

The Sky This Month Jul - Aug 2010

Sol

Our Sun is still quiet. That said, occasionally, one is treated to foreground filaments, spots, and prominences along the edge. If you don't have a Hydrogen-alpha or white-light filter, be sure to visit the Ontario Science Centre during the next Solar Observing Session. The Sun is presently in Cancer but will move on Aug 10 into Leo.

Many around the world are wishing our local star would hurry up and come out of its deep sleep. Be careful what you wish for. A Galaxy 15 communications satellite blew up due to a recent Coronal Mass Ejection. More orbiting equipment will get caught in the crossfire...
<http://sdo.gsfc.nasa.gov>

Luna

○ Jul 25 ● Aug 3 ● Aug 9 ○ Aug 16

Our celestial neighbour will appear close to Jupiter on Jul 30. Then on Aug 4 and 6, respectively, the Pleiades and Messier 35. On Aug 17, the half-lit orb will pass Antares, rival of Mars.

The lunar highlight is a few days before. Beginning on the 11th, a very young Moon will draw close to Mercury. And on the next evening, the 2 to 3 day Moon will join the incredible cluster of planets, Venus, Mars, and Saturn. Get out the cameras and tripods!

Inner Planets

Mercury is spinning toward us and will overtake Venus. It will appear at maximum eastern separation from the Sun on Aug 6. But given that the path of the planets (the ecliptic) is canted so low (giving us lovely hot summers), it will be tough to spot. You'll need good horizon sightlines. Venus is way up. It too reaches maximum separation (or elongation) on Aug 19.

Fading Away

Mars is too far to enjoy telescopically. It is about 2 times the Earth-Sun distance (an Astronomical Unit) from our eyes. And increasing, as we pull away. So too Saturn. Just as the rings are starting to open up, we're moving almost as far away as we can from the gas giant! Mars is to the right of Saturn until Jul 31.

Back at Last

Jupiter returns to our evening skies rising before midnight. It offers a new view with the southern belt missing. This should make the Great Red Spot easier to nab. The Jovian moons will no doubt keep us entertained this fall with their disappearing acts and shadow transits. Try for double shadow sightings on Aug 13 and 20, both in the early morning. Maybe not.

On Jul 24, the largest planet will seem to stop. Then it will begin a brief westward (retrograde) journey, as we close in, until it is opposite the Sun in a month or so. This apparent reverse motion makes Jupiter shift closer to Uranus. They fit in a binocular field. Remember you can see 6 planets at night with just eyes, a brain, dark skies, and perhaps corrective lenses.

As Close as it Gets

August is the month to take in Neptune. It is opposite the Sun from us and that means close! Enjoy the blue disk from a dark location. Focus carefully. And if you see a faint point of light near the distant world, don't assume it is a star.

Lots o' Planets, Large & Dwarf

Near the end of August, if you're viewing from a tall mountain, you might be able to spot all 6 naked eye planets at the same moment. For everyone else, you'll need to about an hour or two to tag them.

While watching your weather sites, if you notice you're going to get back-to-back clear nights, be sure to sketch the

locations of Vesta, Ceres, and Pluto. They're all wandering in the south. Pluto appears near the centre of our galaxy surrounded by those luscious summer constellations Scorpius and Sagittarius.

A Clutch of Eggs

For a couple of months we've been watching planets line up in the west at sunset. Lately, they have been dancing around Regulus, the brightest star (or lucida) in Leo. On Jul 24, enjoy the jagged line of Mercury, Regulus, Venus, Mars, Saturn, and Spica. On Jul 27, Mercury will be almost on top of alpha Leonis.

Over the next month, the pride of planets will put on a most incredible show. And make for photo ops! On Aug 6, Venus, Saturn, and Mars will form a compact triangle of lights. Faint Vesta will be hiding above. Less than a week later, the Moon will sweep up to Mercury and then the next night, Aug 12, swing past the triad of planets. Five nights later, Venus will try to kiss Mars. All this is well timed for Perseid chasers and Starfest campers.
<http://www.skyandtelescope.com/observing/objects/javascript>

Rocks, Ice, Dust

Asteroid occultations of note... (66) Maja will allow Torontians (when they're not burning cars) to observe a 11.5 magnitude star briefly wink out. The rank is 84, which is promising, but you'll need a "big gun," with 8 inches or more of aperture. That one's bright and early Sat 7 Aug at 04:39. (122) Gerda flies over southern western Ontario on Sat 14 Aug, just after midnight. Both Mount Forest and Ravenna lie between the centre and 1-sigma lines... Joy!

Comet 10P/Tempel 2 may prove accessible to early risers. It is predicted to reach maximum brightness soon, if it hasn't already. Some report a magnitude 8.6. It is moving from Aquarius to Cetus.

Already people are talking about the Perseids, due to peak on Thu 12 Aug, with little moonlight. A party is planned at the DDO; Tony will drag his guests from the Thornbury library to the CAO. If we're clouded out, there are lots of other meteors to see, including those radiating from Capricornus and Aquarius. They are due to peak on Jul 25 and Jul 29 respectively.
<http://skyhound.com>
<http://www.asteroidoccultation.com>

Busy Bodies in Space

Virgin Galactic had a successful crew test flight. They have a sexy spaceship! The other commercial shop, SpaceX, is ramping up for its next launch.

NASA is jiggling the shuttle sked. The next launch has shifted to Nov 1. An extra launch (next Feb) was added, happily, but the end is nigh. The final external tank was delivered to the USA space port.

There are 6 humans on orbit at the moment. Sadly, there are no ISS flyovers in the evenings for some time. There go chances to wow people at the CAO... Early morning passes start early Aug.

It's hopping at the Canadian Space Agency. Robot Dextre just took its "final exam." What will the report card say?!

The Mars500 simulation is off and running... Ontario's civic holiday will mark day 60 for the crew. Hope they're all getting along. Can't back out now!

The WISE infrared space telescope mission is wrapping up. They're gonna run her out of gas!

And, finally, JAXA is "shooting the curl" with their solar sail and inspecting the Hayabusa capsule for dust bunnies from space...

We can put men on the Moon but we can't find a cure for mozzies!
<http://spaceflightnow.com>

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