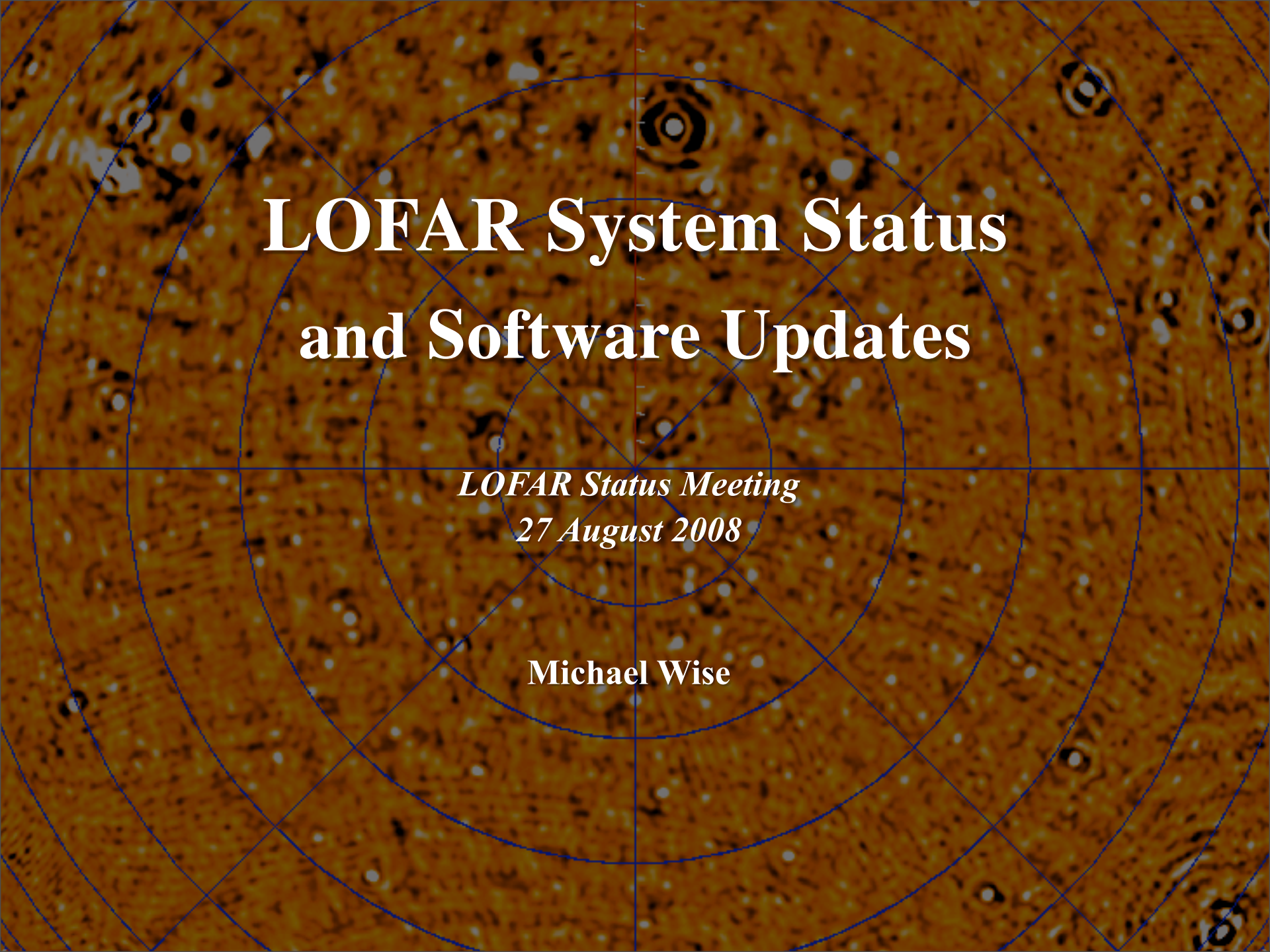


LOFAR System Status and Software Updates

LOFAR Status Meeting
27 August 2008

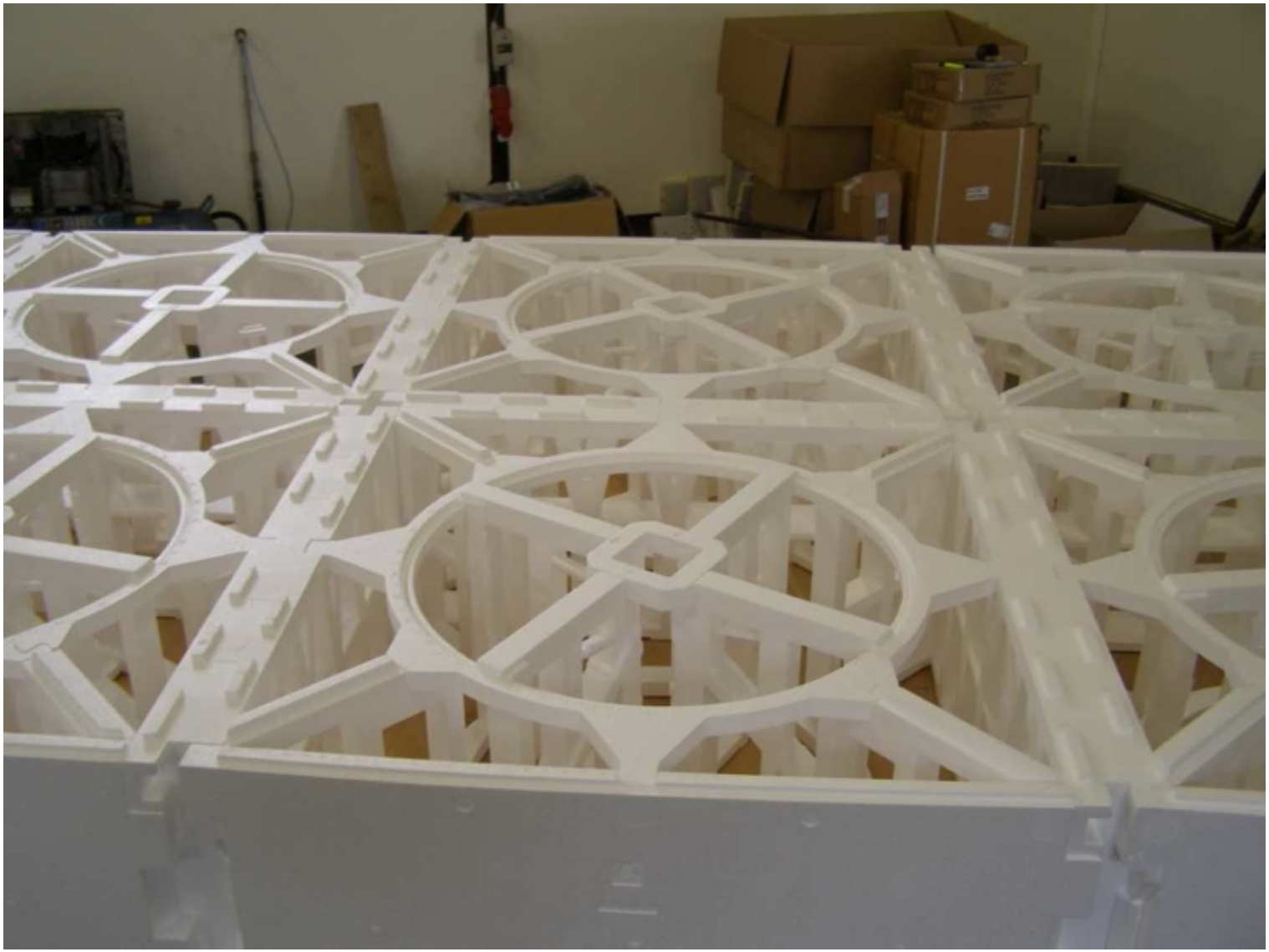
Michael Wise

News from the Field

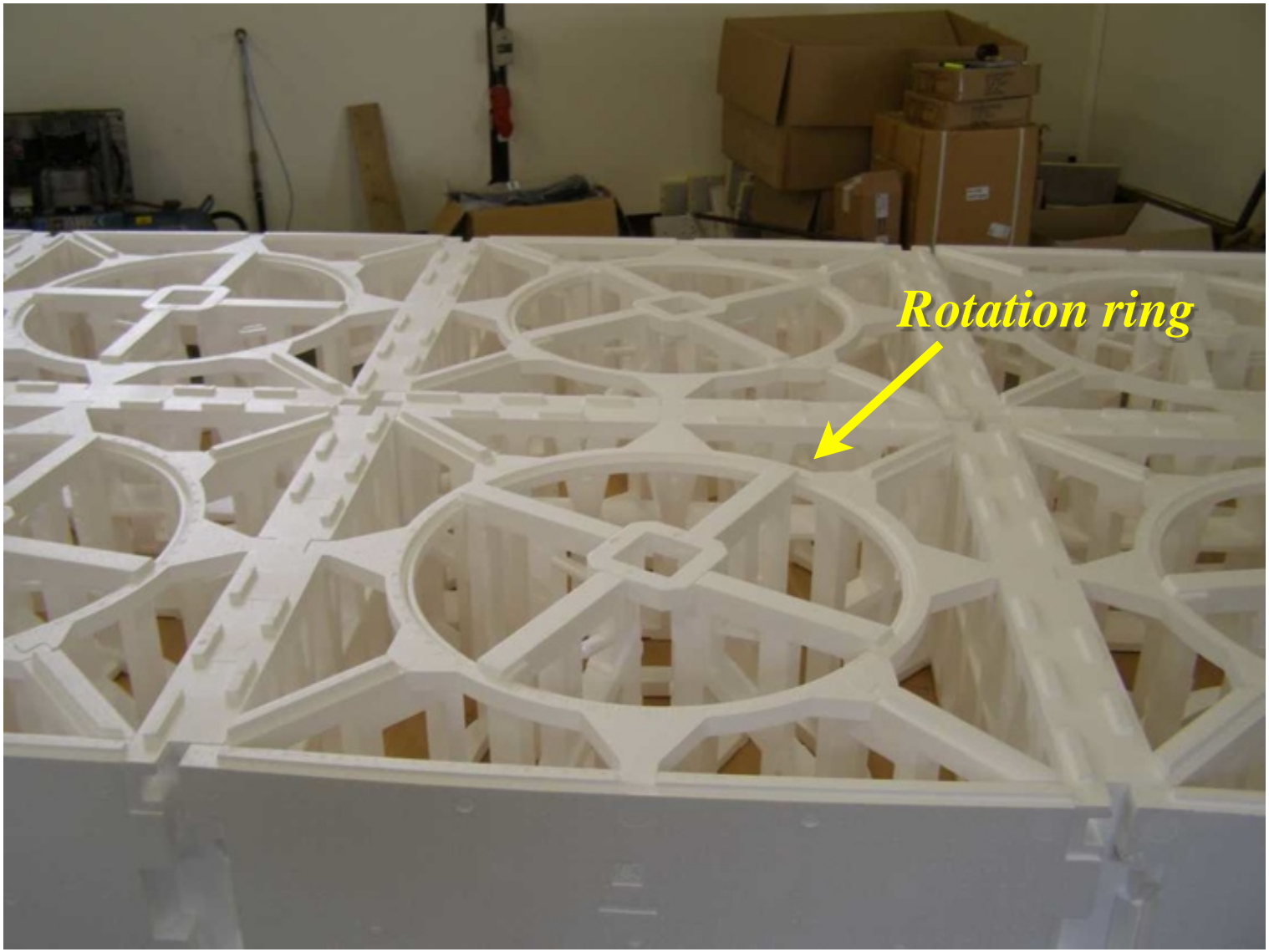
News from the Field

- Two tiles sent back to AutoNational
- Optimize production process
- Can continue ground prep

New Tiles Arriving

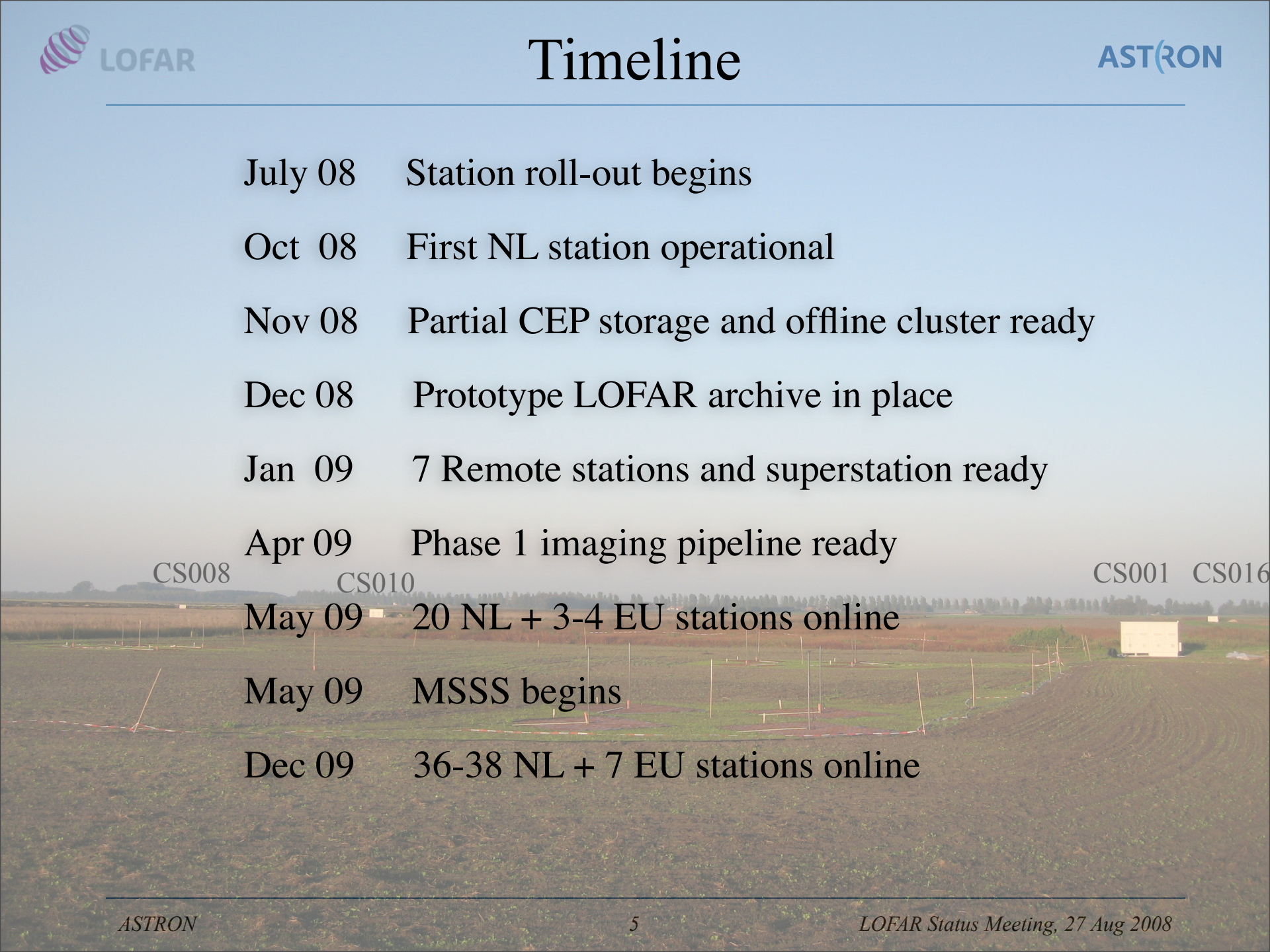


New Tiles Arriving

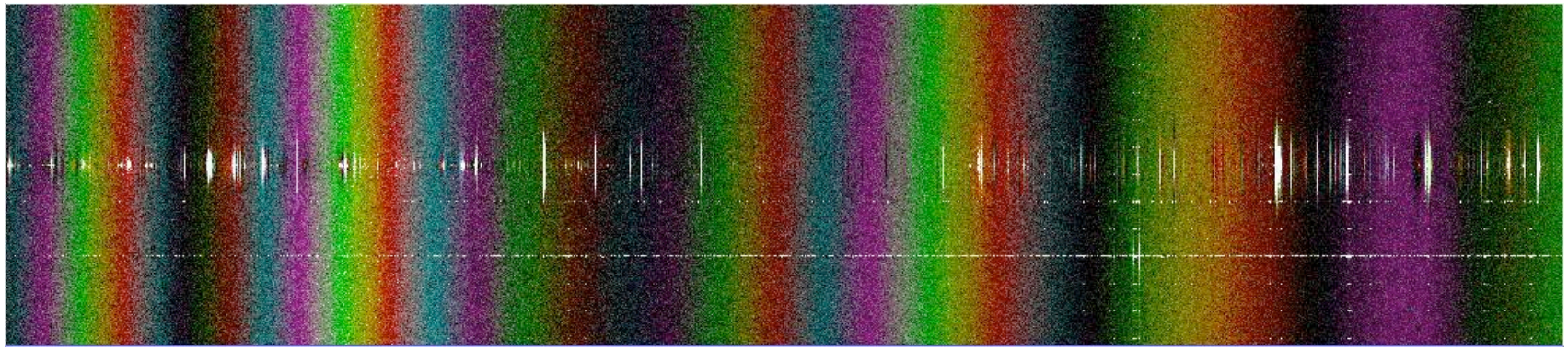


Timeline

July 08	Station roll-out begins
Oct 08	First NL station operational
Nov 08	Partial CEP storage and offline cluster ready
Dec 08	Prototype LOFAR archive in place
Jan 09	7 Remote stations and superstation ready
Apr 09	Phase 1 imaging pipeline ready
May 09	20 NL + 3-4 EU stations online
May 09	MSSS begins
Dec 09	36-38 NL + 7 EU stations online



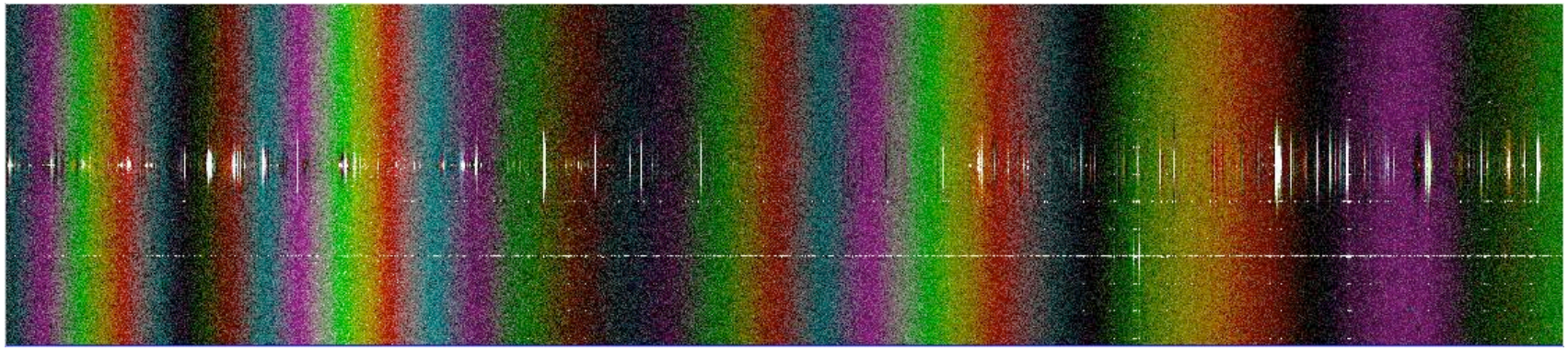
Central Systems



(from J. Romein)

- CS001 and CS016 upgraded to 10 GbE technology
- Change over to more secure network underway
- Station access under tighter control
- Complete in the next week

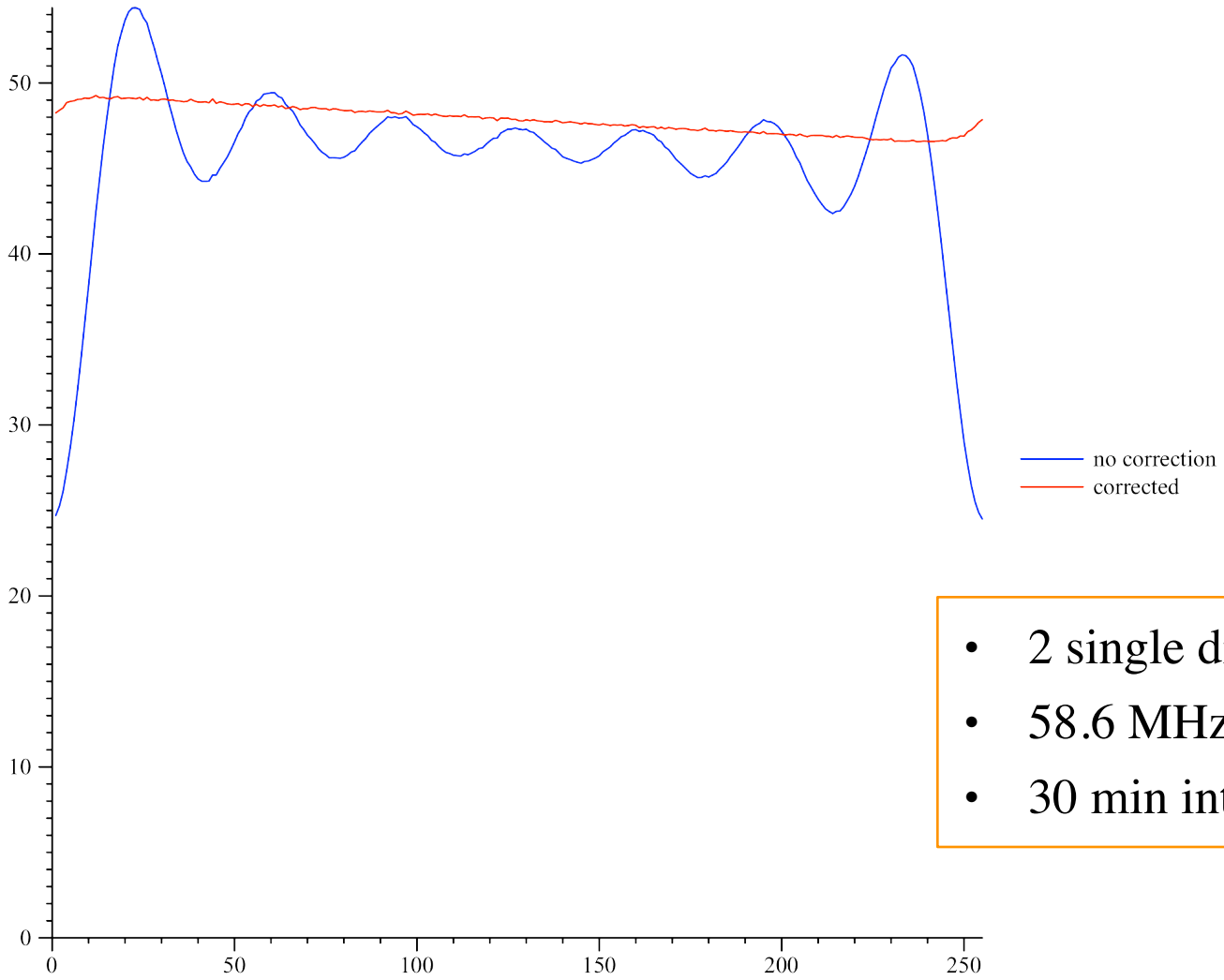
Central Systems



(from J. Romein)

- Production version of OLAP software done
- I/O optimizations awaiting feedback from IBM
- Operators train on new system next week
- Limited observing will begin week after (~Sept 10)

Online Passband Correction



(from J. Romein)

- 2 single dipoles
- 58.6 MHz
- 30 min integration

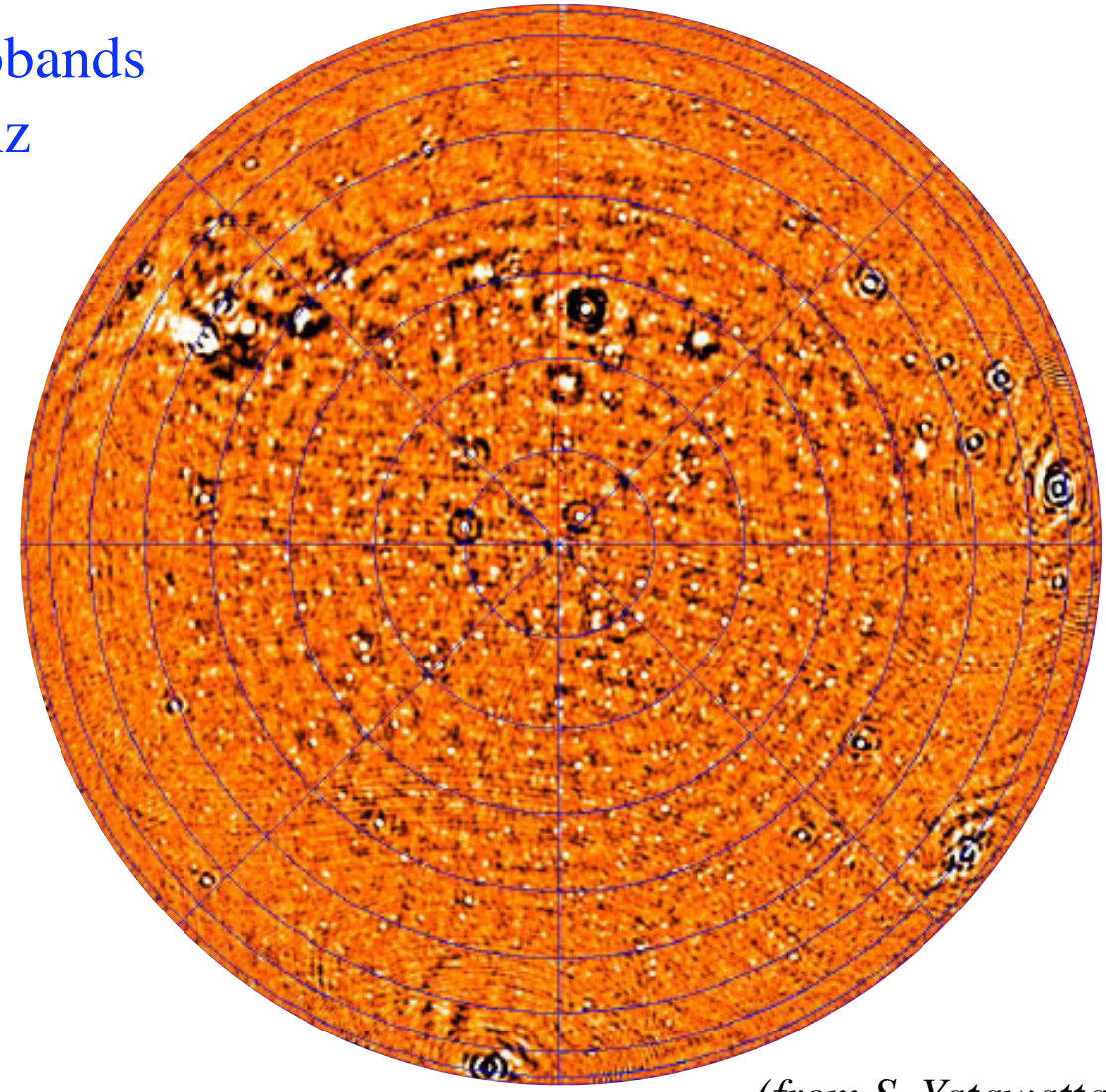
2nd MSSS Meeting

- ASTRON, Aug 21 2008
- Over 30 attendees
- System status
- Observing strategies
- European baselines
- Complimentary observations
- Commissioning tasks

⇒ *Presentations on LOFAR Wiki*

No Beam Correction

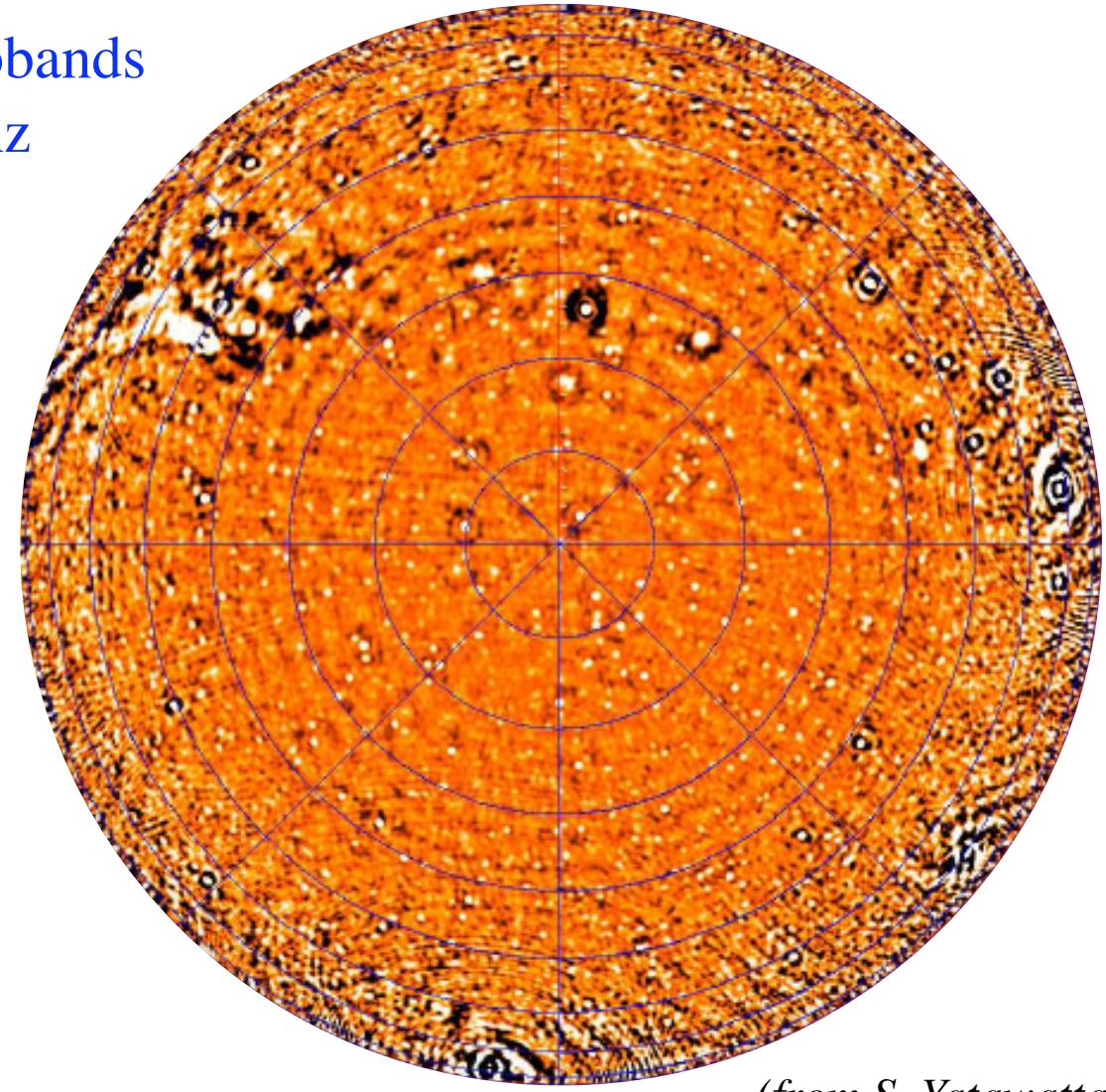
20 subbands
45 Mhz
24 hrs
NCP



(from S. Yatawatta)

Average Beam Correction

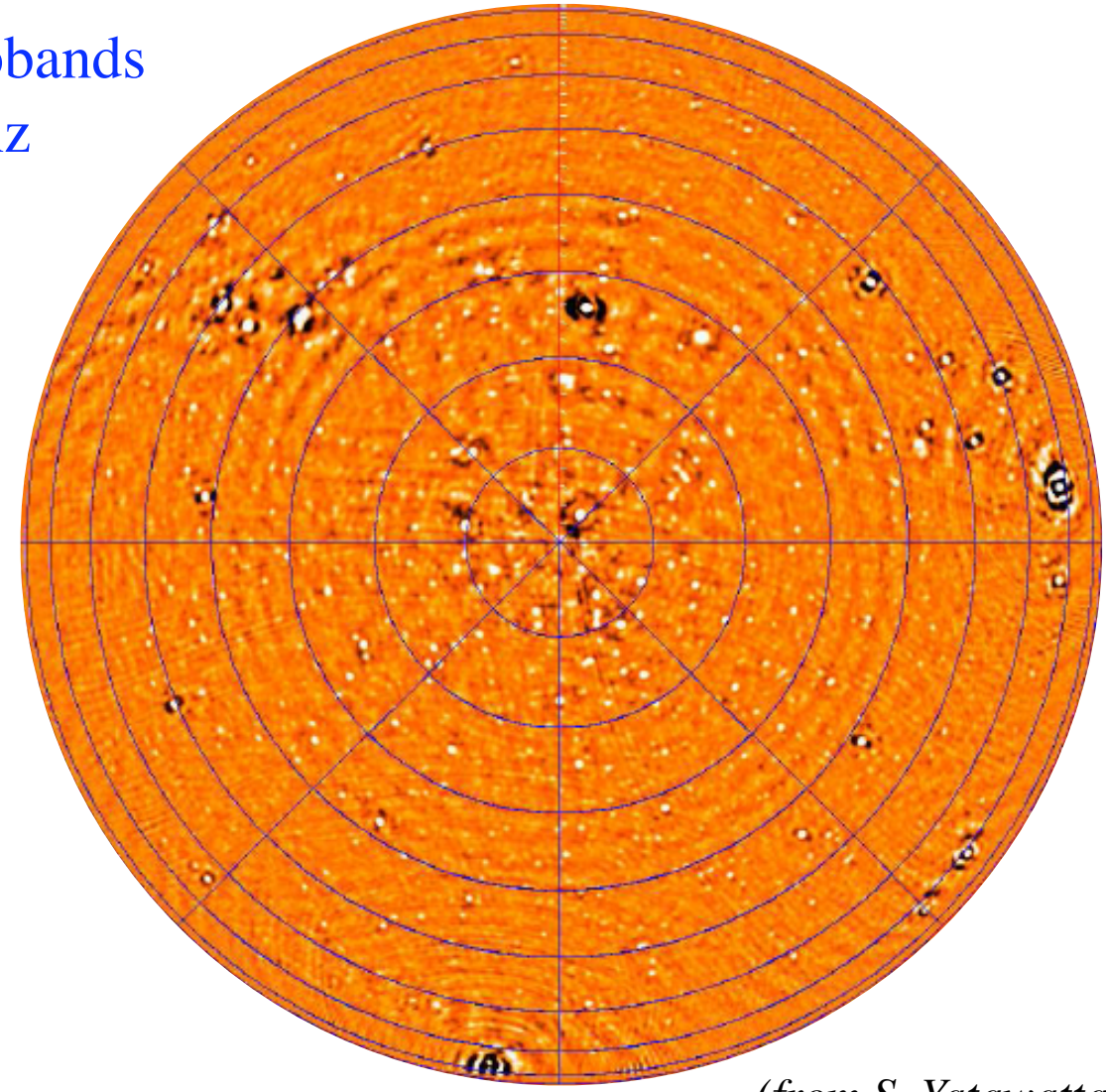
20 subbands
45 Mhz
24 hrs
NCP



(from S. Yatawatta)

Snapshot Beam Correction

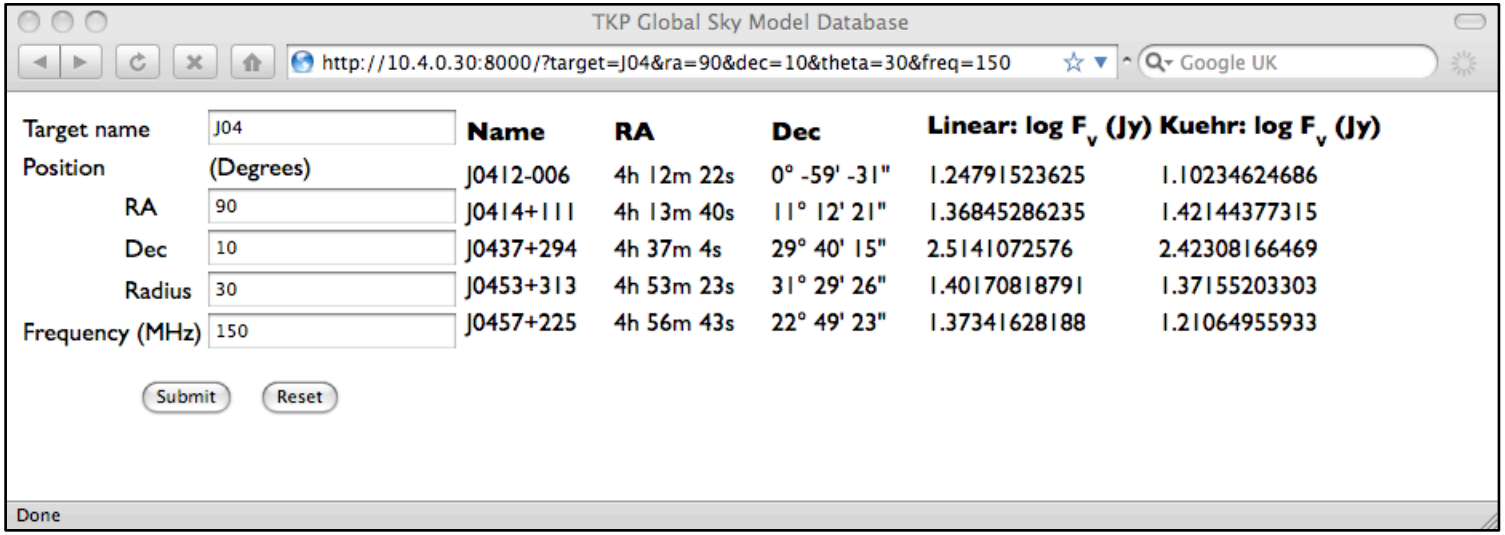
20 subbands
45 Mhz
24 hrs
NCP



(from S. Yatawatta)

GSM Implementation

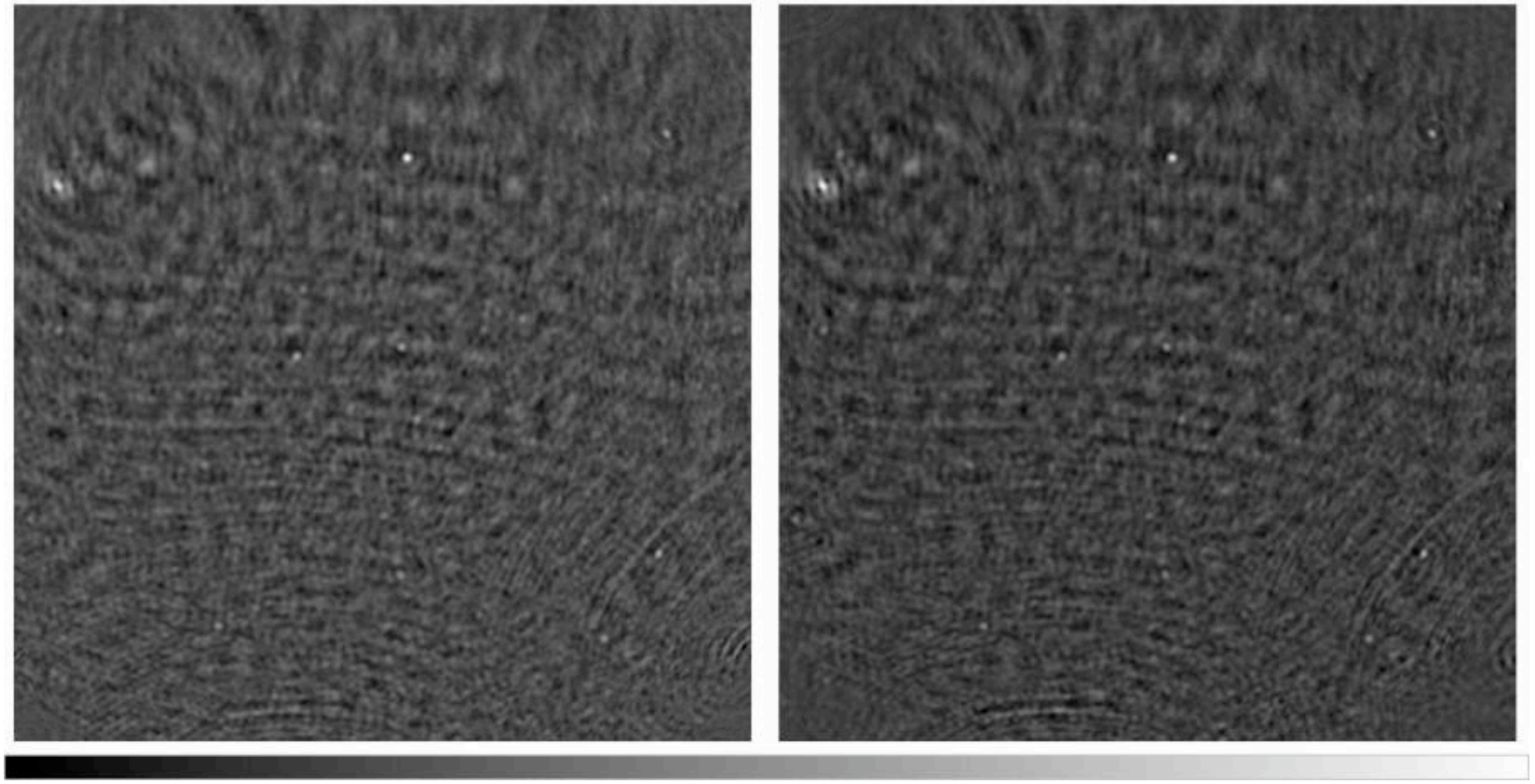
- GSM database prototype (*MySQL, PostgreSQL?, MonetDB?*)
- Many predictive functions implemented in database
- Python interfaces provided for database access
- Simulated maps created using external tools *(ORGSM, N. Mohan)*



Example query on prototype GSM database (*from J. Swinbank*)

CImager Testing

CImager | AIPS++ imager



(from C.Law)

- Qualitatively very similar
- Possible FITS header keyword bug
- Quantitative tests underway