



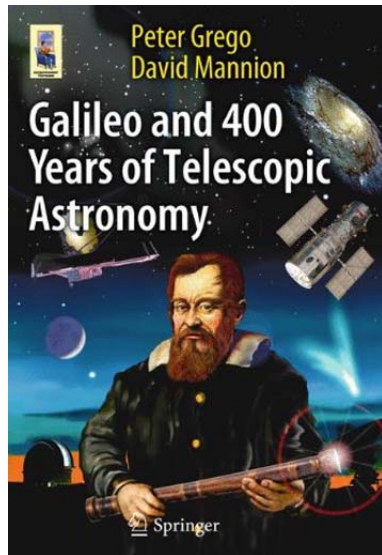
Galileo and 400 years of telescopic astronomy

by Peter Grego & David Mannion

Springer-Verlag, 2010. ISBN 978-1-4419-5570-8. pp ix + 300, £27.50 (pbk).

Galileo and 400 years of telescopic astronomy is a history of observational astronomy, for students of all ages. It would be suitable for GCSE astronomers, A-level physics students, and enquiring minds who prefer not to take examinations. The authors are well-known members of the amateur astronomical community and Peter Grego is webmaster of the BAA Lunar Section.

The book is in six sections. The first covers astronomy up to the sixteenth century, with due credit given to the many cultures who have contributed to human knowledge. Chapter two concentrates on Galileo, chapter three on Newton. Chapter four takes us through the



observational history of the solar system, chapter five out into deep space, and chapter six is a summary of the new vistas opening up to us around the millennium. I found the last chapter a little breathless, repeating some material from chapter five.

The real strength of the book is in the first half, where a very readable account is matched by a series of hands-on observing projects, which encourage the reader to reproduce the observations and experiments of Galileo and others. A lot of thought and care has gone into these projects; the authors tell us they '...won't recommend anything unless they've tried it for themselves'. For example, detailed instructions are given to produce a telescope similar to the narrow-field instrument with which Galileo discovered Jupiter's moons, and tables are given of dates on which the

drawings in *Starry Messenger* can be reproduced 'verbatim'.

I didn't spot many errors; the only statement I disagreed with completely was the curious assertion that 'Landing on the dwarf planet Ceres ... your weight would be reduced by 10,000 times' (p.104; I reckon that in fact on Ceres you weigh about 1/30th what you weigh on Earth). Likewise, subediting has been fairly thorough, barring the unfortunate omission of the words 'of Woolsthorpe' from the first sentence of chapter three. In addition to a useful glossary, there's a directory of astronomical sites in the UK and USA, and virtual sites on the Web. Finally, I'll make special mention of Peter Grego's excellent illustrations, which complement and enhance the text.

I'm happy to recommend this book. Any student motivated to carry out the projects will end up with a thorough understanding of 'how we know what we know', and quite possibly a lifetime passion for observing.

Mike Frost

Mike is Director of the BAA Historical Section, and a founder member of the Society for the History of Astronomy. His day job is as a systems engineer for Converteam, working on automation projects in the steel industry.

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