

# Report of the Double Star and Variable Star Section

## ASSA AGM August 2017

### Double stars

The highlight of the year was a visit by Bob Argyle, ex Cambridge astronomer and president of the Webb Deep-Sky Society.

Between 2016 Aug 21 and Sep 16 Bob Argyle had the use of the 26.5-inch Grubb refractor in Johannesburg. Known as the Innes telescope, it is located at the former site of the Republic Observatory and was erected on that site in February 1925. The telescope was built for the discovery and observation of close double stars and it is still available for that use today.

Nearly four hundred measures were made and the results published in the Webb Deep-Sky Double Star Circulars as well as the Washington Double Star Catalog that is maintained by the United States Naval Observatory.

The programme of observation was similar to that carried out in previous years and included close visual binaries and wider pairs in the John Herschel catalogue which had not been measured for some time.

Vital technical support was provided by members of the Johannesburg Centre of the Astronomical Society of Southern Africa, especially by Jerome Jooste.

The author continued with double star measures of some wide southern doubles using a Meade Astrometric eyepiece and a Celestron C11 telescope. No other reports on double stars were received.

### Variable stars

The author submitted 1800 variable star observations to the AAVSO and participated in an international collaboration with observers in New Zealand, Australia and Chile to observe QZ Carinae, the massive eclipsing binary system in the region of eta Carinae.

A beginner's course on DSLR photometry was presented in the form of two Skype sessions. The purpose of the course was to encourage those with basic DSLR cameras to get involved in the photometry of variable stars and to make a valuable contribution to the science of astronomy.

Several members operate independently and submitted their observations to organisations such as the American Association of Variable star Observers. No variable star observations were reported to the Section.