LOFAR Technical Status: Introduction and Timelines

LOFAR Technical Status Meeting
18 May 2009

Michael Wise



Motivations

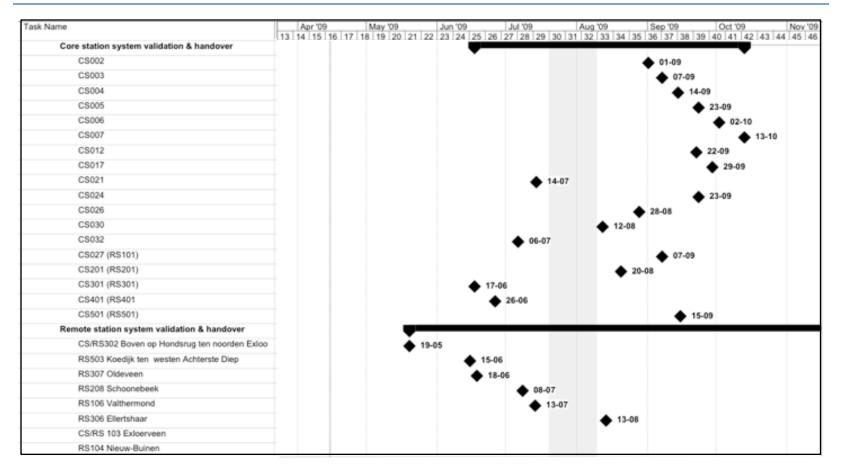
	Monday, May 18	Tuesday, May 19
		, , , ,
9:00 AM	Welcome	
	(Vermeulen)	
9:30 AM	Introduction and Timelines	Proposal Support
0.007	(Wise)	(Polatidis)
10:00 AM	Roll-out Status	Commissioning Plans
	(Vogt)	(Wise)
10:30 AM	Hardware Status	MSSS Specifications
	(Gunst)	(de Bruyn)
11:00 AM		
	Coffee	Coffee
11:30 AM	Bands, Beams, and Bits	Long-baseline Issues
	(Brentjens)	(Conway)
12:00 PM	CEP Performance (Broekema)	Surveys
		Magnetism
12:30 PM	Archive Status	EoR
	(Holties)	Transients
1:00 PM		
1.00 T W		
1:30 PM	Lunch	Lunch
1.00 T M		
2:00 PM	Calibration Status	Pulsars
	(de Bruyn)	Cosmic Rays
2:30 PM	Imaging Sensitivities (Nijboer)	Solar and Space Weather
		Single Station Modes
3:00 PM	LOFAR Observing Modes	Cg.o c.u.io.ii iiiouco
	(Wise)	Discussion
3:30 PM	Discussion	(Jackson)
	(Beck)	
4:00 PM	, ,	
4.00 1 111	Coffee	Coffee
4:30 PM	Imaging Pipeline	Wrap-up (Wise)
4.00 T III	(Nijboer)	map up (mee)
5:00 PM	Pulsar Pipeline	
J.00 F IVI	(Hessels)	
5:30 PM	VHECR Pipeline	KSP Working Groups
J.30 FW	(Horneffer)	Kor Working Groups
6:00 PM	Discussion	
J.00 1 W	(Fender)	
6:30 DM	· · ·	Fnd of Day II
6:30 PM	End of Day I	End of Day II
	· · ·	End of Day II
6:30 PM 7:00 PM	End of Day I	End of Day II
7:00 PM	· · ·	End of Day II
	End of Day I	End of Day II
7:00 PM	End of Day I	End of Day II

- Prepare for call for proposals
- Assess planned technical capabilities
- Synchronize activities roll-out
- Review current commissioning plans
- Inventory KSP commissioning projects
- Allocate available commissioners



Hardware Roll-out





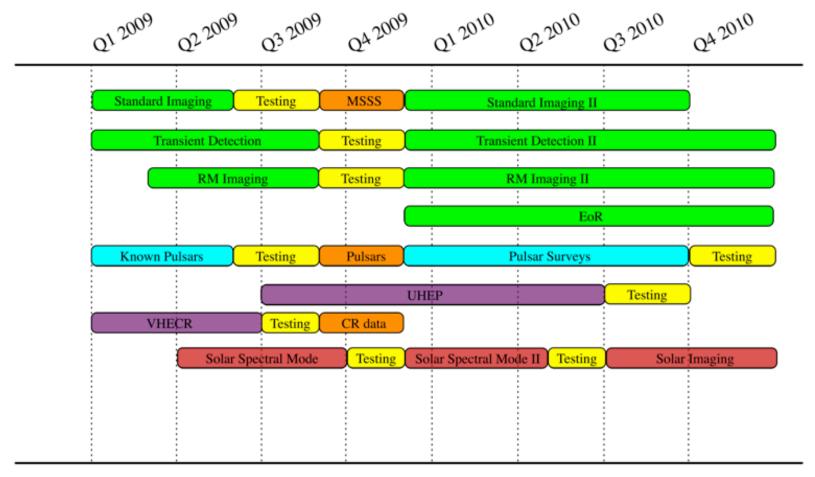
 $Milestones \Rightarrow LOFAR \ 3 \ (mid-June)$ 0.5 CEP (mid-June) LOFAR 20 (late-Sept.)

LOFAR 10 (mid-Aug.) Superstation (mid-Oct.)



Pipeline Roll-out





Milestones ⇒ Standard imaging (June 09)

Known pulsars (July 09)

VHECR (Aug. 09)

Phase I

Present - Aug 09

Station and Pipeline Integration

Operations I

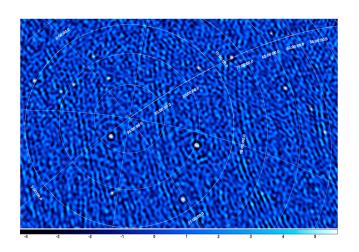
- Basic data-taking
- Manual pipeline execution
- No parallel observations
- Station test procedures

Pipeline Integration I

- Standard Imaging
- Known Pulsars
- VHECR mode

Station Integration I

- LOFAR01
- LOFAR03
- LOFAR05
- LOFAR10
- LOFAR10+INTBL04



Phase II



Sept 09 - Dec 09

Pipeline Testing and Validation

Operations II

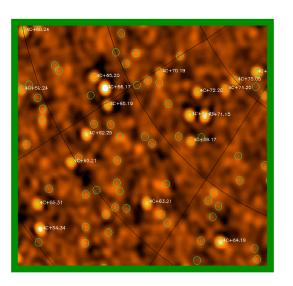
- Routine data-taking
- Automatic pipeline execution
- Limited parallel observations
- Initial archive integration

Pipeline Validation I

- MSSS
- Timing survey
- Offline transient searches
- Latency tests
- RM experiments

Station Integration II

- LOFAR15
- LOFAR20
- LOFAR20+INTBL06
- Core Superstation



Phase III



Jan 10 - Jun 10

Full Array Testing and Early Science

Operations III

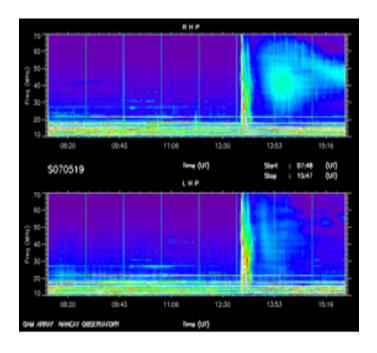
- Automatic pipeline execution
- Routine parallel observations
- Routine archive operations
- Support direct storage modes

Pipeline Integration II

- Standard Imaging upgrades
- Transient Detection
- Pulsar Surveys
- Solar Spectral mode
- UHEP mode

Station Integration III

- LOFAR36
- LOFAR36+INTBL08





Proposal Guidelines

- Primary focus on testing system functions
- Clearly identify system capability to be tested
- Describe required system status
- Describe required observations (new or existing)
- Describe analysis procedure to be used
- Define deliverables (report, algorithm, scripts, etc.)
- Include estimates of required computing resources
- Identify available personnel for project
- Estimate time to complete project