

Berkeley Public Library Weekly Sky Report April 1 – April 7, 2018

<u>The Planets</u>

Jupiter, Saturn and Mars are in the early morning sky. Saturn is towards the south with Mars right below it and Jupiter in glowing in the south west. Now the Evening Star, **Venus** is swinging higher away from the sun and should be visible for the next six months or so. Our sister planet is now the brightest object in the western nighttime sky, and will eventually become luminous enough to cast shadows at night. Of course, it is only shining so lovely because of the sunlight bouncing off its atmospheric clouds of highly reflective sulfuric acid.

Space Stations

Tiangong-1 The time has come for the much heralded return to Earth of the Heavenly Palace, China's first space station. The odds are that it will land in an ocean, but it could start breaking up anywhere. The latest prediction places reentry on Sunday, but no one knows for sure. If it is still in orbit on Monday, this is pretty much the last chance to see the doomed space station. Imagine looking up and seeing a burning space ship blazing across the sky!

Please note: Tiangong-1 is out of control, so the times should be checked on the heavens-above.com web site!

April 2, 5:59am North West (NW) Altitude 18°; 5:59am NNW Alt. 21°; 6:01am NE 10°, Magnitude 1.4 (or much brighter!)

Tiangong-2 The first Heavenly Palace is about to disappear, but the second is still flying high. There are a couple of great passes over Berkeley this week.

April 3, 8:25pm West South West (SW) Altitude 10°; 8:28pm NNW Alt. 84°; 8:30pm ENE Alt. 14°, Magnitude 1.1

April 5, 8:03pm West (W) Alt. 10°; 8:06pm NNW Alt. 53°; 8:09pm ENE Alt. 10°, Magnitude 1.7



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Iridium Flares These are reflections of the Sun off the solar panels of Iridium cell phone satellites. They can be quite dazzling, especially if you don't know what they are. You can even see the brighter ones during the day. Celestial objects are measured so that the brightest is in the negative magnitude range. Sirius, the star with the brightest apparent magnitude for us, rates at magnitude -1.0; Venus can get to almost -5; the full moon can dazzle at over -12, and the Sun is a stellar -27, so -7.1 is pretty shiny. Watch closely and you may see the satellite before and after it flares.

April 1, 6:02pm South West (SW), Altitude 50°; Magnitude -7.1

Rocket Launches

Space X is set to launch its 14th resupply mission to the International Space Station. spacex.com is a great place to watch the festivities.

April 2, 1:30pm Launch window opens.

Most of this information comes from the wonderful web site, Heavens Above. You can enter your location and bookmark it for easy access: <u>http://www.heavens-above.com</u>. Other sources include: <u>http://www.space.com</u> and <u>http://www.nasa.gov</u>. And check <u>spacex.com</u> for possible launches.

Recommended Reading

It's amazing to note that the first scientific detection of a planet outside our solar system was just 20 years ago. Since then, **3,743** planets have been confirmed! Here's a new book on the history and science of these discoveries.

The planet factory : exoplanets and the search for a second Earth. By Elizabeth Tasker.

523.24 Tasker [There's a copy available now!]

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