

Chapter 1 : The Observer's Sky Atlas : Erich Karkoschka :

The Observer's Sky Atlas contains star charts and information for all those who observe the night sky with unaided eyes, with binoculars, or with small telescopes, and also for those who just wish to look at constellations and interesting objects.

I am a lifelong devotee of printed atlases and observing guides, and have been fortunate to experience observing from locations near the equator from time to time. Those factors finally led me to order the book through Amazon from a U. After removing it from the cardboard shipping sleeve I was immediately impressed by the external appearance of this softbound volume. A beautiful image of an unspecified field adorns the front, spine and back covers, which are of heavy matte stock. The printing on the covers and smaller secondary images on the back are done in a glossy slightly raised format. Overall, I found the initial visual impression aesthetically pleasing and of high quality. In fact the atlas part of the equation is noticeably understated. The authors give an overview of various subjects in the first four sections, covering various types of sky phenomena, measurements, stars and deep sky objects, and the multiple aspects of observing. I would recommend the observer have a dedicated larger planisphere at hand. Following those six charts there is a series of eight single page wide field celestial maps covering the entire sky, one for each polar region and six for the remainder of the sky. Atypically for me as a northerner, but completely understandable for a guide geared toward southerners, the southern polar region map is the first in this subset. The final map presents the northern polar region, the only place where the far northern tier is presented within the guide. These charts are obviously for general orientation because of their wide fields and smaller scale, and only plot the most prominent objects in the sky. The authors state that the area around the northern polar region is omitted because that portion of the sky is either too low in the sky or not even visible for most southern observers. Given that this is a field guide written by southern observers for southern observers, I find this a very valid point. Each of the covered 81 constellations is presented in alphabetical order, and in most cases given two pages of space, with six granted three pages Carina, Centaurus, Ophiuchus, Orion, Sagittarius and Scorpius. These constellation sections provide short basic narratives for a small number of the brightest and most common targets within their borders, as well as a few images of selected objects. Each chart also includes a legend showing the stellar magnitude binning scale mag 0 to 6 used for the displayed stars. Additionally it also displays the standardized symbols utilized for the various objects plotted on the accompanying charts for double stars, variable stars, open clusters, globular clusters, nebula, planetary nebula and galaxies. Interestingly, there are three instances where two related constellations are lumped together in one subsection. Normally in atlases and observing guides we see all charts presented with the standard orientation of north upward and west to the right. However, in this case with constellations that either straddle or lie north of the celestial equator, they flip the charts to a north downward and west to the left perspective. For example, in the case of Leo, the celestial lion appears to cross the sky on its back when viewed from locations near or below the terrestrial equator. I have experienced this myself, and it gives one a very unique perspective when they are accustomed to the northern view of this constellation. The same goes for Orion see below chart , which is split almost evenly between the northern and southern celestial hemispheres. While a small deviation from the norm, I found it quite a refreshing twist. The one exception to this rule that I ran across was the single map plotting for Canis Major and Canis Minor. Since one is to the south of the celestial equator and the other to its north, the authors rightfully kept the traditional orientation.

Chapter 2 : Choose a star atlas that's right for you | calendrierdelascience.com

Printable Deep Sky Atlases. Free, printable sky maps in PDF format, designed for a practical field use by deep sky observers. "Deep Sky Hunter" is a large, comprehensive atlas (A3, maps) and the earlier release "TheSky" is an older, lighter version (A4, 80 maps).

We, of course, recommend that beginners start with a larger telescope, if possible, but the fact is most people start small. If you own a small telescope already, you should supplement it with a pair of binoculars, learn to use the equipment you have, and start spending time under the stars. Featuring nearly deep sky objects selected for visibility in a 2. Think of an orange as the whole sphere of the sky. Slice off the two ends, then cut the remainder of the orange into six vertical slices. The first circular map covers the north polar region, six vertical segments spaced around the equator cover the majority of the sky, and the final circular map covers the south polar region. The circular maps are stereographic projections and the vertical segment maps are transverse Mercator projections. Both projections preserve shapes well. The maps highlight the Milky Way with representation digitized from a master Milky Way map by the renowned space artist, Don Davis. You will find this to be a great improvement over Milky Way outlines in most other atlases. Deep sky objects, including a careful selection of double stars and other stars of special interest, are highlighted in blue. Constellation figures are drawn to match the figures on *The Night Sky*. Every deep sky object marked on the map is described in detail on the facing page. Facing each map the highlighted deep sky objects are grouped by constellation with catalog information and helpful commentary. Where more detail would be helpful, a small finder chart is included as an inset map. To be selected, an object must be visible in a typical 2. If you have a larger telescope this is still an excellent starter atlas. Even experienced observers will find it useful as a guide to selecting bright objects for public star parties. Some of the binocular objects are rarely marked on other atlases because they are too large for typical telescope fields of view. If you have another star atlas we challenge you to find a reference to Cr 70, the large but striking open cluster surrounding the three belt stars of Orion, Mel 20, the huge naked-eye cluster surrounding the brightest star in Perseus, Stock 2 or Mel 15 near the double cluster in Perseus, or Mel , the Coma Berenices cluster. These are all excellent binoculars objects that should not be overlooked, but typically are! Preceding the atlas proper is a general overview of observing techniques, equipment, a little background on the nature of the deep sky objects to be observed, and suggestions on where to go next. The last page of the atlas is a list of resources including books, other charts, software, and periodicals. Quoting from the text, "If this atlas does the job it is intended to do, you will soon outgrow it.

Chapter 3 : Useful Star Atlases for Amateur Astronomers

The Observer's Sky Atlas is a wonderful little atlas in concept and, for the most part, in execution. The book was written by a professional planetary astronomer and offers useful star charts on odd numbered pages and tables of information on the even numbered facing pages about the objects shown on the charts.

Sinnott December 2, The notebook-size Jumbo Edition has stiffer covers and spine. It can open flat to show a two-chart spread, or even fold back on itself to show one chart at a time. The pages of our new Jumbo Edition, after all, measure 8 by 11 inches. But we kept "pocket" in the title for continuity and name recognition. The original Pocket Sky Atlas, introduced in 1964, has proven wildly popular for use with portable telescopes. The new version covers the whole sky with the same 80 charts, magnified to 100 percent. For us to give it a jazzy new name would be downright misleading. So just to be clear: The Jumbo Edition plots the same 30,000 stars to as faint as visual magnitude 7. What the Jumbo Edition really brings is a new level of readability in poor light. The larger star dots, deep-sky symbols, and sans-serif lettering are a terrific boon for consulting the charts under the dim glow that observers prefer, to preserve their night vision dark adaptation. With symbols and lettering a third again larger than before, the new edition is easier on the eyes in barely adequate illumination at the telescope. For this new edition, we welcomed the chance to add more close-up charts of high-interest star fields. These charts, a new preface, and a slightly reorganized text give the new book pages, compared to the original. The new edition also keeps another popular feature of the Pocket Sky Atlas: All facing charts form a continuous spread, and successive spreads trace a gore of sky that runs all the way from north to south. At any given time, one such gore corresponds to the swath of sky stretching high overhead, so all the objects best placed for telescopic viewing are grouped within a few adjacent pages in the book. This contrasts with the layout used in nearly all other atlases, where the pages follow strips of equal declination around the sky. Unhelpfully, that puts up to half of each strip below your horizon at a given time. In short, the Jumbo Edition is all about a rewarding experience under the night sky. Our deep-sky targets test the limits of human perception — the tools we use should aid that quest.

Chapter 4 : Printable Deep Sky Atlases - Deep Sky Watch

This sky atlas contains star charts and information for all those who observe the night sky with the naked eye, binoculars, or a small telescope, or who just wish to look at constellations and interesting objects.

Prairie Astronomy Club, Inc. Learning the constellations and the appearance of the sky at various times of the year is a useful and fun way to get familiar with where things are in the heavens, and a good guide book plus a planisphere will definitely help with this task. However, once you begin a telescopic search for the many deep-sky objects scattered about the numerous stars of the major constellations, you really need a good detailed "road map" of the sky to keep from getting lost, and a star atlas is just that. An atlas is useful, not only for helping with the finding process, but as an aid in planning future observing sessions. There are a number of good atlases in print today, and below are some of ones most commonly used by amateur astronomers. This updated version is the 18th edition of a classic work which has been helping observers since it was first published in 1947. In addition to containing useful all-sky star charts, the book is an excellent reference handbook for the amateur astronomer. The atlas portion of this hardbound book contains sixteen 8" by 11" star charts covering the entire sky, plotting 8,000 stars down to magnitude 6. The stars are plotted as black dots of varying size on a white background, which makes for easier reading in dim light. The charts also show the brighter parts of the Milky-Way green, as well as showing the coordinate lines, extensive object labeling, and constellation boundaries. The 16 maps are laid out in adjoining form, so by opening the book flat, you get a really wide continuous area of coverage on the sky. Since the charts are bound in book-form, objects near the binding line where adjoining maps meet with no overlap tend to be a little hard to see unless the book is really pressed open, but otherwise, the maps are very useful for the beginning to intermediate amateur. In addition to star maps, the book also contains 4 detailed quadrant maps of the near side of the Moon, and a small map of the albedo features on Mars. This is a bound set of ten 9" by 12" star maps of the entire sky, showing 9,000 stars down to magnitude 6. Again, the stars are plotted as dark dots on a white background for easy reading in dim light. Like its "big-brother" Sky Atlas It also contains a set of 6 seasonal constellation finder charts. The sheer number of objects shown make it a must-have for those who are doing deep-sky searches like those involved in the Messier and Herschel programs. The scale of the charts is somewhat larger than that of other atlases, which makes locating things in crowded fields easier. Objects like open and globular clusters, diffuse emission or reflection nebulae, planetary nebulae, and galaxies are all plotted with different symbols and are all labeled clearly in color for the Deluxe version. Double, multiple, and variable stars are all shown, along with the large-scale coordinate grids and constellation outlines. Clear plastic overlays are provided to assist in determining the coordinates of any celestial object, or in locating objects which are not plotted, but whose numerical positions are known. An all-sky wide-field constellation finder chart with map boundaries and page numbers is provided at the beginning of the atlas to assist with locating the map of interest. The atlas comes in five versions: Field Edition unbound single-page charts with white stars and markings on a black background. Desk Edition unbound single-page charts with black stars and markings on a white background. Laminated Field Edition spiral bound, and encased in clear plastic. Laminated Desk Edition spiral bound, encased in clear plastic 5. Deluxe Edition spiral bound with Lexan cover, with charts which fold out to 20" by 20". Again, for best results, a good advanced observing guide is needed. Several catalogs for objects plotted on Sky Atlas This atlas is indispensable for the large telescope user intent on pushing towards the limits of Deep-Sky observing. It plots 9,000 stars as faint as magnitude 9. The stars, object symbols, and coordinate grids are plotted as black on a white background page. Some of the common object names include: The scale of these charts is much larger than for Sky Atlas Unlike other atlases, adjoining pages do not together form a contiguous left-to-right area of sky pages are in order of increasing right ascension. This, along with the large scale and huge number of stars and other objects plotted, makes the atlas more difficult for the inexperienced observer to use. It is definitely NOT for beginners, as they could quickly become totally lost in its pages. Uranometria does contain wide-field guide charts in a polar projection to help the user locate the page containing the smaller area of interest, along with plastic overlays for the main charts for fine coordinate measurement or object location. Its 2 volume

hardbound-only edition is more expensive than Sky Atlas

Chapter 5 : The Jumbo-Size Pocket Sky Atlas - Sky & Telescope

Description: The Sky Atlas for Small Telescopes and Binoculars, combined with The Astronomer's Journal and the Packet of Observing Programs from the Astronomical League, makes a great way for any observer to make their next astronomical observing project a success.

The resources described on this page are provided solely for the benefit of club members, and their appearance here does not imply endorsement or a recommendation to purchase. They are simply resources that club members have found useful for their own observing programs. Many other products would undoubtedly prove just as useful. If you know of any observing resources that might benefit RAC members, email your suggestions to the Web Editor.

Atlases and Catalogs There are many great star atlases and catalogs of deep sky objects that make good subjects for amateur astronomers at all levels, from beginner to expert. One of the best collections of atlas, catalog, and sky map descriptions on the web is SkyMaps. One can also purchase products through the website. The list below represents just a few of the many resources available through SkyMaps.

Bright Star Atlas Cambridge Double Star Atlas Star maps and descriptive tables of more than 2, double stars. Spiral bound and red light friendly.

Planetarium Software Each of the planetarium programs below has the ability to show the sky at any time of year and location on Earth; to filter deep sky objects according to characteristics such as type, magnitude, size, catalog, etc. Of the four, MegaStar5 has the least sophisticated graphical presentation of the sky but the most comprehensive set of deep sky catalogs and object filtering and search capabilities.

MegaStar5 Sky Atlas One of the most complete set of catalogs available in any planetarium program. The Sky Popular and widely used planetarium program with highly realistic sky views, including Sun, Moon, and twilight effects.

Starry Night Highly realistic and widely used planetarium program with the ability to change the viewpoint to anywhere in space and time. Accurately shows the sky from anywhere on Earth, at any time up to years in the past or future.

Online Resources Many online websites provide weekly or monthly summaries of sky events and observing highlights. These are often accompanied by maps of the night sky, sometimes customizable by location and time. Some sites provide lists of interesting objects of various types. These summaries and lists can be helpful in planning an observing session, and the star maps provide beginners with a substitute for planispheres and star charts until they can purchase their own. The links below represent some of the more popular and useful ones.

Your Sky Tonight Provides custom star charts for observer location. The Sky Tonight A night sky site devoted to introducing kids to astronomy. Allows creation of maps and tracking of solar system objects.

East Valley Observing Program Perhaps the best collection of observing lists available on the web! Well worth perusing at length.

Saguaro Astronomy Club Download page Offers a number of useful data sheets as well as an extensive deep sky object database.

Hawaiian Astronomical Society Deep Sky List Includes several lists of deep sky objects as prepared by different observers.

Astrosurf Carbon Stars A list of over one hundred carbon stars.

Reddest Carbon Stars A list of the 22 reddest carbon stars.

Skywatching Highlights A summary of noteworthy sky events for the year. Located on the Space.

Your Sky Provides tools to create skymaps for user defined time, location and viewing direction.

AstroViewer Provides tools to create skymaps for user defined time and location.

Willmann-Bell Seller of astronomy books, atlases, catalogs, observing guides and software.

Chapter 6 : OBSERVERS-PAK: Sky Atlas, Astronomer's Journal and AL Programs

Deep-Sky Hunter Star Atlas "Deep Sky hunter" is a printable deep sky atlas designed for serious deep sky observers. It features stars down to magnitude and DSO down to magnitude 14 plotted on A3 charts which cover the entire sky.

My telescopes have been large instruments requiring some planning and setup. For this reason, I typically do little observing during nights when there is a partial moon out. It turns out that what I had in the way of a star atlas was not terribly suited for my new endeavor. My atlases are all geared for deep space observing with big reflectors. They are well worn and tattered and I know from experience that although I have loved them to death, I will learn to hate them if I attempt an observing program with an 80mm telescope. I briefly looked through his and decided immediately that I "needed" one. My grab and go observing will be just that I wanted a volume that fits that bill. The atlas is a small paperback about 6 x 8 inches. Each set of pages includes a table of interesting objects to see on the left side and a chart on the right. The table lists the objects of interest, along with pertinent data. Refractors are very nice for just looking at your standard stars you know. You got your big ones, your blue ones, your red ones There are two additional pieces of data that this volume provides lacking in so many other references. The first is the estimated distance in light years. The other is a guide to help you determine the difficulty in seeing the object shown by a die as in dice. A six is super easy, a one will be more challenging. Near the back of the book are black and white photos of all deep space objects in the guide. This is really nice for your daytime aspects of your observing program or to tease out what you think you see as you compare it to the photograph. At the back of the book is a full sky chart showing all of the constellations and a key to help you zoom in on the individual charts in the book. I am sure that all objects in the book are observable in an 80mm scope and that is why I so heartily recommend this book. This is also a volume that I can highly recommend for budding astronomers. I see little mention of it in observing circles but it is a true little jewel.

Chapter 7 : Sky Atlas for Small Telescopes and Binoculars

A good star atlas provides a road map of the sky. As such, it can start you on an adventure that will last your whole life. The objects it highlights and the information it contains will guide you.

As such, it can start you on an adventure that will last your whole life. Here, I list the features of 10 atlases. Key feature number 1: All of them are good. That said, which one is best for you? That depends on your experience, your goals, and your telescope. Such atlases show stars to about magnitude 6. Beginner atlases also show a wide swath of sky on each page and may include constellation outlines. These atlases also limit the number of plotted deep-sky objects to only those visible through a 4-inch telescope. That list includes the Messier objects, selected objects from the New General Catalogue NGC, and the brightest and most colorful double and variable stars. Sky Calendar from Abrams Planetarium part of Michigan State University has been helping beginning observers learn the sky for more than four decades. Abrams Planetarium Introductory atlases My first pick is not a traditional star atlas. Still, for four decades, the Abrams Planetarium Sky Calendar has promoted basic skywatching. As its name implies, the sheet for each month takes the form of a calendar. The Sky Calendar is a great quick reference for beginners and advanced amateur astronomers alike. And while most of the star atlases in this story contain thousands of stars, the Sky Calendar shows only the brightest or so, depending on the month. That number works well for beginners or for those who observe under moderate light pollution. Abrams Planetarium publishes the Sky Calendar in loose-leaf form and mails it quarterly 3 months per mailing. It also includes approximately 1, double and variable stars and deep-sky objects. This page work contains 12 charts, each with an index of objects. Overall, the atlas contains roughly 7, stars to magnitude 6. The atlas also plots nearly 1, double stars, variable stars, and deep-sky objects. Crowded regions in Orion, Virgo, and Sagittarius have detailed close-up charts that make it easier to tell one object from another. The first edition dates to , and in , Benjamin Cummings Publishing released the 20th edition. Six rectangular charts divide the sky into segments 4 hours of right ascension wide. It first appeared in and is now in its 20th edition. It also shows hundreds of double and variable stars, and more than deep-sky objects. The solar system chapter includes maps of the Moon and Mars. Bright Star Atlas by Wil Tirion displays stars to magnitude 6. Aimed at users of the smallest backyard telescopes, the Bright Star Atlas shows stars to magnitude 6. It also includes about double stars, variable stars, and deep-sky objects. The Bright Star Atlas divides the sky into four polar and six equatorial zones. The maps include constellation boundaries but no constellation figures. A keyed series of six finder charts shows readers how the atlas maps relate to the current night sky. The 20 charts that make up The Cambridge Star Atlas Stars are black, the Milky Way is blue, star clusters are yellow, nebulae are green, and galaxies are red. The facing page of each chart lists the deep-sky objects shown on the map. The Cambridge Star Atlas It contains 20 overlapping full-color star charts. The atlas shows stars to magnitude 6. The atlas also includes a Moon map. It makes up for its size, however, by offering 48 star charts 6" with insets 6" that display stars to 6th magnitude and nearly deep-sky objects. Its small size, however, belies the amount of information inside. In its pages are sections about deep-sky objects, celestial coordinates, magnitude, and size and scale, as well as the atlas itself, which breaks the sky into 48 charts. The maps show stars to 6th magnitude. These insets show stars as faint as 9th magnitude. Accompanying each of the charts is an itemized list of plotted objects, including the Messier objects and other deep-sky targets.

Chapter 8 : Deep Sky Hunter Star Atlas - Deep Sky Watch

Compact, convenient, inexpensive, yet amazingly detailed, Sky & Telescope's Pocket Sky Atlas is a runaway favorite among stargazers.

Chapter 9 : NEW - The Observer's Sky Atlas: With 50 Star Charts Covering the Entire Sky | eBay

DOWNLOAD PDF OBSERVERS SKY ATLAS

Sky Atlas is the best of the mid range star charts. By mid range I mean it covers the sky in 26 charts, pole to pole. It goes to about 9th magnitude for stars and 12th magnitude for deep sky objects. It is an excellent set of charts for modest telescopes or big binoculars. The Night Sky.