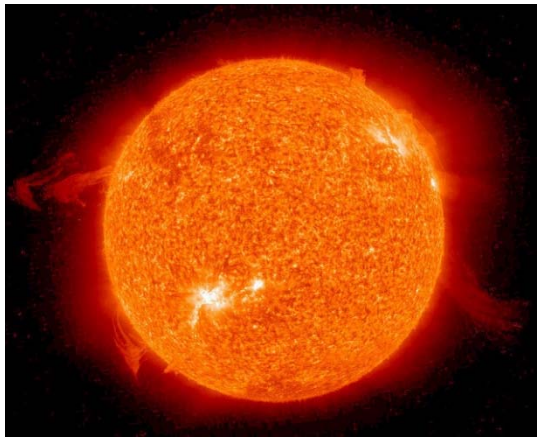

Mai 25, 2016 Sakura kick-off Meeting @ JPGU

Solar wind data archive based on the model

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File information

■Parameters in the text file
time(year month day hour:min:sec)
,density [/cc],T[K],Vx[km/s],Vy[km/s],By[nT],Pdy[nPa]
,(input)-Sun-(planet) angle [deg], input data index (0-1, 1=lack).

input: OMNI, STEREO-A/B (+Solar Surface, Helios, in-situ obs.)
output: Jupiter, Saturn, Mars, Venus, Mercury, Rosetta, Juno
(+Uranus, Neptune, …)

■Time resolution
Δt=1-hour average

■File format
ASCII file, ~1 MB/year/one-in-out-set

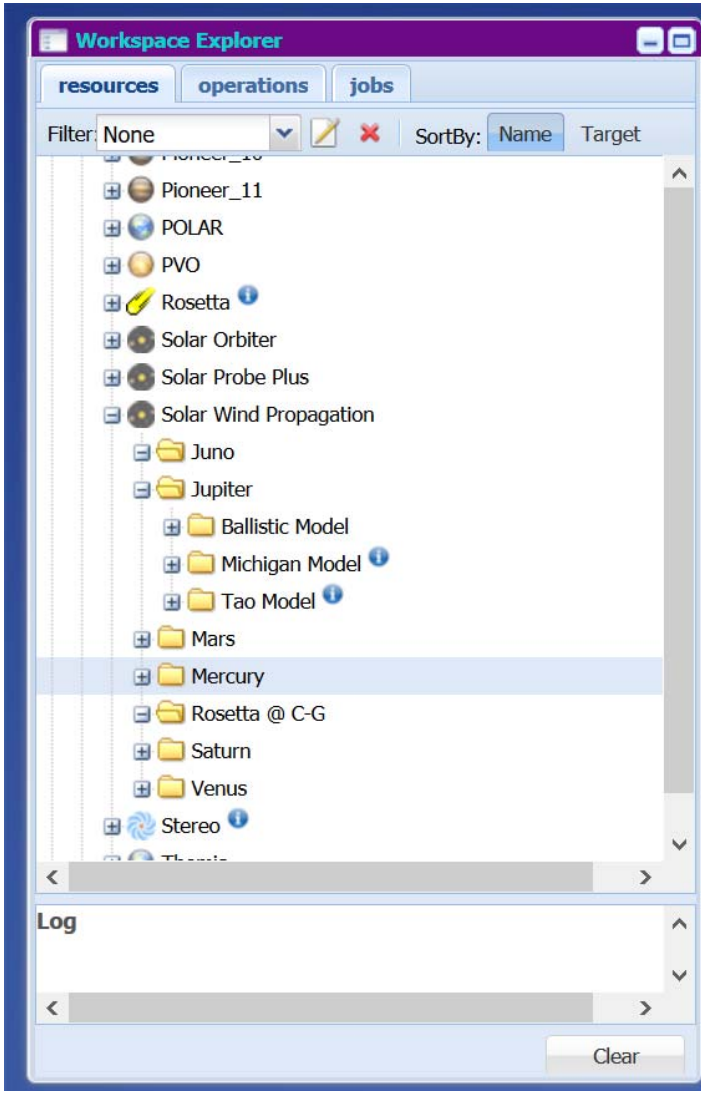
Data Archive

Model output is available (with updated) in AMDA
Current version:
OMNI → Jupiter, Saturn, Mars, Rosetta, Juno,
based on our model with SPICE tool
(cf. empirical equation in my estimation).

I have not updated HP in IASA/JAXA recently.
I will provide these or other dataset by personal contact.

AMDA

Parameters
--AMDA DataBase
....
--Solar Wind Propagation
--Juno
--Jupiter
--Ballistic Model
--Michigan Model
--Tao Model
--Mars
--Mercury
--Rosetta @ C-G
--Saturn
--Venus

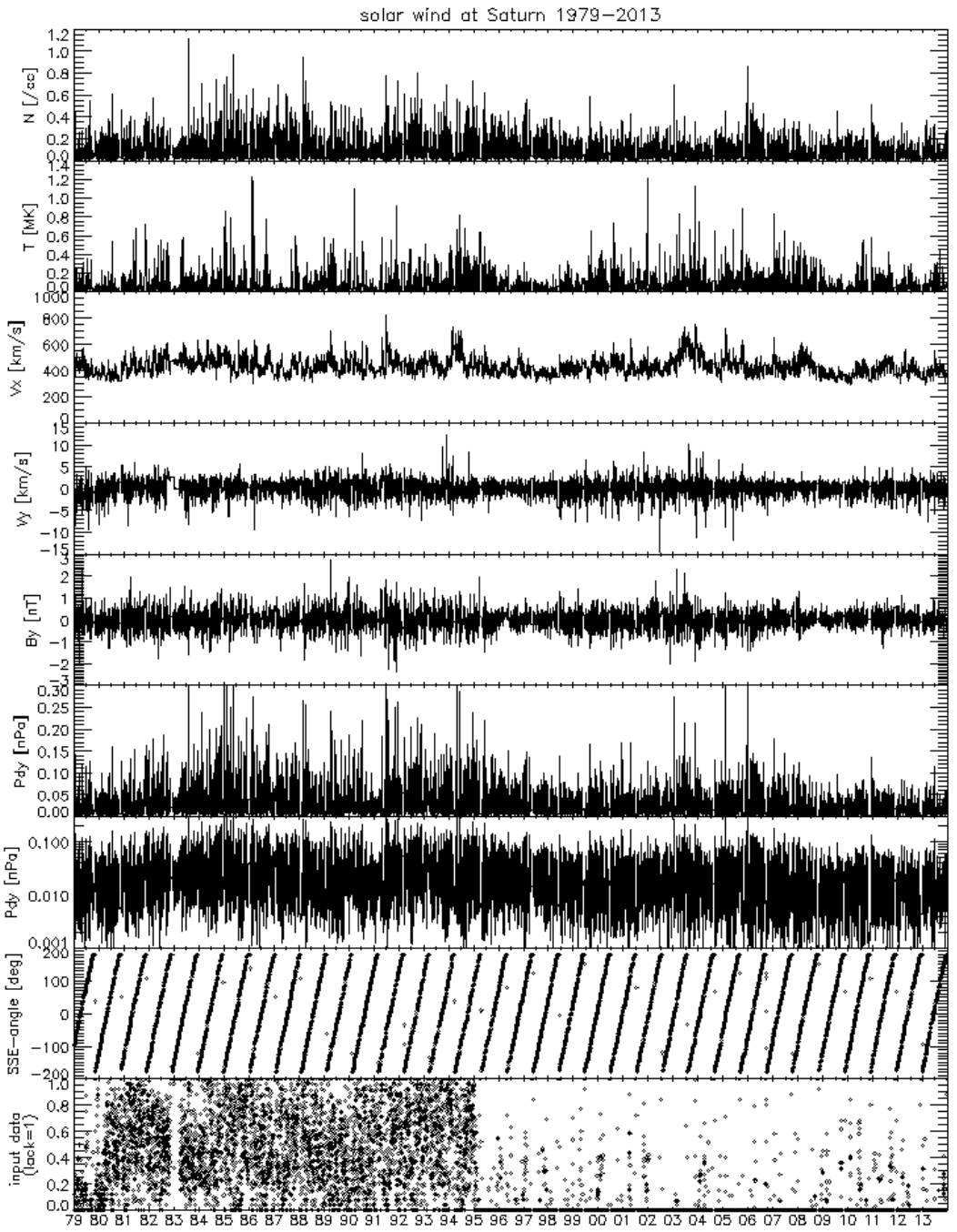


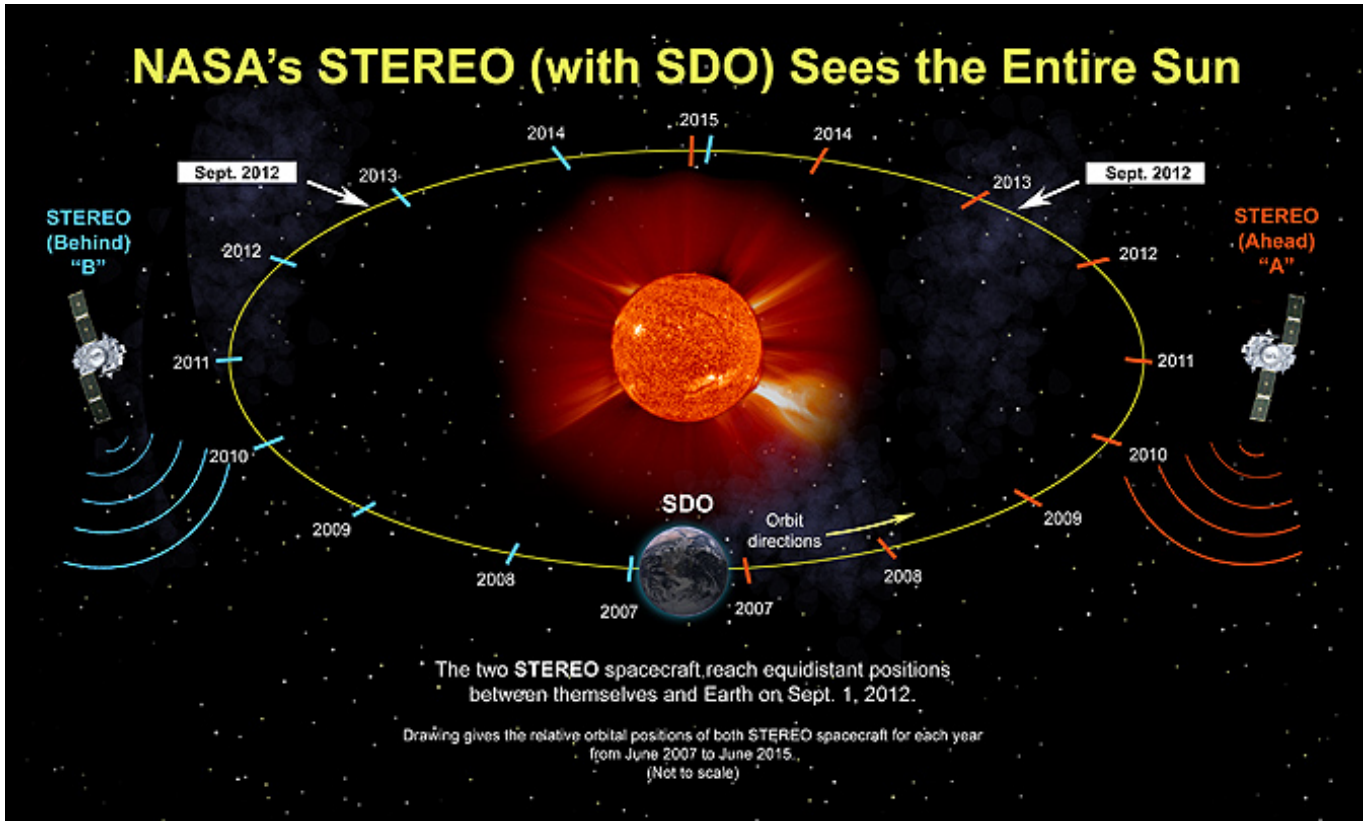
Term

* OMNI 1 hour data (1963-)
* After ACE era (1995-), data coverage is much better
* STEREO data (2007-)

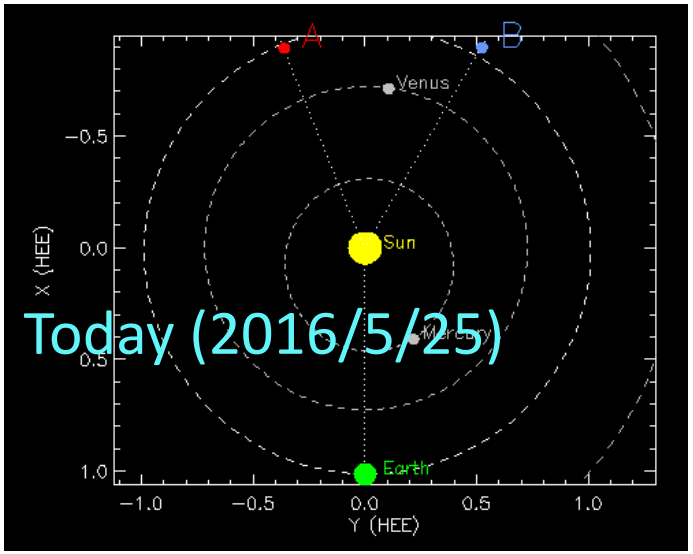
* WIND data is useful to use the latest forecast. WIND data is available upto 2-5 days before. Lead time depends on planets and their position. OMNI data (1-3 months) is used as a final value.

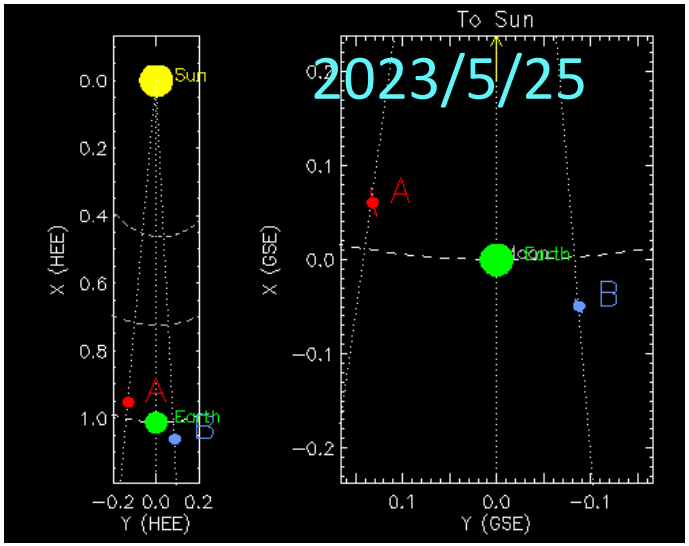
* 1D model → (input)-Sun-(planet) angle < 60 deg. & statistical survey are recommended.





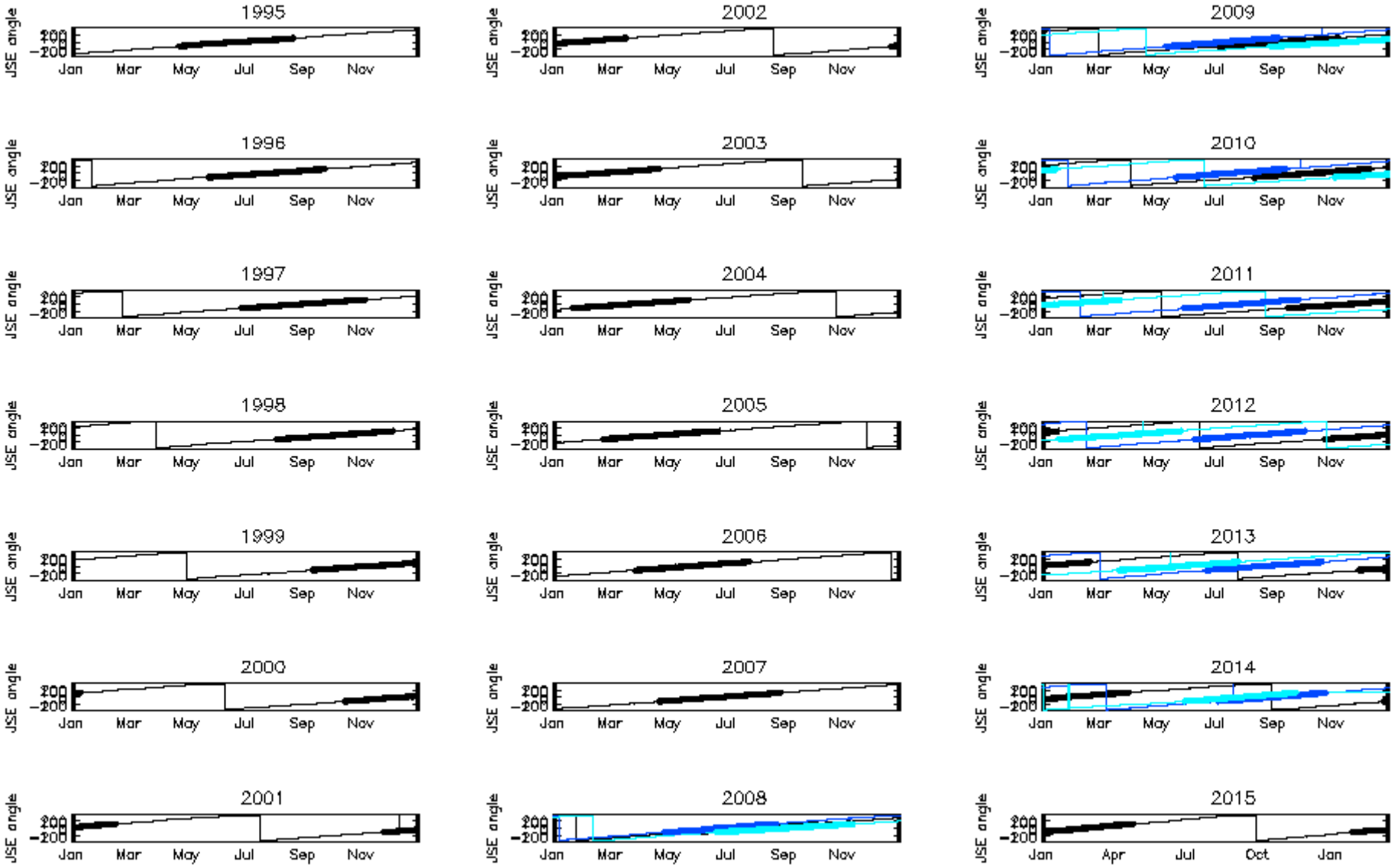
http://stereo-ssc.nascom.nasa.gov/cgi-bin/make_where_gif





Thick line: |angle|<60 deg.

Jupiter-Sun-Earth angle



Thick line: |angle|<60 deg.

Saturn-Sun-Earth angle