NCPR: July 16, 2019

Evening Sky

Some dark is sneaking back in…

<table>
<thead>
<tr>
<th></th>
<th>Winter Extremes</th>
<th>Today</th>
<th>Earliest Sunrise</th>
<th>Summer Solstice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diff. from Today</td>
<td>2:06:54</td>
<td>0:15:41</td>
<td>0:15:18</td>
<td></td>
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</tbody>
</table>

Mars & Mercury close to sun (lost in the dusk)
Mars Passes behind Sun on 9/2/19, Mercury on 9/4/19

Jupiter rises before sunset in Ophiuchus … VERY BRIGHT
Opposition on June 10
Close … 414 million miles away … Galilean moons visible in binoculars

Saturn rises at 8:06 pm in Sagittarius … 30° East of Jupiter
Opposition on July 17
Almost as close as it gets, 840 million miles away
Need a telescope to see the rings, moon Titan

Leo is setting, but the Summer Triangle is back! Will linger well into December
Deneb, Vega, & Altair … Deneb is about 100 times farther away than other two!

Morning Sky

Venus moving toward far side of sun, rises at 4:52 am … lost in dusk
Venus at superior conjunction on August 14
Rises into evening sky in the fall

50th Anniversary of the First Moon Landing on Saturday!!
The Eagle landed in Tranquility basin at 4:17 pm EDT on 7/20/69
Neil stepped onto the moon at 10:56:15 pm EDT on 7/20/69
I thought it was the start of something … not the end

Light for 15h 12m today!
Jupiter and Saturn are nice this summer!!