

THE 2025 OZSKY "CLASSIC" STAR SAFARI

COONABARABRAN, NSW, AUSTRALIA MARCH 23 - 30, 2025

www.Oz\$ky.org

2. OBSERVING AT THE OZSKY "CLASSIC" STAR SAFARI

The southern night skies at the OzSky Star Safari are something to behold! Not only does the hub of the Milky Way reach the zenith (yes, both Sagittarius and Scorpius will cross through the zenith!), but you'll also enjoy Omega Centauri overhead, the entire Crux / Carina region, the stunning Magellanic Clouds and so much more.

POSSIBLE TELESCOPES AT OZSKY

Unlike most "regular" star parties, you're probably already aware that you don't NEED to bring your own telescope to the OzSky Star Safaris, as numerous large telescopes are provided for shared use by all attendees – hence our strict limit on the number of people permitted to register for this unique event.

The range of equipment available at the OzSky Star Safari often includes the following:

- Two 25" f/5 Classic Obsessions
 - 31mm, 17mm & 9mm Naglers;
- One 20" f/5 Classic Obsession
 31mm Nagler + 17mm & 8mm Ethos
- Four 18" f/4.5 Classic Obsessions
 - 26mm, 12mm & 7mm Naglers
- One 18" f/4.2 Ultra-Compact Obsession
 - 22mm Nagler + 13mm Ethos
- One 14" f/4.5 SDM dobsonian
 - 22mm & 12mm Nagler + 8mm Radian
- One 12" f/5 binocular telescope (dobsonian)
 24mm Panoptics + 13mm Naglers + 10mm Radians
- One 10" f/5.6 home-made dobsonian telescope
 23mm, 15mm, 7mm SkyWatcher 82° eyepieces
- One 25×150mm Fujinon Giant Binoculars
- on a motorized SkyRover StarChair with joystick control

How many, and which of these telescopes are brought out for your use depends on the number of people in attendance.

However, as it is looking like OzSky 2025 will have yet another "Full House" of observers, there is a very good chance that most of the telescopes in the arsenal should be available for your observing pleasure.



A small selection of the OzSky Star Safari telescopes

Most of the telescopes are equipped with the incredible Argo Navis Digital Telescope Computer, so finding your way around the Southern Night Skies should be a breeze, especially with the assistance of your experienced Aussie volunteers.

A small selection of telescopes will also be provided without any guidance systems to enable observers to complete any specific observing lists which require star hopping only.

Of course, we fully encourage you to bring your own small, rich-field telescopes or imaging gear if that's something you're interested in, but that's entirely up to you.

The intention of the OzSky "Classic" Star Safari is to provide an impressive range of LARGE telescopes which would otherwise be prohibitive to transport across the Pacific.

EYEPIECE SELECTIONS AT OZSKY

Every telescope is equipped with its own dedicated set of quality TeleVue, Nagler, Ethos, Radian and Panoptic eyepieces which have been perfectly matched to each telescope to optimise views of the southern skies.

Please feel free to bring any of your own favourite eyepieces or filters if that's what you prefer to observe with. In the past, some attendees have even brought their own BinoViewers with full paired sets of eyepieces, for example.



A small selection of the OzSky Star Safari eyepieces

<u>Note</u>: Due to the long drive home on the morning of our departure, all OzSky telescopes and equipment will be shut down at midnight on Saturday March 29, 2025 for the safety of all participants and volunteers.

SHARED ACCESS TO ALL OZSKY TELESCOPES

Folks often ask how each of the telescopes will be "allocated" during the OzSky Star Safari – We are pleased to advise that all official OzSky telescopes on site are fully available for shared/communal use by all attendees, every night.

There may also be a small number of additional (privately-owned) telescopes on site which may be made available by their respective owners, however access and control of those privately-owned telescopes lies entirely with their respective owners.

At the OzSky "Classic" Star Safari, telescopes are never allocated to specific people or groups, however, at virtually all past OzSky Star Safari trips it is usually found that folks with similar observing interests tend to group together around one or two telescopes to observe similar observing lists, often leaving some of the other telescopes unused for long periods of time.

If you would like to use a specific telescope and there is already another observer or group using it, that's not a problem at all - simply join the queue and you will be warmly welcomed.

If there are several people on one telescope with different observing lists, it is suggested that observers take turns shifting from one observer's list to the next.

If you do have a specific observing list or program which you wish to complete during your time at the OzSky Star Safari, please feel free to let the rest of the group know using this group mailing list OzSky.org. You may find that there are others in the group who also have identical or similar wish-lists.

No matter who you are, or what you want to observe, you will have ample opportunity to use any or all of the official telescopes on site.

Everyone is strongly encouraged to roam around the observing field checking out the various telescopes, and keep in mind – you will hear frequent calls for "Who wants to look at 47 Tucanae in the 25-inch telescope?"

OZSKY OBSERVING SITE CO-ORDINATES

31.27°5 | 149.19°E

The co-ordinates of the OzSky "Classic" Star Safari observing site are: 31.27°S, 149.19°E. Google Maps View.

The street address of the observing site is the Warrumbungles Mountain Motel, 882 Timor Road, Coonabarabran NSW 2357, Australia.

STRICT OZSKY DARK OUT PROVISIONS

One of the reasons folks travel half-way across the world to observe or do astro-imaging at the OzSky "Classic" Star Safari is to take advantage of the sheer darkness and the amazing skies we have to offer.



The night skies at OzSky are usually in the range of SQM 21.4–21.9 mag/arcsec² (Bortle 1–3) and it is not unusual to see shadows being cast by the Milky Way itself.

Each of the volunteers at the OzSky "Classic" Star Safari feel a duty of care to ensure that the best possible experience can be enjoyed by all OzSky guests, and as such we implement strict Dark Out provisions requiring that only <u>dim, red</u> light sources may be used on or around the observing field between 7:00pm and 5:00am.

Any light sources which are not generically "astronomy friendly" (such as too bright, or white light etc), must be switched off during official dark out hours, so as not to affect the enjoyment, dark adaption, or photographic exposures of other folks at OzSky.

On-Site room lights must also remain off during this period (unless curtains are fully drawn, and windows shielded) which is particularly important to note for any non-observers in the group.

<u>Note</u>: Remember to pack your red LED flashlight for use while observing, but please do not bring a "head-light" (even if it is red) as these are typically way too bright for serious observing and generally cause more damage to dark adaption than good.

Also leave at home any flashlight which can accidentally be switched to white light - these are strictly prohibited on the observing field and may be confiscated immediately.

DIGITAL OBSERVING AIDS

Folks often raise concerns about modern devices such as kindles, smartphones, tablets, laptops, etc being used on the main observing field.

Feel free to bring your favourite digital devices, but please remember they must not

interfere with any other observer or imager during the official Dark Out hours.

Without going into details of appropriate shielding options for laptops, tablets, smartwatches and other light emitting devices, common sense should, of course, prevail.





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WWW.OZSKY.ORG

EYE CANDY, OBSERVING LISTS & OTHER RESOURCES

While this list is by no means exhaustive, it will hopefully act as a starting point to help you get your own personal observing lists started, or perhaps provide some inspiration to get yours refined if you've already started one.

CRUX/CARINA/CENTAURUS, VELA, MUSCA

Ruby CrucisThe Jewel BoxThe Coal Sack	DY Crucis / EsB 365 NGC 4755
Eta Carinae Nebula	NGC 3372
 The Homunculus 	NGC 3372
 The Keyhole Nebula 	NGC 3372
 The Football Cluster 	NGC 3532
 Southern Pleiades 	IC 2602
 Carina Wolf-Rayet 	NGC 3199
 Omega Centauri 	NGC 5139
 Son of Omega 	NGC 2808
 Pencil Nebula (Vela SNR) 	NGC 2736
 Eight Burst Nebula 	NGC 3132
 The Spiral Planetary 	NGC 5189
 Centaurus A 	NGC 5128
 The Blue Planetary 	NGC 3918
 Centaurus Cluster 	Abell 3526
 Centaurus Cigar 	NGC 4945

SCORPIUS / SAGITTARIUS (AT THE ZENITH!)

Scorpius at the zenith

· Sagittarius at the zenith

The Bug Nebula
 Trifid Nebula
 Lagoon Nebula
 Swan / Omega Nebula
 NGC 6514 / M 20
 NGC 6523 / M 8
 NGC 6618 / M 17

• Zeta Scorpii - One of the most luminous stars

TUCANA & DORADO

• 47 Tucanae	NGC 104
 Tucana Spare Globular 	NGC 362
 Small Magellanic Cloud 	SMC / NGC 292
Large Magellanic Cloud	LMC
The Tarantula Nebula	NGC 2070
 Dorado Sevfert Galaxy 	NGC 1566

OTHER REGIONS (NO PARTICULAR ORDER)

Fornax Barred Spiral	NGC 1365
Antlia Spiral	NGC 2997
Ara Globular	NGC 6397
 Southern Pinwheel 	NGC 5236 / M83
 Meathook Galaxy 	NGC 2442
Ghost of Jupiter	NGC 3242
Thor's Helmet	NGC 2359
 Norma Planetary 	Shapley 1
 Antennae Galaxies 	NGC 4038 / 4039
 Sombrero Galaxy at the zenith!! 	NGC 4594 / M104
 Starfish / Pavo Cluster 	NGC 6752
 The Dark Doodad 	NGC 4372 region
 Silver Dollar Galaxy 	NGC 253
 Sculptor Cigar 	NGC 55
 The Hand of God 	CG 4
Helix Nebula	NGC 7293
 Saturn Nebula 	NGC 7009
 Wild Duck Cluster 	NGC 6705 / M 11
 Orion Nebula & The Trapezium 	NGC 1976 / M 42

CHALLENGE OBJECTS

- Murrell 1 Planetary Nebula discovered by OzSky's very own Andrew Murrell
- Horsehead Nebula (IC 434) A classic, but it's technically a Southern Object!
- The Emu (Dark Nebula) not really a "challenge", but you won't believe it until you see it!
- Proxima Centauri The closest star to Earth (other than the Sun, of course!)
- The "Field of Nothing" You guessed it: a field of view containing absolutely nothing (well, almost...)
- The Aurora Australis Yes, The Southern Lights. Not at all likely to see this, but we have seen it from "worse" latitudes in the past!

ONLINE OZSKY RESOURCES

The OzSky Star Safari website contains several very useful observing resources which you might like to review prior to your trip, including:

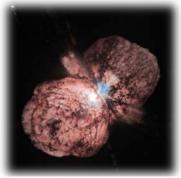
- The Bambury 600 List & Astronomical League Program
- The Small Magellanic Cloud (SMC)
- The Local Group of Galaxies
- Treasures of the SMC

Further information and additional observing lists can also be found on the OzSky Star Safari website at https://www.OzSky.org under the "Resources" link, however in the interim, hopefully this email will serve to whet your appetite for what else there might be to discover in the Southern Night Skies at the OzSky Star Safari.

As mentioned previously, this list is just a very small sample of some of the Southern Skies Eye Candy objects and will hopefully inspire you to get some ideas together for your own OzSky Star Safari southern skies observing lists.



47 Tucanae (NGC 104) in Tucana



The Homunculus in Carina



Seyfert Galaxy (NGC 1566) in Dorado



Spiral Planetary (NGC 5189) in Musca



The Jewel Box (NGC 4755)



The Tarantula Nebula (NGC 2070) in Dorado