



NRC Publications Archive Archives des publications du CNRC

A few more gifts Tapping, Ken

This publication could be one of several versions: author's original, accepted manuscript or the publisher's version. / La version de cette publication peut être l'une des suivantes : la version prépublication de l'auteur, la version acceptée du manuscrit ou la version de l'éditeur.
For the publisher's version, please access the DOI link below. / Pour consulter la version de l'éditeur, utilisez le lien DOI ci-dessous.

Publisher's version / Version de l'éditeur:

<https://doi.org/10.4224/23001144>

Skygazing: Astronomy through the seasons, 2016-12-13

NRC Publications Record / Notice d'Archives des publications de CNRC:

<https://nrc-publications.canada.ca/eng/view/object/?id=bd3cec28-d7a5-46c9-b318-c54af30cbd43>

<https://publications-cnrc.canada.ca/fra/voir/objet/?id=bd3cec28-d7a5-46c9-b318-c54af30cbd43>

Access and use of this website and the material on it are subject to the Terms and Conditions set forth at

<https://nrc-publications.canada.ca/eng/copyright>

READ THESE TERMS AND CONDITIONS CAREFULLY BEFORE USING THIS WEBSITE.

L'accès à ce site Web et l'utilisation de son contenu sont assujettis aux conditions présentées dans le site

<https://publications-cnrc.canada.ca/fra/droits>

LISEZ CES CONDITIONS ATTENTIVEMENT AVANT D'UTILISER CE SITE WEB.

Questions? Contact the NRC Publications Archive team at

PublicationsArchive-ArchivesPublications@nrc-cnrc.gc.ca. If you wish to email the authors directly, please see the first page of the publication for their contact information.

Vous avez des questions? Nous pouvons vous aider. Pour communiquer directement avec un auteur, consultez la première page de la revue dans laquelle son article a été publié afin de trouver ses coordonnées. Si vous n'arrivez pas à les repérer, communiquez avec nous à PublicationsArchive-ArchivesPublications@nrc-cnrc.gc.ca.



A FEW MORE GIFTS

Ken Tapping, 13th December, 2016

With time now running out, you might be finding you need a few more items to give the family astronomer's stocking that nice "full" look, although a couple of the things below will require a larger-than-usual stocking. These are things that you or your astronomer might not think of, but will still be very useful. Some can be obtained from the hardware store, or the local pharmacy or opticians.

Even in the age of digital planetaria and smartphone apps, a good star atlas is a must-have. The venerable "Norton's Star Atlas" is still a good buy. The Wil Tirion "Star Atlas 2000" De Luxe version is a beautiful publication. Look in the local science store or a good-quality bookstore.

Magazine subscriptions, or maybe just a magazine tucked into the stocking are always nice things to have for enjoying on cloudy nights. "Sky and Telescope" is a magazine for more serious amateurs, and then there is "Astronomy", intended for the more general astronomical readership. You should consider a subscription to "SkyNews". This Canadian magazine has been around now for a few years and is getting better and better.

Backyard astronomy is a cold activity. Even on clear summer nights it can be colder than you think, so a layer or two of warm clothing for feet, hands and head will be appreciated. How about a "little red flashlight"? You will have noticed that as you spend more and more time under a dark, clear sky, away from lights, you see more and more detail. Eventually, what starts off as a black sky with a few stars, turns into a dark grey sky with thousands of stars. This is the result of a process called dark adaption. The irises in our eyes open and close to control the amount of light reaching the backs of our eyes. Because being overloaded with light can be dazzling or even painful, those irises are very conservative, and take their time to open up when it is really dark.

Having become completely dark adapted, you don't want to wreck your night vision by shining a bright flashlight on your charts or observing notes,

or finding that dropped eyepiece on the ground. Our eyes can tolerate red light without degrading our night vision quite as much, so we use red flashlights when we need some light while observing. Most of them use LED's (light emitting diodes) these days, and some are adjustable. Try the science store for these.

The lenses or mirrors used in cameras, binoculars and telescopes are delicate things. Moreover, these days lenses are likely to have antireflective coatings that capture more light. However, they do occasionally get dust, water droplets, finger or even nose prints. You don't remove these using hankies or ordinary tissues. You use fine brushes, lens cleaning tissues and for the nose prints, lens cleaning liquids. An aerosol of clean, dry compressed air is good too. Your science store, photography store or local optician should be able to help with making the right choices here.

If the observing setup uses lots of cables, as is increasingly the case, get some brightly coloured labels for the cables. You can also get packages of coloured PVC electrical tape to do the same thing. Bright bands of tape can be put around tripod legs and anything else that might be walked into or fallen over in the midst of the observing sessions, especially at star parties or other events where there are lots of people around, or you are likely to become distracted. A basic tool kit, or a contribution to one would be useful. There is always likely to be something that is jammed and won't undo, or won't tighten. I hope all this helps you fill the stocking and make 2017 a Good Year for astronomical operations.

Venus is low in the southwest after sunset. Look for a bright, starlike object, shining steadily. Mars is low in the Southwest in the evening. Jupiter rises in the early hours. The Moon will be Full on the 13th and reach Last Quarter on the 20th.

Ken Tapping is an astronomer with the National Research Council's Dominion Radio Astrophysical Observatory, Penticton, BC, V2A 6J9.

Tel (250) 497-2300, Fax (250) 497-2355

E-mail: ken.tapping@nrc-cnrc.gc.ca

