

The WEAVE Operational Repository (OR)

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This session

- What is the Operational Repository meant to do? Who is it for?
- Current status
- Current functionality
- What next?

A quick digression: WEAVE accounts at CASU

- SV users will have access to two CASU facilities
- The WEAVE Automated Submission Platform (WASP)
- The WEAVE Operational Repository (OR)
- Accounts will be auto-generated when CASU receives time allocations
- User-model:
 - 1 time allocation = 1 survey = 1 account
 - Same credentials for accessing the WASP and OR

Main roles of the Operational Repository

- Currently in beta-testing within WEAVE consortium
- Primarily – it's just a fileserver
 - Search for some files
 - Request them
 - Download them
- Tracking survey progress, OB status
- Tracking data processing progress, instrument health trends
- All tied together with a web frontend

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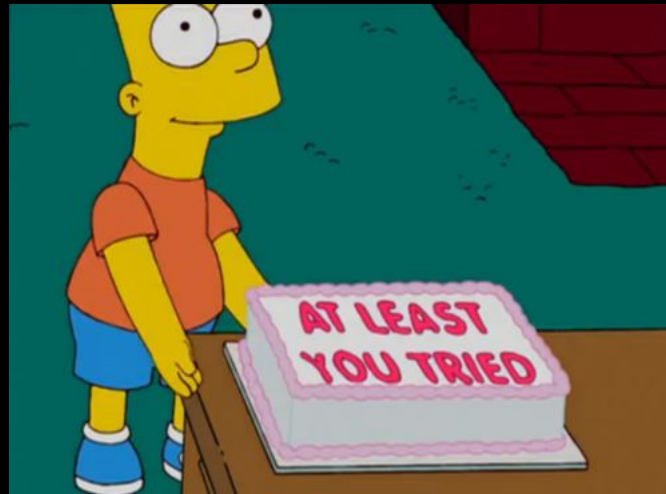
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- Internal to CASU: used for validation of WEAVE output products
 - RAW, L1 processed data and L2 analysis

Current status

- Backend architecture in place (PostgreSQL DB, apache, WSGI)
- Data model “infrastructure” in place (SQLAlchemy)
- Data model defined for XML, RAW, L1, L2 data & targets...
 - ...but not “Superstacks”
 - ...or calibration files (Arcs, Flats, warcs)
- Validation mechanism in place: can test any file against model
- Front-end (lots of CSS, Python and JQuery):
 - Login authentication – user and admin
 - Fully developed search interface
 - Data request, notification and retrieval
 - Inline help and dedicated help page

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WEAVE Operational Repository



[Home](#) | [Guide Stars](#) | [Calibrations](#) | [Raw](#) | [Level 1](#) | [Level 2](#) | [Targets](#) | [OBs](#) | [Survey Status](#) | [Data Processing](#) | [Data Model](#) | [BUGS](#) | [Help](#) | [My requests](#) | [Logout](#)

Query form for L1 data

Query L1 processed files

Night[?]

20111231

Position[?]

33.244 -1.5 12.0

OB id[?]

3130

Object ID[?]

WVE_01332545+3526393

Filename[?]

single_1002045.fit

Submit

All surveys



All modes



Query for L1 observations on 20160903

Query returned 8 rows | Query ID: [1500015155](#) [?]

<input checked="" type="checkbox"/>	Filename	Field Name	OB id	Survey(s)	Coords	Trimester	Night	UTC	Mode	Configuration	Airmass	Seeing	v.
<input checked="" type="checkbox"/> H T D	stacked_1002045	CCG_NGC6791_LR_F1W1	3294	CCG, WD	19:20:52.992 37:46:18.12	S4	20160903	2016-09-03 20:29:49	MOS	LR/Red	1.025	1.1	v3.0
<input checked="" type="checkbox"/> H T	single_1002045	CCG_NGC6791_LR_F1W1	3294	CCG, WD	19:20:52.992 37:46:18.12	S4	20160903	2016-09-03 20:29:49	MOS	LR/Red	1.025	1.1	v3.0
<input checked="" type="checkbox"/> H T D	stacked_1002046	CCG_NGC6791_LR_F1W1	3294	CCG, WD	19:20:52.992 37:46:18.12	S4	20160903	2016-09-03 20:29:49	MOS	LR/Blue	1.025	1.1	v3.0
<input checked="" type="checkbox"/> H T	single_1002046	CCG_NGC6791_LR_F1W1	3294	CCG, WD	19:20:52.992 37:46:18.12	S4	20160903	2016-09-03 20:29:49	MOS	LR/Blue	1.025	1.1	v3.0
<input checked="" type="checkbox"/> H T	single_1002047	CCG_NGC6791_LR_F1W1	3294	CCG, WD	19:20:52.992 37:46:18.12	S4	20160903	2016-09-03 20:48:49	MOS	LR/Red	1.025	1.1	v3.0
<input checked="" type="checkbox"/> H T	single_1002048	CCG_NGC6791_LR_F1W1	3294	CCG, WD	19:20:52.992 37:46:18.12	S4	20160903	2016-09-03 20:48:49	MOS	LR/Blue	1.025	1.1	v3.0
<input checked="" type="checkbox"/> H T	single_1002049	CCG_NGC6791_LR_F1W1	3294	CCG, WD	19:20:52.992 37:46:18.12	S4	20160903	2016-09-03 21:07:49	MOS	LR/Red	1.025	1.1	v3.0
<input checked="" type="checkbox"/> H T	single_1002050	CCG_NGC6791_LR_F1W1	3294	CCG, WD	19:20:52.992 37:46:18.12	S4	20160903	2016-09-03 21:07:49	MOS	LR/Blue	1.025	1.1	v3.0

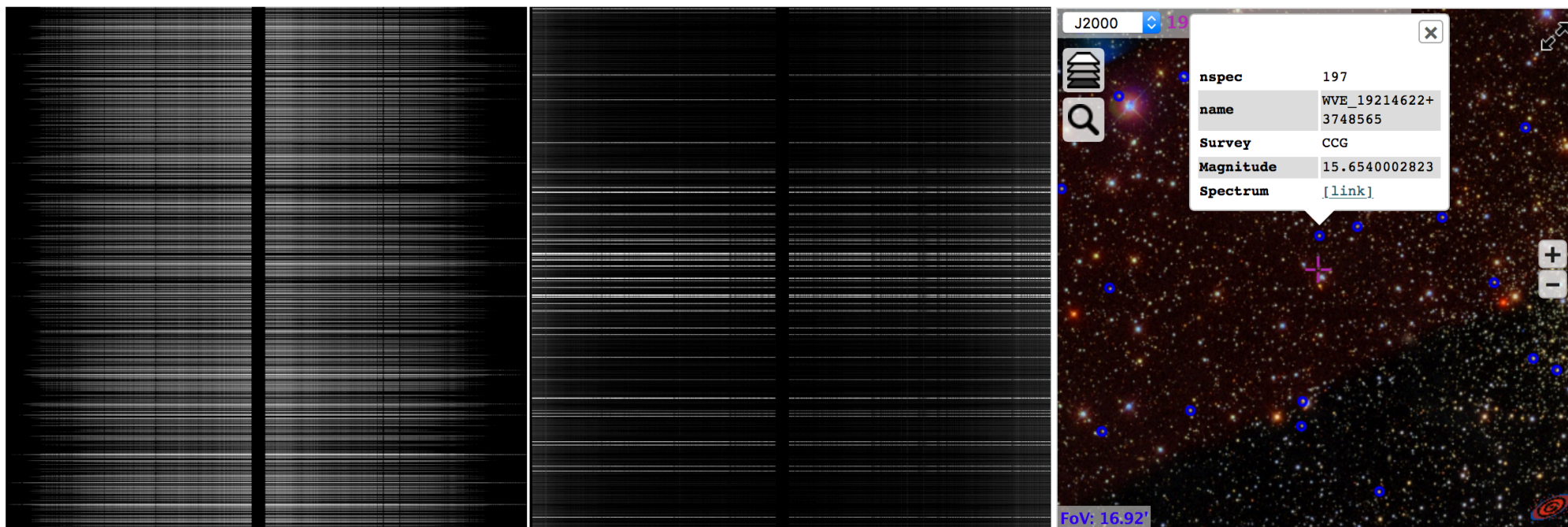
Field: CCG_NGC6791_LR_F1W1

Coordinates:	19:20:52.992 37:46:18.12	Observing mode:	MOS
File name:	stacked_1002045.fit	Camera:	Red
Nightobs:	20160903	Resolution:	LR
OB ID:	3294	Plate:	MOSB
Date of observation:	2016-09-03 20:29:49	Allocated objects:	890
Exposure Time:	1020.0	Trimester:	S4
Airmass:	1.02	Last modified:	2019-09-09 16:46:36
Seeing:	1.1	Frame ID:	-10020450000

OB info

Calibration data

Download this file



What the OR isn't for

- The OR is for data-checking / validation. It is **not** for:
- Regular day-to-day use for downloading data for science purposes
- Flexible target-driven searching
- “Give me all QSOs with $z > 2.0$ ”
- “Download all my targets so I can do my science” when there’s a data release
- Aesthetic beauty. It’s functional!
- See the WAS talk **next** for the above and more!

What's next?

- Tomorrow – after hands on session with XMLs....
- ...imagine your OBs have been submitted, and you finally have data!
- A quick flythrough demo of the OR's current functionality
- Get your hands dirty – explore the OR with a small sample dataset