Preface

In my previous "weird" volumes—*Weird Astronomy* and *Weird Weather*—the principal topics of interest were largely observations that appeared anomalous or that in some way did not "fit" with accepted ideas. The present volume has a slightly different emphasis. From the point of view of Earth, the worlds beyond our own all have aspects that seem "anomalous" or "weird" to us, not because they fail to accord with accepted ideas but simply because they harbor phenomena which lie outside the domain of our normal experience. If some of the things that are regular aspects of the scenery on Mars or Mercury—not even to mention Titan or, still less, planets of other suns—were to occur on Earth, they would make the "weird" events and observations discussed in my previous volumes pale into insignificance! What if the Sun were to halt in the sky, reverse on its track for a while, and then continue as "normal" or rise in the west and set in the east? What if jets of carbon dioxide suddenly erupted from beneath the polar ice, shooting fountains of dust high into the air; or liquid methane rained from the skies; or volcanoes shot fountains of lava so high as to effectively reach the edge of space? What should we think about ice remaining solid at a temperature equivalent to that of white-hot metal or diamond dust falling through a liquid realm that is neither atmosphere nor ocean? Could we even imagine the possibility of finding a form of living organism that would explode in a ball of flame if exposed to the air? Who could conceive that a stone dropped from the top of a cliff could take a quarter hour to reach the bottom? And what more bizarre sight could there be than a moon progressing through all its phases as it crossed the sky between moonrise and moonset—especially if it also went "backward" from west to east?

Yet all of these things are commonplace on other worlds of which we already have some knowledge. Add to this the prospects of simple life in underground oceans on moons and even asteroids, comets that practically strike the Sun as they whip around it at over a million miles per hour, planet-like bodies wandering through the cosmic night of interstellar and maybe even intergalactic space, planet-sized diamonds and similarly proportioned balls of steel and we can agree that some pretty weird things lurk in this Universe. Through the pages of this book, we will look at some of them.

Following the pattern of the previous two volumes, the reader will find several "Projects" within these pages. Most of these are simple observing exercises. Some can be included in astronomy club open nights or suggested as exercises that junior club members might like to try. Either way, they emphasize the fact that astronomy is first of all an observational science and one in which the amateur having only modest equipment can participate and, by participating, come to share something of the excitement of our increasing knowledge of the weird denizens of this wonderful Universe.

The Entrance, NSW, Australia David A.J. Seargent



http://www.springer.com/978-1-4614-7063-2

Weird Worlds
Bizarre Bodies of the Solar System and Beyond
Seargent, D.A.J.
2013, XIII, 309 p. 51 illus., 23 illus. in color., Softcover
ISBN: 978-1-4614-7063-2