



Exploring Mercury: the iron planet

by Robert G. Strom and Ann L. Sprague

Springer/Praxis, 2003. ISBN 1-85233-731-1. Pp xxx + 216 (pbk), £24.50.

Astronomical discoveries are being made at such a breathtaking pace nowadays that some textbooks are out of date before they are even published. Fortunately *Exploring Mercury* is not one of them. That is largely because most of what we know about this tiny, sun-scorched world was gleaned from the problem-dogged *Mariner 10* mission of the mid 1970s.

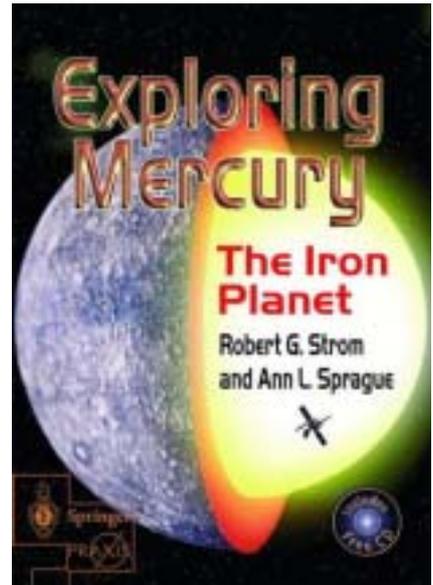
So far, *Mariner 10* is the only spacecraft to have visited Mercury, and what it discovered during its three flybys transformed our knowledge of the solar system's smallest planet. A new and long-overdue phase in the exploration of Mercury is about to begin with the launch in May 2004 of NASA's *Messenger* spacecraft, which will undertake three flybys of Venus and two of Mercury before going into orbit around the latter in July 2009.

Written by two planetary experts at the University of Arizona (Strom is Professor Emeritus in the Department of Planetary Sciences, while Sprague works in the re-

nowned Lunar and Planetary Laboratory), *Exploring Mercury* provides a very useful backdrop to the *Messenger* mission, for it succinctly summarises in largely jargon-free language what we currently know – and don't know – about this enigmatic world.

The book is profusely illustrated with diagrams, monochrome *Mariner 10* pictures and a sprinkling of colour plates. Inside the back cover, by way of an added bonus, is a CD-ROM of the most detailed *Mariner 10* images. The appendices include the names and locations of Mercury's surface features and a useful glossary of terms for readers not familiar with the likes of *rupes* (Latin for scarps or cliffs), *ejecta* (rock and other material thrown up by an impacting meteor and deposited around the resulting crater) and *albedo* (ratio of light received to light reflected).

Exploring Mercury is a highly readable and most informative account of our current state of knowledge about this crater-scarred and metal-rich world, and will be of interest both to planet-observing amateur astronomers and astronomy undergraduates.



I didn't come across any obvious inaccuracies in the text. 'Fact-packed' is a grossly overworked term, but it really does describe this book. It contains everything you ever wanted to know about Mercury, and much more besides.

Ron Toft

Ron Toft is a Winchester-based freelance science journalist and photographer.

This review is copyright © the *Journal* of the British Astronomical Association, www.britastro.org/journal. If you wish to reproduce it, or place it on your own Web page, please contact the Editor: Mrs Hazel McGee, hazelmcgee@compuserve.com