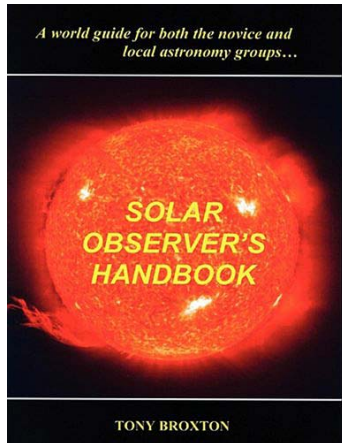




Solar Observer's Handbook

by Tony Broxton

AuthorHouse UK Ltd, 2009. ISBN 978-1-4389-1140-3. Pp ii + 128, £26.99 (pbk).



As all contributors to the different Sections of the BAA already know, the step from being a casual observer to providing useful observations for further analysis and subsequent publication in Section newsletters or the *Journal* can be quite daunting. This A4 sized book by BAA solar observer Tony Broxton aims to provide the missing link based on his own solar observing experience, and thus to encourage the casual observer of

the Sun to gain more from their observing.

After a brief introduction and obligatory and essential warnings about observing the Sun, the book consists of numerous short chapters on various topics relating to what can be observed with amateur solar telescopes, how to determine various parameters from observations and how to submit these to several solar organisations including the BAA. In order to understand the Sun and the features that can be observed on the photosphere and chromosphere, there are chapters on the structure of the Sun, solar features and the nature of sunspots. One of the more difficult aspects of solar observing that needs to be learnt is the orientation of the solar disk, both in terms of the NESW cardinal points in our sky and the solar disk itself. The latter is particularly important if a sunspot is to be assigned to either the northern or southern hemispheres or the location of sunspots and other features are to be calculated. To help with this there are several chapters on the orbit and inclination of the Earth, its implications for the position of the Sun in our sky (through the effects of the seasons and the equation of time) and the orientation of the Sun when using various telescope and mount types.

Two freeware software programs are described that assist with these aspects of solar observing as well as the more calculator-based approach for those without access to this soft-

ware. Observing with both white light and narrow band (hydrogen alpha and calcium K) telescopes is explained. The final set of chapters deals with how to classify various solar features, such as sunspot group types, prior to explaining how observations can be submitted to, for example, the BAA Solar Section.

Throughout the book, numerous colour images and diagrams help with that which is being explained in the text. The images are from a mixture of professional observatories, solar satellites, and amateur observers. The writing style is such that the book is easy to read although I did notice that there is some unnecessary repetition of text from one chapter to the next. It was with one of the solar images that I began to notice errors, of both a factual and typographical nature, that unfortunately exist throughout the book. This together with the ordering of the chapters detracts from the book – a thorough review of the book prior to publication would have easily removed these errors.

Nevertheless, there is plenty of useful material here for anyone wishing to expand their solar observing experience and contribute their observations to amateur solar organisations. This, after all, is the aim of the book.

Peter Meadows

Peter is a regular solar observer who submits his observations to the BAA Solar Section, The Astronomer magazine and the Solar Influences Data Analysis Centre (SIDC). He is the solar editor for The Astronomer and regularly gives talks on solar observing at the BAA Back to Basics Workshops.