





DATA inspection

Must Radio astronomy be
a painful journey to learn how
bad data can look like?



Hans-Rainer Klöckner Albius Kick-off meeting

challenges



CASA

MIRIAD

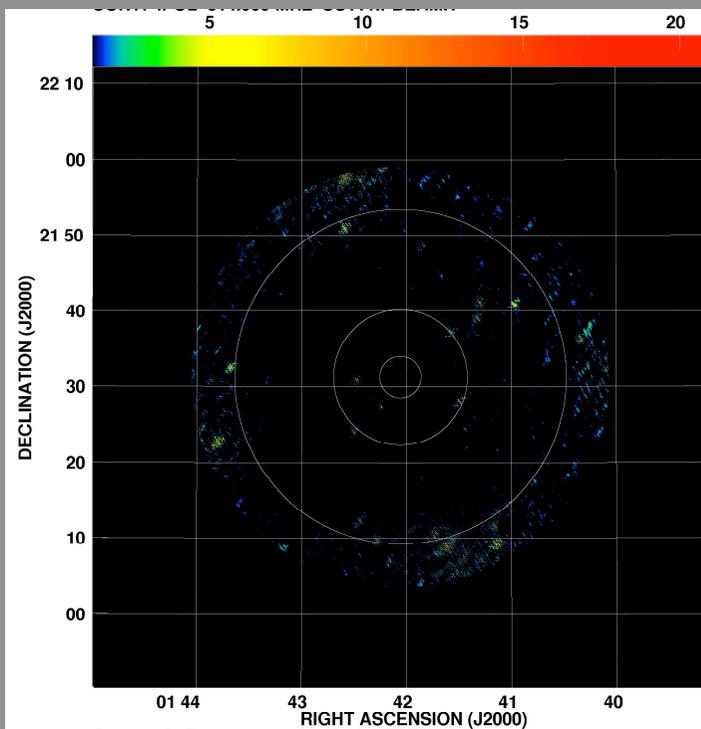
MeqTree

UVFITS

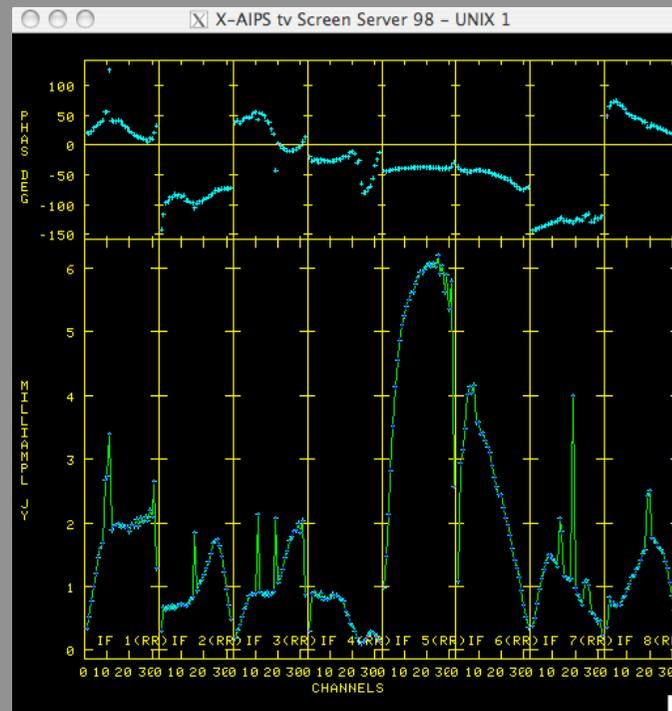
MS

HDF5

FoV



Bandwidth



& tons of Baselines!!!

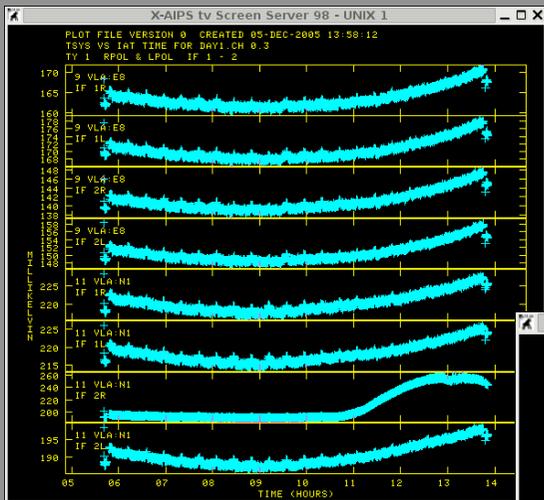
PRE PROCESSING

visibilities only
sky model

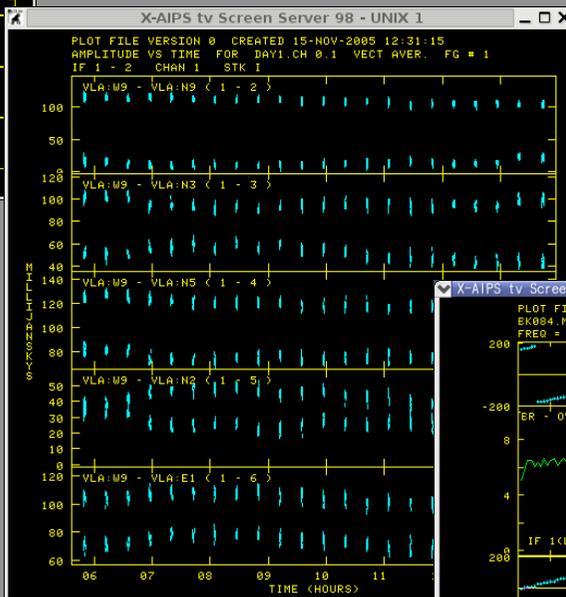
POST CALIBRATION

visibilities
image plane
calibration information

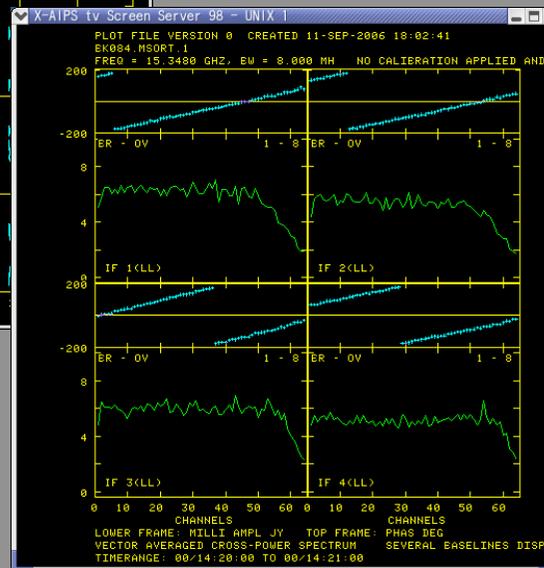
pre processing



Meta data versus time [Tsys, Ionosphere]



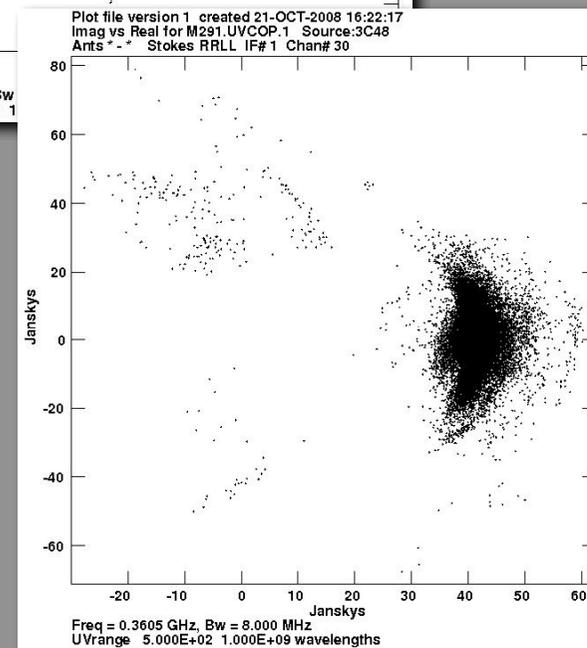
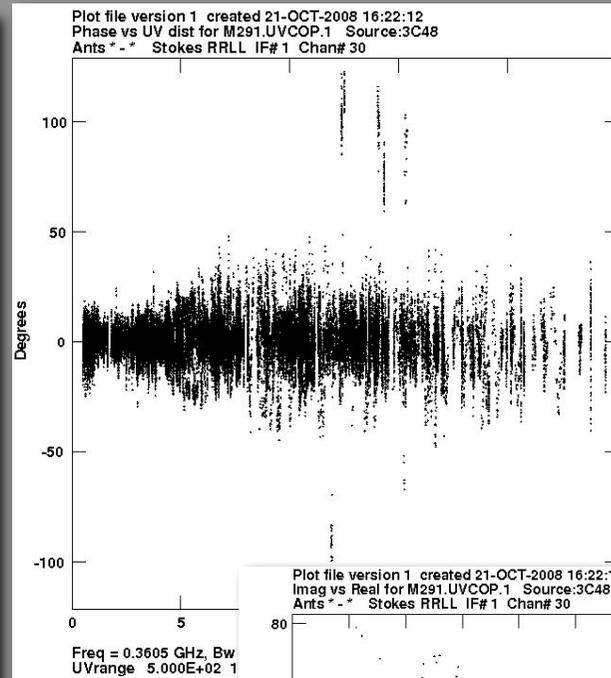
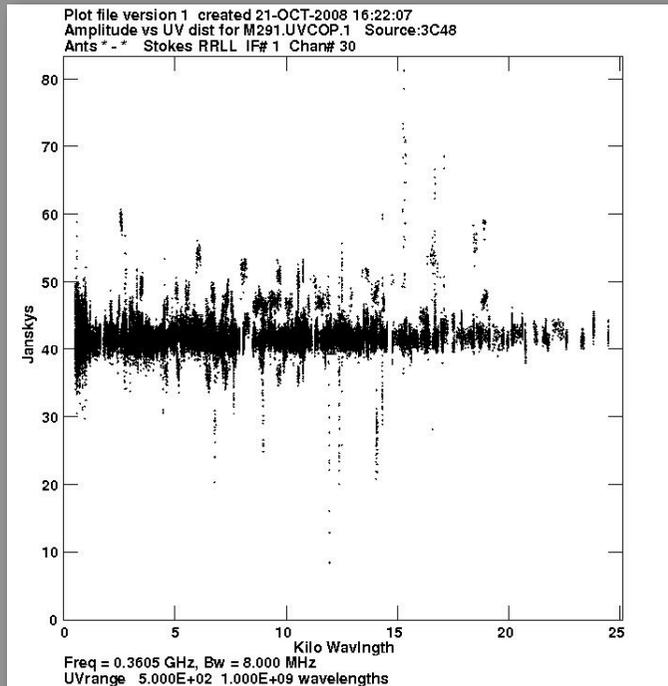
Data versus time [amp]



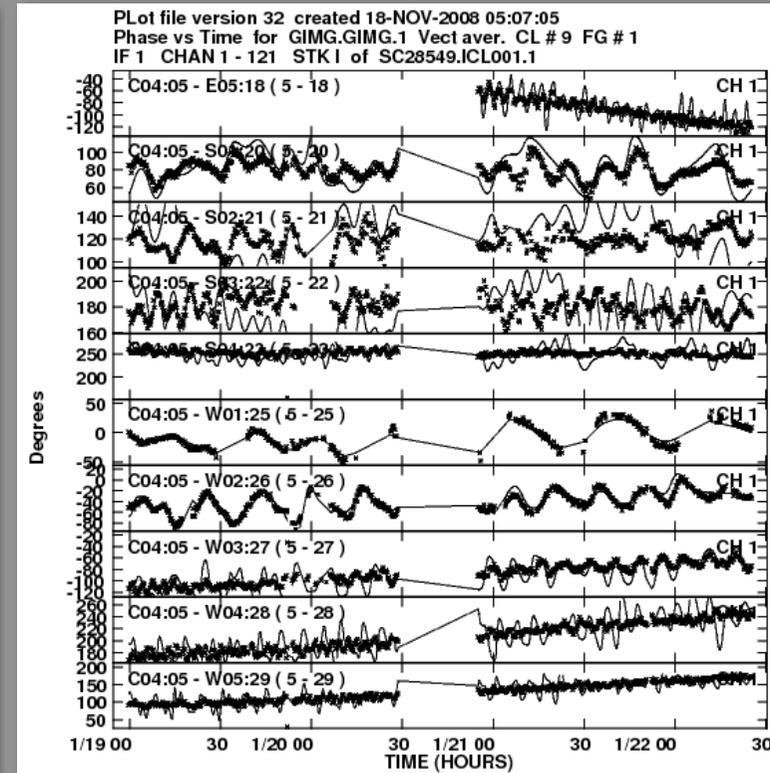
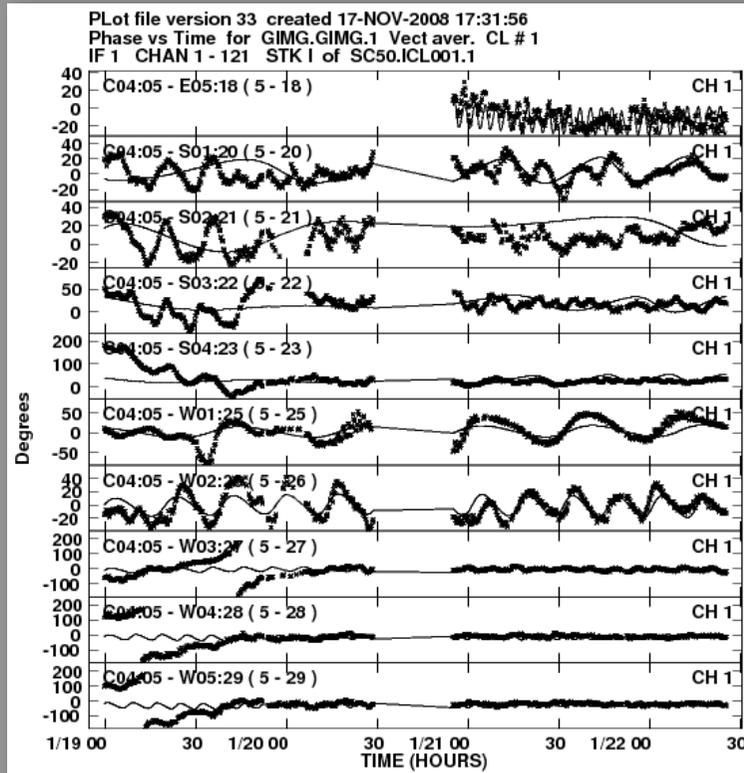
tvflg,
spflg, ...

Integrated spectrum

Post processing

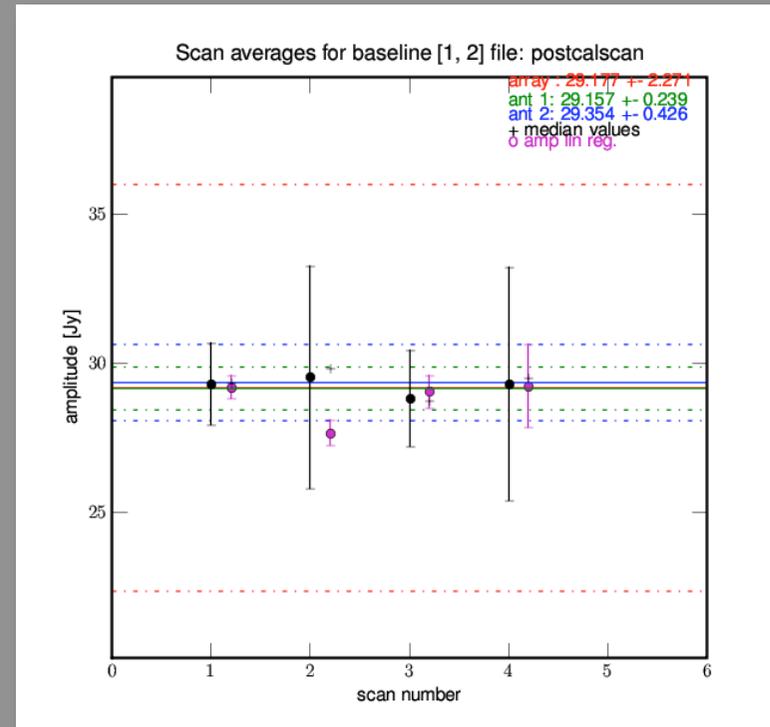
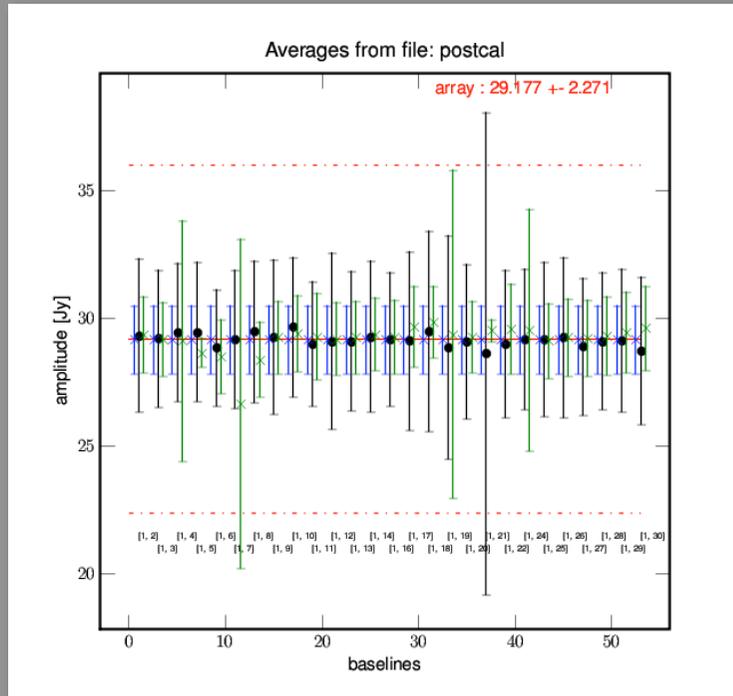


Sky model and visibilities



Data properties outside AIPS

Telescope
Baseline
Scan



PLot file version 1 created 02-JUL-2007 14:00:50
Amplitude vs Time for FGF1.UVCOP.1 Vect aver. CL # 4
IF 1 CHAN 4 - 108 STK 1



Python modules

5C6.288

local and global dynamic range

differential images [input: source list; IF, channels, stokes]

strong source [use CC]

differential visibilities [IF, channels, stokes]

closure relations

RFI flagging information (visual) and statistics

data excision [subset statistics]

Global SKY model [NVSS, WENSS]

primary Beam information

AIPS - MS bafelfish for calibration

Declination (J2000)

+31°45'

+31°30'

+31°15'

+31°00'

+30°45'

2^h28^m

28^m

24^m

22^m

Right Ascension (J2000)