

# Howard Astronomical League



May 17th, 2018

# Introductions

# Observatory Report

Director: Joel Goodman

## Donation by David and Leona Illig

Astrophysics 1200GTO Mount

Takahashi TAO-150 Telescope

SBIG STL-11000M CCD Camera

Two filter wheels

## Plan

Install on Watson Pier

Select astrophotos by David Illig using the equipment that he has donated:

1. M37, the Triangulum Galaxy
2. The Galaxies M81 and M82 in Ursa Major
3. M104, the “Sombrero Galaxy” in Virgo
4. The Gamma Cygni Nebula in Hydrogen Alpha

[http: www.primordial-light.com](http://www.primordial-light.com)









# Upcoming Events

## HAL Events – Alpha Ridge Park

May 19<sup>th</sup> at 8:00 – Public Star Party

June 9<sup>th</sup> at 8:30 – Members' Star Party

June 16<sup>th</sup> at 8:30 – Public Star Party

## Other Events

June 14<sup>th</sup> to 17<sup>th</sup> – Cherry Springs, PA Star Party

# Three Oppositions in 79 Days!

Jupiter: May 8<sup>th</sup>

Saturn: June 27<sup>th</sup>

Mars: July 27<sup>th</sup>

# Venus

15 Aug – Dichotomy (Half phase)

17 Aug – Greatest elongation east

25 Sep – Greatest brightness

26 Oct – Inferior solar conjunction



# This Evening's Speaker

Dr. Joe Bohannon

HAL Member

Astrophotography from Down Under

# **Member's astrophotos and sketches**

MOON  
MARE SERENITATIS  
MARE VOPRUM  
MARE TRANQUILLITATIS

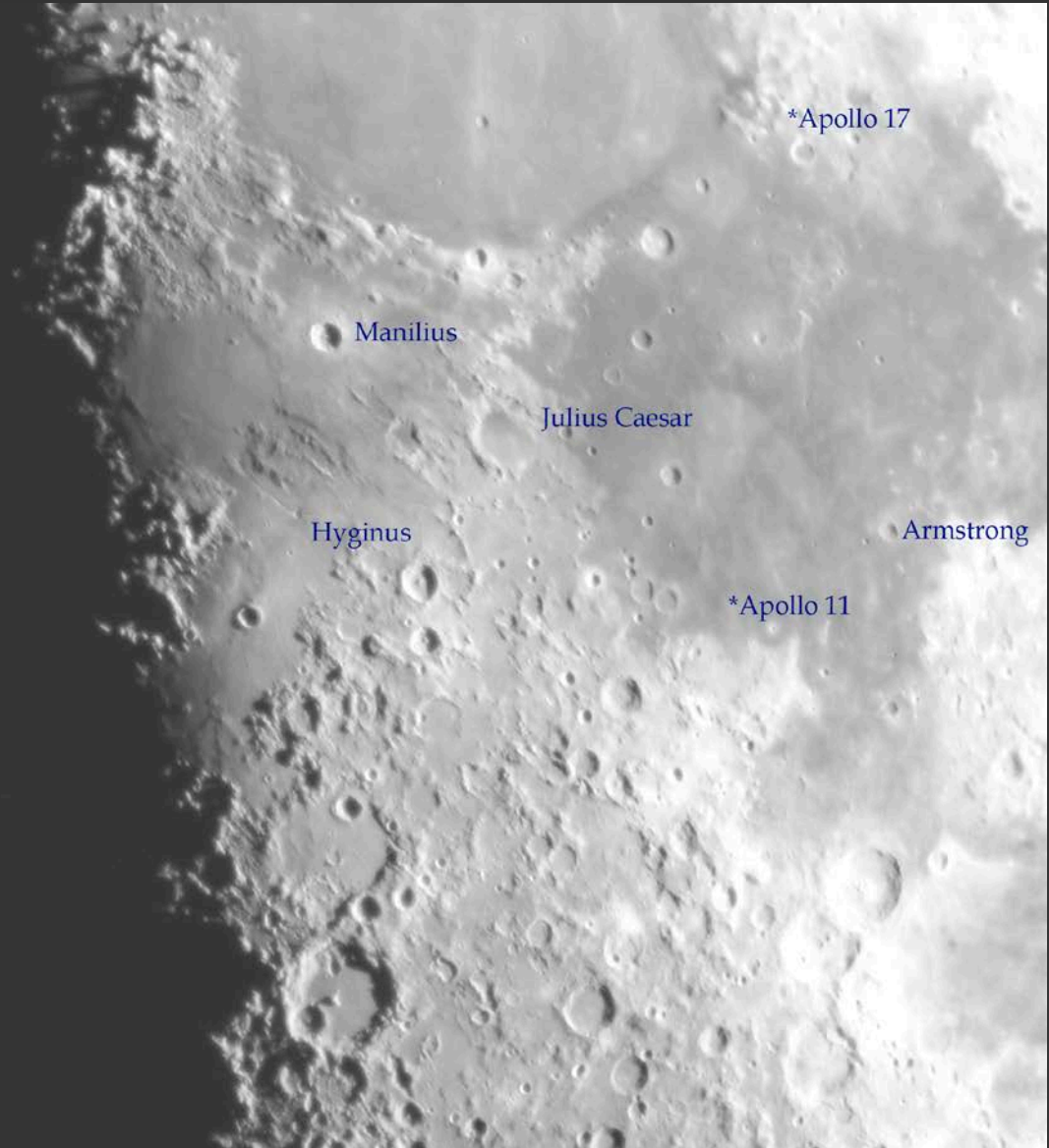
Highlighted Area  
Longitude: 16°S - 28°N  
Latitude: 8°E - 40°E

Date: 04/22/2018  
Time: 09:51 PM EDT  
Location: Elkridge, MD

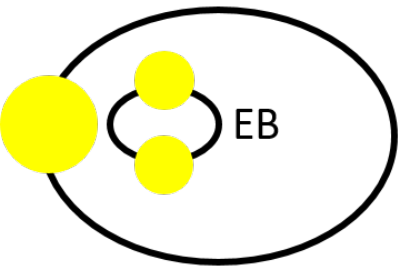
Telescope: 3.5" Questar  
Camera: ZWO ASI 178MM  
Frames captured=20  
Binning=2x2  
ROI=1544x1040  
FPS (avg.)=17  
Shutter=4.623ms  
Gain=212 (41%)

Processing  
RegiStax6  
Adobe Photoshop  
Adobe Lightroom

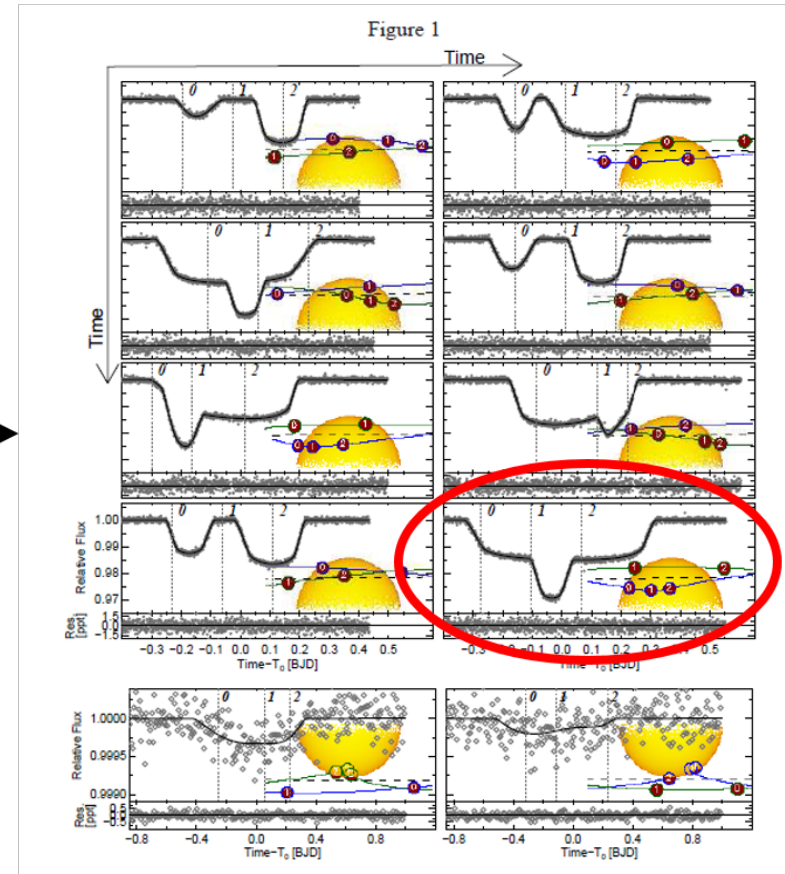
Image by: Phil Whitebloom



# Hierarchical Triple: A star orbiting an eclipsing binary system

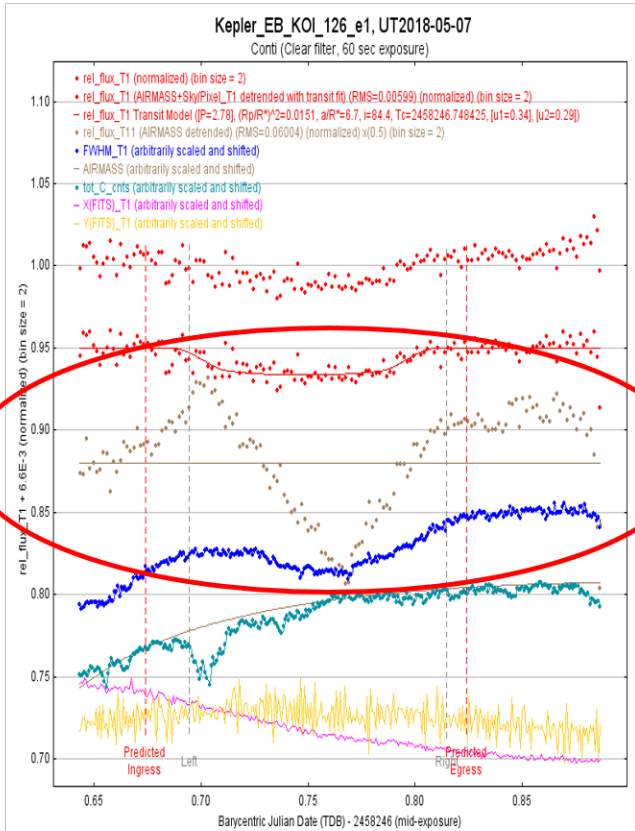


Produces these light curves

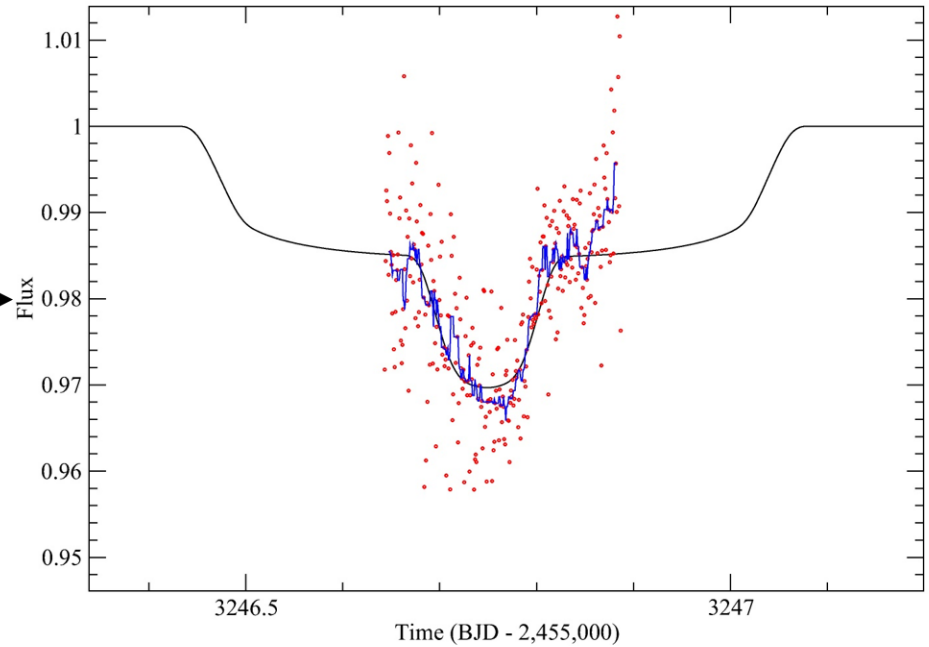


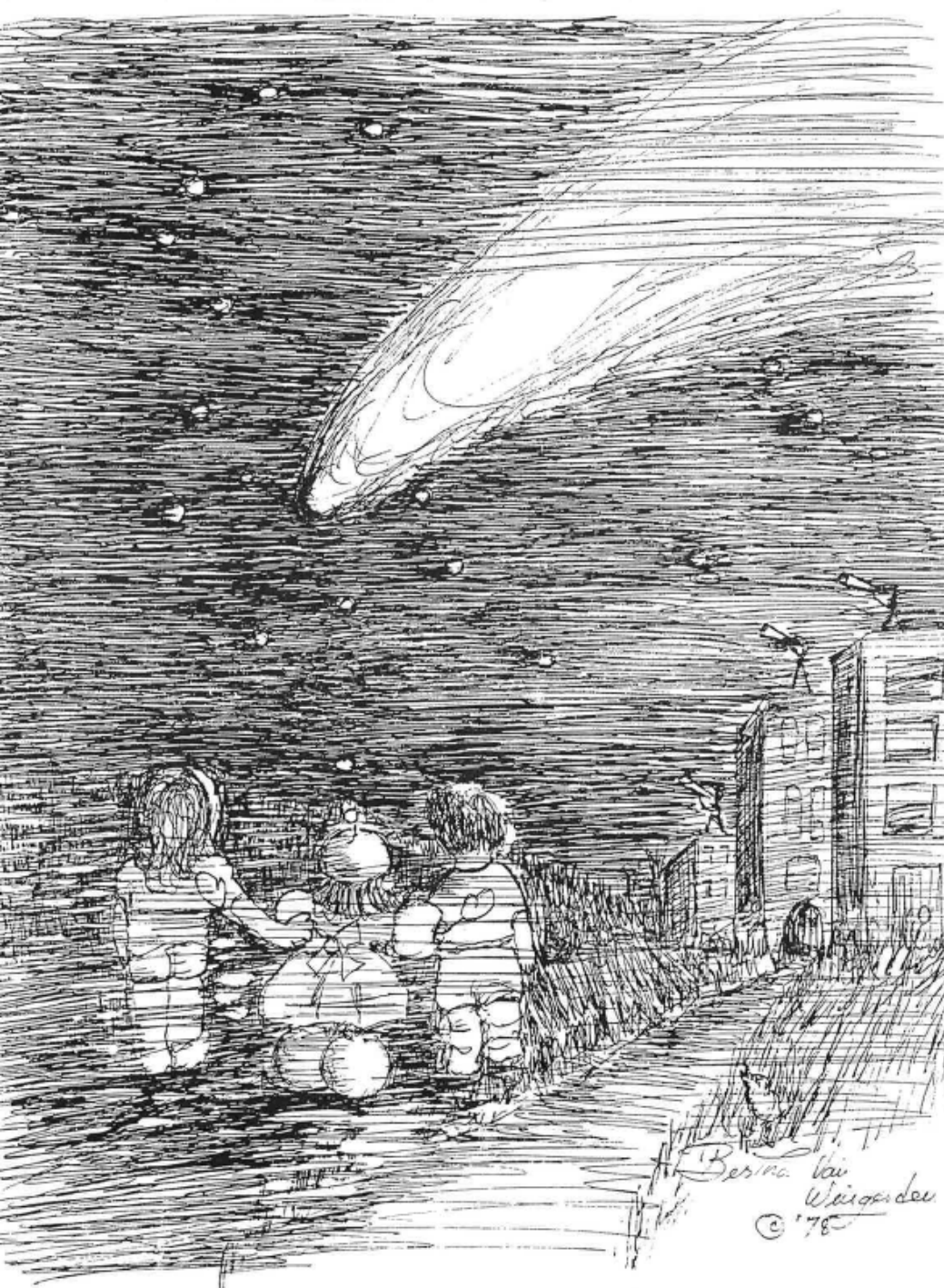
Carter, et al.

# From Conti Observation



# From Kepler Science Team





## REQUEST

About every seventy-six years  
Halley's comet reappears.  
It happened back in 1910  
But we were not around here then.

In 1986 it came  
But it was really not the same,  
Not at all as brilliant then  
As it was in 1910.

However, I am pleased to hear  
Other comets will appear,  
And when one does  
Come watch with me--  
For it will be a sight to see!

PHILOMENA PUMPKINSEED: The Inside Dancer  
and Other Poems by Bertha Van Wingerden  
Morehead City, North Carolina  
1987



HOWARD ASTRONOMY LEAGUE  
Member Star Party  
or  
Why I never made it out to Alpha Ridge

Saturday - May 12, 2018  
Camera: Apple iPhone 8

by  
Phil Whitebloom



Thank You!

Next month's meeting is on Thursday,  
June 21<sup>st</sup> 2018 at 7 PM  
(Summer Solstice!)

Richard Orr

HAL Member

Tips on Observing Mars During the  
2018 Opposition