

Preface

An international Internet collaboration between the authors of *Star Vistas* began in 2005. The computer and Internet-enabled fusion of my imaging skills and Noel's image-processing prowess has culminated in the striking astro images you will find in this book.

I started deep-sky imaging in November 2004, having just acquired a Starlight Xpress SXV-H9C one-shot color CCD camera. This camera provided 1.4 megapixels and coupled to a Starizona Hyperstar lens assembly it turned an optically slow 11-inch f/10 Celestron SCT telescope into a powerful f/1.85 astrograph. The high optical speed of the Hyperstar system meant that low-noise astronomical images could be acquired very quickly, and the shorter exposure times had the additional advantage that telescope mount drive precision was not as critical as for longer exposures. It was clear to me how to progress over time to improve my data acquisition, and in these early days when I also processed the images digitally, it was also becoming clear how to capture good data to minimize the image processing required. However, I was never particularly excited by the image processing aspect of deep-sky astrophotography, which can take a great deal of time, so it came as a great relief when a friend of mine, Bud Guinn, introduced me to the "Our Dark Skies" [ODS] Internet forum.

Noel was known on the ODS forum for transforming peoples' astronomical images into stunning deep-sky works of art using his Astronomy Tools software for Photoshop and his image processing skills, and he does some of his own astrophotography with digital SLR cameras. Noel worked his magic on one of my early images; it was a two-frame mosaic of M33, the Pinwheel galaxy in Triangulum, and he created the most striking image to come out of my observatory up to that time. The partnership was made! Noel realized my color camera and Hyperstar setup produced surprisingly good raw data to work with, and at last I had found an image-processing expert to help with the part of the image creation procedure I liked least.

The result of this Internet collaboration is the book you now hold in your hands. So far the authors have only communicated via the Internet; we have not yet met nor telephoned one another. It is truly remarkable how computers and the Internet have not only enabled communications and business but also allowed such long-distance collaborations – and friendships – to thrive.

Consider this: The *Star Vistas* image of the Quasar APM08279+5255, which lies at a distance of almost 13 billion light-years, was taken in the back garden of a home in the New Forest in Hampshire, U.K. The acquired data was sent via the Internet to Noel Carboni in the United States, who created the image you will find in this book. Photons from near the beginning of time itself – captured in a suburban observatory, transformed digitally halfway around the world, and presented to you in the pages of *Star Vistas!*

- Greg Parker, 2008