

# Mountaineer Skies

Volume 2, Issue 5

<http://www.as.wvu.edu/~planet/index.html>

May 2002

## From the Editor

We are extremely pleased to be able to bring this newsletter to you and hope you find it useful. In the same way, we are glad that we can provide the public with a quality and substantive planetarium show. Our new show for 2002-2003, beginning in late August 2002, is called "**MarsQuest**" and is narrated by Patrick Stewart, aka Captain Jean-Luc Picard of Star Trek fame.

Both of these services, the newsletter and the planetarium shows, are free to the general public. Unfortunately, they are not free to us. New planetarium shows, including "**MarsQuest**", now cost between \$2000 to \$3000. This is up from \$600 just three years ago. Obviously, *Mountaineer Skies* is also expensive to publish in this multicolor format.

If you feel you would like to help us in a financial way, donations, of any size, can be made to the **WVU Planetarium Project** at the West Virginia University Foundation. Their phone number is (304)284-4000.

Your help will assure the continuation of these services to the community.

Thank you.

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## In The Sky This Month

The **Eta Aquarids Meteor Shower** will appear from the direction of the constellation **Aquarius, the Water-bearer**, between April 24 and May 20 with a predicted maximum hourly rate of 60 early on the morning of May 5, 1:30 A.M. EDT.

## Visible Planets in the Night Sky

### Beginning of May\*

	Const	Rise	Transit	Set
Sun		6:16	13:17	20:17
Mercury	Taurus	7:08	14:38	22:09
Venus	Taurus	7:37	15:03	22:31
Mars	Taurus	7:53	15:24	22:54
Jupiter	Gemini	9:57	17:30	00:59
Saturn	Taurus	8:07	15:31	22:52

### Middle of May\*

	Const	Rise	Transit	Set
Sun		6:01	13:16	20:31
Mercury	Taurus	6:46	14:19	21:48
Venus	Taurus	7:45	15:21	22:59
Mars	Taurus	7:35	15:10	22:44
Jupiter	Gemini	9:13	16:45	00:13
Saturn	Taurus	7:19	14:43	22:05

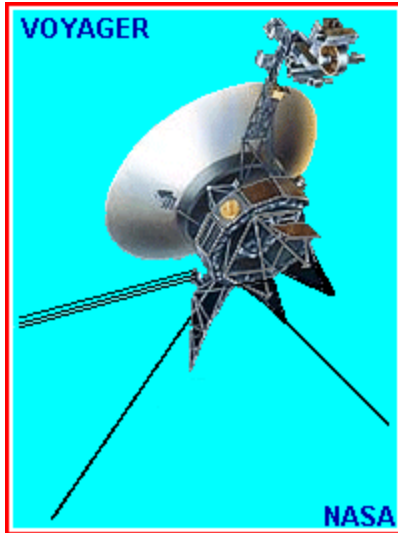
### End of May\*

	Const	Rise	Transit	Set
Sun		5:50	13:17	20:44
Venus	Gemini	8:07	15:43	23:19
Mars	Gemini	7:17	14:53	22:28
Jupiter	Gemini	8:25	15:55	23:22
Saturn	Taurus	6:23	13:49	21:11

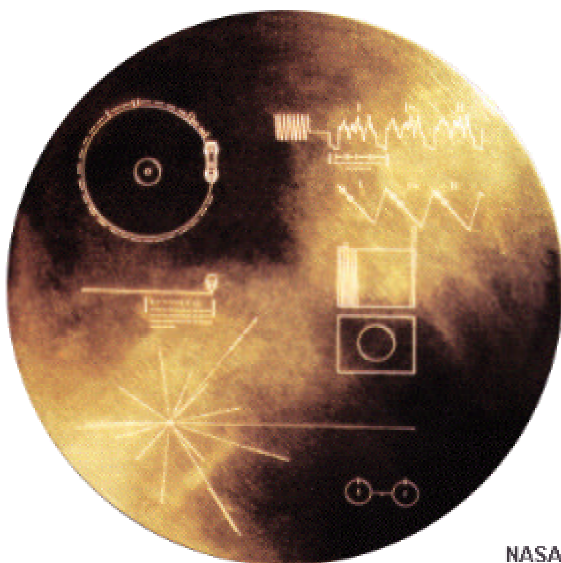
\*All times are local.

## About: **VOYAGER 1 and 2** The Incredible Voyage

**VOYAGER 2** was launched on August 20, 1977 and two weeks later, on September 5, its twin, **VOYAGER 1** was also sent into space on top of a Titan III E-Centaur rocket. Yes, Voyager 2 was indeed launched before Voyager 1.

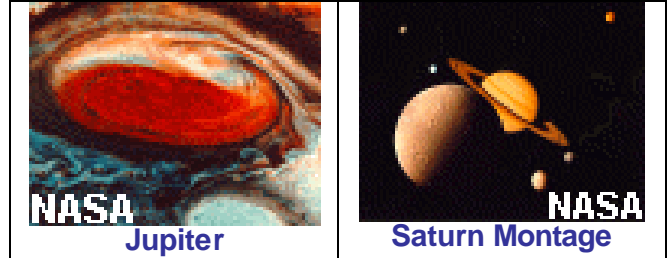


Each spacecraft had on board, along with many instruments, a gold-plated copper phonograph record containing sounds and messages of peace in 55 of the world's languages from Akkadian and Arabic to Welsh and Wu, sent to whomever or whatever finds it, sometime in the future.



Voyager 1's mission was to fly by Jupiter, which it did during March 1979, and Saturn, which it did during November 1980, collecting scientific data and taking close-up images and finally heading out of the Solar System.

### Voyager 1 Photos



Voyager 2 had the same missions, flying by Jupiter (July 1979) and Saturn (August 1981), as Voyager 1 except it was then to continue toward the two remaining gas giants. The space craft flew past Uranus in January of 1986 and Neptune in August of 1989. Unfortunately, Pluto was not favorably positioned to be visited.

### Voyager 2 Photos



The missions of both space craft were successfully completed by 1989, 12 years after launch. That is a very long time in space craft years.

But it was not over. Since 1989, both space craft have been sending data as they get farther and farther away from us.

Voyager 1 is now well over 7.5 billion miles from the Sun, making it the most distant man-made object ever sent from Earth. Voyager 2 is about 6 billion miles away, not quite as far.

They both should be operating and sending back information from beyond our Solar System for at least another 15 years, over 40 years since its launch. Incredible.

## 2002 Planetarium Shows

***Magellan: Report from Venus*** – The Magellan radar-mapping mission to Venus was extraordinarily successful; the spacecraft returned more data than all NASA's previous planetary missions combined. During this half-hour planetarium show, we follow Magellan's progress, from its launch through the most significant discoveries. Included are spectacular images of volcanoes, impact craters and landslides. Important planetary science topics of volcanism, tectonism, and impact cratering are covered, and radar imaging is discussed.

**Coming in Late August**



**Narrated by Patrick Stewart**

[http://www.as.wvu.edu/~planet/mars\\_quest.htm](http://www.as.wvu.edu/~planet/mars_quest.htm)

May 10 & 24, 2002 <i>Magellan from Venus</i>	June 14, 2002 <i>Magellan from Venus</i>	July, 2002 Closed
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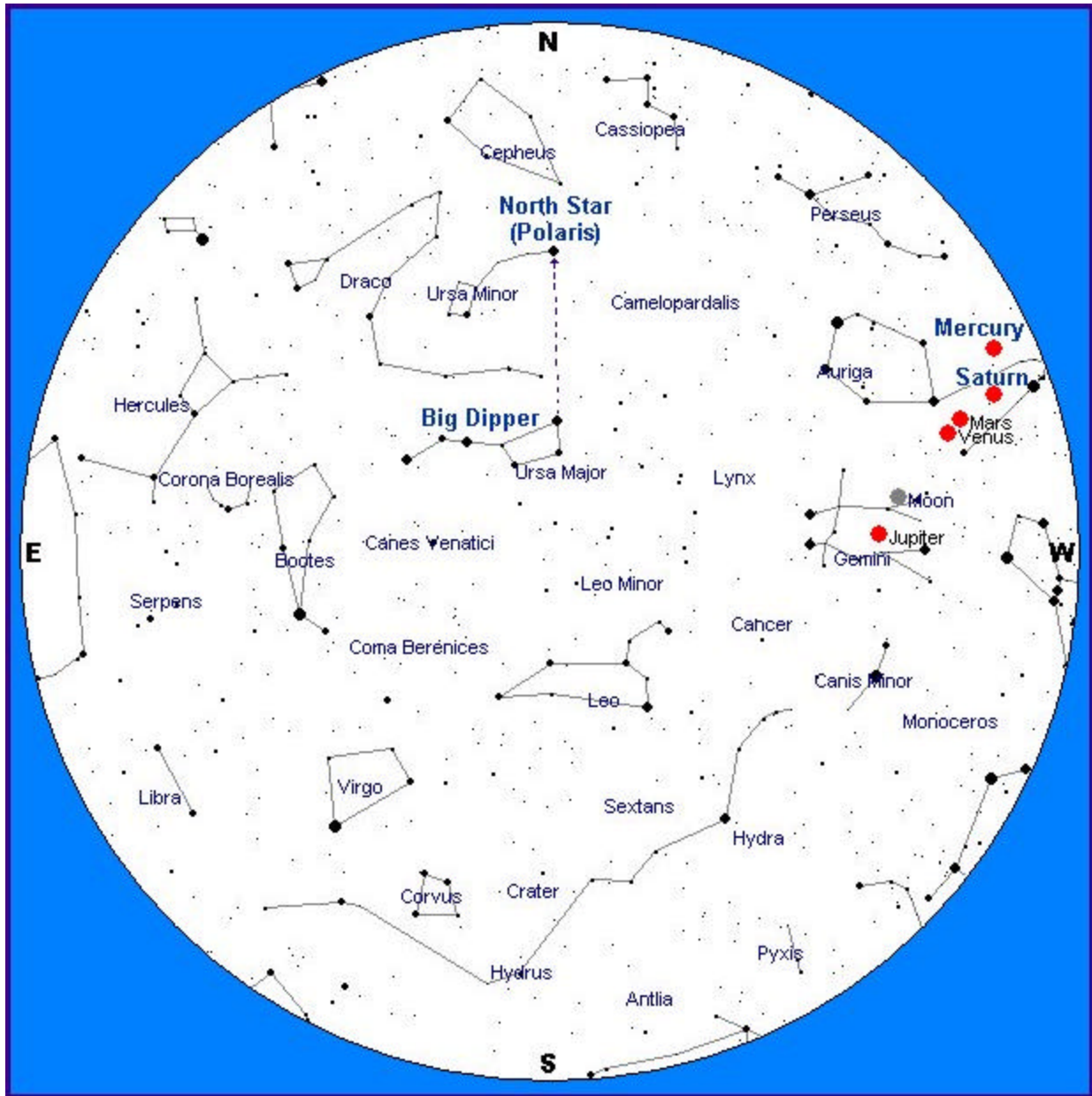
For those who are interested in bringing a group, such as schools or scouts, during the day, please call for more information. These shows are usually given on Tuesday or Thursday mornings.

For further information or reservations, please call John Hopkins at (304)293-3422, extension 1443 or by email at: [jhopkins@mail.wvu.edu](mailto:jhopkins@mail.wvu.edu)

### Selected Sunrise/Sunset and Moon Rise/Moon Set Times

Date	Sunrise	Sunset	Moon Rise	Moon Set	Moon Phase
May 4	6:17 A.M.	8:15 P.M.	2:54 A.M.	12:50 P.M.	Waning Gibbous
May 12	6:08 A.M.	8:23 P.M.	6:24 A.M.	8:48 P.M.	New Moon
May 19	6:02 A.M.	8:29 P.M.	12:35 P.M.	2:17 A.M.	First Quarter
May 26	5:57 A.M.	8:35 P.M.	9:07 P.M.	6:03 A.M.	Full (Flower) Moon

May 2002 Sky Chart\* for:  
 10:00 P.M at the beginning of the month  
 9:00 P.M in the middle of the month  
 8:00 P.M at the end of the month



\*Sky Chart used with the kind permission of **Heavens-Above** at <http://www.heavens-above.com/>

The TOMCHIN PLANETARIUM is named in honor of the late Harold Tomchin, of Princeton, W.Va., who made a generous donation to ensure its continuing operation, and whose family continues to support the planetarium for the educational benefit of WVU students, staff, and faculty members, as well as the local community. Contributions can be made in support of the planetarium through the **WVU Planetarium Project** at the **WVU Foundation, Inc.**, phone **(304)284-4000**. **Thank You.**



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