

pySCHED

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- Schedule experiments
- Developed at NRAO
- Fortran 77

KEYIN

```
setinit = eg1024-1024 /  
  band = '6cm'  
  nchan   = 16  
  bits    = 2  
  bbfilter = 16.0  
  pol     = dual  
  /
```

```
stations = eflsberg, jodrell1, cambg32m, onsala85, wb, noto,  
          medicina, torun
```

```
setup = eg1024-1024
```

```
source='J0045+4555' dur=1:30 gap=1:00 /  
source='m31'      dur=3:30 gap 0 /
```

- New hardware
- Familiarity
- Modern language
- Libraries

- NumPy
- Functions and COMMON blocks
- Call Fortran code from Python

Changing DBBC code

- SCHED main loop
- DEFAULTS
- DEFSET
- CHKSET
- CHKDBBC

- Manual IF and BBC setting
- Frequency catalog
- Download catalogs on-the-fly
- DBBC firmware version
- DBBC3 support

- PGPLOT
- Qt and Matplotlib
- New look

Main GUI

SCHED

PLOT

CLOSE

FILES

AXIS

SOURCES

OPTIONS

RESTART

FINISH

TERMINAL

EXIT

Select Stations to Plot and Highlight

EFLSBERG
 JODRELL1
 CAMBG32M
 ONSALA85
 WSTRBORK
 NOTO
 MEDICINA
 TORUN

Set All Unset All

Baselines: Both stations selected
 Either station selected

Select Sources

3C48
 J0045+4555
 M31

Set All Unset All

UV XY Uptime RA-Dec Beam

Sources

M31
 J0045+4555
 3C48

All

Axis units Km ▾

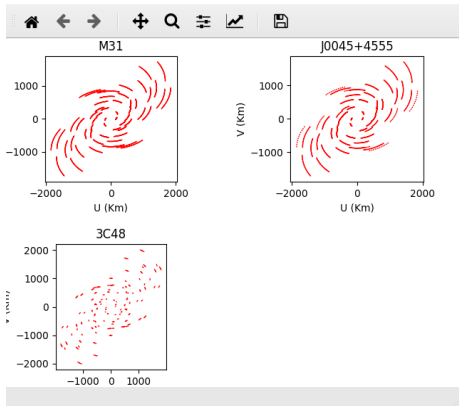
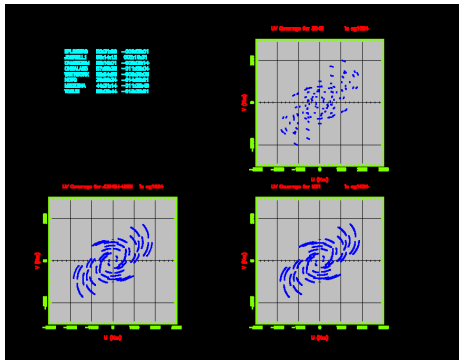
Highlight Advanced

Select H(ide), S(how) or M(ark) per baseline

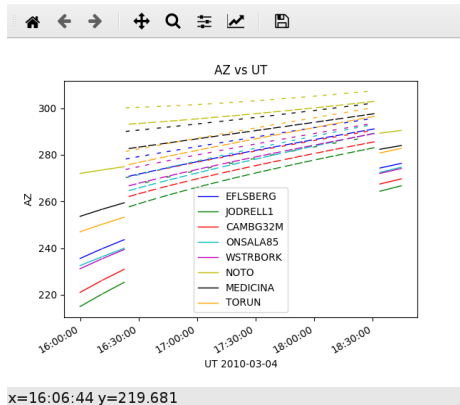
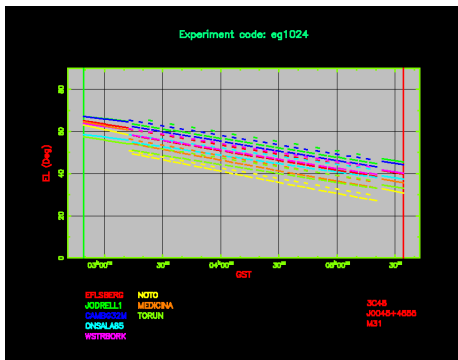
| | J O D R E L L 1 | C A M B G 3 2 M | O N S A L A 8 5 | W S T R B O R K |
|----------|---|---|---|---|
| All | | | | |
| EFLSBERG | <input type="radio"/> H <input type="radio"/> S <input type="radio"/> M | <input type="radio"/> H <input type="radio"/> S <input type="radio"/> M | <input type="radio"/> H <input type="radio"/> S <input type="radio"/> M | <input type="radio"/> H <input type="radio"/> S <input type="radio"/> M |
| JODRELL1 | <input type="radio"/> H <input type="radio"/> S <input type="radio"/> M | <input type="radio"/> H <input type="radio"/> S <input type="radio"/> M | <input type="radio"/> H <input type="radio"/> S <input type="radio"/> M | <input type="radio"/> H <input type="radio"/> S <input type="radio"/> M |
| CAMBG32M | | <input type="radio"/> H <input type="radio"/> S <input type="radio"/> M | <input type="radio"/> H <input type="radio"/> S <input type="radio"/> M | |
| ONSALA85 | | | <input type="radio"/> H <input type="radio"/> S <input type="radio"/> M | |
| WSTRBORK | | | | <input type="radio"/> H <input type="radio"/> S <input type="radio"/> M |
| NOTO | | | | |
| MEDICINA | | | | |

Plot Restart Finish Exit

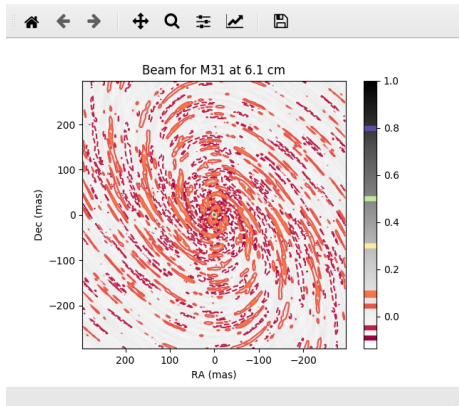
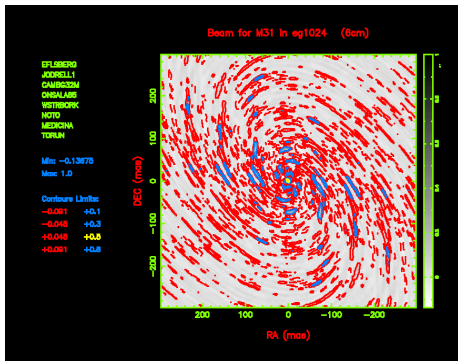
UV plot



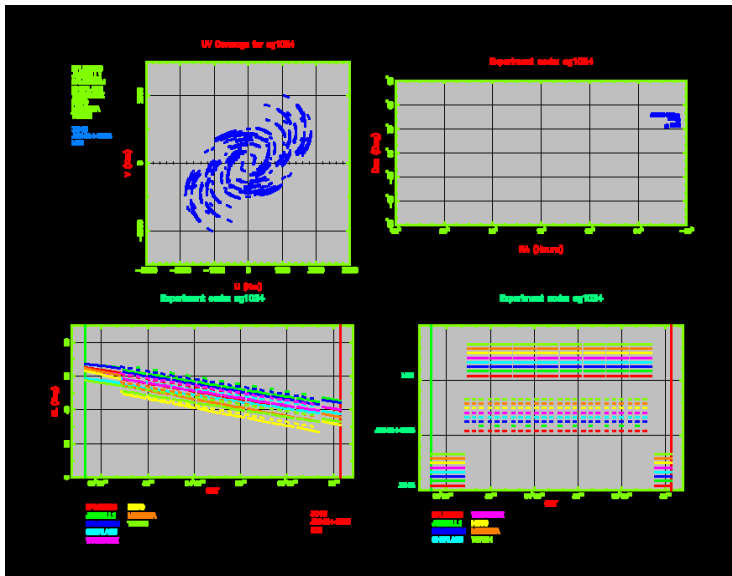
Azimuth plot



Beam plot



Summary plot



- Backwards compatible
- VEX 2
- Readline
- Template
- Command line arguments

- New hardware
- `https://github.com/jive-vlbi/sched/`
- `pip install pythonSCHED`
- `http://mailman.astron.nl/listinfo/sched_forum`
- `elderling@jive.eu`