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## ASSA Special Interest Groups

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The Society has several Special Interest Groups where members meet with others, who have similar interests, to learn together; share information; and get 'hands-on'.

### Astro-Imaging

The [Astro-Imaging group](#) has astrophotography as the centre of its activities. The group uses DSLR cameras and/or dedicated CCD/CMOS cameras. You do not need any imaging or optical equipment to be a member of the group as anyone is welcome to 'come, see and learn'. Members not only learn about imaging, but also about the different types of telescopes, how to use them in a friendly and relaxed environment.

In addition to imaging in our private time, the Group shares, learns and advances their skills during online monthly meetings starting at 7.30pm on the last Friday of each month. When the weather is favourable, practical sessions are conducted where members can share their knowledge and newer members can learn 'hands-on'.

The group runs dedicated astro camps several times a year where members can image at a dark-sky site. Current ASSA membership is a prerequisite to being a member of the Astro-Imaging Group, however casual visitors are welcome.

### Comets, Occultations, Meteors and Asteroids

Some members of the Astronomical Society of South Australia have an interest in observing certain dynamic solar system objects and events. These include the appearance of comets, meteor showers, asteroids, and occultation events. Occultations are when a body such as the Moon, a planet, or an asteroid pass in front of a star.

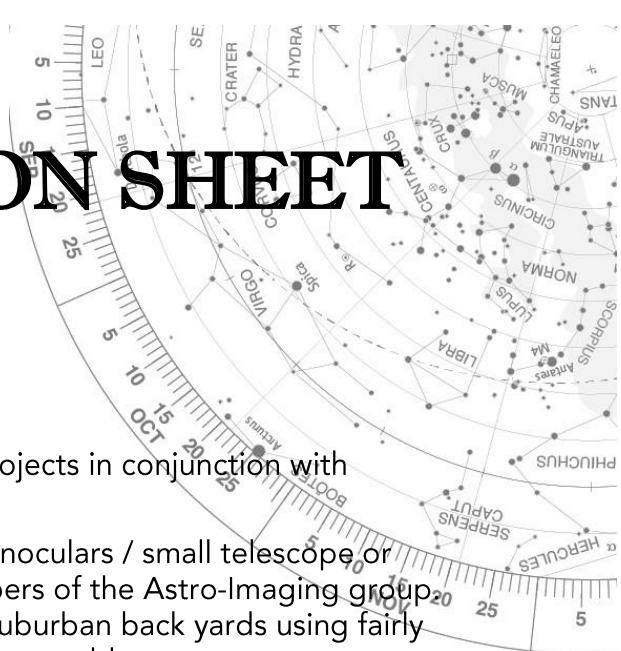
ASSA member, Justin Tilbrook lives on a dark hillside in the Clare Valley district of South Australia and has a comet named after him. The Clare Valley is a bit of a magnet for visiting amateur astronomers; although it isn't clear if the attraction is the dark skies, the many excellent wineries, or both!

[The Comets, Occultations, Meteors and Asteroids group](#) (COMA) was formed in 2021 and provides a focus for these activities in ASSA and the exchange of local information for this very dynamic area of Astronomy.

The group plans regular communications, including Zoom meetings, comet and meteor observing sessions, and encourages members to participate in asteroid occultation events.



Photo: Comet McNaught by Michael Mattiazzo



## Variable Stars

The [Variable Stars group](#) undertakes Citizen Science projects in conjunction with people around the world.

Variable star observations can be made visually, with binoculars / small telescope or using imaging equipment similar to that used by members of the Astro-Imaging group. Serious science observations can be undertaken from suburban back yards using fairly basic equipment which is used by researchers around the world.

The Variable Stars group uses the Variables Chat group on the ASSA Members' webpage as well as via email to keep in touch and share information. Training sessions on how to observe variable stars have been organised in the past and if demand is sufficient, could be held in the future. The Variable Star group have given talks at ASSA General Meetings, schools and interested organisations in South Australia and interstate.

The ASSA Variables Stars group has close links with the following organisation which promote variable star research in the southern hemisphere:

- the American Association of Variable Star Observers (AAVSO) (<http://www.aavso.org>).
- the Variable Stars South (VSS) which is the primary international organisation for variable star observers and data analysis (<http://www.variablestarsouth.org>).

## Radio Astronomy

The [Radio Astronomy group](#) aims to facilitate and encourage the sharing of skills, ideas, techniques and knowledge resources to assist ASSA members in receiving radio emissions from space based sources.

Radio Astronomy only differs from traditional optical astronomy in that telescopes operate in the radio frequency portion of the electromagnetic spectrum where they can detect and collect data on natural radio emitting sources.

Most amateur radio astronomers, if not all, find the fun and challenge is in building custom equipment or modifying other equipment to do the job. The Group provides support to the beginner and the more experienced in radio reception techniques and in using their own antennas, receivers, signal processing hardware and software.



Photo: Blair's Portable Radio Telescope