

Astronomy Day Handbook, 6th Edition



By David H. Levy

with contributions by
Gary E. Tomlinson
Astronomy Day Coordinator

and
Robert Horgan,
Grand Rapids Amateur Astronomical Association

Revised and edited by
Gary E. Tomlinson

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the Astronomical League



Astronomical League
9201 Ward Parkway
Suite 100
Kansas city, MO 64114
(816) DEEP SKY
aloffice@earthlink.net
www.astroleague.org

Published as a public service
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Sky Publishing Corporation
49 Bay State Road
Cambridge, MA 02138-1200
Phone: (617) 864-7360
Fax: (617) 864-6117
skytel@SkyandTelescope.com
SkyandTelescope.com

Acknowledgements

So many people in so many places have helped with Astronomy Day that it is impossible to list all of them. However, a few institutions and individuals stand out for their special contributions.

The authors thank *Sky & Telescope* magazine, the Roger B. Chaffee Planetarium, the National Academy of Sciences, the American Astronomical Society, the Planetary Society, the Astronomical League, the Royal Astronomical Society of Canada, and the Astronomical Association of Northern California for their support not only of Astronomy Day but also for this Handbook.

In particular, we wish to thank Norm Sperling, Doug Berger, Carter Roberts, Andrew Fraknoi, Leo Enright, Peter Boyce, Jack Wilson, Walter Haas, Cliff Holmes, Janet Mattei, Russ Harding, Bert Stevens, Jerry Sherlin, Robert Young, Dennis Stone, Dennis Schatz, Charles Redmond, David Gilman, Laura Bautz, Frank Martin, Sheldon Schafer, Rex Carroll, Steve Dodson, Kenneth Frank, Sandra Ferguson, and Daniel Horowitz as well as all current and future individuals involved in Astronomy Day events.

Additionally, Gary Tomlinson wishes to thank his coworkers David DeBruyn, W. D. Frankforter, Mark Perkins, Jean Gorecki, Phyllis Rohrer, Jean Kurzhals, Dennis O'Connell, Gary Fraser, Timothy Chester, Mary Willey, Annette Hollister-Papp, and Deidra Edmond for their help in the production of the first 2 editions of this Handbook and Astronomical League members, Bob Gent and Sue Wheatley for this edition of the Handbook.

Use of This Handbook

This Handbook was designed to assist institutions, organizations, individuals and combinations thereof to plan and execute special events for Astronomy Day. Therefore, groups hosting Astronomy Day events have permission to:

- Print out this entire Handbook
- Duplicate all or part of this Handbook for local Astronomy Day volunteers

For any other use, contact the Astronomical League and Sky Publishing.

About the Authors

David H. Levy is one of the most successful comet discoverers in history, discovering 21 comets, eight of them using his own backyard telescopes. With Eugene and Carolyn Shoemaker at the Palomar Observatory in California he discovered Shoemaker-Levy 9, the comet that collided with Jupiter in 1994. That episode produced the most spectacular explosions ever witnessed in the solar system. Levy, the author of over 30 books, is an Emmy Award winner and Science Editor for *Parade* Magazine reaching almost a quarter of the population of the United States. A contributing editor for *Sky and Telescope* Magazine, he has appeared on many television programs, such as the Today show, Good Morning America, and ABC's World News Tonight, where he and the Shoemakers were named Persons of the Week for July 22, 1994. He and his wife Wendee host a weekly radio show available worldwide at www.letstalkstars.com and asteroid 3673 (Levy) was named in his honor. Levy resides in Vail, Arizona, with his wife, Wendee.

Gary Tomlinson is a retired astronomy educator from the Chaffee Planetarium, Grand Rapids, MI and winner of the first Astronomy Day award. He is a SIPCA agent for the Harvard-Smithsonian Center for Astrophysics and has been Astronomy Day Coordinator since June 1983. He was designated a "Hoosier Scholar" by the Governor of Indiana.

Robert Horgan, an amateur astronomer, currently resides in Japan.

PART I: Your Objectives

What is Astronomy Day?

What exactly is Astronomy Day? One day each spring, astronomy clubs, planetariums, and other groups of sky lovers band together to show the public how much fun astronomy can be. "To promote the forerunner of all scientific endeavors and to provide information, resources, and encouragement in all facets of astronomy" is the official reading, but showing that astronomy is fun is really what it's all about. "Taking astronomy to the people," "Astronomy is fun!," "Watch the sky," and "Look up!" are all slogans that have been used successfully on Astronomy Day, and now we have the official slogan: "Bringing Astronomy to the People." Some astronomy clubs have expanded the celebration into an entire "Astronomy Week." What a shame, they thought, to spend all that time designing a big mall display and then have to take it down after just one day!

When is Astronomy Day?

Astronomy Day is usually celebrated between mid-April and mid-May, on the Saturday closest to the first-quarter Moon. You should, however, host events when they best suit your needs. The table below shows the dates for Astronomy Day and its more ambitious relative, Astronomy Week for the next few years. Lunar highlights for each day from New Moon are detailed on page 26. Astronomy Day dates could be changed in the future to accommodate a special event like an eclipse, a planetary alignment, or a bright comet.

The formula for determining the date for Astronomy Day is to first determine the date of the first-quarter Moon between mid-April and mid-May and then choose the closest Saturday to this date such that there is a visible Moon in the sky. This was achieved by starting with the date of the 1st quarter Moon. If that was a Sunday, Monday or Tuesday, the preceding Saturday was selected. If that was a Wednesday, Thursday or Friday, then the next Saturday was selected.

Astronomy Week is the week containing Astronomy Day starting on the preceding Monday and ending on the following Sunday. Choosing Astronomy Week in this fashion allows for some groups to hold an Astronomy Weekend.

Year	1 st quarter Moon	Astronomy Day	Days from New Moon	Astronomy Week	Theme**
2005	Sat. 4/16	4/16	7	4/11-17	World Year of Physics
2006	Fri 5/5	5/6	8	5/1-5/7	
2007	Tues 4/24	4/21	4	4/16-22	
2008	Mon 5/12	5/10*	5	5/5-11	
2009	Fri 5/1	5/2	8	4/29-5/3	
2010	Wed 4/21	4/24	10	4/19-25	
2011	Tues 5/10	5/7	4	5/2-8	
2012	Mon 4/30	4/28	5	4/23-29	Transit of Venus
2013	Thur 4/18	4/20	9	4/15-21	
2014	Wed 5/7	5/10*	10	5/5-11	

*Mother's Day weekend in the US

**The theme of Astronomy Day is "Bringing Astronomy to the People," but on occasion there is an additional theme (but not always) when conditions warrant. This additional theme is often decided just a few months prior to Astronomy Day so be sure to check the Astronomical League's web site annually for any additional theme, <http://www.astroleague.org/al/astroday/astroday.html>

Why is Astronomy Day Held in the Spring Instead of the Fall and with a visible Moon?

In a survey we did, four out of five respondents preferred a spring date. Although there were a few suggestions to hold the event at new Moon, 86% agreed that the purpose of the event was to attract urban viewers to the sky, and an evening quarter Moon filled with craters is one of the most impressive celestial sights visible from all urban areas.

If holding Astronomy Day during a bright Moon is of concern, you may, of course, choose another date, but keep in mind that you don't have to show deep-sky objects to celebrate Astronomy Day. Since deep-sky objects are best viewed at new Moon anyway, why not entice Astronomy Day visitors to visit your dark-sky location at a later date? Use Astronomy Day as the hook to capture their attention.

Why Sponsor Astronomy Day?

Astronomy Day is a great way to put your organization(s) before the community. Having the public look through a telescope and at your displays can generate a good deal of publicity, especially if the press gets involved. It spreads the word and joy of astronomy throughout the community, and could also add to your membership roster. Perhaps most important, Astronomy Day is fun and a good boost of morale for your own members. It brings them together for a day of sharing their love of the sky with other people. Finally, it is an opening to talk about light pollution. When \$2 billion a year are spent to light up the underbellies of airplanes and birds, this issue should concern everyone.

Where to Get Help for Your Astronomy Day Event

The first place to look is the Astronomical League's web site for Astronomy Day, <http://www.astroleague.org/al/astroday/astroday.html>. There are several pages to this site so be sure to check them all.

Joining with other nonprofit organizations, like museums and planetariums, other astronomy clubs, and prospace groups, can enhance your event. Your local university astronomy or physics department should be interested, as well as high school science clubs. The organizations listed at the back of this book might also have a few suggestions. The more people and groups that are brought into this event, the better your chances are for good publicity and a large turnout. Sponsors can help with financial contributions, providing free exhibit space or audiovisual equipment, helping with publicity - any of a number of things to bring larger crowds and make the event more successful. Besides, it would be a service to the local community to have every organization involved in astronomy represented - sort of a one-stop shopping for local astronomical resources.

Other possible sources of help could be local governments, parks, nature centers, libraries, zoos, and/or military bases. They can provide locations for star nights as well

as assist with mundane but important items like security. The Star Night event described earlier was arranged with the local Parks Department, which provided the park, covers for the nearby streetlights, and the option of using the nearby artificial skating rink in bad weather.

Commercial sponsors, such as camera stores and telescope dealers, can also provide the same needed resources. Real-estate companies, grocery stores, or any type of retail outlet may welcome the good PR that comes from being either a sponsor (providing a service or funds) or a host (providing a location). The Berks County Amateur Astronomical Society (Kutztown, PA) hosts Astronomy Day at their local SAM's Club. Not only do they have telescopes set up, but they also have a bake sale, and SAM's Club matches dollar-for-dollar what they raise.

Of course, getting too many commercial sponsors can give you a big headache if you end up spending your time trying to please everybody. Our suggestion is to try for as many sponsors as the club needs, and as many that feels right for your club. Inviting one telescope store to participate and ignoring the competitor could generate some bad feelings and nasty letters if the left-out dealer thinks their business is being hurt. If you suspect this could be a problem, it might be better to avoid both dealers. Remember, Astronomy Day is supposed to be fun.

At any rate, it is best to put all arrangements in writing to all involved to avoid misunderstandings and to prevent any problems before they form.

Dealing with the Public

Sometimes it is not easy dealing with the public (but it's always a lot of fun). They can come up with unusual ideas and on top of that, they expect you to keep them entertained. To that end, listed below are articles everyone should read:

- “A Lesson from Hollywood” by Bob Berman, *Astronomy*, October, 1997, pp. 76-79,
- “A common Sense Guide to Cosmic Nonsense” by Phil Plait, *Sky & Telescope*, May 2004, pp. 38-43. See also <http://www.badastronomy.com>.

Simple 4-Stage One Day Program

This Handbook contains a lot of detailed suggestions for varied Astronomy Day programs. Don't let the detail put you off. If you find that a far simpler program would be better, try the model below, which is based on one by the Royal Astronomical Society of Canada's Montreal Centre. It holds its main event on one day only.

Stage 1:

One month before Astronomy Day, club members approach the media and put up posters around town.

Stage 2:

On Astronomy Day, the club joins with other local astronomy-related groups and sets up a display at the local Dow Planetarium. The room looks like a trade show or exposition.

It is impressive to see 10 booths, each with telescopes and displays and paraphernalia; there is a lot to see. The planetarium, with its special Astronomy Day show, is a main drawing card.

The display is quite interactive, with videotapes, a light pollution slide show, and a computer. People are attracted to well-arranged, interactive displays. The setup also includes posters, photographs, and a big display on light pollution. During the day they draw up to 1,000 people.

After Astronomy Day is over, they pack all the exhibits into boxes and store them for next year. After the initial investment of building the displays and planning the exhibits, managing the event from year to year is not difficult. "Once the displays are built," president Louie Bernstein says, "they need little updating from year to year, and future Astronomy Days are quite easy to set up."

Stage 3:

A few weeks after Astronomy Day, the group offers a follow-up visit to their observatory. For their northern climate, having an observatory session later in the spring makes a lot of sense. "Ten percent of membership is out there for each event," Bernstein says. "We found that 12 reliable volunteers, working eight at a time on partially overlapping shifts, works very well."

Stage 4:

An Open House is held at the observatory at the end of the summer.

A seven-hour drive to the southwest, the RASC's Toronto Centre has an Astronomy Week. They have telescopes set up every night of the week at three or four locations around the city. Part of the program involves displays and booths at Ontario Science Center and a local shopping mall. With 1,000 members, they can handle such an extensive program.

Simpler 2-Stage Program

If this four-stage process is still too much for your organization, here is an even simpler two-stage process:

Stage 1:

Obtain publicity for the event.

Stage 2:

Put up a couple of telescopes at a central location.