

The IAS News & Views

Volume 78, Issue 7



www.iasindy.org

**August General Meeting
August 20, 2011
8:00 PM
Goethe Link Observatory
The Phoenix Project
John Shepherd and Greg McCauley**

Concerned about the utilization of the Link Observatory and the 36", the Board has appointed a committee to look into its current use and make recommendations for revitalizing our usage of the grounds and the telescope.

John will present a brief historical overview of the Link 36 with a little bit of the Link Observatory thrown in.

How can we utilize the grounds more effectively? It is not the greatest place from a light pollution perspective but how can the membership use it more and more freely?

Greg will present an overview of what is being done now with the 36". What is being thought about for the 36" in the near future. As discussions progressed, we began dreaming and literally reaching for the stars as it pertained to our desires for the Link 36". Our goal is to use the Link 36" for general science and outreach. The committee talked about some of the things that we saw that needed to happen for that to become a reality. Jokingly we said the Link was not being used constructively so let's dust it off, clean it up and get back to functional operation where we can do pro/am science while keeping it available for public outreach and education; sort of a Phoenix resurrection. John and Greg will present some of their thoughts on how we can do this. That's when we decided we are going to call our efforts the "Phoenix Project." Allowing the Link to rise from idleness to back as being open, available and used on a regular basis. The bones are there, all we need to do is start putting the flesh back on.

This is going to take time and effort from a lot of people get it done. We have the big part (the observatory and the telescope) Let's figure how to get it done.

Finally open up for questions and hopefully answers.

IAS NEWS

We can now pay dues on our website using paypal. There is a cart system where you can pay dues, order magazines, or donate to the Society. Thanks to John Shepherd and Doug Sangunetti for getting it done. It was not as easy as it seemed. The cart is found in the Join the Society section. You will have to establish a PayPal account for your self.

Celestial Meetings

By: Marco Ray

How to describe the Indiana Astronomical Society
That in the summer meets at the Goethe Link Observatory
Hidden in wooded hills like a landed UFO?
How to describe the modern design of the observatory with its
Silver sci-fi lettering, rich hardwood floors, and refrigerator
Filled with caffeinated soda for those late evening lectures
About the stars?
How to describe the people, the star-gazers among us,
Who by day are engineers, and parents, and poets?
They who have their "star parties" when they stay up
All night, holding vigil with one another's stories,
But doing so in whispers as not to disturb the spider web
Of stars above them, or lest someone's loud laughter
Knock a meteor off course.
They star party out in fields where the daylight and the blistering
Street lights are far from their telescopes,
Those machines of the night that come to life under headlights
Or flashlights or by memory of their trainers.

How to describe my first time seeing Saturn?
This was last week, at a mini star party
After the lecture on the summer sky's brightest star, Arcturus.
As a member set up his telescope for me,
I held my breath as if I were diving under the water,
Only to wake to a dreamland, what looked like
A cut-out of the constellations or the set of a 1950s space movie.
How to describe it when Saturn glowed its late-night fireplace glow
In my dark field of vision,
As it proudly wore its rings like a new bride
Who can't wait to show the world that she's married?

Marco Ray visited us at our last general meeting and asked if he could write a poem about the Link.

Logo Clothing

The Board has developed a new supply of logoware with our new logo. new Logo clothing with our new Logo. However, there is some inventory of sweatshirts and t shirts with the old logo on it. So we are going to have a fire sale. All old clothing will be sold after the speaker at the general meeting for half price. Anything left over will be donated to a local charity. This is new clothing with the old logo that has never been sold. Sizes are limited.

We have clothing with the new logo as well. The plan is to take orders and then order clothing. You can pay for it on receipt.

IAS Calendar of Events for August

General Meeting August 20
Board Meeting August 23
NAG at McCloud September 10

NAG

New Astronomer's Group Meeting McCloud Nature Park Saturday September 10 7:30 PM

The Indiana Astronomical Society and Hendricks County Parks Department join to provide monthly New Astronomer's Group meetings by hosting an evening of learning about our spring sky and then, weather permitting, actual observation of some of the June night sky objects. We will be meeting on Saturday September 10, at McCloud Nature Park starting at 7:30 pm. This may be cool so prepare for the temperatures. If it is clear, we will be observing. Please bring mosquito repellent.

THE NAG MEETING WILL BE HELD - RAIN OR SHINE.

The discussion will include

What's Up in September

Observing the Moon

Finding Planets

Observing Galaxies

We look forward to seeing you on the 10th.

Observing Activities

Link Campouts - Our second Link campout of the Summer August 26-28

Gates will open at 500PM on Friday and will stay open through the weekend weather permitting.

Activities for August:

Link Observatory

General Meeting August 20

McCloud Activities–

NAG –. See you September 10.

Prairie Grass Observatory Activities–

We are able to go to the Link, Prairie Grass Observatories, and McCloud Nature Park at non scheduled times if they do not conflict with reserved activities:

For those interested in going to The Link Observatories for observing call John Shepherd at 1 317-862-3442.

For those interested in going to McCloud to observe, please call the park office 765 676 5437 before 4PM on the day you want to go out. They will give you permission to be there at night and make arrangements to cut off the lights.

For those interested in going to Prairie Grass Observatory for observing call Hoppe at 1-765-296-2753.

Other Observing Activities

The Kirkwood Observatory Solar Telescope is open on the "First Saturday" of each month from 1-3 PM. Viewers may even be able to see a solar prominence or two weather permitting. Updated weather conditions and closings will be posted at the Kirkwood Observatory Hotline at (812) 855-7736, and at the Observatory webpage, <http://www.astro.indiana.edu/kirkwood.shtml>.

Monthly openings of the solar telescope are planned for the first Saturday of each monthly during our 2010 observing season. And if you want to follow the Sun in between our monthly Solar Telescope openings, the website www.spaceweather.com provides daily updates.

IU Kirkwood Observatory

Kirkwood Observatory on the IU campus will be open each Wednesday evening through the summer, weather permitting! Join us for a night of observing the night sky with the Kirkwood 12" refractor. Please visit our schedule at <http://www.astro.indiana.edu/kirkwood.shtml>, for a list of dates and times. For updated weather conditions and closings, please call the Kirkwood Observatory Hotline at (812) 855-7736.

The IU Astronomy Department has an electronic bulletin to let people know about local astronomy activities and events. If you would like to subscribe, send an email to astdept@indiana.edu and we'll put you on the distribution list. Information about activities and events to be included in the e-bulletin should be sent to catyp@astro.indiana.edu.

NASA Space Place

New GOES-R to Give More Tornado Warning Time

by Dauna Coulter and Dr. Tony Phillips

So far this spring, more than 1,400 tornadoes have struck the U.S. Some of them have cut jaw-dropping trails of destruction across the countryside and, tragically, across inhabited communities, too. Hundreds of lives have been lost in the onslaught.

Throughout the season, the National Weather Service has routinely issued tornado alerts. In the case of the Alabama tornadoes of April 27th, forecasters warned of severe weather five full days before the twisters struck. Because they couldn't say precisely *where* the twisters would strike, however, many of their warnings went unheeded.

"If people get a hurricane warning, they often evacuate the area," notes NOAA's Steve Goodman. "But we react differently to tornado warnings."

Perhaps it's because tornadoes are smaller than hurricanes, and the odds of a direct hit seem so remote. Recent pictures from Tuscaloosa, Alabama, and Joplin, Missouri, however, show the perils of playing those odds. Goodman believes that more precise warnings could save lives.

To fine-tune tornado warnings, NOAA will soon launch the first in a series of next-generation weather satellites – GOES-R (Geostationary Operational Environmental Satellites-R series). The spacecraft is brimming with advanced sensors for measuring key ingredients of severe weather including winds, cloud growth, and lightning.

"GOES-R will be the first geostationary spacecraft to carry a lightning sensor," says Goodman, the GOES-R Program Senior Scientist. "Studies show that sudden changes in the total lightning activity correlate with storm intensity—and with tornadoes."

The lightning mapper will detect and map not only cloud-to-ground lightning, but also bolts within and between clouds. The kind of cloud-to-ground lightning we see from our front yards accounts for only 15-20 percent of total lightning. To get a clear idea of a storm's intensity, meteorologists need to know about *all* the lightning—a view GOES-R can provide.

All by itself, the lightning mapper will provide 7 minutes more lead time in tornado warnings, according to Goodman. GOES-R's state-of-the-art instruments will also improve long-range forecasts.

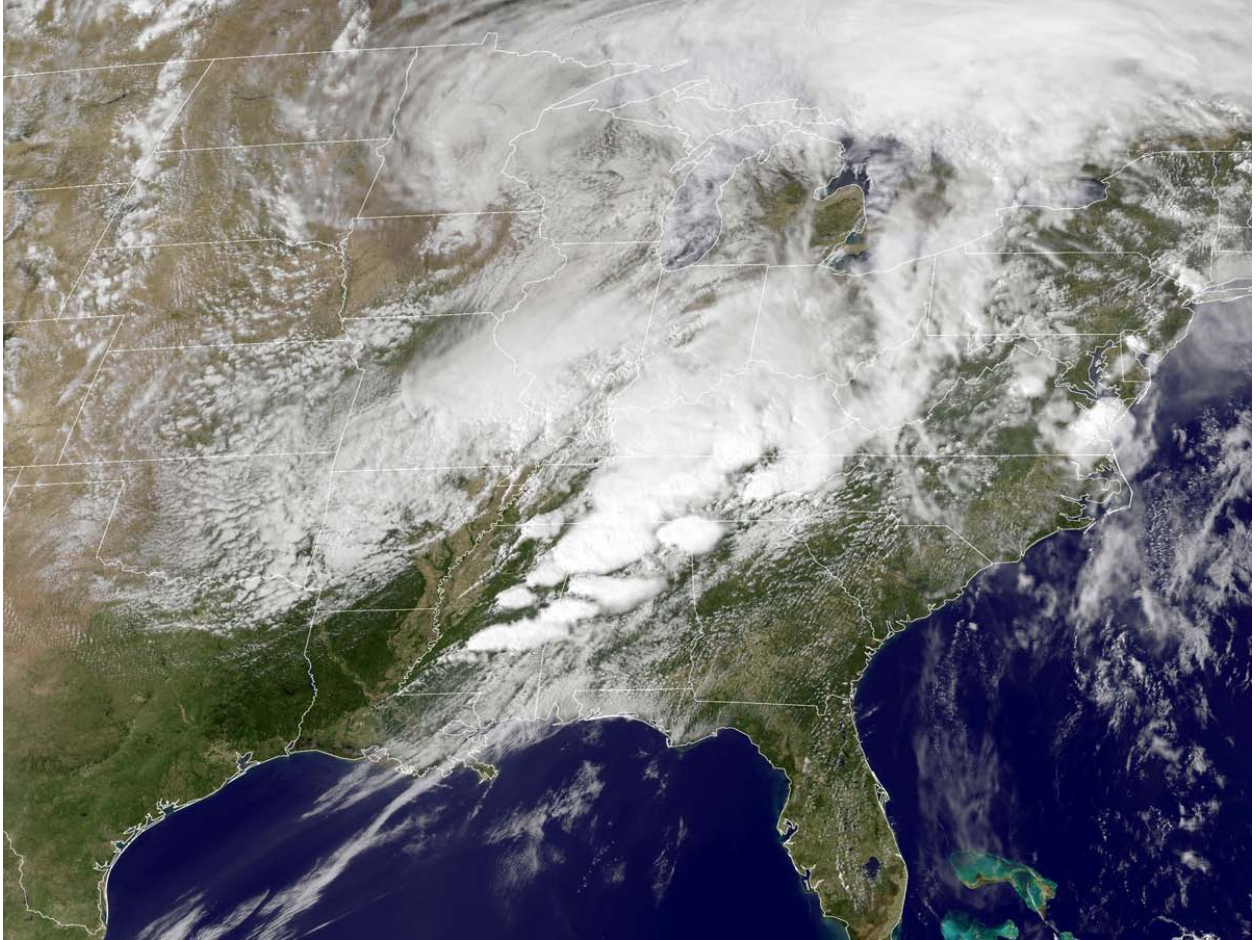
"The satellite's Advanced Baseline Imager (ABI), for instance, will provide a much clearer picture of clouds," says NOAA research meteorologist Tim Schmit. Compared to lesser instruments already in orbit, ABI can better detect super-cold "overshooting tops," evidence of enormous energy and upward velocity that correlate with subsequent severe weather.

"Accurate advanced notice of high-risk tornadic conditions can cue officials to close schools and businesses even before tornadoes are actually detected," says Schmit.

Forecasters doubt tornadoes can ever be predicted with 100% accuracy. The twisters are just too capricious. GOES-R, however, is a step in the right direction.

Find out more about GOES-R's unprecedented capabilities at <http://www.goes-r.gov>. Young people can learn more about tornadoes and all kinds of other weather at <http://scijinks.gov>.

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.



This GOES image shows the storms that spurred the intense April 27 tornado outbreak in the southern U.S. Animation showing the development of weather can be seen at

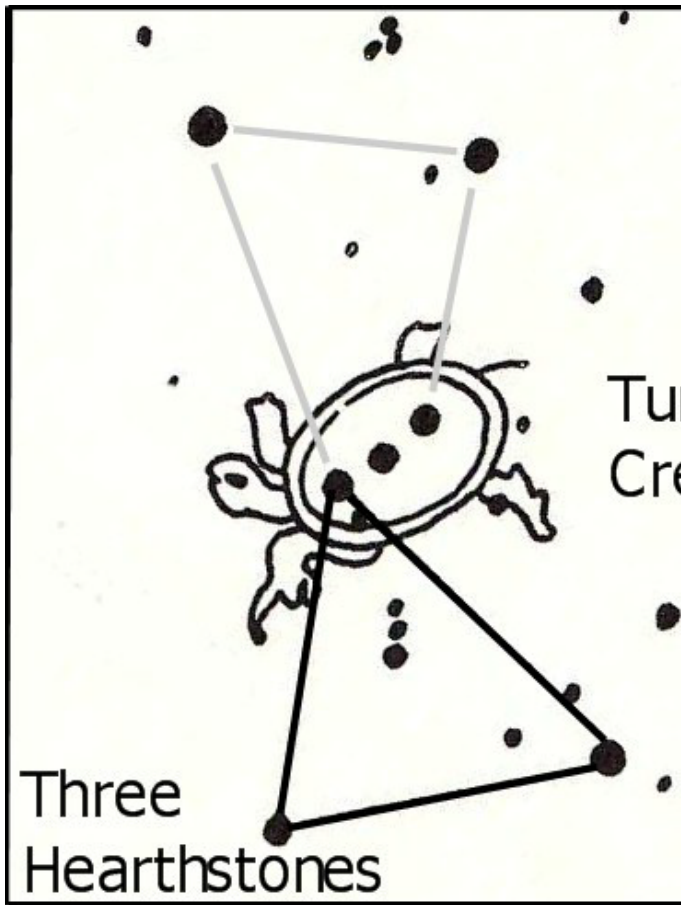
Stargazer

August 12, 2011
Stargazer #562

Constellations

When we peer into the night sky we see stars, planets, the Moon, meteors and other beautiful heavenly bodies. And with a little imagination, we can also “see” a variety of animate and inanimate objects as constellations formed by imaginary lines between some of the brighter stars.

The practice of creating imaginary figures from the stars goes back unknown thousands of years, and has likely been done by many, if not most, peoples of the world. What was seen, of course, reflected the life and experiences of those whose imaginations made them up. Where the Greeks saw a hunter, the Maya saw a Maize God-bearing turtle and the hearthstones of creation. And for all we know, Africans might have seen a zebra, South Americans a snake, Asians a temple, or Australians a kangaroo.



Left image: Orion the Hunter as seen by the Greeks (illustration: Urania's Mirror, London, c. 1825). Right diagram: In the same star field, the Maya saw the Three Hearthstones and Turtle of Creation (illustration: Maya Cosmos, David Freidel, Linda Schele & Joy Parker, 1993)

Since 1930, the International Astronomical Union has recognized 88 official constellations, 48 of which come from antiquity. Some likely came from the Sumerians who might have handed them

down to the Babylonians, who, in turn, bequeathed them to the Greeks., and eventually to us. And who knows what sky lore and knowledge the Sumerians might have inherited from their ancestors. Since these civilizations lived in the Northern Hemisphere, the constellations they invented were only in the parts of the night sky they could see.

The remainder of today's constellations, mostly those seen from deep within the Southern Hemisphere, were created by Europeans when they began exploring previously unknown (to them) parts of the world. When they saw new stars, they invented European-oriented constellations, like a telescope, microscope, compass, and clock.

How I wish they had been less ethnocentric and inquired of the indigenous populations they encountered what they saw in the sky. Our knowledge of this aspect of other ancient cultures, including Native Americans, is quite limited. Imagine how much richer our night sky lore and imagery would be if we also knew how others from around the world had seen the night sky.

Even so, no one with any imagination should find the night sky boring as it is filled with people, animals, mythical creatures, and inanimate objects. Among the people are Andromeda the Princess, Aquarius the Water Carrier, Auriga the Charioteer, Bootes the Herdsman, Cassiopeia the Queen, Cepheus the King, Gemini the Twins (Pollux and Castor), Hercules the Strongman, Indus the American Indian, Ophiuchus the Serpent Bearer, Orion the Hunter, Perseus the Hero, and Virgo the Virgin.

Non-human animals include many kinds of birds, several dogs and fish, three snakes, two lions, two bears, a ram, giraffe, crab, chameleon, dolphin, lizard, rabbit, wolf, lynx, scorpion, bull, colt, fox, and even a fly. Mythical critters include two centaurs, a dragon, seagoat, unicorn, sea monster, and a flying horse.

The plethora of inanimate objects could make for the mother of all garage sales. They include an air pump, alter, engraving tool, drawing compasses, two crowns, cup, cross, furnace, clock, scales, musical lyre, microscope, carpenter's square, octant, painter's easel, mariner's compass, reticle, arrow, sculptor's tool, shield, sextant, telescope, and two triangles. And if that's not enough, there's the long beautiful hair of Queen Berenices, several parts of the great ship Argo on which Jason and the Argonauts had their adventures, and a river and a mountain.

With that much company, how could anyone ever be lonesome or bored under the night sky. But if that's not enough, I encourage you to create your own constellations. Surely you can be just as creative as the Greeks, Babylonians, Sumerians, and others of yesteryear.

IAS LIBRARY:

There is now a link on our website page for our new Multi-Media Library. Greg has built this library of a multitude of videos that are on the web. We think it will be a great addition to our library for both novices and experienced observers. Greg has many more sources to go through so the library will continue to grow. If you have comments or questions about the library please contact Greg McCauley. (Contact Greg via the webpage iasindy.org under the contact us section

IAS Membership Status

The following changes in membership took place in July:

Total Membership: 151

Renewals: 17

New student members: 0

New Members: 0

Inactive status:

Vincent Rizzo - Indianapolis

Chuck Devine - Indianapolis

Joseph Petersen - Paragon

Do you have a question or need?

We have established a list of members who would be willing to receive calls for help on specific objects. If you have a specific skill and would be willing to help others please contact Jeff Patterson KB9SRB@hotmail.com.

Based upon the responses we received to your intro question recently, perhaps we should add a section to the bulletin naming those members who would be willing to receive calls for help on specific subjects.

William Conner (wmtconner@att.net) - for CCD imaging and film photography.

Jeff Patterson (Contact Jeff via the webpage iasindy.org under the contact us section) –

Observatory design and construction

Eric Allen (ericandroberta@sbcglobal.net) - Telescope making and mirror grinding

Brian Murphy (bmurphy@monumentcompanies.com) - "telescope construction and collimation".

Public Outreach Programs – If you want to schedule a program at the Link Observatory or at you site, please contact the following people:

Gerald Venne is our Public Events Coordinator. He will be responsible for coordinating Public Events for the IAS. To schedule a public event contact Gerald Venne (Contact Gerald via the webpage iasindy.org under the contact us section).

He needs your help. Let Gerald know if you would like to show the public our sky. We need people to help at Link and elsewhere. It is actually a lot of fun.

If you would like to schedule the Goethe Link Observatory, please contact

John Shepherd. Contact John via the webpage iasindy.org under the contact us section)

Astro Ads

Are you changing or upgrading your equipment? Do you have or are you looking for astronomical materials and equipment? The Indiana Astronomical Society as a service to its members, will publish non-commercial ads at no charge. The ad will stay in the Bulletin for 4 months and may be renewed at the owner's request.

To place an ad, contact:

Bulletin Editor
Jeff Patterson
1780 S. Morgantown Rd.
Greenwood, IN 46143
(317) 300-0449
E-Mail: KB9SRB@Hotmail.com

For Sale

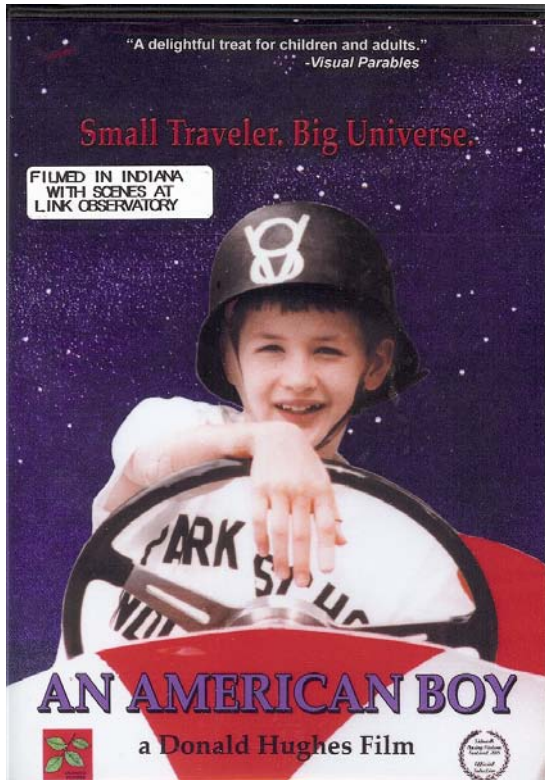
Losmandy GM-8 mount with tripod, several weights. Works great just have too many mounts. \$1000 Call Jeff Patterson at 317 506-0325 or KB9SRB@Comcast.net

For Sale

DVD OF "AN AMERICAN BOY" AVAILABLE FOR
SALE AT GOETHE LINK OBSERVATORY

For the those of you new to the Society or perhaps were unaware of this story, "*An American Boy*", produced by Wildwood Pictures & directed by Donald Hughes, retells the story of his childhood days and looks at Indianapolis in the late 1940's and includes a recreated visit to the Goethe Link Observatory, where Donald (a schoolmate of Goethe Link, Jr.) "**Meets the Universe!**" This happened in 1947 – the year before the observatory was given to Indiana University.

These DVDs are available for \$10 each and were donated to the IAS by Mr. Hughes. All the proceeds from their sale will be used to fund the "36-inch Telescope Rebuilding Project". See Tom Borlik or any IAS Officer to purchase one.



For Sale: MEADE 8" F/4.5 NEWTONIAN

Includes German Equatorial Mount with three counterweights, felt-lined mounting rings, RA and Dec slow motion controls, accessory tray and 6x30 finder scope. Eyepieces include 25mm MA and 9mm Ortho. All instruction manuals are included.

Additional Accessories:

- * Quartz RA motor drive incl battery pack
- * Polar alignment viewfinder
- * 12.5mm illuminated reticle eyepiece
- * Meade 60mm guidescope with mounting rings and 1.25" diagonal
- * 1.25" camera adapter
- * Piggyback camera bracket

Aluminized mirror has been cleaned and collimated. Optics are excellent, like new.

Telescope is in very good condition. A complete package for wide-field astrophotography and deep sky observation.

Asking \$450.00 – Call Bill at 892-2036 or e-mail at bwilhite@tds.net.

For Sale or Trade: CELESTRON HEAVY-DUTY TRIPOD, WEDGE, DRIVE, FORK ARMS

Heavy-duty tripod and wedge for the classic C8. Tripod has 2" legs that are extendable with step-locks and has a center post with an integral leg spreader. Wedge is cast iron with a hand-screw latitude adjustment. These components were built to last a lifetime and then some. I'm also including the drive base, fork arms, and power cord. This is the old-style base with the RA spur drive (no worm). The drive has slow-motion controls and setting circles and yes, it still works.

The C8 optical tube assembly is NOT included. \$300 takes all. I will also consider taking a good

wide-field eyepiece in exchange (20mm f.l. minimum). Contact bruce.bowman@tds.net or call 317-539-2753

Equipment Loan Program

The Loan Program has been helpful to those new to the hobby and others in need of observing equipment. We consider offers of equipment you may not have need for any longer.

Did you know you could borrow a scope or piece of astronomy equipment from the Society and take it for a test drive? The Society has a program where members who are trying to determine what kind of equipment to buy can borrow one of the Society's scopes for a month or two and see how they like it. Philip Dimpelfeld is the chairman of the program and can arrange for your pickup and training on the use of the particular instrument. This is a great way to see what telescope you want to purchase. We have several scopes, eyepieces and binoculars to loan. Philip Dimpelfeld **Contact via the webpage iasindy.org under the contact us section**

Board Meeting –August 23, 2011

The IAS Board Meeting is being held at 75 Executive Dr. Carmel, IN. please contact Jeff Patterson via the webpage iasindy.org under the contact us section

2011 Calendar of Meetings

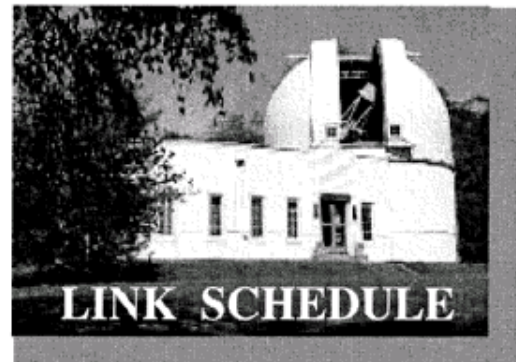
| | NAG | General | Board |
|-----------|------------|----------------|--------------|
| January | | 22-Jan | 25-Jan |
| February | | 19-Feb | 22-Feb |
| March | | 26-Mar | 29-Mar |
| April | 9-Apr | 23-Apr | 26-Apr |
| May | 7-May | 21-May | 24-May |
| June | 11-Jun | 25-Jun | 28-Jun |
| July | 9-Jul | 23-Jul | 26-Jul |
| August | 6-Aug | 20-Aug | 23-Aug |
| September | 10-Sep | 17-Sep | 20-Sep |
| October | 1 Oct | 22-Oct | 25-Oct |
| November | | 19-Nov | 22-Nov |
| December | | 17-Dec | |

Goethe Link Observatory

Observatory Address

**Goethe Link Observatory
8403 N. Observatory Lane
Martinsville, IN 46151**

Latitude: 39 degrees, 33 minutes north
Longitude: 86 degrees, 24 minutes west
Phone: (317) 831-0668



This schedule is being published to assure proper access to the Link Observatory for programs that are designed as observational, general education, astronomy conferences, or amateur research projects. Training programs are tentatively scheduled for Saturday evenings only. Although other requests can over-ride these sessions. It is the purpose of this listing to prevent activity conflicts.

If you need to acquire use of the 36-inch telescope: remember two important IAS guidelines: 1) *There has to be two or more IAS members present.....2) contact the Observatory Manager: John Shepherd* **Contact via the webpage iasindy.org under the contact us section.** DON'T WAIT UNTIL THE LAST MINUTE TO MAKE YOUR REQUEST OR YOU MAY NOT GET ACCESS.

IAS News & Views Stats

Accessing the IAS News & Views

The current bulletin can be found on the website www.iasindy.org

IAS News & Views

The monthly newsletter welcomes articles of local astronomical interest information and want ads:

Please submit to

The Indiana Astronomical Society, Inc

Jeff Patterson, editor

1780 S. Morgantown Rd

Greenwood, IN 46143

Phone: (317) 300-0449

KB9SRB@hotmail.com

Membership information Contact via the webpage iasindy.org under the contact us section

Contact any IAS officer or the Treasurer John Shepherd or Vicki Switzer

Observatory Manager

John Shepherd **Contact via the webpage iasindy.org under the contact us section**

Public Event Coordinator

Gerald Venne **Contact via the webpage iasindy.org under the contact us section**

Equipment Loan Program Coordinator

Philip Dimpelfeld **Contact Phil at philip.dimpelfeld@comcast.net**

Membership Coordinator

Vicki Switzer **Contact Vicki via the webpage iasindy.org under the contact us section**

August Calendar, 2011

For a more detailed Calendar of Events see the webpage www.iasindy.org

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|---------------------|--------|------------------------|-----------|----------|--------|--------------------------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 NAG 1 st QTR ☾ |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 Full Moon |
| 14 | 15 | 16 | 17 ○ | 18 | 19 | 20 General Meeting 8:00 PM |
| 21 3rd QTR ☾ | 22 | 23 Board Meeting | 24 | 25 | 26 | 27 Link Camp Out |
| 28 New Moon ● | 29 | 30 | 31 | | | |