

SWHV

Royal Observatory of Belgium

J/Helioviewer Meeting, ESTEC, Jul 2-3 2014

JPEG2000 formats

- Small bug fixing & maintenance on 'esajpip' server
- JP2 colormaps
- JPEG2000 tools suite at <https://github.com/Helioviewer-Project/hvJP2K> (KDU compatible):
 - JP2 decompression (ready) & compression (incomplete)
 - HV JP2 format verification (almost ready)
 - JPX merge & split (ready)
- JP2 alpha component (support introduced in SWJHV), proof of concept data
- Experiments with bit depth and other compression settings
- Metadata - to be discussed

New image datasets

- Introduced:
 - NSO-GONG H-alpha, Magnetograms, and Far- side
 - Kanzelhoehe H-alpha
 - NSO-SOLIS VSM several measurements
 - ROB-USET H-alpha
 - NRH radio
- Python/C pipeline independent of IDL & KDU

EVE plugin

- Datasets:
 - Callisto radio spectrograms
 - GOES XRS-A & GOES XRS-B (ODI & STAFF)
 - LYRA Lyman-alpha, Herzberg, Aluminium & Zirconium (ODI & STAFF)
 - EVE XRS-A & XRS-B proxy, EVE ESP 17_1, EVE ESP 25_7, EVE ESP 30_4, EVE ESP 36_6, EVE MEGS-P 121_6, EVE ESPquad
- Modified existing API to make it more general

Dataset availability

- Timeline datasets

[http://swhv.oma.be/availability/timelines/availability/
data_availability.php](http://swhv.oma.be/availability/timelines/availability/data_availability.php)

- Image datasets:

[http://swhv.oma.be/availability/images/availability/
data_availability.php](http://swhv.oma.be/availability/images/availability/data_availability.php)

- Presentation to improve

Solar System Geometry Server (not part of SWHV)

- `position(utc, observer, target, frame, abcorr, kind, utc_end, deltat)`
 - `frame` = HEE(Q), GSE(Q), HCI, GSM, etc.
 - `kind` = rectangular, spherical, etc.
- `transform(utc, from_frame, to_frame, kind, utc_end, deltat)`
 - `kind` = matrix, angle, quaternion

Other presentations

- 3D
- image difference
- magnetic field extrapolation
- SW HEK