



COAL SACK

EDUCATING SOUTH FLORIDA SINCE 1922

MAY 2006

GLORIOUS SOLAR ECLIPSE May Public Program

-Barb Yager

FRIDAY, MAY 19th, SOUTHERN CROSS members proudly present our dear friend, DR. MIKE REYNOLDS, renowned astronomer from Jacksonville, who will guide us through the awesome GLORIOUS SOLAR ECLIPSE—a memorable total solar eclipse witnessed by MIKE from the Greek Islands March 29th. Some of you should recall his hilarious program last July—meteor-hunting trek across Antarctica in sub-zero temperatures and hurricane winds. Join us at 8 pm, FIU Astronomy Center, CP-145, in the Physics Building, University Park, SW 109th Ave./SW 8th Street for another fun-filled adventure with DR. MIKE.

Three years ago, MIKE & Family returned to Jacksonville from Oakland, California where he was Executive Director of the famed Chabot Space & Science Center,

and Planetarium Director, for 10 years. He has spent about 30 years devoted to astronomy and space sciences: as university and high school instructor, guest speaker at our famous SCAS Winter Star Party, Annual ALCON, the Astronomical League's National Convention and a multitude of astronomy clubs, and has been honored by many prestigious awards. Several years ago he was a National Finalist in the NASA Teacher-in-Space program and received the Florida State Teacher-of-the Year award. We hope he will bring a few of his latest publications: "Falling Stars" and "Binoculars in Astronomy." MIKE has a

vast collection of meteorites and is a pro when it comes to locating them in strange territories!

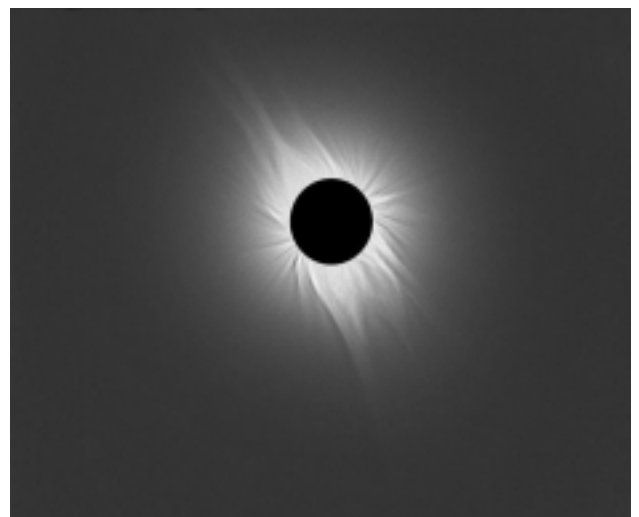
This year MIKE had been plagued with a pinched nerve in his back which resisted any prescription pain-killers. With slow improvement, he managed to participate and record the GLORIOUS SOLAR ECLIPSE from Greece. He recently accepted the position as Dean of Mathematics and Natural Science at Florida Community College—60,000 students—where he had been Professor of Astronomy. His wonderful sense of humor will attract every one!

Bring family and friends to another sensational FREE SCAS program, FRIDAY, MAY 19th includes prizes, food buffet, lively Q & A, and the best astronomy programs with the TOP GUNS from SCAS and FIU who can help you launch a great family hobby. The FIU Physics Building is located in the NE area of University Park, opposite the large campus parking lot SW 109th Ave./SW 8th St. Call SCAS Hotline: 305-661-1375 or www.scas.org

Inside this issue:

MaY program
page 1
members
Page 3
almanac
Page 4
star map
page 5
april events
Page 6
space news
page 7

FOR SCAS/NASA NEWS
CALL THE 24-HOUR
HOTLINE:
305 661-1375
OR VISIT THE
NEW SCAS WEB SITE:
[HTTP://WWW.SCAS.ORG](http://WWW.SCAS.ORG)



Total Solar Eclipse, February 26, 1998. Photo by R. Scott Ireland. Additional information and pictures can be found at www.rsiphotoc.com.

The Coal Sack

The Coal Sack is a monthly publication of the Southern Cross Astronomical Society, Inc., Miami, Florida

Editor: Lisa Merritt
Telephone: 305-412-3855

E-mail: PegasusLM@earthlink.net

Material for the Coal Sack must be submitted to the Editor by the 25th of the month prior to publication. Please use e-mail when possible.
Change of Address: Please notify Managing Editor Barb Yager with change of address or other membership information.

SOUTHERN CROSS ASTRONOMICAL SOCIETY, INC.

President	Dr. Lester Shalloway	305 233-9354
1 st Vice President	Nick Stingone	305 247-3054
2 nd Vice President	Tim Khan	305 301-9946
3 rd Vice President	Mike Smith	305 383-3021
Secretary	Barb Yager	305 273-7291
Treasurer	Boris Ortiz	305 230-9992
Parliamentarian	Ric Babcock	786 243-2486
Programs/Publicity	Barb Yager	305 273-7291
Education	Mike Smith	305 383-3021
Coal Sack Editor	Lisa Merritt	305 412-3855
Membership Dept.	SCAS	305 661-1375
Hospitality	Maria Sarria	305 891-3842
Librarian	Paul Buscher	305 386-7839
Historian	Ric Babcock	786 243-2486
Benevolent	Sharon Grant	305 595-8778
Light Pollution Liaison	Bob Torres	305 232-3990
WSP Registrars	Fred & Lucille Heinrich	386-362-5995
Members Star Party		
Directors:	Herm Perez	305-261-8817
	Tim Khan	305-301-9946

COMMITTEE CHAIRMEN

Observatory	Bob Torres	305 232-3990
WSP Registrars	Fred & Lucille Heinrich	386 362-5995
WSP Director	Tim Khan	305-301-9946

Check the larger SCAS STARGAZER now in the Thursday Miami Herald's Tropical Life section, by Barb Yager, now in its 22th year!

CLASSIFIED

NEW WEBSITE/NEWSLETTER

Please visit Coal Sack editor Lisa Merritt's new website, www.pegasuswriter.com, and sign up for our free monthly newsletter for non-profits and fundraising professionals, or browse our ebook selection.

NEW EYE-PIECE SALE! University Optics MK-70, 2" 40mm eye-piece. \$150. Vixen Lanthanum 2" or 1 1/4" 17mm eye-piece, 65 degree field. \$150. Call Chris: 305-776-1559 anytime.

THE ART OF COLLECTING METEORITES, an in-depth 232-pg. entertaining guide-book with color photos and references by astronomer/explorer Kevin Kitchinka who describes this exciting and educational hobby based on his adventures in the Andes and his friendships with renowned scientists and collectors. Only \$10.00 ! Call: 305-661-1375.

SUPER IMAGING OFFER!

Do you have top-quality solar/celestial images & photos? SCAS member LARRY APPLE, President, Associated Photo & Imaging, 19 SW 6th Street (near Miami River) has offered to enlarge your color graphics to any size (including large wall murals) FREE! Pls contact LARRY: larrya@apimaging.com or 305-373-4774/ 305-495-7709 (cel).

Send in your classified ads to PegasusLM@earthlink.net or BarbYager@aol.com

MEMBERS IN THE NEWS

-Barb Yager

DR. BILL WILLIAMS and Tony Hallas, pro astrophotographers at the Winter Star Party in the Florida Keys, captured an incredibly beautiful view of Carina Nebula rising out of the Atlantic, the Milky Way and Sirius, on p. 98 of June Sky & Telescope magazine....JIM ROSE attended the Lakeland Top Gun Event with his flying friends April 27-30th. The annual event attracts about 100 model pilots to the Lakeland Municipal Airport where they fly their pricey "hand-painted flying machines" in several classifications, maneuvers and competitions, based on absolute accuracy resembling civilian and WarBirds from WW I and II and some latest jets. National judges award \$1,000. to the first prize winners of each division: acrobatic performance, exact replicas by skilled craftsmanship, flying expertise, all radio-controlled. Some model aircraft weigh 50 lbs. and have 10 ft wingspan. JIM recalled the event ended with an unexpected mid-air collision!...LEW GRAMER, marine scientist and astronomer, just returned from an exhausting week-long trip to monitor the Puerto Rican coral reefs. He spent 3 10-hr. days 2 miles offshore in a small research boat alternately snorkeling down 20 ft. and shimmying up a 20 ft. fiberglass tube covered with solar panels, very expensive scientific sensors that measure temp., humidity, water salinity, light, tide, UV rays and CO2 in the water. Data is uploaded hourly via the GOES satellite and the sat antenna/transmitter...BILL WILLIAMS and SERGIO FIGUERA attended the April Star Party & Picnic at the Chiefland Astronomy Village last month...BARB YAGER was recently invited on a Press Tour of the Nat'l Hurricane Center, FIU campus. Huge, spacious rooms are crammed with computers, phones, and 8 ft. storm tracking screens. NOAA staff checks in daily with all military branches, Division of Forestry, KSC, major cruise ships, airlines, and satellites, and updates their radio forecasts. The Hurricane Tracking Room was rather quiet that day! CBS block walls, 3 ft. thick, divide the series of rooms....RIC BABCOCK, Salinas, CA, just ran his 30th Marathon in Farmington, NM and his 14th state.

NEW MEMBERS

-Barb Yager

SCAS sincerely welcomes new members: MOHAN SUNDARAM, software consultant from Miami; CRISTIAN RUIZ, salesman, and wife ESTRELLA of Palmetto Bay....and FRANCISCO LIRA, engineer, in Hialeah. We hope to meet you at our future SCAS events

IN APPRECIATION

-Claire Offemann

I want to thank my marvelous volunteers who make our WSP Young Astronomers Camp so successful. At the 2006 Winter Star Party 20 kids (3 - 15 yrs.) were taking part in scientific projects aimed at this year's theme: The Planets. Also Dr. Story Musgrave, retired NASA astronaut, visited with our Young Astronomers. My heartfelt thanks to: Elaine Biondo, MI-MaryAnn Feller, NY-Kevin Lane, NY-Joan Summerfield, PA-Ron Poller and George Tegzes, FKAC. Looking forward to our next Young Astronomers Camp with all of you!



Another day at the office for SCAS member Lew Grammar, NOAA scientist, atop his monitoring station in Puerto Rico.

MAY ALMANAC AT A GLANCE

FIRST QTR. Friday, 5th 1:13 a.m.
 FULL MOON Saturday 13th 2:51 a.m.
 LAST QTR. Saturday 20th 5:21 a.m.
 NEW MOON Saturday, 27th 1:26 a.m.

SUNRISE: 6:34am (mid-month) SUNSET: 8:00pm

MORNING SKIES:

4th- JUPITER, in LIBRA, lies opposite the SUN 11 a.m. brightest and closest to EARTH.
 5/6th- ETA AQUARID METEOR SHOWER peaks in the predawn hours, radiating from AQUARIUS in the south-east. Bright particles in COMET HALLEY's tail may reach 12/hr.
 Blue NEPTUNE at magn. 7.8, lies in CAPRICORNUS (SSE).
 Turquoise-colored URANUS, at a brighter 5.8 magn., lies in AQUARIUS (SE).
 7/8th- Dim COMET S-W-3 (fragment C) passes close to the Ring Nebula, LYRA near VEGA of the SUMMER TRIANGLE overhead.
 12-14th- COMET passes near the left wing tip of CYGNUS the Swan, within the TRIANGLE on its closest (7 million miles distant) pass by EARTH.
 12th- MOON floats below JUPITER.
 14th- Bright MOON near star ANTARES (red heart) of huge SCORPIUS (SW).
 16th- Moon lies in the SAGITTARIAN TEAPOT (south)-center of our Milky Way Galaxy.
 24th- Waning MOON glides near brilliant VENUS, Morning Star (SE).
 The SUMMER MILKY WAY (River of Stars) arches from the TEAPOT to the TRIANGLE.
 30th- By 5:30 a.m., VENUS (east) & JUPITER (west) are both visible near their horizons.
 VEGA leads the SUMMER TRIANGLE & CYGNUS, Swan, overhead. Dim COMET S-W-3 near VEGA first half of May.
 The GREAT SQUARE of PEGASUS rises higher in the east.
 ANDROMEDA appears in the NE.
 ARIES the Ram peers over the eastern horizon.
 The BIG DIPPER pivots around POLARIS, North Star, into N W.
 LEO the Lion crawls westward.
 CORVUS the Crow leads SPICA, VIRGO the Spring Maiden, lower in the SW.
 Huge SCORPIUS slinks into the SW.
 The SAGITTARIAN Teapot 'pours' onto the Scorpion's 'stinger' tail in the south.

EVENING SKIES: 4 planets visible late May-
 3rd- Crescent MOON floats between the GEMINI TWINS & SATURN in the west.
 Dim MARS lies below the TWINS: Castor & Pollux.
 4th- JUPITER rises in the east at sunset (at opposition) and sets in the west at dawn.
 FIRST QTR. MOON aligns with SATURN & the BEEHIVE

star cluster in CANCER.
 10th- Bright MOON lies near SPICA in VIRGO (SE).
 11th- Bright MOON lies beside golden JUPITER (east).
 13th- Dim COMET S-W-3 cruises closest to EARTH, below the wing tip of CYGNUS.
 Mid-evening, the Full MOON leads SCORPIUS in SE horizon.
 27th- In early evening dusk, tiny MERCURY & a sliver of a young MOON appear briefly on the WNW horizon.
 28th- The northernmost young MOON floats above MERCURY low NW.
 30th- The crescent MOON floats between dim MARS and the GEMINI TWINS, WNW.
 31st- The crescent MOON nudges the BEEHIVE cluster near SATURN in CANCER.

Moon Set/Rise Table for MAY/JUN

Date (m/d)	Moon Rise	Moon Set
15/5/2006	22:47	8:09
16/5/2006	23:44	9:08
17/5/2006	—	10:13
18/5/2006	0:36	11:19
19/5/2006	1:22	12:25
20/5/2006	2:02	13:29
21/5/2006	2:38	14:32
22/5/2006	3:12	15:34
23/5/2006	3:46	16:37
24/5/2006	4:22	17:41
25/5/2006	5:00	18:46
26/5/2006	5:43	19:53
27/5/2006	6:31	20:58
28/5/2006	7:25	21:59
29/5/2006	8:23	22:53
30/5/2006	9:23	23:40
31/5/2006	10:22	—
1/6/2006	11:18	0:20
2/6/2006	12:13	0:55
3/6/2006	13:04	1:26
4/6/2006	13:55	1:55
5/6/2006	14:45	2:22
6/6/2006	15:37	2:50
7/6/2006	16:30	3:19
8/6/2006	17:27	3:51
9/6/2006	18:28	4:27
10/6/2006	19:31	5:10
11/6/2006	20:35	6:00
12/6/2006	21:36	6:58
13/6/2006	22:31	8:02
14/6/2006	23:20	9:10

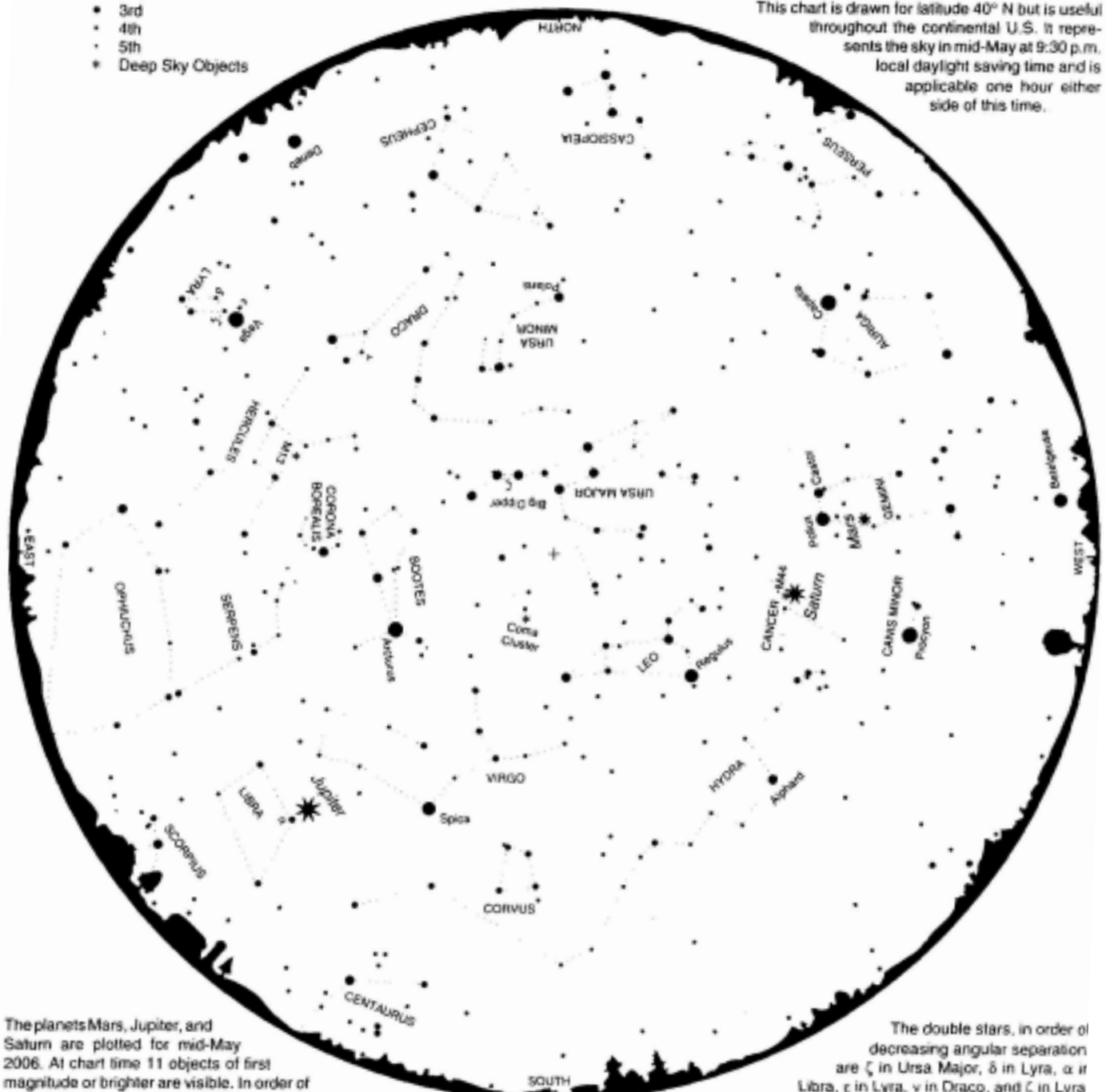
May Evening Skies

LEGEND
Star Magnitudes

- Zero or brighter
- 1st
- 2nd
- 3rd
- 4th
- 5th
- * Deep Sky Objects

© 2006 Abrams Planetarium
 Subscription: \$11.00 per year, from *Sky Calendar*,
 Abrams Planetarium, Michigan State University,
 East Lansing, MI 48824-1324.

This chart is drawn for latitude 40° N but is useful throughout the continental U.S. It represents the sky in mid-May at 9:30 p.m. local daylight saving time and is applicable one hour either side of this time.



The planets Mars, Jupiter, and Saturn are plotted for mid-May 2006. At chart time 11 objects of first magnitude or brighter are visible. In order of brightness they are: Jupiter, Arcturus, Vega, Capella, Saturn, Procyon, Betelgeuse, Spica, Pollux, Deneb, and Regulus.

Our usual monthly maps are designed for stargazers just beginning to find their way around the sky. This month's map is useful for serious stargazing from dark locations. It contains many more stars, inclusive to magnitude 4.5, and some fainter stars as needed to complete patterns or assist in locating special objects.

A selection of double stars (labeled with Greek letters) and "deep sky objects" is also plotted. All are visible with modest equipment; most are within the range of the unaided eye or binoculars.

The double stars, in order of decreasing angular separation are ζ in Ursa Major, δ in Lyra, α in Libra, ε in Lyra, ν in Draco, and ζ in Lyra

Two open or galactic clusters are noted. The Coma Cluster is a loose group of naked-eye stars below the handle of the Big Dipper. The Beehive or Praesepe (M44), near Saturn in Cancer, is much more compact, resembling a hazy patch of light.

The Hercules Cluster (M13) appears still more compact. It is a fine example of a globular cluster: a dense concentration of about a million stars.

APRIL EVENTS

Chekika E. Everglades-

No fooling! Saturday April 1st SCAS members participated in the Partial Re-Opening Event of Chekika E. Everglades. Mike Smith and Mike Mooney were in charge of the popular solarviewing set up for dozens of excited visitors. Judy Elkins rode her bike from the Redlands and had energy left over to help me at our SCAS table piled up with exhibits. Mike Smith, Mike Mooney and Jim Rose were in charge of solarviewing. It was great to meet folks from civic clubs, members of the Everglades Trust and the new Deputy Supt. of Everglades National Park who is planning to meet with SCAS to organize public events at Chekika next winter, when ENP expands their facilities.

FIU Spring Star Party-

The Dept. of Physics held their Annual Spring Star Party to celebrate the end of their semester Friday, April 14th at their telescope deck by the Physics Building University Park. On a beautiful Spring evening, the deck suddenly was packed with visitors,

students & faculty. SCAS members/FIU research astronomers Dr. James Webb and Dr. Walter van Hamme supervised the event, assisted by Lab tech Mike Smith and SCAS scholarship winner Greg Azarnia. More than 100 enthusiastic visitors enjoyed views of Jupiter, Saturn, Orion's Nebula to the guitar folk music composed and sung by Dr. Webb.

Earth Day Celebration-

Following an awesome SCAS astronomy program by Bill Williams at FIU Friday evening, Mike Smith and I trekked out to Crandon Park, Key Biscayne early Saturday 22nd to Celebrate Earth Day. Miami-Dade Parks & Recreation Dept. invited SCAS again to the spacious Marjorie Stoneman Douglas-Biscayne Nature Center. Hundreds of youngsters arrived to make colorful flower garlands from recycled material and repeatedly returned to our SCAS exhibit in the attractive patio to catch another view of the powerful explosions blasting off the solar surface seen in Mike's impressive solar equipment.

FL KEYS ASTROS

The Florida Keys Astronomy Club (FKAC) plan to have public Star Parties at Bahia Honda State Park to view the heavenly objects near our southern horizon: Southern Cross, Omega Centauri and Carina-May 26/27th, June 2/3rd -23/24th. To confirm: call Pres. George Tegzes: 305-872- 9848 www.fkac.com

FL Keys Earth Day

by George Tegzes

David Heeschen, Ron Poller, and I participated in this year's Earth day festivities at the park with our usual solar program. Our club's program was a combination of three instruments for solar observation. There was a Coronado 60mm hydrogen alpha scope brought by David that was giving great views of the sun's prominences. Ron brought a six-inch Newtonian with a white light filter to show the sunspots. Several were visible, and the scope was powered with a solar panel to help show the energy available from the sunlight. The panel was on loan from a local solar enthusiast called Solar George. I brought a solar spectroscope and was able to show people the absorption bands from the chemicals in the solar atmosphere. We had plenty of visual aids to help explain the views to the hundreds of people who showed up for the well-publicized event. Estimates of 600 people attending were made, and there was not five minutes to rest

from 9:00am to 2:00 pm. We were worn out at the end. The club donated two planispheres for the kid's prize drawing, and there were plenty of kids there. There is little doubt that some of them were inspired by the display, because you could here the ohhs and ahhs when they looked at the sun's image in the telescopes. Some of the young ones were there so long their parents had to pull them away. Quite a few came back for a second look. Watching the people get their first looks, and seeing the joy on their faces, reminded me that we have the club not just to have more observing ourselves, but to share the wonder with the world. (photo below by George Tegzes)



Spectacular views in binoculars!

Brilliant blue SIRIUS (nearest star) sparkles in the BIG DOG low SW.
PROCYON, Little Dog, twinkles between SIRIUS and SATURN west.

Bright CAPELLA, AURIGA the Charioteer, lies low NW.

BIG DIPPER hangs in the north.

Bright ARCTURUS, Herdsman, sparkles overhead.

LEO the Lion crawls west of Zenith.

CORVUS the Crow flies ahead of SPICA, VIRGO Spring Maiden, SE.

OMEGA CENTAURI, globular star cluster, shimmers low in the south, below SPICA.

Golden JUPITER & its Moon System rise in LIBRA (east).

In the NE, VEGA brings the SUMMER TRIANGLE toward the Zenith .

CYGNUS the Swan soars within the TRIANGLE.

Huge SCORPIUS rises in SE.

SPACE NEWS

JUPITER-

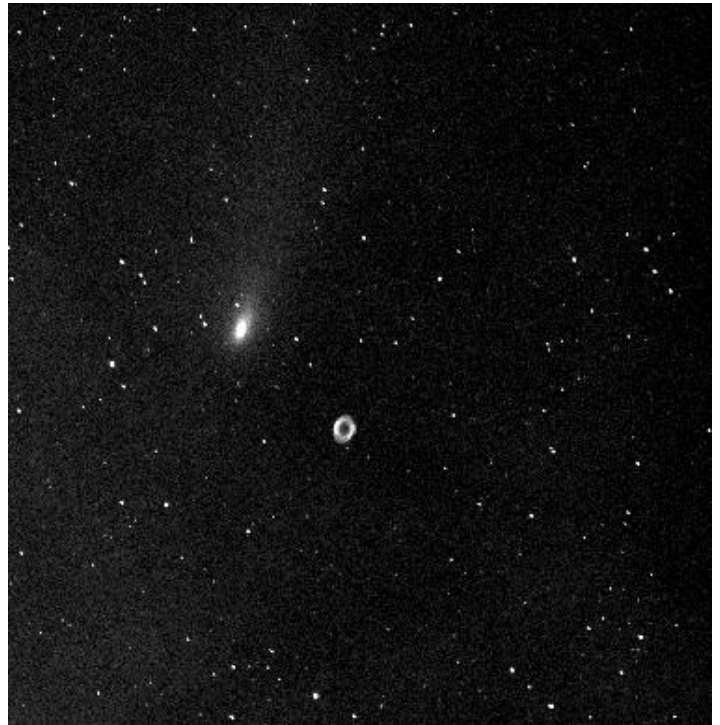
The King of the Planets reached opposition to the Sun May 4th, shining at its brightest in the east after sunset, and bringing it closest (410 million miles) to Earth this month. It's perfect position allows for the best observing of turbulent storm bands that encompass the planet and four closest satellite Moons that constantly swing around it. Simple backyard telescopes will reveal intriguing details as the planet rotates about every 10 hrs.

ETA AQUARID METEORS-

The Eta Aquarid Meteors may be visible from April 20-mid-May zipping from the southeast. The "shower" maxes out in the predawn of May 6th when 8-20 meteors per hour could be seen, since Aquarius remains low to the southern horizon from our N. American latitudes, and depends upon the weather conditions and your observation site. Glittering debris from the tail of long-gone Comet Halley produce bright, fast meteors radiating from the constellation Aquarius rising in the SE about 2-2:30 a.m. especially bright Earthgrazers that slowly cruise horizontally through our upper atmosphere when the radiant rises. The First Quarter Moon will not be a negative factor.

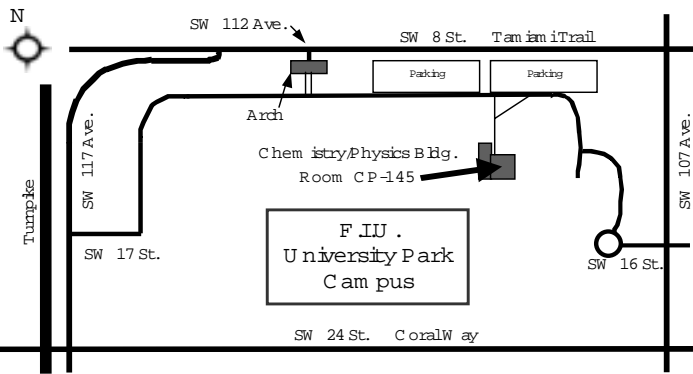
COMET 73P/SCHWASSMANN-WACHMANN-3 - Sunday, May 7th telescopes will help locate the largest fragment C of disintegrating Comet S-W-3. Look for it just below the Ring Nebula, M-57, below Vega in the Summer Triangle rising in the northeast before midnight. May 12-14th- look for it just below

the left wing-tip of Cygnus, Flying Swan, within the Triangle.

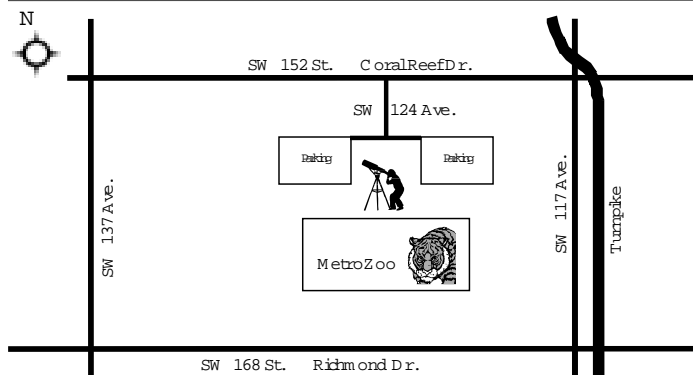


I feel fortunate to have captured Comet S-W 3 (component C) transiting the Ring Nebula from Boca Raton. Visually, it was nice in my 13-inch Dob but difficult to image because it was so low when I took my first images at 10:50PM EDT. I was shooting over oceanfront condos! The comet tail transited the Ring about 11:20PM; the coma missed by about 2-3 arcminutes. Most of the East Coast was cloudy tonight so we were lucky in southern Florida! I set up on my front dock looking northeast. photo by Bill Williams

SCAS General Meetings - Third Friday of every Month



Saturday Solar Viewing - 10am - 12noon

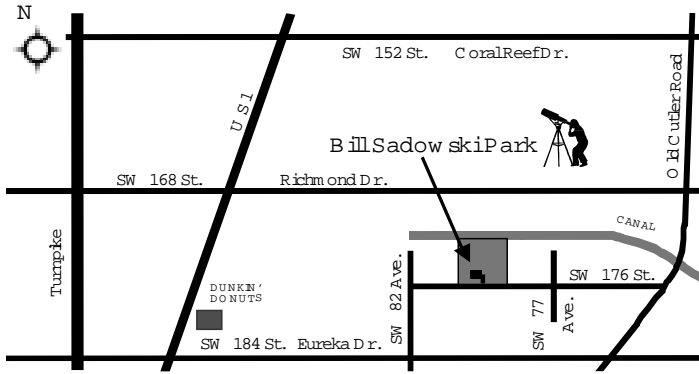


Southern Cross Astronomical Society, Inc.
 c/o 10221 SW 116 Avenue
 Miami, FL 33176
 A 501(c)(3) Non-Profit Organization
 Address corrections requested



SCAS is a member of
 The Astronomical League and
 The International Dark Sky Association

SCAS Star Gazing - Every Saturday Night 8-10pm



For SCAS/NASA News Call
 the 24-Hour HOTLINE:

305-661-1375

Or Visit the NEW SCAS website:

<http://www.scas.org>

SCAS annual dues: \$25 adults/\$10 full-time students