

Eastern Missouri Dark Sky Observers

www.emdso.org

- A 501 (C)(3) organization of amateur astronomers dedicated to the advancement of astronomy in central eastern Missouri.
- Conducts free telescope viewing on the 4th Saturday each month through out spring, summer and fall on the Campus of East Central College in Union, MO.
- Conducts free telescope viewing sessions to groups on request.
- Offers free astronomy lectures to groups on request.
- Sell solar viewing glasses at nominal cost. Contact one of the following:
 - > Rick Schwentker
rschwent@centurytel.net
 - > Paul Chambers
pchambers3@gmail.com
 - > Dennis Borgman
borgmandl@cs.com
 - > Ray Mueller
hilltopdome@gmail.com

All proceeds go to the replacement of the East Central College Observatory in Union, Missouri.



The Eastern Missouri Dark Sky Observers (EMDSO), in coordination with East Central College (ECC) in Union, Missouri, is conducting a fundraising campaign to replace an existing 20-year-old astronomical observatory on the ECC campus.

The existing observatory can no longer adequately function as an educational tool, nor can it meet the needs of today's public outreach demands. The new modern building will be designed to house a recently donated 12" Schmidt Cassegrain telescope with an astronomical imaging camera and a 360 degree, remote controlled, revolving observatory dome. This design will allow deep sky objects to be viewed on computer screens by large groups in an adjacent room or at remote locations.

The completed observatory will be used for outreach programs to the general public and will be available as an extension to the science department at East Central College. EMDSO would appreciate your financial support to help us expand the knowledge of astronomy in our area.

Please send contributions to:

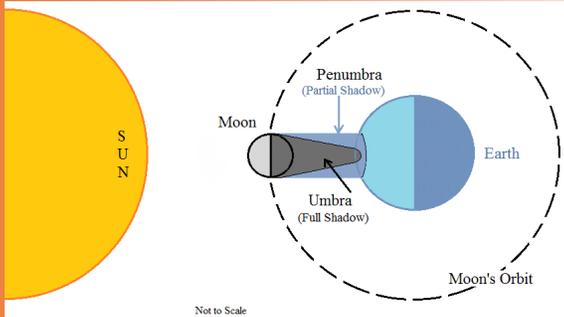
Eastern Missouri Dark Sky Observers
c/o Paul Chambers
435 Sunset Ridge Ln.
Washington, MO 63090



GREAT
AMERICAN
SOLAR
ECLIPSE

MONDAY
AUG 21, 2017

Eclipse of the Sun



- Occurs at New Moon
- Moon casts shadow on the earth
- Under the Penumbra (partial shadow) daylight becomes twilight.
- Under the Umbra (full shadow) daylight becomes night time for a few minutes. Stars appear.
- During Totality the sun's corona appears (glowing plasma in sun's outer atmosphere over 250 times hotter than the sun's surface).
- Eclipse begins in Washington/Union/St. Clair areas around 11:48 AM on 8/21/2017
- Totality starts around 1:15 PM
- Totality only lasts
 - Washington - 2 min 28 seconds
 - Union - 2 min 37 seconds
 - St. Clair - 2 min 40 seconds

Solar Viewing Glasses



- Only solar viewing glasses, welder masks (rating 14) or other special filters allow us to view the sun directly without damaging our eyes.



- Viewers must secure solar viewing glasses across their eyes before directly viewing the sun.
- Do Not use sun glasses to view the sun directly. Sun glasses will not protect your eyes when looking at the sun.



- Use Solar Viewing Glasses or welders mask (rating 14) whenever any of the sun's disk is viewable. Only during Totality can one view an eclipse without eye protection.

Additional 2017 Eclipse Facts



- The path of totality covers 12 states including Missouri
- First solar eclipse on US mainland in 38 years.
- Last total solar eclipse in St. Louis area was 1442.
- Next total solar eclipse in St. Louis area is 2505
- Next total solar eclipse near St. Louis is 2024 in Carbondale, IL
- Visitors and scientists from all over the world will travel great distances to view a total eclipse.
- Cities of Washington, Union and St. Clair are planning large celebrations for the day of the eclipse.
- Highway travel to and from totality locations is expected to be extremely heavy on 8/21/2017.
- For additional information visit:
 - > www.eclipse2017.org
 - > www.greatamericaneclipse.com
 - > www.facebook.com/events/306422896400637/