

SCAS COAL SACK

EDUCATING SOUTH FLORIDA SINCE 1922

JANUARY 206

MAGNETIC STORMS

January Public Program

-Barb Yager

FRIDAY, JANUARY 20th, 8 pm, Southern Cross Astros will present MAGNETIC STORMS -- a wild trip to the Earth's molten iron core 2000 miles underground where trillions of pressure and power produce an invisible shield that protect us from damaging cosmic radiation from outer space. Are the poles reversing? Join us for this incredible journey from the Hawaiian lava fields to the smoldering volcano in Oregon, to the shimmering Aurora Borealis (Northern Lights) overhead. What could happen if our magnetic field becomes too thin? Will supersonic solar winds steer deadly cosmic radiation into our atmosphere? Will geophysical upheavals or a stray asteroid affect our basic survival? What lies ahead for us Earthlings.....???

Bring friends to share this mind-blowing adventure to the center of our Earth.... and beyond! FRIDAY, JANUARY 20th, meet the Brightest Stars in Town, your friendly hosts from SCAS and FIU. The FREE SCAS astronomy programs include prizes, food buffet, lively debates, and a SkyWatch (weather permitting) on the ter-

race of the FIU Astronomy Center, Physics Building, CP-145, University Park opposite SW 109th Avenue/SW 8th Street. Accessible to the disabled. Call: 305-661-1375 or www.scas.org

NO SCAS public program in February

Friday March 17th (Martes, Marzo) the SCAS program will feature renowned astronomers DR. DON PARKER & JOSE OLIVAREZ for their MARS program (rescheduled from Oct.).

The WINTER STAR PARTY is on schedule for February 20-25, 2006!

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305 661-1375

OR VISIT THE

NEW SCAS WEB SITE:

HTTP://WWW.SCAS.ORG



Photo of Earth by NASA Apollo 17 crew. Courtesy of Astronomy Picture of the Day.

The Coal Sack

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

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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.

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Check the larger SCAS STARGAZER in the Wednesday Miami Herald's new TROPIC LIFE section, by Barb Yager, now in its 20th year!

SCAS SUPER SALE

For SCAS members: royal blue POLO shirts with white lettering front & back \$10. S - 2XL

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.

CLASSIFIED

FREE 13.1" DOBSON

A FREE 'Blue Coulter' 13.1" Dob -without primary mirror-~~secondary~~ ^{SOLD} mirror intact. Purchased in 1984, the Coulter is in very good shape. ~~Used~~ ^{SOLD} the primary in my TeleKit that is about complete). ~~FREE~~ ^{SOLD} to anyone willing to pick it up at my home in Okemos, Michigan. Interested astros email: ~~espinosa@sbcglobal.net~~ ^{SOLD} (SCAS member Len Espinosa).

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).

NEW SALE!!

NEXSTAR GPS 11" SCT for sale....Excellent optics-Carbon Fiber Optical tube-2800mm FL F/10-Starbrite Coating-9x50 finderscope-2/1.25 Stardiagonal, new hand controller-all cables-Starizona Landing Pad-Bob's Knobs-manual-12v battery. Excellent condition. \$2200.00-call Boris Ortiz 305-233-9992/Cel: 407-758-3097.

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

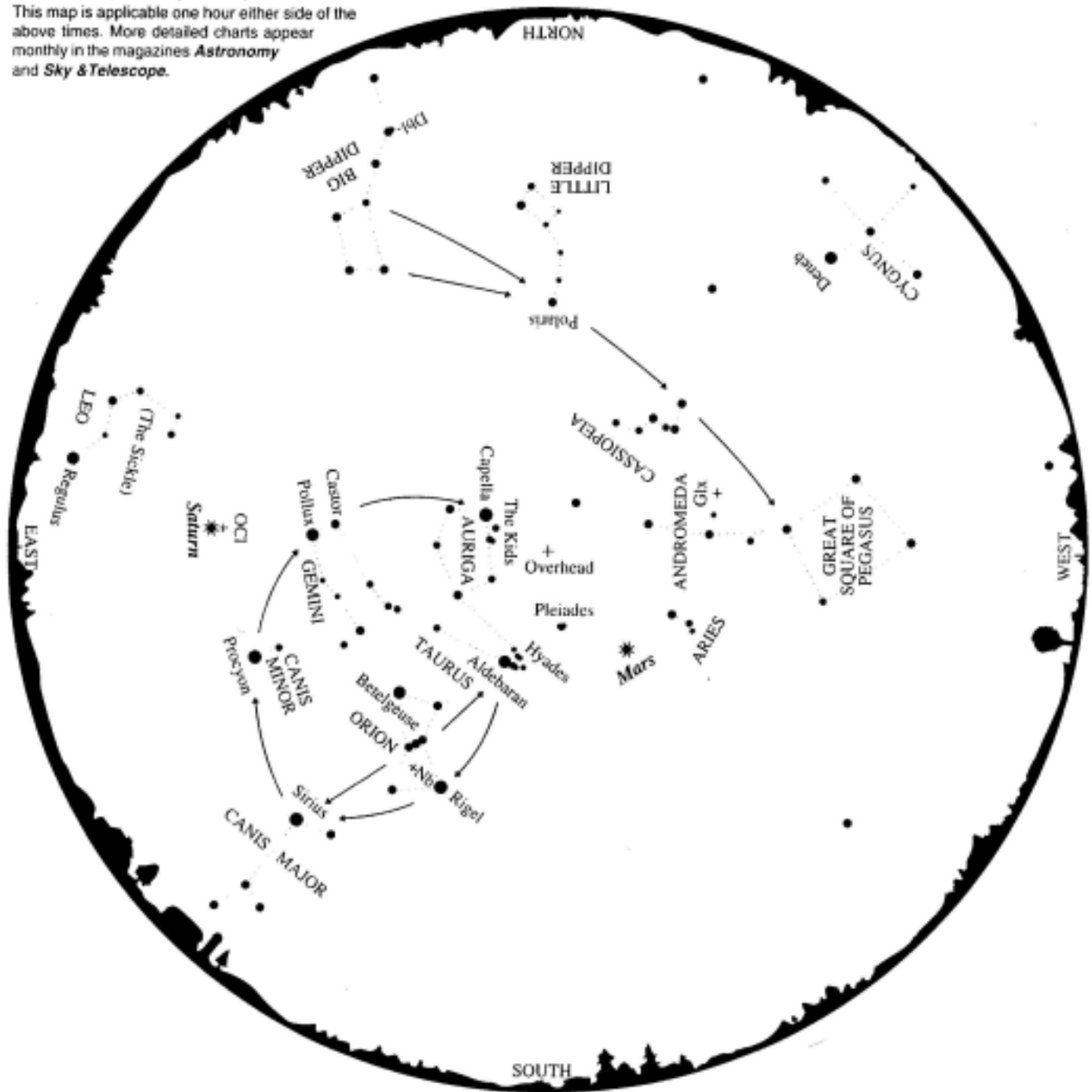
January Evening Skies

This chart is drawn for latitude 40° north, but should be useful to stargazers throughout the continental United States. It represents the sky at the following local standard times:

Late December	10 p.m.
Early January	9 p.m.
Late January	8 p.m.
Early February	7 p.m.

This map is applicable one hour either side of the above times. More detailed charts appear monthly in the magazines *Astronomy* and *Sky & Telescope*.

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



The planets Mars and Saturn are plotted for mid-January 2006. At chart time 11 objects of first magnitude or brighter are visible. In order of brightness they are: Sirius, Mars, Saturn, Capella, Rigel, Procyon, Betelgeuse, Aldebaran, Pollux, Deneb, and Regulus. In addition to stars, other objects that should be visible to the unaided eye are labeled on the map. The double star (Dbl) at the bend of the handle of the Big Dipper should be detectable. The famous

Orion Nebula, a cloud of gas and dust out of which stars are forming, is marked (Nb) in that constellation. The open or galactic star cluster (OC) known as the "Beehive" can be located between the Gemini twins and Leo. The position of an external star system, called the Andromeda Galaxy after the constellation in which it appears, is also indicated (Glx). Try to observe these objects with unaided eye and binoculars.

—D. David Batch

JANUARY ALMANAC AT A GLANCE

First Qtr. Moon Friday, 6th 1:56 p.m.
 Full Moon Saturday 14th 4:48 a.m.
 Last Qtr. Moon Sunday, 22nd 10:14 a.m.
 New Moon Sunday, 29th 9:15 a.m.

SE to NW.

FEBRUARY PREVIEW

Sunrise: 7:03 a.m. (mid-month) Sunset: 5:58 p.m.
 Latest sunrise occurs 7:10 a.m. January 9th.
 3/4th- Quadrantid Meteor Shower- radiating from north.
 Max occurs at noon.
 4th- Earth orbits closest to the Sun (perihelion) by 91.4 million miles, 10 a.m. EST.

5th- First Qtr. Moon
 12th- Full Moon
 14th- Mercury/Uranus 1/2 degree apart in the SW
 17th- Venus at its brightest -4.6 magn. at dawn in the SE.
 21st- Last Qtr. Moon
 23rd- Mercury at its highest altitude of 18 degrees in SW.
 Zodiacal Light may be visible in the west 1 hour after sunset.
 27th- New Moon

MORNING SKIES:

2 a.m. - Jupiter rises in the SE against the stars of Libra.
 Mid-month- Venus appears on the SE horizon-to the upper right of the rising Sun.
 Saturn drifts westward and sets around sunrise.
 Mars sets in the west in the predawn.
 The Big Dipper hangs in the north. Arcturus, Herdsman, sparkles overhead, beyond the Dipper's handle. Leo the Lion crawls westward. Corvus the Crow flies across the south, followed by the star Spica in Virgo, and golden Jupiter in Libra.
 Omega Centauri, famous globular cluster, shimmers low in the south.
 Huge Scorpius climbs higher in the SE, with Antares-its red pulsating heart.
 Vega brings the Summer Triangle above the NE horizon.

EVENING SKIES:

Venus, Evening Star, follows the setting Sun. By mid-month becomes the Morning Star in the SE.
 Uranus in Aquarius, hugs the SW horizon.
 Mars, in Aries the Ram, moves west of Zenith and sets in the predawn. By month's end, the 'warrior planet' moves close to the Pleiades cluster.
 Saturn rises in the ENE early evening, below the Gemini Twins. The Lord of the Rings lies opposite the Sun at 6 pm. on the 27th, rising at sunset and visible all night.
 Saturn will be its brightest and closest to Earth by 755 million miles and lies close to M-44, the Beehive star cluster, in Cancer-within the same binocular field of view.
 The Great Square of Pegasus arrives at the western horizon. Cassiopeia & Andromeda swing into the NW.
 The Summer Triangle slips below the NW horizon.
 Cygnus the Swan becomes the Northern Cross. The Pleiades (Seven Sisters) cluster lead the dazzling winter constellations overhead: Taurus the Bull, Hyades star cluster, Orion the Hunter followed by his Big Dog (Canis Major) in the SE as they chase the Bull overhead blazing blue Sirius sparkles from the Big Dog's collar, Capella in Auriga, Charioteer, rolls across the NE, followed by the Gemini Twins-Castor & Pollux, as Procyon, Little Dog, shimmers in the east to signal the end of the "parade". The Big Dipper rises in the NE. Leo the Lion crawls higher in the east. The handle of the Little Dipper is 'attached' to Polaris, North Star. The Winter Milky Way arches from

Moon Set/Rise Table for JAN/FEB

Date (m/d)	Moon Rise	Moon Set
17/1/2006	20:52	9:20
18/1/2006	21:43	9:49
19/1/2006	22:33	10:16
20/1/2006	23:24	10:44
21/1/2006	—	11:12
22/1/2006	0:17	11:43
23/1/2006	1:14	12:19
24/1/2006	2:14	13:00
25/1/2006	3:18	13:50
26/1/2006	4:24	14:48
27/1/2006	5:29	15:55
28/1/2006	6:28	17:06
29/1/2006	7:21	18:19
30/1/2006	8:06	19:30
31/1/2006	8:47	20:37
1/2/2006	9:24	21:42
2/2/2006	9:58	22:45
3/2/2006	10:33	23:47
4/2/2006	11:09	—
5/2/2006	11:48	0:49
6/2/2006	12:31	1:51
7/2/2006	13:19	2:52
8/2/2006	14:11	3:49
9/2/2006	15:06	4:43
10/2/2006	16:03	5:30
11/2/2006	17:00	6:12
12/2/2006	17:54	6:49
13/2/2006	18:47	7:22
14/2/2006	19:38	7:51
15/2/2006	20:29	8:19

STORY MUSGRAVE BOOK SALE

-Bob & Lisa Smerfield

Winter Star Party special guest speaker, astronaut Dr. Story Musgrave will autograph his books: *The Way of the Water* (biography) and *Australia From Space* (64-pg. color book) filled with spectacular photographs taken by astronauts on the NASA shuttles and the ISS.

The Way of the Water retails for \$29.95 but will be discounted to \$27.00 and the *Australia From Space* that retails for \$24.95 will be discounted to \$22.00 ONLY to pre-orders received before midnight January 19th. Send no money. To reserve your book order, please email your name, address AND home phone and quantity of books to us: Astro2go@aol.com or call us: 215-831-0485. They will be waiting for you at our booth Astronomy To Go in the vendors area at the Winter Star Party.

If you cannot attend the WSP, ask a friend to pay and pick up your order. We will not mail out orders. His books are not available in regular book stores. WSP attendees will need their book in advance of his book signing scheduled late Wednesday morning.

Thank You,
Bob & Lisa

SATURDAY NITE LIVE!

-Barb Yager

On a very frosty evening, the SCAS SATURDAY NITE LIVE team almost resembled the 'March of the Penguins' at Sadowski Park, January 7th. Temperatures slid into the mid-40s by the time we departed, fortunately there was no wind blowing. Dressed in Arctic gear, we ended up with about 12 'scopes, (our SCAS teks made adjustments on 'scopes brought to the park) plus three unidentified 'scopes!

Fantastic clear skies and a bright First Quarter Moon on the heels of a strong dry cold front brought visitors in droves to the park following a two-week Holiday break. Bob Meyer arrived from Key Largo. The David Barndollars made a rare appearance, hopefully not their only one. Beautiful views of Mars, Saturn, Orion Nebula, Castor split, Moon, Cassiopeia clusters, and Beehive cluster were captured in SCAS hi-tech equipment operated by Ashley Stevens, Jim Rose, Steve Van Ryn & Family, Dave Barndollar, Paul Buscher, Tony Romero, Andres Valencia & wife Brite (Key Biscayne & Caracas, Ven.) Nick Stingone and Barb Yager were busy helping at least 80 visitors who were attracted to the dazzling winter constellations.

METEOR UPDATE

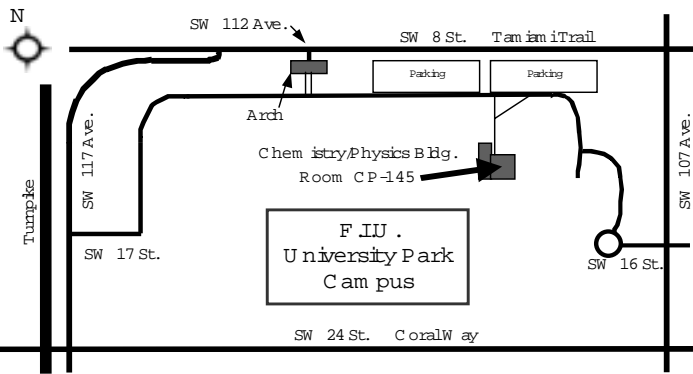
-Lew Gramer

We enjoyed a few more Winter meteors in the Everglades January 3/4th (perhaps the last good shower of the winter) despite a barrage of low-flying clouds. I got out to Pa-hay-okee Lookout in Everglades National Park around 11 pm and set up to slightly fog-hazy skies. Before long, a big ball of scud (low stratocumulus) rolled through, delaying the start of my session. I finally got going by 11:30 p.m. EST when fellow observer Mike Smith arrived by 11:45 pm.

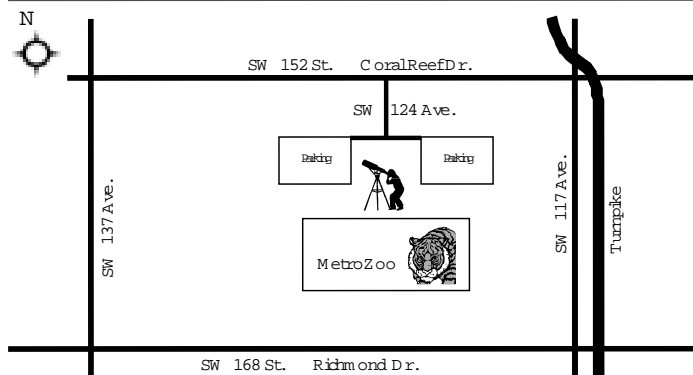
It wasn't long before those low-level cloud decks began to pass overhead again—cutting off first one area of the sky, then another. We had to take a complete break for about an hour. We watched the end of the Orange Bowl—college football game—for as always Mike arrived amply supplied with inverter-powered "comfort gear"—a small TV and microwave for coffee! We restarted our Quadrantid observations near 1 a.m. and managed to keep a 90% clear view for another 40 minutes. A cloud deck rose up and thickened overhead about 2:30 A.M.

The high QUA rates (and the brightest shower meteors) obviously had passed us by before the radiant rose over South Florida. Mike recorded with me using the IMO method. The Lookout is really a lovely place to observe from, but I must remember to bring mosquito coils out there every time, cold front or not—temps dropped from about 70-60 degrees, but "dampness" was only a slight problem near the end of the observing session. This was my first SUCCESSFUL Quadrantid observing session since the last time I lived in S. Florida full time, when I was 15 years old. Despite low counts and a short session, I was pretty happy with the results

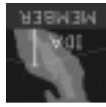
SCAS General Meetings - Third Friday of every Month



Saturday Solar Viewing - 10am - 12noon

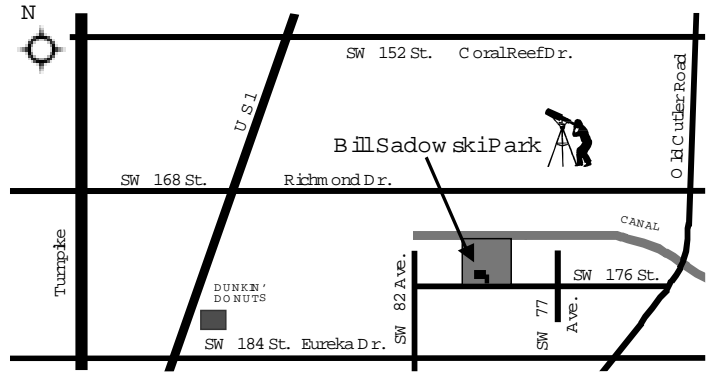


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SCAS is a member of
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SCAS Star Gazing - Every Saturday Night 8-10pm



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