

Star Gazer's Deep Space Atlas – Outdoor Edition

by Wayne Mitchell

Published by Myriad Optics

~200pp with sky-maps and some photographs

Size: 148mm x 210mm (A5).

Spiral bound with laminated pages throughout.

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One's first impression when picking up this book is that it is different from your average star atlas. Our perception of a star atlas is a relatively thin book with large pages, which often make it awkward to use and store. In contrast, *Star Gazer's Deep Space Atlas* is quite small (A5) and relatively thick (some 200 pages). But being spiral bound – which allows its pages to be folded back completely – together with its small size, makes it very nice and easy to handle, even with just one hand. A big advantage of the *Outdoor Edition* is its “artificial” pages which are fully moisture-resistant. Dew can be a serious problem with paper atlases when used outside in high humidity. The pages are thick and stiff, and not being laminated in the usual way should last a long time as they should not peel like commercially laminated pages tend to do with extensive use. However, the cover pages seem to be made differently but will hopefully not suffer this fate. (And, no, there is no *Indoor Edition* available.)

This atlas is not arranged in the same way as such classical atlases as *Norton's*, with

maps of a fixed angular coverage and index maps guiding you to the required map. After an introductory 3-page “How to use this manual” section, *Star Gazer's Deep Space Atlas* starts off with a set of 12 all-sky maps (down to mag 4.5) as seen from southern latitudes, serving as finder charts for all seasons, guiding you to the constellation of interest. They include a horizon and indicate the direction of the movement of the sky, very advantageous for beginners.

This is followed by detailed star-maps for 83 constellations visible from our southern latitudes, arranged alphabetically, one page per constellation, making up the bulk of the book. Although in the “How to use this atlas” section these maps are claimed to go down to magnitude 8, only six of them actually do. The majority are magnitude 7 but they differ throughout with one only having a magnitude penetration of mag. 4.5. To provide orientation and to reduce clutter, the surrounding constellations are only shown to magnitude 3.5, a very nice feature. Again, the maps are orientated as seen from southern latitudes.

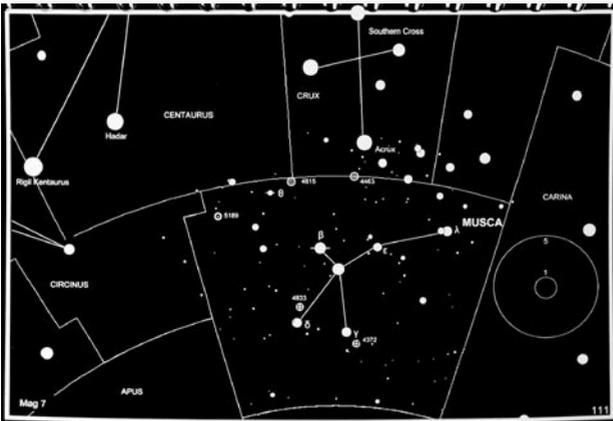
This arrangement reminds me of David Levy's *Skywatching*, where the alphabetical ordering eliminates the need for index maps. Furthermore, selected "object rich" constellations (Carina, Leo, Orion, Sagittarius & Virgo) have extra, more focused (i.e. zoomed in) star-maps, all going down to magnitude 8 (which are five of the six mag. 8 maps mentioned above). The facing page of each of the 83 constellation maps describes and provides information for the prominent or interesting stars and the deep-sky objects the map contains. Where applicable, the objects are also listed in order of how easy they are to observe, with data on their brightness, dimensions and surface brightness given. These pages are often supplemented with "Author's Notes" giving the atlas a nice personal touch. In the remaining dead space between star-maps, some 30 astronomical topics are discussed (see the *Contents* list below).

I liked the way the sizes of the symbols depicting the various objects are scaled to match their observed size or prominence. For example, four different sized ovals are used to represent galaxies, the largest for Messier objects and the smallest for galaxies fainter than mag. 11.5. Because each constellation has to fit on an A5 page (except for Hydra, which is split over two pages), the scale of each map has to be different. This can be awkward, but the author's solution was to include two "Finder Circles" on each page, one representing a one degree and the other a five degree circle on the sky, corresponding to the typical field of view of a telescope and finderscope or binoculars, respectively. The choice of white stars on a black background is in line with some other outdoor atlases, supposedly to provide better contrast when read with a dim red torch without ruining your dark adapted eyesight. The

disadvantage of white on black is that one cannot pencil in notes or sketch the path of a comet.

Two full-colour pages with pictures of a dozen interesting deep-sky objects, as well as Markarian's galaxy chain in Virgo, are included towards the end of the book.

I could not help noticing some inconsistencies, some which may seem trivial but slightly deprive



An example "detailed map" page of the constellation Musca, showing stars to mag. 7 and its surrounding constellations to mag. 3.5. Some "spillage" over the constellation boundary into Crux, mentioned in the text, can be seen.

ing a publication with great potential of a professional finish. For example, four of the twelve all-sky maps are missing their magnitude limit labels. Page 1 is in the wrong place, not opposite its star-map like all the others. The areas of deeper magnitude penetration of quite a few of the detailed star-maps spill over their constellation boundaries. The text of the detailed map for Aquarius is printed sideways compared to the rest – when turning it upright, the book is upside-down. There is absolutely no consistency in writing numbers larger than 1 000 – even on the same page three different formats are found, e.g. on p.25 we see “1600 AU”, “12.000 kilometres” and “7,500 miles”. The symbols for arcminutes and arcseconds are also inconsistent, alternating between straight and curved quotes. What is consistent, unfortunately consistently wrong, is when temperatures are given in Kelvin they incorrectly include a degree symbol, and also sometimes use a lowercase ‘k’. Finally, it is puzzling why the introduc-

tory pages are numbered with a Roman numeral system last in use during the Middle Ages (i.e. with nine represented as VIII and fourteen as XIII). And you may have thought that, in the heading above, ‘ISBN’ was mistyped, however it does actually say ‘ISNB’ on the back cover, although such a system does not exist.

In summary, this practical, attractive-looking atlas, jam-packed with more than just sky-maps and focussed on deep-sky observing will be an asset to the beginner and novice alike. It is actually amazing what Wayne Mitchell from the Pretoria Centre, an amateur since Halley’s previous appearance, accomplished in putting it together in just a year. An atlas compiled by an amateur (as stated on the front cover) for the amateur. It is just a pity that it is not a full magnitude 8 atlas. I assume it is the cost of the durable, waterproof pages that contributed to its relatively steep price.

Willie Koorts

Table of contents

- How to use this Atlas
- All-sky maps
- Detailed maps

The following topics are distributed throughout the *Detailed maps* section:

Double stars, Cepheid variable stars, Viewing galaxies, Black holes, Main-sequence stars, Globular clusters, Discovery of Proxima, Extra-solar planets, Open star clusters, Sub-giant stars, Nebulae, Yellow-dwarf star, Barred spiral galaxies, Galaxies and time, Close double stars, Coloured double stars, Super galaxy clusters, Mira variable stars, Giant stars, Carbon stars, Observing double stars, Solar type stars, Nicolas Louis de Lacaille, Astrophotography, Light year, Sub-dwarf stars, Vernal equinox, Hot Jupiters, Delta-Scuti variable star, Apparent brightness.