



Shallow Sky Section

Summarised Annual Report 2017- 2018

Introduction

This summary report covers the period from August 2017-July 2018, and will only highlight the most significant aspects of the year. A more comprehensive report will be circulated for inclusion in MNASSA.

Asteroids and Comets

Ongoing work has been done by Jerome Jooste (ASSA Jhb) on asteroid search. Tim Cooper, Oleg Toumilovich and Kos Coronaios published their observations on imaging the close approaches of some Near Earth Asteroids in MNASSA Volume 76 Nos 9 & 10, October 2017, pp231-239.

Comet observations were done by Kos Coronaios on Comets 29 Encke, 71P Clarke, C/215 V2 Johnson, C2016 R2 (PANSTARRS), C 2017 01 (ASASSN1) and C/2016 M1 (PANSTARRS).

Meteors/Meteorites

Tim Cooper continues to do excellent, professional level work in this field, with administrative and communication support from Kos Coronaios, which is acknowledged with appreciation.

Fireballs: he received 17 reports in the period. Nine of these were reported in MNASSA Volume 77 Nos 3 & 4, April 2018, pp48-52. The balance will appear in a MNASSA article in preparation. The period included the notable events of:

2018 February 25 – eleven reports from Gauteng, Free State and Northern Cape

2018 June 2 – the entry of asteroid 2018 LA into the atmosphere, which later resulted in the recovery of a fragment weighing about 18 grams. I analysed and calibrated various video footages (travelling over 4200 km in the process) to help define the location of the strewn field. Full report in preparation for MNASSA.

In addition, his report on the bright bolide of 2017 June 15 was published in MNASSA Volume 76 Nos 9 & 10, October 2017, pp218-231

He also observed a number of the main meteor showers including the remnants of Comet Borisov in conjunction with Oleg Toumilovich.

Satellites

Regrettably Greg Roberts' family and health situation have quite seriously affected his work in this field and there is nothing significant to report.

Planetary work

The author has continued his comprehensive imaging work on Mars, Jupiter and Saturn, but has also been requested to submit imaging of Neptune's equatorial storm system for professional use.

A number of the highlights from the year:



- a) Presentation on the Apollo program at Scope-X 2017
- b) Presentation on his Mars coverage of the 2015-2016 apparition at the European Planetary Science Congress in Riga, Latvia, in September 2017. The trip was sponsored by Europlanet which is acknowledged with appreciation. Report was published in MNASSA.
- c) Presentation on his support from South Africa for the NASA Juno mission, at the Europlanet Juno Workshop, Royal Astronomical Society, London in May 2018. Report is in preparation for MNASSA.
- d) Presentations at ASSA Pretoria and ASSA Johannesburg on Planetary Imaging.
- e) Interaction with, and support of a few developing planetary imagers.
- f) Ongoing Pro-Am interaction and collaboration with various international professional planetary astronomers and scientists.

Clyde Foster

Director: Shallow Sky Section

August 2018