

August 2024 Chippewa Valley Astronomy Update

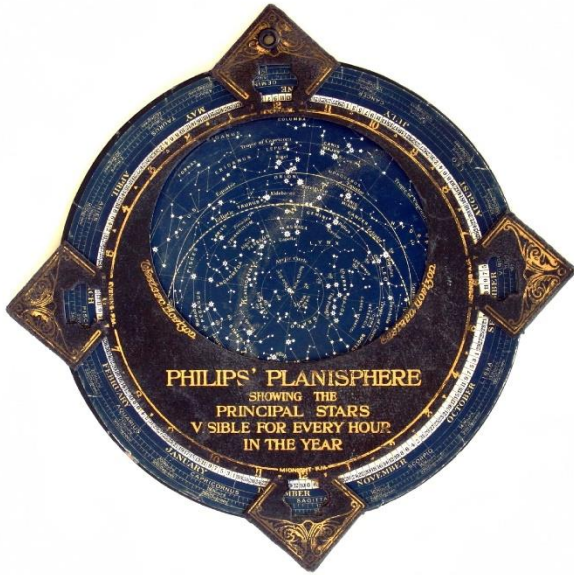


Figure caption: A planisphere allows the user to find out which part of the sky is visible at the day of the year and time of night that you set on the dial. This image is of an original Phillips' Planisphere sold around the year 1900. Many different planispheres are available today, including a modern Phillips' Planisphere.

Image credit: H. Raab

Pack your Star Party Go-Bag

Essay by Lauren Likkel

The night is dark, the stars are bright. If a friend calls and asks if you want to go stargazing, will you be ready? If you hear that the Northern Lights are going on, will you be ready to dash out the door? Is your Star Party Go-Bag packed??

A Go-Bag is an easy to carry pack that is pre-loaded with the essentials in case you need to leave in a hurry. In this case I am talking about night-sky emergencies. The stargazing essentials are simple – either warm clothing layers or mosquito repellent, depending on the time of year. If you have a telescope or if you do astrophotography, you will have some other preparation to do. But for the rest of us, the important equipment is a blanket or yoga mat to sit on, beverages, snacks, and other snacks. The other two important things are a red flashlight and a star chart.

Red flashlights are used by stargazers and astronomers because our eyes adjust to low light levels faster after seeing red light than after seeing white light. If you don't have a red flashlight, use a red cellophane (or plastic) filter to cover your regular flashlight.

A star map will help identify constellations. You could print out a chart for the current month's evening sky (skymaps.com). But for the Go-Bag I recommend

a planisphere (a round star chart that has a sliding wheel) since it can be set for any date and any time of night. A lawn chair (especially a chaise or ‘anti-gravity’ chair) is my favorite equipment for stargazing (and especially meteor showers), but it won’t fit in a Go-Bag.

A smartphone adds to the fun, especially if you download some free astronomy apps now so they are ready. But dim your screen so you don’t ruin your dark adaption (try setting an accessibility shortcut for a red filter to make your phone turn red). There are apps that show the current stars and constellations in the sky, such as **Sky View Lite** or **Sky Safari**. An app like “**ISS Finder**” can tell you if the ISS (International Space Station) will be passing over that night. The app **Astrospheric** is useful for planning (enter your observing location) since it shows the predicted cloud cover for each hour. **Astrospheric** also shows things like moon phase, the time it gets dark, KP index for auroral activity, and a complicated chart of when the planets are up.

To plan a star party, choose a time after dark on a clear night. Aim for a small moon phase; although the moon is beautiful, it adds natural light pollution that hides faint things like stars and the Milky Way. Choose a location that is dark and safe, has a low horizon (not under trees!), and perhaps has a good cell phone signal and restrooms. If you would rather not have to choose a location, CVAS members invite you to visit Hobbs Observatory on a Saturday public night when you will have people to point out constellations and let you look through telescopes.

With the Milky Way and the Summer Triangle up in the evenings, this is a great time of year for stargazing. I hope you get a chance to sit under the stars for long enough to let your eyes truly adjust to the dark as you embrace the night sky.

--Lauren Likkel is a member of the Chippewa Valley Astronomical Society