Observing the Moon: The Modern Astronomer's Guide, Second Edition

Gerald North

Cambridge University Press; 2007; 420 pp.; ISBN 978-0-521-87407-6; \$47.

Even before the ancient Greeks invented optical lenses, humans have peered into the heavens with wonder. Notable figures such as Galileo and Isaac Newton are among the more famous astronomers who have helped humanity understand the solar system and our place within it. The study of the Moon has enhanced our understanding of the solar system, including our own planet. The Moon, in addition to being a fascinating feature in the night sky, has prompted great works of art and literature the world over.

With renewed interest in lunar missions by NASA and the European Space Agency, as well as the recent Japanese, Chinese, and Indian missions, the Moon has not been this popular since NASA astronaut Neil Armstrong took that first step on a nonterrestrial surface on 20 July 1969. An active community of amateur astronomers from all across the world makes lunar observations exciting. With his second edition of *Observing the Moon: The Modern Astronomer's Guide*, Gerald North hopes to equip readers with the tools, know-how, and enthusiasm to become budding astronomers.

North is a well-known amateur astronomer and author of several popular books including *Astronomy in Depth* (Springer, 2002) and *Advanced Amateur Astronomy* (Cambridge University Press, 1997). In *Observing the Moon*, which is intended as a beginner's guide, North has managed to convey his enthusiasm while making this book accessible to those without any prior knowledge of the topic.

The second edition of the book is much like the first in terms of content. There are minor changes to most chapters and a great deal of modification to those chapters dealing with technologies and techniques that have been updated since the first edition. As a text that aims to introduce astronomy to those who have little or no knowledge of the topic, North's friendly and informative writing style assists the reader in learning about the techniques of lunar observation.

North has dedicated half of this 400-page book to the understanding of the Moon, observation techniques, and past lunar missions. The second half of the book provides descriptions of 48 selected lunar landscapes, including Montes Harbinger, Clavius, and Mare Imbrium, to name a few. Each section can be read independently, which makes for an excellent reference tool for first-time astronomers and experts alike. The series of detailed lunar photographs, drawings, and descriptions makes for a very useful reference and a great addition to the bookshelf.

North achieves his goal of writing a textbook to introduce astronomy to those with little or no experience in the topic. Although the second edition improves upon the first in both accuracy and clarity, some of the image-processing examples, software, and technology mentioned in the book are out of date for a book released in 2007. Despite this, the principles of camera optics, practical photography, and image processing are solid and well explained, making this book the perfect companion for a budding amateur astronomer.

—MARTIN VICKERS, Institute of Mathematical and Physical Sciences, University of Aberystwyth, Aberystwyth, UK; E-mail: mjv08@aber.ac.uk