

Winter Observing

Jim Norton, NWJAA

Club members set up their telescopes between the Jenny Jump house and the observatories every Saturday from April through October. These observing sessions are open to the general public and are well attended when the weather cooperates. During the colder months, the only activities that are scheduled are administrative meetings and work projects. Most people pack away their scope and go into hibernation for the November through March freeze, missing some of the best viewing of the sky, as well as an opportunity to study the winter constellations.

We have an opportunity to try something new. Recent improvements at the Jenny Jump facility, including restoration and completion of two observatories and the addition of networking and Wi-Fi capabilities, allow us to explore remote viewing of the night sky through the club scopes using CCD imaging and computer-controlled guidance. We have access to all the equipment we need and we have the expertise to accomplish this. Using the DSL line that UACNJ has installed we can also access and control telescopes in different parts of the world.

During winter observing sessions, we can sit in the comfort of the club house and explore the celestial wonders on our computer screens. If the weather doesn't allow us clear skies, we can access other telescopes where the viewing is more optimal, such as telescopes in the Southern Hemisphere and parts of the sky where the sun is not yet up.

If one of the clubs that has an observatory at Jenny Jump will allow us to interface their scope with the present equipment we have, we can begin these winter observing sessions immediately. If not, then about four to five hours are needed to finish the Ted Barker Solar Observatory and we can set up and utilize our own Meade LX 90 and a DeepSky Pro Imager (permanently on loan). We also need to find cooperating clubs in other parts of the world or set up reserve time with telescopes that allow remote access.

Let's get started! Contact me at norton@optonline.net if you want to participate in these winter activities.

Comet Lulin This Saturday

Join us at 7 PM on February 28 to observe Comet Lulin at our facility in Jenny Jump State Forest! If you have a telescope or binoculars, bring them along. Maximum viewing is around 3 AM. Contact Jim at Norton@optonline.net or 973-214-3662 if you plan to attend.

Other Upcoming Events

March 7 and March 28 - 11 AM

Work sessions

March 21 and March 28 - 1 PM

Observer qualification training

Team Leader training

New Observer orientation

April 1

*Last day to take \$10 deduction off
renewal of Observer Fee*

April 4

First public night of the 2009 season

UACNJ Board of Directors

President

Ron Russo (MMAS)

Vice President

Diane Jeffer (NWJAA)

Secretary

Bill Eberly (MMAS)

Treasurer

Jim Norton (NWJAA)

Trustee 2007-2009
Warren Westura (SHAA)

Trustee 2008-2010
Walter Rothaug (RAC)

Trustee 2009-2011
Dale Gary (AAI)

Credentials Committee

Ron Russo (MMAS)

Finance Committee

Karl Hricko (AAI)

Observatory Committee

Gil Jeffer (NWJAA)

Communications Committee

Sherwood Waggy (NWJAA)

Membership Committee

Diane Jeffer (NWJAA)



Messier Marathon 2009 - March 27, 28, 29, weather permitting

Jim Norton, NWJAA

French astronomer Charles Messier (1730-1817) was famous in his lifetime for the discovery of 20 comets. His modern fame derives from the astronomical deep-sky object catalogue of "Messier Objects" that he published to help comet hunters distinguish between permanent and transient objects in the sky.

A Messier Marathon is an attempt to find as many Messier Objects as possible in one night. A rite of passage for many amateur observers, the Marathon consists of an all-night vigil when most or all of the Messier Objects are able to be observed. The idea was conceived in the 1970s by several amateur astronomers. On the night of March 23/24, 1985, Gerry Rattley found all 110 Messier Objects in Dugas, Arizona; it was only about an hour later that Rick Hull duplicated this success in Anza, California.

The Messier Objects are not evenly distributed throughout the celestial sphere. The number visible on any one night depends on your location and the time of year. There are heavily crowded regions in the sky, especially the *Virgo Cluster** and the region around the *Galactic Center*, while other regions are virtually devoid of Objects. In particular, there are no Messier Objects from right ascensions 21:40 to 23:20, and only the very northern *M52* is between RA 21:40 and 0:40. At low northern latitudes of the earth (best at 25° N), this chance distribution allows one to observe *all 110 Messier objects* in one night! This opportunity occurs once every year, in mid- to late-March; viewing is best near the New Moon.

It is possible to observe all 110 Objects only under exceptionally good observing conditions at optimal viewing locations. This year may be one of the last opportunities to combine a nine-planet marathon with the Messier event, although Neptune and Uranus will provide a challenge. Several *comets* brighter than magnitude 14 may be visible, *meteors* from various showers may occur, and, depending on your location, you may be able to observe the *International Space Station*, ISS.

A complete Messier Marathon history can be found in the booklet, *The Messier Marathon Observer's Guide*, by Don Machholz, or in its successor, *The Observing Guide to the Messier Marathon*. The latter proposes a useful *search sequence* and also points out that less complete Messier Marathons may be run at any time of the year, the percentage of visible objects depending on location and time. More *Messier Marathon tips* can be found on the web and will help one prepare for this endeavor.

Marathon events are enriched if other appealing celestial events can fill in the pauses which normally occur when you have hunted down everything you can and are waiting for the morning objects to rise. In 1997, the outstanding naked-eye comet Hale-Bopp (C/1995O1) gave an extraordinary spectacle exactly at Messier Marathon time in March and April similar to the comet Hyakutake (C/1996B2) display in 1996. In 1998, supernova *SN 1998S* in *NGC 3877* was visible in Ursa Major, brightened up to 12th magnitude. In 2002, there occurred two events just in time for the Marathon: the most remarkable *supernova 2002ap* occurred in *M74* in late January and comet Ikeya-Zhang (C/2002 C1) was discovered, brightening to naked-eye visibility in March and April. In 2006, *supernova 2006X* flashed up in early February, an interesting addition of the marathon.

We won't know in advance what events will give Messier Marathons additional value this year, but we intend to provide the relevant information on our website as soon as it is available. Check for more info on the upcoming *Messier Marathon 2009* at the website listed below.

UACNJ offers a Messier Marathon Certificate to those participating in a marathon at our facility. For information about participating in this year's marathon with your own or one of the telescopes at UACNJ, contact Jim Norton at norton@optonline.net.

* Links to the italicized items can be found at www.nwjaa.org/focus/messier2009.htm.

Information for this article was found at seds.lpl.arizona.edu/messier/Xtra/marathon/mm2009.html.

UACNJ in the News

Gil Jeffer, Observatory Chair, gave an audio interview to Stephen Novak of the Lehigh Valley Express-Times. The interview was carried online in the Five Questions feature on December 30, 2008. They discussed UACNJ, the NJIT/UACNJ project, and amateur astronomy in general. You can listen to the interview at www.tinyurl.com/UACNJ.

2009 Observing Teams

Observers are assigned to teams on a first-come, first-served basis, so if it is important for you to be assigned your first choice, be sure to get your Observer Form in early. All Observers must be a member of an amateur astronomy club that is affiliated with UACNJ. Members of Supporting Clubs receive a discount off the annual Observer Fee. The Observer and Club Membership Forms are available at www.uacnj.org. Contact Diane at jefferfamily@gmail.com if you have any questions.