

SOHO



years

1995 • 2005

SLUNCE

- Průměr: 1 400 000 km
- Hmotnost: $1,989 \times 10^{30}$
- Doba otočení kolem osy: 25 dní, resp. 36 dní
- Teplota povrchu: 5 700 K
- Teplota jádra: 15 000 000 K
- Chemické složení: 92,1% H, 7,8% He, 0,061% O, 0,03 C



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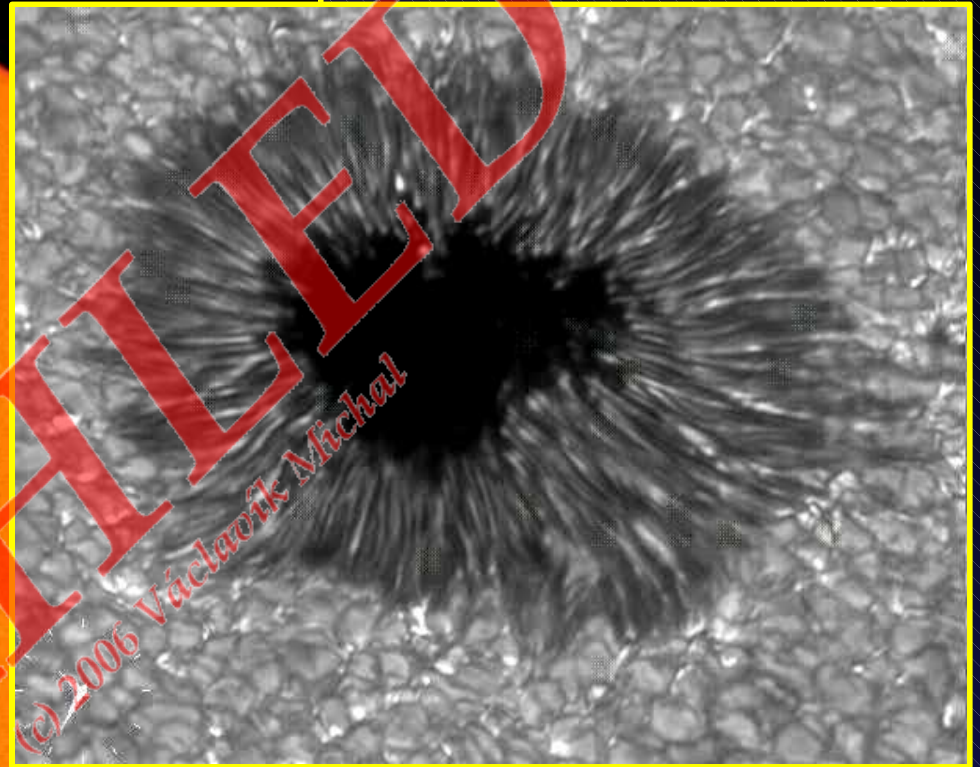
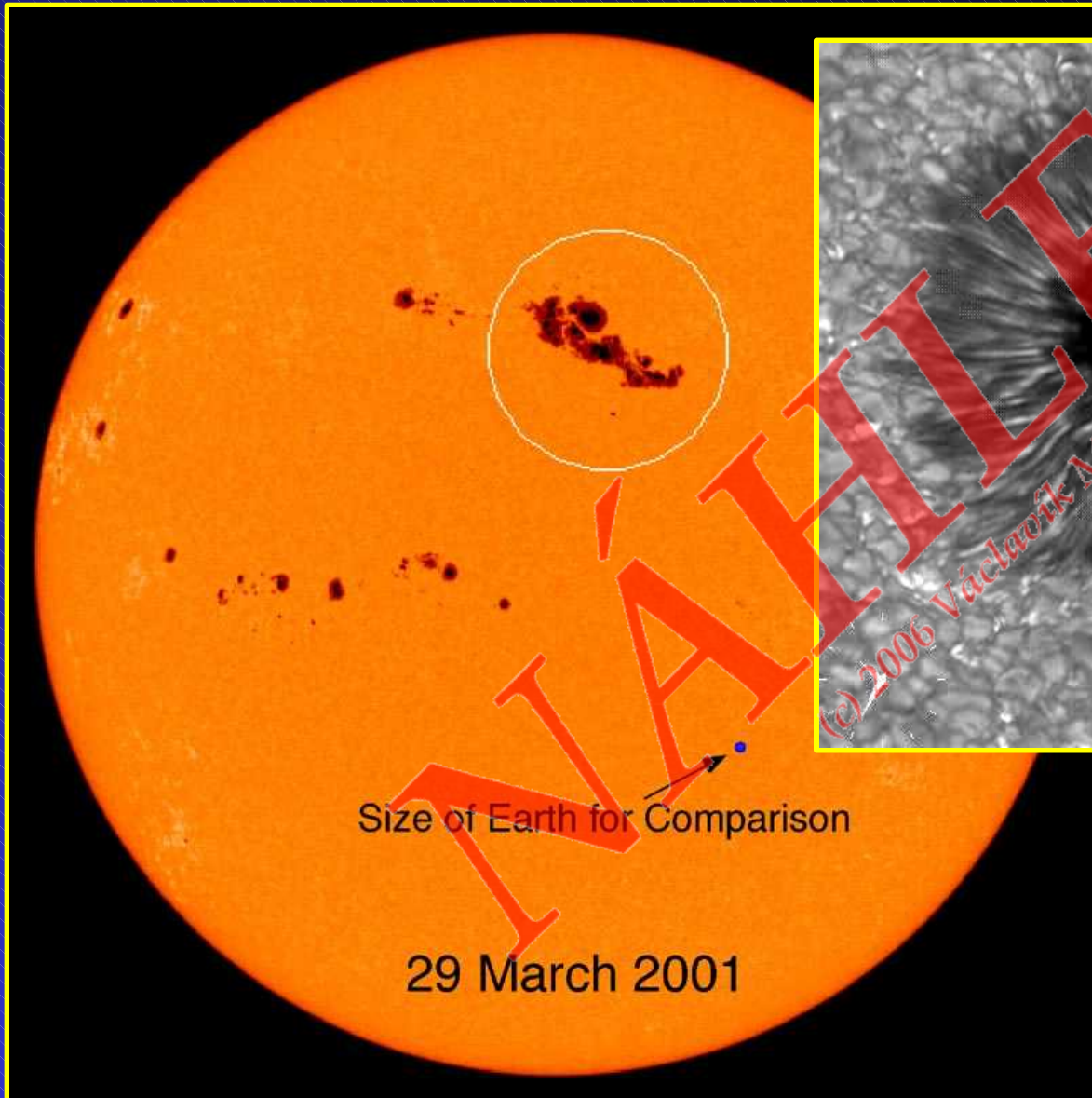
- Hustota v jádře: 130 g/cm^3
- Hustota u povrchu: $0,001 \text{ g/cm}^3$
- Celkový výkon: $4 \times 10^{26} \text{ W}$
- Tok energie u Země: $1,4 \text{ kW/m}^2$
- Úniková rychlost: 618 km/s
- Magnituda: $-26,8^{\text{mag}}$ relativní, $+4,1^{\text{mag}}$ absolutní



SLUNCE



SLUNCE



SLUNCE

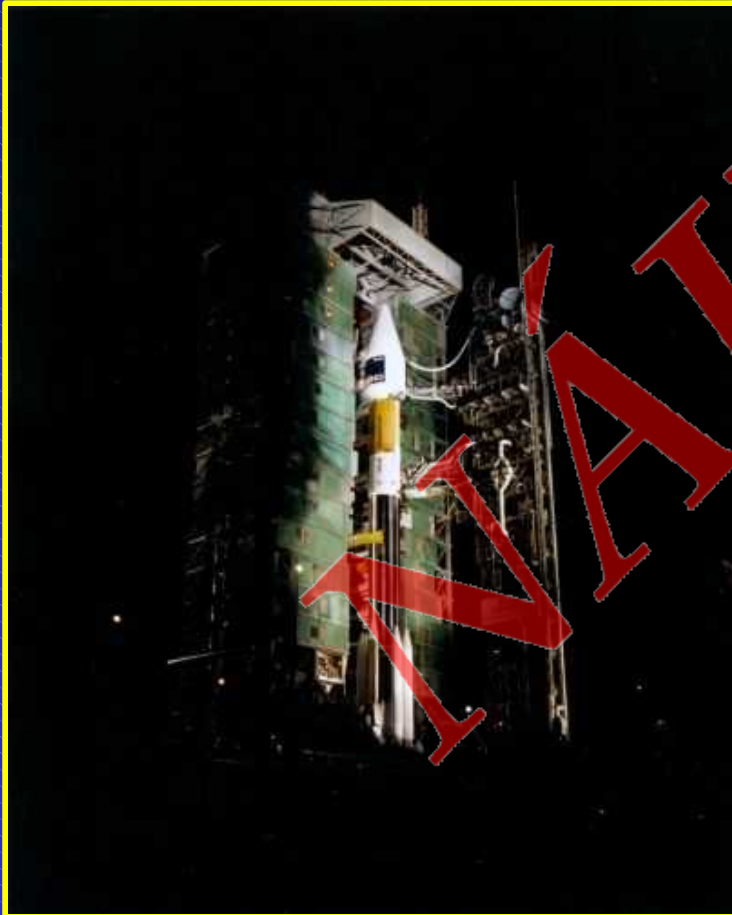


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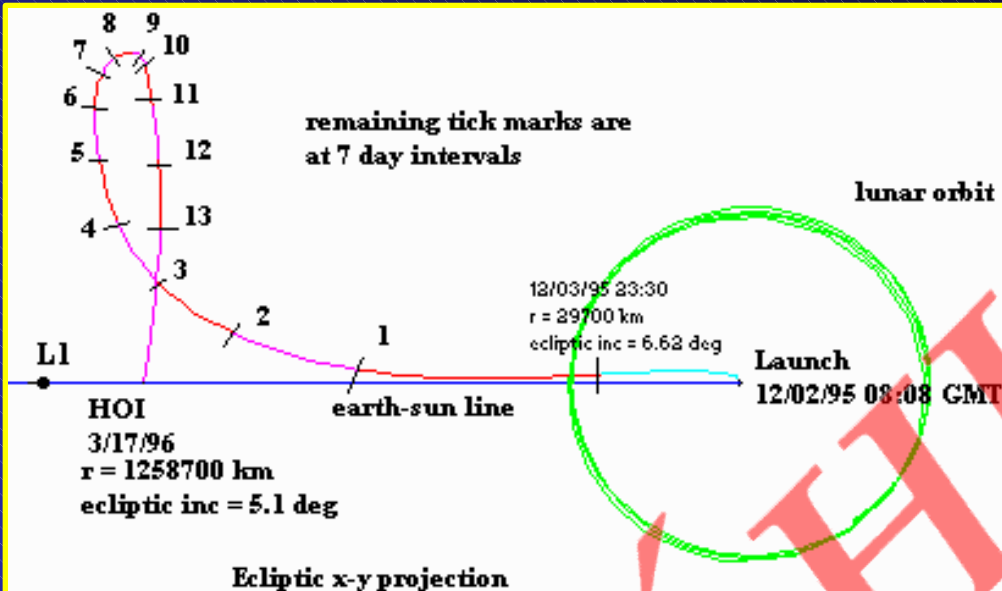


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- Start: 2. prosince 1995 v 8:08:01 UT
- Nosná raketa: Atlas 2AS
- COSPAR: 1995-065A

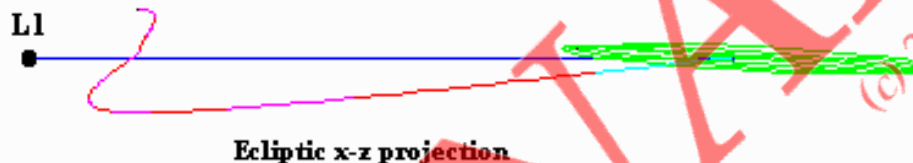


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Range and Ecliptic Inclinations for the Tick Marks are as Follows:

1	r = 808840 km	i = 7.82 deg
2	r = 1084160 km	i = 10.65 deg
3	r = 1256200 km	i = 12.58 deg
4	r = 1364500 km	i = 16.88 deg
5	r = 1439800 km	i = 17.39 deg
6	r = 1490000 km	i = 14.30 deg
7	r = 1507850 km	i = 12.00 deg
8	r = 1495640 km	i = 11.22 deg
8	r = 1468720 km	i = 10.00 deg
9	r = 1431740 km	i = 8.23 deg
10	r = 1380360 km	i = 6.84 deg
11	r = 1319600 km	i = 6.16 deg
12	r = 1270520 km	i = 5.57 deg
13	r = 1258700 km	i = 5.10 deg



RLP Coordinate System

Flight Dynamics Division/553.2
NASA-GSFC

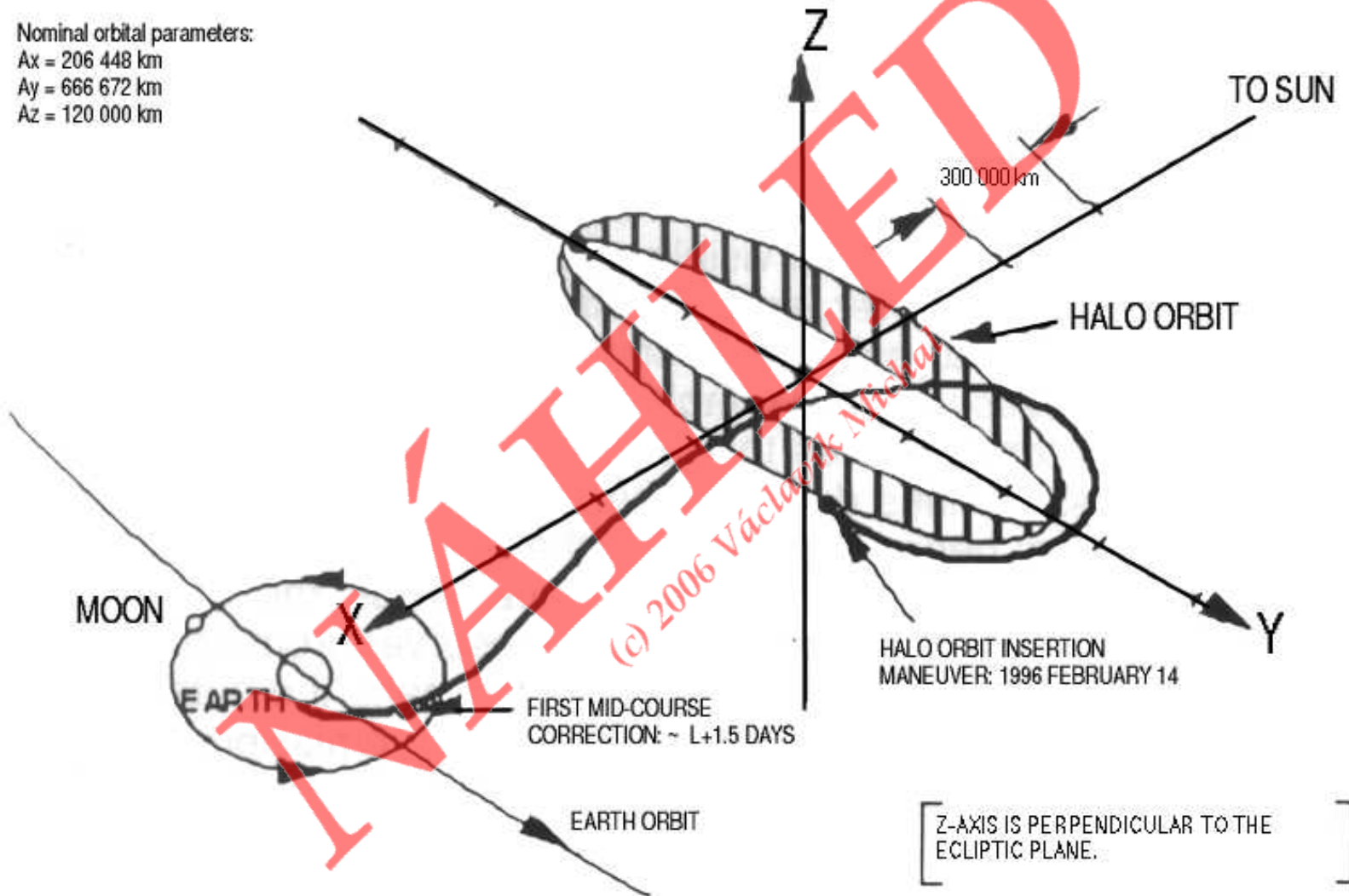
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Nominal orbital parameters:

$A_x = 206\,448\text{ km}$

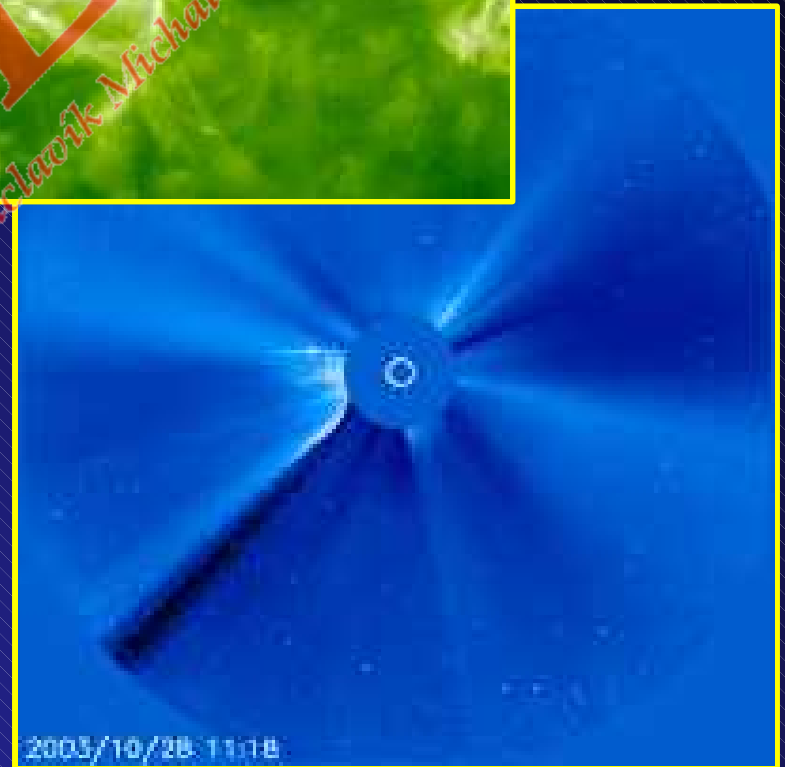
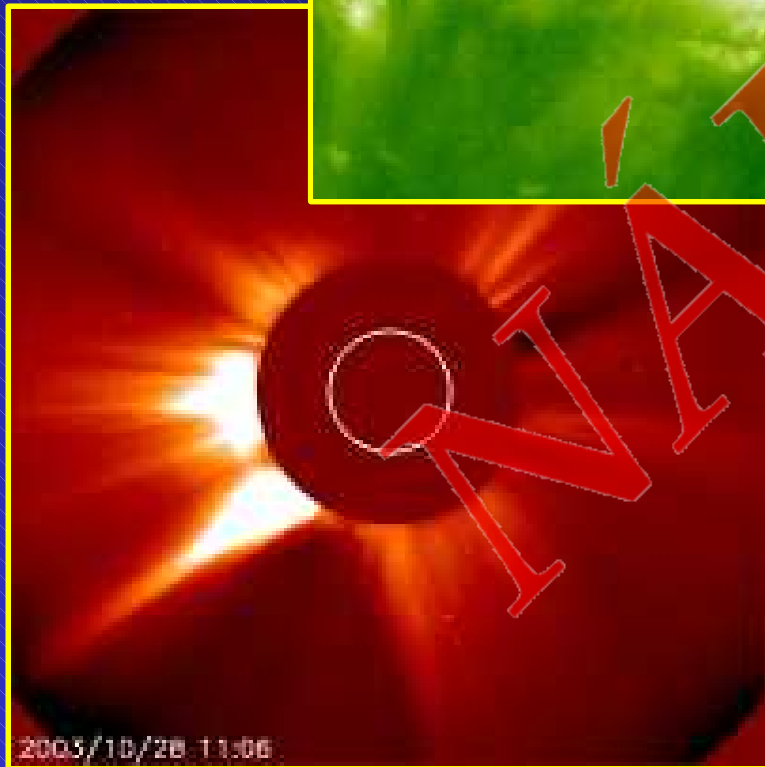
$A_y = 666\,672\text{ km}$

$A_z = 120\,000\text{ km}$



SOHO orbit schematic

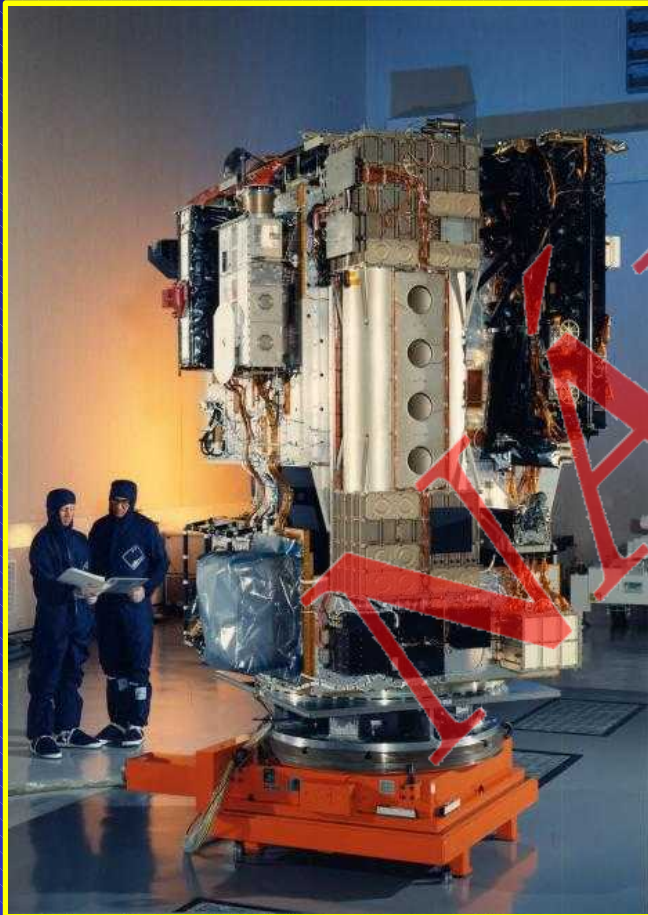
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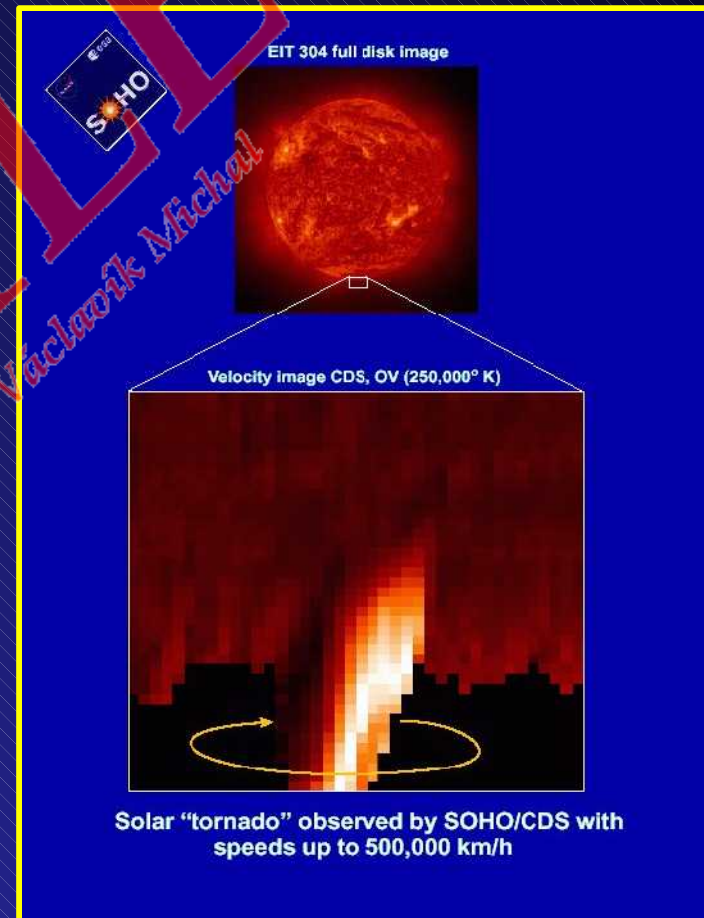
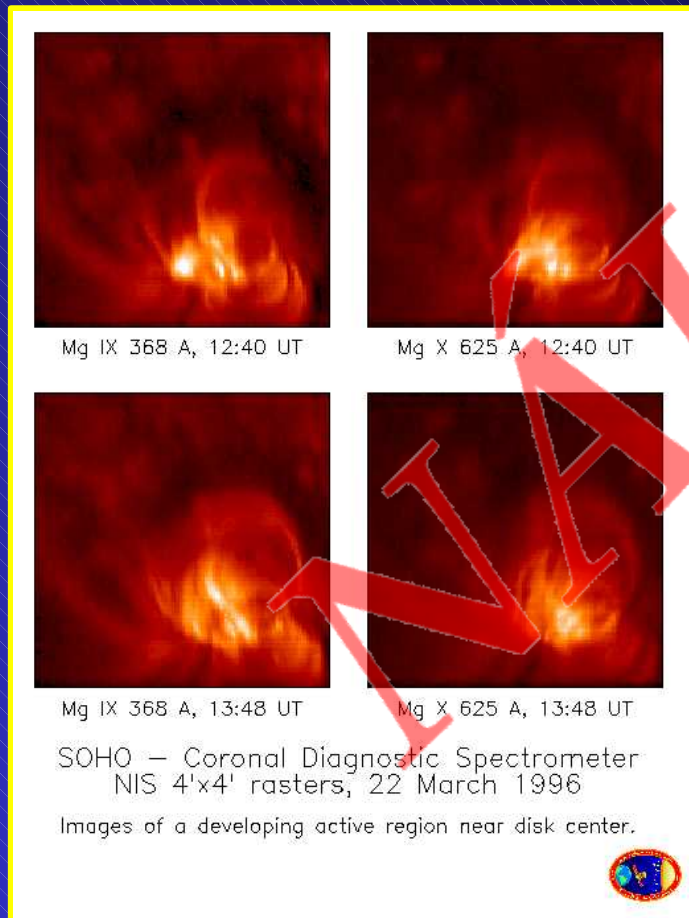
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- Rozměry: 4,3 x 2,7 x 3,65 m
- Hmotnost: 1 850 kg
- Hmotnost vědeckého vybavení: 610 kg



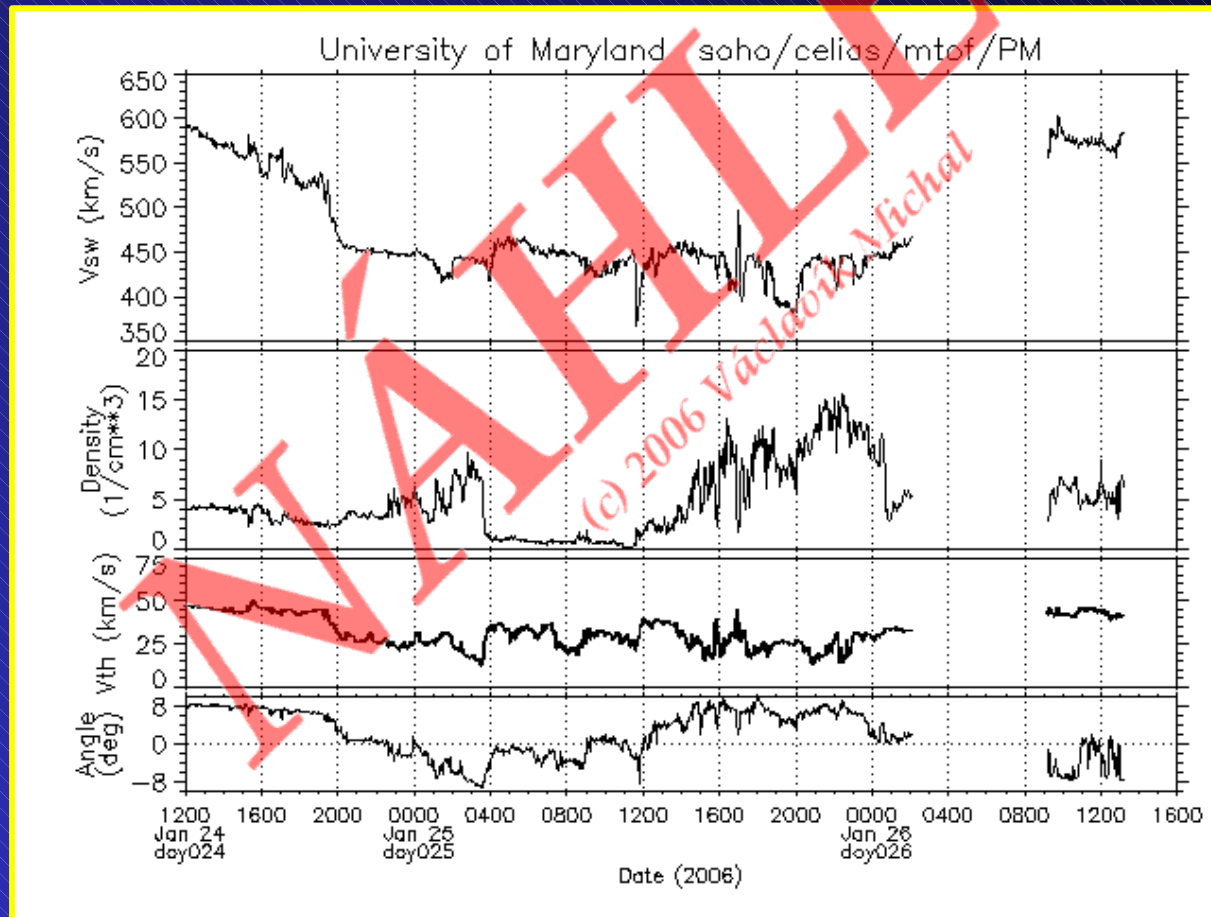
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- CDS (Coronal Diagnostic Spectrometer)
 - vnitřní korona; UV oblast; 10 000 až 1 000 000 °C
 - <http://solar.bnsc.rl.ac.uk/>



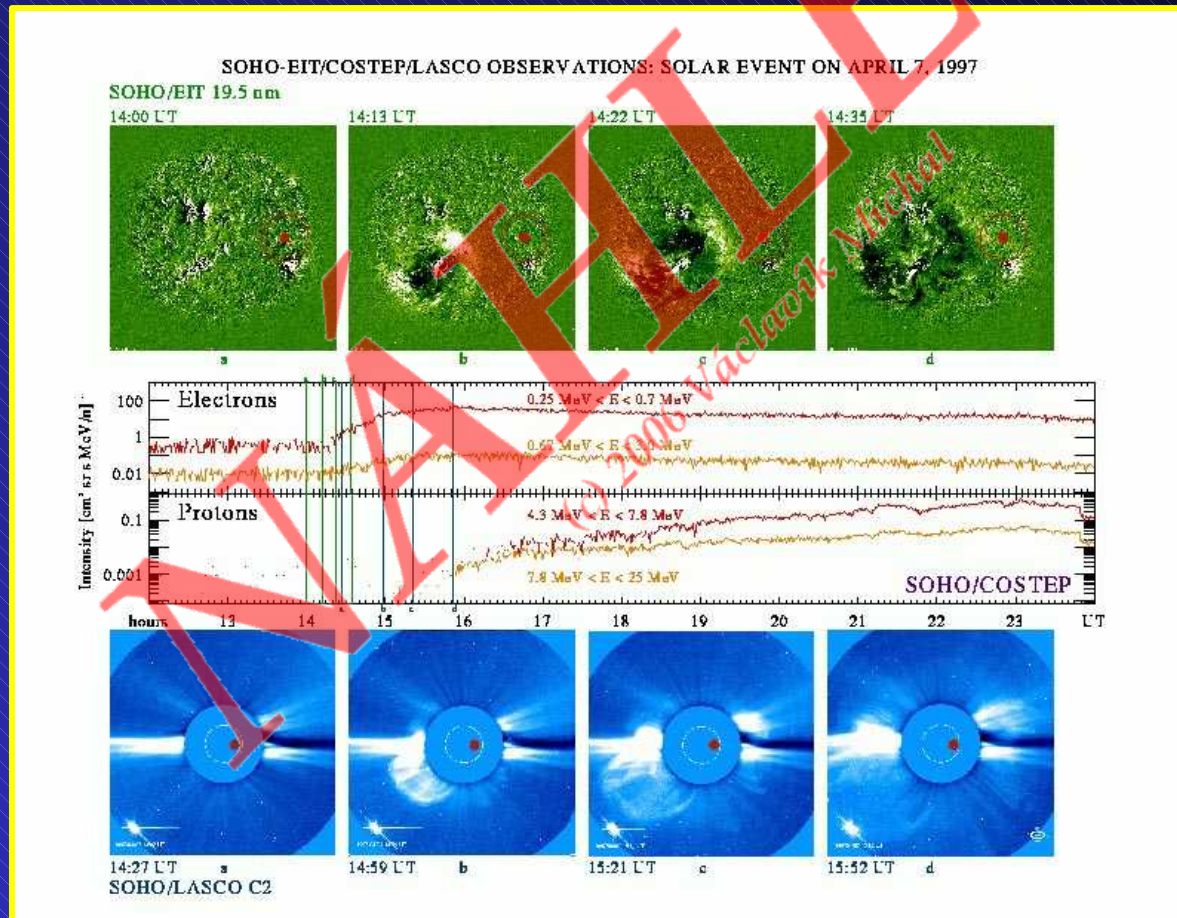
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- CELIAS (Charge, Element, and Isotope Analysis System)
 - detekce slunečního větru
 - <http://www.cx.unibe.ch/phim/soho/>



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- COSTEP (Comprehensive Suprathermal and Energetic Particle Analyzer)
 - energetická spektra izotopů vodíku a helia
 - <http://www.ieap.uni-kiel.de/et/ag-heber/costep/>



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- EIT (Extreme ultraviolet Imaging Telescope)
 - UV oblast; Fe IX/X 171 Å; 1 000 000°C
 - <http://umbra.nascom.nasa.gov/eit/>



SOHO

- EIT (Extreme ultraviolet Imaging Telescope)
 - UV oblast; Fe XII 195 Å; 1 500 000°C
 - <http://umbra.nascom.nasa.gov/eit/>



SOHO

- EIT (Extreme ultraviolet Imaging Telescope)
 - UV oblast; Fe XV 284 Å; 2 250 000°C
 - <http://umbra.nascom.nasa.gov/eit/>



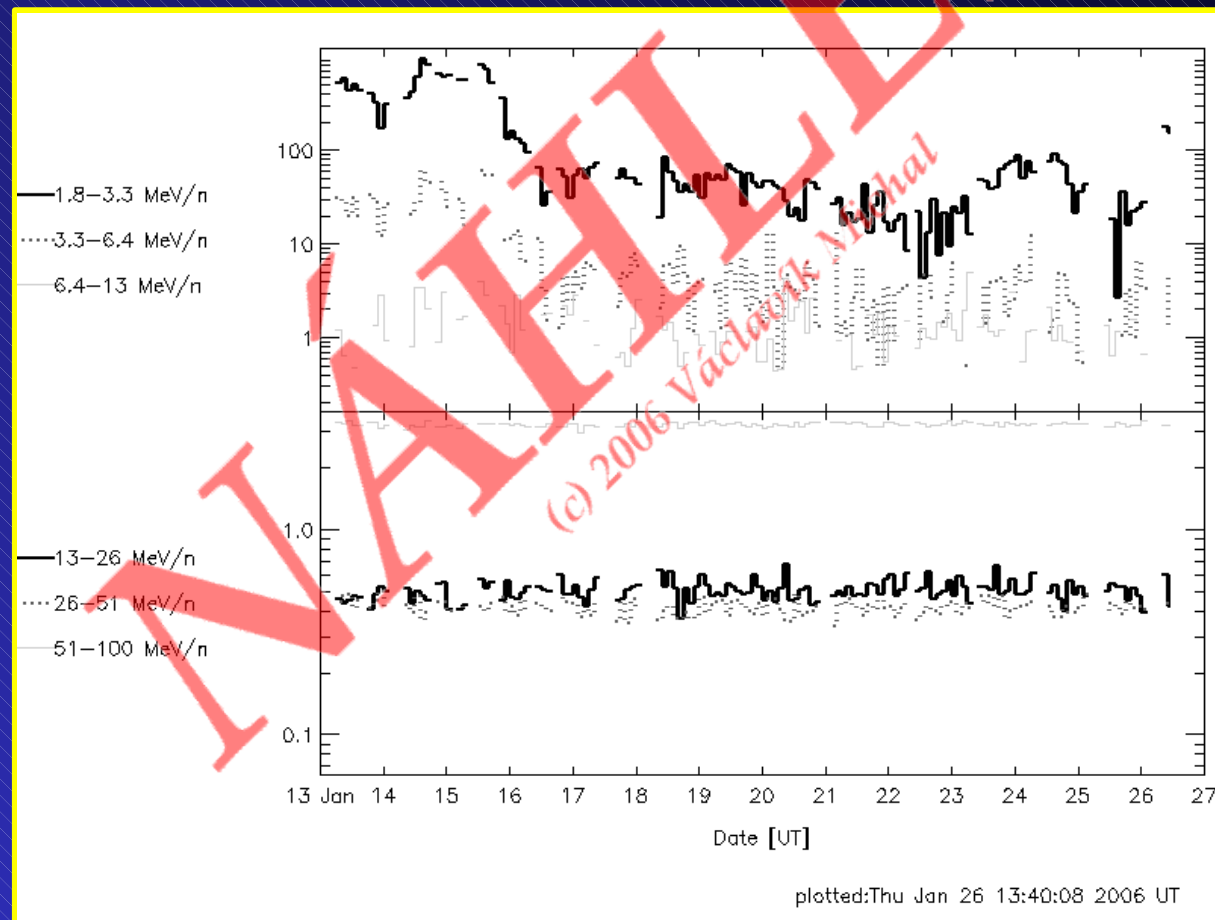
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- EIT (Extreme ultraviolet Imaging Telescope)
 - UV oblast; He II/Si XI 304 Å; 80 000°C
 - <http://umbra.nascom.nasa.gov/eit/>



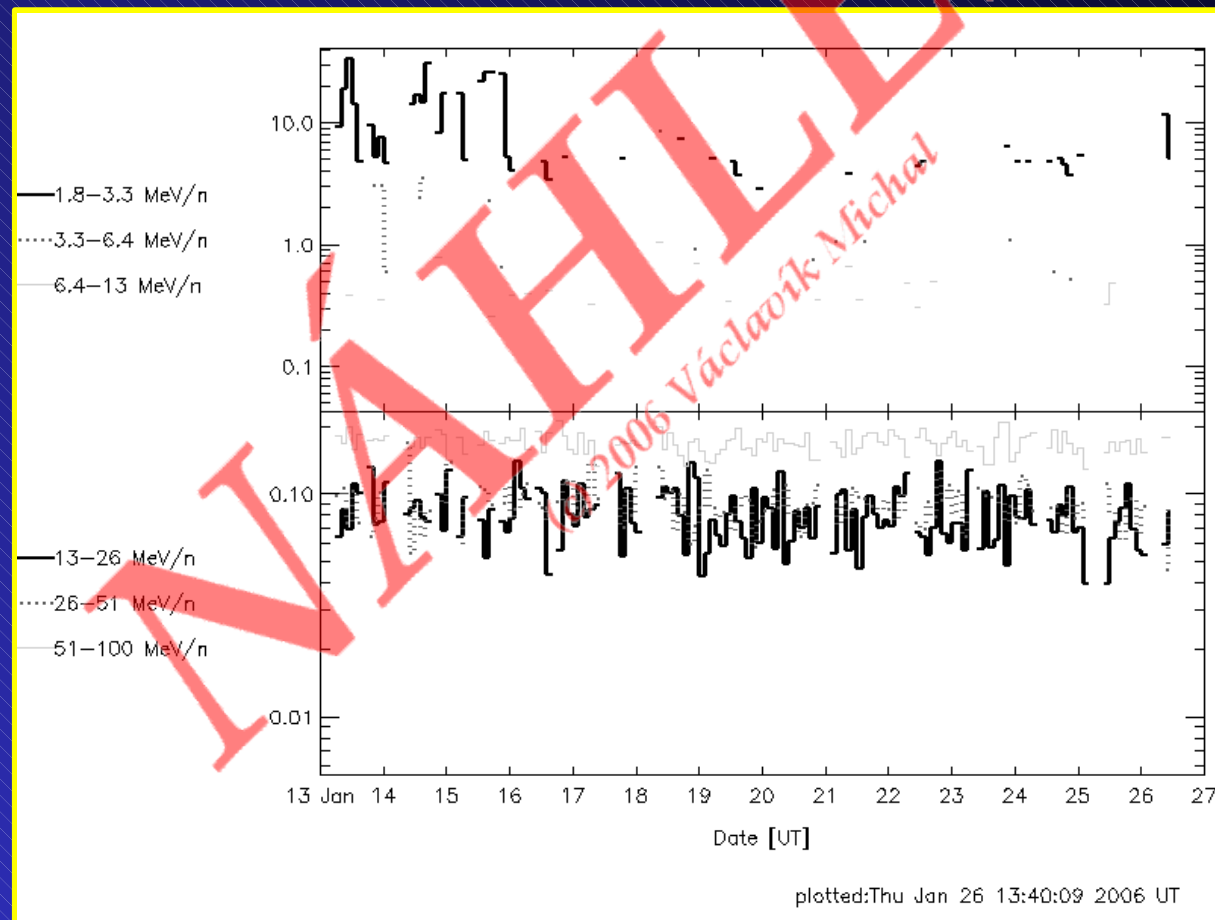
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- ERNE (Energetic and Relativistic Nuclei and Electron Experiment)
 - detekce vysokoenergetických částic (nad 1 MeV)
 - http://www.srl.utu.fi/projects/erne/index_english.html



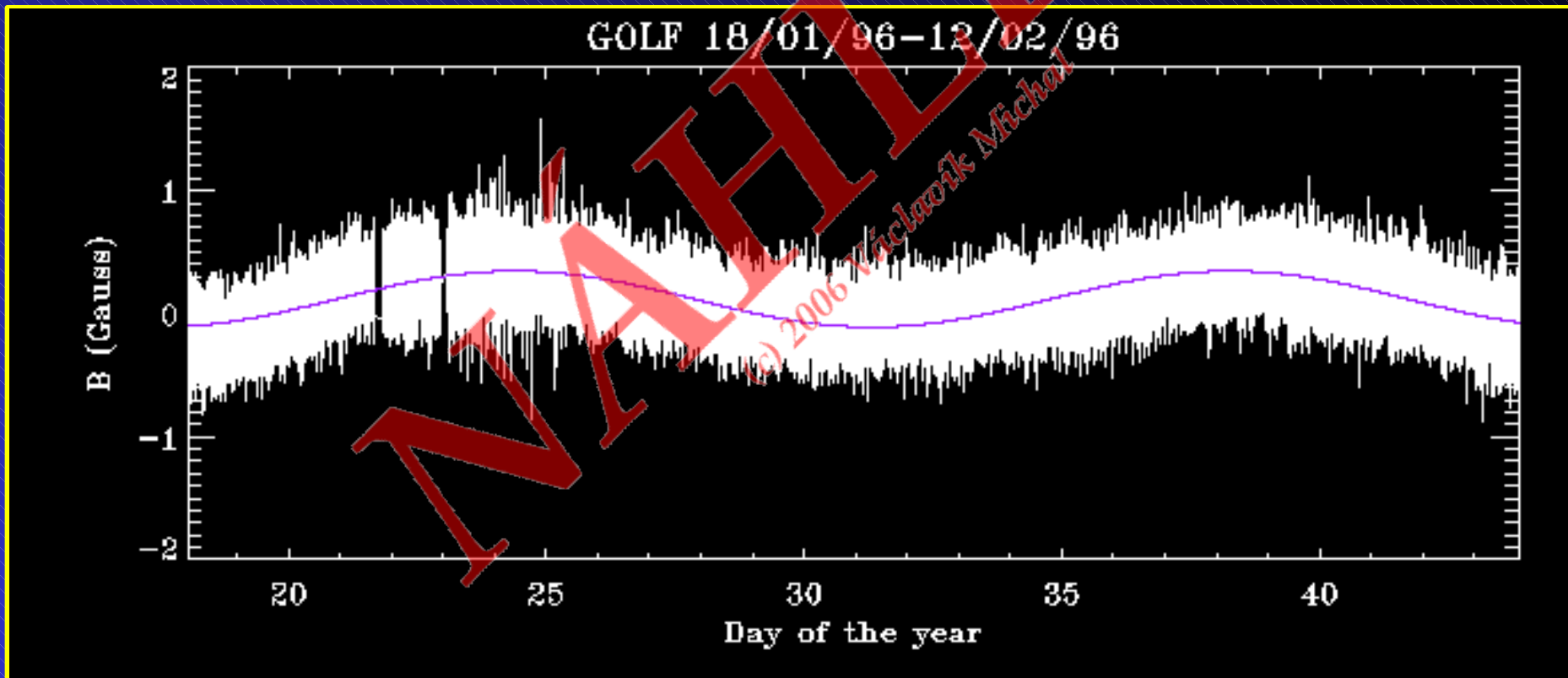
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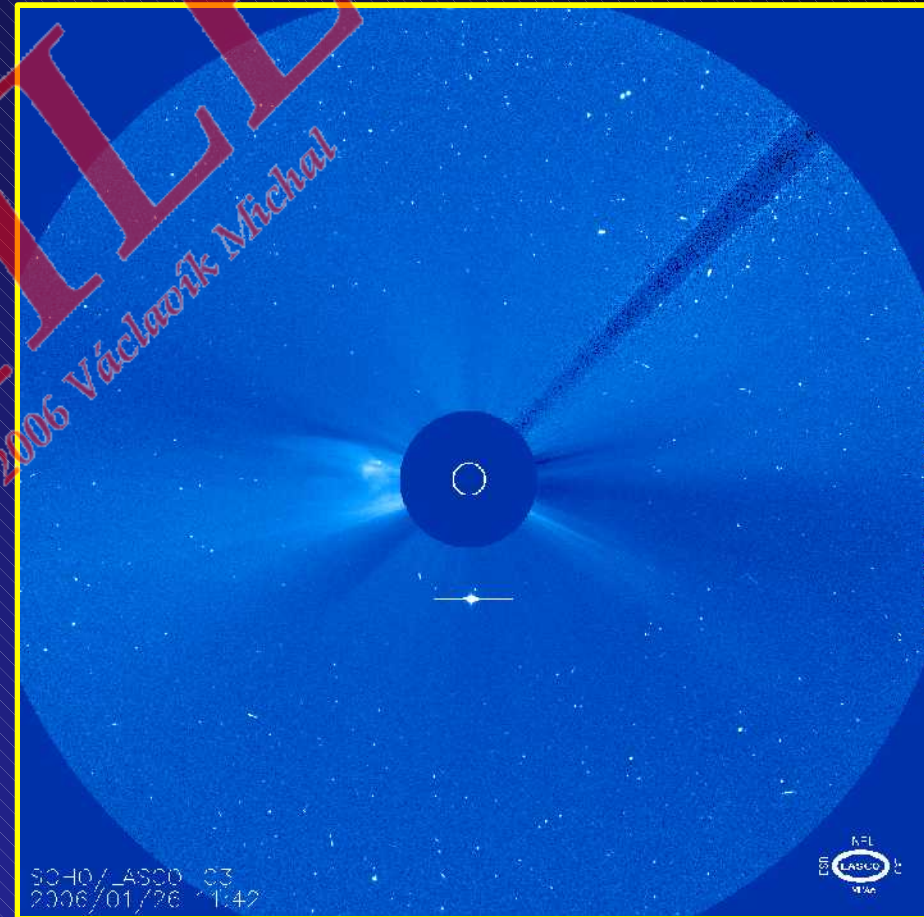
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- GOLF (Global Oscillations at Low Frequencies)
 - zkoumání slunečního nitra; frekvence 10^{-2} až 10^{-7} Hz
 - <http://golfwww.medoc-ias.u-psud.fr/>



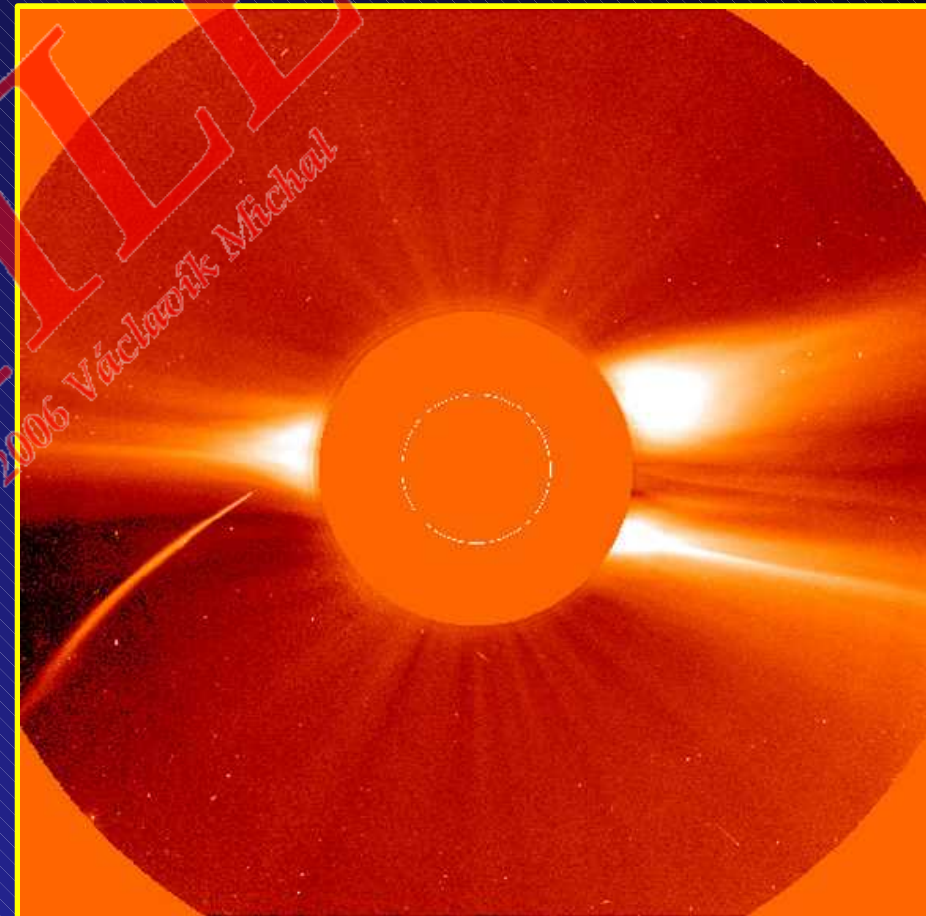
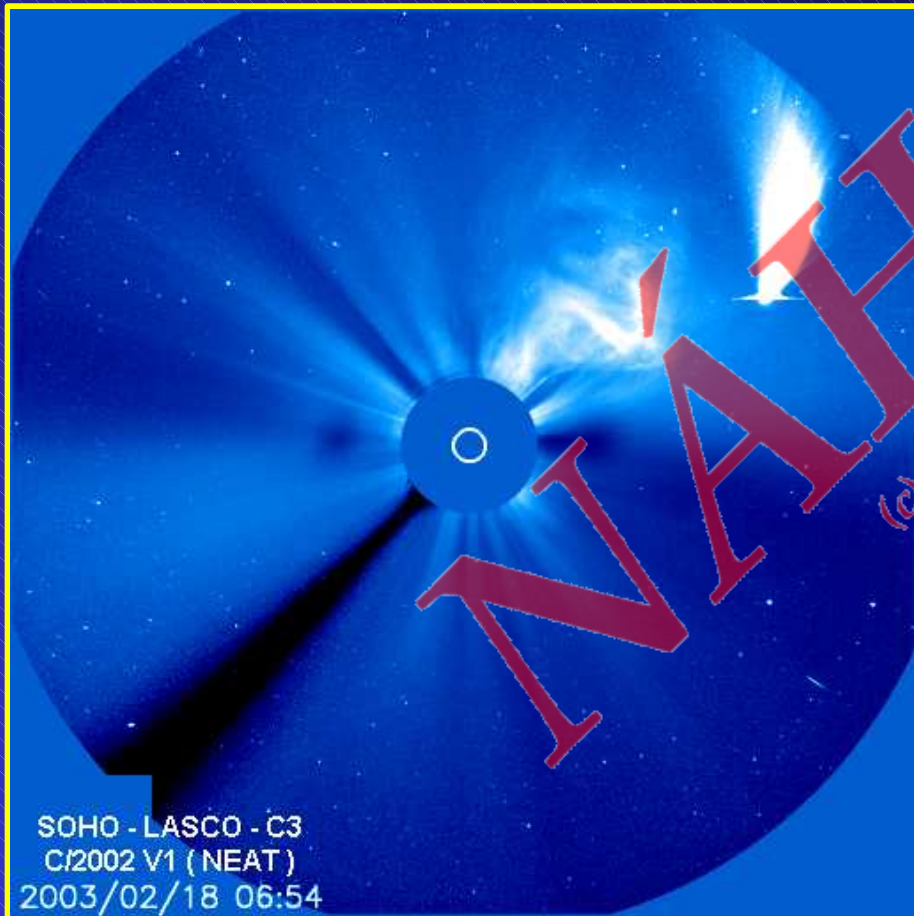
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- LASCO (Large Angle and Spectrometric Coronagraph)
 - pozorování vnější korony Slunce (2 – 6 Rs a 4 – 30 Rs)
 - <http://lasco-www.nrl.navy.mil/lasco.html>



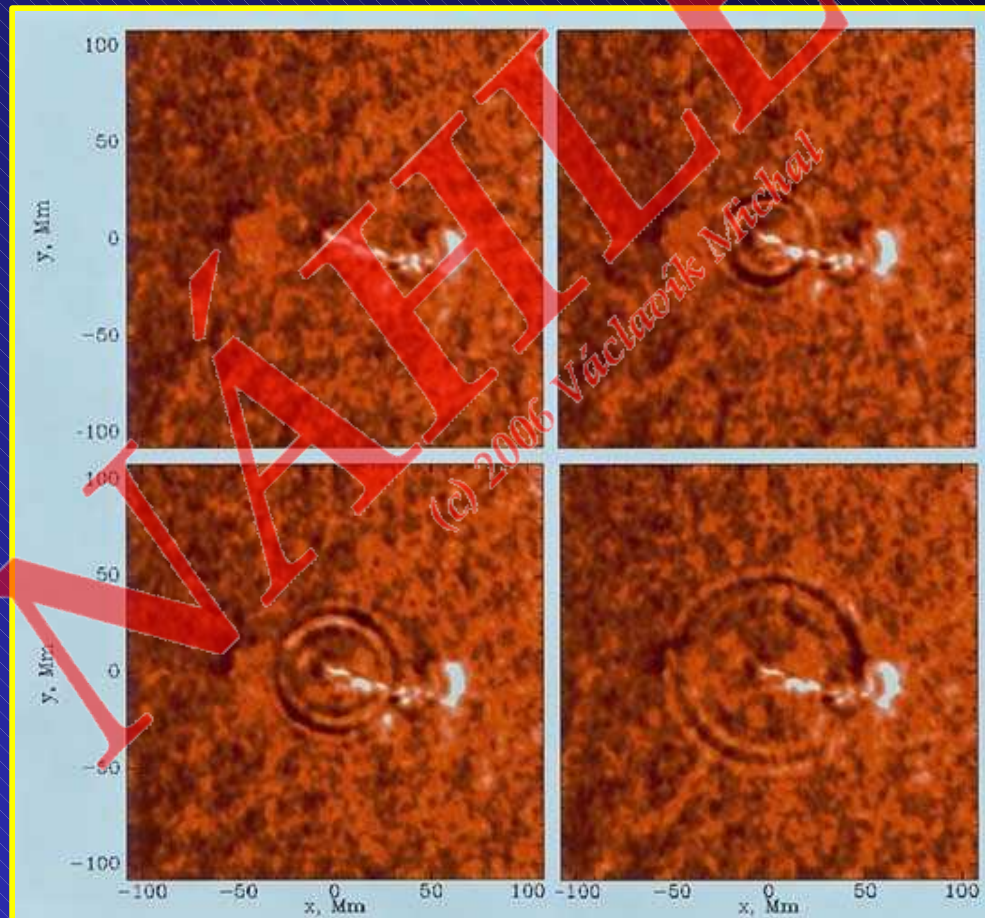
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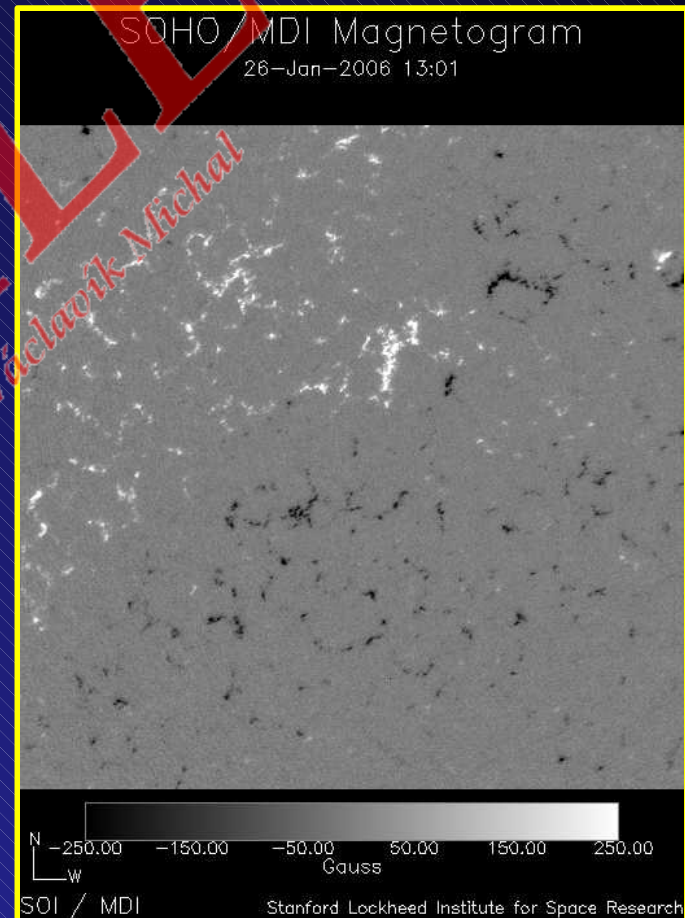
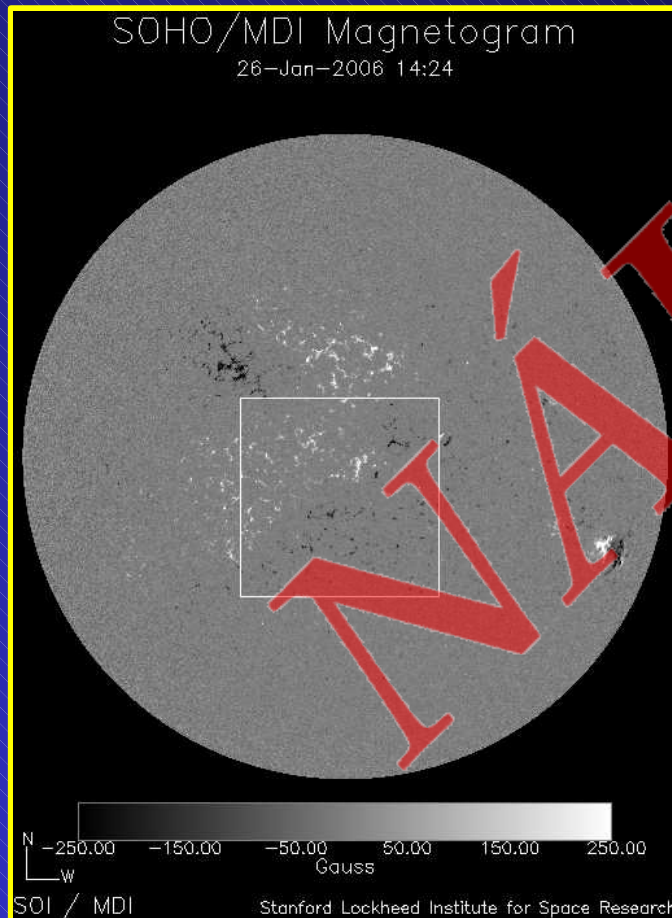
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- MDI/SOI (Michelson Doppler Imager/Solar Oscillations Investigation)
 - struktura a dynamika konvektivní zóny a jádra
 - <http://soi.stanford.edu/>



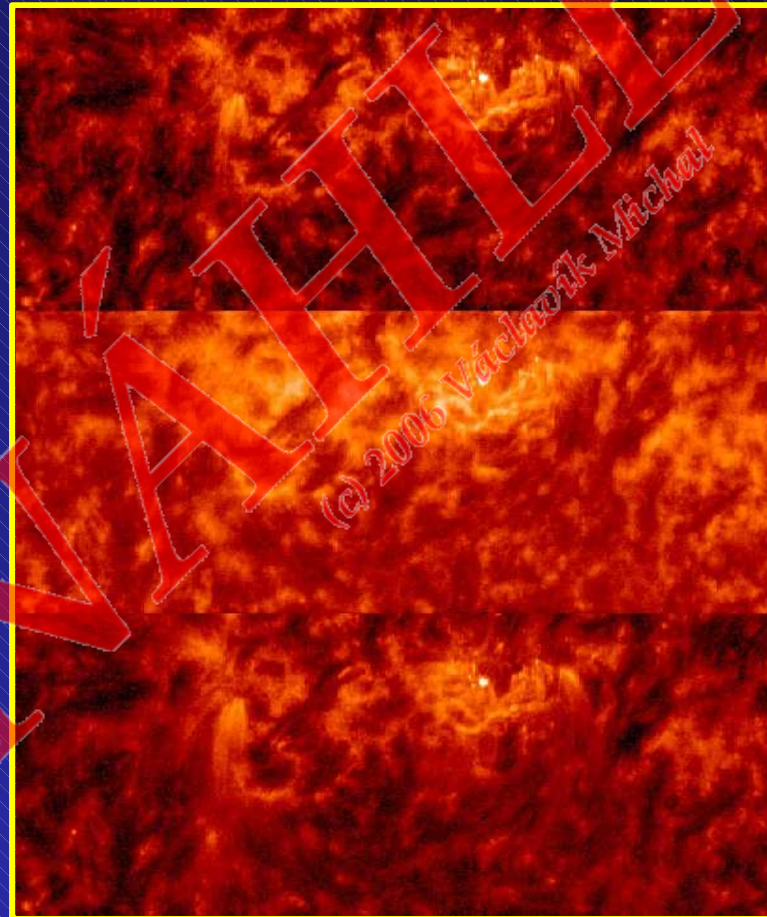
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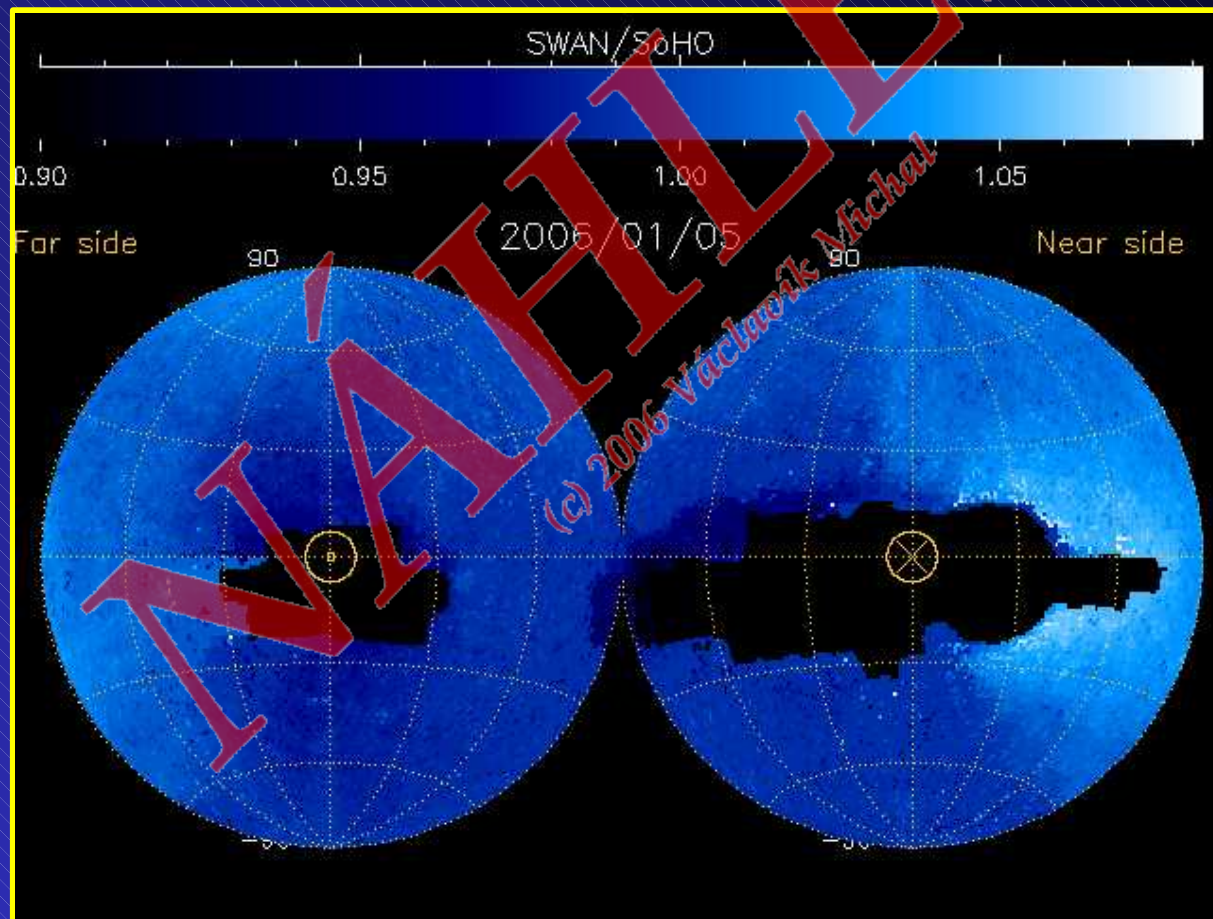
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- SUMER (Solar Ultraviolet Measurements of Emitted Radiation)
 - vlastnosti plazmy v chromosféře a vnitřní koruně
 - <http://www.mps.mpg.de/en/>



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- SWAN (Solar Wind Anisotropies)
 - proudění protonů slunečního záření
 - <http://www.aero.jussieu.fr/experience/SWAN/>



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- UVCS (UltraViolet Coronagraph Spectrometer)
 - vlastnosti slunečního větru a korony
 - <http://cfa-www.harvard.edu/uvcs/>

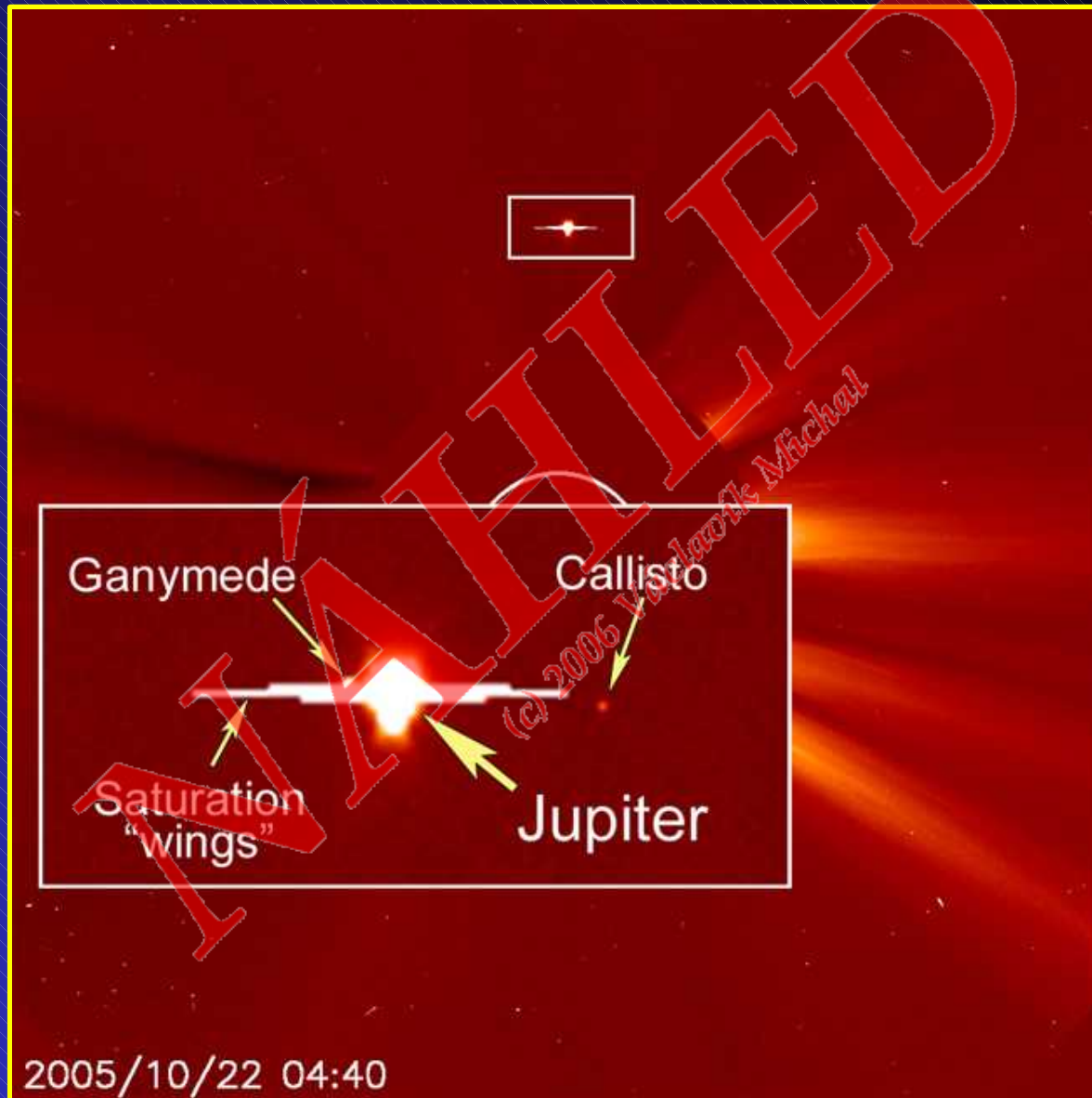


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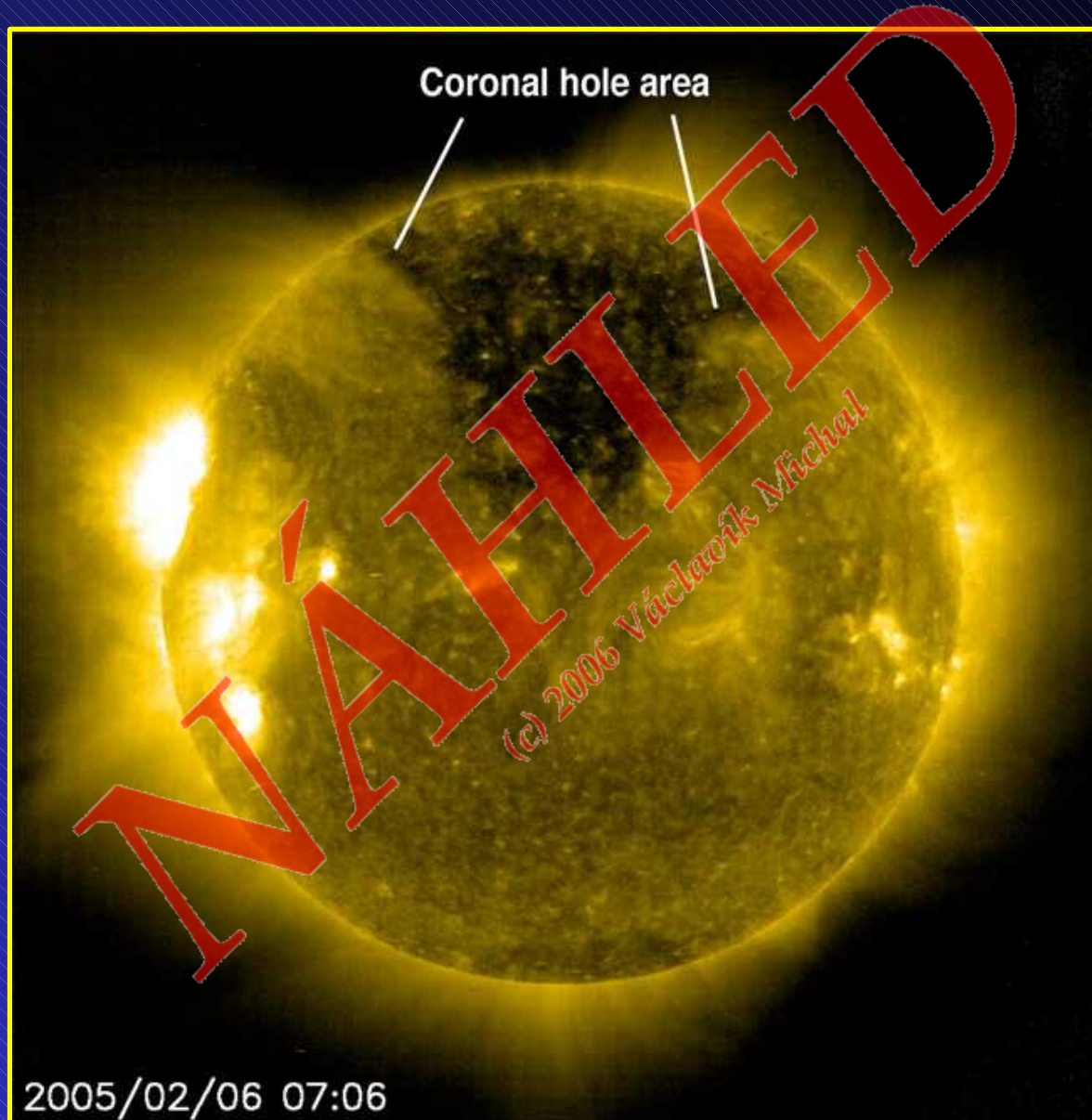
- VIRGO (Variability of Solar Irradiance and Gravity Oscillations)
 - záření Slunce na jednotlivých vlnových délkách
 - <http://www.ias.u-psud.fr/virgo/>

NÁHLED
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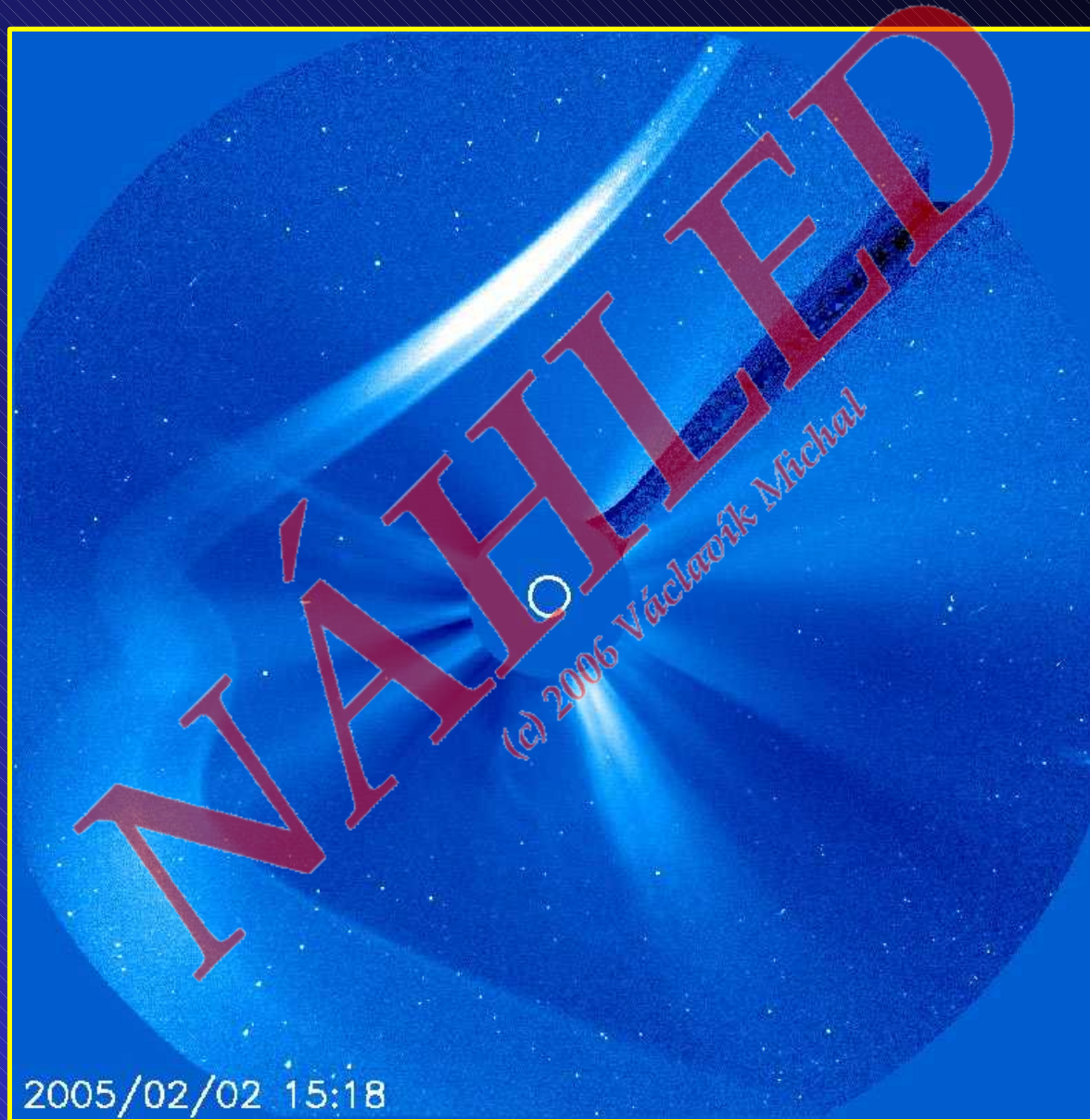
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2005/02/02 15:18

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2003/12/06 01:48

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