

## Pulsar Pipeline Checklist

	tasks	Developer
<b>BG/P</b>	<b>Design/preparatory work for BG/P 2nd transpose</b> Implement BG/P 2nd data transpose Document "new" BFout stream (post 2nd transpose) Test and bug fix 2nd transpose	John Romain, Jan David Mol Rob van Nieuwpoort Jan David Mol Rob van Nieuwpoort, Jan David Mol, John Romain
<b>SAS / MAC</b>	Integrate of OLAP into SAS/MAC Integrate of TAB module into SAS/MAC	Alwin de Jong, Ruud Overeem Jan David Mol, Ruud Overeem
<b>BF2H5</b>	<b>Merge USG repository as svn external package into LOFARSOFT</b> Integrate DAL "BF" and "Common" classes into BF2H5 Integrate parset reader into BF writer w/in LOFARSOFT Integrate new BF H5 data format (ICD) into BF2H5 (raw data) Integrate new BF H5 data format (ICD) into BF2H5 (BG/P out data) Extract UDPcopy and IonProc out of LOFARSOFT Extract parameterDB out of LOFARSOFT Create standalone BF2H5 tool	Alwin de Jong, Lars Baehren, Marcel Loose Alwin de Jong Alwin de Jong, Jan David Mol Alwin de Jong Alwin de Jong, Jan David Mol Alwin de Jong, Jan David Mol Alwin de Jong, Jan David Mol Alwin de Jong, Masaya
<b>BF ICD</b>	<b>Create mock BF H5 files with 4 types of data storage containers</b> Benchmark (DAL C++) 4 storage types to choose optimum BF container Finalize BF ICD Perform benchmarking on H5 chunking Identify source of metadata values (& calculations) Profile BF Observations (& Pipeline) for typical stats on sizes	A2 A2 A2, L. Baehren, J. Romain, JD Mol, J. Hessels, K. Anderson K. Anderson, A2, L. Baehren Alwin de Jong, R. Overeem, J. Hessels J. Hessels, B. Stappers, M. Wise
<b>USG Software Repository</b>	Integrate Pulsar SW into USG	
	<b>Integrate FFTW-3.1.2 into cmake</b> <b>Integrate PPGPLOT into cmake</b> <b>Integrate TEMPO into cmake</b> <b>Integrate PRESTO into cmake</b> Integrate SIGPROC into cmake <b>Test software installation/components on new cluster</b> Test software installation/components on user machines	A2 A2 A2 A2 A2 A2, J. Hessels, B. Stappers Pulsar Group
<b>DAL</b>	<b>Create DAL classes for BF metadata and structure (abide by ICD)</b> Create DAL methods to access data from BF structure (abide by ICD) Wrap BF DAL classes and methods with Python for PyDAL <b>Ongoing PyDAL updates and bugfixes</b> Integrate HDF5 into file I/O for Presto/TEMPO/etc	Lars Baehren, A2 Lars Baehren, A2 A2, Lars Baehren, K. Anderson A2, Lars Baehren, Frank B. A2
<b>Related Tools</b>	Update/maintain/expand "convert" program for ongoing BF observations Integrate "convert" into cmake (?)	A2, Jan David Mol A2
<b>Pulsar Pipeline</b>	Design Pulsar Pipeline for basic onserving modes Decide how to distribute the Pulsar Pipeline Implement Pulsar Pipeline Design within the iPython Framework Pipeline Testing	J. Hessels, B. Stappers, J. van Leeuwen, A2, M. Wise M. Wise, L. Baehren, J. Hessels, A2, J. Swinbank A2, K. Anderson, J. Swinbank A2, K. Anderson, J. Swinbank, J. Hessels, B. Stappers, J. Van Leeuwen

Release Pulsar Pipeline	M. Wise
Design Pulsar Pipeline(s) for other observing modes including survey	J. Hessels, B. Stappers, J. van Leeuwen, A2, M. Wise

**Archive**

Sync Archive schema with BF ICD	A. Renting, A2, L. Baehren, M. Wise, R. Overeem
Archive Pulsar raw data	A. Renting
Archive Pulsar Pipeline Processed data	A. Renting, A2

**Misc.**

Remove PGPLOT from PRESTO	Lars Baehren, A2
Work with the VO on format/protocol issues for LOFAR HDF5 data	?

Commissioner	Expected date of readiness	remarks
Rob van Nieuwpoort, John Romain, Jan David Mol Jan David Mol, Alwin Rob van Nieuwpoort, Jan David Mol, Alwin de Jong, Jason Hessels	in process, 1-2 months 1-2 months 1-2 days 1-2 weeks	check whether Rob only works for ASTRON 1-day per week
Alwin de Jong, Ruud Overeem Jan David Mol, Ruud Overeem		
Alwin de Jong Alwin de Jong Alwin de Jong Alwin de Jong, A2, J. Hessels Alwin de Jong, A2, J. Hessels, Jan David Mol Alwin de Jong Alwin de Jong Masaya, James Anderson	in process, 1-week	
A2 A2, Jason Hessels A2, Lars Baehren, J. Romain, JD Mol, J. Hessels, M. Wise	Done 1-2 weeks	4 types are: 1D arrays, ND arrays, 1D tables, ND tables (note ND arrays are memory limited)  not necessary for completion of the pipeline  should be a chart in the ICD to view typical data sizes for types of observations
	Done Done Pending 1 week	note, depends on system install of PGPLOT problems with reading files with line length > 70 chars
The Pulsar Group	in process	not 100% sure this is needed  Ramesh would like a copy of the software suite within cmake
	in process	
The Pulsar Group		
The Pulsar Group	in process	need to formalize the to-do and bug list
A2, Jan David Mol, J. Hessels A2		needs documentation and upgrade to accept command line parameters
The Pulsar Group		create use-cases and map these to tools/parameter settings do we need to integrate the Transient S/W repository with the USG S/W repository?
A2, K. Anderson, J. Swinbank A2, J. Hessels, B. Stappers, J. Van Leeuwen		

A. Renting, A2, J. Hessels  
A. Renting, A2, J. Hessels, M. Wise  
A. Renting, A2, J. Hessels, M. Wise

in process

not needed for completion of first pipeline release

meetings took place to mesh the LOFAR ICD with the Archive schema

The Pulsar Group  
?

investigate S2PLOT or some other package which can be used in general for LOFAR data plotting  
not needed for pipeline release