


Michael O'Brien



**A Deep
Sky Astro-
photography
Primer**

**Creating Stunning Images
Is Easier Than You Think!**

The Patrick Moore
**Practical
Astronomy**
Series

The Patrick Moore Practical Astronomy Series

Series Editor

Gerald R. Hubbell

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The Patrick Moore Practical Astronomy Series is a treasure trove of how-to guides for the amateur astronomer. The books in this series are written for hobbyists at all levels, from the enthusiastic newcomer to the veteran observer. They thus go far beyond more general, popular-level books in both scope and depth, exploring in detail the latest trends, techniques, and equipment being used by amateur astronomers around the world.

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Overall, this series bridges the gap between the many introductory books available and more specialized technical publications, providing digestible, hands-on guides for those wishing to expand their knowledge of the night skies.

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Astrophotography
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Michael O’Brien 27th September 2021
Lancashire
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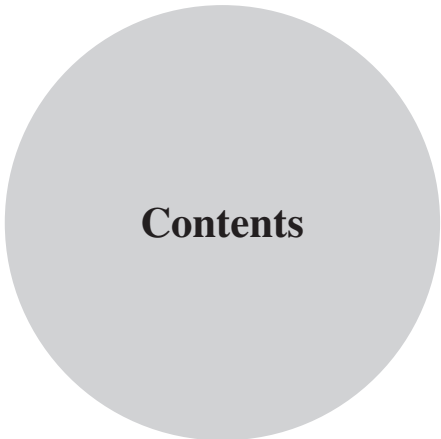
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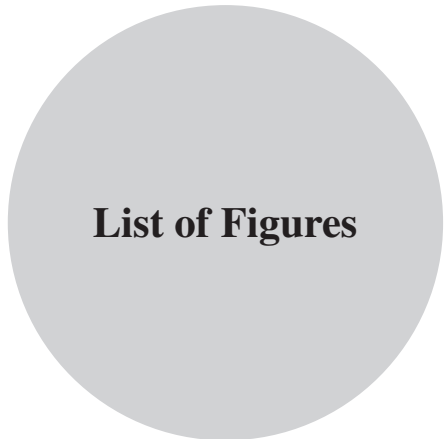
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Chapter 1



Introduction

This book is designed as an introduction to the wonderful field of amateur astrophotography. Most amateurs enter this field after visually observing and wanting to produce images that they can keep and share as they explore the amazing universe that we find ourselves inhabiting. This may be done for purely aesthetic reasons as the objects that we may take images of have a striking beauty all of their own. It may also be that the images are being taken in order to use them in an area of study; whilst the basics of taking these images are similar there are subtle differences. This book is aimed getting you to a level of astrophotography where you are knowledgeable enough to take the type of images that you are interested in. For lots of people this will actually be a mixture of both, images that they can print and frame or use on a website and images that they will use in some area of study.

In order to achieve this you will learn about all the things that make up a successful telescope imaging system, and I will give a brief introduction into processing the images that you have taken time and effort to capture.

All of this has been made possible by the advances and availability to amateurs in the fields of computers, digital imaging, filters and software. It has advanced amateur astrophotography to the point where the images taken by amateurs from light polluted back gardens now rival and in many cases are better than the images taken by professional observatories on mountain tops in the 1970s.