Observing and measuring visual double stars

by Bob Argyle (Ed.)


Bob Argyle, who works for the Institute of Astronomy in Cambridge and is currently President of the Webb Society, and his collaborators have risen to the formidable challenge of covering the whole topic of observing visual double stars with characteristic energy and enthusiasm.

The collection of papers presented in Observing and measuring visual double stars falls into three main types: those intended to form a general introduction to the topic, those dealing with the different techniques used to measure the key features of double stars and those offering advice and additional sources of information to the reader.

Although many of the introductory contributions are excellent, the order in which they appear does seem somewhat arbitrary. I would have preferred to see a more systematic progression from the more basic concepts through to the complexities of orbital computation. It is also particularly unfortunate that two errors can be found in the first four pages – on page 2 the label for figure 1.1 is correct but the description in the text is reversed, while on page 4 the cardinal points on figure 1.2 are juxtaposed.

The more technical papers on measuring techniques and devices are of a uniformly high standard. The full range of devices ranging from the relatively inexpensive illuminated reticle eyepiece, through the various forms of micrometer, to the potentially very expensive charge-couple device, is covered in detail.

The inclusion of clearly identified advantages and disadvantages of each device together with realistic estimates of the likely errors in measurements is particularly useful.

The third section of the book is clearly intended to support the amateur astronomer going through the difficult transition from ‘enthusiastic observer of double stars’ to ‘active contributor of accurate and useful data on double stars’. The wide ranging and well presented material reflects both the range of resources available to the amateur astronomer but also the need for amateur observers to develop good working practices.

The free CD-ROM included with the book includes the complete Washington Double Star and Tycho-2 catalogues together with many computer programs to help process the mass of data collected during double star observations.

There is something in this book for everyone from the complete novice to the experienced double star observer looking for a new challenge, and I have no hesitation in recommending it to members.

Martin Nicholson

Martin Nicholson has spent the last few years making thousands of observations of neglected double stars, and has given talks to both the Webb Society and the BAA on the observational techniques he has pioneered through his work on the Daventry Double Star Survey.