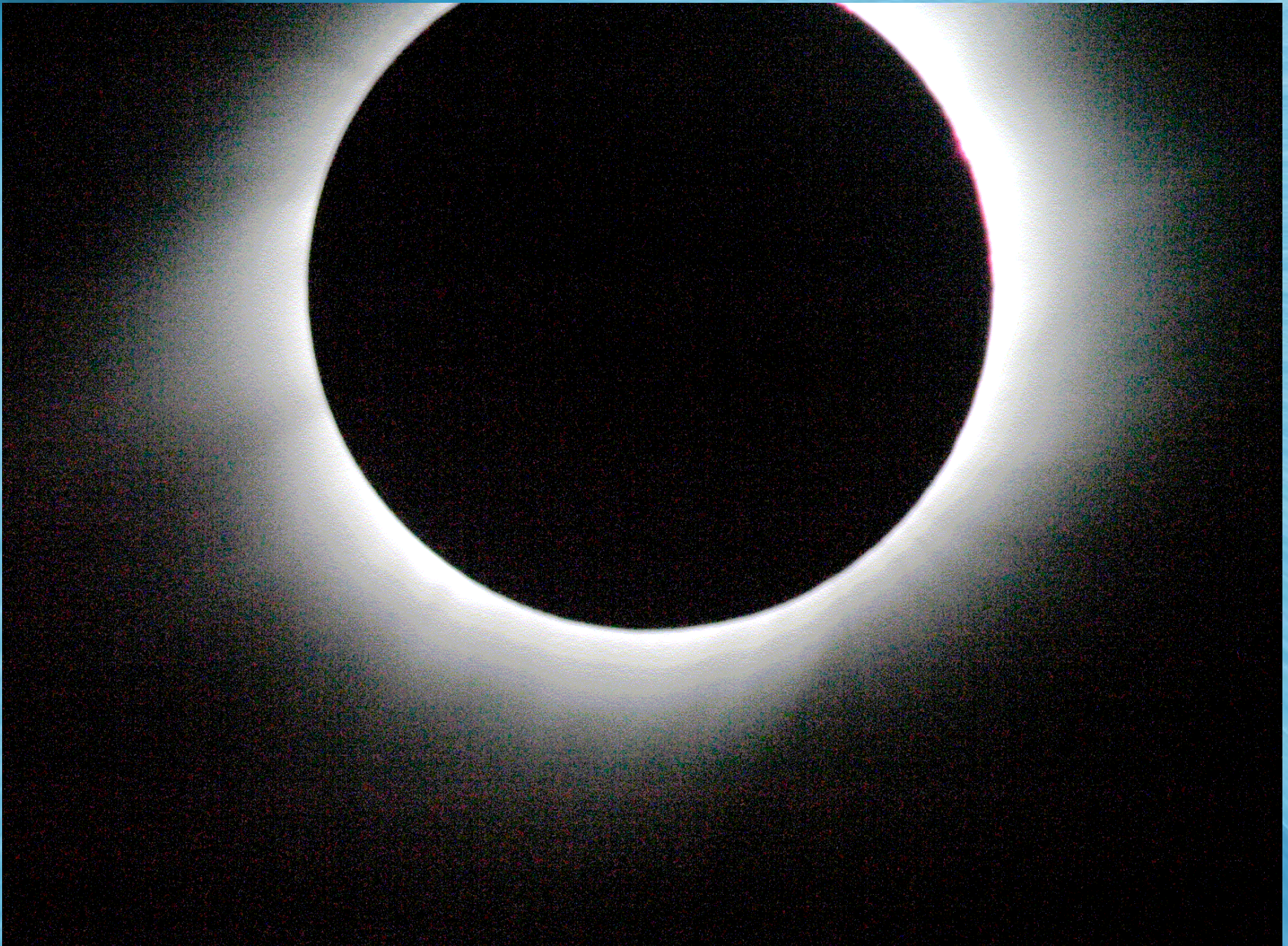


Some Astrophotography Pictures (and a few terrestrial ones too)

Alphonse C. Sterling

The Sun

Ghana (near Cape Coast), 2006



Gangsu Province, China, 2008















Mangaia, Cook Islands, 2010

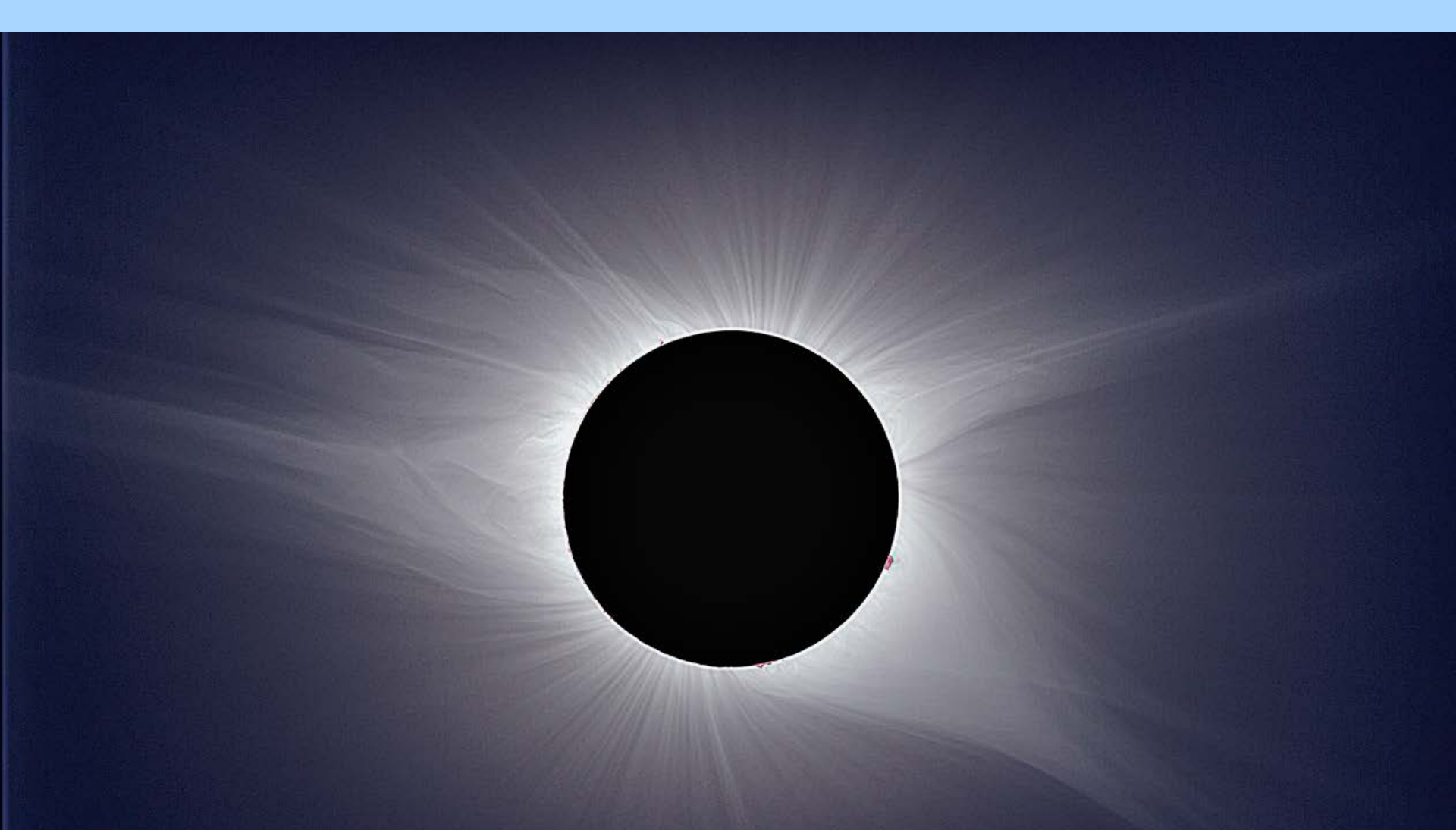


Lewisville, Idaho, 21 August 2017





(A. Sterling, Idaho)



Alphonse Sterling, 21 August 2017
Lewisville, Idaho, USA
Takahashi FSQ106ed, f/5
Canon EOS700D, ISO 100; 1/1000, 1/500
1/250, 1/125, 1/60, 1/30, 1/15, 1/8, 1/4s

A spectral plot showing emission lines. The plot is a curved band of light with a color gradient from blue on the left to red on the right. Four specific lines are labeled with white text and white arrows pointing to their respective positions on the spectrum.

$H\gamma$ 4340

$H\beta$ 4861

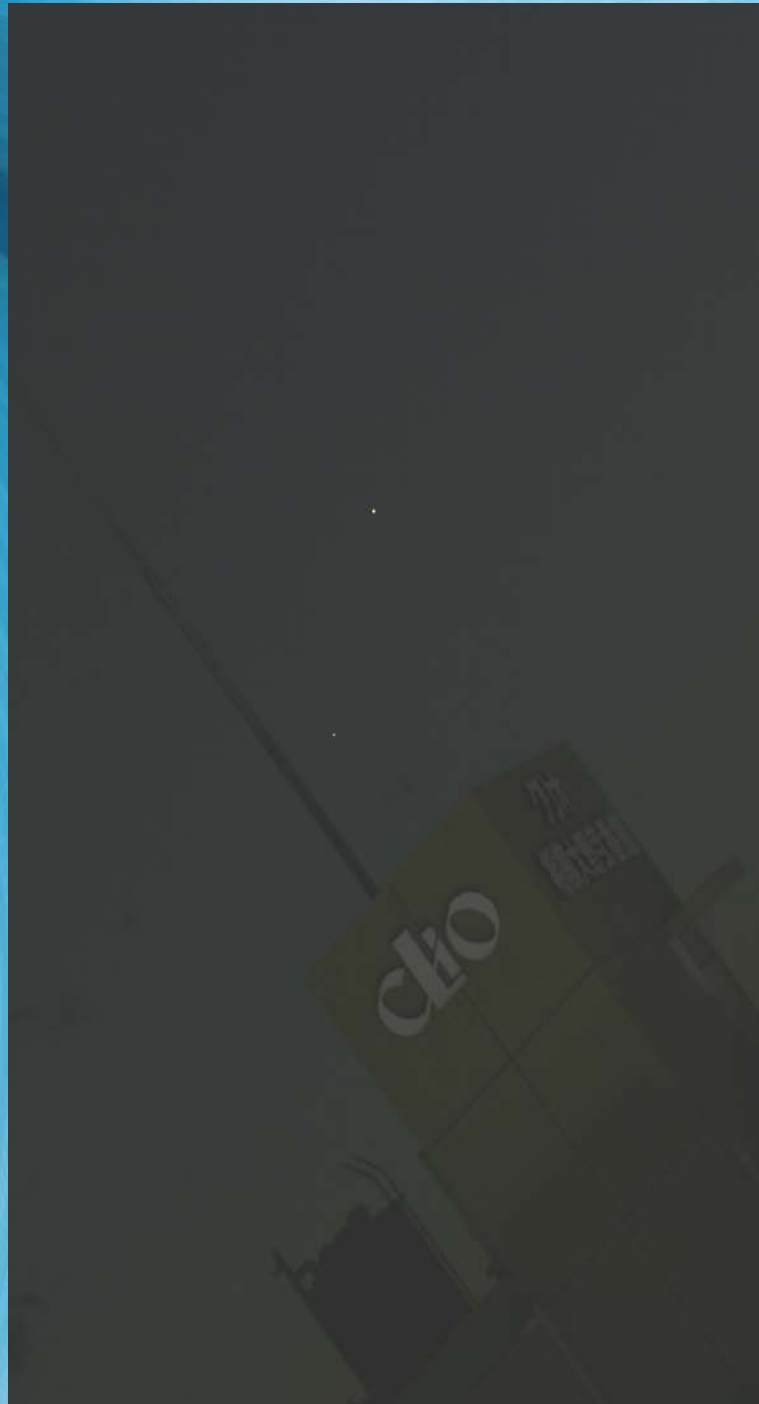
He I 5876(D3)

$H\alpha$ 6563

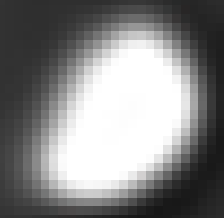
Other Solar System Objects

Mercury

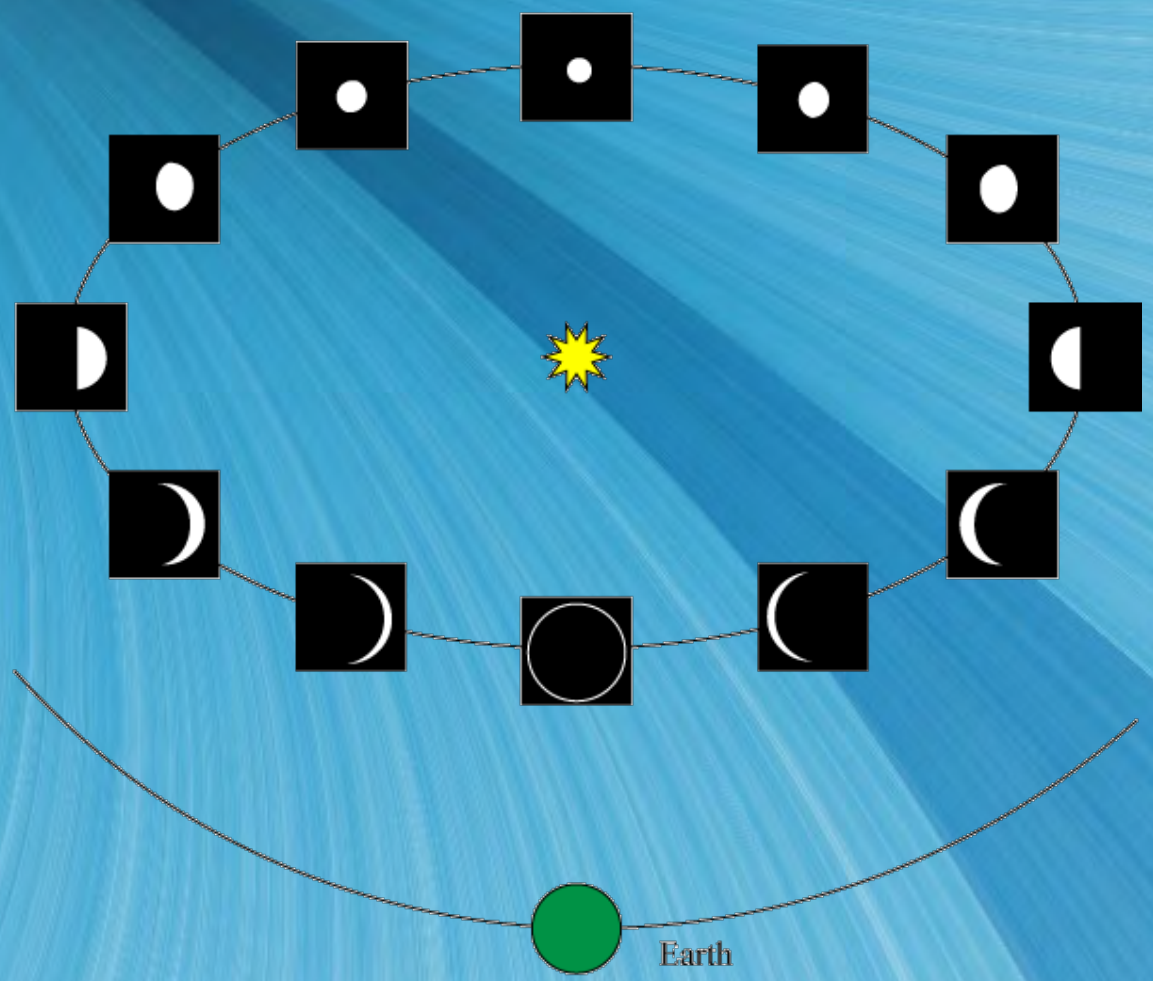
Jupiter (top)
and Mercury:
12/31/2008,
5:25 pm JST



Suisei, WO98, 110910



Phases of Venus as Seen From Earth



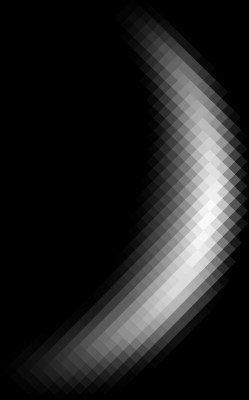
Venus

Venus: 08/26/2010



Kinsei, VC200L, 100826

Venus: 09/19/2010

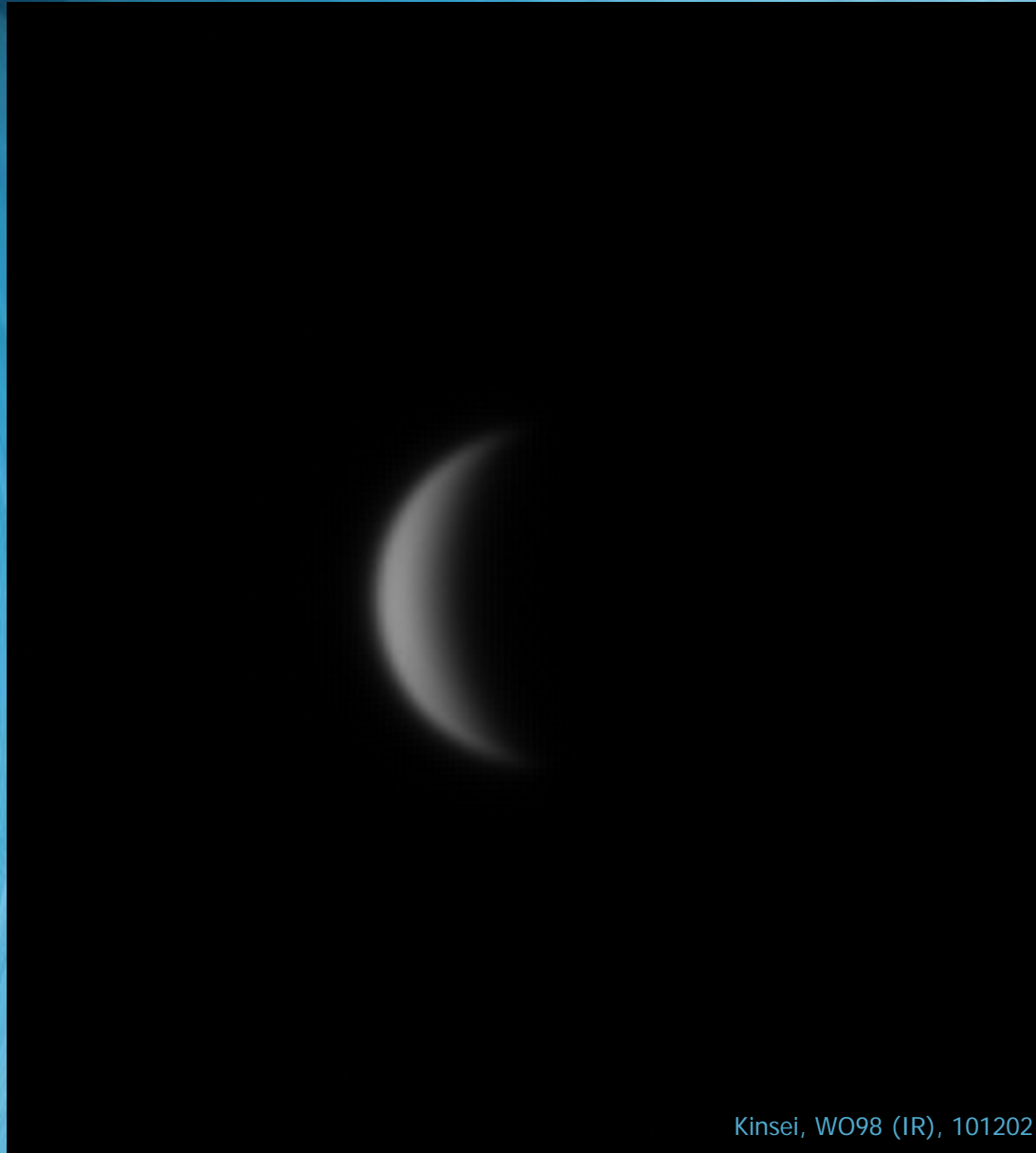


Venus: 11/25/2010



Kinsei, WO98, 101125

Venus: 12/02/2010



Kinsei, WO98 (IR), 101202

Earth









20 May 2012 22:35:02 UT



20 May 2012 22:35:22 UT







(~24 miles)

Our Moon















2018 January 31 Lunar Eclipse (Huntsville, AL, USA)

Alphonse C. Sterling
2018 January 31, Huntsville, Alabama
Takahashi 106 ED, f/5; Canon EOS 70





Alphonse C. Sterling
2018 January 31, Huntsville, Alabama, USA
Takahashi 106 ED, f/5; Canon EOS 700D



2011 December 10 Lunar Eclipse (Outside Tokyo)





21 January 2019

Total Lunar Eclipse

- Observer: Alphonse Sterling
- Location: Huntsville, Alabama, USA
- Equipment:
 - William Optics Zenithstar 66sd (apochromatic doublet).
 - Takahashi EM-11 mount.
 - Canon EOS 700D (aka T5i).

Processing

- All images intensity adjusted and sharpened using Photoshop CS5.
- The “stars” image was dark-current and flat-field corrected, and stacked, using Nebulosity.

Early Penumbral Eclipse



Late Penumbral Eclipse



Mid First Partial



Late First Partial



Start of Totality



Totality (longer exposure)



Totality (longer exposure, to show some stars)



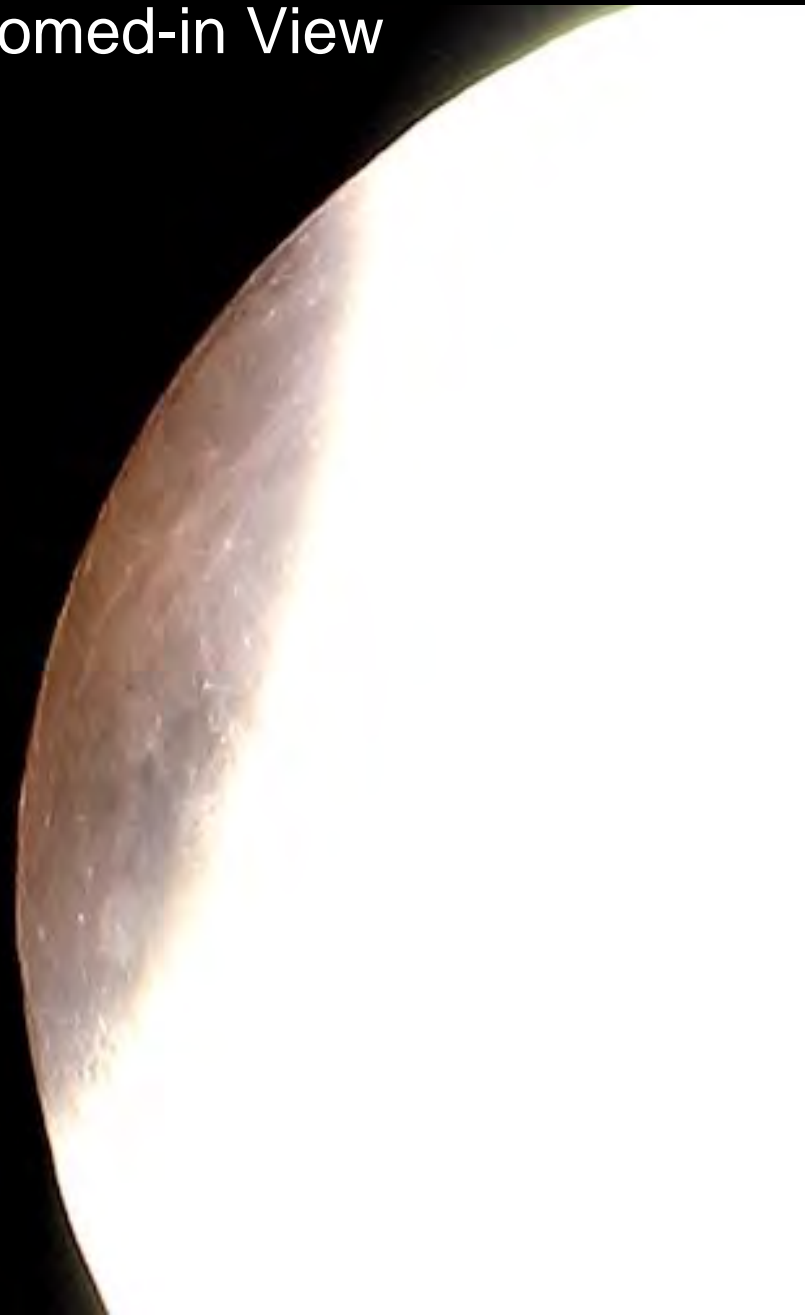
Mid Second Partial



Late Second Partial



Zoomed-in View



6:44:11 UT, 1s exp

© 2019 Alphonse Sterling

Totality: Exposures 90 s (Moon), 12 min (stars)



© 2019 Alphonse Sterling

5:25:20 UT
Moon: 90s exp (diameter increased 10%)
Stars: 90s x 8 = 12 min total

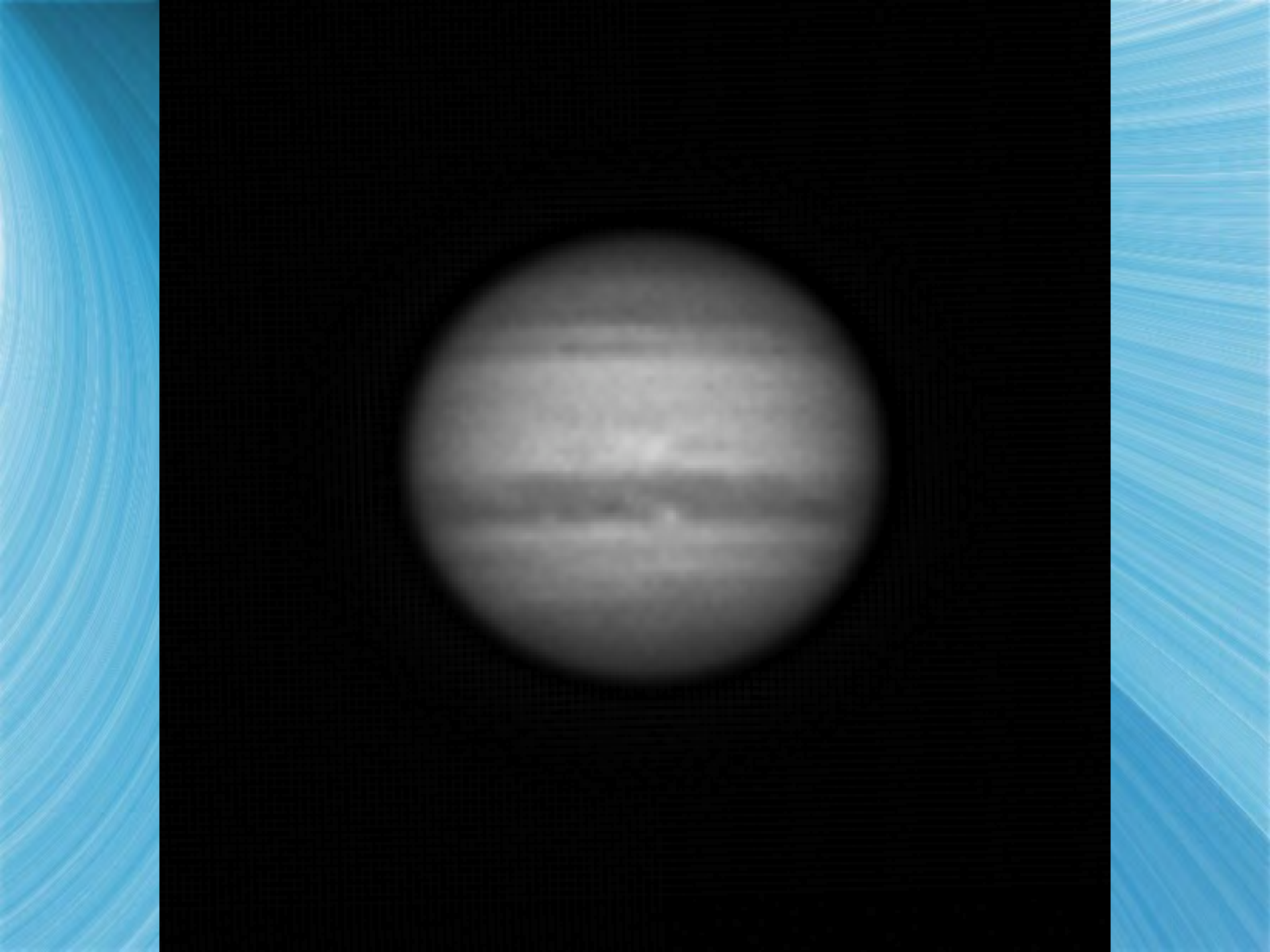
Mars

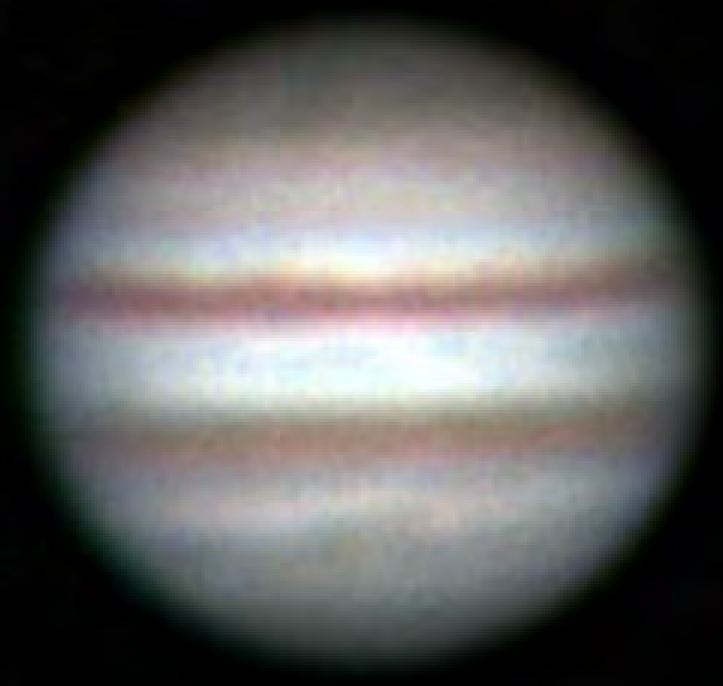


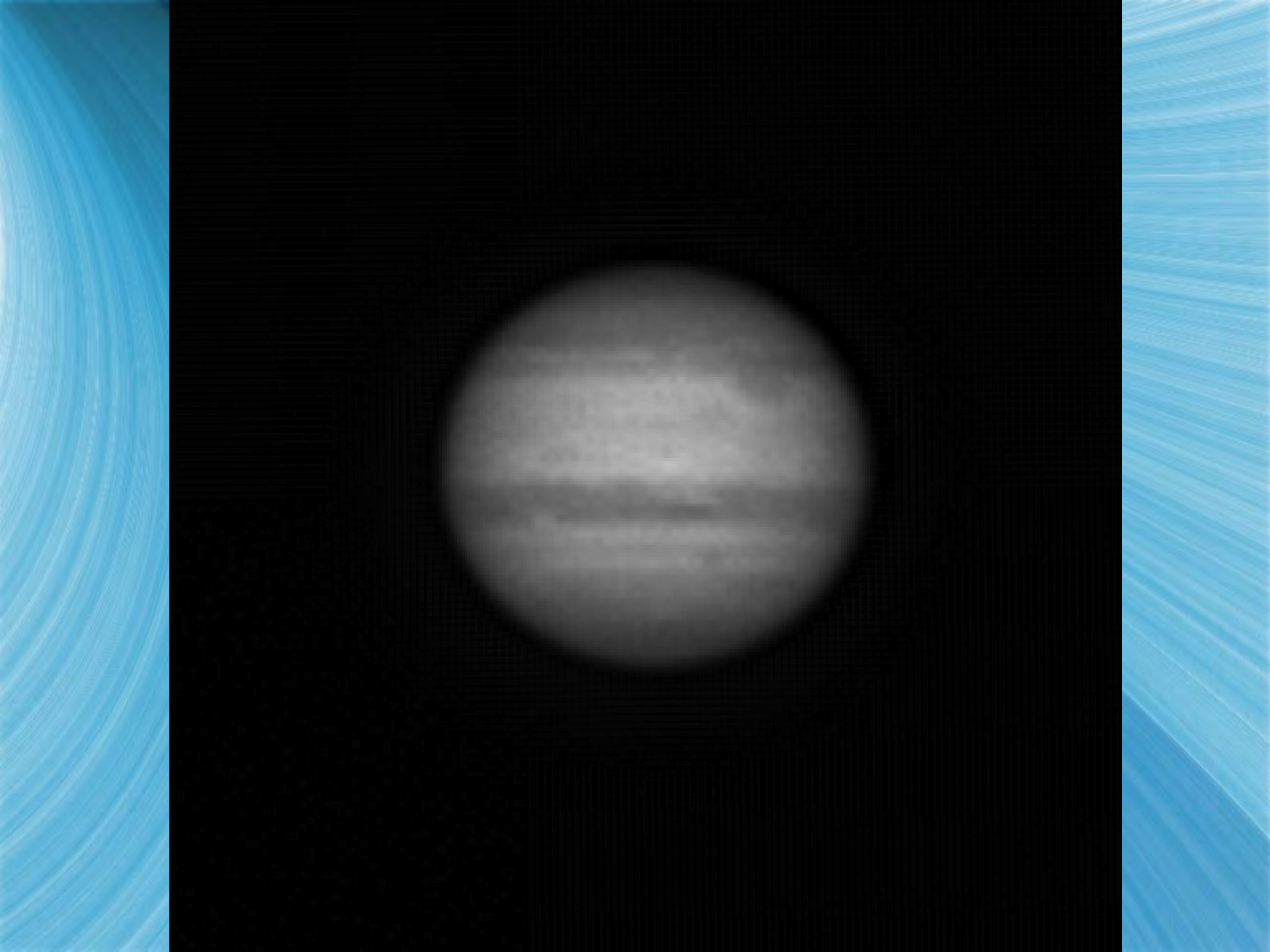




Jupiter

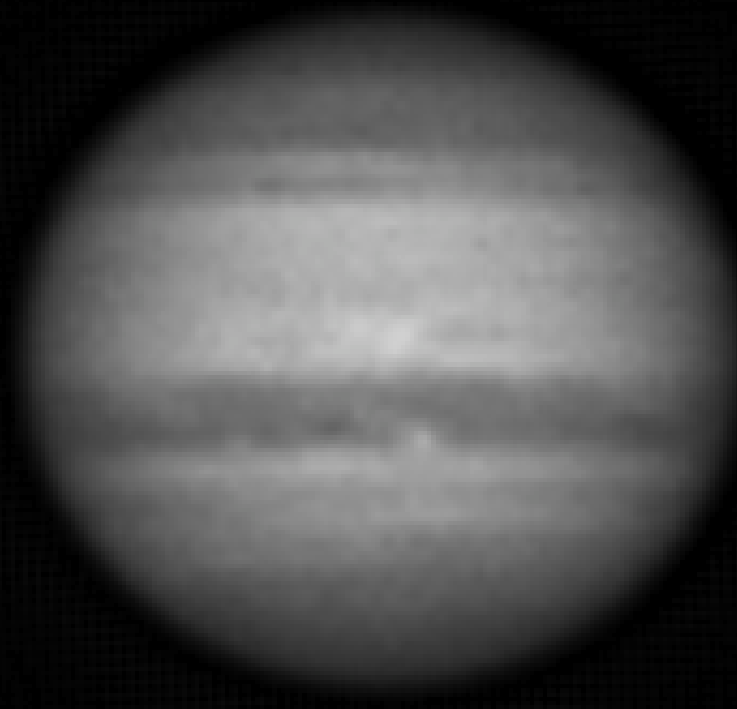




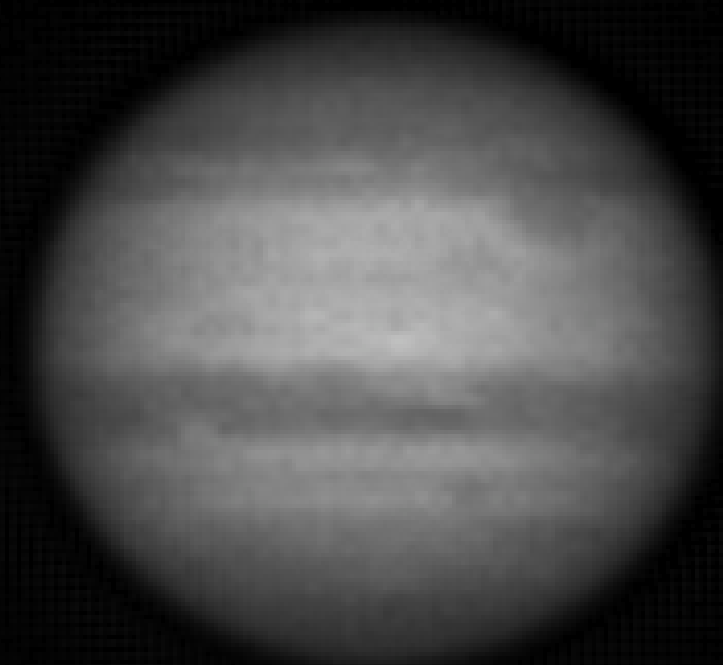


Jupiter's Rotation

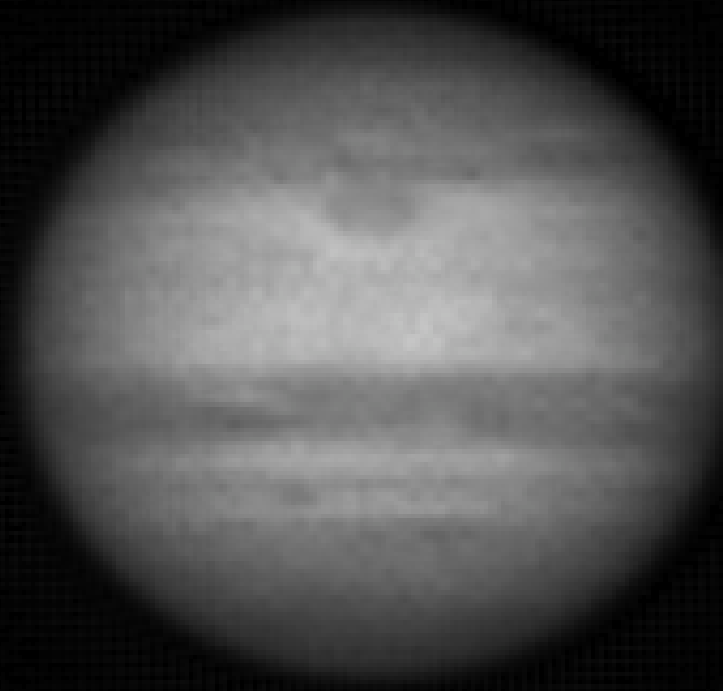
21 Sep 2009, 21:41 JST



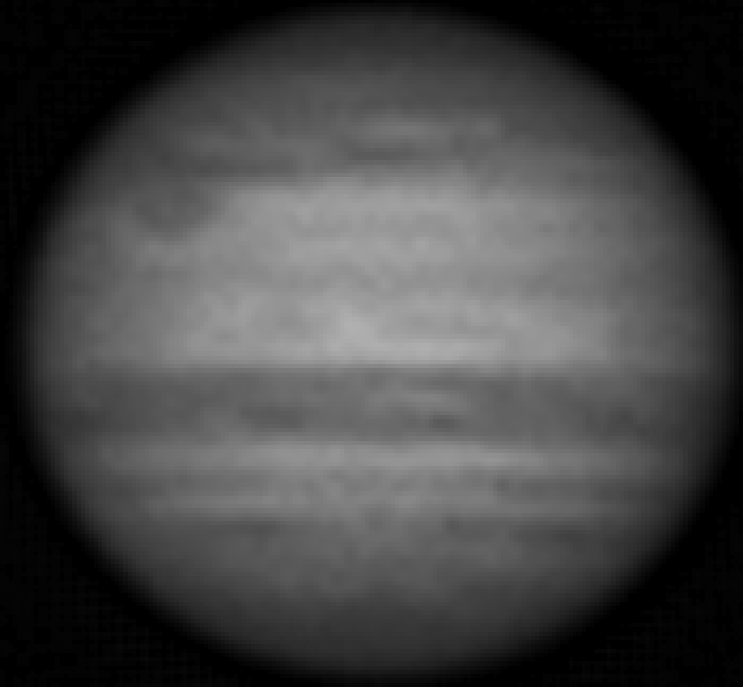
21 Sep 2009, 22:46 JST

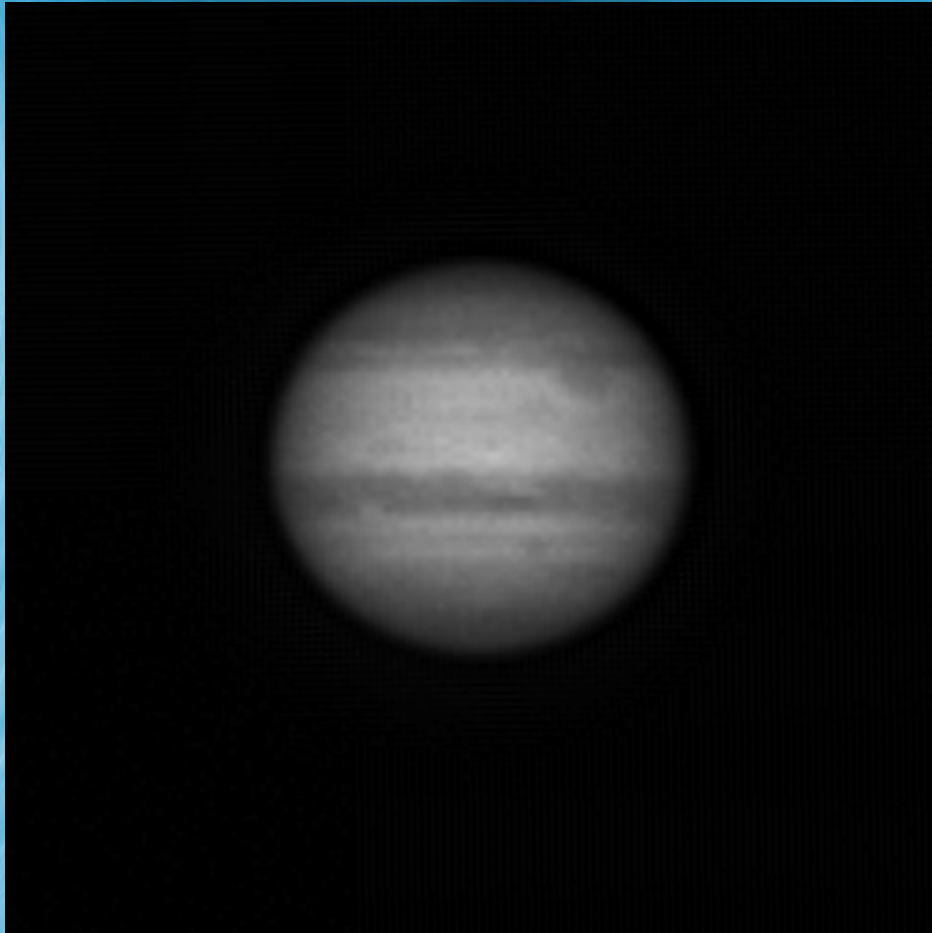


21 Sep 2009, 23:39 JST



22 Sep 2009, 00:41 JST





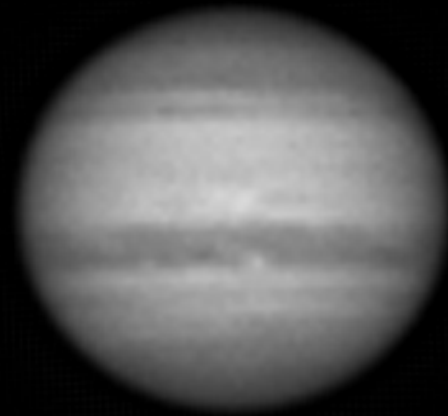


Jupiter's (Large) Moons

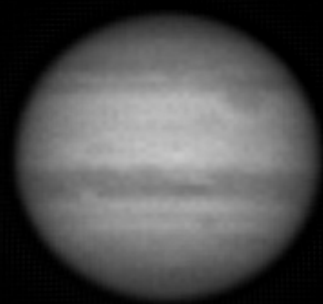
Four large "Galilean" satellites:

Europa, Io, Ganymede, Callisto

21 Sep 2009, 21:41 JST



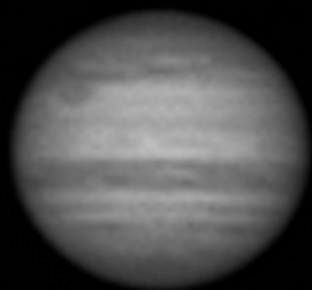
21 Sep 2009, 22:46 JST



21 Sep 2009, 23:39 JST



22 Sep 2009, 00:41 JST



Saturn





Titan



Enceladus

Dione



Mimas



Tethys

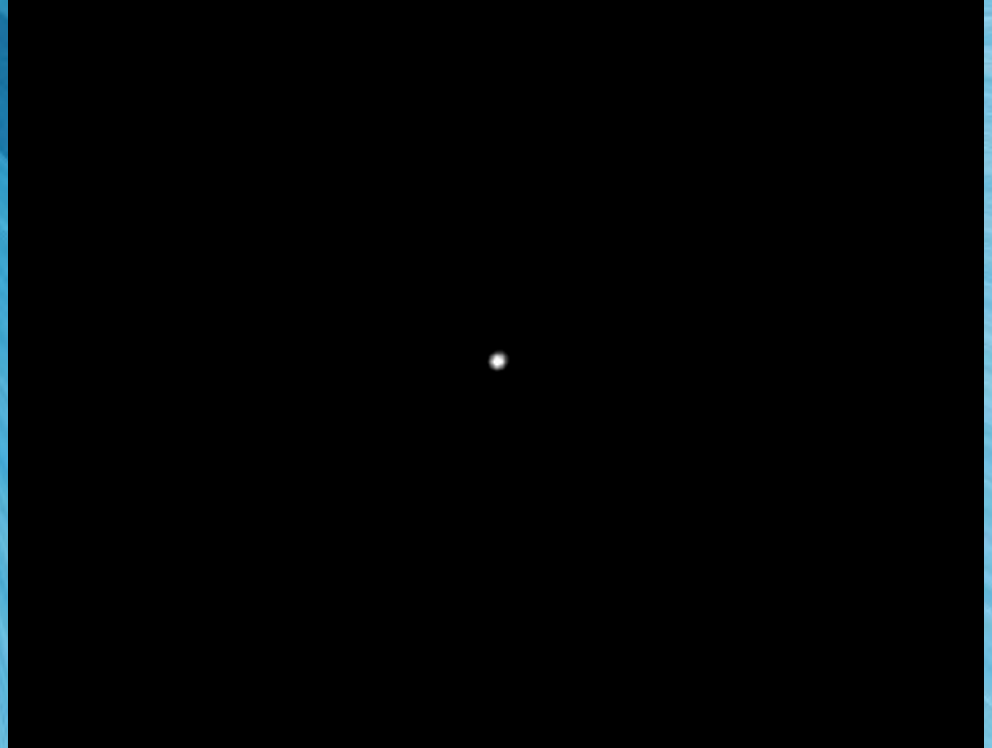
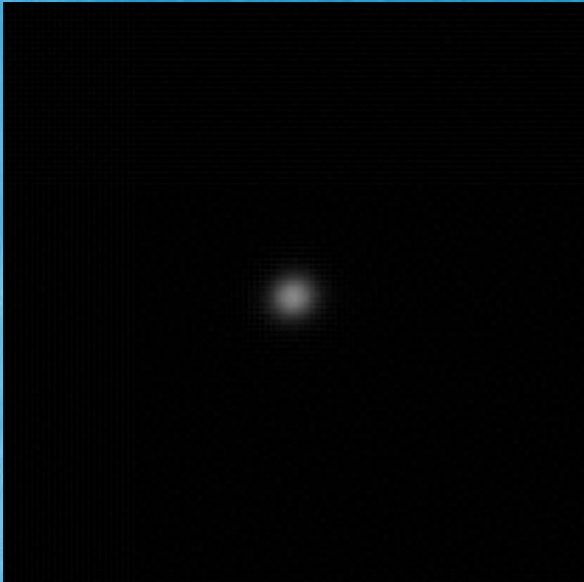


Rhea



2012 Mar 27, 13:47 UT, 1 : X ~500,
moons + one star (10.8 mag); (Sat, same, ~13:22 UT)
Celestron C11, IS DMK21AU04, Sagamihara

Uranus, Neptune



And Beyond...



M57, Kumi1
121208, 40x90s



M57, Kumi1
121208, 40x90s







Kumi1
130216, 28x120s

NGC2423

Minkowski 1-18

4 Pup

2 Pup

M47

NGC2438

M46





131004 EOS700mod
(50mm, 400, f/5.6, 14x180s)



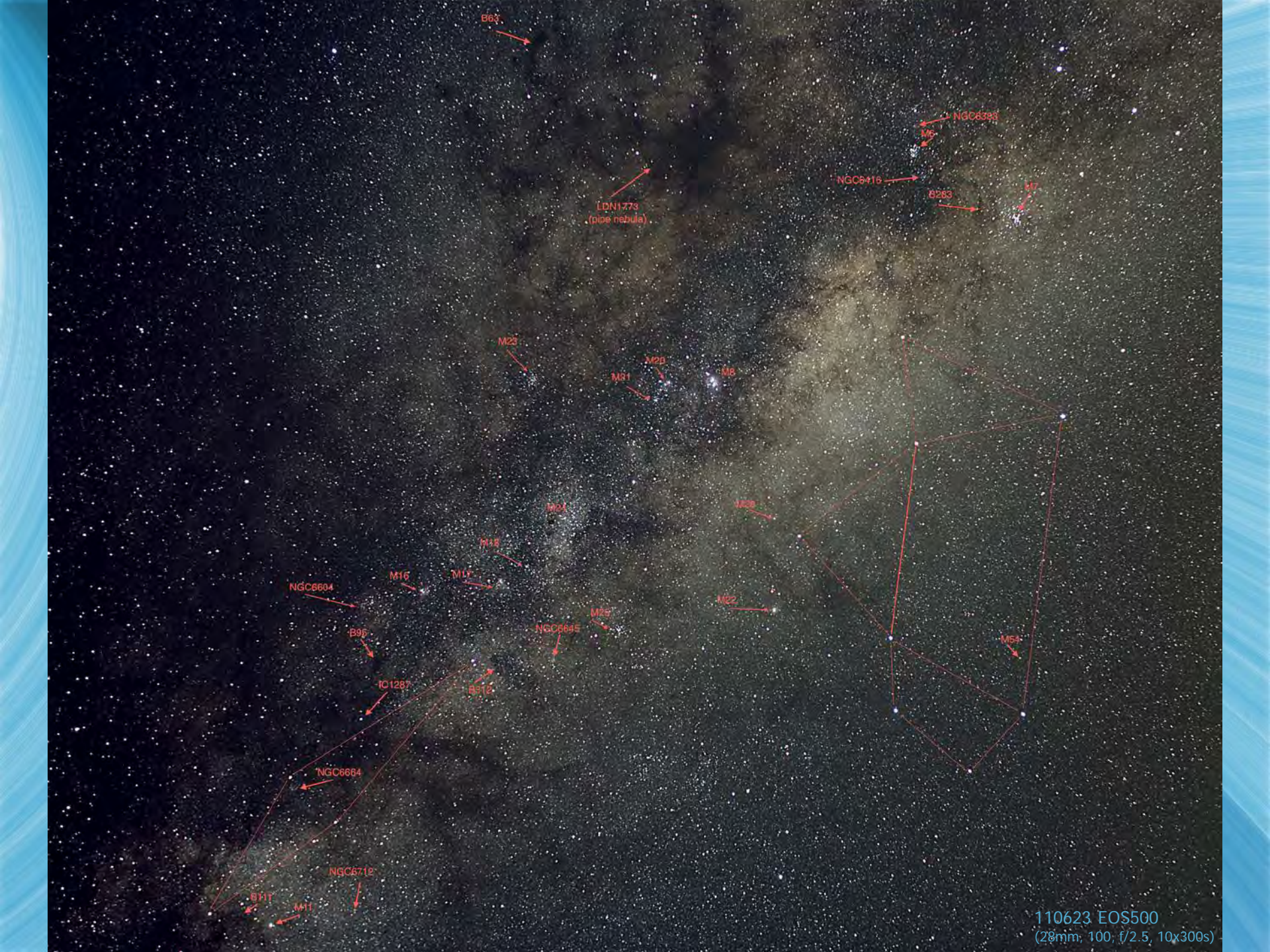


110623 EQS500
(28mm, 100, f/2.5, 10x300s)





110623 EOS500
(28mm; 100; f/2.5; 10x300s)



B63

NGC6393

LDN1773
(pipe nebula)

NGC6416

B283

M7

M23

M20
M41

M8

M44

M29

M38

NGC6604

M16

M17

NGC6645

M25

M22

M54

B95

IC1287

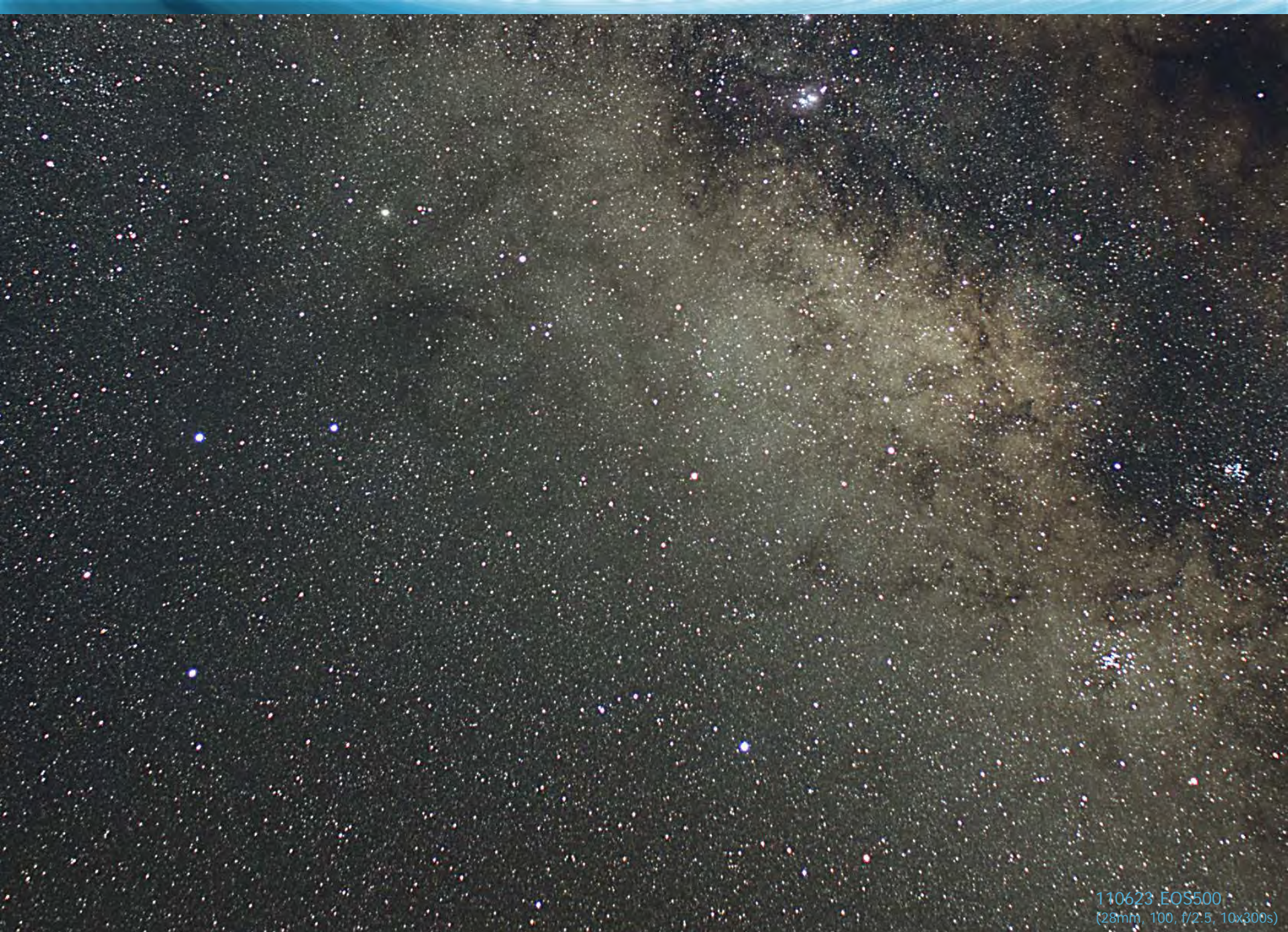
B916

NGC6664

NGC6712

B111

M11



110623 EOS500
(28mm, 100, f/2.5, 10x300s)

M2 M20 (Trifid), M8 (Lagoon)
Kumii1, 130505, 12x120s



NGC253, WO98(?)
101101, 60x00s





NGC4718



NGC4705



IC825



PGC170203



NGC4697 (C52)



PGC43178



PGC42868



NGC4731



PGC43020



(6.3)



"Leo Triplet," WO98
110112, 35x90

One "Leo Triplet," WO98
110112, 35x90



One "Leo Triplet," WO98

110112, 35x90





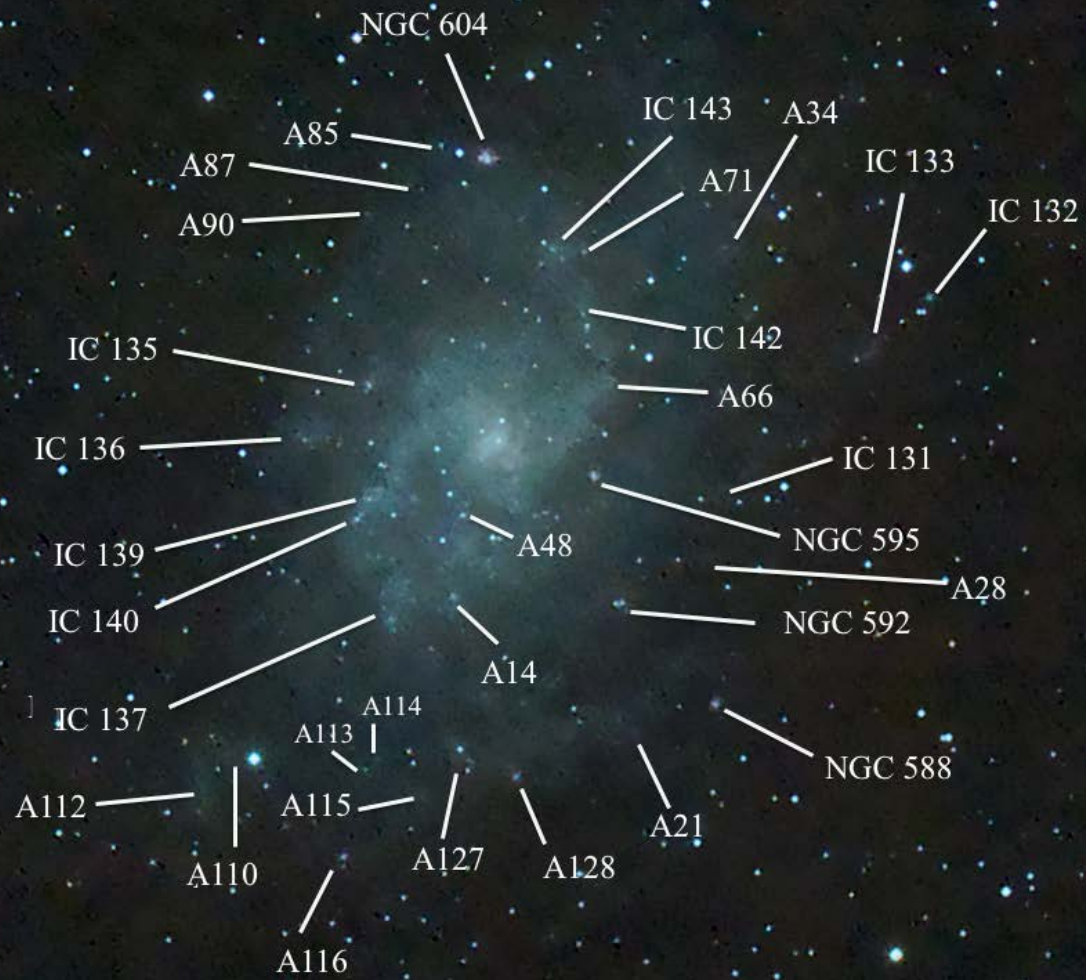
M104 (Sombrero), Kumi1
130210, 44x120



110623 EOS500
(28mm, 100, f/2.5, 10x300s)

M33, Kumi1
130210, 75x120s





2015 April 4 Lunar Eclipse: Earth and Space (Boulder)

















110623 EQS500
(28mm, 100, f/2.5, 10x300s)





110623 EQS500
(28mm, 100, f/2.5, 10x300s)







PM11:14 JUL/ 2/2019







NGC 604 in Spiral Galaxy M33



Hubble
Heritage

C59, Kumi1
130408, 35x120s

