

ASSA Planetary Interest Group

Annual Report 2025- 2026

Introduction

This report covers the period from July 2025-June 2026 (the author was out of the country for the whole of July 2026), will only highlight the most significant aspects of the period, and at this stage remains focussed on the work undertaken by the writer from his Observatory (Oryx Observatory), located on the Khomas highlands in Namibia.

Over the last 12 years, the writer's planetary imaging work has primarily focused on Mars, Jupiter and Saturn, with some limited imaging of Mercury, Venus, Uranus and Neptune. During the last year, more attention has been allocated to Mercury and Venus.

The 2025-26 apparitions of Jupiter and Mars remained rather poor from a southern observer's perspective due to their far northern declinations at opposition, and limited time was allocated to the two planets during the opposition months due to excellent coverage from our northern colleagues. However, as per the authors imaging philosophy, he did manage to capture images when the planets were difficult to observe by others,

A highlight of the period was the author's first attendance at the Namibia Scientific Society's Annual Star Party held at Okahandja north of Windhoek, where he presented the main talk on his planetary work and experiences.

Mercury

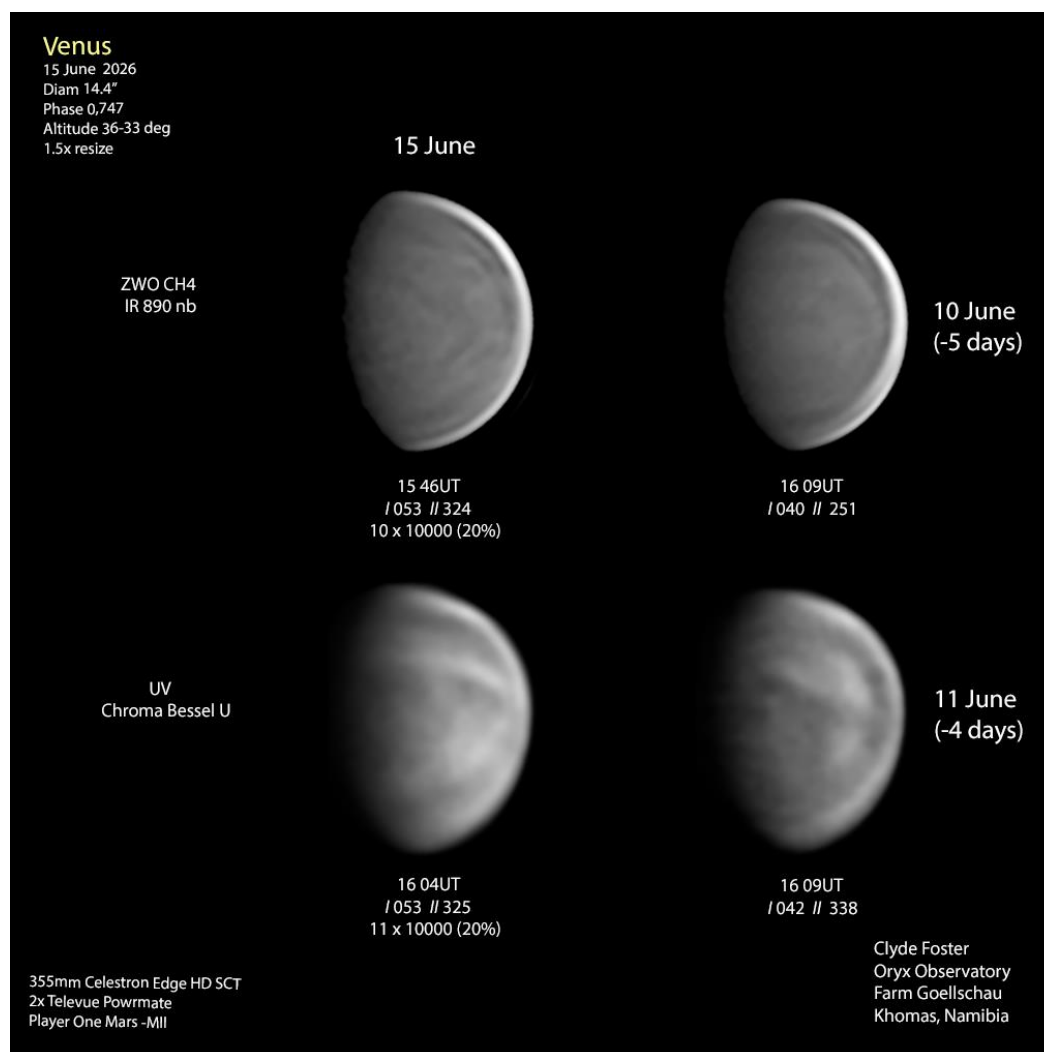
A total of 12 images were captured during this period. Always a challenging target, and rarely observed, the writer was able to capture only one image of the tiny planet on 26 October 2025 during the evening apparition (eastern elongation).



11 further images were produced in 2026, with 3 being captured during the morning apparition over the period 20 April to 2 May and an interesting run of 6 consecutive afternoon captures (10-15 June) with two additional crescent results on the 19 and 20 June. Various surface details were detected not least some of the bright impact craters, such as Fonteyn and Guinness and the light Aparangi Planitia region. The rapid change in phase and rotation of the features was noticeable over these periods, as shown by an animation of my images produced by the ALPO (USA) Mercury section Director, Frank Mellilo.

Venus

A total of 47 IR/UV image sets were produced during this period. Rather bland visually, the planet has been attracting more of the writer's interest in the last few years, particularly imaging in the UV (upper cloud structures) and the Infra-Red (mid-atmospheric cloud structures), more specifically the Methane wavelength (890nm). The writer extensively followed the planet's most recent afternoon/evening apparition over the period 13 April to 20 June as the planet grew in size and reduced in phase. The rapidly changing upper cloud structures, visible in the UV, have been particularly interesting. The writer has included -5 day (IR 890nm) and -4 day (UV) images in his standard template for comparison over generally accepted rotation periods.



Mars

Despite its far northern declination during the 2025-26 apparition, making it a more challenging target for southern observer's, the writer did commit significant time and effort to monitoring the planet early and late in the apparition when fewer observers tend to image.

From August to December 139 individual images were submitted to the international databases, whilst so far this year 83 images, comprehensively covering the start of the new apparition, with Mars still down at 4" in size, have been submitted.

The first detected localised dust activity of the new apparition, in the Valles Marineris region, is seen in the attached recent image (the small bright spot to the left of centre).

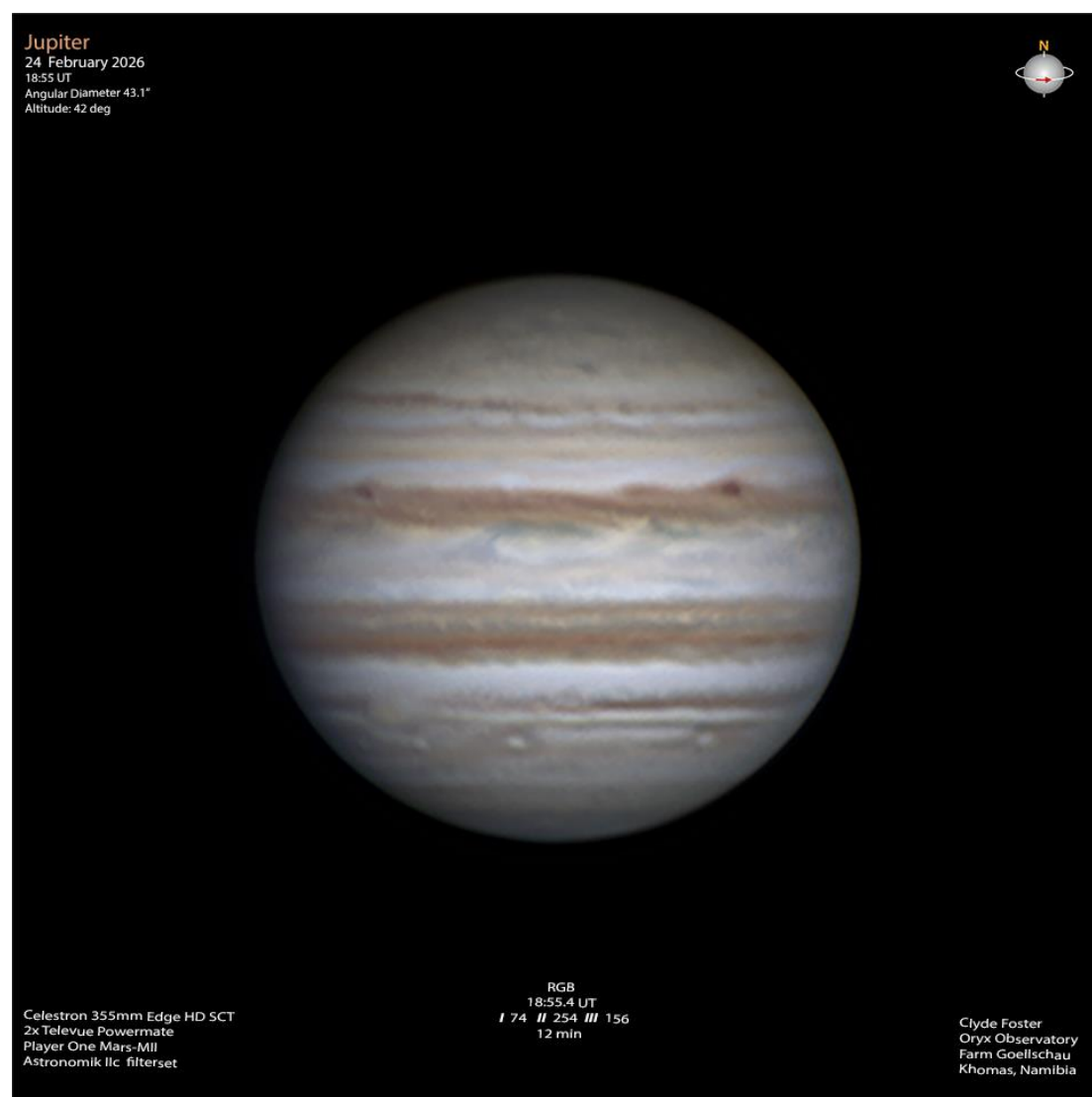


Jupiter

As with Mars, the giant planet was near its highest northern declination for most of the 2025-2026 apparition, far from ideal for southern observers. Given the many excellent images produced by our more northern planetary colleagues, the writer tended to allocate more time to the other planets, whilst still capturing Jupiter data when conditions were acceptable.

From August to December 2025, 9 images were submitted to the international databases, whilst so far this year, 59 images have been submitted.

Although not of high quality, the attached image shows the prominent, and still highly active, dark stripe of the STB Segment G at lower right, which is the result of the Clyde's Spot convective storm of 2020.



Saturn

With Saturn better placed for southern observers, much of the writer's attention was focussed on the ringed planet, as the rings have increased in inclination and the Southern Hemisphere is now well seen.

22 images were submitted to the databases from August to December 2025, mainly covering the latter stages of the 2025 apparition. During this period the rings were at times almost edge on (less than 1 deg inclination)

124 images have been submitted so far this year as the planet became visible in the morning sky after solar conjunction.

With the current ring inclination, many "spoke" observations have been noted.

All data is analysed by DeTect software for potential asteroid impacts.



Saturn with ring inclination less than 1 deg.

SATURN
7 June 2026
04:49 UT
Angular Diameter 16.8"
De -8.5 B⁻ -10.4 Ds -5.9
Altitude 52 deg



355mm Celestron Edge HD
2x Televue Powermate
Player One Mars-MII
Astronomik RGB IIC Filterset

L(R)RGB
04:48.7 UT
CMI 338 CMII 163 CMIII 333
26 mins

Clyde Foster
Oryx Observatory
Farm Goellschau
Komas, Namibia

Uranus and Neptune

No observations were made of the two outermost planets during this period.

Namibia Scientific Society Annual Southern Star Party

Held at The Rock Lodge to the west of Okahandja, +-100kms north of Windhoek. This was my first opportunity to attend, and I was invited to present the keynote address, which covered my planetary imaging experiences over the last 12 years. In my opinion a highly successful and enjoyable event, exposing astronomy to a large group of schoolchildren and public visitors.

Conclusion

The writer's intent is to continue his planetary imaging programmes, with the specific planetary targets based on attempting to optimise his contribution to the planetary science community.

Regrettably, given time limitations, there has been not positive progress on a regular ASSA planetary newsletter, but it remains on the authors action list.

Astronomical Society of Southern Africa



Since the move to Namibia, the writer has continued developing his relationship with the Namibia Scientific Society Astronomy group, and it is hoped that the relationship can extend to developing closer links between NSS and ASSA in the future.

Clyde Foster

Director

ASSA Planetary Interest Group

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