

Chapter 1

Using This Book Effectively

1.1 Amateur astronomy for a new generation

This is a handbook for the modern amateur astronomer. As far as possible, I've tried to write the book that I'd like to have in my own hands while at the telescope — along with a star atlas and the *Handbook of the B.A.A.*, of course.

Amateur astronomy isn't what it used to be. A generation ago, most serious amateurs observed from their homes with large Newtonians; one star atlas and two or three reference books were the amateur's complete guide to the sky; the latest news, arriving by magazine, was two months old; and most of the stars visible in the telescope were absent from even the largest catalogues and atlases.

Those days are gone, thank goodness. Telescopes have changed — they are nearly all portable, and compact designs such as the Schmidt-Cassegrain are popular. As often as not, the telescope is computer-controlled.

More importantly, computers have brought high-quality data sources within the amateur's reach. Alongside star atlases, we use software that plots the star positions measured by the Hipparcos satellite. We can compute the positions of comets, asteroids, and artificial satellites at the touch of a button. We can even track clouds by satellite to see if we're