

Documentation for the Standard Imaging Pipeline

News

23-Apr-2015	DPPP has option of user defined steps (possibly in Python)
22-Apr-2014	Version 14.1 of the Imaging Cookbook is released
25-Sep-2012	Version 1.0 of the online pipeline documentation: pipeline-docs
06-Apr-2012	Version 11.0 of the Imaging Cookbook is released
26-Jan-2012	Version 10.2 of the Imaging Cookbook is released
14-Dec-2011	Version 10.1 of the Imaging Cookbook is released
13-Dec-2011	New NDPPP msin parameters to combine subbands or to select baselines. By default the aoflagger step writes statistical flag information into QUALITY subtables.
4-Nov-2011	Version 10.0 of the Imaging Cookbook is released
7-Sep-2011	Specification of spectral index in BBS and makesourcedb has changed after addition of support for rotation measure.
26-Jul-2011	BBS end-to-end tests runs a series of BBS end-to-end test cases
10-Jul-2011	Version 9.0 of the Imaging Cookbook is released
26-Mar-2011	Info needed for the BBS beam calculation must be part of the MeasurementSet. It can be added to old MSs using makebeamtables .
1-Mar-2011	Version 6.0 of the Imaging Cookbook is released
31-Jan-2011	Added PhaseShift step to NDPPP
28-Jan-2011	gsm.py extracts sources from the Global Sky Model in makesourcedb format
previous_news	

User Documentation

- The latest release of the [Imaging Cookbook](#) is available on the web.
- The development version of the cookbook is available (read only!) from [USG Subversion](#).

MSSS processing

The processing of the MSSS observations will be done in an automated way by means of a few [pipelines](#) that will be started automatically using the scheduler and SAS/MAC.

[Pipeline Framework Changelist](#)

RTCP processing

- Subband passband correction at OLAP
- John Romein

Useful Tools

- [Some handy tools and commands](#)
- [msselect](#): select baselines in a MeasurementSet

- [cexecms](#): run a script on cluster nodes for all data files matching a file name pattern
- [Some scripts for running the pipeline](#)
- [A collection of useful tools and scripts that can be found in /opt/tools](#)
- [Pipeline framework documentation](#)

DPPP

- Pre-flag document
- V.N. Pandey
- Testing of DPPP
- David Rafferty, 11-Mar-2010
- [DPPP documentation](#)
- [How to write a DPPP step in Python](#)
- [LOFAR Data Processing School DPPP Exercise](#)

Beam Specification

- [LOFAR Beam Definition Version 5.0](#)- J. Hamaker et al.

BBS

- [BBS documentation](#)
- [Initial BBS performance](#) 07Jan08 - Joris van Zwieten
- [parmdb: Parameter Database](#) - Ger van Diepen
- [parmdbm](#): program to maintain a parameter table
- [cross-calibration](#): ways to export (transfer) solutions
- [makesourcedb](#), [mergesourcedb](#), [showsourcedb](#): programs to create/handle a Source Parameter Database
- [makems: Creating \(distributed\) MeasurementSet](#) - Ger van Diepen
- [makebeamtables](#): add beam info to a MeasurementSet. Needed for BBS after makems.

Imaging

- [mwimager documentation](#)
- [cimager documentation](#)
 - description of mwimager, clusterdesc and VDS files
- Ger van Diepen.
 - W - Projection paper
- Cornwell et al.
 - Specification of the Frequency Resolution
- Ger de Bruyn
- [Commissioning of the Imager - Last update Aug. 2008](#) - Casey Law
- [Commissioning of the Imager - Last update Oct. 2009](#) - Evert Rol, Fabien Batejat
- [LOFAR Imager test documentation](#) - Evert Rol

Ionosphere

- [Lions: Ionospheric Simulations](#)
- [Ionospheric Simulations and Calibratability](#) - Ilse van Bommel, Maaijke Mevius
- [Ionospheric Calibration in BBS](#)
- See MWImager parset description below

Source Finding

- TKP Source Extraction System
- John Swinbank
- TKP source extraction code description
- Hanno Spreeuw
- TKP notes on Duchamp
- John Swinbank

Global Sky Model

- [gsm.py: extract input for makesourcedb from GSM](#)
- [Expected Data Rates and Volumes for the TKP](#) - Bart Scheers
- [Transient and Variability Detection Algorithms](#) - Bart Scheers
- [Cross-Correlating Multiple Radio Catalogues](#) - Bart Scheers

Integration of the Standard Imaging Pipeline

- [Standard Imaging Pipeline: first results 09Dec08](#) - Marcel Loose
- [TKP pipeline framework](#) - John Swinbank

ParSet documentation

- [LOFAR ParameterSet](#) - Ger van Diepen
- NDPPP: [NDPPP parameter set documentation](#)
- BBS: [BBS parameter set documentation](#)
- mwimager: [mwimager parameter set documentation](#)

Other documents

- [Notes on IPython](#) - John Swinbank
- [LOFAR Software Testing](#) - Ger van Diepen

Pipeline Profiling

Some [records of pipeline runs](#) are available for use in profiling.

People

- [George Heald](#) (group leader, commissioning)
- [Ger van Diepen](#) (NDPPP, parmdb)
- [Tammo Jan Dijkema](#) (Imaging, BBS)
- [Wouter Klijn](#) (pipelines)
- [Bas vd Tol](#) (imaging, ionosphere, clock errors)
- [Nicolas Vilchez](#) (pipelines, commissioning)

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