

WENSS / Lofar

Radio data in Astro-WISE

WJ Vriend

Radio data in Astro-WISE

- WENSS
 - 493 frames
 - Covering hole sky north of 28 deg
- Lofar
 - ~20 frames at 49cm – 69cm
 - Only data from CS1

RadioFrame - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://dbview.astro-wise.org/dbview.py?Queryselect=Q_preselect&QInstrument=%28%27LOFAR%27%29&numrows=100&

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[SET context](#)
[index of tables](#)
[raw science](#)
[raw calibration](#)
[reduced calibration](#)
[reduced science](#)
[source lists](#)
[HOME](#)

Total number of rows selected : 50 from project-context : LOFAR [project-only-setting: ON]

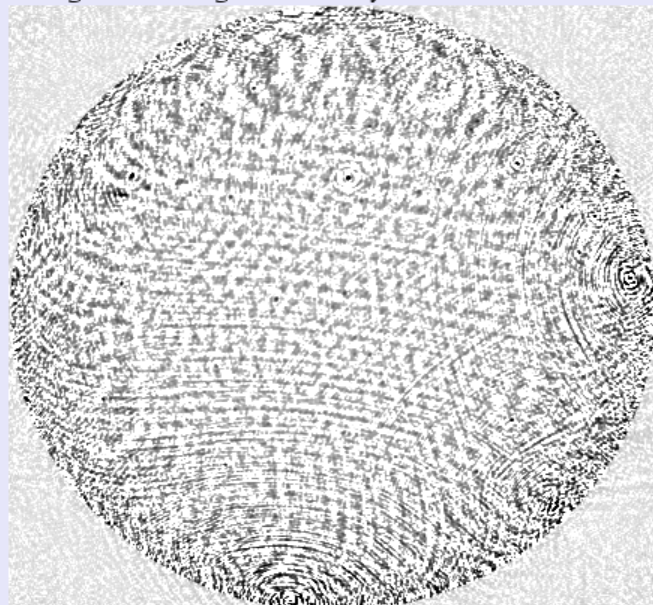
RadioFrame

instrument	NAXIS1 [pixel]	NAXIS2 [pixel]	creation_date	
LOFAR	1728	1728	2007-12-07 11:42:32	Radio-WVRIEND-LOFAR---1.0.0-20070803000000-54.10---Ex Picture
LOFAR	1728	1728	2007-12-07 11:42:31	Radio-WVRIEND-LOFAR---1.0.0-20070803000000-53.52---Ex Picture
LOFAR	1728	1728	2007-12-07 11:42:29	Radio-WVRIEND-LOFAR---1.0.0-20070803000000-41.80---Ex Picture
LOFAR	1728	1728	2007-12-07 11:42:26	Radio-WVRIEND-LOFAR---1.0.0-20070803000000-49.02---Ex Picture
LOFAR	1728	1728	2007-12-07 11:42:24	Radio-WVRIEND-LOFAR---1.0.0-20070803000000-39.26---Ex Picture
LOFAR	1728	1728	2007-12-07 11:42:22	Radio-WVRIEND-LOFAR---1.0.0-20070803000000-62.30---Ex Picture
LOFAR	1728	1728	2007-12-07 11:42:21	Radio-WVRIEND-LOFAR---1.0.0-20070803000000-52.93---Ex Picture
LOFAR	1728	1728	2007-12-07 11:42:20	Radio-WVRIEND-LOFAR---1.0.0-20070803000000-57.42---Ex Picture
LOFAR	1728	1728	2007-12-07 11:42:18	Radio-WVRIEND-LOFAR---1.0.0-20070803000000-50.98---Ex Picture
LOFAR	1728	1728	2007-12-07 11:42:17	Radio-WVRIEND-LOFAR---1.0.0-20070803000000-42.58---Ex Picture

http://imageview.astro-wise.org - RadioFrame Radio-WVR

[POS image](#)
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binningfactor = 4 Image size: x: 1728 y: 1728



Done

Find: Find Next Find Previous Highlight all Match case

http://ds.astro.rug.astro-wise.org:8000/Radio-WVRIEND-LOFAR---1.0.0-20070803000000-54.10---Extracted-----54441.4878810-39c097760a8570704f51bc2ed525f04264d9105a.fits

Shell No. 2 Kapteyn Ir RadioFram http://ima [Nieuw Security.p 12:11:35 vrijdag 28/03/08

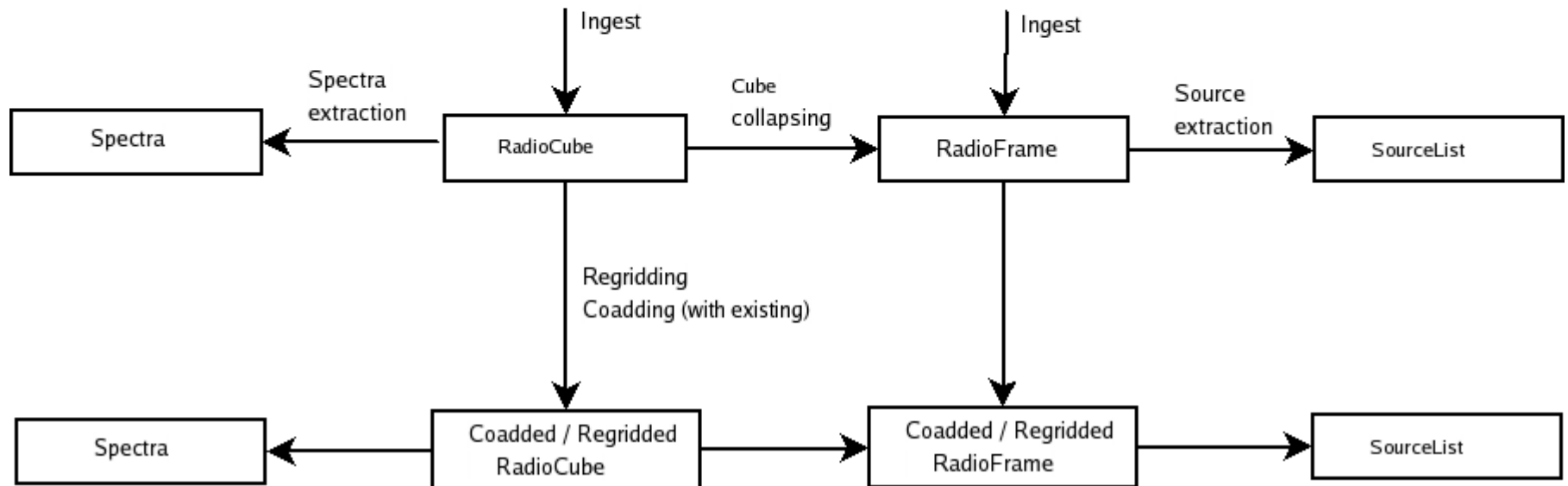
Radio data format

- RadioCube
 - Metadata of 4D cube
 - Coordinates, frequency and polarization
- RadioFrame
 - Metadata of 2D frame
 - Coordinates
 - pyFits for plane extraction

Astro-WISE Radio Survey

How the Astro-WISE classes relate to each other and which applications can be used

Task	Application
Spectra extraction	BDSM
Cube collapsing	BDSM
	PyFits
	Eclipse
Source extraction	BDSM
Regridding	Swarp ?
Coadding	Swarp ?



Radio source extraction

- BDSM
 - Blob Detection and Source Measurement
 - Lofar sky survey
 - Fortran vs python version
 - Islands, Sources, Gaussians, Shapelets

Radio source data format

- Output of BDSM
 - Sources -> SourceList
 - Gaussians -> BDSM_GaussianList
 - Shapelets -> BDSM_ShapeletList
 - Spectra -> SourceList ?

Datamodel BDSM

SID = Source Identifier
SLID = Source List Identifier
GLID = Gaussian List Identifier
SHLID = SHapeletList Identifier

