

## ***Annual report to the ASSA AGM - August 2023***

***Dave Blane – Director, Double and Variable Star Section***

### ***Variable stars***

Astronomy and variable star webinars are growing in popularity and have given us the opportunity to interact with specialists in the field that we did not have previously.

#### ***Variable star observations.***

Berto Monard continued his work on high energy systems with 33 133 observations being submitted to the AAVSO. His tally of variable star observations submitted to the AAVSO is now 2 902 043!

The author submitted 900 photometric measures to the AAVSO, VSS and other projects.

The author collaborated with Dr Petr Harmanec of the Astronomical Institute of the Charles University in the Czech Republic, and others, in producing two papers that were published in *Astronomy and Astrophysics*:

- a. Towards a consistent model of the hot quadruple system HD 93206 = QZ Carinae I. Observations and their initial analyses
- b. Towards a consistent model of the hot quadruple system HD 93206 = QZ Carinae II. *N*-body model

Early warnings of nova and supernova discoveries and other interesting events were posted to alert observers. Observations, light curves and other information was posted on Facebook and WhatsApp.

Talks were given on Variable Stars and DSLR photometry of eclipsing binary stars.

The Director was awarded the Overbeek medal for his observations of variable and double stars over the past 50 years.

No variable star observations were received by the Section as most observers submit their data to organisations such as the AAVSO, BAA and VSS.

### ***Double stars.***

No double star observations were reported for the period under review.