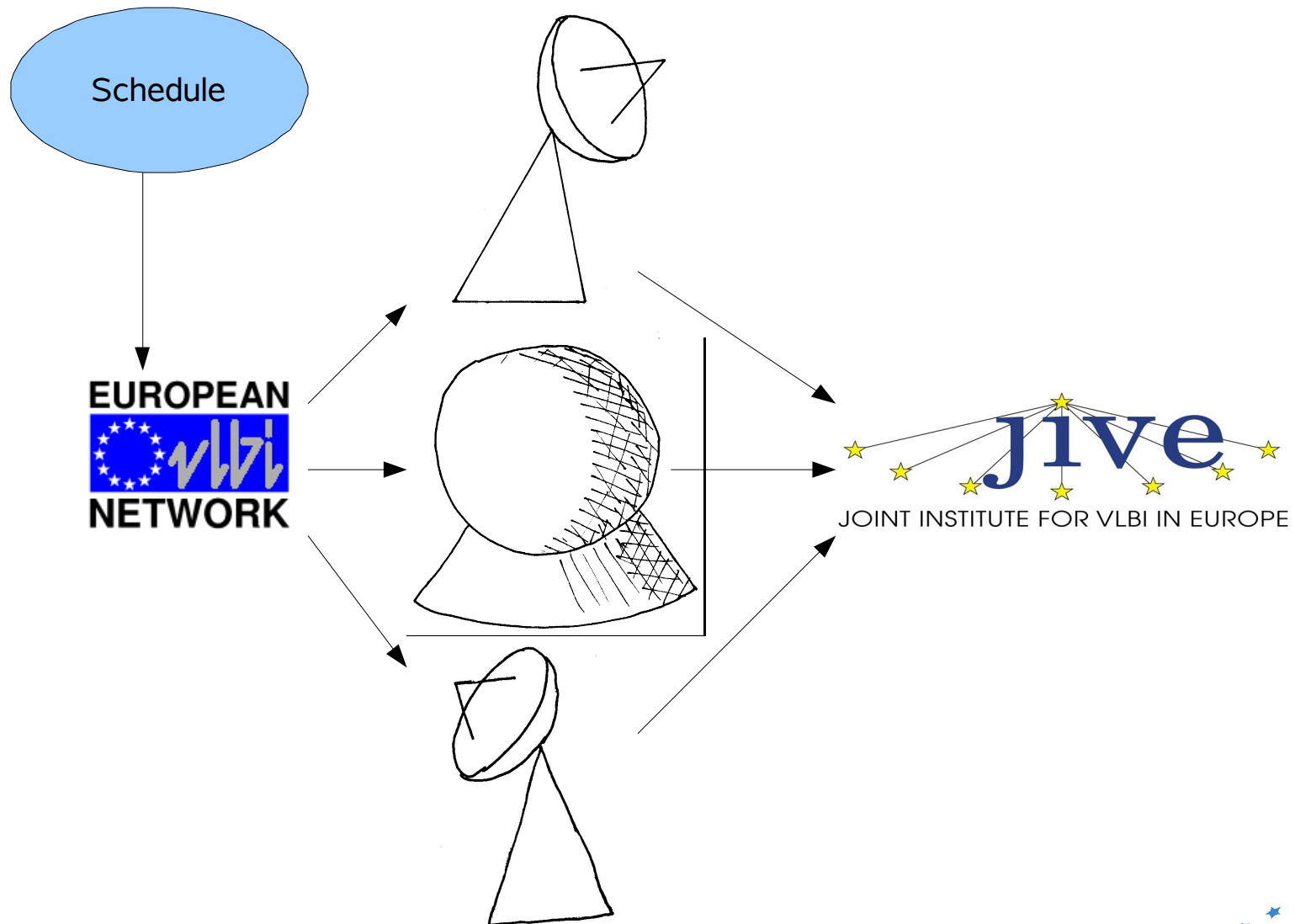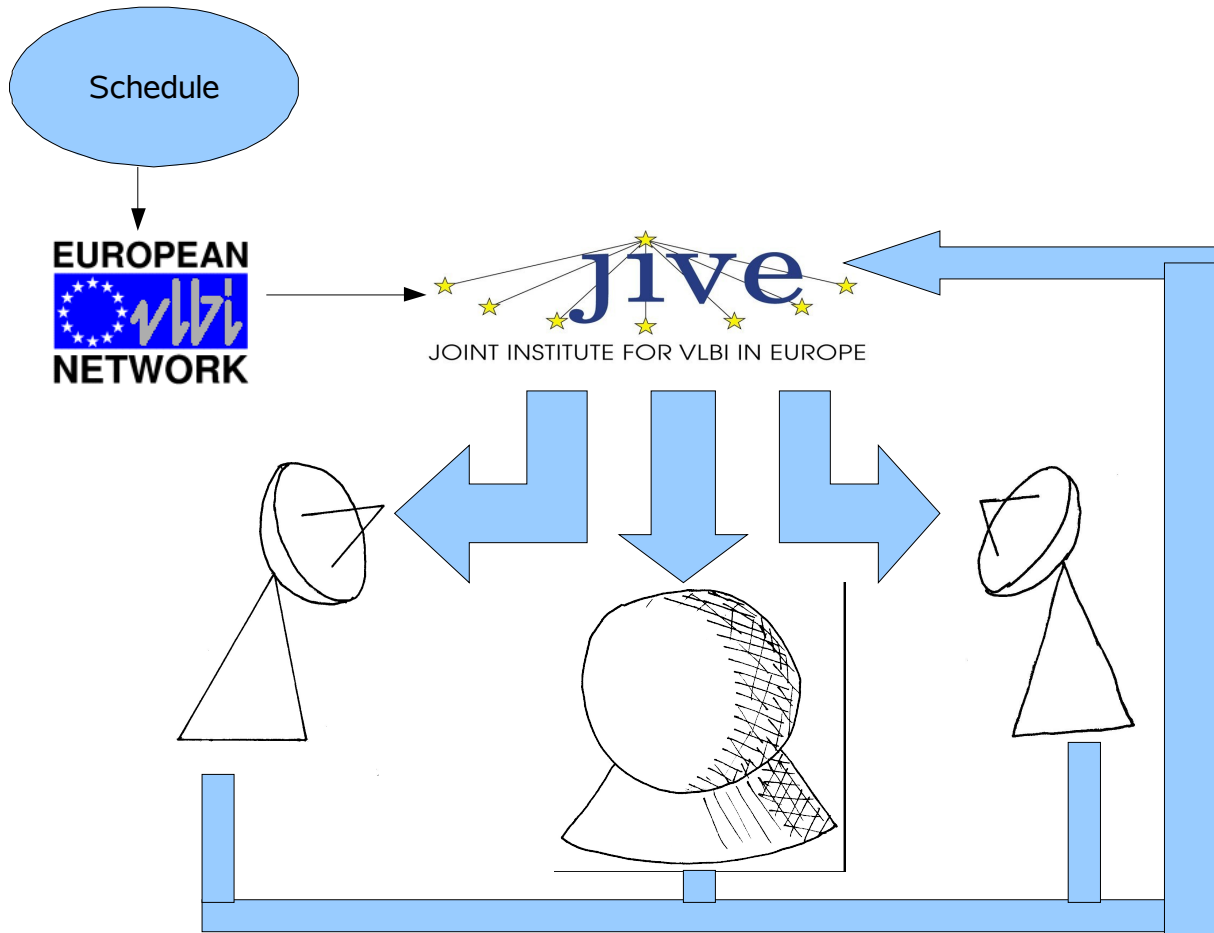# Dynamic scheduling of the e-EVN: a progress report

EXPR**e**S
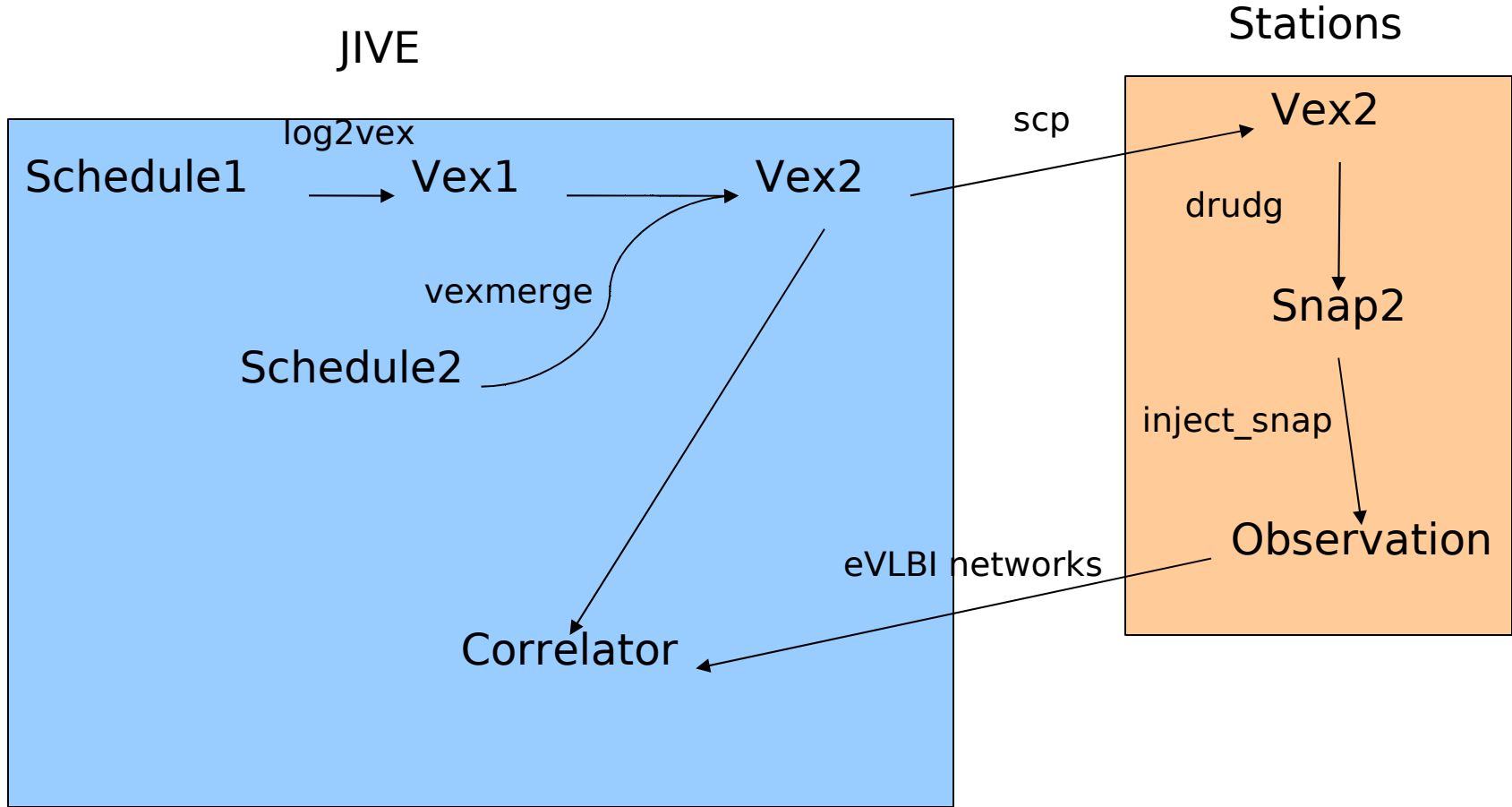
"Batch" mode scheduling

Dynamic scheduling

Requirements

- Propagate new schedule to stations

- Process and inject new schedule to Field System

- *(New!)* Historically-accurate vex file for correlator

Dynamic scheduling dataflow

JIVE

Stations

Schedule1 —log2vex→ Vex1 → Vex2

vexmerge

Schedule2

scp → Vex2

drudg

Snap2

inject_snap

Observation

Correlator

eVLBI networks

EXPR*eS

log2vex

- Turns schedule (`.skd`) files into vex (`.vix`) files

- Adds `$CLOCK, $TAPELOG_OBS, $EOP` blocks

- `$CLOCK` block based on station GPS data for batch VLBI

- Clock-searching is used instead for eVLBI

- Runs at JIVE; written in Perl

vexmerge

- Merges original vex file and new schedule

- Produces updated historically-accurate vex file

- Runs at JIVE; written in Python

EXPR**e**S

Field System tools

- `drudge`: vex file → snap file

- `inject_snap`: stops/starts use of snap file

- FS commands
  - run from JIVE script
  - use `ssh` in single-command mode
  - no login session on FS computers

EXPR℮S

Case study

- Thursday, 28 August 2008 eVLBI session

- Sources: DA193, 4C39.25

- Stations: Torun, Westerbork (single-dish)

- Fringes obtained!

EXPReS

Conclusions and future work

- All components now work

- Station participation actively sought!

- A similar process could fetch GPS data for clocks

- Work is also progressing on real-time monitoring

- Calibration using station temperatures is also possible

EXPReS

Dynamic scheduling tools