



How to observe the Sun safely

by Lee Macdonald

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Here is a book that is ideally suited to someone who has recently begun solar observing or who is contemplating observing our nearest star. Lee Macdonald, a BAA Solar Section member, gives his expertise on solar observing in this easy to read book. After giving a brief description of the Sun, he describes what equipment can be used to observe the Sun in white light and how to use it in a safe manner. He then continues by describing what can be



seen, how to make sunspot drawings and determine the position of sunspot groups.

Now that an observer knows how to record solar activity, the next chapter shows how various measures of solar activity, such as the number of active areas and sunspot number, can be made in a form suitable for submission to astronomical organisations such as the BAA. Observing other white-light features is also described – faculae, naked-eye sunspots and if you are extremely lucky, white-light flares. The remainder of the book is devoted to hydrogen-alpha observing and photography using film and digital techniques. The appendices give a list of equipment suppliers, solar observing organisations and further reading.

The book is particularly error free, al-

though I would have liked to have seen further clarification in a few parts. These include a clear statement on how to count the number of spots if there are many umbrae in the same penumbra, and a clearer description of the orientation of the Sun for different telescope configurations (including the orientation for southern hemisphere observers). Also more details of the McIntosh sunspot group classification could have been given, as this is a bit more involved than is described in the book.

As expected for a book from Patrick Moore's *Practical Astronomy* series, there is sufficient information to enable readers to make their own useful solar observations. I think that the book successfully describes how to observe the Sun safely and how to make the most of any observation. Let us hope that more observers will be encouraged, after reading this book, to observe the Sun and to submit their own observations to the BAA and similar organisations.

Peter Meadows

Peter Meadows is an active solar observer whose white-light drawings can be seen on his solar web site. He is also the solar editor and secretary for The Astronomer magazine.

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