SPACE WEATHER
Current Conditions

## Solar Wind


speed: 361.6 km/s density: 5.2 protons $/ \mathrm{cm}^{3}$
explanation | more data
Updated: Today at 1447 UT

## X-ray Solar Flares

6-hr max: B1 0910 UT May05 24-hr: B1 0325 UT May05 explanation | more data Updated: Today at 1445 UT

Daily Sun: 05 May '06


None of these sunspots pose a threat for strong solar flares. solar flares. Credit: SOHO/MDI.

Sunspot Number: 50
What is the sunspot number? Updated: 04 May 2006

Far Side of the Sun
 This holographic image reveals no large spots on the far side of the sun. Image credit: SOHO/MDI

Interplanetary Mag. Field
$\mathrm{B}_{\text {total }} 5.3 \mathrm{nT}$
$\mathrm{B}_{\mathrm{z}}: 0.7 \mathrm{nT}$ north
explanation | more data
Updated: Today at 1447 UT

## Coronal Holes:



## What's Up in Space -- 5 May 2006 <br> Subscribe to Space Weather News

Roses. Candy. Spatulas? Make that the stars:
Spaceweather PHONE for Mother's Day.
METEOR SHOWER: Earth is about to pass through a stream of dust from Halley's Comet, and this will produce the annual eta Aquarid meteor shower. It peaks on Saturday morning, May 6th: full story.

RED JR: Months after amateur astronomers discovered Jupiter's new red spot, Red Jr. has been photographed by the Hubble Space Telescope. It was worth the wait:


This wonderfully detailed image reveals a storm wider than Earth swirling around a turbulent brick-red core. Red Jr. is about half the size of its legendary cousin, the Great Red Spot. Both are visible in backyard telescopes this month as Jupiter executes a close encounter with Earth.

Last year Red Jr. was a different color: white. What happened? Researchers aren't sure what turned Red Jr. red. Some believe it is a sign of climate change on the solar system's biggest planet: more.

COMET OUTBURST: Fragment B of dying comet $73 \mathrm{P} / \mathrm{Sch}$ wassmann Wachmann is undergoing another outburst. Its brightness has jumped nearly 4 -fold ( 1.5 visual magnitudes) during the past week.

View archives:

## May

05

## 2006

## view



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## Geomagnetic Storms:

Probabilities for significant disturbances in Earth's magnetic field are given for three activity levels: active, minor storm, severe storm
Updated at 2006 May 042203 UTC
Mid-latitudes

|  | $\mathbf{0 - 2 4} \mathbf{~ h r}$ | $\mathbf{2 4 - 4 8} \mathbf{~ h r}$ |
| :---: | :---: | :---: |
| ACTIVE | $25 \%$ | $40 \%$ |
| MINOR | $15 \%$ | $20 \%$ |
| SEVERE | $05 \%$ | $10 \%$ |

High latitudes

|  | $\mathbf{0 - 2 4} \mathbf{~ h r}$ | $\mathbf{2 4 - 4 8} \mathbf{~ h r}$ |
| :---: | :---: | :---: |
| ACTIVE | $30 \%$ | $30 \%$ |
| MINOR | $20 \%$ | $30 \%$ |
| SEVERE | $10 \%$ | $15 \%$ |



Above: Bursting fragment B on May 2nd. Photo credit: Rolando Ligustri of Talmassons, Italy.

The cause of the outburst: Fragment B is falling apart, as shown in this photo from amateur astronomer Stefan Seip. When pieces fall off, fresh veins of ice and dust are exposed to sunlight, causing the ensemble to brighten.

Fragment B now glows like an 7th magnitude star and is an easy target for backyard telescopes. Look for it in the constellation Hercules around midnight.

Sky maps: May 5, May 6, May 7, May 8.

## Near-Earth Asteroids

Potentially Hazardous Asteroids (PHAs) are space rocks larger than approximately 100 m that can come closer to Earth than 0.05 AU . None of the known PHAs is on a collision course with our planet, although astronomers are finding new ones all the time.

## On 5 May 2006 there were 785 known Potentially Hazardous Asteroids

May 2006 Earth-asteroid encounters

| ASTEROID | DATE <br> (UT) | MISS <br> DISTANCE | MAG. | SIZE |
| :--- | :---: | :---: | :---: | :---: |
| 2006 HU50 | May 4 | 3.8 LD | 17 | $\sim 50 \mathrm{~m}$ |
| 2006 HX57 | May 6 | 3.0 LD | 16 | $\sim 45 \mathrm{~m}$ |
| Comet 73P-C | May 12 | 31 LD | 4 | $\sim 1 \mathrm{~km}$ |
| 2006 GY2 | May 16 | 6.7 LD | $13+$ | $\sim 0.8 \mathrm{~km}$ |

Notes: LD is a "Lunar Distance." $1 \mathrm{LD}=384,401 \mathrm{~km}$, the distance between Earth and the Moon. 1 LD also equals 0.00256 AU. MAG is the visual magnitude of the asteroid on the date of closest approach.

