

Imaging Busy Week #7 status update

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- Before we get to real science observations we need a few things
 - Station beam calibration
 - ...
- Many of the things on the to-do list require station beam calibration
- But before calibration in place, there are things that can still be done

- Inspect pipeline output - using 10min snapshot pipeline runs
 - flagging statistics, methods
 - BBS gain solutions and output columns
 - images
- Subtract A-team sources from (uncompressed) visibilities of 10min snapshots
 - calculate how much compression can be accepted for MSSS-like observations
 - determine which sources contribute to observations
 - attempt subtraction in BBS
 - look at long (6 hour) observations of CygA, VirA, TauA



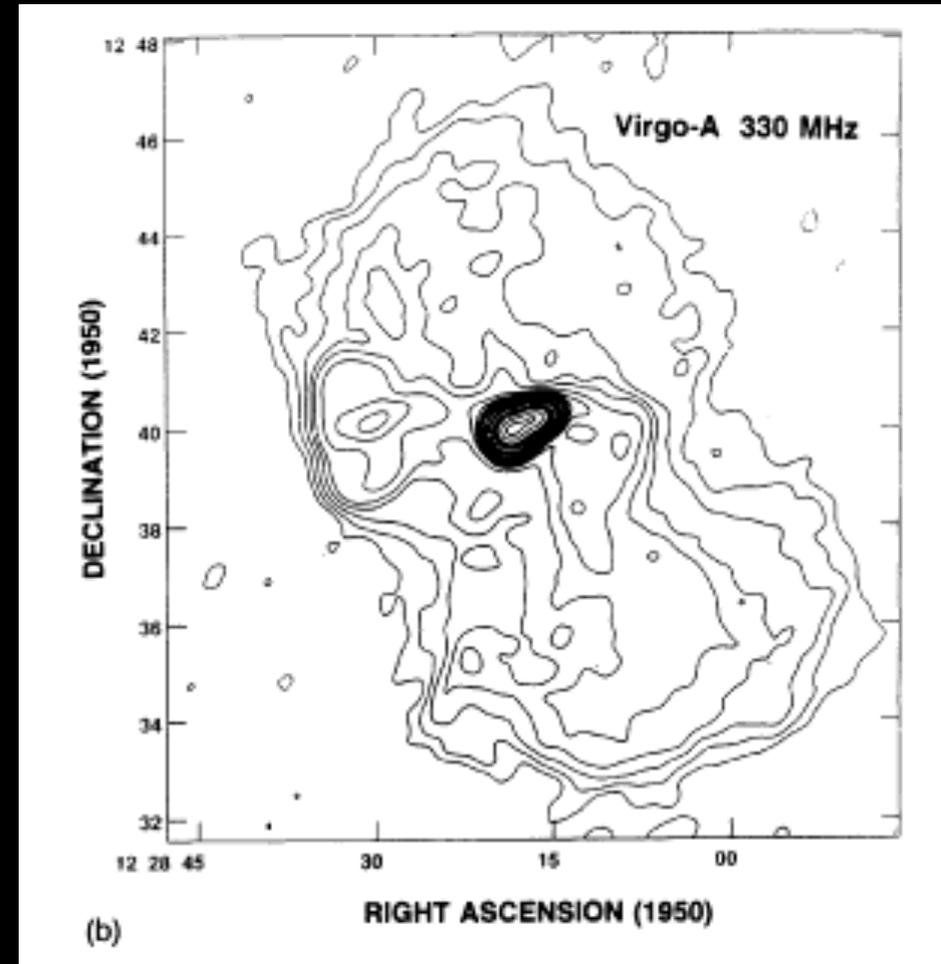
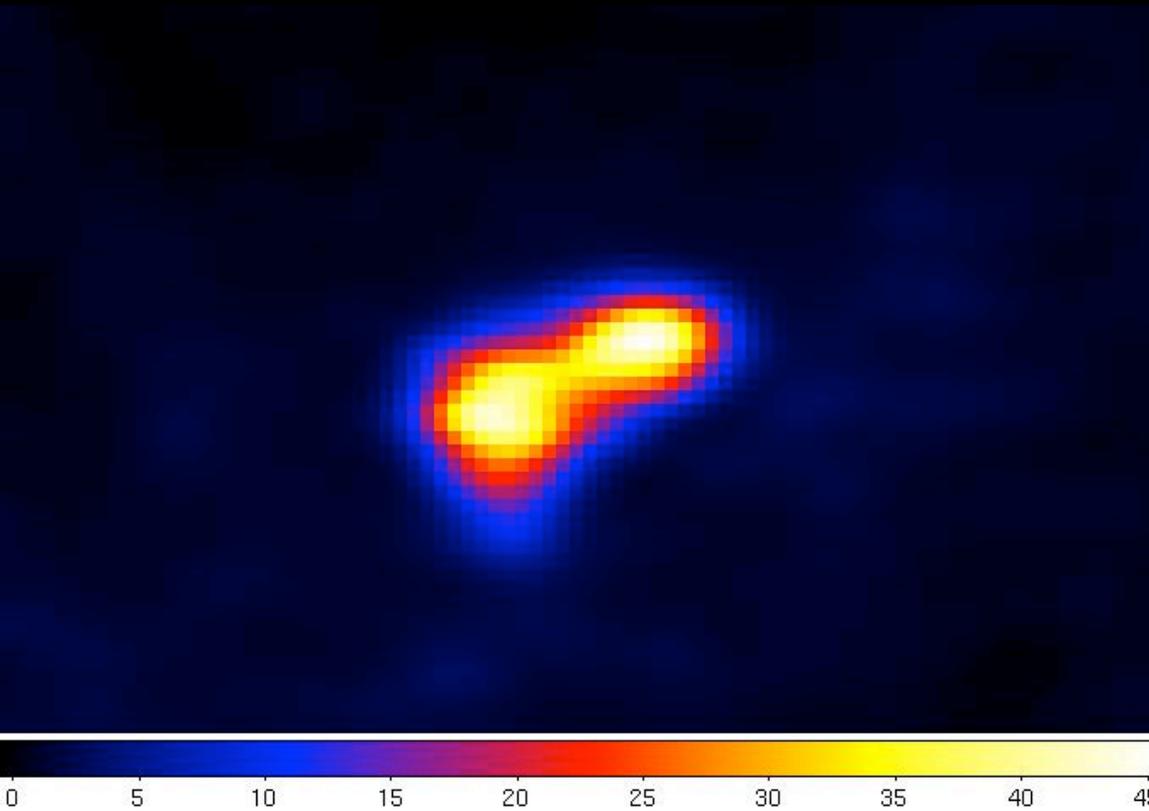
- Long series of snapshot observations produced using imaging implementation of Anastasia Alexov's script for creating pulsar observations
- Works well!

ProjectExplorer		Status		ID
MSSS	Add Details	active	MSSS	
3C196 (HBA Low)	Add Details	finished	3C196 (HBA Low) (HBA Low) at 2010-09-07T13:50:00 for 10 min	
3C196 (HBA Low)	Add Details	finished	3C196 (HBA Low) (HBA Low) at 2010-09-07T14:05:00 for 10 min	
3C196 (HBA Low)	Add Details	finished	3C196 (HBA Low) (HBA Low) at 2010-09-08T05:00:00 for 10 min	
3C196 (HBA Low)	Add Details	finished	3C196 (HBA Low) (HBA Low) at 2010-09-08T07:00:00 for 10 min	
3C196 (HBA Low)	Add Details	aborted	3C196 (HBA Low) (HBA Low) at 2010-09-08T09:00:00 for 10 min	
3C196 (HBA Low)	Add Details	finished	3C196 (HBA Low) (HBA Low) at 2010-09-08T11:00:00 for 10 min	
3C196 (HBA Low)	Add Details	finished	3C196 (HBA Low) (HBA Low) at 2010-09-08T13:00:00 for 10 min	
3C465 (HBA Low)	Add Details	finished	3C465 (HBA Low) (HBA Low) at 2010-09-07T20:20:00 for 10 min	
3C465 (HBA Low)	Add Details	finished	3C465 (HBA Low) (HBA Low) at 2010-09-07T22:20:00 for 10 min	
3C465 (HBA Low)	Add Details	finished	3C465 (HBA Low) (HBA Low) at 2010-09-08T00:20:00 for 10 min	
3C465 (HBA Low)	Add Details	finished	3C465 (HBA Low) (HBA Low) at 2010-09-08T02:20:00 for 10 min	
3C465 (HBA Low)	Add Details	finished	3C465 (HBA Low) (HBA Low) at 2010-09-08T04:20:00 for 10 min	
3C380 (HBA Low)	Add Details	finished	3C380 (HBA Low) (HBA Low) at 2010-09-07T15:10:00 for 10 min	
3C380 (HBA Low)	Add Details	finished	3C380 (HBA Low) (HBA Low) at 2010-09-07T17:10:00 for 10 min	
3C380 (HBA Low)	Add Details	finished	3C380 (HBA Low) (HBA Low) at 2010-09-07T19:10:00 for 10 min	
3C380 (HBA Low)	Add Details	finished	3C380 (HBA Low) (HBA Low) at 2010-09-07T21:10:00 for 10 min	
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3C380 (HBA Low)	Add Details	finished	3C380 (HBA Low) (HBA Low) at 2010-09-07T17:25:00 for 10 min	
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3C380 (HBA Low)	Add Details	finished	3C380 (HBA Low) (HBA Low) at 2010-09-07T21:25:00 for 10 min	
3C380 (HBA Low)	Add Details	finished	3C380 (HBA Low) (HBA Low) at 2010-09-07T23:25:00 for 10 min	

- LBA 10minute snapshots (core only)
 - 3C465: L2010_08555 - 08566
 - 3C380: L2010_08567 - 08570, 08572 - 08579
- HBA 10minute snapshots (core + remote)
 - 3C196: L2010_20184,20185,20212,20242
 - 3C380: L2010_20202,20205,20232
 - 3C465: L2010_20210,20240
- Multibeam test observation (3 target beams + 3 calibration beams)
 - 3C196, field 5 deg north, field 5 deg south, 3C138, 3C147, 3C286
 - L2010_20299 (LBA_OUTER)
- Long (6-hr) A-team (Cyg, Tau, Vir) observations HBA
 - L2010_20311 - 20313 (respectively)

Progress so far...

- Virgo A image (van Weeren)

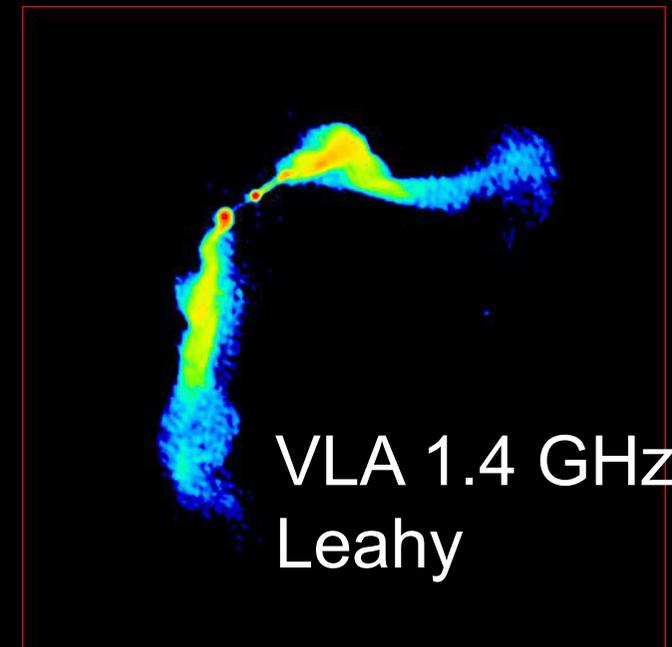
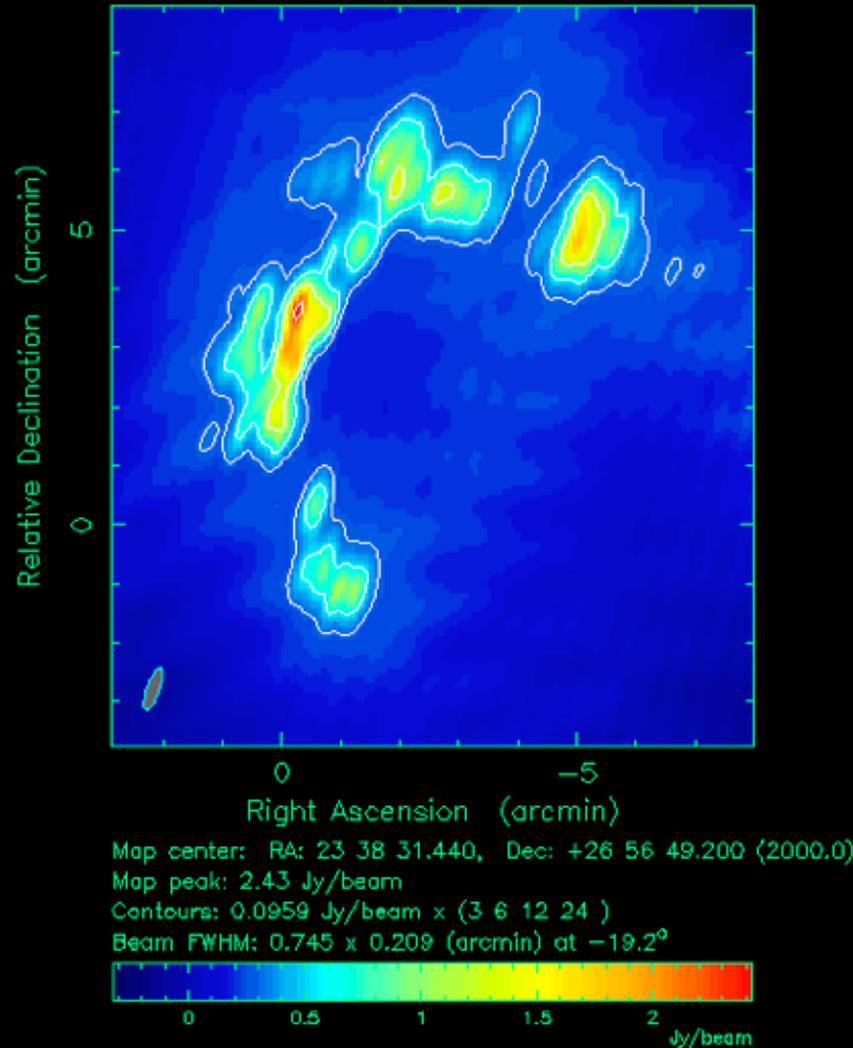


330 MHz, Kassim+ 93



- 3C465 (McKean)

Clean XX map. Array: LOFAR
BEAM_0 at 0.130 GHz 2010 Sep 07



- Jackson: at 40 MHz, using baselines $< 2\text{km}$: average x64 in frequency and use BBS to subtract: works well
- When averaging to 1 chan/SB - no longer works as well
- Had to exclude CS003,4,7 - these need to be checked, they seemed to have been consistently mispointing together
 - Note: identified by *lack* of A-team signal
- Concatenation of individual time slices does not work throughout the pipeline, (because the time grid is not fully uniform?)
- Is there a way around this? We need to concatenate to include RS in MSSS!