FIRST CIENCE RESULTS FROM PROBA?

David Berghmans & PROBA2 Science Center Royal Observatory of Belgium

SOTERIA annual meeting * Debrecen * October 6, 2010 david.berghmans@gmail.com















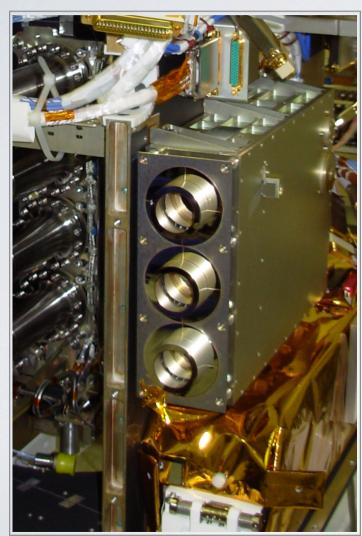




PROBA2 INSTRUMENTATION

Large Yield Radiometer
Sun Watcher with Active Pixel System & Image Processing





Pl: Marie Dominique (ROB)

Important Swiss Contribution: Werner Schmutz (PMOD-WRC)





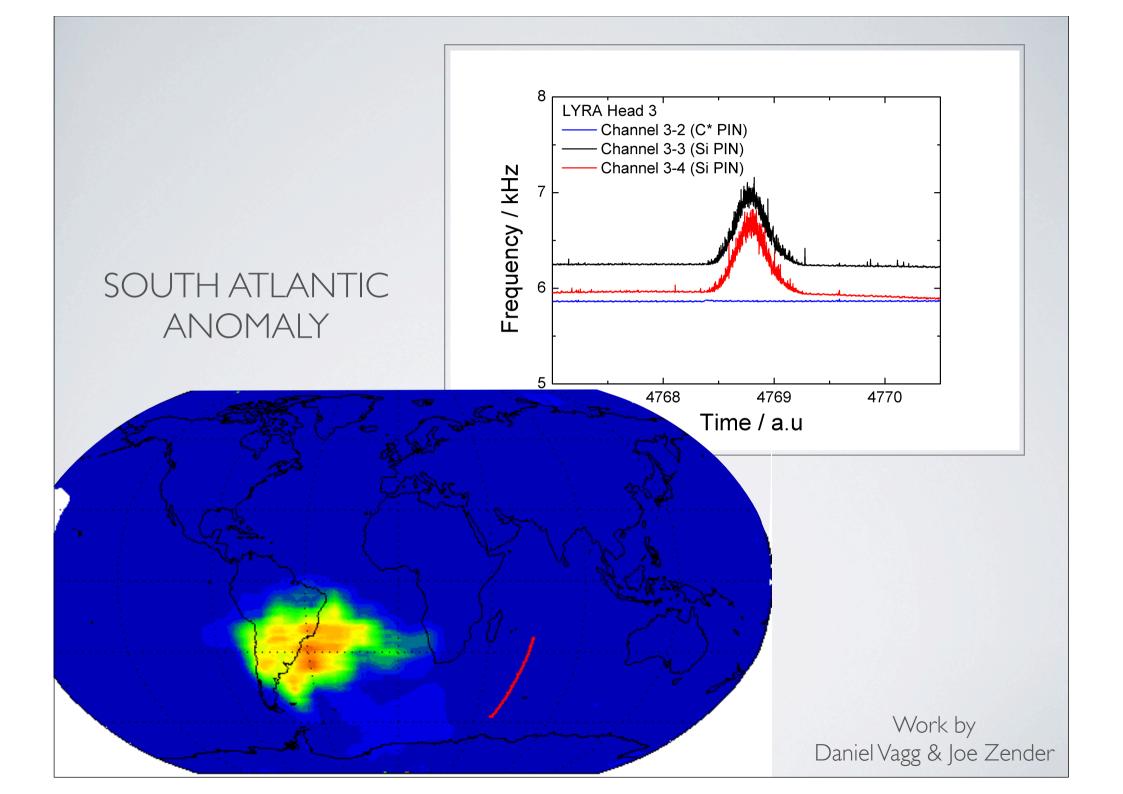


Lyman-α: 120-123 nm

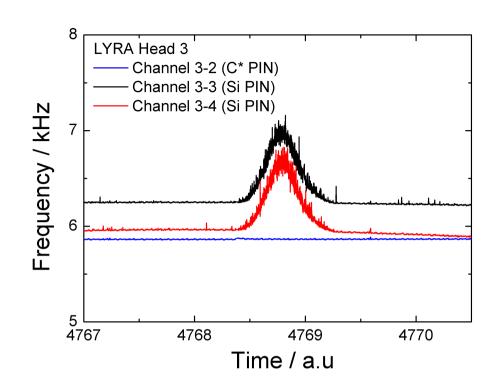
Herzberg Continuum: 190-222 nm

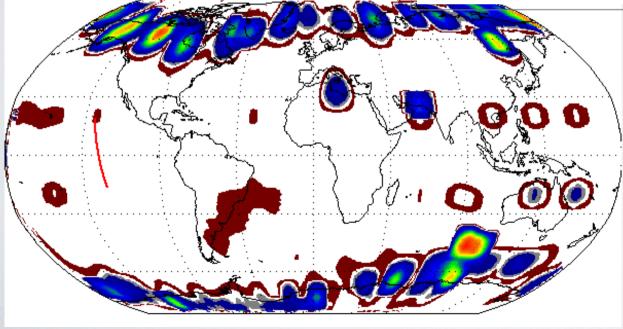
Aluminum Filter: 17-80 nm+a bit of soft X-rays

Zirconium Filter: 6-20 nm+a bit of soft X-rays



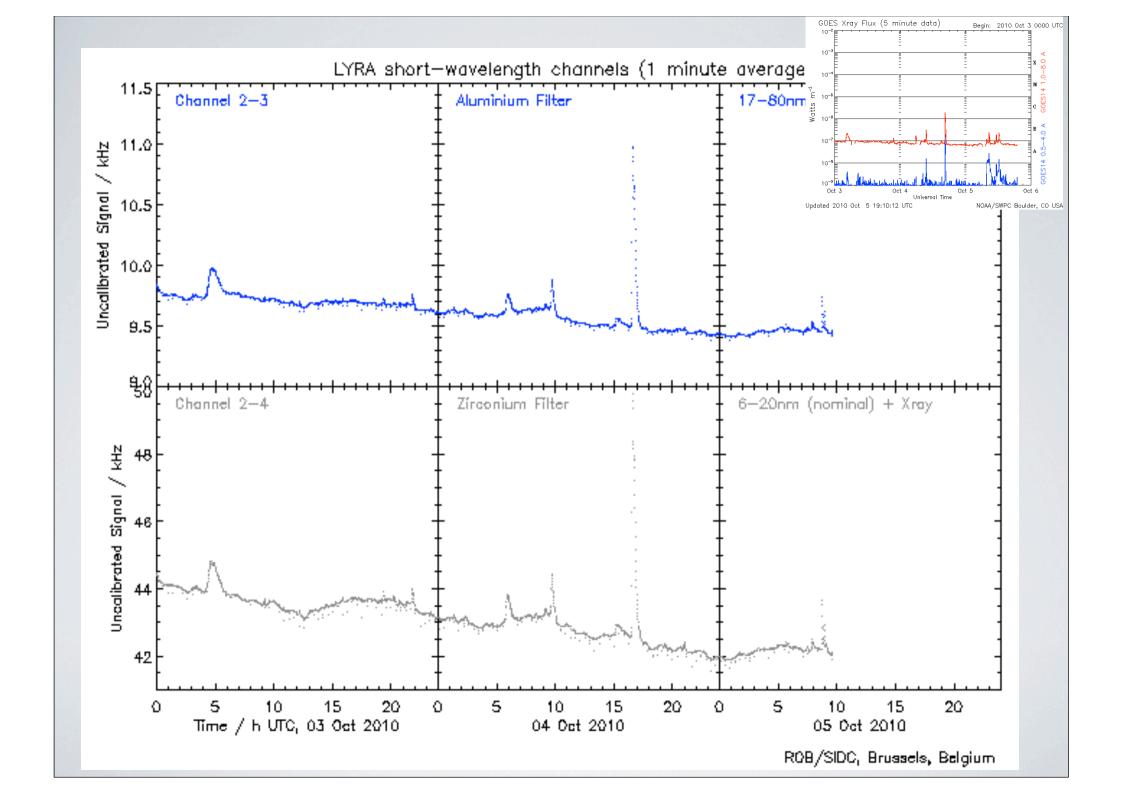
AURORAL ACTIVITY (APRIL 6 2010)

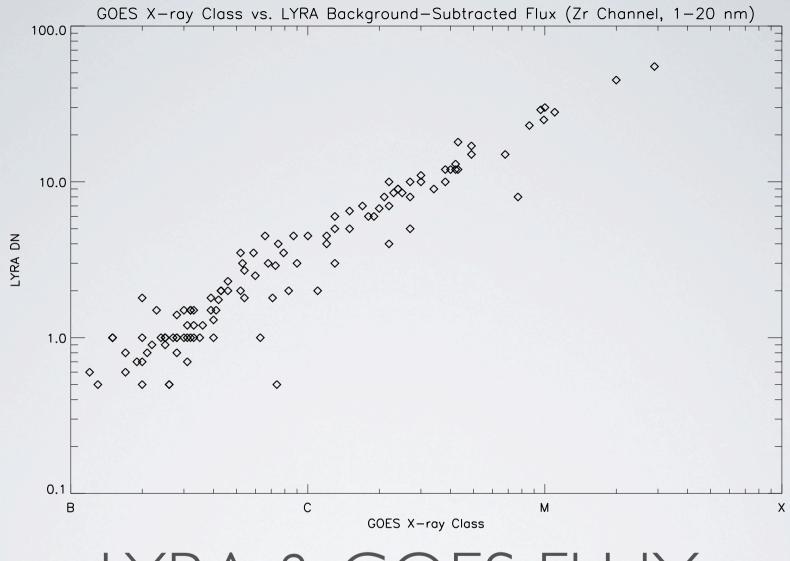






Work by Daniel Vagg & Joe Zender





LYRA & GOES FLUX

Flares observed in 2010, LYRA Zr Channel



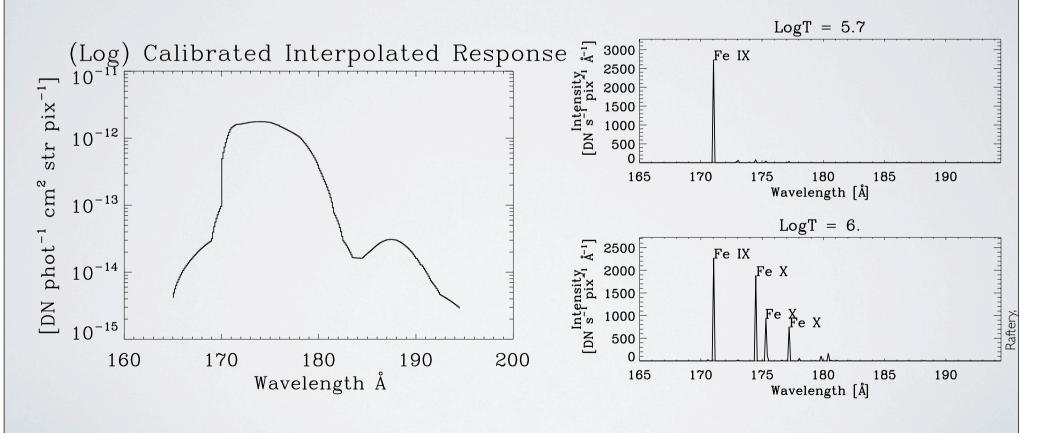


Sun Watcher using APS and Image Processing

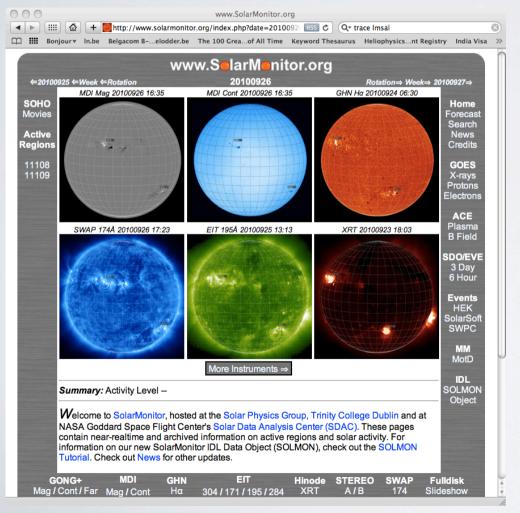
Pl: David Berghmans (ROB) Jean-Marc Defise (CSL)

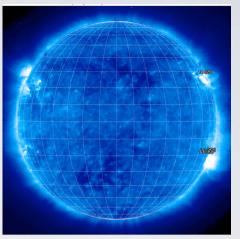
JP Halain (Centre Spatial de Liege) SWAP project manager

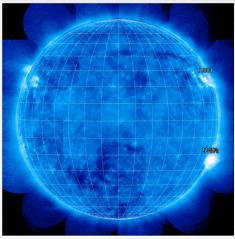
SPECTRAL RESPONSE

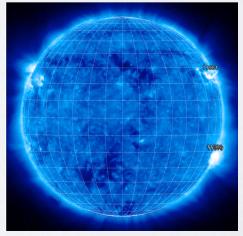


SPECTRAL RESPONSE





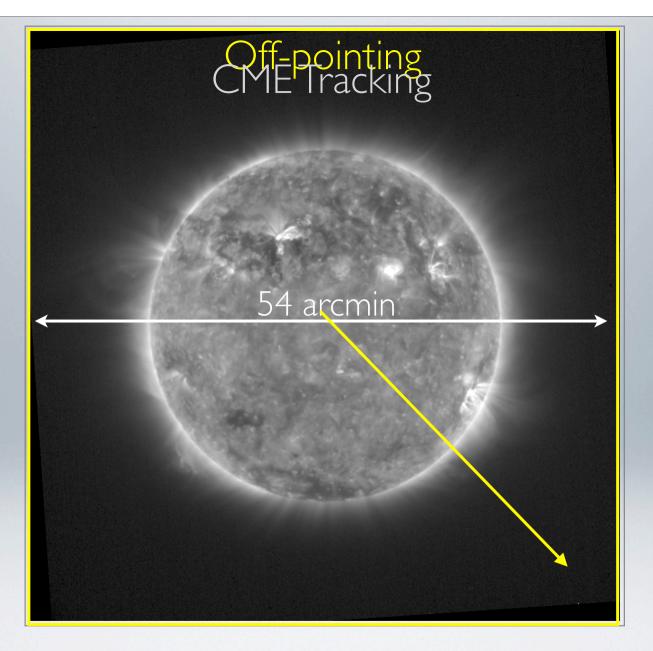




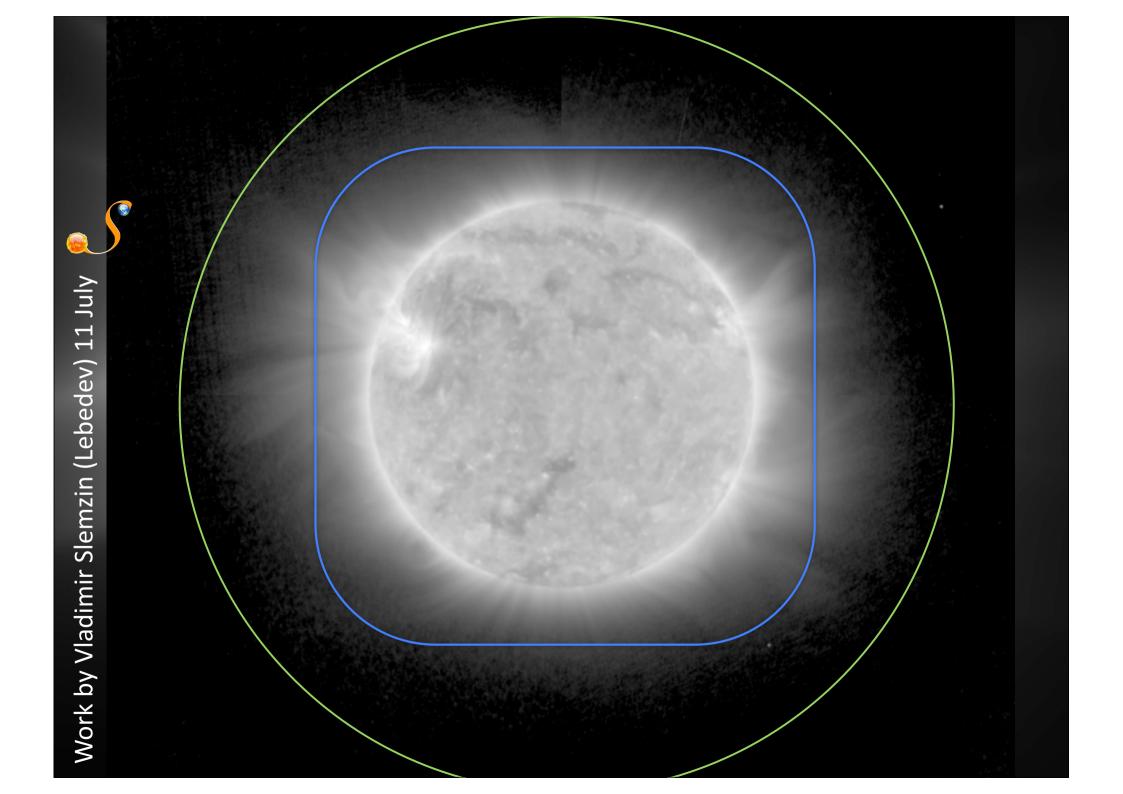


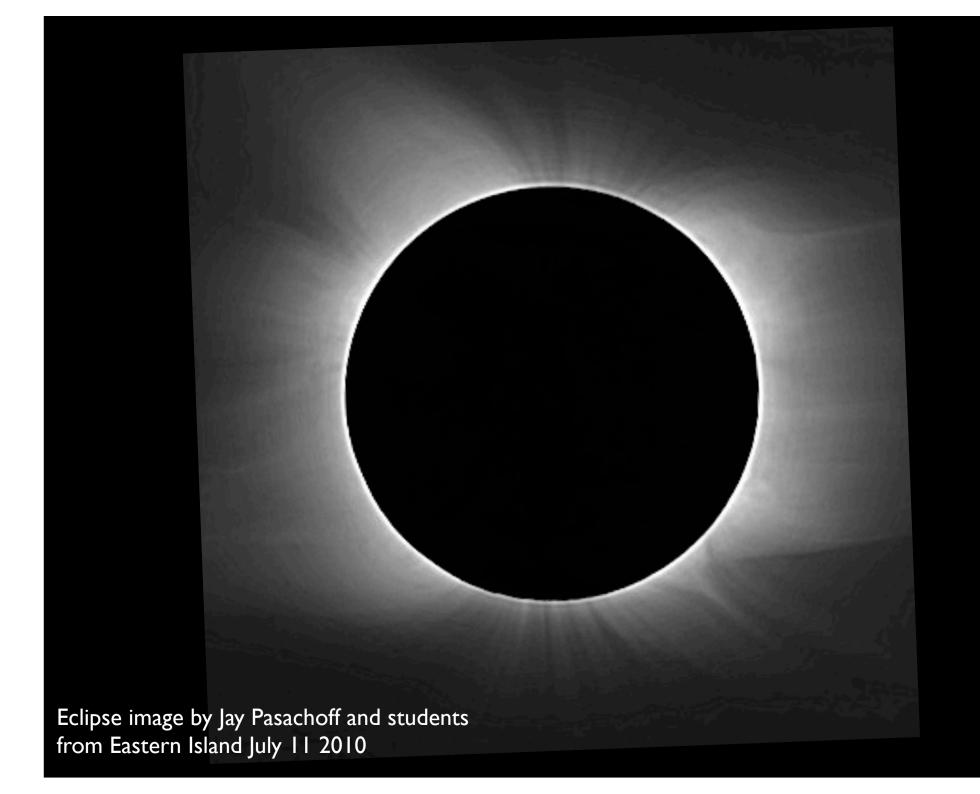


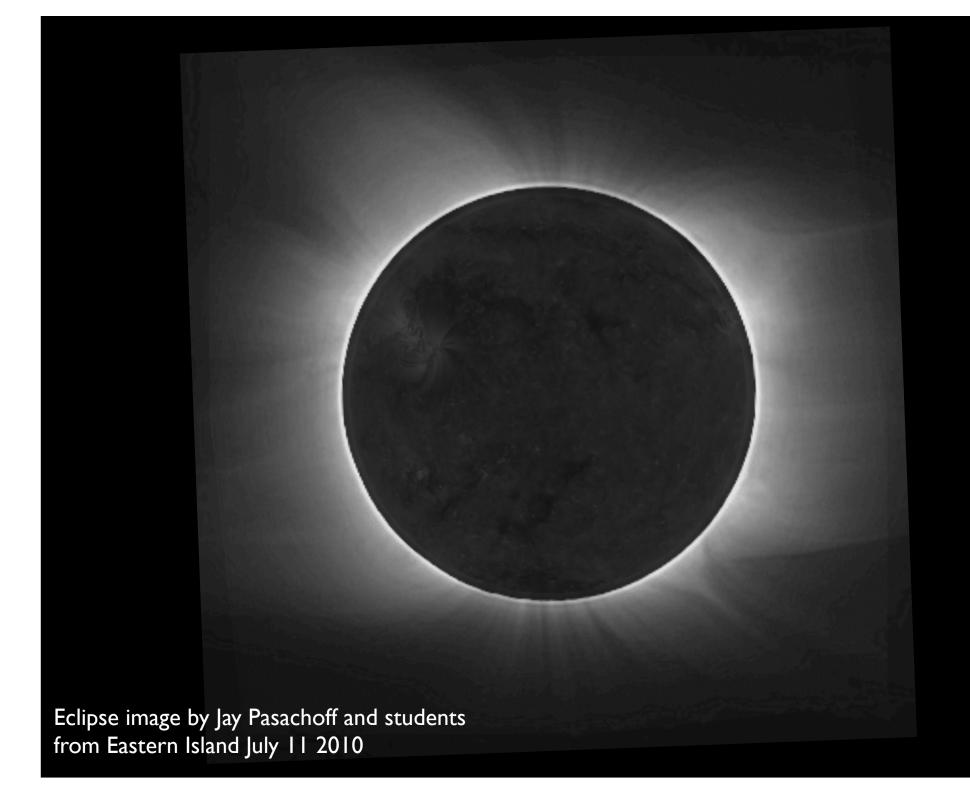


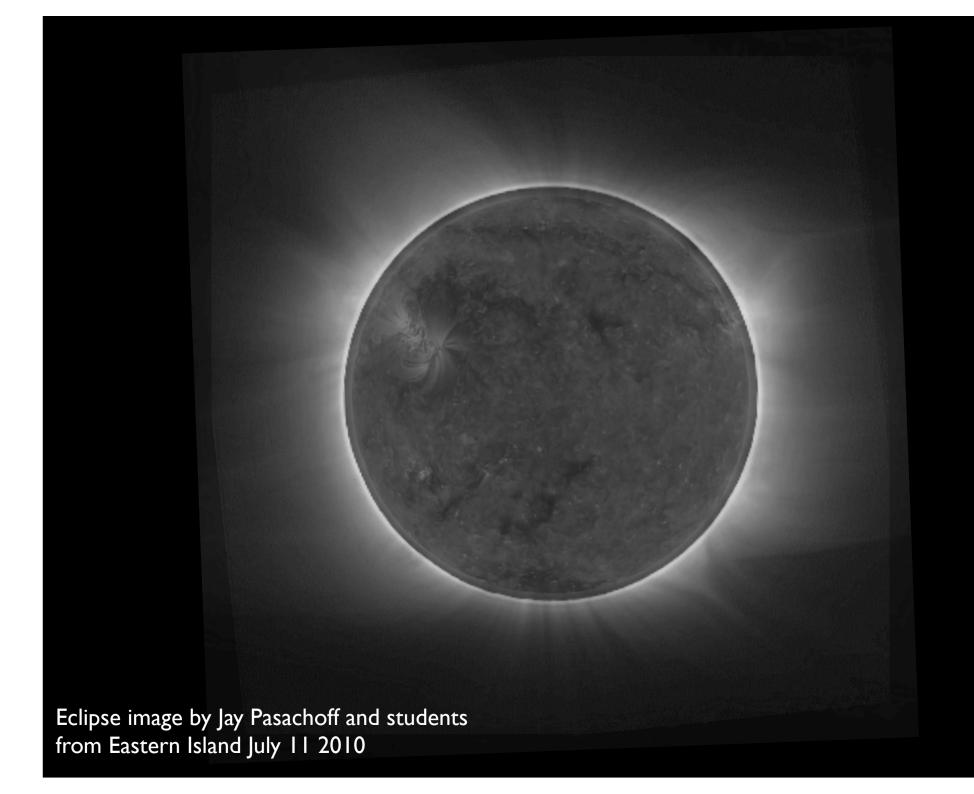


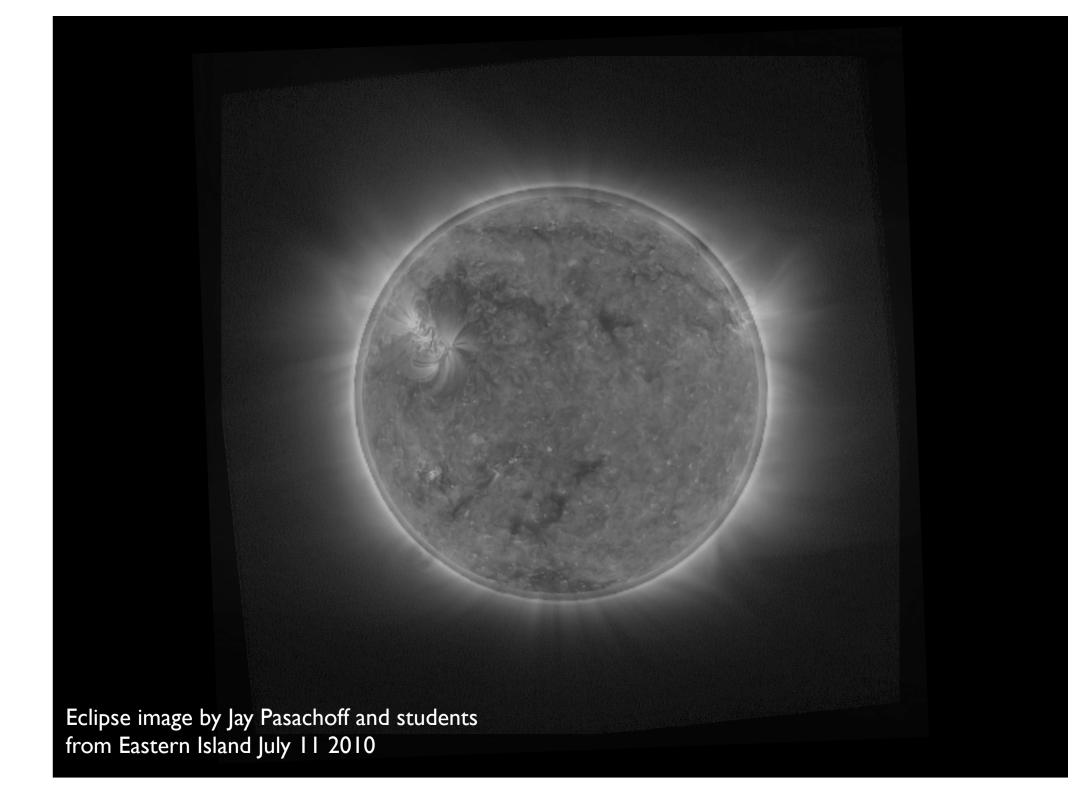
SWAP VS. AIA ON SDO

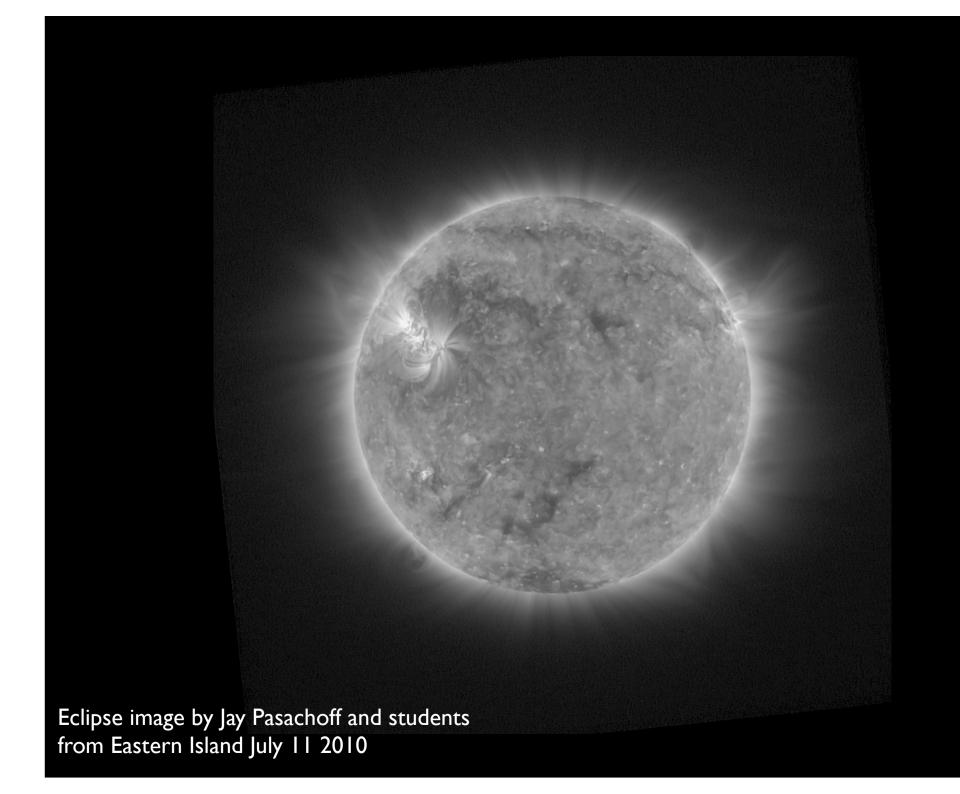


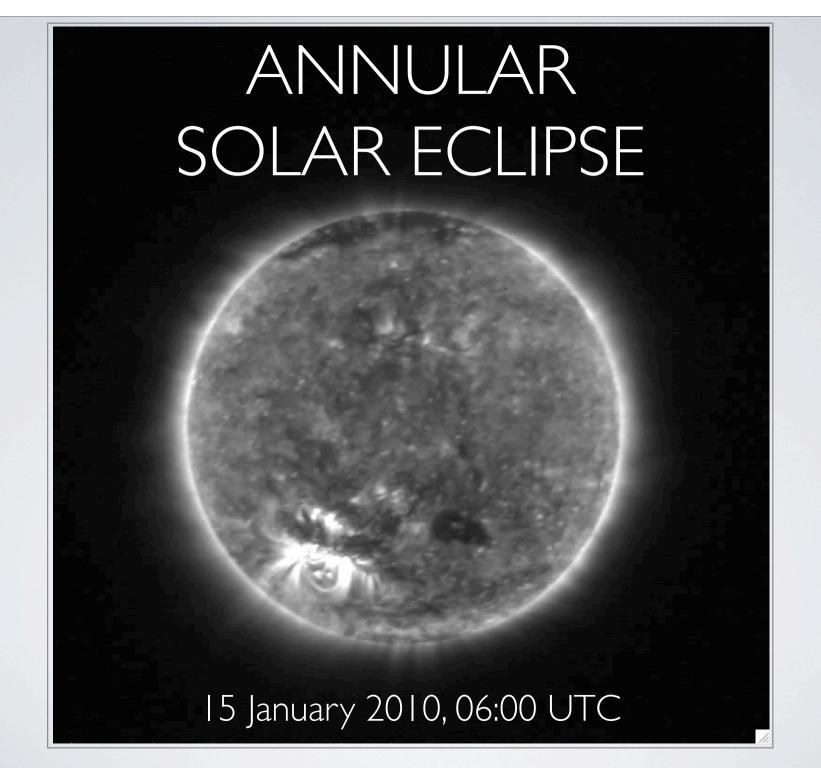


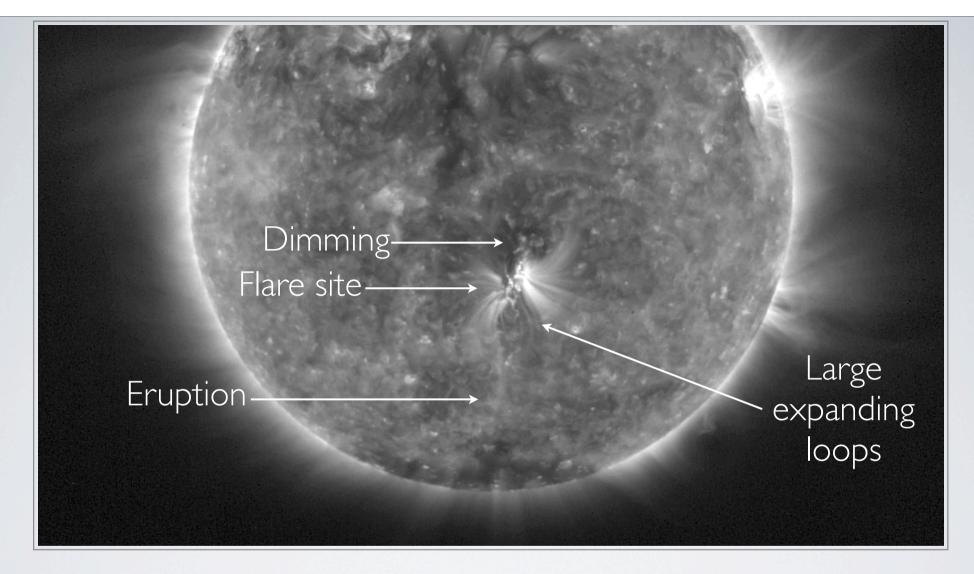








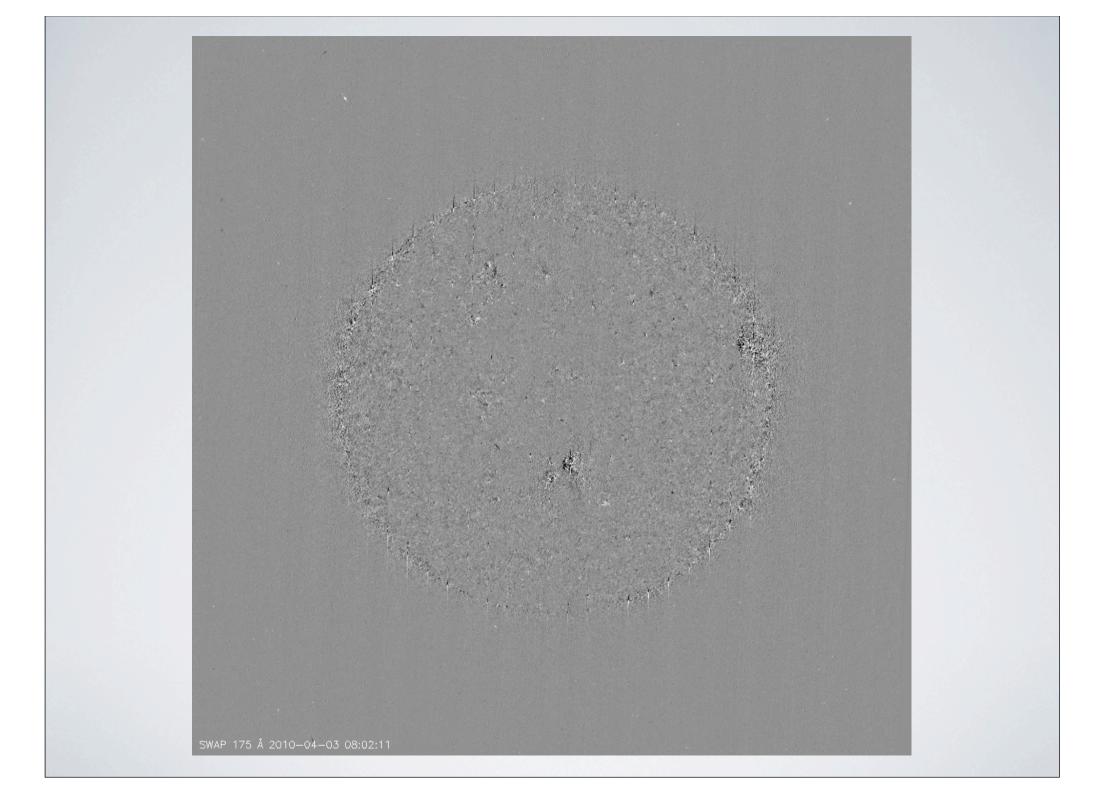




ERUPTION & FLARE

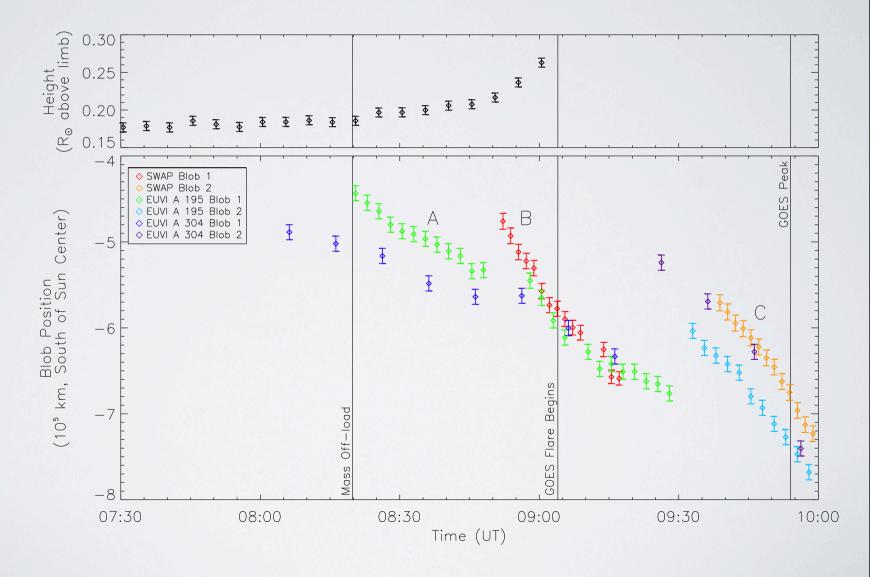
3 April 2010, 09:30 UTC * B7.4 Flare * Geoeffective CME

Post-flare Loops Dimming Expanding Loops Eruption SWAP 175 Å 2010-04-03 08:00:31



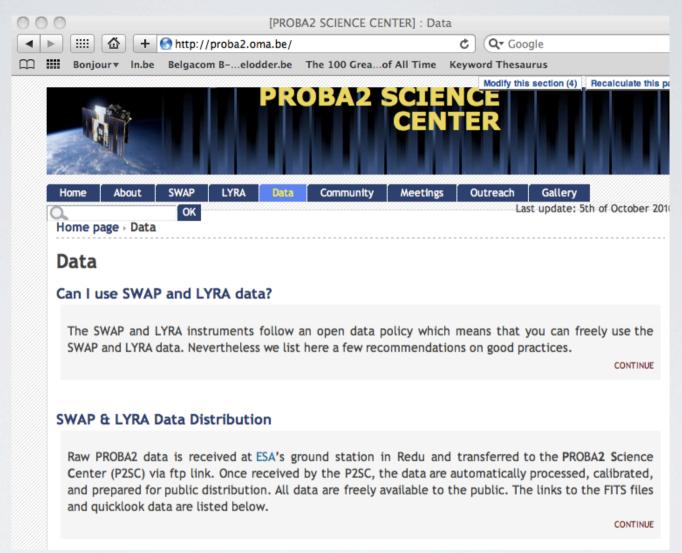
EUVI-B 195 Å EUVI-A 195 Å 08:18:51 08:20:30 08:20:50 174 Å Difference EUVI-A 09:08:51 09:06:15 09:06:35 Å Difference EUVI-A 09:36:35 09:36:15

Seaton, Mierla, et al, 2010 Apj Lett (submitted)



Seaton, Mierla, et al, 2010 Apj Lett (submitted)

http://proba2.sidc.be



swap lyra@oma.be

RECENT MOVIE