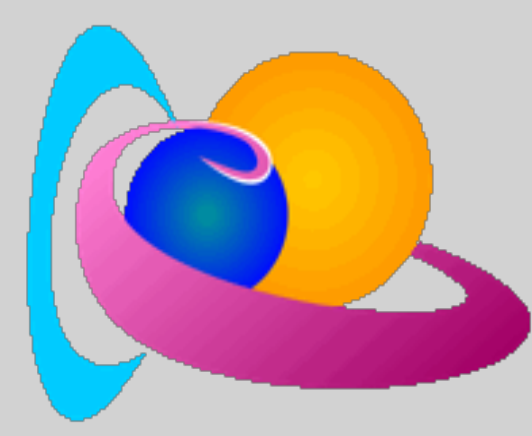# Space Weather Helioviewer

F. Verstringe[1], B. Bourgoignie[1], B. Nicula[1], D. Berghmans[1], C.Marqué[1], V. Delouille[1]

Main goal of the project

This two years ESA GSTP project aims to enhance the capabilities of the Helioviewer system (JHelioviewer[2] and Helioviewer.org[3]) in the field of space weather research and operations.

It will achieve that by incorporating new datasets (images, timelines, models), new user interaction capabilities (3D), and new features in the area of detection and modeling of solar phenomena with space weather implications. The enhancements will be available in 2015.

Incorporate new datasets

3D support:
- Rotate the image freely
- Overlay multiple images at their true location (SOHO)
- Hide/unhide outer corona
- Solar grids
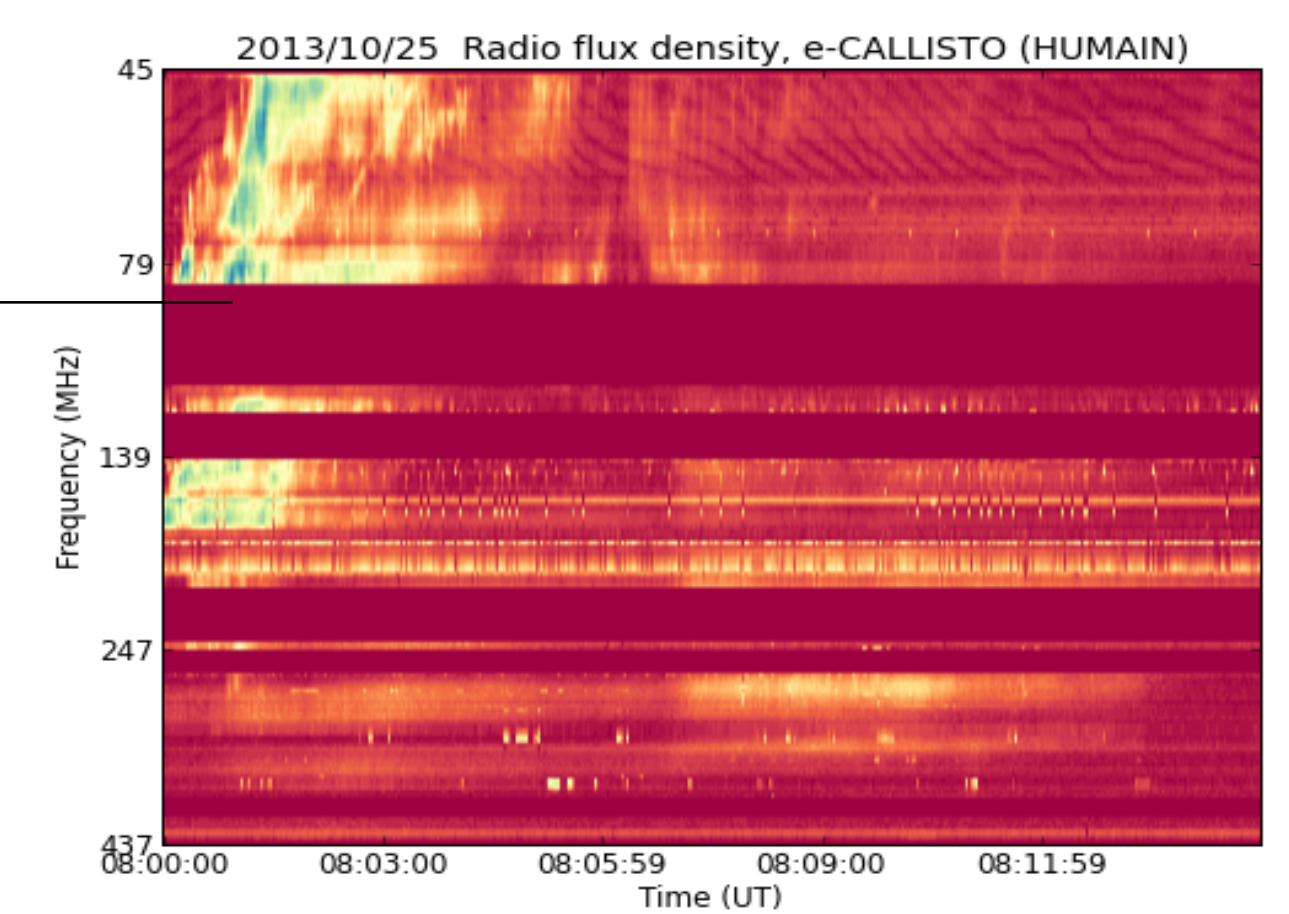- Show magnetic fieldlines

Switch to difference images
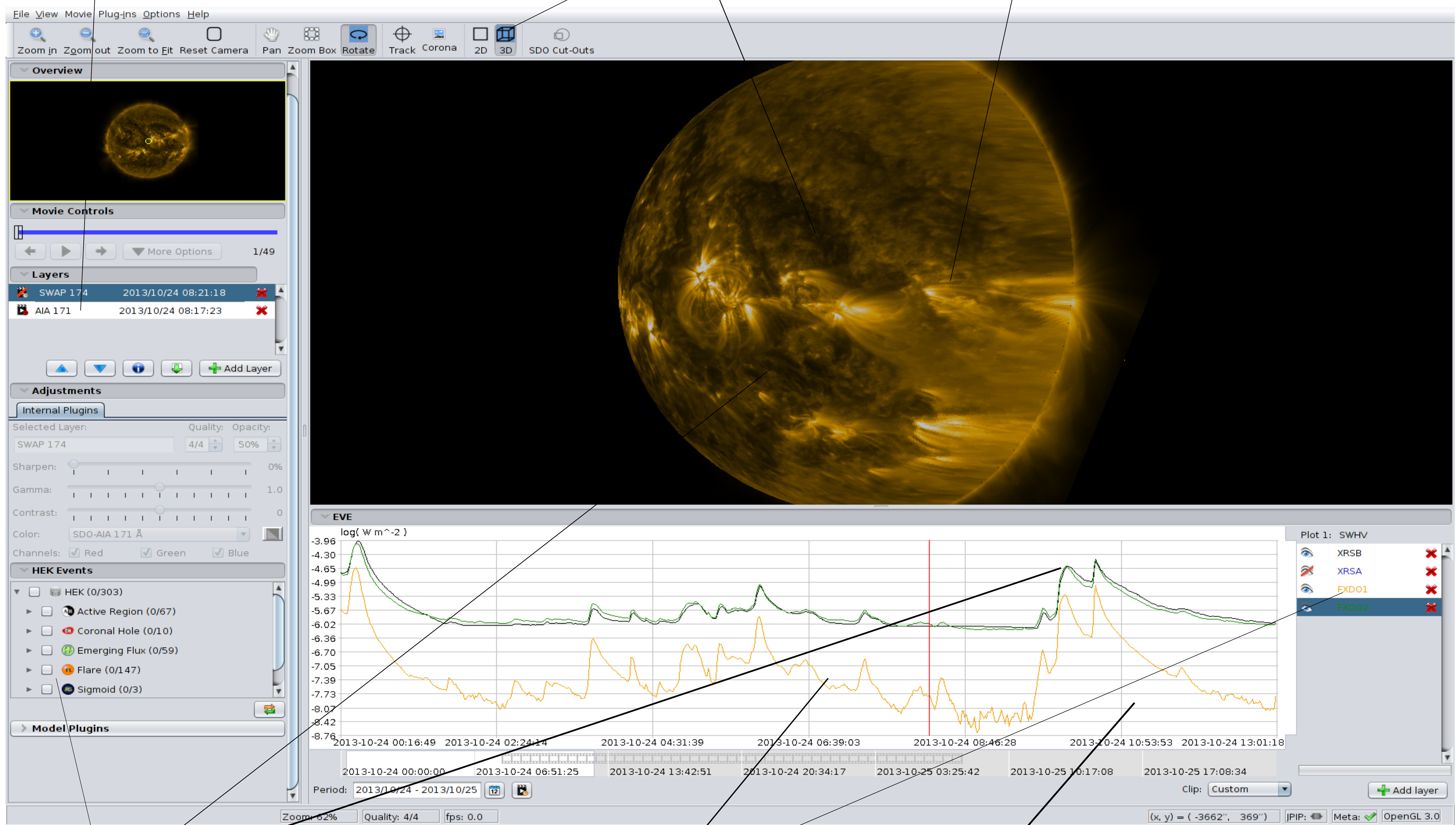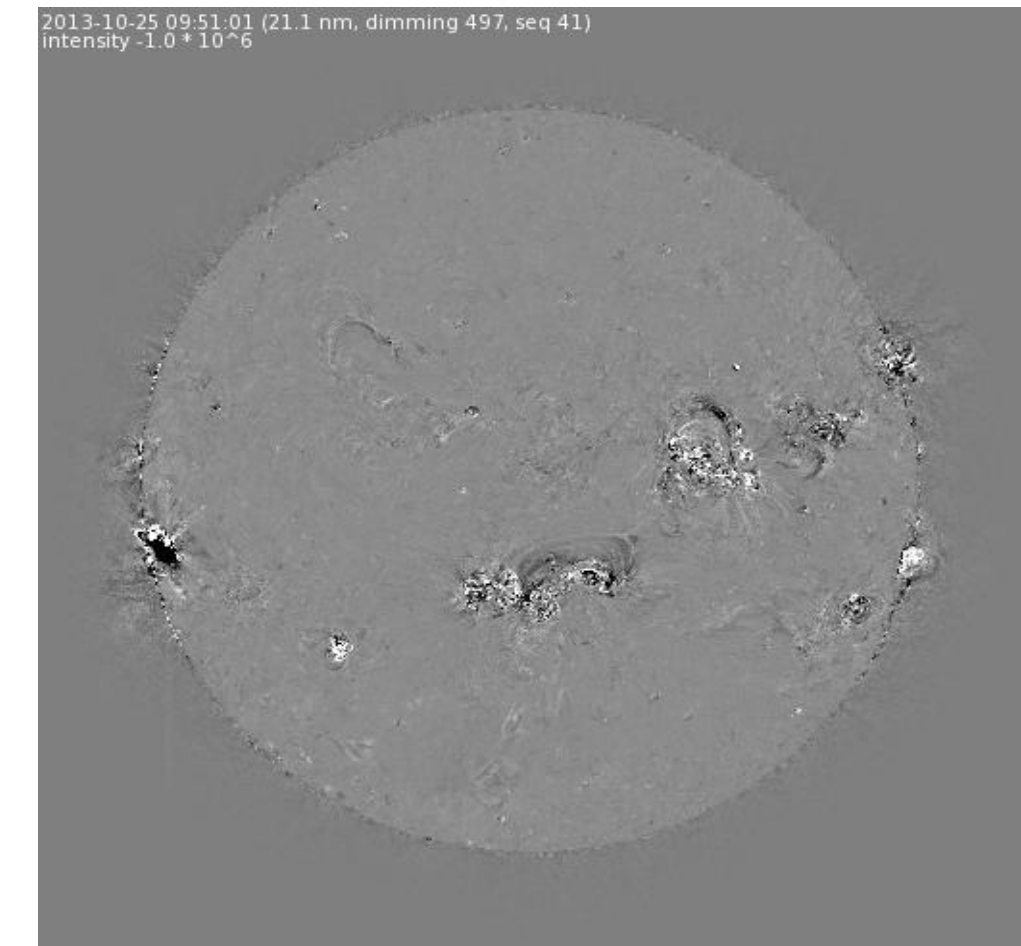
Space weather events
- Tag timelines with events
- Indicate events on disk

Plot space weather relevant timeline data

Show spectral radio image data

2013/10/25 Radio flux density, e-CALLISTO (HUMAIN)

Heterogeneous API for quicklook data

1D data
Timelines API to interact with ODI
- GOES
- Lyra
- EVE proxies for GOES

2D data:
API to interact with helioviewer.org through esa-jpip server
- Halpha (GONG)
- Magnetograms (GONG)
- Backside images (GONG)
- SWAP (PROBA2)
- VSM (SOLIS)

3D data:
API to display solar magnetic fieldlines dynamically

Solar event data
API to interact with HEK database

Contact

Royal Observatory of Belgium
Ringlaan 3
1180 Ukkel
Belgium

swhv@oma.be

References & affiliations

(1) Royal Observatory of Belgium
(2) www.JHelioViewer.org
(3) www.HelioViewer.org

Acknowledgement