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No. 63 UBVRIJKL PHOTOMETRY OF THE BRIGHT STARS

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ABSTRACT

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We present here the results of our multicolor photometric work on the bright stars. Of the stars listed in the *Catalogue of Bright Stars*, we have observed 1567 in U, B, V, R, and I; 653 in J and K; and 268 in L. Comparisons of our new UBV measures with previously published data on the same system indicate that the quality of our data is high. We have found it possible to make a very accurate transformation of the southern Cape photometry to the UBV system: for this reason, we give here a catalog of UBV photometry on nearly 5000 bright stars over the entire sky.

1. Introduction

During the past four years we have been making multicolor photometric observations, over as wide a range of wavelength as possible, of the bright stars. This publication contains the results of our work in eight broad wavelength bands ranging in effective wavelength from 0.36μ in the ultraviolet to 3.4μ in the infrared—a 10 to 1 range in wavelength. Most of the observations were made with the 21-in., 28-in., and 60-in. photometric telescopes of LPL, but an important minority were made with the 40-in. telescope of the Observatorio Astronómico Nacional, Universidad Nacional de México. This has been a joint project between LPL and the Tonantzintla Observatory (site of the 40-in. Mexican telescope), with major financial support (through grants to the University of Arizona) from the National Science Foundation, the Office of Naval Research, and the National Aeronautics and Space Administration.

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Without the financial support of these federal agencies, this project would not have been possible.

2. The Observations

The observations were taken with the apparatus described by Johnson and Mitchell (1962) or improvements thereof. The most important modification of the apparatus since 1962 was the substitution of a very sensitive PbS cell for the InSb cell that was used for the initial work (Johnson 1962a). All reductions of the observational data were made by electronic computers, using the programs described by Johnson and Mitchell (1962).

The photometric system is that defined by Johnson (1964) and Iriarte, Johnson, Mitchell, and Wiśniewski (1965). The filter bands and their effective wavelengths are listed in Table 1. Details of the individual response functions and the absolute calibration of the system have already been published (Johnson 1965a, 1965b). Although we have also observed many fainter stars, this *Communication* is restricted to stars contained in the *Catalogue of Bright Stars* (Hoffleit 1964). Of the stars listed in

TABLE 1
THE EFFECTIVE WAVELENGTHS

FILTER BAND	λ_0	FILTER BAND	λ_0
U	0.36 μ	I	0.90 μ
B	0.44	J	1.25
V	0.55	K	2.2
R	0.70	L	3.4

the *Catalogue*, we have observed 1567 in U, B, V, R, and I; 653 in J and K; and 268 in L.

Our eight-color photometric data are given in Table 2, the first column of which contains the numbers of the stars in the Bright Star Catalogue, the second through ninth, the photometric data, and the tenth, the spectral types. These spectral types have been carefully selected after reference to many sources, the principal ones being the Bright Star Catalogue and the "Catalogue of Stellar Spectra Classified in the Morgan-Keenan System" (Jaschek, Conde, and Sierra 1964). In some cases we have entered in the spectral-type column a rather subjective mean of several nearly identical types, rather than selecting only one. Spectral types by W. W. Morgan, where available, were preferred over all others. The eleventh, twelfth, and thirteenth columns of Table 2 contain the numbers of the individual observations of V, R, and K; the number in the last column refers to the source of the data, which is given in Table 3.

Table 2 contains our estimate of the best mean values obtainable from our data and previously published data. It does not, however, contain all of the information that can be derived from our observations; for example, the date and time of observation

are not contained therein. In order to make possible the extraction of the maximum amount of information from our observational data, we include in Tables 4, 5, 6, and 7 all of the individual observations we made during this four-year program, along with the air masses and Julian Dates of the observations. Table 4 contains the UBVR photometry obtained at the Catalina Station of LPL; Table 5 contains additional RI Catalina photometry; Table 6, the BVRI and UBVR photometry obtained at the Tonantzintla Observatory; and Table 7, the IJKL photometry obtained at both observatories. The IJKL photometry was taken using two different photometers, the IJK photometer and the JKL photometer. As the names indicate, the IJK photometer measures magnitudes I, J, and K, while the JKL measures magnitudes J, K, and L. The I magnitudes that can be derived from Table 7 are nearly, but not exactly, identical to those from Tables 4, 5, and 6; the I magnitudes from Table 7, with few exceptions, were not used in the construction of Table 2.

Not all of the numbers printed in Tables 4, 5, 6, and 7 are actually satisfactory photometric data; in some cases meaningless numbers or zeros appear there. It is the function of the "weight" columns of these tables to indicate which values are actually meaningful; zero weight means that the numbers in the corresponding photometry columns should be ignored. The last column of these tables contains numbers that refer to the reduction procedures: "4" indicates that enough standard and extinction stars were observed that night to derive both extinction coefficients and systemic transformations; "3" indicates that the extinction coefficient and zero-point transformation were determined, and a mean color

TABLE 3
PHOTOMETRY SOURCES

Source 1 All stars in Table 4. In addition, published UBVR from the following sources has been included:

Group A

Harris 1955, 1956; Hoag *et al.* 1961; Johnson 1952, 1953, 1955, 1957, 1962*b*; Johnson and Gardiner 1955; Johnson and Harris 1954; Johnson and Knuckles 1955, 1957; Johnson and Mitchell 1958; Johnson, Mitchell, and Iriarte 1962; Johnson and Morgan 1953, 1955*a*, 1955*b*; Mitchell 1960; Roman 1955.

Group B

Hiltner 1956; Hiltner and Johnson 1956; Johnson and Hiltner 1956; Naur 1955; Serkowski 1961.

Source 2 Stars observed at Tonantzintla (Table 6) combined with published UBVR from:
Cape Royal Observatory 1964; Cousins and Stoy 1963.

Source 3 RI from sources listed below combined with UBVR from Source 1.
Breckinridge and Kron 1964*a*, 1964*b*; Kron and Gascoigne 1953; Kron, Gascoigne, and White 1957; Kron, White, and Gascoigne 1953.

Source 4 RI from Source 3 combined with UBVR from Source 2.

coefficient was assumed; "2" indicates that it was not possible to derive an extinction coefficient (a mean value was assumed), but that systemic transformations were derived; "1" indicates that neither extinction coefficients nor systemic transformations were derived, and that only the zero-points in the transformation equations to the standard system were derived from the standard star observations on that night. Thus, the quality of the nights is indicated by these numbers.

A few stars, for example, 10 Lacertae (B. S. 8622), are so faint in magnitude *L* that it is difficult to obtain accurate measures. The mean values of *K-L* that were used to derive the values of *V-L* in Table 2 include our estimates (not given in Table 7) of the weights of the individual observations. For this reason, a straight mean of the *K-L* values in Table 7 may not in all cases be identical with the values from Table 2.

3. The Quality of the Data

The UBVR photometer at the Catalina Station contains, in the UBVR section, the same 1P21 photomultiplier and the same filters that were used for the original definition of the UBVR system (Johnson and Morgan 1953), and the new UBVR data should be very nearly on the original system. Many data taken with the same 1P21 and filters have already been published; these are listed under Source 1 Group A of Table 3. Other published data (Source 1 Group B) were taken with a photomultiplier and filters that yielded a photometric system indistinguishable from the original UBVR system. These published data provide an excellent comparison list to check the quality of our Catalina data. The differences — Catalina *minus* Published — are shown in Figure 1 as a function of *B-V*; in Figure 2 as a function of *U-B*; in Figure 3 as a function of declination; and in Figure 4 as a function of the Bright Star Catalogue number (and, therefore, of right ascension). Figures 1 and 2 show that the new UBVR data are on a system that is practically identical with the original one. Figure 3 shows that there are no systematic differences correlated with declination between the two lists, except that a small declination difference does appear to exist in the *V* magnitudes. Figure 4 shows that there are no systematic differences correlated with right ascension between the two lists. The UBVR data in Table 2 are the weighted means (weighted according to the number of observations) of the Catalina and the Published data. We cannot establish which of the two lists contains the

small declination error in *V* indicated in Figure 3 (we believe it more likely that it is in the Published data, rather than in the Catalina data), and we have, therefore, taken the means without correction of either list. These mean values comprise our "Prime" list of UBVR data.

The observers at the Cape of Good Hope, South Africa (Cape Royal Observatory 1964; Cousins and Stoy 1963), have made many observations which they have transformed to the UBVR system; furthermore, their data cover the entire southern sky that is not accessible from either Arizona or Mexico, as well as a considerable overlap with us. The comparisons of the Cape published data and our Prime list are shown in Figure 5 as a function of *B-V*, for the declination zone from $+10^\circ$ to -10° . Some small differences between the Cape UBVR data and ours are indicated by Figure 5, and the appropriate corrections to be added to transform their data to our UBVR system are as follows:

$$\Delta V = +0.007$$

$$B - V < +0.3$$

$$\Delta(B - V) = +0.002 - 0.034 (B - V)_c;$$

$$\Delta(U - B) = -0.001 + 0.096 (B - V)_c.$$

$$+0.3 < B - V < +1.0$$

$$\Delta(B - V) = -0.013 + 0.018 (B - V)_c;$$

$$\Delta(U - B) = +0.043 - 0.051 (B - V)_c.$$

$$B - V > +1.0$$

$$\Delta(B - V) = +0.017 - 0.012 (B - V)_c;$$

$$\Delta(U - B) = -0.026 + 0.018 (B - V)_c.$$

If $(U - B)_c < -0.5$, an additional correction to be added is $\Delta(U - B) = -0.018 - 0.038 (U - B)$. The largest correction is that to $(U - B)_c$; a check of the quality of the corrected Cape *U-B* values is shown in Figure 6. Checks of the quality of all three are shown in Figure 7. (We were unable to find a satisfactory transformation for the Cape refractor ultraviolet observations, and only their reflector ultraviolet data are included in this discussion.) The differences between the Prime list and the corrected Cape data are shown in Figure 8 as a function of declination and in Figure 9 as a function of the Bright Star Catalogue number. These diagrams indicate that for *B-V* and *U-B*, there are no significant systematic differences between the two lists. For *V* there may be some small declination or right ascension differences; for example, a systematic difference in *V* magnitude appears between B. S. 6000 and 8500 — a difference that does not appear between the Catalina and Published UBVR data (cf. Fig. 4).

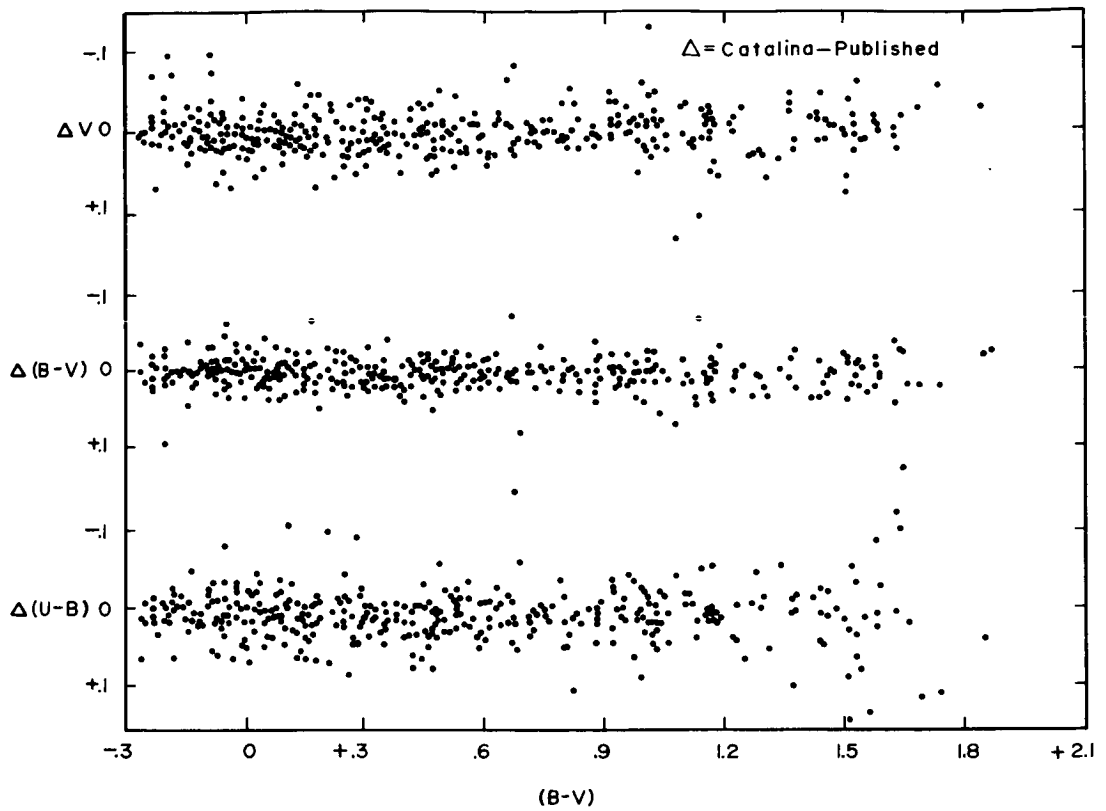


Fig. 1 The comparison of the Catalina and the Published UBV photometry as a function of B-V.

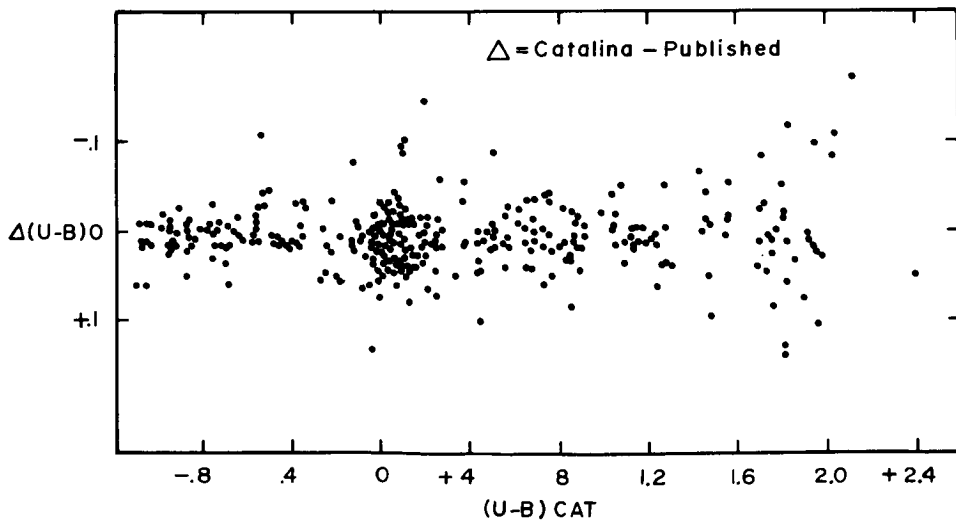


Fig. 2 The comparison of the Catalina and the Published U-B colors.

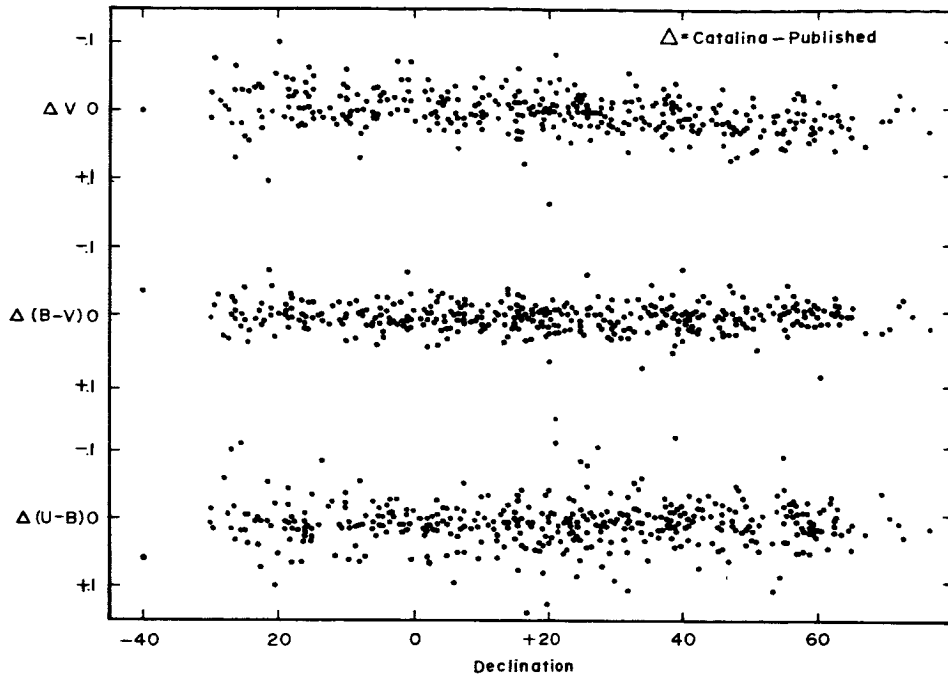


Fig. 3 The comparison of the Catalina and the Published UBV photometry as a function of declination.

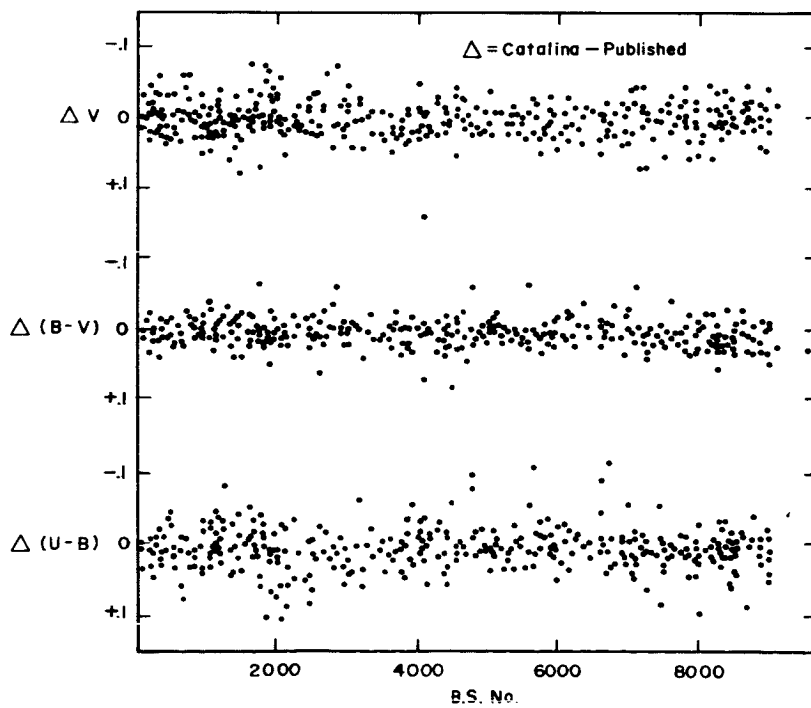


Fig. 4 The comparison of the Catalina and the Published UBV photometry as a function of Bright Star Catalogue number (and therefore of right ascension).

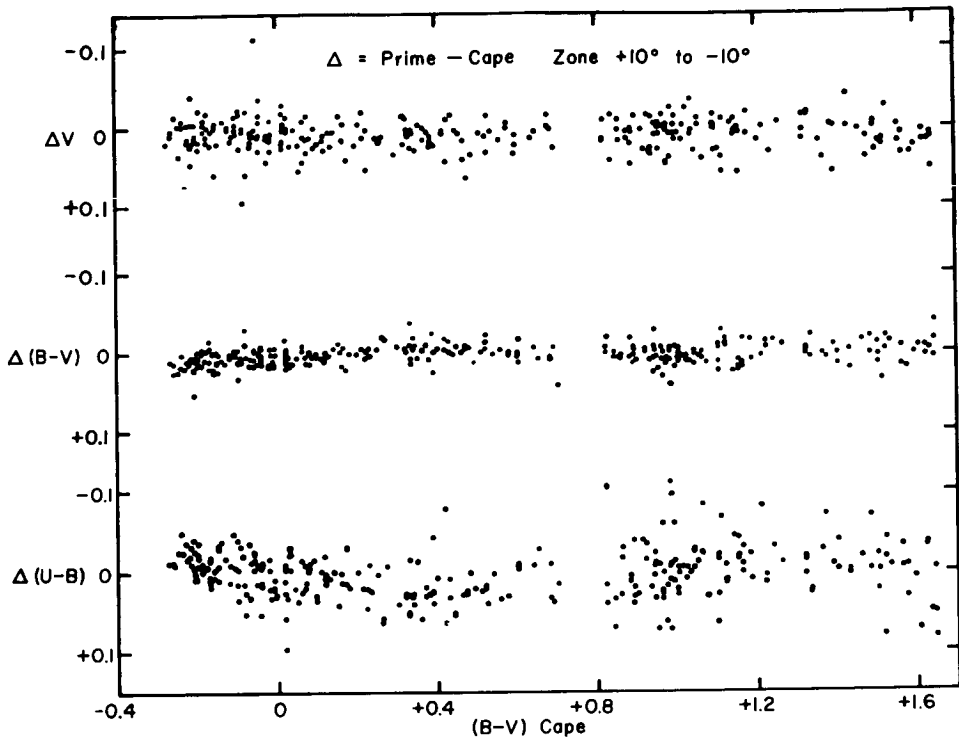


Fig. 5 The comparison of the Prime and the Cape UBV photometry for the declination zone from $+10^\circ$ to -10° .

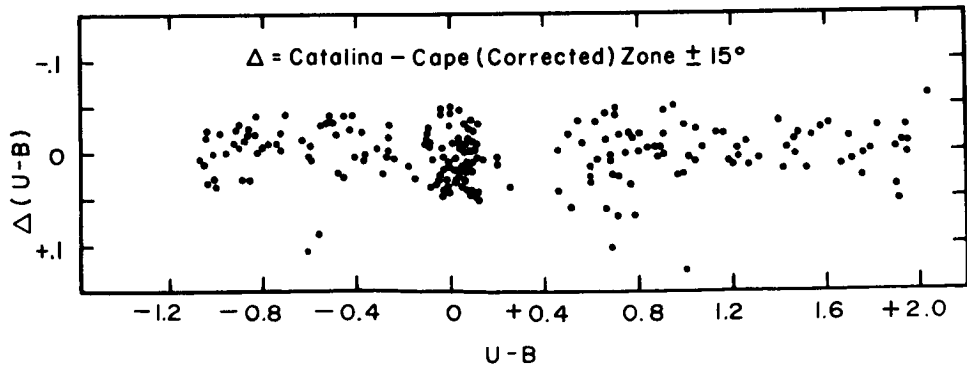


Fig. 6 The comparison of the Prime and the corrected Cape U-B colors for the equatorial zone.

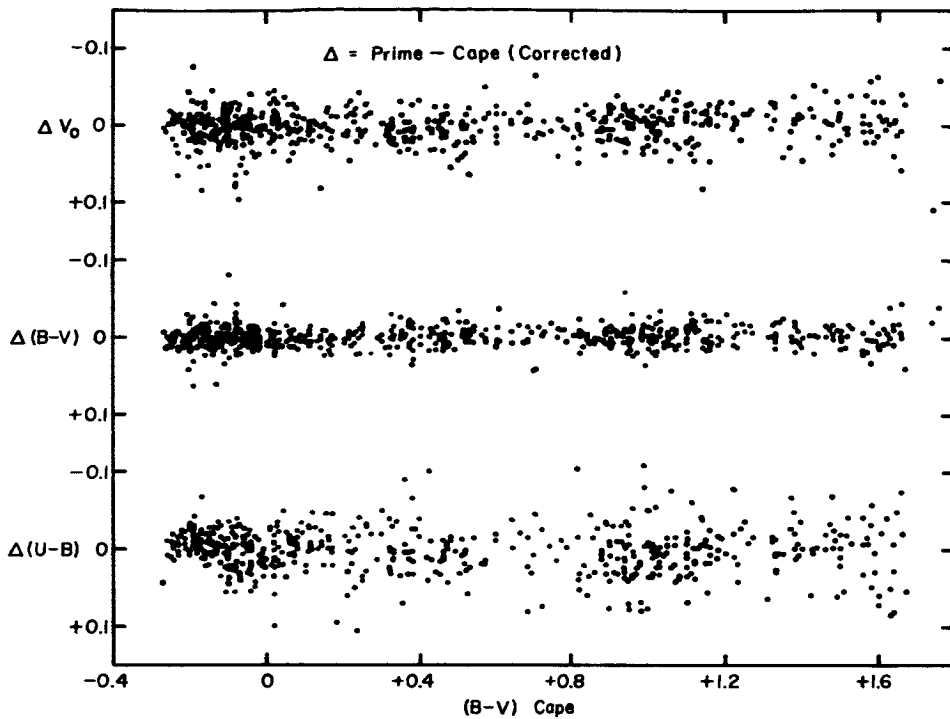


Fig. 7 The comparison of the Prime and the corrected Cape UB photometry as a function of B-V.

The declination-dependent difference in V between the Catalina and Published UB data (cf. Fig. 3) seems not to exist between the Prime and the Cape (corrected) lists.

Figure 10 compares the Prime list with the Tonantzintla data of Table 6; this comparison includes V-R and R-I. The comparison of the Tonantzintla and Cape B-V colors is shown in Figure 11. The comparisons are satisfactory, except that a small difference in B-V (less than 0.02 mag) appears in Figure 10; however, this difference does not appear in the comparison with the Cape photometry. The sky transparency at Tonantzintla is more variable than at the Catalina Station, and we prefer to suppress the Tonantzintla V magnitudes except for stars for which none are available from either Catalina or Cape data. Therefore, Cape or Catalina magnitudes have been substituted in Table 2 for all Tonantzintla-observed stars, except for those

observed only at Tonantzintla. All observed Tonantzintla V magnitudes are, however, given in Table 6.

The comparisons of our R magnitudes and R-I colors with those of Kron, Gascoigne, and White (1957) are shown in Figures 12 and 13. The transformations indicated by these two figures were used to provide R and I data in Table 2 for a few stars that we did not observe in these filters.

The estimated probable errors of our data are given in Table 8. These estimates are based on the internal agreement of the data in Tables 4, 5, 6, and 7 and on the external errors indicated by Figures 1 through 11.

4. UB photometry for the Entire Sky

The combination of our new UB photometry, our previously published photometry, and the published Cape photometry (corrected as indicated above) makes it possible to give a single list of UB

TABLE 8
PROBABLE ERROR OF A SINGLE OBSERVATION AT 1.0 AIR MASS

V	B-V	U-B	V-R	R-I	FOR K < 4.0 mag		
					K	J-K	K-L
±0.015	±0.011	±0.016	±0.018	±0.010	±0.030	±0.025	±0.035

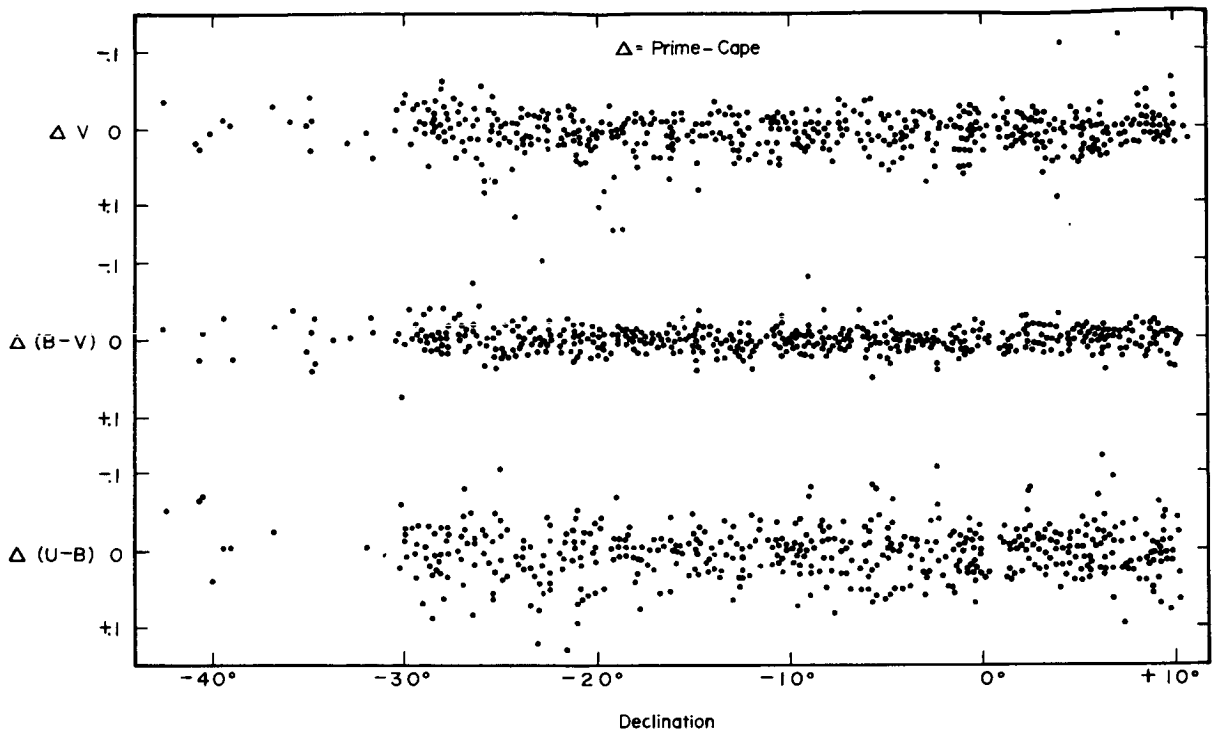


Fig. 8 The comparison of the Prime and the corrected Cape UBV photometry as a function of declination.

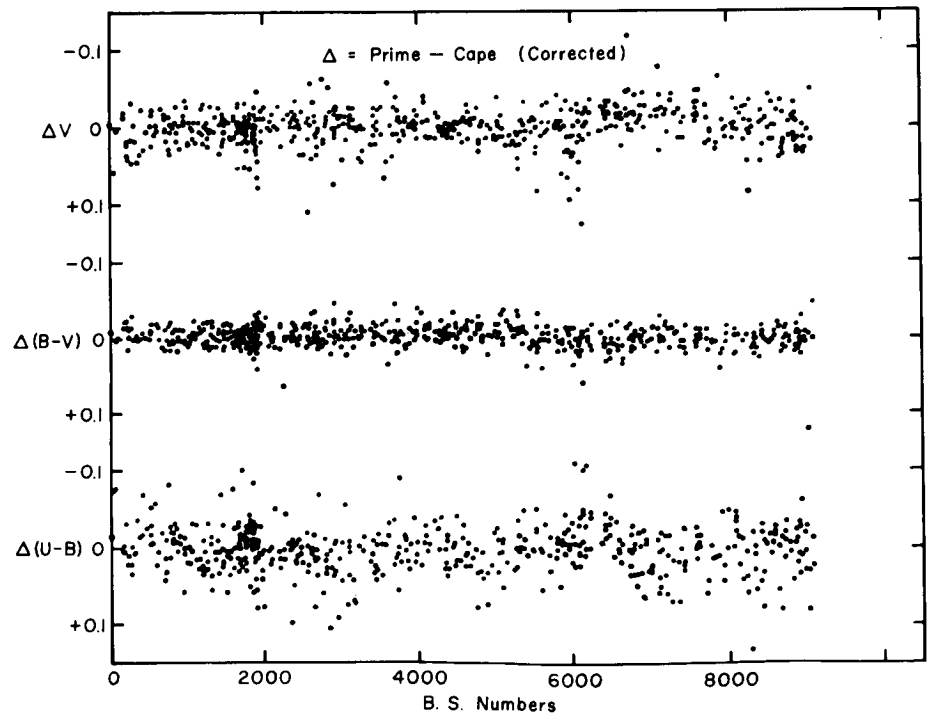


Fig. 9 The comparison of the Prime and the corrected Cape UBV photometry as a function of Bright Star Catalogue number (and therefore of right ascension).

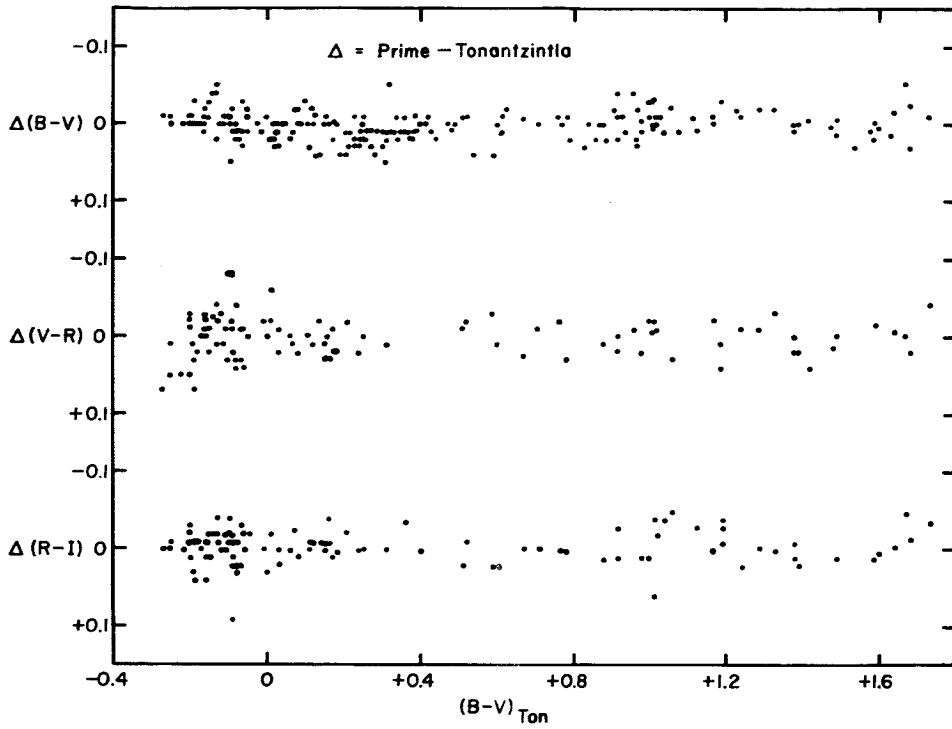


Fig. 10 The comparison of the Prime and the Tonantzintla BVRI photometry as a function of B-V.

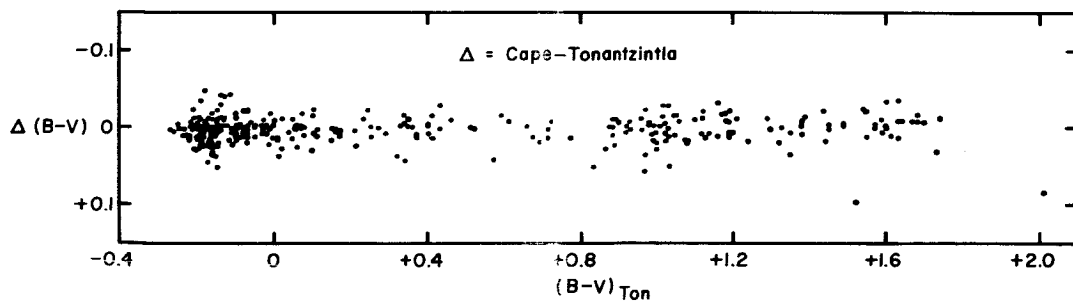


Fig. 11 The comparison of the Cape and the Tonantzintla B-V colors.

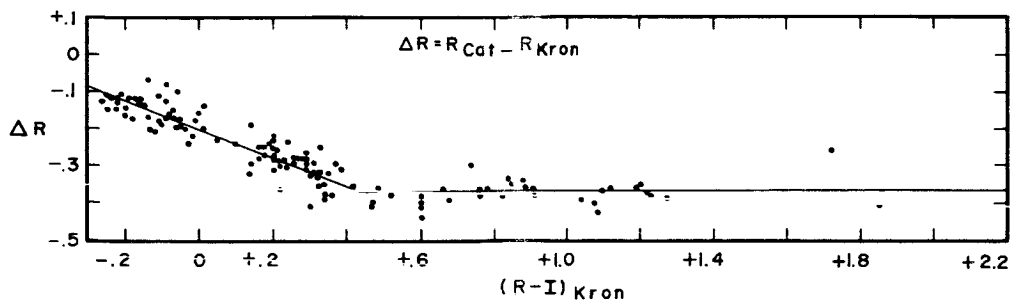


Fig. 12 The comparison of the Catalina R magnitudes with those of Kron and his collaborators.

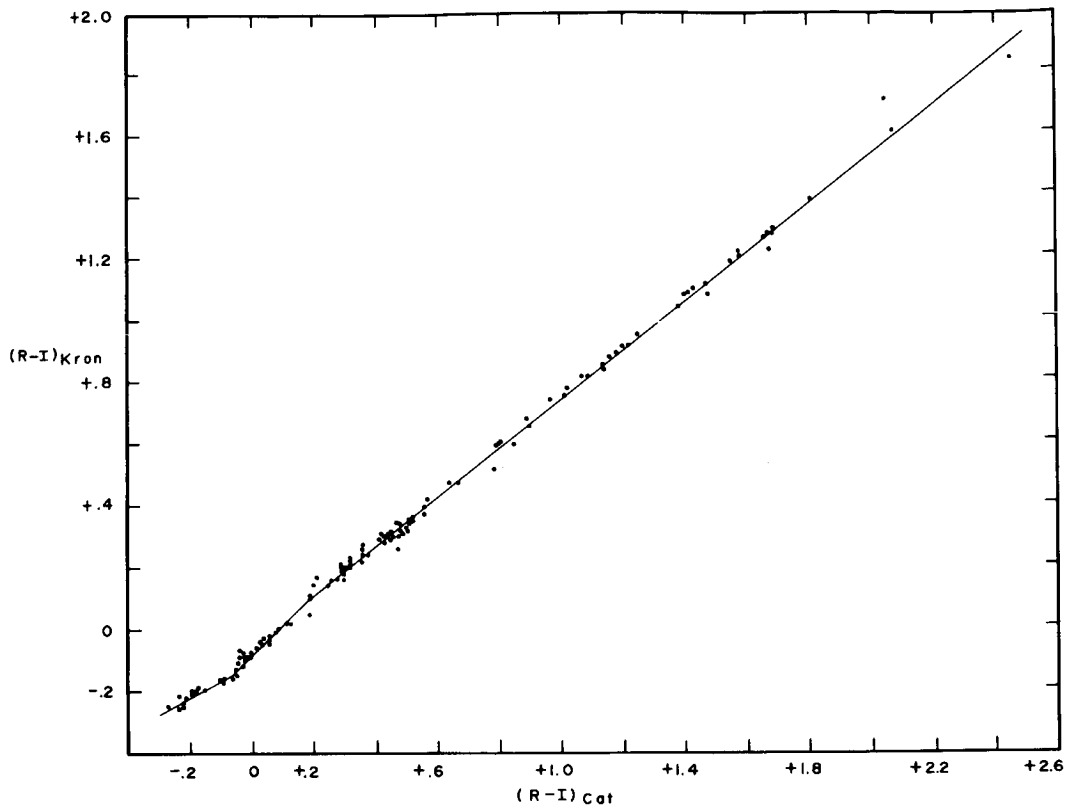


Fig. 13 The comparison of the Catalina R-I colors with those of Kron and his collaborators.

photometry of bright stars for the entire sky. This list, whose quality is indicated by the comparisons shown in Figures 1 through 11, is given in Table 9. (As before, Tonantzintla V magnitudes have been entered only for stars not in the Catalina or Cape lists.) With the few exceptions noted, Cape data have been entered in Table 9 only for stars for which there are no Prime list data. We have, however, corrected the entire Cape list to the UBV system, and Table 10 gives the remaining corrected Cape data that were not used in the construction of Table 9. The "WT" column of Table 9 indicates the number of individual observations making up the mean (all numbers larger than 9 are indicated as 9). The "S" column indicates the source of the data: "1" indicates Prime list, and "2" indicates Cape or Tonantzintla data, as referenced in Table 3.

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and preparing the data for publication. The financial support from the National Science Foundation was received by Grant Nos. NSF-G21870, NSF-G23712, NSF-G25072, GP-3414, GP-3736, GP-4999, GP-5129; from the Office of Naval Research by Grant Nos. Nonr(G)-00010-63, Nonr(G)-00023-64, Nonr(G)-00018-65, Nonr(G)-00004-66; and from the National Aeronautics and Space Administration by Grant No. NsG 161-61.

Note added in proof. In a few cases in Tables 4, 5, 6, and 7, 0.000 was printed without zeros after the decimal.

NOTES ON STARS IN TABLES 2 AND 9

- 321 Seven new observations in UBV made by W. S. Fitch (unpublished).
- 472 Magnitude V was taken from the *Catalogue of Bright Stars*.
- 781 The V magnitude was averaged with Cape measures, and the colors were compared with Cape colors. The weight was doubled.

- 919 The Catalina U-B was corrected by adding
 $\Delta(U-B) = +0.03$ (air mass - 1.8)
 for stars of type B8V to A5V observed at
 greater than 1.8 air mass.
- 977 Tonantzintla and Cape observations are dis-
 cordant by 0.2 mag in V and B-V.
- 1084 L measure is InSb observation (Johnson
 1964).
- 1457 α Tau; McDonald, Lowell, and Catalina ob-
 servations give V range from +0.79 to +0.95
 in 11 measures.
- 1605 ϵ Aur during eclipse, March 1956. V = 3.76,
 B-V = 0.56, U-B = 0.37, n = 3.
- 1657 Same as 781.
- 1673 Prime data, Source 1 (Table 3), has been
 averaged with Cape or Tonantzintla data,
 Source 2.
- 1744 Same as 472.
- 1746 Same as 1673.
- 1761 Catalina means given; Catalina observations
 are discordant with Cape and Sharpless
 (1952).
- 1863 Catalina means given; Catalina V are accord-
 ant with Sharpless (1962), but discordant
 with Cape.
- 2326 Magnitude checked by transforming magni-
 tudes from Cape Mimeo #1. (Tonantzintla
 range 0.2 mag.)
- 2538 Same as 781.
- 2902 Same as 472.
- 2909 Same as 781.
- 3129 The V magnitude is the Harvard photovisual
 magnitude corrected by -0.09 mag to the V
 system.
- 3556 Same as 919.
- 4163 Mean values are taken from Mendoza and
 Johnson (1965).
- 4195 Same as 4163.
- 4251 Same as 781.
- 4314 Same as 1673.
- 4395 Same as 781.
- 5028 Same as 919.
- 5288 Same as 1673.
- 5686 Same as 1673.
- 6060 Same as 1673.
- 6070 Same as 919.
- 6406 Same as 1084.
- 6508 Same as 1673.
- 6580 Same as 781.
- 6647 Same as 1673.
- 6663 Same as 781.

- 8297 Same as 4163.
- 8521 Tonantzintla and Cape observations differ by
 0.3 in V.
- 8597 Same as 919.
- 8641 Same as 919.
- 8709 Same as 919.
- 8728 Same as 919.
- 9016 Same as 919.
- 9091 Same as 1673.
- Note: All bright cepheids except Polaris have been
 removed from the tables.

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TABLE 2 UBVRJKL PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY											BRIGHT STAR PHOTOMETRY										
B+S	R	V	U-V	B-V	V-R	V-I	V-J	V-K	V-L	SP.	B+S	R	V	U-V	B-V	V-R	V-I	V-J	V-K	V-L	SP.
3	4.61	1.91	1.04	0.78	1.32	1.66	2.36	2.43	K1 III		360	4.66	1.87	1.03	0.75	1.28	1.65	2.28		K0 III	
15	2.06	-0.56	-0.11	0.31	-0.03	-0.13	-0.34		B9p (III)		370	4.96	0.68	0.58	0.49	0.85				F8 V	
21	2.27	0.46	0.34	0.31	0.51	0.62	0.79		F2 IV		378	5.17	0.15	0.07	0.11	0.12				A5 V	
25	3.88	1.88	1.03	0.75	1.27	1.67	1.82		K0 III		382	4.99	1.17	0.68	0.64	1.20	1.52	1.89	2.08	F0 Ib	
27	5.04	0.66	0.40	0.42	0.71	0.99	1.23		F2 II		383	4.76	0.13	0.03	0.08	0.13				A3 V	
39	2.84	-1.09	-0.23	-0.10	-0.29	-0.50	-0.68	-0.69	B2 IV		390	4.90	2.05	1.08	0.81	1.30				K0 III-IV	
45	4.80	3.50	1.57	1.34	2.47	3.11	4.17	4.35	M2 III		399	4.74	1.97	1.04	0.78	1.34				K0 III	
48 V	4.46	3.61	1.66	1.40	2.54				(M1)		402	3.59	1.98	1.06	0.76	1.32	1.75	2.41		K0 III	
63	4.41	0.11	0.06	0.08	0.09				A2 V		403 V	2.68	0.26	0.13	0.15	0.24	0.27	0.36		A5 V	
68	4.32	0.12	0.03	0.08	0.08				A2 V		417	4.83	0.42	0.42	0.41	0.64				F4 IV	
74	3.55	2.30	1.22	0.85	1.44	1.89	2.60	2.69	K2 III		423 V	5.77		3.83	2.05	3.43	4.33	5.97		(M3)	
77	4.23	0.60	0.58	0.49	0.83				G2 V		424	2.02	0.98	0.60	0.49	0.80				F8 Ib	
90 V	2.39	3.21	1.97	2.94	5.09	6.22	7.79	8.63	S6,6e(M7e)	JD2439056	429 V	3.41	3.41	1.57	1.26	2.24				K5 III	
98	4.33	0.73	0.62	0.50	0.84				G1 IV		434	4.84	2.90	1.38	1.06	1.38	2.42	3.33		K4 III	
99	2.40	1.91	1.09	0.81	1.40				K0 III		437	3.62	1.71	0.97	0.72	1.22	1.59	2.19		G8 III	
100	3.74	0.27	0.17	0.14	0.22				A7 Vn		440	3.95	1.69	0.99	0.75	1.26				K0 III-IV	
105 V	4.31	3.43	1.64	1.59	2.97				(M5)		442	4.72	1.76	1.00	0.77	1.30				G8 III	
113	5.94	-0.33	0.01			0.03	0.18		(B9)		458	4.10	0.60	0.54	0.46	0.75	0.93	1.25	1.31	F8 V	
123 D	4.73	-0.43	-0.10	0.00	-0.12				(B8)		461	5.56	2.81	1.38	1.06	1.38	1.68			G5 II	
130	4.16	-0.63	0.14	0.14	0.20	0.17	0.24	0.25	B1 Ia		464	3.57	2.72	1.28	0.96	1.61	2.04	2.78		K3 III	
153	3.66	-1.08	-0.19	-0.08	-0.29	-0.58	-0.74	-0.79	B2.5 IV		472	(0.47)		-0.15	-0.03	-0.10				B5 IV	
154	4.36	-0.71	-0.16	-0.04	-0.16				B5 V		477	4.94	-0.50	-0.09	-0.01	-0.08				B8 IV	
163	4.38	1.34	0.87	0.68	1.19	1.54	2.17		G8 IIIp		483	4.96	0.73	0.62	0.53	0.86	1.08	1.39	1.54	G2 V	
165	3.28	2.76	1.28	0.92	1.58	2.04	2.80	2.98	K3 III		485	5.99	1.89	1.01	0.77	1.23				K0 III	
166	5.85	1.43	0.85	0.65	1.04	1.40	1.89		K0 V		486	5.07		0.88	0.69	1.17				K0 V	
168	2.23	2.29	1.17	0.78	1.38	1.81	2.48	2.69	K0 III-III		489	4.44	2.92	1.36	1.06	1.77	2.31	3.20		K3 III	
175	4.31	1.49	0.89	0.71	1.17				G8 III		493	5.24	1.33	0.84	0.69	1.12				K1 V	
179	4.81	-0.76	-0.10	-0.01	-0.13	-0.21	-0.32	-0.22	B2 V		496 V	4.06	-0.96	-0.04	0.16	0.18	0.23	0.71	1.23	Blp8 (III+V)	
180	4.59	1.69	0.97	0.75	1.27				G8 III		509	3.50	0.93	0.72	0.62	1.09	1.34	1.82		G8 Vp	
188	2.02	1.69	1.01	0.72	1.23	1.63	2.27		K1 III		510	4.26	1.64	0.96	0.74	1.22	1.57	2.12		G8 III	
193	4.50	-0.66	0.05	0.00	-0.09	-0.13	-0.14		B2 V		511	5.63	1.21	0.81	0.64	1.03				K0 V	
194	7.75	1.64	1.00	0.71	1.23				K0 III		519	5.49	1.49	0.74	0.68	1.17				(M4)	
215 V	4.06	1.19	1.12	0.85	1.44	1.87	2.54		K1 III		530 D	5.86	1.24	0.54	0.48	0.82				K0 III+A6 V	
219 D	3.44	0.60	0.58	0.50	0.86	1.08	1.47		G0 V		531	4.68	0.35	0.32	0.29	0.45				F2 IV	
222	5.76	1.16	0.88	0.77	1.24				K2 V		534	5.94	0.28	0.30	0.33	0.50				F0 V	
224	4.44	3.19	1.51	1.17	2.04	2.66	3.61		K5 III		539	3.72	2.20	1.14	0.80	1.35	1.80	2.49		K2 III	
226	4.53	-0.23	-0.15	-0.03	-0.18				B5 V		542	3.38	-0.77	-0.15	-0.04	-0.16	-0.29	-0.40	-0.39	B3 III	
235	5.20	0.49	0.50	0.46	0.74				F8 V		544	3.42	0.54	0.48	0.42	0.70	0.89	1.18		F6 IV	
244	4.82	0.65	0.53	0.48	0.78				F8 V		545/6	3.88	-0.17	-0.04	0.01	-0.04				B9 V/A1p	
248	4.78	3.49	1.57	1.23	2.14				M0 III		549	4.63	1.64	0.94	0.73	1.20				K0 III	
253	4.84	2.48	1.22	0.92	1.53				K2 III		553	2.65	0.23	0.13	0.14	0.22	0.18	0.28		A5 V	
264 V	2.39	-1.21	-0.10	0.07	-0.01	-0.08	0.19	0.35	B0 IVe		555	4.41	3.30	1.59	1.73	3.51				M4 III	
265	4.64	1.66	0.96	0.77	1.27				G8 III-IV		558	5.11	-0.20	-0.06	0.02	0.24				(B9)	
269	3.67	0.27	0.15	0.23					A4 III		569	4.79	0.37	0.28	0.28	0.45				F2 IV	
271	4.42	1.33	0.94	0.73	1.21				G8 III-IV		574	4.83	1.39	0.88	0.70	1.15				(G4)	
276	6.32	1.48	0.90	0.67	1.13				G5 III		575	4.54	0.22	0.16	0.18	0.26				A4 V	
280	4.27	-0.75	-0.18	-0.03	-0.16				B8 IIIp		580	3.98	0.03	-0.01	0.06	0.06				A1 V	
285	4.26	2.54	1.21	0.89	1.49				K2 III		585	4.01	3.65	1.56	1.26	2.30	2.90	3.91		M1 III	
290	5.98	0.25	0.16	0.18	0.23				A7 V		590	5.04	-0.40	-0.08	0.03	-0.02				B8 V	
294	4.28	1.57	0.96	0.78	1.30	1.68	2.28		K0 III		595/6	3.82	-0.07	0.02	0.08	0.08				Am+Ap	
315	6.12	1.46	1.01	0.73	1.26				K0 III		599	5.50	0.09	0.03	0.06	0.09				Az III	
321	5.18	0.78	0.69	0.63	1.03				G5 Vp		602	5.14	3.31	1.49	1.22	2.11	2.62	3.62		(M5)	
322 D	3.31	1.46	0.90	0.71	1.23				G8 III		603/4	2.10	2.13	1.21	0.94	1.62	2.08	2.91	2.98	K3 III+A	
330	5.53	0.33	0.34	0.35	0.53				F2 V		612	4.69	-0.68	-0.17	-0.04	-0.18	-0.32	-0.34		A0 III(V)	
334	3.45	2.39	1.16	0.83	1.41	1.87	2.62		K3 III		617	2.00	2.28	1.15	0.84	1.46	1.90	2.64	2.74	K2 III	
335 D	4.25	-0.41	-0.07	0.03	-0.02				B7 V		618	5.67	0.60	0.61	0.59	1.09	1.40	1.74		A1 Ia	
337	2.05	3.53	1.57	1.24	2.24	2.87	3.88		M0 III		620	4.83	0.26	0.12	0.14	0.21				A4 V	
343	4.34	0.30	0.17	0.18	0.25				A7 V		622	3.00	0.26	0.10	0.14	0.22	0.22	0.34		A5 III	
351	4.66	1.84	1.03	0.76	1.30				G8 III		627	6.35	-0.10	0.33	0.34	0.60				B5 Ia	
352	4.51	2.10	1.10	0.82	1.40				K0 III-IV		641	6.43	0.84	0.60	0.55	1.06				A3 Ib	

TABLE 2 UBVRJKL PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY													BRIGHT STAR PHOTOMETRY ^v												
B.S.R	V	U-V	B-V	V-R	V-I	V-J	V-K	V-L	SP.	V-R-K	V-L	SP.	B.S.R	V	U-V	B-V	V-R	V-I	V-J	V-K	V-L	SP.	V-R-K-S		
647	6.06	0.33	0.40	0.38	0.63				F5 V				963 D	3.85	0.56	0.51	0.46	0.77	1.00	1.31		F8 IV	2 6 2 1		
648	5.70	3.50	1.55	1.24	2.21	2.88	3.80		MO III				972	4.89	-0.03	-0.02	0.06	0.03					AO IV	3 3 0 1	
649	4.37	1.49	0.88	0.67	1.16	1.51	2.06		G8 III				977	5.74	2.27	2.27	1.89	3.27	4.36	5.78		(A9)	3 3 0 1		
654	6.48	0.38	0.28	0.34	0.53				B1 Iab				984	4.80	0.32	0.23	0.22	0.33					A7m	3 3 0 1	
656	5.79	0.48	0.40	0.40	0.61				(df3)				985	4.85	-0.82	-0.15	-0.03	-0.16					B2 V	3 3 0 1	
664	4.01	0.04	0.02	0.03	0.03				AO V				991	4.82	3.04	1.49	1.07	1.83	2.36	3.23	3.41		K2 II	2 3 2 1	
681 max	3.04	2.51	1.42	2.01	3.91	4.84	6.04	6.69	M6.5 (gMge)				996	4.84	0.87	0.68	0.57	0.93					G5 V	3 3 0 1	
681 min	8.65	1.30	1.60	4.69	7.91	9.49	10.84	11.53	M7 (gMge)				999	4.47	3.31	1.54	1.20	2.08					K4 III	3 3 0 1	
695	5.20		0.60	0.54	0.90				G1 V				1002	4.95	0.11	0.04	0.08	0.08					A3 V	3 3 0 1	
696	6.25	-0.31	0.30	0.33	0.52	0.61	0.77	0.87	B2 Ia				1003	3.70	3.43	1.62	1.58	3.04	3.77	4.87		(gM3)	3 3 4 1		
699	4.70	3.43	1.53	1.18	2.05				K4 III				1006	5.54		0.64	0.54	0.88					G2 V	3 4 0 4	
707 D	4.53	0.19	0.13	0.16	0.22				A9 V				1008	4.27	0.93	0.71	0.62	1.02					G5 V	3 4 0 4	
708	4.89	-0.07	-0.02	-0.02	-0.05				B9 V				1010	5.24		0.60	0.49	0.83					G1 V	3 4 0 4	
710	5.83	0.23	0.14	0.12	0.16				A7b				1016	5.52	1.47	0.88	0.66	1.13					G5 II	8 3 0 1	
718	4.29	-0.17	-0.06	0.02	-0.03	-0.12	-0.14	0.04	B9 III				1017	1.79	0.87	0.48	0.45	0.78	0.92	1.23	1.31		F5 Ib	9 4 9 1	
721	4.25	-0.64	-0.14	-0.03	-0.16	-0.29	-0.39		B5 III				1030	3.60	1.51	0.89	0.68	1.13	1.46	2.02			G8 III	9 4 3 1	
740	4.73	0.54	0.45	0.41	0.48				F5 IV-V				1034	4.98	-0.65	-0.10	0.01	0.09					B3 V	9 6 0 1	
749 D	4.89	-0.20	-0.06	0.02	0.05				(B9)				1035	4.21	0.18	0.41	0.37	0.75	0.98	1.21	1.36		B9 Ia	7 2 3 1	
753	5.82	1.76	0.97	0.83	1.26				K3 V				1038	3.75	-0.42	-0.09	-0.01	-0.10					B8 V	6 6 0 1	
754	4.86	1.39	0.86	0.65	1.14				G8 III				1040	4.54	0.45	0.56	0.51	1.01	1.32	1.66	1.76		AO Ia	9 4 4 1	
779	4.06	-1.09	-0.21	-0.07	-0.28				B2 IV				1044	4.67	-0.66	-0.09	0.02	-0.09					B3 IV	9 3 0 1	
788	4.92	0.73	0.59	0.50	0.80				F9 V				1046 D	5.10	0.09	0.04	0.09	0.08					A1 V	9 5 0 1	
789	4.75	0.12	0.06	0.10	0.11				A2 V				1052	4.38	2.87	1.34	1.09	1.83	2.31	3.16			K3 III	3 3 3 1	
804	4.11	1.76	1.02	0.79	1.35				KO III				1066	4.10	2.15	1.13	0.77	1.33	1.73	2.39			KO III-III	3 3 3 1	
797	6.30	0.12	0.06	0.05	0.07				A2 V				1069	5.32	0.39	0.41	0.41	0.63	0.87	0.88			F4 III	4 2 1 1	
799	4.13	0.49	0.49	0.46	0.76				F7 V				1070	4.73	-0.36	-0.09	-0.01	-0.09					B8 V	3 2 0 1	
801	4.67	-0.76	-0.13	-0.02	-0.15				B3 V				1084 *	3.73	1.46	0.88	0.72	1.19	1.49	2.03	2.23		K2 V	9 9 3 1	
804 D	3.07	0.16	0.09	0.11	0.15	0.17	0.24		A2 V				1087	4.23	-0.62	-0.06	0.10	0.09					B5 E	9 3 0 1	
811	4.25	-0.59	-0.14	-0.02	-0.16				B7 V				1088	4.28	-0.47	-0.12	0.00	0.12					B8 V	3 3 0 1	
813	4.27	0.38	0.31	0.30	0.49				F0 IV				1101	4.28	0.65	0.57	0.49	0.81	1.00	1.34			F8 V	3 3 3 1	
818	4.66	0.48	0.48	0.43	0.70				F6 V				1106	4.58	1.81	1.04	0.84	1.41	1.81	2.53			KO III	6 3 2 2	
824	4.52	2.10	1.11	0.80	1.36	1.82	2.50		K1 III				1122	3.01	-0.63	-0.12	0.02	-0.09	-0.23	-0.33			B5 III	9 2 4 1	
825	6.26	1.39	0.88	0.82	1.58				A5 Ia				1129	4.79	1.06	0.81	0.74	1.27					A1+G2 III	4 4 0 1	
834	3.79	3.59	1.69	1.23	2.12	2.74	3.70	3.88	K3 Ib+B9 V				1131	3.83	-0.70	0.05	0.12	0.12					B1 III	9 3 0 1	
838	3.63	-0.48	-0.10	-0.02	-0.13				B8 V				1134	5.00	-0.76	-0.16	-0.05	-0.20					(B5h)	6 2 0 2	
840	4.23	0.42	0.34	0.30	0.53				F2 III				1135	3.77	0.74	0.42	0.41	0.67	0.85	1.17			F5 II	4 3 4 1	
841	4.66	1.68	0.99	0.76	1.30				G6 III				1136	3.54	1.59	0.92	0.72	1.22	1.58	2.14			KO IV	7 3 4 1	
843	4.53	3.48	1.56	1.21	2.16	2.77	3.75		K5 III				1138	5.24	0.21	0.09	0.11	0.14					A m	2 2 0 1	
850	3.79	1.51	0.90	0.70	1.17				KO III				1140	5.26	-0.37	-0.04	0.06	0.01	0.01	-0.14	-0.06		B7 IV	8 5 3 1	
854	3.95	1.21	0.75	0.62	1.06	1.40	1.94		G4 III+4 V				1142	3.70	-0.52	-0.12	-0.01	-0.11	-0.18	-0.24	-0.31		B6 III	6 7 4 1	
857	6.05	1.43	0.87	0.71	1.16				K0 V				1144	5.65	-0.43	-0.07	0.03	0.04	-0.12	-0.18	-0.18		B8 V	8 9 3 1	
874	3.87	0.13	0.12	0.19	0.37	1.80	2.47		K1 III-IV				1145	4.30	-0.57	-0.11	-0.01	-0.10	-0.15	-0.21	-0.27		B6 V	7 5 3 1	
875	5.17	0.13	0.08	0.11	0.16				A1 V				1148	4.66	0.10	0.03	0.13	0.17					A5 V	4 4 0 1	
878	5.80	0.42	0.41	0.38	0.58				(df4)				1149	3.87	-0.47	-0.07	0.04	0.02	-0.06	-0.13	-0.10		B7 III	7 7 3 1	
879	4.70	0.18	0.06	0.10	0.14				A2 V				1151	5.76	-0.27	-0.04	0.06	0.02	-0.04	-0.06	-0.07		B8 V	5 4 2 1	
882	4.94	2.53	1.25	0.89	1.53				K2 III				1152	6.43	-0.17	-0.02	0.04	0.02					B9.5 V	7 4 0 1	
887	4.63	0.12	0.04	0.05	0.07				A2 V				1155 V	4.48	4.01	1.88	1.71	3.13	3.97	5.14			M2 III	4 3 4 1	
896	4.70	-0.57	-0.12	-0.03	-0.14				B5 III				1156	4.18	-0.48	-0.06	0.07	0.03	0.02	0.12	0.21		B6 IVnn	6 6 3 1	
897/8	2.91	0.24	0.12	0.14	0.22	0.12	0.20		A3 V				1162	4.42	3.63	1.62	1.34	2.39	3.08	4.14			(gM2)	3 3 4 1	
906	5.95	0.24	0.15	0.13	0.20				A7m				1165	2.87	-0.44	-0.09	0.03	-0.01	-0.08	-0.09	-0.03		B7 III	9 9 9 1	
911	2.93	3.57	1.64	1.35	2.51	3.13	4.21	4.27	B2 III				1172	5.45	-0.39	-0.07	0.05	-0.01	-0.13	-0.22	-0.37		B8 V	9 3 2 1	
915	2.93	1.15	0.70	0.59	1.04	1.40	1.95		G8 III+g3				1173	4.23	0.43	0.42	0.39	0.61					F3 V	3 3 0 1	
919	4.09	0.24	0.16	0.13	0.22				A4 V				1178	3.62	-0.45	-0.09	0.01	-0.04	-0.12	-0.18	-0.05		B8 III	7 6 4 1	
921 V	3.39	3.44	1.65	1.80	3.42	4.17	5.32	5.53	M4 III*				1180 V	5.09	-0.36	-0.08	0.07	0.01	-0.02	0.03	0.14		B8pec	8 4 4 1	
932	4.88	0.07	0.02	0.08	0.07				AO V				1193	6.17	-0.24	-0.05	0.03	-0.02					B9 V	4 4 0 1	
936 V	2.12	-0.42	-0.05	0.04	0.01	-0.04	-0.12		B8 V				1185	6.07	-0.33	-0.01	0.07	0.06					B8 III	2 3 0 1	
937	4.05	0.71	0.60	0.53	0.82	1.00	1.34		G4 V				1182/90	4.57	1.05	0.40	0.02	-0.02					(B9+B8)	6 3 0 2	
941	3.81	1.84	0.98	0.74	1.58	2.16			KO III				1192	5.77	1.63	0.95	0.71	1.21	1.52	2.10			G5 III	6 3 2 2	
947	4.64	2.13	1.11	0.83	1.40				K0 III				1201	5.87	0.34	0.34	0.33	0.50					F2 V	6 4 0 1	
951	4.37	1.89	1.03	0.77	1.28	1.68	2.29		K2 III				1203	2.85	-0.66	0.12	0.14	0.23	0.20	0.18	0.19		B1 Ib	8 3 7 1	

TABLE 2 UBVRJKL PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY											BRIGHT STAR PHOTOMETRY										
B.S.	R	V	U-V	B-V	V-R	V-I	V-J	V-K	V-L	SP.	V	R	K	S	SP.	V	R	K	S	SP.	
1657	5.14	-0.24	-0.06	0.01	-0.09					(B9)	2	1	0	1		2	1	0	1		
1663	5.01	1.46	1.20	2.11	2.61	3.53				M2 III	3	3	3	2		3	3	3	2		
1666	2.79	0.23	0.13	0.14	0.22	0.28	0.41			A3 III	9	3	3	1		9	3	3	1		
1670	6.01	0.31	0.27	0.25	0.39					A m	2	5	0	1		2	5	0	1		
1672	5.43	0.39	0.24	0.20	0.32					A2p	2	4	0	1		2	4	0	1		
1674	4.72	0.48	0.52	0.48	0.78					F8 V	6	7	0	4		6	7	0	4		
1676	4.82	0.50	0.32	0.32	0.51					F2 IV	4	3	0	1		4	3	0	1		
1679	4.27	-1.10	-0.20	-0.08	-0.28					B2 IV	3	3	0	1		3	3	0	1		
1689	4.88	0.28	0.18	0.19	0.29					A m	3	3	0	1		3	3	0	1		
1690	6.67	-0.41	-0.07	0.02	-0.11					B8 V	2	2	0	1		2	2	0	1		
1696	4.44	-0.49	-0.09	-0.02	-0.11					B8 V	3	3	0	1		3	3	0	1		
1698 D	4.45	2.33	1.19	0.85	1.44	1.89	2.61			K3 III	4	4	3	1		4	4	3	1		
1702	3.29	0.51	-0.11	-0.01	-0.13	-0.21	-0.28			B9 III (p)	4	3	1			4	3	1			
1705 D	4.36	-0.44	-0.10	-0.01	-0.10					B8 V	6	2	0	1		6	2	0	1		
1708	0.08	1.25	0.80	0.61	1.04	1.37	1.86	1.95		G8 III: +F	6	2	0	1		6	2	0	1		
1713	0.13	-0.68	-0.03	0.01	-0.01	-0.09	-0.07	-0.04		B8 I*	6	4	9	1		6	4	9	1		
1724	6.42	0.01	-0.02	0.05	0.09					A0 V	2	2	0	1		2	2	0	1		
1726	4.52	2.54	1.27	0.98	1.69					K3 III	3	3	0	1		3	3	0	1		
1729	4.71	0.75	0.62	0.53	0.85	1.07	1.42			G0 V	5	6	3	1		5	6	3	1		
1735	3.59	-0.58	-0.12	-0.02	-0.13					B5 III	3	4	0	1		3	4	0	1		
1743	4.83	1.79	1.00	0.74	1.29	1.71	2.36			K0 IV	6	3	2	2		6	3	2	2		
1748	6.35	-0.85	-0.11	0.01	-0.13	-0.31	-0.39	-0.23		B3.5 V	3	2	4	1		3	2	4	1		
1756	4.29	-1.26	-0.25	-0.12	-0.40					B0.5 IV	2	2	0	1		2	2	0	1		
1761 *	6.65	-0.54	-0.08	0.04	0.00					B5p	2	2	0	1		2	2	0	1		
1762 D	4.71	-0.15	-0.05	0.05	0.00					A0 V	2	3	0	1		2	3	0	1		
1763	5.80	-1.01	-0.13	0.01	-0.12	-0.35	-0.48	-0.50		B1 V	3	3	5	1		3	3	5	1		
1766	6.32	-0.78	-0.10	-0.02	-0.17					B3 V	3	3	0	1		3	3	0	1		
1768	4.74	-0.95	-0.16	-0.05	-0.23	-0.35	-0.48	-0.48		B2 IV	7	5	3	1		7	5	3	1		
1770 D	5.00	-1.02	-0.15	-0.05	-0.23	-0.36	-0.56	-0.66		B1 V	5	5	2	1		5	5	2	1		
1781	5.70	-1.09	-0.21	-0.08	-0.27					B2 V	9	9	0	1		9	9	0	1		
1784	4.12	1.66	0.96	0.72	1.22	1.60	2.22			G8 III	3	3	3	1		3	3	3	1		
1786	6.32	-0.78	-0.10	-0.05	-0.21					B5 V	3	3	0	1		3	3	0	1		
1788 DV	3.35	-1.10	-0.20	-0.08	-0.30	-0.47	-0.59	-0.64		B0.5 V	6	5	7	1		6	5	7	1		
1789	4.86	-1.13	-0.20	-0.08	-0.30					B1 V: p	5	6	0	1		5	6	0	1		
1790	1.64	-1.10	-0.22	-0.09	-0.31	-0.54	-0.70	-0.71		B2 III	9	5	5	1		9	5	5	1		
1791	1.65	-0.62	-0.13	-0.01	-0.11	-0.32	-0.40			B7 III	9	2	3	1		9	2	3	1		
1803	6.16	-0.93	-0.18	-0.06	-0.25					B3 V	3	3	0	1		3	3	0	1		
1806	6.23	-0.28	-0.05	0.01	-0.04					B9 V	2	2	0	1		2	2	0	1		
1810	4.89	-0.91	-0.14	-0.05	-0.20					B3 V	3	3	0	1		3	3	0	1		
1811 D	4.59	-1.14	-0.20	-0.10	-0.33					B2 IV	5	5	0	1		5	5	0	1		
1820	6.44	-0.92	-0.17	-0.07	-0.25					B2 V	2	2	0	1		2	2	0	1		
1829	2.84	1.29	0.82	0.65	1.09	1.43	1.95			G5 III	4	2	3	1		4	2	3	1		
1830	5.78	2.14	1.15	0.83	1.40	1.88	2.60			(G8 I)	2	2	9	1		2	2	9	1		
1833	5.78	-1.05	-0.20	-0.06	-0.26					B1.5 V	6	4	0	1		6	4	0	1		
1839 D	4.20	-0.69	-0.13	-0.06	-0.20	-0.37	-0.44	-0.43		B5 IV	4	6	3	1		4	6	3	1		
1840	6.32	-1.03	-0.19	-0.08	-0.25					B1.5 V	3	3	0	1		3	3	0	1		
1842 D	5.46	-0.99	-0.17	-0.04	-0.26	-0.46	-0.53	-0.49		B1.5 V	2	2	0	1		2	2	0	1		
1843	4.57	-0.09	0.35	0.37	0.64					B5 Iab	3	2	0	1		3	2	0	1		
1843 V	4.55	4.27	2.06	1.76	3.21	4.03	5.24	5.60		M2 Ib	3	3	7	1		3	3	7	1		
1848	6.21	-0.92	-0.18	-0.06	-0.23					B2 V	2	2	0	1		2	2	0	1		
1852 V	2.24	-1.28	-0.22	-0.08	-0.30	-0.49	-0.66	-0.65		O9.5 II	8	5	9	1		8	5	9	1		
1855	4.62	-1.35	-0.26	-0.12	-0.38	-0.67	-0.90	-1.03		B0 V	9	9	0	1		9	9	0	1		
1861	5.35	-1.12	-0.19	-0.05	-0.24					B1 V	9	9	0	1		9	9	0	1		
1862	3.87	2.22	1.14	0.82	1.42	1.87	2.59			(B3 I)	6	3	2	2		6	3	2	2		
1863 *D	6.53	-0.74	-0.10	0.00	-0.12	-0.28	-0.35	-0.56		B5 V	2	2	5	1		2	2	5	1		
1865	2.57	0.45	0.20	0.22	0.43	0.52	0.70			O5 Ib	5	3	4	1		5	3	4	1		
1868 V	5.34	-1.09	-0.18	-0.05	-0.25	-0.46	-0.57	-0.69		B1 V	8	7	4	1		8	7	4	1		
1871	6.58	-0.96	-0.16	-0.07	-0.28					B2 V	4	4	0	1		4	4	0	1		
1872	5.36	0.12	C.05	0.08	0.12					(A2 I)	3	3	0	1		3	3	0	1		
1873	6.20	-0.97	-0.16	-0.05	-0.23					B3 V	3	3	0	1		3	3	0	1		

TABLE 2 UBVRJKL PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY												
B-S-R	V	U-V	B-V	V-R	V-I	V-J	V-K	V-L	SP.	V-R-K	V-J	V-K
2134	4.15	1.39	0.87	0.68	1.13	1.64	2.02		(G5)	2 2 3 1		
2135	4.63	0.39	0.28	0.31	0.53	0.56	0.72	0.87	G2 Ia	6 4 5 1		
2155	4.67	0.06	0.05	0.09					A1 V	3 3 0 1		
2159	4.62	0.82	0.15	0.06	0.22				B3 V	2 2 0 1		
2198	4.92	0.71	0.12	0.02	0.16				B5 V	2 2 0 1		
2199	4.48	0.83	0.17	0.05	0.21	0.33	0.46	0.53	B3 V	3 2 1 1		
2209	4.80	0.03	0.03	0.07	0.06				A0 V	4 3 0 1		
2216 V	3.28	3.27	1.61	1.49	2.80	3.51	4.59		M3 III	3 3 3 1		
2219	4.85	1.82	1.01	0.80	1.34	1.76	2.41		G8 III	3 3 3 1		
2227	3.96	2.73	1.31	0.97	1.61	2.13	2.91		K3 III	3 3 3 1		
2228	6.52	0.36	0.27	0.41					F0 V	3 3 0 1		
2230	6.09	1.52	0.90	0.69	1.18				G5 III	3 3 0 1		
2238	4.48	0.04	0.01	0.06	0.05				A2 V	4 4 0 1		
2240	6.25	0.06	0.45	0.47	0.87				B3 Ia	6 1 0 1		
2244	5.01	0.33	0.09	0.02	0.03				B8 V	2 3 0 1		
2256	4.37	1.83	1.00	0.73	1.23	1.55	2.15		G8 III	6 8 3 1		
2261	5.09	1.05	0.72	0.61	0.94				G5 V	6 8 3 2		
2282	3.02	0.90	0.18	0.05	0.23				B2.5 V	3 3 0 1		
2286	2.87	3.50	1.64	1.57	2.95	3.67	4.76		M3 III	3 3 3 1		
2291	5.64	0.36	0.24	0.22	0.32				A5m	3 3 0 1		
2294	1.97	1.20	0.24	0.14	0.38	0.56	0.69		B1 II-III	8 3 3 1		
2296	3.85	1.40	0.88	0.67	1.11	1.44	1.98		(G6)	6 8 3 2		
2308/9	4.31	0.34	0.20	0.19	0.29				A2 IV / dF4	2 3 0 1		
2308 V	5.23	5.84	2.34	1.83	3.11	4.13	5.53		C6.2	2 2 3 1		
2326	0.75		0.15	0.24	0.44	0.38	0.56		F0 Ib-II	2 2 3 2		
2343	4.14	0.63	0.14	0.03	0.14				B7 IV	3 3 0 1		
2344	5.05	0.82	0.18	0.10	0.27				B2 V	3 3 0 1		
2354-8	3.76	0.89	0.15	0.01	0.17				B3 Vpe	3 3 0 1		
2361	4.48	0.78	0.17	0.06	0.22	0.23	0.45		(B5)	6 8 1 2		
2382	5.83	1.78	1.00	0.72	1.25				K0 III	9 1 0 1		
2385	4.50	0.18	0.00	0.10	0.14				A0 Ib	7 3 0 1		
2387	3.33	1.22	0.24	0.12	0.33				B0.5 IV	3 3 0 1		
2392	5.24	1.88	1.11	0.75	1.23	1.64	2.21		B0.5 II (KOp)	2 2 1 1		
2405	5.29		2.60	1.97	3.40	4.36	6.00		C5.3 (N3)	5 4 2 2		
2414	4.54	0.07	0.06	0.04	0.02				A0 V	3 3 0 1		
2421	1.92	0.05	0.00	0.06	0.05	0.02	0.02		A0 IV	9 4 3 1		
2427	4.79	2.53	1.23	0.90	1.50	2.00	2.74		K3 II-III	4 2 2 1		
2429	3.92	2.04	1.05	0.79	1.30	1.67	2.32		K1 IV	2 2 3 1		
2443	4.42	2.19	1.15	0.86	1.46	1.88	2.61		K1 II-III	6 3 2 1		
2450	4.81	3.17	1.49	1.03	1.76				K3 III	2 3 0 1		
2451	3.17	0.52	0.11	0.00	0.07	0.22	0.24		B8 III	3 7 1 2		
2456 D	4.66	1.31	0.24	0.11	0.33	0.63	0.66		O7	9 8 1 1		
2467	6.37	0.99	0.05	0.07	0.02				06	8 2 0 1		
2470 D	4.87	0.15	0.08	0.12	0.15				(A2n)	2 3 0 1		
2473	2.98	2.86	1.40	0.96	1.57	1.99	2.76		G8 Ib	7 3 3 1		
2478	4.49	2.33	1.16	0.86	1.46	1.92	2.65		K1 III	3 3 3 1		
2484	3.36	0.49	0.43	0.39	0.62	0.79	1.06		F5 IV	5 3 3 1		
2491	1.46	0.05	0.00	0.00	0.03	0.12	0.15	0.17	A1 V	5 4 9 1		
2506	4.46	2.15	1.11	0.79	1.34				K0 III	3 3 0 1		
2527	4.55	3.02	1.36	1.02	1.73				K4 III	3 3 0 1		
2538	3.95	1.16	0.23	0.10	0.30				B2 V*	2 4 0 1		
2540	4.30	0.24	0.10	0.10	0.18				G5 III	6 2 0 1		
2540 D	4.35	1.36	0.85	0.65	1.09	1.46	2.02		G5 III-IV	3 3 3 1		
2564 D	4.85	0.38	0.30	0.32	0.52				F0 V*	3 3 0 1		
2571	4.83	1.17	0.21	0.12	0.34				B1 IV	3 3 0 1		
2574	4.08	3.12	1.43	1.13	1.91	2.68	3.42		K4 III	6 3 3 1		
2580	3.92	3.71	1.71	1.17	1.89	2.66	3.47		K5 Ib	3 3 3 1		
2585	4.90	0.08	0.03	0.05	0.06				A2 V	7 4 0 1		
2590 D	4.89	0.92	0.36	0.38	0.57				(B2)	2 3 0 1		
2591	6.32		2.24	1.73	3.03	3.94	5.44		C8.2 (N1)	5 5 2 2		
2596	4.87	3.22	1.46	1.15	1.98	2.59	3.54			3 3 3 1		
2596 D	3.57	1.62	0.92	0.71	1.16	1.55	2.11		G8 III	9 5 3 1		
2599	1.14	1.86	1.00	0.75	1.25	1.63	2.23	2.31	K0 III	9 4 9 1		
2596	3.99	3.61	1.63	1.31	2.28	2.82	3.81		(K5)	3 6 0 1		
2596	3.95	0.13	0.18	0.26	0.48				A3p II	3 6 0 1		
3003	4.87	3.22	1.46	1.15	1.98	2.59	3.54		K5 III	6 3 3 1		

TABLE 2 UBVRIJKL PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY													BRIGHT STAR PHOTOMETRY												
B.S.R	V	U-V	B-V	V-R	V-I	V-J	V-K	V-L	SP.	V.R.K.S	B.S.R	V	U-V	B-V	V-R	V-I	V-J	V-K	V-L	SP.	V.R.K.S				
3017	3.61	3.43	1.73	1.35	2.35	2.93	4.08	..	(K1)	3 3 1 2	3482	D	3.38	1.05	0.68	0.60	0.99	1.33	1.66	G0 III-IV+BF7	7 3 3 1				
3034	4.52	-1.07	-0.05	0.13	0.13	1.85	2.67	..	B0 V+pe	3 6 0 1	3484	D	4.32	1.54	0.90	0.68	1.14	1.55	2.13	G8 III	5 6 2 1				
3045	3.35	2.43	1.25	0.88	1.53	1.85	2.47	..	G5 III	3 3 3 1	3485	D	1.96	0.11	0.04	0.05	0.09	..	..	A0: V	6 3 0 2		
3046	4.71	1.98	1.06	0.16	1.53	1.73	2.40	..	K0 III	6 4 1 2	3487	D	3.91	-0.05	0.00	0.05	0.18	..	..	A0 III	6 3 0 2		
3055	4.11	-1.19	-0.18	-0.08	-0.25	..	..	..	B0.5 III	6 4 0 2	3492	D	4.37	-0.10	-0.05	0.05	-0.02	..	..	A0 V	3 2 0 1
3064	5.16	0.66	0.60	0.32	0.88	..	..	..	G1 V	3 3 0 1	3518	D	4.01	2.66	1.26	0.95	1.62	2.11	2.52	K4 III	5 7 4 1	
3067	4.98	0.20	0.09	0.13	0.18	..	..	..	A4 V	5 2 0 1	3527	D	5.10	-1.19	-0.21	-0.08	-0.24	..	..	B0 III	6 3 0 2
3080	3.73	1.80	1.05	0.81	1.37	..	..	..	G5 III	3 7 0 1	3541	V	6.64	3.36	2.28	3.65	4.54	6.45	C5.4	3 4 1 2		
3084	4.49	-0.88	-0.19	-0.08	-0.24	..	..	..	B3 V	3 7 0 2	3547	D	3.00	1.82	1.00	0.71	1.30	1.62	2.73	K0 III-III	3 2 6 1	
3089	4.63	-1.15	-0.23	-0.13	-0.34	..	..	..	B2 III	6 3 0 2	3556	D	4.89	0.23	0.10	0.18	..	..	..	A3 V	3 8 0 1
3090	4.24	-1.13	-0.14	-0.02	-0.14	..	..	..	B1 Ib	6 4 0 2	3559	D	3.14	0.26	0.19	0.22	0.39	0.39	0.43	A7 V	9 5 3 1	
3102	4.20	1.16	0.72	0.59	0.96	..	..	..	F8 II	9 4 0 1	3572	D	4.26	0.28	0.13	0.14	0.19	..	..	A m	3 3 0 1
3113	4.79	0.31	0.15	0.20	0.35	0.42	0.64	..	A2 V	6 5 3 2	3576	D	4.76	3.61	1.53	1.47	2.73	3.43	4.47	M3 IIIb	5 5 8 1				
3131	4.61	0.16	0.08	0.15	0.21	..	..	..	A3 V	7 4 0 1	3579	D	3.97	0.49	0.43	0.40	0.82	..	..	F5 V	9 3 0 1
3141	4.67	3.26	1.49	1.17	2.00	..	..	..	K4 III	4 4 0 1	3591	D	4.45	1.03	0.65	0.55	0.96	..	..	F8 III	6 3 0 2
3145	2.25	1.36	0.27	-0.12	-0.34	0.55	0.68	..	K2 III	6 4 3 1	3594	D	3.60	0.01	0.00	0.07	0.08	..	..	(B9n)	5 5 0 1		
3155	4.75	-0.75	-0.15	-0.03	-0.17	..	..	..	B5 V	4 4 0 1	3595	D	5.46	-0.13	-0.03	0.02	-0.02	..	..	B9p	7 3 0 1
3206	4.27	1.83	1.19	0.25	0.11	0.29	..	..	(B3m)	5 5 0 2	3612	D	4.56	1.85	1.04	0.75	1.24	..	..	G8 Ib-III	5 5 0 1
3207	1.83	-1.19	-0.25	-0.02	-0.17	-0.28	-0.14	..	WC7+O7:	3 8 4 2	3614	D	3.75	2.41	1.20	0.82	1.42	1.86	2.56	K2 III	6 3 4 2				
3211	4.72	1.73	0.96	0.73	1.21	1.56	2.15	..	K0 III	5 3 3 1	3616	D	4.81	0.51	0.49	0.45	0.73	..	..	F7 IV-V	4 2 0 1		
3225	4.45	3.47	1.62	1.20	2.10	2.73	3.70	..	(C1)	3 3 4 2	3619	D	4.48	0.39	0.27	0.27	0.38	..	..	A m	7 4 0 1		
3226	4.75	0.25	0.18	0.24	0.46	0.59	0.75	..	(A3p)	9 3 4 2	3624	D	4.67	0.50	0.35	0.32	0.45	..	..	A7m	7 3 0 1		
3237	4.77	-1.09	-0.11	0.09	0.00	0.06	0.40	..	B3p	6 3 1 2	3628	D	4.56	3.48	1.61	1.24	2.14	2.75	3.72	(GMO)	3 8 3 1				
3243	4.44	2.26	1.17	0.84	1.48	1.96	2.70	..	(K0)	3 3 4 2	3634	D	2.21	3.46	1.65	1.24	2.18	2.77	3.78	K5 Ib	3 3 3 2				
3249	3.53	3.25	1.48	1.12	1.90	2.44	3.37	3.52	K4 III	9 9 1 1	3654	D	5.00	-0.35	0.22	0.29	0.51	0.54	0.73	B3 Ia	3 3 1 2				
3270	4.45	0.33	0.22	0.21	0.34	0.33	0.45	..	A7 III	3 3 1 2	3662	D	4.84	0.37	0.18	0.25	0.34	..	..	A5 V	7 4 0 1		
3275	4.25	3.46	1.55	1.20	2.08	2.69	3.67	3.86	K5 III + A	4 4 6 1	3665	D	3.88	0.19	-0.07	-0.01	-0.06	..	..	B9.5 Vp	9 9 0 1		
3276	4.77	1.27	0.77	0.64	1.09	..	..	..	G2 III + A	3 3 0 1	3682	D	4.94	2.17	1.11	0.79	1.26	1.85	2.52	(GK0)	6 3 3 2	
3279	5.38	3.05	1.45	1.00	1.75	2.33	3.18	..	MO III	6 3 4 2	3684	D	4.62	0.55	0.45	0.38	0.66	0.75	1.05	F4 III	6 3 1 2				
3282	4.83	1.37	0.85	0.69	1.11	1.38	1.92	..	B1 V	3 3 1 2	3685	D	1.68	0.03	0.00	0.07	0.09	..	..	A1 IV	9 9 0 4		
3284	4.82	-0.99	-0.15	-0.04	-0.17	-0.32	-0.35	..	G8 II	6 3 1 2	3690	D	3.82	0.11	0.06	0.12	0.15	2.74	3.74	A2 V	3 3 0 1				
3306	5.13	1.58	0.94	1.25	1.19	..	..	..	..	3 1 0 4	3705	D	3.13	3.50	1.55	1.23	2.13	2.74	3.87	MO III	4 4 8 1
3314	3.90	-0.05	-0.02	0.03	-0.02	..	..	..	A0 V	9 3 0 1	3706	D	4.81	1.54	0.93	0.72	1.19	..	..	G8 III	4 9 2 1
3319	5.50	3.52	1.60	1.62	3.03	3.80	4.96	5.19	(W3)	6 4 5 2	3709	D	4.79	1.61	0.94	0.70	1.14	..	..	G8 III-IV	4 4 0 1		
3323	3.36	3.27	1.45	1.00	1.75	2.33	3.18	..	G5 III	6 3 4 2	3718	D	4.72	3.64	1.61	1.40	2.48	3.14	4.20	M1 III	4 9 3 1				
3328	4.82	-0.99	-0.15	-0.04	-0.17	-0.32	-0.35	..	G0 V	3 3 1 2	3731	D	4.46	2.54	1.23	0.91	1.54	2.04	2.78	K2 III	3 3 3 1				
3331	5.64	0.69	0.62	0.52	0.85	..	..	..	G0 V	9 3 0 1	3733	D	4.68	1.54	0.91	0.71	1.18	1.49	2.05	(G7)	4 9 2 1	
3339	4.61	2.33	1.17	0.89	1.52	..	..	..	K2 III	4 3 3 1	3734	D	2.50	-0.93	-0.18	-0.04	-0.24	..	..	B2 IV	6 2 0 4
3403	4.61	2.33	1.17	0.89	1.52	..	..	..	G0 V	3 3 0 1	3748	D	1.97	3.17	1.45	1.04	1.81	2.30	3.16	K4 III	6 2 7 1	
3407	5.01	2.71	1.33	0.97	1.65	2.18	2.99	..	(G7)	6 3 0 1	3749	D	4.68	2.30	1.48	1.08	1.44	..	..	(GK3)	3 3 0 1		
3410	4.17	0.02	0.00	0.04	0.05	..	..	..	A0 V	6 3 4 2	3751	D	3.67	0.43	0.33	0.34	0.52	..	..	K3 III	3 3 0 1
3418	4.43	2.48	1.20	0.89	1.45	1.90	2.64	..	K2 III	4 3 0 1	3757	D	4.61	0.46	0.45	0.43	0.65	..	..	F0 V	5 3 3 1		
3426	6.14	0.23	0.10	0.15	0.31	0.36	0.50	..	A9 II	3 3 1 2	3759	D	4.51	3.12	1.44	1.01	1.77	2.29	3.17	MO III	6 3 3 2				
3427	6.39	1.81	0.98	0.72	1.19	1.64	2.16	2.19	K0 III	9 9 2 1	3771	D	4.57	1.10	0.77	0.66	1.07	1.41	1.89	G4 IV	4 3 3 1				
3428	6.44	1.92	1.02	0.74	1.23	1.65	2.25	2.42	K0 III	5 4 2 1	3773	D	4.31	3.43	1.54	1.23	2.13	2.71	3.69	K5 III	4 5 7 1				
3429	6.30	0.33	0.17	0.17	0.23	..	..	..	A6 III	3 4 0 1	3775	D	3.18	0.49	0.46	0.44	0.71	0.90	1.16	F5 IV	8 2 3 1	
3438	3.98	1.58	0.93	0.66	1.14	..	..	..	G5 III	6 3 0 2	3786	D	3.60	0.29	0.36	0.36	0.58	0.62	0.84	F2 IV	3 6 1 1	
3441	4.88	1.99	1.07	0.82	1.35	..	..	..	K1 III	8 6 0 1	3787	D	4.51	0.20	0.10	0.16	0.22	..	..	A3 III	4 4 0 1
3445	3.83	0.98	0.70	0.63	1.23	..	..	..	F2 Ib	3 3 0 2	3799	D	4.51	0.04	0.00	0.09	0.10	..	..	A2 V	3 3 0 1
3447	3.60	-0.80	-0.18	-0.06	-0.24	..	..	..	B3 III	6 3 0 4	3800	D	4.55	1.55	0.92	0.71	1.17	..	..	G8 III	3 3 0 1
3449	4.66	0.03	0.02	0.06	0.06	..	..	..	A1 V	4 4 0 1	3809	D	4.81	1.75	0.99	0.76	1.29	..	..	K0 III	4 4 0 1
3452	4.77	0.24	0.12	0.21	0.40	..	..	..	A5 II	6 3 0 2	3815	D	5.41	1.21	0.77	0.62	0.99	..	..	G8 IV-V	9 9 0 1
3454	4.30	-0.94	-0.20	-0.07	-0.26	..	..	..	B3 V	6 3 0 2	3834	D	4.68	2.77	1.32	1.06	1.77	2.31	3.18	K3 III	7 5 3 1	
3459	4.61	1.35	0.84	0.65	1.09	..	..	..	G2 Ib	4 4 0 1	3836	D	4.35	0.29	0.17	0.15	0.25	0.27	0.36	(A45)	6 3 1 2	
3461	3.94	2.07	1.08	0.78	1.32	1.75	2.43	..	K0 III	3 4 3 1	3845	D	3.91	0.77	1.32	0.99	1.66	2.18	3.01	K3 III	5 5 7 1				
3464	6.13	1.57	0.94	0.70	1.19	..	..	..	G5 III	3 4 0 1	3849	D	5.05	-0.73	-0.15</							

TABLE 2 UBVRJKL PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY

BRIGHT STAR PHOTOMETRY

B.S. R	V	U-V	B-V	V-R	V-I	V-J	V-K	V-L	SP.	V R K S	V-R	V-I	V-J	V-K	V-L	SP.	V R K S
3873	1.27	0.81	0.65	1.35	1.83				G0 II	8 4 1						A7 III-IV	5 5 0 1
3881	1.07	0.70	0.62	0.53	0.87	1.05	1.38		F2 IV	2 2 1						M0 III	4 2 3 1
3888	0.81	0.38	0.29	0.34	0.50	0.57	0.81		G2 V	8 4 1						G0 V	9 8 3 1
3894 D	4.60	0.11	0.03	0.10	0.10				(A3)	3 4 0 1						K3 III	7 5 7 1
3903	4.11	1.57	0.92	0.69	1.16	1.55	2.09		G8 III	2 4 3 1						A2 V	3 3 0 1
3905	3.88	2.62	1.22	0.91	1.49	1.95	2.66		K2 III	4 4 3 1						G8 III-IV	4 2 7 1
3912	4.98	2.19	1.20	0.83	1.46	1.87	2.58		(F6)	6 5 1 2						B9 V	5 2 0 1
3950	4.70	3.52	1.60	1.43	2.51	3.16	4.20	4.37	M2 III	4 5 7 1						G2 III	2 2 3 1
3970	4.59	-0.37	-0.10	-0.01	-0.10				B8 V	4 4 0 1						F2 IV	9 3 0 1
3974	4.49	0.25	0.18	0.18	0.25				A7 V	9 9 0 1						A5 V	4 4 0 1
3975	3.53	-0.25	-0.04	0.09	0.11	0.09	0.10		A0 Ib	4 4 3 1						G8 III-III	3 4 0 1
3980	4.37	3.20	1.45	1.13	1.90	2.46	3.33		K4 III	3 2 3 1						M0 III	3 3 4 1
3981	4.50	-0.10	-0.04	0.06	0.01				A0 III	3 3 0 1						G7 III	3 7 3 1
3982	1.35	-0.47	-0.11	-0.02	-0.12	-0.20	-0.27	-0.25	B7 V	9 8 9 1						B3 V	9 9 0 1
3994	3.61	1.92	1.00	0.77	1.25	1.64	2.20		K0 III	5 5 3 1						B9 V	3 2 0 1
3998	5.44	0.48	0.46	0.41	0.68				F6 V	3 4 0 1						G9 III	3 3 3 1
4023	3.85	0.13	0.05	0.02	0.04	0.08	0.11		A2 V	6 4 3 2						(B9)	6 4 2 2
4031	3.44	0.50	0.31	0.31	0.50	0.63	0.82		F0 III	9 5 3 1						G8 V	5 2 2 1
4033	3.45	0.09	0.03	0.08	0.07	0.05	0.07		A0 III	9 5 3 1						G8 III	7 4 0 1
4039	5.82	0.45	0.50	0.48	0.75	0.96	1.38		(F6)	6 3 1 1						M1 III	5 3 6 1
4054	6.80	0.46	0.45	0.45	0.68				F6 IV	9 3 0 1						K0 III	4 4 7 1
4057/8	1.90	2.15	1.15	0.85	1.47	1.89	2.66	2.76	K0 III/G7	11 16 4 9 1						G5 III-IV+A	8 5 0 1
4069	3.05	3.48	1.59	1.28	2.24	2.96	3.93		M0 III	6 4 6 1						A3 V	9 9 1 1
4072	4.99	-0.22	-0.07	0.04	-0.02				A0 P	3 3 0 1						F8 V	9 9 4 1
4080	4.83	0.21	1.12	0.80	1.38	1.82	2.43		K1 III	6 5 3 2						K4 III	3 5 3 2
4090	4.74	0.43	0.25	0.26	0.40				F0 V	7 4 0 1						G8 VP	9 9 5 1
4092	5.56	3.38	1.52	1.25	2.20	2.84	3.79		M0 III	5 3 3 1						B9 IV	6 2 2 2
4094	3.79	3.30	1.48	1.11	1.94	2.49	3.42	3.34	K4 III	3 3 7 1						A0 V	9 4 5 1
4100 D	4.21	1.55	0.90	0.69	1.15	1.49	2.05		G8 III-IV	2 2 3 1						A4 V	3 3 0 1
4104	4.25	3.08	1.45	1.10	1.89	2.47	3.41		M0 III	6 5 3 2						G8 III	5 5 3 1
4112	4.84	0.51	0.52	0.48	0.76				F8 V	9 3 0 1						B6 III	6 2 0 2
4119	5.70	-0.67	-0.14	-0.03	-0.17				B6 V	6 5 0 1						B2 V	2 2 0 2
4132	4.75	0.31	0.23	0.20	0.29				A7 IV	3 3 0 1						F2 V	9 5 0 1
4133	3.85	-1.09	-0.14	-0.05	-0.21	-0.33	-0.47		B1 Ib	9 5 6 1						K3 III	5 5 6 1
4141	5.16	0.32	0.34	0.33	0.50				C6+3	6 4 0 1						A3 V	4 5 0 1
4153	5.38		2.88	2.11	3.48				(Nb)	4 4 0 2						B4 V	6 4 0 2
4163 A	4.82	8.47	2.69	1.77	3.04	4.00	5.57	6.00	C7+3	2 2 9 1						A3 V	9 6 5 1
4166	4.72	1.36	0.81	0.68	1.06				G3 III	5 5 0 1						B8 III	9 9 3 1
4167 D	3.84	0.37	0.30	0.25	0.41	0.57	0.72		F4 IV+F4 V+A1 V	6 4 2 2						A3 M	3 4 0 1
4195 A	6.00	7.18	2.41	1.74	3.01	3.96	5.58	6.07	C6+3	3 3 9 1						A3 M	2 4 0 1
4199	2.76	1.22	-0.22	-0.11	-0.34				B0 VP	3 2 0 4						A2 V	6 6 0 1
4216 D	2.69	1.67	0.60	0.68	1.17	1.56	2.10		G5 III	6 4 2 2						(A5)	4 3 0 2
4232	3.11	1.51	1.24	0.93	1.57	2.04	2.83	2.95	K2 III	3 3 8 1						K1 III	7 7 3 1
4247	3.83	1.96	1.04	0.83	1.37	1.76	2.44		K0 III-IV	5 3 2 1						G8 III	6 5 0 1
4248	4.71	-0.11	-0.05	0.05	0.01				A1 V	3 3 0 1						A0 V	4 4 0 2
4259/60	4.32	0.03	0.02	0.10	0.09				A1 V	4 5 0 1						A5+G5 III	9 9 1 1
4273	4.60	1.87	1.03	0.75	1.28	1.66	2.29		G5 III	6 4 3 2						(F7)	3 3 0 4
4278	6.00	3.51	1.59	1.49	2.78				M2 III	2 4 0 1						G7 III	6 6 0 1
4287	4.07	2.07	1.09	0.80	1.35	1.78	2.45		K0 III	5 3 3 1						A5 V	3 5 0 1
4293	4.39	0.23	0.11	0.13	0.20	0.31	0.34		A2 IV	6 4 2 2						F0 V	3 4 0 1
4295	2.37	-0.02	-0.02	0.06	0.02	0.02	0.02		A1 V	7 4 3 1						K0 III	3 4 0 1
4299	4.75	3.54	1.62	1.33	2.29	2.90	3.92	4.08	K5 III	5 5 7 1						B5 V	3 3 0 2
4300	4.42	0.10	0.05	0.06	0.04				A1 V	3 4 0 1						F0 P Shell	2 5 0 1
4301	1.79	0.99	1.07	0.81	1.39	1.74	2.44	2.57	K0 III	8 5 1 1						K1 III-IV	5 4 3 1
4310	4.63	0.41	0.33	0.33	0.50				F2 III-IV	8 5 0 1						A4 V	2 5 0 1
4335	3.01	3.26	1.14	0.84	1.41	1.85	2.57	2.69	K1 III	5 2 7 1						B3 V	6 7 1 2
4343	4.48	0.08	0.03	0.07	0.09				A2 III-IV	4 4 0 1						A3 M	2 4 0 1
4357	2.56	0.23	0.12	0.13	0.16	0.27	0.31		A4 V	6 3 3 1						A0 P	9 9 0 1
4359	3.35	0.06	-0.02	0.05	0.02	0.01	0.05		A2 V	3 3 3 1						A0 P (SI)	9 9 0 1
4362	4.63	3.31	1.66	1.56	2.87	3.51	4.63	4.84	M3 III	3 2 7 1						B9.5 V:n	2 3 4 1

TABLE 2 UBVRJKL PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY											BRIGHT STAR PHOTOMETRY										
B.S.	R	V	U-V	B-V	V-R	V-I	V-J	V-K	V-L	SP.	B.S.	R	V	U-V	B-V	V-R	V-I	V-J	V-K	V-L	SP.
4766	5.46	0.15	0.05	0.06	0.03	.	.	.	.	A2P	5110	4.98	0.45	0.40	0.41	0.71	.	.	.	.	F2 IV
4775	4.32	0.39	0.37	0.38	0.56	.	.	.	.	F0 IV	5112	4.70	0.23	0.12	0.11	0.13	.	.	.	.	A4 V
4780	6.29	0.20	0.11	0.09	0.12	.	.	.	.	A4 V	5127 D	4.83	0.32	0.23	0.27	0.40	.	.	.	.	A7 III
4785	2.67	0.64	0.59	0.54	0.85	1.04	1.43	.	.	G0 V	5132	2.30	1.14	-0.22	-0.15	-0.40	.	.	.	.	B1 V
4786	2.64	1.53	0.88	0.61	1.05	1.40	1.94	2.00	2.00	G5 III	5154	4.66	3.59	1.63	1.40	2.52	3.19	4.25	4.43	4.43	M2 III
4787	3.89	-0.71	-0.14	0.05	-0.03	0.03	0.14	0.46	0.86	B5 IIIe	5165	5.60	1.22	0.81	0.64	1.09	.	.	.	.	G0 II
4789	4.81	-0.01	0.00	0.06	0.04	.	.	.	.	A0 III	5168	4.23	0.38	0.38	0.33	0.54	0.62	0.84	.	.	F2 III
4802	3.86	0.08	0.05	0.05	0.09	.	.	.	.	A2 V	5185	4.50	0.53	0.48	0.41	0.65	.	.	.	.	F7 V
4803	5.45	0.35	0.32	0.31	0.50	.	.	.	.	F2 V	5190	3.41	-1.07	-0.22	-0.12	-0.33	.	.	.	.	B2 IV
4807	5.71	3.42	1.60	1.56	2.98	3.61	4.64	4.94	.	(M3)	5191	1.86	-0.87	-0.19	-0.12	-0.30	-0.41	-0.54	-0.48	.	B3 V
4813	4.67	2.58	1.22	0.90	1.51	.	.	.	.	K2 III	5192	4.19	2.96	1.50	2.13	4.00	4.66	5.84	6.02	.	M4 III
4817	4.64	-0.48	-0.08	-0.02	-0.11	-0.22	-0.01	.	.	B8 IV	5200	2.94	.	-0.16	0.20	0.06	.	.	.	.	B2 V:pmc
4819 D	2.17	-0.02	-0.01	0.03	0.03	0.04	-0.01	.	.	A0 III	5203 V	4.07	3.39	1.52	1.20	2.97	2.72	3.70	3.83	.	K5 III
4825/6	2.74	0.35	0.36	0.29	0.48	0.65	0.86	0.93	0.93	F0 V	5210/1	4.52	-0.73	-0.13	-0.03	-0.18	.	.	.	.	(M3)
4828	4.88	0.12	0.09	0.08	0.10	0.05	-0.01	.	.	A1 V	5214	6.85	0.19	0.12	0.08	0.09	.	.	.	.	B5 Vp/B9 V
4831	4.66	2.11	1.10	0.75	1.32	1.73	2.38	.	.	(K1)	5217	5.89	.	0.01	0.06	0.06	.	.	.	.	A4 V
4837	5.93	1.33	0.86	0.67	1.16	.	.	.	.	G8 IIIp	5219	4.73	3.61	1.65	1.54	2.82	3.51	4.61	4.78	.	B5 V
4845	5.95	0.52	0.55	0.54	0.83	1.04	1.39	1.79	1.79	G0 V	5221 D	4.73	-0.70	-0.14	-0.04	-0.17	.	.	.	.	K5 III
4846 V	4.87	9.16	2.54	1.75	3.13	4.01	5.73	6.39	6.39	C5+4	5226	4.66	3.46	1.57	1.61	2.97	3.70	4.75	.	.	(M3)
4848	4.65	-0.79	-0.16	-0.11	-0.32	.	.	.	.	B3 IV	5231	2.55	-1.13	-0.22	-0.14	-0.34	-0.54	-0.74	.	.	B2 IV
4853	1.25	-1.22	-0.23	-0.13	-0.39	.	.	.	.	B0.5 IV	5235	2.68	0.78	0.58	0.44	0.73	0.98	1.31	1.37	.	G0 IV
4865	5.70	0.09	0.02	0.04	0.03	.	.	.	.	A2 V	5248	3.83	-1.04	-0.21	-0.13	-0.35	.	.	.	.	B2 IV
4867	5.85	0.42	0.46	0.44	0.72	.	.	.	.	F6 V	5249	3.87	-1.00	-0.20	-0.14	-0.35	.	.	.	.	B2 V
4883	4.94	0.87	0.67	0.55	0.90	1.18	1.56	.	.	G0 III	5260	4.34	0.88	0.60	0.48	0.84	.	.	.	.	F7 I-II
4888	4.33	2.95	1.37	0.98	1.73	2.29	3.11	.	.	(K2)	5264	4.26	0.23	0.10	0.15	0.21	.	.	.	.	A3 III
4889	4.27	0.33	0.21	0.20	0.34	0.53	0.63	.	.	B5 V	5285	4.36	-0.96	-0.19	-0.11	-0.33	.	.	.	.	B2 V
4898	4.03	-0.92	-0.17	-0.14	-0.41	.	.	.	.	A7 Ve	5287	3.28	1.12	0.87	1.42	1.85	2.55	2.70	.	.	K0 III-IV
4900	6.25	0.32	0.27	0.25	0.40	.	.	.	.	A7 B	5288	2.06	1.89	0.99	0.76	1.29	.	.	.	.	K0 III-IV
4902	4.80	3.14	1.59	1.57	2.85	3.56	4.67	4.87	4.87	M3 III	5291	3.65	-0.13	-0.05	-0.03	-0.10	.	.	.	.	A0 III
4905	1.77	-0.01	-0.02	-0.02	-0.05	0.05	0.02	.	.	A0p	5299	5.28	3.24	1.58	1.85	3.51	4.48	5.65	5.84	.	M4-4.5 III
4910	3.38	3.38	1.59	1.53	2.86	3.55	4.63	4.81	4.81	M3 III	5304	4.83	0.61	0.54	0.44	0.73	.	.	.	.	F8 IV
4914	5.60	0.31	0.34	0.24	0.47	0.76	0.91	0.84	0.84	F0 V	5305	5.02	-0.61	-0.12	-0.09	-0.23	.	.	.	.	B9p (Si)
4915	2.89	-0.44	-0.12	-0.13	-0.19	-0.15	-0.29	.	.	B9.5p: +FO	5318	4.21	2.79	1.32	0.01	1.82	2.34	3.19	3.26	.	K3 III
4914/5	2.84	-0.43	-0.10	-0.04	-0.12	.	.	.	.	B9.5p: +FO	5328/9	4.41	0.30	0.20	0.11	0.29	.	.	.	.	F2 V/A7 IV
4920	4.79	3.52	1.56	1.35	2.30	2.94	3.91	4.10	4.10	M1 III	5338	4.09	0.54	0.51	0.50	0.77	.	.	.	.	F7 III-IV
4931 D	4.93	0.37	0.36	0.37	0.58	.	.	.	.	F2 V	5340	-0.05	2.51	1.23	0.97	1.62	2.13	2.95	3.09	.	K2 IIIp
4932	2.84	1.68	0.94	0.64	1.09	1.48	2.04	2.09	2.09	G9 II-III	5343	5.98	0.31	0.26	0.23	0.35	.	.	.	.	A6m
4940	4.71	-0.71	-0.14	-0.06	-0.19	.	.	.	.	B5 V	5350	4.75	0.26	0.20	0.15	0.24	.	.	.	.	A7 V
4942	4.27	-0.95	-0.19	-0.09	-0.28	.	.	.	.	B2 V	5351	4.18	0.13	0.08	0.02	0.05	.	.	.	.	A0p
4949	5.60	3.22	1.59	1.97	3.76	4.67	5.83	6.10	6.10	M5 III	5354	3.55	-0.90	-0.18	-0.10	-0.24	.	.	.	.	B3 IV
4954	4.82	3.32	1.45	1.18	1.99	.	.	.	.	K5 III	5359	4.52	0.22	0.13	0.10	0.14	.	.	.	.	A8m
4955	5.19	2.26	1.14	0.82	1.40	.	.	.	.	K1 III	5361	4.81	1.98	1.06	0.76	1.29	.	.	.	.	K0 III
4965 D	4.38	0.00	-0.01	0.05	0.05	.	.	.	.	A1 V	5365	5.41	0.35	0.38	0.34	0.53	.	.	.	.	F5 IV-V
4979	4.85	1.01	0.70	0.57	0.93	1.21	1.58	.	.	(M3)	5367	4.05	-0.14	-0.03	-0.01	-0.03	.	.	.	.	A0 IV
4983	4.26	0.66	0.58	0.49	0.79	1.02	1.36	1.49	1.49	G0 V	5370	4.86	2.63	1.23	0.89	1.49	.	.	.	.	K3 III
5017	4.73	0.50	0.30	0.25	0.40	.	.	.	.	F0 II-IIIp	5373	6.33	0.10	0.05	0.06	0.03	.	.	.	.	A2 V
5019	4.74	0.97	0.71	0.58	0.94	.	.	.	.	G6 V	5381	4.42	0.36	0.38	0.34	0.53	.	.	.	.	B3 V
5020	3.00	1.58	0.92	0.60	1.07	1.46	2.02	2.21	2.21	G8 III	5384	4.75	2.84	1.31	0.97	1.64	.	.	.	.	K5 III
5026	5.49	.	-0.13	-0.08	-0.23	.	.	.	.	B5 III	5386	6.27	0.71	0.63	0.56	0.88	1.13	1.57	1.84	.	(M3)
5028	2.73	0.04	0.03	0.05	0.04	0.02	-0.04	.	.	A2 V	5395	4.56	-0.94	-0.15	-0.10	-0.21	.	.	.	.	B3 III
5054/5	2.06	0.05	-0.02	-0.04	-0.06	-0.04	-0.05	.	.	B2 V+A2 V	5396 D	4.35	0.61	0.43	0.41	0.76	.	.	.	.	(M7)
5056 V	0.97	-1.17	0.23	-0.09	-0.33	-0.53	-0.71	-0.70	-0.70	B1 V	5404	4.06	0.51	0.50	0.42	0.67	.	.	.	.	F7 V
5062	4.02	0.24	0.16	0.17	0.24	.	.	.	.	A5 V	5409	4.82	0.95	0.74	0.58	0.95	.	.	.	.	G2 III
5068	4.75	2.16	1.10	0.79	1.32	.	.	.	.	K1 III	5429	3.59	2.74	1.30	0.92	1.57	2.13	2.93	3.05	.	K3 III
5072	4.98	0.97	0.71	0.61	1.00	.	.	.	.	G5 V	5430	4.25	3.14	1.44	1.05	1.80	.	.	.	.	K4 III
5080 msa	4.97	2.29	1.61	2.70	5.12	6.30	7.63	8.05	8.05	M6 (M7e)	5435	3.02	1.01	0.19	0.10	0.22	0.35	0.45	.	.	A7 III
5089 D	3.68	2.20	1.16	0.84	1.63	1.88	2.56	2.56	2.56	G8 III	5440	2.31	-0.01	-0.19	-0.10	-0.28	.	.	.	.	B1.5 V:mc
5095	4.69	3.26	1.60	1.46	2.62	3.28	4.36	4.55	4.55	M2 III	5447	4.47	0.29	0.37	0.34	0.53	0.69	0.94	.	.	F2 V
5105	4.94	0.02	0.02	0.06	0.05	.	.	.	.	A2p	5453	4.05	-0.71	-0.15	-0.09	-0.20	.	.	.	.	B5 V
5107	3.38	0.20	0.12	0.07	0.15	0.18	0.27	.	.	A3 Vn	5463	3.19	0.36	0.24	0.23	0.33	.	.	.	.	F0 Vp (Si)

TABLE 2 UBVRJKL PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY

BRIGHT STAR PHOTOMETRY

B.S. R	V	U-V	B-V	V-R	V-I	V-J	V-K	V-L	SP.	V R K S
5469	2.30	-1.08	-0.20	-0.09	-0.26	.	.	.	B1 V	3 3 0 2
5471	4.00	-0.36	-0.17	-0.11	-0.26	.	.	.	B3 V	3 3 0 2
5475/6	4.54	-0.36	-0.04	0.07	0.05	.	.	.	B9 IIIp/A m	3 2 0 1
5477/8	3.78	0.10	0.05	0.02	0.01	.	.	.	A2 III	8 4 0 1
5485	4.05	2.38	1.35	1.01	1.74	.	.	.	K5 III	3 4 0 2
5487	3.88	0.37	0.38	0.40	0.62	0.73	0.99	.	F3 IV	5 3 3 1
5489	4.92	-0.22	0.01	0.06	0.08	.	.	.	(A0n)	3 2 0 2
5490 V	4.81	3.50	1.66	1.69	2.71	3.50	4.60	4.81	(F3)	4 4 5 1
5492	6.25	0.30	0.43	0.37	0.57	.	.	.	F2 IV	4 4 0 1
5502	4.60	1.73	0.98	0.73	1.21	1.58	2.17	.	KO III	5 4 3 1
5505/6	2.37	1.70	0.97	0.75	1.27	1.72	2.37	2.42	KO III-III+A	4 5 4 1
5511	3.73	-0.34	-0.01	0.07	0.05	.	.	.	A0 V	9 3 0 1
5526	4.41	2.87	1.40	1.07	1.83	.	.	.	(K4)	3 9 0 1
5528	4.33	-0.75	-0.14	-0.05	-0.16	.	.	.	B6 III:	3 4 0 2
5530	5.16	0.37	0.41	0.38	0.57	0.77	1.03	.	F5 IV	7 7 2 3
5531	2.75	0.24	0.15	0.14	0.18	0.23	0.31	.	A3 V	9 3 2 1
5544 D	4.54	1.06	0.77	0.63	1.06	.	.	.	G8 V	6 3 0 1
5563	2.08	3.24	1.47	1.11	1.87	.	.	.	K4 III	6 3 0 1
5568	5.71	2.17	1.11	0.99	1.53	1.87	2.65	2.92	K5 V	4 2 2 1
5570	2.49	0.36	0.32	0.32	0.49	.	.	.	F0 IV	9 5 0 1
5571	2.68	-1.07	-0.22	-0.10	-0.27	.	.	.	B2 IV	3 3 0 2
5576	3.13	-0.98	-0.20	-0.08	-0.24	.	.	.	B2 V	3 3 0 2
5586 V	4.93	-0.11	0.00	0.08	0.09	.	.	.	(A0)	3 3 0 1
5589 V	4.59	3.18	1.59	1.86	3.57	4.37	5.54	5.73	M5 III	3 3 0 1
5600	4.82	3.33	1.50	1.19	1.98	.	.	.	K4 III	3 3 0 1
5601	4.40	1.91	1.04	0.81	1.35	1.79	2.45	.	K0 III	4 4 3 1
5602	3.50	1.68	0.97	0.65	1.09	1.57	2.16	.	G8 III	3 3 0 1
5603	3.27	3.67	1.71	1.53	2.82	3.53	4.67	4.86	M4 III	5 7 8 1
5605/6	3.89	-0.72	-0.14	-0.10	-0.21	.	.	.	B5 IV	3 3 0 1
5616	4.55	2.57	1.23	0.93	1.58	2.14	2.91	.	K2 III	3 3 3 1
5625	5.85	-0.82	-0.17	-0.10	-0.26	.	.	.	B7 V:m	3 4 0 2
5626 D	4.05	-0.86	-0.16	-0.08	-0.23	.	.	.	B3 V	3 4 0 2
5634	4.93	0.41	0.43	0.40	0.61	0.72	1.03	1.04	F5 V	9 4 2 1
5646/7	3.70	-0.15	-0.03	-0.05	-0.06	.	.	.	B9 V	6 2 0 2
5651	4.82	-0.84	-0.17	-0.10	-0.26	.	.	.	B3 III	6 2 0 2
5652	4.54	-0.46	-0.08	-0.04	-0.13	.	.	.	B9 IV (S1)	3 3 0 1
5660	4.91	1.66	0.97	0.76	1.27	.	.	.	F0 IV	3 3 0 2
5681	3.49	1.63	0.95	0.73	1.24	1.62	2.27	2.53	G8 III	5 2 3 1
5683 D	4.27	-0.46	-0.09	-0.02	-0.06	.	.	.	(B8n)	3 2 0 2
5685	2.61	-0.48	-0.11	-0.04	-0.14	-0.20	-0.25	.	B8 V	9 9 9 1
5686	4.33	2.17	1.10	0.81	1.37	1.59	2.27	2.36	(K0)	2 1 1 2
5694	5.06	0.60	0.54	0.41	0.68	.	.	.	B2 IV-V	3 3 0 3
5695	3.22	-1.09	-0.22	-0.11	-0.33	.	.	.	F8 V	3 6 0 2
5705	3.56	3.41	1.54	1.19	2.06	.	.	.	K5 III	3 2 0 2
5708 D	3.37	-0.91	-0.18	-0.11	-0.27	.	.	.	R3 IV	3 2 0 2
5712	4.54	-0.77	-0.15	-0.06	-0.20	.	.	.	B5 V	3 2 0 2
5721	6.12	0.31	0.26	0.24	0.36	.	.	.	F0 V	3 4 0 1
5727/8	4.98	0.62	0.58	0.48	0.76	.	.	.	G2 V	3 4 0 1
5733	4.32	0.37	0.31	0.30	0.45	.	.	.	F0 IV	5 3 0 1
5735	3.05	0.16	0.05	0.08	0.14	.	.	.	A3 III-III	3 3 0 1
5736	5.45	.	-0.15	-0.09	-0.26	.	.	.	B5 V	4 4 0 2
5744	3.29	2.39	1.16	0.78	1.91	2.61	2.75	2.81	K2 III	3 5 3 1
5747	3.68	0.40	0.29	0.18	0.23	0.28	0.38	0.48	F0 IIIp	5 4 4 1
5763	5.02	3.50	1.59	1.27	2.20	.	.	.	K5 III	3 4 0 1
5764	5.50	.	-0.14	-0.09	-0.26	.	.	.	B2 V:m	3 3 0 2
5774 D	5.02	0.18	0.07	0.15	0.19	.	.	.	(A2)	3 3 0 1
5776 D	2.76	-1.02	-0.20	-0.14	-0.38	.	.	.	B2 Vn	3 5 0 2
5777	4.62	1.88	1.01	0.77	1.29	1.74	2.37	.	K1 IV	5 3 3 1
5778	4.13	-0.68	-0.13	-0.05	-0.16	.	.	.	B7:m	3 3 0 1
5780	3.18	-0.34	-0.09	-0.04	-0.16	.	.	.	B7 IV:	3 1 0 2

BRIGHT STAR PHOTOMETRY

BRIGHT STAR PHOTOMETRY

B.S. R	V	U-V	B-V	V-R	V-I	V-J	V-K	V-L	SP.	V R K S
5781 D	4.54	-0.86	-0.18	-0.15	-0.37	.	.	.	B5 IV	6 5 0 2
5787	3.91	1.76	1.02	0.71	1.26	1.75	2.39	.	G8 III-IV	2 3 3 1
5788/9	3.80	0.38	0.26	0.22	0.33	.	.	.	F0 IV	3 3 0 1
5793 V	2.24	-0.05	-0.02	0.03	-0.01	-0.01	0.06	.	A0 V	8 2 4 1
5794	3.57	2.98	1.39	1.00	1.71	.	.	.	K5 III	4 6 0 1
5797	4.33	3.15	1.43	1.03	1.76	.	.	.	M0 III	3 2 0 2
5812	3.65	-0.87	-0.18	-0.11	-0.30	.	.	.	B2.5 V	3 9 0 1
5820	4.67	1.73	1.00	0.68	1.17	.	.	.	(G8)	3 2 0 2
5824	4.96	2.84	1.33	0.96	1.64	2.07	2.89	2.98	K4 III	6 3 4 2
5825	4.64	0.38	0.40	0.35	0.55	.	.	.	F5 IV-V	6 1 0 2
5830	5.75	0.34	0.36	0.33	0.51	.	.	.	F2 V	3 4 0 1
5838	4.72	3.52	1.58	1.28	2.22	.	.	.	K5 III	3 3 0 1
5839	4.75	-0.68	-0.14	-0.10	-0.26	.	.	.	B6 V	3 4 0 2
5840	6.01	1.51	0.90	0.69	1.15	.	.	.	G5 III	3 4 0 1
5842 D	4.53	0.07	0.05	0.04	0.03	.	.	.	A1 V	5 3 0 1
5843	5.33	0.09	0.04	0.05	0.01	.	.	.	A0p	3 5 0 1
5849 D	3.85	-0.05	-0.01	-0.03	-0.05	.	.	.	A0 IV	3 3 0 1
5854	2.64	2.42	1.17	0.81	1.37	1.88	2.58	2.64	K2 III	9 9 9 1
5859	5.58	0.07	0.04	0.04	0.03	.	.	.	A0 V	5 6 0 1
5867	3.67	0.14	0.06	0.06	0.09	.	.	.	A2 IV	9 4 0 1
5868	4.43	0.70	0.60	0.51	0.83	1.05	1.39	1.42	G0 V	9 3 5 1
5879	4.09	3.57	1.62	1.25	2.23	3.01	4.06	4.23	M1 III	3 3 5 1
5881	3.53	-0.14	-0.04	-0.01	-0.06	.	.	.	A0 V	3 3 0 1
5883	3.95	-0.18	-0.04	-0.02	-0.09	.	.	.	A0 III-IV	6 2 0 2
5885	4.68	-0.79	-0.06	0.01	-0.09	.	.	.	B2.5 Vn	2 9 0 1
5888	5.23	1.84	1.02	0.77	1.30	.	.	.	G8 III	3 5 0 1
5889	4.63	1.17	0.80	0.63	1.05	.	.	.	G5 III-IV	4 4 0 1
5892	3.70	0.25	0.16	0.08	0.13	.	.	.	A m	3 3 0 1
5897	2.85	0.34	0.29	0.32	0.47	.	.	.	F2 IV	6 7 0 4
5899	4.78	3.42	1.54	1.22	2.07	.	.	.	K5 III	2 3 0 1
5901	4.82	1.87	1.00	0.76	1.25	.	.	.	K0 III-IV	4 4 0 1
5902	5.03	-0.01	0.01	0.04	.	.	.	.	B3 V	3 3 0 2
5903	4.32	0.59	0.04	0.06	0.07	.	.	.	A3 V	6 6 0 1
5904 D	5.39	-0.73	-0.06	-0.02	-0.11	.	.	.	B2.5 Vn	4 9 0 1
5906	5.39	-0.73	-0.06	-0.02	-0.11	.	.	.	B6 V	3 3 0 2
5907	5.43	-0.04	0.01	-0.04	.	.	.	.	B2 V:m	3 3 0 2
5908	4.16	1.83	1.01	0.72	1.24	1.67	2.37	2.65	K0 III-IV	4 2 3 1
5914	4.62	0.57	0.57	0.48	0.80	1.10	1.50	.	F9 V	6 3 3 1
5915 D	5.93	.	-0.02	0.02	-0.01	.	.	.	B5 V:	3 3 0 2
5924	5.44	3.53	1.59	1.26	2.23	2.88	3.91	4.11	K4 III	2 3 4 1
5928	3.86	-1.02	-0.20	-0.11	-0.31	.	.	.	B2 V	3 9 0 1
5932	5.38	3.61	1.64	1.49	2.73	3.56	4.61	4.84	M3 III	6 3 4 2
5933	3.86	0.45	0.48	0.49	0.73	0.92	1.20	.	F6 V	9 3 2 1
5941	4.87	-0.26	-0.10	-0.04	-0.09	.	.	.	B p	5 7 0 1
5944	2.91	-1.09	-0.20	-0.09	-0.29	.	.	.	B1 V	3 8 0 1
5947	4.15	2.51	1.23	0.89	1.51	2.06	2.85	3.02	K3 III	9 9 3 1
5948 D	3.42	-1.06	-0.22	-0.14	-0.35	.	.	.	B2 V	3 5 0 2
5953	2.32	-1.02	-0.12	-0.05	-0.18	-0.26	-0.43	-0.51	B0 V	4 5 1 0
5960	4.95	0.30	0.26	0.23	0.37	.	.	.	F0 IV	3 3 0 1
5962	4.65	1.55	0.92	0.67	1.14	.	.	.	(G5)	6 2 0 2
5967	4.89	-0.71	-0.14	-0.07	-0.21	.				

TABLE 2 UBVRJKL PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY											BRIGHT STAR PHOTOMETRY											
B.S.	R	V	U-V	B-V	V-R	V-I	V-J	V-K	V-L	SP.	B.S.	R	V	U-V	B-V	V-R	V-I	V-J	V-K	V-L	SP.	
5997	4.33	1.35	0.84	0.65	1.08	1.48	2.00	..	..	(G2)	5997	4.33	1.35	0.84	0.65	1.08	1.48	2.00	..	..	F0 IVn	
6018	4.76	1.88	1.01	0.75	1.29	1.68	2.38	2.62	..	K0 III	6018	4.76	1.88	1.01	0.75	1.29	1.68	2.38	2.62	..	..	B6 III
6023	4.27	-0.35	-0.07	0.40	-0.09	..	..	..	..	B9p	6023	4.27	-0.35	-0.07	0.40	-0.09	..	..	..	..	..	B6 III
6027	4.01	-0.61	0.03	0.11	0.14	0.20	0.24	0.24	..	A2 IV-V	6027	4.01	-0.61	0.03	0.11	0.14	0.20	0.24	0.24	..	..	M3 II+G5 III
6028	4.59	-0.93	-0.16	-0.05	-0.22	..	..	..	..	B2.5 Vn	6028	4.59	-0.93	-0.16	-0.05	-0.22	..	..	..	..	..	A3 IV
6031	4.93	0.19	0.09	0.12	0.14	..	..	..	..	A2 V	6031	4.93	0.19	0.09	0.12	0.14	..	..	..	..	..	K2 III
6056	2.75	3.55	1.59	1.29	2.32	2.95	3.97	4.11	..	M1 III	6056	2.75	3.55	1.59	1.29	2.32	2.95	3.97	4.11	..	..	G8 V
6070	4.77	0.01	0.02	0.08	0.03	..	..	..	..	A0 V	6070	4.77	0.01	0.02	0.08	0.03	..	..	..	..	..	K3 III
6072	4.02	2.25	1.08	0.78	1.36	..	..	..	..	G8 III	6072	4.02	2.25	1.08	0.78	1.36	..	..	..	..	..	(K5)
6074	5.78	0.17	0.07	0.07	0.07	..	..	..	..	A3 V	6074	5.78	0.17	0.07	0.07	0.07	..	..	..	..	..	B3 III
6075	3.23	1.73	0.98	0.70	1.19	1.63	2.24	2.27	..	G9 III	6075	3.23	1.73	0.98	0.70	1.19	1.63	2.24	2.27	..	..	A2 V
6076	6.06	1.84	1.07	0.83	1.45	..	..	..	..	K5 III	6076	6.06	1.84	1.07	0.83	1.45	..	..	..	..	..	F2 V
6081	4.57	0.50	0.84	0.87	1.71	..	..	..	..	A1 V	6081	4.57	0.50	0.84	0.87	1.71	..	..	..	..	..	A1 V
6084	2.88	-0.56	0.13	0.20	0.31	0.41	0.47	0.45	..	B1 III	6084	2.88	-0.56	0.13	0.20	0.31	0.41	0.47	0.45	..	..	B2 IV
6092	3.90	-0.72	-0.15	-0.09	-0.26	-0.28	-0.51	-0.46	..	B5 IV	6092	3.90	-0.72	-0.15	-0.09	-0.26	-0.28	-0.51	-0.46	..	..	A0p/7A0 IV
6093	4.82	0.36	0.34	0.31	0.46	..	..	..	..	FC V	6093	4.82	0.36	0.34	0.31	0.46	..	..	..	..	..	A9 V
6095	3.76	0.46	0.27	0.29	0.43	..	..	..	..	A9 III	6095	3.76	0.46	0.27	0.29	0.43	..	..	..	..	..	F5 IV
6098	4.91	0.58	0.55	0.54	0.82	..	..	..	..	GO V	6098	4.91	0.58	0.55	0.54	0.82	..	..	..	..	..	F3 V
6103	4.85	1.77	0.97	0.73	1.19	..	..	..	..	K0 III	6103	4.85	1.77	0.97	0.73	1.19	..	..	..	..	..	K3 II
6104	4.50	1.87	1.03	0.78	1.28	1.73	2.31	..	..	K0 III	6104	4.50	1.87	1.03	0.78	1.28	1.73	2.31	..	..	..	B3 Ib
6112/3	4.63	-0.33	0.22	0.36	0.67	..	..	..	..	B3 IV/B3 V	6112/3	4.63	-0.33	0.22	0.36	0.67	..	..	..	..	..	B2+5 V
6115	4.47	-0.60	-0.07	0.04	0.03	..	..	..	..	B5 V	6115	4.47	-0.60	-0.07	0.04	0.03	..	..	..	..	..	(A0n)
6117	4.58	-0.05	-0.01	0.07	0.03	..	..	..	..	A1p	6117	4.58	-0.05	-0.01	0.07	0.03	..	..	..	..	..	(K0)
6118	4.43	-0.48	0.28	0.46	0.70	..	..	..	..	B2 Vn	6118	4.43	-0.48	0.28	0.46	0.70	..	..	..	..	..	F0 Ib
6129	4.63	0.22	0.16	0.16	0.23	..	..	..	..	A m	6129	4.63	0.22	0.16	0.16	0.23	..	..	..	..	..	A m
6132	2.74	1.61	0.91	0.61	1.07	1.57	2.15	2.30	..	G8 III	6132	2.74	1.61	0.91	0.61	1.07	1.57	2.15	2.30	..	..	A5 III
6134	0.91	3.17	1.84	1.55	2.78	3.55	4.69	4.95	..	M1-K2 Iab	6134	0.91	3.17	1.84	1.55	2.78	3.55	4.69	4.95	..	..	F0 IV
6141	4.79	-0.86	-0.07	-0.06	-0.20	..	..	..	..	B2 V	6141	4.79	-0.86	-0.07	-0.06	-0.20	..	..	..	..	..	B8 V
6143	4.23	-0.96	-0.16	-0.06	-0.21	..	..	..	..	B2 IV	6143	4.23	-0.96	-0.16	-0.06	-0.21	..	..	..	..	..	(Bf4)
6146	5.01	2.69	1.52	2.52	4.75	5.77	7.02	7.21	..	M6 III	6146	5.01	2.69	1.52	2.52	4.75	5.77	7.02	7.21	..	..	B2 IV
6147	4.27	1.63	0.92	0.65	1.09	1.35	1.96	2.02	..	G8 III	6147	4.27	1.63	0.92	0.65	1.09	1.35	1.96	2.02	..	..	B2 IV
6148	2.77	1.63	0.94	0.64	1.11	1.56	2.17	..	..	G8 III	6148	2.77	1.63	0.94	0.64	1.11	1.56	2.17	..	..	..	A5 III
6149	3.83	0.03	0.01	-0.01	-0.02	..	..	..	..	A1 V	6149	3.83	0.03	0.01	-0.01	-0.02	..	..	..	..	..	F0 IV
6153	4.45	0.24	0.11	0.13	0.15	..	..	..	..	A7p	6153	4.45	0.24	0.11	0.13	0.15	..	..	..	..	..	B8 V
6159	4.85	3.31	1.49	1.20	2.06	2.64	3.64	3.78	..	K4 III	6159	4.85	3.31	1.49	1.20	2.06	2.64	3.64	3.78	..	..	(Bf4)
6161	5.01	-0.17	-0.06	0.05	0.03	..	..	..	..	B9 IV	6161	5.01	-0.17	-0.06	0.05	0.03	..	..	..	..	..	B2 IV
6165	2.81	-1.26	-0.25	-0.12	-0.37	..	..	..	..	B0 V	6165	2.81	-1.26	-0.25	-0.12	-0.37	..	..	..	..	..	A2 V
6166	4.16	3.51	1.57	1.20	2.20	..	..	..	..	(K6)	6166	4.16	3.51	1.57	1.20	2.20	..	..	..	..	..	B3 V
6168	4.20	-0.11	-0.01	0.03	0.02	..	..	..	..	B9 V	6168	4.20	-0.11	-0.01	0.03	0.02	..	..	..	..	..	K1 III+F4 V
6171	5.74	1.26	0.81	0.61	1.00	..	..	..	..	K0 V	6171	5.74	1.26	0.81	0.61	1.00	..	..	..	..	..	F5 V
6175	2.56	-0.83	0.02	0.10	0.06	-0.05	-0.08	-0.06	..	O9.5 V	6175	2.56	-0.83	0.02	0.10	0.06	-0.05	-0.08	-0.06	..	..	K2 III
6212	3.01	1.86	0.65	0.51	0.83	1.11	1.51	1.67	..	G0 IV	6212	3.01	1.86	0.65	0.51	0.83	1.11	1.51	1.67	..	..	G5 IV
6220	3.50	1.53	0.92	0.67	1.15	1.52	2.15	2.25	..	F2 VII-IV	6220	3.50	1.53	0.92	0.67	1.15	1.52	2.15	2.25	..	..	A0 V
6237	4.84	0.33	0.39	0.35	0.56	..	..	..	..	F2 V	6237	4.84	0.33	0.39	0.35	0.56	..	..	..	..	..	F5 IV-V
6241	2.29	2.32	1.16	0.86	1.46	..	..	..	..	K2 III-IV	6241	2.29	2.32	1.16	0.86	1.46	..	..	..	..	..	F2 Ib
6243	4.66	0.54	0.47	0.45	0.70	..	..	..	..	F5 IV-V	6243	4.66	0.54	0.47	0.45	0.70	..	..	..	..	..	K2 III
6247	3.03	..	-0.22	-0.12	-0.31	..	..	..	..	B1.5 V	6247	3.03	..	-0.22	-0.12	-0.31	..	..	..	..	..	K1 III
6252	3.57	1.05	0.21	-0.13	-0.35	..	..	..	..	B2 IV	6252	3.57	1.05	0.21	-0.13	-0.35	..	..	..	..	..	G0 III
6254	4.82	0.11	0.09	0.10	0.11	..	..	..	..	A2p	6254	4.82	0.11	0.09	0.10	0.11	..	..	..	..	..	(A0n)
6271	3.59	2.57	1.36	1.12	1.80	..	..	..	..	K5 III	6271	3.59	2.57	1.36	1.12	1.80	..	..	..	..	..	G9 III
6281	4.38	-0.40	-0.08	-0.09	-0.17	..	..	..	..	B8 IV	6281	4.38	-0.40	-0.08	-0.09	-0.17	..	..	..	..	..	K5 III
6282	6.08	1.54	0.92	0.70	1.18	..	..	..	..	B1.5 V	6282	6.08	1.54	0.92	0.70	1.18	..	..	..	..	..	K1 III
6299	3.20	2.32	1.16	0.84	1.38	1.85	2.56	2.84	..	K2 III	6299	3.20	2.32	1.16	0.84	1.38	1.85	2.56	2.84	..	..	G0 III
6315	4.90	0.45	0.48	0.45	0.72	..	..	..	..	F6 V	6315	4.90	0.45	0.48	0.45	0.72	..	..	..	..	..	B2 Ve
6322	4.23	1.45	0.90	0.70	1.17	..	..	..	..	G5 III	6322	4.23	1.45	0.90	0.70	1.17	..	..	..	..	..	K0 III-III
6324	3.92	-0.12	-0.01	-0.01	-0.05	..	..	..	..	B9.5 V	6324	3.92	-0.12	-0.01	-0.01	-0.05	..	..	..	..	..	B5 Ib
6334	4.97	-0.43	0.26	0.28	0.45	..	..	..	..	M1 Iab	6334	4.97	-0.43	0.26	0.28	0.45	..	..	..	..	..	A1 V
6337	4.88	3.53	1.60	1.44	2.65	3.39	4.46	4.54	..	B3 III	6337	4.88	3.53	1.60	1.44	2.65	3.39	4.46	4.54	..	..	O5
6355	4.91	0.16	0.12	0.12	0.14	..	..	..	..	A3 IV	6355	4.91	0.16	0.12	0.12	0.14	..	..	..	..	..	K0 III
6378	2.42	0.14	0.05	0.03	0.04	0.12	0.15	..	..	A2.5 V	6378	2.42	0.14	0.05	0.03	0.04	0.12	0.15	..	..	..	K0 V

TABLE 2 UBVRJKL PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY

BRIGHT STAR PHOTOMETRY

B.S. R	V	U-V	B-V	V-R	V-I	V-J	V-K	V-L	SP.	V R K S	
6766	4.55	1.71	0.95	0.66	1.18	.	.	.	(GP)	2 3 0 1	
6770	4.63	1.70	0.97	0.69	1.19	.	.	.	G8 III-IV	3 3 0 1	
6771	3.73	0.21	0.12	0.14	0.19	.	.	.	A4 V	3 3 0 1	
6779	3.83	-0.69	-0.02	0.03	0.03	.	.	.	B9.5 III	3 3 0 1	
6783	4.53	1.79	1.01	0.70	1.18	.	.	.	B5 III	6 1 0 2	
6787	4.35	-0.56	-0.15	-0.06	-0.24	.	.	.	B2 V	3 3 0 1	
6789	4.36	0.65	0.02	0.05	0.04	.	.	.	A1 V	8 3 0 1	
6806	6.40	1.66	0.87	0.77	1.25	.	.	.	K2 V	4 4 0 3	
6812 V	3.85	-0.75	0.22	0.27	0.47	.	.	.	B8 III	2 2 0 1	
6832	3.11	3.06	1.56	1.56	2.88	.	.	.	M3 II	3 1 0 2	
6842	4.63	3.06	1.66	1.21	2.14	.	.	.	(K5)	3 4 0 1	
6859	2.70	2.93	1.38	1.00	1.68	.	.	.	K2 III	3 3 0 1	
6866	4.84	1.52	0.91	0.69	1.14	.	.	.	M0 III	4 4 0 1	
6868	4.86	3.98	1.58	1.34	2.34	.	.	.	G8 III	2 2 0 1	
6869	3.25	1.39	0.94	0.70	1.20	1.60	2.20	.	K0 III-IV	6 3 2 1	
6872	4.34	2.36	1.17	0.86	1.41	.	.	.	K2 III	2 2 2 1	
6879	1.85	-0.16	-0.03	0.00	-0.01	.	.	.	A0 V	3 1 0 2	
6884	4.68	1.56	0.94	0.72	1.19	.	.	.	K0 III	2 2 0 1	
6895	3.84	2.34	1.18	0.85	1.45	1.92	2.68	2.82	K2 III	4 2 3 1	
6896 D	4.81	2.23	1.30	1.10	1.94	.	.	.	K2 II	3 3 0 1	
6897	3.51	-0.82	-0.17	-0.13	-0.34	.	.	.	B3 III	6 1 0 2	
6917	2.81	1.94	1.04	0.75	1.31	1.77	2.43	.	K2 III	6 4 1 1	
6918	5.93	0.16	0.07	0.08	0.12	.	.	.	A2 V	4 3 0 1	
6918 VD	5.21	0.71	0.50	0.49	0.87	.	.	.	G0 III+A6 V	4 3 0 1	
6920 D	4.22	-0.43	-0.10	-0.04	-0.14	.	.	.	A0 P	3 3 0 1	
6923 D	4.99	0.13	0.08	0.05	0.07	.	.	.	A1 V	2 2 0 1	
6927	3.58	0.43	0.49	0.44	0.75	.	.	.	F3 V	6 3 0 1	
6930	4.71	0.11	0.07	0.08	0.13	.	.	.	A3 V	3 3 0 1	
6945	4.82	2.30	1.19	0.86	1.49	.	.	.	K2 III	3 3 0 1	
6951	4.64	1.78	1.02	0.69	1.19	.	.	.	G5 III	6 1 0 2	
6973	5.83	2.87	1.34	0.97	1.65	.	.	.	K3 III	4 2 0 1	
6978	4.80	1.05	0.61	0.53	0.84	.	.	.	F7 Ib	2 2 0 1	
6993	5.74	0.12	0.06	0.07	0.11	.	.	.	(A2)	7 2 0 1	
7001	0.03	0.00	0.00	-0.04	-0.07	0.01	0.01	0.05	A0 V	9 5 9 1	
7020 V	4.72	0.51	0.35	0.30	0.49	.	.	.	F3 III-IV	2 2 0 1	
7029	4.87	-0.89	-0.18	-0.14	-0.30	.	.	.	B3 V	6 1 0 2	
7039	3.16	-0.47	-0.11	-0.01	-0.12	.	.	.	B8 III	5 4 0 1	
7056	4.36	0.35	0.19	0.15	0.23	.	.	.	A m	5 4 0 1	
7059	5.64	0.22	0.14	0.13	0.20	.	.	.	A2 m	5 4 0 1	
7061	4.19	0.48	0.46	0.39	0.65	.	.	.	F6 V	6 2 0 1	
7063	4.22	1.93	0.09	0.79	1.36	1.80	2.48	.	G5 II	2 2 3 1	
7064	4.84	2.42	1.20	0.88	1.49	.	.	.	K3 III	2 2 0 1	
7066 V	5.20	3.10	1.47	1.06	1.83	2.36	3.12	3.64	G0 III-K0 IbJ0243659	3 3 0 1	
7069	4.56	0.20	0.12	0.09	0.10	.	.	.	A3 V	3 3 0 1	
7106 V	3.42	-0.57	0.00	0.11	0.13	0.18	0.36	.	B P	3 3 3 1	
7116	4.83	2.68	1.40	1.01	1.70	.	.	.	(K2)	3 3 0 1	
7120	4.98	1.42	0.82	0.68	1.13	2.13	2.91	3.08	K3 III	5 4 3 1	
7121	2.03	-0.97	-0.22	-0.11	-0.32	.	.	.	B2 V	4 4 0 1	
7125	4.67	2.23	1.19	0.90	1.54	.	.	.	K0 III-III	6 3 0 1	
7133 D	4.60	1.28	0.78	0.64	1.10	1.44	2.04	.	G4 III+A6 V	2 2 3 1	
7137	4.93	1.47	0.90	0.68	1.13	.	.	.	G8 III	3 3 0 1	
7139	3.30	3.32	1.67	1.18	3.41	4.32	5.53	5.75	M4 II	3 3 7 1	
7141/2	4.07	0.26	0.17	0.17	0.24	.	.	.	A5 V	2 3 0 1	
7150	3.51	2.31	1.18	0.60	1.59	1.80	2.52	2.56	K1 III	6 3 3 1	
7157 V	4.00	3.00	1.59	2.05	3.56	4.86	6.09	6.35	M5 III	3 3 8 1	
7172	5.22	6.60	0.53	0.62	0.72	.	.	.	F8 IV	6 4 0 1	
7176	4.02	2.12	0.88	0.76	1.28	1.69	2.33	2.47	K2 III	3 3 3 1	
7178	3.24	-1.15	-0.05	-0.03	-0.04	0.01	0.00	0.07	B9 III	9 6 3 1	
7180	4.82	2.25	1.15	0.85	1.41	.	.	.	K0 III	4 3 0 1	
7193	4.02	2.13	1.09	0.79	1.33	1.79	2.51	2.58	K1 III	4 3 3 1	
B.S. R	D	2.59	0.13	0.08	0.05	0.06	.	.	.	A2 III	7 4 0 1
7215	5.02	0.58	0.19	0.21	0.30	.	.	.	(A7)	4 3 0 1	
7217	3.77	1.86	1.00	0.72	1.25	1.66	2.29	2.35	(GG8)	3 3 3 1	
7234	3.31	2.34	1.20	0.87	1.46	.	.	.	K1 III	5 3 0 1	
7235	2.99	0.00	0.01	0.01	0.01	0.06	0.07	.	B9.5 V	9 3 3 1	
7236	3.43	-0.36	-0.09	-0.03	-0.12	-0.21	-0.24	.	B8 V	5 2 1 2	
7238	4.11	0.13	0.04	0.04	0.04	.	.	.	(A2n)	3 1 0 2	
7259	4.11	2.27	1.20	0.82	1.43	.	.	.	(GG)	3 1 0 2	
7264	2.88	0.58	0.34	0.34	0.58	0.74	1.00	1.14	F2 II-III	4 2 3 1	
7292 D	4.83	0.87	0.55	0.49	0.83	.	.	.	(GFS)	2 2 0 1	
7298	4.38	-0.81	-0.14	-0.10	-0.25	.	.	.	B2 IV	3 3 0 1	
7306	4.77	-0.59	-0.04	0.01	-0.06	.	.	.	B3 IV	3 3 0 1	
7310	3.07	1.78	1.00	0.70	1.21	1.64	2.27	2.30	G9 III	3 3 3 1	
7312	5.14	0.31	0.31	0.31	0.48	.	.	.	F2 V	8 5 0 1	
7314	4.37	2.48	1.25	0.87	1.48	2.00	2.71	2.85	K0 II	2 2 3 1	
7317	6.06	3.00	1.43	1.12	1.95	2.56	3.55	3.62	K3 III	5 4 3 1	
7328	3.76	1.71	0.97	0.63	1.10	1.51	2.09	2.18	G9 III	3 3 3 1	
7350	3.93	0.36	0.22	0.19	0.29	.	.	.	F0 IV	3 3 0 1	
7342	4.61	-0.43	0.10	0.27	0.40	0.61	0.79	.	A P	9 2 2 1	
7352	4.45	2.70	1.25	0.90	1.48	2.00	2.69	.	F2 Ib	3 3 0 1	
7358	5.18	-0.65	-0.12	-0.04	-0.20	.	.	.	B6 III	3 3 0 1	
7371	4.59	0.08	0.02	0.04	0.01	.	.	.	A2 IV	3 3 0 1	
7372	4.97	-0.81	-0.09	0.02	-0.12	.	.	.	B3 IV	3 3 0 1	
7377	3.36	0.36	0.32	0.25	0.41	0.61	0.79	.	F0 IV	9 2 2 1	
7387	4.67	1.11	0.60	0.51	0.97	.	.	.	F2 Ib	3 3 0 1	
7405	4.45	3.32	1.50	1.21	2.18	2.90	3.90	.	M0+III	5 3 2 1	
7417	3.08	1.75	1.13	0.87	1.53	2.07	2.92	3.09	K3 III+B8	5 3 2 1	
7420	3.79	0.25	0.14	0.11	0.18	.	.	.	A5 V	3 3 0 1	
7426	4.74	-0.80	-0.13	0.01	-0.15	.	.	.	B3 IV	3 2 0 1	
7429	4.45	2.42	1.18	0.91	1.52	1.95	2.69	2.82	K3 III	4 6 6 1	
7437	4.99	-0.50	-0.07	-0.01	-0.10	.	.	.	B7 V	3 3 0 1	
7440	4.60	-0.21	0.06	-0.03	-0.09	.	.	.	(B9)	3 3 0 1	
7446	4.96	-0.67	-0.06	0.06	0.02	-0.13	-0.19	-0.12	B0.5 III	9 9 1 1	
7447	4.36	-0.53	-0.09	0.02	-0.06	.	.	.	B5 III	3 4 0 1	
7451	5.74	0.48	0.48	0.46	0.74	.	.	.	F7 V	4 3 0 1	
7462	4.69	1.17	0.80	0.65	1.06	1.37	1.91	2.16	K0 V	5 3 3 1	
7469	4.47	0.37	0.39	0.35	0.56	.	.	.	F4 V	6 3 0 1	
7478	4.70	1.74	0.95	0.68	1.15	.	.	.	G8 III-IV	3 3 0 1	
7479	4.37	1.20	0.77	0.57	0.94	1.29	1.73	1.85	G0 II	3 3 3 1	
7488	4.37	1.94	1.05	0.71	1.21	1.63	2.24	2.37	G8 II	3 3 4 1	
7503	5.95	0.84	0.64	0.45	0.78	1.04	1.43	1.58	G2 V	4 2 4 1	
7504	6.20	0.87	0.66	0.44	0.78	1.16	1.55	1.78	G5 V	4 2 4 1	
7525	2.82	-0.12	-0.02	-0.01	-0.03	0.05	0.06	0.17	B9.5 III	4 4 3 1	
7528	2.77	0.20	0.20	0.20	0.20	.	.	.	A3 V	3 3 0 1	
7546 D	5.00	0.16	0.10	0.14	0.20	.	.	.	B3 V	3 3 0 1	
7536	3.83	2.37	1.41	1.44	2.73	3.46	4.62	4.81	M2 III+AO V	3 3 3 1	
7557	0.76	0.31	0.22	0.14	0.28	0.37	0.50	0.55	A7 IV+V	9 7 9 1	
7564max	4.23	2.78	1.80	2.42	4.22	5.43	6.88	7.48	M5 (S718)	J02438847	
7564min	2.61	2.50	1.90	5.32	9.52	11.86	13.95	14.86	M8 (S718)	J02439056	
7565	4.96	-0.81	-0.12	-0.02	-0.16	.	.	.	B3 V	3 3 0 1	
7582 D	3.82	1.41	0.89	0.64	1.12	1.57	2.14	2.28	G8 III	3 3 3 1	
7589											

TABLE 2 UBVRJKL PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY										BRIGHT STAR PHOTOMETRY											
B.S. R	V	U-V	B-V	V-R	V-I	V-J	V-K	V-L	SP.	V R K S	B.S. R	V	U-V	B-V	V-R	V-I	V-J	V-K	V-L	SP.	V R K S
7619 D	4.92	0.16	0.12	0.10	0.16	2.68	3.63	3.83	A3 IV	3 3 0 1	7990	4.73	0.42	0.32	0.28	0.42	.	.	.	A8m	3 3 0 1
7635	3.47	3.50	1.57	1.20	2.12	.	.	.	K5 III	3 3 3 1	7995	4.61	1.28	0.82	0.68	1.14	.	.	.	G8 III	2 2 0 1
7650	4.59	3.46	1.65	1.87	3.23	.	.	.	M4 III	3 3 0 1	8001	4.77	-0.72	-0.47	-0.07	-0.20	.	.	.	B5 V	2 2 0 1
7653	4.65	0.34	0.76	0.16	0.25	.	.	.	A m	3 3 0 1	8002	5.67	0.14	0.47	0.48	0.67	.	.	.	B8 Ia	4 1 0 1
7665	3.56	1.22	0.76	0.61	0.95	.	.	.	G8 V	6 3 0 4	8028	3.94	0.02	0.02	0.05	0.05	.	.	.	A0 V	3 3 0 1
7678	5.65	0.08	0.54	0.52	0.94	1.15	1.54	.	B1.5 Ia+	5 2 3 1	8034	5.23	0.48	0.46	0.32	0.60	.	.	.	F5 III	3 2 0 4
7685	4.5C	2.81	1.31	0.93	1.58	2.14	2.93	.	K3 III	3 3 3 1	8047	4.75	-0.98	-0.04	0.13	0.12	.	.	.	B1 IV:e	4 4 0 1
7703	5.32	0.87	0.75	1.24	.	.	.	.	K3 V	4 4 0 4	8060	4.84	0.23	0.18	0.16	0.23	.	.	.	A3 m?	3 3 0 1
7708	4.92	-0.90	-0.12	0.03	-0.08	.	.	.	B3 V	4 4 0 1	8075	4.07	0.00	-0.01	0.01	-0.01	.	.	.	A0 V	3 2 0 1
7710	3.22	-0.19	-0.07	-0.12	-0.19	-0.19	-0.16	0.16	B9.5 III	6 3 4 1	8079	3.70	3.45	1.65	1.20	2.10	2.70	3.75	3.98	K5 Ib	2 2 4 1
7722	5.73	1.52	0.88	0.71	1.16	.	.	.	K0 V	3 4 0 3	8080	4.49	3.50	1.60	1.28	2.26	.	.	.	M1 III	3 3 0 1
7724	4.95	0.10	0.09	0.10	0.10	.	.	.	A2 V	2 2 0 1	8085	5.22	1.17	1.03	1.68	2.07	2.83	2.91	K5 V	9 6 3 1	
7730	4.83	0.25	0.09	0.16	0.24	.	.	.	A3 III	2 2 0 1	8086	6.06	3.20	1.37	1.17	2.00	2.48	3.30	3.39	K7 V	9 6 3 1
7735 V	3.80	1.70	1.28	0.97	1.73	2.39	3.31	.	K2 II+B3 V	3 3 3 1	8089	4.56	2.29	1.56	1.17	1.99	.	.	.	K4 Ib-IIa	3 2 0 1
7736	4.99	0.11	0.12	0.20	0.27	.	.	.	A2 III	3 3 0 1	8093	4.52	1.61	0.94	0.69	1.15	1.51	2.10	2.29	G8 III	2 2 3 1
7740	4.77	-0.91	-0.18	-0.08	-0.28	.	.	.	B3 V	3 3 0 1	8097	4.68	0.35	0.26	0.25	0.36	.	.	.	F0p	4 4 0 1
7740	4.30	0.19	0.11	0.12	0.18	.	.	.	A3 IV+V	5 5 0 1	8115	3.20	1.75	0.99	0.70	1.18	1.55	2.11	2.22	G8 II	5 3 3 1
7741	5.15	1.75	1.04	0.74	1.22	.	.	.	G2 Ib	3 3 0 1	8123 D	4.49	0.49	0.50	0.43	0.71	.	.	.	F7 V	5 2 0 1
7744	4.52	2.37	1.26	0.96	1.67	.	.	.	K3 III	4 3 0 1	8130 D	3.73	0.43	0.40	0.33	0.59	0.74	1.02	.	F0 IV	2 2 2 1
7746	5.12	1.96	1.04	0.77	1.30	.	.	.	K1 III	7 4 0 1	8131	3.90	0.82	0.52	0.44	0.79	.	.	.	G0III+ASV	2 2 0 1
7747	4.26	1.65	1.08	0.79	1.32	1.71	2.34	2.48	G3 Ib	2 2 3 1	8143	4.23	-0.26	0.13	0.15	0.29	0.28	0.44	0.63	B9 Ib	2 2 3 1
7750 D	4.39	-0.14	-0.05	-0.02	-0.08	.	.	.	B9 III	3 3 0 1	8146	4.42	-0.92	-0.10	0.05	-0.03	.	.	.	B2 V:b	3 3 0 1
7751 V	3.98	2.56	1.21	1.20	2.79	3.82	.	.	K3 Ib-II+B	3 3 3 1	8151	4.82	-0.05	0.02	0.09	0.13	.	.	.	A0 V (C1)	6 1 0 2
7754	3.58	1.64	0.95	0.69	1.16	1.51	2.10	2.28	G9 III	2 2 2 1	8162	2.45	0.33	0.22	0.21	0.32	0.34	0.49	0.60	A7 IV+V	5 3 3 1
7763 V	4.82	-0.16	0.42	0.54	0.80	1.04	1.51	1.95	B1ep	5 2 4 1	8167	4.27	1.47	0.91	0.62	1.10	1.44	2.00	.	G8 III	2 2 3 1
7767 D	5.84	-0.67	0.10	0.05	0.06	0.09	.	.	B8	9 9 0 1	8170	6.40	0.53	0.53	0.47	0.81	.	.	.	F8 V	6 4 0 1
7770	5.17	1.12	0.65	0.57	0.99	.	.	.	F5 Ib	3 3 0 1	8173	4.09	2.16	1.11	0.79	1.33	1.74	2.45	2.61	K1 III	6 3 3 1
7776	4.76	-0.15	-0.04	0.01	-0.05	.	.	.	B9 V	3 3 0 1	8181	4.22	0.35	0.48	0.47	0.77	.	.	.	F8 V	3 5 0 4
7777	3.08	1.06	0.79	0.55	1.05	1.54	2.17	2.24	F8 V(+A0)	5 2 3 1	8204	3.74	1.60	1.00	0.64	1.07	1.37	1.88	2.00	G4 Ib	3 3 3 1
7781	5.76	0.14	0.12	0.13	0.19	.	.	.	(A2)	6 4 0 1	8207	5.78	3.18	1.44	1.05	1.81	.	.	.	K5 III	6 4 0 1
7784	6.23	0.09	0.06	0.06	0.09	.	.	.	A1 V	6 4 0 1	8213	4.51	1.51	0.91	0.68	1.15	1.46	2.05	2.16	(GG5)	4 4 3 1
7790	1.94	-0.91	-0.20	-0.09	-0.25	.	.	.	B3 IV	3 3 0 4	8225	4.57	3.25	1.62	1.25	2.34	.	.	.	M1 III	3 3 0 1
7796	2.23	1.21	0.67	0.69	0.83	1.07	1.51	1.56	F8 Ib	2 2 3 1	8232	2.87	1.41	0.94	0.61	1.30	1.77	.	.	G0 Ib	4 2 2 1
7806	4.44	2.83	1.33	1.01	1.68	2.15	3.00	3.12	K3 III	6 4 3 1	8238 DV	3.23	-1.18	-0.22	-0.10	-0.32	-0.55	-0.73	.	B2 III	4 2 3 1
7822 D	4.81	0.42	0.37	0.35	0.54	.	.	.	F2 IV	2 3 0 1	8252	4.02	1.45	0.89	0.71	1.21	1.47	2.05	2.14	G8 III	6 2 3 1
7834	4.02	0.70	0.40	0.36	0.59	.	.	.	F5 II	3 3 0 1	8255	4.91	2.08	1.08	0.82	1.36	1.82	2.47	.	K1 III	5 3 2 1
7844	4.95	-0.72	-0.09	0.03	-0.08	.	.	.	B2 V	3 3 0 1	8260	4.72	-0.74	-0.16	-0.04	-0.12	.	.	.	B3 V:b	3 3 0 1
7847	6.18	1.75	1.01	0.85	1.54	2.01	2.64	2.86	F5 Ib	5 2 5 1	8262 V	5.38	2.83	1.59	2.35	4.49	5.46	6.67	.	(gM4e)	2 2 1 1
7850	4.22	0.36	0.20	0.17	0.26	.	.	.	A m	3 3 0 1	8263	6.25	0.11	0.06	0.08	0.10	.	.	.	(A2)	6 4 0 1
7852	4.94	-0.60	-0.12	-0.02	-0.13	.	.	.	B6 III	2 2 0 1	8264	4.69	0.32	0.19	0.17	0.27	.	.	.	A7 V	2 2 0 1
7866	4.43	2.36	1.61	1.30	2.29	.	.	.	K2 Ib+B	2 2 0 1	8278	3.67	0.53	0.32	0.23	0.36	0.51	0.65	.	F0 IIIp	2 2 2 1
7871	4.69	0.32	0.11	0.13	0.18	.	.	.	A3 V	2 2 0 1	8279	4.73	-0.24	0.30	0.31	0.49	0.44	0.55	0.62	B2 Ib	4 2 3 1
7882 D	3.63	0.52	0.44	0.40	0.64	0.74	0.98	.	F5 IV	3 2 3 1	8288	4.73	1.39	0.88	0.67	1.16	.	.	.	G8 III	3 4 0 1
7884	4.33	1.65	0.96	0.67	1.13	1.48	2.05	.	G8 III	3 3 3 1	8291	6.11	0.15	0.07	0.11	0.16	.	.	.	(A2)	6 3 0 1
7891	4.82	-0.09	-0.02	0.03	-0.01	.	.	.	B9.5 V	3 3 3 1	8297 *V	6.05	7.82	2.52	1.83	3.21	4.11	5.71	6.32	C6+3	2 2 3 1
7906	3.77	-0.27	-0.06	-0.00	-0.34	.	.	.	B9 V	9 9 0 1	8301	4.67	-0.81	-0.12	-0.02	-0.15	.	.	.	B3 V	3 3 0 1
7924	1.25	-0.14	0.09	0.11	0.21	0.25	0.36	0.47	A2 Ia	9 5 9 1	8305	4.34	-0.16	-0.05	-0.01	-0.04	.	.	.	A0 V (Si)	6 1 0 2
7928	4.44	0.42	0.32	0.26	0.43	.	.	.	A7p III	3 3 0 1	8308	2.39	3.22	1.52	1.05	1.81	2.36	3.20	.	K2 Ib	3 2 3 1
7936	4.13	0.47	0.43	0.36	0.56	.	.	.	F5 V	4 2 0 1	8309/10	4.31	2.50	1.18	0.80	1.36	.	.	.	F6 V	3 3 0 1
7939	4.91	2.37	1.19	0.85	1.43	1.89	2.63	2.80	K2 III	4 2 3 1	8313	4.51	0.14	0.19	0.19	0.27	.	.	.	G5 Ib	2 2 3 1
7942	3.23	1.94	1.06	0.77	1.30	1.67	2.36	2.56	K0 III	3 3 4 1	8315 D	4.12	0.47	0.44	0.37	0.62	.	.	.	F5 IV	3 2 0 1
7947/8	4.91	0.36	0.85	0.66	1.16	.	.	.	F8Ib-V/K2IV	3 3 0 1	8316 V	4.17	2.71	2.26	2.10	3.86	4.69	5.82	6.22	M2	JD2438300
7949	2.46	1.90	1.03	0.73	1.27	1.69	2.35	2.46	K0 III	9 5 9 1	8317	4.57	2.19	1.10	0.84	1.38	.	.	.	K0 III	3 3 3 1
7950	3.77	0.02	0.00	0.07	0.07	.	.	.	A1 V	9 3 0 1	8322 V	2.83	0.39	0.29	0.24	0.40	0.49	0.69	.	A6m	4 3 0 1
7951	4.44	3.60	1.67	1.47	2.78	3.45	4.62	4.79	M3 III	3 3 3 1	8327	5.94	-0.33	0.31	0.28	0.45	0.53	0.59	.	O9 III	5 2 2 1
7955	4.52	0.64	0.54	0.47	0.75	.	.	.	F8 Ib-V	2 2 0 1	8334	4.29	0.65	0.52	0.50	0.94	1.15	1.44	1.59	A2 Ia	7 4 8 1
7957	3.43	1.53	0.82	0.67	1.16	1.53	2.15	2.24	K0 IV-V	5 2 3 1	8335	4.24	-0.84	-0.12	-0.05	-0.17	.	.	.	B8 III	3 3 0 1
7963 D	4.54	-0.61	-0.11	-0.04	-0.1																

TABLE 2 UBVRJK PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY

BRIGHT STAR PHOTOMETRY

B.S.S. R	V	U-V	B-V	V-R	V-I	V-J	V-K	V-L	SP.	V R K S
8387	4.69	2.01	1.06	0.88	1.44	.	.	.	K5 V	6 2 0 4
8402	4.65	0.47	-0.05	-0.01	-0.05	.	.	.	B8 V	3 3 0 1
8407	5.60	-0.11	-0.02	0.03	0.02	.	.	.	B9p	6 4 0 1
8410	5.31	0.38	0.23	0.18	0.28	.	.	.	A5m	6 4 0 1
8411	4.46	3.03	1.37	1.00	1.78	.	.	.	M0 III	6 1 0 2
8413	4.34	3.24	1.44	1.07	1.83	2.43	3.26	.	K4 III	5 3 3 1
8414	2.92	1.74	0.97	0.66	1.13	1.45	1.97	.	G2 Ib	4 2 3 1
8417 D	4.29	0.43	0.34	0.32	0.45	.	.	.	A m	3 3 0 1
8418	4.25	-0.34	-0.07	-0.05	-0.14	.	.	.	B8 V	2 2 0 1
8421	6.12	3.37	1.60	1.66	3.22	4.01	5.14	5.35	(M8)	4 4 4 1
8425	1.74	-0.63	-0.13	-0.08	-0.14	.	.	.	B5 V	3 1 0 2
8428	5.11	-0.75	0.08	0.16	0.19	0.09	0.17	.	F9.5 Ib	6 2 3 1
8430	3.76	0.41	0.44	0.40	0.65	0.76	1.11	.	F5 V	9 2 3 1
8431	4.50	0.11	0.05	0.07	0.12	.	.	.	A2 V	6 1 0 2
8450	3.55	0.17	0.07	0.05	0.09	.	.	.	A2 V	2 2 0 1
8454	4.29	0.64	0.66	0.39	0.66	.	.	.	F5 III-III	5 2 0 1
8461	5.92	1.68	0.95	0.72	1.21	2.38	3.24	3.35	K1 Ib	6 4 0 1
8468	4.79	1.53	0.92	0.69	1.17	.	.	.	G8 III	6 3 3 1
8469	5.05	-0.50	0.24	0.28	0.43	0.43	0.47	0.65	061	9 5 7 1
8473	6.37	-0.73	-0.06	0.00	-0.07	.	.	.	(A0)	6 3 0 1
8485	4.49	2.83	1.39	1.01	1.75	2.29	3.18	.	K3 III	3 2 2 1
8494	4.19	0.32	0.28	0.27	0.42	.	.	.	F0 IV	7 3 0 1
8498	4.13	3.08	1.46	1.00	1.72	2.27	3.08	.	K3 II-III	3 3 2 1
8499	4.15	1.79	0.99	0.70	1.18	1.57	2.14	.	G8 III-IV	4 3 2 1
8518	3.84	-0.19	-0.06	0.04	0.00	.	.	.	B9 III	3 2 0 1
8520	4.99	-0.31	-0.07	-0.21	.	.	.	.	B2 V	2 2 0 1
8521 *	6.62	2.01	3.44	6.08	7.28	8.73	.	.	S4.7	4 3 4 2
8522	4.81	-0.19	0.00	0.09	0.08	.	.	.	B8 III	3 3 0 1
8523	4.56	-0.60	-0.10	-0.02	-0.13	.	.	.	B6 IV	2 2 0 1
8538	4.44	1.79	1.02	0.75	1.32	1.75	2.37	.	G9 III	3 3 2 1
8539	4.64	1.00	0.04	0.16	0.16	.	.	.	B1 Vpe	3 2 2 1
8541	4.58	-0.25	0.09	0.13	0.23	0.27	0.34	0.31	B9 Ib	2 2 2 1
8551	4.80	1.94	1.06	0.78	1.34	1.81	2.46	2.58	K0 III	5 3 3 1
8556	3.97	1.84	1.03	0.73	1.34	.	.	.	(G5)	3 1 0 2
8558/9	3.66	0.37	0.38	0.39	0.62	.	.	.	F2 IV	2 2 0 1
8560	4.11	3.27	1.57	1.73	3.32	.	.	.	(M6)	3 1 0 2
8572 D	4.37	2.78	1.68	1.39	2.46	3.18	4.21	.	M0 Ia+B	4 3 3 1
8573	4.81	-0.22	-0.08	0.00	-0.04	.	.	.	A0 IV	3 3 0 1
8576 D	4.29	1.03	0.40	0.02	0.04	.	.	.	A0 V	3 1 0 2
8579	4.51	-0.83	-0.09	-0.01	-0.12	.	.	.	B2 IV	8 3 0 1
8585	3.77	0.91	0.10	0.00	-0.03	.	.	.	A2 V	3 3 0 1
8597	4.00	-0.38	-0.10	-0.06	-0.13	.	.	.	B8 V	2 2 0 1
8613	4.63	0.33	0.24	0.22	0.36	.	.	.	A7 IV	3 3 0 1
8622	4.88	-1.25	-0.20	-0.09	-0.30	-0.53	-0.67	-0.62	O9 V	9 9 9 1
8628	4.16	-0.46	-0.12	-0.06	-0.16	.	.	.	B8 V	3 3 0 1
8632	4.46	2.69	1.33	0.92	1.60	2.10	2.95	.	K3 III	3 3 3 1
8634	3.40	-0.33	-0.09	-0.04	-0.11	.	.	.	B8 V	3 2 0 1
8636	2.11	3.22	1.62	1.91	3.68	.	.	.	M3 II	6 1 0 2
8641	4.79	-0.02	-0.01	0.04	0.02	.	.	.	A1 V	3 2 0 1
8644	4.85	1.84	1.03	0.76	1.41	.	.	.	(G5)	3 1 0 2
8649	4.69	1.92	1.36	0.97	1.69	.	.	.	K4 III	6 5 0 1
8650	2.95	1.43	0.86	0.64	1.12	1.49	2.02	.	G2 III-III+7	5 3 3 1
8655	4.19	0.48	0.50	0.43	0.74	.	.	.	F7 V-III+7	6 3 0 1
8657	3.94	1.49	1.08	0.76	1.27	1.69	2.29	.	G8 III-III	3 3 3 1
8679	3.98	3.53	1.59	1.19	2.14	2.78	3.76	.	M0 III	3 4 3 1
8684	3.48	1.62	0.94	0.68	1.15	1.47	2.05	.	G8 III	3 3 2 1
8684	3.53	1.95	1.05	0.83	1.34	1.71	2.34	.	K1 III	3 3 1 1
8695 D	4.46	-0.18	-0.04	0.02	0.04	.	.	.	A0 V	6 1 0 2
8698	3.79	3.41	1.65	1.42	2.61	3.36	4.49	.	M2 III	3 3 2 1
8702	4.74	2.61	1.26	0.94	1.61	.	.	.	K3 III	3 3 0 1
8704	3.81	-0.40	-0.08	0.01	-0.04	.	.	.	(B9)	3 3 0 1
8709	3.28	0.13	0.05	0.07	0.11	.	.	.	A3 V	9 3 0 1
8717	4.90	0.00	0.04	0.04	0.02	.	.	.	A1 V	5 3 0 1
8720	4.21	1.67	0.97	0.74	1.35	.	.	.	(F08)	6 1 0 2
8721	6.49	2.12	1.10	0.95	1.54	.	.	.	K5 V	3 5 0 3
8726	4.94	3.72	1.77	1.35	2.40	3.07	4.10	4.33	K5 Ib	3 3 2 1
8728	1.16	0.15	0.09	0.06	0.08	0.14	0.19	.	A3 V	7 4 4 1
8729	5.50	0.87	0.67	0.54	0.88	1.13	1.51	1.72	G4 V	3 3 7 1
8737	6.43	0.80	0.64	0.53	0.89	.	.	.	(G1)	3 8 0 4
8748	4.72	3.13	1.43	1.09	1.82	.	.	.	K4 III	1 1 0 1
8752 V	5.13	2.88	1.55	1.17	2.02	2.61	3.33	3.59	G0 Ia	J02438300
8762	3.62	-0.62	-0.09	0.01	-0.07	.	.	.	B6p	3 3 0 1
8773	4.52	-0.62	-0.12	-0.02	-0.15	.	.	.	B5 V*	2 2 0 1
8775 V	2.42	3.63	1.67	1.50	2.82	3.52	4.63	4.79	M2+ III-III	5 5 9 1
8780	4.66	1.94	1.06	0.74	1.31	.	.	.	K0 III	2 2 0 1
8781	2.48	1.10	-0.04	0.01	-0.02	-0.04	-0.06	-0.03	B9.5 III	9 5 9 1
8789	4.48	1.49	0.90	0.71	1.20	.	.	.	(F9)	2 2 0 1
8795	4.51	3.46	1.58	1.26	2.28	2.87	3.81	.	M2 III	4 2 2 1
8796	4.77	2.50	1.35	0.97	1.65	.	.	.	K0 Ib	2 2 0 1
8797	4.86	-0.90	-0.03	0.10	-0.01	.	.	.	B0.5 IV	5 2 0 1
8804	3.33	3.13	1.41	1.02	1.77	.	.	.	K5 III	3 1 0 1
8808 D	6.25	-0.61	-0.01	0.05	-0.01	-0.01	0.04	.	B5 V	1 1 1 1
8812	3.64	2.45	1.23	0.84	1.44	1.94	2.70	.	K2 II	3 3 4 1
8817	4.68	1.02	0.64	0.54	0.90	.	.	.	(F0G2)	3 3 0 1
8819 D	4.42	1.27	0.82	0.65	1.08	.	.	.	G2 III	2 2 0 1
8820	3.90	1.88	1.02	0.75	1.31	.	.	.	K0 III	6 2 0 2
8830	4.53	0.34	0.30	0.29	0.45	.	.	.	F0 V	3 3 0 1
8832	5.57	1.89	1.00	0.83	1.36	1.70	2.30	.	K3 V	9 9 1 1
8834	4.22	3.42	1.55	1.28	2.36	3.04	4.05	.	M2 III	3 3 2 1
8841	4.25	2.12	1.11	0.79	1.35	1.73	2.46	.	K0 III	5 3 3 1
8852	3.69	1.48	0.91	0.72	1.23	1.63	2.25	.	G7 III	3 3 3 1
8858	4.40	-0.68	-0.14	-0.07	-0.20	.	.	.	B5 V	3 3 0 1
8860	4.86	3.64	1.67	1.46	2.72	3.40	4.49	.	(F0M2)	2 2 2 1
8863	4.41	2.19	1.13	0.84	1.47	.	.	.	G8 III	6 2 0 2
8872 D	4.76	1.33	0.84	0.65	1.10	.	.	.	K0 III	2 2 0 1
8880	4.60	0.27	0.17	0.21	0.30	.	.	.	A5 IV	3 3 0 1
8892	3.98	2.05	1.10	0.82	1.42	1.93	2.63	.	K0 III	3 3 3 1
8905	4.41	0.75	0.61	0.54	0.86	1.04	1.39	.	F8 IV	5 3 3 1
8906	4.40	3.27	1.47	1.13	1.94	2.52	3.46	.	K5 III	7 3 2 1
8911	4.94	2.00	1.04	0.07	0.04	.	.	.	A2p	6 6 0 1
8916	4.30	2.11	1.08	0.80	1.33	1.76	2.42	.	K1 III	3 3 3 1
8923	4.56	1.68	0.94	0.74	1.19	1.56	2.12	.	G8 III	2 2 3 1
8926 V	4.37	-0.76	-0.12	0.01	-0.13	.	.	.	B5 V	3 3 0 1
8937	4.84	-0.45	-0.09	0.00	-0.07	.	.	.	B9 V(Mn)	6 2 0 2
8939	4.72	0.03	0.02	0.07	0.10	.	.	.	A0 n	3 4 0 1
8947	5.59	0.18	0.10	0.12	0.18	.	.	.	A2 III	6 4 0 1
8949	4.71	0.15	0.08	0.12	0.19	.	.	.	A2 V (Sr)	6 2 0 2
8959	4.74	0.17	0.08	0.11	0.16	.	.	.	G2 V	6 2 0 2
8961 V	3.82	1.72	1.02	0.78	1.35	1.85	2.50	.	G8 III-IV	5 2 2 1
8965	4.29	-0.39	-0.11	0.00	-0.09	.	.	.	B8 V	3 3 0 1
8969	4.13	0.51	0.51	0.44	0.75	.	.	.	F7 V	9 3 0 1
8974	3.21	1.98	1.03	0.75	1.26	.	.	.	K1 IV	8 3 0 1
8976										

TABLE 2 UBVRJKL PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY														
B.S.	R	V	U-V	B-V	V-R	V-I	V-J	V-K	V-L	SP.	V	R	K	S
9030		5.79	3.39	1.66	0.26	0.80	.	.	.	(gM3)	3	3	0	4
9045	V	4.59	2.41	1.26	0.96	1.70	2.00	2.56	2.79	G0 Iap	3	3	3	1
9064		4.66	3.26	1.59	1.46	2.80	3.54	4.63	4.86	M3 III	5	2	4	1
9071	D	4.88	-0.89	-0.06	0.04	-0.07	.	.	.	B1 V	4	4	0	1
9072		4.01	0.49	0.42	0.38	0.62	.	.	.	F4 IV	3	3	0	1
9089		4.41	3.47	1.63	1.56	2.97	3.75	4.88	5.06	M3 III	3	3	5	1
9091		5.00	-0.73	-0.16	-0.05	-0.19	.	.	.	B5 III	5	5	0	2
9098		4.56	-0.16	-0.04	0.03	-0.01	.	.	.	B9 IV	5	5	0	1

TABLE 4 CATALINA UBVRi OBSERVATIONS

CATALINA UBVRi DATA										CATALINA UBVRi DATA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
3	4.572	1.032	0.851	0.759	0.529	11111	1.32	38307.8138	44444	45	4.803	1.587	1.912	1.337	1.140	11111	1.52	39062.5644	44444
3	4.631	1.038	0.856	0.798	0.529	11111	1.27	38323.7285	44444	45	4.796	1.584	1.910	1.342	1.125	11111	1.10	39062.6458	44444
3	4.628	1.042	0.911	0.768	0.550	11111	1.39	38668.8471	44444	45	4.783	1.571	1.929	1.308	1.141	11111	1.02	39062.7078	44444
15	2.017	-0.121	-0.442	-0.037	-0.097	11111	1.01	38269.8960	44444	45	4.808	1.573	1.938	1.325	1.147	11111	1.38	39063.5789	44444
15	2.038	-0.103	-0.527	-0.038	-0.101	11111	1.00	38290.8221	44444	45	4.772	1.588	1.913	1.336	1.124	11111	1.02	39063.7027	44444
15	2.080	-0.085	-0.452	-0.020	-0.127	11111	1.15	38404.6041	44444	45	4.759	1.579	1.923	1.314	1.120	11111	1.45	39064.5672	44444
15	2.097	-0.127	-0.445	-0.039	-0.076	11111	1.17	38410.5949	44444	45	4.772	1.579	1.931	1.336	1.124	11111	1.03	39064.6856	44444
21	2.254	0.361	0.104	0.263	0.233	11111	1.17	38268.9530	21111	45	4.769	1.572	1.925	1.293	1.126	11111	1.40	39065.5707	44444
21	2.288	0.336	0.077	0.324	0.211	11111	1.11	38290.8293	44444	45	4.788	1.589	1.919	1.356	1.128	11111	1.03	39065.5716	44444
21	2.282	0.361	0.124	0.318	0.185	11111	1.23	38404.6119	44444	45	4.777	1.588	1.899	1.306	1.137	11111	1.02	39093.6287	44444
21	2.283	0.309	0.136	0.314	0.202	11111	1.25	38410.6076	44444	48	4.463	1.670	1.908	1.400	1.141	11111	1.65	38270.9130	44444
27	5.037	0.396	0.259	0.413	0.303	11111	1.06	38637.9204	44444	48	4.462	1.645	1.989	1.393	1.149	11111	1.61	38323.7489	44444
27	5.041	0.414	0.245	0.419	0.286	11111	1.07	38639.9218	44444	63	4.601	0.062	0.077	0.091	0.011	11111	1.06	38298.8693	22222
39	2.821	-0.226	-0.887	-0.029	-0.064	11111	1.04	37563.8005	22222	63	4.612	0.057	0.073	0.072	0.	11111	1.01	38310.7701	44444
39	2.828	-0.220	-0.864	-0.012	-0.124	11111	1.15	37565.8668	22222	68	4.497	0.048	0.070	0.086	0.004	11111	1.01	38269.9020	44444
39	2.749	-0.257	-0.862	0.090	-0.040	11100	1.08	38294.7745	44444	68	4.494	0.071	0.080	0.080	-0.003	11111	1.08	38298.8788	22222
39	2.826	-0.226	-0.871	-0.216	-0.201	11111	2.85	38300.0086	44422	74	3.569	1.239	1.195	0.834	0.600	11111	1.37	38270.9198	44443
39	2.813	-0.225	-0.861	-0.140	-0.217	11111	1.05	38323.7377	44444	74	3.522	1.192	1.162	0.859	0.594	11111	1.33	38310.7756	44444
39	3.036	-0.165	-0.867	-0.019	-0.214	11111	1.14	38367.5464	44444	90	7.349	1.949	1.268	2.911	2.123	11111	1.12	39056.6463	44444
39	2.891	-0.217	-0.868	-0.127	-0.237	11111	1.12	38368.5519	44444	90	7.359	1.970	1.254	2.900	2.136	11111	1.04	39057.6820	44444
39	2.845	-0.225	-0.860	-0.097	-0.217	11111	1.10	38369.5547	44444	90	7.406	1.971	1.246	3.012	2.137	11111	1.20	39058.6163	44444
39	2.939	-0.216	-0.840	-0.089	-0.231	11111	1.06	38370.5798	44444	90	7.440	1.987	1.217	2.954	2.189	11111	1.16	39060.6238	44444
39	2.888	-0.201	-0.937	-0.059	-0.252	11111	1.11	38371.5449	44444	123	4.729	-0.094	-0.319	0.019	-0.108	11111	1.14	38298.8889	22222
45	4.794	1.582	1.940	1.384	0.988	11111	1.02	37563.8108	22222	123	4.734	-0.099	-0.336	-0.034	-0.040	11110	1.10	38311.7382	44444
45	4.780	1.578	1.939	1.366	1.095	11111	1.02	37565.7742	22222	123	4.739	-0.122	-0.400	0.011	-0.121	11111	1.08	38371.6072	44444
45	4.798	1.585	1.873	1.305	1.119	11111	1.47	37668.6532	22222	130	4.182	0.131	-0.410	0.055	0.079	11111	1.25	37668.6031	22222
45	4.821	1.598	1.917	1.302	1.159	11111	1.03	38270.9056	44443	130	4.171	0.153	-0.794	0.087	0.101	11111	1.59	37714.5745	22222
45	4.801	1.588	1.903	1.359	1.100	11111	1.08	38298.8597	22222	130	4.146	0.134	-0.790	0.152	0.072	11111	1.34	37835.9484	22222
45	4.852	1.541	1.904	1.364	1.130	11111	1.56	38371.8123	44444	130	4.104	0.139	-0.785	0.173	0.066	11111	1.35	37836.9440	22222
45	4.825	1.566	1.941	1.349	1.110	11111	1.05	38377.5789	44444	130	4.131	0.105	-0.809	0.173	0.049	11111	1.16	38295.8243	22222
45	4.817	1.576	1.954	1.376	1.109	11111	1.03	38378.5673	44444	130	4.196	0.128	-0.794	0.172	0.042	11111	1.18	38311.7315	44444
45	4.846	1.570	1.938	1.359	1.123	11111	1.02	38379.5808	44444	153	3.635	-0.147	-0.984	-0.061	-0.206	11111	1.07	38290.8371	44444
45	4.777	1.553	1.927	1.305	1.126	11111	1.03	38380.5585	44444	153	3.645	-0.194	-0.831	-0.097	-0.203	11111	1.15	38298.8975	22222
45	4.789	1.563	1.938	1.341	1.107	11111	1.05	38381.6136	44444	153	3.680	-0.204	-0.908	-0.075	-0.216	11111	1.07	38371.6148	44444
45	4.851	1.580	1.949	1.348	1.123	11111	1.02	38383.5782	44444	153	3.686	-0.200	-0.836	-0.089	-0.210	11111	1.17	38404.6193	44444
45	4.787	1.574	1.923	1.338	1.120	11111	2.09	38383.7613	44444	154	4.347	-0.155	-0.560	-0.048	-0.128	11111	1.01	38269.9267	44443
45	4.868	1.575	1.940	1.370	1.118	11111	1.02	38387.5583	44444	154	4.365	-0.171	-0.541	-0.027	-0.121	11111	1.00	38323.7615	44444
45	4.756	1.565	1.952	1.328	1.141	11111	2.08	38387.7495	44444	163	4.393	0.890	0.501	0.648	0.501	11111	1.01	38270.9265	44443
45	4.800	1.580	1.920	1.330	1.120	11111	1.03	38390.5612	22222	163	4.385	0.844	0.436	0.714	0.513	11111	1.01	38323.7710	44444
45	4.827	1.565	1.958	1.322	1.129	11111	2.57	38391.5573	44444	165	3.316	1.309	1.501	0.910	0.646	11111	1.02	38270.9330	44443
45	4.766	1.592	1.902	1.364	1.140	11111	2.62	38391.5579	44444	165	3.278	1.292	1.442	0.934	0.666	11111	1.01	38323.7998	44444
45	4.802	1.565	1.939	1.337	1.124	11111	1.23	38392.6510	44444	168	2.210	1.134	1.186	0.811	0.630	11111	1.09	38290.8441	44444
45	4.781	1.586	1.917	1.312	1.111	11111	2.98	38392.7666	44444	168	2.216	1.183	1.142	0.800	0.540	11011	1.18	38298.9069	22222
45	4.828	1.572	1.993	1.322	1.119	11111	1.05	38397.5713	44444	168	2.217	1.192	1.048	0.753	0.611	11111	1.09	38371.6226	44444
45	4.783	1.602	1.896	1.315	1.130	11111	2.70	38397.7458	44444	168	2.224	1.184	1.141	0.758	0.592	11111	1.23	38404.6403	44444
45	4.801	1.572	1.920	1.363	1.132	11111	1.04	38399.5742	21211	175	5.296	0.902	0.633	0.678	0.552	11111	1.02	38992.8898	44444
45	4.802	1.577	1.942	1.323	1.150	11111	1.06	38400.5601	44444	175	5.339	0.921	0.582	0.737	0.469	11111	1.02	38995.8776	44444
45	4.813	1.555	1.894	1.358	1.119	11111	2.09	38400.7142	44444	175	5.338	0.899	0.607	0.724	0.466	11111	1.01	38997.8018	44444
45	4.780	1.572	1.943	1.346	1.114	11111	3.18	38403.7411	44444	179	4.766	-0.097	-0.703	-0.020	-0.108	11111	1.05	38290.8509	44444
45	4.810	1.566	1.904	1.382	1.108	11111	1.28	38410.6114	44444	179	4.794	-0.098	-0.625	-0.012	-0.123	11111	1.27	38404.6484	44444
45	4.814	1.570	1.909	1.379	1.114	11111	2.62	38439.6287	44444	179	4.879	-0.119	-0.621	-0.010	-0.122	11111	1.20	38420.5977	44444
45	4.796	1.564	1.905	1.322	1.129	11111	2.57	38440.6264	44444	188	1.938	0.934	0.907	0.705	0.477	11011	2.46	38298.9476	22222
45	4.831	1.585	1.904	1.354	1.131	11111	2.93	38441.6316	44444	188	2.019								

TABLE 4 CATALINA UBVRi OBSERVATIONS

CATALINA UBVRi DATA											CATALINA UBVRi DATA										
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.		B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	
265	4.656	0.962	0.693	0.794	0.501	11111	1.17	38301.7545	12221		464	3.592	1.283	1.444	0.976	0.650	11111	1.05	38301.8751	12221	
265	4.627	0.961	0.697	0.741	0.504	11111	1.12	38343.7185	44444		464	3.583	1.286	1.387	0.937	0.650	11111	1.04	38306.8438	44444	
269	3.842	0.145	0.168	0.138	0.055	11111	1.03	38301.7849	12221		477	4.914	-0.080	-0.421	-0.034	-0.070	11111	1.01	38295.8588	21122	
269	3.889	0.100	0.129	0.167	0.088	11111	1.01	38345.6987	44444		477	4.973	-0.103	-0.389	0.011	-0.067	11111	1.01	38307.8487	44444	
271	4.403	0.943	0.730	0.748	0.483	11111	1.03	38301.7936	12221		483	4.961	0.609	0.121	0.517	0.316	11111	1.02	38328.7907	44444	
271	4.383	0.955	0.652	0.701	0.486	11111	1.04	38345.7431	44444		483	4.981	0.611	0.098	0.546	0.313	11111	1.02	38329.7730	44444	
											483	4.965	0.613	0.059	0.514	0.359	11111	1.02	38356.6943	44444	
276	6.282	0.926	0.611	0.637	0.447	11111	1.07	38992.9094	44444		489	4.453	1.386	1.543	1.063	0.711	11111	1.12	38295.8735	21122	
276	6.353	0.909	0.603	0.712	0.475	11111	1.07	38995.9018	44444		489	4.458	1.330	1.554	1.074	0.716	11111	1.14	38403.6073	44444	
276	6.300	0.924	0.586	0.659	0.464	11111	1.06	38997.9276	44444		489	4.407	1.377	1.572	1.038	0.718	11111	1.18	38411.6060	44444	
280	4.240	-0.186	-0.600	-0.086	-0.178	11111	2.16	38301.8034	12221		493	5.258	0.854	0.458	0.680	0.446	11111	1.02	38305.8388	44444	
280	4.308	-0.185	-0.533	-0.042	-0.111	11111	2.12	38345.7096	44444		496	4.071	-0.040	-0.941	0.079	0.040	11111	1.33	37714.5823	22222	
285	4.290	1.218	1.280	0.882	0.604	11111	1.69	38299.7811	44422		496	4.067	-0.045	-0.925	0.122	0.049	11111	1.47	37719.5959	22222	
285	4.260	1.210	1.321	0.891	0.605	11111	1.69	38345.7947	44444		496	4.049	-0.043	-0.928	0.174	0.003	11111	1.44	37835.9572	22222	
285	4.252	1.196	1.374	0.889	0.590	11111	1.69	38365.6925	44444		496	4.043	-0.012	-0.917	0.201	0.007	11111	1.45	37836.9530	22222	
290	6.004	0.152	0.118	0.186	0.077	11111	1.04	38995.8860	44444		496	4.079	-0.040	-0.924	0.212	0.011	11111	1.06	38301.8833	12221	
290	5.970	0.176	0.088	0.163	0.016	11111	1.03	38997.9617	44444		509	3.504	0.722	0.210	0.688	0.434	11111	1.48	37563.8372	22222	
294	4.270	0.955	0.680	0.869	0.569	11111	1.14	38268.9604	21111		509	3.499	0.729	0.235	0.576	0.528	11111	1.52	37565.8955	22222	
294	4.240	0.978	0.754	0.744	0.489	11111	1.11	38365.6778	44444		509	3.483	0.715	0.226	0.590	0.439	11111	1.51	38317.8165	44444	
294	4.346	0.948	0.700	0.743	0.516	11111	1.32	38406.6402	43333		510	4.251	0.975	0.000	0.719	0.499	11011	1.11	38301.8927	12221	
294	4.279	0.982	0.689	0.749	0.521	11111	1.78	38408.6873	44444		510	4.282	0.938	0.641	0.748	0.483	11111	1.12	38403.6168	44444	
											510	4.250	0.957	0.719	0.742	0.477	11111	1.16	38411.6183	44444	
315	6.069	1.039	0.838	0.751	0.519	11111	1.36	38997.9364	44444		530	5.875	0.752	0.504	0.685	0.491	11111	1.04	38997.9930	44444	
330	5.537	0.352	-0.004	0.343	0.188	11111	1.14	38997.9532	44444		531	4.654	0.350	0.037	0.280	0.141	11111	1.71	38303.7616	12221	
334	3.464	1.148	1.183	0.844	0.593	11111	1.39	38299.8077	44422		531	4.638	0.318	0.050	0.267	0.171	11111	1.60	38387.7073	44444	
334	3.392	1.144	1.162	0.808	0.580	11111	1.36	38307.8234	44444		531	4.669	0.313	0.020	0.320	0.161	11111	1.83	38410.6716	44444	
334	3.428	1.163	1.261	0.830	0.561	11111	1.42	38365.7030	44444		534	5.937	0.316	-0.020	0.340	0.162	11111	1.08	38997.9763	44444	
335	4.220	-0.062	-0.313	0.019	-0.058	11111	1.07	38365.7125	44444		539	3.729	1.162	1.085	0.802	0.544	11111	1.65	38303.7686	12221	
335	4.275	-0.087	-0.340	0.032	-0.045	11111	1.04	38381.6403	44444		539	3.742	1.115	1.041	0.839	0.545	11111	1.90	38410.6802	44444	
335	4.279	-0.071	-0.374	0.052	-0.045	11111	1.17	38406.6488	43333		539	3.699	1.151	1.045	0.773	0.549	11111	1.37	38658.8966	22222	
335	4.242	-0.046	-0.329	0.014	-0.046	11111	1.40	38408.6964	44444		542	3.326	-0.120	-0.693	0.007	-0.112	11111	1.17	38290.9057	44444	
337	2.091	1.554	1.961	1.285	0.999	11111	1.03	38299.7981	44422		542	3.351	-0.159	-0.590	-0.014	-0.122	11111	1.19	38300.8238	43433	
337	1.991	1.578	1.975	1.198	1.007	11111	1.00	38307.8312	44444		542	3.433	-0.164	-0.603	-0.071	-0.122	11111	1.19	38419.5908	44444	
343	4.381	0.168	0.130	0.209	0.057	11111	1.08	38305.8161	44444		542	3.405	-0.170	-0.585	-0.063	-0.133	11111	1.23	38420.6194	44444	
343	4.345	0.171	0.113	0.170	0.093	11111	1.09	38356.7054	44444		544	3.441	0.490	0.083	0.398	0.282	11111	1.00	38270.9427	44443	
343	4.337	0.165	0.181	0.164	0.059	11111	1.12	38365.7206	44444		544	3.428	0.490	0.074	0.432	0.280	11111	1.00	38305.8539	44444	
351	4.678	1.039	0.805	0.795	0.517	11111	1.03	38269.9427	44443		545	3.904	-0.020	-0.126	0.003	-0.067	11111	1.03	38270.9497	44443	
351	4.651	1.018	0.826	0.731	0.551	11111	1.02	38299.8278	44422		545	3.853	-0.054	-0.137	0.024	-0.047	11111	1.11	38300.7971	43433	
352	4.525	1.108	1.014	0.849	0.574	11111	1.01	38269.9495	44443		549	4.659	0.953	0.687	0.729	0.495	11111	1.21	38300.8150	43433	
352	4.502	1.083	1.004	0.797	0.588	11111	1.00	38299.8369	44422		549	4.593	0.934	0.712	0.744	0.468	11111	1.29	38411.6418	44444	
360	4.671	1.023	0.845	0.763	0.550	11111	1.01	38299.8455	44422		549	4.626	0.925	0.702	0.702	0.467	11111	1.26	38415.6230	44444	
360	4.645	1.043	0.833	0.744	0.503	11111	1.03	38328.7322	44444		553	2.644	0.147	0.109	0.109	0.069	11111	1.08	38269.0129	21111	
378	5.166	0.079	0.087	0.104	0.020	11111	1.15	38997.9453	44444		553	2.646	0.095	0.104	0.120	0.052	11111	2.12	38284.7201	44444	
382	4.991	0.697	0.479	0.626	0.579	11111	1.11	38637.9304	44444		553	2.602	0.138	0.090	0.085	0.033	11111	1.15	38295.7958	21122	
382	4.993	0.690	0.513	0.647	0.563	11111	1.11	38641.9125	22222		553	2.669	0.121	0.089	0.173	0.067	11111	1.03	38300.8415	43433	
382	4.985	0.667	0.462	0.632	0.553	11111	1.11	38658.8863	22222		569	4.803	0.272	0.082	0.307	0.170	11111	1.03	38300.8339	43433	
383	4.765	0.051	0.110	0.090	0.057	11111	1.01	38299.8551	44422		569	4.769	0.274	0.103	0.265	0.129	11111	1.24	38397.7168	44444	
383	4.760	0.006	0.092	0.074	0.031	11111	1.01	38378.7450	44444		569	4.781	0.281	0.086	0.274	0.176	11111	1.03	38416.5837	22222	
390	4.880	1.062	0.987	0.804	0.563	11111	1.03	38299.8628	44422		575	4.542	0.141	0.064	0.197	0.093	11111	1.28	38300.8495	43433	
390	4.862	1.112	1.001	0.774	0.513	11111	1.03	38340.7192	11111		575	4.556	0.156	0.072	0.164	0.067	11111	1.34	38420.6279	44444	
390	4.980	1.047	0.934	0.840	0.514	11111	1.17	38406.6595	43333		575	4.528	0.176	0.053	0.177	0.087	11111	1.33	38421.6214	22222	
399	4.737	1.032	0.949	0.765		11110	1.24	38299.8810	44422		580	3.962	0.008	0.029	0.070	0.013	11111	1.30	38300.8567	43433	
399	4.751	1.035	0.933	0.776	0.513	11111	1.23	38381.6520	44444		580	3.967	-0.021	0.028	0.087	-0.008	11111	1.31	38357.6778	44444	
399	4.738	1.037	0.911	0.784	0.531	11111	1.34	38410.6525	44444		580	4.001	-0.010	0.041	0.033	-0.013	11111	1.38	38420.6385	44444	
402	3.590	1.067	0.912	0.752	0.582	11111	1.32	38317.8053	44444		585	4.055	1.555	1.809	1.270	1.017	11111	1.69	38300.8748	43433	
402	3.598	1.050	0.937	0.766	0.544	11111	1.37	38381.6659	44444		585	3.973	1.560	1.858	1.270	1.769	11000	2.14	38410.6625	44444	
402	3.584	1.068	0.912	0.766	0.556	11111	1.57	38387.6962	44444		585	3.978	1.575	1.980	1.257	1.048	11111	1.75	38415.5943	44444	
403	2.679	0.134	0.171	0.089	0.089	11															

TABLE 4 CATALINA UBVR I OBSERVATIONS

CATALINA UBVR I DATA											CATALINA UBVR I DATA										
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.		
617	1.991	1.173	1.159	0.886	0.627	11111	1.29	38086.5835	22222	617	2.023	1.161	1.116	0.838	0.606	11111	1.02	38655.8863	44444		
617	2.000	1.151	1.120	0.862	0.642	11111	1.32	38087.5861	22211	617	2.008	1.138	1.123	0.832	0.598	11111	1.10	38658.9682	22222		
617	1.986	1.132	1.155	0.870	0.630	11111	1.39	38089.5912	22222	617	2.018	1.171	1.116	0.845	0.626	11111	1.04	38674.8114	44444		
617	2.010	1.156	1.162	0.861	0.649	11111	1.50	38095.5886	44444	617	2.002	1.136	1.134	0.863	0.610	11111	1.04	38674.8114	44444		
617	2.013	1.164	1.130	0.891	0.617	11111	2.03	38095.6299	44444	617	2.019	1.146	1.129	0.834	0.615	11111	1.01	38675.8598	44444		
617	1.989	1.145	1.108	0.808	0.651	11111	2.85	38095.6602	44444	617	1.997	1.154	1.130	0.805	0.637	11111	1.02	38677.8682	22222		
617	2.000	1.151	1.120	0.840	0.640	11111	2.10	38096.6305	32211	617	1.960	1.131	1.105	0.816	0.618	11111	1.01	38678.8379	44444		
617	1.985	1.163	1.148	0.861	0.628	11111	2.98	38098.6551	44444	617	2.002	1.153	1.097	0.875	0.594	11111	1.03	38679.8747	22222		
617	2.034	1.150	1.161	0.910	0.610	11111	2.03	38103.6080	44444	617	2.007	1.143	1.124	0.828	0.633	11111	1.01	38680.8296	44444		
617	2.014	1.139	1.137	0.838	0.664	11111	2.97	38108.6277	44444	617	2.002	1.140	1.118	0.827	0.626	11111	1.05	38682.8769	44444		
617	2.084	1.284	1.269	1.322	0.594	11111	1.96	38202.9863	44444	617	2.000	1.156	1.116	0.828	0.622	11111	1.02	38708.7432	44444		
617	1.994	1.192	1.109	0.666	0.634	11111	1.62	38203.9788	44444	617	2.017	1.161	1.085	0.846	0.596	11111	1.99	38700.5929	44444		
617	2.004	1.169	1.149	0.856	0.614	11111	1.62	38203.9788	44444	617	1.994	1.138	1.130	0.800	0.000	11100	1.03	38703.7456	44400		
617	2.003	1.124	1.124	0.843	0.602	11111	2.03	38284.7294	44444	617	2.004	1.168	1.130	0.833	0.622	11111	1.02	38711.6142	44400		
617	1.645	1.135	1.107	0.900	0.040	11100	1.01	38284.9223	44444	617	2.007	1.137	1.106	0.836	0.615	11111	1.03	38711.7184	44400		
617	1.979	1.139	1.128	0.827	0.628	11111	1.02	38284.9325	44444	617	1.999	1.159	1.119	0.846	0.618	11111	1.03	38728.6809	22222		
617	2.013	1.138	1.090	0.864	0.599	11111	2.16	38288.7120	22211	617	2.003	1.164	1.116	0.800	0.000	11100	1.16	38729.6114	22200		
617	1.999	1.139	1.153	0.829	0.684	11111	1.01	38290.9126	44444	617	2.015	1.154	1.086	0.800	0.000	11100	1.16	38729.6114	22200		
617	2.007	1.139	1.130	0.860	0.574	11111	1.72	38293.7248	44444	617	1.980	1.160	1.114	0.813	0.615	11111	1.01	38729.7040	44444		
617	1.986	1.161	0.000	0.810	0.616	11011	1.10	38294.8194	44444	617	2.031	1.147	1.099	0.800	0.000	11100	1.04	38729.7407	22200		
617	1.977	1.123	1.047	0.834	0.611	11111	2.05	38296.6954	44444	617	2.024	1.151	1.117	0.800	0.000	11100	1.13	38738.5955	22200		
617	1.992	1.173	1.159	0.835	0.648	11111	1.28	38297.0055	44444	617	1.964	1.151	1.166	0.800	0.000	11100	1.05	38741.6201	44400		
617	2.006	1.146	0.000	0.838	0.642	11011	1.07	38299.8203	44422	617	2.040	1.115	1.147	0.800	0.000	11100	1.02	38744.6901	22200		
617	2.052	1.162	1.120	0.842	0.638	11111	1.40	38300.0174	44422	617	2.005	1.167	1.115	0.800	0.000	11100	1.07	38744.7222	22200		
617	2.021	1.162	1.120	0.862	0.659	11111	1.02	38300.8928	43433	617	2.000	1.151	1.120	0.800	0.000	11100	1.02	38756.6535	11100		
617	2.021	1.200	1.157	0.853	0.634	11111	1.02	38302.8563	12221	617	1.999	1.147	1.109	0.800	0.000	11100	1.04	38763.5654	22200		
617	1.996	1.161	1.140	0.809	0.615	11111	2.36	38305.6572	44444	617	1.997	1.159	1.137	0.829	0.622	11111	1.02	38763.6238	44444		
617	2.024	1.159	1.116	0.874	0.628	11111	1.02	38305.8860	44444	617	2.019	1.150	1.127	0.800	0.000	11100	1.02	38771.5841	44400		
617	2.005	1.133	1.123	0.813	0.602	11111	2.49	38306.6496	44444	617	2.005	1.156	1.127	0.800	0.000	11100	1.03	38771.7297	44400		
617	2.002	1.156	1.140	0.860	0.626	11111	1.01	38306.8702	44444	617	2.002	1.157	1.120	0.800	0.000	11100	1.02	38772.5639	22200		
617	2.010	1.123	1.158	0.814	0.623	11111	2.36	38307.6517	44444	617	1.988	1.145	1.120	0.800	0.000	11100	1.03	38772.6160	22200		
617	1.968	1.141	1.122	0.821	0.598	11111	1.01	38307.8571	44444	617	2.025	1.152	1.114	0.886	0.633	11111	1.02	38773.5640	44444		
617	2.000	1.131	1.110	0.815	0.627	11111	2.22	38309.6520	11111	617	2.011	1.158	1.103	0.840	0.640	11111	1.24	38783.6658	44444		
617	2.004	1.145	1.116	0.842	0.616	11111	2.41	38310.6415	44444	617	2.041	1.123	1.096	0.887	0.594	11111	1.08	38784.5478	44444		
617	1.995	1.159	1.137	0.827	0.609	11111	1.01	38310.8533	44444	617	2.008	1.154	1.088	0.850	0.605	11111	1.95	38784.7382	44444		
617	2.009	1.139	1.125	0.842	0.632	11111	2.21	38311.6468	44444	617	1.998	1.164	1.131	0.842	0.592	11111	1.05	38786.5964	44444		
617	2.020	1.168	1.159	0.858	0.622	11111	1.02	38314.8585	22222	617	2.001	1.140	1.101	0.854	0.595	11111	1.02	38787.5686	44444		
617	1.980	1.155	1.096	0.855	0.618	11111	1.08	38315.7727	44444	617	2.005	1.143	1.106	0.800	0.000	11100	1.17	38810.5757	44400		
617	2.003	1.150	1.102	0.860	0.639	11111	2.76	38317.6114	44444	617	1.995	1.159	1.137	0.829	0.622	11111	1.02	38811.6167	44400		
617	1.996	1.151	1.127	0.824	0.646	11111	1.01	38317.8276	44444	617	2.012	1.139	1.103	0.800	0.000	11100	1.04	38811.6167	44400		
617	2.000	1.151	1.120	0.840	0.640	11111	2.02	38320.6316	24211	617	2.027	1.141	1.129	0.846	0.601	11111	1.30	38993.8116	22222		
617	2.003	1.161	1.129	0.835	0.638	11111	1.02	38323.7898	44444	617	2.058	1.181	1.149	0.888	0.599	11111	1.68	38993.8116	22222		
617	2.020	1.167	1.173	0.849	0.627	11111	1.03	38324.7749	44444	617	1.958	1.136	1.105	0.807	0.618	11111	1.85	38995.7935	44444		
617	1.982	1.154	1.134	0.808	0.640	11111	1.30	38325.9300	22222	617	2.057	1.161	1.116	0.863	0.619	11111	1.12	38995.8936	44444		
617	2.007	1.160	1.152	0.847	0.621	11111	1.02	38326.7787	22221	617	2.027	1.161	1.118	0.828	0.612	11111	1.60	38997.8076	44444		
617	1.993	1.161	1.163	0.839	0.605	11111	1.54	38328.9549	44444	617	2.018	1.186	1.092	0.835	0.613	11111	1.01	38997.9694	44444		
617	1.966	1.159	1.128	0.824	0.610	11111	1.42	38329.9372	44444	617	2.004	1.180	1.147	0.834	0.615	11111	1.05	39004.9010	44444		
617	1.996	1.161	1.146	0.822	0.617	11111	1.15	38337.8655	22222	617	2.046	1.159	1.100	0.800	0.000	11100	1.20	39016.8136	44400		
617	2.002	1.152	1.113	0.844	0.626	11111	2.02	38339.9605	44444	617	2.025	1.167	1.098	0.800	0.000	11100	1.06	39016.8632	44400		
617	2.000	1.145	1.154	0.841	0.626	11111	1.03	38342.7313	21111	617	2.031	1.162	1.120	0.864	0.613	11111	1.19	39019.0103	44444		
617	2.002	1.147	1.121	0.845	0.625	11111	1.03	38345.7198	44444	617	2.016	1.168	1.123	0.800	0.000	11100	1.03	39019.8782	44444		
617	2.000	1.150	1.138	0.850	0.624	11111	1.26	38356.6085	44444	617	1.998	1.155	1.121	0.839	0.604	11111	1.01	39025.8916	44444		
617	1.993	1.152	1.131	0.838	0.631	11111	1.01	38356.7154	44444	617	2.034	1.160	1.132	0.800	0.000	11100	1.03	39026.9165	44400		
617	1.992	1.151	1.122	0.846	0.622	11111	1.26	38357.6068	44444	617	2.043	1.175	1.121	0.871	0.640	11111	1.06	39028.9359	44444		
617	2.005	1.152	1.129	0.851	0.632	11111	1.01	38357.7200	44444	617	2.028	1.137	1.125	0.867	0.593	11111	1.75	39032.6997	44444		
617	2.015	1.130	1.141	0.815	0.612	11111	1.17	38368.5963	44444	617	1.991	1.188	1.122	0.835	0.623	11111	1.14	39032.7876	44444		
617	2.009	1.145	1.120	0.851	0.631	11111	1.01	38369.6985	44444	617	2.024	1.148	1.124	0.800	0.000	11100	1.06	39032.8187	44400		
617	2.008	1.146	1.128	0.828	0.620	11111	1.02	38370.6725	44444	617	1.976	1.150	1.125	0.841							

TABLE 4 CATALINA UBVRi OBSERVATIONS

CATALINA UBVRi DATA										CATALINA UBVRi DATA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
617	1.963	1.147	1.139	0.882	0.574	11111	1.21	39096.5936	44444	718	4.278	-0.057	-0.125	0.015	-0.045	11111	1.10	38356.7252	44444
617	1.962	1.134	1.104	0.888	0.583	11111	1.02	39096.7090	44444	718	4.303	-0.084	-0.126	0.048	-0.058	11111	1.45	38357.6164	44444
617	1.992	1.167	1.131	0.810	0.624	11111	1.14	39098.7767	44444	718	4.275	-0.063	-0.108	0.019	-0.040	11111	1.10	38357.7304	44444
617	1.990	1.154	1.142	0.824	0.628	11111	1.12	39100.6063	44444	718	4.285	-0.056	-0.092	0.029	-0.052	11111	1.18	38360.7911	44444
617	2.021	1.147	1.132	0.827	0.632	11111	1.05	39128.5620	44444	718	4.298	-0.055	-0.114	0.054	-0.077	11111	1.10	38366.7041	44444
617	1.996	1.147	1.134	0.835	0.616	11111	1.02	39128.5958	44444	718	4.280	-0.060	-0.130	0.040	-0.040	11111	1.11	38390.6311	44444
617	2.004	1.151	1.137	0.870	0.617	11111	1.01	39129.6025	44444	718	4.269	-0.050	-0.113	-0.000	-0.056	11111	1.10	38396.6391	44444
618	5.724	0.581	-0.012	0.620	0.508	11111	1.14	38378.7112	44444	718	4.269	-0.065	-0.151	-0.005	-0.041	11111	1.10	38397.8109	44444
618	5.666	0.664	-0.033	0.575	0.508	11111	1.11	38638.9383	44444	718	4.301	-0.056	-0.114	0.035	-0.067	11111	1.10	38397.6357	44444
620	4.793	0.121	0.133	0.088	0.066	11111	1.02	38268.9989	21111	718	4.257	-0.039	-0.124	-0.018	-0.049	11111	1.10	38398.7956	44444
620	4.849	0.127	0.117	0.188	0.064	11111	1.02	38305.8926	44444	718	4.288	-0.048	-0.143	0.039	-0.066	11111	1.10	38400.6263	44444
620	4.847	0.106	0.170	0.154	0.057	11111	1.00	38370.6802	44444	718	4.284	-0.067	-0.119	0.014	-0.036	11111	1.10	38400.8132	44444
622	3.005	0.153	0.136	0.127	0.087	11111	1.01	38268.9916	21111	718	4.297	-0.078	-0.089	0.024	-0.064	11111	1.15	38408.6663	44444
622	3.003	0.159	0.141	0.152	0.066	11111	1.00	38306.8770	44444	718	4.273	-0.057	-0.112	0.032	-0.072	11111	1.10	38411.5929	44444
648	5.708	1.529	1.953	1.246	0.977	11111	1.28	38337.8855	22222	718	4.299	-0.075	-0.116	0.034	0.000	11111	1.10	38415.5854	44444
648	5.653	1.576	1.998	1.208	0.948	11111	1.06	38339.8016	44444	718	4.294	-0.085	-0.167	0.014	-0.041	11111	1.10	38450.6673	44444
648	5.677	1.572	1.972	1.266	0.975	11111	1.15	38370.6875	44444	718	4.283	-0.071	-0.124	-0.016	-0.046	11111	1.10	38451.6650	44444
649	4.367	0.873	0.588	0.661	0.507	11111	1.12	38269.0061	21111	718	4.280	-0.059	-0.131	0.017	-0.032	11111	1.10	38456.6487	44444
649	4.368	0.892	0.618	0.675	0.474	11111	1.09	38310.8599	44444	718	4.289	-0.080	-0.116	0.047	-0.064	11111	1.85	38459.6130	22222
664	3.956	0.025	0.012	0.008	-0.005	11111	1.02	38295.9311	21122	718	4.346	-0.075	-0.092	0.045	-0.082	11111	1.63	38461.5905	22222
664	4.032	0.013	0.024	0.069	-0.009	11111	1.00	38307.8541	44444	718	4.261	-0.057	-0.124	0.040	-0.041	11111	2.00	38464.6087	44444
664	0.000	0.038	0.000	0.000	0.000	01000	1.00	38641.9602	22222	718	4.326	-0.050	-0.144	0.055	-0.061	11111	1.10	38637.9627	44444
664	4.029	0.028	0.014	0.024	-0.011	11111	1.00	38655.9126	44444	718	4.277	-0.065	-0.129	0.032	-0.035	11111	2.22	38638.7895	44444
681	8.026	1.588	-0.144	4.197	3.256	11111	1.63	38299.0029	22222	718	4.284	-0.058	-0.147	0.022	-0.016	11111	1.21	38651.8562	22221
681	8.088	1.581	-0.229	4.212	3.351	11111	1.23	38299.8934	44422	718	4.273	-0.071	-0.127	0.018	-0.060	11111	1.14	38669.8335	44444
681	8.079	1.571	-0.236	4.206	3.349	11111	1.33	38299.9484	44422	718	4.271	-0.056	-0.114	0.032	-0.066	11111	1.14	38674.8193	44444
681	8.060	1.578	-0.226	4.187	3.339	11111	1.55	38299.9907	44422	718	4.261	-0.042	-0.129	0.003	-0.032	11111	1.10	38677.8744	22222
681	8.172	1.567	-0.264	4.196	3.420	11111	1.40	38300.8066	43433	718	4.304	-0.052	-0.111	0.022	-0.059	11111	1.10	38676.8537	44444
681	8.160	1.575	-0.278	4.185	3.432	11111	1.24	38300.8460	43433	718	4.248	-0.060	-0.138	0.019	-0.054	11111	1.10	38678.8445	44444
681	8.181	1.593	-0.272	4.218	3.436	11111	1.29	38300.9326	43433	718	4.286	-0.052	-0.124	0.025	-0.055	11111	1.10	38679.8389	22222
681	8.168	1.562	-0.263	4.187	3.438	11111	1.68	38301.0027	43433	718	4.269	-0.056	-0.119	-0.011	-0.053	11111	1.10	38680.8360	44444
681	0.000	0.000	-0.176	0.090	0.416	00101	1.25	38301.8519	12221	718	4.276	-0.045	-0.119	0.007	-0.048	11111	1.20	38699.8676	22222
681	0.000	0.000	-0.212	0.090	0.421	00101	1.30	38301.9327	12221	718	4.262	-0.053	-0.117	-0.001	-0.057	11111	1.13	38700.7568	44444
681	8.049	1.523	-0.292	4.283	3.420	11111	1.62	38301.9934	12221	718	4.285	-0.052	-0.106	0.000	0.000	11100	1.12	38703.7510	44400
681	8.092	1.576	-0.277	4.118	3.424	11111	1.26	38302.8422	22221	718	4.267	-0.047	-0.119	-0.009	-0.056	11111	1.15	38705.7293	44444
681	8.086	1.591	-0.284	4.108	3.432	11111	1.24	38302.9007	22221	718	4.256	-0.046	-0.132	0.000	-0.060	11111	1.10	38718.7549	44444
681	8.165	1.594	-0.221	4.269	3.418	11111	1.26	38303.8442	12221	718	4.277	-0.070	-0.113	0.020	-0.058	11111	1.13	38712.7203	44444
681	8.181	1.576	-0.195	4.273	3.425	11111	1.28	38303.9209	12221	718	4.279	-0.049	-0.122	-0.011	-0.043	11111	1.12	38719.7110	44444
681	8.123	1.565	0.007	4.150	3.216	11111	1.30	38367.6497	44444	718	4.257	-0.028	-0.145	-0.022	-0.029	11111	1.11	38720.7106	44444
681	8.117	1.591	0.004	4.157	3.224	11111	1.24	38367.7258	44444	718	4.280	-0.060	-0.130	0.042	-0.037	11111	2.01	38724.5646	22211
681	7.090	1.501	0.538	3.658	3.055	11111	1.23	38391.6398	44444	718	4.278	-0.046	-0.134	0.024	-0.050	11111	1.10	38725.6906	22222
681	3.329	1.609	0.945	1.975	1.873	11111	2.61	38466.6004	44444	718	4.299	-0.034	-0.123	-0.000	-0.058	11111	1.10	38727.7294	22222
681	3.511	1.742	0.730	2.319	1.874	11111	4.21	38480.5926	44444	718	4.297	-0.063	-0.135	0.000	0.000	11100	1.12	38728.6825	44400
681	8.205	1.666	-0.076	3.446	4.097	11111	1.23	38639.9605	44444	718	4.284	-0.055	-0.141	0.000	0.000	11100	1.10	38729.6216	22200
681	8.444	1.660	-0.127	4.379	3.521	11111	1.23	38651.9212	22221	718	4.278	-0.047	-0.095	0.023	-0.069	11111	1.12	38729.6844	44444
681	8.654	1.596	-0.342	4.391	3.421	11111	1.24	38669.8505	44444	718	4.302	-0.065	-0.114	0.000	0.000	11100	1.11	38729.7931	44400
681	8.684	1.549	-0.224	4.383	3.498	11111	1.25	38676.8819	44444	718	4.284	-0.075	-0.117	0.000	0.000	11100	1.10	38738.7008	22200
681	8.754	1.567	-0.240	4.518	3.458	11111	1.23	38681.8530	44444	718	0.000	-0.067	-0.129	0.000	0.000	01100	1.10	38738.7073	22200
681	8.223	1.498	-0.285	4.266	3.304	11111	1.26	39062.7660	44444	718	4.298	-0.071	-0.127	0.003	-0.054	11111	1.16	38738.7191	22200
681	8.230	1.662	-0.276	3.812	3.774	11111	1.23	39063.7815	44444	718	4.325	-0.106	-0.113	0.000	0.000	11100	1.29	38740.7791	22200
681	8.188	1.626	-0.243	4.271	3.311	11111	1.24	39064.7683	44444	718	4.286	-0.014	-0.155	0.000	0.000	11100	1.17	38741.6251	44400
681	8.154	1.586	-0.205	4.247	3.316	11111	1.89	39065.6561	44444	718	4.252	-0.048	-0.034	0.000	0.000	11100	1.10	38742.6951	22200
681	4.192	1.430	1.096	2.345	2.226	11111	1.23	39098.7019	44444	718	4.281	-0.068	-0.115	0.000	0.000	11100	1.15	38744.7277	22200
681	4.091	1.409	1.118	2.322	2.184	11111	1.28	39099.6523	44444	718	4.286	-0.045	-0.137	0.000	0.000	11100	1.15	38763.5714	22200
681	4.012	1.434	1.093	2.258	2.153	11111	1.42	39100.6133	44444	718	4.306	-0.097	-0.082	0.000	0.000	11100	1.10	38771.6194	44400
681	3.038	1.420	1.090	2.011	1.901	11111	1.25	39129.5907	44444	718	4.300	-0.091	-0.067	0.000	0.000	11100	1.58	38771.7337	44400
696	6.269	0.291	-0.617			11100	1.11	37563.9022	22222	718	4.280	-0.060	-0.130	0.000	0.000	11100	1.12	38772.5674	22200
696	6.300	0.269	-0.599	0.345	0.176	11111	1.10	38377.6694	44444	718	4.295	-0.059	-0.133	0.035	-0.061	11111			

TABLE 4 CATALINA UBVRi OBSERVATIONS

CATALINA UBVRi DATA											CATALINA UBVRi DATA										
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.		
753	5.852	0.955	0.782	0.842	0.528	11111	1.33	37719.5699	22222	875	5.139	0.111	0.034	0.099	-0.073	11111	1.24	38290.9471	44444		
753	5.832	0.950	0.760	0.843	0.533	11111	1.34	37720.5678	22222	875	5.169	0.084	0.050	0.048	-0.039	11111	2.64	38291.7674	34421		
753	5.794	0.974	0.857	0.787	0.543	11111	2.00	38103.6000	44444	875	5.202	0.083	0.077	0.103	0.060	11111	2.39	38293.7707	44444		
753	5.818	0.989	0.749	0.821	0.515	11111	1.22	38295.8941	21122	875	5.000	0.081	0.000	0.090	-0.040	01000	1.24	38294.9137	44444		
753	5.834	0.970	0.788	0.845	0.525	11111	1.14	38430.5806	44444	875	5.163	0.110	0.082	0.115	0.057	11111	1.61	38297.0163	44444		
753	5.841	0.959	0.817	0.839	0.529	11111	2.62	38466.6312	44444	875	5.156	0.106	0.092	0.067	0.053	11111	2.28	38305.7428	44444		
753	5.801	0.988	0.806	0.829	0.558	11111	1.13	38651.9068	22221	875	5.168	0.047	-0.013	0.096	0.034	11111	3.04	38307.7132	44444		
753	5.823	0.940	0.799	0.808	0.516	11111	2.01	38655.7615	44444	875	5.182	0.098	0.083	0.110	0.047	11111	1.24	38307.9016	44444		
753	5.794	0.967	0.792	0.820	0.507	11111	1.15	38659.8416	44444	875	5.168	0.076	0.025	0.096	0.019	11111	2.51	38310.7201	44444		
753	5.810	0.969	0.820	0.815	0.521	11111	1.18	38679.9144	22222	875	5.157	0.090	0.092	0.093	0.039	11111	2.24	38310.8857	44444		
753	5.842	0.941	0.831	0.816	0.529	11111	1.22	38705.7166	44444	875	5.174	0.067	0.043	0.100	0.031	11111	2.50	38311.7177	44444		
753	5.807	0.981	0.801	0.821	0.523	11111	1.16	38725.7829	22222	875	5.193	0.097	0.036	0.103	0.068	11111	2.31	38315.7100	44444		
753	5.837	0.961	0.788	0.800	0.000	11100	1.14	38728.6891	44400	875	5.151	0.092	0.079	0.089	0.065	11111	1.26	38315.8995	44444		
753	5.731	0.978	0.884	0.000	0.000	11100	1.32	38729.6273	22200	875	5.166	0.064	0.048	0.108	0.028	11111	1.89	38316.7342	22221		
753	5.826	0.985	0.774	0.000	0.000	11100	1.13	38729.7508	22200	875	5.184	0.112	0.064	0.121	0.039	11111	1.32	38316.9230	22221		
753	5.820	0.970	0.790	0.850	0.520	11111	1.11	38730.7255	22222	875	5.174	0.086	0.074	0.107	0.049	11111	1.24	38323.8543	44444		
753	5.792	0.961	0.840	0.000	0.000	11100	1.31	38738.6057	22200	875	5.149	0.081	0.054	0.088	0.058	11111	1.92	38323.9834	44444		
753	5.854	0.932	0.851	0.000	0.000	11100	1.26	38740.7737	22200	875	5.184	0.083	0.086	0.117	0.065	11111	1.24	38324.8578	44444		
753	5.821	0.971	0.776	0.000	0.000	11100	1.14	38741.6522	44400	875	5.104	0.062	-0.016	0.072	0.041	11111	2.13	38324.9931	44444		
753	5.808	0.923	0.860	0.000	0.000	11100	1.11	38742.7000	22200	875	5.143	0.094	0.020	0.093	0.048	11111	1.54	38325.9408	22222		
753	5.801	0.963	0.825	0.000	0.000	11100	1.62	38771.7426	44400	875	5.159	0.077	0.079	0.093	0.069	11111	2.57	38328.6689	44444		
753	5.772	0.973	0.810	0.786	0.540	11111	1.54	38779.7291	44444	875	5.233	0.102	0.045	0.173	0.058	11111	1.27	38328.8010	44444		
779	4.037	-0.200	-0.895	-0.047	-0.205	11111	1.18	38296.9061	44444	875	5.194	0.091	0.068	0.098	0.087	11111	1.27	38329.7964	44444		
779	4.073	-0.222	-0.868	-0.100	-0.206	11111	1.18	38307.8813	44444	875	5.208	0.109	0.034	0.139	0.061	11111	2.40	38345.6286	44444		
788	4.904	0.603				11000	1.04	38062.6019	22211	875	5.168	0.090	0.056	0.109	0.066	11111	1.24	38345.7805	44444		
788	4.928	0.604	0.128	0.505	0.309	11111	1.01	38296.9179	44444	875	5.148	0.079	0.047	0.085	0.056	11111	2.08	38345.9326	44444		
788	4.923	0.567	0.142	0.495	0.284	11111	1.01	38307.8934	44444	875	5.168	0.094	0.094	0.130	0.052	11111	1.40	38356.6834	44444		
799	4.146	0.458	0.010	0.471	0.329	11111	1.15	38076.6073	22211	875	5.156	0.093	0.068	0.128	0.064	11111	1.27	38366.7623	44444		
799	4.114	0.510	0.007	0.453	0.296	11111	1.05	38296.9275	44444	875	5.165	0.084	0.051	0.111	0.068	11111	1.25	38430.5733	44444		
799	4.130	0.498	0.011	0.459	0.286	11111	1.04	38655.9200	44444	875	5.240	0.081	0.081	0.102	0.030	11111	1.27	38431.5862	44444		
801	3.673	-0.123	-0.634	-0.001	-0.120	11111	1.01	38296.9374	44444	875	5.190	0.086	0.071	0.000	0.000	11100	1.47	38432.6394	44400		
801	4.654	-0.132	-0.616	-0.039	-0.134	11111	1.00	38310.8738	44444	875	5.173	0.075	0.097	0.000	0.000	11100	1.37	38441.5932	44400		
801	4.692	-0.138	-0.632	-0.022	-0.132	11111	1.00	38370.7179	44444	875	5.176	0.082	0.057	0.000	0.000	11100	2.57	38441.5932	44400		
804	3.451	0.112	0.060	0.088	0.052	11111	1.17	38296.9474	44444	875	5.166	0.080	0.066	0.000	0.000	11100	1.51	38451.5927	44400		
804	3.469	0.094	0.077	0.119	0.043	11111	1.15	38317.8646	44444	875	5.174	0.085	0.085	0.000	0.000	11100	1.43	38452.7777	22200		
804	3.477	0.090	0.078	0.108	0.042	11111	1.30	38404.6977	44444	875	5.200	0.074	0.042	0.116	0.046	11111	2.44	38466.1899	44444		
811	4.228	-0.123	-0.499	-0.035	-0.149	11111	1.45	38290.9238	44444	875	5.172	0.080	0.060	0.130	0.073	11111	1.25	38651.9657	22221		
811	4.231	-0.118	-0.429	-0.053	-0.119	11111	1.45	38310.8800	44444	875	6.757	0.856	-0.382	1.876	0.034	11111	2.50	38655.7754	44444		
811	4.270	-0.151	-0.440	-0.008	-0.112	11111	1.76	38404.7056	44444	875	5.200	0.092	0.080	0.127	0.046	11111	1.24	38655.9460	44444		
811	4.271	-0.163	-0.435	-0.012	-0.154	11111	1.54	38415.6391	44444	875	5.182	0.117	0.062	0.133	0.041	11111	1.24	38668.9004	44444		
813	4.293	0.316	0.096	0.318	0.174	11111	1.12	38296.9575	44444	875	5.187	0.114	0.061	0.121	0.044	11111	1.24	38681.8788	44444		
813	4.279	0.306	0.066	0.303	0.188	11111	1.08	38356.7584	44444	875	5.195	0.061	0.051	0.168	0.046	11111	1.34	38705.7407	44444		
813	4.260	0.294	0.087	0.282	0.205	11111	1.08	38416.5911	22222	875	5.182	0.194	-0.061	0.135	0.043	11111	1.38	38721.6871	22222		
818	4.475	0.490	0.009	0.433	0.284	11111	1.60	38305.8990	44444	875	5.164	0.119	0.055	0.080	0.071	11111	1.28	38722.7947	22222		
818	4.453	0.472	-0.018	0.424	0.253	11111	1.59	38357.7430	44444	875	5.155	0.094	0.082	0.087	0.046	11111	1.28	38722.7947	22222		
824	4.531	1.103	1.044	0.807	0.592	11111	1.01	38305.9071	44444	875	5.157	0.084	0.050	0.000	0.000	11100	2.30	38944.8200	33311		
824	4.501	1.121	1.007	0.796	0.570	11111	1.00	38357.7559	44444	875	5.159	0.079	0.039	0.107	0.070	11111	1.95	38992.8790	44444		
825	6.268	0.882	0.500	0.836	0.765	11111	1.10	38655.9285	44444	875	5.201	0.092	0.064	0.136	0.072	11111	2.32	38995.8515	44444		
825	6.249	0.877	0.521	0.820	0.765	11111	1.11	38700.7821	44444	875	5.174	0.089	0.000	0.108	0.049	11111	1.99	38997.8629	44444		
825	6.266	0.859	0.520	0.850	0.760	11111	1.12	38705.7517	44444	875	5.202	0.071	0.036	0.207	0.061	11111	1.24	39004.8796	44444		
834	3.804	1.719	1.915	1.246	0.892	11111	1.11	38303.8527	12221	875	5.144	0.113	0.032	0.000	0.000	11100	1.86	39016.8201	44400		
834	3.774	1.670	1.867	1.213	0.884	11111	1.09	38357.7654	22241	875	5.229	0.011	0.099	0.000	0.000	11100	1.36	39016.8552	44400		
838	3.595	-0.098	-0.339	-0.014	-0.106	11111	1.01	38269.9685	44443	875	5.177	0.084	0.025	0.000	0.000	11100	2.50	39024.9589	44400		
838	3.583	-0.071	-0.445	-0.023	-0.086	11111	1.00	38290.9311	44444	875	5.179	0.090	0.065	0.000	0.000	11100	1.26	39024.9589	44400		
838	3.663	-0.128	-0.379	-0.049	-0.115	11111	1.03	38419.6196	44444	875	5.192	0.112	-0.001	0.128	0.054	11111	2.29	39025.7707	44444		
838	3.674	-0.121	-0.351	0.008	-0.119	11111	1.08	38439.5966	44444	875	5.178	0.078	0.018	0.118	0.062	11111	2.37	39031.7511	44444		
840	4.266	0.357	0.101	0.292	0.203	11111	1.02	38270.9564	44443	875	5.219	0.080	0.043	0.151	0.038	11111	2.02	39032.7654	44444		
840	4.216	0.349	0.063	0.314	0.281	11111	1.01	38290.9538	44444	875	5.143	0.087	0.060	0.095	0.073	11111					

TABLE 4 CATALINA UBVRI OBSERVATIONS

CATALINA UBVRI DATA											CATALINA UBVRI DATA										
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.		B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	
896	4.686	-0.117	-0.421	-0.046	-0.088	11111	1.10	38270.9761	44443		1040	4.541	0.548	-0.085	0.534	0.490	11111	1.14	37693.5594	22222	
896	4.712	-0.127	-0.463	0.003	-0.128	11111	1.14	38415.6470	44444		1040	4.543	0.560	0.496	0.077	-0.040	11000	1.16	37693.6275	22222	
896	4.710	-0.114	-0.458	-0.048	-0.113	11111	1.16	38419.6454	44444		1040	4.547	0.552	-0.091	0.690	0.509	11111	1.18	37693.6594	22222	
											1040	4.557	0.554	-0.094	0.479	0.508	11111	1.23	37693.6682	22222	
911	2.520	1.648	1.940	1.319	1.155	11111	1.14	38270.9828	44443		1040	4.558	0.576	-0.113	0.077	-0.040	11100	1.27	37693.6839	22222	
911	2.510	1.612	1.934	1.360	1.163	11111	1.14	38299.9019	44442		1040	4.556	0.553	-0.118	0.000	0.000	11100	1.13	38439.5889	44440	
911	2.532	1.624	1.946	1.379	1.164	11111	1.16	38314.9109	22222												
915	2.946	0.703	0.445	0.571	0.441	11111	1.07	38270.9894	44443		1044	4.717	-0.098	-0.572	0.036	-0.095	11111	1.08	38302.8745	22221	
915	0.000	0.709	0.000	-0.023	0.473	01001	1.10	38314.9300	22222		1044	4.616	-0.097	-0.612	0.000	0.000	11100	1.07	38439.5937	44440	
915	2.923	0.692	0.497	0.609	0.422	11111	1.07	38365.7430	44444		1044	4.721	-0.085	-0.558	0.000	0.000	11100	1.25	38454.6389	44440	
919	4.068	0.176	0.063	0.119	0.101	11111	1.79	38299.9120	44422		1046	5.144	-0.004	0.073	0.615	-0.040	11100	1.21	38089.6149	22222	
919	4.066	0.159	0.105	0.145	0.079	11111	1.81	38323.8735	44444		1046	5.118	0.011	0.053	0.064	-0.031	11111	1.09	38364.5583	44444	
921	3.370	1.670	1.684	1.887	1.575	11111	1.16	38081.6182	22211		1046	5.168	0.008	0.146	0.101	-0.025	11111	1.09	38370.7292	44444	
921	3.412	1.671	1.737	1.731	1.649	11111	1.01	38271.0084	44443		1046	5.092	0.005	0.057	0.000	0.000	11100	1.19	38451.6128	44400	
932	4.874	0.045	0.063	0.070	-0.018	11111	1.36	38303.8612	12221		1046	5.113	0.022	0.052	0.000	0.000	11100	1.15	38452.5913	22200	
932	4.869	0.014	2.730	0.061	-0.005	10111	1.35	38381.7224	44444		1052	4.404	1.288	1.467	1.078	0.748	11111	1.14	38076.6383	12211	
932	4.884	0.009	0.033	0.115	-0.013	11111	1.49	38461.6138	22222		1052	4.366	1.397	1.574	1.109	0.758	11111	1.11	38302.0078	22211	
936	2.173	-0.038	0.000	0.014	-0.049	11011	1.01	38271.0145	44443		1052	4.360	1.349	1.542	0.000	0.000	11100	1.06	38439.5979	44400	
936	2.144	-0.074	-0.336	0.001	-0.020	11111	1.01	38381.7079	44444		1066	4.098	1.153	1.014	0.782	0.565	11111	1.09	38302.8916	22221	
936	2.133	-0.052	-0.439	0.099	-0.003	11111	1.01	38390.6827	22222		1066	4.091	1.113	1.029	0.754	0.540	11111	1.20	38397.7529	44444	
937	4.073	0.573	0.270	5.325	-0.662	11000	1.05	38299.9234	44422		1066	4.099	1.115	1.016	0.767	0.529	11111	1.08	38424.6271	44444	
937	4.058	0.587	0.167	0.538	0.292	11111	1.05	38365.7519	44444		1069	5.299	0.439	0.009	0.399	0.225	11111	1.11	38641.9232	22222	
937	4.071	0.607	0.113	0.519	0.288	11111	1.09	38406.5752	44444		1069	5.358	0.401	-0.013	0.411	-0.240	11111	1.04	38655.9383	44444	
941	3.790	0.978	0.826	0.745	0.532	11111	1.02	38299.9316	44444		1069	0.000	0.000	-0.044	0.000	0.217	00101	1.08	38669.8600	44444	
941	3.770	0.994	0.890	0.726	0.464	11111	1.03	38365.7603	44444		1070	4.732	-0.091	-0.252			-0.096	11011	1.32	38302.8830	22221
941	3.879	0.972	0.768	0.752	0.493	11111	1.08	38406.6985	43333		1070	4.731	-0.081	-0.282	0.017	-0.063	11111	1.26	38416.6066	22222	
947	4.611	1.108	1.013	0.828	0.593	11111	1.01	38299.9400	44422		1070	4.731	-0.110	-0.254	-0.029	-0.095	11111	1.30	38424.6351	44444	
947	4.624	1.100	1.053	0.811	0.551	11111	1.03	38381.7377	44444		1084	3.724	0.886	0.585	0.758	0.423	11111	1.33	37565.9538	22222	
947	4.697	1.112	0.985	0.849	0.559	11111	1.09	38406.7075	43333		1084	3.731	0.876	0.585	0.647	0.517	11111	2.26	37594.7077	22222	
951	4.347	1.040	0.866			11100	1.03	38295.9494	21122		1084	3.745	0.872	0.591	0.817	0.455	11111	1.32	37575.6147	22222	
951	4.328	1.025	0.907	0.753	0.507	11111	1.06	38383.7379	44444		1084	3.725	0.872	0.600	0.688	0.488	11111	1.01	38306.7842	44444	
951	4.429	1.031	0.802	0.782	0.518	11111	1.16	38406.7171	43333		1084	3.725	0.868	0.577	0.292	0.470	10101	1.35	38307.9249	44444	
963	3.848	0.513	0.048	0.438	0.301	11111	2.09	38310.8982	44444		1084	3.724	0.907	0.563	0.731	0.463	11111	3.45	38310.7339	44444	
963	3.845	0.504	0.054	0.455	0.303	11111	2.13	38323.8835	44444		1084	3.704	0.890	0.603	0.710	0.461	11111	1.34	38310.9104	44444	
972	4.871	-0.012	0.023	0.057	-0.025	11111	1.02	38301.9141	12221		1084	3.714	0.880	0.590	0.714	0.474	11111	1.36	38314.8737	22222	
972	4.882	-0.031	0.005	0.055	-0.033	11111	1.06	38383.7473	44444		1084	3.690	0.875	0.529	0.672	0.484	11111	1.75	38316.7887	22221	
972	4.911	-0.018	-0.048	0.067	-0.031	11111	1.17	38406.7257	43333		1084	3.729	0.898	0.599	0.738	0.465	11111	1.35	38316.9083	22221	
984	4.791	0.245	0.101	0.207	0.115	11111	1.33	38310.9042	44444		1084	3.743	0.898	0.573	0.734	0.472	11111	2.81	38323.7131	44444	
984	4.798	0.230	0.064	0.215	0.127	11111	1.69	38398.7571	44444		1084	3.723	0.880	0.541	0.725	0.477	11111	1.35	38323.8637	44444	
984	4.801	0.220	0.082	0.228	0.102	11111	1.40	38415.6570	44444		1084	3.725	0.879	0.567	0.742	0.477	11111	1.94	38323.9942	44444	
985	4.876	-0.163	-0.785	-0.048	-0.134	11111	1.22	38419.6554	44444		1084	3.773	0.908	0.615	0.754	0.487	11111	2.83	38324.7098	44444	
985	4.828	-0.145	-0.772	0.000	0.000	11100	1.28	38451.6058	44400		1084	3.701	0.869	0.534	0.712	0.472	11111	1.35	38324.8707	44422	
985	4.835	-0.130	-0.727	0.000	0.000	11100	1.25	38452.5852	22200		1084	3.686	0.853	0.544	0.691	0.451	11111	1.68	38327.7658	22222	
991				1.087	0.771	00011	1.01	38301.9433	12221		1084	3.719	0.885	0.563	0.751	0.484	11111	2.49	38328.7099	44444	
991	4.808	1.500	1.546	1.047	0.754	11111	1.18	38398.7655	44444		1084	3.765	0.912	0.573	0.761	0.479	11111	2.22	38329.7190	44444	
991	4.827	1.474	1.569	1.060	0.757	11111	1.06	38419.6658	44444		1084	3.725	0.889	0.592	0.718	0.470	11111	1.43	38339.8810	44444	
996	4.852	0.675	0.196	0.620	0.336	11111	1.15	37569.8740	22222		1084	3.727	0.884	0.581	0.740	0.470	11111	2.25	38345.6738	44444	
996	4.828	0.679	0.180	0.090	-0.040	11100	4.53	37590.6379	22222		1084	3.712	0.889	0.516	0.720	0.473	11111	1.36	38345.7893	44444	
996	4.861	0.692	0.207	0.523	0.377	11111	1.21	37590.7931	22222		1084	3.699	0.873	0.569	0.698	0.480	11111	2.07	38345.9426	44444	
996	4.860	0.676	0.206	0.636	0.347	11111	1.19	37592.7937	22222		1084	3.730	0.890	0.570	0.730	0.470	11111	2.22	38348.6675	23333	
996	4.826	0.677	0.197	0.507	0.394	11111	1.60	37648.7674	22222		1084	3.742	0.865	0.543	0.758	0.467	11111	1.65	38356.8756	44444	
996	4.823	0.695	0.000	0.560	0.360	10111	1.15	38301.9236	12221		1084	3.754	0.874	0.575	0.750	0.455	11111	2.01	38367.6278	44444	
996	4.846	0.694	0.206	0.565	0.351	11111	1.26	38302.8503	22221		1084	3.762	0.879	0.588	0.732	0.437	11111	2.24	38369.6090	44444	
999	4.506	1.459	1.726	1.228	0.893	11111	1.12	38076.6273	22211		1084	3.676	0.880	0.572	0.750	0.462	11111	2.58	38370.5919	44444	
999	4.463	1.586	0.000	1.223	0.887	10111	1.02	38301.9581	12221		1084	3.743	0.934	0.589	0.690	0.458	11111	1.34	38328.8628	44444	
999	4.428	1.562	1.814	1.157	0.860	11111	1.09	38419.6751	44444		1084	3.763	0.915	0.558	0.748	0.459	11111	2.18	38377.5903	44444	
1002	4.960	0.076	0.069	0.118	0.016	11111	1.04	38301.9845	12221		1084	3.718	0.884	0.549	0.725	0.472	11111	1.35	38389.6731	44444	
1002	4.962	0.056</																			

TABLE 4 CATALINA UBVRi OBSERVATIONS

CATALINA UBVRi DATA										CATALINA UBVRi DATA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
1084	3.716	0.888	0.597	0.710	0.467	11111	1.37	38699.8747	22222	1178	3.624	-0.095	-0.334	-0.	-0.049	11111	1.10	38328.9436	44444
1084	3.730	0.897	0.571	0.742	0.470	11111	1.60	38700.9278	44444	1178	3.587	-0.101	-0.392	0.011	-0.011	11111	1.05	38430.6387	44444
1084	3.717	0.877	0.664	0.728	0.445	11111	1.34	38721.7835	22222	1178	3.586	-0.081	-0.374	0.000	0.000	11100	1.07	38439.6271	44400
1084	3.732	0.879	0.566	0.728	0.470	11111	1.70	38722.6819	22222	1203	2.865	0.095	-0.765	0.129	0.087	11111	1.04	37714.5909	22222
1084	3.730	0.890	0.570	0.728	0.467	11111	1.48	38728.7003	44400	1203	2.876	0.094	-0.748	0.110	0.073	11111	1.10	37719.6047	22222
1084	3.708	0.884	0.579	0.000	0.000	11100	1.00	38744.6474	22211	1203	2.842	0.118	-0.871	0.177	0.098	11111	1.00	38290.9695	44444
1084	3.750	0.874	0.587	0.694	0.488	11111	2.46	38729.6133	44444	1204	5.053	-0.098	-0.168	0.054	-0.081	11111	1.20	38451.6040	44444
1084	3.718	0.890	0.594	0.000	0.000	11100	1.38	38740.7677	22200	1204	5.023	-0.096	-0.159	0.000	0.000	11100	1.23	38459.5986	44400
1084	3.706	0.863	0.548	0.000	0.000	11100	1.47	38741.6673	44400	1211	4.433	0.694	0.441	0.598	0.393	11111	1.23	38365.7799	44444
1084	3.704	0.882	0.607	0.000	0.000	11100	1.38	38744.7560	22200	1211	4.432	0.672	0.386	0.548	0.427	11111	1.39	38420.6992	44444
1084	3.768	0.860	0.562	0.000	0.000	11100	2.24	38771.7860	44400	1211	4.497	0.671	0.432	0.000	0.000	11100	1.33	38439.6340	44400
1084	3.751	0.883	0.573	0.746	0.462	11111	2.65	38773.7972	44444	1213	4.627	-0.155	-0.464	-0.079	-0.126	11111	2.33	38387.8011	44444
1084	3.701	0.867	0.605	0.707	0.452	11111	1.62	38784.7007	44444	1213	4.680	-0.111	-0.495	-0.039	-0.149	11111	1.89	38425.6413	44444
1084	3.720	0.879	0.577	0.000	0.000	11100	1.36	38792.6128	22200	1213	4.631	-0.129	-0.482	0.000	0.000	11100	1.88	38440.5952	44400
1084	3.717	0.871	0.583	0.681	0.486	11111	1.48	38818.5844	22222	1220	2.923	-0.156	-1.004	-0.021	-0.188	11111	1.01	38305.9360	44444
1084	3.751	0.893	0.566	0.726	0.449	11111	2.21	39018.8331	44444	1220	2.834	-0.196	-1.056	-0.102	-0.133	11111	1.04	38430.6463	44444
1084	3.720	0.891	0.593	0.000	0.000	11100	2.49	39024.8042	44400	1220	2.917	-0.184	-0.980	0.000	0.000	11100	1.04	38441.6130	44400
1084	3.721	0.890	0.585	0.000	0.000	11100	1.35	39024.9632	44400	1228	4.044	0.004	-0.925	0.169	-0.012	11111	1.02	37693.5665	22222
1084	3.724	0.861	0.614	0.715	0.480	11111	2.42	39025.8044	44444	1228	4.044	0.003	-0.926	0.124	-0.012	11111	1.01	37693.6215	22222
1084	3.728	0.889	0.599	0.000	0.000	11100	1.37	39026.9780	44400	1228	4.049	0.004	-0.917	0.052	0.007	11100	1.11	37719.6124	22222
1084	3.721	0.890	0.566	0.708	0.443	11111	2.27	39028.8027	44444	1228	4.080	0.017	-0.927	0.181	-0.003	11111	1.00	38305.9434	44444
1084	3.730	0.901	0.585	0.711	0.485	11111	1.49	39029.0092	44444	1231	2.962	1.610	1.943	1.276	1.013	11111	1.44	38305.9515	44444
1084	3.740	0.895	0.606	0.722	0.479	11111	2.28	39031.7940	44444	1231	2.942	1.603	1.948	1.280	0.980	11111	1.44	38356.7892	44444
1084	3.736	0.901	0.572	0.000	0.000	11100	2.37	39033.7844	44400	1231	3.112	1.583	1.935	1.230	0.990	11111	1.44	38357.7904	44444
1084	3.741	0.881	0.590	0.000	0.000	11100	1.34	39033.9319	44400	1239	3.467	-0.114	-0.629	-0.025	-0.106	11111	1.10	38300.9091	43433
1084	3.747	0.898	0.572	0.715	0.476	11111	2.21	39035.7866	44444	1239	3.413	-0.120	-0.592	-0.050	-0.050	11111	1.15	38424.6832	44444
1084	3.757	0.872	0.602	0.729	0.468	11111	2.41	39036.7747	44444	1239	3.356	-0.124	-0.661	-0.011	-0.052	11111	1.14	38430.6632	44444
1084	3.723	0.882	0.602	0.730	0.459	11111	2.02	39037.7920	44444	1240	4.633	-0.156	-0.419	-0.025	-0.098	11111	2.38	38387.8123	44444
1084	3.727	0.903	0.530	0.730	0.465	11111	2.05	39038.7873	44444	1240	4.695	-0.118	-0.420	0.032	-0.122	11111	1.88	38425.6502	44444
1084	3.705	0.868	0.572	0.721	0.455	11111	2.33	39068.6907	44444	1240	4.648	-0.148	-0.387	0.000	0.000	11100	1.85	38440.5999	44400
1084	3.733	0.887	0.555	0.726	0.467	11111	2.37	39068.6907	44444	1242	5.061	0.490	0.472	0.512	0.391	11111	1.16	38669.8891	44444
1084	3.722	0.880	0.585	0.711	0.465	11111	2.15	39069.6968	44444	1242	5.086	0.513	0.496	0.521	0.395	11111	1.12	38674.8556	44444
1084	3.733	0.868	0.576	0.740	0.446	11111	1.41	39084.8358	22222	1242	5.092	0.498	0.505	0.505	0.384	11111	1.13	38676.8911	44444
1084	3.712	0.886	0.591	0.702	0.478	11111	1.37	39099.7809	44444	1251	3.883	0.043	0.041	0.071	-0.023	00011	1.29	38095.6051	44444
1087	4.281	-0.039	-0.594	0.071	-0.003	11111	1.08	38067.6332	44444	1251	3.904	0.018	0.076	0.069	-0.022	11111	1.12	38057.6870	44444
1087	4.267	-0.039	-0.547	0.121	-0.032	11111	1.08	38303.8716	44444	1251	3.929	0.023	0.054	0.089	0.012	11111	1.12	38403.6870	44444
1087	4.277	-0.054	-0.563	0.109	-0.006	11111	1.04	38307.9178	44444	1256	4.332	1.108	0.951	0.769	0.494	11111	1.07	38067.6537	44444
1088	4.286	-0.091	-0.369	-0.008	-0.104	11111	1.71	38307.9107	44444	1256	4.425	1.044	0.894	0.821	0.567	11111	1.04	38300.9165	43433
1088	4.256	-0.137	-0.342	0.008	-0.117	11111	1.75	38411.6633	44444	1256	4.335	1.061	0.996	0.781	0.529	11111	1.07	38383.7861	44444
1088	4.286	-0.135	-0.348	0.007	-0.136	11111	1.83	38415.6738	44444	1261	4.276	0.057	-0.067	0.088	0.030	00011	1.06	38306.6312	22211
1101	4.279	0.582	0.074	0.480	0.307	11111	1.18	38310.9164	44444	1261	4.295	0.009	-0.015	0.074	0.016	11111	1.05	38307.9492	44444
1101	4.291	0.585	0.101	0.503	0.309	11111	1.31	38404.7268	44444	1261	4.294	-0.024	-0.015	0.084	0.015	11111	1.22	38406.7989	44444
1101	4.282	0.556	0.064	0.491	0.336	11111	1.18	38416.6150	22222	1273	4.062	-0.090	-0.516	0.095	-0.022	11111	1.08	38067.6537	44444
1122	3.012	-0.104	-0.420	0.090	-0.103	00001	1.07	38303.8785	12221	1273	4.026	-0.025	-0.567	0.136	-0.040	11110	1.04	38300.9619	43433
1122	0.000	0.000	0.000	0.060	-0.122	11111	1.04	38403.6662	44444	1273	0.000	0.000	0.000	0.000	0.000	00011	1.23	38400.8271	22211
1122	3.042	-0.149	-0.572	0.027	-0.110	11111	1.11	38404.7348	44444	1298	4.048	0.342	0.132	0.110	0.332	00011	1.32	38302.9171	22211
1122	3.009	-0.103	-0.512	0.000	-0.110	11111	1.25	38404.7348	44444	1298	4.064	0.310	0.151	0.304	0.179	11111	1.48	38399.7733	44444
1129	4.789	0.805	0.270	0.020	0.000	11100	1.25	38451.6209	44400	1298	4.027	0.342	0.146	0.000	0.000	11100	1.31	38440.6049	44400
1129	4.796	0.816	0.258	0.000	0.000	11100	1.21	38452.5969	22200	1303	4.198	0.960	0.606	0.809	0.574	11111	1.04	38300.9702	43433
1129	4.796	0.818	0.207	0.728	0.517	11111	1.21	38669.8695	44444	1303	4.144	0.935	0.629	0.777	0.543	11111	1.06	38430.6541	44444
1131	3.845	0.055	-0.718	0.114	0.016	11111	1.00	38307.9322	44444	1303	4.139	0.969	0.649	0.000	0.000	11100	1.13	38432.6895	44400
1131	0.000	0.000	0.000	0.139	0.009	00011	1.10	38404.7423	44444	1303	4.131	0.928	0.673	0.000	0.000	11100	1.10	38438.6594	44400
1131	3.793	0.047	-0.783	0.000	0.000	11100	1.02	38439.6021	44400	1306	4.694	0.994	0.624	0.866	0.562	11111	1.36	38095.6737	44444
1135	3.775	0.426	0.283	0.390	0.271	11111	1.02	38328.8751	44444	1306	4.749	0.991	0.617	0.607	0.562	11111	1.32	38200.9555	34333
1135	3.734	0.426	0.318	0.000	0.000	11100	1.04	38439.6056	44400	1306	4.670	1.035	0.692	0.751	0.561	11111	1.01	38302.9461	22221
1135	3.799	0.415	0.411	0.000	0.000	11100	1.21	38453.6424	44400	1309	5.269	0.366	-0.013	0.334	0.192	11111	1.16	38669.8992	44444
1136	3.524	0.928	0.671	0.713	0.478	11111	1.36	38328.8851	44444	1309	5.302	0.341	0.006	0.374	0.180	11111	1.13	38670.9126	44444
1136	3.550	0.910	0.661																

TABLE 4 CATALINA UBVRi OBSERVATIONS

CATALINA UBVRi DATA											CATALINA UBVRi DATA										
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.		B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	
1346	3.642	1.000	0.781	0.730	0.481	11111	1.05	38310.9419	44444		1520	4.005	-0.161	-0.600	-0.054	-0.129	11111	1.74	38456.6826	44444	
1346	3.641	0.974	0.810	0.723	0.481	11111	1.48	38482.6081	44444		1520	4.038	-0.158	-0.605	0.000	0.000	11100	1.36	38459.6201	44400	
1350	4.871	-0.025	-0.515	0.091	-0.045	11111	1.03	38302.9614	22221		1542	4.284	0.083	-0.845	0.075	0.024	11111	1.20	38062.6414	22211	
1350	4.838	-0.024	-0.554	0.086	-0.049	11111	1.03	38305.9587	44444		1542	4.273	0.005	-0.900	0.133	-0.003	11111	1.25	38427.7142	44444	
1373	4.236	1.035	0.815	1.077	0.513	10101	1.04	38063.6437	11212		1542	4.328	-0.006	-0.889	0.128	-0.049	11111	1.51	38475.6778	44444	
1373	3.755	1.022	0.852	0.749	0.484	11111	1.04	38302.9700	22221		1543	3.172	0.451	-0.021	0.459	0.388	11111	1.09	37563.9959	22222	
1373	3.770	1.013	0.804	0.000	0.000	11100	1.17	38432.6937	44400		1543	3.171	0.457	-0.028	0.445	0.200	11111	1.09	37565.9738	22222	
1380	4.817	0.153	0.141	0.175	0.068	11111	1.04	38310.9492	44444		1543	3.184	0.456	-0.028	0.418	0.263	11111	1.15	37668.7539	22222	
1380	4.846	-0.200	0.389	0.000	0.000	10000	1.18	38432.6983	44400		1543	3.191	0.440	-0.025	0.366	0.277	11111	1.21	37670.7686	22222	
1380	4.769	0.115	0.138	0.000	0.000	11100	1.15	38438.6737	44400		1543	3.198	0.471	0.008	0.378	0.071	11111	1.11	38060.6654	21200	
1380	4.821	0.181	0.100	0.157	0.056	11111	1.07	38676.8999	44444		1543	3.167	0.490	0.039	0.420	0.224	11111	1.28	38083.6704	44444	
1387	4.235	0.141	0.161	0.149	0.063	11111	1.02	38307.9569	44444		1543	3.200	0.442	-0.001	0.438	0.280	11111	1.34	38268.9774	21111	
1387	4.225	0.108	0.179	0.000	0.000	11100	1.09	38459.6061	44400		1543	3.166	0.415	-0.018	0.396	0.281	11111	1.20	38269.9889	44443	
1389	4.308	0.056	0.093	0.083	0.005	11111	1.04	38310.9552	44444		1543	3.217	0.483	-0.011	0.420	0.285	11111	1.27	38271.0022	44443	
1389	4.227	0.010	0.107	0.000	0.000	11100	1.16	38438.6779	44400		1543	3.192	0.481	-0.035	0.398	0.278	11111	1.23	38301.0217	43433	
1392	4.372	0.189	0.117	0.000	0.000	11100	1.17	38432.7048	44400		1544	4.344	0.019	0.021	0.000	0.000	11100	1.30	38451.6725	44400	
1392	4.207	0.211	0.202	0.000	0.000	11100	1.15	38438.6828	44400		1544	4.349	0.015	0.035	0.000	0.000	11100	1.21	38452.6503	22200	
1392	4.289	0.276	0.147	0.271	0.149	11111	1.02	38700.8961	44444		1552	3.690	-0.158	-0.800	0.485	-0.834	11100	1.14	38060.6791	21200	
1392	4.274	0.261	0.158	0.288	0.140	11111	1.09	38705.7973	44444		1552	3.664	-0.137	-0.822	0.090	-0.040	11100	1.26	38089.6463	22222	
1394	4.513	0.262	0.152	0.284	0.153	11111	1.06	38317.9520	44444		1552	3.637	-0.130	-0.818	-0.026	-0.145	11111	1.15	38299.0316	22222	
1394	4.531	0.223	0.154	0.000	0.000	11100	1.14	38459.6083	44400		1552	3.668	-0.149	-0.832	0.000	0.000	11100	1.28	38453.6549	44400	
1396	4.699	0.981	0.698	0.732	0.535	11111	1.05	38323.8955	44444		1552	3.670	-0.180	-0.763	-0.083	-0.148	11111	1.17	38269.9898	44443	
1396	0.000	0.965	0.000	0.000	0.000	10000	1.07	38441.6177	44400		1552	3.701	-0.168	-0.809	-0.051	-0.167	11111	1.22	38789.8598	44444	
1396	4.689	0.972	0.736	0.000	0.000	11100	1.09	38452.6045	22200		1552	3.692	-0.152	-0.818	-0.073	-0.161	11111	1.59	38789.7814	44444	
1396	5.636	0.027	0.721	1.621	0.512	11111	1.06	38676.9220	44444		1560	4.391	0.204	0.171	0.333	0.199	11111	1.32	38076.6487	22211	
1396	4.678	1.019	0.720	0.696	0.525	11111	1.06	38700.9048	44444		1560	4.413	0.247	0.187	0.000	0.000	11100	1.39	38459.6238	44400	
1409	3.603	1.008	0.826	0.714	0.432	11111	1.03	38060.6525	21200		1567	3.706	-0.194	-0.822	0.000	0.000	11100	1.14	38451.6783	44400	
1409	0.000	0.952	0.000	0.090	-0.040	10000	1.03	38074.5858	11111		1567	3.716	-0.188	-0.822	0.000	0.000	11100	1.30	38452.6549	22200	
1409	3.526	1.019	0.861	0.756	0.556	11111	1.18	38268.9702	21111		1567	3.774	-0.200	-0.816	-0.052	-0.173	11111	1.89	38481.6453	33433	
1409	3.545	1.007	0.897	0.692	0.560	11111	1.47	38269.9184	44443		1568	4.463	-0.013	-0.082	0.161	-0.010	11111	1.28	38095.6827	44444	
1409	3.574	1.022	0.878	0.730	0.545	11111	1.14	38269.9184	44443		1568	4.495	-0.005	-0.003	0.084	-0.009	11111	1.07	38307.9698	44444	
1409	3.551	1.023	0.886	0.703	0.526	11111	1.09	38270.9960	44443		1568	4.455	-0.035	-0.028	0.047	-0.013	11111	1.08	38682.9297	44444	
1409	3.536	1.008	0.833	0.749	0.509	11111	1.03	38323.9048	44444		1570	4.645	0.091	0.064	0.108	0.043	11111	1.09	38324.9437	44444	
1409	3.490	1.031	0.897	0.703	0.483	11111	1.13	38337.9482	22222		1570	4.653	0.076	0.076	0.000	0.000	11100	1.22	38452.6597	22200	
1409	3.464	1.018	0.865	-0.030	0.000	11100	1.04	38391.7490	44444		1570	4.701	0.081	0.133	0.000	0.000	11100	1.25	38453.6626	44400	
1409	3.527	1.002	0.885	-0.023	0.000	11100	1.03	38392.7256	44444		1577	2.666	1.533	1.736	1.068	0.821	11111	1.00	38305.9790	44444	
1409	3.592	0.171	0.163	-0.023	0.000	11100	1.15	38392.7256	44444		1577	2.671	1.556	1.763	1.000	0.000	11100	1.08	38432.7089	44400	
1409	3.451	1.004	0.855	-0.023	0.000	11100	1.12	38392.8584	44444		1580	4.052	1.148	1.096	0.867	0.623	11111	1.08	38324.9615	44444	
1409	3.497	1.023	0.895	-0.023	0.000	11100	1.14	38392.8609	44444		1580	4.062	1.141	1.122	0.901	0.618	11111	1.51	38459.6954	22222	
1409	3.666	0.986	0.912	1.089	0.495	11101	1.64	38393.5626	33333		1580	4.083	1.148	1.092	0.904	0.625	11111	1.90	38480.6708	44444	
1409	3.606	0.980	0.852	0.000	0.003	11100	1.05	38393.6855	33333		1592	4.898	0.066	0.007	0.014	-0.040	11110	1.08	38083.6619	44444	
1409	3.566	0.989	0.850	1.518	0.503	11101	1.05	38393.7523	33333		1592	4.957	0.063	0.038	0.084	0.005	11111	1.08	38303.9172	12221	
1411	3.860	0.913	0.000	0.754	0.457	11011	1.16	38095.6145	44444		1592	4.995	0.014	-0.014	0.000	0.000	11100	1.07	38459.6286	44400	
1411	3.852	0.946	0.661	0.726	0.496	11111	1.04	38323.9181	44444		1601	4.477	1.428	1.556	1.009	0.721	11111	1.24	38303.9293	12221	
1411	3.843	0.944	0.737	0.000	0.400	11100	1.09	38452.6105	22200		1601	4.448	1.413	1.446	0.000	0.000	11100	1.32	38432.7132	44400	
1412	0.000	0.138	0.174	1.191	0.100	10101	1.07	38063.6591	11212		1601	4.537	1.357	1.681	0.000	0.000	11100	1.20	38453.6173	44400	
1412	3.401	0.187	0.164	0.177	0.106	11111	1.05	38323.9265	44444		1603	3.997	0.941				11000	1.13	38062.6500	22211	
1412	3.392	0.171	0.163	0.000	0.000	11100	1.18	38451.6451	44400		1603	4.067	0.928	0.651	0.726	0.463	11111	1.15	38303.9463	12221	
1412	3.464	0.183	0.117	0.000	0.000	11100	1.42	38456.6775	44400		1603	4.020	0.911	0.615	0.000	0.000	11100	1.10	38432.7132	44400	
1412	3.409	0.157	0.147	0.210	0.087	11111	1.50	38482.6167	44444		1603	4.062	0.880	0.767	0.000	0.000	11100	1.29	38453.6514	44400	
1427	4.777	0.154	0.150	0.000	0.000	11100	1.12	38451.6283	44400		1605	2.917	0.554	0.292	0.492	0.433	11111	1.05	38303.9383	12221	
1427	4.792	0.177	0.139	0.000	0.000	11100	1.13	38452.6298	22200		1605	3.005	0.551	0.309	0.514	0.433	11111	1.26	38366.6882	44444	
1437	4.893	1.302	1.406	0.915	0.711	11111	1.26	38066.6754	22211		1605	3.003	0.553	0.326	0.530	0.453	11111	1.08	38366.7503	44444	
1437	4.897	1.327	1.465	0.932	0.661	11111	1.18	38327.9014	22222		1605	2.998	0.547	0.329	0.543	0.442	11111	1.03	38366.7942	44444	
1437	4.928	1.305	1.416	0.000	0.000	11100	1.30	38459.6118	44444		1605	3.028	0.526	0.330	0.560	0.461	11111	1.03	38366.8401	44444	
1444	4.642	0.267	0.034	0.231	0.159	11111	1.12	38066.6829	22211		1605	2.985	0.565	0.322	0.524	0.448	11111	1.09	38366.8901	44444	
1444	4.657	0.258	0.105	0.252																	

TABLE 4 CATALINA UBVRi OBSERVATIONS

CATALINA UBVRi DATA										CATALINA UBVRi DATA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
1612	3.860	1.629	1.823	1.172	0.916	11111	1.03	38377.8202	44444	1705	4.319	-0.058	-0.369	0.090	-0.040	11100	1.44	38062.6808	22211
1612	3.837	1.635	1.856	1.197	0.900	11111	1.06	38378.8433	44444	1705	4.368	-0.117	-0.322	0.000	0.000	11100	1.58	38459.6372	44400
1612	3.843	1.638	1.797	1.219	0.902	11111	1.01	38379.7960	44444	1705	4.401	-0.132	-0.333	0.001	-0.094	11111	1.78	38483.6004	22222
1612	3.828	1.636	1.784	1.185	0.877	11111	1.66	38380.9655	44444										
1612	3.867	1.641	1.825	1.212	0.870	11111	1.28	38382.9058	22222	1708	0.053	0.796	0.495	0.629	0.423	11111	1.16	38301.9052	12221
1612	3.818	1.650	1.809	1.193	0.895	11111	1.08	38387.8294	44444	1708	0.058	0.813	0.461	0.581	0.438	11111	1.03	38307.9855	44444
1612	3.867	1.599	1.729	1.125	0.856	11111	1.02	38388.7793	44444										
1612	3.860	1.598	1.777	1.195	0.902	11111	1.11	38391.6646	44444	1713	0.153	-0.027	-0.630	0.019	-0.027	11111	1.33	38308.0078	44444
1612	3.846	1.629	1.789	1.231	0.862	11111	1.04	38397.7796	44444	1713	0.133	-0.054	-0.644	0.008	-0.039	11111	1.44	38315.0310	22222
1612	3.966	1.610	1.745	1.216	0.882	11111	1.37	38403.5680	44444	1713	0.132	-0.030	-0.623	0.008	-0.016	11111	1.40	38315.9134	44444
1612	3.931	1.607	1.726	1.276	0.876	11111	1.12	38403.6290	44444	1713	0.181	-0.014	-0.629	0.021	-0.029	11111	1.32	38316.9547	22221
1612	3.936	1.620	1.739	1.287	0.873	11111	1.03	38403.6768	44444										
1612	3.921	1.627	1.787	1.281	0.880	11111	1.01	38403.7121	44444	1724	6.414	-0.018	0.022	0.047	-0.013	11111	1.86	38789.8140	44444
1612	3.893	1.628	1.837	1.254	0.872	11111	1.04	38403.7628	44444	1724	6.418	-0.012	0.022	0.057	-0.047	11111	1.35	38791.5787	44444
1612	3.899	1.628	1.768	1.258	0.883	11111	1.14	38403.8119	44444										
1612	3.891	1.611	1.780	1.238	0.896	11111	1.34	38403.8608	44444	1726	4.556	1.237	1.323	1.057	0.692	11111	1.12	38083.6937	44444
1612	3.898	1.610	1.786	1.215	0.921	11111	2.04	38403.9319	44444	1726	4.544	1.272	1.238	0.971	0.737	11111	1.00	38305.9954	44444
1612	3.902	1.634	1.800	1.231	0.869	11111	1.42	38404.5582	44444	1726	4.519	1.287	1.261	0.924	0.697	11111	1.00	38307.9922	44444
1612	3.907	1.638	1.774	1.641	0.861	11111	1.28	38404.5827	44444										
1612	3.906	1.651	1.760	1.438	0.847	11111	1.11	38404.6281	44444	1729	4.732	0.607	0.132	0.541	0.318	11111	1.03	38067.6891	44444
1612	3.904	1.649	1.812	1.251	0.875	11111	1.04	38404.6711	44444	1729	0.000	0.000	0.000	0.539	0.351	00001	1.01	38306.0044	44444
1612	3.899	1.633	1.823	1.253	0.854	11111	1.01	38404.7140	44444	1729	4.695	0.597	0.136	0.501	0.324	11111	1.04	38419.7330	44444
1612	3.883	1.656	1.765	1.238	0.868	11111	1.03	38404.7503	44444	1729	4.693	0.611	0.146	0.509	0.299	11111	1.41	38475.6857	44444
1612	3.887	1.646	1.779	1.229	0.873	11111	1.08	38404.7789	44444	1729	4.700	0.596	0.158	0.517	0.326	11111	1.46	38480.6797	44444
1612	3.886	1.646	1.811	1.222	0.886	11111	1.32	38404.8538	44444										
1612	3.874	1.616	1.780	1.227	0.865	11111	1.86	38404.9167	44444	1735	3.572	-0.125	-0.443	-0.042	-0.097	11111	1.29	38323.9533	44444
1612	3.904	1.234	0.479	1.162	0.872	11111	1.36	38406.5622	43333	1735	3.585	-0.116	-0.466	0.000	0.000	11100	1.33	38440.6611	44400
1612	3.884	1.236	0.468	1.133	0.869	11111	1.21	38406.5929	43333	1735	3.625	-0.125	-0.465	-0.050	-0.131	11111	1.66	38474.6369	44444
1612	3.892	1.215	0.432	1.157	0.854	11111	1.04	38406.6665	43333										
1612	3.889	1.196	0.468	1.158	0.864	11111	1.03	38406.7444	43333										
1612	3.877	1.205	0.478	1.135	0.879	11111	1.16	38406.8114	43333	1748	6.353	-0.109	-0.742	-0.305	0.179	11100	1.30	38786.6201	44444
1612	3.759	1.197	0.370	1.161	0.849	11111	1.02	38408.7231	44444	1748	6.352	-0.114	-0.743	0.017	-0.156	11111	1.25	38787.6336	44444
1612	3.771	1.219	0.415	1.112	0.898	11111	1.10	38410.7766	44444	1748	6.346	-0.094	-0.756	0.005	-0.123	11111	1.40	38789.5878	44444
1612	3.745	1.194	0.380	1.114	0.847	11111	1.04	38419.7230	44444										
1617	4.772	-0.193	-0.758	-0.085	-0.170	11111	1.86	38456.6927	44444	1756	4.285	-0.244	-1.018	0.000	0.000	11100	1.48	38440.6649	44400
1617	4.841	-0.190	-0.740	0.000	0.000	11100	1.44	38459.6326	44400	1756	4.305	-0.258	-1.002	0.000	0.000	11100	1.71	38452.6797	22200
1620	4.608	0.195	-0.762	0.120	0.107	11011	1.02	38062.6596	22211	1761	6.680	-0.082	-0.404	0.049	-0.055	11111	1.16	39068.9381	44444
1620	4.659	0.150	-0.131	0.193	0.089	11111	1.02	38305.9873	44444	1761	6.554	-0.086	-0.503	0.032	-0.025	11111	1.14	39084.8493	22222
1620	4.667	0.156	0.173	0.180	0.081	11111	1.02	38314.9677	22222	1761	6.591	-0.104	-0.482	0.002	-0.062	11111	1.43	39129.6366	44444
1621	4.953	-0.044	-0.143	0.046	-0.064	11111	1.67	38425.6803	44444	1762	4.719	-0.065	-0.092	0.045	-0.075	11111	1.71	38415.7217	44444
1621	4.901	-0.071	-0.135	-0.015	-0.061	11111	1.78	38427.7065	44444	1762	4.696	-0.039	-0.102	0.000	0.000	11100	1.76	38440.6688	44400
1621	4.891	-0.045	-0.137	0.000	0.000	11100	1.68	38440.6444	44400										
1637	5.005	0.358	-0.057	0.252	0.174	11111	1.08	38067.6775	44444	1763	5.776	-0.142	-0.863	-0.025	-0.117	11111	1.13	38797.6099	22222
1637	5.003	0.342	0.008	0.342	0.213	11111	1.06	38299.9995	44422	1763	5.797	-0.127	-0.872	0.026	-0.148	11111	1.10	38803.6284	44444
1637	4.998	0.327	0.305	0.347	0.198	11111	1.06	38325.9512	22222	1763	5.825	-0.132	-0.892	0.019	-0.123	11111	1.10	38804.6497	22222
1638	4.675	-0.049	-0.116	0.027	0.008	11111	1.09	38066.6904	22211	1764	5.683	-0.110	-0.661	-0.043	-0.153	11111	1.23	38786.6372	44444
1638	4.668	-0.049	-0.101	0.028	-0.035	11111	1.05	38310.9670	44444	1764	5.691	-0.116	-0.651	-0.014	-0.136	11111	1.26	38787.6226	44444
1638	4.691	-0.062	-0.083	0.058	-0.036	11111	1.06	38314.9842	22222	1764	5.700	-0.111	-0.653	-0.006	-0.156	11111	1.29	38789.6071	44444
1641	3.169	-0.149	-0.646	-0.028	-0.172	11111	1.02	38302.0166	12221	1765	5.697	-0.182	0.000	-0.092	-0.040	01010	1.19	38063.6840	11212
1641	3.177	-0.149	-0.634	-0.054	-0.182	11111	1.03	38303.9566	12221	1765	4.711	-0.166	-0.803	-0.065	-0.170	11111	1.19	38323.9720	44444
1641	3.184	-0.161	-0.640	-0.076	-0.159	11111	1.02	38325.9629	22222	1765	4.726	-0.158	-0.791	0.000	0.000	11100	1.40	38452.6866	22200
1641	3.215	-0.220	-0.650	-0.040	-0.202	11111	1.01	38368.8080	44444	1765	4.746	-0.155	-0.794	0.000	0.000	11100	1.29	38453.6590	44400
1641	3.135	-0.158	-0.690	-0.086	-0.155	11111	1.01	38369.8203	44444	1765	4.766	-0.164	-0.792	0.000	0.000	11100	1.22	38456.6273	44400
1641	3.209	-0.186	-0.724	-0.018	-0.191	11111	1.32	38403.5783	44444	1765	4.732	-0.154	-0.794	-0.065	-0.180	11111	1.25	38786.6297	44444
1641	3.236	-0.203	-0.715	0.006	-0.194	11111	1.10	38403.6391	44444	1765	4.757	-0.168	-0.782	-0.051	-0.182	11111	1.29	38787.6125	44444
1641	3.179	-0.165	-0.702	-0.043	-0.174	11111	1.01	38403.7204	44444	1765	4.749	-0.163	-0.794	-0.031	-0.172	11111	1.26	38789.6155	44444
1641	3.181	-0.177	-0.676	-0.042	-0.174	11111	1.05	38403.7709	44444	1770	4.954	-0.155	6.309	-0.090	-0.166	11011	1.17	38420.7198	44444
1641	3.186	-0.191	-0.643	-0.067	-0.148	11111	2.15	38403.9404	44444	1770	5.038	-0.154	-0.887	-0.039	-0.155	11111	1.19	38425.7163	44444
1641	3.197	-0.147	-0.673	-0.070	-0.175	11111	1.38	38404.5657	44444	1770	5.021	-0.151	-0.847	-0.057	-0.180	11111	1.70	38481.6535	33333
1641	3.187	-0.155	-0.665	-0.058	-0.162	11111	1.03	38404.5701	44444	1770	5.000	-0.143	-0.882	-0.034	-0.186	11111	1.16	38790.6997	22222
1641	3.233	-0.192	-0																

CATALINA UBVRi DATA										CATALINA UBVRi DATA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
1810	4.880	-0.130	-0.768	-0.050	-0.145	11111	1.07	38328.9934	44444	1855	4.612	-0.258	-1.159	-0.134	-0.274	11111	1.30	38388.7903	44444
1810	4.932	-0.142	-0.788	-0.030	-0.147	11111	1.08	38425.7334	44444	1855	4.627	-0.258	-1.138	-0.115	-0.266	11111	1.45	38388.8489	44444
1810	4.858	-0.137	-0.755	-0.078	-0.164	11111	1.66	38480.6875	44444	1855	4.598	-0.271	-1.012	-0.171	-0.250	11111	2.39	38388.9297	44444
1811	4.566	-0.200	-0.926	-0.117	-0.209	11111	1.18	38063.7016	12121	1855	4.659	-0.253	-1.055	-0.091	-0.289	11111	1.84	38391.6504	44444
1811	4.640	-0.205	-0.929	-0.080	-0.215	11111	1.31	38425.7551	44444	1855	4.608	-0.256	-1.056	-0.156	-0.279	11111	1.54	38392.6815	44444
1811	4.617	-0.238	-0.923	-0.088	-0.250	11111	1.25	38464.6332	44444	1855	4.582	-0.255	-1.056	-0.172	-0.278	11111	1.30	38392.7761	44444
1811	4.568	-0.178	-0.965	-0.113	-0.212	11111	1.17	38790.7093	22222	1855	4.613	-0.279	-1.051	-0.114	-0.251	11111	2.70	38392.9296	44444
1811	4.562	-0.193	-0.936	-0.117	-0.225	11111	1.49	38791.7832	44444	1855	4.652	-0.278	-1.064	-0.117	-0.268	11111	2.07	38397.6182	44444
1820	6.369	-0.146	-0.760	-0.096	-0.196	11111	1.30	38728.7721	44444	1855	4.609	-0.262	-1.069	-0.120	-0.263	11111	1.30	38397.7587	44444
1820	6.433	-0.197	-0.731	-0.031	-0.165	11111	1.55	38729.9569	44444	1855	4.586	-0.255	-1.058	-0.147	-0.233	11111	2.15	38397.8937	44444
1829	2.820	0.822	0.492	0.000	0.000	11100	1.75	38440.6770	44400	1855	4.632	-0.235	-1.040	-0.105	-0.265	11111	1.45	38398.5902	44444
1829	2.813	0.815	0.601	0.000	0.000	11100	1.69	38453.6208	44400	1855	4.608	-0.276	-1.076	-0.137	-0.285	11111	1.31	38398.7815	44444
1830	5.789	1.196	0.979	0.852	0.591	11111	1.29	38371.8641	44444	1855	4.635	-0.268	-1.039	-0.084	-0.270	11111	2.16	38400.6048	44444
1830	5.718	1.102	0.999	0.805	0.554	11111	1.25	38388.8011	44444	1855	4.616	-0.254	-1.072	-0.093	-0.262	11111	1.33	38400.7791	44444
1833	5.820	-0.232	-0.832	-0.058	-0.173	11111	1.18	38727.8776	22222	1855	4.631	-0.262	-1.061	-0.111	-0.262	11111	2.21	38403.5940	44444
1833	5.740	-0.176	-0.851	-0.095	-0.220	11111	1.49	38728.7369	44444	1855	4.635	-0.260	-1.084	-0.079	-0.264	11111	2.30	38403.7496	44444
1833	5.786	-0.207	-0.856	-0.053	-0.197	11111	1.27	38756.7014	22222	1855	4.641	-0.258	-1.059	-0.107	-0.270	11111	2.15	38404.5946	44444
1833	5.773	-0.188	-0.838	-0.052	-0.204	11111	1.38	38763.6581	44444	1855	4.626	-0.276	-1.044	-0.106	-0.263	11111	2.40	38406.5779	43333
1839	4.184	-0.119	-0.525	-0.061	-0.148	11111	1.15	38303.9688	12221	1855	4.623	-0.254	-1.053	-0.141	-0.258	11111	1.52	38408.8066	44444
1839	4.259	-0.130	-0.569	-0.037	-0.155	11111	1.30	38425.7653	44444	1855	4.625	-0.277	-1.075	-0.093	-0.297	11111	1.30	38415.7039	44444
1839	4.157	-0.131	-0.585	0.000	0.000	11100	1.23	38439.7095	44000	1855	4.632	-0.259	-1.070	-0.090	-0.264	11111	1.36	38416.6565	22222
1839	4.173	-0.130	-0.569	-0.111	-0.222	11111	1.14	38720.9026	44444	1855	4.608	-0.276	-1.076	-0.137	-0.285	11111	1.31	38419.7136	44444
1839	4.238	-0.110	-0.600	0.084	-0.249	11111	1.50	38723.9805	44444	1855	4.614	-0.267	-1.039	-0.154	-0.268	11111	2.20	38419.8361	44444
1839	4.213	-0.132	-0.571	-0.052	-0.158	11111	1.12	38786.6952	44444	1855	4.718	-0.266	-1.050	-0.106	-0.280	11111	1.78	38420.5762	44444
1839	4.217	-0.140	-0.549	-0.043	-0.145	11111	1.27	39129.6685	44444	1855	4.580	-0.279	-1.058	-0.168	-0.284	11111	1.31	38420.7099	44444
1840	6.328	-0.206	-0.848	-0.054	-0.188	11111	1.35	38705.9478	44444	1855	4.595	-0.261	-1.061	-0.157	-0.268	11111	2.26	38420.8366	44444
1840	6.338	-0.204	-0.850	-0.114	-0.172	11111	1.42	38708.9642	44444	1855	4.630	-0.260	-1.070	-0.110	-0.260	11111	1.39	38421.6324	22222
1840	6.306	-0.160	-0.839	-0.062	-0.208	11111	1.33	38763.7837	44444	1855	4.600	-0.287	-1.050	-0.152	-0.266	11111	2.59	38424.8388	44444
1842	5.456	-0.162	-0.828	-0.059	-0.185	11111	1.21	38720.9204	44444	1855	4.655	-0.254	-1.071	-0.110	-0.267	11111	1.40	38425.6899	44444
1842	5.465	-0.169	-0.810	-0.042	-0.304	11111	1.43	38723.9649	44444	1855	4.620	-0.275	-1.056	-0.107	-0.266	11111	2.59	38425.8359	44444
1842	5.457	-0.174	-0.837	-0.089	-0.192	11111	1.15	38786.7041	44444	1855	4.601	-0.256	-1.075	-0.137	-0.274	11111	1.31	38427.6878	44444
1843	4.765	0.340	-0.447	0.382	0.255	11111	1.12	38083.7022	44444	1855	4.588	-0.269	-1.077	-0.155	-0.264	11111	2.39	38431.8122	44444
1843	4.774	0.355	-0.437	0.365	0.279	11111	1.02	38303.9763	12221	1855	4.698	-0.239	-1.057	-0.130	-0.251	11111	1.38	38432.6050	44444
1845	4.409	2.107	2.229	1.805	1.514	11111	1.04	38303.9842	12221	1855	4.614	-0.259	-1.065	-0.134	-0.280	11111	1.32	38432.6848	44444
1845	4.346	2.037	2.173	1.713	1.422	11111	1.03	38308.0147	44444	1855	4.634	-0.259	-1.075	-0.145	-0.288	11111	1.38	38438.6938	44444
1845	4.293	2.047	2.230	1.754	1.410	11111	1.11	38343.8357	44444	1855	4.634	-0.279	-1.037	-0.187	0.000	11110	2.49	38438.7965	44444
1848	6.213	-0.182	-0.754	-0.048	-0.169	11111	1.30	38705.8866	44444	1855	4.654	-0.268	-1.077	-0.094	-0.278	11111	1.31	38439.6168	44444
1848	6.199	-0.171	-0.730	-0.063	-0.182	11111	1.29	38708.8862	44444	1855	4.615	-0.278	-1.066	-0.108	-0.275	11111	1.36	38439.6838	44444
1852	2.191	-0.198	-1.033	-0.085	-0.224	11111	1.19	38303.9935	12221	1855	4.612	-0.258	-1.060	-0.147	-0.250	11111	2.77	38439.8032	44444
1852	2.226	-0.210	-1.068	-0.094	-0.209	11111	1.22	38404.7748	44444	1855	4.645	-0.271	-1.065	-0.123	-0.274	11111	1.30	38440.6357	44444
1852	2.160	-0.221	-1.095	0.000	0.000	11100	1.32	38439.7131	44000	1855	4.621	-0.257	-1.076	-0.140	-0.266	11111	1.37	38440.6866	44444
1852	2.229	-0.210	-1.035	-0.093	-0.204	11111	1.62	38728.9674	44444	1855	4.604	-0.273	-1.052	-0.158	-0.262	11111	2.39	38440.7877	44444
1852	2.249	-0.231	-1.046	-0.056	-0.215	11111	1.37	38729.9296	44444	1855	4.654	-0.261	-1.069	-0.086	-0.254	11111	1.33	38441.6228	44444
1855	4.609	-0.238	-1.100	-0.097	-0.242	11111	1.28	37668.7151	22222	1855	4.627	-0.260	-1.078	-0.095	-0.275	11111	1.40	38441.6926	44444
1855	4.617	-0.251	-1.082	-0.094	-0.262	11111	1.27	37670.7183	22222	1855	4.588	-0.285	-1.055	-0.155	-0.262	11111	1.44	38441.7884	44444
1855	4.638	-0.256	-1.063	-0.115	-0.252	11111	1.46	37673.6378	22222	1855	4.598	-0.255	-1.055	-0.095	-0.275	11111	1.40	38443.6439	44444
1855	4.618	-0.254	-1.080	-0.049	-0.268	11111	1.27	37673.7020	22222	1855	4.617	-0.273	-1.062	-0.134	-0.277	11111	1.56	38443.7177	44444
1855	4.637	-0.252	-1.057	-0.032	-0.265	11111	1.38	37673.7787	22222	1855	4.592	-0.277	-1.052	-0.165	-0.255	11111	2.49	38443.7832	44444
1855	4.656	-0.254	-1.083	-0.056	-0.265	11111	1.28	37692.6838	22222	1855	4.649	-0.262	-1.075	-0.115	-0.275	11111	1.30	38444.6353	44444
1855	4.606	-0.273	-1.043	-0.128	-0.255	11111	1.84	37692.7892	22222	1855	4.611	-0.272	-1.055	-0.120	-0.278	11111	1.48	38444.7022	44444
1855	4.615	-0.270	-1.073	-0.079	-0.265	11111	1.40	37693.5968	22222	1855	4.650	-0.268	-1.062	-0.141	-0.271	11111	1.34	38446.6580	44444
1855	4.615	-0.268	-1.093	-0.073	-0.262	11111	1.27	37714.6112	22222	1855	4.627	-0.255	-1.071	-0.142	-0.283	11111	1.48	38446.6968	44444
1855	4.618	-0.273	-1.080	-0.055	-0.261	11111	1.31	37719.6294	22222	1855	4.587	-0.304	-1.079	-0.144	-0.257	11111	2.73	38446.7832	44444
1855	4.611	-0.258	-1.076	-0.080	-0.274	11111	1.28	37720.6552	22222	1855	4.621	-0.272	-1.086	-0.135	-0.275	11111	1.35	38448.6562	44444
1855	4.611	-0.252	-1.071	-0.117	-0.271	11111	1.47	38103.6334	44444	1855	4.609	-0.271	-1.046	-0.167	-0.243	11111	2.50	38448.7498	44444
1855	4.636	-0.280	-1.033	-0.108	-0.281	11111	1.45	38112.6042	44444	1855	4.611	-0.282	-1.099	-0.168	-0.256	11111	2.43	38449.7646	44444
1855	4.629	-0.254	-1.078	-0.143	-0.255	11111	1.45	38113.6018	44444	1855	4.637	-0.279	-1.077	-0.126	-0.280	11111	1.32	38450.3666	44444
1855	4.628	-0.254	-1.038	-0.127															

TABLE 4 CATALINA UBVRi OBSERVATIONS

CATALINA UBVRi DATA										CATALINA UBVRi DATA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
1855	4.602	-0.255	-1.054	-0.136	-0.256	11111	1.36	38699.8819	22222	1855	4.626	-0.257	-1.056	-0.111	-0.246	11111	2.00	39034.8779	44444
1855	4.613	-0.281	-1.047	-0.106	-0.241	11111	2.48	38700.7688	44444	1855	4.595	-0.239	-1.069	-0.137	-0.250	11111	1.30	39035.0078	44444
1855	4.627	-0.267	-1.070	0.000	0.000	11100	2.56	38703.7576	44400	1855	4.625	-0.262	-1.071	-0.106	-0.249	11111	1.97	39035.8772	44444
1855	4.651	-0.240	-1.062	0.000	0.000	11100	1.31	38703.8927	44400	1855	4.609	-0.257	-1.047	-0.130	-0.274	11111	1.30	39036.8459	44444
1855	4.633	-0.261	-1.055	-0.129	-0.249	11111	1.95	38705.7822	44400	1855	4.646	-0.255	-1.092	-0.093	-0.260	11111	2.55	39036.0069	44444
1855	4.626	-0.274	-1.042	-0.126	-0.264	11111	1.92	38708.7763	44444	1855	4.621	-0.248	-1.069	-0.127	-0.256	11111	1.30	39036.9976	44444
1855	4.648	-0.226	-1.115	-0.066	-0.255	11111	1.31	38708.9181	44444	1855	4.623	-0.260	-1.076	-0.103	-0.268	11111	1.30	39038.0165	44444
1855	4.648	-0.275	-1.066	-0.099	-0.258	11111	1.91	38711.7689	44444	1855	4.639	-0.258	-1.042	-0.094	-0.263	11111	2.48	39038.8432	44444
1855	4.588	-0.237	-1.076	-0.127	-0.277	11111	1.36	38711.9377	44444	1855	4.631	-0.263	-1.052	-0.115	-0.263	11111	2.44	39041.8365	44444
1855	4.637	-0.267	-1.065	-0.104	-0.259	11111	1.98	38712.7608	44444	1855	4.635	-0.252	-1.085	-0.095	-0.252	11111	1.30	39042.0031	44444
1855	4.589	-0.246	-1.054	-0.109	-0.255	11111	1.31	38712.9091	44444	1855	4.635	-0.263	-1.006	-0.134	-0.270	11111	2.18	39042.8452	44444
1855	4.625	-0.275	-1.075	-0.109	-0.265	11111	2.03	38719.7386	44444	1855	4.632	-0.242	-1.082	-0.098	-0.268	11111	1.30	39042.9825	44444
1855	4.592	-0.225	-1.094	-0.113	-0.267	11111	1.30	38719.8836	44444	1855	4.644	-0.260	-1.041	-0.098	-0.266	11111	2.33	39045.8303	44444
1855	4.623	-0.284	-1.071	-0.109	-0.266	11111	2.09	38720.7521	44444	1855	4.610	-0.251	-1.075	-0.113	-0.269	11111	1.34	39045.9436	44444
1855	4.617	-0.299	-1.040	-0.132	-0.251	11111	1.35	38721.8266	22222	1855	4.630	-0.271	-1.083	-0.114	-0.262	11111	1.94	39055.8241	44444
1855	4.628	-0.300	-1.042	-0.084	-0.275	11111	1.98	38722.7340	22222	1855	4.605	-0.248	-1.068	-0.114	-0.262	11111	1.30	39055.9531	44444
1855	4.637	-0.246	-1.100	-0.114	-0.245	11111	1.31	38722.8453	22222	1855	4.621	-0.246	-1.076	-0.111	-0.251	11111	1.66	39056.8468	44444
1855	4.632	-0.261	-1.093	-0.113	-0.248	11111	1.31	38722.8653	22222	1855	4.616	-0.254	-1.064	-0.131	-0.254	11111	1.32	39056.9221	44444
1855	4.616	-0.243	-1.067	-0.119	-0.251	11111	1.31	38723.8619	44444	1855	4.621	-0.231	-1.088	-0.131	-0.252	11111	1.40	39057.0069	44444
1855	4.661	-0.300	-1.077	-0.085	-0.284	11111	2.41	38724.0127	44444	1855	4.624	-0.264	-1.038	-0.125	-0.253	11111	2.01	39057.8140	44444
1855	4.613	-0.272	-1.074	-0.098	-0.264	11111	1.32	38725.8811	22222	1855	4.610	-0.239	-1.077	-0.139	-0.257	11111	1.30	39057.9419	44444
1855	4.597	-0.270	-1.066	-0.106	-0.256	11111	1.64	38727.7499	22222	1855	4.630	-0.269	-1.055	-0.122	-0.258	11111	1.46	39058.0182	44444
1855	4.639	-0.263	-1.071	-0.110	-0.248	11111	1.34	38727.8855	22222	1855	4.618	-0.255	-1.058	-0.130	-0.234	11111	2.19	39058.8012	44444
1855	4.601	-0.260	-1.048	0.000	0.000	11100	2.10	38728.7098	44400	1855	4.609	-0.274	-1.055	-0.132	-0.253	11111	1.47	39058.8703	44444
1855	4.609	-0.263	-1.048	-0.147	-0.268	11111	1.92	38728.7215	44444	1855	4.618	-0.283	-1.042	-0.148	-0.263	11111	1.37	39058.9932	44444
1855	4.614	-0.260	-1.065	0.000	0.000	11100	1.30	38728.8597	44400	1855	4.609	-0.266	-1.059	-0.106	-0.274	11111	1.74	39059.8298	22222
1855	4.642	-0.260	-1.044	-0.077	-0.264	11111	2.76	38728.9257	44444	1855	4.625	-0.264	-1.056	-0.113	-0.235	11111	1.46	39060.0119	22222
1855	4.613	-0.265	-1.071	0.000	0.000	11100	1.31	38729.8257	22200	1855	4.617	-0.254	-1.052	-0.118	-0.244	11111	1.70	39060.8316	44444
1855	4.630	-0.251	-1.078	-0.104	-0.263	11111	1.30	38729.8416	44444	1855	4.607	-0.279	-1.068	-0.122	-0.256	11111	1.60	39061.0218	44444
1855	4.624	-0.260	-1.088	0.000	0.000	11100	1.32	38729.8681	22200	1855	4.620	-0.261	-1.035	-0.105	-0.231	11111	1.60	39062.8468	44444
1855	4.540	-0.257	-1.059	-0.190	-0.230	11111	2.15	38729.9843	44400	1855	4.626	-0.262	-1.062	-0.105	-0.252	11111	1.56	39062.0247	44444
1855	4.627	-0.246	-1.094	0.000	0.000	11100	1.30	38738.8174	22200	1855	4.619	-0.280	-1.036	-0.122	-0.236	11111	1.81	39062.8155	44444
1855	4.581	-0.222	-1.096	0.000	0.000	11100	1.38	38740.7622	22200	1855	4.618	-0.254	-1.062	-0.120	-0.244	11111	1.50	39063.0122	44444
1855	4.614	-0.241	-1.063	0.000	0.000	11100	1.32	38740.8442	22200	1855	4.635	-0.254	-1.054	-0.110	-0.240	11111	1.74	39063.8191	44444
1855	4.630	-0.245	-1.057	0.000	0.000	11100	1.31	38741.6785	44400	1855	4.608	-0.294	-1.055	-0.144	-0.248	11111	1.54	39064.0160	44444
1855	4.652	-0.323	-1.009	-0.110	-0.243	11111	2.03	38741.8313	44400	1855	4.615	-0.253	-1.049	-0.136	-0.249	11111	1.84	39064.8071	44444
1855	4.760	-0.303	-1.087	0.000	0.000	11100	1.35	38742.7113	22200	1855	4.602	-0.274	-1.060	-0.135	-0.240	11111	1.44	39064.9948	44444
1855	4.575	-0.309	-1.065	0.000	0.000	11100	1.30	38742.8083	22200	1855	4.577	-0.254	-1.039	-0.117	-0.238	11111	1.96	39065.7954	44444
1855	4.559	-0.262	-1.092	0.000	0.000	11100	1.30	38742.8083	22200	1855	4.744	-0.246	-1.015	-0.107	-0.244	11111	1.44	39065.9928	44444
1855	4.616	-0.245	-1.061	0.000	0.000	11100	1.41	38747.7349	22200	1855	4.628	-0.259	-1.023	-0.148	-0.246	11111	2.25	39066.7765	44444
1855	4.601	-0.272	-1.062	-0.130	-0.265	11111	1.71	38756.6632	22200	1855	4.630	-0.267	-1.078	-0.122	-0.245	11111	1.44	39066.9894	44444
1855	4.659	-0.249	-1.077	-0.090	-0.255	11111	1.33	38756.7406	22222	1855	4.627	-0.261	-1.052	-0.101	-0.256	11111	2.09	39068.7791	44444
1855	4.625	-0.260	-1.051	-0.115	-0.262	11111	2.16	38763.6109	44400	1855	4.588	-0.252	-1.074	-0.153	-0.251	11111	1.31	39096.8543	44444
1855	4.598	-0.256	-1.079	0.000	0.000	11100	1.31	38763.7722	22200	1855	4.618	-0.271	-1.033	-0.125	-0.268	11111	2.20	39098.6133	44444
1855	4.602	-0.238	-1.075	-0.120	-0.261	11111	1.44	38763.8203	44400	1855	4.628	-0.250	-1.077	-0.113	-0.253	11111	1.30	39098.8429	44444
1855	4.630	-0.268	-1.048	-0.112	-0.263	11111	2.02	38764.6165	44400	1855	4.619	-0.242	-1.079	-0.122	-0.251	11111	1.44	39098.9030	44444
1855	4.624	-0.235	-1.098	0.000	0.000	11100	1.31	38771.7521	44400	1855	4.618	-0.273	-1.057	-0.124	-0.251	11111	2.53	39099.6747	44444
1855	4.627	-0.248	-1.066	-0.131	-0.256	11111	1.50	38773.8042	44400	1855	4.626	-0.270	-1.060	-0.109	-0.249	11111	2.35	39099.6789	44444
1855	4.630	-0.260	-1.070	-0.110	-0.260	11111	1.32	38782.7283	22222	1855	4.641	-0.273	-1.042	-0.114	-0.262	11111	1.88	39128.6298	44444
1855	4.627	-0.261	-1.065	-0.110	-0.260	11111	1.98	38782.8268	44444	1855	4.624	-0.273	-1.076	-0.119	-0.259	11111	1.36	39128.7961	44444
1855	4.623	-0.259	-1.078	-0.131	-0.260	11111	1.51	38786.6073	44444	1855	4.612	-0.238	-1.078	-0.122	-0.252	11111	2.07	39128.8876	44444
1855	4.619	-0.247	-1.079	-0.106	-0.274	11111	1.30	38786.6828	44444	1855	4.623	-0.264	-1.058	-0.116	-0.253	11111	1.90	39129.6255	44444
1855	4.647	-0.282	-1.050	-0.097	-0.265	11111	2.39	38786.8399	44444	1855	4.618	-0.257	-1.072	-0.116	-0.251	11111	1.30	39129.7376	44444
1855	4.615	-0.255	-1.058	-0.152	-0.170	11110	1.32	38787.7104	44400	1861	5.344	-0.188	-0.934	-0.010	-0.187	11111	1.20	37593.9075	22222
1855	4.628	-0.290	-1.075	-0.137	-0.271	11111	2.43	38787.8387	44444	1861	5.347	-0.208	-0.924	-0.037	-0.167	11111	3.51	37594.7400	22222
1855	4.637	-0.259	-1.078	-0.110	-0.271	11111	1.33	38789.6508	44444	1861	5.343	-0.175	-0.932	-0.050	-0.180	11111	1.27	37594.8761	22222
1855	4.636	-0.283	-1.050	-0.094	-0.259	11111	2.28	38789.8271	44444	1861	5.350	-0.180	-0.923	-0.078	-0.168	11111	1.32	37595.8573	22222
1855	4.600	-0.236	-1.0																

TABLE 4 CATALINA UBVRi OBSERVATIONS

CATALINA UBVRi DATA											CATALINA UBVRi DATA										
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.		B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	
1890	6.552	-0.131	-0.770	-0.068	-0.102	11111	1.32	38670.9573	44444		1938	6.060	0.056	-0.232	0.117	0.046	11111	1.61	39036.8383	44444	
1890	6.535	-0.132	-0.771	-0.022	-0.139	11111	1.52	38671.9110	44444		1938	6.037	0.043	-0.189	0.102	0.040	11111	1.02	39037.9707	44444	
1890	6.549	-0.135	-0.752	-0.063	-0.178	11111	1.58	38795.7691	44444		1938	6.049	0.062	-0.209	0.134	0.038	11111	1.31	39045.8517	44444	
1891	6.255	-0.140	-0.699	0.001	-0.179	11111	1.30	38670.9658	44444		1938	6.022	0.074	-0.218	0.097	-0.056	11111	1.07	39065.0012	44444	
1891	6.240	-0.153	-0.708	-0.018	-0.170	11111	1.48	38671.9181	44444		1946	4.845	-0.115	-0.640	-0.015	-0.112	11111	1.04	38327.9598	22222	
1892	4.630	-0.217	-0.946	-0.048	-0.185	11111	1.26	38451.6196	44444		1946	4.847	-0.128	-0.645	0.000	0.000	11100	1.29	38452.7193	22200	
1892	4.613	-0.203	-0.937	-0.067	-0.166	11111	1.51	38440.6417	22222		1946	4.895	-0.115	-0.621	0.000	0.000	11100	1.19	38453.6944	44400	
1892	4.566	-0.179	-0.930	-0.105	-0.182	11111	1.35	38449.6507	44444		1948	1.713	-0.210	-1.078	-0.083	-0.185	11111	1.22	38327.9718	22222	
1892	4.566	-0.175	-0.944	-0.064	-0.185	11111	1.35	38712.8347	44444		1948	1.757	-0.212	-1.058	0.000	0.000	11100	1.38	38451.6913	44400	
1892	4.533	-0.174	-0.939	-0.098	-0.206	11111	1.49	38719.7867	44444		1948	1.748	-0.222	-1.022	-0.086	-0.194	11111	1.49	38483.6220	22222	
1892	4.598	-0.188	-0.935	-0.081	-0.174	11111	1.35	38789.7413	44444		1948	3.052	-0.193	-1.025	-0.101	-1.119	01110	2.60	38496.6602	44444	
1893	6.727	0.005	-0.871	0.293	0.205	11111	1.31	37673.6669	22222		1948	1.769	-0.229	-1.039	-0.079	-0.200	11111	1.38	38849.6017	44444	
1893	6.706	-0.001	-0.859	0.322	0.223	11111	1.30	37692.7176	22222		1963	4.887	1.178	1.049			11100	1.24	38337.9809	22222	
1895	5.105	-0.005	-0.733	0.195	0.228	11111	1.51	37565.9199	22222		1963	4.885	1.184	1.077	0.867	0.595	11111	1.17	38339.9361	44444	
1895	5.103	0.005	-0.950	0.235	0.176	11111	1.44	37569.9208	22222		1963	4.904	1.167	1.071	0.899	0.619	11111	1.18	38343.8827	44444	
1895	5.149	-0.008	-0.924	0.212	0.170	11111	1.38	37673.6489	22222		1983	3.582	0.483	0.027	0.000	0.000	11100	1.80	38440.6819	44400	
1895	5.138	-0.011	-0.952	0.232	0.142	11111	1.27	37492.7023	22222		1983	3.577	0.484	0.097	0.000	0.000	11100	1.74	38453.6243	44400	
1895	4.606	0.021	-0.891	0.248	0.250	11111	1.36	37692.7331	22222		1995	4.526	0.958	0.683	0.733	0.490	11111	1.01	38310.9961	44444	
1895	4.563	0.076	-0.838	0.192	0.166	11111	1.48	38669.9269	44444		1995	4.515	0.941	0.713	0.743	0.510	11111	1.03	38369.7987	44444	
1896	6.720	0.067	-0.802	0.298	0.195	11111	1.34	37673.6576	22222		1995	4.498	0.933	0.708	0.720	0.481	11111	1.03	38397.8036	44444	
1896	6.703	0.086	-0.826	0.054	-0.040	11100	1.28	37692.7088	22222		1995	4.553	0.915	0.690	0.724	0.483	11111	1.12	38469.6585	44444	
1896	6.690	0.077	-0.832	0.282	0.191	11111	1.33	37692.7258	22222		1998	3.533	0.106	0.145	0.000	0.000	11100	1.48	38453.6278	44400	
1897	5.070	-0.088	-0.943	0.145	0.003	11111	1.24	37673.7044	22222		1998	3.538	0.084	0.055	0.120	0.018	11111	1.49	38682.9596	44444	
1897	5.069	-0.070	-0.935	0.149	0.002	11111	1.35	37673.7866	22222		1998	3.556	0.099	0.063	0.121	0.043	11111	1.48	38700.9160	44444	
1897	5.055	-0.095	-0.944	0.081	0.010	11111	1.39	37692.7409	22222		1998	3.605	0.049	0.065	0.139	-0.003	11111	1.65	38782.7775	22222	
1897	5.022	-0.062	-0.938	0.113	0.001	11111	1.43	38669.9351	44444		1998	3.550	0.076	0.105	0.053	0.053	11111	1.49	38784.7285	44444	
1897	5.077	-0.097	-0.943	0.124	-0.001	11111	1.32	38712.9370	44444		2004	2.072	-0.189	-1.005	0.069	-0.040	11100	1.36	37719.6427	22222	
1897	5.024	-0.077	-0.895	0.084	-0.035	11111	1.28	38719.8504	44444		2004	2.061	-0.177	-1.004	-0.000	-0.171	11111	1.31	37720.5980	22222	
1897	5.104	-0.119	-0.920	0.070	-0.022	11111	1.28	38789.6623	44444		2004	2.053	-0.160	-0.984	-0.044	-0.166	11111	1.50	38434.8443	44444	
1898	6.334	-0.130	-0.695	0.016	-0.166	11111	1.28	38670.9752	44444		2004	2.053	-0.187	-1.006	0.000	0.000	11100	1.41	38459.6416	44400	
1898	6.288	-0.122	-0.735	-0.034	-0.164	11111	1.44	38671.9250	44444		2010	4.885	-0.055	-0.158	0.028	-0.083	11111	1.13	37594.0114	22222	
1898	6.316	-0.125	-0.702	-0.042	-0.142	11111	1.38	38786.7592	44444		2010	4.900	-0.068	-0.145	0.000	0.000	11100	1.34	38452.7279	22200	
1899	2.781	-0.225	-1.060	-0.037	-0.113	11111	1.61	37545.9094	22222		2010	4.940	-0.098	-0.065	0.000	0.000	11100	1.21	38453.6978	44400	
1899	2.791	-0.237	-1.062	-0.079	-0.091	11111	1.51	37569.9121	22222		2011	4.752	1.632	1.964	1.366	1.089	11111	1.00	38311.0027	44444	
1899	2.751	-0.226	-1.068	-0.102	-0.228	11111	1.33	37670.7832	22222		2011	4.724	1.614	1.890	0.000	0.000	11100	1.22	38452.7330	22200	
1899	2.769	-0.246	-1.056	-0.090	-0.183	11111	1.82	38339.7928	44444		2011	4.819	1.586	2.105	0.000	0.000	11100	1.16	38453.7170	44400	
1899	2.774	-0.226	-1.060	0.000	0.000	11100	1.49	38441.7199	44400		2012	3.971	1.141	1.089	0.833	0.575	11111	1.01	38327.9822	22222	
1899	2.752	-0.242	-1.082	-0.086	-0.200	11111	1.60	38706.0117	44444		2012	3.970	1.127	1.097	0.000	0.000	11100	1.27	38450.7521	22200	
1899	2.787	-0.251	-1.065	-0.053	-0.212	11111	1.64	38712.9984	44444		2012	4.012	1.111	1.283	0.000	0.000	11100	1.15	38453.7129	44400	
1900	6.434	-0.104	-0.640	0.031	-0.117	11111	1.27	38674.9562	44444		2018	6.216	1.781	2.063	1.536	1.414	11111	1.03	38337.9725	22222	
1900	6.371	-0.122	-0.668	-0.022	-0.134	11111	1.31	38675.9405	44444		2018	6.230	1.742	2.068	1.571	1.357	11111	1.00	38339.9433	44444	
1900	6.399	-0.129	-0.610	-0.036	-0.126	11111	1.50	38786.7859	44444		2029	4.980	0.053	0.157	0.104	0.022	11111	1.10	38327.9916	22222	
1901	5.258	0.243	0.155	0.286	0.142	11111	1.31	38451.6538	44444		2029	5.014	0.045	0.077	0.000	0.000	11100	1.12	38459.6500	44400	
1903	1.682	-0.188	-1.023	-0.109	-0.186	11111	1.25	38098.6214	44444		2034	4.561	0.010	0.044	0.047	0.002	11111	1.03	38328.0024	22222	
1903	1.680	-0.170	-1.050	-0.075	-0.172	11111	1.25	38404.7820	44444		2034	4.587	-0.045	0.055	0.000	0.000	11100	1.04	38459.6458	44400	
1903	1.707	-0.172	-1.021	0.000	0.000	11100	1.42	38441.7250	44400		2034	4.637	-0.041	0.038	0.016	0.003	11111	1.53	38509.6210	44444	
1903	1.709	-0.174	-1.008	0.000	0.000	11100	1.46	38452.7026	22200		2034	4.592	-0.013	-0.026	0.056	0.000	11111	1.08	38784.7797	44444	
1903	1.714	-0.193	-1.035	-0.032	-0.169	11111	1.21	38676.0174	44444		2035	3.798	0.983	0.735	0.000	0.000	11100	1.84	38440.7105	44400	
1903	1.702	-0.220	-1.031	0.003	-0.160	11111	1.77	38712.0270	44444		2035	3.904	0.974	0.692	0.000	0.000	11100	1.67	38456.6037	44400	
1903	1.640	-0.169	-1.019	-0.092	-0.176	11111	1.74	38720.0027	44444		2047	4.380	0.618	0.067	0.504	0.322	11111	1.19	38083.7240	44444	
1903	1.703	-0.157	-1.032	0.068	-0.279	11111	1.20	38723.8510	44444		2047	4.414	0.583	0.120	0.000	0.000	11100	1.43	38450.7617	44400	
1903	1.657	-0.154	-1.042	-0.099	-0.159	11111	1.20	38728.8539	44444		2047	4.413	0.595	0.093	0.000	0.000	11100	1.31	38452.7381	22200	
1903	1.718	-0.205	-1.000	-0.076	-0.161	11111	1.59	38803.7585	44444		2061	0.626	1.830	2.020	1.601	1.431	11111	1.15	38315.9475	44444	
1903	1.681	-0.162	-1.033	-0.080	-0.190	11111	1.28	38804.5851	22222		2061	0.656	1.891	2.077	1.632	1.441	11111	1.11	38316.9679	22221	
1903	1.702	-0.181	-1.005	-0.101	-0.193	11111	1.27	38822.7462	44444		2061	0.692	1.856	2.093	1.564	1.485	11111	1.12	38317.9629	44444	
1907	4.068	0.960	0.634	0.749	0.591	11111	1.25	38427.7610	44444		2061	0.635	1.857	2.106	1.644	1.271	11111	1.11	38397.7879	44444	
1907	4.092	0.943	0.691	0.																	

TABLE 4 CATALINA UBVRi OBSERVATIONS

CATALINA UBVRi DATA										CATALINA UBVRi DATA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
2128	4.947	-0.110	-0.571	-0.035	-0.083	11111	1.49	38066.7426	22211	2427	4.779	1.241	1.321	0.890	0.587	11111	1.02	38339.9513	44444
2128	4.956	-0.100	-0.570	-0.025	-0.087	11111	1.73	38408.8427	44444	2427	4.801	1.248	1.307	0.915	0.607	11111	1.06	38343.8919	44444
2128	4.926	-0.135	-0.606	0.000	0.000	11100	1.52	38432.7465	44400	2429	3.905	1.069	0.997	0.763	0.521	11111	1.61	38085.6592	44444
2134	4.149	0.857	0.501	0.687	0.442	11111	1.19	38083.7341	44444	2429	4.547	0.402	0.994	1.389	0.519	00001	1.76	38420.7951	44444
2134	4.150	0.880	0.536	0.675	0.453	11111	1.07	38302.9784	22221	2429	3.943	1.022	0.993	0.808	0.514	11111	1.65	38461.6551	22222
2135	4.628	0.281	-0.681	0.238	0.241	11111	1.18	37714.7208	22222	2443	4.401	1.177	1.024	0.866	0.608	11111	1.58	38085.6689	44444
2135	4.617	0.277	-0.690	0.317	0.200	11111	1.02	37719.6213	22222	2443	4.409	1.151	1.047	0.855	0.594	11111	1.77	38420.8035	44444
2135	4.602	0.323	-0.626	0.338	0.219	11111	1.10	38066.7499	22211	2443	4.397	1.135	1.044	0.861	0.580	11111	1.63	38461.6628	22222
2135	4.658	0.284	-0.665	0.341	0.217	11111	1.06	38302.9872	22221	2450	4.789	1.497	1.695	1.098	0.782	11111	1.68	38420.8137	44444
2155	4.677	0.072	-0.082	0.109	0.002	11111	1.76	38080.7287	44444	2450	5.083	1.487	1.559	0.900	0.000	01000	1.49	38456.6736	44400
2155	4.676	0.058	0.058	0.086	0.0	11111	1.49	38343.9027	44444	2450	4.827	1.488	1.658	0.000	0.000	11100	1.47	38459.6542	44400
2155	4.662	0.033	0.003	0.089	-0.010	11111	1.69	38682.9747	44444	2456	4.659	-0.224	-1.080	-0.103	-0.227	11111	1.10	37593.9436	22222
2159	4.425	-0.139	-0.692	-0.068	-0.158	11111	1.06	38085.6508	44444	2456	4.653	-0.222	-1.082	-0.083	-0.223	11111	1.09	37593.9545	22222
2159	4.408	-0.156	-0.651	-0.041	-0.172	11111	1.08	38302.9950	22221	2456	4.648	-0.227	-1.084	-0.121	-0.223	11111	1.25	37692.8049	22222
2198	4.918	-0.123	-0.582	-0.015	-0.138	11111	1.06	38303.0084	22221	2456	4.646	-0.245	-1.071	-0.097	-0.210	11111	1.08	38063.7243	12121
2198	4.927	-0.121	-0.589	-0.021	-0.138	11111	1.05	38343.9127	44444	2456	4.642	-0.229	-1.035	-0.064	-0.208	11111	1.31	38091.7795	12222
2199	4.544	-0.146	-0.684			11100	1.10	38080.7011	44444	2456	4.678	-0.257	-1.052	0.000	0.000	11100	1.36	38450.7663	44400
2199	4.450	-0.163	-0.647	-0.054	-0.168	11111	1.08	38303.0020	22221	2456	4.672	-0.266	-1.075	0.000	0.000	11100	1.14	38451.7954	44400
2199	4.445	-0.191	-0.654	-0.050	-0.140	11111	1.06	38369.8373	44444	2467	6.363	-0.031	-0.943	0.060	-0.060	11111	1.15	37593.9354	22222
2209	4.759	0.073	-0.034	0.088	0.017	11111	1.26	38085.6784	44444	2467	6.389	-0.048	-0.913	0.086	-0.046	11111	1.56	37693.5814	22222
2209	4.830	0.000	0.019	0.074	-0.030	11111	1.25	38368.8538	44444	2470	4.883	0.077	0.083	0.000	0.000	11100	1.30	38450.7827	44400
2209	4.794	0.020	0.009		-0.020	11101	1.43	38393.9294	33333	2470	4.863	0.074	0.068	0.000	0.000	11100	1.16	38451.7155	44400
2209	4.798	0.015	-0.001	0.047	-0.011	11111	1.55	38446.8194	44444	2473	2.973	1.453	1.479	1.007	0.618	11111	1.14	38109.6811	44444
2216	3.190	1.620	1.693	1.528	1.314	11111	1.09	38108.6425	44444	2473	2.994	1.406	1.405	0.000	0.000	11100	2.23	38393.6108	33333
2216	3.388	1.624	1.625	1.498	1.284	11111	1.02	38328.9790	44444	2473	3.026	1.370	1.452	0.000	0.000	11100	1.10	38393.8875	33333
2216	3.231	1.568	1.683	1.422	1.326	11111	1.56	38509.6322	44444	2473	2.963	1.379	1.457	0.000	0.000	11100	1.01	38396.8144	44444
2219	4.329	1.036	0.792	0.787	0.558	11111	1.00	38325.9739	22222	2473	2.951	1.401	1.458	0.000	0.000	11100	1.23	38396.9168	44444
2219	4.334	1.014	0.835	0.795	0.521	11111	1.01	38368.8434	44444	2473	2.987	1.395	1.469	0.959	0.627	11111	1.20	38411.8687	44444
2219	4.339	1.002	0.828	0.817	0.554	11111	1.00	38369.8443	44444	2473	2.985	1.397	1.505	0.000	0.000	11100	1.25	38452.7668	22200
2219	4.374	0.991	0.813	0.000	0.000	11100	1.45	38393.6430	33333	2478	4.483	1.173	1.128	0.870	0.605	11111	1.10	38345.9930	44444
2219	4.380	0.988	0.827	0.000	0.000	11100	1.02	38393.8313	33333	2478	4.495	1.158	1.182	0.000	0.000	11100	1.06	38441.6977	44400
2227	3.960	1.298	1.433	0.989	0.618	11111	1.28	38063.7112	12121	2478	4.488	1.156	1.191	0.000	0.000	11100	1.34	38450.7707	44400
2227	3.982	1.308	1.395	0.976	0.657	11111	1.29	38403.7810	44444	2484	3.350	0.418	0.048	0.000	0.230	11111	1.20	38419.8269	44444
2227	3.941	1.321	1.425	0.944	0.655	11111	1.32	38424.7468	44444	2484	3.330	0.430	0.051	0.390	0.231	11111	1.20	38460.7144	22222
2238	4.481	-0.004	0.015	0.052	-0.014	11111	1.16	38067.7538	44444	2484	3.354	0.410	0.067	0.390	0.233	11111	1.34	38475.7029	44444
2238	4.482	0.006	0.065	0.099	-0.005	11111	1.13	38403.7998	44444	2491	0.000	0.000	0.000	-0.021	-0.029	00011	1.70	38315.9626	44444
2238	4.475	0.008	0.030	0.037	-0.018	11111	1.53	38446.8287	44444	2491	-1.454	-0.004	-0.026	0.007	-0.044	11111	1.55	38316.6599	22221
2238	4.465	0.025	0.012	0.047	-0.027	11111	1.48	38448.8136	44444	2491	-1.425	-0.007	-0.011	0.043	-0.025	11111	1.60	38317.9182	44444
2240	6.250	0.455	-0.416	0.465	0.404	11111	1.10	37668.6884	22222	2491	-1.463	-0.018	-0.009	-0.032	-0.019	11111	1.52	38324.0078	44444
2244	5.017	-0.083	-0.243	0.039	-0.058	11111	1.46	38403.7898	44444	2506	4.454	1.106	1.028	0.789	0.554	11111	1.42	38419.8460	44444
2244	4.994	-0.104	-0.226	0.000	0.000	11100	1.58	38432.7507	44400	2506	4.417	1.111	1.031	0.792	0.443	11111	1.24	38461.6901	22222
2282	3.000	-0.187	-0.747	-0.038	-0.179	11111	2.19	38721.8769	22222	2506	4.447	1.125	1.098	0.756	0.518	11111	1.51	38481.6903	33433
2282	3.034	-0.220	-0.690	-0.045	-0.159	11111	2.17	38722.8816	22222	2527	4.556	1.353	1.663	0.998	0.710	11111	1.64	38446.8509	44444
2282	3.029	-0.147	-0.708	-0.057	-0.200	11111	2.23	38723.8616	44444	2527	4.546	1.373	1.656	1.047	0.699	11111	1.58	38448.8237	44444
2286	2.831	1.709	2.050	2.489	1.354	11101	1.12	38109.6548	44444	2527	4.558	1.358	1.667	1.013	0.719	11111	1.53	38450.7977	44444
2286	2.871	1.616	1.891	1.589	1.384	11111	1.05	38370.8181	44444	2538	3.942	-0.229	-0.926	-0.181	-0.183	11111	2.45	38108.6365	44444
2286	2.827	1.672	1.801	0.000	0.000	11100	1.08	38432.7548	44400	2540	3.609	0.103	0.178			11100	1.01	38079.6599	12221
2286	2.908	1.648	1.873	0.000	0.000	11100	1.39	38450.7787	44400	2540	3.625	0.115	0.123	0.073	0.081	11111	1.08	38080.7518	44444
2294	1.940	-0.246	-0.955	-0.157	-0.236	11111	1.60	38420.7551	44444	2540	3.839	0.085	0.151	0.376	0.502	01001	1.18	38419.8566	44444
2294	1.977	-0.230	-0.968	0.000	0.000	11100	1.66	38440.7201	44400	2540	3.605	0.098	0.150	0.132	0.077	11111	1.39	38431.8634	44444
2294	1.963	-0.240	-0.942	0.000	0.000	11100	1.72	38456.6882	44400	2560	4.347	0.854	0.513	0.678	0.441	11111	1.26	38420.8594	44444
2298	4.273	0.202	0.091	0.177	0.115	11111	1.17	38419.7735	44444	2560	4.355	0.843	0.515	0.643	0.435	11111	1.58	38446.8618	44444
2298	4.360	0.208	0.190	0.000	0.000	11100	1.34	38453.7291	44400	2560	4.344	0.848	0.518	0.636	0.431	11111	1.29	38450.7882	44444
2308	5.992	2.302	3.326	1.718	1.288	11111	1.10	38419.7831	44444	2564	4.662			0.320	0.226	10011	1.18	38067.7936	44444
2308	6.172	2.343	3.451	1.836	1.266	11111	1.33	38459.7348	22222	2564	4.635	0.302	0.058	0.297	0.194	11111	1.28	38420.8492	44444
2308	6.277	2.330	3.574	1.827	1.286	11111	1.20	38469.6810	44444	2564	4.656	0.308	0.085	0.000	0.000	11100	1.06	38441.7014	44400
2343	4.139	-0.136	-0.520	-0.017	-0.080	11111	1.06	38345.9812	44444	2571	4.812	-0.219	-0.962	-0.128	-0.224	11111	1.05	38263.7379	12121
2343	4.143	-0.144	-0.472	-0.037	-0.119	11111	1.50												

TABLE 4 CATALINA UBVRi OBSERVATIONS

CATALINA UBVRi DATA										CATALINA UBVRi DATA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
2653	3.028	-0.052	-0.780	0.015	-0.104	11111	1.82	38064.7544	44444	2852	4.163	0.314	-0.021	0.000	0.000	11100	1.04	38809.6554	44400
2653	2.983	-0.087	-0.807	-0.007	-0.066	11111	1.80	38345.9697	44444	2852	4.172	0.323	-0.002	0.000	0.000	11100	1.07	38810.7701	44400
2653	3.018	-0.088	-0.808	0.029	-0.082	11111	1.81	38369.8720	44444	2852	4.184	0.328	-0.018	0.000	0.000	11100	1.35	38810.8431	44400
2653	3.015	-0.102	-0.782	-0.002	-0.109	11111	1.91	38406.8402	43333	2852	4.208	0.328	-0.027	0.000	0.000	11100	1.05	38812.6423	22200
2657	4.099	-0.099	-0.476	-0.024	-0.079	11111	1.50	38085.6882	44444	2852	4.167	0.318	-0.022	0.295	0.177	11111	1.07	38818.6147	22222
2657	4.113	-0.111	-0.455	-0.003	-0.122	11111	1.49	38343.9716	44444	2852	4.183	0.325	-0.019	0.352	0.176	11111	1.04	38820.7311	22222
2693	1.782	0.661	0.571	0.493	0.336	11111	1.95	38085.6967	44444	2852	4.199	0.329	-0.033	0.330	0.163	11111	1.16	38824.7649	44444
2693	1.784	0.677	0.526	0.499	0.323	11111	1.94	38369.8798	44444	2852	4.197	0.333	-0.024	0.000	0.000	11100	1.01	38833.6653	22200
2693	1.813	0.675	0.517	0.517	0.328	11111	1.98	38383.8907	44444	2852	4.170	0.300	-0.024	0.284	0.174	11111	1.16	38845.7087	44444
2697	4.410	1.249	1.399	1.023	0.623	11111	1.30	38091.7889	12222	2852	4.182	0.317	-0.038	0.290	0.180	11111	1.16	38846.7066	44444
2697	4.421	1.258	1.414	0.954	0.648	11111	1.00	38326.0086	22222	2852	4.173	0.284	0.010	0.308	0.182	11111	1.20	38858.6843	22222
2697	4.428	1.258	1.399	0.903	0.630	11111	1.28	38510.6400	22222	2852	4.173	0.320	-0.001	0.329	0.188	11111	1.00	39056.0163	44444
2701	4.901	1.031	0.791	0.760	0.523	11111	1.24	38339.9696	44444	2852	4.189	0.314	-0.038	0.341	0.206	11111	1.01	39084.9823	22222
2701	4.916	1.035	0.801	0.788	0.527	11111	1.30	38343.9716	44444	2852	4.181	0.303	-0.021	0.310	0.176	11111	1.04	39129.8797	44444
2701	4.925	1.007	0.786	0.810	0.533	11111	1.25	38366.9224	44444	2854	4.295	1.434	1.065	1.100	0.785	11111	1.11	38368.8790	44444
2714	4.171	0.002	-0.008	0.064	0.008	11111	1.27	38108.7677	44444	2854	4.329	1.424	1.499	1.122	0.801	11111	1.15	38385.9201	44444
2714	4.156	0.002	0.059	0.046	-0.000	11111	1.18	38381.8773	44444	2854	4.314	1.425	1.529	1.117	0.785	11111	1.12	38386.9051	44444
2714	4.127	-0.009	0.051	0.062	0.012	11111	1.22	38383.9018	44444	2854	4.264	1.437	0.000	1.065	0.795	11011	1.85	38397.9920	44444
2714	0.000	0.000	0.047	-0.014	0.029	00101	1.71	38397.9520	44444	2864	4.522	1.298	1.378	0.909	0.635	11111	1.11	38063.7461	11212
2745	4.688	-0.202	-0.633	0.059	-0.119	11111	2.13	38356.9963	44444	2864	4.544	1.288	1.374	0.886	0.637	11111	1.47	38521.6261	44444
2745	4.736	-0.193	-0.577	0.028	-0.091	11111	2.07	38383.9140	44444	2874	4.848	0.282	0.106	0.217	0.271	11111	1.76	38063.7563	11212
2745	4.520	-0.212	-0.832	0.018	-0.131	11111	1.93	38721.9206	22222	2874	4.839	0.225	0.203	0.266	0.247	11111	1.83	38424.8021	44444
2749	3.813	-0.162	-0.778	0.029	-0.098	11111	2.18	38383.9249	44444	2874	4.781	0.243	0.201	0.226	0.275	11111	2.07	38430.8211	44444
2749	3.768	-0.151	-0.700	0.008	-0.109	11011	1.95	38397.8239	44444	2874	4.891	0.219	0.246	0.000	0.000	11100	1.88	38439.7701	44400
2749	3.883	-0.234	-0.693	0.013	-0.123	11111	1.98	38721.9108	22222	2890	1.594	0.001	-0.003	0.121	-0.025	11111	1.01	38064.7769	12222
2751	5.036	0.054	0.052	0.145	0.042	11111	1.13	38131.6360	44444	2890	1.542	0.039	-0.018	0.009	-0.031	11111	1.19	38143.6421	44444
2751	5.051	0.095	0.080	0.180	0.078	11111	1.05	38373.9388	44444	2890	1.612	0.040	0.052	0.093	0.014	11111	1.00	38326.0282	22222
2751	5.070	0.066	0.117	0.149	0.064	11111	1.05	38381.8889	44444	2890	1.565	0.027	0.027	0.019	-0.019	11111	1.05	38386.9243	44444
2751	5.065	0.078	0.100	0.143	0.057	11111	1.05	38385.8832	44444	2890	1.551	0.079	-0.000	0.000	0.000	11100	1.13	38792.6651	22200
2751	5.004	0.091	0.114	0.125	0.075	11111	1.29	38397.9592	44444	2905	4.067	1.515	1.966	1.258	0.872	11111	1.24	38143.6510	44444
2763	3.575	0.100	0.091	0.073	0.090	11111	1.12	37668.7341	22222	2905	4.043	1.551	1.941	1.239	0.918	11111	1.07	38386.9338	44444
2763	3.605	0.095	0.137	0.133	0.057	11111	1.08	38082.7347	44444	2905	4.087	1.552	1.922	1.214	0.939	11111	1.34	38521.6337	44444
2763	3.585	0.133	0.075	0.153	0.037	11111	1.08	38089.7203	22222	2906	4.457	0.505	0.042	0.470	0.277	11111	1.79	38455.8273	44444
2763	3.603	0.108	0.087	0.100	0.040	11111	1.04	38108.6185	44444	2906	4.490	0.505	0.084	0.000	0.000	11100	1.85	38439.7741	44400
2764	4.804	1.687	1.838	1.390	0.928	11111	1.81	38085.7094	44444	2906	4.455	0.504	0.072	0.000	0.000	11100	1.75	38440.7458	44400
2764	4.811	1.692	1.924	-0.014	0.000	11100	1.78	38397.8442	44444	2922	4.614	-0.126	-0.433	-0.034	-0.119	11111	2.05	38064.7642	12222
2764	4.787	1.690	1.937	0.975	11111	1.78	38424.7703	44444	2922	4.632	-0.124	-0.430	-0.058	-0.128	11111	2.17	38424.8108	44444	
2764	4.810	1.665	1.832	1.354	0.947	11111	1.05	38722.8919	22222	2922	4.594	-0.115	-0.416	0.026	-0.119	11111	2.09	38464.6860	44444
2764	4.697	1.750	1.872	1.200	0.988	11111	1.90	38723.8826	44444	2930	4.904	0.383	0.155	0.420	0.215	11111	1.02	38367.9645	44444
2766	4.634	1.601	1.898	1.405	1.248	11111	2.02	38400.8325	44444	2930	4.889	0.415	0.092	0.367	0.226	11111	1.08	38386.9443	44444
2766	4.605	1.610	1.886	1.442	1.249	11111	2.06	38424.7807	44444	2930	4.950	0.397	0.119	0.365	0.225	11011	1.14	38393.9486	33333
2766	4.567	1.601	1.894	1.530	1.236	11111	2.18	38464.6952	44444	2930	4.919	0.392	0.119	0.365	0.228	11111	1.22	38510.6499	22222
2777	3.515	0.362	0.059	0.426	0.183	11111	1.45	38091.8095	12222	2943	0.340	0.416	0.067	0.450	0.209	11111	1.54	38143.6621	44444
2777	3.537	0.323	0.083	0.324	0.188	11111	1.03	38381.9041	44444	2943	0.339	0.423	0.057	0.442	0.219	11111	1.39	38147.6311	44444
2777	3.552	0.335	0.027	0.336	0.187	11111	1.03	38385.8941	44444	2943	0.500	0.427	-0.016	0.405	0.343	01111	1.31	38315.9775	44444
2777	3.510	0.338	0.083	0.315	0.204	11111	1.43	38397.9676	44444	2943	0.349	0.454	0.051	0.369	0.247	11111	1.17	38317.0145	22221
2781	4.958	-0.125	-0.993	0.020	-0.091	11111	3.08	38103.7576	44444	2943	0.361	0.440	0.016	0.369	0.247	11100	1.23	38317.9903	44444
2781	4.969	-0.161	-1.005	0.046	-0.128	11111	1.88	38415.7461	44444	2944	4.691	-0.128	-0.344	0.007	-0.102	11111	1.97	38415.8358	44444
2781	4.856	-0.161	-1.000	-0.015	-0.128	11111	1.90	38424.7904	44444	2944	4.739	-0.106	-0.340	0.000	0.000	11100	2.01	38439.7780	44400
2781	5.042	-0.153	-0.971	0.000	0.000	11100	2.06	38438.7799	44400	2944	4.674	-0.095	-0.360	0.000	0.000	11100	1.90	38440.7495	44400
2782	4.432	-0.168	-1.010	0.008	-0.161	11111	1.87	38415.7596	44444	2946	4.956	0.126	0.071	0.188	0.061	11111	1.13	38085.7359	44444
2782	4.428	-0.189	-0.980	0.034	-0.157	11111	1.90	38722.9066	22222	2946	5.014	0.060	0.103	0.020	0.020	11011	1.26	38393.9636	33333
2812	4.967	-0.062	-0.374	0.065	-0.042	11111	1.63	38415.8065	44444	2946	4.996	0.063	0.081	0.171	0.043	11111	1.12	38403.8306	44444
2812	4.902	-0.055	-0.389	0.037	-0.023	11111	1.83	38430.8110	44444	2948	3.830	-0.173	-0.566	-0.043	-0.160	11111	2.13	38415.8487	44444
2812	5.012	-0.046	-0.350	0.000	0.000	11100	1.85	38438.7924	44400	2948	3.793	-0.215	-0.547	-0.051	-0.159	11111	2.29	38461.7399	22222
2812	4.987	-0.045	-0.000	0.000	0.000	11000	1.71	38439.7664	44400	2948	3.788	-0.176	-0.577	-0.030	-0.157	11111	1.96	38464.6775	44444
2818	4.635	-0.042	-0.061	-0.087	-0.065	11111	1.14	38131.6463	44444	2970	3.937	1.004	0.887	0.775	0.538	11111	1.37	38108.6635	44444
2818	4.650	-0.020	0.004	0.021	-0.040														

TABLE 4 CATALINA UBVRI OBSERVATIONS

CATALINA UBVRI DATA										CATALINA UBVRI DATA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
3003	4.851	1.470	1.775	1.138	0.820	11111	1.04	38339.9775	44444	3249	3.520	1.480	1.780	1.130	0.780	11111	1.46	38141.6921	11111
3003	4.862	1.484	1.788	1.166	0.834	11111	1.10	38343.9322	44444	3249	3.548	1.494	1.772	1.137	0.768	11111	1.15	38142.6217	44444
3003	4.895	1.458	1.753	1.652	0.855	11101	1.38	38393.9852	33333	3249	3.526	1.449	1.747	1.171	0.784	11111	2.21	38142.7447	44444
3003	4.812	1.457	1.774	1.131	0.824	11111	1.03	38397.8625	44444	3249	3.546	1.479	1.758	1.138	0.745	11111	1.13	38143.6118	44444
3034	4.593	-0.053	-1.020	0.121	-0.029	11111	1.94	38425.8012	44444	3249	3.546	1.491	1.741	1.240	0.737	11111	2.25	38143.7432	44444
3034	4.496	-0.047	-1.021	0.000	0.000	11100	2.03	38439.7819	44400	3249	3.563	1.426	1.776	1.097	0.976	11111	1.16	38147.6130	44444
3034	4.469	-0.063	-1.005	0.000	0.000	11100	1.92	38440.7536	44400	3249	3.529	1.505	1.752	1.112	0.752	11111	1.25	38147.6390	44444
3045	3.387	1.255	1.144	0.852	0.556	11111	1.94	38425.8152	44444	3249	3.501	1.505	1.755	1.128	0.765	11111	2.94	38147.7538	44444
3045	3.347	1.247	1.235	0.000	0.000	11100	1.99	38439.7860	44400	3249	3.553	1.457	1.763	1.155	0.776	11111	1.19	38148.6216	44444
3045	3.318	1.245	1.150	0.000	0.000	11100	1.88	38440.7576	44400	3249	3.525	1.472	1.785	1.083	0.784	11111	1.32	38148.6401	44444
3067	4.986	0.055	0.076	0.127	0.038	11111	1.09	38131.6533	44444	3249	3.516	1.508	1.770	1.101	0.791	11111	2.96	38153.7378	44444
3067	4.979	0.110	0.120	0.668	0.024	11101	1.33	38393.9942	33333	3249	3.535	1.519	1.731	1.151	0.775	11111	1.25	38154.6199	44444
3067	5.004	0.101	0.161	0.131	0.076	11111	1.03	38110.8599	44444	3249	3.534	1.478	1.744	1.165	0.769	11111	2.31	38154.7155	44444
3080	3.728	1.028	0.648	0.815	0.530	11111	4.22	38095.7490	44444	3249	3.510	1.489	1.747	1.050	0.805	11111	1.25	38155.6185	44444
3080	3.722	1.073	0.831	0.828	0.584	11111	3.37	38103.6664	44444	3249	3.535	1.484	1.762	1.171	0.768	11111	2.41	38155.7165	44444
3080	3.732	1.036	0.759	1.024	0.473	11111	3.39	38113.6451	44444	3249	3.511	1.491	1.830	0.000	0.000	11100	1.95	38165.6319	22200
3102	4.172	0.691	0.403			11100	1.75	38063.7663	11212	3249	3.580	1.473	1.665	0.854	0.788	11111	2.49	38176.6585	44444
3102	4.186	0.690	0.468	0.557	0.318	11111	2.01	38107.7183	34444	3249	3.538	1.494	1.742	1.081	0.778	11111	1.96	38179.6306	44444
3102	0.000	0.739	0.000	-0.014	0.000	01000	1.75	38400.8472	44444	3249	3.542	1.511	1.732	1.119	0.768	11111	2.36	38180.6462	44444
3102	4.201	0.724	0.429	0.585	0.375	11111	1.75	38400.8539	44444	3249	3.524	1.475	1.761	1.108	0.758	11111	2.29	38310.9243	44444
3102	4.246	0.713	0.461	0.000	0.000	11100	1.88	38439.7902	44400	3249	3.514	1.472	1.740	1.124	0.792	11111	1.65	38314.9513	22222
3102	4.206	0.721	0.437	0.000	0.000	11100	1.78	38440.7611	44400	3249	3.564	1.481	1.791	1.116	0.811	11111	1.88	38315.9315	44444
3131	4.623	0.071	0.015	0.139	0.086	11111	2.15	38103.7674	44444	3249	3.529	1.496	1.787	1.134	0.813	11111	1.33	38316.9863	22221
3131	4.627	0.078	0.086	0.142	0.051	11111	1.58	38400.8615	44444	3249	3.492	1.480	1.761	1.105	0.813	11111	1.15	38325.0121	44444
3131	4.589	0.093	0.090	0.136	0.053	11111	1.66	38425.8241	44444	3249	3.539	1.476	1.779	1.157	0.786	11111	1.22	38325.9848	22222
3131	4.557	0.085	0.079	0.171	0.077	11111	1.78	38430.8343	44444	3249	3.514	1.485	1.767	1.122	0.777	11111	1.37	38327.9495	22222
3141	4.714	1.473	1.751	1.201	0.865	11111	1.28	38067.8161	44444	3249	3.540	1.500	1.776	1.136	0.800	11111	1.11	38329.0194	44444
3141	4.698	1.505	1.800	1.179	0.822	11111	1.26	38410.8683	44444	3249	3.531	1.475	1.765	1.136	0.788	11111	2.39	38330.3838	44444
3141	4.638	1.492	1.772	1.152	0.812	11111	1.34	38411.8915	44444	3249	3.517	1.508	1.790	1.124	0.768	11111	1.09	38340.0169	44444
3141	4.625	1.473	1.769	1.157	0.820	11111	1.25	38424.8286	44444	3249	3.511	1.485	1.767	1.122	0.778	11111	2.57	38343.8243	44444
3145	4.370	1.268	1.276	0.994	0.668	11111	1.27	38083.7870	44444	3249	3.529	1.492	1.793	1.135	0.778	11111	1.20	38343.9414	44444
3145	4.429	1.212	1.306	1.045	0.667	11111	1.28	38121.6593	44444	3249	3.542	1.483	1.806	1.145	0.792	11111	1.45	38345.8881	44444
3145	4.348	1.241	1.339	0.984	0.652	11111	1.46	38456.7996	44444	3249	3.528	1.490	1.781	1.133	0.801	11111	1.09	38346.0027	44444
3145	4.331	1.256	1.295	0.944	0.672	11111	1.26	38461.7503	22222	3249	3.522	1.503	1.741	1.120	0.809	11111	1.10	38357.0080	44444
3165	2.227	-0.314	-1.024	0.013	-0.180	11111	2.99	37692.7810	22222	3249	3.521	1.482	1.766	1.118	0.779	11111	2.15	38357.8022	44444
3165	2.295	-0.331	-1.159	-0.113	-0.261	11111	4.04	38095.7558	44444	3249	0.000	0.000	0.000	0.000	0.000	00000	1.09	38357.9874	44444
3165	2.198	-0.228	-0.968	-0.194	-0.146	11111	3.27	38103.6741	44444	3249	3.510	1.490	1.799	1.133	0.778	11111	1.11	38361.0223	44444
3165	2.295	-0.313	-1.072	0.142	-0.284	11101	3.29	38113.6546	44444	3249	3.527	1.481	1.748	1.138	0.778	11111	2.42	38365.7691	44444
3173	4.806	0.084	-0.062	0.127	0.014	11111	1.07	38085.7446	44444	3249	3.517	1.485	1.775	1.126	0.788	11111	2.66	38367.7574	44444
3173	4.866	0.021	-0.013	0.109	0.008	11111	1.06	38108.6556	44444	3249	3.509	1.466	1.768	1.126	0.788	11111	1.10	38367.9238	44444
3173	4.832	0.056	0.070	0.079	0.002	11111	1.06	38404.8450	44444	3249	3.465	1.489	1.804	1.085	0.774	11111	1.10	38367.9438	44444
3185	2.805	0.450	0.173	0.388	0.194	11111	2.64	38103.7759	44444	3249	3.508	1.483	1.768	1.116	0.769	11111	2.81	38368.7928	44444
3185	2.826	0.424			0.225	11001	2.91	38153.6505	44444	3249	3.503	1.488	1.775	1.119	0.797	11111	1.12	38369.9022	44444
3185	2.819	0.440	0.198	0.327	0.198	11111	1.87	38368.9071	44444	3249	3.501	1.488	1.777	1.114	0.790	11111	1.09	38370.9269	44444
3185	2.834	0.432	0.216	0.348	0.212	11111	1.86	38404.8729	44444	3249	3.519	1.479	1.781	1.130	0.779	11111	1.10	38376.9530	44444
3188	4.315	1.016	0.702	0.737	0.452	11111	1.68	38091.8185	12222	3249	3.491	1.488	1.774	1.086	0.801	11111	1.12	38377.9600	44444
3188	4.362	0.961	0.706	0.778	0.461	11111	1.50	38148.6409	44444	3249	3.491	1.480	1.758	1.104	0.792	11111	1.12	38378.9183	44444
3188	4.316	0.947	0.751	0.722	0.442	11111	1.45	38456.7902	44444	3249	3.483	1.484	1.776	1.106	0.781	11111	1.09	38379.8780	44444
3188	4.294	0.977	0.696	0.698	0.466	11111	1.37	38461.7597	22222	3249	3.620	1.528	1.881	1.181	0.783	11111	1.66	38380.7708	44444
3192	4.397	-0.201	0.000	-0.031	-0.110	10111	2.37	38103.7837	44444	3249	3.481	1.484	1.761	1.094	0.794	11111	1.09	38380.9264	44444
3192	4.386	-0.102	-0.596	0.049	-0.122	11111	2.17	38148.6487	44444	3249	3.527	1.483	1.761	1.138	0.779	11111	1.09	38381.7501	44444
3192	4.378	-0.162	-0.597	-0.076	-0.169	11111	1.62	38368.9250	44444	3249	3.517	1.490	1.787	1.090	0.785	11111	0.99	38381.9263	44444
3192	4.424	-0.145	-0.592	-0.040	-0.134	11111	1.67	38404.8814	44444	3249	3.533	1.485	1.785	1.109	0.773	11111	1.10	38382.8793	22222
3211	4.739	0.941	0.710	0.788	0.454	11111	1.79	38080.8282	44444	3249	3.527	1.495	1.743	1.132	0.778	11111	1.54	38383.7737	44444
3211	4.716	0.984	0.722	0.674	0.499	11111	2.15	38153.6578	44444	3249	3.473	1.471	1.783	1.098	0.777	11111	1.11	38383.9370	44444
3211	4.699	0.945	0.877	0.713	0.491	11111	1.58	38383.9696	44444	3249	3.538	1.473	1.780	1.123	0.775	11111	1.28	38385.8064	44444
3249	3.525	1.495	1.784	1.147	0.757	11111	1.60	37565.9864	22222	3249	3.533	1.479	1.774	1.115	0.774	11111	1.11	38386.8656	44444
3249	3.522	1.479	1.764	0.090	-0.040</														

TABLE 4 CATALINA UBVR I OBSERVATIONS

CATALINA UBVR I DATA											CATALINA UBVR I DATA										
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.		
3249	3.497	1.496	1.774	1.120	0.781	11111	2.20	38444.9163	44444	3249	3.520	1.487	1.742	0.000	0.000	11100	2.45	39026.9576	44400		
3249	3.508	1.447	1.785	1.062	0.782	11111	1.17	38446.7978	44444	3249	3.499	1.489	1.742	1.078	0.834	11111	1.56	39032.9945	44444		
3249	3.510	1.475	1.766	1.004	0.783	11111	2.37	38446.9178	44444	3249	3.524	1.481	1.744	1.010	0.807	11111	1.34	39034.0217	44444		
3249	3.515	1.479	1.795	1.100	0.768	11111	1.10	38448.7082	44444	3249	3.515	1.495	1.750	1.117	0.793	11111	1.36	39035.0151	44444		
3249	3.502	1.473	1.781	1.114	0.790	11111	1.14	38448.7800	44444	3249	3.511	1.501	1.729	1.130	0.765	11111	1.30	39037.0205	44444		
3249	3.561	1.464	1.826	1.100	0.786	11111	1.10	38449.7472	44444	3249	3.516	1.482	1.762	1.130	0.773	11111	2.37	39041.9197	44444		
3249	3.496	1.461	1.781	1.090	0.787	11111	2.36	38449.9093	44444	3249	3.506	1.488	1.773	1.081	0.799	11111	1.29	39042.0096	44444		
3249	3.520	1.480	1.780	0.000	0.000	11100	1.10	38450.7437	44400	3249	3.540	1.487	1.787	1.103	0.770	11111	2.32	39042.9189	44444		
3249	3.522	1.459	1.802	1.090	0.784	11111	1.11	38450.7563	44444	3249	3.512	1.522	1.758	1.118	0.789	11111	1.37	39042.9914	44444		
3249	3.521	1.456	1.799	1.134	0.782	11111	1.10	38451.6959	44444	3249	3.524	1.488	1.743	1.130	0.776	11111	2.22	39045.9150	44444		
3249	3.509	1.470	1.776	0.000	0.000	11100	1.09	38451.7270	44400	3249	3.526	1.505	1.765	1.094	0.785	11111	1.11	39057.0258	44444		
3249	3.535	1.481	1.763	0.000	0.000	11100	1.18	38451.7859	44400	3249	3.523	1.511	1.762	1.101	0.793	11111	1.12	39059.0189	44444		
3249	3.550	1.456	1.800	1.107	0.791	11111	1.09	38452.7373	22200	3249	3.516	1.459	1.766	1.121	0.789	11111	1.11	39060.0188	22222		
3249	3.517	1.481	1.733	0.000	0.000	11100	1.13	38452.7627	44444	3249	3.528	1.502	1.774	1.120	0.793	11111	1.11	39061.0188	22222		
3249	3.920	1.495	1.737	0.000	0.777	11111	1.23	38453.7686	22222	3249	3.528	1.497	1.781	1.094	0.819	11111	1.10	39061.0278	44444		
3249	3.519	1.469	1.795	1.094	0.779	11111	1.09	38453.7234	44444	3249	3.536	1.505	1.757	1.111	0.807	11111	1.09	39062.0310	44444		
3249	3.590	1.453	1.963	0.000	0.000	11100	1.10	38453.7321	44400	3249	3.531	1.491	1.784	1.117	0.790	11111	1.10	39063.0197	44444		
3249	3.514	1.495	1.778	1.125	0.795	11111	2.35	38453.8981	44444	3249	3.501	1.484	1.770	1.083	0.790	11111	1.10	39064.0225	44444		
3249	3.773	1.521	1.637	0.000	0.000	11100	1.09	38456.6962	44400	3249	3.526	1.482	1.779	1.113	0.814	11111	2.13	39065.0083	44444		
3249	0.000	0.000	0.000	1.102	0.787	00001	1.13	38456.7506	44444	3249	3.523	1.500	1.756	1.137	0.771	11111	2.13	39066.8615	44444		
3249	3.515	1.493	1.740	0.000	0.000	11100	1.10	38459.6750	44400	3249	3.517	1.503	1.787	1.103	0.768	11111	1.08	39093.8180	44444		
3249	3.509	1.488	1.775	1.131	0.782	11111	1.14	38459.7472	22222	3249	3.521	1.484	1.778	1.099	0.800	11111	1.11	39096.7946	44444		
3249	3.521	1.481	1.776	1.090	0.794	11111	1.09	38460.6902	22222	3249	3.491	1.466	1.787	1.109	0.797	11111	1.11	39096.9562	44444		
3249	3.522	1.479	1.785	1.151	0.769	11111	1.35	38460.8017	22222	3249	3.497	1.511	1.772	1.101	0.822	11111	1.09	39096.9562	44444		
3249	3.482	1.476	1.760	1.135	0.779	11111	1.09	38461.6598	22222	3249	3.497	1.493	1.794	1.103	0.783	11111	1.11	39098.9783	44444		
3249	3.549	1.487	1.766	1.109	0.000	11100	1.10	38474.6788	44400	3249	3.508	1.494	1.797	1.112	0.810	11111	1.10	39129.8932	44444		
3249	3.920	1.495	1.737	0.000	0.000	11100	1.23	38463.7688	22200	3249	3.543	1.480	1.761	1.121	0.799	11111	2.98	39475.8564	44444		
3249	3.521	1.485	1.772	1.116	0.774	11111	1.13	38464.7295	44444	3275	4.273	1.508	1.911	1.175	0.905	11111	1.17	38143.6713	44444		
3249	3.540	1.477	1.775	1.060	0.798	11111	1.09	38466.6864	44444	3275	4.252	1.551	1.928	1.226	0.868	11111	1.04	38343.9822	44444		
3249	3.534	1.472	1.767	0.000	0.000	11100	1.23	38466.7618	22200	3275	4.256	1.562	1.898	1.209	0.859	11111	1.02	38382.9316	22222		
3249	3.509	1.488	1.758	1.147	0.768	11111	2.73	38466.8747	44444	3275	4.228	1.561	1.910	1.192	0.877	11111	1.06	38404.9071	44444		
3249	3.528	1.461	1.797	1.107	0.772	11111	1.11	38469.7071	44444	3314	0.0	0.	0.	0.090	-0.099	00001	1.25	38066.7764	21000		
3249	3.512	1.476	1.748	0.000	0.000	11100	1.10	38473.6874	44400	3314	3.890	-0.003	-0.054	0.013	-0.027	11111	1.24	38089.7307	22222		
3249	3.520	1.480	1.780	1.130	0.780	11111	1.13	38473.7060	44444	3314	3.902	-0.055	-0.008	0.043	-0.049	11111	2.24	38098.6899	44444		
3249	3.534	1.470	1.758	0.000	0.000	11100	1.20	38473.7319	44400	3314	3.874	-0.067	-0.051	0.041	-0.090	11111	1.37	38131.6718	44444		
3249	3.504	1.485	1.762	0.000	0.000	11100	1.17	38474.5934	44400	3323	3.356	0.862	0.528	0.730	0.397	11111	1.14	38098.6983	44444		
3249	3.542	1.470	1.756	0.000	0.000	11100	1.10	38474.6788	44400	3323	3.375	0.847	0.486	0.648	0.441	11111	1.49	38153.7133	44444		
3249	3.548	1.479	1.786	1.072	0.777	11111	1.12	38474.6776	44444	3323	3.360	0.848	0.558	0.673	0.431	11111	1.15	38343.9912	44444		
3249	3.493	1.471	1.759	0.000	0.000	11100	1.14	38475.6049	44400	3403	4.619	1.188	1.134	0.878	0.669	11111	1.19	38067.8193	44444		
3249	3.508	1.494	1.773	1.101	0.775	11111	1.09	38475.6561	44444	3403	4.646	1.136	1.155	0.891	0.596	11111	1.51	38153.7211	44444		
3249	3.523	1.487	1.778	1.111	0.783	11111	1.39	38476.7644	22222	3403	4.578	1.180	1.191	0.900	0.605	11111	1.18	38368.9408	44444		
3249	3.506	1.461	1.768	1.110	0.783	11111	1.09	38480.6598	44444	3410	4.166	-0.034	0.032	0.090	-0.040	11100	1.12	38063.8006	11212		
3249	3.515	1.661	1.877	1.073	0.751	10111	1.18	38481.7044	33433	3410	4.193	0.012	-0.016	0.066	0.017	11111	1.17	38088.7780	22222		
3249	3.520	1.480	1.780	1.130	0.780	11111	1.09	38482.6249	44444	3410	4.149	-0.012	0.015	0.046	0.012	11111	1.12	38098.7139	44444		
3249	3.521	1.478	1.786	1.130	0.777	11111	1.09	38483.6381	22222	3410	4.162	0.025	0.046	0.012	-0.008	11111	1.12	38382.9191	22222		
3249	4.879	1.464	1.760	1.094	0.765	01111	1.13	38496.6439	44444	3418	4.421	1.211	1.255	0.896	0.562	11111	1.20	38083.7949	44444		
3249	3.517	1.492	1.746	1.109	0.782	11111	2.69	38496.7918	44444	3418	4.473	1.179	1.263	0.905	0.545	11111	1.64	38153.6816	44444		
3249	3.518	1.472	1.776	1.103	0.777	11111	1.27	38497.6851	22222	3418	4.418	1.206	1.313	0.862	0.588	11111	1.16	38368.9335	44444		
3249	3.555	1.497	1.774	1.138	0.782	11111	1.09	38498.5988	44444	3441		1.103	1.020	0.847	0.503	01111	1.03	38064.7954	12222		
3249	3.482	1.475	1.774	1.115	0.781	11111	1.09	38498.5988	44444	3441	4.869	1.082	0.908	0.822	0.543	11111	1.06	38093.7220	44444		
3249	3.521	1.475	1.784	1.117	0.785	11111	1.10	38499.6143	44444	3441	4.876	1.055	0.957	0.747	0.540	11111	2.22	38153.6730	44444		
3249	3.532	1.480	1.748	1.081	0.791	11111	1.11	38506.6050	22222	3441	4.832	1.075	0.863	0.000	0.000	11100	1.53	38432.8205	44400		
3249	3.523	1.467	1.788	1.099	0.775	11111	1.25	38509.6492	44444	3441	4.960	1.052	0.886	0.000	0.000	11100	1.52	38438.7973	44400		
3249	3.544	1.470	1.773	1.102	0.776	11111	1.31	38510.6584	22222	3441	4.917	1.048	0.889	0.000	0.000	11100	1.52	38439.7944	44400		
3249	3.572	1.478	1.759	1.059	0.805	11111	1.16	38511.6159	44444	3449	4.667	0.002	0.015	0.083	0.027	11111	1.06	38085.7919	44444		
3249	3.755	1.424	1.778	1.225	0.740	11111	1.16	38512.6124	22222	3449	4.639	0.016	-0.062	0.062	-0.021	11111	1.53	38153.7062	44444		
3249	3.601	1.463	1.762	1.119	0.770	11111	1.18	38513.6160	22222	3449	4.667	0.028	0.001	0.063	-0.002	11111	1.02	38346.0258	44444		
3249	3.541	1.475	1.763	1.009	0																

TABLE 4 CATALINA UBVRi OBSERVATIONS

CATALINA UBVRi DATA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
3454	0.	-0.191	-0.733	0.090	-0.040	0.1100	1.23	38152.6184	44444
3454	4.302	-0.200	0.	-0.042	-0.196	1.0111	1.27	38152.6314	44444
3454	4.300	-0.203	0.711	-0.102	-0.203	1.1111	3.01	38152.7900	44444
3454	4.274	-0.243	-0.763	-0.006	-0.209	1.1111	2.91	38153.7458	44444
3454	4.294	-0.196	-0.742	-0.119	-0.203	1.1111	1.28	38154.6575	44444
3454	4.282	-0.194	-0.719	-0.088	-0.187	1.1111	3.12	38154.7470	44444
3454	4.279	-0.176	-0.776	-0.075	-0.209	1.1111	1.29	38155.6291	44444
3454	4.284	-0.142	-0.748	-0.009	-0.232	1.1111	2.46	38155.7264	44444
3454	4.300	-0.167	-0.569	0.000	0.000	1.1100	1.73	38165.6368	22200
3454	4.311	-0.185	-0.730	-0.354	-0.215	1.1111	2.36	38176.6654	44444
3454	4.291	-0.200	-0.707	-0.027	-0.193	1.1111	2.57	38178.6673	44444
3454	4.304	-0.200	-0.723	-0.044	-0.196	1.1111	2.02	38179.6614	44444
3454	4.310	-0.180	-0.724	-0.054	-0.190	1.1111	2.43	38180.6569	44444
3454	0.000	-0.183	0.000	0.090	-0.040	0.1000	2.35	38305.9646	44444
3454	4.315	-0.227	-0.721	-0.049	-0.156	1.1111	2.21	38305.9701	44444
3454	4.304	-0.189	-0.749	-0.058	-0.181	1.1111	1.39	38315.0138	22222
3454	4.314	-0.193	-0.747	-0.041	-0.170	1.1111	1.48	38324.0520	44444
3454	4.326	-0.204	-0.723	-0.038	-0.174	1.1111	1.33	38325.9964	22222
3454	4.297	-0.208	-0.747	-0.063	-0.178	1.1111	1.24	38328.0111	22222
3454	4.312	-0.191	-0.745	-0.058	-0.173	1.1111	1.19	38329.0300	44444
3454	4.275	-0.197	-0.735	-0.065	-0.194	1.1111	1.19	38330.0240	44444
3454	4.264	-0.179	-0.709	-0.089	-0.198	1.1111	1.81	38338.9029	22221
3454	4.313	-0.204	-0.725	-0.048	-0.183	1.1111	2.07	38343.8735	44444
3454	4.307	-0.207	-0.710	-0.053	-0.169	1.1111	1.64	38345.8980	44444
3454	4.292	-0.202	-0.777	4.810	-0.160	1.0001	1.15	38346.0113	44444
3454	4.299	-0.202	-0.778	-0.050	-0.167	1.1111	1.15	38357.0192	44444
3454	4.295	-0.191	-0.729	-0.053	-0.183	1.1111	2.47	38357.8181	44444
3454	4.289	-0.174	-0.773	-0.060	-0.178	1.1111	1.14	38357.9941	44444
3454	4.290	-0.190	-0.726	-0.065	-0.190	1.1111	1.23	38362.0457	44444
3454	4.328	-0.213	-0.737	-0.068	-0.183	1.1111	1.44	38367.7371	44444
3454	4.295	-0.193	-0.741	-0.064	-0.185	1.1111	1.99	38369.8065	44444
3454	4.300	-0.195	-0.745	-0.052	-0.193	1.1111	2.08	38370.7991	44444
3454	4.306	-0.197	-0.726	-0.070	-0.180	1.1111	1.16	38378.9658	44444
3454	4.307	-0.194	-0.749	-0.055	-0.189	1.1111	2.16	38379.7703	44444
3454	4.292	-0.197	-0.777	-0.050	-0.179	1.1111	1.22	38380.9901	44444
3454	4.312	-0.198	-0.736	-0.043	-0.186	1.1111	2.17	38381.7647	44444
3454	4.291	-0.188	-0.742	-0.095	-0.188	1.1111	1.14	38381.9384	44444
3454	4.315	-0.182	-0.740	-0.093	-0.194	1.1111	1.17	38382.8922	22222
3454	4.295	-0.193	-0.748	-0.101	-0.213	1.1111	1.15	38385.9410	44444
3454	4.284	-0.197	-0.737	-0.105	-0.200	1.1111	1.17	38386.9541	44444
3454	4.328	-0.194	-0.736	-0.068	-0.186	1.1111	2.44	38387.7371	44444
3454	4.283	-0.195	-0.739	-0.090	-0.190	1.1111	1.14	38388.9237	44444
3454	4.307	-0.198	-0.676	-0.068	-0.194	1.1111	1.14	38388.9168	44444
3454	4.297	-0.185	-0.746	-0.084	-0.203	1.1111	1.21	38390.9604	44444
3454	4.306	-0.202	-0.725	-0.061	-0.180	1.1111	1.89	38391.0547	44444
3454	4.300	-0.195	-0.740	-0.060	-0.190	1.1111	1.99	38393.7410	33333
3454	4.300	-0.195	-0.740	-0.060	-0.190	1.1111	1.14	38393.9054	33333
3454	4.323	-0.188	-0.750	-0.060	-0.194	1.1111	1.86	38397.7387	44444
3454	4.272	-0.182	-0.756	-0.059	-0.190	1.1111	1.14	38397.8775	44444
3454	4.311	-0.226	-0.740	-0.034	-0.187	1.1111	2.28	38398.7134	44444
3454	4.321	-0.205	-0.762	-0.053	-0.152	1.1111	2.38	38400.7038	44444
3454	4.301	-0.200	-0.756	-0.066	-0.184	1.1111	1.26	38404.9370	44444
3454	4.295	-0.163	-0.784	-0.066	-0.186	1.1111	2.33	38406.6893	43333
3454	4.304	-0.183	-0.761	-0.066	-0.187	1.1111	1.17	38406.8941	43333
3454	4.360	-0.131	-0.639	-0.062	-0.184	1.1111	2.54	38408.6764	44444
3454	4.284	-0.183	-0.757	-0.078	-0.194	1.1111	1.17	38408.8943	44444
3454	4.327	-0.207	-0.733	-0.051	-0.198	1.1111	2.07	38410.6905	44444
3454	4.283	-0.196	-0.726	-0.069	-0.195	1.1111	1.91	38411.6699	44444
3454	4.310	-0.192	-0.761	-0.030	-0.191	1.1111	1.14	38411.8571	44444
3454	4.298	-0.197	-0.735	-0.074	-0.203	1.1111	1.17	38414.8725	22222
3454	4.263	-0.185	-0.747	-0.062	-0.185	1.1111	1.17	38425.8471	44444
3454	4.301	-0.188	-0.755	-0.060	-0.174	1.1111	2.84	38425.9978	44444
3454	4.302	-0.209	-0.748	-0.061	-0.182	1.1111	1.14	38431.8017	44444
3454	4.266	-0.229	-0.745	-0.091	-0.204	1.1111	1.18	38432.8310	44444
3454	4.286	-0.217	-0.726	-0.079	-0.181	1.1111	1.65	38438.9572	44444
3454	4.270	-0.208	-0.741	0.000	0.000	1.1100	2.07	38439.6110	44400
3454	4.272	-0.185	-0.772	0.000	0.000	1.1100	1.17	38439.8076	44400
3454	4.299	-0.200	-0.748	0.000	0.000	1.1100	2.03	38440.6107	44400
3454	4.281	-0.172	-0.754	0.000	0.000	1.1100	1.14	38440.7708	44400
3454	4.292	-0.214	-0.736	-0.078	-0.204	1.1111	1.16	38440.7974	44444
3454	4.291	-0.190	-0.762	0.000	0.000	1.1100	2.14	38441.6022	44400
3454	4.284	-0.178	-0.742	0.000	0.000	1.1100	1.15	38441.7507	44400
3454	4.284	-0.216	-0.731	-0.080	-0.185	1.1111	2.20	38444.9244	44444
3454	4.279	-0.189	-0.715	-0.116	-0.171	1.1111	2.44	38446.9283	44444
3454	4.303	-0.200	-0.745	-0.095	-0.194	1.1111	2.74	38447.9760	44444
3454	4.278	-0.229	-0.745	-0.103	-0.193	1.1111	2.39	38449.9184	44400
3454	4.300	-0.195	-0.740	0.000	0.000	1.1100	1.14	38450.7483	44400
3454	4.301	-0.203	-0.751	0.000	0.000	1.1100	1.14	38451.7316	44400
3454	4.289	-0.204	-0.738	-0.087	-0.205	1.1111	1.19	38451.7862	44444
3454	4.309	-0.197	-0.732	0.000	0.000	1.1100	1.18	38451.8002	44400
3454	4.286	-0.203	-0.738	-0.093	-0.198	1.1111	1.17	38452.7722	44444
3454	4.278	-0.176	-0.758	0.000	0.000	1.1100	1.15	38452.9274	22200
3454	4.287	-0.206	-0.755	-0.076	-0.172	1.1111	2.79	38452.9227	44444
3454	4.294	-0.179	-0.741	0.000	0.000	1.1100	1.15	38453.7563	44400
3454	4.295	-0.203	-0.723	-0.081	-0.214	1.1111	1.18	38453.7732	44444
3454	4.301	-0.202	-0.739	-0.094	-0.180	1.1111	2.43	38453.9088	44444
3454	4.290	-0.172	-0.748	0.000	0.000	1.1100	1.16	38456.6999	44400
3454	4.301	-0.202	-0.736	-0.061	-0.215	1.1111	1.17	38456.7586	44444
3454	4.308	-0.199	-0.767	0.000	0.000	1.1100	1.17	38459.6700	44400
3454	4.290	-0.176	-0.752	-0.065	-0.170	1.1111	1.19	38459.7635	22222
3454	4.345	-0.230	-0.707	-0.108	-0.236	1.1111	1.15	38460.7010	22222
3454	4.266	-0.195	-0.748	0.000	0.000	1.1100	1.16	38460.7403	44400
3454	4.299	-0.206	-0.745	-0.067	-0.179	1.1111	1.37	38460.8097	22222
3454	4.275	-0.205	-0.750	-0.083	-0.195	1.1111	1.14	38461.7104	22222
3454	4.295	-0.181	-0.745	-0.107	-0.151	1.1111	1.26	38463.7766	22222
3454	4.297	-0.203	-0.751	-0.096	-0.202	1.1111	1.17	38464.7384	44444
3454	4.318	-0.209	-0.748	0.000	0.000	1.1100	1.37	38464.7985	44400
3454	4.314	-0.180	-0.669	-0.091	-0.209	1.1111	1.14	38465.6966	22200
3454	4.300	-0.193	-0.741	0.000	0.000	1.1100	1.25	38466.7661	44400
3454	4.296	-0.189	-0.749	-0.083	-0.166	1.1111	2.65	38466.8806	44444
3454	4.309	-0.202	-0.752	0.000	0.000	1.1100	1.15	38473.6910	44400
3454	4.300	-0.195	-0.767	-0.060	-0.190	1.1111	1.18	38473.7219	44444
3454	4.306	-0.204	-0.757	0.000	0.000	1.1100	1.22	38473.7354	44400
3454	4.312	-0.197	-0.751	0.000	0.000	1.1100	1.14	38474.6808	44400
3454	4.299	-0.197	-0.740	-0.088	-0.191	1.1111	1.17	38474.7143	44444
3454	4.273	-0.200	-0.757	-0.094	-0.218	1.1111	1.14	38475.6696	44444
3454	4.294	-0.176	-0.743	-0.080	-0.195	1.1111	2.92	38475.8632	44444
3454	4.286	-0.192	-0.729	-0.088	-0.207	1.1111	1.41	38476.7722	22222
3454	4.328	-0.206	-0.735	-0.070	-0.198	1.1111	1.21	38481.7110	33433

CATALINA UBVRi DATA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
3454	4.300	-0.195	-0.740	-0.060	-0.190	1.1111	1.15	38482.6316	44444
3454									

TABLE 4 CATALINA UBVRi OBSERVATIONS

CATALINA UBVRi DATA											CATALINA UBVRi DATA										
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.		
3482	3.392	0.694	0.420	-0.023	0.000	11100	1.24	38404.9463	44444	3718	4.731	1.554	2.087	1.389	1.013	11111	2.11	38107.7681	34444		
3482	3.393	0.676	0.395	0.600	0.414	11111	1.12	38410.8760	44444	3718	4.802	1.613	1.979	1.501	1.021	11111	1.90	38112.7025	44444		
3484	3.821	0.793	0.429	0.646	0.428	00011	1.69	38080.8388	44444	3718	4.702	1.683	2.034	1.382	1.082	11111	1.89	38387.9436	44444		
3484	4.266	0.966	0.574	0.609	0.500	11111	1.68	38154.6349	44444	3718	4.653	1.584	2.025	1.430	1.029	11111	1.98	38461.7774	22222		
3484	4.334	0.893	0.762	0.734	0.475	11111	1.54	38383.9816	44444	3731	4.473	1.234	1.314	0.966	0.643	11111	1.02	38063.8542	11212		
3484	4.338	0.868	0.612	0.651	0.449	11111	1.77	38523.6358	44444	3731	4.443	1.218	1.344	0.862	0.603	11111	1.19	38155.6817	44444		
3484	4.311	0.880	0.616	0.707	0.465	11111	1.73	38525.6261	44444	3731	4.453	1.231	1.287	0.901	0.621	11111	1.02	38381.9932	44444		
3484	4.346	0.885	0.604	0.714	0.463	11111	1.67	38526.6148	22222	3733	4.687	0.904	0.630	0.744	0.441	11111	2.22	38114.7333	22222		
3492	4.374	-0.050			-0.057	11001	1.24	38095.7900	44444	3733	4.650	0.950	0.628	0.781	0.445	11111	2.62	38162.6440	44444		
3492	4.381	-0.082	-0.058	0.090	-0.096	11111	1.19	38131.6782	44444	3733	4.695	0.929	0.634	0.671	0.485	11111	2.07	38387.9552	44444		
3492	4.351	-0.023	-0.030	0.014	-0.048	11111	1.14	38381.9639	44444	3733	4.679	0.854	0.627	0.742	0.451	11111	2.19	38461.7845	22222		
3518	4.001	1.241	1.449	0.881	0.719	11111	2.29	38107.7532	34444	3748	1.950	1.471	1.734			11100	1.35	38063.8633	11212		
3518	4.008	1.317	1.320	0.972	0.597	11111	2.55	38154.6449	44444	3748	1.964	1.490	1.696	1.055	0.787	11111	1.33	38082.7934	44444		
3518	4.019	1.284	1.360	0.964	0.668	11111	2.25	38383.9925	44444	3748	1.965	1.450	1.753	1.029	0.751	11111	1.35	38176.6642	44444		
3518	4.068	1.253	1.473	0.000	0.000	11100	2.02	38453.7604	44400	3749	4.681	1.058	1.204	0.837	0.592	11111	1.87	38108.7632	44444		
3518	3.751	1.222	1.374	0.979	0.650	11111	2.17	38461.7694	22222	3749	4.666	1.167	1.137	0.951	0.528	11111	2.18	38165.6430	44444		
3547	3.079	1.011	0.820		0.476	11101	1.17	38093.7786	44444	3749	4.688	1.160	1.158	0.860	0.563	11111	1.74	38387.9656	44444		
3547	3.127	0.984	0.824	0.725	0.486	11111	1.12	38112.6699	44444	3751	4.271	1.485	1.734	1.197	0.749	11111	1.53	38109.7235	44444		
3547	3.096	1.022	0.797	0.694	0.504	11111	1.15	38381.9756	44444	3751	4.324	1.476	1.700	1.087	0.731	11111	1.53	38449.7972	44444		
3556	4.883	0.078	0.137	0.056	0.082	11111	2.33	38107.7605	34444	3751	4.292	1.474	1.734	1.090	0.752	11111	1.53	38387.9768	44444		
3556	4.877	0.110	0.109	0.283	-0.011	11111	2.62	38161.6334	44444	3757	3.664	0.337	0.090	0.358	0.190	11111	1.16	38109.7038	44444		
3556	4.898	0.111	0.097	0.158	0.034	11111	2.30	38384.0011	44444	3757	3.691	0.324	0.102	0.327	0.190	11111	1.18	38382.0056	44444		
3569	3.177	0.226	0.034			11100	1.04	38060.8351	21200	3757	3.660	0.318	0.102	0.327	0.182	11111	1.17	38382.9456	22222		
3569	3.160	0.178	0.077	0.266	0.055	11111	1.11	38095.7978	44444	3759	4.623	0.440	-0.007	0.461	0.264	11111	1.30	38116.7433	22222		
3569	3.178	0.178	0.088	0.205	0.030	11111	1.18	38161.6464	44444	3759	4.605	0.454	0.019	0.438	0.203	11111	1.48	38162.6557	44444		
3569	3.112	0.176	0.088	0.000	0.000	11100	1.05	38432.8311	44400	3759	4.606	0.445	0.003	0.401	0.209	11111	1.73	38449.7972	44444		
3569	3.100	0.177	0.120	0.000	0.000	11100	1.04	38438.8022	44400	3759	4.593	0.438	-0.029	0.410	0.220	11111	1.76	38459.8071	44444		
3569	3.108	0.214	0.095	0.000	0.000	11100	1.04	38439.7985	44400	3771	4.553	0.788	0.318	0.834	0.435	11101	1.32	38093.8310	44444		
3572	4.229	0.164	0.165	0.137	0.050	11111	1.11	38083.8032	44444	3771	4.539	0.767	0.507	0.649	0.421	11011	1.26	38382.9565	22222		
3572	4.262	0.086	0.107	0.107	0.039	11111	1.24	38154.6529	44444	3771	4.589	0.759	0.338	0.666	0.394	11111	1.26	38385.9563	44444		
3572	4.287	0.133	0.171	0.169	0.027	11111	1.09	38370.9359	44444	3771	4.579	0.752	0.358	0.654	0.000	11100	1.30	38525.6367	44444		
3576	4.704	1.582	0.	1.502	1.237	11011	1.23	38085.7815	44444	3773	4.324	1.522	1.867	1.262	0.888	11111	1.07	38095.8051	44444		
3576	4.763	1.470	1.921	1.475	1.222	11111	1.26	38131.6847	44444	3773	4.387	1.552	1.966	1.248	0.923	11111	1.17	38165.6494	44444		
3576	4.775	1.544	1.844	1.506	1.284	11111	1.23	38370.9431	44444	3773	4.245	1.543	1.887	1.206	0.915	11111	1.02	38378.9829	44444		
3576	4.762	1.544	1.887	1.457	1.265	11111	1.47	38521.7126	44444	3773	4.303	1.542	1.858	0.000	0.000	11100	1.03	38474.7399	44400		
3576	4.809	1.525	1.865	1.407	1.270	11111	1.30	38523.6437	44444	3775	3.192	0.455	0.046	0.442	0.277	11111	1.07	38064.8582	12222		
3579	3.951	0.427	0.062	0.397	0.203	11111	1.12	38155.6493	44444	3775	3.223	0.480	0.098	0.444	0.231	11101	1.19	38165.6560	44444		
3579	3.981	0.429	0.068	0.	0.	11100	1.02	38410.8838	44400	3775	3.191	0.451	0.028	0.444	0.280	11111	1.07	38378.9972	44444		
3579	3.945	0.437	0.042	0.358	0.218	11111	1.35	38521.7042	44444	3786	3.627	0.266	-0.099	0.374	0.187	11111	3.44	38095.7751	44444		
3594	3.585	0.030	0.006	0.030	0.038	11111	1.04	38082.7703	44444	3786	3.558	0.412	-0.030	0.344	0.265	11111	3.36	38103.7408	44444		
3594	3.610	-0.017	0.003	0.070	-0.060	11111	1.18	38161.6525	44444	3786	3.613	0.384	-0.072	0.606	0.162	11111	3.35	38117.7129	44444		
3594	3.583	-0.005	0.001	0.073	0.043	11111	1.04	38358.0170	44444	3787	4.574	0.093	0.033	0.182	0.104	11111	1.25	38109.7539	44444		
3594	3.597	-0.013	0.026	0.086	0.002	11111	1.03	38367.9819	44444	3787	4.558	0.106	0.098	0.177	0.030	11111	1.47	38162.6613	44444		
3594	3.644	-0.022	0.031	0.100	-0.001	11111	1.04	38370.9661	44444	3787	4.575	0.108	0.121	0.135	0.063	11111	1.22	38449.8060	44444		
3612	4.580	1.055	0.831	0.738	0.535	11111	1.01	38082.7478	44444	3787	4.558	0.100	0.129	0.134	0.056	11111	1.30	38452.8315	44444		
3612	4.567	0.998	0.859	0.727	0.455	11111	1.25	38155.6903	44444	3799	4.502	0.029	0.029	0.113	0.014	11111	1.07	38109.7322	44444		
3612	4.546	1.054	0.778	0.721	0.517	11111	1.01	38358.0269	44444	3799	4.529	-0.047	0.012	0.094	-0.022	11111	1.25	38154.7080	44444		
3612	4.528	1.037	0.832	0.755	0.472	11111	1.01	38367.9892	44444	3799	4.492	0.022	0.061	0.075	0.005	11111	1.06	38382.9710	22222		
3612	4.576	1.030	0.792	0.794	0.487	11111	1.01	38370.9908	44444	3800	4.541	0.964	0.629	0.748	0.458	11111	1.06	38116.7566	22222		
3616	4.824	0.502	0.015	0.443	0.309	11111	1.22	38067.8275	44444	3800	4.558	0.869	0.661	0.686	0.443	11111	1.32	38154.7258	44444		
3616	4.836	0.506	0.052	0.458	0.250	11111	1.29	38162.6313	44444	3800	4.545	0.917	0.611	0.701	0.455	11111	1.01	38382.9816	22222		
3619	4.492	0.276	0.101	0.309	0.122	11111	1.06	38109.6948	44444	3809	4.801	1.009	0.768	0.790	0.536	11111	1.02	38109.7402	44444		
3619	4.501	0.242	0.117	0.276	0.111	11111	1.10	38131.6906	44444	3809	4.823	0.974	0.775	0.739	0.562	11111	1.01	38113.7150	44444		
3619	4.456	0.287	0.135	0.253	0.092	11111	1.18	38440.8835	44444	3809	4.807	0.988	0.767	0.741	0.502	11111	1.22	38440.9234	44444		
3619	4.485	0.275	0.121	0.244	0.104	11111	1.31	38446.9048	44444	3809	4.813	0.975	0.729	0.763	0.506	11111	1.06	38448.8466	44444		
3624	4.682	0.374	0.172	0.281	0.156	11111	1.17	38082.7586	44444	3815	5.407	0.772	0.446	0.634	0.370	11111	1.03	38059.7998	22211		
3624	4.677	0.348	0.140	0.330	0.112	11111	1.36	38155.6985	44444	3815	5.415	0.784	0.404	0.637	0.387	11111	1.03	38089.8076	22222		
3624	4.681	0.326	0.171	0.337	0.131	11111	1.17	38367.9968	4												

TABLE 4 CATALINA UBVRI OBSERVATIONS

CATALINA UBVRI DATA											CATALINA UBVRI DATA										
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.		
3873	2.975	0.787	0.442	0.000	0.000	11100	1.94	38396.7456	44444	4090	4.731	0.289			0.180	11001	1.01	38067.8819	44444		
3873	2.920	0.826	0.448	0.000	0.000	11100	1.01	38396.9399	44444	4090	4.750	0.238	0.173	0.248	0.104	11111	1.25	38155.7445	44444		
3873	3.040	0.801	0.425	0.632	0.419	11111	1.04	38406.8635	43333	4090	4.729	0.239	0.167	0.263	0.129	11111	1.01	38393.0174	44444		
3881	5.101	0.624	0.072	0.534	0.339	11111	1.03	38357.0331	44444	4090	4.733	0.233	0.180	0.000	0.000	11100	1.04	38473.7999	44400		
3881	5.100	0.627	0.081	0.535	0.327	11111	1.04	38358.0070	44444	4090	4.726	0.264	0.175	0.000	0.000	11100	1.00	38474.7511	44400		
3888	3.805	0.278	0.112	0.329	0.121	11111	1.25	38161.6838	44444	4092	5.612	1.482	1.872	1.300	0.956	11111	1.81	38339.9966	44444		
3888	3.822	0.273	0.125	0.324	0.165	11111	1.12	38368.9931	44444	4092	5.534	1.524	1.910	1.213	0.933	11111	1.64	38384.0029	44444		
3888	3.894	0.307	0.053	0.353	0.151	11111	1.13	38406.8812	43333	4092	5.578	1.526	1.877	1.242	0.946	11111	1.36	38386.0377	44444		
3888	3.817	0.283	0.120	0.340	0.191	11111	1.12	38410.8923	44444	4094	3.807	1.482	1.788	1.113	0.794	11111	1.55	38083.8453	44444		
3894	4.595	0.035	0.048	0.121	0.013	11111	1.09	38109.7609	44444	4094	3.821	1.484	1.856	1.147	0.810	11111	1.62	38384.0647	44444		
3894	4.585	0.026	0.115	0.086	-0.033	00011	1.23	38165.6812	44444	4094	3.757	1.476	1.799	1.081	0.865	11111	1.52	38392.9664	44444		
3894	4.611	0.033	0.083	0.102	0.010	11111	1.08	38377.9770	44444	4100		0.902			0.449	01001	1.00	38061.8737	12111		
3903	4.118	0.881	0.662	0.718	0.487	11111	1.54	38108.7691	44444	4100	4.208	0.902	0.663	0.670	0.475	11111	1.01	38152.6508	44444		
3903	4.023	0.961	0.588	0.681	0.471	11111	1.47	38377.7015	44444	4100	4.208	0.910	0.629	0.715	0.462	11111	1.02	38383.0335	22222		
3903	4.101	0.936	0.629	0.674	0.454	11111	1.49	38385.9906	44444	4100	0.000	0.000	0.642	-0.030	0.458	00101	1.00	38403.9531	44444		
3905	3.896	1.217	1.419	0.959	0.535	11111	1.01	38064.8699	12222	4112	4.832	0.522	-0.009	0.000	0.000	11100	1.11	38383.0439	22222		
3905	3.871	1.204	1.373	0.870	0.627	11111	1.34	38154.7333	44444	4112	4.855	0.501	-0.001	0.479	0.273	11111	1.11	38387.0277	44444		
3905	3.992	1.218	1.281	0.923	0.574	11111	1.03	38406.8691	43333	4112	4.869	0.516	-0.004	0.537	0.276	11111	1.10	38403.9626	44444		
3905	3.865	1.246	1.356	0.892	0.606	11111	1.01	38410.9010	44444	4112	4.817	0.515	0.003	0.430	0.266	11111	1.21	38521.7205	44444		
3905	3.881	1.228	1.412	0.888	0.581	11111	1.24	38440.9319	44444	4119	5.125	-0.152	-0.563	-0.044	-0.147	11111	1.18	38095.7826	44444		
3950	4.679	1.591	1.974	1.430	1.125	11111	1.22	38091.8519	12222	4119	5.097	-0.119	-0.550	0.030	-0.163	11111	1.18	38117.7446	44444		
3950	4.682	1.606	1.964	1.423	1.039	11111	1.10	38112.7239	44444	4119	5.076	-0.150	-0.521	0.000	0.000	11100	1.25	38384.0583	44444		
3950	4.652	1.636	1.792	0.000	0.000	11100	1.11	38432.8131	44400	4119	5.090	-0.137	-0.533	-0.041	-0.149	11111	1.25	38386.0483	44444		
3950	4.752	1.578	1.882	0.000	0.000	11100	1.10	38438.8152	44400	4119	5.123	-0.129	-0.491	-0.003	-0.133	11111	1.18	38473.7429	44444		
3950	4.700	1.621	1.847	0.000	0.000	11100	1.14	38440.8700	44400	4119	5.078	-0.139	-0.512	-0.072	-0.143	11111	1.19	38474.7305	44444		
3970	4.546	-0.094	-0.248	-0.032	-0.099	11111	1.44	38064.8779	12222	4132	4.746	0.238	0.057	0.192	0.106	11111	1.02	38086.8358	22222		
3970	4.605	-0.094	-0.303	-0.035	-0.073	11111	1.48	38108.7751	44444	4132	4.762	0.226	0.106	0.222	0.068	11111	1.23	38165.7194	44444		
3970	4.601	-0.114	-0.259	-0.015	-0.083	11111	1.42	38377.0119	44444	4132	4.730	0.214	0.081	0.186	0.091	11111	1.04	38387.0147	44444		
3970	4.588	-0.090	-0.286	0.027	-0.073	11111	1.43	38381.0074	44444	4133	3.847	-0.123	-0.961	-0.048	-0.151	11111	1.10	37720.7599	22222		
3974	4.486	0.174	0.088	0.195	0.077	11111	1.03	38059.8220	22111	4133	3.824	-0.123	-0.945	-0.039	-0.186	11111	1.19	38080.9023	44444		
3974	4.491	0.204	0.065	0.209	0.071	11111	1.01	38089.8164	22222	4133	3.890	-0.131	-0.948	-0.065	-0.150	11111	1.12	38089.8456	22222		
3974	4.522	0.181	0.059	0.190	0.101	11111	1.01	38108.7566	44444	4133	3.885	-0.147	-0.994	-0.018	-0.174	11111	1.11	38448.8558	44444		
3974	4.000	0.000	0.000	-0.014	0.007	00001	1.01	38113.7397	44444	4133	3.895	-0.156	-0.948	-0.054	-0.182	11111	1.10	38449.8512	44444		
3974	4.497	0.150	0.089	0.180	0.055	11111	1.01	38377.0221	44444	4163	5.311	3.224	3.607	2.158	1.208	11111	1.65	38093.8744	44444		
3974	4.489	0.166	0.061	0.227	0.084	11111	1.01	38381.0166	44444	4163	4.874	2.780	3.869	1.934	1.263	11111	1.90	38165.7071	44444		
3975	3.549	-0.054	-0.221	0.104	0.053	11111	1.05	38067.8747	44444	4163	4.697	2.502	5.349	1.677	1.221	11111	1.43	38388.9895	44444		
3975	3.527	-0.020	-0.177	0.074	-0.022	11111	1.17	38165.6648	44444	4163	4.931	2.719	5.132	1.824	1.286	11111	1.48	38449.8620	44444		
3975	3.531	-0.033	-0.211	0.092	0.013	11111	1.04	38377.9934	44444	4163	4.851	2.595	4.702	1.786	1.314	11111	1.44	38784.8869	44444		
3975	3.516	-0.039	-0.227	0.106	0.022	11111	1.06	38381.0253	44444	4166	4.714	0.808	0.524	0.678	0.412	11111	1.02	38108.7924	44444		
3980	4.388	1.436	1.762			11100	1.08	38063.8729	11212	4166	4.717	0.795	0.575	0.662	0.360	11111	1.33	38155.7519	44444		
3980	4.359	1.455	1.760	1.125	0.792	11111	1.08	38378.0047	44444	4166	4.712	0.799	0.600	0.600	0.000	11100	1.01	38438.8236	44400		
3980	4.373	1.451	1.726	1.128	0.759	11111	1.09	38386.0012	44444	4166	4.740	0.816	0.559	0.000	0.000	11100	1.00	38439.8659	44400		
3981	4.487	-0.048	-0.067	0.075	-0.079	11111	1.45	38161.6902	44444	4166	4.698	0.833	0.544	0.000	0.000	11100	1.01	38440.8735	44400		
3981	4.509	-0.030	-0.067	0.064	-0.020	11111	1.19	38378.0164	44444	4195	6.015	2.371	4.468	1.748	1.293	11111	1.31	38512.7493	22222		
3981	4.503	-0.039	-0.044	0.039	-0.050	11111	1.20	38390.9886	44444	4195	5.935	2.382	4.570	1.754	1.252	11111	1.29	38513.7342	22222		
3982	1.341	-0.102	-0.370	-0.032	-0.101	11111	1.09	38059.8363	22111	4195	5.984	2.352	4.509	1.794	1.255	11111	1.23	38515.6761	44444		
3982	1.328	-0.090	-0.350	-0.038	-0.114	11111	1.07	38083.8154	44444	4195	6.100	2.365	4.326	1.807	1.285	11111	1.45	38566.6558	22222		
3982	1.345	-0.110	-0.372	-0.035	-0.083	11111	1.09	38089.8245	22222	4232	3.118	1.227	1.251	0.904	0.691	11111	1.56	38103.8173	44444		
3982	1.352	-0.094	-0.334	-0.0	-0.088	11111	1.14	38344.0300	44444	4232	3.103	1.254	1.319	1.050	0.596	11111	1.87	38161.7123	44444		
3982	1.376	-0.138	-0.331	-0.003	-0.104	11111	1.11	38368.9775	44444	4232	3.096	1.236	1.250	0.862	0.626	11111	1.50	38389.0019	44444		
3982	1.341	-0.150	-0.345	0.000	0.000	11100	1.09	38432.8170	44400	4247	3.805	1.049	0.920	0.883	0.509	11111	1.00	38086.8452	22222		
3982	1.296	-0.141	-0.330	0.000	0.000	11100	1.07	38438.8194	44400	4247	3.850	1.034	0.968	0.785	0.561	11111	1.23	38155.7596	44444		
3982	1.348	-0.106	-0.351	0.000	0.000	11100	1.09	38439.8624	44400	4247	3.799	1.045	0.902	0.813	0.563	11111	1.00	38379.0281	44444		
3994	3.625	1.005	0.892	0.848	0.459	11111	1.51	38080.8701	44444	4248	4.708	-0.061	-0.073	-0.000	-0.033	11111	1.03	38148.6932	44444		
3994	3.630	1.005	0.903	0.792	0.451	11111	1.13	38155.7355	44444	4248	4.719	-0.047	-0.046	0.045	-0.029	11111	1.02	38379.0397	44444		
3994	3.584	1.015	0.909	0.727	0.506	11111	1.41	38379.0087	44444	4248	4.716	-0.051	-0.038	0.099	-0.059	11111	1.02	38403.9716	44444		
3994	3.616	1.014	0.949	0.000	0.000	11100	1.40	38451.7917	44400	4259	4.338	0.003	-0.036	0.159	-0.017	11111	1.13	38095.8883	44444		
3994	3.619	0.980	0.923	0.000	0.000	11100	1.49														

CATALINA UBVRi DATA										CATALINA UBVRi DATA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
4335	3.016	1.190	1.145	0.830	0.588	11111	1.02	38088.8350	22222	4456	5.962	-0.149	-0.610	-0.029	-0.134	11111	1.05	38386.0604	44444
4335	2.996	1.124	0.0	0.707	0.612	11011	1.02	38131.7088	44444	4456	5.961	-0.159	-0.649	-0.060	-0.169	11111	2.06	38386.8518	44444
4335	3.025	1.140	1.124	0.845	0.555	11111	1.02	38391.0085	44444	4456	5.966	-0.159	-0.645	-0.039	-0.164	11111	1.04	38387.0511	44444
4343	4.439	0.017	0.037	0.037	0.040	11111	1.74	38103.8017	44444	4456	5.967	-0.162	-0.636	-0.032	-0.157	11111	2.04	38387.8502	44444
4343	4.462	0.030	-0.002	0.052	0.036	11111	2.01	38153.7289	44444	4456	5.930	-0.159	-0.643	-0.054	-0.163	11111	1.04	38388.0239	44444
4343	4.470	0.024	0.081	0.000	0.000	11100	1.75	38440.8841	44400	4456	5.994	-0.152	-0.649	-0.005	-0.169	11111	2.26	38388.8373	44444
4343	4.528	0.032	0.097	0.000	0.000	11100	1.74	38443.8583	44400	4456	5.956	-0.156	-0.580	-0.029	-0.157	11111	1.04	38388.9689	44444
4357	2.561	0.088	0.104	0.089	0.025	11111	1.03	38142.6727	44444	4456	5.943	-0.166	-0.644	-0.056	-0.169	11111	1.09	38390.9699	44444
4357	2.565	0.138	0.139	0.109	0.027	11111	1.02	38191.0177	44444	4456	5.986	-0.178	-0.657	-0.026	-0.168	11111	2.11	38393.0240	44444
4357	2.589	0.095	0.090	0.086	0.050	11111	1.02	38403.9811	44444	4456	5.937	-0.152	-0.665	-0.053	-0.165	11111	1.04	38393.0318	44444
4359	3.349	-0.001	0.078	0.049	-0.046	11111	1.05	38391.0280	44444	4456	5.974	-0.161	-0.640	-0.032	-0.177	11111	1.04	38408.9334	44444
4359	3.348	-0.007	0.105	0.104	-0.010	11111	1.05	38403.9892	44444	4456	5.960	-0.154	-0.662	-0.075	-0.185	11111	2.49	38410.7686	44444
4359	3.338	-0.039	0.030	0.000	-0.033	11111	1.05	38142.6809	44444	4456	5.958	-0.134	-0.633	-0.046	-0.195	11111	1.87	38410.8002	44444
4359	3.349	-0.001	0.078	0.049	-0.046	11111	1.05	38391.0280	44444	4456	5.924	-0.175	-0.662	-0.067	-0.186	11111	1.10	38410.9104	44444
4359	3.348	-0.007	0.105	0.104	-0.010	11111	1.05	38403.9892	44444	4456	5.967	-0.166	-0.653	-0.078	-0.154	11111	1.04	38411.9587	44444
4362	4.590	1.709	1.846	1.608	1.247	11111	1.08	38088.9030	22222	4456	5.958	-0.160	-0.652	-0.064	-0.176	11111	1.06	38415.0058	22222
4362	4.620	1.631	1.875	1.519	1.325	11111	1.02	38392.9837	44444	4456	5.937	-0.108	-0.688	-0.094	-0.184	11111	2.06	38415.7724	44444
4362	4.512	1.634	1.884	1.416	1.350	11101	1.01	38397.9937	44444	4456	5.903	-0.122	-0.663	-0.124	-0.177	11111	1.04	38415.8695	44444
4362	4.673	1.651	1.808	0.000	0.000	11100	1.05	38451.7988	44400	4456	5.970	-0.118	-0.658	-0.035	-0.136	11111	2.21	38419.9510	44444
4368	4.439	0.205	0.090	0.292	0.126	11111	1.32	38093.8832	44444	4456	5.947	-0.180	-0.669	-0.055	-0.173	11111	1.92	38420.7670	44444
4368	4.468	0.218	0.116	0.273	0.085	11111	1.26	38148.7096	44444	4456	5.942	-0.142	-0.659	-0.050	-0.161	11111	1.04	38420.9442	44444
4368	4.462	0.211	0.162	0.000	0.000	11100	1.24	38440.8881	44400	4456	5.946	-0.154	-0.656	-0.037	-0.158	11111	1.04	38440.8741	44444
4368	4.479	0.210	0.169	0.000	0.000	11100	1.24	38441.8854	44400	4456	5.954	-0.156	-0.654	0.000	0.000	11100	1.04	38441.8715	44400
4368	4.506	0.212	0.184	0.000	0.000	11100	1.23	38443.8626	44400	4456	5.950	-0.148	-0.671	-0.060	-0.161	11111	1.07	38443.8337	44444
4371	5.179	1.533	1.825	1.298	0.948	11111	1.85	38340.0067	44444	4456	5.931	-0.141	-0.663	-0.057	-0.162	11111	1.10	38431.8521	44444
4371	5.168	1.492	1.924	1.240	0.939	11111	1.65	38344.0120	44444	4456	5.964	-0.130	-0.672	0.000	0.000	11100	2.35	38438.6969	44400
4374	3.786	0.611	0.057	0.547	0.391	11111	1.00	38067.9074	44444	4456	5.921	-0.174	-0.633	0.000	0.000	11100	1.09	38438.8385	44400
4374	3.820	0.588	0.039	0.568	0.351	11111	1.00	38108.8024	44444	4456	5.944	-0.145	-0.665	-0.042	-0.157	11111	1.04	38438.8975	44444
4374	3.804	0.569	0.059	0.490	0.350	11111	1.00	38131.7143	44444	4456	5.973	-0.145	-0.676	0.000	0.000	11100	2.45	38439.6793	44400
4374	3.778	0.617	0.073	0.496	0.305	11111	1.24	38155.7760	44444	4456	5.979	-0.164	-0.664	0.000	0.000	11100	1.04	38439.8753	44444
4374	3.723	0.606	-0.000	0.477	0.348	11111	1.00	38393.0128	44444	4456	5.949	-0.149	-0.641	0.000	0.000	11100	2.21	38440.6931	44400
4374	3.786	0.589	0.051	0.000	0.000	11100	1.01	38440.9042	44400	4456	5.954	-0.156	-0.654	0.000	0.000	11100	1.04	38441.8715	44400
4374	3.793	0.578	0.062	0.000	0.000	11100	1.00	38441.8894	44400	4456	5.950	-0.148	-0.671	-0.060	-0.161	11111	1.07	38443.8337	44444
4374	3.812	0.589	0.071	0.000	0.000	11100	1.00	38443.8660	44400	4456	5.950	-0.161	-0.658	0.000	0.000	11100	1.04	38443.8881	44400
4377	3.482	1.432	1.562	1.071	0.703	11111	1.00	38116.7796	22222	4456	5.958	-0.130	-0.667	-0.044	-0.156	11111	2.29	38444.6829	44444
4377	3.508	1.413	1.590	1.057	0.668	11111	1.27	38155.7829	44444	4456	5.965	-0.147	-0.682	-0.055	-0.167	11111	1.05	38446.8399	44444
4377	3.493	1.395	1.511	0.000	0.000	11100	1.01	38440.8976	44400	4456	5.963	-0.167	-0.606	-0.030	-0.178	11111	1.05	38448.9371	44444
4377	3.480	1.393	1.506	0.000	0.000	11100	1.01	38441.8931	44400	4456	5.937	-0.135	-0.660	-0.079	-0.176	11111	1.08	38448.8720	44444
4377	3.490	1.383	1.556	0.000	0.000	11100	1.00	38443.8690	44400	4456	5.942	-0.154	-0.658	-0.069	-0.169	11111	1.04	38450.8108	44444
4380	4.771	0.142	0.009	0.074	0.017	11111	1.05	38080.9221	44444	4456	5.954	-0.152	-0.651	-0.032	-0.171	11111	1.08	38451.8105	44400
4380	4.815	0.082	0.066	0.114	0.011	11111	1.28	38155.7828	44444	4456	5.962	-0.151	-0.647	0.000	0.000	11100	1.07	38451.8120	44444
4380	4.794	0.126	0.027	0.146	0.049	11111	1.01	38378.0588	44444	4456	5.937	-0.148	-0.662	0.000	0.000	11100	1.04	38452.8584	22200
4382	3.556	1.124	0.961	0.848	0.615	11111	1.47	38088.8457	22222	4456	5.922	-0.136	-0.688	-0.066	-0.169	11111	1.05	38452.8849	44444
4382	3.558	1.129	0.979	0.820	0.582	11111	1.47	38392.9940	44444	4456	5.948	-0.144	-0.635	0.000	0.000	11100	2.04	38453.6701	44400
4382	3.570	1.091	1.012	0.826	0.621	11101	1.47	38394.0151	33333	4456	5.939	-0.147	-0.655	-0.051	-0.164	11111	1.05	38453.8214	44444
4382	3.556	1.110	0.974	0.815	0.597	11111	1.63	38469.8630	44444	4456	5.953	-0.148	-0.655	-0.035	-0.166	11111	1.04	38453.8704	44444
4386	4.079	-0.061	-0.146	0.090	-0.040	11100	1.12	38063.9007	11212	4456	5.951	-0.153	-0.645	0.000	0.000	11100	2.00	38456.6635	44400
4386	4.052	-0.083	-0.124	0.041	-0.062	11111	1.15	38148.7175	44444	4456	5.949	-0.154	-0.644	-0.057	-0.170	11111	1.06	38456.8086	44444
4386	4.055	-0.063	-0.123	-0.003	-0.092	11111	1.23	38392.9359	44444	4456	5.900	-0.163	-0.600	0.000	0.000	01000	1.26	38460.7281	22222
4386	4.065	-0.058	-0.104	0.000	0.000	11100	1.15	38451.8052	44400	4456	5.949	-0.149	-0.641	0.000	0.000	11100	1.06	38460.8594	44400
4386	4.009	-0.056	-0.121	0.000	0.000	11100	1.21	38464.8777	44400	4456	5.983	-0.160	-0.632	0.000	0.000	11100	1.05	38460.7407	22222
4392	4.988	0.990	0.793	0.747	0.469	11111	1.02	38424.9177	44444	4456	5.907	-0.123	-0.656	-0.057	-0.171	11111	1.05	38460.8713	22222
4392	5.006	0.969	0.800	0.747	0.457	11111	1.02	38452.8437	44444	4456	5.921	-0.140	-0.669	-0.049	-0.156	11111	1.06	38461.7940	22222
4399	3.935	0.425	0.079	0.378	0.219	11111	1.10	38078.9057	12222	4456	5.955	-0.161	-0.663	-0.055	-0.258	11111	1.12	38463.8915	22222
4399	3.944	0.430	0.063	0.398	0.219	11111	1.08	38378.0688	44444	4456	5.970	-0.153	-0.649	0.000	0.000	11100	1.19	38463.9125	22200
4399	3.944	0.419	0.064	0.382	0.193	11111	1.17	38392.9645	44444	4456	5.955	-0.169	-0.642	0.000	0.000	11100	1.49	38463.9644	22222
4405	4.076	0.246	0.053	0.249	0.102	11111	1.71	38080.9287	44444	4456	5.951	-0.154	-0.652	-0.076	-0.181	11111	1.09	38464.7692	44444
4405	4.071	0.201	0.093	0.207															

TABLE 4 CATALINA UBVRI OBSERVATIONS

CATALINA UBVRI DATA										CATALINA UBVRI DATA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
4456	5.943	-0.147	-0.658	0.000	0.000	11100	1.07	38528.6898	44400	4527	4.521	0.569	0.254	0.557	0.376	11111	1.04	38088.8928	22222
4456	5.966	-0.158	-0.632	-0.095	-0.176	11111	1.11	38528.7107	44444	4527	4.545	0.548	0.288	0.520	0.332	11111	1.18	38161.7533	44444
4456	5.949	-0.163	-0.643	-0.072	-0.182	11111	2.43	38531.8374	44444	4527	4.503	0.547	0.266	0.526	0.368	11111	1.04	38432.9533	44444
4456	5.990	-0.151	-0.667	-0.036	-0.188	11111	1.04	38532.6287	22222	4527	4.512	0.554	0.282	0.510	0.372	11111	1.02	38438.9064	44444
4456	5.938	-0.173	-0.621	-0.083	-0.191	11111	1.54	38532.7813	22222	4527	4.508	0.562	0.297	0.516	0.349	11111	1.10	38440.9646	44444
4456	5.941	-0.164	-0.663	-0.096	-0.191	11111	1.04	38533.6194	44444	4534	0.	0.090	0.	0.090	-0.040	01000	1.50	38061.7894	12111
4456	5.943	-0.156	-0.643	-0.070	-0.166	11111	1.34	38533.7523	44444	4534	2.158	0.077	0.084	-0.116	0.020	11111	1.05	38063.9295	11212
4456	5.949	-0.151	-0.656	-0.081	-0.172	11111	1.33	38534.7479	44444	4534	2.131	0.042	0.098	0.077	0.001	11111	1.06	38089.8927	22222
4456	5.950	-0.160	-0.640	-0.070	-0.178	11111	1.04	38537.6403	44444	4534	2.140	0.074	0.070	-1.495	1.428	11000	1.10	38135.7846	43411
4456	5.945	-0.154	-0.658	-0.070	-0.175	11111	1.13	38543.6783	22222	4534	2.140	0.076	0.048	0.107	-0.007	11111	1.12	38142.7756	44444
4456	5.943	-0.147	-0.662	-0.054	-0.184	11111	1.05	38544.6275	44444	4534	2.130	0.100	0.050	-0.004	0.028	11111	1.27	38179.7163	44444
4456	5.911	-0.153	-0.641	-0.098	-0.172	11111	1.11	38545.6654	22222	4534	2.122	0.091	0.090	-0.014	0.024	11111	1.08	38183.6436	44421
4456	5.977	-0.169	-0.650	-0.042	-0.177	11111	1.12	38553.6658	44444	4534	2.129	0.108	0.035	0.025	0.042	11111	3.14	38183.8162	44421
4456	5.960	-0.160	-0.657	-0.054	-0.164	11111	1.20	38555.6645	44444	4534	2.113	0.087	0.080	0.000	0.000	11000	1.10	38464.8848	44400
4456	5.941	-0.148	-0.661	-0.065	-0.171	11111	1.16	38556.6529	44444	4534	2.088	0.114	0.076	0.028	0.015	11111	1.09	38480.7429	44444
4456	5.947	-0.145	-0.662	-0.055	-0.173	11111	1.12	38557.6371	44444	4534	2.205	0.038	0.185	0.000	0.000	11000	1.13	38792.8664	22000
4456	5.951	-0.153	-0.665	-0.283	-0.149	11101	1.17	38559.6463	44444	4540	3.609	0.541	0.145	0.453	0.307	11111	1.16	38063.9201	11212
4456	5.939	-0.156	-0.650	-0.045	-0.170	11111	1.17	38560.6427	22222	4540	3.596	0.533	0.136	0.500	0.284	11111	1.18	38089.8914	22222
4456	5.983	-0.167	-0.650	-0.038	-0.167	11111	1.15	38561.6353	22222	4540	3.610	0.567	0.100			11000	1.21	38135.7783	43411
4456	5.910	-0.172	-0.652	-0.090	-0.166	11111	1.26	38562.6591	22222	4540	3.608	0.587	0.095	0.274	0.101	11011	1.26	38136.7283	44444
4456	5.978	-0.175	-0.645	0.000	0.000	11000	1.04	38763.9962	22000	4540	3.601	0.561	0.114	0.598	0.260	11111	1.27	38142.7831	44444
4456	5.912	-0.092	-0.710	0.000	0.000	11000	1.05	38771.9583	44000	4540	3.616	0.552	0.132	0.293	0.288	11111	1.27	38176.6908	44444
4456	5.956	-0.158	-0.673	0.000	0.000	11000	1.04	38783.9494	44444	4540	3.601	0.561	0.114	0.598	0.260	11111	1.27	38142.7831	44444
4456	5.975	-0.182	-0.653	-0.051	-0.132	11111	2.09	38784.7678	44444	4540	3.616	0.552	0.132	0.293	0.288	11111	1.27	38176.6908	44444
4456	5.940	-0.157	-0.647	-0.086	-0.161	11111	1.09	38784.8960	44444	4540	3.630	0.558	0.089	0.212	0.275	11111	2.08	38176.7799	44444
4456	5.939	-0.160	-0.665	-0.044	-0.160	11111	1.04	38786.9463	44444	4540	3.602	0.573	0.118	0.476	0.265	11111	1.28	38183.6881	44421
4456	5.933	-0.155	-0.666	-0.036	-0.150	11111	1.12	38788.0042	44444	4540	3.595	0.544	0.141	0.474	0.283	11111	1.23	38183.6567	44421
4456	5.933	-0.147	-0.662	-0.065	-0.166	11111	1.04	38789.9204	44444	4540	3.619	0.537	0.123	0.532	0.328	11111	1.39	38183.8079	44421
4456	6.008	-0.214	-0.604	-0.015	-0.134	11111	1.09	38790.8725	22222	4540	3.576	0.543	0.132	0.000	0.000	11000	1.23	38464.8848	44400
4456	5.938	-0.150	-0.664	-0.057	-0.163	11111	1.05	38791.8993	44444	4540	3.549	0.559	0.094	0.442	0.276	11111	1.19	38480.7502	44444
4456	5.934	-0.176	-0.646	-0.075	-0.182	11111	1.04	38791.9373	22221	4540	3.598	0.558	0.080	0.428	0.261	11111	1.18	38496.7737	44444
4456	5.968	-0.174	-0.645	-0.022	-0.145	11111	1.04	38805.6811	44444	4550	6.472	0.752	0.185	0.090	-0.040	11000	1.10	37835.6159	22222
4456	5.975	-0.165	-0.677	-0.022	-0.168	11111	1.07	38805.9312	44444	4550	6.482	0.752	0.178	0.664	0.427	11111	1.12	37835.6239	22222
4456	5.954	-0.153	0.000	0.000	0.000	11000	1.04	38809.8891	44000	4550	6.472	0.751	0.177	0.667	0.448	11111	1.15	37836.6342	22222
4456	5.928	-0.145	-0.666	0.000	0.000	11000	2.35	38810.6783	44000	4550	6.382	0.790	0.192	0.596	0.471	11111	1.05	38089.9191	22222
4456	5.941	-0.155	-0.670	0.000	0.000	11000	1.05	38810.8970	44000	4550	6.423	0.744	0.198	0.595	0.480	11111	1.09	38812.7923	44444
4456	5.960	-0.151	-0.672	0.000	0.000	11000	1.04	38811.8771	44000	4550	6.424	0.725	0.218	0.624	0.451	11111	1.07	38143.7834	44444
4456	5.960	-0.141	-0.666	-0.051	-0.179	11111	1.09	38818.7990	22222	4550	6.431	0.735	0.234	0.626	0.438	11111	1.01	38144.6943	22222
4456	5.954	-0.165	-0.652	-0.038	-0.185	11111	1.07	38822.7993	44444	4550	6.423	0.717	0.193	0.584	0.480	11111	1.02	38147.6716	44444
4456	5.933	-0.158	-0.664	-0.059	-0.182	11111	1.20	38822.9339	44444	4550	6.460	0.750	0.170	0.716	0.435	11111	1.11	38157.7614	12211
4456	5.957	-0.147	-0.666	-0.055	-0.169	11111	1.06	38823.8063	44444	4550	6.456	0.756	0.199	0.646	0.437	11111	1.01	38161.6766	44444
4456	5.961	-0.148	-0.664	-0.045	-0.172	11111	1.10	38823.8978	44444	4550	6.455	0.749	0.192	0.658	0.439	11111	1.01	38162.6752	44444
4456	5.946	-0.159	-0.656	-0.042	-0.178	11111	1.06	38824.7972	44444	4550	6.466	0.732	0.041	0.000	0.000	11000	1.04	38165.6472	22000
4456	5.946	-0.147	-0.666	-0.068	-0.161	11111	1.05	38824.8607	44444	4550	6.443	0.752	0.203	0.653	0.455	11111	1.06	38180.6768	44444
4456	5.959	-0.144	-0.662	-0.056	-0.177	11111	1.08	38825.7843	44444	4550	6.443	0.736	0.194	0.635	0.445	11111	1.05	38356.9305	44444
4456	5.952	-0.156	-0.666	-0.053	-0.178	11111	1.04	38825.8420	44444	4550	6.451	0.749	0.171	0.650	0.440	11111	2.09	38361.9020	44444
4456	5.962	-0.180	-0.648	-0.054	-0.171	11111	1.07	38826.7860	44444	4550	6.446	0.749	0.175	0.651	0.437	11111	2.51	38366.8866	44444
4456	5.938	-0.151	-0.672	-0.074	-0.175	11111	1.04	38826.8411	44444	4550	6.423	0.765	0.158	0.676	0.441	11111	1.07	38368.8299	44444
4456	5.952	-0.165	-0.675	-0.044	-0.177	11111	1.07	38845.7361	44444	4550	6.426	0.756	0.177	0.697	0.458	11111	2.54	38368.0220	44444
4456	5.971	-0.148	-0.638	-0.034	-0.172	11111	1.18	38845.8656	44444	4550	6.423	0.770	0.157	0.674	0.473	11111	1.04	38369.0473	44444
4456	5.930	-0.153	-0.657	-0.074	-0.181	11111	1.04	38846.7756	44444	4550	6.431	0.756	0.158	0.661	0.460	11111	2.70	38369.8535	44444
4456	5.946	-0.178	-0.644	-0.055	-0.174	11111	1.04	38846.7961	44444	4550	6.454	0.755	0.162	0.678	0.459	11111	1.13	38370.9996	44444
4456	5.949	-0.167	-0.658	-0.069	-0.177	11111	1.17	38849.8522	44444	4550	6.429	0.767	0.174	0.690	0.487	11111	1.01	38378.0372	44444
4456	5.948	-0.145	-0.666	-0.074	-0.183	11111	1.25	38849.8714	44444	4550	6.461	0.758	0.158	0.689	0.460	11111	1.01	38382.0424	44444
4456	5.946	-0.157	-0.664	-0.029	-0.173	11111	1.04	38858.7603	22222	4550	6.428	0.741	0.154	0.695	0.451	11111	1.05	38383.0024	22222
4456	5.955	-0.172	-0.670	0.000	0.000	11000	1.04	38862.7211	22000	4550	6.435	0.758	0.171	0.663	0.446	11111	1.79	38385.8560	44444
4456	5.955	-0.149	-0.626	0.000	0.000	11000	1.04	38867.7328	22000	4550	6.433	0.752	0.160	0.684	0.439	11111	1.01	38386.0804	44444
4456	5.946	-0.157	-0.650	0.000	0.0														

TABLE 4 CATALINA UBVRi OBSERVATIONS

CATALINA UBVRi DATA											CATALINA UBVRi DATA										
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.		
4550	6.451	0.747	0.169	0.000	0.000	11100	2.46	38453.6330	44400	4550	6.441	0.755	0.169	0.648	0.448	11111	1.01	38864.8055	44444		
4550	6.455	0.731	0.172	0.689	0.443	11111	1.01	38453.8812	44444	4550	6.439	0.745	0.176	0.656	0.447	11111	1.01	38849.8609	44444		
4550	6.423	0.751	0.175	0.669	0.440	11111	1.06	38453.9278	44444	4550	6.429	0.752	0.172	0.621	0.458	11111	1.15	38849.8801	44444		
4550	6.450	0.748	0.174	0.000	0.000	11100	1.92	38456.6528	44400	4550	6.463	0.768	0.175	0.703	0.450	11111	1.01	38858.7507	22222		
4550	6.499	0.736	0.113	0.000	0.000	11100	1.03	38459.8917	44400	4550	6.439	0.751	0.186	0.000	0.000	11100	1.01	38862.7268	22200		
4550	6.447	0.747	0.170	0.693	0.435	11111	1.14	38460.7502	22222	4550	6.461	0.754	0.179	0.000	0.000	11100	1.01	38866.7397	22200		
4550	6.449	0.750	0.169	0.000	0.000	11100	1.01	38460.8694	44400	4550	6.445	0.757	0.179	0.000	0.000	11100	1.02	38864.7761	22200		
4550	6.402	0.759	0.179	0.654	0.460	11111	1.03	38461.8029	22222	4550	6.459	0.750	0.158	0.645	0.444	11111	1.01	38870.7385	44444		
4550	6.424	0.758	0.170	0.645	0.454	11111	1.06	38463.9005	22222	4550	6.440	0.730	0.162	0.662	0.458	11111	2.17	38870.9413	44444		
4550	6.456	0.751	0.114	0.000	0.000	11100	1.09	38463.9161	22200	4550	6.465	0.755	0.156	0.653	0.456	11111	1.03	38871.7671	44444		
4550	6.436	0.734	0.175	0.000	0.000	11100	1.29	38463.9698	22222	4550	6.432	0.763	0.157	0.672	0.446	11111	2.36	38872.9448	44444		
4550	6.440	0.755	0.166	0.000	0.000	11100	1.01	38464.8059	44400	4550	6.413	0.727	0.154	0.615	0.467	11111	1.04	38872.7671	44444		
4550	6.451	0.746	0.173	0.665	0.438	11111	1.08	38464.8090	44444	4550	6.455	0.745	0.173	0.000	0.000	11100	1.05	38872.6444	22200		
4550	6.442	0.743	0.173	0.672	0.443	11111	1.03	38464.8684	44444	4550	6.437	0.742	0.174	0.000	0.000	11100	1.01	38879.6821	44400		
4550	6.438	0.775	0.165	0.000	0.000	11100	1.03	38466.8756	22200	4550	6.470	0.768	0.204	0.000	0.000	11100	1.02	38881.6569	44400		
4550	6.421	0.744	0.195	0.000	0.000	11100	1.01	38473.7872	44400	4550	6.440	0.739	0.186	0.000	0.000	11100	1.04	38882.6417	44400		
4550	6.425	0.751	0.208	0.000	0.000	11100	1.03	38473.8530	44400	4550	6.444	0.738	0.188	0.000	0.000	11100	1.01	38882.6958	44400		
4550	6.454	0.759	0.209	0.000	0.000	11100	1.15	38473.9089	44400	4550	6.440	0.735	0.174	0.000	0.000	11100	1.01	38900.6483	44400		
4550	6.458	0.751	0.174	0.000	0.000	11100	1.99	38474.5993	44400	4550	6.465	0.764	0.152	0.672	0.446	11111	1.01	38903.6404	44444		
4550	6.542	0.753	0.171	0.680	0.429	11111	1.92	38474.6037	44444	4550	6.461	0.753	0.137	0.661	0.432	11111	1.01	38904.6506	44422		
4550	6.439	0.736	0.159	0.660	0.437	11111	1.00	38474.8066	44444	4550	6.453	0.743	0.159	0.662	0.452	11111	1.02	38906.6578	44444		
4550	6.439	0.755	0.194	0.000	0.000	11100	1.02	38474.8388	44400	4550	6.433	0.738	0.180	0.645	0.433	11111	1.02	38908.6569	44444		
4550	6.455	0.759	0.185	0.000	0.000	11100	1.11	38474.8938	44400	4550	6.445	0.749	0.180	0.648	0.454	11111	1.04	38911.6666	44444		
4550	6.423	0.750	0.202	0.000	0.000	11100	1.01	38475.7931	44400	4550	6.474	0.748	0.169	0.651	0.445	11111	1.05	38911.6666	44444		
4550	6.443	0.738	0.177	0.691	0.429	11111	1.06	38476.8620	22222	4550	6.430	0.723	0.175	0.656	0.435	11111	1.06	38912.6719	44444		
4550	6.420	0.715	0.175	0.672	0.439	11111	1.05	38476.8620	22222	4550	6.452	0.759	0.160	0.681	0.462	11111	1.13	39097.0118	44444		
4550	6.458	0.769	0.151	0.683	0.442	11111	1.01	38479.7592	22222	4550	6.412	0.771	0.171	0.665	0.452	11111	1.07	39128.9491	44444		
4550	6.446	0.745	0.201	0.684	0.442	11111	1.20	38479.8586	22222	4550	6.426	0.760	0.175	0.666	0.467	11111	1.03	39128.9749	44444		
4550	6.428	0.752	0.147	0.832	0.413	11111	1.02	38500.7702	22221	4554	2.446	-0.012	0.040	0.004	-0.042	11111	1.09	38078.9275	12222		
4550	6.449	0.750	0.161	0.660	0.494	11111	1.20	38500.8493	22221	4554	2.480	-0.009	0.000	0.000	0.000	11000	1.32	38080.0253	12221		
4550	6.442	0.749	0.151	0.666	0.457	11111	1.10	38506.8017	22222	4554	2.414	0.039	0.032	-0.081	-0.041	11111	1.22	38204.6562	44444		
4550	6.512	0.743	0.152	0.651	0.448	11111	1.01	38508.6908	22222	4554	2.339	0.021	0.051	0.000	0.000	11100	2.39	38204.6023	44444		
4550	6.446	0.766	0.156	0.697	0.445	11111	1.03	38509.7575	44444	4554	2.484	-0.029	0.064	0.049	-0.010	11111	1.08	38428.9146	44444		
4550	6.442	0.752	0.148	0.672	0.454	11111	1.09	38510.7866	22222	4554	2.440	0.003	0.038	0.037	-0.030	11111	1.18	38460.9958	44444		
4550	6.433	0.748	0.168	0.678	0.435	11111	1.04	38511.7576	44444	4589	4.671	0.146	0.119	0.193	0.015	11111	1.11	38064.9257	12222		
4550	6.439	0.758	0.144	0.644	0.421	11111	1.01	38512.7196	22222	4589	4.680	0.104	0.063	0.149	0.065	11111	1.11	38389.0558	44444		
4550	6.451	0.811	0.081	0.605	0.485	11111	1.06	38512.7687	22222	4589	4.654	0.132	0.124	0.135	0.046	11111	1.26	38392.9541	44444		
4550	6.438	0.743	0.151	0.654	0.449	11111	1.01	38513.6950	22222	4608	4.119	1.029	0.665	0.768	0.469	11111	1.09	38063.9379	11212		
4550	6.457	0.750	0.146	0.647	0.450	11111	1.00	38515.6927	44444	4608	4.107	0.975	0.652	0.686	0.549	11111	1.09	38136.7344	44444		
4550	6.432	0.749	0.161	0.627	0.454	11111	1.14	38515.7911	44444	4608	4.125	0.964	0.661	0.765	0.489	11111	1.14	38183.6635	44421		
4550	6.460	0.764	0.146	0.659	0.456	11111	1.05	38517.7490	44444	4608	4.119	0.997	0.610	0.713	0.448	11111	1.38	38206.6612	44444		
4550	0.000	0.685	0.000	0.000	0.000	01000	1.01	38519.6736	44444	4608	4.111	0.994	0.615	0.742	0.500	11111	1.17	38460.7925	22222		
4550	6.425	0.777	0.152	0.663	0.444	11111	2.01	38519.8934	44444	4623	3.983	0.354	-0.002	0.305	0.157	11111	1.83	38064.9358	12222		
4550	6.465	0.749	0.156	0.655	0.438	11111	1.01	38523.6916	44444	4623	4.004	0.338	0.016	0.290	0.167	11111	1.83	38017.8274	34444		
4550	6.449	0.746	0.160	0.645	0.442	11111	1.04	38523.7200	44444	4623	4.005	0.316	-0.059	0.290	0.201	11111	2.00	38183.6708	44421		
4550	6.452	0.778	0.108	0.686	0.448	11111	2.22	38523.8940	44444	4623	4.026	0.323	-0.051	0.332	0.189	11111	1.96	38466.8890	44444		
4550	6.466	0.755	0.162	0.693	0.438	11111	1.01	38525.6565	44444	4623	4.010	0.323	-0.030	0.277	0.185	11111	1.91	38469.8703	44444		
4550	6.442	0.742	0.167	0.683	0.434	11111	1.01	38525.6911	44444	4630	2.982	1.371	1.435	0.953	0.646	11111	1.78	38083.8562	44444		
4550	6.450	0.750	0.180	0.000	0.000	11100	1.01	38526.6420	22200	4630	2.975	1.385	1.455	0.943	0.634	11111	1.76	38152.7245	44444		
4550	6.433	0.760	0.157	0.691	0.448	11111	1.01	38526.6608	22222	4630	2.982	1.305	1.492	0.871	0.647	11111	1.92	38183.6779	44421		
4550	6.449	0.749	0.183	0.000	0.000	11100	1.06	38526.7256	22200	4630	2.982	1.330	1.482	0.940	0.642	11111	1.88	38466.8959	44444		
4550	6.454	0.741	0.188	0.000	0.000	11100	1.02	38527.6287	22200	4630	2.982	1.317	1.493	0.926	0.658	11111	1.83	38469.8771	44444		
4550	6.510	0.743	0.153	0.704	0.433	11111	1.05	38528.7183	44444	4630	2.982	1.317	1.493	0.926	0.658	11111	1.83	38469.8771	44444		
4550	6.452	0.759	0.176	0.664	0.419	11111	1.56	38531.8237	44444	4630	2.975	1.385	1.455	0.943	0.634	11111	1.76	38152.7245	44444		
4550	6.507	0.751	0.155	0.703	0.449	11111	1.01	38532.6218	22222	4630	2.982	1.305	1.492	0.871	0.647	11111	1.92	38183.6779	44421		
4550	6.436	0.743	0.170	0.652	0.444	11111	1.33	38532.7895	22222	4630	2.982	1.330	1.482	0.940	0.642	11111	1.88	38466.8959	44444		
4550	6.439	0.730	0.164	0.630	0.447	11111	1.01	38533.6299	44444	4630	2.982	1.317	1.493	0.926	0.658	11111	1.83	38469.8771	44444		
4550	6.460	0.749	0.166	0																	

TABLE 4 CATALINA UBVRi OBSERVATIONS

CATALINA UBVRi DATA											CATALINA UBVRi DATA										
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.		
4716	4.797	0.863	0.615	0.689	0.446	11111	1.08	38438.9691	44444	4931	4.955	0.344	0.002	0.351	0.197	11111	1.15	38189.7035	44444		
4716	4.782	0.889	0.600	0.692	0.229	11111	1.15	38441.0083	44444	4931	4.933	0.380	0.020	0.000	0.000	11110	1.10	38464.8997	44400		
4737	4.367	1.119	1.129			11100	1.06	38095.9309	44444	4932	2.838	0.926	0.782	0.676	0.469	11111	1.07	38063.9787	11212		
4737	4.363	1.130	1.120	0.842	0.559	11111	1.00	38112.8292	44444	4932	2.833	0.964				11000	1.08	38135.7708	43411		
4737	4.410	1.156	1.206	0.848	0.541	11111	1.04	38165.7252	44444	4932	2.838	0.964	0.653	0.716	0.426	11111	1.19	38157.7976	12211		
4737	4.374	1.105	1.169	0.813	0.503	11111	1.11	38186.7017	44443	4932	2.836	0.945	0.765	0.612	0.438	11111	1.12	38190.6834	44443		
4737	4.346	1.151	1.120	0.808	0.490	11111	1.18	38206.6684	44444	4932	2.859	0.922	0.728	0.571	0.451	11111	1.21	38203.6788	44444		
4751	6.631	0.176	-0.018	0.000	0.000	11100	1.01	38165.6563	22200	4949	5.697	1.597	1.583	0.000	0.000	11100	1.08	38936.6574	44444		
4751	6.687	0.234	0.001	0.000	0.000	11100	1.05	38165.6944	22200	4954	4.808	1.483	1.864	1.245	0.799	11111	1.01	38116.8581	22222		
4752	5.249	-0.112	-0.181	0.000	0.000	11100	1.01	38165.6528	22200	4954	4.820	1.452	1.831	1.226	0.818	11111	1.02	38139.8076	44444		
4752	5.313	-0.108	-0.212	0.000	0.000	11100	1.01	38165.6646	22200	4954	4.821	1.417	1.910	1.149	0.804	11111	1.00	38187.6498	44443		
4752	5.453	-0.126	-0.108	0.000	0.000	11100	1.06	38165.6972	22200	4954	4.845	1.454	1.870	1.108	0.797	11111	1.10	38204.6748	44444		
4757	2.948	-0.028	-0.117	-0.078	-0.062	11111	1.53	38067.9649	44444	4963	4.394	-0.020	0.016	0.086	-0.012	11111	1.27	38065.0014	12222		
4757	2.931	-0.046	-0.085	0.002	-0.044	11111	1.51	38136.7522	44444	4963	4.366	0.025	-0.035	0.056	0.016	11111	1.27	38148.7442	44444		
4757	0.	-0.066	-0.067	-0.078	-0.022	11111	1.53	38187.6368	44443	4963	4.383	-0.019	0.015	0.000	0.000	11100	1.26	38464.9062	44400		
4775	4.292	0.385	0.032	0.362	0.168	11111	1.58	38078.9636	12222	4963	4.358	-0.019	0.013	0.000	0.000	11100	1.26	38466.8847	22200		
4775	4.317	0.373	-0.014	0.389	0.194	11111	1.63	38153.7696	44444	4983	4.248	0.635	0.067	0.453	0.327	11111	1.03	38082.9793	44444		
4775	4.290	0.357	0.020	0.445	0.156	11111	1.81	38161.7769	44444	4983	4.236	0.600	0.063	0.518	0.322	11111	1.00	38112.8571	44444		
4775	4.319	0.357	0.049	0.313	0.206	11111	1.52	38187.6429	44443	4983	4.266	0.586	0.057	0.502	0.268	11111	1.01	38147.7715	44444		
4775	4.347	0.380	0.018	0.000	0.000	11100	1.51	38440.9155	44400	4983	4.276	0.616	0.071	0.525	0.306	11111	1.03	38152.7885	44444		
4775	4.313	0.367	0.031	0.000	0.000	11100	1.57	38443.8770	44400	4983	4.276	0.542	0.131	0.505	0.291	11111	2.41	38152.9588	44444		
4785	4.291	0.613	0.044	0.572	0.323	11111	1.05	38108.8878	44444	4983	4.248	0.579	0.103	0.488	0.254	11111	1.01	38161.7402	44444		
4785	4.269	0.611	0.034	0.540	0.319	11111	1.01	38136.7658	44444	4983	4.235	0.593	0.099	0.661	0.233	11111	2.16	38161.9236	44444		
4785	4.323	0.622			0.333	10001	1.06	38165.7437	44444	4983	4.297	0.590	0.134	0.491	0.286	11111	1.00	38165.6997	44444		
4785	4.277	0.593	0.048	0.499	0.282	11111	1.08	38186.6954	44443	4983	4.243	0.559	0.041	0.553	0.302	11111	2.10	38165.9097	44444		
4786					0.448	00001	1.83	38080.9501	44444	4983	4.275	0.585	0.088	0.504	0.279	11111	1.17	38179.7696	44444		
4786	2.631	0.872	0.650	0.617	0.437	11111	1.78	38108.8564	44444	4983	4.287	0.543	-0.115	0.493	0.308	11111	1.05	38187.7056	44443		
4786	2.649	0.891	0.654	0.595	0.439	11111	1.91	38187.6754	44443	4983	4.271	0.582	0.080	0.392	0.275	11111	1.06	38204.6887	44444		
4787	3.893	-0.182	-0.535	0.091	-0.467	11111	1.27	38064.9915	12222	4983	4.227	0.627	0.051	0.477	0.304	11111	1.29	38204.6887	44444		
4787	3.883	-0.123	-0.604	0.072	-0.081	11111	1.27	38136.7976	44444	4983	4.227	0.555	0.032	0.423	0.322	11111	1.11	38209.6715	44433		
4787	3.803	-0.115	-0.568	0.020	-0.095	11111	1.29	38186.6835	44443	5017	4.729	0.306	0.158	0.280	0.120	11111	1.04	38108.9123	44444		
4789	4.821	0.023	-0.057	0.080	-0.024	11111	1.07	38108.8945	44444	5017	4.715	0.302	0.193	0.255	0.166	11111	1.01	38152.7609	44444		
4789	4.779	0.002	-0.035	0.038	-0.048	11111	1.01	38136.7587	44444	5017	4.736	0.297	0.211	0.359	0.163	11101	1.04	38187.6978	44443		
4789	4.822	0.017	-0.012	-0.005	-0.015	11111	1.13	38165.7649	44444	5017	4.735	0.306	0.210	0.218	0.132	11111	1.09	38202.6875	44444		
4789	4.782	0.007	-0.014	0.077	-0.012	11111	1.09	38189.8823	44443	5019	4.700	0.739	0.231	0.612	0.331	11111	1.64	38078.9907	12222		
4789	4.809	0.006	0.007	0.000	0.000	11100	1.02	38440.9201	44400	5019	4.751	0.717	0.242	0.619	0.341	11111	1.61	38139.8140	44444		
4789	4.841	-0.035	0.016	0.000	0.000	11100	1.02	38441.9012	44400	5019	4.732	0.737	0.259	0.578	0.360	11111	1.58	38147.7451	44444		
4789	4.812	-0.020	0.045	0.000	0.000	11100	1.04	38443.8804	44400	5019	4.750	0.719	0.251	0.545	0.355	11111	1.60	38176.7082	44444		
4813	4.655	1.244	1.353	0.932	0.634	11111	1.36	38088.9360	22222	5019	4.755	0.697	0.	0.559	0.340	10111	1.61	38176.7145	44444		
4813	4.678	1.220	1.347	0.918	0.614	11111	1.33	38139.9730	44444	5019	4.740	0.709	0.281	0.569	0.384	11111	1.61	38180.7019	44444		
4813	4.672	1.222	1.350	0.883	0.375	11110	1.32	38190.6332	44443	5019	4.718	0.704	0.301	0.547	0.362	11111	1.57	38194.6360	44443		
4813	4.654	1.213	1.384	0.860	0.580	11111	1.38	38517.7707	44444	5019	4.780	-1.378	1.884	0.553	0.367	10011	1.67	38209.6417	44433		
4825	2.724	0.405	-0.031	0.326	0.206	11111	1.21	38080.9736	44444	5019	4.716	0.709	0.264	0.591	0.369	11111	1.60	38343.9802	44444		
4825	2.725	0.369	-0.002	0.304	0.188	11111	1.24	38080.9574	44444	5019	4.755	0.687	0.244	0.592	0.360	11111	1.65	38448.9816	22121		
4825	2.723	0.365	0.010	0.295	0.172	11111	1.20	38148.7338	44444	5020	2.975	0.942				11000	1.93	38080.0064	12221		
4825	2.738	0.348	-0.102	0.367	0.184	11111	1.29	38153.7782	44444	5020	2.985	0.914	0.687	0.604	0.482	11111	1.76	38108.8749	44444		
4825	2.737	0.341	-0.014	0.274	0.199	11111	1.32	38189.6886	44443	5020	2.988	0.902	0.658	0.669	0.436	11111	1.80	38192.6420	44443		
4825	2.723	0.372	-0.017	0.246	0.193	11111	1.22	38190.6437	44443	5028	2.781	0.003	-0.046	0.024	-0.039	11111	2.77	38095.9139	44444		
4825	2.757	0.351	-0.019	0.240	0.176	11111	1.34	38202.6594	44444	5028	2.694	0.056	0.011	0.059	0.002	11111	2.76	38131.8058	44444		
4828	4.881	0.100	0.036	0.067	0.040	11111	1.12	38088.9444	22222	5028	2.713	0.031				11000	2.82	38125.8198	43411		
4828	4.861	0.079	-0.039	0.072	0.009	11111	1.16	38153.7850	44444	5054	2.109	0.036				11000	1.11	38079.9966	12221		
4828	4.903	0.096	0.087	0.092	-0.012	11111	1.12	38165.7313	44444	5054	2.075	-0.018			-0.029	11001	1.09	38147.7810	44444		
4828	4.876	0.070	0.052	0.092	0.040	11111	1.19														

TABLE 4 CATALINA UVBRI OBSERVATIONS

CATALINA UVBRI DATA										CATALINA UVBRI DATA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
5095	4.697	1.548	2.053	1.437	1.142	11111	1.28	38131.8284	44444	5315	4.213	1.332	1.487	1.073	0.737	11111	1.36	38131.8544	44444
5095	4.725	1.578			1.179	11001	1.31	38153.7919	44444	5315	4.198	1.303	1.455	1.075	0.746	11111	1.38	38139.8503	44444
5095	4.668	1.624	1.995	1.468	1.143	11111	1.29	38194.6645	44443	5328	4.407	0.210	0.084	0.190	0.127	11111	1.06	38136.8244	44444
5095	4.693	1.608	1.875	0.000	0.000	11100	1.28	38464.9185	44400	5328	4.405	0.198	0.101	0.145	0.116	11111	1.06	38199.6717	44443
5095	4.684	1.620	1.917	0.000	0.000	11100	1.28	38466.8884	22200	5338	4.107	0.506	-0.029	0.534	0.284	11111	1.29	38138.8541	33331
5105	5.006	-0.016	-0.008	0.144	-0.040	11110	1.16	38116.8869	22222	5338	4.060	0.529	0.057	0.447	0.294	11111	1.55	38398.0233	44444
5105	4.934	0.008	-0.010	0.032	0.023	11111	1.14	38148.7685	44444	5338	4.096	0.508	0.049	0.496	0.261	11111	1.29	38415.0460	22222
5105	4.900	0.022	0.013	0.071	-0.058	11111	1.16	38194.6723	44443	5340	-0.040	1.231	1.351	0.997	0.694	11111	1.03	38131.8623	44444
5105	4.935	0.027	-0.004	0.000	0.000	11100	1.15	38464.9224	44400	5340	-0.086	1.269	1.302	0.000	0.000	11100	1.07	38152.8374	44444
5105	4.925	0.030	0.013	0.000	0.000	11100	1.14	38466.8292	22200	5340	-0.071	1.199	1.323	0.000	0.000	11100	1.05	38459.9842	44400
5107	3.368	0.135	0.079	0.101	0.056	11111	1.19	38082.9689	44444	5340	-0.095	1.255	1.287	1.018	0.638	11111	1.03	38509.7915	44444
5107	3.381	0.096	0.068	0.108	0.057	11111	1.18	38148.7607	44444	5340	-0.051	1.235	1.265	0.925	0.649	11111	1.03	38565.6465	22222
5107	3.371	0.116	0.097	0.065	0.059	11111	1.19	38199.6554	44443	5340	-0.049	1.227	1.260	0.988	0.637	11111	1.04	38566.6307	22222
5107	3.386	0.117	0.110	0.018	0.031	11111	1.28	38206.6809	44444	5340	0.045	1.129	1.260	1.102	0.514	11111	1.04	38567.6287	22222
5110	5.027	0.385	0.044	0.413	-0.320	11111	1.00	38131.8219	44444	5350	4.751	0.193	0.033	0.172	0.102	11111	1.06	38136.8301	44444
5110	5.003	0.407	0.050	0.408	0.332	11111	1.01	38152.7752	44444	5350	4.750	0.203	0.069	0.128	0.093	11111	1.06	38199.6828	44443
5110	5.000	0.385	0.067	0.418	0.246	11111	1.01	38192.6769	44443	5350	4.735	0.217	0.066	0.146	0.084	11111	1.19	38223.6956	44444
5112	4.697	0.115				11000	1.06	38135.8422	43411	5351	4.179	0.098	0.037	0.070	0.033	11111	1.03	38136.8358	44444
5112	4.689	0.130	0.106	0.151	-0.001	11111	1.08	38161.7892	44444	5351	4.191	0.065	0.055	0.038	0.029	11111	1.04	38199.6918	44443
5112	4.702	0.120	0.131	0.083	0.038	11111	1.06	38192.6833	44443	5351	4.162	0.079	0.050	-0.053	0.036	11111	1.18	38223.7015	44444
5112	4.703	0.133	0.079	0.086	0.041	11111	1.14	38202.7086	44444	5359	4.560	0.126	0.016	0.183	0.027	11111	1.46	38138.8602	33331
5127	4.828	0.227				11000	1.03	38135.8527	43411	5359	4.537	0.145	0.078	0.081	0.040	11111	1.53	38165.8080	44444
5127	4.830	0.249	0.066	0.260	0.131	11111	1.04	38186.7233	44443	5359	4.538	0.119	0.082	0.067	0.046	11111	1.47	38192.7156	44443
5127	4.823	0.232	0.103	0.267	0.121	11111	1.01	38415.0252	22222	5359	4.523	0.123	0.127	0.118	0.025	11111	1.45	38523.7979	44444
5127	4.848	0.229	0.092	0.281	0.135	11111	1.05	38415.9815	44444	5359	4.492	0.126	0.122	0.070	0.021	11111	1.43	38528.7467	44444
5154	4.675	1.620				11000	1.09	38080.9922	44444	5361	4.800	1.047	0.933	0.776	0.548	11111	1.01	38079.0140	12222
5154	4.642	1.667	1.889	1.355	1.142	11111	1.08	38152.7686	44444	5361	4.802	1.091	0.906	0.726	0.564	11111	1.01	38152.8145	44444
5154	4.642	1.633	1.993	1.398	1.118	11111	1.17	38393.0221	44444	5361	4.821	1.054	0.928	0.765	0.508	11111	1.03	38192.7248	44443
5154	4.630	1.628	1.953	1.412	1.105	11111	1.09	38415.0253	22222	5361	4.833	1.038	0.922	0.769	0.496	11111	1.09	38202.7325	44444
5154	4.687	1.622	1.998	1.422	1.105	11111	1.08	38466.9127	44444	5370	4.901	1.128	1.431	0.912	0.594	11111	1.05	38131.8712	44444
5185	4.502	0.482	0.071	0.457	0.212	11111	1.07	38108.9330	44444	5370	4.804	1.325	1.334	0.872	0.610	11111	1.09	38152.8453	44444
5185	4.489	0.465	0.013	0.366	0.262	11111	1.04	38154.7770	44444	5370	4.897	1.198	1.354	0.875	0.582	11111	1.18	38202.7393	44444
5185	4.482	0.496	0.034	0.379	0.247	11111	1.12	38190.7337	44444	5370	4.812	1.262	1.385	0.913	0.580	11111	1.04	38509.7999	44444
5185	4.501	0.493	0.052	0.000	0.000	11100	1.04	38464.9263	44400	5370	4.869	1.216	1.517	0.887	0.599	11111	1.07	38522.8213	22222
5185	4.485	0.498	0.058	0.000	0.000	11100	1.04	38466.8957	22200	5381	4.616	1.338	1.545	0.910	0.674	11111	2.00	38080.9813	44444
5191	1.848	-0.175	-0.669	-0.127	-0.212	11111	1.05	38136.8115	44444	5381	4.812	1.298	1.526	0.977	0.630	11111	1.99	38528.7673	44444
5191	1.858	-0.175	-0.643	-0.153	-0.195	11111	1.08	38186.7301	44443	5381	4.783	1.334	1.521	0.972	0.676	11111	2.03	38194.7032	44443
5191	1.857	-0.185	-0.679	-0.099	-0.168	11111	1.05	38433.0138	44443	5381	4.806	1.273	1.525	0.960	0.672	11111	2.04	38523.8050	44444
5191	1.884	-0.195	-0.671	-0.083	-0.168	11111	1.05	38439.0094	44444	5381	4.753	1.298	1.526	0.977	0.630	11111	1.99	38528.7673	44444
5200	4.057	1.521	1.881	1.235	0.889	11111	1.05	38088.9627	22222	5384	6.244	0.642	0.080	0.559	0.322	11111	1.17	38526.7741	22222
5200	4.059	1.523	1.855	1.288	0.855	11111	1.07	38139.8438	44444	5384	6.258	0.628	0.079	0.573	0.319	11111	1.19	38528.7956	44444
5200	4.053	1.514	1.869	1.118	0.871	11111	1.05	38194.6787	44443	5384	6.288	0.633	0.071	0.549	0.328	11111	1.19	38543.7527	22222
5200	4.100	1.507	1.906	1.154	0.855	11111	1.11	38204.6865	44444	5404	4.044	0.510	-0.012	0.431	-0.040	11110	1.06	38136.8414	44444
5219	4.705	1.651	2.023	1.529	1.284	11111	1.02	38079.0065	12222	5404	4.065	0.512	0.003	0.418	0.234	11111	1.08	38186.7372	44443
5219	4.741	1.630	1.918	1.545	1.253	11111	1.04	38189.7199	44443	5404	4.074	0.512	0.032	0.394	0.246	11111	1.10	38204.7103	44444
5219	4.868	1.587	1.906	1.484	1.279	11111	1.06	38204.6924	44444	5404	4.106	0.481	-0.005	0.482	0.264	11111	1.06	38466.9377	44444
5219	4.732	1.662	1.947	0.000	0.000	11100	1.02	38459.9712	44400	5409	4.814	0.751	0.207	0.592	0.367	11111	1.23	38152.8224	44444
5219	4.795	1.688	1.760	1.480	1.364	11111	1.12	38784.9521	44444	5409	4.832	0.716	0.221	0.560	0.385	11111	1.06	38190.7756	44443
5219	4.808	1.659	1.948	1.498	1.321	11111	1.05	38786.9794	44444	5429	3.606	1.298	1.452	0.921	0.651	11111	1.00	38142.8386	44444
5226	4.652	1.520	1.901	1.647	1.379	11111	1.21	38108.9392	44444	5429	3.600	1.292	1.439	0.868	0.649	11111	1.03	38192.7312	44443
5226	4.682	1.584	1.921	1.538	1.388	11111	1.19	38147.7993	44444	5429	3.577	1.306	1.431	0.978	0.630	11111	1.00	38201.6745	44421
5226	4.691	1.604	1.825	1.690	1.360	11111	1.19	38194.6873	44443	5430	4.235	1.448			0.796	11001	1.38	38136.8478	44444
5226	4.619	1.568	1.899	1.493	1.332	11111	1.23	38204.6989	44444	5430	4.281	1.427	1.699	1.015	0.713	11111	1.44	38190.7841	44443
5226	4.613	1.579	1.762	0.000	0.000	11100	1.20	38459.9751	44400	5430	4.246	1.442	1.700	1.088	0.743	11111	1.43	38398.0467	44444
5235	2.672	0.571	0.183	0.524	0.249	11111	1.06	37808.7400	22222	5435				0.154	0.069	00011	1.01	38081.0022	44444
5235	2.692	0.591	0.266	0.534	0.275	11111	1.03	38065.0178	12222	5435				0.100	0.000	1.06	38155.8563	44444	
5235	2.662	0.607	0.210	0.442	0.289	11111	1.03	38095.9415	44444	5435	3.050	0.185	0.091	0.155	0.075	11111	1.01	38157.7839	12211
5235	2.671	0.605	0.224	0.434	0.306	11111	1.20	38108.9887	44444	5435	3.035	0.173	0.168	0.105	0.081	11111			

TABLE 4 CATALINA UVBRI OBSERVATIONS

CATALINA UVBRI DATA										CATALINA UVBRI DATA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
5685	2.619	-0.117	-0.345	-0.054	-0.078	11111	1.50	38563.6339	22222	5842	4.561	0.029	-0.020	0.121	-0.009	11111	1.02	38131.9018	44444
5685	2.579	-0.110	-0.348	-0.050	-0.077	11111	1.38	38564.7410	22222	5842	4.516	0.058	0.013	0.042	-0.010	11111	1.04	38192.7668	44444
5685	2.608	-0.138	-0.338	-0.040	-0.098	11111	1.49	38565.7694	22222	5842	4.510	0.088	0.024	-0.065	-0.007	11111	1.11	38205.7717	22222
5685	2.604	-0.125	-0.328	-0.044	-0.089	11111	1.34	38566.6463	22222	5849	3.878	-0.000	-0.084	0.131	-0.059	11101	1.01	38138.9007	33331
5685	2.599	-0.120	-0.336	-0.049	-0.090	11111	1.34	38568.6878	22222	5849	3.815	-0.004	-0.012	-0.013	-0.004	11111	1.01	38187.7578	44443
5685	2.621	-0.100	-0.354	-0.029	-0.088	11111	1.72	38786.9921	44444	5849	0.	0.003	-0.065	-0.055	-0.036	01111	1.01	38207.7040	02222
5685	2.605	-0.097	-0.399	-0.042	-0.067	11111	1.39	38796.0278	44444	5849	3.841	-0.043	-0.012	-0.026	0.013	11111	1.03	38209.7299	44433
5685	2.612	-0.112	-0.368	0.000	0.000	11100	2.70	38811.8678	44400	5854	2.622	1.148	1.243	0.893	0.522	11111	1.12	37796.8937	22222
5685	2.642	-0.126	-0.339	0.011	-0.076	11111	1.41	38818.9566	27222	5854	2.649	1.164	1.226	0.900	0.551	11111	1.11	37808.7508	22222
5685	2.590	-0.133	-0.342	-0.042	-0.100	11111	1.36	38823.0243	44444	5854	2.649	1.167	1.246	0.896	0.548	11111	1.13	37835.6562	22222
5685	2.616	-0.131	-0.344	-0.041	-0.099	11111	1.37	38823.9574	44444	5854	2.593	1.191	1.163	0.754	0.610	11111	1.99	38067.9203	44444
5685	2.610	-0.109	-0.356	-0.023	-0.095	11111	1.48	38824.9238	44444	5854	2.653	1.168	1.240	0.810	1.089	11111	1.11	38080.0476	12221
5685	2.593	-0.117	-0.356	-0.051	-0.095	11111	1.34	38825.9908	44444	5854	2.630	1.168	1.247	0.765	0.569	11111	2.02	38080.8831	44444
5685	2.608	-0.119	-0.345	-0.054	-0.093	11111	1.34	38826.9964	44444	5854	2.627	1.141	1.284	0.803	0.583	11111	1.60	38082.9083	44444
5685	2.624	-0.099	-0.375	-0.007	-0.109	11111	1.44	38845.8760	44444	5854	2.630	1.172	1.312	0.787	0.576	11111	1.12	38083.0225	44444
5685	2.633	-0.116	-0.334	-0.019	-0.083	11111	1.34	38845.9310	44444	5854	2.602	1.173	1.306	0.771	0.609	11111	1.15	38088.2022	22222
5685	2.621	-0.102	-0.371	-0.076	-0.094	11111	1.35	38845.9527	44444	5854	2.634	1.114	1.250	0.782	0.540	11111	1.18	38089.9654	22222
5685	2.617	-0.119	-0.357	-0.019	-0.115	11111	1.37	38849.8905	44444	5854	2.631	1.175	1.292	0.823	0.569	11111	1.14	38109.0049	44444
5685	2.604	-0.104	0.000	0.000	0.000	11000	1.34	38864.8853	22000	5854	2.636	1.171	1.224	0.764	0.607	11111	1.70	38112.8168	44444
5685	2.620	-0.126	-0.346	-0.030	-0.083	11111	1.34	38870.8524	44444	5854	2.631	1.134	1.251	0.866	0.587	11111	1.11	38112.9510	44444
5685	2.605	-0.098	-0.347	-0.032	-0.109	11111	1.41	38871.8144	44444	5854	2.649	1.179	1.134	0.810	0.558	11111	1.84	38113.8038	44444
5685	2.640	-0.115	-0.358	0.012	-0.091	11111	1.35	38872.8408	44444	5854	2.616	1.182	1.290	0.760	0.561	11111	1.42	38112.8369	22222
5685	2.601	-0.134	-0.342	0.000	0.000	11100	1.50	38878.7721	22000	5854	2.633	1.196	1.282	0.815	0.561	11111	1.11	38131.9078	44444
5685	2.612	-0.120	-0.355	0.000	0.000	11100	1.38	38878.8039	22000	5854	2.592	1.202	1.255	0.777	0.578	11111	1.11	38136.8982	44444
5685	2.608	-0.109	-0.368	0.000	0.000	11100	1.43	38878.8978	22000	5854	2.614	1.189	1.231	0.664	0.597	11111	2.06	38139.7194	44444
5685	2.610	-0.102	-0.366	0.000	0.000	11100	1.34	38879.8289	22000	5854	2.633	1.184	1.264	0.826	0.567	11111	1.11	38139.8870	44444
5685	2.631	-0.096	-0.363	0.000	0.000	11100	1.35	38881.8146	44400	5854	2.628	1.159	1.247	0.722	0.560	11111	1.74	38142.7318	44444
5685	2.581	-0.110	-0.384	0.000	0.000	11100	2.00	38881.9608	44400	5854	2.631	1.149	1.271	0.840	0.543	11111	1.11	38142.8849	44444
5685	2.610	-0.094	-0.357	0.000	0.000	11100	1.51	38882.7589	44400	5854	2.631	1.179	1.273	0.874	0.556	11111	1.47	38142.9949	44444
5685	2.631	-0.123	-0.354	0.000	0.000	11100	1.34	38882.8444	44400	5854	2.621	1.175	1.249	0.741	0.581	11111	1.94	38143.7155	44444
5685	2.596	-0.103	-0.349	0.000	0.000	11100	1.35	38899.7676	44400	5854	2.630	1.173	1.282	0.809	0.581	11111	1.11	38143.8614	44444
5685	2.618	-0.105	-0.362	0.000	0.000	11100	1.41	38901.7320	22000	5854	2.617	1.171	1.261	0.663	0.634	11111	1.82	38143.8614	44444
5685	2.612	-0.106	-0.372	-0.038	-0.089	11111	1.93	38903.6537	44444	5854	2.602	1.162	1.266	0.710	0.593	11111	1.77	38147.8717	44444
5685	2.614	-0.118	-0.350	-0.059	-0.087	11111	1.40	38904.7250	44422	5854	2.653	1.140	1.270	0.741	0.553	11111	1.71	38152.7065	44444
5685	2.609	-0.095	-0.366	-0.030	-0.084	11111	1.44	38904.8281	44422	5854	2.676	1.217	1.339	0.649	0.640	11111	1.95	38153.6876	44444
5685	2.569	-0.090	-0.362	-0.092	-0.097	11111	1.35	38905.7826	22222	5854	2.653	1.134	1.249	0.852	0.542	11111	1.11	38153.8507	44444
5685	2.602	-0.129	-0.364	-0.058	-0.082	11111	1.53	38906.6896	44444	5854	2.639	1.144	1.273	0.818	0.564	11111	1.14	38154.8824	44444
5685	2.604	-0.133	-0.358	-0.020	-0.081	11111	1.34	38910.7525	44444	5854	2.666	1.150	1.335	0.896	0.575	11111	1.92	38155.0016	44444
5685	2.596	-0.115	-0.366	-0.044	-0.100	11111	1.34	38911.7183	44444	5854	2.581	1.180	1.254	0.980	0.287	11111	2.34	38155.6634	44444
5685	2.600	-0.094	-0.342	-0.084	-0.105	11111	1.37	38912.7167	44444	5854	2.640	1.158	1.297	0.864	0.533	11111	1.11	38155.8391	44444
5685	2.605	-0.113	-0.367	-0.046	-0.076	11111	1.40	38930.6541	44444	5854	2.627	1.164	1.245	0.826	0.565	11111	1.11	38156.8141	44444
5685	2.603	-0.109	-0.367	-0.039	-0.084	11111	1.37	38931.6645	44444	5854	2.644	1.161	1.234	0.772	0.557	11111	1.71	38176.6414	44444
5685	2.606	-0.131	-0.368	-0.036	-0.054	11111	1.39	38931.7384	44444	5854	2.637	1.180	1.241	0.795	0.565	11111	1.11	38176.7502	44444
5685	2.580	-0.128	-0.369	-0.029	-0.081	11111	1.37	38932.6620	44444	5854	2.637	1.182	1.246	0.866	0.556	11111	1.47	38176.8164	44444
5685	2.611	-0.108	-0.370	-0.039	-0.090	11111	1.38	38933.6532	44444	5854	2.639	1.186	1.197	0.611	0.524	11111	2.27	38176.9592	44444
5685	2.589	-0.113	-0.345	-0.046	-0.080	11111	1.39	38936.6423	44444	5854	2.634	1.161	1.275	0.812	0.580	11111	1.73	38178.6339	44444
5685	2.598	-0.094	-0.358	-0.040	-0.090	11111	1.34	38937.6977	44444	5854	2.643	1.149	1.251	0.795	0.571	11111	1.33	38179.6795	44444
5685	2.598	-0.085	-0.356	-0.076	-0.081	11111	1.37	38938.6477	44444	5854	2.628	1.172	1.276	0.791	0.557	11111	1.14	38179.7403	44444
5685	2.594	-0.078	-0.359	-0.074	-0.061	11111	1.35	38939.6530	44444	5854	2.634	1.186	1.250	0.761	0.552	11111	1.24	38179.8524	44444
5685	2.596	-0.095	-0.375	-0.068	-0.075	11111	1.34	38940.6601	44444	5854	2.623	1.145	1.266	0.804	0.575	11111	1.65	38180.6355	44444
5686	4.315	1.092	1.082	0.811	0.560	11111	2.15	38176.8693	44444	5854	2.645	1.174	1.247	0.809	0.560	11111	1.17	38180.7200	44444
5733	4.320	0.327	0.027	0.398	0.144	11111	1.01	38081.0439	44444	5854	2.634	1.175	1.250	0.784	0.565	11111	1.11	38180.7747	44444
5733	4.327	0.306	0.064	0.232	0.145	11111	1.01	38444.0595	44444	5854	2.628	1.188	1.248	0.769	0.562	11111	1.72	38180.8419	44444
5733	4.340	0.304	0.056	0.283	0.143	11111	1.01	38447.0513	44444	5854	2.630	1.177	1.246	0.809	0.540	11111	2.03	38180.8949	44444
5735	3.027	0.048	0.109	0.128	0.072	11111	1.30	38176.8561	44444	5854	2.638	1.161	1.249	0.806	0.541	11111	1.11	38185.7695	22221
5735	3.064	0.044	0.138	0.028	0.052	11111	1.31	38186.7767	44443	5854	2.642	1.171	1.228	0.757	0.564	11111	1.11	38186.7632	44443
5735	3.067	0.052	0.102	0.096	0.055	11111	1.36	38425.0067	44444	5854	2.626	1.180	1.255	0.773	0.562	11111	2.34	38186.9348	44443
5744	3.295	1.183	1.219																

TABLE 4 CATALINA UVBRI OBSERVATIONS

CATALINA UVBRI DATA										CATALINA UVBRI DATA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
5854	2.614	1.173	1.261	0.839	0.544	11111	1.11	38511.8596	44444	5892	3.695	0.194	0.073	0.139	0.059	11111	1.15	38148.8960	44444
5854	2.635	1.156	1.249	0.841	0.544	11111	1.15	38512.8192	22222	5892	3.710	0.159	0.096	0.071	0.037	11111	1.20	38192.8019	44443
5854	2.617	1.164	1.268	0.817	0.560	11111	1.36	38513.7593	22222	5892	3.694	0.132	0.097	0.006	0.064	11111	1.31	38223.7467	44444
5854	2.612	1.173	1.242	0.780	0.561	11111	1.31	38515.7630	44444	5899	4.784	1.529	1.921	1.210	0.892	11111	1.02	38131.9135	44444
5854	2.622	1.172	1.262	0.818	0.558	11111	1.12	38515.8302	44444	5899	4.768	1.550	1.885	1.206	0.840	11111	1.05	38192.7878	44443
5854	2.666	1.161	1.220	0.859	0.549	11111	1.99	38521.8568	44444	5899	0.	1.532	1.854	1.228	0.838	01111	1.03	38207.7248	02222
5854	2.622	1.172	1.250	0.849	0.573	11111	1.12	38519.8329	22222	5899	4.789	1.443	1.879	1.230	0.900	01111	1.10	38209.7670	44433
5854	2.658	1.162	1.259	0.849	0.573	11111	1.12	38521.8568	44444	5901	4.844	0.975	0.872	0.772	0.517	11111	1.02	38142.9129	44444
5854	2.624	1.175	1.253	0.806	0.547	11111	1.12	38521.8568	44444	5901	4.818	0.986	0.884	0.709	0.498	11111	1.00	38161.8259	44444
5854	2.645	1.163	1.249	0.795	0.585	11111	1.13	38522.8073	22222	5901	4.818	1.002	0.875	0.753	0.491	11111	1.05	38190.8113	44443
5854	2.658	1.151	1.269	0.807	0.558	11111	1.94	38523.6750	44444	5901	4.811	1.015	0.849	0.807	0.467	11111	1.00	38201.7165	44421
5854	2.631	1.167	1.248	0.795	0.558	11111	1.11	38523.8443	44444	5903	4.317	0.097	0.029	0.064	0.070	11111	1.43	38148.8767	44444
5854	2.605	1.166	1.247	0.000	0.000	11100	1.13	38524.8010	22200	5903	4.315	0.015	0.049	0.138	-0.011	11111	1.43	38161.8194	44444
5854	2.644	1.172	1.237	0.759	0.570	11111	1.17	38525.6662	44444	5903	4.297	0.006	0.026	0.100	-0.010	11111	1.43	38203.7110	44444
5854	2.646	1.166	1.259	0.000	0.000	11100	1.11	38528.8108	44400	5903	4.281	0.035	0.044	0.023	-0.010	11111	1.43	38224.6520	44444
5854	2.648	1.159	1.250	0.813	0.571	11111	1.11	38531.8057	44444	5903	4.345	0.047	0.054	0.118	0.013	11111	1.44	38466.9477	44444
5854	2.635	1.181	1.236	0.839	0.547	11111	1.17	38532.7575	22222	5903	4.353	0.051	0.069	0.025	0.017	11111	1.44	38475.9180	44444
5854	2.656	1.172	1.246	0.843	0.557	11111	1.17	38533.7890	44444	5904	4.597	-0.028	-0.680	-0.071	-0.047	11111	1.87	38153.8436	44444
5854	2.658	1.156	1.253	0.851	0.562	11111	1.50	38533.9277	44444	5904	4.602	-0.077	-0.636	0.031	-0.074	11111	1.87	38187.7699	44443
5854	2.625	1.166	1.243	0.837	0.556	11111	1.13	38534.7678	44444	5904	4.591	-0.072	-0.682	0.020	-0.088	11111	1.87	38466.9841	44444
5854	2.647	1.181	1.236	0.830	0.559	11111	1.18	38535.8590	22222	5904	4.565	-0.070	-0.674	0.011	-0.084	11111	1.86	38474.9764	44444
5854	2.642	1.188	1.246	0.791	0.571	11111	1.11	38543.7011	22222	5908	4.159	1.020	0.825	0.731	0.508	11111	1.53	38204.7309	44444
5854	2.623	1.151	1.258	0.776	0.585	11111	1.12	38544.7984	44444	5908	4.148	0.998	0.830	0.702	0.533	11111	1.02	38223.7397	44444
5854	2.686	1.213	1.257	1.077	0.612	11101	1.14	38546.8095	22222	5914	4.642	0.571	-0.003	0.458	0.371	11111	1.02	38131.9337	44444
5854	2.661	1.176	1.239	0.828	0.577	11111	1.68	38547.6286	22222	5914	4.609	0.591	0.001	0.501	0.307	11111	1.07	38190.8186	44443
5854	2.649	1.171	1.244	0.799	0.560	11111	1.11	38553.7482	44444	5914	4.633	0.587	-0.012	0.472	0.303	11111	1.02	38204.7375	44444
5854	2.653	1.169	1.258	0.827	0.557	11111	1.13	38555.7734	44444	5928	3.864	-0.190	-0.806	-0.149	-0.214	11111	2.16	38224.6950	44444
5854	2.635	1.172	1.250	0.792	0.546	11111	1.11	38556.7463	44444	5928	3.868	-0.195	-0.827	-0.081	-0.207	11111	2.09	38466.9915	44444
5854	2.624	1.185	1.250	0.775	0.551	11111	1.20	38557.8032	44444	5928	3.832	-0.200	-0.826	-0.066	-0.205	11111	2.09	38474.9827	44444
5854	2.642	1.166	1.242	0.866	0.588	11111	1.15	38559.7794	44444	5932	5.398	1.629	1.936	0.000	0.000	11100	1.03	38936.6774	44444
5854	2.629	1.163	1.245	0.835	0.576	11111	2.44	38559.9168	44444	5933	3.915	0.445	-0.018	0.529	0.252	11111	1.06	38138.9237	33331
5854	2.655	1.153	1.245	0.835	0.576	11111	2.44	38559.9168	44444	5933	0.	0.529	-0.071	0.387	0.267	01111	1.05	38207.7318	02222
5854	2.661	1.156	1.258	0.837	0.570	11111	1.15	38562.7678	22222	5933	3.863	0.474	-0.039	0.451	0.253	11111	1.04	38466.9885	44444
5854	2.664	1.147	1.256	0.840	0.563	11111	1.26	38563.6433	22222	5933	3.866	0.480	-0.031	0.499	0.206	11111	1.06	38500.9229	22221
5854	2.624	1.170	1.238	0.820	0.557	11111	1.11	38564.7328	22222	5941	4.915	-0.101	-0.242	-0.034	-0.025	11111	1.47	38153.8750	44444
5854	2.629	1.162	1.250	0.796	0.557	11111	1.18	38565.7772	22222	5941	4.895	-0.101	-0.134	-0.040	-0.057	11111	1.46	38508.8761	22222
5854	2.639	1.166	1.256	0.827	0.552	11111	1.11	38566.7036	22222	5941	4.859	-0.099	-0.137	-0.010	-0.053	11111	1.44	38521.8819	44444
5854	2.639	1.177	1.252	0.824	0.556	11111	1.12	38568.6951	22222	5941	4.850	-0.093	-0.143	-0.032	-0.048	11111	1.46	38522.8321	22222
5854	2.659	1.178	1.231	0.000	0.000	11100	2.43	38811.8633	44400	5941	4.859	-0.091	-0.156	-0.040	-0.076	11111	1.59	38546.7188	22222
5854	2.614	1.174	1.211	0.830	0.554	11111	1.12	38823.0358	44444	5944	2.923	-0.219	-0.907	-0.006	-0.215	11111	1.91	38153.8594	44444
5854	2.634	1.154	1.258	0.819	0.556	11111	1.15	38823.9677	44444	5944	2.868	-0.170	-0.891	-0.142	-0.190	11111	1.99	38224.7011	44444
5854	2.621	1.160	1.257	0.835	0.560	11111	1.24	38824.9337	44444	5944	2.943	-0.218	-0.858	-0.072	-0.208	11111	1.91	38508.8745	22222
5854	2.619	1.182	1.257	0.809	0.566	11111	1.11	38826.0001	44444	5947	4.154	1.237	1.275	0.929	0.635	11111	1.03	37835.6652	22222
5854	2.652	1.173	1.271	0.844	0.557	11111	1.20	38827.0055	44444	5947	4.141	1.234	1.266	0.090	-0.040	11100	1.00	37836.7062	22222
5854	2.649	1.159	1.259	0.830	0.565	11111	1.11	38845.9486	44444	5947	4.154	1.232	1.209	0.948	0.569	11111	1.75	38082.8720	44444
5854	2.641	1.176	1.244	0.823	0.568	11111	1.21	38846.8812	44444	5947	4.154	1.181	1.291	0.922	0.633	11111	1.01	38083.0345	44444
5854	2.654	1.169	1.261	0.850	0.557	11111	1.11	38846.9617	44444	5947	4.164	1.240	1.229	0.982	0.606	11111	1.79	38083.8661	44444
5854	2.636	1.179	1.256	0.807	0.575	11111	1.12	38849.9232	44444	5947	4.131	1.242	1.261	0.912	0.622	11111	1.61	38083.8813	44444
5854	2.652	1.171	1.249	0.812	0.554	11111	1.12	38870.8598	44444	5947	4.137	1.230	1.255	0.922	0.589	11111	1.58	38088.8708	22222
5854	2.634	1.160	1.263	0.817	0.565	11111	1.13	38871.8546	44444	5947	4.151	1.214	1.268	0.930	0.583	11111	1.04	38088.9878	22222
5854	2.681	1.196	1.254	0.854	0.537	11111	2.32	38872.7007	44444	5947	4.365	1.059	1.373	0.877	0.717	11111	1.71	38089.8559	22222
5854	2.646	1.162	1.235	0.000	0.000	11100	1.26	38878.7811	22200	5947	4.167	1.167	1.268	0.870	0.607	11111	1.05	38089.9746	22222
5854	2.651	1.155	1.245	0.809	0.566	11111	1.11	38878.8082	22200	5947	4.152	1.230	1.283	0.890	0.607	11111	1.96	38109.7840	44444
5854	2.639	1.168	1.248	0.000	0.000	11100	1.12	38879.8341	22200	5947	4.158	1.209	1.259	0.894	0.591	11111	1.11	38112.8876	44444
5854	2.637	1.156	1.244	0.000	0.000	11100	1.12	38879.8341	22200	5947	4.109	1.239	1.299	0.804	0.662	11111	2.29	38136.6942	44444
5854	2.631	1.146	1.262	0.000	0.000	11100	1.12	38881.8283	44400	5947	4.134	1.237	1.238	0.914	0.657	11111	1.01	38136.9121	44444
5854	2.625	1.173	1.242	0.000	0.000	11100	1.28	38882.7640	44400	5947	4.174	1.218	1.251	0.870	0.635	11111	1.87	38142.6995	44444
5854	2.645	1.156	1.254	0															

CATALINA UBVR I DATA										CATALINA UBVR I DATA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
5947	4.156	1.236	1.268	0.897	0.631	11111	1.13	38202.6339	44444	5947	4.144	1.236	1.282	0.900	0.632	11111	1.01	38932.7328	44444
5947	4.179	1.233	1.228	0.902	0.575	11111	2.13	38202.2334	44444	5947	4.174	1.231	1.281	0.905	0.633	11111	1.00	38933.7208	44444
5947	4.161	1.233	1.271	0.825	0.623	11111	1.09	38203.6460	44444	5947	4.153	1.228	1.278	0.884	0.614	11111	1.01	38936.6879	44444
5947	4.177	1.212	1.280	0.804	0.631	11111	1.01	38203.7380	44444	5947	4.140	1.253	1.268	0.897	0.618	11111	1.01	38937.6903	44444
5947	4.170	1.224	1.255	0.872	0.630	11111	1.26	38203.9269	44444	5947	4.158	1.247	1.269	0.898	0.623	11111	1.02	38938.7337	44444
5947	4.173	1.230	1.273	0.836	0.626	11111	1.04	38204.6687	44444	5947	4.161	1.229	1.257	0.898	0.632	11111	1.00	38939.7102	44444
5947	4.120	1.346	1.234	0.870	0.623	11111	2.32	38204.9266	44444	5947	4.141	1.230	1.287	0.893	0.626	11111	1.02	38940.7313	44444
5947	4.167	1.244	1.273	0.871	0.607	11111	1.01	38205.6889	22222	5947	4.138	1.232	1.272	0.000	0.600	11100	1.98	39034.6381	44400
5947	4.177	1.210	1.268	0.955	0.564	11111	2.70	38206.9342	44444	5953	2.323	-0.092	-0.938	0.054	-0.111	11111	1.77	38152.8869	44444
5947	0.	1.253	1.238	0.820	0.624	01111	1.07	38207.6444	02222	5953	2.313	-0.106	-0.852	-0.098	-0.176	11111	1.76	38202.7463	44444
5947	4.151	1.239	1.275	0.890	0.617	11111	1.01	38211.7069	44443	5953	2.327	-0.136	-0.885	-0.018	-0.148	11111	1.74	38508.8816	22222
5947	4.168	1.231	1.317	0.916	0.623	11111	1.01	38216.6898	44444	5953	2.326	-0.142	-0.908	-0.039	-0.128	11111	1.74	38872.8919	44444
5947	4.172	1.244	1.286	0.944	0.633	11111	1.01	38223.6761	44444	5960	4.989	0.270	0.027	0.210	0.177	11111	1.08	38148.8865	44444
5947	4.157	1.247	1.252	0.827	0.644	11111	2.81	38223.8910	44444	5960	4.972	0.254	0.055	0.275	0.130	11111	1.08	38187.7761	44443
5947	4.163	1.229	1.267	0.873	0.621	11111	1.01	38224.6810	44444	5960	4.894	0.245	0.038	0.218	0.093	11111	1.08	38206.7176	44444
5947	4.154	1.220	1.267	0.889	0.618	11111	3.37	38224.9010	44444	5971	5.020	-0.095	-0.222	0.014	-0.065	11111	1.00	38131.9279	44444
5947	4.146	1.255	1.250	0.888	0.627	11111	2.59	38225.8790	44444	5971	5.003	-0.048	-0.204	0.031	-0.092	11111	1.00	38467.0064	44444
5947	4.150	1.230	1.280	0.890	0.630	11111	1.03	38226.6943	44444	5971	4.902	-0.055	-0.177	-0.018	-0.092	11111	1.00	38508.8898	22222
5947	4.125	1.226	1.283	0.890	0.630	11111	2.50	38227.8705	44444	5972	4.859	0.045	0.024	0.098	0.018	11111	1.01	38131.9197	44444
5947	4.148	1.229	1.273	0.891	0.633	11111	1.92	38228.8803	44444	5972	4.837	0.086	0.074	0.094	0.001	11111	1.02	38201.7481	44421
5947	4.140	1.244	1.271	0.891	0.630	11111	2.73	38229.7059	44444	5972	4.799	0.082	0.042	0.111	-0.002	11111	1.04	38224.7081	44444
5947	3.936	1.215	1.309	0.770	0.594	11111	2.62	38229.6997	34421	5978	4.160	0.471	-0.023	0.377	0.252	11111	1.38	38153.8681	44444
5947	4.148	1.234	1.266	0.892	0.623	11111	2.87	38229.6986	44444	5978	4.185	0.469	0.045	0.357	0.226	11111	1.40	38201.7562	44421
5947	4.149	1.224	1.279	0.886	0.648	11111	2.28	38305.6493	44444	5982	4.799	-0.120	-0.345	0.073	-0.093	11111	1.03	38138.9138	33331
5947	4.160	1.236	1.287	0.897	0.655	11111	2.23	38307.6414	44444	5982	4.736	-0.102	-0.319	-0.025	-0.102	11111	1.03	38161.8442	44444
5947	4.136	1.248	1.242	0.842	0.611	11111	2.46	38311.6396	44444	5982	4.718	-0.185	-0.267	-0.184	-0.114	11111	1.03	38206.7248	44444
5947	4.116	1.220	1.282	0.894	0.618	11111	2.87	38315.6412	44444	5982	4.729	-0.101	-0.301	0.000	0.000	11100	1.03	38464.0090	22200
5947	3.955	1.223	1.040	0.808	0.598	11111	3.72	38408.9125	44444	5984	2.601	-0.062	-0.813	-0.062	-0.153	11111	1.65	38202.7533	44444
5947	3.923	1.126	0.904	0.881	0.479	11111	3.11	38410.9196	44444	5984	2.586	-0.085	-0.803	-0.025	-0.002	11111	2.88	38245.6254	23333
5947	4.180	1.238	1.253	0.938	0.630	11111	1.38	38415.9983	44444	5984	2.576	-0.097	-0.833	-0.001	-0.065	11111	2.08	38288.9860	12221
5947	4.159	1.221	1.286	0.929	0.635	11111	1.16	38425.0162	44444	5984	2.489	-0.079	-0.856	0.003	-0.099	11111	1.66	38272.5198	44444
5947	4.155	1.251	1.256	0.947	0.616	11111	2.20	38443.8572	44444	5986	4.077	0.490	0.066	0.501	0.294	11111	1.13	38142.9218	44444
5947	4.132	1.232	1.300	0.913	0.630	11111	1.01	38444.0482	44444	5986	4.025	0.506	0.093	0.386	0.202	11111	1.17	38206.7331	44444
5947	4.166	1.257	1.276	0.930	0.622	11111	2.23	38449.8392	44444	5986	4.064	0.525	0.095	0.468	0.261	11111	1.14	38475.9342	44444
5947	4.134	1.268	1.275	0.940	0.646	11111	2.18	38450.8389	44444	5993	0.	-0.013	-0.821	0.051	-0.143	01111	1.71	38207.7486	02222
5947	4.141	1.278	1.241	0.926	0.650	11111	2.22	38451.8344	44444	5993	3.969	-0.049	-0.843	0.071	-0.074	11111	1.66	38447.0137	44444
5947	4.156	1.217	1.269	0.926	0.622	11111	1.00	38451.8382	22222	5993	3.998	-0.081	-0.781	0.038	-0.058	11111	1.66	38506.9053	22222
5947	4.141	1.249	1.270	0.000	0.000	11100	2.38	38459.8060	44400	5993	3.950	-0.056	-0.816	0.038	-0.064	11111	1.66	38827.9008	44444
5947	4.170	1.229	1.214	0.000	0.000	11100	1.01	38464.0264	22200	5997	0.	0.853	0.491	0.635	0.440	01111	1.70	38207.7416	02222
5947	4.159	1.244	1.224	0.000	0.000	11100	2.36	38464.7931	44400	5997	4.306	0.854	0.496	0.659	0.419	11111	1.68	38447.0205	44444
5947	4.155	1.229	1.270	0.000	0.000	11100	1.90	38466.8104	22200	5997	4.350	0.816	0.524	0.664	0.435	11111	1.68	38506.9125	22222
5947	4.134	1.250	1.267	0.890	0.645	11111	1.53	38469.8322	44444	6018	4.781	1.006	0.873	0.715	0.550	11111	1.01	38131.9391	44444
5947	4.174	1.243	1.302	0.000	0.000	11100	1.00	38473.9757	44400	6018	4.732	1.013	0.862	0.735	0.531	11111	1.00	38167.8332	12221
5947	4.163	1.216	1.309	0.963	0.613	11111	2.05	38475.7750	44444	6018	4.764	1.019	0.884	0.000	0.000	11100	1.00	38444.8198	22200
5947	4.146	1.233	1.282	0.909	0.630	11111	1.01	38480.9745	44444	6018	4.769	1.024	0.888	0.000	0.000	11100	1.02	38473.9478	44400
5947	4.155	1.239	1.278	0.901	0.611	11111	2.05	38499.7115	44444	6023	4.286	-0.048	-0.310	0.087	-0.087	11111	1.03	38139.8948	44444
5947	4.119	1.225	1.280	0.891	0.625	11111	1.01	38508.8994	22222	6023	4.256	-0.073	-0.273	-0.047	-0.077	11111	1.02	38165.8455	44444
5947	4.149	1.235	1.276	0.901	0.632	11111	2.03	38509.6856	44444	6023	0.	-0.077	-0.262	-0.035	-0.114	11111	1.04	38207.7566	02222
5947	4.170	1.198	1.310	0.913	0.628	11111	1.00	38517.8684	22222	6027	4.029	-0.049	-0.616	0.057	0.014	11111	1.67	38202.7691	44444
5947	4.141	1.228	1.290	0.903	0.637	11111	1.15	38517.8258	22222	6027	4.025	0.031	-0.651	0.143	0.051	11111	1.63	38506.9199	22222
5947	4.195	1.210	1.270	0.000	0.000	11100	1.04	38519.8258	22222	6027	4.012	0.021	-0.634	0.126	0.025	11111	1.62	38518.8500	22222
5947	4.166	1.221	1.279	0.893	0.626	11111	1.22	38515.7538	44444	6027	3.987	0.014	-0.624	0.090	0.035	11111	1.74	38547.7138	22222
5947	4.148	1.234	1.277	0.889	0.625	11111	1.01	38515.8547	44444	6027	3.993	0.044	-0.672	0.126	0.042	11111	1.62	38877.9113	44444
5947	4.179	1.229	1.280	0.921	0.634	11111	1.28	38515.9873	44444	6028	4.575	-0.148	-0.731	-0.053	-0.123	11111	2.05	38199.7650	44443
5947	4.149	1.233	1.271	0.871	0.633	11111	1.01	38517.8787	44444	6028	4.592	-0.181	-0.733	-0.051	-0.188	11111	2.01	38165.8577	22222
5947	4.164	1.256	1.291	0.889	0.627	11111	1.04	38519.9009	44444	6028	4.600	-0.168	-0.738	-0.029	-0.176	11111	2.07	38521.8997	44444
5947	4.137	1.224	1.273	0.905	0.633	11111	1.01	38522.8605	22222	6028	4.570	-0.148	-0.737	-0.073	-0.198	11111	2.35	38464.7293	22222
5947	4.108	1.242	1.281	0.000															

TABLE 4 CATALINA UBVRi OBSERVATIONS

CATALINA UBVRi DATA											CATALINA UBVRi DATA										
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.		B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	
6092	3.924	-0.135	-0.591	-0.002	-0.168	11111	1.03	38136.9188	44444		6092	3.882	-0.145	-0.571	-0.093	-0.164	11111	1.03	38547.7776	22222	
6092	3.908	-0.173	-0.554	-0.181	-0.173	11111	1.68	38142.7103	44444		6092	3.959	-0.129	-0.598	0.000	0.000	11100	1.05	38552.7452	22200	
6092	3.936	-0.163	-0.572	-0.051	-0.184	11111	1.03	38142.9025	44444		6092	3.859	-0.136	-0.574	0.000	0.000	11100	1.05	38552.8212	22200	
6092	3.925	-0.198	-0.560	-0.146	-0.165	11111	1.70	38143.7051	44444		6092	3.874	-0.147	-0.556	-0.092	-0.154	11111	1.08	38561.8171	22222	
6092	3.952	-0.155	-0.577	-0.048	-0.165	11111	1.04	38143.8780	44444		6092	3.893	-0.163	-0.567	-0.070	-0.163	11111	1.07	38563.6961	22222	
6092	3.911	-0.167	-0.581	-0.091	-0.165	11111	1.48	38144.7294	22222		6092	3.923	-0.152	-0.568	-0.062	-0.163	11111	1.22	38564.6294	22222	
6092	3.909	-0.173	-0.545	-0.158	-0.117	11111	1.76	38147.6888	44444		6092	3.915	-0.161	-0.566	-0.081	-0.161	11111	1.04	38564.7164	22222	
6092	3.920	-0.199	-0.539	-0.121	-0.168	11111	1.47	38147.7218	44444		6092	3.895	-0.147	-0.571	-0.090	-0.165	11111	1.14	38565.6541	22222	
6092	3.934	-0.144	-0.603	-0.026	-0.163	11111	1.03	38147.8881	44444		6092	3.905	-0.150	-0.578	-0.074	-0.150	11111	1.03	38565.7523	22222	
6092	3.903	-0.146	-0.551	-0.140	-0.164	11111	1.16	38148.7858	44444		6092	3.879	-0.166	-0.572	-0.095	-0.143	11111	1.17	38566.6387	22222	
6092	3.912	-0.099	-0.622	0.029	-0.189	11111	1.12	38148.9692	44444		6092	3.896	-0.145	-0.584	-0.080	-0.162	11111	1.03	38567.7326	22222	
6092	3.894	-0.144	-0.548	-0.111	-0.165	11111	2.20	38161.6182	44444		6092	3.874	-0.160	-0.555	-0.079	-0.168	11111	1.17	38567.6364	22222	
6092	3.895	-0.154	-0.576	-0.070	-0.161	11111	1.03	38161.8497	44444		6092	3.920	-0.165	-0.558	-0.058	-0.161	11111	1.06	38567.7888	22222	
6092	3.894	-0.153	-0.549	-0.100	-0.170	11111	1.03	38165.9399	44444		6092	3.906	-0.149	-0.569	-0.072	-0.149	11111	1.12	38568.6522	22222	
6092	3.890	-0.152	-0.560	-0.102	-0.170	11111	1.89	38165.6279	44444		6092	3.870	-0.144	-0.571	-0.091	-0.153	11111	1.03	38568.7213	22222	
6092	3.921	-0.163	-0.573	-0.132	-0.140	11111	1.03	38166.6222	44444		6092	3.928	-0.124	-0.566	-0.036	-0.159	11111	1.14	38577.8033	22222	
6092	3.899	-0.152	-0.560	-0.100	-0.170	11111	1.93	38166.6222	44444		6092	3.866	-0.179	-0.573	-0.108	-0.157	11111	1.06	38579.7525	22222	
6092	3.889	-0.152	-0.560	-0.100	-0.160	11111	1.03	38167.8243	12221		6092	3.888	-0.154	-0.567	-0.095	-0.163	11111	2.21	38639.7743	44444	
6092	3.905	-0.173	-0.574	-0.108	-0.146	11111	1.10	38176.7337	44444		6092	3.873	-0.143	-0.559	-0.100	-0.174	11111	2.01	38784.9185	44444	
6092	3.928	-0.170	-0.571	-0.127	-0.161	11111	1.16	38178.7039	44444		6092	3.906	-0.136	-0.554	-0.074	-0.171	11111	1.08	38792.0623	22221	
6092	3.912	-0.154	-0.578	-0.049	-0.168	11111	1.15	38179.7062	44444		6092	3.905	-0.144	-0.564	0.000	0.000	11100	1.46	38809.0108	44400	
6092	3.919	-0.160	-0.565	-0.059	-0.169	11111	1.05	38179.7544	44444		6092	3.907	-0.134	-0.567	-0.053	-0.166	11111	1.03	38827.9242	44444	
6092	3.902	-0.175	-0.576	-0.076	-0.170	11111	1.08	38180.7366	44444		6092	3.875	-0.139	-0.568	-0.084	-0.178	11111	1.03	38845.9669	44444	
6092	3.903	-0.149	-0.561	-0.042	-0.178	11111	1.12	38180.8816	44444		6092	3.909	-0.140	-0.557	-0.068	-0.161	11111	1.03	38846.9769	44444	
6092	3.917	-0.158	-0.591	-0.100	-0.153	11111	1.06	38183.8384	44421		6092	3.906	-0.137	-0.577	-0.053	-0.175	11111	1.04	38849.9409	44444	
6092	3.906	-0.154	-0.569	-0.081	-0.160	11111	1.03	38185.7814	22221		6092	3.908	-0.161	-0.560	0.000	0.000	11100	1.03	38846.9104	22200	
6092	3.904	-0.166	-0.562	-0.061	-0.165	11111	1.03	38186.7836	44443		6092	3.879	-0.154	-0.559	0.000	0.000	11100	1.03	38878.8693	22200	
6092	3.906	-0.166	-0.560	-0.099	-0.146	11111	1.03	38187.7820	44443		6092	3.903	-0.145	-0.568	0.000	0.000	11100	1.05	38878.9266	22200	
6092	3.905	-0.165	-0.565	-0.096	-0.165	11111	1.03	38188.7822	44443		6092	3.899	-0.161	-0.562	0.000	0.000	11100	1.03	38900.8094	44400	
6092	3.910	-0.167	-0.569	-0.094	-0.141	11111	1.03	38189.7749	44443		6092	3.917	-0.177	-0.567	-0.042	-0.156	11111	1.06	38905.8635	22222	
6092	3.899	-0.145	-0.560	-0.094	-0.154	11111	1.03	38190.7683	44443		6092	3.925	-0.134	-0.580	-0.060	-0.162	11111	1.04	38912.8160	44444	
6092	3.897	-0.159	-0.562	-0.083	-0.156	11111	1.03	38192.7598	44443		6092	3.901	-0.142	-0.563	-0.050	-0.176	11111	1.05	38936.6940	44444	
6092	3.905	-0.121	-0.563	-0.112	-0.159	11111	2.00	38192.9843	44443		6092	3.874	-0.135	-0.584	-0.072	-0.178	11111	1.04	38938.7448	44444	
6092	3.908	-0.172	-0.548	-0.074	-0.154	11111	1.03	38194.7574	44443		6092	3.881	-0.145	-0.561	-0.067	-0.166	11111	1.03	38939.7289	44444	
6092	3.911	-0.113	-0.573	-0.122	-0.114	11111	1.98	38194.9776	44443		6092	3.918	-0.171	-0.578	-0.021	-0.156	11111	1.04	38940.7788	44444	
6092	3.891	-0.169	-0.566	-0.091	-0.136	11111	1.03	38199.7483	44443		6092	3.908	-0.156	-0.553	0.000	0.000	11100	2.15	39034.6897	44400	
6092	3.904	-0.137	-0.553	-0.111	-0.163	11111	2.18	38199.9770	44443		6092	3.888	-0.155	-0.588	-0.069	-0.148	11111	2.45	39042.6832	44444	
6092	3.891	-0.150	-0.551	-0.100	-0.163	11111	1.03	38201.7408	44421		6093	4.842	0.357	-0.030	0.372	0.163	11111	1.19	38147.9156	44444	
6092	3.908	-0.176	-0.552	-0.107	-0.144	11111	1.15	38202.6424	44444		6093	4.819	0.344	0.034	0.294	0.148	11111	1.17	38518.8725	22222	
6092	3.899	-0.176	-0.552	-0.107	-0.144	11111	1.15	38202.6424	44444		6093	4.819	0.312	0.040	0.314	0.157	11111	1.17	38522.8521	22222	
6092	3.907	-0.147	-0.553	-0.241	-0.138	11111	1.12	38203.6534	44444		6093	4.783	0.345	0.037	0.254	0.140	11111	1.25	38546.7409	22222	
6092	3.884	-0.139	-0.563	-0.114	-0.165	11111	1.09	38204.6628	44444		6093	3.771	0.269	0.181	0.299	0.114	11111	1.04	38109.0205	44444	
6092	4.021	-0.293	-0.511	-0.199	-0.040	11110	1.79	38204.9349	44444		6093	3.787	0.260	0.189	0.278	0.164	11111	1.03	38131.9453	44444	
6092	3.891	-0.171	-0.561	-0.143	-0.164	11111	1.04	38205.6958	22222		6093	3.733	0.291	0.250	0.000	0.000	11100	1.03	38464.9175	22200	
6092	3.918	-0.156	-0.554	-0.083	-0.215	11111	1.10	38206.6535	44444		6093	3.772	0.280	0.223	0.000	0.000	11100	1.06	38473.9518	44400	
6092	3.900	-0.143	-0.556	-0.260	-0.112	11111	1.99	38206.9457	44444		6093	3.746	0.259	0.214	0.299	0.153	11111	1.04	38475.0158	44444	
6092	0.	-0.101	-0.597	-0.130	-0.151	11111	1.10	38207.6505	02222		6103	4.860	0.992	0.793	0.773	0.460	11111	1.00	38109.0139	44444	
6092	0.	-0.205	-0.522	-0.164	-0.266	01111	1.05	38207.7644	02222		6103	4.835	0.989	0.822	0.664	0.484	11111	1.00	38167.8413	12221	
6092	3.889	-0.159	-0.556	-0.100	-0.157	11111	1.03	38211.7152	44443		6103	4.863	0.988	0.772	0.767	0.464	11111	1.00	38185.7873	22221	
6092	3.883	-0.152	-0.568	-0.116	-0.165	11111	1.03	38216.7085	44443		6103	4.830	0.906	0.801	0.720	0.420	11111	1.00	38206.7377	44444	
6092	3.815	-0.205	-0.616	-0.311	-0.192	11111	2.79	38222.9417	44443		6104	4.501	1.026	0.830	0.790	0.495	11111	1.64	38186.7966	44443	
6092	3.895	-0.166	-0.568	-0.163	-0.139	11111	1.03	38223.6875	44443		6104	4.488	1.039	0.839	0.759	0.518	11111	1.64	38211.7241	44443	
6092	3.992	-0.159	-0.585	-0.028	-0.165	11111	2.34	38223.9200	44444		6112	4.631	0.232	-0.529	0.338	0.353	11111	3.89	38285.6614	23333	
6092	3.894	-0.165	-0.585	-0.092	-0.166	11111	1.03	38224.6678	44444		6112	4.627	0.217	-0.564	0.366	0.293	11111	2.26	38288.5966	12221	
6092	3.895	-0.139	-0.555	-0.119	-0.154	11111	2.17	38224.9079	44444		6117	4.593	-0.013	-0.100	0.099	-0.032	11111	1.05	38136.9253	44444	
6092	3.883	-0.156	-0.547	-0.127	-0.163	11111	2.28	38225.9115	44444		6117	4.589	0.007	-0.044	0.076	-0.076	11111	1.06	38161.8733	44444	
6092	3.890	-0.1																			

TABLE 4 CATALINA UBVRI OBSERVATIONS

CATALINA UBVRI DATA										CATALINA UBVRI DATA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
6153	4.469	0.123	0.102	0.111	-0.397	11110	1.71	38201.7719	44421	6431	4.820	-0.134	-0.788	-0.041	-0.198	11111	1.00	38136.9607	44444
6153	4.441	0.102	0.133	0.150	0.024	11111	1.70	38523.8785	44444	6431	4.743	-0.169	-0.738	-0.077	-0.200	11111	1.01	38161.9087	44444
6153	4.451	0.115	0.141	0.121	0.028	11111	1.71	38543.7896	22222	6431	4.787	-0.155	-0.748	-0.029	-0.180	11111	1.04	38201.8308	44421
										6431	4.956	-0.156	-0.743	-0.104	-0.132	11111	1.13	38222.8155	44443
6159	4.890	1.470	1.830	1.249	0.882	11111	1.08	38142.9316	44444	6436	4.690	0.031	-0.061	0.156	-0.007	11111	1.03	38139.9914	44444
6159	4.838	1.481	1.833	1.182	0.858	11111	1.08	38522.8918	22222	6436	4.627	0.045	-0.022	0.057	-0.004	11111	1.00	38186.8204	44443
6159	4.826	1.490	0.000	1.172	0.839	11011	1.07	38544.8178	44444	6436	4.660	0.068	0.008	0.038	0.018	11111	1.15	38222.8225	44443
6161	5.009	-0.048	-0.127	0.064	-0.017	11111	1.25	38148.9254	44444	6445	4.367	0.420	-0.066	0.384	0.235	11111	1.68	38185.8205	22221
6161	5.013	-0.069	-0.087	0.045	-0.036	11111	1.24	38543.8161	22222	6445	4.391	0.397	-0.058	0.359	0.197	11111	1.84	38201.8404	44421
6161	4.896	-0.045	-0.085	0.136	-0.255	11111	1.25	38546.7762	22222	6446		0.040				01000	1.56	38201.8451	44421
6165	2.826	-0.242	-1.024	-0.094	-0.278	11111	2.06	38203.7689	44444	6446	4.295	0.039	0.005	0.022	-0.015	11111	1.42	38203.7872	44444
6165	2.800	-0.231	-1.016	-0.142	-0.241	11111	2.12	38521.9138	44444	6446	4.300	0.032	0.000	0.073	0.013	11011	1.42	38475.0301	44444
6165	2.809	-0.269	-1.001	-0.103	-0.237	11111	2.04	38523.8850	44444	6446	4.343	0.025	0.062	0.073	0.008	11111	1.42	38506.9510	22222
6168	4.213	-0.008	-0.109	0.051	0.016	11111	1.02	38134.9323	44444	6453	3.241	-0.225	-0.853	-0.104	-0.196	11111	1.85	38185.8269	22221
6168	4.221	-0.069	-0.099	0.014	-0.012	11111	1.03	38165.8788	44444	6453	3.286	-0.236	-0.861	-0.074	-0.203	11111	1.86	38506.9585	22222
6168	4.158	0.002	-0.091	0.011	-0.018	11111	1.02	38508.9156	22222	6453	3.253	-0.207	-0.851	-0.119	-0.229	11111	1.88	38519.9366	44444
6175	2.580	0.027	-0.867	0.226	-0.025	11111	1.44	37794.7825	22222	6484	4.160	0.012	-0.048	-0.019	-0.037	11111	1.00	38204.7677	44444
6175	2.555	0.014	-0.866	0.141	-0.073	11111	1.36	37808.7766	22222	6484	4.150	0.007	-0.080	0.070	-0.011	11111	1.01	38185.8422	22221
6175	2.566	0.021	-0.861	0.188	-0.062	11111	1.39	37836.6863	22222	6484	4.193	-0.013	-0.038	0.022	0.017	11111	1.03	38132.0165	44444
6175	2.565	0.037	-0.841	0.031	-0.041	11111	1.39	38203.7747	44444	6486	4.161	0.296	0.115	0.250	0.143	11111	1.81	38187.8260	44443
6175	2.599	0.044	-0.807	0.026	-0.013	11111	1.66	38222.7857	44443	6486	4.126	0.306	0.142	0.104	0.101	11011	1.82	38204.7903	44444
6212	2.778	0.692	0.243	0.442	0.364	11111	1.01	38136.9540	44444	6486	4.201	0.251	0.116	0.281	0.150	11111	1.82	38506.9658	22222
6212	2.791	0.654	0.186	0.529	0.320	11111	1.00	38508.9227	22222	6486	4.151	0.287	0.101	0.330	0.094	11111	1.86	38519.9453	44444
6212	2.829	0.661	0.188	0.541	0.319	11111	1.16	38528.7603	44444	6492	4.270	0.395	0.049	0.361	0.191	11111	2.14	38188.8286	44443
6212	2.822	0.642	0.192	0.521	0.299	11111	1.00	38544.8244	44444	6492	4.253	0.422	0.081	0.360	0.144	11111	2.25	38519.9551	44444
6212	2.854	0.550	0.077	0.689	0.332	11111	1.00	38546.8191	22222	6492	4.281	0.396	0.093	0.363	0.194	11111	2.15	38521.9214	44444
6220	3.515	0.953	0.585	0.725	0.487	11111	1.04	38131.9951	44444	6493	4.576	0.395	-0.058	0.402	0.220	11111	1.27	38147.9571	44444
6220	3.495	0.899	0.635	0.694	0.481	11111	1.01	38187.8018	44443	6493	4.514	0.452	-0.092	0.393	0.201	11111	1.26	38185.8351	22221
6220	3.494	0.922	0.590	0.578	0.490	11111	1.06	38216.7796	44444	6493	4.529	0.376	0.000	0.344	0.196	11011	1.27	38481.0009	44444
6237	4.872	0.409	-0.079	0.362	0.260	11111	1.11	38148.9354	44444	6498	4.324	1.484	1.562	1.175	0.741	11111	1.14	38138.9743	33331
6237	4.836	0.387	-0.046	0.383	0.178	11111	1.10	38201.7795	44421	6498	4.338	1.504	1.595	1.079	0.795	01001	1.14	38207.7737	02222
6237	4.813	0.366	-0.053	0.296	0.210	11111	1.17	38223.7797	44444	6498	4.323	1.528	1.607	1.032	0.767	11111	1.13	38508.9458	22222
6243	4.624	0.470	0.071	0.407	0.261	11111	1.41	38154.9259	44444	6508	2.661	-0.240	-0.788	-0.094	-0.203	11111	2.91	38132.0015	44444
6243	4.659	0.520	0.054	0.459	0.261	11111	1.37	38211.7325	44443	6519	4.818	0.018	-0.109	0.179	0.007	11111	1.80	38203.7811	44444
6243	4.698	0.433	0.081	0.471	0.240	11111	1.38	38543.8025	22222	6519	4.806	0.003	-0.031	0.073	0.022	11111	1.80	38544.8475	44444
6243	4.583	0.431	0.415	0.618	0.245	11111	1.38	38546.8306	22222	6519	4.814	-0.005	-0.038	0.070	0.012	11111	1.88	38547.8021	22222
6254	4.837	0.077	-0.005	0.138	0.056	11111	1.03	38152.8936	44444	6526	4.377	1.462	1.656	0.988	0.773	11111	1.01	38136.9686	44444
6254	4.813	0.083	0.048	0.049	-0.006	11111	1.04	38199.7930	44443	6526	4.422	1.414	1.696	1.022	0.793	11111	1.13	38225.8117	44444
6254	4.824	0.088	0.007	0.105	-0.007	11111	1.04	38201.7945	44421	6526	4.440	1.443	1.690	0.000	0.000	01000	1.07	38473.9828	44440
6271	3.586	1.361	1.609	1.124	0.675	11111	3.74	38131.9538	44444	6536	2.743	1.044	0.626	0.693	0.517	11111	1.07	38152.9002	44444
6281	4.381	-0.094	-0.320	-0.070	-0.108	11111	1.09	38201.7872	44421	6536	2.810	0.988	0.620	0.673	0.452	11111	1.07	38185.8490	22221
6281	4.388	-0.066	-0.318	-0.103	-0.066	11111	1.24	38222.7933	44443	6536	2.774	0.952	0.658	0.671	0.466	11111	1.07	38224.7427	44444
6299	3.183	1.167	1.150	0.868	0.537	11111	1.08	38475.0221	44444	6554	4.896	0.289	0.046	0.260	0.182	11111	1.08	38153.9288	44444
6299	3.196	1.143	1.167	0.843	0.544	11111	1.08	38508.9298	22222	6554	4.909	0.238	0.001	0.203	0.132	11111	1.09	38165.8982	44444
6299	3.225	1.176	1.158	0.809	0.538	11111	1.08	38543.8281	22222	6554	4.925	0.259	-0.020	0.225	0.116	11111	1.09	38183.8666	44421
6315	4.905	0.480	-0.034	0.453	0.264	11111	1.19	38508.9381	22222	6554	4.831	0.297	0.036	0.260	0.111	11111	1.09	38224.7539	44444
6315	4.928	0.462	-0.010	0.450	0.279	11111	1.19	38543.8511	22222	6555	4.919	0.247	0.008	0.253	0.165	11111	1.09	38152.9365	44444
6322		0.905	0.541			01000	1.55	38148.9432	44444	6555	4.879	0.278	0.268	0.240	0.124	11011	1.09	38165.9032	44444
6322	4.252	0.928	0.523	0.791	0.487	11111	1.55	38148.9503	44444	6555	4.893	0.297	0.023	0.241	0.126	11111	1.10	38183.8725	44421
6322	4.217	0.881	0.546	0.742	0.480	11111	1.55	38165.8913	44444	6555	4.914	0.233	0.017	0.230	0.056	11111	1.09	38203.7945	44444
6322	4.244	0.903	0.550	0.669	0.463	11111	1.54	38187.8135	44443	6555	4.862	0.263	-0.009	0.244	0.103	11111	1.10	38244.7603	44444
6322	4.195	0.876	0.575	0.610	0.435	11111	1.56	38201.8148	44421	6556	2.080	0.155	0.120	0.354	0.196	11000	1.12	37563.5802	22222
6324	3.921	-0.019	-0.115	0.061	-0.052	11111	1.00	38136.9400	44444	6556	2.123	0.148	0.122	0.163	0.076	11111	1.06	38131.9885	44444
6324	3.928	-0.019	-0.106	0.037	-0.025	11111	1.04	38199.8241	44443	6556	2.091	0.024	0.198	0.154	0.068	11111	1.06	38136.9756	44444
6324	3.904	-0.004	-0.090	-0.052	-0.047	11111	1.04	38201.8218	44421	6556	2.117	0.145	0.096	0.181	0.062	11111	1.07	38147.9244	44444
6337	4.975	1.542	1.916	1.424	1.245	11111	2.06	38339.5719	44444	6556	2.068	0.172	0.127	0.189	0.103	11111	2.25	38184.6486	44443
6337	4.905	1.566	1.988	1.341	1.234	11111	2.66	38340.5925	11111	6556	2.070	0.162	0.116	0.132	0.090	11111	1.06	38177.8320	44443
6337	5.002	1.604	1.921	1.414	1.231	11111	1.05	38517.8957	44444	6556	2.042	0.144	0.106	0.048					

TABLE 4. CATALINA UBVRi OBSERVATIONS

CATALINA UBVRi DATA										CATALINA UBVRi DATA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
6603	2.773	1.171	1.228	0.775	0.551	11111	1.33	38186.8432	44443	6603	2.736	1.147	1.218	0.000	0.000	11100	1.20	38881.9904	44400
6603	2.776	1.143	1.243	0.792	0.588	11111	2.49	38187.6567	44443	6603	2.767	1.161	1.235	0.000	0.000	11100	2.04	38882.7725	44400
6603	2.745	1.175	1.239	0.778	0.574	11111	1.33	38187.8377	44443	6603	2.810	1.183	1.216	0.000	0.000	11100	1.13	38882.9477	44400
6603	2.764	1.148	1.240	0.810	0.571	11111	2.37	38189.6556	44443	6603	2.761	1.167	1.251	0.000	0.000	11100	2.41	38900.7072	44400
6603	2.758	1.185	1.238	0.744	0.563	11111	1.17	38189.8751	44443	6603	2.778	1.160	1.267	0.000	0.000	11100	1.13	38900.8919	44400
6603	2.774	1.154	1.235	0.839	0.583	11111	2.27	38190.6566	44443	6603	2.795	1.174	1.249	0.804	0.585	11111	1.23	38905.9357	22222
6603	2.756	1.181	1.235	0.777	0.556	11111	1.13	38190.8255	44443	6603	2.764	1.178	1.242	0.822	0.559	11111	1.25	38930.8736	44444
6603	2.763	1.161	1.233	0.792	0.584	11111	2.33	38192.6490	44443	6603	2.765	1.176	1.246	0.798	0.582	11111	1.14	38934.8089	22222
6603	2.760	1.163	1.233	0.778	0.548	11111	2.17	38194.6502	44443	6603	2.752	1.193	1.237	0.822	0.576	11111	1.24	38938.8493	44444
6603	2.756	1.154	1.249	0.806	0.564	11111	1.13	38194.8209	44443	6603	2.769	1.168	1.240	0.824	0.546	11111	1.24	38940.8439	44444
6603	0.	1.176	1.240	0.764	0.539	11111	1.27	38194.8954	44443	6603	2.856	1.223	1.291	0.840	0.583	11111	1.18	38944.7817	44444
6603	2.749	1.175	1.237	0.813	0.591	11111	2.09	38199.6403	44443	6603	2.770	1.160	1.240	0.810	0.597	11111	1.14	38992.6513	22221
6603	2.767	1.158	1.257	0.804	0.565	11111	1.13	38199.7997	44443	6603	2.719	1.161	1.220	0.749	0.576	11111	1.13	38993.6181	22222
6603	2.781	1.130	1.249	0.795	0.617	11111	1.78	38201.6539	44421	6603	2.759	1.183	1.208	0.853	0.575	11111	1.14	38995.6092	44444
6603	2.764	1.166	1.245	0.822	0.545	11111	1.13	38201.8010	44421	6603	2.714	1.161	1.186	0.799	0.562	11111	1.14	38996.6386	22222
6603	2.763	1.183	1.239	0.909	-0.040	11100	2.19	38201.9665	44421	6603	2.842	1.179	1.299	0.000	0.000	11100	1.52	38996.7419	22222
6603	2.791	1.156	1.281	0.769	0.550	11111	1.15	38202.8283	44444	6603	2.705	1.124	1.234	0.784	0.569	11111	1.14	38997.6042	44444
6603	2.782	1.159	1.247	0.775	0.544	11111	1.14	38203.8087	44444	6603	2.791	1.166	1.289	0.840	0.587	11111	1.14	38997.7604	44444
6603	2.752	1.144	1.267	0.815	0.557	11111	1.84	38204.6414	44444	6603	2.718	1.163	1.226	0.776	0.576	11111	1.17	39004.6358	44444
6603	2.797	1.161	1.247	0.796	0.547	11111	1.13	38204.7807	44444	6603	2.770	1.160	1.240	0.810	0.567	11111	1.17	39014.6137	22221
6603	2.766	1.178	1.259	0.793	0.563	11111	1.13	38205.7880	22222	6603	2.777	1.172	1.245	0.798	0.582	11111	1.18	39018.6090	44444
6603	2.798	1.134	1.244	0.810	0.581	11111	1.13	38206.7817	44444	6603	2.739	1.177	1.240	0.780	0.586	11111	1.17	39019.5704	44444
6603	0.	1.169	1.256	0.786	0.597	11111	1.13	38207.7816	22222	6603	2.777	1.196	1.238	0.847	0.583	11111	1.17	39025.5859	44444
6603	2.722	1.222	1.196	0.872	0.535	11111	1.14	38209.7942	44435	6603	2.748	1.160	1.250	0.000	0.000	11100	1.17	39025.5812	44400
6603	2.777	1.185	1.237	0.759	-0.040	11100	1.13	38222.7383	44443	6603	2.710	1.142	1.221	0.813	0.564	11111	1.17	39028.5886	44444
6603	2.751	1.165	1.252	0.787	0.589	11111	1.20	38223.7955	44444	6603	2.777	1.171	1.249	0.864	0.578	11111	1.20	39029.5760	22222
6603	2.735	1.188	1.231	0.776	0.601	11111	1.32	38269.7017	44443	6603	2.743	1.153	1.286	0.000	0.000	11100	1.17	39032.5669	44400
6603	2.742	1.191	1.265	0.802	0.591	11111	1.22	38270.6713	44443	6603	2.745	1.169	1.241	0.000	0.000	11100	1.35	39033.6159	44400
6603	0.000	1.169	1.247	0.909	-0.040	11100	1.18	38293.5948	44444	6603	2.740	1.170	1.251	0.000	0.000	11100	1.25	39034.5908	44400
6603	2.751	1.182	1.226	0.809	0.601	11111	2.82	38293.7365	44444	6603	2.719	1.162	1.242	0.773	0.603	11111	1.34	39036.6061	44444
6603	2.728	1.173	1.262	0.767	0.575	11111	1.11	38305.5998	44444	6603	2.765	1.169	1.242	0.830	0.573	11111	1.28	39037.5902	44444
6603	2.778	1.156	1.211	0.835	0.567	11111	5.00	38305.7348	44444	6603	2.747	1.144	1.255	0.807	0.585	11111	1.35	39038.6019	44444
6603	2.782	1.173	1.212	0.773	0.567	11111	2.21	38348.9796	44444	6603	2.770	1.172	1.245	0.886	0.587	11111	1.24	39040.5713	22222
6603	2.764	1.200	1.224	0.875	0.581	11111	2.14	38343.9689	44444	6603	2.799	1.183	1.250	0.806	0.580	11011	1.14	39041.5704	44444
6603	2.783	1.176	1.228	0.868	0.581	11111	2.33	38344.9689	44444	6603	2.745	1.175	1.259	0.877	0.597	11111	1.25	39042.5910	44444
6603	2.758	1.195	1.202	0.846	0.563	11111	2.25	38344.9947	44444	6603	2.756	1.140	1.207	0.833	0.556	11111	2.25	39042.6673	44444
6603	2.750	1.178	1.235	0.855	0.566	11111	2.14	38344.9979	44444	6603	2.742	1.145	1.260	0.797	0.597	11111	1.34	39045.8603	44444
6603	2.747	1.166	1.209	0.824	0.580	11111	1.99	38347.8824	44444	6603	2.762	1.192	1.231	0.832	0.579	11111	1.55	39049.5451	44444
6603	2.801	1.163	1.248	0.000	0.000	11100	2.07	38347.8848	44400	6623	3.442	0.744	0.394	0.602	0.331	11111	1.01	38138.9982	33331
6603	2.796	1.166	1.252	0.000	0.000	11100	1.15	38347.0194	44400	6623	3.417	0.750	0.415	0.633	0.369	11111	1.00	38188.8361	44443
6603	2.730	1.180	1.185	0.848	0.560	11111	2.32	38348.8601	44400	6623	3.435	0.755	0.386	0.443	0.371	11111	1.07	38203.8613	44444
6603	2.771	1.164	1.244	0.847	0.561	11111	1.13	38350.9738	22222	6623	3.404	0.751	0.416	0.499	0.424	11111	1.04	38225.7838	44444
6603	2.756	1.169	1.245	0.832	0.558	11111	1.13	38351.9625	22222	6623	3.408	0.741	0.383	0.569	0.407	11111	1.23	38317.5982	44444
6603	2.755	1.159	1.247	0.863	0.558	11111	1.13	38351.9374	44444	6629	3.752	0.029	0.064	0.065	-0.037	11101	1.44	37564.6346	22222
6603	2.784	1.172	1.252	0.837	0.564	11111	1.13	38351.9485	44444	6629	3.754	0.022	0.010	0.090	-0.040	11100	1.41	37571.6112	22222
6603	2.775	1.166	1.254	0.811	0.574	11111	2.35	38351.7578	44444	6629	3.767	0.032	0.059	0.138	-0.040	11101	1.34	37593.5394	22222
6603	2.766	1.147	1.260	0.825	0.573	11111	1.14	38351.9524	22222	6629	3.754	0.008	0.053	0.213	-0.002	11101	1.79	37593.5913	22222
6603	2.776	1.185	1.243	0.859	0.577	11111	2.15	38352.7366	44444	6629	3.726	0.018	0.026	0.234	-0.037	11101	1.60	37594.5716	22222
6603	2.787	1.171	1.234	0.814	0.547	11111	1.21	38352.9774	22222	6629	3.750	0.046	0.064	0.489	0.006	11101	1.20	37595.8811	44443
6603	2.727	1.173	1.246	0.729	0.577	11111	2.15	38352.7366	44444	6629	3.727	0.046	0.067	0.120	-0.005	11101	1.61	37595.8458	22222
6603	2.783	1.152	1.238	0.858	0.572	11111	1.14	38352.9193	44444	6629	3.753	0.032	0.048	0.196	-0.039	11101	1.20	37800.8056	22222
6603	2.761	1.181	1.225	0.812	0.566	11111	1.13	38352.8986	22222	6629	3.763	0.052	0.028	0.088	-0.021	11111	1.15	38147.9468	44444
6603	2.784	1.179	1.247	0.850	0.557	11111	1.13	38353.8902	44444	6629	3.726	0.032	0.037	0.066	-0.045	11111	1.15	38161.9162	44444
6603	2.778	1.181	1.251	0.817	0.561	11111	1.13	38354.8782	44444	6629	3.747	0.038	0.047	0.075	-0.013	11111	1.18	38176.8324	44444
6603	2.745	1.154	1.229	0.817	0.000	11100	1.13	38355.8964	22222	6629	3.744	0.040	0.020	0.046	-0.015	11111	1.25	38180.7925	44444
6603	2.773	1.174	1.258	0.835	0.561	11111	1.31	38355.9696	22222	6629	3.767	0.023	0.005	0.155	-0.006	11111	2.49	38186.6658	44443
6603	2.743	1.171	1.229	0.780	0.548	11111	1.13	38356.8815	22221	6629	3.745	0.048	0.038	0.081	-0.015	11111	1.15	38186.8490	44443
6603	2.797	1.149	1.251																

TABLE 4 CATALINA UBVR I OBSERVATIONS

CATALINA UBVR I DATA												CATALINA UBVR I DATA											
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.				
6629	3.742	0.053	0.043	0.021	-0.004	11111	1.15	38532.9059	22222	6688	3.767	1.166	1.220	0.764	0.580	11111	1.10	38188.8422	44443				
6629	3.777	0.049	0.055	0.051	-0.017	11111	1.15	38533.8968	44444	6688	3.754	1.189	1.200	0.875	0.587	11111	1.10	38545.8557	22222				
6629	3.757	0.056	0.048	-0.004	-0.021	11111	1.15	38534.8850	44444	6688	3.741	1.183	1.213	0.855	0.592	11111	1.10	38558.8511	44444				
6629	3.693	0.046	0.032	0.009	-0.019	11111	1.16	38535.9030	22222	6695	3.856	1.343	1.445	0.928	0.621	11111	1.00	38545.8677	22222				
6629	3.727	0.042	0.041	0.023	-0.005	11111	1.29	38535.9627	22222	6695	3.852	1.368	1.441	0.875	0.603	11111	1.00	38557.8424	44444				
6629	3.747	0.046	0.032	0.046	-0.011	11111	1.15	38536.9627	22221	6695	3.894	1.349	1.484	0.908	0.648	11111	1.10	38558.9136	44444				
6629	3.753	0.034	0.048	0.069	-0.016	11111	1.28	38536.9576	22221	6698	3.335	1.011	0.868	0.642	0.490	11111	1.51	38203.8740	44444				
6629	3.750	0.040	0.040	0.053	0.005	11111	1.89	38537.7333	44443	6698	3.366	0.965	0.880	0.774	0.474	11111	1.36	38545.8882	22222				
6629	3.784	0.009	0.050	0.112	-0.008	11111	1.66	38545.7291	22222	6698	3.345	1.000	0.885	0.696	0.501	11111	1.35	38559.8347	44444				
6629	3.760	0.042	0.053	0.019	-0.006	11111	1.16	38545.8442	22222	6700	4.770	-0.059	-0.026	0.078	-0.023	11111	1.95	38545.9216	22222				
6629	3.752	0.026	0.052	0.047	-0.017	11111	1.45	38557.9314	44444	6700	4.753	-0.033	-0.054	0.040	-0.031	11111	1.79	38557.8349	44444				
6629	3.749	0.063	0.022	0.042	-0.017	11111	1.27	38560.8883	22222	6700	4.732	-0.050	-0.027	0.027	-0.005	11111	1.81	38559.8458	44444				
6629	3.751	0.037	0.056	0.081	-0.021	11111	1.26	38561.8821	22222	6703	3.691	0.967	0.693	0.749	0.441	11111	1.03	38152.9875	44444				
6629	3.777	0.044	0.061	0.076	-0.028	11111	1.26	38562.8809	22222	6703	3.709	0.917	0.687	0.604	0.491	11111	1.05	38223.8020	44444				
6629	3.736	0.060	0.032	0.024	-0.025	11111	1.15	38564.7987	22222	6703	3.709	0.948	0.710	0.720	0.447	11111	1.07	38545.9325	22222				
6629	3.726	0.053	0.040	0.004	-0.011	11111	1.16	38564.7921	22222	6705	2.194	1.510	1.867	1.129	0.817	11111	1.28	38315.6253	44444				
6629	3.732	0.057	0.041	0.020	-0.010	11111	1.15	38565.7959	22222	6705	2.203	1.502	1.903	1.093	0.905	11111	1.30	38317.6259	44444				
6629	3.749	0.047	0.043	0.054	-0.019	11111	1.15	38566.7941	22222	6705	2.240	1.490	1.936	1.151	0.925	11111	1.44	38320.6452	24211				
6629	3.756	0.035	0.058	0.055	-0.011	11111	1.15	38567.8055	22222	6705	2.241	1.513	1.893	1.152	0.854	11111	1.09	38564.8671	22222				
6629	3.723	0.052	0.048	0.029	-0.017	11111	1.20	38568.7489	22222	6705	2.244	1.525	1.872	1.147	0.842	11111	1.06	38565.8133	22222				
6629	3.708	0.008	0.049	-0.021	-0.008	11111	1.15	38577.7731	22222	6705	2.229	1.527	1.894	1.173	0.839	11111	1.09	38567.8554	22222				
6629	3.738	0.038	0.041	0.043	0.001	11111	1.29	38637.6847	44444	6707	4.412	0.395	0.154	0.414	0.227	11111	1.00	38161.9312	44444				
6629	3.839	-0.083	0.154	0.150	-0.041	11111	1.16	38638.6291	44444	6707	4.410	0.391	0.160	0.431	0.227	11111	1.00	38188.8485	44443				
6629	3.709	0.070	0.021	0.013	-0.019	11111	1.50	38638.7183	44444	6707	4.408	0.394	0.123	0.366	0.224	11111	1.00	38211.7872	44443				
6629	3.737	0.047	0.034	0.047	-0.010	11111	1.23	38639.6591	44444	6710	4.622	0.371	-0.017	0.303	0.192	11111	1.26	38142.9409	44444				
6629	3.715	0.050	0.020	0.034	0.015	11111	1.23	38665.6154	44444	6710	4.631	0.412	-0.029	0.313	0.213	11111	1.43	38203.8868	44444				
6629	3.719	0.065	0.048	0.014	-0.009	11111	1.32	38658.8341	22222	6710	4.636	0.377	0.017	0.363	0.192	11111	1.28	38545.9099	22222				
6629	3.737	0.021	0.044	0.041	-0.011	11111	1.41	38668.6232	44444	6710	4.615	0.409	-0.002	0.323	0.194	11111	1.25	38559.8549	44444				
6629	3.759	0.039	0.038	0.042	-0.010	11111	1.32	38668.6929	44444	6712	4.580	-0.023	-0.788	0.151	-0.006	11111	1.27	38545.9436	22222				
6629	3.797	0.052	0.072	0.093	0.019	11111	1.25	38669.5863	44444	6712	4.625	-0.021	-0.823	0.130	-0.004	11111	1.14	38557.8694	44444				
6629	3.743	0.029	0.025	0.036	0.011	11111	1.71	38669.7036	44444	6712	4.625	-0.025	-0.815	0.119	-0.020	11111	1.18	38559.8735	44444				
6629	3.800	0.063	0.064	0.062	0.028	11111	1.37	38670.6096	44444	6713	4.657	1.261	1.215	0.873	0.588	11111	1.18	38545.9529	22222				
6629	3.748	0.020	0.019	0.053	-0.019	11111	1.74	38670.7019	44444	6713	4.697	1.268	1.219	0.893	0.593	11111	1.23	38558.9296	44444				
6629	3.754	0.038	0.051	0.047	0.020	11111	1.26	38671.5835	44444	6713	4.681	1.272	1.211	0.837	0.604	11111	1.09	38559.8821	44444				
6629	3.783	0.034	0.048	0.052	0.010	11111	1.75	38671.6994	44444	6714	3.978	0.015	-0.576	0.113	0.008	11111	1.37	38545.9620	22222				
6629	3.784	0.056	0.040	0.038	0.014	11111	1.30	38673.5883	44444	6714	3.942	0.028	-0.605	0.097	-0.016	11111	1.16	38557.8592	44444				
6629	3.720	0.043	0.022	0.042	-0.003	11111	1.29	38674.5825	44444	6714	3.978	0.006	-0.745	0.094	0.004	11111	1.24	38559.8908	44444				
6629	3.735	0.010	0.022	0.034	-0.000	11111	1.29	38674.6924	44444	6723	4.402	0.046	0.014	0.074	-0.006	11111	1.19	38557.8660	44444				
6629	3.742	0.042	0.013	0.037	-0.014	11111	1.27	38675.5743	44444	6723	4.448	0.028	0.033	0.068	0.026	11111	1.29	38559.9009	44444				
6629	3.754	0.044	0.030	0.041	-0.003	11111	1.27	38675.6850	44444	6736	5.976	-0.006	-0.907	0.236	0.011	11111	1.75	38545.9292	22222				
6629	3.779	0.025	0.008	0.040	-0.019	11111	1.36	38676.5927	44444	6736	5.964	0.013	-0.877	0.259	0.028	11111	1.75	38366.8089	22222				
6629	3.736	0.031	0.044	0.030	-0.004	11111	1.30	38677.5759	22222	6752	4.058	0.861	0.515	0.635	0.447	11111	1.18	38204.8364	44444				
6629	3.805	0.053	0.068	0.066	0.027	11111	1.34	38678.5827	44444	6752	4.031	0.826	0.500	0.656	0.477	11111	1.18	38216.8602	44444				
6629	3.803	0.047	0.054	-0.023	0.020	11111	1.78	38679.6336	22222	6766	4.553	0.948	0.757	0.693	0.523	11111	2.06	38192.8559	44443				
6629	3.748	0.036	0.022	0.056	0.016	11111	1.33	38681.5726	44444	6766	4.555	0.960	0.747	0.553	0.503	11111	2.13	38204.8429	44444				
6629	3.757	0.029	0.037	0.053	-0.005	11111	1.35	38682.5730	44444	6770	4.641	0.939	0.762	0.657	0.519	11111	1.09	38154.9443	44444				
6629	3.785	0.052	0.103	0.098	0.004	11111	1.75	38788.0577	44444	6770	4.597	1.021	0.713	0.665	0.474	11111	1.10	38209.8137	44433				
6629	3.750	0.040	0.044	0.026	-0.015	11111	1.68	38792.0533	22221	6770	4.645	0.950	0.722	0.656	0.495	11111	1.09	38256.9078	22221				
6629	3.756	0.004	0.047	0.080	-0.008	11111	1.75	38818.9732	22222	6770	4.576	0.955	0.691	0.874	0.522	11111	1.09	38564.9798	22222				
6629	3.741	0.040	0.047	0.000	-0.000	11100	1.20	38864.9399	22200	6770	4.623	0.934	0.671	0.962	0.510	11111	1.11	38546.9013	22222				
6629	3.744	0.037	0.058	-0.013	11111	1.19	38871.0088	44444	6771	3.708	0.136	0.106	0.168	-0.003	11111	1.09	38161.9444	44444					
6629	3.760	0.025	0.039	0.011	-0.000	11111	1.16	38871.9819	44444	6771	3.756	0.077	0.099	0.130	0.073	11111	1.09	38209.8072	44433				
6629	3.736	0.047	0.028	0.000	-0.000	11100	1.15	38878.9347	22200	6771	3.727	0.137	0.085	0.113	0.079	11111	1.09	38536.9149	22221				
6629	3.767	0.039	0.045	0.000	-0.000	11100	1.15	38878.9535	22200	6779	3.836	-0.029	-0.065	-0.022	-0.001	11111	1.00	38165.9165	44444				
6629	3.752	0.034	0.041	0.000	-0.000	11100	1.22	38879.7784	44400	6779	3.833	-0.008	-0.040	0.087	-0.011	11111	1.00	38185.8629	22221				
6629	3.788	0.049	0.057	0.000	-0.000	11100	1.18	38879.9067	44400	6779	3.827	-0.018	-0.057	0.024	0.025	11111	1.01	38536.9270	22221				
6629	3.765	0.019	0.041	0.000	-0.000	11100	1.15	38879.9396	22200	6787	4.358	-0.139	-0.804	-0.019	-0.219	11111	1.02	38136.9950	44444				
6629	3.736	0.056	0.032	0.000	-0																		

TABLE 4 CATALINA UBVRi OBSERVATIONS

CATALINA UBVRi DATA										CATALINA UBVRi DATA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
6895	3.865	1.168	1.187	0.867	0.596	11111	1.03	38199.8589	44443	7133	4.614	0.784	0.503	0.654	0.444	11111	1.04	38556.9168	44444
6895	3.848	1.179	1.156	0.836	0.597	11111	1.03	38216.8169	44444	7133	4.582	0.786	0.485	0.632	0.466	11111	1.01	38639.7222	44444
6896	4.767	1.319	0.926	1.125	0.879	11111	1.67	38165.9392	44444	7137	4.942	0.904	0.564	0.661	0.429	11111	1.06	38192.8869	44443
6896	4.814	1.302	0.921	1.039	0.844	11111	1.66	38523.9431	44444	7137	4.931	0.908	0.581	0.690	0.470	11111	1.11	38658.6657	22222
6896	4.836	1.294	0.937	1.137	0.807	11111	1.66	38547.8761	22222	7137	4.906	0.879	0.577	0.679	0.469	11111	1.26	38670.6894	44444
6913	2.805	1.039	0.928	0.727	0.551	11111	1.91	38224.7914	44444	7139	4.287	1.684	1.645	1.739	1.585	11111	1.02	38199.8903	44443
6913	2.826	1.048	0.903	0.792	0.527	11111	1.87	38521.9507	44444	7139	4.328	1.665	1.651	1.837	1.659	11111	1.46	38356.5835	44444
6913	2.825	1.034	0.893	0.749	0.562	11111	1.87	38523.9499	44444	7139	4.301	1.664	1.648	1.775	1.655	11111	1.48	38357.9832	44444
6917	5.826	0.095	0.112	0.091	0.045	11111	1.03	38997.6937	44444	7141	4.099	0.164	0.078	0.192	0.062	11111	1.14	38202.8536	44444
6918	5.205	0.481	0.196	0.474	0.387	11111	1.18	38154.9565	44444	7141	4.036	0.180	0.098	0.155	0.083	11111	1.16	38639.6867	44444
6918	5.209	0.511	0.222	0.508	0.392	11111	1.18	38192.8617	44443	7141	4.600	0.177	0.089	0.147	0.078	01111	1.23	38674.6194	44444
6918	5.226	0.506	0.218	0.473	0.388	11111	1.31	38203.8932	44444	7150	3.534	1.203	1.130	0.829	0.577	11111	1.70	38556.8995	44444
6918	5.216	0.510				11000	1.18	38226.7572	44444	7150	3.498	1.164	1.137	0.793	0.585	11111	2.04	38668.6546	44444
6920	4.225	-0.100	-0.358	0.023	-0.116	11111	1.28	38188.8615	44443	7150	3.464	1.180	1.123	0.786	0.587	11111	1.89	38671.6281	44444
6920	4.201	-0.093	-0.319	-0.086	-0.098	11111	1.29	38547.8889	22222	7157	3.989	1.671	1.484	2.087	1.906	11111	1.02	38154.9825	44444
6920	4.220	-0.104	-0.304	-0.049	-0.098	11111	1.33	38561.7719	22222	7157	4.015	1.529	1.374	2.060	1.912	11111	1.50	38356.5944	44444
6923	5.017	0.081	0.042	0.060	0.010	11111	1.12	38192.8736	44443	7157	3.995	1.525	1.351	1.967	1.924	11111	1.53	38357.5956	44444
6923	4.953	0.083	0.058	0.038	0.022	11111	1.14	38561.7950	22222	7172	5.160	0.499	0.031	0.422	0.287	11111	1.06	38996.6926	22222
6927	3.579	0.514	-0.060	0.422	0.306	11111	1.31	38183.8797	44421	7172	5.228	0.561	0.084	0.480	0.330	11111	1.06	38997.6859	44444
6927	3.606	0.434	-0.021	0.483	0.304	11111	1.31	38560.8579	22222	7176	4.021	1.057	1.059	0.771	0.526	11111	1.17	38639.7310	44444
6927	3.543	0.486	-0.045	0.416	0.305	11111	1.34	38561.7792	22222	7176	4.012	1.089	1.050	0.706	0.541	11111	1.20	38659.6864	22222
6930	4.693	0.064	0.066	0.063	0.053	11111	1.47	38183.8928	44421	7176	4.029	1.079	1.020	0.812	0.498	11111	1.25	38670.6679	44444
6930	4.723	0.044	0.008	0.050	0.057	11111	1.47	38206.8282	44444	7178	3.206	-0.043				11000	2.39	38135.8103	43411
6930	4.708	0.094	0.046	0.129	0.026	11111	1.47	38226.7665	44444	7178	0	-0.013	-0.014	-0.090	-0.040	01100	2.28	38167.7274	12221
6945	4.853	1.173	1.122	0.886	0.608	11111	1.19	38187.8712	44443	7178	3.232	-0.014	-0.054	0.034	0.004	11111	1.00	38167.9501	12221
6945	4.804	1.188	1.110	0.840	0.631	11111	1.21	38561.8026	22222	7178	3.246	-0.045	-0.083	0.075	0.008	11111	1.00	38183.8865	44443
6945	4.806	1.213	1.106	0.865	0.637	11111	1.29	38638.7296	44444	7178	3.232	-0.015	-0.063	-0.055	0.009	11111	1.00	38192.8953	44443
6973	3.877	0.992	1.814	0.969	0.682	10011	1.44	38544.9581	44444	7178	3.221	-0.032	-0.088	-0.017	-0.002	11111	1.00	38224.7985	44444
6973	3.837	1.339	1.496	0.995	0.665	11111	1.32	38547.9020	22222	7180	4.853	1.148			0.555	11001	1.28	38183.9055	44421
6973	3.852	1.340	1.514	0.942	0.701	11111	1.50	38637.7162	44444	7180	4.788	1.146	1.105	0.895	0.526	11111	1.28	38210.8197	11111
6978	4.796	0.610	0.427	0.541	0.298	11111	1.10	38186.8730	44443	7180	4.786	1.145	1.107	0.793	0.588	11111	1.33	38676.6226	44444
6978	4.804	0.609	0.448	0.521	0.314	11111	1.10	38226.7763	44444	7180	4.856	1.149	1.089	0.851	0.587	11111	1.34	38699.5665	22222
6993	5.737	0.085	0.066	0.030	0.028	11111	1.20	38993.6353	22222	7193	3.976	1.101	1.026	0.727	0.528	11111	1.32	38201.8921	44421
6993	5.758	0.059	0.063	0.104	0.034	11111	1.21	38995.6251	44444	7193	4.043	1.115	1.022	0.800	0.600	11100	1.28	38527.9737	22200
6993	5.716	0.027	0.057	0.061	0.031	11111	1.18	38996.6539	22222	7193	4.033	1.077	1.051	0.834	0.529	11111	1.52	38670.6575	44444
6993	5.731	0.025	0.044	0.103	0.035	11111	1.19	38997.6318	44444	7193	4.042	1.075	1.048	0.809	0.575	11111	1.59	38671.6645	44444
7001	0.046	0.045	-0.127	-0.054	-0.022	10101	1.13	38185.9717	22221	7194	2.583	0.110	0.049	0.084	-0.034	11111	2.15	38206.8368	44444
7001	0.021	0.006	0.023	-0.014	-0.031	11111	1.01	38186.8801	44443	7194	2.619	0.052	0.081	-7.277	7.229	11000	2.98	38507.6597	44444
7001	-0.083	-0.062	0.054	-0.099	-0.030	11111	1.17	38294.6860	44444	7194	2.581	0.120	0.059	0.028	0.041	11111	2.22	38309.5905	11111
7001	0.014	-0.006	0.033	-0.026	-0.026	11111	1.27	38315.6547	44444	7194	2.619	0.022	0.056	0.071	0.031	11111	2.28	38668.6219	44444
7001	-0.016	0.005	0.019	-0.029	0.003	11111	1.51	38217.6862	44444	7215	5.070	0.207	0.132	0.184	0.108	11111	1.04	38997.7020	44444
7020	4.749	0.361	0.175	0.322	0.184	11111	1.49	38544.9679	44444	7217	3.786	1.037	0.846	0.614	0.527	11111	1.80	38309.6041	11111
7020	4.680	0.344	0.143	0.279	0.192	11111	1.55	38637.7255	44444	7217	3.760	0.985	0.889	0.829	-0.159	11110	1.71	38525.9720	44444
7039	3.161	-0.113	-0.350	0.059	-0.186	11111	1.96	38521.9576	44444	7217	3.758	0.980	0.877	0.700	0.533	11111	2.20	38668.6701	44444
7039	3.165	-0.119	-0.354	-0.006	-0.088	11111	1.96	38523.9572	44444	7234	3.329	1.231	1.133	0.844	0.600	11111	2.00	38206.8442	44444
7039	3.185	-0.089	-0.364	-0.017	-0.057	11111	2.37	38669.6378	44444	7234	3.293	1.191	1.138	0.614	0.614	11011	2.13	38310.6030	44444
7056	4.370	0.194	0.131	0.188	0.064	11111	1.01	38183.8993	44421	7234	3.295	1.204	1.171	0.877	0.575	11111	2.00	38519.9879	44444
7056	4.348	0.192	0.163	0.136	0.071	11111	1.01	38226.7852	44444	7235	2.975	0.062	-0.002	-0.064	-0.004	11111	1.10	38201.9026	44421
7056	0.000	0.000	0.000	0.122	0.087	00011	1.14	38638.7407	44444	7235	2.958	0.024	0.009	0.015	0.006	11111	1.29	38659.7061	22222
7056	4.329	0.203	0.166	0.158	0.093	11111	1.05	38655.6538	44444	7235	3.018	0.006	-0.000	0.071	-0.001	11111	1.19	38699.5755	22222
7059	5.594	0.112	0.097	0.171	0.036	11111	1.18	38996.6803	22222	7236	3.440	-0.068	-0.266	0.000	0.000	11100	1.26	38527.9780	22200
7059	5.638	0.102	0.051	0.187	0.070	11111	1.18	38997.6403	44444	7236	3.421	-0.108	-0.262	-0.035	-0.086	11111	1.26	38547.9121	22222
7061	4.193	0.477	0.062	0.467	0.267	11011	1.02	38187.8775	44443	7236	3.430	-0.098	-0.275	-0.021	-0.099	11111	1.47	38639.7407	44444
7061	4.190	0.471	0.016	0.376	0.233	11111	1.02	38521.9661	44444	7264	2.883	0.332	0.243	0.352	0.227	11111	1.68	38547.9217	22222
7061	0.000	0.505	0.318	0.242	0.268	01001	1.22	38638.7491	44444	7264	2.875	0.315	0.242	0.332	0.249	11111	2.07	38669.6636	44444
7061	4.185	0.455	0.003	0.400	0.279	11111	1.09	38655.6612	44444	7292	4.814	0.538	0.327	0.449	0.350	11111	2.30	38296.6848	44444
7063	4.222	1.084	0.830	0.782	0.578	11111	1.26	38523.9650	44444	7292	4.847	0.556	0.312	0.515	0.366	11111	1.89	38547.9318	22222
7063	4.210	1.101	0.839	0.799	0.562	11111	1.27	38639.6679	44444										

TABLE 4 CATALINA UBVR I OBSERVATIONS

CATALINA UBVR I DATA										CATALINA UBVR I DATA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
7340	3.966	0.215	0.111	0.185	0.082	11111	1.58	38226.8165	44444	7504	6.182	0.635	0.216	0.435	0.344	11111	1.21	38328.6457	44444
7340	3.911	0.227	0.165	0.179	0.130	11111	1.64	38310.6126	44444	7504	6.200	0.693	0.218	0.448	0.340	11111	1.28	38329.6617	44444
7340	3.910	0.208	0.139	0.190	0.114	11111	1.70	38671.6369	44444	7525	2.735	1.508	1.750	1.090	0.748	11111	2.00	38185.7578	22221
7342	4.611	0.097	-0.539	0.224	0.102	11111	1.51	38202.8610	44444	7525	2.751	1.573	1.602	1.072	0.748	11111	1.13	38185.9789	22221
7342	4.636	0.114	-0.556	0.324	0.115	11111	1.51	38226.8093	44444	7525	2.715	1.512	1.688	1.055	0.751	11111	1.08	38561.6066	22222
7342	4.578	0.084	-0.497	0.271	0.163	11111	1.60	38310.6189	44444	7525	2.669	1.482	1.724	1.075	0.742	11111	1.21	38669.6811	44444
7352	4.456	1.239	1.437	0.898	0.564	11111	1.32	38202.8685	44444	7528	2.881	-0.026	-0.112	-0.062	-0.008	11111	1.03	38192.8994	44443
7352	4.432	1.246	1.463	0.906	0.561	11111	1.32	38210.8377	11111	7528	2.845	-0.001	-0.098	-0.003	-0.032	11111	1.03	38561.9127	22222
7352	4.474	1.275	1.438	0.890	0.605	11111	1.32	38311.5796	44444	7528	2.890	-0.032	-0.100	0.042	-0.015	11111	1.19	38639.7931	44444
7358	5.185	-0.107	-0.545	-0.094	-0.169	11111	1.01	38202.8755	44444	7536	3.841	1.387	0.967	1.427	1.285	11111	1.03	38209.8474	44443
7358	5.151	-0.131	-0.547	-0.038	-0.145	11111	1.01	38216.8419	44444	7536	3.906	1.423	0.947	1.501	1.329	11111	1.22	38304.7021	12221
7358	5.200	-0.132	-0.501	0.010	-0.167	11111	1.02	38225.8267	44444	7536	3.753	1.430	0.956	1.393	1.264	11111	1.04	38561.4916	22222
7371	4.614	0.025	0.050	0.037	0.001	11111	1.20	38165.9717	44444	7546	4.983	0.140	-0.014	0.170	0.055	11111	1.03	38209.8543	44433
7371	4.577	0.036	0.065	0.050	-0.052	11111	1.20	38202.8825	44444	7546	5.010	0.076	0.091	0.118	0.083	11111	1.10	38655.7077	44444
7371	4.563	0.008	0.054	0.024	-0.018	11111	1.20	38216.8339	44444	7546	5.008	0.082	0.103	0.116	0.056	11111	1.13	38671.6741	44444
7372	4.996	-0.073	-0.723	0.005	-0.170	11111	1.00	38204.8569	44444	7557	0.758	0.213	0.087	0.090	-0.040	11001	1.14	37590.5953	22222
7372	4.952	-0.095	-0.720	0.071	-0.146	11111	1.00	38210.8481	11111	7557	0.759	0.206	0.108	0.888	0.117	11001	2.40	38185.7458	22221
7372	4.963	-0.110	-0.701	-0.005	-0.119	11111	1.02	38225.8332	44444	7557	0.778	0.264	-0.072	0.183	0.127	11001	1.15	38185.9851	22221
7377	3.980	0.326	0.046	0.227	0.143	11111	1.16	38202.8892	44444	7557	0.749	0.228	0.077	0.141	0.119	11111	1.09	38192.9064	44443
7377	3.345	0.326	0.065	0.273	0.169	11111	1.15	38311.5869	44444	7557	0.697	0.197	0.062	0.090	0.112	11001	1.10	38270.7112	44443
7387	4.690	0.617	0.485	0.489	0.440	11111	1.18	38204.8635	44444	7557	0.755	0.213	0.101	0.229	0.140	11111	2.93	38270.8975	44443
7387	4.658	0.597	0.533	0.535	0.483	11111	1.26	38310.6269	44444	7557	0.770	0.220	0.080	0.154	0.167	11111	1.09	38279.6721	44433
7387	4.658	0.585	0.511	0.502	0.474	11111	1.35	38639.7511	44444	7557	0.000	0.291	0.000	0.000	0.000	01000	1.12	38296.6807	44444
7405	4.449	1.516	1.858	1.222	0.976	11111	1.02	38199.9060	44443	7557	0.693	0.223	0.072	0.053	0.174	11111	1.13	38290.6865	44444
7405	4.478	1.495	1.808	1.202	0.951	11111	1.02	38202.8964	44444	7557	0.695	0.215	0.074	0.100	0.121	11111	1.09	38295.6230	21122
7405	4.436	1.496	1.873	1.214	0.982	11111	1.14	38639.7606	44444	7557	0.747	0.236	0.115	0.201	0.119	11111	1.12	38304.6448	12221
7417	3.125	1.162	0.611	0.849	0.641	11111	1.00	38204.8699	44444	7564	11.531	2.205	0	6.277	3.987	11001	1.04	38200.8400	44444
7417	3.052	1.112	0.613	0.885	0.652	11111	1.20	38315.6688	44444	7564	11.464	2.021	0.000	5.223	4.129	11001	1.62	38296.8005	44444
7417	3.068	1.128	0.611	0.887	0.697	11111	1.39	38317.6982	44444	7564	9.578	1.921	-0.175	4.717	3.599	11111	1.02	38561.9365	22222
7420	3.786	0.151	0.116	0.056	0.059	11111	1.06	38204.8766	44444	7564	9.715	1.940	-0.179	4.765	3.669	11111	1.11	38564.8090	22222
7420	3.818	0.139	0.075	0.142	0.086	11111	2.25	38397.5802	44444	7564	10.234	2.034	-0.128	5.049	3.810	11111	1.01	38577.8316	22222
7420	3.783	0.139	0.110	0.158	0.074	11111	1.06	38555.9085	44444	7564	4.231	1.825	0.957	2.421	1.798	11111	1.31	38846.9869	44444
7426	4.716	-0.123	-0.669	0.027	-0.169	11111	1.00	38206.8604	44444	7564	4.280	1.871	0.924	2.470	1.813	11111	1.51	38849.9497	44444
7426	4.756	-0.138	-0.648	-0.147	-0.147	11001	1.02	38311.6121	44444	7564	4.974	1.946	0.704	2.913	2.115	11111	1.07	38875.7489	44444
7426	4.783	-0.161	-0.648	-0.069	-0.128	11111	3.39	38397.5901	44444	7564	11.883	2.076	0.293	5.127	4.109	11111	1.04	39037.6666	44444
7429	4.458	1.188	1.204	0.886	0.584	11111	1.15	38311.6187	44444	7564	11.922	1.963	0.393	5.087	4.120	11111	1.00	39033.6146	44444
7429	4.442	1.179	1.229	0.861	0.576	11111	1.11	38555.9157	44444	7564	11.958	2.041	0.424	5.086	4.152	11111	1.01	39034.6308	44444
7437	4.990	-0.084	-0.412	-0.027	-0.099	11111	1.03	38205.8570	22222	7564	12.607	1.955	0.595	5.358	4.151	11111	1.05	39056.6048	44444
7437	4.963	-0.103	-0.423	-0.026	-0.087	11111	1.03	38270.7052	44443	7564	12.613	1.895	0.666	5.363	4.156	11111	1.10	39057.6265	44444
7437	5.004	-0.029	-0.461	0.010	-0.084	11111	1.03	38293.6316	44444	7565	4.975	-0.090	-0.712	-0.027	-0.100	11111	1.02	38209.8611	44433
7440	4.576	-0.055	-0.184	-0.069	-0.032	11111	1.86	38192.9134	44443	7565	4.960	-0.148	-0.670	-0.035	-0.180	11111	1.02	38226.8275	44444
7440	4.595	-0.068	-0.154	0.003	-0.081	11111	1.85	38561.8964	22222	7565	4.934	-0.139	-0.665	0.017	-0.148	11111	1.15	38304.6938	12221
7440	4.622	-0.066	-0.100	-0.025	-0.066	11111	2.01	38670.6477	44444	7582	3.891	0.900	0.520	0.676	0.468	11111	1.26	38192.9202	44443
7446	4.954	-0.033	-0.898	0.063	-0.077	11111	1.27	37565.5988	22222	7582	3.839	0.878	0.518	0.681	0.495	11111	1.38	38676.6565	44444
7446	4.996	0.023	-0.862	0.185	-0.034	11111	1.63	37796.8620	22222	7582	3.739	0.886	0.524	0.558	0.486	11111	1.28	38678.6198	44444
7446	4.972	0.001	-0.861	0.142	-0.055	11111	1.78	37835.7406	22222	7589	5.629	-0.089	-0.978	0.099	-0.115	11111	1.25	37594.6511	22222
7446	4.967	-0.007	-0.877	0.149	-0.055	11111	1.28	37835.8349	22222	7589	5.630	-0.099	-0.974	0.096	-0.120	11111	1.10	37595.5948	22222
7446	4.955	0.005	-0.871	0.097	-0.035	11111	1.31	38176.9222	44444	7592	4.571	-0.073	-0.121	0.022	-0.036	11111	1.02	38302.5951	22221
7446	4.952	0.005	-0.867	0.117	-0.063	11111	1.30	38180.9266	44444	7592	4.581	-0.052	-0.134	0.033	-0.048	11111	1.11	38655.7211	44444
7446	4.942	0.005	-0.851	0.141	-0.016	11111	3.01	38187.7436	44443	7595	4.662	1.067	0.879	0.760	0.558	11111	1.10	38620.6030	22221
7446	4.953	0.016	-0.873	0.105	-0.035	11111	1.30	38187.9095	44443	7595	4.700	1.037	0.902	0.769	0.566	11111	1.24	38655.7279	44444
7446	4.951	0.005	-0.853	0.123	-0.039	11111	2.40	38188.7599	44443	7597	4.729	0.772	0.291	0.600	0.338	11111	1.94	38202.9039	44444
7446	4.951	0.005	-0.895	0.114	-0.008	11111	1.30	38188.9073	44443	7597	4.682	0.720	0.354	0.589	0.399	11111	2.01	38674.6344	44444
7446	4.954	-0.014	-0.827	0.126	-0.023	11111	2.28	38189.7623	44443	7602	3.723	0.851	0.472	0.811	0.511	11111	1.10	37563.6028	22222
7446	4.956	0.011	-0.881	0.105	-0.029	11111	1.30	38189.9121	44443	7602	3.715	0.852	0.473	0.713	0.472	11111	1.12	37563.6496	22222
7446	4.937	0.019	-0.857	0.053	-0.041	11111	2.40	38190.7544	44443	7602	3.699	0.850	0.477	0.524	0.583	11111	1.13	37565.5707	22222
7446	4.944	-0.002	-0.843	0.107	0.014	11111	2.32	38199.7332	44443	7602	3.746	0.874	0.493	0.596	0.523	11111	2.64	38165.8002	44444
7446	4.948	0.018	-0.884	0.109															

TABLE 4 CATALINA UBVR I OBSERVATIONS

CATALINA UBVR I DATA										CATALINA UBVR I DATA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
7618	4.782	0.864	0.522	0.616	0.454	11111	1.96	38302.6434	22221	7776	3.078	0.822	0.335	0.555	0.490	11111	1.51	38192.9615	44443
7618	4.853	0.920	0.555	0.684	0.479	11111	1.93	38309.6108	11111	7776	3.085	0.759	0.254	0.544	0.490	11100	1.48	38216.8582	44444
7619	4.928	0.118	0.062	0.119	0.041	11111	1.07	38203.9113	44444	7776	3.089	0.777	0.239	0.552	0.503	11111	1.47	38216.8663	44444
7619	4.942	0.130	0.033	0.058	0.073	11111	1.14	38223.9089	44444	7781	5.720	0.106	0.006	0.103	0.059	11111	1.10	38993.7034	22222
7619	4.885	0.120	0.083	0.136	0.060	11111	1.22	38674.7057	44444	7781	5.723	0.114	0.012	0.101	0.069	11111	1.09	38995.7200	44444
7635	3.431	1.585	1.940	1.184	0.945	11111	1.03	38302.6193	22221	7781	5.825	0.167	0.047	0.180	0.067	11111	1.09	38997.7438	44444
7635	3.488	1.562	1.926	1.226	0.899	11111	1.05	38310.6340	44444	7784	6.190	0.046	0.036	0.043	0.025	11111	1.02	38993.7124	22222
7635	3.496	1.562	1.929	1.189	0.922	11111	1.03	38674.7196	44444	7784	6.181	0.075	0.004	0.022	0.019	11111	1.01	38995.7279	44444
7650	4.612	1.649	1.782	1.930	1.590	11111	2.01	38194.9183	44443	7784	6.275	0.088	0.068	0.100	0.065	11111	1.01	38997.7362	44444
7650	4.530	1.622	1.825	1.836	1.460	11111	2.03	38202.9122	44444	7796	2.233	0.660	0.559	0.467	0.343	11111	1.01	38187.9416	44443
7650	4.638	1.668	1.830	1.854	1.613	11111	2.01	38227.8262	44444	7796	2.232	0.674	0.529	0.514	0.332	11111	1.02	38298.6755	22222
7653	4.665	0.184	0.107	0.171	0.089	11111	1.00	38194.9107	44443	7806	4.453	1.348	1.479	1.010	0.668	11111	1.00	38194.9319	44443
7653	4.642	0.172	0.185	0.173	0.110	11111	1.02	38302.6515	22221	7806	4.471	0.790	-0.964	1.010	0.669	10011	1.02	38298.6852	22222
7653	4.655	0.188	0.176	0.140	0.067	11111	1.00	38593.9388	44444	7806	4.460	1.350	1.547	1.007	0.668	11111	1.00	38596.9275	44444
7678	5.650	0.590	-0.449	0.527	0.402	11111	1.03	38288.7004	12221	7806	4.443	1.331	1.536	1.006	0.677	11111	1.41	38670.7254	44444
7678	5.643	0.543	-0.460	0.510	0.432	11111	1.14	38637.7974	44444	7822	4.814	0.386	0.048	0.365	0.225	11111	1.57	38307.6335	44444
7685	4.481	1.324	1.506	0.963	0.608	11111	1.24	38201.9336	44421	7822	4.795	0.356	0.050	0.366	0.178	11111	1.57	38560.9145	22222
7685	4.495	1.298	1.479	0.942	0.631	11111	1.23	38216.8521	44444	7834	4.013	0.419	0.268	0.389	0.214	11111	1.01	38186.9739	44443
7685	4.525	1.309	1.508	0.896	0.707	11111	1.23	38225.8437	44444	7834	4.021	0.405	0.292	0.329	0.239	11111	1.00	38216.8758	44444
7708	4.931	-0.126	-0.752	0.062	-0.113	11111	1.00	38186.9436	44443	7834	4.021	0.382	0.292	0.366	0.240	11111	1.00	38555.9318	44444
7708	4.944	-0.101	-0.769	0.024	-0.141	11111	1.03	38201.9415	44421	7844	4.977	-0.076	-0.535	0.059	-0.092	11111	1.04	38187.9477	44443
7708	4.905	-0.130	-0.765	0.024	-0.098	11111	1.02	38225.8653	44444	7844	4.971	-0.095	-0.655	-0.014	-0.126	11111	1.04	38270.7362	44443
7708	4.892	-0.109	-0.825	0.005	-0.093	11111	1.01	38305.6337	44444	7844	4.974	-0.093	-0.576	0.042	-0.082	11111	2.55	38399.6267	21211
7710	3.208	-0.065	-0.112	-0.087	-0.056	11111	1.17	38194.9249	44443	7847	6.211	0.991	0.750	0.883	0.656	11111	1.06	37565.7015	22222
7710	3.247	-0.042	-0.119	-0.057	-0.076	11111	1.23	38201.9491	44421	7847	6.194	1.002	0.740	0.821	0.720	11111	1.24	38668.7954	44444
7724	3.169	-0.093	-0.140	-0.062	-0.024	11111	1.17	38227.8349	44444	7850	4.243	0.210	0.159	0.185	0.063	11111	1.16	38187.9540	44443
7724	4.948	0.086	0.013	0.125	0.004	11111	1.05	38187.9294	44443	7850	4.388	0.172	0.053	0.196	-0.030	11111	1.16	38223.8582	44444
7724	4.957	0.113	-0.010	0.074	-0.004	11111	1.05	38204.8830	44444	7850	4.211	0.192	0.173	0.154	0.080	11111	1.16	38555.9388	44444
7724	4.939	0.060	0.026	0.091	0.016	11111	1.07	38225.8718	44444	7850	4.203	0.206	0.149	0.173	0.112	11111	1.24	38637.8081	44444
7730	4.855	0.107	0.167	0.168	0.062	11111	1.03	38186.9517	44443	7852	4.045	-0.116	-0.478	-0.008	-0.095	11111	1.07	38187.9603	44443
7730	4.806	0.120	0.115	0.258	-0.011	11111	1.03	38206.8913	44444	7852	4.042	-0.120	-0.479	-0.022	-0.124	11111	1.07	38200.9219	44444
7730	4.811	0.080	0.144	0.148	0.102	11111	1.03	38225.8501	44444	7866	4.609	1.609	0.744	1.283	0.953	11111	1.00	38199.8288	44443
7735	3.832	1.256	0.430	0.947	0.747	11111	1.03	38186.9579	44443	7866	4.650	1.607	0.767	1.319	1.022	11111	1.00	38227.8541	44444
7735	3.759	1.322	0.385	0.993	0.699	11111	1.03	38206.8978	44444	7871	4.672	0.115	0.091	0.114	0.039	11111	1.05	38200.9281	44444
7735	3.798	1.272	0.445	0.971	0.843	11111	1.04	38225.8571	44444	7871	4.699	0.113	0.125	0.150	0.063	11111	1.13	38307.6934	44444
7736	5.022	0.058	0.001	0.96	0.030	11111	1.01	38206.9069	44444	7882	3.636	0.452	0.069	0.392	0.223	11111	1.05	38200.9339	44444
7736	4.953	0.171	-0.011	0.206	0.100	11111	1.00	38226.8361	44444	7882	3.602	0.415	0.096	0.303	0.244	11001	1.06	38273.8742	44444
7736	4.985	0.126	-0.001	0.205	0.066	11111	2.56	38397.6013	44444	7882	3.641	0.441	0.096	0.302	0.254	11111	1.14	38307.6993	44444
7739	4.786	-0.208	-0.692	-0.078	-0.214	11111	1.02	38206.9147	44444	7884	4.340	0.935	0.694	0.637	0.423	11111	1.23	38201.9562	44421
7739	4.746	-0.180	-0.752	-0.081	-0.202	11111	1.01	38270.7176	44443	7884	4.311	0.948	0.668	0.685	0.455	11111	1.28	38298.7110	22222
7739	4.779	-0.164	-0.739	-0.072	-0.178	11111	1.01	38293.6535	44444	7884	4.330	1.006	0.690	0.683	0.502	11111	1.20	38309.6189	11111
7740	4.289	0.115	0.085	0.070	0.054	11111	1.09	38199.9128	44443	7891	4.825	-0.051	-0.094	0.057	-0.044	11111	1.04	38300.6179	43433
7740	4.332	0.097	0.025	0.081	0.085	11111	1.09	38209.8760	44443	7891	4.810	0.025	-0.038	0.013	-0.012	11111	1.02	38309.6250	11111
7740	4.273	0.099	0.097	0.119	0.042	11111	1.00	38270.7240	44443	7891	4.811	-0.037	-0.073	0.011	-0.061	11111	1.02	38555.9467	44444
7740	4.288	0.125	0.100	0.155	0.075	11111	1.10	38293.6441	44444	7906	3.761	-0.065	-0.189	0.048	-0.057	11111	1.09	37563.7042	22222
7740	4.331	0.121	0.100	0.172	0.061	11111	1.10	38305.6243	44444	7906	3.793	-0.055	-0.194	0.040	-0.007	11111	1.04	37570.6436	22222
7741	5.145	1.044	0.716	0.701	0.493	11111	1.26	38668.7403	44444	7906	3.763	-0.062	-0.181	0.098	-0.051	11111	1.33	37590.6918	22222
7741	5.155	1.047	0.732	0.747	0.479	11111	1.46	38670.7658	44444	7906	3.769	-0.044	-0.201	-0.0	-0.048	11111	1.09	38176.9400	44444
7741	5.161	1.036	0.687	0.757	0.485	11111	1.06	38681.6445	44444	7906	3.753	-0.057	-0.202	-0.018	-0.047	11111	1.05	38180.9551	44444
7744	4.511	1.287			0.624	11001	1.00	38205.8942	22222	7906	3.783	-0.037	-0.195	0.029	-0.032	11111	1.04	38187.9664	44443
7744	4.563	1.218	1.148	1.004	0.768	11111	1.00	38209.8833	44433	7906	3.770	-0.060	-0.220	0.050	-0.030	11111	1.34	38210.7783	11111
7744	4.495	1.263	1.095	0.931	0.695	11111	1.01	38270.7301	44443	7906	3.755	-0.070	-0.209	-0.092	-0.033	11111	1		

TABLE 4 CATALINA UBVRi OBSERVATIONS

CATALINA UBVRi DATA										CATALINA UBVRi DATA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
7951	4.450	1.672	1.895	1.440	1.269	11111	1.27	38199.9441	44443	8167	4.269	0.897	0.565	0.625	0.482	11111	1.60	38299.7220	44422
7951	4.446	1.655	1.930	1.513	1.364	11111	1.26	38284.7026	44444	8167	4.267	0.916	0.551	0.615	0.481	11111	1.54	38305.6724	44444
7951	4.415	1.685	1.950	1.470	1.281	11111	1.26	38557.9407	44444	8170	6.387	0.518	-0.007	0.498	0.334	11111	1.06	38993.7212	22222
7955	4.541	0.540	0.092	0.477	0.263	11111	1.10	38194.9389	44443	8170	6.368	0.541	-0.033	0.438	0.332	11111	1.03	38995.7370	44444
7955	4.505	0.531	0.109	0.467	0.296	11111	1.10	38302.6604	22221	8170	6.465	0.549	0.048	0.491	0.348	11111	1.01	38997.7698	44444
7957	3.443	0.919	0.603	0.693	0.476	11111	1.15	38194.9457	44443	8173	4.096	1.120	1.038	0.624	0.535	11111	1.03	38192.9774	44443
7957	3.425	0.918	0.585	0.640	0.517	11111	1.15	38227.8538	44444	8173	4.112	1.128	1.034	0.771	0.553	11111	1.03	38203.9604	44444
7963	4.549	-0.113	-0.503	-0.035	-0.121	11111	1.00	38194.9541	44443	8173	4.097	1.098	1.060	0.090	-0.040	11110	1.03	38249.7574	44443
7963	4.523	-0.112	0.	-0.045	-0.126	11011	1.01	38224.8486	44444	8173	4.077	1.121	1.038	0.759	0.556	11111	1.05	38270.7997	44443
7963	4.573	-0.121	-0.488	-0.018	-0.085	11111	1.75	38400.5717	44444	8204	3.739	0.990	0.609	0.647	0.396	11111	1.74	38274.8920	44444
7977	4.874	0.407	-0.455	0.438	0.281	11111	1.10	38298.7383	22222	8204	3.747	0.988	0.603	0.641	0.445	11111	1.74	38305.6786	44444
7977	4.869	0.441	-0.433	0.456	0.335	11111	1.03	38309.6380	11111	8204	3.721	1.012	0.586	0.631	0.433	11111	1.79	38311.6835	44444
7980	4.058	1.550	1.807	1.226	0.915	11111	2.47	38298.7487	22222	8207	5.800	1.417	1.791	1.127	0.744	11111	1.64	38993.7823	22222
7980	4.178	1.642	1.791	1.224	0.968	11111	1.99	38300.6376	43433	8207	5.787	1.463	1.717	1.076	0.759	11111	1.71	38997.7984	44444
7980	4.148	1.644	1.945	1.285	0.932	11111	1.98	38678.6393	44444	8213	4.498	0.909	0.608	0.649	0.462	11111	1.03	38305.6866	44444
7990	4.769	0.313	0.074	0.311	0.163	11111	1.41	38300.6097	43433	8213	4.556	0.926	0.623	0.711	0.486	11111	1.74	38678.6723	44444
7990	4.701	0.326	0.102	0.260	0.132	11111	1.34	38557.9477	44444	8213	4.502	0.905	0.574	0.681	0.462	11111	1.85	38691.6943	44444
7990	4.732	0.309	0.122	0.268	0.135	11111	1.34	38560.9369	22222	8213	4.497	0.914	0.579	0.676	0.475	11111	1.73	38700.6551	44444
7995	4.578	0.821	0.481	0.683	0.463	11111	1.01	38284.7102	44444	8225	4.671	1.613	1.890	1.201	1.119	11111	1.05	38269.7213	44443
7995	4.633	0.808	0.450	0.682	0.453	11111	1.02	38300.6253	43433	8225	4.486	1.620	1.981	1.301	1.057	11111	1.02	38302.7061	22221
8001	4.750	-0.137	-0.578	-0.062	-0.142	11111	1.15	38298.7620	22222	8225	4.498	1.614	1.876	1.263	1.041	11111	1.39	38397.6617	44444
8001	4.781	-0.144	-0.584	-0.071	-0.128	11111	1.03	38310.6510	44444	8232	2.859	0.853	0.549	0.630	0.424	11111	1.30	38249.7376	44443
8020	5.693	0.464	-0.327	0.475	0.397	11111	1.74	37673.5547	22222	8232	2.843	0.822	0.610	0.590	0.397	11111	1.30	38302.7143	22221
8028	3.951	0.033	-0.016	-0.001	0.004	11111	1.02	38204.9050	44444	8238	3.216	-0.210	-0.962	-0.119	-0.208	11111	1.29	38299.7378	44422
8028	3.903	0.007	0.010	0.050	0.005	11111	1.33	38298.8089	22222	8238	3.250	-0.211	-0.949	-0.075	-0.234	11111	1.77	38309.6444	11111
8028	3.958	0.002	0.027	0.087	-0.001	11111	1.02	38556.9423	44444	8252	4.045	0.881	0.536	0.707	0.497	11111	1.03	38300.6696	43433
8047	4.859	-0.008	-0.942	0.101	-0.043	11111	1.04	38204.9111	44444	8252	4.031	0.919	0.603	0.705	0.510	11111	1.03	38300.6586	11111
8047	4.815	-0.075	-0.963	0.105	-0.004	11111	1.04	38277.8622	44444	8252	3.989	0.892	0.546	-0.225	1.380	11100	1.23	38674.7848	44444
8047	4.646	-0.028	-0.906	0.137	-0.004	11111	1.71	38668.7692	44444	8255	4.876	1.089	1.013	0.799	0.525	11111	1.01	38199.9610	44443
8047	4.654	-0.036	-0.964	0.177	-0.004	11111	1.05	38699.6109	22222	8255	4.940	1.085	0.983	0.825	0.563	11011	1.01	38300.6805	43433
8060	4.847	0.196	0.054	0.156	0.062	11111	1.64	38204.9178	44444	8255	4.891	1.109	0.983	0.833	0.536	11111	1.02	38699.6249	22222
8060	4.837	0.179	0.067	0.144	0.096	11111	1.64	38293.6802	44444	8260	4.684	-0.173	0.000	-0.001	-0.086	11011	1.62	38225.8928	44444
8060	4.826	0.150	0.076	0.170	0.046	11111	1.82	38304.5930	17221	8260	4.669	-0.135	-0.574	-0.094	-0.085	11111	1.62	38309.6650	11111
8075	4.071	-0.017			-0.016	11001	1.55	38293.6872	44444	8260	4.820	-0.174	-0.583	-0.032	-0.065	11111	1.69	38681.6845	44444
8075	4.061	0.006	0.027	-0.015	-0.010	11111	1.55	38299.6719	44422	8262	5.376	1.557	1.194	2.477	2.209	11111	1.33	38377.6220	44444
8075	4.066	-0.028	-0.004	0.042	-0.048	11111	1.67	38304.6012	17221	8262	5.494	1.582	1.216	2.331	2.164	11111	1.43	38391.6005	44444
8079	3.706	1.632	1.807	1.172	0.883	11111	1.02	38274.8767	44444	8262	5.367	1.602	1.266	2.381	2.107	11111	1.79	38396.6286	44444
8079	3.687	1.648	1.795	1.227	0.919	11111	1.02	38307.6682	22221	8263	6.261	0.053	0.055	0.147	0.017	11111	1.19	38993.7723	22222
8079		1.669			0.905	01001	1.05	38304.6097	17221	8263	6.190	0.055	0.055	0.031	0.019	11111	1.18	38995.7747	44444
8080	4.502	1.556	1.866	1.289	0.976	11111	1.86	38299.6807	44422	8263	6.284	0.094	0.061	0.088	0.005	11111	1.20	38997.8153	44444
8080	4.464	1.622	1.922	1.240	0.969	11111	1.94	38304.6205	17221	8264	4.697	0.161	0.097	0.181	0.093	11111	1.43	38300.7527	43433
8080	4.512	1.609	1.944	1.313	0.949	11111	2.04	38669.7144	44444	8264	4.691	0.215	0.153	0.166	0.107	11111	1.31	38309.6713	11111
8085	5.234	1.158	1.119	1.015	0.642	11111	1.24	38327.7180	22222	8278	3.655	0.309	0.202	0.214	0.121	11111	1.58	38302.7276	22221
8085	5.289	1.133	1.099	1.062	0.654	11111	1.02	38329.6257	44444	8278	3.680	0.321	0.228	0.245	0.136	11111	1.54	38310.6810	44444
8085	5.238	1.162	1.098	1.006	0.634	11111	1.02	38339.5979	44444	8279	4.733	0.308	-0.565	0.301	0.173	11111	1.15	38199.9683	44443
8085	5.262	1.165	1.112	1.009	0.706	11111	1.12	38647.8359	44444	8279	4.764	0.279	-0.532	0.321	0.187	11111	1.23	38303.5957	17221
8085	5.230	1.181	1.105	0.990	0.687	11111	1.21	38674.7615	44444	8288	4.762	0.870	0.490	0.645	0.516	11111	1.82	38300.7623	43433
8085	5.206	1.161	1.122	1.061	0.606	11111	1.04	38681.6744	44444	8288	0.891					01000	1.62	38310.6851	44444
8086	5.998	1.336	1.247	1.128	0.823	11111	1.44	38327.7524	22222	8288	4.723	0.868	0.529	0.684	0.483	11111	1.64	38699.6328	22222
8086	6.037	1.356	1.238	1.163	0.872	11111	1.04	38329.6345	44444	8288	4.701	0.893	0.511	0.663	0.476	11111	1.64	38700.6288	44444
8086	5.985	1.340	1.254	1.153	0.766	11111	1.03	38340.6064	44444	8291	6.089	0.061	0.074	0.114	0.026	11111	1.67	38993.7299	22222
8086	6.107	1.357	1.220	1.205	0.868	11111	1.09	38647.8219	44444	8291	6.059	0.081	0.088	0.310	0.050	11101	1.04	38995.7450	44444
8086	6.060	1.356	1.211	1.187	0.833	11111	1.30	38670.7906	44444	8291	6.182	0.101	0.110	0.300	0.041	11111	1.01	38997.7777	44444
8086	6.069	1.387	1.224	1.168	0.860	11111	1.19	38671.7675	44444	8297	5.568	2.447	4.649	1.738	1.349	11111	1.25	38348.6855	23333
8089	4.565	1.561	1.736	1.172	0.794	11111	1.04	38295.6680	21122	8297	5.950	2.458	4.374	1.847	1.363	11111	1.04	38368.5625	44444
8089	4.519	1.540	1.684		11100	1.04	38299.6912	44422	8297	5.998	2.488	4.804	1.840	1.369	11111	1.15	38380.5739	44444	
8089	4.587	1.569	1.781	1.177	0.840	11111	1.04	38304.6317	17221	8297	6.044	2.496	4.470	1.860	1.380	11111	1.26	38381.5983	44444
8093	4.540	0.950	0.653	0.686	0.472	11111	1.39	38300.6593	43433	8297									

TABLE 4 CATALINA UBVRi OBSERVATIONS

CATALINA UBVRi DATA										CATALINA UBVRi DATA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
8322	2.814	0.302	0.112	0.242	0.157	11111	1.51	38310.6642	44444	8518	3.843	-0.056	-0.075	0.090	-0.040	11100	1.21	38270.8210	44443
8322	2.807	0.276	0.100	0.237	0.168	11111	1.65	38328.9748	44444	8518	3.880	-0.073	-0.162	0.085	-0.054	11111	1.56	38390.5831	22222
8327	5.928	0.311	-0.651	0.312	0.160	11111	1.20	37835.6089	22222	8518	3.777	-0.038	-0.183	-0.046	-0.013	11111	3.02	38398.6357	44444
8327	5.912	0.311	-0.622	0.243	0.178	11111	1.25	37836.8672	22222	8520	0.000	-0.142	-0.770	5.643	0.350	01100	1.18	38295.8100	21122
8334	4.286	0.519	0.128	0.489	0.447	11111	1.17	37835.9134	22222	8520	5.053	-0.140	-0.799	-0.039	-0.135	11111	3.33	38396.6716	44444
8334	4.287	0.523	0.116	0.498	0.437	11111	1.22	37836.8752	22222	8520	4.967	-0.086	-0.816	-0.077	-0.150	11111	1.15	38639.8600	44444
8334	4.332	0.495	0.130	0.535	0.437	11111	1.14	38305.6952	44444	8522	4.803	-0.012	-0.234	0.087	-0.021	11111	1.00	38228.9176	44444
8334	4.270	0.516	0.120	0.488	0.421	11111	1.16	38311.7094	44444	8522	4.803	0.022	-0.154	0.050	-0.040	11110	1.02	38303.6838	22221
8335	4.199	-0.087	-0.722	-0.114	-0.147	11111	1.04	38204.9613	44444	8522	4.843	-0.013	-0.174	0.146	0.014	11111	1.46	38399.6018	21211
8335	4.243	-0.151	-0.699	-0.045	-0.113	11111	1.04	38225.9043	44444	8523	4.560	-0.080	-0.492	-0.028	-0.115	11111	1.03	38303.7017	12221
8335	4.263	-0.122	-0.729	0.020	-0.118	11111	1.07	38699.6473	22222	8523	4.566	-0.121	-0.534	-0.006	-0.092	11111	1.64	38400.6345	44444
8371	5.798	0.733	-0.022	0.642	0.606	11111	1.18	38668.7823	44444	8538	4.417	1.018	0.788	0.727	0.594	11111	1.07	38225.9474	44444
8371	5.785	0.715	-0.043	0.714	0.586	11111	1.30	38700.7354	44444	8538	4.454	1.015	0.748	0.768	0.551	11111	1.06	38305.7035	44444
8371	5.833	0.684	-0.016	0.694	0.596	11111	1.09	38711.5822	44444	8538	4.438	1.022	0.800	0.771	0.537	11111	2.34	38396.7085	44444
8383	4.970	1.710	0.329	1.729	1.363	11111	1.17	38224.9217	44444	8539	4.650	-0.044	-0.964	0.119	-0.000	11111	1.43	38387.5839	44444
8383	4.840	1.794	0.413	1.721	1.299	11111	1.18	38310.7134	44444	8539	4.629	-0.053	-1.030	0.208	0.009	11111	1.56	38390.5927	22222
8383	4.892	1.759	0.402	1.652	1.368	11111	1.76	38396.6535	44444	8539	4.627	0.027	-0.027	0.000	-0.017	01001	2.10	38399.6097	21211
8402	4.667	-0.064	-0.408	-0.030	-0.054	11111	1.22	38291.7301	34421	8539	4.636	-0.013	-0.877	0.	0.	11100	2.23	38399.6158	21211
8402	4.724	-0.073	-0.395	0.022	-0.037	11111	1.24	38374.6709	44444	8541	4.574	0.089	-0.366	0.107	0.100	11111	1.05	38225.9548	44444
8402	4.678	-0.023	-0.444	-0.016	-0.041	11111	1.31	38638.8624	44444	8541	4.595	0.100	-0.315	0.159	0.089	11111	1.05	38303.7088	12221
8407	5.563	-0.044	-0.103	0.059	-0.039	11111	1.06	38993.7538	22222	8551	4.810	1.053	0.870	0.771	0.565	11111	1.41	38387.5913	44444
8407	5.553	-0.017	-0.118	-0.019	-0.015	11111	1.05	38995.7564	44444	8551	4.784	1.054	0.855	0.787	0.565	11111	1.31	38638.8680	44444
8407	5.661	0.039	-0.098	0.075	-0.006	11111	1.02	38997.7878	44444	8551	4.780	1.084	0.878	0.786	0.532	11111	2.21	38670.8805	44444
8410	5.310	0.237	0.167	0.268	0.070	11111	1.20	38993.8021	22222	8558	3.662	0.398	0.017	0.349	0.239	11111	1.55	38387.5994	44444
8410	5.247	0.225	0.141	0.132	0.103	11111	1.20	38995.8020	44444	8558	3.655	0.369	-0.046	0.429	0.232	11111	1.66	38390.6037	22222
8410	5.320	0.268	0.165	0.189	0.093	11111	1.27	38997.8542	44444	8572	4.376	1.660	1.113	1.364	1.080	11111	1.04	38291.7453	34421
8413	4.830	1.450	1.783	1.068	0.767	11111	1.15	38374.6792	44444	8572	4.354	1.687	1.086	1.364	1.080	11111	1.04	38291.7559	34421
8413	4.825	1.451	1.794	1.066	0.765	11111	1.19	38328.6877	44444	8572	4.407	1.692	1.109	1.442	1.089	11111	1.04	38303.7181	12221
8413	4.843	1.468	1.806	1.065	0.767	11111	1.14	38340.6199	11111	8572	4.333	1.659	1.100	1.354	1.042	11111	1.36	38670.8622	44444
8414	2.911	1.000	0.768	0.671	0.464	11111	1.24	38303.6496	12221	8573	4.856	-0.076	-0.083	-0.035	-0.010	11111	1.96	38387.6070	44444
8414	2.934	0.963	0.814	0.656	0.473	11111	1.22	38324.6879	44444	8573	4.816	-0.103	-0.148	0.091	-0.075	11111	2.19	38390.6138	22222
8417	4.327	0.325	0.045	0.293	0.081	11111	1.18	38206.9561	44444	8573	4.745	-0.053	-0.228	-0.076	-0.056	11111	3.31	38398.6285	44444
8417	4.268	0.330	0.085	0.329	0.169	11111	1.23	38328.6997	44444	8579	4.493	-0.109	-0.743	-0.085	-0.098	11111	1.02	38222.9496	44443
8417	4.282	0.361	0.129	0.335	0.156	11111	1.19	38340.6290	11111	8579	4.508	-0.108	-0.738	0.023	-0.098	11111	1.02	38228.9251	44444
8418	4.248	-0.084	-0.278	-0.081	-0.084	11111	1.48	38306.7241	44444	8579	4.551	-0.110	-0.745	0.034	-0.125	11111	1.02	38305.7107	44444
8418	4.257	-0.061	-0.256	-0.015	-0.095	11111	1.50	38340.6582	11111	8585	3.730	-0.004	-0.021	-0.092	-0.030	11111	1.06	38272.9635	44443
8421	6.139	1.591	1.767	1.641	1.554	11111	1.03	39056.6281	44444	8585	3.799	0.025	0.012	0.061	-0.033	11111	1.05	38305.7178	44444
8421	6.144	1.608	1.753	1.666	1.565	11111	1.03	39057.6665	44444	8585	3.778	0.013	0.019	0.050	-0.017	11111	1.69	38400.6506	44444
8421	6.118	1.599	1.788	1.695	1.550	11111	1.05	39058.9585	44444	8597	4.005	-0.061	-0.289	-0.051	-0.086	11111	1.18	38224.9483	44444
8421	6.081	1.613	1.768	1.626	1.565	11111	1.04	39060.6046	44444	8597	4.000	-0.140	0.000	0.000	0.000	01000	1.18	38290.7559	44444
8428	5.119	0.088	-0.809	0.154	0.032	11111	1.24	38668.7934	44444	8597	3.990	-0.086	-0.270	-0.072	-0.042	11111	2.79	38398.6431	44444
8428	5.086	0.076	-0.848	0.167	0.016	11111	1.40	38670.8433	44444	8613	4.591	0.244	0.085	0.168	0.128	11111	1.06	38222.9695	44443
8428	5.118	0.059	-0.842	0.164	0.026	11111	1.21	38720.6319	44444	8613	4.682	0.247	0.110	0.273	0.143	11111	1.07	38305.7560	44444
8430	3.768	0.439	-0.005	0.419	0.249	11111	1.01	38200.9710	44444	8613	4.626	0.233	0.116	0.224	0.170	11111	1.88	38398.6797	44444
8430	3.747	0.458	0.025	0.380	0.240	11111	1.04	38340.6459	11111	8622	4.861	-0.210	-1.080	-0.101	-0.047	11111	1.02	37563.7635	22222
8450	3.564	0.067	0.103	0.038	0.032	11111	1.35	38387.5736	44444	8622	4.879	-0.195	-1.053	-0.090	-0.212	11111	1.01	37564.7422	22222
8450	3.539	0.068	0.111	0.064	0.052	11111	1.87	38398.5984	44444	8622	4.884	-0.216	-1.072	-0.079	-0.254	11111	1.01	37565.7343	22222
8454	4.257	0.486	0.165	0.383	0.260	11111	1.00	38224.9290	44444	8622	4.875	-0.213	-1.065	-0.060	-0.132	11111	1.14	37565.8903	22222
8454	4.288	0.478	0.189	0.399	0.275	11111	1.00	38270.8078	44443	8622	4.870	-0.209	-1.050	-0.075	-0.130	11111	1.06	37570.7750	22222
8461	5.962	0.936	0.718	0.792	0.482	11111	1.05	38993.7927	22222	8622	4.880	-0.209	-1.067	-0.138	-0.209	11111	1.05	37590.6501	22222
8461	5.904	0.959	0.717	0.663	0.494	11111	1.04	38995.8105	44444	8622	4.873	-0.204	-1.064	-0.035	-0.219	11111	1.06	37590.7202	22222
8461	5.976	0.977	0.749	0.724	0.503	11111	1.13	38997.8726	44444	8622	4.868	-0.201	-1.058	-0.082	-0.210	11111			

TABLE 4 CATALINA UBVRi OBSERVATIONS

CATALINA UBVRi DATA											CATALINA UBVRi DATA										
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.		
8622	4.927	-0.206	-1.010	-0.013	-0.228	11111	1.64	38269.9990	44443	8622	4.905	-0.207	-1.035	-0.060	-0.210	11111	1.01	38696.6512	22222		
8622	4.896	-0.206	-1.024	-0.068	-0.196	11111	1.27	38270.6856	44443	8622	4.855	-0.199	-1.045	-0.100	-0.210	11111	1.16	38696.7506	22222		
8622	4.890	-0.197	-1.071	-0.096	-0.224	11111	1.02	38270.8417	44443	8622	4.897	-0.205	-1.054	-0.048	-0.211	11111	1.10	38699.5588	22222		
8622	4.882	-0.215	-1.057	-0.070	-0.211	11111	1.01	38274.7767	44444	8622	4.897	-0.219	-1.053	-0.055	-0.210	11111	1.02	38699.6696	22222		
8622	4.922	-0.213	-1.026	-0.064	-0.194	11111	1.08	38284.8402	44444	8622	4.914	-0.192	-1.057	-0.056	-0.212	11111	1.06	38700.5780	44444		
8622	4.858	-0.203	-1.040	-0.080	-0.222	11111	1.16	38288.6637	12221	8622	4.880	-0.203	-1.040	-0.080	-0.210	11111	1.14	38701.7325	22222		
8622	4.871	-0.240	-1.031	-0.141	-0.223	11111	1.25	38290.9789	44444	8622	4.859	-0.219	-1.056	0.000	0.000	11100	1.05	38703.5220	44400		
8622	4.912	-0.203	-1.040	-0.080	-0.223	11111	1.01	38291.7757	34121	8622	4.884	-0.202	-1.047	0.000	0.000	11100	1.05	38703.6873	44400		
8622	4.870	-0.192	-1.063	-0.074	-0.214	11111	1.01	38293.7537	44444	8622	4.885	-0.230	-1.023	-0.073	-0.202	11111	1.14	38708.7105	44444		
8622	4.875	-0.195	-1.061	-0.077	-0.226	11111	1.01	38294.7420	44444	8622	4.918	-0.253	-1.036	-0.031	-0.214	11111	1.03	38711.5703	44444		
8622	4.815	-0.201	-1.079	-0.138	0.792	11110	1.04	38295.6991	21122	8622	4.899	-0.217	-1.054	-0.074	-0.219	11111	1.03	38712.5675	44444		
8622	4.888	-0.230	-1.059	-0.080	-0.224	11111	1.32	38296.6046	44444	8622	4.926	-0.225	-1.026	-0.054	-0.201	11111	1.04	38720.6356	44444		
8622	4.887	-0.207	-1.059	-0.068	-0.209	11111	1.08	38296.8185	44444	8622	4.871	-0.208	-1.038	-0.085	-0.208	11111	1.02	38720.6556	44444		
8622	4.878	-0.191	-1.017	-0.085	-0.188	11111	1.45	38296.9761	44444	8622	4.805	-0.321	-1.221	-0.044	-0.232	11111	1.60	38725.5806	22222		
8622	4.892	-0.207	-1.041	-0.066	-0.228	11111	1.12	38299.6449	22722	8622	4.908	-0.214	-1.064	-0.052	-0.211	11111	1.01	38728.5512	44444		
8622	4.869	-0.197	-1.044	-0.077	-0.206	11111	1.03	38300.7769	22722	8622	4.931	-0.208	-1.070	-0.002	-0.223	11111	1.01	38729.5734	44444		
8622	4.894	-0.229	-1.037	-0.075	-0.247	11111	1.38	38304.7690	44422	8622	4.880	-0.203	-1.040	-0.080	-0.210	11111	1.01	38730.5726	22222		
8622	4.870	-0.192	-1.043	-0.087	-0.183	11111	1.01	38299.7507	44422	8622	4.895	-0.218	-1.049	0.000	0.000	11100	1.10	38747.5907	22200		
8622	4.923	-0.212	-1.029	-0.047	-0.227	11111	1.42	38300.5774	43323	8622	4.915	-0.227	-1.054	-0.060	-0.198	11111	1.12	38763.5561	44444		
8622	4.864	-0.222	-1.055	-0.049	-0.197	11111	1.03	38300.7726	43433	8622	4.880	-0.195	-1.058	-0.078	-0.207	11111	1.26	38764.5899	44444		
8622	4.863	-0.203	-1.042	-0.092	-0.203	11111	2.00	38300.9430	43323	8622	4.889	-0.179	-1.039	-0.087	-0.226	11111	1.13	38870.9538	44444		
8622	4.882	-0.200	-1.037	-0.070	-0.236	11111	1.03	38301.6869	12221	8622	4.875	-0.200	-1.038	-0.103	-0.204	11111	1.46	38873.0047	44444		
8622	4.854	-0.206	-1.043	-0.090	-0.226	11111	1.15	38301.8302	12221	8622	4.891	-0.185	-1.057	0.000	0.000	11100	1.40	38878.9964	22200		
8622	4.861	-0.225	-1.058	-0.093	-0.227	11111	1.39	38302.5761	22221	8622	4.883	-0.204	-1.042	0.000	0.000	11100	2.19	38899.8664	44400		
8622	4.880	-0.200	-1.070	-0.075	-0.226	11111	1.01	38302.7309	22221	8622	4.903	-0.192	-1.045	0.000	0.000	11100	1.28	38900.9811	44444		
8622	4.909	-0.221	-1.073	-0.072	-0.238	11111	1.65	38302.9103	22221	8622	4.883	-0.191	-1.039	-0.076	-0.202	11111	1.18	38906.9649	44444		
8622	4.846	-0.209	-1.038	-0.106	-0.221	11111	1.36	38303.5783	12221	8622	4.915	-0.219	-1.039	-0.076	-0.214	11111	1.18	38908.9561	44444		
8622	4.913	-0.192	-1.036	-0.060	-0.229	11111	1.01	38303.7587	12221	8622	4.888	-0.208	-1.029	-0.076	-0.214	11111	2.44	38908.9354	44444		
8622	4.878	-0.208	-1.047	-0.094	-0.225	11111	1.52	38304.8932	12221	8622	4.897	-0.187	-1.050	-0.068	-0.216	11111	1.19	38908.9561	44444		
8622	4.871	-0.203	-1.040	-0.080	-0.218	11111	1.37	38304.5739	12221	8622	4.883	-0.195	-1.041	-0.076	-0.211	11111	2.70	38910.8409	44444		
8622	4.902	-0.205	-1.085	-0.057	-0.237	11111	1.01	38305.7266	44444	8622	4.894	-0.204	-1.034	-0.089	-0.233	11111	1.18	38910.9532	44444		
8622	4.872	-0.198	-1.057	-0.092	-0.225	11111	1.01	38306.7155	44444	8622	4.868	-0.196	-1.037	-0.093	-0.210	11111	2.34	38911.8133	44444		
8622	4.933	-0.212	-1.072	-0.047	-0.187	11111	1.01	38307.7058	44444	8622	4.876	-0.205	-1.028	-0.072	-0.217	11111	2.44	38912.8245	44444		
8622	4.862	-0.175	-1.017	-0.079	-0.213	11111	2.30	38307.9399	44444	8622	4.885	-0.203	-1.031	-0.073	-0.214	11111	2.65	38920.7672	44444		
8622	4.878	-0.193	-1.071	-0.093	-0.216	11111	1.01	38310.7011	44444	8622	4.871	-0.192	-1.044	-0.081	-0.223	11111	1.10	38930.9262	44444		
8622	4.888	-0.194	-1.031	-0.094	-0.186	11111	2.35	38310.9339	44444	8622	4.880	-0.206	-1.029	-0.072	-0.224	11111	2.36	38931.7757	44444		
8622	4.877	-0.193	-1.063	-0.089	-0.227	11111	1.01	38311.6973	44444	8622	4.887	-0.179	-1.052	-0.092	-0.232	11111	1.12	38931.9147	44444		
8622	4.885	-0.219	-1.044	-0.097	-0.200	11111	1.10	38315.6095	44444	8622	4.904	-0.190	-1.047	-0.091	-0.204	11111	1.17	38937.8966	44444		
8622	4.888	-0.209	-1.083	-0.043	-0.210	11111	1.01	38317.6760	44444	8622	4.885	-0.205	-1.039	-0.080	-0.207	11111	1.18	38934.8892	22222		
8622	4.874	-0.214	-1.011	-0.089	-0.188	11111	2.33	38317.9137	44444	8622	4.871	-0.193	-1.034	-0.103	-0.234	11111	1.88	38936.7890	44444		
8622	4.916	-0.185	-1.031	-0.065	-0.193	11111	1.08	38321.9551	44444	8622	4.901	-0.218	-1.064	-0.089	-0.196	11111	1.13	38936.8993	44444		
8622	4.910	-0.225	-1.049	-0.046	-0.202	11111	1.02	38327.6873	22222	8622	4.877	-0.193	-1.041	-0.083	-0.205	11111	2.72	38937.7663	44444		
8622	4.867	-0.207	-1.052	-0.076	-0.212	11111	1.12	38328.5656	44444	8622	4.890	-0.216	-1.038	-0.090	-0.207	11111	1.32	38937.9497	44444		
8622	4.899	-0.186	-1.056	-0.056	-0.219	11111	1.12	38329.5649	44444	8622	4.882	-0.207	-1.051	-0.066	-0.220	11111	1.04	38937.9357	44444		
8622	4.914	-0.196	-1.030	-0.096	-0.171	11111	1.12	38337.5430	22222	8622	4.898	-0.198	-1.039	-0.055	-0.214	11111	2.45	38938.7531	44444		
8622	4.846	-0.218	-1.047	-0.064	-0.254	11111	1.01	38337.6513	22222	8622	4.887	-0.211	-1.040	-0.089	-0.201	11111	1.03	38938.9434	44444		
8622	4.899	-0.222	-1.054	-0.067	-0.213	11111	1.03	38338.5896	22721	8622	4.881	-0.204	-1.043	-0.071	-0.212	11111	2.61	38939.7442	44444		
8622	4.896	-0.199	-1.052	-0.065	-0.231	11111	1.06	38338.6915	22221	8622	4.900	-0.235	-1.046	-0.089	-0.236	11111	1.26	38939.8552	44444		
8622	4.879	-0.192	-1.040	-0.081	-0.215	11111	1.06	38339.5613	44444	8622	4.889	-0.207	-1.040	-0.074	-0.209	11111	2.48	38940.7462	44444		
8622	4.886	-0.195	-1.067	-0.078	-0.217	11111	1.01	38343.6122	44444	8622	4.891	-0.210	-1.028	-0.102	-0.215	11111	1.01	38940.9653	44444		
8622	4.861	-0.196	-1.026	-0.095	-0.214	11111	1.13	38343.7639	44444	8622	4.880	-0.203	-1.040	-0.080	-0.210	11111	1.35	38941.8276	22222		
8622	4.925	-0.206	-1.075	-0.066	-0.214	11111	1.09	38346.4309	44444	8622	4.887	-0.197	-1.035	-0.075	-0.207	11111	2.47	38944.7358	44444		
8622	4.897	-0.209	-1.057	-0.106	-0.193	11111	1.05	38346.6099	44444	8622	4.850	-0.225	-1.042	-0.060	-0.222	11111	1.09	38944.9916	44444		
8622	4.893	-0.205	-1.051	-0.074	-0.202	11111	1.98	38346.6795	44444	8622	4.881	-0.210	-1.065	-0.068	-0.229	11111	1.01	38992.8398	44444		
8622	4.894	-0.217	-1.030	-0.056	-0.226	11111	2.39	38347.6979	44444	8622	4.891	-0.194	-1.009	-0.090	-0.199	11111	1.25	38992.9636	44444		
8622	4.867	-0.224	-1.046	-0.099	-0.199	11111	2.20	38348.6866	44444	8622	4.903	-0.186	-1.013	-0.093	-0.204	11111	1.63	38993.6778	22222		
8622	4.878	-0.205	-1.069	-0.080	-0.198	11111	1.64	38400.6645	44444	8622	4.886	-0.217	-1.057	-0.021	-0.211	11111	1.12	38993.7452	22222		
8622	4.880	-0.203	-1.040	-																	

TABLE 4 CATALINA UBVRi OBSERVATIONS

CATALINA UBVRi DATA										CATALINA UBVRi DATA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
8622	4.872	-0.206	-1.062	-0.070	-0.247	1.1111	1.08	39060.5811	44444	8775	2.469	1.675	1.966	1.518	1.352	1.1111	1.01	38269.8622	44443
8622	4.878	-0.212	-1.058	-0.082	-0.218	1.1111	1.09	39061.5737	44444	8775	2.361	1.657	1.929	1.513	1.269	1.1111	1.04	38315.7581	44444
8622	4.888	-0.204	-1.080	-0.069	-0.221	1.1111	1.06	39062.5835	44444	8775	2.373	1.657	1.959	1.426	1.356	1.1111	1.02	38317.7387	44444
8622	4.899	-0.200	-1.063	-0.077	-0.197	1.1111	1.04	39063.5922	44444	8775	2.455	1.696	1.967	1.530	1.313	1.1111	1.13	38564.9381	22222
8622	4.876	-0.206	-1.053	-0.105	-0.224	1.1111	1.01	39064.6593	44444	8775	2.450	1.682	1.967	1.524	1.319	1.1111	1.19	38565.9188	22222
8622	4.853	-0.194	-1.075	-0.041	-0.232	1.1111	1.02	39065.6085	44444	8780	4.675	1.080	0.866	0.710	0.554	1.1111	1.05	38270.8559	44443
8622	4.853	-0.196	-1.071	-0.085	-0.195	1.1111	1.07	39066.6728	44444	8780	4.652	1.049	0.892	0.781	0.568	1.1111	1.12	38317.7804	44444
8622	4.862	-0.203	-1.056	-0.099	-0.216	1.1111	1.01	39066.6728	44444	8781	2.443	-0.024	-0.064	-0.058	-0.003	1.1111	1.06	38222.9344	44443
8622	4.890	-0.198	-1.046	-0.057	-0.216	1.1111	1.03	39068.5336	44444	8781	2.483	-0.012	-0.036	0.015	-0.032	1.1111	1.06	38270.8627	44443
8622	4.885	-0.213	-1.048	-0.084	-0.211	1.1111	1.07	39068.5639	44444	8781	2.491	-0.039	-0.014	0.026	-0.030	1.1111	1.11	38302.8013	22221
8622	4.880	-0.210	-1.041	-0.063	-0.213	1.1111	1.03	39068.6736	44444	8781	2.451	-0.035	-0.001	0.007	-0.025	1.1111	1.26	38303.6418	12221
8622	4.873	-0.206	-1.033	-0.083	-0.219	1.1111	1.01	39069.6234	44444	8781	2.469	-0.039	-0.034	0.038	-0.022	1.1111	1.20	38317.7926	44444
8622	4.881	-0.204	-1.039	-0.080	-0.218	1.1111	1.01	39091.5643	22222	8789	4.461	0.907	0.589	0.729	0.490	1.1111	1.91	38324.7323	44444
8622	4.886	-0.196	-1.059	-0.081	-0.208	1.1111	1.01	39093.5465	44444	8789	4.492	0.898	0.580	0.690	0.500	1.1111	1.83	38329.6962	44444
8622	4.878	-0.206	-1.058	-0.059	-0.226	1.1111	1.03	39096.5977	44444	8795	4.486	1.607	1.939	1.251	1.037	1.1111	1.10	38302.7670	22221
8622	4.879	-0.212	-1.069	-0.048	-0.217	1.1111	1.14	39098.6432	44444	8795	4.538	1.571	1.938	1.263	1.017	1.1111	1.16	38329.7306	44444
8622	4.879	-0.181	-1.059	-0.067	-0.205	1.1111	1.15	39099.6015	44444	8796	4.779	1.363	1.158	0.956	0.676	1.1111	1.03	38270.8696	44443
8622	4.873	-0.199	-1.089	-0.069	-0.214	1.1111	1.01	39100.5408	44444	8796	4.764	1.335	1.143	0.986	0.681	1.1111	1.08	38329.7410	44444
8622	4.873	-0.200	-1.042	-0.092	-0.221	1.1111	1.16	39129.5659	44444	8797	4.889	-0.011	-0.859	0.114	-0.115	1.1111	1.14	38270.8788	44443
8628	4.218	-0.113	-0.384	-0.091	-0.087	1.1111	1.99	38224.9551	44444	8797	4.871	-0.037	-0.872	0.082	-0.097	1.1111	1.13	38329.7066	44444
8628	4.047	-0.124	-0.293	-0.068	-0.134	1.1111	2.00	38291.7380	34421	8808	6.254	-0.008	-0.600	0.051	-0.059	1.1111	1.17	38284.7943	44444
8628	4.199	-0.122	-0.334	-0.020	-0.071	1.1111	1.98	38306.7306	44444	8812	3.608	1.247	1.203	0.810	0.616	1.1111	1.72	38302.7746	22221
8632	4.414	1.301	1.359	0.878	0.663	1.1111	1.03	38222.9760	44443	8812	3.659	1.211	1.186	0.869	0.553	1.1111	2.55	38410.5692	44444
8632	4.466	1.324	1.346	0.949	0.692	1.1111	1.77	38400.6593	44444	8812	3.670	1.230	1.247	0.842	0.612	1.1111	1.75	38671.7750	44444
8632	4.495	1.375	1.369	0.949	0.692	1.1111	1.08	38638.8774	44444	8817	4.674	0.659	0.382	0.517	0.380	1.1111	1.80	38302.7817	22221
8634	3.397	-0.088	-0.255	-0.026	-0.072	1.1111	1.10	38270.8490	44443	8817	4.683	0.628	0.354	0.483	0.303	1.1111	2.88	38410.5781	44444
8634	3.372	-0.110	-0.255	-0.066	-0.057	1.1111	2.38	38398.6533	44444	8817	4.666	0.642	0.378	0.542	0.381	1.1111	1.84	38671.7830	44444
8641	4.805	-0.005	0.017	0.090	-0.040	1.1100	1.01	38284.7591	44444	8819	4.411	0.805	0.469	0.643	0.427	1.1111	1.38	38302.7919	22221
8641	4.761	-0.020	-0.118	0.014	-0.014	1.1111	2.81	38398.6963	44444	8819	4.420	0.827	0.447	0.658	0.426	1.1111	1.41	38329.7540	44444
8641	4.790	-0.013	-0.005	0.051	-0.042	1.1111	1.44	38670.8711	44444	8830	4.547	0.311	0.058	0.310	0.158	1.1111	1.09	38302.8098	22221
8649	4.678	1.339	1.562	1.029	0.722	1.1111	1.64	38992.8698	44444	8830	4.541	0.289	0.030	0.296	0.167	1.1111	1.31	38383.6668	44444
8649	4.654	1.385	1.564	1.009	0.710	1.1111	1.60	38995.8374	44444	8830	4.503	0.296	0.027	0.248	0.168	1.1111	1.91	38397.7064	44444
8649	4.655	1.345	1.535	0.994	0.697	1.1111	1.60	38997.8336	44444	8832	5.553	1.014	0.868	0.834	0.522	1.1111	1.12	37563.7740	22222
8650	2.933	0.844	0.569	0.664	0.499	1.1111	1.00	38284.7691	44444	8832	5.565	1.015	0.873	0.829	0.517	1.1111	1.12	37564.7311	22222
8650	2.959	0.877	0.618	0.616	0.463	1.1111	1.02	38348.6389	23333	8832	5.561	1.008	0.867	0.789	0.505	1.1111	1.12	37565.7250	22222
8650	2.944	0.878	0.579	0.644	0.461	1.1111	1.11	38544.9296	22222	8832	5.546	1.004	0.894	0.810	0.432	1.1111	1.19	37569.8189	22222
8665	4.204	0.496	-0.031	0.467	0.313	1.1111	1.48	38773.5743	44444	8832	5.562	1.022	0.878	0.816	0.432	1.1111	1.15	37590.7930	22222
8665	4.180	0.528	-0.040	0.410	0.298	1.1111	1.92	38784.5806	44444	8832	5.550	1.006	0.857	0.809	-0.040	1.1100	1.17	37590.6116	22222
8665	4.173	0.503	-0.008	0.416	0.316	1.1111	1.78	38786.5868	44444	8832	5.558	1.007	0.880	0.826	0.510	1.1111	1.14	37590.7286	22222
8667	3.969	1.071	0.901	0.801	0.520	1.1111	1.40	38773.5818	44444	8832	5.541	1.013	0.863	0.822	0.510	1.1111	1.18	37592.6057	22222
8667	3.928	1.083	0.901	0.717	0.518	1.1111	1.76	38784.5875	44444	8832	5.556	0.991	0.863	0.871	0.460	1.1111	1.14	37593.7233	22222
8667	3.913	1.087	0.938	0.736	0.517	1.1111	1.69	38786.5765	44444	8832	5.562	0.990	0.873	0.833	0.511	1.1111	1.12	37594.6698	22222
8679	0.000	0.000	0.000	1.184	0.943	0.0011	2.80	38398.6218	44444	8832	5.574	0.992	0.869	0.811	0.508	1.1111	1.19	37595.7459	22222
8679	3.915	1.001	0.949	1.055	0.949	1.1111	1.44	38641.8090	22222	8832	5.559	0.995	0.870	0.808	0.508	1.1111	1.37	37596.8041	22222
8679	4.023	1.584	1.938	1.237	0.936	1.1111	1.66	38681.7218	44444	8832	5.538	1.011	0.846	0.807	-0.040	1.1100	1.25	37597.7668	22222
8679	3.998	1.565	1.923	1.220	0.961	1.1111	1.06	38700.6833	44444	8832	5.564	1.001	0.853	0.792	0.514	1.1111	1.21	37673.5451	22222
8684	3.447	0.944	0.688	0.668	0.459	1.1111	1.41	38641.8233	22222	8832	5.570	1.019	0.889	0.780	0.526	1.1111	1.42	37694.5503	22222
8684	3.495	0.935	0.675	0.666	0.483	1.1111	1.07	38677.7674	22222	8832	5.539	0.992	0.871	0.778	0.526	1.1111	1.45	37835.8552	22222
8684	3.489	0.945	0.667	0.698	0.483	1.1111	1.04	38699.6850	22222	8832	5.534	1.006	0.880	0.781	0.525	1.1111	1.17	37835.9399	22222
8694	3.573	1.075	0.923	0.928	0.491	1.1111	1.23	38269.7662	44443	8832	5.562	1.006	0.901	0.777	0.521	1.1111	1.46	37836.8508	22222
8694	3.503	1.039	0.851	0.763	0.524	1.1111	1.69	38400.6684	44444	8832	5.544	1.009	0.882	0.776	0.517	1.1111	1.18	37836.9357	22222
8694	3.515	1.033	0.922	0.775	0.533	1.1111													

TABLE 4 CATALINA UBVRi OBSERVATIONS

CATALINA UBVRi DATA													CATALINA UBVRi DATA												
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.						
8832	5.562	0.999	0.851	0.823	0.537	11111	1.28	38326.8068	22221	8832	5.564	1.000	0.908	0.841	0.490	11111	1.55	39000.6596	22222						
8832	5.581	1.010	0.866	0.833	0.510	11111	1.10	38327.7011	22222	8832	5.576	1.020	0.872	0.819	0.510	11111	1.26	39000.7245	22222						
8832	5.583	0.971	0.841	0.858	0.513	11111	1.14	38328.6211	44444	8832	5.583	0.994	0.925	0.803	0.537	11111	1.10	39004.8405	44444						
8832	5.549	0.988	0.892	0.809	0.514	11111	1.14	38329.6149	44444	8832	5.561	1.008	0.850	0.000	0.000	11100	1.10	39013.7982	22200						
8832	5.582	1.020	0.870	0.851	0.510	11111	1.22	38337.5544	22222	8832	5.546	1.007	0.898	0.000	0.000	11100	1.18	39016.7125	44400						
8832	5.562	0.990	0.891	0.827	0.518	11111	1.10	38337.6597	22222	8832	5.506	0.997	0.911	0.000	0.000	11100	1.10	39016.7840	44400						
8832	5.585	0.999	0.880	0.857	0.516	11111	1.10	38338.6447	22221	8832	5.574	0.978	0.883	0.818	0.518	11111	1.14	39018.8504	44444						
8832	5.555	1.021	0.885	0.809	0.516	11111	1.23	38338.7574	22221	8832	5.565	0.989	0.854	0.000	0.000	11100	1.10	39024.7158	44400						
8832	5.578	0.976	0.894	0.849	0.506	11111	1.10	38339.6266	44444	8832	5.565	0.985	0.878	0.803	0.523	11111	1.10	39025.7618	44444						
8832	5.570	1.004	0.862	0.826	0.512	11111	1.11	38339.6783	44444	8832	5.561	1.008	0.862	0.000	0.000	11100	1.17	39026.6896	44400						
8832	5.578	0.996	0.911	0.836	0.507	11111	1.10	38340.6627	11111	8832	5.568	0.998	0.884	0.000	0.000	11100	1.12	39026.8137	44400						
8832	5.562	1.024	0.869	0.824	0.493	11111	1.17	38340.7282	11111	8832	5.570	1.010	0.890	0.830	0.500	11111	1.25	39027.6546	22222						
8832	5.575	1.016	0.896	0.829	0.514	11111	1.10	38342.6557	21111	8832	5.597	0.994	0.892	0.840	0.523	11111	1.12	39028.7278	44444						
8832	5.569	0.987	0.867	0.833	0.510	11111	1.10	38343.6198	44444	8832	5.559	0.995	0.880	0.775	0.489	11111	1.10	39029.7384	22222						
8832	5.570	1.010	0.890	0.830	0.500	11111	1.19	38348.7144	23333	8832	5.560	1.013	0.870	0.838	0.494	11111	1.20	39031.6633	44444						
8832	5.556	1.009	0.939	0.818	0.502	11111	1.15	38365.6471	44444	8832	5.573	1.004	0.889	0.828	0.501	11111	1.10	39031.7604	44444						
8832	5.577	1.000	0.879	0.836	0.510	11111	1.12	38366.0213	44444	8832	5.556	0.986	0.896	0.000	0.000	11100	1.49	39032.5825	44400						
8832	5.561	0.991	0.876	0.862	0.510	11111	1.10	38367.5667	44444	8832	5.571	1.012	0.887	0.830	0.490	11111	1.11	39032.7159	44444						
8832	5.567	0.994	0.912	0.000	0.000	11100	1.21	38552.9682	22200	8832	5.585	0.990	0.903	0.835	0.526	11111	1.11	39032.7525	44400						
8832	5.581	0.996	0.878	0.840	0.503	11111	1.195	38555.8297	44444	8832	5.569	1.015	0.882	0.000	0.000	11100	1.12	39032.7959	44400						
8832	5.570	1.012	0.878	0.822	0.497	11111	1.21	38555.9603	44444	8832	5.573	0.980	0.898	0.825	0.533	11111	1.46	39033.5842	44444						
8832	5.577	1.008	0.878	0.840	0.500	11111	1.209	38556.8149	44444	8832	5.573	0.985	0.901	0.840	0.524	11111	1.21	39033.6518	44444						
8832	5.588	1.003	0.885	0.850	0.503	11111	1.27	38556.9514	44444	8832	5.575	1.003	0.889	0.847	0.515	11111	1.10	39033.7383	44444						
8832	5.573	1.006	0.876	0.828	0.522	11111	1.199	38557.8207	44444	8832	5.576	1.000	0.880	0.000	0.000	11100	1.11	39033.7784	44400						
8832	5.573	1.000	0.890	0.818	0.494	11111	1.20	38560.9506	22222	8832	5.555	1.003	0.893	0.816	0.518	11111	1.43	39034.5875	44444						
8832	5.544	1.012	0.864	0.771	0.511	11111	1.19	38561.9527	22222	8832	5.593	1.000	0.883	0.000	0.000	11100	1.10	39034.7328	44400						
8832	5.550	1.020	0.864	0.799	0.509	11111	1.19	38562.9516	22222	8832	5.582	0.994	0.897	0.835	0.527	11111	1.10	39034.7424	44444						
8832	5.587	1.019	0.872	0.826	0.522	11111	1.20	38566.9323	22222	8832	5.580	0.967	0.887	0.834	0.550	11111	1.15	39035.6753	44444						
8832	5.551	1.002	0.885	0.786	0.526	11111	1.18	38567.9396	22222	8832	5.576	0.985	0.899	0.821	0.533	11111	1.11	39037.8246	44444						
8832	5.622	0.994	0.878	0.863	0.515	11111	1.24	38568.9148	22222	8832	5.579	0.993	0.875	0.810	0.540	11111	1.18	39037.7529	44444						
8832	5.599	1.035	0.912	0.837	0.514	11111	1.67	38579.7950	22222	8832	5.575	1.004	0.888	0.825	0.529	11111	1.12	39038.7769	44444						
8832	5.576	0.985	0.885	0.850	0.500	11111	1.46	38579.8275	22222	8832	5.560	0.994	0.886	0.812	0.513	11111	1.20	39040.6386	22222						
8832	5.555	1.005	0.890	0.811	0.538	11111	1.10	38637.8467	44444	8832	5.582	0.984	0.892	0.818	0.519	11111	1.13	39041.6710	44444						
8832	5.550	1.052	0.860	0.799	0.529	11111	1.21	38638.9276	44444	8832	5.583	0.967	0.915	0.853	0.529	11111	1.20	39042.8184	44444						
8832	5.585	1.001	0.869	0.839	0.527	11111	1.11	38639.9017	44444	8832	5.587	0.987	0.899	0.838	0.528	11111	1.14	39045.7749	44444						
8832	5.575	1.010	0.860	0.830	0.522	11111	1.11	38641.7966	22222	8832	5.586	0.997	0.885	0.847	0.506	11111	1.10	39055.6724	44444						
8832	5.578	1.016	0.897	0.840	0.514	11111	1.12	38645.7306	22222	8832	5.574	1.003	0.887	0.836	0.514	11111	1.10	39056.6750	44444						
8832	5.588	1.012	0.863	0.848	0.517	11111	1.10	38658.7732	22222	8832	5.599	0.986	0.890	0.882	0.545	11111	1.10	39057.6613	44444						
8832	5.553	0.986	0.869	0.831	0.513	11111	1.19	38658.8652	22222	8832	5.613	1.021	0.877	0.852	0.534	11111	1.11	39058.6491	44444						
8832	5.570	1.010	0.890	0.830	0.500	11111	1.22	38659.6706	22222	8832	5.582	0.993	0.879	0.860	0.524	11111	1.24	39059.7522	22222						
8832	5.576	0.985	0.995	0.815	0.530	11111	1.11	38668.7217	44444	8832	5.584	0.993	0.875	0.821	0.526	11111	1.12	39059.7582	22222						
8832	5.564	0.995	0.852	0.855	0.513	11111	1.10	38669.7514	44444	8832	5.572	0.991	0.871	0.831	0.527	11111	1.17	39061.5802	44444						
8832	5.557	0.968	0.878	0.827	0.522	11111	1.10	38670.7431	44444	8832	5.581	1.001	0.878	0.839	0.537	11111	1.15	39063.5986	44444						
8832	5.590	0.995	0.913	0.828	0.536	11111	1.10	38671.7316	44444	8832	5.595	0.991	0.887	0.832	0.526	11111	1.10	39064.6660	44444						
8832	5.562	0.999	0.889	0.824	0.522	11111	1.12	38673.7741	44444	8832	5.567	1.009	0.867	0.807	0.532	11111	1.14	39065.6203	44444						
8832	5.559	1.001	0.870	0.812	0.525	11111	1.166	38673.7741	44444	8832	5.576	0.980	0.895	0.855	0.516	11111	1.11	39066.6290	44444						
8832	5.544	0.971	0.884	0.816	0.520	11111	1.116	38674.6818	44444	8832	5.577	0.970	0.916	0.866	0.497	11111	1.13	39066.7129	44444						
8832	5.575	0.989	0.878	0.836	0.543	11111	1.12	38676.6818	44444	8832	5.583	0.984	0.899	0.840	0.527	11111	1.18	39068.6704	44444						
8832	5.574	1.004	0.876	0.838	0.502	11111	1.10	38677.7463	22222	8832	5.577	0.996	0.891	0.842	0.518	11111	1.11	39068.6704	44444						
8832	5.560	0.982	0.887	0.829	0.510	11111	1.11	38678.6861	44444	8832	5.576	0.979	0.896	0.827	0.521	11111	1.10	39069.6301	44444						
8832	5.507	0.983	0.869	0.820	0.515	11111	1.10	38679.7042	22222	8832	5.558	1.019	0.884	0.797	0.549	11111	1.10	39071.5710	22222						
8832	5.589	1.002	0.897	0.851	0.520	11111	1.10	38680.7099	44444	8832	5.554	0.992	0.904	0.821	0.535	11111	1.11	39071.5710	22222						
8832	5.571	1.006	0.912	0.836	0.524	11111	1.10	38682.7317	44444	8832	5.516	0.990	0.850	0.840	0.505	11111	1.11	39076.6274	44444						
8832	5.570	1.010	0.890	0.830	0.500	11111	1.10	38686.6581	22222	8832	5.581	0.991	0.871	0.831	0.529	11111	1.12	39078.6894	44444						
8832	5.554	1.000	0.867	0.863	0.527	11111	1.12	38699.7023	22222	8832	5.563	0.965	0.897	0.869	0.509	11111	1.21	39098.6689	44444						
8832	5.554	1.000	0.873	0.845	0.516	11111	1.10	38700.6762	44444	8832	5.567	0.977	0.918	0.838	0.502	11111	1.11	39109.6098	44444						
8832	5.570	1.010	0.890	0.830	0.500	11111	1.17	38701.7822	22222	8832	5.536	0.981	0.864	0.787	0.528	11111	1.30	39129.5773	44444						
8832	5.580	1.001																							

TABLE 4 CATALINA UBVRi OBSERVATIONS

CATALINA UBVRi DATA										
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	
8923	4.546	0.951	0.743	0.709	0.471	11111	1.84	38408.6353	44444	
8923	4.566	0.942	0.736	0.759	0.441	11111	1.09	38637.8832	44444	
8926	4.903	-0.138	-0.656	-0.005	-0.132	11111	1.39	38383.6891	44444	
8926	4.987	-0.127	-0.604	0.010	-0.181	11111	1.15	38637.9033	44444	
8926	4.912	-0.097	-0.665	0.030	-0.111	11111	1.28	38673.8663	44444	
8939	4.723	0.032	0.011	0.062	0.018	11111	1.71	38669.7876	44444	
8939	4.661	0.968	-0.798	0.079	0.034	00011	1.88	38681.7907	44444	
8939	4.766	0.025	0.024	0.065	0.035	11111	1.86	38682.7861	44444	
8939	4.686	0.018	-0.018	0.069	0.023	11111	1.78	38700.7213	44444	
8947	5.587	0.134	0.065	0.105	0.066	11111	1.01	38995.8686	44444	
8947	5.613	0.122	0.079	0.119	0.048	11111	1.03	38997.8998	44444	
8961	3.776	1.002	0.720	0.783	0.579	11111	1.03	38291.7930	34421	
8961	3.728	1.022	0.726	0.770	0.572	11111	1.05	38343.6935	44444	
8965	4.275	-0.100	-0.256	-0.009	-0.100	11111	1.02	38291.7994	34421	
8965	4.321	-0.127	-0.303	0.019	-0.087	11111	1.39	38383.6994	44444	
8965	4.282	-0.091	-0.308	-0.008	-0.069	11111	1.57	38400.6774	44444	
8969	4.130	0.503	0.013	0.462	0.337	11111	1.11	37563.7863	22222	
8969	4.134	0.492	0.011	0.445	0.419	11111	1.17	37565.7144	22222	
8969	4.143	0.499	0.016	0.439	0.296	11111	1.14	38305.7884	44444	
8969	4.121	0.510	0.036	0.424	0.291	11111	1.12	38310.7476	44444	
8974	3.196	1.049	0.922	0.715		11110	1.41	38224.9700	44444	
8974	3.197	1.028	0.986			11100	1.41	38291.8052	34421	
8974					0.498	00001	1.41	38291.8117	34421	
8974	3.234	1.024	0.941	0.774	0.525	11111	1.64	38383.7209	44444	
8974	3.207	1.033	0.913	0.754	0.514	11111	1.46	38671.8399	44444	
8976	4.156	-0.091	-0.208	-0.007	-0.088	11111	1.43	38383.7083	44444	
8976	4.143	-0.072	-0.226	-0.009	-0.060	11111	1.61	38400.6843	44444	
8982	4.745	1.680	-0.259	0.600	0.423	00011	1.57	38305.7694	44444	
8982	4.834	0.812	0.491	0.631	0.413	11111	1.75	38681.7976	44444	
8982	4.839	0.815	0.489	0.625	0.417	11111	1.74	38682.7942	44444	
8984	4.467	0.265	0.056	0.152	0.108	11111	1.21	38638.8945	44444	
8984	4.485	0.210	0.104	0.202	0.099	11111	1.21	38641.8870	22222	

CATALINA UBVRi DATA										
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	
8988	4.493	-0.051	-0.114	0.006	-0.068	11111	1.51	38639.8815	44444	
8988	4.509	-0.034	-0.156	0.034	-0.048	11111	1.67	38681.8052	44444	
8988	4.529	-0.038	-0.123	0.035	-0.058	11111	1.68	38682.8039	44444	
8997	4.938	0.931	0.633	0.724	0.471	11111	1.00	38310.7531	44444	
8997	4.928	0.998	0.623	0.689	0.490	11111	1.04	38638.9025	44444	
9004	5.011	2.594	3.328	1.834	1.361	11111	1.39	38567.9492	22222	
9004	5.094	2.530	3.384	1.935	1.336	11111	1.30	38568.9651	22222	
9016	4.596	0.008	-0.014	0.042	-0.025	11111	2.04	38305.7752	44444	
9016	4.544	0.001	-0.039	0.020	-0.023	11111	2.08	38357.6506	44444	
9045	4.593	1.240	1.146	0.970	0.784	11111	1.10	38290.8010	44444	
9045	4.614	1.288	1.144	0.948	0.727	11111	1.11	38305.7972	44444	
9045	4.556	1.258	1.159	0.962	0.710	11111	1.10	38342.6781	21111	
9064	4.648	1.601	1.625	1.471	1.335	11111	1.01	38305.7818	44444	
9064	4.652	1.604	1.624	1.447	1.341	11111	1.01	38342.6668	21111	
9071	4.931	-0.069	-0.839	0.060	-0.112	11111	1.10	38305.8074	44444	
9071	4.831	-0.083	-0.762	0.051	-0.093	11111	1.09	38342.6963	21111	
9071	4.914	-0.092	-0.877	0.068	-0.102	11111	1.09	38357.6277	44444	
9071	4.856	-0.010	-0.839	-0.032	-0.110	11111	1.12	38638.9181	44444	
9072	4.027	0.403	0.092	0.353	0.236	11111	1.11	38310.7587	44444	
9072	3.986	0.416	0.075	0.423	0.250	11111	1.13	38342.7051	21111	
9072	4.026	0.428	0.047	0.372	0.234	11111	1.13	38639.8902	44444	
9089	4.434	1.621	1.821	1.577	1.412	11111	1.32	38342.7148	21111	
9089	4.368	1.624	1.829	1.551	1.411	11111	1.28	38357.6388	44444	
9089	4.420	1.642	1.872	1.542	1.403	11111	1.35	38639.9098	44444	
9091	4.953	-0.207	-0.572	-0.100	-0.176	11111	2.26	38298.8351	22222	
9091	5.000	-0.165	-0.532	-0.074	-0.117	11111	2.23	38307.8048	44444	
9098	4.495	-0.055	-0.126	-0.009	-0.056	11111	1.58	38298.8227	22222	
9098	4.549	-0.048	-0.093	0.003	-0.043	11111	1.55	38310.7643	44444	
9098	4.579	-0.027	-0.107	0.062	-0.035	11111	1.71	38674.8285	44444	
9098	4.571	-0.040	-0.139	0.025	-0.020	11111	1.72	38681.8121	44444	
9098	4.605	-0.043	-0.115	0.051	-0.009	11111	1.73	38682.8110	44444	

TABLE 5 CATALINA RI OBSERVATIONS

CATALINA RI DATA						CATALINA RI DATA						CATALINA RI DATA								
B.S.	R	R-I	WT	AIR	J.D.	CNT.	B.S.	R	R-I	WT	AIR	J.D.	CNT.	B.S.	R	R-I	WT	AIR	J.D.	CNT.
45	3.448	1.114	11	2.28	38936.8591	44	1156	4.102	-0.055	11	1.06	38445.6065	22	1698	3.599	0.552	11	1.26	38444.6809	44
175	4.642	0.467	11	1.10	38999.8231	44	1178	3.605	-0.070	11	1.06	38445.6087	22	1702	3.272	-0.123	11	1.72	38444.6833	44
235	4.705	0.278	11	1.50	38999.8478	44	1204	4.961	-0.067	11	1.29	38460.6252	44	1702	3.289	-0.119	11	1.52	38448.6170	44
235	4.756	0.290	11	1.39	39004.8685	44	1204	4.969	-0.067	11	1.28	38469.5944	44	1702	3.330	-0.115	11	1.86	38469.6333	44
276	5.629	0.453	11	1.21	38999.8284	44	1212	3.849	0.391	11	1.45	38443.6484	44	1705	4.355	-0.081	11	1.60	38464.6267	44
290	5.796	0.052	11	1.10	38999.8380	44	1213	4.633	-0.160	11	2.03	38445.6138	22	1705	4.403	-0.098	11	1.78	38469.6184	44
290	5.826	0.087	11	1.09	39004.8292	44	1213	4.684	-0.125	11	2.09	38447.6153	44	1735	3.592	-0.105	11	1.46	38444.6905	44
315	5.368	0.535	11	1.51	38999.8529	44	1220	2.986	-0.235	11	1.11	38446.6173	44	1735	3.593	-0.114	11	1.30	38448.6192	44
315	5.368	0.529	11	1.39	39004.8735	44	1240	4.632	-0.139	11	1.09	38446.6199	44	1756	4.375	-0.271	11	1.66	38444.6951	44
330	5.181	0.169	11	1.19	38999.8661	44	1298	3.731	0.146	11	1.37	38446.6163	44	1756	4.411	-0.269	11	1.44	38448.6218	44
330	5.206	-0.181	00	1.18	39004.8561	44	1303	3.378	0.537	11	1.08	38446.6212	44	1756	4.451	-0.300	11	1.77	38469.6133	44
378	5.050	0.040	11	1.22	38999.8107	44	1303	3.360	0.507	11	1.09	38447.6252	44	1762	4.646	-0.043	11	2.02	38444.6980	44
378	5.059	0.040	11	1.21	39004.8610	44	1311	4.179	0.451	11	1.15	38446.6187	44	1762	4.668	-0.031	11	1.75	38447.6469	44
461	4.582	0.706	11	1.22	38999.8428	44	1311	4.182	0.440	11	1.16	38447.6222	44	1765	4.764	-0.189	11	1.19	38448.6247	44
461	4.604	0.724	11	1.20	39004.8395	44	1325	3.737	0.462	11	1.40	38446.6240	44	1784	3.379	0.489	11	1.35	38446.6531	44
485	5.224	0.507	11	1.07	38999.8756	44	1325	3.734	0.431	11	1.39	38447.6185	44	1784	3.400	0.490	11	1.32	38448.6274	44
485	5.223	0.537	11	1.12	39004.8440	44	1329	4.708	0.095	11	1.08	38446.6260	44	1788	3.424	-0.279	11	1.26	38446.6554	44
530	5.212	0.490	11	1.10	38999.8797	44	1329	4.678	0.097	11	1.09	38447.6285	44	1788	3.365	-0.220	11	1.43	38448.6904	44
530	5.189	0.506	11	1.16	39004.8485	44	1346	2.881	0.445	11	1.48	38460.6674	44	1788	3.493	-0.184	11	1.40	38466.6042	44
534	5.617	0.182	11	1.17	38999.8840	44	1346	2.933	0.455	11	1.21	38469.5976	44	1789	5.038	-0.259	11	1.20	38446.6580	44
534	5.621	0.190	11	1.15	39004.8777	44	1373	3.036	0.466	11	1.13	38443.6522	44	1789	5.010	-0.244	11	1.36	38448.6973	44
599	5.449	0.024	11	1.07	38999.8888	44	1380	0.014	0.071	01	1.14	38443.6549	44	1791	1.649	-0.114	11	1.17	38460.6778	44
599	5.441	0.048	11	1.02	39003.9839	22	1380	4.682	0.039	11	1.10	38446.6337	44	1791	1.681	-0.090	11	1.00	38461.5869	22
599	5.440	0.037	11	1.04	39004.8950	44	1387	4.046	0.069	11	1.40	38460.6712	44	1829	2.164	0.451	11	1.75	38446.6603	44
617	1.202	0.569	11	2.06	38446.6706	44	1387	4.081	0.056	11	1.17	38469.6045	44	1829	2.160	0.427	11	1.77	38447.6470	44
617	1.162	0.666	11	2.27	38999.7603	44	1387	4.046	0.069	11	1.40	38460.6712	44	1839	4.226	-0.134	11	1.16	38444.6684	44
617	1.172	0.629	11	1.49	38999.8131	44	1387	4.081	0.056	11	1.17	38469.6045	44	1852	2.281	-0.278	11	1.33	36444.7010	44
617	1.183	0.630	11	1.20	38999.8147	44	1389	4.161	0.007	11	1.14	38443.6594	44	1855	4.725	-0.271	11	1.31	38443.6118	44
617	1.101	0.600	11	1.02	38999.9499	44	1389	4.213	0.006	11	1.11	38447.6351	44	1855	4.745	-0.289	11	2.61	38443.7802	44
617	1.230	0.660	11	1.26	39000.8446	22	1392	3.987	0.135	11	1.13	38443.6628	44	1855	4.722	-0.266	11	1.31	38444.6567	44
617	1.156	0.631	11	1.01	39003.9421	22	1392	4.016	0.140	11	1.15	38448.6566	44	1855	4.745	-0.255	11	1.66	38444.7281	44
617	1.161	0.621	11	1.04	39003.9922	22	1394	4.235	0.151	11	1.14	38461.6058	22	1855	4.772	-0.280	11	2.41	38444.7775	44
617	1.171	0.627	11	1.38	39004.8139	44	1394	4.239	0.123	11	1.32	38469.6274	44	1855	4.726	-0.298	11	1.31	38445.6010	22
617	1.174	0.635	11	1.18	39004.8919	44	1396	3.964	0.493	11	1.21	38448.6589	44	1855	4.745	-0.307	11	1.31	38446.6038	44
617	1.178	0.636	11	1.03	39004.9144	44	1396	3.963	0.493	11	1.21	38448.6592	44	1855	4.752	-0.283	11	1.31	38447.6316	44
617	1.172	0.627	11	1.02	39004.9253	44	1411	3.141	0.466	11	1.21	38448.6612	44	1855	4.727	-0.257	11	2.13	38447.7561	44
617	1.173	0.635	11	1.02	39004.9366	44	1412	0.000	0.084	01	1.21	38448.6625	44	1855	4.738	-0.303	11	2.08	38448.7510	44
647	5.710	0.240	11	1.10	38999.8929	44	1412	3.235	0.071	11	1.55	38469.6575	44	1855	4.739	-0.296	11	2.30	38449.7591	44
647	5.670	0.259	11	1.05	39003.9887	22	1427	4.604	0.061	11	1.22	38448.6663	44	1855	4.720	-0.274	11	1.32	38460.6098	44
647	5.665	0.240	11	1.08	39004.8905	44	1427	4.594	0.059	11	1.20	38464.6170	44	1855	4.724	-0.288	11	1.70	38460.6878	44
710	5.591	0.051	11	1.52	38999.9450	44	1427	4.641	0.051	11	1.50	38469.6536	44	1855	4.747	-0.251	11	1.30	38461.5819	22
710	5.697	0.040	11	1.49	39003.9758	22	1437	3.928	0.624	11	1.40	38460.6300	44	1855	4.736	-0.270	11	1.45	38461.6488	22
710	5.709	0.047	11	1.62	39004.9045	44	1479	4.514	0.080	11	1.13	38461.6094	22	1855	4.732	-0.279	11	1.33	38464.6031	44
753	0.008	0.496	01	2.13	38443.6757	44	1479	4.531	0.059	11	1.50	38469.6601	44	1855	4.734	-0.285	11	1.65	38464.6719	44
875	5.069	0.031	11	2.18	38443.6705	44	1481	3.016	0.575	11	1.54	38446.6287	44	1855	4.735	-0.261	11	2.03	38464.7038	44
875	5.076	0.036	11	2.51	38999.8742	44	1481	3.014	0.557	11	1.59	38447.6404	44	1855	4.712	-0.299	11	1.38	38466.6187	44
875	5.025	0.085	11	1.99	38999.8575	44	1496	2.700	1.413	11	1.72	38446.6709	44	1855	4.795	-0.282	11	2.21	38466.7087	44
875	4.980	0.055	11	1.24	38999.9909	44	1496	2.728	1.346	11	1.77	38447.6377	44	1855	4.756	-0.317	11	1.57	38468.6500	44
875	5.058	0.066	11	1.24	39003.9799	22	1497	4.200	-0.158	11	1.15	38448.6684	44	1855	4.788	-0.300	11	2.13	38468.6990	44
875	5.102	0.071	11	2.15	39004.8348	44	1497	4.333	-0.113	11	1.10	38461.6144	22	1868	5.401	-0.188	11	1.36	38444.7038	44
875	5.076	0.068	11	1.71	39004.8647	44	1497	4.316	-0.160	11	1.50	38469.6722	44	1868	5.422	-0.218	11	1.39	38448.6977	44
875	5.074	0.068	11	1.45	39004.8992	44	1520	4.091	-0.132	11	1.37	38461.6177	22	1876	4.390	-0.166	11	1.22	38444.7069	44
875	5.074	0.084	11	1.39	39004.9110	44	1520	4.081	-0.175	11	1.95	38469.6632	44	1876	4.417	-0.189	11	1.24	38448.7017	44
875	5.063	0.060	11	1.24	39004.9303	44	1544	4.289	-0.004	11	1.14	38446.6406	44	1899	2.821	-0.242	11	1.48	38446.7094	44
875	5.068	0.067	11	1.24	39004.9719	44	1544	4.277	0.005	11	1.16	38448.6420	44	1903	1.704	-0.186	11	1.39	38446.7123	44
985	4.858	-0.128	11	1.36	38460.6145	44	1544	4.295	-0.019	11	1.61	38469.6663	44	1903	1.739	-0.217	11	1.42	38448.7059	44
985	4.887	-0.126	11	1.37	38464.6072	44	1552	3.738	-0.149	11	1.23	38461.6201	22	1907	3.294	0.516	11	1.23	38444.7149	44
1002	4.878	-0.008	11	1.12	38443.6250	44	1552	3.716	-0.176	11	1.26	38464.6201	22	1907	3.331	0.535	11	1.25	38448.7038	44
1034	5.013	-0.132	11	1.12	38446.6103	44	1560	4.092	0.139	11	1.42	38461.6250	22	1931	3.875	-0.237	11	1.46		

TABLE 5 CATALINA RI OBSERVATIONS

CATALINA RI DATA							CATALINA RI DATA							CATALINA RI DATA						
B.S.	R	R-1	WT	AIR	J.D.	CNT.	B.S.	R	R-1	WT	AIR	J.D.	CNT.	B.S.	R	R-1	WT	AIR	J.D.	CNT.
2035	3.003	0.578	11	1.67	38448.6300	44	3249	2.392	0.773	11	1.11	38443.7736	44	4386	4.050	-0.048	11	1.12	38468.8093	44
2035	3.004	0.570	11	1.86	38446.6483	44	3249	2.408	0.782	11	1.99	38443.9086	44	4386	4.040	-0.057	11	1.11	38469.7963	44
2035	2.981	0.532	11	1.84	38469.6302	44	3249	2.421	0.787	11	1.20	38444.6656	44	4405	3.852	0.111	11	1.63	38443.8267	44
2047	3.880	0.302	11	1.16	38446.7168	44	3249	2.402	0.780	11	1.09	38444.7309	44	4405	3.838	0.098	11	1.55	38448.8559	44
2047	3.888	0.290	11	1.29	38449.7434	44	3249	2.394	0.778	11	1.61	38445.5976	22	4456	6.023	-0.139	11	2.22	38443.6885	44
2077	2.964	0.498	11	1.27	38444.7671	44	3249	2.410	0.810	11	1.64	38446.5916	44	4456	6.067	-0.187	11	1.06	38443.9159	44
2077	2.969	0.499	11	1.29	38444.7712	44	3249	2.389	0.798	11	1.34	38446.8375	44	4456	6.010	-0.153	11	2.20	38444.6899	44
2077	2.994	0.526	11	1.28	38448.7580	44	3249	2.402	0.793	11	1.55	38447.5984	44	4456	6.005	-0.164	11	2.26	38446.6790	44
2077	0.000	0.502	01	1.25	38449.7486	44	3249	2.401	0.787	11	1.09	38447.7299	44	4456	6.014	-0.179	11	1.05	38446.8400	44
2077	2.984	0.493	11	1.27	38449.7536	44	3249	2.414	0.784	11	1.09	38448.7444	44	4456	6.044	-0.136	11	1.91	38448.6907	44
2084	4.780	-0.124	11	1.13	38448.7191	44	3249	2.442	0.778	11	1.09	38449.7366	44	4456	5.994	-0.172	11	1.04	38448.8698	44
2084	4.784	-0.124	11	1.25	38449.7462	44	3249	2.413	0.789	11	1.09	38460.7148	44	4456	6.004	-0.165	11	1.06	38449.8292	44
2085	3.380	0.165	11	1.45	38448.6323	44	3249	2.397	0.779	11	1.12	38461.6531	22	4456	6.059	-0.145	11	2.21	38460.6427	44
2085	3.388	0.169	11	1.62	38464.6553	44	3249	2.406	0.812	11	1.09	38446.6753	44	4456	6.041	-0.114	11	2.04	38464.6399	44
2085	3.393	0.155	11	1.70	38466.6613	44	3249	2.423	0.792	11	1.12	38466.6359	44	4456	6.011	-0.141	11	2.11	38466.6309	44
2128	4.960	-0.106	11	1.48	38443.7080	44	3249	0.000	0.000	00	1.09	38466.6699	44	4456	5.987	-0.167	11	1.06	38468.8488	44
2244	5.019	-0.056	11	1.54	38443.7108	44	3249	2.393	0.760	11	1.12	38466.7190	44	4456	6.033	-0.145	11	2.31	38469.6138	44
2244	4.965	-0.052	11	1.44	38448.6350	44	3249	2.437	0.772	11	1.10	38468.6528	44	4456	5.992	-0.174	11	1.04	38469.7906	44
2286	1.305	1.392	11	1.06	38443.7138	44	3249	2.422	0.749	11	1.09	38468.6926	44	4456	6.020	-0.181	11	2.01	38469.9889	44
2286	1.315	1.373	11	1.26	38444.7743	44	3249	2.415	0.780	11	1.14	38469.6219	44	4456	5.993	-0.186	11	1.05	38904.6436	22
2294	2.083	-0.248	11	1.69	38443.7177	44	3441	4.073	0.533	11	1.53	38443.7878	44	4456	6.007	-0.175	11	1.06	38906.6489	44
2294	2.097	-0.253	11	1.81	38448.7240	44	3441	4.067	0.503	11	1.56	38444.7976	44	4456	6.010	-0.172	11	1.06	38908.6434	44
2298	4.175	0.081	11	1.28	38448.7111	44	3441	4.058	0.532	11	1.50	38447.7385	44	4456	6.020	-0.170	11	1.10	38910.6614	44
2298	4.062	0.091	11	1.20	38448.7344	44	3454	4.369	-0.192	11	1.75	38443.6205	44	4456	6.025	-0.175	11	1.11	38911.6600	44
2310	5.122	0.617	11	1.21	38468.6659	44	3454	4.362	-0.181	11	1.15	38443.7765	44	4456	6.014	-0.172	11	1.10	38912.6560	44
2310	5.134	0.635	11	1.32	38469.6885	44	3454	4.354	-0.200	11	1.16	38444.7830	44	4456	6.031	-0.161	11	1.47	38940.6567	22
2332	4.777	0.286	11	1.08	38468.6807	44	3454	4.359	-0.163	11	1.12	38445.5922	22	4456	6.142	-0.140	11	1.81	38944.6766	22
2332	4.788	0.332	11	1.12	38469.6837	44	3454	4.414	-0.172	11	1.98	38446.5969	44	4518	2.808	0.600	11	1.04	38468.8120	44
2356	3.752	-0.153	11	1.54	38448.7414	44	3454	4.375	-0.162	11	1.83	38447.6038	44	4518	2.783	0.603	11	1.04	38469.7990	44
2356	3.806	-0.159	11	1.49	38460.7010	44	3454	4.346	-0.186	11	1.14	38447.7420	44	4534	2.042	0.039	11	1.05	38468.8148	44
2356	3.762	-0.156	11	1.40	38466.6657	44	3454	4.355	-0.199	11	1.14	38448.7471	44	4534	2.050	0.017	11	1.05	38469.8017	44
2385	4.379	0.041	11	1.25	38448.7372	44	3454	4.360	-0.240	11	2.05	38448.9061	44	4540	3.110	0.271	11	1.16	38468.8176	44
2385	4.391	0.035	11	1.57	38449.7853	44	3454	4.352	-0.203	11	1.14	38449.7398	44	4540	3.114	0.264	11	1.16	38469.8046	44
2387	4.453	-0.271	11	1.91	38443.7208	44	3454	4.373	-0.164	11	1.14	38450.7190	44	4550	5.008	0.480	01	2.05	38443.6799	44
2387	4.447	-0.280	11	2.05	38448.7269	44	3454	4.367	-0.182	11	1.15	38446.6786	44	4550	5.768	0.455	11	1.99	38443.6837	44
2414	4.501	-0.029	11	1.89	38443.7236	44	3454	4.363	-0.176	11	1.14	38466.6934	44	4550	5.766	0.437	11	1.01	38443.9187	44
2414	4.501	-0.003	11	1.85	38464.6588	44	3454	4.356	-0.168	11	1.16	38466.7242	44	4550	5.757	0.427	11	2.37	38444.6612	44
2450	3.892	0.671	11	1.68	38460.7058	44	3454	4.377	-0.199	11	1.14	38468.6951	44	4550	5.739	0.460	01	1.86	38446.6843	44
2450	3.742	0.763	11	1.52	38464.6618	44	3454	4.384	-0.194	11	1.14	38469.6920	44	4550	5.765	0.448	11	2.33	38448.6521	44
2456	4.754	-0.252	11	1.50	38449.7882	44	3569	2.934	0.093	11	1.04	38443.7851	44	4550	5.767	0.441	11	1.01	38448.8728	44
2456	4.835	-0.212	11	1.23	38460.7115	44	3569	2.920	0.094	11	1.05	38444.7947	44	4550	5.773	0.429	11	1.01	38449.8816	44
2456	4.755	-0.220	11	1.15	38466.6690	44	3569	2.926	0.085	11	1.04	38447.7455	44	4550	5.764	0.458	11	1.97	38460.6385	44
2470	4.749	0.042	11	1.27	38446.7892	44	3662	4.613	0.100	11	1.09	38464.6940	44	4550	5.737	0.446	11	1.94	38466.6240	44
2470	4.756	0.009	11	1.34	38449.7972	44	3665	3.878	-0.038	11	1.18	38464.6910	44	4550	5.747	0.468	11	1.02	38468.8519	44
2470	4.756	0.042	11	1.17	38466.6817	44	3705	1.872	0.911	11	1.01	38464.7002	44	4550	5.751	0.452	11	2.05	38469.6089	44
2473	2.082	0.607	11	1.23	38444.7858	44	3706	4.072	0.478	11	1.43	38464.6970	44	4550	5.783	0.434	11	1.01	38404.6506	22
2478	3.639	0.573	11	1.45	38449.7906	44	3773	3.079	0.895	11	1.03	38466.9699	44	4550	5.767	0.437	11	1.06	38912.6719	44
2478	3.620	0.592	11	1.12	38466.6726	44	3773	3.091	0.873	11	1.05	38468.6801	44	4550	5.808	0.446	11	1.28	38940.6640	22
2564	4.308	0.175	11	1.32	38444.7919	44	3834	3.625	0.707	11	1.13	38443.7906	44	4550	5.834	0.457	11	1.47	38944.6822	22
2571	4.921	-0.221	11	1.72	38443.7264	44	3834	3.638	0.700	11	1.13	38444.8203	44	4775	3.938	0.175	11	1.50	38443.9214	44
2571	4.963	-0.215	11	1.70	38464.6649	44	3834	3.662	0.714	11	1.15	38448.8135	44	4775	3.923	0.185	11	1.58	38448.8596	44
2571	4.943	-0.249	11	1.42	38468.6579	44	3845	2.899	0.668	11	1.17	38443.7943	44	4789	4.741	-0.044	11	1.01	38443.9267	44
2574	2.952	0.764	11	1.47	38443.7302	44	3845	2.923	0.676	11	1.19	38448.8104	44	4789	4.702	-0.009	11	1.05	38448.8633	44
2574	2.981	0.835	11	1.45	38464.6677	44	3845	2.931	0.652	11	1.18	38449.8003	44	4789	4.712	-0.023	11	1.02	38449.8846	44
2574	2.956	0.761	11	1.53	38466.6851	44	3849	5.111	-0.130	11	1.50	38466.7002	44	4902	3.198	1.334	11	1.34	38443.9240	44
2590	4.318	0.202	11	1.74	38443.7339	44	3849	5.153	-0.153	11	1.54	38468.6830	44	4902	3.245	1.314	11	1.43	38448.8668	44
2590	4.289	0.203	11	1.65	38447.6904	44	3950	3.247	1.082	11	1.10	38443.7983	44	4910	1.795	1.324	11	1.16	38468.8363	44
2590	4.320	0.180	11	1.72	38468.6608	44	3950	3.291	1.115	11	1.10	38448.8161	44	4910	1.767	1.328	11	1.23	38469.9277	44
2596	4.338	-0.082	11	1.63	38443.7365	44	3950	3.303	1.070	11										

TABLE 5 CATALINA RI OBSERVATIONS

CATALINA RI DATA							CATALINA RI DATA							CATALINA RI DATA						
B.S.	R	R-I	WT	AIR	J.D.	CNT.	B.S.	R	R-I	WT	AIR	J.D.	CNT.	B.S.	R	R-I	WT	AIR	J.D.	CNT.
5685	2.657	-0.098	11	1.35	38905.7849	22	6603	1.988	0.585	11	1.23	38905.9357	22	8407	5.593	0.028	11	1.04	38999.7554	44
5685	2.647	-0.079	11	1.53	38906.6896	44	6603	1.944	0.559	11	1.25	38930.8736	44	8410	5.159	0.131	11	1.20	38999.7870	44
5685	2.614	-0.076	11	1.34	38910.7525	44	6603	1.960	0.581	11	1.14	38934.8089	22	8461	5.253	0.499	11	1.06	38999.7650	44
5685	2.636	-0.092	11	1.34	38911.7383	44	6603	1.949	0.575	11	1.20	38940.7199	22	8571	3.690	0.415	11	1.12	38939.9428	44
5685	2.674	-0.100	11	1.37	38912.7167	44	6603	1.941	0.560	11	1.13	38940.7716	22	8622	4.960	-0.205	11	2.00	38906.8629	44
5685	2.643	-0.076	11	1.40	38930.6541	44	6603	1.968	0.547	11	1.14	38942.7443	11	8622	4.977	-0.220	11	1.18	38906.9649	44
5685	2.623	-0.080	11	1.39	38936.6423	44	6603	1.986	0.583	11	1.24	38944.6937	22	8622	4.969	-0.207	11	1.19	38908.9561	44
5685	2.630	-0.090	11	1.34	38937.6972	44	6603	2.027	0.586	11	1.18	38944.7187	44	8622	4.958	-0.209	11	2.20	38910.8409	44
5685	2.653	-0.060	11	1.35	38939.6430	44	6603	1.948	0.574	11	1.15	38944.7528	22	8622	4.990	-0.226	11	1.18	38910.9532	44
5854	1.793	0.564	11	2.08	38449.8694	44	6603	1.885	0.540	11	1.13	39000.6093	22	8622	4.960	-0.205	11	2.22	38937.7663	44
5854	1.819	0.561	11	1.99	38468.8224	44	6603	1.966	0.549	11	1.65	39000.7443	22	8622	4.962	-0.214	11	2.65	38930.7672	44
5854	1.824	0.578	11	1.11	38468.9815	44	6603	1.929	0.572	11	1.13	39004.6058	44	8622	4.966	-0.207	11	1.19	38908.9561	44
5854	1.805	0.559	11	1.11	38469.9858	44	6629	3.717	-0.005	11	1.26	38905.9419	22	8622	4.958	-0.209	11	2.20	38910.8409	44
5854	1.848	0.565	11	1.19	38904.7719	22	6629	3.694	0.011	11	1.30	38930.8822	44	8622	4.990	-0.226	11	1.18	38910.9532	44
5854	1.813	0.548	11	1.11	38905.7952	22	6629	3.680	0.003	11	1.16	38934.8156	22	8622	4.961	-0.207	11	1.24	38908.8354	44
5854	1.853	0.574	11	1.16	38906.8313	44	6629	3.710	-0.022	11	1.22	38940.7250	22	8622	4.950	-0.215	11	2.44	38912.8245	44
5854	1.840	0.564	11	1.12	38912.7872	44	6629	3.701	-0.004	11	1.15	38940.7675	22	8622	4.962	-0.214	11	2.65	38930.7672	44
5854	1.849	0.559	11	1.19	38930.6005	44	6629	3.689	0.028	11	1.16	38942.7478	11	8622	4.966	-0.207	11	1.19	38908.9561	44
5854	1.853	0.560	11	1.18	38936.6486	44	6629	3.717	0.011	11	1.27	38944.6969	22	8622	4.983	-0.234	11	1.88	38916.7890	44
5854	1.876	0.552	11	1.14	38939.6594	44	6629	3.700	0.002	11	1.19	38944.7251	44	8622	4.984	-0.196	11	1.13	38936.8993	44
5889	4.008	0.440	11	1.02	38468.9587	44	6629	3.723	0.023	11	1.18	38944.7300	22	8622	4.960	-0.205	11	2.22	38937.7663	44
5947	3.245	0.653	11	2.90	38448.8313	44	6629	3.651	-0.002	11	1.15	39000.6123	22	8622	4.981	-0.207	11	1.32	38937.8497	44
5947	3.241	0.620	11	2.06	38468.7955	44	6629	3.741	-0.018	11	1.19	39000.7672	22	8622	4.953	-0.220	11	1.04	38937.9357	44
5947	3.254	0.628	11	1.02	38904.8361	22	6629	3.660	-0.009	11	1.15	39004.6095	44	8622	5.025	-0.235	11	2.61	38939.7442	44
5947	3.254	0.631	11	1.06	38905.8566	22	6661	5.107	0.962	11	1.28	38937.7937	44	8622	4.972	-0.227	11	1.26	38939.8552	44
5947	3.261	0.630	11	1.03	38906.8383	44	6661	5.202	0.945	11	1.28	38939.7929	44	8622	4.964	-0.247	11	1.18	38940.8712	22
5947	3.263	0.624	11	1.01	38908.8271	44	6742	4.262	0.464	11	2.13	38937.8053	44	8622	4.954	-0.205	11	1.01	38908.7360	44
5947	3.249	0.615	11	1.01	38910.7591	44	6863	4.788	0.450	11	1.60	38937.8161	44	8622	4.964	-0.247	11	1.18	38940.8712	22
5947	3.240	0.619	11	1.03	38911.7442	44	6917	5.774	0.058	11	1.09	38940.7300	22	8622	4.826	-0.251	11	1.09	38944.8916	44
5947	3.269	0.622	11	1.02	38912.7510	44	6917	5.744	0.036	11	1.14	38944.7007	22	8622	4.861	-0.252	11	1.02	38944.9321	22
5947	3.274	0.614	11	1.01	38936.6879	44	6947	5.530	0.642	11	1.61	38906.9058	44	8622	4.970	-0.202	11	1.17	38999.7730	44
5947	3.245	0.618	11	1.01	38937.6903	44	6947	5.686	0.678	11	1.61	38908.8810	44	8622	5.006	-0.205	11	1.01	38999.7978	44
5947	3.292	0.621	11	1.00	38939.7102	44	6947	5.965	0.690	11	1.63	38910.9126	44	8622	5.033	-0.199	11	1.01	39000.8363	22
5947	3.292	0.659	11	1.02	38940.6700	22	6947	5.913	0.813	11	1.61	38937.8286	44	8622	4.947	-0.208	11	1.08	39001.7360	44
5947	3.253	0.623	11	1.17	38940.7998	22	6947	5.900	0.668	11	1.61	38939.8034	44	8622	4.974	-0.215	11	1.31	39003.9456	22
5947	3.277	0.635	11	1.00	38944.6862	22	7059	5.494	0.107	11	1.32	38940.7431	22	8622	4.935	-0.212	11	1.53	39004.6351	44
5947	3.191	0.617	11	1.08	39000.6053	22	7059	5.613	0.090	11	1.44	38944.7081	22	8622	4.964	-0.204	11	1.01	39004.6351	44
5958	8.240	1.561	11	1.01	38940.7048	22	7172	4.780	0.268	11	1.17	38940.7518	22	8649	3.763	0.778	11	1.63	38999.7931	44
5982	4.747	-0.105	11	1.09	38448.9822	44	7172	4.843	0.309	11	1.28	38944.7138	22	8649	3.717	0.678	11	1.60	39004.8022	44
5984	2.454	-0.080	11	1.68	38468.9627	44	7215	4.857	0.090	11	1.10	38940.7577	22	8804	4.314	0.753	11	1.05	38999.8030	44
5984	2.515	-0.117	11	1.63	38469.9823	44	7215	4.844	0.084	11	1.17	38944.7185	22	8832	4.734	0.470	11	1.37	38906.9501	44
6018	3.992	0.527	11	1.02	38468.9662	44	7402	5.855	0.713	11	1.32	38930.9055	44	8832	4.733	0.499	11	2.20	38908.8423	44
6018	3.950	0.519	11	1.03	38469.9573	44	7451	5.302	0.261	11	1.16	38940.7633	22	8832	4.758	0.512	11	1.30	38908.9637	44
6056	1.475	1.049	11	1.27	38468.9690	44	7451	5.301	0.253	11	1.23	38944.7256	22	8832	4.744	0.496	11	2.05	38910.8484	44
6056	1.403	1.020	11	1.27	38469.9649	44	7570	3.422	0.479	11	1.18	38910.9235	44	8832	4.758	0.505	11	1.29	38910.9595	44
6092	3.953	-0.127	11	2.32	38448.8756	44	7570	3.470	0.523	11	1.19	38930.9173	44	8832	4.742	0.498	11	2.15	38911.8378	44
6092	3.972	-0.128	11	1.99	38468.7906	44	7781	5.629	0.070	11	1.09	38999.7228	44	8832	4.746	0.509	11	2.17	38912.8341	44
6092	3.968	-0.154	11	1.06	38905.8635	22	7784	6.158	0.034	11	1.01	38999.7291	44	8832	4.741	0.502	11	2.20	38930.7826	44
6092	3.989	-0.155	11	1.04	38912.8160	44	7949	1.733	0.512	11	1.15	38940.8034	22	8832	4.749	0.508	11	1.21	38930.9327	44
6092	3.948	-0.176	11	1.05	38936.6960	44	7949	1.717	0.522	11	1.30	38944.7575	22	8832	4.745	0.488	11	1.29	38936.8955	22
6092	3.916	-0.154	11	1.03	38939.7289	44	7988	5.335	0.406	11	1.00	38930.9437	44	8832	4.757	0.528	11	1.85	38936.7960	44
6092	3.993	-0.146	11	1.05	38940.6734	22	8170	5.945	0.342	11	1.02	38999.7350	44	8832	4.732	0.488	11	2.06	38937.7761	44
6092	3.966	-0.141	11	1.11	38940.7967	22	8207	4.836	0.813	11	1.70	38999.7509	44	8832	4.755	0.511	11	1.41	38937.8564	44
6092	3.971	-0.135	11	1.03	38944.6897	22	8263	6.195	0.046	11	1.20	38999.7443	44	8832	4.754	0.515	11	1.15	38937.9418	44
6092	3.908	-0.164	11	1.06	39000.6022	22	8291	6.043	0.064	11	1.03	38999.7395	44	8832	4.637	0.534	11	2.11	38939.7644	44
6095	3.508	0.165	11	1.05	38468.9719	44	8322	4.770	0.480	11	1.13	38939.9505	44	8832	4.770	0.480	11	1.13	38939.9505	44
6095	3.475	0.141	11	1.05	38469.9712	44	8332	4.755	0.494	11	1.30	38940.8769	22	8832	4.745	0.488	11	1.29	38936.8955	22
6117	4.554	0.007	11	1.08	38468.9747	44	8332	4.708	0.487	11	1.11	38940.7698	22	8832	4.745	0.488	11	1.29	38936.8955	22
6117	4.533	-0.023	11	1.08	38469.9740	44	8332	4.716	0.483	11	1.42	38944.83								

TABLE 6 TONANTZINTLA BVRI AND UVB OBSERVATIONS

TONANTZINTLA BVRI - UVB										TONANTZINTLA BVRI - UVB									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
25	3.836	1.003	0.000	0.750	0.516	11011	2.74	38403.5479	22022	555	4.330	1.574	0.000	1.752	1.557	11011	2.44	38345.7333	22022
45	4.785	1.612	0.000	1.347	1.103	11011	1.15	38701.5806	44044	555	4.267	1.608	0.000	1.720	1.417	11011	2.56	38370.5965	22022
45	4.810	1.635	0.000	1.352	1.161	11011	1.01	38701.6887	44044	555	4.378	1.605	0.000	1.757	1.531	11011	2.54	38373.5917	22022
45	4.753	1.557	0.000	1.367	1.153	11011	1.86	38701.8371	44044	555	4.248	1.597	0.000	1.707	1.511	11011	2.42	38400.5764	44044
45	4.762	1.625	0.000	1.340	1.116	11011	1.19	38702.5664	44044	558	5.087	-0.086	0.000	0.016	-0.028	11011	2.16	38345.7396	22022
45	4.784	1.632	0.000	1.341	1.123	11011	1.04	38702.6200	44044	558	5.011	-0.070	0.000	0.016	-0.086	11011	2.22	38370.6007	22022
45	4.824	1.610	0.000	1.382	1.190	11011	1.24	38702.7704	44044	558	5.106	-0.072	0.000	0.038	-0.065	11011	2.20	38373.5958	22022
45	4.827	1.577	0.000	1.369	1.148	11011	1.05	38705.7085	22022	558	5.110	-0.046	0.000	0.010	-0.059	11011	2.13	38400.5806	44044
45	4.809	1.563	0.000	1.388	1.132	11011	1.23	38705.7767	22022	574	4.734	0.843	0.000	0.677	0.428	11011	2.64	38370.6042	22022
45	4.825	1.579	0.000	1.367	1.135	11011	1.21	38705.5492	44044	574	4.850	0.879	0.000	0.717	0.467	11011	2.61	38373.6007	22022
45	4.822	1.597	0.000	1.367	1.139	11011	1.00	38707.6358	44044	574	4.831	0.889	0.000	0.698	0.433	11011	2.56	38374.6069	22022
45	4.783	1.583	0.000	1.337	1.107	11011	1.02	38735.5433	44044	574	4.887	0.930	0.000	0.699	0.483	11011	2.20	38400.5868	44044
45	4.765	1.593	0.000	1.361	1.143	11011	1.03	38736.6089	44044	602	5.112	1.464	0.000	1.240	0.954	11011	2.37	38370.6090	22022
45	4.847	1.536	0.000	1.389	1.144	11011	2.06	38736.7518	44044	602	5.156	1.504	0.000	1.208	0.843	11011	2.35	38373.6049	22022
45	4.776	1.575	0.000	1.370	1.147	11011	1.00	38738.5644	22022	602	5.139	1.494	0.000	1.212	0.887	11011	2.31	38374.6125	22022
45	4.777	1.584	0.000	1.371	1.125	11011	1.00	38742.5518	44044	602	5.130	1.504	0.000	1.202	0.911	11011	2.31	38400.5910	44044
45	4.792	1.519	0.000	1.388	1.141	11011	1.91	38742.7282	44044	612	4.627	-0.172	0.000	-0.036	-0.159	11011	1.55	38370.6146	22022
45	4.809	1.595	0.000	1.360	1.138	11011	1.09	38760.5761	44044	612	4.680	-0.154	0.000	-0.016	-0.150	11011	1.55	38373.6097	22022
45	4.802	1.547	0.000	1.366	1.122	11011	2.13	38760.6896	44044	612	4.679	-0.162	0.000	-0.024	-0.149	11011	1.53	38374.6167	22022
45	4.774	1.584	0.000	1.350	1.121	11011	1.01	38761.5297	44044	612	4.672	-0.134	0.000	-0.029	-0.140	11011	1.54	38400.5951	44044
45	4.797	1.574	0.000	1.391	1.125	11011	1.94	38761.6775	44044	617	2.019	1.186	0.000	0.839	0.572	11011	1.03	38345.6826	22022
45	4.809	1.582	0.000	1.362	1.130	11011	1.01	38762.5279	44044	617	1.927	1.174	0.000	0.883	0.640	11011	1.95	38348.5340	44044
45	4.800	1.541	0.000	1.389	1.132	11011	2.05	38762.6803	44044	617	1.972	1.158	0.000	0.854	0.603	11011	1.11	38348.6319	44044
45	4.845	1.595	0.000	1.389	1.131	11011	1.15	38764.5815	44044	617	2.014	1.162	0.000	0.847	0.643	11011	1.01	38348.7299	44044
45	4.825	1.592	0.000	1.340	1.163	11011	2.15	38773.4550	44044	617	2.062	1.177	0.000	0.872	0.689	11011	2.14	38348.8924	44044
45	4.859	1.610	0.000	1.372	1.170	11011	2.49	38774.6644	44044	617	1.965	1.135	0.000	0.828	0.589	11011	1.16	38368.5674	22022
90	9.218	2.106	0.000	4.242	2.897	11011	1.06	38699.6679	44044	617	2.000	1.153	0.000	0.857	0.665	11011	1.34	38368.7799	22022
90	9.304	2.298	0.000	4.215	2.882	11011	1.08	38700.6414	44044	617	2.077	1.174	0.000	0.883	0.640	11011	1.95	38370.8278	22022
90	9.255	2.271	0.000	4.098	2.859	11011	1.09	38701.6310	44044	617	1.972	1.158	0.000	0.854	0.603	11011	1.11	38373.5660	22022
99	2.320	1.100	0.000	0.811	0.585	11011	2.34	38403.5521	22022	617	1.966	1.163	0.000	0.832	0.577	11011	1.07	38374.5756	22022
100	3.878	0.166	0.000	0.140	0.076	11011	2.50	38403.5569	22022	617	1.990	1.175	0.000	0.849	0.570	11011	1.07	38376.5722	22022
105	4.829	1.631	0.000	1.587	1.086	11011	1.86	38403.5625	22022	617	2.004	1.160	0.000	0.856	0.592	11011	1.01	38376.6174	22022
180	4.716	1.018	0.000	0.797	0.556	11011	2.39	38368.5854	22022	617	1.964	1.137	0.000	0.864	0.611	11011	1.70	38376.7958	22022
180	4.491	0.950	0.000	0.732	0.473	11011	2.39	38370.5826	22022	617	1.977	1.129	0.000	0.847	0.606	11011	1.01	38400.5444	44044
180	4.602	0.943	0.000	0.744	0.548	11011	2.38	38373.5826	22022	617	1.961	1.166	0.000	0.821	0.605	11011	1.10	38403.5722	22022
180	4.592	0.965	0.000	0.745	0.489	11011	2.39	38374.5917	22022	617	2.001	1.168	0.000	0.871	0.613	11011	1.10	38430.5590	44044
280	4.376	-0.129	0.000	0.022	-0.083	11011	1.51	38368.6146	22022	617	1.977	1.151	0.000	0.853	0.651	11011	1.81	38430.6562	44044
280	4.191	-0.154	0.000	-0.040	-0.155	11011	1.54	38370.5778	22022	617	1.980	1.164	0.000	0.874	0.656	11011	2.70	38430.6924	44044
280	4.302	-0.149	0.000	-0.022	-0.147	11011	1.51	38374.5958	22022	617	2.006	1.123	0.000	0.866	0.623	11011	1.81	38431.6535	44044
322	3.261	0.886	0.000	0.695	0.485	11011	2.53	38345.7111	22022	617	1.984	1.146	0.000	0.839	0.636	11011	1.68	38431.7083	44044
322	3.377	0.877	0.000	0.716	0.576	11011	2.45	38348.7062	44044	617	2.036	1.170	0.000	0.863	0.600	11011	1.14	38432.5674	44044
322	3.456	0.942	0.000	0.742	0.558	11011	2.44	38368.6708	22022	617	2.013	1.163	0.000	0.854	0.603	11011	1.92	38430.9225	44044
322	3.279	0.895	0.000	0.677	0.449	11011	2.51	38400.5576	44044	617	1.961	1.144	0.000	0.870	0.638	11011	2.53	38433.6799	44044
370	4.857	0.551	0.000	0.482	0.325	11011	2.41	38345.7160	22022	617	1.415	1.166	0.000	0.889	0.623	11011	1.49	38434.6194	44044
370	4.979	0.579	0.000	0.458	0.421	11011	2.38	38348.7014	44044	617	2.005	1.160	0.000	0.848	0.642	11011	2.93	38434.6875	44044
370	5.175	0.642	0.000	0.542	0.407	11011	2.34	38368.6250	22022	617	1.973	1.159	0.000	0.833	0.602	11011	1.60	38449.5875	44044
370	4.942	0.573	0.000	0.481	0.285	11011	2.40	38400.5625	22022	617	1.987	1.167	0.000	0.841	0.656	11011	3.82	38449.6611	44044
423	5.844	3.843	0.000	2.095	1.371	11011	1.61	38700.7200	44044	617	2.044	1.154	0.000	0.852	0.599	11011	1.77	38450.5986	44044
423	5.756	3.801	0.000	2.032	1.370	11011	1.62	38701.7056	44044	617	1.978	1.202	0.000	0.864	0.598	11011	1.09	38498.8218	44044
423	5.711	3.856	0.000	2.033	1.383	11011	1.61	38702.7162	44044	617	1.993	1.201	0.000	0.816	0.660	11011	1.21	38498.8543	44044
429	3.321	1.544	0.000	1.277	0.996	11011	2.27	38345.7239	22022	617	1.975	1.163	0.000	0.838	0.594	11011	1.47	38499.6096	44044
429	3.432	1.603	0.000	1.238	1.048	11011	2.21	38348.7111	22022	617	1.971	1.147	0.000	0.863	0.518	11011	1.71	38490.5857	44044
429	3.309	1.558	0.000	1.265	0.902	11011	2.25	38370.5868	22022	617	1.978	1.221	0.000	0.819	0.617	11011	1.00	38700.7586	44044
429	3.419	1.592	0.000	1.247	0.965	11011	2.20	38400.5667	44044	617	1.942	1.138	0.000	0.813	0.639	11011	1.92	38700.9225	44044
440	3.842	0.980	0.000	0.762	0.489	11011	2.80	38370.5917	22022	617	1.977	1.163	0.000	0.822	0.556	11011	1.52	38701.5982	44044
440	3.930	1.002	0.000	0.754	0.536	11011	2.77	38373.5868	22022	617	1.983	1.184	0.000	0.846	0.593	11011	1.00	38701.7458	44044
440	3.909	0.985	0.000	0.745	0.502	11011	2.75	38400.5571	22022	617	1.962	1.114	0.000	0.868	0.652	11011	2.25	38701.9353	44044
493	5.238	0.845	0.000	0.669	0.410	11011	1.32	38350.5681	44044	617	1.916	1.145	0.000	0.828	0.561	11011</			

TABLE 6 TONANTZINTLA BVRI AND UBV OBSERVATIONS

TONANTZINTLA BVRI - UBV											TONANTZINTLA BVRI - UBV										
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.		B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	
617	2.028	1.157	0.000	0.882	0.616	11011	1.37	38820.5474	22022		718	4.322	-0.058	0.000	-0.016	-0.137	11011	1.29	38816.5536	22022	
617	2.077	1.154	0.000	0.869	0.629	11011	1.41	38822.5471	44044		718	4.315	-0.027	0.000	0.010	-0.044	11011	1.45	38817.5724	22022	
617	2.010	1.179	0.000	0.842	0.637	11011	1.44	38823.5689	44044		718	4.437	-0.057	0.000	0.028	-0.033	11011	1.34	38819.5522	22022	
617	2.061	1.143	0.000	0.874	0.629	11011	1.48	38824.5501	44044		718	4.351	-0.035	0.000	0.031	-0.030	11011	1.36	38820.5522	22022	
617	2.075	1.159	0.000	0.908	0.620	11011	1.47	38825.5668	44044		718	4.341	-0.051	0.000	0.036	-0.059	11011	1.39	38822.5515	44044	
617	2.076	1.172	0.000	0.879	0.626	11011	1.58	38825.5571	44044		718	4.380	-0.042	0.000	0.031	-0.017	11011	1.43	38823.5536	44044	
617	2.110	1.189	0.000	0.882	0.618	11011	1.52	38827.5467	44044		718	4.355	-0.075	0.000	0.017	-0.037	11011	1.47	38824.5544	44044	
617	1.976	1.169	0.000	0.858	0.601	11011	1.91	38836.5508	44044		718	4.378	-0.037	0.000	0.032	-0.021	11011	1.48	38825.5528	44044	
617	1.959	1.126	0.000	0.835	0.617	11011	1.95	38837.5501	44044		718	4.411	-0.020	0.000	0.046	-0.038	11011	1.51	38827.5508	44044	
617	1.876	1.117	0.000	0.834	0.613	11011	2.01	38838.5508	44044		718	4.276	-0.050	0.000	0.022	-0.053	11011	1.94	38837.5542	44044	
617	1.855	1.117	0.000	0.784	0.616	11011	2.45	38839.5657	44044		718	4.298	-0.009	0.000	0.028	-0.043	11011	1.94	38837.5542	44044	
617	1.911	1.092	0.000	0.793	0.589	11011	2.28	38841.5543	44044		718	4.135	-0.106	0.000	-0.043	-0.043	11011	2.02	38838.5557	44044	
617	2.026	1.174	0.000	0.810	0.651	11011	2.40	38842.5558	44044		718	4.151	-0.126	0.000	-0.036	-0.037	11011	2.58	38839.5731	44044	
617	1.966	1.188	1.096	0.000	0.000	11100	3.97	38844.5818	44040		718	4.248	-0.106	0.000	0.006	-0.066	11011	2.29	38841.5585	44044	
617	2.035	1.051	1.209	0.000	0.000	11100	2.91	38845.5616	44040		718	4.327	-0.049	0.000	0.018	-0.061	11011	2.43	38842.5606	44044	
618	5.754	0.623	0.000	0.603	0.473	11011	1.67	38707.5915	44044		718	4.237	-0.191	-0.099	0.000	0.000	11100	3.53	38844.5783	44040	
618	5.645	0.590	0.000	0.579	0.483	11011	1.36	38747.5718	44044		718	4.306	-0.133	-0.043	0.000	0.000	11100	2.63	38845.5582	44040	
618	5.645	0.590	0.000	0.579	0.483	11011	1.36	38747.5718	44044		718	4.306	-0.133	-0.043	0.000	0.000	11100	2.63	38845.5582	44040	
627	6.454	0.357	0.000	0.383	0.239	11011	1.63	38707.5976	44044		721	4.147	-0.120	0.000	-0.020	-0.117	11011	2.73	38770.6174	22022	
627	6.371	0.290	0.000	0.352	0.240	11011	1.33	38742.5815	44044		721	4.227	-0.123	0.000	-0.030	-0.120	11011	2.69	38771.6146	22022	
627	6.376	0.358	0.000	0.327	0.278	11011	1.28	38773.5719	44044		721	4.218	-0.132	0.000	-0.020	-0.147	11011	2.63	38774.6208	22022	
627	6.352	0.361	0.000	0.322	0.276	11011	1.29	38774.5817	44044		721	4.235	-0.132	0.000	-0.042	-0.159	11011	2.66	38780.6007	44044	
641	6.569	0.657	0.000	0.587	0.524	11011	1.60	38707.6068	44044		749	4.870	-0.039	0.000	0.035	-0.060	11011	1.56	38703.6229	22022	
641	6.432	0.571	0.000	0.550	0.490	11011	1.31	38742.6062	44044		749	4.874	-0.071	0.000	0.007	-0.027	11011	1.51	38733.6319	22022	
641	6.461	0.623	0.000	0.563	0.518	11011	1.30	38773.5761	44044		749	4.885	-0.041	0.000	0.017	-0.059	11011	1.52	38774.6250	22022	
641	6.445	0.622	0.000	0.518	0.514	11011	1.31	38774.5858	44044		749	4.885	-0.028	0.000	0.019	-0.064	11011	1.49	38400.6049	44044	
654	6.480	0.258	0.000	0.327	0.165	11011	1.27	38707.7360	44044		753	5.758	1.013	0.000	0.762	0.541	11011	1.42	38699.6461	44044	
654	6.463	0.223	0.000	0.339	0.192	11011	1.29	38761.6264	44044		753	5.807	1.024	0.000	0.805	0.495	11011	1.87	38700.6061	44044	
654	6.524	0.308	0.000	0.320	0.226	11011	1.36	38773.6289	44044		753	5.828	1.025	0.000	0.823	0.532	11011	1.08	38700.7135	44044	
654	6.554	0.282	0.000	0.356	0.197	11011	1.40	38774.6392	44044		753	5.778	0.998	0.000	0.810	0.577	11011	2.01	38701.9577	44044	
656	5.766	0.429	0.000	0.399	0.235	11011	1.05	38350.6639	44044		753	5.828	0.996	0.000	0.811	0.579	11011	1.09	38701.8219	44044	
656	5.760	0.443	0.000	0.396	0.199	11011	1.36	38351.5812	44044		753	5.744	0.983	0.000	0.790	0.506	11011	2.00	38702.5940	44044	
656	5.747	0.432	0.000	0.388	0.195	11011	1.48	38352.5639	44044		753	5.812	1.004	0.000	0.822	0.561	11011	1.03	38702.7475	44044	
656	5.764	0.449	0.000	0.376	0.229	11011	1.46	38353.5639	44044		753	5.840	0.992	0.000	0.830	0.537	11011	1.02	38705.7565	22022	
656	5.771	0.428	0.000	0.416	0.208	11011	1.36	38354.5736	44044		753	5.815	0.953	0.000	0.818	0.516	11011	2.42	38707.5639	44044	
656	5.789	0.417	0.000	0.419	0.204	11011	1.23	38355.5938	44044		753	5.799	1.002	0.000	0.807	0.558	11011	1.08	38707.8028	44044	
696	6.208	0.276	0.000	0.334	0.164	11011	1.37	38707.6625	44044		753	5.805	1.013	0.000	0.796	0.544	11011	1.02	38736.6678	44044	
696	6.237	0.261	0.000	0.307	0.207	11011	1.27	38742.6681	44044		753	5.859	1.005	0.000	0.800	0.539	11011	1.07	38738.6150	22022	
718	4.244	-0.061	0.000	0.003	-0.096	11011	1.64	38350.5729	44044		753	5.793	1.010	0.000	0.805	0.526	11011	1.02	38742.6503	44044	
718	4.290	-0.048	0.000	0.024	-0.043	11011	1.02	38350.7118	44044		753	5.821	0.963	0.000	0.835	0.536	11011	2.18	38742.6287	44044	
718	4.256	-0.065	0.000	0.009	-0.021	11011	1.78	38350.8771	44044		753	5.851	0.945	0.000	0.855	0.536	11011	3.46	38740.8106	44044	
718	4.243	-0.047	0.000	0.017	-0.090	11011	2.19	38351.5396	44044		753	5.851	0.988	0.000	0.853	0.501	11011	1.09	38761.5431	44044	
718	4.286	-0.053	0.000	0.039	-0.045	11011	1.02	38351.7146	44044		753	5.867	0.980	0.000	0.813	0.563	11011	1.91	38761.7644	44044	
718	4.246	-0.063	0.000	0.006	-0.073	11011	2.23	38352.5354	44044		753	5.828	0.986	0.000	0.827	0.513	11011	1.09	38762.5411	44044	
718	4.295	-0.062	0.000	0.038	-0.057	11011	1.02	38352.7069	44044		753	5.811	0.966	0.000	0.830	0.549	11011	1.98	38762.7653	44044	
718	4.297	-0.032	0.000	0.027	-0.060	11011	2.13	38353.5268	44044		753	5.844	0.973	0.000	0.855	0.533	11011	1.55	38763.7337	22022	
718	4.284	-0.064	0.000	0.020	-0.033	11011	1.02	38353.7021	44044		753	5.885	1.020	0.000	0.839	0.530	11011	1.03	38764.5764	44044	
718	4.245	-0.039	0.000	-0.019	-0.074	11011	2.04	38354.5382	44044		753	5.826	0.992	0.000	0.818	0.532	11011	1.02	38772.5749	22022	
718	4.282	-0.055	0.000	0.033	-0.055	11011	1.03	38354.6854	44044		753	5.837	0.972	0.000	0.830	0.528	11011	1.04	38773.5385	44044	
718	4.279	-0.078	0.000	0.030	-0.067	11011	1.20	38355.6153	44044		753	5.825	0.956	0.000	0.804	0.550	11011	1.42	38773.6928	44044	
718	4.285	-0.036	0.000	0.011	-0.067	11011	1.03	38355.7356	44044		753	5.812	1.010	0.000	0.811	0.524	11011	1.03	38774.5478	44044	
718	4.256	-0.064	0.000	0.021	-0.086	11011	1.51	38356.5681	44044		753	5.770	0.979	0.000	0.828	0.526	11011	1.04	38790.5467	44044	
718	4.256	-0.056	0.000	0.011	-0.041	11011	1.04	38356.6715	44044		753	5.852	0.977	0.000	0.819	0.550	11011	2.91	38790.7189	44044	
718	4.252	-0.031	0.000	-0.039	-0.055	11011	1.03	38391.5792	44044		753	5.832	0.982	0.000	0.852	0.550	11011	1.97	38791.5675	44044	
718	4.245	-0.065	0.000	-0.025	-0.004	11011	1.34	38391.7243	44044		753	5.867	0.971	0.000	0.839	0.557	11011	1.07	38791.6856	44044	
718	4.276	-0.053	0.000	0.018	-0.048	11011	1.03	38407.5389	44044		753	5.823	0.985	0.000	0.828	0.565	11011	1.08	38793.5675	44044	
718	4.278	-0.056	0.000	0.034	-0.003	11011	1.21	38408.6556	22022		753	5.880	1.003								

TABLE 6 TONANTZINTLA BVRI AND UBV OBSERVATIONS

TONANTZINTLA BVRI - UBV										TONANTZINTLA BVRI - UBV									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
875	5.151	0.070	0.000	0.138	0.038	11011	1.12	38350.7021	44044	875	5.200	0.072	0.097	0.000	0.000	11100	2.73	38766.7840	44000
875	5.172	0.068	0.000	0.123	0.058	11011	1.11	38350.7069	44044	875	5.178	0.066	0.000	0.108	0.040	11011	1.39	38773.6886	44044
875	5.153	0.059	0.000	0.121	0.079	11011	1.15	38350.8819	44044	875	5.134	0.063	0.000	0.074	0.038	11011	3.81	38774.7811	44044
875	5.148	0.086	0.000	0.102	0.024	11011	2.09	38351.5764	44044	875	5.153	0.091	0.049	0.000	0.000	11000	1.12	38786.6188	44000
875	5.198	0.055	0.000	0.142	0.065	11011	1.09	38351.7451	44044	875	5.159	0.097	0.059	0.000	0.000	11000	1.95	38786.7007	44000
875	5.128	0.065	0.000	0.115	0.027	11011	3.19	38352.5424	44044	875	5.169	0.067	0.071	0.000	0.000	11000	1.10	38787.5736	44000
875	5.152	0.083	0.000	0.116	0.003	11011	1.96	38352.5799	44044	875	5.195	0.081	0.091	0.000	0.000	11000	1.97	38787.6993	44000
875	5.196	0.062	0.000	0.146	0.055	11011	1.09	38352.7340	44044	875	5.154	0.060	0.000	0.095	0.060	11011	2.40	38791.7064	44044
875	5.160	0.079	0.000	0.126	0.092	11011	2.89	38352.9208	44044	875	5.172	0.120	0.057	0.000	0.000	11000	1.13	38798.5597	44000
875	5.161	0.077	0.000	0.093	0.079	11011	3.05	38353.5424	44044	875	5.160	0.072	0.097	0.000	0.000	11000	1.95	38798.6681	44000
875	5.153	0.090	0.000	0.107	0.039	11011	2.03	38353.5736	44044	875	5.186	0.091	0.084	0.000	0.000	11000	1.13	38799.5542	44000
875	5.179	0.082	0.000	0.119	0.064	11011	1.28	38353.6431	44044	875	5.178	0.078	0.077	0.000	0.000	11000	2.35	38799.6826	44000
875	5.168	0.055	0.000	0.133	0.072	11011	1.09	38353.7278	44044	875	5.060	0.075	0.000	0.067	0.079	11011	3.29	38826.6043	44044
875	5.149	0.066	0.000	0.133	0.065	11011	1.34	38353.8299	44044	875	5.162	0.039	0.000	0.092	0.099	11011	3.99	38837.6112	44044
875	5.132	0.077	0.000	0.092	0.075	11011	3.54	38354.5312	44044	875	5.147	0.064	0.021	0.000	0.000	11000	2.72	38844.5707	44000
875	5.151	0.085	0.000	0.112	0.034	11011	2.09	38354.5681	44044	875	5.104	0.061	0.103	0.000	0.000	11000	2.61	38846.5624	44000
875	5.173	0.084	0.000	0.133	0.038	11011	1.56	38354.6035	44044	878	5.779	0.411	0.000	0.392	0.202	11011	1.13	38350.6590	44044
875	5.185	0.076	0.000	0.125	0.050	11011	1.12	38354.6903	44044	878	5.757	0.424	0.000	0.377	0.196	11011	1.59	38351.5875	44044
875	5.150	0.079	0.000	0.107	0.077	11011	1.48	38354.8465	44044	878	5.769	0.432	0.000	0.367	0.192	11011	1.79	38352.5694	44044
875	5.164	0.065	0.000	0.109	0.019	11011	2.11	38355.5646	44044	878	5.756	0.473	0.000	0.352	0.212	11011	1.76	38353.5687	44044
875	5.167	0.061	0.000	0.127	0.038	11011	1.39	38355.6201	44044	878	5.773	0.403	0.000	0.377	0.206	11011	1.60	38354.5785	44044
875	5.189	0.101	0.000	0.112	0.055	11011	1.09	38355.7396	44044	878	5.798	0.406	0.000	0.390	0.186	11011	1.38	38355.5986	44044
875	5.154	0.080	0.000	0.104	0.084	11011	1.47	38355.9347	44044	887	4.616	0.069	0.000	0.066	0.021	11011	1.92	38836.5862	44044
875	5.126	0.055	0.000	0.099	0.005	11011	2.18	38356.5590	44044	887	4.536	0.035	0.000	0.053	0.025	11011	1.77	38837.5744	44044
875	5.140	0.088	0.000	0.115	0.061	11011	1.14	38356.6757	44044	887	4.560	0.016	0.000	0.032	0.007	11011	1.88	38838.5787	44044
875	5.173	0.093	0.000	0.127	0.075	11011	1.09	38356.7946	44044	897	2.921	0.114	0.000	0.159	0.071	11011	1.98	38342.7785	44044
875	5.153	0.095	0.000	0.123	0.026	11011	1.48	38358.5736	22022	897	2.932	0.099	0.000	0.186	0.054	11011	2.08	38370.6417	22022
875	5.177	0.051	0.000	0.123	0.091	11011	1.24	38368.7708	22022	897	2.876	0.108	0.000	0.087	0.111	11011	2.04	38373.6417	22022
875	5.208	0.096	0.000	0.142	0.066	11011	1.83	38370.8326	22022	897	2.908	0.124	0.000	0.145	0.050	11011	1.98	38400.6229	44044
875	5.129	0.087	0.000	0.112	0.027	11011	1.39	38373.5715	22022	906	5.888	0.236	0.000	0.128	0.080	11011	2.55	38836.5911	44044
875	5.151	0.078	0.000	0.115	-0.004	11011	1.29	38374.5847	22022	906	5.912	0.120	0.000	0.145	0.078	11011	2.54	38837.5869	44044
875	5.180	0.094	0.000	0.110	0.010	11011	1.30	38376.5771	22022	906	5.825	0.106	0.000	0.107	0.072	11011	2.57	38838.5897	44044
875	5.173	0.093	0.000	0.129	0.043	11011	1.13	38376.6229	22022	963	3.928	0.499	0.000	0.450	0.265	11011	1.56	38370.6569	22022
875	5.118	0.064	0.000	0.104	0.055	11011	1.63	38376.8014	22022	963	3.853	0.511	0.000	0.459	0.340	11011	1.60	38373.6368	22022
875	5.256	0.107	0.000	0.116	0.071	11011	1.10	38384.6743	22022	963	3.861	0.516	0.000	0.480	0.301	11011	1.58	38374.6403	22022
875	5.191	0.054	0.000	0.091	0.090	11011	1.64	38384.7806	22022	963	3.861	0.551	0.000	0.475	0.328	11011	1.50	38400.6271	44044
875	5.155	0.074	0.000	0.110	0.070	11011	1.81	38385.7903	22022	977	5.736	2.366	0.000	1.886	1.339	11011	4.20	38698.8092	44044
875	5.154	0.112	0.000	0.086	0.035	11011	1.30	38386.5493	44044	977	5.777	2.185	0.000	1.869	1.375	11011	4.21	38700.7988	44044
875	5.173	0.040	0.000	0.104	0.084	11011	2.01	38386.7946	44044	977	5.695	2.222	0.000	1.926	1.370	11011	4.19	38701.7928	44044
875	5.211	0.072	0.000	0.108	0.015	11011	1.25	38388.5528	44044	977	5.738	2.303	0.000	1.878	1.426	11011	4.19	38702.7879	44044
875	5.100	0.084	0.000	0.099	0.108	11011	1.91	38388.7882	44044	1008	4.283	0.713	0.000	0.621	0.425	11011	2.14	38342.7847	44044
875	5.191	0.062	0.000	0.111	0.036	11011	1.22	38389.5583	44044	1008	4.251	0.696	0.000	0.622	0.383	11011	2.28	38374.6444	22022
875	5.163	0.081	0.000	0.122	0.039	11011	1.09	38389.6306	44044	1008	4.266	0.743	0.000	0.604	0.490	11011	2.15	38400.6313	44044
875	5.139	0.101	0.000	0.117	0.013	11011	1.13	38391.5840	44044	1016	5.443	0.897	0.000	0.642	0.497	11011	2.29	38836.5640	44044
875	5.137	0.099	0.000	0.121	0.048	11011	1.30	38391.7194	44044	1016	5.449	0.857	0.000	0.674	0.465	11011	2.30	38837.5619	44044
875	5.150	0.099	0.000	0.109	0.034	11011	1.15	38400.5521	44044	1016	5.359	0.825	0.000	0.657	0.455	11011	2.42	38838.5640	44044
875	5.140	0.094	0.000	0.106	0.045	11011	1.09	38403.5771	22022	1084	3.642	0.878	0.000	0.683	0.434	11011	1.45	38099.5562	44044
875	5.158	0.073	0.000	0.115	0.056	11011	1.14	38407.5340	44044	1084	3.778	0.969	0.000	0.737	0.460	11011	2.74	38099.5722	44044
875	5.148	0.086	0.000	0.130	0.077	11011	2.06	38407.7437	44044	1084	3.748	0.884	0.000	0.692	0.473	11011	1.86	38107.6292	44044
875	5.177	0.070	0.000	0.146	0.084	11011	1.23	38408.6597	22022	1084	3.925	0.866	0.000	0.705	0.481	11011	1.94	38113.5604	44044
875	5.175	0.059	0.000	0.129	0.079	11011	1.91	38409.7306	44044	1084	3.737	0.902	0.000	0.729	0.468	11011	3.67	38114.5656	44044
875	5.182	0.070	0.000	0.119	0.026	11011	1.09	38413.5583	44044	1084	3.835	0.802	0.000	0.729	0.419	11011	3.59	38124.5771	44044
875	5.166	0.081	0.000	0.134	0.068	11011	1.09	38414.5493	44044	1084	3.739	0.844	0.000	0.772	0.507	11011	2.05	38699.6585	44044
875	5.222	0.088	0.000	0.133	0.072	11011	1.13	38430.5653	44044	1084	3.738	0.787	0.000	0.725	0.433	11011	3.40	38700.6177	44044
875	5.173	0.079	0.000	0.118	0.096	11011	1.72	38430.6611	44044	1084	3.710	0.941	0.000	0.727	0.438	11011	1.48	38700.6999	44044
875	5.126	0.044	0.000	0.118	0.089	11011	2.48	38430.6972	44044	1084	3.705	0.872	0.000	0.735	0.495	11011	1.87	38700.9482	44044
875	5.171	0.058	0.000	0.099	0.081	11011	1.72	38431.6583	44044	1084	3.708	0.909	0.000	0.716	0.456	11011	1.16	38705.7662	22022
875	5.217	0.109	0.000	0.126	0.082	11011	2.90	38431.7132	44044	1084	3.673								

TABLE 6 TONANTZINTLA BVRI AND UBV OBSERVATIONS

TONANTZINTLA BVRI - UBV										TONANTZINTLA BVRI - UBV									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
1142	3.697	-0.158	0.000	0.008	-0.083	11011	1.03	38407.5826	44044	1254	5.432	0.358	0.000	0.357	0.239	11011	1.71	38409.7778	44044
1142	3.766	-0.108	0.000	-0.002	-0.061	11011	1.20	38445.6125	44044	1254	5.440	0.362	0.000	0.389	0.210	11011	1.02	38414.5972	44044
1144	5.631	-0.074	0.000	0.009	-0.111	11011	1.80	38356.5882	44044	1279	5.997	0.381	0.000	0.385	0.215	11011	1.04	38350.7458	44044
1144	5.608	-0.064	0.000	-0.025	-0.086	11011	1.76	38356.5910	44044	1279	6.017	0.358	0.000	0.417	0.189	11011	1.28	38351.6743	44044
1144	5.613	-0.088	0.000	0.024	-0.092	11011	1.19	38356.4661	44044	1279	5.988	0.408	0.000	0.367	0.179	11011	2.14	38352.6028	44044
1144	5.651	-0.096	0.000	0.052	-0.078	11011	1.01	38356.7493	44044	1279	6.000	0.378	0.000	0.364	0.227	11011	1.04	38407.6778	44044
1144	5.651	-0.087	0.000	0.027	-0.078	11011	1.06	38407.5646	44044	1292	5.703	0.340	0.000	0.336	0.195	11011	1.06	38350.7556	44044
1144	5.639	-0.068	0.000	0.018	-0.073	11011	1.01	38407.6306	44044	1292	5.715	0.307	0.000	0.370	0.176	11011	1.26	38351.6896	44044
1144	5.657	-0.070	0.000	0.008	-0.052	11011	1.01	38409.5924	44044	1292	5.695	0.370	0.000	0.321	0.148	11011	2.28	38352.6076	44044
1144	5.650	-0.065	0.000	0.014	-0.054	11011	1.01	38409.6257	44044	1292	5.730	0.363	0.000	0.351	0.203	11011	1.07	38409.6764	44044
1144	5.738	-0.073	0.000	0.025	-0.100	11011	1.06	38443.5743	44044	1292	5.693	0.320	0.000	0.379	0.190	11011	1.03	38414.6090	44044
1144	5.735	-0.090	0.000	0.019	-0.077	11011	1.14	38443.6035	44044	1292	5.762	0.392	0.000	0.348	0.192	11011	1.05	38437.5896	22022
1144	5.715	-0.076	0.000	0.020	-0.051	11011	1.62	38443.6750	44044	1292	5.715	0.328	0.000	0.326	0.195	11011	1.05	38438.5868	44044
1144	5.656	-0.072	0.000	0.045	-0.077	11011	1.07	38444.5771	44044	1292	5.698	0.372	0.000	0.343	0.187	11011	1.99	38441.7097	44044
1144	5.694	-0.115	0.000	0.013	-0.051	11011	2.49	38444.7167	44044	1302	4.962	0.324	0.000	0.362	0.225	11011	2.10	38342.8382	44044
1144	5.708	-0.084	0.000	0.024	-0.072	11011	1.06	38445.5708	44044	1302	4.968	0.335	0.000	0.344	0.190	11011	2.08	38374.7444	22022
1144	5.753	-0.073	0.000	0.024	-0.063	11011	1.34	38445.6375	44044	1302	4.990	0.373	0.000	0.341	0.210	11011	2.51	38376.6410	22022
1144	5.703	-0.068	0.000	0.039	-0.064	11011	1.07	38446.5715	44044	1319	6.313	0.398	0.000	0.369	0.211	11011	1.01	38350.7715	44044
1144	5.702	-0.074	0.000	0.029	-0.061	11011	1.16	38446.6000	44044	1319	6.316	0.373	0.000	0.390	0.197	11011	1.16	38351.7035	44044
1144	5.703	-0.076	0.000	0.027	-0.040	11011	1.43	38446.6472	44044	1319	6.355	0.383	0.000	0.385	0.206	11011	1.89	38353.6174	44044
1144	5.714	-0.077	0.000	0.030	-0.070	11011	1.10	38447.5799	44044	1319	6.308	0.405	0.000	0.371	0.224	11011	1.07	38409.6937	44044
1144	5.737	-0.095	0.000	0.035	-0.058	11011	1.78	38447.6757	44044	1326	3.889	1.085	0.000	0.863	0.606	11011	2.12	38342.8424	44044
1144	5.742	-0.070	0.000	0.042	-0.043	11011	1.70	38824.6382	44044	1326	3.900	1.132	0.000	0.846	0.576	11011	2.11	38374.7486	22022
1145	4.254	-0.117	0.000	-0.015	-0.108	11011	1.39	38356.4627	44044	1326	3.936	1.144	0.000	0.868	0.579	11011	2.51	38376.6451	22022
1145	4.304	-0.121	0.000	0.023	-0.081	11011	1.02	38407.5854	44044	1331	5.646	0.265	0.000	0.288	0.179	11011	1.00	38350.8049	44044
1145	4.366	-0.114	0.000	0.021	-0.081	11011	1.22	38445.6174	44044	1331	5.640	0.256	0.000	0.293	0.132	11011	1.11	38351.7187	44044
1149	3.840	-0.077	0.000	0.028	-0.070	11011	1.36	38356.6306	44044	1331	5.625	0.297	0.000	0.249	0.110	11011	2.00	38352.6125	44044
1149	3.871	-0.080	0.000	0.061	-0.053	11011	1.02	38407.5896	44044	1331	5.643	0.278	0.000	0.279	0.176	11011	1.08	38409.7021	44044
1149	3.941	-0.093	0.000	0.073	-0.045	11011	1.23	38445.6208	44044	1346	3.665	1.010	0.000	0.743	0.495	11011	1.01	38350.8111	44044
1151	5.729	-0.041	0.000	0.023	-0.051	11011	1.33	38356.6347	44044	1346	3.659	0.978	0.000	0.724	0.418	11011	1.68	38352.6361	44044
1151	5.770	-0.037	0.000	0.064	-0.038	11011	1.01	38407.5979	44044	1346	3.669	0.987	0.000	0.732	0.450	11011	1.62	38353.6382	44044
1151	5.852	-0.063	0.000	0.056	-0.036	11011	1.28	38445.6299	44044	1347	3.534	-0.114	0.000	-0.024	-0.095	11011	1.69	38342.8472	44044
1151	5.866	-0.041	0.000	0.083	-0.015	11011	1.74	38824.6418	44044	1347	3.564	-0.106	0.000	0.004	-0.116	11011	1.68	38374.7535	22022
1152	6.434	-0.020	0.000	0.043	-0.026	11011	1.01	38407.6028	44044	1347	3.597	-0.092	0.000	-0.003	-0.110	11011	1.94	38376.6493	22022
1152	6.556	-0.047	0.000	0.065	-0.007	11011	1.31	38445.6340	44044	1351	5.574	0.286	0.000	0.282	0.179	11011	1.01	38350.8194	44044
1152	6.478	-0.004	0.000	0.018	-0.008	11011	1.16	38815.5904	44044	1351	5.564	0.260	0.000	0.274	0.170	11011	1.00	38351.7931	44044
1152	6.511	-0.006	0.000	0.046	-0.045	11011	1.32	38816.6203	22022	1351	5.599	0.274	0.000	0.288	0.107	11011	1.49	38352.6542	44044
1156	4.127	-0.048	0.000	0.052	-0.036	11011	1.31	38356.6389	44044	1351	5.571	0.281	0.000	0.282	0.158	11011	1.12	38409.7139	44044
1156	4.165	-0.048	0.000	0.074	-0.027	11011	1.01	38407.6069	44044	1354	6.112	0.375	0.000	0.383	0.231	11011	1.04	38350.8431	44044
1156	4.222	-0.052	0.000	0.086	-0.009	11011	1.11	38446.5875	44044	1354	6.087	0.358	0.000	0.367	0.230	11011	1.01	38351.8153	44044
1165	2.825	-0.098	0.000	0.021	-0.084	11011	2.09	38356.5743	44044	1354	6.077	0.382	0.000	0.323	0.146	11011	1.14	38388.6097	44044
1165	2.826	-0.078	0.000	0.009	-0.066	11011	1.99	38356.5792	44044	1354	6.069	0.363	0.000	0.354	0.172	11011	1.09	38389.6215	44044
1165	2.836	-0.095	0.000	0.029	-0.064	11011	1.24	38356.6521	44044	1354	6.098	0.369	0.000	0.359	0.221	11011	1.13	38409.7181	44044
1165	2.875	-0.078	0.000	0.036	-0.017	11011	1.00	38356.7604	44044	1354	6.104	0.338	0.000	0.405	0.215	11011	1.00	38414.6264	44044
1165	2.858	-0.077	0.000	0.038	-0.049	11011	1.04	38407.5736	44044	1354	6.133	0.379	0.000	0.359	0.201	11011	1.02	38437.5931	22022
1165	2.847	-0.091	0.000	0.033	-0.053	11011	1.02	38409.5840	44044	1354	6.120	0.357	0.000	0.364	0.210	11011	1.02	38438.5910	44044
1165	2.867	-0.120	0.000	0.04	-0.049	11011	1.01	38409.6340	44044	1355	4.370	1.125	0.000	0.800	0.548	11011	4.85	38698.8458	44044
1165	2.876	-0.088	0.000	0.031	-0.033	11011	1.01	38409.6340	44044	1355	4.565	0.990	0.000	0.817	0.569	11011	4.85	38700.8421	44044
1165	2.847	-0.074	0.000	0.020	-0.049	11011	1.05	38443.5701	44044	1355	4.380	0.974	0.000	0.881	0.519	11011	4.85	38701.8296	44044
1165	2.850	-0.089	0.000	0.049	-0.025	11011	1.06	38444.5729	44044	1356	5.260	0.213	0.000	0.240	0.129	11011	1.05	38350.8479	44044
1165	2.919	-0.107	0.000	0.047	-0.015	11011	1.05	38445.5667	44044	1356	5.248	0.192	0.000	0.228	0.140	11011	1.01	38351.8201	44044
1165	2.911	-0.101	0.000	0.049	-0.027	11011	1.09	38446.5799	44044	1356	5.265	0.220	0.000	0.230	0.070	11011	1.40	38352.6464	44044
1165	2.933	-0.103	0.000	0.048	-0.043	11011	1.08	38447.5750	44044	1356	5.239	0.230	0.000	0.224	0.122	11011	1.15	38409.7229	44044
1172	5.452	-0.077	0.000	0.035	-0.067	11011	1.00	38407.6187	44044	1358	6.154	0.459	0.000	0.420	0.276	11011	1.06	38350.8521	44044
1172	5.500	-0.082	0.000	0.039	-0.046	11011	1.13	38446.5958	44044	1358	6.150	0.433	0.000	0.424	0.273	11011	1.02	38351.8243	44044
1172	5.597	-0.078	0.000	0.081	-0.062	11011	1.84	38824.6494	44044	1358	6.155	0.435	0.000	0.420	0.215	11011	1.28	38353.6792	44044
1178	3.584	-0.073	0.000	0.004	-0.075	11011	1.29	38356.6431	44044	1358	6.153	0.421	0.000	0.421	0.239	11011	1.07	38353.7333	44044
1178	3.606	-0.093	0.000																

TABLE 6 TONANTZINTLA BVRI AND UBV OBSERVATIONS

TONANTZINTLA BVRI - UBV										TONANTZINTLA RVRI - UBV									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
1388	5.265	0.224	0.000	0.274	0.164	11011	1.47	38351.9389	44044	1412	3.366	0.190	0.000	0.181	0.071	11011	2.40	38351.6097	44044
1388	5.272	0.214	0.000	0.261	0.099	11011	1.10	38352.7250	44044	1412	3.394	0.167	0.000	0.192	0.066	11011	1.51	38351.6597	44044
1388	5.314	0.242	0.000	0.248	0.156	11011	1.19	38437.6604	22022	1412	3.411	0.160	0.000	0.211	0.080	11011	1.08	38351.7382	44044
1389	4.288	0.036	0.000	0.095	0.059	11011	1.54	38351.9437	44044	1412	3.399	0.169	0.000	0.199	0.113	11011	1.00	38351.7972	44044
1389	4.287	0.030	0.000	0.106	-0.025	11011	1.09	38352.7292	44044	1412	3.402	0.157	0.000	0.211	0.114	11011	1.15	38351.8854	44044
1389	4.276	0.014	0.000	0.094	-0.025	11011	1.01	38353.7694	44044	1412	3.395	0.153	0.000	0.214	0.128	11011	1.38	38351.9750	44044
1389	4.297	0.060	0.000	0.082	-0.020	11011	1.61	38354.6389	44044	1412	3.642	0.333	0.000	0.258	0.097	11011	1.79	38352.5937	44044
1391	6.442	0.484	0.000	0.476	0.287	11011	1.59	38351.9479	44044	1412	3.257	0.180	0.000	0.178	0.065	11011	1.22	38352.6972	44044
1391	6.453	0.480	0.000	0.465	0.229	11011	1.07	38352.7382	44044	1412	3.401	0.153	0.000	0.191	0.097	11011	1.00	38352.7951	44044
1391	6.450	0.503	0.000	0.438	0.214	11011	1.57	38354.6637	44044	1412	3.395	0.166	0.000	0.195	0.107	11011	1.06	38352.8549	44044
1391	6.469	0.485	0.000	0.428	0.279	11011	1.22	38437.6653	22022	1412	3.403	0.130	0.000	0.222	0.116	11011	1.48	38352.9368	44044
1392	4.269	0.236	0.000	0.281	0.195	11011	2.40	38351.9951	44044	1412	3.418	0.176	0.000	0.198	0.108	11011	3.10	38353.5868	44044
1392	4.280	0.226	0.000	0.289	0.147	11011	1.00	38352.8035	44044	1412	3.420	0.171	0.000	0.192	0.078	11011	1.85	38353.6285	44044
1392	4.248	0.247	0.000	0.249	0.151	11011	1.01	38353.7729	44044	1412	3.402	0.168	0.000	0.186	0.086	11011	1.25	38353.6882	44044
1392	4.269	0.279	0.000	0.254	0.120	11011	1.50	38354.6479	44044	1412	3.371	0.154	0.000	0.175	0.111	11011	1.00	38353.7861	44044
1393	3.960	1.473	0.000	1.173	0.831	11011	1.70	38342.8521	44044	1412	3.344	0.175	0.000	0.177	0.090	11011	2.42	38353.9875	44044
1393	3.993	1.482	0.000	1.151	0.829	11011	1.69	38374.7618	22022	1412	3.353	0.153	0.000	0.183	0.136	11011	1.52	38353.9382	44044
1393	4.042	1.523	0.000	1.183	0.826	11011	1.95	38376.6535	22022	1412	3.388	0.170	0.000	0.177	0.120	11011	2.84	38354.5896	44044
1394	4.452	0.225	0.000	0.268	0.128	11011	1.16	38356.6972	44044	1412	3.410	0.163	0.000	0.195	0.082	11011	1.34	38354.6132	44044
1394	4.479	0.266	0.000	0.249	0.177	11011	1.29	38409.7549	44044	1412	3.389	0.177	0.000	0.181	0.062	11011	1.22	38352.6972	44044
1394	4.503	0.253	0.000	0.244	0.172	11011	1.23	38437.6681	22022	1412	3.386	0.179	0.000	0.179	0.072	11011	1.11	38354.7181	44044
1394	4.516	0.224	0.000	0.271	0.148	11011	1.03	38438.6035	44044	1412	3.381	0.188	0.000	0.174	0.088	11011	1.00	38354.7937	44044
1403	5.706	0.241	0.000	0.264	0.140	11011	1.02	38352.8278	44044	1412	3.402	0.168	0.000	0.193	0.109	11011	1.07	38354.8542	44044
1403	5.682	0.269	0.000	0.237	0.148	11011	1.01	38353.8118	44044	1412	3.366	0.187	0.000	0.174	0.131	11011	1.55	38354.9842	44044
1403	5.693	0.280	0.000	0.231	0.123	11011	1.47	38354.6528	44044	1412	3.389	0.162	0.000	0.187	0.046	11011	1.75	38355.6292	44044
1403	5.746	0.258	0.000	0.259	0.148	11011	1.29	38437.6812	22022	1412	3.375	0.182	0.000	0.171	0.054	11011	1.10	38355.7201	44044
1408	5.909	0.278	0.000	0.346	0.189	11011	1.03	38352.8326	44044	1412	3.388	0.188	0.000	0.173	0.087	11011	1.00	38355.7937	44044
1408	5.869	0.321	0.000	0.294	0.204	11011	1.01	38353.8160	44044	1412	3.376	0.184	0.000	0.174	0.113	11011	1.10	38355.8597	44044
1408	5.890	0.324	0.000	0.313	0.151	11011	1.46	38354.6576	44044	1412	3.360	0.207	0.000	0.151	0.122	11011	1.40	38355.9194	44044
1408	5.901	0.334	0.000	0.302	0.198	11011	1.33	38437.6854	22022	1412	3.349	0.175	0.000	0.185	0.078	11011	1.36	38356.6847	44044
1409	3.539	0.985	0.000	0.757	0.484	11011	1.03	38352.8403	44044	1412	3.372	0.156	0.000	0.185	0.078	11011	1.08	38356.7243	44044
1409	3.535	1.014	0.000	0.726	0.498	11011	1.01	38353.8201	44044	1412	3.388	0.160	0.000	0.202	0.074	11011	1.08	38356.7243	44044
1409	3.511	1.016	0.000	0.707	0.450	11011	1.40	38354.6625	44044	1412	3.392	0.172	0.000	0.190	0.080	11011	1.00	38407.6507	44044
1409	3.524	1.020	0.000	0.718	0.413	11011	1.52	38355.6458	44044	1412	3.392	0.165	0.000	0.208	0.108	11011	1.28	38407.7527	44044
1411	3.808	0.944	0.000	0.693	0.416	11011	1.98	38350.6292	44044	1412	3.395	0.178	0.000	0.187	0.112	11011	1.01	38409.6625	44044
1411	3.824	0.952	0.000	0.704	0.486	11011	1.01	38352.8250	44044	1412	3.373	0.185	0.000	0.184	0.117	11011	1.20	38409.7403	44044
1411	3.839	0.954	0.000	0.719	0.416	11011	1.01	38353.8250	44044	1412	3.324	0.172	0.000	0.167	0.113	11011	1.96	38409.8160	44044
1411	3.841	0.937	0.000	0.723	0.491	11011	1.28	38350.9153	44044	1412	3.396	0.169	0.000	0.181	0.044	11011	1.03	38413.5937	44044
1411	3.820	0.928	0.000	0.718	0.482	11011	1.83	38350.9694	44044	1412	3.381	0.151	0.000	0.202	0.062	11011	1.07	38414.5694	44044
1411	3.815	0.974	0.000	0.679	0.446	11011	2.63	38351.6028	44044	1412	3.476	0.158	0.000	0.222	0.104	11011	1.00	38414.6389	44044
1411	3.833	0.942	0.000	0.712	0.435	11011	1.57	38351.6542	44044	1412	3.458	0.168	0.000	0.201	0.082	11011	1.00	38437.5764	22022
1411	3.848	0.932	0.000	0.716	0.457	11011	1.09	38351.7333	44044	1412	3.450	0.189	0.000	0.187	0.104	11011	1.06	38437.6229	22022
1411	3.822	0.941	0.000	0.704	0.481	11011	1.00	38351.8021	44044	1412	3.440	0.177	0.000	0.165	0.097	11011	1.58	38437.6931	22022
1411	3.832	0.930	0.000	0.729	0.487	11011	1.13	38351.8812	44044	1412	3.372	0.156	0.000	0.185	0.078	11011	1.08	38437.7946	22022
1411	3.826	0.928	0.000	0.715	0.501	11011	2.06	38351.9792	44044	1412	3.382	0.155	0.000	0.182	0.077	11011	1.00	38438.5743	44044
1411	3.848	0.922	0.000	0.704	0.443	11011	3.37	38352.5847	44044	1412	3.435	0.143	0.000	0.222	0.104	11011	1.15	38438.6493	44044
1411	3.819	0.958	0.000	0.690	0.413	11011	1.85	38352.6312	44044	1412	3.446	0.161	0.000	0.202	0.080	11011	2.01	38438.7389	44044
1411	3.833	0.932	0.000	0.716	0.414	11011	1.24	38352.6937	44044	1412	3.366	0.162	0.000	0.162	0.074	11011	1.01	38440.5759	44044
1411	3.833	0.925	0.000	0.714	0.450	11011	1.00	38352.7903	44044	1412	3.378	0.179	0.000	0.179	0.072	11011	1.90	38440.7278	44044
1411	3.835	0.935	0.000	0.720	0.480	11011	1.08	38352.8639	44044	1412	3.393	0.139	0.000	0.197	0.072	11011	1.01	38441.5764	44044
1411	3.836	0.923	0.000	0.729	0.491	11011	1.44	38352.9326	44044	1412	3.377	0.184	0.000	0.168	0.081	11011	2.02	38441.7312	44044
1411	3.864	0.983	0.000	0.708	0.464	11011	3.51	38353.5799	44044	1412	3.468	0.150	0.000	0.214	0.078	11011	1.05	38442.6007	44044
1411	3.833	0.955	0.000	0.707	0.433	11011	1.78	38353.6326	44044	1412	3.470	0.191	0.000	0.196	0.106	11011	1.54	38442.6965	44044
1411	3.839	0.937	0.000	0.709	0.440	11011	1.28	38353.6840	44044	1412	3.414	0.175	0.000	0.171	0.106	11011	1.49	38443.6889	44044
1411	3.837	0.938	0.000	0.713	0.459	11011	1.00	38353.7819	44044	1414	5.006	0.175	0.000	0.209	0.122	11011	1.12	38352.8736	44044
1411	3.821	0.930	0.000	0.701	0.487	11011	1.08	38353.8590	44044	1414	4.992	0.195	0.000	0.191	0.120	11011	1.02	38353.8250	44044
1411	3.785	0.967	0.000	0.688	0.501	11011	1.48	38353.9333	44044	1414	5.013	0.198	0.000	0.192	0.073	11011	1.20	38354.6586	44044
1411	3.781	0.9																	

TABLE 6 TONANTZINTLA BVRI AND UVB OBSERVATIONS

TONANTZINTLA BVRI - UVB										TONANTZINTLA BVRI - UVB									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
1464	3.826	0.960	0.000	0.755	0.489	11011	1.57	38342.8569	44044	1781	5.648	-0.221	0.000	-0.070	-0.188	11011	1.06	38386.7632	44044
1464	3.886	0.998	0.000	0.755	0.495	11011	1.82	38376.6583	22022	1781	5.715	-0.201	0.000	-0.091	-0.201	11011	2.45	38389.5590	44044
1464	3.818	0.979	0.000	0.729	0.488	11011	1.89	38449.6257	44044	1781	5.670	-0.183	0.000	-0.084	-0.215	11011	1.06	38388.7319	44044
1472	5.782	0.301	0.000	0.297	0.172	11011	1.01	38354.8174	44044	1781	5.659	-0.241	0.000	-0.065	-0.171	11011	1.25	38388.8278	44044
1472	5.786	0.307	0.000	0.300	0.125	11011	1.03	38355.7597	44044	1781	5.626	-0.204	0.000	-0.123	-0.198	11011	2.10	38389.5694	44044
1472	5.843	0.274	0.000	0.325	0.177	11011	1.23	38438.6736	44044	1781	5.659	-0.195	0.000	-0.089	-0.190	11011	1.11	38389.6847	44044
1472	5.790	0.305	0.000	0.330	0.146	11011	1.64	38441.7146	44044	1781	5.691	-0.190	0.000	-0.078	-0.189	11011	1.06	38389.7528	44044
1473	4.272	0.119	0.000	0.133	0.070	11011	1.02	38354.8215	44044	1781	5.694	-0.200	0.000	-0.101	-0.130	11011	1.77	38389.8833	44044
1473	4.268	0.143	0.000	0.115	0.042	11011	1.03	38355.7646	44044	1781	5.691	-0.177	0.000	-0.089	-0.120	11011	2.29	38389.9090	44044
1473	4.333	0.098	0.000	0.138	0.070	11011	1.27	38438.6785	44044	1781	5.751	-0.224	0.000	-0.054	-0.196	11011	1.36	38390.8417	44044
1473	4.275	0.130	0.000	0.139	0.059	11011	1.73	38441.7187	44044	1781	5.717	-0.282	0.000	-0.122	-0.182	11011	3.45	38390.9373	44044
1479	4.648	0.143	0.000	0.166	0.088	11011	1.09	38354.8681	44044	1781	5.621	-0.185	0.000	-0.105	-0.231	11011	2.13	38391.5625	44044
1479	4.657	0.165	0.000	0.144	0.065	11011	1.00	38355.7847	44044	1781	5.651	-0.120	0.000	-0.075	-0.216	11011	1.40	38391.6160	44044
1480	5.355	0.256	0.000	0.222	0.119	11011	1.10	38354.8639	44044	1781	5.652	-0.192	0.000	-0.065	-0.215	11011	1.07	38391.7090	44044
1480	5.388	0.257	0.000	0.225	0.113	11011	1.03	38355.7792	44044	1781	5.681	-0.219	0.000	-0.083	-0.193	11011	1.70	38407.5431	44044
1480	5.422	0.249	0.000	0.246	0.129	11011	1.32	38438.6826	44044	1781	5.667	-0.189	0.000	-0.090	-0.183	11011	1.08	38407.7181	44044
1480	5.386	0.245	0.000	0.242	0.116	11011	1.84	38441.7229	44044	1781	5.740	-0.215	0.000	-0.061	-0.181	11011	1.43	38407.8042	44044
1502	4.479	0.329	0.000	0.342	0.208	11011	2.10	38342.8625	44044	1781	5.709	-0.206	0.000	-0.039	-0.177	11011	1.06	38408.6799	22022
1502	4.952	0.379	0.000	0.363	0.216	11011	2.48	38376.6625	22022	1781	5.672	-0.207	0.000	-0.091	-0.199	11011	1.44	38409.5618	44044
1502	4.430	0.335	0.000	0.309	0.201	11011	2.64	38449.6319	44044	1781	5.691	-0.185	0.000	-0.081	-0.181	11011	1.07	38409.6528	44044
1507	5.382	0.234	0.000	0.244	0.145	11011	1.11	38354.8729	44044	1781	5.699	-0.214	0.000	-0.080	-0.227	11011	1.29	38413.5722	44044
1507	5.373	0.274	0.000	0.220	0.133	11011	1.01	38355.8035	44044	1781	5.695	-0.208	0.000	-0.077	-0.232	11011	1.16	38413.6021	44044
1507	5.438	0.239	0.000	0.265	0.131	11011	1.36	38438.6958	44044	1781	5.624	-0.188	0.000	-0.065	-0.184	11011	1.38	38414.5556	44044
1507	5.479	0.253	0.000	0.274	0.132	11011	1.17	38442.6514	44044	1781	5.681	-0.197	0.000	-0.075	-0.221	11011	1.13	38417.5465	22022
1517	6.028	1.223	0.000	0.888	0.612	11011	1.70	38838.6397	44044	1781	5.722	-0.174	0.000	-0.079	-0.186	11011	1.06	38437.6153	22022
1517	6.024	1.234	0.000	0.876	0.641	11011	1.68	38842.6274	44044	1781	5.666	-0.208	0.000	-0.104	-0.209	11011	1.86	38437.7583	22022
1519	5.330	0.168	0.000	0.172	0.089	11011	1.11	38354.8771	44044	1781	5.717	-0.221	0.000	-0.073	-0.202	11011	1.06	38438.6208	44044
1519	5.358	0.172	0.000	0.177	0.079	11011	1.01	38355.8076	44044	1781	5.706	-0.197	0.000	-0.075	-0.221	11011	1.13	38437.5465	22022
1519	5.391	0.163	0.000	0.182	0.081	11011	1.38	38438.6993	44044	1781	5.722	-0.174	0.000	-0.079	-0.186	11011	1.06	38437.6153	22022
1519	5.451	0.170	0.000	0.204	0.076	11011	1.18	38442.6556	44044	1781	5.717	-0.221	0.000	-0.073	-0.202	11011	1.06	38438.6208	44044
1547	5.072	0.202	0.000	0.206	0.130	11011	1.20	38354.9076	44044	1781	5.706	-0.197	0.000	-0.075	-0.221	11011	1.13	38437.5465	22022
1547	5.071	0.221	0.000	0.196	0.141	11011	1.07	38355.8687	44044	1781	5.722	-0.174	0.000	-0.079	-0.186	11011	1.06	38437.6153	22022
1547	5.129	0.183	0.000	0.224	0.114	11011	1.46	38438.7167	44044	1781	5.666	-0.208	0.000	-0.104	-0.209	11011	1.86	38437.7583	22022
1547	5.187	0.213	0.000	0.249	0.108	11011	1.23	38442.6722	44044	1781	5.717	-0.221	0.000	-0.073	-0.202	11011	1.06	38438.6208	44044
1551	4.752	1.404	0.000	1.077	0.773	11011	1.38	38820.6615	22022	1781	5.706	-0.197	0.000	-0.075	-0.221	11011	1.13	38437.5465	22022
1551	4.786	1.440	0.000	1.067	0.772	11011	1.41	38825.6515	44044	1781	5.681	-0.219	0.000	-0.083	-0.193	11011	1.70	38407.5431	44044
1551	4.880	1.406	0.000	1.129	0.778	11011	1.41	38827.6458	44044	1781	5.691	-0.221	0.000	-0.077	-0.186	11011	1.07	38444.5646	44044
1566	6.347	0.286	0.000	0.269	0.182	11011	1.10	38355.8785	44044	1781	5.737	-0.172	0.000	-0.077	-0.194	11011	1.16	38445.6500	44044
1566	6.349	0.289	0.000	0.274	0.172	11011	1.80	38438.7472	44044	1781	5.637	-0.212	0.000	-0.083	-0.178	11011	3.09	38445.7771	44044
1566	6.326	0.277	0.000	0.252	0.159	11011	1.25	38440.6847	44044	1781	5.704	-0.211	0.000	-0.071	-0.175	11011	1.17	38446.6493	44044
1566	6.389	0.276	0.000	0.287	0.159	11011	1.32	38441.6924	44044	1781	5.659	-0.216	0.000	-0.080	-0.227	11011	1.29	38413.5722	44044
1566	6.338	0.273	0.000	0.308	0.154	11011	1.29	38442.6847	44044	1781	5.681	-0.219	0.000	-0.083	-0.193	11011	1.70	38407.5431	44044
1620	4.995	0.141	0.000	0.151	0.089	11011	1.23	38354.9208	44044	1781	5.670	-0.220	0.000	-0.066	-0.207	11011	1.07	38441.5639	44044
1620	4.612	0.159	0.000	0.141	0.106	11011	1.10	38355.8875	44044	1781	5.625	-0.187	0.000	-0.162	-0.212	11011	1.42	38441.7715	44044
1620	4.620	0.124	0.000	0.151	0.070	11011	1.91	38438.7611	44044	1781	5.735	-0.216	0.000	-0.074	-0.203	11011	1.06	38442.5785	44044
1620	4.654	0.155	0.000	0.157	0.086	11011	1.24	38443.6799	44044	1781	5.740	-0.215	0.000	-0.061	-0.181	11011	1.43	38407.8042	44044
1648	6.093	3.409	0.000	2.261	1.461	11011	1.05	38773.6690	44044	1781	5.709	-0.212	0.000	-0.072	-0.193	11011	2.42	38439.7771	44044
1648	6.168	3.366	0.000	2.315	1.492	11011	1.12	38774.7269	44044	1781	5.643	-0.210	0.000	-0.102	-0.240	11011	1.08	38440.5632	44044
1648	6.239	3.503	0.000	2.343	1.503	11011	1.29	38790.7232	44044	1781	5.673	-0.193	0.000	-0.066	-0.207	11011	1.06	38441.6597	44044
1648	6.194	3.463	0.000	2.349	1.478	11011	1.11	38791.6765	44044	1781	5.649	-0.212	0.000	-0.111	-0.175	11011	1.42	38441.7715	44044
1648	6.205	3.534	0.000	2.331	1.507	11011	2.35	38842.6599	44044	1781	5.735	-0.216	0.000	-0.074	-0.203	11011	1.06	38442.5785	44044
1652	4.568	1.186	0.000	0.943	0.635	11011	1.73	38342.8667	44044	1781	5.740	-0.215	0.000	-0.061	-0.181	11011	1.43	38407.8042	44044
1652	4.576	1.187	0.000	0.893	0.639	11011	1.73	38368.7951	22022	1781	5.681	-0.219	0.000	-0.083	-0.193	11011	1.70	38407.5431	44044
1652	4.508	1.196	0.000	0.901	0.653	11011	1.84	38376.8076	22022	1781	5.691	-0.221	0.000	-0.077	-0.186	11011	1.07	38444.5646	44044
1663	4.784	1.414	0.000	1.110	0.808	11011	3.01	38099.5715	44044	1781	5.737	-0.172	0.000	-0.077	-0.194	11011	1.16	38445.6500	44044
1663	5.122	1.487	0.000	1.264	0.918	11011	2.77	38342.8736	44044	1781	5.637	-0.212	0.000	-0.083	-0.178	11011	3.09	38445.7771	44044
1663	5.108	1.489	0.000	1.210	1.011	11011	2.97	38348.8847	44044	1781	5.704	-0.211	0.000	-0.071	-0.175	11011	1.17	38446.6493	44044
1670	5.897	0.294	0																

TABLE 6 TONANTZINTLA BVRI AND UVB OBSERVATIONS

TONANTZINTLA BVRI - UVB										TONANTZINTLA BVRI - UVB									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
1855	4.649	-0.241	0.000	-0.133	-0.249	11011	1.40	38815.6774	44044	2256	4.366	1.016	0.000	0.719	0.521	11011	1.74	38433.6243	44044
1855	4.622	-0.264	0.000	-0.103	-0.249	11011	1.60	38816.6967	22022	2256	4.367	0.998	0.000	0.729	0.485	11011	1.91	38449.6736	44044
1855	4.569	-0.267	0.000	-0.114	-0.252	11011	1.12	38817.5807	22022	2256	4.445	0.997	0.000	0.730	0.516	11011	1.74	38450.6333	44044
1855	4.624	-0.234	0.000	-0.147	-0.231	11011	1.40	38817.6708	22022	2256	4.454	0.981	0.000	0.749	0.476	11011	1.74	38451.6299	44044
1855	4.663	-0.254	0.000	-0.121	-0.243	11011	1.18	38818.6175	44044										
1855	4.621	-0.251	0.000	-0.108	-0.267	11011	1.50	38818.6814	44044	2291	5.567	0.199	0.000	0.241	0.087	11011	1.49	38819.7133	22022
1855	4.647	-0.223	0.000	-0.109	-0.256	11011	1.19	38819.6189	22022	2291	5.594	0.195	0.000	0.250	0.092	11011	1.43	38827.6793	44044
1855	4.611	-0.252	0.000	-0.127	-0.245	11011	1.43	38819.6700	22022	2291	5.516	0.229	0.000	0.192	0.102	11011	1.38	38836.6378	44044
1855	4.653	-0.237	0.000	-0.137	-0.247	11011	1.86	38819.7085	22022										
1855	4.592	-0.251	0.000	-0.133	-0.242	11011	1.34	38820.6522	22022	2296	3.786	0.865	0.000	0.658	0.474	11011	1.74	38430.7118	44044
1855	4.637	-0.261	0.000	-0.107	-0.265	11011	1.94	38822.7050	44044	2296	3.828	0.876	0.000	0.660	0.494	11011	1.64	38431.6687	44044
1855	4.581	-0.271	0.000	-0.109	-0.277	11011	1.79	38823.6932	44044	2296	3.863	0.911	0.000	0.677	0.482	11011	1.80	38432.6599	44044
1855	4.671	-0.235	0.000	-0.110	-0.238	11011	1.75	38824.6876	44044	2296	3.826	0.891	0.000	0.675	0.477	11011	1.67	38433.6292	44044
1855	4.619	-0.237	0.000	-0.113	-0.284	11011	1.12	38825.5649	44044	2296	3.845	0.894	0.000	0.680	0.443	11011	1.84	38449.6792	44044
1855	4.660	-0.240	0.000	-0.106	-0.232	11011	1.67	38825.6781	44044	2296	3.867	0.877	0.000	0.688	0.475	11011	1.67	38450.6382	44044
1855	4.693	-0.223	0.000	-0.094	-0.265	11011	1.12	38827.5551	44044	2296	3.907	0.873	0.000	0.677	0.459	11011	1.67	38451.6340	44044
1855	4.690	-0.266	0.000	-0.064	-0.273	11011	1.96	38827.6924	44044	2296	3.799	0.889	0.000	0.636	0.455	11011	1.65	38455.5799	44044
1855	4.609	-0.289	0.000	-0.151	-0.241	11011	1.76	38836.6550	44044										
1855	4.652	-0.262	0.000	-0.098	-0.250	11011	1.50	38837.6293	44044	2326	-0.844	0.125	0.000	0.210	0.175	11011	3.27	38823.5592	44044
1855	4.592	-0.227	0.000	-0.110	-0.248	11011	1.94	38838.6612	44044	2326	-0.653	0.141	0.000	0.269	0.223	11011	3.37	38824.5446	44044
1855	4.597	-0.297	0.000	-0.117	-0.256	11011	2.21	38841.6661	44044										
1855	4.630	-0.271	0.000	-0.095	-0.241	11011	2.68	38842.6786	44044	2361	4.379	-0.229	0.000	-0.061	-0.156	11011	1.83	38376.8854	22022
1855	4.530	-0.309	-1.109	0.000	0.000	11000	1.23	38844.5628	44044	2361	4.429	-0.179	0.000	-0.072	-0.145	11011	1.70	38430.7160	44044
1855	4.583	-0.270	-1.061	0.000	0.000	11000	1.21	38845.5547	44040	2361	4.461	-0.172	0.000	-0.091	-0.126	11011	1.61	38431.6729	44044
1862	3.743	1.105	0.000	0.797	0.540	11011	1.84	38099.5847	44044	2361	4.523	-0.156	0.000	-0.054	-0.119	11011	1.73	38432.6090	44044
1862	3.910	1.134	0.000	0.843	0.596	11011	1.73	38342.8854	44044	2361	4.429	-0.149	0.000	-0.051	-0.163	11011	1.81	38449.6792	44044
1862	3.901	1.156	0.000	0.817	0.669	11011	1.79	38348.8889	44044	2361	4.516	-0.171	0.000	-0.080	-0.176	11011	1.64	38450.6431	44044
1872	5.338	0.046	0.000	0.065	0.021	11011	1.39	38819.6828	22022	2361	4.548	-0.149	0.000	-0.058	-0.145	11011	1.64	38451.6389	44044
1872	5.331	0.066	0.000	0.067	0.049	11011	1.32	38825.6562	44044	2361	4.296	-0.159	0.000	-0.100	-0.308	11011	1.62	38455.5840	44044
1872	5.404	0.053	0.000	0.114	0.032	11011	1.31	38827.6494	44044										
1905	5.503	0.246	0.000	0.196	0.137	11011	1.07	38355.8986	44044	2405	5.295	2.590	0.000	-1.274	3.984	11000	1.07	38773.7083	44044
1905	5.474	0.233	0.000	0.208	0.131	11011	1.23	38409.7937	44044	2405	5.305	2.623	0.000	1.982	1.438	11011	1.07	38774.7539	44044
1905	5.540	0.233	0.000	0.210	0.108	11011	1.28	38437.7257	22022	2405	5.296	2.621	0.000	1.986	1.423	11011	1.09	38790.7328	44044
1905	5.392	0.286	0.000	0.236	0.116	11011	1.70	38438.7687	44044	2405	5.240	2.627	0.000	1.943	1.404	11011	1.06	38791.6904	44044
1938	6.058	0.034	0.000	0.119	0.059	11011	1.16	38814.6699	22022	2451	5.313	2.520	0.000	1.977	1.467	11011	1.40	38842.6743	44044
1938	6.033	0.057	0.000	0.088	0.062	11011	1.18	38815.6731	44044	2451	3.147	-0.134	0.000	-0.012	-0.067	11011	2.26	38430.7194	44044
1938	6.011	0.018	0.000	0.119	0.050	11011	1.28	38816.6919	22022	2451	3.147	-0.116	0.000	-0.038	-0.043	11011	2.16	38431.6778	44044
1938	6.041	0.029	0.000	0.144	0.012	11011	1.21	38817.6744	22022	2451	3.207	-0.107	0.000	0.031	-0.030	11011	2.44	38432.6046	44044
1938	6.101	0.041	0.000	0.113	0.023	11011	1.07	38818.6224	44044	2451	3.207	-0.100	0.000	0.021	-0.053	11011	1.18	38433.6398	44044
1938	6.083	0.070	0.000	0.094	0.025	11011	1.08	38818.6314	44044	2451	3.250	-0.131	0.000	0.008	-0.111	11011	2.18	38450.6479	44044
1938	6.063	0.047	0.000	0.113	0.031	11011	1.12	38818.6465	44044	2451	3.285	-0.122	0.000	0.038	-0.099	11011	2.18	38451.6437	44044
1938	6.033	0.067	0.000	0.082	0.031	11011	1.30	38818.6903	44044	2451	3.118	-0.120	0.000	-0.042	-0.071	11011	2.15	38455.5896	44044
1938	6.075	0.018	0.000	0.129	0.039	11011	1.05	38819.6126	22022	2538	3.952	-0.231	0.000	-0.121	-0.223	11011	1.64	38099.6208	44044
1938	6.057	0.005	0.000	0.106	0.059	11011	1.30	38819.6869	22022	2538	3.804	-0.228	0.000	-0.065	-0.186	11011	1.67	38430.7236	44044
1938	5.992	0.049	0.000	0.081	0.062	11011	1.23	38820.6703	22022	2538	3.876	-0.224	0.000	-0.065	-0.176	11011	1.60	38431.6826	44044
1938	6.118	0.070	0.000	0.145	0.026	11011	1.36	38824.6835	44044	2591	6.263	2.219	0.000	1.718	1.258	11011	2.08	38773.7370	44044
1938	6.103	0.035	0.000	0.140	0.045	11011	1.26	38827.6583	44044	2591	6.312	2.220	0.000	1.743	1.294	11011	2.08	38774.7459	44044
1938	6.063	0.058	0.000	0.108	0.054	11011	1.17	38836.6119	44044	2591	6.355	2.288	0.000	1.717	1.117	11011	2.09	38790.7133	44044
1938	6.037	0.053	0.000	0.114	0.025	11011	1.16	38837.6064	44044	2591	6.330	2.253	0.000	1.774	1.291	11011	2.08	38791.6984	44044
1938	6.020	-0.002	-0.234	0.000	0.000	11000	1.15	38844.5852	44040	2591	6.335	2.241	0.000	1.704	1.316	11011	2.15	38842.5932	44044
1938	6.052	0.044	-0.214	0.000	0.000	11000	1.10	38845.5656	44040										
1956	2.518	-0.180	0.000	-0.051	-0.133	11011	1.17	38099.5910	44044	2608	4.872	1.706	0.000	1.429	1.221	11011	2.77	38430.7292	44044
1956	2.669	-0.117	0.000	0.003	-0.098	11011	1.67	38342.8903	44044	2608	4.926	1.727	0.000	1.445	1.211	11011	2.62	38431.6875	44044
1956	2.574	-0.151	0.000	-0.017	-0.071	11011	1												

TABLE 6 TONANTZINTLA BVRI AND UBV OBSERVATIONS

TONANTZINTLA BVRI - UBV										TONANTZINTLA BVRI - UBV									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
2749	3.808	-0.136	0.000	0.030	-0.095	11011	1.44	38452.6229	44044	2967	5.550	1.615	0.000	1.593	1.436	11011	1.13	38819.7335	22022
2749	3.808	-0.105	0.000	0.023	-0.102	11011	1.47	38453.6701	44044	2967	5.545	1.635	0.000	1.601	1.389	11011	1.06	38827.6882	44044
2749	3.770	-0.120	0.000	-0.005	-0.105	11011	1.43	38455.6424	44044	2967	5.542	1.627	0.000	1.602	1.432	11011	1.03	38836.6467	44044
2762	4.740	-0.075	0.000	-0.032	-0.065	11011	2.72	38449.6903	44044	2993	4.652	1.644	0.000	1.323	0.983	11011	1.51	38431.7931	44044
2762	4.806	-0.087	0.000	-0.017	-0.140	11011	2.95	38450.7104	44044	2993	4.641	1.629	0.000	1.263	0.988	11011	1.61	38434.7694	44044
2762	4.873	-0.129	0.000	0.026	-0.056	11011	2.66	38451.6771	44044	2993	4.645	1.651	0.000	1.301	0.983	11011	1.57	38453.7090	44044
2762	4.738	-0.113	0.000	-0.033	-0.051	11011	2.60	38455.6514	44044	2996	3.946	0.178	0.000	0.259	0.222	11011	1.67	38433.7799	44044
2766	4.719	1.589	0.000	1.531	1.261	11011	1.73	38417.8187	22022	2996	3.967	0.163	0.000	0.249	0.223	11011	1.65	38434.7743	44044
2766	4.758	1.590	0.000	1.474	1.254	11011	1.51	38434.7278	44044	2996	3.983	0.174	0.000	0.252	0.195	11011	1.61	38453.7132	44044
2766	4.698	1.601	0.000	1.486	1.248	11011	1.47	38452.6278	44044	3017	3.543	1.755	0.000	1.364	1.006	11011	2.11	38433.7847	44044
2766	4.677	1.615	0.000	1.495	1.249	11011	1.54	38453.6854	44044	3017	3.627	1.711	0.000	1.335	1.005	11011	2.08	38434.7785	44044
2766	4.640	1.606	0.000	1.497	1.247	11011	1.47	38455.6465	44044	3017	3.595	1.742	0.000	1.361	0.980	11011	2.01	38453.7181	44044
2773	2.770	1.631	0.000	1.232	0.922	11011	1.89	38434.7361	44044	3034	4.426	-0.059	0.000	0.128	-0.007	11011	1.63	38423.7917	44044
2773	2.637	1.633	0.000	1.238	0.907	11011	1.89	38435.6558	44044	3034	4.466	-0.074	0.000	0.145	0.008	11011	1.59	38434.7733	44044
2773	2.677	1.640	0.000	1.255	0.882	11011	2.04	38450.7160	44044	3034	4.487	-0.070	0.000	0.141	-0.031	11011	1.55	38453.7236	44044
2773	2.660	1.621	0.000	1.249	0.919	11011	1.81	38455.6562	44044	3046	4.670	1.023	0.000	0.737	0.567	11011	2.45	38107.6021	44044
2787	4.578	-0.074	0.000	0.094	-0.048	11011	1.89	38449.7000	44044	3046	4.596	1.053	0.000	0.768	0.590	11011	2.15	38433.8021	44044
2787	4.641	-0.094	0.000	0.105	-0.059	11011	2.05	38450.7208	44044	3046	4.675	1.074	0.000	0.743	0.588	11011	2.95	38434.7882	44044
2787	4.647	-0.069	0.000	0.108	-0.063	11011	1.98	38453.7042	44044	3046	4.708	1.054	0.000	0.784	0.546	11011	2.84	38453.7285	44044
2827	2.512	-0.046	0.000	0.046	-0.037	11011	1.78	38417.8243	22022	3055	4.132	-0.160	0.000	-0.059	-0.176	11011	2.88	38107.6083	44044
2827	2.515	-0.068	0.000	0.079	-0.052	11011	1.63	38434.7542	44044	3055	3.962	-0.200	0.000	-0.090	-0.154	11011	3.18	38431.6093	44044
2827	2.492	-0.056	0.000	0.047	-0.068	11011	1.51	38452.6326	44044	3055	4.065	-0.192	0.000	-0.088	-0.153	11011	2.93	38434.7931	44044
2828	4.947	1.012	0.000	0.710	0.492	11011	1.09	38819.7036	22022	3055	4.088	-0.158	0.000	-0.084	-0.187	11011	2.80	38453.7326	44044
2828	5.040	1.012	0.000	0.756	0.488	11011	1.09	38827.6835	44044	3064	5.117	0.617	0.000	0.482	0.334	11011	1.20	38819.6779	22022
2828	5.209	1.006	0.000	0.737	0.517	11011	1.06	38836.6425	44044	3064	5.245	0.608	0.000	0.549	0.375	11011	1.21	38824.6786	44044
2852	4.151	0.320	0.000	0.336	0.193	11011	1.03	38350.9250	44044	3064	5.172	0.602	0.000	0.538	0.357	11011	1.20	38825.6606	44044
2852	4.150	0.305	0.000	0.333	0.169	11011	1.75	38351.7590	44044	3080	3.695	1.048	0.000	0.751	0.582	11011	1.96	38107.6160	44044
2852	4.116	0.333	0.000	0.291	0.207	11011	1.03	38351.9340	44044	3080	3.688	1.037	0.000	0.780	0.566	11011	2.30	38431.7922	44044
2852	4.122	0.314	0.000	0.330	0.190	11011	1.03	38352.9271	44044	3080	3.689	1.040	0.000	0.742	0.594	11011	2.41	38434.7979	44044
2852	4.122	0.301	0.000	0.295	0.221	11011	1.09	38352.9826	44044	3080	3.722	1.047	0.000	0.795	0.599	11011	2.31	38453.7375	44044
2852	4.122	0.318	0.000	0.337	0.140	11011	1.13	38353.8444	44044	3084	4.507	-0.183	0.000	-0.062	-0.172	11011	1.88	38107.6215	44044
2852	4.112	0.337	0.000	0.309	0.188	11011	1.05	38354.9576	44044	3084	4.493	-0.185	0.000	-0.090	-0.159	11011	1.22	38431.8014	44044
2852	4.113	0.323	0.000	0.303	0.212	11011	1.05	38355.9507	44044	3084	4.408	-0.188	0.000	-0.078	-0.125	11011	2.33	38434.8021	44044
2852	4.173	0.297	0.000	0.335	0.196	11011	1.38	38390.9479	44044	3084	4.510	-0.171	0.000	-0.078	-0.191	11011	2.23	38453.7424	44044
2852	4.120	0.281	0.000	0.305	0.190	11011	1.46	38391.5896	44044	3089	4.598	-0.181	0.000	-0.149	-0.174	11011	2.99	38449.7292	44044
2852	4.108	0.293	0.000	0.319	0.150	11011	1.23	38391.7146	44044	3089	4.654	-0.223	0.000	-0.133	-0.210	11011	3.24	38450.7437	44044
2852	4.150	0.300	0.000	0.359	0.165	11011	1.03	38407.7674	44044	3089	4.627	-0.216	0.000	-0.115	-0.231	11011	3.45	38453.7465	44044
2852	4.133	0.310	0.000	0.322	0.211	11011	1.08	38409.8250	44044	3090	4.229	-0.133	0.000	-0.033	-0.103	11011	2.84	38449.7333	44044
2852	4.164	0.307	0.000	0.327	0.173	11011	1.05	38413.7972	44044	3090	4.288	-0.123	0.000	-0.007	-0.123	11011	3.11	38450.7493	44044
2852	4.166	0.328	0.000	0.330	0.190	11011	1.08	38437.7486	22022	3090	4.242	-0.130	0.000	-0.016	-0.141	11011	3.33	38453.7521	44044
2852	4.203	0.297	0.000	0.338	0.171	11011	1.03	38438.6868	44044	3090	4.233	-0.167	0.000	-0.022	-0.124	11011	2.57	38455.6757	44044
2852	4.142	0.277	0.000	0.349	0.185	11011	1.22	38439.7861	44044	3113	4.757	0.138	0.000	0.202	0.143	11011	1.80	38431.8062	44044
2852	4.147	0.336	0.000	0.308	0.204	11011	1.13	38440.7597	44044	3113	4.779	0.150	0.000	0.189	0.168	11011	1.69	38449.7403	44044
2852	4.167	0.293	0.000	0.326	0.179	11011	1.15	38441.7625	44044	3113	4.809	0.141	0.000	0.213	0.165	11011	1.81	38450.7556	44044
2852	4.157	0.304	0.000	0.323	0.201	11011	2.97	38441.8972	44044	3113	4.773	0.142	0.000	0.207	0.137	11011	1.89	38453.7569	44044
2852	4.215	0.323	0.000	0.319	0.170	11011	1.04	38442.7021	44044	3113	4.791	0.167	0.000	0.177	0.167	11011	1.54	38455.6806	44044
2852	4.179	0.324	0.000	0.312	0.174	11011	1.04	38443.7021	44044	3165	2.357	-0.266	0.000	-0.084	-0.225	11011	1.93	38121.5889	44044
2852	4.159	0.292	0.000	0.344	0.199	11011	1.62	38444.8278	44044	3165	2.176	-0.280	0.000	-0.104	-0.175	11011	2.00	38430.7708	44044
2852	4.175	0.318	0.000	0.321	0.184	11011	1.03	38445.6639	44044	3165	2.203	-0.255	0.000	-0.105	-0.226	11011	2.27	38431.8104	44044
2852	4.101	0.281	0.000	0.315	0.193	11011	2.45	38445.8715	44044	3206	4.266	-0.228	0.000	-0.104	-0.201	11011	2.51	38390.8708	44044
2852	4.149	0.307	0.000	0.334	0.183	11011	1.03	38446.6611	44044	3206	4.281	-0.244	0.000	-0.100	-0.183	11011	2.55	38390.8799	44044
2852	4.144	0.282	0.000	0.326	0.198	11011	2.41	38446.8674	44044	3206	4.277	-0.237	0.000	-0.110	-0.180	11011	2.60	38390.8889	44044
2852	4.168	0.283	0.000	0.356	0.178	11011	1.05	38447.6986	44044	3206	4.265	-0.243	0.000	-0.104	-0.194	11011	2.68	38390.8986	44044
2852	4.107	0.303	0.000	0.318	0.240	11011	2.14	38447.8535	44044	3206	4.265	-0.239	0.000	-0.125	-0.172	11011	2.76	38390.9069	44044
2852	4.146	0.328	0.000	0.305	0.205	11011	1.76	38450.8229	44044	3207	1.825	-0.239	0.000	0.046	-0.133	11011	2.52	38114.6299	44044
2852	4.149	0.267	0.000	0.339	0.195	11011	1.66	38451.8125	44044	3207	1.940	-0.234	0.000	-0.002	-0.122	11011	2.48	38121.6591	44044
2852	4.170	0.310	0.000	0.256	0.246	11011	1.74	38452.7556	44044	3207	1.743	-0.274	0.000	-0.045	-0.133	11011	2.52	38124.6028	44044
2852	4.149	0.373	0.000																

TABLE 6 TONANTZINTLA BVRI AND UVB OBSERVATIONS

TONANTZINTLA BVRI - UVB										TONANTZINTLA BVRI - UVB									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	
3249	3.509	1.492	0.000	1.131	0.769	11011	1.09	38342.9208	44044	3249	3.534	1.475	0.000	1.135	0.796	11011	1.05	38734.9556	44044
3249	3.496	1.495	0.000	1.106	0.796	11011	1.02	38350.9826	44044	3249	3.562	1.434	0.000	1.157	0.769	11011	1.54	38736.7653	44044
3249	3.496	1.479	0.000	1.106	0.744	11011	3.29	38351.7521	44044	3249	3.483	1.494	0.000	1.125	0.772	11011	1.41	38736.7787	44044
3249	3.492	1.501	0.000	1.096	0.782	11011	1.01	38351.9604	44044	3249	3.474	1.517	0.000	1.102	0.792	11011	1.14	38736.8278	44044
3249	3.497	1.465	0.000	1.104	0.718	11011	2.13	38352.7999	44044	3249	3.478	1.543	0.000	1.071	0.778	11011	1.08	38742.8333	44044
3249	3.491	1.477	0.000	1.116	0.754	11011	1.02	38352.9632	44044	3249	3.503	1.549	0.000	1.071	0.794	11011	1.01	38742.8881	44044
3249	3.491	1.473	0.000	1.100	0.729	11011	1.26	38353.8493	44044	3249	3.479	1.518	0.000	1.076	0.802	11011	1.12	38742.9614	44044
3249	3.483	1.510	0.000	1.074	0.765	11011	1.01	38353.9514	44044	3249	3.509	1.526	0.000	1.124	0.794	11011	1.01	38760.8378	44044
3249	3.475	1.467	0.000	1.087	0.764	11011	1.02	38354.9618	44044	3249	3.473	1.496	0.000	1.117	0.787	11011	1.13	38760.9129	44044
3249	3.502	1.473	0.000	1.119	0.759	11011	1.52	38355.9556	44044	3249	3.507	1.474	0.000	1.105	0.775	11011	1.40	38760.9639	44044
3249	3.487	1.496	0.000	1.125	0.771	11011	1.42	38368.8761	22022	3249	3.541	1.445	0.000	1.127	0.758	11011	1.70	38761.6839	44044
3249	3.423	1.476	0.000	1.093	0.781	11011	1.11	38370.8396	22022	3249	3.527	1.521	0.000	1.106	0.792	11011	1.01	38761.8381	44044
3249	3.440	1.478	0.000	1.088	0.761	11011	1.26	38376.8761	22022	3249	3.475	1.542	0.000	1.111	0.825	11011	1.13	38761.9097	44044
3249	3.457	1.458	0.000	1.106	0.807	11011	1.02	38376.9000	22022	3249	3.457	1.494	0.000	1.086	0.813	11011	1.47	38761.9686	44044
3249	3.507	1.476	0.000	1.107	0.742	11011	1.01	38390.8556	44044	3249	3.492	1.520	0.000	1.116	0.802	11011	1.01	38762.8317	44044
3249	3.486	1.464	0.000	1.108	0.784	11011	1.10	38390.9167	44044	3249	3.546	1.475	0.000	1.117	0.812	11011	1.40	38762.9585	44044
3249	3.501	1.484	0.000	1.122	0.779	11011	1.31	38390.9639	44044	3249	3.527	1.500	0.000	1.109	0.787	11011	1.16	38763.7476	22022
3249	3.545	1.506	0.000	1.149	0.800	11011	4.65	38391.6271	44044	3249	3.480	1.514	0.000	1.117	0.779	11011	1.42	38763.8507	22022
3249	3.471	1.459	0.000	1.104	0.728	11011	1.67	38391.6993	44044	3249	3.450	1.490	0.000	1.113	0.799	11011	1.43	38763.9586	22022
3249	3.484	1.476	0.000	1.104	0.790	11011	2.10	38400.6500	44044	3249	3.425	1.511	0.000	1.095	0.770	11011	1.02	38764.8093	44044
3249	3.492	1.476	0.000	1.095	0.724	11011	2.99	38407.6361	44044	3249	3.425	1.477	0.000	1.086	0.783	11011	1.24	38764.9283	44044
3249	3.468	1.453	0.000	1.089	0.750	11011	1.03	38407.7736	44044	3249	3.450	1.471	0.000	1.080	0.771	11011	1.48	38764.9617	44044
3249	3.487	1.495	0.000	1.106	0.724	11011	1.76	38409.6437	22022	3249	3.556	1.485	1.831	0.000	0.000	11100	2.10	38766.6679	44040
3249	3.489	1.495	0.000	1.091	0.808	11011	1.01	38409.8021	44044	3249	3.543	1.487	1.794	0.000	0.000	11100	1.07	38766.7694	44040
3249	3.480	1.463	0.000	1.094	0.746	11011	1.02	38413.7785	44044	3249	3.528	1.466	1.787	0.000	0.000	11100	1.05	38766.8639	44040
3249	3.502	1.499	0.000	1.104	0.758	11011	2.49	38413.9785	44044	3249	3.481	1.492	0.000	1.162	0.831	11011	1.03	38772.7797	22022
3249	3.498	1.489	0.000	1.118	0.782	11011	1.02	38417.8447	22022	3249	3.489	1.463	0.000	1.121	0.753	11011	1.19	38773.7136	44044
3249	3.499	1.484	0.000	1.128	0.789	11011	1.10	38417.8444	22022	3249	3.489	1.467	0.000	1.165	0.761	11011	1.06	38773.7539	44044
3249	3.523	1.511	0.000	1.106	0.744	11011	1.99	38430.5736	44044	3249	3.526	1.508	0.000	1.143	0.788	11011	1.02	38773.7983	44044
3249	3.498	1.487	0.000	1.113	0.772	11011	1.09	38430.6806	44044	3249	3.502	1.503	0.000	1.148	0.807	11011	1.03	38773.8339	44044
3249	3.483	1.475	0.000	1.107	0.812	11011	1.02	38430.7583	44044	3249	3.542	1.476	0.000	1.135	0.779	11011	1.10	38774.7356	44044
3249	3.516	1.497	0.000	1.100	0.772	11011	1.23	38431.6447	44044	3249	3.506	1.446	0.000	1.163	0.768	11011	1.01	38774.8053	44044
3249	3.503	1.480	0.000	1.141	0.791	11011	1.02	38431.7187	44044	3249	3.498	1.466	1.777	0.000	0.000	11100	1.54	38786.8285	44040
3249	3.519	1.508	0.000	1.132	0.801	11011	1.30	38431.8516	44044	3249	3.531	1.482	1.793	0.000	0.000	11100	1.06	38786.7097	44040
3249	3.520	1.496	0.000	1.123	0.751	11011	1.81	38432.5778	44044	3249	3.538	1.482	1.785	0.000	0.000	11100	1.06	38786.8160	44040
3249	3.502	1.473	0.000	1.103	0.782	11011	1.02	38432.7229	44044	3249	3.494	1.501	1.762	0.000	0.000	11100	2.43	38787.5785	44040
3249	3.498	1.494	0.000	1.130	0.779	11011	1.09	38432.7939	44044	3249	3.529	1.487	1.800	0.000	0.000	11100	1.09	38787.7049	44040
3249	3.474	1.490	0.000	1.116	0.823	11011	1.36	38432.8569	44044	3249	3.543	1.473	1.777	0.000	0.000	11100	1.02	38787.7819	44040
3249	3.524	1.498	0.000	1.115	0.770	11011	2.04	38433.5625	44044	3249	3.506	1.482	1.774	0.000	0.000	11100	1.12	38787.8361	44040
3249	3.515	1.491	0.000	1.118	0.794	11011	1.02	38433.7514	44044	3249	3.589	1.508	0.000	1.147	0.818	11011	1.01	38790.7543	44044
3249	3.471	1.495	0.000	1.121	0.806	11011	1.15	38433.8139	44044	3249	3.449	1.487	0.000	1.107	0.772	11011	1.02	38791.7397	44044
3249	2.891	1.508	0.000	1.125	0.752	11011	1.25	38434.6306	44044	3249	3.467	1.484	0.000	1.094	0.791	11011	1.48	38791.8881	44044
3249	3.511	1.496	0.000	1.114	0.772	11011	1.04	38434.6993	44044	3249	3.472	1.503	0.000	1.102	0.769	11011	1.15	38793.6682	44044
3249	3.487	1.485	0.000	1.142	0.787	11011	1.14	38434.8083	44044	3249	3.490	1.488	0.000	1.129	0.765	11011	1.02	38794.7411	22022
3249	3.511	1.490	0.000	1.131	0.730	11011	1.02	38437.7021	22022	3249	3.525	1.492	0.000	1.131	0.799	11011	1.13	38794.8203	22022
3249	3.489	1.511	0.000	1.110	0.777	11011	1.10	38437.7816	22022	3249	3.495	1.474	1.790	0.000	0.000	11100	1.13	38798.6812	44040
3249	3.454	1.452	0.000	1.110	0.788	11011	1.41	38437.8493	22022	3249	3.499	1.497	1.773	0.000	0.000	11100	1.95	38799.5653	44040
3249	3.545	1.470	0.000	1.126	0.762	11011	1.01	38438.7257	44044	3249	3.516	1.487	1.778	0.000	0.000	11100	1.05	38799.6931	44040
3249	3.494	1.477	0.000	1.115	0.754	11011	3.05	38438.9236	44044	3249	3.546	1.480	1.815	0.000	0.000	11100	1.21	38812.7913	44040
3249	3.437	1.446	0.000	1.110	0.761	11011	1.12	38439.7903	44044	3249	3.528	1.460	1.798	0.000	0.000	11100	1.48	38812.8311	44040
3249	3.510	1.492	0.000	1.096	0.784	11011	1.03	38440.7403	44044	3249	3.511	1.481	0.000	1.119	0.765	11011	1.60	38814.5472	22022
3249	3.516	1.471	0.000	1.132	0.750	11011	3.16	38440.9201	44044	3249	3.522	1.494	0.000	1.103	0.791	11011	1.01	38814.6940	22022
3249	3.491	1.491	0.000	1.108	0.768	11011	1.03	38441.7410	44044	3249	3.522	1.484	0.000	1.123	0.794	11011	1.68	38814.8432	22022
3249	3.528	1.486	0.000	1.131	0.777	11011	2.49	38441.9021	44044	3249	3.526	1.501	0.000	1.081	0.736	11011	1.45	38815.5586	44044
3249	3.492	1.478	0.000	1.102	0.726	11011	1.39	38442.5875	44044	3249	3.527	1.504	0.000	1.110	0.793	11011	1.01	38815.6925	44044
3249	3.546	1.485	0.000	1.110	0.769	11011	1.02	38442.7236	44044	3249	3.518	1.488	0.000	1.160	0.792	11011	3.10	38815.8925	44044
3249	3.538	1.495	0.000	1.142	0.769	11011	2.94	38442.9104	44044	3249	3.663	1.498	0.000	1.136	0.719	11011	1.40	38816.5626	22022
3249	3.556	1.496																	

TONANTZINTLA										TONANTZINTLA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
3279	5.551	0.790	0.000	0.626	0.455	11011	1.29	38819.6737	22022	3454	4.240	-0.232	0.000	-0.095	-0.185	11011	1.17	38096.7542	22022
3279	5.517	0.760	0.000	0.639	0.442	11011	1.29	38820.6793	22022	3454	4.244	-0.213	0.000	-0.051	-0.167	11011	1.31	38099.7735	44044
3279	5.605	0.757	0.000	0.643	0.466	11011	1.29	38822.6856	44044	3454	4.230	-0.236	0.000	-0.063	-0.184	11011	3.61	38099.8743	44044
3282	4.891	1.444	0.000	1.033	0.737	11011	1.62	38113.6076	44044	3454	4.311	-0.218	0.000	-0.075	-0.183	11011	1.10	38103.7711	44044
3282	4.811	1.452	0.000	1.012	0.740	11011	1.65	38114.6396	44044	3454	4.298	-0.128	0.000	-0.101	-0.161	11011	1.76	38103.8083	44044
3282	4.736	1.439	0.000	0.965	0.752	11011	1.68	38124.6215	44044	3454	4.308	-0.185	0.000	-0.067	-0.244	11011	1.10	38107.5931	44044
3294	4.961	-0.126	0.000	-0.015	-0.124	11011	2.58	38113.6132	44044	3454	4.261	-0.210	0.000	-0.085	-0.126	11011	3.69	38107.8535	44044
3294	4.644	-0.141	0.000	-0.040	-0.123	11011	2.67	38114.6458	44044	3454	4.355	-0.172	0.000	-0.090	-0.189	11011	1.21	38112.7194	44044
3294	4.632	-0.195	0.000	-0.078	-0.127	11011	2.73	38124.6278	44044	3454	4.263	-0.225	0.000	-0.085	-0.144	11011	3.21	38121.8326	44044
3319	5.558	1.594	0.000	1.638	1.413	11011	1.06	38773.7589	44044	3454	4.281	-0.214	0.000	-0.085	-0.187	11011	1.04	38114.6236	44044
3319	5.599	1.566	0.000	1.639	1.446	11011	1.06	38774.7988	44044	3454	4.272	-0.213	0.000	-0.091	-0.197	11011	1.06	38121.5736	44044
3319	5.520	1.658	0.000	1.624	1.394	11011	1.01	38790.7959	44044	3454	4.222	-0.185	0.000	-0.097	-0.130	11011	2.64	38121.7958	44044
3319	5.419	1.629	0.000	1.596	1.377	11011	1.02	38791.7307	44044	3454	4.290	-0.177	0.000	-0.114	-0.169	11011	1.04	38124.5965	44044
3319	5.754	1.611	1.843	0.000	0.000	11000	1.22	38812.8036	44044	3454	4.258	-0.162	0.000	-0.016	-0.148	11011	3.10	38124.7975	44044
3319	5.457	1.593	1.093	0.000	0.000	11000	1.02	38844.5889	44044	3454	4.283	-0.189	0.000	-0.042	-0.208	11011	2.67	38124.9257	44044
3319	5.498	1.588	1.945	0.000	0.000	11000	1.04	38845.5693	44044	3454	4.292	-0.186	0.000	-0.054	-0.213	11011	1.17	38342.9257	44044
3391	5.629	0.595	0.000	0.540	0.311	11011	1.45	38819.7196	22022	3454	4.284	-0.188	0.000	-0.068	-0.151	11011	3.96	38351.7667	44044
3391	5.637	0.651	0.000	0.496	0.356	11011	1.62	38823.7829	44044	3454	4.238	-0.187	0.000	-0.060	-0.180	11011	1.04	38351.9646	44044
3391	5.661	0.612	0.000	0.522	0.352	11011	1.79	38824.8156	44044	3454	4.273	-0.182	-0.770	0.000	0.000	11000	2.04	38733.7646	44044
3391	5.628	0.594	0.000	0.532	0.327	11011	1.65	38825.7862	44044	3454	4.276	-0.218	-0.771	0.000	0.000	11000	1.04	38733.9160	44044
3407	5.088	1.348	0.000	0.993	0.708	11011	2.75	38113.6201	44044	3454	4.311	-0.196	-0.751	0.000	0.000	11000	2.70	38766.6212	44044
3407	4.830	1.331	0.000	0.959	0.708	11011	2.83	38114.6514	44044	3454	4.314	-0.200	-0.738	0.000	0.000	11000	1.16	38766.7660	44044
3407	4.777	1.270	0.000	0.943	0.623	11011	2.88	38124.6319	44044	3454	4.260	-0.183	-0.763	0.000	0.000	11000	1.05	38766.8687	44044
3426	4.216	0.128	0.000	0.136	0.167	11011	2.11	38113.6250	44044	3454	4.251	-0.216	-0.755	0.000	0.000	11000	1.96	38786.6236	44044
3426	4.060	0.100	0.000	0.142	0.148	11011	2.18	38114.6569	44044	3454	4.322	-0.206	-0.738	0.000	0.000	11000	1.18	38786.7696	44044
3426	4.014	0.056	0.000	0.175	0.158	11011	2.22	38124.6375	44044	3454	4.324	-0.196	-0.731	0.000	0.000	11000	1.06	38786.8194	44044
3427	6.403	1.020	0.000	0.664	0.455	11011	1.00	38407.8104	44044	3454	4.300	-0.208	-0.751	0.000	0.000	11000	3.29	38787.5826	44044
3427	6.364	0.959	0.000	0.676	0.475	11011	1.00	38409.8306	44044	3454	4.298	-0.195	-0.741	0.000	0.000	11000	1.16	38787.7083	44044
3427	6.393	0.995	0.000	0.708	0.465	11011	1.00	38413.8028	44044	3454	4.307	-0.177	-0.756	0.000	0.000	11000	1.04	38787.7861	44044
3427	6.385	1.010	0.000	0.703	0.487	11011	1.09	38413.8077	44044	3454	4.275	-0.180	-0.751	0.000	0.000	11000	1.10	38787.8403	44044
3427	6.347	0.989	0.000	0.702	0.480	11011	1.79	38413.9215	44044	3454	4.344	-0.179	-0.763	0.000	0.000	11000	2.29	38798.5771	44044
3427	6.401	1.007	0.000	0.725	0.483	11011	1.76	38413.9701	44044	3454	4.288	-0.225	-0.736	0.000	0.000	11000	1.14	38798.6854	44044
3427	6.374	0.996	0.000	0.704	0.482	11011	1.01	38437.7639	22022	3454	4.310	-0.202	-0.748	0.000	0.000	11000	1.11	38798.8125	44044
3427	6.384	0.978	0.000	0.724	0.502	11011	1.23	38437.8444	22022	3454	4.284	-0.198	-0.760	0.000	0.000	11000	2.33	38799.5694	44044
3427	6.418	0.985	0.000	0.725	0.485	11011	1.07	38438.7972	44044	3454	4.276	-0.192	-0.759	0.000	0.000	11000	1.10	38799.6965	44044
3427	6.394	0.959	0.000	0.728	0.500	11011	1.30	38438.8556	44044	3454	4.309	-0.181	-0.727	0.000	0.000	11000	1.17	38812.7941	44044
3427	6.378	0.959	0.000	0.715	0.482	11011	1.92	38438.9111	44044	3454	4.289	-0.181	-0.735	0.000	0.000	11000	1.33	38812.8252	44044
3427	6.389	0.981	0.000	0.698	0.476	11011	1.03	38440.7729	44044	3454	4.140	-0.228	-0.790	0.000	0.000	11000	1.17	38812.8512	44044
3427	6.398	0.964	0.000	0.714	0.481	11011	1.13	38440.8146	44044	3454	4.338	-0.147	-0.699	0.000	0.000	11000	1.93	38844.7901	44044
3427	6.399	0.958	0.000	0.701	0.501	11011	1.46	38440.8701	44044	3454	4.239	-0.176	-0.767	0.000	0.000	11000	1.08	38845.5804	44044
3427	6.401	1.012	0.000	0.706	0.460	11011	2.04	38440.9318	44044	3454	4.454	-0.222	-0.715	0.000	0.000	11000	1.90	38845.7853	44044
3427	6.373	0.981	0.000	0.697	0.484	11011	1.04	38441.7757	44044	3454	4.251	-0.198	-0.729	0.000	0.000	11000	1.10	38847.6042	44044
3427	6.383	0.973	0.000	0.739	0.463	11011	1.28	38441.8431	44044	3454	4.284	-0.192	-0.742	0.000	0.000	11000	1.03	38873.7049	44044
3427	6.382	0.989	0.000	0.692	0.501	11011	1.70	38441.8889	44044	3464	6.100	0.933	0.000	0.675	0.480	11011	1.85	38819.7376	22022
3427	6.417	0.986	0.000	0.709	0.465	11011	1.00	38442.7326	44044	3464	6.139	0.925	0.000	0.711	0.496	11011	1.22	38823.7883	44044
3427	6.433	0.991	0.000	0.745	0.457	11011	1.12	38442.8049	44044	3464	6.145	0.929	0.000	0.713	0.508	11011	1.43	38824.8203	44044
3427	6.428	0.968	0.000	0.736	0.484	11011	1.46	38442.8653	44044	3464	6.130	0.912	0.000	0.702	0.493	11011	1.26	38825.7904	44044
3427	6.370	1.000	0.000	0.728	0.469	11011	1.97	38442.9028	44044	3468	3.799	-0.159	0.000	-0.060	-0.167	11011	1.64	38113.6472	44044
3427	6.410	0.978	0.000	0.734	0.449	11011	1.00	38443.7264	44044	3468	3.679	-0.190	0.000	-0.056	-0.162	11011	1.72	38114.6575	44044
3427	6.408	0.981	0.000	0.725	0.487	11011	1.17	38443.8153	44044	3468	3.591	-0.258	0.000	-0.115	-0.157	11011	1.77	38124.6569	44044
3427	6.425	0.965	0.000	0.737	0.464	11011	1.44	38443.8604	44044	3477	4.143	0.896	0.000	0.647	0.513	11011	2.12	38113.6528	44044
3427	6.345	0.978	0.000	0.723	0.490	11011	2.26	38443.9132	44044	3477	4.082	0.885	0.000	0.643	0.486	11011	2.10	38121.6243	44044
3427	6.350	1.002	0.000	0.701	0.450	11011	1.00	38444.7514	44044	3477	3.934	0.841	0.000	0.605	0.495	11011	3.33	38124.6611	44044
3427	6.372	0.984	0.000	0.711	0.436	11011	1.03	38445.6778	44044	3485	1.893	0.032	0.000	0.022	0.065	11011	3.66	38449.7458	44044
3427	6.328	0.972	0.000	0.713	0.466	11011	1.00	38445.7243	44044	3485	1.949	0.047	0.000	0.087	0.006	11011	3.88	38450.7604	44044
3427	6.327	0.985	0.000	0.719	0.473	11011	1.08	38445.7819	44044	3485	1.921	0.029	0.000	0.042	0.036	11011	3.50	38455.6867	44044
3427	6.341	0.965	0.000	0.726	0.487	11011	1.55	38445.8660	44044	3487	4.030	0.015	0.000	0.075	0.113	11011	2.39	38113.6576	44044
3427	6.343	0.995	0.000	0.692</															

TABLE 6 TONANTZINTLA BVRI AND UBV OBSERVATIONS

TONANTZINTLA BVRI - UBV											TONANTZINTLA BVRI - UBV										
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.		
3654	5.053	0.243	0.000	0.284	0.208	11011	2.25	38107.6625	44044	4023	3.781	0.043	0.000	-0.013	0.026	11011	2.06	38121.6799	44044		
3654	5.015	0.245	0.000	0.277	0.211	11011	2.28	38121.6472	44044	4023	3.852	0.060	0.000	0.043	0.008	11011	2.11	38455.7264	44044		
3654	4.998	0.229	0.000	0.308	0.245	11011	2.59	38124.6861	44044	4080	4.747	1.094	0.000	0.832	0.542	11011	2.07	38103.7549	44044		
3682	4.926	1.137	0.000	0.769	0.587	11011	1.85	38107.6694	44044	4080	4.816	1.146	0.000	0.754	0.598	11011	2.04	38107.6979	44044		
3682	4.986	1.110	0.000	0.822	0.545	11011	1.88	38121.6521	44044	4080	4.800	1.129	0.000	0.756	0.612	11011	2.09	38113.7340	44044		
3682	4.893	1.110	0.000	0.774	0.594	11011	2.19	38124.6986	44044	4080	4.763	1.117	0.000	0.849	0.591	11011	2.02	38422.8278	44044		
3684	4.687	0.448	0.000	0.425	0.270	11011	1.84	38113.6826	44044	4080	4.824	1.123	0.000	0.810	0.551	11011	2.08	38455.7306	44044		
3684	4.657	0.465	0.000	0.347	0.282	11011	1.83	38121.6562	44044	4104	4.189	1.409	0.000	1.114	0.761	11011	1.59	38103.7625	44044		
3684	4.630	0.470	0.000	0.361	0.292	11011	2.16	38124.7028	44044	4104	4.250	1.448	0.000	1.067	0.795	11011	1.55	38107.7104	44044		
3718	4.711	1.664	0.000	1.405	1.079	11011	1.47	38431.8271	44044	4104	4.199	1.437	0.000	1.081	0.811	11011	1.61	38113.7396	44044		
3718	4.703	1.671	0.000	1.387	1.114	11011	1.44	38449.7646	44044	4104	4.212	1.452	0.000	1.121	0.812	11011	1.55	38432.8319	44044		
3718	4.717	1.675	0.000	1.409	1.109	11011	1.47	38450.7757	44044	4104	4.253	1.464	0.000	1.102	0.777	11011	1.59	38455.7347	44044		
3718	4.691	1.668	0.000	1.374	1.071	11011	1.62	38452.8035	44044	4141	5.192	0.318	0.000	0.350	0.156	11011	1.28	38819.7550	22022		
3718	4.716	1.661	0.000	1.361	1.100	11011	1.42	38455.7042	44044	4141	5.135	0.356	0.000	0.308	0.156	11011	1.30	38823.8008	44044		
3733	4.704	0.910	0.000	0.694	0.469	11011	1.56	38431.8312	44044	4141	5.181	0.330	0.000	0.326	0.204	11011	1.60	38824.8911	44044		
3733	4.699	0.917	0.000	0.693	0.460	11011	1.52	38449.7708	44044	4141	5.132	0.304	0.000	0.326	0.174	11011	1.37	38825.8321	44044		
3733	4.740	0.965	0.000	0.717	0.493	11011	1.57	38450.7826	44044	4153	5.416	2.957	0.000	2.101	1.371	11011	2.01	38773.8565	44044		
3733	4.688	0.911	0.000	0.690	0.474	11011	1.74	38452.8083	44044	4153	5.398	2.869	0.000	2.165	1.352	11011	1.97	38774.8612	44044		
3733	4.723	0.903	0.000	0.704	0.484	11011	1.49	38455.7104	44044	4153	5.272	2.831	0.000	2.103	1.338	11011	1.90	38790.8560	44044		
3765	4.526	1.442	0.000	1.023	0.756	11011	1.76	38113.6889	44044	4153	5.401	2.845	0.000	2.081	1.416	11011	1.94	38842.7365	44044		
3765	4.515	1.456	0.000	1.009	0.738	11011	1.75	38121.6604	44044	4167	3.699	0.288	0.000	0.263	0.112	11011	2.64	38103.7687	44044		
3765	4.499	1.441	0.000	1.004	0.777	11011	2.03	38124.7076	44044	4167	3.826	0.318	0.000	0.219	0.185	11011	2.55	38107.7167	44044		
3786	3.635	0.365	0.000	0.331	0.226	11011	2.01	38113.6937	44044	4167	3.856	0.262	0.000	0.257	0.198	11011	2.65	38113.7444	44044		
3786	3.549	0.363	0.000	0.276	0.237	11011	1.98	38121.6646	44044	4167	3.855	0.304	0.000	0.256	0.152	11011	2.64	38455.7403	44044		
3786	3.569	0.365	0.000	0.296	0.243	11011	2.38	38124.7146	44044	4216	2.540	0.884	0.000	0.672	0.423	11011	2.78	38103.7771	44044		
3815	5.336	0.794	0.000	0.591	0.377	11011	1.05	38388.9132	44044	4216	2.694	0.898	0.000	0.644	0.509	11011	2.69	38107.7222	44044		
3815	5.344	0.801	0.000	0.575	0.338	11011	1.57	38389.7590	44044	4216	2.719	0.848	0.000	0.709	0.528	11011	2.78	38113.7493	44044		
3815	5.380	0.773	0.000	0.638	0.359	11011	1.05	38389.9187	44044	4216	2.723	0.915	0.000	0.707	0.482	11011	2.78	38455.7458	44044		
3815	5.381	0.791	0.000	0.624	0.363	11011	1.05	38390.9215	44044	4273	4.584	1.027	0.000	0.755	0.526	11011	1.86	38103.7889	44044		
3815	5.344	0.809	0.000	0.554	0.385	11011	1.14	38407.7861	44044	4273	4.595	1.037	0.000	0.706	0.534	11011	1.78	38107.7465	44044		
3815	5.374	0.758	0.000	0.666	0.325	11011	1.05	38409.8528	44044	4273	4.584	1.015	0.000	0.749	0.545	11011	1.83	38113.7542	44044		
3815	5.374	0.797	0.000	0.623	0.384	11011	1.05	38413.8660	44044	4273	4.616	1.019	0.000	0.781	0.511	11011	1.84	38455.7507	44044		
3815	5.386	0.783	0.000	0.616	0.380	11011	1.50	38413.9875	44044	4278	5.998	1.595	1.895	0.000	0.000	11100	1.05	38812.8104	44000		
3815	5.410	0.794	0.000	0.623	0.391	11011	1.47	38437.9046	22022	4278	6.057	1.594	0.000	1.499	1.293	11011	1.07	38814.8383	22022		
3815	5.333	0.735	0.000	0.632	0.392	11011	1.37	38437.9046	22022	4278	6.023	1.615	0.000	1.480	1.297	11011	1.12	38815.8654	44044		
3815	5.373	0.773	0.000	0.588	0.385	11011	1.05	38438.7862	44044	4278	5.938	1.546	0.000	1.475	1.259	11011	1.08	38816.8400	22022		
3815	5.397	0.784	0.000	0.629	0.380	11011	1.78	38438.9451	44044	4278	6.135	1.603	0.000	1.510	1.296	11011	1.10	38817.8144	44044		
3815	5.367	0.745	0.000	0.614	0.378	11011	1.06	38439.7993	44044	4278	6.114	1.571	1.931	0.000	0.000	11100	1.18	38844.8097	44000		
3815	5.416	0.746	0.000	0.630	0.364	11011	1.05	38440.7639	44044	4278	6.099	1.594	1.908	0.000	0.000	11100	1.18	38845.8052	44000		
3815	5.413	0.771	0.000	0.613	0.379	11011	1.65	38440.9292	44044	4293	4.354	0.118	0.000	0.128	0.056	11011	2.17	38103.7951	44044		
3815	5.388	0.790	0.000	0.597	0.361	11011	1.05	38441.7576	44044	4293	4.398	0.109	0.000	0.112	0.096	11011	2.07	38107.7535	44044		
3815	5.420	0.796	0.000	0.627	0.397	11011	1.50	38441.9104	44044	4293	4.366	0.098	0.000	0.159	0.074	11011	2.13	38113.7583	44044		
3815	5.356	0.751	0.000	0.609	0.386	11011	1.60	38442.9194	44044	4293	4.427	0.124	0.000	0.121	0.060	11011	2.17	38455.7562	44044		
3815	5.407	0.750	0.000	0.625	0.373	11011	1.05	38443.7674	44044	4418	4.970	1.019	0.000	0.725	0.484	11011	1.09	38819.7642	22022		
3815	5.349	0.790	0.000	0.608	0.348	11011	1.05	38444.7681	44044	4418	5.063	0.915	0.000	0.825	0.517	11011	1.04	38822.8097	44044		
3815	5.327	0.790	0.000	0.622	0.375	11011	1.05	38445.7681	44044	4418	4.974	0.966	0.000	0.730	0.514	11011	1.17	38824.8737	44044		
3815	5.339	0.738	0.000	0.622	0.375	11011	1.05	38445.7681	44044	4418	4.901	0.991	0.000	0.700	0.503	11011	1.08	38825.8364	44044		
3815	5.367	0.766	0.000	0.621	0.376	11011	1.05	38446.7611	44044	4450	3.598	0.958	0.000	0.716	0.477	11011	1.58	38095.7854	44044		
3815	5.377	0.784	0.000	0.608	0.361	11011	1.07	38447.7118	44044	4450	3.549	1.002	0.000	0.652	0.488	11011	1.58	38107.7653	44044		
3815	5.361	0.816	0.000	0.610	0.394	11011	1.18	38450.8285	44044	4450	3.602	0.924	0.000	0.721	0.465	11011	1.58	38112.7535	44044		
3815	5.342	0.770	0.000	0.600	0.376	11011	1.17	38451.8243	44044	4450	3.572	0.954	0.000	0.719	0.456	11011	1.67	38455.7625	44044		
3815	5.393	0.782	0.000	0.617	0.366	11011	1.05	38452.7604	44044	4456	5.952	-0.145	0.000	-0.068	-0.183	11011	1.01	38114.7660	44044		
3836	4.436	0.151	0.000	0.207	0.105	11011	2.76	38113.6986	44044	4456	5.938	-0.134	0.000	-0.066	-0.203	11011	1.07	38114.8056	44044		
3836	4.276	0.165	0.000	0.069	0.125	11011	2.73	38121.6708	44044	4456	5.925	-0.134	0.000	-0.059	-0.209	11011	1.01	38115.7187	22022		
3836	4.318	0.140	0.000	0.163	0.077	11011	3.40	38124.7194	44044	4456	5.877	-0.165	0.000	-0.058	-0.139	11011	1.14	38115.8264	22022		
3871	4.755	0.506	0.000	0.482	0.272	11011	1.50	38121.6847	44044	4456	5.937	-0.146	0.000	-0.087	-0.193	11011	1.13	38116.8264	44044		
3871	4.775	0.524	0.000	0.474	0.321	11011	1.50	38431.8361	44044	4456	5.908	-0.173	0.000	-0.069	-0.183	11011	1.01	38117.7069	44044		
3871	4.741	0.																			

TABLE 6 TONANTZINTLA BVRI AND UBV OBSERVATIONS

TONANTZINTLA BVRI - UBV										TONANTZINTLA BVRI - UBV									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
4456	5.973	-0.147	-0.652	0.000	0.000	11100	1.12	38180.6437	440400	4456	5.910	-0.180	0.000	-0.069	-0.157	11011	1.44	38819.9494	22022
4456	5.867	-0.167	-0.587	0.000	0.000	11100	2.17	38180.7493	440400	4456	5.871	-0.167	0.000	-0.063	-0.197	11011	1.36	38820.6883	22022
4456	5.948	-0.159	0.000	-0.078	-0.141	11011	1.50	38197.6597	440404	4456	5.941	-0.144	0.000	-0.083	-0.177	11011	1.25	38822.6994	440404
4456	5.957	-0.162	0.000	-0.067	-0.193	11011	1.86	38197.6875	440404	4456	5.936	-0.143	0.000	-0.059	-0.161	11011	1.00	38822.8203	440404
4456	5.907	-0.174	0.000	-0.096	-0.147	11011	1.30	38354.9722	440404	4456	5.947	-0.143	0.000	-0.075	-0.144	11011	2.17	38823.9911	440404
4456	5.925	-0.188	0.000	-0.034	-0.143	11011	1.32	38355.9667	440404	4456	5.924	-0.162	0.000	-0.170	-0.133	11011	1.10	38823.8050	440404
4456	5.866	-0.161	0.000	-0.057	-0.188	11011	1.48	38384.8674	22022	4456	5.974	-0.140	0.000	-0.061	-0.170	11011	1.00	38823.9911	440404
4456	5.881	-0.151	0.000	-0.074	-0.169	11011	1.09	38388.9285	440404	4456	5.981	-0.151	0.000	-0.041	-0.130	11011	1.48	38823.9439	440404
4456	5.905	-0.136	0.000	-0.073	-0.115	11010	1.07	38389.9299	440404	4456	5.982	-0.112	0.000	-0.065	-0.164	11011	1.42	38824.6696	440404
4456	5.934	-0.149	0.000	-0.052	-0.179	11011	1.02	38390.9542	440404	4456	5.927	-0.178	0.000	-0.093	-0.218	11011	1.00	38824.8076	440404
4456	5.947	-0.161	0.000	-0.074	-0.168	11011	1.00	38413.9271	440404	4456	5.966	-0.166	0.000	-0.038	-0.185	11011	1.37	38825.6793	440404
4456	5.930	-0.152	0.000	-0.038	-0.129	11011	1.09	38413.9965	440404	4456	5.922	-0.171	0.000	-0.065	-0.147	11011	1.00	38825.7931	440404
4456	5.950	-0.135	0.000	-0.064	-0.192	11011	1.33	38417.7951	22022	4456	5.961	-0.119	0.000	-0.067	-0.198	11011	1.69	38827.6362	440404
4456	5.899	-0.143	0.000	-0.074	-0.195	11011	1.57	38431.7299	440404	4456	5.956	-0.199	0.000	-0.043	-0.192	11011	1.01	38827.7727	440404
4456	5.948	-0.163	0.000	-0.035	-0.200	11011	1.51	38431.8410	440404	4456	5.913	-0.154	0.000	-0.076	-0.167	11011	1.23	38827.8981	440404
4456	5.933	-0.182	0.000	-0.063	-0.181	11011	1.01	38432.7326	440404	4456	5.903	-0.183	0.000	-0.067	-0.160	11011	1.99	38827.9689	440404
4456	5.939	-0.159	0.000	-0.053	-0.191	11011	1.07	38432.8132	440404	4456	5.999	-0.134	0.000	-0.063	-0.190	11011	1.00	38835.8376	440404
4456	5.938	-0.163	0.000	-0.053	-0.176	11011	1.02	38432.8465	440404	4456	5.932	-0.158	0.000	-0.068	-0.176	11011	1.00	38835.6231	440404
4456	5.946	-0.151	0.000	-0.039	-0.148	11011	1.00	38437.8655	22022	4456	5.894	-0.132	0.000	-0.015	-0.218	11011	1.53	38836.6275	440404
4456	5.940	-0.142	0.000	-0.053	-0.157	11011	1.00	38438.8604	440404	4456	6.052	-0.123	0.000	-0.038	-0.145	11011	1.00	38836.7724	440404
4456	5.968	-0.174	0.000	-0.047	-0.126	11011	1.26	38438.8690	440404	4456	5.994	-0.185	0.000	-0.043	-0.145	11011	1.19	38836.8654	440404
4456	5.934	-0.180	0.000	-0.027	-0.153	11011	1.02	38439.8882	440404	4456	5.837	-0.210	0.000	-0.088	-0.163	11011	1.90	38836.9397	440404
4456	5.947	-0.166	0.000	-0.058	-0.166	11011	1.00	38440.8569	440404	4456	5.958	-0.148	0.000	-0.046	-0.177	11011	1.00	38837.7171	440404
4456	5.952	-0.151	0.000	-0.085	-0.153	11011	1.14	38440.9368	440404	4456	5.944	-0.180	0.000	-0.050	-0.156	11011	1.18	38837.8607	440404
4456	5.944	-0.145	0.000	-0.040	-0.152	11011	1.09	38441.9201	440404	4456	5.953	-0.161	0.000	-0.037	-0.176	11011	1.00	38838.7653	440404
4456	5.934	-0.145	0.000	-0.077	-0.149	11011	1.00	38442.8472	440404	4456	5.912	-0.123	0.000	-0.023	-0.167	11011	1.00	38839.7522	440404
4456	5.915	-0.172	0.000	-0.041	-0.164	11011	1.13	38442.9285	440404	4456	5.942	-0.147	0.000	-0.095	-0.150	11011	1.00	38841.7537	440404
4456	5.897	-0.170	0.000	-0.056	-0.158	11011	1.60	38442.9979	440404	4456	5.904	-0.155	0.000	-0.095	-0.154	11011	2.30	38841.9439	440404
4456	5.940	-0.129	0.000	-0.091	-0.184	11011	1.42	38443.7125	440404	4456	6.056	-0.164	0.000	-0.027	0.000	11100	1.01	38844.7724	44000
4456	5.946	-0.149	0.000	-0.057	-0.166	11011	1.00	38443.8507	440404	4456	6.049	-0.143	-0.660	0.000	0.000	11100	1.22	38844.8484	44000
4456	5.909	-0.185	0.000	-0.057	-0.145	11011	1.17	38443.9354	440404	4456	6.086	-0.129	-0.632	0.000	0.000	11100	1.68	38844.9035	44000
4456	5.883	-0.179	0.000	-0.069	-0.151	11011	1.66	38443.9986	440404	4456	6.067	-0.132	-0.646	0.000	0.000	11100	1.01	38845.7658	44000
4456	5.928	-0.160	0.000	-0.028	-0.110	11011	1.00	38444.8833	440404	4456	6.024	-0.158	-0.655	0.000	0.000	11100	1.14	38845.8270	44000
4456	5.874	-0.183	0.000	-0.028	-0.174	11011	1.00	38445.8319	440404	4456	6.045	-0.247	-0.591	0.000	0.000	11100	7.57	38845.9402	44000
4456	5.906	-0.163	0.000	-0.048	-0.129	11011	1.01	38446.8542	440404	4456	5.912	-0.184	-0.645	0.000	0.000	11100	1.06	38873.6104	44000
4456	5.898	-0.151	0.000	-0.064	-0.178	11011	1.28	38447.7208	440404	4456	5.993	-0.174	-0.677	0.000	0.000	11100	1.03	38873.7104	44000
4456	5.897	-0.144	0.000	-0.055	-0.143	11011	1.00	38447.8403	440404	4456	5.957	-0.152	-0.607	0.000	0.000	11100	1.49	38873.8083	44000
4456	5.923	-0.135	0.000	-0.070	-0.193	11011	2.20	38449.6437	440404	4456	5.950	-0.160	-0.640	0.000	0.000	11100	1.00	38874.6771	22000
4456	5.967	-0.176	0.000	-0.040	-0.152	11011	1.00	38449.8347	440404	4494	4.746	-0.062	0.000	0.007	-0.052	11011	1.68	38099.7910	44044
4456	5.941	-0.170	0.000	-0.048	-0.205	11011	1.41	38450.6944	440404	4494	4.725	-0.055	0.000	0.000	-0.044	11011	1.68	38107.7715	44044
4456	5.910	-0.151	0.000	-0.051	-0.179	11011	1.00	38450.8104	440404	4494	4.705	-0.066	0.000	-0.004	-0.046	11011	1.68	38112.7604	44044
4456	5.930	-0.164	0.000	-0.057	-0.147	11011	1.13	38450.9062	440404	4494	4.755	-0.114	0.000	0.050	-0.071	11011	1.79	38455.7674	44044
4456	5.936	-0.146	0.000	-0.053	-0.153	11011	1.33	38450.9458	440404	4546	4.518	1.295	0.000	0.958	0.667	11011	2.27	38099.7965	44044
4456	6.094	-0.126	0.000	-0.038	-0.113	11011	3.11	38451.6122	440404	4546	4.670	1.317	0.000	0.900	0.707	11011	2.27	38107.7785	44044
4456	6.095	-0.143	0.000	-0.028	-0.110	11011	1.00	38451.7056	440404	4546	4.698	1.268	0.000	0.952	0.669	11011	2.27	38112.7667	44044
4456	5.968	-0.154	0.000	-0.052	-0.170	11011	1.01	38451.8014	440404	4546	4.629	1.305	0.000	0.952	0.653	11011	2.37	38453.8028	44044
4456	5.934	-0.148	0.000	-0.057	-0.126	11011	1.17	38451.9153	440404	4546	4.672	1.323	0.000	0.943	0.645	11011	2.43	38455.7757	44044
4456	6.056	-0.081	0.000	-0.039	-0.204	11011	3.04	38452.6118	440404	4550	6.428	0.785	0.000	0.653	0.427	11011	1.06	38114.7569	44044
4456	5.944	-0.135	0.000	-0.067	-0.194	11011	1.11	38452.7444	440404	4550	6.441	0.771	0.000	0.652	0.437	11011	1.10	38114.8111	44044
4456	5.918	-0.155	0.000	-0.051	-0.184	11011	1.00	38452.8292	440404	4550	6.440	0.789	0.000	0.674	0.417	11011	1.09	38115.7118	22022
4456	5.890	-0.174	0.000	-0.045	-0.178	11011	1.27	38452.9306	440404	4550	6.328	0.768	0.000	0.688	0.437	11011	1.16	38115.8333	22022
4456	6.054	-0.102	0.000	-0.044	-0.142	11011	2.00	38453.6417	440404	4550	6.453	0.733	0.000	0.644	0.408	11011	1.23	38116.6500	44043
4456	5.900	-0.190	0.000	-0.037	-0.167	11011	1.01	38453.7910	440404	4550	6.383	0.777	0.000	0.636	0.408	11011	1.10	38118.7000	44043
4456	5.919	-0.158	0.000	-0.069	-0.181	11011	2.71	38455.6111	440404	4550	6.505	0.735	0.000	0.691	0.469	11011	1.08	38118.7833	44043
4456	5.945	-0.169	0.000	-0.088	-0.153	11011	1.00	38455.8069	440404	4550	6.476	0.750	0.000	0.671	0.464	11011	1.30	38118.8597	44043
4456	5.997	-0.175	0.000	-0.017	-0.166	11011	1.14	38455.9844	440404	4550	6.432	0.764	0.000	0.658	0.449	11011	1.84	38119.9215	44043
4456	5.981	-0.128	0.000	-0.081	-0.220	11011	1.10	38455.6028	440404	4550	6.558	0.762	0.000	0.691	0.408	11011			

TABLE 6 TONANTZINTLA BVRI AND UVB OBSERVATIONS

TONANTZINTLA										TONANTZINTLA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
4550	6.456	0.759	0.000	0.662	0.435	11011	1.21	38407.8646	44044	4550	6.459	0.762	0.000	0.642	0.468	11011	1.06	38823.8175	44044
4550	6.407	0.766	0.000	0.631	0.449	11011	1.06	38413.9319	44044	4550	6.446	0.753	0.000	0.669	0.495	11011	1.41	38823.9481	44044
4550	6.458	0.748	0.000	0.675	0.465	11011	1.13	38414.0021	44044	4550	6.514	0.809	0.000	0.662	0.459	11011	1.55	38824.6660	44044
4550	6.473	0.763	0.000	0.685	0.422	11011	1.39	38417.8014	22022	4550	6.444	0.746	0.000	0.656	0.464	11011	1.06	38824.8118	44044
4550	6.366	0.754	0.000	0.632	0.421	11011	1.89	38431.7132	44044	4550	6.479	0.729	0.000	0.647	0.488	11011	1.50	38825.6689	44044
4550	6.447	0.790	0.000	0.684	0.435	11011	1.09	38431.8458	44044	4550	6.407	0.730	0.000	0.632	0.452	11011	1.06	38825.8133	44044
4550	6.431	0.737	0.000	0.692	0.446	11011	1.57	38432.7375	44044	4550	6.438	0.822	0.000	0.628	0.430	11011	1.74	38827.6404	44044
4550	6.436	0.749	0.000	0.676	0.456	11011	1.14	38432.8174	44044	4550	6.445	0.753	0.000	0.640	0.458	11011	1.06	38827.7852	44044
4550	6.441	0.758	0.000	0.667	0.458	11011	1.09	38432.8474	44044	4550	6.410	0.734	0.000	0.639	0.451	11011	1.20	38827.8939	44044
4550	6.440	0.754	0.000	0.690	0.458	11011	1.06	38437.8701	22022	4550	6.422	0.745	0.000	0.661	0.483	11011	1.65	38827.9640	44044
4550	6.438	0.761	0.000	0.654	0.454	11011	1.06	38438.8653	44044	4550	6.456	0.790	0.000	0.647	0.444	11011	1.06	38835.7807	44044
4550	6.443	0.747	0.000	0.685	0.471	11011	1.25	38438.9715	44044	4550	6.450	0.732	0.000	0.652	0.463	11011	1.10	38835.8333	44044
4550	6.397	0.766	0.000	0.653	0.438	11011	1.11	38439.8139	44044	4550	6.397	0.761	0.000	0.656	0.444	11011	1.59	38836.6293	44044
4550	6.401	0.749	0.000	0.657	0.453	11011	1.06	38439.8833	44044	4550	6.517	0.759	0.000	0.644	0.493	11011	1.06	38836.7821	44044
4550	6.481	0.710	0.000	0.690	0.443	11011	1.06	38440.8611	44044	4550	6.520	0.743	0.000	0.685	0.473	11011	1.17	38836.8612	44044
4550	6.436	0.797	0.000	0.647	0.464	11011	1.16	38440.9417	44044	4550	6.351	0.712	0.000	0.628	0.468	11011	1.60	38836.9349	44044
4550	6.441	0.787	0.000	0.647	0.461	11011	1.55	38441.0132	44044	4550	6.453	0.757	0.000	0.673	0.457	11011	1.06	38837.7856	44044
4550	6.453	0.762	0.000	0.674	0.455	11011	1.12	38441.9243	44044	4550	6.480	0.730	0.000	0.697	0.465	11011	1.19	38837.8654	44044
4550	6.455	0.779	0.000	0.650	0.450	11011	1.06	38442.8542	44044	4550	6.470	0.757	0.000	0.675	0.456	11011	1.06	38838.7939	44044
4550	6.414	0.728	0.000	0.666	0.465	11011	1.06	38442.9333	44044	4550	6.447	0.776	0.000	0.688	0.462	11011	1.06	38839.7705	44044
4550	6.407	0.748	0.000	0.661	0.452	11011	1.43	38442.9931	44044	4550	6.466	0.780	0.000	0.665	0.462	11011	1.06	38841.7640	44044
4550	6.455	0.782	0.000	0.656	0.408	11011	1.57	38443.7069	44044	4550	6.450	0.752	0.000	0.692	0.518	11011	2.30	38841.9668	44044
4550	6.435	0.741	0.000	0.665	0.436	11011	1.06	38443.8549	44044	4550	6.465	0.707	0.000	0.690	0.465	11011	1.06	38842.7654	44044
4550	6.425	0.750	0.000	0.666	0.463	11011	1.18	38443.9396	44044	4550	6.530	0.767	0.000	0.690	0.513	11011	1.64	38842.9224	44044
4550	6.427	0.732	0.000	0.672	0.479	11011	1.45	38443.9937	44044	4550	6.475	0.736	0.160	0.000	0.000	11000	1.06	38844.7693	44400
4550	6.418	0.774	0.000	0.664	0.440	11011	1.06	38444.8382	44044	4550	6.542	0.747	0.159	0.000	0.000	11000	1.19	38844.8450	44400
4550	6.349	0.768	0.000	0.652	0.433	11011	1.06	38445.8368	44044	4550	6.614	0.766	0.168	0.000	0.000	11000	1.54	38844.9068	44400
4550	6.414	0.746	0.000	0.678	0.437	11011	1.06	38446.8500	44044	4550	6.583	0.785	0.169	0.000	0.000	11000	1.06	38845.7616	44400
4550	6.411	0.750	0.000	0.652	0.421	11011	1.35	38447.7264	44044	4550	6.556	0.749	0.143	0.000	0.000	11000	1.15	38845.8309	44400
4550	6.419	0.751	0.000	0.679	0.443	11011	1.06	38447.8354	44044	4550	6.554	0.707	0.187	0.000	0.000	11000	1.19	38845.9367	44400
4550	6.444	0.780	0.000	0.665	0.436	11011	1.26	38449.6535	44044	4550	6.385	0.748	0.196	0.000	0.000	11000	1.14	38873.6139	44400
4550	6.459	0.730	0.000	0.675	0.458	11011	1.07	38449.8935	44044	4550	6.447	0.758	0.153	0.000	0.000	11000	1.08	38875.7146	44400
4550	6.449	0.771	0.000	0.670	0.406	11011	1.46	38450.7007	44044	4550	6.416	0.734	0.140	0.000	0.000	11000	1.10	38873.8125	44400
4550	6.422	0.760	0.000	0.660	0.455	11011	1.06	38450.8174	44044	4550	6.450	0.750	0.170	0.000	0.000	11000	1.06	38874.6806	22000
4550	6.449	0.756	0.000	0.681	0.476	11011	1.16	38450.9146	44044	4552	4.320	-0.107	0.000	0.037	-0.083	11011	1.65	38099.8021	44044
4550	6.443	0.761	0.000	0.676	0.499	11011	1.30	38450.9507	44044	4552	4.320	-0.077	0.000	0.017	-0.074	11011	1.65	38107.7840	44044
4550	6.514	0.798	0.000	0.651	0.460	11011	1.35	38451.6083	44044	4552	4.293	-0.083	0.000	-0.027	-0.080	11011	1.65	38112.7729	44044
4550	6.466	0.770	0.000	0.655	0.420	11011	1.37	38451.7111	44044	4552	4.319	-0.151	0.000	0.031	-0.058	11011	1.65	38449.8528	44044
4550	6.404	0.775	0.000	0.631	0.450	11011	1.07	38451.8069	44044	4552	4.283	-0.083	0.000	0.008	-0.086	11011	1.76	38450.7889	44044
4550	6.410	0.743	0.000	0.662	0.469	11011	1.19	38451.9201	44044	4552	4.254	-0.109	0.000	0.007	-0.104	11011	1.66	38452.8146	44044
4550	6.592	0.806	0.000	0.715	0.444	11011	2.79	38452.6167	44044	4618	4.660	-0.069	0.000	-0.043	-0.155	11011	3.46	38505.6243	44044
4550	6.416	0.761	0.000	0.674	0.399	11011	1.18	38452.7507	44044	4618	4.501	-0.146	0.000	-0.123	-0.184	11011	2.87	38529.6549	44044
4550	6.429	0.755	0.000	0.688	0.431	11011	1.06	38452.8354	44044	4621	2.688	-0.041	0.000	0.084	-0.121	11011	3.37	38505.6299	44044
4550	6.370	0.758	0.000	0.662	0.473	11011	1.25	38452.9354	44044	4621	2.613	-0.138	0.000	0.000	-0.120	11011	2.91	38529.6597	44044
4550	6.559	0.839	0.000	0.697	0.446	11011	1.98	38453.6472	44044	4633	5.984	0.123	0.000	0.121	0.009	11011	1.01	38114.7840	44044
4550	6.405	0.715	0.000	0.701	0.435	11011	1.08	38453.7958	44044	4633	6.045	0.106	0.000	0.137	0.015	11011	1.02	38130.7556	22021
4550	6.428	0.764	0.000	0.648	0.460	11011	2.53	38455.6167	44044	4633	6.083	0.130	0.000	0.144	0.013	11011	1.06	38133.6639	44044
4550	6.463	0.731	0.000	0.681	0.453	11011	1.06	38455.8125	44044	4633	6.013	0.120	0.000	0.091	0.047	11011	1.34	38136.8354	44044
4550	6.459	0.767	0.000	0.666	0.474	11011	1.16	38455.8993	44044	4633	6.113	0.124	0.113	0.000	0.000	11000	1.04	38179.6312	44400
4550	6.472	0.787	0.000	0.673	0.429	11011	1.17	38505.6083	44044	4633	6.026	0.105	0.000	0.132	0.070	11011	1.03	38814.8899	22022
4550	6.391	0.756	0.000	0.640	0.463	11011	1.17	38505.7674	44044	4638	4.135	-0.075	0.000	-0.060	-0.129	11011	3.61	38505.6354	44044
4550	6.550	0.736	0.000	0.670	0.488	11011	2.21	38505.8833	44044	4638	3.987	-0.153	0.000	-0.117	-0.201	11011	3.16	38529.6646	44044
4550	6.469	0.794	0.000	0.635	0.451	11011	1.06	38529.6271	44044	4638	4.016	-0.168	0.000	-0.098	-0.228	11011	3.17	38530.6625	44044
4550	6.472	0.750	0.000	0.678	0.468	11011	1.19	38529.7069	44044	4638	3.937	-0.148	0.000	-0.111	-0.088	11011	3.11	38531.6125	44044
4550	6.431	0.738	0.000	0.672	0.470	11011	2.51	38529.8299	44044	4662	2.653	-0.077	0.000	-0.014	-0.086	11011	1.24	38096.8299	22022
4550	6.475	0.750	0.000	0.662	0.433	11011	1.27	38530.6644	44044	4662	2.620	-0.087	0.000	-0.038	-0.081	11011	1.28	38099.7785	44044
4550	6.455	0.791	0.000	0.638	0.464	11011	1.34	38530.7389	44044	4662	2.582	-0.109	0.000	0.002	-0.119	11011	1.38	38103.7354	44044
4550	6.456	0.764	0.																

TABLE 6 TONANTZINTLA BVRI AND UBV OBSERVATIONS

TONANTZINTLA BVRI - UBV										TONANTZINTLA BVRI - UBV									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
4717	5.164	0.072	0.000	0.061	0.045	11011	1.54	38133.8764	44044	4752	5.278	-0.058	0.000	0.032	-0.072	11011	1.13	38131.8187	44043
4717	5.163	0.069	0.000	0.079	0.023	11011	1.34	38136.8451	44044	4752	5.283	-0.027	0.000	0.017	-0.056	11011	1.33	38131.8604	44043
4717	5.116	0.084	0.083	0.000	0.000	11100	1.06	38173.6708	22200	4752	5.257	-0.036	0.000	0.009	-0.072	11011	1.56	38131.8875	44043
4717	5.136	0.102	0.118	0.000	0.000	11100	1.16	38180.6903	44040	4752	5.309	-0.069	0.000	0.041	-0.124	11011	1.08	38132.6698	22021
4717	5.147	0.076	0.000	0.081	0.038	11011	1.13	38815.9433	44044	4752	5.178	-0.114	0.000	-0.020	-0.125	11011	1.03	38132.6986	22021
4719	6.338	0.249	0.000	0.212	0.067	11011	1.11	38118.6938	44043	4752	5.154	-0.101	0.000	-0.009	-0.141	11011	1.01	38132.7174	22021
4719	6.464	0.255	0.000	0.275	0.071	11011	1.02	38131.7576	44043	4752	5.206	-0.096	0.000	-0.024	-0.088	11011	1.01	38132.7500	22021
4719	6.398	0.253	0.000	0.190	0.141	11011	1.58	38133.8806	44044	4752	5.276	-0.130	0.000	0.078	-0.089	11011	1.04	38132.7778	22021
4719	6.384	0.299	0.044	0.000	0.000	11100	1.06	38173.6757	22200	4752	5.198	-0.065	0.000	0.048	-0.084	11011	1.09	38132.8057	22021
4719	6.364	0.361	0.069	0.000	0.000	11100	1.18	38180.6937	44040	4752	5.208	-0.066	0.000	0.008	-0.082	11011	1.15	38132.8222	22021
4719	6.381	0.287	0.000	0.221	0.144	11011	1.14	38815.9437	44044	4752	5.348	-0.093	0.000	0.028	-0.096	11011	1.10	38133.6590	44044
4725	6.027	1.088	0.000	0.799	0.545	11011	1.06	38819.7953	22022	4752	5.282	-0.062	0.000	0.029	-0.077	11011	1.03	38133.6924	44044
4725	6.048	1.119	0.000	0.778	0.565	11011	1.02	38823.8133	44044	4752	5.219	-0.062	0.000	0.025	-0.074	11011	1.01	38133.7472	44044
4725	6.040	1.069	0.000	0.793	0.596	11011	1.07	38824.8960	44044	4752	5.274	-0.073	0.000	0.021	-0.071	11011	1.05	38133.7792	44044
4725	5.994	1.058	0.000	0.783	0.553	11011	1.01	38622.8460	44044	4752	5.246	-0.071	0.000	0.012	-0.075	11011	1.12	38133.8085	44044
4732	4.802	-0.174	0.000	-0.116	-0.170	11011	2.99	38529.6694	44044	4752	5.241	-0.065	0.000	-0.009	-0.054	11011	1.30	38133.8500	44044
4732	4.862	-0.152	0.000	-0.101	-0.210	11011	3.01	38530.6694	44044	4752	5.266	-0.055	0.000	0.012	-0.051	11011	1.60	38133.8854	44044
4732	4.794	-0.159	0.000	-0.124	-0.066	11011	2.99	38531.6174	44044	4752	5.227	-0.058	0.000	0.040	-0.106	11011	1.07	38134.6687	22021
4733	4.899	0.242	0.000	0.245	0.124	11011	1.03	38118.7354	44043	4752	5.220	-0.059	0.000	-0.008	-0.072	11011	1.04	38134.6882	22021
4733	4.957	0.243	0.000	0.277	0.153	11011	1.05	38131.7840	44043	4752	5.219	-0.051	0.000	0.008	-0.048	11011	1.01	38134.7139	22021
4733	4.889	0.223	0.000	0.249	0.139	11011	1.03	38134.6931	22021	4752	5.276	-0.052	0.000	0.026	-0.067	11011	1.09	38135.6153	22021
4733	4.914	0.242	0.000	0.227	0.150	11011	1.37	38136.8500	44044	4752	5.257	-0.045	0.000	0.020	-0.091	11011	1.03	38136.6889	44044
4733	4.799	0.257	0.177	0.000	0.000	11100	1.35	38177.7361	11000	4752	5.277	-0.091	0.000	0.026	-0.093	11011	1.01	38136.7306	44044
4733	4.906	0.260	0.000	0.267	0.171	11011	1.15	38815.9474	44044	4752	5.288	-0.034	0.000	0.031	-0.057	11011	1.04	38136.7646	44044
4738	4.948	0.082	0.000	0.073	0.005	11011	1.03	38118.7396	44043	4752	5.277	-0.031	0.000	0.025	-0.083	11011	1.21	38136.8236	44044
4738	0.000	-0.005	0.000	0.128	0.025	00011	1.06	38131.7889	44043	4752	5.353	-0.046	-0.046	0.000	0.000	11100	1.10	38166.7139	44040
4738	4.914	0.074	0.000	0.054	0.017	11011	1.03	38134.6972	22021	4752	5.251	-0.036	-0.145	0.000	0.000	11100	1.05	38170.6778	22200
4738	4.976	0.084	0.000	0.081	0.018	11011	1.40	38136.8542	44044	4752	5.276	-0.053	-0.133	0.000	0.000	11100	1.23	38170.7368	22200
4738	4.944	0.068	0.123	0.000	0.000	11100	1.38	38177.7396	11000	4752	5.276	-0.074	-0.118	0.000	0.000	11100	1.07	38173.6125	22200
4738	4.951	0.101	0.000	0.090	0.048	11011	1.16	38815.9514	44044	4752	5.266	-0.031	-0.105	0.000	0.000	11100	1.07	38174.6896	22200
4743	3.938	-0.226	0.000	-0.079	-0.179	11011	2.80	38099.8076	44044	4752	5.282	-0.035	-0.105	0.000	0.000	11100	1.14	38174.7035	22200
4743	3.902	-0.174	0.000	-0.115	-0.156	11011	2.78	38107.7937	44044	4752	5.146	-0.087	-0.161	0.000	0.000	11100	1.02	38177.6410	11000
4743	3.916	-0.192	0.000	-0.114	-0.172	11011	2.78	38112.7799	44044	4752	5.104	-0.093	-0.156	0.000	0.000	11100	1.17	38177.7035	11000
4743	3.889	-0.178	0.000	-0.099	-0.201	11011	2.99	38453.8076	44044	4752	5.277	-0.092	-0.031	0.000	0.000	11100	1.42	38177.7465	11000
4743	3.956	-0.161	0.000	-0.078	-0.181	11011	3.26	38455.7812	44044	4752	5.305	-0.050	-0.138	0.000	0.000	11100	1.01	38178.6236	22200
4743	3.894	-0.209	0.000	-0.137	-0.239	11011	2.84	38529.6736	44044	4752	5.250	-0.052	-0.136	0.000	0.000	11100	1.05	38178.6562	22200
4743	3.966	-0.207	0.000	-0.155	-0.235	11011	2.86	38530.6736	44044	4752	5.233	-0.034	-0.146	0.000	0.000	11100	1.11	38178.6833	22200
4750	6.551	0.171	0.000	0.173	0.083	11011	1.01	38118.7729	44043	4752	5.234	-0.037	-0.111	0.000	0.000	11100	1.18	38178.7021	22200
4750	6.517	0.183	0.030	0.139	0.085	11011	1.17	38131.8278	44043	4752	5.266	-0.037	-0.116	0.000	0.000	11100	1.38	38178.7369	22200
4750	6.524	0.163	0.000	0.105	0.110	11011	1.21	38135.6250	22021	4752	5.479	-0.051	-0.166	0.000	0.000	11100	1.01	38178.8682	44040
4750	6.424	0.177	0.079	0.000	0.000	11100	1.03	38178.6431	22200	4752	5.282	-0.029	-0.103	0.000	0.000	11100	1.14	38179.6254	44040
4750	6.482	0.175	0.000	0.183	0.075	11011	1.05	38816.9100	22022	4752	5.319	-0.027	-0.094	0.000	0.000	11100	1.06	38179.6583	44040
4751	6.605	0.215	0.000	0.134	0.049	11011	1.01	38114.7792	44044	4752	5.260	-0.027	-0.131	0.000	0.020	11100	1.18	38179.7014	44040
4751	6.645	0.220	0.000	0.177	0.083	11011	1.02	38118.7937	44043	4752	5.281	-0.020	-0.113	0.000	0.000	11100	1.05	38180.6528	44040
4751	6.582	0.195	0.000	0.095	0.065	11011	1.06	38129.7958	22021	4752	5.107	-0.031	-0.134	0.000	0.000	11100	1.23	38180.7090	44040
4751	6.636	0.223	0.000	0.163	0.093	11011	1.31	38131.8562	44043	4752	5.250	-0.036	0.000	0.037	-0.051	11011	1.18	38815.9585	44044
4751	6.586	0.206	0.000	0.083	0.077	11011	1.01	38133.7424	44043	4752	5.295	-0.062	0.000	0.049	-0.049	11011	1.07	38816.9181	22022
4751	6.630	0.219	0.000	0.173	0.109	11011	1.65	38133.8896	44044	4752	5.196	-0.046	0.000	0.003	-0.114	11011	1.52	38818.7092	44044
4751	6.633	0.208	0.000	0.175	0.076	11011	1.24	38135.8187	22021	4752	5.261	-0.033	0.000	0.024	-0.054	11011	1.20	38822.9437	44044
4751	6.652	0.212	0.000	0.173	0.076	11011	1.62	38136.6931	44044	4766	5.457	0.053	0.000	0.068	-0.082	11011	1.13	38114.7042	44044
4751	6.641	0.208	0.000	0.183	0.049	11011	1.04	38136.7687	44044	4766	5.450	0.072	0.000	0.068	-0.012	11011	1.30	38118.8917	44043
4751	6.628	0.189	0.000	0.163	0.072	11011	1.49	38136.8667	44044	4766	5.434	0.116	0.000	0.062	-0.005	11011	1.21	38131.8389	44043
4751	6.691	0.199	0.129	0.000	0.000	11100	1.08	38166.7062	44040	4766	5.437	0.377	0.000	0.053	-0.028	11011	1.17	38135.6361	22021
4751	6.609	0.222	0.091	0.000	0.000	11100	1.05	38176.6819	22200	4766	5.427	0.065	0.000	0.021	-0.007	11011	1.40	38136.8576	44044
4751	6.645	0.234	0.085	0.000	0.000	11100	1.21	38170.7326	22200	4766	5.420	0.052	0.081	0.000	0.000	11100	1.07	38178.6687	22200
4751	6.630	0.207	0.065	0.000	0.000	11100	1.01	38173.6160	22200	4766	5.419	0.061	0.000	0.071	-0.005	11011	1.37	38816.9217	22022
4751	6.613	0.237	0.085	0.000	0.000	11100	1.07	38173.6792	22200	4780	6.261	0.126	0.000	0.096	0.034	11011	1.37	38118.9042	44043
4751	6.664	0.217	0.095																

TABLE 6 TONANTZINTLA BVRI AND UVB OBSERVATIONS

TONANTZINTLA BVRI - UVB										TONANTZINTLA BVRI - UVB									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
4837	5.937	0.880	0.000	0.678	0.492	11011	1.14	38819.8081	22022	5132	2.307	-0.245	0.000	-0.177	-0.276	11011	3.26	38529.6958	44044
4837	5.935	0.884	0.000	0.661	0.500	11011	1.07	38823.8550	44044	5132	2.338	-0.197	0.000	-0.137	-0.320	11011	3.26	38530.7007	44044
4837	5.932	0.855	0.000	0.681	0.512	11011	1.08	38824.8705	44044	5132	2.279	-0.245	0.000	-0.140	-0.135	11011	3.26	38531.6986	44044
4837	5.880	0.850	0.000	0.639	0.487	11011	1.07	38825.8503	44044	5165	5.559	0.801	0.000	0.637	0.459	11011	1.22	38819.9022	22022
4846	5.429	2.673	0.000	2.052	1.457	11011	1.12	38814.8807	22022	5165	5.595	0.800	0.000	0.634	0.439	11011	1.23	38823.8765	44044
4846	5.397	2.744	0.000	2.037	1.446	11011	1.13	38815.9015	44044	5165	5.579	0.786	0.000	0.641	0.475	11011	1.22	38824.8862	44044
4846	5.335	2.670	0.000	2.004	1.430	11011	1.17	38816.9300	22022	5165	5.517	0.766	0.000	0.639	0.427	11011	1.22	38825.8786	44044
4846	5.421	2.709	0.000	1.976	1.444	11011	1.12	38836.3007	44044	5168	4.213	0.336	0.000	0.347	0.198	11011	1.67	38099.9125	44044
4846	5.402	2.665	0.000	2.004	1.419	11011	1.12	38837.8314	44044	5168	4.182	0.372	0.000	0.334	0.224	11011	1.67	38113.8479	44044
4846	5.372	2.613	0.000	1.995	1.430	11011	1.13	38842.7790	44044	5168	4.142	0.382	0.000	0.291	0.207	11011	1.62	38114.8389	44044
4848	4.668	-0.148	0.000	-0.103	-0.195	11011	3.94	38529.6785	44044	5168	4.210	0.378	0.000	0.339	0.197	11011	1.68	38453.8708	44044
4848	4.707	-0.161	0.000	-0.114	-0.224	11011	3.96	38530.6792	44044	5168	4.280	0.374	0.000	0.358	0.196	11011	1.66	38455.8687	44044
4865	5.702	0.038	0.000	0.060	-0.032	11011	1.09	38819.7994	22022	5190	3.371	-0.268	0.000	-0.120	-0.215	11011	2.11	38099.9181	44044
4865	5.760	0.030	0.000	0.056	-0.019	11011	1.00	38823.8592	44044	5190	3.398	-0.226	0.000	-0.087	-0.196	11011	2.03	38113.8535	44044
4865	5.670	-0.007	0.000	0.021	-0.003	11011	1.05	38824.9008	44044	5190	3.280	-0.228	0.000	-0.134	-0.190	11011	2.03	38114.8437	44044
4865	5.648	0.000	0.000	0.032	-0.013	11011	1.00	38825.8550	44044	5190	3.403	-0.216	0.000	-0.108	-0.224	11011	2.08	38453.8812	44044
4867	5.909	0.496	0.000	0.457	0.274	11011	1.49	38819.7731	22022	5190	3.443	-0.143	0.000	-0.129	-0.262	11011	2.03	38533.6812	44044
4867	6.468	0.477	0.000	0.438	0.200	11010	1.47	38822.9481	44044	5192	4.252	1.442	0.000	2.183	1.885	11011	1.76	38099.9243	44044
4867	5.845	0.461	0.000	0.427	0.291	11011	1.33	38823.8603	44044	5192	4.158	1.495	0.000	2.139	1.899	11011	1.68	38113.8590	44044
4867	5.839	0.442	0.000	0.434	0.279	11011	1.38	38824.9050	44044	5192	4.164	1.496	0.000	2.153	1.865	11011	1.67	38114.8479	44044
4888	4.291	1.285	0.000	1.042	0.697	11011	2.63	38099.8347	44044	5192	4.170	1.513	0.000	2.092	1.855	11011	1.70	38453.8854	44044
4888	4.331	1.366	0.000	0.980	0.764	11011	2.63	38107.8264	44044	5192	4.217	1.524	0.000	2.125	1.842	11011	1.72	38455.8729	44044
4888	4.305	1.368	0.000	1.000	0.748	11011	2.66	38113.7819	44044	5192	4.167	1.490	0.000	2.105	1.873	11011	1.67	38837.8557	44044
4888	4.255	1.376	0.000	0.978	0.725	11011	2.75	38453.8340	44044	5192	4.235	1.543	1.467	0.000	0.000	11100	1.67	38844.8396	44044
4888	4.298	1.358	0.000	0.900	0.812	11011	2.65	38455.8479	44044	5192	4.186	1.482	1.447	0.000	0.000	11100	1.67	38845.8366	44044
4889	4.259	0.186	0.000	0.207	0.118	11011	1.94	38099.8451	44044	5193	2.979	-0.203	0.000	0.017	-0.118	11011	2.29	38099.9375	44044
4889	4.278	0.206	0.000	0.210	0.152	11011	1.94	38107.8326	44044	5193	3.009	-0.143	0.000	0.043	-0.083	11011	2.11	38113.8664	44044
4889	4.255	0.195	0.000	0.194	0.137	11011	1.95	38113.7861	44044	5193	2.853	-0.146	0.000	0.017	-0.092	11011	2.09	38114.8521	44044
4889	4.225	0.203	0.000	0.210	0.116	11011	2.00	38453.8382	44044	5193	3.351	-0.151	0.000	0.051	-0.065	11011	2.08	38531.7042	44044
4889	4.254	0.250	0.000	0.197	0.132	11011	1.94	38455.8535	44044	5210	4.282	-0.171	0.000	-0.039	-0.134	11011	1.79	38099.9444	44044
4898	4.024	-0.162	0.000	-0.157	-0.294	11011	4.12	38529.6847	44044	5210	4.282	-0.147	0.000	-0.031	-0.120	11011	1.64	38113.8694	44044
4898	4.106	-0.202	0.000	-0.115	-0.244	11011	4.14	38530.6847	44044	5210	4.219	-0.147	0.000	-0.044	-0.120	11011	1.63	38114.8569	44044
4900	6.260	0.259	0.000	0.284	0.126	11011	1.09	38819.8036	22022	5210	4.331	-0.121	0.000	-0.079	-0.165	11011	1.62	38530.7062	44044
4900	6.271	0.292	0.000	0.265	0.138	11011	1.01	38823.8676	44044	5214	6.664	0.109	0.000	0.110	-0.027	11011	1.20	38819.8168	22022
4900	6.208	0.247	0.000	0.232	0.162	11011	1.06	38824.9099	44044	5214	6.682	0.117	0.000	0.081	0.025	11011	1.08	38822.9529	44044
4900	6.192	0.228	0.000	0.237	0.164	11011	1.01	38825.8592	44044	5214	6.694	0.122	0.000	0.087	0.013	11011	1.05	38823.8812	44044
4940	4.633	-0.182	0.000	-0.042	-0.161	11011	2.67	38099.8833	44044	5214	6.626	0.073	0.000	0.050	0.022	11011	1.04	38824.9140	44044
4940	4.735	-0.158	0.000	-0.058	-0.103	11011	2.58	38107.8375	44044	5217	5.914	0.011	0.000	0.094	0.009	11011	3.28	38505.7903	44044
4940	4.693	-0.146	0.000	-0.027	-0.096	11011	2.58	38113.8208	44044	5217	5.864	-0.003	0.000	0.035	-0.033	11011	3.24	38529.7014	44044
4940	4.648	-0.136	0.000	-0.070	-0.153	11011	2.70	38453.8431	44044	5217	5.913	0.011	0.000	0.035	-0.055	11011	3.27	38530.6944	44044
4940	4.791	-0.061	0.000	-0.082	-0.176	11011	2.58	38533.6715	44044	5217	5.879	0.021	0.000	0.064	0.081	11011	3.24	38531.6931	44044
4942	4.189	-0.290	0.000	-0.048	-0.214	11011	2.87	38099.8889	44044	5221	4.692	-0.190	0.000	-0.056	-0.133	11011	1.77	38099.9493	44044
4942	4.259	-0.192	0.000	-0.119	-0.124	11011	2.75	38113.8257	44044	5221	4.686	-0.147	0.000	-0.050	-0.103	11011	1.61	38113.8743	44044
4942	3.966	-0.212	0.000	-0.105	-0.164	11011	2.75	38114.8201	44044	5221	4.633	-0.176	0.000	-0.033	-0.105	11011	1.59	38114.8618	44044
4942	4.216	-0.183	0.000	-0.121	-0.206	11011	2.83	38453.8486	44044	5221	4.724	-0.114	0.000	-0.083	-0.156	11011	1.58	38530.7111	44044
4942	4.398	-0.113	0.000	-0.052	-0.266	11011	2.75	38533.6764	44044	5231	2.582	-0.235	0.000	-0.107	-0.208	11011	2.47	38107.8736	44044
4949	5.478	1.578	0.000	1.963	1.809	11011	1.00	38814.8856	22022	5231	2.524	-0.225	0.000	-0.151	-0.189	11011	2.46	38112.8403	44044
4949	5.486	1.584	0.000	1.969	1.788	11011	1.01	38815.9054	44044	5231	2.288	-0.240	0.000	-0.143	-0.216	11011	2.50	38114.8674	44044
4949	5.475	1.547	0.000	1.970	1.791	11011	1.04	38816.9342	22022	5231	2.473	-0.215	0.000	-0.138	-0.208	11011	2.54	38455.8778	44044
4949	5.780	1.568	0.000	2.084	1.880	11011	1.00	38836.8349	44044	5248	3.817	-0.187	0.000	-0.104	-0.197	11011	2.07	38107.8819	44044
4949	5.626	1.569	1.692	0.000	0.000	11100	1.00	38844.8187	44040	5248	3.802	-0.199	0.000	-0.120	-0.206	11011	2.05	38112.8541	44044
4949	5.628	1.623	0.000	0.000	0.000	11000	1.01	38845.8227	44040	5248	3.818	-0.237	0.000	-0.166	-0.198	11011	2.10	38114.8722	44044
4955	5.158	1.151	0.000	0.816	0.568	11011	1.16	38819.8592	22022	5248	3.853	-0.188	0.000	-0.148	-0.250	11011	2.06	38530.7174	44044
4955	5.153	1.142	0.000	0.818	0.575	11011	1.15	38823.8729	44044	5249	3.915	-0.202	0.000	-0.062	-0.160	11011	2.28	38107.8889	44044
4955	5.144	1.128	0.000	0.812	0.604	11011	1.16	38824.8826	44044	5249	3.812	-0.196	0.000	-0.174	-0.195	11011	2.24	38112.8507	44044
4955	5.101	1.109	0.000	0.828	0.566	11011	1.15	38825.8737	44044	5249	3.611	-0.231	0.000	-0.186	-0.233	11011	2.31	38114.8764	44044
4979	4.809	0.647	0.000	0.576	0.350	11011	1.90	38099.8958	44044	5249	3.893	-0.179	0.000	-0.137	-0.290	11011	2.26	38530.7208	44044
4979	4.774	0.																	

TABLE 6 TONANTZINTLA BVRI AND UBV OBSERVATIONS

TONANTZINTLA BVRI - UBV										TONANTZINTLA BVRI - UBV									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
5367	3.992	-0.032	0.000	-0.028	-0.050	11011	1.82	38112.8743	44044	5685	2.633	-0.097	0.000	-0.039	-0.109	11011	1.16	38096.9201	22022
5367	4.029	-0.029	0.000	-0.032	-0.021	11011	1.85	38121.8160	44044	5685	2.626	-0.115	0.000	-0.019	-0.121	11011	1.33	38099.8556	44044
5373	6.287	0.038	0.000	0.047	-0.048	11011	1.11	38819.8793	22022	5685	2.630	-0.097	0.000	-0.064	-0.102	11011	3.41	38107.7292	44044
5373	6.646	0.032	0.000	0.062	-0.007	11011	1.07	38823.8939	44044	5685	2.608	-0.126	0.000	-0.009	-0.088	11011	1.21	38107.9722	44044
5373	6.307	0.002	0.000	0.050	-0.018	11011	1.07	38824.9272	44044	5685	2.680	-0.100	0.000	-0.072	-0.095	11011	2.54	38112.7347	44044
5373	6.326	0.013	0.000	0.060	-0.025	11011	1.06	38827.9065	44044	5685	2.605	-0.107	0.000	0.001	-0.093	11011	1.19	38112.9528	44044
5378	4.481	-0.178	0.000	-0.081	-0.158	11011	1.91	38096.9000	22022	5685	2.610	-0.102	0.000	-0.048	-0.116	11011	3.08	38113.7187	44044
5378	4.442	-0.179	0.000	-0.075	-0.163	11011	2.02	38107.9271	44044	5685	2.599	-0.124	0.000	-0.032	-0.082	11011	1.16	38113.9340	44044
5378	4.355	-0.211	0.000	-0.112	-0.197	11011	1.91	38112.8785	44044	5685	2.647	-0.091	0.000	-0.055	-0.103	11011	3.33	38121.6924	44044
5378	4.368	-0.176	0.000	-0.141	-0.164	11011	1.92	38121.8222	44044	5685	2.657	-0.099	0.000	0.001	-0.087	11011	1.18	38121.9236	44044
5378	4.436	-0.146	0.000	-0.128	-0.157	11011	1.90	38531.7153	44044	5685	2.617	-0.091	0.000	-0.017	-0.117	11011	1.96	38124.7257	44044
5381	4.810	1.307	0.000	0.999	0.688	11011	1.72	38449.8639	44044	5685	2.603	-0.114	-0.371	0.000	0.000	11000	1.12	38166.6861	44000
5381	4.775	1.394	0.000	0.984	0.673	11011	1.64	38450.8729	44044	5685	2.571	-0.095	-0.361	0.000	0.000	11000	1.14	38170.7569	22000
5381	4.692	1.321	0.000	0.954	0.677	11011	1.75	38451.8576	44044	5685	2.655	-0.107	-0.352	0.000	0.000	11000	1.43	38173.8396	22000
5381	4.773	1.320	0.000	0.986	0.647	11011	1.80	38452.8465	44044	5685	2.588	-0.102	-0.376	0.000	0.000	11000	1.14	38174.7347	22000
5381	4.758	1.327	0.000	0.981	0.671	11011	1.64	38452.8674	44044	5685	2.618	-0.122	-0.336	0.000	0.000	11000	1.44	38175.7597	22000
5395	4.513	-0.160	0.000	-0.086	-0.107	11011	2.47	38107.9340	44044	5685	2.574	-0.093	-0.344	0.000	0.000	11000	1.16	38178.8431	22000
5395	4.495	-0.134	0.000	-0.104	-0.127	11011	2.29	38112.8840	44044	5685	2.580	-0.128	-0.323	0.000	0.000	11000	1.57	38178.8431	22000
5396	4.310	0.424	0.000	0.419	0.356	11011	2.53	38107.9403	44044	5685	2.528	-0.077	-0.357	0.000	0.000	11000	1.14	38179.7389	44000
5396	4.333	0.410	0.000	0.421	0.344	11011	2.32	38112.8889	44044	5685	2.519	-0.093	-0.378	0.000	0.000	11000	1.19	38180.7646	44000
5396	4.365	0.437	0.000	0.417	0.336	11011	2.30	38121.8264	44044	5685	2.790	-0.101	-0.435	0.000	0.000	11000	1.88	38180.8618	44000
5396	4.346	0.440	0.000	0.398	0.350	11011	2.30	38121.8312	44044	5685	2.591	-0.108	-0.406	0.000	-0.135	11011	1.78	38437.8799	22022
5440	2.390	-0.213	0.000	-0.101	-0.181	11011	2.26	38107.9465	44044	5685	2.613	-0.086	0.000	-0.029	-0.107	11011	1.32	38438.9299	44044
5440	2.357	-0.213	0.000	-0.082	-0.178	11011	2.08	38112.8944	44044	5685	2.613	-0.102	0.000	-0.015	-0.111	11011	1.17	38438.9771	44044
5440	2.378	-0.184	0.000	-0.090	-0.169	11011	2.07	38121.8361	44044	5685	2.627	-0.090	0.000	-0.012	-0.111	11011	1.23	38440.9472	44044
5440	2.345	-0.220	0.000	-0.137	-0.161	11011	2.06	38531.7201	44044	5685	2.642	-0.118	0.000	-0.026	-0.062	11011	1.14	38441.0083	44044
5453	3.984	-0.151	0.000	-0.103	-0.129	11011	2.73	38112.9000	44044	5685	2.664	-0.107	0.000	0.010	-0.075	11011	1.27	38441.9326	44044
5453	4.026	-0.158	0.000	-0.043	-0.112	11011	2.70	38113.8861	44044	5685	2.620	-0.110	0.000	-0.019	-0.076	11011	1.14	38442.9832	44044
5453	4.035	-0.138	0.000	-0.118	-0.106	11011	2.70	38121.8410	44044	5685	2.608	-0.110	0.000	-0.029	-0.084	11011	1.21	38443.9444	44044
5469	2.272	-0.208	0.000	-0.101	-0.171	11011	2.52	38112.9049	44044	5685	2.610	-0.120	0.000	-0.071	-0.101	11011	1.07	38444.0083	44044
5469	2.322	-0.224	0.000	-0.079	-0.156	11011	2.48	38113.8903	44044	5685	2.608	-0.110	0.000	-0.041	-0.080	11011	3.07	38444.8125	44044
5469	2.336	-0.174	0.000	-0.102	-0.155	11011	2.48	38121.8465	44044	5685	2.515	-0.118	0.000	-0.049	-0.110	11011	1.85	38451.8368	44044
5471	3.973	-0.174	0.000	-0.085	-0.151	11011	1.86	38112.9097	44044	5685	2.589	-0.116	0.000	-0.056	-0.110	11011	3.95	38452.7771	44044
5471	3.985	-0.159	0.000	-0.100	-0.149	11011	1.83	38113.8951	44044	5685	2.617	-0.095	0.000	-0.022	-0.125	11011	2.72	38455.7903	44044
5471	3.974	-0.137	0.000	-0.131	-0.168	11011	1.82	38121.8500	44044	5685	2.617	-0.081	0.000	-0.027	-0.110	11011	1.23	38455.9062	44044
5485	4.113	1.346	0.000	0.989	0.718	11011	1.71	38096.9076	22022	5685	2.611	-0.114	-0.353	0.000	0.000	11000	1.92	38812.8437	44000
5485	4.035	1.323	0.000	1.043	0.725	11011	1.75	38112.9153	44044	5685	2.624	-0.141	0.000	0.009	-0.132	11011	1.72	38814.8518	22022
5485	3.998	1.347	0.000	1.027	0.746	11011	1.72	38113.9014	44044	5685	0.025	-0.005	0.000	0.000	-0.119	00001	1.40	38815.8837	44044
5485	4.053	1.381	0.000	0.992	0.735	11011	1.70	38121.8549	44044	5685	2.618	-0.131	0.000	0.005	-0.085	11011	1.14	38815.9706	44044
5489	4.888	0.013	0.000	0.061	0.010	11011	1.76	38112.9194	44044	5685	5.079	-0.186	0.000	0.003	-0.089	11011	1.16	38816.9483	22022
5489	4.909	0.015	0.000	0.068	0.022	11011	1.73	38113.9052	44044	5685	2.702	-0.041	0.000	-0.013	-0.108	11011	1.89	38819.8255	22022
5489	4.908	0.039	0.000	0.054	0.013	11011	1.70	38121.8960	44044	5685	2.604	-0.108	0.000	-0.051	-0.115	11011	1.43	38819.8683	22022
5492	6.212	0.412	0.000	0.360	0.183	11011	1.44	38819.8737	22022	5685	2.568	-0.133	0.000	-0.023	-0.133	11011	1.14	38819.9255	22022
5492	6.265	0.380	0.000	0.386	0.215	11011	1.38	38823.8987	44044	5685	2.606	-0.102	0.000	-0.058	-0.092	11011	1.45	38822.4579	44044
5492	6.210	0.372	0.000	0.354	0.207	11011	1.35	38824.9315	44044	5685	2.646	-0.134	0.000	-0.019	-0.062	11011	1.14	38822.9626	44044
5492	6.233	0.369	0.000	0.372	0.185	11011	1.36	38827.9112	44044	5685	2.575	-0.117	0.000	-0.038	-0.132	11011	1.63	38823.8356	44044
5526	4.442	1.385	0.000	1.074	0.785	11011	1.82	38449.8715	44044	5685	2.628	-0.110	0.000	-0.039	-0.098	11011	1.18	38823.9161	44044
5526	4.410	1.408	0.000	1.056	0.775	11011	1.74	38450.8825	44044	5685	2.630	-0.089	0.000	-0.013	-0.106	11011	1.14	38823.9269	44044
5526	4.328	1.357	0.000	1.055	0.760	11011	1.86	38451.8625	44044	5685	2.549	-0.146	0.000	-0.026	-0.121	11011	1.50	38824.8461	44044
5526	4.408	1.384	0.000	1.073	0.746	11011	1.95	38452.8514	44044	5685	2.629	-0.101	0.000	-0.078	-0.050	11011	1.14	38837.9169	44044
5526	4.405	1.368	0.000	1.059	0.763	11011	1.75	38452.8722	44044	5685	2.621	-0.084	0.000	-0.010	-0.107	11011	1.98	38838.7697	44044
5528	4.367	-0.155	0.000	-0.059	-0.124	11011	2.16	38096.9474	22022	5685	2.558	-0.072	0.000	-0.053	-0.111	11011	2.43	38839.7479	44044
5528	4.286	-0.160	0.000	-0.079	-0.109	11011	2.25	38112.9257	44044	5685	0.025	-0.005	0.000	0.000	-0.120	00001	1.80	38839.7781	44044
5528	4.346	-0.164	0.000	-0.022	-0.094	11011	2.20	38113.9153	44044	5685	2.625	-0.100	0.000	-0.038	-0.096	11011	2.34	38835.7617	44044
5528	4.353	-0.112	0.000	-0.048	-0.109	11011	2.15	38121.8639	44044	5685	2.587	-0.135	0.000	-0.014	-0.110	11011	1.17	38835.8906	44044
5571	2.652	-0.224	0.000	-0.106	-0.205	11010	2.22	38112.9636	44044	5685	2.686	-0.078	0.000	0.013	-0.107	11011	1.94	38836.7772	44044
5571	2.708	-0.226	0.000	-0.087	-0.162	11011	2.16	38113.9153	44044	5685	2.651	-0.104	0.000	-0.027	-0.111	11011	1.25	38836.8564	44044
5571	2.722	-0.1																	

TABLE 6 TONANTZINTLA BVRI - UVB

TONANTZINTLA BVRI - UVB										TONANTZINTLA BVRI - UVB									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
5763	5.081	1.561	0.000	1.273	0.919	11011	1.10	38827.9203	44044	5854	2.880	1.182	0.000	0.832	0.512	11011	1.65	38823.8314	44044
5763	5.068	1.581	0.000	1.255	0.930	11011	1.22	38835.8460	44044	5854	2.660	1.164	0.000	0.808	0.551	11011	1.11	38823.9119	44044
5764	5.510	-0.158	0.000	-0.075	-0.186	11011	1.25	38505.8153	44044	5854	2.682	1.147	0.000	0.822	0.576	11011	1.03	38823.9571	44044
5764	5.498	-0.129	0.000	-0.102	-0.148	11011	1.26	38529.7451	44044	5854	2.610	1.153	0.000	0.821	0.528	11011	1.41	38824.8515	44044
5764	5.525	-0.131	0.000	-0.101	-0.172	11011	1.23	38530.7646	44044	5854	2.576	1.197	0.000	0.778	0.536	11011	1.69	38825.8631	44044
5776	2.758	-0.195	0.000	-0.141	-0.215	11011	2.03	38505.8194	44044	5854	2.614	1.158	0.000	0.805	0.556	11011	1.21	38827.8758	44044
5776	2.811	-0.212	0.000	-0.142	-0.224	11011	2.04	38529.7493	44044	5854	2.677	1.147	0.000	0.835	0.576	11011	1.03	38827.9508	44044
5776	2.842	-0.192	0.000	-0.160	-0.224	11011	2.00	38530.7701	44044	5854	2.648	1.162	0.000	0.823	0.529	11011	2.26	38835.7661	44044
5776	2.800	-0.188	0.000	-0.134	-0.255	11011	2.11	38532.8118	44044	5854	2.644	1.160	0.000	0.825	0.532	11011	1.10	38835.8850	44044
5776	2.872	-0.127	0.000	-0.116	-0.280	11011	2.39	38533.6882	44044	5854	2.737	1.192	0.000	0.853	0.539	11011	2.14	38836.7682	44044
5780	5.169	-0.105	0.000	-0.037	-0.121	11011	1.14	38505.8257	44044	5854	2.702	1.207	0.000	0.816	0.536	11011	1.20	38836.8522	44044
5781	4.560	-0.173	0.000	-0.125	-0.188	11011	2.27	38505.8306	44044	5854	2.639	1.175	0.000	0.813	0.537	11011	1.04	38836.9112	44044
5781	4.553	-0.174	0.000	-0.159	-0.162	11011	2.28	38529.7589	44044	5854	2.679	1.165	0.000	0.846	0.525	11011	2.10	38837.7668	44044
5781	4.622	-0.129	0.000	-0.132	-0.248	11011	2.26	38530.7743	44044	5854	2.624	1.188	0.000	0.798	0.546	11011	1.21	38837.8486	44044
5781	4.572	-0.163	0.000	-0.163	-0.261	11011	2.40	38532.7250	44044	5854	2.672	1.201	0.000	0.802	0.538	11011	1.89	38838.7744	44044
5781	4.642	-0.151	0.000	-0.127	-0.250	11011	2.63	38533.6965	44044	5854	2.718	1.172	0.000	0.912	0.531	11011	2.72	38839.7413	44044
5794	3.611	1.419	0.000	1.022	0.717	11011	1.96	38450.8896	44044	5854	2.653	1.173	0.000	0.824	0.526	11011	1.73	38839.7821	44044
5794	3.484	1.365	0.000	1.000	0.699	11011	1.96	38451.8868	44044	5854	2.669	1.202	0.000	0.827	0.511	11011	2.30	38841.7483	44044
5794	3.567	1.365	0.000	1.020	0.676	11011	1.83	38452.8958	44044	5854	2.680	1.189	0.000	0.824	0.553	11011	1.02	38841.9307	44044
5794	3.659	1.393	0.000	0.989	0.693	11011	1.52	38532.7299	44044	5854	2.626	1.177	0.000	0.801	0.532	11011	1.95	38842.7606	44044
5797	4.382	1.441	0.000	1.008	0.697	11011	2.16	38532.7354	44044	5854	2.636	1.161	0.000	0.806	0.535	11011	1.26	38842.8258	44044
5797	4.467	1.481	0.000	1.056	0.759	11011	2.38	38533.7007	44044	5854	2.687	1.184	0.000	0.810	0.566	11011	1.03	38842.9182	44044
5812	3.721	-0.143	0.000	-0.082	-0.188	11011	1.76	38450.9174	44044	5854	2.642	1.170	1.265	0.000	0.000	11100	1.40	38844.7983	44044
5812	3.597	-0.181	0.000	-0.087	-0.171	11011	1.98	38451.8917	44044	5854	2.622	1.156	1.262	0.000	0.000	11100	1.03	38844.9111	44044
5812	3.629	-0.174	0.000	-0.088	-0.186	11011	1.80	38452.9069	44044	5854	2.625	1.136	1.268	0.000	0.000	11100	1.42	38845.7937	44044
5812	3.644	-0.180	0.000	-0.098	-0.217	11011	1.51	38505.8368	44044	5854	2.633	1.163	1.264	0.000	0.000	11100	1.13	38845.8457	44044
5812	3.662	-0.158	0.000	-0.146	-0.193	11011	1.53	38529.7618	44044	5854	2.645	1.156	1.262	0.000	0.000	11100	1.03	38845.9249	44044
5812	3.717	-0.163	0.000	-0.098	-0.207	11011	1.51	38530.7799	44044	5859	5.579	0.001	0.000	0.050	-0.033	11011	1.13	38836.8744	44044
5812	3.705	-0.155	0.000	-0.110	-0.227	11011	1.55	38532.7396	44044	5859	5.600	0.035	0.000	0.055	-0.034	11011	1.07	38837.8946	44044
5820	4.667	1.009	0.000	0.663	0.460	11011	1.70	38532.7444	44044	5859	5.601	0.051	0.000	0.029	-0.003	11011	1.06	38841.9710	44044
5820	4.806	1.095	0.000	0.706	0.506	11011	1.86	38533.7056	44044	5859	5.571	0.033	0.000	0.021	-0.030	11011	1.20	38842.8397	44044
5824	5.039	1.330	0.000	0.956	0.675	11011	1.40	38837.9029	44044	5883	3.986	-0.061	0.000	-0.006	-0.034	11011	1.72	38107.9847	44044
5824	5.040	1.346	0.000	0.949	0.683	11011	1.36	38841.9265	44044	5883	4.011	-0.068	0.000	-0.030	-0.106	11011	1.64	38532.7882	44044
5824	5.090	1.332	0.000	0.963	0.640	11011	1.36	38842.9123	44044	5885	4.632	-0.074	0.000	-0.010	-0.110	11011	1.64	38505.8636	44044
5824	4.990	1.325	1.534	0.000	0.000	11100	1.38	38844.8951	44000	5885	4.657	-0.067	0.000	-0.031	-0.086	11011	1.41	38529.7708	44044
5824	4.921	1.290	1.527	0.000	0.000	11100	1.37	38845.8983	44000	5885	4.684	-0.048	0.000	-0.016	-0.102	11011	1.40	38530.7882	44044
5825	4.704	0.433	0.000	0.347	0.199	11011	2.24	38532.7785	44044	5888	5.267	0.998	0.000	0.782	0.521	11011	1.20	38835.8668	44044
5830	5.759	0.281	0.000	0.339	0.183	11011	1.19	38819.9247	22022	5888	5.260	1.017	0.000	0.758	0.520	11011	1.14	38836.8786	44044
5830	5.828	0.305	0.000	0.335	0.192	11011	1.16	38823.9307	44044	5888	5.259	1.030	0.000	0.764	0.534	11011	1.09	38837.8987	44044
5830	5.790	0.322	0.000	0.314	0.174	11011	1.16	38827.9243	44044	5888	5.324	1.052	0.000	0.780	0.558	11011	1.04	38841.9349	44044
5830	5.788	0.315	0.000	0.326	0.169	11011	1.28	38835.8501	44044	5888	5.289	1.022	0.000	0.765	0.508	11011	1.22	38842.8439	44044
5839	4.720	-0.166	0.000	-0.118	-0.141	11011	1.69	38505.8458	44044	5902	5.014	-0.026	0.000	-0.001	-0.045	11011	1.29	38505.8528	44044
5839	4.749	-0.129	0.000	-0.122	-0.150	11011	1.70	38529.7674	44044	5902	5.033	0.002	0.000	-0.005	-0.027	11011	1.29	38529.7771	44044
5839	4.788	-0.117	0.000	-0.086	-0.170	11011	1.69	38530.7833	44044	5902	5.056	-0.007	0.000	0.022	-0.053	11011	1.29	38530.7924	44044
5839	4.784	-0.128	0.000	-0.078	-0.184	11011	1.69	38532.7840	44044	5904	4.662	-0.090	0.000	0.004	-0.098	11011	1.63	38450.9264	44044
5840	5.973	0.888	0.000	0.673	0.455	11011	1.04	38819.9397	22022	5904	4.574	-0.107	0.000	-0.018	-0.079	11011	1.82	38451.9007	44044
5840	6.074	0.913	0.000	0.684	0.489	11011	1.03	38823.9347	44044	5904	4.588	-0.068	0.000	-0.028	-0.101	11011	1.66	38452.9167	44044
5840	6.044	0.881	0.000	0.690	0.463	11011	1.02	38827.9286	44044	5904	4.606	-0.092	0.000	-0.041	-0.112	11011	1.40	38505.8590	44044
5840	6.029	0.881	0.000	0.696	0.441	11011	1.16	38835.8550	44044	5904	4.614	-0.065	0.000	-0.059	-0.107	11011	1.40	38529.7812	44044
5843	5.352	0.044	0.000	0.044	-0.050	11011	1.05	38835.8953	44044	5904	4.659	-0.073	0.000	-0.008	-0.116	11011	1.40	38530.7972	44044
5843	5.362	-0.027	0.000	0.044	-0.064	11011	1.11	38836.8696	44044	5906	5.383	-0.035	0.000	0.035	-0.032	11011	1.42	38505.8903	44044
5843	5.350	0.035	0.000	0.031	-0.029	11011	1.05	38837.8904	44044	5906	5.405	-0.024	0.000	0.014	-				

TABLE 6 TONANTZINTLA BVRI AND UBV OBSERVATIONS

TONANTZINTLA										TONANTZINTLA									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
5947	4.122	1.230	1.248	0.000	0.000	11100	1.01	38174.7681	22200	6074	5.786	0.056	0.000	0.038	-0.004	11011	1.12	38836.8883	44044
5947	4.243	1.191	1.327	0.000	0.000	11100	1.48	38174.9069	22200	6074	5.832	0.076	0.000	0.086	-0.022	11011	1.06	38837.9119	44044
5947	4.142	1.231	1.260	0.000	0.000	11100	1.01	38178.7514	22200	6074	5.828	0.040	0.000	0.089	0.003	11011	1.03	38841.9842	44044
5947	4.163	1.226	1.315	0.000	0.000	11100	1.59	38178.9069	22200	6074	5.870	0.050	0.000	0.066	0.009	11011	1.06	38842.8994	44044
5947	4.122	1.233	1.276	0.000	0.000	11100	1.01	38179.7667	44044	6076	6.293	1.093	0.000	0.774	0.630	11011	1.41	38836.9029	44044
5947	4.065	1.232	1.318	0.000	0.000	11100	1.04	38180.7896	44040	6076	6.382	1.088	0.000	0.884	0.639	11011	1.29	38841.9531	44044
5947	4.179	1.184	1.295	0.000	0.000	11100	1.33	38180.8708	44040	6076	6.396	1.112	0.000	0.848	0.618	11011	1.29	38842.9415	44044
5947	4.201	1.230	0.000	0.892	0.614	11011	1.01	38197.7104	44044	6092	3.884	-0.150	0.000	-0.077	-0.168	11011	1.14	38133.9201	44044
5947	4.291	1.198	0.000	0.888	0.563	11011	1.61	38437.8889	22022	6092	3.877	-0.175	0.000	-0.095	-0.184	11011	1.13	38136.9056	44044
5947	4.143	1.252	0.000	0.887	0.586	11011	1.23	38438.9354	44044	6092	3.876	-0.161	-0.558	0.000	0.000	11000	1.32	38166.6986	44040
5947	4.144	1.240	0.000	0.889	0.599	11011	1.07	38438.9819	44044	6092	3.857	-0.174	-0.556	0.000	0.000	11000	1.13	38166.7799	44040
5947	4.166	1.229	0.000	0.893	0.593	11011	1.11	38440.9604	44044	6092	3.836	-0.187	-0.570	0.000	0.000	11000	1.15	38166.8403	44040
5947	4.187	1.228	0.000	0.908	0.610	11011	1.03	38440.9986	44044	6092	3.870	-0.160	-0.554	0.000	0.000	11000	1.39	38166.9181	44040
5947	4.119	1.225	0.000	0.897	0.584	11011	1.17	38442.9382	44044	6092	3.839	-0.159	-0.594	0.000	0.000	11000	1.13	38170.7771	22200
5947	4.122	1.249	0.000	0.878	0.603	11011	1.06	38442.9750	44044	6092	3.852	-0.166	-0.591	0.000	0.000	11000	1.16	38171.8340	22200
5947	4.138	1.228	0.000	0.872	0.586	11011	1.11	38443.9535	44044	6092	3.825	-0.185	-0.555	0.000	0.000	11000	1.13	38173.7785	22200
5947	4.139	1.231	0.000	0.861	0.596	11011	1.14	38443.9889	44044	6092	4.028	-0.138	-0.590	0.000	0.000	11000	1.37	38173.8956	22200
5947	4.150	1.219	0.000	0.890	0.612	11011	1.39	38444.8792	44044	6092	3.903	-0.168	-0.551	0.000	0.000	11000	1.42	38174.9028	22200
5947	4.147	1.241	0.000	0.909	0.596	11011	1.79	38450.8396	44044	6092	3.910	-0.152	-0.575	0.000	0.000	11000	1.13	38178.7519	22200
5947	4.158	1.244	0.000	0.878	0.617	11011	1.06	38450.9569	44044	6092	3.892	-0.152	-0.525	0.000	0.000	11000	1.56	38178.9118	22200
5947	4.067	1.233	0.000	0.870	0.575	11011	1.70	38451.8831	44044	6092	3.841	-0.151	-0.541	0.000	0.000	11000	1.13	38179.7708	44040
5947	4.148	1.222	0.000	0.904	0.609	11011	1.23	38452.7833	44044	6092	3.862	-0.164	-0.574	0.000	0.000	11000	1.15	38180.8035	44040
5947	4.145	1.228	0.000	0.897	0.596	11011	1.30	38455.8187	44044	6092	3.946	-0.200	-0.524	0.000	0.000	11000	1.36	38180.8750	44040
5947	4.185	1.240	0.000	0.903	0.629	11011	1.14	38455.9097	44044	6092	3.933	-0.145	0.000	-0.095	-0.180	11011	1.13	38187.7035	44044
5947	4.278	1.302	0.000	0.950	0.601	11011	2.91	38505.6451	44044	6092	3.851	-0.174	0.000	-0.090	-0.177	11011	1.74	38437.8965	22022
5947	4.146	1.233	0.000	0.891	0.588	11011	1.14	38505.7743	44044	6092	3.894	-0.146	0.000	-0.072	-0.181	11011	1.39	38438.9396	44044
5947	4.153	1.213	0.000	0.902	0.616	11011	1.01	38505.8646	44044	6092	3.923	-0.166	0.000	-0.063	-0.181	11011	1.26	38440.9653	44044
5947	4.182	1.236	0.000	0.891	0.667	11011	1.10	38505.9271	44044	6092	3.961	-0.164	0.000	-0.045	-0.170	11011	1.18	38440.9937	44044
5947	4.223	1.239	0.000	0.887	0.563	11011	1.67	38529.6236	44044	6092	3.925	-0.139	0.000	-0.071	-0.158	11011	1.29	38440.9842	44044
5947	4.203	1.240	0.000	0.891	0.608	11011	1.10	38529.7229	44044	6092	3.891	-0.160	0.000	-0.069	-0.167	11011	1.20	38442.9789	44044
5947	4.184	1.222	0.000	0.897	0.634	11011	1.02	38529.8118	44044	6092	3.873	-0.147	0.000	-0.070	-0.195	11011	1.25	38443.9353	44044
5947	4.155	1.241	0.000	0.883	0.664	11011	1.51	38529.9382	44044	6092	3.862	-0.139	0.000	-0.088	-0.182	11011	1.18	38444.9847	44044
5947	4.211	1.218	0.000	0.842	0.598	11011	1.45	38530.6514	44044	6092	3.946	-0.148	0.000	-0.062	-0.193	11011	1.94	38450.8444	44044
5947	4.225	1.250	0.000	0.901	0.615	11011	1.07	38530.7326	44044	6092	3.919	-0.162	0.000	-0.075	-0.177	11011	1.19	38450.9611	44044
5947	4.163	1.227	0.000	0.900	0.648	11011	1.04	38530.8340	44044	6092	3.842	-0.168	0.000	-0.067	-0.184	11011	1.86	38451.8672	44044
5947	4.157	1.235	0.000	0.912	0.644	11011	1.45	38530.9285	44044	6092	3.914	-0.134	0.000	-0.073	-0.189	11011	2.05	38455.8229	44044
5947	4.290	1.226	0.000	0.892	0.624	11011	2.18	38531.5972	44044	6092	3.953	-0.166	0.000	-0.073	-0.205	11011	1.29	38455.9139	44044
5947	4.101	1.247	0.000	0.878	0.618	11011	1.26	38531.6764	44044	6092	4.000	-0.050	0.000	-0.072	-0.177	11011	2.88	38505.6507	44044
5947	4.191	1.238	0.000	0.851	0.600	11011	1.10	38532.7132	44044	6092	3.908	-0.158	0.000	-0.075	-0.209	11011	1.28	38505.7799	44044
5947	4.194	1.240	0.000	0.865	0.619	11011	1.01	38532.7674	44044	6092	3.941	-0.179	0.000	-0.051	-0.191	11011	1.13	38505.8701	44044
5947	4.202	1.238	0.000	0.884	0.633	11011	1.05	38532.8340	44044	6092	3.922	-0.157	0.000	-0.069	-0.164	11011	1.16	38505.9215	44044
5947	4.184	1.268	0.000	0.873	0.634	11011	1.42	38532.9194	44044	6092	3.940	-0.135	0.000	-0.116	-0.221	11011	1.87	38529.6375	44044
5947	4.145	1.251	0.000	0.897	0.574	11011	1.71	38533.6597	44044	6092	3.954	-0.151	0.000	-0.082	-0.196	11011	1.27	38529.7181	44044
5947	4.200	1.225	0.000	0.896	0.644	11011	1.03	38533.8132	44044	6092	3.930	-0.156	0.000	-0.087	-0.166	11011	1.13	38529.8167	44044
5947	4.132	1.245	1.251	0.000	0.000	11000	1.71	38812.8542	44000	6092	3.896	-0.175	0.000	-0.076	-0.151	11011	1.51	38529.9444	44044
5947	4.177	1.204	0.000	0.927	0.621	11011	1.57	38814.8607	22022	6092	3.961	-0.161	0.000	-0.088	-0.226	11011	1.61	38530.6556	44044
5947	4.143	1.235	0.000	0.910	0.594	11011	1.41	38815.8751	44044	6092	3.929	-0.163	0.000	-0.074	-0.213	11011	1.23	38530.8271	44044
5947	4.149	1.262	0.000	0.884	0.629	11011	1.02	38815.9792	44044	6092	3.960	-0.143	0.000	-0.093	-0.155	11011	1.15	38530.9366	44044
5947	4.131	1.208	0.000	0.920	0.613	11011	1.05	38816.9571	22022	6092	3.899	-0.155	0.000	-0.096	-0.136	11011	1.47	38530.9361	44044
5947	4.181	1.256	0.000	0.905	0.582	11011	1.58	38819.8453	22022	6092	3.936	-0.138	0.000	-0.105	-0.156	11011	2.28	38531.6028	44044
5947	4.134	1.248	0.000	0.890	0.596	11011	1.17	38819.9064	22022	6092	3.941	-0.153	0.000	-0.086	-0.199	11011	1.42	38531.6806	44044
5947	4.139	1.196	0.000	0.906	0.637	11011	1.03	38819.9626	22022	6092	3.925	-0.139	0.000	-0.119	-0.207	11011	1.28	38532.7181	44044
5947	4.137	1.232	0.000	0.884	0.608	11011	1.33	38822.8675	44044	6092	3.880	-0.117	0.000	-0.112	-0.911	11011	1.14	38532.7722	44044
5947	4.201	1.201	0.000	0.916	0.624	11011	1.67	38823.8267	44044	6092	3.927	-0.151	0.000	-0.095	-0.173	11011	1.15	38532.8389	44044
5947	4.127	1.261	0.000	0.911	0.611	11011	1.67	38823.8267	44044	6092	3.943	-0.085	0.000	-0.059	-0.169	11011	1.37	38532.9132	44044
5947	4.170	1.232	0.000	0.894	0.629	11011	1.13	38823.9078	44044	6092	3.969	-0.122	0.000	-0.078	-0.223	11011	1.48	38533.6653	44044
5947	4.206	1.217	0.000	0.926	0.647	11011	1.02	38823.9619	44044	6092	3.923	-0.164	0.000	-0.082	-0.208	11011	1.13	38533.8194	44044
5947	4.139	1.221	0.000	0.871															

TABLE 6 TONANTZINTLA BVRI AND UVB OBSERVATIONS

TONANTZINTLA BVRI - UVB										TONANTZINTLA BVRI - UVB									
B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.	B.S.	V	B-V	U-B	V-R	R-I	WTS.	AIR	J.D.	CNT.
6175	2.575	-0.004	0.000	0.109	-0.043	11011	1.15	38099.9847	44044	7446	4.883	0.004	0.000	0.084	-0.064	11011	1.34	38113.9910	44044
6175	2.631	0.018	0.000	0.102	-0.008	11011	1.15	38121.9347	44044	7446	4.959	0.016	-0.856	0.000	0.000	11010	1.12	38166.9791	44040
6241	2.283	1.175	0.000	0.856	0.605	11011	1.68	38113.9854	44044	7446	4.886	-0.026	-0.902	0.000	0.000	11010	1.12	38166.9791	44040
6247	2.916	-0.239	0.000	-0.122	-0.200	11011	1.93	38529.8722	44044	7446	4.976	-0.048	-0.894	0.000	0.000	11000	1.28	38170.8469	22200
6247	3.120	-0.203	0.000	-0.118	-0.185	11011	1.86	38530.8507	44044	7446	5.016	-0.014	-0.835	0.000	0.000	11000	1.27	38171.8472	22200
6252	3.527	-0.225	0.000	-0.135	-0.225	11011	1.94	38529.8764	44044	7446	4.898	-0.020	-0.893	0.000	0.000	11000	1.45	38173.8104	22200
6252	3.592	-0.209	0.000	-0.127	-0.219	11011	1.87	38530.8556	44044	7446	4.887	-0.003	-0.933	0.000	0.000	11000	1.11	38173.9167	22200
6292	6.080	0.913	0.000	0.678	0.440	11011	1.20	38836.8925	44044	7446	5.060	0.043	-0.904	0.000	0.000	11000	1.44	38174.8097	22200
6292	6.147	0.921	0.000	0.725	0.521	11011	1.01	38841.9003	44044	7446	4.870	-0.038	-0.904	0.000	0.000	11000	1.11	38174.9125	22200
6292	6.155	0.940	0.000	0.692	0.484	11011	1.10	38842.9043	44044	7446	4.909	0.010	-0.931	0.000	0.000	11000	1.31	38178.8187	22200
6334	4.853	0.246	0.000	0.333	0.186	11011	1.67	38112.9639	44044	8151	4.806	0.010	0.000	0.086	0.046	11011	2.15	38348.5639	44044
6334	4.864	0.283	0.000	0.292	0.152	11011	1.67	38532.8458	44044	8305	4.328	-0.050	0.000	-0.008	-0.027	11011	1.70	38348.5701	44044
6380	3.353	0.411	0.000	0.392	0.248	11011	2.15	38112.9687	44044	8353	2.990	-0.097	0.000	-0.047	-0.059	11011	1.89	38348.5750	44044
6380	3.301	0.416	0.000	0.319	0.164	11011	2.15	38532.8514	44044	8411	4.488	1.383	0.000	0.999	0.780	11011	1.99	38348.5806	44044
6453	3.225	-0.237	0.000	-0.147	-0.202	11011	1.42	38529.8819	44044	8425	1.681	-0.167	0.000	-0.079	-0.060	11011	2.61	38348.5875	44044
6453	3.275	-0.202	0.000	-0.137	-0.223	11011	1.39	38530.8694	44044	8431	4.486	0.056	0.000	0.073	0.050	11011	1.73	38348.5924	44044
6492	4.256	0.401	0.000	0.276	0.175	11011	1.52	38532.8569	44044	8521	6.697	1.943	0.000	3.588	2.709	11011	2.37	38699.5950	44044
6508	2.695	-0.198	0.000	-0.127	-0.206	11011	1.82	38112.9757	44044	8521	6.587	2.032	0.000	3.448	2.448	11011	2.37	38700.5942	44044
6508	2.656	-0.220	0.000	-0.193	-0.267	11011	1.81	38532.8611	44044	8521	6.592	2.077	0.000	3.386	2.596	11011	2.37	38701.5900	44044
6510	2.951	-0.176	0.000	-0.103	-0.236	11011	1.79	38532.8667	44044	8521	6.542	2.071	0.000	3.353	2.643	11011	2.37	38702.5794	44044
6527	1.580	-0.177	0.000	-0.166	-0.279	11011	1.81	38532.8715	44044	8556	3.988	1.026	0.000	0.731	0.610	11011	2.29	38348.6021	44044
6537	4.586	-0.006	0.000	-0.006	-0.056	11011	2.45	38532.8764	44044	8560	4.139	1.569	0.000	1.727	1.597	11011	2.34	38348.6076	44044
6546	4.258	1.075	0.000	0.749	0.552	11011	1.91	38532.8819	44044	8576	4.272	-0.000	0.000	0.023	0.014	11011	1.72	38348.6125	44044
6553	1.860	0.396	0.000	0.336	0.206	11011	2.19	38532.8861	44044	8622	4.891	-0.188	0.000	-0.076	-0.245	11011	2.94	38133.9340	44044
6553	1.864	0.405	0.000	0.365	0.198	11011	2.28	38532.9014	44044	8622	4.879	-0.174	-1.335	0.000	0.000	11000	2.84	38166.8465	44040
6569	4.750	0.399	0.000	0.294	0.213	11011	2.82	38532.8910	44044	8622	4.759	-0.199	-1.040	0.000	0.000	11000	1.42	38166.9326	44040
6580	2.472	-0.187	0.000	-0.104	-0.238	11011	2.02	38522.9062	44044	8622	4.868	-0.192	-1.083	0.000	0.000	11000	1.37	38173.9222	22200
6603	2.834	1.209	0.000	0.853	0.537	11011	2.53	38837.8361	44044	8622	4.863	-0.225	-1.042	0.000	0.000	11000	1.39	38174.9127	22200
6603	2.840	1.183	0.000	0.881	0.543	11011	2.95	38838.8231	44044	8622	4.879	-0.200	0.000	-0.103	-0.185	11011	1.78	38342.7528	44044
6603	2.862	1.162	0.000	0.923	0.565	11011	6.10	38839.7893	44044	8622	4.874	-0.192	0.000	-0.097	-0.219	11011	1.08	38345.5417	22022
6603	2.844	1.162	0.000	0.844	0.567	11011	1.04	38841.9932	44044	8622	4.871	-0.213	0.000	-0.053	-0.191	11011	1.34	38345.6931	22022
6603	2.781	1.166	0.000	0.870	0.543	11011	3.83	38842.7983	44044	8622	4.856	-0.213	0.000	-0.085	-0.248	11011	0.77	38348.5500	44044
6603	2.860	1.181	0.000	0.827	0.574	11011	1.07	38842.9654	44044	8622	4.865	-0.214	0.000	-0.080	-0.217	11011	1.11	38348.6201	44044
6603	2.811	1.242	0.000	0.000	11100	2.09	38844.8325	44040	8622	4.886	-0.185	0.000	-0.081	-0.148	11011	1.59	38348.7181	44044	
6603	2.773	1.170	1.252	0.000	0.000	11100	1.18	38844.9220	44000	8622	4.884	-0.230	0.000	-0.042	-0.193	11011	1.06	38350.5556	44044
6603	2.670	1.059	1.248	0.000	0.000	11100	2.74	38845.8088	44000	8622	4.867	-0.181	0.000	-0.083	-0.175	11011	1.11	38350.6146	44044
6603	2.707	1.161	1.227	0.000	0.000	11100	1.32	38845.8913	44000	8622	4.888	-0.205	0.000	-0.061	-0.191	11011	1.79	38350.7785	44044
6603	2.723	1.161	1.232	0.000	0.000	11100	1.06	38845.9649	44000	8622	4.890	-0.203	0.000	-0.044	-0.192	11011	1.06	38351.5493	44044
6629	3.804	0.067	0.000	0.042	-0.033	11011	2.57	38837.8397	44044	8622	4.885	-0.222	0.000	-0.064	-0.157	11011	2.77	38351.7736	44044
6629	3.838	0.028	0.000	0.062	-0.007	11011	2.99	38838.8272	44044	8622	4.861	-0.191	0.000	-0.062	-0.197	11011	1.06	38352.5486	44044
6629	3.805	0.088	0.000	0.011	0.039	11011	6.00	38839.7946	44044	8622	4.928	-0.202	0.000	-0.053	-0.138	11011	2.25	38352.7535	44044
6629	3.793	0.015	0.000	0.076	-0.020	11011	1.05	38841.9974	44044	8622	4.898	-0.221	0.000	-0.044	-0.185	11011	1.06	38353.5079	44044
6629	3.791	0.053	0.000	0.062	-0.006	11011	3.73	38842.8044	44044	8622	4.900	-0.209	0.000	-0.042	-0.188	11011	1.06	38354.5556	44044
6629	3.809	0.053	0.000	0.032	-0.020	11011	1.08	38842.9694	44044	8622	4.909	-0.229	0.000	-0.045	-0.174	11011	1.06	38354.7264	44044
6629	3.758	0.128	0.027	0.000	0.000	11100	2.13	38844.8358	44000	8622	4.879	-0.188	0.000	-0.069	-0.174	11011	1.08	38355.5764	44044
6629	3.713	0.047	0.053	0.000	0.000	11100	1.19	38844.9255	44000	8622	4.884	-0.177	0.000	-0.071	-0.175	11011	1.06	38356.5486	44044
6629	3.662	-0.017	-0.030	0.000	0.000	11100	2.72	38845.8141	44000	8622	4.881	-0.177	0.000	-0.076	-0.164	11011	2.17	38356.7389	44044
6629	3.690	0.029	0.031	0.000	0.000	11100	1.34	38845.8948	44000	8622	4.842	-0.196	0.000	-0.102	-0.204	11011	1.08	38368.5410	22022
6629	3.659	0.038	0.041	0.000	0.000	11100	1.07	38845.9687	44000	8622	4.775	-0.197	0.000	-0.081	-0.217	11011	1.11	38370.5611	22022
6705	2.169	1.481	0.000	1.147	0.779	11011	1.41	38836.9251	44044	8622	4.955	-0.197	0.000	-0.079	-0.203	11011	1.48	38370.6472	22022
6746	2.978	1.032	0.000	0.725	0.516	11011	1.54	38529.8903	44044	8622	4.883	-0.206	0.000	-0.082	-0.203	11011	1.12	38373.5562	22022
6766	4.543	0.973	0.000	0.705	0.524	11011	1.48	38529.8951	44044	8622	4.872	-0.200	0.000	-0.088	-0.198				

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL								PBS INFRARED IJKL									
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.
3	2.255	0.720	0.000	0.133	1101	1.28	38637.8773	1101	45	0.636	1.027	0.000	0.160	1101	1.16	39055.6439	1101
3	2.265	0.688	0.000	-0.046	1101	1.29	38638.8461	1101	45	0.580	1.072	0.000	0.159	1101	1.03	39055.7076	1101
3	2.228	0.685	0.000	0.130	1101	1.28	38639.8693	1101	45	0.669	1.044	0.000	0.116	1101	1.03	39056.7121	1101
15	2.346	-0.079	-0.221	0.000	1110	1.00	38260.9109	3330	45	0.613	1.069	0.000	0.196	1101	1.03	39057.7140	3303
15	2.423	-0.104	-0.182	0.000	1110	1.00	38291.8186	1110	45	0.662	1.036	0.000	0.153	1101	1.03	39058.7082	3303
15	0.000	-0.040	-0.199	0.000	0110	1.09	38291.8934	1110	45	0.636	1.016	0.000	0.174	1101	1.04	39061.7497	3303
15	2.418	-0.022	-0.163	0.000	1110	1.05	38299.7405	1110	45	0.597	1.088	0.000	0.125	1101	1.08	39063.7686	3303
21	1.429	0.174	0.282	0.000	1110	1.12	38300.8161	3330	45	0.592	1.090	0.000	0.211	1101	1.05	39064.6684	3303
21	1.462	0.187	0.318	0.000	1110	1.12	38317.7521	1110	45	0.691	1.006	0.000	0.137	1101	1.23	39066.5973	1101
21	1.544	0.154	0.266	0.000	1110	1.12	38323.7368	1110	45	0.710	0.959	0.000	0.141	1101	1.10	39066.6346	1101
27	3.807	0.241	0.477	0.000	1110	1.13	38396.6201	1110	45	0.673	0.943	0.000	0.074	1101	1.11	39068.7651	1101
39	3.372	-0.040	-0.300	0.000	1110	1.06	38300.8218	3330	45	0.625	1.072	0.000	0.130	1101	1.19	39069.5988	1101
39	3.487	-0.173	-0.384	0.000	1110	1.05	38317.7576	1110	45	0.627	1.067	0.000	0.172	1101	1.06	39069.6457	1101
39	3.538	-0.167	-0.369	0.000	1110	1.05	38323.7418	1110	45	0.581	1.067	0.000	0.186	1101	1.03	39072.7094	3303
39	3.536	-0.197	0.000	-0.040	1101	1.10	39076.7260	1101	45	0.625	1.043	0.000	0.155	1101	1.09	39076.7373	1101
39	3.665	-0.205	0.000	0.045	0101	1.13	39133.5836	1101	45	0.582	1.038	0.000	0.158	1101	1.12	39099.6852	1101
39	3.607	-0.190	0.000	-0.014	0101	1.13	39135.5790	1101	45	0.643	1.042	0.000	0.204	1101	1.07	39133.5720	1101
45	0.606	1.057	1.679	0.000	1110	1.06	38300.8446	3330	74	0.948	0.714	1.136	0.000	1110	1.44	38303.8527	1110
45	0.576	1.065	1.681	0.000	1110	1.03	38317.7625	1110	74	0.924	0.678	1.113	0.000	1110	1.34	38317.7673	1110
45	0.683	0.998	1.628	0.000	1110	1.03	38323.7471	1110	74	0.942	0.708	1.104	0.000	1110	1.34	38323.7514	1110
45	0.678	0.987	1.600	0.000	1110	1.11	38345.7451	1110	74	0.977	0.753	0.000	0.090	1101	1.45	38742.6540	1101
45	0.599	1.093	1.674	0.000	1110	1.03	38367.6611	1110	90	-0.445	1.609	0.000	0.843	1101	1.05	39054.6865	1101
45	0.637	1.040	1.658	0.000	1110	1.06	38361.6103	1110	90	-0.362	1.512	0.000	0.871	1101	1.09	39055.6597	1101
45	0.711	0.980	1.633	0.000	1110	1.05	38369.5696	1110	90	-0.067	1.420	0.000	0.936	1101	1.10	39066.6279	1101
45	0.616	1.001	1.665	0.000	1110	1.03	38370.6204	3330	90	-0.388	1.564	0.000	0.827	1101	1.05	39068.7593	1101
45	0.588	1.046	1.664	0.000	1110	1.04	38377.6197	3330	90	-0.418	1.602	0.000	0.813	1101	1.13	39069.6089	1101
45	0.591	1.062	1.685	0.000	1110	1.04	38378.6207	3330	90	-0.473	1.471	2.983	0.000	1110	1.70	38680.5682	4440
45	0.630	1.024	1.667	0.000	1110	1.02	38381.5721	3330	90	-0.453	2.457	3.232	0.000	1110	1.09	38681.7731	2220
45	0.592	1.034	1.656	0.000	1110	1.02	38387.5622	3330	90	-0.544	1.498	3.071	0.000	1110	1.07	38694.6694	4440
45	0.600	1.017	1.645	0.000	1110	1.10	38390.6179	3330	91	5.886	-0.071	0.000	0.053	1101	1.08	38744.6260	1101
45	0.711	0.990	1.606	0.000	1110	1.03	38391.5595	3330	113	5.742	0.240	0.000	0.000	1100	1.13	38305.7810	1110
45	0.541	1.130	1.750	0.000	1110	1.08	38395.5958	1110	113	5.777	0.060	0.000	0.000	1100	1.16	38307.8426	1110
45	0.621	1.009	1.668	0.000	1110	1.07	38404.5682	3330	130	3.986	0.012	-0.129	0.000	1110	1.63	37713.5819	1110
45	0.731	1.064	0.000	0.147	1101	1.40	38569.9281	1101	130	3.913	0.056	0.033	0.000	1110	1.37	37829.9537	3330
45	0.693	1.141	0.000	0.136	1101	1.30	38570.9418	1101	130	3.873	0.076	0.000	0.046	1101	1.16	38671.7839	1101
45	0.676	1.290	0.000	0.249	1101	1.05	38637.9159	1101	130	3.927	0.133	0.000	-0.027	1101	1.47	38692.9004	1101
45	0.651	1.076	0.000	0.190	1101	1.04	38638.8378	1101	153	4.462	-0.201	0.000	-0.110	1101	1.08	38742.6303	1101
45	0.622	1.135	0.000	0.176	1101	1.05	38638.9131	1101	153	4.334	-0.118	0.000	-0.002	1101	1.08	38747.6058	1101
45	0.626	1.064	0.000	0.176	1101	1.03	38639.8611	1101	163	2.193	0.694	0.993	0.000	1110	1.09	38303.8825	1110
45	0.647	1.069	0.000	0.185	1101	1.03	38640.8427	1101	163	2.187	0.625	0.978	0.000	1110	1.00	38317.7722	1110
45	0.646	1.184	0.000	0.272	1101	1.06	38640.9137	1101	163	2.262	0.583	0.928	0.000	1110	1.00	38323.7555	1110
45	0.664	1.049	0.000	0.190	1101	1.05	38646.8925	1101	165	0.506	0.777	1.225	0.000	1110	1.13	38303.8983	1110
45	0.692	1.027	0.000	0.203	1101	1.04	38666.8292	1101	165	0.479	0.760	1.211	0.000	1110	1.00	38317.7771	1110
45	0.632	1.097	0.000	0.198	1101	1.06	38667.8413	1101	165	0.499	0.745	1.191	0.000	1110	1.00	38323.7609	1110
45	0.654	1.055	0.000	0.174	1101	1.23	38667.8971	1101	165	0.453	0.735	0.000	0.183	1101	1.03	38750.6309	1101
45	0.632	1.008	0.000	0.213	1101	1.31	38668.6713	1101	166	3.976	0.488	0.748	0.000	1110	1.06	38302.8595	1110
45	0.660	1.055	0.000	0.239	1101	1.03	38668.7755	1101	168	-0.286	0.686	1.030	0.000	1110	1.10	38315.8011	1110
45	0.639	1.084	0.000	0.251	1101	1.03	38669.7780	1101	168	-0.208	0.658	1.047	0.000	1110	1.11	38338.6796	3330
45	0.594	1.103	0.000	0.208	1101	1.36	38670.6589	1101	168	-0.257	0.668	0.000	0.215	1101	1.15	38750.6527	1101
45	0.640	1.102	0.000	0.240	1101	1.04	38670.8161	1101	179	5.109	-0.090	0.000	-0.162	1101	1.06	38738.6461	1101
45	0.626	1.052	0.000	0.212	1101	1.03	38671.8037	1101	179	5.202	-0.172	0.000	0.310	1101	1.07	38743.6408	1101
45	0.661	1.064	0.000	0.159	1101	1.11	38675.8428	3303	179	5.069	-0.069	0.000	0.097	1101	1.06	38751.6010	1101
45	0.697	0.981	1.618	0.000	1110	1.50	38680.5818	4440	188	-0.209	0.624	0.897	0.000	1110	1.63	38323.7201	1101
45	0.595	1.027	1.768	0.000	1110	1.00	38680.7297	4440	188	-0.296	0.675	0.989	0.000	1110	1.64	38339.6728	4440
45	0.641	1.026	1.679	0.000	1110	1.03	38681.7604	2220	188	-0.240	0.627	0.991	0.000	1110	1.76	38356.5997	1110
45	0.663	1.010	1.702	0.000	1110	1.33	38687.5835	4440	193	4.636	-0.048	0.000	-0.009	1101	1.06	38747.6332	1101
45	0.673	1.021	1.648	0.000	1110	1.15	38693.7745	4440	215	1.478	0.656	1.089	0.000	1110	1.03	38315.8116	1110
45	0.644	1.034	1.694	0.000	1110	1.84	38693.8575	4440	215	1.561	0.675	1.091	0.000	1110	1.03	38339.6784	4440
45	0.650	0.984	1.621	0.000	1110	1.34	38694.5628	4440	215	1.534	0.676	1.108	0.000	1110	1.01	38361.6560	1110
45	0.731	0.984	1.661	0.000	1110	1.93	38694.8599	4440	219	1.974	0.364	0.563	0.000	1110	1.12	38315.8197	1110
45	0.652	1.051	1.680	0.000	1110	1.17	38697.5849	4440	219	1.969	0.417	0.673	0.000	1110	1.11	38339.6893	4440
45	0.648	0.987	1.687	0.000	1110	1.01	38697.7007	4440	219	1.967	0.387	0.612	0.000	1110	1.11	38361.6668	1110
45	0.650	0.953	1.650	0.000	1110	1.47	38697.8174	4440	224	0.880	0.942	1.476	0.000	1110	1.11	38338.7063	3330
45	0.579	1.099	0.000	0.131	1101	1.07	38725.5853	1101	224	0.834	0.945	1.542	0.000	1110	1.17	38356.6136	1110
45	0.630	1.056	0.000	0.265	1101	1.03	38738.5851	1101	224	0.795	0.963	1.511	0.000	1110	1.12	38380.6277	3330
45	0.612	1.058	0.000	0.108	1101	1.09	38740.6582	1101	264	2.170	0.311	0.187	0.000	1110	1.14	38316.8115	

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL										PBS INFRARED IJKL									
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.			B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.
337	-1.852	0.993	1.625	0.000	1110	1.00	38295.8568	1110			553	2.349	0.122	0.146	0.000	1110	1.02	38296.8854	1110
337	-1.823	1.037	1.619	0.000	1110	1.00	38300.8472	3330			553	2.380	0.047	0.091	0.000	1110	1.02	38317.8269	1110
											553	2.369	0.137	0.126	0.000	1110	1.02	38329.7818	1110
360	2.342	0.646	0.991	0.000	1110	1.08	38315.8656	1110			585	0.107	1.014	1.554	0.000	1110	1.69	38323.8083	1110
360	2.397	0.626	1.036	0.000	1110	1.01	38340.7404	3330			585	0.053	1.074	1.633	0.000	1110	1.69	38329.7885	1110
360	2.399	0.616	0.998	0.000	1110	1.02	38361.6954	1110			585	0.114	0.961	1.593	0.000	1110	1.70	38338.7490	3330
382	3.066	0.380	0.000	0.180	1101	1.13	39035.8796	1101			589	4.643	0.140	0.301	0.000	1110	1.18	38396.6369	1110
382	3.098	0.367	0.000	0.162	1101	1.12	39036.8606	1101			602	1.524	0.993	1.497	0.000	1110	2.28	38769.5708	3340
382	3.136	0.348	0.000	0.242	1101	1.11	39037.8220	1101			603	-0.838	0.845	1.345	0.000	1110	1.02	38296.8956	1110
390	3.665	-0.205	0.000	0.045	0101	1.13	39133.5836	1101			603	-0.789	0.820	1.304	0.000	1110	1.01	38323.8130	1110
390	3.607	-0.190	0.000	-0.014	0101	1.13	39135.5790	1101			603	-0.813	0.831	1.324	0.000	1110	1.02	38338.7601	3330
402	1.127	0.702	1.071	0.000	1110	1.35	38316.8181	1110			612	5.028	-0.026	-0.243	0.000	1110	1.52	38769.5785	3340
402	1.184	0.637	0.983	0.000	1110	1.32	38328.7734	1110			617	-0.584	0.732	1.168	0.000	1110	1.02	38291.8876	1110
402	1.231	0.646	1.018	0.000	1110	1.35	38361.7114	1110			617	-0.636	0.728	1.112	0.000	1110	1.03	38291.9292	1110
403	2.269	0.117	0.183	0.000	1110	1.13	38260.9471	3330			617	-0.613	0.768	1.156	0.000	1110	1.81	38295.7124	1110
403	2.326	0.120	0.139	0.000	1110	1.13	38300.8521	3330			617	-0.577	0.655	1.101	0.000	1110	1.12	38295.8115	1110
403	2.378	0.047	0.098	0.000	1110	1.13	38317.7918	1110			617	-0.635	0.861	1.186	0.000	1110	1.90	38296.7043	1110
423	-0.213	1.746	2.521	0.000	1110	1.61	38680.7679	2220			617	-0.653	0.721	1.180	0.000	1110	1.04	38296.8493	1110
423	-0.143	1.594	2.744	0.000	1110	1.61	38681.7661	2220			617	-0.721	0.783	1.229	0.000	1110	1.15	38298.7930	1110
423	-0.240	1.593	2.498	0.000	1110	1.61	38697.7286	4440			617	-0.567	0.698	1.090	0.000	1110	1.01	38298.8852	1110
434	1.481	0.935	1.425	0.000	1110	1.13	38343.7110	3330			617	-0.654	0.728	1.139	0.000	1110	1.12	38300.7987	3330
434	1.544	0.882	1.335	0.000	1110	1.12	38397.6007	3330			617	-0.636	0.733	1.187	0.000	1110	1.05	38301.8267	1110
437	1.441	0.588	0.965	0.000	1110	1.05	38316.8233	1110			617	-0.569	0.705	1.155	0.000	1110	1.20	38302.7689	1110
437	1.429	0.659	0.966	0.000	1110	1.07	38365.7103	3330			617	-0.672	0.744	1.169	0.000	1110	1.05	38303.9159	1110
437	1.442	0.586	0.941	0.000	1110	1.05	38378.6277	3330			617	-0.679	0.696	1.129	0.000	1110	1.03	38305.8336	1110
437	1.408	0.590	0.955	0.000	1110	1.05	38380.6478	3330			617	-0.622	0.739	1.187	0.000	1110	1.01	38307.8611	1110
											617	-0.600	0.743	1.185	0.000	1110	1.10	38309.7801	1110
458	2.858	0.286	0.512	0.000	1110	1.02	38316.8278	1110			617	-0.610	0.736	1.150	0.000	1110	1.01	38309.8422	1110
458	2.900	0.341	0.448	0.000	1110	1.03	38365.7161	3330			617	-0.590	0.739	1.193	0.000	1110	1.01	38310.8527	1110
458	2.785	0.354	0.499	0.000	1110	1.06	38368.7274	3330			617	-0.607	0.734	1.150	0.000	1110	1.12	38311.7662	1110
458	2.905	0.249	0.476	0.000	1110	1.01	38378.6326	3330			617	-0.641	0.728	1.117	0.000	1110	1.05	38315.7880	1110
458	2.824	0.318	0.501	0.000	1110	1.02	38380.6636	3330			617	-0.678	0.745	1.186	0.000	1110	1.01	38316.8389	1110
458	2.785	0.382	0.527	0.000	1110	1.11	38392.6878	3330			617	-0.644	0.723	1.157	0.000	1110	1.06	38316.8890	1110
458	2.911	0.327	0.000	0.128	1101	1.04	38637.8863	1101			617	-0.649	0.737	1.172	0.000	1110	1.21	38317.7266	1110
458	2.845	0.307	0.000	-0.008	1101	1.34	38665.9995	1101			617	-0.608	0.699	1.160	0.000	1110	1.04	38317.7866	1110
464	0.734	0.779	1.283	0.000	1110	1.05	38316.8326	1110			617	-0.633	0.739	1.151	0.000	1110	1.01	38317.8402	1110
464	0.840	0.727	1.179	0.000	1110	1.04	38329.7676	1110			617	-0.660	0.704	1.105	0.000	1110	1.13	38323.7296	1110
464	0.797	0.721	1.140	0.000	1110	1.09	38368.7342	3330			617	-0.620	0.732	1.176	0.000	1110	1.05	38323.7672	1110
464	0.828	0.712	1.169	0.000	1110	1.04	38378.6378	3330			617	-0.669	0.807	1.234	0.000	1110	1.02	38323.8343	1110
											617	-0.702	0.756	1.180	0.000	1110	1.06	38324.7577	1110
483	3.546	0.391	0.553	0.000	1110	1.04	38295.8337	1110			617	-0.655	0.729	1.130	0.000	1110	1.06	38324.8619	1110
483	3.473	0.361	0.624	0.000	1110	1.02	38296.8599	1110			617	-0.614	0.726	1.127	0.000	1110	1.04	38325.8508	1110
483	3.593	0.214	0.456	0.000	1110	1.05	38298.8107	1110			617	-0.650	0.744	1.150	0.000	1110	1.05	38326.7578	1110
483	3.625	0.278	0.534	0.000	1110	1.02	38395.6044	1110			617	-0.617	0.731	1.148	0.000	1110	1.01	38326.7963	1110
483	3.618	0.222	0.541	0.000	1110	1.03	38396.6268	1110			617	-0.633	0.719	1.123	0.000	1110	1.02	38327.7766	1110
483	3.663	0.291	0.000	0.231	1101	1.03	38637.8973	1101			617	-0.642	0.734	1.152	0.000	1110	1.04	38327.8458	1110
483	3.400	0.431	0.000	0.039	1101	1.58	38665.8356	1101			617	-0.669	0.703	1.144	0.000	1110	1.03	38328.7678	1110
											617	-0.664	0.737	1.157	0.000	1110	1.02	38329.7625	1110
489	1.214	0.873	1.418	0.000	1110	1.15	38316.8483	1110			617	-0.630	0.739	1.169	0.000	1110	1.03	38338.7544	3330
489	1.203	0.950	1.425	0.000	1110	1.12	38329.7743	1110			617	-0.586	0.703	1.109	0.000	1110	2.03	38339.5793	4440
489	1.316	0.847	1.351	0.000	1110	1.14	38369.7001	1110			617	-0.610	0.720	1.172	0.000	1110	1.18	38339.8679	4440
496	3.416	0.415	0.314	0.000	1110	1.34	37711.5929	1110			617	-0.655	0.747	1.142	0.000	1110	1.97	38340.5795	3330
496	3.331	0.492	0.430	0.000	1110	1.48	37712.6162	1110			617	-0.704	0.819	1.207	0.000	1110	2.03	38343.5682	3330
496	3.385	0.447	0.455	0.000	1110	1.49	37831.9590	1110			617	-0.663	0.714	1.174	0.000	1110	1.01	38343.7706	3330
496	3.307	0.528	0.000	0.531	1101	1.08	38671.7960	1101			617	-0.662	0.786	1.189	0.000	1110	1.13	38345.8200	1110
496	3.412	0.499	0.000	0.501	1101	1.16	38692.8780	1101			617	-0.623	0.722	1.175	0.000	1110	1.03	38357.6899	1110
496	3.300	0.477	0.000	0.519	1101	1.05	38694.7777	3303			617	-0.599	0.747	1.189	0.000	1110	1.01	38361.7207	1110
											617	-0.620	0.675	1.148	0.000	1110	1.03	38365.6655	3330
509	1.768	0.423	0.667	0.000	1110	1.54	38295.8474	1110			617	-0.627	0.749	1.184	0.000	1110	1.19	38367.5937	1110
509	1.643	0.489	0.792	0.000	1110	1.51	38296.8701	1110			617	-0.599	0.723	1.132	0.000	1110	1.07	38367.7512	1110
509	1.628	0.532	0.808	0.000	1110	1.51	38317.8029	1110			617	-0.652	0.735	1.146	0.000	1110	1.05	38368.7410	3330
											617	-0.604	0.715	1.105	0.000	1110	1.02	38369.6643	1110
510	2.122	0.597	0.917	0.000	1110	1.09	38260.9575	3330			617	-0.616	0.718	1.120	0.000	1110	1.03	38370.7174	3330
510	2.142	0.548	0.927	0.000	1110	1.09	38296.8777	1110			617	-0.662	0.688	1.146	0.000	1110	1.01	38379.6641	3330
510	2.165	0.515	0.882	0.000	1110														

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL									PBS INFRARED IJKL								
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.
617	-0.656	0.808	0.000	0.088	1101	1.05	38668.9158	1101	622	2.682	0.120	0.172	0.000	1110	1.00	38323.8175	1110
617	-0.503	0.671	0.000	0.123	1101	1.30	38668.9918	1101	622	2.670	0.093	0.128	0.000	1110	1.01	38328.7802	1110
617	-0.642	0.809	0.000	0.069	1101	1.05	38669.9128	1101	648	1.873	0.985	1.569	0.000	1110	1.10	38343.8166	3330
617	-0.669	0.774	0.000	0.214	1101	1.02	38673.8423	1101	648	1.922	0.873	1.458	0.000	1110	1.05	38397.6049	3330
617	-0.670	0.788	0.000	0.114	1101	1.02	38674.8296	1101	649	2.281	0.538	0.895	0.000	1110	1.10	38316.8600	1110
617	-0.610	0.730	1.130	0.000	1110	1.04	38678.7635	4440	649	2.335	0.573	0.858	0.000	1110	1.09	38323.8218	1110
617	-0.625	0.715	1.149	0.000	1110	2.22	38680.6125	4440	681	-2.266	1.321	3.096	0.000	1110	1.23	38298.9029	1110
617	-0.614	0.726	1.122	0.000	1110	1.00	38680.8095	2220	681	-2.307	1.332	3.228	0.000	1110	1.33	38301.8224	1110
617	-0.565	0.701	1.094	0.000	1110	1.42	38680.9361	2220	681	-2.155	1.308	3.211	0.000	1110	1.23	38323.8274	1110
617	-0.595	0.736	1.150	0.000	1110	1.04	38681.7564	2220	681	-2.092	1.373	3.001	0.000	1110	1.25	38367.6716	1110
617	-0.618	0.731	1.116	0.000	1110	2.34	38687.5887	4440	681	-2.126	1.307	2.856	0.000	1110	1.25	38379.6431	3330
617	-0.608	0.738	1.088	0.000	1110	1.01	38693.7792	4440	681	-2.356	1.333	3.000	0.615	1101	1.27	38638.9201	1101
617	-0.665	0.718	1.130	0.000	1110	1.19	38693.8632	4440	681	-2.153	1.275	3.000	0.523	1101	1.24	38666.8589	1101
617	-0.598	0.722	1.185	0.000	1110	2.33	38694.5700	4440	681	-2.193	1.354	3.000	0.688	1101	1.41	38669.7955	1101
617	-0.608	0.721	1.140	0.000	1110	1.21	38694.6622	4440	681	-2.037	1.389	3.000	0.814	1101	1.24	39062.7820	3303
617	-0.655	0.766	1.189	0.000	1110	1.21	38694.8653	4440	681	-2.095	1.338	3.000	0.798	1101	1.29	39066.7416	1101
617	-0.635	0.723	1.149	0.000	1110	1.75	38697.5906	4440	681	-2.030	1.390	3.000	0.726	1101	1.23	39068.7713	1101
617	-0.567	0.623	1.077	0.000	1110	1.25	38697.6469	4440	681	-1.919	1.321	3.000	0.764	1101	1.30	39069.7276	1101
617	-0.612	0.686	1.162	0.000	1110	1.03	38697.7148	4440	681	-2.325	1.096	3.000	0.774	1101	1.24	39099.6779	1101
617	-0.622	0.765	1.198	0.000	1110	1.25	38697.8649	4440	681	-3.074	1.219	3.000	0.634	1101	1.24	39132.5878	3303
617	-0.610	0.730	0.000	0.118	1101	1.07	38727.7675	1101	696	5.580	0.119	0.000	0.000	1100	1.11	38390.6779	3330
617	-0.583	0.761	0.000	0.080	1101	1.02	38738.6994	1101	696	5.555	0.052	0.000	0.000	1100	1.10	38420.5880	3330
617	-0.555	0.719	0.000	0.047	1101	1.02	38743.6820	1101	696	5.481	0.287	0.000	0.000	1100	1.11	38421.5929	1110
617	-0.596	0.762	1.158	0.000	1110	1.01	38769.5458	3340	696	5.460	0.149	0.000	0.054	1101	1.31	38670.0099	1110
617	-0.651	0.788	0.000	0.063	1101	1.02	38769.6056	1101	696	5.534	0.135	0.000	0.181	1101	1.10	38670.8854	1101
617	-0.631	0.781	1.154	0.000	1110	1.16	38769.6479	3340	696	5.356	0.212	0.000	0.144	1101	1.12	39034.8311	1101
617	-0.626	0.741	1.148	0.000	1110	2.45	38769.7569	3340	696	5.360	0.204	0.000	-0.073	1101	1.10	39035.8565	1101
617	-0.619	0.718	0.000	0.070	1101	1.01	38771.5883	1101	696	5.493	0.125	0.000	0.174	1101	1.10	39037.8654	1101
617	-0.641	0.769	0.000	0.084	1101	1.02	38773.5957	1101	718	4.423	-0.022	0.000	0.181	1101	1.10	38769.6178	1101
617	-0.668	0.775	0.000	0.124	1101	1.03	38778.5983	1101	721	4.638	-0.105	-0.349	0.000	1110	2.55	38769.5868	3340
617	-0.620	0.714	0.000	0.148	1101	1.01	38784.5578	1101	804	0.000	0.112	0.104	0.000	1110	1.18	38303.9321	1110
617	-0.533	0.751	1.153	0.000	1110	1.15	38800.5604	3340	804	3.221	0.057	0.072	0.000	1110	1.15	38316.8653	1110
617	-0.635	0.740	1.108	0.000	1110	2.37	38800.6694	3340	804	3.257	0.050	0.054	0.000	1110	1.15	38323.8523	1110
617	-0.603	0.744	1.157	0.000	1110	1.16	38801.5625	1120	804	3.209	0.091	0.075	0.000	1110	1.18	38328.7861	1110
617	-0.599	0.730	1.161	0.000	1110	1.91	38801.6465	1120	824	2.039	0.675	1.106	0.000	1110	1.01	38323.8585	1110
617	-0.661	0.775	1.157	0.000	1110	1.08	38802.5333	3340	824	2.023	0.673	1.086	0.000	1110	1.02	38328.7916	1110
617	-0.647	0.694	1.114	0.000	1110	2.43	38802.6660	3340	824	1.996	0.681	1.117	0.000	1110	1.02	38338.7661	3330
617	-0.634	0.744	1.160	0.000	1110	1.11	38809.5247	2220	834	0.161	0.895	1.557	0.000	1110	1.19	38303.9920	1110
617	-0.566	0.696	1.113	0.000	1110	1.66	38809.6076	2220	834	0.033	0.983	1.608	0.000	1110	1.09	38316.8708	1110
617	-0.603	0.740	1.158	0.000	1110	3.05	38847.5591	4440	834	0.088	0.962	1.599	0.000	1110	1.09	38323.8629	1110
617	-0.660	0.721	0.000	0.098	1101	1.03	39008.9675	3303	834	0.102	0.975	0.000	0.189	1101	1.11	39045.8263	3303
617	-0.654	0.751	0.000	0.053	1101	1.03	39009.9040	1101	843	0.769	0.972	1.558	0.000	1110	1.01	38316.8832	1110
617	-0.621	0.702	0.000	0.080	1101	1.02	39009.9509	1101	843	0.790	1.001	1.589	0.000	1110	1.01	38323.8674	1110
617	-0.593	0.750	0.000	0.044	1101	1.01	39036.8530	1101	854	1.997	0.543	0.860	0.000	1110	1.07	38316.8759	1110
617	-0.664	0.781	0.000	0.054	1101	1.03	39037.8874	1101	854	2.023	0.556	0.877	0.000	1110	1.07	38323.8726	1110
617	-0.658	0.749	0.000	0.110	1101	1.01	39041.8441	1101	874	1.433	0.636	1.017	0.000	1110	1.36	38317.8339	1110
617	-0.618	0.642	0.000	0.080	1101	1.10	39050.7518	1101	874	1.438	0.659	1.070	0.000	1110	1.37	38338.7719	3330
617	-0.632	0.730	0.000	0.091	1101	1.02	39050.8050	1101	874	1.372	0.682	1.081	0.000	1110	1.46	38370.6560	3330
617	-0.744	0.818	0.000	0.026	1101	1.02	39050.8449	1101	874	1.340	0.713	1.081	0.000	1110	1.42	38377.6464	3330
617	-0.686	0.796	0.000	0.160	1101	1.01	39051.8170	1101	897	2.723	0.030	-0.032	0.000	1110	1.96	38769.5965	3340
617	-0.606	0.772	0.000	0.086	1101	1.56	39052.6609	1101	897	2.706	0.135	-0.010	0.000	1110	2.09	38802.5507	3340
617	-0.695	0.797	0.000	0.030	1101	1.05	39052.7720	1101	911	-1.650	1.068	1.684	0.000	1110	1.23	38295.8641	1110
617	-0.684	0.674	0.000	0.171	1101	1.01	39052.8229	1101	911	-1.697	1.090	1.723	0.000	1110	1.15	38317.8462	1110
617	-0.559	0.666	0.000	0.148	1101	1.22	39053.7083	1101	915	0.960	0.564	0.927	0.000	1110	1.07	38317.8562	1110
617	-0.691	0.844	0.000	0.096	1101	1.01	39053.8038	1101	915	0.998	0.546	0.906	0.000	1110	1.07	38365.7227	3330
617	-0.687	0.776	0.000	0.102	1101	1.19	39054.7125	1101	915	0.979	0.541	0.871	0.000	1110	1.11	38370.6639	3330
617	-0.644	0.735	0.000	0.113	1101	1.02	39054.7992	1101	921	-1.965	1.196	1.975	0.000	1110	1.06	38295.8699	1110
617	-0.646	0.747	0.000	0.075	1101	1.16	39055.7170	1101	921	-1.895	1.144	1.913	0.000	1110	1.01	38317.8635	1110
617	-0.623	0.739	0.000	0.047	1101	1.02	39055.7964	1101	921	-1.923	1.138	1.930	0.000	1110	1.04	38370.6770	3330
617	-0.685	0.748	0.000	0.112	1101	1.02	39059.8115	1101	921	-1.883	1.084	1.827	0.000	1110	1.01	38371.7200	1110
617	-0.568	0.770	0.000	0.119	1101	1.03	39060.7636	1101	921	-1.960	1.136	1.895	0.000	1110	1.02	38380.7268	3330
617	-0.631	0.708	0.000	0.100	1101	1.01	39060.7878	1101	921	-1.918	1.122	1.875	0.000	1110	1.02	38397.6196	3330
617	-0.630	0.747	0.000	0.087	1101	1.03	39061.7583	3303	921	-1.989	1.211	2.000	0.189	1101	1.01	38640.9615	1101
617	-0.661	0.746	0.000	0.099	1101	1.02	39062.7740	3303	921	-1.931	1.146	2.000	0.223	1101	1.05	38668.8543	1101
617	-0.589	0.742	0.000	0.103	1101	1.02	39063.7737	3303	936	2.005	0.088	0.085	0.000	1110	1.02	38317.8511	1110
617	-0.609	0.726	0.000	0.155	1101</												

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL								PBS INFRARED IJKL									
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.
937	2.688	0.317	0.503	0.000	1110	1.07	38370.6840	3330	1017	0.601	0.309	0.468	0.000	1110	1.05	38408.6284	3330
937	2.687	0.341	0.522	0.000	1110	1.07	38380.7421	3330	1017	0.549	0.317	0.469	0.000	1110	1.06	38410.6584	3330
									1017	0.563	0.306	0.451	0.000	1110	2.17	38410.8639	3330
941	1.682	0.584	0.955	0.000	1110	1.02	38317.8736	1110	1017	0.567	0.325	0.488	0.000	1110	1.05	38411.6234	3330
941	1.634	0.603	0.918	0.000	1110	1.02	38365.7464	3330	1017	0.519	0.338	0.532	0.000	1110	2.13	38411.8587	3330
941	1.640	0.554	0.858	0.000	1110	1.03	38370.6992	3330	1017	0.571	0.288	0.508	0.000	1110	1.05	38415.6026	3330
									1017	0.574	0.310	0.478	0.000	1110	1.05	38419.6056	3330
951	2.121	0.592	0.986	0.000	1110	1.03	38317.8778	1110	1017	0.529	0.311	0.509	0.000	1110	1.05	38420.5952	3330
951	2.063	0.661	0.945	0.000	1110	1.03	38365.7605	3330	1017	0.569	0.314	0.486	0.000	1110	1.05	38421.6035	1110
951	2.074	0.595	0.946	0.000	1110	1.03	38370.7069	3330	1017	0.548	0.303	0.468	0.000	1110	1.05	38424.5720	3330
951	2.037	0.609	0.970	0.000	1110	1.07	38380.7548	3330	1017	0.598	0.284	0.467	0.000	1110	1.05	38425.5792	3330
									1017	0.577	0.312	0.500	0.000	1110	1.05	38430.5622	3330
963	2.568	0.355	0.459	0.000	1110	1.50	38769.6021	3340	1017	0.587	0.305	0.474	0.000	1110	1.05	38431.5670	3330
963	2.495	0.279	0.525	0.000	1110	1.73	38800.5937	3340	1017	0.569	0.313	0.484	0.000	1110	1.35	38440.5845	1110
									1017	0.581	0.350	0.469	0.000	1110	1.44	38482.5951	1110
977	0.024	1.371	2.459	0.000	1110	4.19	38697.8067	4440	1017	0.556	0.303	0.488	0.000	1110	2.43	38569.9431	3330
									1017	0.570	0.346	0.500	0.064	1101	1.18	38631.9206	1101
987	5.392	-0.096	0.000	-0.076	1101	1.05	38771.6119	1101	1017	0.557	0.321	0.000	0.075	1101	1.09	38638.9436	1101
									1017	0.585	0.287	0.000	0.112	1101	1.05	38640.9950	1101
989	5.158	-0.015	0.000	-0.236	1101	1.06	38771.6641	1101	1017	0.503	0.298	0.000	0.056	1101	1.07	38665.9727	1101
									1017	0.533	0.353	0.000	0.061	1101	1.30	38667.7891	1101
991	1.617	0.833	0.000	0.184	1101	1.01	39035.8936	1101	1017	0.581	0.307	0.000	0.076	1101	1.22	38668.8076	1101
991	1.567	0.905	0.000	0.179	1101	1.01	39037.8780	1101	1017	0.461	0.339	0.000	0.139	1101	1.05	38669.9186	1101
									1017	0.552	0.336	0.000	0.017	1101	1.05	38670.8978	1101
1003	-1.171	1.142	1.795	0.000	1110	1.72	38317.8950	1110	1017	0.491	0.454	0.000	0.152	1101	1.05	38671.9069	1101
1003	-1.162	1.074	1.775	0.000	1110	1.72	38365.7664	3330	1017	0.570	0.320	0.460	0.000	1110	1.31	38678.7694	4440
1003	-1.182	1.103	1.797	0.000	1110	1.71	38370.7257	3330	1017	0.508	0.347	0.557	0.000	1110	1.11	38680.8474	2220
1003	-1.154	1.063	1.743	0.000	1110	1.73	38397.6414	3330	1017	0.564	0.317	0.451	0.000	1110	1.23	38681.7892	2220
									1017	0.631	0.252	0.000	0.117	1101	1.28	38692.7267	1101
1005	5.482	-0.097	0.000	-0.113	1101	1.07	38771.6931	1101	1017	0.559	0.325	0.000	0.137	1101	1.05	38692.8516	1101
									1017	0.583	0.329	0.000	0.113	1101	1.12	38693.7788	1101
1017	0.511	0.290	0.466	0.000	1110	1.06	37708.5525	1110	1017	0.565	0.321	0.469	0.000	1110	1.18	38693.7858	4440
1017	0.507	0.304	0.519	0.000	1110	1.15	37708.6162	1110	1017	0.471	0.370	0.000	0.152	1101	1.06	38693.8861	1101
1017	0.535	0.313	0.484	0.000	1110	1.09	37711.5725	1110	1017	0.547	0.308	0.429	0.000	1110	2.85	38694.5932	4440
1017	0.588	0.318	0.481	0.000	1110	1.09	37712.5711	1110	1017	0.558	0.347	0.507	0.000	1110	1.57	38694.6767	4440
1017	0.563	0.303	0.455	0.000	1110	1.18	37713.6132	1110	1017	0.468	0.328	0.000	0.104	1101	1.14	38694.7661	3303
1017	0.620	0.370	0.482	0.000	1110	1.13	37721.5719	1110	1017	0.598	0.317	0.490	0.000	1110	1.21	38694.8712	4440
1017	0.588	0.316	0.000	0.000	1100	1.28	37721.6233	1110	1017	0.503	0.285	0.479	0.000	1110	2.22	38697.6118	4440
1017	0.557	0.305	0.000	0.000	1100	1.67	37721.6858	1110	1017	0.508	0.294	0.504	0.000	1110	1.79	38697.6431	4440
1017	0.601	0.335	0.000	0.000	1100	1.10	37722.5524	1100	1017	0.550	0.332	0.482	0.000	1110	1.31	38697.7186	4440
1017	0.584	0.295	0.000	0.000	1100	1.39	37722.6441	1100	1017	0.580	0.339	0.467	0.000	1110	1.23	38697.8694	4440
1017	0.637	0.263	0.426	0.000	1110	1.26	38295.8178	1110	1017	0.578	0.344	0.000	0.071	1101	1.11	38737.8026	1101
1017	0.641	0.353	0.472	0.000	1110	1.45	38296.7769	1110	1017	0.556	-0.520	0.450	0.000	1010	1.22	38769.5521	3340
1017	0.591	0.256	0.432	0.000	1110	1.17	38296.8429	1110	1017	0.676	0.238	0.000	0.146	1101	1.05	38769.6285	1101
1017	0.572	0.336	0.510	0.000	1110	1.21	38298.8241	1110	1017	0.579	0.280	0.430	0.000	1110	1.18	38769.6437	3340
1017	0.609	0.305	0.533	0.000	1110	1.09	38298.8784	1110	1017	0.589	0.346	0.458	0.000	1110	1.57	38769.7528	3340
1017	0.606	0.247	0.426	0.000	1110	1.27	38300.8028	3330	1017	0.576	0.287	0.446	0.000	1110	2.15	38769.8049	3340
1017	0.625	0.271	0.492	0.000	1110	1.15	38301.8385	1110	1017	0.546	0.258	0.000	0.008	1101	1.07	38771.5954	1101
1017	0.643	0.298	0.418	0.000	1110	1.08	38302.8688	1110	1017	0.592	0.358	0.505	0.000	1110	1.19	38800.5646	3340
1017	0.533	0.323	0.478	0.000	1110	1.05	38305.9120	1110	1017	0.519	0.356	0.490	0.000	1110	1.63	38800.6764	3340
1017	0.504	0.345	0.540	0.000	1110	1.10	38305.9793	1110	1017	0.536	0.303	0.457	0.000	1110	2.26	38800.7264	3340
1017	0.635	0.296	0.439	0.000	1110	1.05	38307.8958	1110	1017	0.600	0.307	0.416	0.000	1110	1.19	38801.5674	1120
1017	0.594	0.303	0.507	0.000	1110	1.05	38309.9235	1110	1017	0.585	0.327	0.432	0.000	1110	1.49	38801.6528	1120
1017	0.583	0.313	0.496	0.000	1110	1.06	38310.9288	1110	1017	0.554	0.307	0.414	0.000	1110	2.17	38801.7188	1120
1017	0.518	0.339	0.502	0.000	1110	1.05	38315.8791	1110	1017	0.550	0.305	0.461	0.000	1110	1.17	38802.5375	3340
1017	0.599	0.306	0.476	0.000	1110	1.05	38317.8819	1110	1017	0.592	0.331	0.482	0.000	1110	1.17	38809.5170	2220
1017	0.627	0.314	0.473	0.000	1110	1.07	38317.9235	1110	1017	0.000	0.251	0.414	0.000	0110	1.48	38809.6299	2220
1017	0.540	0.358	0.542	0.000	1110	1.05	38323.8780	1110	1017	0.526	0.295	0.380	0.000	1110	1.69	38847.5543	4440
1017	0.568	0.296	0.502	0.000	1110	1.05	38324.8663	1110	1017	0.507	0.282	0.000	0.157	1101	1.05	39008.9819	3303
1017	0.556	0.327	0.475	0.000	1110	1.05	38325.8547	1110	1017	0.449	0.330	0.000	0.106	1101	1.11	39009.9184	1101
1017	0.599	0.300	0.457	0.000	1110	1.09	38326.8016	1110	1017	0.551	0.220	0.000	0.122	1101	1.07	39009.9445	1101
1017	0.584	0.280	0.464	0.000	1110	1.05	38327.8514	1110	1017	0.493	0.339	0.000	0.074	1101	1.06	39036.8808	1101
1017	0.550	0.348	0.547	0.000	1110	1.05	38328.8569	1110	1017	0.643	0.281	0.000	0.084	1101	1.19	39050.7727	1101
1017	0.568	0.291	0.467	0.000	1110	1.10	38329.9178	1110	1017	0.564	0.380	0.000	0.049	1101	1.12	39051.7991	1101
1017	0.611	0.299	0.483	0.000	1110	1.06	38338.7982	3330	1017	0.513	0.279	0.000	0.100	1101	1.08	39052.8153	1101
1017	0.594	0.307	0.494	0.000	1110	1.08	38345.8585	1110	1017	0.559	0.237	0.000	0.104	1101	1.11	39054.7932	1101
1017	0.527	0.331	0.545	0.000	1110	1.05	38357.7673	1110	1017	0.641	0.255	0.000	0.128	1101	1.11	39055.7910	1101
1017	0.623	0.244	0.461	0.000	1110	1.06	38361.7316	1110	1017	0.607	0.265	0.000	0				

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL									PBS INFRARED IJKL								
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.
1066	1.774	0.658	0.993	0.000	1110	1.07	38317.9104	1110	1180	5.029	0.102	-0.124	0.000	1110	1.00	38693.8301	4440
1066	1.666	0.697	1.093	0.000	1110	1.06	38361.7594	1110	1180	5.029	0.102	-0.124	0.000	1110	1.00	38693.8301	4440
1066	1.680	0.638	1.009	0.000	1110	1.06	38368.7628	3330	1180	5.115	-0.006	-0.026	0.000	1110	1.00	38694.8311	4440
1069	4.493	-0.004	0.291	0.000	1110	1.03	38396.6635	1110	1180	5.115	-0.006	-0.026	0.000	1110	1.00	38694.8311	4440
1084	1.764	0.491	0.822	0.000	1110	1.43	38302.8784	1110	1180	5.042	0.150	-0.019	0.000	1110	1.00	38697.8297	4440
1084	1.679	0.587	0.846	0.000	1110	1.36	38317.9145	1110	1180	5.042	0.150	-0.019	0.000	1110	1.00	38697.8297	4440
1084	1.677	0.525	0.826	0.000	1110	1.34	38369.7482	1110	1180	5.057	0.009	0.000	0.106	1101	1.03	39054.8459	1101
1101	2.957	0.346	0.563	0.000	1110	1.20	38317.9187	1110	1195	2.096	0.575	0.892	0.000	1110	1.76	38769.6160	3340
1101	2.958	0.359	0.495	0.000	1110	1.18	38369.7584	1110	1195	2.038	0.589	0.956	0.000	1110	1.93	38800.6049	3340
1101	2.922	0.319	0.476	0.000	1110	1.19	38370.7622	3330	1203	2.665	-0.024	-0.026	0.000	1110	1.03	37712.5859	1110
1106	2.051	0.742	1.090	0.000	1110	1.97	38769.6083	3340	1203	2.646	0.003	-0.074	0.000	1110	1.01	38315.9312	1110
1106	2.036	0.696	1.131	0.000	1110	2.20	38800.6000	3340	1203	2.671	-0.022	-0.032	0.000	1110	1.00	38377.7375	3330
1122	3.355	-0.101	-0.206	0.000	1110	1.04	38315.8876	1110	1203	2.650	0.014	0.013	0.000	1110	1.00	38378.7212	3330
1122	3.350	-0.097	-0.251	0.000	1110	1.04	38369.7762	1110	1203	2.700	-0.014	0.000	0.065	1101	1.23	38671.8170	1101
1122	3.307	-0.071	-0.219	0.000	1110	1.06	38370.7915	3330	1203	2.722	-0.073	0.000	0.014	1101	1.07	38675.8576	3303
1122	3.376	-0.126	-0.261	0.000	1110	1.05	38397.6472	3330	1203	2.679	-0.042	0.000	-0.037	1101	1.03	38692.9214	1101
1123	3.905	-0.071	-0.160	0.000	1110	1.00	38396.6696	1110	1220	3.560	-0.247	-0.424	0.000	1110	1.05	38315.9662	1110
1135	2.654	0.277	0.432	0.000	1110	1.02	38315.8964	1110	1220	3.582	-0.093	-0.355	0.000	1110	1.01	38378.7267	3330
1135	2.496	0.433	0.559	0.000	1110	1.02	38371.7332	1110	1220	3.510	-0.191	-0.397	0.000	1110	1.02	38397.6619	3330
1135	2.607	0.336	0.491	0.000	1110	1.03	38377.6987	3330	1220	3.542	-0.201	0.000	0.067	1101	1.05	39076.7723	1101
1135	2.630	0.238	0.511	0.000	1110	1.02	38397.6521	3330	1220	3.698	-0.210	0.000	-0.020	0101	1.05	39133.6199	1101
1136	1.397	0.572	0.868	0.000	1110	1.35	38315.9071	1110	1220	3.604	-0.180	0.000	-0.020	0101	1.09	39135.5904	1101
1136	1.399	0.582	0.835	0.000	1110	1.42	38370.8006	3330	1228	4.019	-0.083	-0.160	0.000	1110	1.10	37708.6368	1110
1136	1.425	0.525	0.853	0.000	1110	1.41	38377.6879	3330	1228	3.995	-0.033	-0.076	0.000	1110	1.00	38343.8492	3330
1136	1.393	0.583	0.862	0.000	1110	1.36	38397.6572	3330	1228	4.028	-0.054	0.000	-0.003	1101	1.19	38671.8273	1101
1140	5.618	-0.157	0.000	0.110	1101	1.06	39051.8350	1101	1228	4.053	-0.062	0.000	0.187	1101	1.02	38675.9625	3303
1140	5.617	-0.139	0.000	0.000	1100	1.05	39054.8314	1101	1228	3.935	-0.017	0.000	0.058	1101	1.10	38693.7944	1101
1140	5.568	-0.154	0.000	0.045	1101	1.17	39066.7530	1101	1228	4.006	-0.001	0.000	-0.010	1101	1.24	38694.7531	3303
1142	3.773	-0.104	-0.293	0.000	1110	1.08	38697.8868	4440	1231	-0.848	0.994	1.542	0.000	1110	1.48	38315.9466	1110
1142	3.936	-0.095	0.000	-0.022	1110	1.04	39051.8482	1101	1231	-0.951	1.001	1.566	0.000	1110	1.45	38361.7725	1110
1142	3.963	-0.081	0.000	-0.077	1101	1.10	39055.8042	1101	1231	-0.989	1.015	1.656	0.000	1110	1.49	38367.7313	1110
1142	3.987	-0.055	0.000	-0.098	1101	1.06	39063.8026	3303	1239	3.686	0.028	-0.115	0.000	1110	1.07	38316.8950	1110
1142	3.889	-0.019	0.000	-0.076	1101	1.19	39069.7406	1101	1239	3.615	0.042	-0.021	0.000	1110	1.06	38377.7503	3330
1144	5.782	-0.082	0.000	-0.011	1101	1.02	39051.8623	1101	1239	3.652	-0.029	-0.137	0.000	1110	1.07	38378.7325	3330
1144	5.829	-0.002	0.000	0.195	1101	1.03	39055.8425	1101	1239	3.830	-0.038	0.000	0.048	1101	1.08	39063.8365	3303
1144	5.864	-0.080	0.000	-0.056	1101	1.03	39063.8178	3303	1242	3.757	0.172	0.461	0.000	1110	1.12	38396.6763	1110
1145	4.496	-0.016	-0.129	0.000	1110	1.11	38697.8990	4440	1256	1.939	0.708	1.090	0.000	1110	1.02	38316.9005	1110
1145	4.492	-0.101	0.000	-0.101	1101	1.05	39052.8360	1101	1256	1.971	0.627	1.061	0.000	1110	1.02	38377.7567	3330
1145	4.517	-0.037	0.000	-0.023	1101	1.06	39061.8030	3303	1256	1.978	0.644	1.011	0.000	1110	1.02	38378.7392	3330
1149	3.983	-0.003	-0.138	0.000	1110	1.14	38697.9076	4440	1302	4.038	0.239	0.284	0.000	1110	2.10	38769.6208	3340
1149	3.986	-0.124	0.000	0.093	1101	1.03	39052.8470	1101	1302	4.071	0.257	0.342	0.000	1110	2.22	38800.6097	3340
1149	4.021	-0.081	0.000	-0.035	1101	1.02	39061.8358	3303	1302	3.977	0.302	0.343	0.000	1110	2.14	38801.5924	1120
1151	5.733	-0.001	0.000	-0.010	1101	1.02	39052.8571	1101	1303	1.968	0.557	0.901	0.000	1110	1.04	38316.9071	1110
1151	5.910	-0.028	0.000	-0.023	1101	1.07	39062.7972	3303	1303	1.936	0.531	0.901	0.000	1110	1.04	38377.7620	3330
1155	-0.667	1.152	1.887	0.000	1110	1.19	38315.9146	1110	1303	1.919	0.537	0.860	0.000	1110	1.08	38379.6908	3330
1155	-0.665	1.164	1.920	0.000	1110	1.20	38377.7047	3330	1303	1.877	0.576	0.000	0.109	1101	1.08	39038.0050	1101
1155	-0.618	1.162	1.945	0.000	1110	1.20	38378.7081	3330	1303	1.976	0.531	0.000	0.095	1101	1.13	39041.8528	1101
1155	-0.669	1.183	1.956	0.000	1110	1.19	38392.7121	3330	1309	4.397	0.147	0.263	0.000	1110	1.11	38396.6843	1110
1156	4.053	0.132	0.030	0.000	1110	1.16	38697.9139	4440	1318	2.241	0.691	1.094	0.000	1110	1.37	38343.8546	3330
1156	4.055	0.008	0.000	0.213	1101	1.07	39053.8231	1101	1318	2.209	0.740	1.117	0.000	1110	1.40	38397.6677	3330
1156	4.066	0.182	0.000	-0.067	1101	1.05	39062.8104	3303	1325	2.423	0.534	0.812	0.000	1110	1.31	38316.9220	1110
1162	0.400	1.033	1.634	0.000	1110	1.44	38315.9378	1110	1325	2.395	0.543	0.857	0.000	1110	1.39	38379.6958	3330
1162	0.246	1.042	1.681	0.000	1110	1.46	38377.6933	3330	1325	2.396	0.570	0.827	0.000	1110	1.33	38397.6733	3330
1162	0.282	1.061	1.700	0.000	1110	1.43	38378.7031	3330	1326	1.424	0.611	0.983	0.000	1110	2.08	38769.6535	3340
1162	0.226	1.094	1.714	0.000	1110	1.43	38392.7220	3330	1326	1.352	0.703	1.090	0.000	1110	2.26	38800.6153	3340
1165	2.944	-0.027	-0.070	0.000	1110	1.02	38315.9225	1110	1326	1.350	0.710	1.081	0.000	1110	2.17	38801.5979	1120
1165	2.943	-0.002	-0.075	0.000	1110	1.02	38377.7123	3330	1327	3.409	0.521	0.753	0.000	1110	1.21	38398.6506	3330
1165	3.013	-0.039	-0.111	0.000	1110	1.02	38378.7142	3330	1327	3.415	0.467	0.000	0.033	1101	1.25	38666.8898	1101
1165	3.066	-0.113	-0.138	0.000	1110	1.03	38392.7316	3330	1327	3.407	0.514	0.000	0.071	1101	1.42	38668.8141	1101
1165	2.949	0.015	-0.039	0.000	1110	1.10	38392.7661	3330	1346	1.525	0.559	0.918	0.000	1110	1.05	38316.9278	1110
1165	2.850	0.047	-0.083	0.000	1110	1.20	38678.7783	4440	1346	1.466	0.583	0.914	0.000	1110	1.10	38379.6994	3330
1165	2.880	-0.001	-0.107	0.000	1110	1.01	38678.8674	4440	1346	1.535	0.533	0.866	0.000	1110	1.12	38392.7807	3330
1165	2.958	-0.014	-0.135	0.000	1110	1.02	38680.8420	2220	1347	3.877	-0.033	-0.237	0.000	1110	1.66	38769.6590	3340
1165	2.880	0.104	-0.169	0.000	1110	1.11	38681.7929	2220	1347	3.774	0.084	-0.164	0.000	1110	1.80	38800.6208	3340
1165	2.941	0.043	-0.172	0.000	1110	1.04	38693.7922	4440	1347	3.948	-						

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL									PBS INFRARED IJKL								
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.
1393	0.512	0.958	1.485	0.000	1110	1.67	38769.6625	3340	1457	-2.872	0.984	0.000	0.152	1101	1.04	38675.9484	3303
1393	0.469	0.945	1.524	0.000	1110	1.82	38800.6278	3340	1457	-2.845	1.000	0.000	0.189	1101	1.81	38676.7828	3303
1393	0.550	0.930	1.457	0.000	1110	1.75	38801.6104	1120	1457	-2.850	1.004	1.526	0.000	1110	1.00	38680.9040	2220
1409	1.363	0.579	0.934	0.000	1110	1.03	38316.9508	1110	1457	-2.796	0.989	1.571	0.000	1110	1.02	38693.8368	4440
1409	1.272	0.654	0.957	0.000	1110	1.07	38379.7076	3330	1457	-2.853	0.985	1.586	0.000	1110	1.21	38694.7667	4440
1409	1.353	0.587	1.104	0.000	1110	1.03	38397.7194	3330	1457	-2.807	0.918	1.517	0.000	1110	1.28	38697.7458	4440
1411	1.707	0.589	0.928	0.000	1110	1.05	38323.8995	1110	1457	-2.778	1.022	1.565	0.000	1110	1.00	38697.8589	4440
1411	1.705	0.567	0.879	0.000	1110	1.08	38379.7129	3330	1457	-2.883	1.030	0.000	0.086	1101	1.92	38739.9526	1101
1411	1.787	0.528	0.930	0.000	1110	1.05	38397.7242	3330	1457	-2.814	0.946	0.000	0.285	1101	1.08	38740.8239	1101
1412	2.903	0.150	0.206	0.000	1110	1.04	38323.9036	1110	1457	-2.792	0.938	0.000	0.181	1101	2.27	38740.9672	1101
1412	2.921	0.121	0.131	0.000	1110	1.07	38379.7174	3330	1457	-2.894	1.017	0.000	0.275	1101	1.19	38741.6845	1101
1412	2.943	0.171	0.195	0.000	1110	1.05	38397.7280	3330	1457	-2.898	1.000	0.000	0.128	1101	1.04	38741.7604	1101
1417	5.468	-0.004	0.032	0.000	1110	1.08	38396.6900	1110	1457	-2.836	0.926	0.000	0.134	1101	2.31	38741.9661	1101
1453	2.187	0.703	1.016	0.000	1110	1.52	38769.6674	3340	1457	-2.890	0.990	0.000	0.148	1101	1.24	38742.6694	1101
1453	2.227	0.602	0.959	0.000	1110	1.64	38800.6319	3340	1457	-2.856	0.977	0.000	0.222	1101	2.37	38742.9655	1101
1453	2.232	0.621	0.965	0.000	1110	1.59	38801.6167	1120	1457	-2.970	1.028	0.000	0.147	1101	2.13	38743.5816	1101
1454	1.318	0.752	1.293	0.000	1110	1.02	38316.9134	1110	1457	-2.782	0.910	0.000	0.137	1101	2.33	38743.9613	1101
1454	1.345	0.773	1.299	0.000	1110	1.01	38323.9219	1110	1457	-2.829	0.969	0.000	0.139	1101	1.07	38747.7135	1101
1454	1.317	0.759	0.000	0.179	1101	1.05	39038.0157	1101	1457	-2.913	1.025	0.000	0.211	1101	1.17	38750.6669	1101
1454	1.356	0.726	0.000	0.143	1101	1.13	39041.8603	1101	1457	-2.780	1.000	0.000	0.128	1101	1.04	38750.7617	1101
1457	-2.862	0.980	1.505	0.000	1110	1.08	37713.6201	1110	1457	-2.861	1.003	0.000	0.199	1101	1.22	38751.6490	1101
1457	-2.847	0.993	1.550	0.000	1110	1.29	38260.8962	3330	1457	-2.885	0.979	0.000	0.158	1101	1.10	38751.8009	1101
1457	-2.810	1.008	1.587	0.000	1110	1.24	38260.9886	3330	1457	-2.767	0.988	0.000	0.108	1101	2.21	38751.9345	1101
1457	-2.783	0.933	1.574	0.000	1110	1.33	38295.8761	1110	1457	-2.832	0.979	0.000	0.249	1101	1.21	38752.6496	1101
1457	-2.746	0.911	1.517	0.000	1110	1.19	38296.9029	1110	1457	-2.801	0.982	0.000	0.076	1101	1.04	38752.7357	1101
1457	-2.853	1.113	1.616	0.000	1110	1.66	38298.8293	1110	1457	-2.888	1.021	0.000	0.069	1101	2.29	38752.9353	1101
1457	-2.794	0.958	1.550	0.000	1110	1.20	38298.8952	1110	1457	-2.761	0.939	1.504	0.000	1110	1.24	38769.5569	3340
1457	-2.782	0.990	1.549	0.000	1110	1.37	38300.8564	3330	1457	-2.826	0.960	1.541	0.000	1110	1.01	38769.6396	3340
1457	-2.866	1.030	1.608	0.000	1110	1.45	38301.8425	1110	1457	-2.809	0.941	0.000	0.218	1101	1.04	38769.7003	1101
1457	-2.807	1.007	1.594	0.000	1110	1.24	38302.8734	1110	1457	-2.815	0.985	1.576	0.000	1110	1.15	38769.7472	3340
1457	-2.834	0.937	1.540	0.000	1110	1.05	38305.9841	1110	1457	-2.793	0.959	1.521	0.000	1110	1.58	38769.8097	3340
1457	0.000	0.000	1.566	0.000	0010	1.07	38307.9184	1110	1457	-2.791	1.006	1.549	0.000	1110	1.67	38770.8146	1120
1457	-2.823	1.028	1.587	0.000	1110	1.08	38310.9999	1110	1457	-2.824	0.986	0.000	0.210	1101	1.07	38771.6529	1101
1457	-2.818	0.965	1.557	0.000	1110	1.04	38316.9346	1110	1457	-2.842	0.983	0.000	0.164	1101	1.04	38773.6728	1101
1457	-2.858	1.018	1.598	0.000	1110	1.10	38323.9287	1110	1457	-2.890	0.977	0.000	0.084	1101	2.39	38778.8679	1101
1457	-2.833	0.994	1.599	0.000	1110	1.10	38324.9720	1110	1457	-2.872	1.003	0.000	0.104	1101	1.05	38782.6785	1101
1457	-2.831	0.962	0.000	0.000	1110	1.04	38325.9150	1110	1457	-2.779	0.936	0.000	0.120	1101	1.32	38782.7758	1101
1457	-2.802	0.976	1.503	0.000	1110	1.14	38326.8363	1110	1457	-2.862	0.970	0.000	0.199	1101	1.05	38783.6357	1101
1457	-2.829	0.979	1.556	0.000	1110	1.05	38327.9244	1110	1457	-2.840	0.995	0.000	0.180	1101	1.38	38783.7833	1101
1457	-2.777	0.947	1.524	0.000	1110	1.04	38328.8929	1110	1457	-2.896	0.957	0.000	0.097	1101	2.21	38783.8471	1101
1457	-2.824	0.981	1.581	0.000	1110	1.11	38338.6912	3330	1457	-2.840	0.951	1.503	0.000	1110	1.00	38800.5694	3340
1457	-2.843	0.988	1.502	0.000	1110	1.04	38338.8883	3330	1457	-2.835	1.000	1.547	0.000	1110	1.22	38800.6799	3340
1457	-2.857	0.988	1.554	0.000	1110	1.20	38339.6842	4440	1457	-2.815	0.966	1.579	0.000	1110	1.00	38801.5722	1120
1457	-2.812	0.976	1.560	0.000	1110	1.04	38339.8639	4440	1457	-2.806	0.941	1.549	0.000	1110	2.31	38802.5417	3340
1457	-2.791	0.980	1.539	0.000	1110	1.68	38340.0303	4440	1457	-2.742	0.955	1.520	0.000	1110	1.21	38802.6708	3340
1457	-2.765	0.859	1.514	0.000	1110	1.24	38340.6756	3330	1457	-2.806	0.941	1.549	0.000	1110	2.31	38802.7604	3340
1457	-2.867	0.962	1.616	0.000	1110	2.04	38343.6713	3330	1457	-2.840	0.983	1.562	0.000	1110	1.04	38809.5094	2220
1457	-2.845	0.987	1.565	0.000	1110	1.04	38343.8723	3330	1457	-2.937	0.997	0.000	0.193	1101	1.04	38809.5713	1101
1457	-2.826	0.977	1.527	0.000	1110	1.75	38344.0254	3330	1457	-2.796	1.011	1.834	0.000	1110	1.14	38809.6370	2220
1457	-2.812	0.951	1.517	0.000	1110	1.05	38357.7983	1110	1457	-2.784	0.962	0.000	0.216	1101	2.36	38809.7821	1101
1457	-2.796	0.934	1.498	0.000	1110	1.19	38361.9012	1110	1457	-2.817	0.951	0.000	0.159	1101	1.04	38810.5746	1101
1457	-2.849	0.992	1.561	0.000	1110	1.12	38365.7373	3330	1457	-2.812	1.143	0.000	0.140	1101	2.24	38810.7748	1101
1457	-2.828	0.973	1.525	0.000	1110	1.07	38365.8411	3330	1457	-2.827	0.966	0.000	0.154	1101	1.04	38811.5759	1101
1457	-2.829	0.957	1.518	0.000	1110	1.64	38366.6448	1110	1457	-2.805	0.943	0.000	0.148	1101	2.32	38811.7751	1101
1457	-2.775	0.927	1.486	0.000	1110	1.05	38367.8253	1110	1457	-2.872	0.984	0.000	0.146	1101	1.04	38812.5847	1101
1457	-2.870	1.005	1.634	0.000	1110	1.58	38368.6454	3330	1457	-2.831	0.950	0.000	0.163	1101	1.40	38815.5745	1101
1457	-2.775	0.982	1.518	0.000	1110	1.08	38368.8393	3330	1457	-2.813	0.942	0.000	0.168	1101	2.20	38815.7596	1101
1457	-2.778	0.931	1.506	0.000	1110	1.04	38369.7964	1110	1457	-2.853	0.917	0.000	0.198	1101	1.04	38818.5744	1101
1457	-2.843	0.966	1.522	0.000	1110	1.05	38370.8108	3330	1457	-2.710	0.980	0.000	0.107	1101	2.18	38818.7501	1101
1457	-2.827	0.977	1.548	0.000	1110	2.09	38370.9722	3330	1457	-2.928	1.015	0.000	0.173	1101	1.05	38820.5739	1101
1457	-2.779	0.925	1.487	0.000	1110	1.20	38371.6944	1110	1457	-2.783	0.970	0.000	0.179	1101	2.40	38820.7539	1101
1457	-2.861	1.015	1.573	0.000	1110	1.04	38371.7807	1110	1457	-2.847	0.991	0.000	0.123	1101	2.23	38823.7389	1101
1457	-2.867	1.014	1.603	0.000	1110	1.04	38377.7682	3330	1457	-2.819	1.022	0.000	0.160	1101	2.09	38826.7241	1101
1457	-2.817	0.957	1.553	0.000	1110	1.05	38378.7468	3330	1457	-2.712	0.942	1.531	0.000	1110	1.10	38828.5708	3340
1457	-2.818	0.920	1.509	0.000	1110	1.05	38379.7446	3330	1457	-2.762	0.965	1.519</					

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL									PBS INFRARED IJKL								
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.
1457	-2.679	0.932	0.000	0.335	1101	1.24	39053.0201	1101	1609	-0.320	2.359	3.248	0.000	1110	1.21	38680.9144	2220
1457	-2.717	0.941	0.000	0.315	1101	1.14	39053.8458	1101	1609	-0.238	2.303	3.254	0.000	1110	1.20	38697.8806	4440
1457	-2.775	0.987	0.000	0.099	1101	1.16	39053.9962	1101	1612	0.206	0.902	1.527	0.000	1110	1.02	38306.0072	1110
1457	-2.796	1.004	0.000	0.202	1101	1.10	39054.8560	1101	1612	0.210	0.970	1.584	0.000	1110	1.01	38317.9567	1110
1457	-2.635	0.944	0.000	0.197	1101	1.25	39055.0167	1101	1612	0.181	0.978	1.569	0.000	1110	1.04	38361.7849	1110
1457	-2.750	0.920	0.000	0.285	1101	1.11	39055.8519	1101	1612	0.158	0.988	1.556	0.000	1110	1.12	38365.7329	3330
1457	-2.752	0.974	0.000	0.192	1101	1.22	39056.0078	1101	1612	0.185	0.974	1.534	0.000	1110	1.01	38365.8359	3330
1457	-2.735	0.931	0.000	0.290	1101	1.94	39056.7341	1101	1612	0.144	0.976	1.553	0.000	1110	1.06	38366.6326	1110
1457	-2.742	0.973	0.000	0.212	1101	1.07	39056.9523	1101	1612	0.158	0.893	1.570	0.000	1110	1.53	38366.9898	1110
1457	-2.871	1.022	0.000	0.155	1101	2.12	39057.7219	3303	1612	0.182	1.028	1.568	0.000	1110	1.28	38367.6831	1110
1457	-2.823	1.012	0.000	0.145	1101	2.19	39058.7157	3303	1612	0.155	0.973	1.553	0.000	1110	1.15	38367.7180	1110
1457	-2.781	0.978	0.000	0.173	1101	1.08	39059.9486	1101	1612	0.188	0.972	1.621	0.000	1110	1.02	38367.7926	1110
1457	-2.757	0.981	0.000	0.283	1101	1.04	39060.9058	1101	1612	0.220	0.942	1.534	0.000	1110	1.03	38368.8542	3330
1457	-2.760	0.988	0.000	0.223	1101	1.04	39061.8798	3303	1612	0.215	0.957	1.553	0.000	1110	1.03	38369.8468	1110
1457	-2.793	0.965	0.000	0.188	1101	2.49	39062.6935	3303	1612	0.158	0.973	1.612	0.000	1110	1.01	38377.7785	3330
1457	-2.697	0.944	0.000	0.306	1101	1.04	39062.9099	3303	1612	0.139	0.979	1.668	0.000	1110	1.39	38382.9261	1110
1457	-2.774	0.974	0.000	0.187	1101	2.38	39063.6946	3303	1612	0.152	0.972	1.572	0.000	1110	1.01	38390.7655	3330
1457	-2.767	0.973	0.000	0.260	1101	2.06	39063.9227	3303	1612	0.214	0.937	1.535	0.000	1110	1.09	38391.8256	3330
1457	-2.822	0.979	0.000	0.168	1101	1.30	39064.6950	3303	1612	0.235	0.974	1.554	0.000	1110	1.01	38403.7216	3330
1457	-2.743	0.968	0.000	0.197	1101	1.30	39066.7711	1101	1612	0.188	0.976	1.584	0.000	1100	1.09	38403.7939	3330
1457	-2.734	0.948	0.000	0.206	1101	1.15	39066.8056	1101	1612	0.150	0.947	1.543	0.000	1110	1.26	38403.8454	3330
1457	-2.715	0.952	0.000	0.146	1101	1.19	39066.9718	1101	1612	0.189	0.959	1.544	0.000	1110	1.05	38404.6589	3330
1457	-2.771	0.979	0.000	0.187	1101	1.09	39068.8245	1101	1612	0.209	0.976	1.584	0.000	1110	1.02	38404.7333	3330
1457	-2.756	0.973	0.000	0.315	1101	1.04	39068.8724	1101	1612	0.192	0.953	1.536	0.000	1110	1.22	38404.8334	3330
1457	-2.737	0.984	0.000	0.204	1101	1.17	39068.9603	1101	1612	0.030	0.979	1.694	0.000	1110	1.01	38405.7021	0000
1457	-2.799	0.962	0.000	0.247	1101	1.04	39069.8605	1101	1612	0.073	0.974	1.691	0.000	1110	1.07	38405.7766	0000
1457	-2.705	0.963	0.000	0.204	1101	1.04	39069.8776	1101	1612	0.218	0.953	1.547	0.000	1110	1.06	38406.6512	3330
1457	-2.778	0.903	0.000	0.254	1101	2.11	39072.6813	3303	1612	0.210	0.927	1.525	0.000	1110	1.02	38406.7385	3330
1457	-2.793	0.926	0.000	0.199	1101	1.24	39099.6930	1101	1612	0.234	0.936	1.526	0.000	1110	1.01	38408.6998	3330
1457	-2.806	0.968	0.000	0.225	1101	1.04	39099.7932	1101	1612	0.122	0.970	1.523	0.000	1110	1.01	38410.6896	3330
1457	-2.766	0.966	0.000	0.190	1101	1.39	39099.9189	1101	1641	3.774	-0.255	-0.341	0.000	1110	1.08	38300.9282	3330
1457	-2.920	0.988	0.000	0.202	1101	1.04	39130.7165	1101	1641	3.757	-0.129	-0.285	0.000	1110	1.02	38306.0128	1110
1457	-3.117	0.987	0.000	0.124	1101	1.06	39132.7385	3303	1641	3.710	-0.139	-0.301	0.000	1110	1.25	38367.6914	1110
1457	-3.036	1.053	0.000	0.058	1101	1.12	39133.6340	1101	1641	3.706	-0.133	-0.329	0.000	1110	1.05	38368.8714	3330
1457	-2.997	1.019	0.000	0.102	1101	1.04	39134.6815	1101	1641	3.719	-0.151	-0.341	0.000	1110	1.04	38369.8560	1110
1457	-3.019	1.012	0.000	0.117	1101	1.10	39135.6351	1101	1641	3.597	-0.127	-0.158	0.000	1110	1.01	38405.7108	0000
1457	-2.962	0.956	0.000	0.135	1101	1.08	39138.7319	1101	1641	3.559	-0.070	-0.128	0.000	1110	1.05	38405.7663	0000
1464	1.689	0.628	0.936	0.000	1110	1.55	38769.6729	3340	1641	3.692	-0.073	-0.311	0.000	1110	1.04	38406.7531	3330
1464	1.675	0.616	0.933	0.000	1110	1.69	38800.6375	3340	1641	3.774	-0.155	-0.327	0.000	1110	1.01	38408.7095	3330
1464	1.702	0.579	0.877	0.000	1110	1.63	38801.6222	1120	1641	3.708	-0.098	-0.324	0.000	1110	1.01	38410.7047	3330
1481	1.349	0.656	1.037	0.000	1110	1.46	38323.9083	1110	1641	3.858	-0.131	-0.318	0.000	1110	1.02	38411.7135	3330
1481	1.309	0.697	1.088	0.000	1110	1.52	38379.7233	3330	1648	-0.422	1.931	2.663	0.000	1110	1.05	38809.5615	2220
1496	-0.350	1.057	1.775	0.000	1110	1.63	38323.9150	1110	1648	-0.515	1.856	2.677	0.000	1110	1.60	38847.6058	4440
1496	-0.388	1.037	1.741	0.000	1110	1.69	38379.7279	3330	1652	1.801	0.769	1.191	0.000	1110	1.72	38769.6826	3340
1496	-0.343	1.049	1.738	0.000	1110	1.75	38392.7853	3330	1652	1.813	0.773	1.137	0.000	1110	1.87	38800.6535	3340
1502	3.714	0.195	0.226	0.000	1110	2.06	38769.6778	3340	1652	1.838	0.751	1.191	0.000	1110	1.80	38801.6361	1120
1502	3.695	0.158	0.154	0.000	1110	2.33	38800.6465	3340	1654	-0.241	0.903	1.461	0.000	1110	1.73	38323.9354	1110
1502	3.597	0.221	0.244	0.000	1110	2.22	38801.6306	1120	1654	-0.192	0.899	1.382	0.000	1110	1.73	38339.8965	4440
1543	2.141	0.288	0.421	0.000	1110	1.11	38317.9333	1110	1654	-0.251	0.897	1.421	0.000	1110	1.88	38400.6726	3330
1543	2.068	0.242	0.367	0.000	1110	1.12	38379.7544	3330	1663	1.499	0.967	1.451	0.000	1110	2.73	38769.6882	3340
1543	2.120	0.302	-0.453	0.000	1100	1.11	38398.7178	3330	1663	1.465	0.948	1.529	0.000	1110	3.11	38800.6597	3340
1552	4.074	-0.036	0.000	-0.126	1101	1.13	38820.5844	1101	1663	1.458	0.866	1.527	0.000	1110	2.73	38802.6000	3340
1552	4.082	-0.067	0.000	-0.070	1101	1.36	38826.6490	1101	1666	2.383	0.158	0.152	0.000	1110	1.26	38323.9410	1110
1552	4.201	-0.128	0.000	-0.023	1101	1.32	39058.8232	3303	1666	2.425	0.092	0.168	0.000	1110	1.26	38339.9008	4440
1552	4.250	-0.145	0.000	-0.017	1101	1.26	39059.8361	1101	1666	2.353	0.125	0.184	0.000	1110	1.26	38377.7844	3330
1577	-0.603	0.932	1.465	0.000	1110	1.00	38317.9393	1110	1698	1.848	0.703	1.183	0.000	1110	1.15	38323.9477	1110
1577	-0.666	0.847	1.372	0.000	1110	1.00	38379.7604	3330	1698	1.839	0.749	1.117	0.000	1110	1.15	38339.9075	4440
1577	-0.644	0.948	0.000	0.000	1100	1.00	38398.7213	3330	1698	1.831	0.704	1.179	0.000	1110	1.15	38377.7913	3330
1577	-0.627	0.919	0.000	0.134	1101	1.10	38640.9826	1101	1702	3.571	-0.063	-0.172	0.000	1110	1.52	38323.9540	1110
1577	-0.577	0.854	0.000	0.188	1101	1.25	38668.8633	1101	1702	3.589	-0.091	-0.203	0.000	1110	1.51	38377.7988	3330
1580	1.369	0.783	1.221	0.000	1110	1.06	38317.9439	1110	1702	3.533	-0.034	-0.187	0.000	1110	1.63	38400.6773	3330
1580	1.327	0.740	1.166	0.000	1110	1.06	38379.7654	3330	1708	-1.836	0.502	0.786	0.000	1110	1.05	37712.6337	1110
1580	1.398	0.757	1.202	0.000	1110	1.06	38398.7264	3330	1708	-1.721	0.500	0.801	0.000	1110	1.03	38323.9595	1110
1603	2.134	0.506	0.796	0.000	1110	1.13	38317.9488	1110	1708	-1.776	0.514	0.772	0.000	1110	1.03	38377.8043	3330
1603	2.067	0.498	0.738	0.000	1110	1.13	38379.7698	3330	1708	-1.767							

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL									PBS INFRARED IJKL								
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.
1713	0.173	0.029	-0.076	0.000	1110	1.38	37708.6663	1110	1713	0.256	-0.027	0.000	-0.020	1101	1.34	38672.0174	1101
1713	0.203	0.020	-0.105	0.000	1110	1.29	37711.6178	1110	1713	0.207	-0.004	0.000	0.042	1101	1.35	38674.9516	1101
1713	0.258	0.008	-0.131	0.000	1110	1.83	37711.7222	1110	1713	0.188	0.007	0.000	-0.006	1101	1.80	38675.8669	3303
1713	0.228	0.038	-0.101	0.000	1110	1.41	37712.6639	1110	1713	0.276	-0.025	0.000	0.055	1101	1.34	38676.0106	3303
1713	0.236	0.005	-0.112	0.000	1110	1.32	37713.6318	1110	1713	0.089	0.092	0.000	-0.031	1101	1.51	38693.0108	1101
1713	0.156	0.066	-0.046	0.000	1110	1.43	38298.9523	1110	1713	0.197	0.010	0.000	0.049	1101	2.07	38725.7101	1101
1713	0.182	0.034	-0.058	0.000	1110	2.31	38300.8608	3330	1713	0.273	-0.011	0.000	0.045	1101	1.61	38725.9358	1101
1713	0.176	0.027	-0.084	0.000	1110	1.33	38301.0280	3330	1713	0.192	0.006	0.000	-0.011	1101	1.32	38737.7947	1101
1713	0.237	-0.038	-0.034	0.000	1110	1.32	38304.0097	1110	1713	0.196	0.037	0.000	0.002	1101	1.33	38739.8280	1101
1713	0.088	0.068	-0.010	0.000	1110	1.32	38305.9889	1110	1713	0.218	0.040	0.000	0.024	1101	2.16	38739.9435	1101
1713	0.229	0.068	-0.010	0.000	1110	1.36	38308.0252	1110	1713	0.260	-0.028	0.000	0.103	1101	2.64	38740.9607	1101
1713	0.210	0.023	-0.051	0.000	1110	1.32	38315.9740	1110	1713	0.169	0.018	0.000	0.042	1101	2.32	38741.6536	1101
1713	0.232	0.007	-0.086	0.000	1110	1.32	38317.9620	1110	1713	0.265	-0.042	0.000	0.233	1101	1.88	38741.9196	1101
1713	0.200	0.029	-0.059	0.000	1110	1.34	38323.9715	1110	1713	0.189	0.026	0.000	0.040	1101	2.10	38742.6622	1101
1713	0.155	0.079	-0.042	0.000	1110	1.36	38324.9771	1110	1713	0.151	0.015	0.000	0.088	1101	2.76	38742.9590	1101
1713	0.180	0.069	-0.013	0.000	1110	1.49	38326.0122	1110	1713	0.097	0.132	0.000	0.069	1101	1.89	38743.6730	1101
1713	0.279	0.030	-0.062	0.000	1110	1.49	38327.9973	1110	1713	0.353	-0.094	0.000	-0.028	1101	1.34	38743.8236	1101
1713	0.204	0.061	-0.046	0.000	1110	1.49	38329.0040	1110	1713	0.204	-0.004	0.000	0.152	1101	2.68	38743.9536	1101
1713	0.150	0.096	0.004	0.000	1110	2.23	38340.7556	3330	1713	0.151	-0.003	0.000	0.080	1101	1.35	38744.7707	1101
1713	0.201	-0.041	-0.084	0.000	1110	2.02	38343.7590	3330	1713	0.243	-0.002	0.000	0.031	1101	1.44	38747.7211	1101
1713	0.000	0.085	-0.055	0.000	0110	1.32	38343.8943	3330	1713	0.146	0.038	0.000	0.073	1101	1.82	38750.6595	1101
1713	0.320	-0.061	-0.141	0.000	1110	2.05	38344.0210	3330	1713	0.124	0.068	0.000	0.023	1101	2.03	38751.6419	1101
1713	0.216	0.029	-0.089	0.000	1110	1.50	38357.9259	1110	1713	0.308	-0.006	0.000	-0.068	1101	2.56	38751.9278	1101
1713	0.162	0.028	-0.069	0.000	1110	1.48	38361.9119	1110	1713	0.160	0.062	0.000	0.031	1101	1.99	38752.6418	1101
1713	0.243	-0.027	-0.087	0.000	1110	2.37	38365.6809	3330	1713	0.169	-0.020	0.000	0.020	1101	1.91	38752.8918	1101
1713	0.211	0.061	-0.071	0.000	1110	1.33	38365.8470	3330	1713	0.509	0.057	0.000	0.219	1101	1.32	38771.7286	1101
1713	0.138	0.068	-0.023	0.000	1110	2.07	38368.6875	3330	1713	0.182	0.037	0.000	0.071	1101	1.97	38773.5858	1101
1713	0.272	0.023	-0.097	0.000	1110	1.34	38368.8458	3330	1713	0.159	0.014	0.000	0.071	1101	1.65	38773.8097	1101
1713	0.201	-0.007	-0.101	0.000	1110	2.23	38377.6542	3330	1713	0.222	0.037	0.000	0.049	1101	1.61	38778.6053	1101
1713	0.215	-0.002	-0.073	0.000	1110	2.22	38378.6523	3330	1713	0.157	0.004	0.000	0.067	1101	1.40	38778.7510	1101
1713	0.101	0.095	-0.004	0.000	1110	2.05	38379.6589	3330	1713	0.289	-0.058	0.000	0.002	1101	2.46	38778.8505	1101
1713	0.221	0.088	-0.068	0.000	1110	1.33	38379.8144	3330	1713	0.211	0.031	0.000	0.116	1101	1.32	38782.6864	1101
1713	0.201	0.020	-0.075	0.000	1110	1.32	38380.7854	3330	1713	0.205	0.010	0.000	0.092	1101	1.37	38783.6427	1101
1713	0.149	0.040	-0.050	0.000	1110	2.06	38380.9207	3330	1713	0.180	-0.001	0.000	-0.063	1101	2.50	38783.8383	1101
1713	0.149	0.064	-0.029	0.000	1110	1.41	38381.8399	3330	1713	0.308	0.012	0.000	0.040	1101	1.86	38784.5640	1101
1713	0.175	0.035	-0.057	0.000	1110	1.90	38381.9067	3330	1713	0.172	-0.028	0.000	0.012	1101	2.61	38784.8396	1101
1713	0.225	0.014	-0.063	0.000	1110	2.51	38381.9358	3330	1713	0.047	0.026	0.000	-0.005	1101	1.35	38809.6486	1101
1713	0.140	0.058	0.000	0.000	1100	2.03	38382.9131	1110	1713	0.072	0.079	0.000	-0.115	1101	2.74	38809.7754	1101
1713	0.187	0.017	-0.050	0.000	1110	2.09	38383.6455	3330	1713	0.153	0.015	0.000	-0.040	1101	1.48	38810.6835	1101
1713	0.201	0.018	-0.119	0.000	1110	1.35	38383.7462	3330	1713	0.155	0.040	0.000	0.067	1101	2.61	38810.7685	1101
1713	0.209	0.044	-0.049	0.000	1110	2.17	38383.9187	3330	1713	0.172	0.010	0.000	0.066	1101	1.35	38811.6399	1101
1713	0.193	0.033	-0.050	0.000	1110	2.11	38386.6364	3330	1713	0.137	0.010	0.000	0.058	1101	2.57	38811.7644	1101
1713	0.229	0.011	-0.087	0.000	1110	1.33	38386.7937	3330	1713	0.168	0.046	0.000	0.017	1101	1.33	38812.6269	1101
1713	0.192	0.048	-0.045	0.000	1110	1.42	38387.7116	3330	1713	0.206	0.015	0.000	0.020	1101	1.68	38812.7072	1101
1713	0.263	0.026	-0.053	0.000	1110	1.32	38387.7806	3330	1713	0.247	0.031	0.000	0.067	1101	1.42	38815.6551	1101
1713	0.203	0.051	-0.075	0.000	1110	1.32	38390.7570	3330	1713	0.214	0.004	0.000	0.071	1101	2.36	38815.7453	1101
1713	0.243	-0.008	-0.131	0.000	1110	1.71	38390.8655	3330	1713	0.230	-0.023	0.000	0.064	1101	1.59	38820.6740	1101
1713	0.189	0.027	-0.048	0.000	1110	1.50	38391.8341	3330	1713	0.099	0.074	0.000	0.074	1101	1.38	38823.6200	1101
1713	0.197	0.036	-0.054	0.000	1110	2.41	38391.9078	3330	1713	0.186	0.016	0.000	0.083	1101	2.59	38823.7323	1101
1713	0.237	0.027	-0.121	0.000	1110	1.32	38392.7710	3330	1713	0.164	0.036	0.000	0.032	1101	1.46	38824.6352	1101
1713	0.211	0.028	-0.051	0.000	1110	1.32	38396.7536	1110	1713	0.248	-0.064	0.000	0.057	1101	1.36	38843.5605	1101
1713	0.169	0.079	-0.053	0.000	1110	1.98	38397.6144	3330	1713	0.120	-0.049	0.000	-0.014	1101	1.51	38845.5927	1101
1713	0.231	0.090	-0.056	0.000	1110	1.33	38398.7562	3330	1713	0.185	0.044	0.000	-0.023	1101	1.40	39034.9437	1101
1713	0.164	0.060	-0.071	0.000	1110	1.34	38400.7028	3330	1713	0.142	0.016	0.000	0.055	1101	1.33	39035.9772	1101
1713	0.243	0.052	-0.070	0.000	1110	1.32	38403.7278	3330	1713	0.148	-0.008	0.000	0.023	1101	1.34	39036.0239	1101
1713	0.166	0.024	-0.102	0.000	1110	2.09	38403.8598	3330	1713	0.208	0.009	0.000	0.047	1101	1.32	39036.9999	1101
1713	0.208	0.059	-0.098	0.000	1110	2.10	38404.5878	3330	1713	0.121	0.042	0.000	0.054	1101	1.35	39038.0220	1101
1713	0.221	0.059	-0.059	0.000	1110	1.33	38404.7399	3330	1713	0.180	0.025	0.000	0.027	1101	1.35	39039.0191	1101
1713	0.181	0.043	-0.055	0.000	1110	2.13	38404.8590	3330	1713	0.215	0.015	0.000	0.087	1101	1.33	39041.9585	1101
1713	0.149	0.026	-0.053	0.000	1110	2.44	38406.8682	3330	1713	0.199	-0.003	0.000	0.037	1101	2.07	39045.8338	3303
1713	0.242	0.010	-0.104	0.000	1110	1.51	38408.6350	3330	1713	0.218	0.016	0.000	0.034	1101	1.89	39056.8160	1101
1713	0.207	-0.000	-0.096	0.000	1110	1.43	38408.7724	3330	1713	0.219	0.028	0.000	0.014	1101	1.33	39056.9596	1101
1713	0.169	0.020	-0.065	0.000	1110	1.71	38408.8158	3330	1713	0.199	-0.020	0.000	0.043	1101	2.04	39057.8024	3303
1713	0.149	0.028	-0.061	0.000	1110	2.38	38408.8603	3330	1713	0.207	-0.015	0.000	0.036	1101	1.90	39058.8096	3303
1713	0.187	0.065	-0.044	0.000	1110	1.46	38410.7733	3330	1713	0.196	0.002	0.000</					

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL									PBS INFRARED IJKL								
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.
1765	5.236	-0.141	0.000	0.000	1100	1.20	38778.6715	1101	1868	6.126	-0.357	-0.473	0.000	1110	1.25	38380.8446	3330
1765	5.256	-0.163	0.000	0.011	1101	1.50	38784.7925	1101	1868	5.886	-0.094	0.000	-0.181	1101	1.75	38810.7522	1101
1765	5.178	-0.080	0.000	-0.016	1101	1.18	38820.6006	1101	1868	5.924	-0.142	0.000	-0.239	1101	1.20	38811.6175	1101
1770	5.488	-0.197	0.000	-0.132	1101	1.25	39038.9253	1101	1868	5.914	-0.135	0.000	0.003	1101	1.21	38812.6047	1101
1770	5.628	-0.194	0.000	-0.080	1101	1.17	39041.9476	1101	1868	5.941	-0.071	0.000	-0.044	1101	1.25	39056.9921	1101
1784	1.944	0.610	0.968	0.000	1110	1.32	38323.9654	1110	1876	4.971	-0.131	0.000	0.021	1101	1.29	39056.8565	1101
1784	1.867	0.652	0.988	0.000	1110	1.31	38377.8120	3330	1876	4.984	-0.193	0.000	-0.015	1101	1.30	39057.8507	3303
1784	1.889	0.604	0.975	0.000	1110	1.33	38378.7737	3330	1879	3.928	-0.167	-0.343	0.000	1110	1.12	38343.9478	3330
1788	4.005	-0.238	-0.407	0.000	1110	1.24	38343.9240	3330	1879	3.921	-0.140	-0.341	0.000	1110	1.15	38380.8579	3330
1788	3.830	-0.052	-0.276	0.000	1110	1.23	38378.7845	3330	1879	3.946	-0.143	-0.366	0.000	1110	1.11	38400.7090	3330
1788	3.963	-0.159	-0.412	0.000	1110	1.23	38379.7792	3330	1895	3.755	0.349	0.000	0.418	1101	1.57	38665.9238	1101
1788	0.000	-0.008	0.000	0.000	0100	1.22	38737.8151	1101	1895	3.581	0.436	0.424	0.000	1110	1.25	37711.6385	1101
1788	3.833	-0.195	0.000	0.000	1100	1.36	38737.8900	1101	1895	3.821	0.388	0.000	0.445	1101	1.35	38666.9652	1101
1788	4.156	-0.201	0.000	-0.081	1101	1.43	38738.7287	1101	1895	3.877	0.363	0.000	0.411	1101	1.27	38668.0052	1101
1788	3.882	0.052	0.000	-0.084	1101	1.50	38739.9091	1101	1897	4.718	0.141	0.000	0.000	1100	1.42	37711.6924	1110
1788	3.853	-0.120	0.000	0.006	1101	1.41	38740.7260	1101	1897	4.931	0.065	0.000	0.744	1101	1.51	38665.9332	1101
1790	3.123	0.000	-0.215	0.000	0010	1.11	38339.9146	4440	1897	5.022	0.005	0.000	0.590	1101	1.30	38666.9831	1101
1790	2.286	-0.116	-0.338	0.000	1110	1.12	38378.7845	3330	1897	5.005	0.065	0.000	0.695	1101	1.27	38668.0147	1101
1790	2.312	-0.160	-0.369	0.000	1110	1.12	38379.7840	3330	1897	5.062	0.019	0.000	0.487	1101	1.74	38751.9013	1101
1790	2.345	-0.180	0.000	-0.070	1101	1.25	38666.9329	1101	1897	4.898	0.148	0.000	0.421	1101	1.91	38752.9131	1101
1790	2.391	-0.194	0.000	0.017	1101	1.37	38667.9066	1101	1897	4.982	0.083	0.000	0.516	1101	1.28	38773.7218	1101
1790	2.381	-0.198	0.000	0.050	1101	1.24	38668.9312	1101	1899	3.515	-0.233	-0.462	0.000	1110	1.34	37708.6819	1110
1791	2.007	-0.049	-0.116	0.000	1110	1.00	38339.9188	4440	1899	3.498	-0.181	-0.417	0.000	1110	1.42	38380.8718	3330
1791	2.137	-0.147	-0.307	0.000	1110	1.00	38378.8003	3330	1899	3.443	-0.126	-0.376	0.000	1110	1.31	38400.7141	3330
1791	2.003	-0.035	-0.238	0.000	1110	1.00	38379.7900	3330	1899	3.438	-0.151	-0.363	0.000	1110	1.42	38427.7443	1110
1804	5.069	0.226	0.362	0.000	1110	1.00	38396.7470	1110	1899	3.552	-0.214	0.000	0.007	1101	1.35	39058.9978	3303
1829	0.905	0.490	0.774	0.000	1110	1.70	38343.9284	3330	1899	3.554	-0.240	0.000	-0.067	1101	1.45	39060.0190	1110
1829	0.907	0.545	0.773	0.000	1110	1.67	38379.7950	3330	1903	2.232	-0.118	-0.317	0.000	1110	1.37	37708.7101	1110
1829	0.846	0.539	0.802	0.000	1110	1.79	38400.6917	3330	1903	2.180	-0.105	-0.299	0.000	1110	1.24	38343.9420	3330
1830	3.109	0.784	0.000	0.000	1100	1.31	38324.8985	1110	1903	2.221	-0.098	-0.294	0.000	1110	1.22	38400.7187	3330
1830	3.230	0.683	0.000	0.000	1100	1.30	38387.7303	3330	1903	2.157	-0.080	-0.252	0.000	1110	1.31	38427.7368	1110
1830	3.229	0.732	0.000	0.000	1100	1.39	38390.8459	3330	1903	2.169	-0.108	-0.240	0.000	1110	1.35	38427.7505	1110
1830	3.165	0.751	0.000	0.000	1100	1.39	38391.8427	3330	1903	2.140	-0.064	-0.308	0.000	1110	1.36	38430.5882	3330
1830	3.113	0.782	0.000	0.000	1100	1.42	38391.8497	3330	1903	2.199	-0.122	-0.258	0.000	1110	1.28	38431.6083	3330
1830	3.236	0.676	0.000	0.000	1100	1.39	38403.8094	3330	1903	2.220	-0.107	0.000	0.104	1101	1.41	38671.9185	1101
1830	3.197	0.679	0.000	0.000	1100	1.42	38403.8159	3330	1903	2.245	-0.139	0.000	0.054	1101	1.21	38675.9766	3303
1830	3.209	0.702	0.000	0.000	1100	1.49	38404.8252	3330	1903	2.137	-0.097	0.000	0.030	1101	1.21	38693.9650	1101
1830	3.201	0.680	0.000	0.000	1110	1.33	38408.7628	3330	1903	2.152	-0.164	0.000	-0.060	1101	1.49	38752.8841	1101
1839	4.565	0.005	0.000	-0.018	1101	1.12	38725.8629	1101	1903	2.179	-0.141	0.000	0.051	1101	1.22	39035.9845	1101
1839	4.690	-0.117	0.000	0.012	1101	1.14	38742.7769	1101	1907	1.711	0.666	1.042	0.000	1110	1.09	38397.7489	3330
1839	4.665	-0.082	0.000	0.044	1101	1.54	38743.9292	1101	1907	1.686	0.639	1.052	0.000	1110	1.23	38427.7566	1110
1842	6.045	-0.052	0.000	-0.009	1101	1.61	38725.7294	1101	1907	1.671	0.657	1.016	0.000	1110	1.19	38430.5972	3330
1842	5.960	-0.070	0.000	0.032	1101	1.32	38741.7301	1101	1908	2.118	1.006	1.597	0.000	1110	1.08	38339.9234	4440
1842	5.994	-0.071	0.000	0.000	1100	1.51	38742.6948	1101	1908	2.000	1.049	1.671	0.000	1110	1.12	38343.9528	3330
1842	5.957	-0.078	0.000	0.071	1101	1.28	38743.7366	1101	1910	2.980	0.241	0.169	0.000	1110	1.02	38397.7532	3330
1845	-0.885	1.130	2.032	0.000	1110	1.05	38343.9332	3330	1910	2.970	0.253	0.111	0.000	1110	1.03	38400.7230	3330
1845	-0.902	1.219	2.048	0.000	1110	1.03	38345.8818	1110	1910	2.875	0.299	0.151	0.000	1110	1.09	38430.6021	3330
1845	-0.913	1.217	2.069	0.000	1110	1.04	38361.8329	1110	1931	4.492	-0.158	0.000	-0.022	1101	1.25	38811.5892	1101
1845	-0.875	1.160	2.072	0.000	1110	1.21	38367.7373	1110	1931	4.505	-0.172	0.000	-0.035	1101	1.42	38845.6155	1101
1845	-0.877	1.181	2.070	0.409	1101	1.27	38674.8841	1101	1934	4.688	-0.052	-0.091	0.000	1110	1.34	38415.8010	3330
1845	-0.862	1.278	2.000	0.259	1101	1.48	38675.8503	3303	1934	4.923	-0.090	0.000	0.000	1100	1.36	38424.5906	3330
1845	-0.905	1.293	0.000	0.380	1101	1.07	38693.8927	1101	1934	4.757	-0.005	0.000	-0.050	1101	1.22	38812.6822	1101
1852	2.912	-0.150	-0.378	0.000	1110	1.21	38343.9373	3330	1934	4.904	-0.101	0.000	0.051	1101	1.15	38815.5891	1101
1852	2.904	-0.165	-0.338	0.000	1110	1.18	38379.7991	3330	1934	4.803	-0.081	0.000	0.038	1101	1.14	38818.5897	1101
1852	2.904	-0.116	-0.382	0.000	1110	1.18	38398.7504	3330	1938	5.973	-0.098	0.013	0.000	1110	1.18	38847.5835	4440
1852	2.871	-0.127	0.000	0.067	1101	1.32	38671.9284	1101	1948	2.356	-0.148	-0.328	0.000	1110	1.41	38427.7627	1110
1852	3.006	-0.183	0.000	-0.003	1101	1.18	38675.9869	3303	1948	2.320	-0.115	-0.335	0.000	1110	1.31	38430.6068	3330
1852	2.900	-0.139	0.000	-0.216	1101	1.22	38693.9014	1101	1948	2.334	-0.142	-0.257	0.000	1110	1.28	38431.6137	3330
1852	2.905	-0.200	0.000	-0.087	1101	1.99	38778.8600	1101	1948	2.309	-0.098	0.000	0.006	1101	1.35	38671.9369	1101
1852	2.875	-0.174	0.000	0.071	1101	1.45	38783.7961	1101	1948	2.346	-0.139	0.000	-0.050	1101	1.21	38675.9962	3303
1852	2.816	-0.185	0.000	0.038	1101	1.23	38809.5819	1101	1948	2.293	-0.113	0.000	0.067	1101	1.23	38693.9759	1101
1852	2.881	-0.215	0.000	0.048	1101	1.18	39036.0014	1101	1948	2.389	-0.167	0.000	0.023	1101	1.23	38751.9424	1101
1852	2.920	-0.199	0.000	-0.036	1101	1.36	39036.9216	1101	1948	2.285	-0.132	0.000	-0.054	1101	1.40	38752.8705	1101
1855	5.585	-0.276	0.000	-0.588	1101	1.30	38671.9985	1101	1948	2.359	-0.074	0.000	0.074	1101	1.73	38773.6057	1101
1855	5.393	-0.144	0.000	0.272	1101	1.31	38693.9303	1101	1948	2.296	-						

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL									PBS INFRARED IJKL								
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.
1995	2.320	0.606	0.952	0.000	1110	1.01	38392.7940	3330	2256	2.259	0.590	0.866	0.000	1110	1.71	38769.7187	3340
1995	2.345	0.559	0.869	0.000	1110	1.05	38430.6181	3330	2256	2.251	0.561	0.871	0.000	1110	1.84	38800.7014	3340
									2256	2.143	0.633	0.979	0.000	1110	1.72	38801.6667	1120
2004	2.664	-0.066	-0.339	0.000	1110	1.56	37713.7052	1110	2286	-1.894	1.092	1.852	0.000	1110	1.02	38316.0155	1110
2004	2.575	-0.095	-0.304	0.000	1110	1.35	38317.9807	1110	2286	-1.932	1.097	1.837	0.000	1110	1.24	38427.8158	1110
2004	2.620	-0.150	-0.356	0.000	1110	1.38	38430.6425	3330	2286	-1.852	1.084	1.794	0.000	1110	1.02	38431.7152	3330
2004	2.551	-0.110	-0.297	0.000	1110	1.38	38431.6374	3330									
2004	2.647	-0.154	0.000	-0.003	1101	1.35	38672.0102	1101	2294	2.626	-0.074	-0.323	0.000	1110	1.57	38392.8108	3330
2004	2.545	-0.108	0.000	-0.014	1101	1.48	38693.0205	1101	2294	2.690	-0.152	-0.414	0.000	1110	1.58	38430.7213	3330
									2294	2.681	-0.173	-0.417	0.000	1110	1.59	38431.7205	3330
2011	0.696	1.044	1.672	0.000	1110	1.00	38317.9858	1110	2296	1.845	0.566	0.812	0.000	1110	1.64	38769.7229	3340
2011	0.655	1.037	1.672	0.000	1110	1.03	38325.0134	1110	2296	1.928	0.471	0.774	0.000	1110	1.77	38800.7056	3340
2012	1.544	0.683	1.062	0.000	1110	1.01	38317.9903	1110	2296	1.827	0.568	0.833	0.000	1110	1.66	38801.6722	1120
2012	1.458	0.714	1.087	0.000	1110	1.01	38430.6980	3330									
2012	1.525	0.637	1.017	0.000	1110	1.02	38431.6487	3330	2308	0.815	1.438	2.338	0.000	1110	1.08	38329.0170	1110
2018	1.356	1.115	1.919	0.000	1110	1.00	38339.9301	4440	2308	0.621	1.397	2.252	0.000	1110	1.06	38400.8078	3330
2018	1.300	1.171	1.901	0.000	1110	1.00	38430.6921	3330	2308	0.644	1.371	2.277	0.000	1110	1.33	38427.8232	1110
2018	1.316	1.140	1.897	0.000	1110	1.01	38431.6447	3330	2326	-1.316	0.211	0.211	0.000	1110	3.17	38801.6618	1120
2035	1.323	0.697	1.066	0.000	1110	1.68	38317.9986	1110	2326	-1.386	0.134	0.189	0.000	1110	3.15	38802.6465	3340
2035	1.291	0.702	1.077	0.000	1110	1.69	38392.8002	3330	2326	-1.220	0.200	0.209	0.000	1110	3.15	38829.5729	1120
2035	1.323	0.656	1.008	0.000	1110	1.70	38430.7033	3330	2361	4.921	-0.215	-0.279	0.000	1110	1.61	38802.6528	3340
2037	1.763	0.743	1.394	0.000	1110	1.16	38396.7589	1110	2392	4.034	0.567	0.979	0.000	1110	1.52	38384.8952	1110
2040	0.526	0.775	1.094	0.000	1110	1.73	38769.7083	3340	2405	-0.705	1.658	2.540	0.000	1110	1.08	38809.6016	2220
2040	0.525	0.661	1.080	0.000	1110	1.73	38802.6181	3340	2405	-0.723	1.628	2.573	0.000	1110	1.26	38847.6355	4440
2056	5.349	-0.212	-0.341	0.000	1110	1.65	38802.6236	3340	2421	1.904	-0.005	-0.044	0.000	1110	1.15	37708.7456	1110
2061	-4.052	1.021	1.763	0.000	1110	1.14	38345.8686	1110	2421	1.856	0.028	0.002	0.000	1110	1.30	37711.7720	1110
2061	-1.878	1.088	1.827	0.000	1110	1.11	38379.8064	3330	2421	1.933	0.003	-0.019	0.000	1110	1.06	38329.0214	1110
2061	-4.055	0.986	1.680	0.000	1110	1.11	38431.6569	3330	2427	2.064	0.747	1.231	0.000	1110	1.02	38343.9647	3330
2061	-4.061	1.040	1.730	0.000	1110	1.21	38480.6115	1110	2427	2.052	0.724	1.195	0.000	1110	1.03	38400.8195	3330
2061	-4.124	1.015	0.000	0.278	1101	1.29	38666.9432	1101	2429	1.645	0.635	0.963	0.000	1110	1.61	38339.9490	4440
2061	-4.174	1.027	0.000	0.287	1101	1.10	38676.0040	3303	2429	0.000	0.000	0.000	5.307	0001	1.61	38339.9517	4440
2061	-4.262	0.994	0.000	0.198	1101	1.13	38693.9960	1101	2429	1.576	0.661	0.987	0.000	1110	1.62	38361.8780	1110
2061	-3.153	1.004	0.000	0.301	1101	1.10	38771.7444	1101	2429	1.595	0.650	1.029	0.000	1110	1.61	38368.8860	3330
2077	1.458	0.647	1.003	0.000	1110	1.08	38316.9801	1110	2443	1.853	0.730	1.081	0.000	1110	1.57	38339.9546	4440
2077	1.476	0.595	0.986	0.000	1110	1.09	38430.7093	3330	2443	1.763	0.728	1.127	0.000	1110	1.58	38361.8898	1110
2077	1.463	0.627	0.989	0.000	1110	1.08	38431.6681	3330	2451	3.409	-0.025	-0.190	0.000	1110	2.14	38828.5806	3340
2085	2.856	0.227	0.342	0.000	1110	1.45	38316.9892	1110	2456	5.316	-0.034	0.000	0.000	1100	1.89	38511.6517	1101
2085	2.898	0.223	0.276	0.000	1110	1.50	38430.7153	3330	2473	0.206	0.773	1.242	0.000	1110	1.01	38325.0176	1110
2085	2.951	0.200	0.258	0.000	1110	1.46	38431.6619	3330	2473	0.232	0.752	1.223	0.000	1110	1.01	38396.7888	1110
2088	1.870	-0.004	0.012	0.000	1110	1.02	38316.9965	1110	2473	0.229	0.799	1.211	0.000	1110	1.01	38398.7847	3330
2088	1.878	-0.026	-0.026	0.000	1110	1.03	38361.8623	1110	2478	1.832	0.749	1.156	0.000	1110	1.07	38376.0228	1110
2088	1.835	0.013	0.000	0.000	1110	1.03	38368.8792	3330	2478	1.861	0.699	1.168	0.000	1110	1.06	38397.7937	1110
2091	-0.814	1.130	1.939	0.000	1110	1.03	38317.0018	1110	2478	1.834	0.736	1.132	0.000	1110	1.06	38398.7889	3330
2091	-0.842	1.129	1.901	0.000	1110	1.04	38369.8789	1110	2484	2.318	0.269	0.382	0.000	1110	1.07	38326.0279	1110
2091	-0.781	1.113	1.901	0.000	1110	1.03	38431.6740	3330	2484	2.289	0.252	0.370	0.000	1110	1.11	38397.8567	3330
2091	-0.942	1.225	0.000	0.230	1101	1.03	38771.7522	1101	2484	2.297	0.272	0.404	0.000	1110	1.06	38398.7934	3330
2095	2.792	0.006	-0.083	0.000	1110	1.00	38317.9941	1110	2491	-1.328	-0.007	-0.085	0.000	1110	1.66	37711.7325	1110
2095	2.693	-0.030	-0.109	0.000	1110	1.03	38369.8887	1110	2491	-1.290	-0.028	-0.111	0.000	1110	1.48	37712.6698	1110
2095	2.774	-0.027	-0.150	0.000	1110	1.08	38380.8900	3330	2491	-1.261	-0.032	-0.091	0.000	1110	1.62	37713.7214	1110
2106	4.748	-0.128	-0.298	0.000	1110	1.71	38802.6333	3340	2491	-1.291	-0.003	-0.070	0.000	1110	1.67	38305.9947	1110
2113	1.512	0.779	1.268	0.000	1110	1.29	38369.8970	1110	2491	-1.397	0.018	0.000	-0.075	1101	1.63	38510.5475	1101
2113	1.536	0.832	1.289	0.000	1110	1.50	38427.7865	1110	2491	-1.217	-0.151	0.000	0.059	1101	1.61	38511.5392	1101
2113	1.578	0.794	1.281	0.000	1110	1.23	38431.6868	3330	2491	-1.368	-0.066	0.000	0.075	1101	1.94	38531.5340	1101
2120	1.563	0.636	0.932	0.000	1110	2.11	38769.7139	3340	2491	0.000	0.000	0.000	-0.020	0001	1.55	38667.0391	1101
2120	1.379	0.681	1.081	0.000	1110	2.12	38802.6396	3340	2491	-1.310	-0.024	0.000	0.047	1101	1.59	38675.0026	1101
2134	2.124	0.546	0.880	0.000	1110	1.01	38315.9951	1110	2491	-1.277	-0.035	-0.155	0.000	1110	1.47	38680.9082	2220
2134	2.119	0.580	0.915	0.000	1110	1.19	38427.7929	1110	2491	-1.345	-0.009	-0.104	0.000	1110	1.31	38680.9430	2220
2134	2.147	0.600	0.864	0.000	1110	1.01	38431.6910	3330	2491	-1.303	-0.020	-0.111	0.000	1110	1.73	38693.8424	4440
2135	3.873	0.217	0.240	0.000	1110	1.05	37713.6687	1110	2491	-1.285	0.010	-0.114	0.000	1110	4.71	38697.7529	4440
2135	3.848	0.099	0.281	0.000	1110	1.24	38427.7997	1110	2491	-1.300	-0.031	-0.125	0.000	1110	1.52	38697.8543	4440
2135	3.850	0.225	0.243	0.000	1110	1.03	38431.6953	3330	2491	-1.352	-0.008	-0.089	0.000	1110	1.24	38697.9276	4440
2135	4.085	0.070	0.000	0.150	1101	1.04	39057.9944	3303	2491	-1.267	-0.056	-0.200	0.000	1110	1.75	38769.6333	3340
2135	3.886	0.149	0.000	0.153	1101	1.03	39058.9785	3303	2491	-1.273	-0.029	-0.148	0.000	1110	1.23	38769.7424	3340
2135	3.921	0.200	0.000	0.160	0101	1.08	39130.8239	1101	2491	-1.273	-0.029	-0.148	0.000	1110	1.23	38769.8132	3340
									2491	-1.385	0.018	-0.083	0.000	1110	1.34	38769.8132	3340
									2491	-1.308	-0.021	-0.129	0.000	1110	2.71	38769.9167	3340
									2491	-1.311	-0.037	-0.139	0.000				

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL									PBS INFRARED IJKL								
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.
2491	-1.303	-0.031	0.000	0.036	1101	2.16	39009.0185	3303	2852	3.411	0.228	0.282	0.000	1110	1.24	37767.6591	3330
2491	-1.316	-0.026	0.000	-0.100	1101	1.53	39052.0005	1101	2852	3.390	0.142	0.280	0.000	1110	1.36	37778.6515	1110
2491	-1.248	0.012	0.000	0.053	1101	1.52	39053.0133	1101	2852	3.361	0.243	0.311	0.000	1110	1.00	38379.8920	3330
2491	-1.324	0.006	0.000	-0.090	1101	1.52	39054.0113	1101	2852	3.310	0.227	0.307	0.000	1110	1.14	38380.9766	3330
2491	-1.153	0.033	0.000	-0.093	1101	1.55	39055.0286	1101	2854	0.901	0.931	1.429	0.000	1110	1.09	38379.8855	3330
2491	-1.371	0.018	0.000	-0.052	1101	1.54	39056.0228	1101	2854	0.900	0.878	1.444	0.000	1110	1.10	38397.8071	3330
2491	-1.189	-0.032	0.000	-0.022	1101	1.53	39058.0074	3303	2854	0.884	0.922	1.452	0.000	1110	1.09	38400.8359	3330
2491	-1.300	0.022	0.000	-0.004	1101	2.33	39061.8638	3303	2878	-0.402	0.978	1.548	0.000	1110	2.14	38769.7743	3340
2491	-1.324	-0.024	0.000	0.022	1101	2.23	39062.8664	3303	2878	-0.424	0.975	1.563	0.000	1110	2.14	38828.6250	3340
2491	-1.309	-0.081	0.000	-0.050	1101	1.53	39066.9773	1101	2881	2.821	0.462	0.712	0.000	1110	1.55	38828.6306	3340
2491	-1.353	0.010	0.000	-0.042	1101	1.52	39068.9655	1101	2881	2.691	0.469	0.740	0.000	1110	1.59	38829.5889	1120
2491	-1.309	-0.033	0.000	-0.024	1101	1.52	39099.8786	1101	2890	1.542	0.001	-0.047	0.000	1110	1.05	37708.7628	1110
2491	-1.387	-0.023	0.000	-0.034	1101	2.23	39132.9088	3303	2890	1.527	0.027	-0.048	0.000	1110	1.03	37767.5921	3330
2491	-1.364	-0.107	0.000	-0.129	1101	1.80	39134.8667	1101	2890	1.542	0.005	0.001	0.000	1110	2.11	37767.7501	3330
2560	2.352	0.550	0.873	0.000	1110	1.25	38380.9650	3330	2890	1.547	0.004	-0.027	0.000	1110	1.07	37768.6082	3330
2560	2.310	0.555	0.919	0.000	1110	1.14	38397.8627	3330	2890	1.560	-0.017	-0.009	0.000	1110	1.85	37768.7322	3330
2560	2.340	0.565	0.833	0.000	1110	1.11	38398.8056	3330	2890	1.527	0.036	0.078	0.000	1110	1.11	37769.6218	1110
2574	0.675	0.945	1.429	0.000	1110	1.40	38339.9610	4440	2890	1.556	-0.021	-0.061	0.000	1110	1.12	37777.6054	3330
2574	0.676	0.924	1.444	0.000	1110	1.51	38397.8674	3330	2890	1.512	-0.001	-0.007	0.000	1110	2.16	37777.7253	3330
2574	0.635	0.937	1.419	0.000	1110	1.40	38398.8111	3330	2890	1.484	0.040	0.037	0.000	1110	1.14	37778.6080	1110
2580	0.491	0.810	1.334	0.000	1110	1.81	38339.9659	4440	2890	1.580	0.055	0.001	0.000	1110	2.45	37778.7350	1110
2580	0.432	0.797	1.370	0.000	1110	1.83	38400.8246	3330	2890	1.412	0.150	0.063	0.000	1110	1.14	37779.6056	1110
2580	0.416	0.827	1.437	0.000	1110	1.81	38431.7250	3330	2890	1.581	-0.033	-0.050	0.000	1110	1.26	37780.6328	1110
2591	0.899	1.550	2.311	0.000	1110	2.08	38809.6448	2220	2890	1.397	0.023	0.045	0.000	1110	1.35	37799.5964	1110
2591	0.861	1.441	2.374	0.000	1110	2.24	38847.5961	4440	2890	1.456	-0.018	-0.021	0.000	1110	1.35	37801.5914	3330
2608	0.505	1.141	1.815	0.000	1110	2.71	38769.7271	3340	2890	1.506	0.035	0.053	0.000	1110	1.25	38300.9819	3330
2608	0.587	1.078	1.756	0.000	1110	2.72	38800.7097	3340	2890	1.537	0.015	0.008	0.000	1110	1.03	38317.0174	1110
2608	0.545	1.141	1.847	0.000	1110	2.62	38801.6771	1120	2890	1.532	0.039	0.031	0.000	1110	1.01	38325.0083	1110
2618	2.126	-0.128	-0.461	0.000	1110	1.52	38769.7333	3340	2890	1.537	0.038	0.065	0.000	1110	1.02	38340.0352	4440
2618	2.200	-0.239	-0.511	0.000	1110	1.55	38800.7153	3340	2890	1.509	0.023	0.012	0.000	1110	1.11	38367.0078	1110
2618	2.117	-0.165	-0.491	0.000	1110	1.49	38801.6826	1120	2890	1.445	0.003	0.007	0.000	1110	1.14	38370.0091	1110
2630	3.107	0.537	0.813	0.000	1110	1.02	38396.8451	1110	2890	1.523	0.039	0.030	0.000	1110	1.08	38377.8181	3330
2630	3.109	0.514	0.824	0.000	1110	1.17	38414.8635	3330	2890	1.576	-0.062	-0.040	0.000	1110	2.22	38379.6748	3330
2646	-0.468	0.969	1.626	0.000	1110	1.52	38800.7201	3340	2890	1.577	-0.003	-0.043	0.000	1110	1.00	38379.8990	3330
2646	-0.501	1.004	1.643	0.000	1110	1.47	38801.6889	1120	2890	1.565	0.022	-0.024	0.000	1110	1.66	38380.7083	3330
2653	3.238	0.006	-0.121	0.000	1110	1.79	38339.9702	4440	2890	1.560	0.014	-0.043	0.000	1110	1.00	38380.8999	3330
2653	3.260	-0.014	-0.172	0.000	1110	1.81	38400.8299	3330	2890	1.544	-0.009	-0.028	0.000	1110	1.00	38384.8742	1110
2653	3.202	-0.076	-0.159	0.000	1110	1.79	38431.7309	3330	2890	1.544	0.005	0.004	0.000	1110	1.00	38388.8597	1110
2671	2.244	1.753	0.000	0.473	1101	1.23	39100.0055	1101	2890	1.500	0.010	-0.002	0.000	1110	1.81	38392.6628	3330
2693	0.400	0.372	0.495	0.000	1110	1.51	38800.7326	3340	2890	1.563	-0.003	-0.009	0.000	1110	1.00	38392.8531	3330
2693	0.385	0.389	0.513	0.000	1110	1.43	38801.6938	1120	2890	1.485	0.048	0.001	0.000	1110	1.93	38396.6443	1110
2693	0.484	0.390	0.000	0.106	1101	1.96	39130.8418	1101	2890	1.553	0.021	0.024	0.000	1110	1.00	38396.8583	1110
2697	1.602	0.754	1.243	0.000	1110	1.01	38324.0003	1110	2890	1.510	0.006	-0.011	0.000	1110	2.23	38397.6253	3330
2697	1.572	0.845	1.289	0.000	1110	1.00	38339.9749	4440	2890	1.560	0.032	-0.011	0.000	1110	1.10	38397.7583	3330
2697	1.587	0.797	1.175	0.000	1110	1.00	38368.8952	3330	2890	1.487	0.021	-0.034	0.000	1110	2.17	38398.6253	3330
2701	2.561	0.618	1.019	0.000	1110	1.24	38343.9712	3330	2890	1.502	0.028	0.009	0.000	1110	2.24	38399.6191	3330
2701	2.511	0.684	1.086	0.000	1110	1.24	38398.8292	3330	2890	1.551	0.025	0.002	0.000	1110	1.01	38400.8007	3330
2702	5.463	-0.322	-0.560	0.000	1110	1.94	38828.5868	3340	2890	1.533	0.016	0.010	0.000	1110	2.16	38407.0231	3330
2740	3.702	0.165	0.229	0.000	1110	2.44	38828.5917	3340	2890	1.556	0.040	-0.016	0.000	1110	1.02	38410.8380	3330
2745	4.763	0.031	-0.134	0.000	1110	1.42	38828.6000	3340	2890	1.495	0.057	0.023	0.000	1110	2.45	38420.0003	3330
2745	4.670	0.079	-0.108	0.000	1110	1.47	38829.5649	1120	2890	1.486	0.040	0.026	0.000	1110	2.14	38425.9701	3330
2748	-1.782	1.355	2.787	0.000	1110	2.43	38800.7389	3340	2890	1.505	0.013	0.034	0.000	1110	1.00	38427.7681	1110
2748	-1.788	1.409	2.873	0.000	1110	2.25	38801.6986	1120	2890	1.555	0.015	0.001	0.000	1110	1.00	38431.7417	3330
2749	4.389	-0.057	-0.320	0.000	1110	1.43	38769.7618	3340	2890	1.531	0.052	-0.008	0.000	1110	1.01	38450.6692	1110
2749	4.156	0.046	-0.097	0.000	1110	1.55	38800.7451	3340	2890	1.500	0.012	-0.003	0.000	1110	1.00	38476.6266	1110
2749	4.299	-0.122	-0.356	0.000	1110	1.46	38801.7118	1120	2890	1.527	0.006	-0.033	0.000	1110	1.36	38476.7643	1110
2762	5.131	-0.197	-0.324	0.000	1110	2.57	38828.6090	3340	2890	1.371	0.012	0.034	0.000	1110	1.01	38480.6378	1110
2762	5.159	-0.285	-0.280	0.000	1110	2.65	38829.5778	1120	2890	1.545	-0.007	-0.017	0.000	1110	1.06	38481.6721	1110
2766	0.191	1.101	1.775	0.000	1110	1.46	38769.7660	3340	2890	1.500	0.031	-0.005	0.000	1110	1.01	38482.6303	1110
2766	0.220	1.099	1.760	0.000	1110	1.59	38800.7479	3340	2890	1.530	0.020	-0.025	0.000	1110	1.00	38483.6039	1110
2773	-1.050	0.978	1.613	0.000	1110	1.79	38769.7701	3340	2890	1.530	0.010	-0.015	0.000	1110	1.58	38483.7716	1110
2773	-1.093	0.981	1.565	0.000	1110	1.79	38828.6153	3340	2890	1.608	0.000	-0.057	0.000	1110	1.01	38493.6065	3330
2777	2.611	0.227	0.362	0.000	1110	1.04	37712.6466	1110	2890	1.574	0.033	0.000	0.000	1110	2.88	38493.8118	3330
2777	2.628	0.245	0.377	0.000	1110	1.07	38325.0225	1110	2890	1.486	0.038	0.010	0.000	1110	1.02	38494.6146	3330
2821	1.413	0.665	1.043	0.000	1110	1.01	38324.0075	1110	2890	1.543							

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL									PBS INFRARED IJKL								
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.
2943	-0.676	0.280	0.430	0.000	1110	1.49	37711.8220	1110	2990	-1.103	0.584	0.955	0.000	1110	1.02	38316.0325	1110
2943	-0.666	0.286	0.396	0.000	1110	2.58	37767.7339	3330	2990	-1.036	0.612	0.960	0.000	1110	1.05	38318.0116	1110
2943	-0.648	0.268	0.415	0.000	1110	1.12	38340.0083	4440	2990	-1.124	0.584	0.998	0.000	1110	1.01	38324.0288	1110
2943	-0.678	0.220	0.401	0.000	1110	2.40	38365.7511	3330	2990	-1.041	0.566	0.906	0.000	1110	1.01	38326.0168	1110
2943	-0.654	0.266	0.418	0.000	1110	1.60	38369.7887	1110	2990	-1.005	0.610	0.939	0.000	1110	1.01	38329.0108	1110
2943	-0.659	0.217	0.354	0.000	1110	1.12	38369.9254	1110	2990	-1.040	0.617	0.952	0.000	1110	1.01	38343.9808	3330
2943	-0.644	0.261	0.349	0.000	1110	1.74	38370.7730	3330	2990	-1.005	0.657	0.956	0.000	1110	1.07	38358.0191	1110
2943	-0.648	0.270	0.357	0.000	1110	1.12	38370.9227	3330	2990	-1.097	0.603	0.957	0.000	1110	1.19	38365.8292	3330
2943	-0.660	0.281	0.369	0.000	1110	2.37	38377.7194	3330	2990	-1.069	0.581	0.952	0.000	1110	1.01	38368.9501	3330
2943	-0.627	0.241	0.355	0.000	1110	1.14	38381.9175	3330	2990	-1.080	0.652	0.916	0.000	1110	1.93	38369.7303	1110
2943	-0.609	0.260	0.387	0.000	1110	1.12	38383.8797	3330	2990	-1.126	0.623	0.965	0.000	1110	1.00	38369.9323	1110
2943	-0.669	0.256	0.340	0.000	1110	1.15	38385.9102	1110	2990	-1.064	0.595	0.903	0.000	1110	1.81	38370.7359	3330
2943	-0.617	0.237	0.401	0.000	1110	2.26	38391.0336	3330	2990	-1.071	0.642	0.952	0.000	1110	1.00	38370.9293	3330
2943	-0.609	0.223	0.329	0.000	1110	1.13	38391.8783	3330	2990	-1.055	0.594	0.964	0.000	1110	1.00	38377.9018	3330
2943	-0.671	0.252	0.352	0.000	1110	1.14	38397.8123	3330	2990	-1.078	0.604	0.961	0.000	1110	1.00	38378.9013	3330
2943	-0.642	0.213	0.322	0.000	1110	2.23	38398.6679	3330	2990	-1.077	0.618	0.948	0.000	1110	1.71	38380.7162	3330
2943	-0.682	0.231	0.379	0.000	1110	2.27	38400.6603	3330	2990	-1.042	0.551	0.904	0.000	1110	1.01	38380.9084	3330
2943	-0.615	0.241	0.343	0.000	1110	2.15	38403.6576	3330	2990	-1.094	0.603	0.971	0.000	1110	1.02	38388.9062	1110
2943	-0.637	0.222	0.380	0.000	1110	2.21	38404.9931	3330	2990	-1.108	0.605	0.926	0.000	1110	1.14	38388.9608	1110
2943	-0.584	0.261	0.307	0.000	1110	2.21	38408.6412	3330	2990	-1.110	0.595	0.921	0.000	1110	1.57	38392.6959	3330
2943	-0.659	0.249	0.385	0.000	1110	2.23	38408.9832	3330	2990	-1.063	0.602	0.933	0.000	1110	1.00	38392.8575	3330
2943	-0.636	0.235	0.322	0.000	1110	2.02	38410.6451	3330	2990	-1.123	0.624	0.908	0.000	1110	1.99	38396.6528	1110
2943	-0.663	0.256	0.352	0.000	1110	2.15	38411.6359	3330	2990	-1.071	0.639	1.012	0.000	1110	1.04	38396.7984	1110
2943	-0.613	0.222	0.343	0.000	1110	2.15	38415.6247	3330	2990	-1.063	0.577	0.973	0.000	1110	1.00	38396.8530	1110
2943	-0.671	0.236	0.366	0.000	1110	1.23	38415.8604	3330	2990	-1.081	0.591	0.952	0.000	1110	2.36	38397.6326	3330
2943	-0.659	0.247	0.360	0.000	1110	2.16	38419.6135	3330	2990	-1.098	0.630	0.936	0.000	1110	1.06	38397.9055	3330
2943	-0.639	0.236	0.386	0.000	1110	1.13	38419.8037	3330	2990	-1.119	0.591	0.956	0.000	1110	2.36	38398.6299	3330
2943	-0.683	0.232	0.391	0.000	1110	2.22	38420.6079	3330	2990	-1.067	0.597	0.941	0.000	1110	1.03	38398.7992	3330
2943	-0.624	0.276	0.354	0.000	1110	1.14	38420.8042	3330	2990	-1.092	0.584	0.954	0.000	1110	2.11	38399.6384	3330
2943	-0.636	0.274	0.334	0.000	1110	2.09	38424.6030	3330	2990	-1.082	0.603	0.943	0.000	1110	1.01	38400.8551	3330
2943	-0.594	0.206	0.373	0.000	1110	1.15	38424.8037	3330	2990	-1.067	0.582	0.908	0.000	1110	1.02	38403.8656	3330
2943	-0.686	0.236	0.414	0.000	1110	2.28	38424.9416	3330	2990	-1.097	0.593	0.981	0.000	1110	2.26	38404.0380	3330
2943	-0.654	0.271	0.338	0.000	1110	2.20	38425.5953	3330	2990	-1.088	0.615	0.980	0.000	1110	1.01	38404.8446	3330
2943	-0.650	0.248	0.384	0.000	1110	1.14	38425.7898	3330	2990	-1.100	0.561	0.942	0.000	1110	2.18	38405.0319	3330
2943	-0.717	0.248	0.422	0.000	1110	2.22	38425.9360	3330	2990	-1.110	0.603	0.980	0.000	1110	1.05	38408.8734	3330
2943	-0.662	0.227	0.353	0.000	1110	2.20	38430.5816	3330	2990	-1.033	0.554	0.940	0.000	1110	1.02	38410.8462	3330
2943	-0.689	0.228	0.379	0.000	1110	2.01	38431.5882	3330	2990	-1.037	0.593	0.903	0.000	1110	1.03	38411.8490	3330
2943	-0.660	0.269	0.371	0.000	1110	1.13	38450.6749	1110	2990	-1.049	0.568	0.940	0.000	1110	1.05	38414.8525	3330
2943	-0.625	0.227	0.330	0.000	1110	1.98	38476.7846	1110	2990	-1.059	0.544	0.965	0.000	1110	2.19	38419.9912	3330
2943	-0.652	0.159	0.376	0.000	1110	1.23	38481.6810	1110	2990	-1.066	0.617	0.942	0.000	1110	1.09	38420.8567	3330
2943	-0.652	0.250	0.366	0.000	1110	1.58	38483.7346	1110	2990	-1.106	0.608	0.979	0.000	1110	1.02	38425.8015	3330
2943	-0.590	0.251	0.000	0.046	1101	1.25	38508.6122	1101	2990	-1.105	0.627	0.956	0.000	1110	1.00	38430.7480	3330
2943	-1.699	0.229	0.000	-0.048	1101	1.29	38509.6213	1101	2990	-1.090	0.592	0.938	0.000	1110	1.01	38431.7743	3330
2943	-0.700	0.219	0.000	0.011	1101	1.42	38512.6362	1101	2990	-1.126	0.587	0.967	0.000	1110	1.01	38483.6273	1110
2943	-0.544	0.219	0.000	-0.055	1101	1.40	38532.5773	1101	2990	-1.094	0.614	0.945	0.000	1110	1.60	38483.7777	1110
2943	-0.717	0.280	0.000	-0.053	1101	1.12	38693.0302	1101	2990	-1.171	0.615	1.038	0.000	1110	1.02	38493.6132	3330
2943	-0.703	0.290	0.000	0.080	1101	1.16	38693.9899	1101	2990	-1.132	0.612	0.951	0.000	1110	1.02	38494.6187	3330
2943	-0.641	0.281	0.000	0.055	1101	1.13	38739.9201	1101	2990	-0.986	0.655	0.968	0.000	1110	1.89	38494.7703	3330
2943	-0.641	0.257	0.000	0.293	1101	1.14	38769.8540	1101	2990	0.000	0.606	0.900	0.000	1100	1.08	38496.6465	1110
2943	-0.615	0.247	0.000	0.057	1101	1.25	38811.7837	1101	2990	-1.153	0.584	0.959	0.000	1110	1.14	38496.6655	1110
2943	-0.613	0.263	0.000	0.018	1101	1.16	38812.6628	1101	2990	-1.134	0.640	0.997	0.000	1110	1.01	38498.5931	3330
2943	-0.628	0.247	0.000	-0.033	1101	1.12	38812.7008	1101	2990	-1.106	0.582	0.986	0.000	1110	1.03	38498.6125	3330
2943	-0.670	0.262	0.000	0.064	1101	1.24	38815.7692	1101	2990	-1.097	0.578	0.955	0.000	1110	1.32	38498.7019	3330
2943	-0.655	0.219	0.000	0.055	1101	1.24	38818.7601	1101	2990	-1.174	0.599	0.999	0.000	1110	1.01	38499.5901	1110
2943	-0.653	0.295	0.000	0.080	1101	1.26	38820.7622	1101	2990	-1.060	0.650	0.947	0.000	1110	1.58	38499.7316	1110
2943	-0.597	0.190	0.000	0.070	1101	1.31	39134.9128	1101	2990	-1.134	0.571	0.963	0.000	1110	1.03	38500.6035	1110
2943	-0.589	0.211	0.000	0.029	1101	1.28	39139.8929	1101	2990	-1.137	0.593	1.027	0.000	1110	1.39	38500.7069	1110
2961	5.459	-0.206	-0.440	0.000	1110	1.89	38828.6590	3340	2990	-1.112	0.594	0.956	0.000	1110	1.03	38502.6043	1110
2970	0.000	0.646	1.020	0.000	0110	1.34	38343.9860	3330	2990	-1.087	0.582	0.947	0.000	1110	1.18	38505.6536	1110
2970	1.649	0.613	1.014	0.000	1110	1.35	38396.8299	1110	2990	-0.974	0.610	0.000	-0.068	1101	1.04	38508.5940	1101
2970	1.585	0.624	1.017	0.000	1110	1.34	38400.8422	3330	2990	-1.053	0.728	0.000	-0.027	1101	1.14	38509.6308	1101
2973	1.664	0.699	1.139	0.000	1110	1.00	38396.8340	1110	2990	-1.040	0.610	0.000	0.041	1101	1.01	38510.5636	1101
2973	1.625	0.699	1.093	0.000	1110	1.03	38397.8899	3330	2990	-1.021	0.574	0.000	0.086	1101	1.01	38511.5504	1101
2985	1.420	0.559	0.931	0.000	1110	1.16	38380.9854	3330	2990	-1.144	0.590	0.000	0.000	1101	1.16	38512.6290	1101
2985	1.460	0.582	0.963	0.000	1110	1.01	38396.8375	1110	2990	-1.148	0.655	0.000					

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL									PBS INFRARED IJKL								
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.
2990	-1.089	0.614	0.000	0.144	1101	1.09	38818.7694	1101	3243	1.760	0.743	1.097	0.000	1110	1.99	38769.8389	3340
2990	-1.065	0.599	0.000	0.104	1101	1.11	38820.7703	1101	3243	1.754	0.760	1.104	0.000	1110	2.17	38770.8715	1120
2990	-1.112	0.621	0.944	0.000	1110	1.02	38829.6410	1120	3243	1.785	0.663	1.123	0.000	1110	2.12	38800.7826	3340
2990	-1.131	0.637	0.971	0.000	1110	1.02	38847.6015	4440	3243	1.666	0.798	1.182	0.000	1110	1.97	38802.7035	3340
2990	-1.185	0.736	0.000	0.067	1101	1.02	38865.5975	1101									
2990	-1.041	0.571	0.000	0.065	1101	1.10	38865.6447	1101	3248	-0.453	1.364	0.000	0.601	1101	1.20	39100.0248	1101
2990	-0.961	0.647	0.000	0.028	1101	1.05	38866.6189	1101									
2990	-1.090	0.531	0.000	0.189	1101	1.15	38866.6570	1101	3249	0.148	0.936	1.459	0.000	1110	1.09	38344.0107	3330
2990	-1.127	0.671	0.000	0.001	1101	1.06	38867.6186	1101	3249	0.124	0.939	1.487	0.000	1110	1.10	38377.8952	3330
2990	-1.090	0.600	0.000	0.181	1101	1.08	38868.6249	1101	3249	0.134	0.899	1.425	0.000	1110	1.10	38378.8951	3330
2990	-1.129	0.588	0.000	0.111	1101	1.03	38869.5997	1101	3249	0.092	0.998	0.000	0.153	1101	1.35	38515.6509	1101
2990	-1.049	0.510	0.000	0.049	1101	1.04	38874.5881	1101	3249	0.179	0.854	0.000	0.157	1101	1.16	38739.9905	1101
2990	-1.148	0.642	0.000	0.084	1101	1.13	38875.6260	1101	3249	0.130	0.972	0.000	0.180	1101	1.13	38740.9751	1101
2990	-1.163	0.636	0.000	0.129	1101	1.18	38877.6353	1101	3249	0.141	0.976	0.000	0.111	1101	1.14	38742.9732	1101
2990	-1.099	0.654	0.000	0.191	1101	1.13	38888.5905	1101	3249	0.145	0.915	1.437	0.000	1110	1.14	38769.7375	3340
2990	-1.323	0.661	0.000	0.229	1101	1.10	38889.5760	1101	3249	0.115	0.881	1.431	0.000	1110	1.01	38769.8174	3340
2990	-1.092	0.631	0.000	0.083	1101	1.01	39056.0312	1101	3249	0.095	0.946	0.000	0.132	1101	1.12	38769.8876	1101
2990	-1.065	0.635	0.000	0.116	1101	1.01	39057.0172	1101	3249	0.099	0.964	1.479	0.000	1110	1.02	38770.8194	1120
2990	-1.061	0.616	0.000	0.085	1101	1.01	39058.0251	3303	3249	0.123	0.905	1.446	0.000	1110	1.02	38770.8194	1120
2990	-1.096	0.623	0.000	0.123	1101	1.01	39059.0184	3303	3249	0.197	0.914	0.000	0.097	1101	1.21	38773.6652	1101
2990	-1.081	0.635	0.000	0.065	1101	1.00	39060.0354	1101	3249	0.202	0.921	0.000	0.127	1101	1.14	38773.8884	1101
2990	-1.086	0.625	0.000	0.088	1101	1.01	39061.0095	1101	3249	0.201	0.969	0.000	0.118	1101	1.07	38778.6536	1101
2990	-1.111	0.632	0.000	-0.024	1101	2.16	39061.8227	3303	3249	0.187	0.940	0.000	0.223	1101	1.14	38809.7888	1101
2990	-1.119	0.626	0.000	0.084	1101	1.09	39061.9543	3303	3249	-0.008	0.883	0.000	0.247	1101	1.15	38810.7908	1101
2990	-1.062	0.616	0.000	0.108	1101	1.06	39062.9654	3303	3249	0.167	0.924	0.000	0.124	1101	1.18	38811.8006	1101
2990	-1.095	0.616	0.000	0.151	1101	1.04	39063.9740	3303	3249	0.117	0.962	0.000	0.133	1101	1.17	38815.7869	1101
2990	-1.149	0.637	0.000	0.121	1101	1.01	39066.9936	1101	3249	0.098	0.942	0.000	0.139	1101	1.17	38818.7787	1101
2990	-1.194	0.651	0.000	0.119	1101	1.02	39067.0495	1101	3249	0.178	0.938	0.000	0.122	1101	1.19	38820.7786	1101
2990	-1.086	0.591	0.000	0.148	1101	1.02	39068.9716	1101	3249	0.100	0.904	0.000	0.179	1101	1.11	38869.6129	1101
2990	-1.130	0.628	0.000	0.040	1101	1.01	39069.0307	1101	3249	0.185	0.887	0.000	0.077	1101	1.11	38874.5948	1101
2990	-1.114	0.589	0.000	0.083	1101	1.00	39099.9335	1101	3249	0.268	0.936	0.000	0.185	1101	1.63	39132.9959	3303
2990	0.000	0.623	0.000	0.023	0101	1.13	39100.0132	1101	3249	0.206	0.924	0.000	0.224	1101	1.24	39134.9330	1101
2990	-1.141	0.585	0.000	0.056	1101	1.10	39130.9185	1101	3249	0.216	0.981	0.000	0.127	1101	1.49	39134.9763	1101
2990	-1.140	0.640	0.000	0.072	1101	1.15	39134.9226	1101	3249	0.210	0.901	0.000	0.190	1101	1.18	39135.9153	1101
2990	-1.125	0.633	0.000	-0.029	1101	1.13	39139.9040	1101	3249	0.224	0.914	0.000	0.142	1101	1.27	39139.9273	1101
2993	0.767	1.033	1.578	0.000	1110	1.48	38769.7785	3340	3270	4.056	0.122	0.129	0.000	1110	1.84	38828.6937	3340
2993	0.780	0.963	1.594	0.000	1110	1.51	38828.6646	3340									
3003	1.327	0.944	1.535	0.000	1110	1.04	38343.9762	3330	3275	0.633	0.975	1.508	0.000	1110	1.04	38370.9901	3330
3003	1.361	0.931	1.488	0.000	1110	1.03	38396.8409	1110	3275	0.620	0.968	1.530	0.000	1110	1.02	38377.9099	3330
3003	1.279	0.976	1.526	0.000	1110	1.08	38397.9003	3330	3275	0.606	0.960	1.532	0.000	1110	1.02	38378.9063	3330
3017	-0.475	1.147	1.720	0.000	1110	1.83	38769.7868	3340	3275	0.576	0.986	0.000	0.235	1101	1.02	38769.8621	1101
3045	0.894	0.650	1.066	0.000	1110	1.84	38343.9964	3330	3275	0.477	1.034	0.000	0.177	1101	1.03	38771.8774	1101
3045	0.894	0.576	1.001	0.000	1110	1.84	38400.8489	3330	3275	0.578	1.002	0.000	0.154	1101	1.10	38845.7246	1101
3045	0.863	0.623	1.032	0.000	1110	1.86	38431.7359	3330	3282	1.667	0.877	1.330	0.000	1110	1.65	38769.8437	3340
3046	2.308	0.668	1.063	0.000	1110	2.45	38769.7917	3340	3282	1.650	0.831	1.324	0.000	1110	1.78	38770.8757	1120
3113	4.049	0.294	0.253	0.000	1110	1.53	38769.7958	3340	3282	1.643	0.848	1.344	0.000	1110	1.75	38800.7889	3340
3113	4.259	0.182	0.159	0.000	1110	1.55	38770.8243	1120	3282	1.634	0.864	1.388	0.000	1110	1.63	38802.7090	3340
3113	4.165	0.164	0.230	0.000	1110	1.58	38802.6771	3340	3294	5.170	-0.028	-0.217	0.000	1110	2.72	38828.6979	3340
3145	1.470	0.809	1.294	0.000	1110	1.15	38344.0030	3330	3319	0.684	1.218	1.902	0.000	1110	1.06	38809.6585	2220
3145	1.410	0.794	1.270	0.000	1110	1.17	38378.8846	3330	3319	0.624	1.190	1.929	0.000	1110	1.02	38809.6818	2220
3145	1.340	0.842	1.287	0.000	1110	1.16	38388.8686	1110	3319	0.322	1.163	0.000	0.105	1101	1.27	38887.6337	1101
3165	3.013	-0.162	0.000	0.000	1100	2.98	37708.7276	1110	3319	0.603	1.095	0.000	0.321	1101	1.19	38888.6123	1101
3165	2.887	-0.138	-0.381	0.000	1110	3.14	37767.6030	3330	3319	0.398	1.136	0.000	0.236	1101	1.25	38889.6236	1101
3165	2.954	-0.205	-0.534	0.000	1110	1.94	38769.8222	3340	3323	1.412	0.561	0.823	0.000	1110	1.16	38370.9973	3330
3165	2.987	-0.101	-0.521	0.000	1110	1.98	38770.8340	1120	3323	1.445	0.524	0.791	0.000	1110	1.14	38377.9162	3330
3165	2.898	-0.105	-0.465	0.000	1110	1.98	38800.7528	3340	3407	1.468	0.532	0.812	0.000	1110	1.14	38388.8865	1110
3165	2.864	-0.098	-0.375	0.000	1110	2.00	38802.6819	3340	3407	1.992	0.852	1.276	0.000	1110	2.79	38769.8486	3340
3185	1.910	0.230	0.341	0.000	1110	1.81	38340.0141	4440	3407	2.066	0.829	1.259	0.000	1110	3.09	38770.8833	1120
3185	1.844	0.227	0.321	0.000	1110	1.82	38388.8748	1110	3407	2.069	0.771	1.249	0.000	1110	3.01	38800.7951	3340
3185	1.887	0.191	0.278	0.000	1110	1.85	38400.8817	3330	3407	1.968	0.788	1.259	0.000	1110	2.80	38802.7153	3340
3188	2.268	0.574	0.866	0.000	1110	1.22	38340.0194	4440	3418	1.802	0.734	1.143	0.000	1110	1.20	38371.0051	3330
3188	2.279	0.535	0.906	0.000	1110	1.25	38377.8852	3330	3418	1.792	0.757	1.131	0.000	1110	1.15	38377.9240	3330
3188	2.312	0.512	0.828	0.000	1110	1.24	38378.8913	3330	3418	1.798	0.711	1.172	0.000	1110	1.15	38378.9122	3330
3207	1.931	0.181	-0.087	0.000	1110	2.49	38769.8264	3340	3426	3.640	0.138	0.147	0.000	1110	2.21	38828.7076	3340
3207	1.926	0.238	-0.047	0.000	1110	2.65	38770.8542	1120	3427	4.175	0.554	0.000	0.085	1101	1.04	39067.0196	1101
3207	2.079	0.048	-0.132	0.000	1110	2.55	38800.7583	3340</									

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL									PBS INFRARED IJKL								
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.
3982	1.599	-0.068	-0.196	0.000	1110	1.13	37802.6182	1110	3982	1.663	-0.095	0.000	-0.014	1101	1.07	38769.9198	1101
3982	1.533	-0.050	-0.125	0.000	1110	1.12	37809.5948	1110	3982	1.535	-0.069	0.000	-0.064	1101	1.08	38771.9464	1101
3982	1.622	-0.074	-0.174	0.000	1110	1.50	37830.6145	1110	3982	1.647	-0.118	0.000	0.005	1101	1.20	38773.9968	1101
3982	1.531	-0.077	-0.138	0.000	1110	1.46	37831.6071	1110	3982	1.646	-0.052	0.000	0.004	1101	1.08	38783.8569	1101
3982	1.574	-0.094	-0.184	0.000	1110	1.59	37837.6042	3330	3982	1.574	-0.061	0.000	0.021	1101	1.07	38784.8802	1101
3982	1.638	-0.105	-0.162	0.000	1110	2.14	38365.8530	3330	3982	1.689	-0.055	-0.174	0.000	1110	1.02	38799.7875	1110
3982	1.602	-0.062	-0.169	0.000	1110	1.08	38369.0522	3330	3982	1.617	-0.060	-0.156	0.000	1110	1.04	38799.8486	1110
3982	1.609	-0.030	-0.166	0.000	1110	1.07	38371.0261	3330	3982	1.567	-0.064	-0.180	0.000	1110	1.12	38799.8840	1110
3982	1.628	-0.048	-0.171	0.000	1110	1.12	38377.9478	3330	3982	1.624	-0.054	-0.168	0.000	1110	4.34	38800.5854	3340
3982	1.630	-0.053	-0.178	0.000	1110	2.42	38378.8062	3330	3982	1.668	-0.124	-0.291	0.000	1110	1.30	38800.6951	3340
3982	1.588	-0.048	-0.153	0.000	1110	1.12	38378.9419	3330	3982	1.556	-0.015	-0.177	0.000	1110	1.08	38800.8687	3340
3982	1.702	-0.117	-0.185	0.000	1110	1.07	38378.9875	3330	3982	1.561	-0.088	-0.237	0.000	1110	1.02	38800.9028	3340
3982	1.648	-0.063	-0.226	0.000	1110	1.07	38379.0173	3330	3982	1.629	-0.054	-0.199	0.000	1110	1.01	38802.8042	3340
3982	1.737	-0.044	-0.180	0.000	1110	1.08	38379.9656	3330	3982	1.674	-0.081	-0.198	0.000	1110	1.08	38802.8646	3340
3982	1.559	0.029	-0.110	0.000	1110	1.11	38381.0391	3330	3982	1.619	-0.024	-0.204	0.000	1110	1.26	38809.6764	2220
3982	1.659	-0.044	-0.165	0.000	1110	1.07	38381.9944	3330	3982	1.669	-0.068	0.000	0.068	1101	1.09	38809.8558	1101
3982	1.668	-0.064	-0.168	0.000	1110	1.14	38382.0517	3330	3982	1.660	-0.101	0.000	0.028	1101	1.07	38810.8337	1101
3982	1.657	-0.070	-0.188	0.000	1110	1.10	38383.9419	3330	3982	1.640	-0.048	0.000	-0.000	1101	1.08	38811.8432	1101
3982	1.596	-0.061	-0.165	0.000	1110	1.09	38384.9419	1110	3982	1.621	-0.037	0.000	0.020	1101	1.07	38815.8192	1101
3982	1.618	-0.083	-0.171	0.000	1110	1.07	38388.9715	1110	3982	1.576	-0.058	0.000	0.030	1101	1.07	38818.7876	1101
3982	1.603	-0.064	-0.152	0.000	1110	1.07	38390.9618	3330	3982	1.605	-0.013	0.000	-0.062	1101	1.07	38820.7861	1101
3982	1.659	-0.091	-0.173	0.000	1110	1.13	38391.0228	3330	3982	1.588	-0.078	0.000	0.129	1101	1.08	38822.8042	1101
3982	1.572	-0.048	-0.187	0.000	1110	1.07	38391.9510	3330	3982	1.622	-0.067	0.000	-0.022	1101	1.07	38824.7722	1101
3982	1.610	-0.050	-0.164	0.000	1110	1.11	38392.0115	3330	3982	1.660	-0.034	0.000	-0.054	1101	1.08	38825.7479	1101
3982	1.643	-0.077	-0.160	0.000	1110	2.22	38392.7758	3330	3982	1.621	-0.080	0.000	-0.001	1101	1.07	38826.7497	1101
3982	1.579	-0.043	-0.149	0.000	1110	1.07	38396.9426	1110	3982	1.625	-0.055	0.000	0.018	1101	1.07	38833.7458	1101
3982	1.635	-0.044	-0.164	0.000	1110	1.09	38396.9826	1110	3982	1.599	-0.041	0.000	0.071	1101	1.08	38833.7807	1101
3982	1.652	-0.103	-0.177	0.000	1110	2.15	38397.7650	3330	3982	1.648	-0.069	0.000	-0.052	1101	1.07	38845.7047	1101
3982	1.626	-0.090	-0.178	0.000	1110	1.07	38397.9467	3330	3982	1.648	-0.026	0.000	0.075	1101	1.08	38845.7452	1101
3982	1.659	-0.058	-0.176	0.000	1110	2.19	38398.7608	3330	3982	1.606	-0.050	0.000	0.039	1101	1.28	38845.8191	1101
3982	1.581	-0.037	-0.160	0.000	1110	1.85	38400.7739	2330	3982	1.647	-0.095	0.000	-0.094	1101	1.23	38864.7549	1101
3982	1.590	-0.018	-0.124	0.000	1110	1.07	38403.9263	3330	3982	1.565	-0.084	0.000	0.062	1101	1.07	38865.6546	1101
3982	1.594	-0.063	-0.121	0.000	1110	1.14	38403.9920	3330	3982	1.616	-0.011	0.000	0.015	1101	1.27	38865.7618	1101
3982	1.584	-0.046	-0.145	0.000	1110	1.07	38404.9159	3330	3982	1.590	-0.005	0.000	-0.064	1101	1.08	38866.6388	1101
3982	1.630	-0.082	-0.180	0.000	1110	1.10	38406.8801	3330	3982	1.536	-0.074	0.000	-0.002	1101	1.11	38866.7090	1101
3982	1.615	-0.061	-0.161	0.000	1110	1.07	38408.9250	3330	3982	1.563	-0.088	0.000	0.032	1101	1.32	38866.7681	1101
3982	1.590	-0.051	-0.143	0.000	1110	1.13	38408.9763	3330	3982	1.677	-0.151	0.000	0.079	1101	1.08	38867.6270	1101
3982	1.621	-0.041	-0.156	0.000	1110	1.07	38411.8937	3330	3982	1.618	-0.171	0.000	0.112	1101	1.11	38867.6662	1101
3982	1.598	-0.047	-0.170	0.000	1110	1.07	38414.9061	3330	3982	1.684	-0.074	0.000	0.064	1101	1.09	38874.6012	1101
3982	1.655	-0.050	-0.208	0.000	1110	1.07	38415.9131	3330	3982	1.467	-0.066	0.000	-0.095	1101	1.07	38875.6339	1101
3982	1.620	-0.033	-0.192	0.000	1110	1.08	38419.9889	3330	3982	1.540	-0.124	0.000	0.062	1101	1.07	38877.6447	1101
3982	1.601	-0.062	-0.144	0.000	1110	2.25	38420.6981	3330	3982	1.451	-0.192	0.000	0.140	1101	1.07	38887.6069	1101
3982	1.573	-0.067	-0.158	0.000	1110	1.09	38424.9092	3330	3982	1.741	-0.285	0.000	0.134	1101	1.08	38888.6243	1101
3982	1.525	-0.028	-0.115	0.000	1110	1.12	38425.9228	3330	3982	1.395	-0.071	0.000	0.088	1101	1.07	38889.5905	1101
3982	1.563	-0.029	-0.150	0.000	1110	1.08	38427.8375	1110	3982	1.495	-0.056	0.000	-0.012	1101	1.10	38903.6057	1101
3982	1.639	-0.049	-0.218	0.000	1110	1.98	38430.6839	3330	3982	1.589	-0.075	0.000	-0.116	1101	1.17	38904.6308	1101
3982	1.578	-0.053	-0.159	0.000	1110	1.15	38476.7959	1110	3982	1.655	-0.095	0.000	-0.203	1101	1.15	38906.6173	1101
3982	1.615	-0.023	-0.148	0.000	1110	1.24	38480.8093	1110	3982	1.569	-0.020	0.000	0.009	1101	1.25	38906.6464	1101
3982	1.602	-0.022	-0.159	0.000	1110	1.12	38481.7694	1110	3982	1.422	-0.036	0.000	-0.097	1101	1.18	38908.6218	1101
3982	1.612	-0.091	-0.178	0.000	1110	1.08	38483.6832	1110	3982	1.348	-0.062	0.000	-0.069	1101	1.16	38911.6060	1101
3982	1.648	-0.079	-0.200	0.000	1110	1.07	38496.6835	1110	3982	1.602	0.027	0.000	-0.045	1101	1.20	38912.6174	1101
3982	1.626	-0.106	-0.151	0.000	1110	1.15	38498.6052	3330	3982	1.571	-0.055	0.000	-0.011	1101	1.20	38913.6155	1101
3982	1.589	-0.013	-0.157	0.000	1110	1.08	38498.6428	3330	3982	1.743	-0.073	0.000	0.048	1101	1.26	38916.6197	1101
3982	1.645	-0.103	-0.179	0.000	1110	1.08	38498.6957	3330	3982	1.601	-0.028	0.000	0.017	1101	1.09	38918.5548	1101
3982	1.589	-0.050	-0.144	0.000	1110	1.36	38498.7838	3330	3982	1.505	-0.092	0.000	-0.223	1101	1.35	38918.6315	1101
3982	1.619	-0.095	-0.183	0.000	1110	1.13	38499.6083	1110	3982	1.607	0.064	0.000	-0.029	1101	1.14	38921.5723	1101
3982	1.583	-0.017	-0.104	0.000	1110	1.07	38499.6712	1110	3982	1.659	-0.161	0.000	0.091	1101	2.30	39061.9403	3303
3982	1.592	-0.093	-0.153	0.000	1110	1.25	38499.7601	1110	3982	1.577	-0.049	0.000	-0.038	1101	1.09	39100.0548	1101
3982	0.000	0.000	0.000	0.000	0000	1.08	38500.6409	1110	3982	1.755	-0.118	0.000	0.093	1101	1.07	39130.9293	1101
3982	1.630	-0.008	-0.152	0.000	1110	1.07	38500.6736	1110	3982	1.680	-0.140	0.000	-0.014	1101	1.08	39130.9641	1101
3982	1.582	-0.030	-0.132	0.000	1110	1.57	38500.8046	1110	3982	1.664	-0.079	0.000	0.022	1101	1.10	39132.9751	3303
3982	1.558	-0.074	-0.187	0.000	1110	1.11	38501.7100	1110	3982	1.673	-0.091	0.000	0.081	1101	1.07	39134.9464	1101
3982	1.673	-0.066	-0.171	0.000	1110	1.07	38505.6290	1110	3982	1.698	-0.111	0.000	0.059	1101	1.09	39135.9575	1101
3982	1.577	-0.155	0.000	0.157	1101	1.08	38508.6194	1101	3982	1.630	-0.068	0.000	-0.019	1101	1.12	39135.9745	1101
3982	1.512	-0.056	0.000	0.023	1101	1.13	38509.6949	1101	3982	1.698							

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL								PBS INFRARED IJKL									
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.
4057	-0.718	0.759	0.000	0.170	1101	1.05	38508.6872	1101	4195	0.648	2.102	0.000	0.580	1101	1.23	38510.6758	1101
4057	-0.714	0.737	0.000	0.032	1101	1.12	38509.7201	1101	4195	0.623	1.477	0.000	0.456	1101	1.23	38511.6840	1101
4057	-0.595	0.735	0.000	0.152	1101	1.03	38511.6596	1101	4195	0.538	1.583	0.000	0.462	1101	1.26	38540.6438	1101
4057	-0.727	0.793	0.000	0.098	1101	1.03	38512.6615	1101	4195	0.540	1.566	0.000	0.464	1101	1.25	38542.6255	1101
4057	0.000	0.742	0.000	0.120	1101	1.09	38513.6993	1101	4195	0.402	1.592	0.000	0.433	1101	1.25	38545.6214	1101
4057	-0.579	0.794	0.000	0.076	1101	1.08	38517.6830	1101	4195	0.484	1.525	0.000	0.489	1101	1.26	38547.6246	1101
4057	-0.719	0.800	0.000	-0.004	1101	1.02	38741.0131	1101	4216	0.571	0.528	0.882	0.000	1110	2.68	38807.8319	3340
4057	-0.667	0.756	0.000	0.102	1101	1.03	38744.0173	1101	4216	0.601	0.551	0.817	0.000	1110	2.68	38828.7583	3340
4057	-0.687	0.774	0.000	0.131	1101	1.02	38751.9872	1101	4232	0.294	0.770	1.239	0.000	1110	1.62	37767.6153	3330
4057	-0.671	0.771	0.000	0.119	1101	1.06	38752.0322	1101	4232	0.325	0.755	1.192	0.000	1110	1.51	38382.0052	3330
4057	-0.694	0.773	0.000	0.091	1101	1.04	38753.0072	1101	4232	0.236	0.777	1.239	0.000	1110	1.51	38404.9666	3330
4057	-0.663	0.754	0.000	0.139	1101	1.03	38769.9470	1101	4232	0.258	0.776	1.209	0.000	1110	1.50	38408.9469	3330
4057	-0.643	0.774	0.000	0.123	1101	1.04	38783.8659	1101	4232	0.279	0.823	0.000	0.139	1101	1.50	38752.0056	1101
4057	-0.710	0.801	0.000	0.143	1101	1.03	38784.9069	1101	4232	0.256	0.799	0.000	0.104	1101	1.50	38769.9531	1101
4057	-0.651	0.766	0.000	0.129	1101	1.03	38809.8470	1101	4232	0.253	0.809	0.000	0.120	1101	1.50	38784.9169	1101
4057	-0.596	0.746	0.000	0.060	1101	1.32	38809.9460	1101	4232	0.351	0.794	0.000	0.128	1101	1.53	38810.8716	1101
4057	-0.655	0.764	0.000	0.116	1101	1.03	38810.8438	1101	4247	1.425	0.666	1.060	0.000	1110	1.00	38382.0154	3330
4057	-0.690	0.784	0.000	0.081	1101	1.04	38811.8527	1101	4247	1.350	0.683	1.040	0.000	1110	1.00	38392.0001	3330
4057	-0.700	0.794	0.000	0.062	1101	1.12	38815.8833	1101	4273	2.352	0.641	1.022	0.000	1110	1.79	38799.8535	1110
4057	-0.738	0.782	0.000	0.129	1101	1.02	38818.7964	1101	4273	2.334	0.616	0.934	0.000	1110	1.79	38800.8521	3340
4057	-0.704	0.653	0.000	0.058	1101	1.03	38820.8062	1101	4273	2.243	0.621	0.948	0.000	1110	1.65	38802.7993	3340
4057	-0.693	0.778	0.000	0.099	1101	1.04	38822.7555	1101	4287	1.619	0.695	1.081	0.000	1110	1.57	38382.0277	3330
4057	-0.732	0.824	0.000	0.112	1101	1.02	38823.7905	1101	4287	1.599	0.662	1.042	0.000	1110	1.57	38408.9622	3330
4057	-0.643	0.688	0.000	0.177	1101	1.02	38824.7806	1101	4287	1.650	0.647	1.013	0.000	1110	1.58	38411.9305	3330
4057	-0.692	0.818	0.000	0.131	1101	1.05	38826.7419	1101	4293	4.020	0.033	0.108	0.000	1110	2.06	38802.8354	3340
4057	-0.737	0.782	0.000	0.153	1101	1.03	38833.7718	1101	4293	4.075	0.032	0.010	0.000	1110	2.06	38828.7632	3340
4057	-0.588	0.754	0.000	0.114	1101	1.03	38845.7503	1101	4295	2.431	-0.062	-0.108	0.000	1110	1.11	37767.6895	3330
4057	-0.767	0.818	0.000	0.140	1101	1.20	38845.8242	1101	4295	2.334	0.036	0.023	0.000	1110	1.13	37779.6987	1110
4057	-0.730	0.777	0.000	0.085	1101	1.05	38869.7021	1101	4295	2.305	0.011	-0.040	0.000	1110	1.13	37809.6109	1110
4057	-0.607	0.719	0.000	0.113	1101	1.05	38874.6084	1101	4299	0.898	0.959	1.561	0.000	1110	1.22	38382.0413	3330
4057	-0.784	0.612	0.000	0.143	1101	1.02	38875.6510	1101	4299	0.867	0.958	1.556	0.000	1110	1.22	38411.9383	3330
4057	-0.670	0.796	0.000	0.090	1101	1.04	39130.9726	1101	4299	0.805	1.063	0.000	0.187	1101	1.22	38752.0128	1101
4057	-0.647	0.800	0.000	0.065	1101	1.03	39132.9274	3303	4299	0.846	1.015	0.000	0.101	1101	1.22	38753.0156	1101
4057	-0.666	0.768	0.000	0.035	1101	1.06	39132.9843	3303	4299	0.835	1.071	0.000	0.217	1101	1.22	38769.9648	1101
4057	-0.661	0.776	0.000	0.110	1101	1.03	39134.9576	1101	4299	0.820	1.080	0.000	0.140	1101	1.22	38784.9246	1101
4057	-0.684	0.757	0.000	0.065	1101	1.04	39135.9665	1101	4301	-0.611	0.701	1.063	0.000	1110	1.16	38382.0579	3330
4057	-0.693	0.745	0.000	0.095	1101	1.06	39138.9696	1101	4301	-0.691	0.698	1.104	0.000	1110	1.15	38403.9859	3330
4069	-0.815	0.966	1.573	0.000	1110	1.04	37767.6979	3330	4301	-0.632	0.742	0.000	0.170	1101	1.15	38511.6941	1101
4069	-0.890	0.997	1.611	0.000	1110	1.07	37777.6935	3330	4301	-0.660	0.721	0.000	0.118	1101	1.20	38517.7220	1101
4069	-0.876	1.013	1.608	0.000	1110	1.06	37802.6240	1110	4301	-0.647	0.672	0.000	0.104	1101	1.17	38810.9003	1101
4069	-0.965	0.998	1.636	0.000	1110	1.07	37809.6056	1110	4335	0.483	0.703	1.112	0.000	1110	1.03	37767.6837	3330
4069	-0.960	0.881	0.000	0.037	1101	1.06	38510.7059	1110	4335	0.392	0.713	1.125	0.000	1110	1.05	37777.7010	3330
4069	-0.787	1.057	0.000	0.178	1101	1.06	38511.7031	1101	4335	0.462	0.721	1.138	0.000	1110	1.03	38381.0483	3330
4069	-0.719	0.845	0.000	0.233	1101	1.10	38517.7056	1101	4335	0.445	0.703	0.000	0.089	1101	1.04	38752.9839	1101
4080	2.500	0.587	0.952	0.000	1110	2.02	38769.9028	3340	4335	0.445	0.703	0.000	0.145	1101	1.02	38769.9744	1101
4080	2.349	0.633	1.037	0.000	1110	2.06	38800.8431	3340	4335	0.432	0.715	0.000	0.125	1101	1.02	38775.9514	1101
4080	2.353	0.627	0.992	0.000	1110	2.05	38802.7889	3340	4335	0.436	0.741	0.000	0.126	1101	1.07	38810.9176	1101
4092	1.742	0.937	1.565	0.000	1110	1.31	38403.9699	3330	4357	2.275	0.029	0.079	0.000	1110	1.02	37767.7068	3330
4092	1.812	0.959	1.610	0.000	1110	1.29	38404.9407	3330	4357	2.225	0.066	0.069	0.000	1110	1.04	37777.7115	3330
4092	1.767	0.941	1.523	0.000	1110	1.32	38406.9635	3330	4359	3.293	-0.012	-0.045	0.000	1110	1.04	37767.7200	3330
4094	0.376	0.867	1.429	0.000	1110	1.54	38403.9589	3330	4359	3.258	0.054	0.055	0.000	1110	1.08	37779.7149	1110
4094	0.401	0.894	1.468	0.000	1110	1.53	38404.9488	3330	4359	3.348	0.080	0.063	0.000	1110	1.05	38391.0023	3330
4094	0.340	0.927	1.444	0.000	1110	1.52	38408.9327	3330	4362	0.007	1.080	1.809	0.000	1110	1.01	38391.0134	3330
4094	0.365	0.933	0.000	0.171	1101	1.54	38743.9914	1101	4362	-0.058	1.133	1.804	0.000	1110	1.03	38408.9938	3330
4094	0.352	0.979	0.000	0.061	1101	1.53	38752.9996	1101	4362	0.016	1.122	1.798	0.000	1110	1.02	38415.9233	3330
4094	0.428	0.943	0.000	0.116	1101	1.52	38769.9406	1101	4362	-0.025	1.123	0.000	0.190	1101	1.06	38752.9683	1101
4094	0.384	0.916	0.000	0.166	1101	1.53	38784.8891	1101	4362	-0.013	1.162	0.000	0.256	1101	1.02	38769.9922	1101
4100	2.236	0.522	0.837	0.000	1110	1.01	38371.0508	3330	4362	-0.013	1.133	0.000	0.185	1101	1.01	38773.9604	1101
4100	2.145	0.561	0.839	0.000	1110	1.00	38379.0090	3330	4362	0.046	1.099	0.000	0.191	1101	1.09	38810.9285	1101
4100	2.092	0.591	0.913	0.000	1110	1.02	38403.9776	3330	4371	1.394	0.925	1.481	0.000	1110	1.18	38414.9135	3330
4104	0.813	0.978	1.436	0.000	1110	1.55	38769.9111	3340	4371	1.433	0.883	1.505	0.000	1110	1.16	38415.9344	3330
4104	0.892	0.911	1.419	0.000	1110	1.58	38800.8472	3340	4371	1.438	0.923	1.499	0.000	1110	1.16	38419.9296	3330
4104	0.822	0.926	1.449	0.000	1110	1.57	38802.7951	3340	4374	2.279	0.346	0.000	0.000	1110	1.00	38396.9873	1110
4133	4.410	-0.203	-0.331	0.000	1110	1.15	37713.7601	1110	4374	2.278	0.419	0.615	0.000	1110	1.00	38419.9403	3330
4133	4.306	-0.178	0.000	0.000	1100	1.08	37721.8056	1110	4374	2.212	0						

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL									PBS INFRARED IJKL								
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.
4382	0.944	0.751	0.000	0.159	1101	1.46	38809.8651	1101	4737	1.901	0.684	1.070	0.000	1110	1.02	38398.0049	3330
4382	1.025	0.730	0.000	0.098	1101	1.47	38810.8799	1101	4737	1.912	0.657	1.063	0.000	1110	1.00	38405.0153	3330
4382	0.919	0.733	0.000	0.127	1101	1.50	38811.8924	1101	4737	1.897	0.626	1.100	0.000	1110	1.01	38427.9355	1110
4392	2.783	0.590	0.990	0.000	1110	1.02	38424.9337	3330	4743	4.470	-0.102	-0.392	0.000	1110	3.00	38828.7799	3340
4392	2.753	0.557	0.949	0.000	1110	1.02	38425.9294	3330	4757	3.086	-0.060	-0.088	0.000	1110	1.51	37778.6860	1110
4392	2.837	0.566	0.974	0.000	1110	1.07	38483.7003	1110	4757	3.005	0.013	-0.039	0.000	1110	1.51	38405.0240	3330
4434	-0.074	0.946	1.642	0.000	1110	1.25	38397.0019	1110	4757	3.073	-0.070	-0.141	0.000	1110	1.52	38419.9741	3330
4434	-0.175	1.046	1.648	0.000	1110	1.26	38424.9501	3330	4757	3.047	0.009	-0.095	0.000	1110	1.52	38427.9446	1110
4434	-0.194	1.008	1.648	0.000	1110	1.26	38425.9427	3330	4785	2.809	0.401	0.587	0.000	1110	1.03	38398.0111	3330
4434	-0.099	1.044	0.000	0.177	1101	1.27	38810.9089	1101	4785	2.867	0.385	0.591	0.000	1110	1.01	38427.9651	1110
4450	1.428	0.587	0.935	0.000	1110	1.58	38799.8618	1110	4785	2.862	0.363	0.545	0.000	1110	1.01	38431.9421	3330
4450	1.496	0.509	0.811	0.000	1110	1.58	38800.8750	3340	4786	0.696	0.517	0.761	0.000	1110	1.77	38419.9803	3330
4450	1.419	0.571	0.852	0.000	1110	1.69	38802.8083	3340	4786	0.700	0.525	0.794	0.000	1110	1.77	38427.9510	1110
4471	2.005	0.591	0.995	0.000	1110	1.18	38397.0069	1110	4786	0.702	0.540	0.811	0.000	1110	1.77	38431.9472	3330
4471	2.047	0.621	0.949	0.000	1110	1.18	38415.9557	3330	4786	0.756	0.510	0.000	0.068	1101	1.77	38774.0200	1101
4471	1.993	0.614	0.981	0.000	1110	1.19	38424.9584	3330	4786	0.673	0.584	0.000	0.033	1101	1.80	38809.8921	1101
4494	4.835	-0.050	-0.199	0.000	1110	1.68	38799.8674	1110	4786	0.675	0.546	0.000	0.090	1101	1.77	38811.9002	1101
4494	4.767	-0.051	-0.219	0.000	1110	1.79	38802.8160	3340	4787	3.644	0.243	0.000	0.138	1101	1.26	38864.7762	1101
4496	3.624	0.385	0.687	0.000	1110	1.01	38424.9654	3330	4787	3.771	0.137	0.000	0.227	1101	1.27	38864.7918	1101
4496	3.562	0.399	0.692	0.000	1110	1.00	38425.9503	3330	4787	3.738	0.203	0.000	0.398	1101	1.27	38865.7919	1101
4517	0.075	0.996	1.611	0.000	1110	1.11	38404.0003	3330	4787	3.835	-0.046	0.000	0.361	1101	1.32	38866.6863	1101
4517	0.082	1.000	1.620	0.000	1110	1.12	38409.0041	3330	4787	3.748	0.005	0.000	0.467	1101	1.27	38866.7876	1101
4517	0.041	1.124	0.000	0.143	1101	1.11	38770.0030	1101	4807	1.171	1.026	0.000	0.396	1101	1.23	38888.6520	1101
4517	0.074	1.046	0.000	0.143	1101	1.11	38773.9860	1101	4807	0.952	1.057	0.000	0.265	1101	1.22	38889.6515	1101
4517	0.085	1.066	0.000	0.141	1101	1.11	38809.8748	1101	4807	1.061	1.030	0.000	0.242	1101	1.20	38903.6245	1101
4517	0.118	1.045	0.000	0.121	1101	1.11	38810.8914	1101	4817	4.586	0.210	-0.003	0.000	1110	2.03	38828.7931	3340
4518	0.937	0.768	1.231	0.000	1110	1.04	38397.9941	3330	4819	2.117	-0.048	-0.130	0.000	1110	2.76	38828.7986	3340
4518	0.925	0.758	1.237	0.000	1110	1.04	38404.0072	3330	4825	1.833	0.241	0.348	0.000	1110	1.19	37711.8925	1110
4518	0.920	0.741	1.230	0.000	1110	1.05	38409.0118	3330	4825	1.883	0.213	0.327	0.000	1110	1.21	37768.7177	3330
4518	0.965	0.748	0.000	0.182	1101	1.04	38770.0095	1101	4825	1.833	0.262	0.353	0.000	1110	1.19	37769.7312	1110
4518	0.963	0.799	0.000	0.123	1101	1.06	38773.9424	1101	4825	1.880	0.174	0.258	0.000	1110	1.25	37777.6767	3330
4518	0.964	0.768	0.000	0.241	1101	1.06	38809.9274	1101	4825	1.871	0.195	0.352	0.000	1110	1.23	38398.0153	3330
4518	0.969	0.772	0.000	0.136	1101	1.09	38810.9455	1101	4825	1.896	0.200	0.322	0.000	1110	1.20	38407.0349	3330
4534	1.990	0.034	-0.001	0.000	1110	1.11	37708.8237	1110	4825	1.889	0.212	0.316	0.000	1110	1.21	38416.0234	3330
4540	2.312	0.301	0.508	0.000	1110	1.18	37711.8353	1110	4825	1.910	0.273	0.000	0.092	1101	1.21	38511.7560	1101
4540	2.396	0.256	0.455	0.000	1110	1.24	37767.7887	3330	4825	1.937	0.126	0.000	0.083	1101	1.20	38517.7325	1101
4540	2.348	0.288	0.507	0.000	1110	1.21	37768.6646	3330	4825	1.897	0.210	0.000	0.043	1101	1.21	38563.6180	1101
4540	2.291	0.369	0.562	0.000	1110	1.21	37779.7458	1110	4828	4.921	-0.064	-0.087	0.000	1110	1.41	38828.6479	3340
4546	1.540	0.824	1.257	0.000	1110	2.27	38799.8729	1110	4831	2.238	0.640	0.983	0.000	1110	2.71	38828.8042	3340
4546	1.600	0.797	1.224	0.000	1110	2.27	38800.8868	3340	4845	4.565	0.348	0.000	0.398	1101	1.08	38557.6896	1101
4546	1.526	0.782	1.186	0.000	1110	2.45	38802.8229	3340	4846	-0.863	1.673	2.467	0.000	1110	1.04	38398.0194	3330
4550	4.392	0.529	0.886	0.000	1110	1.06	37799.6966	1110	4846	-0.795	1.716	2.507	0.000	1110	1.03	38425.9815	3330
4550	4.402	0.535	0.865	0.000	1110	1.01	37801.6318	3330	4846	-0.729	1.730	2.523	0.000	1110	1.03	38427.9717	1110
4550	4.381	0.531	0.860	0.000	1110	1.03	37809.6500	1110	4846	-0.849	1.784	0.000	0.608	1101	1.03	38770.0316	1101
4550	4.354	0.630	0.000	-0.719	1101	1.08	38544.6894	1101	4846	-0.770	1.829	0.000	0.668	1101	1.03	38809.9196	1101
4550	4.386	0.572	0.000	0.000	1100	1.06	38557.6426	1101	4846	-0.844	1.829	0.000	0.602	1101	1.05	38811.9595	1101
4552	4.434	-0.154	-0.158	0.000	1110	1.65	38800.8917	3340	4846	-0.811	1.798	0.000	0.580	1101	1.14	38816.0023	1101
4552	4.453	-0.013	-0.181	0.000	1110	1.67	38802.8507	3340	4846	-1.056	1.720	0.000	0.652	1101	1.08	38889.6424	1101
4554	2.399	0.010	-0.022	0.000	1110	1.11	37708.8446	1110	4846	-0.890	1.626	0.000	0.710	1101	1.04	38903.6326	1101
4554	2.406	0.054	-0.022	0.000	1110	1.11	37768.6832	3330	4846	-1.018	1.667	0.000	0.689	1101	1.03	38904.6747	1101
4554	2.303	0.053	0.020	0.000	1110	1.10	37769.6949	1110	4846	-1.051	2.474	0.000	0.684	1101	1.03	38906.6743	1101
4554	2.361	0.011	-0.039	0.000	1110	1.11	37777.6582	3330	4846	-0.876	1.579	0.000	0.754	1101	1.03	38908.6406	1101
4554	2.399	0.025	-0.004	0.000	1110	1.10	37778.6670	1110	4883	3.361	0.382	0.653	0.000	1110	1.00	38425.9902	3330
4566	4.899	-0.043	-0.160	0.000	1110	1.48	38828.6361	3340	4883	3.396	0.373	0.616	0.000	1110	1.02	38483.8553	1110
4608	1.949	0.576	0.964	0.000	1110	1.09	38391.0551	3330	4888	1.212	0.821	1.301	0.000	1110	2.72	38828.8118	3340
4608	1.885	0.590	0.960	0.000	1110	1.10	38398.0000	3330	4889	3.633	0.104	0.152	0.000	1110	1.97	38828.8194	3340
4608	1.854	0.583	0.961	0.000	1110	1.09	38404.0155	3330	4902	0.093	1.118	1.822	0.000	1110	1.34	38405.0400	3330
4630	0.113	0.731	1.231	0.000	1110	1.74	38404.0226	3330	4902	0.123	1.089	1.790	0.000	1110	1.34	38409.0395	3330
4630	0.146	0.782	1.245	0.000	1110	1.74	38415.9900	3330	4902	0.106	1.088	1.786	0.000	1110	1.34	38424.9917	3330
4630	0.090	0.787	1.243	0.000	1110	1.74	38424.9721	3330	4902	0.141	1.145	0.000	0.161	1101	1.34	38774.0301	1101
4630	0.112	0.832	0.000	0.089	1101	1.74	38774.0104	1101	4902	0.189	1.085	0.000	0.276	1101	1.37	38809.9009	1101
4630	0.152	0.814	0.000	0.209	1101	1.75	38809.8839	1101	4902	0.132	1.167	0.000	0.165	1101	1.34	38811.9145	1101
4630	0.118	0.800	0.000	0.160	1101	1.74	38811.9072	1101	4905	1.777	-0.027	-0.072	0.000	1110	1.11	37777.7524	3330
4660	3.123	0.019	0.077	0.000	1110	1.13	37711.8668	1110	4905	1.691	-0.020	-0.004	0.000	1110	1.12	37831.6213	1110
4660	3.129	0.020	0.035	0.000	1110	1.14	37768.6973	3330	4905	1.767							

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL									PBS INFRARED IJKL								
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.
4915	3.108	-0.159	-0.173	0.000	1110	1.03	37831.6279	1110	5056	1.679	-0.273	0.000	0.230	1101	1.39	38510.7520	1101
4915	3.231	-0.143	-0.191	0.000	1110	1.16	37838.6736	3330	5056	1.679	-0.147	0.000	-0.048	1101	1.38	38511.7690	1101
4915	3.204	-0.110	-0.194	0.000	1110	1.02	38398.0291	3330	5056	1.761	-0.197	0.000	0.045	1101	1.52	38512.8326	1101
4920	0.876	0.945	1.571	0.000	1110	1.04	38425.0065	3330	5056	1.703	-0.160	0.000	-0.013	1101	1.46	38513.8170	1101
4920	0.863	0.984	1.590	0.000	1110	1.04	38425.9968	3330	5056	1.738	-0.201	0.000	-0.032	1101	1.41	38515.7268	1101
4920	0.917	0.949	1.576	0.000	1110	1.03	38427.9784	1110	5056	1.629	-0.131	0.000	-0.020	1101	1.38	38517.7426	1101
4920	0.870	1.029	0.000	0.171	1101	1.04	38811.9399	1101	5056	1.697	-0.262	-0.460	0.000	1110	1.38	38521.7487	3330
4920	0.857	1.021	0.000	0.134	1101	1.14	38815.9946	1101	5056	1.721	-0.205	0.000	-0.026	1101	1.52	38531.7814	1101
4920	1.121	0.923	0.000	0.267	0101	1.26	38845.7315	1101	5056	1.654	-0.130	0.000	0.063	1101	1.38	38537.7113	1101
4932	0.803	0.573	0.896	0.000	1110	1.10	37778.6998	1110	5056	1.703	-0.177	0.000	0.004	1101	1.39	38538.7148	1101
4932	0.765	0.511	0.898	0.000	1110	1.09	37831.6368	1110	5056	1.733	-0.215	0.000	0.118	1101	1.39	38539.6731	1101
4932	0.757	0.550	0.919	0.000	1110	1.08	38405.0615	3330	5056	1.700	-0.159	0.000	0.037	1101	1.40	38540.6629	1101
4932	0.759	0.589	0.000	0.013	1101	1.07	38911.9320	1101	5056	1.630	-0.153	0.000	0.135	1101	1.40	38542.7120	1101
4932	0.781	0.577	0.000	0.050	1101	1.16	38815.9865	1101	5056	1.613	-0.089	0.000	0.023	1101	1.38	38543.6977	1101
4932	0.958	0.558	0.000	0.077	1101	1.30	38845.7973	1101	5056	1.675	-0.042	0.000	0.007	1101	1.39	38544.6691	1101
4949	-0.421	1.133	0.000	0.250	1101	1.05	38887.6815	1101	5056	1.734	-0.180	0.000	0.069	1101	1.39	38545.6952	1101
4949	-0.057	1.152	0.000	0.279	1101	1.07	38888.6691	1101	5056	1.661	-0.123	0.000	0.094	1101	1.40	38546.7007	1101
4949	-0.287	1.196	0.000	0.294	1101	1.05	38889.6786	1101	5056	1.692	-0.171	0.000	0.073	1101	1.38	38547.6576	1101
4949	-0.139	1.145	0.000	0.275	1101	1.04	38909.6418	1101	5056	1.708	-0.225	0.000	0.108	1101	1.40	38549.6924	1101
4979	3.266	0.374	0.574	0.000	1110	1.85	38828.8306	3340	5056	1.703	-0.215	0.000	0.078	1101	1.38	38556.6335	1101
4983	2.915	0.284	0.544	0.000	1110	1.10	37838.6650	3330	5056	1.677	-0.198	0.000	0.141	1101	1.53	38556.7139	1101
4983	2.861	0.355	0.546	0.000	1110	1.00	38404.0544	3330	5056	1.650	-0.155	0.000	0.092	1101	1.38	38557.6608	1101
4983	2.924	0.355	0.547	0.000	1110	1.00	38421.0155	3330	5056	1.547	-0.201	0.000	-0.177	1101	1.38	38558.6518	1101
4983	2.867	0.344	0.541	0.000	1110	1.00	38426.0036	3330	5056	1.857	-0.227	0.000	0.092	1101	1.38	38559.6496	1101
4983	2.927	0.355	0.539	0.000	1110	1.00	38428.0014	1110	5056	1.679	-0.193	0.000	0.086	1101	1.40	38563.6555	1101
4983	2.741	0.372	0.000	0.036	1101	1.09	38508.6970	1101	5056	1.681	-0.113	0.000	-0.114	1101	1.42	38564.6639	1101
4983	2.962	0.327	0.000	0.201	1101	1.01	38545.6822	1101	5056	0.000	-0.207	0.000	0.089	0101	1.14	38566.6792	1101
4983	3.005	0.343	0.000	0.000	1100	1.13	38556.7248	1101	5056	1.626	-0.181	0.000	0.057	1101	1.41	38569.6433	1101
4983	2.899	0.349	0.000	0.147	1101	1.06	38557.6985	1101	5056	1.627	-0.220	0.000	-0.050	1101	1.64	38570.6950	1101
5020	0.968	0.608	0.880	0.000	1110	1.76	37778.7120	1110	5056	1.622	-0.164	0.000	-0.025	1101	1.45	38770.0151	1101
5020	0.913	0.573	0.850	0.000	1110	1.76	38409.0481	3330	5056	1.746	-0.109	-0.409	0.000	1110	2.12	38799.7944	1110
5020	0.986	0.602	0.825	0.000	1110	1.77	38428.0095	1110	5056	1.684	-0.257	-0.477	0.000	1110	1.24	38799.8889	1110
5020	0.962	0.578	0.885	0.000	1110	1.80	38431.9535	3330	5056	1.688	-0.169	-0.413	0.000	1110	3.98	38802.7431	3340
5020	1.087	0.566	0.000	0.296	1101	1.76	38845.8615	1101	5056	1.719	-0.217	0.000	-0.039	1101	1.38	38809.9372	1101
5020	0.967	0.469	0.000	0.090	1101	1.76	38866.7977	1101	5056	1.744	-0.214	0.000	-0.068	1101	1.37	38810.9535	1101
5028	2.768	-0.063	-0.118	0.000	1110	1.83	38828.8264	3340	5056	1.652	-0.173	0.000	-0.049	1101	1.37	38811.9487	1101
5054	1.985	0.081	0.063	0.000	1110	1.08	38409.0597	3330	5056	1.656	-0.164	0.000	-0.031	1101	1.39	38815.9607	1101
5054	2.078	-0.031	-0.050	0.000	1110	1.08	38421.0225	3330	5056	1.725	-0.167	0.000	-0.020	1101	2.05	38818.8051	1101
5054	2.254	-0.063	-0.141	0.000	1110	1.09	38428.0160	1110	5056	1.671	-0.198	0.000	-0.042	1101	1.38	38818.9219	1101
5056	1.788	-0.202	-0.441	0.000	1110	1.58	37708.8654	1110	5056	1.739	-0.113	0.000	-1.693	1100	2.13	38820.7947	1110
5056	1.627	-0.128	-0.341	0.000	1110	1.38	37769.7437	1110	5056	1.651	-0.183	0.000	0.058	1101	1.41	38822.8832	1101
5056	1.700	-0.181	-0.378	0.000	1110	1.62	37770.8692	1110	5056	1.690	-0.207	0.000	0.025	1101	1.38	38825.9032	1101
5056	1.680	-0.191	-0.422	0.000	1110	1.35	37777.7421	3330	5056	1.627	-0.162	-0.434	0.000	1110	3.17	38828.6840	3340
5056	1.730	-0.195	-0.416	0.000	1110	1.37	37801.6608	3330	5056	1.675	-0.166	-0.449	0.000	1110	1.40	38828.7750	3340
5056	1.830	-0.179	-0.388	0.000	1110	1.60	37805.7716	1110	5056	1.560	-0.200	-0.461	0.000	1110	1.16	38828.8549	3340
5056	1.744	-0.157	-0.417	0.000	1110	1.36	37809.6991	1110	5056	1.800	-0.237	0.000	0.013	1101	2.19	38833.7555	1101
5056	1.676	-0.149	-0.374	0.000	1110	1.47	37830.6802	1110	5056	1.637	-0.079	0.000	0.074	1101	1.42	38843.8231	1101
5056	1.676	-0.165	-0.356	0.000	1110	1.36	37831.6426	1110	5056	1.759	-0.210	0.000	0.027	1101	1.47	38845.9105	1101
5056	1.781	-0.179	-0.417	0.000	1110	1.78	37831.7212	1110	5056	1.629	-0.143	0.000	-0.081	1101	1.39	38846.7842	1101
5056	1.779	-0.144	-0.420	0.000	1110	1.93	37832.7311	1110	5056	1.806	-0.230	0.000	-0.051	1101	1.40	38864.8326	1101
5056	1.651	-0.190	-0.405	0.000	1110	1.34	37837.6116	3330	5056	1.660	-0.141	0.000	-0.032	1101	1.40	38865.5727	1101
5056	1.638	-0.154	-0.390	0.000	1110	1.46	37838.6569	3330	5056	1.804	-0.289	0.000	-0.107	1101	1.45	38865.8495	1101
5056	1.649	-0.148	-0.391	0.000	1110	2.28	37838.7354	3330	5056	1.688	-0.219	0.000	0.026	1101	1.38	38866.6796	1101
5056	1.693	-0.189	-0.356	0.000	1110	1.40	38200.6520	1110	5056	1.628	-0.078	0.000	-0.089	1101	1.61	38866.8786	1101
5056	1.742	-0.187	-0.429	0.000	1110	1.42	38391.0640	3330	5056	1.632	-0.129	0.000	-0.106	1101	1.38	38877.7596	1101
5056	1.654	-0.150	-0.382	0.000	1110	1.52	38397.0181	1110	5056	2.002	-0.178	0.000	0.159	1101	1.38	38881.7396	1101
5056	1.641	-0.191	-0.381	0.000	1110	1.45	38398.0341	3330	5056	1.597	-0.246	0.000	-0.145	1101	1.54	38881.8262	1101
5056	1.648	-0.156	-0.399	0.000	1110	1.39	38404.0459	3330	5056	1.714	-0.209	0.000	-0.026	1101	1.40	38887.7106	1101
5056	1.632	-0.134	-0.380	0.000	1110	1.50	38405.0008	3330	5056	1.659	-0.261	0.000	-0.072	1101	1.59	38888.6600	1101
5056	1.716	-0.205	-0.436	0.000	1110	1.38	38405.0536	3330	5056	1.861	-0.250	0.000	-0.003	1101	1.45	38888.6884	1101
5056	1.765	-0.202	-0.453	0.000	1110	1.44	38407.0124	3330	5056	1.591	-0.158	0.000	-0.042	1101	1.45	38889.6856	1101
5056	1.628	-0.156	-0.391	0.000	1110	1.38	38409.0327	3330	5056	1.742	-0.185	0.000	-0.080	1101	1.43	38903.6566	1101
5056	1.712	-0.168	-0.441	0.000	1110	1.48	38415.9753	3330	5056	1.536	-0.169	0.000	-0.104	1101	1.38	38904.6814	1101
5056	1.706	-0.146	-0.414	0.000	1110	1.38	38416.0138	3330	5056	1.502	-0.151	0.000	0.017	1101	1.38	38906.6816	1101
5056	1.623	-0.106	-0.340	0.000	1110	1.39	38416.0569	3330	5056	1.702	-0.199	0.000					

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL									PBS INFRARED IJKL								
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.
5095	0.357	1.127	0.000	0.227	1101	1.28	38845.8668	1101	5315	0.989	0.867	1.381	0.000	1110	1.36	38426.0546	3330
5095	0.259	1.094	0.000	0.143	1101	1.28	38866.8024	1101	5315	1.084	0.884	0.000	0.154	1101	1.36	38845.9004	1101
5107	3.079	0.116	0.117	0.000	1110	1.18	38420.0411	3330	5315	0.981	0.857	0.000	0.049	1101	1.36	38866.8182	1101
5107	3.096	0.056	0.095	0.000	1110	1.18	38421.0350	3330	5315	1.003	0.884	0.000	0.005	1101	1.37	38881.7702	1101
5107	3.135	0.114	0.077	0.000	1110	1.20	38428.0328	1110	5340	-2.982	0.839	1.295	0.000	1110	1.35	37708.8584	1110
5154	0.452	1.047	1.680	0.000	1110	1.08	38420.0486	3330	5340	-2.978	0.795	1.254	0.000	1110	1.07	37711.9214	1110
5154	0.417	1.033	1.728	0.000	1110	1.08	38421.0412	3330	5340	-3.009	0.875	1.295	0.000	1110	1.94	37767.6439	3330
5154	0.450	1.084	1.678	0.000	1110	1.10	38431.9648	3330	5340	-3.019	0.801	0.000	0.000	1100	1.02	37767.8352	3330
5154	0.334	1.091	0.000	0.166	1101	1.08	38811.9670	1101	5340	-2.981	0.834	1.301	0.000	1110	2.03	37768.6361	3330
5154	0.358	1.078	0.000	0.179	1101	1.10	38845.9056	1101	5340	-3.053	0.827	1.352	0.000	1110	1.02	37768.8148	3330
5168	3.395	0.211	0.211	0.000	1110	1.69	38828.8389	3340	5340	-3.132	0.912	1.367	0.000	1110	1.56	37769.6666	1110
5191	2.520	-0.147	-0.357	0.000	1110	1.06	38431.9714	3330	5340	-3.119	0.885	1.390	0.000	1110	1.04	37769.8561	1110
5191	2.379	-0.127	-0.209	0.000	1110	1.05	38493.8312	3330	5340	-3.021	0.813	1.307	0.000	1110	1.04	37770.8494	1110
5191	2.301	-0.104	0.000	0.055	1101	1.05	38559.6569	1101	5340	-2.995	0.800	1.287	0.000	1110	1.67	37777.6352	3330
5192	-1.684	1.255	0.000	0.137	1101	2.52	38563.6350	1101	5340	-3.028	0.813	1.293	0.000	1110	1.02	37777.8137	3330
5192	-1.638	1.137	2.054	0.000	1110	1.74	38828.8437	3340	5340	-2.993	0.800	1.299	0.000	1110	1.65	37778.6345	1110
5192	-1.612	1.155	0.000	0.240	1101	2.72	38889.7055	1101	5340	-2.997	0.822	1.304	0.000	1110	1.03	37778.8162	1110
5200	0.441	0.944	1.491	0.000	1110	1.06	38431.9771	3330	5340	-3.019	0.870	1.301	0.000	1110	1.71	37779.6264	1110
5200	0.415	0.981	1.542	0.000	1110	1.16	38481.7898	1110	5340	-3.012	0.818	1.312	0.000	1110	1.02	37779.7757	1110
5200	0.357	0.962	1.598	0.000	1110	1.04	38493.8353	3330	5340	-3.026	0.865	1.293	0.000	1110	1.47	37780.6466	1110
5200	0.298	0.960	0.000	0.119	1101	1.04	38559.6632	1101	5340	-3.001	0.824	1.333	0.000	1110	1.02	37799.7260	1110
5200	0.357	1.001	0.000	0.134	1101	1.04	38811.9747	1101	5340	-3.037	0.835	1.310	0.000	1110	1.08	37801.6715	3330
5200	0.367	1.003	0.000	0.132	1101	1.10	38816.0098	1101	5340	-3.005	0.811	1.316	0.000	1110	1.03	37801.7042	3330
5200	0.332	1.037	0.000	0.118	1101	1.04	38845.8793	1101	5340	-2.982	0.821	1.327	0.000	1110	1.02	37801.7375	3330
5219	0.179	1.079	1.749	0.000	1110	1.00	38420.0547	3330	5340	-3.009	0.802	1.295	0.000	1110	1.03	37802.7076	1110
5219	0.080	1.090	1.805	0.000	1110	1.00	38426.0283	3330	5340	-3.025	0.799	1.372	0.000	1110	1.03	37803.7517	1110
5219	0.175	1.086	1.809	0.000	1110	1.01	38431.9812	3330	5340	-2.991	0.826	1.345	0.000	1110	1.08	37805.7799	1110
5219	0.086	1.143	0.000	0.151	1101	1.00	38811.9822	1101	5340	-3.024	0.785	1.302	0.000	1110	1.03	37809.6815	1110
5219	0.174	1.105	0.000	0.195	1101	1.00	38845.8858	1101	5340	-2.979	0.813	1.273	0.000	1110	1.02	37809.6939	1110
5226	-0.070	1.057	1.791	0.000	1110	1.19	38420.0598	3330	5340	-2.994	0.798	1.335	0.000	1110	1.20	37828.7532	1110
5226	-0.160	1.060	1.788	0.000	1110	1.19	38426.0345	3330	5340	-2.989	0.859	1.368	0.000	1110	1.17	37829.7437	3330
5226	-0.039	1.032	1.780	0.000	1110	1.19	38431.9865	3330	5340	-3.032	0.828	1.315	0.000	1110	2.59	37829.8854	3330
5231	3.282	-0.196	-0.497	0.000	1110	2.58	38828.8493	3340	5340	-3.050	0.816	1.325	0.000	1110	1.04	37830.6812	1110
5235	1.360	0.331	0.542	0.000	1110	1.07	37711.9110	1110	5340	-3.063	0.813	1.349	0.000	1110	1.02	37831.6465	1110
5235	1.335	0.314	0.535	0.000	1110	1.04	37768.8394	3330	5340	-3.020	0.811	1.330	0.000	1110	1.03	37831.6669	1110
5235	1.288	0.351	0.551	0.000	1110	1.06	37769.7573	1110	5340	-3.031	0.808	1.321	0.000	1110	1.09	37831.7104	1110
5235	1.347	0.350	0.567	0.000	1110	1.14	37770.8797	1110	5340	-3.009	0.816	1.325	0.000	1110	1.04	37830.8854	1110
5235	1.369	0.348	0.517	0.000	1110	1.07	37778.7256	1110	5340	-3.031	0.808	1.321	0.000	1110	1.09	37831.7104	1110
5235	1.326	0.332	0.557	0.000	1110	1.03	37779.7589	1110	5340	-3.009	0.816	1.325	0.000	1110	1.04	37830.8854	1110
5235	1.348	0.341	0.543	0.000	1110	1.02	37799.7322	1110	5340	-3.063	0.813	1.349	0.000	1110	1.02	37831.6465	1110
5235	1.382	0.405	0.000	-0.092	1101	1.05	38511.8247	1101	5340	-3.020	0.811	1.330	0.000	1110	1.03	37831.6669	1110
5235	1.384	0.352	0.000	0.066	1101	1.05	38512.8251	1101	5340	-3.031	0.808	1.321	0.000	1110	1.09	37831.7104	1110
5235	1.370	0.364	0.000	0.066	1101	1.04	38513.8100	1101	5340	-3.009	0.816	1.325	0.000	1110	1.04	37830.8854	1110
5235	0.000	0.278	0.000	0.064	0101	1.04	38517.7520	1101	5340	-3.031	0.808	1.321	0.000	1110	1.09	37831.7104	1110
5235	1.348	0.249	0.000	0.038	1101	1.03	38517.7605	1101	5340	-3.009	0.816	1.325	0.000	1110	1.04	37830.8854	1110
5235	1.360	0.288	0.000	-0.030	1101	1.07	38549.7358	1101	5340	-2.989	0.793	1.267	0.000	1110	1.03	37840.0687	3330
5235	1.343	0.352	0.000	0.051	1101	1.10	38770.0218	1101	5340	-2.977	0.794	1.253	0.000	1110	2.17	38411.8863	3330
5235	1.496	0.351	0.000	0.103	1101	2.11	38771.8897	1101	5340	-3.029	0.829	1.315	0.000	1110	2.09	38414.8818	3330
5235	1.442	0.282	0.000	0.009	1101	1.17	38771.9898	1101	5340	-2.986	0.807	1.247	0.000	1110	2.11	38419.8672	3330
5235	1.406	0.359	0.000	0.061	1101	1.03	38784.0625	1101	5340	-2.885	0.800	1.259	0.000	1110	1.03	38420.0658	3330
5235	1.344	0.341	0.000	0.054	1101	1.05	38811.9992	1101	5340	-2.948	0.796	1.248	0.000	1110	2.13	38420.8633	3330
5235	1.419	0.354	0.000	-0.032	1101	1.03	38823.9227	1101	5340	-2.982	0.797	1.291	0.000	1110	1.03	38421.0466	3330
5235	1.361	0.312	0.000	0.095	1101	1.04	39225.9097	1101	5340	-2.984	0.785	1.278	0.000	1110	1.04	38425.0691	3330
5235	1.601	0.276	0.000	0.136	1101	1.06	38845.9148	1101	5340	-2.974	0.803	1.264	0.000	1110	1.03	38426.0194	3330
5235	1.245	0.382	0.000	0.060	1101	1.17	38869.8967	1101	5340	-2.993	0.794	1.276	0.000	1110	1.03	38426.0626	3330
5235	1.420	0.351	0.000	0.120	1101	1.10	38874.7322	1101	5340	-2.912	0.789	1.249	0.000	1110	1.03	38428.0388	1110
5235	1.397	0.348	0.000	0.084	1101	1.04	38875.7659	1101	5340	-2.960	0.787	1.269	0.000	1110	1.12	38480.8176	1110
5235	1.367	0.366	0.000	0.070	1101	1.04	38876.8141	1101	5340	-2.946	0.804	1.276	0.000	1110	1.08	38480.9436	1110
5235	1.592	0.320	0.000	0.281	1101	1.03											

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL								PBS INFRARED IJKL									
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.
5340	-3.069	0.809	0.000	0.075	1101	1.06	38531.7926	1101	5340	-3.128	0.843	0.000	0.118	1101	1.07	38910.7648	1101
5340	-3.073	0.839	0.000	0.124	1101	1.47	38532.6066	1101	5340	-2.992	0.809	0.000	0.231	1101	1.21	38911.6124	1101
5340	-3.063	0.874	0.000	0.036	1101	1.03	38532.7421	1101	5340	-2.931	0.782	0.000	0.187	1101	1.12	38911.6595	1101
5340	-3.027	0.807	0.000	0.092	1101	1.04	38533.7141	1101	5340	-2.936	0.837	0.000	0.246	1101	1.06	38911.6652	1101
5340	-2.985	0.804	0.000	0.116	1101	1.10	38533.8107	1101	5340	-3.212	0.806	0.000	0.196	1101	1.03	38911.7041	1101
5340	-2.945	0.748	0.000	0.168	1101	1.03	38534.7345	1101	5340	-3.267	0.821	0.000	0.185	1101	1.03	38911.7305	1101
5340	0.000	0.834	0.000	0.179	0101	1.23	38536.8391	1101	5340	-2.937	0.767	0.000	0.171	1101	1.22	38912.6076	1101
5340	-3.109	1.013	0.000	0.230	1101	1.05	38537.6994	1101	5340	-2.794	0.687	0.000	0.535	1101	1.06	38912.6610	1101
5340	-2.990	0.803	0.000	0.116	1101	1.06	38537.7798	1101	5340	-2.961	0.805	0.000	0.161	1101	1.20	38913.6076	1101
5340	-2.991	0.759	0.000	0.171	1101	1.04	38538.7037	1101	5340	-2.960	0.778	0.000	0.175	1101	1.15	38916.6133	1101
5340	-2.965	0.801	0.000	0.142	1101	1.06	38538.7730	1101	5340	-3.100	0.893	0.000	0.179	1101	1.03	38916.6753	1101
5340	-3.118	0.856	0.000	0.124	1101	1.10	38539.6637	1101	5340	-3.069	0.875	0.000	0.187	1101	1.03	38916.7129	1101
5340	-3.030	0.868	0.000	0.179	1101	1.12	38540.6531	1101	5340	-2.975	0.809	0.000	0.230	1101	1.05	38916.7356	1101
5340	-2.959	0.850	0.000	-0.020	1101	1.26	38542.6122	1101	5340	-2.925	0.808	0.000	0.058	1101	1.10	38918.6266	1101
5340	-3.160	0.934	0.000	0.140	1101	1.03	38542.7220	1101	5340	-3.039	0.828	0.000	0.189	1101	1.04	38918.7180	1101
5340	-2.945	0.790	0.000	0.124	1101	1.18	38542.8127	1101	5340	-3.099	0.859	0.000	0.201	1101	1.07	38918.7441	1101
5340	-2.925	0.732	0.000	0.196	1101	1.09	38543.6575	1101	5340	-3.022	0.784	0.000	0.143	1101	1.08	38921.6256	1101
5340	-3.062	0.819	0.000	0.128	1101	1.04	38543.6900	1101	5340	-2.954	0.771	0.000	0.273	1101	1.03	38921.6609	1101
5340	-3.131	0.859	0.000	0.134	1101	1.04	38543.7444	1101	5340	-2.986	0.744	0.000	0.220	1101	1.05	38921.7214	1101
5340	-2.892	0.763	0.000	0.107	1101	1.09	38544.6530	1101	5340	-2.908	0.837	0.000	0.322	1101	1.04	38922.6528	1101
5340	-2.974	0.809	0.000	0.131	1101	1.03	38544.7070	1101	5340	-3.018	0.887	0.000	0.149	1101	1.03	38923.6903	1101
5340	-2.933	0.772	0.000	0.083	1101	1.20	38544.8114	1101	5340	-3.041	0.887	0.000	0.082	1101	1.04	38924.6516	1101
5340	-3.042	0.790	0.000	0.160	1101	1.25	38545.6062	1101	5340	-2.879	0.803	0.000	0.400	1101	1.05	38925.6388	1101
5340	-2.969	0.750	0.000	0.086	1101	1.03	38545.7283	1101	5340	-3.151	0.905	0.000	0.179	1101	1.04	38926.6420	1101
5340	-2.934	0.830	0.000	0.025	1101	1.17	38545.8015	1101	5340	-3.030	0.830	0.000	0.120	1101	1.03	38930.6743	1101
5340	-2.984	0.757	0.000	0.048	1101	1.06	38546.6681	1101	5340	-2.665	0.809	0.000	0.190	1101	1.06	38931.6138	1101
5340	-3.079	0.851	0.000	0.183	1101	1.03	38546.7143	1101	5340	-3.030	0.884	0.000	0.148	1101	1.03	38936.6284	1101
5340	-2.989	0.905	0.000	0.013	1101	1.28	38546.8222	1101	5340	-2.943	0.854	0.000	-0.034	1100	1.04	38936.6694	1101
5340	-3.045	0.897	0.000	0.085	1101	1.19	38547.6126	1101	5340	-2.939	0.943	0.000	0.133	1101	1.18	39010.5312	1101
5340	-3.048	0.824	0.000	0.134	1101	1.03	38547.6858	1101	5340	-2.868	0.797	0.000	0.226	1101	1.39	39100.0638	1101
5340	-2.981	0.834	0.000	0.136	1101	1.13	38547.7819	1101	5340	-3.204	0.855	0.000	0.099	1101	1.20	39135.9993	1101
5340	-3.137	0.856	0.000	0.090	1101	1.03	38549.7119	1101	5340	-3.053	0.794	0.000	0.160	1101	1.20	39138.9918	1101
5340	-2.904	0.809	0.000	0.143	1101	1.08	38556.6269	1101	5384	4.689	0.370	0.000	0.000	1100	1.25	38556.7458	1101
5340	-3.060	0.826	0.000	-0.007	1101	1.07	38556.7350	1101	5384	4.711	0.506	0.000	0.274	1101	1.18	38557.7095	1101
5340	-3.043	0.852	0.000	0.122	1101	1.03	38557.6801	1101	5429	0.695	0.821	1.246	0.000	1110	1.17	38481.7955	1110
5340	-3.087	0.808	0.000	0.042	1101	1.11	38559.7412	1101	5429	0.632	0.767	1.320	0.000	1110	1.01	38493.8402	3330
5340	-3.029	0.823	0.000	0.056	1101	1.08	38563.6096	1101	5429	0.670	0.778	1.239	0.000	1110	1.02	38501.8058	1110
5340	-2.871	0.841	0.000	0.190	1101	1.03	38564.6490	1101	5429	0.651	0.815	0.000	0.180	1101	1.02	38826.9161	1101
5340	-3.091	0.815	0.000	0.110	1101	1.03	38565.6682	1101	5429	0.714	0.800	0.000	0.098	1101	1.00	38865.8317	1101
5340	-2.969	0.845	0.000	0.130	1101	1.07	38565.7091	1101	5429	0.583	0.844	0.000	0.088	1101	1.01	38881.7819	1101
5340	-3.044	0.847	0.000	0.046	1101	1.03	38566.6401	1101	5435	2.582	0.070	0.148	0.000	1110	1.02	37768.8528	3330
5340	-2.997	0.850	0.000	0.144	1101	1.03	38566.6711	1101	5435	2.531	0.136	0.214	0.000	1110	1.01	37831.6594	1110
5340	-3.116	0.827	0.000	0.142	1101	1.04	38569.6218	1101	5435	2.595	0.103	0.168	0.000	1110	1.04	38404.0609	3330
5340	-3.136	0.861	0.000	0.103	1101	1.03	38569.6286	1101	5447	3.565	0.283	0.298	0.000	1110	1.15	38481.8032	1110
5340	-3.045	0.794	1.285	0.000	1110	1.09	38569.7055	3330	5447	3.529	0.202	0.420	0.000	1110	1.01	38493.8460	3330
5340	-2.994	0.853	0.000	0.120	1101	1.12	38569.7196	1101	5447	3.509	0.262	0.414	0.000	1110	1.02	38501.8126	1110
5340	-3.092	0.828	0.000	0.148	1101	1.06	38570.6858	1101	5447	3.463	0.278	0.000	0.263	1101	1.07	38556.7631	1101
5340	-3.101	0.910	0.000	0.040	1101	1.55	38627.6382	1101	5447	3.586	0.225	0.000	0.494	1101	1.13	38556.7839	1101
5340	-2.917	0.748	0.000	0.093	1101	1.38	38631.6076	1101	5487	2.842	0.290	0.416	0.000	1110	1.27	38425.0555	3330
5340	-3.006	0.798	0.000	0.101	1101	1.03	38784.0694	1101	5487	2.861	0.270	0.442	0.000	1110	1.28	38493.8518	3330
5340	-3.025	0.822	0.000	0.084	1101	1.05	38785.0203	1101	5487	2.980	0.214	0.329	0.000	1110	1.30	38501.8185	1110
5340	-2.956	0.774	0.000	0.155	1101	1.05	38809.9553	1101	5490	0.207	1.107	1.856	0.000	1110	1.01	38493.8562	3330
5340	-2.944	0.747	0.000	0.100	1101	1.04	38810.9630	1101	5490	0.213	1.134	1.864	0.000	1110	1.01	38501.8461	1110
5340	-3.030	0.806	0.000	0.113	1101	1.03	38811.9897	1101	5490	0.194	1.067	1.783	0.000	1110	1.02	38505.8062	1110
5340	-3.020	0.781	0.000	0.097	1101	1.03	38815.9710	1101	5490	0.172	1.159	0.000	0.173	1101	1.03	38826.9237	1101
5340	-3.006	0.794	0.000	0.093	1101	1.06	38816.0174	1101	5490	0.232	1.067	0.000	0.245	1101	1.02	38865.8260	1101
5340	-3.014	0.803	0.000	0.144	1101	1.05	38819.0015	1101	5490	0.969	1.139	0.000	0.178	1101	1.01	38881.7904	1101
5340	-2.952	0.729	0.000	0.246	1101	1.05	38822.9174	1101	5502	2.432	0.558	0.964	0.000	1110	1.04	38493.8623	3330
5340	-2.872	0.720	0.000	0.067	1101	1.03	38823.9293	1101	5502	2.464	0.607	0.967	0.000	1110	1.04	38501.8517	1110
5340	-3.078	0.889	0.000	0.103	1101	1.03	38824.9399	1101	5502	2.389	0.602	0.923	0.000	1110	1.05	38505.8148	1110
5340	-2.999	0.824	0.000	0.208	1101	1.13	38864.7628	1101	5505	0.007	0.686	1.101	0.000	1110	1.01	37768.8656	3330
5340	-3.017	0.793	0.000	0.259	1101	1.07	38864.7892	1101	5505	0.002	0.638	1.062	0.000	1110	1.02	37778.8490	1110
5340	-3.012	0.860	0.000	0.186	1101	1.03	38864.8275	1101	5505	0.001	0.631	1.051	0.000	1110	1.03	37831.7149	1110
5340	-3.155	0.917	0.000	0.090	1101	1.08	38865.7788	1101	5505	-0.014	0.551	0.000	0.156	1101	1.02	38866.8246	1101
5340	-3.011	0.852	0.000	0.108	1101	1.03	38865.8438	1101	5505	0.628	0.748	0.00					

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL									PBS INFRARED IJKL									
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	
5603	-1.401	1.179	1.879	0.000	1110	1.82	37778.8565	1110	5868	2.996	0.400	0.616	0.000	1110	1.11	38521.8587	3330	
5603	-1.437	1.104	1.860	0.000	1110	2.02	37838.7301	3330	5868	3.080	0.364	0.000	0.036	1101	1.10	38532.8163	1101	
5603	-1.467	1.161	0.000	0.199	1101	1.86	38864.8762	1101	5879	0.049	1.011	1.680	0.000	1110	1.05	38494.8817	3330	
5603	-1.473	1.096	0.000	0.198	1101	1.88	38866.8873	1101	5879	0.034	0.983	1.661	0.000	1110	1.03	38505.8854	1110	
5603	-1.338	1.149	0.000	0.210	1101	1.86	38888.8032	1101	5879	0.066	1.055	1.723	0.000	1110	1.04	38521.8657	3330	
5603	-1.352	1.142	0.000	0.201	1101	1.95	38889.7636	1101	5879	-0.019	1.104	0.000	0.202	1101	1.04	38864.8815	1101	
5603	-1.294	1.095	0.000	0.195	1101	1.87	38908.7423	1101	5879	0.012	1.104	0.000	0.130	1101	1.03	38923.7398	1101	
5603	-1.407	1.166	0.000	0.150	1101	1.90	38911.7148	1101	5902	0.000	0.163	0.000	0.000	0100	1.68	38843.9326	1101	
5616	1.603	0.769	1.327	0.000	1110	1.00	38493.8896	3330	5908	1.768	0.599	1.070	0.000	1110	1.54	38494.9392	3330	
5616	1.697	0.749	1.231	0.000	1110	1.01	38501.8743	3330	5908	1.753	0.649	1.054	0.000	1110	1.53	38523.8495	3330	
5616	1.624	0.793	1.278	0.000	1110	1.01	38505.8325	1110	5908	1.842	0.850	0.000	0.283	1101	1.52	38558.7497	1101	
5634	3.506	0.325	0.520	0.000	0110	1.01	38426.0438	3330	5914	3.049	0.419	0.723	0.000	1110	1.03	38494.8868	3330	
5634	3.913	0.218	0.465	0.000	1110	1.10	38496.9564	1110	5914	3.146	0.413	0.636	0.000	1110	1.03	38521.8722	3330	
5634	3.894	0.380	0.000	0.006	1101	1.01	38558.7260	1101	5914	3.143	0.375	0.591	0.000	1110	1.02	38523.8545	3330	
5681	1.178	0.631	1.040	0.000	1110	1.00	38493.8944	3330	5924	1.605	1.009	0.000	0.253	1101	1.03	38888.8215	1101	
5681	1.216	0.642	0.999	0.000	1110	1.01	38505.8366	1110	5924	1.553	1.033	0.000	0.146	1101	1.17	38889.7481	1101	
5681	1.477	0.737	1.021	0.000	1110	1.05	38521.7622	3330	5924	1.565	1.039	0.000	0.175	1101	1.02	38906.7836	1101	
5681	1.255	0.682	0.000	0.264	1101	1.00	38558.7937	1101	5924	1.425	1.007	0.000	0.254	1101	1.03	38908.8092	1101	
5685	2.885	-0.102	-0.169	0.000	1110	1.33	37778.8655	1110	5932	0.860	1.102	0.000	0.227	1101	1.09	38888.7700	1101	
5685	2.779	-0.030	-0.090	0.000	1110	1.37	37779.7856	1110	5932	0.813	1.084	0.000	0.262	1101	1.24	38889.7174	1101	
5685	2.877	-0.034	-0.130	0.000	1110	1.31	37801.7883	3330	5932	0.771	1.105	0.000	0.160	1101	1.03	38906.8238	1101	
5685	2.871	-0.046	-0.189	0.000	1110	1.37	37802.7233	1110	5932	0.647	1.067	0.000	0.276	1101	1.05	38908.8349	1101	
5685	2.999	-0.077	-0.188	0.000	1110	1.37	37809.7971	1110	5933	2.640	0.294	0.515	0.000	1110	1.05	38494.8986	3330	
5685	2.864	-0.065	-0.174	0.000	1110	1.85	37829.8153	3330	5933	2.683	0.266	0.446	0.000	1110	1.05	38523.8598	3330	
5685	2.827	-0.021	-0.114	0.000	1110	1.34	37837.7108	3330	5947	1.291	0.759	1.225	0.000	1110	1.11	37802.7175	1110	
5685	2.870	-0.018	-0.141	0.000	1110	1.34	38200.6932	1110	5947	1.323	0.716	1.238	0.000	1110	1.01	37830.7050	1110	
5685	2.828	-0.012	-0.158	0.000	1110	2.13	38391.0440	3330	5947	1.278	0.816	1.287	0.000	1110	1.05	38200.6754	1110	
5685	2.837	-0.082	-0.137	0.000	1110	2.06	38407.0044	3330	5947	1.269	0.774	1.280	0.000	1110	1.01	38494.9032	3330	
5685	2.828	-0.042	-0.178	0.000	1110	2.14	38419.9639	3330	5947	1.368	0.843	0.000	0.147	1101	1.00	38511.8791	1101	
5685	2.809	-0.020	-0.168	0.000	1110	2.43	38427.9284	1110	5947	1.266	0.841	0.000	0.192	1101	1.01	38564.7199	1101	
5685	2.871	-0.009	-0.187	0.000	1110	1.91	38427.9573	1110	5953	2.743	-0.104	-0.265	0.000	1110	1.73	37778.9028	1110	
5685	2.822	-0.041	-0.163	0.000	1110	2.09	38431.9345	3330	5953	2.751	-0.208	-0.274	0.000	1110	1.75	38494.9084	3330	
5685	2.889	-0.039	-0.186	0.000	1110	2.35	38480.9514	1110	5953	2.707	-0.136	-0.237	0.000	1110	1.76	38523.8649	3330	
5685	2.810	-0.020	-0.040	0.000	1110	1.07	38494.7637	3330	5953	2.726	-0.063	0.000	-0.126	1101	1.99	38864.8411	1101	
5685	0.000	-0.065	-0.104	0.000	0110	1.38	38494.9325	3330	5953	2.840	-0.181	0.000	-0.221	1101	1.87	38865.8554	1101	
5685	2.939	-0.050	-0.108	0.000	1110	1.35	38496.9058	1110	5953	2.735	-0.264	0.000	0.105	1101	1.74	38866.8973	1101	
5685	2.907	-0.134	-0.220	0.000	1110	1.34	38498.8889	3330	5958	4.908	1.260	0.000	0.347	1101	1.05	38888.7913	1101	
5685	2.881	-0.089	-0.162	0.000	1110	1.72	38498.9852	3330	5958	4.758	1.296	0.000	0.016	1101	1.21	38889.7362	1101	
5685	2.729	0.036	-0.112	0.000	1110	2.00	38499.7543	1110	5958	4.619	1.179	0.000	0.254	1101	1.06	38906.8553	1101	
5685	2.735	-0.009	-0.058	0.000	1110	1.54	38500.7996	1110	5958	4.706	1.220	0.000	0.366	1101	1.01	38908.7765	1101	
5685	2.842	-0.067	-0.143	0.000	1110	1.37	38500.8470	1110	5958	4.719	1.203	0.000	0.089	1101	1.17	38911.6855	1101	
5685	2.927	0.018	-0.137	0.000	1110	1.44	38500.9337	1110	5958	4.686	1.174	0.000	-0.321	1101	1.09	38916.6964	1101	
5685	2.898	-0.100	-0.181	0.000	1110	1.34	38501.8819	1110	5958	4.563	1.581	0.000	0.000	0000	1100	1.04	38916.7238	1101
5685	2.764	0.004	-0.072	0.000	1110	1.35	38505.8418	1110	5958	4.608	1.149	0.000	0.090	1101	1.04	38921.7110	1101	
5685	2.880	-0.044	-0.117	0.000	1110	1.90	38523.6958	3330	5984	2.764	-0.075	-0.155	0.000	1110	1.63	38494.9165	3330	
5685	2.832	-0.084	-0.145	0.000	1110	1.37	38569.7192	3330	5984	2.642	-0.071	-0.077	0.000	1110	1.65	38523.8712	3330	
5686	2.063	0.678	0.000	0.093	1101	2.16	38843.9272	1101	5984	2.836	-0.083	0.000	0.218	1101	1.63	38558.7567	1101	
5744	0.697	0.676	1.143	0.000	1110	1.14	37830.7110	1110	5984	2.754	-0.093	0.000	-0.045	1101	1.81	38864.8514	1101	
5744	0.696	0.688	1.172	0.000	1110	1.13	38494.8662	3330	5984	2.871	-0.148	0.000	-0.051	1101	1.73	38865.8624	1101	
5744	0.666	0.690	1.207	0.000	1110	1.12	38505.8493	1110	5984	2.719	-0.177	0.000	0.011	1101	1.63	38866.9131	1101	
5744	0.723	0.743	1.135	0.000	1110	1.15	38521.7701	3330	5993	4.106	0.005	0.000	-0.084	1101	1.73	38865.8712	1101	
5744	0.614	0.721	0.000	0.135	1101	1.12	38923.7252	1101	5993	3.946	-0.030	0.000	-0.129	1101	1.67	38866.9227	1101	
5747	3.220	0.137	0.214	0.000	1110	1.00	38493.8993	3330	5993	4.053	-0.056	0.000	-0.085	1101	2.08	38869.9908	1101	
5747	3.280	0.004	0.129	0.000	1110	1.01	38505.8558	1110	5997	2.323	0.515	0.829	0.000	1110	1.67	38494.9247	3330	
5747	3.373	0.091	0.067	0.000	1110	1.04	38521.7801	3330	5997	2.334	0.519	0.872	0.000	1110	1.70	38523.8771	3330	
5747	3.330	0.161	0.000	0.104	1101	1.00	38558.7413	1101	6018	2.302	0.677	1.089	0.000	1110	1.00	38494.9291	3330	
5777	2.288	0.642	1.041	0.000	1110	1.35	38493.9044	3330	6018	2.405	0.714	0.000	0.144	1101	1.09	38532.7497	1101	
5777	2.217	0.612	1.004	0.000	1110	1.36	38505.8610	3330	6018	2.431	0.700	0.000	0.339	1101	1.00	38558.7641	1101	
5777	2.246	0.651	1.069	0.000	1110	1.36	38521.8526	3330	6027	3.756	0.071	0.000	0.124	1101	1.76	38864.8605	1101	
5787	1.524	0.569	1.062	0.000	1110	1.51	38494.8718	3330	6027	3.865	0.011	0.000	-0.069	1101	1.67	38865.8808	1101	
5787	1.488	0.658	1.092	0.000	1110	1.47	38505.8668	1110	6027	3.742	0.014	0.000	0.057	1101	1.63	38866.9327	1101	
5787	1.569	0.674	1.026	0.000	1110	1.48	38523.8434	3330	6027	3.733	0.053	0.000	-0.018	1101	1.76	38869.9627	1101	
5793	2.167	0.047	0.035	0.000	1110	1.05	38200.6607	1110	6056	-1.241	1.004	1.673	0.000	1110	1.25	37778.9159	1110	
5793	2.177	0.069	0.083	0.000	1110	1.00	38493.9098	3330	6056	-1.263	0.961	1.635	0.000	1110	1.24	38494.9464	3330	
5793	2.153	0.036	0.081	0.000	1110	1.00	38505.8756	1110	6056	-								

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL									PBS INFRARED IJKL								
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.
6095	2.990	0.140	0.300	0.000	1110	1.03	38494.9543	3330	6536	0.725	0.527	0.902	0.000	1110	1.06	38493.9917	3330
6095	2.910	0.282	0.000	0.000	1100	1.03	38533.8256	1101	6536	0.800	0.513	0.858	0.000	1110	1.08	38569.7425	3330
6095	2.959	0.211	0.000	0.133	1101	1.03	38559.7563	1101	6556	1.655	0.133	0.223	0.000	1110	1.06	38493.9951	3330
6104	2.187	0.591	1.079	0.000	1110	1.65	38494.9597	3330	6556	1.696	0.135	0.000	0.000	1100	1.11	38637.6503	1101
6104	2.185	0.566	1.039	0.000	1110	1.66	38523.8863	3330	6556	1.618	0.126	0.000	0.000	1100	1.07	38638.6189	1101
6119	-0.631	1.443	0.000	0.627	1101	1.10	38889.7977	1101	6603	0.236	0.662	1.107	0.000	1110	3.07	37767.7712	3330
6119	-0.763	1.457	0.000	0.611	1101	1.03	38905.8184	1101	6603	0.187	0.689	1.152	0.000	1110	1.14	37767.9307	3330
6119	-0.781	1.436	0.000	0.537	1101	1.12	38906.8860	1101	6603	0.240	0.672	1.101	0.000	1110	1.73	37768.8222	3330
6119	-0.889	1.443	0.000	0.538	1101	1.09	38908.8698	1101	6603	0.236	0.709	1.137	0.000	1110	1.12	37768.9553	3330
6132	0.622	0.593	0.890	0.000	1110	1.21	37777.8233	3330	6603	0.113	0.755	1.184	0.000	1110	1.33	37769.8678	1110
6132	0.638	0.604	0.985	0.000	1110	1.15	38521.6657	3330	6603	0.214	0.678	1.113	0.000	1110	1.27	37770.8562	1110
6132	0.535	0.558	0.000	-0.098	1100	1.15	38559.7621	1101	6603	0.298	0.731	1.114	0.000	1110	1.33	37799.7856	1110
6132	0.528	0.631	0.000	0.170	1101	1.17	38563.7056	1101	6603	0.423	0.642	1.013	0.000	1110	1.16	37799.8326	1110
6132	0.596	0.512	0.000	0.120	1101	1.15	38923.7710	1101	6603	0.275	0.687	1.096	0.000	1110	1.25	37801.7983	3330
6134	-3.779	1.155	1.980	0.000	1110	1.83	37831.7358	1110	6603	0.203	0.692	1.147	0.000	1110	1.40	37803.7626	1110
6134	-3.882	1.166	0.000	0.336	1101	1.92	38564.7559	1101	6603	0.231	0.707	1.144	0.000	1110	1.11	37803.8753	1110
6134	-3.655	1.056	0.000	0.252	1101	1.01	38566.7474	1101	6603	0.187	0.675	1.110	0.000	1110	1.22	37805.7957	1110
6134	-3.898	1.269	0.000	0.216	1101	1.93	38923.7793	1101	6603	0.248	0.689	1.131	0.000	1110	1.13	37828.7712	1110
6146	-2.078	1.287	2.351	0.000	1110	1.02	38521.8908	3330	6603	0.205	0.701	1.155	0.000	1110	1.15	37828.8411	1110
6146	-1.927	1.189	0.000	0.311	1101	1.03	38534.7990	1101	6603	0.214	0.671	1.121	0.000	1110	1.15	37829.7580	3330
6146	-2.016	1.257	0.000	0.024	1101	1.03	38563.7195	1101	6603	0.219	0.682	1.117	0.000	1110	1.20	37831.7292	1110
6147	2.232	0.523	0.929	0.000	1110	1.54	38523.8906	3330	6603	0.238	0.699	1.113	0.000	1110	1.11	37831.7904	1110
6147	2.240	0.596	0.000	0.076	1101	1.54	38564.7304	1101	6603	0.269	0.692	1.117	0.000	1110	1.30	37831.8802	1110
6147	2.418	0.686	0.000	0.053	1101	1.05	38566.7301	1101	6603	0.197	0.710	1.148	0.000	1110	1.15	37832.7477	1110
6148	0.586	0.619	0.971	0.000	1110	1.01	37769.9032	1110	6603	0.186	0.691	1.142	0.000	1110	1.12	37832.8021	1110
6148	0.614	0.611	0.998	0.000	1110	1.01	37828.7469	1110	6603	0.241	0.658	1.117	0.000	1110	1.13	37832.7471	3330
6159	0.000	0.000	1.658	0.000	0010	1.09	38521.9022	3330	6603	0.256	0.726	1.093	0.000	1110	1.23	38227.7940	1110
6159	1.163	0.955	0.000	0.083	1101	1.07	38559.7850	1101	6603	0.226	0.715	1.138	0.000	1110	1.28	38303.5990	1110
6159	1.254	1.058	0.000	0.185	1101	1.07	38563.7540	1101	6603	0.229	0.704	1.155	0.000	1110	1.51	38304.6354	1110
6175	2.614	-0.043	-0.145	0.000	1110	1.43	37778.9477	1110	6603	0.268	0.688	1.076	0.000	1110	1.33	38309.5937	1110
6175	2.581	-0.020	-0.086	0.000	1110	1.35	37779.8626	1110	6603	0.237	0.686	1.129	0.000	1110	2.14	38416.0442	3330
6175	2.738	-0.014	-0.142	0.000	1110	1.38	37799.7926	1110	6603	0.222	0.677	1.077	0.000	1110	2.14	38425.0208	3330
6175	2.607	-0.036	-0.066	0.000	1110	1.35	37805.7885	1110	6603	0.203	0.677	1.084	0.000	1110	2.24	38426.0133	3330
6175	2.621	-0.034	-0.084	0.000	1110	1.33	37837.7160	3330	6603	0.166	0.722	1.172	0.000	1110	2.29	38493.8256	3330
6175	2.640	0.018	-0.077	0.000	1110	1.93	38284.6427	1110	6603	0.189	0.713	1.146	0.000	1110	2.52	38494.8146	3330
6175	2.521	0.027	-0.049	0.000	1110	2.50	38296.6405	1110	6603	0.236	0.705	1.091	0.000	1110	1.13	38498.9755	3330
6175	1.972	-0.024	-0.198	0.000	1110	2.25	38297.6267	0000	6603	0.207	0.757	1.109	0.000	1110	1.69	38500.8423	1110
6175	2.767	-0.129	0.000	0.128	1101	1.47	38512.8437	1101	6603	0.307	0.711	1.108	0.000	1110	1.13	38500.9772	1110
6175	2.617	-0.035	0.000	0.000	1100	1.53	38513.8267	1101	6603	0.189	0.651	1.109	0.000	1110	1.24	38505.8975	1110
6175	2.619	0.001	0.000	-0.061	1101	1.37	38515.8839	1101	6603	0.143	0.749	0.000	0.078	1101	1.21	38512.8885	1101
6175	2.603	-0.039	0.000	0.007	1101	1.43	38532.8007	1101	6603	0.209	0.714	1.119	0.000	1110	1.17	38521.8798	3330
6175	2.687	0.027	0.000	-0.012	1101	1.36	38533.8420	1101	6603	0.240	0.658	1.107	0.000	1110	1.14	38521.9403	3330
6212	1.300	0.358	0.607	0.000	1110	1.00	37768.9296	3330	6603	0.111	0.706	1.244	0.000	1110	2.04	38523.7553	3330
6212	1.311	0.393	0.679	0.000	1110	1.00	38493.9503	3330	6603	0.175	0.645	1.135	0.000	1110	1.13	38523.9135	3330
6212	1.301	0.440	0.000	0.175	1101	1.01	38558.8001	1101	6603	0.232	0.675	1.090	0.000	1110	1.17	38529.8323	3330
6212	0.000	0.391	0.000	0.147	0101	1.01	38564.7409	1101	6603	0.222	0.716	0.000	0.006	1101	1.15	38627.6589	1101
6220	1.347	0.582	0.997	0.000	1110	1.01	38493.9543	3330	6603	0.160	0.722	0.000	0.151	1101	1.18	38629.6764	1101
6220	1.339	0.704	0.000	0.163	1101	1.02	38558.8056	1101	6603	0.291	0.693	0.000	0.093	1101	1.15	38630.6521	1101
6220	1.371	0.619	0.000	0.036	1101	1.01	38566.7858	1101	6603	0.243	0.667	0.000	0.078	1101	1.13	38638.6122	1101
6299	0.593	0.739	1.161	0.000	1110	1.09	37779.8700	1110	6603	0.238	0.693	0.000	0.078	1101	1.15	38639.6326	1101
6299	0.645	0.695	1.171	0.000	1110	1.09	38493.9582	3330	6603	0.229	0.723	0.000	0.062	1101	2.38	38675.6772	3303
6299	0.703	0.672	0.000	0.084	1101	1.09	38566.7564	1101	6603	0.255	0.683	0.000	0.058	1101	2.34	38676.6727	3303
6337	0.511	1.068	1.764	0.000	1110	1.05	38493.9625	3330	6603	0.221	0.669	0.000	0.065	1101	2.19	38694.6174	3303
6337	0.444	1.113	0.000	-0.003	1101	1.07	38533.8326	1101	6603	0.254	0.757	0.000	-0.014	1101	1.33	38823.0073	1101
6337	0.611	1.041	0.000	0.170	1101	1.05	38566.7660	1101	6603	0.179	0.702	0.000	0.087	1101	1.20	38826.0324	1101
6378	2.238	0.032	0.053	0.000	1110	1.45	37768.9422	3330	6603	0.159	0.703	0.000	0.111	1101	1.31	38864.8966	1101
6378	2.283	0.058	0.064	0.000	1110	1.50	38493.9663	3330	6603	0.278	0.621	0.000	0.059	1101	1.13	38874.9625	1101
6378	2.271	0.014	0.031	0.000	1110	1.50	38523.8972	3330	6603	0.144	0.851	0.000	-0.035	1101	1.17	38875.9077	1101
6396	3.498	-0.086	-0.129	0.000	1110	1.20	38493.9705	3330	6603	0.098	0.756	0.000	0.093	1101	1.14	38876.9260	1101
6396	3.479	-0.070	0.000	0.000	1100	1.20	38566.7777	1101	6603	0.276	0.673	0.000	0.180	1101	1.17	38877.9060	1101
6406	-3.504	1.262	2.329	0.000	1110	1.06	37768.9777	3330	6603	0.364	0.738	0.000	0.134	1101	1.23	38881.8705	1101
6406	-3.516	1.252	2.305	0.000	1110	1.08	37770.8910	1110	6603	0.310	0.681	0.000	0.114	1101	1.24	38888.8485	1101
6410	2.833	0.131	0.170	0.000	1110	1.04	37768.9911	3330	6603	0.428	0.605	0.000	0.364	1101	1.14	38889.8900	1101
6410	2.805	0.122	0.135	0.000	1110	1.03	37779.8788	1110	6603	0.278	0.678	0.000	0.177	1101	1.17	38905.8271	1101
6418	-0.011	0.908	1.448	0.000	1110	1.00	38493.9743	3330	6603	0.230	0.721	0.00					

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL									PBS INFRARED IJKL								
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.
6698	1.138	0.604	0.971	0.000	1110	1.40	37767.9233	3330	7001	0.046	0.043	0.037	0.000	1110	1.20	37838.9219	3330
6698	1.137	0.512	0.992	0.000	1110	1.35	38521.9246	3330	7001	-0.001	0.049	0.039	0.000	1110	1.07	38200.7689	1110
6698	1.094	0.577	1.006	0.000	1110	1.38	38523.9609	3330	7001	0.065	-0.020	0.013	0.000	1110	1.01	38226.7573	1110
									7001	0.057	0.008	-0.002	0.000	1110	1.01	38227.7766	1110
6703	1.626	0.556	0.834	0.000	1110	1.00	38494.0049	3330	7001	0.063	0.021	0.005	0.000	1110	1.15	38228.8602	1110
6703	1.630	0.592	0.923	0.000	1110	1.00	38521.9193	3330	7001	0.060	-0.024	-0.001	0.000	1110	1.85	38260.8740	3330
6703	1.605	0.582	0.950	0.000	1110	1.01	38523.9541	3330	7001	0.020	0.020	0.045	0.000	1110	1.13	38284.7008	1110
									7001	0.001	-0.070	-0.053	0.000	1110	1.07	38296.6458	1110
6705	-1.235	0.917	1.554	0.000	1110	1.06	38521.9327	3330	7001	0.081	-0.068	-0.138	0.000	1110	1.23	38298.6923	1110
6705	-1.250	0.866	1.443	0.000	1110	1.06	38523.9470	3330	7001	-0.024	0.046	0.068	0.000	1110	1.01	38299.5889	1110
6705	-1.340	0.967	0.000	0.179	1101	1.06	38537.8664	1101	7001	-0.019	-0.014	-0.015	0.000	1110	1.01	38301.5782	1110
6705	-1.287	0.926	0.000	0.192	1101	1.08	38537.9339	1101	7001	0.004	0.046	-0.082	0.000	1110	1.11	38301.6462	1110
6705	-1.372	0.994	0.000	0.101	1101	1.11	38538.8214	1101	7001	0.020	0.020	0.045	0.000	1110	1.01	38302.5807	1110
6705	-1.343	0.983	0.000	0.115	1101	1.10	38538.9450	1101	7001	0.020	0.020	0.045	0.000	1110	1.21	38302.6758	1110
6705	-1.406	0.995	0.000	0.228	1101	1.06	38542.8951	1101	7001	-0.039	0.030	0.097	0.000	1110	1.02	38303.5875	1110
6705	-1.379	1.045	0.000	0.097	1101	1.07	38543.8379	1101	7001	0.031	0.016	0.044	0.000	1110	1.07	38304.6211	1110
6705	-1.193	0.890	0.000	0.061	1101	1.06	38544.8559	1101	7001	0.087	-0.037	-0.092	0.000	1110	1.04	38305.5984	1110
6705	-1.384	0.967	0.000	0.173	1101	1.07	38544.8990	1101	7001	0.029	0.010	0.009	0.000	1110	1.06	38306.6140	1110
6705	-1.263	0.926	0.000	0.094	1101	1.10	38545.8094	1101	7001	-0.021	0.016	0.008	0.000	1110	1.02	38307.5799	1110
6705	-1.322	1.000	0.000	0.191	1101	1.07	38545.8982	1101	7001	0.058	0.015	-0.024	0.000	1110	1.03	38309.5799	1110
6705	-1.274	0.971	0.000	0.141	1101	1.06	38546.8622	1101	7001	-0.027	0.039	-0.001	0.000	1110	1.09	38310.6141	1110
6705	-1.329	0.982	0.000	0.093	1101	1.11	38547.7938	1101	7001	0.060	-0.001	0.023	0.000	1110	1.02	38311.5690	1110
6705	-1.408	1.050	0.000	0.144	1101	1.06	38547.8812	1101	7001	-0.028	0.039	0.031	0.000	1110	1.03	38317.5576	1110
6705	-1.337	0.946	0.000	0.130	1101	1.06	38556.8232	1101	7001	0.008	-0.019	0.028	0.000	1110	1.04	38320.5612	1110
6705	-1.285	0.949	0.000	0.084	1101	1.07	38557.7983	1101	7001	0.074	-0.017	-0.089	0.000	1110	1.14	38324.5971	1110
6705	-1.316	1.009	0.000	0.254	1101	1.09	38558.7792	1101	7001	0.026	0.003	-0.042	0.000	1110	1.67	38338.6456	3330
6705	-1.294	1.015	0.000	0.228	1101	1.07	38558.8559	1101	7001	0.011	0.054	0.034	0.000	1110	2.10	38416.0331	3330
6705	-1.402	1.078	0.000	0.123	1101	1.13	38559.7495	1101	7001	0.066	0.023	0.007	0.000	1110	2.04	38431.9929	3330
6705	-1.406	0.931	0.000	0.048	1101	1.07	38559.7912	1101	7001	0.008	0.016	0.037	0.000	1110	2.12	38493.8191	3330
6705	-1.405	0.939	0.000	0.112	1101	1.08	38559.8674	1101	7001	0.002	0.049	0.010	0.000	1110	1.02	38494.0097	3330
6705	-1.335	0.894	0.000	0.253	1101	1.06	38564.8230	1101	7001	0.034	0.035	0.030	0.000	1110	1.29	38500.8825	1110
6705	-1.309	0.956	0.000	0.122	1101	1.07	38565.7821	1101	7001	0.136	0.042	0.023	0.000	1110	1.01	38500.9992	1110
6705	-1.311	0.937	0.000	0.123	1101	1.06	38566.8102	1101	7001	-0.244	0.047	0.000	0.015	1101	1.07	38508.9271	1101
6705	-1.291	0.924	0.000	0.237	1101	1.12	38569.7266	1101	7001	0.029	0.019	0.000	0.109	1101	1.09	38511.9115	1101
6705	-1.389	0.919	0.000	0.186	1101	1.09	38570.7479	1101	7001	-0.164	0.039	0.000	0.047	1101	1.01	38511.9645	1101
6705	-1.392	0.985	0.000	0.238	1101	1.06	38631.6232	1101	7001	0.046	0.006	0.000	0.084	1101	1.27	38512.8552	1101
6705	-1.395	1.015	0.000	0.101	1101	1.06	38637.6204	1101	7001	0.000	-0.070	0.000	0.000	0100	1.10	38512.9014	1101
6705	-1.219	0.899	0.000	0.239	1101	1.31	38669.6630	1101	7001	-0.033	0.049	0.000	0.045	1101	1.03	38515.9306	1101
6705	-1.378	0.916	0.000	0.223	1101	1.07	38888.8950	1101	7001	0.027	0.036	0.049	0.000	1110	2.22	38521.7372	3330
6705	-1.324	0.932	0.000	0.265	1101	1.11	38889.8596	1101	7001	0.062	0.028	0.035	0.000	1110	1.01	38521.9793	3330
6705	-1.298	0.923	0.000	0.223	1101	1.08	38905.8360	1101	7001	0.113	0.017	-0.031	0.000	1110	1.92	38523.7492	3330
6705	-1.400	0.935	0.000	0.150	1101	1.08	38906.8380	1101	7001	0.031	0.010	0.004	0.000	1110	1.01	38523.9674	3330
6705	-1.289	0.911	0.000	0.215	1101	1.06	38908.8552	1101	7001	0.008	-0.022	0.000	0.044	1101	1.01	38532.9187	1101
6705	-1.378	0.880	0.000	0.202	1101	1.06	38910.8423	1101	7001	0.109	-0.117	0.000	0.135	1101	1.18	38535.8173	1101
6705	-1.382	0.929	0.000	0.071	1101	1.21	38911.7539	1101	7001	-0.037	0.091	0.000	0.004	1101	1.01	38533.9114	1101
6705	-1.342	0.915	0.000	0.135	1101	1.17	38918.7503	1101	7001	-0.018	-0.034	0.000	-0.052	1101	1.64	38534.7425	1101
6705	-1.294	0.864	0.000	0.233	1101	1.11	38922.7685	1101	7001	0.031	-0.015	0.000	0.074	1101	1.02	38536.8923	1101
									7001	0.050	-0.016	0.000	0.022	1101	1.01	38537.9011	1101
6707	3.203	0.342	0.000	0.376	1101	1.01	38556.8137	1101	7001	-0.051	0.027	0.000	0.103	1101	1.02	38538.8812	1101
6707	3.249	0.308	0.000	0.274	1101	1.03	38557.7893	1101	7001	-0.045	0.034	0.000	0.085	1101	1.01	38542.9185	1101
									7001	0.045	0.019	0.000	-0.011	1101	1.01	38543.8869	1101
6736	5.790	-0.057	0.000	0.000	1100	1.78	37829.7869	3330	7001	-0.073	0.056	0.000	0.109	1101	1.01	38544.8859	1101
6736	5.916	-0.082	0.000	0.000	1100	1.84	37831.7644	1110	7001	0.017	-0.021	0.000	0.102	1101	1.04	38545.8476	1101
6736	5.827	-0.058	0.000	0.000	1100	1.86	38532.8785	1101	7001	0.033	-0.016	0.000	0.171	1101	1.03	38546.8517	1101
									7001	-0.005	0.005	0.000	0.029	1101	1.08	38547.8168	1101
6746	0.632	0.657	1.061	0.000	1110	2.18	37767.9407	3330	7001	-0.037	0.057	0.000	0.018	1101	1.01	38556.8690	1101
6746	0.666	0.654	0.974	0.000	1110	2.39	38569.8590	3330	7001	0.007	0.034	0.000	0.001	1101	1.02	38557.8872	1101
									7001	-0.029	-0.044	0.000	0.083	1101	1.06	38564.9015	1101
6752	1.893	0.577	0.926	0.000	1110	1.16	38521.9496	3330	7001	0.047	-0.024	0.000	0.107	1101	1.06	38569.7681	1101
6752	1.862	0.649	0.889	0.000	1110	1.25	38569.8692	3330	7001	-0.005	0.059	0.039	0.000	1110	1.01	38569.8450	3330
									7001	0.007	-0.069	0.000	0.091	1101	1.01	38570.8023	1101
6869	1.039	0.584	0.972	0.000	1110	1.23	38521.9559	3330	7001	-0.007	-0.022	0.000	0.040	1101	1.01	38627.6504	1101
6869	1.064	0.516	0.957	0.000	1110	1.39	38569.8942	3330	7001	-0.015	-0.010	0.000	0.134	1101	1.01	38629.6699	1101
									7001	-0.031	0.027	0.000	0.034	1101	1.01	38630.6581	1101
6872	1.758	0.749	1.196	0.000	1110	1.01	38521.9623	3330	7001	-0.066	0.034	0.000	0.047	1101	1.03	38631.6177	1101
6872	1.716	0.748	1.230	0.000	1110	1.06	38569.8815	3330	7001	-0.025	-0.062	0.000	0.029	1101	1.02	38631.6274	1101
									7001	-0.039	0.006	0.000	0.029	1101	1.02	38637.6109	1101
6895	1.179	0.772	0.000	0.15													

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL									PBS INFRARED IJKL								
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.
7001	-0.043	0.017	0.000	0.023	1101	1.27	38864.8902	1101	7157	-2.179	1.330	0.000	0.244	1101	1.14	38667.6664	1101
7001	0.190	-0.194	0.000	0.157	1101	2.13	38865.8000	1101	7157	-2.057	1.157	0.000	0.241	1101	1.07	38669.6271	1101
7001	-0.040	0.064	0.000	0.040	1101	1.08	38865.9442	1101	7157	-2.077	1.220	0.000	0.287	1101	1.19	38670.6741	1101
7001	-0.085	0.073	0.000	-0.028	1101	1.01	38874.9687	1101									
7001	0.113	0.034	0.000	0.011	1101	1.09	38875.9144	1101	7176	1.695	0.668	0.000	0.208	1101	1.08	38637.6988	1101
7001	0.017	-0.033	0.000	0.019	1101	1.05	38876.9316	1101	7176	1.666	0.635	0.000	0.066	1101	1.13	38640.7148	1101
7001	0.144	0.018	0.000	0.281	1101	1.08	38877.9120	1101	7176	1.706	0.626	0.000	0.125	1101	1.27	38666.6813	1101
7001	-0.086	-0.002	0.000	0.089	1101	1.04	38888.9025	1101									
7001	0.056	-0.013	0.000	0.104	1101	1.11	38889.8677	1101	7178	3.217	0.025	0.000	0.000	1100	1.03	38637.7049	1101
7001	0.067	-0.029	0.000	0.095	1101	1.06	38905.8437	1101	7178	3.213	0.013	0.000	0.000	1100	1.08	38640.7205	1101
7001	-0.074	-0.018	0.000	-0.053	1101	1.01	38905.9196	1101	7178	3.291	-0.061	0.000	0.069	1101	1.19	38666.6865	1101
7001	-0.002	0.021	0.000	-0.005	1101	1.02	38906.8710	1101									
7001	-0.052	-0.084	0.000	0.026	1101	1.02	38906.9424	1101	7193	1.600	0.711	0.000	0.090	1101	1.27	38638.6638	1101
7001	0.072	-0.065	0.000	-0.030	1101	1.07	38907.8346	1101	7193	1.566	0.697	0.000	0.141	1101	1.48	38666.6626	1101
7001	-0.172	0.003	0.000	0.034	1101	1.01	38907.8780	1101	7193	1.473	0.742	0.000	0.024	1101	1.65	38667.6837	1101
7001	0.031	0.005	0.000	-0.002	1101	1.16	38908.7960	1101									
7001	-0.029	-0.006	0.000	-0.025	1101	1.01	38908.8880	1101	7217	1.463	0.676	0.000	-0.031	1101	1.71	38638.6715	1101
7001	-0.022	-0.055	0.000	-0.008	1101	1.01	38910.8814	1101	7217	1.512	0.632	0.000	0.078	1101	2.10	38640.7205	1101
7001	0.044	-0.021	0.000	0.016	1101	1.36	38911.7459	1101	7217	1.461	0.585	0.000	0.141	1101	1.85	38668.6308	1101
7001	0.094	0.058	0.000	-0.074	1101	1.04	38915.8274	1101									
7001	-0.025	-0.032	0.000	0.068	1101	1.17	38916.7717	1101	7235	2.899	0.020	0.018	0.000	1110	1.07	38317.5681	1110
7001	0.156	-0.098	0.000	0.243	1101	1.03	38917.8366	1101	7235	2.968	-0.034	0.000	0.000	1100	1.06	38638.6788	1101
7001	-0.018	-0.026	0.000	-0.003	1101	1.15	38918.7738	1101	7235	2.899	0.037	0.000	0.000	1100	1.16	38640.7255	1101
7001	-0.002	0.004	0.000	-0.022	1101	1.08	38923.7860	1101									
7001	0.034	-0.087	0.000	0.109	1101	1.02	38924.8244	1101	7236	3.701	-0.018	-0.118	0.000	1110	1.54	38228.8768	1110
7001	0.001	-0.055	0.000	0.222	1101	1.09	38925.7753	1101	7236	3.641	-0.050	-0.129	0.000	1110	1.30	38317.5760	1110
7001	0.151	-0.112	0.000	0.068	1101	1.03	38926.8094	1101									
7001	0.225	-0.018	0.000	0.173	1101	1.01	38930.8467	1101	7264	1.848	0.242	0.343	0.000	1110	1.76	38317.5839	1110
7001	0.225	-0.018	0.000	0.173	1101	1.01	38930.8467	1101	7264	1.863	0.291	0.000	0.000	1100	1.70	38638.6825	1110
7001	-0.025	-0.048	0.000	-0.048	1101	1.01	38931.8365	1101	7264	1.919	0.254	0.000	0.139	1101	2.07	38666.6719	1101
7001	-0.025	-0.048	0.000	-0.048	1101	1.01	38931.8365	1101									
7001	0.101	-0.077	0.000	0.036	1101	1.01	38934.8204	1101	7310	0.792	0.634	0.990	0.000	1110	1.24	38317.5903	1110
7001	-0.071	-0.093	0.000	0.045	1101	1.01	39010.5985	1101	7310	0.790	0.646	0.000	0.023	1101	1.24	38637.7109	1101
7001	0.036	-0.033	0.000	0.053	1101	1.54	39032.7324	1101	7310	0.815	0.634	0.000	-0.644	1100	1.23	38638.6990	1101
7001	0.036	-0.033	0.000	0.053	1101	1.54	39032.7324	1101									
7001	-0.097	0.044	0.000	0.020	1101	1.02	39034.5835	1101	7314	1.587	0.747	1.209	0.000	1110	1.01	38307.5911	1110
7001	0.054	-0.046	0.000	-0.018	1101	1.01	39035.5688	1101	7314	1.688	0.692	0.000	0.158	1101	1.04	38637.7185	1101
7001	-0.015	-0.025	0.000	0.072	1101	1.01	39036.5712	1101	7314	1.757	0.672	0.000	0.119	1101	1.33	38666.7318	1101
7001	-0.008	0.017	0.000	0.009	1101	1.02	39037.5771	1101									
7001	-0.123	0.012	0.000	0.004	1101	1.02	39038.5781	1101	7317	2.472	0.958	0.000	0.006	1101	1.49	38888.9851	1101
7001	0.016	-0.011	0.000	0.008	1101	1.03	39040.5795	1101	7317	2.620	0.978	0.000	0.136	1101	1.54	38889.9452	1101
7001	0.009	-0.003	0.000	0.026	1101	1.01	39041.5618	1101	7317	2.432	1.029	0.000	0.060	1101	1.50	38908.9393	1101
7001	0.222	-0.160	0.000	0.096	1101	1.08	39052.5802	1101									
7001	0.046	-0.056	0.000	0.098	1101	1.10	39053.5834	1101	7328	1.610	0.610	0.962	0.000	1110	1.07	38307.5937	1110
7001	-0.032	-0.039	0.000	0.089	1101	1.08	39054.5750	1101	7328	1.680	0.559	0.000	0.143	1101	1.10	38637.7246	1101
7001	-0.003	0.020	0.000	0.046	1101	1.11	39055.5842	1101	7328	1.763	0.547	0.000	0.035	1101	1.37	38666.7390	1101
7001	-0.022	-0.009	0.000	0.063	1101	1.08	39056.5684	1101									
7001	-0.020	0.002	0.000	0.051	1101	1.07	39057.5605	3303	7352	1.769	0.685	1.122	0.000	1110	1.34	38317.5981	1110
7001	0.009	0.022	0.000	0.010	1101	1.08	39058.5611	3303									
7001	-0.018	0.022	0.000	0.004	1101	1.10	39061.5633	3303	7377	2.548	0.222	0.285	0.000	1110	1.16	38307.6007	1110
7001	-0.047	0.027	0.000	-0.000	1101	1.07	39062.5481	3303	7377	2.600	0.139	0.268	0.000	1110	1.21	38317.6053	1110
7001	0.025	-0.014	0.000	0.036	1101	1.07	39063.5457	3303									
7001	0.100	-0.060	0.000	0.011	1101	1.15	39064.5720	3303	7405	0.525	1.019	1.595	0.000	1110	1.02	38307.6050	1110
7001	0.117	-0.047	0.000	0.066	1101	1.20	39072.5652	3303	7405	0.587	0.973	1.561	0.000	1110	1.24	38339.6071	4440
7063	1.722	0.684	0.000	0.000	1100	1.26	38637.6644	1101	7417	0.144	0.848	1.318	0.000	1110	1.01	38307.6076	1110
7063	1.740	0.666	0.000	0.000	1100	1.26	38638.6277	1101	7417	0.170	0.858	0.000	0.165	1101	1.04	38511.9740	1101
7063	1.735	0.700	0.000	0.000	1100	1.29	38639.6815	1101									
7066	2.100	0.748	0.000	0.581	1101	1.28	38637.6701	1101	7429	1.810	0.728	0.000	0.000	1100	1.12	38638.7054	1101
7066	2.075	0.743	0.000	0.464	1101	1.28	38638.6341	1101	7429	1.838	0.681	0.000	0.193	1101	1.23	38666.6774	1101
7066	2.070	0.776	0.000	0.521	1101	1.32	38639.6866	1101	7429	1.779	0.725	0.000	0.235	1101	1.36	38667.7033	1101
									7429	1.800	0.746	1.193	0.000	1110	1.18	38695.5745	2220
									7429	1.846	0.735	1.118	0.000	1110	1.16	38697.5642	4440
7106	3.116	0.188	0.000	0.000	1100	1.02	38637.6882	1101	7429	1.678	0.783	0.000	-0.019	1101	1.10	38888.9922	1101
7106	3.026	0.143	0.000	0.000	1100	1.00	38638.6394	1101	7429	1.853	0.726	0.000	0.133	1101	1.17	38889.9364	1101
7106	3.060	0.214	0.000	0.000	1100	1.03	38639.6926	1101	7429	1.612	0.763	0.000	0.144	1101	1.12	38908.9648	1101
7120	2.118	0.870	0.000	0.139	1101	1.89	38888.9130	1101	7446	5.147	-0.057	0.000	0.072	1101	1.37	39037.6371	1101
7120	1.898	0.757	0.000	0.143	1101	1.81	38889.9273	1101									
7120	2.194	0.780	0.000	0.221	1101	1.74	38908.9098	1101	7462	2.854	0.479	0.737	0.000	1110	1.39	38339.6157	4440
									7462	2.712	0.604	0.000	0.000	1100	1.26	38638.7104	1101
									7462	2.778	0.544	0.000	0.254	1101	1.34	38667.6925	1101
7133	2.580	0.572	0.000	0.000	1100	1.04	38637.6926	1101	7479	2.							

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL									PBS INFRARED IJKL								
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.
7528	2.656	0.099	0.000	0.000	1100	1.07	38638.7465	1101	7710	3.335	0.039	0.046	0.000	1110	1.28	38228.8924	1110
7528	2.935	-0.073	0.000	0.098	1101	1.22	38668.7219	1101	7710	3.464	-0.003	-0.122	0.000	1110	1.19	38303.6467	1110
7528	2.846	0.015	0.000	0.120	1101	1.11	38670.6796	1101	7710	3.436	-0.011	0.000	0.000	1100	1.19	38369.7263	1110
									7710	3.377	0.002	0.000	0.029	1101	1.41	38670.7108	1101
7536	-0.776	1.180	0.000	0.165	1101	1.10	38638.7516	1101	7735	0.518	0.932	1.445	0.000	1110	1.05	38303.6676	1110
7536	-0.738	1.097	0.000	0.194	1101	1.38	38668.7348	1101	7735	0.453	0.917	1.421	0.000	1110	1.05	38310.6484	1110
7536	-0.839	1.184	0.000	0.221	1101	1.19	38670.6929	1101	7735	0.506	0.886	1.383	0.000	1110	1.31	38369.5822	1110
7557	0.183	0.222	0.232	0.000	1110	1.09	38226.8113	1110	7747	1.879	0.634	1.043	0.000	1110	1.66	38303.7072	1110
7557	0.268	0.144	0.256	0.000	1110	1.09	38227.8270	1110	7747	1.965	0.612	0.000	0.000	1100	1.43	38369.7312	1110
7557	0.163	0.257	0.294	0.000	1110	1.16	38228.8687	1110	7747	1.915	0.625	0.000	0.141	1101	1.45	38668.6600	1101
7557	0.383	0.144	0.219	0.000	1110	1.10	38295.6155	1110	7751	0.173	1.066	1.590	0.000	1110	1.47	38303.7927	1110
7557	0.288	0.069	0.098	0.000	1110	1.15	38298.6753	1110	7751	0.147	1.030	1.635	0.000	1110	1.06	38310.6535	1110
7557	0.155	0.322	0.000	0.085	1101	1.20	38532.9100	1101	7751	0.155	1.009	1.530	0.000	1110	1.39	38369.5994	1110
7557	0.185	0.209	0.000	-0.004	1101	1.09	38536.9655	1101	7754	1.922	0.623	1.000	0.000	1110	1.46	38304.6598	1110
7557	0.150	0.203	0.000	0.071	1101	1.10	38537.9449	1101	7754	1.516	0.620	0.000	0.000	1100	1.44	38639.7351	1110
7557	0.123	0.201	0.000	0.087	1101	1.11	38538.9350	1101	7754	1.461	0.561	0.000	0.188	1101	1.46	38668.6648	1110
7557	0.217	0.026	0.000	0.042	1101	1.09	38542.9590	1101	7763	3.242	0.423	0.717	0.000	1110	1.09	37832.8215	1110
7557	0.340	0.139	0.000	0.030	1101	1.15	38543.8949	1101	7763	3.252	0.506	0.789	0.000	1110	1.02	37838.9117	3330
7557	0.056	0.172	0.000	0.084	1101	1.10	38544.9229	1101	7763	3.411	0.442	0.000	0.422	1101	1.57	38667.8042	1101
7557	0.264	0.124	0.000	-0.039	1101	1.09	38545.9516	1101	7763	3.372	0.498	0.000	0.456	1101	1.15	38670.7198	1101
7557	0.219	0.150	0.000	0.043	1101	1.09	38546.9341	1101	7776	0.957	0.641	0.000	0.068	1101	1.51	38639.7395	1101
7557	0.361	-0.030	0.000	0.057	1101	1.10	38547.9194	1101	7776	0.942	0.610	0.000	0.000	1100	1.57	38640.7567	1101
7557	0.213	0.145	0.000	0.031	1101	1.09	38556.9098	1101	7776	0.833	0.640	0.000	0.067	1101	1.57	38668.6804	1101
7557	0.219	0.157	0.000	0.039	1101	1.09	38557.9083	1101	7796	0.685	0.440	0.637	0.000	1110	1.67	38303.8151	1110
7557	0.312	0.171	0.000	0.141	1101	1.09	38558.9198	1101	7796	0.750	0.417	0.000	0.063	1101	1.05	38637.7733	1110
7557	0.159	0.136	0.000	0.100	1101	1.10	38564.9108	1101	7796	0.727	0.457	0.000	0.023	1101	1.60	38667.8120	1101
7557	0.247	0.099	0.000	0.063	1101	1.09	38566.8955	1101	7806	1.476	0.827	1.216	0.000	1110	1.06	38305.6877	1110
7557	0.288	0.156	0.000	0.038	1101	1.30	38569.7834	1101	7806	1.426	0.871	0.000	0.125	1101	1.06	38637.7789	1101
7557	0.295	0.154	0.000	0.133	1101	1.12	38570.8371	1101	7806	1.418	0.863	0.000	0.119	1101	1.19	38670.7342	1101
7557	0.257	0.198	0.000	0.093	1101	1.22	38631.6326	1101	7847	3.525	0.598	0.000	0.353	1101	1.01	38556.9249	1101
7557	0.235	0.121	0.000	0.081	1101	1.09	38638.6872	1101	7847	3.554	0.627	0.000	0.290	1101	1.00	38557.9300	1110
7557	0.251	0.115	0.000	0.084	1101	1.11	38639.7154	1101	7847	3.544	0.635	0.000	0.241	1101	1.13	38631.6444	1101
7557	0.294	0.095	0.000	0.060	1101	1.09	38640.6746	1101	7847	3.549	0.631	0.000	0.106	1101	1.01	38631.7576	1101
7557	0.268	0.125	0.000	0.017	1101	1.13	38640.7306	1101	7847	3.573	1.251	0.000	0.110	1001	1.16	39038.7260	1101
7557	0.226	0.091	0.000	0.053	1101	1.12	38667.6510	1101	7882	2.622	0.729	0.376	0.000	1110	1.11	38228.9011	1110
7557	0.308	0.099	0.000	-0.077	1101	1.54	38669.7368	1101	7882	2.700	0.224	0.305	0.000	1110	1.09	38305.6831	1110
7557	0.332	0.085	0.000	-0.058	1101	1.71	38671.7468	1101	7882	2.614	0.264	0.000	0.000	1100	1.12	38637.7843	1110
7557	0.324	0.058	0.000	0.108	1101	1.12	38693.5037	1101	7884	2.327	0.543	0.835	0.000	1110	1.24	38305.6773	1110
7557	0.164	0.235	0.000	-0.043	1101	1.12	38875.0029	1101	7884	2.284	0.557	0.000	0.000	1100	1.30	38637.7878	1101
7557	0.300	0.114	0.000	0.001	1101	1.11	38877.0064	1101	7884	2.216	0.621	0.000	0.000	1100	1.24	38639.7609	1110
7557	0.327	0.149	0.000	0.020	1101	1.09	38878.0246	1101	7924	0.862	0.135	0.145	0.000	1110	1.52	37768.9192	3330
7557	0.249	0.167	0.000	0.016	1101	1.29	38889.9093	1101	7924	0.855	0.158	0.174	0.000	1110	1.16	37778.9661	1110
7557	0.251	0.267	0.000	0.015	1101	1.17	38905.8967	1101	7924	0.920	0.136	0.170	0.000	1110	1.04	37803.9699	1110
7557	0.526	0.099	0.000	0.137	1101	1.15	38906.9030	1101	7924	0.849	0.132	0.158	0.000	1110	1.05	37805.9530	1110
7557	0.077	0.152	0.000	-0.151	1101	1.11	38908.9780	1101	7924	0.915	0.112	0.141	0.000	1110	1.10	37828.8523	1110
7557	0.045	0.133	0.000	0.043	1101	1.09	38910.9483	1101	7924	0.892	0.126	0.155	0.000	1110	1.05	37828.9567	1110
7557	0.225	0.065	0.000	0.173	1101	1.10	38926.9219	1101	7924	0.919	0.134	0.145	0.000	1110	1.04	37829.9365	3330
7557	0.208	0.128	0.000	-0.069	1101	1.09	38934.8753	1101	7924	0.926	0.120	0.158	0.000	1110	1.05	37831.9484	1110
7557	0.396	0.077	0.000	0.055	1101	1.67	39032.7555	1101	7924	0.864	0.090	0.129	0.000	1110	1.04	37832.8980	1110
7557	0.346	0.161	0.000	0.101	1101	1.17	39034.6674	1101	7924	0.934	0.109	0.129	0.000	1110	1.08	37837.9609	3330
7557	0.276	0.117	0.000	0.054	1101	1.10	39035.5861	1101	7924	0.939	0.077	0.139	0.000	1110	1.04	37838.9275	3330
7557	0.244	0.140	0.000	-0.004	1101	1.28	39045.6676	3303	7924	0.926	0.116	0.145	0.000	1110	1.13	38226.7657	1110
7557	0.309	0.047	0.000	0.064	1101	1.43	39053.6716	1101	7924	0.894	0.107	0.130	0.000	1110	1.03	38227.8387	1110
7557	0.177	0.171	0.000	-0.077	1101	1.23	39056.6266	1101	7924	0.946	0.083	0.126	0.000	1110	1.07	38228.9082	1110
7557	0.211	0.170	0.000	-0.011	1101	1.19	39062.5997	3303	7924	0.859	0.124	0.125	0.000	1110	1.03	38293.6478	1110
7557	0.238	0.159	0.000	0.066	1101	1.17	39063.5882	3303	7924	0.958	0.107	0.105	0.000	1110	1.04	38295.6299	1110
7557	0.231	0.171	0.000	0.027	1101	1.22	39064.6028	3303	7924	0.832	0.164	0.120	0.000	1110	1.03	38295.6892	1110
7557	0.248	0.101	0.000	0.036	1101	1.17	39069.5707	1101	7924	0.831	0.108	0.101	0.000	1110	1.27	38295.7951	1110
7557	0.258	0.117	0.000	0.133	1101	1.31	39072.6010	3303	7924	1.001	0.072	0.107	0.000	1110	1.03	38299.6313	1110
7564	-1.949	1.716	3.587	0.000	1110	1.33	39200.7515	1110	7924	0.869	0.098	0.106	0.000	1110	1.26	38302.7736	1110
7564	-2.027	1.791	3.652	0.000	1110	1.18	39200.7821	1110	7924	0.908	0.117	0.198	0.000	1110	1.05	38303.6849	1110
7564	-1.722	1.596	4.003	0.000	1110	1.03	38296.6724	1110	7924	0.999	0.132	0.104	0.000	1110	1.03	38305.6432	1110
7564	-1.790	1.402	3.037	0.000	1110	1.48	38368.5891	3330	7924	0.918	0.084	0.111	0.000	1110	1.03	38306.6290	1110
7564	-2.329	1.675	0.000	0.623	1101	1.00	38564.8787	1101	7924	0.862	0.128	0.141	0.000	1110	1.03	38307.6172	1110
7564	-2.428	1.515	0.000	0.553	1101	1.54	38916.7640	1101	7924	0.842	0.121	0.147	0.000	1110	1.06	38309.	

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL									PBS INFRARED IJKL								
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.
7924	0.900	0.120	0.128	0.000	1.110	1.10	38358.5711	1110	7949	0.076	0.665	1.116	0.000	1.110	1.00	38227.8596	1110
7924	0.891	0.116	0.131	0.000	1.110	1.09	38360.5577	1110	7949	0.138	0.589	1.015	0.000	1.110	1.02	38228.8845	1110
7924	0.867	0.171	0.090	0.000	1.110	2.02	38365.6926	3330	7949	0.115	0.636	1.052	0.000	1.110	1.01	38293.6532	1110
7924	0.000	0.000	0.110	0.000	0.010	1.12	38368.5493	3330	7949	0.137	0.678	1.102	0.000	1.110	1.00	38293.6898	1110
7924	0.896	0.125	0.125	0.000	1.110	2.23	38381.6616	3330	7949	0.140	0.693	1.033	0.000	1.110	1.01	38295.6366	1110
7924	0.852	0.132	0.174	0.000	1.110	1.73	38496.9180	1110	7949	0.024	0.681	1.103	0.000	1.110	1.01	38295.6951	1110
7924	0.229	0.290	0.000	0.043	0.101	1.14	38508.9899	1101	7949	0.028	0.684	1.065	0.000	1.110	1.31	38295.8019	1110
7924	0.790	0.135	0.000	0.142	1.101	1.25	38511.9465	1101	7949	0.041	0.698	1.064	0.000	1.110	1.00	38296.6516	1110
7924	0.974	0.046	0.000	0.074	1.101	1.24	38515.9398	1101	7949	0.064	0.662	1.046	0.000	1.110	1.06	38299.5946	1110
7924	0.956	0.041	0.000	0.222	1.101	1.04	38532.9762	1101	7949	0.156	0.665	1.047	0.000	1.110	1.01	38301.6829	1110
7924	0.851	0.175	0.000	0.167	1.101	1.15	38534.9124	1101	7949	0.025	0.672	1.019	0.000	1.110	1.43	38302.8024	1110
7924	0.974	0.113	0.000	0.117	1.101	1.03	38536.9785	1101	7949	0.181	0.708	0.938	0.000	1.110	1.26	38303.7714	1110
7924	0.822	0.160	0.000	0.102	1.101	1.05	38537.9557	1101	7949	0.221	0.654	0.951	0.000	1.110	1.00	38305.6488	1110
7924	0.875	0.140	0.000	0.100	1.101	1.03	38538.9957	1101	7949	0.111	0.702	1.023	0.000	1.110	1.06	38306.7030	1110
7924	0.886	0.133	0.000	0.108	1.101	1.03	38542.9936	1101	7949	0.116	0.649	0.981	0.000	1.110	1.00	38307.6250	1110
7924	0.829	0.124	0.000	0.077	1.101	1.03	38544.9872	1101	7949	0.078	0.654	0.961	0.000	1.110	1.05	38309.6873	1110
7924	0.823	0.170	0.000	0.107	1.101	1.03	38545.9826	1101	7949	0.150	0.605	0.975	0.000	1.110	1.00	38310.6246	1110
7924	0.898	0.103	0.000	0.114	1.101	1.03	38546.9813	1101	7949	0.101	0.680	1.061	0.000	1.110	1.02	38311.6629	1110
7924	0.908	0.110	0.000	0.128	1.101	1.03	38547.9697	1101	7949	0.169	0.653	1.030	0.000	1.110	1.01	38315.9909	1110
7924	0.898	0.146	0.000	0.127	1.101	1.03	38556.9378	1101	7949	0.122	0.634	0.995	0.000	1.110	1.04	38316.6619	1110
7924	0.874	0.139	0.000	0.122	1.101	1.03	38557.9224	1101	7949	0.110	0.646	1.032	0.000	1.110	1.18	38316.7186	1110
7924	0.889	0.138	0.000	0.223	1.101	1.03	38559.9460	1101	7949	0.131	0.631	0.992	0.000	1.110	1.03	38317.6520	1110
7924	0.908	0.123	0.000	0.104	1.101	1.06	38566.9770	1101	7949	0.165	0.621	0.954	0.000	1.110	1.12	38323.6809	1110
7924	0.934	0.104	0.000	0.106	1.110	1.04	38569.9747	1101	7949	0.154	0.636	1.007	0.000	1.110	1.04	38324.6408	1110
7924	0.913	0.151	0.189	0.000	1.110	1.03	38569.9100	3330	7949	0.085	0.693	1.034	0.000	1.110	1.13	38327.6729	1110
7924	0.955	0.085	0.000	0.121	1.101	1.03	38570.9020	1101	7949	0.103	0.635	0.984	0.000	1.110	1.21	38328.6933	1110
7924	1.030	0.055	0.000	0.211	1.101	1.03	38627.7503	1101	7949	0.112	0.694	1.055	0.000	1.110	1.01	38329.5711	1110
7924	0.877	0.107	0.000	0.215	1.101	1.07	38627.8130	1101	7949	0.148	0.622	1.014	0.000	1.110	1.03	38340.5891	3330
7924	0.969	0.099	0.000	0.078	1.101	1.03	38629.7591	1101	7949	0.150	0.628	1.019	0.000	1.110	1.26	38340.7462	3330
7924	0.897	0.081	0.000	0.126	1.101	1.16	38630.8463	1101	7949	0.152	0.695	0.991	0.000	1.110	1.26	38343.5797	3330
7924	0.876	0.082	0.000	0.058	1.101	1.07	38631.6871	1101	7949	0.105	0.660	1.002	0.000	1.110	1.03	38343.5797	3330
7924	0.903	0.064	0.000	0.193	1.101	1.03	38631.7674	1101	7949	0.146	0.683	0.000	0.000	1.110	2.48	38343.7632	3330
7924	0.918	0.097	0.000	0.120	1.101	1.04	38637.7653	1101	7949	0.123	0.706	1.028	0.000	1.110	1.21	38353.6238	1110
7924	0.894	0.093	0.000	0.164	1.101	1.05	38638.7681	1101	7949	0.100	0.657	1.046	0.000	1.110	1.11	38356.5882	1110
7924	0.927	0.090	0.000	0.123	1.101	1.10	38640.7975	1101	7949	0.113	0.630	1.016	0.000	1.110	1.16	38357.5997	1110
7924	0.889	0.085	0.000	0.096	1.101	1.12	38646.7896	1101	7949	0.129	0.644	1.044	0.000	1.110	1.15	38360.5889	1110
7924	0.884	0.037	0.000	-0.649	1.100	1.44	38665.8135	1101	7949	0.122	0.717	1.002	0.000	1.110	2.11	38365.6865	3330
7924	0.835	0.123	0.000	0.132	1.101	1.05	38666.6970	1101	7949	0.102	0.652	1.025	0.000	1.110	1.12	38368.5565	3330
7924	0.892	0.067	0.000	-0.796	1.100	1.04	38671.6718	1101	7949	0.106	0.636	1.042	0.000	1.110	2.24	38387.6332	3330
7924	0.880	0.103	0.000	0.185	1.101	1.05	38673.5860	1101	7949	0.219	0.754	0.000	0.387	1.101	1.09	38509.0061	1101
7924	0.923	0.098	0.095	0.000	1.110	1.12	38678.5687	1110	7949	0.148	0.703	0.000	0.111	1.101	1.24	38511.9546	1101
7924	0.846	0.139	0.139	0.000	1.110	1.12	38680.5535	4440	7949	0.164	0.655	0.000	0.070	1.110	1.23	38515.9471	1101
7924	0.909	0.115	0.105	0.000	1.110	1.13	38680.6035	4440	7949	0.158	0.641	1.020	0.000	1.110	2.04	38523.8372	3330
7924	0.943	0.094	0.103	0.000	1.110	1.12	38687.5474	4440	7949	0.051	0.639	0.000	0.114	1.101	1.02	38532.9836	1101
7924	0.935	0.088	0.000	0.075	1.101	1.11	38692.6595	1101	7949	0.063	0.703	0.000	0.117	1.101	1.01	38533.9905	1101
7924	0.913	0.086	0.000	0.068	1.101	1.07	38693.5169	1101	7949	0.046	0.736	0.000	0.065	1.101	1.01	38534.9853	1101
7924	0.792	0.200	0.000	0.096	1.101	1.03	38693.5941	1101	7949	0.022	0.709	0.000	0.100	1.101	1.02	38537.9669	1101
7924	0.827	0.140	0.108	0.000	1.110	1.11	38694.5447	4440	7949	0.057	0.715	0.000	0.030	1.101	1.00	38539.0102	1101
7924	0.874	0.122	0.073	0.000	1.110	1.14	38697.5719	4440	7949	0.109	0.663	0.000	0.052	1.101	1.00	38543.0012	1101
7924	0.898	0.082	0.103	0.000	1.110	1.93	38697.7097	4440	7949	0.083	0.652	0.000	0.083	1.101	1.00	38544.9971	1101
7924	0.939	0.057	0.000	0.130	1.101	2.04	38738.6734	1101	7949	0.058	0.745	0.000	0.131	1.101	1.00	38545.9957	1101
7924	0.802	0.089	0.000	0.156	1.101	1.11	38874.9975	1101	7949	0.154	0.689	0.000	0.064	1.101	1.00	38546.9924	1101
7924	0.858	0.138	0.000	0.031	1.101	1.07	38878.0103	1101	7949	0.063	0.665	0.000	0.085	1.101	1.00	38547.9794	1101
7924	0.896	0.171	0.000	0.079	1.101	1.10	38888.9647	1101	7949	0.193	0.605	0.000	0.114	1.101	1.03	38557.9956	1101
7924	0.944	0.094	0.000	0.161	1.101	1.09	38889.9687	1101	7949	0.212	0.640	0.000	0.218	1.101	1.02	38558.9885	1101
7924	0.868	0.113	0.000	0.098	1.101	1.29	38905.8598	1101	7949	0.010	0.671	0.000	0.016	1.101	1.04	38559.9975	1101
7924	0.695	0.106	0.000	-0.001	1.101	1.03	38905.9753	1101	7949	0.115	0.679	0.000	0.105	1.101	1.01	38566.9444	1101
7924	0.689	0.130	0.000	0.084	1.101	1.07	38906.9294	1101	7949	0.170	0.611	0.000	0.114	1.101	1.02	38569.8831	1101
7924	0.939	0.097	0.000	0.091	1.101	1.04	38906.9622	1101	7949	0.153	0.627	1.077	0.000	1.110	1.00	38569.9211	3330
7924	0.903	0.128	0.000	0.166	1.101	1.31	38907.8502	1101	7949	0.125	0.692	0.000	0.116	1.101	1.00	38570.9117	1101
7924	0.839	0.116	0.000	0.130	1.101	1.14	38907.8969	1101	7949	0.129	0.664	0.000	0.095	1.101	1.01	38627.7317	1101
7924	0.873	0.127	0.000	0.099	1.101	1.07	38908.9238	1101	7949	0.064	0.878	0.000	0.177	1.101	1.03	38627.8064	1101
7924	0.858	0.085	0.000	0.111	1.101	1.03	38908.9974	1101	7949	0.054	0.685	0.000	0.168	1.101	1.07	38629.6858	1101
7924	0.721	0.110	0.000	0.075	1.101	1.03	38910.9717	1101	7949	0.232	0.625	0.000	-0.071	1.101	1.21	38629.8669</	

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL									PBS INFRARED IJKL								
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.
7949	0.089	0.708	0.000	0.034	1101	2.06	38738.6631	1101	7951	-0.212	1.215	0.000	0.177	1101	1.33	38639.7779	1101
7949	0.148	0.619	0.000	0.180	1101	1.09	38876.9997	1101									
7949	0.131	0.676	0.000	0.097	1101	1.04	38878.0183	1101	7957	1.332	0.668	0.888	0.000	1110	1.15	38305.6601	1110
7949	0.078	0.667	0.000	0.098	1101	1.03	38888.9994	1101	7957	1.312	0.594	0.955	0.000	1110	1.18	38569.9733	3330
7949	0.150	0.661	0.000	0.131	1101	1.06	38889.9750	1101	7957	1.208	0.590	0.000	0.091	1101	1.24	38637.8222	1101
7949	0.173	0.636	0.000	0.144	1101	1.24	38905.8773	1101									
7949	0.129	0.664	0.000	0.101	1101	1.04	38905.9445	1101	8079	-0.033	1.050	1.632	0.000	1110	1.03	38301.6876	1110
7949	0.088	0.685	0.000	0.082	1101	1.09	38906.9168	1101	8079	-0.006	1.038	0.000	0.272	1101	1.02	38558.9586	1101
7949	0.165	0.651	0.000	0.179	1101	1.00	38906.9814	1101	8079	-0.178	1.048	0.000	0.223	1101	1.11	38637.8281	1101
7949	0.127	0.669	0.000	0.099	1101	1.28	38907.8635	1101	8079	0.015	1.030	0.000	0.199	1101	1.10	38640.8166	1101
7949	0.119	0.692	0.000	0.155	1101	1.09	38907.9159	1101									
7949	-0.007	0.725	0.000	0.122	1101	1.02	38908.9523	1101	8085	2.399	0.716	1.138	0.000	1110	1.23	38302.7837	1110
7949	0.046	0.677	0.300	0.028	1101	1.00	38908.9907	1101	8085	2.497	0.759	0.000	0.065	1101	1.52	38667.8323	1101
7949	0.087	0.755	0.300	0.039	1101	1.94	38910.7842	1101	8085	2.315	0.793	0.000	0.092	1101	1.15	38668.7608	1101
7949	0.209	0.651	0.000	-0.037	1101	1.75	38910.7974	1101									
7949	0.210	0.653	0.000	0.046	1101	1.61	38910.8099	1101	8086	2.718	0.808	1.350	0.000	1110	1.03	37829.8973	3330
7949	0.197	0.623	0.000	0.106	1101	1.43	38910.8305	1101	8086	2.750	0.815	1.334	0.000	1110	1.28	38302.7946	1110
7949	0.230	0.595	0.000	0.102	1101	1.26	38910.8585	1101	8086	2.714	0.844	0.000	0.080	1101	1.47	38667.8257	1101
7949	0.165	0.654	0.000	0.153	1101	1.21	38910.8701	1101	8086	2.726	0.811	0.000	0.093	1101	1.17	38668.7666	1101
7949	0.132	0.607	0.000	0.137	1101	1.12	38910.8932	1101									
7949	0.129	0.631	0.000	0.134	1101	1.09	38910.9050	1101	8093	2.345	0.581	0.903	0.000	1110	1.39	38316.6274	1110
7949	0.104	0.670	0.000	0.139	1101	1.05	38910.9241	1101	8093	2.472	0.606	0.000	0.186	1101	1.39	38558.9661	1101
7949	0.006	0.625	0.000	0.185	1101	1.03	38910.9360	1101	8093	2.440	0.593	0.000	0.000	1100	1.44	38638.7841	1101
7949	-0.101	0.562	0.000	0.142	1101	1.01	38910.9604	1101									
7949	-0.267	0.740	0.000	0.027	1101	1.00	38910.9839	1101	8115	1.061	0.577	0.936	0.000	1110	1.00	38227.8674	1110
7949	0.079	0.703	0.000	0.005	1101	1.88	38911.7849	1101	8115	1.170	0.532	0.864	0.000	1110	1.00	38316.6335	1110
7949	0.060	0.638	0.000	0.063	1101	1.68	38911.8003	1101	8115	1.038	0.591	0.000	0.106	1101	1.11	38668.7497	1101
7949	-0.011	0.621	0.000	0.090	1101	1.56	38911.8124	1101									
7949	0.000	0.678	0.000	0.051	1101	1.47	38911.8234	1101	8130	2.684	0.297	0.419	0.000	1110	1.00	38227.8743	1110
7949	0.094	0.650	0.000	0.045	1101	1.32	38915.8344	1101	8130	2.737	0.264	0.415	0.000	1110	1.01	38316.6405	1110
7949	0.219	0.561	0.000	0.084	1101	1.24	38915.8493	1101									
7949	0.045	0.706	0.000	0.112	1101	1.19	38915.8618	1101	8143	3.772	0.130	0.155	0.000	1110	1.01	38316.6484	1110
7949	0.080	0.645	0.000	0.200	1101	1.09	38915.8924	1101	8143	3.801	0.223	0.000	0.193	1101	1.01	38558.9721	1101
7949	0.124	0.688	0.000	0.032	1101	1.78	38916.7786	1101	8143	3.816	0.125	0.000	0.000	1100	1.10	38637.8351	1101
7949	0.016	0.724	0.000	0.065	1101	1.01	38916.9388	1101									
7949	0.245	0.667	0.000	0.141	1101	1.24	38917.8447	1101	8162	1.928	0.128	0.199	0.000	1110	1.16	38316.6552	1110
7949	0.101	0.620	0.000	0.122	1101	1.18	38917.8576	1101	8162	1.982	0.172	0.000	0.106	1101	1.15	38558.9775	1101
7949	0.069	0.644	0.000	0.114	1101	1.09	38917.8861	1101	8162	1.953	0.164	0.000	0.000	1100	1.23	38637.8406	1101
7949	0.010	0.658	0.000	-0.134	1101	1.00	38917.9693	1101									
7949	0.064	0.628	0.000	0.027	1101	1.00	38917.9807	1101	8167	2.223	0.550	0.814	0.000	1110	1.62	38316.6806	1110
7949	0.106	0.663	0.300	0.081	1101	1.69	38918.7805	1101	8167	2.279	0.573	0.000	0.000	1100	1.59	38638.7895	1101
7949	0.156	0.638	0.300	0.134	1101	1.57	38918.7920	1101	8167	2.291	0.574	0.000	0.000	1100	1.57	38639.7823	1101
7949	0.106	0.591	0.000	0.063	1101	1.22	38918.8451	1101									
7949	0.162	0.658	0.000	0.112	1101	1.00	38918.9667	1101	8173	1.602	0.672	1.075	0.000	1110	1.07	38316.6861	1110
7949	0.580	0.542	0.000	0.148	1101	1.00	38918.9714	1101	8173	1.668	0.734	0.000	0.219	1101	1.03	38638.9832	1101
7949	0.137	0.687	0.000	-0.029	1101	1.60	38921.7806	1101	8173	1.671	0.707	0.000	0.103	1101	1.17	38637.8457	1101
7949	0.194	0.633	0.000	0.109	1101	1.20	38921.8416	1101									
7949	0.114	0.656	0.000	0.078	1101	1.03	38921.9066	1101	8204	1.819	0.557	0.000	0.000	1100	1.81	38638.7949	1101
7949	0.059	0.717	0.000	0.113	1101	1.00	38921.9680	1101	8204	1.856	0.522	0.000	0.000	1100	1.80	38639.7903	1101
7949	0.154	0.613	0.000	0.020	1101	1.98	38922.7489	1101	8204	1.886	0.467	0.000	0.117	1101	1.75	38668.6885	1101
7949	0.122	0.637	0.000	0.012	1101	1.78	38922.7624	1101									
7949	0.203	0.544	0.000	0.200	1101	1.21	38922.8364	1101	8207	0.000	1.627	0.000	0.444	0101	1.05	38566.9053	1101
7949	0.041	0.639	0.000	0.117	1101	1.03	38922.9079	1101									
7949	0.000	0.739	0.000	0.213	0101	1.00	38924.9524	1101	8213	2.495	0.585	0.000	0.000	1100	1.79	38638.7992	1101
7949	0.015	0.689	0.000	0.013	1101	1.04	38924.9968	1101	8213	2.432	0.625	0.000	0.000	1100	1.79	38639.7944	1101
7949	0.282	0.635	0.000	0.004	1101	1.03	38925.9862	1101	8213	2.454	0.578	0.000	0.105	1101	1.75	38668.7027	1101
7949	0.144	0.844	0.000	0.114	1101	1.04	38926.9923	1101									
7949	0.032	0.691	0.000	0.135	1101	1.04	38931.9759	1101	8232	1.084	0.495	0.720	0.000	1110	1.27	38227.8819	1110
7949	0.032	0.691	0.000	0.135	1101	1.04	38931.9759	1101	8232	1.121	0.445	0.708	0.000	1110	1.34	38316.6918	1110
7949	-0.033	0.660	0.000	0.104	1101	1.13	38934.8273	1101									
7949	0.077	0.718	0.000	0.111	1101	1.09	38934.8411	1101	8238	4.027	-0.182	-0.356	0.000	1110	1.27	38227.8900	1110
7949	0.296	0.681	0.000	0.237	1101	1.00	38934.9264	1101	8238	3.935	-0.206	-0.369	0.000	1110	1.30	38303.7318	1110
7949	-0.143	0.635	0.000	0.071	1101	1.06	38936.7560	1101	8238	3.912	-0.149	-0.343	0.000	1110	1.50	38399.5682	3330
7949	0.092	0.642	0.000	0.000	1100	1.23	38936.7941	1101									
7949	0.135	0.756	0.300	0.153	1101	1.10	38936.8321	1101	8252	1.967	0.544	0.860	0.000	1110	1.03	38227.8983	1110
7949	0.106	0.664	0.000	0.099	1101	1.00	38936.9266	1101	8252	0.000	0.000	0.855	0.000	0010	1.03	38303.7543	1110
7949	-0.020	0.768	0.000	0.130	1101	1.56	39032.8190	1101	8252	1.967	0.624	0.000	0.000	1100	1.13	38637.8520	1101
7949	0.087	0.649	0.000	0.118	1101	1.15	39033.7448	1101	8252	1.976	0.579	0.000	0.088	1101	1.11	38640.8364	1101
7949	0.009	0.677	0.000	0.046	1101	1.01	39034.6764	1101									
7949	0.116	0.686	0.000	0.046	1101	1.07	39035.7128	1101	8255	2.450	0.642	1.057	0.000	1110	1.07	38339.6480	4440</

TABLE 7 THE IJK AND JKL OBSERVATIONS

PBS INFRARED IJKL									PBS INFRARED IJKL								
B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.	B.S.	K	J-K	I-K	K-L	WTS.	AIR	J.D.	CNT.
8316	-1.726	1.175	2.249	0.000	1110	1.13	38295.7436	1110	8622	5.587	-0.168	0.000	0.146	1101	1.18	38631.7194	1101
8316	-1.636	1.097	2.063	0.000	1110	1.12	38323.6526	1110	8622	5.663	-0.254	0.000	0.686	1101	1.01	38666.7132	1101
8316	-1.880	1.203	0.000	0.292	1101	1.21	38532.9687	1101	8622	5.610	-0.226	0.000	-0.029	1101	1.03	38492.7003	1101
8316	-1.846	1.146	0.000	0.436	1101	1.14	38566.9187	1101	8622	5.639	-0.199	0.000	0.123	1101	1.13	38693.5664	1101
									8622	5.542	-0.149	0.000	-0.105	1101	1.02	38694.6785	3303
8322	2.077	0.236	0.313	0.000	1110	1.55	38228.9234	1110	8632	1.528	0.840	1.395	0.000	1110	1.02	38228.9338	1110
8322	2.184	0.192	0.266	0.000	1110	1.58	38295.7505	1110	8632	1.495	0.854	1.211	0.000	1110	1.02	38315.6772	1110
8322	2.158	0.195	0.185	0.000	1110	1.54	38323.6606	1110	8632	1.511	0.849	1.337	0.000	1110	1.08	38340.6905	3330
8327	5.361	0.067	0.105	0.000	1110	1.21	37828.9132	1110	8650	0.927	0.590	0.958	0.000	1110	1.00	38228.9402	1110
8327	5.340	0.050	0.000	0.000	1100	1.30	37832.8528	1110	8650	0.906	0.477	0.853	0.000	1110	1.00	38298.7450	1110
									8650	0.956	0.526	0.820	0.000	1110	1.01	38317.7136	1110
8334	2.822	0.337	0.577	0.000	1110	1.24	37828.8859	1110	8667	1.676	0.567	0.920	0.000	1110	1.01	38298.7495	1110
8334	2.892	0.251	0.503	0.000	1110	1.18	38323.6544	4440	8667	1.599	0.645	1.029	0.000	1110	1.02	38317.7183	1110
8334	2.845	0.356	0.584	0.000	1110	1.18	38341.6461	1110	8667	1.689	0.587	1.046	0.000	1110	1.09	38340.6953	3330
8334	2.839	0.277	0.438	0.000	1110	1.45	38399.5851	3330									
8334	2.920	0.251	0.000	0.088	1101	1.36	38515.9694	1101	8679	0.213	0.969	1.583	0.000	1110	1.45	38298.7549	1110
8334	2.819	0.279	0.000	0.234	1101	1.33	38532.9309	1101	8679	0.268	1.003	1.557	0.000	1110	1.63	38340.7005	3330
8334	2.745	0.352	0.000	0.266	1101	1.35	38533.9224	1101	8679	0.167	0.970	1.556	0.000	1110	2.22	38399.5951	3330
8334	2.968	0.201	0.000	0.040	1101	1.32	38631.6658	1101									
8383	-0.146	1.262	2.028	0.000	1110	1.17	38296.7333	1110	8684	1.402	0.598	0.864	0.000	1110	1.01	38315.6874	1110
8383	-0.108	1.157	1.938	0.000	1110	1.17	38323.6668	1110	8684	1.466	0.554	0.933	0.000	1110	1.10	38340.7058	3330
8383	-0.139	1.189	1.925	0.000	1110	1.30	38369.6250	1110									
8413	1.578	0.858	1.316	0.000	1110	1.20	38339.6600	4440	8694	1.160	0.649	0.915	0.000	1110	1.20	38315.6958	1110
8413	1.609	0.808	1.386	0.000	1110	1.13	38340.6062	3330	8694	1.263	0.625	1.056	0.000	1110	1.26	38340.7104	3330
8413	1.550	0.831	1.309	0.000	1110	1.15	38343.6268	3330	8694	1.163	0.624	1.012	0.000	1110	1.23	38361.6328	1110
									8694	1.194	0.617	0.938	0.000	1110	1.27	38369.6333	1110
8414	0.921	0.598	0.911	0.000	1110	1.19	38296.7388	1110	8698	-0.719	1.176	1.856	0.000	1110	1.31	38298.7597	1110
8414	1.034	0.431	0.711	0.000	1110	1.19	38323.6720	1110	8698	-0.688	1.089	1.742	0.000	1110	1.32	38343.6431	3330
8414	0.920	0.536	0.799	0.000	1110	1.34	38368.6025	3330									
8421	1.010	1.144	0.000	0.128	1101	1.04	39052.6196	1101	8726	0.840	1.044	0.000	0.185	1101	1.06	39041.6832	1101
8421	0.997	1.107	0.000	0.229	1101	1.05	39053.6818	1101	8726	0.842	1.004	0.000	0.276	1101	1.08	39045.7605	3303
8421	0.917	1.147	0.000	0.237	1101	1.04	39054.6706	1101									
8421	1.020	1.102	0.000	0.267	1101	1.03	39055.6508	1101									
8428	4.877	0.137	0.000	0.000	1100	1.15	38307.7037	1110	8728	1.099	0.018	-0.012	0.000	1110	2.14	38295.7573	1110
8428	4.998	0.030	0.000	0.000	1100	1.17	38309.6389	1110	8728	0.913	0.058	-0.006	0.000	1110	2.18	38316.7275	1110
									8728	0.935	0.070	0.006	0.000	1110	2.40	38368.6187	3330
									8728	0.935	0.045	-0.008	0.000	1110	2.71	38400.5561	3330
8430	2.654	0.307	0.402	0.000	1110	1.02	38296.7452	1110	8729	3.972	0.400	0.658	0.000	1110	1.02	38295.7674	1110
8430	2.624	0.406	0.514	0.000	1110	1.04	38301.7528	1110	8729	4.062	0.244	0.488	0.000	1110	1.03	38298.7726	1110
8430	2.684	0.341	0.393	0.000	1110	1.02	38323.6764	1110	8729	3.905	0.413	-2.385	0.000	1100	1.12	38368.6337	3330
									8729	3.915	0.442	0.591	0.000	1110	1.32	38398.6003	3330
8465	0.162	0.821	1.375	0.000	1110	1.11	38317.6826	1110	8729	3.906	0.467	0.000	0.278	1101	1.10	38556.9774	1101
8465	0.112	0.814	1.336	0.000	1110	1.18	38368.6085	3330	8729	4.022	0.418	0.000	0.272	1101	1.05	38637.8598	1101
8465	0.070	0.948	0.000	0.110	1101	1.35	38725.6908	1101	8729	4.101	0.311	0.000	0.087	1101	1.09	38666.8069	1101
8469	4.626	-0.005	0.074	0.000	1110	1.32	37828.8662	1110	8752	1.824	0.727	0.000	0.328	1101	1.57	38534.9224	1101
8469	4.532	0.079	0.000	0.000	1100	1.24	37832.8840	1110	8752	1.841	0.732	0.000	0.244	1101	1.14	38557.9795	1101
8469	4.625	0.036	0.000	0.389	1101	1.34	38515.9907	1101	8752	1.843	0.739	0.000	0.274	1101	1.13	38566.9560	1101
8469	4.521	0.045	0.000	0.060	1101	1.31	38532.9506	1101	8752	1.841	0.751	0.000	0.180	1101	1.22	38631.7398	1101
8469	4.441	0.144	0.000	0.282	1101	1.34	38533.9400	1101	8752	1.794	0.682	0.000	0.234	1101	1.15	38631.7757	1101
8469	4.640	-0.043	0.000	0.163	1101	1.12	38631.7910	1101	8752	1.709	0.749	0.000	0.279	1101	1.14	38744.5944	1101
8469	4.636	0.025	0.000	0.012	1101	1.12	39041.6961	1101									
8485	1.332	0.883	1.414	0.000	1110	1.02	38296.7513	1110	8775	-2.307	1.246	1.770	0.000	1110	1.01	38260.8385	3330
8485	1.297	0.888	1.385	0.000	1110	1.01	38317.6899	1110	8775	-2.320	1.157	1.841	0.000	1110	1.00	38260.8582	3330
									8775	-2.207	1.061	1.795	0.000	1110	1.04	38296.7111	1110
8498	1.059	0.793	1.348	0.000	1110	1.02	38296.7565	1110	8775	-2.079	1.011	1.691	0.000	1110	1.10	38299.6749	1110
8498	1.025	0.827	1.284	0.000	1110	1.01	38317.6957	1110	8775	-2.040	1.061	1.828	0.000	1100	1.00	38299.7464	1110
									8775	-2.249	1.118	1.814	0.000	1110	1.01	38301.7351	1110
									8775	-2.310	1.132	1.888	0.000	1110	1.02	38302.7090	1110
8499	2.039	0.563	0.908	0.000	1110	1.35	38296.7622	1110	8775	-2.162	1.094	1.747	0.000	1110	1.00	38305.7273	1110
8499	1.993	0.565	0.905	0.000	1110	1.35	38343.6379	3330	8775	-2.240	1.097	1.794	0.000	1110	1.00	38306.7419	1110
									8775	-2.266	1.106	1.821	0.000	1110	1.01	38307.7118	1110
8521	-2.126	1.446	2.981	0.000	1110	2.56	38680.5964	4440	8775	-2.199	1.127	0.000	-0.065	1110	1.24	38627.7376	1101
8521	-2.159	1.471	2.951	0.000	1110	2.41	38694.5838	4440	8775	-2.241	1.165	0.000	0.123	1101	1.03	38629.8059	1101
8521	-2.062	1.454	2.968	0.000	1110	2.37	38697.6044	4440	8775	-2.188	1.124	0.000	0.200	1101	1.12	38631.9278	1101
8538	2.055	0.605	1.011	0.000	1110	1.06	38298.7247	1110	8781	2.498	-0.007	-0.090	0.000	1110	1.05	38260.8504	3330
8538	2.088	0.618	0.990	0.000	1110	1.07	38317.7013	1110	8781	2.549	-0.028	-0.116	0.000	1110	1.15	38293.6972	1110
									8781	2.574	-0.008	-0.037	0.000	1110	1.05	38301.7404	1110
8541	4.364	0.044	0.000	0.146	1101	1.17	38666.8177	1101	8781	2.549	-0.027	-0.104	0.000	1110	1.21	38303.8312	1110
8541	4.281	0.078	0.000	0.027	1101	1.06	38670.7423	1101	8781	2.542	0.015	-0.036	0.000	1110	1.05	38305.7318	1110
8541	4.203	0.069	0.000	-0.087	1101	1.08	39034.7696	1101	8781	2.502	-0.006	0.019	0.000	1110	1.05	38306.7462	1110

TABLE 9 UB_v PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY				
B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S
2	6.25	1.11	1.02	3 2	99	2.40	1.09	0.88	6 2	193	4.50	-0.06	-0.53	3 1
3	4.61	1.01	0.87	3 1	100	3.94	0.17	0.11	6 2	194	4.75	1.00	0.83	4 1
6	5.70	0.52	0.51	6 2	101	6.19	0.91	0.55	3 2	197	5.24	0.33	.	6 2
8	6.14	0.75	0.33	4 1	105	4.81	1.64	1.80	3 2	198	5.94	0.28	.	3 2
9	6.1E	0.33	.	3 2	107	6.04	0.44	-0.06	3 2	199	6.06	0.44	.	3 2
10	6.15	0.14	.	3 2	108	6.44	0.60	.	3 2	201	6.15	1.62	2.00	3 2
11	6.43	-0.14	-0.48	3 2	109	5.43	1.56	.	6 2	202	6.15	0.53	.	6 2
12	5.94	0.14	.	3 2	112	6.21	0.84	0.55	2 1	206	6.47	0.31	.	3 2
14	6.05	1.38	1.16	3 2	113	5.94	0.61	-0.36	9 1	209	5.80	0.64	.	6 2
15	2.06	-0.11	-0.47	6 1	115	6.14	0.37	.	3 2	210	5.50	0.98	.	3 2
16	5.99	1.04	0.82	3 2	117	5.72	1.56	1.90	3 2	215	4.06	1.12	0.88	3 1
18	6.05	1.67	1.97	3 2	118	5.15	0.12	.	3 2	216	5.99	0.94	0.70	3 2
19	6.23	0.57	0.72	2 1	119	6.15	0.33	.	3 2	219	3.44	0.58	0.02	4 1
20	2.27	0.54	0.11	9 1	120	5.69	0.35	.	3 2	220	5.57	-0.06	.	3 2
23	6.33	0.74	.	6 2	123	4.75	-0.10	-0.35	3 1	221	5.93	1.10	0.99	3 2
25	3.88	1.03	0.84	6 2	124	5.60	1.15	1.12	2 1	222	5.76	0.88	0.58	4 1
27	5.04	0.40	0.25	2 1	125	4.77	0.52	0.04	6 2	224	4.44	1.51	1.87	2 1
29	5.64	0.38	0.74	3 2	126	4.37	-0.07	-0.17	3 2	226	4.53	-0.15	-0.58	7 1
30	5.28	1.35	0.92	3 2	127	4.54	0.15	0.03	3 2	229	6.27	0.90	.	6 2
31	5.66	1.31	.	3 2	130	4.15	0.14	-0.80	9 1	232	6.28	0.13	.	6 2
32	6.64	0.37	0.06	6 2	132	5.67	0.00	-0.17	3 2	235	5.20	0.50	-0.02	6 1
33	5.85	0.44	.	3 2	138	5.55	1.27	.	3 2	236	5.07	1.37	1.68	3 2
35	5.25	0.44	.	3 2	139	6.13	0.23	0.20	3 2	239	6.48	0.29	.	3 2
37	5.25	1.48	1.63	3 2	140	5.57	0.46	.	3 2	242	5.22	0.36	.	6 2
39	2.34	-0.23	-0.87	9 1	142	5.20	0.56	0.08	9 2	243	6.37	1.07	0.88	3 2
42	5.74	1.55	.	3 2	143	5.93	0.44	-0.02	3 2	244	4.82	0.53	0.12	3 1
45	4.80	1.57	1.03	9 1	148	6.06	1.01	.	3 2	245	6.90	0.35	.	3 2
46	5.12	1.62	1.81	6 2	150	6.45	1.06	0.91	3 2	248	4.78	1.57	1.92	2 1
47	5.77	1.72	2.10	3 2	151	6.06	1.29	.	6 2	252	6.22	0.56	0.08	3 2
48	4.45	1.66	1.95	2 1	153	3.66	-0.19	-0.89	4 1	253	4.84	1.22	1.27	2 1
50	5.79	0.31	0.04	3 2	154	4.16	-0.16	-0.55	2 1	255	6.16	0.92	0.54	3 2
51	5.75	-0.08	.	3 2	159	5.57	0.71	.	3 2	263	5.85	1.52	1.73	6 2
57	5.67	1.35	.	3 2	160	6.42	1.26	1.38	3 1	264	2.39	-0.10	-1.10	3 1
58	6.49	1.00	0.72	3 2	161	6.39	1.34	1.52	3 2	265	4.64	0.96	0.70	2 1
59	6.11	0.92	0.66	3 2	162	6.41	1.00	.	3 2	267	5.31	1.52	.	3 2
63	4.61	0.06	0.05	9 1	163	4.38	0.87	0.47	4 1	269	3.87	0.12	0.15	2 1
64	6.77	0.46	0.08	3 2	165	3.28	1.28	0.53	6 2	281	6.23	0.10	.	3 2
65	5.00	0.03	-1.01	3 1	166	5.86	0.85	0.57	5 1	270	5.45	1.09	1.00	3 2
66	6.45	0.37	.	3 2	168	2.23	1.17	1.13	7 1	271	4.42	0.94	0.69	6 1
67	6.17	0.94	0.73	3 2	169	6.85	0.11	0.12	2 2	276	6.52	0.90	0.58	7 1
68	4.52	0.05	0.07	6 1	171	6.01	1.92	.	6 2	280	4.27	-0.18	-0.57	2 1
72	6.46	0.68	0.29	9 1	172	6.49	0.14	0.53	6 2	284	6.11	1.67	1.91	3 2
73	6.33	0.21	.	6 2	173	6.14	0.70	0.57	5 1	285	4.26	1.21	1.33	3 1
74	3.55	0.22	1.18	2 1	174	5.91	1.10	0.89	3 2	286	6.49	0.10	0.07	5 1
77	4.23	0.58	0.02	3 2	175	5.33	0.89	0.60	7 1	288	5.59	1.18	.	3 2
80	5.37	1.34	1.55	3 2	176	5.89	0.55	.	6 2	290	5.98	0.16	0.10	6 1
83	5.51	-0.05	-0.14	3 2	179	4.81	-0.10	-0.65	3 1	293	5.50	0.08	.	3 2
84	5.18	1.00	.	3 2	180	4.59	0.97	0.72	6 2	294	4.28	0.96	0.71	4 1
87	5.97	1.40	1.40	3 2	183	5.70	0.20	.	6 2	295	6.11	0.94	.	6 2
88	6.39	0.66	.	3 2	185	6.06	-0.03	.	6 2	296	5.44	1.11	1.04	2 1
90	7.39	1.97	1.25	4 1	186	5.98	1.32	.	6 2	299	5.36	0.90	.	3 2
91	5.56	-0.11	-0.61	3 1	187	5.39	0.50	0.02	3 2	300	6.29	0.93	.	3 2
94	6.23	1.22	1.23	3 2	188	2.02	1.01	0.88	6 1	301	6.04	0.64	0.13	3 2
97	5.07	0.86	0.57	3 2	189	5.68	-0.13	-0.56	2 1	304	6.21	1.64	1.90	3 2
98	2.80	0.62	0.11	3 2	191	4.36	0.00	-0.02	6 2	307	6.00	1.51	1.85	3 2

TABLE 9 UB-V PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY									
B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S
420	5.93	1.56	1.91	3 2	527	5.91	0.97	0.74	3 2	627	6.35	0.33	-0.43	5 1	733	6.51	0.29		3 2					
423	5.77	3.83	1.02	3 2	528	6.32	1.02		6 2	635	5.63	0.56	0.14	3 2	734	6.37	-0.04	-0.05	3 2					
424	2.02	0.60	0.38	6 1	530	5.86	0.74	0.50	7 1	636	6.32	0.90		6 2	737	5.25	1.41	1.41	3 2					
426	6.20	1.12	1.07	3 2	531	4.68	0.32	0.03	7 1	637	6.12	0.82		3 2	739	5.35	1.02	0.84	3 2					
429	3.41	1.57	1.84	3 2	534	5.94	0.30	-0.03	5 1	638	6.01	0.39		3 2	740	4.75	0.45	-0.01	3 1					
431	6.58	0.30		6 2	535	6.37	0.52		3 2	639	5.93	0.97	0.70	3 2	742	6.30	1.02		3 2					
433	5.13	1.02		3 2	537	6.14	1.01		6 2	641	6.43	0.60	0.24	5 1	745	6.21	1.10		3 2					
434	4.84	1.38	1.53	4 1	539	3.72	1.14	1.06	3 1	642	5.32	0.93	0.62	2 1	749	4.89	-0.06	-0.13	2 1					
435	6.31	1.66	1.86	3 2	541	5.94	0.14		3 2	647	6.06	0.40	-0.07	4 1	751	6.18	1.06	0.88	3 2					
436	5.93	1.34		3 2	542	3.38	-0.15	-0.62	4 1	648	5.70	1.55	1.95	5 1	752	5.75	1.40	1.65	6 2					
437	3.62	0.97	0.74	9 1	544	3.42	0.48	0.06	5 1	649	4.37	0.88	0.60	2 1	753	5.82	0.97	0.80	9 1					
440	3.95	0.99	0.69	3 2	545	3.88	-0.04	-0.13	2 1	650	5.51	0.58	0.09	3 2	754	4.86	0.86	0.53	4 1					
441	5.82	1.08		3 2	547	5.80	0.27		3 2	652	5.28	-0.02		3 2	759	5.53	1.02	1.93	6 2					
442	4.72	1.00	0.76	2 1	549	4.63	0.94	0.70	3 1	654	6.48	0.28	-0.66	5 1	762	6.77	-0.06		3 2					
443	6.17	0.06	0.09	3 2	550	6.07	0.33	0.07	3 2	656	5.79	0.44	0.04	3 1	766	5.81	1.04	0.86	3 2					
444	6.59	-0.04	-0.11	3 2	553	2.65	0.13	0.10	9 1	658	6.55	-0.02	-0.07	3 2	767	5.75	1.02		3 2					
445	5.51	1.02		3 2	555	4.41	1.59	1.70	6 2	659	5.91	0.97		6 2	770	6.39	0.44	0.00	3 2					
447	6.28	0.46		3 2	557	5.67	1.06	0.91	2 1	660	4.87	0.61	0.02	4 1	771	5.65	1.02	0.85	3 2					
448	5.76	0.64	0.21	6 2	558	5.11	-0.06	-0.15	6 2	664	4.01	0.02	0.02	3 1	772	5.79	0.66		6 2					
458	4.10	0.54	0.06	8 1	560	6.01	0.56	0.04	3 2	666	5.51	0.96	0.75	3 2	775	6.21	1.00	0.76	3 2					
460	6.01	0.38		6 2	566	3.70	0.85	0.46	6 2	667	5.55	1.55	1.84	3 2	776	5.28	0.98	0.73	3 2					
461	5.56	1.38	1.43	4 1	569	4.79	0.28	0.09	3 1	672	5.56	0.61	0.09	2 1	777	5.83	0.48		3 2					
462	5.69	0.33		3 2	570	6.69	0.95	0.64	3 2	674	3.56	-0.12	-0.39	6 2	778	5.31	0.27		3 2					
464	3.57	1.28	1.44	4 1	571	6.06	0.37		3 2	678	5.69	1.30	1.48	3 2	779	4.06	-0.21	-0.88	2 1					
466	6.24	0.53	0.00	6 2	573	6.10	0.48		6 2	681	3.04	1.42	1.09	1 1	780	6.49	0.52		3 2					
467	6.11	0.97	0.70	3 2	574	4.83	0.88	0.52	6 2	683	6.34	0.73		3 2	781	4.84	0.45	-0.01	2 1					
471	5.94	1.05		3 2	575	4.54	0.16	0.06	3 1	684	6.50	0.08	0.09	6 2	783	6.25	0.40	-0.03	3 2					
472	(0.47)	-0.15		1 2	576	6.35	1.02		3 2	685	5.17	0.37	-0.11	3 1	784	5.78	0.52	0.00	3 2					
474	6.69	-0.08		3 2	580	3.98	-0.01	0.03	3 1	686	6.37	1.16		3 2	786	6.52	1.04		3 2					
477	4.94	-0.09	-0.41	2 1	582	5.88	0.62	0.19	3 2	689	5.27	1.65	1.85	3 2	788	4.92	0.59	0.14	3 2					
479	6.84	0.44		3 2	584	6.37	0.90	0.62	3 2	691	5.42	0.31	0.10	3 2	789	4.75	0.06	0.06	6 2					
483	4.96	0.62	0.11	6 1	585	4.01	1.56	1.88	3 1	692	5.20	0.60		3 2	790	5.71	0.52	-0.02	3 2					
485	5.99	1.01	0.84	4 1	587	5.51	1.52	1.33	3 2	696	6.25	0.30	-0.62	9 1	794	4.11	1.02	0.74	9 2					
486	5.07	0.88		3 2	588	5.57	1.06		3 2	698	6.31	1.00		3 2	795	6.05	1.16	1.14	3 2					
489	4.44	1.36	1.56	3 1	589	5.58	0.38	-0.27	3 1	699	4.70	1.53	1.90	3 1	797	6.30	0.06	0.06	4 1					
493	5.24	0.84	0.49	9 1	590	5.04	-0.08	-0.32	3 1	700	6.53	1.61		3 2	798	6.55	-0.08	-0.24	3 2					
494	6.17	0.42		3 2	591	2.87	0.28	0.14	3 2	701	5.92	0.22		3 2	799	4.13	0.49	0.00	5 1					
496	4.06	-0.04	-0.93	5 1	593	6.16	0.44	0.01	3 2	704	6.33	0.00	-0.14	3 2	801	4.67	-0.13	-0.63	3 1					
498	5.72	-0.01		3 2	594	5.35	0.88		3 2	705	6.09	0.03	0.05	3 2	804	3.47	0.09	0.07	9 1					
500	4.99	1.38	1.58	3 2	595	3.82	0.02	-0.09	3 1	706	6.18	0.66		3 2	805	6.01	0.92		3 2					
501	6.64	0.12	0.12	3 2	599	5.50	0.03	0.06	4 1	707	4.53	0.13	0.06	4 1	806	4.11	-0.06	-0.14	3 2					
505	5.71	1.27		4 2	600	6.10	1.17	1.21	3 2	708	4.89	-0.02	-0.05	3 1	807	6.10	0.88		6 2					
507	6.19	1.54	1.89	3 2	602	5.14	1.49	1.82	6 2	710	5.83	0.14	0.09	5 1	810	5.41	0.56		3 2					
509	3.50	0.72	0.21	9 1	603	2.10	1.21	0.92	2 1	713	5.88	1.26		3 2	811	4.25	-0.14	-0.45	4 1					
510	4.26	0.96	0.68	3 1	606	6.42	0.14		3 2	714	5.35	0.39		3 2	813	4.27	0.31	0.07	5 1					
511	5.63	0.81	0.40	3 1	607	5.43	0.15	0.12	3 2	715	5.01	1.09	1.04	3 2	814	6.36	-0.02		3 2					
512	5.87	0.61	0.10	3 2	610	5.93	0.88	0.50	3 2	718	4.29	-0.06	-0.12	9 1	816	6.03	0.31	0.09	3 2					
513	5.34	1.52	1.88	6 2	611	5.62	1.59	1.82	6 2	719	6.45	0.97	0.79	3 2	817	6.22	0.04		3 2					
514	5.31	0.39		3 2	612	4.69	-0.17	-0.51	3 1	721	4.25	-0.14	-0.50	6 2	818	4.46	0.09	-0.01	2 1					
516	6.33	0.94	0.69	3 2	614	6.31	1.65	1.82	3 2	722	6.41	1.54	1.45	3 2	821	6.15	0.48		3 2					
517	6.39	0.36		3 2	616	6.28	0.90	0.63	3 2	724	5.14	0.10		3 2	822	6.85	1.36		3 2					
519	5.49	1.59		3 2	617	2.00	1.15	1.13	9 1	725	6.07	1.02	0.85	3 2	823	6.26	0.53	0.01	3 2					
520	5.04	0.04		3 2	618	5.67	0.61	-0.02	7 1	730	6.77	0.19		3 2	824	4.52	1.11	1.03	2 1					
521	5.94	0.97	0.71	2 1	620	4.83	0.12	0.14	3 1	731	6.23	0.90	0.55	2 1	825	6.26	0.88	0.50	9 1					
525	5.69	0.94	0.66	3 2	622	3.00	0.14	0.11	4 1	732	6.00	0.17	0.17	3 2	826	6.49	0.38		3 2					

TABLE 9 UB-V PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY									
B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S
827	6.47	0.34	1.89	3 2	921	3.39	1.65	1.79	5 1	1010	5.24	0.60	0.60	3 2	1101	4.28	0.57	0.08	3 1	1111	5.96	0.92	0.66	3 2
834	3.79	1.69	0.09	2 1	925	5.26	0.20	0.09	6 2	1011	6.28	-0.07	-0.53	9 1	1104	6.75	1.04	0.17	6 2	1114	6.01	-0.02	0.66	3 2
837	4.84	0.05	0.09	3 2	926	6.05	1.04	0.85	3 2	1013	5.39	0.54	0.34	3 2	1106	4.58	1.04	0.77	6 2	1115	5.27	0.94	0.67	3 2
838	3.63	-0.10	-0.38	4 1	932	4.88	0.02	0.05	3 1	1014	6.05	0.13	0.10	3 2	1108	5.85	0.98	0.76	3 2	1116	6.23	1.04	0.89	3 2
840	4.22	0.34	0.08	5 1	934	5.11	0.34	0.05	3 2	1016	5.52	0.88	0.59	8 1	1109	5.70	0.93	0.65	3 2	1119	6.12	1.00	0.77	3 2
841	4.46	0.99	0.69	6 2	935	5.27	1.60	1.77	3 2	1017	1.79	0.48	0.38	9 1	1111	5.96	0.92	0.66	3 2	1121	5.53	-0.15	-0.57	3 2
843	4.52	1.55	1.93	4 1	936	2.12	-0.05	-0.37	8 1	1018	6.35	0.01	0.01	3 2	1114	6.01	-0.02	0.66	3 2	1122	3.01	-0.12	-0.51	9 1
844	6.14	1.07	0.12	8 1	937	4.05	0.60	0.12	8 1	1021	6.39	1.00	0.01	3 2	1115	5.57	0.94	0.67	3 2	1123	6.49	0.36	0.36	3 2
845	5.39	0.02	0.14	3 2	939	5.53	-0.14	-0.51	3 2	1023	6.38	0.86	0.51	3 2	1116	6.23	1.04	0.89	3 2	1125	6.59	0.09	0.09	3 2
850	4.77	0.90	0.61	3 1	941	3.81	0.98	0.83	3 1	1024	6.20	0.70	0.16	6 2	1119	6.12	1.00	0.77	3 2	1128	4.79	0.81	0.25	4 1
852	5.26	0.10	0.06	3 2	942	6.28	1.06	0.88	3 2	1025	5.52	0.44	0.00	6 2	1121	5.53	-0.15	-0.57	3 2	1129	3.01	-0.12	-0.51	9 1
853	6.36	0.05	0.32	3 1	943	6.19	0.16	0.28	3 2	1029	6.09	-0.07	0.40	3 1	1122	3.01	-0.12	-0.51	9 1	1132	6.14	1.01	0.74	2 1
854	3.95	0.75	0.46	3 1	946	6.02	1.28	1.28	2 1	1030	3.60	0.59	0.61	9 1	1125	6.49	0.36	0.36	3 2	1134	5.00	-0.16	-0.60	6 2
857	6.05	0.47	0.56	4 1	947	4.64	1.11	1.02	3 1	1031	4.64	1.11	1.37	6 2	1128	6.59	0.09	0.09	3 2	1135	3.77	0.42	0.32	4 1
858	6.40	0.48	0.06	3 2	949	6.33	1.43	1.64	2 1	1034	4.98	-0.10	-0.56	9 1	1129	4.79	0.81	0.25	4 1	1136	3.54	0.92	0.67	7 1
859	6.32	0.19	0.12	6 2	951	4.37	1.03	0.86	3 1	1035	4.21	0.41	-0.24	7 1	1131	3.83	0.05	-0.75	9 1	1138	5.44	0.09	0.12	2 1
862	5.95	1.04	0.32	3 2	953	6.38	0.93	0.62	6 2	1037	5.58	-0.04	-0.44	9 1	1132	6.14	1.01	0.74	2 1	1139	5.59	0.23	0.33	3 2
863	5.92	0.44	0.44	3 2	955	5.45	1.66	1.93	3 2	1038	3.75	-0.09	-0.33	6 1	1134	5.00	-0.16	-0.60	6 2	1140	5.46	-0.04	-0.33	8 1
866	6.03	1.25	0.62	6 2	957	6.26	1.20	1.04	3 2	1040	4.54	0.56	-0.11	9 1	1135	3.77	0.42	0.32	4 1	1142	3.70	-0.12	-0.40	6 2
870	5.97	0.48	0.06	3 2	958	5.56	1.08	0.64	3 2	1042	6.39	0.08	0.06	3 2	1136	3.54	0.92	0.67	7 1	1143	4.59	1.20	1.31	6 2
872	4.75	1.33	1.56	3 2	959	6.15	1.02	0.83	3 2	1044	4.67	-0.09	-0.57	9 1	1138	5.44	0.09	0.12	2 1	1144	5.65	-0.07	-0.36	8 1
874	3.67	1.12	0.99	3 1	960	6.12	1.12	0.83	3 2	1045	5.93	0.94	0.06	9 1	1139	5.59	0.23	0.33	3 2	1145	4.30	-0.11	-0.46	7 1
875	5.17	0.08	0.05	9 1	961	5.45	0.19	0.11	1 1	1046	5.10	0.94	0.06	9 1	1140	5.46	-0.04	-0.33	8 1	1146	5.25	-0.10	-0.39	3 2
877	6.11	1.69	1.80	3 2	962	5.06	0.57	0.12	3 2	1047	6.24	0.48	0.25	3 2	1142	3.70	-0.12	-0.40	6 2	1148	4.66	0.03	0.07	4 1
878	5.80	0.41	0.01	3 1	963	3.85	0.51	0.05	2 1	1049	6.32	0.06	0.06	6 2	1143	4.59	1.20	1.31	6 2	1149	3.87	-0.07	-0.40	7 1
879	4.70	0.06	0.12	2 1	965	5.61	0.92	0.49	2 1	1051	5.82	-0.04	-0.31	8 1	1144	5.65	-0.07	-0.36	8 1	1150	5.55	1.42	1.72	3 2
880	6.56	1.39	1.59	3 2	968	5.93	0.44	0.49	3 2	1052	4.38	1.34	1.53	3 1	1145	4.30	-0.11	-0.46	7 1	1151	5.76	-0.04	-0.23	5 1
882	4.94	1.25	1.28	2 1	970	6.27	-0.08	0.01	3 2	1053	6.15	0.48	0.25	3 2	1146	5.25	-0.10	-0.39	3 2	1152	6.43	-0.02	-0.15	7 1
883	5.45	0.23	0.09	3 2	972	4.89	-0.02	-0.01	3 1	1054	5.71	1.29	0.06	6 2	1147	5.35	-0.11	-0.61	3 2	1153	5.35	-0.11	-0.61	3 2
887	4.63	0.04	0.08	4 1	974	6.16	1.05	0.05	3 2	1058	6.50	0.13	0.06	3 2	1149	3.87	-0.07	-0.40	7 1	1154	6.29	1.15	1.03	3 2
889	5.84	1.33	0.12	2 1	977	5.74	2.27	0.49	2 1	1060	5.99	1.02	0.87	3 2	1150	5.55	1.42	1.72	3 2	1155	4.48	1.88	2.13	4 1
890	5.28	-0.05	-0.45	3 1	980	6.25	0.04	0.09	3 2	1062	5.59	0.18	0.06	3 2	1151	5.76	-0.04	-0.23	5 1	1156	4.18	-0.06	-0.42	6 1
891	6.74	0.00	-0.15	3 1	981	5.57	0.30	0.09	3 2	1063	5.47	-0.10	-0.56	8 1	1152	6.43	-0.02	-0.15	7 1	1157	6.49	1.06	0.75	3 2
892	5.23	0.00	0.04	3 2	982	5.47	-0.06	-0.34	5 1	1064	5.96	0.42	0.01	3 2	1153	5.91	1.00	0.75	3 2	1159	5.91	1.00	0.75	3 2
893	6.41	-0.03	0.08	3 2	983	6.17	-0.02	-0.25	6 2	1066	4.10	1.13	1.02	3 1	1154	4.42	1.62	2.01	3 1	1162	4.42	1.62	2.01	3 1
895	6.15	0.22	0.45	3 2	984	4.80	0.23	0.08	3 1	1067	5.94	0.96	0.93	3 2	1155	4.48	1.88	2.13	4 1	1163	6.57	0.08	-0.61	6 1
896	4.70	-0.12	-0.45	3 1	985	4.85	-0.15	-0.78	3 1	1069	5.32	0.41	-0.02	4 1	1156	4.18	-0.06	-0.42	6 1	1165	2.87	-0.09	-0.35	9 1
897	2.91	0.12	0.12	6 2	987	5.15	-0.06	-0.56	9 1	1070	4.73	-0.09	-0.26	3 1	1157	6.45	1.06	0.75	3 2	1166	6.49	1.02	0.32	9 1
899	5.56	-0.08	-0.19	3 2	988	6.14	0.40	-0.04	6 2	1072	6.40	0.03	-0.73	3 1	1159	5.91	1.00	0.75	3 2	1167	6.49	1.02	0.32	9 1
900	6.14	1.04	0.08	3 2	989	5.03	-0.06	-0.53	5 1	1074	5.90	-0.06	-0.86	6 1	1160	5.30	1.04	1.10	6 2	1168	5.70	1.04	1.10	6 2
901	5.71	C.40	0.08	3 2	990	6.55	-0.07	0.06	3 2	1075	5.78	0.22	0.06	6 1	1162	4.42	1.62	2.01	3 1	1169	6.30	0.96	0.36	7 1
903	6.31	C.00	0.15	3 2	991	4.82	1.49	1.56	2 1	1076	6.78	0.48	0.30	3 2	1163	6.57	0.08	-0.61	6 1	1171	5.90	0.12	0.12	3 2
904	6.11	1.77	2.07	3 2	992	5.37	1.04	0.81	2 1	1079	5.77	-0.08	-0.30	3 2	1165	2.87	-0.09	-0.35	9 1	1172	5.45	-0.07	-0.32	9 1
906	5.95	0.15	0.09	4 1	993	5.91	0.33	0.06	3 2	1081	5.99	0.11	0.06	3 2	1167	6.49	1.02	0.32	9 1	1173	4.23	0.42	0.42	3 1
907	5.75	1.05	0.87	6 2	994	4.88	0.90	0.07	3 1	1082	6.38	0.12	0.06	3 2	1168	5.70	1.04	1.10	6 2	1175	3.85	1.13	1.10	6 2
908	6.25	1.05	0.82	3 2	996	4.84	0.68	0.19	9 1	1083	4.71	0.39	-0.04	6 2	1171	5.90	0.12	0.12	3 2	1178	3.62	-0.09	-0.36	7 1
909	4.99	0.13	0.15	3 2	997	5.71	0.37	0.06	3 2	1084	3.73	0.88	0.58	9 1	1172	5.85	-0.07	-0.32	9 1	1179	6.59	0.49	0.28	3 2
910	5.62	-0.10	-0.41	3 2	998	5.85	1.24	0.06	3 2	1087	4.23	-0.06	-0.56	9 1	1173	4.23	0.42	0.42	3 1	1180	5.09	-0.08	-0.28	8 1
911	2.53	1.64	1.93	6 1	999	4.47	1.54	1.77	3 1	1088	4.28	-0.12	-0.35	3 1	1174	3.85	1.13	1.10	6 2	1181	5.24	1.07	1.31	3 2
912	5.83	1.11	0.07	3 2	1002	4.95	0.04	0.07	3 1	1089	6.49	0.63	0.16	3 2	1175	3.62	-0.09	-0.36	7 1	1182	5.91	1.24	1.31	3 2
913	6.19	0.60	0.15	3 2	1003	3.70	1.62	1.81	3 1	1091	6.25	0.02	0.06	3 2	1178	3.62	-0.09	-0.36	7 1	1183	6.17	-0.05	-0.19	4 1
914	5.89	0.79	0.45	3 2	1004	5.61	1.66	0.06	3 2	1092	5.83	-0.06	-0.33	3 2	1179	6.59	0.49	0.28	3 2	1184	5.09	-0.08	-0.28	8 1
915	2.93	0.70	0.45	6 1	1006	5.54	0.64	0.06	3 2	1093	6.20	0.06	0.46	3 2	1180	5.24	1.07	1.31	3 2	1185	5.91	1.24	1.31	3 2
917	5.32	0.94	0.73	3 2	1007	5.69	0.97	0.76	3 2	1099	5.71	0.92	0.46	3 2	1181	5.91	1.24	1.31	3 2	1186	6.17			

TABLE 9 UB_v PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY				
B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S
1184	5.54	0.98		3 2	1267	6.13	1.16		3 2	1357	6.37	0.08		3 2
1185	6.07	-0.01	-0.32	2 1	1271	6.41	-0.01	-0.10	3 2	1358	6.17	0.46	0.02	2 1
1186	6.21	0.10		3 2	1272	6.26	0.06	0.09	6 2	1359	6.37	0.13		6 2
1187	5.81	1.64		3 2	1273	4.03	-0.03	-0.55	7 1	1360	5.77	0.92	0.68	3 2
1189	4.27	-0.31	-0.64	6 2	1274	6.34	0.92		3 2	1361	6.53	0.15	0.11	3 2
1191	5.77	0.00	-0.81	6 1	1275	5.58	0.32		3 2	1362	6.27	0.91	0.56	3 2
1193	4.97	0.50	-0.84	3 1	1277	6.09	0.95	0.75	2 1	1363	5.85	-0.13	-0.49	6 2
1195	4.17	0.95	0.69	6 2	1279	6.01	0.40	0.02	3 1	1364	5.34	1.08	0.94	3 2
1199	5.67	0.56	-0.43	3 2	1285	6.59	0.93	0.60	3 2	1365	6.09	0.49		6 2
1200	6.86	-0.34		3 2	1290	5.44	0.94	0.67	3 2	1366	5.86	1.32	1.52	3 2
1201	5.97	0.34	0.00	6 1	1291	6.59	0.37	-0.01	3 2	1368	5.72	0.32	0.10	2 1
1202	5.48	-0.10	-0.41	6 2	1292	5.73	0.36	0.00	3 1	1373	3.76	0.99	0.82	9 1
1203	2.85	0.12	-0.78	8 1	1293	5.70	1.06	0.93	3 2	1374	5.96	0.35		3 2
1204	5.04	-0.16		2 1	1294	6.38	0.64	0.11	9 2	1376	5.64	0.30	0.14	2 1
1206	6.22	0.88		3 2	1298	4.05	0.33	0.14	3 1	1380	4.80	0.15	0.12	5 1
1208	3.25	1.62	1.98	3 2	1299	6.44	1.07		6 2	1381	5.12	0.07	0.11	4 1
1209	6.10	0.59	-0.81	9 1	1300	5.79	0.18		3 2	1383	5.17	0.08	0.08	3 1
1210	5.28	0.41	0.00	1 1	1302	4.93	0.33	0.07	3 2	1384	5.83	1.51		3 2
1211	4.45	0.68	0.42	3 1	1303	4.15	0.95	0.64	4 1	1385	5.97	0.37	0.05	2 1
1213	4.65	-0.13	-0.48	3 1	1304	5.46	0.87	0.46	2 1	1386	6.39	1.24		6 2
1214	5.11	-0.13		3 2	1306	4.71	1.01	0.65	3 1	1387	4.22	0.13	0.14	6 1
1215	5.69	-0.03	-0.75	6 1	1307	6.23	0.05	-0.34	3 2	1388	5.28	0.25	0.10	4 1
1216	5.94	1.23	1.35	3 2	1308	6.51	0.16	0.12	3 2	1389	4.28	0.04	0.08	4 1
1217	6.00	0.32		3 2	1309	5.29	0.36	0.00	3 1	1391	6.46	0.49	0.02	2 1
1219	5.71	0.60		6 2	1311	4.84	0.80	0.51	4 1	1392	4.28	0.26	0.15	7 1
1220	2.89	-0.18	-1.00	8 1	1312	6.45	-0.13	-0.56	3 2	1393	3.96	1.49	1.80	6 2
1224	6.09	0.06	0.05	3 2	1315	5.52	-0.10	-0.34	3 2	1394	4.50	0.25	0.14	4 1
1225	6.19	0.28		3 2	1316	6.71	1.47	1.80	3 2	1396	4.69	0.98	0.72	3 1
1227	6.46	0.16		3 2	1318	4.86	1.18	1.15	4 1	1397	6.05	0.02	-0.42	3 2
1228	4.04	0.02	-0.92	9 1	1319	6.32	0.40	0.02	2 1	1398	6.55	0.44		3 2
1231	2.94	1.60	1.98	6 1	1320	4.30	-0.05	-0.51	2 1	1400	6.23	1.09	1.03	3 2
1232	5.83	1.00	0.85	3 2	1321	6.93	0.70	0.22	3 2	1403	5.72	0.27	0.10	3 1
1233	6.37	0.82	0.00	4 1	1322	6.30	0.59	0.05	3 2	1404	6.39	0.44		3 2
1238	5.89	0.32	0.04	2 1	1323	6.37	1.46		6 2	1405	6.28	0.66		6 2
1239	3.41	-0.12	-0.63	3 1	1324	4.61	0.04	0.03	9 1	1408	5.90	0.32	0.06	3 1
1240	4.66	-0.14	-0.41	3 1	1325	4.43	0.82	0.44	9 1	1409	3.54	1.01	0.87	9 1
1242	5.08	0.50	0.49	3 1	1326	3.86	1.10	1.00	3 2	1410	6.11	0.14		6 2
1243	5.67	0.02	-0.41	3 2	1327	5.27	0.81	0.47	6 1	1411	3.83	0.95	0.71	9 1
1244	5.28	-0.15	-0.55	3 2	1329	4.94	0.26	0.11	3 1	1412	3.39	0.18	0.12	9 1
1245	6.05	0.44		3 2	1330	5.45	0.22	0.12	6 1	1413	6.15	1.02	0.81	3 2
1246	5.93	0.04		6 2	1331	5.65	0.28	0.08	3 1	1414	5.03	0.23	0.12	3 1
1247	4.56	1.62	1.95	3 2	1332	5.94	1.08	0.94	3 2	1415	5.55	-0.10	-0.55	3 2
1249	5.38	0.50	0.50	4 1	1334	6.54	0.16	0.17	3 2	1416	5.95	1.54		3 2
1250	6.51	1.64		6 2	1336	3.55	0.91	0.62	3 2	1418	6.10	0.46		6 2
1251	3.91	0.03	0.06	3 1	1338	4.25	0.30	0.03	3 2	1421	5.96	1.22		3 2
1253	5.33	-0.08	-0.56	3 2	1340	5.45	1.10		3 2	1422	5.58	0.32	0.10	3 1
1254	4.46	0.36	0.00	3 1	1346	3.65	0.99	0.81	9 1	1423	5.60	-0.23		3 2
1256	4.37	1.07	0.95	3 1	1347	3.56	-0.12	-0.37	6 2	1426	5.69	0.84	0.53	3 2
1257	5.36	0.50	0.04	3 2	1349	6.31	1.43	1.60	3 2	1427	4.78	0.17	0.13	5 1
1258	6.46	-0.18		6 2	1350	4.86	-0.02	-0.53	2 1	1428	5.48	0.26	0.10	3 1
1261	4.29	0.02	-0.03	3 1	1351	5.59	0.28	0.08	2 1	1429	6.45	1.64		6 2
1262	5.90	0.82	0.12	4 1	1353	6.07	0.30		3 2	1430	5.41	0.26	0.10	4 1
1263	6.39	1.26		3 2	1354	6.11	0.37	0.03	2 1	1431	6.24	1.00		3 2
1264	4.51	1.64	1.80	3 2	1355	4.44	1.08	1.07	6 2	1432	6.02	0.34	0.04	3 1
1266	4.97	1.42	1.70	6 2	1356	5.26	0.22	0.10	2 1	1433	6.16	1.06		3 2

TABLE 9 UVB PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY									
B.S.*	V	B-V	U-B	WT S	B.S.*	V	B-V	U-B	WT S	B.S.*	V	B-V	U-B	WT S					
1524	6.86	0.90	.	3 2	1612	3.75	1.22	0.38	9 1	1701	6.09	0.42	0.28	3 2					
1525	6.19	0.15	.	3 2	6.32	0.28	0.04	3 2	1702	3.29	-0.11	-0.39	4 1	1797	6.82	1.04	.	6 2	
1526	6.05	1.07	.	6 2	1613	6.21	1.06	1.00	4 1	1703	6.22	1.46	1.34	3 2	1799	5.61	1.56	.	3 2
1531	6.05	1.10	0.95	6 2	1617	4.81	-0.19	-0.75	2 1	1704	6.37	-0.13	-0.54	3 2	1800	6.57	-0.05	-0.18	3 2
1532	5.51	0.64	.	3 2	1618	5.92	1.27	1.39	3 2	1705	4.36	-0.10	-0.34	3 1	1801	6.11	-0.10	-0.18	3 2
1533	6.03	1.19	1.14	3 2	1619	6.24	-0.04	-0.40	3 2	1708	0.08	0.80	0.45	6 1	1803	6.16	-0.18	-0.75	3 1
1536	5.78	0.62	0.20	9 2	1620	4.64	0.16	0.15	5 1	1709	5.50	1.37	1.55	3 2	1806	6.23	-0.05	-0.24	2 1
1538	5.77	0.55	.	3 2	1621	4.92	-0.05	-0.14	3 1	1710	6.21	0.37	.	3 2	1807	6.42	-0.03	-0.03	3 2
1539	6.37	1.07	.	6 2	1625	5.85	1.21	1.36	3 2	1713	0.13	-0.03	-0.65	6 3 1	1811	4.89	-0.14	-0.77	3 1
1540	6.46	1.08	.	3 2	1628	5.02	1.07	0.97	6 2	1716	5.85	0.93	0.64	3 2	1812	5.65	0.44	.	3 2
1541	5.54	-0.12	-0.46	3 2	1629	5.47	1.52	1.82	3 2	1717	6.15	0.39	-0.03	3 2	1815	6.51	1.11	1.00	3 2
1542	4.25	0.43	-0.88	3 1	1631	6.03	0.88	.	3 2	1721	5.76	1.01	.	6 2	1820	6.44	-0.17	-0.75	2 1
1543	3.15	0.45	-0.01	9 1	1634	5.75	1.20	.	3 2	1723	5.07	-0.10	.	3 2	1823	6.07	1.04	.	3 2
1544	4.35	0.61	0.03	2 1	1635	5.94	1.17	1.34	3 2	1724	6.42	-0.02	0.02	2 1	1826	6.39	-0.01	-0.06	3 1
1545	6.26	0.44	.	6 2	1637	5.00	0.34	-0.01	3 1	1726	4.54	1.27	1.27	3 1	1827	5.87	0.23	.	3 2
1547	5.11	0.21	0.12	3 1	1638	4.68	0.05	-0.10	3 1	1727	6.05	1.39	.	3 2	1829	2.84	0.82	0.47	4 1
1548	6.72	0.95	.	3 2	1640	6.41	-0.18	0.44	3 2	1729	4.71	0.62	0.13	5 1	1830	5.78	1.15	0.99	4 1
1551	4.77	1.41	1.58	3 1	1641	2.18	-0.18	-0.67	9 1	1730	6.66	0.15	.	6 2	1833	5.78	-0.20	-0.84	4 1
1552	3.63	-0.16	-0.81	9 1	1645	5.61	0.10	.	3 2	1735	3.59	-0.12	-0.46	3 1	1834	4.71	1.57	1.85	9 2
1553	6.11	0.48	-0.44	3 2	1646	6.05	-0.11	-0.53	3 2	1737	5.51	0.93	.	3 2	1835	5.57	0.02	.	3 2
1557	6.07	0.57	.	6 2	1648	6.17	3.44	.	5 2	1740	5.03	0.27	0.44	2 1	1836	5.14	1.00	.	3 2
1559	5.86	0.08	.	3 2	1649	5.39	0.42	.	3 2	1742	6.49	1.21	.	9 2	1837	6.21	1.27	1.38	3 2
1560	4.40	0.23	0.18	3 1	1651	6.31	0.53	.	3 2	1743	4.83	1.00	0.79	6 2	1839	4.20	-0.13	-0.56	6 1
1562	5.33	1.64	1.93	3 2	1652	4.55	1.20	1.20	6 2	1744	(4.82)	1.29	.	1 2	1840	6.32	-0.19	-0.84	3 1
1563	5.23	0.33	.	6 2	1653	6.34	0.30	.	3 2	1746	5.34	0.41	0.08	4 2	1842	5.46	-0.17	-0.83	3 1
1565	6.61	0.74	0.00	3 2	1654	3.19	1.46	1.77	6 1	1747	5.96	0.58	.	3 2	1843	4.77	0.35	-0.44	2 1
1566	6.37	0.29	0.06	2 1	1655	5.73	1.17	.	6 2	1748	6.35	-0.11	-0.75	3 1	1845	4.35	2.06	2.21	3 1
1567	3.73	-0.19	-0.82	3 1	1657	5.14	-0.06	-0.18	2 1	1756	4.29	-0.25	-1.01	2 1	1848	6.21	-0.18	-0.74	2 1
1568	4.47	-0.02	-0.02	6 1	1662	6.17	0.62	0.09	3 2	1758	5.99	-0.04	.	3 2	1849	5.55	0.00	.	3 2
1570	4.67	0.08	0.09	3 1	1663	5.01	1.46	.	3 2	1759	6.39	-0.03	-0.36	3 2	1852	2.24	-0.22	-1.06	8 1
1571	5.33	1.22	1.18	3 2	1664	5.34	0.32	0.11	2 1	1761	6.65	-0.08	-0.45	2 1	1855	4.62	-0.26	-1.07	9 1
1572	6.06	1.57	1.83	2 1	1665	5.97	0.60	.	3 2	1762	4.71	-0.05	-0.40	2 1	1856	5.46	0.62	.	6 2
1573	5.41	-0.44	-0.44	3 1	1666	2.79	0.13	0.10	9 1	1763	5.80	-0.13	-0.88	3 1	1859	6.03	0.34	0.03	3 2
1574	5.39	-0.12	-0.56	3 2	1670	6.01	0.27	0.04	2 1	1764	5.69	0.11	-0.66	3 1	1861	5.35	-0.19	-0.93	9 1
1577	2.59	1.53	1.78	5 1	1671	5.78	-0.06	-0.36	3 2	1765	4.74	-0.16	-0.79	7 1	1862	3.87	1.14	1.08	6 2
1578	6.50	0.02	-0.01	3 2	1672	5.43	0.24	0.14	2 1	1766	6.34	0.33	.	3 2	1863	6.53	-0.10	-0.65	2 1
1579	5.70	0.96	.	3 2	1673	5.12	0.44	-0.05	2 2	1767	5.45	0.51	.	3 2	1865	2.57	0.20	0.25	5 1
1580	4.06	1.15	1.10	3 1	1674	4.72	0.52	-0.04	6 2	1770	5.00	-0.15	-0.87	5 1	1867	6.59	1.53	.	3 2
1581	5.72	0.88	.	3 2	1676	4.82	0.32	0.19	4 1	1772	6.11	-0.19	.	3 2	1868	5.34	-0.18	-0.90	8 1
1582	5.51	-0.13	-0.56	3 2	1677	5.31	1.00	0.77	3 2	1777	6.35	0.12	0.09	3 2	1870	5.86	1.35	.	3 2
1583	6.72	0.27	.	3 2	1679	4.27	-0.20	-0.90	3 1	1778	5.99	-0.03	-0.36	6 2	1871	6.58	-0.16	-0.80	4 1
1584	6.10	1.42	.	3 2	1680	6.52	1.08	.	3 2	1781	5.70	-0.21	-0.88	9 1	1872	5.36	0.05	0.07	3 1
1591	6.23	0.42	0.06	3 2	1681	6.10	1.10	1.07	3 2	1782	6.11	0.51	0.02	3 2	1873	6.20	-0.16	-0.81	3 1
1592	4.95	0.05	0.01	3 1	1682	6.29	1.51	1.87	3 2	1783	5.25	-0.21	.	3 2	1874	5.93	1.55	1.87	3 2
1595	6.15	-0.21	.	3 2	1685	6.25	0.98	0.81	3 2	1784	4.12	0.96	0.70	2 1	1876	4.41	-0.15	-0.98	3 1
1596	6.35	0.10	0.11	3 2	1687	5.90	0.46	0.04	3 2	1785	6.49	0.50	.	3 2	1877	5.48	1.22	.	3 2
1597	6.12	0.44	.	3 2	1689	4.88	0.18	0.10	3 1	1786	6.32	-0.15	-0.63	3 1	1879	3.59	-0.19	-1.03	5 1
1598	6.41	1.63	1.96	6 2	1690	6.67	-0.07	-0.34	3 1	1787	5.09	0.96	0.68	3 2	1882	6.19	0.22	0.16	3 2
1601	4.49	1.40	1.57	3 1	1691	5.89	0.66	0.29	3 2	1788	3.35	-0.17	-0.93	6 1	1886	5.67	-0.24	-0.91	3 1
1603	4.03	0.93	0.63	3 1	1694	6.41	1.25	.	6 2	1789	4.96	-0.20	-0.92	5 1	1887	4.79	-0.25	-1.02	5 1
1604	5.67	0.44	.	3 2	1696	4.44	-0.09	-0.40	3 1	1790	1.64	-0.22	-0.88	9 1	1890	6.57	-0.13	-0.76	3 1
1605	2.99	0.54	0.33	9 1	1697	5.91	0.96	0.72	6 2	1791	1.65	-0.13	-0.49	9 1	1891	6.25	-0.15	-0.70	2 1
1606	6.28	0.52	0.01	6 2	1698	4.45	1.19	1.14	4 1	1792	5.65	0.00	.	3 2	1892	4.59	-0.19	-0.94	6 1
1609	6.07	-0.07	-0.28	3 2	1699	6.57	1.62	.	6 2	1793	5.71	1.62	.	3 2	1893	6.72	0.00	-0.87	2 1
1611	4.78	0.26	0.17	3 1	1700	6.27	-0.01	0.01	3 2	1794	6.15	1.45	1.68	9 1	1895	5.13	0.00	-0.95	4 1

TABLE 9 UBV PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY						BRIGHT STAR PHOTOMETRY						BRIGHT STAR PHOTOMETRY					
B.S.	V	B-V	U-B	WT	S	B.S.	V	B-V	U-B	WT	S	B.S.	V	B-V	U-B	WT	S
1896	6.70	0.08	-0.82	3	1	1893	3.60	0.47	0.01	7	1	2073	6.36	0.86	0.57	3	2
1897	5.08	-0.11	-0.94	9	1	1894	6.39	0.29	0.81	6	2	2074	6.02	0.39	-0.20	3	1
1898	6.31	-0.13	-0.71	3	1	1896	6.25	1.03	0.81	6	2	2075	5.99	-0.07	-0.15	3	2
1899	2.77	-0.24	-1.07	9	1	1897	5.79	0.88	0.58	3	2	2077	3.72	0.99	0.91	5	1
1900	6.40	-0.12	-0.64	3	1	1898	5.95	0.78	0.41	3	2	2083	6.52	0.90	.	6	2
1901	5.27	0.23	0.17	3	1	1991	6.05	-0.02	-0.33	3	2	2084	4.82	-0.06	-0.93	6	1
1903	1.69	-0.18	-1.03	9	1	1995	4.53	0.94	0.70	7	1	2085	3.72	0.33	0.01	7	1
1905	5.54	0.22	0.10	2	1	1996	5.17	-0.28	.	3	2	2087	4.97	1.11	.	3	2
1906	6.50	-0.16	-0.82	1	1	1998	5.55	0.10	0.07	9	1	2088	1.90	0.03	0.05	6	1
1907	4.09	0.95	0.66	4	1	1999	3.27	0.23	0.17	3	2	2089	6.10	-0.13	.	3	2
1908	5.90	1.60	1.93	2	1	2001	6.03	0.16	.	3	2	2091	4.25	1.72	1.83	3	1
1909	5.78	1.12	0.85	6	2	2004	2.05	-0.18	-1.02	6	1	2093	6.22	1.48	1.84	3	2
1910	3.03	-0.19	-0.62	4	1	2007	5.97	0.64	0.10	3	2	2094	5.29	0.31	.	3	2
1911	5.74	-0.22	-0.91	2	1	2008	5.31	1.04	.	3	2	2095	2.62	-0.08	-0.18	3	1
1912	6.43	0.55	.	3	2	2009	6.32	1.18	.	3	2	2097	6.22	1.14	1.20	3	2
1913	6.12	-0.17	-0.82	3	2	2010	4.91	-0.07	-0.16	9	1	2098	6.44	1.07	.	6	2
1917	5.34	1.04	0.85	6	2	2011	4.74	1.62	1.93	3	1	2100	5.89	0.22	0.16	3	2
1918	6.06	-0.21	-0.92	2	1	2012	3.97	1.14	1.09	2	1	2102	4.65	1.05	0.96	6	2
1919	6.11	0.05	.	3	2	2014	5.80	0.87	0.62	3	2	2103	5.22	0.01	0.01	3	2
1920	5.88	-0.07	-0.37	3	2	2015	4.35	0.21	0.12	3	2	2104	6.63	0.38	0.10	3	2
1923	6.19	-0.04	-0.72	3	2	2018	6.25	1.75	2.02	4	1	2105	4.36	-0.18	-0.66	6	2
1925	6.23	0.84	0.51	3	1	2019	5.97	1.36	1.57	3	2	2107	6.11	0.29	0.10	3	2
1927	6.11	1.16	.	6	2	2020	3.85	0.17	0.10	6	2	2108	5.04	0.19	0.16	6	2
1931	3.80	-0.24	-1.01	6	1	2021	5.49	0.88	.	3	2	2109	6.63	-0.07	-0.39	3	1
1933	5.96	-0.23	-0.91	3	2	2022	5.65	0.60	0.11	6	2	2111	6.05	0.25	-0.26	3	1
1934	4.59	-0.11	-0.76	5	1	2023	6.18	1.40	.	3	2	2113	4.52	1.22	1.21	3	1
1935	5.31	0.46	0.10	2	1	2024	5.98	0.91	0.30	3	2	2114	6.45	1.48	.	3	2
1936	6.32	0.85	.	6	2	2026	5.87	0.06	.	6	2	2118	6.22	0.36	.	6	2
1937	4.81	0.13	0.10	5	1	2029	5.00	0.05	0.12	2	1	2119	6.10	0.97	0.78	2	1
1938	6.04	0.05	-0.21	9	1	2031	5.35	-0.20	-0.83	6	2	2120	3.96	1.14	1.08	6	2
1940	6.00	0.27	0.01	3	2	2034	4.59	-0.02	0.03	4	1	2124	4.13	0.16	0.11	6	1
1942	6.49	-0.10	-0.47	3	1	2035	3.85	0.98	0.71	2	1	2125	5.47	-0.08	-0.24	3	2
1946	4.86	-0.12	-0.64	3	1	2036	6.17	1.02	.	3	2	2127	6.59	-0.05	-0.27	3	2
1948	1.77	-0.21	-1.06	7	1	2037	4.78	1.38	1.46	6	2	2128	4.94	-0.12	-0.58	3	1
1950	6.22	-0.20	-0.87	3	2	2039	5.97	0.10	0.08	3	2	2129	6.05	0.02	.	3	2
1952	4.95	-0.21	-0.83	6	2	2040	3.12	1.16	1.21	6	2	2131	5.55	1.58	.	3	2
1953	5.19	1.13	1.18	3	2	2042	4.51	1.10	0.98	6	2	2134	4.15	0.87	0.52	2	1
1955	5.93	0.30	0.04	3	2	2043	6.45	1.48	.	3	2	2135	4.63	0.28	-0.68	6	1
1956	2.64	-0.12	-0.46	6	2	2044	6.35	0.76	.	3	2	2136	6.20	0.96	.	3	2
1958	5.45	0.92	.	6	2	2047	4.41	0.59	0.07	9	1	2138	5.67	0.20	.	3	2
1959	6.42	0.30	0.07	3	2	2049	5.17	0.99	0.72	6	2	2140	5.05	1.34	.	3	2
1960	6.31	-0.07	-0.15	3	2	2051	6.31	1.29	1.47	3	2	2142	5.21	-0.06	-0.85	3	2
1962	6.21	-0.13	.	3	2	2056	4.87	-0.15	-0.56	6	2	2144	5.67	1.04	0.82	3	2
1963	4.90	1.17	1.06	5	1	2057	6.01	1.34	1.44	3	2	2145	5.63	1.04	0.74	3	2
1964	5.79	1.71	1.83	6	2	2058	6.57	-0.18	-0.81	3	2	2148	4.93	0.24	.	3	2
1967	5.97	0.44	-0.02	3	2	2059	6.20	-0.02	-0.11	3	2	2149	5.65	-0.19	.	3	2
1968	5.87	0.11	.	3	2	2061	0.42	1.84	2.11	5	1	2150	5.87	0.36	.	3	2
1970	6.31	1.47	1.76	3	2	2062	6.53	1.08	0.97	3	2	2153	6.36	1.05	0.82	2	1
1971	5.47	0.03	0.07	3	1	2064	5.11	-0.14	-0.49	3	2	2154	5.38	-0.13	-0.54	6	2
1972	6.19	0.01	.	3	2	2065	5.66	1.53	1.84	2	1	2155	4.67	0.05	0.00	3	1
1975	5.73	-0.01	.	3	2	2067	6.60	0.65	0.13	4	1	2157	6.35	0.52	.	6	2
1977	6.96	3.03	.	4	2	2068	6.36	0.37	.	3	2	2158	5.93	0.46	.	6	2
1978	6.09	0.31	0.09	3	2	2070	5.87	1.18	1.21	3	2	2159	4.42	-0.15	-0.67	2	1
1980	6.34	0.58	.	6	2	2071	6.28	0.06	0.07	3	2	2160	5.80	0.02	.	3	2
1982	6.15	0.94	0.74	3	1	2072	5.94	0.66	.	3	2	2161	6.66	-0.15	.	3	2

TABLE 9 UBV PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY									
B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S
2256	4.37	1.00	0.83	6 2	2341	6.51	1.70	. . .	3 2	2440	6.14	1.48	1.77	3 2	2538	3.95	-0.23	-0.93	2 1
2259	6.24	0.87	0.52	3 2	2343	4.14	-0.14	-0.49	3 1	2441	6.57	-0.07	-0.33	3 2	2540	3.60	0.10	0.14	6 1
2260	5.14	1.30	. . .	3 2	2344	5.05	0.18	-0.76	3 1	2442	6.21	0.05	-0.82	3 2	2543	6.38	0.04	0.09	3 2
2261	5.09	0.72	0.33	6 2	2345	5.80	0.00	. . .	3 2	2443	4.42	1.15	1.04	6 1	2546	6.55	1.51	1.82	3 2
2262	6.00	0.16	. . .	3 2	2347	6.48	-0.07	-0.16	3 2	2447	5.28	1.18	. . .	3 2	2548	5.14	0.44	-0.03	3 2
2264	5.36	0.45	0.12	4 1	2348	5.76	-0.06	-0.17	3 2	2450	4.81	1.49	1.68	2 1	2549	4.99	1.38	. . .	3 2
2267	5.36	1.24	1.32	3 2	2349	6.07	0.54	. . .	3 2	2451	3.17	-0.11	-0.41	3 2	2550	3.27	0.21	0.13	6 2
2268	6.07	1.66	. . .	3 2	2352	5.56	1.51	1.82	3 2	2454	6.51	-0.14	-0.47	3 2	2551	5.77	0.26	0.10	3 2
2270	6.22	-0.04	-0.14	3 2	2354	6.46	0.66	. . .	6 2	2455	6.05	-0.03	-0.06	3 2	2552	6.30	0.99	0.76	3 2
2271	5.81	-0.15	. . .	3 2	2355	6.16	1.54	1.85	3 2	2456	4.66	-0.24	-1.07	9 1	2553	2.93	1.20	1.21	6 2
2273	5.26	-0.19	-0.75	6 2	2356	3.76	-0.15	-0.74	2 1	2459	5.02	1.48	1.83	2 1	2554	4.40	0.92	0.61	6 2
2274	6.43	0.93	. . .	3 2	2359	5.77	1.12	. . .	3 2	2460	5.71	1.14	. . .	3 2	2559	5.64	0.20	0.51	6 2
2275	4.90	1.69	1.96	3 2	2360	6.26	0.13	. . .	3 2	2461	5.79	-0.10	-0.37	3 2	2560	4.35	0.85	0.52	3 1
2278	6.41	1.45	. . .	3 2	2361	4.48	-0.17	-0.61	6 2	2462	4.93	0.67	0.59	3 2	2562	6.11	0.46	. . .	3 2
2280	6.31	0.24	0.09	3 2	2362	6.57	0.14	-0.06	3 2	2467	6.37	-0.05	-0.94	8 1	2564	4.65	0.30	0.07	3 1
2279	5.78	-0.08	. . .	3 2	2367	5.93	1.38	. . .	3 2	2468	6.18	0.62	. . .	3 2	2570	6.41	0.17	0.16	6 2
2281	7.04	0.93	. . .	3 2	2368	6.32	0.40	. . .	3 2	2469	5.19	1.54	1.89	3 2	2571	4.83	-0.21	-0.96	3 1
2282	3.02	-0.18	-0.72	3 1	2369	5.82	1.28	. . .	3 2	2470	4.87	0.08	0.08	2 1	2572	5.45	0.18	0.16	3 2
2283	6.64	0.56	0.01	3 2	2370	6.15	-0.08	-0.87	3 1	2473	2.98	1.40	1.46	7 1	2574	4.08	1.43	1.69	6 1
2286	2.87	1.64	1.85	3 1	2373	6.16	-0.15	. . .	3 2	2474	6.19	1.37	1.61	3 2	2575	6.52	0.42	0.11	3 2
2288	5.52	-0.19	. . .	3 2	2377	5.38	0.97	0.67	6 2	2475	6.12	-0.14	. . .	6 2	2576	6.03	0.72	. . .	3 2
2290	6.60	0.16	. . .	6 2	2380	5.94	-0.15	. . .	3 2	2478	4.69	1.16	1.17	3 1	2577	6.21	0.56	-0.35	3 2
2291	5.64	0.24	0.12	3 1	2381	5.43	1.38	1.52	6 2	2479	5.91	-0.02	-0.89	2 1	2579	6.46	-0.10	-0.38	3 2
2292	6.41	-0.3	-0.63	3 2	2382	1.00	0.00	-0.78	7 1	2481	6.13	0.35	. . .	3 2	2580	3.92	1.71	2.00	3 1
2294	1.97	-0.34	-0.96	8 1	2385	4.50	. . .	-0.17	9 1	2484	3.36	0.43	0.06	5 1	2583	6.04	1.10	0.85	3 2
2295	6.67	0.36	0.02	3 2	2386	5.60	0.25	0.07	6 2	2491	-1.46	0.00	-0.04	5 1	2584	6.29	0.04	0.06	3 2
2296	3.45	0.38	0.52	6 2	2387	4.33	-0.24	-0.98	3 2	2501	5.60	-0.19	. . .	3 2	2593	5.00	1.18	. . .	3 2
2298	4.31	0.20	0.14	2 1	2389	5.22	1.09	. . .	3 2	2502	5.66	-0.05	-0.11	6 2	2594	6.26	0.99	. . .	6 2
2300	6.26	-0.08	-0.31	3 2	2390	6.20	1.40	. . .	3 2	2503	4.77	1.40	1.65	3 2	2595	5.29	-0.18	. . .	3 2
2301	6.19	1.84	2.05	3 2	2392	6.24	1.11	0.78	2 1	2504	5.29	-0.04	. . .	3 2	2596	4.37	-0.06	-0.69	5 1
2305	5.22	1.24	. . .	3 2	2395	5.10	-0.13	-0.56	3 2	2505	6.51	1.11	1.06	3 2	2599	6.34	0.64	0.66	3 2
2308	6.23	2.34	3.51	2 1	2397	5.69	-0.17	. . .	3 2	2506	4.46	1.11	1.04	6 1	2600	5.99	1.23	1.16	2 1
2309	6.12	1.56	. . .	3 2	2400	5.60	0.54	. . .	3 2	2507	6.62	0.12	. . .	3 2	2602	5.40	-0.11	-0.38	3 2
2311	5.53	1.56	. . .	3 2	2404	6.45	-0.02	-0.03	3 2	2508	5.07	1.80	1.88	3 2	2603	6.60	-0.19	. . .	3 2
2312	6.66	-0.04	-0.22	3 2	2405	5.79	2.60	. . .	5 2	2509	6.08	-0.19	-0.62	9 1	2604	6.29	1.29	. . .	3 2
2313	5.87	0.56	0.08	6 2	2408	6.29	0.33	0.06	3 2	2510	6.22	-0.13	. . .	3 2	2606	6.27	0.11	0.10	3 2
2315	6.51	-0.03	-0.06	3 2	2410	5.80	0.00	-0.46	3 2	2514	5.75	0.28	0.05	3 2	2607	5.46	0.36	0.03	2 1
2316	5.62	1.04	. . .	3 2	2415	5.62	-0.08	. . .	3 2	2516	5.02	1.27	1.35	2 1	2608	4.95	1.69	1.92	6 2
2317	6.35	1.02	0.77	3 2	2416	6.19	1.09	. . .	6 2	2517	6.15	-0.13	-0.68	3 2	2609	5.07	1.63	1.97	5 1
2318	6.39	0.62	. . .	3 2	2418	5.52	-0.08	-0.39	6 2	2518	5.26	-0.08	. . .	3 2	2610	5.97	1.06	0.88	3 2
2318	6.39	0.62	. . .	3 2	2421	1.92	0.00	0.05	9 1	2521	5.75	-0.10	-0.47	3 2	2612	6.23	0.46	. . .	6 2
2320	5.61	0.23	. . .	3 2	2414	4.54	-0.06	-0.01	3 1	2514	5.75	0.28	0.05	3 2	2607	5.46	0.36	0.03	2 1
2321	6.40	0.14	0.12	9 2	2415	5.62	-0.08	. . .	3 2	2516	5.02	1.27	1.35	2 1	2608	4.95	1.69	1.92	6 2
2322	5.98	1.04	. . .	3 2	2416	6.19	1.09	. . .	6 2	2517	6.15	-0.13	-0.68	3 2	2609	5.07	1.63	1.97	5 1
2323	6.31	-0.05	. . .	3 2	2418	5.52	-0.08	-0.39	6 2	2518	5.26	-0.08	. . .	3 2	2610	5.97	1.06	0.88	3 2
2324	5.87	0.08	0.09	3 2	2421	1.92	0.00	0.05	9 1	2521	5.75	-0.10	-0.47	3 2	2612	6.23	0.46	. . .	6 2
2325	6.15	-0.14	-0.62	6 2	2422	6.06	0.05	-0.88	6 1	2522	5.39	-0.10	. . .	3 2	2613	6.35	-0.11	-0.47	3 2
2326	-0.75	C.15	. . .	2 2	2427	4.79	1.23	1.30	4 1	2523	5.40	1.34	. . .	3 2	2616	1.50	-0.16	-0.70	3 2
2327	6.71	C.04	0.00	3 2	2428	5.97	1.56	. . .	3 2	2524	6.46	0.86	. . .	6 2	2618	5.50	-0.21	-0.92	7 1
2328	6.27	-0.04	-0.10	3 2	2429	3.92	1.05	1.00	2 1	2526	5.61	1.52	. . .	3 2	2619	5.06	-0.16	. . .	3 2
2329	6.25	1.36	. . .	3 2	2430	6.17	1.08	0.96	3 2	2527	4.55	1.36	1.66	3 1	2621	6.43	-0.13	. . .	3 2
2331	5.88	0.94	0.66	2 1	2431	6.35	0.48	. . .	6 2	2530	5.77	0.39	-0.07	6 2	2622	6.30	0.57	0.09	6 2
2333	5.55	. . .	0.86	3 2	2432	6.15	0.14	-0.73	6 1	2531	6.37	0.96	0.66	3 2	2624	5.96	-0.08	-0.34	6 2
2334	5.20	1.48	1.13	3 2	2433	6.35	-0.11	. . .	3 2	2534	6.31	0.00	0.02	3 2	2626	6.22	0.00	-0.06	3 2
2335	5.55	1.38	1.61	3 2	2435	4.39	-0.02	-0.15	6 2	2535	5.79	1.44	. . .	3 2	2627	6.49	0.22	-0.75	3 2
2336	6.48	0.12	. . .	3 2	2437	6.12	1.00	. . .	3 2	2536	6.11	1.33	1.50	3 2	2628	6.52	-0.16	. . .	3 2

TABLE 9 UB-V PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY									
B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S
2629	6.63	0.66	0.10	3 2	2739	6.04	-0.18	-0.96	9 1	2845	2.89	-0.09	-0.27	4 1	2944	4.70	-0.11	-0.35	3 1					
2633	6.59	-0.02	-0.64	3 2	2740	4.49	-0.32	-0.01	6 2	2847	6.31	-0.17	-0.07	3 2	2946	4.99	0.08	0.08	3 1					
2634	6.27	1.16	0.17	3 2	2741	6.61	-0.17	0.31	3 2	2848	6.47	0.42	-0.07	3 2	2948	3.60	-0.19	-0.56	3 1					
2636	6.17	1.28	1.36	3 2	2744	6.41	0.90	0.57	6 1	2849	5.36	0.45	-0.06	4 1	2950	6.02	-0.04	-0.18	3 2					
2638	6.45	0.39	0.36	3 2	2745	4.65	-0.20	-0.69	3 1	2851	5.25	0.22	0.17	3 2	2952	6.59	-0.05	-0.17	3 2					
2639	5.21	1.68	2.04	3 2	2746	4.90	-0.02	0.31	3 2	2852	4.18	0.32	-0.02	9 1	2954	5.80	-0.16	0.31	3 2					
2640	5.63	-0.17	1.60	3 2	2747	5.82	1.60	1.69	3 2	2854	4.30	1.43	1.53	4 1	2955	6.21	1.02	0.11	6 2					
2646	3.43	1.72	1.87	3 1	2748	5.10	1.36	0.88	4 2	2859	5.79	0.58	0.31	3 2	2958	6.01	0.15	0.11	6 2					
2647	5.97	0.12	0.11	3 2	2749	3.82	-0.18	-0.73	3 1	2862	5.10	1.06	0.31	3 2	2961	4.85	-0.19	-0.65	6 2					
2648	5.00	-0.20	-0.93	4 1	2751	5.05	0.08	0.09	5 1	2864	4.55	1.29	1.37	3 1	2964	5.76	-0.07	0.31	3 2					
2653	3.01	0.08	-0.79	4 1	2754	6.02	-0.02	0.31	3 2	2865	5.59	1.50	1.76	3 2	2966	5.95	-0.04	-0.09	3 2					
2654	6.57	0.01	-0.07	3 2	2756	5.35	-0.17	0.31	3 2	2866	5.86	0.48	-0.02	6 2	2967	5.56	1.64	1.91	3 1					
2655	5.62	1.29	1.24	6 2	2760	6.65	-0.11	-0.41	3 2	2867	5.75	1.62	0.31	3 2	2968	6.00	-0.04	-0.46	3 2					
2656	6.45	-0.08	-0.31	6 2	2762	4.76	-0.10	-0.29	3 1	2868	6.04	0.48	0.31	3 2	2970	3.93	1.02	0.88	4 1					
2657	4.12	-0.11	-0.47	4 1	2763	3.58	0.10	0.09	9 1	2869	6.58	0.06	0.31	3 2	2971	6.06	-0.11	-0.41	3 2					
2658	6.43	-0.04	-0.09	3 2	2764	4.78	1.70	1.87	5 1	2873	5.77	-0.19	0.31	3 2	2973	4.29	1.12	0.97	4 1					
2661	6.02	0.30	0.30	3 2	2765	6.29	1.62	1.96	6 2	2874	4.84	0.24	0.19	4 1	2974	6.56	1.18	0.84	3 1					
2662	5.17	1.40	1.65	6 2	2766	4.60	1.60	1.89	3 1	2875	5.43	-0.16	0.31	3 2	2976	6.34	-0.02	-0.24	3 2					
2663	5.78	1.52	1.87	3 2	2767	5.97	1.10	0.31	3 2	2876	6.24	1.18	1.06	6 2	2981	5.43	-0.15	0.31	3 2					
2666	5.20	0.20	0.31	3 2	2769	5.79	-0.12	0.31	3 2	2878	3.25	1.52	1.77	6 2	2982	6.19	1.02	0.74	3 2					
2667	5.28	0.66	0.31	3 2	2770	5.03	-0.17	-0.69	3 2	2880	5.25	0.22	0.20	3 2	2985	3.57	0.92	0.69	9 1					
2669	6.49	-0.05	-0.88	3 2	2771	5.66	1.44	0.31	3 2	2881	4.65	0.93	0.64	6 2	2989	6.47	0.20	0.14	3 2					
2672	4.93	0.14	0.31	3 2	2773	2.70	1.62	1.24	6 2	2882	1.11	0.54	0.02	9 1	2990	1.14	1.00	0.86	9 1					
2674	5.09	-0.11	0.31	3 2	2777	3.53	0.34	0.04	9 1	2883	5.90	0.54	-0.08	3 2	2993	4.59	1.63	1.98	3 1					
2676	6.11	0.14	-0.45	3 2	2778	5.89	1.07	0.82	3 2	2885	6.68	-0.12	0.31	3 2	2994	5.60	-0.13	0.31	3 2					
2677	6.13	0.37	0.31	3 2	2779	5.91	0.53	0.07	3 2	2887	5.59	0.31	0.10	3 2	2996	3.95	0.18	-0.05	3 1					
2678	5.39	0.05	-0.84	3 2	2781	4.95	-0.15	-0.99	4 1	2888	6.39	1.56	1.84	3 2	2998	5.06	0.78	0.31	3 2					
2679	6.47	-0.10	-0.98	2 1	2782	4.40	-0.15	-0.99	9 1	2890	1.58	0.04	0.02	9 1	3000	6.18	1.73	2.03	3 2					
2682	5.75	1.18	1.08	3 2	2785	6.09	0.62	0.34	3 2	2900	5.85	0.17	0.31	3 2	3002	5.10	1.10	1.67	2 1					
2685	6.11	0.70	0.31	3 2	2786	5.28	0.95	0.65	3 2	2901	5.81	-0.02	-0.09	3 2	3003	4.87	1.46	1.76	6 1					
2689	5.45	0.05	-0.07	3 2	2787	4.67	-0.10	-0.79	9 2	2902	(4.98)	1.40	0.03	2 1	3004	5.62	-0.19	0.31	3 2					
2693	1.84	0.67	0.55	9 1	2790	5.11	-0.16	-0.66	6 2	2904	6.56	0.22	0.15	3 2	3007	5.81	0.31	0.31	3 2					
2694	6.21	0.03	-0.88	2 1	2798	6.55	0.54	0.04	3 2	2905	4.06	1.54	1.96	3 1	3011	5.89	-0.11	0.31	3 2					
2697	4.82	1.26	1.41	3 1	2799	6.61	-0.14	0.31	3 2	2906	4.45	0.51	0.06	7 1	3014	5.48	1.38	1.67	2 1					
2699	6.03	0.06	0.31	3 2	2801	5.99	-0.07	-0.30	3 2	2907	6.26	-0.12	-0.48	3 2	3015	5.04	0.33	0.09	4 1					
2701	4.92	1.03	0.78	5 1	2803	3.98	0.79	0.45	3 2	2909	5.09	0.43	0.03	2 1	3016	6.55	-0.10	0.31	3 2					
2702	4.83	0.37	-0.69	3 2	2806	6.44	-0.19	-1.04	3 1	2911	5.56	-0.06	0.31	3 2	3017	3.61	1.73	1.71	3 2					
2706	5.86	0.38	0.04	3 1	2807	6.23	0.68	0.35	3 2	2912	6.65	0.00	0.31	3 2	3018	5.37	0.58	0.83	3 2					
2707	5.06	0.29	0.14	3 1	2811	5.82	0.35	0.19	6 2	2913	6.11	0.29	0.31	3 2	3019	6.39	1.04	1.93	3 2					
2710	6.09	-0.02	-0.05	3 2	2812	4.96	-0.05	-0.38	8 1	2916	5.77	1.06	0.31	3 2	3020	6.03	-0.07	0.31	3 2					
2712	6.47	1.04	0.87	3 2	2813	5.52	0.49	0.31	3 2	2918	5.91	0.60	0.10	3 2	3022	5.89	-0.11	0.31	3 2					
2713	6.16	1.14	0.97	3 2	2818	4.64	-0.02	-0.01	3 1	2919	5.53	1.28	1.42	3 2	3023	5.90	-0.19	0.31	3 2					
2714	4.15	0.00	0.04	3 1	2819	5.43	-0.14	0.31	3 2	2920	6.27	1.54	1.88	3 2	3024	3.95	1.78	0.83	3 2					
2719	5.15	1.24	0.31	3 2	2821	3.79	1.04	0.85	4 1	2921	5.70	-0.12	-0.71	8 1	3026	6.35	1.04	1.93	3 2					
2720	6.10	0.27	0.31	3 2	2823	5.39	-0.18	0.31	3 2	2922	4.61	-0.12	-0.43	3 1	3031	6.12	0.39	0.31	3 2					
2721	5.58	0.58	0.03	2 1	2824	6.60	-0.19	0.31	3 2	2927	5.12	0.44	0.12	4 1	3032	6.32	-0.16	0.31	3 2					
2725	5.97	-0.14	1.83	2 1	2826	6.21	-0.10	0.31	3 2	2930	4.91	0.40	0.11	7 1	3033	6.53	0.78	0.38	3 2					
2726	5.97	0.16	0.31	3 2	2827	2.44	-0.09	-0.71	5 1	2932	6.53	-0.02	-0.30	3 2	3034	4.52	-0.05	-1.02	3 1					
2727	5.31	0.06	0.09	3 2	2828	4.99	1.01	0.78	3 1	2933	6.37	0.54	0.31	3 2	3035	5.09	-0.10	0.31	3 2					
2729	5.35	1.19	1.18	3 2	2832	5.78	0.42	0.31	3 2	2934	4.94	1.40	1.63	6 2	3036	6.38	0.95	0.65	3 2					
2731	5.75	1.58	1.08	3 2	2833	5.97	0.92	0.62	6 2	2937	4.53	-0.09	-0.31	6 2	3038	6.18	-0.06	-0.09	3 2					
2732	5.91	1.52	1.70	3 2	2834	5.35	1.08	0.31	3 2	2940	5.72	-0.06	0.31	3 2	3043	5.33	0.76	0.31	3 2					
2733	6.27	-0.13	0.31	3 2	2835	6.76	-0.01	-0.11	6 2	2941	6.39	1.18	0.31	3 2	3045	3.35	1.25	1.18	3 1					
2734	6.12	-0.25	0.31	3 2	2839	6.05	0.23	0.31	3 2	2942	6.60	1.14	0.31	3 2	3046	4.71	1.06	0.92	6 2					
2735	3.62	0.91	0.60	3 2	2841	5.78	-0.10	0.31	3 2	2943	0.37	0.42	0.03	5 1	3047	5.61	1.44	1.56	6 2					

TABLE 9 UVB PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY						BRIGHT STAR PHOTOMETRY						BRIGHT STAR PHOTOMETRY							
B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S
3048	6.56	0.58	.	3 2	3148	6.03	0.04	.	3 2	3264	5.83	1.13	.	9 1	3360	5.90	1.11	1.17	2 1
3050	6.18	1.17	1.01	3 2	3150	6.33	0.62	0.13	6 2	3265	6.31	0.33	0.17	6 2	3362	5.65	1.49	.	3 2
3055	4.11	-0.18	-1.01	6 2	3152	6.33	-0.72	.	3 2	3267	6.70	0.24	.	3 2	3364	6.71	1.89	.	3 2
3058	5.85	-0.14	.	3 2	3153	5.17	1.72	.	3 2	3269	6.05	0.97	0.63	3 2	3367	5.42	-0.06	.	3 2
3059	5.14	-0.11	-0.49	3 2	3154	5.96	0.14	.	3 2	3270	4.45	0.22	0.11	6 2	3368	6.36	0.80	.	3 2
3060	6.45	-0.01	.	3 2	3159	4.82	-0.17	-0.62	6 2	3271	6.18	0.60	0.15	3 2	3369	6.36	1.02	0.88	2 1
3061	6.31	1.53	1.61	3 2	3165	2.25	-0.27	-1.09	8 1	3272	6.13	1.33	1.52	6 2	3370	5.53	-0.03	-0.04	3 2
3064	5.16	0.60	0.06	3 1	3168	6.13	-0.16	.	3 2	3273	6.43	-0.08	.	3 2	3373	6.28	-0.14	.	6 2
3067	4.98	0.09	0.11	5 1	3171	6.34	0.14	0.13	3 2	3274	6.42	0.39	.	3 2	3374	6.38	0.27	.	3 2
3068	5.62	0.93	.	3 2	3172	6.41	1.05	1.01	3 2	3275	4.25	1.55	1.91	4 1	3375	6.39	-0.15	.	3 2
3070	5.78	0.42	.	3 2	3173	4.84	0.05	0.00	3 1	3276	6.13	1.04	.	3 2	3378	5.87	1.07	0.87	3 2
3072	5.76	0.41	0.00	6 2	3174	6.01	-0.04	-0.13	3 2	3278	6.50	0.02	-0.02	3 2	3380	6.03	0.33	0.03	3 2
3074	6.32	-0.17	-0.76	3 2	3176	5.30	0.63	0.21	1 1	3279	5.07	1.50	1.50	3 1	3381	6.19	0.27	.	3 2
3076	6.72	1.24	.	3 2	3179	6.19	-0.15	.	6 2	3280	5.08	1.15	1.19	3 1	3382	6.34	1.31	.	3 2
3078	6.05	-0.18	.	3 2	3180	5.53	1.34	.	3 2	3281	5.77	1.05	0.99	2 1	3383	5.81	0.00	0.00	3 2
3079	5.01	0.44	-0.06	3 1	3183	5.38	0.10	.	3 2	3282	4.83	1.45	1.60	6 2	3384	6.38	0.79	.	6 2
3080	3.73	1.05	0.75	3 1	3185	2.81	0.43	0.19	5 1	3283	5.20	-0.19	.	3 2	3386	5.69	0.58	.	3 2
3081	5.79	-0.04	-0.16	3 2	3186	6.30	-0.10	.	3 2	3285	6.15	0.22	0.13	6 2	3387	6.58	0.68	.	9 1
3084	4.49	-0.19	-0.69	6 2	3188	4.32	0.97	0.71	4 1	3286	6.16	0.17	.	3 2	3388	6.49	-0.18	.	3 2
3085	5.43	1.16	.	3 2	3189	6.32	0.00	.	3 2	3288	5.96	1.67	1.85	6 2	3389	5.96	-0.14	.	3 2
3087	5.86	0.35	0.02	3 2	3190	6.36	0.16	.	3 2	3289	3.13	1.00	.	3 2	3391	5.64	0.62	0.07	3 1
3088	5.70	-0.15	.	6 2	3192	4.40	-0.15	-0.60	4 1	3291	5.90	0.37	.	3 2	3392	6.33	1.02	0.87	3 2
3089	4.63	-0.23	-0.93	6 2	3194	5.68	-0.17	.	3 2	3294	4.82	-0.15	-0.84	6 2	3393	5.63	1.02	0.74	3 2
3090	4.24	-0.14	-0.99	6 2	3195	6.41	-0.05	.	3 2	3295	6.01	0.46	0.04	6 2	3395	5.69	0.56	0.09	3 2
3091	5.50	-0.19	.	3 2	3196	6.65	1.40	.	6 2	3296	6.32	1.63	.	3 2	3397	6.43	0.75	.	6 2
3093	6.17	0.98	0.73	3 2	3202	5.54	0.49	.	3 2	3297	5.62	0.46	-0.06	3 1	3398	5.72	-0.03	-0.01	6 2
3097	6.05	1.00	0.86	3 2	3204	5.21	-0.19	.	3 2	3298	6.12	0.93	.	3 2	3402	5.96	0.37	0.03	3 2
3098	6.35	0.50	0.00	3 2	3206	4.27	-0.24	.	5 2	3301	5.37	-0.96	-0.31	3 2	3403	4.61	1.17	1.16	3 1
3099	4.63	-0.14	-0.93	6 2	3207	1.83	-0.25	-0.94	3 1	3302	5.65	-0.10	-0.31	3 2	3404	6.47	0.58	.	3 2
3100	6.38	-0.01	.	3 2	3208	4.67	0.53	.	9 1	3305	5.73	1.53	1.86	3 2	3407	5.01	1.33	1.38	6 2
3101	6.03	-0.11	.	3 2	3210	4.72	0.96	0.78	3 1	3306	5.13	0.94	0.64	3 2	3410	4.17	0.00	0.02	4 1
3102	4.20	0.72	0.44	9 1	3212	5.36	0.89	0.60	6 2	3307	1.86	1.27	0.19	6 2	3411	6.19	1.05	0.89	6 2
3103	6.41	-0.04	-0.07	3 2	3213	6.28	-0.06	.	3 2	3308	5.68	0.06	.	3 2	3412	6.53	-0.02	-0.04	3 2
3105	5.63	1.30	.	3 2	3214	6.44	-0.01	.	6 2	3314	3.90	-0.02	-0.02	9 1	3413	5.80	-0.13	.	3 2
3107	6.79	-0.18	.	3 2	3219	6.44	-0.01	.	6 2	3318	4.07	0.39	-0.02	3 2	3414	4.86	1.00	0.81	6 2
3110	5.28	0.91	0.72	2 1	3220	4.76	0.43	-0.03	6 2	3318	4.07	0.39	-0.02	3 2	3415	5.26	-0.14	.	3 2
3113	4.79	0.15	0.16	6 2	3223	4.35	-0.11	-0.46	3 2	3319	5.50	1.60	1.92	6 2	3416	6.51	0.44	0.17	3 2
3116	5.09	-0.17	.	3 2	3225	4.45	1.62	1.85	3 2	3320	5.98	0.17	.	3 2	3417	6.12	0.95	0.65	3 2
3117	3.47	-0.18	-0.65	6 2	3226	4.75	0.18	0.08	9 2	3321	5.59	0.22	0.09	3 2	3418	4.43	1.20	1.28	3 1
3118	6.22	-0.10	.	3 2	3229	4.59	1.07	.	3 2	3322	5.98	-0.17	-0.01	3 2	3419	6.48	0.33	.	3 2
3120	5.74	1.55	.	3 2	3230	6.52	0.06	.	3 2	3323	3.36	0.85	0.52	4 1	3420	4.14	0.10	0.13	6 2
3121	5.17	1.27	.	3 2	3233	6.43	0.10	.	3 2	3324	5.54	1.19	1.14	2 1	3422	5.27	-0.04	.	3 2
3122	4.93	1.21	1.21	6 2	3234	6.03	-0.11	.	3 2	3325	6.59	0.51	0.06	3 2	3423	6.39	0.98	0.83	8 1
3123	5.11	1.12	.	3 2	3237	4.77	-0.11	-0.98	6 2	3326	5.47	-0.14	.	3 2	3424	6.45	1.08	0.99	3 2
3129	(4.30)	-0.17	-0.95	1 2	3239	6.06	-0.16	.	3 2	3334	5.29	0.01	-0.01	3 2	3425	6.33	1.59	.	6 2
3131	4.61	C.08	0.08	7 1	3241	6.11	-0.18	-0.71	6 2	3337	6.39	0.33	0.08	3 2	3426	4.14	0.10	0.13	6 2
3135	6.49	C.06	-0.80	3 2	3242	5.78	1.02	.	3 2	3338	6.43	1.20	1.23	3 2	3427	6.39	0.98	0.83	8 1
3136	5.65	C.00	0.01	3 2	3243	4.44	1.17	1.09	3 2	3340	4.35	1.16	1.16	3 2	3428	6.44	1.02	0.90	5 1
3137	5.99	-0.14	.	3 2	3244	5.13	-0.48	.	3 2	3342	6.00	0.42	0.20	6 2	3429	6.30	0.17	0.16	3 1
3138	5.60	0.57	.	6 2	3249	3.53	1.48	1.77	9 1	3343	5.75	-0.15	.	6 2	3430	5.05	0.73	.	6 2
3139	6.14	-0.10	.	3 2	3252	6.29	0.98	0.75	3 2	3344	6.51	0.05	0.08	3 2	3431	4.98	1.42	.	6 2
3140	5.24	0.39	.	3 2	3255	6.60	0.02	.	3 2	3345	6.67	-0.06	-0.41	3 2	3432	5.47	1.02	.	3 2
3141	4.67	1.49	1.77	4 1	3259	6.00	0.76	0.32	2 1	3346	5.97	0.96	0.73	3 2	3433	4.89	0.90	.	3 2
3144	6.22	0.57	0.13	3 2	3260	5.16	0.08	.	3 2	3347	3.77	1.13	1.13	3 2	3434	6.13	0.42	.	6 2
3145	4.38	1.25	1.28	6 1	3261	6.45	1.04	.	6 2	3350	5.09	0.25	.	3 2	3437	6.63	-0.02	0.02	3 2
3147	5.81	-3.10	.	6 2	3262	5.14	0.47	-0.06	6 1	3358	5.33	-0.14	.	6 2	3438	3.98	0.93	0.65	6 2

TABLE 9 UBV PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY									
B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S
3439	5.20	-0.10	.	3 2	3503	6.29	-0.10	.	3 2	3595	5.46	-0.03	-0.10	3 1	3677	5.86	0.83	.	6 2	3700	6.32	1.04	.	6 2
3440	5.47	-0.16	-0.54	3 2	3507	6.47	0.23	.	3 2	3596	5.68	1.14	1.04	2 1	3678	5.42	0.31	0.07	6 2	3701	6.32	1.04	0.07	6 2
3441	4.88	1.07	0.92	8 1	3510	6.38	0.64	.	9 1	3598	5.16	0.42	.	3 2	3679	5.27	0.99	.	6 2	3702	6.25	-0.08	-0.27	3 2
3442	5.15	-0.14	.	3 2	3512	5.21	0.87	.	3 2	3599	5.85	1.11	0.98	3 2	3680	6.25	-0.08	-0.27	3 2	3703	6.32	1.04	.	6 2
3443	6.36	0.00	.	3 2	3514	5.49	0.06	.	3 2	3600	5.55	-0.14	.	3 2	3681	5.24	1.17	1.22	9 2	3704	6.32	1.04	.	6 2
3444	5.71	1.65	.	3 2	3516	6.17	-0.08	-0.19	3 2	3602	6.27	1.00	.	6 2	3682	4.94	1.11	1.06	6 2	3705	6.32	1.04	.	6 2
3445	3.83	0.70	0.28	3 2	3517	6.39	0.23	.	3 2	3604	5.79	1.21	.	6 2	3683	5.47	-0.09	-0.30	6 2	3706	6.32	1.04	.	6 2
3446	6.45	0.13	0.13	3 2	3518	4.61	1.26	1.40	5 1	3605	5.23	-0.12	.	3 2	3684	4.62	0.45	0.10	6 2	3707	6.32	1.04	.	6 2
3447	3.60	-0.18	-0.62	6 2	3523	5.54	0.15	0.14	3 2	3607	6.74	-0.03	.	3 2	3685	1.68	0.00	0.03	3 2	3708	6.32	1.04	.	6 2
3449	4.66	0.02	0.01	4 1	3524	6.05	0.23	0.08	3 2	3610	5.88	1.63	1.96	3 2	3687	5.85	1.06	.	3 2	3709	6.32	1.04	.	6 2
3452	4.77	0.12	0.12	6 2	3526	6.33	0.12	0.14	3 2	3611	6.41	-0.10	.	3 2	3688	6.04	0.28	-0.16	3 2	3710	6.32	1.04	.	6 2
3453	5.90	-0.21	.	6 2	3527	5.10	-0.21	-0.98	6 2	3612	4.56	1.04	0.82	5 1	3690	3.82	0.06	0.06	3 1	3711	6.32	1.04	.	6 2
3454	4.30	0.20	-0.74	9 1	3530	6.55	0.04	.	3 2	3613	4.97	1.22	1.21	3 2	3691	6.02	-0.10	.	3 2	3712	6.32	1.04	.	6 2
3455	6.34	0.20	0.14	3 2	3533	6.50	1.46	.	3 2	3614	3.75	1.20	1.22	6 2	3692	5.12	1.66	1.86	3 2	3713	6.32	1.04	.	6 2
3456	5.23	0.21	-0.53	6 2	3534	6.42	0.56	.	3 2	3615	4.01	0.14	0.13	3 2	3693	6.32	1.04	.	6 2	3714	6.32	1.04	.	6 2
3457	4.33	-0.11	-0.80	6 2	3536	5.60	-0.11	0.07	3 2	3616	4.81	0.69	0.02	4 1	3694	5.33	1.17	.	6 2	3715	6.32	1.04	.	6 2
3458	6.37	-0.06	-0.13	3 2	3537	5.35	0.42	0.07	3 2	3618	6.17	1.65	1.95	3 2	3695	6.14	1.09	0.99	3 2	3716	6.32	1.04	.	6 2
3459	4.61	0.84	0.51	4 1	3538	6.00	0.67	0.22	6 2	3619	4.48	0.27	0.12	7 1	3696	4.34	1.63	1.86	6 2	3717	6.32	1.04	.	6 2
3460	5.20	0.01	-0.03	3 2	3539	5.91	-0.15	.	3 2	3622	6.44	0.25	0.19	3 2	3698	2.25	0.18	0.16	6 2	3718	6.32	1.04	.	6 2
3461	3.94	1.08	0.99	3 1	3541	6.64	3.36	.	3 2	3624	4.67	0.35	0.15	7 1	3700	6.33	1.41	.	9 2	3719	6.32	1.04	.	6 2
3462	5.51	-0.18	-0.90	6 2	3542	6.39	0.00	.	3 2	3628	4.56	1.61	1.87	3 1	3702	6.62	0.08	.	6 2	3720	6.32	1.04	.	6 2
3463	6.42	0.02	0.63	3 1	3543	5.79	1.60	1.96	3 2	3629	6.11	-0.15	-0.19	6 2	3703	5.26	0.08	.	3 2	3721	6.32	1.04	.	6 2
3464	6.13	0.94	0.63	3 1	3544	6.11	0.20	0.17	3 2	3630	5.60	-0.06	-0.19	6 2	3704	5.78	1.29	.	3 2	3722	6.32	1.04	.	6 2
3466	5.52	-0.14	.	3 2	3545	5.74	1.09	1.06	2 1	3631	6.73	1.62	.	3 2	3705	3.13	1.95	1.95	4 1	3723	6.32	1.04	.	6 2
3467	4.85	-0.17	.	3 2	3547	6.10	1.00	0.81	3 1	3632	6.37	1.35	1.58	3 2	3706	4.81	0.93	0.62	3 1	3724	6.32	1.04	.	6 2
3468	3.69	-0.18	-0.87	6 2	3548	6.47	0.96	.	3 2	3634	2.21	1.65	1.80	3 2	3708	5.87	0.54	-0.39	6 2	3725	6.32	1.04	.	6 2
3469	6.13	0.20	0.10	3 2	3549	6.03	-0.02	.	3 2	3637	6.15	0.17	.	3 2	3709	4.79	0.94	0.67	4 1	3726	6.32	1.04	.	6 2
3471	6.29	1.18	0.52	6 2	3551	5.33	0.26	.	3 2	3638	5.73	0.00	0.01	3 2	3710	6.39	-0.10	.	3 2	3727	6.32	1.04	.	6 2
3472	6.41	0.52	0.06	6 2	3552	6.08	0.22	0.13	6 2	3641	5.46	1.01	0.78	6 2	3712	5.39	0.42	-0.03	3 2	3728	6.32	1.04	.	6 2
3473	6.11	0.22	.	3 2	3554	5.75	1.32	.	3 2	3642	4.71	-0.15	-0.80	3 2	3713	6.11	1.26	1.10	3 2	3729	6.32	1.04	.	6 2
3475	4.02	1.03	0.78	4 1	3556	4.89	0.10	0.13	3 1	3643	4.48	0.61	0.22	3 2	3714	6.33	0.46	0.02	3 2	3730	6.32	1.04	.	6 2
3476	5.16	-0.20	-1.02	6 2	3557	6.14	1.00	0.75	3 2	3644	5.59	0.19	.	3 2	3715	6.82	0.00	.	3 2	3731	6.32	1.04	.	6 2
3477	4.07	0.87	0.52	6 2	3558	6.17	1.00	.	9 1	3646	6.53	0.00	.	3 2	3716	6.05	1.39	.	3 2	3732	6.32	1.04	.	6 2
3478	5.70	1.10	1.03	3 2	3559	6.39	0.16	0.13	6 2	3647	6.48	0.17	.	3 2	3717	6.28	-0.10	2.03	4 1	3733	6.32	1.04	.	6 2
3479	6.11	0.22	.	3 2	3554	5.75	1.32	.	3 2	3649	6.35	0.32	0.01	3 2	3718	4.72	1.61	2.03	4 1	3734	6.32	1.04	.	6 2
3480	6.25	1.61	.	3 2	3556	4.89	0.10	0.13	3 1	3643	4.48	0.61	0.22	3 2	3719	6.33	0.46	0.02	3 2	3735	6.32	1.04	.	6 2
3482	3.38	0.68	0.37	7 1	3564	5.96	1.54	.	3 2	3645	5.59	0.19	.	3 2	3721	6.82	0.00	.	3 2	3736	6.32	1.04	.	6 2
3483	6.10	0.08	0.26	3 2	3567	6.19	0.98	0.76	3 2	3653	5.73	0.98	.	3 2	3722	6.53	0.22	0.11	3 2	3737	6.32	1.04	.	6 2
3484	4.32	0.90	0.64	5 1	3568	6.38	-0.11	.	6 2	3654	5.00	0.22	-0.58	3 2	3724	5.58	1.63	.	3 2	3738	6.32	1.04	.	6 2
3485	1.96	0.04	0.07	6 2	3569	3.14	0.19	0.08	9 1	3655	6.11	0.22	0.12	3 2	3725	4.81	0.94	0.82	6 2	3739	6.32	1.04	.	6 2
3486	5.29	0.04	0.08	3 2	3570	5.71	0.48	0.00	6 2	3656	6.00	-0.11	-0.83	3 2	3726	6.54	1.13	.	6 2	3740	6.32	1.04	.	6 2
3487	3.91	0.00	-0.05	6 2	3571	3.84	-0.10	-0.45	6 2	3658	5.79	0.86	0.37	2 1	3727	5.74	0.91	0.65	3 2	3741	6.32	1.04	.	6 2
3488	6.21	-0.05	.	3 2	3572	4.46	0.13	0.15	3 1	3659	3.44	-0.19	-0.69	6 2	3728	4.46	1.23	1.31	3 1	3742	6.32	1.04	.	6 2
3489	6.22	-0.10	.	3 2	3573	6.59	0.06	0.09	3 2	3661	5.57	-0.11	-0.86	3 2	3729	5.64	0.19	.	3 2	3743	6.32	1.04	.	6 2
3490	6.37	-0.14	-0.57	3 2	3574	4.69	-0.12	-0.47	6 2	3662	4.84	0.18	0.06	7 1	3730	4.68	0.91	0.63	4 1	3744	6.32	1.04	.	6 2
3491	6.32	1.50	1.78	3 2	3576	4.76	1.53	1.88	5 1	3663	3.97	-0.18	-0.66	6 2	3731	2.50	-0.18	-0.75	6 2	3745	6.32	1.04	.	6 2
3492	4.37	-0.05	-0.04	3 1	3577	6.38	1.55	1.69	2 1	3664	5.97	0.86	0.37	2 1	3732	5.48	0.18	.	3 2	3746	6.32	1.04	.	6 2
3493	6.09	1.28	1.42	3 2	3578	5.86	0.53	0.08	2 1	3665	3.88	-0.07	-0.12	9 1	3733	5.29	0.97	.	9 1	3747	6.32	1.04	.	6 2
3494	5.46	0.26	.	3 2	3579	3.97	0.43	0.06	5 1	3667	6.31	0.00	0.01	3 2	3734	5.06	0.20	.	3 2	3748	6.32	1.04	.	6 2
3495	6.05	0.20	0.08	3 2	3585	6.25	1.00	.	3 2	3668	6.29	1.25	.	6 2	3735	5.59	1.52	1.82	6 2	3749	6.32	1.04	.	6 2
3496	5.75	0.56	0.37	6 2	3588	5.18	0.25	.	3 2	3670	5.92	-0.05	-0.10	3 2	3736	6.07	0.57	.	3 2	3750	6.32	1.04	.	6 2
3497	6.37	0.58	.	3 2	3590	6.07	1.12	1.02	3 2	3672	5.85	-0.13	-0.48	3 2	3737	6.30	1.48	.	3 2	3751	6.32	1.04	.	6 2
3500	5.31	-0.10	-0.35	3 2	3591	4.45	0.65	0.38	6 2	3673	5.54	0.85	.	6 2	3738	5.99	1.32	1.44	3 2	3752	6.32	1.04	.	6 2
3501	6.43	-0.20	-0.77	3 2	3593	6.09	-0.17	.	3 2	3674	6.35	-0.14	-0.56	3 2	3739	5.99	1.06	.	3 2	3753	6.32	1.04	.	6 2
3502	5.47	-0.10	-0.35	3 2	3594	3.60	0.00	0.01	5 1	3675	6.25	0.02	.	3 2	3740	6.54	0.05	0.02	3 2	3754	6.32	1.04	.	6 2

TABLE 9 UVB PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY				
B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S
3745	6.10	-0.10	-0.55	3 2	3822	6.31	0.06	.	3 2	3904	5.73	1.08	1.39	3 2
3746	6.20	0.25	0.25	3 2	3823	6.49	0.42	.	3 2	3905	3.88	1.22	1.39	4 1
3748	1.97	1.45	1.72	6 1	3825	4.08	0.01	-0.56	6 2	3906	6.02	-0.04	-0.09	2 1
3749	4.68	1.13	1.17	3 1	3827	5.00	1.05	0.87	3 2	3907	6.35	0.94	0.68	3 2
3750	5.38	0.64	0.13	6 2	3828	6.53	0.38	.	3 2	3909	5.05	0.94	0.68	6 2
3751	4.30	1.48	-1.72	3 1	3830	5.70	1.12	.	6 2	3910	5.62	1.17	.	6 2
3752	5.76	0.16	.	3 2	3831	6.17	0.27	.	3 2	3912	4.58	1.20	0.99	6 2
3753	5.11	-0.11	.	3 2	3832	6.40	-0.04	-0.09	6 2	3913	5.79	1.36	.	6 2
3754	5.41	0.60	0.14	3 2	3833	5.63	1.02	.	3 2	3914	5.56	1.32	.	3 2
3755	5.71	1.04	0.90	3 2	3834	4.68	1.32	1.45	7 1	3915	5.95	1.66	1.93	3 2
3756	6.65	0.20	.	3 2	3835	5.98	1.12	.	3 2	3916	6.30	0.62	.	3 2
3757	3.67	0.33	0.10	5 1	3836	4.35	0.17	0.13	6 2	3919	4.88	1.23	1.30	6 2
3758	6.27	0.27	0.11	3 2	3837	6.19	1.05	.	6 2	3920	6.48	0.14	.	6 2
3759	4.61	0.45	0.00	9 1	3840	5.45	0.15	.	3 2	3921	6.24	0.04	.	3 2
3760	6.14	0.22	0.16	3 2	3841	6.56	0.10	0.11	3 2	3924	5.93	-0.15	.	3 2
3761	6.05	0.15	0.10	3 2	3842	5.90	1.00	0.67	3 2	3925	5.71	-0.11	.	3 2
3762	6.26	0.84	0.40	3 2	3844	6.70	0.49	-0.58	4 1	3926	5.85	1.13	1.00	3 2
3765	4.51	1.44	1.68	6 2	3845	3.91	1.32	1.45	5 1	3927	5.72	-0.01	-0.01	6 2
3766	6.17	0.22	.	3 2	3846	6.31	-0.03	-0.14	6 2	3928	5.14	0.46	0.00	4 1
3767	6.24	1.7	.	3 2	3848	6.37	0.08	.	3 2	3930	6.41	1.61	.	3 2
3770	5.48	1.36	.	6 2	3849	5.05	-0.15	-0.58	4 1	3931	6.28	0.22	0.11	3 2
3771	4.57	0.77	0.34	4 1	3852	3.52	0.49	0.21	5 1	3932	5.84	1.20	.	3 2
3772	5.85	1.20	1.20	3 2	3856	4.52	-0.02	-0.20	6 2	3933	6.32	0.17	.	3 2
3773	4.31	1.34	1.89	4 1	3858	4.78	0.12	-0.58	4 1	3935	6.37	-0.17	.	3 2
3775	3.18	0.46	0.03	8 1	3860	5.11	-0.14	-0.57	3 2	3938	6.04	1.36	1.55	3 2
3776	5.92	1.10	.	6 2	3862	4.94	0.53	.	3 2	3940	3.54	-0.08	-0.63	6 2
3777	5.47	1.08	0.98	3 2	3863	5.32	0.20	.	3 2	3941	6.12	-0.14	.	3 2
3783	5.91	0.81	-0.02	3 2	3864	5.80	1.09	.	6 2	3943	6.05	-0.13	.	6 2
3784	5.45	-0.10	0.10	3 2	3867	6.41	-0.06	-0.37	3 2	3944	6.35	-0.08	-0.92	3 2
3785	6.14	0.24	0.10	3 2	3868	6.03	-0.13	.	3 2	3945	6.70	0.27	0.09	3 2
3786	3.60	0.36	-0.07	3 1	3871	4.79	0.50	0.35	5 1	3946	6.21	-0.10	-0.68	3 2
3787	4.57	0.10	0.10	4 1	3872	6.15	-0.10	.	3 2	3947	5.23	0.30	.	3 2
3788	6.11	1.19	1.17	9 2	3873	2.98	0.81	0.47	8 1	3948	6.58	1.13	1.07	3 2
3789	5.93	0.26	.	3 2	3874	6.82	0.30	.	3 2	3949	6.20	-0.10	-0.60	3 2
3790	5.87	1.29	.	6 2	3875	5.56	-0.04	.	3 2	3950	4.70	1.60	1.92	4 1
3793	5.89	1.70	.	6 2	3876	5.79	1.64	1.95	3 2	3951	5.35	0.66	0.28	2 1
3794	6.11	0.62	0.26	3 2	3878	6.45	-0.13	-0.94	6 2	3953	6.52	0.98	.	6 2
3795	5.37	0.44	0.04	3 2	3879	5.85	0.34	0.12	3 2	3955	6.20	-0.13	-0.66	6 2
3799	4.51	0.00	0.04	3 1	3880	6.45	0.43	.	9 1	3957	6.20	-0.10	-0.60	3 2
3800	4.55	0.92	0.63	3 1	3881	5.10	0.62	0.08	2 1	3959	6.12	1.66	2.01	6 2
3801	6.12	0.98	0.71	6 2	3883	6.47	-0.11	.	3 2	3960	5.94	0.26	.	3 2
3802	5.94	1.50	.	3 2	3886	5.55	0.18	.	3 2	3961	6.45	0.40	-0.02	3 2
3803	3.13	1.55	1.88	3 2	3887	6.22	0.46	.	3 2	3963	5.86	-0.06	.	3 2
3805	6.25	1.17	1.25	6 2	3888	3.81	0.29	0.10	8 1	3964	6.12	0.02	.	3 2
3807	5.35	0.90	.	6 2	3890	2.97	0.27	0.13	3 2	3966	6.19	0.17	.	3 2
3808	5.01	1.02	.	6 2	3892	5.97	1.24	.	3 2	3968	6.43	1.30	.	3 2
3809	4.81	0.99	0.76	4 1	3893	6.24	0.48	-0.02	3 2	3970	4.59	-0.10	-0.27	4 1
3810	5.91	0.02	.	3 2	3894	4.60	0.03	0.08	3 2	3973	6.21	0.94	0.72	3 2
3812	6.43	0.33	.	3 2	3895	6.06	0.94	.	6 2	3974	4.49	0.18	0.08	9 1
3813	6.27	1.35	1.38	3 2	3897	6.37	1.01	.	6 2	3975	3.53	-0.04	-0.21	4 1
3814	5.56	1.16	1.13	3 2	3898	5.08	-0.10	.	3 2	3976	6.43	1.30	.	3 2
3815	5.41	0.77	0.44	9 1	3899	6.01	0.17	0.11	3 2	3977	5.60	1.50	.	3 2
3817	5.11	-0.12	.	3 2	3901	6.42	0.58	0.11	6 2	3980	4.37	1.45	1.75	3 1
3819	5.01	-0.19	.	3 2	3902	5.45	0.89	0.57	3 2	3981	4.50	-0.04	-0.06	3 1
3821	5.47	1.56	1.74	3 2	3903	4.11	0.92	0.65	5 1	3982	1.35	-0.11	-0.36	9 1

TABLE 9 UBV PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY						BRIGHT STAR PHOTOMETRY						BRIGHT STAR PHOTOMETRY							
B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S
4071	6.50	0.20	.15	3	4149	6.10	0.50	.08	6	4221	5.26	-0.08	.08	3	4300	4.42	0.05	.05	3
4072	4.99	-0.07	-0.15	3	4151	6.23	1.40	.06	2	4222	4.85	-0.15	-0.64	9	4301	1.79	1.07	0.93	8
4074	4.50	-0.12	-0.58	6	4152	6.49	0.20	.03	2	4224	4.93	1.60	1.93	3	4302	6.23	0.31	.03	2
4076	6.13	0.03	.03	3	4153	5.38	2.88	.03	4	4225	5.88	0.03	0.04	3	4303	6.14	0.26	0.06	3
4077	6.07	1.12	1.13	3	4154	6.08	0.94	.03	2	4226	6.35	1.63	.03	6	4304	6.71	0.55	0.04	3
4079	6.54	0.46	-0.04	3	4155	6.57	0.29	.03	2	4228	6.01	0.27	.03	6	4306	5.95	1.22	1.32	3
4080	4.83	1.12	1.08	6	4156	6.04	1.64	.03	3	4229	6.61	0.22	0.08	3	4308	6.35	0.88	.03	2
4082	5.97	-0.10	-0.17	3	4157	6.29	0.48	.03	6	4231	5.47	0.95	0.74	3	4310	4.67	0.33	0.08	8
4083	6.27	0.31	0.05	3	4158	5.72	0.52	0.00	2	4232	3.11	1.24	1.27	3	4311	5.67	0.24	.03	2
4084	5.26	0.37	-0.05	3	4159	4.45	1.62	1.79	6	4233	5.86	1.07	0.91	6	4312	6.19	0.11	0.12	3
4085	6.32	1.00	0.74	3	4160	6.52	0.29	.03	2	4234	4.45	-0.19	-0.70	3	4313	5.43	0.03	.03	2
4086	5.53	0.25	.03	3	4161	7.07	-0.08	-0.51	3	4237	5.79	0.16	0.13	6	4314	4.94	0.36	0.04	2
4087	6.27	0.88	.03	3	4162	4.89	1.62	.03	6	4238	5.61	0.04	0.05	3	4315	6.09	0.30	.03	2
4088	5.61	1.62	1.96	3	4163	4.82	2.68	5.78	2	4239	5.85	0.01	.03	6	4316	6.13	-0.02	.03	2
4089	4.99	-0.13	-0.51	3	4164	5.08	1.18	.03	6	4240	5.95	1.48	1.83	3	4317	5.71	-0.06	-0.26	3
4090	4.74	0.25	0.17	7	4165	5.52	1.27	1.34	2	4242	6.44	1.11	1.01	2	4318	6.30	0.95	.03	2
4091	6.35	1.52	.03	6	4166	4.72	0.81	0.55	5	4244	6.38	0.08	0.13	3	4319	5.52	0.96	0.66	3
4092	5.56	1.52	1.86	5	4167	3.84	0.07	6	4245	6.31	1.50	1.82	3	4320	6.77	0.04	.03	2	
4094	3.79	1.48	1.81	3	4169	5.45	0.50	.03	6	4247	3.83	1.04	0.92	5	4321	6.32	1.16	.03	2
4095	5.95	0.32	.03	3	4170	6.30	1.20	1.27	3	4248	4.71	-0.05	-0.05	3	4322	6.01	1.20	.03	2
4098	6.45	0.60	0.05	4	4171	4.91	0.92	.03	3	4249	6.13	0.91	0.61	3	4324	6.59	0.34	.03	2
4099	6.13	1.13	.03	3	4172	6.04	0.00	.03	2	4250	5.25	0.16	.03	3	4325	4.61	1.03	0.81	6
4100	4.21	0.90	0.65	2	4173	5.91	-0.14	.03	2	4251	5.24	0.46	0.06	2	4326	6.41	0.12	0.13	3
4102	4.00	0.35	-0.01	3	4174	4.11	1.58	1.94	3	4252	6.38	1.16	.03	3	4327	6.15	0.03	.03	2
4104	4.25	1.45	1.63	6	4175	6.12	0.66	.03	6	4253	5.45	0.96	0.77	3	4328	6.54	0.60	.03	2
4105	6.19	0.07	0.11	3	4177	4.66	1.48	0.97	6	4255	5.66	0.83	.03	3	4329	5.57	-0.05	-0.63	6
4107	5.58	1.56	.03	6	4179	5.87	1.44	.03	9	4257	3.78	0.95	0.65	6	4331	6.49	0.03	0.05	3
4109	6.05	0.05	0.04	3	4180	4.28	1.04	0.75	3	4259	4.32	0.02	0.01	4	4334	5.44	0.07	0.06	3
4110	4.65	0.51	0.01	3	4182	6.26	0.88	0.59	3	4262	5.99	-0.02	-0.46	3	4335	3.01	1.14	1.12	5
4111	6.11	1.51	.03	6	4183	6.37	0.92	.03	6	4263	6.11	-0.08	.03	3	4336	5.89	1.57	1.90	2
4112	4.84	0.52	-0.01	5	4185	5.52	-0.16	-0.57	6	4264	6.03	1.13	1.08	2	4337	3.91	1.24	0.94	6
4114	3.82	0.31	0.24	6	4186	6.07	1.71	1.91	3	4265	5.91	0.42	-0.02	3	4338	5.13	0.23	.03	2
4115	6.01	0.09	0.11	3	4188	6.42	0.08	.03	2	4266	5.93	1.75	0.06	2	4339	5.81	0.04	.03	2
4116	5.21	-0.06	-0.12	3	4191	5.18	0.33	0.01	1	4267	5.81	1.45	1.00	3	4342	6.88	-0.08	.03	2
4118	5.56	-0.04	.03	3	4193	5.79	1.17	1.09	3	4268	6.33	1.46	1.57	3	4343	4.48	0.03	0.06	4
4119	5.10	-0.14	-0.53	6	4194	5.64	0.00	.03	3	4271	5.92	1.08	.03	3	4347	6.13	-0.01	.03	2
4120	5.29	1.86	.03	3	4195	6.00	2.41	4.77	3	4273	4.60	1.03	0.84	6	4349	6.35	1.37	1.54	3
4122	6.20	1.38	1.18	3	4196	4.81	-0.13	-0.58	6	4274	5.91	0.18	.03	3	4350	5.36	0.18	.03	2
4125	6.51	0.54	.03	3	4198	5.37	0.26	.03	2	4277	5.05	0.61	0.13	5	4351	6.33	1.15	1.12	1
4129	6.19	0.01	-0.53	3	4199	2.76	-0.22	-1.00	3	4278	6.00	1.59	1.92	2	4352	4.60	0.55	0.05	6
4130	6.05	0.23	.03	3	4200	4.57	1.71	1.87	3	4279	6.13	1.53	1.63	3	4353	6.11	1.06	.03	2
4132	4.95	0.51	0.08	3	4201	6.28	1.21	1.28	3	4282	5.71	0.37	.03	3	4354	5.80	1.66	.03	2
4133	3.85	-0.14	-0.95	9	4202	6.34	1.56	1.90	2	4284	5.89	1.63	.03	3	4356	5.42	-0.03	-0.05	3
4134	4.89	0.50	.03	6	4204	5.77	0.01	.03	2	4287	4.07	1.09	0.98	5	4357	2.56	0.12	0.12	6
4135	5.16	-0.15	.03	3	4205	4.82	-0.13	.03	2	4288	5.08	0.24	0.17	3	4358	5.79	1.12	1.13	3
4138	4.74	0.04	0.07	3	4206	5.97	-0.07	-0.51	3	4289	5.88	1.50	.03	3	4359	3.35	-0.02	0.07	3
4139	5.91	0.92	.03	6	4207	6.37	1.12	1.11	3	4290	6.15	-0.06	.03	6	4360	5.76	1.32	.03	2
4141	5.16	0.34	-0.02	6	4211	6.26	0.20	0.17	3	4291	4.84	1.16	1.12	3	4361	5.74	-0.10	.03	2
4142	4.93	1.68	1.82	3	4212	6.46	0.23	0.14	3	4292	5.81	-0.08	.03	2	4362	4.63	1.66	1.85	3
4143	5.02	1.04	.03	6	4213	6.27	0.49	0.01	3	4293	4.39	0.11	0.12	6	4368	4.47	0.21	0.15	5
4144	6.00	0.31	.03	3	4216	2.69	0.90	0.57	6	4294	4.99	0.16	0.11	3	4369	6.13	0.20	0.16	3
4145	5.08	0.92	0.64	2	4217	6.25	0.04	.03	6	4295	2.37	-0.02	0.00	7	4370	6.31	0.40	.03	2
4146	5.08	0.92	0.64	2	4218	6.07	-0.01	.03	3	4296	6.15	0.18	.03	2	4371	5.18	1.52	1.84	4
4147	6.13	0.36	.03	3	4219	5.34	-0.10	-0.45	6	4298	6.07	0.52	.03	3	4372	6.27	0.10	.03	2
4148	5.67	0.05	0.05	3	4220	5.23	-0.07	-0.47	6	4299	4.75	1.62	1.92	5	4373	6.45	0.40	.03	2

TABLE 9 UB V PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY						BRIGHT STAR PHOTOMETRY						BRIGHT STAR PHOTOMETRY					
B.S.	V	B-V	U-B	WT	S	B.S.	V	B-V	U-B	WT	S	B.S.	V	B-V	U-B	WT	S
4374	3.79	0.59	0.04	9	1	4466	5.25	0.25	0.12	3	2	4550	6.45	0.75	0.17	9	1
4377	3.49	1.40	1.95	7	1	4467	3.13	-0.04	-0.19	3	2	4551	5.57	0.07	. . .	3	2
4379	6.06	1.76	1.93	3	2	4468	4.70	-0.08	-0.16	3	1	4552	4.28	-0.10	-0.33	6	2
4380	4.79	0.12	0.03	3	1	4470	6.31	0.06	. . .	3	2	4553	6.17	0.08	. . .	3	2
4381	5.91	1.04	0.87	3	2	4471	4.30	1.01	0.74	3	1	4554	2.44	0.00	0.03	9	1
4382	3.56	1.11	0.98	4	1	4472	5.82	-0.08	. . .	3	2	4555	6.30	0.20	0.16	3	2
4384	5.99	0.46	0.00	3	2	4473	6.29	0.46	. . .	3	2	4556	6.06	0.05	. . .	3	2
4385	6.35	0.26	0.08	3	2	4475	5.15	1.12	. . .	3	2	4557	6.46	0.52	. . .	3	2
4386	4.05	-0.06	-0.12	5	1	4476	5.44	1.24	. . .	3	2	4559	5.58	0.94	0.67	3	2
4387	6.27	-0.03	-0.12	3	2	4478	6.17	1.08	0.95	3	2	4565	5.93	1.50	. . .	3	2
4389	6.41	0.05	-0.48	3	2	4479	5.65	0.35	-0.01	6	2	4567	5.18	-0.03	. . .	3	2
4390	3.89	-0.15	-0.59	6	2	4483	5.37	1.57	1.50	3	2	4568	6.13	1.02	. . .	3	2
4392	5.00	0.91	0.80	2	1	4484	6.22	1.12	1.07	3	2	4570	6.26	0.40	0.04	3	2
4394	6.05	1.45	1.78	3	2	4485	5.96	1.02	0.83	3	2	4571	6.21	-0.04	. . .	3	2
4395	5.05	0.42	-0.06	2	1	4487	5.15	-0.02	. . .	3	2	4573	5.57	-0.15	. . .	3	2
4397	6.43	0.20	0.11	3	2	4489	6.42	0.82	. . .	3	2	4576	5.44	-0.08	. . .	3	2
4398	5.79	0.01	. . .	3	2	4490	6.21	0.00	. . .	3	2	4577	6.79	0.97	. . .	6	2
4399	3.94	0.41	0.07	9	1	4492	5.17	0.80	0.36	3	2	4578	5.61	0.19	-0.12	3	2
4400	5.39	0.94	0.66	3	2	4494	4.70	-0.07	-0.22	6	2	4579	6.43	0.03	. . .	3	2
4401	5.11	-0.08	-0.42	3	2	4496	5.34	0.74	0.23	5	1	4580	6.17	1.26	1.42	3	2
4402	4.83	1.56	. . .	3	2	4497	5.96	1.66	. . .	3	2	4582	6.05	1.28	. . .	6	2
4403	6.12	-0.8	-0.81	3	2	4498	6.44	0.66	. . .	3	2	4583	4.91	-0.06	-0.16	3	2
4404	5.79	1.18	1.57	2	1	4499	4.94	1.15	0.81	6	2	4585	5.37	0.00	0.00	3	2
4405	4.08	0.21	0.10	4	1	4503	5.22	1.48	. . .	6	2	4586	6.17	1.61	1.90	2	1
4406	5.59	0.06	-0.57	3	2	4507	6.33	1.08	0.88	3	2	4587	5.54	0.76	0.62	2	1
4410	6.27	0.33	0.05	3	2	4508	5.98	1.46	. . .	3	2	4589	4.67	0.13	0.10	3	1
4413	5.17	0.50	. . .	3	2	4509	6.39	0.59	0.59	3	2	4591	6.31	1.21	1.06	3	2
4414	6.16	0.85	0.62	3	2	4510	6.07	0.96	0.71	3	2	4592	6.16	0.00	. . .	3	2
4416	5.94	0.49	. . .	3	2	4511	5.03	0.80	0.34	6	2	4595	6.05	1.29	1.54	3	2
4417	5.81	0.52	. . .	3	2	4514	4.72	0.97	0.74	7	1	4596	6.42	1.17	1.14	6	2
4418	4.95	1.00	0.80	3	1	4515	4.85	0.18	0.10	3	2	4597	5.89	-0.08	-0.28	6	2
4419	3.85	1.62	1.97	3	1	4516	6.26	1.17	. . .	6	2	4598	6.22	1.49	1.83	3	2
4423	5.38	-0.03	. . .	3	2	4517	4.04	1.50	1.78	5	1	4599	4.33	0.27	0.04	3	2
4425	6.39	0.16	-0.42	3	2	4518	3.72	1.18	1.17	4	1	4600	5.15	0.42	-0.04	3	2
4428	5.76	0.07	. . .	3	2	4519	5.29	-0.12	-0.55	3	2	4601	6.44	1.23	0.97	6	2
4432	4.77	1.54	1.82	3	2	4520	3.64	0.16	0.15	3	2	4603	4.72	-0.08	-0.61	6	2
4434	3.85	1.62	1.97	3	1	4522	4.11	0.90	0.58	6	2	4604	5.35	-0.01	-0.17	6	2
4438	6.39	0.52	. . .	3	2	4523	4.91	0.66	. . .	3	2	4605	5.04	1.49	1.78	6	2
4439	5.48	0.50	-0.01	5	1	4524	6.17	0.96	. . .	3	2	4607	5.96	1.67	. . .	6	2
4440	6.24	0.54	. . .	3	2	4525	6.48	0.68	0.24	2	1	4608	4.12	0.99	0.64	5	1
4441	5.13	1.08	0.77	3	2	4526	5.41	1.67	. . .	6	2	4609	5.80	1.01	0.85	2	1
4442	5.14	0.49	-0.11	6	2	4527	4.53	0.55	0.28	8	1	4610	6.13	0.17	1.15	2	1
4446	5.95	1.38	1.64	6	2	4528	5.32	0.02	0.04	3	2	4611	6.33	0.22	-0.48	3	2
4447	5.64	1.58	. . .	6	2	4529	6.26	0.58	0.13	6	2	4612	6.23	-0.08	. . .	3	2
4448	5.90	1.13	1.11	3	2	4533	6.15	0.52	0.08	3	2	4613	6.37	1.00	0.79	3	2
4449	5.04	1.58	. . .	3	2	4534	2.14	0.08	0.07	9	1	4614	6.23	1.24	1.04	6	2
4450	3.54	0.93	0.70	3	1	4537	4.32	-0.15	-0.62	6	2	4615	5.93	0.60	0.32	3	2
4452	6.40	1.05	0.93	2	1	4538	4.97	1.40	1.22	6	2	4616	4.15	0.34	0.03	3	2
4453	5.39	0.12	. . .	3	2	4540	3.60	0.11	0.11	9	1	4617	5.18	1.30	1.37	6	2
4455	5.77	0.46	0.01	3	2	4541	5.70	0.26	. . .	3	2	4618	4.47	-0.15	-0.67	6	2
4456	5.95	-0.16	-0.65	9	1	4544	5.64	1.06	0.88	3	2	4619	6.37	-0.05	. . .	3	2
4458	5.98	2.81	0.39	3	1	4546	4.46	1.30	1.46	3	2	4620	5.34	0.00	-0.04	3	2
4460	4.62	-3.08	-0.21	6	2	4547	6.35	0.40	. . .	3	2	4621	2.65	-0.09	. . .	6	2
4462	5.50	1.04	. . .	6	2	4548	5.85	0.56	. . .	3	2	4622	6.22	1.74	. . .	6	2
4463	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4464	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4465	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4466	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4467	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4468	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4469	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4470	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4471	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4472	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4473	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4474	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4475	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4476	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4477	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4478	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4479	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4480	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4481	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4482	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4483	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4484	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4485	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4486	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4487	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4488	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4489	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4490	5.71	1.66	. . .	3	2	4549	4.90	-0.11	-0.53	3	2	4623	4.02	0.32	-0.02	9	1
4491																	

TABLE 9 UBV PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY									
B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S
4713	6.40	0.29	.	3 2	4805	6.33	0.01	0.01	3 2	4891	6.11	0.50	0.04	3 2	4983	4.26	0.58	0.08	9 1					
4714	5.79	-0.08	.	3 2	4806	6.25	0.06	-0.85	9 2	4897	4.62	-0.15	-0.60	6 2	4989	4.92	0.48	.	3 2					
4716	4.80	0.62	0.62	6 1	4807	5.71	1.60	1.82	3 2	4898	4.80	-0.17	-0.75	3 2	4991	6.16	1.38	.	2 2					
4717	5.18	0.08	0.11	3 1	4809	4.60	0.29	.	3 2	4899	5.19	-0.11	-0.50	3 1	4993	4.80	-0.28	-0.35	3 2					
4718	6.25	1.08	.	6 2	4810	5.89	1.21	.	3 2	4900	6.25	0.27	0.05	3 1	4994	6.37	1.01	1.33	3 2					
4719	6.42	0.27	0.08	3 1	4813	4.67	1.22	1.36	4 1	4901	6.00	0.08	.	3 2	4996	5.89	1.06	.	3 2					
4720	6.30	0.96	0.74	3 2	4814	6.26	-0.05	-0.20	3 2	4902	4.80	1.59	1.54	5 1	4998	5.67	1.50	1.86	2 1					
4721	6.11	0.65	.	6 2	4817	4.64	-0.08	-0.40	6 2	4903	5.89	0.54	.	3 2	4999	6.19	0.97	.	6 2					
4722	5.95	0.03	.	3 2	4818	5.84	1.52	.	3 2	4905	1.77	-0.02	0.02	7 1	5000	6.07	0.44	-0.02	3 2					
4725	6.03	1.10	1.00	3 1	4819	2.17	-0.01	-0.01	3 2	4906	5.47	1.68	.	3 2	5001	5.22	1.04	.	3 2					
4729	4.86	-0.12	-0.59	3 2	4821	5.27	0.42	0.10	1 1	4907	5.93	1.13	0.89	3 2	5002	4.87	1.50	1.58	3 2					
4732	4.82	-0.14	0.13	2 1	4825	2.74	0.36	-0.03	9 1	4910	4.91	1.59	1.79	6 1	5008	5.85	0.20	.	3 2					
4733	4.95	0.27	0.18	2 1	4827	6.04	0.39	.	3 2	4914	5.60	0.18	-0.03	2 1	5011	5.22	0.58	0.09	2 1					
4734	6.26	0.68	.	3 2	4828	4.88	0.09	0.03	4 1	4915	2.89	-0.12	-0.32	2 1	5012	6.04	1.35	1.46	3 2					
4736	6.00	0.07	.	6 2	4829	5.59	0.00	-0.02	3 2	4916	5.24	0.28	0.02	4 1	5014	6.37	0.26	0.04	3 2					
4737	4.37	1.13	1.15	5 1	4831	4.66	1.10	1.01	6 2	4918	6.31	1.07	.	3 2	5015	4.81	1.67	1.95	6 2					
4741	5.00	0.08	0.13	2 1	4834	5.99	-0.08	.	3 2	4920	4.79	1.56	1.96	4 1	5016	6.19	0.01	.	3 2					
4743	6.37	0.93	0.68	3 2	4835	6.39	1.09	.	6 2	4921	5.79	0.18	0.08	3 2	5017	4.73	0.30	0.20	7 1					
4743	3.91	-0.19	-0.77	6 2	4836	6.44	0.25	.	3 2	4922	6.02	0.38	.	3 2	5019	4.74	0.71	0.26	9 1					
4744	6.04	0.02	-0.03	9 2	4837	5.93	0.86	0.47	2 1	4923	3.62	1.18	1.26	3 2	5020	3.00	0.92	0.67	7 1					
4746	6.22	0.44	0.08	3 2	4838	6.39	-0.06	.	3 2	4925	5.99	1.12	1.09	3 2	5021	6.62	0.06	0.03	3 2					
4747	6.22	1.26	.	3 2	4841	6.16	0.69	0.38	6 2	4928	5.32	1.29	1.29	2 1	5026	5.49	-0.13	.	3 2					
4749	6.15	0.92	.	3 2	4842	4.84	1.05	0.93	3 2	4930	6.03	0.05	-0.86	3 2	5027	6.02	0.29	.	6 2					
4750	6.54	0.18	0.11	2 1	4844	3.05	-0.18	-0.74	3 2	4931	4.93	0.36	0.01	9 1	5028	2.73	0.03	0.01	3 1					
4751	6.65	0.22	0.08	4 1	4845	5.95	0.55	-0.03	6 1	4932	2.84	0.94	0.73	5 1	5029	5.77	1.12	.	3 2					
4752	5.29	-0.06	-0.11	9 1	4846	4.87	2.54	6.62	2 1	4933	4.85	0.02	.	3 2	5030	6.05	0.09	-0.34	6 2					
4753	5.48	0.43	0.09	5 1	4847	5.22	0.33	0.15	3 2	4935	5.58	0.56	.	3 2	5031	6.26	0.10	0.10	3 2					
4754	5.80	1.56	.	3 2	4848	4.65	-0.16	-0.63	3 2	4937	6.59	0.29	0.11	3 2	5033	6.21	0.10	.	3 2					
4757	2.94	-0.05	-0.09	2 1	4849	5.67	0.99	0.74	2 1	4938	6.26	1.68	.	3 2	5035	4.53	-0.13	-0.59	3 2					
4763	1.63	1.59	1.77	3 2	4850	5.86	1.34	.	3 2	4939	6.43	1.70	.	3 2	5037	5.69	0.06	0.03	3 2					
4764	6.42	0.16	.	3 2	4853	1.25	-0.23	-0.98	3 2	4940	4.71	-0.14	-0.57	6 2	5040	5.87	0.12	0.10	3 2					
4766	5.46	0.05	0.10	5 1	4854	6.32	-0.05	-0.08	3 2	4942	4.27	-0.19	-0.77	6 2	5041	4.53	0.85	0.47	3 2					
4769	5.88	1.11	1.05	6 2	4856	6.26	0.55	0.07	3 2	4944	5.99	0.48	.	3 2	5042	5.05	1.11	1.01	3 2					
4770	6.05	1.52	1.88	3 2	4857	6.44	-0.06	.	3 2	4947	5.65	0.03	.	3 2	5046	6.48	0.96	.	3 2					
4771	5.95	0.27	.	6 2	4858	6.41	1.60	1.82	3 2	4949	5.60	1.59	1.63	5 2	5047	5.89	1.43	1.66	3 2					
4772	6.19	1.04	0.86	3 2	4860	5.66	0.95	.	6 2	4951	5.71	-0.07	.	3 2	5048	5.31	0.40	-0.01	3 2					
4773	3.87	-0.15	-0.61	3 2	4862	5.55	1.17	0.95	3 2	4952	5.51	-0.02	-0.67	3 2	5049	5.67	-0.03	-0.18	3 2					
4774	6.46	0.20	.	3 2	4864	6.31	0.70	0.25	3 1	4954	4.82	1.45	1.87	4 1	5051	5.63	-0.06	-0.24	3 2					
4775	4.32	0.37	0.02	7 1	4865	5.70	0.02	0.07	3 1	4955	5.19	1.14	1.12	3 1	5054	2.06	0.02	0.03	6 1					
4778	6.26	0.29	.	3 2	4867	5.85	0.46	-0.04	3 1	4957	5.55	1.18	1.18	3 2	5056	0.97	-0.23	-0.93	9 1					
4780	6.29	0.11	0.10	2 1	4870	5.46	1.02	0.79	3 2	4959	6.32	1.02	0.79	3 2	5059	5.97	0.20	0.13	3 2					
4781	5.48	-0.03	-0.10	6 2	4871	6.24	0.05	.	3 2	4961	5.94	1.49	1.69	3 2	5062	4.02	0.16	0.08	9 1					
4782	6.38	0.46	0.63	3 2	4872	5.73	0.13	.	3 2	4963	4.38	-0.01	0.00	5 1	5063	6.28	-0.12	.	6 2					
4785	4.27	0.59	0.05	6 1	4874	4.91	-0.04	.	3 2	4966	5.91	0.42	-0.03	3 2	5064	5.26	1.51	1.76	2 1					
4786	2.64	0.88	0.65	2 1	4876	5.72	0.38	.	6 2	4968	4.32	0.45	-0.06	2 1	5066	6.20	0.02	-0.42	3 2					
4787	3.89	-0.14	-0.57	3 1	4877	6.41	1.02	0.79	3 2	4970	5.79	0.52	.	3 2	5068	4.75	1.10	1.05	3 1					
4788	5.77	0.70	.	6 2	4878	6.02	1.29	1.44	3 2	4972	6.33	0.44	.	3 2	5069	6.11	0.11	0.05	3 1					
4789	4.81	0.00	-0.01	7 1	4879	5.98	-0.10	.	3 2	4975	4.60	-0.08	-0.38	3 2	5071	5.06	0.07	.	3 2					
4790	6.22	0.73	.	9 2	4880	6.33	0.03	.	3 2	4976	5.85	1.07	0.72	3 2	5072	4.98	0.71	0.26	9 1					
4794	5.13	0.22	.	3 2	4881	6.15	0.23	.	3 2	4977	5.90	0.06	0.04	3 2	5078	6.43	1.11	1.11	3 2					
4796	5.60	0.01	.	3 2	4883	4.94	0.67	0.20	5 1	4978	6.51	0.19	.	3 2	5080	4.97	1.61	0.68	4 1					
4797	6.20	0.33	.	3 2	4885	5.93	1.31	.	6 2	4979	4.85	0.70	0.31	6 2	5084	5.58	0.18	0.16	3 2					
4802	3.86	0.05	0.03	6 2	4887	5.76	0.54	.	3 2	4980	6.16	0.60	0.60	3 2	5086	6.17	1.47	1.80	3 2					
4803	5.45	0.32	0.03	4 1	4888	4.73	1.37	1.58	6 2	4981	5.04	0.46	0.02	3 1	5087	6.51	0.96	0.59	3 2					
4804	6.49	0.08	-0.24	6 2	4889	4.27	0.21	0.12	6 2	4982	6.22	1.06	.	3 2	5089	3.88	1.16	1.03	2 1					

TABLE 9 UB V PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY										
B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	
5544	4.54	0.77	0.29	6 1	5671	2.89	0.00	-0.02	3 2	5784	5.43	1.50	-0.16	3 2	5895	5.11	0.12	0.07	3 2	5901	4.82	1.00	0.87	4 1	
5545	5.65	1.30	1.15	3 2	5679	5.83	0.18	0.09	3 2	5786	5.95	-0.04	0.13	3 2	5897	5.29	0.29	0.05	3 2	5902	5.03	-0.01	0.05	3 2	
5546	5.20	1.16	0.81	6 2	5681	3.49	0.93	0.68	3 1	5787	3.91	1.02	0.74	2 1	5898	6.15	0.10	0.07	3 2	5903	4.32	0.04	0.05	6 1	
5547	5.93	1.05	0.81	3 2	5682	5.28	0.18	0.13	3 1	5788	2.80	0.26	0.13	3 1	5899	4.78	1.54	1.89	2 1	5904	4.59	-0.06	-0.67	4 1	
5552	5.46	1.36	0.81	2 1	5683	4.27	-0.09	-0.37	3 2	5792	6.44	0.08	0.08	3 2	5900	5.77	0.34	0.00	3 2	5905	5.76	0.06	0.00	3 2	
5555	6.20	-0.04	-0.20	3 2	5684	6.28	-0.09	-0.60	6 2	5793	2.24	-0.02	-0.02	8 1	5901	4.82	1.00	0.87	4 1	5906	5.39	-0.02	0.00	3 2	
5557	5.91	-0.06	-0.13	3 2	5685	2.61	-0.11	-0.36	9 1	5794	3.57	1.39	1.58	4 1	5902	5.03	-0.01	0.05	6 1	5907	5.43	-0.04	0.00	3 2	
5559	5.64	-0.04	-0.27	3 2	5686	4.33	1.10	1.07	3 1	5797	4.33	1.43	1.72	3 2	5903	4.32	0.04	0.05	6 1	5908	4.16	1.01	0.82	4 1	
5563	2.08	1.47	1.78	6 1	5687	5.59	-0.10	0.00	3 2	5798	5.44	0.00	0.00	3 2	5904	4.59	-0.06	-0.67	4 1	5911	6.10	0.60	0.00	2 1	
5566	6.35	0.71	0.00	6 2	5689	6.20	0.96	0.00	3 2	5803	5.95	0.48	0.00	6 2	5905	5.76	0.06	0.00	3 2	5914	4.62	0.57	0.00	6 1	
5568	5.71	1.11	1.06	4 1	5691	5.13	0.53	0.08	3 1	5812	3.65	-0.18	-0.69	3 1	5915	5.93	-0.02	0.00	3 2	5919	6.29	0.18	0.09	3 2	
5570	4.49	0.32	0.05	9 1	5694	5.06	0.54	0.06	5 1	5814	5.38	0.86	0.54	2 1	5920	5.75	-0.06	-0.40	6 2	5921	6.30	0.37	0.00	3 2	
5571	2.68	-0.22	-0.86	3 2	5695	4.51	0.19	-0.35	3 2	5820	4.67	1.00	0.73	3 2	5922	5.44	1.59	1.94	2 1	5924	5.44	1.59	1.94	2 1	
5576	3.13	-0.20	-0.78	3 2	5698	5.00	0.50	0.00	3 2	5823	5.24	0.88	0.53	2 1	5925	5.93	-0.02	0.00	3 2	5928	3.86	-0.20	-0.82	3 2	
5580	6.10	0.60	0.00	3 2	5699	5.65	0.65	0.00	3 2	5824	4.96	1.33	1.51	6 2	5926	6.30	0.37	0.00	3 2	5930	6.13	0.23	1.97	6 2	
5583	6.09	0.50	0.05	6 2	5700	5.67	0.68	0.00	3 2	5825	4.64	0.40	-0.03	6 2	5927	5.44	1.59	1.94	2 1	5932	5.38	1.64	1.97	6 2	
5586	4.93	0.60	-0.10	3 1	5701	6.17	1.02	0.77	2 1	5829	6.58	0.67	0.13	2 1	5928	4.59	0.09	0.08	3 2	5933	3.86	0.48	-0.03	9 1	
5589	4.59	1.59	1.59	3 1	5704	4.51	0.19	-0.35	3 2	5830	5.75	0.36	-0.02	3 1	5929	3.86	-0.20	-0.82	3 2	5936	5.45	0.33	0.03	2 1	
5591	5.85	0.16	0.00	3 2	5705	3.56	1.54	1.87	3 2	5831	5.53	0.05	0.05	5 1	5930	6.13	0.23	1.97	6 2	5941	4.87	0.10	-0.16	5 1	
5598	6.52	1.59	1.86	6 2	5708	3.37	-0.18	-0.73	3 2	5836	6.49	1.05	0.05	3 1	5931	5.44	1.59	1.94	2 1	5944	2.91	-0.20	-0.89	3 1	
5600	4.82	1.50	1.83	3 1	5709	5.51	1.02	0.77	2 1	5838	4.72	1.58	1.94	3 1	5924	5.44	1.59	1.94	2 1	5946	6.13	0.25	0.00	3 2	
5601	4.40	1.04	0.87	4 1	5710	5.35	1.19	1.22	3 2	5839	4.75	-0.14	-0.53	3 2	5925	4.59	0.09	0.08	3 2	5947	4.15	1.23	1.28	9 1	
5602	3.50	0.97	0.72	3 1	5712	4.51	0.19	-0.35	3 2	5840	6.01	0.90	0.61	3 1	5926	3.86	-0.20	-0.82	3 2	5948	3.41	-0.22	-0.84	3 2	
5603	3.27	1.71	1.96	5 1	5713	5.89	-0.15	-0.62	3 2	5842	4.53	0.05	0.02	5 1	5927	5.75	-0.06	-0.40	6 2	5951	6.25	0.04	0.01	3 2	
5604	6.41	1.46	0.00	3 2	5721	6.12	0.26	0.05	3 1	5843	5.33	0.04	0.05	3 1	5928	5.44	1.59	1.94	2 1	5952	6.21	0.01	-0.01	3 2	
5605	3.89	-0.14	-0.58	3 2	5723	4.94	0.44	0.02	3 2	5846	5.94	0.00	-0.20	3 2	5929	5.44	1.59	1.94	2 1	5953	2.32	-0.12	-0.90	4 1	
5611	6.17	1.47	1.70	6 2	5724	4.60	0.00	-0.06	3 2	5848	5.41	0.23	0.00	3 2	5936	5.45	0.33	0.03	2 1	5954	4.87	0.10	-0.16	5 1	
5614	6.67	-0.01	0.00	3 2	5725	5.71	1.64	1.98	6 2	5849	3.85	-0.01	-0.04	3 1	5941	4.87	0.10	-0.16	5 1	5955	5.70	1.17	1.26	3 2	
5616	4.55	1.23	1.34	3 1	5727	4.98	0.58	0.04	3 1	5851	5.53	0.23	0.10	6 2	5943	4.99	1.00	0.05	3 2	5959	5.55	0.05	-0.05	3 2	
5617	5.77	0.92	0.00	3 2	5729	5.57	0.11	0.00	3 2	5854	2.64	1.17	1.25	9 1	5944	2.91	-0.20	-0.89	3 1	5960	4.95	0.26	0.04	3 1	
5618	4.76	0.65	0.11	3 1	5730	5.49	-0.12	-0.76	3 2	5856	6.51	0.32	0.00	3 2	5946	6.13	0.25	0.00	3 2	5961	4.63	0.24	0.09	6 2	
5621	5.76	0.69	0.39	6 2	5733	4.32	0.31	0.06	5 1	5859	5.58	0.04	0.03	5 1	5947	4.15	1.23	1.28	9 1	5962	4.65	0.92	0.64	6 2	
5624	5.80	-0.14	0.00	6 2	5734	6.50	0.59	0.13	2 1	5860	5.61	-0.11	-0.42	3 2	5948	3.41	-0.22	-0.84	3 2	5966	5.12	0.98	0.74	2 1	
5625	5.85	-0.12	0.00	3 2	5735	3.05	0.05	0.12	3 1	5861	6.33	1.19	1.20	3 2	5951	6.25	0.04	0.01	3 2	5967	4.89	-0.14	-0.57	6 2	
5626	4.05	-0.18	-0.68	6 2	5736	5.45	-0.15	0.00	4 2	5863	5.39	-0.03	-0.40	3 2	5952	6.21	0.01	-0.01	3 2	5968	5.40	0.60	0.09	3 1	
5628	6.01	0.00	-0.24	3 2	5739	5.17	1.66	1.95	2 1	5864	6.01	0.72	0.00	3 2	5953	2.32	-0.12	-0.90	4 1	5971	4.98	-0.07	-0.20	3 1	
5631	6.16	0.94	0.71	3 2	5741	4.24	0.40	0.06	5 1	5865	6.07	1.38	0.08	3 2	5954	5.47	0.52	0.02	2 1	5972	4.83	0.07	0.05	3 1	
5632	6.30	0.63	0.00	3 2	5742	5.26	1.74	0.00	3 2	5867	3.67	0.06	0.06	9 1	5955	5.70	1.17	1.26	3 2	5974	6.10	0.34	0.03	3 1	
5634	4.93	0.43	-0.02	9 1	5744	4.43	0.29	1.16	1.22	5 1	5868	4.43	0.60	0.10	9 1	5959	5.55	0.05	-0.05	3 2	5977	4.17	0.47	0.15	2 1
5646	3.87	-0.05	-0.14	3 2	5747	3.69	0.29	0.11	5 1	5871	5.77	-0.08	-0.23	6 2	5960	4.95	0.26	0.04	3 1	5980	4.72	0.23	0.01	6 2	
5647	5.69	0.14	0.09	3 2	5751	6.25	0.20	0.00	3 2	5872	6.12	0.29	0.00	3 2	5961	4.63	0.24	0.09	6 2	5982	4.76	-0.11	-0.32	3 1	
5649	3.41	0.92	0.66	6 2	5756	6.22	0.22	0.00	6 2	5873	5.73	0.06	0.00	3 2	5962	4.65	0.92	0.64	6 2	5984	2.63	-0.08	-0.88	3 1	
5650	6.33	1.12	1.12	3 2	5757	6.18	1.21	1.36	6 2	5875	5.53	0.12	0.11	3 2	5966	5.12	0.98	0.74	2 1	5985	4.92	-0.02	-0.70	3 1	
5651	4.82	-0.17	-0.67	6 2	5763	5.02	1.59	1.91	3 1	5876	6.54	0.19	0.12	6 2	5967	4.89	-0.14	-0.57	6 2	5986	4.03	0.52	0.10	6 1	
5652	4.54	-0.08	-0.37	3 1	5764	5.50	-0.14	0.00	3 2	5879	4.09	1.62	1.95	3 1	5968	5.40	0.60	0.09	3 1	5987	4.23	-0.18	-0.69	3 2	
5653	6.10	-0.08	0.00	3 2	5766	6.51	0.35	0.03	6 2	5881	3.53	-0.04	-0.11	3 1	5971	4.98	-0.07	-0.20	3 1	5991	5.73	0.29	0.00	3 2	
5655	6.47	-0.04	0.00	3 2	5771	4.11	1.17	1.16	3 1	5882	6.01	1.16	0.00	3 1	5972	4.83	0.07	0.05	3 1	5994	4.59	0.09	0.08	3 2	
5656	6.08	0.12	0.00	3 2	5774	5.02	0.07	0.11	3 1	5883	3.95	-0.04	-0.14	6 2	5974	6.10	0.34	0.03	3 1	5995	4.03	0.52	0.10	6 1	
5657	6.45	0.70	0.00	3 2	5776	2.78	-0.20	-0.82	3 2	5884	6.19	1.47	0.00	6 2	5977	4.17	0.47	0.15	2 1	5996	4.23	-0.18	-0.69	3 2	
5659	6.68	0.68	0.25	2 1	5777	4.62	1.01	0.85	5 1	5885	4.68	-0.06	-0.73	2 1	5980	4.72	0.23	0.01	6 2	5997	4.23	-0.18	-0.69	3 2	
5660	4.91	0.37	0.28	3 2	5778	4.13	-0.13	-0.55	3 1	5888	5.23	1.02	0.82	3 1	5982	4.63	0.24	0.09	6 2	5998	5.73	0.29	0.00	3 2	
5661	5.73	-0.08	-0.87	6 2	5779	6.51	0.58	0.04	3 2	5889	4.63	0.80	0.37	4 1	5984	2.63	-0.08	-0.88	3 1	5999	4.07	0.09	0.08	3 2	
5664	4.06	-0.06	-0.91	3 2	5780	5.18	-0.09	-0.45	6 2	5891	5.09	1.13	0.93	3 1	5985	4.92	-0.02	-0.70	3 1	6000	4.07	0.09	0.08	3 2	
5666	4.86	1.25	1.32	3 2	5781	4.54	-0.18	-0.68</																	

TABLE 9 UBV PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY				
B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S
5992	6.29	0.08	0.11	3 2	6135	5.50	1.22	1.24	3 2	6288	5.48	1.59	.	3 2
5993	3.97	-0.05	-0.82	3 1	6136	5.39	1.46	1.80	3 2	6292	6.08	0.08	0.62	3 1
5996	6.32	0.66	.	3 2	6139	6.02	0.02	0.02	3 2	6293	5.35	1.41	1.66	2 1
5997	4.33	0.84	0.50	2 1	6141	4.79	-0.07	-0.79	2 1	6295	4.06	1.45	1.71	6 2
6005	6.14	1.37	1.51	2 1	6142	5.33	0.33	.	3 2	6296	6.19	1.00	.	3 2
6012	6.47	0.44	.	3 2	6143	4.23	-0.16	-0.79	6 2	6297	5.65	0.19	.	3 2
6014	5.98	1.02	0.76	2 1	6146	5.01	1.52	1.17	3 1	6298	6.09	0.19	.	3 2
6015	5.86	0.27	.	3 2	6147	4.27	0.92	0.70	2 1	6299	3.20	1.16	1.16	3 1
6016	5.37	1.45	1.46	3 2	6148	2.77	0.94	0.69	5 1	6300	6.00	0.88	.	3 2
6018	4.76	1.01	0.87	6 1	6149	3.83	0.01	0.01	4 1	6303	6.85	1.80	.	3 2
6019	5.81	0.34	.	3 2	6151	5.52	0.93	0.73	3 2	6304	6.11	-0.03	.	3 2
6020	4.67	1.69	1.68	3 2	6153	4.45	0.11	0.13	3 1	6312	6.45	0.27	.	3 2
6021	5.27	1.41	1.62	3 2	6159	4.85	1.49	1.83	5 1	6313	6.34	1.28	1.41	2 1
6023	4.27	-0.07	-0.28	2 1	6161	5.01	-0.06	-0.11	2 1	6315	4.90	0.48	-0.03	5 1
6026	4.00	0.05	-0.62	3 2	6163	4.24	1.06	0.95	3 2	6318	4.83	1.48	1.80	3 2
6027	4.01	0.03	-0.64	5 1	6165	2.81	-0.25	-1.01	3 1	6322	4.23	0.90	0.55	4 1
6028	4.59	-0.16	-0.74	4 1	6166	4.16	1.57	1.93	3 2	6324	3.92	-0.01	-0.10	3 1
6029	5.69	0.02	.	3 2	6168	4.20	-0.01	-0.10	3 1	6327	5.92	0.37	.	3 2
6030	3.85	1.11	0.86	9 2	6171	5.74	0.81	0.45	3 1	6329	6.33	0.09	0.06	3 2
6031	4.93	0.09	0.11	3 1	6172	5.91	-0.08	-0.42	3 2	6334	4.87	0.26	-0.69	6 2
6032	6.53	0.24	0.10	3 2	6175	2.56	0.02	-0.86	9 1	6337	4.98	1.60	1.92	7 1
6037	5.75	0.15	0.09	3 2	6177	6.18	0.48	.	3 2	6342	6.09	1.02	0.85	2 1
6040	5.63	0.14	.	3 2	6182	6.03	0.02	0.02	3 2	6347	6.12	0.51	.	3 2
6056	2.75	1.55	1.96	4 1	6188	5.66	-0.03	.	3 2	6349	6.01	0.58	0.06	3 1
6058	4.99	0.80	0.51	6 2	6191	6.34	1.00	0.71	2 1	6355	4.91	0.12	0.05	3 1
6059	6.33	0.28	.	3 2	6192	5.87	0.65	.	3 2	6357	6.22	1.06	1.04	3 2
6060	5.49	0.65	0.17	2 2	6193	6.09	0.20	.	3 2	6358	6.37	1.45	1.73	3 2
6070	4.77	0.02	-0.01	3 1	6201	6.24	0.30	0.07	3 2	6364	5.55	1.50	1.52	2 1
6071	5.45	0.13	.	3 2	6204	5.13	-0.08	-0.45	3 2	6366	5.97	0.50	.	3 2
6072	4.02	1.03	1.16	3 2	6212	2.81	0.65	0.21	7 1	6368	5.89	1.06	0.90	3 2
6074	5.78	0.07	0.10	3 1	6217	1.92	1.44	1.56	3 2	6371	5.08	0.86	0.58	3 2
6075	3.23	-0.15	-0.56	9 1	6220	3.50	0.92	0.60	3 2	6373	6.25	-0.01	0.00	3 2
6076	6.28	1.07	0.77	4 1	6226	6.16	0.07	0.11	2 1	6378	2.42	0.05	0.09	3 1
6081	4.57	0.84	0.67	3 1	6228	5.15	1.53	1.94	3 2	6380	3.34	0.40	0.09	3 2
6084	2.83	0.13	-0.70	5 1	6229	3.76	1.57	1.93	3 2	6381	5.67	0.04	.	3 2
6089	6.15	0.03	.	3 2	6231	6.32	1.28	1.51	3 2	6389	6.01	0.07	.	3 2
6092	3.93	-0.15	-0.56	9 1	6233	6.13	-0.02	-0.28	3 2	6390	6.33	1.04	0.86	3 2
6093	4.82	0.34	0.02	4 1	6236	6.47	0.31	.	3 2	6396	3.17	-0.11	-0.43	3 1
6094	5.39	0.62	.	3 2	6237	4.84	0.39	-0.06	3 1	6398	5.96	0.58	.	6 2
6095	3.76	0.17	0.19	7 1	6241	2.29	1.16	1.17	3 2	6400	6.53	0.60	0.15	6 2
6098	4.91	0.35	0.04	3 2	6243	3.63	0.47	0.07	3 1	6401	4.32	0.86	0.49	3 1
6102	3.89	0.31	0.62	3 2	6247	4.03	-0.22	0.03	6 1	6405	6.12	0.48	.	3 2
6103	4.85	0.37	0.80	4 1	6248	6.32	0.42	-0.05	3 2	6406	3.06	1.45	1.01	4 1
6104	4.50	1.23	0.84	2 1	6250	5.49	0.10	0.11	3 2	6410	3.13	0.08	0.08	7 1
6105	5.41	0.60	.	3 2	6251	5.94	1.59	.	3 2	6411	5.41	-0.04	-0.23	3 2
6111	5.85	-0.01	0.01	3 2	6252	3.57	-0.21	-0.84	6 2	6415	4.72	1.15	1.11	3 1
6112	4.63	0.22	-0.55	2 1	6254	4.82	0.09	0.03	6 1	6416	5.48	0.80	0.38	3 2
6114	5.69	0.00	.	3 2	6255	5.51	0.05	0.03	3 2	6417	4.78	1.21	1.27	2 1
6115	4.47	-0.07	-0.54	3 2	6271	3.59	1.36	1.61	1 1	6418	3.16	1.44	1.66	4 1
6117	4.58	-0.01	-0.04	7 1	6274	6.33	-0.02	.	3 2	6420	5.77	-0.05	-0.14	3 2
6118	4.43	0.28	-0.77	3 1	6276	5.79	-0.10	-0.44	3 2	6426	5.91	1.04	0.82	3 1
6129	4.63	0.16	0.06	5 1	6281	4.38	-0.08	-0.32	2 1	6427	6.65	0.20	0.00	3 2
6132	2.74	0.91	0.71	4 1	6282	6.37	1.71	.	3 2	6429	5.88	1.67	1.80	3 2
6133	6.57	0.91	0.56	6 2	6283	6.11	0.27	.	3 2	6431	4.78	-0.15	-0.76	3 1
6134	0.91	1.84	1.33	9 1	6285	3.13	1.60	1.96	3 2	6433	5.03	1.55	1.90	2 1

TABLE 9 UB V PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY									
B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S
6566	5.05	1.08	0.92	2 1	6714	3.97	0.02	-0.64	3 1	6840	6.00	0.89	0.55	2 1	7012	4.79	0.20	0.08	6 2
6567	4.83	0.21	-0.18	3 1	6719	6.33	0.08	-0.75	3 2	6841	6.54	0.12	-0.84	3 1	7020	4.72	0.35	0.16	2 1
6569	4.77	0.40	-0.04	3 2	6721	5.28	1.28	1.60	3 1	6842	4.63	1.66	1.80	3 2	7027	6.06	0.00	-0.09	3 2
6572	5.79	-0.01	-0.06	3 1	6723	4.42	0.04	0.02	2 1	6853	6.10	1.00	0.70	2 1	7029	4.87	-0.18	-0.71	6 2
6573	5.23	0.61	0.10	3 1	6727	6.74	-0.05	.	3 2	6855	4.36	1.48	1.55	6 2	7032	4.89	1.12	.	3 2
6575	6.25	1.02	0.83	3 2	6731	5.86	1.24	1.43	3 2	6857	5.39	1.07	1.06	3 2	7034	6.31	0.48	0.02	3 2
6580	2.41	-0.21	-0.88	2 1	6733	4.79	0.38	0.05	3 2	6859	2.70	1.38	1.55	6 1	7036	5.73	0.24	0.11	3 2
6581	4.24	0.08	0.11	2 1	6736	5.97	0.00	-0.89	3 2	6866	4.84	0.91	0.61	4 1	7039	3.16	-0.11	-0.36	5 1
6582	3.62	1.19	1.17	6 2	6740	6.41	1.26	1.41	3 2	6868	4.96	1.58	2.00	2 1	7048	5.83	0.04	0.03	3 2
6585	5.15	0.70	.	3 2	6743	3.66	-0.08	-0.84	6 2	6869	3.25	0.94	0.65	6 1	7050	5.24	0.78	.	3 2
6588	3.80	-0.18	-0.69	9 1	6745	4.35	0.22	0.18	6 2	6872	4.34	1.17	1.18	2 1	7056	4.36	0.19	0.16	5 1
6590	5.95	1.26	1.18	3 2	6746	2.99	1.01	0.77	3 2	6875	5.25	-0.19	.	3 2	7057	5.74	0.28	0.06	2 1
6592	6.36	1.20	1.18	2 1	6747	6.15	0.00	-0.90	3 2	6879	1.85	-0.03	-0.13	3 1	7059	5.64	0.14	0.08	5 1
6595	4.87	0.47	-0.04	3 1	6748	5.95	0.62	.	3 2	6884	4.68	0.94	0.71	2 1	7061	4.19	0.46	0.02	6 1
6596	4.80	0.43	-0.01	3 1	6749	4.95	0.22	.	3 2	6888	5.60	1.14	.	3 2	7062	5.49	0.13	.	3 2
6600	6.38	0.37	.	3 2	6751	5.85	0.46	0.05	3 2	6892	6.31	1.16	1.09	3 2	7063	4.22	1.09	0.83	2 1
6623	4.83	1.46	1.68	2 1	6752	4.03	0.86	0.51	5 1	6895	3.84	1.18	1.17	4 1	7064	4.84	1.20	1.22	2 1
6603	2.77	1.17	1.24	9 1	6759	6.15	-0.08	.	3 2	6896	4.81	1.30	0.93	3 1	7065	5.81	0.90	.	3 2
6613	6.43	-0.02	.	3 2	6761	5.49	0.58	.	3 2	6897	3.51	-0.17	-0.64	6 2	7066	5.20	1.47	1.64	1 1
6615	3.03	0.51	0.26	3 2	6762	6.29	0.12	-0.78	3 1	6899	5.89	0.98	0.83	3 2	7069	4.36	0.12	0.07	3 1
6628	3.42	0.75	0.39	9 1	6766	4.55	0.95	0.75	2 1	6902	5.65	0.92	0.45	3 2	7074	4.23	-0.14	.	3 2
6628	4.83	-0.04	-0.29	6 2	6769	5.52	1.11	1.08	2 1	6905	4.13	1.02	0.82	6 2	7077	6.75	0.20	.	3 2
6629	3.75	0.04	0.04	9 1	6770	4.63	0.97	0.73	3 1	6912	2.87	-0.13	-0.37	3 2	7106	3.42	0.60	-0.57	3 1
6630	3.21	1.17	1.19	3 2	6771	3.73	0.12	0.10	3 1	6913	4.81	1.04	0.90	6 1	7110	6.34	0.20	0.11	3 2
6631	4.81	0.26	0.00	6 2	6774	6.73	-0.03	-0.36	3 2	6916	4.64	-0.11	-0.39	6 2	7116	4.83	1.40	1.28	3 1
6633	6.22	0.16	-0.03	3 2	6775	5.04	0.52	-0.10	4 1	6917	5.83	0.07	0.29	4 1	7120	4.98	1.32	1.50	5 1
6634	6.49	1.08	1.28	3 2	6778	6.07	1.20	.	3 2	6918	5.21	0.50	0.21	4 1	7121	2.03	-0.22	-0.75	6 1
6635	6.07	1.20	1.28	3 2	6779	3.83	-0.02	-0.07	3 1	6920	4.22	-0.10	-0.33	3 1	7122	5.36	1.00	.	3 2
6636	4.58	0.43	0.01	3 1	6780	5.53	0.97	.	6 2	6921	6.63	-0.02	.	3 2	7125	4.67	1.19	1.04	4 1
6646	6.35	1.50	1.75	3 2	6781	5.86	0.12	0.08	2 1	6923	4.99	0.08	0.05	2 1	7127	5.14	1.37	.	6 2
6647	5.90	-0.10	-0.64	2 2	6782	5.90	0.14	0.08	2 1	6925	6.07	1.62	1.83	3 2	7130	6.01	0.97	0.80	3 2
6649	6.20	0.54	.	3 2	6783	4.53	1.01	0.78	6 2	6927	3.58	0.49	-0.06	6 1	7133	4.60	0.78	0.49	2 1
6652	6.45	0.02	-0.07	1 1	6786	5.86	0.29	.	3 2	6928	5.72	-0.03	-0.36	3 2	7135	5.57	1.04	0.87	3 2
6657	6.17	-0.03	-0.35	9 1	6787	4.35	-0.15	-0.82	3 1	6930	4.71	0.07	0.04	3 1	7137	4.93	0.90	0.57	3 1
6658	5.60	1.14	1.01	1 1	6788	6.16	-0.15	.	3 2	6934	4.96	-0.11	.	3 2	7139	4.30	1.67	1.65	3 1
6663	6.40	0.00	-0.06	2 1	6789	4.36	0.02	0.03	8 1	6939	6.44	0.68	.	3 2	7141	4.07	0.17	0.09	2 1
6668	5.96	-0.01	-0.10	4 1	6793	5.47	1.17	1.21	2 1	6945	4.82	1.19	1.11	3 2	7144	6.15	0.97	0.71	3 2
6670	5.77	0.42	-0.01	3 2	6795	5.73	0.37	0.03	3 2	6951	4.64	1.02	0.76	6 2	7149	4.80	1.80	1.02	2 1
6672	6.20	0.04	-0.89	3 1	6804	5.47	-0.17	.	3 2	6957	5.94	0.16	0.16	3 1	7150	3.51	1.18	1.13	6 1
6675	4.84	1.21	1.22	6 2	6806	6.40	0.87	0.59	4 1	6958	6.43	-0.04	-0.26	3 2	7157	4.00	1.59	1.41	3 1
6679	6.52	0.05	0.05	9 1	6808	6.33	-0.04	-0.23	3 2	6964	7.16	1.26	1.30	3 2	7161	5.88	0.56	0.13	6 2
6682	4.88	1.65	1.96	3 2	6809	6.04	0.51	-0.01	2 1	6967	6.42	-0.03	-0.34	3 2	7163	6.21	0.46	0.01	3 2
6685	5.45	0.34	0.07	7 1	6810	5.68	0.20	-0.01	2 1	6970	5.14	0.92	.	3 2	7172	5.22	0.53	0.07	6 1
6688	3.75	1.18	1.21	3 1	6811	5.79	0.25	0.07	5 1	6973	3.83	1.34	1.53	4 1	7173	5.76	0.25	-0.44	3 2
6690	6.29	0.00	-0.25	3 2	6812	3.85	0.22	-0.47	2 1	6978	4.80	0.61	0.44	2 1	7176	4.02	1.08	1.04	3 1
6693	4.99	1.62	.	3 2	6813	6.59	0.27	0.14	3 2	6982	4.01	1.14	1.02	6 2	7177	5.23	0.00	.	3 2
6695	3.87	1.35	1.46	3 1	6817	5.94	0.94	0.72	2 1	6985	5.39	0.37	0.02	6 2	7178	3.24	-0.05	-0.08	9 1
6698	3.34	0.99	0.87	5 1	6820	6.12	1.47	1.72	2 1	6987	5.45	0.37	-0.04	3 2	7180	4.82	1.15	1.10	4 1
6700	4.75	-0.05	-0.04	3 1	6822	5.98	0.07	-0.87	3 1	6993	5.74	0.06	0.06	7 1	7186	6.32	1.00	0.78	3 2
6703	3.70	0.94	0.70	3 1	6823	5.98	0.04	-0.88	3 1	6994	6.39	0.60	0.13	3 2	7188	4.75	-0.02	-0.07	6 2
6705	2.22	1.52	1.88	9 1	6828	6.18	0.58	.	6 2	6996	6.37	0.15	0.14	3 2	7190	5.93	1.24	.	6 2
6707	4.41	0.39	0.39	3 1	6829	5.47	0.02	0.04	3 2	7001	0.03	0.00	0.00	9 1	7193	4.02	1.09	1.04	4 1
6710	4.62	0.39	0.00	7 1	6832	3.11	1.56	1.70	3 2	7004	5.78	0.96	0.77	3 2	7194	2.59	0.08	0.05	7 1
6712	4.60	-0.02	-0.81	3 1	6836	6.40	0.54	.	3 2	7005	6.49	1.22	.	6 2	7195	5.65	1.23	.	3 2
6713	4.68	1.27	1.22	3 1	6837	5.95	1.16	1.27	3 2	7010	6.28	0.96	0.69	3 2	7197	5.74	0.32	.	3 2

TABLE 9 UBV PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY				
B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S
7208	6.30	1.62	1.82	3 2	7372	4.97	-0.09	-0.72	3 1	7557	0.76	0.22	0.08	9 1
7209	5.42	0.00	-0.07	3 2	7373	5.16	0.78	0.42	4 1	7562	6.26	0.10	0.09	3 2
7213	5.16	0.53	1.22	6 2	7375	5.59	1.22	0.56	3 2	7564	4.23	1.82	0.96	2 1
7215	5.02	0.19	0.09	4 1	7377	3.36	0.32	0.04	9 1	7565	4.96	-0.12	-0.68	3 1
7217	3.77	1.00	0.86	3 1	7383	5.96	1.64	1.92	3 2	7569	5.78	0.53	0.21	2 1
7219	6.77	0.13	0.14	3 2	7386	6.19	0.52	-0.03	2 1	7574	6.22	0.01	-0.92	3 1
7221	5.33	0.91	0.61	6 2	7387	4.67	0.60	0.51	3 1	7578	6.18	1.02	0.38	2 1
7226	4.21	0.52	0.02	6 2	7392	5.72	1.32	1.38	3 2	7579	5.75	0.22	0.17	3 2
7228	5.47	0.26	0.13	3 2	7394	6.38	1.57	1.79	5 1	7580	6.53	0.02	-0.11	3 2
7232	6.16	0.72	0.13	6 2	7398	5.46	1.12	0.13	3 2	7581	4.13	1.08	0.89	3 2
7233	6.49	1.10	0.10	3 2	7399	6.60	0.39	0.07	3 2	7582	3.82	0.89	0.52	3 1
7234	3.31	1.20	1.15	5 1	7400	5.80	0.08	0.07	3 2	7588	6.39	0.16	0.09	3 2
7235	2.99	0.01	-0.01	9 1	7404	6.25	1.32	1.38	3 2	7589	5.62	-0.07	-0.97	5 1
7236	3.43	-0.09	-0.27	5 1	7405	4.45	1.50	1.82	5 1	7590	3.96	-0.03	-0.05	9 2
7237	5.54	1.54	1.90	2 1	7417	3.08	1.13	0.62	5 1	7592	4.58	-0.06	-0.13	2 1
7242	4.59	1.10	1.03	6 2	7418	5.11	-0.10	-0.32	2 1	7593	5.70	-0.08	-0.49	2 1
7254	4.11	0.04	0.08	3 2	7420	3.79	0.14	0.11	3 1	7594	6.48	-0.04	-0.27	2 1
7257	5.88	-0.08	0.13	3 2	7424	4.90	1.09	0.33	3 2	7595	4.68	1.05	0.89	2 1
7259	4.11	1.20	1.07	3 2	7426	4.74	-0.13	-0.66	3 1	7597	4.70	0.75	0.32	3 1
7264	2.88	0.34	0.24	4 1	7429	4.45	1.18	1.24	4 1	7598	6.15	0.03	0.04	3 2
7271	6.13	0.95	0.10	3 2	7431	5.67	0.19	0.04	3 2	7602	3.72	0.86	0.48	9 1
7273	6.57	1.02	0.17	3 2	7435	6.39	0.02	0.04	3 2	7603	5.76	1.04	0.80	3 2
7274	6.27	0.17	0.14	3 2	7437	4.99	-0.07	-0.43	3 1	7604	4.50	1.46	1.57	3 1
7278	5.53	0.18	0.13	3 2	7440	4.60	0.06	-0.15	3 1	7605	6.55	0.39	0.13	3 2
7287	5.16	-0.07	-0.42	3 2	7446	4.96	0.00	-0.87	9 1	7612	5.31	1.22	1.29	3 2
7292	4.83	0.55	0.32	2 1	7447	4.36	-0.09	-0.44	3 1	7613	4.95	-0.09	-0.52	2 1
7293	6.75	0.64	0.17	2 1	7451	5.74	0.48	0.00	4 1	7615	3.93	1.03	0.89	4 1
7294	6.57	0.63	0.21	2 1	7455	6.09	1.55	1.95	3 2	7618	4.82	0.89	0.54	2 1
7297	6.36	0.43	0.21	2 1	7459	6.26	1.00	0.95	6 2	7619	4.92	0.12	0.06	3 1
7298	4.38	-0.14	-0.66	3 1	7461	6.25	0.28	0.13	3 2	7623	4.36	-0.15	-0.67	3 2
7306	4.77	-0.04	-0.55	3 1	7462	4.69	0.80	0.37	5 1	7627	6.14	1.64	1.52	3 1
7310	3.07	1.00	0.78	3 1	7464	6.61	0.23	0.03	3 2	7630	5.81	0.11	0.11	3 2
7312	5.14	0.31	0.00	8 1	7469	4.47	0.39	-0.03	6 1	7631	5.66	0.49	0.38	3 2
7314	6.23	1.25	1.23	2 1	7478	4.70	0.95	0.80	3 1	7635	3.47	1.57	1.93	3 1
7317	4.37	1.43	1.57	5 1	7479	4.57	0.77	0.43	3 1	7636	6.17	1.13	0.89	3 2
7320	6.34	1.23	1.25	3 2	7482	6.49	0.39	-0.62	3 1	7637	5.87	0.58	0.05	2 1
7323	6.58	1.67	0.34	6 2	7488	4.37	1.05	0.89	3 1	7639	6.29	0.11	0.16	3 2
7325	6.32	1.05	0.88	3 2	7489	5.06	0.33	0.03	3 2	7644	6.07	0.64	0.08	6 2
7328	3.76	0.97	0.74	3 1	7494	6.39	1.40	1.68	3 2	7648	5.91	1.52	1.89	3 2
7329	5.05	0.32	0.14	3 1	7498	5.41	0.22	0.12	6 2	7650	4.59	1.65	1.81	3 1
7330	6.48	0.63	0.14	3 2	7503	5.95	0.64	0.20	4 1	7652	4.77	1.41	1.68	6 2
7334	6.34	1.14	0.23	3 2	7504	6.20	0.66	0.21	4 1	7653	4.65	0.18	0.16	3 2
7336	5.49	-0.04	-0.23	3 2	7510	5.35	0.20	0.03	3 2	7658	6.45	0.50	0.50	3 2
7337	3.92	-0.08	-0.33	3 2	7513	6.45	1.48	1.72	3 2	7663	6.45	1.58	1.98	6 2
7340	3.93	0.22	0.14	3 1	7519	5.91	0.18	0.09	3 2	7665	3.56	0.76	0.45	6 2
7342	4.61	0.10	-0.53	3 1	7524	6.05	0.30	0.08	3 2	7667	5.68	1.30	1.35	3 2
7343	4.29	0.34	0.07	6 2	7525	2.72	1.52	1.68	4 1	7669	5.02	1.06	0.86	3 2
7347	3.97	-0.10	-0.33	3 2	7528	2.87	-0.02	-0.10	3 1	7670	5.70	0.72	0.38	2 1
7348	3.97	-0.10	-0.33	6 2	7534	4.59	0.46	0.00	2 1	7672	5.80	0.61	0.09	2 1
7349	5.83	1.09	0.97	3 2	7536	3.63	1.41	0.96	3 1	7673	4.94	1.62	1.84	6 2
7352	4.65	1.25	1.45	3 1	7538	6.05	0.40	0.08	3 2	7677	5.68	1.30	1.35	3 2
7354	6.35	0.44	-0.03	3 2	7546	5.00	0.10	0.06	3 1	7678	6.26	0.53	-0.46	5 1
7358	5.18	-0.12	-0.53	3 1	7551	6.44	0.20	-0.74	3 1	7679	5.65	0.54	0.54	3 2
7362	5.03	0.23	0.31	3 2	7552	5.33	0.20	0.74	3 1	7681	6.47	1.16	1.00	3 2
7371	4.59	0.02	0.06	3 1	7554	6.51	-0.10	-0.70	3 2	7685	4.50	1.31	1.50	3 1
										7686	6.20	1.61	1.89	2 1

TABLE 9 UBV PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY						BRIGHT STAR PHOTOMETRY						BRIGHT STAR PHOTOMETRY					
B.S.	V	B-V	U-B	WT	S	B.S.	V	B-V	U-B	WT	S	B.S.	V	B-V	U-B	WT	S
7822	4.81	0.37	0.05	2	1	7982	5.99	0.46	-0.03	3	2	8117	6.21	1.14	-0.77	3	2
7827	6.36	0.00	0.00	2	1	7985	5.55	-0.08	0.27	3	2	8119	5.63	0.11	0.11	3	2
7829	6.74	0.22	0.04	2	1	7986	2.65	1.25	1.23	6	2	8121	6.38	1.61	1.92	3	1
7830	5.94	0.08	0.30	2	1	7987	2.35	1.32	1.32	3	2	8123	4.49	0.50	-0.01	5	1
7834	4.02	0.40	0.29	3	1	7990	4.75	0.32	0.10	3	1	8125	6.31	-0.07	-0.22	3	2
7838	6.11	1.29	1.41	3	2	7993	6.45	0.07	-0.77	3	1	8129	6.45	1.40	1.66	3	2
7841	6.40	1.12	1.07	2	1	7995	4.61	0.82	0.47	2	1	8130	3.73	0.40	0.02	2	1
7844	4.95	-0.09	-0.63	3	1	8001	4.77	-0.14	-0.58	2	1	8131	3.90	0.52	0.30	2	1
7845	5.65	0.69	0.69	3	2	8006	6.55	0.29	0.05	3	2	8135	4.71	0.56	0.02	6	2
7847	6.18	1.01	0.74	5	1	8010	6.05	0.82	0.49	3	2	8140	4.39	0.19	0.12	6	2
7848	4.76	0.28	0.05	6	2	8013	5.69	0.50	0.00	3	2	8141	5.82	-0.13	-0.51	3	2
7850	4.22	0.20	0.16	3	1	8014	6.57	-0.10	-0.29	3	2	8142	6.40	0.97	0.62	6	2
7852	4.04	-0.12	-0.48	2	1	8017	6.05	1.22	1.36	3	2	8143	4.23	0.13	-0.39	2	1
7857	6.56	0.08	0.05	3	2	8018	5.87	0.18	0.11	3	2	8146	4.42	-0.10	-0.83	3	1
7863	6.00	0.44	0.11	9	2	8019	6.37	0.10	0.11	3	2	8148	6.56	0.73	0.11	5	1
7864	6.03	0.62	0.19	6	2	8020	5.67	0.47	-0.33	4	1	8151	4.82	0.02	-0.07	6	2
7865	6.19	0.20	0.16	3	2	8021	5.15	0.49	0.13	3	2	8152	6.38	1.32	1.41	3	2
7866	4.63	1.61	0.76	2	1	8023	5.96	0.05	-0.85	3	2	8159	6.09	1.26	1.41	3	2
7869	3.11	1.00	0.79	6	2	8024	6.01	0.23	0.11	3	2	8160	5.87	0.92	0.64	3	2
7871	4.69	0.11	0.11	2	1	8028	3.94	0.02	0.01	3	1	8162	2.45	0.22	0.11	5	1
7875	5.12	0.53	0.19	3	2	8031	6.11	0.39	0.00	3	2	8163	5.82	1.66	1.97	3	2
7881	5.15	-0.06	-0.28	3	2	8034	5.23	0.46	0.02	3	2	8165	5.57	1.05	0.91	2	1
7882	3.63	0.44	0.08	3	1	8038	5.99	0.26	0.09	3	2	8167	4.27	0.53	0.56	2	1
7884	4.33	0.96	0.68	3	1	8039	4.67	0.89	0.54	6	2	8170	6.40	0.53	-0.01	6	1
7891	4.82	-0.02	-0.07	3	1	8042	6.64	0.68	0.00	3	2	8173	4.09	1.11	1.05	6	1
7896	5.02	0.74	0.19	2	1	8046	5.94	1.11	0.06	3	1	8175	5.99	1.54	1.88	3	2
7898	6.37	0.72	0.21	6	2	8047	4.75	-0.04	-0.95	4	1	8176	6.58	0.13	-0.36	3	2
7906	3.77	0.06	-0.21	9	1	8052	6.58	1.23	1.18	3	2	8177	6.51	0.20	0.00	3	2
7909	5.76	1.53	0.12	3	2	8054	6.50	-0.10	-0.49	3	2	8178	5.17	0.05	0.07	3	2
7913	3.43	0.16	0.12	3	1	8056	6.21	0.48	0.02	3	2	8180	5.76	-0.04	0.00	3	2
7915	6.29	1.08	0.00	3	2	8060	4.84	0.18	0.06	3	1	8181	4.22	0.48	-0.13	3	2
7920	4.51	0.27	0.09	6	2	8061	5.68	0.59	0.10	6	2	8187	5.49	0.29	0.13	3	2
7924	1.25	0.09	-0.23	9	1	8066	5.60	1.65	2.01	3	2	8191	6.34	0.47	0.13	2	1
7928	4.44	0.32	0.10	3	1	8068	6.33	0.97	0.61	3	2	8192	6.36	0.33	0.13	3	2
7934	5.41	1.12	1.09	3	2	8073	5.76	1.18	1.15	3	2	8195	5.70	0.20	0.00	3	2
7935	6.49	0.39	0.04	3	2	8075	4.07	-0.01	0.01	3	1	8200	5.63	1.19	1.19	3	2
7936	4.13	0.43	0.04	3	1	8077	5.94	0.54	0.06	3	2	8201	6.47	0.04	0.05	3	2
7939	4.91	1.19	1.18	4	1	8079	3.70	1.65	1.80	2	1	8203	6.46	0.16	0.05	3	2
7940	6.32	0.33	-0.48	3	1	8080	4.49	1.60	1.91	3	1	8204	3.74	1.00	0.60	3	1
7942	4.23	1.06	0.88	3	1	8081	6.20	1.08	1.03	3	2	8205	6.13	0.44	0.01	3	2
7943	5.10	0.35	0.00	3	2	8085	5.22	1.17	1.11	9	1	8207	5.78	1.44	1.74	6	1
7947	3.91	0.85	0.51	3	1	8086	6.03	1.37	1.23	9	1	8213	4.51	0.91	0.60	4	1
7949	2.46	1.03	0.87	8	1	8089	4.56	1.56	1.73	3	1	8219	6.40	1.64	1.90	3	2
7950	3.77	0.00	0.02	9	1	8090	6.15	1.66	1.97	3	2	8225	4.57	1.62	1.93	3	1
7951	4.44	1.67	1.93	3	1	8092	5.02	1.58	1.55	3	2	8229	5.29	1.10	0.00	3	2
7952	4.89	1.52	1.87	6	2	8093	6.45	0.37	0.06	2	1	8232	2.87	0.84	0.58	4	2
7953	5.58	-0.02	-0.09	3	2	8095	6.45	0.34	0.06	3	2	8234	6.18	0.46	0.02	3	2
7955	4.52	0.54	0.10	2	1	8096	6.27	1.16	1.21	3	2	8235	6.43	0.20	0.00	3	2
7957	3.43	0.92	0.61	5	1	8097	4.68	0.26	0.08	4	1	8236	5.57	1.04	0.56	6	2
7959	5.65	0.18	0.00	3	2	8098	6.07	0.02	0.04	3	2	8238	3.23	-0.22	-0.95	4	1
7963	4.54	-0.11	-0.50	3	1	8100	5.83	0.45	0.00	3	2	8249	6.20	0.03	0.05	3	2
7965	4.89	1.00	0.73	6	2	8110	5.42	1.42	0.00	3	2	8251	5.77	1.11	1.04	3	2
7974	6.33	0.02	-0.02	3	2	8111	6.63	0.03	0.00	3	2	8252	4.02	0.89	0.56	6	2
7977	4.86	0.42	-0.45	3	1	8114	5.75	0.19	0.22	3	2	8253	5.73	0.22	0.89	3	2
7980	4.12	1.63	1.91	6	1	8115	3.20	0.99	0.76	5	1	8254	3.76	1.00	0.89	3	2

TABLE 9 UBV PHOTOMETRY OF BRIGHT STARS

BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY					BRIGHT STAR PHOTOMETRY				
B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S	B.S.	V	B-V	U-B	WT S
8371	5.80	0.72	-0.02	6 1	8491	6.21	0.02	-0.04	3 2	8592	5.21	0.44	.	3 2
8376	6.33	0.37	-0.03	3 2	8492	6.15	1.11	.	3 2	8593	6.23	0.20	.	3 2
8379	5.50	1.00	.	3 2	8494	4.19	0.28	0.04	7 1	8597	4.00	-0.10	-0.28	2 1
8380	5.95	0.39	0.11	3 2	8495	6.15	0.19	0.09	3 2	8600	6.28	0.12	.	3 2
8381	6.01	-0.10	.	3 2	8498	4.13	1.46	1.63	3 1	8602	5.86	0.06	.	3 2
8382	6.22	1.00	0.87	3 2	8499	4.15	0.99	0.80	4 1	8603	5.73	-0.15	-0.90	6 1
8383	4.90	1.75	0.38	3 1	8500	5.79	1.16	1.14	3 2	8606	6.29	-0.05	-0.54	4 1
8385	6.00	-0.12	-0.57	3 2	8501	5.37	0.60	.	3 2	8610	5.03	1.14	1.16	6 2
8386	5.42	-0.10	.	3 2	8502	2.86	1.39	1.54	6 2	8611	6.65	0.35	.	3 2
8387	4.69	1.06	0.99	6 2	8504	5.75	0.88	0.51	3 2	8612	6.23	0.78	0.49	3 2
8390	5.58	1.28	1.40	3 2	8505	5.77	1.02	0.88	3 2	8613	4.63	0.24	0.10	3 1
8401	5.54	0.96	0.73	3 2	8507	6.39	0.44	0.00	3 2	8614	6.47	1.04	.	3 1
8402	4.69	-0.05	-0.42	3 1	8510	6.17	0.28	0.11	2 1	8616	5.66	0.05	.	3 2
8405	6.47	1.63	.	3 2	8512	5.37	-0.06	-0.37	3 2	8619	6.31	1.01	.	6 2
8406	5.56	0.07	-0.86	3 1	8513	5.37	0.02	0.47	3 2	8620	5.97	1.46	.	3 2
8407	5.60	-0.02	-0.10	6 1	8514	6.17	0.44	-0.03	3 2	8622	4.88	-0.20	-1.04	9 1
8410	5.31	0.23	0.15	6 1	8515	5.29	0.65	-0.06	6 2	8623	5.87	1.30	.	3 2
8411	4.66	1.37	1.66	6 2	8518	3.84	-0.06	-0.13	3 1	8628	4.16	-0.12	-0.34	3 1
8413	4.84	1.44	1.80	5 1	8520	4.99	-0.10	-0.81	2 1	8629	6.31	0.52	0.00	3 2
8414	2.93	0.97	0.76	4 1	8521	6.62	2.01	.	4 2	8630	4.15	0.20	0.11	3 2
8417	4.29	0.34	0.09	3 1	8522	4.81	0.00	-0.19	3 1	8632	4.46	1.33	1.36	3 1
8418	4.25	-0.07	-0.27	2 1	8523	4.56	-0.10	-0.51	2 1	8634	3.40	-0.09	-0.24	3 1
8420	6.55	1.18	1.30	3 2	8524	5.62	0.01	0.14	3 2	8635	5.98	0.58	0.07	3 2
8421	6.12	1.60	1.77	4 1	8526	6.04	0.64	0.14	3 2	8636	2.11	1.62	1.60	6 2
8423	6.58	0.52	-0.02	2 1	8527	5.78	0.38	0.03	3 2	8639	6.07	0.98	0.68	3 2
8425	1.74	-0.13	-0.47	3 2	8530	5.93	1.00	0.69	3 2	8640	5.25	-0.14	-0.87	5 1
8427	6.27	0.08	-0.71	5 1	8531	5.32	0.67	.	6 2	8641	4.79	-0.01	-0.01	3 1
8428	5.11	0.06	-0.84	6 1	8533	5.78	-0.04	-0.11	3 2	8644	4.85	1.03	0.80	3 2
8430	3.76	0.44	-0.04	9 1	8538	4.44	1.02	0.77	3 1	8645	6.45	0.17	0.12	3 2
8431	4.50	0.05	0.05	6 2	8539	4.64	-0.04	-0.97	3 1	8647	6.41	-0.04	-0.11	3 2
8432	6.15	1.00	0.82	3 2	8540	4.47	-0.03	-0.07	3 2	8649	4.69	1.36	1.55	6 1
8438	5.78	-0.10	-0.41	2 1	8541	4.58	0.09	-0.34	2 1	8650	2.95	0.86	0.57	5 1
8440	6.43	1.33	.	3 2	8546	5.27	-0.03	-0.11	5 1	8651	6.43	-0.09	-0.81	5 1
8443	6.14	0.43	0.24	3 1	8547	5.55	0.20	0.08	3 2	8655	4.85	1.18	1.17	6 2
8447	4.92	0.48	.	3 2	8548	5.75	0.52	0.04	3 2	8657	5.51	1.32	1.42	3 2
8450	3.55	0.07	0.11	2 1	8549	6.45	-0.13	-0.75	5 1	8662	6.56	0.30	0.11	3 2
8451	6.27	-0.01	-0.07	3 2	8551	4.80	1.06	0.88	5 1	8663	5.35	-0.15	-0.50	3 2
8453	6.01	0.93	0.83	3 2	8552	5.47	0.95	.	3 2	8664	6.73	0.11	0.10	3 2
8454	4.25	0.46	0.18	5 1	8553	6.14	-0.14	-0.77	5 1	8665	4.19	0.50	-0.03	6 1
8457	6.09	0.50	.	3 2	8556	3.97	1.03	0.80	3 2	8667	3.94	1.08	0.91	3 1
8461	5.95	0.95	0.73	6 1	8558	3.66	0.38	0.01	2 1	8668	6.28	1.16	.	3 2
8464	6.17	0.17	.	3 2	8560	4.11	1.57	1.70	3 2	8669	6.37	1.06	.	6 2
8465	3.53	1.55	1.71	6 1	8561	5.46	0.37	-0.59	3 1	8671	6.71	0.47	0.10	3 2
8467	6.33	0.50	0.06	3 2	8562	5.58	1.55	1.90	3 2	8672	6.34	0.07	0.10	3 2
8468	4.73	0.52	0.61	3 1	8563	5.95	0.33	.	3 2	8675	3.49	0.08	0.10	6 2
8469	5.05	0.74	-0.74	9 1	8566	5.48	0.38	0.09	3 2	8679	3.98	1.59	1.94	3 1
8471	5.51	0.11	0.12	3 2	8572	4.37	1.68	1.10	4 1	8680	6.33	0.31	0.31	3 2
8473	6.27	-0.06	-0.18	6 1	8573	4.81	-0.08	-0.14	3 1	8681	6.54	0.29	0.05	3 2
8474	5.50	0.38	-0.04	2 1	8576	4.25	0.01	0.02	3 2	8684	3.48	0.94	0.68	3 1
8477	6.23	0.54	.	3 2	8577	6.15	1.38	1.35	3 2	8690	5.91	0.08	-0.51	4 1
8481	5.10	1.47	1.09	3 2	8579	4.51	-0.09	-0.74	8 1	8694	3.53	1.05	0.90	3 1
8484	6.09	1.02	0.81	3 2	8580	6.16	1.08	1.00	3 2	8695	4.46	-0.04	-0.14	6 2
8485	4.49	1.39	1.44	3 1	8581	6.14	0.56	0.06	3 2	8697	5.16	0.48	-0.01	3 1
8486	4.79	0.80	0.47	6 2	8585	3.77	0.01	0.00	3 1	8698	3.79	1.65	1.65	3 2
8488	5.10	0.92	.	3 2	8590	5.89	1.00	0.73	3 2	8700	6.04	0.62	.	3 2
8701	6.05	0.66	0.24	3 2	8701	6.05	0.66	0.24	3 2	8701	6.05	0.66	0.24	3 2
8702	4.74	1.26	1.35	3 1	8702	4.74	1.26	1.35	3 1	8702	4.74	1.26	1.35	3 1
8704	5.81	-0.08	-0.32	6 1	8704	5.81	-0.08	-0.32	6 1	8704	5.81	-0.08	-0.32	6 1
8709	3.28	0.05	0.08	9 1	8709	3.28	0.05	0.08	9 1	8709	3.28	0.05	0.08	9 1
8710	6.19	1.28	1.41	3 1	8710	6.19	1.28	1.41	3 1	8710	6.19	1.28	1.41	3 1
8711	5.56	1.14	1.09	2 1	8711	5.56	1.14	1.09	2 1	8711	5.56	1.14	1.09	2 1
8715	6.11	0.20	0.15	3 2	8715	6.11	0.20	0.15	3 2	8715	6.11	0.20	0.15	3 2
8716	5.72	0.88	0.60	3 1	8716	5.72	0.88	0.60	3 1	8716	5.72	0.88	0.60	3 1
8720	4.21	0.97	0.69	6 2	8720	4.21	0.97	0.69	6 2	8720	4.21	0.97	0.69	6 2
8721	6.49	-0.14	-0.83	4 1	8721	6.49	-0.14	-0.83	4 1	8721	6.49	-0.14	-0.83	4 1
8725	5.58	1.77	1.95	3 1	8725	5.58	1.77	1.95	3 1	8725	5.58	1.77	1.95	3 1
8726	4.94	1.77	1.95	3 1	8726	4.94	1.77	1.95	3 1	8726	4.94	1.77	1.95	3 1
8727	6.31	0.04	0.72	3 1	8727	6.31	0.04	0.72	3 1	8727	6.31	0.04	0.72	3 1
8728	1.16	0.09	0.06	7 1	8728	1.16	0.09	0.06	7 1	8728	1.16	0.09	0.06	7 1
8729	5.50	0.67	0.20	3 1	8729	5.50	0.67	0.20	3 1	8729	5.50	0.67	0.20	3 1
8730	6.28	1.12	1.08	3 2	8730	6.28	1.12	1.08	3 2	8730	6.28	1.12	1.08	3 2
8732	6.13	0.58	.	3 2	8732	6.13	0.58	.	3 2	8732	6.13	0.58	.	3 2
8733	6.17	-0.15	-0.80	4 1	8733	6.17	-0.15	-0.80	4 1	8733	6.17	-0.15	-0.80	4 1
8734	6.16	0.74	0.43	3 2	8734	6.16	0.74	0.43	3 2	8734	6.16	0.74	0.43	3 2
8735	6.37	0.35	0.02	3 2	8735	6.37	0.35	0.02	3 2	8735	6.37	0.35	0.02	3 2
8737	6.43	0.64	0.16	3 2	8737	6.43	0.64	0.16	3 2	8737	6.43	0.64	0.16	3 2
8738	6.33	0.06	0.02	3 2	8738	6.33	0.06	0.02	3 2	8738	6.33	0.06	0.02	3 2
8740	5.51	0.25	.	3 2	8740	5.51	0.25	.	3 2	8740	5.51	0.25	.	3 2
8742	5.43	0.98	0.83	3 2	8742	5.43	0.98	0.83	3 2	8742	5.43	0.98	0.83	3 2
8747	4.12	0.98	0.70	6 2	8747	4.12	0.98	0.70	6 2	8747	4.12	0.98	0.70	6 2
8748	4.72	1.43	1.69	1 1	8748	4.72	1.43	1.69	1 1	8748	4.72	1.43	1.69	1 1
8749	5.68	1.42	.	3 2	8749	5.68	1.42	.	3 2	8749	5.68	1.42	.	3 2
8750	6.21	0.89	0.60	3 2	8750	6.21	0.89	0.60	3 2	8750	6.21	0.89	0.60	3 2
8751	5.83	1.34	1.57	3 2	8751	5.83	1.34	1.57	3 2	8751	5.83	1.34	1.57	3 2
8752	5.13	1.55	1.33	3 1	8752	5.13	1.55	1.33	3 1	8752	5.13	1.55	1.33	3 1
8757	6.21	1.41	1.77	3 2	8757	6.21	1.41	1.77	3 2	8757	6.21	1.41	1.77	3 2
8758	6.54	-0.11	-0.64	4 1	8758	6.54	-0.11	-0.64	4 1	8758	6.54	-0.11	-0.64	4 1
8759	5.94	1.00	0.75	3 2	8759	5.94	1.00	0.75	3 2	8759	5.94	1.00	0.75	3 2
8762	3.62	-0.09	-0.53	3 1	8762	3.62	-0.09	-0.53	3 1	8762	3.62	-0.09	-0.53	3 1
8763	6.15	1.58	1.90	3 2	8763	6.15	1.58	1.90						

TABLE 10 SUPPLEMENTARY CAPE UVB PHOTOMETRY

BRIGHT STAR PHOTOMETRY						BRIGHT STAR PHOTOMETRY						BRIGHT STAR PHOTOMETRY						BRIGHT STAR PHOTOMETRY					
B.S.	V	B-V	U-B	WT	S	B.S.	V	B-V	U-B	WT	S	B.S.	V	B-V	U-B	WT	S	B.S.	V	B-V	U-B	WT	S
3	4.61	1.05	0.89	9	2	1520	4.03	-0.14	-0.61	9	2	2227	3.99	1.33	1.40	6	2	3484	4.31	0.90	0.59	9	2
48	4.41	1.66	2.02	3	2	1543	3.19	0.46	-0.02	6	2	2233	5.63	0.49	-0.00	6	2	3492	4.35	-0.04	-0.05	3	2
74	3.54	1.22	1.26	9	2	1544	4.36	0.02	-0.03	3	2	2244	5.01	-0.08	-0.25	9	2	3518	4.03	1.27	1.40	6	2
188	2.04	1.03	0.87	9	2	1552	3.69	-0.16	-0.82	9	2	2282	3.03	-0.19	-0.69	6	2	3547	3.13	1.01	0.77	3	2
194	4.76	1.03	0.84	9	2	1560	4.38	0.25	0.14	9	2	2294	1.99	-0.24	-0.98	9	2	3556	4.88	0.11	0.16	6	2
222	5.73	0.89	0.62	3	2	1567	3.72	-0.18	-0.82	6	2	2298	4.31	0.21	0.11	6	2	3578	5.80	0.53	.	3	2
224	4.43	1.50	1.85	3	2	1601	4.47	1.40	1.52	6	2	2344	5.06	-0.18	-0.75	9	2	3596	5.64	1.16	1.05	3	2
235	5.16	0.51	.	6	2	1611	4.79	0.26	0.14	9	2	2356	3.77	-0.15	-0.74	6	2	3628	4.62	1.58	1.91	6	2
248	4.76	1.57	1.93	6	2	1614	6.23	1.06	1.08	9	2	2382	5.88	1.00	0.77	3	2	3665	3.89	-0.06	-0.11	9	2
280	4.31	-0.16	-0.56	6	2	1617	4.81	-0.19	-0.72	6	2	2385	4.50	0.02	-0.28	3	2	3706	4.77	0.94	0.66	9	2
294	4.27	0.96	0.67	3	2	1621	4.90	-0.05	-0.15	6	2	2387	4.34	-0.24	-0.98	6	2	3709	4.81	0.94	0.66	9	2
296	5.40	1.12	1.04	3	2	1654	3.19	1.47	1.80	6	2	2414	4.55	-0.03	-0.06	6	2	3718	4.72	1.66	.	3	2
330	5.51	0.33	-0.00	3	2	1657	5.11	-0.07	-0.16	3	2	2422	6.05	0.06	-0.88	6	2	3733	4.72	0.92	0.63	6	2
334	3.45	1.16	1.19	9	2	1664	5.35	0.33	0.10	3	2	2429	3.96	1.07	1.01	9	2	3748	1.98	1.43	1.72	9	2
353	5.91	1.40	1.70	3	2	1666	2.80	0.13	0.12	9	2	2432	6.15	0.15	-0.75	9	2	3749	4.70	1.15	1.12	6	2
378	5.14	0.07	0.10	3	2	1672	5.43	0.24	0.16	3	2	2443	4.44	1.15	1.03	9	2	3759	4.60	0.46	-0.00	9	2
402	3.61	1.07	0.94	9	2	1679	4.26	-0.19	-0.90	6	2	2450	4.83	1.50	1.68	9	2	3786	3.58	0.36	0.03	6	2
434	4.82	1.37	1.60	3	2	1690	6.66	-0.08	-0.31	3	2	2456	4.66	-0.25	-1.06	6	2	3787	4.57	0.10	0.07	6	2
489	4.44	1.37	1.58	6	2	1696	4.46	-0.11	-0.40	9	2	2467	6.37	-0.04	-0.94	6	2	3834	4.67	1.32	1.47	6	2
509	3.49	0.74	0.22	9	2	1698	4.47	1.19	1.17	9	2	2479	5.88	-0.02	-0.90	3	2	3845	3.90	1.33	1.47	6	2
510	4.27	0.96	0.73	3	2	1702	3.29	-0.11	-0.39	9	2	2506	4.48	1.12	1.03	9	2	3849	5.07	-0.15	-0.57	9	2
531	4.65	0.33	0.06	9	2	1705	4.36	-0.09	-0.38	9	2	2509	6.05	-0.17	.	3	2	3858	4.77	-0.13	-0.59	3	2
539	3.73	1.14	1.07	9	2	1724	6.42	-0.02	0.01	3	2	2538	3.97	-0.23	-0.90	3	2	3871	4.79	0.51	0.34	6	2
549	4.61	0.95	0.72	6	2	1735	3.60	-0.11	-0.48	9	2	2571	4.83	-0.22	-0.94	3	2	3903	4.11	0.94	0.62	6	2
585	4.00	1.58	1.94	6	2	1748	6.34	-0.10	-0.73	3	2	2574	4.06	1.44	1.70	9	2	3906	6.03	-0.05	-0.09	3	2
595	3.83	0.01	-0.10	6	2	1756	4.29	-0.26	-1.02	9	2	2580	3.81	1.74	.	3	2	3950	4.69	1.62	1.93	3	2
612	4.69	-0.16	-0.51	6	2	1761	6.52	-0.10	-0.52	3	2	2590	4.66	0.37	0.03	6	2	3970	4.60	-0.08	-0.27	9	2
649	4.37	0.88	0.60	3	2	1762	4.71	-0.04	-0.12	6	2	25	6.39	-0.06	-0.71	6	2	3981	4.49	-0.04	-0.09	6	2
672	5.59	0.60	0.11	3	2	1763	5.79	-0.11	-0.87	3	2	2618	1.51	-0.21	-0.92	3	2	3991	5.30	0.36	.	3	2
708	4.88	-0.03	-0.08	9	2	1764	5.67	-0.12	-0.64	3	2	2646	3.49	1.76	.	3	2	3994	3.62	1.02	0.91	9	2
710	5.86	0.16	.	3	2	1765	4.73	-0.17	-0.79	6	2	2648	4.97	-0.20	-0.93	3	2	4092	5.61	1.53	1.87	6	2
718	4.27	-0.06	-0.11	6	2	1770	4.95	-0.15	-0.84	9	2	2653	3.05	-0.08	-0.82	3	2	4094	3.83	1.49	1.83	9	2
740	4.75	0.45	-0.03	9	2	1781	5.71	-0.21	-0.87	6	2	2657	4.11	-0.12	-0.49	2	2	4119	5.08	-0.13	-0.50	6	2
749	4.91	-0.05	-0.14	3	2	1784	4.14	0.97	0.68	9	2	2679	6.49	-0.10	-0.99	6	2	4133	3.86	-0.14	-0.96	6	2
753	5.80	0.99	0.87	3	2	1786	6.31	-0.14	-0.61	3	2	2693	1.83	0.68	0.47	3	2	4146	5.07	0.94	0.65	3	2
754	4.87	0.88	0.52	3	2	1788	3.38	-0.18	-0.91	6	2	2694	6.22	0.03	-0.90	9	2	4158	5.71	0.54	.	3	2
779	4.07	-0.22	-0.85	6	2	1789	4.95	-0.21	-0.90	6	2	2701	4.91	1.02	0.79	9	2	4232	3.12	1.25	1.31	9	2
781	4.83	0.44	.	3	2	1790	1.65	-0.23	-0.86	6	2	2707	5.44	0.29	0.13	3	2	4251	5.24	0.46	.	3	2
804	3.47	0.09	0.09	6	2	1803	6.15	-0.17	-0.73	3	2	2714	4.15	-0.01	-0.01	6	2	4287	4.08	1.10	1.00	9	2
811	4.24	-0.13	-0.44	9	2	1806	6.23	-0.07	-0.21	3	2	2739	6.01	-0.17	.	3	2	4299	4.73	1.62	1.96	6	2
813	4.27	0.30	0.09	6	2	1811	4.60	-0.21	-0.91	6	2	2745	4.43	-0.10	-0.90	3	2	4310	4.63	0.33	0.08	3	2
818	4.47	0.48	0.01	9	2	1820	6.39	-0.17	-0.74	3	2	2749	4.01	-0.17	-0.67	6	2	4343	4.47	0.03	0.05	6	2
850	4.77	0.91	0.65	6	2	1829	2.84	0.82	0.42	6	2	2764	4.50	1.15	0.54	6	2	4368	4.47	0.21	0.12	6	2
857	6.04	0.87	.	6	2	1830	5.81	1.14	1.06	3	2	2766	4.66	1.60	1.87	6	2	4371	5.17	1.52	1.86	3	2
874	3.90	1.10	1.00	9	2	1833	5.79	-0.19	-0.84	3	2	2782	4.40	-0.15	.	3	2	4382	3.57	1.12	0.95	6	2
875	5.16	0.08	0.07	9	2	1839	4.22	-0.14	-0.54	6	2	2806	6.42	-0.18	-1.03	6	2	4386	4.05	-0.06	-0.13	3	2
896	4.71	-0.11	-0.45	3	2	1840	6.33	-0.20	-0.81	3	2	2812	4.96	-0.04	-0.40	2	2	4395	5.09	0.44	.	3	2
911	2.53	1.64	1.95	6	2	1842	5.47	-0.18	-0.82	3	2	2827	2.45	-0.07	-0.74	3	2	4405	4.07	0.21	0.11	9	2
919	4.07	0.16	0.10	9	2	1848	6.23	-0.17	-0.72	3	2	2828	5.01	1.01	0.77	3	2	4418	4.95	1.01	0.77	3	2
963	3.86	0.52	-0.00	9	2	1852	2.25	-0.22	-1.04	3	2	2845	2.91	-0.10	-0.30	3	2	4450	3.54	0.96	0.70	6	2
984	4.80	0.23	0.09	9	2	1855	4.61	-0.26	-1.06	2	2	2854	4.35	1.43	1.54	3	2	4458	5.97	0.81	.	3	2
992	5.41	1.04	0.80	3	2	1861	5.35	-0.19	-0.92	9	2	2874	4.85	0.23	0.09	9	2	4468	4.71	-0.08	-0.19	6	2
996	4.85	0.68	0.21	6	2	1863	6.38	-0.08	-0.56	3	2	2906	4.45	0.52	0.04	3	2	4471	4.30	1.00	0.75	9	2
1003	3.73	1.61	.	3	2	1865	2.60	0.21	0.19	6	2	2909	5.09	0.46	.	3	2	4514	4.73	0.98	0.73	9	2
1016	5.50	0.88	.	3	2	1871	6.59	-0.19	-0.77	3	2	2921	5.63	-0.08	.	3	2	4517	4.03	1.52	1.82	3	2
1030	3.61	0.89	0.60	6	2	1872	5.35	0.04	0.05	3	2	2922	4.64	-0.11	-0.39	6	2	4525	6.49	0.68	.	3	2
1038	3.73	-0.09	-0.33	3	2	1873	6.21	-0.16	-0.79	3	2	2927	5.15	0.44	0.09	3	2	4540	3.60	0.56	0.09	6	2
1070	4.73	-0.09	-0.29	9	2	1876	4.41	-0.16	-0.95	3	2	2943	0.37	0.42	0.01	6	2	4587	5.55	0.77	0.44	9	2
1084	3.72	0.89	0.61	9	2	1879	3.40	-0.17	-1.02	6	2	2944	4.68	-0.10	-0.36	6	2	4589	4.65	0.12	0.13	3	2
1088	4.26	-0.10	-0.36	9	2	1886	5.67	-0.21	-0.90	3	2	2948	3.83	-0.15	-0.55	3	2	4608	4.13	0.97	0.62	3	2
1101	4.29	0.57	0.06	9	2	1887	4.80	-0.24	-0.99	3	2	2970	3.94	1.03	0.87	9	2	4623	4.03	0.33	-0.03	3	2
1136	3.53	0.93	0.71	9	2	1890	6.56	-0.13	-0.76	6	2	2993	4.59	1.63	1.92	3	2	4630	3.01				

