

PROBA2 SWT17 ☀ 12 NOVEMBER 2018

E. D'HUYS & THE P2SC TEAM

SWAP STATUS UPDATE

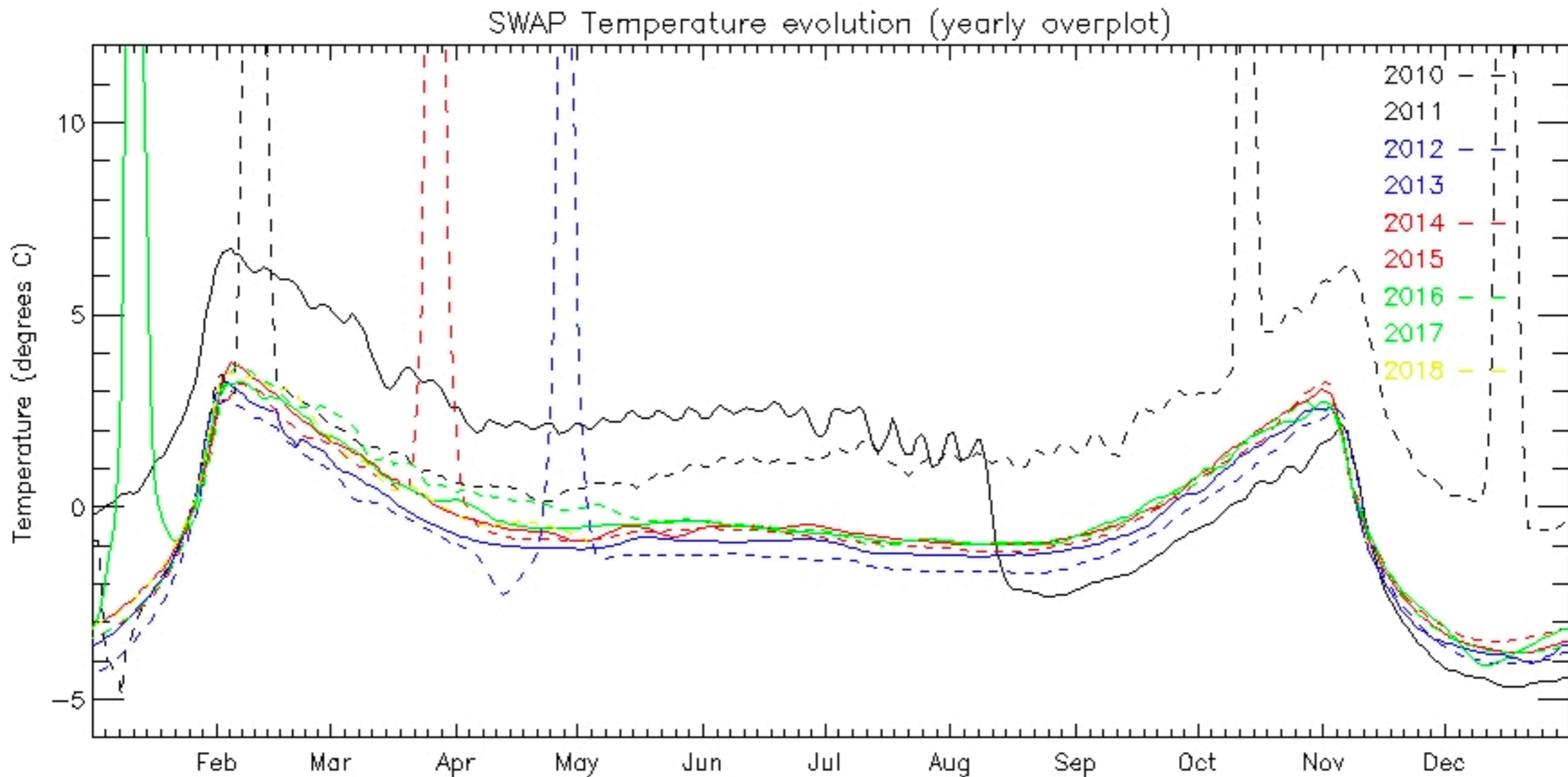
SWAP STATUS UPDATE

INSTRUMENT HEALTH AND PERFORMANCE

SWAP STATUS UPDATE

HEALTH AND PERFORMANCE

SWAP performance is nominal



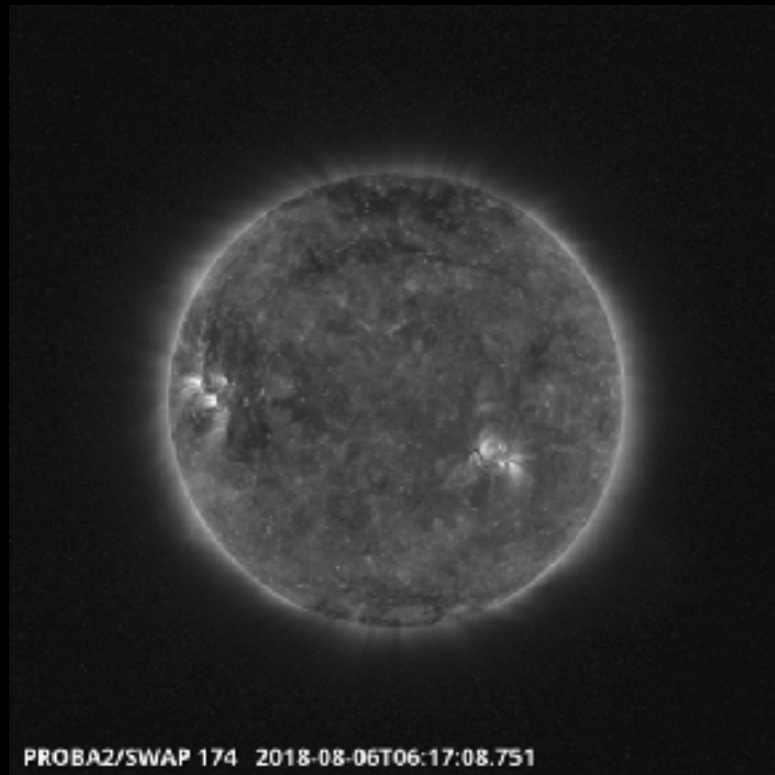
SWAP STATUS UPDATE

SWAP DATA

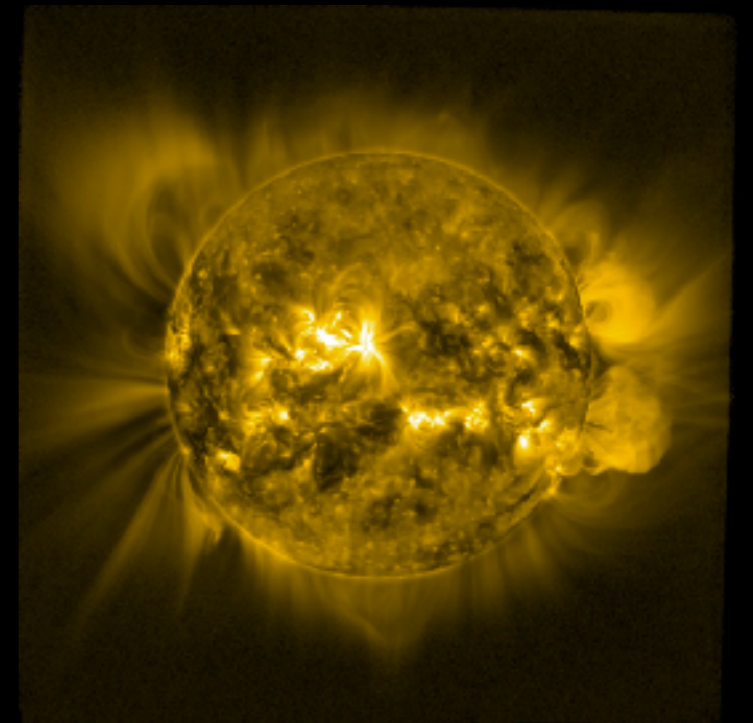
SWAP DATA VOLUMES

- We have over 2 million engineering fits files, and ~1.8 million calibrated images
- Total volume of SWAP data products: ~9.2T

SWAP DATA PRODUCTS



- Raw images (level 0)
- Calibrated images (level 1)
- Quicklook data
- Daily Movies
- Carrington Movies
- Average Intensity (SWAVINT)



SWAP STATUS UPDATE

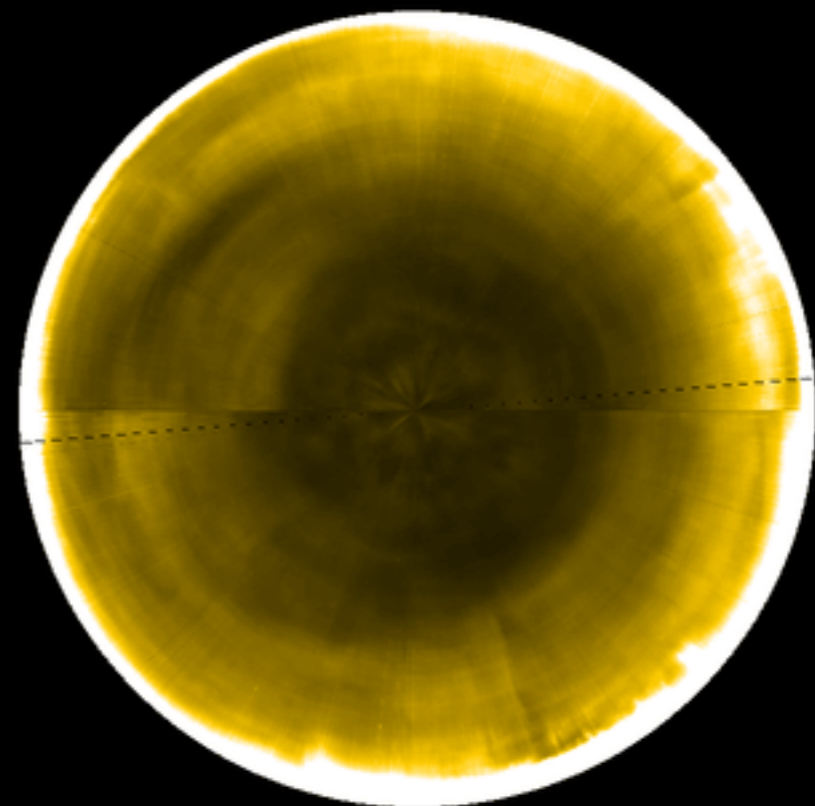
NEW: POLAR IMAGES OF THE SUN

Due to interest in new solar polar missions, efforts have been made to image the poles from the L1 perspective.

A new way of reconstructing the poles using SWAP data has been developed.

Refreshed on a daily basis

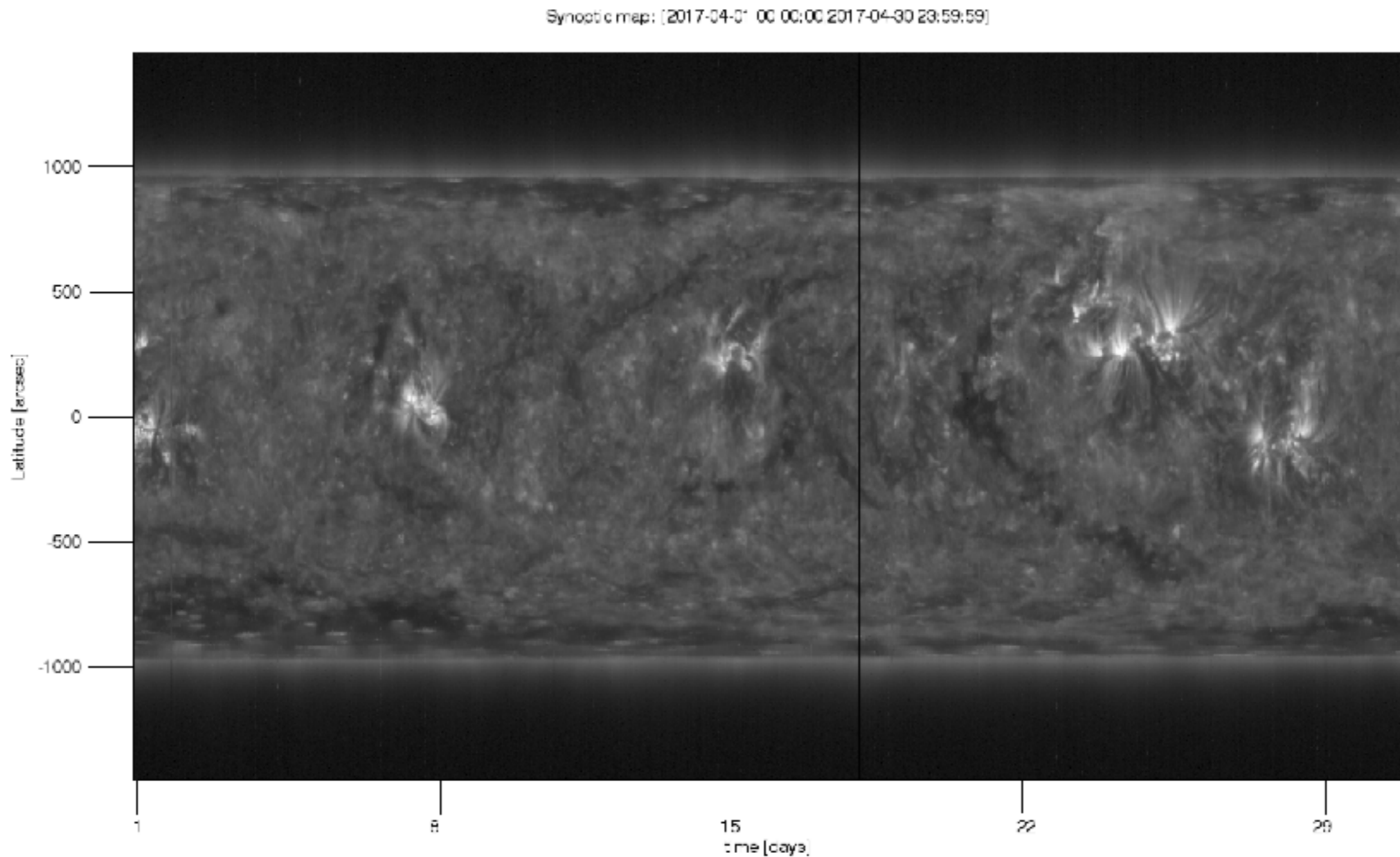
Details can be found here:



<http://proba2.oma.be/Polar-observations>

SWAP STATUS UPDATE

UPCOMING: SWAP SYNOPTIC MAPS



SWAP REPROCESSING

- We are performing a final reprocessing of all P2SC data since the start of the mission.
- All P2SC data will be reprocessed with the most recent calibration software to obtain a coherent and complete dataset
- We plan to have all ancillary data and SWAP fits files processed by the end of next week.

SWAP STATUS UPDATE

SWAP SCIENCE

SWAP PUBLICATIONS

- 9 PROBA2 papers published this year so far
- SWAP-related publications
 - Predicting the COSIE-C Signal from the Outer Corona up to 3 Solar Radii, *Del Zanna G. et al.* (ApJ)
 - Brightening and Darkening of the Extended Solar Corona observed by SWAP telescope during the Superflares on 6 and 10 September 2017, *Goryaev F. et al.* (ApJL)
 - Density fluctuations in a polar coronal hole, *Hahn M. et al.* (ApJ)
 - Analysis of a Failed Eclipse Plasma Ejection Using EUV Observations, *Tavabi E. et al.* (Sol Phys)
 - On the Performance of Multi-Instrument Solar Flare Observations During Solar Cycle 24, *Milligan R.O. et al.* (Sol Phys)

SWAP PUBLICATIONS

- More SWAP-related publications upcoming
 - We are finishing up a publication on the flares observed during the off-pointing campaigns in April 2017 (Vial campaign)
 - Studying EUV emission of the solar corona using Proba2/SWAP, STEREO/EUVI, and AIA/SDO data, Goryaev F. et al. (related to SWAP high-cadence campaigns in 2016 and 2017)
 - We are continuing the work of D.B. Seaton on the long-term, large-scale evolution of the extreme-ultraviolet solar corona (ApJ 2013) by now looking at the complete set of SWAP observations over the whole mission

SWAP STATUS UPDATE

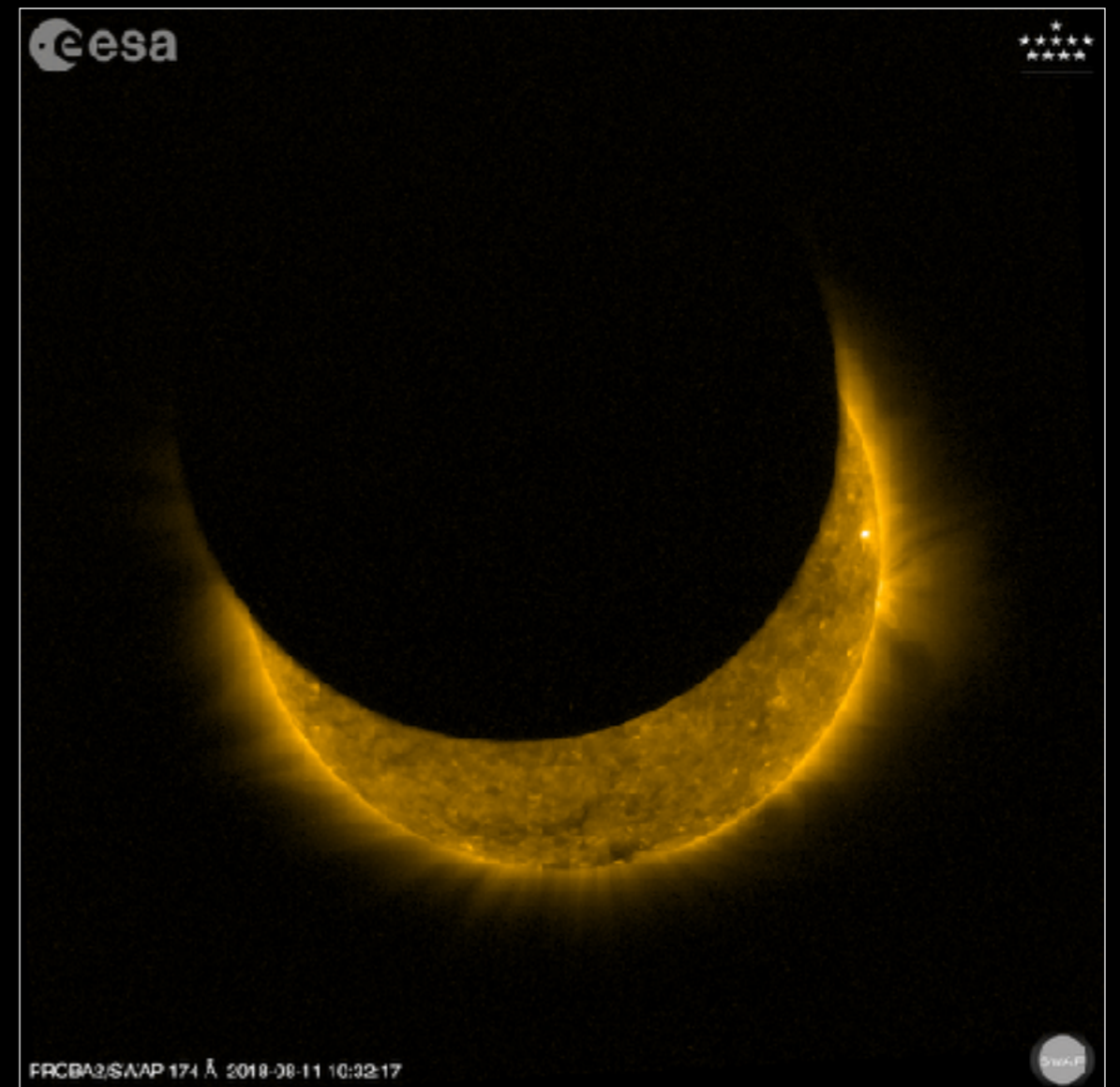
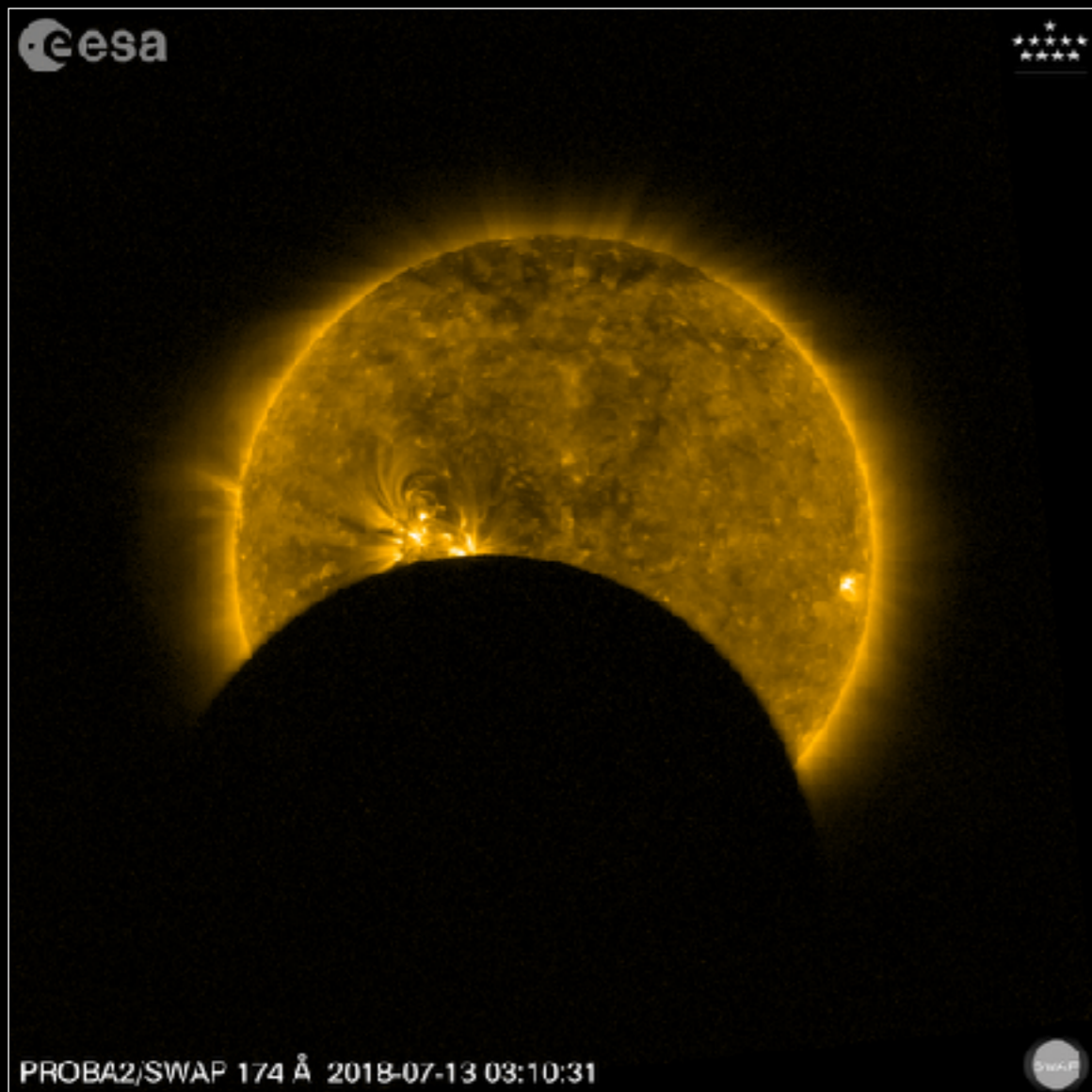
OBSERVATION CAMPAIGNS

SWAP STATUS UPDATE

PARTIAL SOLAR ECLIPSES

2018 July 13

2018 August 11



UPCOMING CAMPAIGNS?

- Science mission until end of 2018, then transitioning to operational satellite
- Any requests for special campaigns?

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