

Astrophotography List (“Photo” on pin)

Astrophotography is a specialized type of photography that entails recording images of astronomical objects and large areas of the night sky.

The easiest way to start is to capture wide views of the night sky with an ordinary DSLR camera with interchangeable lenses. Such equipment affords a wide field of view, making easy work of imaging constellations, meteors, the Milky Way, and much more. Point-and-shoot cameras and newer cell phones can also capture the sky remarkably well. Some of the latest cell phones are surprisingly capable – often even in automatic modes, and especially in manual and pro modes. You might be surprised just how well that phone in your pocket can capture many objects in the night sky. (There are even means to piggyback them onto eyepieces – manual focus typically needed for that.)

Next levels include tracking mounts for the camera, or camera views through tracking telescopes. From there it progresses through various levels all the way to purpose-made astro-imaging telescopes, mounts, cameras, systems and software that rival some observatories.

Since astrophotographers at OSP range from people who are pointing a camera at the night sky for the first time, to people using tracking telescopes or mounts, to people with very sophisticated tracking and imaging systems with extreme capability, the list approach leverages the other lists. To accommodate this better without creating many more lists, we are providing a few starter items here, then leveraging the other four lists for the remainder.

For typical camera lenses and cell phones, if you are just starting out, the Binocular List is a great place to begin as things there tend to be larger. A number of Showpiece items can also be captured pretty easily. As equipment capability is increased, Intermediate and Advanced list items are easily in reach – enabled by accurate tracking, advanced sensors and longer or stacked exposures.

To complete this list, you may choose from the five items shown and/or any of the items in the other four lists to suit your desired challenge level – and do more if you like! Individual beginner and binocular list objects count as a single item. Intermediate list objects count as two. Advanced list objects (must meet full criteria for an object) count as three.

To receive the award pin this year you must photograph at least 10 items, (counting items per the rules above) while you are at OSP.

When finished, bring your record of observations and images to the Observing Program table next to the Information Tent to receive your pin. *Please check the information tent for updates on when the Observing Program table will be staffed, and where it is going to be for the next session. Typically it will be manned later in the afternoon.*

Finally, with your permission, OSP would like to display the images on the website for everyone to see!

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2026 Oregon Star Party Astrophotography Observing List

#	Type	Object	Con	RA	Dec	Mag	Size/ Split	PSA	Alternate Name/Comments
1		North Celestial Pole							Time exposure showing circumpolar star trails. (Polaris as reference.) Also highlights star colors.
2		International Space Station							Time exposure of ISS transit. Option: Tracked image of spacecraft. At 200x solar panels are visible.
3		Constellation or Asterism							Photograph an entire constellation or asterism. Ideas: Sagittarius (Teapot), Ursa Major (Big Dipper), Lyra, Cygnus. If you are a beginner, be sure to look for deep sky objects (fuzzy patches) that show themselves - you may be surprised.
4		Any Beginner List Item							Each counts as one item. Good for tracked telescopic imaging. Many are also good for camera-based imaging (DSLR, etc.), but most objects will be small.
5		Any Binocular List Item							Each counts as one item. Most of these larger items are good for camera-based imaging (DSLR, etc.) or wide-field telescope setups.
6		Any Intermediate List Item							Each counts as two items. Stars/doubles need to show color, planets needs to show disks. Double stars need to show split and orientation relative to N (or W=drift direction) (orientation can be noted/annotated) Most of these items will require more experience, and likely a tracking telescopic setup to image.
7		Any Advanced List Item							Each counts as three items. Photo needs to clearly capture details/aspects required in the list - all items referenced in the list need to be captured for the item to count as a list item. They can be individual photos if needed. All of these items will require significant expertise and capable tracking, telescope, and imaging systems.

Award Requirement:

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Photograph at least 10 items as defined above.