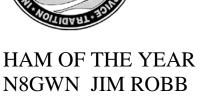
UPPER PENINSULA NET NEWS SERVING THE WESTERN GREAT LAKES





GAYLORD MI



SAULT SAINT MARIE MI

APRIL 2009

FROM THE EDITOR------BILL, N8NJA

Yes, it is very late for a newsletter, but here is the story. I was kind of busy at the end of the month and then got sick, and then the computer decided to let the smoke out. Many of you have had the experience of trying to get everything back in a new computer so you could use it. Well, I finally got enough back in so I could get this done, but there is still a long way to go. Some of it I know I will never recover.

Also a little different look to the newsletter, that is because I wanted to get in the article on sunspots that Jim, WB8IEH sent to me. I thought there would be a lot of interest in it. The envelope was because I did not have room for the back page.

Important stuff. The Cadillac Swap is Saturday May 2nd U. P. Net meeting is at 10 a.m. Hope to see you there. We will have the announcement of the New Ham of the Year, and I am sure some other good topics for discussion. One final at a boy for our out going ham of the year. Jim has been great and I know will continue to do so. Where would I be without that nice pre-net list on Saturday.

NET STATS

FEBRUARY 2009 CHECK-INS 1230 TRAFFIC 45

MARCH 2009 CHECK-INS 1370 TRAFFIC 53

TIME 34 HRS 47 MINUTES

MOST CHECK-INS MARCH 1 50 WB8VOF NET CONTROL

MOST TRAFFIC MARCH 22 4 WB8VOF NET CONTROL

UPPER PENINSULA NET WEBSITE www. michupnet.com

BIRTHDAYS AND ANNIVERSARIES APRIL 2009

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|-----|-----|--|---|-------------------------------|---------------|-----|
| | | | 1 MARSHA XYL OF W8NSH PATTI DAUGHTER OF WA8DHB | 2 | 3 | 4 |
| 5 | 6 | 7 LAURIE DAUGHTER OF KN8N | 8 | 9 LORRAINE XYL OF W8UJH | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 DON WD8PRW | 18 |
| 19 | 20 | 21 | 22 K8ZJU BEVERLEY | 23 GAIL XYL OF KD9TZ | 24 | 25 |
| 26 | 27 | 28 WA8DHB AILEEN WA8THK PERRY | 29 | 30 W8GEP GRANT | | |

EXAMS AND HAMFEST

18-Apr-2009

Sponsor: GENESEE COUNTY RADIO CLUB Time: 9:30 AM (Walk-ins allowed)
Contact: VERLE D WINNINGHAM (810)629-2633 Email: K8VW@ARRL.NET

VEC: ARRL/VEC Location: MOTT COMMUNITY COLLEGE 2100 W THOMPSON RD
SOUTHERN LAKES BRANCH CAMPUS FENTON/FLINT, MI 48430

18-Apr-2009

Sponsor: CASCADES ARS Time: 10:00AM (Walk-ins allowed)Contact: RICHARD H MC GUIRE (517)782-1430 Email: DICKKI8C@JUNO.COM VEC: W5YI VEC Location: JACKSON DISTRICT LIBRARY 244 WEST MICHIGAN DOWNSTAIRS AUDITORIUM JACKSON, MI 49204

19-Apr-2009

Sponsor: GROUP OF VE'S Time: 9:00AM (Walk-ins allowed) Contact: STEVE R SOWDER (269)648-2195 Email: SOWDER@ANDREWS.EDU VEC: ARRL/VEC Location: ANDREWS UNIVERSITY OLD HIGHWAY 31 CHAN SHUN HALL SCHOOL OF BUSINESS BERRIEN SPRINGS, MI 49120

20-Apr-2009

Sponsor: USECA ARC Time: 7:00 PM (Walk-ins allowed) Contact: JOSEPH P KENNEDY (586)977-7222 Email: N80Z@ARRL.NET VEC: W5YI VEC Location: HTTP://USECAARC.COM/TEST/ FOR IMPORTANT DETAILS MOUNT CLEMENS, MI 48043

23-Apr-2009

Sponsor: CORUNNA VE TEAM Time: 7:00PM (Walk-ins allowed)Contact: THOMAS E CARPENTER (517)579-0599 Email: KI8AS@CHARTER.NET VEC: ARRL/VEC Location: AMERICAN RED CROSS 712 CORUNNA AVE REGISTER AT 6:30 PM CORUNNA, MI 48817

25-Apr-2009

Sponsor: MCTI AMATEUR RADIO CLUB Time: 10:00AM (Walk-ins allowed)
Contact: WILLIAM A SHAW (517)369-3154 Email: KD8CYY@CBPU.COM
VEC: ARRL/VEC Location: MCTI-MICHIGAN CAREER TECH INSTITUTE.
11611 PINE LAKE RD PLAINWELL, MI 49080

25-Apr-2009

Sponsor: SOUTH LYON AREA ARC Time: 9:00 AM (Walk-ins allowed) Contact: CHRISTIAN D ANDERSON (248)437-3088 Email: K8VJ@ARRL.NET VEC: ARRL/VEC Location: WITCH'S HAT DEPOT SOUTH LYON HISTORICAL SOCIETY MCHATTIE PARK 200 DOROTHY STREET SOUTH LYON, MI 48178

02-May-2009

Sponsor: TOP OF MICHIGAN ARC Time: 9:00AM (Walk-ins allowed) Contact: CHAD W JOHNSTON (989)705-9322 Email: CHAD@NUWAYSUPPLY.COM VEC: ARRL/VEC Location: OTSEGO COUNTY PUB LIBRARY 700 SOUTH OTSEGO AVE OLD 27 SOUTH MEETING ROOM GAYLORD, MI 49735

02-May-2009

Sponsor: WEXAUKEE ARC/CADILLAC HAMFEST Time: 10:30AM (No walkins)Contact: ALAN E VAN ANTWERP (231)829-3433 VEC: ARRL/VEC Location: CADILLAC JUNIOR HIGH SCHOOL 500 CHESTNUT STREET PLEASE PRE-REGISTER SPACE LIMITED CADILLAC, MI 49601

02-May-2009

Sponsor: MT CLEMENS SAROF Time: 7:30 PM (Walk-ins allowed) Contact: WILLIAM C HEAVER (586)469-6712 Email: K8EDS@ARRL.NET VEC: ARRL/VEC Location: SALVATION ARMY CORPS 55 CHURCH ST CORNER SOUTH GRATIOT

MAY ALSO CALL: 313-526-5261 MOUNT CLEMENS, MI 48043

08-May-2009

Sponsor: GRAND RAPIDS ARA Time: 6:30 PM (Walk-ins allowed) Contact: RICHARD H DOUGLAS (616)531-6218 Email: KC8NKA@ARRL.NET VEC: ARRL/VEC Location: RED CROSS BLDG 1050 FULLER AVE NE INSTRUCTION ROOM L-4 GRAND RAPIDS, MI 49503

09-May-2009

Sponsor: CHERRYLAND ARC Time: 1:00 PM (Walk-ins allowed) Contact: R HOPE FRANCISCO (231)941-7262 Email: AA8SN@ARRL.NET VEC: ARRL/VEC Location: SALVATION ARMY BLDG, 2/24 UPGRADES AND TESTS 1239 BARLOW ST MAY ALSO CALL: 231-218-0622 AA8SN@ARRL.NET TRAVERSE CITY, MI 49686

| 18 Apr 2009 | + | Milford Swap and Shop | Highland, MI | |
|-------------|---|---|-----------------------------|--|
| | | Milford Amateur Radio Club | Milford High School | |
| | | http://www.qsl.net/w8ydk | 2380 South Milford Road | |
| | | Talk-In: 145.49 (PL 67); 146.52 (backup) | Div: Great Lakes | |
| | | Contact: Rose Moore, KC8NQJ | Sect: Michigan | |
| | | 1383 Sylvan Drive | | |
| | | Hartland, MI 48353 | | |
| | | Phone: 810-632-5174 | | |
| 2 May 2009 | + | Wexaukee Amateur Radio Club | Cadillac, MI | |
| | | http://www.wexaukeearc.org | Cadillac Junior High School | |
| | | Talk-In: 146.980 (no PL tone) | 500 South Chestnut Street | |
| | | Contact: Alton McConnell, NU8L | Div: Great Lakes | |
| | | 4189 48th Road West | Sect: Michigan | |
| | | Cadillac, MI 49601 | | |
| | | Phone: 231-862-3774 | | |
| | | Fax: 231-775-8731 | | |
| | | Email: <u>nu8l@yahoo.com</u> | | |

BEST IDEA I HAVE HEARD IN A LONG, LONG TIME !!! FROM WB8IEH

Members of Congress should be compelled to wear uniforms just like

NASCAR drivers, so we could identify their corporate sponsors.



Deep Solar Minimum

04.01.2009

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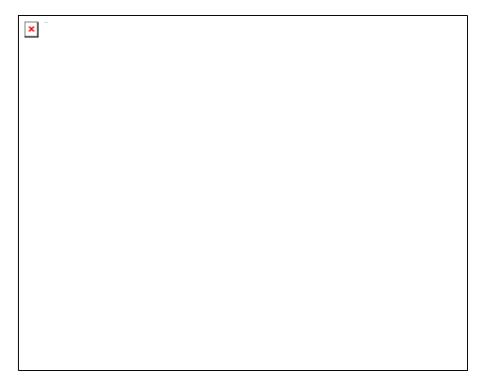
April 1, 2009: The sunspot cycle is behaving a little like the stock market. Just when you think it has hit bottom, it goes even lower.

2008 was a bear. There were no sunspots observed on 266 of the year's 366 days (73%). To find a year with more blank suns, you have to go all the way back to 1913, which had 311 spotless days: plot. Prompted by these numbers, some observers suggested that the solar cycle had hit bottom in 2008.

Maybe not. Sunspot counts for 2009 have dropped even lower. As of March 31st, there were no sunspots on 78 of the year's 90 days (87%).

It adds up to one inescapable conclusion: "We're experiencing a very deep solar minimum," says solar physicist Dean Pesnell of the Goddard Space Flight Center.

"This is the quietest sun we've seen in almost a century," agrees sunspot expert David Hathaway of the Marshall Space Flight Center.



Above: The sunspot cycle from 1995 to the present. The jagged curve traces actual sunspot counts. Smooth curves are fits to the data and one forecaster's predictions of future activity. Credit: David Hathaway, NASA/MSFC. [more]

Quiet suns come along every 11 years or so. It's a natural part of the sunspot cycle, discovered by German astronomer Heinrich Schwabe in the mid-1800s. Sunspots are planet-sized islands of magnetism on the surface of the sun; they are sources of solar flares, coronal mass ejections and intense UV radiation. Plotting sunspot counts, Schwabe saw that peaks of solar activity were always followed by valleys of relative calm—a clockwork pattern that has held true for more than 200 years: plot.

The current solar minimum is part of that pattern. In fact, it's right on time. "We're due for a bit of quiet—and here it is," says Pesnell.

But is it supposed to be *this* quiet? In 2008, the sun set the following records:

A 50-year low in solar wind pressure: Measurements by the Ulysses spacecraft reveal a 20% drop in solar wind pressure since the mid-1990s—the lowest point since such measurements began in the 1960s. The solar wind helps keep galactic cosmic rays out of the inner solar system. With the solar wind flagging, more cosmic rays are permitted to enter, resulting in increased health hazards for extrapouts. Weaker solar wind also means fower gasmagnetic starms.



astronauts. Weaker solar wind also means fewer geomagnetic storms and auroras on Earth.

A 12-year low in solar "irradiance": Careful measurements by several NASA spacecraft show that the sun's brightness has dropped by 0.02% at visible wavelengths and 6% at extreme UV wavelengths since the solar minimum of 1996. The changes so

far are not enough to reverse the course of global warming, but there are some other significant side-effects: Earth's upper atmosphere is heated less by the sun and it is therefore less "puffed up." Satellites in low Earth orbit experience less atmospheric drag, extending their operational lifetimes. Unfortunately, space junk also remains longer in Earth orbit, increasing hazards to spacecraft and satellites.



Above: Space-age measurements of the total solar irradiance (brightness summed across all wavelengths). This plot, which comes from researcher C. Fröhlich, was shown by Dean Pesnell at the Fall 2008 AGU meeting during a lecture entitled "What is Solar Minimum and Why Should We Care?"

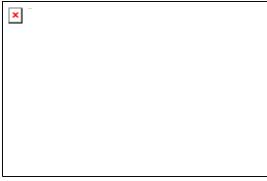
A 55-year low in solar radio emissions: After World War II, astronomers began keeping records of the sun's brightness at radio wavelengths. Records of 10.7 cm flux extend back all the way to the early 1950s. Radio telescopes are now recording the dimmest "radio sun" since 1955: plot. Some researchers believe that the lessening of radio emissions is an indication of weakness in the sun's global magnetic field. No one is certain, however, because the source of these long-monitored radio emissions is not fully understood.

All these lows have sparked a debate about whether the ongoing minimum is "weird", "extreme" or just an overdue "market correction" following a string of unusually intense solar maxima.

"Since the Space Age began in the 1950s, solar activity has been generally high," notes Hathaway. "Five of the ten most intense solar cycles on record have occurred in the last 50 years. We're just not used to this kind of deep calm."

Deep calm was fairly common a hundred years ago. The solar minima of 1901 and 1913, for instance, were even longer than the one we're experiencing now. To match those minima in terms of depth and longevity, the current minimum will have to last at least another year.

In a way, the calm is exciting, says Pesnell. "For the first time in history, we're getting to see what a deep solar minimum is really like." A fleet of spacecraft including the Solar and Heliospheric Observatory (SOHO), the twin STEREO probes, the five THEMIS probes, Hinode, ACE, Wind, TRACE, AIM, TIMED, Geotail and others are studying the sun and its effects on Earth 24/7 using technology that didn't exist 100 years ago. Their measurements of solar wind, cosmic rays, irradiance and magnetic



fields show that solar minimum is much more interesting and profound than anyone expected.

Above: An artist's concept of NASA's Solar Dynamics Observatory. Bristling with advanced sensors, "SDO" is slated to launch later this year--perfect timing to study the ongoing solar minimum. [more]

Modern technology cannot, however, predict what comes next. Competing models by dozens of top solar physicists disagree, sometimes sharply, on when this solar minimum will end and how big the next solar maximum will be. Pesnell has surveyed the scientific literature and prepared a "piano plot" showing the range of predictions. The great uncertainty stems from one simple fact: No one fully understands the underlying physics of the sunspot cycle.

Pesnell believes sunspot counts will pick up again soon, "possibly by the end of the year," to be followed by a solar maximum of below-average intensity in 2012 or 2013.

But like other forecasters, he knows he could be wrong. Bull or bear? Stay tuned for updates.

SEND THIS STORY TO A FRIEND

Author: Dr. Tony Phillips | Credit: http://science.nasa.gov/

more information

Solar Wind Loses Power, Hits 50-year Low -- (Science@NASA)

Spotless Sun: Blankest Year of the Space Age -- (Science@NASA)

NASA Heliophysics Science Mission Directorate

Explore the Entire Region of the Sun's Influence with NASA's Heliophysics Virtual Observatories

Space weather resources: NOAA Space Weather Prediction Center, Solar and Heliospheric Observatory, Spaceweather.com

NASA's Future: US Space Exploration Policy