

The Solar Weather Browser: *a quick look data browser*

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Outlines

SWB concept

- What is the Solar Weather Browser?
- How does it work?

SWB concept

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Server

- Server layout
- SWB processing
- Current status & development

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Client

Client

What is the Solar Weather Browser?

A quick look data browser which allows you to:

- ▶ Access a wide set of solar images
- ▶ Combine different instruments together
- ▶ Overlay additional informations

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Why would you like to use it?

Scientist

- ▶ Look for an event
- ▶ Make quick contextual analyses (time, position ...)
- ▶ Make a last minute figure for your talk

Forecaster: synoptic view of solar activity

Public: an easy access to solar data

How does it work?

SWB concept

What is the Solar Weather
Browser?

How does it work?

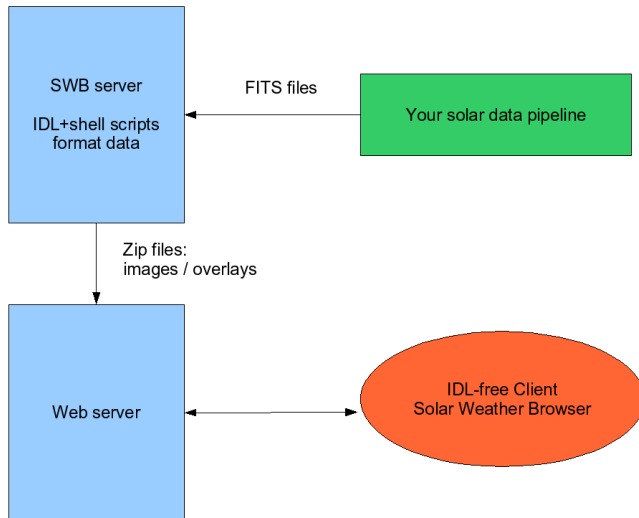
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Unix directory structure

- ▶ SWBS data
linked to the output of your data pipeline
- ▶ SWBS log
logs SWB processing
- ▶ SWBS source
contains IDL programs & shell scripts
- ▶ SWBS tmp
contains temporary files
- ▶ SWBS out
output directory, synchronized with a website

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Converting FITS files to SWB compatible files

SWB format: zip file

- ▶ txt file: *will contain web link to original data or request to virtual observatory*
- ▶ jpeg file: *512x512 solar images, EIT fov (except coronagraphs)*
- ▶ svg file: *Overlays: helio grids, AR numbering, ...*

SWB format is designed to minimize download time through the internet

Tools

IDL+Solarsoft; shell scripts; libplot library (svg files)

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Present situation

- ▶ The current SWB server is located at ROB
- ▶ Full EIT archive, partial LASCO archive, MDI
- ▶ Ground based observations: cm, $H\alpha$, white light, magnetograms
- ▶ Overlays: heliogrid, NOAA AR, Catania sunspot, CACTus detection, solarsoft events

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Current development

- ▶ Multiple remote servers: ROB, Meudon (NRH), NRL (SECCHI)
- ▶ Include new generation of instruments: STEREO, XRT, SWAP, SDO
- ▶ Make more consistent archives

Current situation

- ▶ Open source software
- ▶ Available for Windows, Linux, MacOS
- ▶ Downloadable at <http://sidc.be/SWB>

Next release

- ▶ Multi-site browsing
- ▶ Better data classification
- ▶ Adjustable time cadence

To be released soon...

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