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Jennifer G. Winters

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NEARBY RED DWARFS & THEIR DANCE PARTNERS: CHARACTERIZING MORE THAN
2000 SINGLE & MULTIPLE M DWARFS NEAR THE SUN

by

JENNIFER GWYN WINTERS

Under the Direction of Todd J. Henry, PhD

ABSTRACT

This dissertation presents the results of a study to (1) determine the census of the nearby southern M dwarf stellar population via three types of distances and (2) determine the multiplicity rate of nearby M dwarfs using two different search methodologies.

The first part of this work reports three types of distance calculations (photographic, photometric, and trigonometric) for 1748 southern M dwarfs. Distances were estimated for 500 red dwarfs using photographic plate *BRI* magnitudes from SuperCOSMOS, while estimates were made for 667 stars using CCD *VRI* magnitudes. Both *BRI* and *VRI* were combined with 2MASS infrared *JHK* magnitudes. Distances for an additional 581 red

dwarfs were derived from trigonometric parallaxes, 124 of which were measured for the first time during this work.

For the second portion of this thesis, an all-sky sample of 1122 M dwarfs, known via trigonometric parallaxes to lie within 25 pc of the Sun, was surveyed for stellar companions at separations of $2''$ to $600''$. I -band images using primarily the CTIO/SMARTS 0.9m and the Lowell 42in telescopes were obtained in order to search these systems for companions at separations of $2''$ to $180''$. A complementary reconnaissance of wider companions to $600''$ was also done via blinking SuperCOSMOS BRI images.

We find a stellar multiplicity fraction of $27.4 \pm 1.3\%$ for M dwarfs. Using this new gauge of M dwarf multiplicity near the end of the stellar main sequence, we calculate a multiplicity fraction of 30.1% for stellar systems of all types, implying that most systems are single. We find a peak in the separation distribution of the companions at 26 AU, i.e., distances on the scale of our Solar System, with a weak trend of smaller projected separations for lower mass primaries. A hint that M dwarf multiplicity may be a function of age/composition was revealed, with faster moving (and generally older) systems being multiple slightly less often. We calculate that at least 16% of M dwarf mass is made up of the stellar companions of multiple systems. Finally, we show that the mass function for M dwarfs increases to the end of the main sequence.

INDEX WORDS: astronomy, binaries, parallaxes, solar neighborhood, stars: low-mass, stars: statistics, stars: distances

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2000 SINGLE & MULTIPLE M DWARFS NEAR THE SUN

by

JENNIFER GWYN WINTERS

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy

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Georgia State University

2015

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Jennifer G. Winters
2015

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2000 SINGLE & MULTIPLE M DWARFS NEAR THE SUN

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DEDICATION

I dedicate this work to Todd Henry, the best cheerleader anyone could ever have. I would *really* not be here without you. If I had not been lucky enough to have enrolled in your Astronomy 1010 class, it is very likely that my life would have taken a different path, and I would not be writing this dedication.

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LIST OF ABBREVIATIONS

- 2MASS** 2 Micron All Sky Survey. An all sky survey in the infrared bands J , H , and K_s .
- AO** Adaptive Optics. A system for correcting the effect of atmospheric disturbance to obtain sharper images.
- AU** Astronomical Unit. The mean radius of Earth's orbit, equivalent to 149,603,500 km.
- CCD** Charge-Coupled Device. The most common imaging device for modern optical astronomy.
- CTIO** Cerro Tololo Inter-American Observatory. The NOAO southern hemisphere observatory in Chile.
- CTIOPI** Cerro Tololo Inter-American Observatory Parallax Investigation. A large astrometric program run by the RECONS group on CTIO's 0.9m telescope.
- FGS** Fine Guidance Sensors. An optical interferometer on board HST that is used for acquiring and keeping the telescope's position with respect to guide stars. As a science instrument, it can be used to probe stellar multiplicity by producing an interferogram of the science target.
- FWHM** Full Width at Half Maximum.
- HIP** *HIPPARCOS*. ESA's HIgh Precision PARallax COLlecting Satellite mission.
- HST** *Hubble Space Telescope*. NASA's multi-purpose space telescope capable of

high resolution imaging in infrared, visible, and ultraviolet light.

HR Hertzprung–Russell (Diagram). A diagram where temperature is plotted against luminosity for a stellar population. The Hertzprung–Russell Diagram is one of the most basic tools of stellar astronomy.

IDL Interactive Data Language. A computer language useful for scientific data analysis.

IMF Initial Mass Function. The rate of (sub)stellar formation as a function of mass.

IRAF Image Reduction and Analysis Facility. A versatile computer environment for processing astronomical images developed by NOAO.

LF Luminosity Function. The space density of objects as a function of luminosity. Absolute magnitude or spectral types are often used as proxies for luminosity in the Luminosity Function.

MF Mass Function. The space density of objects as a function of the object's mass.

M_{\odot} Solar Mass. 1.99×10^{30} kg.

PSF Point Spread Function. The pattern of light from an unresolved point source formed in an astronomical light detector.

RECONS

REsearch Consortium On Nearby Stars. A research group led by Todd Henry that aims to discover and characterize the population of the solar neighborhood.

RV Radial Velocity. The component of an object's velocity along the line of sight to that object. Measured through spectroscopic Doppler shift.

YPC The Yale Parallax Catalog. A compendium of trigonometric parallaxes that were published before 1995.

CHAPTER 1

WHAT HAS GONE BEFORE

For millenia, humankind has gazed skyward. Arguably the most famous astronomical site, Stonehenge, dates back to the 30th century BC. Yet, even the brightest M dwarf star, the most populous type of star in the Galaxy, is too faint to detect with the human eye, and thus the existence of these objects smaller and less massive than the Sun did not even enter into the realm of possibility of ancient astronomers.

There is great interest in developing a comprehensive list of nearby M dwarfs for studies of the Milky Way's stellar population, both as astrophysically compelling individual objects and as prime targets for exoplanet and SETI search lists. Because these stars are ubiquitous, it is critical to assess their properties — their luminosity distribution, their mass distribution, their multiplicity — in order to understand how they affect the local Universe.

This treatise was motivated both by a desire to understand the multiplicity statistics of the M dwarfs in the solar neighborhood, i.e., how many have companions, and to investigate how the higher order multiples compare to simple binaries. However, before a systematic companion search could be undertaken, it was vital to identify potential nearby M dwarfs and to determine their distances in order to highlight which objects do indeed lie nearby and should be included in the search. For the purposes of this thesis, we define 'nearby' to be within 25 parsecs (pc) of the Sun, as discussed in §1.2.

Over the past ~ 50 years, much work has gone into discovering M dwarfs and measuring their distances. The most accurate distances are derived from trigonometric parallax, but

photometric distance estimates from both photographic and CCD photometry give an initial idea of which objects are likely to be found nearby. Part of the work presented here includes calculations of photometric distances for 1167 southern M dwarfs, as well as measurements of trigonometric parallaxes for 124 of these southern M dwarfs in order to determine the current membership statistics of the historically neglected southern sky (more details in §1.3). As there are far fewer parallaxes of objects known to be within 25 pc than there are known M dwarfs, the most time-effective sequence of events to define the sample for the multiplicity project was to first determine what objects lie within 25 pc via a trigonometric parallax and then impose color and magnitude cuts on that collection of stars to isolate the M dwarfs.

Fortuitously, the REsearch Consortium On Nearby Stars (RECONS) 25 Parsec Database (discussed in Chapter 4, §4.2), which has as its primary criterion for target inclusion that an object have a high quality published trigonometric parallax, was being designed concurrently with this project. Thus, the starting sample was extracted from this list of systems. In addition, because RECONS has an ongoing parallax program in the southern hemisphere, the Cerro Tololo Inter-American Parallax Investigation (CTIOPI), there were many nearby red dwarfs from that program that would likely have parallaxes published by the time this project reached completion. Those targets were added in order to bolster the size and breadth of the sample. Astrometric information for those objects is presented in Chapter 4, (§4.1).

Because of the telescope facilities available and the author's photometry background, a study to identify M dwarfs photometrically was considered appropriate. However, many objects lacked good quality *VRI* photometry in the literature, and those data had to be

obtained during the course of the multiplicity campaign. After all of the astrometric and photometric data were in hand, a final cut for the multiplicity portion of the project was imposed, and the search was conducted. The sample of southern M dwarfs is presented in Chapter 3. New parallax measurements are described in Chapter 4. Chapter 5 details the multiplicity study, with the analysis presented in Chapter 6. Detection limits and biases are discussed in Chapter 7, and conclusions given in Chapter 8.

1.1 M Dwarf Definition

M dwarfs are the least massive main sequence stars (i.e., those stars that produce energy by fusing hydrogen into helium), with masses $\sim 0.075 < M/M_{\odot} < 0.67$ (Benedict et al. (in prep) and the RECONS 25 Parsec Database), effective temperatures $2400\text{K} < T_{eff} < 3900\text{K}$, and luminosities $0.02 < L/L_{\odot} < 0.6\%$ (Tarter et al. 2007). These low-mass, faint, cool, red stars are the most numerous stars in the Universe, making up at least 75% of all stars in the solar neighborhood (Henry et al. 2006), and can be identified either through their spectra or from their photometric colors. The observational parameters, i.e., the color and absolute magnitude limits, that correspond to main sequence M dwarfs with the above masses are $3.7 < (V - K) < 9.5$ and $8.8 < M_V < 20.0$. These values were determined based on the boundaries of the RECONS 25 Parsec Database sample's (see §2.2.1) main sequence when plotted on an observational HR Diagram, with M_V and $(V - K)$ used as proxies for luminosity and temperature.

1.2 The Solar Neighborhood Definition

The definition of the Solar Neighborhood differs depending upon which type of star is under consideration and upon what distance horizon-based volume would encompass a meaningful sample size for that type of star (Binney & Tremaine 2008). For massive stars, the Solar Neighborhood extends to about a kiloparsec (Binney & Tremaine 2008), but because low-mass red dwarfs are the most populous type of star (Henry et al. 2006), a volume that extends to a distance of 25 pc from the Solar System is ample for a statistically significant sample size. Therefore, much of this treatise will focus on the population of red dwarfs within that distance horizon.

1.2.1 *Catalogs of Nearby Stars (Gliese & Jahreiss)*

Nearby star studies began in earnest with the compilation of the first 20 pc compendium by Gliese (1957), with later updates expanding to 25 pc (Gliese 1969; Gliese & Jahreiß 1979). The Third Catalogue of Nearby Stars (CNS91) (Gliese & Jahreiß 1991), the last available printed version of the catalog, reports the known 25 pc sample as of that date, with all objects having a trigonometric, photometric, or spectroscopic parallax. It contains ~ 3800 stars and is based on an unpublished preliminary version of the *General Catalogue of Trigonometric Parallaxes, 4th ed.* by van Altena et al. (1995). In fact, only 1649 systems with trigonometric parallax are listed in CNS91, with 1569 of those found within 25 pc. Many more nearby stars remained to be discovered.

1.3 Previous Nearby Star Searches

Historically, proper motion searches have been very successful at identifying nearby stars, as most nearby stars' proper motions (their angular motions across the sky) are large and therefore easily discernible. These types of searches are accomplished by comparing — or 'blinking' — images of the same parts of the sky taken years apart to see if any objects are moving in the frames. Because most stars are very far away, their proper motions will not be significant, and they will not appear to move from year to year, or even decade to decade.

A star's proper motion μ is directly proportional to its parallax π or inversely proportional to its distance, which means that nearby stars *typically* have large proper motions and stars found at large distances have small proper motions. The relation between proper motion and parallax is given by:

$$\mu = \frac{\pi \cdot v_{tan}}{4.74} \quad (1.1)$$

where v_{tan} is the tangential velocity in kilometers per second, μ is the proper motion in arcseconds per year, and π is the parallax in arcseconds.

However, stars' velocities increase with age due to interactions with giant molecular clouds and other stars, and as some red dwarfs are among the population of the oldest stars, they tend to have higher proper motions on average. Old, red subdwarfs have some of the highest proper motions of all (Jao et al. 2005, 2011) because they are very members of the Galactic halo that happen to be passing through the solar neighborhood. In contrast, young

red dwarfs have very small proper motions (Riedel 2012), and are usually members of moving groups that happen to be located nearby.

Here we outline the most significant proper motion surveys of the past 65 years. This list is by no means exhaustive, but it includes the largest, most productive efforts.

1.3.1 1950-1980 - Luyten & Giclas

The first generation of sky searches for intrinsically faint, nearby stars included the work of Willem Luyten and Henry Giclas (Luyten 1979a,b, 1980a,b; Giclas et al. 1971, 1978), fierce rivals in the arena of high proper motion (HPM) objects during the second half of the twentieth century. Both astronomers made invaluable contributions to the field of nearby stars, documented in their catalogs and between which there is significant overlap.

The Luyten Half-Second (LHS) Catalog (Luyten 1979a) has a lower proper motion cut-off of $0''.50 \text{ yr}^{-1}$ and contains 3602 objects. Most of the objects found in the LHS Catalog were discovered via the Palomar and the Bruce Proper Motion Surveys. The Palomar Survey targeted objects as faint as $m_{pg} \sim 21.1$ and $m_R \sim 19.4$ at declinations north of -33° , while the Bruce Survey covered objects as faint as $m_{pg} \sim 16.0$ in the remainder of the southern hemisphere, where m_{pg} indicates the photographic visual magnitude and the m_R denotes the photographic magnitude at red wavelengths. The New Luyten Two-Tenths (NLTT) Catalog (Luyten 1979b) was a continuation of the LHS Catalog, and contains 58,845 objects with proper motions greater than $0''.18 \text{ yr}^{-1}$.

Images of the entire northern sky and one-quarter of the southern sky were taken at Lowell Observatory as part of the effort to search for distant planets in our Solar System,

after the serendipitous discovery of the now re-classified dwarf planet Pluto. Henry Giclas took second epoch images to compare to those taken during the ‘Pluto Search’ 25 years earlier in order to determine the proper motions of huge numbers of stars with $8 < m_{pg} \lesssim 16.5$. The project began in 1957 and spanned nearly 20 years. The northern survey ($\delta > 0^\circ$) contains 8991 objects that had proper motions greater than $0''.26 \text{ yr}^{-1}$ (Giclas et al. 1971). The southern survey (stars with $0 < \delta < -40^\circ$) contains 2758 objects with $\mu > 0''.20 \text{ yr}^{-1}$ (Giclas et al. 1978).

1.3.2 1980-2000 - Wroblewski, Torres, Costa, Ruiz

The Wroblewski-Torres-Costa (WTC) Survey (Wroblewski & Torres 1989, 1990, 1991, 1992, 1994, 1995, 1996, 1997, 1998; Wroblewski & Costa 1999, 2000, 2001) was one of the first to focus on the undersampled southern hemisphere. First epoch observations were taken of 164 $5^\circ \times 5^\circ$ fields in 1969 and 1970 with the Maksutov Astrograph operated by the University of Chile, which had a limiting magnitude of $m_{pg} \sim 20$. Second epoch observations to identify objects with proper motions greater than $0''.15 \text{ yr}^{-1}$ with a similar limiting magnitude were begun in 1985 and continued for 26 years, resulting in 2495 new HPM objects.

The Calan-ESO Proper Motion Survey (Ruiz et al. 1993, 2001) utilized plates taken with the ESO Schmidt telescope at La Silla during the ESO survey, which targeted 17 $5^\circ \times 5^\circ$ fields away from the Galactic plane. These southern hemisphere observations had limiting magnitudes of $m_R \sim 20.5$ and 19.5 for the 1993 and 2001 publications, respectively, and resulted in 883 discoveries, many of which had proper motions below the NLTT Catalog limit of $0''.18 \text{ yr}^{-1}$.

1.3.3 >2000 - Scholz, Pokorny, SIPS, Lépine

Scholz and collaborators conducted a proper motion search in the southern hemisphere using plates taken at the UK Schmidt telescope that had been scanned using the Automatic Plate Measuring (APM) machine. Forty $6^\circ \times 6^\circ$ fields were searched for HPM objects with proper motions between $0''.3$ and $1''.0 \text{ yr}^{-1}$ with limiting B_J and R_{59F} plate magnitudes of ~ 22.5 and ~ 21 , respectively. The number of new detections from this collaboration is 124 (Scholz et al. 2000; Lodieu et al. 2002; Scholz et al. 2002a,b; Hambaryan et al. 2004; Scholz & Meusinger 2002; Scholz et al. 2004a,b).

The Liverpool-Edinburgh High Proper Motion (LEHPM) Survey used digitized scans of photographic plates from the SuperCOSMOS Sky Survey (SSS) to identify HPM objects in the southern hemisphere, south of declinations -20° . The SSS includes scans of ESO and UK Schmidt plates in the B_J , R_{ESO} , R_{59F} , and I_{IVN} filters. For this survey, only the two R -bands, with similar limiting magnitudes of ~ 19.5 , were used for detecting objects with proper motions greater than $0''.18 \text{ yr}^{-1}$. 11,289 objects were found, but no cross-referencing appears to have been done, so it is unclear how many of these are new detections (Pokorny et al. 2003, 2004).

The Southern Infrared Proper Motion Survey (SIPS) also used the scans from the SSS to search for very red (brighter than $J = 16$) objects in the southern sky, after first trawling the Two Micron All Sky Survey (2MASS) database to identify objects in the region of interest with infrared colors indicative of mid-M to late-T type dwarfs. The first part of the survey that targeted objects with proper motions in excess of $0''.5 \text{ yr}^{-1}$ detected 68 new objects,

while the second part of the survey that targeted objects with proper motions larger than $0''.1 \text{ yr}^{-1}$ identified 5583 new objects (Deacon et al. 2005a; Deacon & Hambly 2007).

The most comprehensive recent survey in the north is the Lépine-Shara Proper Motion (LSPM) Survey (Lépine & Shara 2005), with a limiting magnitude of $V \sim 21$. The survey utilizes the software *SUPERBLINK*, developed by Sébastien Lépine, which aligns images from two different epochs of Digitized Sky Survey (DSS) plates and then subtracts one from the other, so that objects that have moved from one epoch to the other remain. The search identified 61,977 HPM objects with $\mu > 0''.15 \text{ yr}^{-1}$, most of which are recoveries of Luyten and Giclas stars, and has an estimated completeness of better than 99% and 90% at high ($|b| > 15^\circ$) and low ($|b| \leq 15^\circ$) Galactic latitudes, respectively. A total of 201 new objects with proper motions greater than the LHS limit of $0''.50 \text{ yr}^{-1}$ were discovered, mostly in the crowded fields near the Galactic plane, where this technique yields the highest returns of new objects. This catalog supercedes both the LHS and NLTT catalogs for objects in the northern hemisphere. A more limited search in the southern hemisphere revealed 252 new stars with $0''.45 \text{ yr}^{-1} < \mu < 2''.0 \text{ yr}^{-1}$ (Lépine 2005, 2008).

1.3.4 >2000 - RECONS & the SCR Search

The RECONS group has had great success discovering nearby stars via the proper motion method using the SSS plate scans (Hambly et al. 2004). In short, astrometric and photographic information was used from the four available photographic plates taken with the B_J , R_{ESO} , R_{59F} , and I_{IVN} filters in searching almost the entire southern sky. A few fields were skipped due to limited epoch spreads between plates or crowding near the Galac-

tic plane or the Magellanic Clouds. Seven papers (Hambly et al. 2004; Henry et al. 2004; Subasavage et al. 2005a,b; Finch et al. 2007; Boyd et al. 2011a,b) report the discoveries from the searches conducted for objects with $\mu \geq 0''.18 \text{ yr}^{-1}$ and with $R < 18.0$. To date, 6650 new red dwarfs (named SCR for SuperCOSMOS-RECONS) have been discovered via this work, with 155 of these objects estimated to lie within 25 pc. The characterization of these nearby SCR red dwarf discoveries, as well as the measurements of trigonometric parallaxes for these SCR stars, are part of the work presented here and will be discussed further in Chapters 3 and 4.

Publications to-date resulting from the work in this thesis include Winters et al. (2011) and Winters et al. (2015), with at least two more expected.

CHAPTER 2

TELESCOPES UTILIZED

During the course of this thesis project, data were obtained at four different telescopes: the Hall 42in telescope at Lowell Observatory and the USNO 40in telescope, both in Flagstaff, AZ, and the CTIO/SMARTS 0.9m and 1.0m telescopes in Chile. Astrometry data were acquired at all four telescopes, while relative and absolute photometry data were gathered at the Lowell 42in and CTIO 0.9m telescopes. We outline the technical details of each instrument below, with a summary listed in Table 2.1.

Table 2.1: Telescopes Utilized

| Telescope | FOV | pixel scale | # nights | # objects |
|-------------|----------------------|---------------------------|----------|-----------|
| Lowell 42in | $22.3' \times 22.3'$ | $0''.327 \text{ px}^{-1}$ | 21 | 509 |
| USNO 40in | $22.9' \times 22.9'$ | $0''.670 \text{ px}^{-1}$ | N/A | 22 |
| CTIO 0.9m | $13.6' \times 13.6'$ | $0''.401 \text{ px}^{-1}$ | 16 | 444 |
| CTIO 1.0m | $19.6' \times 19.6'$ | $0''.289 \text{ px}^{-1}$ | 8 | 148 |

2.1 The Northern Hemisphere

2.1.1 Lowell 42in

Over the course of twenty-one nights, 509 targets were observed at Lowell, as noted in Table 2.1. With a CCD size of 4096×4112 pixels and pixel scale of $0''.327 \text{ px}^{-1}$, the resulting field of view was $22.3'$ square.

I-band images at the Hall 42in telescope at Lowell Observatory suffer from fringing, the

major cause of which is night sky emission from atmospheric OH molecules, which has to be removed for reliable absolute photometry results. This effect sometimes occurs with back-illuminated CCD's at optical wavelengths longer than ~ 700 nm where the light is reflected several times between the internal front and back surfaces of the CCD, creating constructive and destructive interference patterns, or fringing (Howell 2000, 2012). The removal of this fringing pattern was not as vital for companion detection as it was for the measuring of accurate absolute photometry, but it was nevertheless removed for all I -band data taken at the Lowell 42in telescope.

In order to remove these fringes, I -band science frames from multiple nights with a minimum of saturated stars in the frame were selected, boxcar smoothed, and then average-combined into a fringe map. This fringe map was then subtracted from all I -band images using a modified IDL code originally crafted by Snodgrass & Carry (2013). This code uses the intensity of user-selected pairs of dark and light regions of the fringe map to calculate the scaling factor by which the fringe map must be increased or decreased before its subtraction from the science image. The fringe map and an example of the images before and after the fringe subtraction are shown in Figure 2.1. Figure 2.2 shows the variation in background counts over the same region of the image, before and after the fringes were subtracted. A region of the image where the fringing was most intense near the bottom middle of Figure 2.1(b) was selected for the line plot shown and is therefore the most extreme case. As evident in the figures, the variation of ~ 40 counts is halved to a variation of ~ 20 counts after the fringes are subtracted, illustrating that the technique is effective, but not 100% perfect.

However, comparisons of photometry of ten targets taken at the Lowell 42in with results from the CTIO 0.9m (see Table 7.1, §7.2) and results from the literature show agreement, with an mean absolute deviation of 0.03 mag.

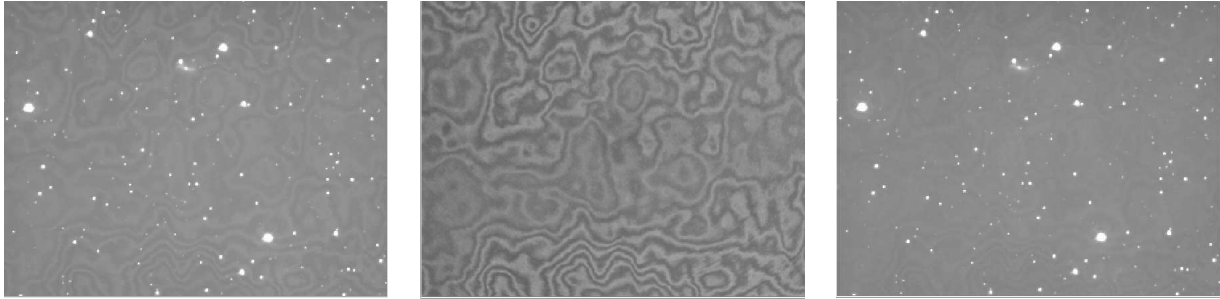


Figure 2.1 *left*: (a) The central portion of an image before the fringing was subtracted. *middle*: (b) The fringe map created and used to scale and subtract the fringe pattern from all I -band data taken at the Lowell 42in telescope. *right*: (c) The image after the fringing pattern was scaled and subtracted.

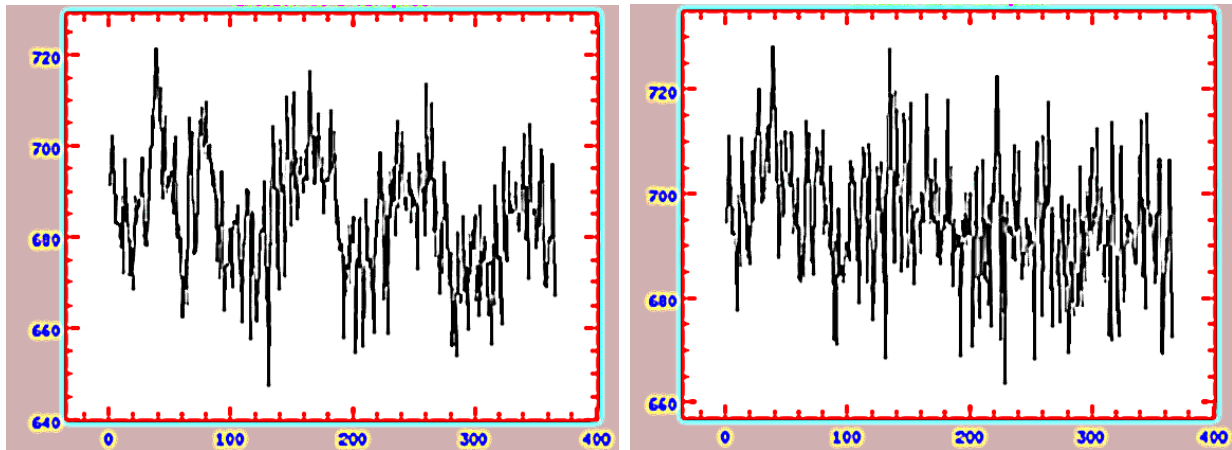


Figure 2.2 *left*: (a) A line plot of the background counts, before the fringing was subtracted. *right*: (b) A line plot of the same area as on the left, after the fringing was subtracted.

While being re-aluminized in December 2012, the mirror was dropped and damaged. The cardboard mask that was installed as a temporary fix resulted in a PSF flare. After inquiries to the technical staff were made, a better mask was installed that slightly improved the PSF.

Fourteen nights of data were gathered after this mishap, during which astrometry data for 51 objects were taken.

2.1.2 USNO 40in

RECONS team member John Subasavage at the United States Naval Observatory, Flagstaff, AZ Station, graciously took astrometry observations for 22 targets on the 40in located there, as noted in Table 2.1. He delivered these data already flat-fielded and bias subtracted. The CCD size of 2048×2048 pixels and pixel scale of $0''.670 \text{ px}^{-1}$ result in a $22.9'$ square field of view.

2.2 The Southern Hemisphere

2.2.1 CTIO 0.9m

A substantial portion of the data reported in this thesis were gathered at the CTIO/SMARTS 0.9m telescope. Most of the absolute photometry reported in Chapter 3, the new parallax data reported in Chapter 4 §4.1, and much of the astrometry data for the I -band imaging portion of the multiplicity project were obtained at the 0.9m telescope. Consistently exceptional seeing and weather conditions make this site superior to any other used. 442 targets were observed on this telescope over the course of sixteen nights, as noted in Table 2.1. The CCD size of 2048×2046 pixels and a pixel scale of $0''.401 \text{ px}^{-1}$ result in a field of view of $13.6' \times 13.6'$.

2.2.2 CTIO 1.0m

Eight nights of data were acquired at the CTIO/SMARTS 1.0m telescope, as noted in Table 2.1, during which data for 148 targets were gathered. The CCD has dimensions of 4064×4064 pixels with a pixel scale of $0''.289 \text{ px}^{-1}$, resulting in a $19.6'$ square field of view. The CCD on this telescope, like that on the Lowell 42in, also suffers from fringing in the I -band. This effect was removed in a similar fashion.

CHAPTER 3

SOUTHERN M DWARFS IN THE SOLAR NEIGHBORHOOD

Determining distances to celestial objects is one of the fundamental challenges in astronomy. In particular, distance determinations to nearby objects are of vital importance, as our solar neighbors set the standards for the primary rung in the cosmic distance ladder. The optimal tool for accomplishing this is trigonometric parallax. But because of observing time and resource constraints, photometric distance estimates are useful in deciding which targets are the best candidates for the limited slots available in traditional parallax programs — or in the near future, which stars are worthy of special attention among the billions of sources that will be unearthed from sky surveys such as *Gaia* and the Large Synoptic Survey Telescope (LSST).

Both in addition to and in combination with proper motion surveys (discussed in §1.3), optical photometry has historically been used to identify and characterize nearby stars. Important work in the late twentieth century included the efforts of Bessel (1990); Bessell (1991)¹, and Weis (1984, 1986, 1987, 1988, 1991a,b, 1993, 1994, 1996, 1999). More recent surveys include that of the SAAO group (Kilkenny & Cousins 1995; Kilkenny et al. 1998, 2007; Koen et al. 2002, 2010; Reid et al. 2001, 2002, 2003a, 2004). The photometric work outlined here and presented in Winters et al. (2015) is a continuation in that tradition.

¹We note that Bessel (1990) is the same author as Bessell (1991), but the name was misspelled by the journal. ‘Bessell’ is the correct name.

Table 3.1: Distance Types for Southern M Dwarfs

| Type of Distance | <25 pc | Total |
|------------------|--------|-------|
| photographic | 500 | 500 |
| photometric | 462 | 667 |
| trigonometric | 442 | 581 |
| TOTAL | 1404 | 1748 |

The collection of stars presented here includes 1748 southern ($\delta \leq 0^\circ$) M dwarf systems with three different types of distance calculations (photographic, photometric, and trigonometric) that were reported in Winters et al. (2015) in an assessment of the completeness of the population of nearby southern M dwarfs. We refer to any collection of stars and their gravitationally bound companion brown dwarfs and/or exoplanets as a system, including single M dwarfs not currently known to have any companions. Systems that contain a white dwarf component have been omitted from the sample presented here, as the white dwarf was initially the brighter and more massive primary component. The M dwarfs analyzed in this chapter are defined by having $3.50 \leq (V_J - K_s) \leq 9.27$, corresponding to spectral types \sim M0.0V to M9.5V, where the red cut-off has been defined by Henry et al. (2004). The breakdown of the sample is listed in Table 3.1. This group of stars is a combination of objects with existing high quality parallaxes, objects for which we have measured photometry as part of our southern astrometry/photometry program, discoveries made during our SuperCOSMOS-RECONS (SCR) proper motion searches for new nearby southern stars, and known objects that were recovered during the SCR searches. The previously identified M dwarfs were objects discovered during the proper motion surveys by Luyten, Giclas, and

others described in §1.3. To eliminate any red giants that may slip into this sample and to be consistent with the proper motion cut-off of Luyten, we limit the targets presented in this chapter to those with proper motions, μ , greater than $0''.18 \text{ yr}^{-1}$.

This work is focused on the southern hemisphere for two reasons: (1) the southern sky has been historically less explored (as described in Chapter 1), and (2) our telescope resources are located in the south in order to resolve the incompleteness of the southern M dwarf population. We do not address the census of northern M dwarfs in this work.

Each system has at least one of three different distance determinations, listed in Table 3.4, with the best distance (i.e., the one with the smallest error) either photographic (*pltdist* — from plate $B_J R_{59F} I_{IVN}$ photometry + 2MASS JHK_s , 500 systems), photometric (*ccddist* — from CCD $V_J R_{KC} I_{KC}$ photometry + 2MASS JHK_s , 667)², or trigonometric (*trgdist* — from parallax, 581). We acknowledge that both *pltdists* and *ccddists* are distance estimates that are photometric in nature. Photometric distance estimates calculated using optical plate BRI magnitudes, in combination with infrared JHK magnitudes are referred to as *pltdist* (discussed in §3.1.3). Photometric distance estimates calculated using optical CCD VRI magnitudes, in combination with infrared JHK magnitudes are referred to as *ccddist* (discussed in §3.1.5). Distances derived from trigonometric parallaxes (discussed in §3.2) are referred to as *trgdist*. Most of the systems presented here have more than one type of distance measurement. For example, a system with a trigonometric parallax published by the RECONS group is likely to also have a *ccddist* and a *pltdist* because we first estimated its

²Hereafter, $B_J R_{59F} I_{IVN}$ will be referred to as BRI , JHK_s will be referred to as JHK , and $V_J R_{KC} I_{KC}$ will be referred to as VRI .

distance photometrically from SuperCOSMOS plates, then measured *VRI* photometry to yield a more accurate *ccdists*, then observed the system for a parallax measurement, which provides *trgdist*. We rank the quality of the distances by the errors associated with each method: *pltdists* from photographic photometry rank third (errors at least 26%), *ccdists* from *VRI* photometry rank second (errors at least 15%), and *trgdist*s derived from accurate trigonometric parallaxes are the best available (errors <5%).

Since the publication of Winters et al. (2015), *VRI* has been measured for additional objects that previously only had distances based on plate photometry, enabling estimates of *ccdists*, and trigonometric parallaxes have been measured for objects that previously had only photometric distances. Therefore, the numbers have shifted slightly from those presented in that paper. These updates are included in Tables 3.2, 3.3, 3.4 and their longer versions in the appendices. However, the analysis from Winters et al. (2015) presented in this chapter remains the same and has not been updated.

3.1 Photometric Parallaxes

3.1.1 $B_J R_{59F} I_{IVN}$ *Photographic Plate Photometry*

BRI plate magnitudes from SuperCOSMOS are given in Table 3.2 for all but a few southern systems and are rounded to the nearest hundredth of a magnitude.³ Errors are typically 0.3 mags for magnitudes fainter than 15, with larger errors for brighter objects due to systematic errors (Hambly et al. 2001). Derived *pltdists* in Table 3.4 for SCR discoveries

³The wavelength ranges for the B_J , R_{59F} , and I_{IVN} filters are 3950-5400Å, 5900-6900Å, and 7150-9000Å, respectively (Morgan 1995). The plate R_{59F} magnitude is the second, more recent R epoch measurement of the two available in the SuperCOSMOS Sky Survey.

have been previously presented in papers from the RECONS group (references listed in Chapter 1 §1.3.4), but we provide *BRI* and new *pltdists* here for 1457 previously known southern objects. Additional SuperCOSMOS queries were recently done in an effort to provide as many *pltdists* as possible for statistical comparisons for the southern systems. Due to an improved SuperCOSMOS photometric calibration,⁴ some magnitudes will be slightly different from those reported in previous papers by the RECONS group; the values presented here are preferred. In some cases, a match was not found because very red objects were not always recovered from the *B* plate, because of very high proper motion, or because of source mergers or corruption. All matches were visually confirmed and were double-checked using the SuperCOSMOS proper motions and *BRI* magnitudes.

3.1.2 JHK_s Photometry from 2MASS

Infrared *JHK* photometry has been extracted from 2MASS (Skrutskie et al. 2006) for all systems and is rounded to the nearest hundredth magnitude in Table 3.2. All stars' *JHK* magnitudes have been confirmed by eye using the stars' proper motions to confirm the objects. The same 2MASS photometry has been used for both the *pltdists* and the *ccddists* presented here. Errors are typically less than 50 millimagnitudes (mmag). Exceptions with larger errors are indicated in Table 3.2 with a superscript *a*.

⁴The recommended access point for the current version of the photometrically calibrated SuperCOSMOS data is the SuperCOSMOS Science Archive, found at <http://surveys.roe.ac.uk/ssa>. Details of the photometric calibration procedure are available in the online documentation at <http://surveys.roe.ac.uk/ssa/dboverview.html#mags>.

3.1.3 Photographic Plate Distance Estimates

The *pltdist* estimates are calculated by combining SuperCOSMOS *BRI* photometry with 2MASS infrared photometry via a suite of 15 color- M_K relations for main sequence stars using *BRIJHK*, as described in Hambly et al. (2004). The four relations M_K vs. $(B - R)$, $(J - H)$, $(J - K)$, and $(H - K)$ have limited spans in color through the M dwarf sequence and are thus omitted. The *pltdist* estimate is considered reliable if the remaining 11 relations are applicable, i.e., if a star's color falls within the range covered by the calibrations for single, main sequence stars. However, if a target star is blended with another source on one plate, up to five relations may drop out of the suite, yielding a less reliable *pltdist* based on 6–10 relations. We consider six relations to be the minimum number acceptable for a *pltdist* because at least two of the three *BRI* magnitudes, combined with three 2MASS measurements, provide optical/infrared colors consistent with those of normal main sequence stars. A few stars have *pltdists* derived using fewer than six relations because plate magnitudes were extracted and distances estimated after it was known that *VRI* photometry and/or trigonometric parallaxes were available. Thus, the new extractions of SuperCOSMOS data simply augment the sample and provide as many distances as possible for comparisons. The representative metallicity of stars that these relations are valid for are average main sequence red dwarfs in the disk of the Galaxy; thus, distance estimates for subdwarfs and young stars will be overestimated and underestimated, respectively.

As described in Hambly et al. (2004), to estimate the reliability of the *pltdists* generated from the suite of relations, single, main sequence, M dwarfs with known *trgdists* placing

them within 10 pc were run back through the relations to derive representative errors. The mean absolute deviation between the *pltdists* and *trgdists* were found to be 26%. In Table 3.4 we list the total errors that include this typical value combined in quadrature with the standard deviation of the up to 11 individual distances computed for a given star. Objects with equal magnitude companions included in unresolved photometry will have distance estimates placing them too close by a factor of 1.4. Light from fainter companions will decrease this offset, whereas light from additional unresolved companions will increase this offset.

3.1.4 $V_J R_{KC} I_{KC}$ CCD Photometry

VRI photometry was measured for 799 of the systems presented here. These measurements were the outcome of our astrometry/photometry program at the CTIO/SMARTS 0.9m and were made between 1999 and 2015.

All of the new *VRI* data, given in Table 3.2, were reduced using IRAF and are on the Johnson-Kron-Cousins system.⁵ Calibration frames taken at the beginnings of nights were used for typical bias subtraction and dome flat-fielding. Standard star fields from Graham (1982), Bessel (1990), and/or Landolt (1992, 2007, 2013) were observed multiple times each night to derive transformation equations and extinction curves. In order to match those used by Landolt, apertures 14'' in diameter were used to determine the stellar fluxes, except in cases where close contaminating sources needed to be deblended. In these cases, smaller

⁵The central wavelengths for the $V_J(\text{old})$, $V_J(\text{new})$, R_{KC} , and I_{KC} filters are 5438Å, 5475Å, 6425Å, and 8075Å, respectively. See Jao et al. (2011) for a discussion of the nearly identical $V_J(\text{old})$ and $V_J(\text{new})$ filters, which are photometrically indistinguishable for M dwarfs at a level of $\lesssim 10$ mmag.

apertures were used and aperture corrections were applied. As outlined in Winters et al. (2011), photometric errors are typically 30 mmag for the V -band and 20 mmag for both the R - and I -bands. Further details about the data reduction procedures, transformation equations, etc., can be found in Jao et al. (2005), Winters et al. (2011), and Winters et al. (2015).

An additional 369 primaries were found to have high quality optical photometry available from the literature, primarily from Bessell, Weis, and the SAAO group. The R and I photometric values from Weis have been transformed to the Johnson-Kron-Cousins (JKC) system via the color relations given in Bessell & Weis (1987) so that all VRI values in Table 3.2 are on the same photometric system. SOAR/SOI (SOAR Optical Imager) photometry for a few dozen of the faintest objects from Dieterich et al. (2014) has also been converted to the JKC system using methods described in that paper.

3.1.5 CCD Photometric Distance Estimates

The *ccdists* in Table 3.4 are determined using a method similar to that used for the *plt-dists*. As described in Henry et al. (2004), the difference is that more accurate CCD VRI magnitudes obtained at CTIO were used instead of plate magnitudes from SuperCOSMOS, in combination with 2MASS JHK to determine the suite of color- M_K relations. Again, the maximum number of possible relations from the combination of $VRIJHK$ magnitudes is 15, but in this case 12 relations yield useful results, as the color spreads in M_K vs. $(J - H)$, $(J - K)$, and $(H - K)$ are limited and these relations are omitted from the suite. Stars with VRI from the literature rather than from our observing program, had *ccdists* calcu-

lated using the same relation suite. All photometry is on the JKC system, and therefore the resulting *ccddists* are all generated in a uniform fashion. The representative metallicity of stars that these relations are valid for are average main sequence red dwarfs in the disk of the Galaxy; thus, distance estimates for subdwarfs and young stars will be overestimated and underestimated, respectively.

Similar to the *pltdists*, stars with all 12 relations have *ccddists* we deem reliable (assuming the stars are single and on the main sequence), and those with 7–11 relations we deem suspect because at least one magnitude and up to five relations have dropped out of the suite. Similarly, some stars in Table 3.4 have *ccddists* with fewer than seven relations because *VRI* photometry was gathered and distances estimated after it was known that trigonometric parallaxes were available. Thus, inclusion of *VRI* data simply augments the sample and provides as many distances as possible for statistical comparisons. As described in Henry et al. (2004), to estimate the reliability of the *ccddists* generated from the suite of relations, single, main sequence M dwarfs with known *trgdists* placing them within 10 pc were run back through the relations to derive representative errors. The mean offsets between the *ccddists* and *trgdists* were found to be 15%. In Table 3.4 are listed the total errors that include this typical value combined in quadrature with the standard deviation of the up to 12 individual distances computed for a given star. As mentioned in §3.1.3, objects with equal magnitude companions included in unresolved photometry will have distance estimates placing them too close by a factor of 1.4. Light from fainter companions will decrease this offset, whereas light from additional unresolved companions will increase this offset.

Figure 3.1 shows the sky distribution of the southern systems with best distances that are photometric; no parallax measurements exist for these systems. Systems within 25 pc are indicated as solid points, while those beyond 25 pc are shown as open points.

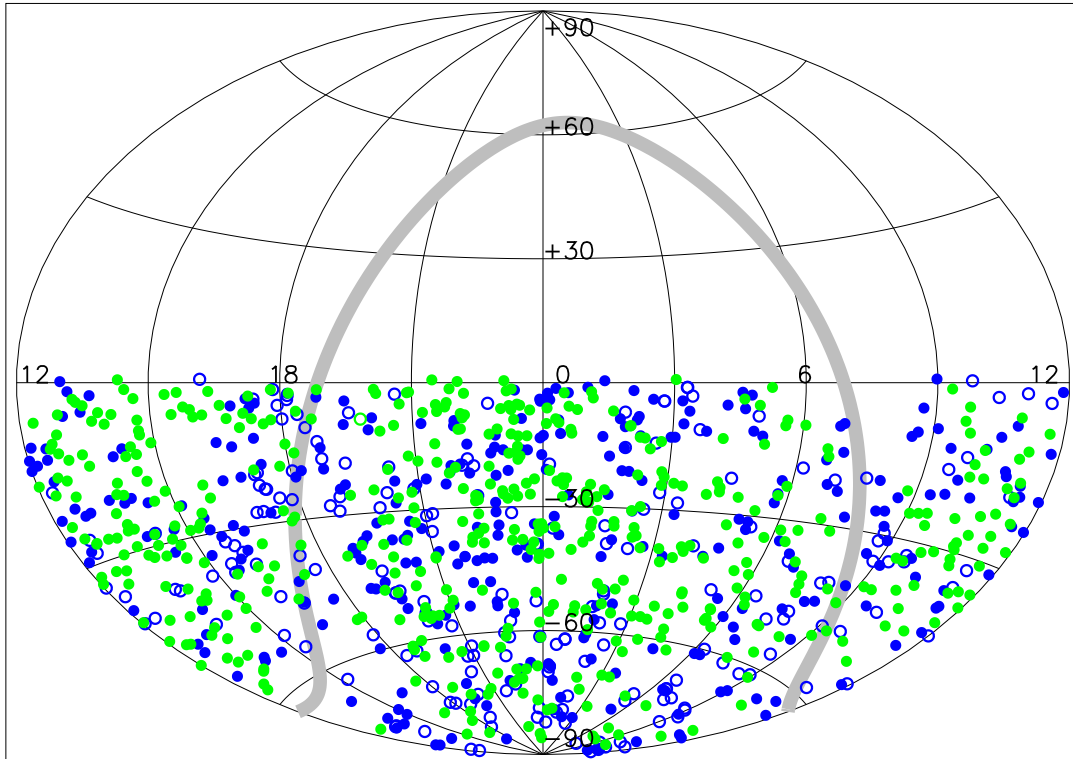


Figure 3.1 The 1167 southern systems with best distances estimated from photometry, i.e., those for which no parallax exists. Solid points indicate those systems that lie within 25 pc, blue for the 462 systems with *ccdists* and green for the 500 systems with *pltdists*; open points indicate the 205 systems with *ccdists* that are greater than 25 pc. The Galactic plane is noted in gray.

Table 3.2 provides the observed photometry data for the first ten of all systems presented in this thesis that lie within 25 pc and those that lie beyond 25 pc. The entire table can be found in Appendix I in Table A.1. Included are the names of the M dwarfs, the number of known components in each system, the sky coordinates (J2000.0), SuperCOSMOS *BRI* plate

magnitudes, VRI and the number of observations or references to literature photometry, 2MASS JHK magnitudes, an asterisk indicating if the object is included in the multiplicity sample (detailed further in Chapter 5), the ΔV between a companion and its primary, the deblended V (described in §6.3.1), and the estimated mass (described in §6.3.2). Components of multiple systems are noted with a capital letter after the name in the first column. If the names of the components are different, the letters identifying which is the primary and which is the secondary are placed within parenthesis (e.g., LHS1104(A) and LHS1105(B)). If the line of data is for a component other than the primary of the system, a ‘0’ is listed in column 2. The number in parentheses next to the number of components indicates the number of objects included in the VRI photometry. For example, the notation ‘0(1)’ indicates that listed is separate photometry data for a companion in a multiple system. Brown dwarf companions are included here and noted by a ‘BD’ next to the ‘0’ in column 2. If any of the assumptions or conversions of ΔV outlined in Chapter 6 §6.3.1 were made, the ΔV and the resulting V and mass estimate are noted in italics.

Table A.1 is divided into the 1986 systems within 25 pc (top) and the 361 systems beyond 25 pc (bottom). An additional 599 systems are listed here. 558 of these are northern M dwarf systems with trigonometric parallaxes placing them within 25 pc that are part of the multiplicity survey discussed in Chapter 5, while the remaining 24 are other southern M dwarf systems with trigonometric parallaxes with proper motions smaller than the lower limit of the sample analyzed in Winters et al. (2015). A ‘ J ’ next to a magnitude indicates that light from a close companion has resulted in blended photometry; however, the photometry

of any pair that has a $\Delta V > 3$ will not be noted as joint, as a companion with a ΔV that large only contributes 7% of the luminosity of the system and the ΔV s may not be very well defined at differences that large. We note that no detailed information regarding multiple systems is given for those beyond 25 pc nor those not part of the multiplicity sample.

Table 3.2: Photometry Data

| Name | # obj | RA | DEC | B_J | R_{59F} | I_{IVN} | V_J | R_{KC} | I_{KC} | # nts/ref | J | H | K_s | Mult | ΔV | V_{db} | Mass |
|--------------|-------|------------|------------|-------|-----------|-----------|--------|----------|----------|-----------|--------|-------------------|--------|------|------------|----------|-----------------|
| (1) | (2) | (hh:mm:ss) | (dd:mm:ss) | (mag) | (mag) | (mag) | (mag) | (mag) | (mag) | (11) | (mag) | (mag) | (mag) | (15) | (mag) | (mag) | (M_{\odot}) |
| Within 25 pc | | | | | | | | | | | | | | | | | |
| 2MA0000-1245 | 1 | 00 00 28.7 | -12 45 16 | ... | 19.26 | 15.88 | 20.78 | 18.71 | 16.27 | /40 | 13.20 | 12.45 | 11.97 | ... | ... | ... | ... |
| LTT09844 | 1 | 00 00 46.9 | -35 10 06 | 13.48 | 11.30 | 10.21 | ... | ... | ... | ... | 9.12 | 8.48 | 8.28 | ... | ... | ... | ... |
| GJ1001B | 0BD | 00 04 34.8 | -40 44 06 | ... | ... | ... | 22.77J | 19.00J | 16.66J | 2/1 | 13.11J | 12.06J | 11.40J | * | ... | ... | ... |
| GJ1001C | 0BD | 00 04 34.8 | -40 44 06 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | ... | ... | ... |
| GJ1001A | 3(1) | 00 04 36.5 | -40 44 03 | 14.21 | 11.83 | 10.06 | 12.83 | 11.62 | 10.08 | /40 | 8.60 | 8.04 | 7.74 | * | ... | 12.86 | 0.248 |
| G158-025 | 1 | 00 04 40.3 | -09 52 42 | 14.47 | 12.52 | 10.92 | ... | ... | ... | ... | 9.77 | 9.10 | 8.82 | ... | ... | ... | ... |
| SIP0004-2058 | 1 | 00 04 41.5 | -20 58 30 | 21.86 | 18.85 | 15.65 | 19.94 | 17.81 | 15.36 | /40 | 12.40 | 11.83 | 11.40 | ... | ... | ... | ... |
| GJ0001 | 1 | 00 05 24.4 | -37 21 27 | 10.10 | 7.91 | 6.28 | 8.54 | 7.57 | 6.41 | /2 | 5.33 | 4.83 ^b | 4.52 | * | ... | 8.53 | 0.457 |
| LP644-034 | 1 | 00 05 34.9 | -06 07 07 | 13.85 | 11.75 | 9.92 | ... | ... | ... | ... | 9.26 | 8.65 | 8.41 | ... | ... | ... | ... |
| LP644-039 | 1 | 00 06 13.1 | -02 32 11 | 15.38 | 13.34 | 10.91 | 14.62 | 13.42 | 11.84 | /24 | 10.22 | 9.60 | 9.30 | ... | ... | ... | ... |
| Beyond 25 pc | | | | | | | | | | | | | | | | | |
| GJ1293 | 1 | 00 01 25.8 | -16 56 55 | 11.48 | 9.08 | 8.46 | 10.73 | 9.88 | 9.04 | /40 | 8.02 | 7.41 | 7.22 | ... | ... | ... | ... |
| L290-032 | 1 | 00 02 27.1 | -46 01 44 | 13.47 | 11.44 | 9.90 | ... | ... | ... | ... | 9.18 | 8.52 | 8.34 | ... | ... | ... | ... |
| LHS0105 | 1 | 00 09 17.3 | -19 42 32 | 16.88 | 14.88 | 12.53 | 15.52 | 14.18 | 12.46 | /40 | 10.88 | 10.33 | 10.07 | ... | ... | ... | ... |
| LTT00074 | 1 | 00 11 04.6 | -05 47 02 | 11.48 | 9.61 | 8.21 | 10.86 | 9.96 | 9.04 | /35 | 7.98 | 7.31 | 7.12 | ... | ... | ... | ... |
| LTT00095 | 1 | 00 13 29.1 | -36 49 44 | 12.26 | 9.69 | 8.47 | ... | ... | ... | ... | 7.80 | 7.18 | 6.96 | ... | ... | ... | ... |
| LHS1048 | 1 | 00 15 33.5 | -35 11 48 | 15.77 | 13.80 | 12.10 | 14.53 | 13.47 | 12.09 | /40 | 10.80 | 10.26 | 10.06 | ... | ... | ... | ... |
| SCR0015-6957 | 1 | 00 15 52.5 | -69 57 21 | 14.58 | 12.54 | 10.91 | 13.54 | 12.52 | 11.18 | /40 | 9.89 | 9.24 | 9.01 | ... | ... | ... | ... |
| LHS0109 | 1 | 00 17 40.0 | -10 46 17 | 15.03 | 12.93 | 12.00 | 13.88 | 12.97 | 12.10 | /40 | 11.05 | 10.56 | 10.37 | ... | ... | ... | ... |
| LEHPM1-0439 | 1 | 00 18 19.4 | -82 07 15 | 16.92 | 14.76 | 12.62 | 15.78 | 14.63 | 13.03 | /40 | 11.68 | 11.12 | 10.86 | ... | ... | ... | ... |
| L086-093 | 1 | 00 18 34.6 | -68 46 60 | 12.33 | 10.05 | 9.21 | 11.32 | 10.43 | 9.57 | /25 | 8.58 | 7.97 | 7.72 | ... | ... | ... | ... |

^a2MASS magnitude error greater than 0.05 mags.

A 'J' next to a photometry value indicates that the magnitude is blended due to one or more close companions.

References: (1) this work; (2) Bessel (1990); (3) Bessell (1991); (4) Costa & Méndez (2003); (5) Costa et al. (2005); (6) Costa et al. (2006); (7) Dahn et al. (1982); (8) Dahn et al. (2002); (9) Dieterich et al. (2014); (10) Harrington & Dahn (1980); (11) Harrington et al. (1993); (12) Henry et al. (2004); (13) Henry et al. (2006); (14) Høg et al. (2000); (15) Jao et al. (2005); (16) Jao et al. (2011); (17) Jao et al. (2014); (18) Kilkenny et al. (2007); (19) Koen et al. (2002); (20) Koen et al. (2010); (21) Lépine et al. (2009); (22) Patterson et al. (1998); (23) Reid et al. (2002); (24) Reid et al. (2003b); (25) Reid et al. (2004); (26) Riedel et al. (2010); (27) Riedel et al. (2014); (28) Weis & Upgren (1982); (29) Weis (1984); (30) Weis (1986); (31) Weis (1987); (32) Weis (1988); (33) Weis (1991a); (34) Weis (1991b); (35) Weis (1993); (36) Weis (1994); (37) Weis (1996); (38) Weis (1999); (39) Winters et al. (2011); (40) Winters et al. (2015).

3.2 Trigonometric Parallaxes

There are two primary sources of trigonometric parallax data currently available. The *General Catalogue of Trigonometric Stellar Parallaxes, Fourth Edition* (van Altena et al. 1995), often called the Yale Parallax Catalogue (hereafter YPC), is a valuable compendium of ground-based parallaxes published up to 1995 and includes about half of the nearby M dwarf parallaxes measured to date, notable among which are from parallax programs at Allegheny, Mt. Stromlo, McCormick, Sproul, Van Vleck, Yale, and Yerkes. The *Hipparcos* mission (initial release by Perryman et al. (1997), and the updated results by van Leeuwen (2007); hereafter HIP) updated many of those parallaxes, and contributed about one hundred-fifty new measurements for bright ($V \lesssim 12.5$) nearby M dwarfs. About one hundred other M dwarf systems have parallaxes available from other publications. The RECONS (REsearch Consortium On Nearby Stars) group has measured a substantial number of parallaxes to nearby stars, adding 148 M dwarf systems to the 25 pc census via new measurements (Jao et al. 2005, 2011, 2014; Costa et al. 2005, 2006; Henry et al. 2006; Subasavage et al. 2009; Riedel et al. 2010, 2011, 2014; von Braun et al. 2011; Mamajek et al. 2013; Dieterich et al. 2014), published in *The Solar Neighborhood* series of papers (hereafter TSN) in *The Astronomical Journal*.

In total, we list the parallax data for the 1342 M dwarf primaries in Tables 3.3 and B.1. The 1180 in the top section of these tables lie within 25 pc, 1122 of which comprise the sample targeted in the multiplicity search described in Chapter 5. The other 58 systems closer than 25 pc either did not have colors and absolute magnitudes that met the updated

M dwarf definition (described in Chapter 5), §5.1, or their parallaxes were finalized after the multiplicity search was already complete.

The 162 M dwarf systems in the lower section of Tables 3.3 and B.1 lie beyond 25 pc. Included in that 162 are 48 systems that have parallaxes < 40 mas measured by RECONS — these were anticipated to be closer than 25 pc because of their *pltdists* and/or *ccddists*, but are now known to lie beyond 25 pc.

For all known southern systems without parallaxes, a search of YPC and HIP was carried out in the event that a parallax < 40 mas already existed. A $30'$ search radius for YPC and a $5'$ search radius for HIP were used in sweeps for objects to compensate for high proper motions as well as poor coordinates, the latter being particularly important for the YPC. Possible matches were then confirmed or refuted by comparing identifiers, proper motions, and V magnitudes. Seven percent (114 systems) of the entire sample of 1749 southern M dwarfs in this chapter were discovered to have parallaxes < 40 mas in YPC and/or HIP. No other systematic literature search for stars with published parallaxes beyond 25 pc has yet been done beyond those using YPC and HIP.

Table 3.3 provides the astrometry data for the first ten M dwarf primaries in each section (< 25 pc and > 25 pc) with trigonometric parallaxes presented in this thesis as a guide, including the names of the M dwarf, the number of known components in each system, coordinates (J2000.0), proper motion magnitudes and position angles with references, the weighted means of the published trigonometric parallaxes and the errors, the number of parallaxes included in the weighted mean and references, and an asterisk indicating if the

object is included in the multiplicity sample. The table is divided into the 1180 systems within 25 pc (top) and the 162 systems beyond 25 pc (bottom). All proper motions are from SuperCOSMOS, except where noted.⁶ Proper motions with the reference ‘RECONS (in prep)’ indicate SuperCOSMOS proper motions that will be published in the RECONS 25 Parsec Database, and parallaxes with that same reference indicate that they will be published in a future paper by a member of the RECONS team. The complete Table B.1 can be found in Appendix II, where the astrometry data for all primaries in this entire thesis that have parallaxes are listed.

Table 3.3: Astrometry Data

| Name | # obj | RA | DEC | μ | P.A. | ref | π | σ_π | # π | ref | Mult |
|--------------|-------|------------|------------|-------------------------|-------|-----|--------------------|--------------|---------|-------|------|
| (1) | (2) | (hh:mm:ss) | (dd:mm:ss) | ($''/\text{yr}^{-1}$) | (deg) | (7) | (mas) | (mas) | (10) | (11) | (12) |
| Within 25 pc | | | | | | | | | | | |
| GJ1001 | 3 | 00 04 36.5 | -40 44 03 | 1.636 | 159.7 | 70 | 79.87 | 3.75 | 2 | 25,66 | * |
| GJ0001 | 1 | 00 05 24.4 | -37 21 27 | 6.106 | 112.5 | 27 | 230.32 | 0.90 | 2 | 66,67 | * |
| LHS1019 | 1 | 00 06 19.2 | -65 50 26 | 0.564 | 158.7 | 70 | 59.85 | 2.64 | 1 | 67 | * |
| GJ1002 | 1 | 00 06 43.2 | -07 32 17 | 2.041 | 204.0 | 37 | 213.00 | 3.60 | 1 | 66 | * |
| GJ1003 | 1 | 00 07 26.7 | +29 14 33 | 1.890 | 127.0 | 36 | 53.50 | 2.50 | 1 | 66 | * |
| LHS1022 | 1 | 00 07 59.1 | +08 00 19 | 0.546 | 222.0 | 36 | 44.00 | 6.30 | 1 | 66 | * |
| L217-028 | 1 | 00 08 17.4 | -57 05 53 | 0.370 | 264.0 | 38 | 75.17 | 2.11 | 1 | 1 | * |
| HIP000687 | 1 | 00 08 27.2 | +17 25 27 | 0.110 | 233.8 | 27 | 45.98 | 1.93 | 1 | 67 | * |
| G131-026 | 2 | 00 08 54.0 | +20 50 18 | 0.251 | 194.4 | 51 | 54.13 | 1.35 | 1 | 51 | * |
| GJ0007 | 1 | 00 09 04.3 | -27 07 20 | 0.715 | 079.7 | 70 | 43.61 | 2.56 | 2 | 66,67 | * |
| Beyond 25 pc | | | | | | | | | | | |
| GJ1293 | 1 | 00 01 25.8 | -16 56 55 | 0.386 | 132.8 | 70 | 31.13 | 2.21 | 1 | 67 | |
| L290-032 | 1 | 00 02 27.1 | -46 01 44 | 0.212 | 096.9 | 70 | 26.06 | 4.35 | 1 | 67 | |
| LTT00074 | 1 | 00 11 04.6 | -05 47 02 | 0.276 | 089.1 | 70 | 38.78 | 2.09 | 2 | 66,67 | |
| LTT00095 | 1 | 00 13 29.1 | -36 49 44 | 0.349 | 211.6 | 70 | 35.48 | 2.30 | 1 | 67 | |
| LHS0109 | 1 | 00 17 40.0 | -10 46 17 | 1.051 | 180.0 | 70 | 28.40 | 3.50 | 1 | 66 | |
| LP644-095 | 1 | 00 19 12.4 | -03 03 13 | 0.237 | 183.6 | 70 | 32.31 | 2.26 | 1 | 67 | |
| LHS0110 | 2 | 00 19 37.0 | -28 09 46 | 1.388 | 192.2 | 70 | 33.75 ^a | 1.20 | 2 | 30,30 | |
| LEHPM1-0494 | 2 | 00 21 05.9 | -42 44 43 | 0.253 | 086.5 | 15 | 38.42 ^a | 1.44 | 2 | 15,15 | |
| LTT00207 | 1 | 00 23 47.3 | -36 51 41 | 0.187 | 252.2 | 70 | 24.89 | 1.59 | 1 | 67 | |
| SCR0027-0806 | 1 | 00 27 45.4 | -08 06 05 | 0.184 | 122.3 | 70 | 24.89 | 1.24 | 1 | 1 | |

^aThe weighted mean parallax includes the parallax of both the primary and the secondary components.

^bThe HIP parallax is markedly different from that published in YPC and has an error of ~ 45 mas.

⁶Some of the proper motion values from the SuperCOSMOS Sky Survey for SCR objects presented here differ slightly from those in the original discovery papers. For the new values, a more comprehensive method has been used that provides multiple measurements of proper motion between various plate pairs, while before only a single value was available that incorporated all plates into the solution simultaneously. The proper motions provided here are those that yield consistent values among multiple determinations and are preferred.

References: (1) this work; (2) Andrei et al. (2011); (3) Anglada-Escudé et al. (2012); (4) Benedict et al. (1999); (5) Benedict et al. (2000); (6) Benedict et al. (2001); (7) Benedict et al. (2002); (8) Biller & Close (2007); (9) Costa et al. (2005); (10) Costa et al. (2006); (11) Dahn et al. (2002); (12) Deacon & Hambly (2001); (13) Deacon et al. (2005b); (14) Deacon et al. (2005a); (15) Dieterich et al. (2014); (16) Dupuy & Liu (2012); (17) Fabricius & Makarov (2000); (18) Faherty et al. (2012); (19) Falin & Mignard (1999); (20) Gatewood et al. (1993); (21) Gatewood et al. (2003); (22) Gatewood (2008); (23) Gatewood & Coban (2009); (24) Henry et al. (1997); (25) Henry et al. (2006); (26) Hershey & Taff (1998); (27) Høg et al. (2000); (28) Ianna et al. (1996); (29) Jao et al. (2005); (30) Jao et al. (2011); (31) Jao et al. (2014); (32) Khovritchev et al. (2013); (33) Lèpine & Shara (2005); (34) Lèpine et al. (2009); (35) Luyten (1979a); (36) Luyten (1979b); (37) Luyten (1980a); (38) Luyten (1980b); (39) Martin & Mignard (1998); (40) Martinache et al. (2007); (41) Martinache et al. (2009); (42) Monet et al. (2003); (43) Pokorný et al. (2004); (44) Pourbaix et al. (2003); (45) Pravdo et al. (2006); (46) Pravdo & Shaklan (2009); (47) RECONS (in prep); (48) Reid et al. (2003b); (49) Riedel et al. (2010); (50) Riedel et al. (2011); (51) Riedel et al. (2014); (52) Ruiz et al. (1993); (53) Schilbach et al. (2009); (54) Schmidt et al. (2007); (55) Shakht (1997); (56) Shkolnik et al. (2012); (57) Smart et al. (2007); (58) Smart et al. (2010); (59) Söderhjelm (1999); (60) Subasavage et al. (2005a); (61) Subasavage et al. (2005b); (62) Teegarden et al. (2003); (63) Teixeira et al. (2009); (64) Tinney et al. (1995); (65) Tinney (1996); (66) van Altena et al. (1995); (67) van Leeuwen (2007); (68) von Braun et al. (2011); (69) Weis (1999); (70) Winters et al. (2015); (71) Wroblewski & Torres (1997).

Table 3.4 provides the derived distance data for all M dwarf primaries in this thesis, split into the 25 pc sample (top) and systems with best quality distances beyond 25 pc (bottom). Only the first ten lines of each section of the table are given here. The entire Table 3.4 can be found in Appendix III in Table C.1. Data for each M dwarf listed include the name of the M dwarf primary, coordinates (J2000.0), information on the *pltdists* (the distance, the total error, number of relations), *ccddists* (the distance, the total error, number of relations), and *trgdists* (the distance from the weighted mean of published parallaxes, the weighted mean error, and the number of parallaxes used to generate the weighted mean). These empirical values are then followed by the most reliable distance and its type. Distances based upon blended photometry are given in square brackets and are typically underestimates due to the added light from the close companion. Distances for both confirmed and candidate subdwarfs are given in curly brackets and are typically closer than estimated, as subdwarfs are underluminous for their colors.

Table 3.4: Derived Distances

| Name | RA | DEC | d_{plt} | σ_{tot} | # rel | d_{ccd} | σ_{tot} | # rel | d_{trig} | σ_{trig} | # π | d_{best} | d_{type} |
|--------------|------------|------------|-----------|----------------|-------|-----------|----------------|-------|------------|-----------------|---------|------------|------------|
| | (hh:mm:ss) | (dd:mm:ss) | (pc) | (pc) | | (pc) | (pc) | | (pc) | (pc) | | (pc) | |
| Within 25 pc | | | | | | | | | | | | | |

| | | | | | | | | | | | | | |
|--------------|------------|-----------|--------|------|----|---------|------|-----|------|-----|-----|------|-----|
| 2MA0000-1245 | 00 00 28.7 | -12 45 16 | 22.2 | 7.6 | 7 | 23.1 | 4.0 | 11 | ... | ... | ... | 23.1 | ccd |
| LTT09844 | 00 00 46.9 | -35 10 06 | 23.5 | 7.4 | 11 | ... | ... | ... | ... | ... | ... | 23.5 | plt |
| GJ1001 | 00 04 36.5 | -40 44 03 | 11.2 | 3.4 | 11 | 12.5 | 1.9 | 12 | 12.5 | 0.6 | 2 | 12.5 | trg |
| G158-025 | 00 04 40.3 | -09 52 42 | 24.5 | 7.4 | 11 | ... | ... | ... | ... | ... | ... | 24.5 | plt |
| SIP0004-2058 | 00 04 41.5 | -20 58 30 | 14.9 | 6.8 | 10 | 18.6 | 3.0 | 11 | ... | ... | ... | 18.6 | ccd |
| GJ0001 | 00 05 24.4 | -37 21 27 | 3.7 | 1.0 | 11 | 5.6 | 0.9 | 11 | 4.3 | 0.0 | 2 | 4.3 | trg |
| LP644-034 | 00 05 34.9 | -06 07 07 | 23.0 | 6.2 | 11 | ... | ... | ... | ... | ... | ... | 23.0 | plt |
| LP644-039 | 00 06 13.1 | -02 32 11 | 27.3 | 9.2 | 11 | 21.9 | 3.9 | 12 | ... | ... | ... | 21.9 | ccd |
| LHS1019 | 00 06 19.2 | -65 50 26 | 16.1 | 4.6 | 11 | 16.6 | 2.6 | 12 | 16.7 | 0.7 | 1 | 16.7 | trg |
| GJ1002 | 00 06 43.2 | -07 32 17 | 6.8 | 2.1 | 11 | 5.4 | 1.0 | 12 | 4.7 | 0.1 | 1 | 4.7 | trg |
| Beyond 25 pc | | | | | | | | | | | | | |
| GJ1293 | 00 01 25.8 | -16 56 55 | 16.5 | 4.6 | 4 | 24.8 | 4.1 | 9 | 32.1 | 2.3 | 1 | 32.1 | trg |
| L290-032 | 00 02 27.1 | -46 01 44 | 24.5 | 6.6 | 11 | ... | ... | ... | 38.4 | 6.6 | 1 | 38.4 | trg |
| LHS0105 | 00 09 17.3 | -19 42 32 | 25.9 | 7.9 | 11 | 29.1 | 5.1 | 12 | ... | ... | ... | 29.1 | ccd |
| LTT00074 | 00 11 04.6 | -05 47 02 | 16.6 | 4.6 | 9 | 21.0 | 3.6 | 10 | 25.8 | 1.4 | 2 | 25.8 | trg |
| LTT00095 | 00 13 29.1 | -36 49 44 | 13.5 | 3.7 | 11 | ... | ... | ... | 28.2 | 1.8 | 1 | 28.2 | trg |
| LHS1048 | 00 15 33.5 | -35 11 48 | 40.6 | 12.1 | 11 | 52.6 | 8.5 | 12 | ... | ... | ... | 52.6 | ccd |
| SCR0015-6957 | 00 15 52.5 | -69 57 21 | 28.1 | 7.8 | 11 | 31.8 | 5.3 | 12 | ... | ... | ... | 31.8 | ccd |
| LHS0109 | 00 17 40.0 | -10 46 17 | {71.7} | 22.1 | 11 | {103.1} | 17.1 | 9 | 35.2 | 4.4 | 1 | 35.2 | trg |
| LEHPM1-0439 | 00 18 19.4 | -82 07 15 | 55.3 | 15.7 | 11 | 58.8 | 11.0 | 12 | ... | ... | ... | 58.8 | ccd |
| L086-093 | 00 18 34.6 | -68 46 60 | 22.6 | 6.6 | 11 | 30.3 | 4.9 | 9 | ... | ... | ... | 30.3 | ccd |

3.3 Distance Comparisons

It is worthwhile to compare the distances from the different methods discussed. As this chapter is drawn from the work that was presented in Winters et al. (2015), only comparisons of the southern systems are given.

Figure 3.2 shows a comparison of the *pltdists* and *ccddists* for the 739 southern stars that have both *BRI* and *VRI* photometry placing them within 25 pc. Only those objects thought to be single have been plotted. Error bars on individual points are omitted for clarity, but can be found for individual systems in Table 3.4. As described above (§3.1.3 and §3.1.5), the errors typical to the technique are 26% and 15% for *pltdists* and *ccddists*, respectively. The total errors are typically 32% in *pltdist* and 16% in *ccddist* and include the aforementioned errors added in quadrature to the standard deviations of the individual estimates for each star. Because estimates from individual relations in the suites are usually quite consistent,

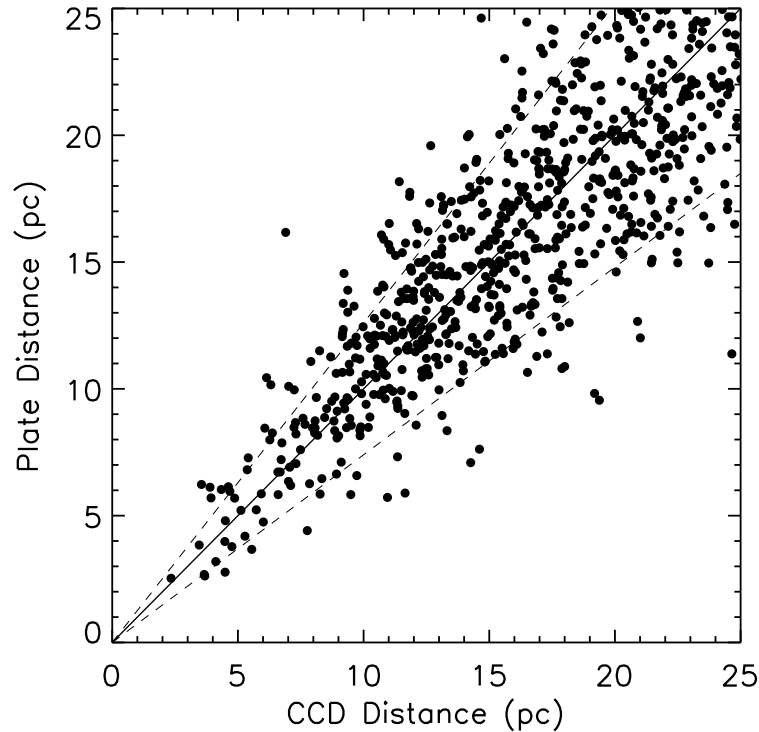


Figure 3.2 Distance comparisons of estimates using photographic plate photometry (*pltdist*) vs. CCD photometry (*ccddist*) for the systems closer than 25 pc that have both *BRI* and *VRI* photometry. Known unresolved multiples with blended photometry were not included. The diagonal line represents 1:1 correspondence in distances, while the dashed lines indicate the 26% errors associated with the plate distance estimates.

the total errors are dominated by the adopted values for systematic errors. The dominant cause of the distance discrepancies is poor plate photometry compared to CCD photometry, as can be seen in a few extreme cases in Figure 3.2.

Figures 3.3 (343 systems) and 3.4 (337 systems) compare the *pltdists* and *ccddists*, respectively, to the available *trgdists* placing southern systems within 25 pc, again using only known single objects. The average offsets are 24% for the *pltdists* and 17% for the *ccddists*, consistent with the 26% and 15% reported in Hambly et al. (2004) and Henry et al. (2004),

respectively. The inherent spreads around the one-to-one lines in each plot have three causes: (1) errors in the photometry and parallaxes used to derive the relations and for the stars targeted here, (2) unresolved systems, and (3) cosmic scatter due to differences in stellar ages, compositions, and perhaps magnetic properties among the stars that are not taken into account by the color-magnitude relations. *BRI* photometry errors dominate the *pltdist* vs. *trgdist* offsets, while cosmic scatter dominates the *ccddist* vs. *trgdist* offsets because the *VRI* photometry and parallax errors are each only a few percent. The reduced scatter in Figure 3.4 again illustrates the value of obtaining accurate photometry, as the scatter has been reduced significantly (from 24% to 12%). The distances are more often underestimated than overestimated, a result of the presence of unknown unresolved multiples and unknown young objects in the sample.

3.3.1 M Dwarfs, M Subdwarfs and M Giants

Before outlining the population results of this study of southern M dwarfs, we must first verify that stars included in the final sample are, indeed, M dwarfs based on the photometry and parallaxes now available. Although our sample for the nearby M dwarf characterization study has been selected to include only southern stars with proper motions in excess of $\mu = 0''.18 \text{ yr}^{-1}$, a few giants might be included that have extraordinary space velocities, or more likely, have erroneous proper motions. For stars without parallaxes, we use several color-color diagrams to separate dwarfs from interloping giants — an example is shown in Figure 3.5, which plots $(J - H)$ vs. $(R - K)$.

A small supplementary set of 23 giants, confirmed through a literature search, not in the

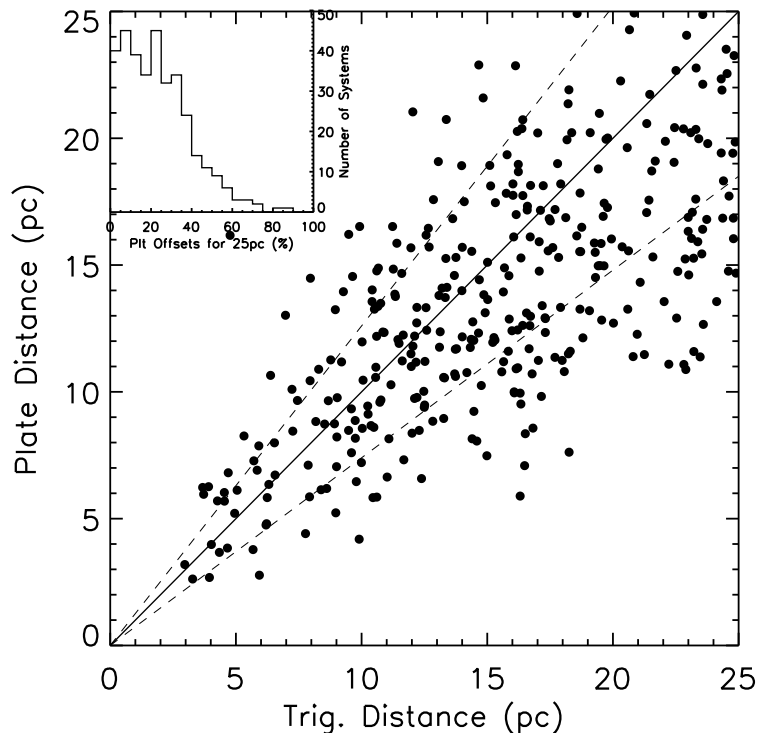


Figure 3.3 Distance comparisons of estimates from photographic plate photometry (*pltdist*) vs. distances measured using trigonometric parallaxes (*trgdist*) for the systems closer than 25 pc. Known unresolved multiples with blended photometry were not included. The diagonal line represents 1:1 correspondence in distances, while the dashed lines indicate the 26% errors associated with the plate distance estimates. The inset histogram indicates the distribution of the distance offsets between the *pltdist* and *trgdist*. For this sample, the absolute mean offset is 24%, consistent with the 26% systematic error determined in Hambly et al. (2004).

M dwarf sample discussed here is included for comparison. These giants have been observed at the 0.9m using the same instrument configuration as for the dwarfs. Only those objects with 2MASS magnitude quality codes of AAA⁷ are used in Figure 3.5. While there appears to be some blending of giants and dwarfs in the early M section of the plot, near $(R - K) \sim 2.5-3.5$ and $(J - H) \sim 0.7-0.8$, it is unlikely that any of the presumed dwarfs with only

⁷AAA indicates measurements where the signal-to-noise ratio was > 10 and where the cmsig error was < 0.10857 (Skrutskie et al. 2006).

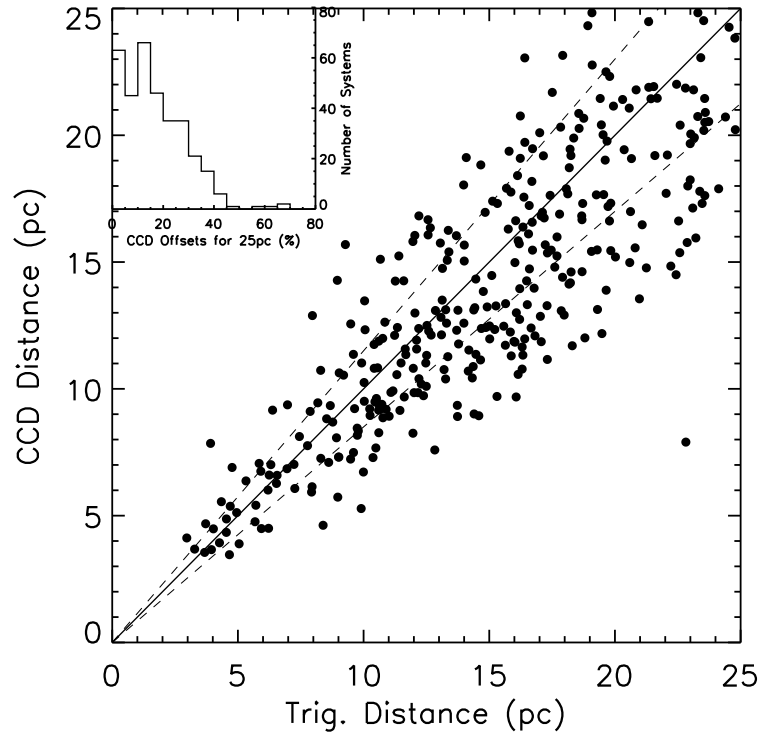


Figure 3.4 Distance comparisons of estimates from CCD photometry (*ccddist*) vs. distances measured using trigonometric parallaxes (*trgdist*) for the systems closer than 25 pc. Known unresolved multiples with blended photometry were not included. The diagonal line represents 1:1 correspondence in distances, while the dashed lines indicate the 15% errors associated with the CCD distance estimates. Note the reduced scatter compared to the similar *pltdist* plot shown in Figure 3.3, indicating the improvement in the photometry. The inset histogram indicates the distribution of the distance offsets between the *pltdist* and *trgdist*. For this sample, the absolute mean offset is 17%, consistent with the 15% systematic error determined by Henry et al. (2004). The outlier with *trgdist* = 22.8 pc and *ccddist* = 7.9 pc is the known young object GJ0871.1A.

a photometric distance estimate in that region will be giants, given the proper motion limit of this sample. It is notable that the giants separate very cleanly from the dwarfs redward of $(R - K) \sim 4$. The *VRIJHK* photometry data for these comparison giants are listed in Table 3.5. The *JHK* photometry for XMen has high errors on its *JHK* photometry due to its brightness and is not included, but the *VRI* is listed.

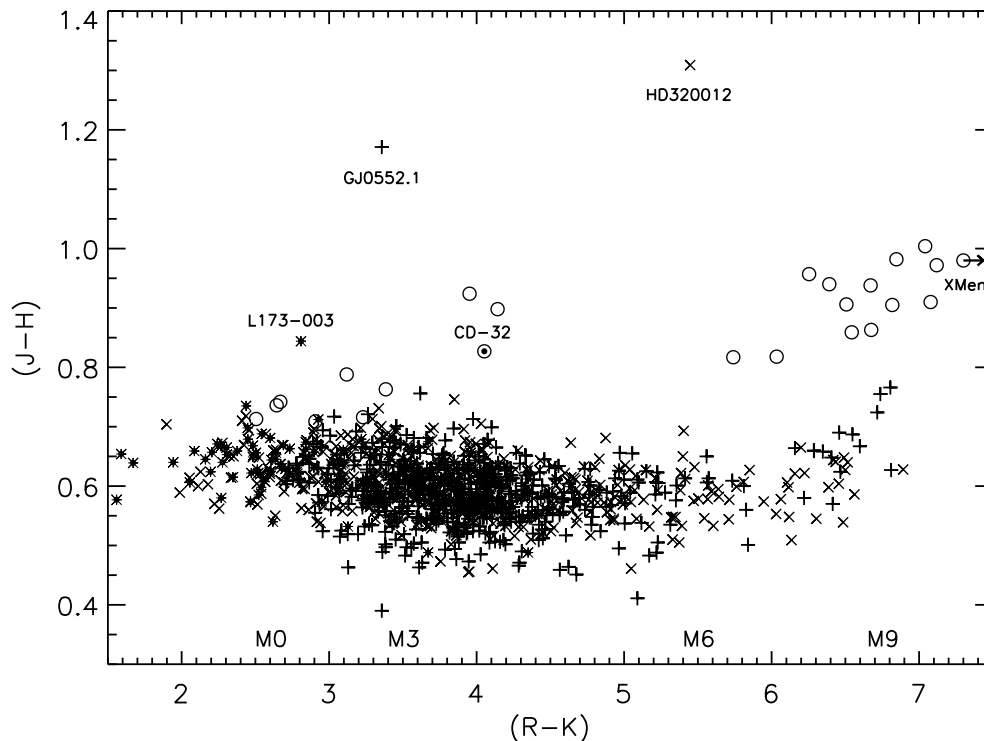


Figure 3.5 Color-color diagram showing $(J-H)$ vs. $(R-K)$ for all presumed single M dwarfs in the sample. Known unresolved multiples with blended photometry were not included. Colors that use plate R magnitudes are shown as x's, while those that use CCD R magnitudes are plotted as plusses. Plate R photometry is used to calculate colors for the objects for which a published parallax, but no CCD VRI photometry, exists and are noted as asterisks with a solid center. For comparison, a few known giants are denoted by open circles. The object CD-32 16735 is plotted as a solid dot surrounded by an open circle, as it is surely a giant, given its preliminary parallax. The giant X Men is too red for the $(R-K)$ color cut-off of this plot, but has been indicated with an arrow. Corresponding spectral type estimates are given along the bottom.

Table 3.5: Comparison Photometry for Giants

| Name | RA (hh:mm:ss) | DEC (dd:mm:ss) | V_J (mag) | R_{KC} (mag) | I_{KC} (mag) | # nts | J (mag) | H (mag) | K_s (mag) |
|--------------|------------------|-------------------|----------------|-------------------|-------------------|-------|--------------|--------------|----------------|
| TT SCL | 00 16 54.6 | -30 13 52 | 11.81 | 10.89 | 10.18 | 2 | 8.92 | 8.21 | 7.98 |
| XMen | 03 32 29.7 | -76 26 55 | 14.88 | 11.53 | 8.77 | 2 | ... | ... | ... |
| AF ERI | 04 20 19.5 | -10 24 26 | 13.18 | 10.99 | 8.75 | 2 | 5.80 | 4.94 | 4.45 |
| HD270965 | 05 00 40.4 | -71 57 53 | 11.38 | 10.62 | 9.94 | 2 | 8.91 | 8.17 | 7.98 |
| DEN0515-2200 | 05 15 36.6 | -22 00 10 | 13.37 | 12.27 | 10.81 | 2 | 9.32 | 8.42 | 8.13 |
| HD269328 | 05 17 07.5 | -70 56 38 | 10.41 | 9.70 | 9.04 | 1 | 8.05 | 7.33 | 7.20 |
| SCR0629-2101 | 06 29 20.2 | -21 01 30 | 15.37 | 12.98 | 10.84 | 1 | 7.82 | 6.91 | 6.47 |
| SCR0656-2918 | 06 56 15.9 | -29 18 03 | 13.89 | 11.72 | 9.45 | 1 | 6.37 | 5.51 | 5.05 |
| SCR0703-3507 | 07 03 49.6 | -35 07 44 | 15.34 | 12.80 | 10.61 | 1 | 7.35 | 6.37 | 5.95 |

| | | | | | | | | | |
|--------------|------------|-----------|-------|-------|-------|---|------|------|------|
| SCR0705-3534 | 07 05 47.4 | -35 34 26 | 13.95 | 11.70 | 9.39 | 1 | 6.03 | 5.12 | 4.62 |
| SCR0833-6107 | 08 33 27.7 | -61 07 58 | 13.02 | 11.90 | 10.72 | 1 | 9.63 | 8.87 | 8.52 |
| SCR1048-7739 | 10 48 26.7 | -77 39 19 | 11.47 | 10.53 | 9.64 | 1 | 8.26 | 7.54 | 7.30 |
| SCR1317-4643 | 13 17 56.5 | -46 43 54 | 13.96 | 12.12 | 10.02 | 1 | 7.57 | 6.75 | 6.38 |
| SCR1358-4910 | 13 58 43.6 | -49 10 52 | 16.14 | 13.91 | 11.62 | 1 | 8.61 | 7.67 | 7.24 |
| SCR1440-7837 | 14 40 37.4 | -78 37 11 | 10.75 | 9.88 | 9.01 | 1 | 7.71 | 6.92 | 6.76 |
| SCR1534-7237 | 15 34 02.5 | -72 37 11 | 16.03 | 13.94 | 11.71 | 1 | 8.90 | 7.96 | 7.55 |
| SCR1544-1805 | 15 44 45.0 | -18 05 07 | 13.54 | 11.36 | 9.09 | 1 | 5.96 | 5.05 | 4.54 |
| HIP082725 | 16 54 32.5 | -62 24 14 | 11.55 | 10.82 | 10.12 | 1 | 9.06 | 8.32 | 8.15 |
| SCR2000-0837 | 20 00 58.3 | -08 37 28 | 14.49 | 12.08 | 9.73 | 1 | 6.46 | 5.46 | 5.04 |
| V506AQL | 20 02 50.8 | -04 32 56 | 13.18 | 10.99 | 8.74 | 1 | 6.14 | 5.18 | 4.74 |
| SCR2038-0409 | 20 38 45.5 | -04 09 27 | 16.44 | 14.01 | 11.65 | 2 | 8.27 | 7.30 | 6.89 |
| 2MA2108-2120 | 21 08 33.1 | -21 20 52 | 14.15 | 12.12 | 9.90 | 2 | 7.31 | 6.49 | 6.09 |
| CD-32 16735 | 21 47 02.7 | -32 24 40 | 9.22 | 8.11 | 6.70 | 3 | 5.24 | 4.41 | 4.06 |
| LEHPM2-0438 | 23 50 08.3 | -86 51 02 | 11.63 | 10.49 | 9.17 | 2 | 7.69 | 6.77 | 6.54 |

Four stars in this diagram are worthy of note. We followed the initially very interesting target CD-32 16735 on our parallax program due to its excitingly nearby *pltdist* (2.5 pc) and *ccddist* (2.3 pc). However, the preliminary parallax we have measured is -4.69 ± 3.88 mas, essentially zero within the errors. Thus, this object is most certainly a giant, which is confirmed by its position in Figure 3.5. Both L173-003 and GJ0552.1 are likely unresolved binaries with odd colors from an inspection of their SuperCOSMOS images (as equal luminosity binaries will appear normal on a color-color plot). A comparison of the two available distances for L173-003 also indicates that it is an unresolved binary, as its *pltdist* (23.4 pc) is an underestimate of the true *trgdist* (47.9 pc). GJ0552.1 also has two distances available for comparison; however they are both photometric estimates that agree within the errors: *pltdist* = 13.2 ± 5.3 versus *ccddist* = 16.3 ± 3.9 . Finally, HD320012 has only a *pltdist*, but has large *H* and *K* magnitude errors.

For roughly one-third of the 1748 southern systems that have a published parallax, confirming that they are red dwarfs is straightforward using an empirical HR diagram. An example HR Diagram, using M_V vs. $(V - K)$, is shown in Figure 3.6. The M dwarf sequence

is well-defined, and there is a noticeable population of cool subdwarfs below the main sequence having $(V - K) = 3.5\text{--}4.5$. As is evident from this diagram, none of the southern stars with trigonometric parallaxes fall in the region where known giants are found, so we are confident that at least among the stars with parallaxes, there are no giants. There are some objects in this sample of southern M dwarfs that have a published trigonometric parallax, for which reliable CCD VRI photometry does not yet exist. Those objects have been included on the Color-Color Diagram in Figure 3.5 using the plate R magnitude, instead of here on Figure 3.6. We thus conclude that 1747 of the 1748 stars assembled here are main sequence stars.

In Figure 3.7 we show a reduced proper motion diagram (see the discussion in Boyd et al. (2011b)) to confirm the subdwarfs identified in Figure 3.6 and to find additional subdwarf candidates in the sample that do not have parallaxes. Note that because subdwarfs are found below the main sequence (contrary to the positions of young and multiple objects above the main sequence), their distances will be *overestimated* rather than underestimated. Distances for these southern subdwarfs have been enclosed in curly brackets in Table 3.4 to highlight this effect. Of these 24 candidates, 21 have parallaxes, three do not, and 18 are confirmed subdwarfs (LHS2852 is buried in the mass of clustered points). There are half a dozen stars along the dwarf-subdwarf boundary of plot 3.7 that are worth noting. While LHS3528, LHS0284, and LHS0323 all appear in (or on the border of) the subdwarf region of Figure 3.7, they have been shown spectroscopically to be dwarfs (Hawley et al. 1996; Jao et al. 2011). LHS0110 and SSS1444-2019 have both been identified as candidates

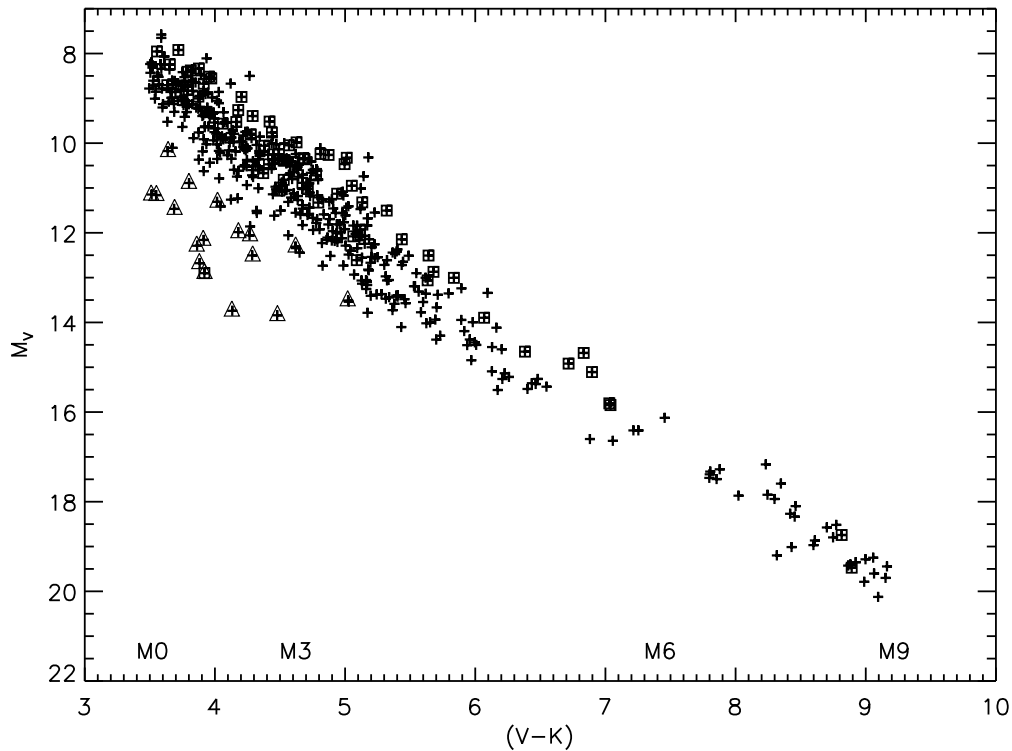


Figure 3.6 An observational HR diagram for all M dwarf systems in the sample that have trigonometric parallaxes, as well as V and K magnitudes, using M_V and $(V - K)$ as proxies for luminosity and temperature, respectively. Known multiples with blended photometry are enclosed in open squares. A set of a few dozen subdwarfs is evident below the main sequence. Spectroscopically confirmed subdwarfs have been enclosed in triangles, with references given in Table 6.5. Corresponding spectral type estimates are given along the bottom.

by others (Jao et al. 2011; Schilbach et al. 2009).

Figure 3.8 outlines the population density of the southern M dwarfs within 25 pc, using the $(V - K)$ color versus distance in ten equal volume shells to 25 pc.⁸ We expect a uniform volume density to the 25 pc horizon, and that is now the case for red dwarfs with types earlier than \sim M4. Although recent work by RECONS (Dieterich et al. 2014) has bolstered the number of the closest and reddest objects on this plot, the sample shows a classic

⁸For those \sim 500 targets that lack a V_J magnitude, one has been estimated using the polynomial given in Winters et al. (2015).

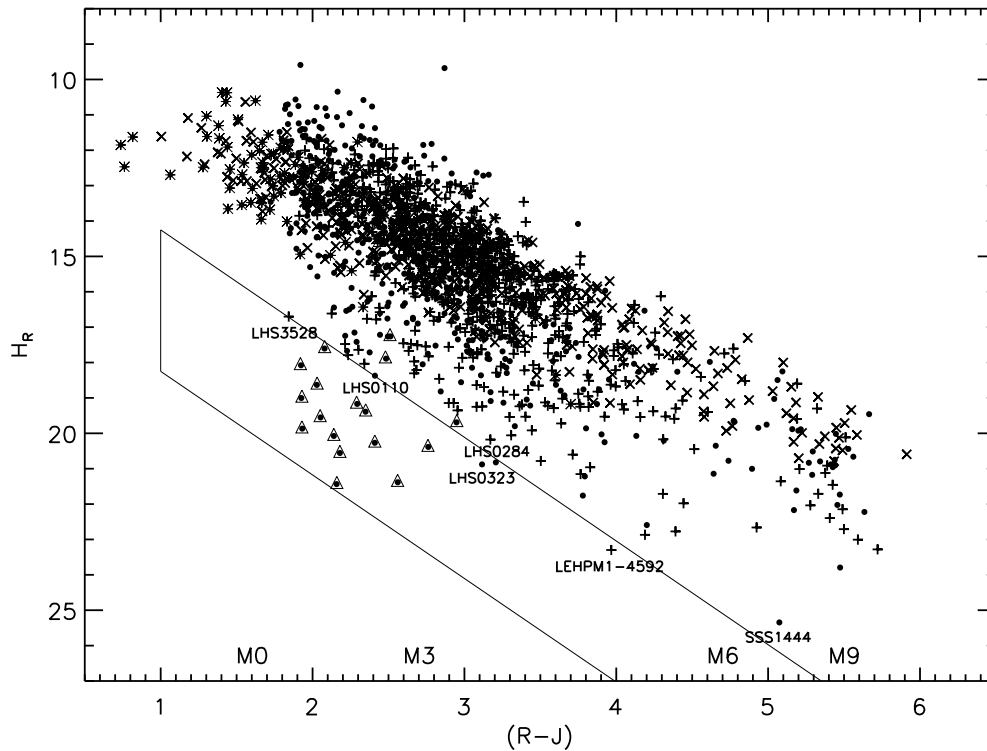


Figure 3.7 A reduced proper motion diagram is shown, which is used to separate the dwarfs from the subdwarfs in the entire sample, based on the proper motions of the objects. The region of interest is outlined, as in Boyd et al. (2011b). The y-axis is $H_R = R + 5 + 5 \log(\mu)$ and the x-axis is the $(R - J)$ color. Primaries with *trgdists* are plotted as solid dots, those with *cddists* are plusses, and those with *pltdists* are x's. Objects that have a published parallax, but no CCD photometry have been indicated as asterisks with solid centers. Spectroscopically confirmed subdwarfs have been enclosed in triangles, three of which fall outside the indicated subdwarf region. Three additional objects are shown inside the outlined subdwarf region: LHS0284, LHS0323, and LEHPM1-4592, although both LHS0284 and LHS0323 have been shown to be dwarfs (Jao et al. (2011)). Corresponding spectral type estimates are given along the bottom.

observational bias for redder, intrinsically fainter stars that are underrepresented at larger distances. There are several reasons for the non-uniform distribution, including: (1) The reddest dwarfs with types later than M6 have simply been missed in various search efforts, including our SCR trawls, due to their intrinsic faintness. (2) Some of the currently known

25 pc members are hidden multiples — resolution of these multiples would move the points to larger distances if they have been placed in Figure 3.8 using *pltdist* or *ccddist*. (3) Some systems are likely among the ~ 80 southern red dwarfs within 25 pc predicted to have $\mu < 0''.18 \text{ yr}^{-1}$ by Riedel (2012). These have been excluded due to our proper motion cut-off. In fact, we currently have ~ 40 stars on our parallax program with $\mu < 0''.18 \text{ yr}^{-1}$ having preliminary parallaxes larger than 40 mas. (4) Finally, some red dwarfs are lurking in the Galactic plane, which has traditionally been avoided due to crowded fields, although this deficit is not likely to be significantly distance-dependent.

We can assess the incompleteness of the current sample by assuming that the 19 southern systems with M dwarf primaries found within 5 pc (Henry 2014) represent a complete sample and that the stellar density is constant to 25 pc. If so, we expect 2375 such systems within 25 pc in the southern sky. The histogram in Figure 3.9 plots the cumulative number of expected systems at distances to 25 pc as a solid line, with the dotted lines representing the Poisson errors. Here, we have propagated the 23% error on the 19 systems within 5 pc to 25 pc, corresponding to an error of 546 systems in 2375. The histogram of systems outlined for the trigonometric sample is the starting point for systems we consider reliably within 25 pc. The histograms for the CCD and plate additions include only those systems with best distances that are “clean”, i.e., those that are for single stars based on current information, and that are not subdwarfs. These histograms are presumably overestimates, as a fraction of the included systems are as yet undiscovered close multiples with blended photometry whose plate and CCD distances are underestimates. We do not expect these overestimates

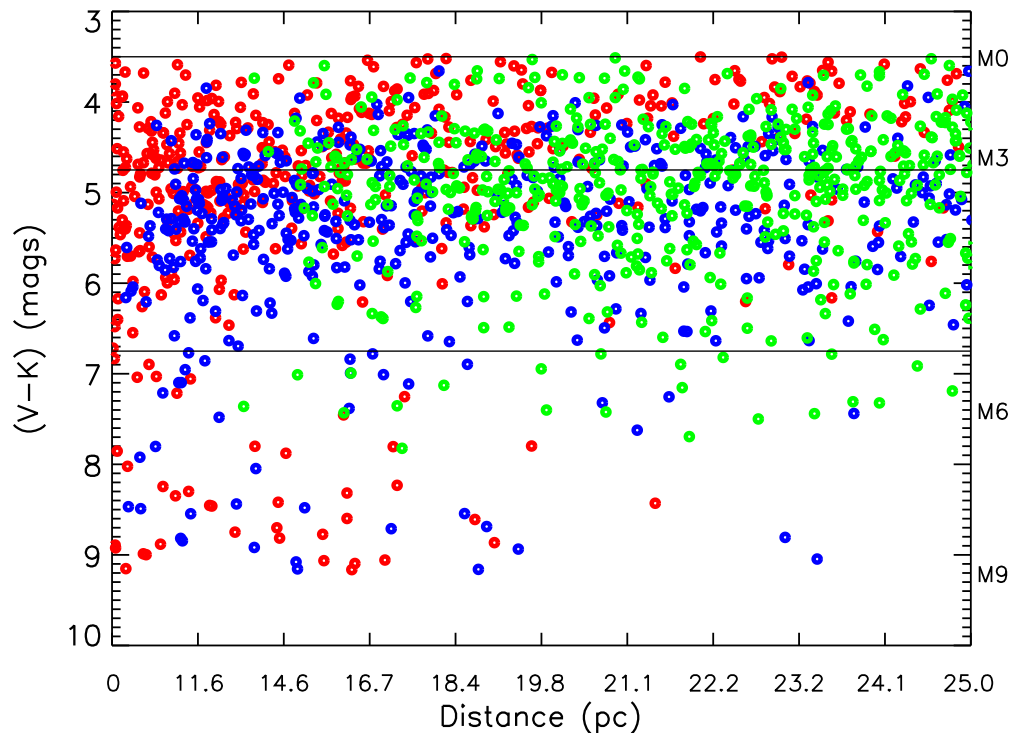


Figure 3.8 The density of M dwarf systems in the southern sky is plotted using $(V - K)$ vs. distance in 10 equal-volume shells to 25 pc. Red points indicate systems with *trgdists*, blue points indicate those with *ccdists*, and green points indicate those with *pltdists*. Corresponding spectral type estimates are given along the right. For those 507 objects without a CCD V magnitude, one has been estimated using the equation in Winters et al. (2015). The horizontal lines highlight masses of 0.60 , 0.30 , and $0.10 M_{\odot}$ from top to bottom.

to be extreme, in part because some of the known close multiple systems purposely removed to clean the sample will remain within 25 pc.

Based on the number of southern red dwarfs found within a 5 pc volume and assuming a constant stellar density, it is estimated that ~ 5000 red dwarf systems reside within 25 pc in the entire sky (Winters et al. 2015), but only ~ 1100 have high quality distances from published trigonometric parallaxes, as outlined in Chapters 5 and 6. Figure 3.9 illustrates that there are still ~ 500 - 1500 that have yet to be identified in the southern sky alone or

have their trigonometric parallaxes measured.

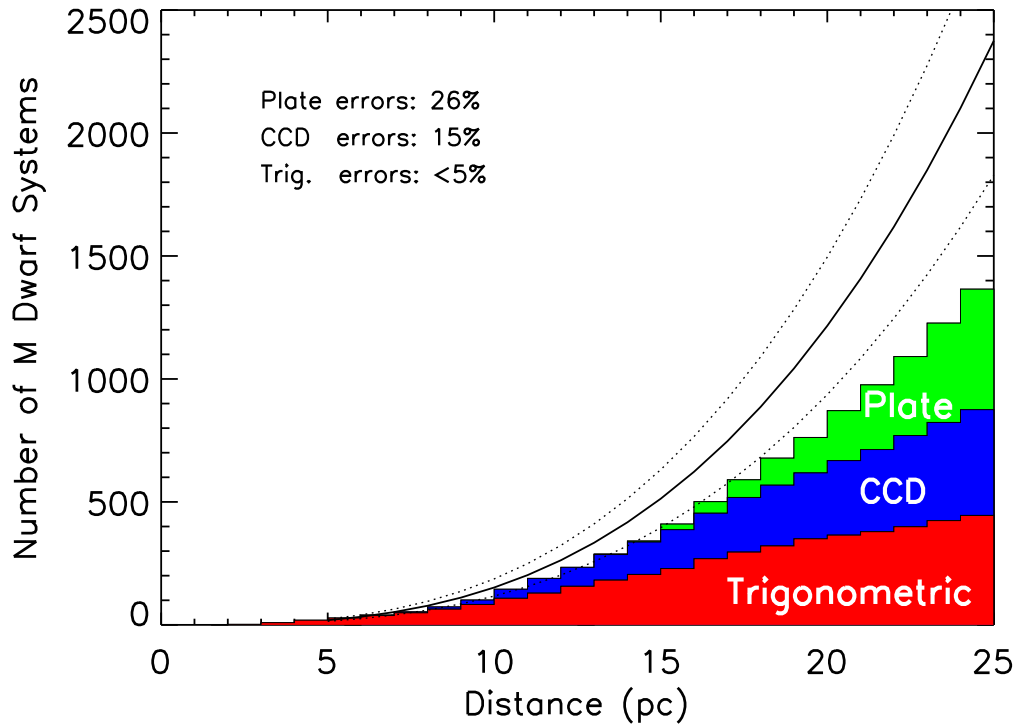


Figure 3.9 The cumulative numbers of southern single M dwarf systems known via the three distance techniques are shown using histograms. Those objects with trigonometric distances are indicated in red, those with photometric distances based on *VRI* CCD photometry are in blue, and those with photometric distances based on *BRI* plate photometry are in green. The solid black curve indicates the expected number within that distance horizon based on the 19 southern M dwarf systems known to lie within 5 pc with accurate trigonometric parallaxes and assuming a uniform density to 25 pc. The dotted lines indicate the extrapolated 23% Poisson errors based on those 19 systems.

Thus, we have presented the current status of the nearby population of southern M dwarf primaries, with a focus on those nearer than 25 pc. In Chapter 5, we will describe an all-sky search for companions to nearby M dwarfs, of which some of these southern systems are included, in order to more thoroughly characterize the red dwarfs found within 25 pc.

CHAPTER 4

PARALLAXES IN THE SOLAR NEIGHBORHOOD

Trigonometric parallax is one of the most time-intensive, but most accurate, methods of distance determination and is most reliable for nearby stars. However, many of these neighbors, particularly the M dwarfs, remain hidden due to their intrinsic faintness and cause us to have an incomplete understanding of local stellar populations. As a part of the work presented here, new parallaxes were measured to nearby M dwarf systems in an effort to fine-tune the census of these ubiquitous stars.

4.1 New RECONS Parallaxes from CTIOPI

Part of the effort of this thesis to characterize the nearby M dwarfs included measuring new parallaxes for 124 M dwarf systems (130 total parallaxes). Of these, 59 were new M dwarf systems discovered during the SCR searches (described in §1.3.4), while an additional 65 previously known M dwarf systems were suspected via photometry to be nearby with $0''.180 < \mu < 0''.499 \text{ yr}^{-1}$. Here we present these new parallaxes.

Each potential nearby star is carefully scrutinized before it is targeted for trigonometric parallax measurement as part of the Cerro Tololo Inter-American Observatory Parallax Investigation (CTIOPI) program, as the parallax measuring process is lengthy (> 2 years) and expensive. First, the target has to be observable from CTIO, so it must be south of $\delta = +30^\circ$. Second, if an object's *pltdist* places it within 30 pc, the object is targeted for *VRI* photometry measurements. If the *ccddist* for the object is found to be < 20 pc, it is targeted

for parallax¹.

Here we outline the method used for parallax observations. The central quarter of the 2048×2048 Tektronix CCD camera on the CTIO/SMARTS 0.9m with a pixel (px) scale of $0''.401 \text{ px}^{-1}$ is used for both astrometric and photometric observations, resulting in a $6''.8 \times 6''.8$ square field of view. Parallax frames are taken using either V_J (old), V_J (new)², R_{KC} , or I_{KC} filters, depending on the brightness of the science target. The magnitudes of the targets in their observed parallax filters are $7.94 < VRI < 18.63$. Brighter targets were observed at V , while fainter objects were observed with the I filter. Typically, three to five frames were taken each night (depending on the exposure time) within 30 minutes of the science target's meridian transit to minimize corrections required for differential color refraction. Exposure times ranged from 20 to 1200 seconds, depending on the magnitudes of the science stars, the reference field stars, and sky conditions. All data were taken between 1999 and 2015. Bias and dome flat frames were taken nightly to enable calibration of the science images. All data have been bias-subtracted and flat-fielded following the procedures outlined in Jao et al. (2005).

As discussed extensively in Jao et al. (2005) and Henry et al. (2006), our data reduction processes disentangle the proper motions and parallactic shifts that contribute to the paths traced on the sky by the science targets. In short, (1) SExtractor (Bertin & Arnouts 1996) was used to measure the centroids of the science and reference stars, (2) a six-constant

¹Resource constraints limit the number of objects that can be targeted; thus only those thought to be closer than 20 pc are measured for parallax.

²Between 2005 March and 2009 September, the V_J (new) filter was used in lieu of the V_J (old) filter and was found to be slightly inferior, astrometrically. See Jao et al. (2011) for a more thorough discussion. Of the targets presented here, 41 were observed in the V filter.

plate model was defined to determine plate constants in order to rotate each frame so that the reference stars are aligned from frame to frame, (3) the reference stars were initially assumed to have zero mean parallax and proper motion, (4) least-square equations were then solved for multi-epoch images, and (5) the relative parallax was corrected to absolute parallax via the photometric distance estimates of the reference stars. The final parallax error is a combination of many factors, including (1) the quality of the reference star frame (brightness, distribution), (2) the accuracy of the (x, y) centroids, including any ellipticity caused by a close component, (3) the total number of parallax images, (4) the time span of the available frame series, (5) the parallax factor coverage, (6) the differential color refraction (DCR) corrections, and (7) the correction from relative to final absolute parallax. The parallax factor coverage is a measure of how many frames were obtained for the ‘morning’ and ‘evening’ halves of the parallax ellipse of each star. The DCR corrections are needed because the parallax star and the reference stars do not have identical colors; therefore, their positions shift relative to each other as a result of refraction by the Earth’s atmosphere.

In order to be considered publishable by the group, three criteria generally needed to be met: (1) the object had to have been observed for at least two years in order to separate the star’s motion into proper motion and parallax; (2) within that two-year period, 30 ‘morning’ and 30 ‘evening’ frames had to have been acquired, covering each half of the RA portion of the parallax ellipse; and (3) the parallax error must be less than 3 mas; (4) *VRI* photometry had to have been obtained for the science and reference stars. The smallest coverage of the objects presented here is 2.32 years for WT 1928, while the longest is 14.97 years for both

LTT 6288AB and LTT 7434AB. The smallest error on the parallaxes reported here is 0.59 mas for SCR 1931-0306, while the largest is 3.51 mas for L 088-043. In the case of L 088-043, the reference field is weak, with only six reference stars, and the integrations are short (the average integration time for the 83 frames is ~ 31 seconds), so that the effects of seeing have not been smoothed, thereby causing poor centroiding.

Of the new parallaxes measured for the 124 systems, 97 systems were found to be within 25 pc. Thirteen exhibit astrometric perturbations caused by unseen companions. New astrometry information is presented in Table 4.1: the name of the system (column 1), its J2000.0 coordinates (2) & (3), the filter in which the parallax was measured (4), the number of seasons N_{sea} covered (5), the number of frames N_{fr} acquired for each star (6), the time interval covered by the data sequence (7), the number of years of coverage (8), the number of reference stars N_{ref} used in each frame (9), the relative parallax π_{rel} (10), the correction to the parallax π_{cor} (needed because the reference stars are not at an infinite distance) (11), and the absolute parallax π_{abs} (12), all with their associated errors. This information is followed by the proper motion magnitude (13) and position angle (14) measured east from north, with their errors, and the tangential velocity (15). The absolute parallax data for these objects are also included in Tables 3.3 and B.1. The expression N_{sea} indicates the number of seasons observed, where 2 – 3 months of observations count as one season. The letter ‘c’ indicates a continuous set of observations where multiple nights of data were taken in each season, whereas an ‘s’ indicates scattered observations when some seasons have only a single night of observations.

Table 4.1: New Astrometry Data

| Name | RA | DEC | fil | N_{sea} | N_{fr} | coverage | T | N_{ref} | π_{rel} | π_{cor} | π_{abs} | μ | P.A. | V_{tan} |
|----------------|-------------|-------------|-----|-----------|----------|-----------------|-------|-----------|--------------|-------------|--------------|-------------------------|--------------|-----------------------|
| (1) | (hh:mm:ss) | (dd:mm:ss) | (4) | (5) | (6) | (7) | (yr) | (9) | (mas) | (mas) | (mas) | (mas yr ⁻¹) | (deg) | (km s ⁻¹) |
| | (2) | (3) | | | | | (8) | | (10) | (11) | (12) | (13) | (14) | (15) |
| Within 25 pc | | | | | | | | | | | | | | |
| LTT00057 | 00 08 17.37 | -57 05 52.9 | V | 8s | 68 | 2000.50-2008.00 | 7.25 | 7 | 73.66 ± 2.10 | 1.51 ± 0.21 | 75.17 ± 2.11 | 385.4 ± 0.07 | 263.1 ± 0.17 | 24.3 |
| LEHPM1-0255 | 00 09 45.06 | -42 01 39.6 | V | 4c | 51 | 2009.75-2012.94 | 3.20 | 6 | 52.12 ± 1.49 | 1.14 ± 0.22 | 53.26 ± 1.51 | 254.8 ± 0.14 | 091.4 ± 0.44 | 22.7 |
| LP349-025AB | 00 27 55.99 | +22 19 32.3 | I | 11s | 94 | 2003.51-2014.94 | 11.43 | 7 | 63.23 ± 1.50 | 1.45 ± 0.14 | 64.68 ± 1.51 | 429.9 ± 0.03 | 112.4 ± 0.08 | 31.5 |
| L087-002 | 00 57 12.48 | -64 15 24.0 | V | 5s | 70 | 2008.86-2012.87 | 4.01 | 7 | 55.57 ± 1.38 | 0.68 ± 0.05 | 56.25 ± 1.38 | 385.8 ± 0.12 | 061.6 ± 0.33 | 32.5 |
| LP707-016 | 01 10 17.53 | -11 51 17.6 | V | 5s | 56 | 2010.97-2014.93 | 3.96 | 6 | 53.42 ± 1.47 | 0.52 ± 0.07 | 53.94 ± 1.47 | 230.0 ± 0.14 | 120.6 ± 0.66 | 20.2 |
| SCR0111-4908 | 01 11 47.52 | -49 08 08.9 | R | 5s | 59 | 2007.82-2014.92 | 7.09 | 8 | 52.96 ± 1.39 | 1.30 ± 0.10 | 54.26 ± 1.39 | 540.6 ± 0.10 | 215.0 ± 0.21 | 47.2 |
| DEN0113-5429 | 01 13 16.41 | -54 29 13.8 | R | 10s | 80 | 1999.91-2014.80 | 14.89 | 9 | 58.84 ± 1.09 | 1.61 ± 0.18 | 60.45 ± 1.10 | 391.2 ± 0.02 | 072.3 ± 0.05 | 30.7 |
| LEHPM1-1882 | 01 47 42.55 | -48 36 05.7 | R | 12s | 87 | 2004.74-2015.54 | 10.80 | 6 | 73.50 ± 1.62 | 0.92 ± 0.08 | 74.42 ± 1.62 | 363.7 ± 0.05 | 144.0 ± 0.15 | 23.2 |
| L088-043 | 01 53 37.08 | -66 53 34.1 | R | 7s | 79 | 2005.71-2011.89 | 6.18 | 6 | 72.47 ± 3.50 | 2.97 ± 0.24 | 75.44 ± 3.51 | 424.2 ± 0.14 | 066.1 ± 0.36 | 26.7 |
| L225-057 | 02 34 21.21 | -53 05 36.8 | V | 7s | 61 | 2003.95-2010.97 | 7.02 | 8 | 50.09 ± 1.82 | 0.85 ± 0.17 | 50.94 ± 1.83 | 403.7 ± 0.08 | 145.2 ± 0.23 | 37.6 |
| SCR0246-7024 | 02 46 02.25 | -70 24 06.3 | R | 9s | 66 | 2006.87-2014.91 | 8.05 | 7 | 79.22 ± 1.27 | 0.96 ± 0.08 | 80.18 ± 1.27 | 225.4 ± 0.05 | 116.7 ± 0.26 | 13.3 |
| LP831-045AB | 03 14 18.18 | -23 09 29.5 | V | 12s | 83 | 2003.95-2014.65 | 10.70 | 8 | 62.48 ± 1.35 | 1.53 ± 0.14 | 64.01 ± 1.36 | 368.9 ± 0.04 | 062.7 ± 0.13 | 27.3 |
| LP831-068 | 03 16 47.81 | -21 25 25.9 | V | 5s | 65 | 2010.96-2014.94 | 3.99 | 7 | 52.07 ± 2.27 | 1.39 ± 0.59 | 53.46 ± 2.35 | 285.2 ± 0.13 | 059.8 ± 0.52 | 25.3 |
| SCR0420-7005 | 04 20 12.55 | -70 05 58.7 | I | 7s | 72 | 2003.94-2011.15 | 7.21 | 7 | 59.67 ± 0.85 | 2.42 ± 0.23 | 62.09 ± 0.88 | 659.5 ± 0.04 | 021.7 ± 0.07 | 50.4 |
| LP775-031 | 04 35 16.14 | -16 06 57.2 | I | 5c | 59 | 2003.95-2007.80 | 3.85 | 8 | 96.33 ± 1.21 | 0.82 ± 0.13 | 97.15 ± 1.22 | 355.4 ± 0.10 | 027.0 ± 0.31 | 17.3 |
| LTT02043A | 04 36 40.85 | -27 21 18.3 | V | 5s | 49 | 2000.96-2007.91 | 4.19 | 5 | 41.07 ± 2.48 | 0.95 ± 0.09 | 42.02 ± 2.48 | 343.1 ± 0.13 | 237.7 ± 0.41 | 38.7 |
| LP715-039 | 04 38 37.16 | -11 30 14.8 | V | 4c | 70 | 2010.96-2013.92 | 2.96 | 7 | 49.25 ± 2.13 | 1.70 ± 0.20 | 50.95 ± 2.14 | 360.7 ± 0.23 | 228.7 ± 0.73 | 33.6 |
| SCR0509-4325 | 05 09 43.85 | -43 25 17.4 | I | 6s | 71 | 2008.86-2015.05 | 6.20 | 8 | 44.79 ± 1.82 | 1.74 ± 0.11 | 46.53 ± 1.82 | 227.2 ± 0.14 | 324.2 ± 0.69 | 23.1 |
| SCR0517-4252 | 05 17 21.43 | -42 52 47.3 | V | 5s | 64 | 2011.17-2014.92 | 3.76 | 9 | 46.31 ± 1.55 | 1.29 ± 0.21 | 47.60 ± 1.56 | 183.7 ± 0.14 | 011.2 ± 0.73 | 18.3 |
| LHS5109 | 05 36 00.07 | -07 38 58.5 | V | 4c | 60 | 2011.73-2014.80 | 3.06 | 11 | 66.36 ± 1.65 | 1.07 ± 0.19 | 67.43 ± 1.66 | 479.4 ± 0.18 | 013.6 ± 0.37 | 33.7 |
| SCR0631-8811 | 06 31 31.04 | -88 11 36.6 | I | 5c | 87 | 2003.94-2013.10 | 9.16 | 6 | 61.32 ± 2.27 | 2.65 ± 0.19 | 63.97 ± 2.28 | 498.0 ± 0.06 | 350.4 ± 0.11 | 36.9 |
| SCR0640-0552 | 06 40 13.99 | -05 52 23.3 | V | 9c | 122 | 2004.91-2012.82 | 7.90 | 10 | 83.20 ± 2.96 | 2.55 ± 0.26 | 85.75 ± 2.97 | 590.5 ± 0.10 | 170.0 ± 0.16 | 32.6 |
| SCR0642-6707 | 06 42 27.17 | -67 07 19.8 | I | 7s | 86 | 2006.87-2015.07 | 8.20 | 8 | 71.67 ± 1.04 | 1.35 ± 0.08 | 73.02 ± 1.04 | 818.7 ± 0.08 | 122.1 ± 0.10 | 53.1 |
| LTT02631 | 06 43 40.67 | -26 24 40.9 | R | 6s | 114 | 2000.88-2014.16 | 13.29 | 10 | 54.38 ± 0.99 | 1.05 ± 0.04 | 55.43 ± 0.99 | 463.3 ± 0.03 | 224.7 ± 0.08 | 39.6 |
| LP382-056A | 06 57 11.74 | -43 24 51.1 | V | 4c | 62 | 2010.96-2014.15 | 3.19 | 12 | 47.00 ± 2.05 | 1.28 ± 0.11 | 48.28 ± 2.05 | 255.2 ± 0.21 | 162.8 ± 0.81 | 25.1 |
| LP382-056B | 06 57 11.74 | -43 24 51.1 | V | 4c | 62 | 2010.96-2014.15 | 3.19 | 12 | 46.58 ± 2.13 | 1.28 ± 0.11 | 47.86 ± 2.13 | 22.0 ± 0.21 | 159.6 ± 1.00 | 21.8 |
| SCR0702-6102AB | 07 02 50.34 | -61 02 47.6 | I | 12c | 184 | 2003.84-2014.93 | 11.09 | 10 | 58.14 ± 1.42 | 1.29 ± 0.15 | 59.43 ± 1.43 | 785.9 ± 0.03 | 042.2 ± 0.05 | 62.7 |
| APM0089 | 07 09 37.66 | -57 03 42.3 | R | 4c | 102 | 2000.14-2003.13 | 3.00 | 9 | 57.55 ± 1.06 | 1.55 ± 0.18 | 59.10 ± 1.08 | 464.8 ± 0.13 | 046.2 ± 0.33 | 37.3 |
| SCR0713-0511 | 07 13 11.23 | -05 11 48.6 | V | 8s | 71 | 2004.97-2012.89 | 7.92 | 11 | 89.66 ± 1.64 | 1.20 ± 0.07 | 90.86 ± 1.64 | 304.5 ± 0.10 | 184.1 ± 0.29 | 15.9 |
| SCR0717-0501 | 07 17 17.09 | -05 01 03.6 | I | 8s | 90 | 2004.18-2013.11 | 8.93 | 9 | 91.33 ± 1.69 | 1.35 ± 0.10 | 92.68 ± 1.69 | 574.1 ± 0.05 | 132.8 ± 0.10 | 29.4 |
| G088-019AB | 07 17 29.94 | +19 34 16.7 | R | 6c | 73 | 2003.94-2009.02 | 5.08 | 8 | 51.97 ± 2.38 | 0.71 ± 0.11 | 52.68 ± 2.38 | 416.6 ± 0.14 | 230.6 ± 0.37 | 37.5 |
| LTT02816 | 07 20 52.04 | -62 10 11.8 | I | 5c | 58 | 2009.09-2012.89 | 3.81 | 8 | 87.85 ± 2.56 | 0.95 ± 0.18 | 88.80 ± 2.57 | 338.9 ± 0.24 | 303.5 ± 0.80 | 18.1 |
| SCR0723-8015AB | 07 23 59.65 | -80 15 17.8 | I | 7s | 86 | 2003.07-2014.04 | 10.97 | 8 | 61.60 ± 1.90 | 1.10 ± 0.15 | 62.70 ± 1.91 | 814.6 ± 0.05 | 329.2 ± 0.06 | 61.6 |
| SCR0736-3024 | 07 36 56.68 | -30 24 16.4 | R | 6s | 82 | 2006.87-2015.07 | 8.20 | 12 | 73.96 ± 1.03 | 1.36 ± 0.15 | 75.32 ± 1.04 | 429.7 ± 0.07 | 148.5 ± 0.18 | 27.0 |
| L528-016 | 07 38 09.69 | -31 12 19.1 | V | 4s | 63 | 2011.96-2015.22 | 3.26 | 8 | 65.97 ± 1.31 | 1.04 ± 0.20 | 67.01 ± 1.33 | 265.7 ± 0.16 | 320.6 ± 0.69 | 18.8 |
| SCR0754-3809 | 07 54 54.84 | -38 09 37.8 | I | 8s | 73 | 2004.97-2011.96 | 6.98 | 9 | 77.74 ± 1.55 | 1.39 ± 0.22 | 79.13 ± 1.57 | 372.0 ± 0.07 | 349.8 ± 0.16 | 22.3 |
| SCR0805-5912 | 08 05 46.17 | -59 12 50.4 | I | 6c | 55 | 2003.94-2009.08 | 5.14 | 10 | 59.96 ± 1.90 | 1.75 ± 0.20 | 61.71 ± 1.91 | 632.7 ± 0.10 | 155.1 ± 0.17 | 48.6 |
| SCR0838-5855AB | 08 38 02.24 | -58 55 58.7 | I | 7s | 96 | 2005.90-2014.28 | 8.38 | 10 | 90.52 ± 0.81 | 1.17 ± 0.08 | 91.69 ± 0.81 | 331.7 ± 0.03 | 195.5 ± 0.09 | 17.1 |
| SCR0853-3924 | 08 53 28.65 | -39 24 41.0 | V | 5c | 65 | 2011.16-2014.95 | 3.79 | 11 | 57.76 ± 1.23 | 0.85 ± 0.11 | 58.61 ± 1.23 | 376.2 ± 0.09 | 265.7 ± 0.22 | 30.4 |
| SCR0914-4134 | 09 14 17.42 | -41 34 37.9 | I | 9s | 94 | 2007.18-2015.07 | 7.89 | 11 | 82.29 ± 1.41 | 1.27 ± 0.15 | 83.56 ± 1.42 | 759.9 ± 0.06 | 314.7 ± 0.08 | 43.1 |
| L749-034 | 09 16 20.65 | -18 37 32.9 | V | 7s | 73 | 2004.17-2009.94 | 5.76 | 9 | 75.60 ± 2.36 | 2.00 ± 0.16 | 77.60 ± 2.37 | 321.7 ± 0.12 | 296.0 ± 0.41 | 19.6 |
| LP788-001AB | 09 31 22.27 | -17 17 42.6 | I | 5s | 65 | 2008.14-2015.31 | 7.17 | 10 | 74.27 ± 1.44 | 0.83 ± 0.06 | 75.10 ± 1.44 | 359.5 ± 0.11 | 246.1 ± 0.34 | 22.7 |
| LP728-070 | 09 50 40.54 | -13 48 38.6 | V | 6s | 59 | 2009.32-2013.95 | 4.63 | 10 | 49.66 ± 1.86 | 1.48 ± 0.13 | 51.14 ± 1.86 | 190.7 ± 0.13 | 122.8 ± 0.74 | 17.7 |
| LTT03790A | 10 19 51.26 | -41 48 46.1 | V | 5s | 62 | 2001.27-2005.10 | 3.91 | 7 | 42.38 ± 2.69 | 2.15 ± 0.22 | 44.53 ± 2.70 | 446.1 ± 0.11 | 190.4 ± 0.19 | 47.5 |
| LTT03790B | 10 19 53.66 | -41 49 01.6 | V | 5s | 62 | 2001.27-2005.10 | 3.91 | 7 | 44.48 ± 2.60 | 2.15 ± 0.22 | 46.63 ± 2.61 | 44.2 ± 0.11 | 190.5 ± 0.26 | 44.9 |
| LTT03896 | 10 37 45.32 | -27 46 38.7 | R | 7s | 91 | 2004.99-2015.40 | 10.41 | 7 | 66.25 ± 1.35 | 1.32 ± 0.12 | 67.57 ± 1.36 | 335.5 ± 0.03 | 320.7 ± 0.10 | 23.5 |
| LEHPM2-2758 | 10 38 47.82 | -86 32 44.1 | R | 10s | 94 | 2005.14-2015.29 | 10.15 | 8 | 73.86 ± 2.58 | 1.45 ± 0.20 | 75.31 ± 2.59 | 244.7 ± 0.07 | 226.9 ± 0.32 | 15.4 |
| LP848-050AB | 10 42 41.36 | -24 16 04.9 | R | 6s | 75 | 2010.16-2015.38 | 5.22 | 13 | 84.58 ± 2.23 | 0.49 ± 0.05 | 85.07 ± 2.23 | 215.5 ± 0.11 | 011.3 ± 0.47 | 12.0 |
| SCR1157-0149 | 11 57 45.55 | -01 49 02.6 | I | 8s | 70 | 2004.18-2012.28 | 8.10 | 10 | 49.57 ± 1.51 | 1.19 ± 0.13 | 50.76 ± 1.52 | 459.9 ± 0.06 | 118.6 ± 0.14 | 42.9 |
| SCR1206-3500 | 12 06 58.52 | -35 00 52.0 | I | 5s | 58 | 2011.16-2015.24 | 4.08 | 8 | 40.74 ± 1.41 | 1.70 ± 0.21 | 42.44 ± 1.43 | 398.4 ± 0.08 | 227.4 ± 0.23 | 44.5 |
| SCR1214-4603 | 12 14 39.98 | -46 03 14.3 | I | 4c | 50 | 2008.13-2011.50 | 3.37 | 9 | 64.92 ± 0.93 | 1.58 ± 0.09 | 66.50 ± 0.93 | 764.6 ± 0.07 | 251.8 ± 0.10 | 54.5 |
| NLTT30359 | 12 20 33.77 | -82 25 57.8 | V | 10s | 123 | 2006.21-2015.39 | 9.19 | 7 | 78.67 ± 2.57 | 7.40 ± 0.62 | 86.07 ± 2.64 | 275.5 ± 0.07 | 007.7 ± 0.23 | 15.2 |
| SCR1230-3411AB | 12 30 01.75 | -34 11 24.1 | R | 7s | 62 | 2008.07-2014.44 | 6.36 | 8 | 51.94 ± 1.52 | 0.86 ± 0.14 | 52.80 ± 1.53 | 517.8 ± 0.09 | 237.2 ± 0.20 | 46.5 |
| LHS5226 | 12 40 00.73 | -11 10 30.3 | V | 6s | 57 | 2009.32-2015.29 | 5.97 | 8 | 70.45 ± 1.69 | 1.83 ± 0.16 | 72.28 ± 1.70 | 503.6 ± 0.09 | 253.6 ± 0.18 | 33.0 |
| SCR1245-5506 | 12 45 52.53 | -55 06 50.2 | I | 6s | 55 | 2004.17-2009.08 | 4.91 | 5 | 97.82 ± 1.35 | 1.34 ± 0.12 | 99.16 ± 1.36 | 384.3 ± 0.08 | 111.4 ± 0.21 | 18.4 |
| SCR1247-0525 | 12 47 14.73 | -05 25 13.2 | I | 7s | 67 | 2004.18-2011.42 | 7.24 | 9 | 48.53 ± 1.06 | 1.46 ± 0.09 | 49.99 ± 1.06 | 742.7 ± 0.05 | 320.3 ± 0.07 | 70.4 |
| SCR1343-4002 | 13 43 41.48 | -40 02 29.3 | I | 4c | 75 | 2011.15-2014.43 | 3.28 | 9 | 57.46 ± 0.99 | 1.35 ± 0.09 | 58.81 ± 0.99 | | | |

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|----------------|----|----|-------|-----|----|------|---|-----|-----|-----------------|-------|----|--------------|-------------|--------------|--------------|--------------|-------|--|
| SCR1444-3426 | 14 | 44 | 06.56 | -34 | 26 | 47.2 | R | 4c | 59 | 2011.16-2014.27 | 3.11 | 10 | 64.33 ± 1.00 | 1.02 ± 0.11 | 65.35 ± 1.01 | 442.0 ± 0.10 | 190.9 ± 0.21 | 32.1 | |
| G151-037 | 15 | 15 | 43.71 | -07 | 25 | 21.0 | V | 6s | 59 | 2010.50-2015.30 | 4.80 | 11 | 58.19 ± 1.06 | 1.01 ± 0.33 | 59.20 ± 1.11 | 294.2 ± 0.09 | 210.3 ± 0.35 | 23.6 | |
| NLTT40317 | 15 | 30 | 52.02 | -68 | 01 | 17.5 | I | 5s | 56 | 2011.50-2015.22 | 3.72 | 11 | 56.16 ± 1.61 | 2.17 ± 0.21 | 58.33 ± 1.62 | 193.3 ± 0.17 | 090.9 ± 0.67 | 15.7 | |
| L408-123AB | 15 | 45 | 41.62 | -43 | 30 | 29.0 | R | 14s | 166 | 2000.58-2015.55 | 14.97 | 9 | 50.05 ± 0.95 | 1.77 ± 0.13 | 51.82 ± 0.96 | 455.3 ± 0.03 | 217.0 ± 0.07 | 41.6 | |
| LHS3124 | 15 | 51 | 21.80 | +29 | 31 | 06.3 | V | 7s | 67 | 2001.43-2009.32 | 7.89 | 9 | 52.64 ± 1.89 | 0.54 ± 0.04 | 53.18 ± 1.89 | 493.9 ± 0.07 | 206.5 ± 0.17 | 44.0 | |
| SCR1601-3421 | 16 | 01 | 55.68 | -34 | 21 | 56.8 | I | 4s | 31 | 2009.32-2014.16 | 4.84 | 10 | 46.09 ± 1.39 | ... | ... | 632.1 ± 0.15 | 119.2 ± 0.27 | 65.0 | |
| SCR1626-3812AB | 16 | 26 | 51.69 | -38 | 12 | 32.6 | I | 5s | 51 | 2010.20-2014.67 | 4.48 | 14 | 71.70 ± 1.26 | 1.50 ± 0.50 | 73.20 ± 1.36 | 381.1 ± 0.11 | 228.8 ± 0.33 | 24.1 | |
| SCR1630-3633A | 16 | 30 | 27.23 | -36 | 33 | 56.1 | I | 4s | 31 | 2008.21-2013.53 | 5.32 | 12 | 63.41 ± 2.23 | 2.69 ± 0.58 | 66.10 ± 2.30 | 441.0 ± 0.22 | 248.8 ± 0.52 | 31.6 | |
| SCR1630-3633B | 16 | 30 | 27.23 | -36 | 33 | 56.1 | I | 4s | 31 | 2008.21-2013.53 | 5.32 | 12 | 62.27 ± 2.13 | 2.69 ± 0.58 | 64.96 ± 2.21 | 45.4 ± 0.21 | 248.8 ± 0.49 | 33.1 | |
| SCR1636-4041 | 16 | 36 | 57.58 | -40 | 41 | 08.8 | R | 5s | 53 | 2010.40-2014.45 | 4.05 | 16 | 44.23 ± 1.26 | 2.12 ± 0.72 | 46.35 ± 1.45 | 290.1 ± 0.13 | 193.1 ± 0.42 | 29.7 | |
| SCR1647-6509 | 16 | 47 | 55.15 | -65 | 09 | 11.6 | I | 9s | 101 | 2004.18-2015.22 | 11.04 | 10 | 65.69 ± 1.00 | 1.00 ± 0.07 | 66.69 ± 1.00 | 368.9 ± 0.03 | 103.9 ± 0.08 | 26.2 | |
| SCR1656-2046 | 16 | 56 | 33.61 | -20 | 46 | 37.4 | I | 4c | 46 | 2012.41-2015.21 | 2.80 | 10 | 60.22 ± 1.08 | 1.57 ± 0.17 | 61.79 ± 1.09 | 270.7 ± 0.11 | 225.2 ± 0.46 | 20.8 | |
| G139-003AB | 16 | 58 | 25.25 | +13 | 58 | 10.8 | R | 5s | 60 | 2003.53-2007.42 | 3.90 | 8 | 69.45 ± 2.06 | 1.45 ± 0.11 | 70.90 ± 2.06 | 400.3 ± 0.19 | 275.6 ± 0.42 | 26.8 | |
| SCR1659-6958 | 16 | 59 | 28.14 | -69 | 58 | 18.3 | I | 5c | 63 | 2003.24-2007.55 | 4.31 | 9 | 47.26 ± 0.88 | 1.60 ± 0.13 | 48.86 ± 0.89 | 686.1 ± 0.09 | 213.1 ± 0.14 | 66.6 | |
| SCR1728-0143 | 17 | 28 | 11.06 | -01 | 43 | 57.0 | I | 4c | 56 | 2011.50-2014.44 | 2.93 | 11 | 40.57 ± 2.33 | ... | ... | 192.3 ± 0.25 | 147.9 ± 1.45 | 22.5 | |
| L204-148 | 17 | 38 | 32.51 | -58 | 32 | 34.4 | R | 5s | 60 | 2011.50-2015.56 | 4.06 | 9 | 61.68 ± 1.28 | 1.31 ± 0.19 | 62.99 ± 1.29 | 327.9 ± 0.09 | 175.7 ± 0.24 | 24.7 | |
| LTT07077 | 17 | 46 | 29.35 | -08 | 42 | 36.5 | V | 5c | 61 | 2011.50-2015.31 | 3.81 | 10 | 74.48 ± 1.52 | 2.70 ± 0.78 | 77.18 ± 1.71 | 425.4 ± 0.16 | 185.8 ± 0.33 | 26.1 | |
| SCR1746-3214AB | 17 | 46 | 40.66 | -32 | 14 | 04.4 | I | 4c | 50 | 2011.50-2014.43 | 2.93 | 11 | 85.04 ± 1.30 | 1.50 ± 0.50 | 86.54 ± 1.39 | 232.1 ± 0.14 | 062.3 ± 0.66 | 12.4 | |
| LTT07138 | 17 | 57 | 14.23 | -41 | 59 | 29.2 | V | 4c | 87 | 2000.57-2003.26 | 2.69 | 9 | 56.11 ± 1.13 | 2.21 ± 0.13 | 58.32 ± 1.14 | 372.3 ± 0.14 | 190.4 ± 0.36 | 30.3 | |
| L043-072 | 18 | 11 | 15.30 | -78 | 59 | 22.7 | V | 6s | 51 | 2009.75-2015.31 | 5.56 | 9 | 87.63 ± 1.98 | 1.64 ± 0.15 | 89.27 ± 1.99 | 325.4 ± 0.13 | 010.6 ± 0.36 | 17.3 | |
| SCR1826-6542 | 18 | 26 | 46.83 | -65 | 42 | 39.9 | I | 6s | 79 | 2005.71-2013.67 | 7.96 | 8 | 65.16 ± 0.77 | 1.20 ± 0.07 | 66.36 ± 0.77 | 306.4 ± 0.04 | 178.9 ± 0.10 | 21.9 | |
| LTT07341 | 18 | 30 | 12.00 | -58 | 16 | 27.7 | V | 4c | 63 | 2011.50-2015.42 | 3.92 | 9 | 67.84 ± 2.64 | 1.15 ± 0.18 | 68.99 ± 2.65 | 436.8 ± 0.22 | 182.8 ± 0.44 | 30.0 | |
| G141-021 | 18 | 36 | 19.24 | +13 | 36 | 26.4 | R | 6c | 85 | 2003.52-2012.58 | 9.06 | 7 | 82.65 ± 1.93 | 3.46 ± 0.57 | 86.11 ± 2.01 | 338.8 ± 0.08 | 034.0 ± 0.26 | 18.7 | |
| SCR1841-4347 | 18 | 41 | 09.81 | -43 | 47 | 32.8 | I | 7s | 61 | 2007.55-2013.38 | 5.83 | 7 | 81.08 ± 0.66 | 1.17 ± 0.09 | 82.25 ± 0.67 | 798.2 ± 0.04 | 264.7 ± 0.05 | 46.0 | |
| LTT07419B | 18 | 43 | 12.38 | -33 | 22 | 31.3 | V | 5s | 54 | 2000.75-2011.25 | 10.85 | 9 | 63.78 ± 2.68 | 2.32 ± 0.19 | 66.10 ± 2.69 | 39.4 ± 0.07 | 202.2 ± 0.20 | 28.2 | |
| LTT07419A | 18 | 43 | 12.51 | -33 | 22 | 46.2 | V | 5s | 54 | 2000.75-2011.25 | 10.85 | 9 | 64.94 ± 2.49 | 2.32 ± 0.19 | 67.26 ± 2.50 | 389.9 ± 0.07 | 199.8 ± 0.18 | 27.5 | |
| LTT07434AB | 18 | 45 | 57.47 | -28 | 55 | 53.2 | V | 9s | 79 | 2000.58-2015.54 | 14.97 | 10 | 58.23 ± 1.31 | 2.93 ± 0.28 | 61.16 ± 1.34 | 409.6 ± 0.02 | 135.0 ± 0.06 | 31.7 | |
| SIP1848-8214 | 18 | 48 | 51.11 | -82 | 14 | 42.0 | I | 7s | 62 | 2009.63-2015.41 | 5.79 | 10 | 55.38 ± 1.56 | 1.14 ± 0.07 | 56.52 ± 1.56 | 268.7 ± 0.07 | 190.1 ± 0.24 | 22.5 | |
| SCR1855-6914 | 18 | 55 | 47.89 | -69 | 14 | 15.1 | I | 6s | 82 | 2003.51-2013.66 | 10.15 | 7 | 85.19 ± 0.65 | 1.25 ± 0.04 | 86.44 ± 0.65 | 826.3 ± 0.03 | 147.1 ± 0.03 | 45.3 | |
| LHS5348AB | 19 | 27 | 52.69 | -28 | 11 | 15.4 | I | 5s | 73 | 2011.50-2015.41 | 3.91 | 8 | 76.66 ± 1.31 | 1.99 ± 0.15 | 78.65 ± 1.32 | 475.0 ± 0.09 | 170.8 ± 0.17 | 28.6 | |
| SCR1931-0306 | 19 | 31 | 04.61 | -03 | 06 | 18.0 | I | 9s | 109 | 2004.58-2013.65 | 9.08 | 8 | 54.89 ± 0.55 | 2.30 ± 0.20 | 57.19 ± 0.59 | 523.9 ± 0.01 | 023.4 ± 0.03 | 43.4 | |
| SCR2016-7531 | 20 | 16 | 11.25 | -75 | 31 | 04.5 | I | 8s | 81 | 2007.74-2014.44 | 6.70 | 9 | 65.27 ± 1.44 | 1.33 ± 0.12 | 66.60 ± 1.44 | 258.8 ± 0.08 | 079.8 ± 0.30 | 18.4 | |
| LEHPM2-1265AB | 20 | 33 | 01.87 | -49 | 03 | 10.6 | R | 8s | 106 | 2008.64-2015.54 | 6.91 | 10 | 58.46 ± 1.16 | 1.28 ± 0.20 | 59.74 ± 1.18 | 241.1 ± 0.06 | 153.9 ± 0.26 | 19.1 | |
| SCR2105-5503 | 21 | 05 | 13.78 | -55 | 03 | 56.3 | R | 6s | 53 | 2008.71-2014.80 | 6.09 | 11 | 66.84 ± 1.47 | 0.96 ± 0.06 | 67.80 ± 1.47 | 327.5 ± 0.10 | 172.9 ± 0.28 | 22.9 | |
| SCR2122-4314 | 21 | 22 | 16.92 | -43 | 14 | 05.0 | V | 5s | 66 | 2008.70-2013.51 | 4.81 | 12 | 47.27 ± 1.66 | 1.50 ± 0.23 | 48.77 ± 1.68 | 223.8 ± 0.15 | 190.7 ± 0.63 | 21.8 | |
| LTT08526 | 21 | 28 | 18.29 | -22 | 18 | 32.3 | V | 4c | 79 | 2000.58-2003.77 | 3.19 | 6 | 50.44 ± 1.51 | 1.39 ± 0.10 | 51.83 ± 1.51 | 314.4 ± 0.14 | 221.0 ± 0.50 | 28.8 | |
| SCR2130-7710 | 21 | 30 | 07.00 | -77 | 10 | 37.5 | I | 4c | 55 | 2011.50-2014.79 | 3.29 | 10 | 46.84 ± 1.30 | 0.77 ± 0.06 | 47.61 ± 1.30 | 568.6 ± 0.12 | 117.0 ± 0.24 | 56.6 | |
| L002-077 | 21 | 46 | 42.71 | -85 | 43 | 04.6 | R | 5s | 65 | 2011.77-2015.42 | 3.65 | 9 | 62.12 ± 1.86 | 1.28 ± 0.21 | 63.40 ± 1.87 | 297.5 ± 0.19 | 128.6 ± 0.72 | 22.2 | |
| LTT09123B | 22 | 38 | 24.67 | -29 | 21 | 14.1 | V | 7s | 105 | 2000.57-2012.81 | 12.24 | 5 | 85.70 ± 1.06 | 0.53 ± 0.06 | 86.23 ± 1.06 | 260.5 ± 0.02 | 183.0 ± 0.07 | 14.3 | |
| SCR2303-4650 | 23 | 03 | 35.61 | -46 | 50 | 47.0 | V | 6s | 88 | 2009.63-2014.82 | 5.19 | 9 | 62.59 ± 1.27 | 0.56 ± 0.06 | 63.15 ± 1.27 | 189.8 ± 0.07 | 263.1 ± 0.33 | 14.2 | |
| SCR2307-8452 | 23 | 07 | 19.67 | -84 | 52 | 03.9 | I | 3c | 75 | 2011.50-2014.80 | 3.30 | 7 | 64.62 ± 1.95 | 1.22 ± 0.12 | 65.84 ± 1.95 | 602.9 ± 0.19 | 096.9 ± 0.29 | 43.4 | |
| L085-031 | 23 | 53 | 25.21 | -70 | 56 | 41.1 | I | 7s | 89 | 2006.53-2014.45 | 7.92 | 7 | 79.44 ± 2.49 | 1.38 ± 0.21 | 80.82 ± 2.50 | 312.8 ± 0.08 | 084.9 ± 0.24 | 18.3 | |
| LTT09828AB | 23 | 59 | 44.83 | -44 | 05 | 00.1 | V | 13s | 124 | 2000.58-2015.54 | 14.96 | 5 | 63.94 ± 2.48 | 0.93 ± 0.15 | 64.87 ± 2.48 | 258.5 ± 0.04 | 352.5 ± 0.15 | 18.9 | |
| Beyond 25 pc | | | | | | | | | | | | | | | | | | | |
| SCR0027-0806 | 00 | 27 | 45.36 | -08 | 06 | 04.7 | I | 5s | 59 | 2008.85-2014.94 | 6.09 | 9 | 23.39 ± 1.24 | 1.50 ± 0.10 | 24.89 ± 1.24 | 118.5 ± 0.09 | 118.6 ± 0.80 | 22.6 | |
| LP705-065 | 00 | 35 | 38.07 | -10 | 04 | 18.7 | V | 6s | 60 | 2010.97-2015.54 | 4.57 | 7 | 31.34 ± 1.47 | 1.38 ± 0.08 | 32.72 ± 1.47 | 210.6 ± 0.12 | 254.3 ± 0.56 | 30.5 | |
| SCR0129-8556 | 01 | 29 | 20.84 | -85 | 56 | 11.0 | I | 6s | 55 | 2003.95-2008.70 | 4.75 | 10 | 30.71 ± 2.47 | 1.81 ± 0.17 | 32.52 ± 2.48 | 434.7 ± 0.15 | 138.1 ± 0.39 | 63.4 | |
| G274-138A | 02 | 02 | 17.53 | -26 | 33 | 51.4 | I | 7x | 56 | 2000.57-2011.89 | 11.32 | 6 | 33.05 ± 1.29 | 1.91 ± 0.20 | 34.96 ± 1.31 | 340.5 ± 0.04 | 143.6 ± 0.14 | 46.2 | |
| G274-138B | 02 | 02 | 17.53 | -26 | 33 | 51.4 | I | 7x | 56 | 2000.57-2011.89 | 11.32 | 6 | 32.66 ± 1.29 | 1.91 ± 0.20 | 34.57 ± 1.31 | 336.0 ± 0.04 | 143.7 ± 0.14 | 46.1 | |
| SCR0211-0354 | 02 | 11 | 51.67 | -03 | 54 | 02.5 | R | 4c | 46 | 2011.73-2014.92 | 3.19 | 9 | 29.17 ± 1.89 | 1.21 ± 0.13 | 30.38 ± 1.89 | 152.2 ± 0.15 | 185.4 ± 0.88 | 23.7 | |
| SCR0327-3634 | 03 | 27 | 46.79 | -36 | 34 | 40.4 | V | 4c | 56 | 2011.77-2015.08 | 3.31 | 9 | 37.57 ± 1.62 | 0.56 ± 0.07 | 38.13 ± 1.62 | 183.0 ± 0.16 | 249.0 ± 0.90 | 22.8 | |
| LTT02043B | 04 | 36 | 39.83 | -27 | 22 | 06.0 | V | 5s | 49 | 2000.96-2007.91 | 4.19 | 5 | 38.03 ± 2.59 | 0.95 ± 0.09 | 38.98 ± 2.59 | 34.1 ± 0.13 | 237.8 ± 0.43 | 41.5 | |
| SCR0644-4223A | 06 | 44 | 32.09 | -42 | 23 | 45.2 | I | 6s | 33 | 2008.85-2013.78 | 4.93 | 11 | 29.98 ± 2.79 | 2.13 ± 0.16 | 32.11 ± 2.79 | 183.6 ± 0.27 | 162.2 ± 1.46 | 27.1 | |
| SCR0644-4223B | 06 | 44 | 32.09 | -42 | 23 | 45.2 | I | 6s | 33 | 2008.85-2013.78 | 4.93 | 11 | 33.01 ± 3.05 | 2.13 ± 0.16 | 35.14 ± 3.05 | 171.4 ± 0.29 | 165.2 ± 1.65 | 23.1 | |
| SCR0724-3125 | 07 | 24 | 21.23 | -31 | 25 | 57.7 | I | 5s | 64 | 2011.23-2015.05 | 3.82 | 10 | 24.84 ± 1.44 | 1.15 ± 0.08 | 25.99 ± 1.44 | 135.2 ± 0.11 | 290.9 ± 0.85 | 24.7 | |
| SCR0733-4406 | 07 | 33 | 42.67 | -44 | 06 | 12.5 | I | 5s | 64 | 2011.23-2014.95 | 3.71 | 10 | 22.45 ± 0.73 | 0.60 ± 0.04 | 23.05 ± 0.73 | 279.4 ± 0.06 | 165.3 ± 0.23 | 57.4 | |
| SCR0829-3709 | 08 | 29 | 41.29 | -37 | 09 | 34.7 | R | 5c | 63 | 2011.16-2015.08 | 3.93 | 11 | 38.26 ± 0.87 | 1.68 ± 0.23 | 39.94 ± 0.90 | 344.4 ± 0.06 | 304.2 ± 0.21 | 40.9 | |
| LP904-036 | 10 | 36 | 28.43 | -28 | 27 | 15.4 | V | 6s | 62 | 2010.02-2015.22 | 5.20 | 8 | 35.88 ± 1.51 | 1.10 ± 0.21 | 36.98 ± 1.52 | 215.2 ± 0.13 | 269.6 ± 0.48 | 27.6 | |
| CE440-087 | 11 | 47 | 50.65 | -28 | 49 | 44.7 | I | 5s | 50 | 2011.14-2005.40 | 4.26 | 7 | 15.74 ± 1.18 | 0.69 ± 0.06 | 16.43 ± 1.18 | 386.2 ± 0.09 | 242.8 ± 0.26 | 111.4 | |
| CE440-139 | 12 | 03 | 28.04 | -29 | 23 | 00.3 | R | 4c | 46 | 2000.06-2014.44 | 14.38 | 11 | 37.18 ± 1.20 | 0.46 ± 0.06 | 37.64 ± 1.20 | 314.0 ± 0.02 | 313.7 ± 0.08 | 39.5 | |
| WT1928 | 12 | 08 | 06.86 | -32 | 06 | 36.1 | V | 3 | | | | | | | | | | | |

| | | | | | | | | | | | | | | |
|--------------|-------------|-------------|---|----|----|-----------------|------|----|------------------|-----------------|------------------|------------------|------------------|------|
| SCR1901-0737 | 19 01 32.37 | -07 37 24.3 | I | 6s | 62 | 2010.66-2015.41 | 4.75 | 9 | 37.73 ± 0.95 | 1.66 ± 0.11 | 39.39 ± 0.96 | 157.7 ± 0.06 | 231.5 ± 0.44 | 19.0 |
| SCR1901-3106 | 19 01 59.16 | -31 06 45.0 | I | 6s | 60 | 2010.66-2015.42 | 4.76 | 9 | 19.06 ± 1.17 | 2.66 ± 0.18 | 21.72 ± 1.18 | 196.8 ± 0.07 | 136.6 ± 0.41 | 43.0 |
| SCR2025-1534 | 20 25 08.55 | -15 34 16.1 | R | 4s | 54 | 2011.77-2014.80 | 3.03 | 12 | 26.49 ± 1.43 | 1.06 ± 0.14 | 27.55 ± 1.44 | 173.8 ± 0.15 | 178.9 ± 0.71 | 29.9 |
| LP567-063 | 20 34 31.14 | -32 30 59.9 | R | 7s | 73 | 2008.73-2014.44 | 5.71 | 10 | 35.75 ± 1.78 | 1.44 ± 0.13 | 37.19 ± 1.78 | 204.9 ± 0.10 | 169.5 ± 0.46 | 26.1 |
| NLTT50324 | 21 02 24.95 | -60 31 36.1 | V | 6s | 60 | 2006.37-2011.42 | 5.06 | 8 | 30.60 ± 1.84 | 0.14 ± 0.02 | 30.74 ± 1.84 | 217.4 ± 0.10 | 136.0 ± 0.55 | 33.5 |
| LHS3615 | 21 03 21.66 | -50 22 52.4 | R | 6x | 86 | 2000.58-2009.55 | 8.97 | 6 | 38.43 ± 1.25 | 1.20 ± 0.10 | 39.63 ± 1.25 | 479.3 ± 0.08 | 142.0 ± 0.20 | 57.3 |

4.1.1 Notes for Interesting Systems with New Parallaxes

LP349-025AB (0027+22 19) This star has a perturbation in both axes, evident in over ten years of data, with an orbit that may have just recently wrapped.

LEHPM1-1882AB (0147-4836) This star has a possible perturbation.

LP831-045AB (0314-2309) This system has a perturbation, resulting in a ~ 6 year period for the pair.

LTT02043AB (0436-2721) While one component lies within 25 pc (A has $\pi = 42.02 \pm 2.48$ mas), and the other beyond (B has $\pi = 38.98 \pm 2.59$ mas), the weighted mean of this system with $\rho \sim 15$, $\theta = 298$ is 40.57 ± 1.79 , placing it within 25 pc.

SCR0702-6102AB (0702-6102) This object shows evidence of a short period perturbation.

SCR0723-8015AB (0723-8015) This star has a large perturbation in both axes, but the orbit has not yet wrapped, with this data set spanning more than twelve years.

SCR0838-5855AB (0838-5855) This star shows evidence for a perturbation in both axes, although it is slightly larger in the RA axis than in the Dec axis. The eight years of data indicate that the orbit may wrap soon.

LP788-001AB (0931-1717) This system has a perturbation and has been observed regularly since December 2011.

LP848-050AB (1042-2416) This object has a perturbation, but the orbit shows no signs of wrapping in the current data set.

SCR1230-3411AB (1230-3411) A perturbation is evident in both the Right Ascension

and Declination axes. The *trigdist* is 18.7 pc vs. the *ccddist* of 11.7 pc, confirmation of the perturbation.

WT1962AB (1259-0730) A long-term trend is evident, but the companion is likely low mass (not equal mass/brightness) because the *ccddist* \sim 45 pc, compared to *trigdist* \sim 38 pc.

L408-123AB (1545-4330) This object has a perturbation in both axes, with an orbit that has wrapped for a period of \sim 10 yr.

SCR1626-3812 (1626-3812) Because this field is in the direction of the Galactic center, the initial correction from the relative parallax to the absolute parallax for this object was 3.23 ± 1.29 mas due to reddening of the reference stars. We have adopted a generic correction of 1.50 ± 0.50 mas.

SCR1731-2452 (1731-2452) Because this field is in the direction of the Galactic center, the initial correction from the relative parallax to the absolute parallax for this object was 4.97 ± 2.82 mas due to reddening of the reference stars. We have adopted a generic correction of 1.50 ± 0.50 mas.

SCR1746-3214 (1746-3214) Because this field is in the direction of the Galactic center, the initial correction from the relative parallax to the absolute parallax for this object was 3.48 ± 1.64 mas due to reddening of the reference stars. We have adopted a generic correction of 1.50 ± 0.50 mas.

LTT07434AB (1845-2855) This object has a perturbation, but the orbit shows no sign of wrapping, even with 15 years of time coverage.

LHS5348AB (1927-2811) The elongation of the star due to a companion found at $\sim 1''$ is obvious in frames with exceptional seeing.

LEHPM2-1265AB (2033-4903) This system has a perturbation, resulting in a ~ 5 year period for the pair.

LTT09828AB (2359-4405) This system has a perturbation, resulting in a ~ 11 year period for the pair that appears to have recently wrapped.

The nightly mean astrometric residual plots in Right Ascension and Declination for stars with perturbations are shown in Figures 4.1, 4.2, and 4.3. The astrometric signatures of each system's proper motion and parallax have been removed. A star without a perturbation would have residuals very close to the '0' line, but these stars all show non-linear trends. The magnitude of most perturbations are typically less than ~ 20 mas, but a few stars, such as LP 848-050AB, LTT 7434AB, and LTT 9828AB show evidence of larger perturbations.

The author would like to express her gratitude to Andrew Sevrinsky for his help with the parallax reductions and notes in this section, most especially for the non-SCR stars.

4.2 RECONS 25 Parsec Database

The RECONS group consists of stellar cartographers, obsessed with characterizing the nearby population of stars. While previous work has reported the census of the 5 pc sample (Henry 2015) and 10 pc sample (Henry et al., in prep), we are expanding our knowledge of the nearest stars to 25 pc. This 25 pc horizon limit is adopted because it is the canonical distance limit of the Catalogue of Nearby Stars (discussed in §1.2.1) and ultimately should

include ~ 5000 stellar systems — a robust sample that can be used to understand the stellar population in the solar neighborhood. Development of a catalog listing all stellar systems located within 25 pc has been underway for the past few years. The RECONS 25 Parsec Database is a listing of all stars, brown dwarfs, and planets thought to be located within 25 pc, with distances determined only via accurate trigonometric parallaxes. Its design, primarily by Wei-Chun Jao, has been a massive undertaking that has spanned at least five years, and the compilation of the data included is due to the efforts of many RECONS members.

The first criterion for inclusion is that each system must have a published trigonometric parallax of ≥ 40 mas, with an error ≤ 10 mas. Included in the database is a wealth of information on each system: coordinates, proper motions, the weighted mean of the parallaxes available for each system, *UBVRIJHK* photometry, spectral types in many cases, and alternate names. Additionally noted are the details of multiple systems: the number of components known to be members of the system, the separations and position angles for those components, the year and method of detection, and the delta-magnitude measurement and filter in which the relative photometry data were obtained. References are given in almost all cases. All data have been judged for quality, with only carefully vetted publications selected for inclusion. The current version, as of 02 October 2015, includes 2827 systems containing 3797 stars, brown dwarfs, and planets, and we anticipate releasing it to the astronomical community in the very near future.

A total of 1180 of the 2347 M dwarf systems presented here have *trgdists* placing them within 25 pc; their parallaxes and resulting distances are listed in the top sections of Tables

3.3 and 3.4, respectively. In some cases, multiple parallaxes from different sources are available for the same system; for these systems, the weighted mean parallax and error are listed. These systems were extracted from the new RECONS 25 Parsec Database 1 January 2012, with new parallaxes measured by RECONS added as they became available.

Figure 4.4 illustrates the distribution on the sky of all 1342 systems in this thesis with trigonometric parallaxes, with those within and beyond 25 pc noted. The noticeably higher density of M dwarfs with parallaxes in the southern hemisphere is due to RECONS' work being focused in that part of the sky.

We have thus described the new parallaxes measured as part of this dissertation work, as well as the RECONS 25 Parsec Database. In the next chapter, we will detail the multiplicity survey of those M dwarfs with trigonometric parallaxes placing them within 25 pc.

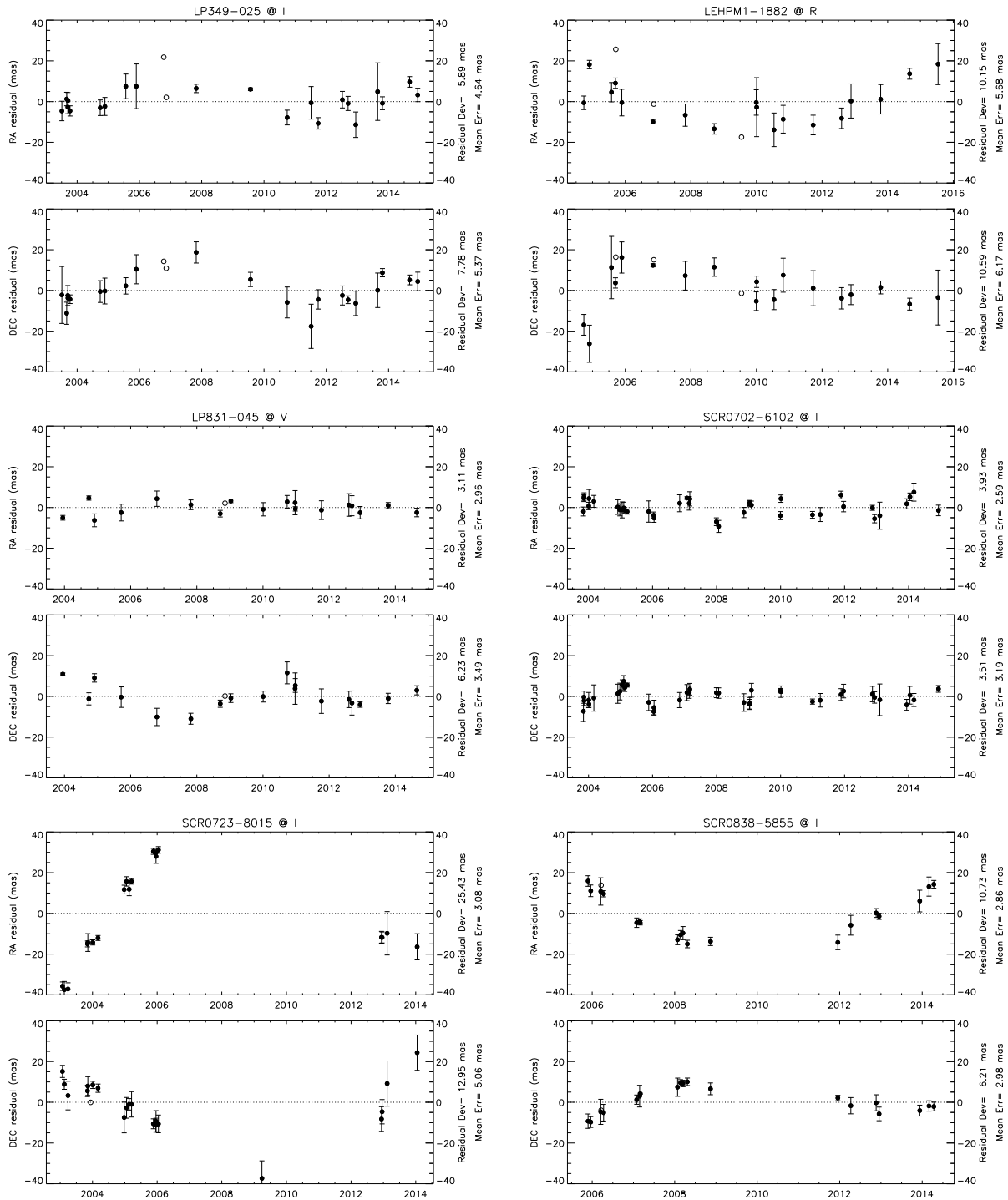


Figure 4.1 Nightly mean astrometric residual plots in Right Ascension and Declination for LP 349-025AB, LEHPM 1-1882, LP 831-045AB, SCR 0702-6102AB, SCR 0723-8015AB, and SCR 0838-5855AB. The astrometric signatures of each system's proper motion and parallax have been removed.

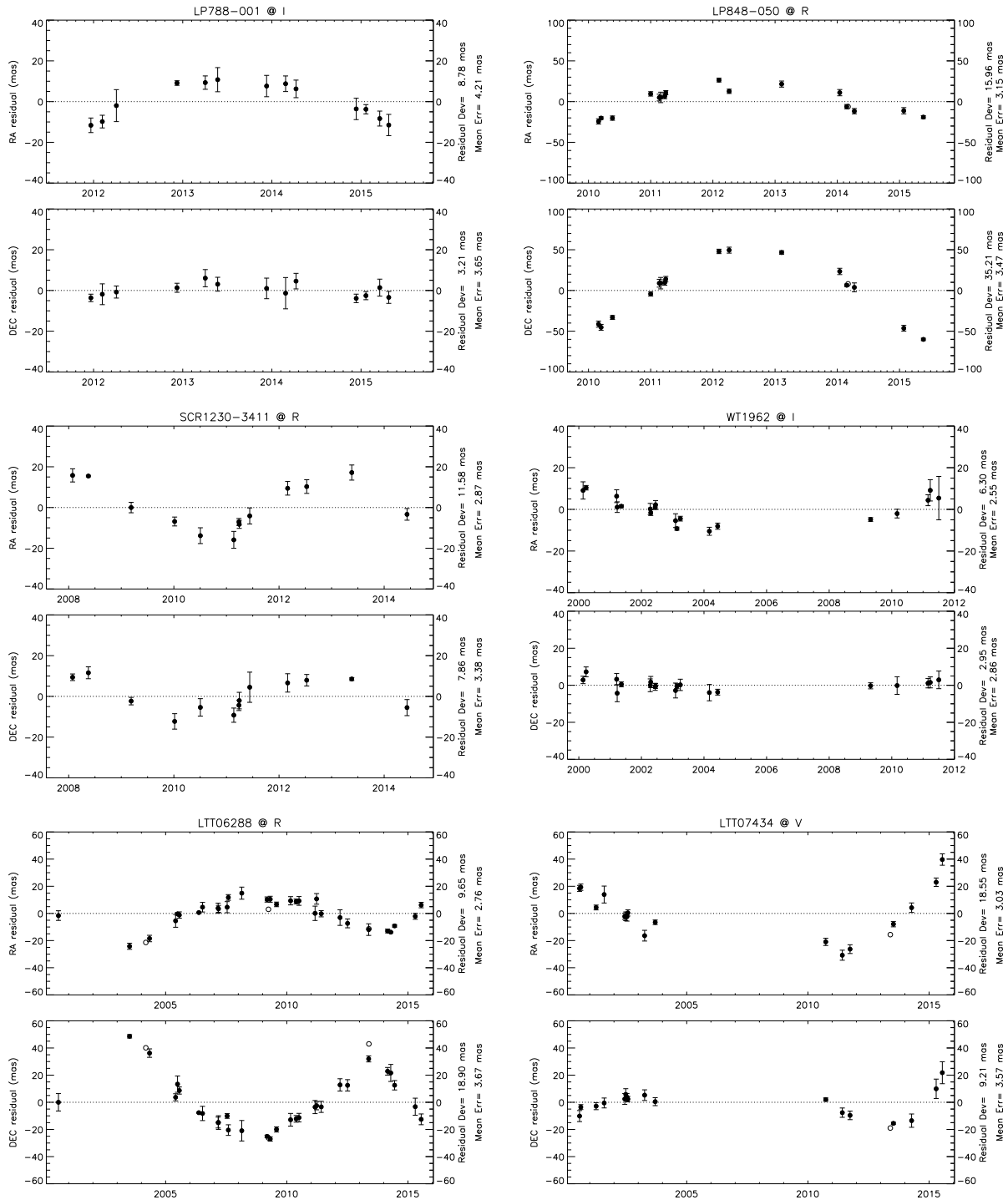


Figure 4.2 Nightly mean astrometric residual plots in Right Ascension and Declination for LP 788-001AB, LP 848-050AB, SCR 1230-3411AB, WT 1962AB, L 408-123AB, and LTT 7434AB. The astrometric signatures of each system's proper motion and parallax have been removed.

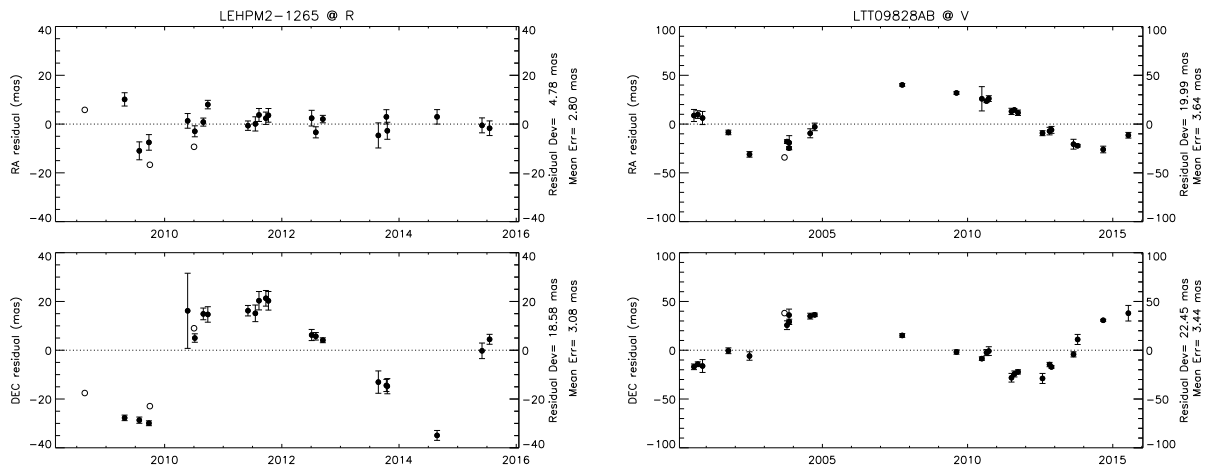


Figure 4.3 Nightly mean astrometric residual plots in Right Ascension and Declination for LEHPM 2-1265AB and LTT 9828AB. The astrometric signatures of each system’s proper motion and parallax have been removed.

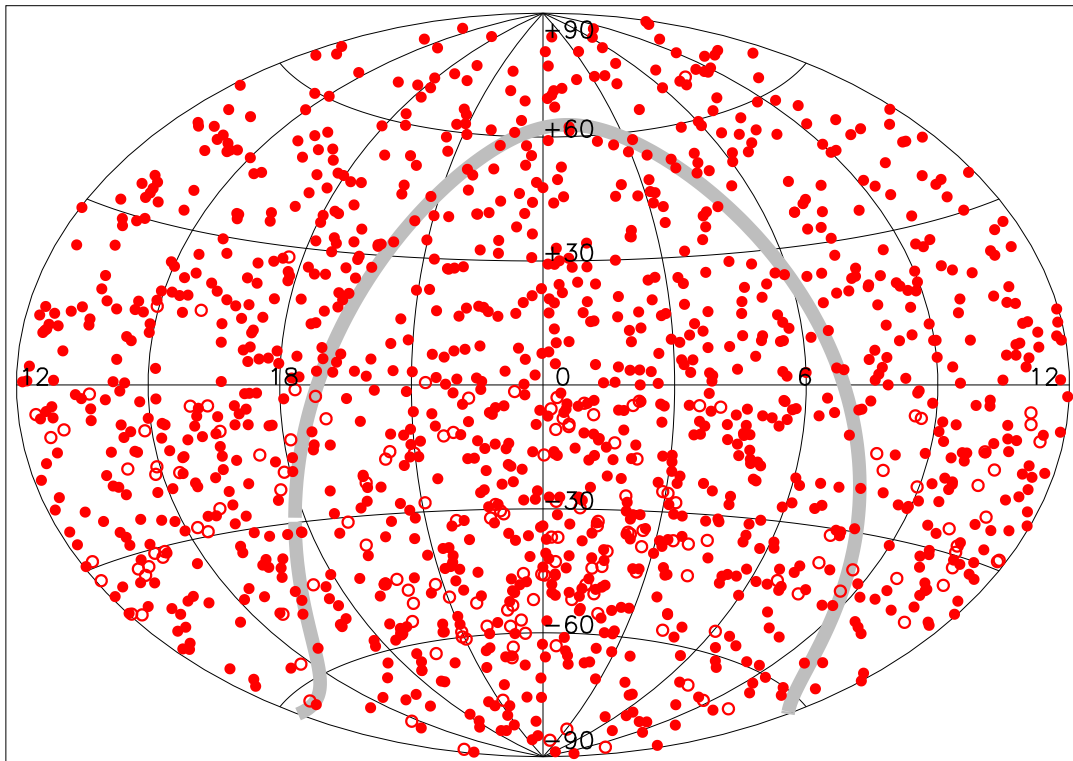


Figure 4.4 The sky distribution of the 1342 systems with trigonometric parallaxes studied in this thesis. Solid points indicate the 1180 systems with trigonometric distances that place them within 25 pc; open points indicate the 162 that lie beyond 25 pc. The gray line indicates the Galactic plane.

CHAPTER 5

M DWARF MULTIPLICITY STUDY

5.1 Outline of the M Dwarf Multiplicity Study

Much like people, stars arrange themselves in various configurations – singles, doubles, multiples, clusters, and great aggregations known as galaxies. Each of these collections is different, depending on the proximity of the members and the shared history and composition of the stars involved. Stellar multiples and their properties (e.g., separations, mass ratio distributions, etc.) provide fundamental clues about the nature of star formation, the distribution of baryonic mass in the Universe, and the evolution of stellar systems over time. How stars are parceled into singles, doubles, and higher order multiples also provides clues about the angular momentum distribution in stellar systems and constraints on whether or not planets may be found (Raghavan et al. 2010; Winn & Fabrycky 2015). Of all the populations in the Galaxy, the nearest stars provide the fundamental framework upon which stellar astrophysics is based because they contain the most easily studied representatives of their kinds. Because red dwarfs dominate the nearby stellar population, accounting for roughly 75% of all stars (Henry et al. 2006), they are an important sample to study in order to understand stellar multiplicity.

Here we describe a search for stellar companions to M dwarfs. Because spectral type M is effectively the end of the stellar main sequence, the companions revealed in this search are M dwarfs as well. For those M dwarf primaries¹ with parallaxes that place them within

¹We refer to any collection of stars and their companion brown dwarfs and/or exoplanets as a system, including single M dwarfs not currently known to have any companions. Systems that contained a white

25 pc, an all-sky multiplicity search for stellar components at separations of $2''$ to $600''$ was undertaken. By obtaining I -band images using the CTIO/SMARTS 0.9m and 1.0m in the south and the Lowell 42in and USNO 40in in the north, the environs of these systems were probed for companions at separations of $2''$ to $10''$. A complementary reconnaissance of wider companions out to $600''$ was also done via the blinking of SuperCOSMOS BRI images. An indirect method based on photometry was used to infer the presence of nearly equal magnitude companions at separations less than $\sim 2''$. Finally, various subsets of the sample were searched for companions at sub-arcsecond separations using astrometry, HST's FGS, *HIPPARCOS* flags, and speckle interferometry.

The observational parameters used to select M dwarfs with masses $0.075 < M_{\odot} < 0.67$ (from the mass-luminosity relation in Benedict et al. in prep) correspond to:

- $8.8 < M_V < 20.0$
- $3.7 < (V - K) < 9.5$
- An initial constraint of $(I - K) < 4.5$ was used for faint objects with no reliable V available until one was measured.
- Membership in the sample is based on the parallax of the system with the requirements of $\pi \geq 40$ mas and $\sigma_{\pi} \leq 10$ mas, and it is assumed that the proper motion information is the same for all components of any multiple system.

The color and absolute magnitude limits were determined at the K-M dwarf boundary by creating an HR Diagram from the RECONS 25 Parsec Database. Spectral types from

dwarf component were excluded from the sample, as the white dwarf was previously the brighter and more massive primary.

RECONS' work, Gray et al. (2003), Reid et al. (1995), and Hawley et al. (1996) were plotted versus $(V - K)$ and M_V . Because spectral types can be imprecise, there was overlap between the M and K types; so, boundaries were chosen to split the types at carefully defined $(V - K)$ and M_V values. A similar method was followed for the L-M dwarf transition using results from Dahn et al. (2002). These procedures resulted in the limits noted above. We note that these updated limits for M dwarfs are slightly different from those listed in Chapter 3 and are preferred.

Imposing these color, absolute magnitude, and distance criteria result in a sample of 1122 red dwarf primaries, as of January 1, 2012. Table 5.1 lists the various sources of the parallax measurements used in the multiplicity study, the largest number (742) being from the YPC and HIP (discussed in §3.2). The next largest collection of parallaxes measured for the nearby M dwarfs is from the RECONS team, contributing 305 in both published and unpublished measurements. As described in §4.1, part of the work presented here includes new parallax measurements of 124 nearby M dwarf systems, with the remaining 17 to be published by other members of the group². Finally, other astrometry groups have contributed parallaxes for an additional 76 nearby red dwarfs.

RECONS' work in the southern hemisphere, both discovering stars via the proper motion searches detailed in §1.3.4 and measuring their parallaxes, makes possible a balanced all-sky survey of M dwarfs for the first time, as the southern hemisphere has historically been under-sampled. Because all 1122 systems have accurate parallaxes, biases inherent to photometrically-selected samples are ameliorated. **This is the largest, most compre-**

²Continuing observations will increase this number.

hensive study ever done of the multiplicity of the most common stars in the Galaxy.

Table 5.1: Parallax Sources for Multiplicity Search

| Reference | # of Targets | | Notes |
|------------------------|--------------|------------|-------------------------------|
| | NORTH | SOUTH | |
| YPC + HIP | 472 | 270 | Within 25.0 pc from Compendia |
| RECONS - published | 21 | 143 | Already in Literature |
| RECONS - unpublished | 10 | 131 | Additions Soon |
| Literature (1995-2012) | 55 | 21 | Additions from Others |
| TOTAL | 558 | 565 | |

Figure 5.1 illustrates the luminosity (LF) and mass functions (MF) for the survey sample. These histograms indicate how many of the sample objects are found within each bin of either absolute V magnitude or mass. One caveat is that no primaries with joint photometry due to unresolved companions have yet been deblended. After deblending, as discussed in §6.3, the distributions for both histograms will shift to the right, to lower masses. The full results are shown and discussed in §8.2.3.

The LF (Figure 5.1(a)) for the sample has been further divided by factors of two in mass, as noted by the vertical lines, where the absolute magnitudes that correspond to the mass divisions of 0.6, 0.3, and 0.15 M_{\odot} are $M_V = 9.25$, 11.80, and 13.86, respectively. These divisions will be explored in the analysis of the results presented in Chapter 6. It is noteworthy that the bin with the most number of primaries is made up of the brightest and most massive objects, which have historically been more easily targeted for parallax measurements.

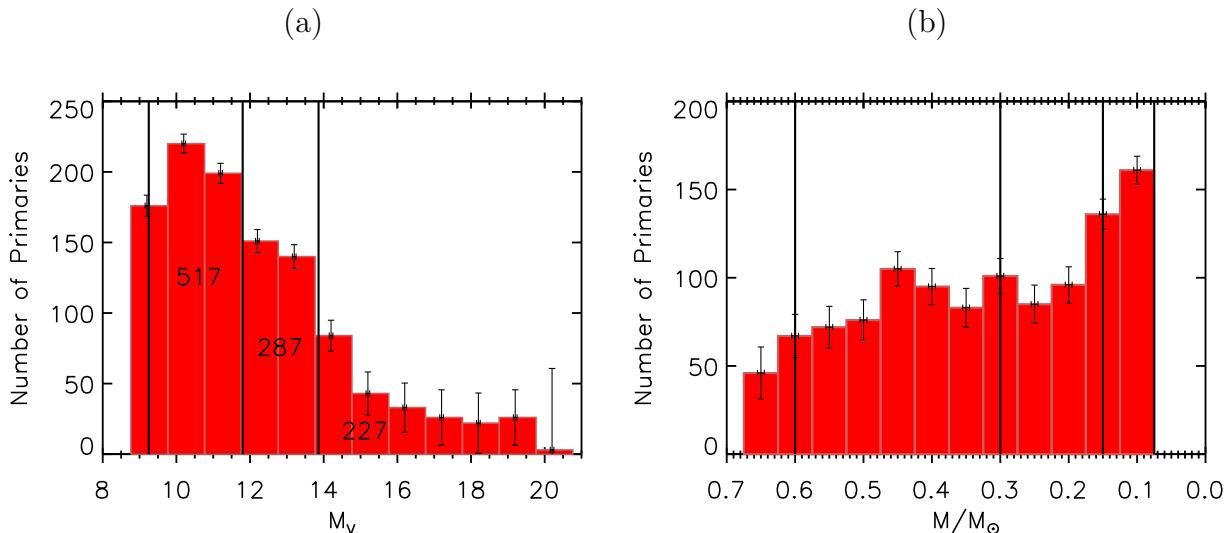


Figure 5.1 The luminosity and mass functions for the primaries in the multiplicity sample. (a) A histogram indicating the M_V distribution, i.e., the luminosity function. (b) A histogram indicating how many primaries are contained within each mass bin, i.e., the mass function. The vertical lines highlight bins that are factors of two in mass (0.075 , 0.15 , 0.30 , and $0.60 M_\odot$). We note that the numbers do not total 1122, as 92 primaries more massive than $0.6 M_\odot$ were excluded from the most massive subset.

To derive the MF, masses were estimated from M_V using the comprehensive mass-luminosity relations in Benedict et al. (in prep), discussed further in §6.3. The resulting mass function that includes the 1122 red dwarf primary masses, spanning $0.075 - 0.67 M_\odot$ and $M_V = 8.8 - 20.0$ mags, is shown in Figure 5.1(b). The peak at the faint (right) end is due partly to RECONS’ work and that of other teams interested in very low mass stars and brown dwarfs. Stars with parallaxes from the MEarth northern survey (Dittmann et al. 2014) were not included in the multiplicity sample, as they were only available after the sample list had been frozen (1 January, 2012), but those results will fill in this histogram somewhat. Even before deblending the joint photometry of the close multiples in the sample from which the masses are estimated and including the contribution from companions, **it is important to note that the mass function increases to lower masses at the end**

of the main sequence.

5.2 Previous M Dwarf Multiplicity Studies

Companion searches have been done for M dwarfs during the past few decades, but until recently, most of the surveys have had on the order of 100 targets. Table 5.2 lists these previous efforts, with the survey presented in this work listed at the bottom for comparison. With samples of this size, our statistical understanding of the distribution of companions is quite weak. The exceptions are the efforts led by Saurav Dhital (Dhital et al. 2010) and Markus Janson (Janson et al. 2012, 2014b), which were available only after the author’s project was begun and underway. Dhital et al. (2010) studied mid-K to mid-M dwarfs from the Sloan Digital Sky Survey that were not nearby and found primarily wide multiple systems, including white dwarf components in their analysis. Only a fraction of the M dwarfs studied by Janson et al. (2012, 2014b) had trigonometric distances available, leading to a sample that was not volume-limited. Considering the large percentage of all stars that M dwarfs comprise, a study with a large sample (i.e., more than 1000 systems) was vital in order to arrive at a conclusive understanding of how many red dwarfs systems are multiple and in order to perform statistical analyses of the results and on subsamples based on primary mass, metallicity, etc. For example, using the Binomial Distribution for error analysis,

$$\sigma^2 = \frac{np(1-p)}{n^2}, \quad (5.1)$$

where σ is the error, n is the number of objects in the sample, and p is the multiplicity rate,

it is possible to calculate errors and to determine the reliability of the result. An expected multiplicity fraction of 30% on samples of 10, 100, and 1000 stars, respectively, yields errors of 14.5%, 4.6%, and 1.4%, thus illustrating the importance of studying a large collection of M dwarfs.

Table 5.2: Previous M Dwarf Multiplicity Studies - Techniques

| Reference | # of Stars | Technique | Search Region |
|--------------------------|------------|----------------------|----------------|
| Skrutskie et al. (1989) | 55 | Infrared Imaging | 2 — 14'' |
| Henry & McCarthy (1990) | 27 | Infrared Speckle | 0.2 — 5'' |
| Henry (1991) | 74 | Infrared Speckle | 0.2 — 5'' |
| Fischer & Marcy (1992) | 28-62 | Various | various |
| Simons et al. (1996) | 63 | Infrared Imaging | 10 — 240'' |
| Delfosse et al. (1999a) | 127 | Radial Velocities | <1.0'' |
| Law et al. (2006) | 32 | Lucky Imaging | 0.1 — 1.5'' |
| Endl et al. (2006) | 90 | Radial Velocities | <1.0'' |
| Law et al. (2008) | 77 | Lucky Imaging | 0.1 — 1.5'' |
| Bergfors et al. (2010) | 124 | Lucky Imaging | 0.2 — 5'' |
| Dhital et al. (2010) | 1342 | Sloan Archive Search | 7 — 180'' |
| Law et al. (2010) | 36 | Adaptive Optics | 0.1 — 1.5'' |
| Dieterich et al. (2012) | 126 | HST-NICMOS | 0.2 — 7.5'' |
| Janson et al. (2012) | 701 | Lucky Imaging | 0.08 — 6'' |
| Janson et al. (2014b) | 286 | Lucky Imaging | 0.1 — 5'' |
| Ward-Duong et al. (2015) | 245 | Infrared AO | 10 — 10,000 AU |
| Winters (this survey) | 1122 | Various | 0 — 600'' |

5.3 Wide-Field Blinking Search

All 1122 systems were blinked for common proper motion (CPM) companions. A wide companion would have a similar proper motion to its primary and would thus appear to

move in the same direction at the same speed across the sky. As most nearby stars have high proper motion (as discussed in §1.3), this method is quite effective for these targets. Archival SuperCOMOS *BRI* photographic plate images $10' \times 10'$ were blinked using the Aladin interface of the Centre de Données astronomiques de Strasbourg (CDS) using a script written by Adric Riedel to detect companions at separations greater than $\sim 5''$. These plates were taken from 1974 — 2002 and provide up to 28 years of temporal resolution; however, for 168 stars, a small proper motion and/or an epoch spread of less than 5 years resulted in undetectable motion. In these cases, the *I*-band images gathered during the direct imaging survey (see §5.4 below) will be blinked with the SuperCOSMOS *I*-band image (see §8.5 in Chapter 8). In the 18 cases where a POSS-I image was available (for $-20.5^\circ < \text{Dec} < +05^\circ$), those images were used, especially for the objects with relatively low proper motions ($\mu < 0''.18 \text{ yr}^{-1}$) because the time baseline reaches back to 1950. The use of the recent images taken for the present study from 2010 — 2014 provides an even larger temporal baseline than using SuperCOSMOS and/or POSS-I. Information for the images blinked is given in Table 5.3, taken from Morgan (1995), Subasavage (2007), and the UK Schmidt webpage³.

Table 5.3: Blinking Survey Information

| Filter | Epoch Span | Decl. Range | Mag. Limit | $\Delta\lambda$ |
|-----------------------------------|-------------|--|-------------|-----------------|
| <i>B_J</i> (IIIaJ) | 1974 - 1994 | all-sky | ~ 20.5 | 3950 - 5400 Å |
| <i>R_{59F}</i> (IIIaF) | 1984 - 2001 | all-sky | ~ 21.5 | 5900 - 6900 Å |
| <i>I_{IVN}</i> (IVN) | 1978 - 2002 | all-sky | ~ 19.5 | 6700 - 9000 Å |
| <i>E_{POSS-I}</i> (103aE) | 1950 - 1957 | $-20.5^\circ < \text{Dec} < +05^\circ$ | ~ 19.5 | 6200 - 6700 Å |
| <i>I_{KC}</i> | 2010 - 2014 | all sky | ~ 17.5 | 7150 - 9000 Å |

³found here: <http://www.roe.ac.uk/ifa/wfau/ukstu/telescope.html>

5.4 CCD Imaging Search

Each M dwarf primary was observed at one of four telescopes (listed in Table 2.1) with integrations of 3, 30, and 300 seconds in order to reveal stellar companions at separations ~ 2 to $10''$. The short 3-second exposure would reveal any close equal magnitude companions, while the long 300-second exposure would reveal faint companions to masses at the end of the main sequence. The 30-second exposure was taken to bridge the intermediate phase space. The images were unbinned in order to achieve the best astrometry possible. Table 2.1 lists the technical and observational information for each telescope used for this portion of the search. Johnson-Kron-Cousins filters were used at all sites; the I -band was used for the astrometry observations, while V , R , and I were used for absolute and relative photometry measurements. Figure 5.2 shows the distribution of the I -band magnitudes of the red dwarfs surveyed. One new companion was detected during this portion of the survey: a nearly equal-magnitude companion to GJ0084.1B.

Absolute photometry for 67 objects was acquired at the Lowell 42in during the course of the multiplicity study in order to characterize the systems. The same observational procedures for obtaining absolute photometry detailed in Chapter 3, §3.1.4 were followed. The results are included in Tables 3.2 and A.1. Absolute photometry for the southern M dwarf primaries is discussed in Chapter 3.

While the author took the majority of the observations, other RECONS members partic-

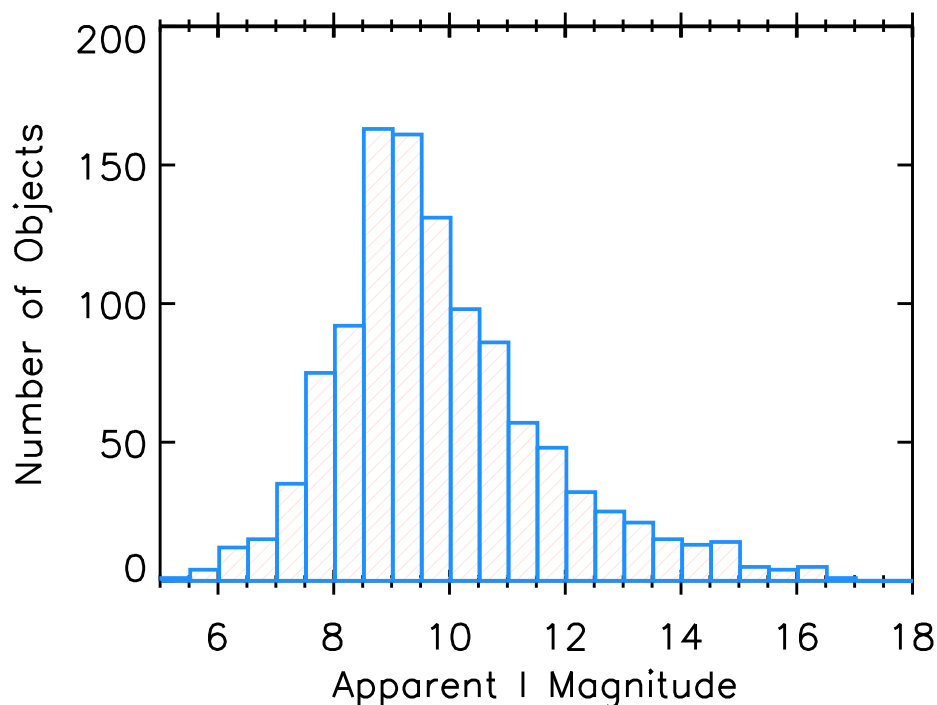


Figure 5.2 The distribution of the multiplicity sample in the I -band. Most of the targets are bright in the I -band, with 85% brighter than $I = 12$.

ipated in the data acquisition, especially Joey Chatelain, making this project a collaborative effort. We would often switch between observing programs, depending on the weather and seeing conditions so as not to lose valuable telescope time.

Figure 5.3 shows the distribution on the sky of the entire sample investigated for multiplicity. The different colors indicate the different telescopes used during the imaging campaign. Seeing conditions better than $2''$ were attained for all but one star — GJ0507, with some stars being observed multiple times. The histogram in Figure 7.1 illustrates the seeing conditions experienced at the four different telescopes.

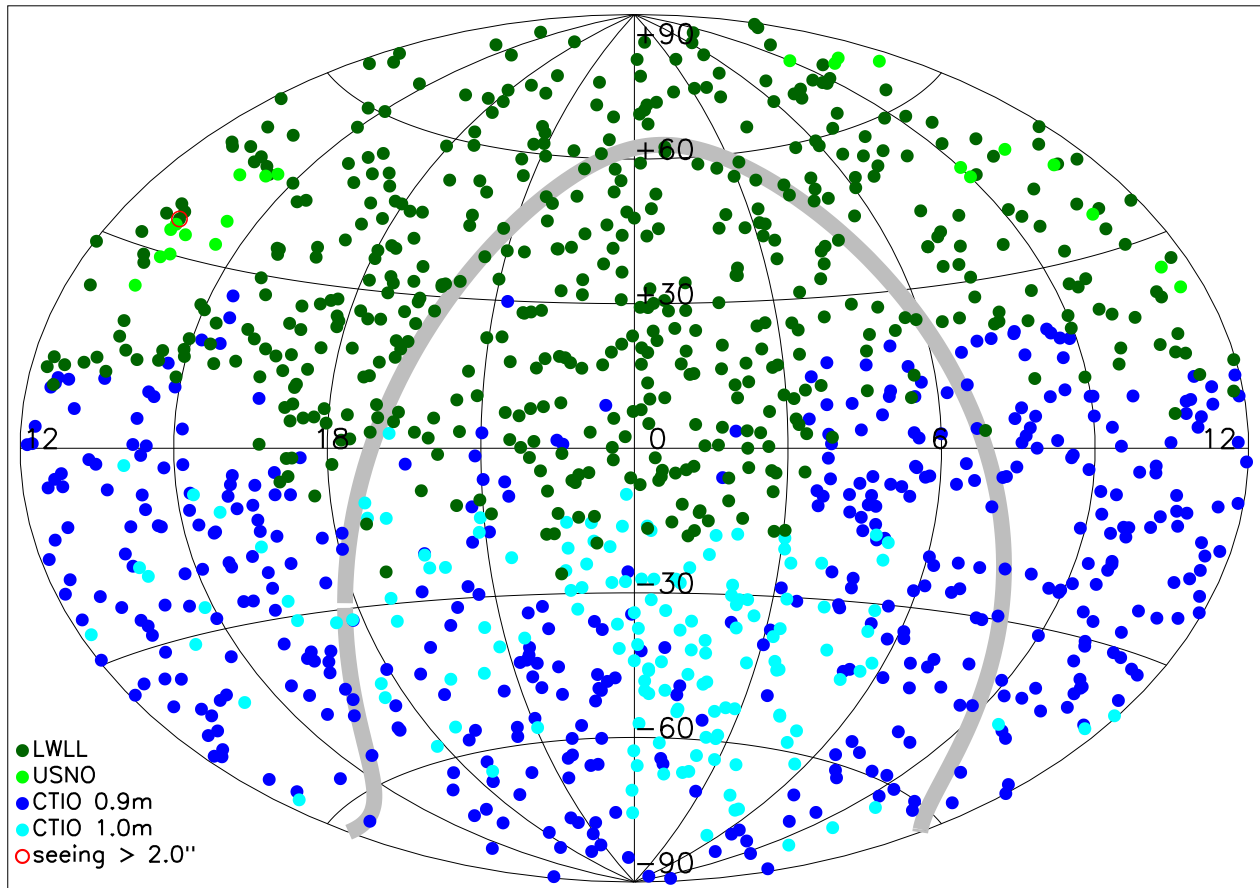


Figure 5.3 The distribution on the sky of all 1122 M dwarfs examined for multiplicity. Different colors indicate the different telescopes that were utilized.

5.5 Sub-Arcsecond Separation Search

In addition to the imaging and blinking campaigns, investigations for companions at smaller separations were possible using a variety of techniques. Because *VRI* was available for all but ten northern ($\delta > +30^\circ$) targets in the sample, photometric techniques based on overluminosity of the red dwarf in question, as discussed in §5.5.1, were used to probe almost the entire sample. Other methods for detections of companions at sub-arcsecond

separations were used for various subsets of the entire sample, including revealing astrometric perturbations on stars with RECONS parallaxes, observations of M dwarfs with the Fine Guidance Sensor (FGS) on the *Hubble Space Telescope* (HST), and the existence of data reduction flags for those objects with *HIPPARCOS* parallaxes.

5.5.1 Overluminosity via Photometry

5.5.1.1 Elevation above the Main Sequence

The existence of very accurate parallaxes and V and K magnitudes for the sample allows the plotting of an observational HR Diagram (see Figure 5.4), where M_V and the $(V - K)$ color are used as proxies for luminosity and temperature. Unresolved equal magnitude binaries would be overluminous and would plot above the main sequence, as would any young systems. There is a clear elevation of known multiples with separations $< 5''$ ⁴ and a few young objects above the sequence of presumed singles. Subdwarfs are located below and to the left of the singles, as they are old, metal-poor and underluminous stars⁵. Ten candidate multiples were identified by eye with this technique and are listed in Table 6.2. They are also marked in Figure 5.4.

⁴This $5''$ separation appears to be the boundary where photometry for multiple systems from the literature — specifically from Bessell and Weis — becomes blended. For photometry from the SAAO group, the separation is closer to $10''$ because they use large apertures.

⁵The known young and subdwarf members are listed in Tables 6.4 and 6.5, along with their identifying characteristics.

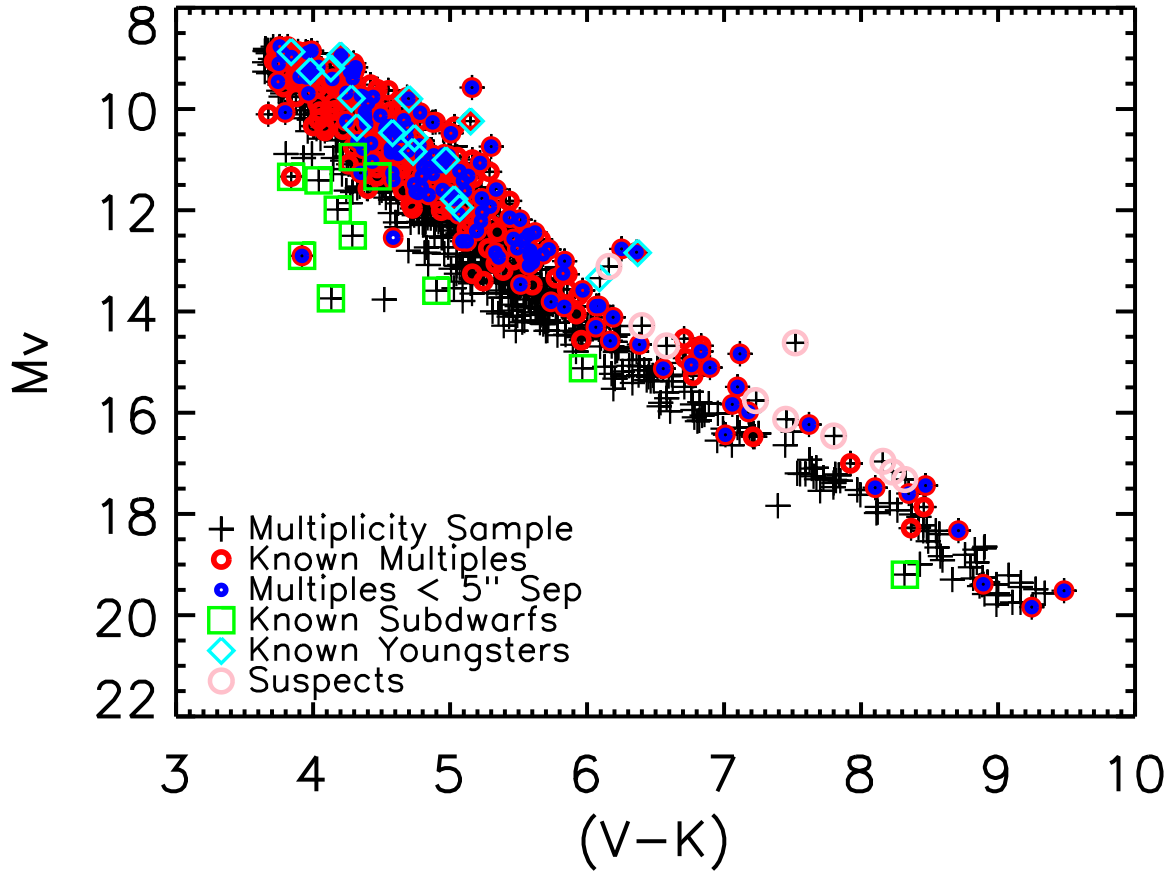


Figure 5.4 Color-Magnitude Diagram for the Multiplicity Sample, with M_V plotted versus the $(V - K)$ color. The sample is plotted in black plusses, with known multiple systems for which separate photometry exists for each component indicated with red circles. Known close multiples with blended photometry are noted in royal blue circles. Known subdwarfs are shown in open green squares, while known young objects are noted with open cyan diamonds. Stars suspected to be unresolved multiples due to their elevated position on the main sequence are noted in open pink circles. Note the elevation of the known multiples with close, unresolved companions.

5.5.1.2 Trigonometric & CCD Distance Mismatches

Because both 2MASS and VRI photometry were available (or newly measured, in the case of VRI) for almost the entire sample, photometric distances were estimated in order to

make comparisons to the true trigonometric distances available from the parallaxes (as seen in Figure 3.4 in Chapter 3). This allowed suspected multiples to be highlighted that would otherwise have been missed due to the lower separation limit ($2''$) of our main imaging survey.

Unresolved equal magnitude multiples would be overluminous, and comparisons of the *ccddist* to the *trigdist* would result in the *ccddist* being closer by up to a factor of 1.414. As shown, for example, by Carroll & Ostlie (2006), the relation between a star's flux F , the energy received at a distance d , and its intrinsic luminosity L is

$$F = \frac{L}{4\pi d^2} . \quad (5.2)$$

The ratio between the fluxes of two objects is then

$$\frac{F_1}{F_2} = \frac{\frac{L_1}{4\pi d_1^2}}{\frac{L_2}{4\pi d_2^2}} . \quad (5.3)$$

However, if one object is actually an equal magnitude binary, then $L_1 = 2L_2$ and the equation becomes

$$\frac{F_1}{F_2} = \frac{\frac{2L_2}{4\pi d_1^2}}{\frac{L_2}{4\pi d_2^2}} , \quad (5.4)$$

which simplifies to

$$\frac{F_1}{F_2} = \frac{2d_2^2}{d_1^2} . \quad (5.5)$$

Rearranging further leads to

$$d_1 = d_2 \cdot \left(\frac{2F_2}{F_1} \right)^{1/2} . \quad (5.6)$$

But, if the measured fluxes from the single and the unresolved double are the same, then $F_1 = F_2$, resulting in

$$\mathbf{d}_1 = 2^{1/2} d_2 = \mathbf{1.414} \mathbf{d}_2 , \quad (5.7)$$

showing how an equal magnitude binary will appear to be 1.414 times closer than another single object of the same apparent flux.

With this method, 64 candidate multiples were revealed with *cddists* at least exactly 1.414 times closer than their *trigdists*. Of these, 37 were already known to have a very close companion, verifying the technique. The other 27 are new candidates, one of which has been confirmed by follow-up observations already. One of these 27 (GJ 207.1) was noted by Reiners et al. (2012) to be a possible spectroscopic binary, and another (LP423-031) was identified as being elevated above the main sequence on the HR diagram. These are listed in Table 6.2.

5.5.2 RECONS Perturbations

A total of 313 stars in the sample have had a parallax measured by RECONS, with the temporal coverage for some of these objects spanning up to sixteen years. The presence of an unequal mass component causes a perturbation in the photocenter of the system that is

evident in the residuals after solving for both the proper motion and parallax. This is the case for 35 of the systems, which are listed in the table of confirmed companions (Table 6.1). We consider these 35 to be confirmed stellar companions. This is the only technique used in this companion search that may have revealed brown dwarf companions.

5.5.3 Hubble Space Telescope's Fine Guidance Sensors

Some stars with astrometric perturbations found through the RECONS parallax program were consequently targeted using *Hubble Space Telescope's* Fine Guidance Sensors (*HST*-FGS) with the F583W filter. *HST's* FGS consists of two large field of view white light interferometers that have the ability to track the position of a light source to one mas precision. They can also obtain sub-mas sampling of an object by obtaining its interferogram, enabling detection of close multiple star systems down to ~ 8 mas (Nelán 2015). *HST's* FGS was used in the transfer function scan mode (TRANS) to produce usually 20 - 80 **S** curves (indicative of the fringe visibility function) that are then cross-correlated and co-added, resulting in a high signal-to-noise ratio transfer function. Data reductions use **S** curves of confirmed single stars of matching color to deconvolve multiple systems. Four of the twelve systems targeted with FGS were found to harbor a companion and are listed in the table of confirmed companions (Table 6.1).

5.5.4 HIPPARCOS Flags

All 459 objects in the multiplicity sample with *HIPPARCOS* parallaxes were searched for the possibility of an entry in the Double and Multiple Systems Annex (DMSA) (Lindgren et al.

1997) in the original *HIPPARCOS* Catalog that might indicate the presence of a companion. We note that 136 of these 459 have a parallax only by *HIPPARCOS*. The remaining 323 stars with a *HIPPARCOS* parallax also have a parallax measurement from another source. Various flags exist in the DMSA that confirm or infer the presence of a companion. They are as follows:

- C - component solutions where both components are resolved and each have an individual parallax;
- G - acceleration solutions, i.e., due to variable proper motions, which could be due to an unseen companion;
- O - orbits from astrometric binaries;
- V - Variability-Induced Movers (VIM), where the variability of an unresolved companion causes the photocenter of the system to move or be perturbed;
- X - stochastic solutions, for which no astrometric parameters could be determined and which may indicate that the star is actually a short-period astrometric binary.

Most of the AFGK systems observed by *HIPPARCOS* with flags in the DMSA have been further examined or re-analyzed by Pourbaix et al. (2003, 2004), Platais et al. (2003), Jancart et al. (2005), and Frankowski et al. (2007); however, few of the M dwarf systems seemed to have been investigated. We found that flags existed for 31 systems in the survey, which are listed in Table 6.2.

Listed in Table 5.4 are the statistics for which methods were used to search which portions of the sample for companions. We note that the number of detections includes confirmations

of previously reported multiples.

Table 5.4: Companion Search Technique Statistics

| Separation | Searched (#) | Searched (%) | Detected (#) |
|-----------------------|-----------------|-----------------|-----------------|
| 10 — 600'' | 972 | 87 | 64 |
| 2 — 10'' | 1122 | 100 | 44 |
| < 2'' | | | |
| Distance Mismatches | 1112 | 99 | 37 |
| HR Diagram Elevation | 1112 | 99 | 10 |
| RECONS Perturbations | 313 | 28 | 35 |
| <i>HIPPARCOS</i> Flag | 459 | 41 | 31 |
| HST-FGS | 12 | 1 | 4 |

5.6 Literature Search

Finally, a literature search was carried out by looking up all 1122 primaries in *SIMBAD* and then using the available bibliography tool to search for additional companions. It is acknowledged that *SIMBAD* is sometimes incomplete, but the author feels that the majority of publications reporting companions were consulted. Papers that were scrutinized in great detail include those that reported high resolution radial velocities (typically for planet searches), parallax papers that might report perturbations, high resolution imaging results, speckle interferometry papers, and other multiplicity papers.

Extensive use of the Washington Double Star Catalogue (WDS), maintained by Brian Mason⁶, was made in targeting publications with information on multiple systems. Two drawbacks of the WDS are that not all companions are actual physical members of the system

⁶A back-up copy is housed at Georgia State University.

with which they are listed and that the companion must be resolved. Thus, spectroscopic binaries are not listed in the WDS, and care had to be taken when determining the number of companions in the system. However, information pertaining to a star in the WDS was usually only accessed after it was already known that the system was multiple and how many components were present in the system, so this was not really troublesome. In fact, the WDS sometimes had references to publications that reported information for a system that *SIMBAD* had not listed.

CHAPTER 6

MULTIPLICITY STUDY RESULTS & ANALYSIS

6.1 Multiplicity Results

Here we report the results of the multiplicity study of the nearby M dwarfs described in Chapter 5. In the interest of clarity, it is important to first define a few terms. *Component* refers to any member of a multiple system. The *primary* is either a single star or the most massive (or brightest in the V -band) component in the system, and *companion* is used throughout to refer to a member of a multiple system that is less massive (or fainter, again in the V -band) than the primary star. The multiplicity and companion fraction will also be discussed at length. The *Multiplicity fraction* is the percentage of all systems that are multiple, regardless of whether the system is double, triple or higher order. For example, discovering that a member of a binary system is actually a binary itself would make the system a triple, but would not affect the multiplicity fraction. The *companion fraction* is the number of companions per primary in the sample, so higher order multiples have an effect on this fraction, as they add a companion to the statistics.

The higher order systems complicate the analysis. Usually these systems are hierarchical, so should the companions be studied in relation to the primary in the system or in relation to the primary of the sub-system of which they are a member? In this study, we analyze all companions in relation to the primary of the system, even if they are members of sub-binaries or -triples.

Companions that were confirmed through any of the search campaigns outlined in Chap-

ter 5 or through the literature search are reported (§6.1.1), followed by a discussion of suspected new multiple systems identified in this survey (§6.1.2) and companion candidates that were subsequently dismissed (§6.1.3). We then describe the treatment of brown dwarf substellar companions (§6.1.4), followed by an analysis of the higher-order multiple systems (§6.1.5). A correction to the initial multiplicity fraction is presented in §6.2. The techniques used to deblend the V magnitudes of close multiples are detailed, followed by a description of the the mass-luminosity relation used to estimate masses (§6.3). Potential correlations between multiplicity rate and mass and tangential velocity are explored (§6.4, §6.5). Finally, we end this chapter with notes on individual systems (§6.7).

6.1.1 Confirmed Companions

Of the 1122 M dwarfs searched, there are 262 multiple systems with 306 new and confirmed *stellar* companions to their primaries, resulting in an initial uncorrected multiplicity fraction of $23.4 \pm 1.3\%$ and an uncorrected stellar companion fraction of $27.3 \pm 1.3\%$. The ratio of singles to higher order systems is 861:224:34:2:2 for singles:doubles:triples:quadruples:quintuples. In percentages, this translates to 76.6:19.9:3.0:0.2:0.2%. For comparison, the statistics for solar-type stars (including brown dwarf companions) are 56:33:8:3% (Raghavan et al. 2010) for singles:doubles:triples:higher-order systems.

Information for all multiple systems (including those containing brown dwarf/substellar components) is presented in Table 6.1, with $n-1$ lines for each system, where n is the total number of components in the system. For example, a quadruple system will have three lines of information that describe the system. The name is followed by the number of components

in the system and the configuration map of the components detailed in that line of the Table. If the line of data pertains to higher order systems containing component configurations for sub-systems (e.g., ‘BC’ of a triple system), the number of components noted will be ‘0’, as the full membership of the system will already have been noted in the line of data containing the ‘A’ component. These data are followed by epoch J2000.0 coordinates, then the angular separation (ρ) in arcseconds, the position angle (θ) in degrees measured East of North, the year of the measurement, the code for the technique used to identify the component, and the reference. We assign a separation of $<2''$ for all spectroscopic binaries (unless more information is available) and to indicate that a companion has been detected, but not yet resolved. We note that where orbit determinations from the literature are reported, the semi-major axis a is listed instead of ρ , where available. If a was not reported, then it was calculated from the period and the estimated masses of the components in question. Next is listed the delta-magnitude (Δmag) between the components indicated by the configuration map, the filter used to measure this Δmag , and the reference for this photometry data. An asterisk next to the Δmag filter of ‘V’ indicates that the photometry is from photographic plates.

The codes for the identifying techniques are as follows:

- AO det — detection using adaptive optics;
- astdet — astrometric detection of a perturbation;
- astorb — orbit from astrometry;
- HSTACS — detection using Hubble Space Telescope’s Advanced Camera for Surveys;

- HSTFGS — detection using Hubble Space Telescope’s Fine Guidance Sensor;
- HSTNIC — detection with Hubble Space Telescope’s NICMOS;
- HSTWPC — detection with Hubble Space Telescope’s Wide Field Planetary Camera 2;
- lkydet — detection with lucky imaging;
- lkyorb — orbit measured from lucky imaging;
- radorb — orbit from radial velocity measurements;
- radvel — detection using radial velocity, but no type of ‘SB’ indicated;
- SB (1, 2, 2O, 3) — spectroscopic binary, either single-, double-, double with an orbit, or triple-lined;
- spkdet — detection using speckle interferometry;
- spkorb — orbit determined from speckle interferometry measurements;
- visdet — visual detection;
- visorb — orbit determined from visual detections.

In many cases, there are multiple separation and Δmag measurements available in the literature from different groups using different techniques. An exhaustive list of these results is beyond the scope of the work presented here. Only the most recent known result for each system is listed here. In some cases, the separation, position angle, and Δmag are not available.

Table 6.1: Multiplicity Information for Sample

| Name | # Obj | Map | RA (hh:mm:ss) | DEC (dd:mm:ss) | ρ ($''$) | θ (deg) | Year | Technique | Ref | Δmag (mag) | Filter | Ref |
|----------|-------|------|------------------|-------------------|--------------------|-------------------|------|-----------|-----|-----------------------------|--------|-----|
| GJ1001 | 0 | BC | 00 04 34.8 | -40 44 06 | 0.087 | 048 | 2003 | HSTACS | 39 | 0.10 | 110 | 39 |
| GJ1001 | 3 | A-BC | 00 04 36.0 | -40 44 02 | 18.2 | 259 | 2003 | visdet | 39 | 9.91 | V | 1 |
| G131-026 | 2 | AB | 00 08 54.0 | +20 50 18 | 0.111 | 170 | 2001 | AO det | 12 | 0.46 | H | 12 |
| GJ0011 | 2 | AB | 00 13 15.8 | +69 19 36 | 0.859 | 089 | 2012 | lkydet | 59 | 0.69 | i' | 59 |

| | | | | | | | | | | | | |
|--------------|---|------|------------|-----------|--------|-----|------|--------|-----|------|----------------|-----|
| LTT17095 | 2 | AB | 00 13 38.7 | +80 39 56 | 12.78 | 126 | 2001 | visdet | 100 | 3.63 | V | 1 |
| GJ1005 | 2 | AB | 00 15 28.1 | -16 08 01 | 0.329 | 234 | 2002 | HSTNIC | 29 | 2.42 | V | 8 |
| 2MA0015-1636 | 2 | AB | 00 15 58.1 | -16 36 57 | 0.105 | 090 | 2011 | AO det | 17 | 0.06 | H | 17 |
| L290-072 | 2 | AB | 00 16 01.9 | -48 15 39 | <2 | ... | 2009 | SB1 | 113 | ... | ... | ... |
| GJ1006 | 2 | AB | 00 16 14.6 | +19 51 37 | 25.09 | 059 | 1999 | visdet | 100 | 0.94 | V | 110 |
| GJ0015 | 2 | AB | 00 18 23.0 | +44 01 24 | 35.15 | 064 | 1999 | visdet | 100 | 2.97 | V | 1 |
| GJ1010 | 2 | AB | 00 23 28.8 | +77 11 21 | 11.18 | 063 | 2001 | visdet | 100 | 2.79 | V | 110 |
| GJ2005 | 0 | BC | 00 24 44.0 | -27 08 24 | 0.238 | 255 | 2008 | astdet | 65 | 0.35 | K | 70 |
| GJ2005 | 3 | A-BC | 00 24 44.0 | -27 08 24 | 1.571 | 027 | 2008 | astdet | 65 | 0.61 | K | 70 |
| LP349-025 | 2 | AB | 00 27 56.0 | +22 19 33 | 0.107 | 007 | 2004 | AO det | 34 | 0.38 | H | 34 |
| GJ0022 | 3 | AC-B | 00 32 29.4 | +67 14 08 | 4.0 | 173 | 2002 | visdet | 112 | 1.57 | V _T | 51 |
| GJ0022 | 0 | AC | 00 32 29.4 | +67 14 08 | 0.3703 | 222 | 2014 | spkdet | 55 | 3.08 | V | 8 |
| GR*0050 | 3 | AC-B | 00 32 53.1 | -04 34 07 | 0.508 | 183 | 2012 | lkyorb | 58 | 3.17 | i' | 57 |
| GR*0050 | 0 | AC | 00 32 53.1 | -04 34 07 | 0.213 | 017 | 2012 | lkyorb | 58 | ... | ... | ... |
| LHS1104 | 2 | AB | 00 35 52.8 | +52 41 45 | 24.74 | 008 | 1999 | visdet | 100 | 2.56 | V | 110 |
| LTT10301 | 2 | AB | 00 50 33.2 | +24 49 00 | 1.305 | 319 | 2008 | lkydet | 9 | 0.94 | i' | 9 |
| GJ0049 | 2 | AB | 01 02 38.8 | +62 20 42 | 294.9 | ... | 1999 | visdet | 102 | 4.22 | V | 110 |
| GJ1026 | 2 | AB | 01 03 14.1 | +20 05 52 | 2.7 | 028 | 1979 | visdet | 73 | 1.29 | H _p | 72 |
| GJ0054 | 2 | AB | 01 10 22.0 | -67 26 42 | 0.13 | 283 | 2003 | HSTFGS | 39 | 1.03 | V | 39 |
| LP467-016 | 2 | AB | 01 11 25.4 | +15 26 21 | 0.409 | 147 | 2000 | AO det | 12 | 0.69 | K _s | 12 |
| LHS1212 | 2 | AB | 01 11 57.0 | +04 54 50 | 63.55 | 146 | 2001 | visdet | 100 | 1.02 | V | 110 |
| LHS1240 | 2 | AB | 01 22 43.2 | +00 31 07 | 2.5 | 070 | 1977 | visorb | 41 | 1.00 | V | 41 |
| GJ0065 | 2 | AB | 01 39 01.7 | -17 57 01 | 1.653 | 103 | 2002 | HSTNIC | 29 | 0.45 | V | 8 |
| GJ1041 | 3 | A-BC | 01 59 12.4 | +03 31 09 | 4.07 | 055 | 2008 | visdet | 98 | 1.09 | V | 1 |
| GJ1041 | 0 | BC | 01 59 12.4 | +03 31 09 | <2 | ... | 2008 | SB2 | 97 | ... | ... | ... |
| LP030-055 | 2 | AB | 02 01 54.0 | +73 32 32 | 0.437 | 259 | 2012 | lkydet | 59 | 1.25 | i' | 59 |
| GJ0084 | 2 | AB | 02 05 04.8 | -17 36 52 | 0.443 | 103 | 2003 | HSTFGS | 39 | 3.59 | H | 12 |
| GJ0084.1 | 0 | BC | 02 05 21.2 | -28 04 36 | 1.5 | ... | 2011 | visdet | 1 | ... | ... | ... |
| GJ0084.1 | 3 | A-BC | 02 05 23.6 | -28 04 11 | 58.12 | 014 | 1999 | visdet | 100 | 1.89 | V | 10 |
| LTT01133 | 3 | AB | 02 11 02.2 | -35 40 14 | 3.4 | 143 | 1999 | visdet | 100 | 1.5 | V | 1 |
| LTT01133 | 0 | AB-C | 02 11 03.1 | -35 40 03 | 13.6 | 041 | 1999 | visdet | 100 | 0.0 | V | 1 |
| LHS1377 | 2 | AB | 02 16 41.2 | -30 59 18 | 105.53 | 312 | 2000 | visdet | 100 | 1.07 | V | 87 |
| GJ1046 | 2 | AB | 02 19 10.0 | -36 46 41 | 0.03 | orb | 2008 | SB1 | 66 | ... | ... | ... |
| GJ1047 | 0 | AB-C | 02 21 01.9 | +36 52 47 | 31.025 | 233 | 2000 | visdet | 67 | 0.98 | V | 110 |
| GJ1047 | 3 | AB | 02 21 04.7 | +36 53 02 | 1 | 009 | 1966 | visdet | 90 | 0.0 | V | 90 |
| L225-057 | 2 | AB | 02 34 21.0 | -53 05 35 | <2 | ... | ... | SB2 | 15 | ... | ... | ... |
| LP993-115 | 3 | A-BC | 02 45 14.3 | -43 44 10 | 44.55 | 061 | 2000 | visdet | 60 | 0.31 | V | 60 |
| LP993-115 | 0 | BC | 02 45 14.3 | -43 44 10 | 0.257 | 215 | 2008 | lkydet | 9 | 0.87 | i' | 9 |
| LTT17413 | 2 | AB | 02 45 39.6 | +44 56 55 | 18.08 | 066 | 1999 | visdet | 100 | ... | ... | ... |
| GJ0119 | 2 | AB | 02 56 34.4 | +55 26 14 | 16.88 | 021 | 1999 | visdet | 100 | 1.17 | V | 110 |
| LTT01445 | 0 | BC | 03 01 51.0 | -16 35 31 | 1.344 | 138 | 2003 | HSTNIC | 29 | 0.9 | V | 50 |
| LTT01445 | 3 | A-BC | 03 01 51.0 | -16 35 31 | 7.706 | 315 | 2003 | HSTNIC | 29 | 0.3 | V | 60 |
| GJ1054 | 0 | AC | 03 07 55.7 | -28 13 11 | <2 | ... | 1994 | SB2 | 38 | ... | ... | ... |
| GJ1054 | 3 | AC-B | 03 07 55.7 | -28 13 11 | 66.69 | 208 | 1999 | visdet | 100 | 2.85 | V | 109 |
| GJ0125 | 2 | AB | 03 09 30.7 | +45 43 57 | 0.393 | 023 | 1991 | astdet | 72 | 2.17 | H _p | 72 |
| LP831-045 | 2 | AB | 03 14 18.0 | -23 09 31 | <2 | ... | 2015 | astdet | 1 | ... | ... | ... |
| LHS1521 | 0 | AB-C | 03 15 29.4 | +57 51 33 | 1164.1 | 198 | ... | visdet | 19 | 4.9 | V | 110 |
| GJ0130.1 | 3 | AB | 03 16 13.8 | +58 10 02 | 4.92 | 8 | 1999 | visdet | 100 | 0.40 | V _T | 51 |
| LTT17492 | 2 | AB | 03 17 12.2 | +45 22 22 | 0.07 | 172 | 2005 | astdet | 84 | 1.24 | J | 84 |
| SIP0320-0446 | 2 | AB | 03 20 28.3 | -04 46 36 | <0.33 | ... | 2007 | SB1 | 14 | ... | ... | ... |
| GJ0140 | 3 | AB | 03 24 06.4 | +23 47 06 | 2.247 | 347 | 1991 | astdet | 72 | 1.27 | H _p | 72 |
| GJ0140 | 0 | AB-C | 03 24 12.8 | +23 46 19 | 99 | 117 | 2012 | visdet | 21 | 1.42 | V | 109 |
| LP532-081 | 3 | AB | 03 25 41.7 | +05 51 54 | 0.275 | 069 | 2012 | lkydet | 59 | 1.63 | i' | 59 |
| LP532-081 | 0 | AB-C | 03 25 41.7 | +05 51 54 | 2.01 | 210 | 2012 | lkydet | 59 | 0.17 | i' | 59 |
| LHS1582 | 2 | AB | 03 43 22.0 | -09 33 50 | 0.0184 | ... | 2009 | astorb | 91 | ... | ... | ... |
| LP833-014 | 2 | AB | 03 52 23.1 | -22 52 57 | 1.86 | 339 | 1991 | astdet | 72 | 0.08 | H _p | 72 |
| LHS1610 | 2 | AB | 03 52 41.0 | +17 01 04 | <2 | ... | ... | SB2 | 15 | ... | ... | ... |
| LP031-301 | 3 | A-BC | 04 05 57.0 | +71 16 38 | 5.3 | 240 | 2006 | visdet | 71 | 0.50 | K _s | 100 |
| LP031-302 | 0 | BC | 04 05 58.0 | +71 16 41 | 0.7 | 245 | 2006 | visdet | 71 | 0.85 | V | 71 |
| LHS1630 | 2 | AB | 04 07 20.0 | -24 29 13 | 0.61 | 072 | 2002 | AO det | 12 | 0.34 | K _s | 12 |
| GJ0164 | 2 | AB | 04 12 58.8 | +52 36 42 | 0.07 | orb | 2004 | astdet | 83 | 1.72 | K _s | 77 |
| GJ0165 | 2 | AB | 04 13 08.2 | +50 31 21 | 1.219 | 155 | 1983 | spkdet | 80 | 0.0 | V* | 46 |
| GJ2033 | 2 | AB | 04 16 41.6 | -12 33 23 | 2.4 | 089 | 1991 | visdet | 72 | 1.1 | H _p | 72 |
| LHS0189 | 2 | AB | 04 25 38.0 | -06 52 37 | 2.81 | 281 | 2006 | visdet | 61 | 2.1 | V | 61 |
| 2MA0429-3123 | 2 | AB | 04 29 18.4 | -31 23 56 | 0.531 | 299 | 2003 | AO det | 100 | 1.2 | J | 99 |
| LP715-051 | 2 | AB | 04 31 09.0 | -13 30 52 | 0.20 | 167 | 1991 | astdet | 72 | 1.2 | H _p | 72 |
| LP775-031 | 2 | AB | 04 35 16.1 | -16 06 57 | <2 | ... | ... | SB2 | 88 | ... | ... | ... |
| L591-042 | 2 | AB | 04 36 40.9 | -27 21 18 | 49.58 | 196 | 2001 | visdet | 60 | 0.31 | V | 60 |
| LTT11472 | 2 | AB | 04 38 12.6 | +28 13 00 | 0.54 | 299 | 2002 | AO det | 12 | 0.42 | K _s | 12 |
| HIP021765 | 2 | AB | 04 40 29.2 | -09 11 46 | 0.877 | 293 | 1983 | spkdet | 36 | 0.1 | V | 3 |
| 2MA0446-1116 | 2 | AB | 04 46 51.8 | -11 16 47 | 1.59 | 279 | 2010 | astdet | 98 | 1.93 | I | 98 |
| GJ2036 | 2 | AB | 04 53 31.2 | -55 51 37 | 7.74 | 315 | 2000 | visdet | 100 | 1.08 | V | 1 |
| LP476-207 | 3 | AC-B | 05 01 58.8 | +09 58 59 | 0.97 | 180 | 1997 | SB2 | 26 | 0.9 | K | 26 |
| LP476-207 | 0 | AC | 05 01 58.8 | +09 58 59 | 0.012 | orb | 1998 | SB2 | 26 | ... | ... | ... |
| GJ0184 | 2 | AB | 05 03 23.9 | +53 07 42 | 5.58 | 279 | 2014 | AO det | 106 | 4.81 | K _s | 105 |
| BD-21 01074 | 0 | BC | 05 06 49.5 | -21 35 04 | 0.76 | 148 | 2008 | HSTFGS | 92 | 1.0 | V | 92 |
| BD-21 01074 | 3 | A-BC | 05 06 49.5 | -21 35 08 | 8.22 | 311 | 2002 | visdet | 60 | 0.72 | V | 60 |
| LP015-315 | 2 | AB | 05 08 18.0 | +75 38 15 | 0.191 | 212 | 211 | lkydet | 59 | 1.00 | i' | 59 |
| GJ0190 | 2 | AB | 05 08 35.0 | -18 10 19 | 0.1232 | 039 | 2010 | spkdet | 42 | 0.20 | I | 42 |
| L1672-014 | 2 | AB | 05 10 19.3 | +48 50 05 | 1.97 | 118 | 1987 | astdet | 44 | 0.08 | V* | 47 |
| LHS1749 | 2 | AB | 05 16 00.0 | -72 14 12 | 2.86 | 139 | 2001 | visdet | 60 | 2.98 | V | 60 |
| L449-001 | 2 | AB | 05 17 23.6 | -35 21 45 | 0.047 | 333 | 2008 | HSTFGS | 92 | 1.01 | V | 92 |
| LP717-036 | 2 | AB | 05 25 41.6 | -09 09 12 | 0.616 | 059 | 2008 | lkydet | 9 | 0.53 | i' | 9 |
| GJ1080 | 2 | AB | 05 28 14.6 | +02 58 14 | <2 | ... | 2007 | SB2 | 62 | 0 | V | 62 |
| GJ2043 | 2 | AB | 05 29 27.0 | +15 34 38 | 14.96 | 298 | 1999 | visdet | 100 | 4.5 | V | 1 |
| GJ0206 | 2 | AB | 05 32 14.6 | +09 49 14 | <0.017 | orb | 2009 | SB2 | 97 | ... | ... | ... |
| GJ1081 | 2 | AB | 05 33 19.1 | +44 48 59 | 0.04 | ... | ... | astdet | 64 | 1.67 | V | 49 |

| | | | | | | | | | | | | |
|--------------|---|--------|------------|-----------|--------|-----|------|--------|-----|------|----------------|-----|
| SCR0533-4257 | 2 | AB | 05 33 28.0 | -42 57 20 | <2 | ... | ... | HSTFGS | 85 | ... | ... | ... |
| GJ1083 | 2 | AB | 05 40 25.7 | +24 48 08 | 0.472 | 337 | 2012 | lkydet | 59 | 0.98 | i' | 59 |
| G192-011 | 2 | AB | 05 59 37.7 | +58 35 34 | 161.32 | 120 | 1999 | visdet | 100 | 3.32 | V | 108 |
| LHS0214 | 2 | AB | 06 00 49.0 | +68 09 24 | 56.19 | 197 | 1999 | visdet | 100 | 0.38 | V | 110 |
| CD-35 02722 | 2 | AB | 06 09 19.2 | -35 49 30 | 3.137 | 243 | 2010 | AO det | 105 | 5.77 | J | 104 |
| GJ0229 | 2 | AB | 06 10 34.6 | -21 51 52 | 7.627 | 164 | 1997 | HSTNIC | 29 | 9.63 | 110 | 29 |
| GJ0228 | 2 | AB | 06 10 54.8 | +10 19 05 | 2.6 | 016 | 1980 | astdet | 48 | 1.5 | V* | 48 |
| GJ0234 | 2 | AB | 06 29 23.4 | -02 48 50 | 1.359 | 037 | 2004 | spkdet | 4 | 3.08 | V | 8 |
| SCR0630-7643 | 2 | AB | 06 30 46.0 | -76 43 09 | 1.0 | 034 | 2005 | visdet | 111 | 0.2 | V | 50 |
| L032-009 | 2 | AB | 06 33 43.3 | -75 37 48 | 22.40 | 036 | 1999 | visdet | 100 | 1.00 | V | 1 |
| G108-021 | 2 | AB | 06 42 09.5 | +03 35 41 | 50.13 | 040 | 2000 | visdet | 100 | 1.27 | V | 108 |
| LHS1864 | 2 | AB | 06 43 50.9 | +51 07 03 | 1.765 | 271 | 2011 | AO det | 17 | 0.67 | K _s | 17 |
| GJ2050 | 2 | AB | 06 44 45.6 | +71 53 15 | 0.633 | 068 | 2007 | spkdet | 52 | 3.40 | 698 | 52 |
| LHS0221 | 2 | AB | 06 54 04.2 | +60 52 18 | 0.284 | 290 | 2007 | spkdet | 52 | 1.61 | V | 8 |
| GJ0257 | 2 | AB | 06 57 46.6 | -44 17 28 | 0.560 | 280 | 1998 | HSTNIC | 29 | 0.00 | 222 | 29 |
| SCR0702-6102 | 2 | AB | 07 02 49.7 | -61 02 52 | <2 | ... | 2015 | astdet | 1 | ... | ... | ... |
| LHS0224 | 2 | AB | 07 04 01.1 | +52 41 12 | 0.16 | 330 | 2003 | HSTNIC | 39 | 0.29 | V | 39 |
| GJ0263 | 2 | AB | 07 04 17.7 | -10 30 31 | 0.110 | 287 | 1999 | AO det | 12 | 0.46 | H | 12 |
| LHS0225 | 2 | AB | 07 04 45.0 | -38 36 07 | 2.45 | 270 | 2001 | visdet | 60 | 0.1 | V | 60 |
| GJ0268 | 2 | AB | 07 10 01.8 | +38 31 46 | 0.011 | orb | 1998 | SB2 | 26 | ... | ... | ... |
| LHS1901 | 2 | AB | 07 11 11.0 | +43 29 58 | 0.174 | 220 | 2005 | AO det | 81 | 0.14 | H | 81 |
| GJ0268.3 | 2 | AB | 07 16 19.7 | +27 08 33 | 0.054 | 124 | 2000 | AO det | 12 | 0.57 | H | 12 |
| SCR0723-8015 | 2 | AB | 07 24 00.8 | -80 15 22 | <2 | ... | 2015 | astdet | 1 | ... | ... | ... |
| GJ0273 | 2 | AB | 07 27 24.5 | +05 13 32 | 0.17 | 327 | 2003 | AO det | 106 | 1.07 | H | 105 |
| GJ2060 | 0 | AB-C | 07 28 51.2 | -30 15 53 | 67.2 | 180 | 2005 | visdet | 2 | 4.06 | V | 1 |
| GJ2060 | 3 | AB | 07 28 51.3 | -30 14 48 | 0.485 | 170 | 2008 | lkydet | 9 | 1.50 | i' | 9 |
| GJ0277 | 3 | AC-B | 07 31 57.7 | +36 13 09 | 37.87 | 353 | 1998 | visdet | 100 | 1.2 | V | 109 |
| GJ0277 | 0 | AC | 07 31 57.7 | +36 13 09 | 0.684 | 195 | 2000 | AO det | 12 | 2.02 | K | 12 |
| LTT17993 | 2 | AB | 07 36 25.0 | +07 04 43 | 0.7 | 300 | 1996 | spkdet | 50 | 0.0 | K | 49 |
| 2MA0746+2000 | 2 | AB | 07 46 43.0 | +20 00 32 | 0.22 | 015 | 2000 | HSTWPC | 86 | 0.62 | 814 | 86 |
| LHS1955 | 2 | AB | 07 54 54.0 | -29 20 56 | 0.8081 | 104 | 2001 | astdet | 91 | 0.5 | R | 91 |
| LHS1976 | 2 | AB | 08 03 19.5 | +52 50 38 | 0.1609 | 125 | 2010 | spkdet | 53 | 0.32 | 692 | 53 |
| LHS2010 | 2 | AB | 08 27 11.0 | -44 59 21 | 0.914 | 279 | 2008 | lkydet | 63 | 1.74 | I | 63 |
| GJ0308 | 2 | AB | 08 28 22.1 | +35 00 59 | 0.56 | 231 | 2008 | lkydet | 63 | 0.11 | I | 63 |
| GJ2069 | 0 | BD | 08 31 37.4 | +19 23 50 | 0.549 | 219 | 2000 | AO det | 12 | 0.52 | K | 12 |
| GJ2069 | 0 | AC | 08 31 37.5 | +19 23 39 | 0.003 | orb | 1998 | SB2 | 26 | ... | ... | ... |
| GJ2069 | 5 | ACE-BD | 08 31 37.5 | +19 23 39 | 10.17 | 348 | 1999 | visdet | 100 | 1.44 | V | 1 |
| GJ2069 | 0 | AC-E | 08 31 37.5 | +19 23 39 | 0.682 | 158 | 2000 | AO det | 12 | 3.20 | K | 12 |
| SCR0838-5855 | 2 | AB | 08 38 02.3 | -58 55 57 | <2 | ... | 2015 | astdet | 1 | ... | ... | ... |
| GJ2072 | 2 | AB | 08 44 23.1 | -44 28 21 | 0.37 | 280 | 1991 | astdet | 72 | 0.90 | H _p | 72 |
| GJ0326 | 2 | AB | 08 54 05.2 | -13 07 38 | 0.9 | 170 | 1985 | astdet | 48 | 0.0 | V* | 31 |
| LHS2071 | 2 | AB | 08 55 20.0 | -23 52 15 | 0.0212 | ... | 2009 | astdet | 91 | ... | ... | ... |
| GJ0330 | 2 | AB | 08 57 04.6 | +11 38 49 | 0.799 | 233 | 1991 | astdet | 72 | 1.82 | H _p | 72 |
| GJ1116 | 2 | AB | 08 58 12.2 | +19 45 47 | 1.498 | 103 | 1998 | HSTNIC | 29 | 0.6 | i' | 69 |
| LTT12352 | 3 | AC-B | 08 58 56.0 | +08 28 26 | 0.62 | 095 | 1997 | AO det | 26 | 0.5 | K | 26 |
| LTT12352 | 0 | AC | 08 58 56.0 | +08 28 26 | 0.007 | orb | 1998 | SB2 | 26 | ... | ... | ... |
| GJ0333.2 | 2 | AB | 09 00 48.5 | +05 14 41 | 29.42 | 114 | 2000 | visdet | 100 | 0.30 | V | 10 |
| GJ0338 | 2 | AB | 09 14 22.7 | +52 41 11 | 17.05 | 092 | 1999 | visdet | 100 | 0.09 | V _T | 51 |
| LHS167 | 2 | AB | 09 15 36.4 | -10 35 47 | 0.123 | 176 | 2012 | lkydet | 59 | 1.43 | i' | 59 |
| GJ1122 | 2 | AB | 09 19 18.5 | +38 31 19 | 7.49 | 188 | 2000 | visdet | 100 | 0.15 | V | 108 |
| GJ0347 | 2 | AB | 09 28 53.3 | -07 22 15 | 35.60 | 084 | 1999 | visdet | 100 | 2.94 | V | 10 |
| GJ0352 | 2 | AB | 09 31 19.4 | -13 29 18 | 0.6691 | 306 | 2010 | spkdet | 42 | 0.3 | I | 42 |
| GJ0360 | 2 | AB | 09 42 34.8 | +70 02 02 | 88.68 | 077 | 1999 | visdet | 100 | 0.66 | V | 110 |
| LP462-119 | 2 | AB | 09 45 40.0 | -39 02 26 | 0.51 | 029 | 1991 | astdet | 72 | 0.54 | H _p | 72 |
| GJ0372 | 2 | AB | 09 53 11.7 | -03 41 24 | 0.02 | orb | 1995 | radvel | 40 | 0.95 | V | 40 |
| GJ0375 | 2 | AB | 09 58 34.3 | -46 25 30 | 0.002 | orb | 2007 | SB2 | 28 | 0 | ... | 28 |
| LHS166 | 2 | AB | 10 04 38.8 | -33 35 11 | 12.12 | 142 | 1999 | visdet | 100 | 3.90 | K _s | 100 |
| GJ0381 | 2 | AB | 10 12 04.7 | -02 41 05 | 0.18 | ... | 1997 | AO det | 26 | 0.95 | K | 26 |
| TWA022 | 2 | AB | 10 17 27.0 | -53 54 27 | 0.1 | orb | 2007 | AO det | 16 | 0.46 | K _s | 16 |
| L392-039 | 2 | AB | 10 19 51.0 | -41 48 48 | 30.91 | 120 | 2001 | visdet | 60 | 1.53 | V | 60 |
| GJ0389 | 2 | AB | 10 22 24.6 | -60 10 37 | 8.90 | 019 | 2000 | visdet | 100 | 1.91 | V | 10 |
| 2MA1036+1521 | 0 | BC | 10 36 44.8 | +15 21 39 | 0.189 | ... | 2006 | AO det | 23 | ... | ... | ... |
| 2MA1036+1521 | 3 | A-BC | 10 36 44.8 | +15 21 39 | 0.96 | 160 | 2010 | astdet | 98 | 1.7 | I | 98 |
| LP465-084 | 2 | AB | 10 39 44.3 | -37 55 13 | 1.32 | 139 | 1991 | astdet | 72 | 1.63 | H _p | 72 |
| GJ1135 | 2 | AB | 10 41 09.3 | -36 53 43 | 1.08 | 166 | 1991 | astdet | 72 | 2.65 | H _p | 72 |
| GJ1136 | 2 | AB | 10 41 51.8 | -36 38 00 | 17.11 | 303 | 1997 | visdet | 72 | 1.44 | V | 1 |
| LP848-050 | 2 | AB | 10 42 41.3 | -24 16 04 | <2 | ... | 2015 | astdet | 1 | ... | ... | ... |
| WT1827 | 2 | AB | 10 43 02.0 | -09 12 40 | 0.5 | ... | ... | spkdet | 1 | ... | ... | ... |
| GJ1138 | 2 | AB | 10 49 45.6 | +35 32 50 | 0.303 | 056 | 2000 | AO det | 12 | 1.89 | K _s | 12 |
| GJ1141 | 2 | AB | 11 02 21.0 | +16 30 45 | 18.69 | 282 | 2001 | visdet | 100 | 0.13 | V | 108 |
| GJ0412 | 2 | AB | 11 05 28.5 | +43 31 36 | 31.4 | 126 | 2000 | visdet | 93 | 5.67 | V | 10 |
| GJ0414.1 | 2 | AB | 11 11 19.4 | +43 25 02 | 3.76 | 078 | 1976 | visdet | 41 | 0.35 | V | 41 |
| GJ0424 | 2 | AB | 11 20 04.8 | +65 50 47 | 0.132 | 334 | 2004 | spkdet | 30 | 3.70 | 800 | 30 |
| LHS2397a | 2 | AB | 11 21 47.8 | -13 13 08 | 0.207 | 152 | 2002 | AO det | 35 | 4.42 | I | 35 |
| LHS2405 | 2 | AB | 11 25 28.2 | +78 15 44 | 72.95 | 328 | 1999 | visdet | 100 | 0.48 | V | 110 |
| GJ0433 | 2 | AB | 11 35 26.9 | -32 32 23 | 0.0043 | orb | 1997 | astorb | 72 | ... | ... | ... |
| LP793-033 | 2 | AB | 11 45 34.4 | -20 21 12 | 15.40 | 061 | 1999 | visdet | 100 | 6.16 | V | 1 |
| GJ0455 | 2 | AB | 12 02 19.5 | +28 35 33 | 0.003 | orb | 1996 | SB2 | 37 | 0.0 | V | 37 |
| L758-108 | 2 | AB | 12 11 11.7 | -19 57 38 | 85.1 | 121 | 1998 | visdet | 100 | 0.94 | V | 1 |
| GJ0458 | 2 | AB | 12 12 20.8 | +54 29 08 | 14.66 | 010 | 1999 | visdet | 100 | 3.54 | V | 109 |
| GJ1154 | 2 | AB | 12 14 16.6 | +00 37 26 | <2 | ... | ... | SB2 | 15 | ... | ... | ... |
| GJ1155 | 2 | AB | 12 16 51.8 | +02 58 02 | 2.736 | 178 | 2006 | spkdet | 78 | 2.00 | V* | 43 |
| LTT17123 | 2 | AB | 12 23 33.1 | +67 11 17 | 0.59 | 035 | 2007 | astdet | 72 | 0.26 | H _p | 72 |
| GJ0469 | 2 | AB | 12 28 57.5 | +08 25 31 | 0.19 | 016 | 2009 | spkdet | 54 | 1.59 | V | 49 |
| LHS2567 | 2 | AB | 12 29 54.2 | -05 27 24 | 8.062 | 061 | 2009 | visdet | 91 | 1.13 | V | 1 |
| SCR1230-3411 | 2 | AB | 12 30 01.8 | -34 11 24 | <2 | ... | 2015 | astdet | 1 | ... | ... | ... |
| GJ0473 | 2 | AB | 12 33 16.3 | +09 01 16 | 0.18 | 197 | 1991 | astdet | 46 | 0.38 | V | 8 |

| | | | | | | | | | | | | |
|--------------|---|-------|------------|-----------|---------|-----|------|--------|-----|------|----------------|-----|
| GJ0477 | 2 | AB | 12 35 58.4 | -45 56 20 | <2 | ... | 2009 | radvel | 113 | ... | ... | ... |
| GJ0487 | 3 | AC-B | 12 49 02.7 | +66 06 36 | 0.23 | 240 | 1997 | SB3 | 26 | 0.7 | K | 26 |
| GJ0487 | 0 | AC | 12 49 02.7 | +66 06 36 | 0.022 | orb | 1998 | SB3 | 26 | ... | ... | ... |
| DEN1250-2121 | 2 | AB | 12 50 52.2 | -21 21 09 | <2 | ... | 2015 | astdet | 1 | ... | ... | ... |
| GJ0490 | 0 | BC | 12 57 39.3 | +35 13 19 | 0.171 | 310 | 2011 | AO det | 17 | 0.06 | K _s | 17 |
| GJ0490 | 4 | AD-BC | 12 57 40.2 | +35 13 30 | 16.11 | 226 | 1998 | visdet | 100 | 2.52 | V | 109 |
| GJ0490 | 0 | AD | 12 57 40.2 | +35 13 30 | 0.106 | 310 | 2011 | AO det | 17 | 1.91 | K _s | 17 |
| GJ0494 | 0 | AB-C | 13 00 41.7 | +12 21 15 | 103 | orb | 2000 | astdet | 95 | 11.3 | K | 95 |
| GJ0494 | 3 | AB | 13 00 46.5 | +12 22 32 | 0.475 | 082 | 2000 | AO det | 12 | 4.41 | K _s | 12 |
| G164-042 | 3 | AB | 13 05 29.8 | +37 08 10 | 0.468 | orb | 2009 | spkdet | 54 | 0.81 | 562 | 54 |
| G164-049 | 0 | AB-C | 13 11 24.2 | +37 24 37 | 4342.8 | ... | ... | visdet | 74 | ... | ... | ... |
| NLTT33370 | 2 | AB | 13 14 20.0 | +13 20 01 | 0.13 | 046 | 2005 | spkdet | 68 | 0.93 | i' | 68 |
| GJ0507 | 3 | AC-B | 13 19 33.5 | +35 06 36 | 17.73 | 130 | 1999 | visdet | 100 | 2.64 | V | 1 |
| GJ0507 | 0 | AC | 13 19 33.5 | +35 06 36 | 0.073 | 183 | 2006 | spkdet | 5 | ... | ... | ... |
| L977-016 | 2 | AB | 13 20 24.9 | -01 39 27 | 199.73 | 248 | 1999 | visorb | 100 | 1.87 | V | 1 |
| LHS2739 | 2 | AB | 13 27 19.7 | -31 10 39 | 0.544 | 334 | 2005 | AO det | 23 | 0.17 | K _s | 23 |
| GJ0512 | 2 | AB | 13 28 21.0 | -02 21 37 | 8.48 | 052 | 1999 | visdet | 100 | 2.27 | V | 10 |
| LP323-158 | 2 | AB | 13 31 46.6 | +29 16 36 | 0.174 | 253 | 2000 | AO det | 12 | 0.16 | K _s | 12 |
| GJ0516 | 2 | AB | 13 32 44.6 | +16 48 39 | 2.33 | 051 | 2012 | spkdet | 22 | 0.27 | V | 22 |
| GJ0521 | 2 | AB | 13 39 24.1 | +46 11 11 | 0.447 | 016 | 2008 | lkydet | 63 | ... | ... | ... |
| LHS2789 | 2 | AB | 13 44 27.6 | +51 41 04 | 1.05 | 051 | 1968 | visorb | 103 | 0.40 | V | 103 |
| GJ0537 | 2 | AB | 14 02 32.2 | +46 20 02 | 2.96 | orb | 1999 | visorb | 100 | 0.22 | V _T | 100 |
| WT0460 | 2 | AB | 14 11 59.0 | -41 32 21 | 0.511 | 213 | 2005 | AO det | 81 | 2.47 | H | 81 |
| LHS2875 | 3 | AB | 14 12 11.0 | -00 35 04 | 0.615 | 172 | 2010 | spkdet | 107 | 0.50 | V | 106 |
| LHS2876 | 0 | AB-C | 14 12 12.1 | -00 35 16 | 20.9 | 125 | 2000 | visdet | 20 | 3.54 | K _s | 100 |
| GJ1183 | 2 | AB | 14 27 56.0 | -00 22 36 | 12.92 | 022 | 2000 | visdet | 100 | 0.07 | V | 108 |
| LTT14363 | 2 | AB | 14 42 21.5 | +66 03 20 | 3.041 | 114 | 1998 | HSTNIC | 39 | 4.9 | z | 39 |
| GJ0563.2 | 2 | AB | 14 49 32.6 | -26 06 20 | 26.79 | 244 | 1998 | visdet | 100 | 0.39 | V | 10 |
| GJ0568 | 2 | AB | 14 53 51.4 | +23 33 20 | 0.9591 | 092 | 2014 | spkdet | 55 | 1.36 | 692 | 55 |
| GJ0569 | 3 | A-BC | 14 54 29.2 | +16 06 03 | 5.0 | 025 | 1999 | AO det | 75 | 6.70 | I | 33 |
| GJ0569 | 0 | BC | 14 54 29.2 | +16 06 03 | 0.06 | 268 | 2010 | AO det | 33 | 0.62 | I | 33 |
| LHS3001 | 2 | AB | 14 56 27.2 | +17 55 00 | 12.7 | 046 | 2001 | visdet | 60 | 2.87 | V | 1 |
| GJ0572 | 2 | AB | 15 00 55.5 | +45 25 34 | 0.425 | 342 | 1991 | astdet | 72 | 3.03 | I | 63 |
| LHS3056 | 2 | AB | 15 19 11.8 | -12 45 06 | <2 | ... | ... | SB | 15 | ... | ... | ... |
| LHS3075 | 2 | AB | 15 29 46.7 | +42 52 13 | 0.570 | 009 | 2012 | lkydet | 59 | 1.56 | i' | 59 |
| GJ0589 | 2 | AB | 15 35 20.5 | +17 42 47 | 17.74 | 351 | 1999 | visdet | 100 | 2.60 | V | 10 |
| GJ1194 | 2 | AB | 15 40 03.5 | +43 29 40 | 4.75 | 151 | 1999 | visdet | 100 | ... | ... | ... |
| GJ0597 | 2 | AB | 15 41 16.5 | +75 59 34 | 0.0745 | orb | 1990 | astdet | 47 | 1: | V* | 47 |
| GJ0595 | 2 | AB | 15 42 06.5 | -19 28 18 | 0.02 | orb | 2000 | radorb | 82 | ... | ... | ... |
| L408-123 | 2 | AB | 15 45 37.0 | -43 31 42 | <2 | ... | 2015 | astdet | 1 | ... | ... | ... |
| SCR1546-5534 | 2 | AB | 15 46 41.8 | -55 34 47 | <2 | ... | 2015 | astdet | 1 | ... | ... | ... |
| LHS3117 | 2 | AB | 15 47 24.6 | -10 53 47 | <2 | ... | 2008 | radvel | 113 | ... | ... | ... |
| LHS3122 | 2 | AB | 15 49 32.9 | +34 49 36 | 0.209 | 085 | 2011 | AO det | 17 | 1.46 | H | 17 |
| LHS3129 | 2 | AB | 15 53 08.7 | +34 44 39 | 26.54 | 172 | 2000 | visdet | 100 | 1.41 | V | 110 |
| GJ0618 | 2 | AB | 16 20 03.5 | -37 31 44 | 5.574 | 227 | 1998 | HSTNIC | 29 | 3.55 | V | 10 |
| GJ0623 | 2 | AB | 16 24 09.3 | +48 21 10 | 0.238 | orb | 2006 | astorb | 76 | 5.28 | V | 8 |
| GJ2121 | 2 | AB | 16 30 13.0 | -14 39 49 | 0.431 | 218 | 2008 | lkydet | 63 | ... | ... | ... |
| SCR1630-3633 | 2 | AB | 16 30 27.2 | -36 33 56 | 2.0 | 247 | 2015 | visdet | 1 | ... | ... | ... |
| GJ2122 | 2 | AB | 16 45 17.0 | -38 48 30 | 0.6 | ... | 2015 | astdet | 1 | ... | ... | ... |
| GJ0643 | 0 | ABD-C | 16 55 25.0 | -08 19 21 | 72.18 | 313 | 1999 | visdet | 100 | 2.77 | V | 10 |
| GJ0644 | 0 | BD | 16 55 28.0 | -08 20 11 | <0.258 | ... | ... | SB3 | 79 | ... | ... | ... |
| GJ0644 | 5 | A-BD | 16 55 28.0 | -08 20 11 | 0.258 | 151 | 1998 | HSTNIC | 29 | 0.43 | 222 | 29 |
| GJ0644 | 0 | ABD-E | 16 55 35.0 | -08 23 40 | 220.81 | 155 | 1999 | visdet | 100 | 7.77 | V | 11 |
| G139-003 | 2 | AB | 16 58 25.0 | +13 58 06 | 0.822 | 294 | 2008 | spkdet | 52 | 0.48 | 754 | 52 |
| GJ1210 | 2 | AB | 17 07 40.8 | +07 22 07 | 0.3807 | 066 | 2010 | spkdet | 53 | 0.92 | 562 | 53 |
| UPM1710-5300 | 2 | AB | 17 10 44.3 | -53 00 25 | 1.2 | ... | 2014 | visdet | 1 | ... | ... | ... |
| GJ0660 | 2 | AB | 17 11 52.2 | -01 51 06 | 0.891 | 009 | 2006 | spkdet | 5 | 1.3 | I | 63 |
| GJ0661 | 2 | AB | 17 12 07.9 | +45 39 57 | 0.647 | 188 | 2002 | HSTNIC | 29 | 0.28 | 222 | 29 |
| GJ0660.1 | 2 | AB | 17 12 51.2 | -05 07 31 | 6.08 | 353 | 2009 | visdet | 94 | 4 | J | 94 |
| GJ1212 | 2 | AB | 17 13 40.4 | -08 26 14 | <2 | ... | ... | SB | 89 | ... | ... | ... |
| GJ1215 | 0 | BC | 17 17 42.9 | +11 39 45 | <2 | ... | 2015 | astdet | 1 | ... | ... | ... |
| GJ1215 | 3 | AB | 17 17 42.9 | +11 39 45 | <2 | ... | 2015 | astdet | 1 | ... | ... | ... |
| HIP084652 | 2 | AB | 17 18 21.7 | -01 46 53 | 0.367 | 148 | 2006 | spkdet | 5 | ... | ... | ... |
| GJ0669 | 2 | AB | 17 19 54.2 | +26 30 03 | 16.64 | 269 | 1999 | visdet | 100 | 1.57 | V | 108 |
| GJ0682 | 2 | AB | 17 37 03.6 | -44 19 09 | 0.17 | 190 | 2005 | AO det | 106 | 1.01 | H | 105 |
| L1422-016 | 3 | A-BC | 17 39 30.7 | +27 45 44 | 56.60 | 021 | 2000 | visdet | 100 | 1.60 | V | 108 |
| L1422-015 | 0 | BC | 17 39 32.2 | +27 46 37 | 0.299 | 318 | 2008 | lkydet | 63 | 1.18 | I | 63 |
| G140-009 | 2 | AB | 17 43 00.8 | +05 47 21 | 0.346 | 131 | 2010 | spkdet | 53 | 1.71 | 692 | 53 |
| GJ0694.2 | 2 | AB | 17 45 33.5 | +46 51 19 | 0.720 | 058 | 2008 | lkydet | 63 | 3.01 | I | 63 |
| GJ2130 | 3 | A-BC | 17 46 12.7 | -32 06 09 | 21.23 | 088 | 2001 | visdet | 60 | 1.00 | V | 50 |
| GJ2130 | 0 | BC | 17 46 14.4 | -32 06 08 | <2 | ... | ... | SB2 | 85 | ... | ... | ... |
| LHS3343 | 2 | AB | 17 57 50.9 | +46 35 19 | 196.987 | 131 | 1999 | visdet | 100 | 8.46 | K _s | 100 |
| G154-043 | 2 | AB | 18 03 36.0 | -18 58 50 | <2 | ... | 2015 | astdet | 1 | ... | ... | ... |
| G182-037 | 2 | AB | 18 04 17.5 | +35 57 25 | 0.297 | 339 | 2008 | lkydet | 63 | ... | ... | ... |
| LHS0462 | 2 | AB | 18 18 02.7 | +38 45 19 | 9.74 | 280 | 1998 | visdet | 100 | 1.66 | V | 110 |
| GJ0720 | 2 | AB | 18 35 18.3 | +45 44 38 | 112.10 | 056 | 1998 | visdet | 100 | 3.16 | V | 110 |
| GJ2138 | 2 | AB | 18 38 44.7 | -14 29 26 | 0.107 | 358 | 1991 | astdet | 72 | 0.05 | H _p | 72 |
| GJ1230 | 0 | AC | 18 41 09.4 | +24 47 15 | 0.005 | ... | ... | SB2 | 26 | ... | ... | ... |
| GJ1230 | 3 | AC-B | 18 41 09.4 | +24 47 15 | 5.20 | 006 | 2000 | visdet | 100 | 2.56 | V | 1 |
| GJ0725 | 2 | AB | 18 42 46.6 | +59 37 49 | 12.62 | 172 | 2000 | visdet | 100 | 0.79 | V | 110 |
| LTT07419 | 2 | AB | 18 43 12.5 | -33 22 46 | 14.90 | 354 | 2001 | visdet | 60 | 5.99 | V | 1 |
| SCR1845-6357 | 2 | AB | 18 45 02.0 | -63 57 47 | 1.17 | 170 | 2005 | AO det | 13 | 4.19 | H | 13 |
| LTT07434 | 2 | AB | 18 45 57.5 | -28 55 53 | <2 | ... | ... | SB2 | 15 | ... | ... | ... |
| GJ0735 | 2 | AB | 18 55 27.4 | +08 24 09 | 0.002 | orb | 1988 | SB2 | 32 | 0.16 | V | 32 |
| GJ0745 | 2 | AB | 19 07 05.5 | +20 53 17 | 114.14 | 110 | 2000 | visdet | 100 | 0.02 | V | 110 |
| GJ0747 | 2 | AB | 19 07 43.0 | +32 32 41 | 0.234 | 087 | 2002 | HSTNIC | 29 | 0.03 | 222 | 29 |
| GJ0748 | 2 | AB | 19 12 14.6 | +02 53 11 | 0.149 | orb | 1997 | HSTFGS | 7 | 1.83 | V | 7 |

| | | | | | | | | | | | | |
|--------------|---|-------|------------|-------------|--------|-----|------|--------|-----|------|----------------|-----|
| LHS3445 | 2 | AB | 19 14 39.1 | +19 19 03 | 40.70 | 179 | 1997 | visdet | 100 | 1.69 | V | 110 |
| GJ0752 | 2 | AB | 19 16 55.2 | +05 10 08 | 75.21 | 152 | 2000 | visdet | 100 | 8.10 | V | 10 |
| LHS5348 | 2 | AB | 19 27 52.6 | -28 11 15 | 1 | ... | 2015 | visdet | 1 | ... | ... | ... |
| LP869-026 | 2 | AB | 19 44 53.7 | -23 37 59 | 0.828 | 353 | 2005 | AO det | 81 | 0.08 | K' | 81 |
| GJ0766 | 2 | AB | 19 45 45.5 | +27 07 32 | 1.10 | orb | 1990 | astdet | 45 | 0.5 | V* | 45 |
| LTT15769 | 2 | AB | 19 45 49.7 | +32 23 13 | 12.765 | 339 | 1991 | astdet | 72 | 2.26 | H _p | 72 |
| GJ0767 | 2 | AB | 19 46 24.3 | +32 00 57 | 5.1 | 134 | 1998 | visdet | 100 | 0.77 | V _T | 51 |
| LHS3489 | 2 | AB | 19 50 04.4 | +32 35 22 | 0.222 | 345 | 2012 | lkydet | 59 | 1.38 | i' | 59 |
| 2MA1951-3510 | 2 | AB | 19 51 35.8 | -35 10 37 | <2 | ... | 2015 | visdet | 1 | ... | ... | ... |
| GJ1245 | 3 | AC-B | 19 53 54.4 | +44 24 54 | 6.964 | 083 | 1998 | HSTNIC | 29 | 0.60 | V | 110 |
| GJ1245 | 0 | AC | 19 53 54.5 | +44 24 53 | 0.594 | 270 | 1998 | HSTNIC | 29 | 3.29 | V | 49 |
| GJ0774 | 2 | AB | 20 04 02.8 | -65 36 48 | 17.53 | 280 | 2000 | visdet | 100 | 1.48 | V | 10 |
| GJ0781.1 | 2 | AB | 20 07 44.9 | -31 45 14 | 41.95 | 291 | 1999 | visdet | 100 | 0.29 | V | 10 |
| GJ1250 | 2 | AB | 20 08 17.9 | +33 18 13 | <2 | ... | 2015 | spkdet | 1 | ... | ... | ... |
| GJ0791.2 | 2 | AB | 20 29 48.3 | +09 41 20 | 0.109 | orb | 1997 | HSTFGS | 6 | 3.27 | V | 6 |
| GJ0792 | 2 | AB | 20 31 25.6 | +38 33 44 | 0.118 | 252 | 2012 | lkydet | 59 | 1.49 | i' | 59 |
| GJ0802 | 3 | AC-B | 20 43 19.3 | +55 20 53 | 0.085 | 020 | 2007 | astdet | 56 | 4.85 | K | 56 |
| GJ0802 | 0 | AC | 20 43 19.3 | +55 20 53 * | <2 | ... | 2007 | SB2 | 56 | ... | ... | ... |
| GJ0810 | 3 | AC-B | 20 55 37.0 | -14 02 08 | 107.12 | 185 | 2001 | visdet | 60 | 2.13 | V | 60 |
| GJ0810 | 0 | AC | 20 55 37.0 | -14 02 08 | 0.044 | 050 | 2009 | AO det | 85 | ... | ... | ... |
| GJ0815 | 0 | AC | 21 00 05.3 | +40 04 13 | 0.001 | orb | ... | SB2O | 32 | ... | ... | ... |
| GJ0815 | 3 | AC-B | 21 00 05.3 | +40 04 13 | 0.685 | 039 | 2012 | lkydet | 59 | 1.86 | i' | 59 |
| USN2101+0307 | 2 | AB | 21 01 04.8 | +03 07 04 | <2 | ... | 2015 | astdet | 1 | ... | ... | ... |
| LHS0064 | 2 | AB | 21 07 46.5 | +59 41 13 | <2 | ... | 2000 | SB | 25 | ... | ... | ... |
| L1433-004 | 0 | AC-B | 21 16 03.8 | +29 51 46 | 26.215 | 259 | 1998 | visdet | 100 | 0.81 | V | 108 |
| LTT16240 | 3 | AC | 21 16 05.8 | +29 51 51 | 0.049 | 048 | 2011 | AO det | 17 | 0.34 | H | 17 |
| GJ0829 | 2 | AB | 21 29 36.8 | +17 38 35 | 0.025 | orb | 1998 | SB2 | 26 | ... | ... | ... |
| GJ0831 | 2 | AB | 21 31 18.6 | -09 47 26 | 0.504 | orb | 2000 | SB2 | 96 | 2.10 | V | 49 |
| LHS3686 | 2 | AB | 21 33 50.2 | +01 46 15 | 5.14 | 002 | 1998 | visdet | 100 | 0.53 | V | 1 |
| GJ0835 | 2 | AB | 21 38 00.3 | +27 43 25 | 0.17 | 109 | 1991 | astdet | 72 | 3.35 | I | 63 |
| LTT16329 | 2 | AB | 21 39 54.3 | +27 36 43 | 0.184 | 338 | 2008 | spkdet | 52 | 1.66 | 698 | 52 |
| GJ1263 | 2 | AB | 21 46 43.0 | -00 10 09 | 32 | 253 | 2009 | visdet | 18 | 9.8 | J | 18 |
| LHS3738 | 0 | A-BC | 21 58 49.0 | -32 26 25 | 113.1 | 354 | 2009 | visdet | 91 | 1.06 | V | 1 |
| LHS3739 | 3 | A-BC | 21 58 50.0 | -32 28 17 | 113.1 | 354 | 2009 | visdet | 91 | 1.06 | V | 1 |
| GJ0844 | 2 | AB | 22 01 49.0 | +16 28 02 | 0.356 | 232 | 2008 | spkdet | 54 | 0.31 | 550 | 54 |
| GJ0852 | 0 | BC | 22 17 18.7 | -08 48 19 | 0.97 | 317 | 2008 | lkydet | 9 | 1.18 | K | 12 |
| GJ0852 | 3 | A-BC | 22 17 19.8 | -08 48 31 | 7.77 | 213 | 1999 | visdet | 100 | 1.02 | V | 110 |
| GJ0856 | 2 | AB | 22 23 29.1 | +32 27 33 | 1.77 | 199 | 1991 | astdet | 72 | 0.4 | V _T | 51 |
| GJ0860 | 2 | AB | 22 27 59.4 | +57 41 45 | 3.184 | 100 | 1998 | astdet | 29 | 1.47 | V _T | 51 |
| LP876-026 | 2 | AB | 22 28 23.4 | -25 54 07 | 3.3 | 210 | 1999 | visdet | 100 | 1.03 | V _T | 51 |
| GJ0864 | 2 | AB | 22 36 09.6 | -00 50 30 | 0.653 | 237 | 2008 | lkydet | 63 | 3.43 | I | 63 |
| L645-074 | 2 | AB | 22 38 23.0 | -29 21 00 | 14.57 | 136 | 2002 | visdet | 60 | 1.71 | V | 60 |
| GJ0865 | 2 | AB | 22 38 29.7 | -65 22 42 | 0.77 | 016 | 1991 | astdet | 72 | 0.13 | V _T | 51 |
| GJ0866 | 0 | AC | 22 38 37.2 | -15 17 07 | 0.008 | orb | 1999 | radvel | 27 | 2.0 | V | 27 |
| GJ0866 | 3 | AC-B | 22 38 37.2 | -15 17 07 | 0.346 | orb | 1999 | radvel | 27 | 0.4 | V | 49 |
| GJ0867 | 0 | BD | 22 38 45.3 | -20 36 52 | <2 | ... | 2012 | SB1 | 24 | ... | ... | ... |
| GJ0867 | 0 | AC | 22 38 45.5 | -20 37 16 | 0.005 | ... | ... | SB2 | 101 | ... | ... | ... |
| GJ0867 | 4 | AC-BD | 22 38 45.5 | -20 37 16 | 24.52 | 351 | 1992 | visdet | 104 | 2.36 | V | 10 |
| GJ0871.1 | 2 | AB | 22 44 57.9 | -33 15 01 | 35.86 | 133 | 1999 | visdet | 100 | 1.28 | V | 1 |
| L718-070 | 2 | AB | 23 00 33.4 | -23 57 10 | 74.54 | 144 | 1998 | visdet | 100 | 0.04 | V | 108 |
| GJ0887 | 2 | AB | 23 05 52.0 | -35 51 11 | 0.07 | 267 | 2003 | AO det | 106 | 1.21 | H | 105 |
| GJ2154 | 2 | AB | 23 14 16.6 | -19 38 39 | 7.25 | 199 | 1999 | visdet | 100 | 3.34 | V | 1 |
| G190-027 | 0 | BC | 23 29 25.2 | +41 27 48 | 0.078 | 269 | 2011 | AO det | 17 | 0.43 | H | 17 |
| G190-028 | 3 | A-BC | 23 29 26.2 | +41 28 20 | 17.67 | 214 | 2000 | visdet | 100 | 0.53 | V | 108 |
| GJ1284 | 2 | AB | 23 30 13.4 | -20 23 27 | <2 | ... | ... | SB2 | 38 | ... | ... | ... |
| GJ0896 | 2 | AB | 23 31 52.2 | +19 56 14 | 5.351 | 088 | 2004 | astdet | 29 | 2.12 | V | 1 |
| LHS4009 | 2 | AB | 23 45 31.0 | -16 10 20 | 0.067 | 250 | 2005 | AO det | 81 | 0.14 | K' | 81 |
| LHS4016 | 2 | AB | 23 48 36.0 | -27 39 38 | <0.006 | orb | 2007 | SB2 | 97 | ... | ... | ... |
| LEHPM1-6333 | 2 | AB | 23 51 50.4 | -25 37 36 | <2 | ... | 2015 | astdet | 1 | ... | ... | ... |
| GJ0912 | 2 | AB | 23 55 39.7 | -06 08 33 | <2 | ... | 2015 | spkdet | 1 | ... | ... | ... |
| LTT09828 | 2 | AB | 23 59 44.8 | -44 05 00 | <2 | ... | 2015 | astdet | 1 | ... | ... | ... |

References: (1) this work; (2) Allen & Reid (2008); (3) Al-Shukri et al. (1996); (4) Balega et al. (2007); (5) Balega et al. (2013); (6) Benedict et al. (2000); (7) Benedict et al. (2001); (8) Benedict et al., in prep; (9) Bergfors et al. (2010); (10) Bessel (1990); (11) Bessell (1991); (12) Beuzit et al. (2004); (13) Biller et al. (2006); (14) Blake et al. (2008); (15) Bonfils et al. (2013); (16) Bonnefoy et al. (2009); (17) Bowler et al. (2015); (18) Burningham et al. (2009); (19) Caballero (2009); (20) Chanamé & Gould (2004); (21) Cortes-Contreras et al. (2014); (22) Cvetković et al. (2015); (23) Daemgen et al. (2007); (24) Davison et al. (2014); (25) Dawson & De Robertis (2005); (26) Delfosse et al. (1999a); (27) Delfosse et al. (1999b); (28) Díaz et al. (2007); (29) Dieterich et al. (2012); (30) Docobo et al. (2006); (31) Doyle & Butler (1990); (32) Duquennoy & Mayor (1988); (33) Femenía et al. (2011); (34) Forveille et al. (2005); (35) Freed et al. (2003); (36) Fu et al. (1997); (37) Gizis (1998); (38) Gizis et al. (2002); (39) Golimowski et al. (2004); (40) Harlow (1996); (41) Harrington et al. (1985); (42) Hartkopf et al. (2012); (43) Heintz (1985); (44) Heintz (1990); (45) Heintz (1991); (46) Heintz (1992); (47) Heintz (1993); (48) Heintz (1994); (49) Henry et al. (1999); (50) Henry et al. (2006); (51) Høg et al. (2000); (52) Horch et al. (2010); (53) Horch et al. (2011a); (54) Horch et al. (2012); (55) Horch et al. (2015); (56) Ireland et al. (2008); (57) Janson et al. (2012); (58) Janson et al. (2014b); (59) Janson et al. (2014a); (60) Jao et al. (2003); (61) Jao et al. (2009); (62) Jenkins et al. (2009); (63) Jódar et al. (2013); (64) Kafatos et al. (1986); (65) Köhler et al. (2012); (66) Kürster et al. (2009); (67) Lampens et al. (2007); (68) Law et al. (2006); (69) Law et al. (2008); (70) Leinert et al. (1994); (71) Lépine et al. (2009); (72) Lindgren et al. (1997); (73) Luyten (1979a); (74) Makarov et al. (2008); (75) Martín et al. (2000); (76) Martinache et al. (2007); (77) Martinache et al. (2009); (78) Mason et al. (2009); (79) Mazeh et al. (2001); (80) McAlister et al. (1987); (81) Montagnier et al. (2006); (82) Nidever et al. (2002); (83) Pravdo et al. (2004); (84) Pravdo et al. (2006); (85) RECONS, in prep; (86) Reid et al. (2001); (87) Reid et al. (2002); (88) Reiners & Basri (2010); (89) Reiners et al. (2012); (90) Riddle et al. (1971); (91) Riedel et al. (2010); (92) Riedel et al. (2014); (93) Salim & Gould (2003); (94) Schneider et al. (2011); (95) Scholz (2010); (96) Ségransan et al. (2000); (97) Shkolnik et al. (2010); (98) Shkolnik et al. (2012); (99) Siegler et al. (2005); (100) Skrutskie et al. (2006); (101) Tokovinin et al. (2010); (102) Tokovinin & Lépine (2012); (103) van Biesbroeck (1974); (104) van Dessel & Sinachopoulos (1993); (105) Wahhaj et al. (2011); (106) Ward-Duong et al. (2015); (107) Washington Double Star Catalogue, unpublished detection by Brian Mason; (108) Weis (1991b); (109) Weis (1993); (110) Weis (1996); (111) Winters et al. (2011); (112) Woitas et al. (2003); (113) Zechmeister et al. (2009).

Figure 6.1 illustrates the results from this multiplicity project to date, with the projected separations of the 21 new, 288 confirmed, and 87 suspected companions from their primaries shown. Of note is the peak in the separation distribution at 26 AU, highlighting that **most companions are found at separations on the scale of our Solar System, i.e., 10 – 100 AU**. This distribution peaks at slightly larger projected separations than the one presented in Janson et al. (2012) for early-type M dwarfs (6 – 32 AU), but their sample was of multiples with angular separations $0''.08$ — $6''$ at inferred distances out to 52 pc, while this study surveyed angular separations to $600''$ out to 25 pc. We note that the sample that they used to construct their Figure 6 (to which we are comparing) contained 85 multiples (91 pairs — from 79 binaries and six triples), compared to our 306 pairs. The distribution peak that we find is at much larger separations than the 5.3 AU peak reported for stars $0.1 \lesssim M/M_{\odot} \lesssim 0.5$ by Duchêne & Kraus (2013). The distribution peak we report here for the nearby M dwarf multiples is \sim one-half the peak separation for the nearby solar-type stars (~ 51 AU) found by Raghavan et al. (2010). Also noteworthy is that 38 of the confirmed and new, plus all of the suspected systems' projected separations are upper limits due to unresolved systems for which separations of $1''$ were adopted, so the distribution will shift leftward to smaller actual separations. Incorporating the correction of 1.26 from Fischer & Marcy (1992) for those systems for which no orbital information is known (all but 22 of the systems presented here), would shift the distribution slightly to larger projected separations.

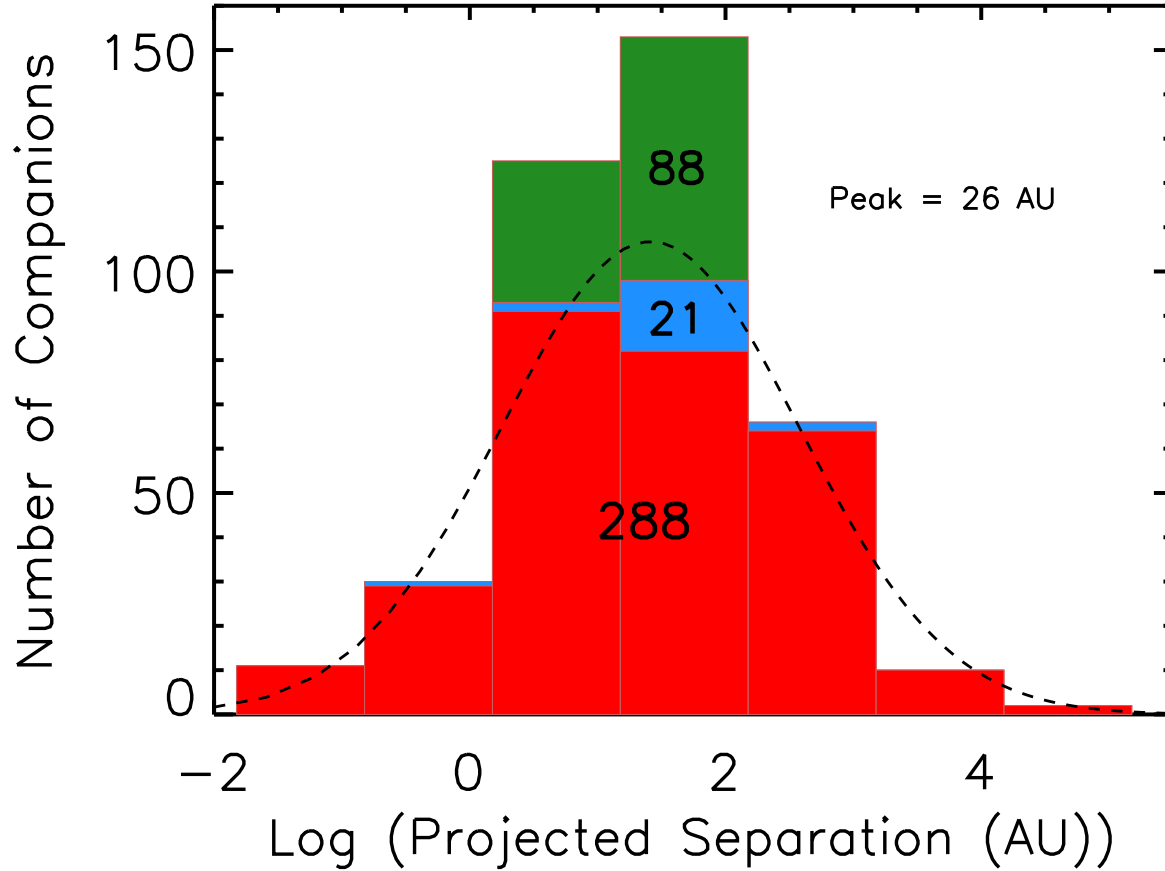


Figure 6.1 A histogram of the distribution of the projected separations of all companions from their red dwarf primaries, in log form for clarity. The 288 confirmed, 21 new, and 88 suspected companions are indicated. A Gaussian curve has been fit to the distribution of confirmed and new (but not suspected) companions and has a peak at 26 AU, with σ corresponding to 1.8 – 380 AU (log-projected separation = 1.41 ± 1.17).

6.1.2 Suspected Multiples

Eighty-five singles (38 of which have been noted, but not confirmed by others) suspected to be binaries were revealed through the course of this survey, two of which (GJ 912 and GJ 1250) have so far been confirmed with follow-up observations, which are continuing. An additional

five binaries are suspected to be triples, rounding out to 88 the total suspected systems with candidate companions. These do not include the two new confirmed multiples that are listed in Table 6.1. These are listed in Table 6.2 with the suspected number of components followed by a question mark to indicate the system’s suspect status, coordinates, a code for the reason they were flagged and the reference. A single letter refers to the *HIPPARCOS* code (30 objects, most of them with the ‘X’ code, referring to a stochastic solution which might indicate that the object is an astrometric binary; see Table note for descriptions.), ‘pb?’ refers to a possible perturbation of the object’s parallax due to the presence of an unseen unequal mass companion revealed during the reduction of its CTIOPI parallax (14 objects), ‘possSB’ indicates a possible spectroscopic binary noted from the literature, ‘ol’ represents ‘overluminosity’ and means that object’s *ccddist* is at least a factor of 1.4 closer than its *trigdist* (46 targets, at least one of which — G080-021 — is thought to be young due to the presence of Lithium in its spectrum), and ‘elev’ means that the object is elevated above the main sequence in the Color-Magnitude Diagram in Figure 5.4 (ten objects, none of which are known to be young). A few systems had more than one indication that they were multiple, e.g., an object with a perturbation might also have a distance mismatch. We note that none of those systems suspected to be multiple have been included in any of the analyses that follow. A number of primaries that were suspected to be multiple due to an underestimated *ccddist* were found through the literature search to have already been resolved by others and have been included in the analyses as confirmed companions.

Table 6.2: Suspected Multiple Systems

| System | # | RA | DEC | Flag | Reference |
|--------------|----|------------|-----------|-----------|-------------------------|
| GJ1006 | 3? | 00 16 14.6 | +19 51 37 | dist | this work |
| HIP006365 | 2? | 01 21 45.3 | -46 42 51 | X | Lindegren et al. (1997) |
| LHS1288 | 2? | 01 42 55.7 | -42 12 12 | X | Lindegren et al. (1997) |
| L294-092 | 2? | 01 47 42.1 | -48 35 59 | pb? | this work |
| GJ0082 | 2? | 01 59 23.5 | +58 31 16 | dist | this work |
| LHS1347 | 2? | 02 09 36.1 | -14 21 32 | dist | this work |
| GJ0091 | 2? | 02 13 53.6 | -32 02 28 | X | Lindegren et al. (1997) |
| GJ0109 | 2? | 02 44 15.5 | +25 31 24 | V | Lindegren et al. (1997) |
| GJ0134 | 2? | 03 18 07.5 | +38 15 07 | dist | this work |
| GJ0143.3 | 2? | 03 31 47.1 | +14 19 17 | X | Lindegren et al. (1997) |
| G080-021 | 2? | 03 47 23.3 | -01 58 19 | dist | this work, young? |
| GJ0157.1 | 2? | 03 59 56.8 | +26 05 41 | dist | this work |
| LTT11399 | 2? | 04 19 59.6 | +36 29 11 | X | Lindegren et al. (1997) |
| GJ0192 | 2? | 05 12 42.2 | +19 39 56 | X | Lindegren et al. (1997) |
| GJ0207.1 | 2? | 05 33 44.8 | +01 56 43 | possSB | Reiners et al. (2012) |
| GJ0220 | 2? | 05 53 14.1 | +24 15 32 | dist | this work |
| SCR0631-8811 | 2? | 06 31 31.7 | -88 11 38 | elev | this work |
| GJ0238 | 2? | 06 33 49.9 | -58 31 42 | dist | this work |
| LP381-004 | 2? | 06 36 18.2 | -40 00 23 | G | Lindegren et al. (1997) |
| GJ0275.1 | 2? | 07 32 02.0 | +68 37 15 | dist | this work |
| GJ0285 | 2? | 07 44 40.1 | +03 33 08 | dist | this work |
| LP423-031 | 2? | 07 52 24.0 | +16 12 15 | dist/elev | this work |
| GJ1105 | 2? | 07 58 12.7 | +41 18 13 | X | Lindegren et al. (1997) |
| LHS2029 | 2? | 08 37 07.9 | +15 07 45 | X | Lindegren et al. (1997) |
| GJ0317 | 2? | 08 40 55.7 | -23 28 00 | dist | this work |
| LHS0259 | 2? | 09 00 52.1 | +48 25 25 | elev | this work |
| SCR0914-4134 | 2? | 09 14 17.4 | -41 34 37 | elev | this work |
| LHS2122 | 2? | 09 16 25.0 | -62 04 16 | dist | this work |
| GJ0341 | 2? | 09 21 37.6 | -60 16 55 | possSB | Reiners et al. (2012) |
| GJ0360 | 3? | 09 42 34.8 | +70 02 02 | dist | this work |
| GJ0367 | 2? | 09 44 29.8 | -45 46 35 | X | Lindegren et al. (1997) |
| G161-071 | 2? | 09 44 54.2 | -12 20 54 | elev | this work |
| GJ0369 | 2? | 09 51 09.6 | -12 19 47 | X | Lindegren et al. (1997) |
| GJ0373 | 2? | 09 56 08.6 | +62 47 18 | possSB | Reiners et al. (2012) |
| GJ1136 | 2? | 10 41 51.8 | -36 38 00 | X | Lindegren et al. (1997) |
| LHS2317 | 2? | 10 50 26.5 | +33 05 19 | dist | this work |
| GJ0402 | 2? | 10 50 52.0 | +06 48 29 | X | Lindegren et al. (1997) |
| GJ0431 | 2? | 11 31 46.5 | -41 02 47 | dist | this work |
| GJ1148 | 2? | 11 41 44.6 | +42 45 07 | dist | this work |
| GJ0443 | 2? | 11 46 42.9 | -14 00 51 | dist | this work |
| LHS2520 | 2? | 12 10 05.0 | -15 04 16 | dist | this work |
| GJ0465 | 2? | 12 24 52.0 | -18 14 32 | astdet | Heintz (1986) |
| GJ0480 | 2? | 12 38 52.4 | +11 41 46 | dist | this work |

| | | | | | | | | | |
|--------------|----|----|----|------|-----|----|----|--------|-------------------------|
| LHS2633 | 2? | 12 | 47 | 00.9 | +46 | 37 | 33 | dist | this work |
| WT0392 | 2? | 13 | 13 | 09.0 | -41 | 30 | 39 | dist | this work |
| GJ0507.1 | 2? | 13 | 19 | 40.1 | +33 | 20 | 47 | X | Lindegren et al. (1997) |
| GJ0540 | 2? | 14 | 08 | 12.9 | +80 | 35 | 50 | X | Lindegren et al. (1997) |
| 2MA1507-2000 | 2? | 15 | 07 | 27.7 | -20 | 00 | 43 | elev | this work |
| HIP075187 | 2? | 15 | 21 | 52.9 | +20 | 58 | 39 | dist | this work |
| G202-016 | 2? | 15 | 49 | 36.2 | +51 | 02 | 57 | G | Lindegren et al. (1997) |
| LHS3129 | 3? | 15 | 53 | 08.7 | +34 | 44 | 39 | dist | this work |
| GJ0620 | 2? | 16 | 23 | 07.6 | -24 | 42 | 35 | G | Lindegren et al. (1997) |
| GJ1203 | 2? | 16 | 32 | 45.1 | +12 | 36 | 45 | X | Lindegren et al. (1997) |
| LP069-457 | 2? | 16 | 40 | 14.7 | +67 | 36 | 32 | dist | this work |
| LTT14949 | 2? | 16 | 40 | 48.9 | +36 | 19 | 00 | X | Lindegren et al. (1997) |
| HIP083405 | 2? | 17 | 02 | 49.5 | -06 | 04 | 06 | X | Lindegren et al. (1997) |
| GJ0669 | 3? | 17 | 19 | 54.2 | +26 | 30 | 03 | dist | this work |
| LP044-162 | 2? | 17 | 57 | 15.0 | +70 | 42 | 01 | elev | this work |
| LP334-011 | 2? | 18 | 09 | 40.7 | +31 | 52 | 12 | X | Lindegren et al. (1997) |
| SCR1826-6542 | 2? | 18 | 26 | 46.8 | -65 | 42 | 38 | elev | this work |
| LP044-334 | 2? | 18 | 40 | 02.0 | +72 | 40 | 54 | dist | this work |
| GJ0723 | 2? | 18 | 40 | 17.8 | -10 | 27 | 54 | X | Lindegren et al. (1997) |
| HIP092451 | 2? | 18 | 50 | 26.6 | -62 | 03 | 03 | possSB | Reiners et al. (2012) |
| LHS3443 | 2? | 19 | 13 | 07.0 | -39 | 01 | 53 | dist | this work |
| LHS3445 | 3? | 19 | 14 | 39.1 | +19 | 19 | 03 | dist | this work |
| GJ0756 | 2? | 19 | 21 | 51.4 | +28 | 39 | 58 | X | Lindegren et al. (1997) |
| LEHPM2-0783 | 2? | 20 | 19 | 49.8 | -58 | 16 | 40 | elev | this work |
| GJ0791 | 2? | 20 | 27 | 41.6 | -27 | 44 | 51 | X | Lindegren et al. (1997) |
| GJ1254 | 2? | 20 | 33 | 40.3 | +61 | 45 | 14 | dist | this work |
| LHS3564 | 2? | 20 | 34 | 43.0 | +03 | 20 | 51 | X | Lindegren et al. (1997) |
| GJ0811.1 | 2? | 20 | 56 | 46.6 | -10 | 26 | 54 | X | Lindegren et al. (1997) |
| L117-123 | 2? | 21 | 20 | 09.8 | -67 | 39 | 05 | X | Lindegren et al. (1997) |
| HIP106803 | 2? | 21 | 37 | 55.6 | -63 | 42 | 42 | X | Lindegren et al. (1997) |
| LTT18537 | 2? | 21 | 44 | 12.9 | +06 | 38 | 29 | dist | this work |
| LTT16412 | 2? | 21 | 57 | 26.2 | +08 | 08 | 13 | dist | this work |
| LHS3748 | 2? | 22 | 03 | 27.1 | -50 | 38 | 38 | X | Lindegren et al. (1997) |
| GJ0849 | 2? | 22 | 09 | 40.3 | -04 | 38 | 26 | dist | this work |
| G214-014 | 2? | 22 | 11 | 16.9 | +41 | 00 | 54 | X | Lindegren et al. (1997) |
| GJ0851 | 2? | 22 | 11 | 30.0 | +18 | 25 | 34 | dist | this work |
| GJ1271 | 2? | 22 | 42 | 38.7 | +17 | 40 | 09 | dist | this work |
| GJ0875.1 | 2? | 22 | 51 | 53.5 | +31 | 45 | 15 | dist | this work |
| GJ0876 | 2? | 22 | 53 | 16.7 | -14 | 15 | 49 | dist | this work |
| LHS0543 | 2? | 23 | 21 | 37.4 | +17 | 17 | 25 | dist | this work |
| LHS0543a | 2? | 23 | 25 | 47.5 | +53 | 08 | 25 | dist | this work |
| GJ0899 | 2? | 23 | 34 | 03.3 | +00 | 10 | 46 | X | Lindegren et al. (1997) |
| GJ1290 | 2? | 23 | 44 | 23.3 | +21 | 36 | 14 | dist | this work |
| LHS4021 | 2? | 23 | 50 | 31.0 | -09 | 33 | 32 | dist | this work |

LTT17066 2? 23 58 32.6 +07 38 31 dist this work

Flag Description: **pb?** means a possible astrometric detection of a perturbation; **elev** means that the object is elevated above the main sequence in the HR Diagram in Figure 5.4 due to overluminosity; **dist** means that the *ccddist* is at least 1.414 times closer than the *trigdist* due to the object’s overluminosity; **possSB** means that the object has been noted as a possible spectroscopic binary by Reiners et al. (2012). The the single letters are *HIPPARCOS* flags as follows: *G* is an acceleration solution where a component might be causing a variation in the proper motion; *V* is for Variability-Induced Movers, where one component in an unresolved binary could be causing the photocenter of the system to be perturbed; *X* is for a stochastic solution, where no reliable astrometric parameters could be determined, and which may be astrometric binaries.

6.1.3 *Eliminated Companions*

Candidate CPM companions were also detected during the blinking campaign, but after further investigation were found either to be at larger distances than the star in question or to have different proper motions, with $\Delta\mu \geq 25 \text{ mas yr}^{-1}$ and/or with $\Delta\theta \geq 15^\circ$, as defined in Boyd et al. (2011b).

6.1.4 *Substellar Companions*

Because this study focuses on the *stellar* companions to M dwarfs, it was important to determine which companions were stellar and which were *substellar*. Dieterich et al. (2014) have shown that the boundary between stars and brown dwarfs is near the L2.0 spectral type, but we do not yet know exactly to which mass this spectral type corresponds. As mentioned in Chapter 5, $M_V = 20.0$ and $(V - K) = 9.5$ were used to define the end of the M dwarfs, but from analysis of the main sequence in the HR diagram created from stars in the RECONS 25 Parsec Database (discussed in §5.1), $M_V = 21.5$ and $(V - K) = 10.3$ likely correspond to the end of the stellar main sequence. As the lowest mass M dwarf with an accurate mass from

Benedict et al. (2015) is GJ1245C, with a mass of $0.076 \pm 0.001 M_{\odot}$, a mass of $0.075 M_{\odot}$ was chosen to define the stellar/substellar boundary for this work. The seventeen brown dwarf companions to fifteen M dwarf primaries are noted in Tables 3.2 and A.1 with a ‘BD’ for the component in the object column (column 2). These brown dwarfs were identified in the literature search. Although this work is not an attempt to detect brown dwarf companions, we note that the fraction of M dwarf primaries with known brown dwarf companions is only $1.3 \pm 0.3\%$. This is **much** lower than the stellar multiplicity rate, considering the stellar and brown dwarf companions detected to date. While more brown dwarf companions will undoubtedly be found in the future, they are much rarer than stellar companions. We note that astrometric detection via a perturbation is the only technique used in this survey that was sensitive to brown dwarf companions, and only a handful (GJ1001BC, SCR1845-6357B, GJ1215BC) were found. We do not address planetary companions in this work.

6.1.5 Higher Order Multiple Systems

It is worthwhile to consider the configuration of the higher order systems. Are most of the components all very close to each other? Or, is there a hierarchical configuration that is preferred? We calculate that the ratio of higher order multiple systems to the binary systems is 17.0%, while the percentage of the entire sample made up of the higher order systems is 3.4%.

There are thirty-nine triple systems in the population of M dwarfs studied. Three of these (GJ1001, GJ0569, GJ1215) have only substellar companions and are not considered in the analysis of the multiple systems. Two of these triples (GJ0494, GJ0802) have both a

stellar and a substellar companion, making them effectively binaries and reducing the number of stellar triple systems to thirty-four. The remaining triples are primarily hierarchical in nature, being composed of a close double with $\rho < 2''$ plus a more distant single. Only eight of the triples (GJ2005ABC, GIC0050ABC, LP476-207ABC, LTT12352ABC, 2MA1036+1521ABC, GJ0487ABC, GJ0815ABC, and GJ0866ABC) are close, where none of the components are separated by more than $2''$ from each other or the primary.

The two quadruple systems (GJ0490ABCD and GJ0867ABCD) are each made up of two close ($\rho < 2''$) binaries separated from each other by more than $10''$. The two quintuple systems (GJ2069ABDCE and GJ0644ABCDE) have quite a different configuration from each other. GJ2069ABDCE is made up of a close ($\rho < 2''$) triple with a close ($\rho < 2''$) binary pair located $\sim 10''$ away. GJ0644 also contains a close ($\rho < 2''$) triple, but the other two components are both singles found arcminutes away. None of the quadruple or quintuple systems contain a substellar component.

6.2 Corrections to the Multiplicity Fraction

Because this survey was not uniformly sensitive to systems with companions at $\rho \leq 2''$, a correction had to be made in order to determine a final multiplicity value. The RECONS group now thinks that we know at least 90% of all the red dwarf primaries within 10 pc, so if it is possible to show that most of the systems within 10 pc have been targeted by some kind of high resolution technique, a correction based on the stellar multiplicity fraction of those objects with close companions could be determined. To evaluate the thoroughness of

companion searches for M dwarfs within 10 pc, a literature search for high resolution studies of the 10 pc members was performed. It was found that all but two systems either already had a close companion (at $\rho < 2''$) or had been observed with high resolution techniques, i.e., high resolution radial velocity programs, HST, speckle interferometry, lucky imaging, or astrometry.

These results are presented in Table 6.3 with the primary name, the technique and instrument used, the detection (period or separation) limit of that instrument, and the reference for the paper where those results are presented. The codes used for the technique are as follows: ‘AO’ for adaptive optics; ‘astr’ for astrometry; ‘img’ for imaging; ‘intf’ for interferometry; ‘lky’ for lucky imaging; ‘RV’ for radial velocity; and ‘spkl’ for speckle interferometry. If a companion with $\rho < 2''$ is known to exist, the code ‘comp det’ for ‘companion detected’ (stellar or substellar) is noted and no further information is listed. Because 186 of the 188 M dwarfs within 10 pc have been searched, we conclude that we can use the 10 pc sample to correct for unresolved companions at separations $< 2''$ from 10 — 25 pc.

The codes for the instruments used are:

- CSHELL — a long-slit spectrograph on NASA’s Infrared Telescope Facility;
- CTIOPI — the RECONS group’s long-term astrometry program;
- HJS — Harlan J. Smith 2.7m telescope;
- HARPS — High Accuracy Radial Velocity Planet Searcher on ESO’s 3.6m telescope;
- HIRES — High Resolution Echelle Spectrometer on the Keck-I 10m telescope;
- HSTFGS — *Hubble Space Telescope’s* Fine Guidance Sensor;

- HSTNIC — *Hubble Space Telescope's* NICMOS instrument;
- KECK — one of the Keck 10m telescopes;
- LKYCM — LuckyCam, a lucky imaging instrument;
- NIRSPEC — the Near Infrared Spectrometer on the Keck-II 10m telescope;
- UVES — the Ultraviolet and Visual Eschelle Spectrograph on the 8.2 VLT;
- VLT — the Very Large Telescope.

Table 6.3: High Resolution Studies of 10 Parsec M Dwarfs

| Name | Technique | Instrument | Detection Limit | Reference |
|---------------|-----------|------------|---------------------|--------------------------|
| GJ0001 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ1002 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| LSPM0011+5908 | ... | ... | ... | ... |
| GJ1005 | img | HSTNIC | comp det | Dieterich et al. (2012) |
| GJ0015 | RV | HJS | $\Delta t < 2680$ d | Endl et al. (2006) |
| GJ2005 | spkl | | comp det | Leinert et al. (1994) |
| GJ0048 | RV | HIRES | $a < 15$ AU | Montet et al. (2014) |
| GJ0049 | RV | HIRES | $a < 15$ AU | Montet et al. (2014) |
| LP647-013 | img | KECK | $a > 0''.3$ | Koerner et al. (1999) |
| GJ0054 | | HSTFGS | comp det | Golimowski et al. (2004) |
| GJ0054.1 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0065 | img | HSTNIC | comp det | Dieterich et al. (2012) |
| LP991-084 | intf | HSTFGS | | RECONS, in prep |
| LHS1302 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| GJ0083.1 | RV | HIRES | $a < 15$ AU | Montet et al. (2014) |
| L173-019 | intf | HSTFGS | | RECONS, in prep |
| LHS1326 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| GJ0084 | | HSTFGS | comp det | Golimowski et al. (2004) |
| LHS1339 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| LHS1375 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| GJ0102 | RV | CSHELL | $P < 100$ d | Davison et al. (2015) |
| APM0237-5928 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| GJ0109 | RV | HIRES | $a < 15$ AU | Montet et al. (2014) |
| SO0253+1652 | RV | NIRSPEC | | Tanner et al. (2012) |
| LTT01445 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ1057 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| LSPM0330+5413 | lky | LKYCM | $0.1 - 2''$ | Law et al. (2008) |
| LEHPM1-3396 | RV | UVES | $a > 0.03$ AU | Barnes et al. (2014) |
| GJ1061 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |

| | | | | |
|---------------|------|--------|-------------------|-------------------------|
| GJ1065 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| LHS1610 | RV | HARPS | comp det | Bonfils et al. (2013) |
| GJ1068 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| LP655-048 | RV | HIRES | $a < 0''.861$ | Shkolnik et al. (2009) |
| GJ0176 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| LHS1723 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| LHS1731 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| G097-015 | astr | CTIOPI | | RECONS, in prep |
| GJ0190 | spkl | | comp det | Hartkopf et al. (2012) |
| LSPM0510+2714 | ... | ... | ... | ... |
| GJ0191 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0203 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0205 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0213 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| G099-049 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| LHS1805 | RV | HIRES | $a < 15$ AU | Montet et al. (2014) |
| LHS1809 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| APCOL | RV | HIRES | | Riedel et al. (2010) |
| GJ0226 | RV | HIRES | $a < 15$ AU | Montet et al. (2014) |
| GJ0229 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0232 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| GJ0234 | spkl | | comp det | Balega et al. (2007) |
| SCR0630-7643 | img | | comp det | Winters et al. (2011) |
| L032-009 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0239 | spkl | | 21 mas | Balega et al. (2007) |
| GJ0251 | RV | HIRES | $a < 15$ AU | Montet et al. (2014) |
| GJ0257 | img | HSTNIC | comp det | Dieterich et al. (2012) |
| GJ1093 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| LHS0224 | img | HSTNIC | comp det | Dieterich et al. (2012) |
| GJ0268 | | | comp det | Delfosse et al. (1999a) |
| GJ0273 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| LTT17993 | intf | HSTFGS | comp det | Henry et al. (2006) |
| SCR0740-4257 | intf | HSTFGS | | RECONS, in prep |
| GJ0285 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ1103 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| GJ1105 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| GJ0299 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0300 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ2066 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ1111 | RV | HIRES | $a < 6$ AU | Basri & Reiners (2006) |
| LHS0252 | lky | LKYCM | $0.1 - 2''$ | Law et al. (2008) |
| LHS2065 | RV | HIRES | $a < 6$ AU | Basri & Reiners (2006) |
| GJ1116 | img | HSTNIC | comp det | Dieterich et al. (2012) |
| LTT12352 | | | comp det | Delfosse et al. (1999a) |
| LHS2090 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |

| | | | | |
|--------------|------|---------|---------------------|--------------------------|
| GJ0338 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| LHS6167 | AO | | comp det | Montagnier et al. (2006) |
| GJ1123 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ1125 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0357 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0358 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ1128 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| GJ0367 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| LHS2206 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| GJ0382 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0388 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0393 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| LHS0288 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| DEN1048-3956 | RV | HIRES | $a < 6$ AU | Basri & Reiners (2006) |
| LHS0292 | RV | HIRES | $a < 6$ AU | Basri & Reiners (2006) |
| GJ1138 | img | HSTNIC | comp det | Dieterich et al. (2012) |
| GJ0402 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0406 | RV | HIRES | $a < 15$ AU | Montet et al. (2014) |
| GJ0408 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| GJ0411 | RV | HIRES | $a < 15$ AU | Montet et al. (2014) |
| GJ0412 | RV | HJS | $\Delta t < 1826$ d | Endl et al. (2006) |
| GJ0424 | RV | HIRES | $a < 15$ AU | Montet et al. (2014) |
| GJ0433 | RV | HARPS | comp det | Bonfils et al. (2013) |
| SCR1138-7721 | intf | HSTFGS | | RECONS, in prep |
| SIP1141-3624 | intf | HSTFGS | | RECONS, in prep |
| GJ0445 | RV | HIRES | $a < 15$ AU | Montet et al. (2014) |
| GJ0447 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ1151 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| GJ0450 | RV | HIRES | $a < 15$ AU | Montet et al. (2014) |
| RX1159-5247 | astr | CTIOPI | | RECONS, in prep |
| GJ1154 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ1156 | RV | NIRSPEC | | Rodler et al. (2012) |
| GJ0465 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0473 | | | comp det | Heintz (1992) |
| GJ0479 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| LHS0337 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0480.1 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0486 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| SIP1259-4336 | astr | CTIOPI | | RECONS, in prep |
| GJ0493.1 | RV | CSHELL | $P < 100$ d | Davison et al. (2015) |
| GJ0514 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| LHS2784 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| GJ0526 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| WT0460 | AO | | comp det | Montagnier et al. (2006) |
| LHS2930 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |

| | | | | |
|--------------|------|---------|-------------------|--------------------------|
| GJ0555 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0569 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| LHS3003 | RV | HIRES | $a < 6$ AU | Basri & Reiners (2006) |
| GJ0581 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0588 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| SCR1546-5534 | astr | | comp det | Henry et al., in prep |
| GJ0609 | RV | CSHELL | $P < 100$ d | Davison et al. (2015) |
| GJ0618 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0623 | | | comp det | Martinache et al. (2007) |
| GJ0625 | RV | HIRES | $a < 15$ AU | Montet et al. (2014) |
| GJ0628 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0644 | RV | HARPS | comp det | Bonfils et al. (2013) |
| GJ1207 | RV | CSHELL | $P < 100$ d | Davison et al. (2015) |
| LHS3262 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| GJ0661 | img | HSTNIC | comp det | Dieterich et al. (2012) |
| GJ0674 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0678.1 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0680 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0687 | RV | HIRES | $a < 15$ AU | Montet et al. (2014) |
| GJ0682 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0686 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0694 | RV | HIRES | $a < 15$ AU | Montet et al. (2014) |
| GJ0693 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| BARNARDS | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0701 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ1224 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| LHS3376 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| GJ1227 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| 2MA1835+3259 | RV | NIRSPEC | | Tanner et al. (2012) |
| GJ1230 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| GJ0725 | RV | NIRSPEC | $P < 30$ d | Bailey et al. (2012) |
| LHS5341 | astr | CTIOPI | | RECONS, in prep |
| SCR1845-6357 | AO | VLT | comp det | Biller et al. (2006) |
| GJ0729 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0745 | RV | HIRES | $a < 15$ AU | Montet et al. (2014) |
| GJ0747 | img | HSTNIC | comp det | Dieterich et al. (2012) |
| GJ0752 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0754 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ1235 | RV | CSHELL | $P < 100$ d | Davison et al. (2015) |
| GJ1245 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| GJ0784 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| GJ1253 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| GJ0791.2 | | HSTFGS | comp det | Benedict et al. (2000) |
| GJ0793 | RV | HIRES | $a < 15$ AU | Montet et al. (2014) |
| GJ1256 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |

| | | | | |
|--------------|------|---------|-------------------|-------------------------|
| SCR2049-4012 | astr | CTIOPI | | RECONS, in prep |
| LP816-060 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0809 | RV | HIRES | $a < 15$ AU | Montet et al. (2014) |
| GJ0829 | | | comp det | Delfosse et al. (1999a) |
| GJ0831 | | | comp det | Ségransan et al. (2000) |
| GJ0832 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| G188-038 | RV | CSHELL | $P < 100$ d | Davison et al. (2015) |
| LHS3746 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0849 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| LHS3799 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0860 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| GJ0866 | | | comp det | Delfosse et al. (1999a) |
| GJ0867 | RV | CSHELL | $P < 100$ d | Davison et al. (2014) |
| GJ0873 | RV | NIRSPEC | $P < 30$ d | Bailey et al. (2012) |
| GJ0876 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0877 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0880 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0887 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| GJ0896 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| GJ1286 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| GJ0905 | RV | HIRES | $a < 15$ AU | Montet et al. (2014) |
| GJ1289 | img | HSTNIC | $a > 0''.2$ | Dieterich et al. (2012) |
| GJ0908 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |
| L026-027 | RV | HARPS | $\Delta t < 6$ yr | Bonfils et al. (2013) |

Figure 6.2 presents a graph of the running *stellar* multiplicity at different angular separations as a function of distance for the entire 25 pc multiplicity survey. In the cases of the ten binary systems containing a substellar companion, the system was considered single for the purpose of the multiplicity calculation. For the five triple systems containing substellar companions, the three that had two substellar companions were considered single, while the two systems that had both an M dwarf and a substellar companion were still considered multiple. For higher order multiple systems with more than one companion, the smallest separation between the primary and the companion was chosen to mitigate the likely incompleteness at small ρ . The most striking feature is that most stellar companions to red dwarfs are found at

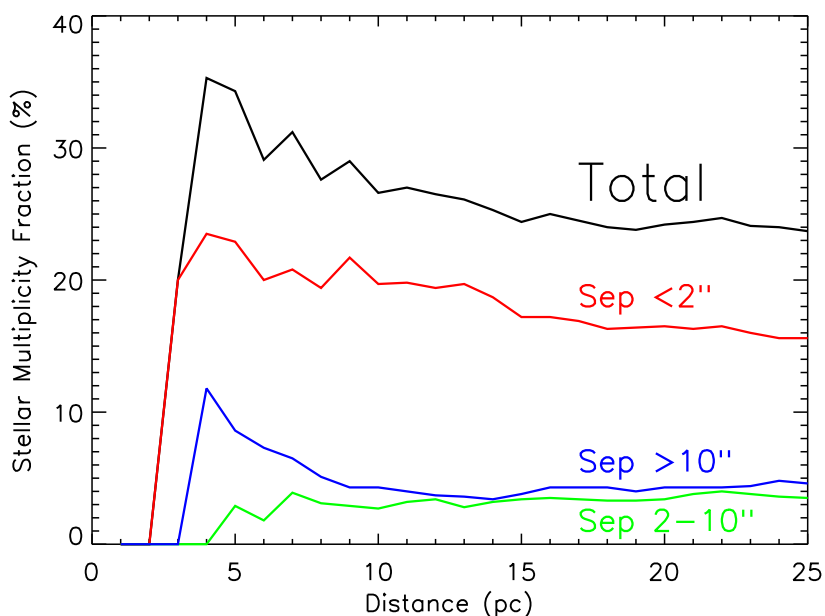


Figure 6.2 Plotted is the running multiplicity fraction at different angular separations, subdivided into ρ less than $2''$, $\rho = 2 - 10''$, and ρ greater than $2''$. The fractions for separations greater than $2''$ remain fairly constant from 10 to 25 pc, while the fraction for separations smaller than $2''$ decreases from ~ 13 to 25 pc, indicating that a correction is needed. Neither suspected nor substellar companions are included in this graph, and for multiple systems with more than one companion, the companion with the smallest separation from its primary was used.

observable separations less than $2''$. Thus, it is not surprising that the two main campaigns for detecting companions undertaken here yielded few new objects. It is evident that the two bins of systems with companions at separations greater than $2''$ are fairly constant from 10 to 25 pc, indicating that there are not significant numbers of overlooked companions at large separations from their primaries. The multiplicity fractions for companions with angular separations $2'' - 10''$ and $> 10''$ are 3.5% and 4.6%, respectively. However, the curve for companions with separations smaller than $2''$ decreases from $\sim 20\%$ at 13 pc to $\sim 15.5\%$ at 25 pc, indicating that more close multiples remain to be found within the outer volume.

Many of these are presumably the candidates discussed in §6.1.2 and listed in Table §6.2. A correction must be made for these missing close multiples. By taking the multiplicity fraction for $\rho < 2''$ at 10 pc ($37/188 = 19.7 \pm 2.9\%$) and comparing it to the actual fraction at 25 pc ($175/1122 = 15.6 \pm 1.1\%$), a correction of 4.1% was determined. Adding this 4.1% to the initial total multiplicity fraction ($23.3 \pm 1.3\%$) gives a corrected total multiplicity fraction of $27.4 \pm 1.3\%$. We can also add this correction to the companion fraction for a corrected rate of $31.3 \pm 1.3\%$.

We note that a few of the stars suspected to be multiple are located within 10 pc. If they are found to have a companion, the correction will change, but only slightly.

For comparison, Figure 6.3 shows the cumulative multiplicity of the M dwarf primaries as a function of distance, subdivided by separation in AU. The same criteria in Figure 6.2 were used in creating this plot: no substellar companions were included and the smallest separation between the primary and its companion was used in the cases of higher order systems. Of note are the similarities between the three smaller and three larger separation curves. The three curves indicating the smaller separations (< 0.1 AU, $0.1 - 1$ AU, $1 - 10$ AU) display similar behavior: they exhibit peaks at distances less than 10 pc and then decline. The three curves indicating the larger separations ($10 - 100$ AU, $100 - 1000$ AU, > 1000 AU) are alike in that they all begin to increase at distances of ~ 10 pc. The result is that the curves illustrating the extremes of the projected separations all cross each other (purple and red, orange and blue, and cyan and green), effectively averaging each other out.

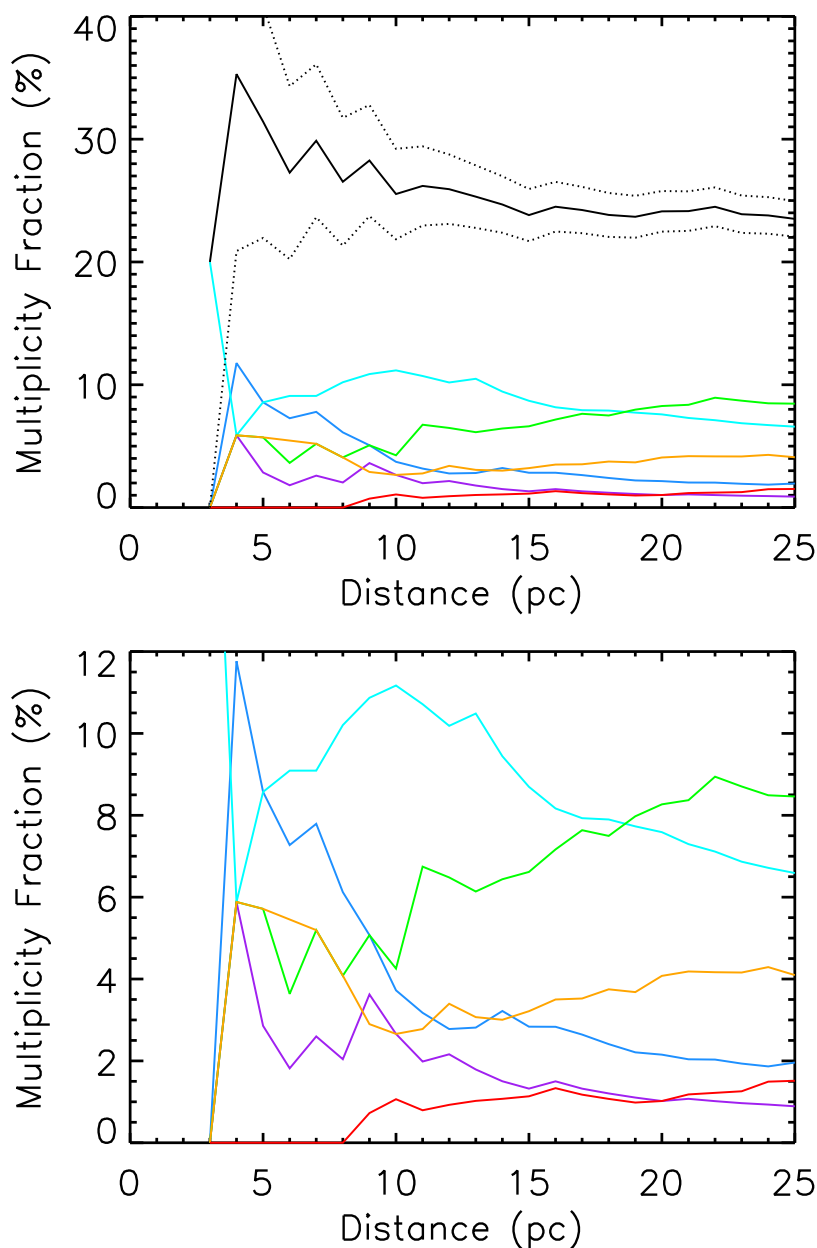


Figure 6.3 (top) The cumulative separations in AU for the pairs in the multiplicity sample as a function of distance for deblended companions (no corrections applied). The black line indicates the total multiplicity; the dotted lines are the Poisson errors. The purple line indicates the cumulative multiplicity of those systems with projected separations < 0.1 AU, the blue line indicates projected separations $0.1 - 1$ AU, the cyan line indicates projected separations $1 - 10$ AU, the green line indicates projected separations $10 - 100$ AU, the orange line indicates projected separations $100 - 1000$ AU, and the red line indicates projected separations > 1000 AU. (bottom) A zoomed-in view of the subdivisions.

6.3 Determining Masses

In order to perform any quantitative analysis of the multiplicity results related to stellar mass, a conversion from M_V to mass was necessary. But first, the deblending of the V magnitudes of systems with close separations ($\sim 1 - 5''$) via Point Spread Function (PSF) photometry was necessary in order to be able to estimate masses for each individual member of a system. For those stars with companions too close for PSF photometry, estimates of the Δm s had to be made based on the information available in the literature.

6.3.1 Deblending Photometry

For those systems with companions at separations too small (typically $1 - 5''$) for effective aperture correction photometry, Point Spread Function (PSF) photometry was performed on frames acquired in Arizona and Chile during the imaging program in order to measure ΔV for each system. Individual V magnitudes were then calculated and used to estimate masses for each component in the multiple systems.

A script provided by Wei-Chun Jao was modified to determine ΔV for the multiples with small separations. In short, the contribution from the sky background was calculated from a ‘blank’ part of the image. The region around the close pair being analyzed was then cropped, as we were only interested in the relevant pair, and the background subtracted. A Moffat curve was fit to the PSF of the primary, the flux determined from the total counts, and then the primary was subtracted from the image. Care was taken to minimize the residual counts from the primary. Gaussian and Lorentzian curves were also tested, but it was found

that the Moffat curve fit the shape of the PSF best. A Moffat curve was then fit to the secondary component's PSF and the flux calculated from the counts. The ratio of the fluxes then yielded the ΔV .

For the many close multiples with Δ mags reported in the literature that were not in the V -band, the relations reported in Riedel et al. (2014) were used to convert ΔR_{KC} , ΔI_{KC} , $\Delta r'$, $\Delta i'$, or 2MASS ΔJ , ΔH , or ΔK filters to ΔV_J . Delta-magnitudes from the *HIPPARCOS* H_p and *Tycho-2* V_T filters were considered to be equivalent to V_J , as were any visual Δ mags reported in the literature, e.g., those from any binary papers before ~ 1995 that used photographic plates. For *HST* data, the 110 and 222 filters were considered equivalent to J and K . For results using the Differential Speckle Survey Instrument (DSSI) (Horch et al. 2009) reported in Horch et al. (2011a, 2012, 2015), $\Delta 692$ was assumed to be ΔR , and $\Delta 562$ was assumed to be ΔV . Horch et al. (2009) states that the 692 and 562 nm DSSI filters' central wavelengths are close to those of the Johnson $UBVRI$ system. For observations on the RIT-Yale Tip-tilt Speckle Imager (RYTSI) (Meyer et al. 2006) reported in Horch et al. (2010, 2012), $\Delta 550$ were assumed to be ΔV , $\Delta 698$ were assumed to be ΔR , and $\Delta 754$ nm measurements were assumed to mimic ΔI . The $\Delta 814$ measurements reported in Reid et al. (2001) was assumed to be ΔI .

Systems with unknown magnitude differences between the components (i.e., typically those systems with separations $< 1''$) required estimates of the Δ mag, which were made as follows: (1) SB2s were assigned Δ mag = 0, (2) SB1s were assigned Δ mag = 1, and (3) unresolved astrometric detections were assigned Δ mag = 2. These estimates were all done for

the filter in which the observations were done or reported; e.g., an object with a perturbation that was being observed in the I -band by our group at the CTIO/SMARTS 0.9m was noted as having a $\Delta I = 2$, which was then converted to ΔV . For results reported in the literature, the waveband in which the observations were made was used and then converted to ΔV . As discussed in §8.5.1.2, future efforts with DSSI will target systems without ΔV measurements to refine the fluxes of components. The ΔV and deblended V magnitudes for the individual components of multiple systems are given in Tables 3.2 and A.1, with the estimate in italics if the aforementioned assumptions were made. This is the case for roughly half of the pairs. We note that this method of estimating ΔV is imperfect, and propose future work using DSSI to constrain these assumptions, as outlined in Chapter 8, §8.5.1.2.

For close triples ($\rho < 4''$), the pair with the widest separation were deblended first using the ΔV that corresponded to the wide ρ to calculate the deblended V magnitude for the single and the resulting pair. Then the ΔV relevant to the remaining pair was used to calculate individual V magnitudes for the components of the closest pair.

6.3.2 *Estimating Masses*

A rigorous analysis of the mass-luminosity relation for red dwarfs from Benedict et al. (in prep) using extensive HST-FGS and radial velocity data sets was used to estimate masses for the red dwarfs. It is given here:

$$M_V = y_0 + A_1 \exp \left\{ \frac{-(M - x_0)}{\tau_1} \right\} + A_2 \exp \left\{ \frac{-(M - x_0)}{\tau_2} \right\}, \quad (6.1)$$

where y_0 is 3.89, the coefficients A_1 and A_2 are 4.26 and 10.58, respectively, M is the mass, x_0 is 0.0762, and τ_1 and τ_2 are 0.03 and 0.77, respectively. This relation is relevant for M dwarfs, based on measured masses with average errors of $0.005 M_\odot$ and a scatter of $0.017 M_\odot$.

To estimate the masses, a range of masses was input to create an output list of M_V . The massive end of the M dwarf spectral sequence at $M_V = 8.8$ was found to correspond to $0.67 M_\odot$, while the least massive M dwarf with $M_V = 20.0$ was chosen to have a mass of $0.075 M_\odot$, only slightly lower than the lowest mass M dwarf in Benedict et al. (in prep.), GJ1245C with mass = $0.076 \pm 0.001 M_\odot$. Masses were assigned to each M dwarf in the sample based its M_V from the output grid.

For pairs with ΔV s larger than 3.0, and the mass of the primary was calculated as if it were single, as a companion with that ΔV only contributes 7% of the luminosity of the system; the ΔV s may not be very well defined at differences that large and would not affect the mass estimate significantly. The ΔV was then simply added to the V magnitude of the primary and the mass estimated for the companion, unless the companion was known to be a brown dwarf. A comparison of twenty-nine of the measured masses reported in Benedict et al. (in prep) to masses estimated for the same red dwarfs in the survey yields a mean absolute deviation of 10.5%. This difference is due almost entirely to cosmic scatter, as discussed in §3.3. Mass estimates for all components are listed in Tables 3.2 and A.1.

As mentioned above, all companions were analyzed in relation to the primary of the system. Thus, the 34 triples equate to 68 pairs of objects, the two quadruple systems to six

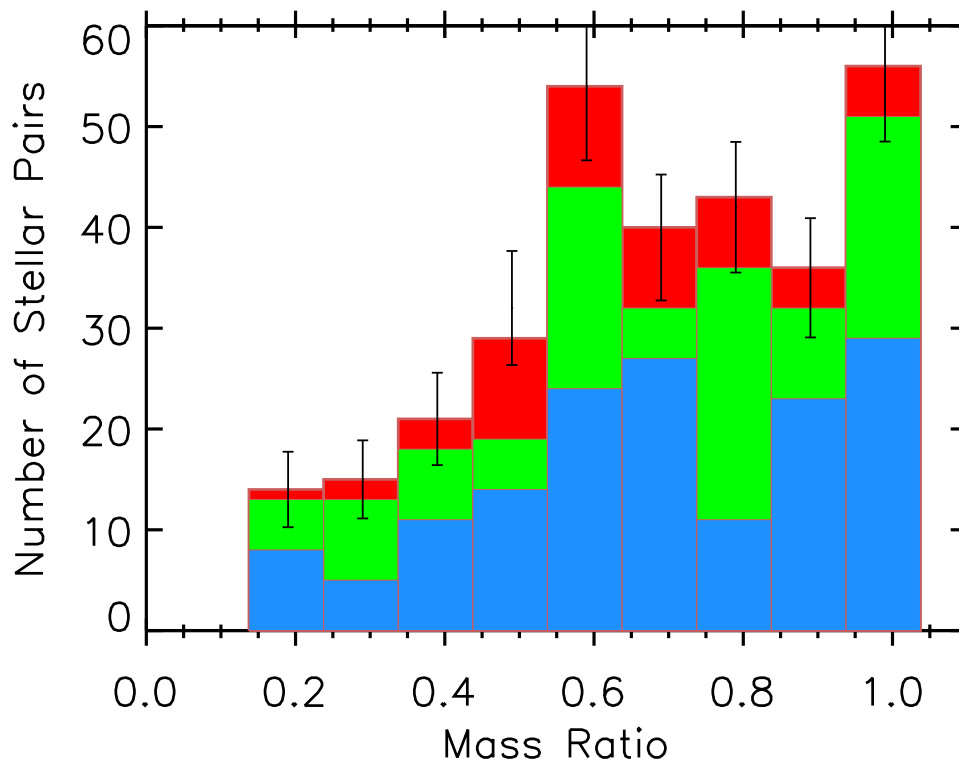


Figure 6.4 A histogram of the distribution of the ratios of all 306 stellar companions' masses to their primaries (M_2/M_1 , M_3/M_1 , etc.) in the multiplicity sample. In blue are plotted those objects for which no conversion or assumption to ΔV was made, green indicates a conversion to ΔV from another filter, and red indicates that an assumption was made regarding the Δmag . The error bars are the Poisson errors on each mass ratio bin.

pairs, and the two quintuple systems to eight pairs. In the instances where $\Delta mags$ reported in the literature for hierarchical systems was other than with respect to the 'A' component, these data had to be calculated by first deblending the pair in question, calculating individual magnitudes, estimating individual masses, and then calculating the mass ratio in relation to the primary. Figure 6.4 shows the distribution of the mass ratios ($q = M_{comp}/M_{pri}$) for the 306 pairs in the sample. Those objects reported in the literature in V are shown in blue. Plotted in green are those pairs for which a conversion from a Δmag other than

ΔV was made, and plotted in red are the pairs for which an assumption had to be made about the Δmag between the two components, e.g., unresolved spectroscopic binaries and astrometric perturbations. The peak at $q = 0.6$ may not be real and could be the result of the assumptions and/or conversions (as described in §6.3.1) that had to be made in order to arrive at ΔV for all the pairs, although Janson et al. (2012) show a similar feature for their sample of M0 — M5 primaries with angular separations $0''.08$ — $6''.0$ in Figure 5 of that paper. The error bars calculated from Poisson statistics for each mass ratio bin show that the distribution might very well be uniform at $q > 0.55$, with the incompleteness at lower mass ratios being partially due to the currently known 15 brown dwarf companions being excluded from the analysis. We also show in §6.4 that primaries with masses 0.075 — 0.30 likely have companions that have eluded detection. These missing companions might fill in parts of the lower mass ratio portion of the graph.

An important question relating to the star formation process can be addressed by this survey. Is there a relationship between the masses of the primary stars and the components' separations from their primary stars? Figure 6.5 presents the log of the projected separation (in AU) of the 306 components from their primaries as a function of primary mass. There seems to be a lack of very close companions to the more massive targets at separations 0.01 — 1 AU. It is possible that the very close companions exist but have not yet been detected for the more massive primaries. M dwarfs have only recently been targeted by radial velocity searches for planets, so perhaps detections have been made, but just not yet reported.

A weak trend of decreasing projected separation with decreasing primary mass is also

seen, hinting that lower mass red dwarfs may not be massive enough to keep companions at larger distances. The two outliers at projected separations greater than 10,000 AU are very wide companions that are each part of hierarchical triple systems: G164-042C and GJ0130.1C. Both objects are separated from their primaries by thousands of arcseconds, the largest angular separations in the sample.

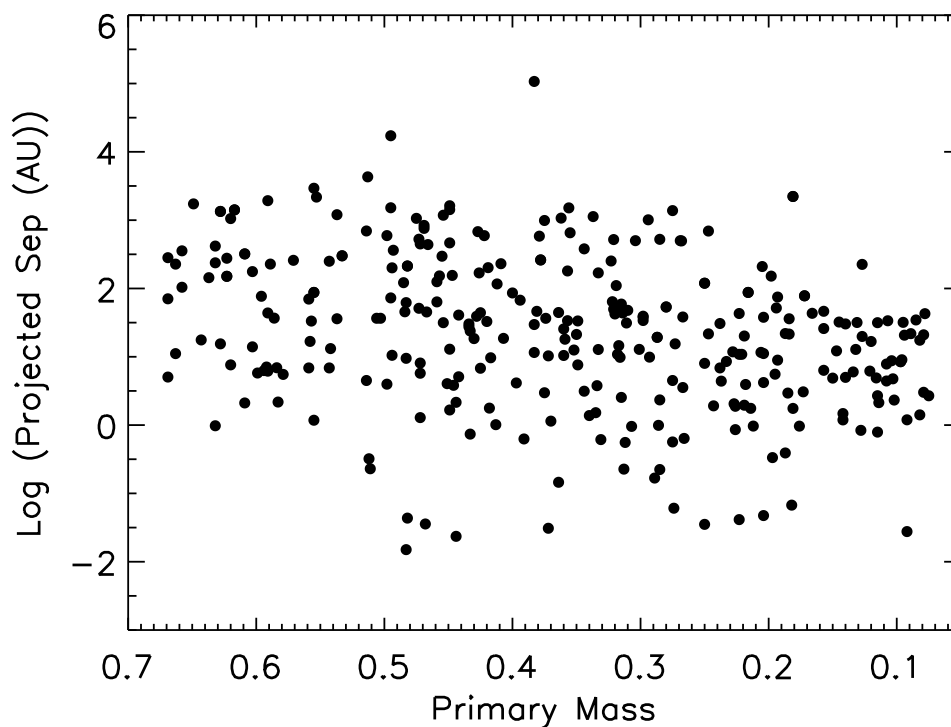


Figure 6.5 The log of the projected separation in AU as a function of primary mass for the 306 pairs. The more massive M dwarf primaries seem to lack companions at very close separations, and a weak trend of decreasing projected separation with primary mass is seen. The two outliers at very large projected separations from their primaries are G164-042C and GJ0130.1C, both with angular separations from their primaries in the thousands of arcseconds.

Another puzzle of star formation can be investigated by this survey. Is there a preferred

companion mass for these objects that form as members of red dwarf systems? Figure 6.6 shows the mass ratio of all 306 pairs in the sample, as a function of primary mass. In this sample, there do not seem to be any M0 + M9.5 pairs, as the mass ratio of the least massive M dwarf (defined by this sample to $0.075 M_{\odot}$) to the most massive M dwarf ($0.67 M_{\odot}$, by the mass-luminosity relation discussed in §6.3.2) is 0.11, and there are no data points in that region of the plot. Primaries with masses $0.45 - 0.60 M_{\odot}$ appear to have companions with a wide variety of masses, but as the mass of the primary decreases, the mass ratio increases to unity. We expect this because we have set a hard limit on companion masses by only including stellar companions, and there is a decreasing amount of mass phase space available as the primary's mass approaches this stellar boundary.

As noted in §6.1.4, brown dwarf companions have been excluded from the analysis. However, the percentage of M dwarfs with known brown dwarf companions is 1.3%, a fraction too low to fill in the open region on the graph where low mass primaries have no secondaries at large mass ratios. We note that this fraction is consistent with the number of solar-type stars with brown dwarf companions in the sample studied by Raghavan et al. (2010): $7/454 = 1.5\%$.

Another possibility presents itself. Given that there are larger numbers of smaller stars compared to more massive stars, why is the multiplicity rate so low for M dwarfs (27%) compared to G dwarfs (46%)? One might wonder why the multiplicity fraction for M dwarfs is not 100%. Is there some other process at work? It is possible that M dwarfs simply do not have enough mass to retain their companions, and thus they lose the lowest mass objects.

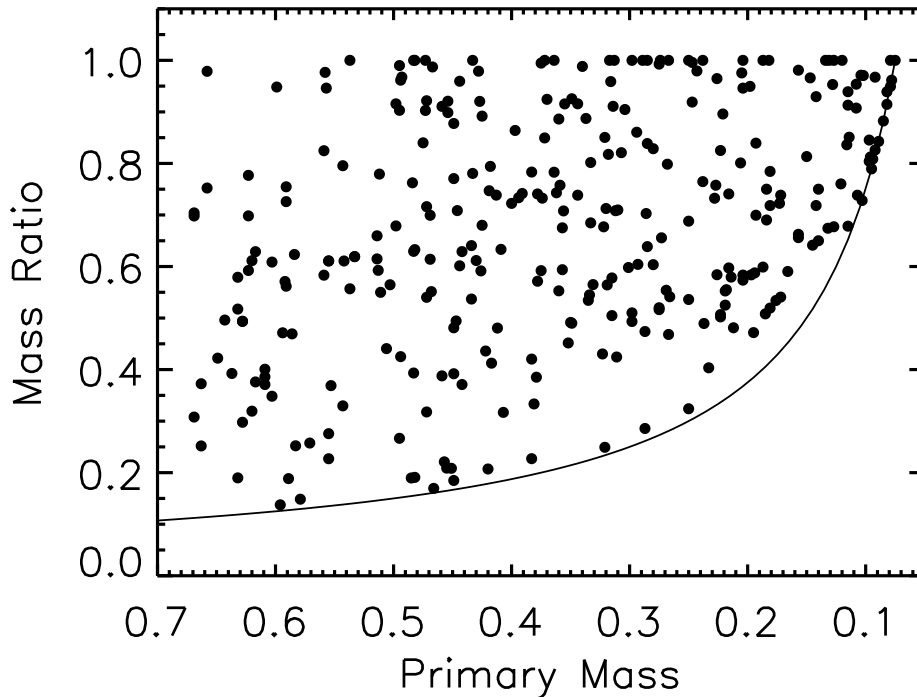


Figure 6.6 The mass ratio of multiples as a function of primary mass. A trend of mass ratios increasing to unity for low mass primaries is noted. The solid line indicates the mass ratio boundary relative to the lowest mass star considered here for this survey, with $M = 0.075 M_{\odot}$.

We propose pursuing this intriguing topic in the future by imposing the same mass ratio range studied in this survey ($0.075 M_{\odot} - 0.67 M_{\odot}$ equates to $q = 0.11 M_{\odot}$) on the sample of solar-type stars studied in Raghavan et al. (2010), which would correspond to masses $0.13 M_{\odot} - 1.2 M_{\odot}$ with a matching lower limit of $q = 0.11 M_{\odot}$. We will then re-create Figure 6.6 for the solar-type sample and create histograms, binned by tenths of a solar mass for the M dwarf sample and by two-tenths of a solar mass for the solar-type sample to compare the mass ratio distributions for each bin. An additional probe would be to create comparison

curves of the normalized cumulative mass ratios for the two G and M dwarf samples as functions of mass ratio for the same mass ratio range described above. This would enable a better understanding of the mass ratio distributions for each population of stars and provide hints as to what fuels the multiplicity rate for those samples.

6.4 M Dwarf Multiplicity as a Function of Mass

It is known that the multiplicity rate decreases with the mass of the primary star (Duchêne & Kraus 2013). Because the survey presented here is so robust, it is possible to analyze the multiplicity rates of subsets of the M dwarf population as a function of primary mass. Figure 6.7 subdivides the sample into bins of mass that differ by factors of two. It is evident that the largest mass bin has a markedly higher multiplicity fraction ($27.8 \pm 2.3\%$) than the two smaller mass bins ($20.8 \pm 2.6\%$ and $15.8 \pm 2.6\%$ for the mid- and low-mass bins, respectively). In all three subsamples, no corrections have been applied for undetected companions. This agrees with Figure 3 in Janson et al. (2012) and Figure 7 in Janson et al. (2014b), although their sample only extends to spectral type M6, so they do not address our lowest mass bin. It also appears that multiple systems are missing from the lowest mass bin at distances 18 to 25 pc, as that curve drops within that distance range. These missing multiples are likely due to that population being more difficult to study, due to their low luminosities.

Figure 6.8 shows the mass ratio distributions for the sample subsets by mass. The slight rises in the largest and smallest mass sub-samples leads to the more compelling upward trend in Figure ???. A spike at mass ratios $\sim 0.5 - 0.6$ is evident in both the large and medium

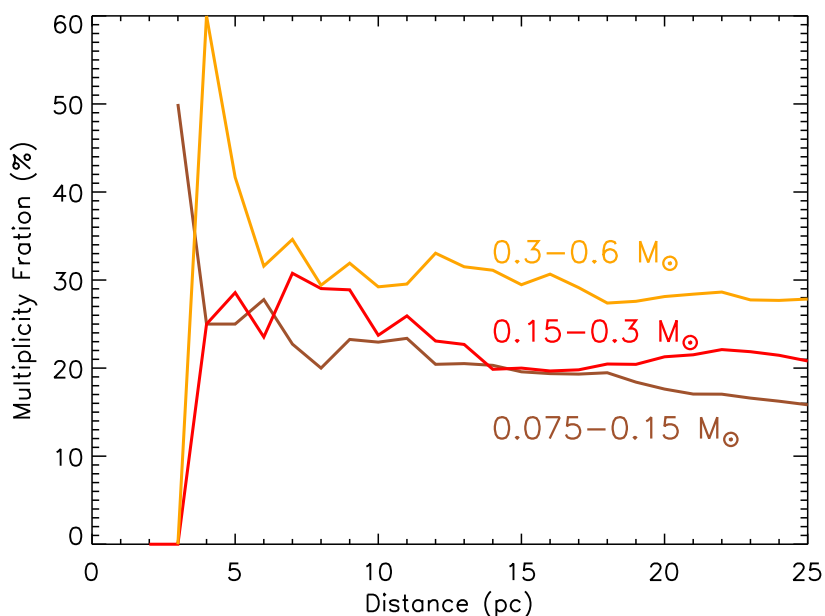


Figure 6.7 Cumulative stellar multiplicity fraction by primary mass. Shown are the running multiplicity fractions of the three mass subsets, with the masses of the primaries calculated from deblended photometry: primary masses $0.30 - 0.60 M_{\odot}$ represented by the orange line, with an uncorrected multiplicity rate of $27.8 \pm 2.3\%$; primary masses $0.15 - 0.30 M_{\odot}$ shown by the red line with an uncorrected multiplicity fraction of $20.8 \pm 2.6\%$; and primary masses $0.075 - 0.15 M_{\odot}$ shown by the brown line, with an uncorrected multiplicity rate of $15.8 \pm 2.6\%$. The largest mass bin has a markedly higher multiplicity fraction than the two smaller mass bins. It appears likely that multiple systems are missing from the lowest mass bin at distances 18 to 25 pc, as the curve decreases at those distances. Neither suspected nor substellar companions are included.

mass sub-samples and may be due to the estimates of ΔV , as mentioned in the discussion of Figure 6.3.2, although Janson et al. (2012) show a similar feature for their sample of M0 – M5 primaries with angular separations $0''.08 - 6''.0$ in Figure 5 of that paper. The axes were kept the same scale between plots in order to underline the changes with decreasing primary mass. The number of multiples decreases as a function of primary mass, and the mass ratio range decreases as the primary mass decreases, in part due to less mass availability for a

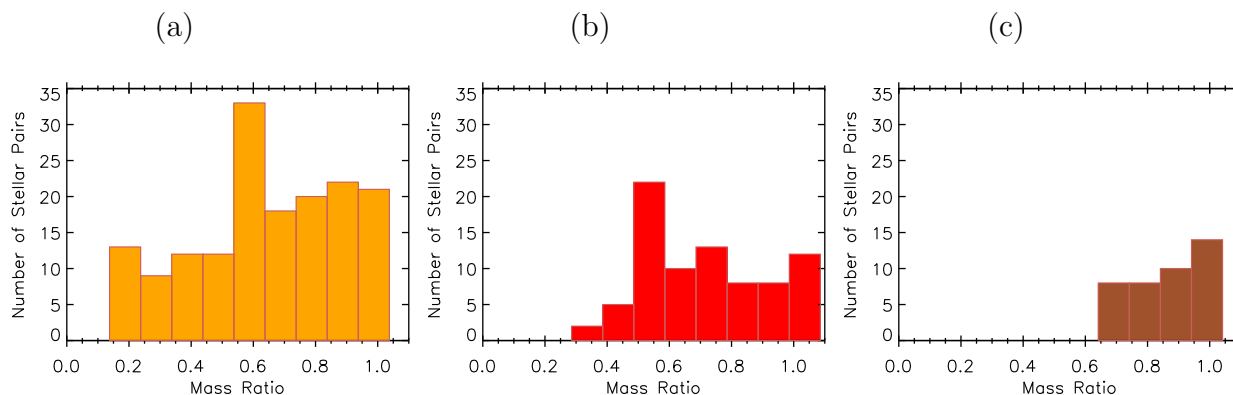


Figure 6.8 Mass ratio distributions for the primary mass sub-samples: (a) mass ratios for primaries with masses $0.30 - 0.60 M_{\odot}$ are represented in orange; (b) mass ratios for primaries with masses $0.15 - 0.30 M_{\odot}$ are shown in red; (c) mass ratios for primaries with masses $0.075 - 0.15 M_{\odot}$ are shown in brown. The axes are the same for all three plots to highlight the differences between each mass subsample. The distributions for the largest and smallest mass subsets increase toward equal mass ratios, with the range of mass ratios shrinking as a function of decreasing primary mass.

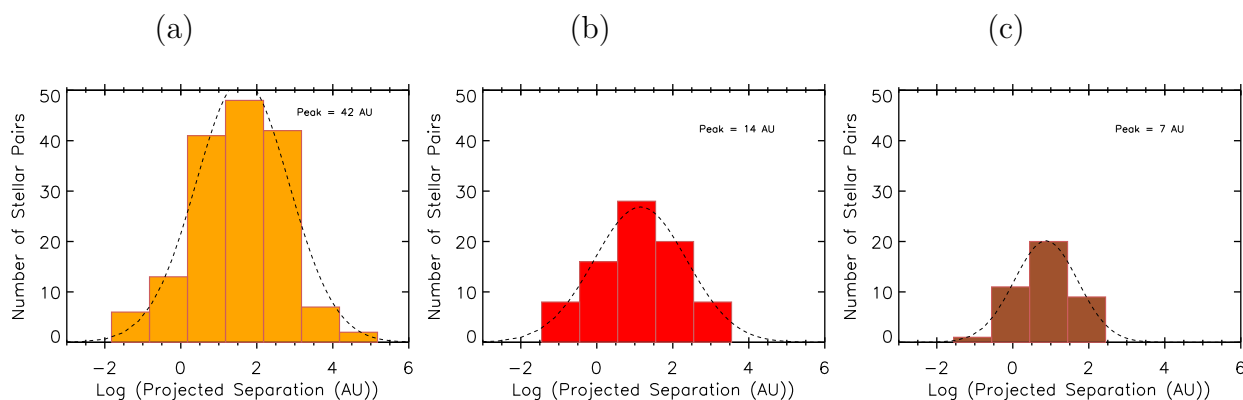


Figure 6.9 Log-separation distributions for the mass sub-samples: (a) the distribution of the projected separations of the subset of masses $0.30 - 0.60 M_{\odot}$ peak at 42 AU with $\sigma = 1.22$; (b) the distribution of the projected separations of the subset of masses $0.15 - 0.30 M_{\odot}$ peak at 14 AU with $\sigma = 1.22$; (c) the distribution of the projected separations of the subset of masses $0.075 - 0.15 M_{\odot}$ peak at 7 AU with $\sigma = 0.84$. The axes are the same for all three plots to highlight the differences between each mass subsample.

stellar companion. No substellar or suspected companions are included in these figures.

Figure 6.9 shows the log-projected separation distributions for the sample subsets by mass. Again, the axes are the same scale between plots. As mentioned, the number of

multiples decreases as a function of primary mass, and it is evident that the distribution peaks move to smaller separations as a function of decreasing primary mass, as noted in Figure 6.5. Again, comparison of our distribution peak for the mid-mass sub-sample, which corresponds most closely to the mid-M sample surveyed in Janson et al. (2014b), shows a peak at slightly larger projected separations (14 AU) than the peak reported in that paper (3 – 10 AU). No substellar or suspected companions are included in these figures.

6.5 M Dwarf Multiplicity as a Function of Tangential Velocity

Because it is known that the tangential velocity of a star increases with age due to gravitational kicks from objects in the Milky Way (usually from Giant Molecular Clouds), cool subdwarfs will generally have larger ($> 100 \text{ km s}^{-1}$) tangential velocities than young stars ($< 30 \text{ km s}^{-1}$). Thus, it is interesting to investigate multiplicity as a function of tangential velocity, which we can use as a proxy for age. Is there any trend? Figure 6.10 shows the tangential velocity distribution of the multiplicity sample, using the v_{tan} of the primary (or single) component. There appear to be more multiple systems at v_{tan} less than $\sim 50 \text{ km s}^{-1}$ than at larger v_{tan} . We can quantify this by naively dividing the sample in half (at $\sim 42 \text{ km s}^{-1}$) and calculating the multiplicity rate for each half. This exercise yields a multiplicity fraction of $26.7 \pm 2.2\%$ (151/566) for the half of the sample with $v_{tan} < 42 \text{ km s}^{-1}$, compared to $20.1 \pm 1.9\%$ (112/556) for the half with $v_{tan} > 42 \text{ km s}^{-1}$, hinting that **objects with lower tangential velocity may be more likely to be multiple.**

Perhaps systems that experience more encounters are less able to hold on to their com-

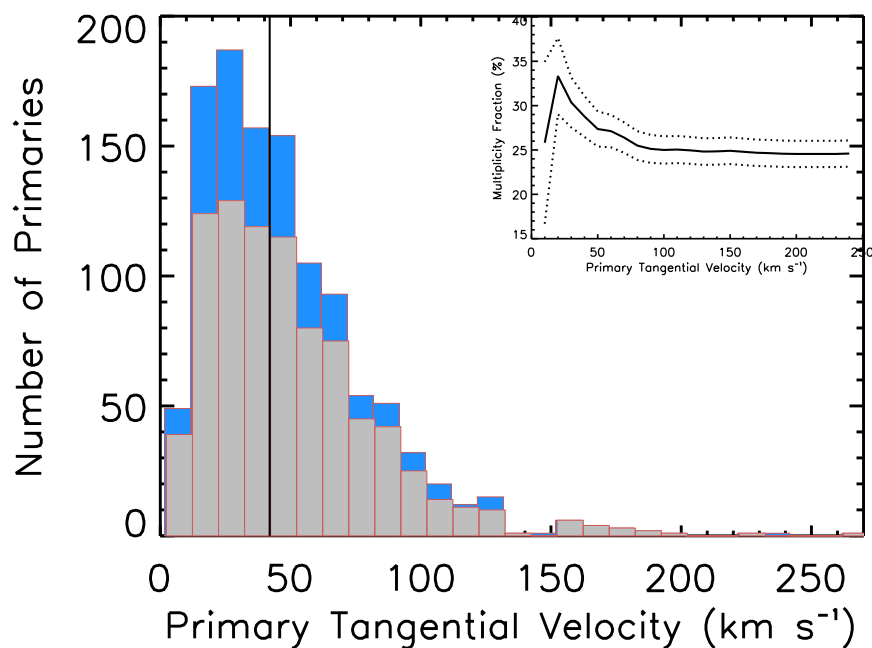


Figure 6.10 Histogram of primary tangential velocity. The tangential velocity of the primary (or single) component in each system is plotted in gray, with multiple systems indicated in blue. The inset graph at the top right is the running multiplicity fraction as a function of v_{tan} , indicating that slower moving objects tend to have companions slightly more often.

panions and thus lose a few along the way. The inset graph at the top right of Figure 6.10 gives the running multiplicity fraction as a function of v_{tan} , showing a small rise in the number of multiple systems at lower v_{tan} .

6.5.1 Young Stellar Objects

Within the solar neighborhood are young moving groups that have contributed members to the multiplicity sample. Within the studied collection are sixteen known young M dwarfs, nine of which are known to be multiple, yielding a multiplicity fraction of $56.3 \pm 18.8\%$.

However, this result is not statistically robust due to the small number of objects with which it was calculated. Presented in Table 6.4 are these known nearby young red dwarfs, with their astrometric data duplicated from Table B.1. In addition, the tangential velocity v_{tan} is listed, along with the youth indicators, and the moving group with which they are associated (Riedel et al., in prep). The youth indicators are as follows: BF — a bona fide and well-known member of a moving group; Li — the presence of Lithium; ol — over-luminous. Any member of a multiple system where one component exhibits any of these indicators is also assumed to be young, as in the case of GJ0871.1AB.

Table 6.4: Young Members

| Name | # obj | RA | DEC | μ (" yr ⁻¹) | P.A. (deg) | ref | v_{tan} (km s ⁻¹) | youth indicator | Moving Group |
|--------------|-------|------------|-----------|--------------------------------|------------|-----|------------------------------------|-----------------|--------------|
| LTT10301AB | 2 | 00 50 33.2 | +24 49 00 | 0.199 | 101.4 | 3 | 11 | ol | Argus |
| G080-021 | 1 | 03 47 23.3 | -01 58 19 | 0.330 | 145.8 | 3 | 25 | Li | AB Dor |
| 2MA0414-0906 | 1 | 04 14 17.3 | -09 06 54 | 0.168 | 325.2 | 2 | 19 | Li | none |
| LP776-025 | 1 | 04 52 24.4 | -16 49 21 | 0.243 | 150.7 | 1 | 19 | ol | AB Dor |
| GJ2036AB | 2 | 04 53 31.2 | -55 51 37 | 0.153 | 061.6 | 3 | 8 | BF | AB Dor |
| LP717-036AB | 2 | 05 25 41.6 | -09 09 12 | 0.208 | 164.2 | 4 | 20 | ol | AB Dor |
| APCOL | 1 | 06 04 52.1 | -34 33 40 | 0.330 | 003.6 | 4 | 13 | Li | Argus |
| CD-35 2722AB | 2 | 06 09 19.2 | -35 49 30 | 0.060 | 184.4 | 2 | 6 | BF | AB Dor |
| GJ2060ABC | 3 | 07 28 51.3 | -30 14 48 | 0.185 | 224.7 | 3 | 14 | BF | AB Dor |
| GJ0382 | 1 | 10 12 17.6 | -03 44 44 | 0.287 | 211.7 | 3 | 11 | ol | AB Dor |
| TWA022AB | 2 | 10 17 27.0 | -53 54 27 | 0.149 | 264.4 | 4 | 15 | Li | Beta Pic |
| GJ0393 | 1 | 10 28 55.6 | +00 50 28 | 0.947 | 219.6 | 3 | 32 | ol | AB Dor |
| GJ0490ABCD | 4 | 12 57 40.2 | +35 13 30 | 0.318 | 236.3 | 3 | 30 | BF | Tuc-Hor |
| GJ0856AB | 2 | 22 23 29.1 | +32 27 33 | 0.329 | 130.2 | 3 | 24 | Li | AB Dor |
| GJ0871.1AB | 2 | 22 44 57.9 | -33 15 01 | 0.220 | 123.0 | 3 | 24 | (Li) | Beta Pic |
| HIP114066 | 1 | 23 06 04.8 | +63 55 34 | 0.181 | 108.9 | 3 | 21 | Li | AB Dor |

References: (1) Høg et al. (2000); (2) Shkolnik et al. (2012); (3) van Leeuwen (2007); (4) Winters et al. (2015). The youth indicators are as follows: BF — a bona fide and well-known member of a moving group; Li — the presence of Lithium; ol — over-luminous.

6.5.2 Old, Cool Subdwarfs

There are very few old halo members, also known as subdwarfs, that happen to be passing through the solar neighborhood. The objects have been identified either spectroscopically or stand out on the Reduced Proper Motion Diagram shown in Figure 3.7 in Chapter 3. Out of the eleven confirmed subdwarf members with trigonometric parallaxes found within 25 pc, only three are multiple systems, resulting in a multiplicity fraction of $27.3 \pm 15.7\%$, which is very similar to that of the M dwarf population as a whole. As with the young stars, with such a small number of objects, this result is not statistically robust. These objects are identified in Table 6.5. In addition to the astrometric data for each system that have been duplicated from Table B.1, the calculated tangential velocities v_{tan} and spectral types from the literature are listed.

Table 6.5: Subdwarf Members

| Name | # obj | RA | DEC | μ (" yr ⁻¹) | P.A. ref (deg) | v_{tan} (km s ⁻¹) | Spectral Type | ref |
|-----------------|-------|-------------|-------------|--------------------------------|-------------------|------------------------------------|---------------|-----|
| LHS1490 | 1 | 03 02 06.36 | -39 50 51.9 | 0.859 | 221.3 | 8 | M5.0 VI | 4 |
| GJ1062 | 1 | 03 38 15.70 | -11 29 13.5 | 3.033 | 152.0 | 7 | M2.5 VI | 3 |
| LHS0189AB | 2 | 04 25 38.35 | -06 52 37.0 | 1.204 | 145.7 | 2 | M3.0 VIJ | 4 |
| LHS0272 | 1 | 09 43 46.16 | -17 47 06.2 | 1.439 | 279.2 | 5 | M3.0 VI | 3 |
| GJ0455AB | 2 | 12 02 18.08 | +28 35 14.2 | 0.791 | 268.0 | 7 | M3.5 VIJ | 3 |
| LHS2852 | 1 | 14 02 46.66 | -24 31 49.6 | 0.506 | 315.6 | 8 | M2.0 VI | 3 |
| LHS0375 | 1 | 14 31 38.25 | -25 25 32.9 | 1.386 | 269.0 | 7 | M4.0 VI | 3 |
| SSSPMJ1444-2019 | 1 | 14 44 20.33 | -20 19 25.5 | 3.507 | 236.0 | 6 | M9.0 VI: | 6 |
| GJ2116 | 1 | 15 43 18.33 | -20 15 32.9 | 1.173 | 195.3 | 8 | M2.0 VI | 1 |
| LHS3409 | 1 | 18 45 52.24 | +52 27 40.6 | 0.843 | 298.0 | 7 | M4.5 VI | 3 |
| LHS0064AB | 2 | 21 07 55.39 | +59 43 19.4 | 2.098 | 209.0 | 7 | M1.5 VIJ | 3 |

References: (1) Bidelman (1985); (2) Costa et al. (2006); (3) Gizis (1997); (4) Jao et al. (2008); (5) Jao et al. (2011); (6) Schilbach et al. (2009); (7) van Altena et al. (1995); (8) Winters et al. (2015).

6.6 Summary of Results

To conclude this analysis of the multiplicity survey, we report 21 new and 88 suspected companions companions to M dwarfs within 25 pc. We find a corrected multiplicity fraction of $27.4 \pm 1.3\%$ for M dwarfs, with the distribution of the projected separations of the companions peaking at 26 AU, i.e., the scale of the outer Solar System. We calculate the uncorrected multiplicity fractions for the three angular separation regimes ($< 2''$, $2 - 10''$, and $> 10''$) to be $15.6 \pm 1.2\%$, $3.5 \pm 0.6\%$, and $4.6 \pm 0.6\%$. A weak trend of decreasing projected separation with primary mass was found. We find the uncorrected multiplicity fraction of the the three mass subsets ($0.30 - 0.60 M/M_{\odot}$, $0.15 - 0.30 M/M_{\odot}$, and $0.075 - 0.15 M/M_{\odot}$) to be $27.8 \pm 2.3\%$, $20.8 \pm 2.6\%$, and $15.8 \pm 2.6\%$, with a hint that multiple systems have yet to be discovered for the two lower mass bins. The mass ratios for the mass sub-samples show weak rises that lead to a more compelling rise to equal mass ratios for the entire M dwarf multiplicity sample. Analysis of the tangential velocities of the primaries reveals a possible relation between multiplicity and tangential velocity, indicating that older, faster moving M dwarfs tend to have fewer companions as a population than their younger counterparts.

6.7 Notes on Individual Systems

There are some systems that require more detail than that given in Table 6.1, typically those that constitute more than two components or that are particularly interesting. These are listed here with the first four digits of RA and Decl.

GJ 1001ABC (0004-4044) Both the B and C components of this system are substellar (Dieterich et al. 2012).

GJ 1003 (0007+2914) Gliese & Jahreiss (1988) claim that GJ1003 and GJ1034 are members of the same system. They are separated by $\sim 16^\circ$, with $\mu = 1''.89 \text{ yr}^{-1}$, $\theta = 127^\circ$ for GJ1003 and $\mu = 1''.84 \text{ yr}^{-1}$, $\theta = 112^\circ$ for GJ1034, with $\pi = 53.5 \pm 2.5 \text{ mas}$ and $48.9 \pm 4.5 \text{ mas}$, respectively. While their proper motions and distances are similar, this would be the widest separation of any multiple system in the sample, with a projected separation of 5.6 pc. We do not link these two stars as a binary.

GJ 2005ABC (0024-2708) This system is a triple, not a quadruple. The D component reported in Henry et al. (1999) is not real (private communication from TJH).

GJ 0109 (0244+2531) This object is tagged as a VIM (Variability-Induced Mover) in the *HIPPARCOS* catalog, which could imply duplicity. However, Pourbaix et al. (2003) have shown this to be an incorrect tag in their re-analysis and re-calculation of the $(V - I)$ colors.

GJ 165AB (0413+5031) Allen et al. (2007) refer to GL 165B as an L4 dwarf; however, this is likely either a mistake or a typo for GD 165B. Kirkpatrick & McCarthy (1994) discuss both Gl 65B and GD 165B, so perhaps that is the source of the confusion. GD 165B is reported as a bona fide brown dwarf by Kirkpatrick & McCarthy (1994), but its coordinates are $\alpha = 14:24:39.09$, $\delta = +09:17:10.4$, so it is not the same object as GJ 165B. GJ 165AB seems, from a comment in Heintz (1992) to be a possibly equal magnitude binary. McAlister et al. (1987) provide separation information from speckle observations, but do not

provide any Δmag information.

LTT 11399 (0419+3629) Both Worley (1961) and Worley (1962) claim that this is a binary with a separation of $6''.4$ at 226° . Closer inspection and backtracking of its proper motion indicate that the alleged component is a background star. Balega et al. (2007) looked at this star with speckle but were unable to resolve it. It is marked as having a stochastic solution in Lindegren et al. (1997).

GJ 289 (0748+2022) Marcy & Benitz (1989) mention that Gl289 (GJ 289) is an SB2, but this is actually a typo for GJ0829, which is an SB. GJ 289 is single.

GJ 1103 (0751-0000) Reiners et al. (2012) cite Delfosse et al. (1998) for GJ1103(A) being an SB. However, Delfosse et al. (1998) only exclude GJ1103 from their sample due to it being a binary. They do not claim that it is an SB. In the LHS Catalog, also known as LHS1951 is advertised to have a companion LHS1952 with a separation of $3''$ at $\theta = 78^\circ$, with component magnitudes of $m_R = 13.0$ and 15.5 , and $m_{pg} = 15.0$ and 17.5 . Krupa Ghanda looked for the companion in September 2006 by examining (a) our own astrometry frames, in which the seeing was sometimes $1''.2$ or better, and (b) blinking POSS plates via Aladin. No companion was found. We conclude that GJ 1103 is single.

GJ 1155AB (1216+0258) This object was previously thought to have a white dwarf companion, but Gianninas et al. (2011) report that the white dwarf is actually a misclassified M dwarf. It was also not spectroscopically confirmed in a survey of SDSS objects by Kleinman et al. (2004).

GJ 465 (1224-1814) Heintz (1986) notes this object may yet be a long-term binary.

GJ 1167 (1309+2859) Jahreiß et al. (2008) note that the B component has $\mu = 0''.292$ yr⁻¹, $\theta = 234.9^\circ$. He also devotes an entire section to the B component and states that the two stars are not physically associated, as the photometric distance for B is 190 pc while the trigonometric distance for A is 12 pc. We calculate the *ccddist* for A to be 14.2 pc. Janson et al. (2012) note that A is single in their survey. Gliese & Jahreiß (1979) note it as AB, but the given proper motions are exactly the same. In notes to that object, however, they give the proper motion data as from Luyten ($0''.38$ yr⁻¹ and 240°) and G164-47 ($0''.48$ yr⁻¹ and 235°). We conclude that GJ 1167‘B’ is not a CPM companion to GJ 1167A and that GJ 1167 is a single system.

GJ 687 (1736+6820) Montet et al. (2014) cite Jenkins et al. (2009) for the M3.5 companion that they note in their Table 2. But the spectral type of the *primary* is M3.5. Jenkins et al. (2009) do not note any additional information about a companion.

The WDS lists GJ 687 as the B component to an F5 star, but the parallax for the F5 star is 11.20 mas (i.e., 89 pc) (van Leeuwen 2007) which places this object at a much larger distance than the M dwarf ($\pi = 220.47$, corresponding to 4.5 pc). It appears that the ‘A’ component, the F5 star (at $\alpha = 17:36:42$, $\delta = +68:22:59$, compared to $\alpha = 17:36:25.9$, $\delta = +68:20:20$ for GJ 687) is the SB, for which the measurement by McAlister et al. (1987) pertains. Tokovinin (1992) notes GJ 687 as both an astrometric and speckle binary in the table in that paper named ‘Long-period spectroscopic binaries’. But this, too, is likely for the F dwarf. The companion is deemed to be optical, and presumably GJ 687 is single.

LTT 15769 (1945+3223) This system is listed as double in the *HIPPARCOS* DMSA

(Lindgren et al. 1997) with $\rho = 12''.76$, $\theta = 339^\circ$ with a quality code of ‘D’, meaning an uncertain solution. Blinking of the system with SuperCOSMOS images having an epoch difference of five years reveals the motion of the primary, but not that of the bright ‘secondary’ with a ΔH_p of 2.3 mag. We thus refute this companion and deem the system ‘single.’

GJ 912 (2355-0608) This object had a code of ‘X’ from Lindgren et al. (1997) and has been confirmed as double with observations from DSSI.

CHAPTER 7

MULTIPLICITY STUDY BIASES & DETECTION LIMITS

An attempt is made here to recognize the biases present in the population studied and to understand their influences on the survey outcome. This is followed by discussion of detection limits in an effort to quantify the inherently human element present in searches done *by eye*.

7.1 Observational Biases & Selection Effects

All astronomical samples are subject to biases, even those having the benefit of a rich dataset, as does this study. While it is not straightforward, or even possible, to correct for them all, it is important to identify them in order to interpret the outcome of the survey. Those biases known to have affected the survey include (1) a Malmquist bias, (2) missing primaries, particularly from the lowest mass bin, (3) selection effects from imposed parallax error limits, (4) companions at intermediate ρ with large Δm s, and (5) close, unresolved companions at ρ smaller than the sensitivities probed. Each is discussed below, but only the final bias discussed is explicitly corrected in this work.

7.1.1 *Malmquist Bias*

In the most easily defined sample, one that is magnitude-limited, the brightest stars within a magnitude limit m are found within a larger volume than the fainter stars within the same magnitude limit. Therefore, the more luminous stars within that sample are over-represented. This is known as the *Malmquist Bias*. One criterion for an object's inclusion in the current sample of 1122 stars is that it have a trigonometric parallax in order to create

a volume-limited collection of M dwarfs. Because brighter objects are generally targeted for parallax measurements before fainter objects for which measurements are more difficult, 85% of the sample is made up of bright stars ($I < 12.00$), introducing an implicit Malmquist bias. As unresolved multiple systems are usually over-luminous, this survey's outcomes are biased toward a larger multiplicity fraction.

7.1.2 Missing Faint Primaries

As will be shown in Chapter 8, there is mass missing within 25 pc in the form of M dwarf primaries, the largest incomplete subsample being the lowest mass bin ($0.075 - 0.15 M_{\odot}$). We can make a conservative estimate for how many of these low mass primaries are missing by assuming that the 61 of these low mass systems found within 10 pc is complete. Extrapolating that value to 25 pc, assuming a constant stellar density, gives us an expected number of 953 systems, of which 240 are currently known, implying that 713 systems are missing from that low mass bin of M dwarfs. That bin also has the smallest (uncorrected) multiplicity fraction: 15.8%, (see §6.4), yielding 113 missing multiples. If we add those 713 systems to the current known sample of 1122, those 113 multiples amount to 6.1% that would be missing from that much larger collection of M dwarfs. However, the current uncorrected multiplicity rate of 23.4% would decrease to 14.4% with the sample increase of $1122 + 701 = 1823$ M dwarf primaries before the addition of the 6.1% from the faint primaries.

7.1.3 *Parallax Error Limits*

Because we have required the error on the published trigonometric parallax to be ≤ 10 mas in order to limit the sample to members that are reliably within 25 pc, it is possible that binaries were missed, as perturbations on the parallax due to an unseen companion can increase the parallax error. This is the case for 45 M dwarf systems with YPC or HIP parallaxes that were eliminated from the sample. If all 45 were included to the sample, the sample size would increase to 1167, and if all were found to be multiple, the multiplicity fraction would increase by 3.9%.

This bias only exists for parallaxes from the YPC or those measured by HIP, about two-thirds of the M dwarf primaries studied. The parallaxes measured as a result of our own astrometry program CTIOPI, \sim one-third of the sample, would not factor into this negative bias, as all these data were examined and perturbations flagged. We remind the reader that all parallaxes measured by the RECONS team have data spanning a minimum, and usually more, than two years, enabling the detection of perturbations. In addition, one of the criteria for publication of a parallax from our group is that the parallax error must be 3 mas, a factor of three less than the 10 mas error in question.

7.1.4 *Faint Companions*

This study was not sensitive to companions with large Δ mags at separations $\sim 1 - 2''$, as we show in §7.2. The ΔM_I for the M dwarf sequence from M0 to M9.5 spans almost nine magnitudes, with M_I varying from 6.78 — 15.32 mag. While the long exposure I -band

images obtained during the direct imaging campaign would likely reveal fainter companions at $\rho \sim 2 - 5''$, the saturation of most of the observed stars creates a CCD bleed along columns in the direction in which the CCDs read out. Those faint companions located within $\sim 1 - 2''$ of their primaries, but at an orientation 0 or 180° would be overwhelmed by the CCD bleed of the saturated star to even larger separations and not be detected. This effect would decrease the expected multiplicity fraction very slightly.

7.1.5 Close Companions

Another bias that has already been discussed in §6.2 is that this study was not uniformly sensitive to ‘close’ companions found at separations smaller than $\sim 2''$, so these unresolved multiples will have been missed, resulting in a smaller multiplicity fraction. This effect is believed to be the most significant sample bias encountered and has been addressed by studying the nearly completely searched 10 pc sample. As detailed in §6.2, we have determined that a correction of 4.1% is needed for the stars between 10 — 25 pc.

If we multiply this 4.1% by the number of M dwarf systems in the sample found at distances 10 — 25 pc (934 systems), the number of close multiples missing from the sample amount to 38. However, we have identified 91 candidate multiple systems, 83 of which are currently believed to be single; the other eight are already known to have a companion at a large angular separation. An additional eight of these 83 candidates have parallaxes placing them within 10 pc, leaving 75 suspected close multiples at distances 10 — 25 pc. If these eight candidates within 10 pc are found to be multiple, they would need to be added to the currently known 37 (of 188) M dwarf systems known have companions at angular

separations $< 2''$, and the correction factor would increase to 8.3%. The number of close multiples missing at distances 10 — 25 pc would then increase to 78, a number very close to the 75 candidates that have already been identified.

7.2 Consistency Between Telescopes

Because this was an all-sky survey, multiple telescopes with different CCDs were used to gather both astrometric and photometric data. Here, comparisons are made between the instrument specifications from the various sites to determine whether the astrometry data are consistent. Photometry results from the 42in are then compared to those from the 0.9m and from the literature to determine whether they are in agreement.

7.2.1 Astrometry

The four telescopes used for the imaging campaign are one-meter class telescopes^a and have CCD cameras that provide similar pixel scales. As listed in Table 2.1, the CTIO/SMARTS 0.9m has pixels $0''.401$ in size, the CTIO/SMARTS 1.0m has $0''.289$ pixels, Lowell’s 42in has $0''.327$ pixels, and the USNO 40in has $0''.67$ pixels. While the 0.9m has a slightly larger pixel scale than the 1.0m and the 42in, the seeing was typically better at that site, allowing for better resolution, as shown in Figure 7.1. Only 22 (fewer than 2% of the survey) were observed at the USNO 40in, so we do not consider the coarser pixel scale to affect the overall survey in any significant way. Therefore, it was felt that overall, the data from the four telescopes used was of similar quality and that the results could be combined without

^aLowell Observatory’s 42in Hall telescope mirror is 1.1m; the USNO 40in telescope’s mirror is 1.0m.

modification. We note that all data were acquired without binning pixels.

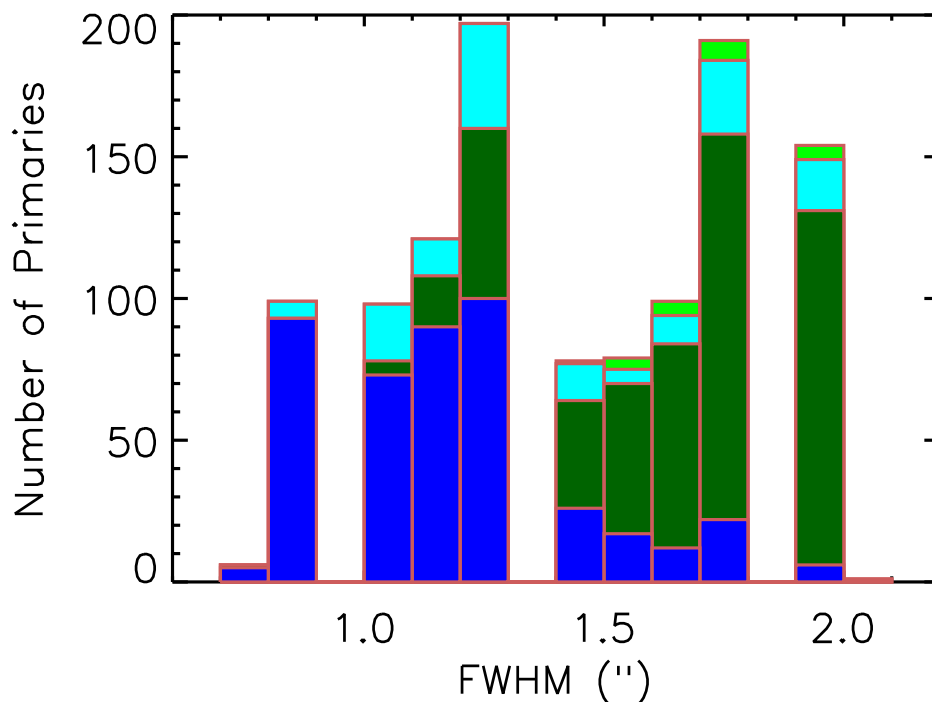


Figure 7.1 The seeing conditions experienced for the observations of the multiplicity sample in the I -band at each of the telescopes used. The four different telescopes are symbolized by the different colors: royal blue for the CTIO/SMARTS 0.9m, dark green for the Lowell 42in, cyan for the CTIO/SMARTS 1.0m, and bright green for the USNO 40in.

7.2.2 Photometry

The long history of published absolute photometry from the CTIO/SMARTS 0.9m as a by-product of the astrometry program (Winters et al. 2011, 2015, and citations in §3.2) is a testament to the quality of the data obtained with that telescope and instrument set-up. But it is important to ensure that the photometric data from the 42in and the 0.9m agree. Four targets were observed for photometry at both locations. Results match to 0.06 mag, except

for the R -band magnitude of GJ1167, as shown in Table 7.1, which can be attributed to a possible flare event observed at the time of observation at the 42in, as the V and I magnitudes are consistent. This object is in fact included in a flare star catalog of UV Cet-type variables (Gershberg et al. 1999). An additional six targets had published high quality photometry from the literature to which results from the Lowell 42in were compared^b. The photometry matches to within 0.08 mags for all six objects. As described in Winters et al. (2015), our typical 1σ errors are 0.03 mag, so the comparison of data presented here have differences of 2σ or less in 28 of the 30 cases shown in Table 7.1. No absolute photometry data were obtained from either the SMARTS/CTIO 1.0m or the USNO 40in telescopes.

Table 7.1: Overlapping Photometry Data

| Name | $(V - K)$ | V_J | R_{KC} | I_{KC} | # obs | tel/ref |
|--------------|-----------|-------|----------|----------|-------|-------------|
| 2MA0738+2400 | 4.86 | 12.98 | 11.81 | 10.35 | 1 | 42in |
| | | 12.98 | 11.83 | 10.35 | 2 | 0.9m |
| G043-002 | 4.76 | 13.23 | 12.08 | 10.67 | 1 | 42in |
| | | 13.24 | 12.07 | 10.66 | 2 | 0.9m |
| 2MA1113+1025 | 5.34 | 14.55 | 13.27 | 11.63 | 1 | 42in |
| | | 14.50 | 13.21 | 11.59 | 2 | 0.9m |
| GJ1167 | 5.59 | 14.16 | 12.67 | 11.10 | 1 | 42in |
| | | 14.20 | 12.82 | 11.11 | 1 | 0.9m |
| LTT17095A | 4.22 | 11.12 | 10.12 | 9.00 | 1 | 42in |
| | | 11.11 | 10.11 | 8.94 | ... | Weis (1993) |
| GJ0015B | 5.12 | 11.07 | 9.82 | 8.34 | 2 | 42in |
| | | 11.06 | 9.83 | 8.26 | ... | Weis (1996) |
| GJ0507AC | 3.96 | 9.52 | 8.56 | 7.55 | 1 | 42in |
| | | 9.52 | 8.58 | 7.55 | ... | Weis (1996) |
| GJ0507B | 4.64 | 12.15 | 11.06 | 9.66 | 1 | 42in |
| | | 12.12 | 11.03 | 9.65 | ... | Weis (1996) |
| GJ0617A | 3.64 | 8.59 | 7.68 | 6.85 | 1 | 42in |
| | | 8.60 | 7.72 | 6.86 | ... | Weis (1996) |
| GJ0617B | 4.67 | 10.74 | 9.67 | 8.29 | 1 | 42in |
| | | 10.71 | 9.63 | 8.25 | ... | Weis (1994) |

^bWe note again that all photometry from the literature has been converted to the JKC system, where applicable.

7.3 Detection Limits

It is a difficult but important task to quantify the subjectivity contributed by human analysis. Outlined here are the detection limits for both the blinking and imaging campaigns, where an effort is made to account for the human element of the searches.

7.3.1 *Blinking Search*

The common proper motion (CPM) search had two elements that needed to be evaluated in order to confidently identify objects moving with the primary star in question: companion brightness and magnitude of each system's proper motion.

As archival SuperCOSMOS plates were used for the blinking campaign, it is important to determine which companions would have been bright enough to be detected on the plates during this part of the search. A companion would have to have been detectable on at least two of the three plates in order to notice its proper motion, so any companion would need to be brighter than the magnitude limits given in Table 5.3. As the search is for *stellar* companions, it is only necessary to be able to detect a companion as faint as the faintest object in the sample, effectively an M9.5 V at 25 pc.

The faintest target in the sample in both the V - and R -bands, RG0050.5-2722, has $V = 21.54$, $R = 19.19$, and $I = 16.70$. The B magnitude for this object will therefore be much fainter than the ~ 20.5 faintness limit of the B plate, and thus RG0050.5-2722 was not found on the B plate; however, it was identified on both the R and I plates, as its R and I magnitudes are both brighter than the limits of those plates. Ten other objects are too

faint to be seen on the B plate, but as is the case with RG0050.5-2722, all are bright enough for detection on the R and I plates. The faintest target in the I -band is DEN0909-0658, with $I = 17.18$, well within the magnitude limits of the SuperCOSMOS I plate. (This star is slightly bluer than RG0050.5-2722, and thus its V magnitude is slightly brighter.)

As the sample has no lower limit to the proper motion, the epoch spread between the plates needed to be large enough to detect the primary star moving in order to then notice a companion moving in tandem with it. Fifty-eight of the objects studied have μ less than Luyten's historical cut-off of $0''.18 \text{ yr}^{-1}$; the slowest has $\mu = 0''.03 \text{ yr}^{-1}$. In order to detect this slowest object moving by $1''.5$, the epoch spread would need to be 50 years. The three main SuperCOSMOS plates used provide coverage of only up to 28 years, so in eighteen cases, the POSS-I plate was used for primaries with Declination $-20 < \delta < +5^\circ$. This extended the epoch spread by eight to twenty-four years, enabling the movement of these eighteen objects to be perceived. As noted in the histogram of μ shown in Figure 7.2, these 58 slower-moving objects with $\mu < 0''.18 \text{ yr}^{-1}$ make up only $\sim 5\%$ of the sample.

The motions of an additional 150 primaries were not able to confidently be detected due to the epoch spread of the plates being less than 5 years. These will be compared to the I -band images taken during the imaging portion of the survey in the near future. Because this is the CPM part of the survey, these companions would have angular separations greater than $10''$, the separation subset that has a multiplicity rate of 4.6% (as discussed in §6.2 and shown in Figure 6.2). Currently, it is possible that seven CPM companions were missed due to this small epoch spread.

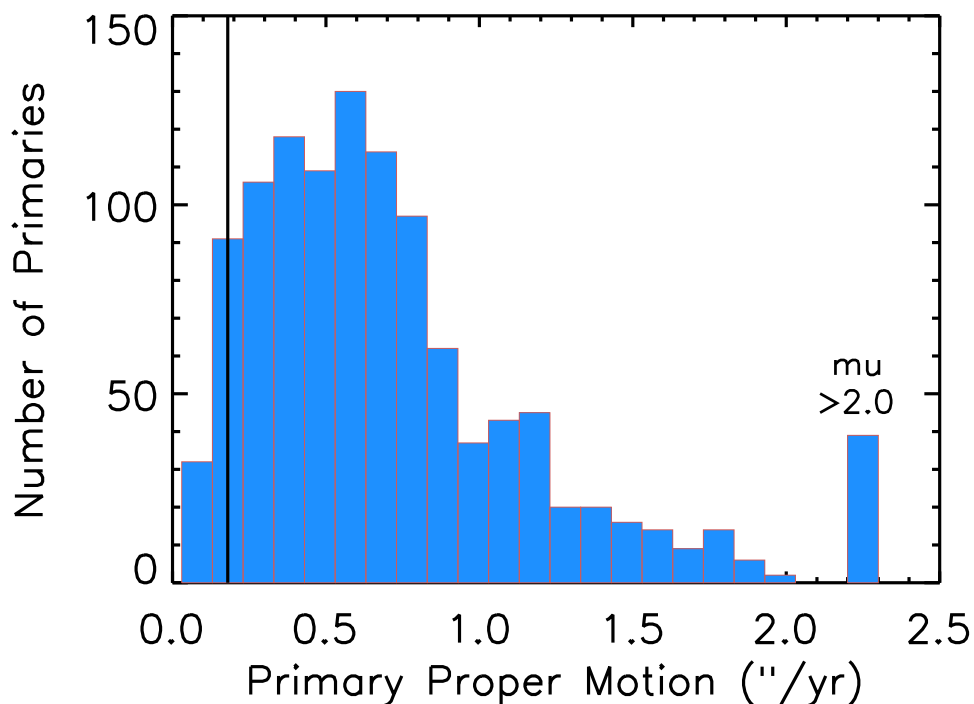


Figure 7.2 Histogram of the proper motion of the primary (or single) component in each system is plotted, with the vertical line indicating $\mu = 0''.18 \text{ yr}^{-1}$, the canonical lower proper motion limit of Luyten.

7.3.2 Imaging Search

A study of the detection limits of the imaging campaign was done for objects with a range of I magnitudes at $\rho = 1\text{--}5''$ and at $\Delta\text{mags} = 0$ up to 10 in one-magnitude increments for different seeing conditions at the two main telescopes where the bulk of the data were acquired: the CTIO/SMARTS 0.9m and the Lowell 42in.

Because the apparent I -band magnitudes for the stars in the multiplicity sample range from 5.32 — 17.18 (see Figure 5.2), objects with I -band magnitudes of 8, 12, and 16 were selected for investigation. Only 88 primaries (7.8% of the sample) have $I < 8$, so it was not

felt necessary to create a separate set of simulations around these brighter stars. These stars are listed in Table 7.2 with their I magnitudes, the FWHM at which they were observed and at which telescope, and any relevant notes.

As noted above, the faintest primary in the I -band found in the sample is DEN0909-0658 ($I = 17.18$), with $\pi = 42.5$ mas (corresponding to 23.5 pc), $(V - K) = 8.9$, and $M_V = 19.58$, all parameters that place it at the boundary of the sample in both distance and spectral type. Therefore, Δ mags of up to 10 magnitudes were probed in order to determine if a companion with $I = 18$ could be detected within 1 — 5'' of a primary with $I = 8$.

Table 7.2: Stars Used for Detection Limit Study

| Star | I (mag) | FWHM (arcsec) | Telescope | Note |
|----------------|--------------|------------------|-----------|------------------------|
| GJ0285 | 8.24 | 0.8 | 0.9m | |
| LP848-050AB | 12.47J | 0.8 | 0.9m | $\rho_{AB} < 2''$ |
| SIP1632-0631 | 15.56 | 0.8 | 0.9m | |
| L032-009A | 8.04 | 1.0 | 0.9m | $\rho_{AB} = 22''.40$ |
| SCR0754-3809 | 11.98 | 1.0 | 0.9m | |
| BRI1222-1221 | 15.59 | 1.0 | 0.9m | |
| GJ0709 | 8.41 | 1.0 | 42in | |
| GJ1231 | 12.08 | 1.0 | 42in | |
| Reference Star | 16 (scaled) | 1.0 | 42in | |
| GJ2060AB | 7.83J | 1.5 | 0.9m | $\rho_{AB} = 0''.485$ |
| 2MA2053-0133 | 12.46 | 1.5 | 0.9m | |
| Reference Star | 16 (scaled) | 1.5 | 0.9m | |
| GJ0109 | 8.10 | 1.5 | 42in | |
| LHS1378 | 12.09 | 1.5 | 42in | |
| 2MA0352+0210 | 16.12 | 1.5 | 42in | |
| Reference Star | 8 (scaled) | 1.8 | 0.9m | |
| SCR2307-8452 | 12.00 | 1.8 | 0.9m | |
| Reference Star | 16 (scaled) | 1.8 | 0.9m | |
| GJ0134 | 8.21 | 1.8 | 42in | |
| LHS1375 | 12.01 | 1.8 | 42in | |
| SIP0320-0446AB | 16.37 | 1.8 | 42in | $\rho_{AB} < 0''.33$ |
| GJ0720A | 8.02 | 2.0 | 42in | $\rho_{AB} = 112''.10$ |
| LHS3005 | 11.99 | 2.0 | 42in | |
| 2MA1731+2721 | 15.50 | 2.0 | 42in | |

Each of the stars was analyzed in seeing conditions of $1''.0$, $1''.5$, and $1''.8$, but because the seeing at CTIO is typically better than that at Anderson Mesa, where the Lowell 42in is located, we were able to push to $0''.8$ for the CTIO 0.9m, but had to extend to $2''.0$ for the Lowell 42in. These test stars were verified to have no known detectable companions within the $1 - 5''$ radii explored in this part of the project. We note that LP848-050AB has an astrometric perturbation due to an unresolved companion, but that at FWHM of $0.8''$, the two stars were still not resolved. As the imaging search probes separations $1 - 5''$, we argue that using this star does not affect the detection limit analysis. The other binaries used all either had larger or smaller separations than the $1 - 5''$ regions explored.

The *IDL shift* task was used to shift and add the science star as a proxy for an embedded companion, scaled by a factor of 2.512 for each magnitude difference. In cases where the science star was saturated in the frame, a reference star was selected from the shorter exposure taken in similar seeing in which the science star was not saturated. Its relative magnitude difference was calculated so that it could be scaled to the desired brightness in the longer exposure, and then it was embedded for the analysis. In all cases, the background sky counts were subtracted before any scaling was done.

Eighth magnitude targets were searched using the 3-second exposure to probe $\Delta I = 0$, 1, 2, 3, using the 30-second exposure for $\Delta I = 4$, 5, and using the 300-second exposure for $\Delta I = 6$, 7, 8, 9, 10. Similarly, twelfth magnitude objects were probed at $\Delta I = 0$, 1, 2, 3 using the 30-second exposure and at $\Delta I = 4$, 5 with the 300-second frame. Finally, the

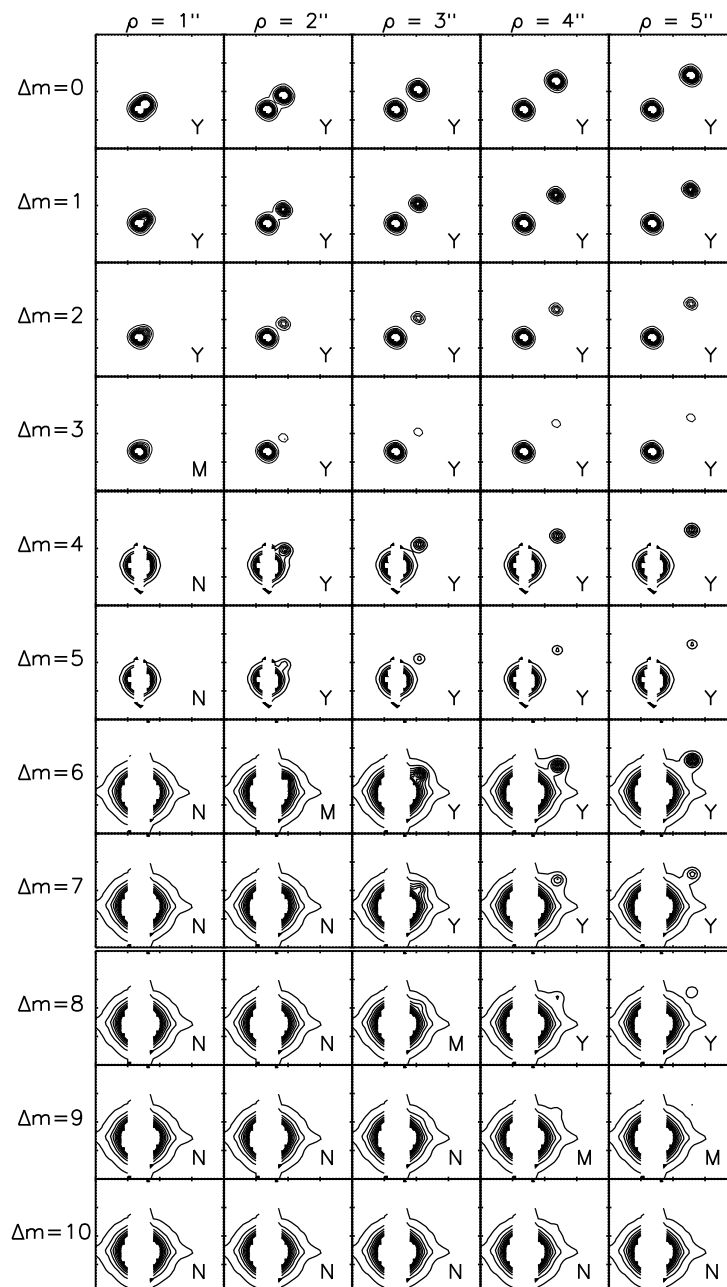


Figure 7.3 Detection Limits for the CTIO/SMARTS 0.9m: Contour plots for L032-009A, with $I = 8.04$ in $1''0$ seeing conditions for an embedded companion at $\rho = 1\text{--}5''$ with $\Delta m_{\text{ags}} = 0\text{--}10$. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 3-second exposure was used for $\Delta m_{\text{ags}} = 0\text{--}3$, the 30-second exposure was used for $\Delta m_{\text{ags}} = 4\text{--}5$, and the 300-second exposure was used for $\Delta m_{\text{ags}} = 6\text{--}10$. Thirty-five simulated companions were detected, five were possibly detected, while fifteen were not detected.

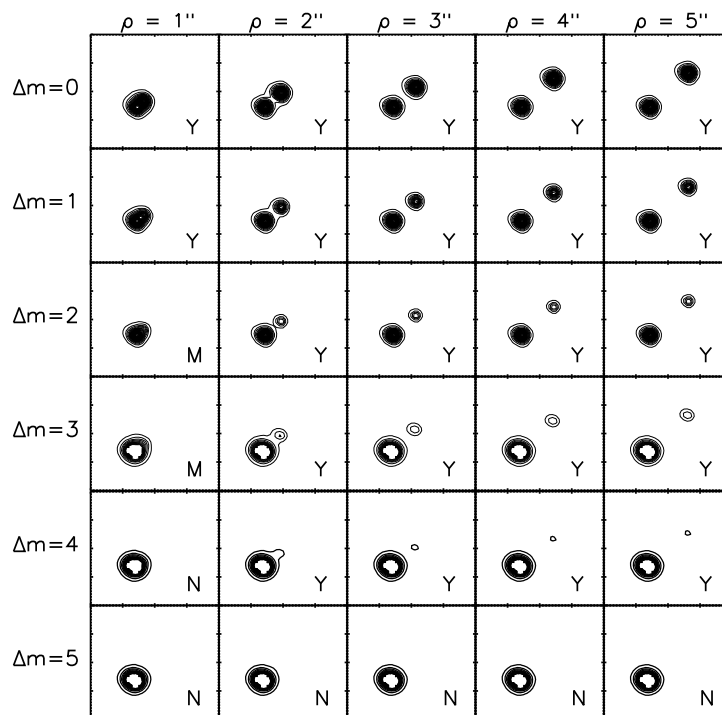


Figure 7.4 Detection Limits for the CTIO/SMARTS 0.9m: Contour plots for SCR0754-3809, with $I = 11.98$ at $1''.0$ seeing conditions for an embedded companion at $\rho = 1-5''$ with Δm s = 0 – 5. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 30-second exposure was used for Δm s = 0, 1, 2, and the 300-second exposure was used for Δm s = 3, 4, 5. Twenty-two simulated companions were detected, two were possibly detected, while six were undetectable.

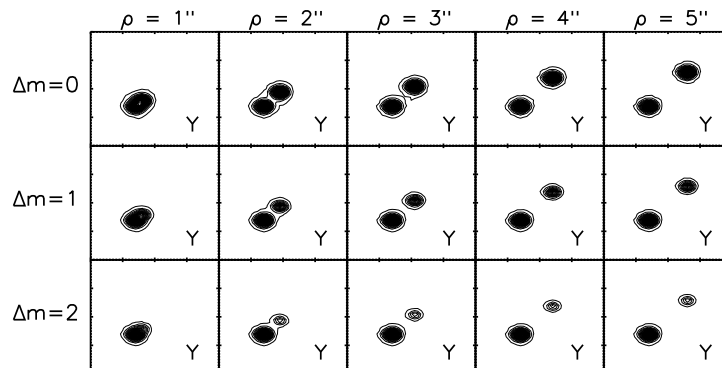


Figure 7.5 Detection Limits for the CTIO/SMARTS 0.9m: Contour plots for BRI1222-1221, with $I = 15.59$ at $1''.0$ seeing conditions for an embedded companion at $\rho = 1-5''$ with Δm s = 0 – 2. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 300-second exposure was used. Fifteen out of fifteen simulated companions were detected.

300-second exposure was used to explore the regions around the sixteenth magnitude objects for evidence of a stellar companion at $\Delta I = 0, 1, 2$. The images were examined in *IRAF* using both the contour and radial plot features; however, only contour plots are presented here. We note that the radial plots are often more sensitive.

Example contour plots for seeing conditions of $1''0$ at the CTIO/SMARTS 0.9m telescope are shown in Figures 7.3, 7.4, and 7.5. The ‘Y’, ‘N’, or ‘M’ labels in each plot indicate *yes*, *no*, or *maybe* for whether or not the companion was detectable by eye at the separation, magnitude, and seeing conditions explored. In most cases, a companion would have been detected. As can be seen, the science star is saturated in the frames used for ΔI greater than 4. The companion can be detected in 72 of 100 simulated situations, possibly detected in seven more cases, and not detected in twenty-one cases. The conditions where the companion remains undetected are at small ρ , at $\Delta I >$ than ~ 4 , and at all ρ for $\Delta I = 10$. We note that use of the radial plots will sometimes permit detection of an object that was not visible in the contour plot. Also, comparison of any elongated stars’ contour plots to contour plots of other stars in the frame allow judgement calls of whether or not the star in question is multiple.

All 800 contour plots made with *IDL* are presented in Appendix IV. As noted in §7.1.4, the ΔI for the M dwarf sequence is slightly less than nine magnitudes, so ΔI s of ten would be detections of brown dwarf companions. There were no companions detected with $\Delta I = 10$ around the brighter stars in the simulations. These simulations emphasize that this survey was not sensitive to brown dwarf companions at separations $1 - 5''$ around the very bright

M dwarfs in the sample. Because this search was for stellar companions, we can then ignore the $\Delta I = 10$ results for our summary of detection sensitivity, reducing the total contour plot number to 760. We will not consider the non-detections in the $\Delta I = 10$ simulations in our summary or in 7.3.

Table 7.3 presents a summary of the results of the detections of the embedded companions, with the fake companions being detected 68% of the time, possibly being detected in 9% of the simulations, and not detected in 23% of the simulations. For the simulations of bright stars ($I = 8$), 57% of the embedded companions were detected. For the stars with $I = 12$, the simulated companions were detected in 66% of the cases tested. For the faint stars ($I = 16$), the embedded companions were detected in 89% of the cases tested. At $\rho = 1''$, the embedded companion was detected in 27% of cases, possibly detected in 20% of cases, and not detected 53% of cases. However, we do not claim high sensitivity at separations this small. The detections are better in simulations at larger ρ . For $\rho = 2''$, the percentages are 68%, 1%, and 22% for the ‘yes’, ‘maybe’, and ‘no’ cases, respectively. They are 80%, 8%, and 13% for the test cases for $\rho = 3''$, 83%, 5%, 13% for the simulations for $\rho = 4''$, and 83%, 3%, 14% for the cases where $\rho = 5''$.

Table 7.3: Detection Limit Summary

| Seeing Conditions | Yes | Maybe | No |
|----------------------|-----|-------|-----|
| <hr/> | | | |
| CTIO 0.9m | | | |
| FWHM = 0".8 | 75 | 5 | 15 |
| $I = 8$ mag | 36 | 5 | 9 |
| $I = 12$ mag | 24 | ... | 6 |
| $I = 16$ mag | 15 | ... | ... |
| <hr/> | | | |
| FWHM = 1".0 | 72 | 7 | 16 |
| $I = 8$ mag | 35 | 5 | 10 |

| | | | |
|---------------------|-----|-----|-----|
| $I = 12$ mag | 22 | 2 | 6 |
| $I = 16$ mag | 15 | ... | ... |
| FWHM = $1''.5$ | 65 | 11 | 19 |
| $I = 8$ mag | 33 | 5 | 12 |
| $I = 12$ mag | 20 | 3 | 7 |
| $I = 16$ mag | 12 | 3 | ... |
| FWHM = $1''.8$ | 58 | 10 | 27 |
| $I = 8$ mag | 28 | 4 | 18 |
| $I = 12$ mag | 18 | 3 | 9 |
| $I = 16$ mag | 12 | 3 | ... |
| TOTAL - CTIO 0.9m | 270 | 33 | 77 |
| Lowell 42in | | | |
| FWHM = $1''.0$ | 70 | 4 | 21 |
| $I = 8$ mag | 34 | 4 | 12 |
| $I = 12$ mag | 21 | ... | 9 |
| $I = 16$ mag | 15 | ... | ... |
| FWHM = $1''.5$ | 64 | 10 | 21 |
| $I = 8$ mag | 33 | 6 | 11 |
| $I = 12$ mag | 17 | 3 | 10 |
| $I = 16$ mag | 14 | 1 | ... |
| FWHM = $1''.8$ | 60 | 11 | 24 |
| $I = 8$ mag | 29 | 6 | 15 |
| $I = 12$ mag | 19 | 2 | 9 |
| $I = 16$ mag | 12 | 3 | ... |
| FWHM = $2''.0$ | 54 | 12 | 29 |
| $I = 8$ mag | 24 | 9 | 17 |
| $I = 12$ mag | 18 | 2 | 10 |
| $I = 16$ mag | 12 | 1 | 2 |
| TOTAL - Lowell 42in | 248 | 37 | 95 |
| TOTAL | 518 | 70 | 172 |

Figure 7.6 illustrates the detection limits of the survey. Four companions have angular separations outside the range of the plot, but well within the $600''$ sensitivity of the searches. We note that the largest ΔI detected was ~ 6.4 (GJ0184B), while the largest angular separation detected was $295''$ (GJ0049B).

To summarize, biases that affect the survey's results have been noted, including the

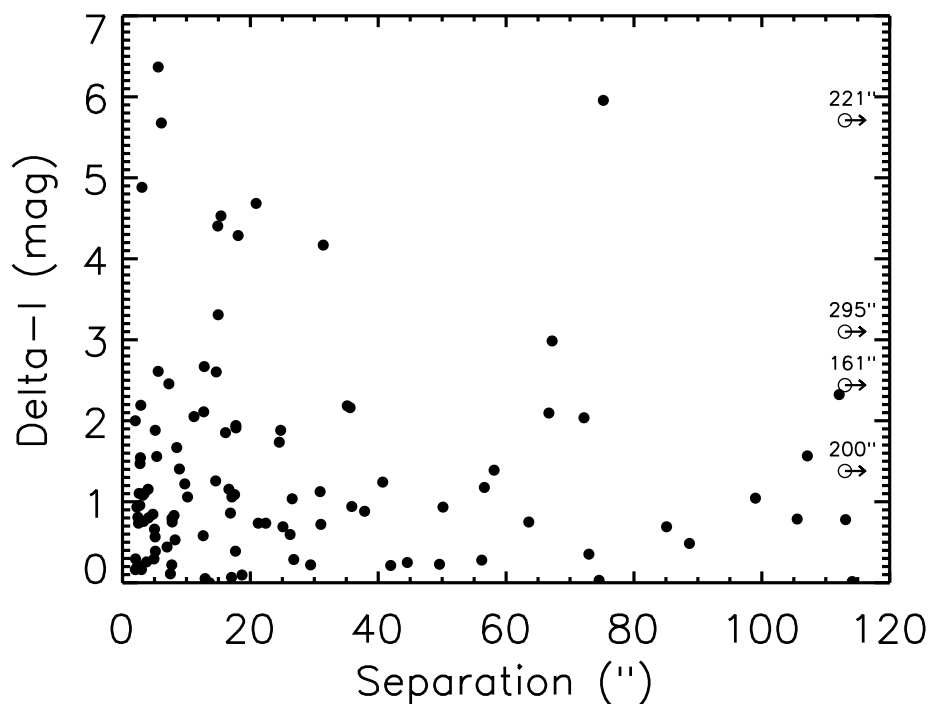


Figure 7.6 ρ vs. ΔI is plotted to show the observational limits of the survey. The solid points indicate companions that were detected during the two main campaigns (imaging and blinking). The open circles with arrows indicate companions that have lie outside the range of the plot: L977-016B with $\rho = 200''$ and $\Delta I = 1.38$, G192-011B with $\rho = 161''$ and $\Delta I = 2.44$, GJ0049B with $\rho = 295''$ and $\Delta I = 3.10$, and GJ0644E with $\rho = 221''$ and $\Delta I = 5.71$.

ubiquitous Malmquist bias, missing low mass primaries, user-imposed parallax criteria limits, as well as faint companions at small separations. An attempt has also been made to mitigate the human error factor that contributes to searches *by eye*. As we have shown, in at least two-thirds of the cases tested, a companion within the separation and Δmag limits probed would have been discernible from images alone — additional close companions have been recovered via high resolution imaging techniques, astrometric perturbations, and literature searches.

CHAPTER 8

CONCLUSIONS

8.1 The Big Picture

It is important to put the results from this survey in perspective. Comparisons to the results from other M dwarf multiplicity surveys will be made here, as well as to surveys of more massive stars. The missing mass problem will be then be addressed, including a discussion of how both missing primaries and unresolved companions affect the red dwarf mass function. We will assess the current status of the nearby M dwarf population, along with its relevance to those conducting planet searches. Finally, directions for future work will be outlined.

8.1.1 Comparison to Other M Dwarf Surveys

As noted in Chapter 5, previous surveys have been done to determine M dwarf multiplicity, but most have studied samples on the order of a hundred stars. We reproduce in Table 8.1 the listing of those efforts outlined in Chapter 5, Table 5.2, with the addition of the multiplicity rate reported by each survey. In the notes column, we provide information related to each particular study that indicates whether a direct comparison is possible or even relevant.

Table 8.1: Previous M Dwarf Multiplicity Studies - Multiplicity Rates

| Reference | # | Mult. | Notes |
|--------------------------|-------|--------------------|---------------------------|
| Skrutskie et al. (1989) | 55 | ... | multiplicity not reported |
| Henry & McCarthy (1990) | 27 | 34 ± 9 | |
| Henry (1991) | 74 | 20 ± 5 | |
| Fischer & Marcy (1992) | 28-62 | 42 ± 9 | varied sample |
| Simons et al. (1996) | 63 | 40 | |
| Delfosse et al. (1999a) | 127 | ... | multiplicity not reported |
| Law et al. (2006) | 32 | 7^{+7}_{-3} | M5 - M8 |
| Endl et al. (2006) | 90 | ... | Jovian search |
| Law et al. (2008) | 77 | $13.6^{+6.5}_{-4}$ | late-type M's |
| Bergfors et al. (2010) | 124 | 32 ± 6 | young M0 - M6 |
| Dhital et al. (2010) | 1342 | ... | wide binary search |
| Law et al. (2010) | 36 | ... | wide binary search |
| Dieterich et al. (2012) | 126 | ... | brown dwarf search |
| Janson et al. (2012) | 701 | 27 ± 3 | young M0 - M5 |
| Janson et al. (2014b) | 286 | 21-27 | > M5 |
| Ward-Duong et al. (2015) | 245 | 23.5 ± 3.2 | K7 - M6 |
| this work | 1122 | 27.8 ± 1.3 | all trig. distances |

At first glance, it is evident that the multiplicity fractions reported by others varies over a large range, from 7% to 42%. However, it is necessary to probe deeper to understand the limitations of each survey.

Some of the surveys (Skrutskie et al. 1989; Delfosse et al. 1999a) did not report a multiplicity fraction in their results, so they will not be addressed. Others explored the regions around M dwarfs in search of different types of objects (brown dwarfs or exoplanets) or at different separation regimes and are thus not relevant to the present comparison. Dhital et al. (2010) and Law et al. (2010) explored only the wide binary fraction, while other searches

were for substellar objects, brown dwarfs in the case of Dieterich et al. (2012) and Jovian mass planets in the case of Endl et al. (2006). While these searches for substellar objects can be considered lower limits for the types of companions found around M dwarfs, we note that stellar companions are not always reported. Law et al. (2006, 2008) probed different sample sizes of late-type M dwarfs using the same technique and report multiplicity rates that are different by a factor of two, but still within their large errors. We note that the multiplicity rate calculated here for the lowest mass bin of M dwarfs agrees with that reported in Law et al. (2008).

A number of the other samples for M dwarf multiplicity determination were volume-limited. Henry & McCarthy (1990) searched the 5 pc sample of M dwarfs, while Henry (1991) and Simons et al. (1996) extended the volume searched to 8 pc. Fischer & Marcy (1992) searched a varied sample of M dwarfs within 20 pc. The samples of Bergfors et al. (2010); Janson et al. (2012), and Janson et al. (2014b) were all within 52 pc, but had mostly photometric parallaxes. The only other sizeable survey that is volume-limited and has trigonometric parallaxes available is that of Ward-Duong et al. (2015); however, their sample does not include any late M dwarfs.

We find that our multiplicity fraction result agrees with most of the more recent surveys (Bergfors et al. 2010; Janson et al. 2012, 2014b; Ward-Duong et al. 2015) (32%, 27%, 21 — 27%, 24%, respectively). Our results also agree with the earlier studies of Henry & McCarthy (1990) and Henry (1991) (34% and 20%) within the errors, but are smaller than the studies of Fischer & Marcy (1992) and Simons et al. (1996) (42% and 40%). It is likely that some

of the earlier works simply did not have enough targets from which to calculate accurate results with low statistical errors.

We find a somewhat larger multiplicity fraction than that of Ward-Duong et al. (2015), who had a volume-limited sample of late-K to mid-M dwarfs, all with trigonometric parallaxes, although results agree within the error bars. We note that the fraction that they report should be larger, as (a) it includes the more massive M dwarfs, which have a higher multiplicity rate, (b) it samples well the smaller separations, which dominate the multiplicity rate, and (c) their stars were all closer (distances $< 15\text{pc}$) and therefore their sample should be more complete.

The answer lies in the fact that they used parallaxes only from *HIPPARCOS* (van Leeuwen 2007). Examination of the sample studied here reveals an additional 308 M dwarfs with parallaxes from sources other than van Leeuwen (2007) that place them within 15 pc, 247 of which are within the color-limits of their sample ($3.65 < (V - K) \lesssim 6.8$)^a. Of course, unearthing every parallax to every nearby M dwarf is no trivial task. It is much simpler to use one source for trigonometric distances. But the benefit of access to the RECONS 25 pc Database for creation of the sample presented here is emphasized.

Due to all of the targets in our multiplicity sample having accurate trigonometric parallaxes, the study presented here has a number of advantages over ones conducted by others. All of the targets considered were reliably known to be within 25 pc. Because we measured *VRI* photometry for all targets lacking it, we were able to use data all on the same photometric system, combined with the existing parallaxes, to calculate M_V and thus, estimate

^aThis red limit has been estimated from the color-color diagram in their paper, as it is not specified.

masses. Most other surveys were forced to use less accurate types of distances to draw conclusions from their data. We were also able to calculate projected separations that were more accurate than those of others. Our survey was comprehensive in two search regimes, while also able to infer the presence of candidate companions using other methods.

8.1.2 Comparison to More Massive Stars

Listed in Table 8.2 are the multiplicity statistics for stars of other main sequence spectral types. While brown dwarfs are not main sequence objects, they have been included for comparison. The percentage of stars that they comprise has been purposely left blank, as they are not stars, and in fact the size of the brown dwarf population is not well constrained. As previously mentioned, the multiplicity rate decreases with primary mass. The thorough study presented here provides an anchor for the statistics at the low end of the stellar main sequence, enabling a complete picture of stellar multiplicity.

Table 8.2: Multiplicity of Main Sequence Stars

| Spectral Type | % of Stars | Ref | Mult. Fraction | Comp. Fraction | Mult Ref |
|---------------|------------|-----|----------------|----------------|----------|
| O | <0.1 | 2 | >80 | 130 | 5 |
| B | 0.1 | 2 | 70 | 100 | 3 |
| A | 0.6 | 2 | 70 | 100 | 3 |
| F | 3.3 | 2 | 50 | 75 | 6 |
| G | 7.8 | 2 | 46 | 75 | 6 |
| K | 10.2 | 2 | ~40 | 56 | 6 |
| M | 75.0 | 4 | 27 | 31 | 1 |
| L,T | ... | | 22 | 22 | 3 |

References: (1) this work; (2) Binney & Merrifield (1998); (3) Duchêne & Kraus (2013); (4) Henry et al. (2006); (5) Mason et al. (2009); (6) Raghavan et al. (2010).

Solar-type FGK stars are the ones with which we are most familiar, as they make up $\sim 21\%$ of all stars (Binney & Merrifield 1998). More massive stars of types OBA are even more rare, accounting for less than 1% of all stars (Binney & Merrifield 1998). Table 8.2 gives the multiplicity fraction of dwarf stars by spectral type, along with the percentages of all stars made up by that spectral type. The K dwarf multiplicity fraction is the most uncertain, with no comprehensive multiplicity search having yet been done for that spectral type. While the multiplicity fraction decreases as a function of primary mass, it is evident that the number of stars increases with decreasing mass, which is why the large study reported here is so important.

Table 8.3: Multiplicity Example

| Spectral Type | % of Stars | # of Stars | Mult. Fraction | # Mult |
|---------------|------------|------------|----------------|---------|
| O | 0.003 | 30 | 80 | 24 |
| B | 0.1 | 1,000 | 70 | 700 |
| A | 0.6 | 6,000 | 70 | 4,200 |
| F | 3.3 | 33,000 | 50 | 16,500 |
| G | 7.8 | 78,000 | 46 | 35,880 |
| K | 10.2 | 102,000 | 40 | 40,800 |
| M | 75.0 | 750,000 | 27 | 202,500 |
| | 97.0 | 970,030 | 31.0 | 300,604 |

From this now complete picture of stellar multiplicity, we can determine the multiplicity fraction of all star systems. Consider one million stars. Table 8.3 duplicates the percentages of stars for each main sequence spectral type and the multiplicity fraction for each of those spectral types from Table 8.2. In addition, however, is listed the number of stars within

one million that each spectral type would contribute and how many of those would be multiple. The extra three percent of stars not shown in the second column are made up of giants, supergiants, and white dwarfs (Binney & Merrifield 1998). Based on the numbers presented, we can conclude that the multiplicity fraction of all main sequence star systems is 31.0%, and that therefore, **most stellar systems are single.**

8.2 Missing Mass Within 25 pc

Due to their low luminosities, the M dwarfs suffer from incompleteness as a population, even in the solar neighborhood. This can have a critical effect on determinations of the Initial Mass Function (IMF), the relative number of stars per mass bin. As shown for the southern M dwarfs in Figure 3.9, it is anticipated that hundreds, perhaps thousands, of red dwarfs still remain to be discovered within 25 pc. With the multiplicity sample, it is possible to assess what portions of the known total red dwarf mass each sub-population of primaries and their components comprise. We can then infer how much ‘missing mass’ can be attributed to missing primaries and hidden companions in the sample, and then estimate which of these elusive solar neighborhood members are most likely to be yet undetected and how they might affect the IMF.

8.2.1 *Missing Primaries*

First, it is important to discuss the density of the nearby stellar system population, as defined by the primary stars. Population density diagrams provide a gauge of the uniformity of systems within a volume stretching to 25 pc, as shown in Figure 8.1, where M_V , a proxy for

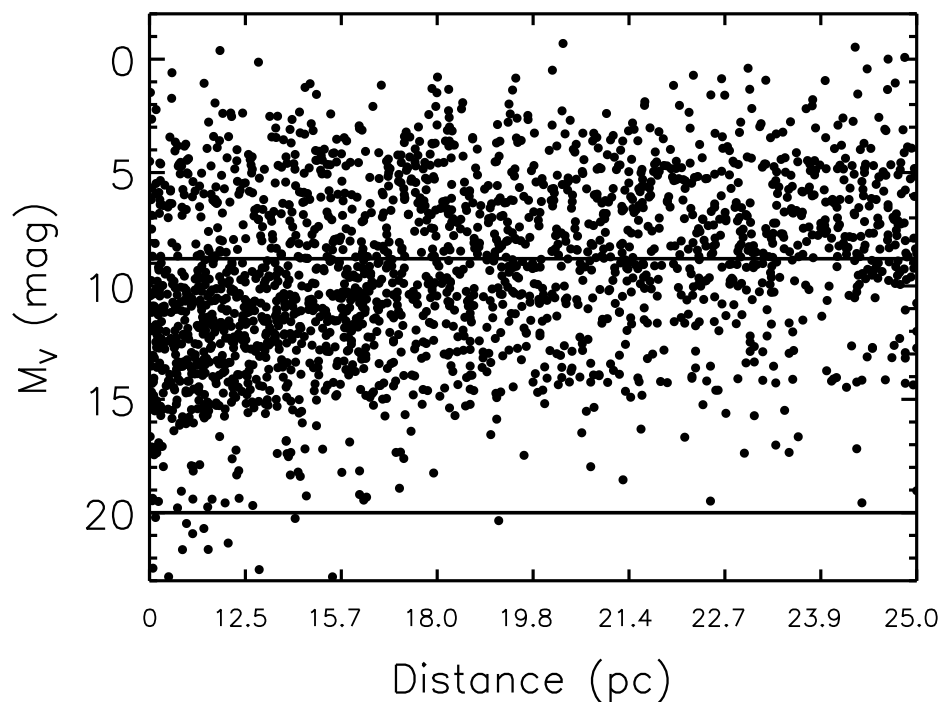


Figure 8.1 Population density plot for the entire 25 pc sample. Illustrated is the constant stellar density to 25 pc for brighter and more massive objects in the solar neighborhood from $M_V = 0 - 8.8$. The horizontal lines outline the M dwarf region at $M_V = 8.8 - 20$.

mass, is plotted versus distance in eight equal volume shells. It is evident that the density of the more massive ($M_V = 0 - 8.8$ mags) stellar members of the solar neighborhood is constant to 25 pc. Thus, a constant density for the M dwarfs can be assumed as well.

With the expectation that the nearby M dwarf population should be uniformly distributed to 25 pc, we can turn our attention to the state of the current census. Figures 8.2 (a) and (b) are population density diagrams for the M dwarf sample within 25 pc, where mass is plotted versus distance in eight equal volume shells to 25 pc for the primaries alone (a) and all M dwarfs (b) in the multiplicity project. Primaries have been noted in red, the companions in

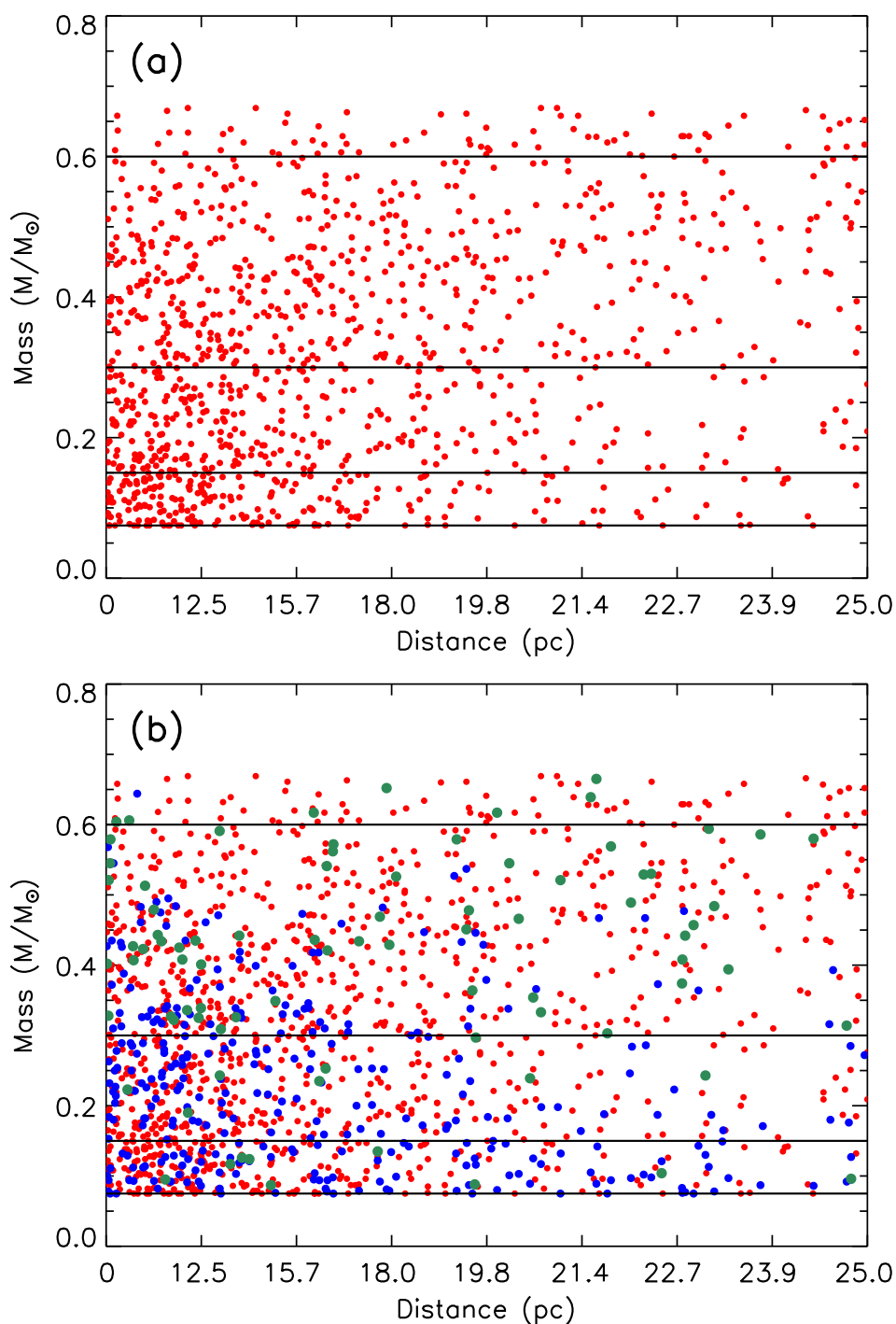


Figure 8.2 Population density diagrams. (a) A population density diagram for the 1122 M dwarf primaries in the multiplicity sample with masses estimated from deblended photometry. (b) A population density diagram for the 1431 M dwarf components in the multiplicity sample with masses estimated from deblended photometry. Primaries are plotted in red; companions in blue, suspected new companions in green. The horizontal lines divide the sample into subsamples that span factors of two in mass.

blue, and the suspected companions in green. The horizontal lines indicate the subsamples of M dwarfs at masses $0.075 - 0.15 M_{\odot}$, $0.15 - 0.30 M_{\odot}$, and $0.30 - 0.60 M_{\odot}$ (divisions by factors of two in mass) that have been analyzed. It is evident that the closer primaries are more uniformly distributed, but that beyond ~ 15 pc, the density drops, indicating that both primaries, particularly those in the lowest mass regions, and secondaries are missing at further distances. The missing secondaries were revealed previously in the cumulative multiplicity fraction (Figure 6.2).

Next, we can analyze the collection of M dwarfs by mass subset to determine which of the subsamples are most incomplete and at what distances their numbers begin to diverge from expected values. Figure 8.3 illustrates cumulative curves of the numbers of M dwarf primaries in each mass bin (1048 with masses less than $0.6 M_{\odot}$) *currently* found within 25 pc as a function of increasing distance. Mass estimates are calculated from deblended photometry. The solid curves represent the numbers of actual red dwarf primaries in each mass bin. The dashed lines are the expected numbers of primaries, based on the number found either within (a) 5 pc or (b) 10 pc and extrapolated to 25 pc. The dotted lines are the Poisson error limits calculated from the number of objects either within (a) 5 pc or (b) 10 pc. Orange indicates the bin of the largest mass objects ($0.30 - 0.60 M_{\odot}$), red shows the mid-mass bin ($0.15 - 0.30 M_{\odot}$), and brown is for the lowest mass bin ($0.075 - 0.15 M_{\odot}$).

Let us consider Figure 8.3(b) first. The curves of known stars and predicted stars appear to be the same up to distances of 15, 13, and 11 pc, respectively for the large, medium, and small mass bins. The sample of most massive stars (the orange curve) appears most

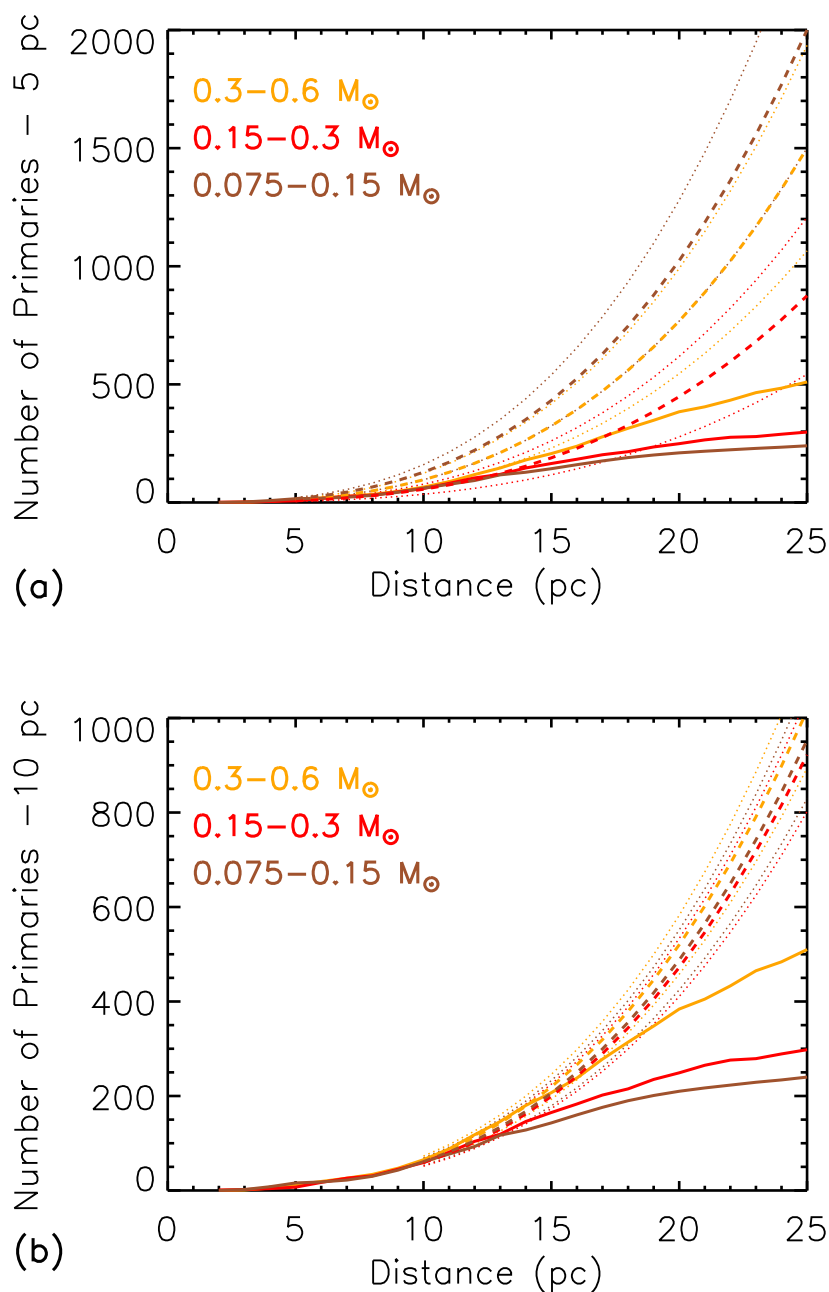


Figure 8.3 Cumulative censuses of M dwarf primaries in the multiplicity study. Masses have been estimated from the deblended photometry of M dwarf primaries. The solid lines represent the cumulative known numbers of M dwarf primaries in each mass bin. The dashed lines indicate the expected number of primaries in each mass bin extrapolated to 25 pc from the number known to lie within (a) 5 pc or (b) 10 pc, and assuming a constant stellar density. The dotted lines are the upper and lower Poisson error limits.

complete, while the sample of least massive stars (the brown curve) is the most incomplete at 25 pc, which is expected. The errors on the extrapolated values are satisfyingly small, due to a reasonable number of objects within the three mass bins at 10 pc (65, 59, and 61 for the largest, medium, and lowest mass bins, respectively). But these numbers are all very similar, and an impression is given that each bin therefore makes up an equal percentage of the M dwarf population. But this is not what is expected, judging from the trend presented in Table 8.2 of increasing numbers of objects with decreasing mass. There is no reason to expect that the situation would change suddenly in the M dwarf regime. We expect that the lowest mass bin of M dwarfs will be the most populous, hinting that more objects in the mid- and lowest mass bins remain to be found even within 10 pc.

Let us now inspect Figure 8.3(a). For now, we assume that we know all stars within 5 pc, even though the number of objects found in each mass bin is small: 12, 7, and 16 for the large, medium, and small subsamples, respectively. Admittedly these are very small numbers of stars. Surprisingly, the medium mass bin appears complete to ~ 13 pc, while the curves for the largest and lowest mass objects already diverge from the expected curves at ~ 6 pc. But the expected incompleteness of the lowest mass subsample is revealed. All of the curves we expect to shift upward to larger percentages of the sample once more M dwarfs are discovered and/or have parallaxes measured.

8.2.2 Current Census of M Dwarf Primaries

Here we assess the current status of M dwarf primaries in the solar neighborhood. Recent results from the M_{Earth} survey (Dittmann et al. 2014) have added new parallaxes for 653

northern M dwarf systems within 25 pc. We show the updated statistics in Table 8.4 for M dwarfs within 25 pc with three different methods of distance determinations. We note that all red dwarfs with photometric distances (*pltdists* and *ccddists*) in this table were studied in this thesis, as were all those with *trgdists* aside from the 653 from Dittmann et al. (2014).

It is evident that great strides are being made toward identifying members of the nearby M dwarf population and determining their distances. Upcoming results from *Gaia* should make large contributions to this effort. Ultimately, we expect there to be ~ 5000 M dwarf primaries within 25 pc.

Table 8.4: Current 25 pc M Dwarf Statistics

| Type of Distance | North | South | All-Sky |
|----------------------------|-------|-------|---------|
| <i>pltdists</i> | ... | 500 | 500 |
| <i>ccddists</i> | ... | 462 | 462 |
| <i>trgdists</i> | 558 | 564 | 1122 |
| MEarth (<i>trgdists</i>) | 653 | ... | 653 |
| TOTAL | 1211 | 1526 | 2737 |

8.2.3 Mass Contributions from Primaries and Hidden Companions

It is now interesting to consider the contributions to the Galactic mass budget by M dwarfs. How much mass is found in the primaries and how much do companions add to the M dwarf mass budget? How much mass may be hidden from unresolved binaries?

Before deblending any of the photometry from which masses are estimated, a naive totaling of the mass of all primaries yields $368 M_{\odot}$. However, of the 266 primaries in the sample of multiples, 195 have 204 companions located at angular separations of less than

2", resulting in 'joint', or blended, V magnitudes for the primaries, for which an accounting must be made.

The total mass of the 195 blended primaries is $69 M_{\odot}$; after deblending this decreases to $64 M_{\odot}$, with all the primaries now estimated to contain $364 M_{\odot}$. But, the deblended companions have now added $45 M_{\odot}$ to the M dwarf mass, indicating that an additional 12% of M dwarf mass was hidden as unresolved stars.

The total mass of all companions at all separations is $71 M_{\odot}$, bringing the total mass in M dwarfs known within 25 pc to $435 M_{\odot}$. This means that **16% ($71 M_{\odot}/435 M_{\odot}$) of M dwarf mass is found in companions, with unresolved companions contributing 63% ($45 M_{\odot}/71 M_{\odot}$) of the companion mass and donating 10% ($45 M_{\odot}/435 M_{\odot}$) to the total mass budget of M dwarfs.** This is not quite surprising, as in Figure 6.2 in §6.2, it was shown that the majority of companions are found at $\rho < 2''$. However, the quantification is illuminating.

8.2.4 The Luminosity and Mass Functions

It is worthwhile to return to the luminosity and mass functions initially presented in Chapter 5. Shown in Figure 8.4 are the deblended luminosity functions for (a) the primaries only and (b) all M dwarf components in the multiplicity survey. Primaries are indicated in red, while the companions are shown in blue. The V magnitude has been deblended in both histograms before the calculation of M_V and subsequently, mass. The vertical lines at $M_V = 9.25$, 11.80, and 13.86 further divide the sample into smaller mass bins corresponding to 0.60, 0.30, and $0.15 M_{\odot}$ for analysis. Again, note that the brighter (and more massive) M dwarf primaries

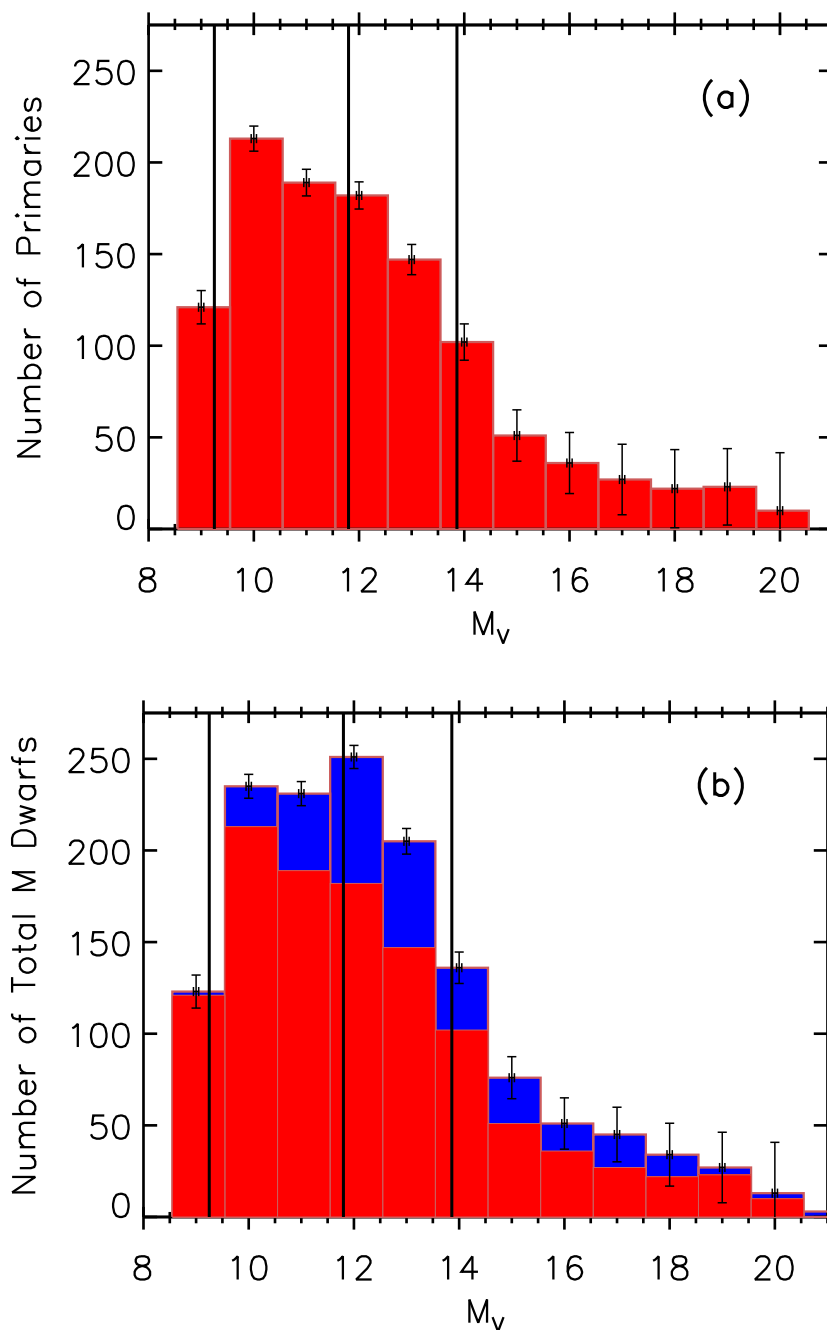


Figure 8.4 Deblended Luminosity Function. (a) The luminosity function for the 1122 M dwarf primaries in the multiplicity survey with M_V calculated from deblended photometry. (b) The luminosity function for all 1431 M dwarfs in the multiplicity survey, including both primaries and their M dwarf companions. Primaries are plotted in red; companions in blue. The scales are the same for both plots to emphasize the contributions of the companions. Errors in the y-direction are the Poisson errors per bin; errors in the x-direction are ~ 0.05 mags. The vertical lines denote the subdivisions by mass explored throughout the study.

have more companions, which is expected from the trend of decreasing multiplicity fraction by primary mass, as shown in Figure 6.7 in §6.4.

The mass functions provide a wealth of information. Figure 8.5 shows (a) the MF for the 1122 primaries and (b) the MF for all 1431 M dwarf components in the survey. In Figure 8.5(a), there is a gentle, but steady rise to the end of the stellar main sequence, what we have defined to be $0.075 M_{\odot}$. This feature becomes quite dramatic in Figure 8.5(b), with the addition of the 308 companions, as they are all lower masses than their primaries, by definition. Comparison of the LF and MF for the M dwarf primaries within 25 pc to the LF and MF of the more complete sample of M dwarf primaries within 10 pc in Figure 8.6 indicate that the increase of the mass function to the end of the main sequence is a real phenomenon.

The current thought on the IMF in the low-mass star regime is that there is a peak at $\sim 0.2-0.3 M_{\odot}$ (Bastian et al. 2010) in the log-normal distribution. However, we have shown that **the M dwarf MF increases to the end of the main sequence** in a normal distribution for both the 10 and 25 pc M dwarf population. Given that missing systems are preferentially of low mass, the MF will ultimately be even steeper than shown.

8.3 Main Results

Here we summarize the most important results from this survey of M dwarf multiplicity. We find that:

- most M dwarf systems are single (§6.1.1);

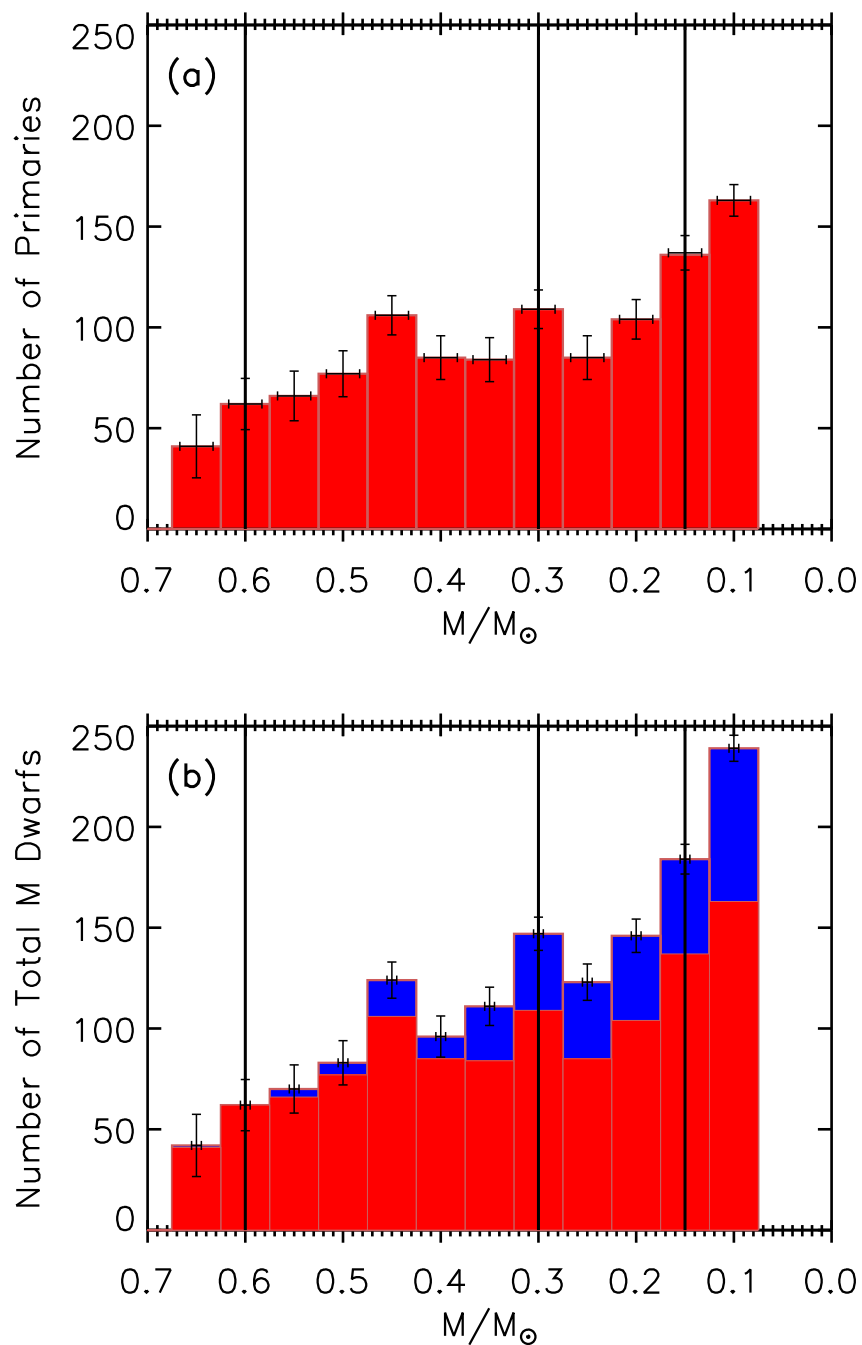


Figure 8.5 Deblended Mass Function. (a) The mass function for the 1122 M dwarf primaries in the multiplicity survey with masses estimated from deblended photometry. (b) The mass function for all 1431 M dwarfs in the multiplicity survey, including both primaries and their companions. Primaries are plotted in red; companions in blue. The scales are the same for both plots to emphasize the contributions from the companions. Errors in the y-direction are the Poisson errors per bin; errors in the x-direction are the $0.017 M_{\odot}$ reported in Benedict et al., in prep.

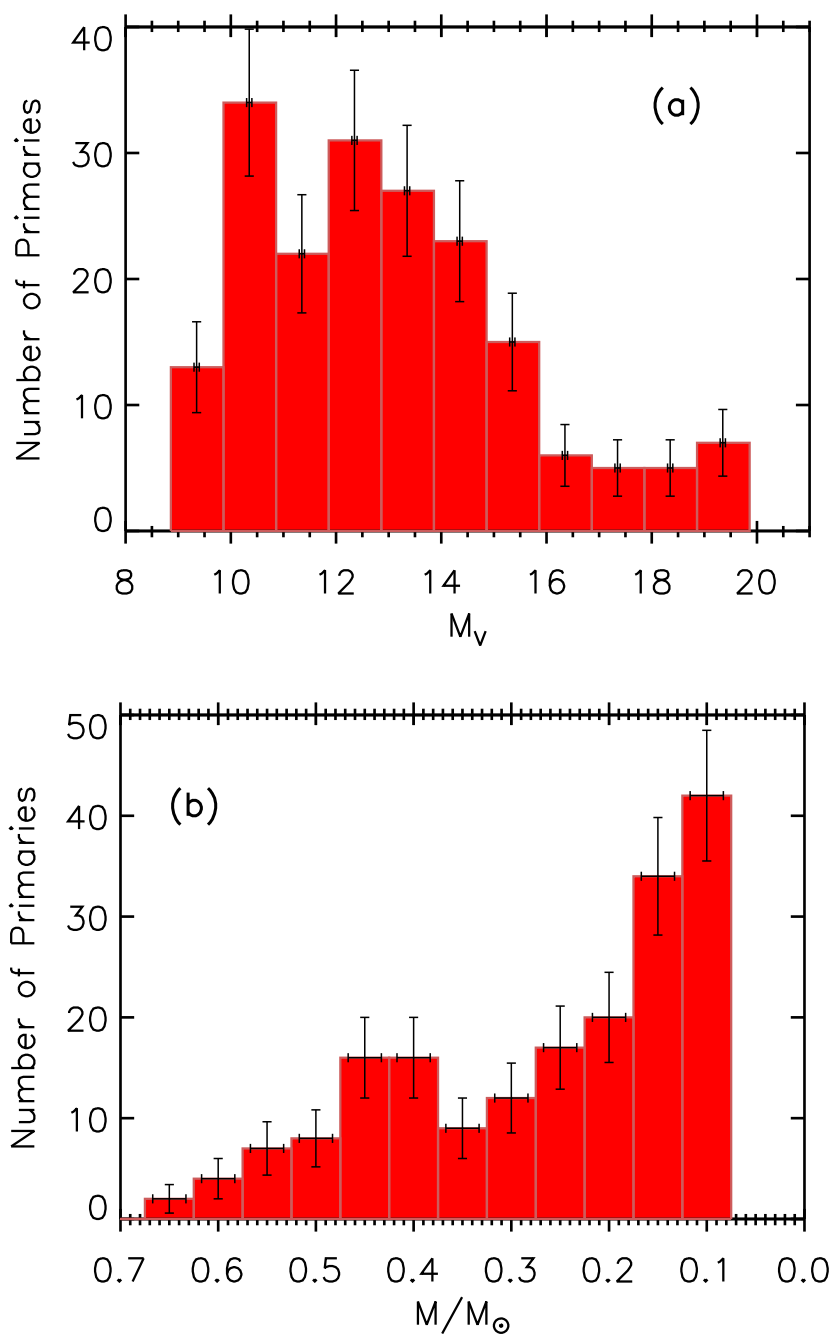


Figure 8.6 Deblended luminosity and mass functions for the 10 pc sample. (a) The luminosity function for the 188 M dwarf primaries within 10 pc in the multiplicity survey with M_V calculated from deblended photometry. Errors in the y-direction are the Poisson errors per bin; errors in the x-direction are ~ 0.05 mags. (b) The mass function for the 188 M dwarf primaries within 10 pc in the multiplicity survey with masses estimated from deblended photometry. Errors in the y-direction are the Poisson errors per bin; errors in the x-direction are the $0.017 M_\odot$ reported in Benedict et al., in prep.

- most stellar systems are single (§8.1.2);
- most companions to M dwarfs are found at angular separations $< 2''$ (Figure 6.2);
- most companions to M dwarfs found to-date are at separations 10 — 100 AU (Figure 6.1);
- the mass ratio distribution between companions and their primaries increases to unity (Figure 6.4);
- a weak trend exists of smaller projected separations for lower mass primaries (Figure 6.5);
- M dwarf multiplicity may be a function of tangential velocity (§6.5);
- at least 10% of M dwarf mass is hidden in unresolved multiple systems (§8.2.3);
- the mass function for M dwarfs increases to the end of the main sequence (§8.2.4).

8.4 M Dwarf Multiples and Planetary Companions

While it was noted in Chapter 6 that no detailed discussion of planetary companions would be included here, we would be remiss for making no mention of them. There is much recent interest in exoplanet explorations around M dwarfs because the stars are ubiquitous, with the nearby population numbering in the thousands, providing ample opportunity for discoveries. They are also less variable at optical wavelengths than previously thought (Hosey et al. 2015) and thereby potentially hospitable to life on orbiting planets. It is interesting to note that five of the M dwarf primaries that are suspected to be unresolved multiples due to overluminosity are known to harbor at least one planet.

Determining the multiplicity of these host star planets is vital for understanding the radii of the planets discovered via the transit method, as finding Earth-sized planets is the holy

grail for planet searches. Ciardi et al. (2015) have shown that the radius of a known planet can be underestimated by a factor of 1.5, on average, without a high resolution image to confirm that its host star is, in fact, single and uncontaminated by any nearby background stars.

Recent work has indicated that planets are 4.5 – 2.6 times less likely to be present in circumstellar binaries (i.e., where the planet orbits one of the stellar members) at separations of 10 – 100 AU, respectively, from their host stars (Wang et al. 2014). However, it appears that the sample of 56 Kepler planet host stars studied did not include any M dwarfs, as the effective temperatures for their objects are larger than at least 4700 K. Therefore, it is still unknown how the multiplicity of M stars affects the formation of planets in those systems. Regardless, this work has shown that even if planets are *less* likely to form in a multiple system with a red dwarf primary, fewer than \sim one-third of the numerous existing M dwarf systems are eliminated from consideration because most are single stars.

8.5 What Is Yet to Come

While the multiplicity survey presented here was comprehensive for companions to M dwarfs with separations 2 – 600'', much work remains to be done. Here we describe future work that involves investigation of the separation space $<2''$, including imaging and radial velocity work, and further exploration of the star formation processes responsible for the creation of multiple systems.

8.5.1 Sub-Arcsecond Follow-Up Observations

8.5.1.1 Robo-AO

Robo-AO data exist for roughly half of the sample as a result of a collaboration with Nick Law. Robo-AO (Baranec et al. 2013), is an adaptive optics system used on the Palomar 60in telescope that has the ability to resolve close systems with separations down to $0.1''$. Due to Palomar's location and the faintness limitations of the instrument, the targets had to have been north of $\delta = -13$ and be brighter than $V = 16$. Therefore, $\sim 56\%$ of the M dwarf primaries in the multiplicity sample with trigonometric parallaxes, in addition to many known of their known companions with separations $> 10''$, have been observed. Continuing work with these data will likely reveal some of the missing companions with small separations from their primaries.

8.5.1.2 Speckle Interferometry with DSSI

Follow-up observations of suspected multiple systems are currently being done with the Differential Speckle Survey Instrument (DSSI), built by Elliott Horch at Southern Connecticut State University. DSSI (Horch et al. 2009) is a state-of-the-art high resolution speckle camera that has the ability to obtain separation, Δmag , and color information for close companions. Two bandpasses are imaged simultaneously, so the color of any detected companion is measured in a single observation. An added benefit of the dual nature of DSSI is that gathering simultaneous speckle clouds enables the ability to distinguish between residual atmospheric dispersion and duplicity due to elongated speckles (Horch et al. 2011b). This camera has

been a visitor instrument on both Gemini-North’s 8m and Lowell Observatory’s 4.3m Discovery Channel telescopes and is scheduled to be on Gemini-South in semester 2016A, thereby enabling all-sky follow-up of most of the M dwarf sample presented here. The high resolution capabilities of this instrument allow it to resolve binaries as close as ~ 5 mas, one-quarter of Gemini’s diffraction limit, corresponding to 0.13 AU even at 25 pc. DSSI’s highest resolution field of view of $2.8''$ is being used for these follow-up observations. Two of the suspected multiple systems have already been confirmed with DSSI: GJ 912 and GJ 1250.

We will also take advantage of our access to DSSI to refine the assumptions of ΔV made in Chapter 6, §6.3.1 by observing known systems with perturbations of differing magnitudes, as well as known spectroscopic binaries.

8.5.2 Radial Velocities

We showed in Chapter 6 Figure 6.10 that a relation may exist between multiplicity and tangential velocity. As tangential velocity is a proxy for age, which is intertwined with composition, this tentative result warrants further investigation. This relation can be confirmed by calculating 3-D space motions using radial velocities (RV’s), many of which can be harvested from the literature, in conjunction with the proper motions that are already available. *Gaia* will measure RV’s for stars with $V \leq 12$, but the remaining 57% of the sample with $V > 12$ will require a concerted observational effort from the ground.

8.5.3 Interactions Between Binaries

The hint at a decrease in multiplicity with v_{tan} , and consequently with age, encourages further exploration of what mechanisms might influence this possible trend. Future work will investigate whether there is any interaction between the components of these systems. Are they gravitationally bound to each other? If so, how likely is it that they will remain a pair over time? That is, over time are binaries disrupted because of interactions with other components of our Galaxy?

8.5.4 G Dwarf Mass Ratio Comparison

As outlined in Chapter 6 §6.3.2, more work will be done in an attempt to understand the star formation processes that result in multiple systems by comparing the sample of solar-type stars studied by Raghavan et al. (2010) to the results presented here. Specifically, the same range in mass ratios for multiple systems will be further investigated in relation to their primary stars.

8.6 Concluding Thoughts

M dwarfs are bewitching. They are the most populous type of star, yet many that are suspected to be nearby remain to be identified. *Gaia* will soon identify and provide trigonometric parallaxes for most of these hidden close M dwarfs, including any that might lie within 10 pc. I welcome this new era of astronomy, where accurate distances to large numbers of M dwarfs will be so readily available, allowing further exploration of this ubiquitous population of stars. Of particular interest is exactly where the mass function turns over at the end of

the stellar main sequence and what clues to star-brown dwarf-planet formation this provides.

In the next decade, the Large Synoptic Survey Telescope (LSST) and the James Webb Space Telescope (JWST) will facilitate even more M dwarf science as we reach further into the Cosmos, well beyond 25 pc for even the faintest red dwarfs.

An instrument that would enable unprecedented science is an infrared version of DSSI that would help constrain the multiplicity statistics of the faintest M dwarfs at separations not possible with current technologies. The only contender, the Gemini Planet Imager (GPI), is able to directly image planets down to 0.2 - 1", not quite the current DSSI's resolution capability of ~ 5 mas.

I look forward to being bewitched for decades to come.

For my part I know nothing with any certainty, but the sight of the stars makes me dream.

- Vincent Van Gogh

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APPENDIX A

PHOTOMETRY DATA

This appendix provides the photometry and mass estimate for all components of the 2347 M dwarf systems presented in this thesis. Included in the table is the name of the M dwarf (1), the number of known components in the system (2), coordinates (J2000.0) (3, 4), SuperCOSMOS *BRI* plate magnitudes (5, 6, 7), *VRI* magnitudes (8, 9, 10) and the number of observations and/or reference (11), and the 2MASS *JHK* magnitudes (12, 13, 14). Components of multiple systems are noted with a capital letter after the name in the first column. If the names of the components are different, the letters identifying which is the primary and which is the secondary are placed within parenthesis (e.g., LHS1104(A) and LHS1105(B)). If the star is a companion in a multiple system, a ‘0’ is given in column (2). The number in parentheses next to the number of components indicates the number of objects included in the *VRI* photometry. For example, the notation ‘0(1)’ indicates that listed is separate photometry data for a companion in a multiple system. Brown dwarf companions are included here and noted by a ‘BD’ next to the ‘0’ in column 2.

Next is listed an asterisk (15) indicating if the object is included in the multiplicity sample, the ΔV between a companion and its primary (16), the deblended *V* magnitude (17), and the estimated mass (18). If any type of assumption or conversion was made regarding the ΔV , it, the V_{db} , and the mass estimate are shown in italics. If the ΔV is larger than 3, the magnitude of the primary was treated as single. All *VRI* magnitudes are on the Johnson-Kron-Cousins system, except for one object — XXX — for which a Tycho *B*

magnitude, necessary for the conversion, was not available. All masses are estimated from the absolute V magnitude, which has been calculated from the deblended V magnitude for each star.

The table is divided into the 1986 systems within 25 pc (top) and the 361 systems beyond 25 pc (bottom). ' J ' next to a magnitude indicates that light from a close companion has resulted in blended photometry. We note that no detailed information regarding multiple systems is given for those not part of the multiplicity sample or those beyond 25 pc.

Table A.1: Photometry Data

| Name | # obj | RA | DEC | B_J | R_{59F} | I_{JVN} | V_J | R_{KC} | I_{KC} | # nts/ref | J | H | K_s | Mult | ΔV | V_{db} | Mass |
|---------------|-------|------------|-----------|--------|-----------|-----------|--------|----------|----------|-----------|-------------------|-------------------|--------|------|------------|----------|-----------------|
| (1) | (2) | (3) | (4) | (mag) | (mag) | (mag) | (mag) | (mag) | (mag) | (11) | (mag) | (mag) | (mag) | (15) | (mag) | (mag) | (M_{\odot}) |
| Within 25 pc | | | | | | | | | | | | | | | | | |
| 2MA0000-1245 | 1 | 00 00 28.7 | -12 45 16 | ... | 19.26 | 15.88 | 20.78 | 18.71 | 16.27 | /40 | 13.20 | 12.45 | 11.97 | ... | ... | ... | ... |
| LTT09844 | 1 | 00 00 46.9 | -35 10 06 | 13.48 | 11.30 | 10.21 | ... | ... | ... | ... | 9.12 | 8.48 | 8.28 | ... | ... | ... | ... |
| GJ1001B | 0BD | 00 04 34.8 | -40 44 06 | ... | ... | ... | 22.77J | 19.00J | 16.66J | 2/1 | 13.11J | 12.06J | 11.40J | * | ... | ... | ... |
| GJ1001C | 0BD | 00 04 34.8 | -40 44 06 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | ... | ... | ... |
| GJ1001A | 3(1) | 00 04 36.5 | -40 44 03 | 14.21 | 11.83 | 10.06 | 12.83 | 11.62 | 10.08 | /40 | 8.60 | 8.04 | 7.74 | * | ... | 12.86 | 0.248 |
| G158-025 | 1 | 00 04 40.3 | -09 52 42 | 14.47 | 12.52 | 10.92 | ... | ... | ... | ... | 9.77 | 9.10 | 8.82 | ... | ... | ... | ... |
| SIP0004-2058 | 1 | 00 04 41.5 | -20 58 30 | 21.86 | 18.85 | 15.65 | 19.94 | 17.81 | 15.36 | /40 | 12.40 | 11.83 | 11.40 | ... | ... | ... | ... |
| GJ0001 | 1 | 00 05 24.4 | -37 21 27 | 10.10 | 7.91 | 6.28 | 8.54 | 7.57 | 6.41 | /2 | 5.33 | 4.83 ^a | 4.52 | * | ... | 8.53 | 0.457 |
| LP644-034 | 1 | 00 05 34.9 | -06 07 07 | 13.85 | 11.75 | 9.92 | ... | ... | ... | ... | 9.26 | 8.65 | 8.41 | ... | ... | ... | ... |
| LP644-039 | 1 | 00 06 13.1 | -02 32 11 | 15.38 | 13.34 | 10.91 | 14.62 | 13.42 | 11.84 | /24 | 10.22 | 9.60 | 9.30 | ... | ... | ... | ... |
| LHS1019 | 1 | 00 06 19.2 | -65 50 26 | 13.13 | 10.92 | 8.98 | 12.17 | 11.11 | 9.78 | /20 | 8.48 | 7.84 | 7.63 | * | ... | 12.17 | 0.376 |
| GJ1002 | 1 | 00 06 43.2 | -07 32 17 | 15.04 | 12.34 | 9.88 | 13.84 | 12.21 | 10.21 | /40 | 8.32 | 7.79 | 7.44 | * | ... | 13.77 | 0.110 |
| GJ1003 | 1 | 00 07 26.7 | +29 14 33 | ... | ... | ... | 14.16 | 13.01 | 11.54 | /37 | 10.22 | 9.74 | 9.46 | * | ... | 14.16 | 0.212 |
| LHS1022 | 1 | 00 07 59.1 | +08 00 19 | ... | ... | ... | 13.09 | 12.02 | 10.65 | /37 | 9.39 | 8.91 | 8.65 | * | ... | 13.09 | 0.349 |
| L217-028 | 1 | 00 08 17.4 | -57 05 53 | 12.20 | 10.22 | 9.30 | 12.13 | 11.00 | 9.57 | /40 | 8.21 | 7.63 | 7.40 | * | ... | 12.13 | 0.329 |
| HIP000687 | 1 | 00 08 27.2 | +17 25 27 | ... | ... | ... | 10.80 | 9.88 | 8.93 | /35 | 7.81 | 7.17 | 6.98 | * | ... | 10.80 | 0.620 |
| G131-026B | 0 | 00 08 54.0 | +20 50 18 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.80 | 14.74 | 0.172 |
| G131-026A | 2 | 00 08 54.0 | +20 50 18 | ... | ... | ... | 13.52J | 12.19J | 10.50J | 3/1 | 8.87J | 8.26J | 8.01J | * | ... | 13.94 | 0.227 |
| GJ0007 | 1 | 00 09 04.3 | -27 07 20 | 12.52 | 10.13 | 9.11 | 11.69 | 10.74 | 9.79 | /2 | 8.66 | 8.14 | 7.86 | * | ... | 11.69 | 0.513 |
| LP644-094 | 1 | 00 09 13.5 | -04 08 02 | 12.60 | 10.75 | 9.04 | 12.03 | 11.01 | 9.80 | /25 | 8.58 | 7.98 | 7.73 | ... | ... | ... | ... |
| BPM46052 | 1 | 00 09 20.0 | -21 14 41 | 13.50 | 11.75 | 9.89 | ... | ... | ... | ... | 8.76 | 8.16 | 7.94 | ... | ... | ... | ... |
| LEHPM1-0254 | 1 | 00 09 43.3 | -41 17 36 | 17.24 | 15.01 | 12.89 | ... | ... | ... | ... | 10.92 | 10.38 | 10.08 | ... | ... | ... | ... |
| LEHPM1-0255 | 1 | 00 09 45.1 | -42 01 40 | 15.17 | 13.01 | 10.68 | 13.62 | 12.35 | 10.66 | /40 | 9.07 | 8.45 | 8.22 | * | ... | 13.62 | 0.258 |
| LSPM0011+5908 | 1 | 00 11 32.0 | +59 08 40 | ... | ... | ... | 15.63 | 13.95 | 11.91 | 1/1 | 9.95 | 9.39 | 9.09 | * | ... | 15.63 | 0.104 |
| L217-009 | 1 | 00 11 49.1 | -55 21 52 | 13.99 | 11.93 | 11.04 | ... | ... | ... | ... | 9.33 | 8.72 | 8.50 | ... | ... | ... | ... |
| GJ0011B | 0 | 00 13 15.8 | +69 19 36 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.88 | 13.72 | 0.272 |
| GJ0011A | 2 | 00 13 15.8 | +69 19 36 | ... | ... | ... | 12.44J | 11.33J | 9.92J | /37 | 8.56J | 7.98J | 7.75J | * | ... | 12.84 | 0.359 |
| LTT17095A | 2 | 00 13 38.7 | +80 39 56 | ... | ... | ... | 11.12 | 10.12 | 9.00 | 1/1 | 7.76 | 7.13 | 6.90 | * | ... | 11.12 | 0.543 |
| LTT17095B | 0 | 00 13 43.1 | +80 39 49 | ... | ... | ... | 14.75 | 13.93 | 12.55 | 1/1 | 10.94 | 10.37 | 10.06 | * | 3.63 | 14.75 | 0.179 |
| GJ1005B | 0 | 00 15 28.1 | -16 08 01 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.38 | 13.97 | 0.115 |
| GJ1005A | 2 | 00 15 28.1 | -16 08 02 | 12.24J | 9.96J | 8.07J | 11.48J | 10.27J | 8.70J | /40 | 7.22J | 6.71J | 6.39J | * | ... | 11.59 | 0.219 |
| GJ0012 | 1 | 00 15 49.0 | +13 33 22 | ... | ... | ... | 12.610 | 11.459 | 10.044 | /2 | 8.62 | 8.07 | 7.81 | * | ... | 12.61 | 0.255 |
| LHS1051 | 2(1) | 00 15 51.5 | -67 59 52 | 12.01 | 9.72 | 8.57 | 10.90 | 9.94 | 8.91 | /40 | 7.80 | 7.21 | 6.95 | ... | ... | ... | ... |
| 2MA0015-1636B | 0 | 00 15 58.1 | -16 36 57 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.10 | 14.00 | 0.218 |
| 2MA0015-1636A | 2 | 00 15 58.1 | -16 36 57 | ... | ... | ... | 13.20J | 11.93J | 10.30J | 2/1 | 8.74J | 8.19J | 7.91J | * | ... | 13.90 | 0.226 |
| L290-072B | 0 | 00 16 01.9 | -48 15 39 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.00 | 12.91 | 0.369 |
| L290-072A | 2 | 00 16 02.0 | -48 15 39 | 12.08J | 9.85J | 8.58J | 11.55J | 10.51J | 9.24J | /20 | 7.97J | 7.36J | 7.11J | * | ... | 11.91 | 0.484 |
| GJ1006A | 2(1) | 00 16 14.6 | +19 51 37 | ... | ... | ... | 12.26 | 11.05 | 9.46 | /37 | 7.88 | 7.32 | 7.09 | * | ... | 12.26 | 0.344 |
| GJ1006B | 0(1) | 00 16 16.1 | +19 51 52 | ... | ... | ... | 13.20 | 11.99 | 10.40 | /37 | 8.89 | 8.34 | 8.10 | * | 0.94 | 13.20 | 0.254 |
| L218-009 | 1 | 00 16 36.6 | -50 16 09 | 13.01 | 10.54 | 9.26 | 12.35 | 11.34 | 10.14 | /20 | 8.97 | 8.33 | 8.17 | * | ... | 12.35 | 0.425 |
| GJ1007 | 1 | 00 16 56.3 | +05 07 27 | ... | ... | ... | 13.79 | 12.55 | 10.91 | /37 | 9.40 | 8.87 ^a | 8.59 | * | ... | 13.79 | 0.231 |
| SCR0017-3219 | 1 | 00 17 15.7 | -32 19 54 | 16.80 | 14.59 | 12.48 | 15.45 | 14.11 | 12.39 | /39 | 10.64 | 10.08 | 9.73 | ... | ... | ... | ... |
| LHS1054 | 1 | 00 17 20.3 | +29 10 58 | ... | ... | ... | 11.52 | 10.52 | 9.35 | /37 | 8.15 | 7.50 | 7.24 | * | ... | 11.52 | 0.534 |
| LP704-074 | 1 | 00 17 28.2 | -08 44 23 | 13.63 | 11.64 | 10.05 | ... | ... | ... | ... | 9.16 | 8.60 | 8.36 | ... | ... | ... | ... |
| LTT00139 | 1 | 00 17 40.7 | -01 22 41 | 13.96 | 11.92 | 10.26 | 12.89 | 11.84 | 10.50 | /24 | 9.24 | 8.57 | 8.36 | ... | ... | ... | ... |
| GJ0016 | 1 | 00 18 16.5 | +10 12 10 | ... | ... | ... | 10.910 | 9.917 | 8.781 | /2 | 7.56 | 6.92 ^a | 6.74 | * | ... | 10.91 | 0.522 |
| GJ0015A | 2(1) | 00 18 23.0 | +44 01 24 | ... | ... | ... | 8.09 | 7.10 | 6.07 | 2/1 | 5.25 ^a | 4.48 ^a | 4.02 | * | ... | 8.10 | 0.459 |
| GJ0015B | 0(1) | 00 18 26.0 | +44 01 42 | ... | ... | ... | 11.07 | 9.82 | 8.34 | 2/1 | 6.79 | 6.19 | 5.95 | * | 2.97 | 11.07 | 0.178 |
| LTT00151 | 1 | 00 18 44.8 | -34 50 15 | 14.14 | 11.92 | 10.49 | 12.91 | 11.84 | 10.45 | 1/1 | 9.02 | 8.39 | 8.16 | ... | ... | ... | ... |
| GJ2003 | 1 | 00 20 08.3 | -17 03 41 | ... | ... | ... | 11.68 | 10.70 | 9.64 | 2/1 | 8.55 | 7.91 | 7.70 | * | ... | 11.68 | 0.518 |
| LP825-035 | 1 | 00 20 23.2 | -23 46 05 | 20.19 | 17.84 | 14.83 | 18.92 | 16.99 | 14.73 | 1/1 | 12.35 | 11.72 | 11.34 | ... | ... | ... | ... |
| LHS0112 | 1 | 00 20 29.4 | +33 05 06 | ... | ... | ... | 16.09 | 14.41 | 12.36 | /37 | 10.28 | 9.69 | 9.33 | * | ... | 16.09 | 0.107 |
| L170-007 | 1 | 00 20 41.5 | -53 40 54 | 14.54 | 12.40 | 10.68 | ... | ... | ... | ... | 9.68 | 9.10 | 8.81 | ... | ... | ... | ... |
| GJ0017.1 | 1 | 00 21 19.6 | -45 44 47 | 11.37 | 8.87 | 7.88 | 10.40 | 9.46 | 8.50 | /2 | 7.41 | 6.81 | 6.54 | * | ... | 10.40 | 0.606 |
| LHS5004a | 1 | 00 21 37.3 | -46 05 33 | 13.18 | 10.60 | 9.16 | 12.24 | 11.14 | 9.73 | /20 | 8.33 | 7.73 | 7.45 | * | ... | 12.24 | 0.403 |
| LTT00180 | 1 | 00 21 39.4 | -09 00 25 | 15.07 | 12.95 | 11.25 | 13.94 | 12.76 | 11.24 | /24 | 9.71 | 9.15 | 8.87 | ... | ... | ... | ... |
| G158-066 | 1 | 00 21 53.4 | -09 38 03 | 14.04 | 12.02 | 10.64 | ... | ... | ... | ... | 9.46 | 8.78 ^a | 8.57 | ... | ... | ... | ... |
| L086-082 | 1 | 00 21 54.9 | -68 31 26 | 12.38 | 9.76 | 8.86 | 11.13 | 10.21 | 9.26 | /25 | 8.23 | 7.59 | 7.35 | ... | ... | ... | ... |
| GJ1009 | 1 | 00 21 56.1 | -31 24 22 | 12.19 | 9.90 | 8.85 | 11.13 | 10.12 | 8.92 | /20 | 7.67 | 7.05 | 6.79 | * | ... | 11.13 | 0.517 |

| | | | | | | | | | | | | | | | | |
|--------------|------|------------|-----------|--------|--------|--------|--------|--------|--------|-----|-------------------|-------------------|-------------------|-----|------|-------------|
| L026-099 | 1 | 00 22 27.1 | -79 09 59 | 12.18 | 10.21 | 8.68 | ... | ... | ... | ... | 8.45 | 7.84 | 7.62 | ... | ... | ... |
| LHS1064 | 1 | 00 23 18.5 | -50 53 38 | 13.10 | 10.94 | 9.30 | 11.89 | 10.84 | 9.56 | /20 | 8.26 | 7.64 | 7.38 | * | ... | 11.89 0.453 |
| GJ1011 | 1 | 00 23 27.1 | +24 18 20 | ... | ... | ... | 14.27 | ... | ... | /10 | 9.75J | 9.17J | 8.87J | * | ... | 14.23 0.187 |
| GJ1010A | 2(1) | 00 23 28.8 | +77 11 21 | ... | ... | ... | 11.31 | 10.32 | 9.19 | /37 | 8.04 | 7.39 | 7.19 | * | ... | 11.31 0.494 |
| GJ1010B | 0(1) | 00 23 31.7 | +77 11 27 | ... | ... | ... | 14.10 | 12.90 | 11.37 | /37 | 9.93 | 9.36 | 9.11 | * | 2.79 | 14.10 0.210 |
| NLTT01261 | 1 | 00 24 24.9 | -01 58 28 | ... | ... | ... | 19.88 | 17.46 | 15.12 | 2/1 | 11.99 | 11.08 | 10.54 | * | ... | 19.88 0.075 |
| LTT00214 | 1 | 00 24 25.2 | -12 17 25 | 12.82 | 10.66 | 9.28 | 12.25 | 11.23 | 10.02 | /24 | 8.83 | 8.21 | 7.98 | ... | ... | ... |
| LHS1068 | 1 | 00 24 38.4 | +30 02 19 | ... | ... | ... | 14.56 | 13.23 | 11.48 | /37 | 9.78 | 9.22 | 8.89 | * | ... | 14.56 0.186 |
| GJ2005B | 0 | 00 24 44.0 | -27 08 24 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.58 | 17.34 0.082 |
| GJ2005C | 0 | 00 24 44.0 | -27 08 24 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.21 | 17.97 0.078 |
| GJ2005A | 3 | 00 24 44.2 | -27 08 24 | 17.03J | 14.42J | 11.46J | 15.28J | 13.52J | 11.37J | /40 | 9.25J | 8.55J | 8.24J | * | ... | 15.76 0.097 |
| LTT00220 | 1 | 00 25 04.3 | -36 46 18 | 13.80 | 11.53 | 10.13 | 12.48 | 11.38 | 10.00 | /40 | 8.65 | 8.04 | 7.83 | ... | ... | ... |
| GJ0021 | 1 | 00 26 52.7 | +70 08 32 | ... | ... | ... | 10.53 | 9.58 | 8.55 | /35 | 7.41 | 6.74 | 6.57 | * | ... | 10.53 0.573 |
| G217-051 | 1 | 00 27 04.0 | +49 41 04 | ... | ... | ... | 14.25 | 12.98 | 11.36 | /32 | 9.73 | 9.16 | 8.85 | * | ... | 14.25 0.227 |
| LP349-025B | 0 | 00 27 56.0 | +22 19 33 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.66 | 19.17 0.077 |
| LP349-025A | 2 | 00 27 56.0 | +22 19 33 | ... | ... | ... | 18.04J | 15.82J | 13.37J | 3/1 | 10.61J | 9.97J | 9.57J | * | ... | 18.51 0.082 |
| LTT00250 | 2(1) | 00 28 05.0 | -23 00 37 | 15.12 | 13.11 | 11.31 | ... | ... | ... | ... | 9.93 | 9.27 | 9.07 | ... | ... | ... |
| GJ1012 | 1 | 00 28 39.5 | -06 39 49 | 13.20 | 11.26 | 8.54 | 12.17 | 11.01 | 9.50 | /37 | 8.04 | 7.50 ^a | 7.19 | * | ... | 12.17 0.325 |
| LEHPM1-0640 | 1 | 00 28 54.8 | -27 33 34 | 16.65 | 14.56 | 12.47 | ... | ... | ... | ... | 10.76 | 10.15 | 9.90 | ... | ... | ... |
| LTT17138 | 1 | 00 28 57.7 | -02 26 59 | 14.27 | 12.23 | 10.10 | ... | ... | ... | ... | 9.53 | 8.92 | 8.67 | ... | ... | ... |
| LTT00266 | 1 | 00 29 58.7 | -24 38 27 | 13.93 | 11.49 | 10.28 | ... | ... | ... | ... | 9.16 | 8.56 | 8.28 | ... | ... | ... |
| L050-078 | 1 | 00 31 04.3 | -72 01 06 | 15.25 | 13.21 | 11.41 | 13.69 | 12.47 | 10.90 | /25 | 9.37 | 8.75 | 8.45 | ... | ... | ... |
| GJ1013 | 1 | 00 31 35.4 | -05 52 13 | 13.77 | 11.59 | 9.59 | 12.73 | 11.59 | 10.14 | /37 | 8.76 | 8.22 | 7.95 | * | ... | 12.73 0.311 |
| GJ0022B | 0 | 00 32 29.4 | +67 14 08 | ... | ... | ... | ... | ... | ... | ... | 7.17 ^a | 6.54 ^a | 6.38 ^a | * | 1.57 | 12.08 0.278 |
| GJ0022C | 0 | 00 32 29.4 | +67 14 08 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 3.08 | 13.59 0.164 |
| GJ0022A | 3 | 00 32 29.4 | +67 14 08 | ... | ... | ... | 10.28J | 9.24J | 7.98J | /37 | 6.84J | 6.27J | 6.04J | * | ... | 10.51 0.442 |
| GR*0050B | 0 | 00 32 53.1 | -04 34 07 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.56 | 16.63 0.116 |
| GR*0050C | 0 | 00 32 53.1 | -04 34 07 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 4.06 | 18.13 0.094 |
| GR*0050A | 3 | 00 32 53.2 | -04 34 07 | 15.32J | 13.16J | 10.86J | 13.97J | 12.68J | 11.00J | /40 | 9.28J | 8.62J | 8.35J | * | ... | 14.07 0.233 |
| L291-115 | 1 | 00 33 13.5 | -47 33 17 | 16.96 | 14.62 | 11.97 | 15.80 | 14.26 | 12.34 | 1/1 | 10.45 | 9.83 | 9.54 | ... | ... | ... |
| LHS1099 | 1 | 00 34 07.5 | -23 03 19 | 14.98 | 12.65 | 11.23 | ... | ... | ... | ... | 9.89 | 9.28 | 9.03 | ... | ... | ... |
| LTT00307 | 1 | 00 34 39.0 | -02 25 00 | 13.26 | 10.91 | 9.74 | 11.95 | 10.95 | 9.79 | /24 | 8.57 | 7.95 | 7.69 | ... | ... | ... |
| LHS1101 | 1 | 00 34 44.1 | +71 11 31 | ... | ... | ... | 13.53 | 12.37 | 10.88 | /37 | 9.47 | 8.88 | 8.67 | * | ... | 13.53 0.276 |
| LP645-053 | 1 | 00 35 44.1 | -05 41 11 | 17.35 | 15.09 | 12.74 | 16.02 | 14.52 | 12.61 | 1/1 | 10.67 | 10.07 | 9.71 | ... | ... | ... |
| LHS1104(A) | 2(1) | 00 35 52.8 | +52 41 45 | ... | ... | ... | 12.54 | 11.49 | 10.20 | /37 | 8.93 | 8.35 | 8.10 | * | ... | 12.54 0.422 |
| LHS1105(B) | 0(1) | 00 35 53.7 | +52 41 37 | ... | ... | ... | 15.10 | 13.83 | 12.19 | /37 | 10.63 | 10.08 | 9.79 | * | 2.56 | 15.10 0.184 |
| GJ1014 | 1 | 00 36 00.4 | +10 28 08 | ... | ... | ... | 15.32 | 13.88 | 12.02 | /37 | 10.22 | 9.66 | 9.37 | * | ... | 15.32 0.134 |
| G172-013 | 1 | 00 36 06.7 | +45 30 49 | ... | ... | ... | 11.71 | 10.67 | 9.42 | /38 | 8.17 | 7.58 | 7.36 | * | ... | 11.71 0.509 |
| LP881-239 | 1 | 00 37 35.8 | -27 08 31 | 15.57 | 13.50 | 11.12 | 14.32 | 13.13 | 11.58 | /25 | 10.03 | 9.46 | 9.18 | ... | ... | ... |
| LTT00338 | 1 | 00 38 33.4 | -11 16 03 | 13.63 | 11.61 | 10.36 | ... | ... | ... | ... | 9.35 | 8.68 | 8.44 | ... | ... | ... |
| GJ0026 | 1 | 00 38 59.0 | +30 36 59 | ... | ... | ... | 11.08 | 10.03 | 8.75 | /37 | 7.45 | 6.86 | 6.61 | * | ... | 11.08 0.427 |
| GJ0027.1 | 1 | 00 39 58.8 | -44 15 12 | 12.29 | 9.87 | 8.92 | 11.39 | 10.44 | 9.36 | /2 | 8.23 | 7.61 | 7.39 | * | ... | 11.39 0.572 |
| LTT00349 | 1 | 00 39 59.4 | -12 11 43 | 13.61 | 11.53 | 9.86 | ... | ... | ... | ... | 9.14 | 8.58 | 8.23 | ... | ... | ... |
| GJ1016 | 1 | 00 41 30.5 | -33 37 32 | 10.99 | 8.86 | 8.14 | 10.53 | 9.62 | 8.74 | /20 | 7.71 | 7.10 | 6.88 | * | ... | 10.53 0.624 |
| LHS1134 | 1 | 00 43 26.0 | -41 17 34 | 14.26 | 12.09 | 9.82 | 13.00 | 11.75 | 10.11 | /40 | 8.57 | 8.03 | 7.71 | * | ... | 13.00 0.205 |
| GJ1019 | 1 | 00 43 35.6 | +28 26 41 | ... | ... | ... | 14.51 | 13.33 | 11.80 | /37 | 10.39 | 9.88 | 9.67 | * | ... | 14.51 0.192 |
| LEHPM1-0927 | 1 | 00 44 38.0 | -78 45 09 | 18.87 | 16.59 | 13.10 | ... | ... | ... | ... | 11.37 | 10.74 | 10.37 | ... | ... | ... |
| LHS1140 | 1 | 00 44 59.3 | -15 16 18 | 14.98 | 12.48 | 10.03 | 14.18 | 12.88 | 11.19 | /40 | 9.61 | 9.09 | 8.82 | * | ... | 14.18 0.176 |
| LP989-200 | 1 | 00 46 16.3 | -40 17 54 | 14.58 | 12.49 | 10.76 | ... | ... | ... | ... | 9.64 | 9.05 | 8.77 | ... | ... | ... |
| LP646-016 | 1 | 00 47 18.0 | -06 28 38 | 15.32 | 13.37 | 11.43 | ... | ... | ... | ... | 10.07 | 9.50 | 9.21 | ... | ... | ... |
| LTT00453 | 1 | 00 48 13.4 | -05 08 08 | 13.32 | 10.86 | 9.89 | 12.04 | 11.04 | 9.94 | /40 | 8.77 | 8.18 | 7.93 | * | ... | 12.03 0.479 |
| LTT00464 | 1 | 00 49 01.7 | -50 08 42 | 11.39 | 9.58 | 7.83 | 10.73 | 9.80 | 8.86 | /20 | 7.80 | 7.16 | 6.95 | * | ... | 10.73 0.628 |
| GJ1022 | 1 | 00 49 29.1 | -61 02 33 | 13.10 | 10.78 | 9.19 | 12.17 | 11.12 | 9.86 | /16 | 8.63 | 8.09 | 7.84 | * | ... | 12.17 0.427 |
| LTT10301B | 0 | 00 50 33.2 | +24 49 00 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.20 | 13.66 0.179 |
| LTT10301A | 2 | 00 50 33.2 | +24 49 00 | ... | ... | ... | 12.15J | 10.96J | 9.42J | /20 | 7.95J | 7.35J | 7.12J | * | ... | 12.46 0.273 |
| RG0050-2722 | 1 | 00 52 54.6 | -27 05 56 | ... | ... | ... | 21.54 | 19.14 | 16.68 | 2/1 | 13.61 | 12.98 | 12.54 | * | ... | 21.54 0.075 |
| GJ1024 | 1 | 00 56 38.4 | +17 27 35 | ... | ... | ... | 13.71 | 12.47 | 10.88 | /37 | 9.29 | 8.66 | 8.37 | * | ... | 13.71 0.239 |
| LTT00534 | 1 | 00 56 50.4 | -11 35 20 | 11.28 | 9.52 | 8.10 | 11.12 | 10.19 | 9.25 | /20 | 8.23 | 7.60 ^a | 7.36 | * | ... | 11.12 0.614 |
| L087-002 | 1 | 00 57 12.5 | -64 15 24 | 13.57 | 11.28 | 9.64 | 12.40 | 11.28 | 9.81 | /40 | 8.40 | 7.82 | 7.60 | * | ... | 12.40 0.366 |
| GJ0046 | 1 | 00 58 27.9 | -27 51 25 | 13.39 | 11.69 | 9.31 | 11.77 | 10.65 | 9.17 | /2 | 7.76 | 7.20 ^a | 6.89 | * | ... | 11.77 0.349 |
| LTT00556 | 1 | 00 58 52.8 | -28 13 52 | 15.39 | 13.61 | 11.65 | ... | ... | ... | ... | 9.95 | 9.35 | 9.07 | ... | ... | ... |
| GJ1025 | 1 | 01 00 56.1 | -04 26 57 | 14.46 | 12.02 | 10.21 | 13.35 | 12.08 | 10.52 | /15 | 9.04 | 8.49 | 8.22 | * | ... | 13.36 0.193 |
| LEP0100-7904 | 1 | 01 00 56.4 | -79 04 25 | 13.70 | 11.70 | 9.98 | 12.46 | 11.41 | 10.08 | /40 | 8.80 | 8.17 | 7.88 | ... | ... | ... |
| GJ0047 | 1 | 01 01 20.0 | +61 21 57 | ... | ... | ... | 10.85 | 9.81 | 8.56 | /37 | 7.27 | 6.71 | 6.48 | * | ... | 10.85 0.422 |
| LTT00573 | 1 | 01 01 24.7 | -01 05 59 | 14.67 | 12.40 | 10.45 | 13.39 | 12.21 | 10.62 | /24 | 9.27 | 8.63 | 8.37 | ... | ... | ... |
| L171-012 | 1 | 01 01 57.9 | -55 23 46 | 15.34 | 13.33 | 11.24 | ... | ... | ... | ... | 10.01 | 9.47 | 9.17 | ... | ... | ... |

| | | | | | | | | | | | | | | | | | |
|--------------|------|------------|-----------|--------|--------|-------|--------|--------|--------|-----|-------|-------------------|-------|-----|------|-------|-------|
| GJ0048 | 1 | 01 02 32.2 | +71 40 47 | ... | ... | ... | 9.98 | 8.92 | 7.55 | /37 | 6.30 | 5.70 | 5.45 | * | ... | 9.98 | 0.450 |
| GJ0049(A) | 2(1) | 01 02 38.8 | +62 20 42 | ... | ... | ... | 9.56 | 8.58 | 7.44 | /37 | 6.23 | 5.58 | 5.37 | * | ... | 9.56 | 0.555 |
| LHS0132 | 1 | 01 02 51.1 | -37 37 44 | 19.82 | 17.24 | 13.81 | 18.53 | 16.30 | 13.88 | /9 | 11.13 | 10.48 | 10.07 | * | ... | 18.49 | 0.081 |
| LEHPM1-1188 | 1 | 01 03 12.0 | -53 51 43 | 19.91 | 17.40 | 14.64 | ... | ... | ... | ... | 12.21 | 11.55 | 11.20 | * | ... | ... | ... |
| GJ1026B | 0 | 01 03 14.1 | +20 05 52 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.30 | 12.99 | 0.289 |
| GJ1026A | 2 | 01 03 14.1 | +20 05 52 | ... | ... | ... | 11.40J | 10.31J | 8.97J | /37 | 7.67J | 7.09J | 6.83J | * | ... | 11.69 | 0.425 |
| GJ0051(B) | 0(1) | 01 03 19.8 | +62 21 56 | ... | ... | ... | 13.78 | 12.35 | 10.42 | /37 | 8.61 | 8.01 | 7.72 | * | 4.22 | 13.78 | 0.153 |
| LTT00597 | 1 | 01 03 54.8 | -26 20 05 | 14.28 | 12.07 | 10.44 | ... | ... | ... | ... | 9.40 | 8.85 | 8.56 | ... | ... | ... | ... |
| L087-010 | 1 | 01 04 07.0 | -65 22 27 | 15.20 | 12.89 | 10.74 | 13.98 | 12.63 | 10.95 | /40 | 9.40 | 8.84 | 8.53 | * | ... | 13.98 | 0.162 |
| G269-089 | 1 | 01 04 28.9 | -38 27 49 | 14.09 | 12.13 | 10.05 | ... | ... | ... | ... | 9.00 | 8.36 | 8.14 | ... | ... | ... | ... |
| GJ1028 | 1 | 01 04 53.8 | -18 07 29 | 15.51 | 13.33 | 10.85 | 14.45 | 12.99 | 11.13 | /37 | 9.39 | 8.75 | 8.45 | * | ... | 14.45 | 0.130 |
| GJ1029 | 1 | 01 05 37.6 | +28 29 34 | ... | ... | ... | 14.79 | 13.29 | 11.37 | /37 | 9.49 | 8.88 | 8.55 | * | ... | 14.79 | 0.135 |
| LTT00622 | 1 | 01 06 27.1 | -02 10 35 | 14.16 | 12.28 | 10.52 | ... | ... | ... | ... | 9.59 | 8.93 | 8.71 | ... | ... | ... | ... |
| GJ1030 | 1 | 01 06 41.5 | +15 16 22 | ... | ... | ... | 11.44 | 10.43 | 9.25 | /32 | 8.01 | 7.37 | 7.16 | * | ... | 11.44 | 0.531 |
| GJ0052.2 | 1 | 01 07 49.6 | +34 12 54 | ... | ... | ... | 13.37 | 12.33 | 11.05 | /37 | 9.84 | 9.31 | 9.08 | * | ... | 13.37 | 0.316 |
| GJ1031 | 1 | 01 08 18.3 | -28 48 21 | 14.55 | 12.18 | 10.22 | ... | ... | ... | ... | 9.09 | 8.54 | 8.23 | ... | ... | ... | ... |
| G271-001 | 1 | 01 08 50.4 | -03 40 34 | 14.51 | 12.63 | 10.58 | ... | ... | ... | ... | 9.52 | 8.89 | 8.62 | ... | ... | ... | ... |
| SSS0109-5101 | 1 | 01 09 01.5 | -51 00 50 | 21.19 | 18.31 | 14.78 | 20.17 | 17.55 | 15.11 | /40 | 12.23 | 11.54 | 11.09 | * | ... | 20.17 | 0.075 |
| GJ1032 | 1 | 01 09 12.5 | -24 41 21 | 13.19 | 11.06 | 9.52 | 12.25 | 11.17 | 9.80 | /20 | 8.45 | 7.84 | 7.61 | * | ... | 12.25 | 0.441 |
| GJ2021 | 1 | 01 09 18.7 | -24 30 24 | 15.78 | 13.47 | 11.37 | ... | ... | ... | ... | 9.94 | 9.39 | 9.07 | ... | ... | ... | ... |
| LP647-013 | 1 | 01 09 51.2 | -03 43 26 | 21.10 | 17.94 | 14.77 | 19.31 | 17.14 | 14.88 | /40 | 11.69 | 10.93 | 10.43 | * | ... | 19.31 | 0.075 |
| LP707-016 | 1 | 01 10 17.5 | -11 51 18 | 13.00 | 10.87 | 8.68 | 12.70 | 11.50 | 10.02 | /40 | 8.63 | 7.93 | 7.66 | ... | ... | ... | ... |
| GJ0054B | 0 | 01 10 22.0 | -67 26 42 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.03 | 11.21 | 0.305 |
| GJ0054A | 2 | 01 10 22.9 | -67 26 42 | 11.64J | 8.38J | 7.77J | 9.82J | 8.70J | 7.32J | /13 | 6.00J | 5.41J | 5.13J | * | ... | 10.18 | 0.413 |
| LP467-016B | 0 | 01 11 25.4 | +15 26 21 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.24 | 16.00 | 0.135 |
| LP467-016A | 2 | 01 11 25.4 | +15 26 21 | ... | ... | ... | 14.46J | 12.95J | 11.03J | 2/1 | 9.08J | 8.51J | 8.21J | * | ... | 14.76 | 0.199 |
| SCR0111-4908 | 1 | 01 11 47.5 | -49 08 09 | 18.93 | 16.50 | 13.01 | 17.72 | 15.92 | 13.75 | /39 | 11.54 | 11.00 | 10.61 | * | ... | 17.72 | 0.096 |
| LHS1212(A) | 2(1) | 01 11 57.0 | +04 54 50 | ... | ... | ... | 12.88 | 11.73 | 10.27 | /37 | 8.80 | 8.24 | 7.95 | * | ... | 12.88 | 0.294 |
| LHS1213(B) | 0(1) | 01 11 58.0 | +04 54 12 | ... | ... | ... | 13.90 | 12.67 | 11.10 | /37 | 9.64 | 9.08 | 8.81 | * | 1.02 | 13.32 | 0.253 |
| GJ0054.1 | 1 | 01 12 30.7 | -16 59 56 | 13.08 | 10.56 | 8.52 | 12.15 | 10.72 | 8.94 | /40 | 7.26 | 6.75 | 6.42 | * | ... | 12.10 | 0.136 |
| LEHPM1-1343 | 1 | 01 13 16.4 | -54 29 14 | 15.39 | 13.45 | 10.99 | 14.16 | 12.85 | 11.17 | /40 | 9.57 | 8.98 | 8.68 | * | ... | 14.16 | 0.193 |
| SCR0113-7603 | 1 | 01 13 31.5 | -76 03 09 | 17.68 | 15.23 | 13.05 | 16.07 | 14.62 | 12.83 | /39 | 11.03 | 10.47 | 10.13 | ... | ... | ... | ... |
| LHS1217 | 1 | 01 14 08.6 | -36 56 43 | 15.11 | 12.99 | 11.23 | ... | ... | ... | ... | 9.63 | 9.07 | 8.81 | ... | ... | ... | ... |
| L221-060 | 1 | 01 14 34.2 | -53 56 32 | 12.21 | 9.95 | 8.60 | 11.08 | 10.09 | 8.99 | /20 | 7.81 | 7.24 | 6.97 | * | ... | 11.08 | 0.502 |
| LP938-144 | 1 | 01 14 36.7 | -34 34 51 | 17.13 | 15.03 | 12.86 | ... | ... | ... | ... | 10.96 | 10.36 | 10.07 | ... | ... | ... | ... |
| LP938-149 | 1 | 01 15 29.8 | -33 25 52 | 17.14 | 14.99 | 12.69 | ... | ... | ... | ... | 10.95 | 10.37 | 10.06 | ... | ... | ... | ... |
| GJ1034 | 1 | 01 16 29.2 | +24 19 27 | ... | ... | ... | 15.00 | 13.78 | 12.15 | /37 | 10.71 | 10.17 | 9.91 | * | ... | 15.00 | 0.172 |
| GJ1036 | 1 | 01 17 15.4 | -35 42 57 | 12.68 | 10.18 | 9.09 | 11.28 | 10.26 | 9.05 | /20 | 7.85 | 7.18 ^a | 6.94 | * | ... | 11.28 | 0.471 |
| L797-030 | 1 | 01 17 15.7 | -13 15 48 | 11.33 | 9.09 | 7.63 | 10.79 | 9.84 | 8.86 | /20 | 7.76 | 7.17 | 6.91 | * | ... | 10.79 | 0.644 |
| GJ0056.1 | 1 | 01 18 16.0 | -12 53 59 | 12.33 | 9.97 | 8.49 | 11.79 | 10.78 | 9.55 | /2 | 8.36 | 7.74 | 7.55 | * | ... | 11.79 | 0.490 |
| LTT00734 | 1 | 01 19 51.1 | -27 26 39 | 15.47 | 13.11 | 11.32 | ... | ... | ... | ... | 9.98 | 9.36 | 9.10 | ... | ... | ... | ... |
| GJ1035 | 1 | 01 19 52.2 | +84 09 33 | ... | ... | ... | 14.75 | 13.38 | 11.59 | /37 | 9.86 | 9.31 | 9.03 | * | ... | 14.75 | 0.144 |
| GJ0057 | 1 | 01 21 34.6 | -41 39 23 | 11.06 | 9.33 | 7.97 | 10.12 | 9.25 | 8.38 | /2 | 7.36 | 6.76 | 6.58 | * | ... | 11.53 | 0.448 |
| HIP006365 | 1 | 01 21 45.3 | -46 42 51 | ... | ... | ... | 11.40 | 10.43 | 9.31 | /20 | 8.17 | 7.54 | 7.29 | * | ... | 11.40 | 0.545 |
| LTT00755 | 1 | 01 22 23.1 | -33 12 51 | 11.67 | 9.33 | 8.93 | ... | ... | ... | ... | 7.79 | 7.18 | 6.98 | ... | ... | ... | ... |
| LHS1241(B) | 0 | 01 22 43.2 | +00 31 07 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.00 | 14.99 | 0.138 |
| LHS1240(A) | 2 | 01 22 43.2 | +00 31 07 | ... | ... | ... | 13.63J | 12.33J | 10.64J | /37 | 9.20J | 8.45J | 8.30J | * | ... | 13.99 | 0.184 |
| L797-023 | 1 | 01 23 18.0 | -12 56 23 | 13.74 | 11.34 | 9.67 | 12.99 | 11.88 | 10.49 | /40 | 9.18 | 8.63 ^a | 8.35 | ... | ... | ... | ... |
| LTT00774 | 1 | 01 23 24.8 | -30 45 34 | 13.05 | 10.86 | 9.86 | ... | ... | ... | ... | 8.62 | 8.03 | 7.82 | ... | ... | ... | ... |
| SCR0124-0027 | 1 | 01 24 31.3 | -00 27 56 | 19.46 | 16.93 | 13.94 | 18.38 | 16.48 | 14.37 | /40 | 12.11 | 11.51 | 11.13 | ... | ... | ... | ... |
| LEHPM1-1550 | 1 | 01 26 43.1 | -54 43 30 | 17.27 | 15.10 | 12.74 | ... | ... | ... | ... | 10.87 | 10.24 | 9.95 | ... | ... | ... | ... |
| SCR0128-1458 | 1 | 01 28 39.5 | -14 58 04 | ... | ... | ... | 13.60 | 12.33 | 10.67 | 3/1 | 9.06 | 8.56 ^a | 8.20 | * | ... | 13.60 | 0.203 |
| LTT00818 | 1 | 01 30 05.1 | -25 45 08 | 12.76 | 10.68 | 9.38 | ... | ... | ... | ... | 8.66 | 7.97 | 7.79 | ... | ... | ... | ... |
| LHS0142 | 1 | 01 32 26.2 | -21 54 19 | 11.64 | 9.51 | 8.11 | 11.18 | 10.18 | 9.08 | /40 | 7.98 | 7.35 | 7.10 | * | ... | 11.16 | 0.516 |
| LP768-113 | 1 | 01 33 58.0 | -17 38 24 | 13.56 | 11.27 | 9.35 | 13.04 | 11.85 | 10.31 | /40 | 8.84 | 8.24 | 7.97 | ... | ... | ... | ... |
| SCR0135-6127 | 1 | 01 35 53.7 | -61 27 11 | 15.01 | 12.83 | 10.96 | 14.32 | 13.11 | 11.57 | /39 | 10.06 | 9.53 | 9.24 | ... | ... | ... | ... |
| LP883-537 | 1 | 01 36 08.7 | -26 52 16 | 14.28 | 12.08 | 10.25 | 13.22 | 12.10 | 10.62 | /40 | 9.22 | 8.60 | 8.41 | ... | ... | ... | ... |
| LP648-020 | 1 | 01 36 55.2 | -06 47 38 | 14.87 | 12.54 | 10.40 | ... | ... | ... | ... | 9.71 | 9.14 | 8.86 | ... | ... | ... | ... |
| LHS1268 | 1 | 01 37 20.8 | -49 11 44 | 11.35 | 9.23 | 8.27 | 10.39 | 9.48 | 8.56 | /20 | 7.50 | 6.85 | 6.62 | ... | ... | ... | ... |
| SCR0137-4148 | 1 | 01 37 23.5 | -41 48 56 | 16.91 | 14.55 | 12.24 | 15.33 | 13.99 | 12.30 | /39 | 10.68 | 10.07 | 9.78 | ... | ... | ... | ... |
| SCR0138-6029 | 1 | 01 38 01.1 | -60 29 56 | 17.46 | 15.17 | 12.44 | 16.61 | 15.07 | 13.16 | /40 | 11.19 | 10.66 | 10.29 | ... | ... | ... | ... |
| LHS1272 | 1 | 01 38 29.9 | +00 39 05 | ... | ... | ... | 11.58 | 10.58 | 9.39 | /37 | 8.19 | 7.61 | 7.32 | * | ... | 11.58 | 0.493 |
| GJ0065A | 2 | 01 39 01.5 | -17 57 02 | 12.78J | 10.42J | 7.58J | 12.06J | 10.40J | 8.35J | /3 | 6.28J | 5.69J | 5.34J | * | ... | 12.68 | 0.108 |
| GJ0065B | 0 | 01 39 01.7 | -17 57 01 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.29 | 12.97 | 0.103 |
| L294-078 | 1 | 01 39 11.5 | -48 17 50 | 15.17 | 13.11 | 11.10 | ... | ... | ... | ... | 9.82 | 9.18 | 8.95 | ... | ... | ... | ... |
| LP991-084 | 1 | 01 39 21.7 | -39 36 09 | 15.85 | 13.64 | 10.79 | 14.48 | 12.97 | 11.06 | /40 | 9.21 | 8.63 | 8.27 | * | ... | 14.48 | 0.122 |

| | | | | | | | | | | | | | | | | |
|--------------|------|------------|-----------|--------|--------|-------|--------|--------|--------|-----|--------------------|--------------------|-------------------|-----|------|-------------|
| SCR0139-5927 | 1 | 01 39 39.8 | -59 27 56 | 12.81 | 10.81 | 9.50 | ... | ... | ... | ... | 8.51 | 7.85 | 7.66 | ... | ... | ... |
| LHS1288 | 1 | 01 42 55.7 | -42 12 12 | ... | ... | ... | 11.17 | 10.26 | 9.29 | 2/1 | 8.24 | 7.62 ^a | 7.40 | * | ... | 11.17 0.572 |
| GJ0070 | 1 | 01 43 20.1 | +04 19 18 | ... | ... | ... | 10.920 | 9.884 | 8.610 | /2 | 7.37 | 6.81 | 6.52 | * | ... | 10.92 0.423 |
| SCR0143-0602 | 1 | 01 43 45.1 | -06 02 40 | ... | ... | ... | 13.01 | 11.80 | 10.25 | 2/1 | 8.77 | 8.17 | 7.91 | * | ... | 13.01 0.327 |
| GJ0073 | 1 | 01 44 58.5 | +16 20 39 | ... | ... | ... | 14.120 | 12.830 | 11.200 | /2 | 9.58 | 9.01 | 8.71 | * | ... | 14.12 0.194 |
| WT0050 | 1 | 01 46 29.4 | -53 39 33 | 15.53 | 13.31 | 10.90 | 14.18 | 12.81 | 11.08 | /40 | 9.46 | 8.85 ^a | 8.61 | ... | ... | ... |
| L870-044 | 1 | 01 46 36.8 | -08 38 58 | 13.87 | 11.68 | 10.25 | 12.99 | 11.82 | 10.30 | /38 | 8.83 | 8.24 | 7.99 | ... | ... | ... |
| L294-092 | 1 | 01 47 42.6 | -48 36 06 | 13.83 | 11.53 | 9.61 | 12.42 | 11.23 | 9.72 | /40 | 8.25 | 7.69 | 7.45 | * | ... | 12.42 0.309 |
| L1303-013 | 1 | 01 48 03.9 | +21 12 24 | ... | ... | ... | 12.16 | 11.10 | 9.79 | /38 | 8.51 | 7.90 | 7.64 | * | ... | 12.16 0.426 |
| L173-039 | 1 | 01 48 26.0 | -56 58 42 | 13.09 | 11.14 | 9.30 | 11.76 | 10.73 | 9.47 | /40 | 8.22 | 7.55 ^a | 7.32 | ... | ... | ... |
| L052-022 | 1 | 01 48 26.2 | -70 58 29 | 12.67 | 10.49 | 8.71 | ... | ... | ... | ... | 8.81 | 8.25 | 7.97 | ... | ... | ... |
| 2MA0149+2956 | 1 | 01 49 09.0 | +29 56 13 | ... | ... | ... | 21.25 | 18.94 | 16.81 | /8 | 13.45 | 12.58 | 11.98 | * | ... | 21.25 0.075 |
| SCR0149-8038 | 1 | 01 49 42.7 | -80 38 28 | 18.42 | 16.36 | 13.84 | 17.14 | 15.60 | 13.69 | /40 | 11.68 | 11.11 | 10.72 | ... | ... | ... |
| LP940-020 | 1 | 01 49 43.5 | -33 19 20 | 17.00 | 14.85 | 12.39 | ... | ... | ... | ... | 10.92 | 10.32 | 10.01 | ... | ... | ... |
| LP940-021 | 1 | 01 50 13.3 | -37 41 52 | 15.80 | 13.49 | 11.41 | 14.47 | 13.23 | 11.64 | /39 | 10.11 | 9.54 | 9.24 | ... | ... | ... |
| LHS1300 | 1 | 01 50 20.1 | -49 36 40 | 14.87 | 12.77 | 11.08 | ... | ... | ... | ... | 9.84 | 9.26 | 8.99 | ... | ... | ... |
| LHS5043 | 1 | 01 50 53.3 | -34 24 39 | 15.05 | 12.93 | 11.31 | ... | ... | ... | ... | 9.96 | 9.35 | 9.07 | ... | ... | ... |
| LHS1302 | 1 | 01 51 04.1 | -06 07 05 | 15.22 | 12.76 | 10.25 | 14.49 | 13.00 | 11.17 | /27 | 9.41 | 8.84 | 8.55 | * | ... | 14.49 0.129 |
| GJ0078 | 1 | 01 51 48.7 | -10 48 13 | 12.57 | 10.51 | 9.33 | 11.80 | 10.81 | 9.59 | /2 | 8.38 | 7.85 | 7.63 | * | ... | 11.80 0.410 |
| GJ0079 | 1 | 01 52 49.2 | -22 26 06 | 10.03 | 7.70 | 6.34 | 8.88 | 7.98 | 7.08 | /2 | 6.06 | 5.41 | 5.18 | ... | ... | ... |
| LHS5045 | 1 | 01 52 51.6 | -48 05 41 | 15.22 | 12.94 | 10.65 | 13.79 | 12.48 | 10.80 | /40 | 9.17 | 8.60 ^a | 8.24 | * | ... | 13.79 0.189 |
| LTT01010 | 1 | 01 53 11.4 | -21 05 43 | 12.15 | 10.03 | 8.68 | 11.42 | 10.42 | 9.26 | /25 | 8.07 | 7.42 ^a | 7.14 | ... | ... | ... |
| L088-043 | 1 | 01 53 37.1 | -66 53 34 | 12.40 | 10.39 | 8.54 | 11.68 | 10.60 | 9.24 | /40 | 7.91 | 7.29 | 6.99 | * | ... | 11.68 0.375 |
| LHS1311 | 1 | 01 53 50.6 | -10 32 14 | 16.58 | 14.47 | 11.75 | 15.43 | 14.03 | 12.22 | /37 | 10.45 | 9.93 | 9.65 | ... | ... | ... |
| LP768-670 | 1 | 01 54 08.0 | -15 36 22 | 15.23 | 12.82 | 10.68 | 14.42 | 13.13 | 11.44 | /25 | 9.81 | 9.22 | 8.90 | ... | ... | ... |
| L223-077 | 1 | 01 55 13.2 | -53 06 31 | 16.65 | 14.61 | 12.23 | ... | ... | ... | ... | 10.54 | 9.98 | 9.73 | ... | ... | ... |
| GJ1041C | 0 | 01 59 12.4 | +03 31 09 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.84 | 13.07 0.339 |
| GJ1041B | 0(2) | 01 59 12.4 | +03 31 09 | ... | ... | ... | 12.32J | 11.19J | 9.79J | 1/1 | 8.00J ^a | 7.38J ^a | 7.12J | * | 1.84 | 13.07 0.339 |
| GJ1041A | 3(1) | 01 59 12.4 | +03 31 09 | ... | ... | ... | 11.23 | 10.28 | 9.29 | 1/1 | 7.91 ^a | 7.22 ^a | 7.07 | * | ... | 11.23 0.555 |
| GJ0082 | 1 | 01 59 23.5 | +58 31 16 | ... | ... | ... | 12.21 | 10.99 | 9.38 | /38 | 7.79 | 7.22 ^a | 6.96 | * | ... | 12.21 0.303 |
| GJ0083.1 | 1 | 02 00 13.0 | +13 03 07 | ... | ... | ... | 12.310 | 10.945 | 9.206 | /2 | 7.51 | 6.97 | 6.65 | * | ... | 12.31 0.142 |
| L173-019 | 1 | 02 00 38.3 | -55 58 04 | ... | ... | ... | 11.90 | 10.70 | 9.15 | 3/1 | 7.63 | 7.09 | 6.77 | * | ... | 11.90 0.251 |
| LHS1325 | 1 | 02 00 47.3 | -10 21 21 | 15.18 | 12.96 | 10.99 | ... | ... | ... | ... | 9.89 | 9.35 | 9.09 | ... | ... | ... |
| LP709-018 | 1 | 02 01 43.9 | -10 17 29 | 15.61 | 13.37 | 11.42 | ... | ... | ... | ... | 10.03 | 9.47 | 9.19 | ... | ... | ... |
| LP030-055B | 0 | 02 01 54.0 | +73 32 32 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.60 | 16.02 0.105 |
| LP030-055A | 2 | 02 01 54.0 | +73 32 32 | ... | ... | ... | 14.20J | 12.75J | 10.94J | 1/1 | 9.25J | 8.67J | 8.37J | * | ... | 14.42 0.140 |
| LHS1326 | 1 | 02 02 13.8 | +10 20 11 | ... | ... | ... | 15.70 | 13.99 | 11.91 | 3/1 | 9.84 | 9.25 | 8.93 | * | ... | 15.70 0.102 |
| L655-017 | 1 | 02 03 20.8 | -21 13 43 | 11.28 | 9.34 | 7.38 | 11.21 | 10.18 | 8.90 | /34 | 7.61 | 7.03 | 6.77 | ... | ... | ... |
| LHS1332 | 1 | 02 04 27.5 | -01 52 57 | 14.76 | 12.68 | 10.74 | 13.77 | 12.59 | 11.04 | /37 | 9.59 | 9.09 | 8.80 | ... | ... | ... |
| GJ0084B | 0 | 02 05 04.8 | -17 36 52 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 6.21 | 16.40 0.094 |
| GJ0084A | 2 | 02 05 04.9 | -17 36 53 | 10.39J | 8.35J | 6.54J | 10.19J | 9.14J | 7.84J | /2 | 6.54J | 5.90J | 5.66J | * | ... | 10.19 0.451 |
| GJ0084.1C | 0 | 02 05 21.2 | -28 04 36 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.64 | 13.52 0.310 |
| GJ0084.1B | 0(2) | 02 05 21.2 | -28 04 36 | ... | ... | ... | 12.77J | 11.68J | 10.18J | /2 | 8.80J | 8.26J | 8.04J | * | 2.64 | 13.52 0.310 |
| GJ0084.1A | 3(1) | 02 05 23.7 | -28 04 11 | 11.93 | 9.92 | 8.64 | 10.88 | 10.00 | 9.04 | /2 | 7.99 | 7.35 ^a | 7.16 | * | ... | 10.88 0.628 |
| LHS1339 | 1 | 02 05 48.6 | -30 10 36 | 13.34 | 11.02 | 9.42 | 12.18 | 11.07 | 9.69 | /40 | 8.37 | 7.87 | 7.56 | * | ... | 12.17 0.251 |
| GJ0084.2 | 1 | 02 06 57.2 | +45 11 04 | ... | ... | ... | 10.29 | 9.39 | 8.51 | /37 | 7.40 | 6.80 | 6.60 | * | ... | 10.29 0.661 |
| GJ0085 | 1 | 02 07 23.3 | -66 34 12 | 12.18 | 9.79 | 8.45 | 11.49 | 10.49 | 9.31 | /40 | 8.13 | 7.61 | 7.36 | * | ... | 11.51 0.362 |
| LHS1347 | 1 | 02 09 36.1 | -14 21 33 | 12.38 | 9.36 | 8.42 | 11.81 | 10.75 | 9.46 | /37 | 8.12 | 7.50 | 7.26 | * | ... | 11.81 0.457 |
| LP709-043 | 1 | 02 10 03.7 | -08 53 00 | 13.89 | 11.72 | 9.86 | 13.05 | 11.91 | 10.40 | /23 | 8.95 | 8.34 ^a | 8.08 | ... | ... | ... |
| SCR0210-6622 | 1 | 02 10 45.1 | -66 22 27 | 16.86 | 14.60 | 12.15 | 15.94 | 14.56 | 12.77 | /40 | 10.97 | 10.43 | 10.09 | ... | ... | ... |
| LTT01133B | 0(1) | 02 11 02.2 | -35 40 14 | ... | ... | ... | 11.81 | 10.81 | 9.62 | 1/1 | 7.61 | 7.00 ^a | 6.67 ^a | * | 1.46 | 11.81 0.471 |
| LTT01133A | 3(1) | 02 11 02.2 | -35 40 14 | ... | ... | ... | 10.35 | 9.46 | 8.59 | 1/1 | 7.35 | 6.73 ^a | 6.54 | * | ... | 10.35 0.669 |
| LTT01133C | 0(1) | 02 11 03.1 | -35 40 03 | ... | ... | ... | 11.84 | 10.81 | 9.60 | 1/1 | 8.42 | 7.83 ^a | 7.56 | * | 1.49 | 11.84 0.467 |
| LHS1351 | 1 | 02 11 18.0 | -63 13 41 | 12.99 | 10.60 | 9.14 | 12.23 | 11.15 | 9.82 | /26 | 8.54 | 7.98 | 7.73 | * | ... | 12.23 0.330 |
| GJ0087 | 1 | 02 12 20.9 | +03 34 32 | ... | ... | ... | 10.040 | 9.097 | 7.989 | /2 | 6.83 | 6.32 | 6.08 | * | ... | 10.04 0.505 |
| LHS1354 | 2 | 02 12 29.2 | -08 04 10 | 12.70J | 10.91J | 9.84J | 11.99J | 11.06J | 9.86J | /37 | 8.65J | 8.07J | 7.83J | ... | ... | ... |
| LHS1358 | 1 | 02 12 54.0 | +00 00 16 | ... | ... | ... | 13.58 | 12.31 | 10.66 | 2/1 | 9.06 | 8.52 | 8.17 | * | ... | 13.58 0.224 |
| LHS1356 | 1 | 02 12 58.8 | -73 45 50 | 13.84 | 11.68 | 10.09 | ... | ... | ... | ... | 9.24 | 8.56 | 8.34 | ... | ... | ... |
| L296-105 | 1 | 02 13 53.0 | -49 23 14 | 14.34 | 12.07 | 10.34 | ... | ... | ... | ... | 9.43 | 8.76 | 8.53 | ... | ... | ... |
| GJ0091 | 1 | 02 13 53.6 | -32 02 29 | 10.96 | 9.10 | 7.30 | 10.31 | 9.32 | 8.15 | /2 | 6.96 | 6.33 | 6.09 | * | ... | 10.31 0.521 |
| LHS1363 | 1 | 02 14 12.6 | -03 57 44 | 17.28 | 14.96 | 11.96 | 16.44 | 14.71 | 12.62 | /40 | 10.48 | 9.86 | 9.49 | * | ... | 16.44 0.101 |
| LP885-034 | 1 | 02 14 18.6 | -30 33 47 | 13.38 | 11.69 | 9.68 | ... | ... | ... | ... | 8.82 | 8.24 ^a | 7.96 | ... | ... | ... |
| GJ1045 | 1 | 02 14 59.4 | +17 25 09 | ... | ... | ... | 14.44 | 13.19 | 11.58 | /37 | 9.97 | 9.38 | 9.10 | * | ... | 14.44 0.206 |
| LHS1367 | 1 | 02 15 08.1 | -30 40 01 | 20.23 | 17.68 | 14.03 | 18.98 | 16.70 | 14.23 | /40 | 11.62 | 10.95 | 10.54 | ... | ... | ... |
| StKM1-249 | 1 | 02 15 20.0 | -13 00 58 | 12.48 | 10.44 | 9.23 | ... | ... | ... | ... | 8.63 | 8.00 | 7.77 | ... | ... | ... |
| LHS1373 | 1 | 02 15 48.9 | -12 40 27 | 13.84 | 11.83 | 9.90 | 13.00 | 11.89 | 10.46 | /37 | 9.05 | 8.47 ^a | 8.17 | ... | ... | ... |

| | | | | | | | | | | | | | | | | |
|--------------|------|-------------|-----------|--------|--------|-------|--------|--------|--------|-----|-------|-------------------|-------|-----|------|-------------|
| LP829-041 | 1 | 02 16 21.4 | -22 00 49 | 18.14 | 15.72 | 12.74 | ... | ... | ... | ... | 11.31 | 10.76 | 10.40 | ... | ... | ... |
| LHS1375 | 1 | 02 16 31.5 | +13 35 37 | ... | ... | ... | 15.81 | 14.13 | 12.01 | 4/1 | 9.87 | 9.31 | 8.98 | * | ... | 15.80 0.099 |
| SCR0216-5257 | 1 | 02 16 32.0 | -52 57 47 | 16.20 | 14.11 | 11.99 | 15.23 | 13.95 | 12.28 | /40 | 10.62 | 9.96 | 9.68 | ... | ... | ... |
| LHS1376(B) | 0(1) | 02 16 41.2 | -30 59 18 | ... | ... | ... | 13.10 | 11.88 | 10.26 | /23 | 8.78 | 8.19 | 7.89 | * | 1.07 | 13.10 0.252 |
| LHS1377(A) | 2(1) | 02 16 41.2 | -30 59 18 | 12.71 | 10.79 | 8.54 | 12.03 | 10.87 | 9.38 | /40 | 7.99 | 7.32 | 7.13 | * | ... | 12.03 0.356 |
| LHS1378 | 1 | 02 17 12.9 | +35 26 19 | ... | ... | ... | 15.90 | 14.19 | 12.09 | /37 | 9.98 | 9.35 | 9.01 | * | ... | 15.90 0.104 |
| WT0084 | 1 | 02 17 28.5 | -59 22 44 | 17.19 | 14.66 | 11.50 | 15.67 | 14.19 | 12.25 | /5 | 10.44 | 9.87 | 9.54 | * | ... | 15.67 0.116 |
| GJ0093 | 1 | 02 17 34.2 | -53 59 20 | 12.16 | 9.64 | 8.88 | 11.40 | 10.50 | 9.51 | /2 | 8.47 | 7.83 | 7.65 | * | ... | 11.40 0.546 |
| L174-034 | 1 | 02 18 17.9 | -55 07 33 | 14.37 | 12.27 | 10.40 | ... | ... | ... | ... | 9.48 | 8.91 | 8.64 | ... | ... | ... |
| GJ0094 | 1 | 02 18 59.4 | +35 21 00 | ... | ... | ... | 12.55 | 11.43 | 9.96 | /37 | 8.66 | 8.14 | 7.90 | * | ... | 12.55 0.349 |
| GJ1046B | 0BD | 02 19 10.0 | -36 46 41 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | ... | ... |
| GJ1046A | 2(1) | 02 19 10.1 | -36 46 41 | 12.41 | 10.11 | 8.65 | 11.56 | 10.52 | 9.19 | /40 | 7.92 | 7.32 ^a | 7.03 | * | ... | 11.60 0.398 |
| GJ1047C | 0(1) | 02 21 01.9 | +36 52 47 | ... | ... | ... | 14.29 | 13.11 | 11.63 | /37 | 10.21 | 9.66 | 9.41 | * | 0.23 | 14.29 0.227 |
| GJ1047B | 0 | 02 21 04.7 | +36 53 02 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.00 | 14.06 0.246 |
| GJ1047A | 3(2) | 02 21 04.7 | +36 53 02 | ... | ... | ... | 13.31J | 12.17J | 10.72J | /37 | 9.37J | 8.78J | 8.56J | * | ... | 14.06 0.247 |
| GJ0096 | 1 | 02 22 14.6 | +47 52 48 | ... | ... | ... | 9.40 | 8.46 | 7.51 | 2/1 | 6.38 | 5.77 | 5.55 | * | ... | 9.40 0.634 |
| LP710-008 | 1 | 02 22 17.8 | -13 11 06 | 14.87 | 12.86 | 10.87 | ... | ... | ... | ... | 9.83 | 9.23 | 8.96 | ... | ... | ... |
| LP941-057 | 1 | 02 22 18.3 | -36 51 52 | 17.45 | 15.20 | 12.57 | ... | ... | ... | ... | 11.06 | 10.47 | 10.13 | ... | ... | ... |
| L440-002 | 1 | 02 22 25.6 | -34 33 18 | 12.11 | 9.73 | 8.68 | ... | ... | ... | ... | 8.36 | 7.76 | 7.56 | ... | ... | ... |
| LP829-051 | 1 | 02 23 24.0 | -23 18 25 | 15.34 | 13.14 | 10.70 | 14.21 | 12.98 | 11.38 | /23 | 9.86 | 9.31 | 9.01 | ... | ... | ... |
| L296-061 | 1 | 02 24 26.6 | -47 10 24 | 14.00 | 11.29 | 9.74 | ... | ... | ... | ... | 8.96 | 8.37 | 8.18 | ... | ... | ... |
| LP885-059 | 1 | 02 26 32.8 | -29 30 56 | 12.50 | 10.89 | 9.16 | ... | ... | ... | ... | 8.94 | 8.26 | 8.05 | ... | ... | ... |
| L513-008 | 1 | 02 27 30.4 | -30 54 36 | 11.45 | 9.30 | 7.78 | 10.89 | 9.93 | 8.88 | /20 | 7.76 | 7.11 | 6.93 | * | ... | 10.89 0.590 |
| LHS1407 | 1 | 02 28 05.5 | +03 10 05 | ... | ... | ... | 17.61 | 15.84 | 13.76 | 1/1 | 11.67 | 11.12 | 10.79 | * | ... | 17.61 0.104 |
| LP941-090 | 1 | 02 28 07.7 | -36 28 20 | 14.88 | 12.77 | 10.56 | ... | ... | ... | ... | 9.72 | 9.14 | 8.87 | ... | ... | ... |
| LHS1412 | 1 | 02 30 34.9 | -15 43 25 | 13.94 | 11.91 | 10.19 | ... | ... | ... | ... | 9.28 | 8.65 | 8.42 | ... | ... | ... |
| GJ0101 | 1 | 02 31 27.7 | +57 22 43 | ... | ... | ... | 13.22 | 12.07 | 10.58 | /37 | 9.22 | 8.64 ^a | 8.42 | * | ... | 13.22 0.298 |
| LP650-158 | 1 | 02 31 33.3 | -03 56 23 | ... | 10.51 | 9.30 | 12.43 | 11.43 | 10.25 | /25 | 8.95 | 8.31 ^a | 8.08 | ... | ... | ... |
| GJ0102 | 1 | 02 33 37.2 | +24 55 38 | ... | ... | ... | 12.98 | 11.71 | 10.07 | /37 | 8.47 | 7.91 | 7.63 | ... | ... | 12.98 0.195 |
| L225-057B | 0 | 02 34 21.0 | -53 05 35 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.00 | 13.28 0.298 |
| L225-057A | 2 | 02 34 21.2 | -53 05 37 | 13.57J | 11.09J | 9.28J | 12.53J | 11.32J | 9.76J | /40 | 8.23J | 7.61J | 7.31J | * | ... | 13.28 0.298 |
| GJ0103 | 2 | 02 34 22.6 | -43 47 47 | 9.59J | 6.85J | 6.92J | 8.84J | 7.96J | 7.00J | /2 | 5.80J | 5.13J | 4.89J | ... | ... | ... |
| GJ0104 | 1 | 02 35 53.3 | +20 13 11 | ... | ... | ... | 10.66 | 9.65 | 8.44 | /35 | 7.21 | 6.57 | 6.33 | * | ... | 10.66 0.502 |
| APM0237-5928 | 1 | 02 36 32.5 | -59 28 06 | 15.29 | 12.70 | 9.96 | 14.47 | 12.96 | 11.08 | /13 | 9.28 | 8.70 | 8.34 | * | ... | 14.47 0.128 |
| LHS1426 | 1 | 02 37 32.1 | +00 21 12 | ... | ... | ... | 15.16 | 13.81 | 12.14 | 1/1 | 10.55 | 9.97 | 9.69 | * | ... | 15.16 0.185 |
| L174-028 | 1 | 02 37 52.8 | -58 45 11 | 12.92 | 11.03 | 8.73 | 12.44 | 11.27 | 9.78 | /40 | 8.36 | 7.79 | 7.51 | * | ... | 12.46 0.322 |
| LEHPM1-2662 | 1 | 02 38 49.1 | -39 16 37 | 16.47 | 14.21 | 11.89 | ... | ... | ... | ... | 10.62 | 9.98 | 9.70 | ... | ... | ... |
| LTT17400 | 1 | 02 39 17.35 | +07 28 17 | ... | ... | ... | 14.27 | 13.03 | 11.43 | /30 | 9.88 | 9.34 | 9.03 | * | ... | 14.27 0.212 |
| GJ1050 | 1 | 02 39 50.7 | -34 07 58 | 12.59 | 10.38 | 8.57 | 11.76 | 10.68 | 9.35 | /40 | 8.06 | 7.54 | 7.31 | * | ... | 11.79 0.315 |
| G075-035 | 1 | 02 41 15.1 | -04 32 18 | 14.50 | 12.23 | 10.02 | 13.79 | 12.48 | 10.77 | /40 | 9.20 | 8.58 ^a | 8.25 | * | ... | 13.79 0.171 |
| LHS1434 | 1 | 02 42 56.3 | -38 56 12 | 14.25 | 12.13 | 10.36 | 13.04 | 11.96 | 10.56 | /40 | 9.24 | 8.64 | 8.38 | ... | ... | ... |
| GJ1051 | 1 | 02 43 53.2 | -08 49 46 | 11.94 | 10.25 | 8.49 | 11.91 | 10.95 | 9.83 | /20 | 8.69 | 8.10 | 7.92 | * | ... | 11.91 0.505 |
| GJ0109 | 1 | 02 44 15.5 | +25 31 24 | ... | ... | ... | 10.57 | 9.48 | 8.10 | /37 | 6.75 | 6.20 | 5.96 | * | ... | 10.57 0.364 |
| LP993-115B | 0 | 02 45 14.3 | -43 44 10 | ... | ... | ... | 12.69J | 11.37J | 9.67J | 3/1 | 8.14J | 7.55J | 7.27J | * | 0.64 | 13.02 0.214 |
| LP993-115C | 0 | 02 45 14.3 | -43 44 10 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.75 | 14.13 0.149 |
| LP993-115A | 3(1) | 02 45 14.3 | -43 44 11 | 12.98 | 10.79 | 8.22 | 12.38 | 11.17 | 9.61 | /27 | 8.06 | 7.53 | 7.20 | * | ... | 12.38 0.268 |
| LP711-005 | 1 | 02 45 18.5 | -13 56 24 | 14.16 | 12.04 | 10.01 | ... | ... | ... | ... | 9.45 | 8.81 | 8.59 | ... | ... | ... |
| LTT17413A | 2(1) | 02 45 39.6 | +44 56 55 | ... | ... | ... | 10.85 | 9.93 | 8.95 | /31 | 7.82 | 7.17 | 6.98 | * | ... | 10.85 0.632 |
| LTT17413B | 0(1) | 02 45 41.2 | +44 57 03 | ... | ... | ... | ... | ... | ... | ... | 11.17 | 10.59 | 10.22 | * | 5.83 | 16.68 0.120 |
| SCR0246-7024 | 1 | 02 46 02.3 | -70 24 06 | 15.71 | 13.33 | 10.71 | 14.86 | 13.44 | 11.61 | /39 | 9.84 | 9.33 | 9.02 | * | ... | 14.86 0.132 |
| LHS0017 | 1 | 02 46 14.9 | -04 59 21 | 17.23 | 15.04 | 12.10 | 16.36 | 14.75 | 12.76 | /40 | 10.97 | 10.50 | 10.15 | * | ... | 16.33 0.112 |
| LHS1443 | 1 | 02 46 34.7 | +16 25 10 | ... | ... | ... | 16.99 | 15.16 | 12.97 | 2/1 | 10.97 | 10.52 | 10.19 | * | ... | 16.99 0.098 |
| LTT01349 | 1 | 02 46 42.9 | -23 05 12 | 11.20 | 8.99 | 8.03 | 10.24 | 9.36 | 8.54 | /20 | 7.56 | 6.93 | 6.74 | ... | ... | ... |
| LP771-021 | 1 | 02 48 41.0 | -16 51 22 | 21.23 | 18.52 | 15.02 | 20.02 | 17.71 | 15.32 | /9 | 12.55 | 11.87 | 11.42 | * | ... | 20.31 0.075 |
| GJ0114.1 | 1 | 02 50 09.8 | -53 08 20 | 11.57 | 9.05 | 7.82 | 10.72 | 9.73 | 8.55 | /2 | 7.35 | 6.75 | 6.50 | * | ... | 10.72 0.483 |
| LEHPM1-2816 | 1 | 02 50 23.0 | -21 04 45 | 13.79 | 11.78 | 9.96 | ... | ... | ... | ... | 9.32 | 8.72 | 8.51 | ... | ... | ... |
| GJ0118 | 1 | 02 52 22.2 | -63 40 48 | 12.17 | 9.80 | 8.23 | 11.38 | 10.32 | 8.99 | /2 | 7.67 | 7.12 | 6.83 | * | ... | 11.38 0.377 |
| LEHPM1-2855 | 1 | 02 52 29.3 | -24 17 19 | 13.40 | 11.60 | 9.45 | ... | ... | ... | ... | 9.05 | 8.37 | 8.17 | ... | ... | ... |
| SO0253+1652 | 1 | 02 53 00.0 | +16 52 52 | ... | ... | ... | 15.14 | 13.03 | 10.65 | 3/1 | 8.39 | 7.88 | 7.59 | * | ... | 15.14 0.088 |
| L012-006 | 1 | 02 53 17.0 | -80 31 20 | 15.14 | 13.10 | 11.12 | 14.10 | 12.92 | 11.42 | /40 | 10.00 | 9.40 | 9.09 | ... | ... | ... |
| L127-058 | 1 | 02 53 46.9 | -61 35 19 | 13.16 | 11.03 | 9.48 | ... | ... | ... | ... | 8.57 | 7.95 | 7.70 | ... | ... | ... |
| LP831-001 | 1 | 02 54 39.5 | -22 15 59 | 13.68 | 11.58 | 9.57 | ... | ... | ... | ... | 8.98 | 8.44 | 8.17 | ... | ... | ... |
| LHS1471 | 1 | 02 55 14.5 | -51 40 21 | 15.35 | 13.25 | 11.13 | ... | ... | ... | ... | 9.94 | 9.37 | 9.08 | ... | ... | ... |
| GJ0119B | 0(1) | 02 56 34.4 | +55 26 14 | ... | ... | ... | 11.65 | 10.62 | 9.31 | /37 | 8.01 | 7.41 | 7.20 | * | 1.17 | 11.65 0.495 |
| GJ0119A | 2(1) | 02 56 34.4 | +55 26 14 | ... | ... | ... | 10.48 | 9.56 | 8.56 | /37 | 7.43 | 6.80 | 6.59 | * | ... | 10.48 0.658 |
| GJ0120 | 1 | 02 57 31.0 | +10 47 25 | ... | ... | ... | 13.060 | 11.945 | 10.519 | /2 | 9.16 | 8.66 | 8.43 | * | ... | 13.06 0.325 |

| | | | | | | | | | | | | | | | | |
|---------------|------|------------|-----------|--------|--------|-------|--------|--------|--------|-----|-------|-------------------|-------|-----|------|-------------|
| LHS1481 | 1 | 02 58 10.2 | -12 53 06 | 13.71 | 11.25 | 10.00 | 12.69 | 11.58 | 10.23 | /40 | 8.95 | 8.45 | 8.20 | ... | ... | ... |
| LTT01445C | 0 | 03 01 51.0 | -16 35 31 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.62 | 11.84 0.467 |
| LTT01445B | 0(2) | 03 01 51.0 | -16 35 36 | ... | ... | ... | 11.37J | 10.13J | 8.58J | 4/1 | 7.29J | 6.77J | 6.50J | * | 0.54 | 11.76 0.232 |
| LTT01445A | 3(1) | 03 01 51.0 | -16 35 31 | 11.03J | 8.55J | 6.82J | 11.22 | 10.07 | 8.66 | /13 | 7.11 | 6.56 | 6.29 | * | ... | 11.22 0.280 |
| LHS1490 | 1 | 03 02 06.4 | -39 50 52 | 17.18 | 14.49 | 11.93 | 15.87 | 14.35 | 12.44 | /40 | 10.71 | 10.18 | 9.89 | * | ... | 15.85 0.115 |
| G075-060 | 1 | 03 02 09.8 | -00 44 43 | 14.28 | 12.33 | 10.68 | ... | ... | ... | ... | 9.53 | 8.94 | 8.71 | ... | ... | ... |
| APM0302-6952 | 1 | 03 02 30.8 | -69 52 03 | 15.09 | 13.02 | 10.97 | ... | ... | ... | ... | 9.69 | 9.18 | 8.91 | ... | ... | ... |
| GJ0121.1 | 1 | 03 02 38.1 | -18 09 59 | 12.30 | 10.70 | 8.46 | 11.80 | 10.76 | 9.46 | /2 | 8.21 | 7.59 | 7.34 | * | ... | 11.80 0.454 |
| LEHPM1-3019 | 1 | 03 03 00.7 | -55 24 53 | 16.27 | 14.04 | 11.70 | ... | ... | ... | ... | 10.45 | 9.93 | 9.60 | ... | ... | ... |
| LP711-044 | 2(1) | 03 03 47.9 | -12 51 19 | 14.46 | 12.11 | 10.52 | 13.37 | 12.22 | 10.73 | /33 | 9.28 | 8.66 | 8.37 | ... | ... | ... |
| LHS1491 | 1 | 03 04 04.5 | -20 22 43 | 13.56 | 11.80 | 9.49 | 12.84 | 11.65 | 10.13 | /26 | 8.63 | 8.02 | 7.75 | * | ... | 12.84 0.283 |
| LEHPM1-3070 | 1 | 03 06 11.6 | -36 47 53 | 20.55 | 17.79 | 13.76 | 19.38 | 16.98 | 14.49 | /9 | 11.69 | 11.07 | 10.63 | * | ... | 19.39 0.076 |
| GJ1054B | 0(1) | 03 07 53.4 | -28 14 10 | ... | ... | ... | 13.09 | 11.85 | 10.87 | /35 | 9.35 | 8.78 | 8.52 | * | 2.10 | 13.09 0.299 |
| GJ1054C | 0 | 03 07 55.7 | -28 13 11 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.00 | 10.99 0.537 |
| GJ1054A | 3(2) | 03 07 55.8 | -28 13 11 | 10.11J | 8.05J | 6.82J | 10.24J | 9.35J | 8.38J | /35 | 7.24J | 6.58J | 6.37J | * | ... | 10.99 0.537 |
| LHS1499 | 1 | 03 08 28.2 | +43 01 40 | ... | ... | ... | 14.79 | 13.62 | 12.17 | 3/1 | 10.75 | 10.20 | 9.95 | * | ... | 14.79 0.209 |
| GJ1055 | 1 | 03 09 00.2 | +10 01 26 | ... | ... | ... | 14.85 | 13.44 | 11.62 | /37 | 9.93 | 9.33 | 9.07 | * | ... | 14.85 0.130 |
| LP994-114 | 1 | 03 09 22.2 | -39 11 03 | 13.56 | 11.96 | 9.99 | ... | ... | ... | ... | 9.00 | 8.37 | 8.15 | ... | ... | ... |
| GJ0125B | 0 | 03 09 30.7 | +45 43 57 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.17 | 12.46 0.332 |
| GJ0125A | 2 | 03 09 30.7 | +45 43 57 | ... | ... | ... | 10.15J | 9.16J | 7.97J | /37 | 6.73J | 6.08J | 5.84J | * | ... | 10.29 0.591 |
| LP831-035 | 1 | 03 10 03.1 | -23 41 31 | 14.35 | 12.31 | 10.14 | ... | ... | ... | ... | 9.41 | 8.78 | 8.57 | ... | ... | ... |
| LHS1512 | 1 | 03 10 15.4 | +05 54 31 | ... | ... | ... | 11.90 | 10.86 | 9.60 | /37 | 8.36 | 7.75 | 7.53 | * | ... | 11.90 0.409 |
| GJ1053 | 1 | 03 10 58.3 | +73 46 20 | ... | ... | ... | 14.61 | 13.27 | 11.45 | /37 | 9.85 | 9.41 | 9.08 | * | ... | 14.61 0.138 |
| LTT01505 | 1 | 03 11 36.7 | -04 16 37 | 13.75 | 11.76 | 9.72 | 13.38 | 12.21 | 10.71 | /23 | 9.33 | 8.72 | 8.46 | ... | ... | ... |
| GJ0130 | 1 | 03 12 29.8 | -38 05 20 | ... | 10.39 | 8.76 | 11.43 | 10.40 | 9.18 | /2 | 8.03 | 7.42 | 7.19 | * | ... | 11.43 0.390 |
| GJ1057 | 1 | 03 13 22.9 | +04 46 29 | ... | ... | ... | 13.86 | 12.44 | 10.59 | /37 | 8.78 | 8.21 | 7.83 | * | ... | 13.86 0.138 |
| LP831-045B | 0 | 03 14 18.0 | -23 09 31 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.72 | 15.38 0.132 |
| LP831-045A | 2 | 03 14 18.2 | -23 09 30 | 13.29J | 11.09J | 9.37J | 12.58J | 11.42J | 9.93J | /40 | 8.49J | 7.88J | 7.63J | * | ... | 12.66 0.311 |
| StKM1-350 | 1 | 03 14 36.7 | -09 40 03 | 11.80 | 9.97 | 8.67 | 11.63 | 10.67 | 9.62 | /34 | 8.53 | 7.91 | 7.68 | ... | ... | ... |
| LTT11051 | 1 | 03 14 47.7 | +48 30 51 | ... | ... | ... | 11.42 | 10.45 | 9.37 | 2/1 | 8.17 | 7.64 | 7.41 | * | ... | 11.43 0.508 |
| LHS1521(C) | 0(1) | 03 15 29.4 | +57 51 33 | ... | ... | ... | 15.24 | 13.81 | 12.63 | /37 | 11.12 | 10.53 | 10.27 | * | 4.36 | 15.24 0.132 |
| GJ0130.1A | 3(2) | 03 16 13.8 | +58 10 02 | ... | ... | ... | 10.31J | 9.30J | 8.08J | /37 | 7.34 | 6.76 ^a | 6.57 | * | ... | 10.88 0.495 |
| GJ0130.1B | 0 | 03 16 14.0 | +58 10 08 | ... | ... | ... | ... | ... | ... | ... | 7.50 | 6.84 | 6.64 | * | 0.40 | 11.28 0.447 |
| LP831-068 | 1 | 03 16 47.8 | -21 25 26 | 11.55 | 9.90 | 7.97 | 11.04 | 10.01 | 8.79 | /40 | 7.61 | 6.95 | 6.69 | ... | ... | ... |
| LP994-091 | 1 | 03 17 03.0 | -42 14 33 | 14.62 | 12.63 | 10.46 | ... | ... | ... | ... | 9.70 | 9.13 | 8.85 | ... | ... | ... |
| LTT17492B | 0 | 03 17 12.2 | +45 22 22 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.07 | 13.61 0.255 |
| LTT17492A | 2 | 03 17 12.2 | +45 22 22 | ... | ... | ... | 12.39J | 11.26J | 9.82J | /32 | 8.42J | 7.87J | 7.59J | * | ... | 11.54 0.472 |
| LHS1525 | 1 | 03 17 45.2 | +25 15 06 | ... | ... | ... | 11.78 | 10.78 | 9.63 | /20 | 8.49 | 7.92 | 7.67 | * | ... | 11.78 0.485 |
| LP887-070 | 1 | 03 18 04.0 | -30 24 12 | 11.69 | 9.68 | 7.87 | 11.00 | 10.05 | 9.05 | /20 | 7.99 | 7.36 | 7.12 | * | ... | 11.00 0.609 |
| GJ0134 | 1 | 03 18 07.5 | +38 15 07 | ... | ... | ... | 10.28 | 9.31 | 8.21 | /37 | 7.02 | 6.37 | 6.16 | * | ... | 10.28 0.604 |
| LP994-096 | 1 | 03 18 45.5 | -40 51 34 | 12.96 | 11.03 | 8.85 | 12.10 | 10.99 | 9.61 | /40 | 8.29 | 7.71 | 7.39 | ... | ... | ... |
| LTT01577 | 1 | 03 18 58.3 | -36 23 35 | 12.12 | 9.66 | 8.20 | 11.88 | 10.82 | 9.51 | /20 | 8.21 | 7.63 ^a | 7.40 | * | ... | 11.88 0.455 |
| LTT01578 | 1 | 03 19 29.2 | -30 59 44 | 15.00 | 12.80 | 10.30 | 14.00 | 12.78 | 11.18 | /23 | 9.65 | 9.06 | 8.78 | ... | ... | ... |
| 2MA0320-0446B | 0BD | 03 20 28.3 | -04 46 36 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | ... | ... |
| 2MA0320-0446A | 2(1) | 03 20 28.4 | -04 46 37 | ... | 19.84 | 16.56 | 21.18 | 18.85 | 16.37 | /40 | 13.26 | 12.54 | 12.13 | * | ... | 21.18 0.075 |
| L127-124 | 1 | 03 20 51.8 | -63 51 53 | 14.29 | 11.95 | 9.49 | ... | ... | ... | ... | 9.13 | 8.54 | 8.20 | ... | ... | ... |
| DEN0320-5520 | 1 | 03 20 58.9 | -55 20 16 | 19.39 | 17.24 | 14.24 | ... | ... | ... | ... | 12.07 | 11.45 | 11.08 | ... | ... | ... |
| LP412-031 | 1 | 03 20 59.0 | +18 54 22 | ... | ... | ... | 19.21 | 16.98 | 14.70 | /8 | 11.76 | 11.07 | 10.64 | * | ... | 19.21 0.078 |
| GJ0133 | 1 | 03 21 21.7 | +79 58 02 | ... | ... | ... | 11.21 | 10.18 | 8.99 | /38 | 7.70 | 7.12 | 6.89 | * | ... | 11.21 0.441 |
| LTT17505 | 1 | 03 21 46.9 | -06 40 24 | 12.54 | 10.39 | 8.92 | 11.32 | 10.29 | 9.07 | /40 | 7.86 | 7.28 | 6.98 | ... | ... | ... |
| GJ1058 | 1 | 03 22 05.5 | +02 55 46 | ... | ... | ... | 14.78 | 13.50 | 11.82 | /37 | 10.31 | 9.81 | 9.51 | * | ... | 14.78 0.160 |
| GJ1059 | 1 | 03 23 04.8 | +41 59 53 | ... | ... | ... | 15.31 | 13.90 | 12.05 | /37 | 10.39 | 9.86 | 9.60 | * | ... | 15.31 0.132 |
| LP832-007 | 1 | 03 23 06.7 | -24 13 28 | 15.00 | 12.91 | 10.83 | ... | ... | ... | ... | 9.87 | 9.24 | 8.99 | ... | ... | ... |
| LTT11117 | 1 | 03 23 20.6 | +11 41 11 | ... | ... | ... | 12.19 | 11.09 | 9.70 | /37 | 8.39 | 7.81 | 7.56 | * | ... | 12.19 0.395 |
| GJ0140B | 0 | 03 24 06.4 | +23 47 06 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.27 | 12.03 0.429 |
| GJ0140A | 3(2) | 03 24 06.4 | +23 47 06 | ... | ... | ... | 10.47J | 9.49J | 8.34J | /35 | 7.13J | 6.49J | 6.27J | * | ... | 10.76 0.591 |
| GJ0140C | 0(1) | 03 24 12.8 | +23 46 19 | ... | ... | ... | 11.89 | 10.72 | 9.71 | /35 | 8.28 | 7.68 | 7.46 | * | 1.13 | 11.89 0.446 |
| DEN0324-7727 | 1 | 03 24 26.9 | -77 27 05 | 19.88 | 17.56 | 14.39 | ... | ... | ... | ... | 12.10 | 11.46 | 11.05 | ... | ... | ... |
| LTT01628 | 1 | 03 25 39.7 | -42 59 12 | 11.96 | 9.85 | 8.61 | 11.25 | 10.33 | 9.35 | /20 | 8.30 | 7.73 | 7.48 | * | ... | 11.25 0.577 |
| LP532-081B | 0 | 03 25 41.7 | +05 51 54 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.09 | 17.59 0.104 |
| LP532-081C | 0 | 03 25 41.7 | +05 51 54 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.07 | 15.57 0.154 |
| LP532-081A | 3 | 03 25 41.7 | +05 51 54 | ... | ... | ... | 14.70J | 13.31J | 11.49J | /37 | 9.95J | 9.33J | 9.12J | * | ... | 15.50 0.157 |
| L055-011 | 1 | 03 28 08.4 | -70 01 41 | 14.08 | 12.04 | 10.40 | ... | ... | ... | ... | 9.41 | 8.81 | 8.59 | ... | ... | ... |
| GJ0143.1 | 1 | 03 29 19.8 | -11 40 42 | 10.17 | 8.03 | 7.28 | 9.95 | 9.10 | 8.27 | /2 | 7.30 | 6.65 | 6.45 | ... | ... | ... |
| LSPM0330+5413 | 1 | 03 30 49.0 | +54 13 55 | ... | ... | ... | 15.89 | 14.21 | 12.16 | 1/1 | 10.17 | 9.60 | 9.28 | * | ... | 15.89 0.101 |
| LP888-018 | 1 | 03 31 30.3 | -30 42 39 | 19.91 | 17.26 | 13.55 | 18.81 | 16.55 | 14.10 | /40 | 11.36 | 10.70 | 10.26 | * | ... | 18.81 0.079 |

| | | | | | | | | | | | | | | | | | |
|---------------|------|------------|-----------|--------|--------|--------|--------|--------|--------|-----|--------|--------------------|-------|-----|------|-------|-------|
| GJ0143.3 | 1 | 03 31 47.1 | +14 19 17 | ... | ... | ... | 12.27 | 11.23 | 9.96 | /37 | 8.70 | 8.15 | 7.91 | * | ... | 12.27 | 0.408 |
| GJ0145 | 1 | 03 32 55.8 | -44 42 07 | 11.80 | 9.97 | 8.02 | 11.47 | 10.40 | 9.06 | /2 | 7.74 | 7.21 | 6.91 | * | ... | 11.47 | 0.349 |
| LEHPM1-3396 | 1 | 03 34 12.2 | -49 53 32 | 20.50 | 17.54 | 13.92 | 19.38 | 16.85 | 14.39 | /40 | 11.38 | 10.82 | 10.39 | * | ... | 19.38 | 0.075 |
| LHS0176 | 1 | 03 35 38.6 | -08 29 23 | 17.04 | 14.66 | 11.60 | 15.92 | 14.30 | 12.31 | /16 | 10.38 | 9.80 | 9.46 | * | ... | 15.92 | 0.110 |
| GJ1061 | 1 | 03 35 59.7 | -44 30 45 | 13.51 | 11.20 | 8.37 | 13.09 | 11.45 | 9.47 | /40 | 7.52 | 7.02 | 6.61 | * | ... | 13.09 | 0.112 |
| LHS1567 | 1 | 03 36 06.7 | -40 59 54 | 13.76 | 11.95 | 9.79 | ... | ... | ... | ... | 9.29 | 8.64 | 8.39 | ... | ... | ... | ... |
| LSPM0336+3118 | 1 | 03 36 09.0 | +31 18 40 | ... | ... | ... | 13.98 | 12.63 | 10.90 | 1/1 | 9.19 | 8.60 | 8.32 | * | ... | 13.98 | 0.168 |
| LEHPM1-3427 | 1 | 03 36 47.6 | -55 45 08 | 15.17 | 13.05 | 10.79 | ... | ... | ... | ... | 9.86 | 9.31 | 9.01 | ... | ... | ... | ... |
| LHS1572 | 2 | 03 38 10.0 | -68 56 46 | 12.92J | 10.62J | 9.20J | 11.95J | 10.86J | 9.52J | /40 | 8.21J | 7.60J | 7.37J | ... | ... | ... | ... |
| GJ1062 | 1 | 03 38 15.7 | -11 29 14 | 13.92 | 11.55 | 9.84 | 13.01 | 11.98 | 10.81 | /37 | 9.63 | 9.11 | 8.83 | * | ... | 13.01 | 0.282 |
| L228-092 | 1 | 03 38 55.9 | -52 34 11 | 15.67 | 13.18 | 10.90 | ... | ... | ... | ... | 9.69 | 9.11 | 8.80 | ... | ... | ... | ... |
| LP944-020 | 1 | 03 39 35.3 | -35 25 44 | 20.24 | 17.02 | 13.29 | 18.70 | 16.39 | 14.01 | /9 | 10.73 | 10.02 | 9.55 | ... | ... | ... | ... |
| L128-007 | 1 | 03 40 08.9 | -60 35 59 | 13.35 | 11.10 | 9.67 | ... | ... | ... | ... | 9.00 | 8.43 | 8.13 | ... | ... | ... | ... |
| LHS0178 | 1 | 03 42 29.4 | +12 31 33 | ... | ... | ... | 12.87 | 11.89 | 10.78 | 2/1 | 9.60 | 9.11 | 8.88 | * | ... | 12.87 | 0.394 |
| SCR0342-6407 | 1 | 03 42 57.4 | -64 07 57 | 17.17 | 15.13 | 12.34 | 16.01 | 14.65 | 12.89 | /16 | 11.32 | 10.89 | 10.58 | * | ... | 16.01 | 0.141 |
| LHS1582B | 0 | 03 43 22.0 | -09 33 50 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.12 | 16.95 | 0.112 |
| LHS1582A | 2 | 03 43 22.1 | -09 33 51 | 15.73J | 13.37J | 10.95J | 14.69J | 13.33J | 11.60J | /26 | 9.80J | 9.18J | 8.85J | * | ... | 14.83 | 0.187 |
| LP944-038 | 2 | 03 44 47.9 | -38 20 13 | 13.03J | 10.78J | 9.42J | ... | ... | ... | ... | 8.59 | 8.02 | 7.79 | ... | ... | ... | ... |
| LHS1590 | 1 | 03 46 45.4 | -11 17 42 | 13.25 | 10.91 | 9.44 | 12.70 | 11.64 | 10.31 | /37 | 9.00 | 8.46 | 8.19 | ... | ... | ... | ... |
| LHS1593 | 1 | 03 47 23.2 | +08 40 44 | ... | ... | ... | 14.48 | 13.16 | 11.44 | /37 | 9.85 | 9.27 | 9.02 | * | ... | 14.48 | 0.145 |
| G080-021 | 1 | 03 47 23.4 | -01 58 20 | 12.28 | 10.04 | 8.52 | 11.51 | 10.44 | 9.11 | /23 | 7.80 | 7.17 ^a | 6.93 | * | ... | 11.51 | 0.442 |
| GJ0155.1 | 1 | 03 47 58.1 | +02 47 16 | ... | ... | ... | 11.020 | 10.069 | 9.053 | /2 | 7.96 | 7.38 ^a | 7.11 | * | ... | 11.02 | 0.517 |
| LHS1596 | 1 | 03 48 33.3 | +73 33 18 | ... | ... | ... | 11.32 | 10.33 | 9.20 | /37 | 7.99 | 7.36 | 7.17 | * | ... | 11.32 | 0.469 |
| LEHPM1-3548 | 1 | 03 50 05.5 | -39 22 32 | 13.06 | 10.95 | 9.76 | ... | ... | ... | ... | 8.94 | 8.31 | 8.05 | ... | ... | ... | ... |
| GJ1065 | 1 | 03 50 44.3 | -06 05 42 | 13.37 | 11.19 | 9.11 | 12.82 | 11.60 | 10.04 | /40 | 8.57 | 8.00 ^a | 7.75 | * | ... | 12.80 | 0.205 |
| LHS1604 | 1 | 03 51 00.0 | -00 52 45 | 19.22 | 16.68 | 13.44 | 18.11 | 16.08 | 13.80 | /9 | 11.30 | 10.61 | 10.23 | * | ... | 18.07 | 0.087 |
| 2MA0352+0210 | 1 | 03 52 10.8 | +02 10 48 | ... | ... | ... | 21.05 | 18.68 | 16.20 | 1/1 | 13.08 | 12.41 | 11.96 | * | ... | 21.06 | 0.075 |
| LP833-014B | 0(1) | 03 52 23.1 | -22 52 57 | ... | ... | ... | 12.24 | 11.13 | 10.06 | 1/1 | ... | ... | ... | * | 0.05 | 12.24 | 0.461 |
| LP833-014A | 2(1) | 03 52 23.1 | -22 52 56 | 12.31J | 10.24J | 8.86J | 12.19 | 11.27 | 10.04 | 1/1 | 8.13J | 7.53J | 7.30J | * | ... | 12.19 | 0.467 |
| LHS1610B | 0 | 03 52 41.0 | +17 01 04 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.00 | 14.54 | 0.127 |
| LHS1610A | 2 | 03 52 41.0 | +17 01 04 | ... | ... | ... | 13.79J | 12.42J | 10.67J | /37 | 8.93J | 8.38J | 8.05J | * | ... | 14.54 | 0.127 |
| LEHPM1-3582 | 1 | 03 57 49.1 | -37 54 04 | 12.85 | 10.84 | 9.53 | ... | ... | ... | ... | 8.53 | 7.89 | 7.66 | ... | ... | ... | ... |
| GJ0157.1 | 1 | 03 59 56.8 | +26 05 41 | ... | ... | ... | 12.62 | 11.51 | 10.08 | /37 | 8.71 | 8.08 | 7.82 | * | ... | 12.62 | 0.401 |
| LP833-023 | 1 | 04 00 28.6 | -25 52 52 | 14.32 | 12.30 | 10.27 | ... | ... | ... | ... | 9.42 | 8.89 | 8.61 | ... | ... | ... | ... |
| LP031-301A | 3(1) | 04 05 57.0 | +71 16 38 | ... | ... | ... | 13.97 | 12.72 | 11.11 | 1/1 | 9.53 | 8.89 | 8.69 | * | ... | 13.97 | 0.216 |
| LP031-302C | 0 | 04 05 58.0 | +71 16 41 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.73 | 15.70 | 0.129 |
| LP031-302B | 0(2) | 04 05 58.0 | +71 16 41 | ... | ... | ... | 14.44J | 13.48J | 11.92J | 1/1 | 10.10J | 9.37J ^a | 9.20J | * | 0.88 | 14.85 | 0.160 |
| LHS1630B | 0 | 04 07 20.0 | -24 29 13 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.61 | 13.48 | 0.260 |
| LHS1630A | 2 | 04 07 20.5 | -24 29 14 | 13.22J | 11.12J | 9.22J | 12.38J | 11.22J | 9.68J | /26 | 8.24J | 7.68J | 7.44J | * | ... | 12.87 | 0.318 |
| GJ0162 | 1 | 04 08 37.4 | +33 38 13 | ... | ... | ... | 10.20 | 9.25 | 8.21 | /37 | 7.02 | 6.40 | 6.18 | * | ... | 10.20 | 0.556 |
| LP889-037 | 1 | 04 08 55.6 | -31 28 54 | 15.47 | 13.29 | 10.87 | 14.56 | 13.21 | 11.48 | /40 | 9.78 | 9.16 | 8.82 | * | ... | 14.56 | 0.162 |
| GJ0163 | 1 | 04 09 15.7 | -53 22 25 | 12.69 | 10.04 | 8.66 | 11.84 | 10.76 | 9.34 | /2 | 7.95 | 7.43 | 7.14 | * | ... | 11.84 | 0.387 |
| GJ1068 | 1 | 04 10 28.1 | -53 36 08 | ... | 12.11 | 9.81 | 13.60 | 12.18 | 10.42 | /40 | 8.75 | 8.21 | 7.90 | * | ... | 13.60 | 0.132 |
| LP714-037 | 1 | 04 10 48.1 | -12 51 43 | 17.40 | 14.93 | 12.13 | ... | ... | ... | ... | 11.01 | 10.37 | 9.92 | ... | ... | ... | ... |
| LHS1638 | 1 | 04 12 20.3 | +64 43 36 | ... | ... | ... | 13.73 | 12.44 | 10.77 | /37 | 9.16 | 8.58 | 8.29 | * | ... | 13.73 | 0.174 |
| LHS1641 | 1 | 04 12 43.1 | -22 50 39 | 14.44 | 12.47 | 10.57 | ... | ... | ... | ... | 9.57 | 8.96 | 8.71 | ... | ... | ... | ... |
| LHS1639 | 1 | 04 12 47.5 | -53 52 04 | 14.65 | 12.58 | 10.45 | ... | ... | ... | ... | 9.51 | 8.92 | 8.68 | ... | ... | ... | ... |
| GJ0164B | 0 | 04 12 58.8 | +52 36 42 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 3.10 | 16.60 | 0.102 |
| GJ0164A | 2 | 04 12 58.8 | +52 36 42 | ... | ... | ... | 13.50J | 12.19J | 10.47J | /37 | 8.77J | 8.25J | 7.92J | * | ... | 13.50 | 0.212 |
| GJ0165B | 0 | 04 13 08.2 | +50 31 21 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.00 | 14.42 | 0.187 |
| GJ0165A | 2 | 04 13 08.2 | +50 31 21 | ... | ... | ... | 13.67J | 12.40J | 10.74J | /38 | 9.26J | 8.75J | 8.47J | * | ... | 14.42 | 0.187 |
| G160-054 | 1 | 04 13 45.9 | -05 09 05 | 14.75 | 12.70 | 10.29 | 14.21 | 12.95 | 11.28 | /24 | 9.72 | 9.11 | 8.82 | ... | ... | ... | ... |
| 2MA0414-0906 | 1 | 04 14 17.3 | -09 06 54 | ... | ... | ... | 13.83 | 12.62 | 11.09 | 1/1 | 9.63 | 9.06 | 8.76 | * | ... | 13.83 | 0.286 |
| GJ2033B | 0(1) | 04 16 41.6 | -12 33 23 | ... | ... | ... | 12.32 | 11.27 | 9.98 | 1/1 | ... | ... | ... | * | 1.04 | 12.32 | 0.419 |
| GJ2033A | 2(1) | 04 16 41.7 | -12 33 23 | 11.87J | 9.80J | 8.31J | 11.28 | 10.26 | 9.18 | 1/1 | 7.57J | 6.98J | 6.73J | * | ... | 11.28 | 0.547 |
| G007-034 | 1 | 04 17 18.4 | +08 49 20 | ... | ... | ... | 13.84 | 12.50 | 10.75 | 3/1 | 9.03 | 8.48 | 8.18 | * | ... | 13.84 | 0.187 |
| LEHPM1-3719 | 1 | 04 17 34.6 | -48 34 39 | 16.74 | 14.25 | 11.25 | ... | ... | ... | ... | 10.28 | 9.71 | 9.34 | ... | ... | ... | ... |
| LHS1654 | 1 | 04 18 04.7 | -49 01 30 | 13.81 | 11.68 | 9.70 | ... | ... | ... | ... | 9.30 | 8.70 | 8.47 | ... | ... | ... | ... |
| LP834-013 | 1 | 04 18 06.5 | -24 06 24 | 17.12 | 14.83 | 12.29 | ... | ... | ... | ... | 10.92 | 10.34 | 10.02 | ... | ... | ... | ... |
| LP834-015 | 1 | 04 18 40.1 | -25 07 09 | 16.32 | 13.99 | 11.70 | ... | ... | ... | ... | 10.37 | 9.78 | 9.48 | ... | ... | ... | ... |
| LTT11399 | 1 | 04 19 59.6 | +36 29 11 | ... | ... | ... | 11.52 | 10.53 | 9.43 | 2/1 | 8.23 | 7.61 | 7.41 | * | ... | 11.52 | 0.541 |
| SCR0420-7005 | 1 | 04 20 12.6 | -70 05 59 | 18.18 | 15.68 | 12.58 | 17.09 | 15.35 | 13.25 | /39 | 11.19 | 10.59 | 10.25 | * | ... | 17.09 | 0.100 |
| LHS1665 | 1 | 04 22 12.5 | -57 26 01 | 12.53 | 9.75 | 8.47 | ... | ... | ... | ... | 8.08 | 7.50 | 7.21 | ... | ... | ... | ... |
| GJ1070 | 1 | 04 22 33.5 | +39 00 44 | ... | ... | ... | 15.30 | 13.95 | 12.17 | /37 | 10.47 | 9.94 | 9.67 | * | ... | 15.30 | 0.147 |
| LHS1668 | 1 | 04 24 56.2 | -40 02 48 | 15.03 | 12.62 | 10.38 | 14.10 | 12.77 | 11.07 | /25 | 9.53 | 8.99 | 8.67 | ... | ... | ... | ... |
| LHS0190(B) | 0 | 04 25 38.0 | -06 52 37 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.10 | 16.48 | 0.114 |

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|---------------|------|------------|-----------|--------|--------|--------|--------|--------|--------|-----|--------|---------------------|--------|-----|------|-------|-------|
| LHS0189(A) | 2 | 04 25 38.4 | -06 52 37 | 14.55J | 12.30J | 10.81J | 14.23J | 13.17J | 11.91J | /40 | 11.14J | 10.66J ^a | 10.31J | * | ... | 14.38 | 0.194 |
| LHS0191 | 1 | 04 26 20.1 | +03 35 43 | ... | ... | ... | 18.510 | 16.240 | 13.960 | /3 | 11.62 | 11.07 | 10.69 | * | ... | 18.51 | 0.087 |
| LHS5094 | 1 | 04 26 32.6 | -30 48 02 | 15.06 | 12.99 | 10.53 | 14.17 | 12.73 | 10.99 | /40 | 9.30 | 8.72 | 8.41 | * | ... | 14.17 | 0.164 |
| LEHPM2-1698 | 1 | 04 27 05.8 | -40 26 40 | 15.65 | 13.45 | 11.21 | ... | ... | ... | ... | 10.15 | 9.53 | 9.25 | ... | ... | ... | ... |
| L178-101 | 1 | 04 27 36.2 | -59 21 16 | 14.21 | 12.09 | 10.31 | ... | ... | ... | ... | 9.30 | 8.70 | 8.44 | ... | ... | ... | ... |
| L130-037 | 1 | 04 28 05.7 | -62 09 25 | 14.15 | 12.06 | 9.96 | 13.06 | 11.88 | 10.36 | /40 | 8.94 | 8.34 ^a | 8.01 | ... | ... | ... | ... |
| 2MA0429-3123B | 0 | 04 29 18.4 | -31 23 56 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.00 | 19.55 | 0.078 |
| 2MA0429-3123A | 2 | 04 29 18.4 | -31 23 56 | ... | ... | ... | 17.39J | 15.50J | 13.32J | 3/1 | 10.87J | 10.21J | 9.77J | * | ... | 17.55 | 0.096 |
| GJ0170 | 1 | 04 30 25.2 | +39 51 00 | ... | ... | ... | 13.93 | 12.58 | 10.81 | /37 | 9.11 | 8.53 | 8.25 | * | ... | 13.93 | 0.151 |
| LP715-051B | 0 | 04 31 09.0 | -13 30 52 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.20 | 13.05 | 0.316 |
| LP715-051A | 2 | 04 31 09.0 | -13 30 53 | 12.53J | 10.33J | 8.85J | 11.54J | 10.49J | 9.21J | /20 | 7.96J | 7.30J | 7.05J | * | ... | 11.85 | 0.446 |
| LHS1678 | 1 | 04 32 42.6 | -39 47 12 | 13.44 | 10.90 | 9.69 | 12.48 | 11.46 | 10.26 | /40 | 9.02 | 8.50 | 8.26 | * | ... | 12.48 | 0.380 |
| SCR0433-0211 | 1 | 04 33 31.5 | -02 11 01 | 18.01 | 15.87 | 12.88 | 17.16 | 15.47 | 13.45 | /40 | 11.48 | 10.95 | 10.63 | ... | ... | ... | ... |
| L231-032 | 1 | 04 33 39.7 | -51 57 22 | 13.46 | 11.35 | 9.76 | ... | ... | ... | ... | 9.10 | 8.53 ^a | 8.25 | ... | ... | ... | ... |
| LP775-031B | 0 | 04 35 16.1 | -16 06 57 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.00 | 18.45 | 0.079 |
| LP775-031A | 2 | 04 35 16.1 | -16 06 57 | 18.85J | 16.37J | 12.34J | 17.70J | 15.50J | 13.06J | /40 | 10.41J | 9.78J | 9.35J | * | ... | 18.45 | 0.079 |
| LP834-032 | 1 | 04 35 36.2 | -25 27 35 | 13.21 | 10.98 | 8.83 | 12.44 | 11.26 | 9.73 | /40 | 8.24 | 7.65 | 7.41 | * | ... | 12.44 | 0.357 |
| L951-054 | 1 | 04 36 26.8 | -03 43 56 | 14.86 | 12.75 | 10.56 | ... | ... | ... | ... | 9.69 | 9.07 | 8.81 | ... | ... | ... | ... |
| L591-043B | 0(1) | 04 36 40.9 | -27 21 18 | ... | ... | ... | 12.56 | 11.47 | 10.10 | 2/1 | 8.78 | 7.17 | 7.88 | * | 0.31 | 12.56 | 0.418 |
| L591-042A | 2(1) | 04 36 40.9 | -27 21 18 | 12.95 | 10.94 | 9.19 | 12.25 | 11.20 | 9.88 | /40 | 8.61 | 7.98 | 7.73 | * | ... | 12.25 | 0.454 |
| LHS1686 | 1 | 04 36 41.5 | +11 13 35 | ... | ... | ... | 14.30 | 13.12 | 11.57 | /37 | 10.09 | 9.55 | 9.30 | * | ... | 14.30 | 0.251 |
| GJ0173 | 1 | 04 37 41.9 | -11 02 20 | 11.48 | 9.29 | 7.76 | 10.34 | 9.34 | 8.16 | /2 | 6.94 | 6.33 | 6.09 | * | ... | 10.34 | 0.484 |
| LP655-043 | 1 | 04 38 02.5 | -05 56 13 | 15.54 | 13.42 | 10.80 | 14.44 | 13.14 | 11.41 | /23 | 9.73 | 9.14 | 8.82 | ... | ... | ... | ... |
| LTT11472B | 0 | 04 38 12.6 | +28 13 00 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.76 | 13.76 | 0.182 |
| LTT11472A | 2 | 04 38 12.6 | +28 13 00 | ... | ... | ... | 12.56J | 11.31J | 9.70J | 3/1 | 8.17J | 7.62J | 7.33J | * | ... | 13.00 | 0.238 |
| LP715-039 | 1 | 04 38 37.2 | -11 30 15 | 13.76 | 11.63 | 9.89 | 12.69 | 11.54 | 10.09 | /40 | 8.67 | 8.11 | 7.82 | ... | ... | ... | ... |
| LHS1690 | 1 | 04 39 32.0 | +16 15 43 | ... | ... | ... | 15.57 | 13.97 | 12.01 | 2/1 | 10.14 | 9.53 | 9.19 | * | ... | 15.57 | 0.112 |
| LP655-048 | 1 | 04 40 23.3 | -05 30 08 | 18.85 | 16.49 | 13.17 | 17.79 | 15.72 | 13.36 | /27 | 10.66 | 9.99 | 9.55 | * | ... | 17.81 | 0.082 |
| HIP021765B | 0 | 04 40 29.2 | -09 11 46 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.10 | 11.06 | 0.545 |
| HIP021765A | 2 | 04 40 29.2 | -09 11 46 | ... | ... | ... | 10.26J | 9.30J | 8.25J | /20 | 7.13J | 6.52J | 6.27J | * | ... | 10.96 | 0.558 |
| GJ0176 | 1 | 04 42 55.7 | +18 57 29 | ... | ... | ... | 9.98 | 8.96 | 7.73 | /37 | 6.46 | 5.82 | 5.61 | * | ... | 9.98 | 0.475 |
| LP891-006 | 1 | 04 43 11.8 | -32 26 42 | 15.63 | 13.40 | 11.52 | ... | ... | ... | ... | 10.25 | 9.58 | 9.33 | ... | ... | ... | ... |
| UPM0444-3749 | 1 | 04 44 50.2 | -37 49 41 | 15.44 | 13.15 | 10.98 | 14.55 | 13.26 | 11.61 | /40 | 10.08 | 9.49 | 9.18 | ... | ... | ... | ... |
| LHS0197 | 1 | 04 46 23.8 | +48 44 18 | ... | ... | ... | 17.29 | 15.58 | 13.50 | 2/1 | 11.56 | 11.05 | 10.76 | * | ... | 17.29 | 0.103 |
| LP656-009 | 1 | 04 46 24.4 | -02 49 08 | 12.68 | 10.27 | 9.15 | 11.91 | 10.93 | 9.84 | /23 | 8.68 | 8.09 | 7.86 | ... | ... | ... | ... |
| 2MA0446-1116B | 0 | 04 46 51.8 | -11 16 47 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.62 | 14.96 | 0.161 |
| 2MA0446-1116A | 2 | 04 46 51.8 | -11 16 47 | ... | ... | ... | 12.25J | 11.05J | 9.57J | 2/1 | 8.14J | 7.56J | 7.29J | * | ... | 12.94 | 0.383 |
| LP835-018 | 1 | 04 48 01.0 | -26 03 01 | 16.93 | 14.71 | 12.10 | ... | ... | ... | ... | 10.77 | 10.26 | 9.94 | ... | ... | ... | ... |
| L736-001 | 1 | 04 49 32.8 | -14 47 23 | 10.95 | 8.87 | 7.57 | 10.87 | 9.97 | 9.08 | 2/1 | 8.05 | 7.41 | 7.20 | * | ... | 10.87 | 0.652 |
| GJ1072 | 1 | 04 50 50.9 | +22 07 22 | ... | ... | ... | 15.20 | 13.71 | 11.83 | /37 | 9.90 | 9.31 | 8.98 | * | ... | 15.20 | 0.130 |
| APM0452-5819 | 1 | 04 51 37.3 | -58 18 52 | 19.39 | 17.19 | 13.98 | 18.51 | 16.43 | 14.14 | /5 | 11.69 | 11.09 | 10.71 | * | ... | 18.51 | 0.087 |
| LP716-010 | 1 | 04 52 04.0 | -10 58 22 | 17.32 | 15.20 | 12.42 | 16.24 | 14.61 | 12.60 | /40 | 10.50 | 9.97 | 9.61 | ... | ... | ... | ... |
| GJ0179 | 1 | 04 52 05.7 | +06 28 35 | ... | ... | ... | 11.980 | 10.825 | 9.333 | /2 | 7.81 | 7.21 | 6.94 | * | ... | 11.98 | 0.328 |
| LP776-025 | 1 | 04 52 24.4 | -16 49 22 | ... | 9.72 | 7.33 | 11.63 | 10.53 | 9.12 | /40 | 7.74 | 7.15 | 6.89 | * | ... | 11.63 | 0.430 |
| GJ1073 | 1 | 04 52 34.6 | +40 42 24 | ... | ... | ... | 13.44 | 12.21 | 10.58 | /37 | 9.07 | 8.55 | 8.31 | * | ... | 13.44 | 0.206 |
| GJ2036B | 0(1) | 04 53 30.5 | -55 51 32 | ... | ... | ... | 12.12 | 10.94 | 9.32 | 2/1 | 7.80 | 7.24 | 6.89 | * | 1.08 | 12.15 | 0.289 |
| GJ2036A | 2(1) | 04 53 31.2 | -55 51 37 | ... | ... | ... | 11.07 | 9.99 | 8.57 | 2/1 | 7.20 | 6.62 ^a | 6.34 | * | ... | 11.07 | 0.400 |
| GJ0180 | 1 | 04 53 50.0 | -17 46 24 | 12.22 | 9.80 | 8.41 | 10.91 | 9.89 | 8.69 | /2 | 7.41 | 6.86 | 6.60 | * | ... | 10.91 | 0.440 |
| G084-025 | 1 | 04 57 58.6 | -05 06 17 | 15.84 | 13.50 | 11.04 | ... | ... | ... | ... | 10.13 | 9.58 | 9.29 | ... | ... | ... | ... |
| GJ1074 | 1 | 04 58 45.9 | +50 56 37 | ... | ... | ... | 10.98 | 10.04 | 9.02 | /37 | 7.90 | 7.27 | 7.04 | * | ... | 10.98 | 0.558 |
| LP891-046 | 1 | 04 59 24.4 | -30 55 58 | 16.11 | 13.65 | 11.13 | 14.95 | 13.65 | 11.94 | /24 | 10.23 | 9.63 | 9.35 | ... | ... | ... | ... |
| L131-012 | 1 | 04 59 32.3 | -61 53 04 | 13.55 | 11.29 | 9.47 | ... | ... | ... | ... | 8.70 | 8.09 | 7.81 | ... | ... | ... | ... |
| LHS1723 | 1 | 05 01 57.4 | -06 56 47 | 13.00 | 10.57 | 8.48 | 12.20 | 10.86 | 9.18 | /40 | 7.62 | 7.07 | 6.74 | * | ... | 12.20 | 0.163 |
| LP476-207B | 0 | 05 01 58.8 | +09 58 59 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.87 | 13.37 | 0.338 |
| LP476-207C | 0 | 05 01 58.8 | +09 58 59 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.00 | 12.50 | 0.433 |
| LP476-207A | 3 | 05 01 58.8 | +09 58 59 | ... | ... | ... | 11.53J | 10.33J | 8.74J | 2/1 | 7.21J | 6.66J | 6.37J | * | ... | 12.50 | 0.433 |
| GJ0185 | 2 | 05 02 28.4 | -21 15 24 | 9.32J | 6.82J | 5.81J | 8.28J | 7.37J | 6.47J | /40 | 5.45J | 4.85J | 4.60J | ... | ... | ... | ... |
| LHS1731 | 1 | 05 03 20.1 | -17 22 25 | 12.70 | 9.61 | 7.42 | 11.74 | 10.60 | 9.17 | /40 | 7.82 | 7.24 | 6.94 | * | ... | 11.69 | 0.295 |
| GJ0184B | 0 | 05 03 23.9 | +53 07 42 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 8.66 | 18.64 | 0.082 |
| GJ0184A | 2(1) | 05 03 23.9 | +53 07 42 | ... | ... | ... | 9.98 | 9.08 | 8.12 | /37 | 7.00 | 6.41 | 6.17 | * | ... | 9.98 | 0.596 |
| G097-015 | 1 | 05 04 15.0 | +11 03 24 | ... | ... | ... | 13.76 | 12.43 | 10.74 | 3/1 | 9.14 | 8.61 | 8.31 | * | ... | 13.76 | 0.150 |
| LP716-035 | 1 | 05 05 11.8 | -12 00 29 | 13.83 | 11.55 | 9.66 | 12.97 | 11.51 | 10.35 | /25 | 9.10 | 8.50 | 8.25 | ... | ... | ... | ... |
| BD-21 01074C | 0 | 05 06 49.5 | -21 35 04 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.03 | 12.44 | 0.368 |
| BD-21 01074B | 0(2) | 05 06 49.5 | -21 35 04 | ... | ... | ... | 11.08J | 9.92J | 8.45J | 4 | 7.05J | 6.39J | 6.12J | * | 1.03 | 11.44 | 0.484 |
| BD-21 01074A | 3(1) | 05 06 49.9 | -21 35 08 | ... | ... | ... | 10.41 | 9.40 | 8.25 | 3/1 | 7.00 | 6.39 | 6.11 | * | ... | 10.41 | 0.623 |
| L057-064 | 1 | 05 08 09.1 | -73 26 50 | 13.98 | 11.80 | 11.26 | ... | ... | ... | ... | 9.44 | 8.83 | 8.58 | ... | ... | ... | ... |

| | | | | | | | | | | | | | | | | |
|---------------|------|------------|-----------|--------|--------|--------|--------|--------|--------|-----|--------|---------------------|-------------------|-----|------|-------------|
| LP837-019 | 1 | 05 44 57.0 | -21 36 56 | 12.78 | 10.73 | 9.17 | 12.31 | 11.24 | 9.93 | /23 | 8.65 | 8.06 | 7.82 | ... | ... | ... |
| LP837-020 | 1 | 05 44 57.9 | -24 56 10 | 17.01 | 14.81 | 12.41 | ... | ... | ... | ... | 10.76 | 10.13 | 9.85 | ... | ... | ... |
| LHS1785 | 1 | 05 47 09.1 | -05 12 11 | 15.78 | 13.83 | 11.10 | 14.58 | 13.29 | 11.62 | /40 | 10.04 | 9.51 | 9.18 | * | ... | 14.62 0.168 |
| GJ0218 | 1 | 05 47 40.6 | -36 19 43 | 11.33 | 9.06 | 7.84 | 10.74 | 9.77 | 8.62 | /2 | 7.41 | 6.81 | 6.62 | * | ... | 10.74 0.516 |
| WT2440 | 1 | 05 47 50.2 | -34 19 14 | 12.53 | 10.34 | 8.87 | ... | ... | ... | ... | 8.50 | 7.95 ^a | 7.71 | ... | ... | ... |
| L307-012 | 1 | 05 48 45.2 | -45 55 42 | 12.36 | 10.18 | 9.03 | ... | ... | ... | ... | 8.68 | 8.03 | 7.85 | ... | ... | ... |
| LHS1793 | 1 | 05 52 29.2 | -55 06 43 | 14.03 | 11.81 | 10.22 | ... | ... | ... | ... | 9.22 | 8.61 | 8.38 | ... | ... | ... |
| GJ0220 | 1 | 05 53 14.1 | +24 15 32 | ... | ... | ... | 10.84 | 9.85 | 8.72 | /37 | 7.49 | 6.83 | 6.63 | * | ... | 10.84 0.579 |
| L379-017 | 1 | 05 53 40.1 | -42 41 44 | 14.29 | 12.00 | 10.07 | ... | ... | ... | ... | 9.45 | 8.89 | 8.60 | ... | ... | ... |
| LP837-037 | 1 | 05 53 55.4 | -22 46 58 | 18.99 | 16.65 | 13.57 | ... | ... | ... | ... | 11.62 | 11.05 | 10.70 | ... | ... | ... |
| LP837-053 | 1 | 05 55 43.2 | -26 51 23 | 11.96 | 9.78 | 7.76 | 10.82 | 9.78 | 8.47 | /20 | 7.18 | 6.48 | 6.29 | * | ... | 10.82 0.499 |
| LHS5112 | 2 | 05 56 56.2 | -46 55 54 | 11.63J | 9.56J | 8.23J | 10.58J | 9.66J | 8.72J | /20 | 7.64J | 7.00J | 6.79J | ... | ... | ... |
| UPM0559-5225 | 1 | 05 59 33.2 | -52 25 05 | 14.67 | 12.54 | 10.57 | 13.66 | 12.49 | 11.00 | /40 | 9.63 | 8.95 | 8.70 | ... | ... | ... |
| G192-011(A) | 2(1) | 05 59 37.7 | +58 35 34 | ... | ... | ... | 10.24 | 9.29 | 8.22 | /33 | 7.07 | 6.42 | 6.21 | * | 3.32 | 10.24 0.553 |
| G192-012(B) | 0(1) | 05 59 55.7 | +58 34 16 | ... | ... | ... | 13.56 | 12.28 | 10.62 | /33 | 9.03 | 8.46 | 8.18 | * | ... | 13.56 0.204 |
| LTT17897 | 1 | 06 00 03.0 | +02 42 23 | ... | ... | ... | 11.31 | 10.04 | 8.43 | 5/1 | 6.91 | 6.31 | 6.04 | * | ... | 11.31 0.219 |
| LHS0214(A) | 2(1) | 06 00 49.0 | +68 09 24 | ... | ... | ... | 12.94 | 11.80 | 10.33 | /37 | 8.92 | 8.35 | 8.08 | * | ... | 12.94 0.337 |
| LHS0213(B) | 0(1) | 06 00 54.0 | +68 08 00 | ... | ... | ... | 13.32 | 12.16 | 10.65 | /37 | 9.18 | 8.59 | 8.33 | * | 0.38 | 13.32 0.299 |
| LHS1805 | 1 | 06 01 11.0 | +59 35 01 | ... | ... | ... | 11.71 | 10.52 | 8.99 | /37 | 7.47 | 6.95 | 6.64 | * | ... | 11.71 0.253 |
| LHS1807 | 1 | 06 02 22.6 | -20 19 44 | 14.47 | 12.28 | 10.22 | 13.26 | 12.10 | 10.62 | /26 | 9.22 | 8.67 | 8.37 | * | ... | 13.26 0.235 |
| LHS1809 | 1 | 06 02 29.6 | +49 50 58 | ... | ... | ... | 14.53 | 13.04 | 11.15 | /37 | 9.35 | 8.77 | 8.44 | * | ... | 14.53 0.124 |
| LHS1810 | 1 | 06 02 54.2 | -09 15 04 | 17.86 | 15.75 | 12.59 | ... | ... | ... | ... | 10.98 | 10.40 | 10.03 | ... | ... | ... |
| APCOL | 1 | 06 04 52.2 | -34 33 36 | 13.78 | 11.70 | 9.03 | 12.96 | 11.49 | 9.60 | /27 | 7.74 | 7.18 | 6.87 | * | ... | 12.96 0.176 |
| LP838-016 | 1 | 06 07 43.7 | -25 44 42 | 12.58 | 10.33 | 8.48 | 11.88 | 10.78 | 9.37 | /23 | 8.02 | 7.50 ^a | 7.17 | * | ... | 11.88 0.319 |
| LEHPM2-3528 | 1 | 06 07 58.1 | -61 15 11 | 15.75 | 13.43 | 11.13 | 14.57 | 13.26 | 11.57 | /39 | 9.98 | 9.38 | 9.10 | ... | ... | ... |
| LHS1823 | 1 | 06 08 16.4 | -32 16 46 | 14.26 | 12.06 | 10.12 | ... | ... | ... | ... | 9.01 | 8.50 | 8.20 | ... | ... | ... |
| CD-35 02722B | 0BD | 06 09 19.2 | -35 49 30 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | ... | ... |
| CD-35 02722A | 2(1) | 06 09 19.2 | -35 49 30 | ... | ... | ... | 11.03 | 10.08 | 9.05 | 2/1 | 7.92 | 7.28 | 7.05 | * | ... | 11.03 0.600 |
| GJ0226 | 1 | 06 10 19.8 | +82 06 24 | ... | ... | ... | 10.49 | 9.45 | 8.17 | /37 | 6.87 | 6.30 | 6.06 | * | ... | 10.49 0.423 |
| GJ0229A | 2(1) | 06 10 34.6 | -21 51 53 | 8.94 | 7.37 | 4.72 | 8.10 | 7.15 | 6.08 | /40 | 5.10 | 4.39 ^a | 4.17 ^a | * | ... | 8.10 0.593 |
| GJ0229B | 0BD | 06 10 34.8 | -21 52 00 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | ... | ... |
| GJ1088 | 1 | 06 10 52.9 | -43 24 18 | 13.20 | 10.95 | 9.05 | 12.28 | 11.11 | 9.61 | /26 | 8.17 | 7.58 ^a | 7.31 | * | ... | 12.28 0.283 |
| GJ0228B | 0 | 06 10 54.8 | +10 19 05 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.50 | 12.16 0.278 |
| GJ0228A | 2 | 06 10 54.8 | +10 19 05 | ... | ... | ... | 10.42J | 9.39J | 8.08J | /37 | 6.80J | 6.31J | 6.03J | * | ... | 10.66 0.434 |
| L308-038 | 1 | 06 12 36.7 | -47 29 33 | 13.34 | 11.05 | 9.47 | ... | ... | ... | ... | 8.85 | 8.23 | 7.98 | ... | ... | ... |
| SCR0613-3437 | 2 | 06 13 57.3 | -34 37 02 | 16.06J | 14.09J | 11.46J | 15.32J | 13.87J | 12.05J | /40 | 10.61J | 10.06J ^a | 9.53J | ... | ... | ... |
| G192-022 | 1 | 06 14 02.4 | +51 40 08 | ... | ... | ... | 12.86 | 11.72 | 10.27 | /32 | 8.86 | 8.36 | 8.12 | * | ... | 12.86 0.272 |
| GJ0231.3 | 1 | 06 19 20.8 | -06 39 22 | 13.58 | 11.33 | 9.17 | 13.06 | 11.92 | 10.50 | /2 | 9.12 | 8.54 | 8.24 | * | ... | 13.06 0.260 |
| L308-057 | 1 | 06 21 06.7 | -49 05 38 | 14.41 | 11.94 | 9.55 | ... | ... | ... | ... | 9.16 | 8.63 ^a | 8.35 | ... | ... | ... |
| UPM0621-6111 | 1 | 06 21 45.7 | -61 11 13 | 16.11 | 14.26 | 12.03 | 14.95 | 13.68 | 12.06 | /40 | 10.43 | 9.79 | 9.53 | ... | ... | ... |
| SCR0622-4956 | 1 | 06 22 36.1 | -49 56 29 | 17.40 | 15.16 | 12.45 | 16.30 | 14.88 | 13.05 | /40 | 11.20 | 10.62 | 10.29 | ... | ... | ... |
| 2MA0623-3435 | 1 | 06 23 08.8 | -34 35 53 | 13.66 | 11.72 | 9.89 | ... | ... | ... | ... | 9.24 | 8.69 | 8.38 | ... | ... | ... |
| GJ0232 | 1 | 06 24 41.3 | +23 25 59 | ... | ... | ... | 13.06 | 11.82 | 10.18 | /37 | 8.66 | 8.16 ^a | 7.91 | * | ... | 13.06 0.169 |
| LHS1848 | 1 | 06 25 53.5 | +56 09 42 | ... | ... | ... | 14.62 | 13.37 | 11.77 | /37 | 10.26 | 9.65 | 9.36 | * | ... | 14.62 0.206 |
| GJ0234B | 0 | 06 29 23.4 | -02 48 50 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 3.08 | 14.85 0.092 |
| GJ0234A | 2 | 06 29 23.5 | -02 48 51 | 11.46J | 8.58J | 7.19J | 11.12J | 9.78J | 8.04J | /40 | 6.38J | 5.75J | 5.49J | * | ... | 11.09 0.195 |
| SCR0630-7643B | 0 | 06 30 46.0 | -76 43 09 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.20 | 15.68 0.101 |
| SCR0630-7643A | 2 | 06 30 46.6 | -76 43 09 | 15.78J | 13.56J | 10.74J | 14.82J | 13.08J | 11.00J | /39 | 8.89J | 8.28J | 7.92J | * | ... | 15.48 0.104 |
| SCR0631-8811 | 1 | 06 31 31.0 | -88 11 37 | 16.96 | 14.67 | 11.46 | 15.65 | 14.05 | 12.04 | /39 | 10.04 | 9.46 | 9.07 | * | ... | 15.65 0.124 |
| GJ0237 | 2 | 06 31 51.1 | -43 32 03 | 11.42J | 9.19J | 8.04J | 10.58J | 9.64J | 8.65J | /2 | 7.63 | 7.00 | 6.79 | ... | ... | ... |
| LHS1852 | 1 | 06 32 22.0 | -69 57 44 | 14.02 | 11.75 | 9.97 | 12.97 | 11.89 | 10.53 | /40 | 9.23 | 8.61 | 8.38 | ... | ... | ... |
| L032-009(A) | 2(1) | 06 33 43.3 | -75 37 48 | 11.30 | 8.81 | 8.14 | 10.44 | 9.37 | 8.04 | /40 | 6.73 | 6.15 | 5.86 | * | ... | 10.44 0.419 |
| L032-008(B) | 0(1) | 06 33 46.8 | -75 37 30 | ... | ... | ... | 11.44 | 10.29 | 8.82 | 3/1 | 7.41 | 6.85 | 6.56 | * | 1.00 | 11.44 0.313 |
| GJ0238 | 1 | 06 33 50.0 | -58 31 43 | 12.54 | 10.10 | 8.84 | 11.66 | 10.61 | 9.27 | /2 | 7.90 | 7.31 | 7.03 | * | ... | 11.66 0.429 |
| LTT02591 | 1 | 06 34 18.6 | -31 52 23 | 14.02 | 11.76 | 9.98 | ... | ... | ... | ... | 9.20 | 8.58 | 8.29 | ... | ... | ... |
| SCR0634-5403 | 1 | 06 34 36.9 | -54 03 13 | 17.18 | 14.89 | 12.29 | 15.98 | 14.56 | 12.79 | /40 | 11.07 | 10.45 | 10.13 | ... | ... | ... |
| LHS1857 | 1 | 06 36 07.6 | +11 36 05 | ... | ... | ... | 14.24 | 13.00 | 11.34 | /37 | 9.79 | 9.31 | 8.99 | * | ... | 14.24 0.203 |
| LP381-004 | 1 | 06 36 18.3 | -40 00 24 | 11.52 | 9.50 | 8.91 | 10.59 | 9.66 | 8.72 | /20 | 7.62 | 7.08 | 6.79 | * | ... | 10.59 0.617 |
| GJ0239 | 1 | 06 37 10.8 | +17 33 53 | ... | ... | ... | 9.64 | 8.72 | 7.78 | /37 | 6.67 | 6.03 | 5.86 | * | ... | 9.64 0.539 |
| LP720-031 | 1 | 06 38 35.3 | -14 04 58 | 15.43 | 13.13 | 11.52 | ... | ... | ... | ... | 10.02 | 9.43 | 9.14 | ... | ... | ... |
| LP780-032 | 1 | 06 39 37.4 | -21 01 33 | 13.26 | 11.04 | 9.02 | 12.77 | 11.55 | 9.99 | /40 | 8.51 | 7.91 | 7.65 | * | ... | 12.77 0.299 |
| L182-007 | 1 | 06 39 37.6 | -55 36 35 | 10.48 | 8.30 | 7.18 | 9.81 | 8.88 | 7.93 | /20 | 6.86 | 6.28 | 6.03 | * | ... | 9.81 0.609 |
| LP453-031 | 1 | 06 39 41.1 | -36 59 03 | 12.53 | 10.29 | 9.20 | 11.90 | 10.86 | 9.58 | /25 | 8.30 | 7.63 | 7.42 | ... | ... | ... |
| LP780-023 | 1 | 06 40 08.6 | -16 27 26 | 13.95 | 11.69 | 9.68 | 12.94 | 11.83 | 10.43 | /25 | 9.12 | 8.51 | 8.22 | ... | ... | ... |
| SCR0640-0552 | 1 | 06 40 14.0 | -05 52 23 | 11.23 | 8.79 | 7.59 | 10.22 | 9.22 | 8.03 | /39 | 6.84 | 6.21 | 5.96 | * | ... | 10.22 0.513 |
| G108-021(A) | 2(1) | 06 42 09.5 | +03 35 41 | ... | ... | ... | 12.06 | 10.96 | 9.55 | /33 | 8.17 | 7.62 | 7.33 | * | ... | 12.06 0.285 |

| | | | | | | | | | | | | | | | | |
|---------------|------|-------------|-----------|--------|--------|--------|--------|--------|--------|-----|--------|-------------------|-------|-----|------|-------------|
| LP780-026 | 1 | 06 42 10.8 | -15 43 15 | 13.90 | 11.76 | 10.13 | ... | ... | ... | ... | 9.38 | 8.72 | 8.51 | ... | ... | ... |
| G108-022(B) | 0(1) | 06 42 13.3 | +03 35 31 | ... | ... | ... | 13.33 | 12.16 | 10.61 | /33 | 9.11 | 8.61 | 8.28 | * | 1.27 | 13.33 0.182 |
| SCR0642-6707 | 1 | 06 42 27.2 | -67 07 20 | 17.00 | 14.69 | 11.61 | 16.01 | 14.43 | 12.42 | /39 | 10.62 | 10.15 | 9.81 | * | ... | 16.01 0.111 |
| L059-002 | 1 | 06 43 29.8 | -70 03 21 | 13.95 | 11.51 | 9.75 | 12.92 | 11.76 | 10.29 | /39 | 8.85 | 8.28 | 7.97 | ... | ... | ... |
| L597-018 | 1 | 06 43 40.7 | -26 24 41 | 13.84 | 11.45 | 9.77 | 12.92 | 11.76 | 10.31 | /40 | 8.91 | 8.43 ^a | 8.13 | * | ... | 12.90 0.314 |
| LHS1864B | 0 | 06 43 50.9 | +51 07 03 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.21 | 13.86 0.241 |
| LHS1864A | 2 | 06 43 50.9 | +51 07 03 | ... | ... | ... | 12.34J | 11.21J | 9.77J | /37 | 8.36J | 7.81J | 7.55J | * | ... | 12.65 0.357 |
| GJ2050B | 0 | 06 44 45.6 | +71 53 15 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 3.60 | 14.55 0.210 |
| GJ2050A | 2 | 06 44 45.6 | +71 53 15 | ... | ... | ... | 10.95 | 10.02 | 9.00 | /37 | 7.85 | 7.25 | 7.00 | * | ... | 10.95 0.603 |
| LTT11918 | 1 | 06 47 18.9 | +23 46 44 | ... | ... | ... | 12.64 | 11.71 | 10.68 | /31 | 9.54 | 8.92 | 8.71 | * | ... | 12.64 0.386 |
| GJ1091 | 1 | 06 48 49.2 | +37 08 37 | ... | ... | ... | 13.34 | 12.33 | 11.07 | /38 | 9.81 | 9.18 | 8.95 | * | ... | 13.34 0.323 |
| GJ1092 | 1 | 06 49 05.5 | +37 06 51 | ... | ... | ... | 13.78 | 12.58 | 11.00 | /37 | 9.56 | 9.05 | 8.77 | * | ... | 13.78 0.187 |
| SCR0650-2135 | 1 | 06 50 26.6 | -21 35 58 | 18.18 | 16.10 | 13.06 | 17.18 | 15.49 | 13.49 | /40 | 11.51 | 10.89 | 10.55 | ... | ... | ... |
| LHS1873 | 1 | 06 50 59.5 | -09 10 50 | 13.73 | 11.51 | 9.19 | 13.31 | 12.20 | 10.76 | /25 | 9.40 | 8.83 ^a | 8.56 | ... | ... | ... |
| G108-036 | 1 | 06 51 59.02 | +03 12 55 | ... | ... | ... | 13.00 | 11.88 | 10.49 | 2/1 | 9.14 | 8.57 ^a | 8.32 | * | ... | 13.00 0.354 |
| DEN0652-2534 | 1 | 06 52 19.8 | -25 34 50 | ... | 19.14 | 15.96 | 20.58 | 18.32 | 15.97 | /40 | 12.76 | 12.02 | 11.52 | * | ... | 20.77 0.075 |
| L059-054 | 1 | 06 52 37.8 | -73 58 16 | 13.79 | 11.75 | 10.08 | ... | ... | ... | ... | 9.14 | 8.56 ^a | 8.29 | ... | ... | ... |
| LHS0221B | 0 | 06 54 04.2 | +60 52 18 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.61 | 12.78 0.222 |
| LHS0221A | 2 | 06 54 04.2 | +60 52 18 | ... | ... | ... | 10.95J | 9.86J | 8.47J | /37 | 7.13J | 6.60J | 6.35J | * | ... | 11.17 0.375 |
| GJ0251 | 1 | 06 54 48.9 | +33 16 05 | ... | ... | ... | 10.02 | 8.90 | 7.49 | /37 | 6.10 | 5.53 | 5.28 | * | ... | 10.02 0.354 |
| LP721-012 | 1 | 06 56 00.9 | -38 24 17 | 13.28 | 11.00 | 9.36 | ... | ... | ... | ... | 9.06 | 8.42 | 8.17 | ... | ... | ... |
| LP661-013 | 1 | 06 56 19.0 | -08 35 46 | 14.98 | 12.74 | 10.26 | 13.97 | 12.76 | 11.17 | /25 | 9.63 | 9.07 | 8.76 | ... | ... | ... |
| LHS1882 | 1 | 06 56 22.7 | +54 57 38 | ... | ... | ... | 12.47 | 11.45 | 10.25 | /37 | 9.00 | 8.49 | 8.26 | * | ... | 12.47 0.352 |
| LP382-056 | 2 | 06 57 11.7 | -43 24 51 | 11.58J | 9.41J | 8.01J | 11.17J | 10.12J | 8.87J | /40 | 7.59J | 6.98J | 6.76J | ... | ... | ... |
| GJ0257B | 0 | 06 57 46.6 | -44 17 28 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.02 | 11.61 0.273 |
| GJ0257A | 2 | 06 57 46.6 | -44 17 28 | 11.27J | 9.12J | 7.22J | 10.85J | 9.72J | 8.32J | /19 | 6.88J | 6.37J | 6.06J | * | ... | 11.59 0.275 |
| WT0204 | 1 | 06 58 18.9 | -39 32 16 | 13.78 | 11.42 | 9.44 | 13.18 | 12.02 | 10.60 | /40 | 9.23 | 8.64 ^a | 8.35 | ... | ... | ... |
| GJ1093 | 1 | 06 59 28.8 | +19 20 56 | ... | ... | ... | 14.94 | 13.25 | 11.24 | 4/1 | 9.16 | 8.55 | 8.23 | * | ... | 14.94 0.108 |
| SCR0659-5622 | 1 | 06 59 40.8 | -56 22 47 | 15.80 | 13.48 | 11.19 | 14.81 | 13.50 | 11.85 | /40 | 10.35 | 9.77 | 9.49 | ... | ... | ... |
| WT1539 | 1 | 07 00 09.5 | -28 47 02 | 11.83 | 9.46 | 9.07 | ... | ... | ... | ... | 7.94 | 7.33 ^a | 7.12 | ... | ... | ... |
| SCR0701-1437 | 1 | 07 01 36.6 | -14 37 18 | 17.71 | 15.57 | 12.68 | 16.36 | 14.90 | 13.05 | /40 | 11.25 | 10.67 | 10.32 | ... | ... | ... |
| WT0207 | 1 | 07 02 36.6 | -40 06 28 | 16.07 | 13.88 | 11.38 | 15.13 | 13.90 | 12.26 | /40 | 10.74 | 10.26 | 9.96 | * | ... | 15.13 0.187 |
| SCR0702-6102B | 0 | 07 02 49.7 | -61 02 52 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.72 | 19.43 0.079 |
| SCR0702-6102A | 2 | 07 02 50.4 | -61 02 48 | 17.50J | 15.11J | 11.73J | 16.62J | 14.75J | 12.49J | /39 | 10.36J | 9.85J | 9.52J | * | ... | 16.71 0.107 |
| LHS0224B | 0 | 07 04 01.1 | +52 41 12 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.29 | 14.20 0.132 |
| LHS0224A | 2 | 07 04 01.1 | +52 41 12 | ... | ... | ... | 13.29J | 11.94J | 10.15J | /37 | 8.54J | 8.09J | 7.78J | * | ... | 13.91 0.142 |
| GJ0263B | 0 | 07 04 17.7 | -10 30 31 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.80 | 12.52 0.332 |
| GJ0263A | 2 | 07 04 17.7 | -10 30 32 | ... | ... | 7.83J | 11.30J | 10.18J | 8.74J | /2 | 7.31J | 6.69J | 6.43J | * | ... | 11.72 0.418 |
| GJ0258 | 1 | 07 04 25.9 | +68 17 19 | ... | ... | ... | 11.96 | 10.87 | 9.50 | /38 | 8.17 | 7.59 | 7.27 | * | ... | 11.96 0.373 |
| LHS0225B | 0 | 07 04 45.0 | -38 36 07 | ... | ... | ... | 13.03 | 11.99 | 10.63 | ... | ... | ... | ... | * | 0.29 | 13.21 0.286 |
| LHS0225A | 2 | 07 04 45.8 | -38 36 08 | 12.59J | 10.47J | 8.66J | 12.88 | 11.85 | 10.51 | /15 | 8.61 | 8.07 | 7.87 | * | ... | 12.92 0.314 |
| LEHPM2-0449 | 1 | 07 05 09.3 | -80 29 50 | 15.07 | 13.41 | 11.21 | ... | ... | ... | ... | 9.95 | 9.32 | 9.06 | ... | ... | ... |
| GJ2055 | 1 | 07 07 22.9 | -21 27 27 | 11.80 | 9.26 | 8.73 | 11.08 | 10.09 | 8.87 | /20 | 7.63 | 7.03 | 6.80 | * | ... | 11.08 0.513 |
| LTT11972 | 1 | 07 07 50.4 | +67 12 04 | ... | ... | ... | 11.18 | 10.20 | 9.08 | /35 | 7.87 | 7.27 | 7.03 | * | ... | 11.18 0.505 |
| ESQ207-061 | 1 | 07 07 53.3 | -49 00 50 | ... | 19.55 | 16.15 | 21.20 | 18.70 | 16.24 | /40 | 13.23 | 12.54 | 12.11 | ... | ... | ... |
| LP840-016 | 1 | 07 08 07.0 | -22 48 47 | 12.36 | 10.03 | 8.37 | 11.42 | 10.42 | 9.27 | /25 | 8.09 | 7.51 | 7.27 | ... | ... | ... |
| APM0710-5704 | 1 | 07 09 37.7 | -57 03 42 | 14.49 | 12.17 | 9.88 | 13.64 | 12.36 | 10.73 | /40 | 9.25 | 8.63 ^a | 8.30 | * | ... | 13.62 0.238 |
| GJ0268B | 0 | 07 10 01.8 | +38 31 46 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.00 | 12.17 0.182 |
| GJ0268A | 2 | 07 10 01.8 | +38 31 46 | ... | ... | ... | 11.48J | 10.16J | 8.45J | /37 | 6.73J | 6.15J | 5.85J | * | ... | 12.17 0.182 |
| LHS1901B | 0 | 07 11 11.0 | +43 29 58 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.24 | 16.78 0.099 |
| LHS1901A | 2 | 07 11 11.0 | +43 29 58 | ... | ... | ... | 15.90J | ... | 11.92J | /21 | 9.98J | 9.47J | 9.13J | * | ... | 16.54 0.102 |
| LHS1906 | 1 | 07 12 54.1 | -52 20 06 | 13.48 | 11.22 | 9.65 | ... | ... | ... | ... | 8.88 | 8.32 | 8.06 | ... | ... | ... |
| SCR0713-0511 | 1 | 07 13 11.2 | -05 11 49 | 11.76 | 9.31 | 8.84 | 11.13 | 10.08 | 8.86 | /39 | 7.65 | 7.08 | 6.82 | * | ... | 11.13 0.391 |
| LHS1909 | 1 | 07 15 49.0 | -83 00 19 | 12.12 | 10.51 | 8.92 | ... | ... | ... | ... | 8.42 | 7.77 | 7.55 | ... | ... | ... |
| GJ1096 | 1 | 07 16 18.0 | +33 09 10 | ... | ... | ... | 14.48 | ... | ... | /10 | 9.76 | 9.18 | 8.88 | * | ... | 14.45 0.163 |
| GJ0268.3B | 0 | 07 16 19.7 | +27 08 33 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.99 | 12.23 0.290 |
| GJ0268.3A | 2 | 07 16 19.7 | +27 08 33 | ... | ... | ... | 10.87J | 9.77J | 8.39J | /35 | 7.01J | 6.44J | 6.19J | * | ... | 11.24 0.391 |
| SCR0717-0501 | 1 | 07 17 17.1 | -05 01 04 | 13.86 | 11.34 | 8.83 | 13.29 | 12.02 | 10.39 | /39 | 8.87 | 8.35 ^a | 8.05 | * | ... | 13.29 0.189 |
| LTT17957 | 1 | 07 17 32.2 | +19 33 53 | ... | ... | ... | 12.79 | 11.69 | 10.32 | /29 | 9.02 | 8.43 | 8.16 | * | ... | 12.93 0.350 |
| LTT12003 | 1 | 07 18 08.1 | +39 16 29 | ... | ... | ... | 10.34 | 9.39 | 8.36 | /32 | 7.21 | 6.59 | 6.37 | * | ... | 10.34 0.561 |
| LEHPM2-4145 | 1 | 07 18 14.0 | -52 29 30 | 12.35 | 9.93 | 9.27 | ... | ... | ... | ... | 8.66 | 8.04 ^a | 7.80 | ... | ... | ... |
| L383-019 | 1 | 07 20 30.2 | -40 55 33 | 12.41 | 10.12 | 8.89 | ... | ... | ... | ... | 8.46 | 7.86 | 7.61 | ... | ... | ... |
| L136-037 | 1 | 07 20 52.0 | -62 10 12 | 13.15 | 11.03 | 8.98 | 12.33 | 11.18 | 9.74 | /40 | 8.38 | 7.84 ^a | 7.52 | * | ... | 12.35 0.273 |
| LP527-012 | 1 | 07 21 54.4 | -31 04 37 | 14.15 | 11.62 | 9.61 | ... | ... | ... | ... | 9.37 | 8.76 ^a | 8.54 | ... | ... | ... |
| LHS1914 | 1 | 07 22 41.1 | +30 39 37 | ... | ... | ... | 13.38 | 12.27 | 10.80 | /37 | 9.51 | 8.92 | 8.69 | * | ... | 13.38 0.329 |
| L136-001 | 1 | 07 23 20.8 | -60 06 13 | 12.96 | 10.81 | 9.11 | ... | ... | ... | ... | 8.59 | 8.03 | 7.76 | ... | ... | ... |

| | | | | | | | | | | | | | | | | | |
|---------------|------|-------------|-----------|--------|--------|--------|--------|--------|--------|-----|--------|--------------------|--------|-----|------|-------|-------|
| SCR0723-8015A | 2 | 07 23 59.7 | -80 15 18 | 18.68J | 16.44J | 13.27J | 17.45J | 15.61J | 13.41J | /40 | 11.30J | 10.82J | 10.44J | * | ... | 17.54 | 0.095 |
| SCR0723-8015B | 0 | 07 24 00.8 | -80 15 22 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.72 | 20.26 | 0.075 |
| L383-082 | 1 | 07 25 35.6 | -42 38 57 | 14.69 | 12.39 | 10.53 | ... | ... | ... | ... | 9.54 | 9.00 | 8.68 | ... | ... | ... | ... |
| GJ0273B | 0 | 07 27 24.5 | +05 13 32 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.85 | 11.89 | 0.144 |
| GJ0273A | 2 | 07 27 24.5 | +05 13 32 | ... | ... | ... | 9.86J | 8.68J | 7.14J | /37 | 5.71J | 5.22J ^a | 4.86J | * | ... | 10.04 | 0.266 |
| LTT12020 | 1 | 07 27 28.6 | +22 02 37 | ... | ... | ... | 11.25 | 10.26 | 9.09 | /31 | 7.82 | 7.17 | 6.95 | * | ... | 11.25 | 0.522 |
| GJ1097 | 1 | 07 28 45.5 | -03 17 53 | 12.06 | 9.67 | 8.84 | 11.43 | 10.33 | 8.93 | /37 | 7.54 | 6.98 | 6.70 | * | ... | 11.43 | 0.373 |
| GJ2060C | 0(1) | 07 28 51.2 | -30 15 53 | ... | ... | ... | 13.98 | 12.62 | 10.88 | 1/1 | 8.90 | 8.37 ^a | 8.06 | * | 3.89 | 13.98 | 0.198 |
| GJ2060B | 0 | 07 28 51.3 | -30 14 48 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.92 | 12.01 | 0.379 |
| GJ2060A | 3(2) | 07 28 51.4 | -30 14 49 | 10.55J | 8.14J | 7.43J | 9.92J | 8.95J | 7.83J | /20 | 6.62J | 5.97J | 5.72J | * | ... | 10.09 | 0.620 |
| LHS1922 | 1 | 07 30 39.3 | -44 24 01 | 11.16 | 9.20 | 7.75 | ... | ... | ... | ... | 7.52 | 6.87 | 6.68 | ... | ... | ... | ... |
| SCR0731-4807 | 1 | 07 31 08.1 | -48 07 33 | 17.72 | 15.59 | 13.00 | 16.74 | 15.19 | 13.29 | /40 | 11.32 | 10.77 | 10.41 | ... | ... | ... | ... |
| GJ0277B | 0(1) | 07 31 57.3 | +36 13 47 | ... | ... | ... | 11.79 | 10.41 | 9.19 | /35 | 7.57 | 6.99 | 6.76 | * | 1.20 | 11.79 | 0.338 |
| GJ0277C | 0 | 07 31 57.7 | +36 13 09 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 3.64 | 14.23 | 0.150 |
| GJ0277A | 3(1) | 07 31 57.7 | +36 13 09 | ... | ... | ... | 10.59 | 9.51 | 8.15 | /36 | 6.77 | 6.18 | 5.93 | * | ... | 10.59 | 0.472 |
| GJ0275.1 | 1 | 07 32 02.0 | +68 37 15 | ... | ... | ... | 10.89 | 9.95 | 8.89 | /35 | 7.75 | 7.09 | 6.86 | * | ... | 10.89 | 0.652 |
| LHS1923 | 1 | 07 32 11.0 | +57 55 35 | ... | ... | ... | 18.09 | ... | ... | ... | 11.92 | 11.38 | 11.09 | * | ... | 18.09 | 0.096 |
| SCR0733-2749 | 1 | 07 33 26.8 | -27 49 04 | 17.37 | 14.96 | 12.05 | 16.03 | 14.56 | 12.73 | /40 | 11.01 | 10.43 | 10.08 | ... | ... | ... | ... |
| LHS0231 | 1 | 07 33 56.1 | +22 23 02 | ... | ... | ... | 16.36 | 14.99 | 13.20 | 2/1 | 11.61 | 11.12 | 10.88 | * | ... | 16.36 | 0.132 |
| GJ1099 | 1 | 07 34 17.6 | +00 59 09 | ... | ... | ... | 11.91 | 10.84 | 9.52 | /37 | 8.26 | 7.67 | 7.43 | * | ... | 11.91 | 0.373 |
| GJ0277.1 | 1 | 07 34 27.4 | +62 56 29 | ... | ... | ... | 10.49 | 9.54 | 8.51 | /35 | 7.34 | 6.78 | 6.56 | * | ... | 10.94 | 0.430 |
| HIP036915 | 1 | 07 35 21.8 | +54 50 59 | ... | ... | ... | 11.29 | 10.25 | 9.00 | /35 | 7.77 | 7.22 | 6.96 | * | ... | 11.29 | 0.410 |
| LHS1932 | 1 | 07 36 12.0 | -51 55 21 | 13.25 | 11.05 | 9.27 | 12.48 | 11.36 | 9.92 | /26 | 8.55 | 8.04 | 7.76 | * | ... | 12.48 | 0.336 |
| LTT17993B | 0 | 07 36 25.0 | +07 04 43 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.00 | 13.99 | 0.134 |
| LTT17993A | 2 | 07 36 25.0 | +07 04 43 | ... | ... | ... | 13.25J | 11.81J | 9.97J | 4/1 | 8.18J | 7.61J | 7.28J | * | ... | 13.99 | 0.134 |
| SCR0736-3024 | 1 | 07 36 56.7 | -30 24 16 | 14.76 | 12.06 | 9.46 | 13.64 | 12.41 | 10.83 | /39 | 9.36 | 8.79 | 8.50 | * | ... | 13.64 | 0.196 |
| L528-016 | 1 | 07 38 09.7 | -31 12 19 | 12.84 | 10.22 | 8.73 | 11.89 | 10.80 | 9.48 | /40 | 8.18 | 7.56 | 7.30 | ... | ... | ... | ... |
| 2MA0738+2400 | 1 | 07 38 29.52 | +24 00 08 | ... | ... | ... | 12.98 | 11.82 | 10.35 | 3/1 | 8.93 | 8.35 | 8.12 | * | ... | 12.98 | 0.320 |
| LHS1935 | 1 | 07 38 41.0 | -21 13 28 | 12.08 | 9.85 | 8.26 | 11.72 | 10.62 | 9.23 | /37 | 7.85 | 7.33 | 7.06 | * | ... | 11.72 | 0.322 |
| GJ0281 | 1 | 07 39 23.0 | +02 11 01 | ... | ... | ... | 9.580 | 8.688 | 7.796 | /2 | 6.77 | 6.09 | 5.87 | * | ... | 9.58 | 0.669 |
| SCR0740-4257 | 1 | 07 40 11.8 | -42 57 40 | 14.52 | 12.37 | 9.99 | 13.81 | 12.36 | 10.50 | /39 | 8.68 | 8.09 | 7.77 | * | ... | 13.81 | 0.134 |
| GJ0285 | 1 | 07 44 40.1 | +03 33 08 | ... | ... | ... | 11.190 | 9.920 | 8.240 | /2 | 6.58 | 6.01 | 5.70 | * | ... | 11.19 | 0.253 |
| 2MA0746+2000B | 0 | 07 46 43.0 | +20 00 32 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.84 | 21.20 | 0.075 |
| 2MA0746+2000A | 2 | 07 46 43.0 | +20 00 32 | ... | ... | ... | 19.95J | 17.41J | 15.05J | 3/1 | 11.76J | 11.01J | 10.47J | * | ... | 20.36 | 0.075 |
| GJ0289 | 1 | 07 48 16.3 | +20 22 05 | ... | ... | ... | 11.45 | 10.47 | 9.34 | /37 | 8.12 | 7.61 | 7.40 | * | ... | 11.45 | 0.428 |
| L034-026 | 1 | 07 49 12.7 | -76 42 07 | 11.38 | 9.33 | 7.50 | 11.31 | 10.19 | 8.79 | /27 | 7.41 | 6.86 | 6.58 | * | ... | 11.31 | 0.363 |
| GJ1103 | 1 | 07 51 54.7 | -00 00 13 | 14.16 | 11.79 | 9.44 | 13.26 | 11.89 | 10.19 | /40 | 8.50 | 7.94 ^a | 7.66 | * | ... | 14.72 | 0.156 |
| LHS1950 | 1 | 07 51 54.9 | +05 32 13 | ... | ... | ... | 14.72 | 13.37 | 11.62 | /37 | 9.97 | 9.40 | 9.09 | * | ... | 13.22 | 0.167 |
| LP423-031 | 1 | 07 52 24.0 | +16 12 15 | ... | ... | ... | 17.04 | 15.32 | 13.21 | 2/1 | 10.88 | 10.20 | 9.85 | * | ... | 17.08 | 0.104 |
| LHS1955B | 0 | 07 54 54.0 | -29 20 56 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.53 | 13.84 | 0.184 |
| SCR0754-3809 | 1 | 07 54 54.8 | -38 09 38 | 16.90 | 14.68 | 11.75 | 15.46 | 13.91 | 11.98 | /39 | 10.01 | 9.42 | 9.08 | * | ... | 15.46 | 0.119 |
| LHS1955A | 2 | 07 54 54.8 | -38 09 38 | 13.19J | 10.75J | 8.72J | 12.79J | 11.52J | 9.89J | /26 | 8.31J | 7.69J | 7.35J | * | ... | 13.31 | 0.223 |
| GJ1101 | 1 | 07 55 49.9 | +83 23 19 | ... | ... | ... | 13.13 | 11.90 | 10.29 | /37 | 8.74 | 8.14 | 7.91 | * | ... | 13.13 | 0.224 |
| LHS1957 | 1 | 07 56 53.9 | -45 38 14 | 13.08 | 10.86 | 8.87 | 12.28 | 11.27 | 10.02 | /40 | 8.76 | 8.23 | 8.00 | ... | ... | ... | ... |
| 2MA0757+1201 | 1 | 07 57 27.16 | +12 01 27 | ... | ... | ... | 12.70 | 11.63 | 10.32 | 2/1 | 9.06 | 8.44 | 8.20 | * | ... | 12.70 | 0.393 |
| SCR0757-7114 | 1 | 07 57 32.5 | -71 14 53 | ... | ... | ... | 12.46 | 11.28 | 9.77 | 3/1 | 8.32 | 7.75 | 7.42 | * | ... | 12.46 | 0.411 |
| GJ1105 | 1 | 07 58 12.7 | +41 18 13 | ... | ... | ... | 11.98 | 10.78 | 9.25 | /37 | 7.73 | 7.13 | 6.88 | * | ... | 11.98 | 0.243 |
| LHS5132 | 1 | 08 00 51.3 | -57 30 34 | 15.13 | 12.95 | 11.06 | ... | ... | ... | ... | 9.91 | 9.35 | 9.05 | ... | ... | ... | ... |
| LHS1976B | 0 | 08 03 19.5 | +52 50 38 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.34 | 12.32 | 0.456 |
| LHS1976A | 2 | 08 03 19.5 | +52 50 38 | ... | ... | ... | 11.38J | 10.40J | 9.26J | /37 | 8.06J | 7.48J | 7.24J | * | ... | 11.98 | 0.498 |
| SCR0803-1939 | 2 | 08 03 26.9 | -19 39 28 | 15.19J | 12.66J | 10.02J | 14.26J | 13.04J | 11.48J | /40 | 10.02J | 9.45J | 9.16J | ... | ... | ... | ... |
| LHS1978 | 1 | 08 04 25.8 | -83 13 59 | 13.33 | 11.28 | 9.69 | ... | ... | ... | ... | 8.97 | 8.35 ^a | 8.11 | ... | ... | ... | ... |
| SCR0805-5912 | 1 | 08 05 46.2 | -59 12 50 | 15.76 | 13.76 | 11.33 | 14.69 | 13.38 | 11.68 | /39 | 10.07 | 9.52 | 9.22 | * | ... | 14.69 | 0.160 |
| L1321-040 | 1 | 08 09 30.9 | +21 54 17 | ... | ... | ... | 11.80 | 10.79 | 9.59 | /31 | 8.33 | 7.72 | 7.51 | * | ... | 11.80 | 0.492 |
| GJ0298 | 1 | 08 09 58.1 | -52 58 05 | 12.89 | 10.61 | 8.87 | 11.81 | 10.73 | 9.34 | /2 | 7.99 | 7.44 | 7.14 | * | ... | 11.81 | 0.416 |
| GJ0299 | 1 | 08 11 58.0 | +08 46 23 | ... | ... | ... | 12.82 | 11.56 | 9.91 | /37 | 8.42 | 7.93 | 7.66 | * | ... | 12.82 | 0.159 |
| GJ0300 | 1 | 08 12 40.9 | -21 33 07 | 12.79 | 9.57 | 8.07 | 12.15 | 10.85 | 9.22 | /13 | 7.60 | 6.96 | 6.71 | * | ... | 12.16 | 0.223 |
| SCR0812-4504 | 1 | 08 12 44.3 | -45 04 34 | 18.70 | 16.66 | 13.29 | 17.54 | 15.87 | 13.82 | /40 | 11.73 | 11.23 | 10.91 | ... | ... | ... | ... |
| GJ0301 | 2 | 08 13 08.5 | -13 55 01 | 10.31J | 8.29J | 7.10J | 9.37J | 8.50J | 7.66J | /20 | 6.64J | 6.04J | 5.82J | ... | ... | ... | ... |
| L242-075 | 1 | 08 13 26.1 | -53 17 38 | 12.99 | 10.82 | 9.73 | ... | ... | ... | ... | 8.54 | 7.99 | 7.73 | ... | ... | ... | ... |
| LHS1992 | 1 | 08 13 42.6 | -76 07 49 | 12.00 | 9.92 | 8.35 | 11.86 | 10.79 | 9.46 | /40 | 8.16 | 7.60 ^a | 7.30 | ... | ... | ... | ... |
| LP843-016 | 1 | 08 14 22.6 | -25 42 19 | 11.87 | 9.71 | 8.35 | 11.55 | 10.55 | 9.34 | /25 | 8.11 | 7.47 | 7.20 | ... | ... | ... | ... |
| GJ2066 | 1 | 08 16 07.9 | +01 18 09 | ... | ... | ... | 10.11 | 9.08 | 7.86 | /34 | 6.63 | 6.04 | 5.77 | * | ... | 10.11 | 0.461 |
| LP386-035 | 1 | 08 16 37.5 | -42 12 26 | 12.43 | 10.15 | 9.07 | ... | ... | ... | ... | 8.76 | 8.08 | 7.88 | ... | ... | ... | ... |
| L098-059 | 1 | 08 18 07.6 | -68 18 47 | 12.71 | 10.44 | 8.97 | 11.71 | 10.61 | 9.25 | /40 | 7.93 | 7.36 | 7.10 | * | ... | 11.71 | 0.321 |
| LHS0246 | 1 | 08 25 49.7 | +69 02 11 | ... | ... | ... | 15.78 | 14.10 | 12.09 | 1/1 | 10.08 | 9.50 | 9.16 | * | ... | 15.78 | 0.113 |

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|---------------|------|------------|-----------|--------|--------|--------|--------|--------|--------|-----|--------|-------------------|-------|-----|------|-------------|
| SCR0827-2526 | 1 | 08 27 07.0 | -25 26 54 | 14.91 | 12.29 | 10.12 | 13.90 | 12.66 | 11.10 | /40 | 9.65 | 9.09 | 8.78 | ... | ... | ... |
| LHS2010B | 0 | 08 27 11.0 | -44 59 21 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.37 | 14.35 0.159 |
| LHS2010A | 2 | 08 27 11.8 | -44 59 21 | 12.47J | 9.89J | 7.62J | 11.86J | 10.70J | 9.19J | /26 | 7.75J | 7.15J | 6.87J | * | ... | 11.98 0.352 |
| GJ1110 | 1 | 08 28 11.4 | +20 07 48 | ... | ... | ... | 13.12 | 12.05 | 10.69 | /37 | 9.40 | 8.87 | 8.68 | * | ... | 13.12 0.340 |
| GJ0308B | 0 | 08 28 22.1 | +35 00 59 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.15 | 11.56 0.475 |
| GJ0308A | 2 | 08 28 22.1 | +35 00 59 | ... | ... | ... | 10.73J | 9.80J | 8.81J | /37 | 7.63J | 7.05J | 6.83J | * | ... | 11.41 0.494 |
| GJ1111 | 1 | 08 29 49.5 | +26 46 34 | ... | ... | ... | 14.900 | 12.898 | 10.639 | /2 | 8.24 | 7.62 | 7.26 | * | ... | 14.90 0.089 |
| LHS2021 | 1 | 08 30 32.0 | +09 47 15 | ... | ... | ... | 19.17 | 16.99 | 14.66 | 4/1 | 11.89 | 11.17 | 10.76 | * | ... | 19.21 0.080 |
| LHS2024 | 1 | 08 31 23.5 | -10 29 54 | 15.71 | 13.08 | 10.32 | 15.06 | 13.62 | 11.84 | /40 | 10.07 | 9.49 | 9.14 | ... | ... | ... |
| GJ2069D | 0 | 08 31 37.4 | +19 23 50 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.00 | 14.69 0.134 |
| GJ2069B | 0(2) | 08 31 37.4 | +19 23 50 | ... | ... | ... | 13.37J | 12.03J | 10.30J | 3/1 | 8.63J | 8.05J | 7.72J | * | 1.06 | 13.75 0.172 |
| GJ2069C | 0 | 08 31 37.5 | +19 23 39 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.00 | 12.69 0.250 |
| GJ2069E | 0 | 08 31 37.5 | +19 23 39 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 5.76 | 18.45 0.081 |
| GJ2069A | 5(3) | 08 31 37.5 | +19 23 39 | ... | ... | ... | 11.93J | 10.70J | 9.10J | 3/1 | 7.51J | 6.89J | 6.60J | * | ... | 12.69 0.250 |
| LHS2026 | 1 | 08 32 30.5 | -01 34 39 | 19.83 | 17.07 | 13.68 | 18.94 | 16.69 | 14.32 | /3 | 12.04 | 11.48 | 11.14 | * | ... | 18.94 0.085 |
| GJ2070 | 1 | 08 34 25.9 | -01 08 40 | 13.74 | 11.70 | 9.83 | 12.74 | 11.59 | 10.15 | 2/1 | 8.81 | 8.32 | 8.03 | * | ... | 12.74 0.275 |
| SCR0835-3400 | 1 | 08 35 31.7 | -34 00 37 | 15.31 | 12.76 | 10.25 | 14.26 | 12.99 | 11.39 | /40 | 9.90 | 9.37 | 9.08 | ... | ... | ... |
| LHS0250 | 1 | 08 35 38.4 | +68 03 21 | ... | ... | ... | 11.640 | 10.573 | 9.196 | /2 | 7.86 | 7.29 | 7.05 | * | ... | 11.64 0.375 |
| LHS2029 | 1 | 08 37 07.9 | +15 07 45 | ... | ... | ... | 11.79 | 10.74 | 9.42 | /37 | 8.12 | 7.57 | 7.32 | * | ... | 11.79 0.443 |
| SCR0837-2819 | 1 | 08 37 20.4 | -28 19 58 | 17.05 | 14.60 | 11.95 | 15.59 | 14.18 | 12.43 | /40 | 10.73 | 10.19 | 9.89 | ... | ... | ... |
| LP844-004 | 1 | 08 37 33.9 | -22 32 32 | 16.34 | 14.09 | 12.01 | 15.15 | 13.82 | 12.14 | /40 | 10.50 | 9.94 | 9.64 | ... | ... | ... |
| SCR0838-5855A | 2 | 08 38 02.2 | -58 55 59 | 18.44J | 16.11J | 12.44J | 17.19J | 15.08J | 12.78J | /40 | 10.31J | 9.71J | 9.27J | * | ... | 17.28 0.089 |
| SCR0838-5855B | 0 | 08 38 02.3 | -58 55 57 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.72 | 20.00 0.075 |
| SCR0838-5302 | 1 | 08 38 13.2 | -53 02 12 | 21.75 | 17.81 | 15.23 | 18.89 | 17.01 | 14.81 | /40 | 12.50 | 11.85 | 11.45 | ... | ... | ... |
| LTT03201 | 1 | 08 38 54.5 | -09 33 59 | 12.33 | 10.02 | 8.59 | 11.80 | 10.80 | 9.59 | /23 | 8.36 | 7.68 | 7.44 | ... | ... | ... |
| SCR0840-4044 | 1 | 08 40 01.7 | -40 44 31 | 17.19 | 15.24 | 12.50 | 16.29 | 14.81 | 12.97 | /40 | 11.19 | 10.64 | 10.25 | ... | ... | ... |
| GJ0316.1 | 1 | 08 40 29.7 | +18 24 09 | ... | ... | ... | 17.67 | 15.72 | 13.44 | 2/1 | 11.05 | 10.42 | 10.05 | * | ... | 17.67 0.090 |
| LHS2038 | 1 | 08 40 55.3 | +67 39 15 | ... | ... | ... | 14.66 | 13.41 | 11.83 | /37 | 10.29 | 9.72 | 9.41 | * | ... | 14.66 0.219 |
| GJ0317 | 1 | 08 40 59.2 | -23 27 23 | 12.74 | 10.27 | 8.44 | 12.01 | 10.84 | 9.37 | /40 | 7.93 | 7.32 ^a | 7.03 | * | ... | 12.00 0.374 |
| LHS0252 | 1 | 08 41 17.6 | +59 28 22 | ... | ... | ... | 15.05 | 13.48 | 11.49 | /37 | 9.62 | 9.00 | 8.67 | * | ... | 15.05 0.116 |
| G114-014 | 1 | 08 42 23.2 | -04 53 55 | 13.91 | 11.65 | 10.30 | 12.86 | 11.76 | 10.37 | /23 | 9.05 | 8.54 ^a | 8.19 | ... | ... | ... |
| GJ2072B | 0 | 08 44 23.1 | -44 28 21 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.90 | 11.90 0.432 |
| GJ2072A | 2 | 08 44 23.1 | -44 28 21 | ... | ... | ... | 10.61J | 9.62J | 8.42J | /20 | 7.21J | 6.57J | 6.31J | * | ... | 11.00 0.543 |
| LP786-005 | 1 | 08 47 17.6 | -20 58 20 | 13.84 | 11.91 | 10.52 | ... | ... | ... | ... | 9.44 | 8.75 | 8.56 | ... | ... | ... |
| L388-106 | 2(1) | 08 48 23.2 | -44 12 26 | 14.60 | 12.33 | 10.36 | ... | ... | ... | ... | 9.69 | 9.05 | 8.79 | ... | ... | ... |
| LEHPM2-0870 | 1 | 08 48 59.1 | -80 35 02 | 16.30 | 14.23 | 11.86 | ... | ... | ... | ... | 10.42 | 9.79 | 9.50 | ... | ... | ... |
| GJ1114 | 1 | 08 51 43.8 | +18 07 29 | ... | ... | ... | 11.55 | 10.57 | 9.44 | /37 | 8.28 | 7.72 | 7.53 | * | ... | 11.55 0.451 |
| SCR0852-6608 | 1 | 08 52 50.0 | -66 08 47 | 17.81 | 15.50 | 12.88 | 16.41 | 14.93 | 13.11 | /40 | 11.34 | 10.73 | 10.39 | ... | ... | ... |
| SCR0853-3924 | 1 | 08 53 28.7 | -39 24 41 | 13.21 | 10.86 | 8.34 | 12.32 | 11.22 | 9.87 | /40 | 8.51 | 7.94 | 7.72 | * | ... | 12.30 0.367 |
| LHS2065 | 1 | 08 53 36.2 | -03 29 32 | 20.08 | 17.27 | 13.92 | 18.94 | 16.74 | 14.46 | /9 | 11.21 | 10.47 | 9.94 | * | ... | 18.74 0.075 |
| L532-012 | 1 | 08 54 02.4 | -30 51 37 | 14.36 | 12.16 | 9.91 | 13.44 | 12.16 | 10.55 | /40 | 9.01 | 8.39 | 8.09 | ... | ... | ... |
| GJ0326B | 0 | 08 54 05.2 | -13 07 38 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.00 | 12.68 0.317 |
| GJ0326A | 2 | 08 54 05.3 | -13 07 31 | 12.75J | 10.40J | 8.77J | 11.93J | 10.81J | 9.42J | /37 | 8.05J | 7.53J | 7.26J | * | ... | 12.68 0.317 |
| LHS2071B | 0 | 08 55 20.0 | -23 52 15 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.12 | 16.14 0.115 |
| LHS2071A | 2 | 08 55 20.3 | -23 52 15 | 14.92J | 12.56J | 10.35J | 13.88J | 12.55J | 10.82J | /26 | 9.11J | 8.54J | 8.20J | * | ... | 14.02 0.197 |
| L139-024 | 1 | 08 56 06.6 | -61 57 44 | 14.27 | 12.33 | 10.94 | ... | ... | ... | ... | 9.48 | 8.95 ^a | 8.67 | ... | ... | ... |
| LP844-033 | 1 | 08 56 17.6 | -23 26 57 | 17.17 | 14.75 | 11.93 | 15.98 | 14.43 | 12.55 | /6 | 10.70 | 10.13 | 9.82 | * | ... | 15.98 0.141 |
| GJ0330B | 0 | 08 57 04.6 | +11 38 49 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.82 | 12.58 0.331 |
| GJ0330A | 2 | 08 57 04.6 | +11 38 49 | ... | ... | ... | 10.57J | 9.59J | 8.52J | /2 | 7.31J | 6.78J | 6.49J | * | ... | 10.76 0.542 |
| GJ1116B | 0 | 08 58 12.2 | +19 45 47 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.77 | 14.85 0.098 |
| GJ1116A | 2 | 08 58 12.2 | +19 45 47 | ... | ... | ... | 13.65J | 11.97J | 9.85J | /37 | 7.79J | 7.24J | 6.89J | * | ... | 14.08 0.108 |
| LP606-030 | 1 | 08 58 43.3 | -00 41 47 | 18.64 | 16.32 | 15.20 | 17.40 | 15.77 | 13.75 | /40 | 11.72 | 11.15 | 10.76 | ... | ... | ... |
| LTT12352B | 0 | 08 58 56.0 | +08 28 26 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.15 | 12.21 0.459 |
| LTT12352C | 0 | 08 58 56.0 | +08 28 26 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.00 | 12.06 0.204 |
| LTT12352A | 3 | 08 58 56.0 | +08 28 26 | ... | ... | ... | 10.92J | 9.67J | 8.05J | /13 | 6.51J | 5.97J | 5.69J | * | ... | 12.06 0.204 |
| GJ1118 | 1 | 08 59 05.3 | -31 13 27 | 14.78 | 12.46 | 10.41 | 13.79 | 12.56 | 10.95 | /15 | 9.41 | 8.86 | 8.59 | * | ... | 13.79 0.233 |
| LHS2088 | 1 | 09 00 14.8 | +72 57 40 | ... | ... | ... | 14.34 | 13.02 | 11.34 | 1/1 | 9.73 | 9.24 | 8.98 | * | ... | 14.34 0.160 |
| LHS2090 | 1 | 09 00 23.0 | +21 50 04 | ... | ... | ... | 16.11 | 14.12 | 11.84 | 3/1 | 9.44 | 8.84 | 8.44 | * | ... | 16.11 0.089 |
| GJ1119 | 1 | 09 00 32.5 | +46 35 11 | ... | ... | ... | 13.32 | 12.01 | 10.29 | /37 | 8.60 | 8.03 | 7.74 | * | ... | 13.32 0.181 |
| GJ0333.2A | 2(1) | 09 00 48.5 | +05 14 41 | ... | ... | ... | 12.42 | 11.37 | 10.00 | /2 | 8.61 | 8.01 | 7.82 | * | ... | 12.42 0.427 |
| GJ0333.2B | 0(1) | 09 00 50.3 | +05 14 29 | ... | ... | ... | 12.72 | 11.68 | 10.27 | /2 | 8.85 | 8.32 ^a | 8.03 | * | 0.30 | 12.72 0.393 |
| LHS0259 | 1 | 09 00 52.1 | +48 25 25 | ... | ... | ... | 15.720 | 14.578 | 13.072 | /2 | 10.08 | 9.55 | 9.32 | * | ... | 15.72 0.135 |
| 2MA0901-6526 | 1 | 09 01 31.7 | -65 26 40 | 16.27 | 14.22 | 11.47 | 15.04 | 13.63 | 11.85 | /40 | 10.14 | 9.59 | 9.28 | ... | ... | ... |
| L063-046 | 1 | 09 01 39.0 | -72 40 17 | 13.61 | 11.53 | 9.50 | 12.41 | 11.37 | 10.09 | /40 | 8.82 | 8.24 | 7.99 | ... | ... | ... |
| LHS2094 | 1 | 09 02 19.8 | +08 28 06 | ... | ... | ... | 11.77 | 10.72 | 9.41 | /37 | 8.15 | 7.53 | 7.31 | * | ... | 11.77 0.460 |
| LP060-179 | 1 | 09 02 51.0 | +68 03 18 | ... | ... | ... | 12.65 | 11.47 | 9.92 | /32 | 8.45 | 7.99 | 7.71 | * | ... | 12.65 0.254 |

| | | | | | | | | | | | | | | | | |
|--------------|------|------------|-----------|--------|--------|-------|--------|--------|--------|-----|-------------------|-------------------|-------|-----|-------|-------------|
| LTT03347 | 1 | 09 04 02.3 | -25 04 10 | 13.38 | 11.31 | 9.84 | ... | ... | ... | ... | 9.15 | 8.56 | 8.31 | ... | ... | ... |
| L244-024 | 1 | 09 05 17.9 | -51 02 36 | 14.67 | 12.57 | 10.55 | ... | ... | ... | ... | 9.50 | 8.88 ^a | 8.64 | ... | ... | ... |
| SCR0905-0841 | 1 | 09 05 43.3 | -08 41 58 | 16.90 | 14.64 | 12.30 | 15.88 | 14.45 | 12.65 | /40 | 10.83 | 10.24 | 9.96 | ... | ... | ... |
| GJ0334 | 1 | 09 06 45.4 | -08 48 25 | 10.24 | 8.13 | 7.05 | 9.50 | 8.59 | 7.68 | /2 | 6.64 | 5.98 | 5.76 | ... | ... | ... |
| LHS2106 | 1 | 09 07 02.8 | -22 08 50 | 15.11 | 12.72 | 10.18 | 14.21 | 12.87 | 11.13 | /26 | 9.53 | 9.00 | 8.65 | * | 14.21 | 0.177 |
| SCR0907-3533 | 1 | 09 07 17.1 | -35 33 03 | 14.39 | 12.85 | 10.60 | 13.89 | 12.73 | 11.28 | /40 | 9.85 | 9.28 | 8.96 | ... | ... | ... |
| L460-139 | 1 | 09 09 14.9 | -39 59 32 | 13.51 | 11.30 | 9.50 | ... | ... | ... | ... | 9.15 | 8.54 | 8.32 | ... | ... | ... |
| GJ1121 | 1 | 09 09 24.0 | +40 06 05 | ... | ... | ... | 14.53 | 13.27 | 11.66 | /37 | 10.14 | 9.62 | 9.31 | * | 14.53 | 0.212 |
| DEN0909-0658 | 1 | 09 09 57.3 | -06 58 19 | ... | ... | ... | 21.44 | 19.47 | 17.18 | 1/1 | 13.89 | 13.09 | 12.54 | * | 21.44 | 0.075 |
| GJ0336.1 | 1 | 09 11 30.8 | +46 37 01 | ... | ... | ... | 10.94 | 10.02 | 9.04 | /35 | 7.90 | 7.26 | 7.06 | * | 10.94 | 0.638 |
| SCR0914-4134 | 1 | 09 14 17.4 | -41 34 38 | 16.33 | 13.69 | 10.98 | 15.01 | 13.57 | 11.72 | /39 | 9.98 | 9.42 | 9.12 | * | 15.01 | 0.126 |
| GJ0338B | 0(1) | 09 14 22.7 | +52 41 11 | ... | ... | ... | 7.88 | ... | ... | /14 | 4.89 | 3.99 ^a | 3.99 | * | 0.09 | 7.88 0.644 |
| GJ0338A | 2(1) | 09 14 22.7 | +52 41 11 | ... | ... | ... | 7.60 | ... | ... | /14 | 4.78 ^a | 4.04 ^a | 4.14 | * | ... | 7.79 0.658 |
| LHS6167B | 0 | 09 15 36.4 | -10 35 47 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.83 | 15.83 0.102 |
| LHS6167A | 2 | 09 15 36.4 | -10 35 47 | 14.86J | 12.40J | 9.79J | 13.82J | 12.32J | 10.42J | /40 | 8.61J | 8.07J | 7.73J | * | ... | 14.00 0.142 |
| L749-034 | 1 | 09 16 20.7 | -18 37 33 | 11.06 | 8.89 | 7.56 | 10.73 | 9.72 | 8.54 | /40 | 7.35 | 6.76 | 6.49 | * | 10.73 | 0.477 |
| LHS2122 | 1 | 09 16 26.0 | -62 04 16 | 13.36 | 10.83 | 9.09 | 12.57 | 11.43 | 9.94 | /26 | 8.47 | 7.83 | 7.55 | * | 12.57 | 0.339 |
| LTT03416 | 1 | 09 16 44.0 | -24 47 43 | 12.55 | 10.31 | 9.04 | ... | ... | ... | ... | 8.70 | 8.05 | 7.83 | ... | ... | ... |
| GJ1123 | 1 | 09 17 05.3 | -77 49 23 | 14.17 | 12.15 | 9.88 | 13.16 | 11.86 | 10.16 | /15 | 8.33 | 7.77 | 7.45 | * | 13.15 | 0.173 |
| LHS0265 | 1 | 09 17 45.3 | +58 24 13 | ... | ... | ... | 15.12 | 13.75 | 11.96 | /37 | 10.26 | 9.70 | 9.40 | * | 15.12 | 0.138 |
| GJ1122A | 2(1) | 09 19 18.5 | +38 31 19 | ... | ... | ... | 14.52 | 13.21 | 11.52 | /33 | 9.92 | 9.38 | 9.06 | * | 14.52 | 0.198 |
| GJ1122B | 0(1) | 09 19 19.0 | +38 31 23 | ... | ... | ... | 14.67 | 13.35 | 11.65 | /33 | 10.05 | 9.44 | 9.15 | * | 0.15 | 14.67 0.188 |
| G161-013 | 1 | 09 20 11.1 | -01 10 17 | 14.88 | 12.74 | 11.00 | ... | ... | ... | ... | 9.88 | 9.13 | 8.89 | ... | ... | ... |
| LHS0266 | 1 | 09 20 21.1 | +26 43 43 | ... | ... | ... | 15.60 | 14.29 | 12.59 | 2/1 | 11.07 | 10.57 | 10.29 | * | 15.60 | 0.145 |
| LEP0920-4922 | 1 | 09 20 26.0 | -49 22 35 | 17.88 | 16.67 | 13.68 | ... | ... | ... | ... | 11.33 | 10.82 | 10.53 | ... | ... | ... |
| LHS0267 | 1 | 09 20 58.1 | +03 20 59 | ... | ... | ... | 13.32 | 12.18 | 10.70 | 2/1 | 9.36 | 8.80 | 8.52 | * | 13.32 | 0.259 |
| SIP0921-2104 | 1 | 09 21 14.1 | -21 04 44 | 22.26 | 19.07 | 16.03 | 20.85 | 18.50 | 16.17 | /40 | 12.78 | 12.15 | 11.69 | ... | ... | ... |
| GJ0341 | 1 | 09 21 37.6 | -60 16 55 | 10.22 | 6.98 | 8.29 | 9.49 | 8.55 | 7.54 | /2 | 6.44 | 5.79 | 5.59 | * | 9.49 | 0.580 |
| LP902-060 | 1 | 09 23 32.4 | -33 32 56 | 12.83 | 10.46 | 9.77 | ... | ... | ... | ... | 8.89 | 8.17 | 8.02 | ... | ... | ... |
| LP389-001 | 2(1) | 09 24 17.3 | -40 05 45 | 11.35 | 9.45 | 8.15 | ... | ... | ... | ... | 7.85 | 7.16 | 6.99 | ... | ... | ... |
| L822-019 | 1 | 09 28 41.6 | -12 09 56 | 13.06 | 10.75 | 9.48 | 12.23 | 11.23 | 9.05 | /23 | 8.84 | 8.20 ^a | 7.95 | ... | ... | ... |
| GJ0347A | 2(1) | 09 28 53.3 | -07 22 16 | 12.40 | 10.27 | 9.03 | 12.10 | 11.05 | 9.72 | /2 | 8.45 | 7.89 | 7.63 | * | 12.10 | 0.379 |
| GJ0347B | 0(1) | 09 28 55.7 | -07 22 11 | ... | ... | ... | 15.04 | 13.72 | 11.99 | /2 | 10.37 | 9.84 | 9.54 | * | 2.94 | 15.04 0.146 |
| WT1637 | 1 | 09 29 03.8 | -24 29 04 | 18.28 | 15.94 | 12.73 | ... | ... | ... | ... | 10.84 | 10.29 | 9.91 | ... | ... | ... |
| LHS0269 | 1 | 09 29 11.0 | +25 58 09 | ... | ... | ... | 16.41 | 14.81 | 12.84 | 1/1 | 10.91 | 10.31 | 9.96 | * | 16.41 | 0.114 |
| GJ1125 | 1 | 09 30 44.6 | +00 19 22 | ... | ... | ... | 11.72 | 10.58 | 9.12 | /37 | 7.70 | 7.18 | 6.87 | * | 11.72 | 0.306 |
| GJ0352B | 0 | 09 31 19.4 | -13 29 18 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.41 | 11.06 0.379 |
| GJ0352A | 2 | 09 31 19.4 | -13 29 19 | 9.76J | 7.46J | 5.74J | 10.08J | 9.03J | 7.69J | /2 | 6.36J | 5.76J | 5.51J | * | 10.65 | 0.425 |
| LP788-001 | 1 | 09 31 22.3 | -17 17 43 | 18.99 | 16.74 | 13.14 | 17.55 | 15.63 | 13.38 | /40 | 11.07 | 10.47 | 10.07 | ... | ... | ... |
| GJ0353 | 1 | 09 31 56.3 | +36 19 12 | ... | ... | ... | 10.22 | 9.28 | 8.28 | /37 | 7.12 | 6.57 ^a | 6.30 | * | 10.22 | 0.568 |
| LP846-015 | 1 | 09 34 27.9 | -26 43 27 | 15.36 | 12.94 | 10.71 | ... | ... | ... | ... | 9.47 | 8.94 | 8.62 | ... | ... | ... |
| LTT03532 | 1 | 09 35 54.4 | -33 43 51 | 14.14 | 11.94 | 10.16 | ... | ... | ... | ... | 9.39 | 8.82 | 8.58 | ... | ... | ... |
| GJ0357 | 1 | 09 36 01.6 | -21 39 39 | 11.27 | 10.49 | 7.49 | 10.92 | 9.86 | 8.57 | /40 | 7.34 | 6.74 | 6.48 | * | 10.90 | 0.369 |
| 2MA0936-2610 | 1 | 09 36 57.8 | -26 10 11 | ... | ... | ... | 13.11 | 11.86 | 10.31 | 2/1 | 8.86 | 8.28 | 7.96 | * | 13.11 | 0.304 |
| G117-034 | 1 | 09 39 24.2 | +31 45 17 | ... | ... | ... | 11.92n | ... | ... | /14 | 8.49 | 7.89 | 7.68 | * | 11.91 | 0.498 |
| SCR0939-4300 | 1 | 09 39 44.7 | -43 00 27 | 14.05 | 12.14 | 10.30 | 13.57 | 12.42 | 10.93 | /40 | 9.50 | 8.87 | 8.64 | ... | ... | ... |
| GJ0358 | 1 | 09 39 46.4 | -41 04 03 | 11.33 | 9.07 | 7.78 | 10.78 | 9.66 | 8.27 | /40 | 6.90 | 6.32 | 6.06 | * | 10.71 | 0.402 |
| GJ0359 | 1 | 09 41 02.1 | +22 01 28 | ... | ... | ... | 14.24 | 12.93 | 11.20 | /37 | 9.63 | 9.09 | 8.81 | * | 14.24 | 0.156 |
| GJ0361 | 1 | 09 41 10.3 | +13 12 34 | ... | ... | ... | 10.40 | 9.39 | 8.20 | /37 | 6.97 | 6.37 | 6.13 | * | 10.40 | 0.483 |
| LTT03553 | 1 | 09 41 21.2 | -20 34 41 | 13.55 | 11.18 | 9.50 | 12.56 | 11.52 | 10.23 | /23 | 8.98 | 8.28 | 8.06 | ... | ... | ... |
| G161-066 | 1 | 09 42 12.8 | -07 01 46 | 14.93 | 12.60 | 10.47 | ... | ... | ... | ... | 9.75 | 9.22 | 8.92 | ... | ... | ... |
| GJ0363 | 1 | 09 42 17.9 | +55 58 31 | ... | ... | ... | 12.50 | 11.34 | 9.82 | /37 | 8.37 | 7.81 | 7.53 | * | 12.50 | 0.323 |
| GJ0360(A) | 2(1) | 09 42 34.8 | +70 02 02 | ... | ... | ... | 10.58 | 9.53 | 8.24 | /37 | 6.92 | 6.33 | 6.08 | * | 10.58 | 0.475 |
| LHS2177 | 1 | 09 42 35.7 | -19 14 05 | 12.69 | 10.15 | 8.66 | 11.96 | 10.90 | 9.60 | /37 | 8.30 | 7.72 | 7.50 | * | 11.96 | 0.386 |
| GJ1128 | 1 | 09 42 46.4 | -68 53 06 | 13.76 | 11.24 | 9.02 | 12.74 | 11.39 | 9.65 | /15 | 7.95 | 7.39 ^a | 7.04 | * | 12.74 | 0.159 |
| LHS5156 | 1 | 09 42 49.6 | -63 37 56 | 14.06 | 11.69 | 9.30 | 13.30 | 11.98 | 10.28 | /26 | 8.62 | 8.10 | 7.77 | * | 13.30 | 0.185 |
| GJ0362(B) | 0(1) | 09 42 51.7 | +70 02 21 | ... | ... | ... | 11.24 | 10.12 | 8.71 | /37 | 7.33 | 6.73 | 6.47 | * | 0.66 | 11.24 0.399 |
| LHS0272 | 1 | 09 43 46.2 | -17 47 06 | 14.09 | 11.61 | 10.01 | 13.16 | 12.10 | 10.87 | /16 | 9.62 | 9.12 | 8.87 | * | 13.16 | 0.237 |
| LHS2181 | 1 | 09 43 55.6 | +26 58 08 | ... | ... | ... | 12.05 | 10.92 | 9.46 | /37 | 8.04 | 7.46 | 7.19 | * | 12.05 | 0.348 |
| WT0244 | 1 | 09 44 23.7 | -73 58 38 | 16.24 | 14.08 | 11.49 | 15.17 | 13.80 | 12.02 | /26 | 10.23 | 9.71 | 9.38 | * | 15.17 | 0.175 |
| GJ0367 | 1 | 09 44 29.8 | -45 46 36 | 10.28 | 8.66 | 7.81 | 10.12 | 9.10 | 7.86 | /40 | 6.63 | 6.05 | 5.78 | * | 10.12 | 0.478 |
| GJ1129 | 1 | 09 44 47.3 | -18 12 49 | 13.31 | 10.18 | 8.56 | 12.46 | 11.24 | 9.67 | /16 | 8.12 | 7.54 | 7.26 | * | 12.46 | 0.252 |
| G161-071 | 1 | 09 44 54.2 | -12 20 54 | 14.54 | 11.90 | 9.32 | 13.76 | 12.26 | 10.36 | /40 | 8.50 | 7.92 | 7.60 | * | 13.76 | 0.190 |
| LP462-119B | 0 | 09 45 40.0 | -39 02 26 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.54 | 13.17 0.316 |
| LP462-119A | 2 | 09 45 40.1 | -39 02 27 | 12.54J | 10.30J | 8.92J | 12.11J | 10.99J | 9.64J | 2/1 | 8.37J | 7.78J | 7.52J | * | ... | 12.63 0.372 |
| WT2458 | 1 | 09 45 58.4 | -32 53 30 | 15.31 | 12.89 | 10.43 | 14.04 | 12.66 | 10.89 | /40 | 9.20 | 8.60 | 8.28 | ... | ... | ... |

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|------------------|------|------------|-----------|--------|--------|-------|--------|--------|--------|-----|-------|--------------------|--------------------|-----|------|-------------|
| LHS2186 | 1 | 09 46 09.3 | -04 25 43 | 15.19 | 12.78 | 10.38 | ... | ... | ... | ... | 9.69 | 9.15 | 8.83 | ... | ... | ... |
| GJ0366 | 1 | 09 46 48.4 | +76 02 38 | ... | ... | ... | 10.64 | 9.69 | 8.58 | /37 | 7.44 | 6.84 | 6.63 | * | ... | 10.64 0.549 |
| G043-002 | 1 | 09 48 50.2 | +15 38 44 | ... | ... | ... | 13.24 | 12.07 | 10.66 | 3/1 | 9.30 | 8.73 | 8.47 | * | ... | 13.23 0.280 |
| LHS2195 | 1 | 09 49 22.2 | +08 06 45 | ... | ... | ... | 19.76 | 17.66 | 15.20 | 1/1 | 12.31 | 11.63 | 11.21 | * | ... | 19.76 0.077 |
| GJ2075 | 2 | 09 49 27.8 | -55 20 09 | 10.76 | 8.60 | 7.47 | 10.28J | 9.34J | 8.33J | /20 | 7.25J | 6.57J | 6.37J | ... | ... | ... |
| LTT03613 | 1 | 09 50 40.5 | -13 48 39 | 13.25 | 10.93 | 8.85 | 12.71 | 11.52 | 9.99 | /40 | 8.58 | 7.97 | 7.72 | * | ... | 12.71 0.356 |
| LTT03612 | 1 | 09 50 48.3 | -09 07 10 | 13.90 | 11.65 | 9.67 | ... | ... | ... | ... | 9.26 | 8.66 | 8.38 | ... | ... | ... |
| GJ0369 | 1 | 09 51 09.6 | -12 19 48 | 10.49 | 8.37 | 6.93 | 10.06 | 9.13 | 8.11 | /2 | 6.99 | 6.40 | 6.15 | * | ... | 10.06 0.586 |
| LTT03616 | 1 | 09 51 23.3 | -17 44 24 | 12.45 | 10.10 | 8.67 | 11.84 | 10.83 | 9.55 | /23 | 8.30 | 7.74 | 7.49 | ... | ... | ... |
| GJ0372B | 0 | 09 53 11.7 | -03 41 24 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.95 | 11.88 0.399 |
| GJ0372A | 2 | 09 53 11.8 | -03 41 25 | 11.28J | 8.96J | 7.78J | 10.55J | 9.53J | 8.29J | /2 | 7.00J | 6.41J | 6.13J | * | ... | 10.93 0.512 |
| GJ1130 | 2(1) | 09 53 28.1 | -31 45 08 | 11.06 | 8.79 | 8.00 | 10.15 | 9.29 | 8.43 | /40 | 7.40 | 6.77 | 6.57 | ... | ... | ... |
| LTT03629 | 1 | 09 53 30.3 | -31 28 12 | 13.53 | 11.59 | 10.05 | ... | ... | ... | ... | 9.14 | 8.55 | 8.32 | ... | ... | ... |
| LHS2206 | 1 | 09 53 55.0 | +20 56 46 | ... | ... | ... | 14.02 | 12.63 | 10.85 | 3/1 | 9.21 | 8.60 | 8.33 | * | ... | 14.02 0.138 |
| LPS47-048 | 1 | 09 55 23.9 | -27 15 41 | 12.56 | 10.20 | 8.43 | 12.08 | 10.90 | 9.44 | /40 | 8.03 | 7.43 | 7.14 | * | ... | 12.08 0.299 |
| GJ0373 | 1 | 09 56 08.6 | +62 47 18 | ... | ... | ... | 8.97 | 8.07 | 7.13 | /37 | 6.03 | 5.37 | 5.20 | * | ... | 8.97 0.665 |
| GJ0375B | 0 | 09 58 34.3 | -46 25 30 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.00 | 12.04 0.372 |
| GJ0375A | 2 | 09 58 34.3 | -46 25 30 | 12.15J | 10.07J | 8.55J | 11.27J | 10.11J | 8.59J | /40 | 7.13J | 6.52J | 6.26J | * | ... | 12.04 0.372 |
| GJ0377 | 1 | 10 01 10.7 | -30 23 25 | 12.51 | 9.91 | 8.54 | 11.44 | 10.36 | 8.98 | /20 | 7.60 | 6.99 ^a | 6.70 | * | ... | 11.44 0.449 |
| LP463-104 | 1 | 10 01 23.8 | -38 50 25 | 12.47 | 10.16 | 8.62 | ... | ... | ... | ... | 8.33 | 7.74 ^a | 7.46 | ... | ... | ... |
| GJ0378 | 1 | 10 02 21.7 | +48 05 19 | ... | ... | ... | 10.10 | 9.18 | 8.13 | /37 | 6.95 | 6.36 | 6.16 | * | ... | 10.10 0.606 |
| LHS5166(A) | 2(1) | 10 04 38.7 | -33 35 10 | 15.39 | 13.01 | 10.90 | 14.36 | 13.08 | 11.41 | /40 | 9.85 | 9.30 | 9.03 | * | ... | 14.36 0.194 |
| 2MAW1004-3335(B) | 0BD | 10 04 39.3 | -33 35 19 | ... | ... | ... | ... | ... | ... | ... | 14.48 | 13.49 | 12.92 | * | ... | ... |
| LP903-021 | 1 | 10 04 50.6 | -31 05 28 | 13.08 | 10.61 | 9.31 | 12.00 | 10.97 | 9.75 | /20 | 8.46 | 7.86 ^a | 7.62 | * | ... | 12.00 0.475 |
| L319-147 | 1 | 10 06 08.7 | -49 49 38 | 13.06 | 10.97 | 9.19 | ... | ... | ... | ... | 8.89 | 8.33 | 8.10 | ... | ... | ... |
| LP789-023 | 1 | 10 06 31.9 | -16 53 26 | 20.10 | 17.41 | 13.83 | ... | ... | ... | ... | 12.04 | 11.39 | 10.99 | ... | ... | ... |
| LHS2220 | 1 | 10 06 43.8 | +41 42 52 | ... | ... | ... | 11.33 | 10.39 | 9.38 | /37 | 8.21 | 7.62 | 7.40 | * | ... | 11.33 0.531 |
| L016-059 | 2 | 10 07 09.9 | -82 50 16 | 12.94J | 10.93J | 9.17J | ... | ... | ... | ... | 8.52J | 8.14J ^a | 7.74J ^a | ... | ... | ... |
| GJ1131 | 1 | 10 07 59.4 | +69 14 46 | ... | ... | ... | 14.35 | 13.11 | 11.55 | /37 | 10.10 | 9.58 | 9.30 | ... | ... | 14.35 0.191 |
| LP729-033 | 1 | 10 08 01.1 | -14 36 27 | 16.83 | 14.68 | 12.04 | ... | ... | ... | ... | 10.60 | 10.02 | 9.67 | ... | ... | ... |
| LHS2224 | 1 | 10 09 24.6 | +51 15 39 | ... | ... | ... | 13.48 | 12.27 | 10.71 | /37 | 9.30 | 8.71 | 8.52 | * | ... | 13.48 0.208 |
| LP903-035 | 1 | 10 10 46.8 | -30 46 49 | 14.27 | 12.21 | 10.50 | ... | ... | ... | ... | 9.48 | 8.86 | 8.59 | ... | ... | ... |
| WT1757 | 1 | 10 11 45.0 | -24 25 34 | 12.13 | 10.00 | 8.96 | ... | ... | ... | ... | 8.17 | 7.50 | 7.32 | ... | ... | ... |
| GJ0381B | 0 | 10 12 04.7 | -02 41 05 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.71 | 12.55 0.267 |
| GJ0381A | 2 | 10 12 04.7 | -02 41 05 | 11.89J | 9.40J | 7.74J | 10.64J | 9.59J | 8.32J | /2 | 7.02J | 6.47J | 6.19J | * | ... | 10.84 0.444 |
| GJ0382 | 1 | 10 12 17.7 | -03 44 44 | 10.12 | 7.61 | 6.58 | 9.29 | 8.28 | 7.11 | /2 | 5.89 | 5.26 | 5.02 | * | ... | 9.29 0.526 |
| LHS2233 | 1 | 10 12 59.6 | -35 43 59 | 13.95 | 11.77 | 10.19 | 13.02 | 11.86 | 10.47 | /4 | 9.22 | 8.58 | 8.36 | ... | ... | ... |
| GJ1132 | 1 | 10 14 51.8 | -47 09 24 | 13.95 | 11.93 | 9.57 | 13.49 | 12.26 | 10.69 | /15 | 9.25 | 8.67 | 8.32 | * | ... | 13.49 0.191 |
| G162-037 | 1 | 10 16 35.7 | -11 56 48 | 15.10 | 13.14 | 11.28 | ... | ... | ... | ... | 9.96 | 9.40 | 9.13 | ... | ... | ... |
| GJ0386 | 1 | 10 16 46.0 | -11 57 42 | 12.08 | 9.71 | 8.53 | 10.51 | 9.46 | 8.14 | /2 | 7.32 | 6.71 | 6.45 | * | ... | 10.51 0.512 |
| TWA022B | 0 | 10 17 27.0 | -53 54 27 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.83 | 15.30 0.142 |
| TWA022A | 2 | 10 17 27.0 | -53 54 27 | ... | ... | ... | 14.05J | 12.47J | 10.52J | 2/1 | 8.55J | 8.09J | 7.69J | * | ... | 14.47 0.181 |
| LP790-002 | 2(1) | 10 18 13.9 | -20 28 41 | 14.90 | 12.73 | 10.28 | 13.95 | 12.58 | 10.81 | /40 | 9.00 | 8.42 | 8.15 | ... | ... | ... |
| LTT03780 | 1 | 10 18 35.2 | -11 43 00 | 13.88 | 12.02 | 10.40 | 13.07 | 11.94 | 10.44 | /23 | 9.01 | 8.44 ^a | 8.20 | ... | ... | ... |
| GJ0388 | 1 | 10 19 36.2 | +19 52 11 | ... | ... | ... | 9.29 | 8.17 | 6.78 | 3/1 | 5.45 | 4.84 | 4.59 | * | ... | 9.29 0.400 |
| LP392-039B | 0(1) | 10 19 51.0 | -41 48 48 | ... | ... | ... | 13.17 | 12.00 | 10.49 | 2/1 | 9.06 | 8.54 | 8.29 | * | 1.53 | 13.17 0.339 |
| LP392-039A | 2(1) | 10 19 51.3 | -41 48 46 | 12.43 | 10.16 | 8.68 | 11.64 | 10.66 | 9.52 | /40 | 8.36 | 7.72 | 7.49 | * | ... | 11.64 0.514 |
| WT2473 | 1 | 10 21 12.1 | -37 05 44 | 14.53 | 12.47 | 10.30 | ... | ... | ... | ... | 9.39 | 8.75 | 8.47 | ... | ... | ... |
| GJ0389A | 2(1) | 10 22 24.6 | -60 10 38 | 10.92J | 8.34J | 7.27J | 10.72 | 9.82 | 8.80 | /2 | 7.71 | 7.08 | 6.85 | * | ... | 10.72 0.603 |
| GJ0389B | 0(1) | 10 22 25.0 | -60 10 29 | ... | ... | ... | 12.63 | 11.50 | 10.12 | /2 | 8.71 | 8.20 ^a | 7.90 | * | 1.91 | 12.63 0.367 |
| L101-009 | 1 | 10 22 46.1 | -66 02 26 | 14.77 | 12.79 | 10.51 | ... | ... | ... | ... | 9.55 | 8.98 | 8.72 | ... | ... | ... |
| L142-086 | 1 | 10 24 07.0 | -63 59 55 | 11.55 | 8.98 | ... | 10.62 | 9.67 | 8.66 | /40 | 7.54 | 6.85 | 6.66 | ... | ... | ... |
| GJ0390 | 1 | 10 25 10.8 | -10 13 43 | 11.31 | 8.97 | 7.82 | 10.17 | 9.19 | 8.10 | /2 | 6.90 | 6.26 | 6.03 | * | ... | 10.17 0.535 |
| LTT03835 | 2 | 10 26 38.3 | -16 51 19 | 12.28J | 10.18J | 8.36J | ... | ... | ... | ... | 8.55J | 7.90J | 7.69J | ... | ... | ... |
| LHS2268 | 1 | 10 28 31.2 | +48 14 10 | ... | ... | ... | 13.25 | 12.06 | 10.52 | /37 | 9.06 | 8.47 | 8.23 | * | ... | 13.25 0.316 |
| GJ0393 | 1 | 10 28 55.6 | +00 50 28 | ... | ... | ... | 9.630 | 8.615 | 7.393 | /2 | 6.18 | 5.61 | 5.31 | * | ... | 9.63 0.455 |
| LTT03855 | 1 | 10 30 50.8 | -35 46 39 | 12.15 | 9.74 | 8.46 | 11.24 | 10.28 | 9.26 | 2/1 | 8.19 | 7.49 | 7.29 | * | ... | 11.24 0.596 |
| LTT03538 | 1 | 10 31 08.5 | -41 27 49 | 14.42 | 11.96 | 10.04 | ... | ... | ... | ... | 9.43 | 8.85 | 8.61 | ... | ... | ... |
| LP904-068 | 1 | 10 33 39.1 | -29 00 32 | 13.91 | 11.62 | 10.12 | ... | ... | ... | ... | 9.16 | 8.49 | 8.24 | ... | ... | ... |
| LEHPM2-4342 | 1 | 10 34 24.7 | -28 19 19 | 13.36 | 11.18 | 9.52 | ... | ... | ... | ... | 8.69 | 8.06 | 7.79 | ... | ... | ... |
| LTT03877 | 1 | 10 35 01.1 | -09 24 39 | 12.69 | 10.37 | 9.01 | 12.11 | 11.02 | 9.63 | /23 | 8.28 | 7.68 ^a | 7.39 | ... | ... | ... |
| LHS0283 | 1 | 10 35 06.5 | +69 26 16 | ... | ... | ... | 11.950 | 10.833 | 9.331 | /2 | 7.90 | 7.39 | 7.16 | * | ... | 11.95 0.345 |
| GJ0398 | 1 | 10 36 01.8 | +05 07 06 | ... | ... | ... | 12.69 | 11.48 | 9.92 | 2/1 | 8.46 | 7.88 | 7.60 | * | ... | 12.69 0.291 |
| 2MA1036+1521B | 0 | 10 36 44.8 | +15 21 39 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.31 | 15.76 0.136 |
| 2MA1036+1521C | 0 | 10 36 44.8 | +15 21 39 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 5.91 | 19.36 0.082 |
| 2MA1036+1521A | 3 | 10 36 44.8 | +15 21 39 | ... | ... | ... | 13.33J | 12.01J | 10.34J | 1/1 | 8.75J | 8.18J | 7.90J | * | ... | 13.45 0.287 |

| | | | | | | | | | | | | | | | | |
|--------------|------|-------------|-----------|--------|--------|--------|--------|--------|--------|-----|-------------------|-------------------|-------------------|-----|------|-------------|
| LP904-038 | 1 | 10 37 41.6 | -29 31 04 | 14.44 | 12.45 | 11.02 | ... | ... | ... | ... | 9.64 | 9.07 | 8.82 | ... | ... | ... |
| LTT03896 | 1 | 10 37 45.3 | -27 46 39 | 14.30 | 12.02 | 9.94 | 13.14 | 11.84 | 10.19 | /40 | 8.60 | 8.04 ^a | 7.72 | * | ... | 13.14 0.255 |
| LEHPM2-2758 | 1 | 10 38 47.8 | -86 32 44 | 14.08 | 13.04 | 10.31 | 13.24 | 12.02 | 10.46 | /40 | 8.97 | 8.40 | 8.11 | * | ... | 13.24 0.227 |
| GJ0399 | 1 | 10 39 40.6 | -06 55 26 | 11.51 | 9.49 | 7.73 | 11.31 | 10.27 | 8.99 | /2 | 7.66 | 7.05 ^a | 6.82 | * | ... | 11.31 0.457 |
| LP465-084B | 0 | 10 39 44.3 | -37 55 13 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.63 | 12.93 0.263 |
| LP465-084A | 2 | 10 39 44.4 | -37 55 14 | 12.23J | 9.85J | 8.52J | 11.06J | 9.94J | 8.54J | /40 | 7.21J | 6.63J | 6.38J | * | ... | 11.30 0.430 |
| WT0309 | 1 | 10 40 47.5 | -44 45 53 | 14.56 | 12.20 | 10.24 | ... | ... | ... | ... | 9.50 | 8.84 | 8.66 | ... | ... | ... |
| GJ1135B | 0 | 10 41 09.3 | -36 53 43 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.65 | 12.68 0.319 |
| GJ1135A | 2 | 10 41 09.3 | -36 53 44 | 10.86J | 8.64J | 7.36J | 9.94J | 9.00J | 7.98J | /20 | 6.91J | 6.22J | 5.99J | * | ... | 10.03 0.643 |
| GJ1134 | 1 | 10 41 37.9 | +37 36 39 | ... | ... | ... | 12.98 | 11.72 | 10.07 | /37 | 8.49 | 8.01 | 7.71 | * | ... | 12.98 0.204 |
| LP904-051 | 1 | 10 41 44.0 | -31 11 55 | 17.48 | 15.20 | 12.73 | ... | ... | ... | ... | 11.04 | 10.45 | 10.16 | ... | ... | ... |
| GJ1136B | 0(1) | 10 41 51.7 | -36 38 07 | ... | ... | ... | 11.59 | 10.57 | 9.30 | 2/1 | 8.09 | 7.45 | 7.22 | * | 1.44 | 11.58 0.435 |
| GJ1136A | 2(1) | 10 41 51.8 | -36 38 00 | ... | ... | ... | 10.15 | 9.25 | 8.31 | 2/1 | 7.23 | 6.64 | 6.39 | * | ... | 10.14 0.623 |
| LP848-050B | 0 | 10 42 41.3 | -24 16 04 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.12 | 18.81 0.076 |
| LP848-050A | 2 | 10 42 41.4 | -24 16 05 | 17.68J | 15.34J | 12.09J | 16.55J | 14.57J | 12.47J | /40 | 10.28J | 9.67J | 9.34J | * | ... | 16.69 0.094 |
| WT1827B | 0 | 10 43 02.0 | -09 12 40 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.00 | 17.27 0.092 |
| WT1827A | 2 | 10 43 02.8 | -09 12 41 | 16.00J | 13.80J | 10.85J | 15.11J | 13.57J | 11.59J | /40 | 9.67J | 9.10J | 8.73J | * | ... | 15.27 0.121 |
| LTT03936 | 1 | 10 44 09.5 | -26 37 44 | 13.79 | 11.54 | 10.13 | ... | ... | ... | ... | 9.08 | 8.48 | 8.25 | ... | ... | ... |
| LHS0288 | 1 | 10 44 21.0 | -61 12 35 | ... | ... | ... | 13.920 | 12.330 | 10.310 | /3 | 8.49 | 8.05 | 7.73 | * | ... | 13.92 0.108 |
| LP905-056 | 1 | 10 45 16.7 | -30 48 27 | 12.54 | 10.08 | 8.65 | 11.22 | 10.21 | 9.03 | /20 | 7.82 | 7.22 | 6.99 | * | ... | 11.22 0.440 |
| LP849-006 | 1 | 10 45 51.8 | -23 09 01 | 16.27 | 13.95 | 11.43 | ... | ... | ... | ... | 10.04 | 9.49 | 9.18 | ... | ... | ... |
| LP905-017 | 1 | 10 47 11.2 | -32 15 06 | 13.66 | 11.41 | 10.30 | ... | ... | ... | ... | 9.17 | 8.51 | 8.26 | ... | ... | ... |
| LHS2310 | 1 | 10 47 38.7 | -79 27 46 | 14.64 | 12.71 | 10.69 | 13.45 | 12.19 | 10.60 | /40 | 9.05 | 8.49 | 8.14 | ... | ... | ... |
| L037-012 | 1 | 10 48 01.0 | -76 34 16 | 15.31 | 13.45 | 11.95 | ... | ... | ... | ... | 9.98 | 9.43 | 9.14 | ... | ... | ... |
| DEN1048-3956 | 1 | 10 48 12.6 | -39 56 07 | 18.75 | 15.93 | 12.10 | 17.37 | 14.98 | 12.47 | /40 | 9.54 | 8.91 | 8.45 | * | ... | 17.37 0.075 |
| LHS0292 | 1 | 10 48 14.6 | -11 20 10 | 16.83 | 14.17 | 10.40 | 15.78 | 13.63 | 11.25 | /9 | 8.86 | 8.26 | 7.93 | * | ... | 15.60 0.087 |
| LHS2314 | 1 | 10 49 01.8 | +05 01 59 | ... | ... | ... | 19.13 | 17.10 | 14.90 | 2/1 | 12.54 | 11.97 | 11.60 | * | ... | 19.13 0.088 |
| GJ1138B | 0 | 10 49 45.6 | +35 32 50 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 3.40 | 16.53 0.094 |
| GJ1138A | 2(1) | 10 49 45.6 | +35 32 50 | ... | ... | ... | 13.13 | 11.85 | 10.16 | /2 | 8.54 | 8.04 | 7.74 | * | ... | 13.13 0.185 |
| LHS2317 | 1 | 10 50 26.5 | +33 05 19 | ... | ... | ... | 13.07 | 11.90 | 10.37 | /37 | 8.90 | 8.26 | 8.01 | * | ... | 13.07 0.354 |
| GJ0402 | 1 | 10 50 52.0 | +06 48 29 | ... | ... | ... | 11.650 | 10.430 | 8.848 | /2 | 7.32 | 6.71 ^a | 6.37 | * | ... | 11.65 0.239 |
| GJ0403 | 1 | 10 52 04.0 | +13 59 51 | ... | ... | ... | 12.72 | 11.54 | 10.06 | 3/1 | 8.61 | 8.06 | 7.80 | * | ... | 12.71 0.260 |
| LHS5179 | 1 | 10 53 02.2 | -15 05 03 | 15.11 | 12.99 | 11.32 | 13.94 | 12.80 | 11.31 | /23 | 9.87 | 9.29 | 8.99 | ... | ... | ... |
| 2MA1054-8505 | 1 | 10 54 11.0 | -85 05 02 | 21.40 | 19.13 | 15.99 | 20.59 | 18.12 | 15.64 | /40 | 12.70 | 12.07 | 11.65 | ... | ... | ... |
| LTT04004 | 1 | 10 54 42.0 | -07 18 33 | 14.09 | 11.98 | 9.89 | 13.26 | 12.03 | 10.42 | /40 | 8.88 | 8.25 | 7.97 | ... | ... | ... |
| LHS2328 | 1 | 10 55 34.5 | -09 21 26 | 14.12 | 11.97 | 9.59 | 13.55 | 12.37 | 10.86 | /26 | 9.42 | 8.87 | 8.61 | * | ... | 13.55 0.262 |
| LHS2329 | 1 | 10 55 40.1 | -52 10 15 | 13.47 | 11.31 | 9.88 | ... | ... | ... | ... | 9.13 | 8.52 | 8.22 | ... | ... | ... |
| GJ0406 | 1 | 10 56 28.9 | +07 00 53 | ... | ... | ... | 13.530 | 11.674 | 9.497 | /2 | 7.09 | 6.48 | 6.08 | * | ... | 13.53 0.093 |
| LP731-028 | 1 | 10 56 38.9 | -15 52 54 | 12.97 | 10.77 | 9.09 | 11.82 | 10.74 | 9.39 | /40 | 8.07 | 7.47 | 7.23 | ... | ... | ... |
| LTT04030 | 1 | 10 58 34.2 | -05 54 09 | 14.08 | 11.95 | 10.08 | ... | ... | ... | ... | 9.20 | 8.60 | 8.33 | ... | ... | ... |
| LHS2335 | 1 | 10 58 35.1 | -31 08 38 | 12.62 | 10.32 | 9.29 | 11.93 | 10.90 | 9.63 | /26 | 8.36 | 7.76 | 7.47 | * | ... | 11.93 0.444 |
| LHS2337 | 1 | 10 59 04.8 | +30 14 55 | ... | ... | ... | 15.43 | 14.03 | 12.28 | 1/1 | 10.54 | 9.94 | 9.65 | * | ... | 15.43 0.157 |
| GJ0408 | 1 | 11 00 04.2 | +22 49 58 | ... | ... | ... | 10.02 | 8.96 | 7.63 | /36 | 6.31 | 5.76 | 5.50 ^a | * | ... | 10.02 0.394 |
| LHS0296 | 1 | 11 01 23.2 | +02 59 46 | ... | ... | ... | 14.06 | 12.82 | 11.21 | /37 | 9.71 | 9.23 | 8.91 | * | ... | 14.06 0.176 |
| GJ1141B | 0(1) | 11 02 21 | +16 30 45 | ... | ... | ... | 11.62 | 10.63 | 9.51 | /35 | 8.35 | 7.73 | 7.51 | * | ... | 11.62 0.477 |
| GJ1141A | 2(1) | 11 02 21.0 | +16 30 45 | ... | ... | ... | 11.49 | 10.52 | 9.44 | /35 | 8.27 | 7.69 | 7.44 | * | 0.13 | 11.49 0.493 |
| GJ0410 | 1 | 11 02 38.3 | +21 58 01 | ... | ... | ... | 9.57 | 8.64 | 7.63 | /20 | 6.52 | 5.90 | 5.69 | * | ... | 9.57 0.604 |
| GJ0411 | 1 | 11 03 20.1 | +35 58 11 | ... | ... | ... | 7.46 | ... | ... | /11 | 4.20 ^a | 3.64 ^a | 3.25 ^a | * | ... | 7.46 0.447 |
| LP491-051 | 1 | 11 03 21.25 | +13 37 57 | ... | ... | ... | 12.96 | 11.75 | 10.25 | 2/1 | 8.76 | 8.18 | 7.91 | * | ... | 12.96 0.279 |
| LP791-023 | 1 | 11 04 25.2 | -17 48 09 | 16.89 | 14.67 | 12.34 | ... | ... | ... | ... | 10.83 | 10.19 | 9.87 | ... | ... | ... |
| L066-047 | 2(1) | 11 04 33.5 | -72 57 10 | 11.95 | 10.21 | 9.34 | ... | ... | ... | ... | 8.47 | 7.85 ^a | 7.61 | ... | ... | ... |
| UPM1104-6232 | 1 | 11 04 33.8 | -62 32 35 | 16.42 | 14.09 | 11.48 | 15.20 | 13.77 | 11.96 | /40 | 10.26 | 9.68 | 9.36 | ... | ... | ... |
| LP849-051 | 1 | 11 05 06.9 | -22 12 52 | 17.25 | 15.04 | 12.32 | ... | ... | ... | ... | 10.70 | 10.14 | 9.82 | ... | ... | ... |
| GJ0412A | 2(1) | 11 05 28.5 | +43 31 36 | ... | ... | ... | 8.77 | 7.79 | 6.73 | /37 | 5.54 | 5.00 | 4.77 | * | ... | 8.77 0.457 |
| GJ0412B | 0(1) | 11 05 31.3 | +43 31 17 | ... | ... | ... | 14.44 | 12.77 | 10.68 | /2 | 8.74 | 8.18 | 7.84 | * | 5.67 | 14.44 0.101 |
| LHS2348 | 1 | 11 05 43.1 | +10 14 09 | ... | ... | ... | 12.37 | 11.28 | 9.92 | /37 | 8.64 | 8.05 ^a | 7.80 | * | ... | 12.37 0.393 |
| LHS2351 | 1 | 11 06 20.0 | +04 28 17 | ... | ... | ... | 19.45 | 17.26 | 14.84 | 2/1 | 12.33 | 11.72 | 11.33 | * | ... | 19.45 0.082 |
| LP731-047 | 1 | 11 06 56.9 | -12 44 03 | 19.70 | 16.91 | 13.37 | ... | ... | ... | ... | 11.79 | 11.19 | 10.79 | ... | ... | ... |
| L754-040 | 1 | 11 07 27.7 | -19 17 30 | 11.24 | 9.14 | 7.90 | 10.38 | 9.46 | 8.52 | /20 | 7.45 | 6.85 ^a | 6.62 | * | ... | 10.38 0.634 |
| L017-069 | 1 | 11 07 58.2 | -83 51 23 | 14.08 | 12.25 | 10.81 | 12.68 | 11.62 | 10.31 | /40 | 9.06 | 8.45 | 8.18 | ... | ... | ... |
| GJ0413.1 | 1 | 11 09 31.3 | -24 35 55 | 11.12 | 8.81 | 7.68 | 10.44 | 9.42 | 8.19 | /2 | 6.95 | 6.36 | 6.10 | * | ... | 10.44 0.463 |
| LHS2360 | 1 | 11 10 00.5 | -74 36 15 | 15.03 | 13.14 | 11.16 | 13.57 | 12.43 | 10.78 | /40 | 9.24 | 8.61 ^a | 8.35 | ... | ... | ... |
| SCR1110-3608 | 1 | 11 10 29.0 | -36 08 25 | 17.20 | 15.07 | 12.72 | 15.76 | 14.38 | 12.64 | /39 | 10.93 | 10.34 | 10.00 | ... | ... | ... |
| GJ0414.1B | 0 | 11 11 19.4 | +43 25 02 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.35 | 11.82 0.418 |
| GJ0414.1A | 2 | 11 11 19.4 | +43 25 02 | ... | ... | ... | 10.88J | 9.82J | 8.48J | /37 | 7.33J | 6.74J | 6.53J | * | ... | 11.47 0.459 |
| 2MA1113+1025 | 1 | 11 13 00.6 | +10 25 05 | ... | ... | ... | 14.52 | 13.23 | 11.60 | 3/1 | 10.03 | 9.49 | 9.20 | * | ... | 14.54 0.218 |

| | | | | | | | | | | | | | | | | | |
|--------------|------|-------------|-----------|--------|--------|-------|--------|--------|--------|-----|-------|-------------------|-------|-----|------|-------|-------|
| GJ0422 | 1 | 11 16 00.2 | -57 32 52 | 11.16 | 9.53 | 8.05 | 11.64 | 10.57 | 9.17 | /2 | 7.81 | 7.30 ^a | 7.04 | * | ... | 11.64 | 0.369 |
| L611-120 | 1 | 11 16 06.8 | -30 10 41 | 11.23 | 8.97 | 7.89 | ... | ... | ... | ... | 7.66 | 7.02 | 6.81 | ... | ... | ... | ... |
| LP850-015 | 1 | 11 16 18.7 | -25 49 22 | 16.57 | 14.53 | 12.26 | ... | ... | ... | ... | 10.65 | 10.00 | 9.69 | ... | ... | ... | ... |
| GJ1144 | 1 | 11 16 22.2 | -14 41 36 | 10.18 | 8.09 | 7.12 | 9.98 | 9.10 | 7.40 | /23 | 7.28 | 6.65 | 6.46 | ... | ... | ... | ... |
| LHS2386 | 1 | 11 16 36.7 | -44 07 50 | 15.37 | 13.16 | 11.07 | ... | ... | ... | ... | 9.92 | 9.30 | 9.05 | ... | ... | ... | ... |
| LHS2385 | 1 | 11 16 37.6 | -27 57 19 | 14.81 | 12.57 | 10.33 | ... | ... | ... | ... | 9.36 | 8.91 | 8.62 | ... | ... | ... | ... |
| LP732-015 | 1 | 11 17 06.5 | -11 22 25 | 14.52 | 12.35 | 10.31 | ... | ... | ... | ... | 9.62 | 8.95 | 8.73 | ... | ... | ... | ... |
| GJ1145 | 1 | 11 17 07.5 | -27 48 49 | 10.74 | 8.46 | 7.51 | 9.76 | 8.88 | 8.07 | /20 | 7.06 | 6.42 | 6.20 | ... | ... | ... | ... |
| LP792-053 | 1 | 11 19 22.8 | -19 00 30 | 15.37 | 12.96 | 11.00 | ... | ... | ... | ... | 9.93 | 9.43 | 9.14 | ... | ... | ... | ... |
| LHS2395 | 1 | 11 19 31.0 | +46 41 43 | ... | ... | ... | 15.78 | 14.10 | 12.02 | /37 | 10.09 | 9.53 | 9.20 | * | ... | 15.78 | 0.105 |
| L467-021 | 1 | 11 19 41.1 | -36 15 20 | 14.63 | 12.47 | 10.88 | ... | ... | ... | ... | 9.64 | 9.06 | 8.82 | ... | ... | ... | ... |
| LP792-014 | 1 | 11 19 48.2 | -16 32 38 | 16.71 | 14.46 | 11.70 | ... | ... | ... | ... | 10.65 | 10.05 | 9.79 | ... | ... | ... | ... |
| GJ0424B | 0 | 11 20 04.8 | +65 50 47 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 5.03 | 14.35 | 0.126 |
| GJ0424A | 2 | 11 20 04.8 | +65 50 47 | ... | ... | ... | 9.32J | 8.42J | 7.44J | /37 | 6.31J | 5.73J | 5.53J | * | ... | 9.32 | 0.555 |
| LP792-016 | 1 | 11 20 46.5 | -19 39 07 | 13.83 | 11.61 | 9.88 | 12.87 | 11.78 | 10.40 | /23 | 9.08 | 8.47 ^a | 8.21 | ... | ... | ... | ... |
| LP792-017 | 1 | 11 20 59.9 | -17 01 49 | 12.32 | 10.30 | 8.64 | 12.19 | 11.15 | 9.85 | /23 | 8.59 | 7.92 | 7.70 | ... | ... | ... | ... |
| GJ1146 | 1 | 11 21 38.5 | +06 08 26 | ... | ... | ... | 13.57 | 12.49 | 11.10 | /37 | 9.77 | 9.26 | 8.97 | * | ... | 13.57 | 0.259 |
| LHS2397aB | 0 | 11 21 47.8 | -13 13 08 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 6.01 | 25.56 | 0.075 |
| LHS2397aA | 2(1) | 11 21 49.2 | -13 13 09 | 20.71 | 17.95 | 14.67 | 19.55 | 17.27 | 14.90 | /9 | 11.93 | 11.23 | 10.74 | * | ... | 19.55 | 0.076 |
| LHS2400 | 1 | 11 22 42.5 | -32 05 40 | 17.27 | 15.43 | 12.43 | ... | ... | ... | /6 | 11.04 | 10.52 | 10.17 | * | ... | 16.37 | 0.126 |
| LHS0302 | 1 | 11 23 08.2 | +25 53 37 | ... | ... | ... | 15.14 | 13.77 | 11.98 | /37 | 10.29 | 9.75 | 9.46 | * | ... | 15.14 | 0.147 |
| GJ2085 | 1 | 11 23 44.5 | +08 33 48 | ... | ... | ... | 11.19 | 10.22 | 9.14 | /20 | 7.99 | 7.40 | 7.16 | * | ... | 11.19 | 0.562 |
| LHS2401 | 1 | 11 23 57.3 | -18 21 49 | 14.03 | 11.82 | 10.01 | 13.10 | 11.97 | 10.54 | /26 | 9.17 | 8.59 | 8.32 | * | ... | 13.10 | 0.302 |
| SCR1124-3900 | 1 | 11 24 23.2 | -39 00 43 | 15.67 | 13.65 | 11.37 | 14.29 | 13.05 | 11.47 | /40 | 10.00 | 9.45 | 9.10 | ... | ... | ... | ... |
| LHS2404B | 0(1) | 11 25 17.1 | +78 16 44 | ... | ... | ... | 12.63 | 11.61 | 10.33 | /37 | 9.05 | 8.56 | 8.29 | * | 0.48 | 12.63 | 0.394 |
| LHS2405A | 2(1) | 11 25 28.2 | +78 15 44 | ... | ... | ... | 12.15 | 11.16 | 9.92 | /37 | 8.73 | 8.17 | 7.93 | * | ... | 12.15 | 0.449 |
| SCR1125-3834 | 1 | 11 25 37.3 | -38 34 43 | 16.04 | 13.80 | 11.66 | 14.57 | 13.29 | 11.67 | /39 | 10.09 | 9.51 | 9.19 | ... | ... | ... | ... |
| LP792-060 | 1 | 11 26 50.8 | -18 44 59 | 15.51 | 13.27 | 11.13 | 14.50 | 13.32 | 11.74 | /24 | 10.11 | 9.47 | 9.17 | ... | ... | ... | ... |
| LTT04244 | 1 | 11 30 06.9 | -30 42 44 | 13.92 | 11.54 | 9.47 | ... | ... | ... | ... | 9.31 | 8.66 | 8.40 | ... | ... | ... | ... |
| LP672-042 | 1 | 11 30 41.8 | -08 05 43 | 12.41 | 10.31 | 8.44 | 12.06 | 10.90 | 9.46 | /40 | 8.03 | 7.46 | 7.15 | * | ... | 12.01 | 0.339 |
| LHS0306 | 1 | 11 31 08.4 | -14 57 21 | 15.11 | 12.62 | 10.18 | 14.19 | 12.81 | 11.05 | /40 | 9.36 | 8.76 | 8.50 | * | ... | 14.19 | 0.147 |
| GJ0430.1 | 1 | 11 31 43.3 | +22 40 01 | ... | ... | ... | 10.27 | 9.33 | 8.29 | /20 | 7.17 | 6.55 | 6.32 | * | ... | 10.27 | 0.598 |
| GJ0431 | 1 | 11 31 46.5 | -41 02 47 | 12.53 | 9.74 | 8.30 | 11.52 | 10.36 | 8.87 | /2 | 7.37 | 6.77 | 6.51 | * | ... | 11.52 | 0.336 |
| L540-090 | 1 | 11 32 18.4 | -35 26 14 | 14.27 | 12.76 | 10.96 | ... | ... | ... | ... | 9.46 | 8.81 | 8.57 | ... | ... | ... | ... |
| LP792-033 | 1 | 11 32 19.0 | -16 58 07 | 11.60 | 9.50 | 8.44 | 11.42 | 10.48 | 9.42 | /23 | 8.28 | 7.68 | 7.47 | * | ... | 11.42 | 0.547 |
| L324-051 | 1 | 11 32 22.0 | -46 28 30 | 13.13 | 11.14 | 10.49 | 12.20 | 11.13 | 9.83 | /40 | 8.55 | 7.95 | 7.70 | ... | ... | ... | ... |
| LP850-047 | 1 | 11 33 01.9 | -23 11 08 | 13.96 | 11.53 | 10.44 | ... | ... | ... | ... | 9.33 | 8.71 | 8.47 | ... | ... | ... | ... |
| LHS2427 | 1 | 11 34 38.0 | -23 52 15 | 12.38 | 9.75 | 9.33 | 11.17 | 10.22 | 9.21 | /37 | 8.09 | 7.48 | 7.26 | * | ... | 11.17 | 0.512 |
| L066-086 | 1 | 11 34 59.7 | -74 36 09 | 12.48 | 10.41 | 9.37 | 11.04 | 10.08 | 9.00 | /40 | 7.84 | 7.20 | 7.01 | ... | ... | ... | ... |
| GJ0433B | 0 | 11 35 26.9 | -32 32 23 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.00 | 12.00 | 0.258 |
| GJ0433A | 2 | 11 35 27.0 | -32 32 24 | 10.01J | 7.88J | 6.76J | 9.84J | 8.84J | 7.69J | /2 | 6.47J | 5.86J | 5.62J | * | ... | 10.00 | 0.468 |
| LP851-027 | 2 | 11 36 57.1 | -23 29 48 | 13.64J | 11.47J | 9.68J | 12.90J | 11.79J | 10.36J | /25 | 9.35J | 8.43J | 8.27J | ... | ... | ... | ... |
| SCR1138-7721 | 1 | 11 38 16.8 | -77 21 49 | 16.45 | 14.12 | 11.46 | 14.78 | 13.20 | 11.24 | /39 | 9.40 | 8.89 | 8.52 | * | ... | 14.78 | 0.114 |
| GJ1147 | 1 | 11 38 25.0 | -41 22 33 | 14.84 | 12.48 | 10.49 | 13.72 | 12.49 | 10.91 | /26 | 9.44 | 8.86 | 8.54 | * | ... | 13.72 | 0.211 |
| LP673-025 | 1 | 11 40 18.0 | -08 11 27 | 13.27 | 11.27 | 9.86 | ... | ... | ... | ... | 9.08 | 8.44 ^a | 8.20 | ... | ... | ... | ... |
| SIP1141-3624 | 1 | 11 41 21.5 | -36 24 35 | 14.23 | 12.19 | 10.11 | 13.10 | 11.79 | 10.10 | /40 | 8.49 | 7.97 | 7.70 | * | ... | 13.10 | 0.171 |
| GJ1148 | 1 | 11 41 44.6 | +42 45 07 | ... | ... | ... | 11.92 | 10.73 | 9.17 | /37 | 7.61 | 7.07 | 6.82 | * | ... | 11.92 | 0.314 |
| GJ0436 | 1 | 11 42 11.0 | +26 42 23 | ... | ... | ... | 10.65 | 9.58 | 8.24 | /37 | 6.90 | 6.32 | 6.07 | * | ... | 10.65 | 0.423 |
| UPM1142-6440 | 1 | 11 42 29.9 | -64 40 34 | 16.07 | 14.08 | 11.42 | 15.21 | 13.84 | 12.06 | /40 | 10.39 | 9.85 | 9.48 | ... | ... | ... | ... |
| GJ0438 | 1 | 11 43 19.8 | -51 50 26 | 10.62 | 7.89 | 7.12 | 10.35 | 9.36 | 8.27 | /26 | 7.14 | 6.58 | 6.32 | * | ... | 10.37 | 0.475 |
| SCR1144-4302 | 1 | 11 44 24.9 | -43 02 54 | 19.60 | 17.50 | 14.39 | 18.82 | 16.61 | 14.41 | /40 | 12.17 | 11.56 | 11.20 | ... | ... | ... | ... |
| LP793-033(A) | 2(1) | 11 45 34.5 | -20 21 12 | 12.64 | 10.57 | 9.38 | 11.78 | 10.76 | 9.53 | /40 | 8.31 | 7.71 | 7.44 | * | ... | 11.78 | 0.455 |
| SIP1145-4055 | 1 | 11 45 35.4 | -40 55 59 | 15.41 | 13.13 | 10.75 | ... | ... | ... | ... | 9.70 | 9.10 | 8.79 | ... | ... | ... | ... |
| LP793-034(B) | 0(1) | 11 45 35.4 | -20 21 05 | ... | ... | ... | 17.94 | 16.06 | 13.86 | 3/1 | 11.73 | 11.12 | 10.78 | * | 6.16 | 17.94 | 0.095 |
| GJ0443 | 1 | 11 46 42.9 | -14 00 52 | 12.06 | 9.84 | 8.45 | 11.69 | 10.64 | 9.28 | /2 | 7.97 | 7.28 | 7.07 | * | ... | 11.69 | 0.469 |
| GJ0445 | 1 | 11 47 41.3 | +78 41 28 | ... | ... | ... | 10.79 | 9.63 | 8.13 | /37 | 6.72 | 6.22 | 5.95 | * | ... | 10.79 | 0.267 |
| GJ0447 | 1 | 11 47 44.4 | +00 48 16 | ... | ... | ... | 11.160 | 9.850 | 8.172 | /2 | 6.51 | 5.95 | 5.65 | * | ... | 11.16 | 0.165 |
| SCR1147-5504 | 1 | 11 47 52.5 | -55 04 12 | 14.96 | 12.23 | 10.25 | 13.72 | 12.54 | 11.06 | /39 | 9.67 | 9.08 | 8.81 | ... | ... | ... | ... |
| LHS2460 | 1 | 11 48 19.4 | -11 17 14 | 13.80 | 11.92 | 9.84 | 12.99 | 11.89 | 10.47 | /23 | 9.03 | 8.43 ^a | 8.17 | ... | ... | ... | ... |
| G010-052 | 1 | 11 48 35.49 | +07 41 40 | ... | ... | ... | 13.65 | 12.46 | 10.91 | 1/1 | 9.48 | 8.88 | 8.60 | * | ... | 13.65 | 0.275 |
| GJ1151 | 1 | 11 50 57.7 | +48 22 39 | ... | ... | ... | 13.24 | 11.91 | 10.18 | /37 | 8.49 | 7.95 | 7.64 | * | ... | 13.24 | 0.158 |
| GJ0450 | 1 | 11 51 07.3 | +35 16 19 | ... | ... | ... | 9.77 | 8.79 | 7.67 | 1/1 | 6.42 | 5.83 | 5.61 | * | ... | 9.77 | 0.487 |
| LP613-062 | 1 | 11 51 55.3 | -01 31 32 | 16.57 | 14.19 | 11.59 | 15.64 | 14.23 | 12.39 | /24 | 10.54 | 9.99 | 9.64 | ... | ... | ... | ... |
| LTT04404 | 1 | 11 51 55.4 | -27 29 10 | 12.37 | 10.23 | 8.77 | ... | ... | ... | ... | 8.50 | 7.88 ^a | 7.67 | ... | ... | ... | ... |
| LP961-051 | 1 | 11 52 35.6 | -35 09 43 | 13.89 | 11.72 | 10.17 | ... | ... | ... | ... | 9.39 | 8.69 | 8.50 | ... | ... | ... | ... |
| LHS0317 | 1 | 11 53 12.4 | -31 23 56 | 14.65 | 12.55 | 10.25 | 13.65 | 12.42 | 10.80 | /40 | 9.31 | 8.78 | 8.56 | ... | ... | ... | ... |

| | | | | | | | | | | | | | | | | | |
|--------------|------|------------|-----------|--------|--------|--------|--------|--------|--------|-----|-------|--------------------|-------|-----|------|-------|-------|
| GJ0452 | 1 | 11 53 16.1 | -07 22 28 | 12.38 | 10.84 | 8.75 | 11.86 | 10.83 | 9.55 | /2 | 8.30 | 7.70 | 7.45 | * | ... | 11.86 | 0.442 |
| LHS2471 | 1 | 11 53 54.2 | +06 59 06 | ... | ... | ... | 18.110 | 16.000 | 14.150 | /3 | 11.26 | 10.66 | 10.26 | * | ... | 18.11 | 0.087 |
| GJ0452.1 | 1 | 11 54 08.0 | +09 48 12 | ... | ... | ... | 12.810 | 11.605 | 10.116 | /2 | 8.70 | 8.19 | 7.87 | * | ... | 12.81 | 0.233 |
| LP961-053 | 1 | 11 54 18.4 | -37 33 10 | 12.48 | 10.31 | 9.19 | ... | ... | ... | ... | 8.48 | 7.88 | 7.62 | ... | ... | ... | ... |
| LP851-346 | 1 | 11 55 42.9 | -22 24 59 | 19.35 | 16.83 | 13.20 | 18.18 | 15.97 | 13.50 | /9 | 10.93 | 10.30 | 9.88 | * | ... | 18.25 | 0.081 |
| LHS2476 | 1 | 11 55 44.3 | -18 54 32 | 15.24 | 13.09 | 10.91 | 14.25 | 13.04 | 11.48 | /37 | 9.97 | 9.40 | 9.09 | ... | ... | ... | ... |
| GJ2086 | 1 | 11 55 49.2 | -38 16 49 | 12.90 | 10.81 | 9.59 | 11.96 | 10.98 | 9.91 | /20 | 8.77 | 8.18 | 7.95 | * | ... | 11.96 | 0.495 |
| LHS2482 | 1 | 11 57 32.8 | +11 49 39 | ... | ... | ... | 11.84 | 10.82 | 9.64 | 2/1 | 8.43 | 7.79 | 7.57 | * | ... | 11.84 | 0.511 |
| SCR1157-0149 | 1 | 11 57 45.6 | -01 49 03 | 17.29 | 15.13 | 12.62 | 15.99 | 14.54 | 12.68 | /39 | 10.91 | 10.35 | 10.02 | * | ... | 15.99 | 0.129 |
| LP851-399 | 1 | 11 57 53.5 | -23 49 01 | 15.76 | 13.55 | 11.31 | 14.77 | 13.51 | 11.84 | /25 | 10.22 | 9.62 | 9.36 | ... | ... | ... | ... |
| RXJ1159-5247 | 1 | 11 59 27.4 | -52 47 19 | 21.00 | 17.64 | 13.74 | 19.14 | 16.92 | 14.49 | /40 | 11.43 | 10.76 | 10.32 | * | ... | 19.14 | 0.075 |
| L325-274 | 1 | 12 00 22.9 | -49 31 14 | 13.07 | 10.71 | 8.83 | ... | ... | ... | ... | 8.68 | 8.08 | 7.87 | ... | ... | ... | ... |
| LHS5205 | 2 | 12 00 36.9 | -13 49 36 | 13.18J | 11.19J | 9.28J | 12.74J | 11.59J | 10.11J | /34 | 8.85 | 8.22 | 7.93 | ... | ... | ... | ... |
| L829-010 | 2 | 12 01 40.8 | -12 13 54 | 13.10J | 11.16J | 9.54J | 12.34J | 11.30J | 9.96J | /34 | 8.69 | 8.10 | 7.87 | ... | ... | ... | ... |
| GJ2088 | 2 | 12 02 13.2 | -38 00 29 | 11.46J | 9.17J | 8.12J | 10.52J | 9.60J | 8.65J | /20 | 7.61J | 6.95J | 6.78J | ... | ... | ... | ... |
| LP794-013 | 1 | 12 02 16.9 | -16 22 04 | 14.02 | 11.97 | 10.21 | ... | ... | ... | ... | 9.28 | 8.65 | 8.38 | ... | ... | ... | ... |
| GJ0455B | 0 | 12 02 19.5 | +28 35 33 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.00 | 13.61 | 0.274 |
| GJ0455A | 2 | 12 02 19.5 | +28 35 33 | ... | ... | ... | 12.86J | 11.74J | 10.37J | /37 | 9.13J | 8.61J | 8.39J | * | ... | 13.61 | 0.274 |
| SIP1203-4023 | 1 | 12 03 51.3 | -40 23 42 | 16.15 | 14.08 | 11.63 | ... | ... | ... | ... | 10.24 | 9.69 | 9.40 | ... | ... | ... | ... |
| LHS2506 | 1 | 12 03 58.3 | -33 01 27 | 14.94 | 12.70 | 10.62 | ... | ... | ... | ... | 9.53 | 9.07 | 8.74 | ... | ... | ... | ... |
| LP852-005 | 2(1) | 12 05 12.9 | -25 33 54 | 13.89 | 11.71 | 10.04 | 13.10 | 12.02 | 10.65 | /23 | 9.27 | 8.66 | 8.40 | ... | ... | ... | ... |
| L397-071 | 1 | 12 06 39.1 | -44 27 54 | 13.46 | 11.37 | 9.51 | ... | ... | ... | ... | 8.68 | 8.08 | 7.83 | ... | ... | ... | ... |
| SCR1206-3500 | 1 | 12 06 58.5 | -35 00 52 | 15.55 | 13.46 | 11.19 | 14.67 | 13.35 | 11.66 | /39 | 10.01 | 9.40 | 9.13 | * | ... | 14.67 | 0.212 |
| GJ0456 | 1 | 12 08 22.2 | -00 28 58 | 12.34 | 9.92 | 9.37 | 11.28 | 10.38 | 9.50 | /37 | 8.40 | 7.81 | 7.59 | * | ... | 11.24 | 0.598 |
| LP734-030 | 1 | 12 08 47.1 | -10 16 00 | 13.39 | 11.39 | 9.63 | 12.65 | 11.60 | 10.27 | /23 | 8.96 | 8.30 | 8.04 | ... | ... | ... | ... |
| SCR1209-3815 | 1 | 12 09 23.6 | -38 15 43 | 16.38 | 14.15 | 11.82 | 15.05 | 13.69 | 11.95 | /40 | 10.33 | 9.75 | 9.45 | ... | ... | ... | ... |
| LP908-025 | 1 | 12 09 54.1 | -29 20 16 | 16.15 | 14.12 | 11.62 | 14.72 | 13.49 | 11.85 | /24 | 10.22 | 9.64 | 9.34 | ... | ... | ... | ... |
| LHS2520 | 1 | 12 10 05.6 | -15 04 17 | 12.89 | 10.76 | 8.82 | 12.09 | 10.88 | 9.30 | /26 | 7.77 | 7.14 | 6.86 | * | ... | 12.09 | 0.325 |
| LHS2521 | 1 | 12 10 11.6 | -31 58 24 | 17.87 | 15.69 | 13.00 | ... | ... | ... | ... | 11.11 | 10.53 | 10.22 | ... | ... | ... | ... |
| LP734-034 | 1 | 12 10 28.4 | -13 10 24 | 14.66 | 12.52 | 10.46 | 13.83 | 12.52 | 10.85 | /40 | 9.29 | 8.68 | 8.41 | ... | ... | ... | ... |
| SCR1210-2213 | 2 | 12 10 42.2 | -22 13 09 | 13.56J | 11.41J | 9.92J | 13.05J | 11.91J | 10.43J | /40 | 9.03 | 8.66 | 8.37 | ... | ... | ... | ... |
| L758-108(A) | 2(1) | 12 11 11.8 | -19 57 38 | 12.50 | 10.32 | 8.72 | 11.68 | 10.59 | 9.22 | /33 | 7.90 | 7.36 | 7.04 | * | ... | 11.69 | 0.362 |
| L758-107(B) | 0(1) | 12 11 17.0 | -19 58 21 | ... | ... | ... | 12.63 | 11.47 | 9.98 | 2/1 | 8.60 | 8.01 | 7.74 | * | 0.94 | 12.63 | 0.269 |
| GJ0458B | 0(1) | 12 12 20.8 | +54 29 08 | ... | ... | ... | 13.33 | 12.15 | 10.63 | /35 | 6.88 | 6.25 | 6.06 | * | 3.54 | 13.33 | 0.247 |
| GJ0458A | 2(1) | 12 12 20.8 | +54 29 08 | ... | ... | ... | 9.79 | 8.91 | 8.00 | /35 | 6.88 | 6.25 | 6.06 | * | ... | 9.79 | 0.661 |
| LP852-057 | 1 | 12 13 32.9 | -25 55 25 | 12.24 | 10.09 | 8.98 | 11.47 | 10.51 | 9.49 | /20 | 8.38 | 7.74 | 7.55 | * | ... | 11.47 | 0.549 |
| SCR1214-2345 | 1 | 12 14 08.6 | -23 45 17 | ... | ... | ... | 13.96 | 12.57 | 10.78 | 2/1 | 10.32 | 9.75 | 9.44 | * | ... | 13.96 | 0.154 |
| GJ1154B | 0 | 12 14 16.6 | +00 37 26 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.00 | 14.48 | 0.120 |
| GJ1154A | 2 | 12 14 16.6 | +00 37 26 | ... | ... | ... | 13.73J | 12.30J | 10.47J | /37 | 8.46J | 7.86J | 7.54J | * | ... | 14.48 | 0.120 |
| SCR1214-4603 | 1 | 12 14 40.0 | -46 03 14 | 16.80 | 14.53 | 11.60 | 15.66 | 14.14 | 12.23 | /39 | 10.32 | 9.75 | 9.44 | * | ... | 15.66 | 0.122 |
| GJ1155B | 0 | 12 16 51.8 | +02 58 02 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.00 | 15.32 | 0.159 |
| GJ1155A | 2 | 12 16 51.8 | +02 58 02 | ... | ... | ... | 13.16J | 12.08J | 10.64J | /37 | 9.23J | 8.67J | 8.42J | * | ... | 15.32 | 0.315 |
| SCR1217-7810 | 1 | 12 17 26.9 | -78 10 46 | 17.55 | 15.69 | 13.15 | 16.43 | 14.92 | 13.05 | /39 | 11.20 | 10.64 | 10.36 | ... | ... | ... | ... |
| LP674-104 | 1 | 12 18 34.9 | -06 25 23 | 14.89 | 12.72 | 10.74 | ... | ... | ... | ... | 9.55 | 8.97 | 8.71 | ... | ... | ... | ... |
| GJ1156 | 1 | 12 18 59.4 | +11 07 34 | ... | ... | ... | 13.80 | 12.31 | 10.35 | /37 | 8.53 | 7.88 | 7.57 | * | ... | 13.80 | 0.124 |
| LP052-034 | 1 | 12 19 48.8 | -23 32 05 | 16.58 | 14.36 | 11.69 | ... | ... | ... | ... | 10.49 | 9.90 | 9.58 | ... | ... | ... | ... |
| LP794-053 | 1 | 12 20 05.1 | -18 13 00 | 16.77 | 14.40 | 11.94 | ... | ... | ... | ... | 10.56 | 9.99 | 9.62 | ... | ... | ... | ... |
| L018-022 | 1 | 12 20 33.8 | -82 25 58 | 12.89 | 10.74 | 9.10 | 11.96 | 10.76 | 9.20 | /40 | 7.70 | 7.14 | 6.84 | * | ... | 11.96 | 0.317 |
| L038-047 | 1 | 12 22 06.8 | -78 38 27 | 13.08 | 10.97 | 9.36 | 12.13 | 11.04 | 9.69 | /40 | 8.36 | 7.75 | 7.48 | ... | ... | ... | ... |
| GJ0463 | 1 | 12 23 00.1 | +64 01 51 | ... | ... | ... | 11.59 | 10.56 | 9.23 | /37 | 7.94 | 7.34 | 7.12 | * | ... | 11.59 | 0.463 |
| GJ1157 | 1 | 12 23 01.4 | -46 37 09 | 14.39 | 12.19 | 9.94 | 13.59 | 12.35 | 10.71 | /26 | 9.17 | 8.63 | 8.36 | * | ... | 13.59 | 0.231 |
| LTT17123B | 0 | 12 23 33.1 | +67 11 17 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.26 | 12.12 | 0.323 |
| LTT17123A | 2 | 12 23 33.1 | +67 11 17 | ... | ... | ... | 11.23J | 10.17J | 8.87J | /32 | 7.60J | 7.09J | 6.81J | * | ... | 11.86 | 0.349 |
| 2MA1223-4606 | 2 | 12 23 38.6 | -46 06 20 | 14.94J | 12.43J | 10.89J | ... | ... | ... | ... | 9.53J | 8.94J | 8.70J | ... | ... | ... | ... |
| GJ0464 | 1 | 12 23 53.5 | +12 34 48 | ... | ... | ... | 10.390 | 9.485 | 8.587 | /2 | 7.48 | 6.86 | 6.63 | * | ... | 10.39 | 0.669 |
| LHS0325a | 1 | 12 23 56.2 | -27 57 46 | 19.35 | 17.15 | 14.15 | 18.39 | 16.42 | 14.20 | /12 | 11.98 | 11.40 | 11.07 | ... | ... | ... | ... |
| SCR1224-5339 | 1 | 12 24 24.4 | -53 39 09 | 16.52 | 14.04 | 11.50 | 15.31 | 13.95 | 12.19 | /39 | 10.51 | 9.93 | 9.65 | ... | ... | ... | ... |
| GJ0465 | 1 | 12 24 52.2 | -12 38 36 | 12.14 | 9.92 | 8.30 | 11.27 | 10.23 | 8.97 | /40 | 7.73 | 7.25 | 6.95 | * | ... | 20.52 | 0.075 |
| BRI1222-1222 | 1 | 12 24 52.5 | -18 14 32 | 21.83 | 18.58 | 15.26 | 20.41 | 18.01 | 15.60 | /9 | 12.57 | 11.82 | 11.35 | * | ... | 11.29 | 0.327 |
| LHS2557 | 1 | 12 25 32.0 | -15 59 42 | 15.77 | 13.65 | 11.21 | 15.19 | 13.76 | 11.85 | /24 | 9.95 | 9.36 | 9.00 | ... | ... | ... | ... |
| LP735-048 | 1 | 12 26 44.1 | -12 29 18 | 12.82 | 10.54 | 8.85 | 12.59 | 11.49 | 10.08 | /23 | 8.87 | 8.12 | 7.87 | ... | ... | ... | ... |
| LP852-050 | 1 | 12 27 02.2 | -25 45 01 | 16.92 | 14.75 | 12.25 | ... | ... | ... | ... | 10.84 | 10.27 | 9.93 | ... | ... | ... | ... |
| LP735-011 | 2 | 12 28 53.0 | -10 39 51 | 10.88J | 8.87J | 7.35J | 10.97J | 9.93J | 8.67J | /40 | 7.65 | 7.19 ^a | 6.79 | ... | ... | ... | ... |
| GJ0469B | 0 | 12 28 57.5 | +08 25 31 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.59 | 13.87 | 0.182 |
| GJ0469A | 2 | 12 28 57.5 | +08 25 31 | ... | ... | ... | 12.05J | 10.85J | 9.30J | 3/1 | 7.84J | 7.20J ^a | 6.96J | * | ... | 12.28 | 0.315 |
| LP377-100 | 1 | 12 29 27.1 | +22 59 47 | ... | ... | ... | 14.18 | 12.95 | 11.36 | /31 | 9.82 | 9.27 | 9.00 | * | ... | 14.18 | 0.225 |

| | | | | | | | | | | | | | | | | | |
|---------------|------|------------|-----------|--------|--------|--------|--------|--------|--------|-----|-------|--------------------|--------------------|-----|------|-------|-------|
| GJ1158 | 1 | 12 29 34.5 | -55 59 37 | 14.53 | 12.41 | 10.30 | 13.26 | 12.02 | 10.41 | /16 | 8.89 | 8.35 | 8.07 | * | ... | 13.26 | 0.223 |
| LHS2567(A) | 2(1) | 12 29 54.2 | -05 27 24 | 12.75J | 10.73J | 8.72J | 13.08 | 11.87 | 10.33 | /26 | 8.82 | 8.27 ^a | 7.96 | * | ... | 13.08 | 0.333 |
| LHS2568(B) | 0(1) | 12 29 54.7 | -05 27 20 | ... | ... | ... | 14.21 | 12.96 | 11.37 | 3/1 | 9.79 | 9.24 | 8.92 | * | 1.13 | 14.21 | 0.228 |
| SCR1230-3411B | 0 | 12 30 01.8 | -34 11 24 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.12 | 16.42 | 0.117 |
| SCR1230-3411A | 2 | 12 30 01.8 | -34 11 24 | 15.29J | 13.18J | 10.92J | 14.16J | 12.81J | 11.07J | /39 | 9.34J | 8.77J ^a | 8.44J | * | ... | 14.30 | 0.204 |
| L194-073 | 1 | 12 30 16.6 | -57 37 20 | 14.93 | 12.83 | 11.00 | ... | ... | ... | ... | 9.69 | 9.03 | 8.79 | ... | ... | ... | ... |
| L327-030 | 1 | 12 30 44.9 | -46 22 43 | 12.04 | 9.85 | 8.63 | ... | ... | ... | ... | 8.37 | 7.72 | 7.49 | ... | ... | ... | ... |
| GJ0471 | 1 | 12 31 15.8 | +08 48 38 | ... | ... | ... | 9.660 | 8.760 | 7.850 | /2 | 6.78 | 6.09 | 5.89 | * | ... | 9.66 | 0.639 |
| LP735-016 | 1 | 12 32 44.5 | -15 30 55 | 18.14 | 15.85 | 13.47 | ... | ... | ... | ... | 11.38 | 10.85 | 10.46 | ... | ... | ... | ... |
| GJ0473B | 0 | 12 33 16.3 | +09 01 16 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.38 | 13.71 | 0.108 |
| GJ0473A | 2 | 12 33 16.3 | +09 01 16 | ... | ... | ... | 12.75J | 11.44J | 9.74J | /13 | 7.00J | 6.40J | 6.04J | * | ... | 13.33 | 0.115 |
| L327-121 | 1 | 12 33 33.1 | -48 26 11 | 13.07 | 10.94 | 8.99 | 12.05 | 10.90 | 9.43 | /40 | 8.01 | 7.38 | 7.14 | ... | ... | ... | ... |
| LP735-019 | 1 | 12 34 44.5 | -10 47 41 | 15.12 | 12.88 | 11.10 | ... | ... | ... | ... | 9.92 | 9.31 | 9.05 | ... | ... | ... | ... |
| GJ0476 | 1 | 12 35 00.7 | +09 49 42 | ... | ... | ... | 11.410 | 10.410 | 9.196 | /2 | 8.00 | 7.37 | 7.15 | * | ... | 11.41 | 0.487 |
| GJ0477B | 0 | 12 35 58.4 | -45 56 20 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.00 | 13.28 | 0.284 |
| GJ0477A | 2 | 12 35 58.4 | -45 56 21 | 11.62J | 9.64J | 8.01J | 11.12J | 10.12J | 8.93J | /2 | 7.67J | 7.03J | 6.84J | * | ... | 11.28 | 0.503 |
| LP795-038 | 1 | 12 37 21.6 | -20 52 36 | 14.05 | 11.78 | 9.83 | 13.28 | 12.10 | 10.54 | /23 | 8.97 | 8.32 | 8.09 | ... | ... | ... | ... |
| LHS5221 | 1 | 12 37 21.7 | -32 00 37 | 16.17 | 13.84 | 11.10 | ... | ... | ... | ... | 10.17 | 9.61 | 9.29 | ... | ... | ... | ... |
| GJ0479 | 1 | 12 37 52.2 | -52 00 06 | 11.57 | 9.31 | 7.53 | 10.66 | 9.57 | 8.21 | /40 | 6.86 | 6.29 | 6.02 | * | ... | 10.67 | 0.409 |
| 2MA1238-2703 | 1 | 12 38 37.1 | -27 03 35 | 13.44 | 11.34 | 9.79 | ... | ... | ... | ... | 8.73 | 8.08 | 7.84 | ... | ... | ... | ... |
| GJ1162 | 1 | 12 38 47.3 | -04 19 17 | 14.59 | 11.99 | 10.07 | 13.56 | 12.37 | 10.82 | /23 | 9.33 | 8.76 | 8.46 | * | ... | 13.56 | 0.273 |
| LHS0337 | 1 | 12 38 49.1 | -38 22 54 | 13.67 | 11.44 | 9.08 | 12.75 | 11.44 | 9.74 | /13 | 8.17 | 7.76 ^a | 7.39 | * | ... | 12.75 | 0.156 |
| LP735-024 | 1 | 12 38 52.2 | -10 02 40 | 15.26 | 13.07 | 11.13 | ... | ... | ... | ... | 9.98 | 9.43 | 9.13 | ... | ... | ... | ... |
| GJ0480 | 1 | 12 38 52.4 | +11 41 46 | ... | ... | ... | 11.510 | 10.406 | 8.983 | /2 | 7.58 | 6.94 | 6.69 | * | ... | 11.51 | 0.407 |
| G123-049 | 1 | 12 39 04.7 | +47 02 23 | ... | ... | ... | 12.14 | 11.10 | 9.84 | /32 | 8.65 | 7.99 | 7.79 | * | ... | 12.14 | 0.444 |
| CE258 | 1 | 12 39 17.5 | -34 27 25 | 15.83 | 13.67 | 11.87 | ... | ... | ... | ... | 10.30 | 9.75 | 9.48 | ... | ... | ... | ... |
| LHS2597 | 1 | 12 39 36.4 | -26 58 11 | 16.68 | 14.28 | 11.42 | ... | ... | ... | ... | 10.04 | 9.58 | 9.23 | ... | ... | ... | ... |
| GJ0480.1 | 1 | 12 40 46.3 | -43 33 59 | 13.10 | 10.57 | 8.79 | 12.24 | 11.06 | 9.58 | /40 | 8.22 | 7.70 | 7.41 | * | ... | 12.24 | 0.218 |
| SCR1241-4655 | 1 | 12 41 03.3 | -46 55 23 | 12.84 | 10.44 | 9.07 | 12.14 | 11.12 | 9.89 | /40 | 8.68 | 8.09 ^a | 7.81 | ... | ... | ... | ... |
| LHS5224 | 1 | 12 41 26.6 | -56 42 00 | 13.22 | 11.37 | 9.87 | ... | ... | ... | ... | 8.97 | 8.27 | 8.02 | ... | ... | ... | ... |
| LHS2608 | 1 | 12 42 19.7 | -71 38 20 | 14.03 | 12.42 | 10.50 | ... | ... | ... | ... | 9.17 | 8.54 ^a | 8.22 | ... | ... | ... | ... |
| LP796-001 | 1 | 12 43 58.9 | -16 14 35 | 15.85 | 13.66 | 11.23 | ... | ... | ... | ... | 9.78 | 9.20 | 8.90 | ... | ... | ... | ... |
| LHS5226 | 1 | 12 44 00.7 | -11 10 30 | 15.40 | 13.22 | 10.94 | 14.19 | 12.85 | 11.13 | /40 | 9.52 | 8.97 | 8.67 | * | ... | 14.19 | 0.167 |
| LP736-031 | 1 | 12 44 31.0 | -11 42 15 | 15.33 | 13.31 | 11.19 | ... | ... | ... | ... | 9.93 | 9.38 | 9.07 | ... | ... | ... | ... |
| LTT04866 | 1 | 12 44 37.6 | -41 55 38 | 12.19 | 9.89 | 8.94 | ... | ... | ... | ... | 8.45 | 7.88 | 7.67 | ... | ... | ... | ... |
| SCR1245-5506 | 1 | 12 45 52.5 | -55 06 50 | 14.84 | 12.82 | 10.34 | 13.66 | 12.32 | 10.61 | /39 | 8.99 | 8.43 | 8.12 | * | ... | 13.66 | 0.160 |
| LHS2632 | 1 | 12 46 51.0 | +31 47 57 | ... | ... | ... | 18.91 | 16.89 | 14.67 | 1/1 | 12.23 | 11.58 | 11.21 | * | ... | 18.91 | 0.085 |
| LP796-006 | 1 | 12 46 59.8 | -19 02 30 | 13.08 | 10.94 | 9.60 | ... | ... | ... | ... | 8.73 | 8.05 | 7.81 | ... | ... | ... | ... |
| LHS2633 | 1 | 12 47 00.9 | +46 37 33 | ... | ... | ... | 11.76 | 10.71 | 9.39 | /37 | 8.10 | 7.47 | 7.22 | * | ... | 11.76 | 0.479 |
| LHS2634 | 1 | 12 47 09.8 | -03 34 18 | 13.36 | 11.02 | 9.60 | 12.60 | 11.51 | 10.11 | /40 | 8.77 | 8.16 | 7.89 | * | ... | 12.60 | 0.392 |
| LP853-034 | 1 | 12 47 10.0 | -22 22 37 | 13.30 | 10.97 | 9.53 | 12.29 | 11.25 | 9.99 | /23 | 8.69 | 8.10 | 7.84 | ... | ... | ... | ... |
| SCR1247-0525 | 1 | 12 47 14.7 | -05 25 13 | 15.90 | 13.38 | 10.92 | 14.78 | 13.45 | 11.73 | /40 | 10.13 | 9.62 | 9.29 | * | ... | 14.78 | 0.180 |
| LHS5228 | 1 | 12 47 46.9 | -08 36 17 | 12.98 | 10.78 | 9.73 | ... | ... | ... | ... | 8.85 | 8.22 | 8.00 | ... | ... | ... | ... |
| GJ0486 | 1 | 12 47 56.6 | +09 45 05 | ... | ... | ... | 11.390 | 10.217 | 8.680 | /2 | 7.20 | 6.67 | 6.36 | * | ... | 11.39 | 0.302 |
| GJ0487B | 0 | 12 49 02.7 | +66 06 36 | ... | ... | ... | ... | ... | ... | ... | 6.88 | 6.30 | 6.07 | * | 0.51 | 12.51 | 0.239 |
| GJ0487C | 0 | 12 49 02.7 | +66 06 36 | ... | ... | ... | ... | ... | ... | ... | 6.88 | 6.30 | 6.07 | * | 0.00 | 12.00 | 0.285 |
| GJ0487A | 3 | 12 49 02.7 | +66 06 36 | ... | ... | ... | 10.95J | 9.79J | 8.35J | 1/1 | 6.88J | 6.30J | 6.07J | * | ... | 12.00 | 0.285 |
| GJ0488 | 1 | 12 50 43.6 | -00 46 05 | 9.24 | 7.40 | 6.26 | 8.47 | 7.59 | 6.75 | /19 | 5.75 | 5.22 ^a | 4.88 | ... | ... | ... | ... |
| DEN1250-2121 | 1 | 12 50 52.7 | -21 21 14 | 19.40 | 16.95 | 13.34 | 18.36 | 16.15 | 13.78 | /9 | 11.16 | 10.55 | 10.13 | * | ... | 18.36 | 0.088 |
| LP909-045 | 1 | 12 52 16.8 | -32 27 08 | 12.88 | 10.92 | 9.71 | ... | ... | ... | ... | 8.87 | 8.18 | 8.02 | ... | ... | ... | ... |
| LTT04925 | 1 | 12 53 19.4 | -05 19 53 | 13.71 | 11.52 | 9.94 | ... | ... | ... | ... | 8.92 | 8.37 | 8.12 | ... | ... | ... | ... |
| L256-005 | 1 | 12 53 47.8 | -50 49 35 | 13.57 | 11.85 | 10.22 | ... | ... | ... | ... | 9.19 | 8.57 | 8.35 | ... | ... | ... | ... |
| LHS2651 | 1 | 12 55 57.4 | +50 55 22 | ... | ... | ... | 14.42 | 13.25 | 11.77 | /37 | 10.38 | 9.88 | 9.61 | * | ... | 14.42 | 0.209 |
| LP736-015 | 1 | 12 56 02.1 | -12 57 22 | 18.86 | 16.35 | 12.56 | ... | ... | ... | ... | 11.02 | 10.47 | 10.04 | ... | ... | ... | ... |
| LP854-003 | 1 | 12 56 13.3 | -22 04 59 | 13.04 | 10.79 | 9.28 | 12.54 | 11.47 | 10.16 | /23 | 8.87 | 8.33 | 8.05 | ... | ... | ... | ... |
| GJ0490B | 0 | 12 57 39.3 | +35 13 19 | ... | ... | ... | 13.20J | 11.74J | 10.48J | /35 | 8.87J | 8.28J | 8.02J | * | 3.22 | 13.90 | 0.244 |
| GJ0490C | 0 | 12 57 39.3 | +35 13 19 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 3.33 | 14.01 | 0.235 |
| GJ0490D | 0 | 12 57 40.2 | +35 13 30 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 3.44 | 14.12 | 0.226 |
| GJ0490A | 4(1) | 12 57 40.2 | +35 13 30 | ... | ... | ... | 10.68 | 9.73 | 8.66 | /35 | 7.40 | 6.73 | 6.55 | * | ... | 10.68 | 0.609 |
| SIP1259-4336 | 1 | 12 59 04.8 | -43 36 25 | 19.02 | 16.71 | 12.80 | 18.01 | 15.74 | 13.29 | /40 | 10.53 | 9.95 | 9.52 | * | ... | 18.01 | 0.077 |
| LP854-057 | 1 | 12 59 41.7 | -26 50 16 | 14.85 | 12.69 | 10.78 | ... | ... | ... | ... | 9.64 | 9.07 | 8.78 | ... | ... | ... | ... |
| LTT04969 | 1 | 13 00 04.0 | -05 37 48 | 13.42 | 11.07 | 9.62 | 12.57 | 11.45 | 10.01 | /23 | 8.66 | 8.04 | 7.78 | ... | ... | ... | ... |
| HIP063480 | 1 | 13 00 25.8 | -34 36 24 | ... | ... | ... | 10.63 | 9.69 | 8.70 | /20 | 7.60 | 6.98 | 6.72 | * | ... | 10.63 | 0.614 |
| GJ0493.1 | 1 | 13 00 33.5 | +05 41 08 | ... | ... | ... | 13.410 | 12.051 | 10.286 | /2 | 8.55 | 7.97 | 7.66 | * | ... | 13.41 | 0.150 |
| GJ0494C | 0BD | 13 00 41.7 | +12 21 15 | ... | ... | ... | ... | ... | ... | ... | 16.69 | 17.01 | 16.90 ^a | * | ... | ... | ... |
| L256-025 | 1 | 13 00 43.3 | -52 09 41 | 13.03 | 11.02 | 9.64 | ... | ... | ... | ... | 8.77 | 8.13 | 7.94 | ... | ... | ... | ... |

| | | | | | | | | | | | | | | | | | |
|--------------|------|------------|-----------|--------|--------|-------|--------|--------|--------|-----|--------------------|-------------------|-------|-----|------|-------|-------|
| GJ0521A | 2 | 13 39 24.1 | +46 11 11 | ... | ... | ... | 10.25J | 9.31J | 8.24J | 1/1 | 7.05J | 6.51J | 6.28J | * | ... | 10.34 | 0.527 |
| GJ0521.1 | 1 | 13 40 07.1 | -04 11 10 | 10.41 | 8.13 | 7.51 | 9.63 | 8.76 | 7.92 | /2 | 6.90 | 6.25 ^a | 6.04 | ... | ... | ... | ... |
| GJ1174 | 1 | 13 40 08.8 | +43 46 38 | ... | ... | ... | 12.76 | 11.57 | 10.05 | /37 | 8.60 | 8.04 | 7.79 | * | ... | 12.76 | 0.305 |
| LHS2777 | 1 | 13 40 18.0 | +47 12 30 | ... | ... | ... | 15.42 | 14.09 | 12.38 | 1/1 | 10.69 | 10.15 | 9.86 | * | ... | 15.42 | 0.159 |
| LTT05298 | 1 | 13 40 45.5 | -31 10 15 | 13.91 | 11.59 | 10.30 | ... | ... | ... | ... | 9.15 | 8.46 | 8.22 | ... | ... | ... | ... |
| LHS0358 | 1 | 13 41 10.4 | +30 01 53 | ... | ... | ... | 15.87 | 14.53 | 12.82 | 1/1 | 11.18 | 10.74 | 10.48 | * | ... | 15.87 | 0.135 |
| LHS2783 | 1 | 13 42 09.9 | -16 00 23 | 13.57 | 11.55 | 9.59 | 13.42 | 12.14 | 10.52 | /40 | 8.97 | 8.39 | 8.09 | * | ... | 13.42 | 0.274 |
| LHS2784 | 1 | 13 42 43.2 | +33 17 24 | ... | ... | ... | 11.97 | 10.79 | 9.27 | /37 | 7.79 | 7.21 | 6.98 | * | ... | 11.97 | 0.267 |
| SCR1343-4002 | 1 | 13 43 41.5 | -40 02 29 | 16.44 | 14.05 | 11.37 | 15.07 | 13.69 | 11.89 | /40 | 10.14 | 9.61 | 9.25 | * | ... | 15.07 | 0.148 |
| LP855-060 | 1 | 13 44 20.9 | -26 18 35 | 14.51 | 12.48 | 10.42 | ... | ... | ... | ... | 9.15 | 8.61 ^a | 8.29 | ... | ... | ... | ... |
| LHS2789B | 0 | 13 44 27.6 | +51 41 04 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.40 | 13.54 | 0.319 |
| LHS2789A | 2 | 13 44 27.6 | +51 41 04 | ... | ... | ... | 12.57J | 11.52J | 10.27J | /37 | 8.99J | 8.48J | 8.25J | * | ... | 13.14 | 0.360 |
| LP798-029 | 1 | 13 44 37.1 | -19 54 44 | 14.72 | 12.71 | 10.71 | ... | ... | ... | ... | 9.56 | 8.97 | 8.72 | ... | ... | ... | ... |
| GJ0524 | 1 | 13 44 48.8 | -54 07 18 | 13.72 | 11.15 | 9.11 | 12.46 | 11.40 | 10.12 | /2 | 8.86 | 8.30 | 8.07 | ... | ... | ... | ... |
| GJ0526 | 1 | 13 45 43.7 | +14 53 29 | ... | ... | ... | 8.46 | 7.50 | 6.39 | /37 | 5.18 | 4.78 ^a | 4.42 | * | ... | 8.46 | 0.526 |
| LHS2794 | 1 | 13 45 50.7 | -17 58 06 | 13.02 | 10.43 | 8.88 | 11.86 | 10.69 | 9.19 | /37 | 7.75 | 7.19 | 6.90 | * | ... | 11.86 | 0.299 |
| LP911-056 | 1 | 13 46 46.0 | -31 49 26 | 18.78 | 16.52 | 13.17 | ... | ... | ... | ... | 10.98 | 10.44 | 10.04 | ... | ... | ... | ... |
| LHS2804 | 1 | 13 48 40.8 | -05 17 08 | 15.89 | 13.67 | 11.53 | ... | ... | ... | ... | 10.33 | 9.70 | 9.40 | ... | ... | ... | ... |
| UPM1349-4228 | 1 | 13 49 01.0 | -42 31 10 | 14.73 | 13.76 | 13.35 | 13.27 | 12.16 | 10.78 | /40 | 9.45 | 8.86 | 8.62 | ... | ... | ... | ... |
| L039-039 | 1 | 13 49 02.5 | -79 25 54 | 12.48 | 10.24 | 8.79 | 11.70 | 10.70 | 9.52 | /40 | 8.34 | 7.69 ^a | 7.39 | ... | ... | ... | ... |
| L691-021 | 2(1) | 13 50 23.8 | -21 37 20 | 14.83 | 12.80 | 10.68 | 13.61 | 12.41 | 10.90 | /33 | 9.46 | 8.86 | 8.63 | ... | ... | ... | ... |
| LHS2813 | 1 | 13 51 21.8 | -53 32 46 | 14.28 | 12.00 | 10.00 | 12.84 | 11.73 | 10.32 | /40 | 8.93 | 8.38 | 8.12 | ... | ... | ... | ... |
| LP798-049 | 1 | 13 51 57.1 | -17 58 49 | 17.11 | 15.14 | 12.82 | ... | ... | ... | ... | 10.82 | 10.21 | 9.93 | ... | ... | ... | ... |
| LP798-051 | 1 | 13 52 53.5 | -18 20 17 | 12.76 | 10.67 | 9.31 | 11.80 | 10.80 | 9.65 | /23 | 8.46 | 7.87 | 7.61 | * | ... | 11.80 | 0.504 |
| LHS2822 | 1 | 13 53 55.6 | -20 14 43 | 13.65 | 11.45 | 9.80 | ... | ... | ... | ... | 9.03 | 8.46 | 8.21 | ... | ... | ... | ... |
| 2MA1354-7121 | 1 | 13 54 53.9 | -71 21 48 | 12.60 | 10.67 | 8.75 | 12.28 | 11.19 | 9.86 | /40 | 8.55 | 7.92 | 7.67 | ... | ... | ... | ... |
| GJ1181 | 2 | 13 55 02.6 | -29 05 26 | 10.72J | 8.65J | 7.49J | 9.52J | 8.60J | 7.64J | /20 | 6.52J | 5.84J | 5.64J | ... | ... | ... | ... |
| L070-053 | 1 | 13 55 28.0 | -73 29 41 | 11.98 | 10.27 | 9.17 | 11.36 | 10.40 | 9.30 | /40 | 8.18 | 7.58 | 7.35 | ... | ... | ... | ... |
| LTT05425 | 1 | 13 55 35.1 | -07 23 17 | 13.31 | 11.23 | 9.61 | ... | ... | ... | ... | 8.81 | 8.23 | 7.95 | ... | ... | ... | ... |
| LHS2826 | 1 | 13 56 20.6 | -28 03 50 | 16.26 | 14.23 | 12.03 | 15.26 | 13.87 | 12.14 | /6 | 10.48 | 9.88 | 9.57 | ... | ... | ... | ... |
| LP475-052 | 2(1) | 13 57 14.0 | -38 32 28 | 13.39 | 11.24 | 9.80 | ... | ... | ... | ... | 9.18 | 8.52 | 8.27 | ... | ... | ... | ... |
| SSS1358-3938 | 1 | 13 58 05.4 | -39 37 55 | 15.14 | 12.63 | 10.27 | 14.04 | 12.80 | 11.20 | /40 | 9.72 | 9.23 | 8.95 | * | ... | 14.04 | 0.153 |
| LP739-002 | 1 | 13 58 16.2 | -12 02 59 | 14.94 | 12.78 | 10.48 | 14.46 | 13.10 | 11.39 | /40 | 9.73 | 9.17 | 8.89 | * | ... | 14.46 | 0.189 |
| LP739-003 | 1 | 13 58 19.6 | -13 16 25 | 14.64 | 12.39 | 10.23 | 13.96 | 12.71 | 11.08 | /23 | 9.49 | 8.93 | 8.65 | ... | ... | ... | ... |
| LHS2836 | 1 | 13 59 10.4 | -19 50 04 | 13.98 | 11.69 | 9.52 | 12.88 | 11.60 | 9.90 | /27 | 8.33 | 7.76 ^a | 7.45 | * | ... | 12.88 | 0.219 |
| SIP1400-4109 | 1 | 14 00 49.7 | -41 09 54 | 16.24 | 13.96 | 11.44 | ... | ... | ... | ... | 10.29 | 9.71 | 9.45 | ... | ... | ... | ... |
| GJ0536 | 1 | 14 01 03.2 | -02 39 18 | 10.06 | 7.95 | 6.29 | 9.68 | 8.73 | 7.65 | /2 | 6.52 | 5.94 | 5.68 | * | ... | 9.71 | 0.538 |
| HIP068570 | 1 | 14 02 19.6 | +13 41 22 | ... | ... | ... | 10.66 | 9.76 | 8.74 | /35 | 7.56 | 6.89 | 6.71 | * | ... | 10.66 | 0.612 |
| LHS2848 | 1 | 14 02 28.9 | -21 00 37 | 14.32 | 12.21 | 10.33 | 13.19 | 12.04 | 10.56 | /37 | 9.16 | 8.60 | 8.25 | ... | ... | ... | ... |
| GJ0537B | 0 | 14 02 32.2 | +46 20 02 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.22 | 10.04 | 0.527 |
| GJ0537A | 2 | 14 02 32.2 | +46 20 02 | ... | ... | ... | 9.17J | 8.20J | 7.15J | /37 | 6.27J ^a | 5.65J | 5.39J | * | ... | 9.82 | 0.557 |
| LHS2852 | 1 | 14 02 46.7 | -24 31 50 | 13.32 | 10.53 | 9.55 | 12.13 | 11.08 | 9.85 | /40 | 8.64 | 8.10 | 7.84 | * | ... | 12.13 | 0.388 |
| LP912-046 | 1 | 14 04 03.2 | -30 00 47 | 14.53 | 12.60 | 10.80 | ... | ... | ... | ... | 9.46 | 8.83 | 8.62 | ... | ... | ... | ... |
| L106-015 | 1 | 14 04 08.2 | -66 14 38 | 14.01 | 11.98 | 10.61 | 11.59 | 10.51 | 9.14 | /40 | 7.78 | 7.15 | 6.92 | ... | ... | ... | ... |
| LP912-048 | 1 | 14 05 36.9 | -32 08 39 | 16.88 | 14.68 | 12.45 | ... | ... | ... | ... | 10.70 | 10.02 | 9.80 | ... | ... | ... | ... |
| LP679-084 | 1 | 14 06 39.3 | -05 43 29 | 14.80 | 12.72 | 10.50 | ... | ... | ... | ... | 9.57 | 8.96 | 8.68 | ... | ... | ... | ... |
| GJ0540 | 1 | 14 08 12.9 | +80 35 50 | ... | ... | ... | 10.35 | 9.40 | 8.34 | /37 | 7.18 | 6.53 | 6.33 | * | ... | 10.35 | 0.606 |
| LHS2866 | 1 | 14 08 16.9 | +75 51 14 | ... | ... | ... | 11.59 | 10.61 | 9.52 | /37 | 8.35 | 7.79 | 7.56 | * | ... | 11.59 | 0.550 |
| LP912-052 | 1 | 14 08 41.0 | -28 01 04 | 16.76 | 14.63 | 12.50 | ... | ... | ... | ... | 10.78 | 10.19 | 9.87 | ... | ... | ... | ... |
| LTT05526 | 1 | 14 09 36.5 | -41 22 28 | 15.12 | 13.08 | 11.09 | ... | ... | ... | ... | 9.83 | 9.26 | 8.99 | ... | ... | ... | ... |
| L548-010 | 1 | 14 10 57.5 | -31 17 25 | 12.06 | 9.93 | 8.43 | 10.83 | 9.85 | 8.73 | /20 | 7.55 | 6.94 | 6.69 | * | ... | 10.83 | 0.537 |
| WT0460B | 0 | 14 11 59.0 | -41 32 21 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 4.27 | 19.92 | 0.075 |
| WT0460A | 2(1) | 14 11 59.9 | -41 32 21 | 16.85 | 13.97 | 11.59 | 15.65 | 13.91 | 11.80 | /40 | 9.67 | 9.04 | 8.62 | * | ... | 15.65 | 0.104 |
| LHS2875B | 0 | 14 12 11.0 | -00 35 04 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.50 | 14.07 | 0.273 |
| LHS2875A | 3(2) | 14 12 11.0 | -00 35 04 | 13.31J | 11.33J | 9.61J | 13.04J | 11.96J | 10.62J | /3 | 9.35J | 8.79J | 8.55J | * | ... | 13.57 | 0.321 |
| LHS2876C | 0(1) | 14 12 12.1 | -00 35 16 | ... | ... | ... | 20.14 | 18.07 | 15.70 | /3 | 13.09 | 12.53 | 12.09 | * | 6.57 | 20.14 | 0.080 |
| GJ0540.2 | 1 | 14 13 04.9 | -12 01 27 | 14.89 | 12.61 | 10.45 | 13.89 | 12.52 | 10.79 | /40 | 9.04 | 8.45 | 8.16 | ... | ... | ... | ... |
| GJ2106 | 1 | 14 13 12.9 | -56 44 32 | 11.47 | 9.36 | 8.91 | 10.19 | 9.21 | 8.11 | /20 | 6.95 | 6.39 | 6.14 | * | ... | 10.19 | 0.518 |
| LHS2884 | 1 | 14 15 11.8 | +45 00 40 | ... | ... | ... | 11.86 | 10.78 | 9.38 | /37 | 8.01 | 7.47 | 7.23 | * | ... | 11.86 | 0.404 |
| GJ1182 | 1 | 14 15 30.2 | +04 38 44 | ... | ... | ... | 14.30 | 12.95 | 11.09 | /37 | 9.43 | 8.94 | 8.62 | * | ... | 14.30 | 0.163 |
| LP739-036 | 1 | 14 15 46.4 | -13 29 34 | 13.13 | 10.98 | 9.47 | ... | ... | ... | ... | 8.96 | 8.34 | 8.11 | ... | ... | ... | ... |
| L404-216 | 1 | 14 16 47.5 | -44 53 21 | 12.63 | 10.34 | 8.37 | ... | ... | ... | ... | 8.33 | 7.71 | 7.45 | ... | ... | ... | ... |
| GJ0541.2 | 1 | 14 17 24.3 | +45 26 40 | ... | ... | ... | 10.25 | 9.36 | 8.48 | /35 | 7.39 | 6.78 | 6.60 | * | ... | 10.25 | 0.660 |
| L404-010 | 1 | 14 17 25.9 | -40 18 15 | 13.48 | 11.30 | 9.71 | ... | ... | ... | ... | 8.63 | 8.09 | 7.81 | ... | ... | ... | ... |
| LP619-064 | 1 | 14 17 59.1 | -00 31 29 | 13.86 | 11.99 | 10.23 | ... | ... | ... | ... | 9.04 | 8.50 | 8.28 | ... | ... | ... | ... |
| GJ0543 | 1 | 14 19 11.0 | -07 18 12 | 14.01 | 11.53 | 9.82 | 13.48 | 12.39 | 10.99 | /2 | 9.67 | 9.23 | 8.92 | * | ... | 13.48 | 0.276 |

| | | | | | | | | | | | | | | | | | |
|--------------|------|------------|-----------|--------|--------|--------|--------|--------|--------|-----|--------|-------------------|-------|-----|------|-------|-------|
| GJ0545 | 1 | 14 20 07.4 | -09 37 13 | 13.94 | 11.48 | 9.94 | 12.84 | 11.69 | 10.15 | /15 | 8.74 | 8.19 | 7.98 | * | ... | 12.96 | 0.260 |
| SCR1420-7516 | 1 | 14 20 36.8 | -75 16 06 | 14.23 | 12.68 | 10.45 | 13.78 | 12.55 | 10.95 | /39 | 9.44 | 8.91 | 8.63 | * | ... | 13.78 | 0.286 |
| LHS0370 | 1 | 14 20 53.0 | +36 57 16 | ... | ... | ... | 16.15 | 14.70 | 12.85 | 1/1 | 11.05 | 10.55 | 10.25 | * | ... | 16.15 | 0.124 |
| LHS2899 | 1 | 14 21 15.1 | -01 07 20 | 14.30 | 12.20 | 10.20 | 13.12 | 11.92 | 10.39 | /26 | 8.95 | 8.39 | 8.09 | * | ... | 13.12 | 0.237 |
| LP913-013 | 1 | 14 21 49.0 | -31 54 35 | 14.31 | 12.12 | 10.26 | 12.85 | 11.79 | 10.47 | /23 | 9.14 | 8.58 | 8.31 | ... | ... | ... | ... |
| GJ2107 | 1 | 14 23 06.4 | -68 22 58 | 11.20 | 8.98 | 8.82 | 10.21 | 9.33 | 8.46 | /40 | 7.42 | 6.82 | 6.56 | ... | ... | ... | ... |
| LHS2906 | 1 | 14 23 07.8 | -22 17 09 | 16.13 | 14.13 | 12.00 | 14.98 | 13.70 | 12.03 | /40 | 10.40 | 9.79 | 9.50 | ... | ... | ... | ... |
| LHS2913 | 1 | 14 24 55.9 | +08 53 15 | ... | ... | ... | 12.23 | 11.11 | 9.71 | /37 | 8.42 | 7.80 | 7.59 | * | ... | 12.23 | 0.326 |
| LP800-058 | 1 | 14 25 13.3 | -16 24 56 | 18.46 | 16.06 | 13.13 | ... | ... | ... | ... | 11.48 | 10.90 | 10.49 | ... | ... | ... | ... |
| LP740-010 | 1 | 14 25 34.1 | -11 48 52 | 14.41 | 12.22 | 10.48 | ... | ... | ... | ... | 9.35 | 8.70 | 8.39 | ... | ... | ... | ... |
| LP620-012 | 1 | 14 26 36.8 | -01 15 23 | 14.97 | 12.92 | 11.17 | ... | ... | ... | ... | 9.84 | 9.27 | 9.01 | ... | ... | ... | ... |
| GJ1183A | 2(1) | 14 27 56.1 | -00 22 31 | 15.32 | 12.93 | 11.22 | 13.95 | 12.65 | 10.93 | /33 | 9.31 | 8.70 | 8.40 | * | ... | 13.95 | 0.205 |
| GJ1183B | 0(1) | 14 27 57.0 | -00 22 24 | ... | ... | ... | 14.02 | 12.71 | 10.98 | /33 | 9.35 | 8.76 | 8.46 | * | 0.07 | 14.02 | 0.200 |
| LHS2919 | 1 | 14 28 04.0 | +13 56 13 | ... | ... | ... | 17.62 | 15.61 | 13.33 | 1/1 | 11.01 | 10.39 | 10.03 | * | ... | 17.62 | 0.088 |
| LHS2921 | 1 | 14 28 27.7 | +45 54 29 | ... | ... | ... | 17.03 | 15.37 | 13.37 | 1/1 | 11.34 | 10.75 | 10.43 | * | ... | 17.03 | 0.112 |
| LHS2924 | 1 | 14 28 42.0 | +33 10 03 | ... | ... | ... | 19.74 | ... | 15.300 | /3 | 11.99 | 11.23 | 10.74 | * | ... | 19.74 | 0.075 |
| GJ0550.3 | 1 | 14 29 18.6 | -46 27 50 | 11.20 | 8.76 | 8.06 | 10.35 | 9.49 | 8.61 | /2 | 7.64 | 7.01 ^a | 6.79 | ... | ... | ... | ... |
| GJ0552 | 1 | 14 29 29.7 | +15 31 57 | ... | ... | ... | 10.68 | 9.67 | 8.46 | /37 | 7.23 | 6.61 | 6.39 | * | ... | 10.68 | 0.508 |
| LP913-027 | 1 | 14 29 49.2 | -29 32 14 | 13.27 | 11.12 | 9.67 | ... | ... | ... | ... | 8.94 | 8.34 ^a | 8.10 | ... | ... | ... | ... |
| LHS2930 | 1 | 14 30 33.7 | +59 43 14 | ... | ... | ... | 17.90 | ... | 13.30 | /3 | 10.79 | 10.14 | 9.79 | * | ... | 17.90 | 0.081 |
| GJ0553 | 1 | 14 30 47.7 | -08 38 47 | 10.03 | 7.58 | 6.98 | 9.38 | 8.51 | 7.67 | /2 | 6.62 | 6.01 | 5.77 | ... | ... | ... | ... |
| GJ0552.1 | 1 | 14 30 58.9 | -54 06 05 | 12.80 | 10.78 | 9.68 | 11.66 | 10.63 | 9.36 | /2 | 8.60 | 7.43 | 7.27 | ... | ... | ... | ... |
| GJ0553.1 | 1 | 14 31 01.2 | -12 17 46 | 12.58 | 9.89 | 8.66 | 11.95 | 10.79 | 9.30 | /2 | 7.80 | 7.26 | 6.96 | * | ... | 11.95 | 0.304 |
| LP740-020 | 1 | 14 31 15.6 | -13 18 25 | 17.52 | 15.14 | 12.52 | ... | ... | ... | ... | 11.10 | 10.47 | 10.10 | ... | ... | ... | ... |
| LHS0375 | 1 | 14 31 38.3 | -25 25 33 | 16.79 | 14.83 | 13.07 | 15.64 | 14.56 | 13.35 | /40 | 12.15 | 11.67 | 11.51 | * | ... | 15.64 | 0.155 |
| SIP1432-3326 | 2 | 14 32 04.8 | -33 26 26 | 16.47J | 14.33J | 12.12J | ... | ... | ... | ... | 10.37J | 9.85J | 9.53J | ... | ... | ... | ... |
| LHS2935 | 1 | 14 32 08.0 | +08 11 30 | ... | ... | ... | 15.68 | 14.08 | 12.09 | 3/1 | 10.11 | 9.53 | 9.17 | * | ... | 15.68 | 0.115 |
| LP913-077 | 1 | 14 32 18.0 | -33 20 59 | 15.25 | 13.13 | 11.08 | ... | ... | ... | ... | 9.69 | 9.11 | 8.81 | ... | ... | ... | ... |
| LP857-051 | 1 | 14 33 12.2 | -22 12 31 | 14.56 | 12.31 | 10.71 | ... | ... | ... | ... | 9.68 | 9.05 | 8.80 | ... | ... | ... | ... |
| LHS5273 | 1 | 14 34 04.9 | -18 24 11 | 15.39 | 13.05 | 10.67 | ... | ... | ... | ... | 9.58 | 9.03 | 8.71 | ... | ... | ... | ... |
| GJ0555 | 1 | 14 34 16.8 | -12 31 10 | 12.43 | 10.16 | 8.23 | 11.34 | 10.06 | 8.44 | /40 | 6.84 | 6.26 | 5.94 | * | ... | 11.32 | 0.250 |
| LP913-046 | 1 | 14 36 18.1 | -30 57 33 | 14.22 | 12.08 | 10.48 | ... | ... | ... | ... | 9.54 | 8.93 | 8.69 | ... | ... | ... | ... |
| LP620-047 | 1 | 14 38 39.4 | -02 57 24 | 15.01 | 12.88 | 11.05 | ... | ... | ... | ... | 9.86 | 9.30 | 9.03 | ... | ... | ... | ... |
| L333-199 | 1 | 14 40 20.8 | -48 36 59 | 12.88 | 10.55 | 9.38 | ... | ... | ... | ... | 8.33 | 7.71 | 7.47 | ... | ... | ... | ... |
| LP914-006 | 1 | 14 40 22.1 | -27 52 42 | 14.72 | 12.55 | 10.66 | 13.58 | 12.44 | 10.97 | /23 | 9.57 | 9.03 | 8.75 | ... | ... | ... | ... |
| 2MA1440+1339 | 1 | 14 40 22.9 | +13 39 22 | ... | ... | ... | 18.99 | 17.05 | 14.80 | 2/1 | 12.40 | 11.71 | 11.34 | * | ... | 18.99 | 0.087 |
| LTT05828 | 1 | 14 41 09.9 | -08 59 20 | 14.72 | 12.60 | 10.75 | ... | ... | ... | ... | 9.35 | 8.76 | 8.51 | ... | ... | ... | ... |
| LP680-049 | 1 | 14 41 15.3 | -06 59 09 | 14.48 | 12.44 | 10.84 | ... | ... | ... | ... | 9.48 | 8.94 | 8.68 | ... | ... | ... | ... |
| LTT05831 | 3 | 14 41 35.8 | -09 46 39 | 13.53J | 11.44J | 10.02J | ... | ... | ... | ... | 8.67J | 8.05J | 7.82J | ... | ... | ... | ... |
| LTT14363B | 0 | 14 42 21.5 | +66 03 20 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 6.64 | 17.47 | 0.087 |
| LTT14363A | 2(1) | 14 42 21.5 | +66 03 20 | ... | ... | ... | 10.83 | 9.80 | 8.58 | /35 | 7.31 | 6.73 | 6.49 | * | ... | 10.83 | 0.420 |
| SCR1444-3426 | 1 | 14 44 06.6 | -34 26 47 | 15.01 | 12.49 | 10.47 | 14.17 | 12.89 | 11.26 | /39 | 9.74 | 9.18 | 8.88 | * | ... | 14.15 | 0.182 |
| LP858-020 | 1 | 14 44 15.0 | -27 17 26 | 17.08 | 14.95 | 12.64 | ... | ... | ... | ... | 10.89 | 10.32 | 10.04 | ... | ... | ... | ... |
| SSS1444-2019 | 1 | 14 44 20.3 | -20 19 26 | 21.16 | 18.47 | 14.95 | 20.25 | 17.62 | 14.95 | /40 | 12.55 | 12.14 | 11.93 | * | ... | 20.25 | 0.075 |
| GJ1185 | 1 | 14 47 55.2 | -03 09 36 | 14.39 | 12.28 | 10.70 | 13.33 | 12.28 | 10.99 | /37 | 9.78 | 9.28 | 9.06 | * | ... | 13.33 | 0.295 |
| GJ0563.2B | 0(1) | 14 49 31.7 | -26 06 42 | ... | ... | ... | 12.07 | 11.08 | 9.92 | /2 | 8.66 | 8.13 | 7.89 | * | 0.39 | 12.07 | 0.427 |
| GJ0563.2A | 2(1) | 14 49 33.2 | -26 06 20 | 13.13 | 11.04 | 10.13 | 11.68 | 10.70 | 9.62 | /2 | 8.44 | 7.86 | 7.64 | * | ... | 11.68 | 0.508 |
| SIP1452-3458 | 1 | 14 52 52.9 | -34 58 47 | 17.72 | 15.21 | 12.26 | ... | ... | ... | ... | 11.05 | 10.48 | 10.16 | ... | ... | ... | ... |
| GJ1186 | 1 | 14 53 37.2 | +11 34 13 | ... | ... | ... | 15.35 | 13.98 | 12.22 | 1/1 | 10.58 | 9.97 | 9.65 | * | ... | 15.35 | 0.145 |
| GJ0568B | 0 | 14 53 51.4 | +23 33 20 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.44 | 13.38 | 0.177 |
| GJ0568A | 2 | 14 53 51.4 | +23 33 20 | ... | ... | ... | 11.68J | 10.49J | 8.94J | /37 | 7.44J | 6.83J | 6.57J | * | ... | 11.94 | 0.293 |
| LP801-025 | 1 | 14 54 10.4 | -20 41 29 | 16.34 | 14.04 | 11.43 | ... | ... | ... | ... | 10.26 | 9.67 | 9.35 | ... | ... | ... | ... |
| GJ0569B | 0BD | 14 54 29.2 | +16 06 03 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | ... | ... | ... |
| GJ0569C | 0BD | 14 54 29.2 | +16 06 03 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | ... | ... | ... |
| GJ0569A | 3(1) | 14 54 29.2 | +16 06 03 | ... | ... | ... | 10.15 | 9.12 | 7.87 | /20 | 6.63 | 5.99 | 5.77 | * | ... | 10.15 | 0.479 |
| LHS2999 | 1 | 14 54 53.4 | +09 56 36 | ... | ... | ... | 11.29 | 10.38 | 9.35 | /37 | 8.22 | 7.62 ^a | 7.39 | * | ... | 11.29 | 0.587 |
| LTT05930 | 1 | 14 54 58.3 | -11 23 21 | 13.85 | 11.87 | 10.02 | ... | ... | ... | ... | 9.07 | 8.37 | 8.18 | ... | ... | ... | ... |
| SCR1456-7239 | 1 | 14 56 02.3 | -72 39 41 | 16.50 | 14.22 | 11.99 | 15.36 | 13.99 | 12.28 | /39 | 10.62 | 10.06 | 9.74 | ... | ... | ... | ... |
| LHS3001(A) | 2(1) | 14 56 27.2 | +17 55 00 | ... | ... | ... | 15.81 | 14.35 | 12.52 | 2/1 | 10.74 | 10.15 | 9.85 | * | ... | 15.81 | 0.127 |
| LHS3002(B) | 0(1) | 14 56 27.8 | +17 55 09 | ... | ... | ... | 18.68 | 16.65 | 14.42 | 2/1 | 11.98 | 11.30 | 10.92 | * | 2.87 | 18.68 | 0.086 |
| LP406-203 | 1 | 14 56 37.7 | -44 56 28 | 14.12 | 11.82 | 9.72 | ... | ... | ... | ... | 9.38 | 8.74 | 8.49 | ... | ... | ... | ... |
| LHS3003 | 1 | 14 56 38.3 | -28 09 49 | 18.37 | 16.07 | 11.99 | 16.95 | 14.90 | 12.50 | /9 | 9.97 | 9.32 | 8.93 | * | ... | 17.05 | 0.081 |
| LHS3005 | 1 | 14 57 20.6 | +14 58 55 | ... | ... | ... | 14.83 | 13.55 | 11.99 | 1/1 | 10.48 | 9.90 | 9.66 | * | ... | 14.83 | 0.209 |
| LP681-091 | 1 | 14 57 33.3 | -06 19 49 | 11.83 | 10.12 | 8.73 | 11.47 | 10.59 | 9.73 | /35 | 8.65 | 8.00 | 7.84 | ... | ... | ... | ... |
| GJ1187 | 1 | 14 57 53.7 | +56 39 24 | ... | ... | ... | 15.53 | 13.99 | 12.00 | /37 | 10.21 | 9.64 | 9.27 | * | ... | 15.53 | 0.112 |
| SCR1459-4210 | 1 | 14 59 57.4 | -42 10 09 | 16.34 | 14.54 | 12.31 | 15.39 | 14.07 | 12.37 | /40 | 10.68 | 10.12 | 9.87 | ... | ... | ... | ... |

| | | | | | | | | | | | | | | | | |
|---------------|------|------------|-----------|--------|--------|--------|--------|--------|--------|-----|--------------------|--------------------|-------------------|-----|------|-------------|
| SCR1551-3554 | 1 | 15 51 12.2 | -35 54 48 | 15.94 | 14.26 | 12.39 | 14.48 | 13.24 | 11.66 | /40 | 10.12 | 9.49 | 9.19 | ... | ... | ... |
| LHS3124 | 1 | 15 51 21.0 | +29 31 06 | ... | ... | ... | 13.03 | 11.87 | 10.39 | 2/1 | 8.96 | 8.38 | 8.15 | * | ... | 13.03 0.314 |
| LHS5303 | 1 | 15 52 44.6 | -26 23 14 | 17.59 | 15.48 | 12.31 | 16.53 | 14.66 | 12.49 | /9 | 10.26 | 9.68 | 9.32 | * | ... | 16.53 0.096 |
| LHS3129(A) | 2(1) | 15 53 08.7 | +34 44 39 | ... | ... | ... | 11.76 | 10.68 | 9.32 | /37 | 8.00 | 7.34 ^a | 7.09 | * | ... | 11.76 0.498 |
| LHS3130(B) | 0(1) | 15 53 08.8 | +34 44 20 | ... | ... | ... | 13.17 | 12.01 | 10.50 | /37 | 8.99 | 8.42 | 8.18 | * | 1.41 | 13.17 0.338 |
| LP860-046 | 1 | 15 53 57.1 | -23 11 53 | 18.25 | 16.19 | 13.59 | ... | ... | ... | ... | 11.55 | 10.95 | 10.62 | ... | ... | ... |
| LP409-071 | 1 | 15 54 00.8 | -43 03 10 | 12.42 | 9.76 | 9.15 | ... | ... | ... | ... | 8.75 | 8.05 | 7.86 | ... | ... | ... |
| LP683-049 | 1 | 15 54 50.4 | -05 21 47 | 16.05 | 14.02 | 11.83 | ... | ... | ... | ... | 10.33 | 9.71 | 9.38 | ... | ... | ... |
| LHS3132 | 1 | 15 55 05.2 | +33 50 55 | ... | ... | ... | 15.99 | 14.62 | 12.88 | 1/1 | 11.20 | 10.78 | 10.50 | * | ... | 15.99 0.142 |
| LTT06368 | 1 | 15 58 27.8 | -06 51 45 | 12.96 | 10.62 | 9.17 | ... | ... | ... | ... | 8.68 | 8.12 | 7.81 | ... | ... | ... |
| LHS3142 | 1 | 15 59 51.0 | +14 59 50 | ... | ... | ... | 14.05 | 12.90 | 11.46 | 1/1 | 10.07 | 9.56 | 9.32 | * | ... | 14.05 0.276 |
| GJ0606 | 1 | 15 59 53.4 | -08 15 11 | 11.01 | 8.81 | 7.51 | 10.49 | 9.51 | 8.39 | /2 | 7.19 | 6.60 | 6.34 | * | ... | 10.49 0.526 |
| SCR1601-3421 | 1 | 16 01 55.7 | -34 21 57 | 17.05 | 15.75 | 13.28 | 16.18 | 14.71 | 12.86 | /39 | 10.96 | 10.33 | 9.98 | * | ... | 16.18 0.129 |
| GJ0609 | 1 | 16 02 50.9 | +20 35 21 | ... | ... | ... | 12.570 | 11.329 | 9.734 | /2 | 8.13 | 7.65 | 7.37 | * | ... | 12.57 0.230 |
| LHS3149 | 1 | 16 04 20.0 | -06 16 46 | 16.50 | 14.41 | 11.68 | 15.65 | 14.12 | 12.28 | 1/1 | 10.45 | 9.88 | 9.55 | * | ... | 15.65 0.128 |
| LP917-019 | 2(1) | 16 04 23.2 | -33 03 40 | 11.32 | 9.03 | 8.89 | 10.08 | 9.22 | 8.41 | /20 | 7.38 | 6.75 | 6.56 | ... | ... | ... |
| GJ1197 | 1 | 16 07 15.5 | +26 49 49 | ... | ... | ... | 13.30 | 12.22 | 10.87 | 1/1 | 9.62 | 9.03 | 8.80 | * | ... | 13.30 0.319 |
| 2MA1607-0442 | 1 | 16 07 31.2 | -04 42 10 | 20.98 | 18.24 | 14.87 | 19.49 | 17.19 | 14.78 | /9 | 11.90 | 11.19 | 10.72 | * | ... | 19.62 0.077 |
| GJ1198 | 1 | 16 08 15.0 | -10 26 14 | 15.57 | 13.72 | 11.38 | 14.69 | 13.43 | 11.78 | /40 | 10.26 | 9.75 | 9.53 | * | ... | 14.69 0.193 |
| SCR1608-2913 | 2 | 16 08 45.5 | -29 13 06 | 13.61J | 11.65J | 9.91J | 13.66J | 12.49J | 11.02J | /40 | 9.68J ^a | 9.15J ^a | 8.51 | ... | ... | ... |
| HIP079126 | 1 | 16 09 03.1 | +52 56 37 | ... | ... | ... | 10.19 | 9.27 | 8.31 | /35 | 7.19 | 6.53 | 6.33 | * | ... | 10.19 0.629 |
| LP481-066 | 1 | 16 09 13.0 | -38 04 33 | 14.51 | 12.96 | 11.84 | ... | ... | ... | ... | 9.45 | 8.81 | 8.52 | ... | ... | ... |
| SCR1609-3431 | 1 | 16 09 46.2 | -34 31 07 | 18.48 | 16.61 | 13.99 | 17.20 | 15.59 | 13.56 | /40 | 11.58 | 10.99 | 10.67 | ... | ... | ... |
| LP684-033 | 1 | 16 10 58.4 | -06 31 33 | 18.33 | 16.13 | 12.95 | ... | ... | ... | ... | 11.35 | 10.75 | 10.37 | ... | ... | ... |
| LHS3165 | 1 | 16 12 07.1 | -40 48 45 | 13.81 | 12.07 | 11.17 | ... | ... | ... | ... | 9.22 | 8.60 | 8.38 | ... | ... | ... |
| LP804-027 | 1 | 16 12 41.8 | -18 52 32 | 12.13 | 10.77 | 8.87 | 11.37 | 10.29 | 8.92 | /20 | 7.56 | 6.86 | 6.59 | * | ... | 11.37 0.429 |
| LHS3167 | 1 | 16 13 05.9 | -70 09 08 | 14.58 | 12.44 | 10.10 | 13.71 | 12.45 | 10.82 | /26 | 9.26 | 8.74 ^a | 8.39 | * | ... | 13.71 0.227 |
| LHS3169 | 1 | 16 14 21.9 | -28 30 37 | 14.01 | 12.01 | 10.30 | 12.95 | 11.80 | 10.29 | /26 | 8.92 | 8.36 | 8.11 | * | ... | 12.95 0.321 |
| GJ1200 | 1 | 16 14 28.7 | +19 06 04 | ... | ... | ... | 12.87 | 11.77 | 10.32 | 1/1 | 8.99 | 8.48 | 8.26 | * | ... | 12.87 0.319 |
| GJ0618B | 0(1) | 16 20 03.2 | -37 31 49 | ... | ... | ... | 14.15 | 12.74 | 10.92 | /2 | 8.34 ^a | 8.04 ^a | 7.77 ^a | * | 3.55 | 14.15 0.127 |
| GJ0618A | 2(1) | 16 20 03.5 | -37 31 45 | 11.51J | 10.05J | 9.71J | 10.62 | 9.46 | 8.11 | /40 | 6.79 | 6.22 | 5.95 | * | ... | 10.60 0.381 |
| LP917-025 | 1 | 16 20 37.6 | -30 39 41 | 12.89 | 10.88 | 9.80 | 11.96 | 10.98 | 9.81 | /25 | 8.61 | 8.01 | 7.80 | ... | ... | ... |
| LP805-001 | 1 | 16 20 41.9 | -20 05 14 | 15.02 | 13.56 | 12.04 | 13.68 | 12.44 | 10.84 | /40 | 9.36 | 8.75 | 8.42 | ... | ... | ... |
| LP625-004 | 2(1) | 16 21 26.3 | -01 47 02 | 14.56 | 12.54 | 10.87 | ... | ... | ... | ... | 9.71 | 9.10 | 8.89 | ... | ... | ... |
| GJ0618.4 | 1 | 16 22 41.0 | -48 39 20 | 12.89 | 10.94 | 9.18 | 11.84 | 10.85 | 9.70 | /2 | 8.48 | 7.87 | 7.64 | * | ... | 11.84 0.504 |
| LEP1623-6905 | 1 | 16 23 02.8 | -69 05 37 | 17.72 | 14.82 | 12.70 | 16.78 | 15.14 | 13.13 | /40 | 11.38 | 10.86 | 10.54 | ... | ... | ... |
| GJ0620 | 1 | 16 23 07.6 | -24 42 35 | 11.47 | 10.62 | 9.90 | 10.22 | 9.30 | 8.34 | /2 | 7.26 | 6.59 | 6.39 | * | ... | 10.22 0.617 |
| GJ0623B | 0 | 16 24 09.3 | +48 21 10 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 5.28 | 15.56 0.100 |
| GJ0623A | 2(1) | 16 24 09.3 | +48 21 10 | ... | ... | ... | 10.28 | 9.25 | 7.94 | /37 | 6.64 | 6.14 | 5.92 | * | ... | 10.28 0.407 |
| LTT06556 | 1 | 16 25 01.5 | -12 15 26 | 13.48 | 11.61 | 9.94 | 12.87 | 11.82 | 10.50 | /23 | 9.19 | 8.51 | 8.30 | ... | ... | ... |
| GJ0622 | 1 | 16 25 13.0 | -21 56 14 | 11.73 | 9.80 | 9.15 | 10.41 | 9.50 | 8.63 | /2 | 7.55 | 6.92 | 6.73 | * | ... | 10.41 0.617 |
| GJ0625 | 1 | 16 25 24.6 | +54 18 14 | ... | ... | ... | 10.11 | 9.07 | 7.88 | 1/1 | 6.61 | 6.06 | 5.83 | * | ... | 10.11 0.378 |
| LHS3197 | 1 | 16 26 48.1 | -17 23 34 | 14.91 | 12.74 | 10.22 | 14.30 | 12.93 | 11.16 | /26 | 9.55 | 9.00 | 8.68 | * | ... | 14.30 0.198 |
| SCR1626-3812 | 1 | 16 26 51.7 | -38 12 33 | 17.46 | 15.82 | 13.15 | 15.75 | 14.23 | 12.29 | /40 | 10.37 | 9.80 | 9.44 | * | ... | 15.75 0.116 |
| GJ2120 | 1 | 16 27 33.2 | -10 00 29 | 11.30 | 9.11 | 8.40 | 10.85 | 9.89 | 8.84 | /20 | 7.69 | 7.04 | 6.83 | * | ... | 10.85 0.629 |
| GJ2121B | 0 | 16 30 13.0 | -14 39 49 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.72 | 15.16 0.172 |
| GJ2121A | 2 | 16 30 13.1 | -14 39 50 | 12.37J | 10.60J | 9.02J | 12.35J | 11.25J | 9.83J | /37 | 8.42J | 7.92J | 7.60J | * | ... | 12.44 0.417 |
| GJ0628 | 1 | 16 30 18.1 | -12 39 45 | 10.07 | 8.04 | 5.99 | 10.07 | 8.89 | 7.37 | /40 | 5.95 | 5.37 | 5.08 | * | ... | 10.10 0.286 |
| SCR1630-3633B | 0 | 16 30 27.2 | -36 33 56 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.72 | 17.76 0.091 |
| SCR1630-3633A | 2 | 16 30 27.2 | -36 33 56 | 15.94J | 14.39J | 11.88J | 14.95J | 13.47J | 11.59J | /39 | 10.04J | 9.50J | 9.03J | * | ... | 15.04 0.140 |
| GJ1202 | 1 | 16 31 35.1 | +17 33 49 | ... | ... | ... | 12.82 | 11.69 | 10.28 | 1/1 | 8.93 | 8.43 | 8.18 | * | ... | 12.82 0.333 |
| GJ1203 | 1 | 16 32 45.1 | +12 36 45 | ... | ... | ... | 12.16 | 11.12 | 9.77 | /20 | 8.43 | 7.90 | 7.68 | * | ... | 12.16 0.394 |
| 2MA1632-0631 | 1 | 16 32 58.8 | -06 31 48 | 21.71 | 19.50 | 15.88 | 20.23 | 18.01 | 15.58 | /9 | 12.74 | 12.05 | 11.62 | * | ... | 20.20 0.076 |
| L339-020 | 1 | 16 34 43.8 | -46 01 31 | 12.05 | 10.08 | 9.20 | ... | ... | ... | ... | 8.38 | 7.69 | 7.51 | ... | ... | ... |
| L483-080 | 1 | 16 34 59.0 | -38 34 34 | 14.22 | 12.55 | 11.45 | ... | ... | ... | ... | 9.37 | 8.70 | 8.46 | ... | ... | ... |
| LHS3218 | 1 | 16 35 24.6 | -27 18 55 | 15.64 | 13.79 | 11.79 | 14.18 | 12.93 | 11.28 | /26 | 9.78 | 9.27 | 9.00 | * | ... | 14.18 0.209 |
| UPM1635-5202 | 1 | 16 35 37.2 | -52 02 01 | 16.73 | 14.73 | 12.22 | 15.58 | 14.09 | 12.18 | /40 | 10.41 | 9.80 | 9.56 | ... | ... | ... |
| LHS0423 | 1 | 16 35 40.4 | -30 51 20 | 13.14 | 11.35 | 10.00 | 12.66 | 11.58 | 10.16 | /40 | 8.89 | 8.36 | 8.08 | * | ... | 12.66 0.360 |
| GJ1204 | 1 | 16 36 05.3 | +08 48 34 | ... | ... | ... | 13.81 | 12.56 | 10.92 | /37 | 9.42 | 8.80 | 8.51 | * | ... | 13.81 0.206 |
| LP685-036 | 1 | 16 36 06.0 | -04 40 13 | 17.27 | 15.27 | 12.96 | ... | ... | ... | ... | 11.05 | 10.51 | 10.18 | ... | ... | ... |
| SCR1636-4041 | 1 | 16 36 57.6 | -40 41 09 | 14.69 | 12.89 | 10.93 | 13.47 | 12.26 | 10.70 | /40 | 9.20 | 8.57 | 8.31 | * | ... | 13.47 0.300 |
| L555-115 | 1 | 16 36 58.4 | -33 46 51 | 13.96 | 12.09 | 10.49 | ... | ... | ... | ... | 9.12 | 8.48 ^a | 8.25 | ... | ... | ... |
| SCR1639-4652 | 1 | 16 39 25.8 | -46 53 00 | 14.46 | 12.44 | 10.46 | 13.28 | 12.12 | 10.67 | /40 | 9.30 | 8.69 | 8.43 | ... | ... | ... |
| LHS5319 | 1 | 16 39 30.2 | +50 34 03 | ... | ... | ... | 11.83 | 10.87 | 9.81 | /34 | 8.63 | 8.12 | 7.86 | * | ... | 11.83 0.473 |
| LP625-034 | 1 | 16 40 05.7 | +00 42 05 | ... | ... | ... | 13.70 | 12.39 | 10.72 | /29 | 9.12 | 8.59 | 8.21 | * | ... | 13.70 0.169 |
| LP069-457 | 1 | 16 40 14.7 | +67 36 32 | ... | ... | ... | 15.65 | 14.00 | 11.95 | /31 | 9.85 | 9.29 | 8.95 | * | ... | 15.65 0.117 |

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|---------------|------|------------|-----------|--------|--------|-------|--------|--------|--------|-----|-------|-------------------|-------|-----|------|-------|-------|
| GJ0633 | 1 | 16 40 45.3 | -45 59 59 | 13.90 | 11.28 | 9.85 | 12.67 | 11.56 | 10.20 | /26 | 8.89 | 8.31 | 8.05 | * | ... | 12.65 | 0.327 |
| LTT14949 | 1 | 16 40 48.9 | +36 19 00 | ... | ... | ... | 11.50 | 10.49 | 9.31 | /34 | 8.07 | 7.42 | 7.20 | * | ... | 11.50 | 0.489 |
| GJ0634 | 1 | 16 41 28.3 | -43 59 11 | 12.56 | 10.28 | 9.08 | 11.58 | 10.57 | 9.38 | /2 | 8.14 | 7.62 | 7.33 | * | ... | 11.58 | 0.454 |
| LP686-002 | 1 | 16 43 55.9 | -07 26 10 | 12.05 | 9.97 | 9.40 | ... | ... | ... | ... | 8.54 | 7.98 ^a | 7.71 | ... | ... | ... | ... |
| 2MA1643-7530 | 1 | 16 43 57.7 | -75 30 21 | 12.14 | 10.54 | 9.54 | ... | ... | ... | ... | 8.43 | 7.81 | 7.57 | ... | ... | ... | ... |
| GJ2122B | 0 | 16 45 17.0 | -38 48 30 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.00 | 11.83 | 0.326 |
| GJ2122A | 2 | 16 45 17.0 | -38 48 30 | ... | ... | ... | 9.68J | 8.73J | 7.69J | 3/1 | 6.57J | 5.94J | 5.72J | * | ... | 9.83 | 0.559 |
| 2MA1645-1319 | 1 | 16 45 22.1 | -13 19 52 | ... | 18.80 | 15.97 | 20.30 | 17.95 | 15.67 | /40 | 12.45 | 11.69 | 11.15 | ... | ... | ... | ... |
| LHS3240 | 1 | 16 46 13.7 | +16 28 40 | ... | ... | ... | 11.65 | 10.60 | 9.27 | /20 | 7.95 | 7.29 | 7.09 | * | ... | 11.65 | 0.423 |
| LHS3241 | 1 | 16 46 31.0 | +34 34 56 | ... | ... | ... | 16.81 | 14.93 | 12.75 | 1/1 | 10.53 | 9.97 | 9.61 | * | ... | 16.81 | 0.096 |
| LP806-004 | 2(1) | 16 47 35.6 | -19 44 27 | 12.92 | 10.97 | 9.65 | 12.04 | 11.04 | 9.87 | /23 | 8.64 | 8.04 ^a | 7.79 | ... | ... | ... | ... |
| LP154-205 | 1 | 16 47 55.2 | -65 09 12 | 15.11 | 12.73 | 10.70 | 13.98 | 12.73 | 11.16 | /40 | 9.70 | 9.17 | 8.88 | * | ... | 13.97 | 0.189 |
| GJ0637 | 1 | 16 48 24.5 | -72 58 34 | 12.20 | 10.33 | 9.49 | 11.35 | 10.37 | 9.26 | /2 | 8.04 | 7.48 | 7.22 | * | ... | 11.35 | 0.456 |
| LP806-008 | 1 | 16 48 46.0 | -15 44 20 | 11.66 | 10.30 | 8.55 | 10.94 | 9.97 | 8.84 | /34 | 7.66 | 7.00 | 6.77 | * | ... | 10.94 | 0.546 |
| LHS3246 | 1 | 16 50 53.8 | -04 50 35 | 14.22 | 12.20 | 10.43 | 13.45 | 12.30 | 10.81 | /37 | 9.47 | 8.92 ^a | 8.68 | ... | ... | ... | ... |
| G169-029 | 1 | 16 50 57.0 | +22 26 48 | ... | ... | ... | 14.08 | 12.69 | 10.91 | 3/1 | 9.14 | 8.57 | 8.31 | * | ... | 14.08 | 0.144 |
| GJ0643(E) | 0(1) | 16 55 25.0 | -08 19 21 | ... | ... | ... | 11.80 | 10.59 | 9.05 | /2 | 7.56 | 7.06 ^a | 6.72 | * | 2.34 | 11.80 | 0.216 |
| GJ0644B | 0 | 16 55 28.0 | -08 20 11 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.93 | 10.39 | 0.346 |
| GJ0644D | 0 | 16 55 28.0 | -08 20 11 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.93 | 10.39 | 0.346 |
| GJ0644A | 5(3) | 16 55 28.8 | -08 20 11 | 9.61J | 8.51J | 5.49J | 9.03J | 7.94J | 6.57J | /2 | 5.27J | 4.78J | 4.40J | * | ... | 9.46 | 0.449 |
| GJ0644C | 0(1) | 16 55 35.0 | -08 23 40 | ... | ... | ... | 16.80 | 14.60 | 12.18 | /3 | 9.78 | 9.20 | 8.82 | * | 7.34 | 16.80 | 0.083 |
| LTT06745 | 1 | 16 55 38.0 | -32 04 04 | 10.94 | 9.10 | 8.52 | 9.57 | 8.70 | 7.90 | /20 | 6.92 | 6.25 | 6.05 | ... | ... | ... | ... |
| SCR1656-2046 | 1 | 16 56 33.6 | -20 46 37 | 18.65 | 16.39 | 13.66 | 17.36 | 15.58 | 13.42 | /40 | 11.30 | 10.71 | 10.37 | * | ... | 17.36 | 0.097 |
| GJ0645 | 1 | 16 56 45.1 | -37 03 39 | 12.94 | 11.53 | 10.73 | 11.44 | 10.46 | 9.34 | /2 | 8.17 | 7.57 | 7.34 | * | ... | 11.44 | 0.466 |
| SCR1656-4238 | 1 | 16 56 49.8 | -42 38 48 | 14.42 | 11.96 | 10.32 | 13.33 | 12.23 | 10.82 | /40 | 9.52 | 8.86 | 8.61 | ... | ... | ... | ... |
| GJ1207 | 1 | 16 57 05.7 | -04 20 56 | 13.66 | 10.08 | 9.70 | 12.25 | 11.00 | 9.43 | /27 | 7.97 | 7.44 ^a | 7.12 | * | ... | 12.24 | 0.233 |
| GJ0649 | 1 | 16 58 08.8 | +25 44 39 | ... | ... | ... | 9.69 | 8.72 | 7.64 | /37 | 6.45 | 5.87 | 5.62 | * | ... | 9.69 | 0.547 |
| G139-003B | 0 | 16 58 25.0 | +13 58 06 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.65 | 14.29 | 0.165 |
| G139-003A | 2 | 16 58 25.0 | +13 58 06 | ... | ... | ... | 13.16J | 11.90J | 10.31J | 3/1 | 8.80J | 8.28J | 7.97J | * | ... | 13.64 | 0.206 |
| SCR1659-6958 | 1 | 16 59 28.1 | -69 58 18 | 15.93 | 14.30 | 11.63 | 15.36 | 13.93 | 12.15 | /40 | 10.54 | 10.00 | 9.70 | * | ... | 15.36 | 0.152 |
| LP746-041 | 1 | 17 00 42.2 | -09 25 35 | 16.61 | 15.46 | 12.15 | ... | ... | ... | ... | 10.79 | 10.20 | 9.87 | ... | ... | ... | ... |
| HIP083405 | 1 | 17 02 49.5 | -06 04 06 | ... | ... | ... | 10.85 | 9.92 | 8.92 | /34 | 7.80 | 7.16 | 6.95 | * | ... | 10.85 | 0.562 |
| LHS3262 | 1 | 17 03 25.4 | +51 25 21 | ... | ... | ... | 13.54 | 12.21 | 10.48 | /37 | 8.77 | 8.19 | 7.92 | * | ... | 13.54 | 0.159 |
| GJ1209 | 1 | 17 04 22.3 | +16 55 56 | ... | ... | ... | 12.30 | 11.22 | 9.89 | /37 | 8.57 | 8.07 | 7.80 | * | ... | 12.30 | 0.369 |
| LEHPM2-1755 | 1 | 17 06 50.0 | -82 11 42 | 15.47 | 13.30 | 11.34 | ... | ... | ... | ... | 10.13 | 9.56 | 9.28 | ... | ... | ... | ... |
| GJ0655 | 1 | 17 07 07.4 | +21 33 14 | ... | ... | ... | 11.62 | 10.54 | 9.20 | /32 | 7.88 | 7.29 | 7.04 | * | ... | 11.62 | 0.395 |
| BD-06 04552 | 1 | 17 07 34.8 | -06 27 26 | 14.22 | 12.71 | 11.28 | ... | ... | ... | ... | 9.57 | 8.90 | 8.71 | ... | ... | ... | ... |
| GJ1210 | 0 | 17 07 40.8 | +07 22 07 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.92 | 15.33 | 0.122 |
| GJ1210 | 2 | 17 07 40.8 | +07 22 07 | ... | ... | ... | 14.02J | 12.64J | 10.88J | /37 | 9.28J | 8.65J | 8.42J | * | ... | 14.41 | 0.150 |
| NLTT44215 | 1 | 17 08 23.8 | -18 27 58 | 15.07 | 12.88 | 12.35 | ... | ... | ... | ... | 9.88 | 9.24 | 9.16 | ... | ... | ... | ... |
| UPM1710-5300B | 0 | 17 10 44.3 | -53 00 25 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 3.72 | 15.45 | 0.129 |
| UPM1710-5300A | 2 | 17 10 44.3 | -53 00 25 | 12.47J | 10.03J | 7.99J | 11.73J | 10.63J | 9.29J | /40 | 8.00J | 7.41J | 7.16J | * | ... | 11.73 | 0.407 |
| L268-067 | 1 | 17 10 59.2 | -52 30 56 | 10.38 | 8.15 | 6.51 | 10.02 | 9.06 | 8.00 | /20 | 6.87 | 6.23 | 6.03 | * | ... | 10.02 | 0.559 |
| LTT15087 | 1 | 17 11 34.7 | +38 26 33 | ... | ... | ... | 11.61 | 10.48 | 9.02 | /31 | 7.63 | 7.04 | 6.80 | * | ... | 11.61 | 0.360 |
| GJ0660B | 0 | 17 11 52.2 | -01 51 06 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.77 | 13.33 | 0.199 |
| GJ0660A | 2 | 17 11 52.3 | -01 51 06 | 11.86J | 10.42J | 8.37J | 11.37J | 10.25J | 8.82J | /2 | 7.46J | 6.92J | 6.66J | * | ... | 11.56 | 0.360 |
| LP919-015 | 1 | 17 12 01.2 | -27 46 02 | 15.15 | 13.52 | 12.30 | 13.40 | 12.29 | 10.85 | /40 | 9.51 | 8.91 | 8.66 | ... | ... | ... | ... |
| SIP1712-0323 | 1 | 17 12 04.3 | -03 23 30 | 19.10 | 17.29 | 14.48 | 18.02 | 16.21 | 13.99 | /40 | 11.61 | 10.99 | 10.64 | ... | ... | ... | ... |
| GJ0661B | 0 | 17 12 07.9 | +45 39 57 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.50 | 10.40 | 0.343 |
| GJ0661A | 2 | 17 12 07.9 | +45 39 57 | ... | ... | ... | 9.37J | 8.31J | 6.91J | /37 | 5.55J | 5.07J | 4.83J | * | ... | 9.90 | 0.397 |
| GJ0660.1B | 0 | 17 12 51.2 | -05 07 25 | ... | ... | ... | ... | ... | ... | ... | 13.05 | 12.57 | 12.23 | * | 7.72 | 19.33 | 0.083 |
| GJ0660.1A | 2(1) | 17 12 51.3 | -05 07 32 | 12.58 | 10.44 | 9.87 | 11.61 | 10.70 | 9.75 | /2 | 8.66 | 8.07 | 7.94 | * | ... | 11.61 | 0.487 |
| LP413-057 | 1 | 17 13 09.6 | -41 28 28 | 13.60 | 11.48 | 10.32 | ... | ... | ... | ... | 9.03 | 8.43 ^a | 8.17 | ... | ... | ... | ... |
| GJ1212B | 0 | 17 13 40.4 | -08 26 14 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.00 | 13.39 | 0.274 |
| GJ1212A | 2 | 17 13 40.5 | -08 25 15 | 13.07J | 10.69J | 9.65J | 12.03J | 10.93J | 9.53J | /20 | 8.12J | 7.51J | 7.25J | * | ... | 12.39 | 0.374 |
| GJ1214 | 1 | 17 15 18.9 | +04 57 50 | ... | ... | ... | 14.68 | 13.31 | 11.59 | /37 | 9.75 | 9.09 | 8.78 | * | ... | 14.68 | 0.141 |
| LTT06876 | 1 | 17 15 54.9 | -02 50 10 | 12.49 | 10.59 | 10.25 | ... | ... | ... | ... | 8.79 | 8.13 | 7.97 | ... | ... | ... | ... |
| L1205-067 | 1 | 17 16 00.6 | +11 03 27 | ... | ... | ... | 10.85 | 9.88 | 8.79 | /30 | 7.63 | 7.02 | 6.82 | * | ... | 10.85 | 0.551 |
| LP687-017 | 1 | 17 16 20.7 | -05 23 51 | 13.70 | 12.28 | 10.76 | 12.49 | 11.39 | 10.02 | /40 | 8.70 | 8.09 | 7.83 | ... | ... | ... | ... |
| GJ2128 | 1 | 17 16 40.9 | +08 03 30 | ... | ... | ... | 11.49 | 10.45 | 9.18 | /30 | 7.93 | 7.39 | 7.11 | * | ... | 11.49 | 0.425 |
| GJ1215 | 0BD | 17 17 42.9 | +11 39 45 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | ... | ... | ... |
| GJ1215 | 0BD | 17 17 42.9 | +11 39 45 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | ... | ... | ... |
| GJ1215 | 3(1) | 17 17 42.9 | +11 39 45 | ... | ... | ... | 15.10 | 13.62 | 11.77 | /37 | 9.82 | 9.26 | 8.93 | * | ... | 15.10 | 0.127 |
| L845-016 | 2(1) | 17 17 45.3 | -11 48 54 | 14.14 | 12.53 | 10.23 | 12.92 | 11.81 | 10.38 | /33 | 8.82 | 8.11 | 7.83 | ... | ... | ... | ... |
| HIP084652B | 0 | 17 18 21.7 | -01 46 53 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.12 | 12.85 | 0.338 |
| HIP084652A | 2 | 17 18 21.7 | -01 46 53 | ... | ... | ... | 10.59J | 9.67J | 8.72J | /35 | 7.55J | 6.92J | 6.72J | * | ... | 10.73 | 0.592 |

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|--------------|------|------------|-----------|--------|-------|-------|--------|--------|--------|-----|-------|--------------------|-------------------|-----|------|-------------|
| LP687-045 | 1 | 17 18 29.1 | -07 39 15 | 15.13 | 13.56 | 12.13 | ... | ... | ... | ... | 9.89 | 9.37 | 9.05 | ... | ... | ... |
| GJ0671 | 1 | 17 19 52.7 | +41 42 49 | ... | ... | ... | 11.41 | 10.34 | 9.01 | /37 | 7.71 | 7.13 | 6.92 | * | ... | 11.41 0.389 |
| GJ0669B | 0(1) | 17 19 53.0 | +26 30 03 | ... | ... | ... | 12.99 | 11.68 | 9.94 | /33 | 8.23 | 7.64 | 7.35 | * | 1.57 | 12.99 0.212 |
| GJ0669A | 2(1) | 17 19 54.2 | +26 30 03 | ... | ... | ... | 11.42 | 10.25 | 8.75 | /33 | 7.27 | 6.71 | 6.42 | * | ... | 11.42 0.357 |
| GJ1216 | 1 | 17 20 46.3 | +49 15 20 | ... | ... | ... | 14.530 | 13.294 | 11.704 | /2 | 10.12 | 9.64 | 9.38 | * | ... | 14.53 0.174 |
| OUT1720-1725 | 1 | 17 20 52.4 | -17 25 40 | 14.69 | 13.33 | 11.63 | 14.20 | 12.97 | 11.38 | /40 | 9.79 | 9.19 | 8.92 | ... | ... | ... |
| GJ0672.1 | 1 | 17 23 49.2 | -32 15 16 | 13.43 | 11.12 | 9.92 | 11.64 | 10.67 | 9.55 | /2 | 8.38 | 7.82 | 7.52 | * | ... | 11.64 0.527 |
| L989-038 | 1 | 17 24 16.9 | -04 21 52 | 13.30 | 11.86 | 10.80 | 12.13 | 11.08 | 9.77 | /40 | 8.52 | 7.91 | 7.66 | ... | ... | ... |
| SCR1726-8433 | 1 | 17 26 22.9 | -84 33 08 | 15.42 | 13.31 | 11.16 | 14.25 | 13.00 | 11.41 | /39 | 9.87 | 9.33 | 9.02 | ... | ... | ... |
| GJ1219 | 1 | 17 27 39.9 | +14 29 02 | ... | ... | ... | 13.73 | 12.60 | 11.11 | 2/1 | 9.69 | 9.22 | 8.96 | ... | ... | 13.73 0.260 |
| GJ1218 | 1 | 17 28 07.3 | -62 27 14 | 13.97 | 11.93 | 9.84 | 12.74 | 11.54 | 9.96 | /40 | 8.42 | 7.85 ^a | 7.57 | * | ... | 12.74 0.312 |
| SCR1728-0143 | 1 | 17 28 11.1 | -01 43 57 | 15.61 | 13.93 | 11.99 | 14.42 | 13.15 | 11.51 | /40 | 9.89 | 9.32 | 9.01 | * | ... | 14.42 0.240 |
| GJ0674 | 1 | 17 28 39.9 | -46 53 43 | 9.43 | 7.02 | 4.90 | 9.37 | 8.28 | 6.97 | /40 | 5.71 | 5.15 | 4.86 | * | ... | 9.37 0.374 |
| LHS3295 | 1 | 17 29 27.3 | -80 08 57 | 13.49 | 11.39 | 9.64 | 12.18 | 11.02 | 9.53 | /26 | 8.09 | 7.52 | 7.30 | * | ... | 12.18 0.311 |
| GJ0676 | 2(1) | 17 30 11.2 | -51 38 13 | 10.96 | 9.26 | 8.63 | 9.59 | 8.68 | 7.76 | /20 | 6.71 | 6.08 | 5.83 | ... | ... | ... |
| GJ0678.1 | 1 | 17 30 22.7 | +05 32 54 | ... | ... | ... | 9.300 | 8.370 | 7.402 | /2 | 6.24 | 5.65 | 5.42 | * | ... | 9.30 0.591 |
| SCR1731-2452 | 1 | 17 31 03.8 | -24 52 44 | 14.76 | 13.40 | 13.00 | 13.23 | 12.08 | 10.64 | /40 | 9.27 | 8.61 | 8.38 | * | ... | 13.23 0.356 |
| GJ1220 | 1 | 17 31 07.4 | +82 05 53 | ... | ... | ... | 14.13 | 12.84 | 11.11 | /37 | 9.57 | 9.02 | 8.73 | * | ... | 14.13 0.173 |
| LP920-019 | 1 | 17 31 20.9 | -27 39 20 | 13.18 | 11.91 | 11.95 | ... | ... | ... | ... | 9.08 | 8.45 | 8.30 | ... | ... | ... |
| 2MA1731+2721 | 1 | 17 31 29.7 | +27 21 23 | ... | ... | ... | 19.58 | 17.75 | 15.50 | 2/1 | 12.09 | 11.39 | 10.91 | * | ... | 19.58 0.075 |
| SIP1731-7851 | 1 | 17 31 44.9 | -78 51 26 | 18.83 | 16.78 | 14.17 | ... | ... | ... | ... | 11.61 | 11.01 | 10.68 | ... | ... | ... |
| UPM1732-4736 | 1 | 17 32 21.9 | -47 36 58 | 14.88 | 12.77 | 11.00 | 13.98 | 12.72 | 11.12 | /40 | 9.59 | 8.98 | 8.68 | ... | ... | ... |
| LP688-003 | 1 | 17 34 08.7 | -08 49 52 | 17.13 | 15.43 | 13.24 | ... | ... | ... | ... | 10.91 | 10.40 | 10.06 | ... | ... | ... |
| HD320012 | 1 | 17 34 15.4 | -35 19 54 | 16.63 | 15.28 | 14.42 | ... | ... | ... | ... | 11.76 | 10.45 ^a | 9.83 ^a | ... | ... | ... |
| GJ0680 | 1 | 17 35 13.6 | -48 40 51 | 11.32 | 9.36 | 7.95 | 10.17 | 9.13 | 7.89 | /2 | 6.67 | 6.08 | 5.83 | * | ... | 10.17 0.472 |
| L112-088 | 1 | 17 36 14.6 | -67 56 06 | 15.38 | 13.26 | 11.17 | ... | ... | ... | ... | 10.04 | 9.45 | 9.17 | ... | ... | ... |
| GJ0687 | 1 | 17 36 25.9 | +68 20 20 | ... | ... | ... | 9.17J | 8.08J | 6.67J | /37 | 5.34 | 4.77 | 4.55 | * | ... | 9.17 0.394 |
| GJ0682B | 0 | 17 37 03.6 | -44 19 09 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.75 | 12.90 0.132 |
| GJ0682A | 2 | 17 37 03.7 | -44 19 09 | 11.19J | 8.99J | 7.47J | 10.99J | 9.75J | 8.15J | /40 | 6.54J | 5.92J | 5.61J | * | ... | 11.15 0.226 |
| GJ0686 | 1 | 17 37 53.3 | +18 35 30 | ... | ... | ... | 9.61 | 8.64 | 7.57 | /37 | 6.36 | 5.79 | 5.57 | * | ... | 9.61 0.489 |
| LP920-069 | 2(1) | 17 38 03.6 | -30 00 57 | 12.44 | 10.18 | 9.33 | ... | ... | ... | ... | 8.12 | 7.46 | 7.27 | ... | ... | ... |
| L204-148 | 1 | 17 38 32.5 | -58 32 34 | 13.69 | 11.32 | 9.15 | 12.52 | 11.38 | 9.91 | /40 | 8.48 | 7.93 | 7.67 | ... | ... | ... |
| SCR1738-5942 | 1 | 17 38 41.0 | -59 42 24 | 16.57 | 14.21 | 11.93 | 14.95 | 13.65 | 11.96 | /39 | 10.38 | 9.83 | 9.58 | ... | ... | ... |
| L1422-016A | 3(1) | 17 39 30.7 | +27 45 44 | ... | ... | ... | 11.12 | 10.20 | 9.22 | /33 | 8.10 | 7.47 | 7.26 | * | ... | 11.12 0.617 |
| L1422-015C | 0 | 17 39 32.2 | +27 46 37 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 3.42 | 14.54 0.232 |
| L1422-015B | 0(2) | 17 39 32.2 | +27 46 37 | ... | ... | ... | 12.72J | 11.61J | 10.18J | /33 | 8.83J | 8.16J | 7.97J | * | 1.82 | 12.94 0.388 |
| LHS3315 | 1 | 17 42 10.8 | -08 49 00 | 14.72 | 13.41 | 12.02 | 13.66 | 12.48 | 11.12 | 2/1 | 9.81 | 9.32 | 9.07 | * | ... | 13.63 0.301 |
| GJ0690.1 | 1 | 17 42 32.3 | -16 38 25 | 14.02 | 14.25 | 10.81 | 13.00 | 11.96 | 10.68 | /2 | 9.44 | 8.93 | 8.68 | ... | ... | 13.00 0.324 |
| G140-009B | 0 | 17 43 00.8 | +05 47 21 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.81 | 12.67 0.364 |
| G140-009A | 2 | 17 43 00.8 | +05 47 21 | ... | ... | ... | 10.67J | 9.70J | 8.62J | /30 | 7.44J | 6.80J | 6.63J | * | ... | 10.86 0.584 |
| GJ0694 | 1 | 17 43 55.9 | +43 22 43 | ... | ... | ... | 10.45 | 9.39 | 8.10 | /37 | 6.81 | 6.22 | 5.96 | * | ... | 10.45 0.432 |
| LP921-012 | 1 | 17 44 17.4 | -29 15 48 | 13.77 | 11.96 | 11.31 | ... | ... | ... | ... | 9.86 | 9.12 | 8.63 | ... | ... | ... |
| LT07069 | 1 | 17 45 07.4 | -08 00 45 | 12.45 | 10.79 | 9.73 | ... | ... | ... | ... | 8.57 | 7.92 | 7.76 | ... | ... | ... |
| GJ0694.2B | 0 | 17 45 33.5 | +46 51 19 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 4.09 | 14.81 0.187 |
| GJ0694.2A | 2(1) | 17 45 33.5 | +46 51 19 | ... | ... | ... | 10.72 | 9.80 | 8.80 | /35 | 7.64 | 7.00 | 6.80 | * | ... | 10.72 0.628 |
| L270-064 | 1 | 17 45 43.7 | -52 47 38 | 14.66 | 12.48 | 10.69 | ... | ... | ... | ... | 9.71 | 9.12 | 8.89 | ... | ... | ... |
| LHS3324 | 1 | 17 46 05.8 | +24 39 31 | ... | ... | ... | 12.68 | 11.57 | 10.14 | /37 | 8.81 | 8.31 | 8.06 | * | ... | 12.68 0.295 |
| GJ2130A | 3(1) | 17 46 12.8 | -32 06 09 | ... | ... | ... | 10.50 | 9.49 | 8.34 | /13 | 7.11 | 6.53 | 6.25 | * | ... | 10.50 0.533 |
| GJ2130C | 0 | 17 46 14.4 | -32 06 08 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.76 | 12.26 0.330 |
| GJ2130B | 0(2) | 17 46 14.4 | -32 06 08 | ... | ... | ... | 11.51J | 10.34J | 8.86J | /13 | 7.46J | 6.86J | 6.59J | * | 1.76 | 12.26 0.330 |
| G154-016 | 1 | 17 46 23.3 | -18 07 09 | 15.44 | 13.66 | 12.53 | ... | ... | ... | ... | 9.94 | 9.27 | 9.02 | ... | ... | ... |
| LT07077 | 1 | 17 46 29.4 | -08 42 37 | 13.68 | 12.18 | 9.92 | 12.72 | 11.44 | 9.78 | /40 | 8.20 | 7.69 | 7.35 | ... | ... | ... |
| GJ0693 | 1 | 17 46 34.2 | -57 19 09 | 11.70 | 9.43 | 8.37 | 10.77 | 9.62 | 8.20 | /40 | 6.86 | 6.30 | 6.02 | * | ... | 10.76 0.288 |
| SCR1746-3214 | 1 | 17 46 40.7 | -32 14 04 | 17.94 | 15.89 | 12.71 | 16.15 | 14.47 | 12.40 | /40 | 10.35 | 9.74 | 9.38 | * | ... | 16.15 0.103 |
| G020-014 | 1 | 17 47 10.2 | -01 29 55 | 14.83 | 12.93 | 11.18 | ... | ... | ... | ... | 9.62 | 9.03 | 8.76 | ... | ... | ... |
| LHS3332 | 1 | 17 49 56.1 | +22 40 56 | ... | ... | ... | 18.68 | 16.78 | 14.50 | 1/1 | 12.17 | 11.67 | 11.29 | * | ... | 18.68 0.075 |
| LHS3333 | 1 | 17 50 13.9 | +23 46 16 | ... | ... | ... | 13.50 | 12.33 | 10.80 | 1/1 | 9.32 | 8.63 | 8.45 | * | ... | 13.50 0.304 |
| GJ1222 | 1 | 17 54 17.1 | +07 22 45 | ... | ... | ... | 13.12 | 11.93 | 10.35 | /37 | 8.77 | 8.25 ^a | 7.97 | * | ... | 13.12 0.280 |
| LHS3339 | 1 | 17 55 36.2 | +58 25 04 | ... | ... | ... | 18.06 | 16.18 | 13.97 | 1/1 | 11.82 | 11.23 | 10.88 | * | ... | 18.06 0.096 |
| L415-082 | 1 | 17 57 14.2 | -41 59 29 | 11.24 | 8.96 | 7.89 | 11.28 | 10.30 | 9.17 | /40 | 7.96 | 7.37 | 7.14 | * | ... | 11.28 0.485 |
| LP044-162 | 1 | 17 57 15.0 | +70 42 01 | ... | ... | ... | 18.72 | 16.48 | 14.04 | 1/1 | 11.45 | 10.84 | 10.40 | * | ... | 18.72 0.087 |
| L271-081 | 1 | 17 57 22.6 | -52 29 07 | 14.55 | 12.10 | 10.62 | ... | ... | ... | ... | 9.44 | 8.93 ^a | 8.61 | ... | ... | ... |
| BARNARDS | 1 | 17 57 48.5 | +04 41 36 | ... | ... | ... | 9.570 | 8.354 | 6.786 | /2 | 5.24 | 4.83 | 4.52 | * | ... | 9.57 0.181 |
| LHS3343 | 0BD | 17 57 50.9 | +46 35 19 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | ... | ... |
| LHS3343 | 2(1) | 17 57 50.9 | +46 35 19 | ... | ... | ... | 11.68 | 10.58 | 9.18 | /37 | 7.85 | 7.25 | 7.00 | * | ... | 11.68 0.392 |
| LP749-016 | 1 | 17 59 58.7 | -13 23 44 | 13.37 | 11.82 | 11.07 | ... | ... | ... | ... | 9.27 | 8.64 | 8.49 | ... | ... | ... |

| | | | | | | | | | | | | | | | | | |
|---------------|------|-------------|-----------|--------|--------|--------|--------|--------|--------|-----|--------------------|--------------------|--------------------|-----|------|-------|-------|
| GJ1223 | 1 | 18 02 46.3 | +37 31 03 | ... | ... | ... | 14.80 | 13.40 | 11.56 | /37 | 9.72 | 9.19 | 8.89 | * | ... | 14.80 | 0.132 |
| G154-043B | 0 | 18 03 36.0 | -18 58 50 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.12 | 16.39 | 0.103 |
| G154-043A | 2 | 18 03 36.1 | -18 58 51 | 15.98J | 13.80J | 11.95J | 14.13J | 12.72J | 10.90J | /40 | 9.13J | 8.53J | 8.28J | * | ... | 14.27 | 0.157 |
| G182-037B | 0 | 18 04 17.5 | +35 57 25 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.72 | 13.64 | 0.280 |
| G182-037A | 2 | 18 04 17.5 | +35 57 25 | ... | ... | ... | 10.83J | 9.89J | 8.84J | /34 | 7.73J | 7.05J | 6.87J | * | ... | 10.92 | 0.594 |
| GJ0701 | 1 | 18 05 07.6 | -03 01 53 | 10.68 | 8.18 | 9.56 | 9.37 | 8.38 | 7.30 | /2 | 6.16 | 5.57 | 5.31 | * | ... | 9.37 | 0.509 |
| SCR1805-2042 | 1 | 18 05 15.1 | -20 42 28 | 16.84 | 15.08 | 12.96 | 15.21 | 13.85 | 12.21 | /40 | 10.58 | 9.95 | 9.62 | ... | ... | ... | ... |
| GJ1224 | 1 | 18 07 32.9 | -15 57 47 | 15.41 | 13.07 | 10.98 | 13.48 | 12.08 | 10.31 | /27 | 8.64 | 8.09 | 7.83 | * | ... | 13.61 | 0.138 |
| LP334-011 | 1 | 18 09 40.7 | +31 52 12 | ... | ... | ... | 11.41 | 10.44 | 9.40 | 1/1 | 8.23 | 7.66 | 7.43 | * | ... | 11.41 | 0.530 |
| LEP1809-0219 | 1 | 18 09 43.7 | -02 19 35 | 16.63 | 15.95 | 12.94 | 15.10 | 13.72 | 11.95 | /40 | 10.12 | 9.61 | 9.27 | ... | ... | ... | ... |
| G154-048 | 1 | 18 10 11.0 | -15 25 48 | 16.10 | 14.59 | 12.95 | ... | ... | ... | ... | 10.49 | 9.95 | 9.66 | ... | ... | ... | ... |
| L043-072 | 2 | 18 11 15.3 | -78 59 23 | 13.74J | 11.29J | 9.64J | 12.57J | 11.23J | 9.50J | /40 | 7.84J | 7.33J | 6.96J | ... | ... | ... | ... |
| LP629-020 | 1 | 18 11 23.4 | -02 17 50 | 15.07 | 13.75 | 14.01 | ... | ... | ... | ... | 10.23 | 9.72 | 9.50 | ... | ... | ... | ... |
| LP390-016 | 1 | 18 13 06.57 | +26 01 51 | ... | ... | ... | 13.32 | 12.10 | 10.48 | /31 | 8.90 | 8.31 | 8.07 | * | ... | 13.32 | 0.268 |
| LHS3370 | 1 | 18 13 52.9 | -77 08 21 | 16.49 | 14.40 | 12.40 | 15.38 | 14.11 | 12.55 | /6 | 11.13 | 10.62 | 10.35 | * | ... | 15.38 | 0.165 |
| LTT07246 | 1 | 18 15 12.4 | -19 24 07 | 11.93 | 10.15 | 7.48 | 10.88 | 9.88 | 8.73 | /40 | 7.32 | 6.72 | 6.45 | ... | ... | ... | ... |
| LTT15403 | 1 | 18 15 43.5 | +18 56 19 | ... | ... | ... | 10.84 | 9.90 | 8.92 | /30 | 7.76 | 7.17 | 6.96 | ... | ... | 10.84 | 0.629 |
| GJ0708.3 | 1 | 18 16 18.2 | +01 31 27 | ... | ... | ... | 12.510 | 11.422 | 10.092 | /2 | 8.74 | 8.19 ^a | 7.89 | * | ... | 12.51 | 0.340 |
| GJ0709 | 1 | 18 16 31.0 | +45 33 28 | ... | ... | ... | 10.28 | 9.36 | 8.41 | /35 | 7.26 | 6.66 | 6.46 | * | ... | 10.28 | 0.618 |
| GJ1225 | 1 | 18 17 15.0 | +68 33 19 | ... | ... | ... | 15.39 | 14.06 | 12.37 | /37 | 10.78 | 10.28 | 10.04 | * | ... | 15.39 | 0.143 |
| LHS0462(A) | 2(1) | 18 18 02.7 | +38 45 19 | ... | ... | ... | 11.88 | 10.78 | 9.42 | /37 | 8.04 | 7.49 | 7.22 | * | ... | 11.88 | 0.319 |
| LHS0461(B) | 0(1) | 18 18 03.5 | +38 46 36 | ... | ... | ... | 13.54 | 12.29 | 10.71 | /37 | 9.20 | 8.63 | 8.37 | * | 1.66 | 13.54 | 0.180 |
| LHS3376 | 1 | 18 19 02.8 | +66 11 07 | ... | ... | ... | 13.49 | 12.15 | 10.45 | /37 | 8.74 | 8.26 | 7.95 | * | ... | 13.49 | 0.138 |
| LHS3378 | 1 | 18 19 17.0 | -77 02 50 | 15.11 | 13.17 | 11.42 | ... | ... | ... | ... | 9.81 | 9.35 | 9.06 | ... | ... | ... | ... |
| LP690-011 | 1 | 18 19 59.6 | -06 17 32 | 15.11 | 13.98 | 12.78 | ... | ... | ... | ... | 10.15 | 9.54 | 9.31 | ... | ... | ... | ... |
| GJ0712 | 1 | 18 22 06.7 | +06 20 38 | ... | ... | ... | 12.600 | 11.483 | 10.027 | /2 | 8.67 | 8.13 | 7.94 | * | ... | 12.60 | 0.301 |
| GJ1227 | 1 | 18 22 27.1 | +62 03 02 | ... | ... | ... | 13.460 | 12.118 | 10.352 | /2 | 8.64 | 8.05 | 7.74 | * | ... | 13.46 | 0.149 |
| LTT15449 | 1 | 18 25 04.7 | +24 38 04 | ... | ... | ... | 10.79 | 9.87 | 8.94 | /31 | 7.90 ^a | 7.17 | 6.98 | * | ... | 10.79 | 0.623 |
| LHS3385 | 1 | 18 25 31.9 | +38 21 12 | ... | ... | ... | 11.27 | 10.35 | 9.39 | /37 | 8.29 | 7.66 | 7.49 | * | ... | 11.27 | 0.590 |
| LP630-081 | 1 | 18 26 17.0 | +01 46 21 | ... | ... | ... | 14.90 | 13.52 | 11.79 | 2/1 | 10.04 | 9.47 | 9.17 | * | ... | 14.90 | 0.165 |
| WT0562 | 1 | 18 26 19.8 | -65 47 41 | 16.82 | 14.49 | 11.97 | 15.36 | 13.93 | 12.13 | /26 | 10.35 | 9.81 | 9.45 | * | ... | 15.36 | 0.138 |
| SCR1826-6542 | 1 | 18 26 46.8 | -65 42 40 | 18.68 | 16.44 | 12.91 | 17.35 | 15.28 | 12.96 | /39 | 10.57 | 9.96 | 9.55 | * | ... | 17.35 | 0.095 |
| GJ0714 | 1 | 18 30 12.0 | -58 16 28 | 10.91 | 8.30 | 7.45 | 9.81 | 8.89 | 7.93 | /40 | 6.87 | 6.24 | 5.96 | ... | ... | ... | ... |
| GJ0720B | 0(1) | 18 35 18.3 | +45 44 38 | ... | ... | ... | 13.02 | 11.84 | 10.33 | /37 | 6.88 | 6.26 | 6.08 | * | 3.16 | 13.02 | 0.274 |
| GJ0720A | 2(1) | 18 35 18.3 | +45 44 38 | ... | ... | ... | 9.86 | 8.95 | 8.02 | /37 | 6.88 | 6.26 | 6.08 | * | ... | 9.86 | 0.648 |
| 2MA1835+3259 | 1 | 18 35 38.0 | +32 59 54 | ... | ... | ... | 18.16 | 15.84 | 13.38 | 1/1 | 10.27 | 9.62 | 9.17 | * | ... | 18.16 | 0.075 |
| G141-021 | 1 | 18 36 19.0 | +13 36 30 | ... | ... | ... | 12.45 | 11.23 | 9.69 | 3/1 | 8.19 | 7.61 | 7.37 | * | ... | 12.45 | 0.269 |
| L489-068 | 1 | 18 38 30.3 | -39 04 31 | 14.57 | 12.17 | 10.37 | ... | ... | ... | ... | 9.54 | 8.96 | 8.69 | ... | ... | ... | ... |
| GJ2138B | 0 | 18 38 44.7 | -14 29 26 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.04 | 11.99 | 0.336 |
| GJ2138A | 2 | 18 38 44.8 | -14 29 26 | 12.66J | 10.84J | 8.87J | 11.22J | 10.18J | 8.93J | /20 | 7.66J | 7.06J | 6.85J | * | ... | 11.95 | 0.340 |
| LP335-012 | 1 | 18 39 33.0 | +29 52 17 | ... | ... | ... | 18.00 | 15.89 | 13.47 | 1/1 | 11.01 | 10.38 | 10.01 | * | ... | 18.00 | 0.084 |
| LP044-334 | 1 | 18 40 02.0 | +72 40 54 | ... | ... | ... | 17.51 | 15.57 | 13.31 | 1/1 | 10.97 | 10.38 | 10.01 | * | ... | 17.51 | 0.096 |
| GJ0723 | 1 | 18 40 17.8 | -10 27 55 | 12.53 | 9.50 | 8.42 | 11.47 | 10.46 | 9.38 | /2 | 8.26 | 7.69 | 7.46 | * | ... | 11.47 | 0.526 |
| Wolf1467 | 1 | 18 40 50.2 | -08 04 59 | 14.78 | 12.83 | 11.51 | ... | ... | ... | ... | 9.56 | 9.05 | 8.74 | ... | ... | ... | ... |
| GJ0724 | 1 | 18 40 57.3 | -13 22 47 | 12.14 | 10.21 | 9.21 | 10.62 | 9.63 | 8.56 | /2 | 7.40 | 6.73 ^a | 6.55 | * | ... | 10.62 | 0.561 |
| GJ1230C | 0 | 18 41 09.4 | +24 47 15 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.56 | 14.82 | 0.113 |
| GJ1230A | 3(2) | 18 41 09.4 | +24 47 15 | ... | ... | ... | 12.16J | 10.82J | 9.08J | /37 | 7.53J | 6.91J | 6.62J | * | ... | 12.26 | 0.223 |
| SCR1841-4347 | 1 | 18 41 09.8 | -43 47 33 | 17.65 | 15.19 | 12.32 | 16.46 | 14.72 | 12.59 | /39 | 10.48 | 9.94 | 9.60 | * | ... | 16.46 | 0.100 |
| GJ1230B | 0(1) | 18 41 09.8 | +24 47 20 | ... | ... | ... | 14.88 | 13.28 | 11.34 | 3/1 | 8.86 ^a | 8.03 ^a | 7.77 ^a | * | 2.62 | 14.88 | 0.112 |
| LTT15513 | 1 | 18 41 59.0 | +31 49 49 | ... | ... | ... | 11.27 | 10.19 | 8.87 | /31 | 7.52 | 6.98 | 6.72 | * | ... | 11.27 | 0.383 |
| G141-029 | 1 | 18 42 45.0 | +13 54 24 | ... | ... | ... | 12.84 | 11.57 | 9.94 | 3/1 | 8.36 | 7.81 | 7.55 | * | ... | 12.84 | 0.227 |
| GJ0725A | 2(1) | 18 42 46.6 | +59 37 49 | ... | ... | ... | 8.90 | 7.83 | 6.47 | /37 | 5.19 | 4.74 | 4.43 | * | ... | 8.90 | 0.364 |
| GJ0725B | 0(1) | 18 42 46.9 | +59 37 36 | ... | ... | ... | 9.69 | 8.57 | 7.13 | /37 | 5.72 | 5.20 | 5.00 | * | 0.79 | 9.69 | 0.285 |
| LHS5341 | 1 | 18 43 07.0 | -54 36 48 | 13.89 | 11.91 | 9.91 | 12.97 | 11.68 | 10.03 | /40 | 8.42 | 7.79 | 7.49 | * | ... | 12.97 | 0.195 |
| LTT07419(A) | 2(1) | 18 43 12.5 | -33 22 46 | 10.34 | 8.34 | 7.32 | 10.25 | 9.30 | 8.28 | /40 | 7.19 | 6.54 | 6.33 | * | ... | 10.25 | 0.589 |
| CE507(B) | 0(1) | 18 43 12.7 | -33 22 26 | ... | ... | ... | 16.24 | 14.66 | 12.67 | 2/1 | 10.73 | 10.14 | 9.83 | * | 5.99 | 16.24 | 0.111 |
| LHS3406 | 1 | 18 43 21.7 | +40 40 54 | ... | ... | ... | 18.28 | 16.27 | 13.94 | /8 | 11.31 | 10.69 | 10.31 | * | ... | 18.28 | 0.085 |
| SCR1845-6357B | 0BD | 18 45 02.0 | -63 57 47 | ... | ... | ... | ... | ... | ... | ... | 15.55 ^a | 15.28 ^a | 15.11 ^a | * | ... | ... | ... |
| SCR1845-6357A | 2(1) | 18 45 05.3 | -63 57 48 | ... | 16.33 | 12.53 | 17.40 | 15.00 | 12.46 | /39 | 9.54 | 8.97 | 8.51 | * | ... | 17.40 | 0.075 |
| LHS3409 | 1 | 18 45 44.0 | +52 28 20 | ... | ... | ... | 15.13 | 13.92 | 12.38 | /37 | 10.97 | 10.49 | 10.23 | * | ... | 15.13 | 0.162 |
| LTT07434B | 0 | 18 45 57.5 | -28 55 53 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.00 | 13.41 | 0.238 |
| LTT07434A | 2 | 18 45 57.5 | -28 55 53 | 14.84J | 13.47J | 12.31J | 12.68J | 11.49J | 9.94J | /40 | 8.41J | 7.90J | 7.60J | * | ... | 13.41 | 0.238 |
| SCR1847-1922 | 1 | 18 47 16.7 | -19 22 21 | 15.36 | 13.08 | 10.94 | 14.35 | 13.11 | 11.48 | /39 | 9.91 | 9.38 | 9.09 | ... | ... | ... | ... |
| LTT07452 | 1 | 18 48 01.3 | -14 34 51 | 13.55 | 11.93 | 10.04 | 12.08 | 11.00 | 9.67 | /40 | 8.38 | 7.83 | 7.56 | ... | ... | ... | ... |
| SCR1848-6855 | 2 | 18 48 21.0 | -68 55 34 | 17.99J | 16.07J | 13.97J | 16.86J | 15.68J | 13.83J | /17 | 11.89J | 11.40J | 11.10J | ... | ... | ... | ... |
| LHS3411 | 1 | 18 48 38.7 | -61 35 26 | 13.80 | 11.79 | 10.01 | ... | ... | ... | ... | 9.05 | 8.45 | 8.17 | ... | ... | ... | ... |

| | | | | | | | | | | | | | | | | |
|--------------|------|------------|-----------|--------|--------|--------|--------|--------|--------|-----|--------|--------------------|-------|-----|------|-------------|
| L345-091 | 2 | 18 48 41.4 | -46 47 08 | 12.54J | 10.82J | 9.29J | 11.60J | 10.50J | 9.12J | /40 | 7.83J | 7.24J | 6.99J | ... | ... | ... |
| SIP1848-8214 | 1 | 18 48 51.1 | -82 14 42 | 19.69 | 17.54 | 14.37 | 18.55 | 16.33 | 14.00 | /40 | 11.48 | 10.92 | 10.50 | ... | ... | ... |
| LP691-015 | 1 | 18 49 06.4 | -03 15 18 | 15.80 | 14.40 | 11.85 | 14.23 | 12.91 | 11.22 | /40 | 9.61 | 8.98 | 8.70 | ... | ... | ... |
| GJ0729 | 1 | 18 49 49.4 | -23 50 11 | 11.55 | 10.70 | 8.15 | 10.50 | 9.26 | 7.68 | /40 | 6.22 | 5.66 | 5.37 | * | ... | 10.44 0.192 |
| LHS3413 | 1 | 18 49 51.2 | -57 26 49 | 13.75 | 11.44 | 9.04 | 12.68 | 11.44 | 9.88 | /26 | 8.32 | 7.70 | 7.46 | * | ... | 12.68 0.258 |
| 2MA1849-0134 | 1 | 18 49 55.4 | -01 34 09 | 14.29 | 12.76 | 11.38 | ... | ... | ... | ... | 9.78 | 9.11 | 8.84 | ... | ... | ... |
| GJ0730 | 1 | 18 50 00.8 | +03 05 17 | ... | ... | ... | 10.740 | 9.782 | 8.789 | /2 | 7.72 | 7.08 | 6.86 | * | ... | 10.74 0.613 |
| HIP092451 | 1 | 18 50 26.6 | -62 03 03 | ... | ... | ... | 10.70 | 9.73 | 8.69 | /20 | 7.56 | 6.98 | 6.70 | * | ... | 10.70 0.545 |
| GJ0731 | 1 | 18 51 51.1 | +16 34 59 | ... | ... | ... | 10.150 | 9.216 | 8.280 | /2 | 7.16 | 6.53 | 6.32 | * | ... | 10.15 0.603 |
| LHS3418 | 1 | 18 52 00.2 | -60 46 11 | 14.47 | 12.21 | 10.20 | ... | ... | ... | ... | 9.31 | 8.72 | 8.46 | ... | ... | ... |
| L489-043 | 1 | 18 52 25.3 | -37 30 36 | 13.05 | 10.95 | 8.75 | 12.71 | 11.49 | 9.86 | /40 | 8.38 | 7.86 | 7.56 | ... | ... | ... |
| GJ0732 | 2(1) | 18 53 39.9 | -38 36 45 | 12.90 | 11.07 | 9.41 | 12.66 | 11.45 | 9.87 | /40 | 8.40 | 7.82 | 7.59 | ... | ... | ... |
| L077-046 | 1 | 18 55 14.7 | -71 15 03 | 15.76 | 13.77 | 11.26 | ... | ... | ... | ... | 10.08 | 9.47 | 9.22 | ... | ... | ... |
| GJ0735B | 0 | 18 55 27.4 | +08 24 09 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.16 | 10.96 0.426 |
| GJ0735A | 2 | 18 55 27.4 | +08 24 09 | ... | ... | ... | 10.12J | 9.02J | 7.66J | /2 | 6.31J | 5.68J | 5.43J | * | ... | 8.90 0.364 |
| SCR1855-6914 | 1 | 18 55 47.9 | -69 14 15 | 18.01 | 15.63 | 12.20 | 16.61 | 14.79 | 12.66 | /39 | 10.47 | 9.88 | 9.51 | * | ... | 16.61 0.097 |
| SCR1856-4704 | 2 | 18 56 38.4 | -47 04 58 | 16.29J | 13.93J | 11.65J | 14.85J | 13.55J | 11.87J | /39 | 10.29J | 9.75J | 9.45J | ... | ... | ... |
| SCR1856-4011 | 3(2) | 18 57 01.1 | -40 11 51 | 14.67J | 12.98J | 10.56J | 14.44J | 13.07J | 11.31J | /40 | 9.86 | 9.74 ^a | 9.08 | ... | ... | ... |
| GJ0737 | 2 | 18 57 30.6 | -55 59 30 | 10.10J | 7.75J | 6.51J | 8.84J | 7.90J | 6.92J | /20 | 5.87J | 5.25J ^a | 5.03J | ... | ... | ... |
| GJ0740 | 1 | 18 58 00.1 | +05 54 29 | ... | ... | ... | 9.210 | 8.279 | 7.309 | /2 | 6.24 | 5.59 | 5.36 | * | ... | 9.21 0.634 |
| GJ0739 | 1 | 18 59 07.5 | -48 16 28 | 11.92 | 9.93 | 8.81 | 11.14 | 10.10 | 8.80 | /20 | 7.52 | 6.93 | 6.70 | * | ... | 11.14 0.453 |
| L159-126 | 1 | 18 59 40.7 | -63 27 22 | 13.97 | 11.83 | 9.68 | ... | ... | ... | ... | 8.89 | 8.42 | 8.08 | ... | ... | ... |
| GJ0741 | 1 | 19 03 16.7 | -13 34 05 | 14.62 | 14.01 | 11.43 | 14.78 | 13.63 | 12.08 | /2 | 10.38 | 9.80 | 9.54 | * | ... | 14.78 0.173 |
| SCR1904-2406 | 1 | 19 04 21.8 | -24 06 16 | 15.63 | 13.53 | 11.59 | 14.53 | 13.27 | 11.64 | /40 | 10.12 | 9.55 | 9.27 | ... | ... | ... |
| L274-159 | 1 | 19 05 20.3 | -54 34 43 | 14.42 | 12.46 | 10.73 | ... | ... | ... | ... | 9.41 | 8.71 | 8.55 | ... | ... | ... |
| GJ0745A | 2(1) | 19 07 05.5 | +20 53 17 | ... | ... | ... | 10.76 | 9.74 | 8.53 | /37 | 7.28 | 6.75 ^a | 6.52 | * | ... | 10.76 0.375 |
| GJ0745B | 0(1) | 19 07 13.2 | +20 52 37 | ... | ... | ... | 10.78 | 9.75 | 8.55 | /37 | 7.30 | 6.73 ^a | 6.52 | * | 0.02 | 10.78 0.373 |
| GJ0747B | 0 | 19 07 43.0 | +32 32 41 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.05 | 12.04 0.238 |
| GJ0747A | 2 | 19 07 43.0 | +32 32 41 | ... | ... | ... | 11.26J | 10.10J | 8.65J | /37 | 7.24J | 6.67J | 6.42J | * | ... | 11.99 0.243 |
| GJ1231 | 1 | 19 08 15.8 | +26 35 06 | ... | ... | ... | 15.14 | 13.79 | 12.08 | /37 | 10.36 | 9.76 | 9.47 | * | ... | 15.14 0.147 |
| L490-020 | 1 | 19 08 22.1 | -37 05 28 | 14.75 | 12.79 | 10.92 | ... | ... | ... | ... | 9.76 | 9.19 | 8.93 | ... | ... | ... |
| GJ1232 | 1 | 19 09 50.9 | +17 40 06 | ... | ... | ... | 13.50 | 12.18 | 10.47 | /37 | 8.82 | 8.20 | 7.90 | * | ... | 13.50 0.174 |
| SIP1910-4132 | 3(1) | 19 10 34.6 | -41 33 45 | 15.17 | 12.93 | 11.00 | ... | ... | ... | ... | 9.85 | 9.25 | 9.03 | ... | ... | ... |
| L346-096 | 1 | 19 11 04.1 | -47 39 14 | 15.90 | 13.77 | 11.35 | ... | ... | ... | ... | 10.11 | 9.51 | 9.23 | ... | ... | ... |
| GJ0748B | 0 | 19 12 14.6 | +02 53 11 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.81 | 13.32 0.179 |
| GJ0748A | 2 | 19 12 14.6 | +02 53 11 | ... | ... | ... | 11.31J | 9.99J | 8.52J | /2 | 7.09J | 6.57J | 6.29J | * | ... | 11.49 0.335 |
| GJ0747.4 | 1 | 19 12 25.3 | -55 52 08 | 12.21 | 10.12 | 9.07 | 11.30 | 10.34 | 9.35 | /2 | 8.22 | 7.61 | 7.38 | * | ... | 11.30 0.546 |
| G207-022 | 1 | 19 12 30.4 | +35 33 35 | ... | ... | ... | 12.02 | 10.96 | 9.69 | /31 | 8.40 | 7.82 | 7.61 | * | ... | 12.02 0.399 |
| WIS1912-3615 | 1 | 19 12 39.3 | -36 14 57 | 14.44 | 12.16 | 10.09 | 13.91 | 12.64 | 11.00 | /40 | 9.52 | 9.01 ^a | 8.77 | ... | ... | ... |
| SCR1913-2312 | 1 | 19 13 06.1 | -23 12 05 | 17.89 | 15.81 | 13.40 | 17.01 | 15.43 | 13.43 | /40 | 11.43 | 10.87 | 10.52 | ... | ... | ... |
| LHS3443 | 1 | 19 13 08.0 | -39 01 54 | 13.30 | 11.68 | 9.70 | 12.39 | 11.27 | 9.85 | /26 | 8.47 | 7.92 | 7.66 | * | ... | 12.39 0.402 |
| LHS3445(A) | 2(1) | 19 14 39.1 | +19 19 03 | ... | ... | ... | 11.59 | 10.49 | 9.03 | /37 | 7.58 | 7.03 | 6.81 | * | ... | 11.59 0.469 |
| LHS3446(B) | 0(1) | 19 14 39.3 | +19 18 22 | ... | ... | ... | 13.28 | 12.11 | 10.57 | /37 | 9.10 | 8.56 | 8.34 | * | 1.69 | 13.28 0.288 |
| LP868-019 | 1 | 19 16 35.6 | -25 38 42 | 14.75 | 12.67 | 10.83 | ... | ... | ... | ... | 9.70 | 9.10 | 8.85 | ... | ... | ... |
| GJ0750 | 2 | 19 16 42.9 | -45 53 22 | 10.29J | 7.95J | 7.13J | 9.36J | 8.43J | 7.48J | /20 | 6.45J | 5.77J | 5.57J | ... | ... | ... |
| GJ0752A | 2(1) | 19 16 55.2 | +05 10 08 | ... | ... | ... | 9.10 | 8.07 | 6.78 | /2 | 5.58 | 4.93 | 4.67 | * | ... | 9.10 0.466 |
| GJ0752B | 0(1) | 19 16 58.0 | +05 09 02 | ... | ... | ... | 17.20 | 15.10 | 12.84 | /2 | 9.91 | 9.23 | 8.77 | * | 8.10 | 17.20 0.079 |
| SCR1918-4554 | 1 | 19 18 29.5 | -45 54 30 | 17.89 | 15.29 | 12.57 | 16.58 | 15.03 | 13.07 | /40 | 11.21 | 10.65 | 10.30 | ... | ... | ... |
| L160-005 | 1 | 19 19 41.2 | -59 55 20 | 14.90 | 12.61 | 10.29 | ... | ... | ... | ... | 9.45 | 8.89 | 8.61 | ... | ... | ... |
| GJ0754 | 1 | 19 20 48.0 | -45 33 30 | 13.12 | 10.96 | 8.83 | 12.25 | 10.94 | 9.25 | /40 | 7.66 | 7.13 | 6.85 | * | ... | 12.23 0.174 |
| LHS0475 | 1 | 19 20 54.3 | -82 33 16 | 13.74 | 11.83 | 10.14 | 12.69 | 11.51 | 10.00 | /16 | 8.56 | 8.00 | 7.69 | * | ... | 12.69 0.255 |
| GJ1235 | 1 | 19 21 38.7 | +20 52 03 | ... | ... | ... | 13.37 | 12.09 | 10.44 | /37 | 8.80 | 8.22 | 7.94 | * | ... | 13.37 0.174 |
| GJ0756 | 1 | 19 21 51.4 | +28 39 58 | ... | ... | ... | 11.86 | 10.97 | 9.84 | /1 | 8.35 | 7.75 | 7.55 | * | ... | 11.86 0.529 |
| GJ1236 | 1 | 19 22 02.0 | +07 02 31 | ... | ... | ... | 12.40 | 11.27 | 9.86 | /37 | 8.52 | 7.94 | 7.69 | * | ... | 12.40 0.259 |
| SCR1922-3503 | 1 | 19 22 05.6 | -35 03 45 | 15.82 | 13.26 | 11.28 | 14.90 | 13.59 | 11.91 | /40 | 10.29 | 9.78 | 9.47 | ... | ... | ... |
| LHS3459 | 1 | 19 22 40.0 | +29 25 15 | ... | ... | ... | 15.35 | 14.05 | 12.34 | /37 | 10.75 | 10.24 | 9.97 | * | ... | 15.35 0.156 |
| SCR1924-0931 | 1 | 19 24 11.0 | -09 31 34 | 14.76 | 12.72 | 10.81 | 13.89 | 12.73 | 11.21 | /40 | 9.83 | 9.20 | 8.93 | ... | ... | ... |
| GJ1238 | 1 | 19 24 16.3 | +75 33 12 | ... | ... | ... | 15.38 | 13.81 | 11.84 | /37 | 9.91 | 9.28 | 8.96 | * | ... | 15.38 0.114 |
| G185-023 | 1 | 19 26 02.0 | +24 26 17 | ... | ... | ... | 14.51 | 12.98 | 11.41 | /1 | 9.63 | 9.03 | 8.73 | * | ... | 14.51 0.204 |
| SCR1927-0409 | 1 | 19 27 13.0 | -04 09 49 | 16.47 | 14.77 | 12.47 | 15.38 | 14.01 | 12.23 | /40 | 10.56 | 9.94 | 9.68 | ... | ... | ... |
| LHS5348B | 0 | 19 27 52.6 | -28 11 15 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.72 | 17.66 0.089 |
| LHS5348A | 2 | 19 27 52.7 | -28 11 15 | 15.79J | 13.55J | 11.01J | 14.85J | 13.36J | 11.46J | /40 | 9.69J | 9.11J | 8.79J | * | ... | 14.94 0.132 |
| L045-006 | 1 | 19 29 38.3 | -74 44 42 | 12.91 | 10.73 | 9.96 | 11.80 | 10.78 | 9.53 | /40 | 8.29 | 7.73 | 7.45 | ... | ... | ... |
| L078-093 | 1 | 19 31 01.4 | -73 37 06 | 13.52 | 12.20 | 10.71 | ... | ... | ... | ... | 9.18 | 8.51 | 8.24 | ... | ... | ... |
| SCR1931-0306 | 1 | 19 31 04.6 | -03 06 18 | 17.67 | 15.77 | 12.93 | 16.81 | 15.11 | 13.11 | /39 | 11.15 | 10.56 | 10.23 | * | ... | 16.81 0.107 |
| L348-141 | 1 | 19 31 53.2 | -48 33 54 | 16.50 | 14.34 | 11.76 | ... | ... | ... | ... | 10.63 | 10.02 | 9.72 | ... | ... | ... |

| | | | | | | | | | | | | | | | | |
|---------------|------|------------|-----------|--------|--------|--------|--------|--------|--------|-----|-------|-------------------|-------------------|-----|-------|-------------|
| SCR1932-5005 | 1 | 19 32 48.6 | -50 05 39 | 16.87 | 14.51 | 11.99 | 15.47 | 14.14 | 12.42 | /39 | 10.75 | 10.11 | 9.85 | ... | ... | ... |
| L275-026 | 1 | 19 34 03.9 | -52 25 14 | 13.92 | 11.56 | 9.38 | 12.83 | 11.68 | 10.19 | /40 | 8.77 | 8.16 | 7.92 | ... | ... | ... |
| LHS3472 | 1 | 19 34 57.6 | +53 15 06 | ... | ... | ... | 12.20 | 11.12 | 9.81 | /37 | 8.55 | 7.97 | 7.68 ^a | * | 12.20 | 0.331 |
| LTT18490 | 1 | 19 39 32.8 | +71 52 19 | ... | ... | ... | 10.98 | 10.06 | 9.09 | /34 | 8.02 | 7.38 | 7.19 | * | 10.98 | 0.601 |
| LP869-042 | 1 | 19 39 36.2 | -26 45 07 | 11.58 | 9.64 | 8.69 | 10.48 | 9.56 | 8.58 | /20 | 7.50 | 6.83 | 6.65 | ... | ... | ... |
| GJ1242 | 1 | 19 41 54.2 | +03 09 16 | ... | ... | ... | 12.98 | 11.95 | 10.77 | 1/1 | 9.30 | 8.76 | 8.52 | * | 12.98 | 0.366 |
| LP869-019 | 1 | 19 42 00.7 | -21 04 06 | 14.01 | 12.08 | 9.93 | 13.22 | 11.93 | 10.28 | /40 | 8.69 | 8.08 | 7.82 | * | 13.22 | 0.294 |
| SCR1942-2045 | 1 | 19 42 12.8 | -20 45 48 | ... | ... | ... | 14.29 | 12.98 | 11.25 | 2/1 | 9.60 | 9.03 | 8.76 | * | 14.29 | 0.178 |
| L420-142 | 1 | 19 42 53.3 | -44 06 28 | 14.32 | 12.14 | 10.14 | ... | ... | ... | ... | 9.43 | 8.85 | 8.59 | ... | ... | ... |
| 2MA1943-3722 | 1 | 19 43 24.7 | -37 22 11 | 14.43 | 12.28 | 10.17 | ... | ... | ... | ... | 9.20 | 8.49 | 8.25 | ... | ... | ... |
| LP925-037 | 1 | 19 43 51.8 | -32 24 04 | 12.38 | 10.53 | 9.23 | 11.87 | 10.87 | 9.65 | /40 | 8.12 | 7.53 | 7.29 | ... | ... | ... |
| LP869-026B | 0 | 19 44 53.7 | -23 37 59 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.14 | 14.91 0.142 |
| LP869-026A | 2 | 19 44 53.8 | -23 37 59 | 15.24J | 13.19J | 10.71J | 14.09J | 12.65J | 10.85J | /40 | 9.17J | 8.57J | 8.27J | * | ... | ... |
| GJ0766B | 0 | 19 45 45.5 | +27 07 32 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.92 | 13.66 0.167 |
| GJ0766A | 2 | 19 45 45.5 | +27 07 32 | ... | ... | ... | 12.37J | 11.13J | 9.52J | /37 | 8.00J | 7.41J | 7.14J | * | ... | 12.76 0.228 |
| LTT15769 | 1 | 19 45 49.7 | +32 23 13 | ... | ... | ... | 10.86 | 9.89 | 8.76 | /31 | 7.57 | 7.03 | 6.77 | * | ... | 10.86 0.447 |
| GJ0767B | 0 | 19 46 24.0 | +32 01 01 | ... | ... | ... | ... | ... | ... | ... | 7.32 | 6.64 ^a | 6.48 | * | 0.77 | 10.99 0.461 |
| GJ0767A | 2 | 19 46 24.3 | +32 00 57 | ... | ... | ... | 9.79J | 8.81J | 7.67J | /37 | 6.88 | 6.22 | 6.04 | * | ... | 10.22 0.559 |
| LHS3484 | 1 | 19 47 04.5 | -71 05 33 | 14.86 | 12.74 | 10.75 | 13.88 | 12.70 | 11.19 | /26 | 9.79 | 9.22 | 8.98 | ... | ... | ... |
| SCR1947-7646 | 1 | 19 47 14.7 | -76 46 55 | 17.58 | 15.78 | 13.35 | 16.80 | 15.25 | 13.31 | /40 | 11.39 | 10.78 | 10.49 | ... | ... | ... |
| WT2180 | 1 | 19 48 22.7 | -08 22 52 | 17.91 | 15.70 | 12.93 | 16.64 | 14.97 | 13.04 | /8 | 11.12 | 10.54 | 10.19 | * | ... | 16.64 0.112 |
| LHS3489B | 0 | 19 50 04.4 | +32 35 22 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.77 | 14.38 0.182 |
| LHS3489A | 2 | 19 50 04.4 | +32 35 22 | ... | ... | ... | 12.42J | 11.34J | 9.98J | /37 | 8.65J | 8.05J | 7.84J | * | ... | 12.61 0.334 |
| GJ1243 | 1 | 19 51 09.3 | +46 29 00 | ... | ... | ... | 12.83 | 11.63 | 10.09 | /29 | 8.59 | 8.05 | 7.77 | * | ... | 12.83 0.241 |
| 2MA1951-3510B | 0 | 19 51 35.8 | -35 10 37 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.36 | 14.72 0.172 |
| 2MA1951-3510A | 2 | 19 51 35.9 | -35 10 38 | 13.97J | 11.57J | 9.49J | 13.06J | 11.75J | 10.08J | /40 | 8.58J | 8.04J | 7.74J | * | ... | 13.36 0.184 |
| 2MA1951-4025 | 1 | 19 51 36.0 | -40 25 21 | 14.49 | 12.38 | 10.27 | ... | ... | ... | ... | 9.58 | 8.98 | 8.71 | ... | ... | ... |
| LP870-054 | 1 | 19 52 41.6 | -24 46 02 | 14.16 | 12.27 | 10.86 | ... | ... | ... | ... | 9.51 | 8.93 | 8.69 | ... | ... | ... |
| GJ1245A | 3(2) | 19 53 54.4 | +44 24 54 | ... | ... | ... | 13.41J | 11.81J | 9.80J | /37 | 7.79J | 7.19J | 6.85J | * | ... | 13.41 0.115 |
| GJ1245C | 0 | 19 53 54.5 | +44 24 53 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 3.29 | 16.70 0.078 |
| GJ1245B | 0(1) | 19 53 55.1 | +44 24 55 | ... | ... | ... | 14.01 | 12.36 | 10.28 | /37 | 8.28 | 7.73 | 7.39 | * | 0.60 | 14.01 0.105 |
| L160-159 | 1 | 19 54 04.1 | -64 38 10 | 15.21 | 13.16 | 11.18 | ... | ... | ... | ... | 9.96 | 9.34 | 9.09 | ... | ... | ... |
| LP926-055 | 1 | 19 54 24.9 | -31 47 60 | 14.28 | 12.15 | 10.38 | ... | ... | ... | ... | 9.10 | 8.57 | 8.32 | ... | ... | ... |
| LHS3499 | 1 | 19 55 52.8 | +51 16 22 | ... | ... | ... | 11.86 | 10.90 | 9.81 | /37 | 8.66 | 8.07 | 7.85 | * | ... | 11.86 0.513 |
| LEHPM2-4639 | 1 | 19 56 06.6 | -54 42 54 | 13.80 | 11.73 | 9.37 | ... | ... | ... | ... | 9.16 | 8.48 | 8.34 | ... | ... | ... |
| LP754-008 | 1 | 19 57 52.0 | -10 53 05 | 15.06 | 13.29 | 10.98 | 14.35 | 13.06 | 11.38 | /24 | 9.73 | 9.17 | 8.84 | ... | ... | ... |
| LHS3505 | 1 | 19 58 13.5 | +02 01 25 | ... | ... | ... | 11.97 | 10.92 | 9.64 | /37 | 8.37 | 7.82 | 7.56 | * | ... | 11.97 0.384 |
| SCR1959-3631 | 1 | 19 59 21.0 | -36 31 04 | 11.58 | 9.44 | 8.40 | 11.07 | 10.19 | 9.31 | /39 | 8.24 | 7.62 | 7.41 | ... | ... | ... |
| SCR1959-6236 | 1 | 19 59 33.6 | -62 36 13 | 17.48 | 15.36 | 12.68 | 16.27 | 14.82 | 12.96 | /39 | 11.07 | 10.49 | 10.23 | ... | ... | ... |
| DEN2002-5425 | 1 | 20 02 13.4 | -54 25 56 | 19.39 | 17.21 | 13.86 | ... | ... | ... | ... | 11.62 | 11.04 | 10.64 | ... | ... | ... |
| GJ1248 | 1 | 20 03 51.0 | +05 59 44 | ... | ... | ... | 12.11 | 11.07 | 9.85 | /37 | 8.63 | 8.08 | 7.87 | * | ... | 12.11 0.319 |
| LHS3514 | 1 | 20 03 58.9 | -08 07 47 | 14.73 | 12.70 | 10.76 | 13.54 | 12.31 | 10.71 | /40 | 9.18 | 8.58 ^a | 8.29 | ... | ... | ... |
| GJ0774B | 0(1) | 20 04 01.9 | -65 35 57 | ... | ... | ... | 12.83 | 11.71 | 10.24 | /2 | 8.87 | 8.38 | 8.13 | * | 1.48 | 12.83 0.259 |
| GJ0774A | 2(1) | 20 04 04.7 | -65 36 01 | 12.35 | ... | ... | 11.35 | 10.34 | 9.06 | /2 | 7.80 | 7.28 | 7.06 | * | ... | 11.35 0.409 |
| LHS3516 | 1 | 20 04 06.8 | -31 41 48 | 15.43 | 13.60 | 11.26 | ... | ... | ... | ... | 9.91 | 9.31 | 9.03 | ... | ... | ... |
| LP870-065 | 1 | 20 04 30.8 | -23 42 02 | 13.97 | 12.02 | 10.00 | 13.02 | 11.75 | 10.09 | /40 | 8.56 | 8.01 | 7.70 | * | ... | 13.02 0.308 |
| GJ0781.1A | 2(1) | 20 07 45.0 | -31 45 14 | 13.54 | 11.37 | 9.39 | 12.22 | 11.12 | 9.73 | /2 | 8.27 | 7.68 | 7.40 | * | ... | 12.22 0.355 |
| GJ0781.1B | 0(1) | 20 07 48.0 | -31 45 28 | ... | ... | ... | 12.51 | 11.28 | 9.70 | /2 | 8.37 | 7.83 | 7.59 | * | 0.29 | 12.51 0.325 |
| LEHPM2-0064 | 1 | 20 07 55.2 | -42 05 15 | 15.70 | 13.39 | 10.75 | 14.30 | 12.96 | 11.20 | /40 | 9.52 | 8.96 ^a | 8.61 | ... | ... | ... |
| LTT07959 | 1 | 20 07 57.6 | -01 32 28 | 14.32 | 12.36 | 10.56 | ... | ... | ... | ... | 9.59 | 8.99 | 8.75 | ... | ... | ... |
| LHS3525 | 1 | 20 08 07.5 | -52 44 25 | 14.36 | 12.28 | 10.43 | ... | ... | ... | ... | 9.46 | 8.76 | 8.57 | ... | ... | ... |
| GJ1250B | 0 | 20 08 17.9 | +33 18 13 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.72 | 17.91 0.098 |
| GJ1250A | 2 | 20 08 17.9 | +33 18 13 | ... | ... | ... | 14.93J | 13.52J | 11.71J | 2/1 | 9.96J | 9.40J | 9.08J | * | ... | 15.19 0.166 |
| WT0682 | 1 | 20 08 23.8 | -55 21 26 | 15.46 | 13.90 | 12.11 | ... | ... | ... | ... | 10.24 | 9.67 | 9.38 | ... | ... | ... |
| 2MA2009-0113 | 1 | 20 09 18.2 | -01 13 38 | 15.36 | 13.09 | 10.62 | 14.47 | 12.98 | 11.16 | /27 | 9.40 | 8.83 | 8.51 | * | ... | 14.47 0.132 |
| L349-063 | 1 | 20 09 51.6 | -47 31 34 | 15.53 | 13.36 | 11.12 | ... | ... | ... | ... | 9.93 | 9.31 | 9.01 | ... | ... | ... |
| LTT07991 | 1 | 20 11 06.7 | -02 30 10 | 14.73 | 12.96 | 11.17 | ... | ... | ... | ... | 9.62 | 9.01 | 8.80 | ... | ... | ... |
| GJ0784 | 1 | 20 13 53.4 | -45 09 51 | 8.82 | 6.21 | 5.21 | 7.95 | 7.04 | 6.13 | /2 | 5.12 | 4.53 ^a | 4.28 | * | ... | 7.97 0.637 |
| LP754-031 | 1 | 20 13 59.5 | -11 14 55 | 13.11 | 11.22 | 9.72 | ... | ... | ... | ... | 9.07 | 8.48 | 8.22 | ... | ... | ... |
| LHS3534 | 1 | 20 14 15.3 | -54 49 15 | 14.76 | 12.69 | 10.78 | ... | ... | ... | ... | 9.75 | 9.18 | 8.92 | ... | ... | ... |
| L209-071 | 1 | 20 15 22.7 | -56 45 54 | 13.83 | 11.68 | 9.52 | 12.85 | 11.68 | 10.15 | /40 | 8.68 | 8.03 | 7.77 | ... | ... | ... |
| SCR2016-7531 | 1 | 20 16 11.3 | -75 31 05 | 17.07 | 14.75 | 12.25 | 15.84 | 14.28 | 12.35 | /39 | 10.47 | 9.86 | 9.51 | * | ... | 15.84 0.118 |
| SCR2018-3635 | 1 | 20 18 06.5 | -36 35 28 | 16.31 | 14.07 | 11.47 | 14.63 | 13.38 | 11.75 | /39 | 10.21 | 9.67 | 9.44 | ... | ... | ... |
| LP814-065 | 1 | 20 18 14.6 | -20 12 48 | 14.32 | 12.18 | 10.27 | ... | ... | ... | ... | 9.46 | 8.84 | 8.58 | ... | ... | ... |
| LEHPM2-0783 | 1 | 20 19 49.8 | -58 16 43 | 18.64 | 16.35 | 12.87 | 17.17 | 15.28 | 13.03 | /27 | 10.66 | 10.10 | 9.72 | * | ... | 17.17 0.099 |
| LP927-008 | 1 | 20 20 43.6 | -28 06 07 | 14.65 | 12.48 | 10.48 | 13.96 | 12.73 | 11.15 | /40 | 9.63 | 8.97 | 8.72 | ... | ... | ... |

| | | | | | | | | | | | | | | | | | |
|--------------|------|------------|-----------|--------|--------|--------|--------|--------|--------|-------|--------|-------------------|-------|------|------|-------------|-------------|
| 2MA2022-3653 | 1 | 20 22 01.8 | -36 53 02 | 16.98 | 14.84 | 12.49 | ... | ... | ... | ... | 10.71 | 10.14 | 9.86 | ... | ... | ... | |
| GJ0788.1 | 1 | 20 22 41.9 | -58 17 09 | 11.67 | 9.66 | 8.52 | 10.57 | 9.67 | 8.81 | /2 | 7.82 | 7.18 | 6.97 | ... | ... | ... | |
| SCR2025-2259 | 1 | 20 25 18.9 | -22 59 06 | 15.26 | 13.26 | 11.40 | 14.22 | 13.03 | 11.48 | /39 | 10.00 | 9.48 | 9.16 | ... | ... | ... | |
| SCR2025-3545 | 1 | 20 25 30.0 | -35 45 46 | 15.93 | 13.55 | 11.32 | 14.37 | 13.11 | 11.53 | /40 | 9.98 | 9.39 | 9.04 | ... | ... | ... | |
| SCR2025-4207 | 1 | 20 25 41.3 | -42 07 31 | 13.86 | 11.73 | 9.63 | 13.16 | 12.08 | 10.72 | /40 | 9.41 | 8.73 | 8.51 | ... | ... | ... | |
| LP927-017 | 1 | 20 25 51.6 | -26 57 19 | 14.24 | 12.07 | 10.61 | ... | ... | ... | ... | 9.49 | 8.83 | 8.63 | ... | ... | ... | |
| GJ1253 | 1 | 20 26 05.3 | +58 34 23 | ... | ... | ... | 14.04 | 12.64 | 10.86 | /37 | 9.03 | 8.48 ^a | 8.10 | * | ... | 14.04 0.138 | |
| LEHPM2-0285 | 1 | 20 27 07.1 | -44 21 29 | 15.38 | 13.25 | 11.00 | ... | ... | ... | ... | 10.08 | 9.48 | 9.16 | ... | ... | ... | |
| L210-011 | 1 | 20 27 37.3 | -54 52 59 | 13.82 | 11.64 | 9.86 | ... | ... | ... | ... | 8.77 | 8.16 | 7.92 | ... | ... | ... | |
| GJ0791 | 1 | 20 27 41.7 | -27 44 52 | 12.02 | 10.03 | 8.21 | 11.47 | 10.40 | 9.04 | /2 | 7.71 | 7.08 | 6.86 | * | ... | 11.47 0.425 | |
| GJ1252 | 1 | 20 27 42.1 | -56 27 25 | 13.01 | 11.07 | 9.49 | 12.20 | 11.19 | 9.93 | /15 | 8.70 | 8.16 | 7.92 | * | ... | 12.20 0.413 | |
| GJ1251 | 1 | 20 28 03.7 | -76 40 16 | 14.90 | 12.93 | 10.73 | 13.88 | 12.58 | 10.91 | /40 | 9.36 | 8.88 | 8.60 | * | ... | 13.88 0.174 | |
| L755-019 | 1 | 20 28 43.6 | -11 28 31 | 13.22 | 10.97 | 8.28 | 12.47 | 11.31 | 9.81 | /27 | 8.39 | 7.76 | 7.50 | * | ... | 12.47 0.372 | |
| L080-175 | 1 | 20 29 06.9 | -74 21 12 | 13.68 | 11.73 | 10.26 | ... | ... | ... | ... | 9.40 | 8.69 | 8.44 | ... | ... | ... | |
| GJ0791.2B | 0 | 20 29 48.3 | +09 41 20 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 3.27 | 16.35 0.094 | |
| GJ0791.2A | 2(1) | 20 29 48.3 | +09 41 20 | ... | ... | ... | 13.08 | 11.73 | 9.98 | /2 | 8.23 | 7.67 | 7.31 | * | ... | 13.08 0.176 | |
| GJ0793 | 1 | 20 30 32.0 | +65 26 58 | ... | ... | ... | 10.56 | 9.47 | 8.11 | /37 | 6.74 | 6.14 | 5.93 | * | ... | 10.56 0.378 | |
| GJ0792B | 0 | 20 31 25.6 | +38 33 44 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.91 | 15.56 0.124 | |
| GJ0792A | 2 | 20 31 25.6 | +38 33 44 | ... | ... | ... | 13.48J | 12.24J | 10.67J | /37 | 9.19J | 8.63J | 8.36J | * | ... | 13.65 0.214 | |
| LEHPM2-1265B | 0 | 20 33 01.9 | -49 03 11 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.12 | 17.45 0.097 | |
| LEHPM2-1265A | 2 | 20 33 01.9 | -49 03 11 | 16.57J | 14.17J | 11.34J | 15.33J | 13.84J | 11.98J | /40 | 10.11J | 9.52J | 9.19J | * | ... | 15.33 0.138 | |
| LP755-027 | 1 | 20 33 32.3 | -09 59 05 | 14.82 | 12.67 | 10.98 | ... | ... | ... | ... | 9.88 | 9.25 | 8.96 | ... | ... | ... | |
| GJ1254 | 1 | 20 33 40.3 | +61 45 14 | ... | ... | ... | 12.54 | 11.35 | 9.79 | /37 | 8.29 | 7.66 ^a | 7.40 | * | ... | 12.54 0.326 | |
| LHS3564 | 1 | 20 34 43.0 | +03 20 51 | ... | ... | ... | 11.92 | 10.89 | 9.61 | /37 | 8.45 | 7.91 | 7.63 | * | ... | 11.92 0.466 | |
| L162-190 | 1 | 20 34 52.9 | -63 47 46 | 14.34 | 12.03 | 10.15 | ... | ... | ... | ... | 9.37 | 8.76 | 8.51 | ... | ... | ... | |
| SCR2036-3607 | 1 | 20 36 08.3 | -36 07 12 | ... | ... | ... | 11.66 | 10.59 | 9.27 | 2/1 | 8.03 | 7.42 | 7.17 | * | ... | 11.66 0.423 | |
| LHS3566 | 1 | 20 39 23.8 | -29 26 35 | 18.95 | 16.50 | 13.68 | 17.62 | 15.67 | 13.64 | /5 | 11.36 | 10.74 | 10.37 | * | ... | 17.62 0.096 | |
| SCR2040-5501 | 1 | 20 40 12.4 | -55 01 26 | 16.61 | 14.39 | 12.15 | 15.22 | 13.91 | 12.22 | /39 | 10.56 | 10.02 | 9.69 | * | ... | ... | |
| GJ1256 | 1 | 20 40 33.9 | +15 29 59 | ... | ... | ... | 13.45 | 12.10 | 10.38 | /37 | 8.64 | 8.08 | 7.75 | * | ... | 13.45 0.167 | |
| L567-074 | 1 | 20 42 43.4 | -32 55 18 | 11.79 | 9.76 | 8.29 | ... | ... | ... | ... | 8.23 | 7.56 | 7.33 | ... | ... | ... | |
| LP695-372 | 1 | 20 42 45.2 | -05 00 19 | 18.87 | 16.60 | 13.35 | ... | ... | ... | ... | 11.45 | 10.87 | 10.54 | ... | ... | ... | |
| GJ0800 | 1 | 20 42 57.2 | -18 55 06 | 11.72 | 9.77 | 8.02 | 10.80 | 9.86 | 8.76 | /2 | 7.56 | 6.95 | 6.74 | * | ... | 10.80 0.563 | |
| GJ0802C | 0 | 20 43 19.3 | +55 20 53 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.00 | 15.44 0.131 | |
| GJ0802B | 0BD | 20 43 19.3 | +55 20 53 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | ... | ... | |
| GJ0802A | 3(2) | 20 43 19.3 | +55 20 53 | ... | ... | ... | 14.69J | 13.26J | 11.36J | /37 | 9.56J | 9.06J | 8.75J | * | ... | 15.44 0.131 | |
| G262-026 | 1 | 20 43 41.3 | +64 16 54 | ... | ... | ... | 11.38 | 10.45 | 9.49 | /38 | 8.40 | 7.82 | 7.61 | * | ... | 11.38 0.530 | |
| GJ0806 | 1 | 20 45 04.1 | +44 29 56 | ... | ... | ... | 10.77 | 9.76 | 8.58 | /37 | 7.33 | 6.77 | 6.53 | * | ... | 10.77 0.459 | |
| GJ0803 | 3(1) | 20 45 09.5 | -31 20 27 | 9.82 | 7.68 | 5.96 | 8.65 | 7.68 | 6.61 | /40 | 5.44 | 4.83 | 4.53 | ... | ... | ... | |
| LHS3580 | 1 | 20 45 45.4 | -29 27 29 | 14.54 | 12.38 | 10.38 | ... | ... | ... | ... | 9.38 | 8.75 | 8.51 | ... | ... | ... | |
| LHS3583 | 1 | 20 46 37.1 | -81 43 14 | 12.58 | 10.06 | 8.71 | 11.50 | 10.39 | 9.02 | /26 | 7.69 | 7.12 | 6.83 | * | ... | 11.50 0.342 | |
| LP756-003 | 1 | 20 46 43.6 | -11 48 13 | 14.61 | 12.41 | 10.20 | 13.80 | 12.52 | 10.88 | /40 | 9.35 | 8.73 | 8.44 | * | ... | 13.80 0.242 | |
| LHS3585 | 1 | 20 47 22.6 | -25 47 07 | 14.59 | 12.38 | 10.64 | ... | ... | ... | ... | 9.65 | 9.05 | 8.78 | ... | ... | ... | |
| SCR2049-4012 | 1 | 20 49 10.0 | -40 12 06 | ... | ... | ... | 13.53 | 12.12 | 10.31 | 3/1 | 8.60 | 8.02 | 7.70 | * | ... | 13.53 0.156 | |
| SIP2049-1716 | 1 | 20 49 52.7 | -17 16 08 | 18.72 | 17.26 | 14.00 | ... | ... | ... | ... | 11.81 | 11.21 | 10.81 | ... | ... | ... | |
| LEP2050-3424 | 1 | 20 50 16.2 | -34 24 43 | 14.34 | 12.13 | 9.54 | 13.74 | 12.31 | 10.55 | /40 | 8.82 | 8.27 | 8.00 | ... | ... | ... | |
| GJ0808 | 1 | 20 51 41.6 | -79 18 40 | 13.06 | 10.81 | 9.43 | 11.81 | 10.82 | 9.64 | /16 | 8.46 | 7.91 | 7.66 | * | ... | 11.83 0.426 | |
| LP816-060 | 1 | 20 52 33.0 | -16 58 29 | 12.42 | 9.62 | 7.56 | 11.50 | 10.25 | 8.64 | /40 | 7.09 | 6.52 | 6.20 | * | ... | 11.46 0.222 | |
| 2MA2053-0133 | 1 | 20 53 09.1 | -01 33 04 | ... | ... | ... | 11.29 | 15.80 | 14.34 | 12.45 | /40 | 10.66 | 10.11 | 9.79 | * | ... | 15.79 0.127 |
| LP636-019 | 1 | 20 53 14.7 | -02 21 22 | 13.75 | 11.23 | 9.23 | ... | ... | ... | ... | 9.33 | 8.71 | 8.45 | ... | ... | ... | |
| GJ0809 | 1 | 20 53 19.7 | +62 09 15 | ... | ... | ... | 8.56 | 7.62 | 6.59 | /37 | 5.43 | 4.92 ^a | 4.62 | * | ... | 8.56 0.590 | |
| LEHPM1-3996 | 1 | 20 53 28.0 | -73 08 10 | 13.84 | 11.67 | 10.02 | ... | ... | ... | ... | 9.13 | 8.58 | 8.35 | ... | ... | ... | |
| LHS3593 | 1 | 20 53 33.2 | +10 36 37 | ... | ... | ... | 13.97 | 12.67 | 11.01 | /37 | 9.35 | 8.75 | 8.48 | * | ... | 13.97 0.181 | |
| LEHPM2-5514 | 1 | 20 54 15.0 | -53 29 56 | 13.14 | 10.92 | 9.69 | ... | ... | ... | ... | 8.86 | 8.22 | 8.05 | ... | ... | ... | |
| GJ0810C | 0 | 20 55 37.0 | -14 02 08 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.00 | 14.62 0.142 | |
| GJ0810B | 0(1) | 20 55 37.1 | -14 03 55 | ... | ... | ... | 14.61 | 13.25 | 11.46 | /2 | 9.72 | 9.22 | 8.92 | * | 1.99 | 14.61 0.143 | |
| GJ0810A | 3(2) | 20 55 37.8 | -14 02 08 | 13.56J | 11.65J | 9.55J | 12.48J | 11.23J | 9.62J | /16 | 8.12J | 7.64J | 7.37J | * | ... | 12.62 0.275 | |
| LP636-060 | 1 | 20 56 04.1 | -02 12 20 | 14.57 | 12.48 | 10.68 | ... | ... | ... | ... | 9.59 | 9.03 | 8.74 | ... | ... | ... | |
| LP872-027 | 1 | 20 56 27.2 | -24 00 13 | 16.33 | 14.15 | 11.60 | 15.16 | 13.79 | 12.00 | /24 | 10.25 | 9.69 | 9.38 | ... | ... | ... | |
| GJ0811.1 | 1 | 20 56 46.6 | -10 26 55 | 12.10 | 9.85 | 7.98 | 11.50 | 10.44 | 9.11 | /2 | 7.77 | 7.14 | 6.88 | * | ... | 11.50 0.436 | |
| GJ0813 | 1 | 20 57 25.3 | +22 21 45 | ... | ... | ... | 12.00 | 10.96 | 9.68 | /37 | 8.41 | 7.87 ^a | 7.64 | * | ... | 12.00 0.348 | |
| LTT16135 | 1 | 20 58 41.9 | +34 16 27 | ... | ... | ... | 11.06 | 10.14 | 9.18 | /38 | 8.07 | 7.43 | 7.25 | * | ... | 11.06 0.614 | |
| GJ0815B | 0 | 21 00 05.3 | +40 04 13 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.63 | 12.64 0.304 | |
| GJ0815C | 0 | 21 00 05.3 | +40 04 13 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.00 | 11.01 0.483 | |
| GJ0815A | 3 | 21 00 05.3 | +40 04 13 | ... | ... | ... | 10.15J | 9.15J | 7.97J | /37 | 6.67J | 6.09J | 5.88J | * | ... | 11.01 0.483 | |
| L424-030 | 1 | 21 00 54.9 | -41 31 44 | 14.95 | 12.57 | 10.25 | ... | ... | ... | ... | 9.49 | 8.84 | 8.60 | ... | ... | ... | |
| APM2101-4125 | 1 | 21 01 03.8 | -41 14 33 | 15.64 | 13.34 | 11.03 | ... | ... | ... | ... | 9.97 | 9.38 | 9.09 | ... | ... | ... | |

| | | | | | | | | | | | | | | | | | |
|---------------|------|------------|-----------|--------|-------|-------|--------|--------|--------|-----|--------|-------------------|-------|-----|------|-------|-------|
| GJ1263A | 2(1) | 21 46 42.7 | -00 10 24 | 13.68 | 11.57 | 9.49 | 12.64 | 11.43 | 9.87 | /37 | 8.36 | 7.83 | 7.49 | * | ... | 12.64 | 0.258 |
| LP874-062 | 1 | 21 46 45.5 | -21 17 47 | 14.71 | 12.52 | 10.45 | 13.66 | 12.43 | 10.82 | /24 | 9.29 | 8.71 | 8.38 | ... | ... | ... | ... |
| LTT16369 | 1 | 21 46 56.0 | +46 38 06 | ... | ... | ... | 13.36 | 12.18 | 10.62 | /32 | 9.09 | 8.48 | 8.21 | * | ... | 13.36 | 0.257 |
| LP698-042 | 1 | 21 47 17.5 | -04 44 41 | 14.88 | 12.35 | 10.05 | ... | ... | ... | ... | 9.42 | 8.84 | 8.50 | ... | ... | ... | ... |
| LHS3711 | 1 | 21 47 53.7 | +50 15 16 | ... | ... | ... | 13.33 | 12.18 | 10.68 | /37 | 9.31 | 8.77 ^a | 8.56 | * | ... | 13.33 | 0.312 |
| LHS3713 | 1 | 21 48 14.3 | +27 54 56 | ... | ... | ... | 11.99 | 10.97 | 9.73 | /37 | 8.51 | 7.93 | 7.69 | * | ... | 11.99 | 0.418 |
| LP818-034 | 1 | 21 48 53.0 | -19 47 27 | 16.09 | 13.77 | 11.40 | 14.85 | 13.55 | 11.82 | /24 | 10.13 | 9.51 | 9.21 | ... | ... | ... | ... |
| GJ1264 | 2 | 21 49 05.9 | -72 06 08 | 10.74J | 8.62J | 7.38J | 9.62J | 8.68J | 7.64J | /20 | 6.54J | 5.84J | 5.65J | ... | ... | ... | ... |
| L427-034 | 2 | 21 49 11.4 | -41 33 30 | 12.19J | 9.94J | 8.20J | 11.55J | 10.39J | 9.02J | /40 | 7.75J | 7.17J | 6.88J | ... | ... | ... | ... |
| LHS3719 | 1 | 21 49 25.9 | -63 06 52 | 13.32 | 11.41 | 9.69 | 12.56 | 11.45 | 10.08 | /26 | 8.74 | 8.12 | 7.89 | * | ... | 12.56 | 0.334 |
| WT0818 | 1 | 21 49 44.8 | -41 38 33 | 14.58 | 12.36 | 10.29 | 13.56 | 12.36 | 10.85 | /40 | 9.39 | 8.87 | 8.54 | ... | ... | ... | ... |
| LP638-050 | 1 | 21 51 27.0 | -01 27 14 | 18.15 | 15.93 | 13.09 | ... | ... | ... | ... | 11.28 | 10.74 | 10.39 | ... | ... | ... | ... |
| SCR2154-4754 | 1 | 21 54 02.5 | -47 54 02 | 16.46 | 14.32 | 12.00 | 15.43 | 14.07 | 12.37 | /40 | 10.71 | 10.13 | 9.84 | ... | ... | ... | ... |
| LP818-054 | 1 | 21 55 02.2 | -20 14 27 | 15.34 | 13.10 | 11.07 | ... | ... | ... | ... | 9.98 | 9.44 | 9.10 | ... | ... | ... | ... |
| LP983-034 | 1 | 21 55 48.4 | -33 13 15 | 13.30 | 11.25 | 9.40 | ... | ... | ... | ... | 8.60 | 7.98 | 7.70 | ... | ... | ... | ... |
| LP758-062 | 1 | 21 56 19.8 | -10 20 17 | 15.67 | 13.66 | 11.33 | 14.59 | 13.27 | 11.52 | /24 | 9.93 | 9.39 | 9.09 | ... | ... | ... | ... |
| LHS0516 | 1 | 21 56 55.3 | -01 54 09 | 15.28 | 13.36 | 11.08 | 14.65 | 13.29 | 11.52 | /37 | 9.88 | 9.32 | 9.03 | * | ... | 14.65 | 0.144 |
| LP759-006 | 1 | 21 57 12.7 | -09 03 27 | 16.34 | 14.24 | 11.88 | 15.11 | 13.73 | 11.94 | /24 | 10.14 | 9.51 | 9.24 | ... | ... | ... | ... |
| LTT16412 | 1 | 21 57 26.2 | +08 08 13 | ... | ... | ... | 11.03 | 10.06 | 8.91 | /20 | 7.72 | 7.12 | 6.85 | * | ... | 11.03 | 0.579 |
| LHS3735 | 1 | 21 57 39.3 | -09 28 13 | 16.19 | 14.12 | 12.02 | 14.84 | 13.60 | 11.98 | /37 | 10.45 | 9.82 | 9.54 | ... | ... | ... | ... |
| GJ0842.2 | 1 | 21 58 24.5 | +75 35 20 | ... | ... | ... | 10.57 | 9.66 | 8.69 | /35 | 7.60 | 6.93 | 6.73 | * | ... | 10.57 | 0.636 |
| LSPM2158+6117 | 1 | 21 58 35.0 | +61 17 06 | ... | ... | ... | 17.23 | 15.57 | 13.35 | 1/1 | 11.29 | 10.79 | 10.45 | * | ... | 17.23 | 0.100 |
| LHS3738(C) | 0 | 21 58 49.0 | -32 26 25 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 3.32 | 18.04 | 0.094 |
| LHS3738(B) | 0(2) | 21 58 49.0 | -32 26 25 | ... | ... | ... | 15.78J | 14.29J | 12.46J | 3/1 | 10.65J | 10.09J | 9.76J | * | 1.20 | 15.92 | 0.130 |
| LHS3739(A) | 3(1) | 21 58 50.2 | -32 28 18 | 15.67 | 13.38 | 11.07 | 14.72 | 13.45 | 11.88 | /26 | 10.39 | 9.83 | 9.56 | * | ... | 14.72 | 0.181 |
| GJ0842 | 1 | 21 59 34.7 | -59 45 10 | 10.57 | 8.56 | 7.02 | 9.74 | 8.78 | 7.75 | /2 | 6.61 | 5.99 | 5.76 | * | ... | 9.74 | 0.587 |
| G188-038 | 1 | 22 01 13.1 | +28 18 24 | ... | ... | ... | 11.99 | 10.76 | 9.17 | /31 | 7.64 | 7.04 | 6.78 | * | ... | 11.99 | 0.260 |
| GJ0844B | 0 | 22 01 49.0 | +16 28 02 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.31 | 11.57 | 0.435 |
| GJ0844A | 2 | 22 01 49.0 | +16 28 02 | ... | ... | ... | 10.65J | 9.61J | 8.33J | /20 | 7.01J | 6.42J | 6.18J | * | ... | 11.26 | 0.472 |
| GJ0843 | 1 | 22 02 00.8 | -19 28 59 | 12.82 | 10.23 | 8.84 | 12.03 | 10.89 | 9.45 | /2 | 8.05 | 7.50 ^a | 7.19 | ... | ... | ... | ... |
| GJ0846 | 1 | 22 02 10.2 | +01 24 00 | ... | ... | ... | 9.170 | 8.238 | 7.268 | /2 | 6.20 | 5.56 ^a | 5.32 | * | ... | 9.17 | 0.618 |
| LP759-017 | 1 | 22 02 11.3 | -11 09 46 | 20.11 | 17.87 | 14.88 | ... | ... | ... | ... | 12.36 | 11.71 | 11.37 | ... | ... | ... | ... |
| LHS3746 | 1 | 22 02 29.4 | -37 04 51 | 12.42 | 10.35 | 8.20 | 11.76 | 10.56 | 9.04 | /13 | 7.60 | 7.02 | 6.72 | * | ... | 11.76 | 0.245 |
| LTT18559 | 1 | 22 02 31.3 | -00 17 10 | 15.24 | 13.15 | 10.82 | ... | ... | ... | ... | 10.02 | 9.40 | 9.11 | ... | ... | ... | ... |
| LP875-009 | 1 | 22 03 20.0 | -25 21 52 | 13.72 | 11.16 | 9.86 | ... | ... | ... | ... | 9.03 | 8.49 | 8.25 | ... | ... | ... | ... |
| LHS3748 | 1 | 22 03 27.1 | -50 38 38 | 13.44 | 11.27 | 9.64 | 12.10 | 11.08 | 9.86 | /20 | 8.63 | 8.04 | 7.81 | * | ... | 12.10 | 0.427 |
| LP759-025 | 1 | 22 05 35.7 | -11 04 29 | 18.93 | 16.53 | 13.76 | ... | ... | ... | ... | 11.66 | 11.05 | 10.72 | ... | ... | ... | ... |
| LTT08848 | 2(1) | 22 05 51.3 | -11 54 51 | 13.32 | 9.11 | 7.95 | 10.15 | 9.25 | 8.33 | /34 | 7.22 | 6.60 | 6.40 | ... | ... | ... | ... |
| LHS3756 | 1 | 22 05 54.4 | -38 16 06 | 13.18 | 10.98 | 9.27 | ... | ... | ... | ... | 8.80 | 8.26 | 8.04 | ... | ... | ... | ... |
| LP699-032 | 1 | 22 06 09.6 | -07 23 36 | 17.45 | 15.17 | 12.49 | ... | ... | ... | ... | 10.67 | 10.06 | 9.76 | ... | ... | ... | ... |
| WT0870 | 1 | 22 06 40.7 | -44 58 07 | 15.66 | 13.36 | 10.95 | 14.43 | 13.10 | 11.40 | /26 | 9.76 | 9.18 | 8.89 | * | ... | 14.43 | 0.185 |
| L283-001 | 1 | 22 06 57.2 | -49 49 42 | 14.42 | 12.33 | 10.48 | ... | ... | ... | ... | 9.34 | 8.72 | 8.45 | ... | ... | ... | ... |
| LP983-102 | 1 | 22 07 53.9 | -37 04 24 | 13.96 | 11.71 | 9.97 | ... | ... | ... | ... | 9.27 | 8.69 | 8.43 | ... | ... | ... | ... |
| LP1032-066 | 1 | 22 08 16.2 | -42 42 59 | 13.71 | 11.60 | 10.11 | 12.68 | 11.62 | 10.32 | /24 | 9.05 | 8.47 | 8.19 | ... | ... | ... | ... |
| LTT08875 | 1 | 22 08 32.4 | -08 24 52 | 14.15 | 11.96 | 10.41 | ... | ... | ... | ... | 9.23 | 8.57 | 8.37 | ... | ... | ... | ... |
| L024-098 | 1 | 22 08 38.6 | -83 03 29 | 13.41 | 11.47 | 10.15 | ... | ... | ... | ... | 9.04 | 8.47 | 8.22 | ... | ... | ... | ... |
| GJ0849 | 1 | 22 09 40.3 | -04 38 27 | 11.64 | 9.21 | 7.55 | 10.38 | 9.27 | 7.87 | /40 | 6.51 | 5.90 | 5.59 | * | ... | 10.38 | 0.423 |
| G214-012 | 1 | 22 09 45.5 | +41 02 21 | ... | ... | ... | 12.60 | 11.51 | 10.10 | 1/1 | 8.76 | 8.12 | 7.87 | * | ... | 12.60 | 0.402 |
| LEHPM1-4416 | 1 | 22 10 13.2 | -71 46 07 | 15.90 | 13.68 | 11.32 | 14.53 | 13.20 | 11.54 | /40 | 9.98 | 9.42 | 9.11 | ... | ... | ... | ... |
| LTT08900 | 1 | 22 11 13.5 | -02 32 37 | 13.38 | 11.36 | 10.10 | ... | ... | ... | ... | 8.69 | 8.14 ^a | 7.82 | ... | ... | ... | ... |
| G214-014 | 1 | 22 11 16.9 | +41 00 54 | ... | ... | ... | 11.11 | 10.21 | 9.31 | /31 | 8.23 | 7.64 | 7.44 | * | ... | 11.11 | 0.594 |
| GJ0851 | 1 | 22 11 30.0 | +18 25 34 | ... | ... | ... | 10.23 | 9.21 | 7.97 | /35 | 6.73 | 6.04 | 5.82 | * | ... | 10.23 | 0.513 |
| LTT08905 | 1 | 22 11 56.9 | -07 42 57 | 13.77 | 11.66 | 10.24 | ... | ... | ... | ... | 9.24 | 8.58 | 8.36 | ... | ... | ... | ... |
| LHS3773 | 1 | 22 12 35.9 | +08 33 11 | ... | ... | ... | 11.97 | 10.90 | 9.55 | /37 | 8.28 | 7.68 | 7.47 | * | ... | 11.97 | 0.388 |
| LTT08914 | 2(1) | 22 13 28.8 | -14 44 54 | 14.21 | 12.49 | 10.60 | 13.34 | 12.22 | 10.79 | /38 | 9.45 | 8.82 ^a | 8.53 | ... | ... | ... | ... |
| GJ1265 | 1 | 22 13 42.9 | -17 41 09 | 14.57 | 12.40 | 9.96 | 13.57 | 12.27 | 10.58 | /37 | 8.96 | 8.42 | 8.12 | * | ... | 13.57 | 0.168 |
| WT0887 | 1 | 22 13 50.5 | -63 42 10 | 18.28 | 15.79 | 12.59 | ... | ... | ... | ... | 10.92 | 10.30 | 9.94 | ... | ... | ... | ... |
| LP875-068 | 1 | 22 14 38.4 | -21 41 53 | 11.37 | 8.65 | 8.05 | 10.38 | 9.50 | 8.61 | /40 | 7.54 | 6.90 | 6.72 | ... | ... | ... | ... |
| GJ1266 | 1 | 22 16 20.2 | +70 56 40 | ... | ... | ... | 12.12 | 11.13 | 9.96 | /37 | 8.75 | 8.27 | 8.02 | * | ... | 12.12 | 0.450 |
| GJ0852C | 0 | 22 17 18.7 | -08 48 19 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 3.28 | 16.69 | 0.093 |
| GJ0852B | 0(2) | 22 17 18.7 | -08 48 19 | ... | ... | ... | 14.43J | 13.04J | 11.20J | /37 | 9.46J | 8.84J | 8.53J | * | 1.16 | 14.57 | 0.127 |
| LP984-001 | 1 | 22 17 19.0 | -34 44 03 | 16.75 | 14.16 | 11.67 | 15.48 | 13.94 | 12.02 | /40 | 10.15 | 9.53 | 9.17 | ... | ... | ... | ... |
| GJ0852A | 3(1) | 22 17 19.2 | -08 48 13 | 13.25 | 10.94 | 8.96 | 13.48 | 12.18 | 10.54 | /2 | 9.02 | 8.49 ^a | 8.17 | * | ... | 13.41 | 0.172 |
| LHS3789 | 1 | 22 17 53.3 | -36 11 20 | 15.38 | 13.07 | 11.09 | ... | ... | ... | ... | 9.93 | 9.36 | 9.09 | ... | ... | ... | ... |
| LHS3793 | 1 | 22 19 23.7 | -28 23 21 | 15.79 | 13.64 | 11.40 | ... | ... | ... | ... | 10.17 | 9.64 | 9.36 | ... | ... | ... | ... |
| LP931-042 | 1 | 22 20 24.7 | -27 05 52 | 13.63 | 11.49 | 10.49 | ... | ... | ... | ... | 9.25 | 8.58 | 8.44 | ... | ... | ... | ... |

| | | | | | | | | | | | | | | | | | |
|--------------|------|------------|-----------|--------|--------|--------|--------|--------|-------|-----|-------------------|-------------------|-------------------|-----|------|-------|-------|
| L119-033 | 1 | 22 21 42.9 | -65 31 33 | ... | ... | ... | 12.03 | 10.99 | 9.72 | /20 | 8.45 | 7.88 | 7.64 | * | ... | 12.03 | 0.418 |
| LHS5384 | 1 | 22 21 49.7 | -42 09 03 | 15.94 | 13.74 | 11.56 | 14.74 | 13.46 | 11.81 | /24 | 10.21 | 9.64 | 9.35 | ... | ... | ... | ... |
| LP931-048 | 1 | 22 21 53.4 | -31 31 23 | 14.56 | 12.46 | 10.58 | ... | ... | ... | ... | 9.48 | 8.89 | 8.60 | ... | ... | ... | ... |
| LEHPM1-4635 | 1 | 22 22 43.5 | -72 15 44 | 16.17 | 13.99 | 11.64 | ... | ... | ... | ... | 10.38 | 9.79 | 9.51 | ... | ... | ... | ... |
| LHS3799 | 1 | 22 23 07.0 | -17 36 26 | 14.23 | 11.76 | 9.27 | 13.30 | 11.87 | 10.04 | /27 | 8.24 | 7.64 | 7.32 | * | ... | 13.26 | 0.148 |
| LP931-053 | 1 | 22 23 14.0 | -27 23 58 | 14.15 | 12.00 | 10.57 | ... | ... | ... | ... | 9.13 | 8.60 | 8.33 | ... | ... | ... | ... |
| GJ0856B | 0 | 22 23 29.1 | +32 27 33 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.40 | 11.72 | 0.408 |
| GJ0856A | 2 | 22 23 29.1 | +32 27 33 | ... | ... | ... | 10.75J | 9.65J | 8.25J | /35 | 6.90J | 6.28J | 6.05J | * | ... | 11.32 | 0.454 |
| GJ0855 | 1 | 22 23 33.3 | -57 13 14 | 11.65 | 9.39 | 7.97 | 10.72 | 9.77 | 8.72 | /2 | 7.60 | 6.96 | 6.73 | * | ... | 10.72 | 0.590 |
| LP931-057 | 2 | 22 23 46.3 | -28 06 50 | 14.70J | 12.69J | 10.66J | ... | ... | ... | ... | 9.65J | 9.05J | 8.83J | ... | ... | ... | ... |
| GJ1268 | 1 | 22 24 55.9 | +52 00 19 | ... | ... | ... | 14.94 | ... | ... | /10 | 10.16 | 9.60 | 9.30 | * | ... | 14.93 | 0.148 |
| LP1033-011 | 1 | 22 24 56.7 | -38 31 10 | 12.95 | 11.04 | 9.64 | ... | ... | ... | ... | 9.00 | 8.33 | 8.13 | ... | ... | ... | ... |
| LHS3804 | 1 | 22 25 05.1 | -47 52 47 | 13.16 | 11.20 | 9.07 | 12.51 | 11.31 | 9.82 | /25 | 8.34 | 7.73 | 7.43 | ... | ... | ... | ... |
| LEHPM1-4728 | 1 | 22 27 27.1 | -35 00 51 | 14.81 | 12.67 | 10.77 | ... | ... | ... | ... | 9.77 | 9.16 | 8.88 | ... | ... | ... | ... |
| GJ0860B | 0 | 22 27 59.4 | +57 41 45 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.47 | 11.29 | 0.180 |
| GJ0860A | 2 | 22 27 59.4 | +57 41 45 | ... | ... | ... | 9.57J | 8.41J | 6.93J | /37 | 5.58J | 5.04J | 4.78J | * | ... | 9.82 | 0.301 |
| LP876-025(B) | 0 | 22 28 23.4 | -25 54 07 | ... | ... | ... | ... | ... | ... | ... | 8.36 | 7.70 | 7.51 ^a | * | 1.03 | 13.47 | 0.289 |
| LP876-026(A) | 2 | 22 28 23.4 | -25 54 08 | 13.02J | 10.85J | 9.00J | 12.08J | 10.93J | 9.46J | /20 | 8.34 ^a | 7.58 | 7.45 ^a | * | ... | 12.44 | 0.394 |
| LTT16590 | 1 | 22 28 45.9 | +18 55 54 | ... | ... | ... | 10.74 | 9.84 | 8.91 | /35 | 7.82 | 7.17 | 6.98 | * | ... | 10.74 | 0.632 |
| LHS0523 | 1 | 22 28 54.4 | -13 25 19 | 18.19 | 15.78 | 12.64 | 16.90 | 14.90 | 12.56 | /3 | 10.77 | 10.22 | 9.84 | * | ... | 16.90 | 0.093 |
| LP640-074 | 1 | 22 29 05.8 | +01 39 48 | ... | ... | ... | 10.50 | 9.58 | 8.65 | /20 | 7.62 | 6.96 | 6.75 | * | ... | 10.50 | 0.658 |
| GJ1270 | 1 | 22 29 49.0 | +41 28 49 | ... | ... | ... | 13.24 | 12.01 | 10.40 | /37 | 8.85 | 8.33 | 8.04 | * | ... | 13.24 | 0.233 |
| LEHPM1-4771 | 1 | 22 30 09.5 | -53 44 56 | 15.81 | 13.57 | 11.20 | 14.47 | 13.09 | 11.30 | /40 | 9.54 | 8.96 | 8.63 | ... | ... | ... | ... |
| SCR2230-5244 | 1 | 22 30 28.0 | -52 44 29 | 19.02 | 16.34 | 14.13 | 17.37 | 15.91 | 13.88 | /39 | 11.85 | 11.24 | 10.91 | ... | ... | ... | ... |
| GJ0863 | 1 | 22 33 02.2 | +09 22 40 | ... | ... | ... | 10.38 | 9.42 | 8.35 | /37 | 7.21 | 6.60 | 6.36 | * | ... | 10.38 | 0.530 |
| LP876-034 | 1 | 22 34 00.5 | -25 14 33 | 12.64 | 10.44 | 8.84 | 11.29 | 10.23 | 8.98 | /40 | 7.73 | 7.14 | 6.88 | * | ... | 11.26 | 0.471 |
| L166-044 | 1 | 22 34 04.6 | -61 07 41 | 16.18 | 14.01 | 11.73 | ... | ... | ... | ... | 10.14 | 9.60 | 9.34 | ... | ... | ... | ... |
| LHS0526 | 1 | 22 34 53.7 | -01 04 58 | 15.96 | 13.78 | 10.90 | 14.83 | 13.56 | 11.91 | /37 | 10.39 | 9.78 | 9.52 | * | ... | 14.83 | 0.200 |
| LTT09084 | 1 | 22 35 04.9 | -42 17 48 | 14.40 | 12.30 | 10.34 | 13.34 | 12.12 | 10.56 | /40 | 9.10 | 8.47 | 8.21 | ... | ... | ... | ... |
| LP460-044 | 1 | 22 35 49.0 | +18 40 30 | ... | ... | ... | 19.18 | 17.16 | 14.88 | 3/1 | 12.39 | 11.77 | 11.37 | * | ... | 19.09 | 0.087 |
| GJ0864B | 0 | 22 36 09.6 | -00 50 30 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 4.66 | 14.65 | 0.167 |
| GJ0864A | 2(1) | 22 36 09.7 | -00 50 30 | 10.15 | 8.10 | 6.88 | 9.99 | 9.09 | 8.12 | /2 | 7.04 | 6.37 | 6.16 | * | ... | 9.99 | 0.663 |
| L645-074B | 0(1) | 22 38 23.0 | -29 21 00 | ... | ... | ... | 12.64 | 11.46 | 9.96 | 5/1 | 8.57 | 7.99 | 7.70 | * | 1.71 | 12.64 | 0.252 |
| L645-074A | 2(1) | 22 38 24.7 | -29 21 14 | 11.71 | 8.52 | 7.55 | 10.93 | 9.89 | 8.64 | /40 | 7.41 | 6.81 | 6.57 | * | ... | 10.93 | 0.426 |
| GJ0865B | 0 | 22 38 29.7 | -65 22 42 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.13 | 12.30 | 0.303 |
| GJ0865A | 2 | 22 38 29.8 | -65 22 42 | 12.12J | 10.25J | 8.01J | 11.48J | 10.30J | 8.77J | /2 | 7.27J | 6.72J | 6.43J | * | ... | 12.17 | 0.316 |
| GJ0866A | 3 | 22 38 33.6 | -15 17 59 | 13.01J | 10.60J | 7.19J | 12.37J | 10.70J | 8.64J | /3 | 6.55J | 5.95J | 5.54J | * | ... | 14.50 | 0.092 |
| GJ0866B | 0 | 22 38 37.2 | -15 17 07 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.24 | 14.74 | 0.089 |
| GJ0866C | 0 | 22 38 37.2 | -15 17 07 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.00 | 16.50 | 0.076 |
| GJ0867B | 0 | 22 38 45.3 | -20 36 52 | ... | ... | ... | 11.45 | 10.29 | 8.78 | /2 | 7.34 | 6.82 ^a | 6.49 | * | 1.61 | 11.45 | 0.305 |
| GJ0867D | 0 | 22 38 45.3 | -20 36 52 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | ... | ... | ... |
| GJ0867C | 0 | 22 38 45.5 | -20 37 16 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.00 | 9.84 | 0.482 |
| GJ0867A | 4(1) | 22 38 45.6 | -20 37 16 | 10.36 | ... | ... | 9.09 | 8.08 | 6.88 | /2 | 5.67 | 5.11 | 4.80 | * | ... | 9.84 | 0.482 |
| L083-030 | 1 | 22 40 42.9 | -71 31 11 | 11.96 | 10.09 | 8.96 | ... | ... | ... | ... | 8.18 | 7.55 ^a | 7.36 | ... | ... | ... | ... |
| LHS3844 | 1 | 22 41 58.1 | -69 10 08 | 16.38 | 14.14 | 11.62 | ... | ... | ... | ... | 10.05 | 9.48 | 9.15 | ... | ... | ... | ... |
| LEHPM1-5031 | 1 | 22 41 59.4 | -75 00 33 | 17.27 | 14.77 | 12.07 | ... | ... | ... | ... | 10.43 | 9.90 | 9.60 | ... | ... | ... | ... |
| L166-003 | 1 | 22 42 00.1 | -59 15 13 | 15.34 | 13.44 | 11.25 | ... | ... | ... | ... | 9.83 | 9.28 | 9.01 | ... | ... | ... | ... |
| GJ1271 | 1 | 22 42 38.7 | +17 40 09 | ... | ... | ... | 11.76 | 10.71 | 9.38 | /37 | 8.06 | 7.38 | 7.18 | * | ... | 11.76 | 0.451 |
| LP820-060 | 1 | 22 43 02.0 | -20 07 18 | 14.96 | 12.81 | 11.08 | ... | ... | ... | ... | 9.70 | 9.12 | 8.86 | ... | ... | ... | ... |
| LP876-008 | 1 | 22 43 23.1 | -24 24 52 | 16.28 | 14.12 | 11.77 | ... | ... | ... | ... | 10.25 | 9.67 | 9.41 | ... | ... | ... | ... |
| GJ0871.1A | 2(1) | 22 44 58.0 | -33 15 02 | 12.50 | 10.48 | 8.13 | 12.11 | 10.91 | 9.32 | /40 | 7.79 | 7.15 | 6.93 | * | ... | 12.08 | 0.469 |
| GJ0871.1B | 0(1) | 22 45 00.1 | -33 15 26 | ... | ... | ... | 13.37 | 12.06 | 10.33 | 6/1 | 8.68 | 8.06 | 7.79 | * | 1.28 | 13.36 | 0.328 |
| G156-046 | 1 | 22 45 06.1 | -12 23 43 | 14.68 | 12.59 | 10.21 | ... | ... | ... | ... | 9.68 | 9.05 | 8.79 | ... | ... | ... | ... |
| LP821-016 | 1 | 22 46 23.8 | -16 56 53 | 13.15 | 11.10 | 9.18 | 12.61 | 11.58 | 10.30 | /24 | 9.06 | 8.49 ^a | 8.21 | ... | ... | ... | ... |
| LHS3850 | 1 | 22 46 26.4 | -06 39 26 | 16.92 | 14.49 | 11.77 | 15.99 | 14.53 | 12.66 | 2/1 | 10.79 | 10.19 | 9.85 | * | ... | 16.07 | 0.124 |
| GJ0873 | 1 | 22 46 49.7 | +44 20 02 | ... | ... | ... | 10.22 | 9.05 | 7.54 | /37 | 6.11 | 5.55 | 5.30 | * | ... | 10.22 | 0.309 |
| GJ0874 | 1 | 22 48 17.4 | -36 47 23 | 12.35 | 10.42 | 8.81 | 11.90 | 10.89 | 9.68 | /2 | 8.48 | 7.87 | 7.63 | ... | ... | ... | ... |
| LP932-081 | 1 | 22 48 38.4 | -31 08 41 | 13.12 | 10.88 | 9.27 | 12.33 | 11.21 | 9.79 | /40 | 8.41 | 7.82 | 7.49 | ... | ... | ... | ... |
| LP932-083 | 1 | 22 49 08.4 | -28 51 20 | 14.68 | 12.59 | 10.57 | 13.94 | 12.67 | 10.98 | /40 | 9.34 | 8.78 ^a | 8.47 | ... | ... | ... | ... |
| GJ0875 | 1 | 22 50 19.4 | -07 05 24 | ... | ... | ... | 9.860 | 8.942 | 8.015 | /2 | 6.93 | 6.32 | 6.10 | * | ... | 9.86 | 0.620 |
| GJ1274 | 1 | 22 50 37.7 | +34 51 21 | ... | ... | ... | 11.72 | 10.71 | 9.52 | /37 | 8.28 | 7.72 | 7.51 | * | ... | 11.72 | 0.446 |
| LP985-032 | 1 | 22 51 23.7 | -34 19 36 | 11.89 | 9.75 | 8.32 | 11.52 | 10.55 | 9.47 | /24 | 8.36 | 7.75 | 7.49 | ... | ... | ... | ... |
| GJ0875.1 | 1 | 22 51 53.5 | +31 45 15 | ... | ... | ... | 11.62 | 10.51 | 9.10 | /37 | 7.70 | 7.13 | 6.87 | * | ... | 11.62 | 0.408 |
| LP821-027 | 1 | 22 52 05.2 | -15 32 51 | 15.77 | 13.37 | 10.90 | 15.08 | 13.74 | 11.96 | /24 | 10.24 | 9.69 | 9.37 | ... | ... | ... | ... |
| SCR2252-6905 | 1 | 22 52 19.2 | -69 05 48 | 16.83 | 14.83 | 12.39 | 15.72 | 14.38 | 12.65 | /40 | 10.93 | 10.31 | 10.02 | ... | ... | ... | ... |
| SCR2252-2220 | 1 | 22 52 25.8 | -22 20 07 | 14.95 | 12.82 | 10.85 | 13.71 | 12.56 | 11.10 | /39 | 9.70 | 9.11 | 8.86 | ... | ... | ... | ... |

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|--------------|------|------------|-----------|--------|--------|--------|--------|--------|--------|-----|--------------------|--------------------|--------------------|-----|------|-------|-------|
| LHS5394 | 1 | 22 52 48.1 | -28 47 43 | 13.04 | 10.42 | 9.43 | 11.87 | 10.85 | 9.65 | /20 | 8.41 | 7.82 ^a | 7.58 | * | ... | 11.87 | 0.449 |
| GJ0876 | 1 | 22 53 16.8 | -14 15 49 | 11.15 | 8.68 | 7.23 | 10.18 | 8.97 | 7.40 | /40 | 5.93 | 5.35 | 5.01 | * | ... | 10.18 | 0.297 |
| SCR2253-1238 | 1 | 22 53 42.8 | -12 38 43 | 13.49 | 10.90 | 9.78 | 12.58 | 11.55 | 10.31 | /40 | 9.02 | 8.40 | 8.17 | ... | ... | ... | ... |
| LEHPM1-5263 | 1 | 22 53 50.9 | -71 28 07 | 17.38 | 15.29 | 12.67 | ... | ... | ... | ... | 10.85 | 10.30 | 9.96 | ... | ... | ... | ... |
| GJ0878 | 1 | 22 54 21.5 | +60 59 44 | ... | ... | ... | 12.78 | 11.66 | 10.22 | /37 | 8.84 | 8.20 | 7.97 | * | ... | 12.78 | 0.294 |
| LHS3872 | 1 | 22 54 46.5 | -05 28 26 | 14.60 | 12.34 | 10.43 | 13.89 | 12.67 | 11.12 | /40 | 9.65 | 9.09 | 8.81 | * | ... | 13.87 | 0.280 |
| HIP113201 | 1 | 22 55 27.2 | -52 18 10 | 12.49 | 10.36 | 8.99 | 11.51 | 10.53 | 9.44 | /20 | 8.32 | 7.66 ^a | 7.42 | * | ... | 11.51 | 0.559 |
| GJ0877 | 1 | 22 55 45.5 | -75 27 31 | 11.56 | 9.39 | 7.47 | 10.38 | 9.31 | 7.95 | /2 | 6.62 | 6.08 | 5.81 | * | ... | 10.38 | 0.416 |
| GJ1277 | 1 | 22 56 24.7 | -60 03 49 | 15.40 | 13.19 | 10.65 | 14.00 | 12.59 | 10.79 | /16 | 8.98 | 8.36 | 8.11 | * | ... | 14.00 | 0.147 |
| LP761-006 | 1 | 22 56 26.2 | -11 09 39 | 16.27 | 14.17 | 12.29 | ... | ... | ... | ... | 10.50 | 9.92 | 9.63 | ... | ... | ... | ... |
| GJ0880 | 1 | 22 56 34.8 | +16 33 12 | ... | ... | ... | 8.65 | 7.67 | 6.55 | /2 | 5.36 | 4.80 | 4.52 | * | ... | 8.65 | 0.568 |
| L718-070(A) | 2(1) | 23 00 33.4 | -23 57 10 | 12.81 | 10.31 | 9.24 | 11.57 | 10.59 | 9.48 | /33 | 8.25 | 7.67 | 7.41 | * | ... | 11.57 | 0.495 |
| L718-071(B) | 0(1) | 23 00 36.5 | -23 58 10 | ... | ... | ... | 11.61 | 10.62 | 9.49 | /33 | 8.26 | 7.66 | 7.42 | * | 0.04 | 11.61 | 0.490 |
| LP877-045 | 1 | 23 00 36.7 | -26 04 56 | 14.52 | 12.17 | 10.83 | ... | ... | ... | ... | 9.54 | 9.00 | 8.75 | ... | ... | ... | ... |
| LP933-037 | 1 | 23 01 23.9 | -26 49 47 | 16.73 | 14.58 | 12.35 | ... | ... | ... | ... | 10.74 | 10.16 | 9.88 | ... | ... | ... | ... |
| L215-016 | 1 | 23 01 32.5 | -55 30 18 | 14.06 | 12.24 | 10.25 | 12.65 | 11.57 | 10.25 | /39 | 8.98 | 8.36 | 8.13 | ... | ... | ... | ... |
| LP701-056 | 1 | 23 01 46.2 | -06 14 23 | 14.28 | 12.12 | 10.12 | ... | ... | ... | ... | 9.49 | 8.90 | 8.65 | ... | ... | ... | ... |
| L286-074 | 1 | 23 01 49.5 | -53 17 08 | 14.46 | 12.58 | 10.75 | ... | ... | ... | ... | 9.39 | 8.74 | 8.50 | ... | ... | ... | ... |
| HIP113850 | 1 | 23 03 20.8 | -49 43 34 | ... | ... | ... | 10.67 | 9.74 | 8.75 | /20 | 7.66 | 7.03 | 6.81 | * | ... | 10.67 | 0.617 |
| SCR2303-4650 | 1 | 23 03 35.6 | -46 50 47 | ... | ... | ... | 13.89 | 12.54 | 10.83 | 2/1 | 9.22 | 8.69 | 8.26 | * | ... | 13.90 | 0.203 |
| LP821-054 | 1 | 23 03 59.7 | -16 12 07 | 15.73 | 13.62 | 11.46 | 14.63 | 13.38 | 11.77 | /24 | 10.21 | 9.66 | 9.29 | ... | ... | ... | ... |
| GJ0887B | 0 | 23 05 52.0 | -35 51 11 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.09 | 9.58 | 0.281 |
| GJ0887A | 2 | 23 05 52.1 | -35 51 11 | 8.00J | 6.91J | 5.28J | 7.34J | 6.37J | 5.32J | /2 | 4.34J ^a | 3.61J ^a | 3.47J ^a | * | ... | 7.49 | 0.511 |
| HIP114066 | 1 | 23 06 04.8 | +63 55 34 | ... | ... | ... | 10.82 | 9.93 | 9.00 | /35 | 7.82 | 7.17 | 6.98 | * | ... | 10.82 | 0.657 |
| L1007-017 | 1 | 23 06 27.8 | -00 29 38 | 13.27 | 11.24 | 9.51 | ... | ... | ... | ... | 9.08 | 8.40 | 8.16 | ... | ... | ... | ... |
| 2MA2306-0502 | 1 | 23 06 29.4 | -05 02 29 | 19.88 | 17.32 | 13.58 | 18.75 | 16.54 | 14.10 | /40 | 11.35 | 10.72 | 10.30 | * | ... | 18.75 | 0.079 |
| SSS2307-5009 | 1 | 23 06 58.8 | -50 08 59 | 22.80 | 19.74 | 16.69 | 20.67 | 19.02 | 16.60 | /9 | 13.39 | 12.70 | 12.24 | * | ... | 20.67 | 0.075 |
| SCR2307-8452 | 1 | 23 07 19.7 | -84 52 04 | 16.33 | 14.16 | 11.83 | 15.13 | 13.76 | 12.00 | /39 | 10.36 | 9.81 | 9.47 | * | ... | 15.13 | 0.137 |
| LHS0535 | 1 | 23 07 43.5 | +68 40 06 | ... | ... | ... | 12.45 | 11.36 | 9.96 | /37 | 8.62 | 8.10 | 7.92 | * | ... | 12.45 | 0.305 |
| LHS3898 | 1 | 23 07 46.8 | -27 54 23 | 13.47 | 10.97 | 9.82 | ... | ... | ... | ... | 8.80 | 8.21 | 7.92 | ... | ... | ... | ... |
| GJ0889.1 | 1 | 23 08 06.9 | +03 19 44 | ... | ... | ... | 10.910 | 9.973 | 8.983 | /2 | 7.87 | 7.31 | 7.07 | * | ... | 10.91 | 0.511 |
| GJ0890 | 1 | 23 08 19.5 | -15 24 35 | ... | ... | ... | 10.840 | 9.949 | 9.006 | /2 | 7.98 | 7.30 | 7.11 | * | ... | 10.84 | 0.629 |
| LTT09381 | 1 | 23 09 39.3 | -01 58 24 | 13.22 | 11.24 | 9.23 | ... | ... | ... | ... | 8.67 | 8.01 | 7.80 | ... | ... | ... | ... |
| GJ1279 | 1 | 23 09 40.9 | -67 43 58 | 9.45 | 7.52 | 6.56 | ... | ... | ... | ... | 6.08 | 5.46 | 5.33 | ... | ... | ... | ... |
| LTT09388 | 1 | 23 10 00.3 | -21 11 43 | 13.67 | 11.52 | 9.82 | 12.77 | 11.66 | 10.22 | /40 | 8.86 | 8.24 | 8.00 | ... | ... | ... | ... |
| L120-181 | 1 | 23 10 20.7 | -69 12 22 | 13.18 | 11.17 | 9.79 | ... | ... | ... | ... | 8.89 | 8.26 | 8.06 | ... | ... | ... | ... |
| GJ1281 | 1 | 23 10 42.2 | -19 13 35 | 13.45 | 11.39 | 9.92 | 12.45 | 11.42 | 10.19 | /15 | 8.98 | 8.46 | 8.23 | * | ... | 12.45 | 0.436 |
| LEHPM1-5562 | 1 | 23 10 54.9 | -38 02 01 | 13.93 | 11.71 | 9.97 | ... | ... | ... | ... | 9.38 | 8.71 | 8.51 | ... | ... | ... | ... |
| LP822-037 | 1 | 23 11 57.8 | -17 01 59 | 14.97 | 12.71 | 10.77 | ... | ... | ... | ... | 9.57 | 8.96 | 8.70 | ... | ... | ... | ... |
| LHS3909 | 1 | 23 12 11.3 | -14 06 12 | 13.93 | 11.20 | 9.89 | 12.97 | 11.82 | 10.40 | /26 | 9.06 | 8.48 | 8.22 | * | ... | 12.97 | 0.313 |
| LTT09412 | 1 | 23 13 01.8 | -05 31 10 | 12.96 | 10.61 | 9.55 | ... | ... | ... | ... | 8.86 | 8.20 | 7.97 | ... | ... | ... | ... |
| GJ2154B | 0(1) | 23 14 16.4 | -19 38 46 | ... | ... | ... | 13.90 | 12.67 | 11.07 | 2/1 | 9.41 | 8.89 | 8.48 | * | 3.34 | 13.83 | 0.250 |
| GJ2154A | 2(1) | 23 14 16.7 | -19 38 39 | 11.26J | 9.01J | 7.79J | 10.49 | 9.53 | 8.56 | /40 | 7.47 | 6.80 | 6.62 | * | ... | 10.49 | 0.641 |
| LEHPM1-5625 | 1 | 23 15 02.0 | -35 28 25 | 14.45 | 12.01 | 9.95 | ... | ... | ... | ... | 9.24 | 8.70 | 8.40 | ... | ... | ... | ... |
| LHS3918 | 1 | 23 15 43.8 | -12 21 49 | 13.70 | 11.74 | 9.98 | ... | ... | ... | ... | 9.26 | 8.63 ^a | 8.39 | ... | ... | ... | ... |
| LHS0539 | 1 | 23 15 51.6 | -37 33 31 | 15.97 | 13.81 | 11.56 | 14.97 | 13.66 | 11.98 | /40 | 10.40 | 9.87 | 9.59 | * | ... | 14.97 | 0.162 |
| LP702-050 | 1 | 23 15 54.5 | -06 27 46 | 18.06 | 15.94 | 13.13 | ... | ... | ... | ... | 11.11 | 10.57 | 10.23 | ... | ... | ... | ... |
| LHS3916 | 2 | 23 15 57.2 | -81 22 21 | 11.61J | 9.49J | 8.24J | 10.00J | 9.12J | 8.23J | /20 | 7.19J | 6.58J | 6.35J | ... | ... | ... | ... |
| LTT09448 | 1 | 23 16 36.7 | -01 30 48 | 15.05 | 13.01 | 11.14 | ... | ... | ... | ... | 9.82 | 9.19 | 8.91 | ... | ... | ... | ... |
| L719-021 | 1 | 23 17 00.2 | -23 23 47 | 12.13 | 9.76 | 8.94 | 10.85 | 9.96 | 9.10 | /20 | 8.10 | 7.45 | 7.25 | ... | ... | ... | ... |
| LTT09461 | 1 | 23 17 21.8 | -25 42 21 | 14.92 | 12.76 | 11.14 | ... | ... | ... | ... | 9.88 | 9.29 | 9.02 | ... | ... | ... | ... |
| LHS3923 | 1 | 23 17 22.9 | +38 12 03 | ... | ... | ... | 11.46 | 10.39 | 9.07 | /37 | 7.76 | 7.19 | 6.96 | * | ... | 11.46 | 0.469 |
| LTT09462 | 1 | 23 17 25.5 | -40 26 46 | 14.09 | 12.26 | 10.25 | 13.06 | 11.96 | 10.56 | /40 | 9.24 | 8.57 | 8.35 | ... | ... | ... | ... |
| LHS3925 | 1 | 23 17 50.3 | -48 18 47 | 14.83 | 12.50 | 10.53 | 13.61 | 12.44 | 10.92 | /26 | 9.53 | 8.97 ^a | 8.71 | * | ... | 13.61 | 0.285 |
| GJ0894.1 | 1 | 23 18 17.9 | +46 17 21 | ... | ... | ... | 10.89 | 9.95 | 8.98 | 2/1 | 7.89 | 7.23 | 7.02 | * | ... | 10.89 | 0.647 |
| G273-014 | 1 | 23 19 35.6 | -08 53 17 | 16.12 | 14.04 | 12.08 | ... | ... | ... | ... | 10.42 | 9.86 | 9.58 | ... | ... | ... | ... |
| LP642-048 | 2 | 23 20 57.7 | -01 47 37 | 14.79J | 12.84J | 10.57J | 13.64J | 12.42J | 10.84J | /40 | 9.36J | 8.79J | 8.49J | ... | ... | ... | ... |
| LTT09506 | 1 | 23 21 05.7 | -16 51 49 | 13.85 | 11.69 | 10.03 | ... | ... | ... | ... | 9.17 | 8.60 | 8.34 | ... | ... | ... | ... |
| LHS0543 | 1 | 23 21 37.4 | +17 17 25 | ... | ... | ... | 11.65 | 10.46 | 8.88 | /37 | 7.39 | 6.77 | 6.51 | * | ... | 11.65 | 0.333 |
| LP934-033 | 1 | 23 22 23.6 | -27 25 45 | 18.75 | 16.39 | 13.62 | ... | ... | ... | ... | 11.64 | 11.06 | 10.75 | ... | ... | ... | ... |
| LTT09524 | 1 | 23 24 05.6 | -05 11 14 | 14.49 | 12.40 | 10.58 | ... | ... | ... | ... | 9.56 | 8.94 | 8.69 | ... | ... | ... | ... |
| LP822-073 | 1 | 23 24 16.9 | -15 22 23 | 17.96 | 15.60 | 12.84 | ... | ... | ... | ... | 11.19 | 10.54 | 10.20 | ... | ... | ... | ... |
| LP822-074 | 1 | 23 24 29.1 | -18 31 15 | 14.50 | 12.45 | 10.36 | ... | ... | ... | ... | 9.54 | 8.97 | 8.69 | ... | ... | ... | ... |
| GJ0895 | 1 | 23 24 30.5 | +57 51 15 | ... | ... | ... | 10.00 | 9.03 | 7.95 | 2/1 | 6.80 | 6.10 | 5.87 | * | ... | 10.01 | 0.575 |
| G273-039 | 1 | 23 25 16.0 | -12 52 31 | 12.35 | 10.39 | 9.53 | ... | ... | ... | ... | 8.82 | 8.11 | 7.98 | ... | ... | ... | ... |
| L120-120 | 1 | 23 25 25.1 | -67 40 08 | 15.60 | 13.32 | 11.09 | 14.38 | 13.11 | 11.48 | /39 | 9.91 | 9.33 | 9.05 | ... | ... | ... | ... |

| | | | | | | | | | | | | | | | | | |
|-----------------|------|------------|-----------|--------|--------|--------|--------|--------|--------|-----|-------------------|-------------------|--------|-----|------|-------|-------|
| LHS0543a | 1 | 23 25 47.5 | +53 08 25 | ... | ... | ... | 14.64 | 13.31 | 11.62 | 1/1 | 9.88 | 9.28 | 8.98 | * | ... | 14.64 | 0.223 |
| GJ2155 | 1 | 23 26 12.3 | +08 53 37 | ... | ... | ... | 10.59 | 9.71 | 8.84 | /37 | 7.76 | 7.07 | 6.92 | * | ... | 10.59 | 0.661 |
| LHS3954 | 1 | 23 27 26.5 | -17 41 33 | 19.38 | 16.95 | 13.71 | ... | ... | ... | ... | 11.75 | 11.20 | 10.84 | ... | ... | ... | ... |
| LP986-059 | 1 | 23 27 28.7 | -37 54 12 | 13.32 | 10.91 | 9.62 | ... | ... | ... | ... | 8.85 | 8.25 | 7.98 | ... | ... | ... | ... |
| LP702-096 | 1 | 23 27 55.5 | -05 27 01 | 14.42 | 12.38 | 10.66 | ... | ... | ... | ... | 9.68 | 9.05 | 8.78 | ... | ... | ... | ... |
| G190-027C | 0 | 23 29 25.2 | +41 27 48 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 1.71 | 13.60 | 0.216 |
| G190-027B | 0(2) | 23 29 25.2 | +41 27 48 | ... | ... | ... | 12.42J | 11.18J | 9.56J | /33 | 8.02J | 7.41J | 7.17J | * | 0.97 | 12.86 | 0.280 |
| G190-028A | 3(1) | 23 29 26.2 | +41 28 20 | ... | ... | ... | 11.89 | 10.76 | 9.31 | /33 | 7.93 | 7.33 | 7.07 | * | ... | 11.89 | 0.378 |
| GJ1284B | 0 | 23 30 13.4 | -20 23 27 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.00 | 17.75 | 0.093 |
| GJ1284A | 2 | 23 30 13.5 | -20 23 27 | 11.89J | 9.85J | 7.83J | 11.14J | 10.02J | 8.59J | /27 | 7.20J | 6.61J | 6.33J | * | ... | 15.03 | 0.145 |
| APM2330-4737 | 1 | 23 30 16.2 | -47 36 45 | 19.17 | 16.75 | 13.19 | 18.08 | 15.87 | 13.68 | /6 | 11.23 | 10.64 | 10.28 | * | ... | 18.08 | 0.086 |
| SCR2330-0838 | 2(1) | 23 30 16.9 | -08 38 37 | 15.47 | 13.57 | 11.58 | 14.29 | 13.07 | 11.48 | /40 | 9.97 | 9.36 | 9.13 | ... | ... | ... | ... |
| LEHPM2-2163 | 1 | 23 30 38.2 | -84 55 19 | 15.69 | 13.52 | 11.17 | ... | ... | ... | ... | 9.84 | 9.31 | 9.00 | ... | ... | ... | ... |
| DEN2331-2749 | 1 | 23 31 21.8 | -27 49 50 | 20.42 | 17.99 | 14.40 | 19.07 | 16.54 | 14.19 | /6 | 11.65 | 11.06 | 10.65 | * | ... | 19.07 | 0.079 |
| LTT09580 | 1 | 23 31 25.0 | -16 15 58 | 13.90 | 11.78 | 9.74 | 13.13 | 11.95 | 10.40 | /40 | 8.88 | 8.29 ^a | 8.00 | ... | ... | ... | ... |
| GJ0896A | 2(1) | 23 31 52.2 | +19 56 14 | ... | ... | ... | 10.29 | 9.13 | 7.62 | 3/1 | 6.16 | 5.58 | 5.33 | * | ... | 10.29 | 0.349 |
| GJ0896B | 0(1) | 23 31 52.6 | +19 56 14 | ... | ... | ... | 12.41 | 11.05 | 9.30 | 3/1 | 7.10 ^a | 6.56 | 6.26 | * | 2.12 | 12.41 | 0.171 |
| LTT09582 | 1 | 23 32 00.2 | -39 17 37 | 13.87 | 11.42 | 9.91 | 12.93 | 11.77 | 10.30 | /40 | 8.90 | 8.26 | 8.02 | ... | ... | ... | ... |
| LTT09596 | 1 | 23 33 36.7 | -42 13 22 | 13.68 | 11.28 | 9.92 | 12.58 | 11.48 | 10.10 | /40 | 8.68 | 8.07 | 7.80 | ... | ... | ... | ... |
| GJ0899 | 1 | 23 34 03.3 | +00 10 46 | ... | ... | ... | 11.180 | 10.154 | 8.888 | /2 | 7.66 | 7.07 | 6.83 | * | ... | 11.18 | 0.442 |
| GJ1286 | 1 | 23 35 10.5 | -02 23 21 | 15.56 | 13.42 | 10.30 | 14.73 | 13.10 | 11.10 | /40 | 9.15 | 8.51 | 8.18 | * | ... | 14.67 | 0.111 |
| LHS3978 | 1 | 23 35 44.6 | +06 11 46 | ... | ... | ... | 16.17 | 14.73 | 12.90 | 2/1 | 11.09 | 10.48 | 10.17 | * | ... | 16.17 | 0.135 |
| G275-071 | 1 | 23 35 48.8 | -24 19 09 | 14.68 | 12.74 | 10.83 | ... | ... | ... | ... | 9.65 | 9.07 ^a | 8.77 | ... | ... | ... | ... |
| LTT16952 | 1 | 23 36 25.6 | +55 29 43 | ... | ... | ... | 11.70 | 10.73 | 9.62 | /32 | 8.45 | 7.81 | 7.58 | * | ... | 11.70 | 0.535 |
| LHS0547 | 1 | 23 36 52.3 | -36 28 52 | 14.85 | 12.76 | 10.54 | 13.76 | 12.46 | 10.79 | /15 | 9.19 | 8.67 | 8.42 | * | ... | 13.76 | 0.170 |
| LP763-003 | 1 | 23 37 38.3 | -12 50 28 | 18.61 | 15.93 | 12.92 | ... | ... | ... | ... | 11.46 | 10.83 | 10.45 | ... | ... | ... | ... |
| L026-054 | 1 | 23 37 52.8 | -76 45 26 | 13.06 | 11.77 | 8.97 | ... | ... | ... | ... | 8.58 | 8.01 | 7.68 | ... | ... | ... | ... |
| LTT09634 | 1 | 23 38 08.2 | -16 14 10 | 11.52 | 9.34 | 7.68 | 11.34 | 10.31 | 9.08 | /34 | 7.81 | 7.21 | 7.00 | ... | ... | ... | ... |
| LTT09635 | 1 | 23 38 17.4 | -41 31 04 | 12.99 | 10.56 | 9.39 | 11.93 | 10.89 | 9.62 | /20 | 8.36 | 7.73 | 7.49 | * | ... | 11.93 | 0.430 |
| LEHPM1-6053 | 1 | 23 40 23.9 | -40 21 47 | 14.23 | 12.29 | 10.46 | ... | ... | ... | ... | 9.26 | 8.63 | 8.34 | ... | ... | ... | ... |
| G275-082 | 1 | 23 41 16.3 | -26 57 21 | 13.97 | 11.74 | 9.75 | ... | ... | ... | ... | 9.20 | 8.50 | 8.28 | ... | ... | ... | ... |
| LP703-042 | 1 | 23 41 39.3 | -06 35 50 | 16.11 | 13.99 | 11.61 | ... | ... | ... | ... | 10.32 | 9.70 | 9.40 | ... | ... | ... | ... |
| LEHPM2-1679 | 1 | 23 41 41.6 | -85 56 07 | 16.59 | 14.36 | 12.21 | ... | ... | ... | ... | 10.60 | 10.02 | 9.69 | ... | ... | ... | ... |
| GJ0905 | 1 | 23 41 55.0 | +44 10 39 | ... | ... | ... | 12.29 | 10.77 | 8.85 | /37 | 6.88 | 6.25 | 5.93 | * | ... | 12.29 | 0.122 |
| GJ1288 | 1 | 23 42 51.0 | +30 48 59 | ... | ... | ... | 14.36 | ... | ... | /10 | 9.64 | 9.08 | 8.81 | * | ... | 14.36 | 0.148 |
| GJ1289 | 1 | 23 43 06.3 | +36 32 13 | ... | ... | ... | 12.57 | 11.30 | 9.67 | /37 | 8.11 | 7.45 | 7.23 | * | ... | 12.57 | 0.195 |
| LEHPM1-6134 | 1 | 23 44 10.9 | -68 31 47 | 15.67 | 13.52 | 11.49 | ... | ... | ... | ... | 10.03 | 9.52 | 9.16 | ... | ... | ... | ... |
| GJ1290 | 1 | 23 44 23.3 | +21 36 14 | ... | ... | ... | 13.29 | 12.09 | 10.56 | /31 | 9.07 | 8.45 | 8.23 | * | ... | 13.29 | 0.322 |
| LEHPM1-6159 | 1 | 23 45 10.6 | -38 32 24 | 15.13 | 12.96 | 10.94 | ... | ... | ... | ... | 9.78 | 9.16 | 8.88 | ... | ... | ... | ... |
| LHS4009B | 0 | 23 45 31.0 | -16 10 20 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.25 | 15.26 | 0.122 |
| LHS4009A | 2 | 23 45 31.3 | -16 10 20 | 15.31J | 12.72J | 9.93J | 14.38J | 12.90J | 10.99J | /26 | 9.21J | 8.61J | 8.31J | * | ... | 15.01 | 0.128 |
| LHS4012 | 1 | 23 46 32.0 | -50 43 28 | 15.75 | 13.37 | 11.16 | ... | ... | ... | ... | 10.05 | 9.51 | 9.26 | ... | ... | ... | ... |
| LP987-023 | 1 | 23 46 38.2 | -34 10 02 | 13.67 | 11.34 | 9.82 | 12.58 | 11.49 | 10.14 | /24 | 8.85 | 8.25 | 8.04 | ... | ... | ... | ... |
| GR0481 | 1 | 23 47 37.8 | -23 16 06 | 15.05 | 13.21 | 11.13 | ... | ... | ... | ... | 9.80 | 9.14 | 8.93 | ... | ... | ... | ... |
| GJ0907 | 1 | 23 48 03.1 | +49 00 57 | ... | ... | ... | 12.08 | 11.08 | 9.93 | /37 | 8.77 | 8.14 | 7.93 | * | ... | 12.08 | 0.386 |
| LHS4016B | 0 | 23 48 36.0 | -27 39 38 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 0.00 | 13.09 | 0.364 |
| LHS4016A | 2 | 23 48 36.1 | -27 39 39 | 13.13J | 10.88J | 9.30J | 12.34J | 11.25J | 9.90J | /27 | 8.58J | 8.02J | 7.74J | * | ... | 13.09 | 0.364 |
| GJ0908 | 1 | 23 49 12.5 | +02 24 04 | ... | ... | ... | 8.980 | 8.028 | 6.947 | /2 | 5.83 | 5.28 | 5.04 | * | ... | 8.98 | 0.485 |
| LHS4021 | 1 | 23 50 31.6 | -09 33 33 | 14.01 | 11.45 | 9.58 | 13.44 | 12.19 | 10.59 | /26 | 8.94 | 8.39 ^a | 8.04 | * | ... | 13.44 | 0.243 |
| 2MA2351-2537(B) | 0 | 23 51 50.4 | -25 37 36 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.72 | 22.79 | 0.075 |
| LEHPM1-6333(A) | 2 | 23 51 50.5 | -25 37 37 | 22.05J | 18.89J | 15.57J | 19.98J | 17.86J | 15.47J | /40 | 12.47J | 11.73J | 11.27J | * | ... | 20.07 | 0.078 |
| LEHPM1-6366 | 1 | 23 52 32.2 | -34 13 07 | 17.87 | 15.65 | 13.18 | ... | ... | ... | ... | 11.31 | 10.72 | 10.42 | ... | ... | ... | ... |
| L217-036 | 1 | 23 52 44.4 | -57 56 03 | 14.42 | 12.22 | 10.26 | ... | ... | ... | ... | 9.25 | 8.59 ^a | 8.30 | ... | ... | ... | ... |
| LTT09783 | 1 | 23 53 08.3 | -42 32 04 | 13.72 | 11.60 | 9.77 | ... | ... | ... | ... | 9.17 | 8.59 | 8.34 | ... | ... | ... | ... |
| L085-031 | 1 | 23 53 25.2 | -70 56 41 | 14.32 | 11.96 | 9.80 | 13.01 | 11.78 | 10.18 | /40 | 8.68 | 8.10 | 7.78 | * | ... | 13.01 | 0.236 |
| LP987-047 | 1 | 23 53 41.0 | -35 59 06 | 14.77 | 12.69 | 10.68 | ... | ... | ... | ... | 9.41 | 8.78 | 8.55 | ... | ... | ... | ... |
| L026-027 | 1 | 23 53 50.1 | -75 37 57 | 10.80 | 8.27 | 6.94 | 10.02 | 8.99 | 7.72 | /20 | 6.45 | 5.78 | 5.55 | * | ... | 10.02 | 0.497 |
| LHS4038 | 1 | 23 54 04.3 | -41 32 31 | 14.68 | 12.55 | 10.63 | ... | ... | ... | ... | 9.50 | 8.93 | 8.67 | ... | ... | ... | ... |
| L169-058 | 1 | 23 54 41.3 | -61 35 10 | 14.16 | 11.74 | 9.93 | ... | ... | ... | ... | 9.19 | 8.62 | 8.35 | ... | ... | ... | ... |
| LHS4046 | 1 | 23 55 26.0 | -03 59 00 | 14.77 | 12.94 | 10.77 | 13.86 | 12.72 | 11.25 | /37 | 9.87 | 9.21 | 8.95 | ... | ... | ... | ... |
| GJ0912B | 0 | 23 55 39.7 | -06 08 33 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.72 | 13.97 | 0.223 |
| GJ0912A | 2 | 23 55 39.8 | -06 08 33 | 11.80J | 9.98J | 7.99J | 11.16J | 10.13J | 8.87J | /2 | 7.60J | 6.96J | 6.72J | * | ... | 11.25 | 0.506 |
| G158-008 | 1 | 23 55 55.2 | -13 21 24 | 14.24 | 12.11 | 10.36 | 13.43 | 12.26 | 10.72 | /24 | 9.26 | 8.70 | 8.43 | ... | ... | ... | ... |
| LEHPM1-6494 | 1 | 23 56 10.8 | -34 26 05 | 22.21 | 19.31 | 16.15 | 20.83 | 18.36 | 15.91 | /9 | 12.95 | 12.38 | 11.97 | * | ... | 20.83 | 0.075 |
| SCR2356-0429 | 2 | 23 56 20.4 | -04 29 32 | 14.74J | 12.75J | 10.54J | 13.70J | 12.54J | 11.04J | /40 | 9.64 | 9.04 | 8.78 | ... | ... | ... | ... |
| GJ1292 | 1 | 23 57 44.1 | +23 18 17 | ... | ... | ... | 11.72 | 10.60 | 9.15 | /37 | 7.80 | 7.32 ^a | 7.06 | * | ... | 11.72 | 0.379 |

| | | | | | | | | | | | | | | | | |
|--------------|------|------------|-----------|--------|--------|--------|--------|--------|--------|-----|-------------------|-------------------|-------|-----|------|-------------|
| LP987-060 | 1 | 23 57 53.6 | -34 07 36 | 14.36 | 12.03 | 10.36 | ... | ... | ... | ... | 9.28 | 8.62 | 8.36 | ... | ... | ... |
| LP764-040 | 3(1) | 23 58 13.7 | -17 24 34 | 13.24 | 11.36 | 9.38 | 11.88 | 11.00 | 10.09 | /40 | 8.31 | 7.70 | 7.44 | ... | ... | ... |
| LTT17066 | 1 | 23 58 32.6 | +07 38 31 | ... | ... | ... | 11.71 | 10.61 | 9.21 | /30 | 7.91 | 7.29 | 7.06 | * | ... | 11.71 0.434 |
| APM2359-6246 | 1 | 23 58 42.9 | -62 45 42 | 18.17 | 15.88 | 13.08 | 16.95 | 15.26 | 13.30 | /6 | 11.39 | 10.83 | 10.52 | * | ... | 16.95 0.111 |
| LTT09828B | 0 | 23 59 44.8 | -44 05 00 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | * | 2.00 | 14.97 0.152 |
| LTT09828A | 2 | 23 59 44.8 | -44 05 00 | 13.90J | 11.79J | 9.70J | 12.81J | 11.67J | 10.23J | /40 | 8.88J | 8.29J | 8.04J | * | ... | 12.97 0.298 |
| LHS4057 | 1 | 23 59 50.2 | +47 45 09 | ... | ... | ... | 16.12 | 14.63 | 12.76 | 2/1 | 10.87 | 10.26 | 9.93 | * | ... | 16.11 0.124 |
| LHS4058 | 1 | 23 59 51.4 | -34 06 43 | 14.07 | 11.89 | 9.81 | 12.84 | 11.64 | 10.08 | /26 | 8.59 | 7.98 | 7.75 | * | ... | 12.84 0.297 |
| Beyond 25 pc | | | | | | | | | | | | | | | | |
| GJ1293 | 1 | 00 01 25.8 | -16 56 55 | 11.48 | 9.08 | 8.46 | 10.73 | 9.88 | 9.04 | /40 | 8.02 | 7.41 | 7.22 | ... | ... | ... |
| L290-032 | 1 | 00 02 27.1 | -46 01 44 | 13.47 | 11.44 | 9.90 | ... | ... | ... | ... | 9.18 | 8.52 | 8.34 | ... | ... | ... |
| LHS0105 | 1 | 00 09 17.3 | -19 42 32 | 16.88 | 14.88 | 12.53 | 15.52 | 14.18 | 12.46 | /40 | 10.88 | 10.33 | 10.07 | ... | ... | ... |
| LTT00074 | 1 | 00 11 04.6 | -05 47 02 | 11.48 | 9.61 | 8.21 | 10.86 | 9.96 | 9.04 | /35 | 7.98 | 7.31 | 7.12 | ... | ... | ... |
| LTT00095 | 1 | 00 13 29.1 | -36 49 44 | 12.26 | 9.69 | 8.47 | ... | ... | ... | ... | 7.80 | 7.18 | 6.96 | ... | ... | ... |
| LHS1048 | 1 | 00 15 33.5 | -35 11 48 | 15.77 | 13.80 | 12.10 | 14.53 | 13.47 | 12.09 | /40 | 10.80 | 10.26 | 10.06 | ... | ... | ... |
| SCR0015-6957 | 1 | 00 15 52.5 | -69 57 21 | 14.58 | 12.54 | 10.91 | 13.54 | 12.52 | 11.18 | /40 | 9.89 | 9.24 | 9.01 | ... | ... | ... |
| LHS0109 | 1 | 00 17 40.0 | -10 46 17 | 15.03 | 12.93 | 12.00 | 13.88 | 12.97 | 12.10 | /40 | 11.05 | 10.56 | 10.37 | ... | ... | ... |
| LEHPM1-0439 | 1 | 00 18 19.4 | -82 07 15 | 16.92 | 14.76 | 12.62 | 15.78 | 14.63 | 13.03 | /40 | 11.68 | 11.12 | 10.86 | ... | ... | ... |
| L086-093 | 1 | 00 18 34.6 | -68 46 60 | 12.33 | 10.05 | 9.21 | 11.32 | 10.43 | 9.57 | /25 | 8.58 | 7.97 | 7.72 | ... | ... | ... |
| LP644-095 | 1 | 00 19 12.4 | -03 03 13 | 12.05 | 10.06 | 8.72 | ... | ... | ... | ... | 8.27 | 7.65 | 7.46 | ... | ... | ... |
| LHS0110 | 2 | 00 19 37.0 | -28 09 46 | 13.39J | 11.37J | 10.25J | 13.65 | 12.66 | 11.44 | /16 | 10.25 | 9.73 | 9.48 | ... | ... | ... |
| LEHPM1-0494 | 2(1) | 00 21 05.9 | -42 44 43 | 18.56 | 16.18 | 13.60 | 17.28 | 15.67 | 13.69 | /9 | 12.00 | 11.37 | 11.05 | ... | ... | ... |
| LTT00207 | 1 | 00 23 47.3 | -36 51 41 | 11.87 | 9.78 | 9.39 | ... | ... | ... | ... | 8.27 | 7.61 | 7.47 | ... | ... | ... |
| SCR0027-0806 | 1 | 00 27 45.4 | -08 06 05 | 18.65 | 16.26 | 13.49 | 17.51 | 15.83 | 13.72 | /39 | 11.57 | 10.97 | 10.61 | ... | ... | ... |
| LHS1094 | 1 | 00 32 15.4 | -63 05 28 | 10.87 | 9.01 | 7.43 | ... | ... | ... | ... | 7.02 | 6.34 | 6.17 | ... | ... | ... |
| SCR0033-6317 | 1 | 00 33 02.3 | -63 17 50 | 15.68 | 13.79 | 11.93 | 14.79 | 13.62 | 12.02 | /40 | 10.41 | 9.80 | 9.57 | ... | ... | ... |
| LTT00313 | 1 | 00 35 38.1 | -10 04 19 | 13.01 | 11.05 | 9.33 | 11.85 | 10.81 | 9.57 | /40 | 8.33 | 7.74 | 7.48 | ... | ... | ... |
| LHS1106 | 1 | 00 36 00.0 | -09 30 56 | 12.33 | 10.13 | 9.27 | 11.25 | 10.40 | 9.60 | /37 | 8.54 | 7.90 | 7.72 | ... | ... | ... |
| SCR0052-6155 | 1 | 00 52 09.9 | -61 55 23 | 14.82 | 12.63 | 10.86 | 13.69 | 12.60 | 11.26 | /40 | 9.98 | 9.35 | 9.12 | ... | ... | ... |
| SIP0052-6201 | 1 | 00 52 15.3 | -62 01 55 | 19.63 | 17.36 | 14.18 | 18.41 | 16.46 | 14.26 | /40 | 12.15 | 11.74 | 11.37 | ... | ... | ... |
| GJ0043 | 1 | 00 55 25.4 | -51 49 58 | 13.04 | 11.15 | 9.21 | 12.34 | 11.34 | 10.16 | /2 | 8.99 | 8.39 | 8.11 | ... | ... | ... |
| LTT00525 | 1 | 00 55 49.3 | -29 40 34 | 11.09 | 9.19 | 8.09 | ... | ... | ... | ... | 7.28 | 6.74 | 6.57 | ... | ... | ... |
| G270-100 | 1 | 00 56 30.2 | -04 25 16 | 16.06 | 13.91 | 11.81 | ... | ... | ... | ... | 10.44 | 9.83 | 9.56 | ... | ... | ... |
| LTT00648 | 1 | 01 09 38.8 | -07 10 50 | 12.19 | 9.88 | 8.86 | 11.38 | 10.38 | 9.20 | /19 | 7.96 | 7.38 | 7.11 | ... | ... | ... |
| SCR0112-7939 | 1 | 01 12 23.5 | -79 39 13 | 17.16 | 15.14 | 12.89 | 15.75 | 14.48 | 12.79 | /40 | 11.18 | 10.62 | 10.34 | ... | ... | ... |
| GJ0056.2 | 1 | 01 17 59.4 | -48 09 01 | 12.72 | 10.35 | 9.64 | 11.54 | 10.65 | 9.74 | /2 | 8.68 | 8.00 | 7.84 | ... | ... | ... |
| LHS1245 | 1 | 01 24 22.1 | -44 08 11 | 13.30 | 10.76 | 9.88 | ... | ... | ... | ... | 8.93 | 8.30 | 8.09 | ... | ... | ... |
| GJ2022 | 3(2) | 01 24 27.7 | -33 55 09 | 14.63J | 12.65J | 10.70J | 13.56J | 12.26J | 10.62J | /27 | 9.20J | 8.66J | 8.24J | ... | ... | ... |
| GJ1038 | 1 | 01 25 01.8 | -32 51 04 | 11.08 | 8.69 | 8.21 | ... | ... | ... | ... | 7.07 | 6.42 | 6.21 | ... | ... | ... |
| L002-060 | 1 | 01 29 20.9 | -85 56 11 | 14.53 | 12.59 | 10.46 | 13.49 | 12.21 | 10.58 | /40 | 9.05 | 8.39 | 8.08 | ... | ... | ... |
| L222-009 | 1 | 01 35 40.4 | -50 15 42 | 11.53 | 9.23 | 8.37 | ... | ... | ... | ... | 7.93 | 7.27 | 7.14 | ... | ... | ... |
| LP939-103 | 1 | 01 36 36.9 | -34 23 26 | 15.40 | 14.66 | 12.65 | 15.49 | 14.37 | 12.88 | /40 | 11.47 | 10.92 | 10.64 | ... | ... | ... |
| SCR0138-5353 | 1 | 01 38 20.5 | -53 53 26 | 15.70 | 13.70 | 11.74 | 14.36 | 13.20 | 11.70 | /39 | 10.28 | 9.69 | 9.42 | ... | ... | ... |
| SCR0138-7855 | 2 | 01 38 54.0 | -78 55 18 | 14.87J | 12.78J | 11.20J | 13.54J | 12.49J | 11.19J | /40 | 9.92J | 9.35J | 9.11J | ... | ... | ... |
| SCR0139-7536 | 1 | 01 39 27.9 | -75 36 14 | 15.57 | 13.17 | 11.51 | 13.79 | 12.66 | 11.23 | /40 | 9.87 | 9.24 | 8.97 | ... | ... | ... |
| LP708-253 | 1 | 01 40 04.8 | -13 54 41 | 13.31 | 11.38 | 9.94 | ... | ... | ... | ... | 8.78 | 8.09 | 7.93 | ... | ... | ... |
| L367-082 | 1 | 01 41 03.6 | -43 38 10 | 12.45 | 10.41 | 9.53 | ... | ... | ... | ... | 8.81 | 8.14 | 7.96 | ... | ... | ... |
| SCR0143-3840 | 1 | 01 43 03.3 | -38 40 08 | 12.71 | 10.51 | 9.22 | 11.55 | 10.60 | 9.59 | /40 | 8.52 | 7.85 | 7.68 | ... | ... | ... |
| L367-008 | 1 | 01 45 21.4 | -39 57 20 | 12.49 | 10.28 | 9.14 | ... | ... | ... | ... | 8.43 | 7.76 | 7.59 | ... | ... | ... |
| L173-003 | 1 | 01 51 46.2 | -54 57 58 | 12.64 | 10.75 | 9.61 | ... | ... | ... | ... | 9.01 | 8.17 | 7.94 | ... | ... | ... |
| SCR0153-0703 | 1 | 01 53 20.6 | -07 03 32 | 15.66 | 13.39 | 11.76 | 14.42 | 13.22 | 11.72 | /40 | 10.31 | 9.71 | 9.44 | ... | ... | ... |
| SCR0153-5000 | 1 | 01 53 24.2 | -50 00 04 | 14.78 | 12.45 | 10.95 | 13.41 | 12.38 | 11.11 | /40 | 9.93 | 9.30 | 9.03 | ... | ... | ... |
| L223-102 | 1 | 01 54 39.0 | -50 45 58 | 15.54 | 13.39 | 11.79 | 14.16 | 13.19 | 11.98 | /40 | 10.77 | 10.31 | 10.06 | ... | ... | ... |
| LTT01021 | 1 | 01 55 32.2 | -15 31 22 | 12.40 | 9.57 | 9.10 | 11.71 | 10.80 | 9.85 | /25 | 8.81 | 8.17 ^a | 7.94 | ... | ... | ... |
| SCR0156-6702 | 2(1) | 01 56 26.1 | -67 02 36 | 13.55 | 11.37 | 10.22 | 12.72 | 11.77 | 10.61 | /40 | 9.44 | 8.75 | 8.59 | ... | ... | ... |
| SCR0201-5739 | 1 | 02 01 38.8 | -57 39 36 | 14.98 | 13.05 | 11.49 | 13.56 | 12.54 | 11.35 | /40 | 10.14 | 9.47 | 9.25 | ... | ... | ... |
| L583-033 | 2 | 02 02 17.5 | -26 33 52 | 14.30J | 11.83J | 9.80J | 13.45J | 12.24J | 10.69J | /40 | 9.81 ^a | 9.22 ^a | 8.95 | ... | ... | ... |
| LP649-030 | 1 | 02 03 30.2 | -04 54 41 | 11.81 | 9.63 | 8.79 | 11.12 | 10.23 | 9.32 | /35 | 8.20 | 7.54 | 7.36 | ... | ... | ... |
| SCR0211-0354 | 1 | 02 11 52 | -03 54 02 | ... | ... | ... | 15.97 | 14.42 | 12.53 | 2/1 | 10.68 | 10.07 | 9.73 | ... | ... | ... |
| GJ0088 | 1 | 02 12 51.0 | -17 41 12 | 11.30 | 9.29 | 8.25 | 11.08 | 10.16 | 9.24 | /2 | 8.20 | 7.60 ^a | 7.34 | ... | ... | ... |
| LP941-016 | 1 | 02 13 37.4 | -35 12 24 | 12.94 | 10.34 | 9.69 | ... | ... | ... | ... | 8.75 | 8.10 | 7.85 | ... | ... | ... |
| LHS1380 | 1 | 02 17 56.8 | -35 37 01 | 12.42 | 10.08 | 8.88 | 11.63 | 10.67 | 9.62 | /23 | 8.51 | 7.93 | 7.68 | ... | ... | ... |
| LHS1386 | 1 | 02 18 41.4 | -39 37 11 | 14.22 | 11.98 | 10.27 | 13.33 | 12.27 | 10.93 | /40 | 9.67 | 9.07 | 8.80 | ... | ... | ... |
| SCR0228-6248 | 1 | 02 28 13.9 | -62 48 05 | 15.84 | 13.53 | 11.28 | 14.83 | 13.57 | 11.94 | /40 | 10.43 | 9.86 | 9.57 | ... | ... | ... |
| SCR0232-3006 | 1 | 02 32 03.1 | -30 06 41 | 15.95 | 13.32 | 11.78 | 14.78 | 13.59 | 12.05 | /40 | 10.57 | 9.93 | 9.65 | ... | ... | ... |
| SCR0234-8204 | 1 | 02 34 47.1 | -82 04 29 | ... | 14.13 | 12.81 | 14.97 | 13.87 | 12.46 | /40 | 11.11 | 10.51 | 10.25 | ... | ... | ... |

| | | | | | | | | | | | | | | | | |
|--------------|------|------------|-----------|--------|--------|--------|--------|--------|--------|-----|--------|-------------------|--------|-----|-----|-----|
| LHS5058 | 1 | 02 36 32.8 | -34 36 32 | 12.47 | 10.33 | 9.18 | ... | ... | ... | ... | 8.67 | 8.02 | 7.84 | ... | ... | ... |
| SCR0238-1420 | 1 | 02 38 07.5 | -14 20 11 | 12.99 | 11.41 | 9.75 | 12.36 | 11.38 | 10.22 | /40 | 9.05 | 8.39 | 8.16 | ... | ... | ... |
| L441-032 | 1 | 02 39 56.7 | -38 28 00 | 12.31 | 10.27 | 9.21 | ... | ... | ... | ... | 8.47 | 7.82 | 7.63 | ... | ... | ... |
| LHS0158 | 1 | 02 42 02.9 | -44 30 59 | 14.15 | 11.82 | 10.46 | 13.64 | 12.66 | 11.60 | /15 | 10.43 | 9.94 | 9.73 | ... | ... | ... |
| LP651-009 | 1 | 02 46 12.9 | -04 19 57 | 16.06 | 13.82 | 11.97 | 15.06 | 13.88 | 12.37 | /40 | 10.91 | 10.37 | 10.08 | ... | ... | ... |
| LP651-011 | 1 | 02 46 48.9 | -04 21 28 | 14.24 | 12.22 | 10.70 | 13.48 | 12.46 | 11.26 | /40 | 10.05 | 9.48 | 9.23 | ... | ... | ... |
| SCR0247-5729 | 2 | 02 47 14.6 | -57 29 22 | 16.80J | 14.56J | 12.43J | 15.65J | 14.36J | 12.73J | /40 | 11.20J | 10.62J | 10.36J | ... | ... | ... |
| LHS1459 | 1 | 02 51 43.3 | -26 01 39 | 14.83 | 12.79 | 11.23 | 13.88 | 12.91 | 11.83 | /40 | 10.70 | 10.17 | 9.95 | ... | ... | ... |
| LTT01393 | 1 | 02 55 23.2 | -25 13 29 | 11.94 | 10.13 | 8.20 | ... | ... | ... | ... | 8.08 | 7.45 | 7.23 | ... | ... | ... |
| L012-040 | 1 | 03 03 26.4 | -82 50 39 | 12.05 | 10.11 | 9.29 | ... | ... | ... | ... | 8.37 | 7.75 | 7.59 | ... | ... | ... |
| LTT01453 | 1 | 03 03 36.7 | -25 35 33 | 11.68 | 9.71 | 8.14 | 11.04 | 10.11 | 9.13 | /23 | 8.00 | 7.34 | 7.11 | ... | ... | ... |
| LTT01552 | 1 | 03 17 28.2 | -01 07 27 | 13.79 | 11.61 | 10.53 | 12.85 | 11.89 | 10.87 | /40 | 9.73 | 9.18 | 8.99 | ... | ... | ... |
| LP887-068 | 1 | 03 17 35.1 | -27 41 47 | 12.39 | 10.30 | 9.00 | ... | ... | ... | ... | 8.36 | 7.70 ^a | 7.46 | ... | ... | ... |
| G077-042 | 1 | 03 17 55.4 | -01 05 41 | 15.48 | 13.43 | 11.64 | 14.45 | 13.36 | 12.08 | /40 | 10.81 | 10.26 | 9.97 | ... | ... | ... |
| LP888-006 | 1 | 03 20 51.1 | -28 15 34 | 12.80 | 10.66 | 8.96 | 12.19 | 11.21 | 10.07 | /23 | 8.94 | 8.29 | 8.04 | ... | ... | ... |
| SCR0325-0308 | 1 | 03 25 03.1 | -03 08 20 | 15.22 | 13.17 | 11.39 | 13.88 | 12.79 | 11.41 | /39 | 10.06 | 9.45 | 9.20 | ... | ... | ... |
| SCR0327-3634 | 1 | 03 27 46.8 | -36 34 40 | 13.40 | 11.29 | 9.27 | 12.69 | 11.61 | 10.24 | /40 | 8.92 | 8.26 | 8.04 | ... | ... | ... |
| LHS1561 | 1 | 03 34 39.6 | -04 50 33 | 13.63 | 11.43 | 9.47 | 13.07 | 11.84 | 10.30 | /26 | 8.83 | 8.27 | 7.93 | ... | ... | ... |
| SCR0337-1056 | 1 | 03 37 38.2 | -10 56 55 | 11.81 | 9.68 | 8.44 | 11.34 | 10.45 | 9.45 | /40 | 8.41 | 7.80 | 7.59 | ... | ... | ... |
| GJ0155.3 | 1 | 03 53 19.7 | -37 03 59 | 13.06 | 11.08 | 9.63 | ... | ... | ... | ... | 8.74 | 8.21 | 7.95 | ... | ... | ... |
| LHS1622 | 1 | 04 03 30.4 | -37 53 33 | 16.01 | 13.86 | 11.99 | 14.73 | 13.51 | 11.96 | /40 | 10.43 | 9.87 | 9.58 | ... | ... | ... |
| LHS0186 | 1 | 04 03 38.4 | -05 08 05 | 16.24 | 14.31 | 12.76 | 14.87 | 13.86 | 12.73 | /40 | 11.57 | 11.10 | 10.85 | ... | ... | ... |
| WT0135 | 1 | 04 11 27.1 | -44 18 10 | 15.04 | 12.65 | 11.03 | 14.10 | 13.06 | 11.82 | /16 | 10.55 | 10.11 | 9.83 | ... | ... | ... |
| LHS1656 | 1 | 04 18 51.0 | -57 14 01 | 14.07 | 12.02 | 10.03 | 13.29 | 12.18 | 10.84 | /26 | 9.52 | 8.94 | 8.65 | ... | ... | ... |
| L446-008 | 1 | 04 21 00.5 | -35 51 21 | 11.57 | 8.73 | 8.43 | 10.63 | 9.78 | 8.94 | /40 | 7.92 | 7.32 | 7.11 | ... | ... | ... |
| LHS1676 | 1 | 04 31 44.0 | -21 50 44 | 17.31 | 15.14 | 12.42 | 16.02 | 14.57 | 12.75 | /40 | 11.02 | 10.55 | 10.28 | ... | ... | ... |
| SCR0457-0731 | 1 | 04 57 23.8 | -07 31 40 | 14.23 | 12.15 | 10.30 | 13.58 | 12.45 | 11.05 | /40 | 9.68 | 9.07 | 8.82 | ... | ... | ... |
| L305-024 | 1 | 05 06 07.3 | -47 12 52 | 14.07 | 11.96 | 10.32 | 12.63 | 11.65 | 10.46 | /39 | 9.32 | 8.66 ^a | 8.43 | ... | ... | ... |
| LP892-040 | 1 | 05 21 15.9 | -32 21 27 | 15.51 | 13.17 | 11.13 | 14.24 | 13.10 | 11.57 | /24 | 10.08 | 9.49 | 9.21 | ... | ... | ... |
| SCR0525-7425 | 1 | 05 25 45.6 | -74 25 26 | 14.81 | 12.89 | 11.35 | 13.43 | 12.44 | 11.21 | /40 | 10.03 | 9.42 | 9.21 | ... | ... | ... |
| SCR0527-7231 | 1 | 05 27 07.0 | -72 31 20 | 16.01 | 13.97 | 11.77 | 14.71 | 13.49 | 11.86 | /39 | 10.34 | 9.76 | 9.47 | ... | ... | ... |
| LHS1815 | 1 | 06 04 20.4 | -55 18 47 | 13.27 | 11.06 | 9.61 | ... | ... | ... | ... | 8.80 | 8.21 | 7.99 | ... | ... | ... |
| SCR0610-1832 | 1 | 06 10 08.2 | -18 32 25 | 15.98 | 13.81 | 11.58 | 14.87 | 13.68 | 12.12 | /40 | 10.64 | 10.05 | 9.76 | ... | ... | ... |
| LHS1837 | 1 | 06 19 50.7 | -59 52 25 | 14.75 | 12.55 | 10.86 | 13.73 | 12.69 | 11.48 | /40 | 10.25 | 9.67 | 9.45 | ... | ... | ... |
| SCR0629-4648 | 2(1) | 06 29 33.6 | -46 48 37 | 14.39 | 11.98 | 10.38 | 13.31 | 12.20 | 10.86 | /40 | 9.59 | 8.98 | 8.72 | ... | ... | ... |
| SCR0635-6722 | 1 | 06 35 48.8 | -67 22 59 | 12.21 | 9.84 | 8.67 | 11.54 | 10.62 | 9.64 | /39 | 8.54 | 7.96 | 7.69 | ... | ... | ... |
| SCR0639-6939 | 1 | 06 39 08.4 | -69 39 32 | 14.60 | 12.40 | 10.59 | 13.61 | 12.56 | 11.32 | /40 | 10.09 | 9.49 | 9.25 | ... | ... | ... |
| SCR0639-6934 | 1 | 06 39 22.3 | -69 34 13 | 13.68 | 11.25 | 10.11 | 12.71 | 11.74 | 10.69 | /40 | 9.55 | 8.94 | 8.73 | ... | ... | ... |
| SCR0644-4223 | 2 | 06 44 32.1 | -42 23 45 | 15.59J | 13.35J | 11.18J | 14.44J | 13.19J | 11.55J | /39 | 9.93J | 9.27J | 8.98J | ... | ... | ... |
| LP453-049 | 1 | 06 44 32.4 | -38 31 59 | 15.58 | 13.25 | 11.11 | 14.18 | 13.04 | 11.54 | /25 | 10.09 | 9.47 | 9.20 | ... | ... | ... |
| SCR0659-2031 | 1 | 06 59 48.7 | -20 31 47 | 13.95 | 11.56 | 9.64 | 13.00 | 11.98 | 10.72 | /40 | 9.51 | 8.93 | 8.68 | ... | ... | ... |
| LHS1904 | 1 | 07 11 19.7 | -67 07 22 | 11.95 | 9.80 | 8.90 | 11.15 | 10.23 | 9.30 | /18 | 8.28 | 7.64 | 7.41 | ... | ... | ... |
| SCR0714-7140 | 1 | 07 14 26.2 | -71 40 38 | 17.83 | 15.82 | 13.34 | 16.79 | 15.32 | 13.50 | /40 | 11.72 | 11.09 | 10.77 | ... | ... | ... |
| SCR0719-5050 | 1 | 07 19 35.4 | -50 50 52 | 16.00 | 13.74 | 10.88 | 14.59 | 13.35 | 11.80 | /40 | 10.33 | 9.74 | 9.48 | ... | ... | ... |
| SCR0724-3125 | 1 | 07 24 21.2 | -31 25 58 | 15.25 | 12.35 | 10.25 | 14.41 | 13.08 | 11.38 | /40 | 9.79 | 9.22 | 8.89 | ... | ... | ... |
| SCR0725-8530 | 1 | 07 25 22.2 | -85 30 58 | 15.44 | 13.03 | 11.26 | 14.30 | 13.21 | 11.84 | /40 | 10.54 | 10.02 | 9.70 | ... | ... | ... |
| LTT02856 | 1 | 07 26 29.1 | -70 49 41 | 13.73 | 11.30 | 9.70 | 12.59 | 11.52 | 10.30 | /4 | 9.09 | 8.47 | 8.24 | ... | ... | ... |
| WT0214 | 1 | 07 28 40.1 | -61 20 41 | 17.36 | 15.33 | 12.83 | 16.00 | 14.74 | 13.10 | /40 | 11.61 | 11.11 | 10.86 | ... | ... | ... |
| GJ2061 | 1 | 07 31 04.1 | -37 13 46 | 12.39 | 10.01 | 9.05 | 11.47 | 10.49 | 9.40 | /19 | 8.25 | 7.65 | 7.44 | ... | ... | ... |
| SCR0733-4406 | 1 | 07 33 42.7 | -44 06 13 | 16.19 | 13.89 | 11.53 | 15.13 | 13.79 | 12.05 | /40 | 10.32 | 9.73 | 9.44 | ... | ... | ... |
| SCR0743-1929 | 1 | 07 43 22.1 | -19 29 04 | 15.81 | 13.24 | 10.61 | 14.41 | 13.25 | 11.74 | /40 | 10.26 | 9.71 | 9.45 | ... | ... | ... |
| SCR0745-4814 | 2(1) | 07 45 32.2 | -48 14 57 | 18.00 | 15.80 | 13.14 | 16.62 | 15.16 | 13.32 | /40 | 11.57 | 11.03 | 10.74 | ... | ... | ... |
| GJ1100 | 1 | 07 47 03.1 | -13 56 19 | 12.40 | 9.91 | 8.67 | 11.51 | 10.61 | 9.66 | /38 | 8.53 | 7.94 | 7.73 | ... | ... | ... |
| SCR0749-4955 | 1 | 07 49 29.4 | -49 55 06 | 16.64 | 14.74 | 12.34 | 15.28 | 14.03 | 12.44 | /40 | 10.93 | 10.25 | 9.96 | ... | ... | ... |
| SCR0758-4126 | 1 | 07 58 28.7 | -41 26 44 | 14.59 | 12.28 | 10.11 | 13.44 | 12.36 | 11.01 | /40 | 9.69 | 9.13 | 8.91 | ... | ... | ... |
| LP784-012 | 1 | 08 02 03.4 | -17 10 18 | 12.00 | 8.91 | 9.08 | ... | ... | ... | ... | 8.18 | 7.60 | 7.35 | ... | ... | ... |
| SCR0810-4056 | 1 | 08 10 20.3 | -40 56 50 | 13.35 | 11.14 | 9.83 | 12.44 | 11.48 | 10.41 | /40 | 9.30 | 8.66 | 8.45 | ... | ... | ... |
| SCR0829-6203 | 1 | 08 29 24.7 | -62 03 23 | 17.78 | 15.72 | 13.42 | 16.22 | 14.95 | 13.24 | /40 | 11.70 | 11.21 | 10.92 | ... | ... | ... |
| SCR0829-3709 | 1 | 08 29 41.3 | -37 09 35 | 15.14 | 12.69 | 10.28 | 14.27 | 13.02 | 11.41 | /40 | 9.83 | 9.26 | 9.00 | ... | ... | ... |
| L891-016 | 2(1) | 08 31 21.6 | -06 02 02 | 11.78 | 9.49 | 8.11 | 11.21 | 10.29 | 9.21 | /34 | 8.00 | 7.37 | 7.18 | ... | ... | ... |
| L186-042 | 1 | 08 35 47.5 | -56 45 13 | 13.23 | 10.01 | 9.58 | 11.78 | 10.88 | 9.99 | /25 | 8.97 | 8.34 | 8.16 | ... | ... | ... |
| LTT03187 | 1 | 08 36 14.3 | -41 33 26 | 11.74 | 9.46 | 7.37 | ... | ... | ... | ... | 8.08 | 7.34 ^a | 7.02 | ... | ... | ... |
| GJ0316 | 1 | 08 40 00.3 | -06 28 33 | 10.87 | 8.92 | 8.23 | 9.97 | 9.11 | 8.25 | /2 | 7.20 | 6.57 | 6.38 | ... | ... | ... |
| SCR0840-3113 | 1 | 08 40 56.6 | -31 13 33 | 15.57 | 13.32 | 11.35 | 14.34 | 13.12 | 11.59 | /40 | 10.06 | 9.54 | 9.27 | ... | ... | ... |
| L098-062 | 1 | 08 41 32.6 | -68 25 40 | 11.87 | 9.80 | 9.40 | 11.05 | 10.18 | 9.29 | /40 | 8.23 | 7.58 ^a | 7.38 | ... | ... | ... |
| SCR0843-2937 | 1 | 08 43 09.5 | -29 37 31 | 16.13 | 13.95 | 11.68 | 14.93 | 13.66 | 12.06 | /40 | 10.53 | 10.01 | 9.72 | ... | ... | ... |

| | | | | | | | | | | | | | | | | |
|--------------|------|------------|-----------|--------|-------|-------|-------|-------|-------|-----|-------|-------------------|-------|-----|-----|-----|
| SCR0844-7120 | 1 | 08 44 54.6 | -71 20 43 | 15.11 | 13.08 | 11.04 | 14.07 | 12.96 | 11.56 | /40 | 10.25 | 9.57 | 9.30 | ... | ... | ... |
| SCR0852-3507 | 1 | 08 52 54.1 | -35 07 33 | 14.89 | 12.79 | 10.17 | 13.79 | 12.64 | 11.17 | /40 | 9.77 | 9.19 | 8.94 | ... | ... | ... |
| SCR0853-6123 | 1 | 08 53 03.0 | -61 23 48 | 17.94 | 15.73 | 12.96 | 16.75 | 15.31 | 13.52 | /40 | 11.82 | 11.27 | 10.91 | ... | ... | ... |
| LHS2072 | 1 | 08 55 04.7 | -71 35 48 | 15.65 | 13.36 | 11.24 | 14.46 | 13.22 | 11.65 | /40 | 10.17 | 9.59 | 9.34 | ... | ... | ... |
| LP786-022 | 1 | 08 57 14.2 | -19 35 04 | 12.69 | 10.72 | 9.54 | ... | ... | ... | ... | 8.69 | 8.05 | 7.86 | ... | ... | ... |
| SCR0859-7517 | 1 | 08 59 52.0 | -75 17 30 | 14.64 | 12.66 | 10.96 | 13.58 | 12.50 | 11.15 | /40 | 9.86 | 9.24 | 9.03 | ... | ... | ... |
| SCR0904-4851 | 1 | 09 04 47.8 | -48 51 24 | 17.58 | 15.80 | 13.54 | 16.18 | 14.83 | 13.13 | /40 | 11.49 | 10.94 | 10.60 | ... | ... | ... |
| SCR0912-8311 | 1 | 09 12 59.6 | -83 11 52 | 17.99 | 15.74 | 13.19 | 16.66 | 15.20 | 13.37 | /40 | 11.56 | 10.98 | 10.69 | ... | ... | ... |
| SCR0914-7304 | 1 | 09 14 53.9 | -73 04 19 | 16.00 | 13.84 | 11.87 | 14.68 | 13.49 | 11.95 | /40 | 10.50 | 9.87 | 9.61 | ... | ... | ... |
| SCR0916-3431 | 1 | 09 16 07.1 | -34 31 31 | 16.29 | 14.22 | 11.81 | 15.04 | 13.82 | 12.23 | /40 | 10.71 | 10.11 | 9.81 | ... | ... | ... |
| SIP0933-1602 | 1 | 09 33 49.7 | -16 02 55 | 20.17 | 18.01 | 15.31 | 19.11 | 17.11 | 14.78 | /40 | 12.72 | 12.23 | 11.89 | ... | ... | ... |
| SCR0936-3237 | 1 | 09 36 01.5 | -32 37 59 | 13.02 | 10.69 | 9.19 | 12.19 | 11.19 | 10.09 | /40 | 8.95 | 8.34 | 8.12 | ... | ... | ... |
| CE089 | 1 | 09 38 53.8 | -33 48 45 | 17.97 | 15.85 | 13.13 | 16.87 | 15.34 | 13.38 | /40 | 11.51 | 11.05 | 10.78 | ... | ... | ... |
| SCR0943-4833 | 1 | 09 43 18.2 | -48 33 50 | 15.31 | 13.27 | 11.30 | 14.30 | 13.14 | 11.63 | /40 | 10.18 | 9.56 | 9.27 | ... | ... | ... |
| L462-023 | 1 | 09 44 45.4 | -36 32 38 | 12.39 | 10.27 | 9.27 | ... | ... | ... | ... | 8.61 | 7.94 | 7.79 | ... | ... | ... |
| SCR0947-0020 | 1 | 09 47 20.1 | -00 20 09 | 19.44 | 17.26 | 14.47 | 18.23 | 16.50 | 14.32 | /40 | 12.26 | 11.63 | 11.35 | ... | ... | ... |
| LHS2209 | 1 | 09 54 52.5 | -13 31 21 | 15.54 | 13.53 | 11.95 | 14.46 | 13.48 | 12.41 | /40 | 11.25 | 10.69 | 10.47 | ... | ... | ... |
| SCR1005-4322 | 1 | 10 05 03.1 | -43 22 28 | 14.76 | 12.51 | ... | 13.76 | 12.65 | 11.20 | /40 | 9.85 | 9.33 | 9.06 | ... | ... | ... |
| WT0248 | 1 | 10 05 54.9 | -67 21 31 | 14.67 | 13.28 | 12.02 | 14.52 | 13.40 | 11.95 | /15 | 10.56 | 10.10 | 9.87 | ... | ... | ... |
| LTT03719 | 1 | 10 10 00.0 | -25 58 33 | 12.02 | 10.13 | 9.15 | ... | ... | ... | ... | 8.32 | 7.67 ^a | 7.50 | ... | ... | ... |
| LHS2228 | 1 | 10 11 09.2 | -82 51 58 | 11.90 | 9.75 | 8.87 | ... | ... | ... | ... | 8.21 | 7.55 | 7.37 | ... | ... | ... |
| SCR1011-8106 | 1 | 10 11 12.4 | -81 06 42 | 16.54 | 14.50 | 12.53 | 15.20 | 13.94 | 12.37 | /40 | 10.82 | 10.24 | 9.93 | ... | ... | ... |
| LTT03763 | 1 | 10 15 50.1 | -11 47 48 | 12.66 | 10.42 | 9.62 | ... | ... | ... | ... | 8.69 | 8.05 ^a | 7.81 | ... | ... | ... |
| L752-053 | 1 | 10 21 08.1 | -17 43 38 | 11.58 | 9.39 | 8.13 | 11.25 | 10.32 | 9.36 | /23 | 8.26 | 7.59 | 7.40 | ... | ... | ... |
| LHS2257 | 1 | 10 24 23.4 | -02 34 18 | ... | ... | ... | 14.89 | 14.39 | 13.89 | /40 | 10.86 | 10.37 | 10.08 | ... | ... | ... |
| LHS0284 | 1 | 10 36 03.1 | -14 42 29 | 17.75 | 15.75 | 13.64 | 16.78 | 15.49 | 13.81 | /16 | 12.28 | 11.79 | 11.58 | ... | ... | ... |
| LP904-036 | 1 | 10 36 28.4 | -28 27 15 | 13.23 | 11.07 | 9.60 | 12.02 | 10.99 | 9.74 | /40 | 8.50 | 7.83 ^a | 7.58 | ... | ... | ... |
| LP904-045 | 1 | 10 40 18.5 | -29 30 23 | 13.13 | 10.82 | 9.76 | ... | ... | ... | ... | 8.78 | 8.07 ^a | 7.89 | ... | ... | ... |
| L017-050 | 1 | 10 41 56.4 | -82 59 23 | 14.78 | 12.41 | 10.95 | 13.21 | 12.12 | 10.77 | /40 | 9.51 | 8.92 | 8.66 | ... | ... | ... |
| LP905-022 | 1 | 10 51 58.9 | -32 01 20 | 12.91 | 10.63 | 9.49 | ... | ... | ... | ... | 8.42 | 7.78 | 7.60 | ... | ... | ... |
| LP849-020 | 1 | 10 52 26.4 | -22 41 16 | 12.67 | 10.66 | 9.32 | ... | ... | ... | ... | 8.86 | 8.23 | 7.96 | ... | ... | ... |
| LTT04033 | 1 | 10 58 41.3 | -42 40 09 | 12.64 | 10.76 | 10.28 | ... | ... | ... | ... | 8.89 | 8.26 | 8.16 | ... | ... | ... |
| LTT04042 | 1 | 11 00 02.8 | -35 06 37 | 12.03 | 9.91 | 8.47 | ... | ... | ... | ... | 8.08 | 7.44 | 7.24 | ... | ... | ... |
| SCR1104-0150 | 1 | 11 04 08.4 | -01 50 18 | 14.38 | 12.52 | 11.10 | 13.29 | 12.29 | 11.11 | /40 | 9.87 | 9.30 | 9.04 | ... | ... | ... |
| SCR1104-8352 | 1 | 11 04 51.0 | -83 52 25 | 15.50 | 13.47 | 12.23 | 13.89 | 12.92 | 11.67 | /40 | 10.53 | 9.96 | 9.67 | ... | ... | ... |
| UPM1105-5825 | 2(1) | 11 05 30.4 | -58 25 19 | 14.44 | ... | 11.60 | 13.95 | 12.88 | 11.57 | /40 | 10.30 | 9.71 | 9.50 | ... | ... | ... |
| LTT04105 | 1 | 11 09 12.2 | -04 36 25 | 11.76 | 10.13 | 8.55 | ... | ... | ... | ... | 8.20 | 7.60 | 7.33 | ... | ... | ... |
| LHS0299 | 1 | 11 11 22.7 | -06 31 56 | 15.51 | 13.38 | 12.16 | 14.78 | 13.85 | 12.94 | /40 | 11.92 | 11.37 | 11.14 | ... | ... | ... |
| LP792-044 | 3(1) | 11 13 13.0 | -19 06 23 | 15.98 | 13.97 | 12.11 | 15.05 | 13.92 | 12.43 | /40 | 11.20 | 10.66 | 10.46 | ... | ... | ... |
| SCR1117-3202 | 1 | 11 17 29.3 | -32 02 10 | 16.00 | 13.58 | 11.33 | 14.58 | 13.37 | 11.80 | /40 | 10.34 | 9.76 | 9.48 | ... | ... | ... |
| SCR1118-3511 | 1 | 11 18 59.7 | -35 11 39 | 17.17 | 14.90 | 12.81 | 15.93 | 14.56 | 12.83 | /40 | 11.15 | 10.50 | 10.23 | ... | ... | ... |
| SCR1121-8057 | 1 | 11 21 27.9 | -80 57 03 | 15.26 | 13.71 | 11.50 | 14.54 | 13.38 | 11.90 | /40 | 10.48 | 9.84 | 9.60 | ... | ... | ... |
| GJ0429.2 | 1 | 11 28 00.5 | -09 10 57 | 12.77 | 10.90 | 9.39 | 12.37 | 11.43 | 10.38 | /40 | 9.29 | 8.74 ^a | 8.49 | ... | ... | ... |
| SCR1132-8446 | 1 | 11 32 22.3 | -84 46 28 | 17.64 | 15.87 | 13.94 | 16.27 | 15.12 | 13.58 | /40 | 12.22 | 11.76 | 11.51 | ... | ... | ... |
| USN1137-0317 | 1 | 11 37 16.6 | -03 17 37 | 16.41 | 14.24 | 12.02 | 15.65 | 14.27 | 12.50 | /40 | 10.87 | 10.36 | 10.09 | ... | ... | ... |
| CE440-087 | 1 | 11 47 50.7 | -28 49 45 | ... | ... | ... | 16.21 | 14.98 | 13.38 | /40 | 12.02 | 11.45 | 11.24 | ... | ... | ... |
| Ruiz440-064 | 1 | 11 48 50.6 | -28 33 23 | ... | ... | 12.84 | 16.24 | 14.79 | 12.92 | /40 | 11.13 | 10.64 | 10.35 | ... | ... | ... |
| SCR1153-5430 | 1 | 11 53 22.6 | -54 30 08 | 15.39 | 13.16 | 11.01 | 14.30 | 13.39 | 11.61 | /40 | 10.21 | 9.58 | 9.28 | ... | ... | ... |
| SCR1159-4256 | 1 | 11 59 37.7 | -42 56 39 | 14.20 | 11.96 | 10.35 | 13.35 | 12.22 | 10.85 | /40 | 9.54 | 8.98 ^a | 8.72 | ... | ... | ... |
| LP907-063 | 1 | 12 03 03.9 | -33 39 55 | 18.61 | 16.54 | 14.06 | 17.79 | 16.15 | 14.22 | /40 | 12.39 | 11.83 | 11.50 | ... | ... | ... |
| LP908-010 | 1 | 12 03 28.1 | -29 23 00 | 16.70 | 13.65 | 11.70 | 15.36 | 14.04 | 12.36 | /40 | 10.74 | 10.13 | 9.81 | ... | ... | ... |
| SCR1204-4037 | 1 | 12 04 15.5 | -40 37 53 | 14.70 | 12.61 | 10.72 | 13.47 | 12.34 | 10.92 | /39 | 9.57 | 9.02 | 8.75 | ... | ... | ... |
| GJ2090 | 1 | 12 04 36.6 | -38 16 25 | 12.96 | 10.71 | 9.56 | ... | ... | ... | ... | 8.60 | 7.99 | 7.73 | ... | ... | ... |
| WT1928 | 1 | 12 08 06.9 | -32 06 36 | 15.61 | 13.77 | 12.05 | 14.04 | 12.96 | 11.62 | /40 | 10.30 | 9.66 | 9.40 | ... | ... | ... |
| NLTT30217 | 1 | 12 17 06.8 | -17 38 15 | 12.78 | 10.83 | 9.66 | 11.98 | 11.03 | 9.99 | /23 | 8.86 | 8.23 | 8.03 | ... | ... | ... |
| LHS0323 | 1 | 12 17 30.2 | -29 02 21 | 17.94 | 16.06 | 13.99 | 16.95 | 15.66 | 14.02 | /16 | 12.54 | 12.05 | 11.78 | ... | ... | ... |
| LP470-065 | 2 | 12 17 46.8 | -39 04 05 | 12.12J | 9.98J | 9.13J | ... | ... | ... | ... | 8.55 | 7.87 | 7.70 | ... | ... | ... |
| SCR1217-3557 | 1 | 12 17 55.8 | -35 57 15 | 15.05 | 13.06 | 11.02 | 13.94 | 12.78 | 11.35 | /40 | 9.94 | 9.33 | 9.09 | ... | ... | ... |
| SCR1220-8302 | 1 | 12 20 03.7 | -83 02 29 | 17.03 | 14.94 | 12.80 | 15.71 | 14.35 | 12.62 | /39 | 10.97 | 10.39 | 10.07 | ... | ... | ... |
| LHS0326 | 1 | 12 24 26.8 | -04 43 37 | 16.08 | 14.02 | 12.99 | 14.92 | 13.98 | 13.05 | /40 | 11.93 | 11.43 | 11.23 | ... | ... | ... |
| SCR1224-8205 | 1 | 12 24 39.8 | -82 05 53 | 16.42 | 14.37 | 12.22 | 15.25 | 13.96 | 12.27 | /40 | 10.69 | 10.06 | 9.81 | ... | ... | ... |
| SCR1227-4039 | 1 | 12 27 03.9 | -40 39 40 | 13.00 | 10.82 | 9.40 | 11.96 | 11.03 | 10.03 | /40 | 8.93 | 8.27 | 8.08 | ... | ... | ... |
| LP909-006 | 1 | 12 30 19.6 | -28 24 31 | 16.51 | 14.41 | 11.64 | 15.39 | 14.10 | 12.45 | /40 | 10.85 | 10.27 | 9.96 | ... | ... | ... |
| LHS2573 | 1 | 12 32 32.2 | -26 10 14 | 14.35 | 12.22 | 10.44 | 13.47 | 12.40 | 11.03 | /40 | 9.75 | 9.23 | 9.02 | ... | ... | ... |
| LTT04828 | 1 | 12 39 55.9 | -08 34 42 | 12.50 | 10.30 | 9.39 | ... | ... | ... | ... | 8.64 | 8.02 | 7.82 | ... | ... | ... |
| SCR1240-8116 | 1 | 12 40 56.0 | -81 16 31 | 15.15 | 13.12 | 11.25 | 14.11 | 12.89 | 11.28 | /39 | 9.73 | 9.16 | 8.89 | ... | ... | ... |

| | | | | | | | | | | | | | | | | |
|--------------|------|------------|-----------|--------|--------|--------|--------|--------|--------|-----|--------|-------------------|--------|-----|-----|-----|
| LHS5231 | 1 | 12 59 18.2 | -00 10 33 | 13.81 | 11.84 | 9.87 | 12.93 | 11.77 | 10.24 | /40 | 8.79 | 8.23 ^a | 7.92 | ... | ... | ... |
| WT1962 | 2 | 12 59 51.3 | -07 30 35 | 16.29J | 14.15J | 12.38J | 15.42J | 14.23J | 12.68J | /40 | 11.19J | 10.68J | 10.43J | ... | ... | ... |
| L147-045 | 1 | 13 04 43.8 | -62 15 26 | 13.08 | 11.10 | 10.07 | ... | ... | ... | ... | 8.48 | 7.85 ^a | 7.61 | ... | ... | ... |
| LHS2698 | 1 | 13 13 29.6 | -32 27 05 | 15.34 | 13.34 | 11.50 | 14.21 | 13.14 | 11.76 | /26 | 10.48 | 9.96 | 9.70 | ... | ... | ... |
| LP910-061 | 1 | 13 16 21.9 | -33 47 45 | 12.89 | 11.04 | 9.61 | ... | ... | ... | ... | 8.97 | 8.32 | 8.14 | ... | ... | ... |
| SCR1322-7254 | 1 | 13 22 27.5 | -72 54 37 | 16.24 | 14.12 | 12.25 | 15.33 | 14.13 | 12.60 | /40 | 11.14 | 10.55 | 10.31 | ... | ... | ... |
| SCR1328-7253 | 1 | 13 28 42.1 | -72 53 47 | 17.91 | 15.97 | 13.78 | 16.90 | 15.64 | 13.99 | /40 | 12.47 | 12.00 | 11.69 | ... | ... | ... |
| LHS2744 | 1 | 13 30 52.6 | -32 37 49 | 12.39 | 10.73 | 9.24 | ... | ... | ... | ... | 8.81 | 8.15 | 8.00 | ... | ... | ... |
| SIP1338-3752 | 1 | 13 38 26.5 | -37 52 50 | 17.72 | 15.76 | 13.14 | 16.75 | 15.25 | 13.39 | /40 | 11.75 | 11.28 | 10.97 | ... | ... | ... |
| LTT05294 | 1 | 13 39 37.6 | -01 35 43 | 12.65 | 9.83 | 9.66 | ... | ... | ... | ... | 8.76 | 8.12 | 7.88 | ... | ... | ... |
| SIP1343-3823 | 1 | 13 43 49.4 | -38 23 50 | 17.12 | 14.95 | 12.59 | 15.78 | 14.48 | 12.84 | /40 | 11.26 | 10.68 | 10.41 | ... | ... | ... |
| LTT05330 | 2(1) | 13 44 55.1 | -45 35 19 | 11.85 | 9.71 | 9.72 | 11.29 | 10.41 | 9.51 | /40 | 8.47 | 7.86 | 7.66 | ... | ... | ... |
| SCR1347-7610 | 1 | 13 47 56.8 | -76 10 20 | 12.40 | 10.27 | 8.88 | 11.49 | 10.57 | 9.66 | /39 | 8.62 | 8.01 | 7.77 | ... | ... | ... |
| LP912-026 | 1 | 13 53 19.8 | -30 46 38 | 13.20 | 11.14 | 9.85 | ... | ... | ... | ... | 8.90 | 8.26 | 8.05 | ... | ... | ... |
| LHS2841 | 1 | 14 00 57.0 | -31 47 50 | 12.10 | 10.44 | 9.17 | ... | ... | ... | ... | 8.22 | 7.57 ^a | 7.34 | ... | ... | ... |
| GJ0539.2 | 2(1) | 14 09 27.2 | -30 55 49 | 13.07 | 10.99 | 9.64 | 11.81 | 10.88 | 9.88 | /2 | 8.79 | 8.12 | 7.90 | ... | ... | ... |
| SCR1410-2750 | 1 | 14 10 22.6 | -27 50 59 | 17.04 | 14.83 | 12.63 | 15.43 | 14.11 | 12.46 | /40 | 10.89 | 10.31 | 10.05 | ... | ... | ... |
| L836-121 | 3(2) | 14 14 21.4 | -15 21 22 | 10.58J | 9.13J | 7.63J | 10.32J | 9.49J | 8.58J | /34 | 7.43J | 6.78J | 6.60J | ... | ... | ... |
| LHS5275 | 1 | 14 39 58.8 | -56 54 46 | 12.66 | 10.05 | ... | ... | ... | ... | ... | 8.33 | 7.71 | 7.52 | ... | ... | ... |
| SCR1441-7338 | 1 | 14 41 14.4 | -73 38 41 | 18.28 | 16.15 | 13.05 | 17.05 | 15.31 | 13.25 | /39 | 11.20 | 10.61 | 10.27 | ... | ... | ... |
| SCR1450-3742 | 1 | 14 50 02.9 | -37 42 10 | 14.82 | 12.40 | 10.44 | 14.01 | 12.84 | 11.32 | /39 | 9.95 | 9.37 | 9.07 | ... | ... | ... |
| LHS0381 | 1 | 14 50 28.9 | -08 38 37 | 16.53 | 14.36 | 13.18 | 15.10 | 14.11 | 13.07 | /40 | 11.97 | 11.46 | 11.24 | ... | ... | ... |
| LHS0382 | 1 | 14 50 41.2 | -16 56 31 | 16.40 | 14.27 | 12.30 | 15.73 | 14.61 | 13.17 | /40 | 11.85 | 11.38 | 11.11 | ... | ... | ... |
| LHS0385 | 1 | 14 55 35.8 | -15 33 44 | 15.47 | 13.39 | 12.23 | 14.61 | 13.67 | 12.78 | /40 | 11.74 | 11.28 | 11.06 | ... | ... | ... |
| SCR1510-5141 | 1 | 15 10 56.6 | -51 41 36 | 13.95 | 11.32 | 9.59 | 13.04 | 11.96 | 10.64 | /40 | 9.39 | 8.84 ^a | 8.58 | ... | ... | ... |
| UPM1515-6258 | 1 | 15 15 04.9 | -62 58 06 | 16.90 | 16.13 | 14.79 | 15.74 | 14.60 | 13.13 | /40 | 11.74 | 11.13 | 10.85 | ... | ... | ... |
| LP915-016 | 2 | 15 17 21.1 | -27 59 50 | 11.83J | 9.83J | 9.18J | 11.05J | 10.17J | 9.30J | /20 | 8.23J | 7.60J | 7.42J | ... | ... | ... |
| UPM1523-5454 | 1 | 15 23 43.7 | -54 54 35 | ... | ... | ... | 13.45 | 12.37 | 11.08 | /40 | 9.77 | 9.19 | 8.87 | ... | ... | ... |
| LP802-068 | 1 | 15 24 45.8 | -17 07 39 | 12.53 | 10.75 | 9.24 | ... | ... | ... | ... | 8.41 | 7.73 | 7.53 | ... | ... | ... |
| SCR1528-3807 | 1 | 15 28 50.6 | -38 07 41 | 13.74 | 11.96 | 10.63 | 12.27 | 11.34 | 10.34 | /40 | 9.28 | 8.59 | 8.38 | ... | ... | ... |
| LEHPM2-0016 | 1 | 15 29 14.0 | -29 07 38 | 20.38 | 18.43 | 15.48 | 19.38 | 17.52 | 15.28 | /16 | 13.32 | 12.86 | 12.50 | ... | ... | ... |
| SCR1532-3622 | 1 | 15 32 13.9 | -36 22 31 | 15.48 | 13.50 | 11.96 | 14.03 | 12.89 | 11.45 | /39 | 10.10 | 9.54 | 9.28 | ... | ... | ... |
| LP916-023 | 1 | 15 44 05.5 | -32 05 22 | 14.92 | 12.91 | 11.14 | 13.74 | 12.62 | 11.18 | /23 | 9.81 | 9.21 | 8.94 | ... | ... | ... |
| L336-071 | 1 | 15 49 38.3 | -47 36 34 | 11.94 | 9.85 | 8.93 | 11.16 | 10.24 | 9.35 | /19 | 8.30 | 7.68 ^a | 7.50 | ... | ... | ... |
| LP916-003 | 1 | 15 54 23.5 | -33 08 44 | 13.61 | 11.62 | 10.34 | 12.02 | 11.07 | 10.02 | /23 | 8.85 | 8.20 | 8.02 | ... | ... | ... |
| LP684-003 | 1 | 15 56 41.4 | -04 14 21 | 12.41 | 10.35 | 9.40 | ... | ... | ... | ... | 8.68 | 8.09 | 7.83 | ... | ... | ... |
| LHS3144 | 1 | 16 00 27.8 | -34 43 17 | 15.13 | 12.96 | 11.32 | 13.58 | 12.49 | 11.09 | /25 | 9.75 | 9.26 | 8.98 | ... | ... | ... |
| LHS3147 | 1 | 16 02 23.6 | -25 05 57 | 14.06 | 11.61 | 9.59 | 13.20 | 12.09 | 10.63 | /26 | 9.28 | 8.69 | 8.41 | ... | ... | ... |
| SCR1608-4442 | 1 | 16 08 43.9 | -44 42 29 | 16.59 | 14.95 | 12.94 | 15.40 | 14.12 | 12.46 | /40 | 10.88 | 10.36 | 10.10 | ... | ... | ... |
| SCR1609-3730 | 1 | 16 09 05.4 | -37 30 40 | 14.30 | 12.34 | 11.44 | 12.71 | 11.79 | 10.85 | /40 | 9.81 | 9.19 | 8.99 | ... | ... | ... |
| LEP1610-0040 | 2 | 16 10 29.0 | -00 40 54 | 21.22J | 17.70J | 14.90J | 19.09J | 17.10J | 14.97J | /40 | 12.91J | 12.30J | 12.02J | ... | ... | ... |
| GJ0618.1 | 1 | 16 20 24.8 | -04 16 02 | 11.43 | 9.54 | 8.36 | 10.69 | 9.83 | 8.97 | /2 | 7.95 | 7.27 | 7.08 | ... | ... | ... |
| LP745-070 | 1 | 16 33 41.6 | -09 33 12 | 12.37 | 10.09 | 9.51 | ... | ... | ... | ... | 8.38 | 7.78 ^a | 7.55 | ... | ... | ... |
| SCR1637-4703 | 1 | 16 37 56.6 | -47 03 44 | 16.26 | 13.88 | 11.56 | 14.77 | 13.57 | 12.04 | /39 | 10.60 | 10.04 | 9.70 | ... | ... | ... |
| 2MA1651-2719 | 1 | 16 51 59.8 | -27 19 51 | ... | ... | ... | 15.38 | 14.17 | 12.56 | /40 | 10.96 | 10.39 | 10.10 | ... | ... | ... |
| CCD1702-2718 | 2(1) | 17 02 09.1 | -27 18 24 | 13.22 | 11.48 | 10.00 | 11.82 | 10.94 | 10.07 | /40 | 8.88 | 8.25 | 8.02 | ... | ... | ... |
| LP806-025 | 1 | 17 07 58.3 | -19 28 43 | 15.89 | 14.07 | 12.48 | 12.98 | 11.92 | 10.63 | /40 | 9.35 | 8.78 | 8.55 | ... | ... | ... |
| NLT744264 | 1 | 17 10 03.8 | -21 46 56 | 15.69 | 13.64 | 12.30 | 12.65 | 11.65 | 10.52 | /40 | 9.36 | 8.76 | 8.51 | ... | ... | ... |
| SCR1712-1907 | 1 | 17 12 26.1 | -19 07 04 | 17.03 | 15.40 | 14.10 | 14.52 | 13.43 | 12.08 | /40 | 10.72 | 10.16 | 9.90 | ... | ... | ... |
| SCR1716-2239 | 1 | 17 16 35.7 | -22 39 49 | 16.49 | 14.75 | 13.38 | 14.80 | 13.63 | 12.12 | /40 | 10.69 | 10.07 | 9.84 | ... | ... | ... |
| UPM1718-2245 | 2(1) | 17 18 25.6 | -22 46 29 | 16.14 | 14.79 | 13.29 | 14.07 | 13.01 | 11.69 | /40 | 10.21 | 9.61 | 9.38 | ... | ... | ... |
| LHS0440 | 1 | 17 18 32.3 | -43 26 38 | 13.55 | 10.68 | 10.04 | 12.98 | 11.98 | 10.87 | /40 | 9.70 | 9.13 | 8.95 | ... | ... | ... |
| LP920-011 | 1 | 17 19 13.7 | -27 45 44 | 15.76 | 13.82 | 13.50 | 13.81 | 12.71 | 11.36 | /40 | 10.03 | 9.40 | 9.20 | ... | ... | ... |
| GJ1217 | 1 | 17 22 43.0 | -14 57 37 | 11.92 | 9.81 | 9.17 | 10.93 | 10.08 | 9.26 | /35 | 8.25 | 7.63 | 7.44 | ... | ... | ... |
| LP687-026 | 1 | 17 22 50.6 | -03 29 38 | 14.92 | 13.77 | 12.54 | 13.81 | 12.75 | 11.48 | /40 | 10.21 | 9.58 | 9.35 | ... | ... | ... |
| SCR1724-3727 | 1 | 17 24 07.0 | -37 27 53 | 16.53 | 14.58 | 12.64 | 15.00 | 13.78 | 12.20 | /40 | 10.69 | 10.13 | 9.80 | ... | ... | ... |
| SCR1733-2452 | 1 | 17 33 04.6 | -24 52 57 | 15.64 | 14.40 | 14.36 | 14.04 | 13.02 | 11.84 | /40 | 10.63 | 9.97 | 9.77 | ... | ... | ... |
| SCR1735-4051 | 1 | 17 35 15.5 | -40 51 13 | 17.98 | 16.29 | 13.82 | 16.70 | 15.28 | 13.41 | /40 | 11.61 | 11.04 | 10.70 | ... | ... | ... |
| LTT07022 | 1 | 17 39 28.3 | -22 41 46 | 12.64 | 11.20 | 11.00 | ... | ... | ... | ... | 8.60 | 7.95 | 7.78 | ... | ... | ... |
| SCR1750-2530 | 1 | 17 50 07.6 | -25 30 21 | 16.75 | 14.89 | 12.48 | 15.06 | 13.78 | 12.25 | /40 | 10.65 | 9.95 | 9.68 | ... | ... | ... |
| SCR1750-0128 | 1 | 17 50 14.4 | -01 28 51 | 15.43 | 13.93 | 12.21 | 14.56 | 13.38 | 11.84 | /40 | 10.43 | 9.89 | 9.64 | ... | ... | ... |
| LHS0456 | 1 | 17 50 59.0 | -56 36 07 | 12.95 | 10.91 | 9.93 | 12.08 | 11.12 | 10.09 | /40 | 8.99 | 8.42 | 8.19 | ... | ... | ... |
| LP808-023 | 1 | 17 51 27.5 | -18 59 32 | 13.43 | 11.46 | 11.15 | ... | ... | ... | ... | 8.87 | 8.22 | 8.06 | ... | ... | ... |
| SCR1753-7403 | 1 | 17 53 32.6 | -74 03 46 | 16.28 | 14.04 | 11.80 | 15.05 | 13.76 | 12.09 | /40 | 10.56 | 9.96 | 9.70 | ... | ... | ... |
| SCR1755-0455 | 1 | 17 55 30.7 | -04 55 42 | 16.63 | 15.34 | 13.76 | 15.19 | 13.90 | 12.25 | /40 | 10.70 | 10.08 | 9.78 | ... | ... | ... |
| SCR1800-0755 | 1 | 18 00 33.9 | -07 55 03 | 14.71 | 13.56 | 12.08 | 13.36 | 12.30 | 10.99 | /40 | 9.86 | 9.26 | 8.98 | ... | ... | ... |

| | | | | | | | | | | | | | | | | |
|--------------|------|------------|-----------|--------|--------|--------|--------|--------|--------|-----|-------|-------------------|-------|-----|-----|-----|
| SCR1801-7000 | 1 | 18 01 28.9 | -70 00 49 | 15.10 | 13.00 | 10.97 | 14.00 | 12.87 | 11.42 | /40 | 10.01 | 9.41 | 9.16 | ... | ... | ... |
| SCR1802-1919 | 1 | 18 02 28.7 | -19 19 19 | 16.14 | 14.51 | 13.76 | 14.18 | 13.13 | 11.85 | /40 | 10.64 | 9.97 | 9.77 | ... | ... | ... |
| L077-206 | 1 | 18 06 55.6 | -74 35 20 | 15.06 | 13.13 | 10.66 | 14.05 | 12.97 | 11.59 | /40 | 10.18 | 9.69 | 9.45 | ... | ... | ... |
| LEHPM2-0088 | 1 | 18 08 00.0 | -81 20 49 | ... | 15.45 | 13.19 | 16.02 | 14.69 | 13.00 | /40 | 11.36 | 10.79 | 10.52 | ... | ... | ... |
| SCR1808-0341 | 1 | 18 08 48.4 | -03 41 54 | 16.74 | 16.07 | 15.40 | 15.37 | 14.32 | 13.01 | /40 | 11.72 | 11.19 | 11.03 | ... | ... | ... |
| LTT07218 | 1 | 18 09 33.3 | -12 02 20 | 11.80 | 10.10 | 9.21 | ... | ... | ... | ... | 7.80 | 7.16 | 6.99 | ... | ... | ... |
| LEP1809-0247 | 1 | 18 09 50.1 | -02 47 43 | 17.68 | 17.03 | 15.84 | 16.25 | 14.87 | 13.04 | /40 | 11.43 | 10.92 | 10.68 | ... | ... | ... |
| SCR1820-6225 | 1 | 18 20 49.4 | -62 25 53 | 12.84 | 10.95 | 9.63 | 12.04 | 11.12 | 10.17 | /39 | 9.14 | 8.49 | 8.30 | ... | ... | ... |
| GJ1226 | 2 | 18 20 57.2 | -01 02 58 | 13.47J | 12.10J | 9.79J | 13.07 | 11.98 | 10.56 | /15 | 8.75J | 8.19J | 7.95J | ... | ... | ... |
| SCR1821-0700 | 1 | 18 21 54.2 | -07 00 18 | 13.93 | 12.57 | 12.34 | 12.70 | 11.76 | 10.71 | /40 | 9.63 | 8.91 | 8.73 | ... | ... | ... |
| G155-020 | 2(1) | 18 31 04.4 | -09 58 09 | 15.07 | 13.72 | 12.30 | 13.98 | 12.85 | 11.40 | /40 | 9.99 | 9.36 | 9.12 | ... | ... | ... |
| SCR1842-2736 | 1 | 18 42 56.7 | -27 36 33 | 13.43 | 11.80 | 10.95 | 13.04 | 12.13 | 11.13 | /40 | 10.02 | 9.36 | 9.18 | ... | ... | ... |
| SCR1844-1310 | 1 | 18 44 59.6 | -13 10 24 | 16.13 | 14.84 | 13.75 | 14.52 | 13.42 | 12.04 | /40 | 10.69 | 10.12 | 9.89 | ... | ... | ... |
| G155-041 | 1 | 18 47 36.0 | -17 03 16 | 15.09 | 13.54 | 12.04 | 13.61 | 12.58 | 11.29 | /25 | 10.04 | 9.46 | 9.23 | ... | ... | ... |
| LHS0468 | 1 | 18 48 44.9 | -02 33 46 | 15.18 | 13.35 | 12.26 | 13.54 | 12.54 | 11.35 | /40 | 10.16 | 9.65 | 9.42 | ... | ... | ... |
| SCR1851-6156 | 1 | 18 51 55.4 | -61 56 56 | 14.09 | 12.10 | 10.30 | 13.19 | 12.12 | 10.78 | /40 | 9.50 | 8.88 | 8.69 | ... | ... | ... |
| LHS3421 | 1 | 18 52 52.4 | -57 07 37 | 13.09 | 11.26 | 9.65 | ... | ... | ... | ... | 8.52 | 7.84 | 7.59 | ... | ... | ... |
| SCR1853-7537 | 1 | 18 53 26.6 | -75 37 40 | 12.20 | 9.85 | 9.09 | 11.18 | 10.29 | 9.41 | /39 | 8.34 | 7.73 | 7.50 | ... | ... | ... |
| SCR1854-2859 | 1 | 18 54 20.8 | -28 59 53 | 15.30 | 13.86 | 13.03 | 13.42 | 12.44 | 11.22 | /40 | 10.01 | 9.42 | 9.20 | ... | ... | ... |
| SCR1900-2547 | 1 | 19 00 47.1 | -25 47 13 | 15.25 | 13.26 | 11.50 | 14.15 | 12.99 | 11.54 | /40 | 10.13 | 9.52 | 9.28 | ... | ... | ... |
| SCR1901-0737 | 1 | 19 01 32.4 | -07 37 24 | 16.53 | 14.44 | 12.12 | 15.63 | 14.19 | 12.38 | /40 | 10.57 | 10.00 | 9.70 | ... | ... | ... |
| SCR1901-3106 | 1 | 19 01 59.2 | -31 06 45 | 13.97 | 11.90 | 10.93 | 14.19 | 12.99 | 11.54 | /40 | 9.61 | 9.01 | 8.77 | ... | ... | ... |
| SCR1907-7924 | 1 | 19 07 53.5 | -79 24 03 | 15.53 | 13.59 | 11.77 | 14.38 | 13.22 | 11.78 | /40 | 10.36 | 9.82 | 9.56 | ... | ... | ... |
| SCR1916-3638 | 1 | 19 16 46.6 | -36 38 06 | 18.20 | 15.88 | 14.78 | 16.83 | 15.82 | 14.76 | /16 | 13.66 | 13.12 | 12.95 | ... | ... | ... |
| LP347-017 | 1 | 19 19 09.0 | -45 47 59 | 12.32 | 10.19 | 9.28 | ... | ... | ... | ... | 8.52 | 7.83 | 7.64 | ... | ... | ... |
| LHS3451 | 2(1) | 19 19 29.3 | -18 19 06 | 15.34 | 12.84 | 11.45 | 14.77 | 13.71 | 12.35 | /40 | 11.02 | 10.52 | 10.33 | ... | ... | ... |
| LEHPM2-3658 | 2(1) | 19 22 43.7 | -43 19 21 | 13.79 | 11.54 | 9.84 | 12.88 | 11.78 | 10.53 | /40 | 9.28 | 8.70 | 8.46 | ... | ... | ... |
| L347-073 | 1 | 19 26 30.2 | -48 36 16 | 14.04 | 11.80 | 9.90 | 13.06 | 11.96 | 10.63 | /40 | 9.39 | 8.85 ^a | 8.53 | ... | ... | ... |
| L347-072 | 1 | 19 27 30.9 | -48 33 53 | 13.87 | 11.67 | 9.93 | 12.88 | 11.85 | 10.63 | /40 | 9.43 | 8.87 ^a | 8.62 | ... | ... | ... |
| L208-005 | 1 | 19 30 13.7 | -54 56 19 | 12.24 | 9.93 | 9.43 | ... | ... | ... | ... | 8.65 | 8.04 | 7.87 | ... | ... | ... |
| SCR1932-0652 | 1 | 19 32 46.3 | -06 52 18 | 14.92 | 13.27 | 11.50 | 13.97 | 12.83 | 11.34 | /39 | 9.94 | 9.36 | 9.10 | ... | ... | ... |
| GJ0762 | 1 | 19 34 36.5 | -62 50 39 | 13.18 | 11.32 | 9.88 | 12.09 | 11.07 | 9.83 | /26 | 8.59 | 8.00 ^a | 7.77 | ... | ... | ... |
| SCR1936-4816 | 1 | 19 36 33.3 | -48 16 54 | 17.23 | 15.05 | 12.55 | 15.92 | 14.50 | 12.76 | /40 | 11.05 | 10.47 | 10.18 | ... | ... | ... |
| LTT07786 | 3(1) | 19 42 52.8 | -45 04 53 | 10.68 | 8.73 | 7.59 | ... | ... | ... | ... | 7.30 | 6.66 | 6.45 | ... | ... | ... |
| LHS3480 | 1 | 19 44 22.0 | -22 30 54 | 18.50 | 16.41 | 14.60 | 17.27 | 16.00 | 14.46 | /40 | 13.05 | 12.53 | 12.25 | ... | ... | ... |
| LHS3492 | 1 | 19 51 31.3 | -50 55 38 | 16.52 | 14.58 | 12.29 | 15.27 | 14.05 | 12.45 | /40 | 10.97 | 10.49 | 10.19 | ... | ... | ... |
| GJ0769 | 1 | 19 54 00.1 | -47 48 37 | 13.72 | 11.43 | 10.59 | 12.53 | 11.52 | 10.28 | /2 | 9.08 | 8.54 | 8.29 | ... | ... | ... |
| SCR1954-7356 | 1 | 19 54 06.4 | -73 56 51 | 16.85 | 14.89 | 12.96 | 15.78 | 14.64 | 13.17 | /40 | 11.81 | 11.31 | 11.08 | ... | ... | ... |
| SCR1955-2856 | 1 | 19 55 16.8 | -28 56 43 | 15.10 | 13.12 | 11.35 | 14.14 | 12.92 | 11.46 | /40 | 10.04 | 9.48 | 9.22 | ... | ... | ... |
| SCR1959-5549 | 1 | 19 59 58.8 | -55 49 30 | 16.19 | 13.95 | 11.82 | 14.85 | 13.59 | 11.98 | /40 | 10.47 | 9.88 | 9.63 | ... | ... | ... |
| L277-205 | 1 | 20 03 52.4 | -53 57 28 | 14.22 | 12.21 | 10.32 | 13.03 | 11.99 | 10.68 | /40 | 9.42 | 8.77 | 8.59 | ... | ... | ... |
| L277-082 | 1 | 20 10 45.4 | -51 19 39 | 13.43 | 11.35 | 10.34 | 12.56 | 11.65 | 10.73 | /40 | 9.71 | 9.07 | 8.87 | ... | ... | ... |
| LHS3528 | 1 | 20 10 55.5 | -25 35 09 | 15.97 | 13.99 | 11.20 | 13.11 | 12.06 | 10.76 | /24 | 10.22 | 9.61 | 9.35 | ... | ... | ... |
| LP814-044 | 1 | 20 17 52.4 | -17 17 09 | 11.84 | 10.15 | 7.99 | ... | ... | ... | ... | 8.37 | 7.69 | 7.55 | ... | ... | ... |
| LP815-001 | 1 | 20 20 07.1 | -19 39 03 | 13.42 | 11.35 | 8.74 | 12.33 | 11.34 | 10.20 | /24 | 9.01 | 8.44 | 8.21 | ... | ... | ... |
| SCR2025-1534 | 1 | 20 25 08.6 | -15 34 16 | 13.33 | 11.23 | 9.29 | 12.70 | 11.62 | 10.25 | /40 | 8.92 | 8.30 | 8.05 | ... | ... | ... |
| WT0708 | 1 | 20 27 04.4 | -68 41 07 | 18.66 | 16.34 | 13.74 | 17.26 | 15.75 | 13.86 | /40 | 11.99 | 11.38 | 11.13 | ... | ... | ... |
| LP567-063 | 1 | 20 34 31.1 | -32 31 00 | 13.40 | 11.42 | 9.77 | 12.17 | 11.08 | 9.71 | /40 | 8.37 | 7.74 | 7.51 | ... | ... | ... |
| LTT08147 | 1 | 20 36 43.6 | -02 41 20 | 12.77 | 10.48 | 9.98 | 12.13 | 11.18 | 10.10 | /38 | 8.93 | 8.28 | 8.10 | ... | ... | ... |
| SCR2042-5737 | 2 | 20 42 46.4 | -57 37 15 | 15.07J | 13.22J | 11.56J | 14.12J | 12.89J | 11.33J | /39 | 9.97J | 9.53J | 9.03J | ... | ... | ... |
| SCR2043-6501 | 1 | 20 43 10.4 | -65 01 17 | 16.18 | 14.04 | 12.04 | 14.97 | 13.88 | 12.52 | /40 | 11.25 | 10.76 | 10.52 | ... | ... | ... |
| LHS3582 | 1 | 20 46 18.0 | -47 09 28 | 12.23 | 10.17 | 8.89 | ... | ... | ... | ... | 8.72 | 8.14 | 7.90 | ... | ... | ... |
| 2MA2051-2458 | 1 | 20 51 09.8 | -24 58 18 | 15.71 | 13.47 | 11.62 | 14.51 | 13.26 | 11.70 | /40 | 10.20 | 9.64 | 9.37 | ... | ... | ... |
| LHS3600 | 1 | 20 55 59.9 | -59 56 44 | 13.17 | 11.55 | 9.99 | ... | ... | ... | ... | 8.44 | 7.78 | 7.60 | ... | ... | ... |
| LEHPM1-4008 | 1 | 20 58 30.4 | -65 01 11 | 18.14 | 15.90 | 13.78 | 16.61 | 15.22 | 13.48 | /40 | 11.80 | 11.21 | 10.89 | ... | ... | ... |
| LP816-061 | 1 | 20 59 06.6 | -16 05 37 | 12.28 | 10.26 | 9.16 | ... | ... | ... | ... | 8.60 | 8.03 | 7.80 | ... | ... | ... |
| L211-096 | 1 | 20 59 51.3 | -58 45 31 | 13.31 | 11.69 | 10.25 | ... | ... | ... | ... | 8.66 | 8.06 | 7.82 | ... | ... | ... |
| SCR2102-3128 | 2(1) | 21 02 15.6 | -31 28 13 | 14.17 | 12.17 | 10.27 | 13.26 | 12.19 | 10.86 | /40 | 9.57 | 8.97 | 8.73 | ... | ... | ... |
| L163-023 | 1 | 21 02 25.0 | -60 31 36 | 13.52 | 12.08 | 10.27 | 11.96 | 10.97 | 9.79 | /40 | 8.64 | 7.92 | 7.71 | ... | ... | ... |
| LHS3615 | 1 | 21 03 21.7 | -50 22 52 | 13.84 | 11.60 | 9.71 | 13.10 | 11.96 | 10.48 | /40 | 9.11 | 8.46 | 8.19 | ... | ... | ... |
| LHS3620 | 1 | 21 04 25.4 | -27 52 47 | 17.69 | 15.60 | 14.36 | 16.61 | 15.59 | 14.53 | /16 | 13.41 | 12.89 | 12.70 | ... | ... | ... |
| LEHPM1-4021 | 1 | 21 05 11.4 | -62 47 02 | 18.32 | 16.31 | 14.10 | 17.01 | 15.55 | 13.80 | /40 | 12.17 | 11.64 | 11.36 | ... | ... | ... |
| SCR2105-3515 | 1 | 21 05 41.8 | -35 15 00 | 15.06 | 12.93 | 10.88 | 14.03 | 12.87 | 11.41 | /40 | 10.02 | 9.46 | 9.18 | ... | ... | ... |
| LHS0505 | 1 | 21 11 57.9 | -31 03 16 | 22.25 | 15.33 | ... | 16.25 | 14.93 | 13.20 | /40 | 11.62 | 11.10 | 10.84 | ... | ... | ... |
| LEHPM1-4051 | 1 | 21 15 15.1 | -75 41 52 | 15.47 | 13.37 | 11.13 | 14.48 | 13.25 | 11.66 | /16 | 10.14 | 9.60 | 9.33 | ... | ... | ... |
| LP637-024 | 1 | 21 19 18.3 | -00 33 19 | 12.22 | 10.18 | 9.03 | ... | ... | ... | ... | 8.72 | 8.06 | 7.87 | ... | ... | ... |

| | | | | | | | | | | | | | | | | |
|--------------|------|------------|-----------|--------|--------|--------|--------|--------|--------|-----|--------|-------------------|--------|-----|-----|-----|
| GJ0836.4 | 1 | 21 42 07.5 | -12 09 48 | 13.32 | 11.32 | 9.48 | 12.83 | 11.74 | 10.35 | /2 | 8.92 | 8.30 | 8.02 | ... | ... | ... |
| L048-001 | 1 | 21 42 58.5 | -74 05 56 | 14.24 | 12.20 | 10.59 | 13.06 | 12.02 | 10.74 | /39 | 9.46 | 8.78 | 8.58 | ... | ... | ... |
| CD-32 16735 | 1 | 21 47 02.7 | -32 24 40 | 10.27 | 7.74 | 6.46 | 9.22 | 8.11 | 6.70 | /40 | 5.24 | 4.41 ^a | 4.06 | ... | ... | ... |
| L282-061 | 1 | 21 51 12.3 | -52 15 40 | 12.14 | 10.23 | 8.94 | 11.36 | 10.47 | 9.62 | /19 | 8.61 | 8.00 | 7.82 | ... | ... | ... |
| LHS0515 | 1 | 21 55 48.0 | -11 21 43 | 18.89 | 16.39 | 15.10 | 17.39 | 16.20 | 14.87 | /40 | 13.64 | 13.19 | 12.91 | ... | ... | ... |
| LHS3740 | 1 | 21 58 53.2 | -57 56 04 | 15.13 | 13.09 | 10.90 | 14.06 | 12.88 | 11.33 | /16 | 9.85 | 9.27 | 9.00 | ... | ... | ... |
| LHS3754 | 1 | 22 04 40.9 | -19 46 42 | 15.15 | 10.77 | 10.32 | 14.28 | 13.21 | 11.93 | /40 | 10.54 | 10.15 | 9.85 | ... | ... | ... |
| LHS3775 | 1 | 22 12 56.0 | -18 15 21 | 15.69 | 13.53 | 11.90 | 14.55 | 13.59 | 12.45 | /40 | 11.29 | 10.77 | 10.52 | ... | ... | ... |
| LP699-075 | 1 | 22 18 13.2 | -03 10 20 | 11.86 | 10.08 | 8.95 | ... | ... | ... | ... | 8.34 | 7.73 | 7.52 | ... | ... | ... |
| LEHPM1-4592 | 1 | 22 21 11.4 | -19 58 15 | 21.09 | 18.84 | 16.07 | 19.96 | 18.16 | 15.98 | /40 | 14.19 | 13.74 | 13.48 | ... | ... | ... |
| WT0918 | 1 | 22 21 37.0 | -65 47 30 | 17.54 | 15.19 | 12.82 | 16.27 | 15.02 | 13.32 | /40 | 11.66 | 11.07 | 10.75 | ... | ... | ... |
| LP931-054 | 1 | 22 23 18.0 | -27 09 15 | 16.26 | 14.17 | 11.78 | 14.65 | 13.44 | 11.86 | /24 | 10.36 | 9.79 | 9.51 | ... | ... | ... |
| SCR2224-7242 | 1 | 22 24 51.6 | -72 42 00 | 15.80 | 13.80 | 11.79 | 14.80 | 13.56 | 11.99 | /40 | 10.46 | 9.87 | 9.57 | ... | ... | ... |
| LEHPM1-4828 | 1 | 22 32 42.7 | -60 16 34 | 16.92 | 14.86 | 12.95 | 15.55 | 14.31 | 12.74 | /40 | 11.25 | 10.70 | 10.45 | ... | ... | ... |
| LHS3836 | 1 | 22 38 02.9 | -65 50 09 | 15.13 | 13.09 | 11.07 | 14.34 | 13.14 | 11.61 | /26 | 10.18 | 9.67 | 9.41 | ... | ... | ... |
| LP932-053 | 1 | 22 39 44.0 | -32 04 18 | 11.84 | 9.73 | 9.01 | ... | ... | ... | ... | 8.34 | 7.68 | 7.52 | ... | ... | ... |
| SCR2241-6119 | 2(1) | 22 41 44.4 | -61 19 31 | 15.64 | 13.65 | 11.70 | 14.41 | 13.21 | 11.66 | /39 | 10.21 | 9.61 | 9.35 | ... | ... | ... |
| SCR2242-5103 | 2 | 22 42 10.9 | -51 03 28 | 12.78J | 10.98J | 9.44J | 12.27J | 11.33J | 10.20J | /40 | 9.20J | 8.66J | 8.36J | ... | ... | ... |
| LHS3846 | 1 | 22 44 00.2 | -04 57 57 | 16.00 | 13.61 | 11.45 | 15.19 | 14.08 | 12.70 | /40 | 11.40 | 10.89 | 10.63 | ... | ... | ... |
| L106-104 | 1 | 22 46 45.2 | -63 18 05 | 12.14 | 10.33 | 8.84 | 11.41 | 10.46 | 9.41 | /19 | 8.29 | 7.71 | 7.45 | ... | ... | ... |
| LTT09210 | 1 | 22 48 53.0 | -28 50 03 | 11.44 | 9.35 | 8.47 | 10.67 | 9.81 | 8.96 | /40 | 7.90 | 7.28 | 7.08 | ... | ... | ... |
| LTT09203 | 1 | 22 48 54.5 | -54 18 52 | 12.67 | 10.36 | 9.52 | 11.24 | 10.33 | 9.43 | /19 | 8.36 | 7.70 | 7.55 | ... | ... | ... |
| L214-072 | 1 | 22 49 26.0 | -58 15 12 | 11.98 | 9.96 | 8.91 | ... | ... | ... | ... | 8.28 | 7.63 ^a | 7.46 | ... | ... | ... |
| SCR2250-5726 | 2(1) | 22 50 45.0 | -57 26 02 | 18.07J | 16.10J | 13.80J | 17.76 | 16.34 | 14.54 | /40 | 12.63J | 12.00J | 11.81J | ... | ... | ... |
| LP933-024 | 2 | 22 55 43.9 | -30 22 39 | 12.66J | 10.16J | 9.24J | ... | ... | ... | ... | 8.56 | 7.90 | 7.71 | ... | ... | ... |
| LHS5396 | 1 | 23 00 23.6 | -31 07 12 | 12.27 | 9.51 | 8.72 | 11.07 | 10.15 | 9.20 | /19 | 8.13 | 7.48 | 7.25 | ... | ... | ... |
| L286-071 | 1 | 23 00 26.1 | -53 13 40 | 11.93 | 10.08 | 9.19 | ... | ... | ... | ... | 8.35 | 7.78 | 7.61 | ... | ... | ... |
| SCR2312-3124 | 1 | 23 12 08.7 | -31 24 04 | 17.18 | 14.88 | 12.56 | 15.69 | 14.43 | 12.74 | /40 | 11.13 | 10.53 | 10.26 | ... | ... | ... |
| LHS5397 | 1 | 23 14 15.4 | -56 50 52 | 13.29 | 11.29 | 9.81 | ... | ... | ... | ... | 8.87 | 8.22 | 8.01 | ... | ... | ... |
| L168-009 | 1 | 23 20 07.5 | -60 03 55 | 11.61 | 9.63 | 8.06 | 11.01 | 10.07 | 9.06 | /19 | 7.94 | 7.32 ^a | 7.08 | ... | ... | ... |
| LTT09507 | 1 | 23 21 11.3 | -01 35 45 | 12.76 | 10.77 | 9.33 | ... | ... | ... | ... | 8.70 | 8.13 | 7.82 | ... | ... | ... |
| GJ0895.1 | 1 | 23 25 42.0 | -45 36 35 | 12.02 | 9.63 | 8.82 | 11.26 | 10.32 | 9.34 | /19 | 8.23 | 7.59 | 7.37 | ... | ... | ... |
| SCR2325-8057 | 1 | 23 25 52.9 | -80 57 41 | 16.22 | 13.03 | 11.84 | 15.28 | 14.05 | 12.42 | /40 | 10.85 | 10.26 | 9.98 | ... | ... | ... |
| L288-049 | 1 | 23 41 43.6 | -51 56 37 | 12.79 | 10.30 | 9.20 | ... | ... | ... | ... | 8.63 | 8.00 | 7.79 | ... | ... | ... |
| LEHPM1-6094 | 1 | 23 42 02.3 | -78 41 23 | 16.09 | 13.81 | 11.67 | 15.02 | 13.79 | 12.29 | /40 | 10.89 | 10.36 | 10.06 | ... | ... | ... |
| WT1026 | 1 | 23 46 35.2 | -52 47 02 | 15.82 | 13.64 | 12.18 | 14.78 | 13.76 | 12.59 | /40 | 11.42 | 10.89 | 10.68 | ... | ... | ... |
| LP1035-064 | 1 | 23 47 56.5 | -39 11 13 | 15.73 | 13.61 | 11.54 | 14.42 | 13.24 | 11.70 | /40 | 10.19 | 9.58 | 9.32 | ... | ... | ... |
| LHS4025 | 1 | 23 50 52.6 | -39 05 17 | 15.93 | 13.47 | 11.43 | 14.44 | 13.19 | 11.64 | /40 | 10.16 | 9.59 | 9.31 | ... | ... | ... |
| SCR2352-6124 | 1 | 23 52 29.5 | -61 24 23 | 17.10 | 14.73 | 12.63 | 15.65 | 14.45 | 12.93 | /40 | 11.52 | 11.02 | 10.82 | ... | ... | ... |
| L361-021 | 1 | 23 57 45.6 | -45 48 55 | 12.11 | 10.00 | 8.81 | 11.13 | 10.25 | 9.38 | /19 | 8.36 | 7.71 | 7.52 | ... | ... | ... |

^a2MASS magnitude error greater than 0.05 mags.

A 'J' next to a photometry value indicates that the magnitude is blended due to one or more close companions.

References: (1) this work; (2) Bessel (1990); (3) Bessell (1991); (4) Costa & Méndez (2003); (5) Costa et al. (2005); (6) Costa et al. (2006); (7) Dahn et al. (1982); (8) Dahn et al. (2002); (9) Dieterich et al. (2014); (10) Harrington & Dahn (1980); (11) Harrington et al. (1993); (12) Henry et al. (2004); (13) Henry et al. (2006); (14) Høg et al. (2000); (15) Jao et al. (2005); (16) Jao et al. (2011); (17) Jao et al. (2014); (18) Kilkenny et al. (2007); (19) Koen et al. (2002); (20) Koen et al. (2010); (21) Lépine et al. (2009); (22) Patterson et al. (1998); (23) Reid et al. (2002); (24) Reid et al. (2003b); (25) Reid et al. (2004); (26) Riedel et al. (2010); (27) Riedel et al. (2014); (28) Weis & Upgren (1982); (29) Weis (1984); (30) Weis (1986); (31) Weis (1987); (32) Weis (1988); (33) Weis (1991a); (34) Weis (1991b); (35) Weis (1993); (36) Weis (1994); (37) Weis (1996); (38) Weis (1999); (39) Winters et al. (2011); (40) Winters et al. (2015).

APPENDIX B

ASTROMETRY DATA

This appendix provides the astrometry data for the M dwarf primaries with trigonometric parallaxes presented in this thesis, including the names of the M dwarf, the number of known components in each system, coordinates (J2000.0), proper motion magnitudes and position angles with references, the weighted means of the published trigonometric parallaxes and the errors, the number of parallaxes included in the weighted mean and references, and an asterisk indicating if the object is included in the multiplicity sample. The table is divided into the 1180 systems within 25 pc (top) and the 162 systems beyond 25 pc (bottom). All proper motions are from SuperCOSMOS, except where noted. Proper motions with the reference ‘RECONS (in prep)’ indicate SuperCOSMOS proper motions that will be published in the RECONS 25 Parsec Database, and parallaxes with that same reference indicate that they will be published in a future paper by a member of the RECONS team.

Table B.1: Astrometry Data

| Name | # obj | RA | DEC | μ ($''/\text{yr}^{-1}$) | P.A. (deg) | ref | π (mas) | σ_{π} (mas) | # π | ref | Mult |
|---------------|-------|------------|-----------|----------------------------------|---------------|-----|----------------|-------------------------|---------|-------------|------|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
| Within 25 pc | | | | | | | | | | | |
| GJ1001 | 3 | 00 04 36.5 | -40 44 03 | 1.636 | 159.7 | 70 | 79.87 | 3.75 | 2 | 25,66 | * |
| GJ0001 | 1 | 00 05 24.4 | -37 21 27 | 6.106 | 112.5 | 27 | 230.32 | 0.90 | 2 | 66,67 | * |
| LHS1019 | 1 | 00 06 19.2 | -65 50 26 | 0.564 | 158.7 | 70 | 59.85 | 2.64 | 1 | 67 | * |
| GJ1002 | 1 | 00 06 43.2 | -07 32 17 | 2.041 | 204.0 | 37 | 213.00 | 3.60 | 1 | 66 | * |
| GJ1003 | 1 | 00 07 26.7 | +29 14 33 | 1.890 | 127.0 | 36 | 53.50 | 2.50 | 1 | 66 | * |
| LHS1022 | 1 | 00 07 59.1 | +08 00 19 | 0.546 | 222.0 | 36 | 44.00 | 6.30 | 1 | 66 | * |
| L217-028 | 1 | 00 08 17.4 | -57 05 53 | 0.370 | 264.0 | 38 | 75.17 | 2.11 | 1 | 1 | * |
| HIP000687 | 1 | 00 08 27.2 | +17 25 27 | 0.110 | 233.8 | 27 | 45.98 | 1.93 | 1 | 67 | * |
| G131-026 | 2 | 00 08 54.0 | +20 50 18 | 0.251 | 194.4 | 51 | 54.13 | 1.35 | 1 | 51 | * |
| GJ0007 | 1 | 00 09 04.3 | -27 07 20 | 0.715 | 079.7 | 70 | 43.61 | 2.56 | 2 | 66,67 | * |
| LEHPM1-0255 | 1 | 00 09 45.1 | -42 01 40 | 0.271 | 096.7 | 70 | 53.26 | 1.51 | 1 | 1 | * |
| LSPM0011+5908 | 1 | 00 11 32.0 | +59 08 40 | 1.482 | 218.1 | 33 | 108.34 | 0.49 | 2 | 33,23 | * |
| GJ0011 | 2 | 00 13 15.8 | +69 19 36 | 0.774 | 112.2 | 27 | 47.51 | 3.90 | 2 | 66,67 | * |
| LTT17095 | 2 | 00 13 38.7 | +80 39 56 | 0.314 | 053.8 | 27 | 51.05 | 1.75 | 1 | 67 | * |
| GJ1005 | 2 | 00 15 28.1 | -16 08 02 | 0.842 | 132.4 | 58 | 168.42 | 0.89 | 4 | 26,58,59,66 | * |
| GJ0012 | 1 | 00 15 49.0 | +13 33 22 | 0.687 | 064.1 | 47 | 86.42 | 2.03 | 3 | 66,49,58 | * |
| 2MA0015-1636 | 2 | 00 15 58.1 | -16 36 57 | 0.120 | 276.9 | 47 | 55.70 | 1.30 | 1 | 56 | * |
| L290-072 | 2 | 00 16 02.0 | -48 15 39 | 0.244 | 190.9 | 70 | 43.89 | 4.39 | 1 | 67 | * |
| GJ1006 | 2 | 00 16 14.6 | +19 51 37 | 1.043 | 136.2 | 27 | 66.03 | 1.59 | 2 | 66,67 | * |

| | | | | | | | | | | | |
|--------------|---|------------|-----------|-------|-------|----|--------|------|---|----------|---|
| L218-009 | 1 | 00 16 36.6 | -50 16 09 | 0.432 | 052.2 | 70 | 45.04 | 3.36 | 1 | 67 | * |
| GJ1007 | 1 | 00 16 56.3 | +05 07 27 | 0.633 | 189.0 | 47 | 56.90 | 3.70 | 1 | 66 | * |
| LHS1054 | 1 | 00 17 20.3 | +29 10 58 | 0.808 | 061.5 | 47 | 43.82 | 2.26 | 2 | 66,67 | * |
| GJ0016 | 1 | 00 18 16.5 | +10 12 10 | 0.031 | 173.0 | 27 | 60.44 | 2.09 | 2 | 66,67 | * |
| GJ0015 | 2 | 00 18 23.0 | +44 01 24 | 2.916 | 081.9 | 27 | 279.87 | 0.60 | 3 | 66,67,22 | * |
| GJ2003 | 1 | 00 20 08.3 | -17 03 41 | 0.136 | 094.0 | 27 | 43.11 | 3.75 | 1 | 67 | * |
| LHS0112 | 1 | 00 20 29.4 | +33 05 06 | 1.363 | 129.0 | 36 | 79.30 | 3.70 | 1 | 66 | * |
| GJ0017.1 | 1 | 00 21 19.6 | -45 44 47 | 0.854 | 179.8 | 70 | 57.76 | 1.92 | 2 | 66,67 | * |
| LHS5004a | 1 | 00 21 37.3 | -46 05 33 | 0.442 | 218.1 | 70 | 51.80 | 4.40 | 1 | 67 | * |
| GJ1009 | 1 | 00 21 56.1 | -31 24 22 | 0.223 | 165.9 | 70 | 55.62 | 2.32 | 1 | 67 | * |
| LHS1064 | 1 | 00 23 18.5 | -50 53 38 | 0.570 | 090.6 | 70 | 49.95 | 2.71 | 2 | 66,67 | * |
| GJ1011 | 1 | 00 23 27.1 | +24 18 20 | 0.259 | 298.0 | 36 | 61.00 | 4.10 | 1 | 66 | * |
| GJ1010 | 2 | 00 23 28.8 | +77 11 21 | 0.839 | 273.1 | 27 | 55.80 | 2.59 | 2 | 66,19 | * |
| NLTT01261 | 1 | 00 24 24.9 | -01 58 28 | 0.158 | 329.5 | 47 | 86.60 | 4.00 | 1 | 64 | * |
| LHS1068 | 1 | 00 24 38.4 | +30 02 19 | 0.600 | 089.1 | 47 | 52.80 | 4.40 | 1 | 66 | * |
| GJ2005 | 3 | 00 24 44.2 | -27 08 24 | 0.654 | 348.3 | 9 | 129.71 | 2.43 | 2 | 9,66 | * |
| GJ0021 | 1 | 00 26 52.7 | +70 08 32 | 0.199 | 223.3 | 27 | 60.55 | 1.34 | 2 | 66,67 | * |
| G217-051 | 1 | 00 27 04.0 | +49 41 04 | 0.477 | 123.0 | 36 | 46.90 | 3.10 | 1 | 66 | * |
| LP349-025 | 2 | 00 27 56.0 | +22 19 33 | 0.427 | 111.8 | 47 | 69.70 | 0.70 | 3 | 23,16,1 | * |
| GJ1012 | 1 | 00 28 39.5 | -06 39 49 | 0.865 | 203.0 | 36 | 75.40 | 5.10 | 1 | 66 | * |
| GJ1013 | 1 | 00 31 35.4 | -05 52 13 | 1.098 | 163.0 | 37 | 62.30 | 4.20 | 1 | 66 | * |
| GJ0022 | 3 | 00 32 29.4 | +67 14 08 | 1.759 | 098.1 | 27 | 98.09 | 1.56 | 2 | 66,59 | * |
| GR*0050 | 3 | 00 32 53.2 | -04 34 07 | 0.186 | 155.4 | 70 | 56.17 | 1.45 | 1 | 1 | * |
| LHS1101 | 1 | 00 34 44.1 | +71 11 31 | 0.609 | 126.4 | 47 | 50.70 | 3.10 | 1 | 66 | * |
| LHS1104 | 2 | 00 35 52.8 | +52 41 45 | 0.789 | 102.0 | 36 | 41.69 | 2.14 | 2 | 66,58 | * |
| GJ1014 | 1 | 00 36 00.4 | +10 28 08 | 1.178 | 111.7 | 47 | 63.60 | 4.50 | 1 | 66 | * |
| G172-013 | 1 | 00 36 06.7 | +45 30 49 | 0.298 | 242.0 | 36 | 43.90 | 9.80 | 1 | 66 | * |
| GJ0026 | 1 | 00 38 59.0 | +30 36 59 | 1.557 | 088.8 | 27 | 80.10 | 3.90 | 1 | 66 | * |
| GJ0027.1 | 1 | 00 39 58.8 | -44 15 12 | 0.535 | 114.6 | 27 | 40.99 | 2.70 | 2 | 66,67 | * |
| GJ1016 | 1 | 00 41 30.5 | -33 37 32 | 0.452 | 234.8 | 70 | 51.21 | 2.23 | 1 | 67 | * |
| LHS1134 | 1 | 00 43 26.0 | -41 17 34 | 0.738 | 217.1 | 70 | 95.49 | 2.11 | 1 | 1 | * |
| GJ1019 | 1 | 00 43 35.6 | +28 26 41 | 1.077 | 188.1 | 47 | 51.80 | 4.00 | 1 | 66 | * |
| LHS1140 | 1 | 00 44 59.3 | -15 16 18 | 0.625 | 153.0 | 70 | 80.18 | 2.76 | 1 | 1 | * |
| LTT00453 | 1 | 00 48 13.4 | -05 08 08 | 0.218 | 125.8 | 70 | 42.07 | 3.76 | 1 | 67 | * |
| LTT00464 | 1 | 00 49 01.7 | -50 08 42 | 0.340 | 133.2 | 70 | 46.32 | 2.08 | 1 | 67 | * |
| GJ1022 | 1 | 00 49 29.1 | -61 02 33 | 1.143 | 093.5 | 70 | 48.62 | 1.39 | 1 | 30 | * |
| LTT10301 | 2 | 00 50 33.2 | +24 49 00 | 0.203 | 101.9 | 27 | 84.42 | 4.65 | 1 | 67 | * |
| RG0050-2722 | 1 | 00 52 54.6 | -27 05 56 | 0.098 | 026.0 | 66 | 41.00 | 4.00 | 1 | 66 | * |
| GJ1024 | 1 | 00 56 38.4 | +17 27 35 | 0.728 | 114.0 | 36 | 56.40 | 4.10 | 1 | 66 | * |
| LTT00534 | 1 | 00 56 50.4 | -11 35 20 | 0.324 | 223.4 | 70 | 40.37 | 2.81 | 1 | 67 | * |
| L087-002 | 1 | 00 57 12.5 | -64 15 24 | 0.391 | 066.6 | 70 | 56.25 | 1.38 | 1 | 1 | * |
| GJ0046 | 1 | 00 58 27.9 | -27 51 25 | 1.339 | 105.0 | 70 | 80.75 | 3.13 | 2 | 66,67 | * |
| GJ1025 | 1 | 01 00 56.1 | -04 26 57 | 1.350 | 069.0 | 70 | 87.70 | 2.38 | 1 | 29 | * |
| GJ0047 | 1 | 01 01 20.0 | +61 21 57 | 0.840 | 158.0 | 36 | 90.90 | 4.40 | 1 | 66 | * |
| GJ0048 | 1 | 01 02 32.2 | +71 40 47 | 1.785 | 102.3 | 27 | 121.07 | 1.20 | 2 | 66,67 | * |
| GJ0049 | 2 | 01 02 38.8 | +62 20 42 | 0.736 | 083.1 | 27 | 100.59 | 1.44 | 3 | 66,66,67 | * |
| LHS0132 | 1 | 01 02 51.1 | -37 37 44 | 1.493 | 082.2 | 70 | 81.95 | 2.73 | 1 | 9 | * |
| GJ1026 | 2 | 01 03 14.1 | +20 05 52 | 0.671 | 086.5 | 27 | 61.14 | 3.03 | 2 | 66,67 | * |
| L087-010 | 1 | 01 04 07.0 | -65 22 27 | 0.343 | 239.1 | 70 | 83.80 | 1.25 | 1 | 1 | * |
| GJ1028 | 1 | 01 04 53.8 | -18 07 29 | 1.342 | 071.0 | 37 | 99.80 | 5.00 | 1 | 66 | * |
| GJ1029 | 1 | 01 05 37.6 | +28 29 34 | 1.906 | 095.0 | 36 | 79.30 | 3.00 | 1 | 66 | * |
| GJ1030 | 1 | 01 06 41.5 | +15 16 22 | 0.277 | 203.8 | 27 | 45.87 | 2.25 | 2 | 66,67 | * |
| GJ0052.2 | 1 | 01 07 49.6 | +34 12 54 | 1.483 | 069.3 | 47 | 45.10 | 3.20 | 1 | 66 | * |
| SSS0109-5101 | 1 | 01 09 01.5 | -51 00 50 | 0.224 | 067.3 | 70 | 64.35 | 1.53 | 1 | 47 | * |
| GJ1032 | 1 | 01 09 12.5 | -24 41 21 | 0.301 | 090.4 | 70 | 44.29 | 3.02 | 1 | 67 | * |
| LP647-013 | 1 | 01 09 51.2 | -03 43 26 | 0.376 | 086.6 | 70 | 104.23 | 2.29 | 1 | 9 | * |
| LP707-016 | 1 | 01 10 17.5 | -11 51 18 | 0.236 | 119.0 | 37 | 53.94 | 1.47 | 1 | 1 | * |
| GJ0054 | 2 | 01 10 22.9 | -67 26 42 | 0.697 | 033.7 | 27 | 128.24 | 1.93 | 3 | 25,66,67 | * |
| LP467-016 | 2 | 01 11 25.4 | +15 26 21 | 0.223 | 122.7 | 51 | 45.79 | 1.78 | 1 | 51 | * |
| SCR0111-4908 | 1 | 01 11 47.5 | -49 08 09 | 0.542 | 213.1 | 70 | 54.26 | 1.39 | 1 | 1 | * |
| LHS1212 | 2 | 01 11 57.0 | +04 54 50 | 0.623 | 146.0 | 36 | 62.80 | 1.80 | 1 | 66 | * |
| GJ0054.1 | 1 | 01 12 30.7 | -16 59 56 | 1.386 | 063.6 | 70 | 269.08 | 2.99 | 2 | 66,67 | * |
| LEHPM1-1343 | 1 | 01 13 16.4 | -54 29 14 | 0.369 | 070.2 | 70 | 60.45 | 1.10 | 1 | 1 | * |
| L221-060 | 1 | 01 14 34.2 | -53 56 32 | 0.340 | 020.0 | 70 | 60.38 | 1.81 | 1 | 67 | * |

| | | | | | | | | | | | |
|--------------|---|------------|-----------|-------|-------|----|--------|------|---|----------|---|
| GJ1034 | 1 | 01 16 29.2 | +24 19 27 | 1.822 | 112.9 | 47 | 48.10 | 4.50 | 1 | 66 | * |
| GJ1036 | 1 | 01 17 15.4 | -35 42 57 | 0.197 | 152.7 | 70 | 61.68 | 3.43 | 1 | 67 | * |
| L797-030 | 1 | 01 17 15.7 | -13 15 48 | 0.368 | 086.9 | 27 | 42.78 | 2.55 | 1 | 67 | * |
| GJ0056.1 | 1 | 01 18 16.0 | -12 53 59 | 0.722 | 165.5 | 70 | 45.28 | 3.27 | 2 | 66,67 | * |
| GJ1035 | 1 | 01 19 52.2 | +84 09 33 | 1.081 | 295.0 | 36 | 71.60 | 2.70 | 1 | 66 | * |
| GJ0057 | 1 | 01 21 34.6 | -41 39 23 | 1.279 | 112.5 | 70 | 59.90 | 1.53 | 2 | 66,67 | * |
| HIP006365 | 1 | 01 21 45.3 | -46 42 51 | 0.134 | 231.9 | 27 | 44.71 | 2.57 | 1 | 67 | * |
| LTT00755 | 1 | 01 22 23.1 | -33 12 51 | 0.470 | 130.7 | 70 | 40.66 | 1.85 | 1 | 67 | * |
| LHS1240 | 2 | 01 22 43.2 | +00 31 07 | 0.567 | 202.0 | 36 | 69.40 | 4.00 | 1 | 66 | * |
| SCR0128-1458 | 1 | 01 28 39.5 | -14 58 04 | 0.075 | 224.6 | 47 | 73.24 | 1.41 | 1 | 47 | * |
| LHS0142 | 1 | 01 32 26.2 | -21 54 19 | 1.050 | 212.2 | 70 | 55.18 | 1.88 | 2 | 66,67 | * |
| LHS1268 | 1 | 01 37 20.8 | -49 11 44 | 0.509 | 076.7 | 27 | 44.38 | 1.49 | 2 | 66,67 | * |
| LHS1272 | 1 | 01 38 29.9 | +00 39 05 | 0.538 | 072.5 | 27 | 49.44 | 3.00 | 1 | 67 | * |
| GJ0065 | 2 | 01 39 01.5 | -17 57 02 | 3.368 | 080.4 | 35 | 373.70 | 2.70 | 1 | 66 | * |
| LP991-084 | 1 | 01 39 21.7 | -39 36 09 | 0.283 | 146.1 | 70 | 115.90 | 1.33 | 1 | 47 | * |
| LHS1288 | 1 | 01 42 55.7 | -42 12 12 | 0.663 | 102.2 | 27 | 42.56 | 2.33 | 2 | 66,67 | * |
| GJ0070 | 1 | 01 43 20.1 | +04 19 18 | 0.875 | 209.0 | 27 | 87.35 | 1.86 | 2 | 66,67 | * |
| SCR0143-0602 | 1 | 01 43 45.1 | -06 02 40 | 0.047 | 104.5 | 47 | 50.52 | 1.49 | 1 | 47 | * |
| GJ0073 | 1 | 01 44 58.5 | +16 20 39 | 0.815 | 240.0 | 36 | 61.00 | 3.70 | 1 | 66 | * |
| L294-092 | 1 | 01 47 42.6 | -48 36 06 | 0.371 | 141.5 | 70 | 74.42 | 1.62 | 1 | 1 | * |
| L1303-013 | 1 | 01 48 03.9 | +21 12 24 | 0.402 | 122.0 | 27 | 49.06 | 3.36 | 1 | 67 | * |
| 2MA0149+2956 | 1 | 01 49 09.0 | +29 56 13 | 0.409 | 155.4 | 47 | 44.40 | 0.70 | 1 | 11 | * |
| LHS1302 | 1 | 01 51 04.1 | -06 07 05 | 0.609 | 118.6 | 70 | 100.78 | 1.89 | 1 | 25 | * |
| GJ0078 | 1 | 01 51 48.7 | -10 48 13 | 0.782 | 133.4 | 27 | 61.59 | 2.80 | 2 | 66,67 | * |
| GJ0079 | 1 | 01 52 49.2 | -22 26 06 | 0.845 | 090.0 | 27 | 90.77 | 1.15 | 2 | 66,67 | * |
| LHS5045 | 1 | 01 52 51.6 | -48 05 41 | 0.565 | 247.5 | 70 | 74.96 | 1.68 | 1 | 1 | * |
| L088-043 | 1 | 01 53 37.1 | -66 53 34 | 0.417 | 065.0 | 70 | 75.44 | 3.51 | 1 | 1 | * |
| GJ1041 | 3 | 01 59 12.4 | +03 31 09 | 0.256 | 083.7 | 27 | 41.34 | 1.29 | 3 | 56,56,67 | * |
| GJ0082 | 1 | 01 59 23.5 | +58 31 16 | 0.383 | 119.8 | 47 | 81.69 | 3.41 | 2 | 66,67 | * |
| GJ0083.1 | 1 | 02 00 13.0 | +13 03 07 | 2.097 | 148.0 | 36 | 224.80 | 2.90 | 1 | 66 | * |
| L173-019 | 1 | 02 00 38.3 | -55 58 04 | 0.125 | 122.8 | 47 | 121.93 | 2.71 | 1 | 47 | * |
| LP030-055 | 2 | 02 01 54.0 | +73 32 32 | 0.319 | 104 | 36 | 87.46 | 0.56 | 1 | 23 | * |
| LHS1326 | 1 | 02 02 13.8 | +10 20 11 | 0.746 | 248.8 | 47 | 112.00 | 3.20 | 1 | 66 | * |
| GJ0084 | 2 | 02 05 04.9 | -17 36 53 | 1.315 | 097.4 | 27 | 109.59 | 1.87 | 2 | 66,67 | * |
| GJ0084.1 | 3 | 02 05 23.7 | -28 04 11 | 0.572 | 037.5 | 70 | 43.24 | 2.06 | 2 | 66,67 | * |
| LHS1339 | 1 | 02 05 48.6 | -30 10 36 | 0.500 | 282.1 | 70 | 107.81 | 2.92 | 1 | 67 | * |
| GJ0084.2 | 1 | 02 06 57.2 | +45 11 04 | 0.519 | 150.1 | 27 | 51.33 | 3.40 | 2 | 66,67 | * |
| GJ0085 | 1 | 02 07 23.3 | -66 34 12 | 1.800 | 078.0 | 36 | 86.15 | 1.83 | 1 | 47 | * |
| LHS1347 | 1 | 02 09 36.1 | -14 21 33 | 0.610 | 127.7 | 70 | 50.89 | 2.47 | 2 | 66,67 | * |
| LTT01133 | 3 | 02 11 02.2 | -35 40 14 | 0.263 | 218.7 | 27 | 48.21 | 2.89 | 1 | 67 | * |
| LHS1351 | 1 | 02 11 18.0 | -63 13 41 | 0.765 | 243.2 | 49 | 71.53 | 1.64 | 1 | 49 | * |
| GJ0087 | 1 | 02 12 20.9 | +03 34 32 | 1.776 | 262.8 | 27 | 95.92 | 1.38 | 2 | 66,67 | * |
| LHS1358 | 1 | 02 12 54.0 | +00 00 16 | 0.508 | 087.2 | 47 | 65.27 | 2.07 | 1 | 49 | * |
| GJ0091 | 1 | 02 13 53.6 | -32 02 29 | 0.911 | 122.5 | 70 | 80.04 | 1.68 | 2 | 66,67 | * |
| LHS1363 | 1 | 02 14 12.6 | -03 57 44 | 0.504 | 105.0 | 70 | 82.13 | 1.14 | 1 | 47 | * |
| GJ1045 | 1 | 02 14 59.4 | +17 25 09 | 0.594 | 145.2 | 47 | 48.80 | 3.40 | 1 | 66 | * |
| LHS1375 | 1 | 02 16 31.5 | +13 35 37 | 0.665 | 130.3 | 47 | 117.70 | 4.00 | 1 | 66 | * |
| LHS1377 | 2 | 02 16 41.2 | -30 59 18 | 0.724 | 069.9 | 70 | 69.81 | 3.10 | 1 | 67 | * |
| LHS1378 | 1 | 02 17 12.9 | +35 26 19 | 0.600 | 115.6 | 47 | 96.40 | 1.10 | 1 | 66 | * |
| WT0084 | 1 | 02 17 28.5 | -59 22 44 | 0.537 | 202.2 | 70 | 76.61 | 3.02 | 1 | 9 | * |
| GJ0093 | 1 | 02 17 34.2 | -53 59 20 | 0.621 | 050.5 | 70 | 44.43 | 2.50 | 2 | 66,67 | * |
| GJ0094 | 1 | 02 18 59.4 | +35 21 00 | 0.792 | 122.0 | 36 | 56.40 | 8.10 | 1 | 66 | * |
| GJ1046 | 2 | 02 19 10.1 | -36 46 41 | 1.497 | 068.5 | 35 | 71.06 | 3.23 | 1 | 67 | * |
| GJ1047 | 3 | 02 21 04.7 | +36 53 02 | 0.919 | 128.0 | 36 | 46.20 | 3.60 | 1 | 66 | * |
| GJ0096 | 1 | 02 22 14.6 | +47 52 48 | 0.220 | 079.8 | 27 | 84.10 | 1.07 | 2 | 66,67 | * |
| L513-008 | 1 | 02 27 30.4 | -30 54 36 | 0.431 | 099.1 | 70 | 48.50 | 1.96 | 1 | 67 | * |
| LHS1407 | 1 | 02 28 05.5 | +03 10 05 | 0.816 | 180.9 | 47 | 43.30 | 5.20 | 1 | 66 | * |
| GJ0101 | 1 | 02 31 27.7 | +57 22 43 | 1.042 | 088.0 | 36 | 52.65 | 1.63 | 2 | 66,32 | * |
| GJ0102 | 1 | 02 33 37.2 | +24 55 38 | 0.687 | 177.0 | 36 | 102.40 | 2.70 | 1 | 66 | * |
| L225-057 | 2 | 02 34 21.2 | -53 05 37 | 0.425 | 141.4 | 70 | 50.94 | 1.83 | 1 | 1 | * |
| GJ0103 | 2 | 02 34 22.6 | -43 47 47 | 0.300 | 157.7 | 70 | 86.18 | 0.78 | 2 | 66,67 | * |
| GJ0104 | 1 | 02 35 53.3 | +20 13 11 | 0.288 | 119.9 | 27 | 73.21 | 1.78 | 2 | 66,67 | * |
| APM0237-5928 | 1 | 02 36 32.5 | -59 28 06 | 0.731 | 054.8 | 70 | 103.72 | 1.12 | 1 | 25 | * |
| LHS1426 | 1 | 02 37 32.1 | +00 21 12 | 0.562 | 108.9 | 47 | 40.20 | 4.30 | 1 | 66 | * |

| | | | | | | | | | | | |
|---------------|---|-------------|-----------|-------|-------|----|---------------------|------|---|-------------|---|
| L174-028 | 1 | 02 37 52.8 | -58 45 11 | 0.216 | 022.0 | 70 | 66.62 | 3.37 | 1 | 67 | * |
| LTT17400 | 1 | 02 39 17.35 | +07 28 17 | 0.527 | 106.7 | 47 | 51.50 | 3.00 | 1 | 56 | * |
| GJ1050 | 1 | 02 39 50.7 | -34 07 58 | 1.737 | 162.5 | 29 | 93.74 | 4.44 | 1 | 29 | * |
| G075-035 | 1 | 02 41 15.1 | -04 32 18 | 0.353 | 097.6 | 70 | 84.71 | 1.38 | 1 | 47 | * |
| GJ1051 | 1 | 02 43 53.2 | -08 49 46 | 0.973 | 140.3 | 70 | 40.29 | 3.90 | 2 | 66,67 | * |
| GJ0109 | 1 | 02 44 15.5 | +25 31 24 | 0.935 | 112.7 | 27 | 131.67 | 1.87 | 2 | 66,44 | * |
| LP993-115 | 3 | 02 45 14.3 | -43 44 11 | 0.433 | 168.4 | 70 | 87.37 ^a | 1.33 | 2 | 51,51 | * |
| LTT17413 | 2 | 02 45 39.6 | +44 56 55 | 0.427 | 107.1 | 27 | 43.32 | 2.33 | 1 | 67 | * |
| SCR0246-7024 | 1 | 02 46 02.3 | -70 24 06 | 0.259 | 113.3 | 70 | 80.18 | 1.27 | 1 | 1 | * |
| LHS0017 | 1 | 02 46 14.9 | -04 59 21 | 2.524 | 138.1 | 35 | 60.30 | 8.20 | 1 | 66 | * |
| LHS1443 | 1 | 02 46 34.7 | +16 25 10 | 0.970 | 231.2 | 47 | 68.50 | 3.50 | 1 | 66 | * |
| LTT01349 | 1 | 02 46 42.9 | -23 05 12 | 0.300 | 069.4 | 70 | 43.45 | 1.72 | 1 | 67 | * |
| LP771-021 | 1 | 02 48 41.0 | -16 51 22 | 0.272 | 192.1 | 70 | 61.60 | 5.40 | 1 | 65 | * |
| GJ0114.1 | 1 | 02 50 09.8 | -53 08 20 | 0.521 | 348.9 | 70 | 76.34 | 1.62 | 2 | 66,67 | * |
| GJ0118 | 1 | 02 52 22.2 | -63 40 48 | 1.166 | 057.1 | 67 | 85.79 | 1.97 | 2 | 66,67 | * |
| SO0253+1652 | 1 | 02 53 00.0 | +16 52 52 | 5.107 | 138.2 | 25 | 259.41 | 0.89 | 3 | 25,62,23 | * |
| GJ0119 | 2 | 02 56 34.4 | +55 26 14 | 0.859 | 121.9 | 27 | 48.13 | 2.85 | 4 | 66,67,67,58 | * |
| GJ0120 | 1 | 02 57 31.0 | +10 47 25 | 1.821 | 103.0 | 36 | 50.00 | 5.80 | 1 | 66 | * |
| LTT01445 | 3 | 03 01 51.0 | -16 35 31 | 0.503 | 238.3 | 70 | 143.81 ^a | 2.49 | 3 | 25,25,67 | * |
| LHS1490 | 1 | 03 02 06.4 | -39 50 52 | 0.859 | 221.3 | 70 | 71.51 | 2.60 | 1 | 47 | * |
| GJ0121.1 | 1 | 03 02 38.1 | -18 09 59 | 0.446 | 068.9 | 70 | 51.83 | 3.87 | 2 | 66,67 | * |
| LHS1491 | 1 | 03 04 04.5 | -20 22 43 | 0.703 | 138.9 | 70 | 67.28 | 1.25 | 1 | 49 | * |
| LEHPM1-3070 | 1 | 03 06 11.6 | -36 47 53 | 0.690 | 196.0 | 15 | 76.46 | 1.42 | 1 | 15 | * |
| GJ1054 | 3 | 03 07 55.8 | -28 13 11 | 0.342 | 249.8 | 70 | 55.50 | 2.50 | 1 | 17 | * |
| LHS1499 | 1 | 03 08 28.2 | +43 01 40 | 0.558 | 140.0 | 36 | 40.80 | 5.60 | 1 | 66 | * |
| GJ1055 | 1 | 03 09 00.2 | +10 01 26 | 0.646 | 153.0 | 36 | 83.90 | 4.00 | 1 | 66 | * |
| GJ0125 | 2 | 03 09 30.7 | +45 43 57 | 0.543 | 230.6 | 27 | 63.82 | 1.91 | 2 | 66,67 | * |
| LHS1512 | 1 | 03 10 15.4 | +05 54 31 | 0.575 | 192.6 | 27 | 59.12 | 4.68 | 1 | 67 | * |
| GJ1053 | 1 | 03 10 58.3 | +73 46 20 | 2.124 | 121.6 | 47 | 83.30 | 3.40 | 1 | 66 | * |
| GJ0130 | 1 | 03 12 29.8 | -38 05 20 | 1.460 | 060.1 | 70 | 79.60 | 9.70 | 1 | 66 | * |
| GJ1057 | 1 | 03 13 22.9 | +04 46 29 | 1.706 | 086.0 | 36 | 117.10 | 3.50 | 1 | 66 | * |
| LP831-045 | 2 | 03 14 18.2 | -23 09 30 | 0.397 | 062.4 | 70 | 64.01 | 1.36 | 1 | 1 | * |
| LTT11051 | 1 | 03 14 47.7 | +48 30 51 | 0.377 | 159.8 | 27 | 50.20 | 9.40 | 1 | 66 | * |
| GJ0130.1 | 3 | 03 16 13.8 | +58 10 02 | 0.561 | 127.4 | 27 | 67.67 | 2.90 | 2 | 66,67 | * |
| LP831-068 | 1 | 03 16 47.8 | -21 25 26 | 0.295 | 061.0 | 70 | 53.46 | 2.35 | 1 | 1 | * |
| LTT17492 | 2 | 03 17 12.2 | +45 22 22 | 0.276 | 247.3 | 47 | 54.40 | 1.00 | 1 | 45 | * |
| LHS1525 | 1 | 03 17 45.2 | +25 15 06 | 0.865 | 114.9 | 27 | 46.29 | 2.98 | 1 | 67 | * |
| LP887-070 | 1 | 03 18 04.0 | -30 24 12 | 0.342 | 208.3 | 70 | 43.49 | 2.55 | 1 | 67 | * |
| GJ0134 | 1 | 03 18 07.5 | +38 15 07 | 0.720 | 142.6 | 27 | 61.30 | 1.85 | 2 | 66,67 | * |
| LTT01577 | 1 | 03 18 58.3 | -36 23 35 | 0.198 | 229.9 | 70 | 49.59 | 3.15 | 1 | 67 | * |
| 2MA0320-0446 | 2 | 03 20 28.4 | -04 46 37 | 0.678 | 190.6 | 13 | 49.22 | 2.88 | 1 | 47 | * |
| LP412-031 | 1 | 03 20 59.0 | +18 54 22 | 0.427 | 125.6 | 47 | 68.80 | 0.59 | 2 | 9,11 | * |
| GJ0133 | 1 | 03 21 21.7 | +79 58 02 | 0.499 | 055.2 | 67 | 71.58 | 1.50 | 2 | 66,67 | * |
| GJ1058 | 1 | 03 22 05.5 | +02 55 46 | 0.803 | 156.0 | 36 | 59.10 | 5.10 | 1 | 66 | * |
| GJ1059 | 1 | 03 23 04.8 | +41 59 53 | 0.719 | 143.0 | 36 | 65.10 | 3.40 | 1 | 66 | * |
| LTT11117 | 1 | 03 23 20.6 | +11 41 11 | 0.275 | 241.0 | 36 | 54.70 | 2.40 | 1 | 66 | * |
| GJ0140 | 3 | 03 24 06.4 | +23 47 06 | 0.251 | 121.6 | 27 | 51.31 | 4.66 | 1 | 67 | * |
| LTT01628 | 1 | 03 25 39.7 | -42 59 12 | 0.355 | 113.4 | 70 | 42.92 | 2.11 | 1 | 67 | * |
| LP532-081 | 3 | 03 25 41.7 | +05 51 54 | 0.253 | 226.2 | 47 | 43.40 | 3.50 | 1 | 66 | * |
| GJ0143.1 | 1 | 03 29 19.8 | -11 40 42 | 0.329 | 169.2 | 70 | 45.38 | 1.96 | 2 | 66,67 | * |
| LSPM0330+5413 | 1 | 03 30 49.0 | +54 13 55 | 0.158 | 268.8 | 47 | 103.80 | 1.40 | 1 | 34 | * |
| LP888-018 | 1 | 03 31 30.3 | -30 42 39 | 0.406 | 174.0 | 70 | 80.32 | 1.07 | 1 | 47 | * |
| GJ0143.3 | 1 | 03 31 47.1 | +14 19 17 | 0.676 | 176.8 | 27 | 50.12 | 2.79 | 2 | 66,67 | * |
| GJ0145 | 1 | 03 32 55.8 | -44 42 07 | 0.335 | 293.7 | 70 | 92.93 | 1.92 | 2 | 66,67 | * |
| LEHPM1-3396 | 1 | 03 34 12.2 | -49 53 32 | 2.448 | 077.6 | 70 | 120.60 | 3.60 | 1 | 18 | * |
| LHS0176 | 1 | 03 35 38.6 | -08 29 23 | 1.550 | 101.9 | 30 | 77.77 | 1.30 | 1 | 30 | * |
| GJ1061 | 1 | 03 35 59.7 | -44 30 45 | 0.802 | 114.4 | 70 | 272.01 | 1.30 | 2 | 25,24 | * |
| LSPM0336+3118 | 1 | 03 36 09.0 | +31 18 40 | 0.168 | 138.4 | 47 | 79.60 | 2.50 | 1 | 34 | * |
| GJ1062 | 1 | 03 38 15.7 | -11 29 14 | 3.033 | 152.1 | 35 | 62.40 | 3.30 | 1 | 66 | * |
| LP944-020 | 1 | 03 39 35.3 | -35 25 44 | 0.411 | 047.8 | 70 | 158.47 | 1.00 | 2 | 15,65 | * |
| LHS0178 | 1 | 03 42 29.4 | +12 31 33 | 1.572 | 153.4 | 47 | 40.19 | 2.49 | 1 | 47 | * |
| SCR0342-6407 | 1 | 03 42 57.4 | -64 07 57 | 1.071 | 141.4 | 70 | 41.56 | 2.01 | 1 | 30 | * |
| LHS1582 | 2 | 03 43 22.1 | -09 33 51 | 0.505 | 053.4 | 70 | 46.04 | 1.78 | 1 | 49 | * |
| LHS1593 | 1 | 03 47 23.2 | +08 40 44 | 0.818 | 143.6 | 47 | 79.50 | 3.50 | 1 | 66 | * |

| | | | | | | | | | | | |
|--------------|---|------------|-----------|-------|-------|----|--------------------|------|---|-------|---|
| G080-021 | 1 | 03 47 23.4 | -01 58 20 | 0.323 | 147.8 | 70 | 62.57 | 1.89 | 2 | 56,67 | * |
| GJ0155.1 | 1 | 03 47 58.1 | +02 47 16 | 0.577 | 222.7 | 27 | 58.68 | 2.34 | 2 | 66,67 | * |
| LHS1596 | 1 | 03 48 33.3 | +73 33 18 | 0.482 | 124.4 | 27 | 60.70 | 2.00 | 1 | 66 | * |
| GJ1065 | 1 | 03 50 44.3 | -06 05 42 | 1.428 | 196.8 | 35 | 105.40 | 3.20 | 1 | 66 | * |
| LHS1604 | 1 | 03 51 00.0 | -00 52 45 | 0.525 | 175.0 | 37 | 68.10 | 1.80 | 1 | 66 | * |
| 2MA0352+0210 | 1 | 03 52 10.8 | +02 10 48 | 0.458 | 041.0 | 47 | 54.62 | 2.54 | 1 | 47 | * |
| LP833-014 | 2 | 03 52 23.1 | -22 52 56 | 0.464 | 066.8 | 70 | 41.07 | 4.81 | 1 | 67 | * |
| LHS1610 | 2 | 03 52 41.0 | +17 01 04 | 0.767 | 146.1 | 25 | 100.88 | 2.05 | 2 | 66,25 | * |
| GJ0157.1 | 1 | 03 59 56.8 | +26 05 41 | 0.736 | 108.7 | 47 | 43.80 | 5.10 | 1 | 66 | * |
| LP031-301 | 3 | 04 05 57.0 | +71 16 38 | 0.430 | 165.9 | 47 | 57.10 | 1.20 | 1 | 34 | * |
| LHS1630 | 2 | 04 07 20.5 | -24 29 14 | 0.704 | 161.1 | 70 | 56.18 | 1.06 | 1 | 49 | * |
| GJ0162 | 1 | 04 08 37.4 | +33 38 13 | 0.540 | 076.4 | 27 | 74.40 | 2.62 | 2 | 66,67 | * |
| LP889-037 | 1 | 04 08 55.6 | -31 28 54 | 0.260 | 195.0 | 38 | 64.35 | 1.75 | 1 | 47 | * |
| GJ0163 | 1 | 04 09 15.7 | -53 22 25 | 1.147 | 064.3 | 70 | 66.59 | 1.79 | 2 | 66,67 | * |
| GJ1068 | 1 | 04 10 28.1 | -53 36 08 | 2.554 | 199.1 | 29 | 143.42 | 1.92 | 1 | 29 | * |
| LHS1638 | 1 | 04 12 20.3 | +64 43 36 | 0.647 | 130.0 | 36 | 84.80 | 2.90 | 1 | 66 | * |
| GJ0164 | 2 | 04 12 58.8 | +52 36 42 | 0.910 | 203.0 | 36 | 72.34 | 1.18 | 2 | 66,41 | * |
| GJ0165 | 2 | 04 13 08.2 | +50 31 21 | 0.457 | 242.0 | 36 | 55.70 | 8.70 | 1 | 66 | * |
| 2MA0414-0906 | 1 | 04 14 17.3 | -09 06 54 | 0.168 | 325.2 | 56 | 42.00 | 2.50 | 1 | 56 | * |
| GJ2033 | 2 | 04 16 41.7 | -12 33 23 | 0.225 | 348.9 | 70 | 46.82 | 4.32 | 1 | 67 | * |
| G007-034 | 1 | 04 17 18.4 | +08 49 20 | 0.395 | 161.2 | 51 | 73.27 | 1.27 | 1 | 51 | * |
| LTT11399 | 1 | 04 19 59.6 | +36 29 11 | 0.502 | 154.8 | 27 | 42.90 | 3.98 | 2 | 66,67 | * |
| SCR0420-7005 | 1 | 04 20 12.6 | -70 05 59 | 0.689 | 021.0 | 70 | 62.09 | 0.88 | 1 | 1 | * |
| GJ1070 | 1 | 04 22 33.5 | +39 00 44 | 0.712 | 136.0 | 36 | 53.40 | 4.70 | 1 | 66 | * |
| LHS0189 | 2 | 04 25 38.4 | -06 52 37 | 1.204 | 145.7 | 9 | 54.24 ^a | 3.03 | 2 | 10,10 | * |
| LHS0191 | 1 | 04 26 20.1 | +03 35 43 | 1.056 | 187.1 | 47 | 58.40 | 1.80 | 1 | 66 | * |
| LHS5094 | 1 | 04 26 32.6 | -30 48 02 | 0.483 | 185.7 | 35 | 75.39 | 2.90 | 1 | 47 | * |
| 2MA0429-3123 | 2 | 04 29 18.4 | -31 23 56 | 0.129 | 038.9 | 47 | 58.71 | 1.25 | 1 | 47 | * |
| GJ0170 | 1 | 04 30 25.2 | +39 51 00 | 0.633 | 153.1 | 47 | 95.90 | 2.80 | 1 | 66 | * |
| LP715-051 | 2 | 04 31 09.0 | -13 30 53 | 0.254 | 219.5 | 70 | 52.33 | 3.56 | 1 | 67 | * |
| LHS1678 | 1 | 04 32 42.6 | -39 47 12 | 0.997 | 165.9 | 35 | 51.08 | 1.25 | 1 | 47 | * |
| LP775-031 | 2 | 04 35 16.1 | -16 06 57 | 0.355 | 028.1 | 70 | 95.35 | 1.06 | 1 | 15 | * |
| LP834-032 | 1 | 04 35 36.2 | -25 27 35 | 0.242 | 160.4 | 70 | 57.64 | 1.78 | 1 | 47 | * |
| L591-042 | 2 | 04 36 40.9 | -27 21 18 | 0.347 | 231.9 | 70 | 40.57 | 1.79 | 2 | 1 | * |
| LHS1686 | 1 | 04 36 41.5 | +11 13 35 | 0.662 | 055.2 | 47 | 40.30 | 5.40 | 1 | 66 | * |
| GJ0173 | 1 | 04 37 41.9 | -11 02 20 | 0.318 | 232.0 | 70 | 90.20 | 1.72 | 2 | 66,67 | * |
| LTT11472 | 2 | 04 38 12.6 | +28 13 00 | 0.399 | 097.3 | 47 | 75.03 | 1.89 | 2 | 56,51 | * |
| LP715-039 | 1 | 04 38 37.2 | -11 30 15 | 0.371 | 227.4 | 70 | 50.95 | 2.14 | 1 | 1 | * |
| LHS1690 | 1 | 04 39 32.0 | +16 15 43 | 0.778 | 183.5 | 47 | 86.60 | 2.50 | 1 | 34 | * |
| LP655-048 | 1 | 04 40 23.3 | -05 30 08 | 0.359 | 069.2 | 51 | 102.61 | 0.71 | 1 | 51 | * |
| HIP021765 | 2 | 04 40 29.2 | -09 11 46 | 0.149 | 226.3 | 27 | 52.25 | 3.52 | 2 | 66,67 | * |
| GJ0176 | 1 | 04 42 55.7 | +18 57 29 | 1.298 | 149.6 | 27 | 110.00 | 2.00 | 2 | 66,67 | * |
| LHS0197 | 1 | 04 46 23.8 | +48 44 18 | 1.204 | 122.0 | 36 | 52.10 | 0.90 | 1 | 66 | * |
| 2MA0446-1116 | 2 | 04 46 51.8 | -11 16 47 | 0.169 | 243.0 | 47 | 53.60 | 5.00 | 1 | 56 | * |
| L736-001 | 1 | 04 49 32.8 | -14 47 23 | 0.356 | 216.7 | 70 | 40.33 | 2.34 | 1 | 67 | * |
| GJ1072 | 1 | 04 50 50.9 | +22 07 22 | 0.744 | 124.0 | 36 | 71.10 | 5.70 | 1 | 66 | * |
| APM0452-5819 | 1 | 04 51 37.3 | -58 18 52 | 0.740 | 190.5 | 70 | 58.05 | 1.17 | 1 | 9 | * |
| GJ0179 | 1 | 04 52 05.7 | +06 28 35 | 0.341 | 155.2 | 67 | 80.82 | 3.78 | 2 | 66,67 | * |
| LP776-025 | 1 | 04 52 24.4 | -16 49 21 | 0.243 | 150.7 | 27 | 61.40 | 1.50 | 1 | 56 | * |
| GJ1073 | 1 | 04 52 34.6 | +40 42 24 | 1.633 | 133.0 | 36 | 77.40 | 2.40 | 1 | 66 | * |
| GJ2036 | 2 | 04 53 31.2 | -55 51 37 | 0.149 | 060.6 | 27 | 90.02 | 1.98 | 1 | 67 | * |
| GJ0180 | 1 | 04 53 50.0 | -17 46 24 | 0.767 | 148.1 | 27 | 82.60 | 2.32 | 2 | 66,67 | * |
| GJ1074 | 1 | 04 58 45.9 | +50 56 37 | 0.602 | 124.9 | 27 | 51.84 | 2.31 | 2 | 66,67 | * |
| LHS1723 | 1 | 05 01 57.4 | -06 56 47 | 0.769 | 226.9 | 25 | 187.92 | 1.26 | 1 | 25 | * |
| LP476-207 | 3 | 05 01 58.8 | +09 58 59 | 0.106 | 165.4 | 51 | 40.67 | 2.12 | 1 | 51 | * |
| GJ0185 | 2 | 05 02 28.4 | -21 15 24 | 0.278 | 206.9 | 70 | 120.27 | 1.67 | 2 | 17,66 | * |
| LHS1731 | 1 | 05 03 20.1 | -17 22 25 | 0.519 | 205.4 | 70 | 108.66 | 1.67 | 2 | 29,67 | * |
| GJ0184 | 2 | 05 03 23.9 | +53 07 42 | 2.018 | 139.7 | 27 | 72.60 | 1.78 | 2 | 66,67 | * |
| G097-015 | 1 | 05 04 15.0 | +11 03 24 | 0.207 | 342.0 | 47 | 104.96 | 1.48 | 1 | 47 | * |
| BD-21 01074 | 3 | 05 06 49.9 | -21 35 08 | 0.051 | 111.1 | 51 | 51.98 | 1.30 | 2 | 51,51 | * |
| LP015-315 | 2 | 05 08 18.0 | +75 38 15 | 0.204 | 126.2 | 47 | 62.30 | 0.67 | 1 | 23 | * |
| GJ0190 | 2 | 05 08 35.1 | -18 10 19 | 1.487 | 159.4 | 70 | 107.57 | 2.08 | 2 | 66,67 | * |
| SCR0509-4325 | 1 | 05 09 43.9 | -43 25 17 | 0.225 | 324.9 | 70 | 46.53 | 1.82 | 1 | 1 | * |
| HD271076 | 1 | 05 10 09.1 | -72 36 28 | 0.131 | 080.3 | 47 | 49.51 | 2.79 | 1 | 47 | * |

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|---------------|---|------------|-----------|-------|-------|----|---------------------|-------|---|------------|---|
| L1672-014 | 2 | 05 10 19.3 | +48 50 05 | 0.454 | 154.0 | 36 | 50.35 | 4.59 | 2 | 66,17 | * |
| LSPM0510+2714 | 1 | 05 10 20.0 | +27 14 02 | 0.665 | 196.2 | 47 | 100.70 | 1.60 | 1 | 34 | * |
| GJ0191 | 1 | 05 11 40.6 | -45 01 06 | 8.728 | 131.4 | 27 | 255.67 | 0.91 | 2 | 66,67 | * |
| GJ0192 | 1 | 05 12 42.2 | +19 39 56 | 0.368 | 049.2 | 27 | 77.09 | 3.18 | 2 | 66,67 | * |
| LHS1747 | 1 | 05 15 08.1 | -07 20 49 | 0.514 | 148.0 | 27 | 44.54 | 4.06 | 1 | 67 | * |
| LSPM0515+5911 | 1 | 05 15 31.0 | +59 11 18 | 1.019 | 173.1 | 33 | 65.70 | 1.30 | 1 | 34 | * |
| LHS1748 | 1 | 05 15 46.7 | -31 17 45 | 0.593 | 065.6 | 70 | 43.18 | 1.40 | 1 | 49 | * |
| LHS1749 | 2 | 05 16 00.4 | -72 14 13 | 0.814 | 356.4 | 49 | 46.08 | 1.40 | 2 | 10,49 | * |
| GJ1077 | 1 | 05 16 59.7 | -78 17 20 | 1.123 | 176.0 | 70 | 65.71 | 1.88 | 2 | 30,66 | * |
| SCR0517-4252 | 1 | 05 17 21.4 | -42 52 47 | 0.186 | 012.8 | 70 | 47.60 | 1.56 | 1 | 1 | * |
| L449-001 | 2 | 05 17 22.9 | -35 21 55 | 0.269 | 230.6 | 70 | 84.38 | 1.35 | 1 | 51 | * |
| 2MA0517-3349 | 1 | 05 17 37.7 | -33 49 03 | 0.560 | 124.7 | 70 | 61.57 | 1.54 | 1 | 47 | * |
| GJ1078 | 1 | 05 23 49.6 | +22 32 20 | 0.359 | 140.6 | 47 | 48.00 | 4.50 | 1 | 66 | * |
| LP717-036 | 2 | 05 25 41.6 | -09 09 12 | 0.197 | 164.7 | 47 | 48.20 | 5.00 | 1 | 56 | * |
| GJ0203 | 1 | 05 28 00.1 | +09 38 38 | 0.784 | 194.3 | 27 | 102.60 | 2.09 | 2 | 66,67 | * |
| GJ1080 | 2 | 05 28 14.6 | +02 58 14 | 1.186 | 198.0 | 36 | 52.30 | 2.20 | 1 | 66 | * |
| GJ2043 | 2 | 05 29 27.0 | +15 34 38 | 0.154 | 214.2 | 27 | 57.95 | 2.60 | 1 | 67 | * |
| GJ0204.2 | 1 | 05 29 52.0 | -03 26 30 | 0.540 | 211.2 | 70 | 56.80 | 6.50 | 1 | 66 | * |
| LHS1767 | 1 | 05 31 04.3 | -30 11 45 | 0.615 | 140.9 | 70 | 65.26 | 1.51 | 1 | 49 | * |
| GJ0205 | 1 | 05 31 27.4 | -03 40 38 | 2.228 | 159.9 | 27 | 175.99 | 1.04 | 2 | 66,67 | * |
| GJ0206 | 2 | 05 32 14.6 | +09 49 14 | 0.286 | 216.9 | 47 | 74.96 | 2.68 | 2 | 66,67 | * |
| GJ1081 | 2 | 05 33 19.1 | +44 48 59 | 0.377 | 170.9 | 47 | 65.20 | 1.80 | 1 | 66 | * |
| SCR0533-4257 | 2 | 05 33 28.0 | -42 57 20 | 0.039 | 328.7 | 47 | 99.35 | 1.70 | 1 | 47 | * |
| GJ0207.1 | 1 | 05 33 44.8 | +01 56 43 | 0.286 | 236.8 | 67 | 62.80 | 2.18 | 3 | 66,67,56 | * |
| LTT11684 | 1 | 05 34 51.2 | +13 52 25 | 0.410 | 197.0 | 36 | 80.60 | 9.80 | 1 | 66 | * |
| LHS5109 | 1 | 05 36 00.1 | -07 38 59 | 0.472 | 003.7 | 70 | 67.43 | 1.66 | 1 | 1 | * |
| WT0178 | 1 | 05 37 39.8 | -61 54 44 | 0.506 | 011.7 | 70 | 62.02 | 0.89 | 1 | 49 | * |
| LHS0207 | 1 | 05 38 10.3 | +79 31 19 | 1.192 | 141.0 | 36 | 45.10 | 1.40 | 1 | 66 | * |
| GJ1083 | 2 | 05 40 25.7 | +24 48 08 | 0.364 | 163.0 | 36 | 96.30 | 2.50 | 1 | 66 | * |
| GJ0213 | 1 | 05 42 09.2 | +12 29 21 | 2.546 | 128.2 | 27 | 171.50 | 1.00 | 3 | 66,67,22 | * |
| GJ2045 | 1 | 05 42 12.7 | -05 27 56 | 0.980 | 351.4 | 70 | 79.58 | 1.15 | 4 | 9,18,29,66 | * |
| APM0544-4108 | 1 | 05 43 46.6 | -41 08 08 | 0.621 | 168.3 | 70 | 48.41 | 0.78 | 1 | 49 | * |
| LHS1785 | 1 | 05 47 09.1 | -05 12 11 | 0.757 | 136.1 | 70 | 58.80 | 1.90 | 1 | 66 | * |
| GJ0218 | 1 | 05 47 40.6 | -36 19 43 | 0.781 | 099.1 | 27 | 67.04 | 1.42 | 2 | 66,67 | * |
| GJ0220 | 1 | 05 53 14.1 | +24 15 32 | 0.620 | 164.2 | 47 | 51.50 | 4.60 | 1 | 66 | * |
| LP837-053 | 1 | 05 55 43.2 | -26 51 23 | 0.323 | 092.6 | 70 | 68.57 | 2.17 | 1 | 67 | * |
| LHS5112 | 2 | 05 56 56.2 | -46 55 54 | 0.529 | 013.9 | 70 | 42.29 | 1.11 | 2 | 66,67 | * |
| G192-011 | 2 | 05 59 37.7 | +58 35 34 | 0.253 | 177.5 | 27 | 73.89 | 1.64 | 1 | 67 | * |
| LTT17897 | 1 | 06 00 03.0 | +02 42 23 | 0.314 | 097.8 | 27 | 190.77 | 1.86 | 2 | 66,25 | * |
| LHS0214 | 2 | 06 00 49.0 | +68 09 24 | 1.199 | 158.9 | 47 | 49.79 | 1.13 | 3 | 66,32,32 | * |
| LHS1805 | 1 | 06 01 11.0 | +59 35 01 | 0.831 | 190.0 | 36 | 128.20 | 2.30 | 1 | 66,32 | * |
| LHS1807 | 1 | 06 02 22.6 | -20 19 44 | 0.574 | 353.7 | 70 | 71.00 | 1.58 | 1 | 49 | * |
| LHS1809 | 1 | 06 02 29.6 | +49 50 58 | 0.801 | 174.0 | 36 | 107.70 | 2.60 | 1 | 66 | * |
| APCOL | 1 | 06 04 52.2 | -34 33 36 | 0.330 | 003.6 | 70 | 119.21 | 0.98 | 1 | 50 | * |
| LP838-016 | 1 | 06 07 43.7 | -25 44 42 | 0.262 | 220.9 | 70 | 88.14 | 2.50 | 1 | 67 | * |
| CD-35 02722 | 2 | 06 09 19.2 | -35 49 30 | 0.057 | 186.4 | 27 | 44.10 | 1.20 | 1 | 56 | * |
| GJ0226 | 1 | 06 10 19.8 | +82 06 24 | 1.333 | 177.9 | 27 | 106.63 | 1.20 | 2 | 66,67 | * |
| GJ0229 | 2 | 06 10 34.6 | -21 51 53 | 0.717 | 191.2 | 27 | 173.77 | 0.97 | 2 | 66,67 | * |
| GJ1088 | 1 | 06 10 52.9 | -43 24 18 | 0.748 | 014.5 | 70 | 87.03 | 1.28 | 1 | 49 | * |
| GJ0228 | 2 | 06 10 54.8 | +10 19 05 | 0.943 | 176.8 | 27 | 94.44 | 2.60 | 2 | 66,67 | * |
| G192-022 | 1 | 06 14 02.4 | +51 40 08 | 0.370 | 258.0 | 36 | 70.40 | 10.00 | 1 | 66 | * |
| GJ0231.3 | 1 | 06 19 20.8 | -06 39 22 | 0.648 | 183.2 | 70 | 68.20 | 8.90 | 1 | 66 | * |
| GJ0232 | 1 | 06 24 41.3 | +23 25 59 | 0.763 | 132.0 | 36 | 119.40 | 2.30 | 1 | 66 | * |
| LHS1848 | 1 | 06 25 53.5 | +56 09 42 | 0.530 | 166.0 | 36 | 44.80 | 4.70 | 1 | 66 | * |
| GJ0234 | 2 | 06 29 23.5 | -02 48 51 | 0.930 | 131.7 | 27 | 244.44 | 0.92 | 3 | 21,59,66 | * |
| SCR0630-7643 | 2 | 06 30 46.6 | -76 43 09 | 0.491 | 355.8 | 70 | 114.16 | 1.85 | 1 | 25 | * |
| SCR0631-8811 | 1 | 06 31 31.0 | -88 11 37 | 0.484 | 354.8 | 70 | 63.97 | 2.28 | 1 | 1 | * |
| GJ0237 | 2 | 06 31 51.1 | -43 32 03 | 0.263 | 261.1 | 70 | 42.87 | 1.41 | 2 | 66,67 | * |
| L032-009 | 2 | 06 33 43.3 | -75 37 48 | 0.420 | 324.3 | 70 | 111.07 ^a | 2.20 | 2 | 67,67 | * |
| GJ0238 | 1 | 06 33 50.0 | -58 31 43 | 0.903 | 332.2 | 70 | 60.94 | 1.92 | 2 | 66,67 | * |
| LHS1857 | 1 | 06 36 07.6 | +11 36 05 | 0.935 | 198.0 | 47 | 54.70 | 2.40 | 1 | 66 | * |
| LP381-004 | 1 | 06 36 18.3 | -40 00 24 | 0.247 | 285.9 | 70 | 51.15 | 1.68 | 1 | 67 | * |
| GJ0239 | 1 | 06 37 10.8 | +17 33 53 | 0.837 | 293.8 | 27 | 102.46 | 1.52 | 2 | 66,67 | * |
| LP780-032 | 1 | 06 39 37.4 | -21 01 33 | 0.208 | 301.8 | 70 | 64.39 | 0.80 | 1 | 47 | * |

| | | | | | | | | | | | |
|--------------|---|-------------|-----------|-------|-------|----|--------------------|------|---|----------|---|
| L182-007 | 1 | 06 39 37.6 | -55 36 35 | 0.381 | 274.6 | 70 | 75.19 | 1.10 | 1 | 67 | * |
| SCR0640-0552 | 1 | 06 40 14.0 | -05 52 23 | 0.620 | 172.1 | 70 | 85.75 | 2.97 | 1 | 1 | * |
| G108-021 | 2 | 06 42 09.5 | +03 35 41 | 0.287 | 173.0 | 36 | 95.70 | 8.50 | 1 | 66 | * |
| SCR0642-6707 | 1 | 06 42 27.2 | -67 07 20 | 0.804 | 120.2 | 70 | 73.02 | 1.04 | 1 | 1 | * |
| L597-018 | 1 | 06 43 40.7 | -26 24 41 | 0.464 | 225.1 | 70 | 55.43 | 0.99 | 1 | 1 | * |
| LHS1864 | 2 | 06 43 50.9 | +51 07 03 | 0.881 | 174.1 | 47 | 52.30 | 4.20 | 1 | 66 | * |
| GJ2050 | 2 | 06 44 45.6 | +71 53 15 | 0.563 | 192.7 | 27 | 45.31 | 2.12 | 2 | 66,67 | * |
| LTT11918 | 1 | 06 47 18.9 | +23 46 44 | 0.255 | 285.0 | 36 | 46.30 | 9.90 | 1 | 66 | * |
| GJ1091 | 1 | 06 48 49.2 | +37 08 37 | 0.194 | 274.0 | 36 | 44.30 | 5.60 | 1 | 66 | * |
| GJ1092 | 1 | 06 49 05.5 | +37 06 51 | 1.620 | 173.4 | 47 | 72.76 | 1.85 | 2 | 66,32 | * |
| G108-036 | 1 | 06 51 59.02 | +03 12 55 | 0.218 | 257.8 | 56 | 45.00 | 1.30 | 1 | 56 | * |
| DEN0652-2534 | 1 | 06 52 19.8 | -25 34 50 | 0.294 | 300.8 | 70 | 63.76 | 0.94 | 1 | 15 | * |
| LHS0221 | 2 | 06 54 04.2 | +60 52 18 | 1.125 | 152.6 | 27 | 95.42 | 1.85 | 2 | 66,59 | * |
| GJ0251 | 1 | 06 54 48.9 | +33 16 05 | 0.831 | 241.1 | 27 | 178.11 | 1.43 | 2 | 66,67 | * |
| LHS1882 | 1 | 06 56 22.7 | +54 57 38 | 0.706 | 199.0 | 36 | 58.00 | 6.90 | 1 | 66 | * |
| LP382-056 | 2 | 06 57 11.7 | -43 24 51 | 0.232 | 161.3 | 70 | 48.08 | 1.48 | 1 | 1 | * |
| GJ0257 | 2 | 06 57 46.6 | -44 17 28 | 1.107 | 263.8 | 70 | 124.57 | 2.08 | 2 | 66,67 | * |
| GJ1093 | 1 | 06 59 28.8 | +19 20 56 | 1.225 | 137.0 | 36 | 128.80 | 3.50 | 1 | 66 | * |
| WT0207 | 1 | 07 02 36.6 | -40 06 28 | 0.632 | 103.2 | 9 | 40.44 | 1.33 | 1 | 10 | * |
| SCR0702-6102 | 2 | 07 02 50.4 | -61 02 48 | 0.812 | 051.5 | 70 | 59.43 | 1.43 | 1 | 1 | * |
| LHS0224 | 2 | 07 04 01.1 | +52 41 12 | 1.167 | 144.8 | 47 | 109.77 | 1.37 | 1 | 66,32 | * |
| GJ0263 | 2 | 07 04 17.7 | -10 30 32 | 0.821 | 189.7 | 27 | 62.05 | 2.92 | 2 | 66,67 | * |
| GJ0258 | 1 | 07 04 25.9 | +68 17 19 | 0.348 | 081.2 | 27 | 66.97 | 2.51 | 2 | 66,67 | * |
| LHS0225 | 2 | 07 04 45.8 | -38 36 08 | 1.228 | 099.3 | 70 | 55.98 ^a | 2.19 | 2 | 29,29 | * |
| GJ2055 | 1 | 07 07 22.9 | -21 27 27 | 0.288 | 137.7 | 27 | 57.81 | 2.36 | 1 | 67 | * |
| LTT11972 | 1 | 07 07 50.4 | +67 12 04 | 0.288 | 258.5 | 27 | 56.80 | 2.07 | 1 | 67 | * |
| ESO207-061 | 1 | 07 07 53.3 | -49 00 50 | 0.404 | 355.3 | 70 | 60.93 | 3.02 | 2 | 65,66 | * |
| APM0710-5704 | 1 | 07 09 37.7 | -57 03 42 | 0.456 | 046.3 | 70 | 59.10 | 1.08 | 1 | 1 | * |
| GJ0268 | 2 | 07 10 01.8 | +38 31 46 | 1.043 | 205.3 | 27 | 163.41 | 1.78 | 2 | 66,67 | * |
| LHS1901 | 2 | 07 11 11.0 | +43 29 58 | 0.680 | 146.0 | 36 | 74.56 | 0.95 | 2 | 34,16 | * |
| SCR0713-0511 | 1 | 07 13 11.2 | -05 11 49 | 0.319 | 187.2 | 70 | 90.86 | 1.64 | 1 | 1 | * |
| GJ1096 | 1 | 07 16 18.0 | +33 09 10 | 0.458 | 194.2 | 47 | 66.90 | 4.10 | 1 | 66 | * |
| GJ0268.3 | 2 | 07 16 19.7 | +27 08 33 | 0.196 | 191.5 | 27 | 86.13 | 2.22 | 3 | 66,67,28 | * |
| SCR0717-0501 | 1 | 07 17 17.1 | -05 01 04 | 0.602 | 136.3 | 70 | 92.68 | 1.69 | 1 | 1 | * |
| LTT17957 | 2 | 07 17 32.2 | +19 33 53 | 0.426 | 233.0 | 36 | 49.67 | 1.62 | 2 | 66,1 | * |
| LTT12003 | 1 | 07 18 08.1 | +39 16 29 | 0.241 | 242.3 | 27 | 69.01 | 2.07 | 1 | 67 | * |
| L136-037 | 1 | 07 20 52.0 | -62 10 12 | 0.344 | 303.1 | 70 | 88.80 | 2.57 | 1 | 1 | * |
| LHS1914 | 1 | 07 22 41.1 | +30 39 37 | 0.715 | 214.0 | 36 | 42.20 | 3.30 | 1 | 66 | * |
| SCR0723-8015 | 2 | 07 23 59.7 | -80 15 18 | 0.817 | 329.3 | 70 | 62.70 | 1.91 | 1 | 1 | * |
| GJ0273 | 2 | 07 27 24.5 | +05 13 32 | 3.735 | 171.2 | 27 | 266.23 | 0.66 | 3 | 66,67,22 | * |
| LTT12020 | 1 | 07 27 28.6 | +22 02 37 | 0.301 | 241.4 | 27 | 51.69 | 1.88 | 2 | 66,67 | * |
| GJ1097 | 1 | 07 28 45.5 | -03 17 53 | 0.931 | 150.5 | 70 | 86.08 | 1.83 | 2 | 66,67 | * |
| GJ2060 | 3 | 07 28 51.4 | -30 14 49 | 0.212 | 207.9 | 70 | 64.53 | 1.52 | 2 | 56,67 | * |
| GJ0277 | 3 | 07 31 57.7 | +36 13 09 | 0.360 | 224.4 | 27 | 84.44 | 1.81 | 3 | 66,67,67 | * |
| GJ0275.1 | 1 | 07 32 02.0 | +68 37 15 | 0.211 | 235.3 | 27 | 40.05 | 2.25 | 2 | 66,67 | * |
| LHS1923 | 1 | 07 32 11.0 | +57 55 35 | 0.929 | 179.0 | 36 | 44.00 | 1.70 | 1 | 58 | * |
| LHS0231 | 1 | 07 33 56.1 | +22 23 02 | 1.104 | 123.0 | 36 | 40.14 | 0.99 | 2 | 66,32 | * |
| GJ1099 | 1 | 07 34 17.6 | +00 59 09 | 0.624 | 181.9 | 47 | 68.70 | 2.60 | 1 | 66 | * |
| GJ0277.1 | 1 | 07 34 27.4 | +62 56 29 | 0.512 | 258.1 | 27 | 84.32 | 2.10 | 2 | 66,67 | * |
| HIP036915 | 1 | 07 35 21.8 | +54 50 59 | 0.121 | 282.2 | 27 | 78.14 | 2.69 | 1 | 67 | * |
| LHS1932 | 1 | 07 36 12.0 | -51 55 21 | 0.586 | 044.3 | 70 | 61.92 | 0.98 | 1 | 49 | * |
| LTT17993 | 2 | 07 36 25.0 | +07 04 43 | 0.397 | 143 | 25 | 116.60 | 0.97 | 1 | 25 | * |
| SCR0736-3024 | 1 | 07 36 56.7 | -30 24 16 | 0.424 | 145.7 | 61 | 75.32 | 1.04 | 1 | 1 | * |
| L528-016 | 1 | 07 38 09.7 | -31 12 19 | 0.251 | 318.7 | 70 | 67.01 | 1.33 | 1 | 1 | * |
| 2MA0738+2400 | 1 | 07 38 29.52 | +24 00 08 | 0.224 | 235.1 | 47 | 53.00 | 2.50 | 1 | 56 | * |
| LHS1935 | 1 | 07 38 41.0 | -21 13 28 | 0.657 | 136.3 | 27 | 94.31 | 3.31 | 1 | 67 | * |
| GJ0281 | 1 | 07 39 23.0 | +02 11 01 | 0.288 | 210.8 | 27 | 68.80 | 1.38 | 2 | 66,67 | * |
| SCR0740-4257 | 1 | 07 40 11.8 | -42 57 40 | 0.713 | 318.2 | 70 | 127.23 | 1.06 | 1 | 47 | * |
| GJ0285 | 1 | 07 44 40.1 | +03 33 08 | 0.567 | 217.9 | 27 | 167.19 | 2.05 | 2 | 66,67 | * |
| 2MA0746+2000 | 2 | 07 46 43.0 | +20 00 32 | 0.345 | 249.8 | 47 | 81.84 | 0.28 | 3 | 11,18,16 | * |
| GJ0289 | 1 | 07 48 16.3 | +20 22 05 | 1.757 | 124.1 | 27 | 67.18 | 1.74 | 2 | 66,67 | * |
| L034-026 | 1 | 07 49 12.7 | -76 42 07 | 0.212 | 205.6 | 70 | 94.36 | 2.11 | 1 | 51 | * |
| GJ1103 | 1 | 07 51 54.7 | -00 00 13 | 0.793 | 161.9 | 70 | 114.00 | 3.30 | 1 | 66 | * |
| LHS1950 | 1 | 07 51 54.9 | +05 32 13 | 0.572 | 135.0 | 36 | 62.70 | 3.10 | 1 | 66 | * |

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|--------------|---|-------------|-----------|-------|-------|----|--------|------|---|------------|---|
| LP423-031 | 1 | 07 52 24.0 | +16 12 15 | 0.411 | 148.1 | 47 | 54.31 | 0.96 | 1 | 23,56 | * |
| SCR0754-3809 | 1 | 07 54 54.8 | -38 09 38 | 0.400 | 351.4 | 70 | 79.13 | 1.57 | 1 | 1 | * |
| LHS1955 | 2 | 07 54 54.8 | -29 20 56 | 0.629 | 146.8 | 70 | 74.36 | 1.13 | 1 | 49 | * |
| GJ1101 | 1 | 07 55 49.9 | +83 23 19 | 0.615 | 197.7 | 47 | 80.30 | 3.00 | 1 | 66 | * |
| 2MA0757+1201 | 1 | 07 57 27.16 | +12 01 27 | 0.134 | 184.9 | 47 | 43.70 | 2.00 | 1 | 56 | * |
| SCR0757-7114 | 1 | 07 57 32.5 | -71 14 53 | 0.104 | 090.5 | 51 | 45.25 | 1.96 | 1 | 51 | * |
| GJ1105 | 1 | 07 58 12.7 | +41 18 13 | 0.717 | 162.8 | 27 | 120.94 | 2.32 | 2 | 66,67 | * |
| LHS1976 | 2 | 08 03 19.5 | +52 50 38 | 0.732 | 148.0 | 36 | 40.30 | 5.10 | 1 | 58 | * |
| SCR0805-5912 | 1 | 08 05 46.2 | -59 12 50 | 0.640 | 154.4 | 70 | 61.71 | 1.91 | 1 | 1 | * |
| L1321-040 | 1 | 08 09 30.9 | +21 54 17 | 0.324 | 258.7 | 27 | 44.86 | 3.36 | 1 | 67 | * |
| GJ0298 | 1 | 08 09 58.1 | -52 58 05 | 0.832 | 322.6 | 70 | 60.01 | 2.43 | 2 | 66,67 | * |
| GJ0299 | 1 | 08 11 58.0 | +08 46 23 | 5.211 | 167.0 | 36 | 146.30 | 3.10 | 1 | 66 | * |
| GJ0300 | 1 | 08 12 40.9 | -21 33 07 | 0.699 | 178.7 | 25 | 125.78 | 0.97 | 2 | 25,66 | * |
| GJ0301 | 2 | 08 13 08.5 | -13 55 01 | 0.536 | 198.7 | 70 | 52.11 | 1.98 | 2 | 59,66 | * |
| LHS1992 | 1 | 08 13 42.6 | -76 07 49 | 0.685 | 337.4 | 70 | 61.86 | 1.82 | 1 | 1 | * |
| GJ2066 | 1 | 08 16 07.9 | +01 18 09 | 0.379 | 279.0 | 27 | 109.82 | 1.48 | 2 | 66,67 | * |
| L098-059 | 1 | 08 18 07.6 | -68 18 47 | 0.391 | 162.6 | 70 | 94.80 | 2.98 | 1 | 47 | * |
| LHS0246 | 1 | 08 25 49.7 | +69 02 11 | 1.377 | 205.0 | 36 | 78.41 | 3.51 | 2 | 66,32 | * |
| LHS2010 | 2 | 08 27 11.8 | -44 59 21 | 0.537 | 343.1 | 49 | 72.80 | 1.30 | 1 | 49 | * |
| GJ1110 | 1 | 08 28 11.4 | +20 07 48 | 0.703 | 204.2 | 47 | 45.20 | 3.20 | 1 | 66 | * |
| GJ0308 | 2 | 08 28 22.1 | +35 00 59 | 1.046 | 252.0 | 27 | 53.28 | 5.00 | 2 | 66,67 | * |
| GJ1111 | 1 | 08 29 49.5 | +26 46 34 | 1.290 | 242.0 | 36 | 275.80 | 3.00 | 1 | 66 | * |
| LHS2021 | 1 | 08 30 32.0 | +09 47 15 | 0.667 | 226.0 | 49 | 63.44 | 1.11 | 2 | 10,49 | * |
| GJ2069 | 5 | 08 31 37.5 | +19 23 39 | 0.272 | 249.6 | 67 | 85.16 | 6.42 | 1 | 44 | * |
| LHS2026 | 1 | 08 32 30.5 | -01 34 39 | 0.540 | 151.9 | 70 | 50.80 | 0.50 | 1 | 66 | * |
| GJ2070 | 1 | 08 34 25.9 | -01 08 40 | 0.472 | 156.0 | 37 | 73.40 | 9.60 | 1 | 66 | * |
| LHS0250 | 1 | 08 35 38.4 | +68 03 21 | 1.009 | 236.4 | 27 | 76.87 | 1.98 | 2 | 66,32 | * |
| LHS2029 | 1 | 08 37 07.9 | +15 07 45 | 0.901 | 187.6 | 27 | 52.74 | 3.69 | 1 | 67 | * |
| SCR0838-5855 | 2 | 08 38 02.2 | -58 55 59 | 0.320 | 189.0 | 70 | 91.69 | 0.81 | 1 | 1 | * |
| GJ0316.1 | 1 | 08 40 29.7 | +18 24 09 | 0.908 | 240.0 | 36 | 81.84 | 0.28 | 2 | 66,56 | * |
| LHS2038 | 1 | 08 40 55.3 | +67 39 15 | 0.754 | 243.5 | 47 | 40.80 | 3.20 | 1 | 66 | * |
| GJ0317 | 1 | 08 40 59.2 | -23 27 23 | 0.912 | 329.0 | 70 | 65.33 | 0.40 | 2 | 3,66 | * |
| LHS0252 | 1 | 08 41 17.6 | +59 28 22 | 1.290 | 191.5 | 47 | 101.61 | 2.56 | 2 | 66,32 | * |
| GJ2072 | 2 | 08 44 23.1 | -44 28 21 | 0.148 | 057.9 | 27 | 53.89 | 2.20 | 1 | 67 | * |
| GJ1114 | 1 | 08 51 43.8 | +18 07 29 | 0.899 | 266.5 | 27 | 58.62 | 2.55 | 2 | 66,67 | * |
| SCR0853-3924 | 1 | 08 53 28.7 | -39 24 41 | 0.355 | 262.3 | 70 | 58.61 | 1.23 | 1 | 1 | * |
| LHS2065 | 1 | 08 53 36.2 | -03 29 32 | 0.550 | 249.4 | 15 | 117.25 | 0.64 | 4 | 9,15,58,66 | * |
| GJ0326 | 2 | 08 54 05.3 | -13 07 31 | 0.676 | 149.1 | 47 | 61.80 | 6.70 | 1 | 66 | * |
| LHS2071 | 2 | 08 55 20.3 | -23 52 15 | 0.578 | 267.6 | 70 | 62.84 | 1.43 | 1 | 49 | * |
| LP844-033 | 1 | 08 56 17.6 | -23 26 57 | 0.401 | 277.5 | 70 | 42.42 | 2.94 | 1 | 10 | * |
| GJ0330 | 2 | 08 57 04.6 | +11 38 49 | 0.326 | 185.1 | 27 | 60.63 | 2.23 | 2 | 66,67 | * |
| GJ1116 | 2 | 08 58 12.2 | +19 45 47 | 0.436 | 281.0 | 36 | 191.20 | 2.50 | 1 | 66 | * |
| LTT12352 | 3 | 08 58 56.0 | +08 28 26 | 0.503 | 130 | 25 | 147.66 | 1.98 | 1 | 25 | * |
| GJ1118 | 1 | 08 59 05.3 | -31 13 27 | 1.094 | 139.9 | 29 | 56.19 | 1.76 | 1 | 29 | * |
| LHS2088 | 1 | 09 00 14.8 | +72 57 40 | 0.893 | 090.0 | 36 | 72.60 | 3.40 | 1 | 66 | * |
| LHS2090 | 1 | 09 00 23.0 | +21 50 04 | 0.789 | 222.7 | 47 | 156.87 | 2.67 | 1 | 25 | * |
| GJ1119 | 1 | 09 00 32.5 | +46 35 11 | 0.703 | 218.9 | 47 | 96.90 | 2.70 | 1 | 66 | * |
| GJ0333.2 | 2 | 09 00 48.5 | +05 14 41 | 0.323 | 230.0 | 27 | 43.35 | 3.85 | 2 | 66,67 | * |
| LHS0259 | 1 | 09 00 52.1 | +48 25 25 | 1.130 | 193.0 | 36 | 51.61 | 3.01 | 2 | 66,32 | * |
| LHS2094 | 1 | 09 02 19.8 | +08 28 06 | 0.648 | 108.1 | 27 | 51.25 | 3.72 | 1 | 67 | * |
| LP060-179 | 1 | 09 02 51.0 | +68 03 18 | 0.419 | 031.0 | 36 | 85.30 | 3.80 | 1 | 57 | * |
| GJ0334 | 1 | 09 06 45.4 | -08 48 25 | 0.366 | 304.6 | 27 | 69.12 | 1.24 | 2 | 66,67 | * |
| LHS2106 | 1 | 09 07 02.8 | -22 08 50 | 0.499 | 211.7 | 70 | 66.23 | 1.16 | 1 | 49 | * |
| GJ1121 | 1 | 09 09 24.0 | +40 06 05 | 0.814 | 220.2 | 47 | 45.70 | 3.40 | 1 | 66 | * |
| DEN0909-0658 | 1 | 09 09 57.3 | -06 58 19 | 0.185 | 276.4 | 2 | 42.50 | 4.20 | 1 | 2 | * |
| GJ0336.1 | 1 | 09 11 30.8 | +46 37 01 | 0.358 | 263.6 | 27 | 40.69 | 2.37 | 2 | 66,67 | * |
| SCR0914-4134 | 1 | 09 14 17.4 | -41 34 38 | 0.749 | 312.5 | 61 | 83.56 | 1.42 | 1 | 1 | * |
| GJ0338 | 2 | 09 14 22.7 | +52 41 11 | 1.657 | 249.9 | 27 | 163.73 | 2.52 | 3 | 66,67,67 | * |
| LHS6167 | 2 | 09 15 36.4 | -10 35 47 | 0.440 | 242.0 | 70 | 103.33 | 1.00 | 1 | 47 | * |
| L749-034 | 1 | 09 16 20.7 | -18 37 33 | 0.348 | 295.2 | 27 | 77.60 | 2.37 | 1 | 1 | * |
| LHS2122 | 1 | 09 16 26.0 | -62 04 16 | 0.934 | 313.3 | 49 | 58.59 | 2.57 | 1 | 49 | * |
| GJ1123 | 1 | 09 17 05.3 | -77 49 23 | 1.052 | 141.6 | 29 | 110.92 | 2.02 | 1 | 29 | * |
| LHS0265 | 1 | 09 17 45.3 | +58 24 13 | 1.134 | 180.0 | 36 | 64.80 | 3.38 | 2 | 66,32 | * |
| GJ1122 | 2 | 09 19 18.5 | +38 31 19 | 0.233 | 277.3 | 47 | 49.40 | 2.70 | 1 | 66 | * |

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|--------------|---|------------|-----------|-------|-------|----|--------|------|---|-------------|---|
| LHS0266 | 1 | 09 20 21.1 | +26 43 43 | 1.007 | 121.0 | 36 | 47.80 | 4.60 | 1 | 66 | * |
| LHS0267 | 1 | 09 20 58.1 | +03 20 59 | 1.185 | 165.4 | 47 | 60.80 | 4.10 | 1 | 66 | * |
| GJ0341 | 1 | 09 21 37.6 | -60 16 55 | 0.859 | 253.1 | 70 | 95.68 | 0.91 | 2 | 66,67 | * |
| GJ0347 | 2 | 09 28 53.3 | -07 22 16 | 0.773 | 195.1 | 70 | 61.06 | 2.86 | 2 | 66,67 | * |
| LHS0269 | 1 | 09 29 11.0 | +25 58 09 | 1.086 | 255.0 | 36 | 56.47 | 0.97 | 2 | 57,23 | * |
| GJ1125 | 1 | 09 30 44.6 | +00 19 22 | 0.794 | 225.9 | 27 | 100.95 | 2.48 | 2 | 66,67 | * |
| GJ0352 | 2 | 09 31 19.4 | -13 29 19 | 0.733 | 087.9 | 70 | 98.48 | 3.10 | 2 | 59,66 | * |
| LP788-001 | 1 | 09 31 22.3 | -17 17 43 | 0.359 | 246.7 | 70 | 75.10 | 1.44 | 1 | 1 | |
| GJ0353 | 1 | 09 31 56.3 | +36 19 12 | 0.564 | 201.7 | 27 | 71.11 | 1.71 | 2 | 66,67 | * |
| GJ0357 | 1 | 09 36 01.6 | -21 39 39 | 0.995 | 171.8 | 27 | 110.74 | 1.90 | 2 | 66,67 | * |
| 2MA0936-2610 | 1 | 09 36 57.8 | -26 10 11 | 0.044 | 137.7 | 47 | 53.75 | 1.42 | 1 | 47 | * |
| G117-034 | 1 | 09 39 24.2 | +31 45 17 | 0.282 | 222.5 | 27 | 41.65 | 3.79 | 1 | 67 | * |
| GJ0358 | 1 | 09 39 46.4 | -41 04 03 | 0.620 | 302.8 | 70 | 105.46 | 1.62 | 2 | 66,67 | * |
| GJ0359 | 1 | 09 41 02.1 | +22 01 28 | 0.672 | 135.0 | 36 | 79.00 | 3.80 | 1 | 66 | * |
| GJ0361 | 1 | 09 41 10.3 | +13 12 34 | 0.674 | 257.6 | 27 | 88.25 | 1.60 | 2 | 66,67 | * |
| GJ0363 | 1 | 09 42 17.9 | +55 58 31 | 0.861 | 234.9 | 47 | 65.10 | 8.70 | 1 | 66 | * |
| GJ0360 | 2 | 09 42 34.8 | +70 02 02 | 0.724 | 248.2 | 27 | 83.48 | 1.31 | 4 | 66,66,67,67 | * |
| LHS2177 | 1 | 09 42 35.7 | -19 14 05 | 0.545 | 241.6 | 70 | 63.47 | 3.54 | 1 | 67 | * |
| GJ1128 | 1 | 09 42 46.4 | -68 53 06 | 1.125 | 000.6 | 70 | 153.05 | 2.41 | 1 | 29 | * |
| LHS5156 | 1 | 09 42 49.6 | -63 37 56 | 0.506 | 084.1 | 70 | 95.15 | 1.17 | 1 | 49 | * |
| LHS0272 | 1 | 09 43 46.2 | -17 47 06 | 1.439 | 279.2 | 30 | 73.95 | 1.18 | 1 | 30 | * |
| LHS2181 | 1 | 09 43 55.6 | +26 58 08 | 0.590 | 260.2 | 27 | 71.29 | 4.49 | 1 | 67 | * |
| WT0244 | 1 | 09 44 23.7 | -73 58 38 | 0.517 | 257.2 | 70 | 43.30 | 1.50 | 1 | 49 | * |
| GJ0367 | 1 | 09 44 29.8 | -45 46 36 | 0.745 | 218.6 | 27 | 102.55 | 2.94 | 2 | 66,67 | * |
| GJ1129 | 1 | 09 44 47.3 | -18 12 49 | 1.597 | 264.3 | 30 | 93.89 | 2.49 | 1 | 30 | * |
| G161-071 | 1 | 09 44 54.2 | -12 20 54 | 0.353 | 275.7 | 70 | 74.10 | 1.43 | 1 | 47 | * |
| LP462-119 | 2 | 09 45 40.1 | -39 02 27 | 0.307 | 206.3 | 70 | 49.48 | 4.79 | 1 | 67 | * |
| GJ0366 | 1 | 09 46 48.4 | +76 02 38 | 1.003 | 175.1 | 27 | 62.63 | 1.25 | 2 | 66,67 | * |
| G043-002 | 1 | 09 48 50.2 | +15 38 44 | 0.222 | 359.7 | 47 | 56.90 | 3.20 | 1 | 56 | * |
| LHS2195 | 1 | 09 49 22.2 | +08 06 45 | 0.887 | 177.4 | 15 | 60.32 | 1.67 | 1 | 15 | * |
| GJ2075 | 2 | 09 49 27.8 | -55 20 09 | 0.300 | 126.5 | 70 | 47.70 | 1.84 | 1 | 67 | * |
| LTT03613 | 1 | 09 50 40.5 | -13 48 39 | 0.195 | 125.5 | 70 | 51.14 | 1.86 | 1 | 1 | * |
| GJ0369 | 1 | 09 51 09.6 | -12 19 48 | 1.850 | 142.1 | 27 | 72.98 | 1.74 | 2 | 66,67 | * |
| GJ0372 | 2 | 09 53 11.8 | -03 41 25 | 0.512 | 190.7 | 70 | 62.20 | 2.10 | 2 | 66,67 | * |
| GJ1130 | 2 | 09 53 28.1 | -31 45 08 | 0.180 | 235.2 | 70 | 41.45 | 1.55 | 1 | 67 | * |
| LHS2206 | 1 | 09 53 55.0 | +20 56 46 | 0.516 | 319.1 | 47 | 108.69 | 2.06 | 2 | 25,58 | * |
| LP847-048 | 1 | 09 55 23.9 | -27 15 41 | 0.185 | 207.7 | 70 | 88.32 | 3.18 | 1 | 67 | * |
| GJ0373 | 1 | 09 56 08.6 | +62 47 18 | 0.658 | 207.5 | 27 | 92.81 | 1.14 | 2 | 66,67 | * |
| GJ0375 | 2 | 09 58 34.3 | -46 25 30 | 0.678 | 138.4 | 70 | 64.77 | 1.72 | 2 | 66,67 | * |
| GJ0377 | 1 | 10 01 10.7 | -30 23 25 | 1.273 | 300.3 | 27 | 62.23 | 2.46 | 2 | 66,67 | * |
| GJ0378 | 1 | 10 02 21.7 | +48 05 19 | 1.647 | 202.8 | 47 | 66.40 | 1.54 | 2 | 66,67 | * |
| LHS5166 | 2 | 10 04 38.7 | -33 35 10 | 0.493 | 137.6 | 35 | 54.80 | 5.60 | 1 | 2 | * |
| LP903-021 | 1 | 10 04 50.6 | -31 05 28 | 0.339 | 226.8 | 70 | 43.49 | 3.44 | 1 | 67 | * |
| LHS2220 | 1 | 10 06 43.8 | +41 42 52 | 0.503 | 212.4 | 47 | 48.39 | 2.73 | 1 | 67 | * |
| GJ1131 | 1 | 10 07 59.4 | +69 14 46 | 0.872 | 269.0 | 36 | 56.20 | 4.00 | 1 | 66 | * |
| LHS2224 | 1 | 10 09 24.6 | +51 15 39 | 0.961 | 210.1 | 47 | 75.20 | 3.20 | 1 | 66 | * |
| GJ0381 | 2 | 10 12 04.7 | -02 41 05 | 0.790 | 140.3 | 27 | 83.52 | 2.77 | 2 | 66,67 | * |
| GJ0382 | 1 | 10 12 17.7 | -03 44 44 | 0.314 | 219.0 | 70 | 126.11 | 1.81 | 2 | 66,67 | * |
| GJ1132 | 1 | 10 14 51.8 | -47 09 24 | 1.126 | 291.7 | 29 | 83.07 | 1.69 | 1 | 29 | * |
| GJ0386 | 1 | 10 16 46.0 | -11 57 42 | 0.726 | 217.6 | 70 | 75.38 | 2.45 | 2 | 66,67 | * |
| TWA022 | 2 | 10 17 27.0 | -53 54 27 | 0.149 | 264.4 | 47 | 57.00 | 0.70 | 1 | 63 | * |
| GJ0388 | 1 | 10 19 36.2 | +19 52 11 | 0.504 | 265.1 | 27 | 204.60 | 2.80 | 1 | 66 | * |
| LP392-039 | 2 | 10 19 51.3 | -41 48 46 | 0.442 | 193.0 | 70 | 45.62 | 1.88 | 1 | 1 | * |
| GJ0389 | 2 | 10 22 24.6 | -60 10 38 | 0.531 | 139.6 | 27 | 50.42 | 1.83 | 2 | 66,67 | * |
| GJ0390 | 1 | 10 25 10.8 | -10 13 43 | 0.709 | 278.6 | 70 | 81.34 | 1.78 | 2 | 66,67 | * |
| LHS2268 | 1 | 10 28 31.2 | +48 14 10 | 0.612 | 103.5 | 47 | 47.70 | 2.20 | 1 | 66 | * |
| GJ0393 | 1 | 10 28 55.6 | +00 50 28 | 0.950 | 219.3 | 27 | 140.27 | 2.04 | 2 | 66,67 | * |
| LTT03855 | 1 | 10 30 50.8 | -35 46 39 | 0.334 | 271.3 | 70 | 40.62 | 2.03 | 1 | 67 | * |
| LHS0283 | 1 | 10 35 06.5 | +69 26 16 | 1.761 | 246.5 | 47 | 81.75 | 2.45 | 2 | 66,32 | * |
| GJ0398 | 1 | 10 36 01.8 | +05 07 06 | 0.679 | 279.6 | 47 | 68.80 | 6.30 | 1 | 66 | * |
| 2MA1036+1521 | 3 | 10 36 44.8 | +15 21 39 | 0.118 | 120.5 | 56 | 49.80 | 5.00 | 1 | 56 | * |
| LTT03896 | 1 | 10 37 45.3 | -27 46 39 | 0.322 | 318.4 | 70 | 67.57 | 1.36 | 1 | 1 | * |
| LEHPM2-2758 | 1 | 10 38 47.8 | -86 32 44 | 0.223 | 198.2 | 43 | 75.31 | 2.59 | 1 | 1 | * |
| GJ0399 | 1 | 10 39 40.6 | -06 55 26 | 0.756 | 263.8 | 70 | 63.94 | 2.78 | 2 | 66,67 | * |

| | | | | | | | | | | | |
|--------------|---|-------------|-----------|-------|-------|----|--------|------|---|---------------|---|
| LP465-084 | 2 | 10 39 44.4 | -37 55 14 | 0.241 | 123.8 | 70 | 71.51 | 2.48 | 1 | 67 | * |
| GJ1135 | 2 | 10 41 09.3 | -36 53 44 | 0.255 | 131.7 | 70 | 61.21 | 1.52 | 1 | 67 | * |
| GJ1134 | 1 | 10 41 37.9 | +37 36 39 | 1.492 | 256.5 | 47 | 96.70 | 2.30 | 1 | 66 | * |
| GJ1136 | 2 | 10 41 51.8 | -36 38 00 | 0.118 | 306.3 | 27 | 61.79 | 4.12 | 1 | 67 | * |
| LP848-050 | 2 | 10 42 41.4 | -24 16 05 | 0.205 | 015.4 | 70 | 85.07 | 2.23 | 1 | 1 | * |
| WT1827 | 2 | 10 43 02.8 | -09 12 41 | 1.959 | 280.0 | 29 | 80.99 | 2.42 | 1 | 29 | * |
| LHS0288 | 1 | 10 44 21.0 | -61 12 35 | 1.643 | 347.7 | 25 | 209.70 | 2.65 | 2 | 66,25 | * |
| LP905-056 | 1 | 10 45 16.7 | -30 48 27 | 0.247 | 185.2 | 70 | 71.41 | 2.37 | 1 | 67 | * |
| DEN1048-3956 | 1 | 10 48 12.6 | -39 56 07 | 1.530 | 229.2 | 29 | 248.53 | 1.18 | 3 | 9,12,29 | * |
| LHS0292 | 1 | 10 48 14.6 | -11 20 10 | 1.598 | 159.3 | 70 | 220.30 | 3.60 | 2 | 15,66 | * |
| LHS2314 | 1 | 10 49 01.8 | +05 01 59 | 0.598 | 215.4 | 47 | 41.10 | 2.30 | 1 | 66 | * |
| GJ1138 | 2 | 10 49 45.6 | +35 32 50 | 1.231 | 213.0 | 36 | 103.85 | 2.96 | 2 | 66,32 | * |
| LHS2317 | 1 | 10 50 26.5 | +33 05 19 | 0.593 | 177.4 | 47 | 43.60 | 2.80 | 1 | 66 | * |
| GJ0402 | 1 | 10 50 52.0 | +06 48 29 | 1.187 | 226.1 | 67 | 147.15 | 2.98 | 2 | 66,67 | * |
| GJ0403 | 1 | 10 52 04.0 | +13 59 51 | 1.126 | 280.0 | 36 | 80.24 | 2.69 | 2 | 66,57 | * |
| LHS2328 | 1 | 10 55 34.5 | -09 21 26 | 0.500 | 331.0 | 70 | 53.84 | 1.47 | 1 | 49 | * |
| GJ0406 | 1 | 10 56 28.9 | +07 00 53 | 4.696 | 234.0 | 36 | 419.10 | 2.10 | 1 | 66 | * |
| LHS2335 | 1 | 10 58 35.1 | -31 08 38 | 0.551 | 259.8 | 70 | 50.55 | 1.55 | 1 | 49 | * |
| LHS2337 | 1 | 10 59 04.8 | +30 14 55 | 0.611 | 239.7 | 47 | 44.80 | 5.80 | 1 | 66 | * |
| GJ0408 | 1 | 11 00 04.2 | +22 49 58 | 0.511 | 236.7 | 27 | 149.32 | 1.58 | 2 | 66,67 | * |
| LHS0296 | 1 | 11 01 23.2 | +02 59 46 | 1.103 | 112.0 | 36 | 71.80 | 3.10 | 1 | 66 | * |
| GJ1141 | 2 | 11 02 21.0 | +16 30 45 | 0.162 | 185.2 | 27 | 51.56 | 6.65 | 3 | 66,67,67 | * |
| GJ0410 | 1 | 11 02 38.3 | +21 58 01 | 0.150 | 110.1 | 27 | 85.01 | 1.02 | 2 | 66,67 | * |
| GJ0411 | 1 | 11 03 20.1 | +35 58 11 | 4.797 | 186.9 | 27 | 393.25 | 0.57 | 2 | 66,67 | * |
| LP491-051 | 1 | 11 03 21.25 | +13 37 57 | 0.229 | 290.7 | 47 | 64.80 | 3.00 | 1 | 56 | * |
| GJ0412 | 2 | 11 05 28.5 | +43 31 36 | 4.518 | 282.1 | 27 | 205.67 | 0.93 | 2 | 66,67 | * |
| LHS2348 | 1 | 11 05 43.1 | +10 14 09 | 0.933 | 138.5 | 27 | 50.90 | 4.58 | 1 | 67 | * |
| LHS2351 | 1 | 11 06 20.0 | +04 28 17 | 0.506 | 315.0 | 36 | 48.10 | 3.10 | 1 | 65 | * |
| L754-040 | 1 | 11 07 27.7 | -19 17 30 | 0.220 | 256.3 | 70 | 53.51 | 1.64 | 1 | 67 | * |
| GJ0413.1 | 1 | 11 09 31.3 | -24 35 55 | 0.892 | 244.7 | 70 | 93.23 | 1.67 | 2 | 66,67 | * |
| GJ0414.1 | 2 | 11 11 19.4 | +43 25 02 | 0.773 | 234.8 | 67 | 59.16 | 2.54 | 1 | 67 | * |
| 2MA1113+1025 | 1 | 11 13 00.6 | +10 25 05 | 0.212 | 136.9 | 47 | 43.40 | 3.00 | 1 | 56 | * |
| GJ0422 | 1 | 11 16 00.2 | -57 32 52 | 2.733 | 294.9 | 35 | 78.82 | 2.49 | 2 | 66,67 | * |
| L611-120 | 1 | 11 16 06.8 | -30 10 41 | 0.338 | 289.7 | 70 | 43.09 | 2.10 | 1 | 67 | * |
| GJ1144 | 1 | 11 16 22.2 | -14 41 36 | 0.222 | 230.2 | 70 | 55.82 | 1.50 | 1 | 67 | * |
| GJ1145 | 1 | 11 17 07.5 | -27 48 49 | 0.234 | 110.0 | 70 | 56.52 | 1.28 | 1 | 67 | * |
| LHS2395 | 1 | 11 19 31.0 | +46 41 43 | 0.692 | 154 | 36 | 97.00 | 2.60 | 1 | 34 | * |
| GJ0424 | 2 | 11 20 04.8 | +65 50 47 | 2.956 | 273.6 | 27 | 112.10 | 0.99 | 2 | 66,67 | * |
| GJ1146 | 1 | 11 21 38.5 | +06 08 26 | 1.749 | 206.0 | 36 | 54.20 | 4.20 | 1 | 66 | * |
| LHS2397a | 2 | 11 21 49.2 | -13 13 09 | 0.507 | 264.7 | 15 | 68.98 | 1.12 | 5 | 8,15,16,65,66 | * |
| LHS2400 | 1 | 11 22 42.5 | -32 05 40 | 0.614 | 175.6 | 9 | 44.26 | 2.28 | 1 | 10 | * |
| LHS0302 | 1 | 11 23 08.2 | +25 53 37 | 1.062 | 251.7 | 47 | 60.60 | 2.97 | 2 | 66,32 | * |
| GJ2085 | 1 | 11 23 44.5 | +08 33 48 | 1.019 | 281.0 | 27 | 46.24 | 2.27 | 2 | 66,67 | * |
| LHS2401 | 1 | 11 23 57.3 | -18 21 49 | 0.567 | 261.8 | 70 | 54.47 | 2.51 | 1 | 49 | * |
| LHS2405 | 2 | 11 25 28.2 | +78 15 44 | 0.661 | 254.9 | 27 | 44.88 | 7.98 | 2 | 66,66 | * |
| LP672-042 | 1 | 11 30 41.8 | -08 05 43 | 0.419 | 306.6 | 70 | 75.75 | 4.22 | 1 | 67 | * |
| LHS0306 | 1 | 11 31 08.4 | -14 57 21 | 1.432 | 163.2 | 29 | 89.02 | 1.66 | 2 | 29,57 | * |
| GJ0430.1 | 1 | 11 31 43.3 | +22 40 01 | 0.587 | 273.1 | 27 | 62.86 | 1.44 | 2 | 66,67 | * |
| GJ0431 | 1 | 11 31 46.5 | -41 02 47 | 0.735 | 283.7 | 27 | 96.39 | 2.34 | 2 | 66,67 | * |
| LP792-033 | 1 | 11 32 19.0 | -16 58 07 | 0.270 | 147.1 | 70 | 43.85 | 2.65 | 1 | 67 | * |
| LHS2427 | 1 | 11 34 38.0 | -23 52 15 | 0.683 | 244.2 | 27 | 56.06 | 2.03 | 2 | 66,67 | * |
| GJ0433 | 2 | 11 35 27.0 | -32 32 24 | 0.811 | 184.5 | 70 | 112.09 | 1.43 | 2 | 66,67 | * |
| SCR1138-7721 | 1 | 11 38 16.8 | -77 21 49 | 2.148 | 286.9 | 25 | 122.27 | 2.92 | 1 | 25 | * |
| GJ1147 | 1 | 11 38 25.0 | -41 22 33 | 0.945 | 272.7 | 70 | 66.08 | 1.08 | 1 | 49 | * |
| SIP1141-3624 | 1 | 11 41 21.5 | -36 24 35 | 0.573 | 058.3 | 70 | 115.67 | 1.55 | 1 | 47 | * |
| GJ1148 | 1 | 11 41 44.6 | +42 45 07 | 0.587 | 261.2 | 27 | 88.81 | 2.14 | 2 | 66,67 | * |
| GJ0436 | 1 | 11 42 11.0 | +26 42 23 | 1.210 | 132.2 | 67 | 98.95 | 2.07 | 2 | 66,67 | * |
| GJ0438 | 1 | 11 43 19.8 | -51 50 26 | 0.847 | 129.5 | 27 | 92.20 | 2.03 | 2 | 49,66 | * |
| LP793-033 | 2 | 11 45 34.5 | -20 21 12 | 0.202 | 072.7 | 70 | 51.92 | 3.35 | 1 | 67 | * |
| GJ0443 | 1 | 11 46 42.9 | -14 00 52 | 1.111 | 137.8 | 70 | 51.33 | 3.04 | 2 | 66,67 | * |
| GJ0445 | 1 | 11 47 41.3 | +78 41 28 | 0.884 | 057.3 | 27 | 187.26 | 1.64 | 2 | 66,67 | * |
| GJ0447 | 1 | 11 47 44.4 | +00 48 16 | 1.361 | 153.6 | 67 | 298.14 | 1.37 | 2 | 66,67 | * |
| G010-052 | 1 | 11 48 35.49 | +07 41 40 | 0.266 | 151.8 | 47 | 48.20 | 2.20 | 1 | 56 | * |
| GJ1151 | 1 | 11 50 57.7 | +48 22 39 | 1.821 | 237.0 | 36 | 121.76 | 2.59 | 2 | 66,32 | * |

| | | | | | | | | | | | |
|--------------|---|------------|-----------|-------|-------|----|--------------------|------|---|----------|---|
| GJ0450 | 1 | 11 51 07.3 | +35 16 19 | 0.372 | 313.0 | 27 | 116.18 | 1.16 | 2 | 66,67 | * |
| GJ0452 | 1 | 11 53 16.1 | -07 22 28 | 0.540 | 198.5 | 27 | 52.78 | 3.48 | 2 | 66,67 | * |
| LHS2471 | 1 | 11 53 54.2 | +06 59 06 | 0.921 | 166.5 | 47 | 70.30 | 2.60 | 1 | 66 | * |
| GJ0452.1 | 1 | 11 54 08.0 | +09 48 12 | 0.794 | 175.8 | 47 | 88.51 | 3.65 | 2 | 66,58 | * |
| LP851-346 | 1 | 11 55 42.9 | -22 24 59 | 0.409 | 244.0 | 15 | 89.54 | 1.77 | 1 | 15 | * |
| GJ2086 | 1 | 11 55 49.2 | -38 16 49 | 0.681 | 116.9 | 70 | 41.09 | 2.88 | 1 | 67 | * |
| LHS2482 | 1 | 11 57 32.8 | +11 49 39 | 0.724 | 289.3 | 27 | 41.05 | 2.78 | 2 | 66,67 | * |
| SCR1157-0149 | 1 | 11 57 45.6 | -01 49 03 | 0.453 | 120.1 | 70 | 50.76 | 1.52 | 1 | 1 | * |
| RXJ1159-5247 | 1 | 11 59 27.4 | -52 47 19 | 1.110 | 264.8 | 70 | 106.35 | 0.74 | 1 | 47 | * |
| GJ2088 | 2 | 12 02 13.2 | -38 00 29 | 0.282 | 207.3 | 70 | 43.63 | 1.92 | 1 | 67 | * |
| GJ0455 | 2 | 12 02 19.5 | +28 35 33 | 0.769 | 269.4 | 47 | 49.40 | 3.90 | 1 | 66 | * |
| SCR1206-3500 | 1 | 12 06 58.5 | -35 00 52 | 0.403 | 225.7 | 70 | 42.44 | 1.43 | 1 | 1 | * |
| GJ0456 | 1 | 12 08 22.2 | -00 28 58 | 0.965 | 264.7 | 27 | 40.22 | 2.49 | 2 | 66,67 | * |
| LHS2520 | 1 | 12 10 05.6 | -15 04 17 | 0.719 | 184.5 | 70 | 77.93 | 2.41 | 1 | 49 | * |
| L758-108 | 2 | 12 11 11.8 | -19 57 38 | 0.260 | 227.9 | 70 | 79.43 | 2.36 | 1 | 67 | * |
| GJ0458 | 2 | 12 12 20.8 | +54 29 08 | 0.250 | 068.6 | 27 | 64.53 | 1.42 | 2 | 66,67 | * |
| LP852-057 | 1 | 12 13 32.9 | -25 55 25 | 0.433 | 137.3 | 70 | 42.71 | 2.03 | 1 | 67 | * |
| SCR1214-2345 | 1 | 12 14 08.6 | -23 45 17 | 0.100 | 034.3 | 51 | 91.39 | 1.55 | 1 | 51 | * |
| GJ1154 | 2 | 12 14 16.6 | +00 37 26 | 0.985 | 253.0 | 36 | 119.40 | 3.50 | 1 | 66 | * |
| SCR1214-4603 | 1 | 12 14 40.0 | -46 03 14 | 0.750 | 250.8 | 61 | 66.50 | 0.93 | 1 | 1 | * |
| GJ1155 | 2 | 12 16 51.8 | +02 58 02 | 0.706 | 292.0 | 36 | 46.30 | 3.40 | 1 | 66 | * |
| GJ1156 | 1 | 12 18 59.4 | +11 07 34 | 1.301 | 279.0 | 36 | 152.90 | 3.00 | 1 | 66 | * |
| L018-022 | 1 | 12 20 33.8 | -82 25 58 | 0.273 | 004.5 | 70 | 86.07 | 2.64 | 1 | 1 | * |
| GJ0463 | 1 | 12 23 00.1 | +64 01 51 | 0.766 | 299.4 | 27 | 54.86 | 1.86 | 2 | 66,67 | * |
| GJ1157 | 1 | 12 23 01.4 | -46 37 09 | 0.848 | 245.3 | 70 | 62.42 | 0.63 | 1 | 49 | * |
| LTT17123 | 2 | 12 23 33.1 | +67 11 17 | 0.259 | 114.5 | 27 | 77.54 | 3.23 | 1 | 67 | * |
| GJ0464 | 1 | 12 23 53.5 | +12 34 48 | 0.175 | 166.6 | 27 | 47.63 | 2.45 | 1 | 67 | * |
| GJ0465 | 1 | 12 24 52.2 | -12 38 36 | 2.553 | 154.4 | 29 | 111.67 | 1.68 | 3 | 29,66,67 | * |
| BRI1222-1222 | 1 | 12 24 52.5 | -18 14 32 | 0.353 | 230.4 | 70 | 58.60 | 3.80 | 1 | 65 | * |
| GJ0469 | 2 | 12 28 57.5 | +08 25 31 | 0.685 | 247.8 | 27 | 74.77 | 3.39 | 2 | 66,67 | * |
| LP377-100 | 1 | 12 29 27.1 | +22 59 47 | 0.166 | 261.3 | 47 | 49.10 | 3.00 | 1 | 56 | * |
| GJ1158 | 1 | 12 29 34.5 | -55 59 37 | 1.164 | 228.9 | 70 | 76.18 | 1.38 | 1 | 30 | * |
| LHS2567 | 2 | 12 29 54.2 | -05 27 24 | 0.660 | 243.8 | 70 | 47.68 ^a | 1.29 | 2 | 49,49 | * |
| SCR1230-3411 | 2 | 12 30 01.8 | -34 11 24 | 0.529 | 234.4 | 70 | 52.80 | 1.53 | 1 | 1 | * |
| GJ0471 | 1 | 12 31 15.8 | +08 48 38 | 0.822 | 230.7 | 27 | 73.13 | 1.28 | 2 | 66,67 | * |
| GJ0473 | 2 | 12 33 16.3 | +09 01 16 | 1.811 | 277.0 | 36 | 227.90 | 4.60 | 1 | 66 | * |
| GJ0476 | 1 | 12 35 00.7 | +09 49 42 | 0.550 | 234.8 | 27 | 54.69 | 3.05 | 1 | 67 | * |
| GJ0477 | 2 | 12 35 58.4 | -45 56 21 | 0.706 | 188.7 | 27 | 54.65 | 2.93 | 2 | 66,67 | * |
| GJ0479 | 1 | 12 37 52.2 | -52 00 06 | 1.077 | 270.6 | 70 | 104.19 | 2.24 | 2 | 66,67 | * |
| GJ1162 | 1 | 12 38 47.3 | -04 19 17 | 0.765 | 253.7 | 70 | 50.70 | 3.10 | 1 | 66 | * |
| LHS0337 | 1 | 12 38 49.1 | -38 22 54 | 1.464 | 206.4 | 25 | 156.78 | 1.99 | 1 | 25 | * |
| GJ0480 | 1 | 12 38 52.4 | +11 41 46 | 1.183 | 258.0 | 67 | 71.34 | 2.54 | 2 | 66,67 | * |
| G123-049 | 1 | 12 39 04.7 | +47 02 23 | 0.408 | 107.3 | 67 | 45.90 | 4.48 | 1 | 67 | * |
| GJ0480.1 | 1 | 12 40 46.3 | -43 33 59 | 1.045 | 311.6 | 27 | 125.57 | 3.83 | 2 | 66,67 | * |
| LHS5226 | 1 | 12 44 00.7 | -11 10 30 | 0.501 | 250.8 | 70 | 72.28 | 1.70 | 1 | 1 | * |
| SCR1245-5506 | 1 | 12 45 52.5 | -55 06 50 | 0.413 | 107.0 | 70 | 99.16 | 1.36 | 1 | 1 | * |
| LHS2632 | 1 | 12 46 51.0 | +31 47 57 | 0.794 | 274.0 | 36 | 53.30 | 2.30 | 1 | 58 | * |
| LHS2633 | 1 | 12 47 00.9 | +46 37 33 | 0.827 | 250.9 | 47 | 47.77 | 2.36 | 1 | 67 | * |
| LHS2634 | 1 | 12 47 09.8 | -03 34 18 | 0.499 | 264.4 | 70 | 45.84 | 1.97 | 1 | 1 | * |
| SCR1247-0525 | 1 | 12 47 14.7 | -05 25 13 | 0.725 | 320.9 | 70 | 49.99 | 1.06 | 1 | 1 | * |
| GJ0486 | 1 | 12 47 56.6 | +09 45 05 | 1.108 | 245.4 | 27 | 119.58 | 2.64 | 2 | 66,67 | * |
| GJ0487 | 3 | 12 49 02.7 | +66 06 36 | 0.450 | 257.1 | 27 | 98.40 | 1.71 | 2 | 66,67 | * |
| GJ0488 | 1 | 12 50 43.6 | -00 46 05 | 0.420 | 170.5 | 70 | 94.30 | 0.81 | 2 | 66,67 | * |
| DEN1250-2121 | 1 | 12 50 52.7 | -21 21 14 | 0.526 | 128.6 | 70 | 57.77 | 1.72 | 1 | 15 | * |
| LHS2651 | 1 | 12 55 57.4 | +50 55 22 | 0.846 | 164.4 | 47 | 48.40 | 4.00 | 1 | 66 | * |
| GJ0490 | 4 | 12 57 40.2 | +35 13 30 | 0.307 | 240.9 | 27 | 50.28 | 2.30 | 2 | 66,67 | * |
| SIP1259-4336 | 1 | 12 59 04.8 | -43 36 25 | 1.133 | 104.0 | 13 | 127.62 | 0.52 | 1 | 47 | * |
| HIP063480 | 1 | 13 00 25.8 | -34 36 24 | 0.102 | 323.0 | 27 | 50.65 | 2.01 | 1 | 67 | * |
| GJ0493.1 | 1 | 13 00 33.5 | +05 41 08 | 0.973 | 284.0 | 36 | 123.10 | 3.50 | 1 | 66 | * |
| GJ0494 | 3 | 13 00 46.5 | +12 22 32 | 0.641 | 267.8 | 27 | 86.03 | 1.48 | 2 | 66,67 | * |
| LHS2668 | 1 | 13 01 19.7 | -63 11 42 | 0.595 | 225.5 | 70 | 58.19 | 2.37 | 2 | 66,67 | * |
| G164-042 | 3 | 13 05 29.8 | +37 08 10 | 0.367 | 235.9 | 67 | 40.50 | 5.29 | 1 | 67 | * |
| LHS0346 | 1 | 13 09 20.4 | -40 09 27 | 1.224 | 141.9 | 70 | 61.75 | 1.12 | 1 | 29 | * |
| CE303 | 1 | 13 09 21.9 | -23 30 36 | 0.378 | 177.4 | 70 | 69.33 | 1.33 | 1 | 15 | * |

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|--------------|---|------------|-----------|-------|-------|----|--------|------|---|----------|---|
| GJ1167 | 1 | 13 09 31.3 | +28 58 42 | 0.388 | 238.7 | 47 | 91.90 | 4.74 | 2 | 66,58 | * |
| LHS2686 | 1 | 13 10 12.7 | +47 45 19 | 0.825 | 226.0 | 36 | 96.80 | 4.70 | 1 | 58 | * |
| WT0392 | 1 | 13 13 09.3 | -41 30 40 | 1.028 | 271.7 | 29 | 83.58 | 1.58 | 1 | 29 | * |
| NLTT33370 | 2 | 13 14 20.0 | +13 20 01 | 0.317 | 241.1 | 47 | 61.00 | 2.80 | 1 | 34 | * |
| GJ1169 | 1 | 13 16 30.2 | +27 52 44 | 0.787 | 287.5 | 47 | 63.20 | 2.50 | 1 | 66 | * |
| GJ1170 | 1 | 13 17 58.4 | +36 17 56 | 0.350 | 192.5 | 27 | 46.32 | 2.05 | 2 | 66,67 | * |
| GJ0507 | 3 | 13 19 33.5 | +35 06 36 | 0.868 | 153.5 | 27 | 74.70 | 1.44 | 3 | 66,67,67 | * |
| GJ0507.1 | 1 | 13 19 40.1 | +33 20 47 | 0.330 | 244.0 | 27 | 58.58 | 1.46 | 2 | 66,67 | * |
| LHS2718 | 1 | 13 20 03.9 | -35 24 44 | 0.962 | 241.1 | 49 | 73.04 | 0.79 | 1 | 49 | * |
| L977-016 | 2 | 13 20 24.9 | -01 39 27 | 0.290 | 150.0 | 70 | 46.42 | 3.24 | 1 | 67 | * |
| GJ0508.2 | 1 | 13 20 58.0 | +34 16 44 | 0.562 | 122.4 | 27 | 62.16 | 1.83 | 2 | 66,67 | * |
| LHS0350 | 1 | 13 22 54.6 | +24 28 00 | 1.056 | 214.3 | 47 | 73.10 | 2.70 | 1 | 66 | * |
| LHS2729 | 1 | 13 23 38.0 | -25 54 45 | 0.643 | 244.8 | 70 | 71.48 | 1.53 | 1 | 49 | * |
| GJ0510 | 1 | 13 25 48.9 | -28 22 26 | 0.444 | 260.9 | 70 | 59.81 | 2.36 | 2 | 66,67 | * |
| LHS2739 | 2 | 13 27 19.6 | -31 10 40 | 0.587 | 254.5 | 70 | 50.10 | 2.50 | 1 | 56 | * |
| LP855-014 | 1 | 13 27 54.0 | -26 57 01 | 0.212 | 241.0 | 70 | 47.43 | 2.81 | 1 | 67 | * |
| GJ0512 | 2 | 13 28 21.1 | -02 21 37 | 0.520 | 167.4 | 70 | 72.84 | 2.70 | 2 | 66,67 | * |
| GJ0513 | 1 | 13 29 21.3 | +11 26 27 | 1.193 | 165.8 | 47 | 62.90 | 6.70 | 1 | 66 | * |
| GJ0514 | 1 | 13 29 59.7 | +10 22 37 | 1.557 | 133.6 | 27 | 131.70 | 0.99 | 2 | 66,67 | * |
| GJ1171 | 1 | 13 30 31.1 | +19 09 34 | 1.383 | 201.7 | 47 | 68.70 | 4.40 | 1 | 66 | * |
| LP323-158 | 2 | 13 31 46.6 | +29 16 36 | 0.260 | 237.1 | 51 | 55.51 | 2.38 | 1 | 51 | * |
| GJ0516 | 2 | 13 32 44.6 | +16 48 39 | 0.336 | 131.3 | 27 | 63.38 | 3.48 | 2 | 66,17 | * |
| L906-011 | 1 | 13 38 58.7 | -06 14 13 | 0.207 | 157.9 | 70 | 42.43 | 2.21 | 1 | 67 | * |
| GJ0521 | 2 | 13 39 24.1 | +46 11 11 | 0.393 | 353.5 | 27 | 77.29 | 1.54 | 2 | 66,67 | * |
| GJ0521.1 | 1 | 13 40 07.1 | -04 11 10 | 0.641 | 324.0 | 70 | 67.74 | 1.16 | 2 | 66,67 | * |
| GJ1174 | 1 | 13 40 08.8 | +43 46 38 | 1.135 | 283.7 | 47 | 62.70 | 3.80 | 1 | 66 | * |
| LHS2777 | 1 | 13 40 18.0 | +47 12 30 | 0.575 | 152.5 | 47 | 44.40 | 5.30 | 1 | 66 | * |
| LHS0358 | 1 | 13 41 10.4 | +30 01 53 | 1.564 | 269.2 | 47 | 48.10 | 1.90 | 1 | 66 | * |
| LHS2783 | 1 | 13 42 09.9 | -16 00 23 | 0.510 | 268.5 | 35 | 53.87 | 1.14 | 1 | 47 | * |
| LHS2784 | 1 | 13 42 43.2 | +33 17 24 | 0.748 | 187.4 | 47 | 108.51 | 3.10 | 2 | 66,67 | * |
| SCR1343-4002 | 1 | 13 43 41.5 | -40 02 29 | 0.242 | 117.8 | 70 | 58.81 | 0.99 | 1 | 1 | * |
| LHS2789 | 2 | 13 44 27.6 | +51 41 04 | 0.766 | 269.1 | 47 | 41.10 | 6.30 | 1 | 66 | * |
| GJ0526 | 1 | 13 45 43.7 | +14 53 29 | 2.298 | 129.3 | 27 | 184.72 | 0.74 | 3 | 66,67,22 | * |
| LHS2794 | 1 | 13 45 50.7 | -17 58 06 | 0.595 | 206.2 | 70 | 97.62 | 5.03 | 1 | 67 | * |
| LP798-051 | 1 | 13 52 53.5 | -18 20 17 | 0.290 | 242.3 | 70 | 42.93 | 3.25 | 1 | 67 | * |
| GJ1181 | 2 | 13 55 02.6 | -29 05 26 | 0.277 | 253.9 | 70 | 57.93 | 1.48 | 1 | 67 | * |
| SSS1358-3938 | 1 | 13 58 05.4 | -39 37 55 | 1.960 | 117.1 | 47 | 89.26 | 1.12 | 1 | 47 | * |
| LP739-002 | 1 | 13 58 16.2 | -12 02 59 | 0.345 | 275.3 | 70 | 54.24 | 1.33 | 1 | 47 | * |
| LHS2836 | 1 | 13 59 10.4 | -19 50 04 | 0.589 | 247.3 | 70 | 92.86 | 0.89 | 1 | 49 | * |
| GJ0536 | 1 | 14 01 03.2 | -02 39 18 | 1.046 | 303.3 | 70 | 99.73 | 1.51 | 2 | 66,67 | * |
| HIP068570 | 1 | 14 02 19.6 | +13 41 22 | 0.173 | 145.6 | 27 | 50.36 | 2.04 | 1 | 67 | * |
| GJ0537 | 2 | 14 02 32.2 | +46 20 02 | 0.585 | 095.0 | 36 | 88.80 | 3.90 | 1 | 66 | * |
| LHS2852 | 1 | 14 02 46.7 | -24 31 50 | 0.506 | 315.6 | 70 | 57.99 | 1.88 | 1 | 47 | * |
| GJ0540 | 1 | 14 08 12.9 | +80 35 50 | 0.584 | 158.8 | 27 | 59.18 | 1.14 | 2 | 66,67 | * |
| LHS2866 | 1 | 14 08 16.9 | +75 51 14 | 0.545 | 312.5 | 27 | 40.10 | 7.20 | 1 | 66 | * |
| L548-010 | 1 | 14 10 57.5 | -31 17 25 | 0.322 | 305.6 | 70 | 59.58 | 2.06 | 1 | 67 | * |
| WT0460 | 2 | 14 11 59.9 | -41 32 21 | 0.693 | 265.4 | 70 | 107.41 | 1.52 | 1 | 25 | * |
| LHS2875 | 3 | 14 12 11.0 | -00 35 04 | 0.746 | 290.8 | 70 | 40.20 | 3.40 | 1 | 66 | * |
| GJ2106 | 1 | 14 13 12.9 | -56 44 32 | 0.353 | 068.7 | 70 | 85.62 | 1.94 | 1 | 67 | * |
| LHS2884 | 1 | 14 15 11.8 | +45 00 40 | 0.707 | 251.5 | 27 | 61.30 | 6.10 | 1 | 66 | * |
| GJ1182 | 1 | 14 15 30.2 | +04 38 44 | 1.078 | 224.7 | 47 | 71.70 | 3.40 | 1 | 66 | * |
| GJ0541.2 | 1 | 14 17 24.3 | +45 26 40 | 0.049 | 113.5 | 27 | 52.60 | 1.25 | 1 | 67 | * |
| GJ0543 | 1 | 14 19 11.0 | -07 18 12 | 1.355 | 235.5 | 35 | 51.90 | 4.40 | 1 | 66 | * |
| GJ0545 | 1 | 14 20 07.4 | -09 37 13 | 1.023 | 217.7 | 70 | 71.40 | 1.30 | 3 | 29,58,66 | * |
| SCR1420-7516 | 1 | 14 20 36.8 | -75 16 06 | 0.194 | 243.8 | 70 | 43.12 | 1.82 | 1 | 1 | * |
| LHS0370 | 1 | 14 20 53.0 | +36 57 16 | 1.363 | 279.6 | 36 | 50.30 | 1.30 | 1 | 57 | * |
| LHS2899 | 1 | 14 21 15.1 | -01 07 20 | 0.670 | 162.5 | 70 | 74.66 | 2.15 | 1 | 49 | * |
| GJ2107 | 1 | 14 23 06.4 | -68 22 58 | 0.241 | 163.8 | 70 | 42.61 | 1.47 | 1 | 67 | * |
| LHS2913 | 1 | 14 24 55.9 | +08 53 15 | 0.569 | 073.8 | 27 | 72.83 | 4.53 | 2 | 66,67 | * |
| GJ1183 | 2 | 14 27 56.1 | -00 22 31 | 0.340 | 281.4 | 70 | 61.70 | 3.20 | 1 | 66 | * |
| LHS2919 | 1 | 14 28 04.0 | +13 56 13 | 0.605 | 217.6 | 47 | 82.80 | 4.10 | 1 | 34 | * |
| LHS2921 | 1 | 14 28 27.7 | +45 54 29 | 0.907 | 276.0 | 36 | 44.60 | 5.50 | 1 | 66 | * |
| LHS2924 | 1 | 14 28 42.0 | +33 10 03 | 0.815 | 213.7 | 47 | 92.25 | 1.25 | 3 | 66,64,58 | * |
| GJ0550.3 | 1 | 14 29 18.6 | -46 27 50 | 0.199 | 195.9 | 70 | 42.49 | 2.07 | 2 | 66,67 | * |

| | | | | | | | | | | | |
|----------------|---|------------|-----------|-------|-------|----|--------------------|------|---|----------|---|
| GJ0552 | 1 | 14 29 29.7 | +15 31 57 | 1.677 | 321.2 | 27 | 70.91 | 1.90 | 2 | 66,67 | * |
| LHS2930 | 1 | 14 30 33.7 | +59 43 14 | 0.812 | 278.6 | 47 | 103.80 | 1.30 | 1 | 66 | * |
| GJ0553 | 1 | 14 30 47.7 | -08 38 47 | 1.292 | 259.3 | 27 | 59.46 | 1.40 | 2 | 66,67 | * |
| GJ0553.1 | 1 | 14 31 01.2 | -12 17 46 | 0.580 | 234.6 | 70 | 91.78 | 3.70 | 2 | 66,67 | * |
| LHS0375 | 1 | 14 31 38.3 | -25 25 33 | 1.386 | 268.6 | 35 | 41.70 | 1.00 | 1 | 66 | * |
| LHS2935 | 1 | 14 32 08.0 | +08 11 30 | 0.471 | 272.1 | 47 | 77.38 | 0.99 | 1 | 1 | * |
| GJ0555 | 1 | 14 34 16.8 | -12 31 10 | 0.691 | 330.3 | 29 | 160.78 | 1.98 | 3 | 29,66,67 | * |
| 2MA1440+1339 | 1 | 14 40 22.9 | +13 39 22 | 0.331 | 204.7 | 15 | 45.00 | 1.11 | 1 | 15 | * |
| LTT14363 | 2 | 14 42 21.5 | +66 03 20 | 0.311 | 263.8 | 27 | 93.17 | 1.30 | 1 | 67 | * |
| SCR1444-3426 | 1 | 14 44 06.6 | -34 26 47 | 0.451 | 187.7 | 70 | 65.35 | 1.01 | 1 | 1 | * |
| SSS1444-2019 | 1 | 14 44 20.3 | -20 19 26 | 3.507 | 236.0 | 53 | 61.60 | 1.96 | 2 | 18,53 | * |
| GJ1185 | 1 | 14 47 55.2 | -03 09 36 | 0.639 | 306.0 | 70 | 50.80 | 3.60 | 1 | 66 | * |
| GJ0563.2 | 2 | 14 49 33.2 | -26 06 20 | 1.396 | 275.6 | 27 | 50.91 ^b | 7.84 | 3 | 66,67,67 | * |
| GJ1186 | 1 | 14 53 37.2 | +11 34 13 | 0.763 | 172.9 | 47 | 53.50 | 4.10 | 1 | 66 | * |
| GJ0568 | 2 | 14 53 51.4 | +23 33 20 | 0.724 | 278.5 | 27 | 97.11 | 3.01 | 2 | 66,67 | * |
| GJ0569 | 3 | 14 54 29.2 | +16 06 03 | 0.308 | 115.5 | 27 | 100.62 | 1.28 | 2 | 66,67 | * |
| LHS2999 | 1 | 14 54 53.4 | +09 56 36 | 0.510 | 217.9 | 27 | 40.78 | 2.48 | 1 | 67 | * |
| LHS3001 | 2 | 14 56 27.2 | +17 55 00 | 0.982 | 301.2 | 49 | 56.41 | 0.95 | 2 | 49,49 | * |
| LHS3003 | 1 | 14 56 38.3 | -28 09 49 | 0.975 | 209.8 | 9 | 152.49 | 2.02 | 3 | 9,65,66 | * |
| LHS3005 | 1 | 14 57 20.6 | +14 58 55 | 0.580 | 287.4 | 47 | 40.00 | 3.40 | 1 | 66 | * |
| LP681-091 | 1 | 14 57 33.3 | -06 19 49 | 0.234 | 164.9 | 70 | 40.81 | 4.60 | 1 | 67 | * |
| GJ1187 | 1 | 14 57 53.7 | +56 39 24 | 0.712 | 158.4 | 47 | 89.00 | 4.60 | 1 | 66 | * |
| GJ0572 | 2 | 15 00 55.5 | +45 25 34 | 0.411 | 032.1 | 47 | 84.17 | 1.04 | 2 | 66,67 | * |
| TVLM513-46546 | 1 | 15 01 05.5 | +22 49 59 | 0.082 | 215.6 | 47 | 94.50 | 0.60 | 2 | 64,11 | * |
| LHS3018 | 1 | 15 04 18.5 | +60 23 04 | 0.684 | 285.1 | 27 | 56.01 | 1.31 | 1 | 67 | * |
| 2MA1507-2000 | 1 | 15 07 27.7 | -20 00 43 | 0.129 | 121.9 | 47 | 42.53 | 0.63 | 1 | 47 | * |
| LHS3030 | 1 | 15 09 35.5 | +03 10 00 | 0.771 | 308.8 | 27 | 70.03 | 2.51 | 2 | 66,67 | * |
| TVLM868-110639 | 1 | 15 10 16.8 | -02 41 08 | 0.383 | 277.0 | 70 | 61.20 | 4.70 | 1 | 64 | * |
| LTT06043 | 1 | 15 10 35.7 | -42 58 37 | 0.421 | 229.3 | 70 | 41.04 | 2.28 | 2 | 66,67 | * |
| LHS0392 | 1 | 15 11 50.6 | -10 14 18 | 1.005 | 257.6 | 35 | 67.40 | 3.10 | 1 | 66 | * |
| LHS3033 | 1 | 15 11 53.4 | +17 56 39 | 0.678 | 216.0 | 36 | 42.50 | 3.10 | 1 | 66 | * |
| LP682-018 | 1 | 15 15 43.7 | -07 25 21 | 0.329 | 219.6 | 70 | 59.20 | 1.11 | 1 | 1 | * |
| LHS3056 | 2 | 15 19 11.7 | -12 45 07 | 0.724 | 253.5 | 35 | 47.25 | 2.08 | 1 | 47 | * |
| GJ0581 | 1 | 15 19 26.8 | -07 43 20 | 1.224 | 265.6 | 68 | 160.12 | 1.33 | 3 | 66,67,68 | * |
| HIP075187 | 1 | 15 21 52.9 | +20 58 39 | 0.152 | 031.9 | 27 | 87.79 | 1.79 | 2 | 66,67 | * |
| GJ0585 | 1 | 15 23 50.0 | +17 27 38 | 1.302 | 197.0 | 36 | 85.10 | 2.90 | 1 | 66 | * |
| GJ0587.1 | 1 | 15 28 01.3 | +25 47 23 | 0.113 | 123.6 | 27 | 40.73 | 2.55 | 1 | 67 | * |
| LP802-069 | 1 | 15 29 07.2 | -17 22 55 | 0.184 | 272.3 | 70 | 40.17 | 2.54 | 1 | 67 | * |
| LHS3075 | 2 | 15 29 46.7 | +42 52 13 | 0.669 | 148.1 | 47 | 51.10 | 4.40 | 1 | 66 | * |
| L108-087 | 1 | 15 30 52.0 | -68 01 18 | 0.213 | 091.4 | 70 | 58.33 | 1.62 | 1 | 1 | * |
| GJ0588 | 1 | 15 32 13.0 | -41 16 32 | 1.563 | 228.7 | 27 | 168.52 | 1.27 | 2 | 66,67 | * |
| GJ1193 | 1 | 15 34 30.5 | +14 16 18 | 0.697 | 258.0 | 36 | 48.50 | 3.40 | 1 | 66 | * |
| 2MA1534-1418 | 1 | 15 34 56.9 | -14 18 49 | 1.000 | 251.0 | 54 | 91.51 | 0.82 | 1 | 47 | * |
| GJ0589 | 2 | 15 35 20.5 | +17 42 47 | 1.258 | 259.4 | 47 | 70.30 | 2.10 | 1 | 66 | * |
| LHS3091 | 1 | 15 35 41.1 | +22 08 54 | 0.759 | 259.1 | 47 | 53.80 | 3.50 | 1 | 66 | * |
| GJ0592 | 1 | 15 36 58.6 | -14 08 02 | 0.756 | 214.7 | 70 | 74.90 | 3.80 | 1 | 66 | * |
| GJ1194 | 2 | 15 40 03.5 | +43 29 40 | 1.255 | 104.2 | 47 | 74.20 | 4.80 | 1 | 66 | * |
| SIP1540-2613 | 1 | 15 40 29.6 | -26 13 43 | 1.653 | 226.0 | 70 | 66.92 | 1.13 | 1 | 1 | * |
| GJ0597 | 2 | 15 41 16.5 | +75 59 34 | 1.096 | 132.5 | 27 | 74.61 | 1.98 | 2 | 66,67 | * |
| GJ0595 | 2 | 15 42 06.5 | -19 28 18 | 2.283 | 242.9 | 27 | 99.42 | 3.46 | 2 | 66,67 | * |
| GJ2116 | 1 | 15 43 18.3 | -20 15 33 | 1.173 | 195.3 | 70 | 46.73 | 1.17 | 1 | 30 | * |
| L408-123 | 2 | 15 45 41.6 | -43 30 29 | 0.467 | 215.1 | 70 | 52.71 | 1.02 | 1 | 1 | * |
| LHS3114 | 1 | 15 46 31.9 | -47 14 01 | 0.573 | 224.2 | 27 | 41.14 | 3.16 | 2 | 66,67 | * |
| SCR1546-5534 | 2 | 15 46 41.8 | -55 34 47 | 0.436 | 225.1 | 70 | 114.41 | 1.70 | 1 | 47 | * |
| LHS3117 | 2 | 15 47 24.6 | -10 53 47 | 0.521 | 225.7 | 70 | 66.21 | 3.18 | 1 | 67 | * |
| LHS3122 | 2 | 15 49 32.9 | +34 49 36 | 0.980 | 318.9 | 47 | 58.90 | 3.80 | 1 | 66 | * |
| G202-016 | 1 | 15 49 36.2 | +51 02 57 | 0.459 | 307.1 | 27 | 52.43 | 3.14 | 1 | 67 | * |
| LHS3124 | 1 | 15 51 21.0 | +29 31 06 | 0.494 | 206.5 | 47 | 53.18 | 1.89 | 1 | 1 | * |
| LHS5303 | 1 | 15 52 44.6 | -26 23 14 | 0.525 | 152.9 | 70 | 94.63 | 0.70 | 1 | 15 | * |
| LHS3129 | 2 | 15 53 08.7 | +34 44 39 | 0.565 | 154.2 | 47 | 44.66 | 2.33 | 2 | 66,66 | * |
| LHS3132 | 1 | 15 55 05.2 | +33 50 55 | 0.641 | 139.9 | 47 | 41.50 | 4.00 | 1 | 66 | * |
| LHS3142 | 1 | 15 59 51.0 | +14 59 50 | 0.879 | 209.0 | 47 | 40.00 | 5.10 | 1 | 66 | * |
| GJ0606 | 1 | 15 59 53.4 | -08 15 11 | 0.230 | 098.1 | 70 | 72.58 | 1.86 | 2 | 66,67 | * |
| SCR1601-3421 | 1 | 16 01 55.7 | -34 21 57 | 0.683 | 118.3 | 70 | 46.09 | 1.39 | 1 | 1 | * |

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|--------------|---|------------|-----------|-------|-------|----|---------------------|------|---|---------------|---|
| GJ0609 | 1 | 16 02 50.9 | +20 35 21 | 1.534 | 224.7 | 47 | 100.30 | 3.10 | 1 | 66 | * |
| LHS3149 | 1 | 16 04 20.0 | -06 16 46 | 0.884 | 185.8 | 70 | 59.70 | 4.40 | 1 | 66 | * |
| LP917-019 | 2 | 16 04 23.2 | -33 03 40 | 0.256 | 261.3 | 70 | 43.67 | 2.14 | 1 | 67 | |
| GJ1197 | 1 | 16 07 15.5 | +26 49 49 | 0.564 | 140.0 | 36 | 45.90 | 3.70 | 1 | 66 | * |
| 2MA1607-0442 | 1 | 16 07 31.2 | -04 42 10 | 0.462 | 176.5 | 70 | 63.90 | 1.47 | 1 | 15 | * |
| GJ1198 | 1 | 16 08 15.0 | -10 26 14 | 1.354 | 195.1 | 35 | 47.10 | 2.70 | 1 | 66 | * |
| HIP079126 | 1 | 16 09 03.1 | +52 56 37 | 0.215 | 072.9 | 27 | 59.07 | 1.04 | 1 | 67 | * |
| LP804-027 | 1 | 16 12 41.8 | -18 52 32 | 0.236 | 172.1 | 70 | 69.46 | 3.12 | 1 | 67 | * |
| LHS3167 | 1 | 16 13 05.9 | -70 09 08 | 0.607 | 202.1 | 49 | 60.25 | 0.95 | 1 | 49 | * |
| LHS3169 | 1 | 16 14 21.9 | -28 30 37 | 0.521 | 228.9 | 70 | 53.43 | 1.46 | 1 | 49 | * |
| GJ1200 | 1 | 16 14 28.7 | +19 06 04 | 2.033 | 280.0 | 36 | 55.90 | 3.30 | 1 | 66 | * |
| GJ0618 | 2 | 16 20 03.5 | -37 31 45 | 1.269 | 323.3 | 70 | 120.53 | 2.44 | 2 | 66,67 | * |
| GJ0618.4 | 1 | 16 22 41.0 | -48 39 20 | 0.729 | 230.7 | 70 | 42.14 | 3.35 | 2 | 66,67 | * |
| GJ0620 | 1 | 16 23 07.6 | -24 42 35 | 0.760 | 207.1 | 27 | 60.66 | 2.05 | 2 | 66,67 | * |
| GJ0623 | 2 | 16 24 09.3 | +48 21 10 | 1.230 | 111.5 | 27 | 126.12 | 1.15 | 3 | 66,40,55 | * |
| GJ0622 | 1 | 16 25 13.0 | -21 56 14 | 0.664 | 239.2 | 27 | 55.36 | 2.25 | 2 | 66,67 | * |
| GJ0625 | 1 | 16 25 24.6 | +54 18 14 | 0.468 | 111.8 | 27 | 153.14 | 0.92 | 2 | 66,67 | * |
| LHS3197 | 1 | 16 26 48.1 | -17 23 34 | 0.511 | 217.5 | 70 | 55.03 | 1.36 | 1 | 49 | * |
| SCR1626-3812 | 1 | 16 26 51.7 | -38 12 33 | 0.397 | 229.8 | 70 | 73.20 | 1.36 | 1 | 1 | * |
| GJ2120 | 1 | 16 27 33.2 | -10 00 29 | 0.397 | 214.5 | 70 | 43.72 | 3.13 | 1 | 67 | * |
| GJ2121 | 2 | 16 30 13.1 | -14 39 50 | 0.540 | 247.6 | 70 | 44.58 | 5.36 | 1 | 67 | * |
| GJ0628 | 1 | 16 30 18.1 | -12 39 45 | 1.188 | 184.3 | 27 | 234.38 | 1.50 | 2 | 66,67 | * |
| SCR1630-3633 | 2 | 16 30 27.2 | -36 33 56 | 0.369 | 262.2 | 70 | 65.51 | 1.59 | 1 | 1 | * |
| GJ1202 | 1 | 16 31 35.1 | +17 33 49 | 0.865 | 202.5 | 47 | 53.50 | 2.90 | 1 | 66 | * |
| GJ1203 | 1 | 16 32 45.1 | +12 36 45 | 0.779 | 259.7 | 27 | 55.62 | 2.53 | 2 | 66,67 | * |
| 2MA1632-0631 | 1 | 16 32 58.8 | -06 31 48 | 0.367 | 175.4 | 70 | 53.31 | 1.48 | 1 | 15 | * |
| LHS3218 | 1 | 16 35 24.6 | -27 18 55 | 0.889 | 180.7 | 49 | 53.88 | 0.77 | 1 | 49 | * |
| LHS0423 | 1 | 16 35 40.4 | -30 51 20 | 1.158 | 223.6 | 29 | 51.39 | 2.94 | 1 | 29 | * |
| GJ1204 | 1 | 16 36 05.3 | +08 48 34 | 0.557 | 254.0 | 36 | 65.20 | 4.20 | 1 | 66 | * |
| SCR1636-4041 | 1 | 16 36 57.6 | -40 41 09 | 0.284 | 192.6 | 70 | 46.35 | 1.45 | 1 | 1 | * |
| LHS5319 | 1 | 16 39 30.2 | +50 34 03 | 0.517 | 141.5 | 67 | 47.46 | 1.97 | 1 | 67 | * |
| LP625-034 | 1 | 16 40 05.7 | +00 42 05 | 0.261 | 129.7 | 47 | 89.00 | 2.30 | 1 | 66 | * |
| LP069-457 | 1 | 16 40 14.7 | +67 36 32 | 0.451 | 326.0 | 36 | 74.70 | 4.30 | 1 | 66 | * |
| GJ0633 | 1 | 16 40 45.3 | -45 59 59 | 0.520 | 139.6 | 70 | 59.80 | 1.19 | 2 | 49,66 | * |
| LTT14949 | 1 | 16 40 48.9 | +36 19 00 | 0.228 | 322.0 | 27 | 52.03 | 2.31 | 1 | 67 | * |
| GJ0634 | 1 | 16 41 28.3 | -43 59 11 | 0.591 | 215.1 | 70 | 57.40 | 6.60 | 1 | 66 | * |
| GJ2122 | 2 | 16 45 17.0 | -38 48 30 | 0.062 | 205.3 | 47 | 87.35 | 2.28 | 1 | 47 | * |
| LHS3240 | 1 | 16 46 13.7 | +16 28 40 | 0.581 | 216.5 | 67 | 62.50 | 2.95 | 2 | 66,67 | * |
| LHS3241 | 1 | 16 46 31.0 | +34 34 56 | 0.531 | 223.9 | 47 | 84.30 | 0.76 | 1 | 23 | * |
| LP154-205 | 1 | 16 47 55.2 | -65 09 12 | 0.330 | 115.0 | 38 | 67.52 | 0.91 | 1 | 1 | * |
| GJ0637 | 1 | 16 48 24.5 | -72 58 34 | 0.709 | 219.5 | 70 | 63.05 | 1.95 | 2 | 66,67 | * |
| LP806-008 | 1 | 16 48 46.0 | -15 44 20 | 0.212 | 176.1 | 70 | 54.86 | 2.18 | 1 | 67 | * |
| G169-029 | 1 | 16 50 57.0 | +22 26 48 | 0.401 | 006.1 | 47 | 96.61 | 1.18 | 1 | 47 | * |
| GJ0644 | 5 | 16 55 28.8 | -08 20 11 | 1.206 | 222.2 | 27 | 154.96 ^a | 0.52 | 5 | 9,59,66,66,67 | * |
| LTT06745 | 1 | 16 55 38.0 | -32 04 04 | 0.360 | 165.9 | 70 | 54.78 | 1.16 | 1 | 67 | * |
| SCR1656-2046 | 1 | 16 56 33.6 | -20 46 37 | 0.275 | 224.0 | 70 | 61.79 | 1.09 | 1 | 1 | * |
| GJ0645 | 1 | 16 56 45.1 | -37 03 39 | 0.469 | 198.0 | 38 | 58.30 | 9.00 | 1 | 66 | * |
| GJ1207 | 1 | 16 57 05.7 | -04 20 56 | 0.612 | 129.0 | 70 | 115.26 | 1.50 | 2 | 25,66 | * |
| GJ0649 | 1 | 16 58 08.8 | +25 44 39 | 0.520 | 192.6 | 27 | 97.28 | 1.32 | 2 | 66,67 | * |
| G139-003 | 2 | 16 58 25.0 | +13 58 06 | 0.400 | 275.6 | 47 | 70.90 | 2.06 | 1 | 1 | * |
| SCR1659-6958 | 1 | 16 59 28.1 | -69 58 18 | 0.721 | 207.0 | 70 | 48.86 | 0.89 | 1 | 1 | * |
| HIP083405 | 1 | 17 02 49.5 | -06 04 06 | 0.148 | 236.0 | 27 | 52.83 | 1.98 | 1 | 67 | * |
| LHS3262 | 1 | 17 03 25.4 | +51 25 21 | 0.624 | 011.9 | 47 | 105.40 | 2.50 | 1 | 66 | * |
| GJ1209 | 1 | 17 04 22.3 | +16 55 56 | 1.136 | 175.0 | 36 | 58.20 | 3.20 | 1 | 66 | * |
| GJ0655 | 1 | 17 07 07.4 | +21 33 14 | 0.466 | 266.6 | 67 | 71.28 | 2.11 | 2 | 66,67 | * |
| GJ1210 | 2 | 17 07 40.8 | +07 22 07 | 0.606 | 231.5 | 47 | 78.00 | 5.30 | 1 | 66 | * |
| UPM1710-5300 | 2 | 17 10 44.3 | -53 00 25 | 0.207 | 184.3 | 70 | 64.55 | 2.96 | 1 | 1 | * |
| L268-067 | 1 | 17 10 59.2 | -52 30 56 | 0.280 | 304.9 | 27 | 80.17 | 1.84 | 1 | 67 | * |
| LTT15087 | 1 | 17 11 34.7 | +38 26 33 | 0.214 | 104.5 | 27 | 83.31 | 1.98 | 1 | 67 | * |
| GJ0660 | 2 | 17 11 52.3 | -01 51 06 | 0.640 | 239.5 | 67 | 85.23 | 2.47 | 2 | 59,66 | * |
| GJ0661 | 2 | 17 12 07.9 | +45 39 57 | 1.592 | 170.9 | 27 | 156.32 | 1.28 | 2 | 66,59 | * |
| GJ0660.1 | 2 | 17 12 51.3 | -05 07 32 | 0.717 | 163.5 | 70 | 49.99 | 3.39 | 2 | 66,67 | * |
| GJ1212 | 2 | 17 13 40.5 | -08 25 15 | 0.591 | 227.0 | 70 | 54.68 | 4.43 | 2 | 66,67 | * |
| GJ1214 | 1 | 17 15 18.9 | +04 57 50 | 0.946 | 141.9 | 47 | 77.20 | 5.40 | 1 | 66 | * |

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|--------------|---|-------------|-----------|--------|-------|----|--------------------|------|---|-------------|---|
| L1205-067 | 1 | 17 16 00.6 | +11 03 27 | 0.373 | 201.7 | 27 | 56.20 | 2.26 | 1 | 67 | * |
| GJ2128 | 1 | 17 16 40.9 | +08 03 30 | 0.289 | 246.7 | 47 | 67.08 | 2.69 | 1 | 67 | * |
| GJ1215 | 3 | 17 17 42.9 | +11 39 45 | 0.565 | 225.9 | 47 | 78.70 | 3.30 | 1 | 66 | * |
| HIP084652 | 2 | 17 18 21.7 | -01 46 53 | 0.136 | 137.1 | 47 | 51.86 | 2.49 | 1 | 67 | * |
| GJ0671 | 1 | 17 19 52.7 | +41 42 49 | 0.872 | 160.9 | 27 | 80.36 | 1.55 | 2 | 66,67 | * |
| GJ0669 | 2 | 17 19 54.2 | +26 30 03 | 0.411 | 328.1 | 67 | 90.65 | 1.65 | 4 | 66,67,56,56 | * |
| GJ1216 | 1 | 17 20 46.3 | +49 15 20 | 1.304 | 156.0 | 36 | 58.60 | 4.90 | 1 | 66 | * |
| GJ0672.1 | 1 | 17 23 49.2 | -32 15 16 | 0.639 | 195.4 | 27 | 42.38 | 3.92 | 2 | 66,67 | * |
| GJ1219 | 1 | 17 27 39.9 | +14 29 02 | 1.191 | 253.4 | 47 | 50.10 | 2.60 | 1 | 66 | * |
| GJ1218 | 1 | 17 28 07.3 | -62 27 14 | 0.959 | 197.4 | 29 | 61.32 | 1.10 | 2 | 9,29 | * |
| SCR1728-0143 | 1 | 17 28 11.1 | -01 43 57 | 0.206 | 148.7 | 70 | 40.57 | 2.33 | 1 | 1 | * |
| GJ0674 | 1 | 17 28 39.9 | -46 53 43 | 1.060 | 153.8 | 70 | 220.11 | 1.39 | 2 | 66,67 | * |
| LHS3295 | 1 | 17 29 27.3 | -80 08 57 | 0.670 | 317.9 | 70 | 79.95 | 1.82 | 1 | 49 | * |
| GJ0676 | 2 | 17 30 11.2 | -51 38 13 | 0.321 | 228.4 | 70 | 61.32 | 1.60 | 2 | 66,67 | * |
| GJ0687.1 | 1 | 17 30 22.7 | +05 32 54 | 0.252 | 173.5 | 27 | 100.57 | 1.04 | 2 | 66,67 | * |
| SCR1731-2452 | 1 | 17 31 03.8 | -24 52 44 | 0.198 | 217.6 | 70 | 40.16 | 1.50 | 1 | 1 | * |
| GJ1220 | 1 | 17 31 07.4 | +82 05 53 | 0.572 | 326.9 | 47 | 70.90 | 3.40 | 1 | 66 | * |
| 2MA1731+2721 | 1 | 17 31 29.7 | +27 21 23 | 0.262 | 200.9 | 47 | 87.75 | 2.37 | 1 | 47 | * |
| GJ0680 | 1 | 17 35 13.6 | -48 40 51 | 0.456 | 006.2 | 27 | 102.15 | 2.70 | 2 | 66,67 | * |
| GJ0687 | 1 | 17 36 25.9 | +68 20 20 | 1.310 | 194.2 | 27 | 220.47 | 0.83 | 2 | 66,67 | * |
| GJ0682 | 2 | 17 37 03.7 | -44 19 09 | 1.177 | 217.1 | 27 | 198.09 | 2.06 | 2 | 66,67 | * |
| GJ0686 | 1 | 17 37 53.3 | +18 35 30 | 1.350 | 043.3 | 27 | 124.21 | 1.48 | 2 | 66,67 | * |
| L204-148 | 1 | 17 38 32.5 | -58 32 34 | 0.305 | 169.2 | 70 | 62.99 | 1.29 | 1 | 1 | * |
| L1422-016 | 3 | 17 39 30.7 | +27 45 44 | 0.202 | 176.4 | 27 | 40.05 | 2.46 | 1 | 67 | * |
| LHS3315 | 1 | 17 42 10.8 | -08 49 00 | 0.972 | 237.9 | 70 | 42.90 | 3.20 | 1 | 66 | * |
| GJ0690.1 | 1 | 17 42 32.3 | -16 38 25 | 0.656 | 191.4 | 35 | 51.50 | 5.20 | 1 | 66 | * |
| G140-009 | 2 | 17 43 00.8 | +05 47 21 | 0.249 | 104.9 | 27 | 50.09 | 2.48 | 1 | 67 | * |
| GJ0694 | 1 | 17 43 55.9 | +43 22 43 | 0.602 | 179.0 | 27 | 105.04 | 1.13 | 2 | 66,67 | * |
| GJ0694.2 | 2 | 17 45 33.5 | +46 51 19 | 0.029 | 310.6 | 27 | 46.58 | 1.09 | 2 | 66,67 | * |
| LHS3324 | 1 | 17 46 05.8 | +24 39 31 | 0.600 | 327.0 | 36 | 68.70 | 2.40 | 1 | 66 | * |
| GJ2130 | 3 | 17 46 12.8 | -32 06 09 | 0.278 | 196.2 | 25 | 70.60 ^a | 1.59 | 3 | 17,25,2 | * |
| LTT07077 | 1 | 17 46 29.4 | -08 42 37 | 0.453 | 183.4 | 70 | 77.18 | 1.71 | 1 | 1 | * |
| GJ0693 | 1 | 17 46 34.2 | -57 19 09 | 1.711 | 218.0 | 70 | 171.10 | 2.22 | 2 | 66,67 | * |
| SCR1746-3214 | 1 | 17 46 40.7 | -32 14 04 | 0.240 | 062.2 | 70 | 86.54 | 1.39 | 1 | 1 | * |
| LHS3332 | 1 | 17 49 56.1 | +22 40 56 | 0.780 | 259.0 | 36 | 67.90 | 5.60 | 1 | 66 | * |
| LHS3333 | 1 | 17 50 13.9 | +23 46 16 | 0.574 | 322.8 | 47 | 44.80 | 4.10 | 1 | 66 | * |
| GJ1222 | 1 | 17 54 17.1 | +07 22 45 | 0.668 | 242.0 | 36 | 60.00 | 3.70 | 1 | 66 | * |
| LHS3339 | 1 | 17 55 36.2 | +58 25 04 | 0.879 | 017.0 | 36 | 46.40 | 1.00 | 1 | 66 | * |
| L415-082 | 1 | 17 57 14.2 | -41 59 29 | 0.353 | 188.5 | 70 | 58.32 | 1.14 | 1 | 1 | * |
| LP044-162 | 1 | 17 57 15.0 | +70 42 01 | 0.289 | 358.5 | 47 | 52.40 | 1.10 | 1 | 34 | * |
| BARNARDS | 1 | 17 57 48.5 | +04 41 36 | 10.308 | 355.6 | 27 | 545.51 | 0.29 | 3 | 66,67,4 | * |
| LHS3343 | 2 | 17 57 50.9 | +46 35 19 | 0.580 | 358.4 | 67 | 69.99 | 1.44 | 3 | 66,67,58 | * |
| GJ1223 | 1 | 18 02 46.3 | +37 31 03 | 1.202 | 175.9 | 47 | 83.50 | 3.90 | 1 | 66 | * |
| G154-043 | 2 | 18 03 36.1 | -18 58 51 | 0.395 | 141.8 | 70 | 77.19 | 1.90 | 1 | 1 | * |
| G182-037 | 2 | 18 04 17.5 | +35 57 25 | 0.278 | 162.8 | 27 | 47.26 | 1.71 | 1 | 67 | * |
| GJ0701 | 1 | 18 05 07.6 | -03 01 53 | 0.662 | 120.3 | 27 | 128.72 | 1.36 | 2 | 66,67 | * |
| GJ1224 | 1 | 18 07 32.9 | -15 57 47 | 0.702 | 241.0 | 51 | 126.99 | 1.01 | 2 | 51,66 | * |
| LP334-011 | 1 | 18 09 40.7 | +31 52 12 | 0.205 | 014.6 | 27 | 46.59 | 3.22 | 1 | 67 | * |
| L043-072 | 2 | 18 11 15.3 | -78 59 23 | 0.279 | 020.0 | 38 | 89.27 | 1.99 | 1 | 1 | * |
| LP390-016 | 1 | 18 13 06.57 | +26 01 51 | 0.221 | 279.4 | 56 | 58.20 | 2.30 | 1 | 56 | * |
| LHS3370 | 1 | 18 13 52.9 | -77 08 21 | 0.775 | 195.9 | 70 | 42.85 | 4.25 | 1 | 10 | * |
| LTT15403 | 1 | 18 15 43.5 | +18 56 19 | 0.432 | 185.1 | 27 | 43.86 | 2.36 | 2 | 66,67 | * |
| GJ0708.3 | 1 | 18 16 18.2 | +01 31 27 | 0.771 | 211.0 | 36 | 60.10 | 7.20 | 1 | 66 | * |
| GJ0709 | 1 | 18 16 31.0 | +45 33 28 | 0.335 | 357.8 | 27 | 58.74 | 1.04 | 2 | 66,67 | * |
| GJ1225 | 1 | 18 17 15.0 | +68 33 19 | 1.704 | 202.7 | 47 | 53.70 | 3.30 | 1 | 66 | * |
| LHS0462 | 2 | 18 18 02.7 | +38 45 19 | 1.091 | 198.0 | 36 | 88.40 | 3.60 | 1 | 66 | * |
| LHS3376 | 1 | 18 19 02.8 | +66 11 07 | 0.623 | 131.0 | 36 | 137.50 | 5.30 | 1 | 66 | * |
| GJ0712 | 1 | 18 22 06.7 | +06 20 38 | 1.158 | 273.0 | 36 | 68.90 | 2.20 | 1 | 66 | * |
| GJ1227 | 1 | 18 22 27.1 | +62 03 02 | 1.578 | 218.8 | 47 | 121.50 | 2.20 | 1 | 66 | * |
| LTT15449 | 1 | 18 25 04.7 | +24 38 04 | 0.448 | 185.4 | 27 | 45.77 | 1.92 | 1 | 67 | * |
| LHS3385 | 1 | 18 25 31.9 | +38 21 12 | 0.748 | 185.9 | 67 | 40.80 | 1.81 | 2 | 66,67 | * |
| LP630-081 | 1 | 18 26 17.0 | +01 46 21 | 0.332 | 330.7 | 47 | 53.50 | 2.00 | 1 | 34 | * |
| WT0562 | 1 | 18 26 19.8 | -65 47 41 | 0.640 | 177.5 | 70 | 58.43 | 0.90 | 1 | 49 | * |
| SCR1826-6542 | 1 | 18 26 46.8 | -65 42 40 | 0.311 | 179.0 | 70 | 66.36 | 0.77 | 1 | 1 | * |

| | | | | | | | | | | | |
|--------------|---|------------|-----------|-------|-------|----|--------|------|---|-------------|---|
| GJ0714 | 1 | 18 30 12.0 | -58 16 28 | 0.476 | 176.9 | 70 | 68.99 | 2.65 | 1 | 1 | |
| GJ0720 | 2 | 18 35 18.3 | +45 44 38 | 0.578 | 050.9 | 27 | 64.79 | 0.86 | 2 | 66,67 | * |
| 2MA1835+3259 | 1 | 18 35 38.0 | +32 59 54 | 0.783 | 184.5 | 47 | 176.50 | 0.50 | 1 | 48 | * |
| G141-021 | 1 | 18 36 19.0 | +13 36 30 | 0.339 | 034.0 | 47 | 86.11 | 2.01 | 1 | 1 | * |
| GJ2138 | 2 | 18 38 44.8 | -14 29 26 | 0.582 | 168.8 | 27 | 77.60 | 2.79 | 1 | 67 | * |
| LP335-012 | 1 | 18 39 33.0 | +29 52 17 | 0.228 | 159.0 | 36 | 84.07 | 0.93 | 2 | 23,34 | * |
| LP044-334 | 1 | 18 40 02.0 | +72 40 54 | 0.192 | 351 | 36 | 59.30 | 2.20 | 1 | 34 | * |
| GJ0723 | 1 | 18 40 17.8 | -10 27 55 | 0.552 | 198.0 | 27 | 46.12 | 5.81 | 2 | 66,67 | * |
| GJ0724 | 1 | 18 40 57.3 | -13 22 47 | 0.677 | 187.9 | 27 | 60.56 | 1.99 | 2 | 66,67 | * |
| GJ1230 | 3 | 18 41 09.4 | +24 47 15 | 0.482 | 082.1 | 47 | 120.90 | 7.20 | 1 | 66 | * |
| SCR1841-4347 | 1 | 18 41 09.8 | -43 47 33 | 0.854 | 265.4 | 70 | 82.25 | 0.67 | 1 | 1 | * |
| LTT15513 | 1 | 18 41 59.0 | +31 49 49 | 0.303 | 271.6 | 27 | 87.89 | 2.58 | 2 | 66,67 | * |
| G141-029 | 1 | 18 42 45.0 | +13 54 24 | 0.361 | 354.6 | 51 | 90.09 | 1.91 | 1 | 51 | * |
| GJ0725 | 2 | 18 42 46.6 | +59 37 49 | 2.245 | 323.6 | 67 | 283.83 | 1.46 | 3 | 66,67,67 | * |
| LHS5341 | 1 | 18 43 07.0 | -54 36 48 | 0.499 | 197.0 | 35 | 102.91 | 1.20 | 1 | 47 | * |
| LTT07419 | 2 | 18 43 12.5 | -33 22 46 | 0.394 | 203.3 | 9 | 66.30 | 1.48 | 3 | 10,1,1 | * |
| LHS3406 | 1 | 18 43 21.7 | +40 40 54 | 0.598 | 345.7 | 47 | 70.70 | 0.80 | 1 | 66 | * |
| SCR1845-6357 | 2 | 18 45 05.3 | -63 57 48 | 2.664 | 076.6 | 25 | 259.50 | 1.11 | 2 | 14,25 | * |
| LHS3409 | 1 | 18 45 44.0 | +52 28 20 | 0.843 | 299.0 | 36 | 49.20 | 1.30 | 1 | 66 | * |
| LTT07434 | 2 | 18 45 57.5 | -28 55 53 | 0.424 | 130.7 | 70 | 61.16 | 1.34 | 1 | 1 | * |
| SCR1848-6855 | 2 | 18 48 21.0 | -68 55 34 | 1.281 | 195.7 | 31 | 40.63 | 0.72 | 1 | 31 | * |
| SIP1848-8214 | 1 | 18 48 51.1 | -82 14 42 | 0.274 | 189.6 | 70 | 56.52 | 1.56 | 1 | 1 | * |
| GJ0729 | 1 | 18 49 49.4 | -23 50 11 | 0.643 | 107.8 | 70 | 337.22 | 1.97 | 2 | 66,67 | * |
| LHS3413 | 1 | 18 49 51.2 | -57 26 49 | 0.634 | 257.0 | 70 | 82.21 | 2.01 | 1 | 49 | * |
| GJ0730 | 1 | 18 50 00.8 | +03 05 17 | 0.448 | 204.1 | 27 | 48.31 | 2.02 | 2 | 66,67 | * |
| HIP092451 | 1 | 18 50 26.6 | -62 03 03 | 0.108 | 056.5 | 27 | 61.75 | 2.07 | 1 | 67 | * |
| GJ0731 | 1 | 18 51 51.1 | +16 34 59 | 0.533 | 205.1 | 27 | 65.58 | 1.56 | 2 | 66,67 | * |
| GJ0735 | 2 | 18 55 27.4 | +08 24 09 | 0.120 | 128.4 | 27 | 85.04 | 1.45 | 2 | 66,67 | * |
| SCR1855-6914 | 1 | 18 55 47.9 | -69 14 15 | 0.885 | 146.1 | 70 | 86.44 | 0.65 | 1 | 1 | * |
| GJ0737 | 2 | 18 57 30.6 | -55 59 30 | 0.450 | 180.4 | 27 | 80.84 | 1.89 | 2 | 66,67 | * |
| GJ0740 | 1 | 18 58 00.1 | +05 54 29 | 1.235 | 189.1 | 27 | 91.73 | 1.50 | 2 | 66,67 | * |
| GJ0739 | 1 | 18 59 07.5 | -48 16 28 | 0.516 | 163.5 | 27 | 70.48 | 2.40 | 3 | 66,66,67 | * |
| GJ0741 | 1 | 19 03 16.7 | -13 34 05 | 0.780 | 226.0 | 37 | 52.40 | 3.80 | 1 | 66 | * |
| GJ0745 | 2 | 19 07 05.5 | +20 53 17 | 0.584 | 235.2 | 27 | 115.45 | 1.51 | 3 | 66,67,67 | * |
| GJ0747 | 2 | 19 07 43.0 | +32 32 41 | 1.679 | 048.9 | 47 | 122.30 | 2.50 | 1 | 66 | * |
| GJ1231 | 1 | 19 08 15.8 | +26 35 06 | 0.539 | 203.0 | 36 | 57.80 | 3.30 | 1 | 66 | * |
| GJ1232 | 1 | 19 09 50.9 | +17 40 06 | 0.740 | 227.0 | 36 | 93.60 | 2.80 | 1 | 66 | * |
| GJ0748 | 2 | 19 12 14.6 | +02 53 11 | 1.863 | 106.2 | 27 | 98.05 | 0.39 | 3 | 66,39,6 | * |
| GJ0747.4 | 1 | 19 12 25.3 | -55 52 08 | 0.302 | 240.6 | 70 | 46.66 | 3.19 | 2 | 66,67 | * |
| G207-022 | 1 | 19 12 30.4 | +35 33 35 | 0.261 | 113.2 | 47 | 58.30 | 2.90 | 1 | 66 | * |
| LHS3443 | 1 | 19 13 08.0 | -39 01 54 | 0.506 | 120.1 | 70 | 48.57 | 1.14 | 1 | 49 | * |
| LHS3445 | 2 | 19 14 39.1 | +19 19 03 | 0.748 | 305.0 | 27 | 53.72 | 1.73 | 3 | 66,67,58 | * |
| GJ0750 | 2 | 19 16 42.9 | -45 53 22 | 0.465 | 152.3 | 67 | 64.50 | 1.86 | 2 | 59,66 | * |
| GJ0752 | 2 | 19 16 55.2 | +05 10 08 | 1.454 | 203.4 | 27 | 171.20 | 0.50 | 4 | 66,67,64,46 | * |
| GJ0754 | 1 | 19 20 48.0 | -45 33 30 | 2.961 | 167.5 | 29 | 169.17 | 1.53 | 2 | 29,66 | * |
| LHS0475 | 1 | 19 20 54.3 | -82 33 16 | 1.269 | 164.8 | 70 | 83.04 | 0.93 | 1 | 30 | * |
| GJ1235 | 1 | 19 21 38.7 | +20 52 03 | 1.751 | 213.0 | 36 | 100.10 | 3.50 | 1 | 66 | * |
| GJ0756 | 1 | 19 21 51.4 | +28 39 58 | 0.907 | 073.7 | 27 | 44.51 | 2.58 | 2 | 66,67 | * |
| GJ1236 | 1 | 19 22 02.0 | +07 02 31 | 0.836 | 242.0 | 36 | 92.90 | 2.50 | 1 | 66 | * |
| LHS3459 | 1 | 19 22 40.0 | +29 25 15 | 0.704 | 180.0 | 36 | 47.30 | 4.10 | 1 | 66 | * |
| GJ1238 | 1 | 19 24 16.3 | +75 33 12 | 0.711 | 033.7 | 47 | 90.30 | 5.10 | 1 | 66 | * |
| G185-023 | 1 | 19 26 02.0 | +24 26 17 | 0.227 | 056.3 | 47 | 52.80 | 1.50 | 1 | 34 | * |
| LHS5348 | 2 | 19 27 52.7 | -28 11 15 | 0.509 | 170.5 | 70 | 78.65 | 1.32 | 1 | 1 | * |
| SCR1931-0306 | 1 | 19 31 04.6 | -03 06 18 | 0.505 | 023.4 | 70 | 57.19 | 0.59 | 1 | 1 | * |
| LHS3472 | 1 | 19 34 57.6 | +53 15 06 | 0.564 | 037.8 | 47 | 72.10 | 7.30 | 1 | 66 | * |
| LTT18490 | 1 | 19 39 32.8 | +71 52 19 | 0.483 | 202.9 | 27 | 44.96 | 1.27 | 2 | 66,67 | * |
| LP869-042 | 1 | 19 39 36.2 | -26 45 07 | 0.440 | 132.6 | 70 | 43.07 | 1.92 | 1 | 67 | * |
| GJ1242 | 1 | 19 41 54.2 | +03 09 16 | 0.536 | 210.0 | 36 | 43.00 | 2.60 | 1 | 66 | * |
| LP869-019 | 1 | 19 42 00.7 | -21 04 06 | 0.306 | 164.4 | 70 | 53.81 | 1.59 | 1 | 47 | * |
| SCR1942-2045 | 1 | 19 42 12.8 | -20 45 48 | 0.162 | 184.3 | 47 | 62.75 | 0.90 | 2 | 56,51 | * |
| LP869-026 | 2 | 19 44 53.8 | -23 37 59 | 0.410 | 115.8 | 70 | 67.87 | 1.10 | 1 | 47 | * |
| GJ0766 | 2 | 19 45 45.5 | +27 07 32 | 1.226 | 182.0 | 36 | 93.06 | 3.74 | 2 | 66,59 | * |
| LTT15769 | 2 | 19 45 49.7 | +32 23 13 | 0.442 | 063.4 | 27 | 82.19 | 3.36 | 2 | 66,17 | * |
| GJ0767 | 2 | 19 46 24.3 | +32 00 57 | 0.602 | 129.9 | 67 | 72.98 | 1.22 | 3 | 66,67,58 | * |

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|---------------|---|------------|-----------|-------|-------|----|---------------------|------|---|-------------------|---|
| WT2180 | 1 | 19 48 22.0 | -08 22 52 | 0.546 | 228.3 | 47 | 53.76 | 2.25 | 1 | 9 | * |
| LHS3489 | 2 | 19 50 04.4 | +32 35 22 | 0.526 | 062.0 | 36 | 58.80 | 3.40 | 1 | 66 | * |
| GJ1243 | 1 | 19 51 09.3 | +46 29 00 | 0.304 | 030.6 | 47 | 84.10 | 2.40 | 1 | 66 | * |
| 2MA1951-3510 | 2 | 19 51 35.9 | -35 10 38 | 0.373 | 078.4 | 70 | 93.06 | 3.48 | 1 | 1 | * |
| GJ1245 | 3 | 19 53 54.4 | +44 24 54 | 0.707 | 140.7 | 47 | 220.68 | 0.97 | 2 | 66,58 | * |
| LHS3499 | 1 | 19 55 52.8 | +51 16 22 | 0.582 | 053.9 | 27 | 40.38 | 2.31 | 2 | 66,67 | * |
| LHS3505 | 1 | 19 58 13.5 | +02 01 25 | 0.864 | 201.0 | 36 | 63.40 | 3.80 | 1 | 66 | * |
| GJ1248 | 1 | 20 03 51.0 | +05 59 44 | 0.922 | 212.0 | 36 | 79.50 | 4.00 | 1 | 66 | * |
| GJ0774 | 2 | 20 04 04.7 | -65 36 01 | 0.856 | 170.9 | 70 | 76.12 | 6.36 | 2 | 17,66 | * |
| LP870-065 | 1 | 20 04 30.8 | -23 42 02 | 0.377 | 155.9 | 70 | 55.00 | 1.60 | 1 | 47 | * |
| GJ0781.1 | 2 | 20 07 45.0 | -31 45 14 | 0.807 | 158.9 | 27 | 64.20 | 4.56 | 2 | 66,67 | * |
| GJ1250 | 2 | 20 08 17.9 | +33 18 13 | 0.488 | 039.0 | 36 | 46.20 | 5.40 | 1 | 66 | * |
| 2MA2009-0113 | 1 | 20 09 18.2 | -01 13 38 | 0.395 | 185.8 | 70 | 95.95 | 1.54 | 1 | 51 | * |
| GJ0784 | 1 | 20 13 53.4 | -45 09 51 | 0.760 | 094.1 | 70 | 161.35 | 0.99 | 2 | 66,67 | * |
| SCR2016-7531 | 1 | 20 16 11.3 | -75 31 05 | 0.253 | 081.3 | 70 | 66.60 | 1.44 | 1 | 1 | * |
| LEHPM2-0783 | 1 | 20 19 49.8 | -58 16 43 | 0.347 | 181.9 | 70 | 61.93 | 1.02 | 1 | 51 | * |
| GJ0788.1 | 1 | 20 22 41.9 | -58 17 09 | 0.862 | 122.4 | 70 | 51.51 | 1.88 | 2 | 66,67 | * |
| GJ1253 | 1 | 20 26 05.3 | +58 34 23 | 0.606 | 024.0 | 36 | 107.50 | 3.60 | 1 | 66 | * |
| GJ0791 | 1 | 20 27 41.7 | -27 44 52 | 0.925 | 193.8 | 70 | 68.25 | 2.88 | 2 | 66,67 | * |
| GJ1252 | 1 | 20 27 42.1 | -56 27 25 | 1.299 | 161.3 | 29 | 50.53 | 2.14 | 1 | 29 | * |
| GJ1251 | 1 | 20 28 03.7 | -76 40 16 | 1.427 | 149.6 | 29 | 79.02 | 2.25 | 1 | 29 | * |
| L755-019 | 1 | 20 28 43.6 | -11 28 31 | 0.186 | 117.6 | 70 | 53.18 | 1.67 | 1 | 51 | * |
| GJ0791.2 | 2 | 20 29 48.3 | +09 41 20 | 0.685 | 080.0 | 36 | 112.92 | 0.30 | 2 | 66,5 | * |
| GJ0793 | 1 | 20 30 32.0 | +65 26 58 | 0.528 | 057.7 | 27 | 124.63 | 1.02 | 2 | 66,67 | * |
| GJ0792 | 2 | 20 31 25.6 | +38 33 44 | 0.743 | 017.0 | 36 | 67.10 | 2.80 | 1 | 66 | * |
| LEHPM2-1265 | 2 | 20 33 01.9 | -49 03 11 | 0.261 | 150.4 | 70 | 59.74 | 1.18 | 1 | 1 | * |
| GJ1254 | 1 | 20 33 40.3 | +61 45 14 | 1.028 | 027.2 | 47 | 63.00 | 2.70 | 1 | 66 | * |
| LHS3564 | 1 | 20 34 43.0 | +03 20 51 | 0.533 | 144.0 | 27 | 47.04 | 2.06 | 2 | 66,67 | * |
| SCR2036-3607 | 1 | 20 36 08.3 | -36 07 12 | 0.051 | 007.3 | 51 | 62.13 | 1.40 | 1 | 51 | * |
| LHS3566 | 1 | 20 39 23.8 | -29 26 35 | 0.808 | 155.6 | 70 | 57.26 | 2.68 | 1 | 9 | * |
| GJ1256 | 1 | 20 40 33.9 | +15 29 59 | 1.471 | 063.1 | 47 | 102.00 | 2.20 | 1 | 66 | * |
| GJ0800 | 1 | 20 42 57.2 | -18 55 06 | 1.016 | 146.1 | 35 | 56.62 | 2.29 | 2 | 66,67 | * |
| GJ0802 | 3 | 20 43 19.3 | +55 20 53 | 1.941 | 28.5 | 47 | 63.00 | 5.50 | 1 | 66 | * |
| G262-026 | 1 | 20 43 41.3 | +64 16 54 | 0.321 | 107.0 | 27 | 47.32 | 1.66 | 1 | 67 | * |
| GJ0806 | 1 | 20 45 04.1 | +44 29 56 | 0.510 | 058.2 | 27 | 81.75 | 1.36 | 2 | 66,67 | * |
| GJ0803 | 3 | 20 45 09.5 | -31 20 27 | 0.451 | 130.9 | 70 | 100.97 ^a | 1.00 | 6 | 66,66,51,51,67,67 | * |
| LHS3583 | 1 | 20 46 37.1 | -81 43 14 | 0.732 | 137.0 | 70 | 94.72 | 2.38 | 1 | 49 | * |
| LP756-003 | 1 | 20 46 43.6 | -11 48 13 | 0.360 | 098.8 | 70 | 53.50 | 1.30 | 1 | 56 | * |
| SCR2049-4012 | 1 | 20 49 10.0 | -40 12 06 | 0.066 | 290.3 | 47 | 109.43 | 1.52 | 1 | 47 | * |
| GJ0808 | 1 | 20 51 41.6 | -79 18 40 | 1.234 | 142.4 | 70 | 57.12 | 2.09 | 2 | 30,66 | * |
| LP816-060 | 1 | 20 52 33.0 | -16 58 29 | 0.308 | 275.7 | 27 | 175.03 | 3.40 | 1 | 67 | * |
| 2MA2053-0133 | 1 | 20 53 09.1 | -01 33 04 | 0.416 | 121.6 | 42 | 55.00 | 2.00 | 1 | 56 | * |
| GJ0809 | 1 | 20 53 19.7 | +62 09 15 | 0.775 | 179.9 | 27 | 141.61 | 0.63 | 2 | 66,67 | * |
| LHS3593 | 1 | 20 53 33.2 | +10 36 37 | 0.674 | 229.0 | 47 | 71.90 | 2.80 | 1 | 66 | * |
| GJ0810 | 3 | 20 55 37.8 | -14 02 08 | 1.298 | 108.2 | 29 | 77.65 ^a | 0.85 | 3 | 30,30,66 | * |
| GJ0811.1 | 1 | 20 56 46.6 | -10 26 55 | 1.131 | 182.1 | 27 | 63.00 | 2.95 | 2 | 66,67 | * |
| GJ0813 | 1 | 20 57 25.3 | +22 21 45 | 0.800 | 105.4 | 27 | 73.06 | 2.74 | 2 | 66,67 | * |
| LTT16135 | 1 | 20 58 41.9 | +34 16 27 | 0.323 | 116.7 | 27 | 41.49 | 2.24 | 1 | 67 | * |
| GJ0815 | 3 | 21 00 05.3 | +40 04 13 | 0.662 | 111.9 | 27 | 66.55 | 1.58 | 2 | 66,59 | * |
| USN2101+0307 | 2 | 21 01 04.8 | +03 07 04 | 1.004 | 091.9 | 47 | 57.82 | 2.04 | 1 | 47 | * |
| GJ0816 | 1 | 21 01 58.6 | -06 19 08 | 0.482 | 205.0 | 70 | 69.64 | 2.58 | 2 | 66,67 | * |
| GJ2151 | 1 | 21 03 13.9 | -56 57 48 | 0.466 | 316.1 | 70 | 75.03 | 5.60 | 2 | 66,67 | * |
| GJ0817 | 1 | 21 04 53.4 | -16 57 32 | 2.234 | 204.2 | 27 | 55.80 | 2.53 | 2 | 66,67 | * |
| LEHPM2-0801 | 1 | 21 05 13.8 | -55 03 56 | 0.334 | 171.0 | 70 | 67.80 | 1.47 | 1 | 1 | * |
| LHS0064 | 2 | 21 07 46.5 | +59 41 13 | 2.098 | 209.0 | 36 | 41.80 | 2.70 | 1 | 66 | * |
| GJ0821 | 1 | 21 09 17.4 | -13 18 09 | 2.118 | 160.3 | 27 | 81.97 | 1.90 | 2 | 66,67 | * |
| LHS3639 | 1 | 21 11 49.6 | -43 36 49 | 0.741 | 161.7 | 70 | 63.34 | 3.41 | 2 | 66,67 | * |
| LTT16240 | 3 | 21 16 05.8 | +29 51 51 | 0.183 | 086.5 | 47 | 51.55 | 2.12 | 2 | 56,56 | * |
| LP397-010 | 1 | 21 16 06.0 | +22 38 47 | 0.179 | 017.4 | 47 | 48.43 | 1.07 | 1 | 23 | * |
| GJ0825 | 1 | 21 17 15.3 | -38 52 03 | 3.453 | 250.5 | 35 | 253.44 | 0.80 | 2 | 66,67 | * |
| L117-123 | 1 | 21 20 09.8 | -67 39 06 | 0.455 | 280.9 | 70 | 48.07 | 2.13 | 3 | 66,66,67 | * |
| SCR2122-4314 | 1 | 21 22 16.9 | -43 14 05 | 0.262 | 184.7 | 70 | 48.77 | 1.68 | 1 | 1 | * |
| GJ0826.2 | 1 | 21 24 18.4 | -46 41 35 | 0.739 | 094.0 | 27 | 40.75 | 4.40 | 2 | 66,67 | * |
| LSPM2124+4003 | 1 | 21 24 32.0 | +40 04 00 | 0.694 | 086.9 | 33 | 66.69 | 1.32 | 1 | 23 | * |

| | | | | | | | | | | | |
|---------------|---|------------|-----------|-------|-------|----|--------------------|------|---|----------|---|
| APM2127-3844 | 1 | 21 27 04.6 | -38 44 51 | 0.927 | 142.6 | 70 | 49.25 | 1.38 | 1 | 49 | * |
| GJ0828.2 | 1 | 21 27 16.9 | -06 50 39 | 0.417 | 174.7 | 70 | 60.92 | 2.35 | 2 | 66,67 | * |
| HB2124-4228 | 1 | 21 27 26.1 | -42 15 18 | 0.191 | 132.5 | 70 | 42.30 | 3.60 | 1 | 66 | * |
| LHS3677 | 1 | 21 27 46.6 | +07 17 16 | 0.652 | 199.5 | 47 | 40.70 | 5.90 | 1 | 66 | * |
| L714-046 | 1 | 21 28 18.3 | -22 18 32 | 0.343 | 218.3 | 70 | 51.83 | 1.51 | 1 | 1 | * |
| GJ0829 | 2 | 21 29 36.8 | +17 38 35 | 1.078 | 069.6 | 27 | 149.01 | 1.69 | 2 | 66,67 | * |
| SCR2130-7710 | 1 | 21 30 07.0 | -77 10 38 | 0.589 | 118.0 | 60 | 47.61 | 1.30 | 1 | 1 | * |
| LHS0510 | 1 | 21 30 47.7 | -40 42 30 | 1.759 | 143.4 | 70 | 83.60 | 2.52 | 1 | 29 | * |
| GJ0831 | 2 | 21 31 18.6 | -09 47 26 | 1.163 | 092.7 | 27 | 125.12 | 2.15 | 2 | 66,67 | * |
| GJ0832 | 1 | 21 33 34.0 | -49 00 33 | 0.800 | 183.9 | 35 | 202.03 | 1.00 | 2 | 66,67 | * |
| LHS3686 | 2 | 21 33 50.2 | +01 46 15 | 0.669 | 181.0 | 36 | 68.60 | 5.60 | 1 | 66 | * |
| LHS3693 | 1 | 21 34 50.3 | +51 32 13 | 0.552 | 055.9 | 67 | 55.90 | 2.43 | 2 | 66,67 | * |
| WT0795 | 1 | 21 36 25.3 | -44 01 00 | 0.827 | 144.4 | 49 | 69.53 | 0.70 | 1 | 49 | * |
| HIP106803 | 1 | 21 37 55.7 | -63 42 43 | 0.190 | 245.0 | 70 | 47.06 | 2.55 | 1 | 67 | * |
| GJ0835 | 2 | 21 38 00.3 | +27 43 25 | 0.465 | 096.0 | 27 | 78.20 | 2.10 | 1 | 59 | * |
| LHS0512 | 1 | 21 38 43.7 | -33 39 55 | 1.160 | 117.4 | 70 | 82.02 | 2.10 | 1 | 29 | * |
| LTT16329 | 2 | 21 39 54.3 | +27 36 43 | 0.363 | 129.4 | 27 | 40.93 | 3.05 | 1 | 67 | * |
| LTT18537 | 1 | 21 44 12.9 | +06 38 29 | 0.401 | 231.2 | 47 | 48.03 | 3.24 | 2 | 66,67 | * |
| GJ1263 | 2 | 21 46 42.7 | -00 10 24 | 0.944 | 121.8 | 70 | 83.50 | 3.90 | 1 | 66 | * |
| L002-077 | 1 | 21 46 42.7 | -85 43 05 | 0.298 | 128.6 | 1 | 63.40 | 1.87 | 1 | 1 | * |
| LTT16369 | 1 | 21 46 56.0 | +46 38 06 | 0.295 | 089.0 | 36 | 60.50 | 0.80 | 1 | 46 | * |
| LHS3711 | 1 | 21 47 53.7 | +50 15 16 | 0.823 | 058.0 | 36 | 46.70 | 6.00 | 1 | 66 | * |
| LHS3713 | 1 | 21 48 14.3 | +27 54 56 | 0.708 | 196.0 | 36 | 54.80 | 4.40 | 1 | 66 | * |
| GJ1264 | 2 | 21 49 05.9 | -72 06 08 | 0.459 | 127.4 | 70 | 61.29 | 1.54 | 1 | 67 | * |
| LHS3719 | 1 | 21 49 25.9 | -63 06 52 | 0.558 | 038.3 | 70 | 60.28 | 1.37 | 1 | 49 | * |
| LHS0516 | 1 | 21 56 55.3 | -01 54 09 | 1.417 | 064.9 | 70 | 74.80 | 3.20 | 1 | 66 | * |
| LTT16412 | 1 | 21 57 26.2 | +08 08 13 | 0.387 | 075.1 | 27 | 47.24 | 1.66 | 3 | 66,67,28 | * |
| GJ0842.2 | 1 | 21 58 24.5 | +75 35 20 | 0.233 | 083.9 | 27 | 48.49 | 1.06 | 2 | 66,67 | * |
| LSPM2158+6117 | 1 | 21 58 35.0 | +61 17 06 | 0.819 | 082.5 | 33 | 59.17 | 2.16 | 1 | 23 | * |
| LHS3739 | 3 | 21 58 50.2 | -32 28 18 | 0.542 | 223.7 | 70 | 50.92 ^a | 0.77 | 2 | 49,49 | * |
| GJ0842 | 1 | 21 59 34.7 | -59 45 10 | 0.895 | 097.9 | 27 | 83.28 | 1.74 | 2 | 66,67 | * |
| G188-038 | 1 | 22 01 13.1 | +28 18 24 | 0.376 | 084.3 | 67 | 111.70 | 1.73 | 2 | 66,67 | * |
| GJ0844 | 2 | 22 01 49.0 | +16 28 02 | 0.428 | 070.4 | 27 | 61.99 | 2.21 | 2 | 66,67 | * |
| GJ0846 | 1 | 22 02 10.2 | +01 24 00 | 0.530 | 238.6 | 27 | 97.93 | 1.45 | 2 | 66,67 | * |
| LHS3746 | 1 | 22 02 29.4 | -37 04 51 | 0.843 | 101.3 | 70 | 134.29 | 1.31 | 1 | 25 | * |
| LHS3748 | 1 | 22 03 27.1 | -50 38 38 | 0.589 | 142.7 | 70 | 50.15 | 4.27 | 1 | 17 | * |
| LTT08848 | 2 | 22 05 51.3 | -11 54 51 | 0.340 | 236.6 | 70 | 45.00 | 2.68 | 1 | 67 | * |
| WT0870 | 1 | 22 06 40.7 | -44 58 07 | 0.753 | 216.9 | 70 | 56.51 | 1.13 | 1 | 49 | * |
| GJ0849 | 1 | 22 09 40.3 | -04 38 27 | 1.083 | 090.9 | 70 | 111.45 | 1.75 | 2 | 66,67 | * |
| G214-012 | 1 | 22 09 45.5 | +41 02 21 | 0.452 | 059.0 | 36 | 44.10 | 3.10 | 1 | 66 | * |
| G214-014 | 1 | 22 11 16.9 | +41 00 54 | 0.312 | 317.7 | 27 | 43.32 | 2.17 | 2 | 66,67 | * |
| GJ0851 | 1 | 22 11 30.0 | +18 25 34 | 0.376 | 061.1 | 27 | 85.69 | 1.22 | 2 | 66,67 | * |
| LHS3773 | 1 | 22 12 35.9 | +08 33 11 | 0.687 | 173.1 | 47 | 62.60 | 3.90 | 2 | 66,67 | * |
| GJ1265 | 1 | 22 13 42.9 | -17 41 09 | 0.928 | 110.9 | 70 | 96.00 | 3.90 | 1 | 66 | * |
| GJ1266 | 1 | 22 16 20.2 | +70 56 40 | 0.863 | 092.7 | 27 | 45.20 | 2.30 | 1 | 66 | * |
| GJ0852 | 3 | 22 17 19.2 | -08 48 13 | 0.569 | 237.4 | 70 | 99.60 | 3.30 | 1 | 66 | * |
| L119-033 | 1 | 22 21 42.9 | -65 31 33 | 0.165 | 334.1 | 27 | 53.65 | 3.15 | 1 | 67 | * |
| LHS3799 | 1 | 22 23 07.0 | -17 36 26 | 0.787 | 157.0 | 70 | 137.69 | 1.75 | 2 | 51,66 | * |
| GJ0856 | 2 | 22 23 29.1 | +32 27 33 | 0.329 | 129.1 | 27 | 64.47 | 6.49 | 1 | 67 | * |
| GJ0855 | 1 | 22 23 33.3 | -57 13 14 | 0.721 | 122.0 | 70 | 52.45 | 2.11 | 2 | 66,67 | * |
| GJ1268 | 1 | 22 24 55.9 | +52 00 19 | 0.483 | 030.3 | 47 | 62.70 | 3.60 | 1 | 66 | * |
| GJ0860 | 2 | 22 27 59.4 | +57 41 45 | 0.782 | 245.8 | 27 | 248.06 | 1.39 | 2 | 66,59 | * |
| LP876-026 | 2 | 22 28 23.4 | -25 54 08 | 0.329 | 173.7 | 70 | 49.00 | 6.47 | 1 | 67 | * |
| LTT16590 | 1 | 22 28 45.9 | +18 55 54 | 0.211 | 127.0 | 27 | 45.42 | 1.74 | 1 | 67 | * |
| LHS0523 | 1 | 22 28 54.4 | -13 25 19 | 1.083 | 196.5 | 35 | 88.80 | 4.90 | 1 | 66 | * |
| LP640-074 | 1 | 22 29 05.8 | +01 39 48 | 0.201 | 168.4 | 27 | 46.91 | 1.99 | 1 | 67 | * |
| GJ1270 | 1 | 22 29 49.0 | +41 28 49 | 1.293 | 069.0 | 36 | 72.50 | 2.90 | 1 | 66 | * |
| GJ0863 | 1 | 22 33 02.2 | +09 22 40 | 0.555 | 075.2 | 27 | 75.09 | 2.18 | 2 | 66,67 | * |
| LP876-034 | 1 | 22 34 00.5 | -25 14 33 | 0.325 | 198.8 | 70 | 62.20 | 3.07 | 1 | 67 | * |
| LHS0526 | 1 | 22 34 53.7 | -01 04 58 | 1.136 | 078.8 | 70 | 42.50 | 3.70 | 1 | 66 | * |
| LP460-044 | 1 | 22 35 49.0 | +18 40 30 | 0.326 | 081.6 | 47 | 43.54 | 3.55 | 1 | 23 | * |
| GJ0864 | 2 | 22 36 09.7 | -00 50 30 | 0.628 | 174.6 | 27 | 58.71 | 1.74 | 2 | 66,67 | * |
| L645-074 | 2 | 22 38 24.7 | -29 21 14 | 0.260 | 183.0 | 37 | 86.23 | 1.06 | 1 | 1 | * |
| GJ0865 | 2 | 22 38 29.8 | -65 22 42 | 0.815 | 101.5 | 70 | 78.34 | 5.24 | 2 | 66,67 | * |

| | | | | | | | | | | | |
|--------------|---|------------|-----------|-------|-------|----|--------------------|------|---|----------|---|
| GJ0866 | 3 | 22 38 33.6 | -15 17 59 | 3.254 | 046.8 | 35 | 289.50 | 4.40 | 1 | 66 | * |
| GJ0867 | 4 | 22 38 45.6 | -20 37 16 | 0.456 | 100.0 | 27 | 115.01 | 1.30 | 2 | 66,67 | * |
| GJ1271 | 1 | 22 42 38.7 | +17 40 09 | 1.220 | 065.4 | 47 | 53.30 | 1.75 | 3 | 66,67,58 | * |
| GJ0871.1 | 2 | 22 44 58.0 | -33 15 02 | 0.230 | 123.1 | 70 | 43.82 | 2.31 | 2 | 56,67 | * |
| LHS3850 | 1 | 22 46 26.4 | -06 39 26 | 0.865 | 128.0 | 35 | 53.30 | 4.60 | 1 | 66 | * |
| GJ0873 | 1 | 22 46 49.7 | +44 20 02 | 0.842 | 236.9 | 27 | 198.21 | 0.84 | 3 | 66,67,20 | * |
| GJ0875 | 1 | 22 50 19.4 | -07 05 24 | 0.149 | 314.6 | 27 | 70.77 | 1.82 | 2 | 66,67 | * |
| GJ1274 | 1 | 22 50 37.7 | +34 51 21 | 0.901 | 070.1 | 27 | 55.49 | 2.33 | 2 | 66,67 | * |
| GJ0875.1 | 1 | 22 51 53.5 | +31 45 15 | 0.525 | 095.7 | 27 | 67.55 | 2.04 | 2 | 66,67 | * |
| LHS5394 | 1 | 22 52 48.1 | -28 47 43 | 0.461 | 229.7 | 70 | 50.99 | 2.84 | 1 | 67 | * |
| GJ0876 | 1 | 22 53 16.8 | -14 15 49 | 1.172 | 125.0 | 27 | 214.47 | 0.57 | 3 | 7,66,67 | * |
| GJ0878 | 1 | 22 54 21.5 | +60 59 44 | 0.729 | 261.5 | 47 | 65.70 | 5.90 | 1 | 66 | * |
| LHS3872 | 1 | 22 54 46.5 | -05 28 26 | 0.675 | 055.4 | 70 | 42.42 | 4.52 | 2 | 58,66 | * |
| HIP113201 | 1 | 22 55 27.2 | -52 18 10 | 0.185 | 132.8 | 70 | 40.34 | 2.84 | 1 | 67 | * |
| GJ0877 | 1 | 22 55 45.5 | -75 27 31 | 1.420 | 225.6 | 35 | 116.13 | 1.18 | 2 | 66,67 | * |
| GJ1277 | 1 | 22 56 24.7 | -60 03 49 | 1.082 | 210.4 | 30 | 97.48 | 1.17 | 1 | 30 | * |
| GJ0880 | 1 | 22 56 34.8 | +16 33 12 | 1.071 | 254.6 | 27 | 146.37 | 0.95 | 2 | 66,67 | * |
| L718-071 | 2 | 23 00 33.4 | -23 57 10 | 0.382 | 150.5 | 70 | 49.10 ^a | 2.38 | 2 | 67,67 | * |
| HIP113850 | 1 | 23 03 20.8 | -49 43 34 | 0.108 | 196.3 | 27 | 49.22 | 2.02 | 1 | 67 | * |
| SCR2303-4650 | 1 | 23 03 35.6 | -46 50 47 | 0.190 | 263.1 | 1 | 63.15 | 1.27 | 1 | 1 | * |
| GJ0887 | 2 | 23 05 52.1 | -35 51 11 | 6.907 | 078.9 | 35 | 305.08 | 0.70 | 2 | 66,67 | * |
| HIP114066 | 1 | 23 06 04.8 | +63 55 34 | 0.185 | 108.5 | 27 | 40.81 | 1.60 | 1 | 67 | * |
| 2MA2306-0502 | 1 | 23 06 29.4 | -05 02 29 | 1.036 | 117.1 | 9 | 82.58 | 2.58 | 1 | 10 | * |
| SSS2307-5009 | 1 | 23 06 58.8 | -50 08 59 | 0.437 | 087.4 | 70 | 46.59 | 1.57 | 1 | 15 | * |
| SCR2307-8452 | 1 | 23 07 19.7 | -84 52 04 | 0.613 | 097.2 | 60 | 65.84 | 1.95 | 1 | 1 | * |
| LHS0535 | 1 | 23 07 43.5 | +68 40 06 | 1.125 | 089.0 | 36 | 72.48 | 2.21 | 2 | 66,58 | * |
| GJ0889.1 | 1 | 23 08 06.9 | +03 19 44 | 0.555 | 062.4 | 27 | 63.15 | 2.13 | 2 | 66,67 | * |
| GJ0890 | 1 | 23 08 19.5 | -15 24 35 | 0.109 | 100.2 | 27 | 42.78 | 1.73 | 3 | 66,67,28 | * |
| GJ1279 | 1 | 23 09 40.9 | -67 43 58 | 0.372 | 238.9 | 70 | 66.74 | 0.83 | 1 | 67 | * |
| GJ1281 | 1 | 23 10 42.2 | -19 13 35 | 1.443 | 177.1 | 70 | 41.14 | 2.31 | 1 | 29 | * |
| LHS3909 | 1 | 23 12 11.3 | -14 06 12 | 0.755 | 196.3 | 70 | 54.90 | 2.00 | 1 | 49 | * |
| GJ2154 | 2 | 23 14 16.7 | -19 38 39 | 0.459 | 083.3 | 70 | 50.42 | 2.14 | 1 | 67 | * |
| LHS0539 | 1 | 23 15 51.6 | -37 33 31 | 1.311 | 078.4 | 29 | 52.85 | 2.01 | 1 | 29 | * |
| LHS3916 | 2 | 23 15 57.2 | -81 22 21 | 0.502 | 079.2 | 27 | 44.52 | 1.31 | 1 | 67 | * |
| L719-021 | 1 | 23 17 00.2 | -23 23 47 | 0.370 | 128.5 | 70 | 46.86 | 1.70 | 1 | 67 | * |
| LHS3923 | 1 | 23 17 22.9 | +38 12 03 | 0.470 | 196.0 | 36 | 57.10 | 3.20 | 1 | 66 | * |
| LHS3925 | 1 | 23 17 50.3 | -48 18 47 | 0.756 | 157.5 | 49 | 46.85 | 1.17 | 1 | 49 | * |
| GJ0894.1 | 1 | 23 18 17.9 | +46 17 21 | 0.356 | 067.2 | 27 | 40.49 | 1.98 | 2 | 66,67 | * |
| LHS0543 | 1 | 23 21 37.4 | +17 17 25 | 1.485 | 201.2 | 27 | 91.84 | 2.30 | 2 | 66,67 | * |
| GJ0895 | 1 | 23 24 30.5 | +57 51 15 | 0.293 | 192.3 | 27 | 76.48 | 1.22 | 2 | 66,67 | * |
| LHS0543a | 1 | 23 25 47.5 | +53 08 25 | 1.071 | 071.0 | 36 | 40.40 | 3.10 | 1 | 66 | * |
| GJ2155 | 1 | 23 26 12.3 | +08 53 37 | 0.565 | 067.9 | 27 | 44.70 | 1.79 | 2 | 66,67 | * |
| G190-028 | 3 | 23 29 26.2 | +41 28 20 | 0.404 | 095.0 | 36 | 67.58 | 1.59 | 2 | 66,66 | * |
| GJ1284 | 2 | 23 30 13.5 | -20 23 27 | 0.374 | 122.6 | 70 | 66.13 | 1.91 | 2 | 17,51 | * |
| APM2330-4737 | 1 | 23 30 16.2 | -47 36 45 | 1.134 | 208.7 | 70 | 72.71 | 3.33 | 1 | 10 | * |
| DEN2331-2749 | 1 | 23 31 21.8 | -27 49 50 | 0.781 | 001.4 | 70 | 69.14 | 2.06 | 1 | 10 | * |
| GJ0896 | 2 | 23 31 52.2 | +19 56 14 | 0.545 | 094.7 | 27 | 159.88 | 1.53 | 3 | 66,67,69 | * |
| GJ0899 | 1 | 23 34 03.3 | +00 10 46 | 1.377 | 225.2 | 47 | 72.21 | 2.72 | 2 | 66,67 | * |
| GJ1286 | 1 | 23 35 10.5 | -02 23 21 | 1.191 | 135.1 | 70 | 138.30 | 3.50 | 1 | 66 | * |
| LHS3978 | 1 | 23 35 44.6 | +06 11 46 | 0.608 | 064.9 | 47 | 41.60 | 3.20 | 1 | 66 | * |
| LTT16952 | 1 | 23 36 25.6 | +55 29 43 | 0.499 | 101.4 | 27 | 40.18 | 2.37 | 1 | 67 | * |
| LHS0547 | 1 | 23 36 52.3 | -36 28 52 | 1.225 | 087.9 | 70 | 86.23 | 2.03 | 1 | 29 | * |
| LTT09635 | 1 | 23 38 17.4 | -41 31 04 | 0.301 | 135.9 | 70 | 53.54 | 3.52 | 1 | 67 | * |
| GJ0905 | 1 | 23 41 55.0 | +44 10 39 | 1.606 | 179.1 | 47 | 316.37 | 0.55 | 3 | 66,22,22 | * |
| GJ1288 | 1 | 23 42 51.0 | +30 48 59 | 0.475 | 232.1 | 47 | 81.80 | 2.60 | 1 | 66 | * |
| GJ1289 | 1 | 23 43 06.3 | +36 32 13 | 0.971 | 097.8 | 47 | 123.50 | 2.90 | 1 | 66 | * |
| GJ1290 | 1 | 23 44 23.3 | +21 36 14 | 0.428 | 079.0 | 36 | 45.40 | 4.00 | 1 | 66 | * |
| LHS4009 | 2 | 23 45 31.3 | -16 10 20 | 0.671 | 217.0 | 70 | 79.97 | 1.37 | 1 | 49 | * |
| GJ0907 | 1 | 23 48 03.1 | +49 00 57 | 0.629 | 083.6 | 67 | 59.94 | 2.94 | 2 | 66,67 | * |
| LHS4016 | 2 | 23 48 36.1 | -27 39 39 | 0.565 | 244.0 | 70 | 41.25 | 1.55 | 1 | 49 | * |
| GJ0908 | 1 | 23 49 12.5 | +02 24 04 | 1.390 | 134.2 | 67 | 168.02 | 1.18 | 2 | 66,67 | * |
| LHS4021 | 1 | 23 50 31.6 | -09 33 33 | 0.753 | 121.5 | 70 | 62.41 | 1.70 | 1 | 49 | * |
| LEHPM1-6333 | 2 | 23 51 50.5 | -25 37 37 | 0.408 | 067.3 | 70 | 46.77 | 1.27 | 1 | 47 | * |
| L085-031 | 1 | 23 53 25.2 | -70 56 41 | 0.292 | 089.4 | 70 | 80.82 | 2.50 | 1 | 1 | * |

| | | | | | | | | | | | |
|--------------|---|------------|-----------|-------|-------|----|--------------------|------|---|-------|---|
| L026-027 | 1 | 23 53 50.1 | -75 37 57 | 0.452 | 147.1 | 27 | 100.07 | 1.05 | 1 | 67 | * |
| GJ0912 | 2 | 23 55 39.8 | -06 08 33 | 0.615 | 231.3 | 27 | 54.64 | 2.76 | 2 | 66,67 | * |
| LEHPM1-6494 | 1 | 23 56 10.8 | -34 26 05 | 0.319 | 163.6 | 70 | 52.37 | 1.71 | 1 | 15 | * |
| GJ1292 | 1 | 23 57 44.1 | +23 18 17 | 1.460 | 135.0 | 36 | 72.80 | 2.70 | 1 | 66 | * |
| LTT17066 | 1 | 23 58 32.6 | +07 38 31 | 0.368 | 167.3 | 27 | 58.34 | 1.87 | 2 | 66,67 | * |
| APM2359-6246 | 1 | 23 58 42.9 | -62 45 42 | 0.606 | 083.6 | 70 | 47.98 | 2.22 | 1 | 10 | * |
| LTT09828 | 2 | 23 59 44.8 | -44 05 00 | 0.255 | 358.0 | 70 | 64.87 | 2.48 | 1 | 1 | * |
| LHS4057 | 1 | 23 59 50.2 | +47 45 09 | 0.893 | 104.0 | 36 | 51.90 | 0.90 | 1 | 66 | * |
| LHS4058 | 1 | 23 59 51.4 | -34 06 43 | 0.939 | 132.8 | 49 | 63.14 | 2.02 | 1 | 49 | * |
| <hr/> | | | | | | | | | | | |
| Beyond 25 pc | | | | | | | | | | | |
| GJ1293 | 1 | 00 01 25.8 | -16 56 55 | 0.386 | 132.8 | 70 | 31.13 | 2.21 | 1 | 67 | |
| L290-032 | 1 | 00 02 27.1 | -46 01 44 | 0.212 | 096.9 | 70 | 26.06 | 4.35 | 1 | 67 | |
| LTT00074 | 1 | 00 11 04.6 | -05 47 02 | 0.276 | 089.1 | 70 | 38.78 | 2.09 | 2 | 66,67 | |
| LTT00095 | 1 | 00 13 29.1 | -36 49 44 | 0.349 | 211.6 | 70 | 35.48 | 2.30 | 1 | 67 | |
| LHS0109 | 1 | 00 17 40.0 | -10 46 17 | 1.051 | 180.0 | 70 | 28.40 | 3.50 | 1 | 66 | |
| LP644-095 | 1 | 00 19 12.4 | -03 03 13 | 0.237 | 183.6 | 70 | 32.31 | 2.26 | 1 | 67 | |
| LHS0110 | 2 | 00 19 37.0 | -28 09 46 | 1.388 | 192.2 | 70 | 33.75 ^a | 1.20 | 2 | 30,30 | |
| LEHPM1-0494 | 2 | 00 21 05.9 | -42 44 43 | 0.253 | 086.5 | 15 | 38.42 ^a | 1.44 | 2 | 15,15 | |
| LTT00207 | 1 | 00 23 47.3 | -36 51 41 | 0.187 | 252.2 | 70 | 24.89 | 1.59 | 1 | 67 | |
| SCR0027-0806 | 1 | 00 27 45.4 | -08 06 05 | 0.184 | 122.3 | 70 | 24.89 | 1.24 | 1 | 1 | |
| LHS1094 | 1 | 00 32 15.4 | -63 05 28 | 0.525 | 103.2 | 70 | 39.88 | 1.09 | 2 | 66,67 | |
| LTT00313 | 1 | 00 35 38.1 | -10 04 19 | 0.193 | 250.6 | 70 | 32.72 | 1.47 | 1 | 1 | |
| LHS1106 | 1 | 00 36 00.0 | -09 30 56 | 0.577 | 195.4 | 70 | 29.60 | 2.06 | 1 | 67 | |
| GJ0043 | 1 | 00 55 25.4 | -51 49 58 | 0.432 | 045.0 | 70 | 30.31 | 3.94 | 2 | 66,67 | |
| LTT00525 | 1 | 00 55 49.3 | -29 40 34 | 0.400 | 074.5 | 70 | 32.81 | 1.13 | 2 | 66,67 | |
| G270-100 | 1 | 00 56 30.2 | -04 25 16 | 0.370 | 109.9 | 70 | 33.30 | 3.80 | 1 | 66 | |
| LTT00648 | 1 | 01 09 38.8 | -07 10 50 | 0.430 | 214.3 | 27 | 26.55 | 2.87 | 1 | 67 | |
| GJ0056.2 | 1 | 01 17 59.4 | -48 09 01 | 0.244 | 067.0 | 70 | 29.07 | 2.75 | 2 | 66,67 | |
| LHS1245 | 1 | 01 24 22.1 | -44 08 11 | 0.447 | 220.2 | 70 | 29.49 | 4.01 | 1 | 67 | |
| GJ2022 | 3 | 01 24 27.7 | -33 55 09 | 0.215 | 130.1 | 70 | 38.80 | 2.13 | 1 | 51 | |
| GJ1038 | 1 | 01 25 01.8 | -32 51 04 | 0.241 | 056.4 | 70 | 39.77 | 1.60 | 1 | 67 | |
| L002-060 | 1 | 01 29 20.9 | -85 56 11 | 0.431 | 137.9 | 70 | 32.52 | 2.48 | 1 | 1 | |
| L222-009 | 1 | 01 35 40.4 | -50 15 42 | 0.230 | 078.2 | 70 | 20.73 | 2.43 | 1 | 67 | |
| LP708-253 | 1 | 01 40 04.8 | -13 54 41 | 0.217 | 173.9 | 27 | 28.65 | 3.74 | 1 | 67 | |
| L367-082 | 1 | 01 41 03.6 | -43 38 10 | 0.221 | 190.5 | 70 | 23.95 | 2.61 | 1 | 67 | |
| L367-008 | 1 | 01 45 21.4 | -39 57 20 | 0.316 | 067.1 | 70 | 33.84 | 2.30 | 1 | 67 | |
| L173-003 | 1 | 01 51 46.2 | -54 57 58 | 0.283 | 092.8 | 70 | 20.89 | 3.35 | 1 | 67 | |
| L583-033 | 2 | 02 02 17.5 | -26 33 52 | 0.336 | 146.0 | 37 | 34.77 | 0.93 | 2 | 1 | |
| LP649-030 | 1 | 02 03 30.2 | -04 54 41 | 0.210 | 150.4 | 70 | 34.74 | 2.59 | 1 | 67 | |
| SCR0211-0354 | 1 | 02 11 52.0 | -03 54 02 | 0.152 | 185.4 | 1 | 30.38 | 1.89 | 1 | 1 | |
| GJ0088 | 1 | 02 12 51.0 | -17 41 12 | 0.548 | 067.0 | 70 | 37.73 | 2.64 | 2 | 66,67 | |
| LP941-016 | 1 | 02 13 37.4 | -35 12 24 | 0.424 | 199.4 | 70 | 34.50 | 3.55 | 1 | 67 | |
| LHS1380 | 1 | 02 17 56.8 | -35 37 01 | 0.553 | 057.6 | 70 | 34.94 | 2.75 | 1 | 67 | |
| LHS5058 | 1 | 02 36 32.8 | -34 36 32 | 0.530 | 136.0 | 70 | 31.86 | 3.18 | 1 | 67 | |
| L441-032 | 1 | 02 39 56.7 | -38 28 00 | 0.388 | 035.5 | 70 | 29.11 | 2.31 | 1 | 67 | |
| LHS0158 | 1 | 02 42 02.9 | -44 30 59 | 1.005 | 087.6 | 29 | 24.94 | 1.61 | 1 | 29 | |
| LTT01393 | 1 | 02 55 23.2 | -25 13 29 | 0.343 | 102.2 | 70 | 34.49 | 3.45 | 1 | 67 | |
| L012-040 | 1 | 03 03 26.4 | -82 50 39 | 0.434 | 056.0 | 70 | 27.25 | 1.29 | 1 | 67 | |
| LTT01453 | 1 | 03 03 36.7 | -25 35 33 | 0.251 | 060.3 | 70 | 25.92 | 2.56 | 1 | 67 | |
| LP887-068 | 1 | 03 17 35.1 | -27 41 47 | 0.329 | 099.8 | 70 | 33.95 | 2.61 | 1 | 67 | |
| SCR0327-3634 | 1 | 03 27 46.8 | -36 34 40 | 0.184 | 244.6 | 70 | 38.13 | 1.62 | 1 | 1 | |
| LHS1561 | 1 | 03 34 39.6 | -04 50 33 | 0.543 | 129.5 | 70 | 34.20 | 1.72 | 1 | 49 | |
| GJ0155.3 | 1 | 03 53 19.7 | -37 03 59 | 1.179 | 195.9 | 70 | 39.85 | 2.83 | 2 | 66,67 | |
| LHS0186 | 1 | 04 03 38.4 | -05 08 05 | 1.153 | 168.0 | 70 | 19.40 | 4.30 | 1 | 66 | |
| WT0135 | 1 | 04 11 27.1 | -44 18 10 | 0.692 | 067.1 | 30 | 39.04 | 2.42 | 1 | 30 | |
| LHS1656 | 1 | 04 18 51.0 | -57 14 01 | 0.815 | 022.1 | 49 | 39.41 | 1.94 | 1 | 49 | |
| L446-008 | 1 | 04 21 00.5 | -35 51 21 | 0.246 | 090.0 | 27 | 34.45 | 1.59 | 1 | 67 | |
| LHS1815 | 1 | 06 04 20.4 | -55 18 47 | 0.741 | 064.6 | 70 | 35.45 | 2.57 | 2 | 66,67 | |
| SCR0644-4223 | 2 | 06 44 32.1 | -42 23 45 | 0.197 | 163.8 | 70 | 33.49 | 2.06 | 2 | 1 | |
| LHS1904 | 1 | 07 11 19.7 | -67 07 22 | 0.649 | 172.7 | 70 | 37.88 | 1.39 | 2 | 66,67 | |
| SCR0724-3125 | 1 | 07 24 21.2 | -31 25 58 | 0.209 | 282.6 | 70 | 25.99 | 1.44 | 1 | 1 | |
| GJ2061 | 1 | 07 31 04.1 | -37 13 46 | 0.289 | 186.5 | 70 | 30.03 | 4.08 | 1 | 67 | |
| SCR0733-4406 | 1 | 07 33 42.7 | -44 06 13 | 0.298 | 161.6 | 70 | 23.05 | 0.73 | 1 | 1 | |
| GJ1100 | 1 | 07 47 03.1 | -13 56 19 | 0.513 | 166.3 | 27 | 36.23 | 2.59 | 2 | 66,67 | |

| | | | | | | | | | | |
|--------------|---|------------|-----------|-------|-------|----|--------------------|------|---|-------|
| LP784-012 | 1 | 08 02 03.4 | -17 10 18 | 0.387 | 294.2 | 70 | 33.31 | 3.16 | 1 | 67 |
| SCR0829-3709 | 1 | 08 29 41.3 | -37 09 35 | 0.327 | 300.8 | 70 | 39.94 | 0.90 | 1 | 1 |
| L891-016 | 2 | 08 31 21.6 | -06 02 02 | 0.455 | 260.4 | 70 | 37.95 | 2.70 | 1 | 67 |
| LTT03187 | 1 | 08 36 14.3 | -41 33 26 | 0.234 | 293.3 | 70 | 25.67 | 2.03 | 2 | 66,67 |
| GJ0316 | 1 | 08 40 00.3 | -06 28 33 | 0.213 | 153.1 | 70 | 33.22 | 1.57 | 2 | 66,67 |
| L098-062 | 1 | 08 41 32.6 | -68 25 40 | 0.191 | 327.4 | 70 | 32.44 | 1.45 | 1 | 67 |
| LP786-022 | 1 | 08 57 14.2 | -19 35 04 | 0.326 | 190.1 | 70 | 35.35 | 2.40 | 1 | 67 |
| L462-023 | 1 | 09 44 45.4 | -36 32 38 | 0.282 | 238.2 | 70 | 25.13 | 2.21 | 1 | 67 |
| WT0248 | 1 | 10 05 54.9 | -67 21 31 | 1.212 | 265.2 | 29 | 38.44 | 2.83 | 1 | 29 |
| LTT03719 | 1 | 10 10 00.0 | -25 58 33 | 0.318 | 146.2 | 70 | 26.60 | 1.93 | 1 | 67 |
| LHS2228 | 1 | 10 11 09.2 | -82 51 58 | 0.576 | 305.6 | 70 | 35.77 | 1.47 | 1 | 67 |
| LTT03763 | 1 | 10 15 50.1 | -11 47 48 | 0.302 | 255.8 | 70 | 25.97 | 3.45 | 1 | 67 |
| L752-053 | 1 | 10 21 08.1 | -17 43 38 | 0.448 | 281.2 | 70 | 30.18 | 2.39 | 1 | 67 |
| LHS0284 | 1 | 10 36 03.1 | -14 42 29 | 1.165 | 300.5 | 70 | 21.14 | 1.30 | 1 | 30 |
| LP904-036 | 1 | 10 36 28.4 | -28 27 15 | 0.191 | 258.0 | 70 | 37.49 | 1.37 | 2 | 67,1 |
| LP904-045 | 1 | 10 40 18.5 | -29 30 23 | 0.205 | 259.8 | 70 | 26.56 | 2.29 | 1 | 67 |
| LP905-022 | 1 | 10 51 58.9 | -32 01 20 | 0.236 | 282.3 | 70 | 30.86 | 2.68 | 1 | 67 |
| LP849-020 | 1 | 10 52 26.4 | -22 41 16 | 0.184 | 131.2 | 70 | 34.92 | 3.36 | 1 | 67 |
| LTT04033 | 1 | 10 58 41.3 | -42 40 09 | 0.252 | 292.5 | 70 | 19.27 | 3.43 | 2 | 66,67 |
| LTT04042 | 1 | 11 00 02.8 | -35 06 37 | 0.259 | 147.1 | 70 | 29.55 | 4.37 | 1 | 67 |
| LTT04105 | 1 | 11 09 12.2 | -04 36 25 | 0.347 | 251.1 | 70 | 35.06 | 2.35 | 1 | 67 |
| LHS0299 | 1 | 11 11 22.7 | -06 31 56 | 1.073 | 206.9 | 70 | 12.00 | 2.90 | 1 | 66 |
| GJ0429.2 | 1 | 11 28 00.5 | -09 10 57 | 1.007 | 147.8 | 27 | 39.79 | 2.99 | 2 | 66,67 |
| CE440-087 | 1 | 11 47 50.7 | -28 49 45 | 0.430 | 239.0 | 52 | 16.43 | 1.18 | 1 | 1 |
| Ruiz440-064 | 1 | 11 48 50.6 | -28 33 23 | 0.673 | 261.8 | 9 | 25.11 | 1.49 | 1 | 9 |
| LP908-010 | 1 | 12 03 28.0 | -29 23 00 | 0.314 | 313.7 | 1 | 37.64 | 1.20 | 1 | 1 |
| GJ2090 | 1 | 12 04 36.6 | -38 16 25 | 0.711 | 108.1 | 70 | 36.34 | 2.76 | 1 | 67 |
| WT1928 | 1 | 12 08 06.9 | -32 06 36 | 0.381 | 258.0 | 71 | 17.76 | 1.21 | 1 | 1 |
| LHS0323 | 1 | 12 17 30.2 | -29 02 21 | 1.106 | 267.1 | 30 | 23.29 | 1.83 | 1 | 30 |
| LP470-065 | 2 | 12 17 46.8 | -39 04 05 | 0.243 | 204.0 | 70 | 32.38 | 2.60 | 1 | 67 |
| LHS0326 | 1 | 12 24 26.8 | -04 43 37 | 1.301 | 241.8 | 30 | 20.39 | 1.94 | 1 | 30 |
| LTT04828 | 1 | 12 39 55.9 | -08 34 42 | 0.221 | 247.2 | 70 | 27.79 | 2.87 | 1 | 67 |
| SCR1240-8116 | 1 | 12 40 56.0 | -81 16 31 | 0.476 | 279.3 | 70 | 32.34 | 2.32 | 1 | 1 |
| LHS5231 | 1 | 12 59 18.2 | -00 10 33 | 0.470 | 161.2 | 1 | 34.41 | 1.76 | 1 | 1 |
| WT1962 | 2 | 12 59 51.3 | -07 30 35 | 0.501 | 291.0 | 71 | 28.37 | 1.32 | 1 | 1 |
| L147-045 | 1 | 13 04 43.8 | -62 15 26 | 0.276 | 290.4 | 70 | 26.00 | 3.30 | 1 | 67 |
| LHS2698 | 1 | 13 13 29.6 | -32 27 05 | 0.533 | 266.3 | 70 | 21.59 | 0.92 | 1 | 49 |
| LP910-061 | 1 | 13 16 21.9 | -33 47 45 | 0.203 | 175.1 | 70 | 25.56 | 2.85 | 1 | 67 |
| LHS2744 | 1 | 13 30 52.6 | -32 37 49 | 0.695 | 241.4 | 70 | 26.18 | 2.27 | 1 | 67 |
| LTT05294 | 1 | 13 39 37.6 | -01 35 43 | 0.375 | 238.5 | 70 | 30.93 | 3.29 | 1 | 67 |
| LP912-026 | 1 | 13 53 19.8 | -30 46 38 | 0.236 | 279.1 | 70 | 30.05 | 3.71 | 1 | 67 |
| LHS2841 | 1 | 14 00 57.0 | -31 47 50 | 0.681 | 277.0 | 66 | 29.67 | 2.38 | 2 | 66,67 |
| GJ0539.2 | 2 | 14 09 27.2 | -30 55 49 | 0.463 | 245.4 | 70 | 25.37 | 3.31 | 2 | 66,67 |
| L836-121 | 3 | 14 14 21.4 | -15 21 22 | 0.239 | 222.0 | 70 | 33.14 | 4.90 | 1 | 67 |
| LHS5275 | 1 | 14 39 58.8 | -56 54 46 | 0.533 | 126.2 | 70 | 17.70 | 8.80 | 1 | 66 |
| SCR1441-7338 | 1 | 14 41 14.4 | -73 38 41 | 0.206 | 029.1 | 70 | 39.82 | 0.94 | 1 | 1 |
| LHS0381 | 1 | 14 50 28.9 | -08 38 37 | 1.560 | 188.4 | 70 | 27.40 | 5.40 | 1 | 66 |
| LHS0382 | 1 | 14 50 41.2 | -16 56 31 | 1.429 | 244.0 | 29 | 20.69 | 2.25 | 1 | 29 |
| LHS0385 | 1 | 14 55 35.8 | -15 33 44 | 1.736 | 209.6 | 35 | 20.40 | 5.80 | 1 | 66 |
| LP915-016 | 2 | 15 17 21.1 | -27 59 50 | 0.193 | 252.2 | 70 | 33.98 | 3.77 | 1 | 67 |
| LP802-068 | 1 | 15 24 45.8 | -17 07 39 | 0.391 | 236.8 | 70 | 28.92 | 5.19 | 1 | 67 |
| LEHPM2-0016 | 1 | 15 29 14.0 | -29 07 38 | 1.034 | 188.4 | 70 | 27.82 | 1.03 | 1 | 30 |
| L336-071 | 1 | 15 49 38.3 | -47 36 34 | 0.390 | 174.1 | 70 | 36.80 | 2.42 | 2 | 66,67 |
| LP684-003 | 1 | 15 56 41.4 | -04 14 21 | 0.193 | 310.2 | 27 | 24.49 | 3.65 | 1 | 67 |
| LHS3147 | 1 | 16 02 23.6 | -25 05 57 | 0.661 | 200.4 | 70 | 39.18 | 1.37 | 1 | 49 |
| GJ0618.1 | 1 | 16 20 24.8 | -04 16 02 | 0.385 | 264.1 | 70 | 29.84 | 2.13 | 2 | 66,67 |
| LP745-070 | 1 | 16 33 41.6 | -09 33 12 | 0.198 | 198.3 | 70 | 32.60 | 2.47 | 1 | 67 |
| LHS0440 | 1 | 17 18 32.3 | -43 26 38 | 1.083 | 233.3 | 30 | 36.40 | 1.22 | 1 | 30 |
| GJ1217 | 1 | 17 22 43.0 | -14 57 37 | 0.216 | 193.3 | 70 | 37.17 | 2.80 | 1 | 67 |
| LTT07022 | 1 | 17 39 28.3 | -22 41 46 | 0.309 | 200.1 | 70 | 23.00 | 9.20 | 1 | 66 |
| LP808-023 | 1 | 17 51 27.5 | -18 59 32 | 0.334 | 165.2 | 70 | 22.71 | 2.92 | 1 | 67 |
| LTT07218 | 1 | 18 09 33.3 | -12 02 20 | 0.216 | 162.2 | 27 | 35.19 | 2.53 | 2 | 66,67 |
| GJ1226 | 2 | 18 20 57.2 | -01 02 58 | 1.079 | 209.4 | 70 | 34.10 ^a | 4.00 | 2 | 29,29 |
| LHS0468 | 1 | 18 48 44.9 | -02 33 46 | 1.083 | 235.5 | 70 | 35.00 | 4.40 | 1 | 66 |

| | | | | | | | | | | |
|--------------|---|------------|-----------|-------|-------|----|-------|------|---|-------|
| LHS3421 | 1 | 18 52 52.4 | -57 07 37 | 0.773 | 194.1 | 70 | 37.62 | 3.82 | 2 | 66,67 |
| SCR1901-0737 | 1 | 19 01 32.4 | -07 37 24 | 0.189 | 227.1 | 70 | 39.39 | 0.96 | 1 | 1 |
| SCR1901-3106 | 1 | 19 01 59.2 | -31 06 45 | 0.211 | 122.4 | 70 | 21.72 | 1.18 | 1 | 1 |
| SCR1916-3638 | 1 | 19 16 46.6 | -36 38 06 | 1.328 | 184.0 | 70 | 14.78 | 1.37 | 1 | 30 |
| LP347-017 | 1 | 19 19 09.0 | -45 47 59 | 0.457 | 174.0 | 70 | 25.87 | 3.53 | 1 | 67 |
| L208-005 | 1 | 19 30 13.7 | -54 56 19 | 0.324 | 176.1 | 70 | 28.89 | 2.73 | 1 | 67 |
| GJ0762 | 1 | 19 34 36.5 | -62 50 39 | 0.515 | 222.7 | 70 | 38.89 | 1.33 | 2 | 49,66 |
| LTT07786 | 3 | 19 42 52.8 | -45 04 53 | 0.239 | 190.1 | 70 | 36.59 | 2.18 | 2 | 66,67 |
| LHS3480 | 1 | 19 44 22.0 | -22 30 54 | 0.547 | 139.5 | 70 | 17.70 | 0.80 | 1 | 66 |
| LHS3492 | 1 | 19 51 31.3 | -50 55 38 | 0.827 | 191.8 | 70 | 39.09 | 1.86 | 1 | 1 |
| GJ0769 | 1 | 19 54 00.1 | -47 48 37 | 1.041 | 185.6 | 70 | 39.60 | 8.50 | 1 | 66 |
| LP814-044 | 1 | 20 17 52.4 | -17 17 09 | 0.328 | 183.3 | 70 | 28.51 | 2.28 | 1 | 67 |
| SCR2025-1534 | 1 | 20 25 08.6 | -15 34 16 | 0.190 | 179.3 | 70 | 27.55 | 1.44 | 1 | 1 |
| LP567-063 | 1 | 20 34 31.1 | -32 31 00 | 0.205 | 169.5 | 1 | 37.19 | 1.78 | 1 | 1 |
| LHS3582 | 1 | 20 46 18.0 | -47 09 28 | 0.499 | 174.6 | 70 | 30.80 | 9.70 | 1 | 66 |
| LHS3600 | 1 | 20 55 59.9 | -59 56 44 | 0.619 | 125.3 | 70 | 36.04 | 2.47 | 1 | 67 |
| LP816-061 | 1 | 20 59 06.6 | -16 05 37 | 0.279 | 202.9 | 70 | 29.62 | 2.55 | 1 | 67 |
| L211-096 | 1 | 20 59 51.3 | -58 45 31 | 0.363 | 158.0 | 70 | 33.14 | 3.20 | 1 | 67 |
| L163-023 | 1 | 21 02 25.0 | -60 31 36 | 0.227 | 133.9 | 70 | 30.74 | 1.84 | 1 | 1 |
| LHS3615 | 1 | 21 03 21.7 | -50 22 52 | 0.495 | 142.0 | 70 | 39.63 | 1.25 | 1 | 1 |
| LHS3620 | 1 | 21 04 25.4 | -27 52 47 | 0.985 | 184.4 | 70 | 12.88 | 1.40 | 1 | 30 |
| LEHPM1-4051 | 1 | 21 15 15.1 | -75 41 52 | 1.053 | 144.6 | 30 | 32.96 | 1.28 | 1 | 30 |
| LP637-024 | 1 | 21 19 18.3 | -00 33 19 | 0.379 | 220.8 | 27 | 24.73 | 3.66 | 1 | 67 |
| GJ0836.4 | 1 | 21 42 07.5 | -12 09 48 | 0.719 | 170.4 | 70 | 28.60 | 2.60 | 1 | 66 |
| CD-32 16735 | 1 | 21 47 02.7 | -32 24 40 | 0.206 | 071.2 | 70 | -4.69 | 3.88 | 1 | 70 |
| L282-061 | 1 | 21 51 12.3 | -52 15 40 | 0.353 | 126.8 | 70 | 31.55 | 2.51 | 1 | 67 |
| LHS0515 | 1 | 21 55 48.0 | -11 21 43 | 1.088 | 120.0 | 66 | 19.50 | 4.00 | 1 | 66 |
| LHS3740 | 1 | 21 58 53.2 | -57 56 04 | 0.923 | 096.9 | 70 | 35.94 | 1.45 | 1 | 30 |
| LP699-075 | 1 | 22 18 13.2 | -03 10 20 | 0.253 | 096.6 | 70 | 24.58 | 1.97 | 1 | 67 |
| LHS3836 | 1 | 22 38 02.9 | -65 50 09 | 0.694 | 118.9 | 49 | 36.42 | 1.32 | 1 | 49 |
| LP932-053 | 1 | 22 39 44.0 | -32 04 18 | 0.244 | 223.1 | 70 | 25.19 | 2.15 | 1 | 67 |
| L106-104 | 1 | 22 46 45.2 | -63 18 05 | 0.238 | 122.5 | 70 | 39.90 | 3.04 | 1 | 67 |
| LTT09210 | 1 | 22 48 53.0 | -28 50 03 | 0.284 | 215.6 | 70 | 24.91 | 2.19 | 1 | 67 |
| LTT09203 | 1 | 22 48 54.5 | -54 18 52 | 0.434 | 143.3 | 70 | 29.81 | 2.65 | 1 | 67 |
| L214-072 | 1 | 22 49 26.0 | -58 15 12 | 0.321 | 123.6 | 70 | 27.30 | 2.32 | 1 | 67 |
| LP933-024 | 2 | 22 55 43.9 | -30 22 39 | 0.384 | 062.4 | 27 | 30.95 | 2.75 | 1 | 67 |
| LHS5396 | 1 | 23 00 23.6 | -31 07 12 | 0.464 | 201.4 | 70 | 32.48 | 2.47 | 1 | 67 |
| L286-071 | 1 | 23 00 26.1 | -53 13 40 | 0.255 | 211.2 | 70 | 24.18 | 1.86 | 1 | 67 |
| LHS5397 | 1 | 23 14 15.4 | -56 50 52 | 0.440 | 239.8 | 70 | 35.75 | 3.02 | 1 | 67 |
| L168-009 | 1 | 23 20 07.5 | -60 03 55 | 0.332 | 246.3 | 70 | 37.92 | 2.23 | 1 | 67 |
| LTT09507 | 1 | 23 21 11.3 | -01 35 45 | 0.367 | 198.8 | 70 | 35.85 | 4.04 | 2 | 66,67 |
| GJ0895.1 | 1 | 23 25 42.0 | -45 36 35 | 0.490 | 093.6 | 70 | 27.86 | 2.80 | 2 | 66,67 |
| L288-049 | 1 | 23 41 43.6 | -51 56 37 | 0.257 | 184.5 | 70 | 36.29 | 4.03 | 1 | 67 |
| L361-021 | 1 | 23 57 45.6 | -45 48 55 | 0.389 | 113.2 | 70 | 24.39 | 2.91 | 2 | 66,67 |

^aThe weighted mean parallax includes the parallax of both the primary and the secondary components.

^bThe HIP parallax is markedly different from that published in YPC and has an error of ~ 45 mas.

References: (1) this work; (2) Andrei et al. (2011); (3) Anglada-Escudé et al. (2012); (4) Benedict et al. (1999); (5) Benedict et al. (2000); (6) Benedict et al. (2001); (7) Benedict et al. (2002); (8) Biller & Close (2007); (9) Costa et al. (2005); (10) Costa et al. (2006); (11) Dahn et al. (2002); (12) Deacon & Hambly (2001); (13) Deacon et al. (2005b); (14) Deacon et al. (2005a); (15) Dieterich et al. (2014); (16) Dupuy & Liu (2012); (17) Fabricius & Makarov (2000); (18) Faherty et al. (2012); (19) Falin & Mignard (1999); (20) Gatewood et al. (1993); (21) Gatewood et al. (2003); (22) Gatewood (2008); (23) Gatewood & Coban (2009); (24) Henry et al. (1997); (25) Henry et al. (2006); (26) Hershey & Taff (1998); (27) Høg et al. (2000); (28) Ianna et al. (1996); (29) Jao et al. (2005); (30) Jao et al. (2011); (31) Jao et al. (2014); (32) Khovritchev et al. (2013); (33) Lèpine & Shara (2005); (34) Lèpine et al. (2009); (35) Luyten (1979a); (36) Luyten (1979b); (37) Luyten (1980a); (38) Luyten (1980b); (39) Martin & Mignard (1998); (40) Martinache et al. (2007); (41) Martinache et al. (2009); (42) Monet et al. (2003); (43) Pokorný et al. (2004); (44) Pourbaix et al. (2003); (45) Pravdo et al. (2006); (46) Pravdo & Shaklan (2009); (47) RECONS (in prep); (48) Reid et al. (2003b); (49) Riedel et al. (2010); (50) Riedel et al. (2011); (51) Riedel et al. (2014); (52) Ruiz et al. (1993); (53) Schilbach et al. (2009); (54) Schmidt et al. (2007); (55) Shakht (1997); (56) Shkolnik et al. (2012); (57) Smart et al. (2007); (58) Smart et al. (2010); (59) Söderhjelm (1999); (60) Subasavage et al. (2005a); (61) Subasavage et al. (2005b); (62) Teegarden et al. (2003); (63) Teixeira et al. (2009); (64) Tinney et al. (1995); (65) Tinney (1996); (66) van Altena et al. (1995); (67) van Leeuwen (2007); (68) von Braun et al. (2011); (69) Weis (1999); (70) Winters et al. (2015); (71) Wroblewski & Torres (1997).

APPENDIX C

DERIVED DISTANCES

This appendix provides the derived distance data for all M dwarf primaries, split into the 25 pc sample (top) and systems with best quality distances beyond 25 pc (bottom). Data listed includes the name of the M dwarf primary, coordinates, information on the *pltdists* (the distance, the total error, number of relations), *ccddists* (the distance, the total error, number of relations), and *trgdists* (the distance from the weighted mean of published parallaxes, the weighted mean error, and the number of parallaxes used to generate the weighted mean). These empirical values are then followed by the most reliable distance and its type. Distances based upon blended photometry are given in square brackets and are typically further than estimated. Distances for subdwarfs (both confirmed and candidates) are given in curly brackets and are typically closer than estimated.

Table C.1: Derived Distances for Nearby Red Dwarf Systems

| Name | RA (hh:mm:ss) | DEC (dd:mm:ss) | d_{plt} (pc) | σ_{tot} (pc) | # rel | d_{ccd} (pc) | σ_{tot} (pc) | # rel | d_{trig} (pc) | σ_{trig} (pc) | # π | d_{best} (pc) | d_{type} |
|---------------|------------------|-------------------|-------------------|------------------------|-------|-------------------|------------------------|-------|--------------------|-------------------------|---------|--------------------|------------|
| Within 25 pc | | | | | | | | | | | | | |
| 2MA0000-1245 | 00 00 28.7 | -12 45 16 | 22.2 | 7.6 | 7 | 23.1 | 4.0 | 11 | ... | ... | ... | 23.1 | ccd |
| LTT09844 | 00 00 46.9 | -35 10 06 | 23.5 | 7.4 | 11 | ... | ... | ... | ... | ... | ... | 23.5 | plt |
| GJ1001 | 00 04 36.5 | -40 44 03 | 11.2 | 3.4 | 11 | 12.5 | 1.9 | 12 | 12.5 | 0.6 | 2 | 12.5 | trg |
| G158-025 | 00 04 40.3 | -09 52 42 | 24.5 | 7.4 | 11 | ... | ... | ... | ... | ... | ... | 24.5 | plt |
| SIP0004-2058 | 00 04 41.5 | -20 58 30 | 14.9 | 6.8 | 10 | 18.6 | 3.0 | 11 | ... | ... | ... | 18.6 | ccd |
| GJ0001 | 00 05 24.4 | -37 21 27 | 3.7 | 1.0 | 11 | 5.6 | 0.9 | 11 | 4.3 | 0.0 | 2 | 4.3 | trg |
| LP644-034 | 00 05 34.9 | -06 07 07 | 23.0 | 6.2 | 11 | ... | ... | ... | ... | ... | ... | 23.0 | plt |
| LP644-039 | 00 06 13.1 | -02 32 11 | 27.3 | 9.2 | 11 | 21.9 | 3.9 | 12 | ... | ... | ... | 21.9 | ccd |
| LHS1019 | 00 06 19.2 | -65 50 26 | 16.1 | 4.6 | 11 | 16.6 | 2.6 | 12 | 16.7 | 0.7 | 1 | 16.7 | trg |
| GJ1002 | 00 06 43.2 | -07 32 17 | 6.8 | 2.1 | 11 | 5.4 | 1.0 | 12 | 4.7 | 0.1 | 1 | 4.7 | trg |
| GJ1003 | 00 07 26.7 | +29 14 33 | ... | ... | ... | 36.0 | 7.0 | 12 | 18.7 | 0.9 | 1 | 18.7 | trg |
| LHS1022 | 00 07 59.1 | +08 00 19 | ... | ... | ... | 28.9 | 5.2 | 12 | 22.7 | 3.3 | 1 | 22.7 | trg |
| L217-028 | 00 08 17.4 | -57 05 53 | 17.3 | 5.9 | 11 | 13.2 | 2.0 | 12 | 13.3 | 0.4 | 1 | 13.3 | trg |
| HIP000687 | 00 08 27.2 | +17 25 27 | ... | ... | ... | 18.5 | 3.2 | 12 | 21.8 | 0.9 | 1 | 21.8 | trg |
| G131-026 | 00 08 54.0 | +20 50 18 | ... | ... | ... | [10.7] | 1.7 | 12 | 18.5 | 0.5 | 1 | 18.5 | trg |
| GJ0007 | 00 09 04.3 | -27 07 20 | 24.1 | 6.6 | 11 | 28.1 | 4.7 | 9 | 22.9 | 1.4 | 2 | 22.9 | trg |
| LP644-094 | 00 09 13.5 | -04 08 02 | 19.8 | 5.6 | 11 | 20.4 | 3.2 | 12 | ... | ... | ... | 20.4 | ccd |
| BPM46052 | 00 09 20.0 | -21 14 41 | 16.0 | 4.8 | 11 | ... | ... | ... | ... | ... | ... | 16.0 | plt |
| LEHPM1-0254 | 00 09 43.3 | -41 17 36 | 23.4 | 8.7 | 11 | ... | ... | ... | ... | ... | ... | 23.4 | plt |
| LEHPM1-0255 | 00 09 45.1 | -42 01 40 | 10.8 | 3.2 | 11 | 12.5 | 2.0 | 12 | 18.8 | 0.5 | 1 | 18.8 | trg |
| LSPM0011+5908 | 00 11 32.0 | +59 08 40 | ... | ... | ... | 10.7 | 1.9 | 12 | 9.2 | 0.0 | 2 | 9.2 | trg |
| L217-009 | 00 11 49.1 | -55 21 52 | 22.2 | 10.3 | 11 | ... | ... | ... | ... | ... | ... | 22.2 | plt |
| GJ0011 | 00 13 15.8 | +69 19 36 | ... | ... | ... | [15.9] | 2.4 | 12 | 21.1 | 1.7 | 2 | 21.1 | trg |
| LTT17095 | 00 13 38.7 | +80 39 56 | ... | ... | ... | [14.8] | 2.3 | 12 | 19.6 | 0.7 | 1 | 19.6 | trg |
| GJ1005 | 00 15 28.1 | -16 08 02 | [8.0] | 2.2 | 11 | [6.7] | 1.1 | 12 | 5.9 | 0.0 | 4 | 5.9 | trg |
| GJ0012 | 00 15 49.0 | +13 33 22 | ... | ... | ... | 15.3 | 2.4 | 12 | 11.6 | 0.3 | 3 | 11.6 | trg |
| LHS1051 | 00 15 51.5 | -67 59 52 | 14.0 | 3.9 | 11 | 17.5 | 2.8 | 12 | ... | ... | ... | 17.5 | ccd |
| 2MA0015-1636 | 00 15 58.1 | -16 36 57 | ... | ... | ... | [11.8] | 1.8 | 12 | 18.0 | 0.4 | 1 | 18.0 | trg |
| L290-072 | 00 16 02.0 | -48 15 39 | [15.4] | 4.2 | 11 | [14.1] | 2.2 | 12 | 22.8 | 2.3 | 1 | 22.8 | trg |

| | | | | | | | | | | | | | |
|--------------|------------|-----------|-------|-----|-----|--------|-----|-----|------|-----|-----|------|-----|
| GJ1006 | 00 16 14.6 | +19 51 37 | ... | ... | ... | 8.4 | 1.3 | 12 | 15.1 | 0.4 | 2 | 15.1 | trg |
| L218-009 | 00 16 36.6 | -50 16 09 | 26.5 | 7.3 | 11 | 26.3 | 4.1 | 12 | 22.2 | 1.7 | 1 | 22.2 | trg |
| GJ1007 | 00 16 56.3 | +05 07 27 | ... | ... | ... | 17.1 | 2.8 | 12 | 17.6 | 1.2 | 1 | 17.6 | trg |
| SCR0017-3219 | 00 17 15.7 | -32 19 54 | 21.0 | 7.4 | 11 | 21.3 | 3.4 | 12 | ... | ... | ... | 21.3 | ccd |
| LHS1054 | 00 17 20.3 | +29 10 58 | ... | ... | ... | 16.7 | 2.8 | 12 | 22.8 | 1.2 | 2 | 22.8 | trg |
| LP704-074 | 00 17 28.2 | -08 44 23 | 23.2 | 6.3 | 11 | ... | ... | ... | ... | ... | ... | 23.2 | plt |
| LTT00139 | 00 17 40.7 | -01 22 41 | 20.3 | 5.6 | 11 | 23.5 | 3.8 | 12 | ... | ... | ... | 23.5 | ccd |
| GJ0016 | 00 18 16.5 | +10 12 10 | ... | ... | ... | 13.7 | 2.3 | 12 | 16.6 | 0.6 | 2 | 16.6 | trg |
| GJ0015 | 00 18 23.0 | +44 01 24 | ... | ... | ... | 4.5 | 0.9 | 9 | 3.6 | 0.0 | 3 | 3.6 | trg |
| LTT00151 | 00 18 44.8 | -34 50 15 | 16.0 | 5.6 | 11 | ... | ... | ... | ... | ... | ... | 16.0 | plt |
| GJ2003 | 00 20 08.3 | -17 03 41 | ... | ... | ... | 24.2 | 3.9 | 12 | 23.2 | 2.0 | 1 | 23.2 | trg |
| LP825-035 | 00 20 23.2 | -23 46 05 | 23.4 | 7.9 | 11 | ... | ... | ... | ... | ... | ... | 23.4 | plt |
| LHS0112 | 00 20 29.4 | +33 05 06 | ... | ... | ... | 10.9 | 1.7 | 12 | 12.6 | 0.6 | 1 | 12.6 | trg |
| L170-007 | 00 20 41.5 | -53 40 54 | 24.6 | 6.5 | 11 | ... | ... | ... | ... | ... | ... | 24.6 | plt |
| GJ0017.1 | 00 21 19.6 | -45 44 47 | 12.9 | 3.6 | 11 | 15.4 | 2.5 | 11 | 17.3 | 0.6 | 2 | 17.3 | trg |
| LHS5004a | 00 21 37.3 | -46 05 33 | 14.5 | 3.9 | 11 | 13.1 | 2.1 | 12 | 19.3 | 1.7 | 1 | 19.3 | trg |
| LTT00180 | 00 21 39.4 | -09 00 25 | 19.8 | 6.6 | 11 | 20.9 | 3.3 | 12 | ... | ... | ... | 20.9 | ccd |
| G158-066 | 00 21 53.4 | -09 38 03 | 23.4 | 7.4 | 11 | ... | ... | ... | ... | ... | ... | 23.4 | plt |
| L086-082 | 00 21 54.9 | -68 31 26 | 17.8 | 5.1 | 11 | 23.3 | 3.8 | 10 | ... | ... | ... | 23.3 | ccd |
| GJ1009 | 00 21 56.1 | -31 24 22 | 11.2 | 3.7 | 11 | 12.9 | 2.2 | 12 | 18.0 | 0.8 | 1 | 18.0 | trg |
| L026-099 | 00 22 27.1 | -79 09 59 | 20.8 | 5.8 | 11 | ... | ... | ... | ... | ... | ... | 20.8 | plt |
| LHS1064 | 00 23 18.5 | -50 53 38 | 12.7 | 3.4 | 11 | 15.2 | 2.5 | 12 | 20.0 | 1.1 | 2 | 20.0 | trg |
| GJ1011 | 00 23 27.1 | +24 18 20 | ... | ... | ... | ... | ... | ... | 16.4 | 1.1 | 1 | 16.4 | trg |
| GJ1010 | 00 23 28.8 | +77 11 21 | ... | ... | ... | 17.6 | 2.8 | 12 | 17.9 | 0.8 | 2 | 17.9 | trg |
| NLTT01261 | 00 24 24.9 | -01 58 28 | ... | ... | ... | 11.4 | 2.0 | 8 | 11.6 | 0.5 | 1 | 11.6 | trg |
| LTT00214 | 00 24 25.2 | -12 17 25 | 23.6 | 6.4 | 11 | 23.4 | 3.6 | 12 | ... | ... | ... | 23.4 | ccd |
| LHS1068 | 00 24 38.4 | +30 02 19 | ... | ... | ... | 14.8 | 2.3 | 12 | 18.9 | 1.6 | 1 | 18.9 | trg |
| GJ2005 | 00 24 44.2 | -27 08 24 | [6.1] | 1.8 | 11 | [6.0] | 1.0 | 12 | 7.7 | 0.1 | 2 | 7.7 | trg |
| LTT00220 | 00 25 04.3 | -36 46 18 | 13.8 | 4.8 | 11 | 16.8 | 2.6 | 12 | ... | ... | ... | 16.8 | ccd |
| GJ0021 | 00 26 52.7 | +70 08 32 | ... | ... | ... | 14.3 | 2.4 | 12 | 16.5 | 0.4 | 2 | 16.5 | trg |
| G217-051 | 00 27 04.0 | +49 41 04 | ... | ... | ... | 17.1 | 2.7 | 12 | 21.3 | 1.4 | 1 | 21.3 | trg |
| LP349-025 | 00 27 56.0 | +22 19 33 | ... | ... | ... | [8.2] | 1.3 | 11 | 14.1 | 0.1 | 2 | 14.1 | trg |
| LTT00250 | 00 28 05.0 | -23 00 37 | 22.7 | 7.0 | 11 | ... | ... | ... | ... | ... | ... | 22.7 | plt |
| GJ1012 | 00 28 39.5 | -06 39 49 | 10.6 | 4.2 | 11 | 10.4 | 1.6 | 12 | 13.3 | 0.9 | 1 | 13.3 | trg |
| LEHPM1-0640 | 00 28 54.8 | -27 33 34 | 24.8 | 8.3 | 11 | ... | ... | ... | ... | ... | ... | 24.8 | plt |
| LTT17138 | 00 28 57.7 | -02 26 59 | 24.4 | 7.3 | 11 | ... | ... | ... | ... | ... | ... | 24.4 | plt |
| LTT00266 | 00 29 58.7 | -24 38 27 | 21.0 | 6.3 | 11 | ... | ... | ... | ... | ... | ... | 21.0 | plt |
| L050-078 | 00 31 04.3 | -72 01 06 | 12.4 | 5.9 | 11 | 15.7 | 2.5 | 12 | ... | ... | ... | 15.7 | ccd |
| GJ1013 | 00 31 35.4 | -05 52 13 | 16.1 | 4.5 | 11 | 16.6 | 2.6 | 12 | 16.1 | 1.1 | 1 | 16.1 | trg |
| GJ0022 | 00 32 29.4 | +67 14 08 | ... | ... | ... | [9.9] | 1.7 | 12 | 10.2 | 0.2 | 2 | 10.2 | trg |
| GR*0050 | 00 32 53.2 | -04 34 07 | 11.5 | 3.4 | 11 | [11.7] | 2.0 | 12 | 17.8 | 0.5 | 1 | 17.8 | trg |
| L291-115 | 00 33 13.5 | -47 33 17 | 17.7 | 5.3 | 11 | ... | ... | ... | ... | ... | ... | 17.7 | plt |
| LHS1099 | 00 34 07.5 | -23 03 19 | 25.0 | 7.9 | 11 | ... | ... | ... | ... | ... | ... | 25.0 | plt |
| LTT00307 | 00 34 39.0 | -02 25 00 | 16.2 | 5.1 | 11 | 20.7 | 3.4 | 12 | ... | ... | ... | 20.7 | ccd |
| LHS1101 | 00 34 44.1 | +71 11 31 | ... | ... | ... | 21.6 | 3.4 | 12 | 19.7 | 1.2 | 1 | 19.7 | trg |
| LP645-053 | 00 35 44.1 | -05 41 11 | 16.8 | 6.2 | 11 | ... | ... | ... | ... | ... | ... | 16.8 | plt |
| LHS1104 | 00 35 52.8 | +52 41 45 | ... | ... | ... | 22.1 | 3.4 | 12 | 24.0 | 1.2 | 2 | 24.0 | trg |
| GJ1014 | 00 36 00.4 | +10 28 08 | ... | ... | ... | 15.7 | 2.5 | 12 | 15.7 | 1.1 | 1 | 15.7 | trg |
| G172-013 | 00 36 06.7 | +45 30 49 | ... | ... | ... | 16.5 | 2.5 | 12 | 22.8 | 5.4 | 1 | 22.8 | trg |
| LP881-239 | 00 37 35.8 | -27 08 31 | 22.0 | 6.6 | 11 | 23.0 | 3.6 | 12 | ... | ... | ... | 23.0 | ccd |
| LTT00338 | 00 38 33.4 | -11 16 03 | 25.0 | 7.7 | 11 | ... | ... | ... | ... | ... | ... | 25.0 | plt |
| GJ0026 | 00 38 59.0 | +30 36 59 | ... | ... | ... | 10.9 | 1.7 | 12 | 12.5 | 0.6 | 1 | 12.5 | trg |
| GJ0027.1 | 00 39 58.8 | -44 15 12 | 18.3 | 5.3 | 11 | 20.7 | 3.3 | 12 | 24.4 | 1.6 | 2 | 24.4 | trg |
| LTT00349 | 00 39 59.4 | -12 11 43 | 22.0 | 5.9 | 11 | ... | ... | ... | ... | ... | ... | 22.0 | plt |
| GJ1016 | 00 41 30.5 | -33 37 32 | 15.9 | 4.7 | 8 | 20.0 | 3.2 | 9 | 19.5 | 0.9 | 1 | 19.5 | trg |
| LHS1134 | 00 43 26.0 | -41 17 34 | 10.5 | 3.0 | 11 | 10.9 | 1.7 | 12 | 10.5 | 0.2 | 1 | 10.5 | trg |
| GJ1019 | 00 43 35.6 | +28 26 41 | ... | ... | ... | 34.8 | 6.2 | 12 | 19.3 | 1.5 | 1 | 19.3 | trg |
| LEHPM1-0927 | 00 44 38.0 | -78 45 09 | 18.2 | 6.4 | 11 | ... | ... | ... | ... | ... | ... | 18.2 | plt |
| LHS1140 | 00 44 59.3 | -15 16 18 | 23.2 | 9.4 | 11 | 17.2 | 2.9 | 12 | 12.5 | 0.4 | 1 | 12.5 | trg |
| LP989-200 | 00 46 16.3 | -40 17 54 | 22.8 | 6.2 | 11 | ... | ... | ... | ... | ... | ... | 22.8 | plt |
| LP646-016 | 00 47 18.0 | -06 28 38 | 23.6 | 7.0 | 11 | ... | ... | ... | ... | ... | ... | 23.6 | plt |
| LTT00453 | 00 48 13.4 | -05 08 08 | 19.8 | 6.4 | 11 | 25.2 | 4.0 | 12 | 23.8 | 2.1 | 1 | 23.8 | trg |
| LTT00464 | 00 49 01.7 | -50 08 42 | 15.3 | 4.6 | 9 | 19.2 | 3.1 | 10 | 21.6 | 1.0 | 1 | 21.6 | trg |
| GJ1022 | 00 49 29.1 | -61 02 33 | 19.6 | 5.3 | 11 | 21.1 | 3.3 | 12 | 20.6 | 0.6 | 1 | 20.6 | trg |
| LTT10301 | 00 50 33.2 | +24 49 00 | ... | ... | ... | [9.5] | 1.5 | 12 | 11.9 | 0.7 | 1 | 11.9 | trg |
| RG0050-2722 | 00 52 54.6 | -27 05 56 | ... | ... | ... | 28.5 | 4.8 | 10 | 24.4 | 2.4 | 1 | 24.4 | trg |
| GJ1024 | 00 56 38.4 | +17 27 35 | ... | ... | ... | 14.2 | 2.3 | 12 | 17.7 | 1.3 | 1 | 17.7 | trg |
| LTT00534 | 00 56 50.4 | -11 35 20 | 19.4 | 5.5 | 5 | 23.8 | 3.9 | 9 | 24.8 | 1.7 | 1 | 24.8 | trg |
| L087-002 | 00 57 12.5 | -64 15 24 | 12.7 | 3.5 | 11 | 13.6 | 2.1 | 12 | 17.8 | 0.4 | 1 | 17.8 | trg |
| GJ0046 | 00 58 27.9 | -27 51 25 | 6.6 | 2.1 | 11 | 9.7 | 1.5 | 12 | 12.4 | 0.5 | 2 | 12.4 | trg |
| LTT00556 | 00 58 52.8 | -28 13 52 | 19.3 | 7.4 | 11 | ... | ... | ... | ... | ... | ... | 19.3 | plt |
| GJ1025 | 01 00 56.1 | -04 26 57 | 15.9 | 4.3 | 11 | 15.2 | 2.5 | 12 | 11.4 | 0.3 | 1 | 11.4 | trg |
| LEP0100-7904 | 01 00 56.4 | -79 04 25 | 14.9 | 4.3 | 11 | 18.8 | 3.1 | 12 | ... | ... | ... | 18.8 | ccd |
| GJ0047 | 01 01 20.0 | +61 21 57 | ... | ... | ... | 10.8 | 1.7 | 12 | 11.0 | 0.5 | 1 | 11.0 | trg |
| LTT00573 | 01 01 24.7 | -01 05 59 | 16.0 | 4.3 | 11 | 17.7 | 3.1 | 12 | ... | ... | ... | 17.7 | ccd |
| L171-012 | 01 01 57.9 | -55 23 46 | 23.2 | 6.4 | 11 | ... | ... | ... | ... | ... | ... | 23.2 | plt |
| GJ0048 | 01 02 32.2 | +71 40 47 | ... | ... | ... | 6.3 | 1.0 | 12 | 8.3 | 0.1 | 2 | 8.3 | trg |
| GJ0049 | 01 02 38.8 | +62 20 42 | ... | ... | ... | 7.3 | 1.2 | 12 | 9.9 | 0.1 | 3 | 9.9 | trg |
| LHS0132 | 01 02 51.1 | -37 37 44 | 9.8 | 3.0 | 11 | 10.4 | 1.6 | 12 | 12.2 | 0.4 | 1 | 12.2 | trg |
| LEHPM1-1188 | 01 03 12.0 | -53 51 43 | 23.8 | 8.6 | 11 | ... | ... | ... | ... | ... | ... | 23.8 | plt |
| GJ1026 | 01 03 14.1 | +20 05 52 | ... | ... | ... | [11.5] | 1.8 | 12 | 16.4 | 0.8 | 2 | 16.4 | trg |
| LTT00597 | 01 03 54.8 | -26 20 05 | 22.1 | 5.9 | 11 | ... | ... | ... | ... | ... | ... | 22.1 | plt |
| L087-010 | 01 04 07.0 | -65 22 27 | 14.9 | 4.2 | 11 | 14.7 | 2.5 | 12 | 11.9 | 0.2 | 1 | 11.9 | trg |
| G269-089 | 01 04 28.9 | -38 27 49 | 15.7 | 4.3 | 11 | ... | ... | ... | ... | ... | ... | 15.7 | plt |
| GJ1028 | 01 04 53.8 | -18 07 29 | 12.0 | 3.5 | 11 | 10.3 | 1.6 | 12 | 10.0 | 0.5 | 1 | 10.0 | trg |
| GJ1029 | 01 05 37.6 | +28 29 34 | ... | ... | ... | 9.4 | 1.5 | 12 | 12.6 | 0.5 | 1 | 12.6 | trg |
| LTT00622 | 01 06 27.1 | -02 10 35 | 24.9 | 7.0 | 11 | ... | ... | ... | ... | ... | ... | 24.9 | plt |

| | | | | | | | | | | | | | |
|--------------|------------|-----------|-------|-------|-----|--------|-----|-----|------|-----|-----|------|-----|
| GJ1030 | 01 06 41.5 | +15 16 22 | ... | ... | ... | 15.6 | 2.6 | 12 | 21.8 | 1.1 | 2 | 21.8 | trg |
| GJ0052.2 | 01 07 49.6 | +34 12 54 | ... | ... | ... | 38.3 | 6.3 | 12 | 22.2 | 1.6 | 1 | 22.2 | trg |
| GJ1031 | 01 08 18.3 | -28 48 21 | 15.4 | 4.2 | 11 | ... | ... | ... | ... | ... | ... | 15.4 | plt |
| GJ21-001 | 01 08 50.4 | -03 40 34 | 20.0 | 5.6 | 11 | ... | ... | ... | ... | ... | ... | 20.0 | plt |
| SSS0109-5101 | 01 09 01.5 | -51 00 50 | 15.0 | 4.3 | 11 | 15.0 | 2.7 | 9 | 15.5 | 0.4 | 1 | 15.5 | trg |
| GJ1032 | 01 09 12.5 | -24 41 21 | 14.8 | 4.1 | 11 | 15.4 | 2.4 | 12 | 22.6 | 1.6 | 1 | 22.6 | trg |
| GJ2021 | 01 09 18.7 | -24 30 24 | 18.6 | 5.2 | 11 | ... | ... | ... | ... | ... | ... | 18.6 | plt |
| LP647-013 | 01 09 51.2 | -03 43 26 | 9.3 | 4.3 | 11 | 11.4 | 2.1 | 12 | 9.6 | 0.2 | 1 | 9.6 | trg |
| LP707-016 | 01 10 17.5 | -11 51 18 | 17.3 | 5.5 | 11 | 12.6 | 2.1 | 12 | 18.5 | 0.5 | 1 | 18.5 | trg |
| GJ0054 | 01 10 22.9 | -67 26 42 | [3.6] | 1.6 | 10 | [4.9] | 0.8 | 12 | 7.8 | 0.1 | 3 | 7.8 | trg |
| LP467-016 | 01 11 25.4 | +15 26 21 | ... | ... | ... | [7.9] | 1.2 | 12 | 21.8 | 0.9 | 1 | 21.8 | trg |
| SCR0111-4908 | 01 11 47.5 | -49 08 09 | 23.6 | 10.8 | 11 | 17.5 | 2.8 | 12 | 18.4 | 0.5 | 1 | 18.4 | trg |
| LHS1212 | 01 11 57.0 | +04 54 50 | ... | ... | ... | 15.1 | 2.4 | 12 | 15.9 | 0.5 | 1 | 15.9 | trg |
| GJ0054.1 | 01 12 30.7 | -16 59 56 | 6.0 | 1.7 | 11 | 4.7 | 0.8 | 12 | 3.7 | 0.0 | 2 | 3.7 | trg |
| LEHPM1-1343 | 01 13 16.4 | -54 29 14 | 14.6 | 4.3 | 11 | 15.2 | 2.3 | 12 | 16.5 | 0.3 | 1 | 16.5 | trg |
| SCR0113-7603 | 01 13 31.5 | -76 03 09 | 21.7 | 8.0 | 11 | 22.8 | 3.6 | 12 | ... | ... | ... | 22.8 | ccd |
| LHS1217 | 01 14 08.6 | -36 56 43 | 18.3 | 6.2 | 11 | ... | ... | ... | ... | ... | ... | 18.3 | plt |
| L221-060 | 01 14 34.2 | -53 56 32 | 13.1 | 3.5 | 11 | 16.1 | 2.6 | 12 | 16.6 | 0.5 | 1 | 16.6 | trg |
| LP938-144 | 01 14 36.7 | -34 34 51 | 23.8 | 8.8 | 11 | ... | ... | ... | ... | ... | ... | 23.8 | plt |
| LP938-149 | 01 15 29.8 | -33 25 52 | 24.0 | 7.5 | 11 | ... | ... | ... | ... | ... | ... | 24.0 | plt |
| GJ1034 | 01 16 29.2 | +24 19 27 | ... | ... | ... | 33.8 | 6.0 | 12 | 20.8 | 2.0 | 1 | 20.8 | trg |
| GJ1036 | 01 17 15.4 | -35 42 57 | 11.0 | 3.7 | 11 | 14.0 | 2.3 | 12 | 16.2 | 0.9 | 1 | 16.2 | trg |
| L797-030 | 01 17 15.7 | -13 15 48 | 15.9 | 4.7 | 8 | 17.8 | 2.9 | 12 | 23.4 | 1.4 | 1 | 23.4 | trg |
| GJ0056.1 | 01 18 16.0 | -12 53 59 | 19.9 | 5.6 | 11 | 19.2 | 3.0 | 12 | 22.1 | 1.6 | 2 | 22.1 | trg |
| LTT00734 | 01 19 51.1 | -27 26 39 | 21.9 | 6.2 | 11 | ... | ... | ... | ... | ... | ... | 21.9 | plt |
| GJ1035 | 01 19 52.2 | +84 09 33 | ... | ... | ... | 15.1 | 2.4 | 12 | 14.0 | 0.5 | 1 | 14.0 | trg |
| GJ0057 | 01 21 34.6 | -41 39 23 | 12.6 | 3.7 | 11 | 18.2 | 2.9 | 9 | 16.7 | 0.4 | 2 | 16.7 | trg |
| HIP006365 | 01 21 45.3 | -46 42 51 | ... | ... | ... | 18.9 | 3.0 | 12 | 22.4 | 1.3 | 1 | 22.4 | trg |
| LTT00755 | 01 22 23.1 | -33 12 51 | 14.8 | 5.4 | 10 | ... | ... | ... | 24.6 | 1.1 | 1 | 24.6 | trg |
| LHS1240 | 01 22 43.2 | +00 31 07 | ... | ... | ... | [13.8] | 2.7 | 12 | 14.4 | 0.8 | 1 | 14.4 | trg |
| L797-023 | 01 23 18.0 | -12 56 23 | 24.4 | 6.7 | 11 | 22.2 | 3.5 | 12 | ... | ... | ... | 22.2 | ccd |
| LTT00774 | 01 23 24.8 | -30 45 34 | 18.6 | 6.4 | 11 | ... | ... | ... | ... | ... | ... | 18.6 | plt |
| SCR0124-0027 | 01 24 31.3 | -00 27 56 | 27.6 | 8.2 | 11 | 21.6 | 3.4 | 12 | ... | ... | ... | 21.6 | ccd |
| LEHPM1-1550 | 01 26 43.1 | -54 43 30 | 20.7 | 6.9 | 11 | ... | ... | ... | ... | ... | ... | 20.7 | plt |
| SCR0128-1458 | 01 28 39.5 | -14 58 04 | ... | ... | ... | 12.8 | 2.0 | 12 | 13.7 | 0.3 | 1 | 13.7 | trg |
| LTT00818 | 01 30 05.1 | -25 45 08 | 20.3 | 5.6 | 11 | ... | ... | ... | ... | ... | ... | 20.3 | plt |
| LHS0142 | 01 32 26.2 | -21 54 19 | 16.9 | 4.7 | 11 | 17.7 | 2.9 | 12 | 18.1 | 0.6 | 2 | 18.1 | trg |
| LP768-113 | 01 33 58.0 | -17 38 24 | 18.7 | 5.4 | 11 | 14.0 | 2.2 | 12 | ... | ... | ... | 14.0 | ccd |
| SCR0135-6127 | 01 35 53.7 | -61 27 11 | 29.9 | 7.9 | 11 | 24.9 | 3.9 | 12 | ... | ... | ... | 24.9 | ccd |
| LP883-537 | 01 36 08.7 | -26 52 16 | 19.1 | 5.1 | 11 | 19.6 | 3.1 | 12 | ... | ... | ... | 19.6 | ccd |
| LP648-020 | 01 36 55.2 | -06 47 38 | 23.9 | 7.5 | 11 | ... | ... | ... | ... | ... | ... | 23.9 | plt |
| LHS1268 | 01 37 20.8 | -49 11 44 | 12.9 | 3.9 | 11 | 16.6 | 2.8 | 10 | 22.5 | 0.8 | 2 | 22.5 | trg |
| SCR0137-4148 | 01 37 23.5 | -41 48 56 | 21.9 | 6.3 | 11 | 24.1 | 3.8 | 12 | ... | ... | ... | 24.1 | ccd |
| SCR0138-6029 | 01 38 01.1 | -60 29 56 | 28.7 | 10.2 | 11 | 20.3 | 3.2 | 12 | ... | ... | ... | 20.3 | ccd |
| LHS1272 | 01 38 29.9 | +00 39 05 | ... | ... | ... | 17.6 | 2.8 | 12 | 20.2 | 1.2 | 1 | 20.2 | trg |
| GJ0065 | 01 39 01.5 | -17 57 02 | [2.7] | 1.0 | 11 | [1.8] | 0.3 | 12 | 2.7 | 0.0 | 1 | 2.7 | trg |
| L294-078 | 01 39 11.5 | -48 17 50 | 20.5 | 5.7 | 11 | ... | ... | ... | ... | ... | ... | 20.5 | plt |
| LP991-084 | 01 39 21.7 | -39 36 09 | 9.2 | 2.8 | 11 | 8.5 | 1.3 | 12 | 8.6 | 0.1 | 1 | 8.6 | trg |
| SCR0139-5927 | 01 39 39.8 | -59 27 56 | 17.4 | 5.2 | 11 | ... | ... | ... | ... | ... | ... | 17.4 | plt |
| LHS1288 | 01 42 55.8 | -42 12 13 | 16.4 | 4.8 | 11 | 23.8 | 3.7 | 9 | 23.5 | 1.3 | 2 | 23.5 | trg |
| GJ0070 | 01 43 20.1 | +04 19 18 | ... | ... | ... | 11.1 | 1.7 | 12 | 11.5 | 0.2 | 2 | 11.5 | trg |
| SCR0143-0602 | 01 43 45.1 | -06 02 40 | ... | ... | ... | 13.3 | 2.1 | 12 | 19.8 | 0.6 | 1 | 19.8 | trg |
| GJ0073 | 01 44 58.5 | +16 20 39 | ... | ... | ... | 15.9 | 2.5 | 12 | 16.4 | 1.0 | 1 | 16.4 | trg |
| WT0050 | 01 46 29.4 | -53 39 33 | 13.5 | 3.9 | 11 | 13.7 | 2.3 | 12 | ... | ... | ... | 13.7 | ccd |
| L870-044 | 01 46 36.8 | -08 38 58 | 15.5 | 5.1 | 11 | 14.6 | 2.2 | 12 | ... | ... | ... | 14.6 | ccd |
| L294-092 | 01 47 42.6 | -48 36 06 | 9.9 | 2.8 | 11 | 11.5 | 1.8 | 12 | 13.4 | 0.3 | 1 | 13.4 | trg |
| L1303-013 | 01 48 03.9 | +21 12 24 | ... | ... | ... | 17.2 | 2.7 | 12 | 20.4 | 1.4 | 1 | 20.4 | trg |
| L173-039 | 01 48 26.0 | -56 58 42 | 11.6 | 3.2 | 11 | 15.5 | 2.6 | 12 | ... | ... | ... | 15.5 | ccd |
| L052-022 | 01 48 26.2 | -70 58 29 | 24.0 | 7.6 | 8 | ... | ... | ... | ... | ... | ... | 24.0 | plt |
| 2MA0149+2956 | 01 49 09.0 | +29 56 13 | ... | ... | ... | 19.8 | 3.2 | 3 | 22.5 | 0.4 | 1 | 22.5 | trg |
| SCR0149-8038 | 01 49 42.7 | -80 38 28 | 25.3 | 9.6 | 11 | 23.8 | 3.8 | 12 | ... | ... | ... | 23.8 | ccd |
| LP940-020 | 01 49 43.5 | -33 19 20 | 25.0 | 7.2 | 11 | ... | ... | ... | ... | ... | ... | 25.0 | plt |
| LP940-021 | 01 50 13.3 | -37 41 52 | 21.6 | 6.0 | 11 | 22.7 | 3.5 | 12 | ... | ... | ... | 22.7 | ccd |
| LHS1300 | 01 50 20.1 | -49 36 40 | 24.3 | 6.9 | 11 | ... | ... | ... | ... | ... | ... | 24.3 | plt |
| LHS5043 | 01 50 53.3 | -34 24 39 | 24.3 | 7.5 | 11 | ... | ... | ... | ... | ... | ... | 24.3 | plt |
| LHS1302 | 01 51 04.1 | -06 07 05 | 16.5 | 6.5 | 11 | 11.0 | 1.9 | 12 | 9.9 | 0.2 | 1 | 9.9 | trg |
| GJ0078 | 01 51 48.7 | -10 48 13 | 18.7 | 5.5 | 11 | 20.8 | 3.2 | 12 | 16.2 | 0.7 | 2 | 16.2 | trg |
| GJ0079 | 01 52 49.2 | -22 26 06 | 6.6 | 1.8 | 11 | 8.9 | 1.5 | 10 | 11.0 | 0.1 | 2 | 11.0 | trg |
| LHS5045 | 01 52 51.6 | -48 05 41 | 11.5 | 3.3 | 11 | 12.1 | 1.9 | 12 | 13.3 | 0.3 | 1 | 13.3 | trg |
| LTT01010 | 01 53 11.4 | -21 05 43 | 15.3 | 4.2 | 11 | 16.0 | 2.7 | 12 | ... | ... | ... | 16.0 | ccd |
| L088-043 | 01 53 37.1 | -66 53 34 | 12.1 | 3.3 | 11 | 11.6 | 1.9 | 12 | 13.3 | 0.6 | 1 | 13.3 | trg |
| LHS1311 | 01 53 50.6 | -10 32 14 | 22.0 | 7.3 | 11 | 19.4 | 3.1 | 12 | ... | ... | ... | 19.4 | ccd |
| LP768-670 | 01 54 08.0 | -15 36 22 | 21.7 | 6.6 | 11 | 16.3 | 2.5 | 12 | ... | ... | ... | 16.3 | ccd |
| L223-077 | 01 55 13.2 | -53 06 31 | 21.2 | 6.4 | 11 | ... | ... | ... | ... | ... | ... | 21.2 | plt |
| GJ1041 | 01 59 12.4 | +03 31 09 | ... | ... | ... | 19.4 | 3.9 | 10 | 24.2 | 0.8 | 3 | 24.2 | trg |
| GJ0082 | 01 59 23.5 | +58 31 16 | ... | ... | ... | 7.7 | 1.2 | 12 | 12.2 | 0.5 | 2 | 12.2 | trg |
| GJ0083.1 | 02 00 13.0 | +13 03 07 | ... | ... | ... | 5.3 | 0.8 | 12 | 4.5 | 0.1 | 1 | 4.5 | trg |
| L173-019 | 02 00 38.3 | -55 58 04 | | | ... | 7.8 | 1.2 | 12 | 8.2 | 0.2 | 1 | 8.2 | trg |
| LHS1325 | 02 00 47.3 | -10 21 21 | 24.1 | 6.5 | 11 | ... | ... | ... | ... | ... | ... | 24.1 | plt |
| LP709-018 | 02 01 43.9 | -10 17 29 | 21.7 | 6.1 | 11 | ... | ... | ... | ... | ... | ... | 21.7 | plt |
| LP030-055 | 02 01 54.0 | +73 32 32 | ... | ... | ... | [10.9] | 1.9 | 12 | 11.4 | 0.1 | 1 | 11.4 | trg |
| LHS1326 | 02 02 13.8 | +10 20 11 | ... | ... | ... | 9.0 | 1.4 | 12 | 8.9 | 0.3 | 1 | 8.9 | trg |
| L655-017 | 02 03 20.8 | -21 13 43 | 13.9 | 4.6 | 8 | 12.0 | 1.9 | 12 | ... | ... | ... | 12.0 | ccd |
| LHS1332 | 02 04 27.5 | -01 52 57 | 21.7 | 5.9 | 11 | 21.9 | 3.6 | 12 | ... | ... | ... | 21.9 | ccd |
| GJ0084 | 02 05 04.9 | -17 36 53 | [8.1] | 2.5 | 9 | [6.8] | 1.1 | 12 | 9.1 | 0.2 | 2 | 9.1 | trg |
| GJ0084.1 | 02 05 23.7 | -28 04 11 | 16.1 | 4.5 | 11 | 21.8 | 3.5 | 10 | 23.1 | 1.1 | 2 | 23.1 | trg |
| LHS1339 | 02 05 48.6 | -30 10 36 | 14.0 | 3.7 | 11 | 15.7 | 2.6 | 12 | 9.3 | 0.3 | 1 | 9.3 | trg |

| | | | | | | | | | | | | | |
|--------------|-------------|-----------|--------|------|-----|--------|-----|-----|------|-----|-----|--------|-----|
| GJ0084.2 | 02 06 57.2 | +45 11 04 | ... | ... | ... | 16.7 | 2.9 | 10 | 19.5 | 1.3 | 2 | 19.5 | trg |
| GJ0085 | 02 07 23.3 | -66 34 12 | 18.3 | 5.0 | 11 | 19.2 | 3.0 | 12 | 11.6 | 0.3 | 1 | 11.6 | trg |
| LHS1347 | 02 09 36.1 | -14 21 33 | 17.4 | 5.1 | 11 | 13.9 | 2.3 | 12 | 19.7 | 1.0 | 2 | 19.7 | trg |
| LP709-043 | 02 10 03.7 | -08 53 00 | 17.2 | 4.5 | 11 | 15.6 | 2.5 | 12 | ... | ... | ... | 15.6 | ccd |
| SCR0210-6622 | 02 10 45.1 | -66 22 27 | 30.0 | 9.5 | 11 | 23.3 | 3.6 | 12 | ... | ... | ... | 23.3 | ccd |
| LTTO1133 | 02 11 02.2 | -35 40 14 | ... | ... | ... | 14.8 | 3.4 | 12 | 20.7 | 1.3 | 1 | 20.7 | trg |
| LHS1351 | 02 11 18.0 | -63 13 41 | 18.9 | 5.0 | 11 | 18.0 | 2.8 | 12 | 14.0 | 0.3 | 1 | 14.0 | trg |
| GJ0087 | 02 12 20.9 | +03 34 32 | ... | ... | ... | 11.4 | 1.8 | 11 | 10.4 | 0.2 | 2 | 10.4 | trg |
| LHS1354 | 02 12 29.2 | -08 04 10 | [19.8] | 7.0 | 11 | [22.9] | 3.9 | 12 | ... | ... | ... | [22.9] | ccd |
| LHS1358 | 02 12 54.0 | +00 00 16 | ... | ... | ... | 12.5 | 1.9 | 12 | 15.3 | 0.5 | 1 | 15.3 | trg |
| LHS1356 | 02 12 58.8 | -73 45 50 | 21.9 | 5.8 | 11 | ... | ... | ... | ... | ... | ... | 21.9 | plt |
| L296-105 | 02 13 53.0 | -49 23 14 | 21.4 | 5.6 | 11 | ... | ... | ... | ... | ... | ... | 21.4 | plt |
| GJ0091 | 02 13 53.6 | -32 02 29 | 9.4 | 2.7 | 11 | 10.1 | 1.6 | 12 | 12.5 | 0.3 | 2 | 12.5 | trg |
| LHS1363 | 02 14 12.6 | -03 57 44 | 15.7 | 5.4 | 11 | 11.0 | 1.7 | 12 | 12.2 | 0.2 | 1 | 12.2 | trg |
| NLTT07418 | 02 14 18.6 | -30 33 47 | 17.4 | 5.2 | 11 | ... | ... | ... | ... | ... | ... | 17.4 | plt |
| GJ1045 | 02 14 59.4 | +17 25 09 | ... | ... | ... | 19.6 | 3.1 | 12 | 20.5 | 1.4 | 1 | 20.5 | trg |
| LHS1367 | 02 15 08.1 | -30 40 01 | 12.7 | 3.5 | 11 | 13.1 | 2.1 | 11 | ... | ... | ... | 13.1 | ccd |
| StKM1-249 | 02 15 20.0 | -13 00 58 | 21.8 | 6.1 | 11 | ... | ... | ... | ... | ... | ... | 21.8 | plt |
| LHS1373 | 02 15 48.9 | -12 40 27 | 18.6 | 5.0 | 11 | 18.0 | 2.9 | 12 | ... | ... | ... | 18.0 | ccd |
| LP829-041 | 02 16 21.4 | -22 00 49 | 25.0 | 9.3 | 11 | ... | ... | ... | ... | ... | ... | 25.0 | plt |
| LHS1375 | 02 16 31.5 | +13 35 37 | ... | ... | ... | 8.9 | 1.4 | 12 | 8.5 | 0.3 | 1 | 8.5 | trg |
| SCR0216-5257 | 02 16 32.0 | -52 57 47 | 25.6 | 7.3 | 11 | 22.8 | 3.8 | 12 | ... | ... | ... | 22.8 | ccd |
| LHS1377 | 02 16 41.2 | -30 59 18 | 11.8 | 3.7 | 11 | 10.4 | 1.7 | 12 | 14.3 | 0.6 | 1 | 14.3 | trg |
| LHS1378 | 02 17 12.9 | +35 26 19 | ... | ... | ... | 9.0 | 1.4 | 12 | 10.4 | 0.1 | 1 | 10.4 | trg |
| WT0084 | 02 17 28.5 | -59 22 44 | 19.1 | 9.8 | 11 | 15.8 | 2.6 | 12 | 13.1 | 0.5 | 1 | 13.1 | trg |
| GJ0093 | 02 17 34.2 | -53 59 20 | 22.7 | 6.4 | 11 | 27.0 | 4.2 | 10 | 22.5 | 1.3 | 2 | 22.5 | trg |
| L174-034 | 02 18 17.9 | -55 07 33 | 22.5 | 6.0 | 11 | ... | ... | ... | ... | ... | ... | 22.5 | plt |
| GJ0094 | 02 18 59.4 | +35 21 00 | ... | ... | ... | 17.8 | 3.3 | 12 | 17.7 | 2.6 | 1 | 17.7 | trg |
| GJ1046 | 02 19 10.1 | -36 46 41 | 13.1 | 3.4 | 11 | 13.0 | 2.1 | 12 | 14.1 | 0.6 | 1 | 14.1 | trg |
| GJ1047 | 02 21 04.7 | +36 53 02 | ... | ... | ... | [22.4] | 3.5 | 12 | 21.7 | 1.7 | 1 | 21.7 | trg |
| GJ0096 | 02 22 14.6 | +47 52 48 | ... | ... | ... | 9.6 | 1.6 | 12 | 11.9 | 0.2 | 2 | 11.9 | trg |
| LP710-008 | 02 22 17.8 | -13 11 06 | 23.8 | 6.5 | 11 | ... | ... | ... | ... | ... | ... | 23.8 | plt |
| LP941-057 | 02 22 18.3 | -36 51 52 | 23.9 | 7.1 | 11 | ... | ... | ... | ... | ... | ... | 23.9 | plt |
| L440-002 | 02 22 25.6 | -34 33 18 | 21.2 | 5.8 | 11 | ... | ... | ... | ... | ... | ... | 21.2 | plt |
| LP829-051 | 02 23 24.0 | -23 18 25 | 21.9 | 7.6 | 11 | 20.8 | 3.2 | 12 | ... | ... | ... | 20.8 | ccd |
| L296-061 | 02 24 26.6 | -47 10 24 | 19.7 | 5.6 | 11 | ... | ... | ... | ... | ... | ... | 19.7 | plt |
| LP885-059 | 02 26 32.8 | -29 30 56 | 24.8 | 7.3 | 11 | ... | ... | ... | ... | ... | ... | 24.8 | plt |
| L513-008 | 02 27 30.4 | -30 54 36 | 15.6 | 4.5 | 9 | 17.0 | 2.7 | 12 | 20.6 | 0.8 | 1 | 20.6 | trg |
| LHS1407 | 02 28 05.5 | +03 10 05 | ... | ... | ... | 21.0 | 3.5 | 12 | 23.1 | 2.8 | 1 | 23.1 | trg |
| LP941-090 | 02 28 07.7 | -36 28 20 | 22.7 | 6.8 | 11 | ... | ... | ... | ... | ... | ... | 22.7 | plt |
| LHS1412 | 02 30 34.9 | -15 43 25 | 21.9 | 5.9 | 11 | ... | ... | ... | ... | ... | ... | 21.9 | plt |
| GJ0101 | 02 31 27.7 | +57 22 43 | ... | ... | ... | 20.2 | 3.3 | 12 | 19.0 | 0.6 | 2 | 19.0 | trg |
| LP650-158 | 02 31 33.3 | -03 56 23 | 25.6 | 6.9 | 7 | 22.9 | 4.3 | 12 | ... | ... | ... | 22.9 | ccd |
| GJ0102 | 02 33 37.2 | +24 55 38 | ... | ... | ... | 9.9 | 1.5 | 12 | 9.8 | 0.3 | 1 | 9.8 | trg |
| L225-057 | 02 34 21.2 | -53 05 37 | [10.7] | 2.9 | 11 | [9.5] | 1.5 | 12 | 19.6 | 0.7 | 1 | 19.6 | trg |
| GJ0103 | 02 34 22.6 | -43 47 47 | [5.6] | 2.2 | 9 | [6.6] | 1.5 | 12 | 11.6 | 0.1 | 2 | 11.6 | trg |
| GJ0104 | 02 35 53.3 | +20 13 11 | ... | ... | ... | 10.5 | 1.7 | 12 | 13.7 | 0.3 | 2 | 13.7 | trg |
| APM0237-5928 | 02 36 32.5 | -59 28 06 | 14.6 | 7.0 | 11 | 9.2 | 1.5 | 12 | 9.6 | 0.1 | 1 | 9.6 | trg |
| LHS1426 | 02 37 32.1 | +00 21 12 | ... | ... | ... | 24.2 | 4.0 | 12 | 24.9 | 2.7 | 1 | 24.9 | trg |
| L174-028 | 02 37 52.8 | -58 45 11 | 15.1 | 4.9 | 11 | 12.5 | 1.9 | 12 | 15.0 | 0.8 | 1 | 15.0 | trg |
| LEHPM1-2662 | 02 38 49.1 | -39 16 37 | 24.4 | 7.0 | 11 | ... | ... | ... | ... | ... | ... | 24.4 | plt |
| LTTO17400 | 02 39 17.35 | +07 28 17 | ... | ... | ... | 20.6 | 3.2 | 12 | 19.4 | 1.1 | 1 | 19.4 | trg |
| GJ1050 | 02 39 50.7 | -34 07 58 | 14.9 | 4.1 | 11 | 15.1 | 2.4 | 12 | 10.7 | 0.5 | 1 | 10.7 | trg |
| G075-035 | 02 41 15.1 | -04 32 18 | 16.3 | 5.0 | 11 | 12.2 | 1.9 | 12 | 11.8 | 0.2 | 1 | 11.8 | trg |
| LHS1434 | 02 42 56.3 | -38 56 12 | 18.8 | 5.1 | 11 | 22.1 | 3.4 | 12 | ... | ... | ... | 22.1 | ccd |
| GJ1051 | 02 43 53.2 | -08 49 46 | 23.3 | 7.4 | 5 | 26.3 | 4.1 | 12 | 24.8 | 2.4 | 2 | 24.8 | trg |
| GJ0109 | 02 44 15.5 | +25 31 24 | ... | ... | ... | 7.3 | 1.1 | 12 | 7.6 | 0.1 | 2 | 7.6 | trg |
| LP993-115 | 02 45 14.3 | -43 44 11 | 12.1 | 4.6 | 11 | 9.2 | 1.4 | 12 | 11.2 | 0.2 | 2 | 11.2 | trg |
| LP711-005 | 02 45 18.5 | -13 56 24 | 24.0 | 6.9 | 11 | ... | ... | ... | ... | ... | ... | 24.0 | plt |
| LTTO17413 | 02 45 39.6 | +44 56 55 | ... | ... | ... | 18.1 | 3.2 | 12 | 23.1 | 1.3 | 1 | 23.1 | trg |
| SCR0246-7024 | 02 46 02.3 | -70 24 06 | 20.0 | 8.1 | 11 | 14.2 | 2.3 | 12 | 12.5 | 0.2 | 1 | 12.5 | trg |
| LHS0017 | 02 46 14.9 | -04 59 21 | 27.9 | 11.7 | 11 | 20.9 | 4.5 | 12 | 16.6 | 2.3 | 1 | 16.6 | trg |
| LHS1443 | 02 46 34.7 | +16 25 10 | ... | ... | ... | 16.2 | 3.6 | 12 | 14.6 | 0.8 | 1 | 14.6 | trg |
| LTTO1349 | 02 46 42.9 | -23 05 12 | 14.6 | 4.1 | 11 | 20.1 | 3.2 | 9 | 23.0 | 0.9 | 1 | 23.0 | trg |
| LP771-021 | 02 48 41.0 | -16 51 22 | 19.0 | 5.2 | 11 | 19.1 | 3.0 | 12 | 16.2 | 1.4 | 1 | 16.2 | trg |
| GJ0114.1 | 02 50 09.8 | -53 08 20 | 11.8 | 3.2 | 11 | 12.1 | 1.9 | 12 | 13.1 | 0.3 | 2 | 13.1 | trg |
| LEHPM1-2816 | 02 50 23.0 | -21 04 45 | 25.0 | 6.9 | 11 | ... | ... | ... | ... | ... | ... | 25.0 | plt |
| GJ0118 | 02 52 22.2 | -63 40 48 | 12.2 | 3.3 | 11 | 11.6 | 1.8 | 12 | 11.7 | 0.3 | 2 | 11.7 | trg |
| LEHPM1-2855 | 02 52 29.3 | -24 17 19 | 21.4 | 6.6 | 11 | ... | ... | ... | ... | ... | ... | 21.4 | plt |
| SO0253+1652 | 02 53 00.0 | +16 52 52 | ... | ... | ... | 4.0 | 0.7 | 12 | 3.9 | 0.0 | 3 | 3.9 | trg |
| L012-006 | 02 53 17.0 | -80 31 20 | 24.0 | 6.5 | 11 | 24.8 | 3.9 | 12 | ... | ... | ... | 24.8 | ccd |
| NLTT09315 | 02 53 46.9 | -61 35 19 | 16.5 | 4.4 | 11 | ... | ... | ... | ... | ... | ... | 16.5 | plt |
| LP831-001 | 02 54 39.5 | -22 15 59 | 20.1 | 5.8 | 11 | ... | ... | ... | ... | ... | ... | 20.1 | plt |
| LHS1471 | 02 55 14.5 | -51 40 21 | 21.8 | 6.0 | 11 | ... | ... | ... | ... | ... | ... | 21.8 | plt |
| GJ0119 | 02 56 34.4 | +55 26 14 | ... | ... | ... | 15.0 | 2.5 | 12 | 20.8 | 1.2 | 4 | 20.8 | trg |
| GJ0120 | 02 57 31.0 | +10 47 25 | ... | ... | ... | 22.6 | 3.8 | 12 | 20.0 | 2.4 | 1 | 20.0 | trg |
| LHS1481 | 02 58 10.2 | -12 53 06 | 21.3 | 5.8 | 11 | 22.6 | 3.9 | 12 | ... | ... | ... | 22.6 | ccd |
| LTTO1445 | 03 01 51.0 | -16 35 31 | [11.1] | 3.7 | 8 | 6.9 | 1.3 | 12 | 7.0 | 0.1 | 3 | 7.0 | trg |
| LHS1490 | 03 02 06.4 | -39 50 52 | {24.3} | 9.2 | 11 | {20.1} | 4.0 | 12 | 14.0 | 0.5 | 1 | 14.0 | trg |
| G075-060 | 03 02 09.8 | -00 44 43 | 23.6 | 6.9 | 11 | ... | ... | ... | ... | ... | ... | 23.6 | plt |
| APM0302-6952 | 03 02 30.8 | -69 52 03 | 20.4 | 5.6 | 11 | ... | ... | ... | ... | ... | ... | 20.4 | plt |
| GJ0121.1 | 03 02 38.1 | -18 09 59 | 15.5 | 5.1 | 11 | 15.5 | 2.4 | 12 | 19.3 | 1.5 | 2 | 19.3 | trg |
| LEHPM1-3019 | 03 03 00.7 | -55 24 53 | 24.4 | 7.2 | 11 | ... | ... | ... | ... | ... | ... | 24.4 | plt |
| LP711-044 | 03 03 47.9 | -12 51 19 | 17.8 | 5.1 | 11 | 17.7 | 2.8 | 12 | ... | ... | ... | 17.7 | ccd |
| LHS1491 | 03 04 04.5 | -20 22 43 | 13.8 | 4.2 | 11 | 12.4 | 2.0 | 12 | 14.9 | 0.3 | 1 | 14.9 | trg |
| LEHPM1-3070 | 03 06 11.6 | -36 47 53 | 13.8 | 5.4 | 11 | 12.8 | 2.0 | 10 | 13.1 | 0.2 | 1 | 13.1 | trg |
| GJ1054 | 03 07 55.8 | -28 13 11 | [11.4] | 3.0 | 2 | [13.7] | 2.6 | 12 | 18.0 | 0.8 | 1 | 18.0 | trg |

| | | | | | | | | | | | | | |
|---------------|------------|-----------|--------|------|-----|--------|------|-----|------|-----|-----|--------|-----|
| LHS1499 | 03 08 28.2 | +43 01 40 | ... | ... | ... | 39.9 | 6.2 | 12 | 24.5 | 3.4 | 1 | 24.5 | trg |
| GJ1055 | 03 09 00.2 | +10 01 26 | ... | ... | ... | 15.0 | 2.5 | 12 | 11.9 | 0.6 | 1 | 11.9 | trg |
| LP994-114 | 03 09 22.2 | -39 11 03 | 18.4 | 5.7 | 11 | ... | ... | ... | ... | ... | ... | 18.4 | plt |
| GJ0125 | 03 09 30.7 | +45 43 57 | ... | ... | ... | [8.5] | 1.5 | 12 | 15.7 | 0.5 | 2 | 15.7 | trg |
| LP831-035 | 03 10 03.1 | -23 41 31 | 21.3 | 6.3 | 11 | ... | ... | ... | ... | ... | ... | 21.3 | plt |
| LHS1512 | 03 10 15.4 | +05 54 31 | ... | ... | ... | 17.8 | 2.7 | 12 | 16.9 | 1.4 | 1 | 16.9 | trg |
| GJ1053 | 03 10 58.3 | +73 46 20 | ... | ... | ... | 17.9 | 3.9 | 12 | 12.0 | 0.5 | 1 | 12.0 | trg |
| LTTO1505 | 03 11 36.7 | -04 16 37 | 24.7 | 7.4 | 11 | 19.5 | 3.1 | 12 | ... | ... | ... | 19.5 | ccd |
| GJ0130 | 03 12 29.8 | -38 05 20 | 13.3 | 3.5 | 7 | 16.7 | 2.7 | 12 | 12.6 | 1.6 | 1 | 12.6 | trg |
| GJ1057 | 03 13 22.9 | +04 46 29 | ... | ... | ... | 7.6 | 1.2 | 12 | 8.5 | 0.3 | 1 | 8.5 | trg |
| LP831-045 | 03 14 18.2 | -23 09 30 | [14.8] | 3.9 | 11 | [12.8] | 2.0 | 12 | 15.6 | 0.3 | 1 | 15.6 | trg |
| StKM1-350 | 03 14 36.7 | -09 40 03 | 21.9 | 5.9 | 8 | 24.6 | 3.9 | 12 | ... | ... | ... | 24.6 | ccd |
| LTTO11051 | 03 14 47.7 | +48 30 51 | ... | ... | ... | 20.4 | 3.2 | 12 | 19.9 | 3.9 | 1 | 19.9 | trg |
| GJ0130.1 | 03 16 13.8 | +58 10 02 | ... | ... | ... | [16.1] | 4.9 | 8 | 14.8 | 0.6 | 2 | 14.8 | trg |
| LP831-068 | 03 16 47.8 | -21 25 26 | 12.1 | 3.7 | 11 | 12.6 | 2.1 | 12 | 18.7 | 0.8 | 1 | 18.7 | trg |
| LP994-091 | 03 17 03.0 | -42 14 33 | 24.3 | 7.2 | 11 | ... | ... | ... | ... | ... | ... | 24.3 | plt |
| LTTO17492 | 03 17 12.2 | +45 22 22 | ... | ... | ... | [18.5] | 8.1 | 10 | 18.4 | 0.3 | 1 | 18.4 | trg |
| LHS1525 | 03 17 45.2 | +25 15 06 | ... | ... | ... | 22.5 | 3.5 | 12 | 21.6 | 1.4 | 1 | 21.6 | trg |
| LP887-070 | 03 18 04.0 | -30 24 12 | 16.3 | 5.2 | 8 | 19.7 | 3.2 | 12 | 23.0 | 1.4 | 1 | 23.0 | trg |
| GJ0134 | 03 18 07.5 | +38 15 07 | ... | ... | ... | 10.9 | 1.9 | 12 | 16.3 | 0.5 | 2 | 16.3 | trg |
| LP994-096 | 03 18 45.5 | -40 51 34 | 13.6 | 4.1 | 11 | 13.9 | 2.2 | 12 | ... | ... | ... | 13.9 | ccd |
| LTTO1577 | 03 18 58.3 | -36 23 35 | 19.1 | 5.7 | 8 | 15.4 | 2.4 | 12 | 20.2 | 1.3 | 1 | 20.2 | trg |
| LTTO1578 | 03 19 29.2 | -30 59 44 | 21.0 | 7.8 | 11 | 18.4 | 2.8 | 12 | ... | ... | ... | 18.4 | ccd |
| 2MA0320-0446 | 03 20 28.4 | -04 46 37 | 19.1 | 10.7 | 6 | 23.4 | 4.0 | 11 | 20.3 | 1.2 | 1 | 20.3 | trg |
| L127-124 | 03 20 51.8 | -63 51 53 | 17.7 | 6.8 | 11 | ... | ... | ... | ... | ... | ... | 17.7 | plt |
| DEN0320-5520 | 03 20 58.9 | -55 20 16 | 24.5 | 7.4 | 11 | ... | ... | ... | ... | ... | ... | 24.5 | plt |
| LP412-031 | 03 20 59.0 | +18 54 22 | ... | ... | ... | 14.3 | 2.2 | 3 | 14.5 | 0.1 | 2 | 14.5 | trg |
| GJ0133 | 03 21 21.7 | +79 58 02 | ... | ... | ... | 13.4 | 2.2 | 12 | 14.0 | 0.3 | 2 | 14.0 | trg |
| LTTO17505 | 03 21 46.9 | -06 40 24 | 11.4 | 3.2 | 11 | 14.5 | 2.3 | 12 | ... | ... | ... | 14.5 | ccd |
| GJ1058 | 03 22 05.5 | +02 55 46 | ... | ... | ... | 25.4 | 4.7 | 12 | 16.9 | 1.5 | 1 | 16.9 | trg |
| GJ1059 | 03 23 04.8 | +41 59 53 | ... | ... | ... | 20.0 | 3.9 | 12 | 15.4 | 0.8 | 1 | 15.4 | trg |
| LP832-007 | 03 23 06.7 | -24 13 28 | 23.5 | 6.5 | 11 | ... | ... | ... | ... | ... | ... | 23.5 | plt |
| LTTO11117 | 03 23 20.6 | +11 41 11 | ... | ... | ... | 15.4 | 2.4 | 12 | 18.3 | 0.8 | 1 | 18.3 | trg |
| GJ0140 | 03 24 06.4 | +23 47 06 | ... | ... | ... | [10.9] | 1.8 | 12 | 19.5 | 1.8 | 1 | 19.5 | trg |
| DEN0324-7727 | 03 24 26.9 | -77 27 05 | 20.8 | 6.0 | 11 | ... | ... | ... | ... | ... | ... | 20.8 | plt |
| LTTO1628 | 03 25 39.7 | -42 59 12 | 20.4 | 5.6 | 11 | 24.8 | 3.9 | 9 | 23.3 | 1.2 | 1 | 23.3 | trg |
| LP532-081 | 03 25 41.7 | +05 51 54 | ... | ... | ... | [17.5] | 3.7 | 12 | 23.0 | 1.9 | 1 | 23.0 | trg |
| L055-011 | 03 28 08.4 | -70 01 41 | 23.6 | 6.4 | 11 | ... | ... | ... | ... | ... | ... | 23.6 | plt |
| GJ0143.1 | 03 29 19.8 | -11 40 42 | 13.6 | 4.0 | 3 | 17.7 | 2.9 | 9 | 22.0 | 1.0 | 2 | 22.0 | trg |
| LSPM0330+5413 | 03 30 49.0 | +54 13 55 | ... | ... | ... | 11.3 | 1.9 | 12 | 9.6 | 0.1 | 1 | 9.6 | trg |
| LP888-018 | 03 31 30.3 | -30 42 39 | 12.1 | 3.6 | 11 | 11.3 | 1.8 | 11 | 12.5 | 0.2 | 1 | 12.5 | trg |
| GJ0143.3 | 03 31 47.1 | +14 19 17 | ... | ... | ... | 21.1 | 3.2 | 12 | 20.0 | 1.1 | 2 | 20.0 | trg |
| GJ0145 | 03 32 55.8 | -44 42 07 | 13.5 | 4.0 | 11 | 12.0 | 1.9 | 12 | 10.8 | 0.2 | 2 | 10.8 | trg |
| LEHPM1-3396 | 03 34 12.2 | -49 53 32 | 10.9 | 3.1 | 11 | 10.7 | 1.9 | 9 | 8.3 | 0.3 | 1 | 8.3 | trg |
| LHS0176 | 03 35 38.6 | -08 29 23 | 17.6 | 7.6 | 11 | 13.1 | 2.1 | 12 | 12.9 | 0.2 | 1 | 12.9 | trg |
| GJ1061 | 03 35 59.7 | -44 30 45 | 6.2 | 2.8 | 11 | 3.6 | 0.6 | 12 | 3.7 | 0.0 | 2 | 3.7 | trg |
| LHS1567 | 03 36 06.7 | -40 59 54 | 22.6 | 6.9 | 11 | ... | ... | ... | ... | ... | ... | 22.6 | plt |
| LSPM0336+3118 | 03 36 09.0 | +31 18 40 | ... | ... | ... | 30.9 | 19.8 | 11 | 12.6 | 0.4 | 1 | 12.6 | trg |
| LEHPM1-3427 | 03 36 47.6 | -55 45 08 | 22.8 | 6.9 | 11 | ... | ... | ... | ... | ... | ... | 22.8 | plt |
| LHS1572 | 03 38 10.0 | -68 56 46 | [13.9] | 3.8 | 11 | [14.5] | 2.2 | 12 | ... | ... | ... | [14.5] | ccd |
| GJ1062 | 03 38 15.7 | -11 29 14 | {33.2} | 9.6 | 11 | {37.0} | 6.0 | 12 | 16.0 | 0.9 | 1 | 16.0 | trg |
| L228-092 | 03 38 55.9 | -52 34 11 | 16.5 | 5.1 | 11 | ... | ... | ... | ... | ... | ... | 16.5 | plt |
| LP944-020 | 03 39 35.3 | -35 25 44 | 6.4 | 2.0 | 10 | 7.0 | 1.3 | 11 | 6.3 | 0.0 | 2 | 6.3 | trg |
| NLTT11616 | 03 40 08.9 | -60 35 59 | 22.8 | 6.0 | 11 | ... | ... | ... | ... | ... | ... | 22.8 | plt |
| LHS0178 | 03 42 29.4 | +12 31 33 | ... | ... | ... | 40.9 | 6.6 | 12 | 24.9 | 1.6 | 1 | 24.9 | trg |
| SCR0342-6407 | 03 42 57.4 | -64 07 57 | 39.3 | 15.5 | 11 | 37.9 | 8.6 | 12 | 24.1 | 1.2 | 1 | 24.1 | trg |
| LHS1582 | 03 43 22.1 | -09 33 51 | [16.7] | 5.3 | 11 | [13.3] | 2.3 | 12 | 21.7 | 0.8 | 1 | 21.7 | trg |
| LP944-038 | 03 44 47.9 | -38 20 13 | [19.0] | 5.1 | 11 | ... | ... | ... | ... | ... | ... | [19.0] | plt |
| LHS1590 | 03 46 45.4 | -11 17 42 | 25.0 | 6.7 | 11 | 22.0 | 3.4 | 12 | ... | ... | ... | 22.0 | ccd |
| LHS1593 | 03 47 23.2 | +08 40 44 | ... | ... | ... | 17.7 | 2.9 | 12 | 12.6 | 0.6 | 1 | 12.6 | trg |
| G080-021 | 03 47 23.4 | -01 58 20 | 12.4 | 3.3 | 11 | 11.9 | 1.9 | 12 | 16.0 | 0.5 | 2 | 16.0 | trg |
| GJ0155.1 | 03 47 58.1 | +02 47 16 | ... | ... | ... | 19.5 | 3.1 | 12 | 17.0 | 0.7 | 2 | 17.0 | trg |
| LHS1596 | 03 48 33.3 | +73 33 18 | ... | ... | ... | 16.8 | 2.8 | 12 | 16.5 | 0.5 | 1 | 16.5 | trg |
| LEHPM1-3548 | 03 50 05.5 | -39 22 32 | 22.9 | 6.6 | 11 | ... | ... | ... | ... | ... | ... | 22.9 | plt |
| GJ1065 | 03 50 44.3 | -06 05 42 | 16.2 | 4.9 | 11 | 12.6 | 2.0 | 12 | 9.5 | 0.3 | 1 | 9.5 | trg |
| LHS1604 | 03 51 00.0 | -00 52 45 | 14.4 | 4.0 | 11 | 12.4 | 1.9 | 12 | 14.7 | 0.4 | 1 | 14.7 | trg |
| 2MA0352+0210 | 03 52 10.8 | +02 10 48 | ... | ... | ... | 21.4 | 3.7 | 10 | 18.3 | 0.9 | 1 | 18.3 | trg |
| LP833-014 | 03 52 23.1 | -22 52 56 | [16.0] | 4.4 | 11 | [18.1] | 2.8 | 12 | 24.4 | 2.9 | 1 | 24.4 | trg |
| LHS1610 | 03 52 41.0 | +17 01 04 | ... | ... | ... | [9.7] | 1.5 | 12 | 9.9 | 0.2 | 2 | 9.9 | trg |
| LEHPM1-3582 | 03 57 49.1 | -37 54 04 | 17.3 | 5.2 | 11 | ... | ... | ... | ... | ... | ... | 17.3 | plt |
| GJ0157.1 | 03 59 56.8 | +26 05 41 | ... | ... | ... | 15.6 | 2.5 | 12 | 22.8 | 2.7 | 1 | 22.8 | trg |
| LP833-023 | 04 00 28.6 | -25 52 52 | 22.2 | 6.2 | 11 | ... | ... | ... | ... | ... | ... | 22.2 | plt |
| LP031-301 | 04 05 57.0 | +71 16 38 | ... | ... | ... | 16.6 | 2.6 | 12 | 17.5 | 0.4 | 1 | 17.5 | trg |
| LHS1630 | 04 07 20.5 | -24 29 14 | [12.6] | 3.4 | 11 | [11.7] | 1.8 | 12 | 17.8 | 0.3 | 1 | 17.8 | trg |
| GJ0162 | 04 08 37.4 | +33 38 13 | ... | ... | ... | 11.5 | 2.0 | 12 | 13.4 | 0.5 | 2 | 13.4 | trg |
| LP889-037 | 04 08 55.6 | -31 28 54 | 17.5 | 5.4 | 11 | 14.0 | 2.2 | 12 | 15.5 | 0.4 | 1 | 15.5 | trg |
| GJ0163 | 04 09 15.7 | -53 22 25 | 13.6 | 3.8 | 11 | 12.0 | 1.9 | 12 | 15.0 | 0.4 | 2 | 15.0 | trg |
| GJ1068 | 04 10 28.1 | -53 36 08 | 13.0 | 4.0 | 7 | 9.4 | 1.6 | 12 | 7.0 | 0.1 | 1 | 7.0 | trg |
| LP714-037 | 04 10 48.1 | -12 51 43 | 23.5 | 9.4 | 11 | ... | ... | ... | ... | ... | ... | 23.5 | plt |
| LHS1638 | 04 12 20.3 | +64 43 36 | ... | ... | ... | 12.8 | 2.0 | 12 | 11.8 | 0.4 | 1 | 11.8 | trg |
| LHS1641 | 04 12 43.1 | -22 50 39 | 22.5 | 6.1 | 11 | ... | ... | ... | ... | ... | ... | 22.5 | plt |
| LHS1639 | 04 12 47.5 | -53 52 04 | 20.7 | 5.8 | 11 | ... | ... | ... | ... | ... | ... | 20.7 | plt |
| GJ0164 | 04 12 58.8 | +52 36 42 | ... | ... | ... | [9.9] | 1.5 | 12 | 13.8 | 0.2 | 2 | 13.8 | trg |
| GJ0165 | 04 13 08.2 | +50 31 21 | ... | ... | ... | [16.5] | 3.1 | 12 | 18.0 | 2.9 | 1 | 18.0 | trg |
| G160-054 | 04 13 45.9 | -05 09 05 | 23.4 | 8.0 | 11 | 17.0 | 2.6 | 12 | ... | ... | ... | 17.0 | ccd |
| 2MA0414-0906 | 04 14 17.3 | -09 06 54 | ... | ... | ... | 20.3 | 3.1 | 12 | 23.8 | 1.4 | 1 | 23.8 | trg |
| GJ2033 | 04 16 41.7 | -12 33 23 | [11.8] | 3.2 | 11 | [13.9] | 2.2 | 12 | 21.4 | 2.0 | 1 | 21.4 | trg |

| | | | | | | | | | | | | | |
|---------------|------------|-----------|----------|-------|-------|----------|------|-----|------|-----|-----|------|-----|
| G007-034 | 04 17 18.4 | +08 49 20 | ... | ... | ... | 10.7 | 1.6 | 12 | 13.7 | 0.2 | 1 | 13.7 | trg |
| LEHPM1-3719 | 04 17 34.6 | -48 34 39 | 18.9 | 9.2 | 11 | ... | ... | ... | ... | ... | ... | 18.9 | plt |
| LHS1654 | 04 18 04.7 | -49 01 30 | 24.9 | 7.3 | 11 | ... | ... | ... | ... | ... | ... | 24.9 | plt |
| NLTT12979 | 04 18 06.5 | -24 06 24 | 25.0 | 7.7 | 11 | ... | ... | ... | ... | ... | ... | 25.0 | plt |
| NLTT12997 | 04 18 40.1 | -25 07 09 | 21.7 | 6.2 | 11 | ... | ... | ... | ... | ... | ... | 21.7 | plt |
| LTT11399 | 04 19 59.6 | +36 29 11 | ... | ... | ... | 19.4 | 3.1 | 12 | 23.3 | 2.2 | 2 | 23.3 | trg |
| SCR0420-7005 | 04 20 12.6 | -70 05 59 | 22.5 | 9.2 | 11 | 16.3 | 2.7 | 12 | 16.1 | 0.2 | 1 | 16.1 | trg |
| LHS1665 | 04 22 12.5 | -57 26 01 | 15.8 | 4.5 | 11 | ... | ... | ... | ... | ... | ... | 15.8 | plt |
| GJ1070 | 04 22 33.5 | +39 00 44 | ... | ... | ... | 21.3 | 3.4 | 12 | 18.7 | 1.7 | 1 | 18.7 | trg |
| LHS1668 | 04 24 56.2 | -40 02 48 | 19.3 | 6.3 | 11 | 15.8 | 2.8 | 12 | ... | ... | ... | 15.8 | ccd |
| LHS0189 | 04 25 38.4 | -06 52 37 | {[70.0]} | 22.9 | 4 | {[83.1]} | 24.9 | 8 | 18.4 | 1.0 | 2 | 18.4 | trg |
| LHS0191 | 04 26 20.1 | +03 35 43 | ... | ... | ... | 16.0 | 2.7 | 12 | 17.1 | 0.5 | 1 | 17.1 | trg |
| LHS5094 | 04 26 32.6 | -30 48 02 | 13.8 | 4.1 | 11 | 11.5 | 1.9 | 12 | 13.3 | 0.5 | 1 | 13.3 | trg |
| LEHPM2-1698 | 04 27 05.8 | -40 26 40 | 23.2 | 6.7 | 11 | ... | ... | ... | ... | ... | ... | 23.2 | plt |
| L178-101 | 04 27 36.2 | -59 21 16 | 20.2 | 5.3 | 11 | ... | ... | ... | ... | ... | ... | 20.2 | plt |
| L130-037 | 04 28 05.7 | -62 09 25 | 14.4 | 4.0 | 11 | 14.9 | 2.4 | 12 | ... | ... | ... | 14.9 | ccd |
| 2MA0429-3123 | 04 29 18.4 | -31 23 56 | | | .. | [10.6] | 1.7 | 12 | 17.0 | 0.4 | 1 | 17.0 | trg |
| GJ0170 | 04 30 25.2 | +39 51 00 | ... | ... | ... | 10.8 | 1.7 | 12 | 10.4 | 0.3 | 1 | 10.4 | trg |
| LP715-051 | 04 31 09.0 | -13 30 53 | [12.3] | 3.3 | 11 | [13.4] | 2.2 | 12 | 19.1 | 1.3 | 1 | 19.1 | trg |
| LHS1678 | 04 32 42.6 | -39 47 12 | 25.4 | 6.9 | 11 | 27.1 | 4.2 | 12 | 19.6 | 0.5 | 1 | 19.6 | trg |
| SCR0433-0211 | 04 33 31.5 | -02 11 01 | 29.6 | 10.7 | 11 | 21.8 | 3.8 | 12 | ... | ... | ... | 21.8 | ccd |
| L231-032 | 04 33 39.7 | -51 57 22 | 23.5 | 6.3 | 11 | ... | ... | ... | ... | ... | ... | 23.5 | plt |
| LP775-031 | 04 35 16.1 | -16 06 57 | [8.6] | 3.5 | 11 | [7.7] | 1.2 | 11 | 10.5 | 0.1 | 1 | 10.5 | trg |
| LP834-032 | 04 35 36.2 | -25 27 35 | 13.0 | 4.0 | 11 | 10.8 | 1.7 | 12 | 17.3 | 0.5 | 1 | 17.3 | trg |
| L951-054 | 04 36 26.8 | -03 43 56 | 21.8 | 6.3 | 11 | ... | ... | ... | ... | ... | ... | 21.8 | plt |
| L591-042 | 04 36 40.9 | -27 21 18 | 18.1 | 4.9 | 11 | 17.9 | 2.8 | 12 | 24.6 | 1.1 | 2 | 24.6 | trg |
| LHS1686 | 04 36 41.5 | +11 13 35 | ... | ... | ... | 26.5 | 4.2 | 12 | 24.8 | 3.4 | 1 | 24.8 | trg |
| GJ0173 | 04 37 41.9 | -11 02 20 | 8.2 | 2.1 | 11 | 9.9 | 1.6 | 12 | 11.1 | 0.2 | 2 | 11.1 | trg |
| LP655-043 | 04 38 02.5 | -05 56 13 | 16.8 | 5.8 | 11 | 14.7 | 2.3 | 12 | ... | ... | ... | 14.7 | ccd |
| LTT11472 | 04 38 12.6 | +28 13 00 | ... | ... | ... | [9.4] | 1.5 | 12 | 13.3 | 0.3 | 2 | 13.3 | trg |
| LP715-039 | 04 38 37.2 | -11 30 15 | 14.0 | 3.9 | 11 | 14.9 | 2.3 | 12 | 19.6 | 0.8 | 1 | 19.6 | trg |
| LHS1690 | 04 39 32.0 | +16 15 43 | ... | ... | ... | 12.3 | 2.0 | 12 | 11.6 | 0.3 | 1 | 11.6 | trg |
| LP655-048 | 04 40 23.3 | -05 30 08 | 8.9 | 2.7 | 11 | 8.5 | 1.3 | 12 | 9.8 | 0.1 | 1 | 9.8 | trg |
| HIP021765 | 04 40 29.2 | -09 11 46 | ... | ... | ... | [12.6] | 2.0 | 12 | 19.1 | 1.3 | 2 | 19.1 | trg |
| GJ0176 | 04 42 55.7 | +18 57 29 | ... | ... | ... | 7.2 | 1.2 | 12 | 9.1 | 0.2 | 2 | 9.1 | trg |
| LP891-006 | 04 43 11.8 | -32 26 42 | 24.6 | 6.8 | 11 | ... | ... | ... | ... | ... | ... | 24.6 | plt |
| UPM0444-3749 | 04 44 50.2 | -37 49 41 | 24.7 | 7.4 | 11 | 20.7 | 3.3 | 12 | ... | ... | ... | 20.7 | ccd |
| LHS0197 | 04 46 23.8 | +48 44 18 | ... | ... | ... | 23.3 | 4.7 | 12 | 19.2 | 0.3 | 1 | 19.2 | trg |
| LP656-009 | 04 46 24.4 | -02 49 08 | 23.2 | 6.3 | 11 | 24.9 | 3.9 | 12 | ... | ... | ... | 24.9 | ccd |
| 2MA0446-1116 | 04 46 51.8 | -11 16 47 | ... | ... | ... | [11.1] | 1.7 | 12 | 18.7 | 1.8 | 1 | 18.7 | trg |
| LP835-018 | 04 48 01.0 | -26 03 01 | 25.0 | 8.0 | 11 | ... | ... | ... | ... | ... | ... | 25.0 | plt |
| L736-001 | 04 49 32.8 | -14 47 23 | 16.0 | 4.2 | 2 | 22.8 | 3.7 | 10 | 24.8 | 1.4 | 1 | 24.8 | trg |
| GJ1072 | 04 50 50.9 | +22 07 22 | ... | ... | ... | 11.5 | 1.8 | 12 | 14.1 | 1.1 | 1 | 14.1 | trg |
| APM0452-5819 | 04 51 37.3 | -58 18 52 | 18.1 | 5.3 | 11 | 15.7 | 2.4 | 12 | 17.2 | 0.4 | 1 | 17.2 | trg |
| LP716-010 | 04 52 04.0 | -10 58 22 | 15.3 | 4.5 | 11 | 12.9 | 2.0 | 12 | ... | ... | ... | 12.9 | ccd |
| GJ0179 | 04 52 05.7 | +06 28 35 | ... | ... | ... | 8.8 | 1.5 | 12 | 12.4 | 0.6 | 2 | 12.4 | trg |
| LP776-025 | 04 52 24.4 | -16 49 22 | 12.1 | 4.9 | 4 | 10.4 | 1.6 | 12 | 16.3 | 0.4 | 1 | 16.3 | trg |
| GJ1073 | 04 52 34.6 | +40 42 24 | ... | ... | ... | 15.4 | 2.6 | 12 | 12.9 | 0.4 | 1 | 12.9 | trg |
| GJ2036 | 04 53 31.2 | -55 51 37 | ... | ... | ... | 8.2 | 1.3 | 12 | 11.1 | 0.2 | 1 | 11.1 | trg |
| GJ0180 | 04 53 50.0 | -17 46 24 | 9.7 | 2.7 | 11 | 11.9 | 1.9 | 12 | 12.1 | 0.3 | 2 | 12.1 | trg |
| G084-025 | 04 57 58.6 | -05 06 17 | 23.4 | 8.4 | 11 | ... | ... | ... | ... | ... | ... | 23.4 | plt |
| GJ1074 | 04 58 45.9 | +50 56 37 | ... | ... | ... | 18.2 | 3.0 | 12 | 19.3 | 0.9 | 2 | 19.3 | trg |
| LP891-046 | 04 59 24.4 | -30 55 58 | 22.8 | 8.7 | 11 | 18.7 | 3.0 | 12 | ... | ... | ... | 18.7 | ccd |
| NLTT14380 | 04 59 32.3 | -61 53 04 | 16.1 | 4.3 | 11 | ... | ... | ... | ... | ... | ... | 16.1 | plt |
| LHS1723 | 05 01 57.4 | -06 56 47 | 8.3 | 2.5 | 11 | 6.4 | 1.1 | 12 | 5.3 | 0.0 | 1 | 5.3 | trg |
| LP476-207 | 05 01 58.8 | +09 58 59 | ... | ... | ... | [6.3] | 1.0 | 12 | 24.6 | 1.3 | 1 | 24.6 | trg |
| GJ0185 | 05 02 28.4 | -21 15 24 | [5.4] | 1.5 | 11 | [6.9] | 1.1 | 9 | 8.3 | 0.1 | 2 | 8.3 | trg |
| LHS1731 | 05 03 20.1 | -17 22 25 | 11.2 | 4.9 | 8 | 10.5 | 1.7 | 12 | 9.2 | 0.1 | 2 | 9.2 | trg |
| GJ0184 | 05 03 23.9 | +53 07 42 | ... | ... | ... | 13.1 | 2.2 | 10 | 13.8 | 0.3 | 2 | 13.8 | trg |
| G097-015 | 05 04 15.0 | +11 03 24 | ... | ... | ... | 13.0 | 2.1 | 12 | 9.5 | 0.1 | 1 | 9.5 | trg |
| LP716-035 | 05 05 11.8 | -12 00 29 | 21.1 | 5.9 | 11 | 22.1 | 6.5 | 12 | ... | ... | ... | 22.1 | ccd |
| BD-21 01074 | 05 06 49.9 | -21 35 08 | ... | ... | ... | 9.8 | 1.7 | 12 | 19.2 | 0.5 | 2 | 19.2 | trg |
| NLTT14654 | 05 08 09.1 | -73 26 50 | 22.7 | 10.8 | 10 | ... | ... | ... | ... | ... | ... | 22.7 | trg |
| LP015-315 | 05 08 18.0 | +75 38 15 | ... | ... | ... | [13.3] | 2.1 | 12 | 16.1 | 0.2 | 1 | 16.1 | trg |
| GJ0190 | 05 08 35.1 | -18 10 19 | [6.0] | 1.8 | 11 | [4.3] | 0.7 | 12 | 9.3 | 0.2 | 2 | 9.3 | trg |
| LP717-003 | 05 09 19.4 | -13 48 41 | 22.2 | 6.7 | 11 | ... | ... | ... | ... | ... | ... | 22.2 | plt |
| SCR0509-4325 | 05 09 43.9 | -43 25 17 | 18.0 | 5.2 | 11 | 16.4 | 2.6 | 12 | 21.5 | 0.8 | 1 | 21.5 | trg |
| HD271076 | 05 10 09.1 | -72 36 28 | | | | 14.9 | 2.3 | 12 | 20.2 | 1.1 | 1 | 20.2 | trg |
| L1672-014 | 05 10 19.3 | +48 50 05 | ... | ... | ... | [13.5] | 2.1 | 12 | 19.9 | 1.8 | 2 | 19.9 | trg |
| LSPM0510+2714 | 05 10 20.0 | +27 14 02 | ... | ... | ... | 8.6 | 1.4 | 12 | 9.9 | 0.2 | 1 | 9.9 | trg |
| GJ0191 | 05 11 40.6 | -45 01 06 | 6.3 | 1.8 | 11 | 7.9 | 1.2 | 9 | 3.9 | 0.0 | 2 | 3.9 | trg |
| WT2419 | 05 11 44.6 | -36 12 31 | 24.1 | 7.1 | 11 | ... | ... | ... | ... | ... | ... | 24.1 | plt |
| GJ0192 | 05 12 42.2 | +19 39 56 | ... | ... | ... | 11.5 | 1.8 | 12 | 13.0 | 0.5 | 2 | 13.0 | trg |
| NLTT14823 | 05 13 06.0 | -76 53 22 | 16.2 | 8.6 | 11 | 22.6 | 3.6 | 12 | ... | ... | ... | 22.6 | ccd |
| LTT02208 | 05 13 47.3 | -31 19 34 | 23.5 | 6.6 | 11 | 24.8 | 3.8 | 12 | ... | ... | ... | 24.8 | ccd |
| G084-040 | 05 13 50.8 | -01 03 07 | 24.0 | 8.2 | 8 | ... | ... | ... | ... | ... | ... | 24.0 | plt |
| L521-011 | 05 14 53.6 | -33 04 30 | 16.1 | 5.3 | 11 | 15.4 | 2.6 | 12 | ... | ... | ... | 15.4 | ccd |
| LHS1747 | 05 15 08.1 | -07 20 49 | 20.4 | 5.7 | 11 | 22.0 | 3.5 | 12 | 22.5 | 2.1 | 1 | 22.5 | trg |
| LSPM0515+5911 | 05 15 31.0 | +59 11 18 | ... | ... | ... | 13.1 | 2.1 | 12 | 15.2 | 0.3 | 1 | 15.2 | trg |
| LHS1748 | 05 15 46.7 | -31 17 45 | 17.1 | 4.5 | 11 | 19.9 | 3.1 | 12 | 23.2 | 0.8 | 1 | 23.2 | trg |
| LHS1749 | 05 16 00.4 | -72 14 13 | [8.6] | 5.0 | 11 | [16.3] | 2.6 | 12 | 21.7 | 0.7 | 2 | 21.7 | trg |
| GJ1077 | 05 16 59.7 | -78 17 20 | 12.0 | 3.2 | 11 | 12.3 | 2.0 | 12 | 15.2 | 0.4 | 2 | 15.2 | trg |
| SCR0517-4252 | 05 17 21.4 | -42 52 47 | 16.6 | 4.9 | 11 | 16.3 | 2.6 | 12 | 21.0 | 0.7 | 1 | 21.0 | trg |
| L449-001 | 05 17 22.9 | -35 21 55 | [6.6] | 1.8 | 11 | [7.0] | 1.1 | 12 | 11.9 | 0.2 | 1 | 11.9 | trg |
| 2MA0517-3349 | 05 17 37.7 | -33 49 03 | 12.4 | 5.4 | 11 | 13.7 | 2.2 | 12 | 16.2 | 0.4 | 1 | 16.2 | trg |
| LP892-032 | 05 18 36.6 | -28 42 07 | 24.2 | 7.9 | 11 | ... | ... | ... | ... | ... | ... | 24.2 | plt |
| GJ1078 | 05 23 49.6 | +22 32 20 | ... | ... | ... | 23.5 | 3.9 | 12 | 20.8 | 2.0 | 1 | 20.8 | trg |

| | | | | | | | | | | | | | |
|--------------|------------|-----------|--------|------|-----|--------|-----|-----|------|-----|-----|--------|-----|
| LP717-036 | 05 25 41.7 | -09 09 13 | [12.8] | 3.5 | 11 | [12.6] | 1.9 | 12 | 20.7 | 2.2 | 1 | 20.7 | trg |
| L233-036 | 05 25 48.6 | -51 19 16 | 20.0 | 5.6 | 11 | ... | ... | ... | ... | ... | ... | 20.0 | plt |
| CD 42-01943 | 05 26 36.0 | -42 20 18 | [15.4] | 4.8 | 8 | ... | ... | ... | ... | ... | ... | [15.4] | plt |
| L306-062 | 05 26 40.8 | -48 51 47 | 20.1 | 5.3 | 11 | 20.7 | 3.3 | 12 | ... | ... | ... | 20.7 | ccd |
| LEHPM2-1009 | 05 27 30.6 | -51 29 16 | 16.0 | 4.9 | 11 | ... | ... | ... | ... | ... | ... | 16.0 | plt |
| GJ0203 | 05 28 00.1 | +09 38 38 | ... | ... | ... | 12.4 | 2.1 | 12 | 9.8 | 0.2 | 2 | 9.8 | trg |
| GJ1080 | 05 28 14.6 | +02 58 14 | ... | ... | ... | [21.7] | 4.1 | 12 | 19.1 | 0.8 | 1 | 19.1 | trg |
| GJ2043 | 05 29 27.0 | +15 34 38 | ... | ... | ... | 16.6 | 2.8 | 12 | 17.3 | 0.8 | 1 | 17.3 | trg |
| GJ0204.2 | 05 29 52.0 | -03 26 30 | 15.7 | 4.4 | 11 | 14.8 | 2.3 | 12 | 17.6 | 2.0 | 1 | 17.6 | trg |
| LTT02295 | 05 30 18.6 | -53 58 48 | 14.2 | 4.1 | 11 | ... | ... | ... | ... | ... | ... | 14.2 | plt |
| L234-022 | 05 30 57.2 | -53 30 52 | 16.6 | 4.6 | 11 | ... | ... | ... | ... | ... | ... | 16.6 | plt |
| LHS1767 | 05 31 04.3 | -30 11 45 | 17.5 | 4.7 | 11 | 17.3 | 2.7 | 12 | 15.3 | 0.4 | 1 | 15.3 | trg |
| GJ0205 | 05 31 27.4 | -03 40 38 | 3.8 | 1.1 | 11 | 4.8 | 1.1 | 12 | 5.7 | 0.0 | 2 | 5.7 | trg |
| GJ0206 | 05 32 14.6 | +09 49 14 | ... | ... | ... | [7.8] | 1.2 | 12 | 13.3 | 0.5 | 2 | 13.3 | trg |
| GJ1081 | 05 33 19.1 | +44 48 59 | ... | ... | ... | [11.8] | 1.8 | 12 | 15.3 | 0.4 | 1 | 15.3 | trg |
| SCR0533-4257 | 05 33 28.0 | -42 57 20 | ... | ... | ... | [7.4] | 1.2 | 12 | 10.1 | 0.2 | 1 | 10.1 | trg |
| GJ0207.1 | 05 33 44.8 | +01 56 43 | ... | ... | ... | 10.9 | 1.8 | 12 | 15.9 | 0.6 | 3 | 15.9 | trg |
| LTT11684 | 05 34 51.2 | +13 52 25 | ... | ... | ... | 9.7 | 1.5 | 12 | 12.4 | 1.5 | 1 | 12.4 | trg |
| LP718-005 | 05 35 21.3 | -09 31 07 | 19.9 | 6.0 | 11 | ... | ... | ... | ... | ... | ... | 19.9 | plt |
| LHS5109 | 05 36 00.1 | -07 38 59 | 12.5 | 3.5 | 11 | 10.0 | 1.6 | 12 | 14.8 | 0.4 | 1 | 14.8 | trg |
| LP658-106 | 05 37 23.3 | -08 16 06 | 24.8 | 8.1 | 11 | ... | ... | ... | ... | ... | ... | 24.8 | plt |
| WT0178 | 05 37 39.8 | -61 54 44 | 22.9 | 7.5 | 11 | 18.4 | 2.9 | 12 | 16.1 | 0.2 | 1 | 16.1 | trg |
| LHS0207 | 05 38 10.3 | +79 31 19 | ... | ... | ... | 25.4 | 4.7 | 12 | 22.2 | 0.7 | 1 | 22.2 | trg |
| L378-006 | 05 40 02.6 | -40 11 14 | 23.8 | 6.8 | 11 | ... | ... | ... | ... | ... | ... | 23.8 | plt |
| GJ1083 | 05 40 25.7 | +24 48 08 | ... | ... | ... | [5.8] | 0.9 | 12 | 10.4 | 0.3 | 1 | 10.4 | trg |
| GJ0213 | 05 42 09.2 | +12 29 21 | ... | ... | ... | 6.1 | 1.0 | 12 | 5.8 | 0.0 | 3 | 5.8 | trg |
| GJ2045 | 05 42 12.7 | -05 27 56 | 16.2 | 7.1 | 11 | 16.1 | 3.2 | 12 | 12.6 | 0.2 | 4 | 12.6 | trg |
| LP837-016 | 05 43 04.6 | -26 35 40 | 21.8 | 6.3 | 11 | 22.9 | 3.6 | 12 | ... | ... | ... | 22.9 | ccd |
| APM0544-4108 | 05 43 46.6 | -41 08 08 | 24.3 | 8.1 | 11 | 19.1 | 3.0 | 12 | 20.7 | 0.3 | 1 | 20.7 | trg |
| 2MA0544-2433 | 05 44 11.5 | -24 33 03 | 18.0 | 7.0 | 11 | 19.0 | 3.0 | 12 | ... | ... | ... | 19.0 | ccd |
| LP837-019 | 05 44 57.0 | -21 36 56 | 20.8 | 5.6 | 11 | 18.9 | 2.9 | 12 | ... | ... | ... | 18.9 | ccd |
| LP837-020 | 05 44 57.9 | -24 56 10 | 21.4 | 6.3 | 11 | ... | ... | ... | ... | ... | ... | 21.4 | plt |
| LHS1785 | 05 47 09.1 | -05 12 11 | 20.2 | 7.2 | 11 | 20.1 | 3.2 | 12 | 17.0 | 0.6 | 1 | 17.0 | trg |
| GJ0218 | 05 47 40.6 | -36 19 43 | 13.1 | 3.6 | 11 | 13.2 | 2.1 | 12 | 14.9 | 0.3 | 2 | 14.9 | trg |
| WT2440 | 05 47 50.2 | -34 19 14 | 20.9 | 5.7 | 11 | ... | ... | ... | ... | ... | ... | 20.9 | plt |
| L307-012 | 05 48 45.2 | -45 55 42 | 24.1 | 6.6 | 11 | ... | ... | ... | ... | ... | ... | 24.1 | plt |
| LHS1793 | 05 52 29.2 | -55 06 43 | 20.9 | 5.6 | 11 | ... | ... | ... | ... | ... | ... | 20.9 | plt |
| GJ0220 | 05 53 14.1 | +24 15 32 | ... | ... | ... | 12.8 | 2.2 | 12 | 19.4 | 1.8 | 1 | 19.4 | trg |
| L379-017 | 05 53 40.1 | -42 41 44 | 23.9 | 6.8 | 11 | ... | ... | ... | ... | ... | ... | 23.9 | plt |
| NLTT15791 | 05 53 55.4 | -22 46 58 | 21.8 | 6.2 | 11 | ... | ... | ... | ... | ... | ... | 21.8 | plt |
| LP837-053 | 05 55 43.2 | -26 51 23 | 8.1 | 2.3 | 11 | 8.9 | 1.6 | 12 | 14.6 | 0.5 | 1 | 14.6 | trg |
| LHS5112 | 05 56 56.2 | -46 55 54 | [13.4] | 3.7 | 11 | [17.6] | 3.0 | 10 | 23.7 | 0.6 | 2 | 23.7 | trg |
| UPM0559-5225 | 05 59 33.2 | -52 25 05 | 21.3 | 5.7 | 11 | 21.4 | 3.5 | 12 | ... | ... | ... | 21.4 | ccd |
| G192-011 | 05 59 37.7 | +58 35 34 | ... | ... | ... | 11.8 | 2.0 | 12 | 13.5 | 0.3 | 1 | 13.5 | trg |
| LTT17897 | 06 00 03.0 | +02 42 23 | ... | ... | ... | 5.1 | 0.8 | 12 | 5.2 | 0.1 | 2 | 5.2 | trg |
| LHS0214 | 06 00 49.0 | +68 09 24 | ... | ... | ... | 16.7 | 2.6 | 12 | 20.1 | 0.5 | 3 | 20.1 | trg |
| LHS1805 | 06 01 11.0 | +59 35 01 | ... | ... | ... | 7.5 | 1.2 | 12 | 7.8 | 0.1 | 1 | 7.8 | trg |
| LHS1807 | 06 02 22.6 | -20 19 44 | 17.5 | 4.8 | 11 | 19.1 | 3.0 | 12 | 14.1 | 0.3 | 1 | 14.1 | trg |
| LHS1809 | 06 02 29.6 | +49 50 58 | ... | ... | ... | 9.7 | 1.6 | 12 | 9.3 | 0.2 | 1 | 9.3 | trg |
| LHS1810 | 06 02 54.2 | -09 15 04 | 18.9 | 6.3 | 11 | ... | ... | ... | ... | ... | ... | 18.9 | plt |
| APCOL | 06 04 52.2 | -34 33 36 | 6.1 | 2.0 | 11 | 4.6 | 0.7 | 12 | 8.4 | 0.1 | 1 | 8.4 | trg |
| LP838-016 | 06 07 43.7 | -25 44 42 | 13.8 | 3.9 | 11 | 12.4 | 2.0 | 12 | 11.4 | 0.3 | 1 | 11.4 | trg |
| LEHPM2-3528 | 06 07 58.1 | -61 15 11 | 19.8 | 5.9 | 11 | 18.3 | 2.9 | 12 | ... | ... | ... | 18.3 | ccd |
| LHS1823 | 06 08 16.4 | -32 16 46 | 16.2 | 4.3 | 11 | ... | ... | ... | ... | ... | ... | 16.2 | plt |
| CD-35 02722 | 06 09 19.2 | -35 49 30 | ... | ... | ... | 17.9 | 3.0 | 12 | 22.7 | 0.6 | 1 | 22.7 | trg |
| GJ0226 | 06 10 19.8 | +82 06 24 | ... | ... | ... | 8.6 | 1.3 | 12 | 9.4 | 0.1 | 2 | 9.4 | trg |
| GJ0229 | 06 10 34.6 | -21 51 53 | 3.5 | 1.4 | 8 | 5.1 | 0.9 | 12 | 5.8 | 0.0 | 2 | 5.8 | trg |
| GJ1088 | 06 10 52.9 | -43 24 18 | 11.9 | 3.2 | 11 | 11.0 | 1.7 | 12 | 11.5 | 0.2 | 1 | 11.5 | trg |
| GJ0228 | 06 10 54.8 | +10 19 05 | ... | ... | ... | [8.8] | 1.4 | 12 | 10.6 | 0.3 | 2 | 10.6 | trg |
| L308-038 | 06 12 36.7 | -47 29 33 | 20.3 | 5.3 | 11 | ... | ... | ... | ... | ... | ... | 20.3 | plt |
| SCR0613-3437 | 06 13 57.3 | -34 37 02 | [26.2] | 9.4 | 11 | [21.9] | 6.2 | 12 | ... | ... | ... | [21.9] | ccd |
| G192-022 | 06 14 02.4 | +51 40 08 | ... | ... | ... | 18.2 | 2.9 | 12 | 14.2 | 2.1 | 1 | 14.2 | trg |
| GJ0231.3 | 06 19 20.8 | -06 39 22 | 22.9 | 7.3 | 11 | 18.8 | 2.9 | 12 | 14.7 | 2.0 | 1 | 14.7 | trg |
| L308-057 | 06 21 06.7 | -49 05 38 | 19.3 | 7.5 | 11 | ... | ... | ... | ... | ... | ... | 19.3 | plt |
| UPM0621-6111 | 06 21 45.7 | -61 11 13 | 21.8 | 7.2 | 11 | 22.8 | 3.7 | 12 | ... | ... | ... | 22.8 | ccd |
| SCR0622-4956 | 06 22 36.1 | -49 56 29 | 28.9 | 10.0 | 11 | 23.4 | 3.6 | 12 | ... | ... | ... | 23.4 | ccd |
| 2MA0623-3435 | 06 23 08.8 | -34 35 53 | 23.7 | 6.6 | 11 | ... | ... | ... | ... | ... | ... | 23.7 | plt |
| GJ0232 | 06 24 41.3 | +23 25 59 | ... | ... | ... | 12.7 | 2.2 | 12 | 8.4 | 0.2 | 1 | 8.4 | trg |
| LHS1848 | 06 25 53.5 | +56 09 42 | ... | ... | ... | 23.8 | 3.7 | 12 | 22.3 | 2.4 | 1 | 22.3 | trg |
| GJ0234 | 06 29 23.5 | -02 48 51 | [5.7] | 1.7 | 11 | [3.1] | 0.5 | 12 | 4.1 | 0.0 | 3 | 4.1 | trg |
| SCR0630-7643 | 06 30 46.6 | -76 43 09 | [6.9] | 2.0 | 11 | [5.5] | 0.9 | 12 | 8.8 | 0.1 | 1 | 8.8 | trg |
| SCR0631-8811 | 06 31 31.0 | -88 11 37 | 12.8 | 5.1 | 11 | 10.4 | 1.6 | 12 | 15.6 | 0.6 | 1 | 15.6 | trg |
| GJ0237 | 06 31 51.1 | -43 32 03 | [14.5] | 4.0 | 11 | [17.8] | 2.9 | 10 | 23.3 | 0.8 | 2 | 23.3 | trg |
| LHS1852 | 06 32 22.0 | -69 57 44 | 21.5 | 5.7 | 11 | 22.8 | 3.5 | 12 | ... | ... | ... | 22.8 | ccd |
| L032-009 | 06 33 43.3 | -75 37 48 | 7.1 | 2.7 | 10 | 7.3 | 1.1 | 12 | 9.0 | 0.2 | 2 | 9.0 | trg |
| GJ0238 | 06 33 50.0 | -58 31 43 | 12.6 | 3.5 | 11 | 12.0 | 2.0 | 12 | 16.4 | 0.5 | 2 | 16.4 | trg |
| LTT02591 | 06 34 18.6 | -31 52 23 | 20.2 | 5.3 | 11 | ... | ... | ... | ... | ... | ... | 20.2 | plt |
| SCR0634-5403 | 06 34 36.9 | -54 03 13 | 27.6 | 9.1 | 11 | 24.1 | 3.8 | 12 | ... | ... | ... | 24.1 | ccd |
| LHS1857 | 06 36 07.6 | +11 36 05 | ... | ... | ... | 20.1 | 3.4 | 12 | 18.3 | 0.8 | 1 | 18.3 | trg |
| LP381-004 | 06 36 18.3 | -40 00 24 | 12.8 | 5.0 | 10 | 17.7 | 2.9 | 9 | 19.6 | 0.6 | 1 | 19.6 | trg |
| GJ0239 | 06 37 10.8 | +17 33 53 | ... | ... | ... | 11.3 | 1.9 | 12 | 9.8 | 0.1 | 2 | 9.8 | trg |
| LP720-031 | 06 38 35.3 | -14 04 58 | 22.6 | 7.4 | 11 | ... | ... | ... | ... | ... | ... | 22.6 | plt |
| LP780-032 | 06 39 37.4 | -21 01 33 | 15.8 | 4.6 | 11 | 11.7 | 1.8 | 12 | 15.5 | 0.2 | 1 | 15.5 | trg |
| L182-007 | 06 39 37.6 | -55 36 35 | 10.6 | 2.9 | 11 | 12.6 | 2.0 | 9 | 13.3 | 0.2 | 1 | 13.3 | trg |
| LP453-031 | 06 39 41.1 | -36 59 03 | 16.7 | 4.9 | 11 | 15.7 | 2.6 | 12 | ... | ... | ... | 15.7 | ccd |
| LP780-023 | 06 40 08.6 | -16 27 26 | 19.8 | 5.8 | 11 | 20.0 | 3.2 | 12 | ... | ... | ... | 20.0 | ccd |
| SCR0640-0552 | 06 40 14.0 | -05 52 23 | 8.5 | 2.3 | 11 | 9.3 | 1.5 | 12 | 11.7 | 0.4 | 1 | 11.7 | trg |

| | | | | | | | | | | | | | |
|--------------|-------------|-----------|--------|------|-----|--------|-----|-----|------|-----|-----|------|-----|
| G108-021 | 06 42 09.5 | +03 35 41 | ... | ... | ... | 13.0 | 2.0 | 12 | 10.5 | 0.9 | 1 | 10.5 | trg |
| LP780-026 | 06 42 10.8 | -15 43 15 | 24.6 | 6.5 | 11 | ... | ... | ... | ... | ... | ... | 24.6 | plt |
| SCR0642-6707 | 06 42 27.2 | -67 07 20 | 24.1 | 12.0 | 11 | 17.6 | 3.8 | 12 | 13.7 | 0.2 | 1 | 13.7 | trg |
| NLTT16977 | 06 43 29.8 | -70 03 21 | 16.2 | 4.4 | 11 | 15.3 | 2.4 | 12 | ... | ... | ... | 15.3 | ccd |
| L597-018 | 06 43 40.7 | -26 24 41 | 19.1 | 5.1 | 11 | 18.1 | 3.0 | 12 | 18.0 | 0.3 | 1 | 18.0 | trg |
| LHS1864 | 06 43 50.9 | +51 07 03 | ... | ... | ... | [13.6] | 2.1 | 12 | 19.1 | 1.6 | 1 | 19.1 | trg |
| GJ2050 | 06 44 45.6 | +71 53 15 | ... | ... | ... | 17.8 | 3.0 | 12 | 22.1 | 1.0 | 2 | 22.1 | trg |
| LTT11918 | 06 47 18.9 | +23 46 44 | ... | ... | ... | 39.1 | 6.4 | 12 | 21.6 | 4.8 | 1 | 21.6 | trg |
| GJ1091 | 06 48 49.2 | +37 08 37 | ... | ... | ... | 33.5 | 5.5 | 12 | 22.6 | 2.9 | 1 | 22.6 | trg |
| GJ1092 | 06 49 05.5 | +37 06 51 | ... | ... | ... | 21.2 | 3.7 | 12 | 13.7 | 0.4 | 2 | 13.7 | trg |
| SCR0650-2135 | 06 50 26.6 | -21 35 58 | 25.5 | 8.2 | 11 | 20.4 | 3.3 | 12 | ... | ... | ... | 20.4 | ccd |
| LHS1873 | 06 50 59.5 | -09 10 50 | 25.6 | 9.2 | 8 | 22.5 | 3.5 | 12 | ... | ... | ... | 22.5 | ccd |
| G108-036 | 06 51 59.02 | +03 12 55 | ... | ... | ... | 20.8 | 3.2 | 12 | 22.2 | 0.6 | 1 | 22.2 | trg |
| DEN0652-2534 | 06 52 19.8 | -25 34 50 | 14.9 | 8.2 | 7 | 17.9 | 3.2 | 12 | 15.7 | 0.2 | 1 | 15.7 | trg |
| L059-054 | 06 52 37.8 | -73 58 16 | 20.7 | 5.6 | 11 | ... | ... | ... | ... | ... | ... | 20.7 | plt |
| LHS0221 | 06 54 04.2 | +60 52 18 | ... | ... | ... | [8.9] | 1.4 | 12 | 10.5 | 0.2 | 2 | 10.5 | trg |
| GJ0251 | 06 54 48.9 | +33 16 05 | ... | ... | ... | 4.9 | 0.8 | 12 | 5.6 | 0.1 | 2 | 5.6 | trg |
| LP721-012 | 06 56 00.9 | -38 24 17 | 24.2 | 6.7 | 11 | ... | ... | ... | ... | ... | ... | 24.2 | plt |
| LP661-013 | 06 56 19.0 | -08 35 46 | 21.0 | 7.8 | 11 | 18.5 | 2.8 | 12 | ... | ... | ... | 18.5 | ccd |
| LHS1882 | 06 56 22.7 | +54 57 38 | ... | ... | ... | 27.0 | 4.2 | 12 | 17.2 | 2.1 | 1 | 17.2 | trg |
| LP382-056 | 06 57 11.7 | -43 24 51 | [13.5] | 3.7 | 11 | [12.0] | 1.9 | 12 | 20.8 | 0.7 | 2 | 20.8 | trg |
| GJ0257 | 06 57 46.6 | -44 17 28 | [8.6] | 2.5 | 11 | [6.9] | 1.1 | 12 | 8.0 | 0.1 | 2 | 8.0 | trg |
| WT0204 | 06 58 18.9 | -39 32 16 | 23.9 | 7.3 | 11 | 19.7 | 3.1 | 12 | ... | ... | ... | 19.7 | ccd |
| GJ1093 | 06 59 28.8 | +19 20 56 | ... | ... | ... | 6.7 | 1.1 | 12 | 7.8 | 0.2 | 1 | 7.8 | trg |
| SCR0659-5622 | 06 59 40.8 | -56 22 47 | 28.0 | 9.1 | 11 | 24.4 | 4.2 | 12 | ... | ... | ... | 24.4 | ccd |
| WT1539 | 07 00 09.5 | -28 47 02 | 15.7 | 5.7 | 10 | ... | ... | ... | ... | ... | ... | 15.7 | plt |
| SCR0701-1437 | 07 01 36.6 | -14 37 18 | 25.5 | 8.5 | 11 | 23.8 | 3.7 | 12 | ... | ... | ... | 23.8 | ccd |
| WT0207 | 07 02 36.6 | -40 06 28 | 37.4 | 14.0 | 11 | 32.8 | 5.6 | 12 | 24.7 | 0.8 | 1 | 24.7 | trg |
| SCR0702-6102 | 07 02 50.4 | -61 02 48 | [15.9] | 7.6 | 11 | [10.8] | 2.0 | 12 | 16.8 | 0.4 | 1 | 16.8 | trg |
| LHS0224 | 07 04 01.1 | +52 41 12 | ... | ... | ... | [9.8] | 2.0 | 12 | 9.1 | 0.1 | 1 | 9.1 | trg |
| GJ0263 | 07 04 17.7 | -10 30 32 | [10.5] | 2.7 | 3 | [7.8] | 1.3 | 12 | 16.1 | 0.8 | 2 | 16.1 | trg |
| GJ0258 | 07 04 25.9 | +68 17 19 | ... | ... | ... | 13.2 | 2.1 | 12 | 14.9 | 0.6 | 2 | 14.9 | trg |
| LHS0225 | 07 04 45.8 | -38 36 08 | [22.3] | 6.8 | 9 | 13.1 | 5.1 | 12 | 17.9 | 0.7 | 2 | 17.9 | trg |
| LEHPM2-0449 | 07 05 09.3 | -80 29 50 | 22.0 | 6.8 | 11 | ... | ... | ... | ... | ... | ... | 22.0 | plt |
| GJ2055 | 07 07 22.9 | -21 27 27 | 12.9 | 4.4 | 10 | 13.3 | 2.1 | 12 | 17.3 | 0.7 | 1 | 17.3 | trg |
| LTT11972 | 07 07 50.4 | +67 12 04 | ... | ... | ... | 16.0 | 2.6 | 12 | 17.6 | 0.6 | 1 | 17.6 | trg |
| ESO207-061 | 07 07 53.3 | -49 00 50 | 20.7 | 8.2 | 7 | 23.1 | 4.0 | 9 | 16.4 | 0.8 | 2 | 16.4 | trg |
| LP840-016 | 07 08 07.0 | -22 48 47 | 16.1 | 4.5 | 11 | 18.1 | 2.8 | 12 | ... | ... | ... | 18.1 | ccd |
| APM0710-5704 | 07 09 37.7 | -57 03 42 | 17.6 | 6.0 | 11 | 14.3 | 2.4 | 12 | 16.9 | 0.3 | 1 | 16.9 | trg |
| GJ0268 | 07 10 01.8 | +38 31 46 | ... | ... | ... | [3.7] | 0.6 | 12 | 6.1 | 0.1 | 2 | 6.1 | trg |
| LHS1901 | 07 11 11.0 | +43 29 58 | ... | ... | ... | ... | ... | ... | 13.4 | 0.2 | 2 | 13.4 | trg |
| LHS1906 | 07 12 54.1 | -52 20 06 | 20.3 | 5.3 | 11 | ... | ... | ... | ... | ... | ... | 20.3 | plt |
| SCR0713-0511 | 07 13 11.2 | -05 11 49 | 13.1 | 4.7 | 10 | 13.5 | 2.1 | 12 | 11.0 | 0.2 | 1 | 11.0 | trg |
| LHS1909 | 07 15 49.0 | -83 00 19 | 19.2 | 5.7 | 11 | ... | ... | ... | ... | ... | ... | 19.2 | plt |
| GJ1096 | 07 16 18.0 | +33 09 10 | ... | ... | ... | ... | ... | ... | 15.0 | 0.9 | 1 | 15.0 | trg |
| GJ0268.3 | 07 16 19.7 | +27 08 33 | ... | ... | ... | [7.8] | 1.2 | 12 | 11.6 | 0.3 | 3 | 11.6 | trg |
| SCR0717-0501 | 07 17 17.1 | -05 01 04 | 15.9 | 5.8 | 8 | 13.1 | 2.2 | 12 | 10.8 | 0.2 | 1 | 10.8 | trg |
| LTT17957 | 07 17 32.2 | +19 33 53 | ... | ... | ... | 20.5 | 3.2 | 12 | 21.2 | 0.7 | 1 | 21.2 | trg |
| LTT12003 | 07 18 08.1 | +39 16 29 | ... | ... | ... | 13.0 | 2.2 | 12 | 14.5 | 0.4 | 1 | 14.5 | trg |
| LEHPM2-4145 | 07 18 14.0 | -52 29 30 | 23.5 | 6.9 | 10 | ... | ... | ... | ... | ... | ... | 23.5 | plt |
| NLTT17739 | 07 20 30.2 | -40 55 33 | 20.6 | 5.6 | 11 | ... | ... | ... | ... | ... | ... | 20.6 | plt |
| L136-037 | 07 20 52.0 | -62 10 12 | 14.5 | 4.2 | 11 | 13.7 | 2.2 | 12 | 11.3 | 0.3 | 1 | 11.3 | trg |
| LP527-012 | 07 21 54.4 | -31 04 37 | 24.9 | 8.1 | 11 | ... | ... | ... | ... | ... | ... | 24.9 | plt |
| LHS1914 | 07 22 41.1 | +30 39 37 | ... | ... | ... | 24.9 | 4.2 | 12 | 23.7 | 1.9 | 1 | 23.7 | trg |
| L136-001 | 07 23 20.8 | -60 06 13 | 18.9 | 5.1 | 11 | ... | ... | ... | ... | ... | ... | 18.9 | plt |
| SCR0723-8015 | 07 23 59.7 | -80 15 18 | [19.3] | 5.6 | 11 | [17.0] | 3.1 | 12 | 15.9 | 0.5 | 1 | 15.9 | trg |
| L383-082 | 07 25 35.6 | -42 38 57 | 21.4 | 5.7 | 11 | ... | ... | ... | ... | ... | ... | 21.4 | plt |
| GJ0273 | 07 27 24.5 | +05 13 32 | ... | ... | ... | [3.6] | 0.6 | 12 | 3.8 | 0.0 | 3 | 3.8 | trg |
| LTT12020 | 07 27 28.6 | +22 02 37 | ... | ... | ... | 14.0 | 2.5 | 12 | 19.4 | 0.7 | 2 | 19.4 | trg |
| GJ1097 | 07 28 45.5 | -03 17 53 | 11.2 | 4.1 | 11 | 9.7 | 1.5 | 12 | 11.6 | 0.3 | 2 | 11.6 | trg |
| GJ2060 | 07 28 51.4 | -30 14 49 | [8.7] | 2.7 | 11 | [8.6] | 1.5 | 12 | 15.5 | 0.4 | 2 | 15.5 | trg |
| LHS1922 | 07 30 39.3 | -44 24 01 | 13.7 | 3.8 | 11 | ... | ... | ... | ... | ... | ... | 13.7 | plt |
| SCR0731-4807 | 07 31 08.1 | -48 07 33 | 26.1 | 7.6 | 11 | 21.3 | 3.4 | 12 | ... | ... | ... | 21.3 | ccd |
| GJ0277 | 07 31 57.7 | +36 13 09 | ... | ... | ... | 7.0 | 1.1 | 12 | 11.8 | 0.3 | 3 | 11.8 | trg |
| GJ0275.1 | 07 32 02.0 | +68 37 15 | ... | ... | ... | 16.0 | 2.8 | 12 | 25.0 | 1.4 | 2 | 25.0 | trg |
| LHS1923 | 07 32 11.0 | +57 55 35 | ... | ... | ... | ... | ... | ... | 22.7 | 0.9 | 1 | 22.7 | trg |
| SCR0733-2749 | 07 33 26.8 | -27 49 04 | 26.6 | 11.7 | 11 | 22.6 | 3.7 | 12 | ... | ... | ... | 22.6 | ccd |
| LHS0231 | 07 33 56.1 | +22 23 02 | ... | ... | ... | 41.5 | 8.9 | 12 | 24.9 | 0.6 | 2 | 24.9 | trg |
| GJ1099 | 07 34 17.6 | +00 59 09 | ... | ... | ... | 16.0 | 2.5 | 12 | 14.6 | 0.6 | 1 | 14.6 | trg |
| GJ0277.1 | 07 34 27.4 | +62 56 29 | ... | ... | ... | 12.3 | 3.6 | 12 | 11.9 | 0.3 | 2 | 11.9 | trg |
| HIP036915 | 07 35 21.8 | +54 50 59 | ... | ... | ... | 14.1 | 2.2 | 12 | 12.8 | 0.4 | 1 | 12.8 | trg |
| LHS1932 | 07 36 12.0 | -51 55 21 | 17.0 | 4.5 | 11 | 15.8 | 2.5 | 12 | 16.2 | 0.3 | 1 | 16.2 | trg |
| LTT17993 | 07 36 25.0 | +07 04 43 | ... | ... | ... | [6.0] | 0.9 | 12 | 8.6 | 0.1 | 1 | 8.6 | trg |
| SCR0736-3024 | 07 36 56.7 | -30 24 16 | 20.2 | 9.0 | 11 | 17.2 | 2.7 | 12 | 13.3 | 0.2 | 1 | 13.3 | trg |
| L528-016 | 07 38 09.7 | -31 12 19 | 14.8 | 4.1 | 11 | 14.1 | 2.2 | 12 | 14.9 | 0.3 | 1 | 14.9 | trg |
| 2MA0738+2400 | 07 38 29.52 | +24 00 08 | ... | ... | ... | 17.0 | 2.6 | 12 | 18.9 | 0.9 | 1 | 18.9 | trg |
| LHS1935 | 07 38 41.0 | -21 13 28 | 14.8 | 4.0 | 11 | 11.9 | 1.9 | 12 | 10.6 | 0.4 | 1 | 10.6 | trg |
| GJ0281 | 07 39 23.0 | +02 11 01 | ... | ... | ... | 12.2 | 2.1 | 10 | 14.5 | 0.3 | 2 | 14.5 | trg |
| SCR0740-4257 | 07 40 11.8 | -42 57 40 | 10.0 | 2.9 | 11 | 7.2 | 1.1 | 12 | 7.9 | 0.1 | 1 | 7.9 | trg |
| GJ0285 | 07 44 40.1 | +03 33 08 | ... | ... | ... | 3.8 | 0.6 | 12 | 6.0 | 0.1 | 2 | 6.0 | trg |
| 2MA0746+2000 | 07 46 43.0 | +20 00 32 | ... | ... | ... | [10.8] | 1.9 | 8 | 12.2 | 0.0 | 3 | 12.2 | trg |
| GJ0289 | 07 48 16.3 | +20 22 05 | ... | ... | ... | 19.7 | 3.1 | 12 | 14.9 | 0.4 | 2 | 14.9 | trg |
| L034-026 | 07 49 12.7 | -76 42 07 | 12.2 | 3.6 | 11 | 9.2 | 1.4 | 12 | 10.6 | 0.2 | 1 | 10.6 | trg |
| GJ1103 | 07 51 54.7 | -00 00 13 | 11.3 | 3.8 | 11 | 8.7 | 1.4 | 12 | 8.8 | 0.3 | 1 | 8.8 | trg |
| LHS1950 | 07 51 54.9 | +05 32 13 | ... | ... | ... | 16.7 | 2.6 | 12 | 16.0 | 0.8 | 1 | 16.0 | trg |
| LP423-031 | 07 52 24.0 | +16 12 15 | ... | ... | ... | 11.9 | 1.9 | 12 | 18.4 | 0.3 | 1 | 18.4 | trg |
| SCR0754-3809 | 07 54 54.8 | -38 09 38 | 12.0 | 3.5 | 11 | 11.2 | 1.8 | 12 | 12.6 | 0.3 | 1 | 12.6 | trg |

| | | | | | | | | | | | | | |
|--------------|-------------|-----------|--------|------|-----|--------|-----|-----|------|-----|-----|--------|-----|
| LHS1955 | 07 54 54.8 | -29 20 56 | [13.4] | 4.3 | 11 | [8.6] | 1.4 | 12 | 13.5 | 0.2 | 1 | 13.5 | trg |
| GJ1101 | 07 55 49.9 | +83 23 19 | ... | ... | ... | 12.1 | 1.9 | 12 | 12.5 | 0.5 | 1 | 12.5 | trg |
| LHS1957 | 07 56 53.9 | -45 38 14 | 21.6 | 6.7 | 10 | 23.0 | 3.5 | 12 | ... | ... | ... | 23.0 | ccd |
| 2MA0757+1201 | 07 57 27.16 | +12 01 27 | ... | ... | ... | 22.7 | 3.5 | 12 | 22.9 | 1.1 | 1 | 22.9 | trg |
| SCR0757-7114 | 07 57 32.5 | -71 14 53 | ... | ... | ... | 11.2 | 1.8 | 12 | 22.1 | 1.0 | 1 | 22.1 | trg |
| GJ1105 | 07 58 12.7 | +41 18 13 | ... | ... | ... | 8.2 | 1.3 | 12 | 8.3 | 0.2 | 2 | 8.3 | trg |
| LHS5132 | 08 00 51.3 | -57 30 34 | 23.7 | 6.3 | 11 | ... | ... | ... | ... | ... | ... | 23.7 | plt |
| LHS1976 | 08 03 19.5 | +52 50 38 | ... | ... | ... | [17.8] | 2.8 | 12 | 24.8 | 3.2 | 1 | 24.8 | trg |
| SCR0803-1939 | 08 03 26.9 | -19 39 28 | [23.8] | 8.6 | 8 | [23.9] | 3.8 | 12 | ... | ... | ... | [23.9] | ccd |
| LHS1978 | 08 04 25.8 | -83 13 59 | 21.6 | 5.8 | 11 | ... | ... | ... | ... | ... | ... | 21.6 | plt |
| SCR0805-5912 | 08 05 46.2 | -59 12 50 | 20.4 | 6.0 | 11 | 19.3 | 3.0 | 12 | 16.2 | 0.5 | 1 | 16.2 | trg |
| L1321-040 | 08 09 30.9 | +21 54 17 | ... | ... | ... | 18.3 | 2.9 | 12 | 22.3 | 1.7 | 1 | 22.3 | trg |
| GJ0298 | 08 09 58.1 | -52 58 05 | 11.7 | 3.1 | 11 | 12.4 | 1.9 | 12 | 16.7 | 0.7 | 2 | 16.7 | trg |
| GJ0299 | 08 11 58.0 | +08 46 23 | ... | ... | ... | 11.5 | 2.2 | 12 | 6.8 | 0.1 | 1 | 6.8 | trg |
| GJ0300 | 08 12 40.9 | -21 33 07 | 10.4 | 3.7 | 11 | 6.1 | 1.0 | 12 | 8.0 | 0.1 | 2 | 8.0 | trg |
| SCR0812-4504 | 08 12 44.3 | -45 04 34 | 28.6 | 11.2 | 11 | 23.3 | 3.8 | 12 | ... | ... | ... | 23.3 | ccd |
| GJ0301 | 08 13 08.5 | -13 55 01 | [9.3] | 2.6 | 11 | [12.8] | 2.1 | 9 | 19.2 | 0.7 | 2 | 19.2 | trg |
| L242-075 | 08 13 26.1 | -53 17 38 | 17.8 | 5.8 | 11 | ... | ... | ... | ... | ... | ... | 17.8 | plt |
| LHS1992 | 08 13 42.6 | -76 07 49 | 17.7 | 5.0 | 11 | 14.4 | 2.2 | 12 | 16.2 | 0.5 | 1 | 16.2 | trg |
| LP843-016 | 08 14 22.6 | -25 42 19 | 17.4 | 4.8 | 11 | 15.7 | 2.6 | 12 | ... | ... | ... | 15.7 | ccd |
| GJ2066 | 08 16 07.9 | +01 18 09 | ... | ... | ... | 8.1 | 1.3 | 12 | 9.1 | 0.1 | 2 | 9.1 | trg |
| LP386-035 | 08 16 37.5 | -42 12 26 | 24.5 | 6.7 | 11 | ... | ... | ... | ... | ... | ... | 24.5 | plt |
| L098-059 | 08 18 07.6 | -68 18 47 | 11.9 | 3.2 | 11 | 12.6 | 1.9 | 12 | 10.5 | 0.3 | 1 | 10.5 | trg |
| LHS0246 | 08 25 49.7 | +69 02 11 | ... | ... | ... | 10.7 | 1.7 | 12 | 12.8 | 0.6 | 2 | 12.8 | trg |
| SCR0827-2526 | 08 27 07.0 | -25 26 54 | 23.8 | 8.6 | 11 | 20.2 | 3.3 | 12 | ... | ... | ... | 20.2 | ccd |
| LHS2010 | 08 27 11.8 | -44 59 21 | [10.6] | 3.8 | 8 | [8.9] | 1.4 | 12 | 13.7 | 0.3 | 1 | 13.7 | trg |
| GJ1110 | 08 28 11.4 | +20 07 48 | ... | ... | ... | 28.3 | 4.6 | 12 | 22.1 | 1.6 | 1 | 22.1 | trg |
| GJ0308 | 08 28 22.1 | +35 00 59 | ... | ... | ... | [16.5] | 2.8 | 12 | 18.8 | 1.8 | 2 | 18.8 | trg |
| GJ1111 | 08 29 49.5 | +26 46 34 | ... | ... | ... | 3.3 | 0.5 | 12 | 3.6 | 0.0 | 1 | 3.6 | trg |
| LHS2021 | 08 30 32.0 | +09 47 15 | ... | ... | ... | 14.4 | 2.3 | 12 | 15.8 | 0.3 | 2 | 15.8 | trg |
| LHS2024 | 08 31 23.5 | -10 29 54 | 24.6 | 12.2 | 11 | 14.7 | 2.3 | 12 | ... | ... | ... | 14.7 | ccd |
| GJ2069 | 08 31 37.5 | +19 23 39 | ... | ... | ... | [6.3] | 1.0 | 12 | 11.7 | 0.9 | 1 | 11.7 | trg |
| LHS2026 | 08 32 30.5 | -01 34 39 | 27.5 | 11.5 | 11 | 19.8 | 3.5 | 12 | 19.7 | 0.2 | 1 | 19.7 | trg |
| GJ2070 | 08 34 25.9 | -01 08 40 | 16.8 | 4.5 | 11 | 18.4 | 3.3 | 12 | 13.6 | 1.8 | 1 | 13.6 | trg |
| SCR0835-3400 | 08 35 31.7 | -34 00 37 | 25.9 | 10.9 | 11 | 22.0 | 3.7 | 12 | ... | ... | ... | 22.0 | ccd |
| LHS0250 | 08 35 38.4 | +68 03 21 | ... | ... | ... | 12.3 | 1.9 | 12 | 13.0 | 0.3 | 2 | 13.0 | trg |
| LHS2029 | 08 37 07.9 | +15 07 45 | ... | ... | ... | 15.1 | 2.3 | 12 | 19.0 | 1.3 | 1 | 19.0 | trg |
| SCR0837-2819 | 08 37 20.4 | -28 19 58 | 24.4 | 8.9 | 11 | 23.1 | 3.8 | 12 | ... | ... | ... | 23.1 | ccd |
| LP844-004 | 08 37 33.9 | -22 32 32 | 23.8 | 6.9 | 11 | 23.1 | 3.6 | 12 | ... | ... | ... | 23.1 | ccd |
| SCR0838-5855 | 08 38 02.2 | -58 55 59 | [8.5] | 2.5 | 11 | [8.0] | 1.3 | 12 | 10.9 | 0.1 | 1 | 10.9 | trg |
| SCR0838-5302 | 08 38 13.2 | -53 02 12 | 21.1 | 11.2 | 11 | 23.8 | 3.7 | 12 | ... | ... | ... | 23.8 | ccd |
| LTT03201 | 08 38 54.5 | -09 33 59 | 18.7 | 5.1 | 11 | 17.3 | 3.0 | 12 | ... | ... | ... | 17.3 | ccd |
| SCR0840-4044 | 08 40 01.7 | -40 44 31 | 28.5 | 9.1 | 11 | 23.3 | 3.7 | 12 | ... | ... | ... | 23.3 | ccd |
| GJ0316.1 | 08 40 29.7 | +18 24 09 | ... | ... | ... | 11.9 | 1.9 | 12 | 12.2 | 0.0 | 2 | 12.2 | trg |
| LHS2038 | 08 40 55.3 | +67 39 15 | ... | ... | ... | 24.5 | 3.8 | 12 | 24.5 | 1.9 | 1 | 24.5 | trg |
| GJ0317 | 08 40 59.2 | -23 27 23 | 12.0 | 3.5 | 11 | 9.7 | 1.5 | 12 | 15.3 | 0.1 | 2 | 15.3 | trg |
| LHS0252 | 08 41 17.6 | +59 28 22 | ... | ... | ... | 9.4 | 1.5 | 12 | 9.8 | 0.3 | 2 | 9.8 | trg |
| G114-014 | 08 42 23.2 | -04 53 55 | 18.8 | 5.7 | 11 | 20.6 | 3.4 | 12 | ... | ... | ... | 20.6 | ccd |
| GJ2072 | 08 44 23.1 | -44 28 21 | ... | ... | ... | [10.7] | 1.8 | 12 | 18.6 | 0.8 | 1 | 18.6 | trg |
| LP786-005 | 08 47 17.6 | -20 58 20 | 24.8 | 7.7 | 11 | ... | ... | ... | ... | ... | ... | 24.8 | plt |
| L388-106 | 08 48 23.2 | -44 12 26 | 24.8 | 7.0 | 11 | ... | ... | ... | ... | ... | ... | 24.8 | plt |
| LEHPM2-0870 | 08 48 59.1 | -80 35 02 | 21.0 | 6.0 | 11 | ... | ... | ... | ... | ... | ... | 21.0 | plt |
| GJ1114 | 08 51 43.8 | +18 07 29 | ... | ... | ... | 21.5 | 3.3 | 12 | 17.1 | 0.7 | 2 | 17.1 | trg |
| SCR0852-6608 | 08 52 50.0 | -66 08 47 | 26.3 | 7.7 | 11 | 25.0 | 4.0 | 12 | ... | ... | ... | 25.0 | ccd |
| SCR0853-3924 | 08 53 28.7 | -39 24 41 | 15.1 | 5.5 | 8 | 16.5 | 2.5 | 12 | 17.1 | 0.4 | 1 | 17.1 | trg |
| LHS2065 | 08 53 36.2 | -03 29 32 | 8.7 | 2.9 | 11 | 8.8 | 1.6 | 12 | 8.5 | 0.1 | 4 | 8.5 | trg |
| L532-012 | 08 54 02.4 | -30 51 37 | 14.7 | 4.4 | 11 | 12.6 | 2.0 | 12 | ... | ... | ... | 12.6 | ccd |
| GJ0326 | 08 54 05.3 | -13 07 31 | [13.9] | 3.7 | 11 | [13.0] | 2.0 | 12 | 16.2 | 1.8 | 1 | 16.2 | trg |
| LHS2071 | 08 55 20.3 | -23 52 15 | [12.9] | 3.7 | 11 | [10.8] | 1.7 | 12 | 15.9 | 0.4 | 1 | 15.9 | trg |
| L139-024 | 08 56 06.6 | -61 57 44 | 22.6 | 8.1 | 11 | ... | ... | ... | ... | ... | ... | 22.6 | plt |
| LP844-033 | 08 56 17.6 | -23 26 57 | 22.1 | 8.6 | 11 | 17.6 | 2.9 | 12 | 23.6 | 1.6 | 1 | 23.6 | trg |
| GJ0330 | 08 57 04.6 | +11 38 49 | ... | ... | ... | [13.1] | 2.1 | 12 | 16.5 | 0.6 | 2 | 16.5 | trg |
| GJ1116 | 08 58 12.2 | +19 45 47 | ... | ... | ... | [3.5] | 0.6 | 12 | 5.2 | 0.1 | 1 | 5.2 | trg |
| LP606-030 | 08 58 43.3 | -00 41 47 | 30.6 | 29.7 | 11 | 22.2 | 3.5 | 12 | ... | ... | ... | 22.2 | ccd |
| LTT12352 | 08 58 56.0 | +08 28 26 | ... | ... | ... | [4.4] | 0.7 | 12 | 6.8 | 0.1 | 1 | 6.8 | trg |
| GJ1118 | 08 59 05.3 | -31 13 27 | 19.0 | 5.3 | 11 | 16.9 | 2.6 | 12 | 17.8 | 0.6 | 1 | 17.8 | trg |
| LHS2088 | 09 00 14.8 | +72 57 40 | ... | ... | ... | 18.2 | 3.2 | 12 | 13.8 | 0.7 | 1 | 13.8 | trg |
| LHS2090 | 09 00 23.0 | +21 50 04 | ... | ... | ... | 5.6 | 0.9 | 12 | 6.4 | 0.1 | 1 | 6.4 | trg |
| GJ1119 | 09 00 32.5 | +46 35 11 | ... | ... | ... | 9.1 | 1.4 | 12 | 10.3 | 0.3 | 1 | 10.3 | trg |
| GJ0333.2 | 09 00 48.5 | +05 14 41 | ... | ... | ... | 16.9 | 2.8 | 12 | 23.1 | 2.1 | 2 | 23.1 | trg |
| LHS0259 | 09 00 52.1 | +48 25 25 | ... | ... | ... | 14.4 | 9.0 | 12 | 19.4 | 1.1 | 2 | 19.4 | trg |
| 2MA0901-6526 | 09 01 31.7 | -65 26 40 | 18.0 | 5.9 | 11 | 17.0 | 2.7 | 12 | ... | ... | ... | 17.0 | ccd |
| L063-046 | 09 01 39.0 | -72 40 17 | 17.7 | 5.0 | 11 | 21.3 | 3.3 | 12 | ... | ... | ... | 21.3 | ccd |
| LHS2094 | 09 02 19.8 | +08 28 06 | ... | ... | ... | 15.1 | 2.3 | 12 | 19.5 | 1.4 | 1 | 19.5 | trg |
| LP060-179 | 09 02 51.0 | +68 03 18 | ... | ... | ... | 13.4 | 2.3 | 12 | 11.7 | 0.5 | 1 | 11.7 | trg |
| LTT03347 | 09 04 02.3 | -25 04 10 | 25.0 | 6.7 | 11 | ... | ... | ... | ... | ... | ... | 25.0 | plt |
| L244-024 | 09 05 17.9 | -51 02 36 | 19.7 | 5.3 | 11 | ... | ... | ... | ... | ... | ... | 19.7 | plt |
| SCR0905-0841 | 09 05 43.3 | -08 41 58 | 25.2 | 7.2 | 11 | 20.8 | 3.3 | 12 | ... | ... | ... | 20.8 | ccd |
| GJ0334 | 09 06 45.4 | -08 48 25 | 9.2 | 2.6 | 11 | 11.4 | 1.9 | 10 | 14.5 | 0.3 | 2 | 14.5 | trg |
| LHS2106 | 09 07 02.8 | -22 08 50 | 18.9 | 7.7 | 11 | 14.5 | 2.4 | 12 | 15.1 | 0.3 | 1 | 15.1 | trg |
| SCR0907-3533 | 09 07 17.1 | -35 33 03 | 27.4 | 8.8 | 11 | 24.6 | 3.9 | 12 | ... | ... | ... | 24.6 | ccd |
| L460-139 | 09 09 14.9 | -39 59 32 | 24.8 | 7.0 | 11 | ... | ... | ... | ... | ... | ... | 24.8 | plt |
| GJ1121 | 09 09 24.0 | +40 06 05 | ... | ... | ... | 23.7 | 3.9 | 12 | 21.9 | 1.6 | 1 | 21.9 | trg |
| DEN0909-0658 | 09 09 57.3 | -06 58 19 | ... | ... | ... | 29.6 | 6.2 | 11 | 23.5 | 2.4 | 1 | 23.5 | trg |
| GJ0336.1 | 09 11 30.8 | +46 37 01 | ... | ... | ... | 18.7 | 3.3 | 12 | 24.6 | 1.4 | 2 | 24.6 | trg |
| SCR0914-4134 | 09 14 17.4 | -41 34 38 | 18.2 | 8.0 | 11 | 14.6 | 2.4 | 12 | 12.0 | 0.2 | 1 | 12.0 | trg |
| GJ0338 | 09 14 22.7 | +52 41 11 | ... | ... | ... | ... | ... | ... | 6.1 | 0.1 | 3 | 6.1 | trg |

| | | | | | | | | | | | | | |
|--------------|------------|-----------|--------|------|-----|--------|------|-----|------|-----|-----|--------|-----|
| LHS6167 | 09 15 36.4 | -10 35 47 | [9.3] | 3.4 | 11 | [7.0] | 1.2 | 12 | 9.7 | 0.1 | 1 | 9.7 | trg |
| L749-034 | 09 16 20.7 | -18 37 33 | 12.8 | 3.5 | 11 | 12.1 | 1.9 | 12 | 12.9 | 0.4 | 1 | 12.9 | trg |
| LHS2122 | 09 16 26.0 | -62 04 16 | 14.8 | 4.2 | 11 | 11.9 | 2.0 | 12 | 17.1 | 0.8 | 1 | 17.1 | trg |
| LTT03416 | 09 16 44.0 | -24 47 43 | 23.0 | 6.3 | 11 | ... | ... | ... | ... | ... | ... | 23.0 | plt |
| GJ1123 | 09 17 05.3 | -77 49 23 | 8.2 | 2.4 | 11 | 7.3 | 1.3 | 12 | 9.0 | 0.2 | 1 | 9.0 | trg |
| LHS0265 | 09 17 45.3 | +58 24 13 | ... | ... | ... | 18.2 | 2.9 | 12 | 15.4 | 0.8 | 2 | 15.4 | trg |
| GJ1122 | 09 19 18.5 | +38 31 19 | ... | ... | ... | 18.3 | 2.9 | 12 | 20.2 | 1.1 | 1 | 20.2 | trg |
| G161-013 | 09 20 11.1 | -01 10 17 | 22.8 | 6.4 | 11 | ... | ... | ... | ... | ... | ... | 22.8 | plt |
| LHS0266 | 09 20 21.1 | +26 43 43 | ... | ... | ... | 35.3 | 7.1 | 12 | 20.9 | 2.0 | 1 | 20.9 | trg |
| LEP0920-4922 | 09 20 26.0 | -49 22 35 | 22.3 | 11.3 | 11 | ... | ... | ... | ... | ... | ... | 22.3 | plt |
| LHS0267 | 09 20 58.1 | +03 20 59 | ... | ... | ... | 21.8 | 3.6 | 12 | 16.5 | 1.1 | 1 | 16.5 | trg |
| SIP0921-2104 | 09 21 14.1 | -21 04 44 | 17.2 | 8.6 | 11 | 18.8 | 3.7 | 10 | ... | ... | ... | 18.8 | ccd |
| GJ0341 | 09 21 37.6 | -60 16 55 | 5.8 | 3.9 | 6 | 9.5 | 1.6 | 12 | 10.5 | 0.1 | 2 | 10.5 | trg |
| LP902-060 | 09 23 32.4 | -33 32 56 | 24.7 | 8.1 | 11 | ... | ... | ... | ... | ... | ... | 24.7 | plt |
| LP389-001 | 09 24 17.3 | -40 05 45 | 15.7 | 4.3 | 9 | ... | ... | ... | ... | ... | ... | 15.7 | plt |
| L822-019 | 09 28 41.6 | -12 09 56 | 22.0 | 5.9 | 11 | 23.9 | 15.4 | 10 | ... | ... | ... | 23.9 | ccd |
| GJ0347 | 09 28 53.3 | -07 22 16 | 20.4 | 5.6 | 11 | 17.6 | 2.7 | 12 | 16.4 | 0.8 | 2 | 16.4 | trg |
| WT1637 | 09 29 03.8 | -24 29 04 | 15.0 | 4.5 | 11 | ... | ... | ... | ... | ... | ... | 15.0 | plt |
| LHS0269 | 09 29 11.0 | +25 58 09 | ... | ... | ... | 16.6 | 2.6 | 12 | 17.7 | 0.3 | 2 | 17.7 | trg |
| GJ1125 | 09 30 44.6 | +00 19 22 | ... | ... | ... | 9.8 | 1.5 | 12 | 9.9 | 0.2 | 2 | 9.9 | trg |
| GJ0352 | 09 31 19.4 | -13 29 19 | [7.5] | 2.7 | 5 | [6.2] | 1.0 | 12 | 10.2 | 0.3 | 2 | 10.2 | trg |
| LP788-001 | 09 31 22.3 | -17 17 43 | 13.1 | 3.9 | 11 | 12.5 | 2.0 | 12 | 13.3 | 0.3 | ... | 13.3 | trg |
| GJ0353 | 09 31 56.3 | +36 19 12 | ... | ... | ... | 13.1 | 2.1 | 12 | 14.1 | 0.3 | 2 | 14.1 | trg |
| LP846-015 | 09 34 27.9 | -26 43 27 | 15.6 | 4.6 | 11 | ... | ... | ... | ... | ... | ... | 15.6 | plt |
| LTT03532 | 09 35 54.4 | -33 43 51 | 24.0 | 6.4 | 11 | ... | ... | ... | ... | ... | ... | 24.0 | plt |
| GJ0357 | 09 36 01.6 | -21 39 39 | 9.8 | 4.3 | 11 | 10.6 | 1.7 | 12 | 9.0 | 0.2 | 2 | 9.0 | trg |
| 2MA0936-2610 | 09 36 57.8 | -26 10 11 | ... | ... | ... | 13.6 | 2.2 | 12 | 18.6 | 0.5 | 1 | 18.6 | trg |
| G117-034 | 09 39 24.2 | +31 45 17 | ... | ... | ... | ... | ... | ... | 24.0 | 2.2 | 1 | 24.0 | trg |
| SCR0939-4300 | 09 39 44.7 | -43 00 27 | 24.8 | 6.8 | 11 | 20.5 | 3.2 | 12 | ... | ... | ... | 20.5 | ccd |
| GJ0358 | 09 39 46.4 | -41 04 03 | 8.5 | 2.3 | 11 | 7.2 | 1.1 | 12 | 9.5 | 0.2 | 2 | 9.5 | trg |
| GJ0359 | 09 41 02.1 | +22 01 28 | ... | ... | ... | 16.5 | 2.9 | 12 | 12.7 | 0.6 | 1 | 12.7 | trg |
| GJ0361 | 09 41 10.3 | +13 12 34 | ... | ... | ... | 9.9 | 1.6 | 12 | 11.3 | 0.2 | 2 | 11.3 | trg |
| LTT03553 | 09 41 21.2 | -20 34 41 | 20.5 | 5.6 | 11 | 21.1 | 3.6 | 12 | ... | ... | ... | 21.1 | ccd |
| G161-066 | 09 42 12.8 | -07 01 46 | 24.5 | 7.6 | 11 | ... | ... | ... | ... | ... | ... | 24.5 | plt |
| GJ0363 | 09 42 17.9 | +55 58 31 | ... | ... | ... | 12.1 | 1.9 | 12 | 15.4 | 2.1 | 1 | 15.4 | trg |
| GJ0360 | 09 42 34.8 | +70 02 02 | ... | ... | ... | 8.3 | 1.3 | 12 | 12.0 | 0.2 | 4 | 12.0 | trg |
| LHS2177 | 09 42 35.7 | -19 14 05 | 17.8 | 5.0 | 11 | 16.3 | 2.5 | 12 | 15.8 | 0.9 | 1 | 15.8 | trg |
| GJ1128 | 09 42 46.4 | -68 53 06 | 8.0 | 2.5 | 11 | 6.3 | 1.0 | 12 | 6.5 | 0.1 | 1 | 6.5 | trg |
| LHS5156 | 09 42 49.6 | -63 37 56 | 13.3 | 4.9 | 11 | 9.6 | 1.5 | 12 | 10.5 | 0.1 | 1 | 10.5 | trg |
| LHS0272 | 09 43 46.2 | -17 47 06 | {32.9} | 9.2 | 11 | {34.6} | 5.6 | 12 | 13.5 | 0.2 | 1 | 13.5 | trg |
| LHS2181 | 09 43 55.6 | +26 58 08 | ... | ... | ... | 11.1 | 1.7 | 12 | 14.0 | 0.9 | 1 | 14.0 | trg |
| WT0244 | 09 44 23.7 | -73 58 38 | 20.2 | 6.5 | 11 | 17.1 | 2.7 | 12 | 23.1 | 0.8 | 1 | 23.1 | trg |
| GJ0367 | 09 44 29.8 | -45 46 36 | 8.2 | 3.1 | 10 | 8.2 | 1.3 | 12 | 9.8 | 0.3 | 2 | 9.8 | trg |
| GJ1129 | 09 44 47.3 | -18 12 49 | 13.4 | 4.7 | 11 | 9.2 | 1.4 | 12 | 10.7 | 0.3 | 1 | 10.7 | trg |
| G161-071 | 09 44 54.2 | -12 20 54 | 10.2 | 4.4 | 11 | 6.3 | 1.0 | 12 | 13.5 | 0.3 | 1 | 13.5 | trg |
| LP462-119 | 09 45 40.1 | -39 02 27 | [18.4] | 4.9 | 11 | [15.8] | 2.6 | 12 | 20.2 | 2.0 | 1 | 20.2 | trg |
| WT2458 | 09 45 58.4 | -32 53 30 | 12.1 | 3.9 | 11 | 10.8 | 1.7 | 12 | ... | ... | ... | 10.8 | ccd |
| LHS2186 | 09 46 09.3 | -04 25 43 | 21.2 | 7.9 | 11 | ... | ... | ... | ... | ... | ... | 21.2 | plt |
| GJ0366 | 09 46 48.4 | +76 02 38 | ... | ... | ... | 14.4 | 2.2 | 12 | 16.0 | 0.3 | 2 | 16.0 | trg |
| G043-002 | 09 48 50.2 | +15 38 44 | ... | ... | ... | 21.6 | 3.4 | 12 | 17.6 | 1.0 | 1 | 17.6 | trg |
| LHS2195 | 09 49 22.2 | +08 06 45 | ... | ... | ... | 17.1 | 2.8 | 11 | 16.6 | 0.5 | 1 | 16.6 | trg |
| GJ2075 | 09 49 27.8 | -55 20 09 | [12.3] | 3.4 | 10 | [13.6] | 2.3 | 12 | 21.0 | 0.8 | 1 | 21.0 | trg |
| LTT03613 | 09 50 40.5 | -13 48 39 | 17.0 | 5.4 | 11 | 13.1 | 2.1 | 12 | 19.6 | 0.7 | 1 | 19.6 | trg |
| LTT03612 | 09 50 48.3 | -09 07 10 | 23.1 | 6.8 | 11 | ... | ... | ... | ... | ... | ... | 23.1 | plt |
| GJ0369 | 09 51 09.6 | -12 19 48 | 10.7 | 3.2 | 5 | 12.3 | 2.0 | 12 | 13.7 | 0.3 | 2 | 13.7 | trg |
| LTT03616 | 09 51 23.3 | -17 44 24 | 18.7 | 5.1 | 11 | 17.7 | 2.7 | 12 | ... | ... | ... | 17.7 | ccd |
| GJ0372 | 09 53 11.8 | -03 41 25 | [9.4] | 2.6 | 11 | [9.1] | 1.5 | 12 | 16.1 | 0.5 | 2 | 16.1 | trg |
| GJ1130 | 09 53 28.1 | -31 45 08 | 13.6 | 3.8 | 11 | 17.9 | 3.0 | 9 | 24.1 | 0.9 | 1 | 24.1 | trg |
| LTT03629 | 09 53 30.3 | -31 28 12 | 23.0 | 6.5 | 11 | ... | ... | ... | ... | ... | ... | 23.0 | plt |
| LHS2206 | 09 53 55.0 | +20 56 46 | ... | ... | ... | 11.4 | 1.9 | 12 | 9.2 | 0.2 | 2 | 9.2 | trg |
| LP847-048 | 09 55 23.9 | -27 15 41 | 13.9 | 3.9 | 11 | 10.6 | 1.7 | 12 | 11.3 | 0.4 | 1 | 11.3 | trg |
| GJ0373 | 09 56 08.6 | +62 47 18 | ... | ... | ... | 8.4 | 1.5 | 12 | 10.8 | 0.1 | 2 | 10.8 | trg |
| GJ0375 | 09 58 34.3 | -46 25 30 | [6.8] | 2.3 | 11 | [6.5] | 1.0 | 12 | 15.4 | 0.4 | 2 | 15.4 | trg |
| GJ0377 | 10 01 10.7 | -30 23 25 | 10.0 | 2.8 | 11 | 9.7 | 1.6 | 12 | 16.1 | 0.6 | 2 | 16.1 | trg |
| LP463-104 | 10 01 23.8 | -38 50 25 | 18.2 | 5.0 | 11 | ... | ... | ... | ... | ... | ... | 18.2 | plt |
| GJ0378 | 10 02 21.7 | +48 05 19 | ... | ... | ... | 11.9 | 2.0 | 12 | 15.1 | 0.4 | 2 | 15.1 | trg |
| LHS5166 | 10 04 38.7 | -33 35 10 | 21.9 | 6.3 | 11 | 19.2 | 3.1 | 12 | 18.3 | 1.9 | 1 | 18.3 | trg |
| LP903-021 | 10 04 50.6 | -31 05 28 | 16.9 | 4.6 | 11 | 18.2 | 3.0 | 12 | 23.0 | 1.8 | 1 | 23.0 | trg |
| L319-147 | 10 06 08.7 | -49 49 38 | 23.6 | 6.7 | 11 | ... | ... | ... | ... | ... | ... | 23.6 | plt |
| LP789-023 | 10 06 31.9 | -16 53 26 | 21.9 | 8.3 | 11 | ... | ... | ... | ... | ... | ... | 21.9 | plt |
| LHS2220 | 10 06 43.8 | +41 42 52 | ... | ... | ... | 21.3 | 3.6 | 12 | 20.7 | 1.2 | 1 | 20.7 | trg |
| L016-059 | 10 07 09.9 | -82 50 16 | [18.4] | 5.1 | 11 | ... | ... | ... | ... | ... | ... | [18.4] | plt |
| GJ1131 | 10 07 59.4 | +69 14 46 | ... | ... | ... | 26.4 | 4.5 | 12 | 17.8 | 1.3 | 1 | 17.8 | trg |
| LP729-033 | 10 08 01.1 | -14 36 27 | 20.3 | 6.1 | 11 | ... | ... | ... | ... | ... | ... | 20.3 | plt |
| LHS2224 | 10 09 24.6 | +51 15 39 | ... | ... | ... | 19.1 | 3.3 | 12 | 13.3 | 0.6 | 1 | 13.3 | trg |
| NLTT23623 | 10 10 46.8 | -30 46 49 | 22.3 | 6.0 | 11 | ... | ... | ... | ... | ... | ... | 22.3 | plt |
| WT1757 | 10 11 45.0 | -24 25 34 | 17.3 | 5.1 | 11 | ... | ... | ... | ... | ... | ... | 17.3 | plt |
| GJ0381 | 10 12 04.7 | -02 41 05 | [8.1] | 2.2 | 11 | [9.2] | 1.4 | 12 | 12.0 | 0.4 | 2 | 12.0 | trg |
| GJ0382 | 10 12 17.7 | -03 44 44 | 5.9 | 1.7 | 11 | 5.9 | 1.0 | 12 | 7.9 | 0.1 | 2 | 7.9 | trg |
| LHS2233 | 10 12 59.6 | -35 43 59 | 21.1 | 5.6 | 11 | 22.1 | 3.9 | 12 | ... | ... | ... | 22.1 | ccd |
| GJ1132 | 10 14 51.8 | -47 09 24 | 21.0 | 7.1 | 11 | 16.1 | 2.6 | 12 | 12.0 | 0.3 | 1 | 12.0 | trg |
| G162-037 | 10 16 35.7 | -11 56 48 | 24.1 | 7.1 | 11 | ... | ... | ... | ... | ... | ... | 24.1 | plt |
| GJ0386 | 10 16 46.0 | -11 57 42 | 9.0 | 2.8 | 11 | 13.1 | 3.3 | 10 | 13.3 | 0.4 | 2 | 13.3 | trg |
| TWA022 | 10 17 27.0 | -53 54 27 | ... | ... | ... | [6.1] | 1.0 | 12 | 17.5 | 0.2 | 1 | 17.5 | trg |
| LP790-002 | 10 18 13.9 | -20 28 41 | 11.8 | 3.5 | 11 | 9.5 | 1.5 | 12 | ... | ... | ... | 9.5 | ccd |
| LTT03780 | 10 18 35.2 | -11 43 00 | 17.3 | 5.8 | 11 | 17.4 | 2.7 | 12 | ... | ... | ... | 17.4 | ccd |
| GJ0388 | 10 19 36.2 | +19 52 11 | ... | ... | ... | 3.8 | 0.6 | 12 | 4.9 | 0.1 | 1 | 4.9 | trg |

| | | | | | | | | | | | | | |
|--------------|-------------|-----------|--------|------|-----|--------|-----|-----|------|-----|-----|--------|-----|
| LP392-039 | 10 19 51.3 | -41 48 46 | 18.6 | 5.1 | 11 | 20.0 | 3.2 | 12 | 21.9 | 1.0 | 2 | 21.9 | trg |
| WT2473 | 10 21 12.1 | -37 05 44 | 18.3 | 5.2 | 11 | ... | ... | ... | ... | ... | ... | 18.3 | plt |
| GJ0389 | 10 22 24.6 | -60 10 38 | [13.9] | 4.1 | 2 | 17.3 | 2.9 | 12 | 19.8 | 0.7 | 2 | 19.8 | trg |
| NLTT24218 | 10 22 46.1 | -66 02 26 | 20.1 | 5.9 | 11 | ... | ... | ... | ... | ... | ... | 20.1 | plt |
| L142-086 | 10 24 07.0 | -63 59 55 | 14.2 | 3.8 | 6 | 15.1 | 2.6 | 12 | ... | ... | ... | 15.1 | ccd |
| GJ0390 | 10 25 10.8 | -10 13 43 | 8.5 | 2.4 | 11 | 10.2 | 1.8 | 12 | 12.3 | 0.3 | 2 | 12.3 | trg |
| LTT03835 | 10 26 38.3 | -16 51 19 | [21.3] | 6.9 | 8 | ... | ... | ... | ... | ... | ... | [21.3] | plt |
| LHS2268 | 10 28 31.2 | +48 14 10 | ... | ... | ... | 16.1 | 2.5 | 12 | 21.0 | 1.0 | 1 | 21.0 | trg |
| GJ0393 | 10 28 55.6 | +00 50 28 | ... | ... | ... | 6.7 | 1.1 | 12 | 7.1 | 0.1 | 2 | 7.1 | trg |
| LTT03855 | 10 30 50.8 | -35 46 39 | 17.7 | 4.9 | 11 | 20.5 | 3.5 | 12 | 24.6 | 1.2 | 1 | 24.6 | trg |
| LTT03538 | 10 31 08.5 | -41 27 49 | 23.5 | 7.0 | 11 | ... | ... | ... | ... | ... | ... | 23.5 | plt |
| LP904-068 | 10 33 39.1 | -29 00 32 | 20.0 | 5.4 | 11 | ... | ... | ... | ... | ... | ... | 20.0 | plt |
| LEHPM2-4342 | 10 34 24.7 | -28 19 19 | 16.7 | 4.4 | 11 | ... | ... | ... | ... | ... | ... | 16.7 | plt |
| LTT03877 | 10 35 01.1 | -09 24 39 | 16.0 | 4.2 | 11 | 13.6 | 2.1 | 12 | ... | ... | ... | 13.6 | ccd |
| LHS0283 | 10 35 06.5 | +69 26 16 | ... | ... | ... | 11.2 | 1.8 | 12 | 12.2 | 0.4 | 2 | 12.2 | trg |
| GJ0398 | 10 36 01.8 | +05 07 06 | ... | ... | ... | 11.6 | 1.8 | 12 | 14.5 | 1.3 | 1 | 14.5 | trg |
| 2MA1036+1521 | 10 36 44.8 | +15 21 39 | ... | ... | ... | [10.8] | 1.7 | 12 | 20.1 | 2.0 | 1 | 20.1 | trg |
| NLTT24896 | 10 37 41.6 | -29 31 04 | 24.2 | 8.2 | 11 | ... | ... | ... | ... | ... | ... | 24.2 | plt |
| LTT03896 | 10 37 45.3 | -27 46 39 | 10.6 | 2.9 | 11 | 10.1 | 1.6 | 12 | 14.8 | 0.3 | 1 | 14.8 | trg |
| LEHPM2-2758 | 10 38 47.8 | -86 32 44 | 13.2 | 5.2 | 11 | 14.5 | 2.2 | 12 | 13.3 | 0.5 | 1 | 13.3 | trg |
| GJ0399 | 10 39 40.6 | -06 55 26 | 13.9 | 4.1 | 11 | 11.7 | 1.9 | 12 | 15.6 | 0.7 | 2 | 15.6 | trg |
| LP465-084 | 10 39 44.4 | -37 55 14 | [7.8] | 2.4 | 11 | [8.7] | 1.3 | 12 | 14.0 | 0.5 | 1 | 14.0 | trg |
| WT0309 | 10 40 47.5 | -44 45 53 | 22.4 | 6.4 | 11 | ... | ... | ... | ... | ... | ... | 22.4 | plt |
| GJ1135 | 10 41 09.3 | -36 53 44 | [9.5] | 2.6 | 11 | [11.3] | 1.9 | 12 | 16.3 | 0.4 | 1 | 16.3 | trg |
| GJ1134 | 10 41 37.9 | +37 36 39 | ... | ... | ... | 10.9 | 1.8 | 12 | 10.3 | 0.3 | 1 | 10.3 | trg |
| LP904-051 | 10 41 44.0 | -31 11 55 | 23.6 | 6.8 | 11 | ... | ... | ... | ... | ... | ... | 23.6 | plt |
| GJ1136 | 10 41 51.8 | -36 38 00 | ... | ... | ... | 15.1 | 2.5 | 9 | 16.2 | 1.1 | 1 | 16.2 | trg |
| LP848-050 | 10 42 41.4 | -24 16 05 | [11.7] | 3.7 | 11 | [9.7] | 1.6 | 12 | 11.8 | 0.3 | 1 | 11.8 | trg |
| WT1827 | 10 43 02.8 | -09 12 41 | [13.5] | 5.4 | 11 | [9.7] | 1.5 | 12 | 12.4 | 0.4 | 1 | 12.4 | trg |
| LTT03936 | 10 44 09.5 | -26 37 44 | 20.7 | 5.7 | 11 | ... | ... | ... | ... | ... | ... | 20.7 | plt |
| LHS0288 | 10 44 21.0 | -61 12 35 | ... | ... | ... | 6.8 | 1.6 | 12 | 4.8 | 0.1 | 2 | 4.8 | trg |
| LP905-056 | 10 45 16.7 | -30 48 27 | 12.2 | 3.2 | 11 | 15.0 | 2.3 | 12 | 14.0 | 0.5 | 1 | 14.0 | trg |
| LP849-006 | 10 45 51.8 | -23 09 01 | 17.1 | 5.2 | 11 | ... | ... | ... | ... | ... | ... | 17.1 | plt |
| LP905-017 | 10 47 11.2 | -32 15 06 | 22.1 | 7.1 | 11 | ... | ... | ... | ... | ... | ... | 22.1 | plt |
| LHS2310 | 10 47 38.7 | -79 27 46 | 12.2 | 4.2 | 11 | 13.3 | 2.1 | 12 | ... | ... | ... | 13.3 | ccd |
| NLTT25431 | 10 48 01.0 | -76 34 16 | 21.4 | 10.6 | 11 | ... | ... | ... | ... | ... | ... | 21.4 | plt |
| DEN1048-3956 | 10 48 12.6 | -39 56 07 | 4.0 | 1.2 | 11 | 4.5 | 0.7 | 10 | 4.0 | 0.0 | 3 | 4.0 | trg |
| LHS0292 | 10 48 14.6 | -11 20 10 | 6.0 | 3.0 | 11 | 4.3 | 0.7 | 12 | 4.5 | 0.1 | 2 | 4.5 | trg |
| LHS2314 | 10 49 01.8 | +05 01 59 | ... | ... | ... | 25.1 | 3.9 | 12 | 24.3 | 1.4 | 1 | 24.3 | trg |
| GJ1138 | 10 49 45.6 | +35 32 50 | ... | ... | ... | 10.2 | 1.6 | 12 | 9.6 | 0.3 | 2 | 9.6 | trg |
| LHS2317 | 10 50 26.5 | +33 05 19 | ... | ... | ... | 14.2 | 2.3 | 12 | 22.9 | 1.5 | 1 | 22.9 | trg |
| GJ0402 | 10 50 52.0 | +06 48 29 | ... | ... | ... | 6.0 | 1.0 | 12 | 6.8 | 0.1 | 2 | 6.8 | trg |
| GJ0403 | 10 52 04.0 | +13 59 51 | ... | ... | ... | 14.2 | 2.2 | 12 | 12.5 | 0.4 | 2 | 12.5 | trg |
| LHS5179 | 10 53 02.2 | -15 05 03 | 22.0 | 7.1 | 11 | 24.3 | 3.8 | 12 | ... | ... | ... | 24.3 | ccd |
| 2MA1054-8505 | 10 54 11.0 | -85 05 02 | 20.0 | 10.4 | 10 | 19.5 | 3.2 | 9 | ... | ... | ... | 19.5 | ccd |
| LTT04004 | 10 54 42.0 | -07 18 33 | 14.2 | 3.9 | 11 | 12.2 | 1.9 | 12 | ... | ... | ... | 12.2 | ccd |
| LHS2328 | 10 55 34.5 | -09 21 26 | 24.9 | 8.6 | 11 | 20.3 | 3.2 | 12 | 18.6 | 0.5 | 1 | 18.6 | trg |
| LHS2329 | 10 55 40.1 | -52 10 15 | 23.1 | 6.2 | 11 | ... | ... | ... | ... | ... | ... | 23.1 | plt |
| GJ0406 | 10 56 28.9 | +07 00 53 | ... | ... | ... | 2.0 | 0.3 | 12 | 2.4 | 0.0 | 1 | 2.4 | trg |
| LP731-028 | 10 56 38.9 | -15 52 54 | 11.8 | 3.1 | 11 | 13.4 | 2.1 | 12 | ... | ... | ... | 13.4 | ccd |
| LTT04030 | 10 58 34.2 | -05 54 09 | 19.6 | 5.2 | 11 | ... | ... | ... | ... | ... | ... | 19.6 | plt |
| LHS2335 | 10 58 35.1 | -31 08 38 | 17.3 | 5.2 | 11 | 16.6 | 2.7 | 12 | 19.8 | 0.6 | 1 | 19.8 | trg |
| LHS2337 | 10 59 04.8 | +30 14 55 | ... | ... | ... | 19.7 | 3.1 | 12 | 22.3 | 2.9 | 1 | 22.3 | trg |
| GJ0408 | 11 00 04.2 | +22 49 58 | ... | ... | ... | 6.3 | 1.0 | 12 | 6.7 | 0.1 | 2 | 6.7 | trg |
| LHS0296 | 11 01 23.2 | +02 59 46 | ... | ... | ... | 20.7 | 3.6 | 12 | 13.9 | 0.6 | 1 | 13.9 | trg |
| GJ1141 | 11 02 21.0 | +16 30 45 | ... | ... | ... | 20.6 | 3.3 | 12 | 19.4 | 2.5 | 3 | 19.4 | trg |
| GJ0410 | 11 02 38.3 | +21 58 01 | ... | ... | ... | 10.0 | 1.6 | 12 | 11.8 | 0.1 | 2 | 11.8 | trg |
| GJ0411 | 11 03 20.1 | +35 58 11 | ... | ... | ... | ... | ... | ... | 2.5 | 0.0 | 2 | 2.5 | trg |
| LP491-051 | 11 03 21.25 | +13 37 57 | ... | ... | ... | 13.8 | 2.1 | 12 | 15.4 | 0.7 | 1 | 15.4 | trg |
| LP791-023 | 11 04 25.2 | -17 48 09 | 23.4 | 6.7 | 11 | ... | ... | ... | ... | ... | ... | 23.4 | plt |
| L066-047 | 11 04 33.5 | -72 57 10 | 19.7 | 6.6 | 8 | ... | ... | ... | ... | ... | ... | 19.7 | plt |
| UPM1104-6232 | 11 04 33.8 | -62 32 35 | 19.4 | 6.5 | 11 | 16.9 | 2.7 | 12 | ... | ... | ... | 16.9 | ccd |
| LP849-051 | 11 05 06.9 | -22 12 52 | 19.5 | 5.7 | 11 | ... | ... | ... | ... | ... | ... | 19.5 | plt |
| GJ0412 | 11 05 28.5 | +43 31 36 | ... | ... | ... | 6.1 | 1.0 | 12 | 4.9 | 0.0 | 2 | 4.9 | trg |
| LHS2348 | 11 05 43.1 | +10 14 09 | ... | ... | ... | 17.9 | 2.8 | 12 | 19.7 | 1.8 | 1 | 19.7 | trg |
| LHS2351 | 11 06 20.0 | +04 28 17 | ... | ... | ... | 19.8 | 3.1 | 12 | 20.8 | 1.4 | 1 | 20.8 | trg |
| LP731-047 | 11 06 56.9 | -12 44 03 | 22.7 | 10.3 | 11 | ... | ... | ... | ... | ... | ... | 22.7 | plt |
| L754-040 | 11 07 27.7 | -19 17 30 | 13.3 | 3.6 | 11 | 16.7 | 2.7 | 10 | 18.7 | 0.6 | 1 | 18.7 | trg |
| L017-069 | 11 07 58.2 | -83 51 23 | 15.4 | 6.9 | 11 | 22.5 | 3.5 | 12 | ... | ... | ... | 22.5 | ccd |
| GJ0413.1 | 11 09 31.3 | -24 35 55 | 9.6 | 2.7 | 11 | 9.4 | 1.5 | 12 | 10.7 | 0.2 | 2 | 10.7 | trg |
| LHS2360 | 11 10 00.5 | -74 36 15 | 12.1 | 5.2 | 11 | 14.9 | 2.8 | 12 | ... | ... | ... | 14.9 | ccd |
| SCR1110-3608 | 11 10 29.0 | -36 08 25 | 22.3 | 7.1 | 11 | 23.8 | 3.7 | 12 | ... | ... | ... | 23.8 | ccd |
| GJ0414.1 | 11 11 19.4 | +43 25 02 | ... | ... | ... | [11.6] | 2.2 | 12 | 16.9 | 0.7 | 1 | 16.9 | trg |
| 2MA1113+1025 | 11 13 00.6 | +10 25 05 | ... | ... | ... | 20.9 | 3.4 | 12 | 23.0 | 1.6 | 1 | 23.0 | trg |
| GJ0422 | 11 16 00.2 | -57 32 52 | 15.7 | 4.3 | 8 | 12.1 | 1.9 | 12 | 12.7 | 0.4 | 2 | 12.7 | trg |
| L611-120 | 11 16 06.8 | -30 10 41 | 15.3 | 4.2 | 11 | ... | ... | ... | 23.2 | 1.1 | 1 | 23.2 | trg |
| LP850-015 | 11 16 18.7 | -25 49 22 | 21.9 | 6.8 | 11 | ... | ... | ... | ... | ... | ... | 21.9 | plt |
| GJ1144 | 11 16 22.2 | -14 41 36 | 13.3 | 3.5 | 2 | 14.4 | 5.8 | 7 | 17.9 | 0.5 | 1 | 17.9 | trg |
| LHS2386 | 11 16 36.7 | -44 07 50 | 21.5 | 5.9 | 11 | ... | ... | ... | ... | ... | ... | 21.5 | plt |
| LHS2385 | 11 16 37.6 | -27 57 19 | 19.1 | 5.9 | 11 | ... | ... | ... | ... | ... | ... | 19.1 | plt |
| LP732-015 | 11 17 06.5 | -11 22 25 | 23.5 | 6.7 | 11 | ... | ... | ... | ... | ... | ... | 23.5 | plt |
| GJ1145 | 11 17 07.5 | -27 48 49 | 11.4 | 3.2 | 11 | 15.2 | 2.6 | 9 | 17.7 | 0.4 | 1 | 17.7 | trg |
| LP792-053 | 11 19 22.8 | -19 00 30 | 24.4 | 6.8 | 11 | ... | ... | ... | ... | ... | ... | 24.4 | plt |
| LHS2395 | 11 19 31.0 | +46 41 43 | ... | ... | ... | 11.2 | 2.0 | 12 | 10.3 | 0.3 | 1 | 10.3 | trg |
| L467-021 | 11 19 41.1 | -36 15 20 | 23.3 | 6.7 | 11 | ... | ... | ... | ... | ... | ... | 23.3 | plt |
| LP792-014 | 11 19 48.2 | -16 32 38 | 25.0 | 9.7 | 11 | ... | ... | ... | ... | ... | ... | 25.0 | plt |
| GJ0424 | 11 20 04.8 | +65 50 47 | ... | ... | ... | [9.7] | 1.6 | 12 | 8.9 | 0.1 | 2 | 8.9 | trg |

| | | | | | | | | | | | | | |
|--------------|-------------|-----------|--------|-----|-----|----------|------|-----|------|-----|-----|--------|-----|
| LP792-016 | 11 20 46.5 | -19 39 07 | 20.0 | 5.2 | 11 | 20.4 | 3.2 | 12 | ... | ... | ... | 20.4 | ccd |
| LP792-017 | 11 20 59.9 | -17 01 49 | 21.4 | 6.2 | 11 | 17.8 | 2.9 | 12 | ... | ... | ... | 17.8 | ccd |
| GJ1146 | 11 21 38.5 | +06 08 26 | ... | ... | ... | 30.1 | 4.8 | 12 | 18.5 | 1.4 | 1 | 18.5 | trg |
| LHS2397a | 11 21 49.2 | -13 13 09 | 13.1 | 4.4 | 11 | 13.4 | 2.1 | 12 | 14.5 | 0.2 | 5 | 14.5 | trg |
| LHS2400 | 11 22 42.5 | -32 05 40 | 25.2 | 8.7 | 11 | 20.4 | 3.4 | 12 | 22.6 | 1.2 | 1 | 22.6 | trg |
| LHS0302 | 11 23 08.2 | +25 53 37 | ... | ... | ... | 19.0 | 3.1 | 12 | 16.5 | 0.8 | 2 | 16.5 | trg |
| GJ2085 | 11 23 44.5 | +08 33 48 | ... | ... | ... | 18.4 | 2.9 | 12 | 21.6 | 1.1 | 2 | 21.6 | trg |
| LHS2401 | 11 23 57.3 | -18 21 49 | 20.2 | 5.3 | 11 | 19.9 | 3.1 | 12 | 18.4 | 0.9 | 1 | 18.4 | trg |
| SCR1124-3900 | 11 24 23.2 | -39 00 43 | 19.1 | 5.4 | 11 | 22.5 | 3.6 | 12 | ... | ... | ... | 22.5 | ccd |
| LHS2405 | 11 25 28.2 | +78 15 44 | ... | ... | ... | 23.5 | 3.7 | 12 | 22.3 | 4.1 | 2 | 22.3 | trg |
| SCR1125-3834 | 11 25 37.3 | -38 34 43 | 18.1 | 5.4 | 11 | 20.4 | 3.2 | 12 | ... | ... | ... | 20.4 | ccd |
| LP792-060 | 11 26 50.8 | -18 44 59 | 23.4 | 6.6 | 11 | 20.6 | 4.0 | 12 | ... | ... | ... | 20.6 | ccd |
| LTT04244 | 11 30 06.9 | -30 42 44 | 23.8 | 7.6 | 11 | ... | ... | ... | ... | ... | ... | 23.8 | plt |
| LP672-042 | 11 30 41.8 | -08 05 43 | 14.1 | 4.0 | 11 | 10.8 | 1.7 | 12 | 13.2 | 0.7 | 1 | 13.2 | trg |
| LHS0306 | 11 31 08.4 | -14 57 21 | 16.5 | 6.3 | 11 | 12.1 | 1.9 | 12 | 11.2 | 0.2 | 2 | 11.2 | trg |
| GJ0430.1 | 11 31 43.3 | +22 40 01 | ... | ... | ... | 13.0 | 2.1 | 12 | 15.9 | 0.4 | 2 | 15.9 | trg |
| GJ0431 | 11 31 46.5 | -41 02 47 | 8.7 | 2.5 | 11 | 7.3 | 1.2 | 12 | 10.4 | 0.3 | 2 | 10.4 | trg |
| L540-090 | 11 32 18.4 | -35 26 14 | 19.1 | 7.6 | 11 | ... | ... | ... | ... | ... | ... | 19.1 | plt |
| LP792-033 | 11 32 19.0 | -16 58 07 | 20.4 | 5.5 | 8 | 21.9 | 3.5 | 12 | 22.8 | 1.4 | 1 | 22.8 | trg |
| L324-051 | 11 32 22.0 | -46 28 30 | 14.3 | 7.3 | 10 | 17.8 | 2.8 | 12 | ... | ... | ... | 17.8 | ccd |
| LP850-047 | 11 33 01.9 | -23 11 08 | 24.3 | 7.6 | 11 | ... | ... | ... | ... | ... | ... | 24.3 | plt |
| LHS2427 | 11 34 38.0 | -23 52 15 | 15.3 | 5.6 | 10 | 20.3 | 3.3 | 12 | 17.8 | 0.7 | 2 | 17.8 | trg |
| L066-086 | 11 34 59.7 | -74 36 09 | 11.3 | 4.6 | 11 | 16.9 | 2.8 | 12 | ... | ... | ... | 16.9 | ccd |
| GJ0433 | 11 35 27.0 | -32 32 24 | [8.7] | 2.4 | 10 | [8.1] | 1.3 | 12 | 8.9 | 0.1 | 2 | 8.9 | trg |
| LP851-027 | 11 36 57.1 | -23 29 48 | [23.0] | 6.5 | 11 | [23.1] | 6.7 | 12 | ... | ... | ... | [23.1] | ccd |
| SCR1138-7721 | 11 38 16.8 | -77 21 49 | 8.8 | 2.7 | 11 | 9.5 | 1.7 | 12 | 8.2 | 0.2 | 1 | 8.2 | trg |
| GJ1147 | 11 38 25.0 | -41 22 33 | 18.1 | 5.0 | 11 | 17.4 | 2.7 | 12 | 15.1 | 0.3 | 1 | 15.1 | trg |
| LP673-025 | 11 40 18.0 | -08 11 27 | 23.5 | 6.6 | 11 | ... | ... | ... | ... | ... | ... | 23.5 | plt |
| SIP1141-3624 | 11 41 21.5 | -36 24 35 | 9.8 | 3.1 | 11 | 9.9 | 1.6 | 12 | 8.6 | 0.1 | 1 | 8.6 | trg |
| GJ1148 | 11 41 44.6 | +42 45 07 | ... | ... | ... | 7.8 | 1.2 | 12 | 11.3 | 0.3 | 2 | 11.3 | trg |
| GJ0436 | 11 42 11.0 | +26 42 23 | ... | ... | ... | 7.9 | 1.2 | 12 | 10.1 | 0.2 | 2 | 10.1 | trg |
| UPM1142-6440 | 11 42 29.9 | -64 40 34 | 23.8 | 8.3 | 11 | 19.3 | 3.1 | 12 | ... | ... | ... | 19.3 | ccd |
| GJ0438 | 11 43 19.8 | -51 50 26 | 12.4 | 4.2 | 2 | 12.6 | 2.0 | 12 | 10.9 | 0.2 | 2 | 10.9 | trg |
| SCR1144-4302 | 11 44 24.9 | -43 02 54 | 24.7 | 7.4 | 11 | 21.2 | 3.6 | 12 | ... | ... | ... | 21.2 | ccd |
| LP793-033 | 11 45 34.5 | -20 21 12 | 15.9 | 4.9 | 11 | 17.7 | 2.8 | 12 | 19.3 | 1.3 | 1 | 19.3 | trg |
| SIP1145-4055 | 11 45 35.4 | -40 55 59 | 17.7 | 5.6 | 11 | ... | ... | ... | ... | ... | ... | 17.7 | plt |
| GJ0443 | 11 46 42.9 | -14 00 52 | 15.0 | 4.0 | 11 | 12.2 | 2.1 | 12 | 19.5 | 1.2 | 2 | 19.5 | trg |
| GJ0445 | 11 47 41.3 | +78 41 28 | ... | ... | ... | 6.4 | 1.1 | 12 | 5.3 | 0.1 | 2 | 5.3 | trg |
| GJ0447 | 11 47 44.4 | +00 48 16 | ... | ... | ... | 3.6 | 0.6 | 12 | 3.4 | 0.0 | 2 | 3.4 | trg |
| SCR1147-5504 | 11 47 52.5 | -55 04 12 | 24.2 | 8.1 | 11 | 23.1 | 3.6 | 12 | ... | ... | ... | 23.1 | ccd |
| LHS2460 | 11 48 19.4 | -11 17 14 | 18.4 | 5.3 | 11 | 17.8 | 3.0 | 12 | ... | ... | ... | 17.8 | ccd |
| G010-052 | 11 48 35.49 | +07 41 40 | ... | ... | ... | 19.1 | 3.0 | 12 | 20.8 | 1.0 | 1 | 20.8 | trg |
| GJ1151 | 11 50 57.7 | +48 22 39 | ... | ... | ... | 8.6 | 1.3 | 12 | 8.2 | 0.2 | 2 | 8.2 | trg |
| GJ0450 | 11 51 07.3 | +35 16 19 | ... | ... | ... | 8.1 | 1.4 | 12 | 8.6 | 0.1 | 2 | 8.6 | trg |
| LP613-062 | 11 51 55.3 | -01 31 32 | 24.2 | 9.0 | 11 | 17.5 | 2.7 | 12 | ... | ... | ... | 17.5 | ccd |
| LTT04404 | 11 51 55.4 | -27 29 10 | 21.0 | 5.8 | 11 | ... | ... | ... | ... | ... | ... | 21.0 | plt |
| LP961-051 | 11 52 35.6 | -35 09 43 | 24.6 | 6.5 | 11 | ... | ... | ... | ... | ... | ... | 24.6 | plt |
| LHS0317 | 11 53 12.4 | -31 23 56 | 18.5 | 5.7 | 11 | 17.7 | 3.0 | 12 | ... | ... | ... | 17.7 | ccd |
| GJ0452 | 11 53 16.1 | -07 22 28 | 16.3 | 5.2 | 11 | 16.8 | 2.6 | 12 | 19.0 | 1.3 | 2 | 19.0 | trg |
| LHS2471 | 11 53 54.2 | +06 59 06 | ... | ... | ... | 13.4 | 3.8 | 12 | 14.2 | 0.5 | 1 | 14.2 | trg |
| GJ0452.1 | 11 54 08.0 | +09 48 12 | ... | ... | ... | 14.9 | 2.5 | 12 | 11.3 | 0.5 | 2 | 11.3 | trg |
| LP961-053 | 11 54 18.4 | -37 33 10 | 19.8 | 5.6 | 11 | ... | ... | ... | ... | ... | ... | 19.8 | plt |
| LP851-346 | 11 55 42.9 | -22 24 59 | 10.3 | 2.8 | 11 | 9.9 | 1.6 | 11 | 11.2 | 0.2 | 1 | 11.2 | trg |
| LHS2476 | 11 55 44.3 | -18 54 32 | 24.0 | 6.9 | 11 | 22.3 | 3.4 | 12 | ... | ... | ... | 22.3 | ccd |
| GJ2086 | 11 55 49.2 | -38 16 49 | 21.9 | 6.2 | 11 | 26.5 | 4.1 | 12 | 24.3 | 1.7 | 1 | 24.3 | trg |
| LHS2482 | 11 57 32.8 | +11 49 39 | ... | ... | ... | 19.2 | 3.1 | 12 | 24.4 | 1.7 | 2 | 24.4 | trg |
| SCR1157-0149 | 11 57 45.6 | -01 49 03 | 22.2 | 6.5 | 11 | 21.4 | 3.4 | 12 | 19.7 | 0.6 | 1 | 19.7 | trg |
| LP851-399 | 11 57 53.5 | -23 49 01 | 24.2 | 7.0 | 11 | 21.0 | 3.3 | 12 | ... | ... | ... | 21.0 | ccd |
| RXJ1159-5247 | 11 59 27.4 | -52 47 19 | 10.7 | 3.7 | 8 | 10.8 | 1.8 | 11 | 9.4 | 0.1 | 1 | 9.4 | trg |
| L325-274 | 12 00 22.9 | -49 31 14 | 20.4 | 6.1 | 11 | ... | ... | ... | ... | ... | ... | 20.4 | plt |
| LHS5205 | 12 00 36.9 | -13 49 36 | [19.8] | 5.7 | 11 | [17.0] | 3.1 | 12 | ... | ... | ... | [17.0] | ccd |
| L829-010 | 12 01 40.8 | -12 13 54 | [18.6] | 5.1 | 11 | [19.5] | 3.0 | 12 | ... | ... | ... | [19.5] | ccd |
| GJ2088 | 12 02 13.2 | -38 00 29 | [14.4] | 4.0 | 11 | [18.1] | 2.9 | 10 | 22.9 | 1.0 | 1 | 22.9 | trg |
| LP794-013 | 12 02 16.9 | -16 22 04 | 20.7 | 5.5 | 11 | ... | ... | ... | ... | ... | ... | 20.7 | plt |
| GJ0455 | 12 02 19.5 | +28 35 33 | ... | ... | ... | {[25.2]} | 4.8 | 12 | 20.2 | 1.6 | 1 | 20.2 | trg |
| SIP1203-4023 | 12 03 51.3 | -40 23 42 | 20.4 | 5.9 | 11 | ... | ... | ... | ... | ... | ... | 20.4 | plt |
| LHS2506 | 12 03 58.3 | -33 01 27 | 20.1 | 5.6 | 11 | ... | ... | ... | ... | ... | ... | 20.1 | plt |
| LP852-005 | 12 05 12.9 | -25 33 54 | 22.8 | 6.0 | 11 | 21.5 | 3.5 | 12 | ... | ... | ... | 21.5 | ccd |
| L397-071 | 12 06 39.1 | -44 27 54 | 16.2 | 4.3 | 11 | ... | ... | ... | ... | ... | ... | 16.2 | plt |
| SCR1206-3500 | 12 06 58.5 | -35 00 52 | 21.0 | 5.9 | 11 | 17.7 | 2.7 | 12 | 23.6 | 0.8 | 1 | 23.6 | trg |
| GJ0456 | 12 08 22.2 | -00 28 58 | 19.9 | 6.5 | 10 | 26.6 | 4.6 | 10 | 24.9 | 1.6 | 2 | 24.9 | trg |
| LP734-030 | 12 08 47.1 | -10 16 00 | 19.9 | 5.4 | 11 | 19.5 | 3.3 | 12 | ... | ... | ... | 19.5 | ccd |
| SCR1209-3815 | 12 09 23.6 | -38 15 43 | 20.0 | 5.7 | 11 | 20.3 | 3.3 | 12 | ... | ... | ... | 20.3 | ccd |
| LP908-025 | 12 09 54.1 | -29 20 16 | 19.3 | 5.6 | 11 | 21.4 | 3.4 | 12 | ... | ... | ... | 21.4 | ccd |
| LHS2520 | 12 10 05.6 | -15 04 17 | 8.8 | 2.4 | 11 | 7.6 | 1.2 | 12 | 12.8 | 0.4 | 1 | 12.8 | trg |
| LHS2521 | 12 10 11.6 | -31 58 24 | 20.8 | 6.2 | 11 | ... | ... | ... | ... | ... | ... | 20.8 | plt |
| LP734-034 | 12 10 28.4 | -13 10 24 | 16.3 | 4.4 | 11 | 13.9 | 2.2 | 12 | ... | ... | ... | 13.9 | ccd |
| SCR1210-2213 | 12 10 42.2 | -22 13 09 | [24.5] | 6.6 | 11 | [21.5] | 4.6 | 12 | ... | ... | ... | [21.5] | ccd |
| L758-108 | 12 11 11.8 | -19 57 38 | 12.4 | 3.3 | 11 | 12.3 | 1.9 | 12 | 12.6 | 0.4 | 1 | 12.6 | trg |
| GJ0458 | 12 12 20.8 | +54 29 08 | ... | ... | ... | 12.7 | 2.4 | 10 | 15.5 | 0.3 | 2 | 15.5 | trg |
| LP852-057 | 12 13 32.9 | -25 55 25 | 20.0 | 5.6 | 11 | 23.1 | 3.7 | 12 | 23.4 | 1.1 | 1 | 23.4 | trg |
| SCR1214-2345 | 12 14 08.6 | -23 45 17 | ... | ... | ... | 43.8 | 27.9 | 10 | 10.9 | 0.2 | 1 | 10.9 | trg |
| GJ1154 | 12 14 16.6 | +00 37 26 | ... | ... | ... | [6.0] | 1.1 | 12 | 8.4 | 0.3 | 1 | 8.4 | trg |
| SCR1214-4603 | 12 14 40.0 | -46 03 14 | 18.0 | 6.9 | 11 | 14.2 | 2.2 | 12 | 15.0 | 0.2 | 1 | 15.0 | trg |
| GJ1155 | 12 16 51.8 | +02 58 02 | ... | ... | ... | [20.9] | 3.3 | 12 | 21.6 | 1.6 | 1 | 21.6 | trg |
| SCR1217-7810 | 12 17 26.9 | -78 10 46 | 24.5 | 8.6 | 11 | 23.3 | 3.8 | 12 | ... | ... | ... | 23.3 | ccd |
| LP674-104 | 12 18 34.9 | -06 25 23 | 19.2 | 5.2 | 11 | ... | ... | ... | ... | ... | ... | 19.2 | plt |

| | | | | | | | | | | | | | |
|--------------|------------|-----------|--------|-----|-----|--------|-----|-----|------|-----|-----|--------|-----|
| GJ1156 | 12 18 59.4 | +11 07 34 | ... | ... | ... | 6.1 | 1.0 | 12 | 6.5 | 0.1 | 1 | 6.5 | trg |
| LP052-034 | 12 19 48.8 | -23 32 05 | 21.6 | 7.4 | 11 | ... | ... | ... | ... | ... | ... | 21.6 | plt |
| LP794-053 | 12 20 05.1 | -18 13 00 | 21.1 | 6.4 | 11 | ... | ... | ... | ... | ... | ... | 21.1 | plt |
| L018-022 | 12 20 33.8 | -82 25 58 | 8.5 | 2.6 | 11 | 8.1 | 1.2 | 12 | 11.6 | 0.4 | 1 | 11.6 | trg |
| L038-047 | 12 22 06.8 | -78 38 27 | 14.0 | 3.8 | 11 | 14.7 | 2.3 | 12 | ... | ... | ... | 14.7 | ccd |
| GJ0463 | 12 23 00.1 | +64 01 51 | ... | ... | ... | 13.7 | 2.2 | 12 | 18.2 | 0.6 | 2 | 18.2 | trg |
| GJ1157 | 12 23 01.4 | -46 37 09 | 18.2 | 5.8 | 11 | 15.0 | 2.4 | 12 | 16.0 | 0.2 | 1 | 16.0 | trg |
| LTT17123 | 12 23 33.1 | +67 11 17 | ... | ... | ... | [12.4] | 2.0 | 12 | 12.9 | 0.5 | 1 | 12.9 | trg |
| 2MA1223-4606 | 12 23 38.6 | -46 06 20 | [19.7] | 6.0 | 11 | ... | ... | ... | ... | ... | ... | [19.7] | plt |
| GJ0464 | 12 23 53.5 | +12 34 48 | ... | ... | ... | 16.7 | 2.9 | 10 | 21.0 | 1.1 | 1 | 21.0 | trg |
| LHS0325a | 12 23 56.2 | -27 57 46 | 24.5 | 7.2 | 11 | 20.7 | 3.4 | 12 | ... | ... | ... | 20.7 | ccd |
| SCR1224-5339 | 12 24 24.4 | -53 39 09 | 25.0 | 9.5 | 11 | 20.9 | 3.3 | 12 | ... | ... | ... | 20.9 | ccd |
| GJ0465 | 12 24 52.2 | -12 38 36 | 13.2 | 3.6 | 11 | 14.3 | 2.4 | 12 | 9.0 | 0.1 | 3 | 9.0 | trg |
| BR11222-1222 | 12 24 52.5 | -18 14 32 | 15.9 | 5.5 | 11 | 16.8 | 2.8 | 12 | 17.1 | 1.1 | 1 | 17.1 | trg |
| LHS2557 | 12 25 32.0 | -15 59 42 | 17.6 | 5.2 | 11 | 11.8 | 1.9 | 12 | ... | ... | ... | 11.8 | ccd |
| LP735-048 | 12 26 44.1 | -12 29 18 | 22.1 | 6.5 | 10 | 17.5 | 3.3 | 12 | ... | ... | ... | 17.5 | ccd |
| LP852-050 | 12 27 02.2 | -25 45 01 | 24.5 | 7.2 | 11 | ... | ... | ... | ... | ... | ... | 24.5 | plt |
| LP735-011 | 12 28 53.0 | -10 39 51 | [14.1] | 4.4 | 4 | [15.0] | 3.1 | 11 | ... | ... | ... | [15.0] | ccd |
| GJ0469 | 12 28 57.5 | +08 25 31 | ... | ... | ... | [8.6] | 1.3 | 12 | 13.4 | 0.6 | 2 | 13.4 | trg |
| LP377-100 | 12 29 27.1 | +22 59 47 | ... | ... | ... | 20.8 | 3.2 | 12 | 20.4 | 1.3 | 1 | 20.4 | trg |
| GJ1158 | 12 29 34.5 | -55 59 37 | 12.4 | 3.5 | 11 | 13.5 | 2.1 | 12 | 13.1 | 0.2 | 1 | 13.1 | trg |
| LHS2567 | 12 29 54.2 | -05 27 24 | [22.5] | 7.5 | 8 | 13.6 | 2.1 | 12 | 21.0 | 0.6 | 2 | 21.0 | trg |
| SCR1230-3411 | 12 30 01.8 | -34 11 24 | [12.6] | 3.7 | 11 | [11.7] | 1.8 | 12 | 18.9 | 0.6 | 1 | 18.9 | trg |
| L194-073 | 12 30 16.6 | -57 37 20 | 19.8 | 5.7 | 11 | ... | ... | ... | ... | ... | ... | 19.8 | plt |
| L327-030 | 12 30 44.9 | -46 22 43 | 20.4 | 5.6 | 11 | ... | ... | ... | ... | ... | ... | 20.4 | plt |
| GJ0471 | 12 31 15.8 | +08 48 38 | ... | ... | ... | 11.8 | 2.2 | 10 | 13.7 | 0.2 | 2 | 13.7 | trg |
| LP735-016 | 12 32 44.5 | -15 30 55 | 23.5 | 8.5 | 11 | ... | ... | ... | ... | ... | ... | 23.5 | plt |
| GJ0473 | 12 33 16.3 | +09 01 16 | ... | ... | ... | [2.6] | 1.1 | 12 | 4.4 | 0.1 | 1 | 4.4 | trg |
| L327-121 | 12 33 33.1 | -48 26 11 | 10.4 | 2.8 | 11 | 10.5 | 1.7 | 12 | ... | ... | ... | 10.5 | ccd |
| LP735-019 | 12 34 44.5 | -10 47 41 | 23.8 | 6.5 | 11 | ... | ... | ... | ... | ... | ... | 23.8 | plt |
| GJ0476 | 12 35 00.7 | +09 49 42 | ... | ... | ... | 16.0 | 2.5 | 12 | 18.3 | 1.0 | 1 | 18.3 | trg |
| GJ0477 | 12 35 58.4 | -45 56 21 | [13.8] | 3.9 | 11 | [13.4] | 2.3 | 12 | 18.3 | 1.0 | 2 | 18.3 | trg |
| LP795-038 | 12 37 21.6 | -20 52 36 | 16.5 | 4.5 | 11 | 13.3 | 2.3 | 12 | ... | ... | ... | 13.3 | ccd |
| LHS5221 | 12 37 21.7 | -32 00 37 | 21.0 | 8.7 | 11 | ... | ... | ... | ... | ... | ... | 21.0 | plt |
| GJ0479 | 12 37 52.2 | -52 00 06 | 7.6 | 2.0 | 11 | 7.5 | 1.2 | 12 | 9.6 | 0.2 | 2 | 9.6 | trg |
| 2MA1238-2703 | 12 38 37.1 | -27 03 35 | 16.3 | 4.6 | 11 | ... | ... | ... | ... | ... | ... | 16.3 | plt |
| GJ1162 | 12 38 47.3 | -04 19 17 | 20.0 | 6.1 | 11 | 17.2 | 2.6 | 12 | 19.7 | 1.2 | 1 | 19.7 | trg |
| LHS0337 | 12 38 49.1 | -38 22 54 | 10.7 | 3.6 | 11 | 9.2 | 1.8 | 12 | 6.4 | 0.1 | 1 | 6.4 | trg |
| LP735-024 | 12 38 52.2 | -10 02 40 | 24.2 | 6.5 | 11 | ... | ... | ... | ... | ... | ... | 24.2 | plt |
| GJ0480 | 12 38 52.4 | +11 41 46 | ... | ... | ... | 9.1 | 1.5 | 12 | 14.0 | 0.5 | 2 | 14.0 | trg |
| G123-049 | 12 39 04.7 | +47 02 23 | ... | ... | ... | 20.3 | 3.2 | 12 | 21.8 | 2.2 | 1 | 21.8 | trg |
| CE258 | 12 39 17.5 | -34 27 25 | 24.7 | 8.0 | 11 | ... | ... | ... | ... | ... | ... | 24.7 | plt |
| LHS2597 | 12 39 36.4 | -26 58 11 | 16.0 | 6.0 | 11 | ... | ... | ... | ... | ... | ... | 16.0 | plt |
| GJ0480.1 | 12 40 46.3 | -43 33 59 | 14.5 | 4.2 | 11 | 12.9 | 2.3 | 12 | 8.0 | 0.2 | 2 | 8.0 | trg |
| SCR1241-4655 | 12 41 03.3 | -46 55 23 | 21.5 | 5.8 | 11 | 21.1 | 3.3 | 12 | ... | ... | ... | 21.1 | ccd |
| LHS5224 | 12 41 26.6 | -56 42 00 | 20.1 | 6.0 | 11 | ... | ... | ... | ... | ... | ... | 20.1 | plt |
| LHS2608 | 12 42 19.7 | -71 38 20 | 16.2 | 5.6 | 11 | ... | ... | ... | ... | ... | ... | 16.2 | plt |
| LP796-001 | 12 43 58.9 | -16 14 35 | 15.3 | 4.4 | 11 | ... | ... | ... | ... | ... | ... | 15.3 | plt |
| LHS5226 | 12 44 00.7 | -11 10 30 | 15.0 | 4.2 | 11 | 14.7 | 2.4 | 12 | 13.8 | 0.3 | 1 | 13.8 | trg |
| LP736-031 | 12 44 31.0 | -11 42 15 | 21.5 | 6.0 | 11 | ... | ... | ... | ... | ... | ... | 21.5 | plt |
| LTT04866 | 12 44 37.6 | -41 55 38 | 22.4 | 6.2 | 11 | ... | ... | ... | ... | ... | ... | 22.4 | plt |
| SCR1245-5506 | 12 45 52.5 | -55 06 50 | 11.5 | 3.4 | 11 | 11.4 | 1.8 | 12 | 10.1 | 0.1 | 1 | 10.1 | trg |
| LHS2632 | 12 46 51.0 | +31 47 57 | ... | ... | ... | 20.2 | 3.1 | 12 | 18.8 | 0.8 | 1 | 18.8 | trg |
| LP796-006 | 12 46 59.8 | -19 02 30 | 18.8 | 5.2 | 11 | ... | ... | ... | ... | ... | ... | 18.8 | plt |
| LHS2633 | 12 47 00.9 | +46 37 33 | ... | ... | ... | 14.0 | 2.2 | 12 | 20.9 | 1.0 | 1 | 20.9 | trg |
| LHS2634 | 12 47 09.8 | -03 34 18 | 18.7 | 4.9 | 11 | 17.0 | 2.7 | 12 | 21.8 | 0.9 | 1 | 21.8 | trg |
| LP853-034 | 12 47 10.0 | -22 22 37 | 18.2 | 4.8 | 11 | 19.4 | 3.1 | 12 | ... | ... | ... | 19.4 | ccd |
| SCR1247-0525 | 12 47 14.7 | -05 25 13 | 24.2 | 9.6 | 11 | 20.1 | 3.4 | 12 | 20.0 | 0.4 | 1 | 20.0 | trg |
| LHS5228 | 12 47 46.9 | -08 36 17 | 22.6 | 6.7 | 11 | ... | ... | ... | ... | ... | ... | 22.6 | plt |
| GJ0486 | 12 47 56.6 | +09 45 05 | ... | ... | ... | 6.9 | 1.1 | 12 | 8.4 | 0.2 | 2 | 8.4 | trg |
| GJ0487 | 12 49 02.7 | +66 06 36 | ... | ... | ... | [6.4] | 1.0 | 12 | 10.2 | 0.2 | 2 | 10.2 | trg |
| GJ0488 | 12 50 43.6 | -00 46 05 | 5.9 | 1.6 | 8 | 8.3 | 1.4 | 9 | 10.6 | 0.1 | 2 | 10.6 | trg |
| DEN1250-2121 | 12 50 52.7 | -21 21 14 | 12.3 | 3.5 | 11 | 11.2 | 1.7 | 12 | 17.3 | 0.5 | 1 | 17.3 | trg |
| LP909-045 | 12 52 16.8 | -32 27 08 | 22.7 | 6.8 | 11 | ... | ... | ... | ... | ... | ... | 22.7 | plt |
| LTT04925 | 12 53 19.4 | -05 19 53 | 18.8 | 5.0 | 11 | ... | ... | ... | ... | ... | ... | 18.8 | plt |
| L256-005 | 12 53 47.8 | -50 49 35 | 22.2 | 6.8 | 11 | ... | ... | ... | ... | ... | ... | 22.2 | plt |
| LHS2651 | 12 55 57.4 | +50 55 22 | ... | ... | ... | 35.1 | 6.0 | 12 | 20.7 | 1.7 | 1 | 20.7 | trg |
| LP736-015 | 12 56 02.1 | -12 57 22 | 16.2 | 8.1 | 11 | ... | ... | ... | ... | ... | ... | 16.2 | plt |
| LP854-003 | 12 56 13.3 | -22 04 59 | 23.7 | 6.4 | 11 | 21.2 | 3.3 | 12 | ... | ... | ... | 21.2 | ccd |
| GJ0490 | 12 57 40.2 | +35 13 30 | ... | ... | ... | 12.7 | 2.6 | 12 | 19.9 | 0.9 | 2 | 19.9 | trg |
| SIP1259-4336 | 12 59 04.8 | -43 36 25 | 8.3 | 2.6 | 11 | 8.1 | 1.3 | 11 | 7.8 | 0.0 | 1 | 7.8 | trg |
| LP854-057 | 12 59 41.7 | -26 50 16 | 21.0 | 5.6 | 11 | ... | ... | ... | ... | ... | ... | 21.0 | plt |
| LTT04969 | 13 00 04.0 | -05 37 48 | 16.5 | 4.4 | 11 | 15.4 | 2.4 | 12 | ... | ... | ... | 15.4 | ccd |
| HIP063480 | 13 00 25.8 | -34 36 24 | ... | ... | ... | 16.1 | 2.7 | 12 | 19.7 | 0.8 | 1 | 19.7 | trg |
| GJ0493.1 | 13 00 33.5 | +05 41 08 | ... | ... | ... | 8.0 | 1.2 | 12 | 8.1 | 0.2 | 1 | 8.1 | trg |
| L256-025 | 13 00 43.3 | -52 09 41 | 20.4 | 5.8 | 11 | ... | ... | ... | ... | ... | ... | 20.4 | plt |
| GJ0494 | 13 00 46.5 | +12 22 32 | ... | ... | ... | 8.1 | 1.5 | 12 | 11.6 | 0.2 | 2 | 11.6 | trg |
| LHS2668 | 13 01 19.7 | -63 11 42 | 13.4 | 4.0 | 11 | 16.7 | 2.6 | 12 | 17.2 | 0.7 | 2 | 17.2 | trg |
| G164-042 | 13 05 29.8 | +37 08 10 | ... | ... | ... | [16.7] | 2.6 | 12 | 24.7 | 3.3 | 1 | 24.7 | trg |
| LP910-013 | 13 06 12.2 | -29 56 35 | 22.3 | 6.8 | 11 | ... | ... | ... | ... | ... | ... | 22.3 | plt |
| LTT05031 | 13 08 51.2 | -01 31 08 | 19.1 | 5.2 | 11 | 18.7 | 2.9 | 12 | ... | ... | ... | 18.7 | ccd |
| LHS0346 | 13 09 20.4 | -40 09 27 | 20.3 | 5.8 | 11 | 15.7 | 2.4 | 12 | 16.2 | 0.3 | 1 | 16.2 | trg |
| CE303 | 13 09 21.9 | -23 30 36 | 12.8 | 4.2 | 11 | 13.2 | 2.1 | 12 | 14.4 | 0.3 | 1 | 14.4 | trg |
| GJ1167 | 13 09 31.3 | +28 58 42 | ... | ... | ... | 13.8 | 2.3 | 12 | 10.9 | 0.6 | 2 | 10.9 | trg |
| LHS2686 | 13 10 12.7 | +47 45 19 | ... | ... | ... | 12.4 | 2.0 | 12 | 10.3 | 0.5 | 1 | 10.3 | trg |
| SCR1311-4619 | 13 11 49.3 | -46 19 17 | 26.9 | 8.3 | 11 | 22.0 | 3.5 | 12 | ... | ... | ... | 22.0 | ccd |
| LTT05056 | 13 12 31.7 | -27 02 23 | 23.8 | 6.4 | 11 | ... | ... | ... | ... | ... | ... | 23.8 | plt |

| | | | | | | | | | | | | | |
|--------------|------------|-----------|--------|-----|-----|--------|-----|-----|------|-----|-----|--------|-----|
| WT0392 | 13 13 09.3 | -41 30 40 | 11.5 | 3.4 | 11 | 8.3 | 1.3 | 12 | 12.0 | 0.2 | 1 | 12.0 | trg |
| NLTT33370 | 13 14 20.0 | +13 20 01 | ... | ... | ... | [7.9] | 1.2 | 3 | 16.4 | 0.8 | 1 | 16.4 | trg |
| LP617-021 | 13 15 18.5 | -02 49 52 | 18.7 | 5.5 | 11 | ... | ... | ... | ... | ... | ... | 18.7 | plt |
| LHS2707 | 13 16 04.2 | -55 16 42 | 24.9 | 6.9 | 11 | ... | ... | ... | ... | ... | ... | 24.9 | plt |
| LHS2704 | 13 16 16.5 | -73 08 35 | 21.8 | 6.0 | 11 | 21.6 | 3.3 | 12 | ... | ... | ... | 21.6 | ccd |
| GJ1169 | 13 16 30.2 | +27 52 44 | ... | ... | ... | 20.7 | 3.3 | 12 | 15.8 | 0.6 | 1 | 15.8 | trg |
| LP737-014 | 13 16 45.4 | -12 20 20 | 22.2 | 6.0 | 11 | ... | ... | ... | ... | ... | ... | 22.2 | plt |
| GJ1170 | 13 17 58.4 | +36 17 56 | ... | ... | ... | 20.3 | 3.5 | 12 | 21.6 | 1.0 | 2 | 21.6 | trg |
| LTT05105 | 13 18 19.0 | -46 47 30 | 23.3 | 6.2 | 11 | ... | ... | ... | ... | ... | ... | 23.3 | plt |
| LP617-030 | 13 19 29.1 | -03 21 40 | 23.6 | 7.4 | 11 | ... | ... | ... | ... | ... | ... | 23.6 | plt |
| L401-070 | 13 19 32.6 | -42 45 30 | 18.1 | 4.8 | 11 | ... | ... | ... | ... | ... | ... | 18.1 | plt |
| GJ0507 | 13 19 33.5 | +35 06 36 | ... | ... | ... | [9.0] | 1.5 | 12 | 13.4 | 0.3 | 3 | 13.4 | trg |
| GJ0507.1 | 13 19 40.1 | +33 20 47 | ... | ... | ... | 11.4 | 2.0 | 12 | 17.1 | 0.4 | 2 | 17.1 | trg |
| LHS2718 | 13 20 03.9 | -35 24 44 | 14.6 | 4.0 | 11 | 16.0 | 2.5 | 12 | 13.7 | 0.2 | 1 | 13.7 | trg |
| L977-016 | 13 20 24.9 | -01 39 27 | 18.7 | 5.3 | 11 | 21.9 | 3.4 | 12 | 21.5 | 1.5 | 1 | 21.5 | trg |
| GJ0508.2 | 13 20 58.0 | +34 16 44 | ... | ... | ... | 13.4 | 2.3 | 12 | 16.1 | 0.5 | 2 | 16.1 | trg |
| LP737-051 | 13 21 54.1 | -14 24 10 | 24.7 | 8.0 | 11 | ... | ... | ... | ... | ... | ... | 24.7 | plt |
| L257-129 | 13 22 04.7 | -55 00 59 | 16.2 | 4.4 | 11 | ... | ... | ... | ... | ... | ... | 16.2 | plt |
| LHS0350 | 13 22 54.6 | +24 28 00 | ... | ... | ... | 14.1 | 2.3 | 12 | 13.7 | 0.5 | 1 | 13.7 | trg |
| LHS2729 | 13 23 38.0 | -25 54 45 | 14.0 | 4.2 | 11 | 12.6 | 1.9 | 12 | 14.0 | 0.3 | 1 | 14.0 | trg |
| G014-052 | 13 24 46.5 | -05 04 20 | 14.7 | 4.7 | 11 | 16.0 | 2.5 | 12 | ... | ... | ... | 16.0 | ccd |
| GJ0510 | 13 25 48.9 | -28 22 26 | 13.0 | 3.6 | 11 | 15.5 | 2.4 | 12 | 16.7 | 0.7 | 2 | 16.7 | trg |
| LHS2739 | 13 27 19.6 | -31 10 40 | [18.3] | 5.0 | 11 | [17.7] | 2.7 | 7 | 20.0 | 1.0 | 1 | 20.0 | trg |
| LP855-014 | 13 27 54.0 | -26 57 01 | 14.3 | 4.0 | 11 | 16.5 | 6.7 | 9 | 21.1 | 1.3 | 1 | 21.1 | trg |
| GJ0512 | 13 28 21.1 | -02 21 37 | 11.7 | 3.2 | 11 | 9.4 | 1.6 | 12 | 13.7 | 0.5 | 2 | 13.7 | trg |
| LP677-097 | 13 28 24.2 | -03 59 13 | 20.8 | 7.0 | 11 | ... | ... | ... | ... | ... | ... | 20.8 | plt |
| 2MA1328-3654 | 13 28 32.9 | -36 54 23 | 21.1 | 5.8 | 11 | ... | ... | ... | ... | ... | ... | 21.1 | plt |
| GJ0513 | 13 29 21.3 | +11 26 27 | ... | ... | ... | 16.0 | 2.7 | 12 | 15.9 | 1.7 | 1 | 15.9 | trg |
| GJ0514 | 13 29 59.7 | +10 22 37 | ... | ... | ... | 7.1 | 1.1 | 12 | 7.6 | 0.1 | 2 | 7.6 | trg |
| LHS2743 | 13 30 25.8 | -52 02 40 | 20.5 | 5.6 | 11 | ... | ... | ... | ... | ... | ... | 20.5 | plt |
| GJ1171 | 13 30 31.1 | +19 09 34 | ... | ... | ... | 19.3 | 3.1 | 12 | 14.6 | 0.9 | 1 | 14.6 | trg |
| LEP1330-2039 | 13 30 40.9 | -20 39 03 | 16.1 | 4.5 | 11 | 10.7 | 1.7 | 12 | ... | ... | ... | 10.7 | ccd |
| LP855-025 | 13 31 27.4 | -23 04 57 | 22.2 | 6.1 | 11 | ... | ... | ... | ... | ... | ... | 22.2 | plt |
| LP323-158 | 13 31 46.6 | +29 16 36 | ... | ... | ... | [6.7] | 1.0 | 12 | 18.0 | 0.8 | 1 | 18.0 | trg |
| GJ0516 | 13 32 44.6 | +16 48 39 | ... | ... | ... | 11.3 | 1.7 | 12 | 15.8 | 0.9 | 2 | 15.8 | trg |
| LP911-026 | 13 32 55.8 | -29 16 20 | 17.7 | 5.5 | 11 | ... | ... | ... | ... | ... | ... | 17.7 | plt |
| LHS2758 | 13 34 23.6 | -26 22 12 | 17.7 | 4.9 | 11 | ... | ... | ... | ... | ... | ... | 17.7 | plt |
| L330-100 | 13 35 11.5 | -48 21 26 | 18.4 | 5.5 | 10 | ... | ... | ... | ... | ... | ... | 18.4 | plt |
| LP330-008 | 13 36 23.1 | -45 56 16 | 14.9 | 6.4 | 10 | ... | ... | ... | ... | ... | ... | 14.9 | plt |
| 2MA1338-2516 | 13 38 25.6 | -25 16 47 | [17.9] | 5.2 | 11 | ... | ... | ... | ... | ... | ... | [17.9] | plt |
| LTT05282 | 13 38 53.4 | -02 15 47 | 18.4 | 6.4 | 10 | 19.9 | 3.1 | 12 | ... | ... | ... | 19.9 | ccd |
| L906-011 | 13 38 58.7 | -06 14 13 | 16.4 | 4.8 | 11 | 21.5 | 3.5 | 10 | 23.6 | 1.2 | 1 | 23.6 | trg |
| LP678-016 | 13 38 59.7 | -06 44 36 | 23.7 | 6.4 | 11 | ... | ... | ... | ... | ... | ... | 23.7 | plt |
| GJ0521 | 13 39 24.1 | +46 11 11 | ... | ... | ... | [12.5] | 2.0 | 12 | 12.9 | 0.3 | 2 | 12.9 | trg |
| GJ0521.1 | 13 40 07.1 | -04 11 10 | 10.3 | 3.1 | 8 | 13.8 | 2.4 | 10 | 14.8 | 0.3 | 2 | 14.8 | trg |
| GJ1174 | 13 40 08.8 | +43 46 38 | ... | ... | ... | 13.6 | 2.1 | 12 | 16.0 | 1.0 | 1 | 16.0 | trg |
| LHS2777 | 13 40 18.0 | +47 12 30 | ... | ... | ... | 24.5 | 8.1 | 12 | 22.5 | 2.7 | 1 | 22.5 | trg |
| LTT05298 | 13 40 45.5 | -31 10 15 | 19.6 | 6.0 | 11 | ... | ... | ... | ... | ... | ... | 19.6 | plt |
| LHS0358 | 13 41 10.4 | +30 01 53 | ... | ... | ... | 35.7 | 6.8 | 12 | 20.8 | 0.8 | 1 | 20.8 | trg |
| LHS2783 | 13 42 09.9 | -16 00 23 | 19.6 | 5.5 | 11 | 12.7 | 2.0 | 12 | 18.6 | 0.4 | 1 | 18.6 | trg |
| LHS2784 | 13 42 43.2 | +33 17 24 | ... | ... | ... | 9.1 | 1.4 | 12 | 9.2 | 0.3 | 2 | 9.2 | trg |
| SCR1343-4002 | 13 43 41.5 | -40 02 29 | 18.0 | 6.5 | 11 | 16.2 | 2.5 | 12 | 17.0 | 0.3 | 1 | 17.0 | trg |
| LP855-060 | 13 44 20.9 | -26 18 35 | 15.2 | 4.2 | 11 | ... | ... | ... | ... | ... | ... | 15.2 | plt |
| LHS2789 | 13 44 27.6 | +51 41 04 | ... | ... | ... | [25.1] | 3.9 | 12 | 24.3 | 3.8 | 1 | 24.3 | trg |
| LP798-029 | 13 44 37.1 | -19 54 44 | 20.1 | 5.5 | 11 | ... | ... | ... | ... | ... | ... | 20.1 | plt |
| GJ0524 | 13 44 48.8 | -54 07 18 | 19.8 | 6.6 | 11 | 22.4 | 3.5 | 12 | ... | ... | ... | 22.4 | ccd |
| GJ0526 | 13 45 43.7 | +14 53 29 | ... | ... | ... | 5.1 | 0.8 | 11 | 5.4 | 0.0 | 3 | 5.4 | trg |
| LHS2794 | 13 45 50.7 | -17 58 06 | 9.4 | 2.7 | 11 | 9.2 | 1.4 | 12 | 10.2 | 0.5 | 1 | 10.2 | trg |
| LP911-056 | 13 46 46.0 | -31 49 26 | 13.4 | 3.7 | 11 | ... | ... | ... | ... | ... | ... | 13.4 | plt |
| LHS2804 | 13 48 40.8 | -05 17 08 | 23.9 | 6.6 | 11 | ... | ... | ... | ... | ... | ... | 23.9 | plt |
| UPM1349-4228 | 13 49 01.0 | -42 31 10 | 11.4 | 7.2 | 8 | 24.7 | 3.8 | 12 | ... | ... | ... | 24.7 | ccd |
| L039-039 | 13 49 02.5 | -79 25 54 | 17.2 | 4.6 | 11 | 17.9 | 3.1 | 12 | ... | ... | ... | 17.9 | ccd |
| L691-021 | 13 50 23.8 | -21 37 20 | 17.7 | 4.9 | 11 | 19.8 | 3.1 | 12 | ... | ... | ... | 19.8 | ccd |
| LHS2813 | 13 51 21.8 | -53 32 46 | 15.4 | 4.4 | 11 | 18.6 | 2.9 | 12 | ... | ... | ... | 18.6 | ccd |
| LP798-049 | 13 51 57.1 | -17 58 49 | 20.6 | 7.9 | 11 | ... | ... | ... | ... | ... | ... | 20.6 | plt |
| LP798-051 | 13 52 53.5 | -18 20 17 | 17.6 | 4.9 | 11 | 20.7 | 3.3 | 12 | 23.3 | 1.8 | 1 | 23.3 | trg |
| LHS2822 | 13 53 55.6 | -20 14 43 | 21.2 | 5.6 | 11 | ... | ... | ... | ... | ... | ... | 21.2 | plt |
| 2MA1354-7121 | 13 54 53.9 | -71 21 48 | 19.3 | 5.7 | 11 | 16.4 | 2.6 | 12 | ... | ... | ... | 16.4 | ccd |
| GJ1181 | 13 55 02.6 | -29 05 26 | [7.2] | 2.2 | 11 | [9.8] | 1.8 | 12 | 17.3 | 0.4 | 1 | 17.3 | trg |
| L070-053 | 13 55 28.0 | -73 29 41 | 17.1 | 5.7 | 11 | 20.4 | 3.1 | 12 | ... | ... | ... | 20.4 | ccd |
| LTT05425 | 13 55 35.1 | -07 23 17 | 19.1 | 5.1 | 11 | ... | ... | ... | ... | ... | ... | 19.1 | plt |
| LHS2826 | 13 56 20.6 | -28 03 50 | 22.1 | 6.7 | 11 | 20.3 | 3.2 | 12 | ... | ... | ... | 20.3 | ccd |
| LP475-052 | 13 57 14.0 | -38 32 28 | 24.8 | 6.6 | 11 | ... | ... | ... | ... | ... | ... | 24.8 | plt |
| SSS1358-3938 | 13 58 05.4 | -39 37 55 | 24.2 | 9.3 | 11 | 21.7 | 3.8 | 12 | 11.2 | 0.1 | 1 | 11.2 | trg |
| LP739-002 | 13 58 16.2 | -12 02 59 | 23.0 | 7.4 | 11 | 15.6 | 2.5 | 12 | 18.4 | 0.5 | 1 | 18.4 | trg |
| LP739-003 | 13 58 19.6 | -13 16 25 | 21.5 | 6.6 | 11 | 16.3 | 2.5 | 12 | ... | ... | ... | 16.3 | ccd |
| LHS2836 | 13 59 10.4 | -19 50 04 | 9.7 | 2.7 | 11 | 8.9 | 1.4 | 12 | 10.8 | 0.1 | 1 | 10.8 | trg |
| SIP1400-4109 | 14 00 49.7 | -41 09 54 | 22.0 | 7.3 | 11 | ... | ... | ... | ... | ... | ... | 22.0 | plt |
| GJ0536 | 14 01 03.2 | -02 39 18 | 8.6 | 2.8 | 6 | 9.5 | 1.5 | 12 | 10.0 | 0.2 | 2 | 10.0 | trg |
| HIP068570 | 14 02 19.6 | +13 41 22 | ... | ... | ... | 15.2 | 3.0 | 12 | 19.9 | 0.8 | 1 | 19.9 | trg |
| LHS2848 | 14 02 28.9 | -21 00 37 | 16.5 | 4.5 | 11 | 17.9 | 2.8 | 12 | ... | ... | ... | 17.9 | ccd |
| GJ0537 | 14 02 32.2 | +46 20 02 | ... | ... | ... | [9.7] | 2.0 | 9 | 11.3 | 0.5 | 1 | 11.3 | trg |
| LHS2852 | 14 02 46.7 | -24 31 50 | {19.6} | 6.0 | 11 | {21.8} | 3.5 | 12 | 17.2 | 0.6 | 1 | 17.2 | trg |
| LP912-046 | 14 04 03.2 | -30 00 47 | 19.3 | 5.9 | 11 | ... | ... | ... | ... | ... | ... | 19.3 | plt |
| L106-015 | 14 04 08.2 | -66 14 38 | 5.7 | 4.5 | 11 | 11.0 | 1.8 | 12 | ... | ... | ... | 11.0 | ccd |
| LP912-048 | 14 05 36.9 | -32 08 39 | 21.2 | 6.9 | 11 | ... | ... | ... | ... | ... | ... | 21.2 | plt |
| LP679-084 | 14 06 39.3 | -05 43 29 | 19.8 | 5.8 | 11 | ... | ... | ... | ... | ... | ... | 19.8 | plt |

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|----------------|------------|-----------|--------|------|-----|---------|------|-----|------|-----|-----|--------|-----|
| GJ0540 | 14 08 12.9 | +80 35 50 | ... | ... | ... | 12.4 | 2.1 | 12 | 16.9 | 0.3 | 2 | 16.9 | trg |
| LHS2866 | 14 08 16.9 | +75 51 14 | ... | ... | ... | 21.9 | 3.4 | 12 | 24.9 | 4.6 | 1 | 24.9 | trg |
| LP912-052 | 14 08 41.0 | -28 01 04 | 23.6 | 7.8 | 11 | ... | ... | ... | ... | ... | ... | 23.6 | plt |
| LTT05526 | 14 09 36.5 | -41 22 28 | 21.7 | 6.0 | 11 | ... | ... | ... | ... | ... | ... | 21.7 | plt |
| L548-010 | 14 10 57.5 | -31 17 25 | 10.7 | 2.9 | 11 | 14.0 | 2.2 | 12 | 16.8 | 0.6 | 1 | 16.8 | trg |
| WT0460 | 14 11 59.9 | -41 32 21 | 9.6 | 3.2 | 11 | 7.3 | 1.1 | 12 | 9.3 | 0.1 | 1 | 9.3 | trg |
| LHS2875 | 14 12 11.0 | -00 35 04 | [30.3] | 8.6 | 11 | [26.4] | 4.2 | 12 | 24.9 | 2.1 | 1 | 24.9 | trg |
| GJ0540.2 | 14 13 04.9 | -12 01 27 | 12.1 | 3.4 | 11 | 10.2 | 1.6 | 12 | ... | ... | ... | 10.2 | ccd |
| GJ2106 | 14 13 12.9 | -56 44 32 | 7.3 | 3.7 | 10 | 11.4 | 1.8 | 12 | 11.7 | 0.3 | 1 | 11.7 | trg |
| LHS2884 | 14 15 11.8 | +45 00 40 | ... | ... | ... | 12.9 | 2.0 | 12 | 16.3 | 1.6 | 1 | 16.3 | trg |
| GJ1182 | 14 15 30.2 | +04 38 44 | ... | ... | ... | 13.1 | 2.5 | 12 | 14.0 | 0.7 | 1 | 14.0 | trg |
| LP739-036 | 14 15 46.4 | -13 29 34 | 23.6 | 6.3 | 11 | ... | ... | ... | ... | ... | ... | 23.6 | plt |
| L404-216 | 14 16 47.5 | -44 53 21 | 16.8 | 5.1 | 11 | ... | ... | ... | ... | ... | ... | 16.8 | plt |
| GJ0541.2 | 14 17 24.3 | +45 26 40 | ... | ... | ... | 17.1 | 2.9 | 10 | 19.0 | 0.5 | 1 | 19.0 | trg |
| L404-010 | 14 17 25.9 | -40 18 15 | 15.9 | 4.3 | 11 | ... | ... | ... | ... | ... | ... | 15.9 | plt |
| LP619-064 | 14 17 59.1 | -00 31 29 | 18.8 | 5.5 | 11 | ... | ... | ... | ... | ... | ... | 18.8 | plt |
| GJ0543 | 14 19 11.0 | -07 18 12 | 34.4 | 10.5 | 9 | 30.4 | 5.6 | 12 | 19.3 | 1.7 | 1 | 19.3 | trg |
| GJ0545 | 14 20 07.4 | -09 37 13 | 15.7 | 4.4 | 11 | 15.7 | 2.6 | 12 | 14.0 | 0.3 | 3 | 14.0 | trg |
| SCR1420-7516 | 14 20 36.8 | -75 16 06 | 21.4 | 6.7 | 11 | 18.0 | 2.9 | 12 | 23.2 | 1.0 | 1 | 23.2 | trg |
| LHS0370 | 14 20 53.0 | +36 57 16 | ... | ... | ... | 24.3 | 4.1 | 12 | 19.9 | 0.5 | 1 | 19.9 | trg |
| LHS2899 | 14 21 15.1 | -01 07 20 | 14.1 | 3.9 | 11 | 15.4 | 2.4 | 12 | 13.4 | 0.4 | 1 | 13.4 | trg |
| LP913-013 | 14 21 49.0 | -31 54 35 | 17.4 | 4.6 | 11 | 22.9 | 3.6 | 12 | ... | ... | ... | 22.9 | ccd |
| GJ2107 | 14 23 06.4 | -68 22 58 | 11.4 | 4.9 | 9 | 17.3 | 2.9 | 9 | 23.5 | 0.8 | 1 | 23.5 | trg |
| LHS2906 | 14 23 07.8 | -22 17 09 | 21.9 | 6.5 | 11 | 21.9 | 3.4 | 12 | ... | ... | ... | 21.9 | ccd |
| LHS2913 | 14 24 55.9 | +08 53 15 | ... | ... | ... | 15.5 | 2.5 | 12 | 13.7 | 0.9 | 2 | 13.7 | trg |
| LP800-058 | 14 25 13.3 | -16 24 56 | 23.3 | 7.3 | 11 | ... | ... | ... | ... | ... | ... | 23.3 | plt |
| LP740-010 | 14 25 34.1 | -11 48 52 | 18.3 | 5.0 | 11 | ... | ... | ... | ... | ... | ... | 18.3 | plt |
| LP620-012 | 14 26 36.8 | -01 15 23 | 23.3 | 6.9 | 11 | ... | ... | ... | ... | ... | ... | 23.3 | plt |
| GJ1183 | 14 27 56.1 | -00 22 31 | 12.4 | 5.2 | 11 | 12.7 | 2.0 | 12 | 16.2 | 0.8 | 1 | 16.2 | trg |
| LHS2919 | 14 28 04.0 | +13 56 13 | ... | ... | ... | 12.1 | 1.9 | 3 | 12.1 | 0.6 | 1 | 12.1 | trg |
| LHS2921 | 14 28 27.7 | +45 54 29 | ... | ... | ... | 19.2 | 3.0 | 12 | 22.4 | 2.8 | 1 | 22.4 | trg |
| LHS2924 | 14 28 42.0 | +33 10 03 | ... | ... | ... | 12.1 | 2.2 | 7 | 10.8 | 0.2 | 3 | 10.8 | trg |
| GJ0550.3 | 14 29 18.6 | -46 27 50 | 15.4 | 4.4 | 11 | 20.2 | 3.2 | 9 | 23.5 | 1.2 | 2 | 23.5 | trg |
| GJ0552 | 14 29 29.7 | +15 31 57 | ... | ... | ... | 11.0 | 1.7 | 12 | 14.1 | 0.4 | 2 | 14.1 | trg |
| LP913-027 | 14 29 49.2 | -29 32 14 | 22.2 | 5.9 | 11 | ... | ... | ... | ... | ... | ... | 22.2 | plt |
| LHS2930 | 14 30 33.7 | +59 43 14 | ... | ... | ... | 9.7 | 1.5 | 7 | 9.6 | 0.1 | 1 | 9.6 | trg |
| GJ0553 | 14 30 47.7 | -08 38 47 | 8.6 | 2.3 | 4 | 12.1 | 2.1 | 10 | 16.8 | 0.4 | 2 | 16.8 | trg |
| GJ0552.1 | 14 30 58.9 | -54 06 05 | 13.2 | 5.3 | 11 | 16.3 | 3.9 | 11 | ... | ... | ... | 16.3 | ccd |
| GJ0553.1 | 14 31 01.2 | -12 17 46 | 12.3 | 3.5 | 11 | 9.2 | 1.5 | 12 | 10.9 | 0.4 | 2 | 10.9 | trg |
| LP740-020 | 14 31 15.6 | -13 18 25 | 23.8 | 7.4 | 11 | ... | ... | ... | ... | ... | ... | 23.8 | plt |
| LHS0375 | 14 31 38.3 | -25 25 33 | {94.9} | 26.1 | 11 | {126.3} | 24.8 | 12 | 24.0 | 0.6 | 1 | 24.0 | trg |
| SIP1432-3326 | 14 32 04.8 | -33 26 26 | [19.8] | 6.3 | 11 | ... | ... | ... | ... | ... | ... | [19.8] | plt |
| LHS2935 | 14 32 08.0 | +08 11 30 | ... | ... | ... | 11.2 | 1.7 | 12 | 12.9 | 0.2 | 1 | 12.9 | trg |
| LP913-077 | 14 32 18.0 | -33 20 59 | 17.7 | 5.0 | 11 | ... | ... | ... | ... | ... | ... | 17.7 | plt |
| LP857-051 | 14 33 12.2 | -22 12 31 | 24.5 | 6.6 | 11 | ... | ... | ... | ... | ... | ... | 24.5 | plt |
| LHS5273 | 14 34 04.9 | -18 24 11 | 16.8 | 5.4 | 11 | ... | ... | ... | ... | ... | ... | 16.8 | plt |
| GJ0555 | 14 34 16.8 | -12 31 10 | 4.8 | 1.4 | 11 | 4.5 | 0.7 | 12 | 6.2 | 0.1 | 3 | 6.2 | trg |
| LP913-046 | 14 36 18.1 | -30 57 33 | 25.0 | 6.7 | 11 | ... | ... | ... | ... | ... | ... | 25.0 | plt |
| LP620-047 | 14 38 39.4 | -02 57 24 | 24.0 | 6.5 | 11 | ... | ... | ... | ... | ... | ... | 24.0 | plt |
| L333-199 | 14 40 20.8 | -48 36 59 | 15.5 | 4.6 | 11 | ... | ... | ... | ... | ... | ... | 15.5 | plt |
| LP914-006 | 14 40 22.1 | -27 52 42 | 21.6 | 5.7 | 11 | 23.4 | 3.6 | 12 | ... | ... | ... | 23.4 | ccd |
| 2MA1440+1339 | 14 40 22.9 | +13 39 22 | ... | ... | ... | 21.5 | 3.4 | 12 | 22.2 | 0.6 | 1 | 22.2 | trg |
| LTT05828 | 14 41 09.9 | -08 59 20 | 16.8 | 4.9 | 11 | ... | ... | ... | ... | ... | ... | 16.8 | plt |
| LP680-049 | 14 41 15.3 | -06 59 09 | 21.3 | 6.6 | 11 | ... | ... | ... | ... | ... | ... | 21.3 | plt |
| LTT05831 | 14 41 35.8 | -09 46 39 | [15.1] | 4.9 | 11 | ... | ... | ... | ... | ... | ... | [15.1] | plt |
| LTT14363 | 14 42 21.5 | +66 03 20 | ... | ... | ... | 11.1 | 1.8 | 12 | 10.7 | 0.2 | 1 | 10.7 | trg |
| SCR1444-3426 | 14 44 06.6 | -34 26 47 | {24.0} | 7.5 | 11 | {18.8} | 3.0 | 12 | 15.3 | 0.2 | 1 | 15.3 | trg |
| LP858-020 | 14 44 15.0 | -27 17 26 | 23.8 | 7.4 | 11 | ... | ... | ... | ... | ... | ... | 23.8 | plt |
| SSS1444-2019 | 14 44 20.3 | -20 19 26 | {28.0} | 8.5 | 11 | {27.8} | 6.3 | 9 | 16.2 | 0.5 | 2 | 16.2 | trg |
| GJ1185 | 14 47 55.2 | -03 09 36 | 31.6 | 8.4 | 11 | 38.3 | 6.8 | 12 | 19.7 | 1.4 | 1 | 19.7 | trg |
| GJ0563.2 | 14 49 33.2 | -26 06 20 | 15.0 | 6.8 | 11 | 22.5 | 3.5 | 12 | 19.6 | 3.1 | 3 | 19.6 | trg |
| SIP1452-3458 | 14 52 52.9 | -34 58 47 | 25.0 | 10.7 | 11 | ... | ... | ... | ... | ... | ... | 25.0 | plt |
| GJ1186 | 14 53 37.2 | +11 34 13 | ... | ... | ... | 21.6 | 3.3 | 3 | 18.7 | 1.4 | 1 | 18.7 | trg |
| GJ0568 | 14 53 51.4 | +23 33 20 | ... | ... | ... | [7.1] | 1.1 | 12 | 10.3 | 0.3 | 2 | 10.3 | trg |
| LP801-025 | 14 54 10.4 | -20 41 29 | 19.8 | 6.8 | 11 | ... | ... | ... | ... | ... | ... | 19.8 | plt |
| GJ0569 | 14 54 29.2 | +16 06 03 | ... | ... | ... | 7.9 | 1.3 | 12 | 9.9 | 0.1 | 2 | 9.9 | trg |
| LHS2999 | 14 54 53.4 | +09 56 36 | ... | ... | ... | 21.7 | 3.6 | 12 | 24.5 | 1.5 | 1 | 24.5 | trg |
| LTT05930 | 14 54 58.3 | -11 23 21 | 18.1 | 4.9 | 11 | ... | ... | ... | ... | ... | ... | 18.1 | plt |
| SCR1456-7239 | 14 56 02.3 | -72 39 41 | 24.9 | 7.0 | 11 | 22.9 | 3.6 | 12 | ... | ... | ... | 22.9 | ccd |
| LHS3001 | 14 56 27.2 | +17 55 00 | ... | ... | ... | 19.7 | 3.1 | 12 | 17.7 | 0.3 | 2 | 17.7 | trg |
| LP406-203 | 14 56 37.7 | -44 56 28 | 23.5 | 7.4 | 11 | ... | ... | ... | ... | ... | ... | 23.5 | plt |
| LHS3003 | 14 56 38.3 | -28 09 49 | 6.7 | 2.6 | 11 | 6.6 | 1.0 | 12 | 6.6 | 0.1 | 3 | 6.6 | trg |
| LHS3005 | 14 57 20.6 | +14 58 55 | ... | ... | ... | 28.4 | 4.6 | 12 | 25.0 | 2.1 | 1 | 25.0 | trg |
| LP681-091 | 14 57 33.3 | -06 19 49 | 23.5 | 6.5 | 7 | 30.4 | 5.5 | 10 | 24.5 | 2.8 | 1 | 24.5 | trg |
| GJ1187 | 14 57 53.7 | +56 39 24 | ... | ... | ... | 13.4 | 2.4 | 12 | 11.2 | 0.6 | 1 | 11.2 | trg |
| SCR1459-4210 | 14 59 57.4 | -42 10 09 | 26.1 | 8.6 | 11 | 24.8 | 3.9 | 12 | ... | ... | ... | 24.8 | ccd |
| GJ0572 | 15 00 55.5 | +45 25 34 | ... | ... | ... | 9.3 | 1.6 | 10 | 11.9 | 0.2 | 2 | 11.9 | trg |
| TVLM513-46546 | 15 01 05.5 | +22 49 59 | ... | ... | ... | 11.9 | 2.2 | 12 | 10.6 | 0.1 | 2 | 10.6 | trg |
| L072-010 | 15 02 07.7 | -71 18 01 | 14.8 | 4.5 | 11 | 13.1 | 2.1 | 12 | ... | ... | ... | 13.1 | ccd |
| LP914-041 | 15 03 13.2 | -28 40 14 | 24.0 | 6.9 | 11 | ... | ... | ... | ... | ... | ... | 24.0 | plt |
| L406-116 | 15 03 42.2 | -42 38 51 | 22.7 | 6.1 | 11 | ... | ... | ... | ... | ... | ... | 22.7 | plt |
| LP859-001 | 15 04 16.2 | -23 55 57 | 17.4 | 5.7 | 11 | ... | ... | ... | ... | ... | ... | 17.4 | plt |
| LHS3018 | 15 04 18.5 | +60 23 04 | ... | ... | ... | 15.3 | 2.4 | 12 | 17.9 | 0.4 | 1 | 17.9 | trg |
| 2MA1507-2000 | 15 07 27.7 | -20 00 43 | ... | ... | ... | 14.4 | 2.2 | 12 | 23.5 | 0.4 | 1 | 23.5 | trg |
| LP859-011 | 15 08 23.4 | -23 51 38 | 18.6 | 4.9 | 11 | 20.0 | 3.1 | 12 | ... | ... | ... | 20.0 | ccd |
| LHS3030 | 15 09 35.5 | +03 10 00 | ... | ... | ... | 11.3 | 1.8 | 12 | 14.3 | 0.5 | 2 | 14.3 | trg |
| TVLM868-110639 | 15 10 16.8 | -02 41 08 | 15.3 | 6.2 | 11 | 16.4 | 2.8 | 10 | 16.3 | 1.3 | 1 | 16.3 | trg |

| | | | | | | | | | | | | | |
|--------------|------------|-----------|--------|------|-----|--------|-----|-----|------|-----|-----|--------|-----|
| LTT06043 | 15 10 35.7 | -42 58 37 | 16.9 | 5.0 | 5 | ... | ... | ... | 24.4 | 1.4 | 2 | 24.4 | trg |
| SCR1511-3403 | 15 11 38.6 | -34 03 17 | 16.1 | 7.4 | 11 | 20.5 | 3.2 | 12 | ... | ... | ... | 20.5 | ccd |
| LHS0392 | 15 11 50.6 | -10 14 18 | 21.6 | 6.3 | 11 | 17.0 | 2.7 | 12 | 14.8 | 0.7 | 1 | 14.8 | trg |
| LHS3033 | 15 11 53.4 | +17 56 39 | ... | ... | ... | 25.2 | 4.1 | 12 | 23.5 | 1.7 | 1 | 23.5 | trg |
| LP682-018 | 15 15 43.7 | -07 25 21 | 13.6 | 3.9 | 11 | 11.6 | 1.8 | 12 | 16.9 | 0.3 | 1 | 16.9 | trg |
| LEHPM2-0027 | 15 16 53.1 | -28 32 16 | 22.0 | 6.4 | 11 | ... | ... | ... | ... | ... | ... | 22.0 | plt |
| LTT06063 | 15 17 21.7 | -80 28 23 | 17.8 | 6.0 | 11 | ... | ... | ... | ... | ... | ... | 17.8 | plt |
| LHS3056 | 15 19 11.7 | -12 45 07 | [11.6] | 3.2 | 11 | [10.3] | 1.6 | 12 | 21.2 | 0.9 | 1 | 21.2 | trg |
| GJ0581 | 15 19 26.8 | -07 43 20 | 5.8 | 1.5 | 11 | 6.6 | 1.0 | 12 | 6.3 | 0.1 | 3 | 6.3 | trg |
| LTT06128 | 15 21 34.3 | -02 16 58 | 17.6 | 5.0 | 11 | ... | ... | ... | ... | ... | ... | 17.6 | plt |
| HIP075187 | 15 21 52.9 | +20 58 39 | ... | ... | ... | 7.8 | 1.4 | 12 | 11.4 | 0.2 | 2 | 11.4 | trg |
| GJ2112 | 15 22 13.0 | -27 49 43 | [17.2] | 4.9 | 11 | ... | ... | ... | ... | ... | ... | [17.2] | plt |
| GJ0585 | 15 23 50.0 | +17 27 38 | ... | ... | ... | 12.9 | 2.1 | 12 | 11.8 | 0.4 | 1 | 11.8 | trg |
| GJ0587.1 | 15 28 01.3 | +25 47 23 | ... | ... | ... | 21.3 | 3.7 | 12 | 24.6 | 1.5 | 1 | 24.6 | trg |
| G151-064 | 15 29 01.4 | -06 12 46 | 24.4 | 7.0 | 11 | ... | ... | ... | ... | ... | ... | 24.4 | plt |
| LP802-069 | 15 29 07.2 | -17 22 55 | 14.7 | 4.0 | 8 | ... | ... | ... | 24.9 | 1.6 | 1 | 24.9 | trg |
| L480-094 | 15 29 40.7 | -38 32 28 | 21.2 | 7.7 | 11 | ... | ... | ... | ... | ... | ... | 21.2 | plt |
| LHS3075 | 15 29 46.7 | +42 52 13 | ... | ... | ... | [15.1] | 2.3 | 12 | 19.6 | 1.7 | 1 | 19.6 | trg |
| L108-087 | 15 30 52.0 | -68 01 18 | 14.5 | 4.9 | 11 | 13.5 | 2.1 | 12 | 17.1 | 0.5 | 1 | 17.1 | trg |
| LHS3079 | 15 31 38.3 | -26 54 07 | 19.3 | 8.8 | 11 | 22.2 | 3.5 | 12 | ... | ... | ... | 22.2 | ccd |
| LP915-041 | 15 31 39.9 | -29 16 29 | 18.1 | 6.6 | 11 | 24.4 | 4.0 | 12 | ... | ... | ... | 24.4 | ccd |
| GJ0588 | 15 32 13.0 | -41 16 32 | 2.8 | 0.8 | 11 | 4.5 | 0.7 | 12 | 5.9 | 0.0 | 2 | 5.9 | trg |
| LEHPM2-0455 | 15 32 18.9 | -25 51 03 | 23.9 | 9.8 | 11 | ... | ... | ... | ... | ... | ... | 23.9 | plt |
| GJ1193 | 15 34 30.5 | +14 16 18 | ... | ... | ... | 21.0 | 3.2 | 3 | 20.6 | 1.5 | 1 | 20.6 | trg |
| 2MA1534-1418 | 15 34 56.9 | -14 18 49 | 9.6 | 3.2 | 11 | 10.9 | 1.8 | 9 | 10.9 | 0.1 | 1 | 10.9 | trg |
| GJ0589 | 15 35 20.5 | +17 42 47 | ... | ... | ... | 21.0 | 3.5 | 12 | 14.2 | 0.4 | 1 | 14.2 | trg |
| LHS3091 | 15 35 41.1 | +22 08 54 | ... | ... | ... | 15.6 | 2.5 | 12 | 18.6 | 1.2 | 1 | 18.6 | trg |
| GJ0590 | 15 36 34.5 | -37 54 23 | 9.0 | 3.9 | 11 | 11.6 | 2.0 | 12 | ... | ... | ... | 11.6 | ccd |
| GJ0592 | 15 36 58.6 | -14 08 02 | 15.3 | 4.8 | 11 | 11.3 | 1.7 | 12 | 13.4 | 0.7 | 1 | 13.4 | trg |
| LP623-020 | 15 38 14.1 | -01 54 55 | 19.3 | 5.7 | 11 | ... | ... | ... | ... | ... | ... | 19.3 | plt |
| GJ1194 | 15 40 03.5 | +43 29 40 | ... | ... | ... | [18.6] | 4.4 | 11 | 13.5 | 0.9 | 1 | 13.5 | trg |
| SIP1540-2613 | 15 40 29.6 | -26 13 43 | 13.7 | 5.5 | 11 | 15.2 | 2.6 | 9 | 14.9 | 0.3 | 1 | 14.9 | trg |
| GJ0597 | 15 41 16.5 | +75 59 34 | ... | ... | ... | [13.1] | 2.0 | 12 | 13.4 | 0.4 | 2 | 13.4 | trg |
| GJ0595 | 15 42 06.5 | -19 28 18 | 10.5 | 2.9 | 11 | 12.3 | 2.0 | 12 | 10.1 | 0.4 | 2 | 10.1 | trg |
| GJ2116 | 15 43 18.3 | -20 15 33 | {30.7} | 8.6 | 11 | {42.7} | 6.7 | 12 | 21.4 | 0.5 | 1 | 21.4 | trg |
| LHS3109 | 15 43 19.6 | -30 55 51 | 22.8 | 7.0 | 11 | 24.8 | 3.8 | 12 | ... | ... | ... | 24.8 | ccd |
| L408-123 | 15 45 41.6 | -43 30 29 | [15.8] | 4.9 | 11 | [15.4] | 2.4 | 12 | 19.0 | 0.4 | 1 | 19.0 | trg |
| LHS3112 | 15 45 54.5 | -04 48 23 | 22.6 | 9.3 | 11 | ... | ... | ... | ... | ... | ... | 22.6 | plt |
| LHS3114 | 15 46 31.9 | -47 14 01 | 19.4 | 5.1 | 2 | 21.5 | 3.8 | 10 | 24.3 | 1.9 | 2 | 24.3 | trg |
| SCR1546-5534 | 15 46 41.8 | -55 34 47 | [6.7] | 4.7 | 8 | [6.7] | 1.1 | 12 | 8.7 | 0.1 | 1 | 8.7 | trg |
| LHS3117 | 15 47 24.6 | -10 53 47 | [8.5] | 3.3 | 11 | [11.2] | 1.8 | 12 | 15.1 | 0.7 | 1 | 15.1 | trg |
| LHS3122 | 15 49 32.9 | +34 49 36 | ... | ... | ... | [10.9] | 1.8 | 12 | 17.0 | 1.1 | 1 | 17.0 | trg |
| G202-016 | 15 49 36.2 | +51 02 57 | ... | ... | ... | 20.9 | 3.2 | 12 | 19.1 | 1.2 | 1 | 19.1 | trg |
| LP803-037 | 15 50 09.8 | -20 29 11 | 25.0 | 9.4 | 11 | ... | ... | ... | ... | ... | ... | 25.0 | plt |
| SCR1551-3554 | 15 51 12.2 | -35 54 48 | 16.9 | 9.8 | 11 | 21.6 | 3.4 | 12 | ... | ... | ... | 21.6 | ccd |
| LHS3124 | 15 51 21.0 | +29 31 06 | ... | ... | ... | 16.9 | 2.6 | 12 | 18.8 | 0.7 | 1 | 18.8 | trg |
| LHS5303 | 15 52 44.6 | -26 23 14 | 11.0 | 3.1 | 11 | 9.4 | 1.5 | 12 | 10.6 | 0.1 | 1 | 10.6 | trg |
| LHS3129 | 15 53 08.7 | +34 44 39 | ... | ... | ... | 12.1 | 2.0 | 12 | 22.4 | 1.2 | 2 | 22.4 | trg |
| LP860-046 | 15 53 57.1 | -23 11 53 | 24.5 | 8.4 | 11 | ... | ... | ... | ... | ... | ... | 24.5 | plt |
| LP409-071 | 15 54 00.8 | -43 03 10 | 23.9 | 6.8 | 8 | ... | ... | ... | ... | ... | ... | 23.9 | plt |
| LP683-049 | 15 54 50.4 | -05 21 47 | 20.7 | 6.2 | 11 | ... | ... | ... | ... | ... | ... | 20.7 | plt |
| LHS3132 | 15 55 05.2 | +33 50 55 | ... | ... | ... | 34.1 | 6.7 | 12 | 24.1 | 2.3 | 1 | 24.1 | trg |
| LTT06368 | 15 58 27.8 | -06 51 45 | 20.6 | 5.5 | 11 | ... | ... | ... | ... | ... | ... | 20.6 | plt |
| LHS3142 | 15 59 51.0 | +14 59 50 | ... | ... | ... | 32.0 | 5.2 | 12 | 25.0 | 3.2 | 1 | 25.0 | trg |
| GJ0606 | 15 59 53.4 | -08 15 11 | 11.7 | 3.2 | 11 | 11.8 | 1.9 | 12 | 13.8 | 0.4 | 2 | 13.8 | trg |
| SCR1601-3421 | 16 01 55.7 | -34 21 57 | 20.2 | 11.9 | 11 | 18.6 | 3.0 | 12 | 21.7 | 0.7 | 1 | 21.7 | trg |
| GJ0609 | 16 02 50.9 | +20 35 21 | ... | ... | ... | 9.6 | 1.5 | 12 | 10.0 | 0.3 | 1 | 10.0 | trg |
| LHS3149 | 16 04 20.0 | -06 16 46 | 21.1 | 7.1 | 11 | 16.2 | 2.6 | 12 | 16.8 | 1.2 | 1 | 16.8 | trg |
| LP917-019 | 16 04 23.2 | -33 03 40 | 10.9 | 4.9 | 9 | 18.0 | 3.1 | 10 | 22.9 | 1.1 | 1 | 22.9 | trg |
| GJ1197 | 16 07 15.5 | +26 49 49 | ... | ... | ... | 29.6 | 4.7 | 12 | 21.8 | 1.8 | 1 | 21.8 | trg |
| 2MA1607-0442 | 16 07 31.2 | -04 42 10 | 11.2 | 4.2 | 11 | 13.4 | 2.1 | 12 | 15.7 | 0.4 | 1 | 15.7 | trg |
| GJ1198 | 16 08 15.0 | -10 26 14 | 27.8 | 8.3 | 11 | 26.5 | 4.8 | 12 | 21.2 | 1.2 | 1 | 21.2 | trg |
| SCR1608-2913 | 16 08 45.5 | -29 13 06 | [28.9] | 8.4 | 11 | [20.2] | 4.6 | 12 | ... | ... | ... | [20.2] | ccd |
| HIP079126 | 16 09 03.1 | +52 56 37 | ... | ... | ... | 13.5 | 2.4 | 12 | 16.9 | 0.3 | 1 | 16.9 | trg |
| LP481-066 | 16 09 13.0 | -38 04 33 | 16.9 | 11.2 | 11 | ... | ... | ... | ... | ... | ... | 16.9 | plt |
| SCR1609-3431 | 16 09 46.2 | -34 31 07 | 22.5 | 10.3 | 11 | 21.9 | 3.5 | 12 | ... | ... | ... | 21.9 | ccd |
| LP684-033 | 16 10 58.4 | -06 31 33 | 21.6 | 7.3 | 11 | ... | ... | ... | ... | ... | ... | 21.6 | plt |
| LHS3165 | 16 12 07.1 | -40 48 45 | 20.0 | 10.7 | 11 | ... | ... | ... | ... | ... | ... | 20.0 | plt |
| LP804-027 | 16 12 41.8 | -18 52 32 | 8.2 | 3.2 | 11 | 9.0 | 1.7 | 12 | 14.4 | 0.7 | 1 | 14.4 | trg |
| LHS3167 | 16 13 05.9 | -70 09 08 | 17.3 | 5.5 | 11 | 14.7 | 2.3 | 12 | 16.6 | 0.3 | 1 | 16.6 | trg |
| LHS3169 | 16 14 21.9 | -28 30 37 | 15.5 | 4.8 | 11 | 17.3 | 2.8 | 12 | 18.7 | 0.5 | 1 | 18.7 | trg |
| GJ1200 | 16 14 28.7 | +19 06 04 | ... | ... | ... | 21.2 | 3.7 | 12 | 17.9 | 1.1 | 1 | 17.9 | trg |
| GJ0618 | 16 20 03.5 | -37 31 45 | [4.4] | 2.9 | 9 | 7.3 | 1.2 | 12 | 8.3 | 0.2 | 2 | 8.3 | trg |
| LP917-025 | 16 20 37.6 | -30 39 41 | 18.8 | 6.4 | 11 | 22.6 | 3.5 | 12 | ... | ... | ... | 22.6 | ccd |
| LP805-001 | 16 20 41.9 | -20 05 14 | 12.6 | 9.5 | 11 | 15.7 | 2.5 | 12 | ... | ... | ... | 15.7 | ccd |
| LP625-004 | 16 21 26.3 | -01 47 02 | 24.9 | 7.1 | 11 | ... | ... | ... | ... | ... | ... | 24.9 | plt |
| GJ0618.4 | 16 22 41.0 | -48 39 20 | 16.8 | 4.6 | 11 | 20.5 | 3.3 | 12 | 23.7 | 1.9 | 2 | 23.7 | trg |
| LEP1623-6905 | 16 23 02.8 | -69 05 37 | 35.0 | 11.6 | 11 | 24.6 | 5.8 | 12 | ... | ... | ... | 24.6 | ccd |
| GJ0620 | 16 23 07.6 | -24 42 35 | 7.1 | 5.2 | 10 | 14.3 | 2.4 | 12 | 16.5 | 0.6 | 2 | 16.5 | trg |
| GJ0623 | 16 24 09.3 | +48 21 10 | ... | ... | ... | 8.3 | 1.3 | 12 | 7.9 | 0.1 | 3 | 7.9 | trg |
| LTT06556 | 16 25 01.5 | -12 15 26 | 23.0 | 6.4 | 11 | 22.1 | 3.8 | 12 | ... | ... | ... | 22.1 | ccd |
| GJ0622 | 16 25 13.0 | -21 56 14 | 10.8 | 4.8 | 10 | 17.9 | 3.1 | 10 | 18.1 | 0.7 | 2 | 18.1 | trg |
| GJ0625 | 16 25 24.6 | +54 18 14 | ... | ... | ... | 8.5 | 1.3 | 12 | 6.5 | 0.0 | 2 | 6.5 | trg |
| LHS3197 | 16 26 48.1 | -17 23 34 | 19.9 | 7.4 | 11 | 14.1 | 2.4 | 12 | 18.2 | 0.5 | 1 | 18.2 | trg |
| SCR1626-3812 | 16 26 51.7 | -38 12 33 | 11.7 | 7.0 | 11 | 13.8 | 2.1 | 12 | 13.7 | 0.3 | 1 | 13.7 | trg |
| GJ2120 | 16 27 33.2 | -10 00 29 | 15.2 | 4.7 | 11 | 15.8 | 2.7 | 12 | 22.9 | 1.7 | 1 | 22.9 | trg |
| GJ2121 | 16 30 13.1 | -14 39 50 | [19.1] | 5.5 | 11 | [14.5] | 2.3 | 12 | 22.4 | 2.7 | 1 | 22.4 | trg |

| | | | | | | | | | | | | | |
|--------------|------------|-----------|----------|------|-----|----------|-----|-----|------|-----|-----|------|-----|
| GJ0628 | 16 30 18.1 | -12 39 45 | 5.7 | 1.8 | 10 | 3.9 | 0.6 | 12 | 4.3 | 0.0 | 2 | 4.3 | trg |
| SCR1630-3633 | 16 30 27.2 | -36 33 56 | [14.8] | 5.9 | 11 | [15.4] | 3.8 | 12 | 15.3 | 0.4 | 2 | 15.3 | trg |
| GJ1202 | 16 31 35.1 | +17 33 49 | ... | ... | ... | 20.0 | 3.4 | 12 | 18.7 | 1.0 | 1 | 18.7 | trg |
| GJ1203 | 16 32 45.1 | +12 36 45 | ... | ... | ... | 17.3 | 2.7 | 12 | 18.0 | 0.8 | 2 | 18.0 | trg |
| 2MA1632-0631 | 16 32 58.8 | -06 31 48 | 16.5 | 7.0 | 10 | 20.7 | 3.3 | 11 | 18.8 | 0.5 | 1 | 18.8 | trg |
| L339-020 | 16 34 43.8 | -46 01 31 | 19.7 | 6.2 | 11 | ... | ... | ... | ... | ... | ... | 19.7 | plt |
| L483-080 | 16 34 59.0 | -38 34 34 | 18.1 | 10.4 | 11 | ... | ... | ... | ... | ... | ... | 18.1 | plt |
| LHS3218 | 16 35 24.6 | -27 18 55 | 16.2 | 7.1 | 11 | 20.9 | 3.7 | 12 | 18.6 | 0.3 | 1 | 18.6 | trg |
| UPM1635-5202 | 16 35 37.2 | -52 02 01 | 17.6 | 5.5 | 11 | 16.5 | 2.9 | 12 | ... | ... | ... | 16.5 | ccd |
| LHS0423 | 16 35 40.4 | -30 51 20 | 21.0 | 6.7 | 11 | 20.4 | 3.5 | 12 | 19.5 | 1.1 | 1 | 19.5 | trg |
| GJ1204 | 16 36 05.3 | +08 48 34 | ... | ... | ... | 15.8 | 2.5 | 12 | 15.3 | 1.0 | 1 | 15.3 | trg |
| LP685-036 | 16 36 06.0 | -04 40 13 | 24.4 | 8.6 | 11 | ... | ... | ... | ... | ... | ... | 24.4 | plt |
| SCR1636-4041 | 16 36 57.6 | -40 41 09 | 13.3 | 5.2 | 11 | 15.4 | 2.4 | 12 | 21.6 | 0.7 | 1 | 21.6 | trg |
| L555-115 | 16 36 58.4 | -33 46 51 | 17.5 | 5.9 | 11 | ... | ... | ... | ... | ... | ... | 17.5 | plt |
| SCR1639-4652 | 16 39 25.8 | -46 53 00 | 17.6 | 4.8 | 11 | 20.1 | 3.1 | 12 | ... | ... | ... | 20.1 | ccd |
| LHS5319 | 16 39 30.2 | +50 34 03 | ... | ... | ... | 25.9 | 4.1 | 12 | 21.1 | 0.9 | 1 | 21.1 | trg |
| LP625-034 | 16 40 05.7 | +00 42 05 | ... | ... | ... | 12.4 | 2.0 | 12 | 11.2 | 0.3 | 1 | 11.2 | trg |
| LP069-457 | 16 40 14.7 | +67 36 32 | ... | ... | ... | 9.3 | 1.4 | 12 | 13.4 | 0.8 | 1 | 13.4 | trg |
| GJ0633 | 16 40 45.3 | -45 59 59 | 18.1 | 5.0 | 11 | 19.5 | 3.0 | 12 | 16.7 | 0.3 | 2 | 16.7 | trg |
| LTT14949 | 16 40 48.9 | +36 19 00 | ... | ... | ... | 15.9 | 2.7 | 12 | 19.2 | 0.9 | 1 | 19.2 | trg |
| GJ0634 | 16 41 28.3 | -43 59 11 | 15.6 | 4.4 | 11 | 17.6 | 2.8 | 12 | 17.4 | 2.0 | 1 | 17.4 | trg |
| LP686-002 | 16 43 55.9 | -07 26 10 | 20.9 | 7.1 | 7 | ... | ... | ... | ... | ... | ... | 20.9 | plt |
| 2MA1643-7530 | 16 43 57.7 | -75 30 21 | 18.8 | 6.8 | 11 | ... | ... | ... | ... | ... | ... | 18.8 | plt |
| GJ2122 | 16 45 17.0 | -38 48 30 | ... | ... | ... | [9.9] | 1.6 | 12 | 11.4 | 0.3 | 1 | 11.4 | trg |
| 2MA1645-1319 | 16 45 22.1 | -13 19 52 | 13.2 | 10.0 | 7 | 15.0 | 2.7 | 12 | ... | ... | ... | 15.0 | ccd |
| LHS3240 | 16 46 13.7 | +16 28 40 | ... | ... | ... | 12.7 | 2.1 | 12 | 16.0 | 0.8 | 2 | 16.0 | trg |
| LHS3241 | 16 46 31.0 | +34 34 56 | ... | ... | ... | 10.8 | 1.7 | 12 | 11.9 | 0.1 | 1 | 11.9 | trg |
| LP806-004 | 16 47 35.6 | -19 44 27 | 18.6 | 5.6 | 11 | 21.6 | 3.5 | 12 | ... | ... | ... | 21.6 | ccd |
| LP154-205 | 16 47 55.2 | -65 09 12 | 21.7 | 6.2 | 11 | 21.1 | 3.6 | 12 | 14.8 | 0.2 | 1 | 14.8 | trg |
| GJ0637 | 16 48 24.5 | -72 58 34 | 14.6 | 6.0 | 11 | 17.8 | 2.9 | 12 | 15.9 | 0.5 | 2 | 15.9 | trg |
| LP806-008 | 16 48 46.0 | -15 44 20 | 11.5 | 3.9 | 11 | 14.2 | 2.4 | 12 | 18.2 | 0.7 | 1 | 18.2 | trg |
| LHS3246 | 16 50 53.8 | -04 50 35 | 24.1 | 6.5 | 11 | 23.5 | 4.0 | 12 | ... | ... | ... | 23.5 | ccd |
| G169-029 | 16 50 57.0 | +22 26 48 | ... | ... | ... | 10.5 | 1.6 | 12 | 10.4 | 0.1 | 1 | 10.4 | trg |
| GJ0644 | 16 55 28.8 | -08 20 11 | [3.5] | 1.5 | 11 | [3.8] | 0.6 | 12 | 6.5 | 0.0 | 5 | 6.5 | trg |
| LTT06745 | 16 55 38.0 | -32 04 04 | 7.6 | 3.5 | 9 | 14.6 | 2.5 | 9 | 18.3 | 0.4 | 1 | 18.3 | trg |
| SCR1656-2046 | 16 56 33.6 | -20 46 37 | 17.8 | 6.4 | 11 | 16.3 | 2.7 | 12 | 16.2 | 0.3 | 1 | 16.2 | trg |
| GJ0645 | 16 56 45.1 | -37 03 39 | 9.8 | 6.7 | 10 | 19.2 | 3.0 | 12 | 17.2 | 2.7 | 1 | 17.2 | trg |
| SCR1656-4238 | 16 56 49.8 | -42 38 48 | 23.4 | 6.2 | 11 | 23.9 | 3.8 | 12 | ... | ... | ... | 23.9 | ccd |
| GJ1207 | 16 57 05.7 | -04 20 56 | 9.7 | 4.7 | 10 | 9.3 | 1.6 | 12 | 8.7 | 0.1 | 2 | 8.7 | trg |
| GJ0649 | 16 58 08.8 | +25 44 39 | ... | ... | ... | 8.8 | 1.4 | 12 | 10.3 | 0.1 | 2 | 10.3 | trg |
| G139-003 | 16 58 25.0 | +13 58 06 | ... | ... | ... | [13.1] | 2.1 | 12 | 14.1 | 0.4 | 1 | 14.1 | trg |
| SCR1659-6958 | 16 59 28.1 | -69 58 18 | 27.6 | 9.2 | 11 | 22.1 | 4.2 | 12 | 20.5 | 0.4 | 1 | 20.5 | trg |
| LP746-041 | 17 00 42.2 | -09 25 35 | 22.8 | 8.8 | 11 | ... | ... | ... | ... | ... | ... | 22.8 | plt |
| HIP083405 | 17 02 49.5 | -06 04 06 | ... | ... | ... | 17.7 | 3.0 | 12 | 18.9 | 0.7 | 1 | 18.9 | trg |
| LHS3262 | 17 03 25.4 | +51 25 21 | ... | ... | ... | 9.6 | 1.5 | 12 | 9.5 | 0.2 | 1 | 9.5 | trg |
| GJ1209 | 17 04 22.3 | +16 55 56 | ... | ... | ... | 18.5 | 2.9 | 12 | 17.2 | 1.0 | 1 | 17.2 | trg |
| LEHPM2-1755 | 17 06 50.0 | -82 11 42 | 24.9 | 6.7 | 11 | ... | ... | ... | ... | ... | ... | 24.9 | plt |
| GJ0655 | 17 07 07.4 | +21 33 14 | ... | ... | ... | 12.4 | 1.9 | 12 | 14.0 | 0.4 | 2 | 14.0 | trg |
| BD-06-04552 | 17 07 34.8 | -06 27 26 | 21.6 | 10.2 | 11 | ... | ... | ... | ... | ... | ... | 21.6 | plt |
| GJ1210 | 17 07 40.8 | +07 22 07 | ... | ... | ... | [12.4] | 2.2 | 12 | 12.8 | 0.9 | 1 | 12.8 | trg |
| NLTT44215 | 17 08 23.8 | -18 27 58 | 22.0 | 13.9 | 10 | ... | ... | ... | ... | ... | ... | 22.0 | plt |
| UPM1710-5300 | 17 10 44.3 | -53 00 25 | [13.5] | 4.5 | 8 | [13.4] | 2.1 | 12 | 15.5 | 0.7 | 1 | 15.5 | trg |
| L268-067 | 17 10 59.2 | -52 30 56 | 10.0 | 3.3 | 6 | 11.0 | 1.8 | 12 | 12.5 | 0.3 | 1 | 12.5 | trg |
| LTT15087 | 17 11 34.7 | +38 26 33 | ... | ... | ... | 9.6 | 1.5 | 12 | 12.0 | 0.3 | 1 | 12.0 | trg |
| GJ0660 | 17 11 52.3 | -01 51 06 | [9.9] | 3.2 | 11 | [9.6] | 1.5 | 12 | 11.7 | 0.3 | 2 | 11.7 | trg |
| LP919-015 | 17 12 01.2 | -27 46 02 | 15.0 | 11.6 | 11 | 23.7 | 3.7 | 12 | ... | ... | ... | 23.7 | ccd |
| SIP1712-0323 | 17 12 04.3 | -03 23 30 | 17.8 | 10.0 | 11 | 16.3 | 2.5 | 12 | ... | ... | ... | 16.3 | ccd |
| GJ0661 | 17 12 07.9 | +45 39 57 | ... | ... | ... | [4.5] | 0.7 | 12 | 6.4 | 0.1 | 2 | 6.4 | trg |
| GJ0660.1 | 17 12 51.3 | -05 07 32 | {[22.3]} | 8.2 | 10 | {[31.1]} | 5.0 | 10 | 20.0 | 1.4 | 2 | 20.0 | trg |
| LP413-057 | 17 13 09.6 | -41 28 28 | 20.2 | 6.9 | 11 | ... | ... | ... | ... | ... | ... | 20.2 | plt |
| GJ1212 | 17 13 40.5 | -08 25 15 | [11.8] | 4.7 | 11 | [12.0] | 2.0 | 12 | 18.3 | 1.5 | 2 | 18.3 | trg |
| GJ1214 | 17 15 18.9 | +04 57 50 | ... | ... | ... | 12.4 | 2.3 | 12 | 13.0 | 0.9 | 1 | 13.0 | trg |
| LTT06876 | 17 15 54.9 | -02 50 10 | 21.1 | 9.4 | 9 | ... | ... | ... | ... | ... | ... | 21.1 | plt |
| L1205-067 | 17 16 00.6 | +11 03 27 | ... | ... | ... | 15.5 | 2.4 | 12 | 17.8 | 0.7 | 1 | 17.8 | trg |
| LP687-017 | 17 16 20.7 | -05 23 51 | 12.2 | 6.9 | 11 | 17.1 | 2.7 | 12 | ... | ... | ... | 17.1 | ccd |
| GJ2128 | 17 16 40.9 | +08 03 30 | ... | ... | ... | 14.7 | 2.3 | 12 | 14.9 | 0.6 | 1 | 14.9 | trg |
| GJ1215 | 17 17 42.9 | +11 39 45 | ... | ... | ... | 11.5 | 1.8 | 12 | 12.7 | 0.5 | 1 | 12.7 | trg |
| L845-016 | 17 17 45.3 | -11 48 54 | 11.0 | 3.7 | 11 | 13.0 | 3.1 | 12 | ... | ... | ... | 13.0 | ccd |
| HIP084652 | 17 18 21.7 | -01 46 53 | ... | ... | ... | [15.6] | 4.5 | 12 | 19.3 | 0.9 | 1 | 19.3 | trg |
| LP687-045 | 17 18 29.1 | -07 39 15 | 20.4 | 12.2 | 11 | ... | ... | ... | ... | ... | ... | 20.4 | plt |
| GJ0671 | 17 19 52.7 | +41 42 49 | ... | ... | ... | 12.2 | 1.9 | 12 | 12.4 | 0.2 | 2 | 12.4 | trg |
| GJ0669 | 17 19 54.2 | +26 30 03 | ... | ... | ... | 7.2 | 1.1 | 12 | 11.0 | 0.2 | 4 | 11.0 | trg |
| GJ1216 | 17 20 46.3 | +49 15 20 | ... | ... | ... | 24.7 | 4.0 | 12 | 17.1 | 1.4 | 1 | 17.1 | trg |
| OUT1720-1725 | 17 20 52.4 | -17 25 40 | 21.0 | 10.5 | 11 | 18.8 | 3.0 | 12 | ... | ... | ... | 18.8 | ccd |
| GJ0672.1 | 17 23 49.2 | -32 15 16 | 12.7 | 4.8 | 11 | 20.9 | 3.3 | 12 | 23.6 | 2.2 | 2 | 23.6 | trg |
| L989-038 | 17 24 16.9 | -04 21 52 | 12.5 | 7.8 | 11 | 17.8 | 2.8 | 12 | ... | ... | ... | 17.8 | ccd |
| SCR1726-8433 | 17 26 22.9 | -84 33 08 | 20.1 | 5.5 | 11 | 20.7 | 3.2 | 12 | ... | ... | ... | 20.7 | ccd |
| GJ1219 | 17 27 39.9 | +14 29 02 | ... | ... | ... | 26.3 | 4.4 | 12 | 20.0 | 1.0 | 1 | 20.0 | trg |
| GJ1218 | 17 28 07.3 | -62 27 14 | 10.0 | 2.9 | 11 | 10.8 | 1.7 | 12 | 16.3 | 0.3 | 2 | 16.3 | trg |
| SCR1728-0143 | 17 28 11.1 | -01 43 57 | 16.4 | 8.3 | 11 | 18.3 | 2.8 | 12 | 24.6 | 1.5 | 1 | 24.6 | trg |
| GJ0674 | 17 28 39.9 | -46 53 43 | 5.7 | 2.2 | 8 | 4.9 | 0.8 | 12 | 4.5 | 0.0 | 2 | 4.5 | trg |
| LHS3295 | 17 29 27.3 | -80 08 57 | 9.5 | 3.1 | 11 | 11.3 | 1.8 | 12 | 12.5 | 0.3 | 1 | 12.5 | trg |
| GJ0676 | 17 30 11.2 | -51 38 13 | 5.9 | 3.0 | 9 | 11.7 | 1.9 | 10 | 16.3 | 0.4 | 2 | 16.3 | trg |
| GJ0678.1 | 17 30 22.7 | +05 32 54 | ... | ... | ... | 8.8 | 1.5 | 12 | 9.9 | 0.1 | 2 | 9.9 | trg |
| SCR1731-2452 | 17 31 03.8 | -24 52 44 | 9.6 | 5.5 | 8 | 19.4 | 3.1 | 12 | 24.9 | 0.9 | 1 | 24.9 | trg |
| GJ1220 | 17 31 07.4 | +82 05 53 | ... | ... | ... | 16.3 | 2.8 | 12 | 14.1 | 0.7 | 1 | 14.1 | trg |
| LP920-019 | 17 31 20.9 | -27 39 20 | 16.8 | 11.9 | 9 | ... | ... | ... | ... | ... | ... | 16.8 | plt |

| | | | | | | | | | | | | | |
|--------------|-------------|-----------|-------|------|-----|--------|-----|-----|------|-----|-----|------|-----|
| 2MA1731+2721 | 17 31 29.7 | +27 21 23 | ... | ... | ... | 14.2 | 3.4 | 12 | 11.4 | 0.3 | 1 | 11.4 | trg |
| SIP1731-7851 | 17 31 44.9 | -78 51 26 | 20.7 | 9.7 | 11 | ... | ... | ... | ... | ... | ... | 20.7 | plt |
| UPM1732-4736 | 17 32 21.9 | -47 36 58 | 18.5 | 5.7 | 11 | 17.0 | 2.6 | 12 | ... | ... | ... | 17.0 | ccd |
| LP688-003 | 17 34 08.7 | -08 49 52 | 21.9 | 11.7 | 11 | ... | ... | ... | ... | ... | ... | 21.9 | plt |
| HD320012 | 17 34 15.4 | -35 19 54 | 23.5 | 20.2 | 10 | ... | ... | ... | ... | ... | ... | 23.5 | plt |
| GJ0680 | 17 35 13.6 | -48 40 51 | 6.5 | 2.1 | 11 | 8.3 | 1.3 | 12 | 9.8 | 0.3 | 2 | 9.8 | trg |
| L112-088 | 17 36 14.6 | -67 56 06 | 23.5 | 6.4 | 11 | ... | ... | ... | ... | ... | ... | 23.5 | plt |
| GJ0687 | 17 36 25.9 | +68 20 20 | ... | ... | ... | 3.8 | 0.6 | 12 | 4.5 | 0.0 | 2 | 4.5 | trg |
| GJ0682 | 17 37 03.7 | -44 19 09 | [6.1] | 1.6 | 11 | [3.9] | 0.7 | 12 | 5.1 | 0.1 | 2 | 5.1 | trg |
| GJ0686 | 17 37 53.3 | +18 35 30 | ... | ... | ... | 8.6 | 1.4 | 12 | 8.1 | 0.1 | 2 | 8.1 | trg |
| LP920-069 | 17 38 03.6 | -30 00 57 | 15.1 | 5.4 | 11 | ... | ... | ... | ... | ... | ... | 15.1 | plt |
| L204-148 | 17 38 32.5 | -58 32 34 | 13.8 | 4.5 | 11 | 13.8 | 2.1 | 12 | 15.9 | 0.3 | 1 | 15.9 | trg |
| SCR1738-5942 | 17 38 41.0 | -59 42 24 | 20.8 | 6.0 | 11 | 24.1 | 4.0 | 12 | ... | ... | ... | 24.1 | ccd |
| L1422-016 | 17 39 30.7 | +27 45 44 | ... | ... | ... | 20.8 | 3.5 | 12 | 25.0 | 1.5 | 1 | 25.0 | trg |
| LHS3315 | 17 42 10.8 | -08 49 00 | 22.8 | 13.4 | 11 | 32.2 | 5.8 | 12 | 23.3 | 1.8 | 1 | 23.3 | trg |
| GJ0690.1 | 17 42 32.3 | -16 38 25 | 18.8 | 10.9 | 11 | 31.2 | 5.0 | 12 | 19.4 | 2.0 | 1 | 19.4 | trg |
| G140-009 | 17 43 00.8 | +05 47 21 | ... | ... | ... | [14.0] | 2.3 | 12 | 20.0 | 1.0 | 1 | 20.0 | trg |
| GJ0694 | 17 43 55.9 | +43 22 43 | ... | ... | ... | 8.1 | 1.3 | 12 | 9.5 | 0.1 | 2 | 9.5 | trg |
| LP921-012 | 17 44 17.4 | -29 15 48 | 24.7 | 11.3 | 9 | ... | ... | ... | ... | ... | ... | 24.7 | plt |
| LTTO7069 | 17 45 07.4 | -08 00 45 | 19.6 | 7.2 | 11 | ... | ... | ... | ... | ... | ... | 19.6 | plt |
| GJ0694.2 | 17 45 33.5 | +46 51 19 | ... | ... | ... | 16.1 | 2.9 | 12 | 21.5 | 0.5 | 2 | 21.5 | trg |
| L270-064 | 17 45 43.7 | -52 47 38 | 25.0 | 6.6 | 11 | ... | ... | ... | ... | ... | ... | 25.0 | plt |
| LHS3324 | 17 46 05.8 | +24 39 31 | ... | ... | ... | 19.4 | 3.3 | 12 | 14.6 | 0.5 | 1 | 14.6 | trg |
| GJ2130 | 17 46 12.8 | -32 06 09 | ... | ... | ... | 10.7 | 1.7 | 12 | 14.2 | 0.3 | 3 | 14.2 | trg |
| G154-016 | 17 46 23.3 | -18 07 09 | 18.7 | 13.7 | 11 | ... | ... | ... | ... | ... | ... | 18.7 | plt |
| LTTO7077 | 17 46 29.4 | -08 42 37 | 8.4 | 3.3 | 11 | 8.9 | 1.4 | 12 | 13.0 | 0.3 | 1 | 13.0 | trg |
| GJ0693 | 17 46 34.2 | -57 19 09 | 6.9 | 2.7 | 11 | 7.1 | 1.1 | 12 | 5.8 | 0.1 | 2 | 5.8 | trg |
| SCR1746-3214 | 17 46 40.7 | -32 14 04 | 9.9 | 3.2 | 11 | 11.2 | 1.8 | 12 | 11.6 | 0.2 | 1 | 11.6 | trg |
| NLTT45438 | 17 47 10.2 | -01 29 55 | 19.0 | 6.8 | 11 | ... | ... | ... | ... | ... | ... | 19.0 | plt |
| LHS3332 | 17 49 56.1 | +22 40 56 | ... | ... | ... | 15.5 | 2.6 | 3 | 14.7 | 1.2 | 1 | 14.7 | trg |
| LHS3333 | 17 50 13.9 | +23 46 16 | ... | ... | ... | 17.3 | 2.7 | 3 | 22.3 | 2.1 | 1 | 22.3 | trg |
| GJ1222 | 17 54 17.1 | +07 22 45 | ... | ... | ... | 13.0 | 2.1 | 12 | 16.7 | 1.0 | 1 | 16.7 | trg |
| LHS3339 | 17 55 36.2 | +58 25 04 | ... | ... | ... | 19.7 | 3.3 | 12 | 21.6 | 0.5 | 1 | 21.6 | trg |
| L415-082 | 17 57 14.2 | -41 59 29 | 16.9 | 4.5 | 2 | 16.9 | 2.7 | 12 | 17.1 | 0.3 | 1 | 17.1 | trg |
| LP044-162 | 17 57 15.0 | +70 42 01 | ... | ... | ... | 12.6 | 2.0 | 11 | 19.1 | 0.4 | 1 | 19.1 | trg |
| L271-081 | 17 57 22.6 | -52 29 07 | 21.7 | 6.1 | 11 | ... | ... | ... | ... | ... | ... | 21.7 | plt |
| BARNARDS | 17 57 48.5 | +04 41 36 | ... | ... | ... | 2.9 | 0.5 | 12 | 1.8 | 0.0 | 3 | 1.8 | trg |
| LHS3343 | 17 57 50.9 | +46 35 19 | ... | ... | ... | 11.5 | 1.8 | 12 | 14.3 | 0.3 | 3 | 14.3 | trg |
| LP749-016 | 17 59 58.7 | -13 23 44 | 23.4 | 12.0 | 10 | ... | ... | ... | ... | ... | ... | 23.4 | plt |
| GJ1223 | 18 02 46.3 | +37 31 03 | ... | ... | ... | 12.7 | 2.0 | 12 | 12.0 | 0.6 | 1 | 12.0 | trg |
| G154-043 | 18 03 36.1 | -18 58 51 | [8.5] | 5.8 | 11 | [9.9] | 1.5 | 12 | 13.0 | 0.3 | 1 | 13.0 | trg |
| G182-037 | 18 04 17.5 | +35 57 25 | ... | ... | ... | [16.5] | 2.8 | 12 | 21.2 | 0.8 | 1 | 21.2 | trg |
| GJ0701 | 18 05 07.6 | -03 01 53 | 4.4 | 3.1 | 9 | 7.8 | 1.2 | 12 | 7.8 | 0.1 | 2 | 7.8 | trg |
| SCR1805-2042 | 18 05 15.1 | -20 42 28 | 17.4 | 10.0 | 11 | 22.3 | 3.7 | 12 | ... | ... | ... | 22.3 | ccd |
| GJ1224 | 18 07 32.9 | -15 57 47 | 7.1 | 3.3 | 11 | 9.1 | 1.6 | 12 | 7.9 | 0.1 | 2 | 7.9 | trg |
| LP334-011 | 18 09 40.7 | +31 52 12 | ... | ... | ... | 21.2 | 3.4 | 12 | 21.5 | 1.5 | 1 | 21.5 | trg |
| LEP1809-0219 | 18 09 43.7 | -02 19 35 | 11.9 | 9.4 | 11 | 16.0 | 2.5 | 12 | ... | ... | ... | 16.0 | ccd |
| NLTT46026 | 18 10 11.0 | -15 25 48 | 23.0 | 15.2 | 11 | ... | ... | ... | ... | ... | ... | 23.0 | plt |
| L043-072 | 18 11 15.3 | -78 59 23 | [7.0] | 2.7 | 11 | [6.4] | 1.0 | 12 | 11.2 | 0.3 | 1 | 11.2 | trg |
| LP629-020 | 18 11 23.4 | -02 17 50 | 22.9 | 14.6 | 8 | ... | ... | ... | ... | ... | ... | 22.9 | plt |
| LP390-016 | 18 13 06.57 | +26 01 51 | ... | ... | ... | 12.7 | 2.0 | 12 | 17.2 | 0.7 | 1 | 17.2 | trg |
| LHS3370 | 18 13 52.9 | -77 08 21 | 40.6 | 11.1 | 11 | 43.9 | 8.6 | 12 | 23.3 | 2.3 | 1 | 23.3 | trg |
| LTTO7246 | 18 15 12.4 | -19 24 07 | 8.9 | 3.3 | 11 | 10.3 | 2.3 | 12 | ... | ... | ... | 10.3 | ccd |
| LT15403 | 18 15 43.5 | +18 56 19 | ... | ... | ... | 17.8 | 3.0 | 12 | 22.8 | 1.2 | 2 | 22.8 | trg |
| GJ0708.3 | 18 16 18.2 | +01 31 27 | ... | ... | ... | 18.1 | 2.9 | 12 | 16.6 | 2.0 | 1 | 16.6 | trg |
| GJ0709 | 18 16 31.0 | +45 33 28 | ... | ... | ... | 14.5 | 2.5 | 12 | 17.0 | 0.3 | 2 | 17.0 | trg |
| GJ1225 | 18 17 15.0 | +68 33 19 | ... | ... | ... | 30.0 | 5.5 | 12 | 18.6 | 1.2 | 1 | 18.6 | trg |
| LHS0462 | 18 18 02.7 | +38 45 19 | ... | ... | ... | 12.8 | 2.0 | 12 | 11.3 | 0.5 | 1 | 11.3 | trg |
| LHS3376 | 18 19 02.8 | +66 11 07 | ... | ... | ... | 10.2 | 1.7 | 12 | 7.3 | 0.3 | 1 | 7.3 | trg |
| LHS3378 | 18 19 17.0 | -77 02 50 | 22.0 | 7.7 | 11 | ... | ... | ... | ... | ... | ... | 22.0 | plt |
| LP690-011 | 18 19 59.6 | -06 17 32 | 20.6 | 13.6 | 10 | ... | ... | ... | ... | ... | ... | 20.6 | plt |
| GJ0712 | 18 22 06.7 | +06 20 38 | ... | ... | ... | 17.4 | 2.9 | 12 | 14.5 | 0.5 | 1 | 14.5 | trg |
| GJ1227 | 18 22 27.1 | +62 03 02 | ... | ... | ... | 8.5 | 1.3 | 12 | 8.2 | 0.2 | 1 | 8.2 | trg |
| LT15449 | 18 25 04.7 | +24 38 04 | ... | ... | ... | 19.0 | 3.5 | 12 | 21.9 | 0.9 | 1 | 21.9 | trg |
| LHS3385 | 18 25 31.9 | +38 21 12 | ... | ... | ... | 23.9 | 4.0 | 12 | 24.5 | 1.1 | 2 | 24.5 | trg |
| LP630-081 | 18 26 17.0 | +01 46 21 | ... | ... | ... | 16.3 | 2.5 | 12 | 18.7 | 0.7 | 1 | 18.7 | trg |
| WT0562 | 18 26 19.8 | -65 47 41 | 17.2 | 5.0 | 11 | 17.0 | 2.7 | 12 | 17.1 | 0.3 | 1 | 17.1 | trg |
| SCR1826-6542 | 18 26 46.8 | -65 42 40 | 9.2 | 2.5 | 11 | 9.3 | 1.5 | 12 | 15.1 | 0.2 | 1 | 15.1 | trg |
| GJ0714 | 18 30 12.0 | -58 16 28 | 9.7 | 2.8 | 11 | 12.0 | 2.0 | 10 | 14.5 | 0.6 | 1 | 14.5 | trg |
| GJ0720 | 18 35 18.3 | +45 44 38 | ... | ... | ... | 12.4 | 2.2 | 12 | 15.4 | 0.2 | 2 | 15.4 | trg |
| 2MA1835+3259 | 18 35 38.0 | +32 59 54 | ... | ... | ... | 6.1 | 1.0 | 11 | 5.7 | 0.0 | 1 | 5.7 | trg |
| G141-021 | 18 36 19.0 | +13 36 30 | ... | ... | ... | 10.3 | 1.6 | 12 | 11.6 | 0.3 | 1 | 11.6 | trg |
| L489-068 | 18 38 30.3 | -39 04 31 | 23.3 | 6.3 | 11 | ... | ... | ... | ... | ... | ... | 23.3 | plt |
| GJ2138 | 18 38 44.8 | -14 29 26 | [8.8] | 2.6 | 11 | [12.8] | 2.0 | 12 | 12.9 | 0.5 | 1 | 12.9 | trg |
| LP335-012 | 18 39 33.0 | +29 52 17 | ... | ... | ... | 11.0 | 1.7 | 12 | 11.9 | 0.1 | 2 | 11.9 | trg |
| LP044-334 | 18 40 02.0 | +72 40 54 | ... | ... | ... | 12.0 | 1.9 | 12 | 16.9 | 0.6 | 1 | 16.9 | trg |
| GJ0723 | 18 40 17.8 | -10 27 55 | 19.1 | 5.6 | 11 | 21.5 | 3.4 | 12 | 21.7 | 2.8 | 2 | 21.7 | trg |
| Wolf1467 | 18 40 50.2 | -08 04 59 | 19.2 | 9.4 | 11 | ... | ... | ... | ... | ... | ... | 19.2 | plt |
| GJ0724 | 18 40 57.3 | -13 22 47 | 8.4 | 4.1 | 11 | 13.3 | 2.3 | 12 | 16.5 | 0.5 | 2 | 16.5 | trg |
| GJ1230 | 18 41 09.4 | +24 47 15 | ... | ... | ... | [5.7] | 1.0 | 12 | 8.3 | 0.5 | 1 | 8.3 | trg |
| SCR1841-4347 | 18 41 09.8 | -43 47 33 | 14.6 | 4.3 | 11 | 11.9 | 2.0 | 12 | 12.2 | 0.1 | 1 | 12.2 | trg |
| LT15513 | 18 41 59.0 | +31 49 49 | ... | ... | ... | 10.9 | 1.7 | 12 | 11.4 | 0.3 | 2 | 11.4 | trg |
| G141-029 | 18 42 45.0 | +13 54 24 | ... | ... | ... | 9.9 | 1.5 | 12 | 11.1 | 0.2 | 1 | 11.1 | trg |
| GJ0725 | 18 42 46.6 | +59 37 49 | ... | ... | ... | 4.1 | 0.8 | 12 | 3.5 | 0.0 | 3 | 3.5 | trg |
| LHS5341 | 18 43 07.0 | -54 36 48 | 9.5 | 3.0 | 11 | 8.7 | 1.4 | 12 | 9.7 | 0.1 | 1 | 9.7 | trg |
| LTTO7419 | 18 43 12.5 | -33 22 46 | 12.1 | 3.3 | 8 | 13.3 | 2.2 | 12 | 15.1 | 0.3 | 3 | 15.1 | trg |
| LHS3406 | 18 43 21.7 | +40 40 54 | ... | ... | ... | 12.5 | 2.0 | 12 | 14.1 | 0.2 | 1 | 14.1 | trg |

| | | | | | | | | | | | | | |
|--------------|------------|-----------|--------|------|-----|--------|------|-----|------|-----|-----|--------|-----|
| SCR1845-6357 | 18 45 05.3 | -63 57 48 | 3.5 | 1.2 | 6 | 4.6 | 0.8 | 10 | 3.9 | 0.0 | 2 | 3.9 | trg |
| LHS3409 | 18 45 44.0 | +52 28 20 | ... | ... | ... | {44.2} | 8.4 | 12 | 20.3 | 0.5 | 1 | 20.3 | trg |
| LTT07434 | 18 45 57.5 | -28 55 53 | [8.3] | 8.1 | 10 | [11.6] | 1.8 | 12 | 16.4 | 0.4 | 1 | 16.4 | trg |
| SCR1847-1922 | 18 47 16.7 | -19 22 21 | 23.0 | 6.6 | 11 | 20.6 | 3.2 | 12 | ... | ... | ... | 20.6 | ccd |
| LTT07452 | 18 48 01.3 | -14 34 51 | 10.7 | 4.2 | 11 | 16.5 | 2.6 | 12 | ... | ... | ... | 16.5 | ccd |
| SCR1848-6855 | 18 48 21.0 | -68 55 34 | [39.0] | 16.8 | 11 | [37.3] | 10.3 | 12 | 24.6 | 0.4 | 1 | 24.6 | trg |
| LHS3411 | 18 48 38.7 | -61 35 26 | 18.6 | 5.0 | 11 | ... | ... | ... | ... | ... | ... | 18.6 | plt |
| L345-091 | 18 48 41.4 | -46 47 08 | [10.1] | 3.8 | 11 | [12.0] | 1.9 | 12 | ... | ... | ... | [12.0] | ccd |
| SIP1848-8214 | 18 48 51.1 | -82 14 42 | 13.5 | 5.7 | 11 | 13.8 | 2.2 | 12 | 17.7 | 0.5 | 1 | 17.7 | trg |
| LP691-015 | 18 49 06.4 | -03 15 18 | 11.1 | 5.8 | 11 | 14.8 | 2.3 | 12 | ... | ... | ... | 14.8 | ccd |
| GJ0729 | 18 49 49.4 | -23 50 11 | 3.2 | 1.7 | 11 | 4.1 | 0.7 | 12 | 3.0 | 0.0 | 2 | 3.0 | trg |
| LHS3413 | 18 49 51.2 | -57 26 49 | 11.2 | 4.0 | 11 | 9.9 | 1.6 | 12 | 12.2 | 0.3 | 1 | 12.2 | trg |
| 2MA1849-0134 | 18 49 55.4 | -01 34 09 | 24.1 | 10.9 | 11 | ... | ... | ... | ... | ... | ... | 24.1 | plt |
| GJ0730 | 18 50 00.8 | +03 05 17 | ... | ... | ... | 17.4 | 2.8 | 12 | 20.7 | 0.9 | 2 | 20.7 | trg |
| HIP092451 | 18 50 26.6 | -62 03 03 | ... | ... | ... | 15.4 | 2.5 | 12 | 16.2 | 0.5 | 1 | 16.2 | trg |
| GJ0731 | 18 51 51.1 | +16 34 59 | ... | ... | ... | 13.7 | 2.4 | 12 | 15.3 | 0.4 | 2 | 15.3 | trg |
| LHS3418 | 18 52 00.2 | -60 46 11 | 19.2 | 5.3 | 11 | ... | ... | ... | ... | ... | ... | 19.2 | plt |
| L489-043 | 18 52 25.3 | -37 30 36 | 15.5 | 4.9 | 11 | 11.1 | 1.9 | 12 | ... | ... | ... | 11.1 | ccd |
| GJ0732 | 18 53 39.9 | -38 36 45 | 15.4 | 4.5 | 11 | 11.5 | 1.8 | 12 | ... | ... | ... | 11.5 | ccd |
| L077-046 | 18 55 14.7 | -71 15 03 | 20.6 | 6.3 | 11 | ... | ... | ... | ... | ... | ... | 20.6 | plt |
| GJ0735 | 18 55 27.4 | +08 24 09 | ... | ... | ... | [5.6] | 0.9 | 12 | 11.8 | 0.2 | 2 | 11.8 | trg |
| SCR1855-6914 | 18 55 47.9 | -69 14 15 | 12.5 | 4.5 | 11 | 10.7 | 1.7 | 12 | 11.6 | 0.1 | 1 | 11.6 | trg |
| SCR1856-4704 | 18 56 38.4 | -47 04 58 | [21.4] | 6.2 | 11 | [22.6] | 3.6 | 12 | ... | ... | ... | [22.6] | ccd |
| SCR1856-4011 | 18 57 01.1 | -40 11 51 | [28.9] | 10.0 | 11 | [21.0] | 6.0 | 11 | ... | ... | ... | [21.0] | ccd |
| GJ0737 | 18 57 30.6 | -55 59 30 | [5.8] | 1.6 | 11 | [7.8] | 1.2 | 11 | 12.4 | 0.3 | 2 | 12.4 | trg |
| GJ0740 | 18 58 00.1 | +05 54 29 | ... | ... | ... | 8.9 | 1.5 | 12 | 10.9 | 0.2 | 2 | 10.9 | trg |
| GJ0739 | 18 59 07.5 | -48 16 28 | 10.8 | 3.8 | 11 | 11.5 | 1.8 | 12 | 14.2 | 0.5 | 3 | 14.2 | trg |
| L159-126 | 18 59 40.7 | -63 27 22 | 16.8 | 5.0 | 11 | ... | ... | ... | ... | ... | ... | 16.8 | plt |
| GJ0741 | 19 03 16.7 | -13 34 05 | 34.2 | 15.6 | 11 | 24.8 | 5.4 | 12 | 19.1 | 1.4 | 1 | 19.1 | trg |
| SCR1904-2406 | 19 04 21.8 | -24 06 16 | 22.3 | 6.7 | 11 | 22.6 | 3.6 | 12 | ... | ... | ... | 22.6 | ccd |
| L274-159 | 19 05 20.3 | -54 34 43 | 19.0 | 5.9 | 11 | ... | ... | ... | ... | ... | ... | 19.0 | plt |
| GJ0745 | 19 07 05.5 | +20 53 17 | ... | ... | ... | 11.7 | 1.8 | 12 | 8.7 | 0.1 | 3 | 8.7 | trg |
| GJ0747 | 19 07 43.0 | +32 32 41 | ... | ... | ... | [7.9] | 1.2 | 12 | 8.2 | 0.2 | 1 | 8.2 | trg |
| GJ1231 | 19 08 15.8 | +26 35 06 | ... | ... | ... | 19.2 | 3.0 | 12 | 17.3 | 1.0 | 1 | 17.3 | trg |
| L490-020 | 19 08 22.1 | -37 05 28 | 23.7 | 6.6 | 11 | ... | ... | ... | ... | ... | ... | 23.7 | plt |
| GJ1232 | 19 09 50.9 | +17 40 06 | ... | ... | ... | 9.8 | 1.5 | 12 | 10.7 | 0.3 | 1 | 10.7 | trg |
| SIP1910-4132 | 19 10 34.6 | -41 33 45 | 22.8 | 6.1 | 11 | ... | ... | ... | ... | ... | ... | 22.8 | plt |
| L346-096 | 19 11 04.1 | -47 39 14 | 20.1 | 5.9 | 11 | ... | ... | ... | ... | ... | ... | 20.1 | plt |
| GJ0748 | 19 12 14.6 | +02 53 11 | ... | ... | ... | [6.9] | 1.4 | 12 | 10.2 | 0.0 | 3 | 10.2 | trg |
| GJ0747.4 | 19 12 25.3 | -55 52 08 | 17.6 | 5.2 | 11 | 21.4 | 3.5 | 12 | 21.4 | 1.5 | 2 | 21.4 | trg |
| G207-022 | 19 12 30.4 | +35 33 35 | ... | ... | ... | 17.7 | 2.7 | 12 | 17.2 | 0.9 | 1 | 17.2 | trg |
| WIS1912-3615 | 19 12 39.3 | -36 14 57 | 25.6 | 7.8 | 11 | 19.3 | 3.7 | 12 | ... | ... | ... | 19.3 | ccd |
| SCR1913-2312 | 19 13 06.1 | -23 12 05 | 26.0 | 9.1 | 11 | 20.8 | 3.2 | 12 | ... | ... | ... | 20.8 | ccd |
| LHS3443 | 19 13 08.0 | -39 01 54 | 13.3 | 4.2 | 11 | 15.0 | 2.3 | 12 | 20.6 | 0.5 | 1 | 20.6 | trg |
| LHS3445 | 19 14 39.1 | +19 19 03 | ... | ... | ... | 9.5 | 1.5 | 12 | 18.6 | 0.6 | 3 | 18.6 | trg |
| LP868-019 | 19 16 35.6 | -25 38 42 | 22.7 | 6.1 | 11 | ... | ... | ... | ... | ... | ... | 22.7 | plt |
| GJ0750 | 19 16 42.9 | -45 53 22 | [8.2] | 2.5 | 11 | [10.1] | 1.7 | 11 | 15.5 | 0.5 | 2 | 15.5 | trg |
| GJ0752 | 19 16 55.2 | +05 10 08 | ... | ... | ... | 4.7 | 0.8 | 12 | 5.8 | 0.0 | 4 | 5.8 | trg |
| SCR1918-4554 | 19 18 29.5 | -45 54 30 | 25.9 | 9.4 | 11 | 20.9 | 3.5 | 12 | ... | ... | ... | 20.9 | ccd |
| L160-005 | 19 19 41.2 | -59 55 20 | 18.8 | 6.2 | 11 | ... | ... | ... | ... | ... | ... | 18.8 | plt |
| GJ0754 | 19 20 48.0 | -45 33 30 | 7.9 | 2.2 | 11 | 6.8 | 1.1 | 12 | 5.9 | 0.1 | 2 | 5.9 | trg |
| LHS0475 | 19 20 54.3 | -82 33 16 | 11.8 | 4.3 | 11 | 13.0 | 2.0 | 12 | 12.0 | 0.1 | 1 | 12.0 | trg |
| GJ1235 | 19 21 38.7 | +20 52 03 | ... | ... | ... | 10.8 | 1.7 | 12 | 10.0 | 0.4 | 1 | 10.0 | trg |
| GJ0756 | 19 21 51.4 | +28 39 58 | ... | ... | ... | 22.2 | 3.6 | 12 | 22.5 | 1.3 | 2 | 22.5 | trg |
| GJ1236 | 19 22 02.0 | +07 02 31 | ... | ... | ... | 15.5 | 2.4 | 12 | 10.8 | 0.3 | 1 | 10.8 | trg |
| SCR1922-3503 | 19 22 05.6 | -35 03 45 | 28.3 | 8.4 | 11 | 22.2 | 3.6 | 12 | ... | ... | ... | 22.2 | ccd |
| LHS3459 | 19 22 40.0 | +29 25 15 | ... | ... | ... | 28.7 | 4.9 | 12 | 21.1 | 1.9 | 1 | 21.1 | trg |
| SCR1924-0931 | 19 24 11.0 | -09 31 34 | 24.5 | 6.6 | 11 | 23.6 | 3.8 | 12 | ... | ... | ... | 23.6 | ccd |
| GJ1238 | 19 24 16.3 | +75 33 12 | ... | ... | ... | 10.5 | 1.6 | 12 | 11.1 | 0.6 | 1 | 11.1 | trg |
| G185-023 | 19 26 02.0 | +24 26 17 | ... | ... | ... | 14.5 | 2.2 | 3 | 18.9 | 0.5 | 1 | 18.9 | trg |
| SCR1927-0409 | 19 27 13.0 | -04 09 49 | 20.5 | 8.4 | 11 | 20.8 | 3.3 | 12 | ... | ... | ... | 20.8 | ccd |
| LHS5348 | 19 27 52.7 | -28 11 15 | [14.7] | 4.5 | 11 | [11.6] | 1.9 | 12 | 12.7 | 0.2 | 1 | 12.7 | trg |
| L045-006 | 19 29 38.3 | -74 44 42 | 14.4 | 6.6 | 11 | 17.5 | 2.7 | 12 | ... | ... | ... | 17.5 | ccd |
| L078-093 | 19 31 01.4 | -73 37 06 | 18.9 | 8.6 | 11 | ... | ... | ... | ... | ... | ... | 18.9 | plt |
| SCR1931-0306 | 19 31 04.6 | -03 06 18 | 21.8 | 6.6 | 11 | 17.9 | 3.0 | 12 | 17.5 | 0.2 | 1 | 17.5 | trg |
| L348-141 | 19 31 53.2 | -48 33 54 | 24.8 | 8.2 | 11 | ... | ... | ... | ... | ... | ... | 24.8 | plt |
| SCR1932-5005 | 19 32 48.6 | -50 05 39 | 24.4 | 7.8 | 11 | 23.5 | 3.6 | 12 | ... | ... | ... | 23.5 | ccd |
| L275-026 | 19 34 03.9 | -52 25 14 | 15.6 | 5.1 | 11 | 15.0 | 2.3 | 12 | ... | ... | ... | 15.0 | ccd |
| LHS3472 | 19 34 57.6 | +53 15 06 | ... | ... | ... | 17.9 | 2.8 | 12 | 13.9 | 1.4 | 1 | 13.9 | trg |
| LTT18490 | 19 39 32.8 | +71 52 19 | ... | ... | ... | 20.9 | 3.4 | 12 | 22.2 | 0.6 | 2 | 22.2 | trg |
| LP869-042 | 19 39 36.2 | -26 45 07 | 11.6 | 4.2 | 11 | 16.0 | 2.7 | 12 | 23.2 | 1.0 | 1 | 23.2 | trg |
| GJ1242 | 19 41 54.2 | +03 09 16 | ... | ... | ... | 28.2 | 4.3 | 3 | 23.3 | 1.4 | 1 | 23.3 | trg |
| LP869-019 | 19 42 00.7 | -21 04 06 | 12.1 | 3.4 | 11 | 10.5 | 1.6 | 12 | 18.6 | 0.6 | 1 | 18.6 | trg |
| SCR1942-2045 | 19 42 12.8 | -20 45 48 | ... | ... | ... | 14.9 | 2.3 | 12 | 15.9 | 0.2 | 2 | 15.9 | trg |
| L420-142 | 19 42 53.3 | -44 06 28 | 22.7 | 6.4 | 11 | ... | ... | ... | ... | ... | ... | 22.7 | plt |
| 2MA1943-3722 | 19 43 24.7 | -37 22 11 | 15.9 | 4.4 | 11 | ... | ... | ... | ... | ... | ... | 15.9 | plt |
| LP925-037 | 19 43 51.8 | -32 24 04 | 14.6 | 4.7 | 11 | 13.4 | 3.5 | 12 | ... | ... | ... | 13.4 | ccd |
| LP869-026 | 19 44 53.8 | -23 37 59 | [11.0] | 3.2 | 11 | [10.4] | 1.7 | 12 | 14.7 | 0.2 | 1 | 14.7 | trg |
| GJ0766 | 19 45 45.5 | +27 07 32 | ... | ... | ... | [8.6] | 1.3 | 12 | 10.8 | 0.4 | 2 | 10.8 | trg |
| LTT15769 | 19 45 49.7 | +32 23 13 | ... | ... | ... | 14.9 | 2.3 | 12 | 12.2 | 0.5 | 2 | 12.2 | trg |
| GJ0767 | 19 46 24.3 | +32 00 57 | ... | ... | ... | [12.7] | 2.9 | 8 | 13.7 | 0.2 | 3 | 13.7 | trg |
| LHS3484 | 19 47 04.5 | -71 05 33 | 24.7 | 6.7 | 11 | 24.7 | 3.9 | 12 | ... | ... | ... | 24.7 | ccd |
| SCR1947-7646 | 19 47 14.7 | -76 46 55 | 27.0 | 10.4 | 11 | 22.2 | 3.5 | 12 | ... | ... | ... | 22.2 | ccd |
| WT2180 | 19 48 22.7 | -08 22 52 | 20.6 | 5.9 | 11 | 18.8 | 3.2 | 12 | 18.6 | 0.8 | 1 | 18.6 | trg |
| LHS3489 | 19 50 04.4 | +32 35 22 | ... | ... | ... | [17.7] | 2.7 | 12 | 17.0 | 1.0 | 1 | 17.0 | trg |
| GJ1243 | 19 51 09.3 | +46 29 00 | ... | ... | ... | 12.7 | 2.0 | 12 | 11.9 | 0.3 | 1 | 11.9 | trg |
| 2MA1951-3510 | 19 51 35.9 | -35 10 38 | [13.0] | 3.9 | 11 | [11.0] | 2.0 | 12 | 10.7 | 0.4 | 1 | 10.7 | trg |

| | | | | | | | | | | | | | |
|--------------|------------|-----------|--------|------|-----|--------|-----|-----|------|-----|-----|------|-----|
| 2MA1951-4025 | 19 51 36.0 | -40 25 21 | 23.4 | 6.8 | 11 | ... | ... | ... | ... | ... | ... | 23.4 | plt |
| LP870-054 | 19 52 41.6 | -24 46 02 | 23.8 | 8.2 | 11 | ... | ... | ... | ... | ... | ... | 23.8 | plt |
| GJ1245 | 19 53 54.4 | +44 24 54 | ... | ... | ... | [3.8] | 0.6 | 12 | 4.5 | 0.0 | 2 | 4.5 | trg |
| L160-159 | 19 54 04.1 | -64 38 10 | 22.8 | 6.3 | 11 | ... | ... | ... | ... | ... | ... | 22.8 | plt |
| LP926-055 | 19 54 24.9 | -31 47 60 | 17.2 | 4.8 | 11 | ... | ... | ... | ... | ... | ... | 17.2 | plt |
| LHS3499 | 19 55 52.8 | +51 16 22 | ... | ... | ... | 25.3 | 3.9 | 12 | 24.8 | 1.4 | 2 | 24.8 | trg |
| LEHPM2-4639 | 19 56 06.6 | -54 42 54 | 21.9 | 7.5 | 11 | ... | ... | ... | ... | ... | ... | 21.9 | plt |
| LP754-008 | 19 57 52.0 | -10 53 05 | 18.9 | 5.6 | 11 | 16.0 | 2.5 | 12 | ... | ... | ... | 16.0 | ccd |
| LHS3505 | 19 58 13.5 | +02 01 25 | ... | ... | ... | 17.6 | 2.7 | 12 | 15.8 | 1.0 | 1 | 15.8 | trg |
| SCR1959-3631 | 19 59 21.0 | -36 31 04 | 19.8 | 5.4 | 8 | 25.0 | 4.3 | 10 | ... | ... | ... | 25.0 | ccd |
| SCR1959-6236 | 19 59 33.6 | -62 36 13 | 24.4 | 7.2 | 11 | 21.8 | 3.4 | 12 | ... | ... | ... | 21.8 | ccd |
| DEN2002-5425 | 20 02 13.4 | -54 25 56 | 17.3 | 4.8 | 11 | ... | ... | ... | ... | ... | ... | 17.3 | plt |
| GJ1248 | 20 03 51.0 | +05 59 44 | ... | ... | ... | 22.3 | 3.5 | 12 | 12.6 | 0.6 | 1 | 12.6 | trg |
| LHS3514 | 20 03 58.9 | -08 07 47 | 13.5 | 4.5 | 11 | 14.5 | 2.2 | 12 | ... | ... | ... | 14.5 | ccd |
| GJ0774 | 20 04 04.7 | -65 36 01 | [13.7] | 3.6 | 3 | 14.8 | 2.3 | 12 | 13.1 | 1.1 | 2 | 13.1 | trg |
| LHS3516 | 20 04 06.8 | -31 41 48 | 19.0 | 5.6 | 11 | ... | ... | ... | ... | ... | ... | 19.0 | plt |
| LP870-065 | 20 04 30.8 | -23 42 02 | 11.1 | 3.2 | 11 | 10.7 | 1.7 | 12 | 18.2 | 0.5 | 1 | 18.2 | trg |
| GJ0781.1 | 20 07 45.0 | -31 45 14 | 10.8 | 2.9 | 11 | 12.5 | 2.2 | 12 | 15.6 | 1.1 | 2 | 15.6 | trg |
| LEHPM2-0064 | 20 07 55.2 | -42 05 15 | 13.6 | 4.6 | 11 | 13.0 | 2.0 | 12 | ... | ... | ... | 13.0 | ccd |
| LTT07959 | 20 07 57.6 | -01 32 28 | 24.3 | 6.6 | 11 | ... | ... | ... | ... | ... | ... | 24.3 | plt |
| LHS3525 | 20 08 07.5 | -52 44 25 | 21.0 | 5.6 | 11 | ... | ... | ... | ... | ... | ... | 21.0 | plt |
| GJ1250 | 20 08 17.9 | +33 18 13 | ... | ... | ... | [14.6] | 2.3 | 12 | 21.7 | 2.6 | 1 | 21.7 | trg |
| WT0682 | 20 08 23.8 | -55 21 26 | 23.4 | 11.1 | 11 | ... | ... | ... | ... | ... | ... | 23.4 | plt |
| 2MA2009-0113 | 20 09 18.2 | -01 13 38 | 14.0 | 4.4 | 11 | 10.8 | 1.8 | 12 | 10.4 | 0.2 | 1 | 10.4 | trg |
| L349-063 | 20 09 51.6 | -47 31 34 | 19.6 | 5.5 | 11 | ... | ... | ... | ... | ... | ... | 19.6 | plt |
| LTT07991 | 20 11 06.7 | -02 30 10 | 19.9 | 7.3 | 11 | ... | ... | ... | ... | ... | ... | 19.9 | plt |
| GJ0784 | 20 13 53.4 | -45 09 51 | 4.8 | 1.3 | 11 | 6.0 | 1.0 | 9 | 6.2 | 0.0 | 2 | 6.2 | trg |
| LP754-031 | 20 13 59.5 | -11 14 55 | 24.8 | 6.9 | 11 | ... | ... | ... | ... | ... | ... | 24.8 | plt |
| LHS3534 | 20 14 15.3 | -54 49 15 | 24.1 | 6.4 | 11 | ... | ... | ... | ... | ... | ... | 24.1 | plt |
| L209-071 | 20 15 22.7 | -56 45 54 | 13.5 | 3.9 | 11 | 12.6 | 2.0 | 12 | ... | ... | ... | 12.6 | ccd |
| SCR2016-7531 | 20 16 11.3 | -75 31 05 | 16.2 | 4.8 | 11 | 14.3 | 2.3 | 12 | 15.0 | 0.3 | 1 | 15.0 | trg |
| SCR2018-3635 | 20 18 06.5 | -36 35 28 | 20.7 | 6.9 | 11 | 24.9 | 4.0 | 12 | ... | ... | ... | 24.9 | ccd |
| LP814-065 | 20 18 14.6 | -20 12 48 | 22.2 | 6.0 | 11 | ... | ... | ... | ... | ... | ... | 22.2 | plt |
| LEHPM2-0783 | 20 19 49.8 | -58 16 43 | 10.9 | 3.0 | 11 | 10.6 | 1.7 | 12 | 16.2 | 0.3 | 1 | 16.2 | trg |
| LP927-008 | 20 20 43.6 | -28 06 07 | 22.1 | 6.0 | 11 | 17.7 | 2.8 | 12 | ... | ... | ... | 17.7 | ccd |
| 2MA2022-3653 | 20 22 01.8 | -36 53 02 | 21.3 | 6.6 | 11 | ... | ... | ... | ... | ... | ... | 21.3 | plt |
| GJ0788.1 | 20 22 41.9 | -58 17 09 | 15.0 | 4.3 | 11 | 21.5 | 3.5 | 9 | 19.4 | 0.7 | 2 | 19.4 | trg |
| SCR2025-2259 | 20 25 18.9 | -22 59 06 | 23.5 | 7.0 | 11 | 24.6 | 3.9 | 12 | ... | ... | ... | 24.6 | ccd |
| SCR2025-3545 | 20 25 30.0 | -35 45 46 | 17.8 | 5.1 | 11 | 20.1 | 3.2 | 12 | ... | ... | ... | 20.1 | ccd |
| SCR2025-4207 | 20 25 41.3 | -42 07 31 | 25.4 | 7.8 | 11 | 23.3 | 3.9 | 12 | ... | ... | ... | 23.3 | ccd |
| LP927-017 | 20 25 51.6 | -26 57 19 | 23.4 | 6.7 | 11 | ... | ... | ... | ... | ... | ... | 23.4 | plt |
| GJ1253 | 20 26 05.3 | +58 34 23 | ... | ... | ... | 8.9 | 1.4 | 12 | 9.3 | 0.3 | 1 | 9.3 | trg |
| LEHPM2-0285 | 20 27 07.1 | -44 21 29 | 24.1 | 7.1 | 11 | ... | ... | ... | ... | ... | ... | 24.1 | plt |
| L210-011 | 20 27 37.3 | -54 52 59 | 15.1 | 4.0 | 11 | ... | ... | ... | ... | ... | ... | 15.1 | plt |
| GJ0791 | 20 27 41.7 | -27 44 52 | 12.3 | 3.4 | 11 | 11.1 | 1.8 | 12 | 14.7 | 0.6 | 2 | 14.7 | trg |
| GJ1252 | 20 27 42.1 | -56 27 25 | 20.0 | 5.5 | 11 | 22.3 | 3.5 | 12 | 19.8 | 0.8 | 1 | 19.8 | trg |
| GJ1251 | 20 28 03.7 | -76 40 16 | 16.5 | 4.7 | 11 | 16.4 | 3.0 | 12 | 12.7 | 0.4 | 1 | 12.7 | trg |
| L755-019 | 20 28 43.6 | -11 28 31 | 12.1 | 4.4 | 8 | 12.0 | 1.9 | 12 | 18.8 | 0.6 | 1 | 18.8 | trg |
| L080-175 | 20 29 06.9 | -74 21 12 | 24.5 | 7.0 | 11 | ... | ... | ... | ... | ... | ... | 24.5 | plt |
| GJ0791.2 | 20 29 48.3 | +09 41 20 | ... | ... | ... | 6.8 | 1.1 | 12 | 8.9 | 0.0 | 2 | 8.9 | trg |
| GJ0793 | 20 30 32.0 | +65 26 58 | ... | ... | ... | 7.1 | 1.1 | 12 | 8.0 | 0.1 | 2 | 8.0 | trg |
| GJ0792 | 20 31 25.6 | +38 33 44 | ... | ... | ... | [16.2] | 2.6 | 12 | 14.9 | 0.6 | 1 | 14.9 | trg |
| LEHPM2-1265 | 20 33 01.9 | -49 03 11 | 16.5 | 6.4 | 11 | [13.3] | 2.1 | 12 | 16.7 | 0.3 | 1 | 16.7 | trg |
| LP755-027 | 20 33 32.3 | -09 59 05 | 25.0 | 6.8 | 11 | ... | ... | ... | ... | ... | ... | 25.0 | plt |
| GJ1254 | 20 33 40.3 | +61 45 14 | ... | ... | ... | 10.2 | 1.6 | 12 | 15.9 | 0.7 | 1 | 15.9 | trg |
| LHS3564 | 20 34 43.0 | +03 20 51 | ... | ... | ... | 20.1 | 3.5 | 12 | 21.3 | 0.9 | 2 | 21.3 | trg |
| L162-190 | 20 34 52.9 | -63 47 46 | 21.4 | 5.9 | 11 | ... | ... | ... | ... | ... | ... | 21.4 | plt |
| SCR2036-3607 | 20 36 08.3 | -36 07 12 | ... | ... | ... | 14.2 | 2.2 | 12 | 16.1 | 0.4 | 1 | 16.1 | trg |
| LHS3566 | 20 39 23.8 | -29 26 35 | 16.8 | 5.6 | 11 | 15.5 | 2.6 | 12 | 17.5 | 0.8 | 1 | 17.5 | trg |
| SCR2040-5501 | 20 40 12.4 | -55 01 26 | 22.0 | 6.4 | 11 | 23.2 | 3.6 | 12 | ... | ... | ... | 23.2 | ccd |
| GJ1256 | 20 40 33.9 | +15 29 59 | ... | ... | ... | 8.6 | 1.3 | 12 | 9.8 | 0.2 | 1 | 9.8 | trg |
| L567-074 | 20 42 43.4 | -32 55 18 | 18.8 | 5.3 | 11 | ... | ... | ... | ... | ... | ... | 18.8 | plt |
| LP695-372 | 20 42 45.2 | -05 00 19 | 19.8 | 5.9 | 11 | ... | ... | ... | ... | ... | ... | 19.8 | plt |
| GJ0800 | 20 42 57.2 | -18 55 06 | 12.3 | 3.4 | 11 | 14.6 | 2.5 | 12 | 17.7 | 0.7 | 2 | 17.7 | trg |
| GJ0802 | 20 43 19.3 | +55 20 53 | ... | ... | ... | [11.9] | 2.0 | 12 | 15.9 | 1.4 | 1 | 15.9 | trg |
| G262-026 | 20 43 41.3 | +64 16 54 | ... | ... | ... | 26.0 | 4.1 | 10 | 21.1 | 0.7 | 1 | 21.1 | trg |
| GJ0806 | 20 45 04.1 | +44 29 56 | ... | ... | ... | 12.0 | 1.9 | 12 | 12.2 | 0.2 | 2 | 12.2 | trg |
| GJ0803 | 20 45 09.5 | -31 20 27 | 4.2 | 1.1 | 11 | 5.3 | 0.9 | 12 | 9.9 | 0.1 | 4 | 9.9 | trg |
| LHS3580 | 20 45 45.4 | -29 27 29 | 18.9 | 5.1 | 11 | ... | ... | ... | ... | ... | ... | 18.9 | plt |
| LHS3583 | 20 46 37.1 | -81 43 14 | 10.6 | 2.9 | 11 | 10.8 | 1.7 | 12 | 10.6 | 0.3 | 1 | 10.6 | trg |
| LP756-003 | 20 46 43.6 | -11 48 13 | 17.8 | 5.4 | 11 | 14.6 | 2.3 | 12 | 18.7 | 0.5 | 1 | 18.7 | trg |
| LHS3585 | 20 47 22.6 | -25 47 07 | 23.7 | 6.2 | 11 | ... | ... | ... | ... | ... | ... | 23.7 | plt |
| SCR2049-4012 | 20 49 10.0 | -40 12 06 | ... | ... | ... | 7.9 | 1.3 | 12 | 9.1 | 0.1 | 1 | 9.1 | trg |
| SIP2049-1716 | 20 49 52.7 | -17 16 08 | 22.1 | 8.6 | 11 | ... | ... | ... | ... | ... | ... | 22.1 | plt |
| LEP2050-3424 | 20 50 16.2 | -34 24 43 | 13.9 | 5.4 | 11 | 9.4 | 1.5 | 12 | ... | ... | ... | 9.4 | ccd |
| GJ0808 | 20 51 41.6 | -79 18 40 | 16.7 | 4.6 | 11 | 21.7 | 3.3 | 12 | 17.5 | 0.6 | 2 | 17.5 | trg |
| LP816-060 | 20 52 33.0 | -16 58 29 | 7.3 | 2.7 | 11 | 5.4 | 0.8 | 12 | 5.7 | 0.1 | 1 | 5.7 | trg |
| 2MA2053-0133 | 20 53 09.1 | -01 33 04 | 47.5 | 12.4 | 3 | 18.7 | 3.0 | 12 | 18.2 | 0.7 | 1 | 18.2 | trg |
| LP636-019 | 20 53 14.7 | -02 21 22 | 25.0 | 8.5 | 8 | ... | ... | ... | ... | ... | ... | 25.0 | plt |
| GJ0809 | 20 53 19.7 | +62 09 15 | ... | ... | ... | 6.0 | 1.0 | 12 | 7.1 | 0.0 | 2 | 7.1 | trg |
| LEHPM1-3996 | 20 53 28.0 | -73 08 10 | 21.8 | 5.7 | 11 | ... | ... | ... | ... | ... | ... | 21.8 | plt |
| LHS3593 | 20 53 33.2 | +10 36 37 | ... | ... | ... | 13.5 | 2.1 | 12 | 13.9 | 0.5 | 1 | 13.9 | trg |
| LEHPM2-5514 | 20 54 15.0 | -53 29 56 | 22.3 | 6.2 | 11 | ... | ... | ... | ... | ... | ... | 22.3 | plt |
| GJ0810 | 20 55 37.8 | -14 02 08 | [9.5] | 2.8 | 11 | [10.3] | 1.8 | 12 | 12.9 | 0.1 | 3 | 12.9 | trg |
| LP636-060 | 20 56 04.1 | -02 12 20 | 22.4 | 6.0 | 11 | ... | ... | ... | ... | ... | ... | 22.4 | plt |
| LP872-027 | 20 56 27.2 | -24 00 13 | 19.3 | 5.9 | 11 | 17.3 | 2.7 | 12 | ... | ... | ... | 17.3 | ccd |
| GJ0811.1 | 20 56 46.6 | -10 26 55 | 12.9 | 3.8 | 11 | 11.3 | 1.9 | 12 | 15.9 | 0.7 | 2 | 15.9 | trg |

| | | | | | | | | | | | | | |
|---------------|------------|-----------|--------|------|-----|----------|------|-----|------|-----|-----|--------|-----|
| GJ0813 | 20 57 25.3 | +22 21 45 | ... | ... | ... | 18.6 | 2.9 | 12 | 13.7 | 0.5 | 2 | 13.7 | trg |
| LTT16135 | 20 58 41.9 | +34 16 27 | ... | ... | ... | 21.1 | 3.6 | 12 | 24.1 | 1.3 | 1 | 24.1 | trg |
| GJ0815 | 21 00 05.3 | +40 04 13 | ... | ... | ... | [8.6] | 1.5 | 12 | 15.0 | 0.4 | 2 | 15.0 | trg |
| L424-030 | 21 00 54.9 | -41 31 44 | 18.7 | 6.4 | 11 | ... | ... | ... | ... | ... | ... | 18.7 | plt |
| APM2101-4125 | 21 01 03.8 | -41 14 33 | 20.8 | 6.4 | 11 | ... | ... | ... | ... | ... | ... | 20.8 | plt |
| USN2101+0307 | 21 01 04.8 | +03 07 04 | ... | ... | ... | [13.9] | 2.2 | 12 | 17.3 | 0.6 | 1 | 17.3 | trg |
| WT0766 | 21 01 07.4 | -49 07 25 | 18.0 | 5.3 | 11 | ... | ... | ... | ... | ... | ... | 18.0 | plt |
| GJ0816 | 21 01 58.6 | -06 19 08 | 12.1 | 5.2 | 5 | 10.9 | 1.7 | 12 | 14.4 | 0.5 | 2 | 14.4 | trg |
| LTT08345 | 21 02 40.7 | -18 31 17 | 20.2 | 5.5 | 11 | ... | ... | ... | ... | ... | ... | 20.2 | plt |
| GJ2151 | 21 03 13.9 | -56 57 48 | 13.7 | 3.8 | 11 | 15.1 | 2.3 | 12 | 13.3 | 1.0 | 2 | 13.3 | trg |
| GJ0817 | 21 04 53.4 | -16 57 32 | 18.2 | 5.0 | 11 | 23.2 | 3.6 | 12 | 17.9 | 0.8 | 2 | 17.9 | trg |
| L281-046 | 21 04 53.9 | -52 48 34 | 22.1 | 6.4 | 11 | 24.5 | 3.8 | 12 | ... | ... | ... | 24.5 | ccd |
| LEHPM2-0801 | 21 05 13.8 | -55 03 56 | 17.1 | 4.8 | 11 | 16.7 | 2.9 | 12 | 14.7 | 0.3 | 1 | 14.7 | trg |
| L280-056 | 21 06 26.9 | -51 42 37 | 21.6 | 5.7 | 11 | ... | ... | ... | ... | ... | ... | 21.6 | plt |
| LHS0064 | 21 07 46.5 | +59 41 13 | ... | ... | ... | {[55.8]} | 8.9 | 11 | 23.9 | 1.6 | 1 | 23.9 | trg |
| APM2109-4003 | 21 08 31.3 | -40 03 49 | 24.7 | 6.7 | 11 | 24.5 | 3.8 | 12 | ... | ... | ... | 24.5 | ccd |
| GJ0821 | 21 09 17.4 | -13 18 09 | 13.3 | 3.6 | 11 | 16.8 | 2.6 | 12 | 12.2 | 0.3 | 2 | 12.2 | trg |
| LP873-009 | 21 11 13.7 | -22 48 18 | 18.7 | 6.3 | 11 | 17.5 | 2.8 | 12 | ... | ... | ... | 17.5 | ccd |
| LP757-092 | 21 11 24.2 | -09 40 33 | 20.0 | 6.1 | 11 | 15.4 | 2.5 | 12 | ... | ... | ... | 15.4 | ccd |
| LHS3639 | 21 11 49.6 | -43 36 49 | 19.4 | 5.4 | 11 | 19.4 | 3.0 | 12 | 15.8 | 0.9 | 2 | 15.8 | trg |
| WT2203 | 21 14 14.0 | -07 02 50 | 19.5 | 5.5 | 11 | ... | ... | ... | ... | ... | ... | 19.5 | plt |
| LTT16240 | 21 16 05.8 | +29 51 51 | ... | ... | ... | [11.7] | 1.8 | 12 | 19.4 | 0.8 | 2 | 19.4 | trg |
| LP397-010 | 21 16 06.0 | +22 38 47 | ... | ... | ... | 19.3 | 3.2 | 12 | 20.7 | 0.5 | 1 | 20.7 | trg |
| GJ0825 | 21 17 15.3 | -38 52 03 | 2.7 | 0.7 | 11 | 3.7 | 0.6 | 8 | 4.0 | 0.0 | 2 | 4.0 | trg |
| L117-123 | 21 20 09.8 | -67 39 06 | 11.4 | 3.1 | 11 | 15.6 | 2.6 | 12 | 20.8 | 0.9 | 3 | 20.8 | trg |
| SCR2122-4314 | 21 22 16.9 | -43 14 05 | 17.0 | 4.7 | 11 | 14.9 | 2.3 | 12 | 20.5 | 0.7 | 1 | 20.5 | trg |
| GJ0826.2 | 21 24 18.4 | -46 41 35 | 22.6 | 6.1 | 11 | 24.3 | 3.8 | 12 | 24.5 | 2.7 | 2 | 24.5 | trg |
| LSPM2124+4003 | 21 24 32.0 | +40 04 00 | ... | ... | ... | 12.3 | 1.9 | 12 | 15.0 | 0.3 | 1 | 15.0 | trg |
| APM2127-3844 | 21 27 04.6 | -38 44 51 | 22.3 | 6.2 | 11 | 21.4 | 3.5 | 12 | 20.3 | 0.6 | 1 | 20.3 | trg |
| GJ0828.2 | 21 27 16.9 | -06 50 39 | 17.7 | 5.0 | 7 | 19.7 | 3.2 | 12 | 16.4 | 0.6 | 2 | 16.4 | trg |
| HB2124-4228 | 21 27 26.1 | -42 15 18 | 29.3 | 10.6 | 11 | 27.1 | 4.2 | 7 | 23.6 | 2.0 | 1 | 23.6 | trg |
| LHS3677 | 21 27 46.6 | +07 17 16 | ... | ... | ... | ... | ... | ... | 24.6 | 3.6 | 1 | 24.6 | trg |
| LTT08524 | 21 27 58.5 | -00 39 50 | 24.1 | 6.7 | 11 | ... | ... | ... | ... | ... | ... | 24.1 | plt |
| L714-046 | 21 28 18.3 | -22 18 32 | 18.7 | 5.0 | 11 | 17.0 | 2.7 | 12 | 19.3 | 0.6 | 1 | 19.3 | trg |
| LP817-050 | 21 28 41.1 | -14 31 04 | 24.9 | 6.8 | 11 | ... | ... | ... | ... | ... | ... | 24.9 | plt |
| LP817-054 | 21 29 23.4 | -18 55 08 | 22.6 | 7.4 | 11 | ... | ... | ... | ... | ... | ... | 22.6 | plt |
| GJ0829 | 21 29 36.8 | +17 38 35 | ... | ... | ... | [5.0] | 0.8 | 12 | 6.7 | 0.1 | 2 | 6.7 | trg |
| SCR2130-7710 | 21 30 07.0 | -77 10 38 | 22.0 | 9.1 | 11 | 18.3 | 2.9 | 12 | 21.0 | 0.6 | 1 | 21.0 | trg |
| LHS0510 | 21 30 47.7 | -40 42 30 | 15.7 | 4.3 | 11 | 15.8 | 2.8 | 12 | 12.0 | 0.4 | 1 | 12.0 | trg |
| GJ0831 | 21 31 18.6 | -09 47 26 | [6.2] | 1.9 | 11 | [4.8] | 0.8 | 12 | 8.0 | 0.1 | 2 | 8.0 | trg |
| LP698-002 | 21 32 29.8 | -05 11 59 | 22.9 | 7.5 | 11 | ... | ... | ... | ... | ... | ... | 22.9 | plt |
| GJ0832 | 21 33 34.0 | -49 00 33 | 5.2 | 1.5 | 11 | 5.1 | 0.8 | 12 | 5.0 | 0.0 | 2 | 5.0 | trg |
| LHS3689 | 21 33 48.9 | -06 51 10 | 21.7 | 7.0 | 11 | ... | ... | ... | ... | ... | ... | 21.7 | plt |
| LHS3686 | 21 33 50.2 | +01 46 15 | ... | ... | ... | 31.4 | 13.4 | 11 | 14.6 | 1.2 | 1 | 14.6 | trg |
| L164-131 | 21 34 03.8 | -63 11 07 | 23.6 | 6.3 | 11 | ... | ... | ... | ... | ... | ... | 23.6 | plt |
| WT0792 | 21 34 22.3 | -43 16 11 | 17.2 | 5.2 | 11 | 13.2 | 2.1 | 12 | ... | ... | ... | 13.2 | ccd |
| LHS3693 | 21 34 50.3 | +51 32 13 | ... | ... | ... | 14.1 | 2.2 | 12 | 17.9 | 0.8 | 2 | 17.9 | trg |
| L164-124 | 21 34 52.2 | -63 01 08 | 22.0 | 6.6 | 11 | ... | ... | ... | ... | ... | ... | 22.0 | plt |
| SIP2135-3855 | 21 35 16.2 | -38 55 48 | 25.7 | 7.6 | 11 | 23.3 | 3.6 | 12 | ... | ... | ... | 23.3 | ccd |
| SCR2135-5325 | 21 35 39.6 | -53 25 32 | 20.8 | 6.7 | 11 | 20.7 | 3.6 | 12 | ... | ... | ... | 20.7 | ccd |
| WT0795 | 21 36 25.3 | -44 01 00 | 15.5 | 4.4 | 11 | 13.1 | 2.1 | 12 | 14.4 | 0.1 | 1 | 14.4 | trg |
| HIP106803 | 21 37 55.7 | -63 42 43 | 11.5 | 3.3 | 11 | 14.8 | 2.5 | 12 | 21.3 | 1.2 | 1 | 21.3 | trg |
| GJ0835 | 21 38 00.3 | +27 43 25 | ... | ... | ... | 10.8 | 1.8 | 12 | 12.8 | 0.3 | 1 | 12.8 | trg |
| LHS0512 | 21 38 43.7 | -33 39 55 | 12.7 | 3.9 | 11 | 12.4 | 1.9 | 12 | 12.2 | 0.3 | 1 | 12.2 | trg |
| GJ0836 | 21 39 00.9 | -24 09 29 | 17.4 | 4.8 | 11 | 16.2 | 2.5 | 12 | ... | ... | ... | 16.2 | ccd |
| LTT16329 | 21 39 54.3 | +27 36 43 | ... | ... | ... | [17.9] | 2.8 | 12 | 24.4 | 1.8 | 1 | 24.4 | trg |
| L081-009 | 21 41 03.8 | -69 45 35 | 22.0 | 5.8 | 11 | ... | ... | ... | ... | ... | ... | 22.0 | plt |
| LTT18537 | 21 44 12.9 | +06 38 29 | ... | ... | ... | 13.8 | 2.3 | 12 | 20.8 | 1.4 | 2 | 20.8 | trg |
| LTT08678 | 21 45 00.8 | -05 47 13 | 24.2 | 6.8 | 11 | ... | ... | ... | ... | ... | ... | 24.2 | plt |
| LP874-061 | 21 45 26.7 | -21 33 58 | 23.3 | 6.7 | 11 | ... | ... | ... | ... | ... | ... | 23.3 | plt |
| L002-077 | 21 46 40.4 | -85 43 05 | 18.2 | 5.2 | 11 | 11.4 | 1.8 | 12 | 15.8 | 0.6 | 1 | 15.8 | trg |
| GJ1263 | 21 46 42.7 | -00 10 24 | 11.0 | 3.0 | 11 | 10.8 | 1.7 | 12 | 12.0 | 0.5 | 1 | 12.0 | trg |
| LP874-062 | 21 46 45.5 | -21 17 47 | 15.9 | 4.3 | 11 | 15.0 | 2.3 | 12 | ... | ... | ... | 15.0 | ccd |
| LTT16369 | 21 46 56.0 | +46 38 06 | ... | ... | ... | 14.7 | 2.4 | 12 | 16.5 | 0.2 | 1 | 16.5 | trg |
| LP698-042 | 21 47 17.5 | -04 44 41 | 18.7 | 6.9 | 11 | ... | ... | ... | ... | ... | ... | 18.7 | plt |
| LHS3711 | 21 47 53.7 | +50 15 16 | ... | ... | ... | 21.8 | 3.7 | 12 | 21.4 | 2.8 | 1 | 21.4 | trg |
| LHS3713 | 21 48 14.3 | +27 54 56 | ... | ... | ... | 19.9 | 3.1 | 12 | 18.3 | 1.5 | 1 | 18.3 | trg |
| LP818-034 | 21 48 53.0 | -19 47 27 | 19.0 | 5.6 | 11 | 17.4 | 2.7 | 12 | ... | ... | ... | 17.4 | ccd |
| GJ1264 | 21 49 05.9 | -72 06 08 | [7.3] | 2.1 | 11 | [9.4] | 1.6 | 12 | 16.3 | 0.4 | 1 | 16.3 | trg |
| L427-034 | 21 49 11.4 | -41 33 30 | [12.5] | 3.4 | 11 | [11.4] | 2.0 | 12 | ... | ... | ... | [11.4] | ccd |
| LHS3719 | 21 49 25.9 | -63 06 52 | 17.2 | 4.8 | 11 | 17.2 | 2.7 | 12 | 16.6 | 0.4 | 1 | 16.6 | trg |
| WT0818 | 21 49 44.8 | -41 38 33 | 19.8 | 5.6 | 11 | 19.1 | 3.0 | 12 | ... | ... | ... | 19.1 | ccd |
| LP638-050 | 21 51 27.0 | -01 27 14 | 22.2 | 6.4 | 11 | ... | ... | ... | ... | ... | ... | 22.2 | plt |
| SCR2154-4754 | 21 54 02.5 | -47 54 02 | 26.9 | 7.7 | 11 | 24.0 | 3.8 | 12 | ... | ... | ... | 24.0 | ccd |
| LP818-054 | 21 55 02.2 | -20 14 27 | 23.4 | 6.4 | 11 | ... | ... | ... | ... | ... | ... | 23.4 | plt |
| LP983-034 | 21 55 48.4 | -33 13 15 | 15.5 | 4.1 | 11 | ... | ... | ... | ... | ... | ... | 15.5 | plt |
| LP758-062 | 21 56 19.8 | -10 20 17 | 18.7 | 5.3 | 11 | 18.0 | 3.0 | 12 | ... | ... | ... | 18.0 | ccd |
| LHS0516 | 21 56 55.3 | -01 54 09 | 20.7 | 5.9 | 11 | 16.3 | 2.7 | 12 | 13.4 | 0.6 | 1 | 13.4 | trg |
| LP759-006 | 21 57 12.7 | -09 03 27 | 16.1 | 5.1 | 11 | 15.3 | 2.4 | 12 | ... | ... | ... | 15.3 | ccd |
| LTT16412 | 21 57 26.2 | +08 08 13 | ... | ... | ... | 14.7 | 2.4 | 12 | 21.2 | 0.7 | 3 | 21.2 | trg |
| LHS3735 | 21 57 39.3 | -09 28 13 | 22.2 | 6.9 | 11 | 25.0 | 3.9 | 12 | ... | ... | ... | 25.0 | ccd |
| GJ0842.2 | 21 58 24.5 | +75 35 20 | ... | ... | ... | 16.5 | 2.9 | 12 | 20.6 | 0.5 | 2 | 20.6 | trg |
| LSPM2158+6117 | 21 58 35.0 | +61 17 06 | ... | ... | ... | 18.0 | 3.3 | 12 | 16.9 | 0.6 | 1 | 16.9 | trg |
| LHS3739 | 21 58 50.2 | -32 28 18 | 31.5 | 10.7 | 11 | 27.6 | 4.5 | 12 | 19.6 | 0.3 | 2 | 19.6 | trg |
| GJ0842 | 21 59 34.7 | -59 45 10 | 8.4 | 2.3 | 11 | 9.9 | 1.6 | 12 | 12.0 | 0.3 | 2 | 12.0 | trg |
| G188-038 | 22 01 13.1 | +28 18 24 | ... | ... | ... | 7.3 | 1.1 | 12 | 9.0 | 0.1 | 2 | 9.0 | trg |
| GJ0844 | 22 01 49.0 | +16 28 02 | ... | ... | ... | [8.9] | 1.4 | 12 | 16.1 | 0.6 | 2 | 16.1 | trg |

| | | | | | | | | | | | | | |
|--------------|------------|-----------|--------|------|-----|--------|-----|-----|------|-----|-----|--------|-----|
| GJ0843 | 22 02 00.8 | -19 28 59 | 13.4 | 3.6 | 11 | 11.4 | 1.8 | 12 | ... | ... | ... | 11.4 | ccd |
| GJ0846 | 22 02 10.2 | +01 24 00 | ... | ... | ... | 8.8 | 1.4 | 11 | 10.2 | 0.2 | 2 | 10.2 | trg |
| LP759-017 | 22 02 11.3 | -11 09 46 | 24.1 | 8.7 | 11 | ... | ... | ... | ... | ... | ... | 24.1 | plt |
| LHS3746 | 22 02 29.4 | -37 04 51 | 9.7 | 2.9 | 11 | 8.1 | 1.3 | 12 | 7.5 | 0.1 | 1 | 7.5 | trg |
| LT118559 | 22 02 31.3 | -00 17 10 | 24.4 | 7.7 | 11 | ... | ... | ... | ... | ... | ... | 24.4 | plt |
| LP875-009 | 22 03 20.0 | -25 21 52 | 22.7 | 6.2 | 11 | ... | ... | ... | ... | ... | ... | 22.7 | plt |
| LHS3748 | 22 03 27.1 | -50 38 38 | 16.0 | 4.3 | 11 | 21.2 | 3.3 | 12 | 19.9 | 1.7 | 1 | 19.9 | trg |
| LP759-025 | 22 05 35.7 | -11 04 29 | 22.3 | 6.7 | 11 | ... | ... | ... | ... | ... | ... | 22.3 | plt |
| LT108848 | 22 05 51.3 | -11 54 51 | 11.1 | 3.1 | 11 | 14.8 | 2.6 | 10 | 22.2 | 1.3 | 1 | 22.2 | trg |
| LHS3756 | 22 05 54.4 | -38 16 06 | 21.9 | 6.0 | 11 | ... | ... | ... | ... | ... | ... | 21.9 | plt |
| LP699-032 | 22 06 09.6 | -07 23 36 | 17.0 | 4.9 | 11 | ... | ... | ... | ... | ... | ... | 17.0 | plt |
| WT0870 | 22 06 40.7 | -44 58 07 | 17.2 | 5.4 | 11 | 16.0 | 2.5 | 12 | 17.7 | 0.4 | 1 | 17.7 | trg |
| L283-001 | 22 06 57.2 | -49 49 42 | 18.4 | 5.0 | 11 | ... | ... | ... | ... | ... | ... | 18.4 | plt |
| LP983-102 | 22 07 53.9 | -37 04 24 | 23.0 | 6.1 | 11 | ... | ... | ... | ... | ... | ... | 23.0 | plt |
| LP1032-066 | 22 08 16.2 | -42 42 59 | 19.9 | 5.6 | 11 | 22.7 | 3.5 | 12 | ... | ... | ... | 22.7 | ccd |
| LT108875 | 22 08 32.4 | -08 24 52 | 19.3 | 5.5 | 11 | ... | ... | ... | ... | ... | ... | 19.3 | plt |
| L024-098 | 22 08 38.6 | -83 03 29 | 21.9 | 6.8 | 11 | ... | ... | ... | ... | ... | ... | 21.9 | plt |
| GJ0849 | 22 09 40.3 | -04 38 27 | 5.2 | 1.4 | 11 | 5.7 | 0.9 | 12 | 9.0 | 0.1 | 2 | 9.0 | trg |
| G214-012 | 22 09 45.5 | +41 02 21 | ... | ... | ... | 16.6 | 2.6 | 12 | 22.7 | 1.6 | 1 | 22.7 | trg |
| LEHPM1-4416 | 22 10 13.2 | -71 46 07 | 18.3 | 5.3 | 11 | 19.4 | 3.2 | 12 | ... | ... | ... | 19.4 | ccd |
| LT108900 | 22 11 13.5 | -02 32 37 | 16.0 | 5.8 | 11 | ... | ... | ... | ... | ... | ... | 16.0 | plt |
| G214-014 | 22 11 16.9 | +41 00 54 | ... | ... | ... | 25.0 | 4.1 | 10 | 23.1 | 1.2 | 2 | 23.1 | trg |
| GJ0851 | 22 11 30.0 | +18 25 34 | ... | ... | ... | 7.9 | 1.4 | 12 | 11.7 | 0.2 | 2 | 11.7 | trg |
| LT108905 | 22 11 56.9 | -07 42 57 | 22.3 | 6.3 | 11 | ... | ... | ... | ... | ... | ... | 22.3 | plt |
| LHS3773 | 22 12 35.9 | +08 33 11 | ... | ... | ... | 15.9 | 2.5 | 12 | 16.0 | 1.0 | 2 | 16.0 | trg |
| LT108914 | 22 13 28.8 | -14 44 54 | 20.2 | 6.2 | 11 | 21.9 | 3.5 | 12 | ... | ... | ... | 21.9 | ccd |
| GJ1265 | 22 13 42.9 | -17 41 09 | 13.6 | 4.5 | 11 | 11.8 | 1.8 | 12 | 10.4 | 0.4 | 1 | 10.4 | trg |
| WT0887 | 22 13 50.5 | -63 42 10 | 16.3 | 5.6 | 11 | ... | ... | ... | ... | ... | ... | 16.3 | plt |
| LP875-068 | 22 14 38.4 | -21 41 53 | 14.2 | 4.0 | 10 | 18.1 | 3.1 | 10 | ... | ... | ... | 18.1 | ccd |
| GJ1266 | 22 16 20.2 | +70 56 40 | ... | ... | ... | 26.0 | 4.2 | 12 | 22.1 | 1.1 | 1 | 22.1 | trg |
| LP984-001 | 22 17 19.0 | -34 44 03 | 15.0 | 4.6 | 11 | 12.4 | 1.9 | 12 | ... | ... | ... | 12.4 | ccd |
| GJ0852 | 22 17 19.2 | -08 48 13 | [23.4] | 7.7 | 8 | 13.5 | 2.3 | 12 | 10.0 | 0.3 | 1 | 10.0 | trg |
| LHS3789 | 22 17 53.3 | -36 11 20 | 22.6 | 6.1 | 11 | ... | ... | ... | ... | ... | ... | 22.6 | plt |
| LHS3793 | 22 19 23.7 | -28 23 21 | 23.3 | 6.6 | 11 | ... | ... | ... | ... | ... | ... | 23.3 | plt |
| LP931-042 | 22 20 24.7 | -27 05 52 | 24.7 | 8.7 | 11 | ... | ... | ... | ... | ... | ... | 24.7 | plt |
| L119-033 | 22 21 42.9 | -65 31 33 | ... | ... | ... | 18.4 | 2.8 | 12 | 18.6 | 1.1 | 1 | 18.6 | trg |
| LHS5384 | 22 21 49.7 | -42 09 03 | 21.9 | 6.1 | 11 | 21.6 | 3.3 | 12 | ... | ... | ... | 21.6 | ccd |
| LP931-048 | 22 21 53.4 | -31 31 23 | 20.0 | 5.4 | 11 | ... | ... | ... | ... | ... | ... | 20.0 | plt |
| LEHPM1-4635 | 22 22 43.5 | -72 15 44 | 22.9 | 6.6 | 11 | ... | ... | ... | ... | ... | ... | 22.9 | plt |
| LHS3799 | 22 23 07.0 | -17 36 26 | 8.5 | 3.0 | 11 | 6.1 | 0.9 | 12 | 7.3 | 0.1 | 2 | 7.3 | trg |
| LP931-053 | 22 23 14.0 | -27 23 58 | 18.4 | 6.1 | 11 | ... | ... | ... | ... | ... | ... | 18.4 | plt |
| GJ0856 | 22 23 29.1 | +32 27 33 | ... | ... | ... | [7.3] | 1.1 | 12 | 15.5 | 1.6 | 1 | 15.5 | trg |
| GJ0855 | 22 23 33.3 | -57 13 14 | 13.2 | 3.6 | 11 | 15.4 | 2.5 | 12 | 19.1 | 0.8 | 2 | 19.1 | trg |
| LP931-057 | 22 23 46.3 | -28 06 50 | [22.5] | 6.1 | 11 | ... | ... | ... | ... | ... | ... | [22.5] | plt |
| GJ1268 | 22 24 55.9 | +52 00 19 | ... | ... | ... | ... | ... | ... | 16.0 | 0.9 | 1 | 16.0 | trg |
| LP1033-011 | 22 24 56.7 | -38 31 10 | 24.3 | 6.8 | 11 | ... | ... | ... | ... | ... | ... | 24.3 | plt |
| LHS3804 | 22 25 05.1 | -47 52 47 | 12.9 | 3.7 | 11 | 10.9 | 1.8 | 12 | ... | ... | ... | 10.9 | ccd |
| LEHPM1-4728 | 22 27 27.1 | -35 00 51 | 23.5 | 6.2 | 11 | ... | ... | ... | ... | ... | ... | 23.5 | plt |
| GJ0860 | 22 27 59.4 | +57 41 45 | ... | ... | ... | [3.9] | 0.7 | 12 | 4.0 | 0.0 | 2 | 4.0 | trg |
| LP876-026 | 22 28 23.4 | -25 54 08 | [14.1] | 3.8 | 11 | [15.1] | 3.6 | 12 | 20.4 | 2.7 | 1 | 20.4 | trg |
| LT116590 | 22 28 45.9 | +18 55 54 | ... | ... | ... | 19.4 | 3.4 | 10 | 22.0 | 0.8 | 1 | 22.0 | trg |
| LHS0523 | 22 28 54.4 | -13 25 19 | 14.8 | 4.4 | 11 | 14.3 | 4.4 | 12 | 11.3 | 0.6 | 1 | 11.3 | trg |
| LP640-074 | 22 29 05.8 | +01 39 48 | ... | ... | ... | 17.9 | 2.9 | 10 | 21.3 | 0.9 | 1 | 21.3 | trg |
| GJ1270 | 22 29 49.0 | +41 28 49 | ... | ... | ... | 13.2 | 2.1 | 12 | 13.8 | 0.6 | 1 | 13.8 | trg |
| LEHPM1-4771 | 22 30 09.5 | -53 44 56 | 12.3 | 3.6 | 11 | 12.0 | 1.8 | 12 | ... | ... | ... | 12.0 | ccd |
| SCR2230-5244 | 22 30 28.0 | -52 44 29 | 26.4 | 11.1 | 11 | 24.8 | 4.2 | 12 | ... | ... | ... | 24.8 | ccd |
| GJ0863 | 22 33 02.2 | +09 22 40 | ... | ... | ... | 12.8 | 2.0 | 12 | 13.3 | 0.4 | 2 | 13.3 | trg |
| LP876-034 | 22 34 00.5 | -25 14 33 | 10.0 | 2.7 | 11 | 13.0 | 2.0 | 12 | 16.1 | 0.8 | 1 | 16.1 | trg |
| L166-044 | 22 34 04.6 | -61 07 41 | 18.9 | 5.5 | 11 | ... | ... | ... | ... | ... | ... | 18.9 | plt |
| LHS0526 | 22 34 53.7 | -01 04 58 | 27.6 | 12.8 | 11 | 24.5 | 3.9 | 12 | 23.5 | 2.1 | 1 | 23.5 | trg |
| LT109084 | 22 35 04.9 | -42 17 48 | 14.9 | 4.1 | 11 | 15.1 | 2.4 | 12 | ... | ... | ... | 15.1 | ccd |
| LP460-044 | 22 35 49.0 | +18 40 30 | ... | ... | ... | 21.4 | 3.3 | 12 | 23.0 | 1.9 | 1 | 23.0 | trg |
| GJ0864 | 22 36 09.7 | -00 50 30 | 11.2 | 3.1 | 4 | 12.9 | 2.2 | 12 | 17.0 | 0.5 | 2 | 17.0 | trg |
| L645-074 | 22 38 24.7 | -29 21 14 | 12.6 | 3.8 | 11 | 11.5 | 1.8 | 12 | 11.6 | 0.1 | 1 | 11.6 | trg |
| GJ0865 | 22 38 29.8 | -65 22 42 | [8.1] | 2.5 | 11 | [6.9] | 1.1 | 12 | 12.8 | 0.9 | 2 | 12.8 | trg |
| GJ0866 | 22 38 33.6 | -15 17 59 | [3.5] | 2.2 | 11 | [1.9] | 0.3 | 12 | 3.5 | 0.1 | 1 | 3.5 | trg |
| GJ0867 | 22 38 45.6 | -20 37 16 | 4.4 | 1.1 | 3 | 5.4 | 0.9 | 12 | 8.7 | 0.1 | 2 | 8.7 | trg |
| L083-030 | 22 40 42.9 | -71 31 11 | 17.9 | 5.4 | 11 | ... | ... | ... | ... | ... | ... | 17.9 | plt |
| LHS3844 | 22 41 58.1 | -69 10 08 | 15.5 | 4.5 | 11 | ... | ... | ... | ... | ... | ... | 15.5 | plt |
| LEHPM1-5031 | 22 41 59.4 | -75 00 33 | 17.0 | 5.3 | 11 | ... | ... | ... | ... | ... | ... | 17.0 | plt |
| L166-003 | 22 42 00.1 | -59 15 13 | 19.3 | 5.7 | 11 | ... | ... | ... | ... | ... | ... | 19.3 | plt |
| GJ1271 | 22 42 38.7 | +17 40 09 | ... | ... | ... | 13.1 | 2.3 | 12 | 18.8 | 0.6 | 3 | 18.8 | trg |
| LP820-060 | 22 43 02.0 | -20 07 18 | 20.8 | 6.2 | 11 | ... | ... | ... | ... | ... | ... | 20.8 | plt |
| LP876-008 | 22 43 23.1 | -24 24 52 | 19.5 | 5.6 | 11 | ... | ... | ... | ... | ... | ... | 19.5 | plt |
| GJ0871.1 | 22 44 58.0 | -33 15 02 | 11.1 | 3.7 | 11 | 7.9 | 1.3 | 12 | 22.8 | 1.2 | 2 | 22.8 | trg |
| G156-046 | 22 45 06.1 | -12 23 43 | 23.4 | 8.0 | 11 | ... | ... | ... | ... | ... | ... | 23.4 | plt |
| LP821-016 | 22 46 23.8 | -16 56 53 | 25.0 | 7.4 | 11 | 24.3 | 3.8 | 12 | ... | ... | ... | 24.3 | ccd |
| LHS3850 | 22 46 26.4 | -06 39 26 | 25.9 | 10.7 | 11 | 18.0 | 2.8 | 12 | 18.8 | 1.6 | 1 | 18.8 | trg |
| GJ0873 | 22 46 49.7 | +44 20 02 | ... | ... | ... | 4.5 | 0.7 | 12 | 5.1 | 0.0 | 3 | 5.1 | trg |
| GJ0874 | 22 48 17.4 | -36 47 23 | 20.0 | 5.6 | 11 | 19.8 | 3.1 | 12 | ... | ... | ... | 19.8 | ccd |
| LP932-081 | 22 48 38.4 | -31 08 41 | 14.5 | 3.8 | 11 | 13.3 | 2.1 | 12 | ... | ... | ... | 13.3 | ccd |
| LP932-083 | 22 49 08.4 | -28 51 20 | 16.9 | 4.6 | 11 | 13.7 | 2.1 | 12 | ... | ... | ... | 13.7 | ccd |
| GJ0875 | 22 50 19.4 | -07 05 24 | ... | ... | ... | 13.1 | 2.2 | 10 | 14.1 | 0.4 | 2 | 14.1 | trg |
| GJ1274 | 22 50 37.7 | +34 51 21 | ... | ... | ... | 19.1 | 2.9 | 12 | 18.0 | 0.8 | 2 | 18.0 | trg |
| LP985-032 | 22 51 23.7 | -34 19 36 | 20.7 | 6.0 | 7 | 21.7 | 3.4 | 12 | ... | ... | ... | 21.7 | ccd |
| GJ0875.1 | 22 51 53.5 | +31 45 15 | ... | ... | ... | 10.3 | 1.6 | 12 | 14.8 | 0.5 | 2 | 14.8 | trg |
| LP821-027 | 22 52 05.2 | -15 32 51 | 26.8 | 10.4 | 11 | 18.0 | 2.8 | 12 | ... | ... | ... | 18.0 | ccd |

| | | | | | | | | | | | | | |
|--------------|------------|-----------|--------|------|-----|--------|-----|-----|------|-----|-----|--------|-----|
| SCR2252-6905 | 22 52 19.2 | -69 05 48 | 26.0 | 7.5 | 11 | 24.3 | 3.8 | 12 | ... | ... | ... | 24.3 | ccd |
| SCR2252-2220 | 22 52 25.8 | -22 20 07 | 21.3 | 5.7 | 11 | 24.2 | 3.7 | 12 | ... | ... | ... | 24.2 | ccd |
| LHS5394 | 22 52 48.1 | -28 47 43 | 16.9 | 5.3 | 11 | 19.0 | 3.0 | 12 | 19.6 | 1.1 | 1 | 19.6 | trg |
| GJ0876 | 22 53 16.8 | -14 15 49 | 3.8 | 1.2 | 11 | 3.5 | 0.5 | 12 | 4.7 | 0.0 | 3 | 4.7 | trg |
| SCR2253-1238 | 22 53 42.8 | -12 38 43 | 23.4 | 6.6 | 11 | 22.9 | 3.8 | 12 | ... | ... | ... | 22.9 | ccd |
| LEHPM1-5263 | 22 53 50.9 | -71 28 07 | 19.9 | 6.0 | 11 | ... | ... | ... | ... | ... | ... | 19.9 | plt |
| GJ0878 | 22 54 21.5 | +60 59 44 | ... | ... | ... | 16.4 | 2.6 | 12 | 15.2 | 1.4 | 1 | 15.2 | trg |
| LHS3872 | 22 54 46.5 | -05 28 26 | 24.9 | 6.8 | 11 | 20.5 | 3.2 | 12 | 23.6 | 2.5 | 2 | 23.6 | trg |
| HIP113201 | 22 55 27.2 | -52 18 10 | 16.9 | 4.6 | 11 | 20.2 | 3.3 | 12 | 24.8 | 1.8 | 1 | 24.8 | trg |
| GJ0877 | 22 55 45.5 | -75 27 31 | 6.2 | 1.7 | 11 | 7.1 | 1.1 | 12 | 8.6 | 0.1 | 2 | 8.6 | trg |
| GJ1277 | 22 56 24.7 | -60 03 49 | 9.1 | 2.6 | 11 | 9.0 | 1.4 | 12 | 10.3 | 0.1 | 1 | 10.3 | trg |
| LP761-006 | 22 56 26.2 | -11 09 39 | 23.0 | 8.7 | 11 | ... | ... | ... | ... | ... | ... | 23.0 | plt |
| GJ0880 | 22 56 34.8 | +16 33 12 | ... | ... | ... | 5.2 | 0.8 | 12 | 6.8 | 0.0 | 2 | 6.8 | trg |
| L718-070 | 23 00 33.4 | -23 57 10 | 15.7 | 4.7 | 11 | 19.4 | 3.1 | 12 | 20.6 | 1.0 | 2 | 20.6 | trg |
| LP877-045 | 23 00 36.7 | -26 04 56 | 23.8 | 7.3 | 11 | ... | ... | ... | ... | ... | ... | 23.8 | plt |
| LP933-037 | 23 01 23.9 | -26 49 47 | 24.3 | 7.2 | 11 | ... | ... | ... | ... | ... | ... | 24.3 | plt |
| L215-016 | 23 01 32.5 | -55 30 18 | 15.1 | 4.5 | 11 | 21.5 | 3.3 | 12 | ... | ... | ... | 21.5 | ccd |
| LP701-056 | 23 01 46.2 | -06 14 23 | 24.2 | 6.9 | 11 | ... | ... | ... | ... | ... | ... | 24.2 | plt |
| L286-074 | 23 01 49.5 | -53 17 08 | 17.9 | 5.7 | 11 | ... | ... | ... | ... | ... | ... | 17.9 | plt |
| HIP113850 | 23 03 20.8 | -49 43 34 | ... | ... | ... | 17.1 | 2.8 | 12 | 20.3 | 0.8 | 1 | 20.3 | trg |
| SCR2303-4650 | 23 03 35.6 | -46 50 47 | ... | ... | ... | 11.9 | 2.0 | 12 | 15.8 | 0.3 | 1 | 15.8 | trg |
| LP821-054 | 23 03 59.7 | -16 12 07 | 22.8 | 6.3 | 11 | 22.3 | 3.5 | 12 | ... | ... | ... | 22.3 | ccd |
| GJ0887 | 23 05 52.1 | -35 51 11 | [2.6] | 1.0 | 11 | [3.7] | 0.7 | 12 | 3.3 | 0.0 | 2 | 3.3 | trg |
| HIP114066 | 23 06 04.8 | +63 55 34 | ... | ... | ... | 18.1 | 3.7 | 12 | 24.5 | 1.0 | 1 | 24.5 | trg |
| L1007-017 | 23 06 27.8 | -00 29 38 | 23.2 | 6.4 | 11 | ... | ... | ... | ... | ... | ... | 23.2 | plt |
| 2MA2306-0502 | 23 06 29.4 | -05 02 29 | 12.2 | 3.6 | 11 | 11.6 | 1.8 | 11 | 12.1 | 0.4 | 1 | 12.1 | trg |
| SSS2307-5009 | 23 06 58.8 | -50 08 59 | 21.7 | 11.3 | 11 | 27.6 | 6.5 | 12 | 21.5 | 0.7 | 1 | 21.5 | trg |
| SCR2307-8452 | 23 07 19.7 | -84 52 04 | 20.6 | 5.9 | 11 | 20.0 | 3.3 | 12 | 15.2 | 0.5 | 1 | 15.2 | trg |
| LHS0535 | 23 07 43.5 | +68 40 06 | ... | ... | ... | 18.6 | 3.1 | 12 | 13.8 | 0.4 | 2 | 13.8 | trg |
| LHS3898 | 23 07 46.8 | -27 54 23 | 18.9 | 5.6 | 11 | ... | ... | ... | ... | ... | ... | 18.9 | plt |
| GJ0889.1 | 23 08 06.9 | +03 19 44 | ... | ... | ... | 19.4 | 3.1 | 11 | 15.8 | 0.5 | 2 | 15.8 | trg |
| GJ0890 | 23 08 19.5 | -15 24 35 | ... | ... | ... | 21.3 | 3.5 | 10 | 23.4 | 1.0 | 3 | 23.4 | trg |
| LTT09381 | 23 09 39.3 | -01 58 24 | 17.2 | 4.9 | 11 | ... | ... | ... | ... | ... | ... | 17.2 | plt |
| GJ1279 | 23 09 40.9 | -67 43 58 | 7.5 | 2.1 | 8 | ... | ... | ... | 15.0 | 0.2 | 1 | 15.0 | trg |
| LTT09388 | 23 10 00.3 | -21 11 43 | 17.2 | 4.6 | 11 | 17.1 | 2.7 | 12 | ... | ... | ... | 17.1 | ccd |
| L120-181 | 23 10 20.7 | -69 12 22 | 21.3 | 6.1 | 11 | ... | ... | ... | ... | ... | ... | 21.3 | plt |
| GJ1281 | 23 10 42.2 | -19 13 35 | 22.3 | 6.1 | 11 | 26.8 | 4.3 | 12 | 24.3 | 1.4 | 1 | 24.3 | trg |
| LEHPM1-5562 | 23 10 54.9 | -38 02 01 | 24.9 | 6.7 | 11 | ... | ... | ... | ... | ... | ... | 24.9 | plt |
| LP822-037 | 23 11 57.8 | -17 01 59 | 18.8 | 5.1 | 11 | ... | ... | ... | ... | ... | ... | 18.8 | plt |
| LHS3909 | 23 12 11.3 | -14 06 12 | 21.4 | 6.1 | 11 | 19.5 | 3.1 | 12 | 18.2 | 0.7 | 1 | 18.2 | trg |
| LTT09412 | 23 13 01.8 | -05 31 10 | 23.1 | 6.5 | 11 | ... | ... | ... | ... | ... | ... | 23.1 | plt |
| GJ2154 | 23 14 16.7 | -19 38 39 | [13.4] | 3.7 | 11 | 15.5 | 2.6 | 12 | 19.8 | 0.8 | 1 | 19.8 | trg |
| LEHPM1-5625 | 23 15 02.0 | -35 28 25 | 19.5 | 6.0 | 11 | ... | ... | ... | ... | ... | ... | 19.5 | plt |
| LHS3918 | 23 15 43.8 | -12 21 49 | 23.4 | 6.4 | 11 | ... | ... | ... | ... | ... | ... | 23.4 | plt |
| LHS0539 | 23 15 51.6 | -37 33 31 | 26.8 | 7.7 | 11 | 24.3 | 4.0 | 12 | 18.9 | 0.7 | 1 | 18.9 | trg |
| LP702-050 | 23 15 54.5 | -06 27 46 | 19.3 | 5.8 | 11 | ... | ... | ... | ... | ... | ... | 19.3 | plt |
| LHS3916 | 23 15 57.2 | -81 22 21 | [9.4] | 2.8 | 11 | [15.6] | 2.6 | 9 | 22.5 | 0.7 | 1 | 22.5 | trg |
| LTT09448 | 23 16 36.7 | -01 30 48 | 20.8 | 6.1 | 11 | ... | ... | ... | ... | ... | ... | 20.8 | plt |
| L719-021 | 23 17 00.2 | -23 23 47 | 17.1 | 5.3 | 11 | 24.5 | 4.0 | 9 | 21.3 | 0.8 | 1 | 21.3 | trg |
| LTT09461 | 23 17 21.8 | -25 42 21 | 24.7 | 7.2 | 11 | ... | ... | ... | ... | ... | ... | 24.7 | plt |
| LHS3923 | 23 17 22.9 | +38 12 03 | ... | ... | ... | 12.5 | 1.9 | 12 | 17.5 | 1.0 | 1 | 17.5 | trg |
| LTT09462 | 23 17 25.5 | -40 26 46 | 18.6 | 5.3 | 11 | 21.0 | 3.4 | 12 | ... | ... | ... | 21.0 | ccd |
| LHS3925 | 23 17 50.3 | -48 18 47 | 20.6 | 5.6 | 11 | 21.9 | 3.5 | 12 | 21.3 | 0.5 | 1 | 21.3 | trg |
| GJ0894.1 | 23 18 17.9 | +46 17 21 | ... | ... | ... | 18.7 | 3.2 | 12 | 24.7 | 1.2 | 2 | 24.7 | trg |
| G273-014 | 23 19 35.6 | -08 53 17 | 23.5 | 7.8 | 11 | ... | ... | ... | ... | ... | ... | 23.5 | plt |
| LP642-048 | 23 20 57.7 | -01 47 37 | [16.0] | 4.5 | 11 | [17.1] | 2.7 | 12 | ... | ... | ... | [17.1] | ccd |
| LTT09506 | 23 21 05.7 | -16 51 49 | 21.7 | 5.7 | 11 | ... | ... | ... | ... | ... | ... | 21.7 | plt |
| LHS0543 | 23 21 37.4 | +17 17 25 | ... | ... | ... | 6.8 | 1.1 | 12 | 10.9 | 0.3 | 2 | 10.9 | trg |
| LP934-033 | 23 22 23.6 | -27 25 45 | 24.1 | 7.0 | 11 | ... | ... | ... | ... | ... | ... | 24.1 | plt |
| LTT09524 | 23 24 05.6 | -05 11 14 | 22.3 | 5.9 | 11 | ... | ... | ... | ... | ... | ... | 22.3 | plt |
| LP822-073 | 23 24 16.9 | -15 22 23 | 21.3 | 6.3 | 11 | ... | ... | ... | ... | ... | ... | 21.3 | plt |
| LP822-074 | 23 24 29.1 | -18 31 15 | 22.4 | 6.3 | 11 | ... | ... | ... | ... | ... | ... | 22.4 | plt |
| GJ0895 | 23 24 30.5 | +57 51 15 | ... | ... | ... | 9.6 | 1.7 | 12 | 13.1 | 0.2 | 2 | 13.1 | trg |
| G273-039 | 23 25 16.0 | -12 52 31 | 24.6 | 7.7 | 9 | ... | ... | ... | ... | ... | ... | 24.6 | plt |
| L120-120 | 23 25 25.1 | -67 40 08 | 20.0 | 5.7 | 11 | 19.5 | 3.0 | 12 | ... | ... | ... | 19.5 | ccd |
| LHS0543a | 23 25 47.5 | +53 08 25 | ... | ... | ... | 15.4 | 2.5 | 12 | 24.8 | 1.9 | 1 | 24.8 | trg |
| GJ2155 | 23 26 12.3 | +08 53 37 | ... | ... | ... | 19.6 | 3.7 | 10 | 22.4 | 0.9 | 2 | 22.4 | trg |
| LHS3954 | 23 27 26.5 | -17 41 33 | 21.8 | 6.4 | 11 | ... | ... | ... | ... | ... | ... | 21.8 | plt |
| LP986-059 | 23 27 28.7 | -37 54 12 | 20.9 | 5.6 | 11 | ... | ... | ... | ... | ... | ... | 20.9 | plt |
| LP702-096 | 23 27 55.5 | -05 27 01 | 24.7 | 6.7 | 11 | ... | ... | ... | ... | ... | ... | 24.7 | plt |
| G190-028 | 23 29 26.2 | +41 28 20 | ... | ... | ... | 10.8 | 1.7 | 12 | 14.8 | 0.4 | 2 | 14.8 | trg |
| GJ1284 | 23 30 13.5 | -20 23 27 | [8.4] | 2.4 | 11 | [7.8] | 1.2 | 12 | 15.1 | 0.4 | 2 | 15.1 | trg |
| APM2330-4737 | 23 30 16.2 | -47 36 45 | 15.3 | 4.9 | 11 | 13.1 | 2.1 | 12 | 13.8 | 0.6 | 1 | 13.8 | trg |
| SCR2330-0838 | 23 30 16.9 | -08 38 37 | 19.9 | 6.8 | 11 | 22.1 | 3.4 | 12 | ... | ... | ... | 22.1 | ccd |
| LEHPM2-2163 | 23 30 38.2 | -84 55 19 | 17.8 | 5.1 | 11 | ... | ... | ... | ... | ... | ... | 17.8 | plt |
| DEN2331-2749 | 23 31 21.8 | -27 49 50 | 12.0 | 3.8 | 11 | 14.3 | 2.3 | 10 | 14.5 | 0.4 | 1 | 14.5 | trg |
| LTT09580 | 23 31 25.0 | -16 15 58 | 16.0 | 4.4 | 11 | 13.6 | 2.2 | 12 | ... | ... | ... | 13.6 | ccd |
| GJ0896 | 23 31 52.2 | +19 56 14 | ... | ... | ... | 5.1 | 1.1 | 12 | 6.3 | 0.1 | 3 | 6.3 | trg |
| LTT09582 | 23 32 00.2 | -39 17 37 | 17.3 | 4.7 | 11 | 15.9 | 2.5 | 12 | ... | ... | ... | 15.9 | ccd |
| LTT09596 | 23 33 36.7 | -42 13 22 | 15.1 | 4.6 | 11 | 15.4 | 2.6 | 12 | ... | ... | ... | 15.4 | ccd |
| GJ0899 | 23 34 03.3 | +00 10 46 | ... | ... | ... | 13.1 | 2.0 | 12 | 13.9 | 0.5 | 2 | 13.9 | trg |
| GJ1286 | 23 35 10.5 | -02 23 21 | 10.1 | 4.3 | 11 | 7.0 | 1.1 | 12 | 7.2 | 0.2 | 1 | 7.2 | trg |
| LHS3978 | 23 35 44.6 | +06 11 46 | ... | ... | ... | 23.1 | 3.5 | 3 | 24.0 | 1.9 | 1 | 24.0 | trg |
| G275-071 | 23 35 48.8 | -24 19 09 | 21.3 | 6.0 | 11 | ... | ... | ... | ... | ... | ... | 21.3 | plt |
| LTT16952 | 23 36 25.6 | +55 29 43 | ... | ... | ... | 21.2 | 3.5 | 12 | 24.9 | 1.5 | 1 | 24.9 | trg |
| LHS0547 | 23 36 52.3 | -36 28 52 | 14.7 | 4.1 | 11 | 14.3 | 2.4 | 12 | 11.6 | 0.3 | 1 | 11.6 | trg |
| LP763-003 | 23 37 38.3 | -12 50 28 | 23.6 | 9.1 | 11 | ... | ... | ... | ... | ... | ... | 23.6 | plt |

| | | | | | | | | | | | | | |
|--------------|------------|-----------|--------|-----|-----|--------|-----|-----|------|-----|-----|--------|-----|
| L026-054 | 23 37 52.8 | -76 45 26 | 15.3 | 6.1 | 11 | ... | ... | ... | ... | ... | ... | 15.3 | plt |
| LTT09634 | 23 38 08.2 | -16 14 10 | 16.0 | 5.0 | 8 | 14.0 | 2.2 | 12 | ... | ... | ... | 14.0 | ccd |
| LTT09635 | 23 38 17.4 | -41 31 04 | 15.5 | 4.6 | 11 | 16.8 | 2.7 | 12 | 18.7 | 1.2 | 1 | 18.7 | trg |
| LEHPM1-6053 | 23 40 23.9 | -40 21 47 | 17.7 | 5.1 | 11 | ... | ... | ... | ... | ... | ... | 17.7 | plt |
| G275-082 | 23 41 16.3 | -26 57 21 | 20.5 | 5.9 | 11 | ... | ... | ... | ... | ... | ... | 20.5 | plt |
| LP703-042 | 23 41 39.3 | -06 35 50 | 21.2 | 6.1 | 11 | ... | ... | ... | ... | ... | ... | 21.2 | plt |
| LEHPM2-1679 | 23 41 41.6 | -85 56 07 | 22.3 | 6.7 | 11 | ... | ... | ... | ... | ... | ... | 22.3 | plt |
| GJ0905 | 23 41 55.0 | +44 10 39 | ... | ... | ... | 2.7 | 0.4 | 12 | 3.2 | 0.0 | 3 | 3.2 | trg |
| GJ1288 | 23 42 51.0 | +30 48 59 | ... | ... | ... | ... | ... | ... | 12.2 | 0.4 | 1 | 12.2 | trg |
| GJ1289 | 23 43 06.3 | +36 32 13 | ... | ... | ... | 8.2 | 1.3 | 12 | 8.1 | 0.2 | 1 | 8.1 | trg |
| LEHPM1-6134 | 23 44 10.9 | -68 31 47 | 20.4 | 5.9 | 11 | ... | ... | ... | ... | ... | ... | 20.4 | plt |
| GJ1290 | 23 44 23.3 | +21 36 14 | ... | ... | ... | 15.5 | 2.4 | 12 | 22.0 | 2.0 | 1 | 22.0 | trg |
| LEHPM1-6159 | 23 45 10.6 | -38 32 24 | 20.5 | 5.5 | 11 | ... | ... | ... | ... | ... | ... | 20.5 | plt |
| LHS4009 | 23 45 31.3 | -16 10 20 | [13.9] | 6.8 | 11 | [9.2] | 1.5 | 12 | 12.5 | 0.2 | 1 | 12.5 | trg |
| LHS4012 | 23 46 32.0 | -50 43 28 | 22.9 | 6.8 | 11 | ... | ... | ... | ... | ... | ... | 22.9 | plt |
| LP987-023 | 23 46 38.2 | -34 10 02 | 18.4 | 4.9 | 11 | 20.1 | 3.1 | 12 | ... | ... | ... | 20.1 | ccd |
| GR0481 | 23 47 37.8 | -23 16 06 | 20.1 | 6.1 | 11 | ... | ... | ... | ... | ... | ... | 20.1 | plt |
| GJ0907 | 23 48 03.1 | +49 00 57 | ... | ... | ... | 24.4 | 3.8 | 12 | 16.7 | 0.8 | 2 | 16.7 | trg |
| LHS4016 | 23 48 36.1 | -27 39 39 | [17.8] | 4.7 | 11 | [17.2] | 2.7 | 12 | 24.2 | 0.9 | 1 | 24.2 | trg |
| GJ0908 | 23 49 12.5 | +02 24 04 | ... | ... | ... | 7.3 | 1.1 | 11 | 6.0 | 0.0 | 2 | 6.0 | trg |
| LHS4021 | 23 50 31.6 | -09 33 33 | 17.8 | 5.3 | 11 | 11.8 | 2.0 | 12 | 16.0 | 0.4 | 1 | 16.0 | trg |
| LEHPM1-6333 | 23 51 50.5 | -25 37 37 | [13.4] | 6.2 | 8 | [17.2] | 2.8 | 12 | 21.4 | 0.6 | 1 | 21.4 | trg |
| LEHPM1-6366 | 23 52 32.2 | -34 13 07 | 24.8 | 7.7 | 11 | ... | ... | ... | ... | ... | ... | 24.8 | plt |
| L217-036 | 23 52 44.4 | -57 56 03 | 16.9 | 4.5 | 11 | ... | ... | ... | ... | ... | ... | 16.9 | plt |
| LTT09783 | 23 53 08.3 | -42 32 04 | 23.0 | 6.3 | 11 | ... | ... | ... | ... | ... | ... | 23.0 | plt |
| L085-031 | 23 53 25.2 | -70 56 41 | 11.5 | 3.3 | 11 | 11.8 | 1.8 | 12 | 12.4 | 0.4 | 1 | 12.4 | trg |
| LP987-047 | 23 53 41.0 | -35 59 06 | 17.1 | 4.8 | 11 | ... | ... | ... | ... | ... | ... | 17.1 | plt |
| L026-027 | 23 53 50.1 | -75 37 57 | 7.2 | 2.0 | 11 | 6.7 | 1.1 | 12 | 10.0 | 0.1 | 1 | 10.0 | trg |
| LHS4038 | 23 54 04.3 | -41 32 31 | 20.2 | 5.4 | 11 | ... | ... | ... | ... | ... | ... | 20.2 | plt |
| L169-058 | 23 54 41.3 | -61 35 10 | 20.6 | 5.7 | 11 | ... | ... | ... | ... | ... | ... | 20.6 | plt |
| LHS4046 | 23 55 26.0 | -03 59 00 | 24.0 | 7.0 | 11 | 24.5 | 3.9 | 12 | ... | ... | ... | 24.5 | ccd |
| GJ0912 | 23 55 39.8 | -06 08 33 | [11.6] | 3.4 | 11 | [11.7] | 1.9 | 12 | 18.3 | 0.9 | 2 | 18.3 | trg |
| G158-008 | 23 55 55.2 | -13 21 24 | 19.7 | 5.3 | 11 | 18.0 | 2.8 | 12 | ... | ... | ... | 18.0 | ccd |
| LEHPM1-6494 | 23 56 10.8 | -34 26 05 | 20.2 | 9.0 | 11 | 22.8 | 3.8 | 9 | 19.1 | 0.6 | 1 | 19.1 | trg |
| SCR2356-0429 | 23 56 20.4 | -04 29 32 | [21.6] | 6.2 | 11 | [22.4] | 3.5 | 12 | ... | ... | ... | [22.4] | ccd |
| GJ1292 | 23 57 44.1 | +23 18 17 | ... | ... | ... | 11.9 | 2.1 | 12 | 13.7 | 0.5 | 1 | 13.7 | trg |
| LP987-060 | 23 57 53.6 | -34 07 36 | 18.5 | 5.0 | 11 | ... | ... | ... | ... | ... | ... | 18.5 | plt |
| LP764-040 | 23 58 13.7 | -17 24 34 | 12.0 | 3.4 | 11 | 16.0 | 7.8 | 12 | ... | ... | ... | 16.0 | ccd |
| LTT17066 | 23 58 32.6 | +07 38 31 | ... | ... | ... | 12.1 | 1.9 | 12 | 17.1 | 0.6 | 2 | 17.1 | trg |
| APM2359-6246 | 23 58 42.9 | -62 45 42 | 24.9 | 7.4 | 11 | 21.8 | 3.9 | 12 | 20.8 | 1.0 | 1 | 20.8 | trg |
| LTT09828 | 23 59 44.8 | -44 05 00 | [16.4] | 4.7 | 11 | [17.6] | 2.7 | 12 | 15.4 | 0.6 | 1 | 15.4 | trg |
| LHS4057 | 23 59 50.2 | +47 45 09 | ... | ... | ... | 18.3 | 2.8 | 12 | 19.3 | 0.3 | 1 | 19.3 | trg |
| LHS4058 | 23 59 51.4 | -34 06 43 | 11.6 | 3.2 | 11 | 12.2 | 1.9 | 12 | 15.8 | 0.5 | 1 | 15.8 | trg |

Beyond 25 pc

| | | | | | | | | | | | | | |
|--------------|------------|-----------|--------|------|----|---------|------|-----|-------------------|-----|-----|--------|-----|
| GJ1293 | 00 01 25.8 | -16 56 55 | 16.5 | 4.6 | 4 | 24.8 | 4.1 | 9 | 32.1 | 2.3 | 1 | 32.1 | trg |
| L290-032 | 00 02 27.1 | -46 01 44 | 24.5 | 6.6 | 11 | ... | ... | ... | 38.4 | 6.6 | 1 | 38.4 | trg |
| LHS0105 | 00 09 17.3 | -19 42 32 | 25.9 | 7.9 | 11 | 29.1 | 5.1 | 12 | ... | ... | ... | 29.1 | ccd |
| LTT00074 | 00 11 04.6 | -05 47 02 | 16.6 | 4.6 | 9 | 21.0 | 3.6 | 10 | 25.8 | 1.4 | 2 | 25.8 | trg |
| LTT00095 | 00 13 29.1 | -36 49 44 | 13.5 | 3.7 | 11 | ... | ... | ... | 28.2 | 1.8 | 1 | 28.2 | trg |
| LHS1048 | 00 15 33.5 | -35 11 48 | 40.6 | 12.1 | 11 | 52.6 | 8.5 | 12 | ... | ... | ... | 52.6 | ccd |
| SCR0015-6957 | 00 15 52.5 | -69 57 21 | 28.1 | 7.8 | 11 | 31.8 | 5.3 | 12 | ... | ... | ... | 31.8 | ccd |
| LHS0109 | 00 17 40.0 | -10 46 17 | {71.7} | 22.1 | 11 | {103.1} | 17.1 | 9 | 35.2 | 4.4 | 1 | 35.2 | trg |
| LEHPM1-0439 | 00 18 19.4 | -82 07 15 | 55.3 | 15.7 | 11 | 58.8 | 11.0 | 12 | ... | ... | ... | 58.8 | ccd |
| L086-093 | 00 18 34.6 | -68 46 60 | 22.6 | 6.6 | 11 | 30.3 | 4.9 | 9 | ... | ... | ... | 30.3 | ccd |
| LP644-095 | 00 19 12.4 | -03 03 13 | 19.3 | 5.3 | 11 | ... | ... | ... | 31.0 | 2.2 | 1 | 31.0 | trg |
| LHS0110 | 00 19 37.0 | -28 09 46 | [51.9] | 13.8 | 3 | [49.3] | 7.9 | 12 | 30.5 ^A | 1.1 | 2 | 30.5 | trg |
| LEHPM1-0494 | 00 21 05.9 | -42 44 43 | 34.6 | 10.1 | 11 | 31.7 | 7.0 | 12 | 26.9 ^A | 1.0 | 2 | 26.9 | trg |
| LTT00207 | 00 23 47.3 | -36 51 41 | 19.0 | 7.0 | 10 | ... | ... | ... | 40.2 | 2.6 | 1 | 40.2 | trg |
| SCR0027-0806 | 00 27 45.4 | -08 06 05 | 22.9 | 6.6 | 11 | 18.6 | 2.9 | 12 | 40.2 | 2.0 | 1 | 40.2 | trg |
| LHS1094 | 00 32 15.4 | -63 05 28 | 10.1 | 2.9 | 11 | ... | ... | ... | 25.1 | 0.7 | 2 | 25.1 | trg |
| SCR0033-6317 | 00 33 02.3 | -63 17 50 | 27.0 | 9.1 | 11 | 25.6 | 4.6 | 12 | ... | ... | ... | 25.6 | ccd |
| LTT00313 | 00 35 38.1 | -10 04 19 | 13.9 | 3.8 | 11 | 17.5 | 2.7 | 12 | 30.6 | 1.4 | 1 | 30.6 | trg |
| LHS1106 | 00 36 00.0 | -09 30 56 | 22.2 | 6.6 | 11 | 30.5 | 5.7 | 10 | 33.8 | 2.4 | 1 | 33.8 | trg |
| SCR0052-6155 | 00 52 09.9 | -61 55 23 | 28.9 | 7.6 | 11 | 32.6 | 5.1 | 12 | ... | ... | ... | 32.6 | ccd |
| SIP0052-6201 | 00 52 15.3 | -62 01 55 | 29.3 | 8.6 | 11 | 26.5 | 5.6 | 12 | ... | ... | ... | 26.5 | ccd |
| GJ0043 | 00 55 25.4 | -51 49 58 | 23.5 | 7.0 | 11 | 25.8 | 4.1 | 12 | 33.0 | 4.4 | 2 | 33.0 | trg |
| LTT00525 | 00 55 49.3 | -29 40 34 | 12.6 | 3.8 | 11 | ... | ... | ... | 30.5 | 1.1 | 2 | 30.5 | trg |
| G270-100 | 00 56 30.2 | -04 25 16 | 24.6 | 6.9 | 11 | ... | ... | ... | 30.0 | 3.5 | 1 | 30.0 | trg |
| LTT00648 | 01 09 38.8 | -07 10 50 | 15.0 | 4.4 | 11 | 15.6 | 2.5 | 12 | 37.7 | 4.1 | 1 | 37.7 | trg |
| SCR0112-7939 | 01 12 23.5 | -79 39 13 | 29.3 | 9.3 | 11 | 33.3 | 5.1 | 12 | ... | ... | ... | 33.3 | ccd |
| GJ0056.2 | 01 17 59.4 | -48 09 01 | 22.2 | 7.4 | 11 | 29.8 | 5.2 | 10 | 34.4 | 3.3 | 2 | 34.4 | trg |
| LHS1245 | 01 24 22.1 | -44 08 11 | 23.0 | 7.2 | 11 | ... | ... | ... | 33.9 | 4.7 | 1 | 33.9 | trg |
| GJ2022 | 01 24 27.7 | -33 55 09 | [13.8] | 4.4 | 11 | [14.8] | 3.0 | 12 | 25.8 | 1.4 | 1 | 25.8 | trg |
| GJ1038 | 01 25 01.8 | -32 51 04 | 10.0 | 3.6 | 10 | ... | ... | ... | 25.1 | 1.0 | 1 | 25.1 | trg |
| L002-060 | 01 29 20.9 | -85 56 11 | 12.3 | 3.7 | 11 | 12.2 | 2.0 | 12 | 30.8 | 2.4 | 1 | 30.8 | trg |
| L222-009 | 01 35 40.4 | -50 15 42 | 17.9 | 5.0 | 11 | ... | ... | ... | 48.2 | 5.7 | 1 | 48.2 | trg |
| LP939-103 | 01 36 36.9 | -34 23 26 | 63.1 | 28.3 | 11 | 54.6 | 8.5 | 12 | ... | ... | ... | 54.6 | ccd |
| SCR0138-5353 | 01 38 20.5 | -53 53 26 | 24.3 | 7.4 | 11 | 29.7 | 4.5 | 12 | ... | ... | ... | 29.7 | ccd |
| SCR0138-7855 | 01 38 54.0 | -78 55 18 | [26.7] | 7.9 | 11 | [35.3] | 5.4 | 12 | ... | ... | ... | [35.3] | ccd |
| SCR0139-7536 | 01 39 27.9 | -75 36 14 | 18.5 | 6.6 | 11 | 26.2 | 4.1 | 12 | ... | ... | ... | 26.2 | ccd |
| LP708-253 | 01 40 04.8 | -13 54 41 | 17.6 | 5.6 | 11 | ... | ... | ... | 34.9 | 4.6 | 1 | 34.9 | trg |
| L367-082 | 01 41 03.6 | -43 38 10 | 25.0 | 7.6 | 11 | ... | ... | ... | 41.8 | 4.6 | 1 | 41.8 | trg |
| SCR0143-3840 | 01 43 03.3 | -38 40 08 | 19.3 | 5.3 | 11 | 25.3 | 4.1 | 12 | ... | ... | ... | 25.3 | ccd |
| L367-008 | 01 45 21.4 | -39 57 20 | 19.3 | 5.4 | 11 | ... | ... | ... | 29.6 | 2.0 | 1 | 29.6 | trg |
| L173-003 | 01 51 46.2 | -54 57 58 | 23.4 | 7.0 | 11 | ... | ... | ... | 47.9 | 7.9 | 1 | 47.9 | trg |

| | | | | | | | | | | | | | |
|--------------|------------|-----------|--------|------|----|--------|------|-----|------|------|-----|--------|-----|
| SCR0153-0703 | 01 53 20.6 | -07 03 32 | 26.6 | 8.4 | 11 | 29.5 | 4.7 | 12 | ... | ... | ... | 29.5 | ccd |
| SCR0153-5000 | 01 53 24.2 | -50 00 04 | 28.0 | 7.6 | 11 | 36.3 | 5.9 | 12 | ... | ... | ... | 36.3 | ccd |
| L223-102 | 01 54 39.0 | -50 45 58 | 47.4 | 12.7 | 11 | 66.6 | 11.2 | 12 | ... | ... | ... | 66.6 | ccd |
| LTT01021 | 01 55 32.2 | -15 31 22 | 25.0 | 7.0 | 7 | 30.6 | 5.0 | 10 | ... | ... | ... | 30.6 | ccd |
| SCR0156-6702 | 01 56 26.1 | -67 02 36 | 29.7 | 8.5 | 11 | 32.8 | 5.7 | 12 | ... | ... | ... | 32.8 | ccd |
| SCR0201-5739 | 02 01 38.8 | -57 39 36 | 27.9 | 9.3 | 11 | 40.8 | 6.8 | 12 | ... | ... | ... | 40.8 | ccd |
| L583-033 | 02 02 17.5 | -26 33 52 | [30.6] | 10.1 | 8 | [35.5] | 15.1 | 11 | 28.8 | 0.8 | 2 | 28.8 | trg |
| LP649-030 | 02 03 30.2 | -04 54 41 | 19.5 | 5.7 | 11 | 22.8 | 4.3 | 11 | 28.8 | 2.2 | 1 | 28.8 | trg |
| SCR0211-0354 | 02 11 52.0 | -03 54 02 | 22.9 | ... | 11 | 16.8 | ... | 12 | 32.9 | 2.1 | 1 | 32.9 | trg |
| GJ0088 | 02 12 51.0 | -17 41 12 | 19.6 | 5.3 | 7 | 23.7 | 3.8 | 9 | 26.5 | 1.9 | 2 | 26.5 | trg |
| LP941-016 | 02 13 37.4 | -35 12 24 | 21.1 | 6.7 | 10 | ... | ... | ... | 29.0 | 3.0 | 1 | 29.0 | trg |
| LHS1380 | 02 17 56.8 | -35 37 01 | 21.6 | 5.9 | 11 | 24.5 | 3.8 | 12 | 28.6 | 2.3 | 1 | 28.6 | trg |
| LHS1386 | 02 18 41.4 | -39 37 11 | 28.8 | 7.7 | 11 | 29.5 | 4.6 | 12 | ... | ... | ... | 29.5 | ccd |
| SCR0228-6248 | 02 28 13.9 | -62 48 05 | 29.6 | 9.4 | 11 | 26.2 | 4.2 | 12 | ... | ... | ... | 26.2 | ccd |
| SCR0232-3006 | 02 32 03.1 | -30 06 41 | 31.3 | 9.2 | 11 | 29.3 | 4.6 | 12 | ... | ... | ... | 29.3 | ccd |
| SCR0234-8204 | 02 34 47.1 | -82 04 29 | 36.8 | 16.3 | 7 | 50.1 | 7.7 | 12 | ... | ... | ... | 50.1 | ccd |
| LHS5058 | 02 36 32.8 | -34 36 32 | 23.2 | 6.4 | 11 | ... | ... | ... | 31.4 | 3.2 | 1 | 31.4 | trg |
| SCR0238-1420 | 02 38 07.5 | -14 20 11 | 23.3 | 7.1 | 11 | 26.4 | 4.4 | 12 | ... | ... | ... | 26.4 | ccd |
| L441-032 | 02 39 56.7 | -38 28 00 | 20.4 | 6.0 | 11 | ... | ... | ... | 34.4 | 2.7 | 1 | 34.4 | trg |
| LHS0158 | 02 42 02.9 | -44 30 59 | 58.6 | 16.9 | 8 | 62.7 | 10.1 | 12 | 40.1 | 2.6 | 1 | 40.1 | trg |
| LP651-009 | 02 46 12.9 | -04 19 57 | 40.4 | 10.7 | 11 | 39.1 | 6.0 | 12 | ... | ... | ... | 39.1 | ccd |
| LP651-011 | 02 46 48.9 | -04 21 28 | 38.8 | 10.5 | 11 | 42.1 | 6.5 | 12 | ... | ... | ... | 42.1 | ccd |
| SCR0247-5729 | 02 47 14.6 | -57 29 22 | [37.3] | 10.3 | 11 | [36.6] | 5.9 | 12 | ... | ... | ... | [36.6] | ccd |
| LHS1459 | 02 51 43.3 | -26 01 39 | 56.2 | 15.4 | 11 | 69.3 | 10.8 | 11 | ... | ... | ... | 69.3 | ccd |
| LTT01393 | 02 55 23.2 | -25 13 29 | 16.3 | 4.9 | 11 | ... | ... | ... | 29.0 | 2.9 | 1 | 29.0 | trg |
| L012-040 | 03 03 26.4 | -82 50 39 | 20.6 | 6.8 | 11 | ... | ... | ... | 36.7 | 1.7 | 1 | 36.7 | trg |
| LTT01453 | 03 03 36.7 | -25 35 33 | 16.5 | 4.7 | 11 | 18.8 | 3.4 | 12 | 38.6 | 3.9 | 1 | 38.6 | trg |
| LTT01552 | 03 17 28.2 | -01 07 27 | 37.2 | 10.6 | 11 | 45.6 | 7.2 | 12 | ... | ... | ... | 45.6 | ccd |
| LP887-068 | 03 17 35.1 | -27 41 47 | 17.9 | 4.9 | 11 | ... | ... | ... | 29.5 | 2.3 | 1 | 29.5 | trg |
| G077-042 | 03 17 55.4 | -01 05 41 | 45.5 | 12.1 | 11 | 52.1 | 8.3 | 12 | ... | ... | ... | 52.1 | ccd |
| LP888-006 | 03 20 51.1 | -28 15 34 | 24.6 | 7.2 | 10 | 26.2 | 4.2 | 12 | ... | ... | ... | 26.2 | ccd |
| SCR0325-0308 | 03 25 03.1 | -03 08 20 | 24.8 | 7.4 | 11 | 31.4 | 4.9 | 12 | ... | ... | ... | 31.4 | ccd |
| SCR0327-3634 | 03 27 46.8 | -36 34 40 | 20.2 | 6.0 | 11 | 18.8 | 3.0 | 12 | 26.2 | 1.1 | 1 | 26.2 | trg |
| LHS1561 | 03 34 39.6 | -04 50 33 | 17.4 | 4.9 | 11 | 13.5 | 2.1 | 12 | 29.2 | 1.5 | 1 | 29.2 | trg |
| SCR0337-1056 | 03 37 38.2 | -10 56 55 | 21.3 | 5.9 | 6 | 26.2 | 4.1 | 9 | ... | ... | ... | 26.2 | ccd |
| GJ0155.3 | 03 53 19.7 | -37 03 59 | 20.3 | 5.7 | 11 | ... | ... | ... | 25.1 | 1.8 | 2 | 25.1 | trg |
| LHS1622 | 04 03 30.4 | -37 53 33 | 25.1 | 8.0 | 11 | 27.7 | 4.3 | 12 | ... | ... | ... | 27.7 | ccd |
| LHS0186 | 04 03 38.4 | -05 08 05 | {67.1} | 20.0 | 11 | {99.6} | 16.1 | 11 | 51.6 | 12.0 | 1 | 51.6 | trg |
| WT01135 | 04 11 27.1 | -44 18 10 | {50.5} | 14.0 | 11 | {54.6} | 9.3 | 12 | 25.6 | 1.6 | 1 | 25.6 | trg |
| LHS1656 | 04 18 51.0 | -57 14 01 | 26.2 | 7.5 | 11 | 25.7 | 4.0 | 12 | 25.4 | 1.3 | 1 | 25.4 | trg |
| L446-008 | 04 21 00.5 | -35 51 21 | 16.8 | 4.9 | 7 | 23.5 | 3.9 | 9 | 29.0 | 1.3 | 1 | 29.0 | trg |
| LHS1676 | 04 31 44.0 | -21 50 44 | 28.1 | 9.3 | 11 | 26.8 | 5.2 | 12 | ... | ... | ... | 26.8 | ccd |
| SCR0457-0731 | 04 57 23.8 | -07 31 40 | 28.2 | 7.7 | 11 | 25.2 | 3.9 | 12 | ... | ... | ... | 25.2 | ccd |
| L305-024 | 05 06 07.3 | -47 12 52 | 21.1 | 5.7 | 11 | 30.3 | 4.9 | 12 | ... | ... | ... | 30.3 | ccd |
| LP892-040 | 05 21 15.9 | -32 21 27 | 24.4 | 6.8 | 11 | 25.3 | 4.1 | 12 | ... | ... | ... | 25.3 | ccd |
| SCR0525-7425 | 05 25 45.6 | -74 25 26 | 28.7 | 9.4 | 11 | 42.2 | 6.6 | 12 | ... | ... | ... | 42.2 | ccd |
| SCR0527-7231 | 05 27 07.0 | -72 31 20 | 22.7 | 6.5 | 11 | 25.1 | 3.9 | 12 | ... | ... | ... | 25.1 | ccd |
| LHS1815 | 06 04 20.4 | -55 18 47 | 20.3 | 5.4 | 11 | ... | ... | ... | 28.2 | 2.1 | 2 | 28.2 | trg |
| SCR0610-1832 | 06 10 08.2 | -18 32 25 | 31.8 | 9.4 | 11 | 31.2 | 4.8 | 12 | ... | ... | ... | 31.2 | ccd |
| LHS1837 | 06 19 50.7 | -59 52 25 | 39.7 | 10.6 | 11 | 45.2 | 7.0 | 12 | ... | ... | ... | 45.2 | ccd |
| SCR0629-4648 | 06 29 33.6 | -46 48 37 | 25.8 | 6.8 | 11 | 27.3 | 4.3 | 12 | ... | ... | ... | 27.3 | ccd |
| SCR0635-6722 | 06 35 48.8 | -67 22 59 | 22.7 | 6.3 | 11 | 26.1 | 4.2 | 11 | ... | ... | ... | 26.1 | ccd |
| SCR0639-6939 | 06 39 08.4 | -69 39 32 | 36.0 | 9.9 | 11 | 39.7 | 6.2 | 12 | ... | ... | ... | 39.7 | ccd |
| SCR0639-6934 | 06 39 22.3 | -69 34 13 | 33.4 | 9.1 | 11 | 38.5 | 6.1 | 12 | ... | ... | ... | 38.5 | ccd |
| SCR0644-4223 | 06 44 32.1 | -42 23 45 | [18.8] | 5.2 | 11 | [17.5] | 2.9 | 12 | 29.9 | 1.9 | 2 | 29.9 | trg |
| LP453-049 | 06 44 32.4 | -38 31 59 | 23.6 | 6.8 | 11 | 26.1 | 4.2 | 12 | ... | ... | ... | 26.1 | ccd |
| SCR0659-2031 | 06 59 48.7 | -20 31 47 | 29.2 | 8.9 | 11 | 31.3 | 4.8 | 12 | ... | ... | ... | 31.3 | ccd |
| LHS1904 | 07 11 19.7 | -67 07 22 | 19.5 | 5.7 | 11 | 24.5 | 4.0 | 10 | 26.4 | 1.0 | 2 | 26.4 | trg |
| SCR0714-7140 | 07 14 26.2 | -71 40 38 | 33.1 | 9.9 | 11 | 29.4 | 4.7 | 12 | ... | ... | ... | 29.4 | ccd |
| SCR0719-5050 | 07 19 35.4 | -50 50 52 | 26.6 | 12.6 | 11 | 27.4 | 4.3 | 12 | ... | ... | ... | 27.4 | ccd |
| SCR0724-3125 | 07 24 21.2 | -31 25 58 | 24.5 | 9.5 | 11 | 16.5 | 2.6 | 12 | 38.5 | 2.1 | 1 | 38.5 | trg |
| SCR0725-8530 | 07 25 22.2 | -85 30 58 | 39.7 | 10.8 | 11 | 42.9 | 6.9 | 12 | ... | ... | ... | 42.9 | ccd |
| LTT02856 | 07 26 29.1 | -70 49 41 | 22.2 | 6.0 | 11 | 25.2 | 4.0 | 12 | ... | ... | ... | 25.2 | ccd |
| WT0214 | 07 28 40.1 | -61 20 41 | 44.2 | 13.8 | 11 | 50.3 | 9.4 | 12 | ... | ... | ... | 50.3 | ccd |
| GJ2061 | 07 31 04.1 | -37 13 46 | 18.2 | 5.3 | 11 | 20.7 | 3.2 | 12 | 33.3 | 4.6 | 1 | 33.3 | trg |
| SCR0733-4406 | 07 33 42.7 | -44 06 13 | 22.3 | 6.7 | 11 | 18.7 | 2.9 | 12 | 43.4 | 1.4 | 1 | 43.4 | trg |
| SCR0743-1929 | 07 43 22.1 | -19 29 04 | 29.4 | 13.4 | 11 | 29.1 | 4.5 | 12 | ... | ... | ... | 29.1 | ccd |
| SCR0745-4814 | 07 45 32.2 | -48 14 57 | 31.5 | 9.4 | 11 | 30.9 | 5.2 | 12 | ... | ... | ... | 30.9 | ccd |
| GJ1100 | 07 47 03.1 | -13 56 19 | 22.5 | 6.3 | 11 | 26.8 | 4.6 | 11 | 27.6 | 2.0 | 2 | 27.6 | trg |
| SCR0749-4955 | 07 49 29.4 | -49 55 06 | 26.4 | 7.8 | 11 | 30.4 | 5.0 | 12 | ... | ... | ... | 30.4 | ccd |
| SCR0758-4126 | 07 58 28.7 | -41 26 44 | 27.6 | 9.0 | 11 | 30.0 | 4.6 | 12 | ... | ... | ... | 30.0 | ccd |
| LP784-012 | 08 02 03.4 | -17 10 18 | 17.4 | 6.0 | 7 | ... | ... | ... | 30.0 | 2.9 | 1 | 30.0 | trg |
| SCR0810-4056 | 08 10 20.3 | -40 56 50 | 28.9 | 7.8 | 11 | 34.0 | 5.4 | 12 | ... | ... | ... | 34.0 | ccd |
| SCR0829-6203 | 08 29 24.7 | -62 03 23 | 37.9 | 11.6 | 11 | 47.2 | 8.7 | 12 | ... | ... | ... | 47.2 | ccd |
| SCR0829-3709 | 08 29 41.3 | -37 09 35 | 25.1 | 9.7 | 11 | 19.4 | 3.0 | 12 | 25.0 | 0.6 | 1 | 25.0 | trg |
| L891-016 | 08 31 21.6 | -06 02 02 | 17.4 | 4.9 | 11 | 18.0 | 3.3 | 12 | 26.4 | 1.9 | 1 | 26.4 | trg |
| L186-042 | 08 35 47.5 | -56 45 13 | 23.6 | 6.3 | 7 | 36.3 | 5.7 | 9 | ... | ... | ... | 36.3 | ccd |
| LTT03187 | 08 36 14.3 | -41 33 26 | 15.3 | 5.7 | 8 | ... | ... | ... | 39.0 | 3.1 | 2 | 39.0 | trg |
| GJ0316 | 08 40 00.3 | -06 28 33 | 11.8 | 4.1 | 11 | 16.1 | 2.8 | 10 | 30.1 | 1.4 | 2 | 30.1 | trg |
| SCR0840-3113 | 08 40 56.6 | -31 13 33 | 23.8 | 6.5 | 11 | 25.1 | 3.9 | 12 | ... | ... | ... | 25.1 | ccd |
| L098-062 | 08 41 32.6 | -68 25 40 | 17.4 | 6.7 | 9 | 24.5 | 4.3 | 10 | 30.8 | 1.4 | 1 | 30.8 | trg |
| SCR0843-2937 | 08 43 09.5 | -29 37 31 | 28.3 | 8.3 | 11 | 28.8 | 4.7 | 12 | ... | ... | ... | 28.8 | ccd |
| SCR0844-7120 | 08 44 54.6 | -71 20 43 | 29.9 | 8.3 | 11 | 32.0 | 5.3 | 12 | ... | ... | ... | 32.0 | ccd |
| SCR0852-3507 | 08 52 54.1 | -35 07 33 | 24.7 | 9.8 | 11 | 25.1 | 3.9 | 12 | ... | ... | ... | 25.1 | ccd |
| SCR0853-6123 | 08 53 03.0 | -61 23 48 | 40.3 | 15.0 | 11 | 35.2 | 5.8 | 12 | ... | ... | ... | 35.2 | ccd |
| LHS2072 | 08 55 04.7 | -71 35 48 | 25.2 | 7.1 | 11 | 25.3 | 4.0 | 12 | ... | ... | ... | 25.3 | ccd |
| LP786-022 | 08 57 14.2 | -19 35 04 | 21.3 | 6.3 | 11 | ... | ... | ... | 28.3 | 1.9 | 1 | 28.3 | trg |

| | | | | | | | | | | | | | |
|--------------|------------|-----------|---------|------|----|---------|------|-----|------|------|-----|------|-----|
| SCR0859-7517 | 08 59 52.0 | -75 17 30 | 27.1 | 7.6 | 11 | 31.4 | 4.9 | 12 | ... | ... | ... | 31.4 | ccd |
| SCR0904-4851 | 09 04 47.8 | -48 51 24 | 29.7 | 12.9 | 11 | 35.0 | 5.5 | 12 | ... | ... | ... | 35.0 | ccd |
| SCR0912-8311 | 09 12 59.6 | -83 11 52 | 30.4 | 8.8 | 11 | 28.6 | 4.5 | 12 | ... | ... | ... | 28.6 | ccd |
| SCR0914-7304 | 09 14 53.9 | -73 04 19 | 26.3 | 7.5 | 11 | 29.8 | 4.6 | 12 | ... | ... | ... | 29.8 | ccd |
| SCR0916-3431 | 09 16 07.1 | -34 31 31 | 28.5 | 8.6 | 11 | 29.8 | 4.6 | 12 | ... | ... | ... | 29.8 | ccd |
| SIP0933-1602 | 09 33 49.7 | -16 02 55 | 34.8 | 14.6 | 11 | 32.3 | 7.2 | 12 | ... | ... | ... | 32.3 | ccd |
| SCR0936-3237 | 09 36 01.5 | -32 37 59 | 25.2 | 7.0 | 11 | 27.9 | 4.4 | 12 | ... | ... | ... | 27.9 | ccd |
| CE089 | 09 38 53.8 | -33 48 45 | 32.0 | 9.7 | 11 | 27.8 | 5.4 | 12 | ... | ... | ... | 27.8 | ccd |
| SCR0943-4833 | 09 43 18.2 | -48 33 50 | 26.1 | 7.1 | 11 | 26.3 | 4.2 | 12 | ... | ... | ... | 26.3 | ccd |
| L462-023 | 09 44 45.4 | -36 32 38 | 22.6 | 6.5 | 11 | ... | ... | ... | 39.8 | 3.5 | 1 | 39.8 | trg |
| SCR0947-0020 | 09 47 20.1 | -00 20 09 | 29.3 | 9.8 | 11 | 26.3 | 4.5 | 12 | ... | ... | ... | 26.3 | ccd |
| LHS2209 | 09 54 52.5 | -13 31 21 | 66.2 | 17.9 | 11 | 85.0 | 13.2 | 12 | ... | ... | ... | 85.0 | ccd |
| SCR1005-4322 | 10 05 03.1 | -43 22 28 | 28.1 | 7.3 | 6 | 29.3 | 4.7 | 12 | ... | ... | ... | 29.3 | ccd |
| WT0248 | 10 05 54.9 | -67 21 31 | 47.1 | 19.3 | 11 | 42.8 | 7.5 | 12 | 26.0 | 1.9 | 1 | 26.0 | trg |
| LTT03719 | 10 10 00.0 | -25 58 33 | 19.4 | 6.0 | 11 | ... | ... | ... | 37.6 | 2.7 | 1 | 37.6 | trg |
| LHS2228 | 10 11 09.2 | -82 51 58 | 19.2 | 5.7 | 11 | ... | ... | ... | 28.0 | 1.2 | 1 | 28.0 | trg |
| SCR1011-8106 | 10 11 12.4 | -81 06 42 | 26.7 | 9.4 | 11 | 30.6 | 4.8 | 12 | ... | ... | ... | 30.6 | ccd |
| LTT03763 | 10 15 50.1 | -11 47 48 | 21.9 | 7.1 | 11 | ... | ... | ... | 38.5 | 5.2 | 1 | 38.5 | trg |
| L752-053 | 10 21 08.1 | -17 43 38 | 19.8 | 5.5 | 5 | 22.3 | 3.9 | 12 | 33.1 | 2.6 | 1 | 33.1 | trg |
| LHS2257 | 10 24 23.4 | -02 34 18 | 57.1 | 26.7 | 5 | 47.2 | 49.2 | 11 | ... | ... | ... | 47.2 | ccd |
| LHS0284 | 10 36 03.1 | -14 42 29 | {67.9} | 19.2 | 11 | {66.8} | 13.6 | 12 | 47.3 | 2.9 | 1 | 47.3 | trg |
| LP904-036 | 10 36 28.4 | -28 27 15 | 14.4 | 4.1 | 11 | 17.7 | 3.0 | 12 | 25.2 | 1.0 | 1 | 25.2 | trg |
| LP904-045 | 10 40 18.5 | -29 30 23 | 20.0 | 6.1 | 11 | ... | ... | ... | 37.7 | 3.3 | 1 | 37.7 | trg |
| L017-050 | 10 41 56.4 | -82 59 23 | 19.7 | 6.5 | 11 | 27.1 | 4.3 | 12 | ... | ... | ... | 27.1 | ccd |
| LP905-022 | 10 51 58.9 | -32 01 20 | 16.7 | 5.1 | 11 | ... | ... | ... | 32.4 | 2.8 | 1 | 32.4 | trg |
| LP849-020 | 10 52 26.4 | -22 41 16 | 23.9 | 6.6 | 11 | ... | ... | ... | 28.6 | 2.8 | 1 | 28.6 | trg |
| LTT04033 | 10 58 41.3 | -42 40 09 | 23.3 | 9.8 | 9 | ... | ... | ... | 51.9 | 9.5 | 2 | 51.9 | trg |
| LTT04042 | 11 00 02.8 | -35 06 37 | 16.9 | 4.6 | 11 | ... | ... | ... | 33.8 | 5.1 | 1 | 33.8 | trg |
| SCR1104-0150 | 11 04 08.4 | -01 50 18 | 29.6 | 9.7 | 11 | 38.2 | 6.1 | 12 | ... | ... | ... | 38.2 | ccd |
| SCR1104-8352 | 11 04 51.0 | -83 52 25 | 33.1 | 14.3 | 11 | 53.9 | 9.0 | 12 | ... | ... | ... | 53.9 | ccd |
| UPM1105-5825 | 11 05 30.4 | -58 25 19 | 40.6 | 17.1 | 7 | 41.4 | 6.4 | 12 | ... | ... | ... | 41.4 | ccd |
| LTT04105 | 11 09 12.2 | -04 36 25 | 18.1 | 5.2 | 11 | ... | ... | ... | 28.5 | 1.9 | 1 | 28.5 | trg |
| LHS0299 | 11 11 22.7 | -06 31 56 | {109.1} | 29.9 | 9 | {142.2} | 22.8 | 9 | 83.3 | 21.4 | 1 | 83.3 | trg |
| LP792-044 | 11 13 13.0 | -19 06 23 | 54.7 | 14.8 | 11 | 60.7 | 13.4 | 12 | ... | ... | ... | 60.7 | ccd |
| SCR1117-3202 | 11 17 29.3 | -32 02 10 | 26.3 | 8.1 | 11 | 27.6 | 4.3 | 12 | ... | ... | ... | 27.6 | ccd |
| SCR1118-3511 | 11 18 59.7 | -35 11 39 | 28.0 | 8.9 | 11 | 26.8 | 4.2 | 12 | ... | ... | ... | 26.8 | ccd |
| SCR1121-8057 | 11 21 27.9 | -80 57 03 | 32.4 | 10.2 | 11 | 32.0 | 5.0 | 12 | ... | ... | ... | 32.0 | ccd |
| GJ0429.2 | 11 28 00.5 | -09 10 57 | 30.8 | 8.6 | 7 | 36.8 | 5.7 | 11 | 25.1 | 1.9 | 2 | 25.1 | trg |
| SCR1132-8446 | 11 32 22.3 | -84 46 28 | 62.7 | 23.4 | 11 | 87.3 | 18.0 | 12 | ... | ... | ... | 87.3 | ccd |
| USN1137-0317 | 11 37 16.6 | -03 17 37 | 34.4 | 9.8 | 11 | 27.4 | 5.1 | 12 | ... | ... | ... | 27.4 | ccd |
| CE440-087 | 11 47 50.7 | -28 49 45 | 84.0 | 36.7 | 5 | 67.7 | 13.9 | 12 | 60.9 | 4.4 | 1 | 60.9 | trg |
| Ruiz440-064 | 11 48 50.6 | -28 33 23 | 28.1 | 7.6 | 3 | 25.3 | 4.4 | 12 | 39.8 | 2.4 | 1 | 39.8 | trg |
| SCR1153-5430 | 11 53 22.6 | -54 30 08 | 27.5 | 8.1 | 11 | 27.3 | 10.8 | 12 | ... | ... | ... | 27.3 | ccd |
| SCR1159-4256 | 11 59 37.7 | -42 56 39 | 26.7 | 7.0 | 11 | 26.5 | 4.2 | 12 | ... | ... | ... | 26.5 | ccd |
| LP907-063 | 12 03 03.9 | -33 39 55 | 45.8 | 13.5 | 11 | 36.9 | 6.8 | 12 | ... | ... | ... | 36.9 | ccd |
| LP908-010 | 12 03 28.1 | -29 23 00 | 30.5 | 10.9 | 11 | 24.7 | 3.8 | 12 | 26.6 | 0.9 | 1 | 26.6 | trg |
| SCR1204-4037 | 12 04 15.5 | -40 37 53 | 21.2 | 5.7 | 11 | 25.1 | 3.9 | 12 | ... | ... | ... | 25.1 | ccd |
| GJ2090 | 12 04 36.6 | -38 16 25 | 18.6 | 5.5 | 11 | ... | ... | ... | 27.5 | 2.1 | 1 | 27.5 | trg |
| WT1928 | 12 08 06.9 | -32 06 36 | 23.8 | 10.0 | 11 | 35.9 | 5.8 | 12 | 56.3 | 3.9 | 1 | 56.3 | trg |
| NLTT30217 | 12 17 06.8 | -17 38 15 | 23.8 | 7.0 | 11 | 28.5 | 4.6 | 12 | ... | ... | ... | 28.5 | ccd |
| LHS0323 | 12 17 30.2 | -29 02 21 | {73.3} | 22.1 | 11 | {76.7} | 15.3 | 12 | 42.9 | 3.4 | 1 | 42.9 | trg |
| LP470-065 | 12 17 46.8 | -39 04 05 | {22.8} | 6.7 | 11 | ... | ... | ... | 30.9 | 2.5 | 1 | 30.9 | trg |
| SCR1217-3557 | 12 17 55.8 | -35 57 15 | 24.4 | 6.7 | 11 | 26.8 | 4.2 | 12 | ... | ... | ... | 26.8 | ccd |
| SCR1220-8302 | 12 20 03.7 | -83 02 29 | 25.0 | 8.8 | 11 | 26.4 | 4.1 | 12 | ... | ... | ... | 26.4 | ccd |
| LHS0326 | 12 24 26.8 | -04 43 37 | {99.9} | 31.4 | 11 | {140.7} | 23.4 | 9 | 49.0 | 4.7 | 1 | 49.0 | trg |
| SCR1224-8205 | 12 24 39.8 | -82 05 53 | 25.4 | 7.7 | 11 | 25.7 | 4.0 | 12 | ... | ... | ... | 25.7 | ccd |
| SCR1227-4039 | 12 27 03.9 | -40 39 40 | 24.4 | 6.7 | 11 | 30.1 | 5.0 | 12 | ... | ... | ... | 30.1 | ccd |
| LP909-006 | 12 30 19.6 | -28 24 31 | 31.3 | 12.8 | 11 | 28.1 | 4.3 | 12 | ... | ... | ... | 28.1 | ccd |
| LHS2573 | 12 32 32.2 | -26 10 14 | 31.4 | 8.5 | 11 | 33.2 | 5.6 | 12 | ... | ... | ... | 33.2 | ccd |
| LTT04828 | 12 39 55.9 | -08 34 42 | 22.9 | 6.8 | 11 | ... | ... | ... | 36.0 | 3.8 | 1 | 36.0 | trg |
| SCR1240-8116 | 12 40 56.0 | -81 16 31 | 19.2 | 6.1 | 11 | 19.2 | 3.0 | 12 | 30.9 | 2.2 | 1 | 30.9 | trg |
| LHS5231 | 12 59 18.2 | -00 10 33 | 14.8 | 4.0 | 11 | 14.3 | 2.2 | 12 | 29.1 | 1.5 | 1 | 29.1 | trg |
| WT1962 | 12 59 51.3 | -07 30 35 | {47.5} | 12.9 | 11 | {44.6} | 7.1 | 12 | 35.2 | 1.6 | 1 | 35.2 | trg |
| L147-045 | 13 04 43.8 | -62 15 26 | 14.7 | 6.3 | 11 | ... | ... | ... | 38.5 | 5.0 | 1 | 38.5 | trg |
| LHS2698 | 13 13 29.6 | -32 27 05 | 36.8 | 9.9 | 11 | 44.4 | 7.3 | 12 | 46.3 | 2.0 | 1 | 46.3 | trg |
| LP910-061 | 13 16 21.9 | -33 47 45 | 24.6 | 7.0 | 11 | ... | ... | ... | 39.1 | 4.4 | 1 | 39.1 | trg |
| SCR1322-7254 | 13 22 27.5 | -72 54 37 | 44.1 | 11.8 | 11 | 41.9 | 6.5 | 12 | ... | ... | ... | 41.9 | ccd |
| SCR1328-7253 | 13 28 42.1 | -72 53 47 | 71.2 | 20.3 | 11 | 71.7 | 13.0 | 12 | ... | ... | ... | 71.7 | ccd |
| LHS2744 | 13 30 52.6 | -32 37 49 | 24.6 | 7.1 | 11 | ... | ... | ... | 38.2 | 3.3 | 1 | 38.2 | trg |
| SIP1338-3752 | 13 38 26.5 | -37 52 50 | 41.3 | 12.7 | 11 | 37.7 | 9.0 | 12 | ... | ... | ... | 37.7 | ccd |
| LTT05294 | 13 39 37.6 | -01 35 43 | 22.8 | 7.6 | 9 | ... | ... | ... | 32.3 | 3.5 | 1 | 32.3 | trg |
| SIP1343-3823 | 13 43 49.4 | -38 23 50 | 33.7 | 9.7 | 11 | 35.5 | 5.5 | 12 | ... | ... | ... | 35.5 | ccd |
| LTT05330 | 13 44 55.1 | -45 35 19 | 17.8 | 8.2 | 6 | 28.7 | 4.6 | 9 | ... | ... | ... | 28.7 | ccd |
| SCR1347-7610 | 13 47 56.8 | -76 10 20 | 22.6 | 6.2 | 11 | 29.2 | 4.7 | 9 | ... | ... | ... | 29.2 | ccd |
| LP912-026 | 13 53 19.8 | -30 46 38 | 21.1 | 6.2 | 11 | ... | ... | ... | 33.3 | 4.2 | 1 | 33.3 | trg |
| LHS2841 | 14 00 57.0 | -31 47 50 | 16.3 | 5.3 | 11 | ... | ... | ... | 33.7 | 2.7 | 2 | 33.7 | trg |
| GJ0539.2 | 14 09 27.2 | -30 55 49 | 19.9 | 5.6 | 11 | 27.5 | 4.7 | 12 | 39.4 | 5.2 | 2 | 39.4 | trg |
| SCR1410-2750 | 14 10 22.6 | -27 50 59 | 24.8 | 7.8 | 11 | 30.0 | 4.9 | 12 | ... | ... | ... | 30.0 | ccd |
| L836-121 | 14 14 21.4 | -15 21 22 | {12.8} | 3.6 | 8 | {16.2} | 3.5 | 11 | 30.2 | 4.6 | 1 | 30.2 | trg |
| LHS5275 | 14 39 58.8 | -56 54 46 | 19.3 | 5.2 | 6 | ... | ... | ... | 56.5 | 37.3 | 1 | 56.5 | trg |
| SCR1441-7338 | 14 41 14.4 | -73 38 41 | 19.0 | 5.5 | 11 | 16.8 | 2.7 | 12 | 25.1 | 0.6 | 1 | 25.1 | trg |
| SCR1450-3742 | 14 50 02.9 | -37 42 10 | 30.1 | 9.1 | 11 | 25.9 | 4.2 | 12 | ... | ... | ... | 25.9 | ccd |
| LHS0381 | 14 50 28.9 | -08 38 37 | {87.0} | 27.3 | 11 | {129.8} | 21.3 | 10 | 36.5 | 7.5 | 1 | 36.5 | trg |
| LHS0382 | 14 50 41.2 | -16 56 31 | {84.8} | 24.8 | 11 | {79.8} | 14.7 | 12 | 48.3 | 5.3 | 1 | 48.3 | trg |
| LHS0385 | 14 55 35.8 | -15 33 44 | {105.7} | 29.2 | 11 | {140.0} | 24.1 | 9 | 49.0 | 15.2 | 1 | 49.0 | trg |
| SCR1510-5141 | 15 10 56.6 | -51 41 36 | 28.1 | 8.5 | 11 | 27.5 | 4.4 | 12 | ... | ... | ... | 27.5 | ccd |
| UPM1515-6258 | 15 15 04.9 | -62 58 06 | 35.7 | 26.0 | 10 | 59.7 | 9.2 | 12 | ... | ... | ... | 59.7 | ccd |

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|--------------|------------|-----------|---------|------|----|---------|------|-----|-------------------|------|-----|--------|-----|
| LP915-016 | 15 17 21.1 | -27 59 50 | [18.8] | 6.3 | 10 | [25.2] | 4.4 | 10 | 29.4 | 3.3 | 1 | 29.4 | trg |
| UPM1523-5454 | 15 23 43.7 | -54 54 35 | ... | ... | 0 | 29.7 | 4.8 | 12 | ... | ... | ... | 29.7 | ccd |
| LP802-068 | 15 24 45.8 | -17 07 39 | 16.8 | 5.0 | 11 | ... | ... | ... | 34.6 | 6.4 | 1 | 34.6 | trg |
| SCR1528-3807 | 15 28 50.6 | -38 07 41 | 21.3 | 7.9 | 11 | 35.0 | 5.9 | 12 | ... | ... | ... | 35.0 | ccd |
| LEHPM2-0016 | 15 29 14.0 | -29 07 38 | 51.8 | 16.3 | 11 | 47.4 | 11.4 | 12 | 36.0 | 1.3 | 1 | 36.0 | trg |
| SCR1532-3622 | 15 32 13.9 | -36 22 31 | 23.0 | 10.3 | 11 | 31.6 | 5.0 | 12 | ... | ... | ... | 31.6 | ccd |
| LP916-023 | 15 44 05.5 | -32 05 22 | 22.3 | 6.7 | 11 | 26.1 | 4.0 | 12 | ... | ... | ... | 26.1 | ccd |
| L336-071 | 15 49 38.3 | -47 36 34 | 20.5 | 5.9 | 11 | 25.9 | 4.2 | 10 | 27.2 | 1.8 | 2 | 27.2 | trg |
| LP916-003 | 15 54 23.5 | -33 08 44 | 16.7 | 6.4 | 11 | 27.0 | 4.7 | 12 | ... | ... | ... | 27.0 | ccd |
| LP684-003 | 15 56 41.4 | -04 14 21 | 23.2 | 6.9 | 11 | ... | ... | ... | 40.8 | 6.2 | 1 | 40.8 | trg |
| LHS3144 | 16 00 27.8 | -34 43 17 | 21.3 | 7.1 | 11 | 30.0 | 4.9 | 12 | ... | ... | ... | 30.0 | ccd |
| LHS3147 | 16 02 23.6 | -25 05 57 | 23.1 | 7.3 | 11 | 20.7 | 3.2 | 12 | 25.5 | 0.9 | 1 | 25.5 | trg |
| SCR1608-4442 | 16 08 43.9 | -44 42 29 | 27.5 | 13.2 | 11 | 31.8 | 5.2 | 12 | ... | ... | ... | 31.8 | ccd |
| SCR1609-3730 | 16 09 05.4 | -37 30 40 | 29.2 | 13.0 | 11 | 50.8 | 8.0 | 10 | ... | ... | ... | 50.8 | ccd |
| LEP1610-0040 | 16 10 29.0 | -00 40 54 | [37.5] | 13.3 | 11 | [35.3] | 6.5 | 12 | ... | ... | ... | [35.3] | ccd |
| GJ0618.1 | 16 20 24.8 | -04 16 02 | 16.4 | 4.5 | 9 | 22.1 | 3.9 | 10 | 33.5 | 2.4 | 2 | 33.5 | trg |
| LP745-070 | 16 33 41.6 | -09 33 12 | 18.6 | 6.5 | 10 | ... | ... | ... | 30.7 | 2.3 | 1 | 30.7 | trg |
| SCR1637-4703 | 16 37 56.6 | -47 03 44 | 28.4 | 9.3 | 11 | 31.9 | 5.0 | 12 | ... | ... | ... | 31.9 | ccd |
| 2MA1651-2719 | 16 51 59.8 | -27 19 51 | ... | ... | 0 | 32.2 | 5.1 | 12 | ... | ... | ... | 32.2 | ccd |
| CCD1702-2718 | 17 02 09.1 | -27 18 24 | 19.3 | 6.3 | 11 | 30.2 | 6.7 | 11 | ... | ... | ... | 30.2 | ccd |
| LP806-025 | 17 07 58.3 | -19 28 43 | 10.8 | 9.1 | 11 | 27.3 | 4.2 | 12 | ... | ... | ... | 27.3 | ccd |
| NLTT44264 | 17 10 03.8 | -21 46 56 | 11.7 | 9.5 | 11 | 32.3 | 5.1 | 12 | ... | ... | ... | 32.3 | ccd |
| SCR1712-1907 | 17 12 26.1 | -19 07 04 | 22.1 | 20.7 | 11 | 44.7 | 7.0 | 12 | ... | ... | ... | 44.7 | ccd |
| SCR1716-2239 | 17 16 35.7 | -22 39 49 | 24.4 | 18.1 | 11 | 35.2 | 5.4 | 12 | ... | ... | ... | 35.2 | ccd |
| UPM1718-2245 | 17 18 25.6 | -22 46 29 | 18.2 | 15.6 | 11 | 32.8 | 6.7 | 12 | ... | ... | ... | 32.8 | ccd |
| LHS0440 | 17 18 32.3 | -43 26 38 | 38.7 | 10.7 | 7 | 41.1 | 6.4 | 12 | 27.5 | 0.9 | 1 | 27.5 | trg |
| LP920-011 | 17 19 13.7 | -27 45 44 | 12.9 | 7.8 | 9 | 32.5 | 5.1 | 12 | ... | ... | ... | 32.5 | ccd |
| GJ1217 | 17 22 43.0 | -14 57 37 | 19.0 | 6.3 | 10 | 27.7 | 4.6 | 9 | 26.9 | 2.0 | 1 | 26.9 | trg |
| LP687-026 | 17 22 50.6 | -03 29 38 | 23.5 | 14.1 | 10 | 38.8 | 6.2 | 12 | ... | ... | ... | 38.8 | ccd |
| SCR1724-3727 | 17 24 07.0 | -37 27 53 | 23.4 | 10.1 | 11 | 30.2 | 4.7 | 12 | ... | ... | ... | 30.2 | ccd |
| SCR1733-2452 | 17 33 04.6 | -24 52 57 | 22.6 | 14.2 | 8 | 52.8 | 8.6 | 12 | ... | ... | ... | 52.8 | ccd |
| SCR1735-4051 | 17 35 15.5 | -40 51 13 | 27.2 | 12.6 | 11 | 28.6 | 4.4 | 12 | ... | ... | ... | 28.6 | ccd |
| LTTO7022 | 17 39 28.3 | -22 41 46 | 14.3 | 9.1 | 9 | ... | ... | ... | 43.5 | 20.7 | 1 | 43.5 | trg |
| SCR1750-2530 | 17 50 07.6 | -25 30 21 | 19.1 | 6.9 | 11 | 25.6 | 4.8 | 12 | ... | ... | ... | 25.6 | ccd |
| SCR1750-0128 | 17 50 14.4 | -01 28 51 | 29.3 | 13.3 | 11 | 33.0 | 5.5 | 12 | ... | ... | ... | 33.0 | ccd |
| LHS0456 | 17 50 59.0 | -56 36 07 | 25.6 | 8.0 | 11 | 31.9 | 5.0 | 12 | ... | ... | ... | 31.9 | ccd |
| LP808-023 | 17 51 27.5 | -18 59 32 | 14.6 | 8.1 | 9 | ... | ... | ... | 44.0 | 5.8 | 1 | 44.0 | trg |
| SCR1753-7403 | 17 53 32.6 | -74 03 46 | 26.1 | 7.4 | 11 | 26.1 | 4.2 | 12 | ... | ... | ... | 26.1 | ccd |
| SCR1755-0455 | 17 55 30.7 | -04 55 42 | 21.5 | 18.5 | 11 | 26.5 | 4.1 | 12 | ... | ... | ... | 26.5 | ccd |
| SCR1800-0755 | 18 00 33.9 | -07 55 03 | 21.1 | 13.1 | 11 | 36.3 | 6.7 | 12 | ... | ... | ... | 36.3 | ccd |
| SCR1801-7000 | 18 01 28.9 | -70 00 49 | 26.2 | 7.1 | 11 | 27.8 | 4.3 | 12 | ... | ... | ... | 27.8 | ccd |
| SCR1802-1919 | 18 02 28.7 | -19 19 19 | 23.1 | 20.0 | 10 | 48.8 | 7.8 | 12 | ... | ... | ... | 48.8 | ccd |
| LO77-206 | 18 06 55.6 | -74 35 20 | 33.7 | 11.8 | 11 | 36.0 | 5.7 | 12 | ... | ... | ... | 36.0 | ccd |
| LEHPM2-0088 | 18 08 00.0 | -81 20 49 | 28.3 | 8.6 | 7 | 34.4 | 5.4 | 12 | ... | ... | ... | 34.4 | ccd |
| SCR1808-0341 | 18 08 48.4 | -03 41 54 | 49.4 | 41.0 | 9 | 87.4 | 14.2 | 12 | ... | ... | ... | 87.4 | ccd |
| LTTO7218 | 18 09 33.3 | -12 02 20 | 13.3 | 5.5 | 11 | ... | ... | ... | 28.4 | 2.1 | 2 | 28.4 | trg |
| LEP1809-0247 | 18 09 50.1 | -02 47 43 | 28.3 | 24.6 | 8 | 35.6 | 7.6 | 12 | ... | ... | ... | 35.6 | ccd |
| SCR1820-6225 | 18 20 49.4 | -62 25 53 | 28.3 | 7.9 | 11 | 36.4 | 5.8 | 10 | ... | ... | ... | 36.4 | ccd |
| GJ1226 | 18 20 57.2 | -01 02 58 | [15.5] | 5.3 | 11 | [12.7] | 3.9 | 12 | 25.8 ^a | 3.5 | 2 | 25.8 | trg |
| SCR1821-0700 | 18 21 54.2 | -07 00 18 | 18.6 | 12.5 | 9 | 38.9 | 6.7 | 12 | ... | ... | ... | 38.9 | ccd |
| G155-020 | 18 31 04.4 | -09 58 09 | 21.2 | 13.6 | 11 | 26.8 | 4.2 | 12 | ... | ... | ... | 26.8 | ccd |
| SCR1842-2736 | 18 42 56.7 | -27 36 33 | 38.5 | 13.4 | 7 | 50.3 | 8.6 | 12 | ... | ... | ... | 50.3 | ccd |
| SCR1844-1310 | 18 44 59.6 | -13 10 24 | 23.2 | 17.7 | 10 | 44.2 | 6.8 | 12 | ... | ... | ... | 44.2 | ccd |
| G155-041 | 18 47 36.0 | -17 03 16 | 23.7 | 12.5 | 11 | 38.4 | 5.9 | 12 | ... | ... | ... | 38.4 | ccd |
| LHS0468 | 18 48 44.9 | -02 33 46 | [28.4] | 15.5 | 11 | {49.1} | 7.9 | 12 | 28.6 | 3.7 | 1 | 28.6 | trg |
| SCR1851-6156 | 18 51 55.4 | -61 56 56 | 25.5 | 6.9 | 11 | 27.4 | 4.3 | 12 | ... | ... | ... | 27.4 | ccd |
| LHS3421 | 18 52 52.4 | -57 07 37 | 14.4 | 4.5 | 11 | ... | ... | ... | 26.6 | 2.7 | 2 | 26.6 | trg |
| SCR1853-7537 | 18 53 26.6 | -75 37 40 | 20.1 | 6.1 | 11 | 25.9 | 4.4 | 10 | ... | ... | ... | 25.9 | ccd |
| SCR1854-2859 | 18 54 20.8 | -28 59 53 | 18.8 | 15.0 | 10 | 41.7 | 6.5 | 12 | ... | ... | ... | 41.7 | ccd |
| SCR1900-2547 | 19 00 47.1 | -25 47 13 | 25.8 | 8.0 | 11 | 28.8 | 4.5 | 12 | ... | ... | ... | 28.8 | ccd |
| SCR1901-0737 | 19 01 32.4 | -07 37 24 | 22.4 | 6.5 | 11 | 18.5 | 2.9 | 12 | 25.4 | 0.6 | 1 | 25.4 | trg |
| SCR1901-3106 | 19 01 59.2 | -31 06 45 | 28.7 | 10.6 | 11 | 15.7 | 5.0 | 12 | 46.0 | 2.5 | 1 | 46.0 | trg |
| SCR1907-7924 | 19 07 53.5 | -79 24 03 | 29.0 | 8.9 | 11 | 33.8 | 5.3 | 12 | ... | ... | ... | 33.8 | ccd |
| SCR1916-3638 | 19 16 46.6 | -36 38 06 | {199.2} | 60.9 | 11 | {280.7} | 47.9 | 11 | 67.7 | 6.3 | 1 | 67.7 | trg |
| LP347-017 | 19 19 09.0 | -45 47 59 | 20.9 | 6.4 | 11 | ... | ... | ... | 38.7 | 5.4 | 1 | 38.7 | trg |
| LHS3451 | 19 19 29.3 | -18 19 06 | 68.0 | 18.7 | 11 | 59.7 | 9.8 | 12 | ... | ... | ... | 59.7 | ccd |
| LEHPM2-3658 | 19 22 43.7 | -43 19 21 | 25.2 | 6.8 | 11 | 26.6 | 4.3 | 12 | ... | ... | ... | 26.6 | ccd |
| L347-073 | 19 26 30.2 | -48 36 16 | 24.8 | 7.1 | 11 | 26.6 | 4.5 | 12 | ... | ... | ... | 26.6 | ccd |
| L347-072 | 19 27 30.9 | -48 33 53 | 27.9 | 7.6 | 11 | 31.8 | 4.9 | 12 | ... | ... | ... | 31.8 | ccd |
| L208-005 | 19 30 13.7 | -54 56 19 | 23.8 | 7.6 | 9 | ... | ... | ... | 34.6 | 3.3 | 1 | 34.6 | trg |
| SCR1932-0652 | 19 32 46.3 | -06 52 18 | 23.7 | 9.1 | 11 | 26.7 | 4.1 | 12 | ... | ... | ... | 26.7 | ccd |
| GJ0762 | 19 34 36.5 | -62 50 39 | 15.9 | 5.3 | 11 | 20.4 | 3.1 | 12 | 25.7 | 0.9 | 2 | 25.7 | trg |
| SCR1936-4816 | 19 36 33.3 | -48 16 54 | 26.3 | 7.6 | 11 | 25.9 | 4.2 | 12 | ... | ... | ... | 25.9 | ccd |
| LTTO7786 | 19 42 52.8 | -45 04 53 | 12.5 | 3.4 | 8 | ... | ... | ... | 27.3 | 1.6 | 2 | 27.3 | trg |
| LHS3480 | 19 44 22.0 | -22 30 54 | {91.1} | 29.2 | 11 | {106.2} | 20.3 | 12 | 56.5 | 2.6 | 1 | 56.5 | trg |
| LHS3492 | 19 51 31.3 | -50 55 38 | 34.0 | 9.8 | 11 | 38.8 | 6.8 | 12 | 25.6 | 1.2 | 1 | 25.6 | trg |
| GJ0769 | 19 54 00.1 | -47 48 37 | 21.7 | 8.8 | 11 | 27.3 | 4.3 | 12 | 25.3 | 5.7 | 1 | 25.3 | trg |
| SCR1954-7356 | 19 54 06.4 | -73 56 51 | 64.3 | 17.8 | 11 | 73.5 | 13.0 | 12 | ... | ... | ... | 73.5 | ccd |
| SCR1955-2856 | 19 55 16.8 | -28 56 43 | 26.2 | 7.8 | 11 | 27.5 | 4.5 | 12 | ... | ... | ... | 27.5 | ccd |
| SCR1959-5549 | 19 59 58.8 | -55 49 30 | 25.0 | 7.0 | 11 | 27.1 | 4.3 | 12 | ... | ... | ... | 27.1 | ccd |
| L277-205 | 20 03 52.4 | -53 57 28 | 22.3 | 6.0 | 11 | 27.2 | 4.3 | 12 | ... | ... | ... | 27.2 | ccd |
| L277-082 | 20 10 45.4 | -51 19 39 | 37.7 | 10.9 | 11 | 49.2 | 7.8 | 9 | ... | ... | ... | 49.2 | ccd |
| LHS3528 | 20 10 55.5 | -25 35 09 | {22.0} | 8.3 | 11 | {58.4} | 22.1 | 8 | ... | ... | ... | {58.4} | ccd |
| LP814-044 | 20 17 52.4 | -17 17 09 | 18.3 | 6.6 | 6 | ... | ... | ... | 35.1 | 2.8 | 1 | 35.1 | trg |
| LP815-001 | 20 20 07.1 | -19 39 03 | 20.2 | 7.7 | 8 | 28.0 | 4.3 | 12 | ... | ... | ... | 28.0 | ccd |
| SCR2025-1534 | 20 25 08.6 | -15 34 16 | 21.0 | 6.1 | 11 | 18.9 | 3.0 | 12 | 36.3 | 1.9 | 1 | 36.3 | trg |
| WT0708 | 20 27 04.4 | -68 41 07 | 33.9 | 9.8 | 11 | 31.9 | 5.1 | 12 | ... | ... | ... | 31.9 | ccd |

| | | | | | | | | | | | | | |
|--------------|------------|-----------|---------|------|----|---------|------|-----|-------|-------|-----|--------|-----|
| LP567-063 | 20 34 31.1 | -32 31 00 | 11.8 | 3.8 | 11 | 14.5 | 2.3 | 12 | 26.9 | 1.3 | 1 | 26.9 | trg |
| LTT08147 | 20 36 43.6 | -02 41 20 | 24.9 | 8.7 | 10 | 27.7 | 4.7 | 12 | ... | ... | ... | 27.7 | ccd |
| SCR2042-5737 | 20 42 46.4 | -57 37 15 | [22.7] | 8.5 | 11 | [25.3] | 5.9 | 12 | ... | ... | ... | [25.3] | ccd |
| SCR2043-6501 | 20 43 10.4 | -65 01 17 | 55.3 | 15.6 | 11 | 67.1 | 11.9 | 12 | ... | ... | ... | 67.1 | ccd |
| LHS3582 | 20 46 18.0 | -47 09 28 | 24.0 | 6.5 | 8 | ... | ... | ... | 32.5 | 11.4 | 1 | 32.5 | trg |
| 2MA2051-2458 | 20 51 09.8 | -24 58 18 | 24.2 | 7.0 | 11 | 25.4 | 4.0 | 12 | ... | ... | ... | 25.4 | ccd |
| LHS3600 | 20 55 59.9 | -59 56 44 | 12.9 | 5.3 | 11 | ... | ... | ... | 27.8 | 1.9 | 1 | 27.8 | trg |
| LEHPM1-4008 | 20 58 30.4 | -65 01 11 | 33.1 | 12.7 | 11 | 36.6 | 5.8 | 12 | ... | ... | ... | 36.6 | ccd |
| LP816-061 | 20 59 06.6 | -16 05 37 | 23.2 | 6.5 | 11 | ... | ... | ... | 33.8 | 2.9 | 1 | 33.8 | trg |
| L211-096 | 20 59 51.3 | -58 45 31 | 14.8 | 6.3 | 11 | ... | ... | ... | 30.2 | 2.9 | 1 | 30.2 | trg |
| SCR2102-3128 | 21 02 15.6 | -31 28 13 | 26.2 | 7.2 | 11 | 28.0 | 4.3 | 12 | ... | ... | ... | 28.0 | ccd |
| L163-023 | 21 02 25.0 | -60 31 36 | 12.0 | 5.3 | 11 | 21.0 | 3.7 | 12 | 32.5 | 2.0 | 1 | 32.5 | trg |
| LHS3615 | 21 03 21.7 | -50 22 52 | 20.1 | 5.6 | 11 | 17.4 | 2.8 | 12 | 25.2 | 0.8 | 1 | 25.2 | trg |
| LHS3620 | 21 04 25.4 | -27 52 47 | {188.7} | 54.4 | 11 | {246.0} | 41.8 | 11 | 77.6 | 8.5 | 1 | 77.6 | trg |
| LEHPM1-4021 | 21 05 11.4 | -62 47 02 | 43.7 | 16.1 | 11 | 47.8 | 9.4 | 12 | ... | ... | ... | 47.8 | ccd |
| SCR2105-3515 | 21 05 41.8 | -35 15 00 | 27.5 | 7.7 | 11 | 28.2 | 4.4 | 12 | ... | ... | ... | 28.2 | ccd |
| LHS0505 | 21 11 57.9 | -31 03 16 | 37.9 | 9.9 | 3 | 42.3 | 7.7 | 12 | ... | ... | ... | 42.3 | ccd |
| LEHPM1-4051 | 21 15 15.1 | -75 41 52 | 26.1 | 7.6 | 11 | 24.6 | 3.8 | 12 | 30.3 | 1.2 | 1 | 30.3 | trg |
| LP637-024 | 21 19 18.3 | -00 33 19 | 24.1 | 6.6 | 9 | ... | ... | ... | 40.4 | 6.1 | 1 | 40.4 | trg |
| GJ0836.4 | 21 42 07.5 | -12 09 48 | 20.3 | 5.6 | 11 | 16.9 | 3.0 | 12 | 35.0 | 3.2 | 1 | 35.0 | trg |
| L048-001 | 21 42 58.5 | -74 05 56 | 21.9 | 6.3 | 11 | 26.7 | 4.5 | 12 | ... | ... | ... | 26.7 | ccd |
| CD-32 16735 | 21 47 02.7 | -32 24 40 | 2.5 | 0.9 | 11 | 2.3 | 0.6 | 12 | 213.2 | 558.9 | 1 | 213.2 | trg |
| L282-061 | 21 51 12.3 | -52 15 40 | 23.1 | 6.3 | 9 | 32.1 | 5.1 | 9 | 31.7 | 2.5 | 1 | 31.7 | trg |
| LHS0515 | 21 55 48.0 | -11 21 43 | {151.3} | 50.6 | 11 | {207.4} | 48.9 | 12 | 51.3 | 11.0 | 1 | 51.3 | trg |
| LHS3740 | 21 58 53.2 | -57 56 04 | 22.2 | 6.3 | 11 | 22.4 | 3.4 | 12 | 27.8 | 1.1 | 1 | 27.8 | trg |
| LHS3754 | 22 04 40.9 | -19 46 42 | 43.1 | 17.1 | 4 | 49.3 | 8.7 | 12 | ... | ... | ... | 49.3 | ccd |
| LHS3775 | 22 12 56.0 | -18 15 21 | 67.6 | 18.1 | 11 | 86.1 | 13.5 | 12 | ... | ... | ... | 86.1 | ccd |
| LP699-075 | 22 18 13.2 | -03 10 20 | 19.2 | 5.4 | 8 | ... | ... | ... | 40.7 | 3.3 | 1 | 40.7 | trg |
| LEHPM1-4592 | 22 21 11.4 | -19 58 15 | {95.4} | 27.9 | 11 | {89.0} | 29.1 | 12 | ... | ... | ... | {89.0} | ccd |
| WT0918 | 22 21 37.0 | -65 47 30 | 41.0 | 12.7 | 11 | 38.0 | 6.2 | 12 | ... | ... | ... | 38.0 | ccd |
| LP931-054 | 22 23 18.0 | -27 09 15 | 21.4 | 6.1 | 11 | 27.1 | 4.2 | 12 | ... | ... | ... | 27.1 | ccd |
| SCR2224-7242 | 22 24 51.6 | -72 42 00 | 26.9 | 7.7 | 11 | 26.5 | 4.1 | 12 | ... | ... | ... | 26.5 | ccd |
| LEHPM1-4828 | 22 32 42.7 | -60 16 34 | 35.4 | 12.3 | 11 | 42.5 | 6.8 | 12 | ... | ... | ... | 42.5 | ccd |
| LHS3836 | 22 38 02.9 | -65 50 09 | 31.8 | 8.8 | 11 | 29.5 | 5.0 | 12 | 27.5 | 1.0 | 1 | 27.5 | trg |
| LP932-053 | 22 39 44.0 | -32 04 18 | 20.7 | 6.5 | 9 | ... | ... | ... | 39.7 | 3.4 | 1 | 39.7 | trg |
| SCR2241-6119 | 22 41 44.4 | -61 19 31 | 23.2 | 7.3 | 11 | 26.6 | 4.1 | 12 | ... | ... | ... | 26.6 | ccd |
| SCR2242-5103 | 22 42 10.9 | -51 03 28 | [29.2] | 8.3 | 10 | [34.7] | 6.0 | 11 | ... | ... | ... | [34.7] | ccd |
| LHS3846 | 22 44 00.2 | -04 57 57 | 65.5 | 22.0 | 9 | 66.1 | 11.1 | 12 | ... | ... | ... | 66.1 | ccd |
| L106-104 | 22 46 45.2 | -63 18 05 | 18.3 | 5.2 | 11 | 22.0 | 3.4 | 12 | 25.1 | 1.9 | 1 | 25.1 | trg |
| LTT09210 | 22 48 53.0 | -28 50 03 | 17.1 | 5.0 | 10 | 22.2 | 3.9 | 10 | 40.1 | 3.6 | 1 | 40.1 | trg |
| LTT09203 | 22 48 54.5 | -54 18 52 | 17.5 | 6.1 | 11 | 26.0 | 4.5 | 10 | 33.6 | 3.0 | 1 | 33.6 | trg |
| L214-072 | 22 49 26.0 | -58 15 12 | 19.6 | 5.6 | 11 | ... | ... | ... | 36.6 | 3.1 | 1 | 36.6 | trg |
| SCR2250-5726 | 22 50 45.0 | -57 26 02 | 73.7 | 21.2 | 11 | 46.4 | 8.0 | 12 | ... | ... | ... | 46.4 | ccd |
| LP933-024 | 22 55 43.9 | -30 22 39 | [21.0] | 6.1 | 11 | ... | ... | ... | 32.3 | 2.9 | 1 | 32.3 | trg |
| LHS5396 | 23 00 23.6 | -31 07 12 | 17.4 | 5.1 | 11 | 21.4 | 3.6 | 12 | 30.8 | 2.4 | 1 | 30.8 | trg |
| L286-071 | 23 00 26.1 | -53 13 40 | 20.9 | 6.6 | 10 | ... | ... | ... | 41.4 | 3.2 | 1 | 41.4 | trg |
| SCR2312-3124 | 23 12 08.7 | -31 24 04 | 29.4 | 8.4 | 11 | 31.6 | 4.9 | 12 | ... | ... | ... | 31.6 | ccd |
| LHS5397 | 23 14 15.4 | -56 50 52 | 19.6 | 5.6 | 11 | ... | ... | ... | 28.0 | 2.4 | 1 | 28.0 | trg |
| L168-009 | 23 20 07.5 | -60 03 55 | 16.4 | 4.7 | 11 | 18.7 | 3.1 | 12 | 26.4 | 1.6 | 1 | 26.4 | trg |
| LTT09507 | 23 21 11.3 | -01 35 45 | 20.9 | 5.7 | 11 | ... | ... | ... | 27.9 | 3.2 | 2 | 27.9 | trg |
| GJ0895.1 | 23 25 42.0 | -45 36 35 | 19.3 | 5.6 | 11 | 21.7 | 3.6 | 12 | 35.9 | 3.6 | 2 | 35.9 | trg |
| SCR2325-8057 | 23 25 52.9 | -80 57 41 | 43.1 | 15.1 | 11 | 30.2 | 4.7 | 12 | ... | ... | ... | 30.2 | ccd |
| L288-049 | 23 41 43.6 | -51 56 37 | 21.5 | 5.9 | 11 | ... | ... | ... | 27.6 | 3.1 | 1 | 27.6 | trg |
| LEHPM1-6094 | 23 42 02.3 | -78 41 23 | 40.7 | 12.4 | 11 | 40.4 | 7.1 | 12 | ... | ... | ... | 40.4 | ccd |
| WT1026 | 23 46 35.2 | -52 47 02 | 72.8 | 19.3 | 11 | 88.7 | 14.4 | 12 | ... | ... | ... | 88.7 | ccd |
| LP1035-064 | 23 47 56.5 | -39 11 13 | 22.7 | 6.4 | 11 | 25.3 | 4.0 | 12 | ... | ... | ... | 25.3 | ccd |
| LHS4025 | 23 50 52.6 | -39 05 17 | 22.4 | 6.3 | 11 | 25.2 | 4.0 | 12 | ... | ... | ... | 25.2 | ccd |
| SCR2352-6124 | 23 52 29.5 | -61 24 23 | 50.3 | 14.6 | 11 | 59.4 | 11.2 | 12 | ... | ... | ... | 59.4 | ccd |
| L361-021 | 23 57 45.6 | -45 48 55 | 20.2 | 5.6 | 11 | 27.1 | 4.5 | 10 | 41.0 | 5.0 | 2 | 41.0 | trg |

GJ1293 32.12 L290-032 38.37 LTT00074 25.79 LTT00095 28.18 LHS0109 35.21 LP644-095
30.95 LHS0110 29.63 LEHPM1-0494 26.03 LTT00207 40.18 SCR0027-0806 40.18 LHS1094
25.08 LTT00313 30.56 LHS1106 33.78 GJ0043 32.99 LTT00525 30.48 G270-100 30.03 LTT00648
37.66 GJ0056.2 34.40 LHS1245 33.91 GJ2022 25.77 GJ1038 25.14 L002-060 30.75 L222-009
48.24 LP708-253 34.90 L367-082 41.75 L367-008 29.55 L173-003 47.87 L583-033 28.60 LP649-

^aThe weighted mean distance includes that of both the primary and the secondary components.

030 28.79 SCR0211-0354 32.92 GJ0088 26.50 LP941-016 28.99 LHS1380 28.62 LHS5058 31.39
L441-032 34.35 LHS0158 40.10 LTT01393 28.99 L012-040 36.70 LTT01453 38.58 LP887-
068 29.46 SCR0327-3634 26.23 LHS1561 29.24 GJ0155.3 25.09 LHS0186 51.55 WT0135
25.61 LHS1656 25.37 L446-008 29.03 LHS1815 28.21 SCR0644-4223 31.14 LHS1904 26.40
SCR0724-3125 38.48 GJ2061 33.30 SCR0733-4406 43.38 GJ1100 27.60 LP784-012 30.02
SCR0829-3709 25.04 L891-016 26.35 LTT03187 38.96 GJ0316 30.10 L098-062 30.83 LP786-
022 28.29 L462-023 39.79 WT0248 26.01 LTT03719 37.59 LHS2228 27.96 LTT03763 38.51
L752-053 33.13 LHS0284 47.30 LP904-036 26.67 LP904-045 37.65 LP905-022 32.40 LP849-
020 28.64 LTT04033 51.89 LTT04042 33.84 LTT04105 28.52 LHS0299 83.33 GJ0429.2 25.13
CE440-087 60.86 Ruiz440-064 39.82 LP908-010 26.57 GJ2090 27.52 WT1928 56.31 LHS0323
42.94 LP470-065 30.88 LHS0326 49.04 LTT04828 35.98 SCR1240-8116 30.92 LHS5231 29.06
WT1962 35.25 L147-045 38.46 LHS2698 46.32 LP910-061 39.12 LHS2744 38.20 LTT05294
32.33 LP912-026 33.28 LHS2841 33.70 GJ0539.2 39.42 L836-121 30.18 LHS5275 56.50 SCR1441-
7338 25.11 LHS0381 36.50 LHS0382 48.33 LHS0385 49.02 LP915-016 29.43 LP802-068 34.58
LEHPM2-0016 35.95 L336-071 27.17 LP684-003 40.83 LHS3147 25.52 GJ0618.1 33.51 LP745-
070 30.67 LHS0440 27.47 GJ1217 26.90 LTT07022 43.48 LP808-023 44.03 LTT07218 28.42
GJ1226 29.33 LHS0468 28.57 LHS3421 26.58 SCR1901-0737 25.39 SCR1901-3106 46.04
SCR1916-3638 67.66 LP347-017 38.65 L208-005 34.61 GJ0762 25.71 LTT07786 27.33 LHS3480
56.50 LHS3492 25.58 GJ0769 25.25 LP814-044 35.08 SCR2025-1534 36.30 LP567-063 26.89
LHS3582 32.47 LHS3600 27.75 LP816-061 33.76 L211-096 30.18 L163-023 32.53 LHS3615
25.23 LHS3620 77.64 LEHPM1-4051 30.34 LP637-024 40.44 GJ0836.4 34.97 CD-32 16735

***** L282-061 31.70 LHS0515 51.28 LHS3740 27.82 LP699-075 40.68 LHS3836 27.46
LP932-053 39.70 L106-104 25.06 LTT09210 40.14 LTT09203 33.55 L214-072 36.63 LP933-
024 32.31 LHS5396 30.79 L286-071 41.36 LHS5397 27.97 L168-009 26.37 LTT09507 27.89
GJ0895.1 35.89 L288-049 27.56 L361-021 41.00

APPENDIX D
DETECTION LIMITS CONTOUR PLOTS

This appendix provides contour plots for the 880 detection limit simulations. The ‘Y’, ‘N’, or ‘M’ labels in each plot indicate *yes*, *no*, or *maybe* for whether or not the companion was detectable at the separation, magnitude and seeing conditions explored.

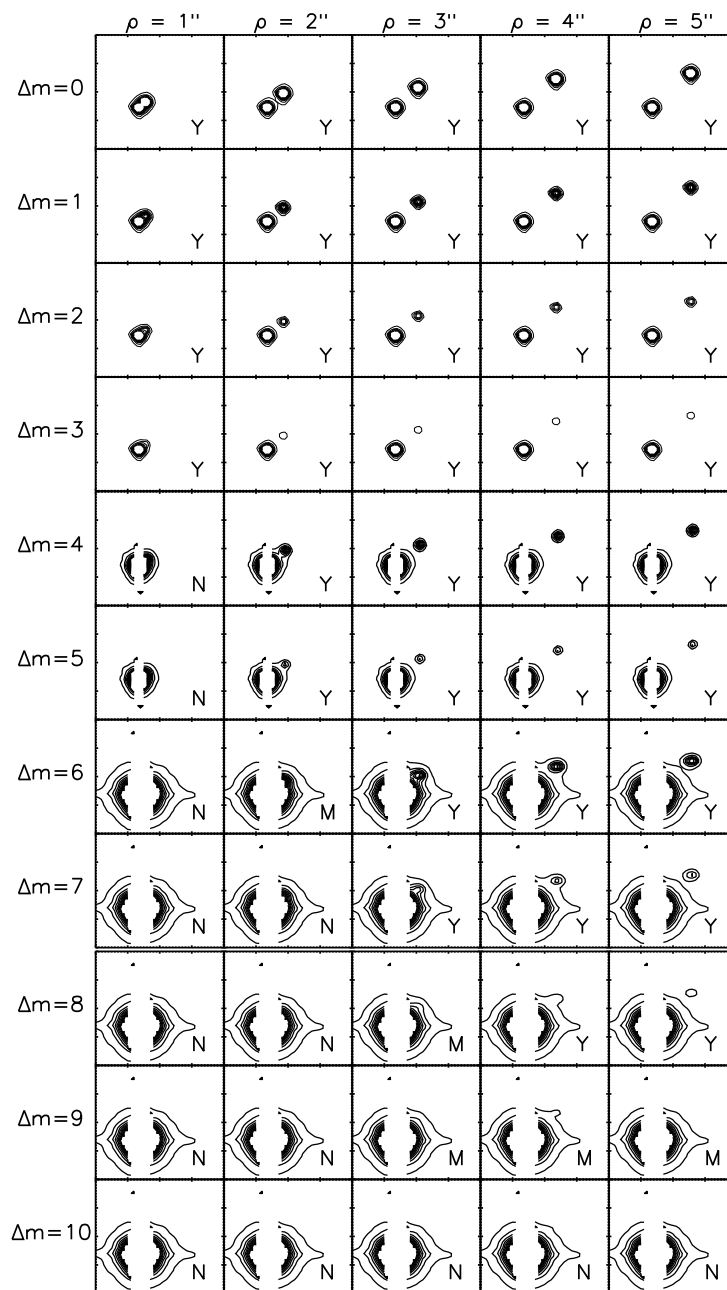


Figure D.1 Detection Limits for the CTIO/SMARTS 0.9m: Contour plots for GJ 285, with $I = 8.24$ at $0'.8$ seeing conditions for an embedded companion at $\rho = 1 - 5''$ with $\Delta m_{\text{ags}} = 0 - 10$. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 3-second exposure was used for $\Delta m_{\text{ags}} = 0 - 3$, the 30-second exposure was used for $\Delta m_{\text{ags}} = 4 - 5$, and the 300-second exposure was used for $\Delta m_{\text{ags}} = 6 - 10$.

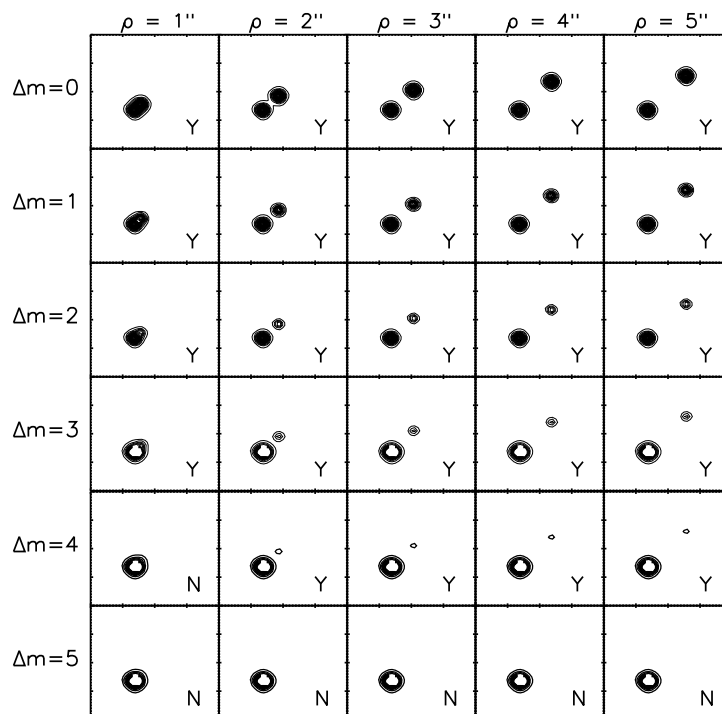


Figure D.2 Detection Limits for the CTIO/SMARTS 0.9m: Contour plots for LP848-050AB, with $I = 12.47$ at $0''.8$ seeing conditions for an embedded companion at $\rho = 1 - 5''$ with $\Delta m_{\text{ags}} = 0 - 5$. The AB separation is $\rho < 2''$. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 30-second exposure was used for $\Delta m_{\text{ags}} = 0, 1, 2$, and the 300-second exposure was used for $\Delta m_{\text{ags}} = 3, 4, 5$.

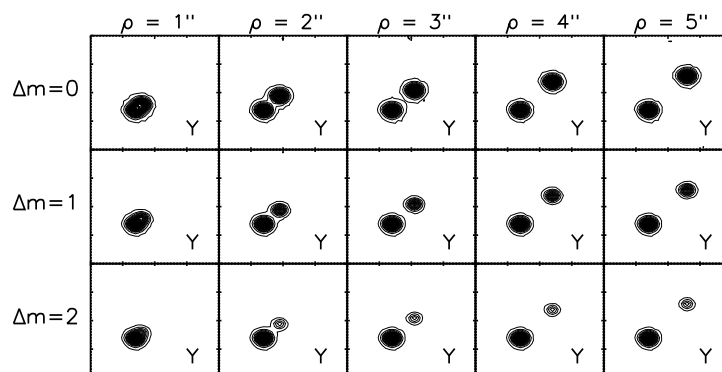


Figure D.3 Detection Limits for the CTIO/SMARTS 0.9m: Contour plots for SIP1632-0631, with $I = 15.56$ at $0''.8$ seeing conditions for an embedded companion at $\rho = 1 - 5''$ with $\Delta m_{\text{ags}} = 0 - 2$. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 300-second exposure was used.

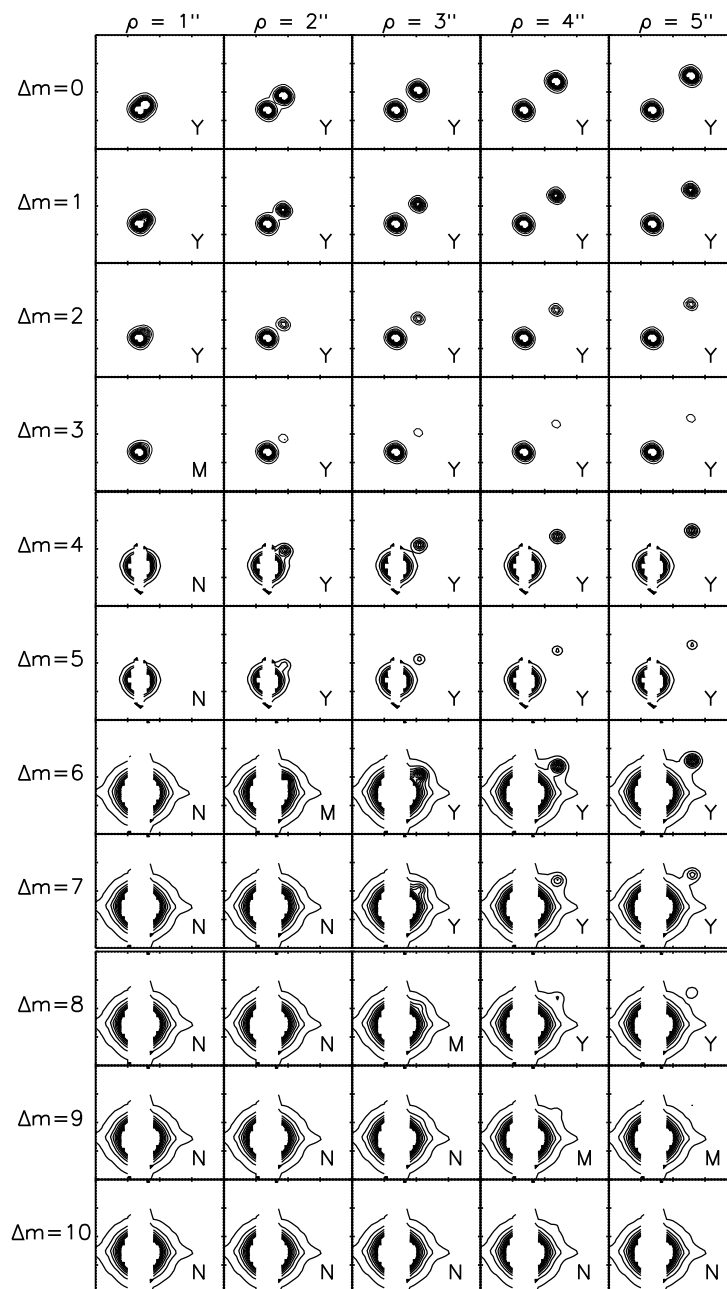


Figure D.4 Detection Limits for the CTIO/SMARTS 0.9m: Contour plots for L032-009A, with $I = 8.04$ at $1''$ seeing conditions for an embedded companion at $\rho = 1 - 5''$ with $\Delta m_{\text{ags}} = 0 - 10$. The AB separation is $\rho_{AB} = 22.40''$. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 3-second exposure was used for $\Delta m_{\text{ags}} = 0 - 3$, the 30-second exposure was used for $\Delta m_{\text{ags}} = 4 - 5$, and the 300-second exposure was used for $\Delta m_{\text{ags}} = 6 - 10$.

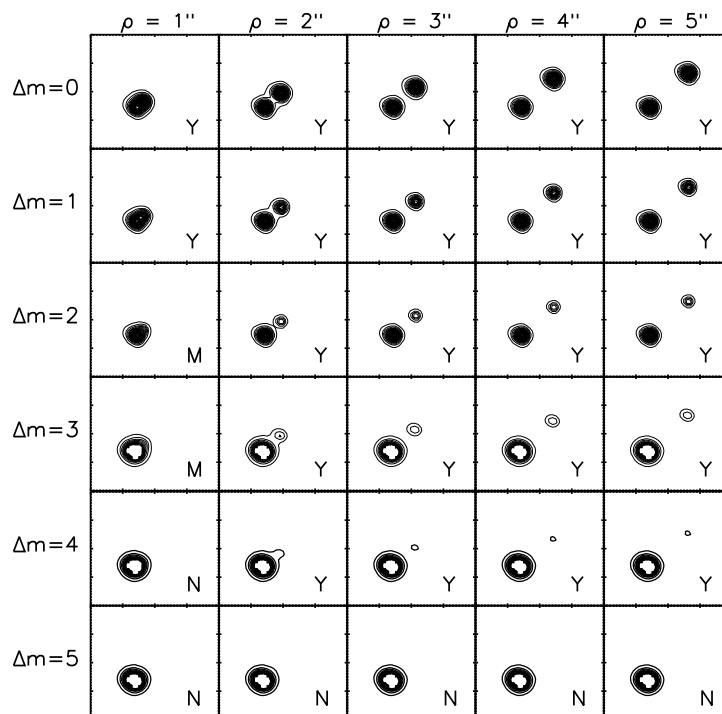


Figure D.5 Detection Limits for the CTIO/SMARTS 0.9m: Contour plots for SCR0754-3809, with $I = 11.98$ at $1''.0$ seeing conditions for an embedded companion at $\rho = 1 - 5''$ with $\Delta m_{\text{ags}} = 0 - 5$. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 30-second exposure was used for $\Delta m_{\text{ags}} = 0, 1, 2$, and the 300-second exposure was used for $\Delta m_{\text{ags}} = 3, 4, 5$.

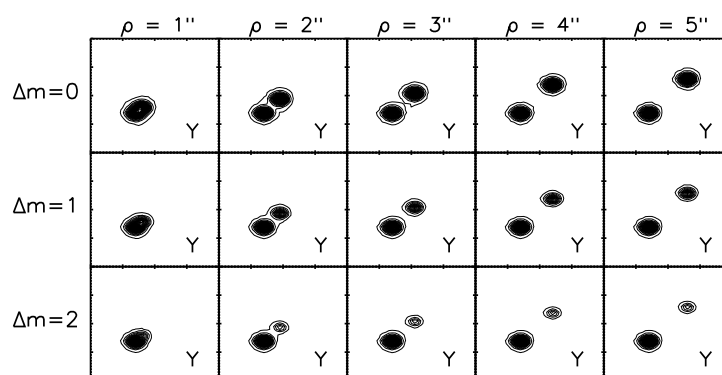


Figure D.6 Detection Limits for the CTIO/SMARTS 0.9m: Contour plots for BRI1222-1221, with $I = 15.59$ at $1''.0$ seeing conditions for an embedded companion at $\rho = 1 - 5''$ with $\Delta m_{\text{ags}} = 0 - 2$. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 300-second exposure was used.

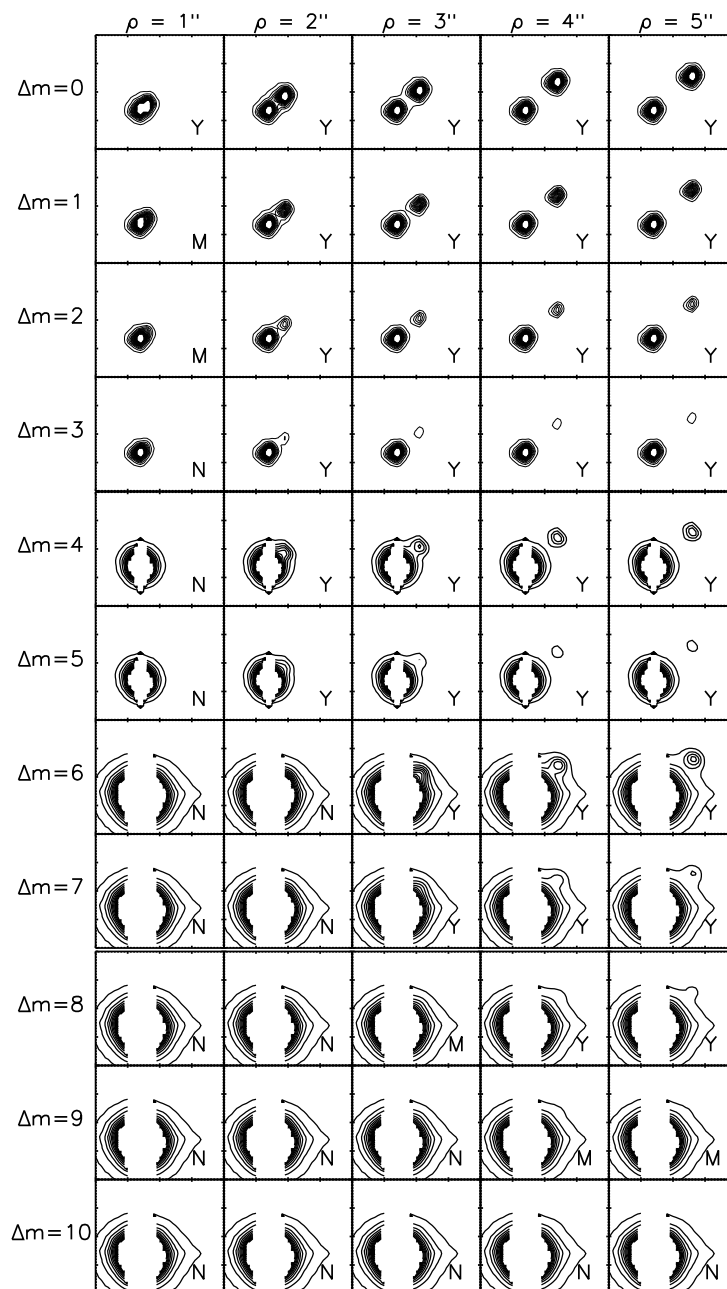


Figure D.7 Detection Limits for the CTIO/SMARTS 0.9m: Contour plots for GJ2060AB, with $I = 7.83$ at $1''.5$ seeing conditions for an embedded companion at $\rho = 1 - 5''$ with $\Delta m_{\text{ags}} = 0 - 10$. AB have $\rho = 0''.485$. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 3-second exposure was used for $\Delta m_{\text{ags}} = 0 - 3$, the 30-second exposure was used for $\Delta m_{\text{ags}} = 4 - 5$, and the 300-second exposure was used for $\Delta m_{\text{ags}} = 6 - 10$.

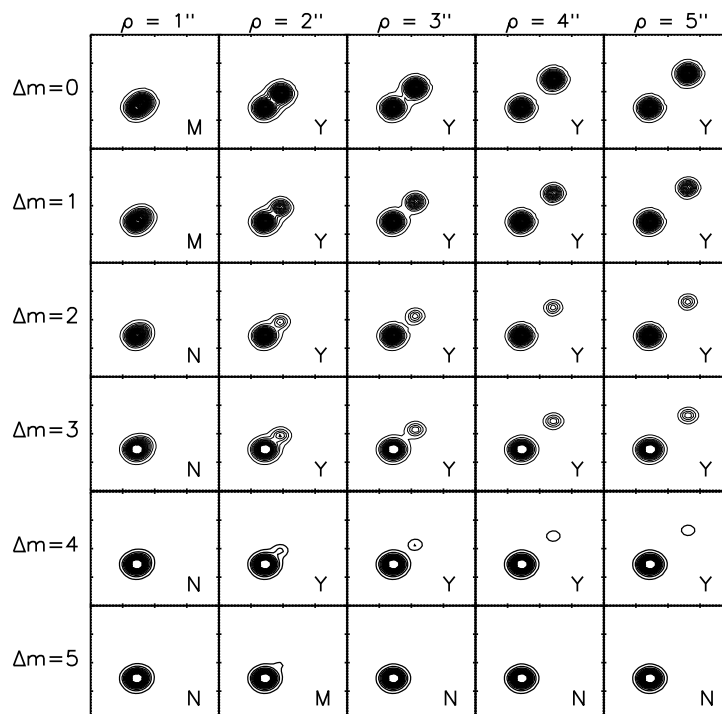


Figure D.8 Detection Limits for the CTIO/SMARTS 0.9m: Contour plots for 2MA2053-0133, with $I = 12.46$ at $1''.5$ seeing conditions for an embedded companion at $\rho = 1 - 5''$ with $\Delta m_{\text{ags}} = 0 - 5$. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 30-second exposure was used for $\Delta m_{\text{ags}} = 0, 1, 2$, and the 300-second exposure was used for $\Delta m_{\text{ags}} = 3, 4, 5$.

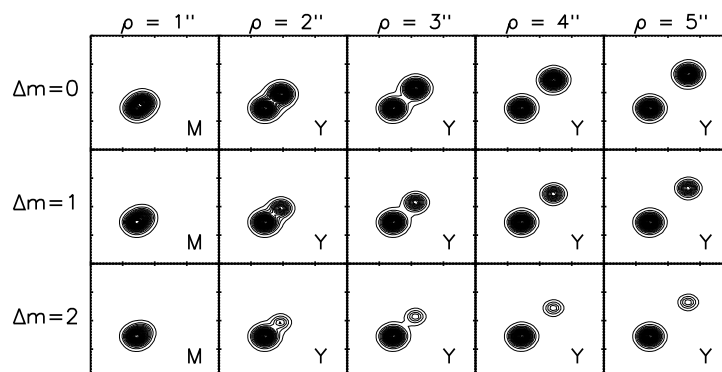


Figure D.9 Detection Limits for the CTIO/SMARTS 0.9m: Contour plots for a reference star scaled to $I = 16.00$ at $1''.5$ seeing conditions for an embedded companion at $\rho = 1 - 5''$ with $\Delta m_{\text{ags}} = 0 - 2$. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 300-second exposure was used.

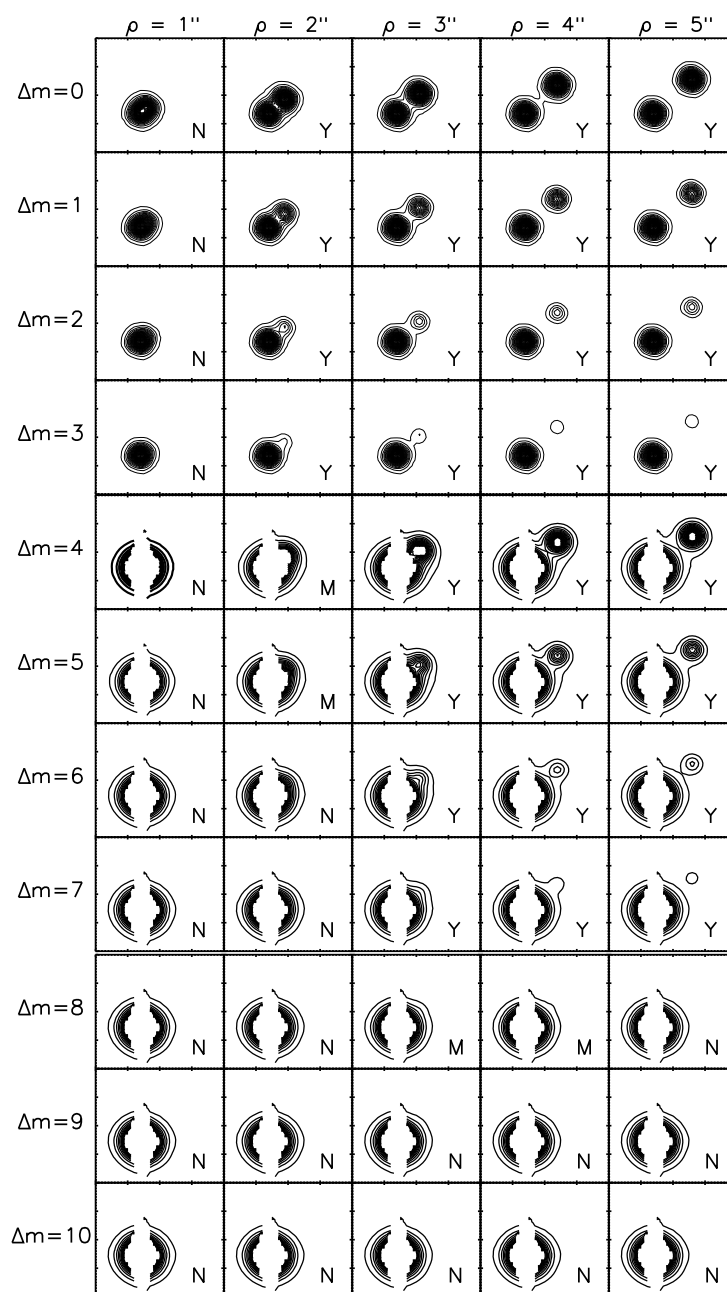


Figure D.10 Detection Limits for the CTIO/SMARTS 0.9m: Contour plots for a reference star scaled to $I = 8.00$ at $1''.8$ seeing conditions for an embedded companion at $\rho = 1 - 5''$ with $\Delta m_{\text{ags}} = 0 - 10$. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 3-second exposure was used for $\Delta m_{\text{ags}} = 0 - 3$, and the 300-second exposure was used for $\Delta m_{\text{ags}} = 4 - 10$.

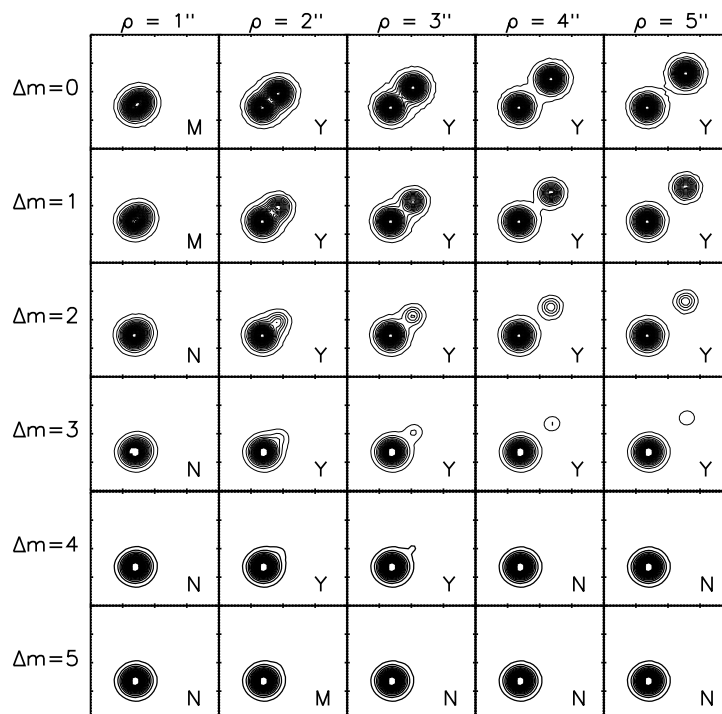


Figure D.11 Detection Limits for the CTIO/SMARTS 0.9m: Contour plots for SCR2307-8452, with $I = 12.00$ at $1''.8$ seeing conditions for an embedded companion at $\rho = 1 - 5''$ with $\Delta m_{\text{ags}} = 0 - 5$. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 30-second exposure was used for $\Delta m_{\text{ags}} = 0, 1, 2$, and the 300-second exposure was used for $\Delta m_{\text{ags}} = 3, 4, 5$.

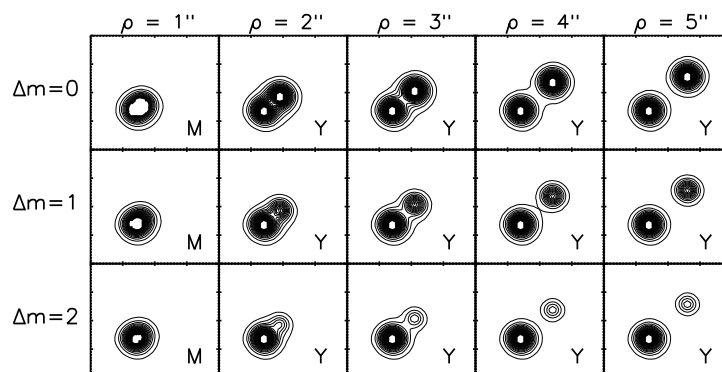


Figure D.12 Detection Limits for the CTIO/SMARTS 0.9m: Contour plots for a reference star scaled to $I = 16.00$ at $1''.8$ seeing conditions for an embedded companion at $\rho = 1 - 5''$ with $\Delta m_{\text{ags}} = 0 - 2$. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 300-second exposure was used.

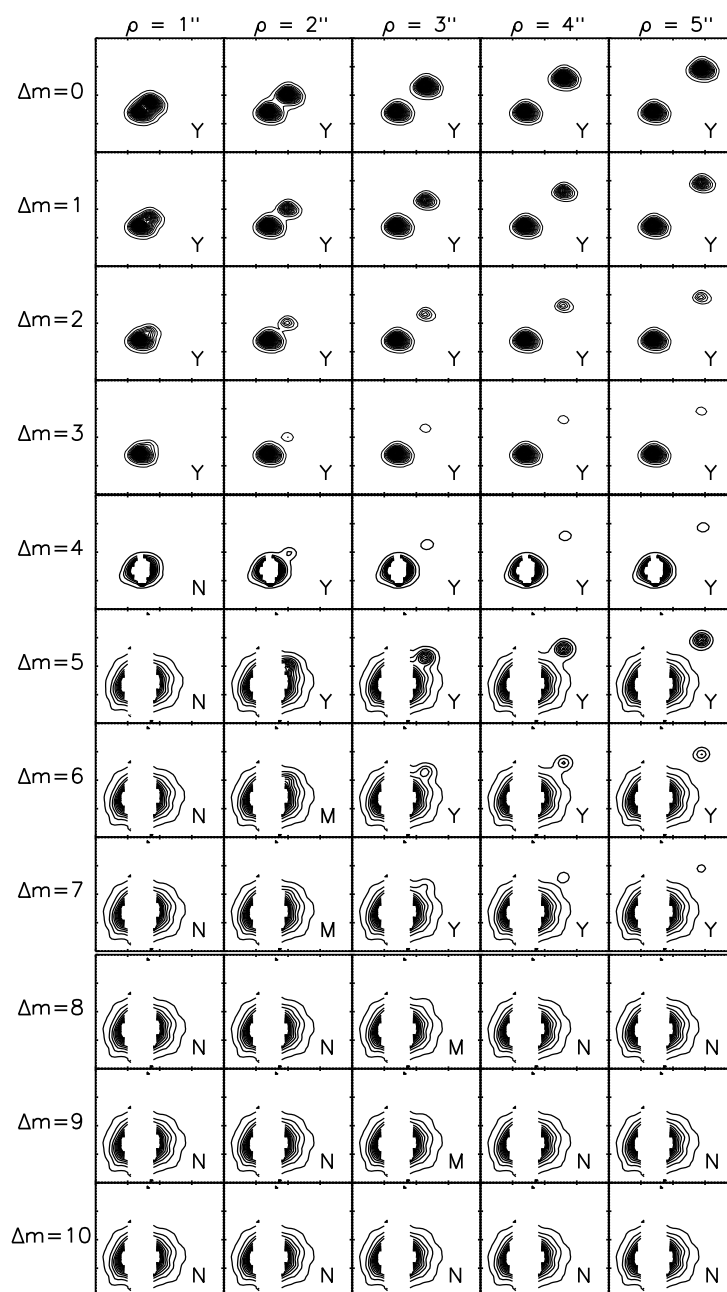


Figure D.13 Detection Limits for the Lowell 42in: Contour plots for GJ 709, with $I = 8.41$ at $1''.0$ seeing conditions for an embedded companion at $\rho = 1 - 5''$ with $\Delta m_{\text{ags}} = 0 - 10$. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 3-second exposure was used for $\Delta m_{\text{ags}} = 0 - 3$, the 30-second exposure was used for $\Delta m_{\text{ags}} = 4$, and the 300-second exposure was used for $\Delta m_{\text{ags}} = 5 - 10$.

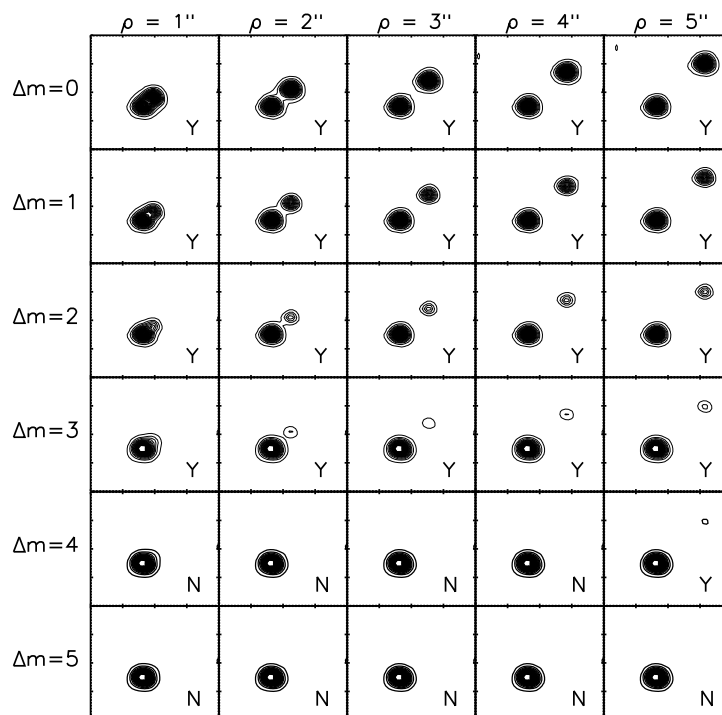


Figure D.14 Detection Limits for the Lowell 42in: Contour plots for GJ1231, with $I = 12.08$ at $1''.0$ seeing conditions for an embedded companion at $\rho = 1 - 5''$ with $\Delta\text{mags} = 0 - 5$. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 30-second exposure was used for $\Delta\text{mags} = 0 - 2$, and the 300-second exposure was used for $\Delta\text{mags} = 3 - 5$.

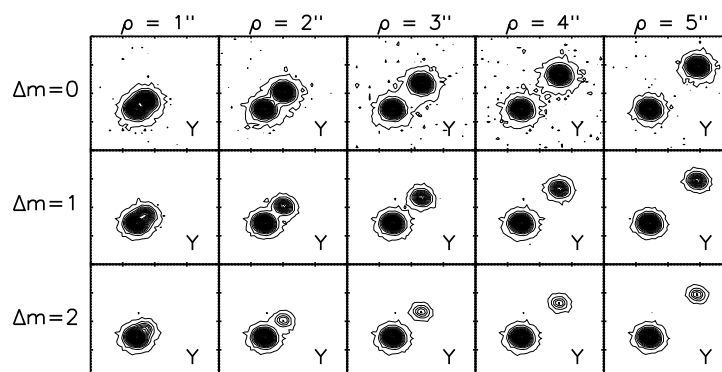


Figure D.15 Detection Limits for the Lowell 42in: Contour plots for a reference star scaled to $I = 16.00$ at $1''.0$ seeing conditions for an embedded companion at $\rho = 1 - 5''$ with $\Delta\text{mags} = 0 - 2$. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 300-second exposure was used.

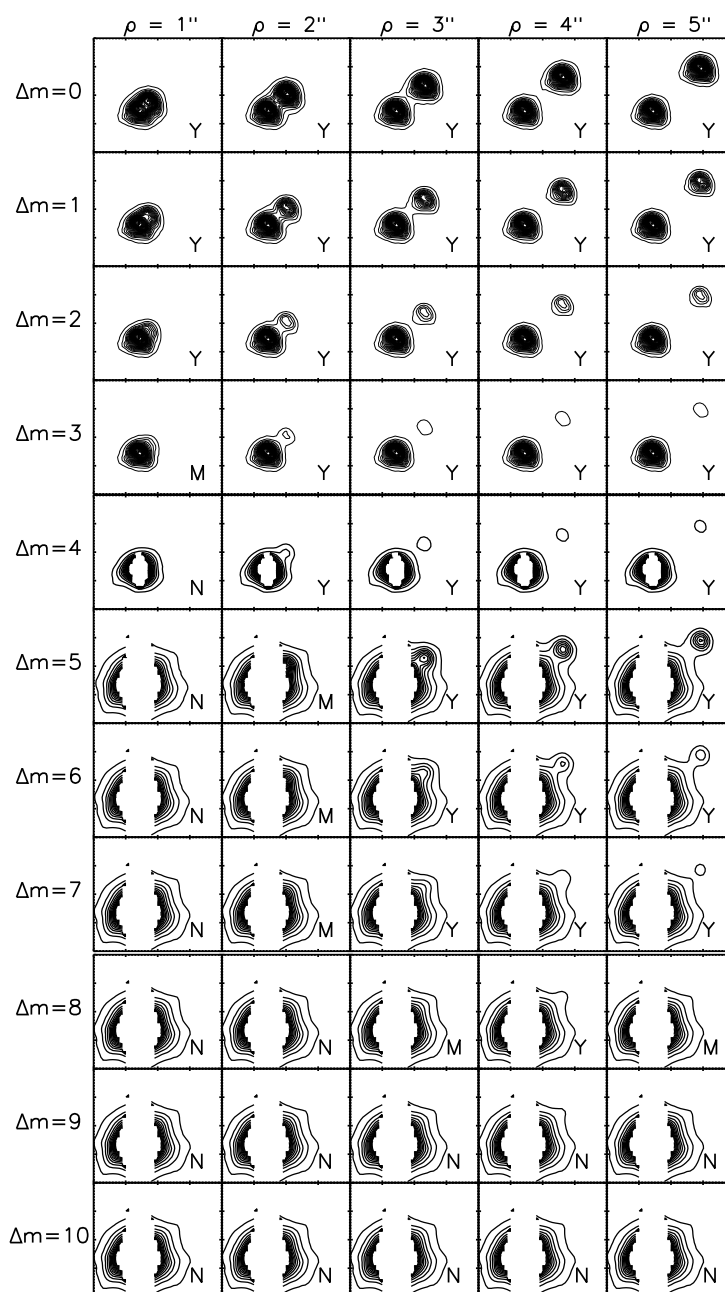


Figure D.16 Detection Limits for the Lowell 42in: Contour plots for GJ 109, with $I = 8.10$ at $1''.5$ seeing conditions for an embedded companion at $\rho = 1 - 5''$ with $\Delta m = 0 - 10$. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 3-second exposure was used for $\Delta m = 0 - 3$, the 30-second exposure was used for $\Delta m = 4$, and the 300-second exposure was used for $\Delta m = 5 - 10$.

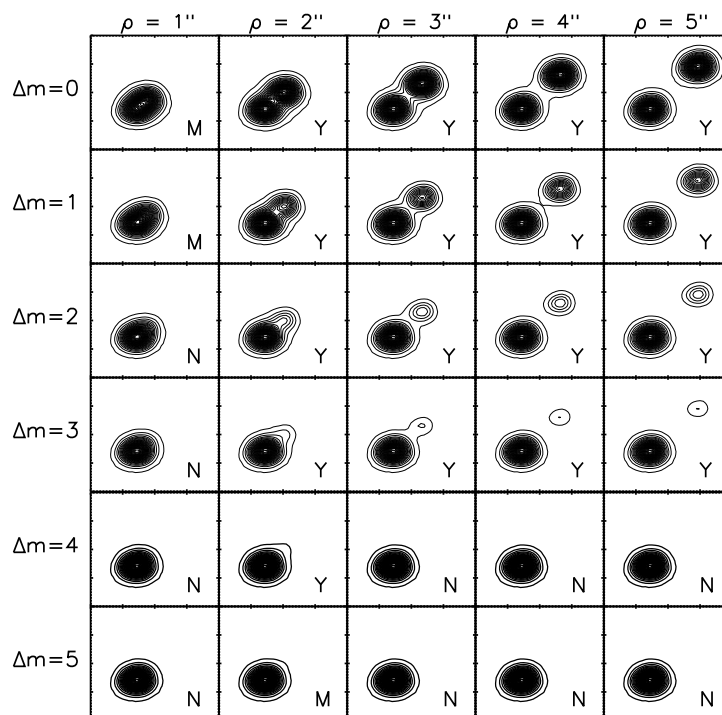


Figure D.17 Detection Limits for the Lowell 42in: Contour plots for LHS 1378, with $I = 12.09$ at $1''.5$ seeing conditions for an embedded companion at $\rho = 1 - 5''$ with $\Delta m_{\text{ags}} = 0 - 5$. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 300-second exposure was used.

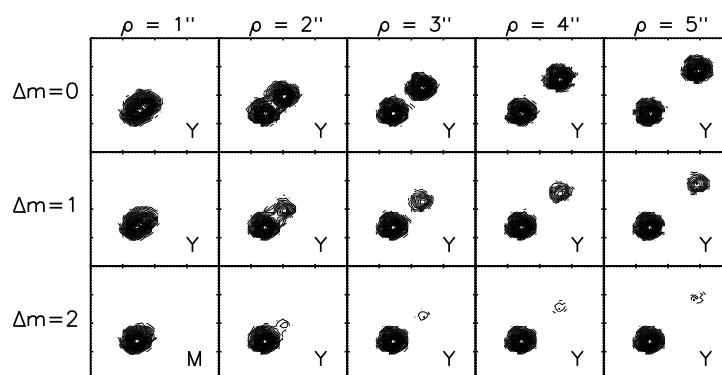


Figure D.18 Detection Limits for the Lowell 42in: Contour plots for 2MA0352+0210, with $I = 16.12$ at $1''.5$ seeing conditions for an embedded companion at $\rho = 1 - 5''$ with $\Delta m_{\text{ags}} = 0 - 2$. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 300-second exposure was used.

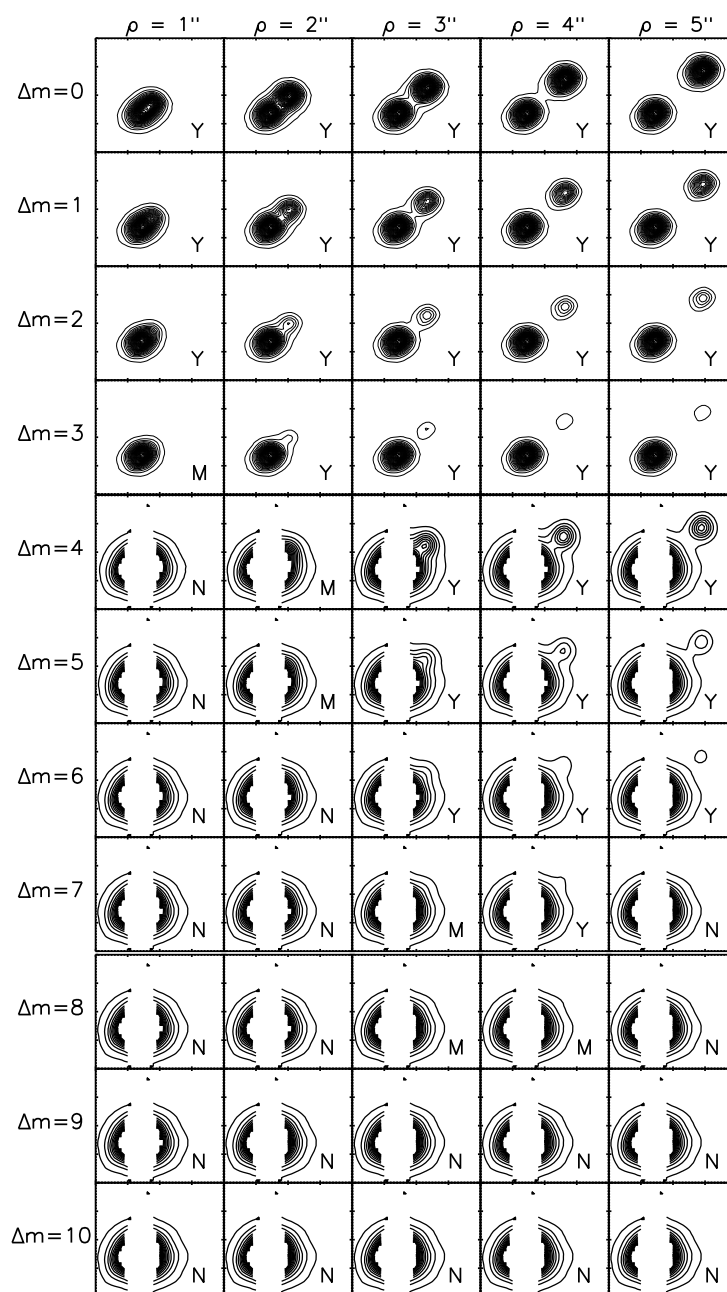


Figure D.19 Detection Limits for the Lowell 42in: Contour plots for GJ 134, with $I = 8.21$ at $1''.8$ seeing conditions for an embedded companion at $\rho = 1 - 5''$ with $\Delta m_{\text{ags}} = 0 - 10$. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 3-second exposure was used for $\Delta m_{\text{ags}} = 0 - 3$, and the 300-second exposure was used for $\Delta m_{\text{ags}} = 4 - 10$.

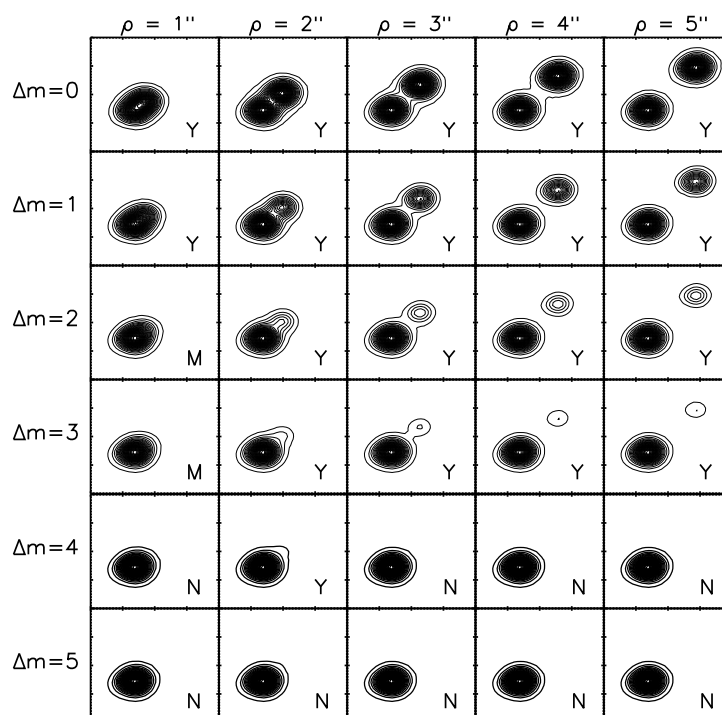


Figure D.20 Detection Limits for the Lowell 42in: Contour plots for LHS1375, with $I = 12.01$ at $1''.8$ seeing conditions for an embedded companion at $\rho = 1 - 5''$ with $\Delta m_{\text{ags}} = 0 - 5$. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 300-second exposure was used.

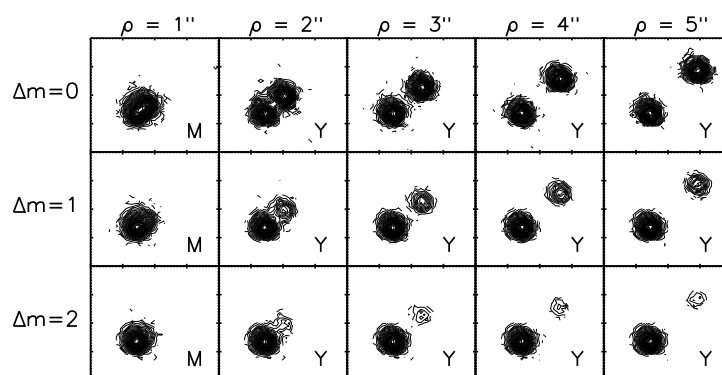


Figure D.21 Detection Limits for the Lowell 42in: Contour plots for SIP0320-0446AB, with $I = 16.37$ at $1''.8$ seeing conditions for an embedded companion at $\rho = 1 - 5''$ with $\Delta m_{\text{ags}} = 0 - 2$. AB have $\rho_{AB} < 0.33$. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 300-second exposure was used.

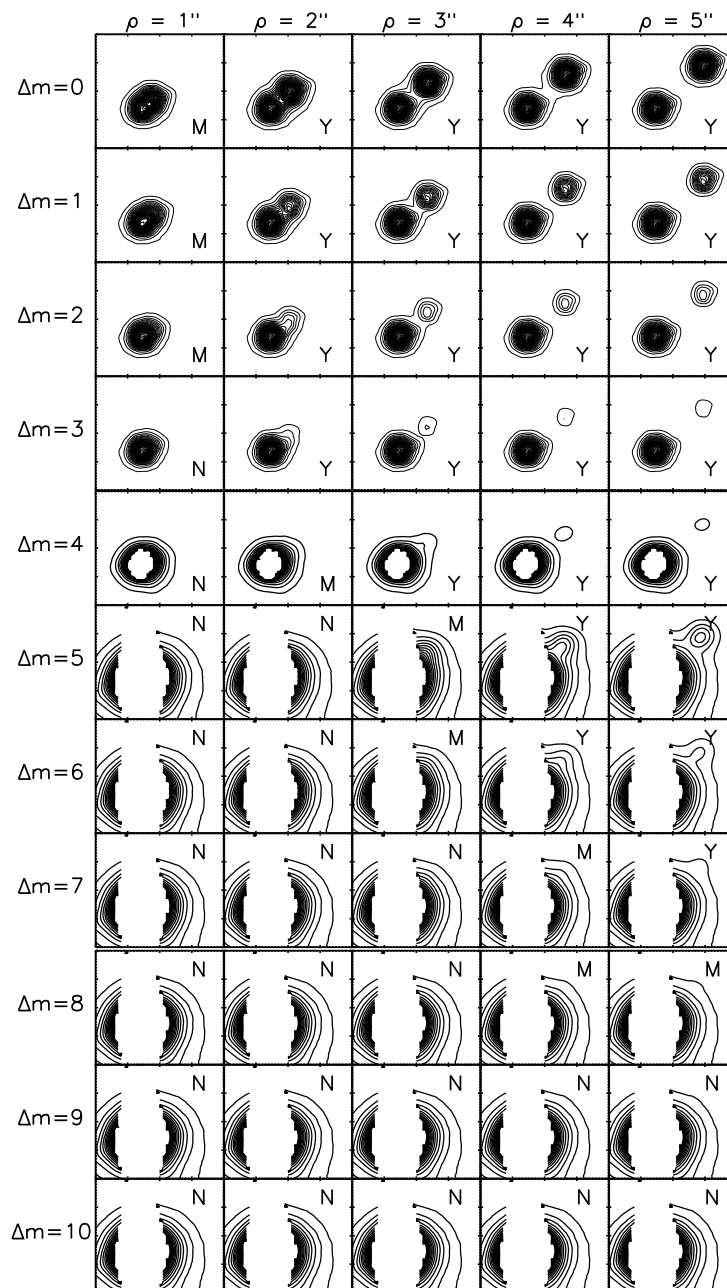


Figure D.22 Detection Limits for the Lowell 42in: Contour plots for GJ 720A, with $I = 8.02$ at $2''$ seeing conditions for an embedded companion at $\rho = 1 - 5''$ with $\Delta m_{\text{ags}} = 0 - 10$. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 3-second exposure was used for $\Delta m_{\text{ags}} = 0 - 3$, the 30-second exposure was used for $\Delta m_{\text{ags}} = 4$, and the 300-second exposure was used for $\Delta m_{\text{ags}} = 5 - 10$.

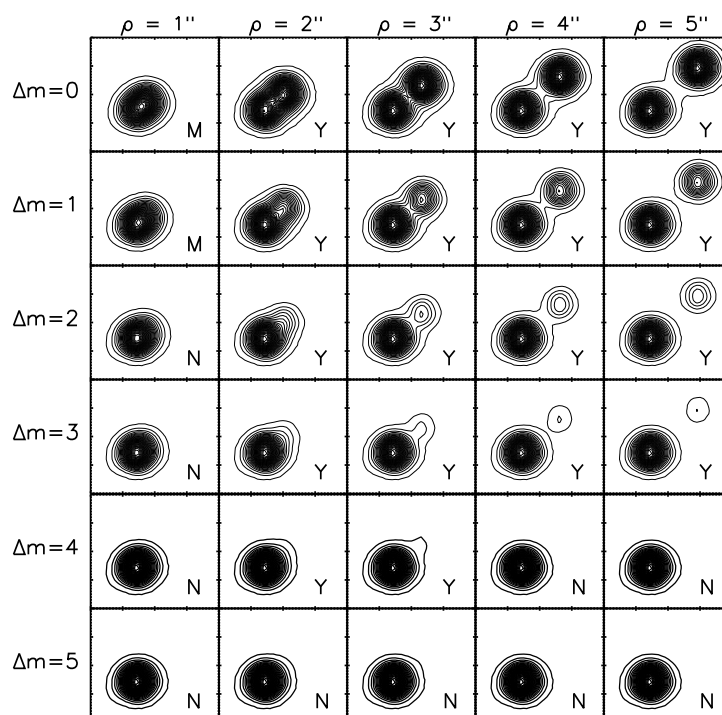


Figure D.23 Detection Limits for the Lowell 42in: Contour plots for LHS3005, with $I = 11.99$ at $2''.0$ seeing conditions for an embedded companion at $\rho = 1 - 5''$ with $\Delta m_{\text{ags}} = 0 - 5$. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 300-second exposure was used.

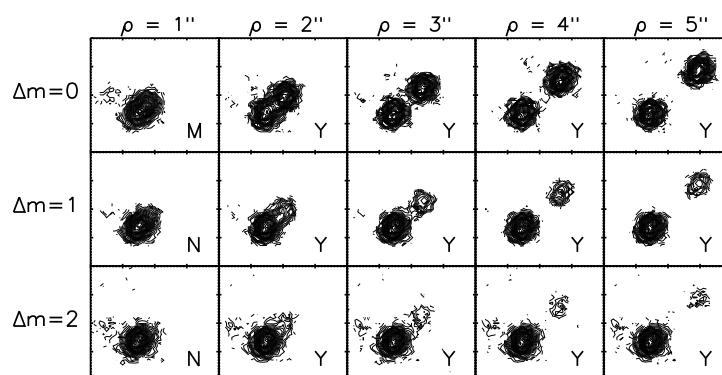


Figure D.24 Detection Limits for the Lowell 42in: Contour plots for 2MA1731+2721, with $I = 15.50$ at $2''.0$ seeing conditions for an embedded companion at $\rho = 1 - 5''$ with $\Delta m_{\text{ags}} = 0 - 2$. The Y, N, and M labels indicate *yes*, *no*, or *maybe* for whether or not the embedded companion is detectable. The 300-second exposure was used.