



Radio Observatory Report

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Development Work / Issues



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- SAS/MAC related :
 - ➤ CS103 and CS024 awaiting integration to SAS/MAC
 - ➤ Using both HBA fields in core stations (problem with HBA2 identified, solution implemented).
 - Continuing test of integration of SAS/MAC and MoM.
- Investigating GPS vs Rubidium clock stability.
- Working on scripts automatically generating inspection plots of every observation. Will be accessible through a web page
- Further development of MoM for interferometry and Beam Formed obs.

Observations last week

- •Multiple observations involving most of the available stations at different configurations.
- •Latter half of the week, HBA observations to test the SAS/MAC update.

Control and Metadata Busy Week I



- Test the flow of an observation starting with an astronomer defining a project, interaction with the Radio Observatory, data taking and the flow of processed data through the online and offline systems up to the data archive.
- Simulated an astronomer using MoM to describe an observation, interaction with RO support scientists and observers, and observations taking place under SAS/MAC (multiple observations).

FIRST RESULTS

- Many issues identified; some solved, others entered in CRAFT for further tracking
 Definition of observations through MoM and SAS functioning Ok
- Interaction between observer, scientist, friend & scheduler going far more smoothly.
- Now able to schedule HBA through MoM & SAS
- Data management on the agenda
- Archiving of LOFAR datasets again in progress after a long period
- •Will continue:simulations of processing (a "cut down" pipeline), data scrutiny and archiving of data.



■ □ Session_1

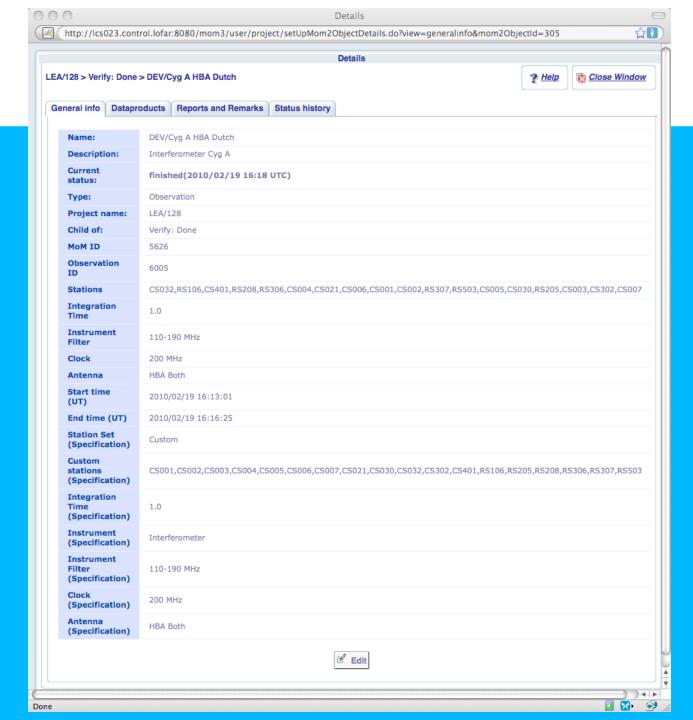




Main session of 9 x 6 hours

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Details





Coordination of CEP offline resource usage



With increased number of stations, some observations require a large number of storage nodes to have sufficient bandwidth available for storing data.

Reshuffling of data is highly inefficient.

Simultaneous use of storage nodes for observing and processing expected to severely degrade the performance of the systems (will test this).

Current strategy of appointing subclusters to user groups is no longer sufficient

Solutions under consideration

- Keep /data1 in each storage node free for observations Process observations and move data out as soon as possible.
- Stick with the "dedicated" subcluster allocation for usual work <u>and</u>
- Allocate additional resources to larger observations for limited time (ie spare subclusters, all /data1 partitions):
 - Assign generic accounts to user groups which will have permission to access the additional resources
 - Assign a "friend" of resources (support scientist)

Will consult with the user groups and implement a policy.



Current Observations



Control and Metadata Busy Week:

Test observations described by MoM and executed by SAS/MAC