Radiotelescope Observations 24 jan. 2013

Schedule

team A : _____   _____

team B : _____   _____

Start	Team A	Team B
09:00	**D**: sky profile	**H**: MWG rot.curve
09:45	**H**: MWG rot.curve	**D**: sky profile
10:30	**D**: sun	**H**: sun with offsets
11:15	**H**: sun with offsets	**D**: sun

- Homework: each one writes up a summary of the observations, analysis, and results
- **H**aystack can operate in simulation mode only. You will get original observational data from Milky Way, if you like.
- The observation times given in the following text are only suggestions! Please feel free to make your own decisions and experiment!!!

Dresden: sun ➜ determine solar temperature and radio flux. (Homework: Compare flux with NOAA data)

1. 5 min calibration
2. 15 min half-scan, followed by sky
3. 5 min calibration
4. Second attempt, or try full-scan …

Dresden: sky ➜ separate receiver noise level from atmospheric noise. (Homework: Correct solar temperature)

1. 7 min calibration
2. 7 min sky @ EL=10°
3. 7 min sky @ EL=20°
4. 7 min sky @ EL=30°
5. 7 min sky @ EL=60°
6. 7 min calibration

Haystack: sun with offsets ➜ determine solar temperature and radio flux, and telescope's HPBW. (Homework: Compare flux with NOAA data)

1. 1 min calibration @ ISU
2. 5 min sun: map
3. 1 min sun (tracked)
4. 1 min each: offset in AZ=3°, 6°, 9°, 12°, …
   PLEASE try your own sequence of angles!
5. 1 min each: offset in EL=3°, 6°, 9°, 12°, …
6. 1 min sky @ AZ=40° east of sun
7. 1 min calibration @ ISU

Haystack: MWG ➜ determine rotation curve

4 min for each for any 13 positions: G80 … G20