

Howard Astronomical League



June 20, 2013

New Astronomical League award:

Chris Todd

Outreach Award #491

Basic (10 hours)

and

Stellar (Basic + 50

hours)



HAL Librarian Wanted

Jim Nickel donated about 130 astronomy books to HAL in his will

We need someone with about 10 linear feet of bookshelf space to be the club librarian

Stumper Question



What have I got in my pocket?



1241 UT
23/10/02

1342 UT
12/10/02

1352 UT
5/10/02

1352 UT
23/9/02

1519 UT
16/9/02

1541 UT
10/9/02

1548 UT
31/8/02

1350 UT
12/8/02

1803 UT
1/8/02

1630 UT
20/7/02

1940 UT
3/7/02

1525 UT
19/6/02

1902 UT
1/6/02

1810 UT
3/5/02

VENUS 2002

Photographed at the TBGS Observatory
by Chris Proctor

**At what percentage
illumination does Venus reach
its greatest brightness (in
2013)?**



Upcoming club activities

Star Parties!

July 6th – Members only Star Party

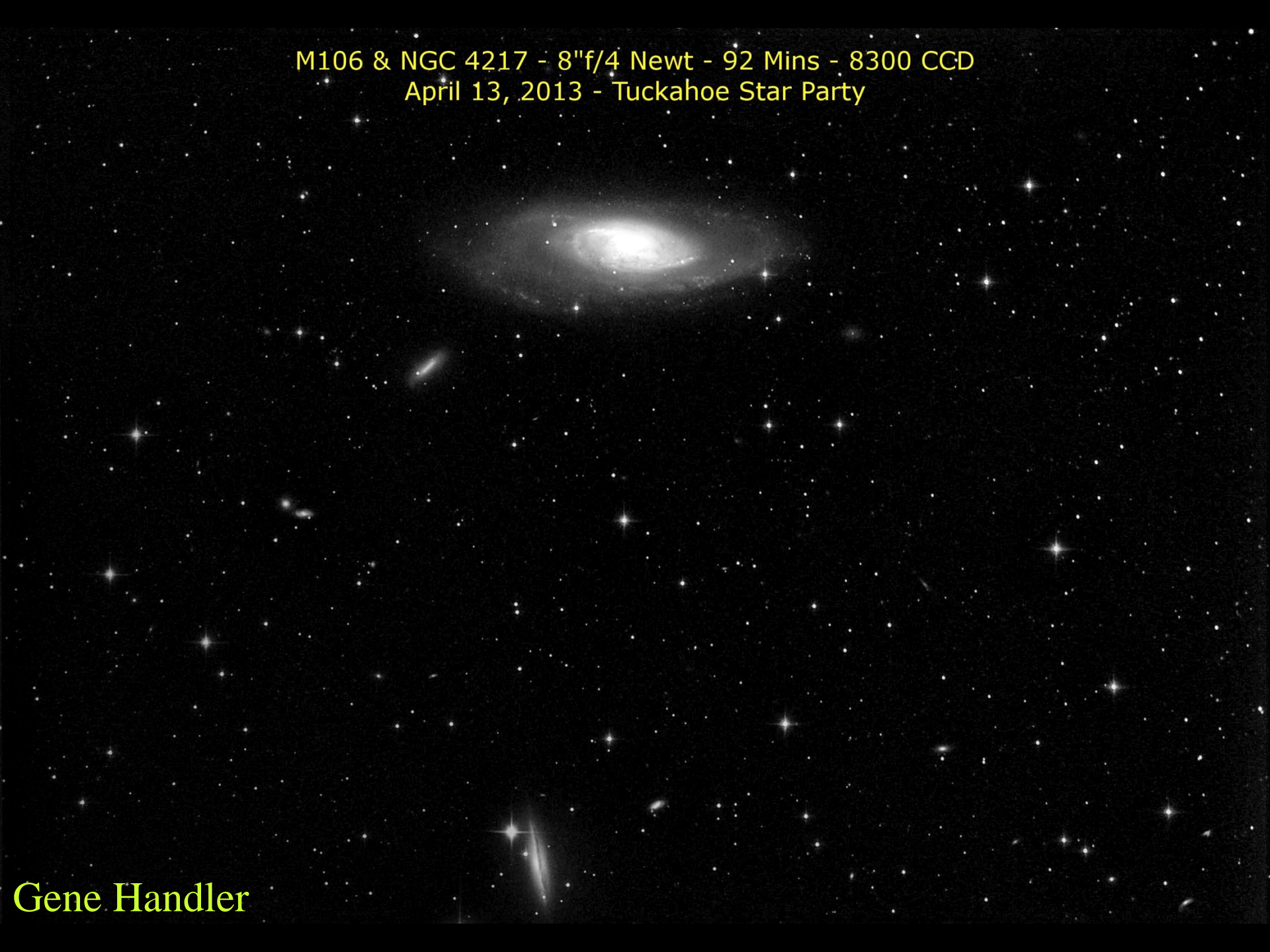
July 13th – Public Star Party
(Celestial Searchers Star-B-Q before
hand)



**Member's
astrophotos and
sketches**

M106 & NGC 4217 - 8" f/4 Newt - 92 Mins - 8300 CCD
April 13, 2013 - Tuckahoe Star Party

Gene Handler



Gene Handler

M3 - 8" f/4 Newt - 66 Mins - 8300 CCD
May 25, 2013 - Glenelg, MD

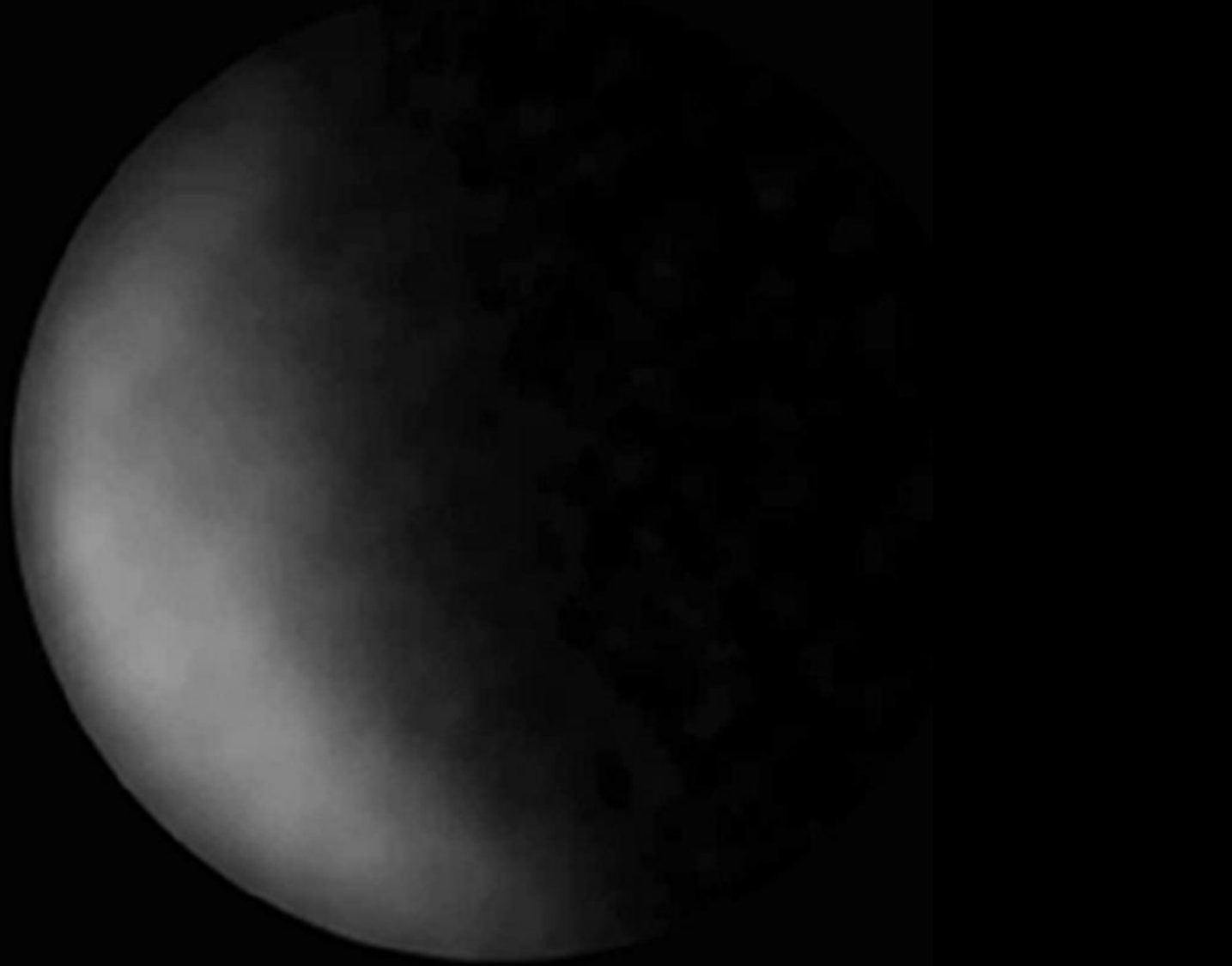


Peter Nerbun



Peter Nerbun

Peter Nerbun



Mercury 06/16/2013 00:16 UT, C11 F/28
Alt 20° 31% lit, IR742 Peter Nerbun, MD, USA

Chris McGrath



Photo by Chris McGrath

Chris McGrath



Photo by Chris McGrath

James Willingham



Elevation: 39 Degrees

CM1: 218.7 CM2: 126.2 CM3: 307.0

Elkridge, Maryland USA/Meade 12" SCT/Astronomix RGB Filters/2.5X Powermate

0508.0UT

May 2nd 2013

James Willingham

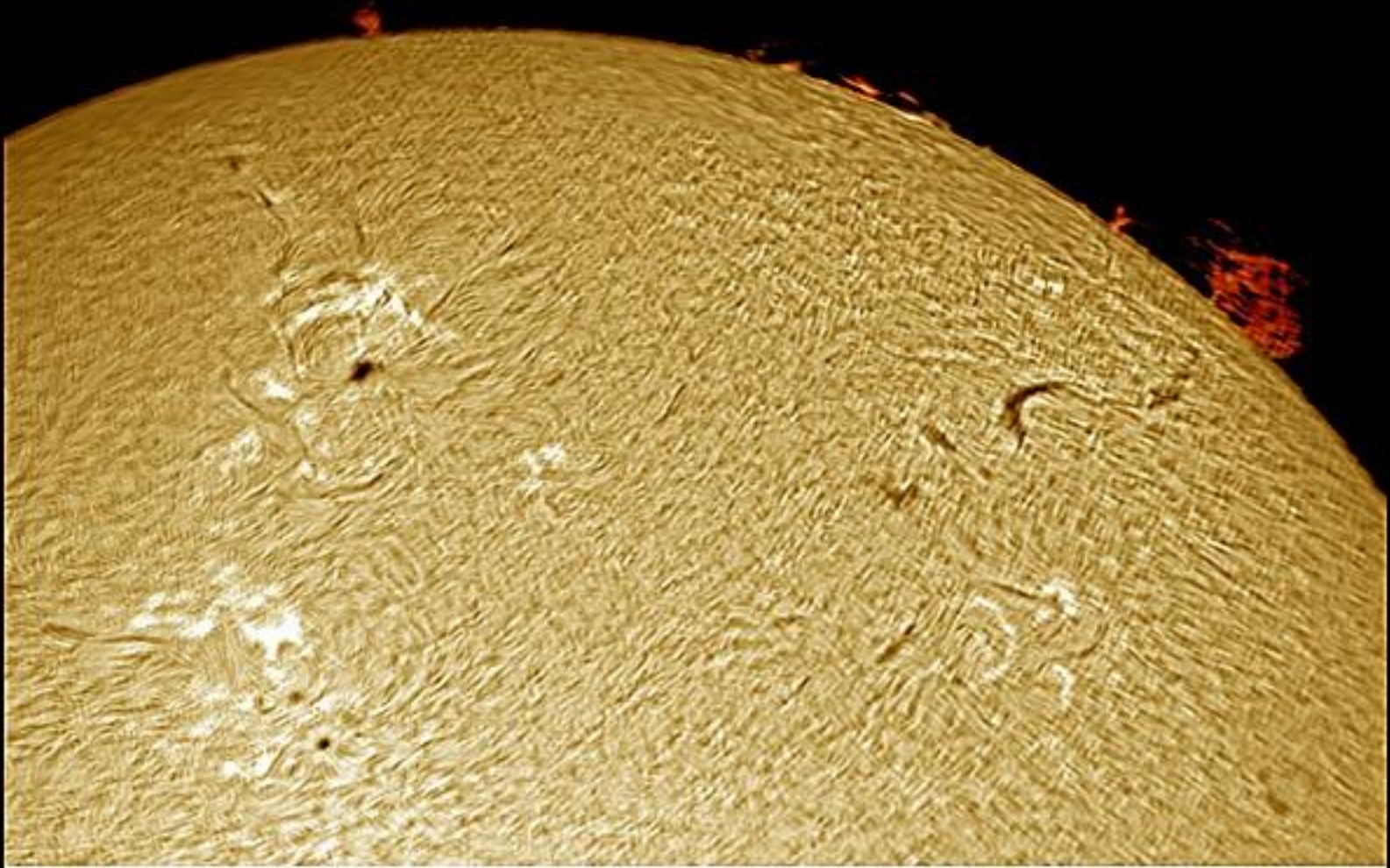
James Willingham



Herman Heyn

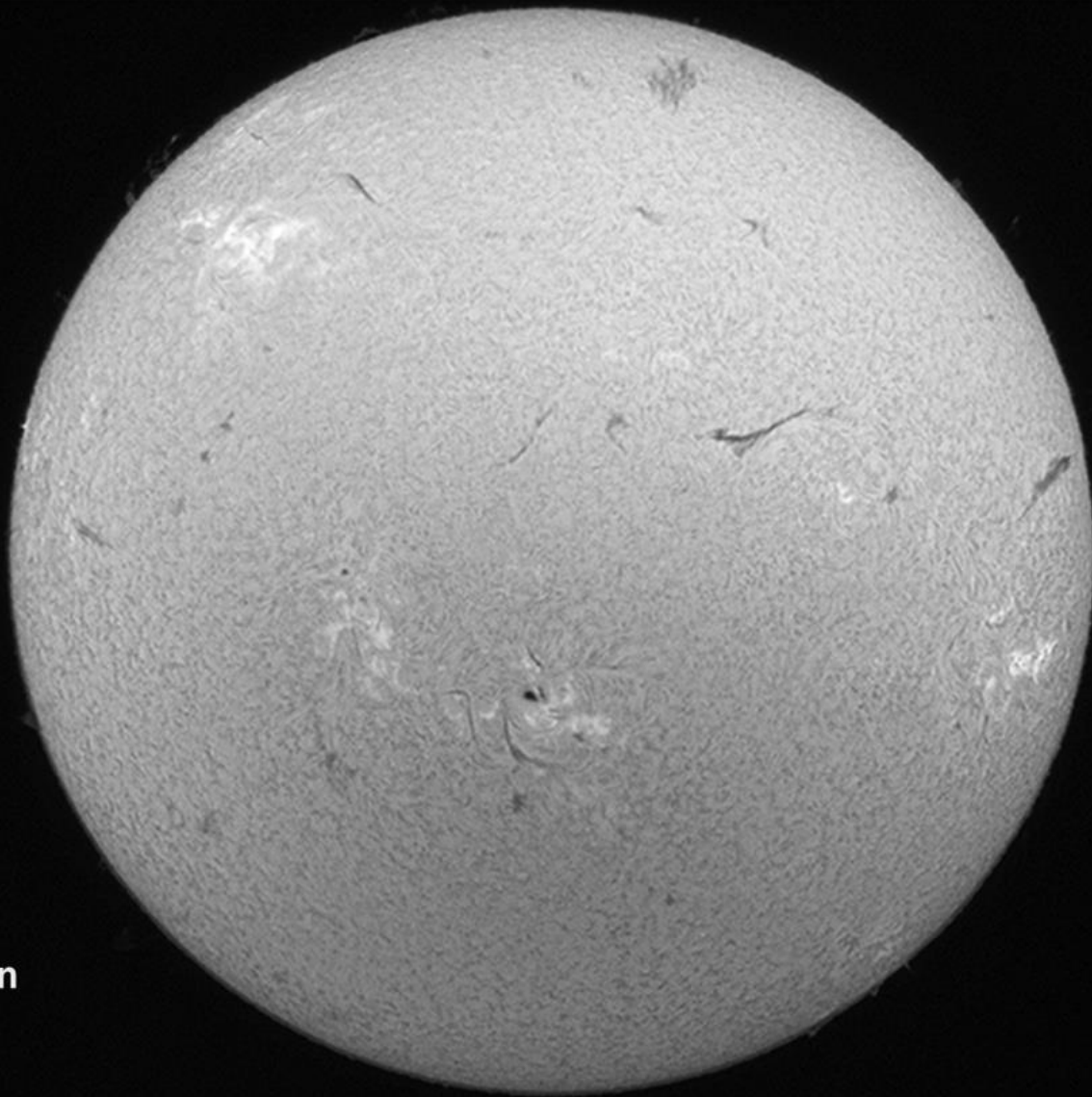


James Willingham

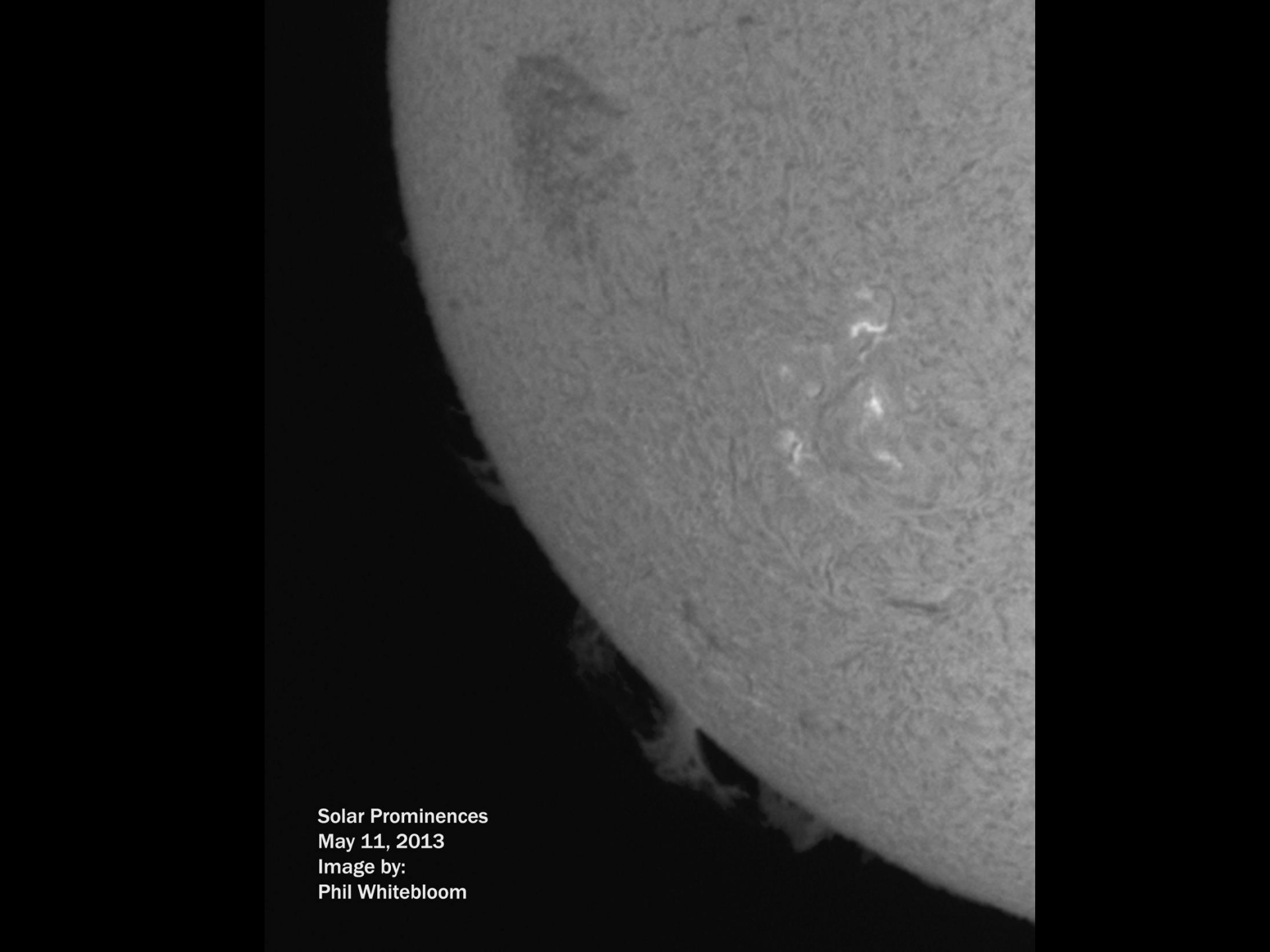


James Willingham





Face in Our Sun
May 5, 2013
Image by:
Phil Whitebloom



Solar Prominences
May 11, 2013
Image by:
Phil Whitebloom

Alpha Ridge
May 26, 2013
photo by Gerald Elgert

Mercury


Jupiter

Venus

ISS Carr's Mill June 4, 2013

photo by Gerald Elgert

Saturn at top right

A dark, black night sky with a few scattered, faint white specks. A thin, white, diagonal line is visible in the lower half of the image, extending from the bottom left towards the middle right.



Anticrepuscular rays

Carrs Mill June 4, 2013

photo by Gerald Elgert

**So you wanna
attend a regional
star party?**

What's a regional Star Party?

- Lasts 2-7 nights
- Camp near your scope
- Typically at dark sites in the middle of nowhere
- Dozens to hundreds of attendees
- Lots of scopes (many huge dobos and sweet refractors)
- Fun!

Star Party Etiquette

The background of the slide is a dark, starry night sky. It is filled with numerous small, faint stars of various colors, including white, blue, and orange. Several larger, more prominent stars are scattered across the field, some showing distinct four-pointed diffraction patterns. The overall effect is a deep, cosmic atmosphere.

Star Party Etiquette

**WHITE
LIGHT IS
EVIL!!!!!!!**

What to bring?

- All your astronomy gear (make a list!)
- Extra batteries (9V, AA, AAA, etc.) and other expendable supplies (chemical hand warmers, etc.)
- Battery chargers
- Camping gear (make a list!)
- Cold/wet weather gear (even in summer!)
- Food/snacks/water/coffee (sometimes)
- Medicine and first aid

Where to go?

- Delmarva Stargaze/No Frills
- Mason Dixon
- Cherry Springs
- Almost Heaven
- Greenbank StarQuest
- Winter Star Party
- Texas Star Party

Demlarva Stargaze and No Frills

- Stargaze: Spring, No Frills: Fall
- Three nights: Thursday, Friday, Saturday
- Held at Tuckahoe State Park Equestrian Center – 60-90 minute drive
- Very laid back and friendly (< 100 attendees)
- Relatively cheap (~\$40)
- Relatively dark
- Dew and skeeters can be a problem
- Free coffee, but bring your own food (Fish Fry Saturday night), or hit local fast food in Denton
- No vendors or speakers, no bathrooms or showers (porta johns), but there is a small raffle
- No WiFi, but decent cell service

Demlarva Stargaze and No Frills



Demlarva Stargaze and No Frills



Chris Todd

Delmarva Stargaze and No Frills



Chris Todd

Delmarva Stargaze and No Frills



Chris Todd

Mason Dixon

- Summer
- Four nights: Wednesday through Saturday
- Held on an airfield near York, PA (nice flat ground) – about 90 minute drive
- Laid back (< 100 attendees)
- Relatively cheap (~\$35)
- Relatively dark – maybe same as Tuckahoe
- Food vendor, but consider bringing food
- Speakers and vendors (raffle?)
- Real bathrooms, but no showers
- No WiFi, but decent cell service

Cherry Springs

- CSSP: June, Black Forest: September
- CSSP: Three nights: Thursday, Friday, Saturday
- BFSP: Two nights: Friday, Saturday
- Held at Cherry Springs State Park (IDA Dark Park), about 5-6 hour drive
- Dedicated astronomy park – **VERY, VERY DARK!**
- Hundreds of attendees – lots of big scopes. **Often sells out.**
- AC Electrical all over the field
- Relatively cheap (~\$40)
- Dew and skeeters can be a problem
- Food vendor quite good and up all night
- Quite a few vendors, good raffle, and good speakers
- Real bathrooms, showers available at nearby park
- Very spotty cell service, but they have WiFi, though it can be flaky

Cherry Springs



Cherry Springs



Chris Todd

Cherry Springs



Chris Todd

Cherry Springs



Dave Tillman

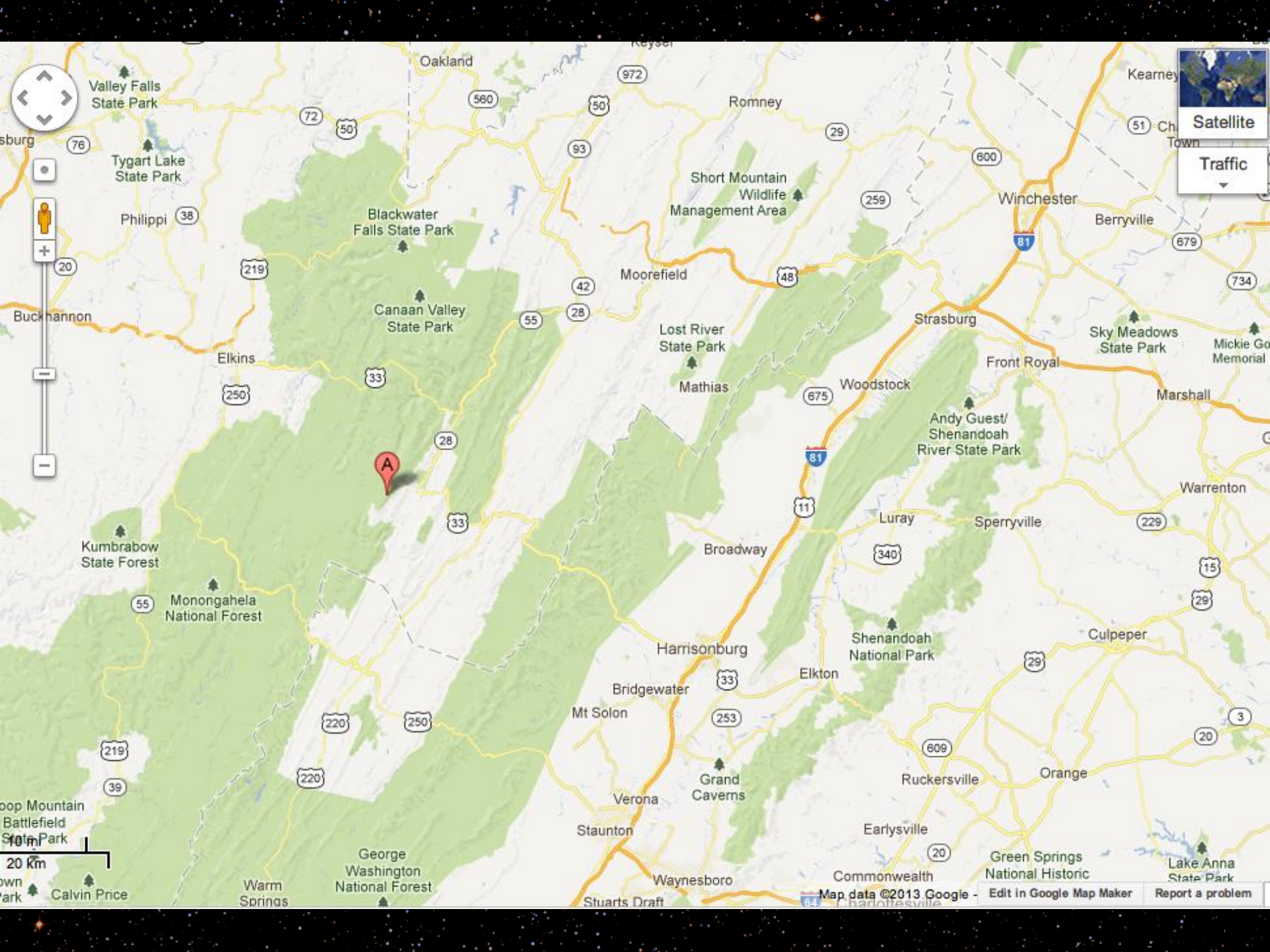
Dave Tillman

Cherry Springs



Almost Heaven Star Party

- Held at The Mountain Institute on Spruce Knob, WV, about 5-6 hour drive, in late August or September
- Four nights: Friday through Tuesday
- Middle of nowhere, at $> 4,000$ ft – **VERY, VERY DARK!**
- Hundreds of attendees – **ALWAYS SELLS OUT**
- No AC on field, but can recharge batteries at Yurt
- Moderately expensive (~\$100+)
- Weather variable and can be extreme (and cold!)
- Meal plan excellent, but not cheap
- Several vendors, great raffle, and excellent speakers
- Real bathrooms and showers!
- No wireless service (National Radio Quiet Zone), but WiFi available
- Field can be uneven; scope setup can be challenging



Satellite

Traffic



20 Km



P





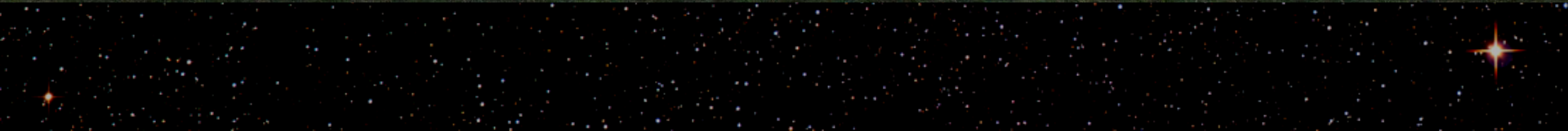






SNAP MEET
4 PM
by tent
by Registration





Greenbank StarQuest

- Four nights: Wednesday-Sunday
- Held at National Radio Astronomy Observatory, Greenbank, WV, about 5-6 hour drive, usually in July
- Extremely cool facility, and very family friendly
- Almost as dark as AHSP, but you're in a valley – dew and fog is bad
- 100-200 attendees
- Flat field, no AC on field, but can recharge batteries at barn
- Moderately expensive (~\$85)
- Meal plan quite good in cafeteria, Starlight Café has great milkshakes
- Quite a few vendors, good raffle, and lots of excellent speakers
- No wireless service (National Radio Quiet Zone), but Internet available in computer lab
- Electronics on the field can cause problems for Radio Telescopes – you might be asked to turn some things off. Leave your cell phone off.
- Real bathrooms and showers – bunkhouse available at slight extra cost

GREEN BANK STAR QUEST

JULY 10,11,12,13 2013



10th Anniversary

The Dream Continues

2013 Star Quest is a celebration of 10 years of the largest optical and radio star party in the nation.

Register now to be a part of Star Quest Family 2013!

Keynote Speakers:

Robert Naeya - Editor of Sky and Telescope Magazine

Warren Keller - a Nationally known Astrophotographer

Meet Part of the Original Rocket Boys

Presenters and Activities:

Tom Crowley, Sue Ann Heatherly, Mark "Indy" Kochte,
Dr. Michell Shinn, Robert Royce, Dr Andrew Clegg, and many more!!

- Optical & Radio Astronomy Presentations
- Free shower accommodations available
- Bunk house available for rent
- Dark West Virginia skies in the radio-quiet zone
- Kids Activities, Great Vendors, Gift Shop
- Movies, Large Raffle, and First Class Presenters
- Nearby West Virginia tourist attractions
- Meet Green Bank Staff Radio Astronomers
- Learn to operate a 40ft radio telescope
- Radio Jove operation instruction
- High-Tech Tours of Green Bank NRAO
- NASA Multimedia Bus
- Swap Meet Saturday
- Rain - No Problem. All events are held indoors

4-day registration is \$85 per participant, includes campsite and access to all events.

For other registration options, and details visit our web-site www.greenbankstarquest.org

Green Bank Star Quest, PO Box 1862, Clarksburg, WV, 26301



Greenbank StarQuest



Greenbank StarQuest



Winter Star Party

- February 24-March 2, 2014 – **SIX NIGHTS!**
- Held at Camp Wesumkee, Scout Key, FL
- Very dark to the South, light domes to Northwest and Northeast
- **25* latitude – Orion is at ~ 60*, Omega Centauri gets to 18*, and Eta Carina nebula gets to about 7***
- **Best seeing conditions you have ever seen!**
- **Daytime highs in the 70s to 80, night time lows in 60s to 70s**
- Hundreds of attendees – lots of big scopes. Used to sell out every year, hasn't in several years
- AC Electrical all over the field (bring your own 100' extension cord)
- Expensive to register, and to get there (~\$180 registration and camping)
- Dew and wind can be a problem
- Food vendor quite good, but you're only 20-30 minutes from civilization and excellent restaurants
- Many vendors, excellent raffle, and excellent speakers
- Real bathrooms and showers
- No WiFi, but good cell service

Winter Star Party

Big Pine Key

Big Pine Key

Bahia Honda Key

1
Scout Key, Florida 33043

Marathon

Vaca Key

© 2012 Google

Data SIO, NOAA, U.S. Navy, NGA, GEBCO

©2010 Go

Winter Star Party

- Auto Train is easiest
- Depart Lorton, VA @ 4 pm
- Arrive Sanford, FL @ 8 am
- Get a sleeping berth
- Not cheap, but better than driving 18 hours



Winter Star Party



Winter Star Party



Winter Star Party



Winter Star Party



Winter Star Party



Winter Star Party

- Night sky time-lapse

Texas Star Party

- **Seven nights**, typically in Spring (April or May; May 5-12, 2013)
- Held at Prude Guest Ranch, Fort Davis, Texas, at > 5,000 feet, in the middle of nowhere. Prude Guest Ranch is awesome facility
- **Probably the darkest skies you'll ever see**
- Hundreds of attendees – lots of big scopes (including 36" dob)
- AC Electrical all over the field
- Surprisingly reasonable registration (~\$60)
- Don't bother camping, get a spot in the bunkhouse (\$45/day, includes meals!)
Food is awesome and plentiful
- Dew is almost never a problem, but bring ChapStick and a tarp (dust!)
- Quite a few vendors, good raffle, and good speakers
- Real bathrooms and showers, bunkhouses have heat and A/C
- McDonald Observatory is awesome and worth a tour, and Fort Davis is a charming little town, with a few decent restaurants, Fort Davis is a neat piece of history, and Davis Mountains State Park is nearby
- Weak and spotty cell service, but WiFi available on the observing field

Texas Star Party





















Texas Star Party

- Night sky time-lapse

Stumper answer

**At what percentage illumination does
Venus reach its greatest brightness (in
2013)?**

**28%, when it reaches an apparent
magnitude of -4.5**

Thank You!

Next month's meeting is on Thursday,
July 18, 2013
7:30 PM

Guest speakers:

I have no idea yet