

Shallow and Deep Sky Observing Section

Annual Report: 1 August 2025-31 July 2026

Director: Colin Steyn

1. Introduction.

With the passage of the year 2025/2026 herewith my third Annual Report.

2. Observing Highlights

Weather and Moon permitting the following Observations and Photo's taken were made from Boyden Observatory and the Sterland Observatory on my farm Onze Rust 25 km south of Bloemfontein -

2025

- 2.1 03.08.2025 - The Ring Nebula (M57)
- 2.2 21.08.2025 - The Grus Triplet (NGC 7582,7590 and 7599)
- 2.3 01.09.2025 - The Double-Double in Lyra (Epsilon)
- 2.4 03.09.2025 - Albireo in Cygnus.
- 2.5 07.09.2025 - The Lunar Eclipse at Boyden Observatory
- 2.6 12.09.2025 - Antares
- 2.7 16.09.2025 - The Lagoon Nebula (M8)
- 2.8 19.09.2025 - The Dumbell Nebula (M27)
- 2.9 14.10.2025 - Saturnus and it's moons
- 2.10 15.10.2025 - The Bug Planetary Nebula (NGC 6302)
- 2.11 28.10.2025 - The Tarantula Nebula (NGC 2070)
- 2.12 26.11.2025 - Sigma Orionis
- 2.13 11.12.2025 - Sirius and Companion.

2026

- 2.14 25.01.2026 - The Orion Nebula (M42)
- 2.15 17.02.2026 - The Partial Solar Eclipse and the Spanish Dancer Galaxy (NGC 1566)
- 2.16 11.03.2026 - Centaurus A (NGC 5128) and the Sombrero Galaxy (M104)
- 2.17 02.05.2026 - Comet C/2025 R3 PANSTARRS
- 2.18 12.05.2026 - The Crux and Scorpius Jewel Boxes (NGC 4852 and 6231)
- 2.19 24.05.2026 - Omega Centauri (NGC5139)
- 2.20 27.05.2026 - The Bug Nebula (NGC 6302)
- 2.21 07.06.2026 - The Cat's Paw Nebula (NGC6334)
- 2.22 09.06.2026 - Planetary Alignment of Jupiter, Venus and Mercurius
- 2.23 05.07.2026 - M22, Trifid Nebula (M20) and Lagoon Nebula (M8).
- 2.24 07.07.2026 - The Eagle Nebula (M16)
- 2.25 13.07.2026 - The Southern Pinwheel Galaxy (M83)

As was the case in the previous years observations of T Coronae Borealis is ongoing as it is expected to Nova in the immediate future.

3. Star Parties:

3.1 The first Star Party, after 3 postponements due to the weather, was held at Sterland, Onze Rust, on 20 December 2025. Attended by 16 ASSA: Bloemfontein members and friend's observations and photographs were made, of Saturnus, Jupiter and their moons after the customary braai. Sterland's 10-inch reflector and 14-inch Schmidt-Cassegrain telescopes were used to this end.

3.2 The second Star Party was held at Sterland on 18 April during which Comet C/2025 R3 PANSTARRS was observed by 13 members and friends.

3.3 The third Star Party at Sterland was held on the 16th of May when 19 members and friends observed the above-mentioned Comet, the Virgo Galaxy Cluster, Sombrero Galaxy, Tucana 47, Omega Centauri, and the Tarantula Nebula. The telescopes employed were 10- and 14-inch Schmidt-Cassegrains, 10-inch reflector and a SeeStar 50 with which stunning photos were taken.

Future ASSA: Bloemfontein Star Parties at Sterland is set down, weather permitting, for the 15th of August, 7 November and 12 December.

4. Shallow and Deep Sky Bulletins

The following Bulletins were submitted by me in the last year, namely: -

- 4.1 The Upcoming Lunar Eclipse (03.09.2025)
- 4.2 Epsilon Lyrae - the Double-Double Star in Lyra (16.09.2025)
- 4.3 The Bejeweled Eye of the Swan - Albireo (Beta Cygni) (20.10.25)
- 4.4 The Stars Betelgeuse (Alpha Orionis) and Rigel (Beta Orionis) (22.11.2025)
- 4.5 The Condor Galaxy (NGC6872) (08.12.2025)
- 4.6 The Cosmic Rose in Monoceros (31.01.2026)
- 4.7 The Cosmic Dancer Galaxy (NGC1566) (27.2.2026)
- 4.8 Orion's Stellar Treasures - Sigma Orionis (11.03.2026)
- 4.9 The Cosmic Colossus (M87 Galaxy in Virgo) (24.4.2026).
- 4.10 The Jewel box of the Scorpion (NGC 6231) (26.05.2026)
- 4.11 The Jewel box of the Cross (NGC 4755) (29.06.2026)

5. Projects:

ASSA: Durban visited ASSA: Bloemfontein and donated a 10-inch reflector telescope which is now being restored for use at ASSA: Bloemfontein's 16-inch Observatory at Boyden. Sterland's third Observatory, with a domed roof, is half-way completed and may be rounded off in the coming year. Invitations have been sent to Onze Rust Primary and Secondary School as well as Grey College and Oranje Meisieskool for Stargazing Evenings.

The enduring close collaboration by ASSA: Bloemfontein with the University of the Free State at Boyden Observatory and the Naval Hill Planetarium resulted in growing public attendance of all educational and observing activities there and at Sterland Observatory. In the coming year I will again strive to do my utmost to advance the interests of these entities.

6. Instrumentation

Due note should again be taken of the preferred Instrumentation to be used for observing Celestial targets as indicated in my eleven (x11) Shallow and Deep Sky Bulletins in the last year as they deliver the optimum results.

7. Public Outreach and Education

On the 24th of October 2025 the teachers and pupils of Kgotsfalo School (62 attendees) visited Sterland Observatory where they were introduced to the 5- and 10-inch Reflector Telescopes, the 70mm Refractor and the 14-inch Schmidt-Cassegrain telescopes and their mechanisms. They were tutored on the nature of the Cosmos by means of Star Charts and photo's of Messier's Catalogue, to great effect.

Stargazing evenings at Sterland are introducing the public to the wonders of the Cosmos at an ongoing basis as all the visitors and guests of the Onze Rust Restaurant and Leeuwberg Guesthouse have free access, weather permitting, to view the Celestial wonders through the above-mentioned telescopes.

The local farming community and their workers also visit Sterland at an ongoing basis for free every weekend.

7. Conclusion

After my third year as Director of the Shallow and Deep Sky Observing Section I want to express my gratitude to all who supported and guided me the previous 12 months. It was a most enriching and rewarding experience and I hereby again give my solemn pledge to advance, expand and propagate the interests of ASSA in general, and the Shallow and Deep Sky Observing Section in particular, to the best of my abilities in the coming year. This endeavour is a great honour and privilege for me.

"Dwell on the beauty of life. Watch the stars and see yourself running with them."
Marcus Aurelius, the last of the five Good Roman Emperors, (161 - 180 AD).

Colin Steyn
14 July 2026