

Pulsar Pipeline Checklist

	tasks	Developer
BG/P	Design/preparatory work for BG/P 2nd transpose 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
SAS / MAC	Integrate of OLAP into SAS/MAC Integrate of TAB module into SAS/MAC	Alwin de Jong, Ruud Overeem Jan David Mol, Ruud Overeem
BF2H5	Merge USG repository as svn external package into LOFARSOFT 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
BF ICD	Create mock BF H5 files with 4 types of data storage containers 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
USG Software Repository	Integrate Pulsar SW into USG	
	Integrate FFTW-3.1.2 into cmake Integrate PPGPLOT into cmake Integrate TEMPO into cmake Integrate PRESTO into cmake Integrate SIGPROC into cmake Test software installation/components on new cluster Test software installation/components on user machines	A2 A2 A2 A2 A2 A2, J. Hessels, B. Stappers Pulsar Group
DAL	Create DAL classes for BF metadata and structure (abide by ICD) Create DAL methods to access data from BF structure (abide by ICD) Wrap BF DAL classes and methods with Python for PyDAL Ongoing PyDAL updates and bugfixes 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
Related Tools	Update/maintain/expand "convert" program for ongoing BF observations Integrate "convert" into cmake	Tom Hassal, A2, Jan David Mol A2
Pulsar Pipeline	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) J. Swinbank, A2, M. Wise, K. Anderson

Commissioner	Expected date of readiness	remarks
Rob van Nieuwpoort, John Romain, Jan David Mol	in process, 1-2 months	
Jan David Mol, Alwin	1-2 months	check whether Rob only works for ASTRON 1-day per week
Rob van Nieuwpoort, Jan David Mol, Alwin de Jong, Jason Hessels	1-2 days	
	1-2 weeks	
Alwin de Jong, Ruud Overeem		
Jan David Mol, Ruud Overeem		
Alwin de Jong	in process, 1-week	
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		
A2	Done	4 types are: 1D arrays, ND arrays, 1D tables, ND tables (note ND arrays are memory limited)
A2, Jason Hessels	1-2 weeks	
A2, Lars Baehren, J. Romain, JD Mol, J. Hessels, M. Wise		not necessary for completion of the pipeline
		should be a chart in the ICD to view typical data sizes for types of observations
A2 fixing seg fault & other issues on new cluster build	Done	
	Done	note, depends on system install of PGPLOT
	Done	workaround for problems with reading files with line length > 70 chars; fix requested to developer
	1-2 weeks	not 100% sure this is needed
The Pulsar Group	in process	Ramesh would like a copy of the software suite within cmake
	in process	
The Pulsar Group	in process	need to formalize the to-do and bug list
The Pulsar Group		
A2, Tom Hassal, Jan David Mol, J. Hessels		needs documentation and upgrade to accept command line parameters
A2, Tom Hassal		
The Pulsar Group		create use-cases and map these to tools/parameter settings; start at PBW#5 & #6
A2, K. Anderson, J. Swinbank		do we need to integrate the Transient S/W repository with the USG S/W repository?
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