



# M-STAR



<http://mstar-astronomy.tripod.com>

Vol. 9 No. 5

July, 2005

Founded in 1982

## Treasurer's Update

Hello:

Our semi-active club is now made-up of ten dues-paying members. As of mid-June, we have a checking account of slightly more than \$1,179.00 and a savings account of \$28.08.

The club officers decided to once again renew our membership in the Astronomical League. For this, you should each get a bi-monthly "Reflector" magazine and also have access to obtain observing certificates. I, for one, hope to be able to achieve some of these in the future.

I have been following-up on two leads to try to find our club a dark, relatively secure site within an hour of Merced. Doug's Mountain is up a difficult horse trail and has a number of trees. The off-road park always has the possibility of other visitors. It is my hope that finding such a site will encourage more observing. I will update you again when I have more information.

Clear Skies,

Mike

*Excerpted from NASA web-site...*

[www.nasa.gov/mission\\_pages/deepimpact/media/deepimpact-060905.html](http://www.nasa.gov/mission_pages/deepimpact/media/deepimpact-060905.html)

### **NASA Announces Spectacular Day of the Comet**

After a voyage of 173 days and 431 million kilometers (268 million miles), NASA's Deep Impact spacecraft will get up-close and personal with comet Tempel 1 on July 4 (EDT).

The first of its kind, hyper-speed impact between space-borne iceberg and copper-fortified probe is scheduled for approximately 1:52 a.m. EDT on Independence Day (10:52 p.m. PDT on July 3). The potentially spectacular collision will be observed by the Deep Impact spacecraft, and ground and space-based observatories

Deep Impact will provide a glimpse beneath the surface of a comet, where material from the solar system's formation remains relatively unchanged. Mission scientists expect the project will answer basic questions about the formation of the solar system, by offering a better look at the nature and composition of the frozen celestial travelers we call comets.

The University of Maryland is responsible for overall Deep Impact mission management, and project management is handled by JPL. The spacecraft was built for NASA by Ball Aerospace & Technologies Corporation, Boulder, Colo.

For more information about Deep Impact on the Internet, visit: <http://www.nasa.gov/deepimpact>.



NASA Photo

## SKY & TELESCOPE'S WEEKLY NEWS BULLETINS



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*Welcome to S&T's Weekly News Bulletins. Images, the full text of stories abridged here, and other enhancements are available on our Web site, SkyandTelescope.com, at the URLs provided below. Clear skies!*

### **WATCHING COMET TEMPEL 1 - AND DEEP IMPACT**

Periodic comet 9P/Tempel 1, currently glowing at a dim 10th magnitude in the evening sky near Spica, will be blasted by NASA's Deep Impact probe (the cover story of the June SKY & TELESCOPE) this weekend.

The latest time prediction (updated June 29th) is that the impact will occur at 10:52:12 p.m. Pacific Daylight Time Sunday night July 3rd, plus or minus about 10 seconds, as seen from Earth (that's 5:52:12 Universal Time July 4th). Most of the American West, Mexico, and Central America have a view of the comet in darkness at that time. There may be a brief flash, and the resulting debris cloud may brighten Tempel 1 dramatically for hours, days, or weeks....

[http://SkyandTelescope.com/observing/highlights/article\\_1522\\_1.asp](http://SkyandTelescope.com/observing/highlights/article_1522_1.asp)

### **FOMALHAUT'S KUIPER BELT**

Shining at 1st magnitude in the southern constellation Piscis Austrinus, Fomalhaut is the 18th brightest star in the night sky. At a distance of only 25 light-years, this dazzling beacon is one of the best-studied stars and the subject of numerous sci-fi stories. With that kind of background, one might think that astronomers have learned everything they wanted to know about Fomalhaut.

But when Paul G. Kalas (University of California, Berkeley) and two colleagues pointed the Hubble Space Telescope at Fomalhaut last year, they were in for a huge surprise. Hoping to detect the feeble glow of orbiting planets, Kalas instead found a belt of cold dust orbiting far from the star....

[http://SkyandTelescope.com/news/article\\_1533\\_1.asp](http://SkyandTelescope.com/news/article_1533_1.asp)

### **NEW TYPE OF EXOPLANET: A HYBRID EARTH-URANUS**

After three years of maintaining secrecy while collecting more and more evidence, this week a team of astronomers announced finding an entirely new type of planet orbiting a dim star 15 light-years away. The object is the lightest known extrasolar planet orbiting a normal star, with a mass between 6 and 9 Earths and most likely around 7.5 Earth masses. At a National Science Foundation press conference this afternoon, Geoffrey W. Marcy (University of California, Berkeley), R. Paul Butler (Carnegie Institution of Washington), and four colleagues called their find the most Earthlike world yet discovered outside our solar system.

While that is technically true, the planet is truly weird by any Earthly standard....

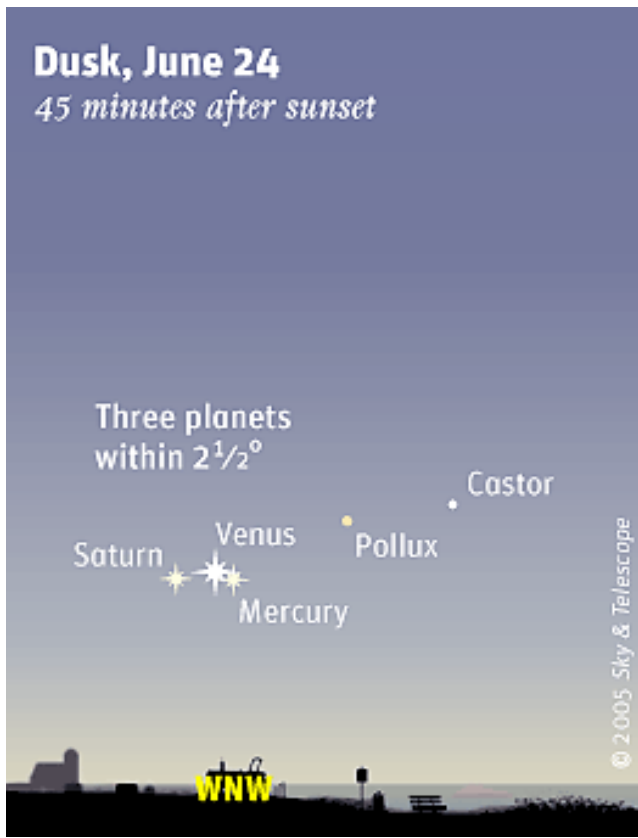
[http://SkyandTelescope.com/news/article\\_1530\\_1.asp](http://SkyandTelescope.com/news/article_1530_1.asp)

### **PROSPECTING FOR MARTIAN ICE**

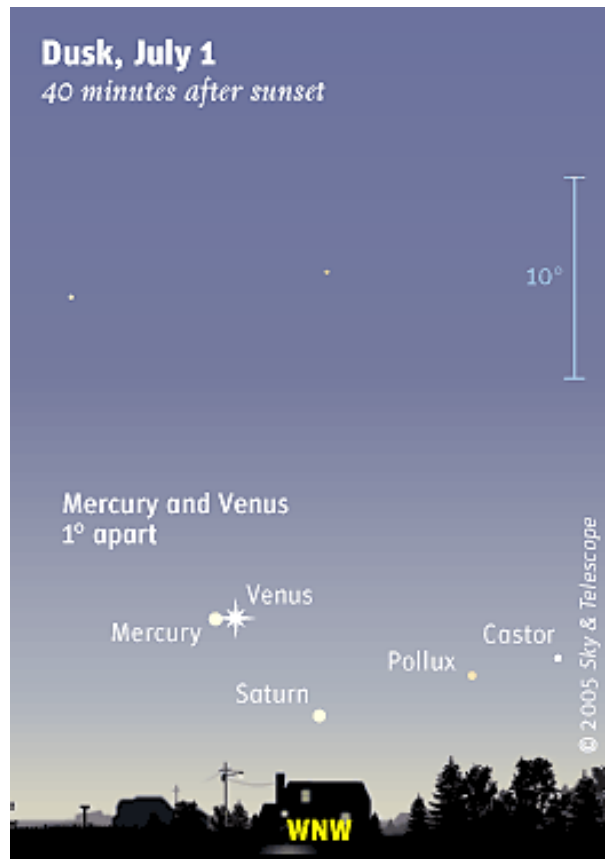
Since it entered Martian orbit in December 2003, the European Space Agency's Mars Express spacecraft has advanced humanity's knowledge of the Red Planet through cutting-edge spectroscopy and beautiful imagery. In recent months, the instrument-laden orbiter has detected evidence of methane and formaldehyde in Mars's thin atmosphere, and it has even captured ultraviolet emission from auroras.

But much more is to come....

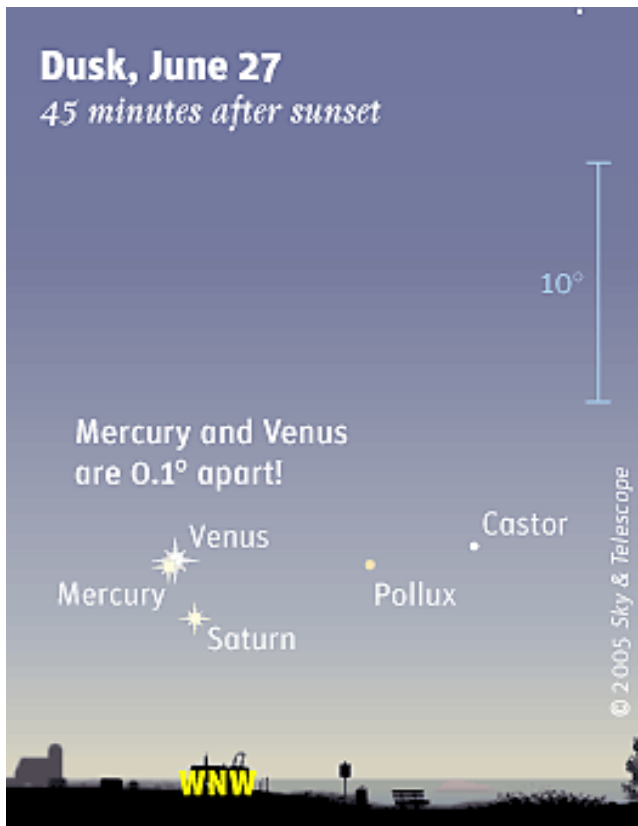
[http://SkyandTelescope.com/news/article\\_1532\\_1.asp](http://SkyandTelescope.com/news/article_1532_1.asp)



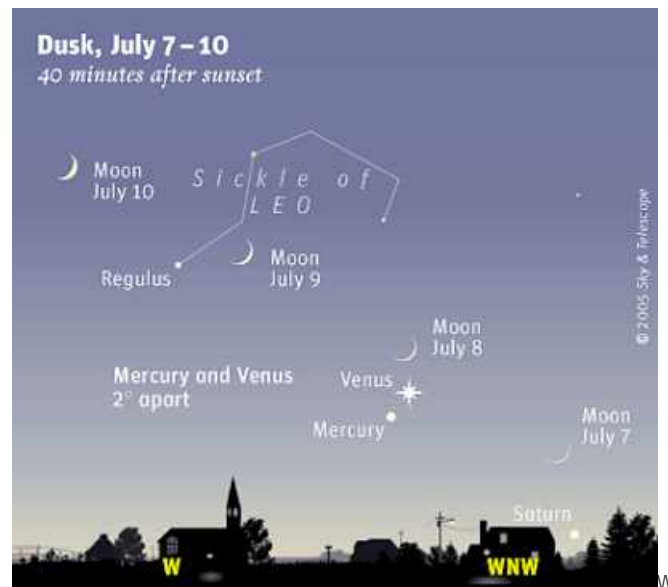
Venus, Saturn, and Mercury are bunched unusually close together low in the twilight. Watch them shift positions from one evening to the next. Click on the image to download an animation ([a 537-kilobyte .mov file](#)) showing the planets changing positions from night to night through July 9th. In addition, publication-quality versions of individual frames are available for the following dates: [June 22](#), [June 24](#), [June 26](#), [June 28](#), [July 8](#). You're invited to use them however you wish, as long as *Sky & Telescope* is properly credited. *Sky & Telescope diagrams* by Gregg Dinderman.



Mercury is fading now, and Saturn is getting very low. The blue 10° scale is about the width of your fist held at arm's length. *Sky & Telescope diagram.*



Venus and Mercury are now extraordinarily close together! Bring binoculars or a telescope. *Sky & Telescope diagram.*



Watch the waxing Moon pass the remaining planets — especially on Friday, July 8th. These scenes are drawn exact for the middle of North America. European observers: move each Moon symbol a quarter of the way toward the one for the previous date. For clarity, the Moon is drawn three times its actual size. *Sky & Telescope diagram.*

## M-STAR Officers

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*The M-STAR newsletter is  
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The Deep Impact housed inside of its Boeing Delta II launch vehicle in the early morning hours of January 12, 2005. NASA Photo

**Central Valley Astronomers  
(CVA) [www.cvafresno.org](http://www.cvafresno.org)**

### **July Calendar**

- 2 - Star Party at Courtright**
- 9 - Star Party at Hensley Lake**
- 23 - CVA Meeting**  
**CSUF, East ENGR 191**

## *Join M-STAR and See the UNIVERSE*

*Membership terms are on an annual calendar from Jan. 1 through Dec. 31*

**Mail to: M-STAR Treasurer, 1136 N. Stratford Ave Atwater, CA 95301**

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone # \_\_\_\_\_

e-mail \_\_\_\_\_

Main Astronomical Interests: \_\_\_\_\_

\_\_\_\_\_

### *Membership Plan:*

New \_\_\_\_\_ Renewal \_\_\_\_\_

Family/Individual (\$15) \_\_\_\_\_

Student, over 18 (\$10) \_\_\_\_\_

Youth, under 18 (\$5) \_\_\_\_\_



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