


## PHM Planetarium & Air/Space Museum

### *What's Up?*

#### 2008

October 29	Teacher resources, in-service schedule, and ideas for Let There Be Night are at <a href="http://www.LetThereBeNight.com/teachers.html">www.LetThereBeNight.com/teachers.html</a> . For example, print <a href="#">town mat</a> and enlarge copy to poster board. Kids color in and discuss features. Do light demo in dark room with their town mat.	
August	The <i>Let There Be Night</i> program continues to grow with the support of the PHM Educational Foundation and other generous <a href="#">supporters</a> .	
February 29	The PHM Planetarium is awarded a Toyota TAPESTRY grant with the support of other contributors to create a planetarium program and complementary district-wide experiment. The <i>Let There Be Night</i> program will introduce students to outdoor lighting issues and guide them in assessing the local sky conditions.	
February 25 to March 8	Help assess the quality of our night sky and compare local conditions to those around the rest of the world. The <i>Globe at Night</i> program is an easy opportunity for citizen-scientists of any age to participate in this global experiment.	
February 20	Witness a total lunar eclipse! Telescopes will be set up at Toscana Park in Mishawaka, with supporting activities for the family. See <a href="http://www.nightwise.org/eclipse.htm">http://www.nightwise.org/eclipse.htm</a> for all the action.	

#### 2007

March 8-21	The <i>Globe at Night</i> star count will occur March 8-21, when observers from around the world count the stars of the constellation Orion to suggest their sky's limiting magnitude, as influenced by light pollution. Kids and adults alike can send observations to a worldwide data bank and check out the global results. See <a href="http://www.globe.gov/GaN/">http://www.globe.gov/GaN/</a> for details about this easy activity.
March 3	A total lunar eclipse is underway at sunset this date and continues into the evening. Details and activity ideas are at <a href="http://analyzer.depaul.edu/paperplate/lunareclipse07-03-03.htm">http://analyzer.depaul.edu/paperplate/lunareclipse07-03-03.htm</a> .

#### 2006

October 10	A transit of Mercury will occur on November 8, 2006, for which the <a href="#">PHM Planetarium will have solar-filtered telescopes available for public viewing</a> , weather permitting. See <a href="#">mercury.htm</a> for details on this celestial event.
August 30	New definition for planet ousts Pluto, leaving us with eight planets. A planet is a celestial object that orbits the sun, has sufficient mass for its self-gravity to overcome rigid-body forces so that it is nearly round, and has "cleared the neighborhood around its orbit." A separate category acknowledges dwarf planets. See news at <a href="http://skytonight.com/3728231.html">http://skytonight.com/3728231.html</a> .
August 16	What is a planet? Proposed definition features elegant criteria: "A planet is a celestial body that (a) has sufficient mass for its self-gravity to overcome rigid-body forces so that it assumes a hydrostatic equilibrium (nearly round) shape, and (b) is in orbit around a star, and is neither a star nor a satellite of a planet." See <a href="http://skytonight.com/news/home/3580231.html">http://skytonight.com/news/home/3580231.html</a> .
August	<a href="http://www.nightwise.org">www.nightwise.org</a> addresses light pollution issues, with an emphasis on local Michiana skies.
February	<i>Schedule Change:</i> Due to Super Bowl XL being the evening of Sunday, February 5, the planetarium program "It's a Phase We're Going Through" scheduled to coincide with kickoff is

cancelled.

January 29

"[Countdown to Science Alive!](#)" features astronomy programs for youths on Sunday, January 29, 2006, at the Centre Township Branch of the Public Library, 1150 E. Kern Rd. (corner of Miami Rd.), South Bend, IN. Supported by AstroCamp at YMCA Camp Eberhart in Three Rivers, MI. See [countdown.htm](#).

**2005 (below)**

December 19

*AstroCamp* puts telescopes in the hands of kids at YMCA Camp Eberhart in Three Rivers, Michigan. For images from past AstroCamp adventures, see <http://analyzer.depaul.edu/paperplate/astrocamp05.htm>.  
A comment on the analemma addresses misconceptions in Indiana's time zone issues. See [timezone.htm](#).

August 23

New [PHM Planetarium Sky Clock](#) allows skygazers to preview anticipated observer conditions.

**May 19**

Special program at P-H-M Planetarium  
The big questions of physics will be addressed by a Notre Dame professor at a very special program at the planetarium.  
On Thursday, May 19, at 7:00 p.m., a very special event will take place at the P-H-M Planetarium. Dr. Philip Sakimoto of the University of Notre Dame's Department of Physics, and formerly acting director of NASA's Space Science Education and Public Outreach Program, will give a multi-media presentation entitled "The Universe and Everything in It."  
NASA is engaged in a focused effort to find answers to the fundamental questions about our existence: How did the universe begin and evolve? How did life arise? Are we alone? Dr. Sakimoto will review what has been learned, what remains to be answered, and what future missions are being planned to continue seeking the answers.  
This one-hour presentation includes spectacular NASA imagery and is designed to be accessible to young people and general audiences. It is based on a lecture that Dr. Sakimoto gave earlier this year as part of the University of Notre Dame's Miller Lecture Series in celebration of the World Year of Physics.  
A donation of \$5 per person will be collected at the door.  
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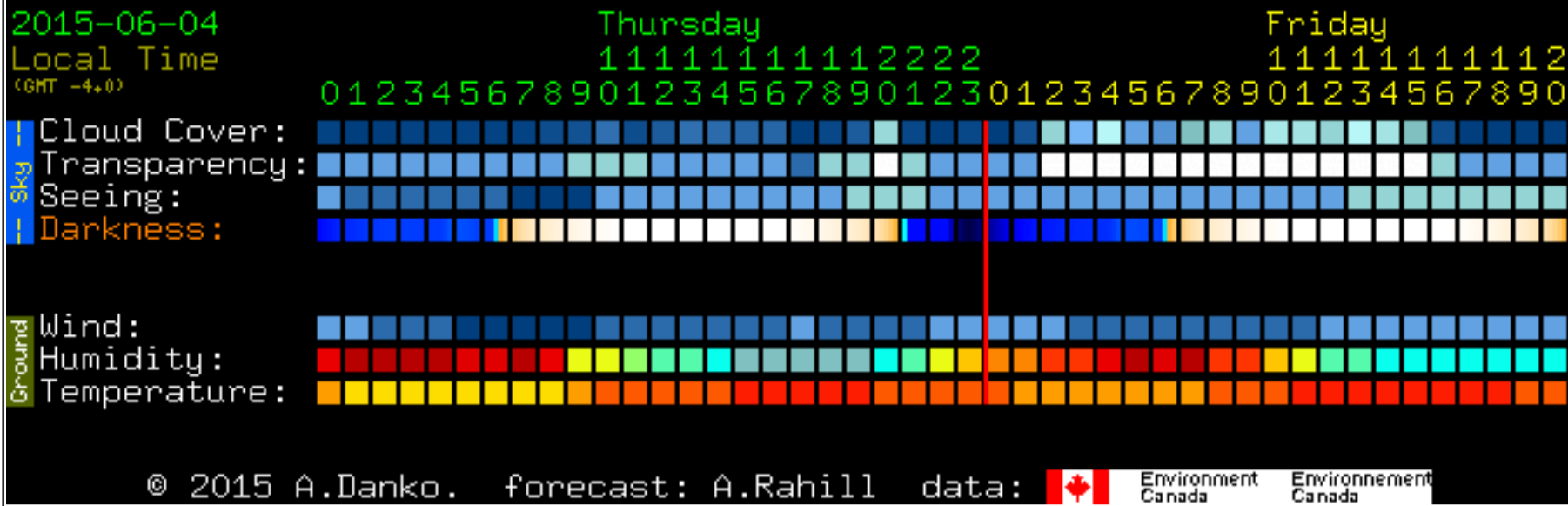
March 15

In his [2005 and 2006 Budget Adjustments and Reductions](#) proposal, PHM Superintendent Robert Howard recommended "eliminating planetarium position effective with the 2006/2007 school year. However, after public input, that suggestion appears to have been reversed in May meetings of the PHM Board of Education.

March & April

New lighting ordinance enacted by St. Joseph County Council to impact night sky. See Lighting Issues at [lights.htm](#).

See anticipated viewing conditions tonight at the [PHM Planetarium Clear Sky Clock](#). Details and more information--including some useful observing links--at <http://cleardarksky.com/c/PnnHrMPINkey.html>.



[www.nightwise.org](http://www.nightwise.org)

Addresses light pollution with emphasis on northern Indiana lighting issues.

[www.spaceweather.com](http://www.spaceweather.com)

Spaceweather announces sunspots, aurorae, bright comets, and other highlights visible to the average casual observer.

<http://skyandtelescope.com/observing/>

*Sky & Telescope* magazine features observing highlights, interactive sky charts, and this week's sky at a glance.

<http://www.heavens-above.com>

*Heavens-Above* lists up-to-the-minute information on satellite passes, planetary data, and other current items.

<http://www.pa.msu.edu/abrams/SkyWatchersDiary/Diary.html>

*Abrams Planetarium Skywatchers Diary* gives a written description each month of celestial highlights.



<http://analyzer.depaul.edu/paperplate/Events.htm>

*Paper Plate Education* regularly lists upcoming celestial events and paper plate activities to accompany them.



[www.transitofvenus.org](http://www.transitofvenus.org)

The transit of Venus on June 8, 2004, was a spectacle that had not been witnessed by any human then alive. See <http://www.transitofvenus.org/june8.htm> for images from events coordinated by the PHM Planetarium & Air/Space Museum.

[PHM http://www.phm.k12.in.us](http://www.phm.k12.in.us)

Home page of Penn Harris Madison School Corporation, the school district in which the PHM Planetarium & Air/Space Museum resides.

<http://marsrovers.jpl.nasa.gov/home/index.html>

Spirit and Opportunity rovers on Mars.

