

# Astronomy Photographer of the Year Equipment Analysis 2018-2023: Methodology

<u>Our analysis</u> of the equipment used in images shortlisted in the *Astronomy Photographer of the Year* competition is produced by analyzing information provided by Royal Museums Greenwich.

## Number of Images

In total, we looked at 828 astrophotography images shortlisted in the competition for the six years from 2018 to 2023.

#### **Image Categorization**

Images in the competition are placed in various categories. In 2023 this was:

- 1. Our Moon
- 2. Our Sun
- 3. People and Space
- 4. Galaxies
- 5. Skyscapes
- 6. Planets, Comets and Asteroids
- 7. Stars and Nebulae
- 8. Best Newcomer
- 9. Young Competition
- 10. Image Innovation

The categories change slightly each year and so for our analysis we categorize each image as either:

1. Landscape Astrophotography

- 2. Planetary Astrophotography
- 3. Deep Sky Astrophotography

Broken down this way we have:

- 315 Landscape Astrophotography Images: Images of the Milky Way and star trails above the Earth as long as part of the Earth's landscape makes up part of the image, including aurorae.
- 284 Deep Sky Images: Deep space objects like galaxies and nebulae.
- 229 Planetary Images: This covers the major planets and objects in our solar system, including our sun and moon.

Breaking up the images into these categories is necessary as different equipment is typically used for different types of astronomy imaging and so aids the analysis.

### Caveats and Survey Limitations

- Sometimes images do not fit neatly within the categories of landscape, deep sky, or planetary astrophotography. For instance, a landscape image that heavily features the moon, or a deep sky image that also features a planetary object. In these cases, we make a judgment on which category is most appropriate.
- 2. We disregard the results in the *image innovation* category as that involves using publicly available data to create images from sources like NASA space telescopes, rather than individual photographers taking pictures themselves.
- 3. Some individual photographers have more than one photo shortlisted and so may use the same equipment more than once and will be counted more than once in the results.
- 4. Some images may use more than one camera or telescope for a single photo, in these cases both pieces of equipment are counted in the results.
- 5. Sometimes equipment details are unclear, i.e. different names used for the same equipment or manufacturer not named, etc. In these cases, we've tried to find the correct make/model used in the US market.
- 6. Sometimes equipment information is missing, for example, no star tracker or tracking mount is mentioned even though the length of the exposure would have required it.
- 7. Some cameras may have been astro-modified and some images used filters. This information is not always provided.
- 8. Some photographers used homemade mounts or telescopes and these have been left out of the results.

#### Links, Contacts and Use of Data

Any text or image on that page is free to be quoted or reused in other publications, websites, or social media. Please just provide a link to the analysis on our website in your publication: <u>https://skiesandscopes.com/astronomy-photographer-of-the-year/</u>

You can contact Skies & Scopes at <u>contact@skiesandscopes.com</u> with any questions.

See also our <u>contact page</u> for other options.