

PROBA2 GEGEVENS VAN SWAP & LYRA



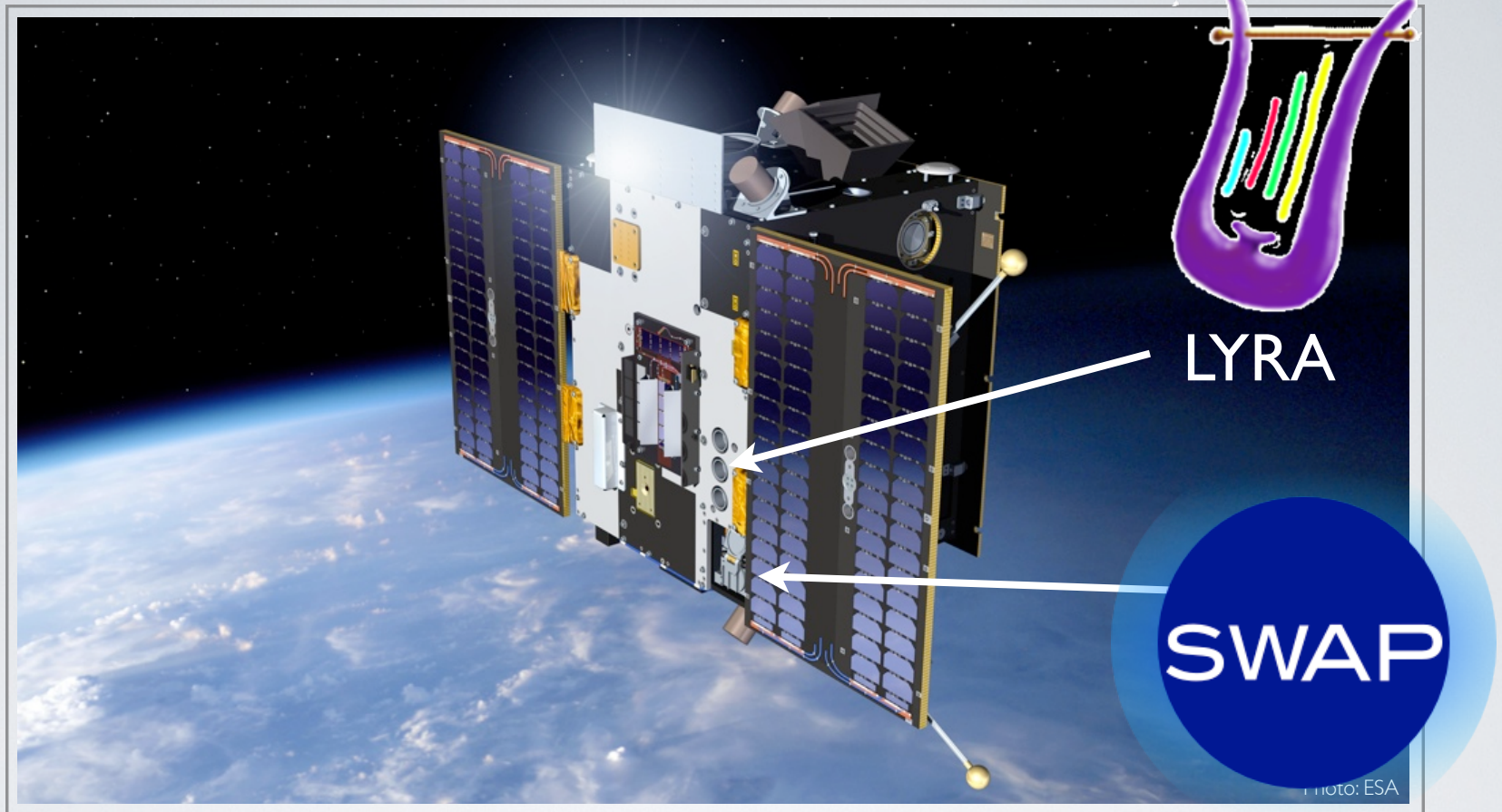
Het ruimteweer op 1 augustus 2010

Elke D'Huys & PROBA2 Science Center
Koninklijke Sterrenwacht van België

WAB seminarie ☀ Heverlee ☀ 28 september 2010

elke.dhuys@oma.be

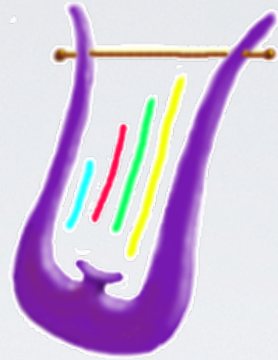




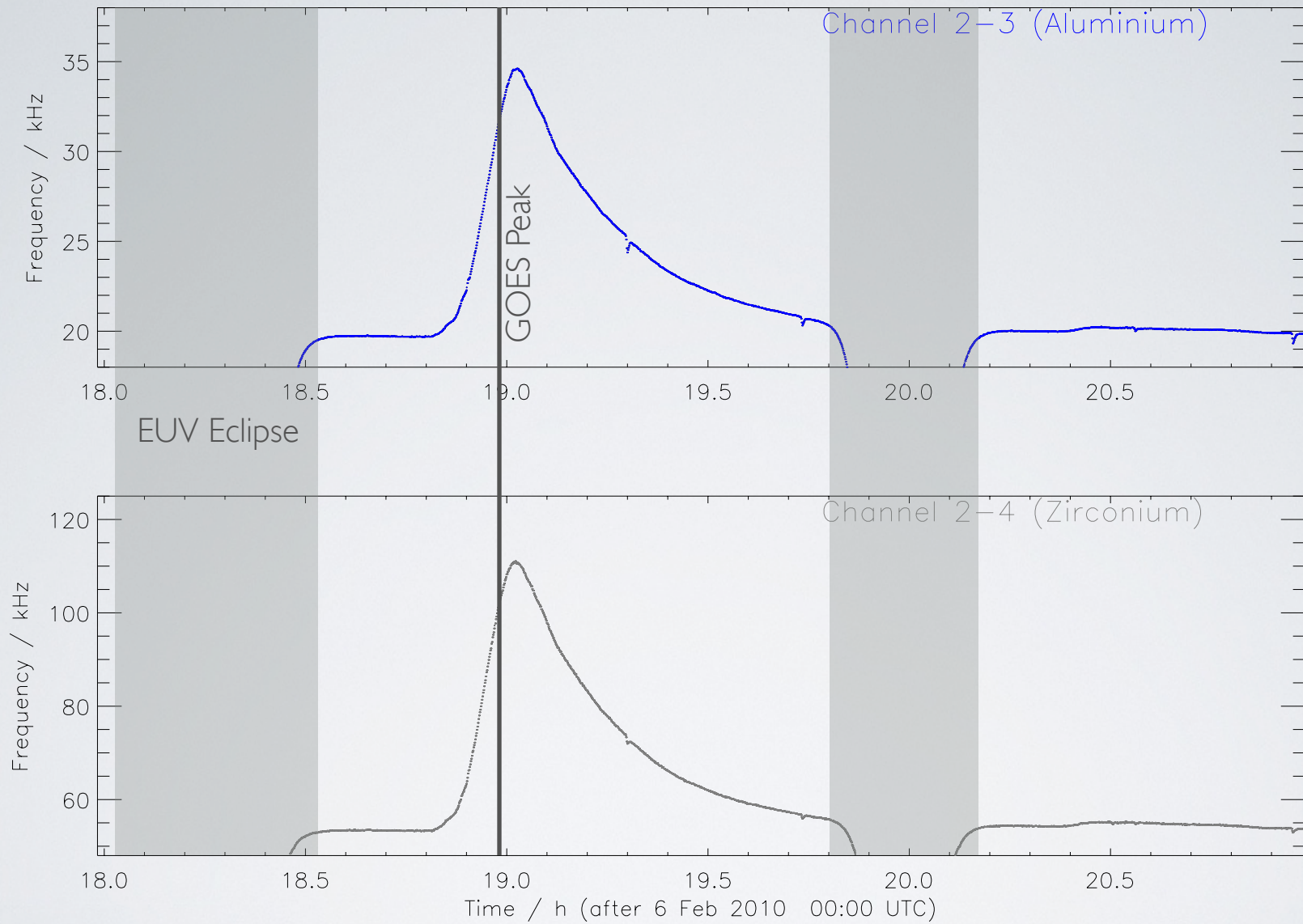
PROBA2 INSTRUMENTEN

Large **Y**ield **R**adiometer

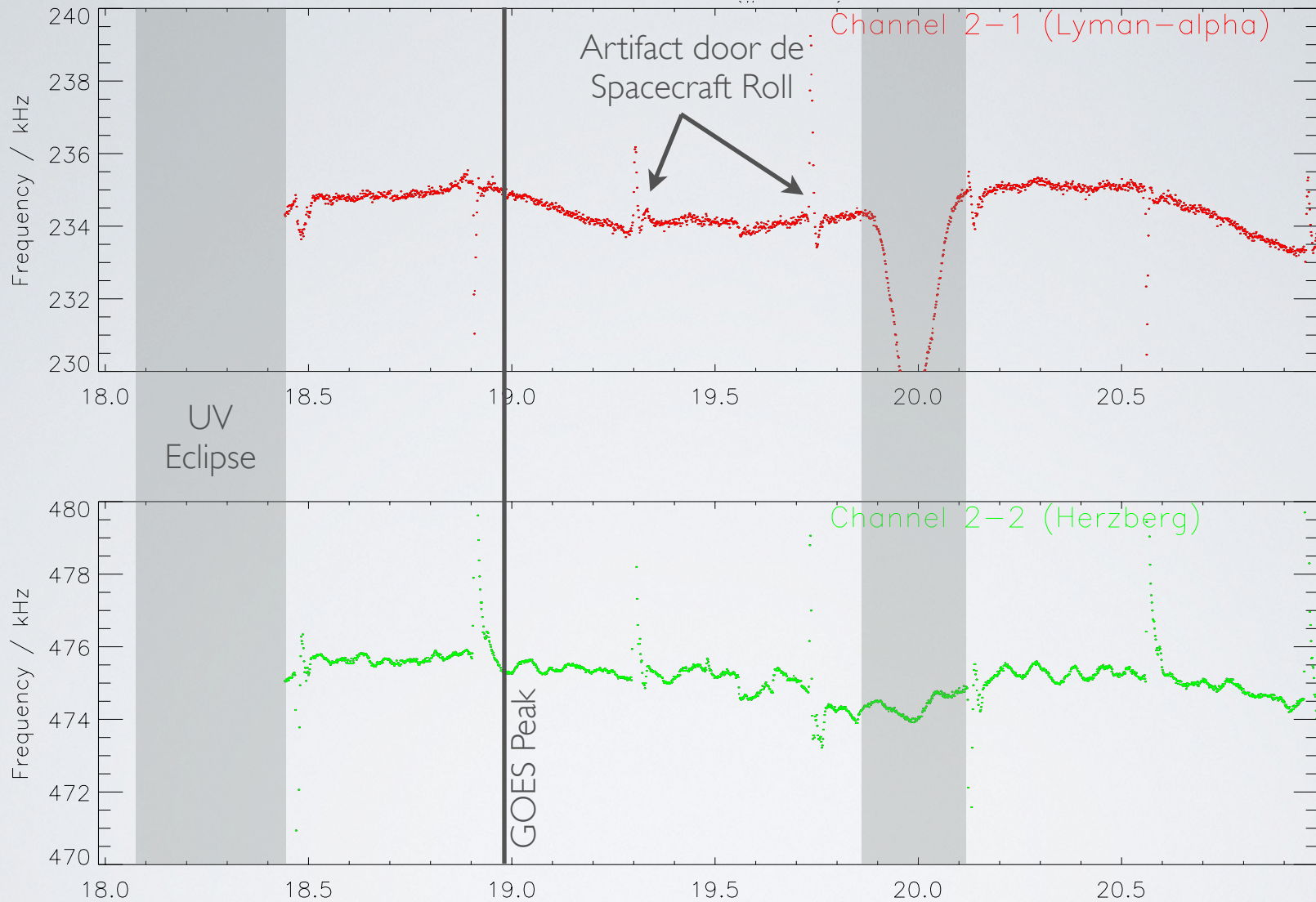
Sun **W**atcher with **A**ctive Pixel System & Image **P**rocessing



WAARNEMINGEN MET LYRA

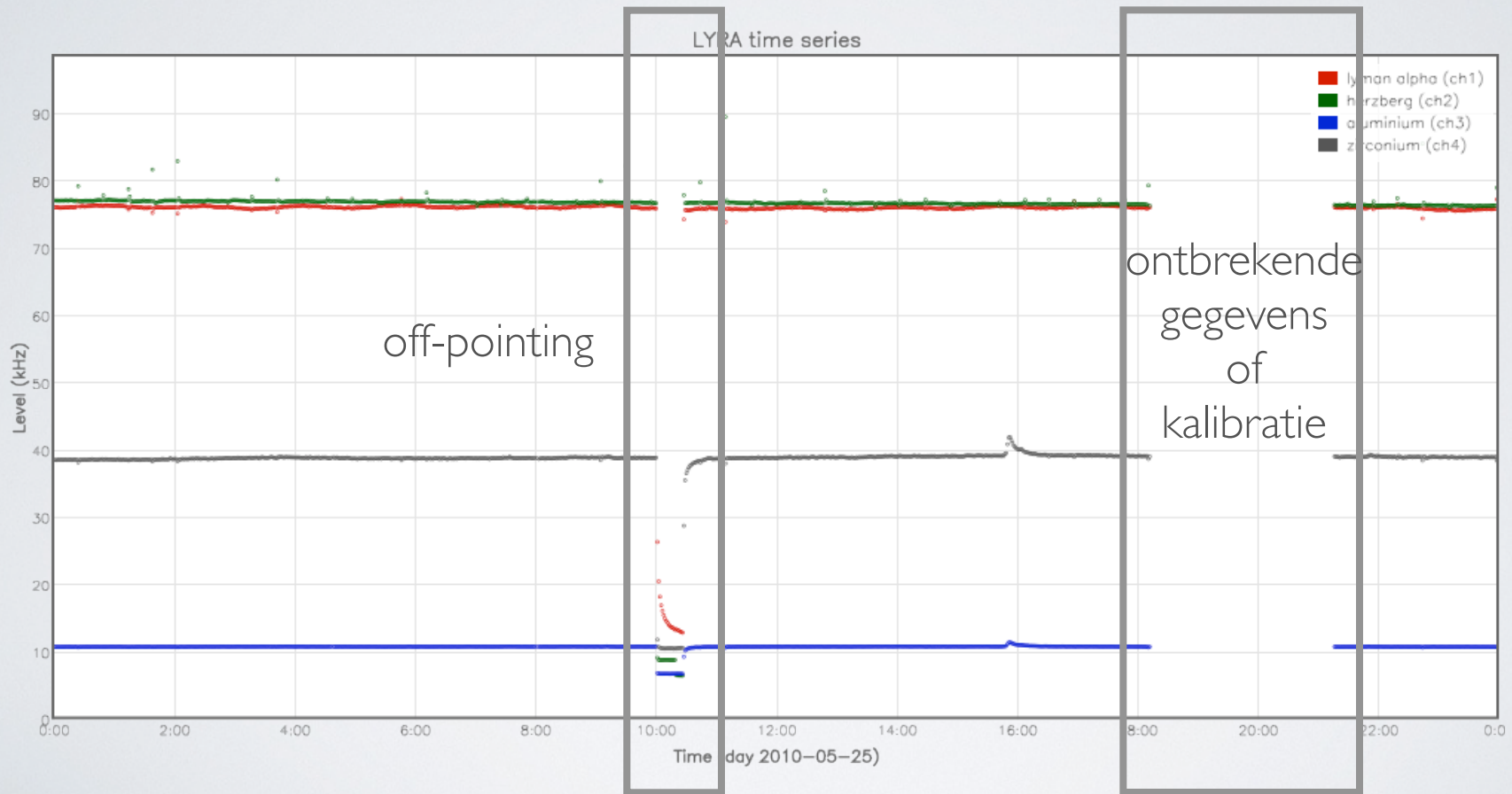


M2.9 Zonnevlam, 6 Februari 2010

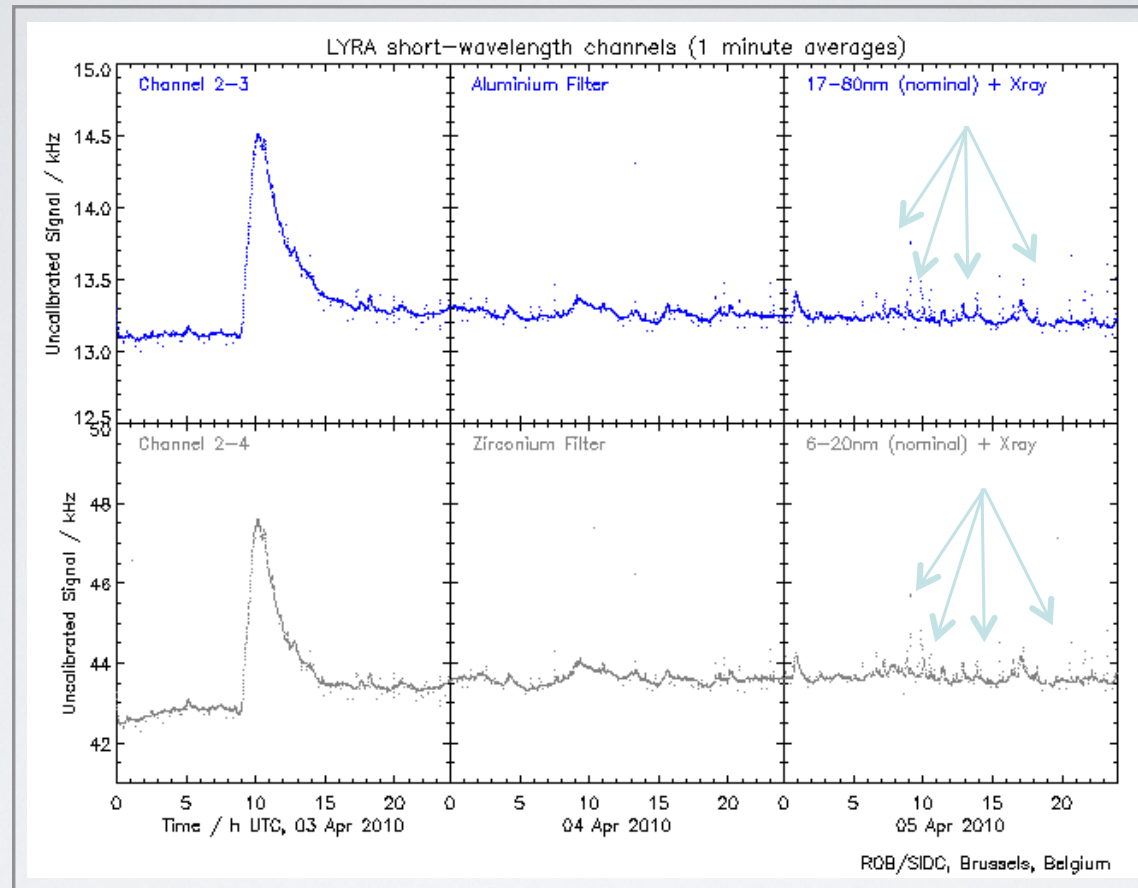


M2.9 Zonnevlam, 6 Februari 2010

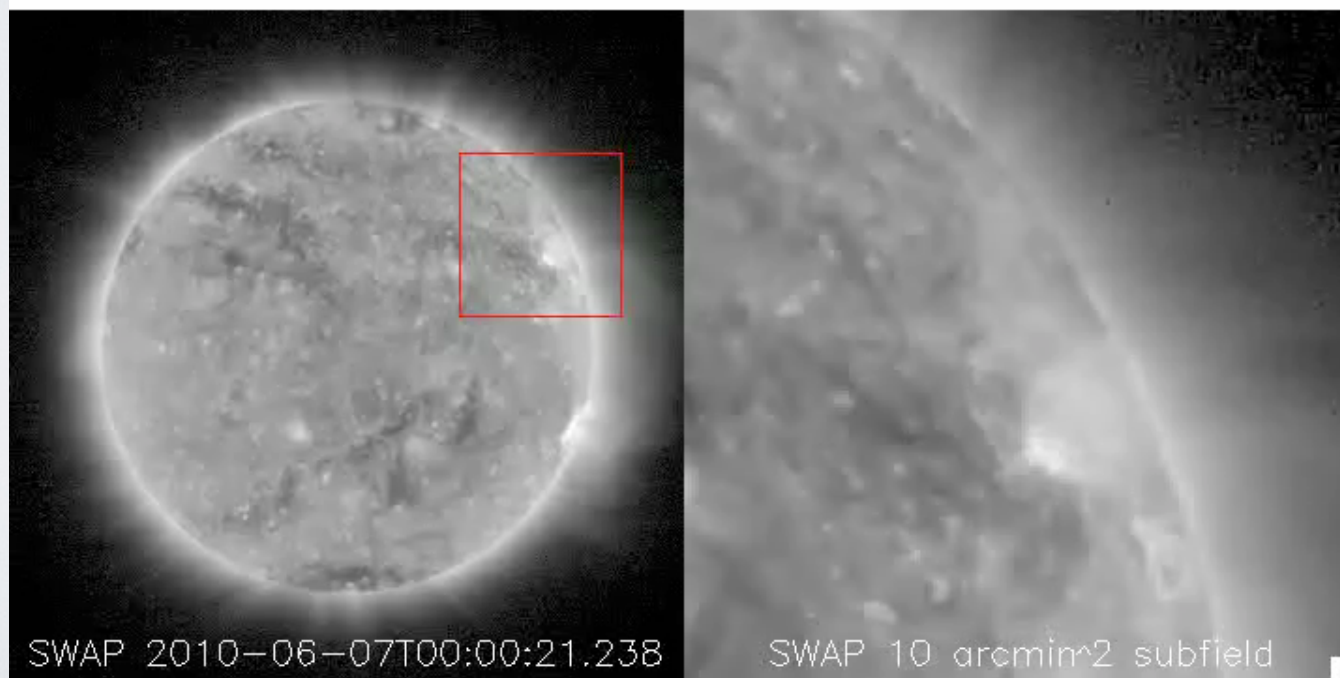
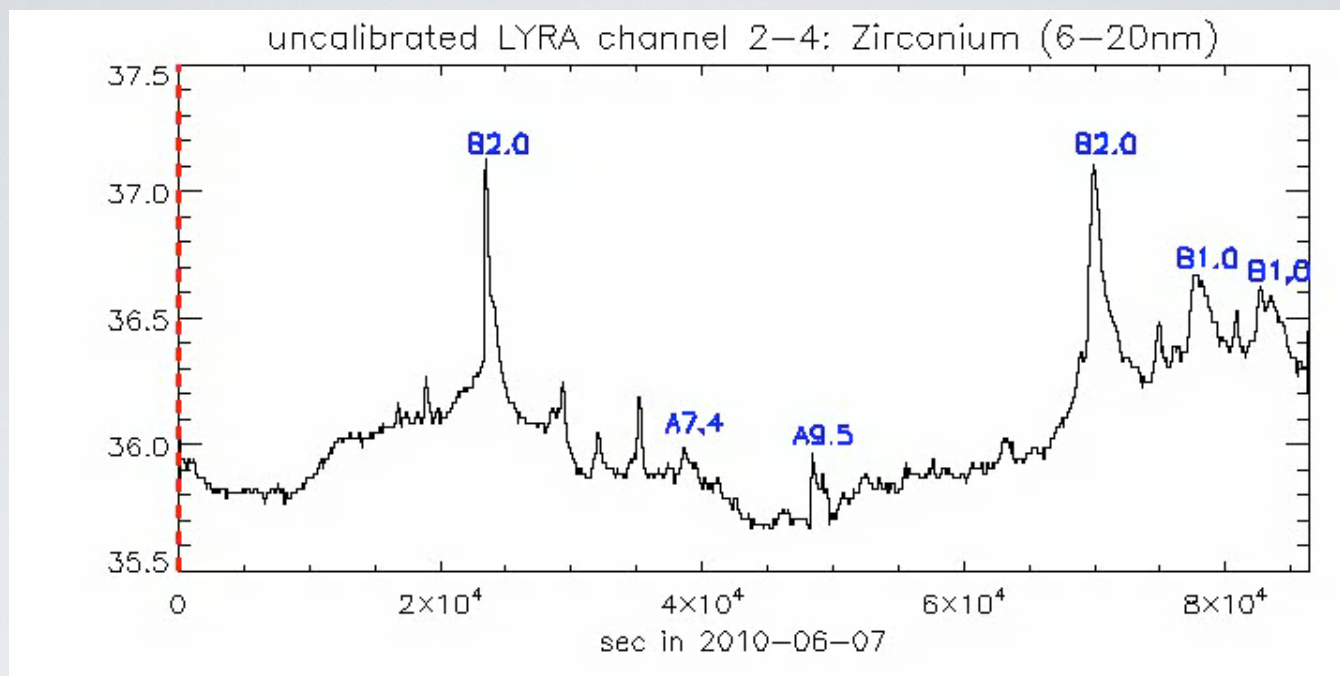
PROBA2 OFF-POINTING



ANDERE EFFECTEN IN LYRA

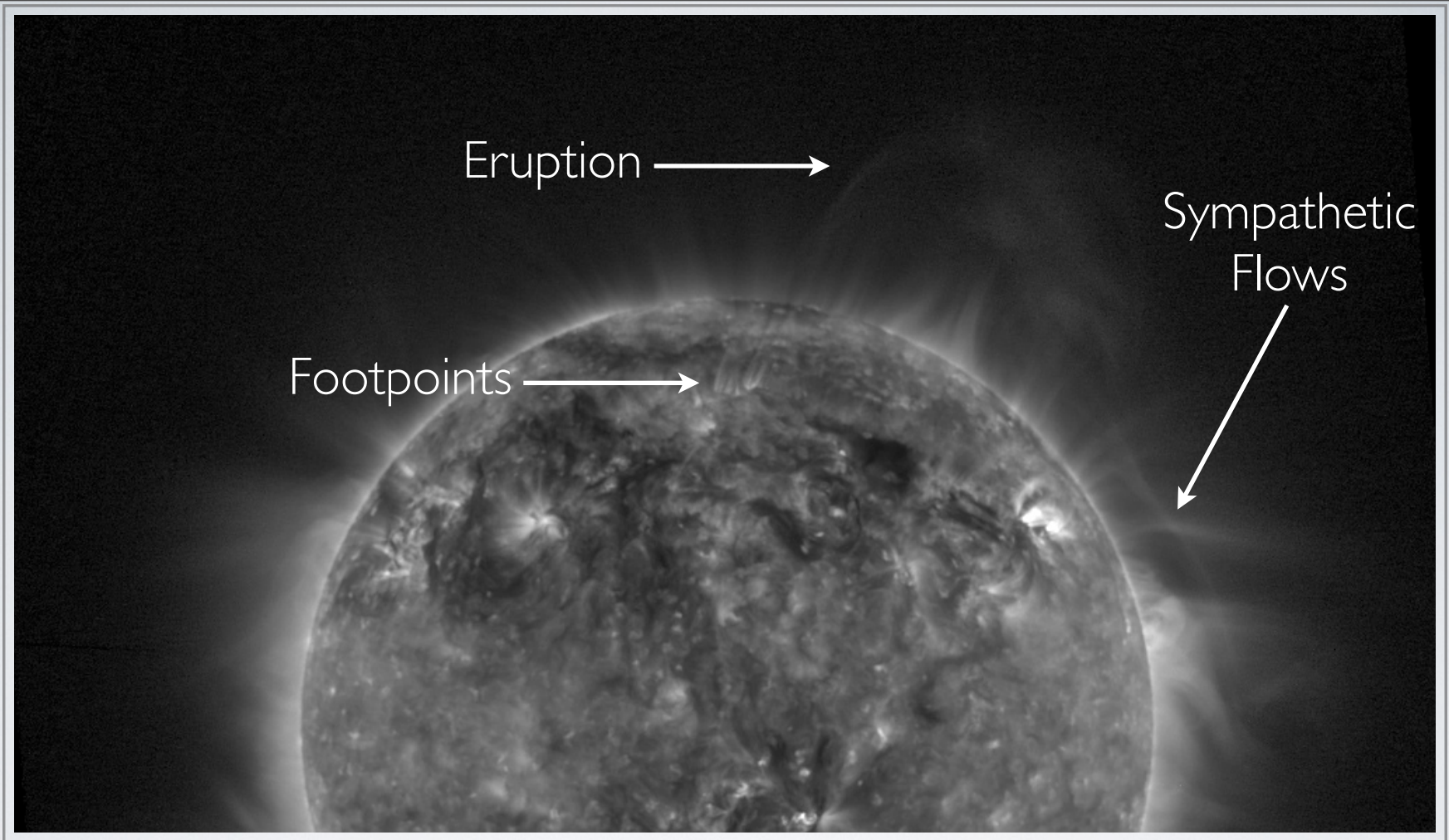


Geomagnetische verstoring:
+/-75deg latitude, 2-3 dagen na CME



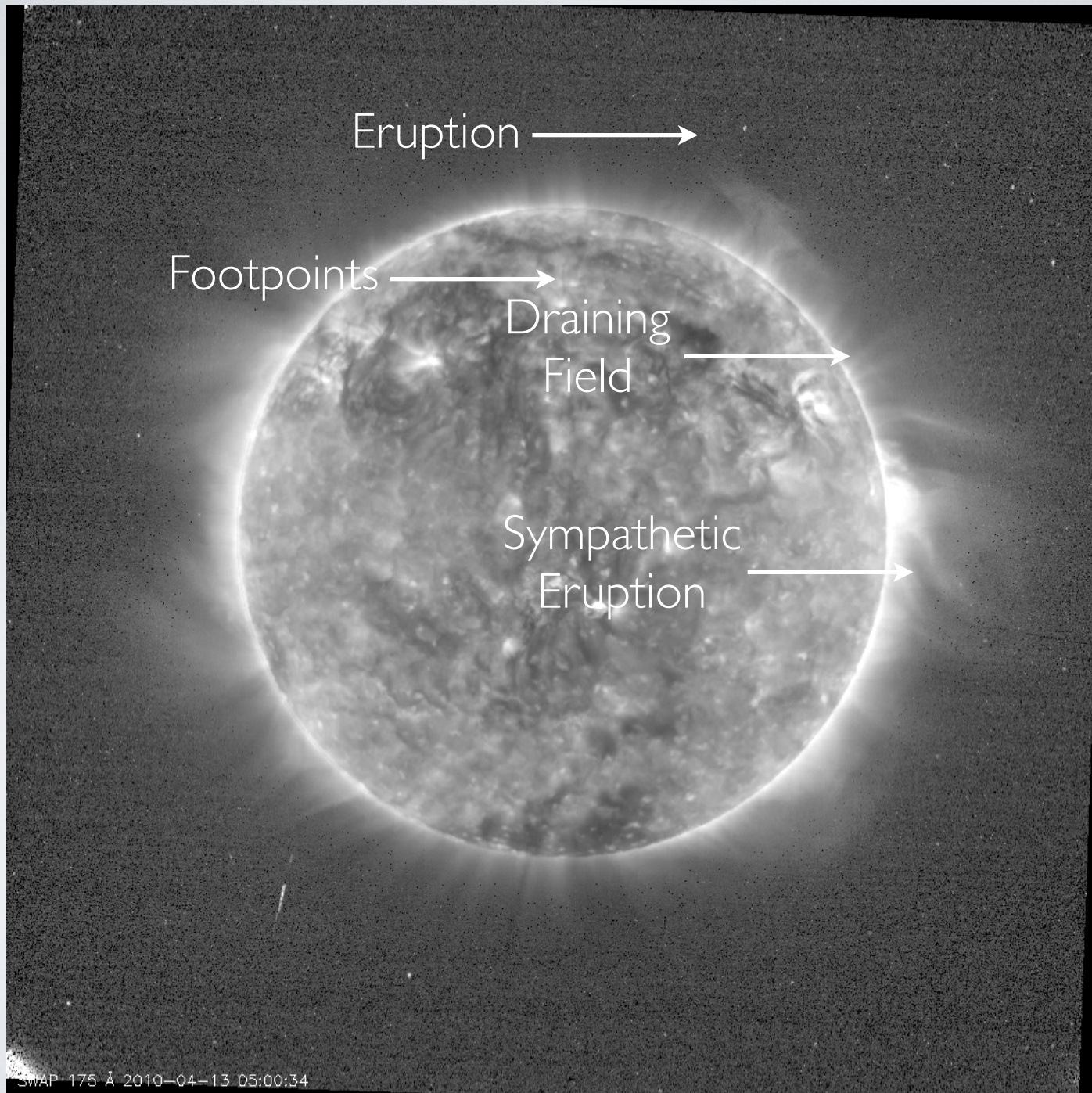


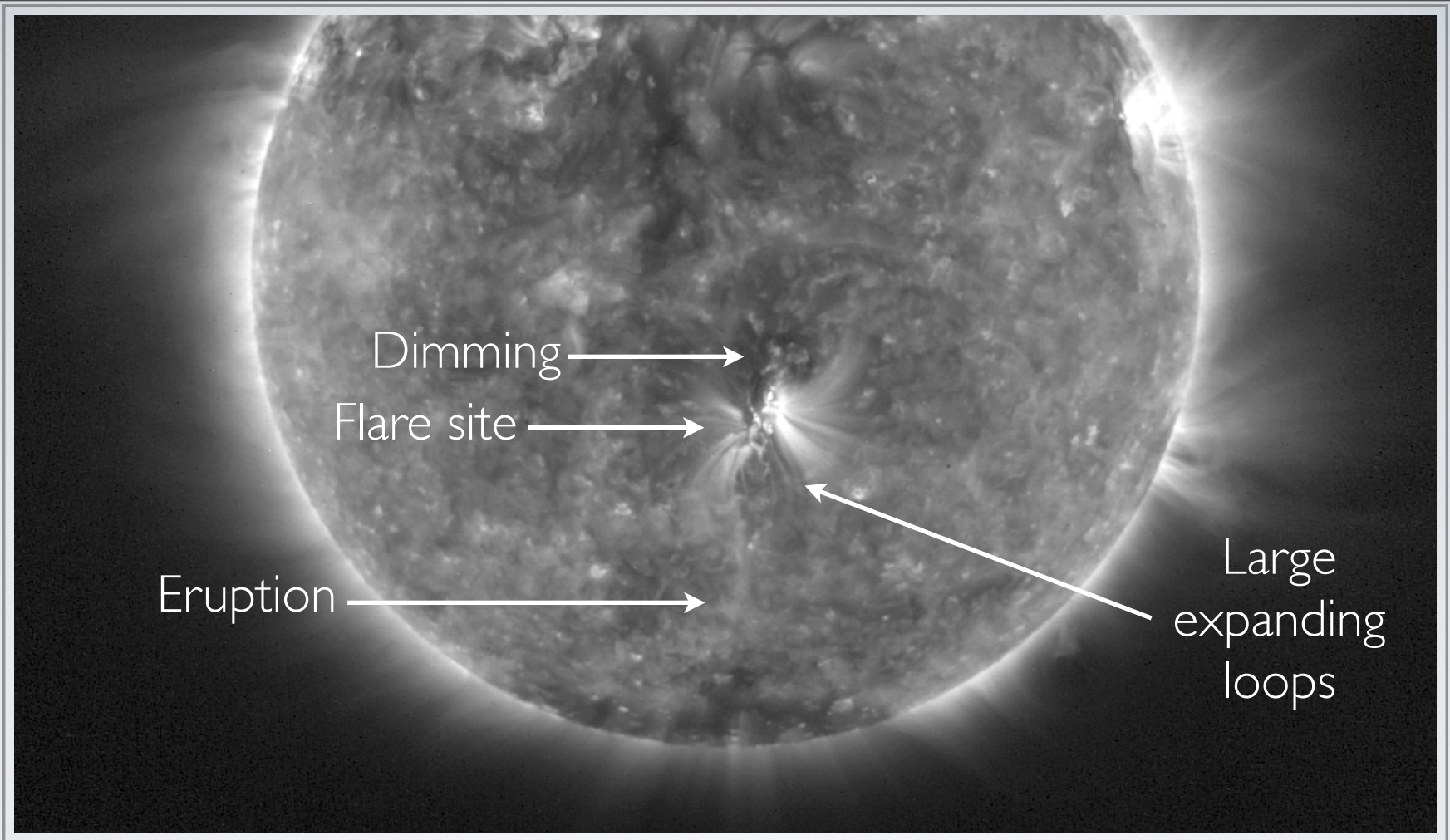
WAARNEMINGEN MET SWAP



PROTUBERANS UITBARSTING

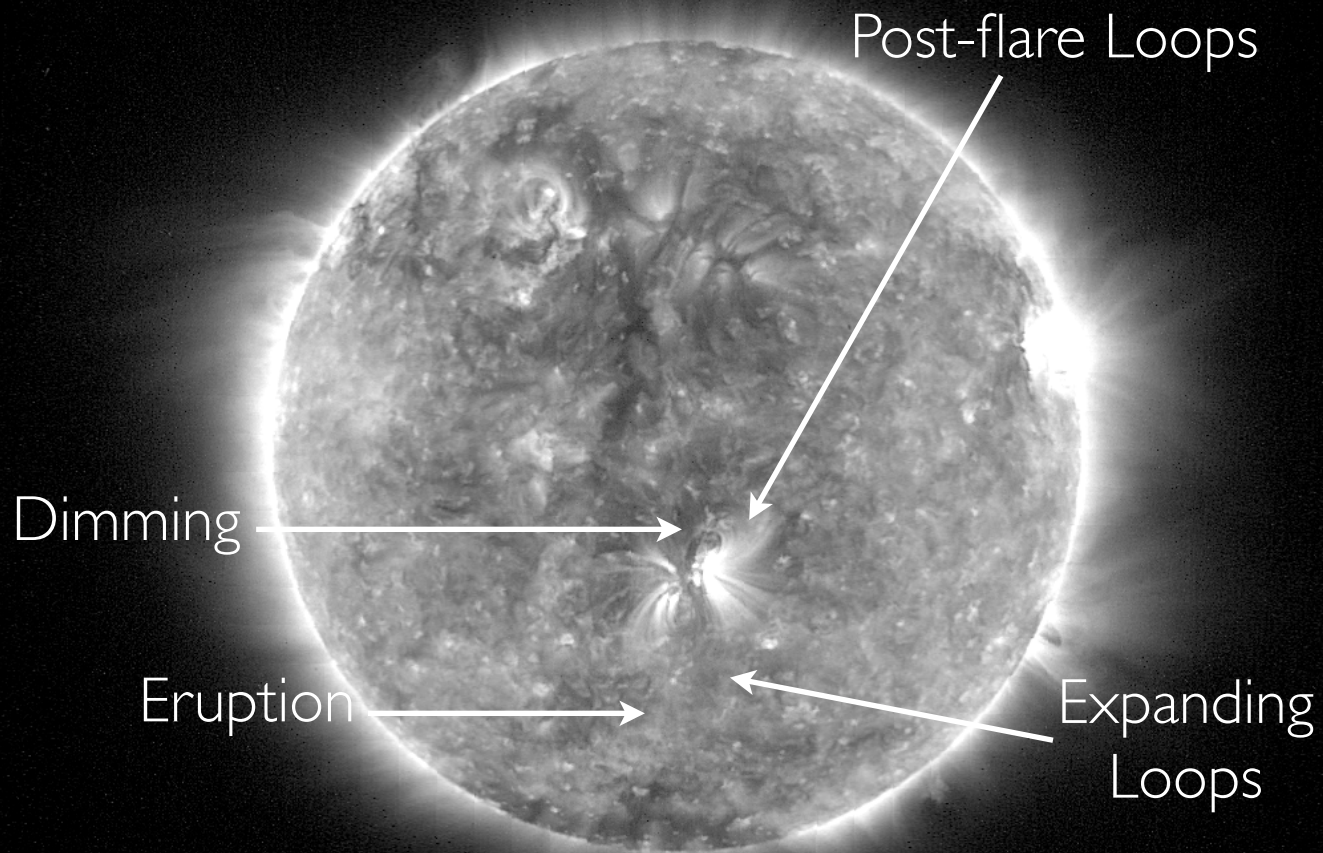
13 April 2010, 09:30 UTC

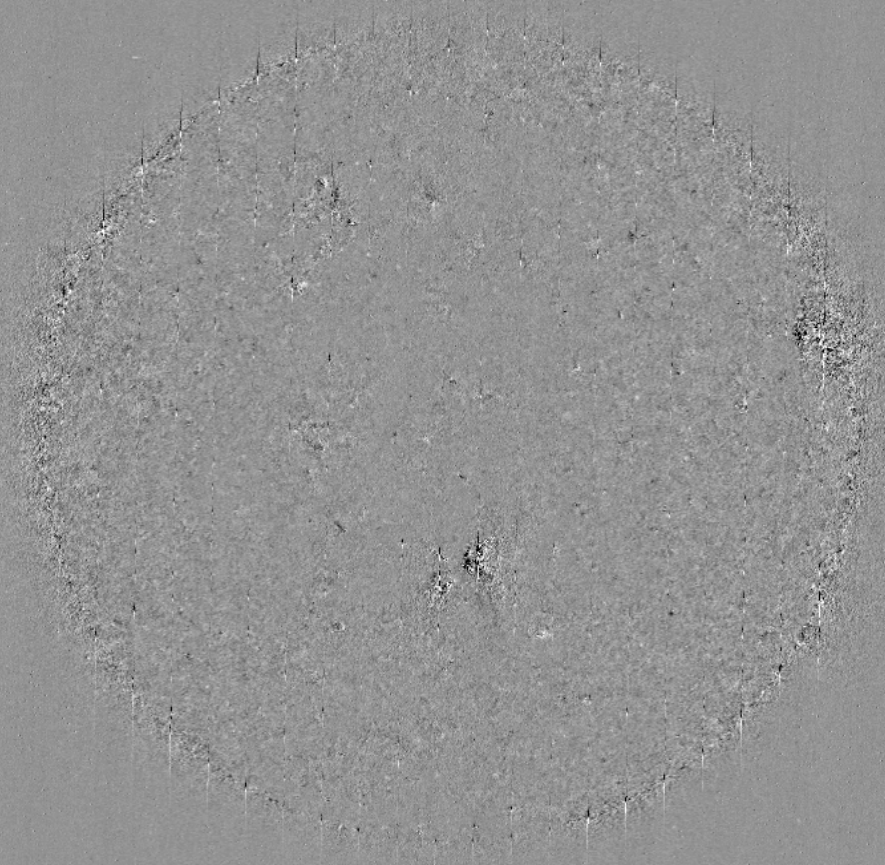




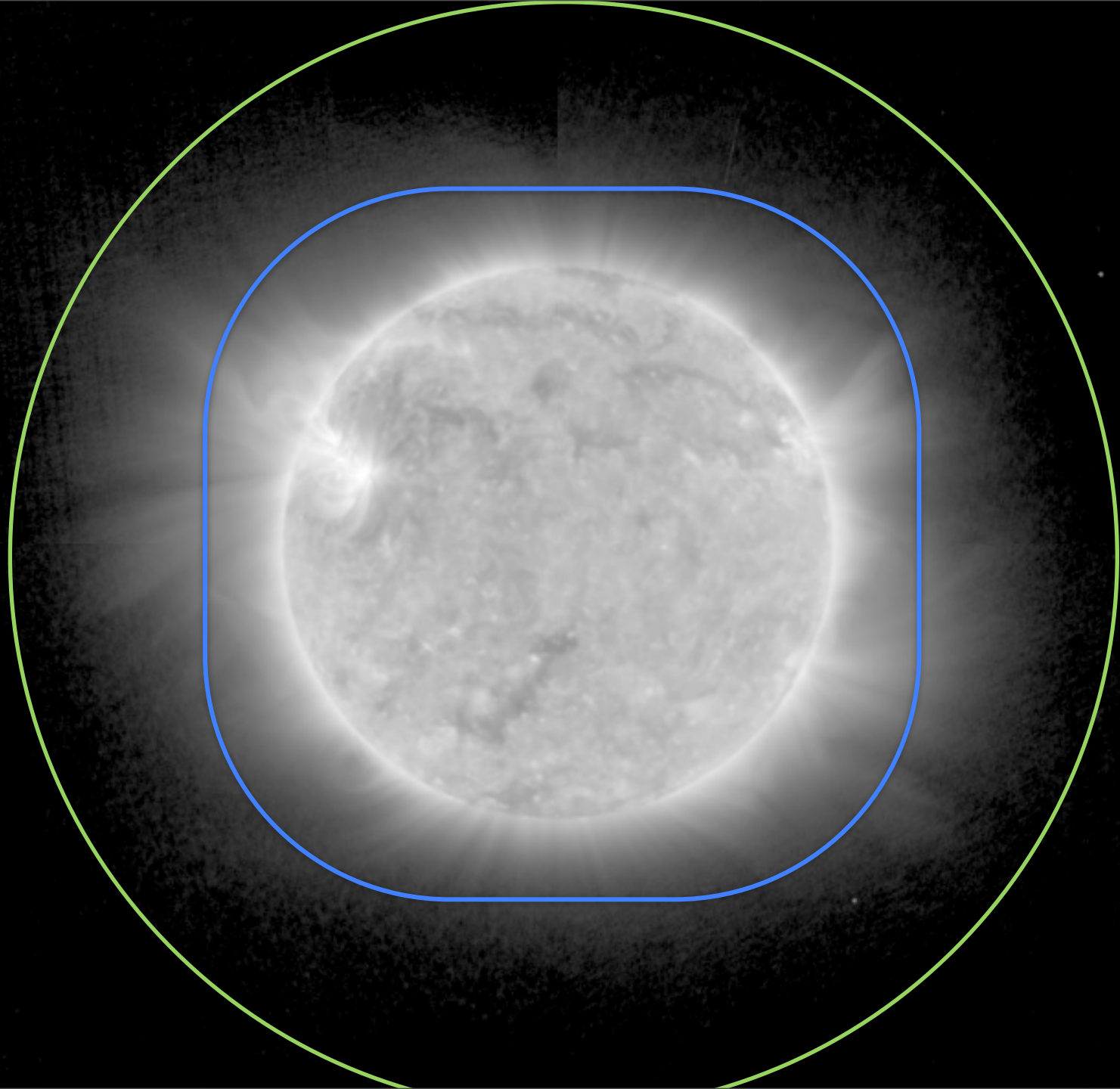
UITBARSTING & ZONNEVLAM

3 April 2010, 09:30 UTC ☀ B7.4 Flare ☀ Geo-effectieve CME





SWAP 175 Å 2010-04-03 08:02:11

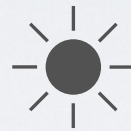




4 ECLIPSEN OP 1 DAG

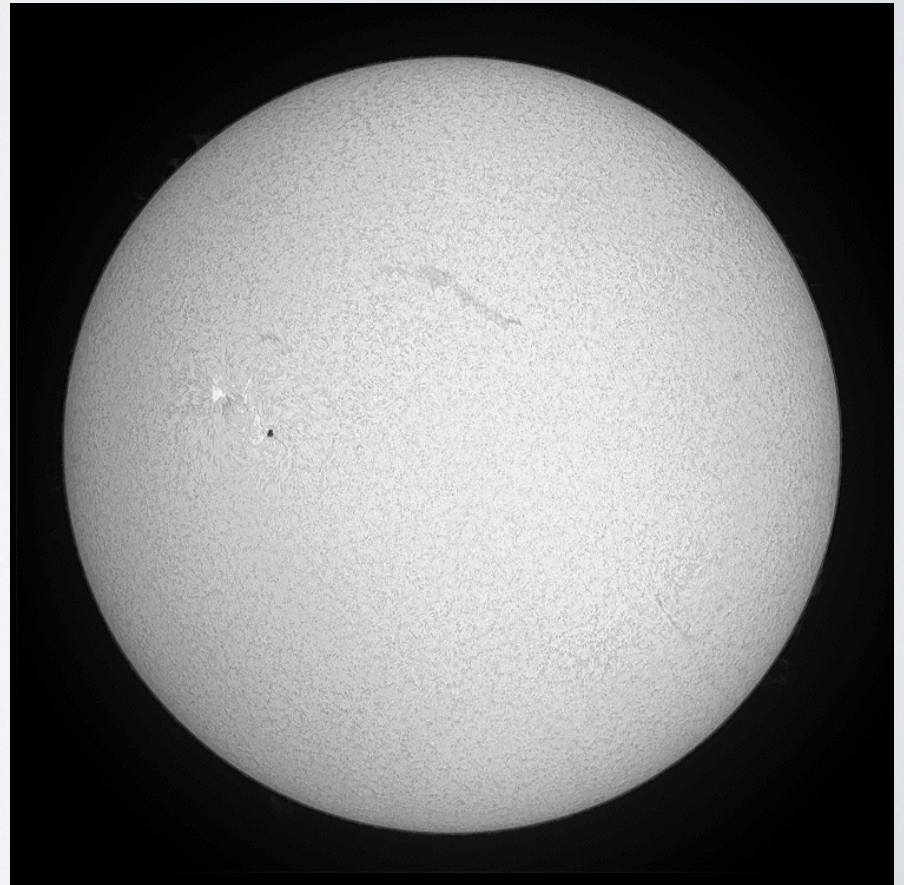
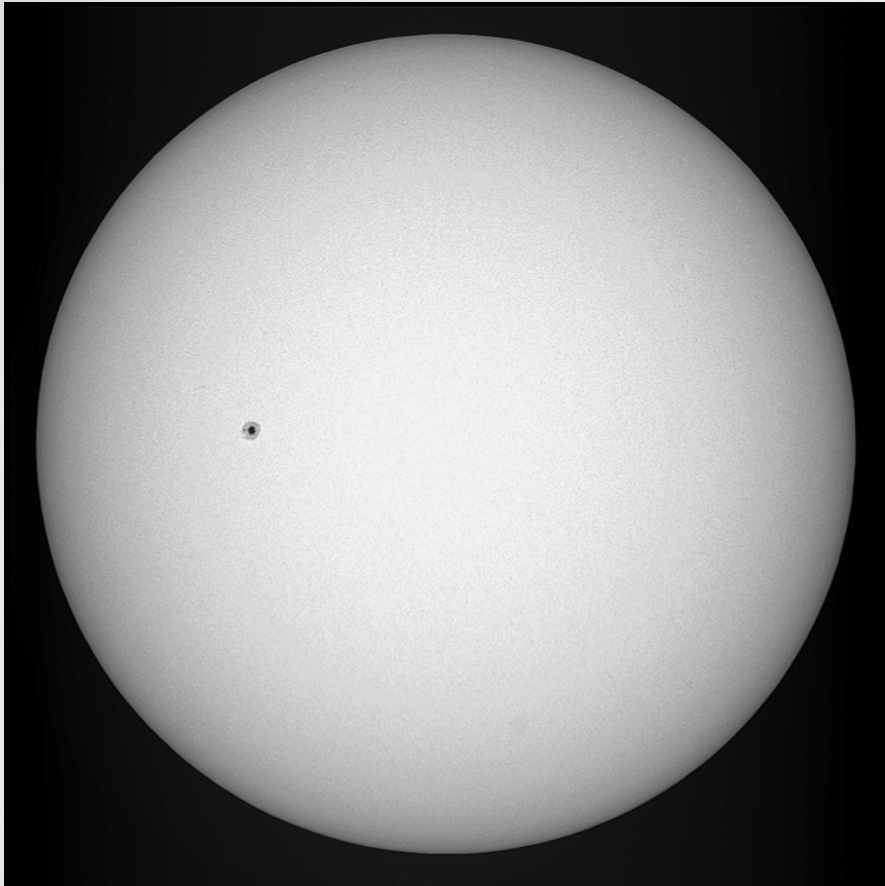
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RUIMTEWEER IN ACTIE

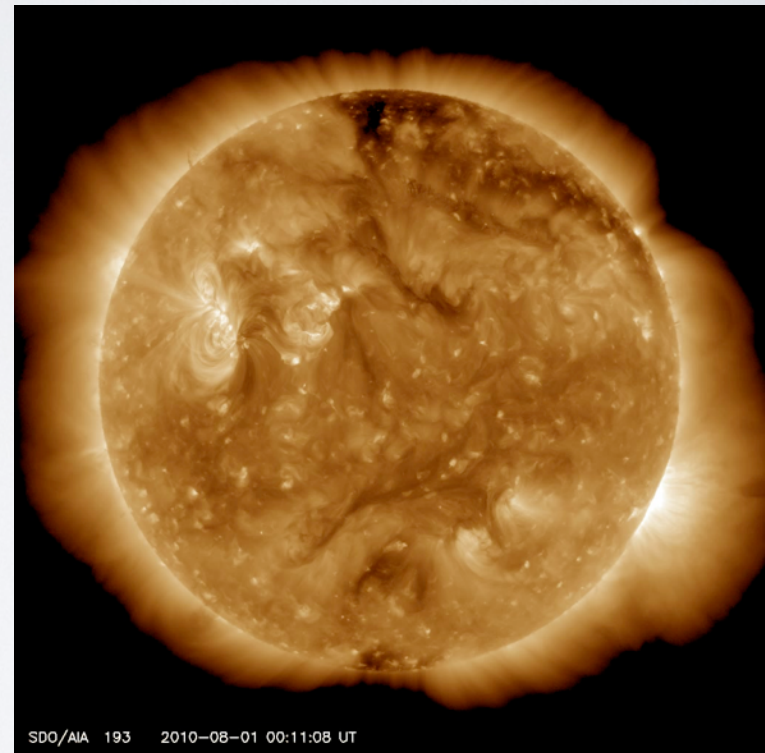
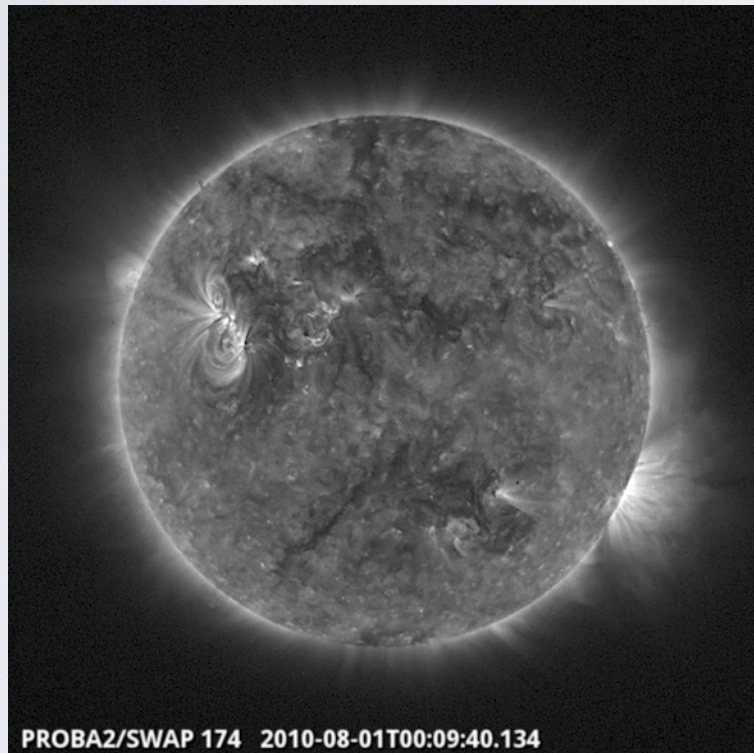


I AUGUSTUS 2010

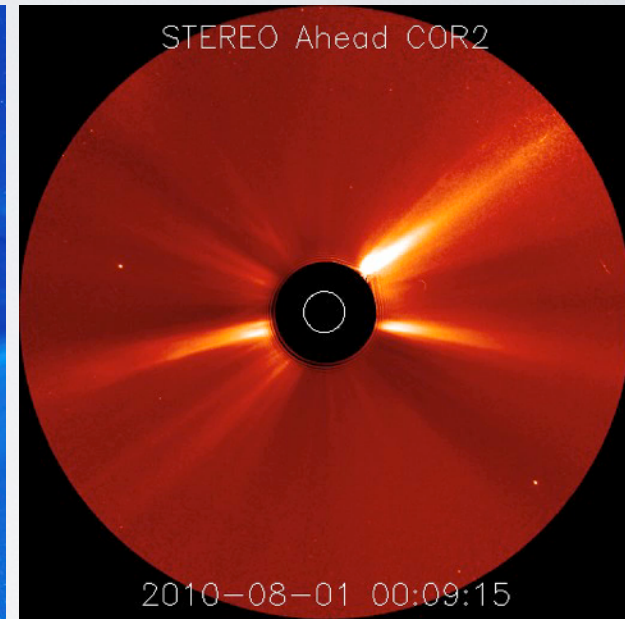
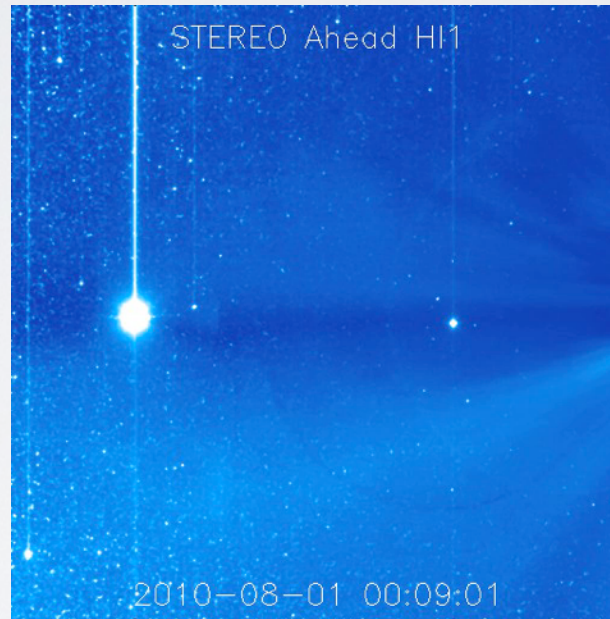
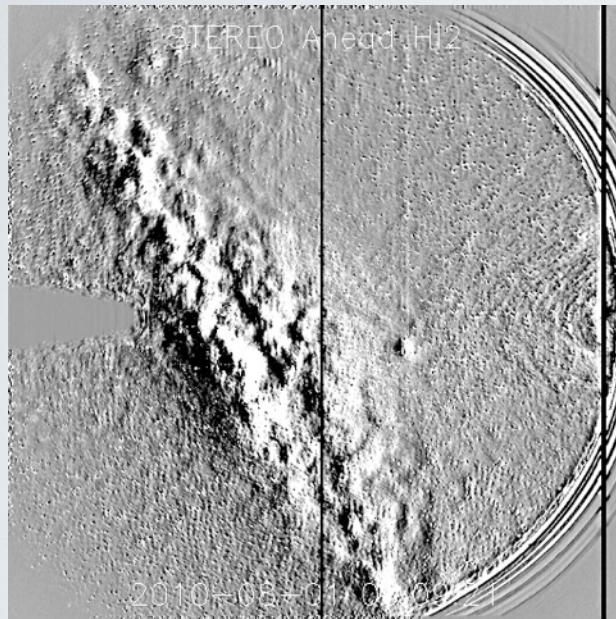
USET



SWAP (174 Å) & SDO (193 Å)



VOORTPLANTING IN DE HELIOSFEER



ROB/SIDC VOORSPELDE EEN GEOMAGNETISCHE STORM

:Issued: 2010 Aug 02 1249 UTC

:Product: documentation at <http://www.sidc.be/products/meu>

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#-----#  
# DAILY BULLETIN ON SOLAR AND GEOMAGNETIC ACTIVITY from the SIDC #  
# (RWC Belgium) #  
#-----#
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SIDC URSIGRAM 00802

SIDC SOLAR BULLETIN 02 Aug 2010, 1214UT

SIDC FORECAST (valid from 1230UT, 02 Aug 2010 until 04 Aug 2010)

SOLAR FLARES : Quiet conditions (<50% probability of C-class flares)

GEOMAGNETISM : Active conditions expected (A>=20 or K=4)

SOLAR PROTONS : Quiet

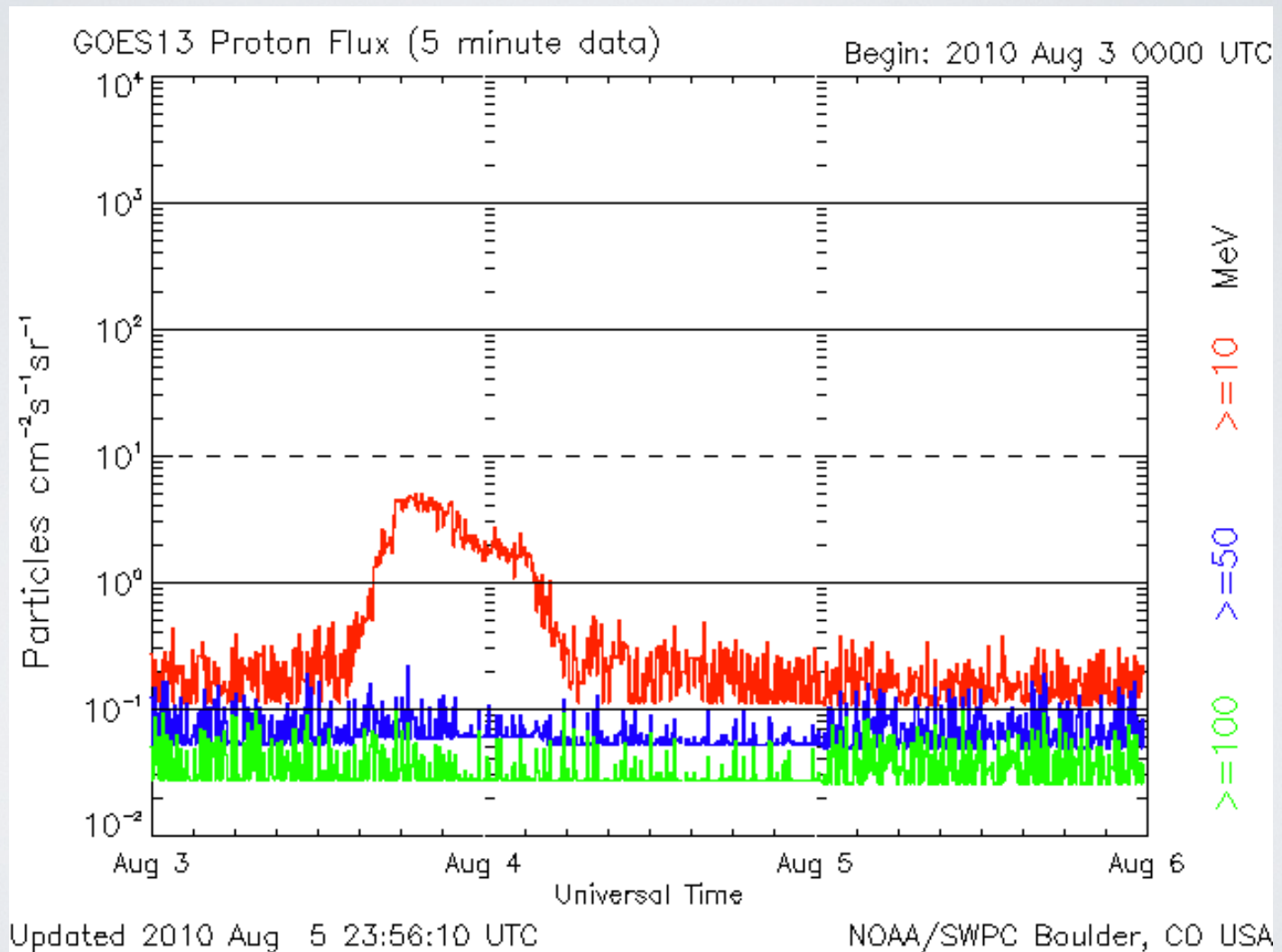
PREDICTIONS FOR 02 Aug 2010 10CM FLUX: 079 / AP: 008

PREDICTIONS FOR 03 Aug 2010 10CM FLUX: 079 / AP: 022

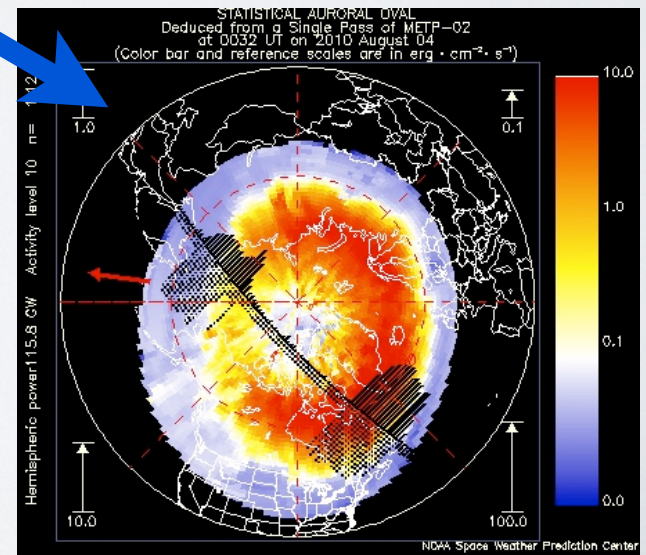
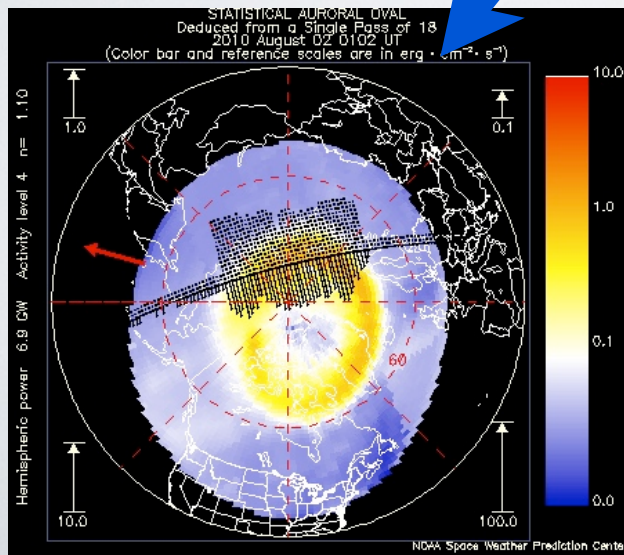
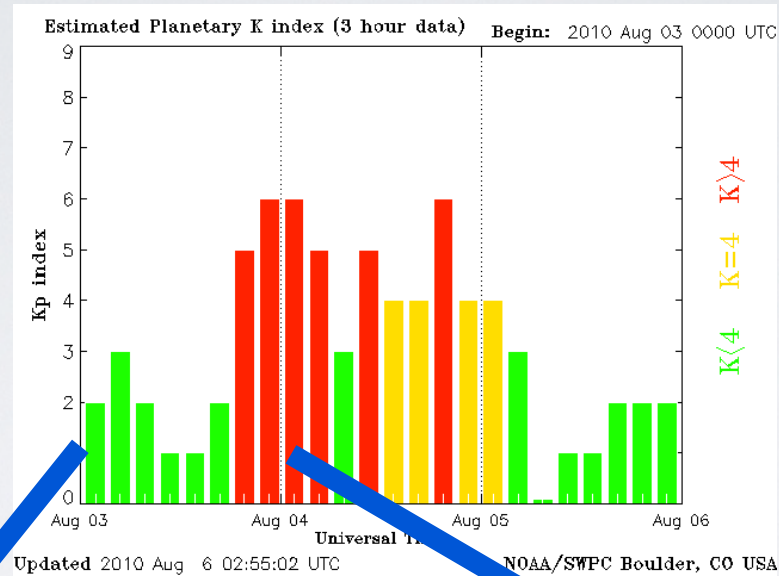
PREDICTIONS FOR 04 Aug 2010 10CM FLUX: 079 / AP: 022

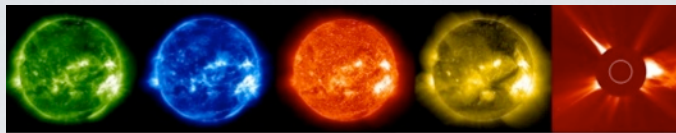
COMMENT: Solar activity is expected to be mostly quiet with possible risks of C class flares from NOAA AR 1092. **Geomagnetic activity is expected to be unsettled to active by the end of Aug. 2nd due to the arrival of a halo CME linked to the long duration event of Aug. 1st.** Coronagraphic observations show actually a complex CME event, with a fast component linked to the flaring event of NOAA AR 1092 (C class flare) and subsequently, a slower component linked to a polar crown filament eruption, to the north of this active region. SWAP observations show that the fast component might not be completely Earth directed. Arrival of the CME at the Earth orbit is expected for the end of Aug. 2nd. The filament eruption seems more favorable in terms of geomagnetic effects, and is expected to trigger geomagnetic disturbances on Aug. 4.

ZONNEWIND EN PROTONEN



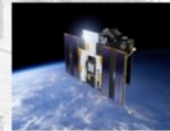
EFFECT OF AARDE: GEOMAGNETISME





K.U.Leuven-Academisch Vormingsinstituut voor Leraren
Vliebergh-Senciecentrum
i.s.m. De Koninklijke Sterrenwacht van België

PROBA2



Ruimteweer waarnemen
met een Belgische satelliet

Documentatietekst voor leraren
Geschreven door
Elke D'Huys en Petra Vanlommel



PROBA2@SCHOOL

petra.vanlommel@oma.be

elke.dhuys@oma.be