

aus | SRC

SKAO Regional Centre Australia

Community Engagement Workshop

5th December 2024



Welcome to the AusSRC Community Engagement Workshop!

Karen Lee-Waddell
AusSRC Director

5 December 2024

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SKAO Regional Centre Australia



Image credit: SKAO

Acknowledgment

I would like to acknowledge the Whadjuk people of the Noongar nation, who are traditional custodians of the lands on which we are hosting this workshop.

I would also like to acknowledge the traditional custodians of the different lands where all who are present online are working.

I pay my respects to all elders, past, present, and emerging, and celebrate the diversity of the Indigenous people and their cultures and connections to country.

Noongar boodjar seasons

NOONGAR GROUPS (in white/blue)
MAJOR CITIES/TOWNS (in black)



Image credit:
Wikipedia

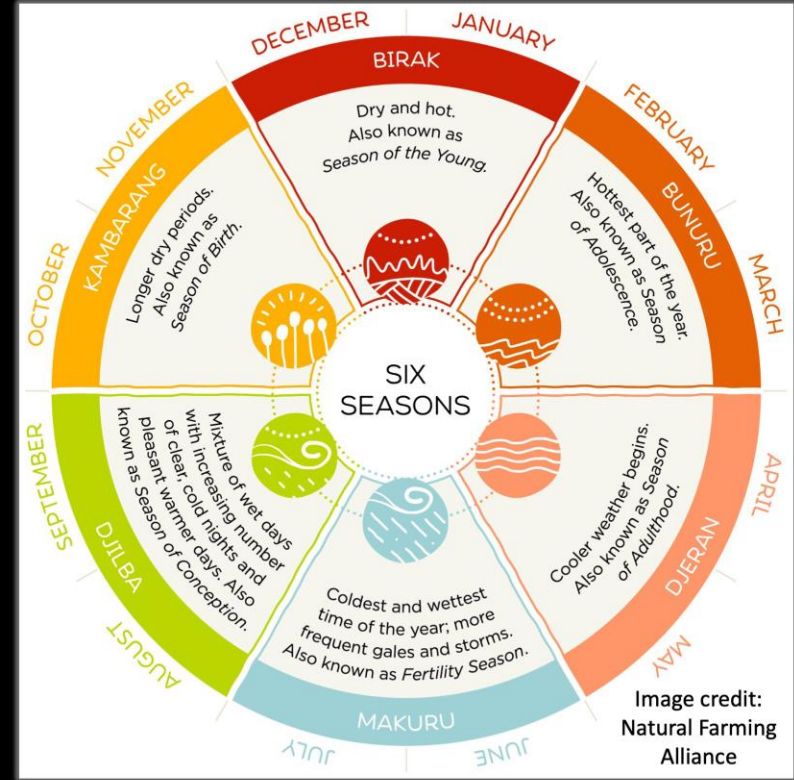
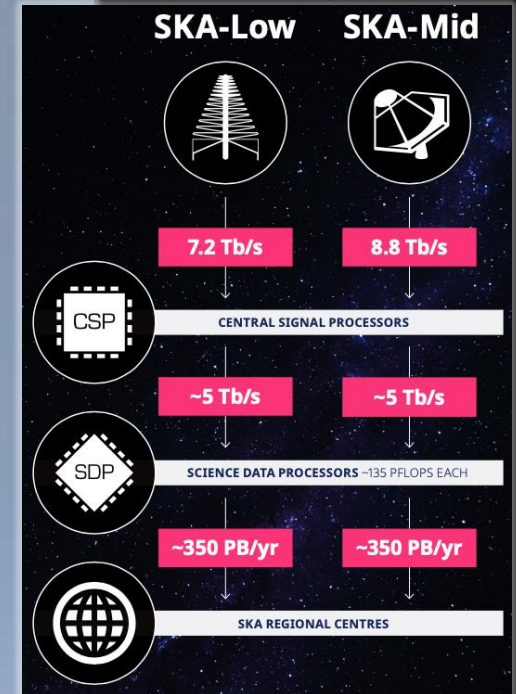
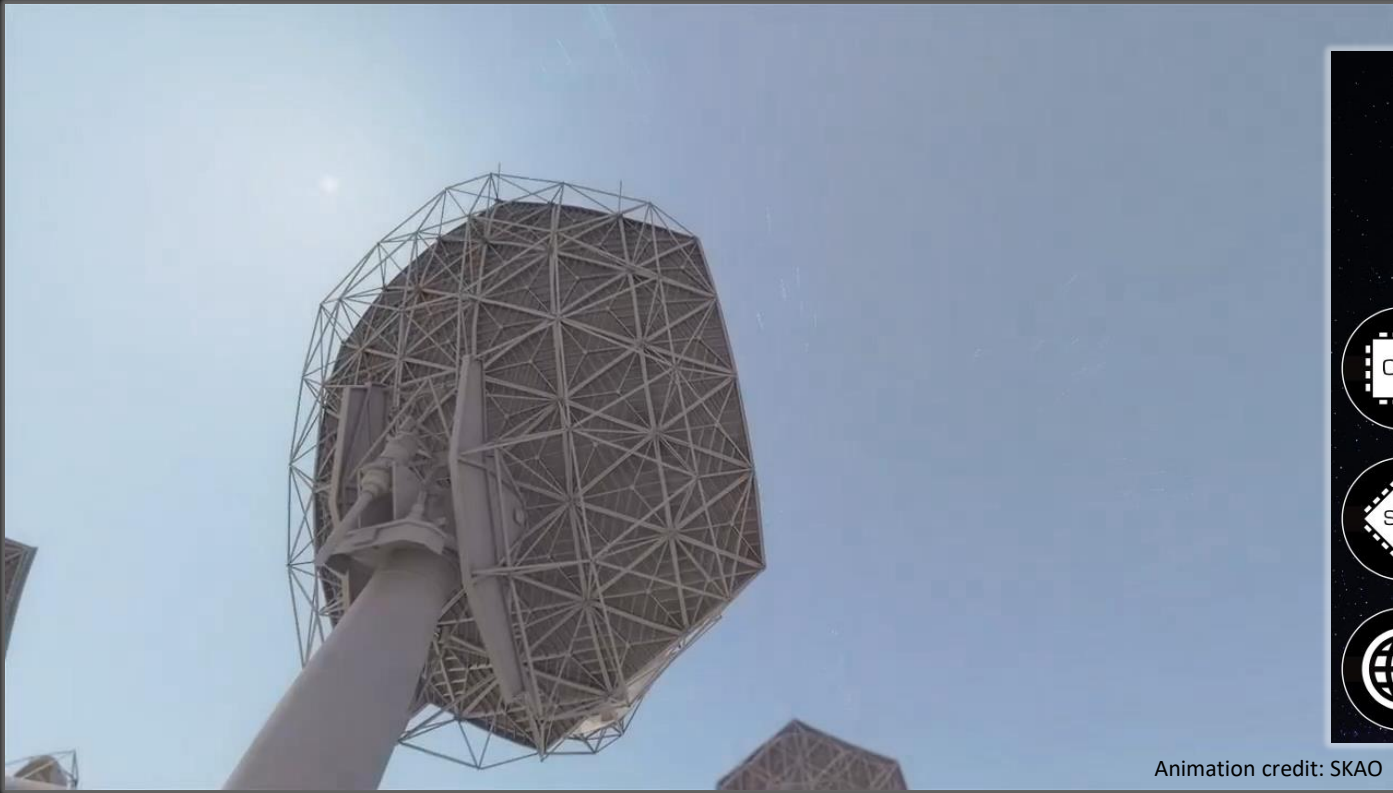


Image credit:
Natural Farming Alliance

SKAO: Challenging engineering and computing



Animation credit: SKAO

SKA Regional Centres (SRCs)

- regionally lead hubs forming a collaborative effort
- provide the resources needed to fully process, distribute, archive, and utilise data from SKA telescopes
- only user access point for SKA data



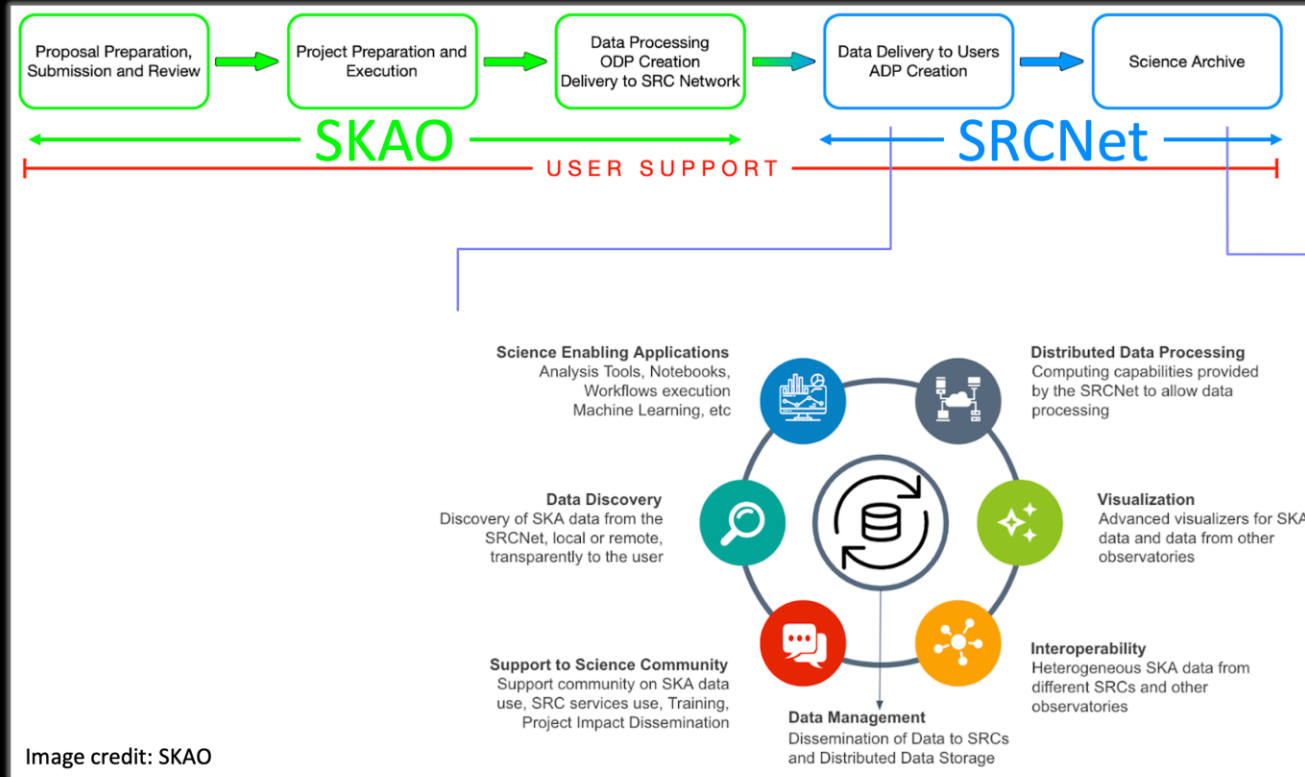
SRC Network (SRCNet)

develop and deploy a **collaborative and federated network** of SKA Regional Centres, globally distributed across SKA partner countries, to host the **SKA Science Archive**. The SRC Network will make data storage, processing and collaboration spaces available, while supporting and training the community, to **maximise the scientific productivity and impact** of the SKA

SRC | Net

SKAO Regional Centre Network

SKAO end-to-end science operations



Australian SKA Regional Centre (AusSRC)



Kathryn Barker
Business Manager
(she/her)



Lachlan Campbell
Head of Operations
(he/him)



Jordan Collier
Senior Project Scientist
(he/him)



Karen Lee-Waddell
Director
(she/her)



Hasan Rayan
Head of Software
Development
(he/him)



Courtney Carr
Industry & External
Engagement Lead
(she/her)



Bradley Meyers
Support Scientist
(he/him)



Dev Null
Senior Developer
(they/them)



Clare Peter
Finance Manager
(she/her)



Austin Shen
Senior Developer
(he/him)



Gordon German
Senior Developer
(he/him)



Debashis (Deb) Mitra
SRCNet Product
Manager
(he/him)



Mara Papavassiliou
Communications &
Outreach Coordinator
(she/her)



Kat Ross
Support Scientist
(she/they)

Australian SKA Regional Centre (AusSRC)

To fundamentally enable the **scientific output** of the **Australian SKA community**, be at the forefront of the **international SRC effort**, and take the leading role in delivering **SKA-low science** for the Australian and international research communities



Australian Government



Curtin University



pawsey



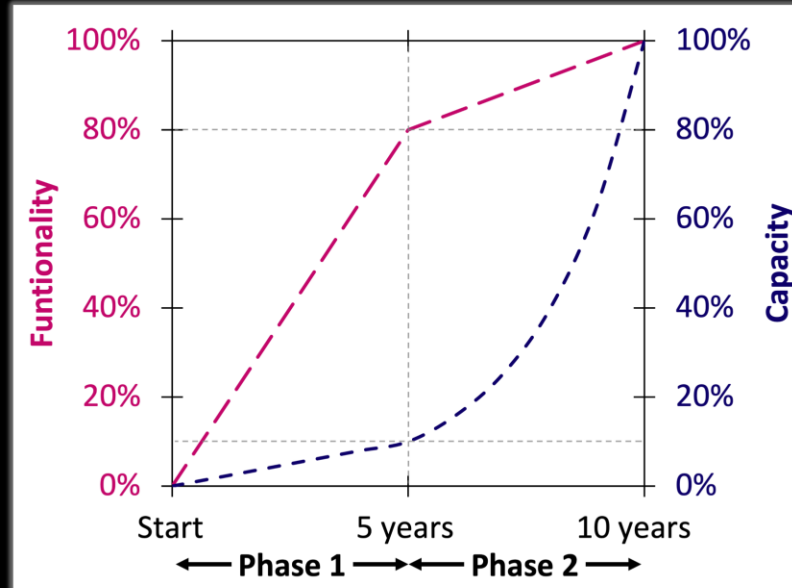
THE UNIVERSITY OF
WESTERN
AUSTRALIA

Developing long-term capability

Phase 1

Proto-SRC

- Develop functionality
- Facilitate ASKAP & MWA post-processing
- Help establish global SRC Network



Awarded **\$63 million** funding grant from Australian Government (2022-2031)

Phase 2

Operational SRC

- Build up computing & storage capacity
- Contribute SKA commissioning
- Be fundamental part of the global SRC Network

Thank-you!

Karen Lee-Waddell
AusSRC Director

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SKAO Regional Centre Australia



Image credit: SKAO

Workshop introduction

Expectations for today:

- Raise awareness about needs / requirements of Australian SKA Science community
- Learn about AusSRC, the development / support we offer to SKA precursor science

Specifically:

- Discussion on the feasibility of your proposal or ideas
- Input on design & implementation (esp. AusSRC science & software dev teams)
- To meet the AusSRC team, learn about and build upon existing science projects, workflows, and services we have developed and support

Agenda (AWST)

09:00 – 09:10 **Arrival and Coffee**

09:10 – 10:30 **Session 1: AusSRC Overview and Science**

10:30 – 11:00 (AWST) **Morning Tea Break** / 13:30 – 14:00 (AEDT) **Lunch Break**

11:00 – 12:10 **Session 2: Time-Domain Science**

12:10 – 12:30 **Session 3: Spectral-Line Science**

12:30 – 13:15 (AWST) **Lunch Break** / 15:30 – 16:15 (AEDT) **Afternoon Tea Break**

13:15 – 13:45 **Session 3: Spectral-Line Science (continued)**

13:45 – 14:00 **Next Steps and Conclusion**

Science Support

We want to help Australian scientists make the best use of SKA precursor instruments and technologies, and to deliver high-quality science to the world.

The AusSRC aims to **enable** and **expand** the scientific impact of the Australian SKA community. The Science Support team is here to **support** scientists, help **drive science delivery** from precursors, represent users and **develop workflows** and procedures to extract science.

This might look like:

- Defining procedures and documentation, training...
- Creation, optimization, deployment and maintenance of workflows with a focus on common utility/functionality...
- Connecting developers, engineers and scientists...

Feedback regarding planned and completed AusSRC projects will always be welcome. We are here **FOR YOU**.



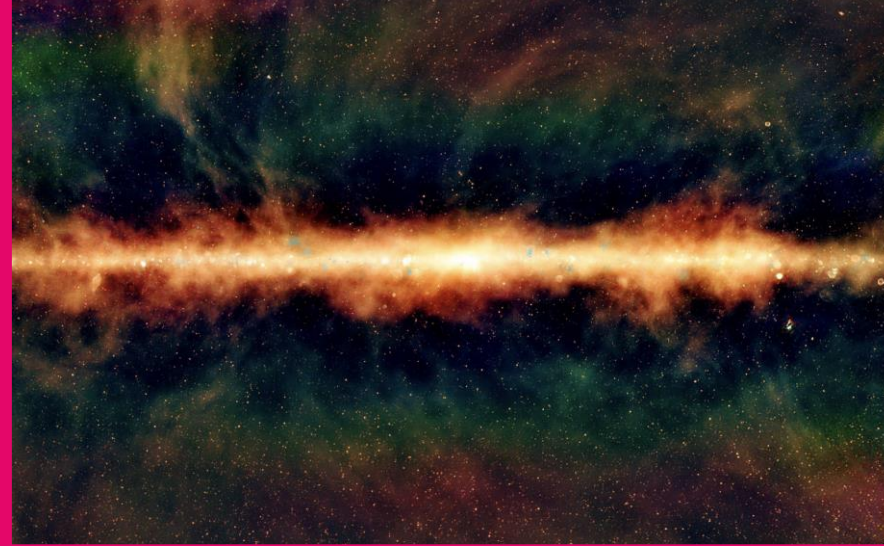
Science Support Team

Kat Ross

- Continuum imaging and survey science
- AGN, PSS, scintillation, variability, ionospheric effects
- HPC, VLBI, low-frequency calibration

Bradley Meyers

- Time-domain astronomy expertise
- Pulsars, FRBs, GRBs, long-period + fast transients...
- Low-frequencies, high-time resolution data, HPC and real-time processing, RFI mitigation...



Translation & Impact

We want the impact of the AusSRC to reach beyond radio astronomy

The AusSRC aims to deliver broader **economic** and **social impact** across **Australia** through **translation** and **impact** initiatives

What could this look like?

- Engaging with industry partners to co-develop and deliver data and processing intensive innovations.
- Translation of astronomy technologies, techniques, concepts, knowledge and skills into other domains.

Why should we do it?

By making radio astronomy accessible to all we can:

- Create relationships and collaborations between industry, government, non-profit organisations, and students.
- Encourage impactful multi-disciplinary research and innovations.
- Develop mutually beneficial long-term relationships, and widespread societal benefits.

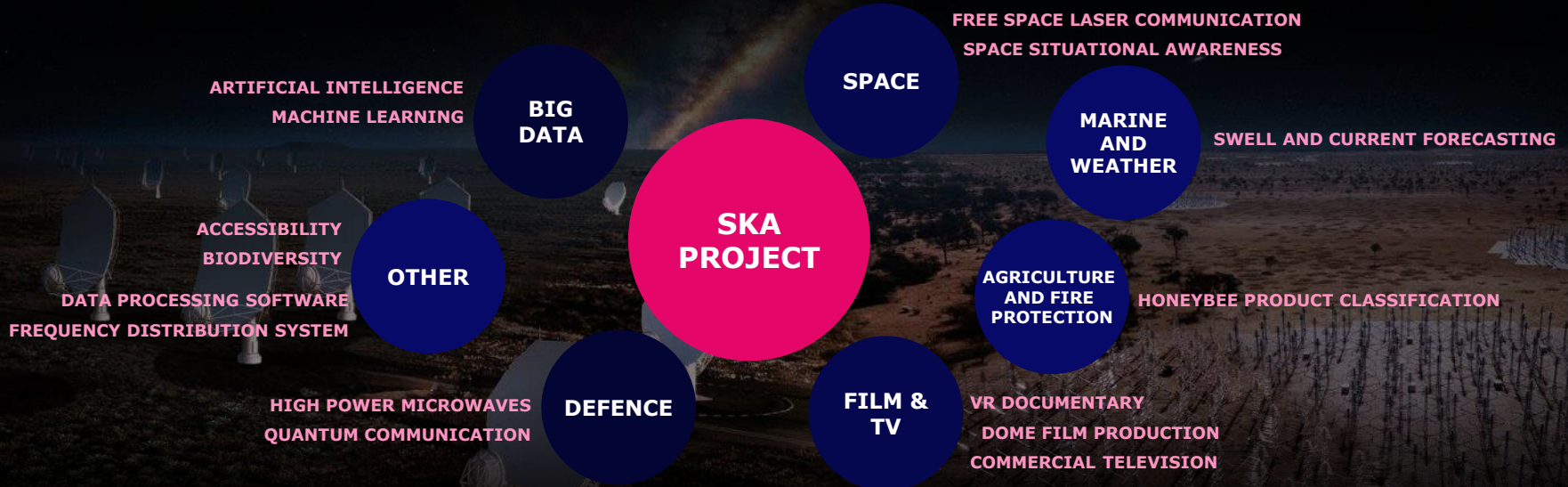


Credit:
ICRAR Curtin & Yamaji Art



Translation & Impact | Examples

The International Centre for Radio Astronomy Research (ICRAR), who played a pivotal role in securing the SKA Project in Australia, already deliver a broad range of capabilities in other sectors across WA and beyond through T&I efforts:

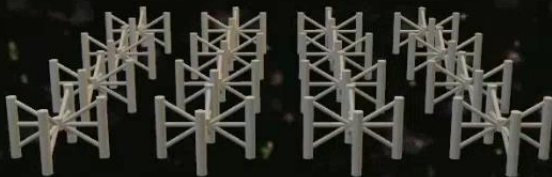


The AusSRC team aim to extend this even further in the areas of big data, high performance computing, data driven discovery, machine learning, and more!

How To See Through Time

Dev Null (they/them)

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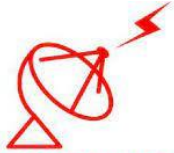


SKAO Regional Centre **Australia**



AusSRC Processing For FLASH*

*First Large Absorption Survey in H1



ASKAP-FLASH

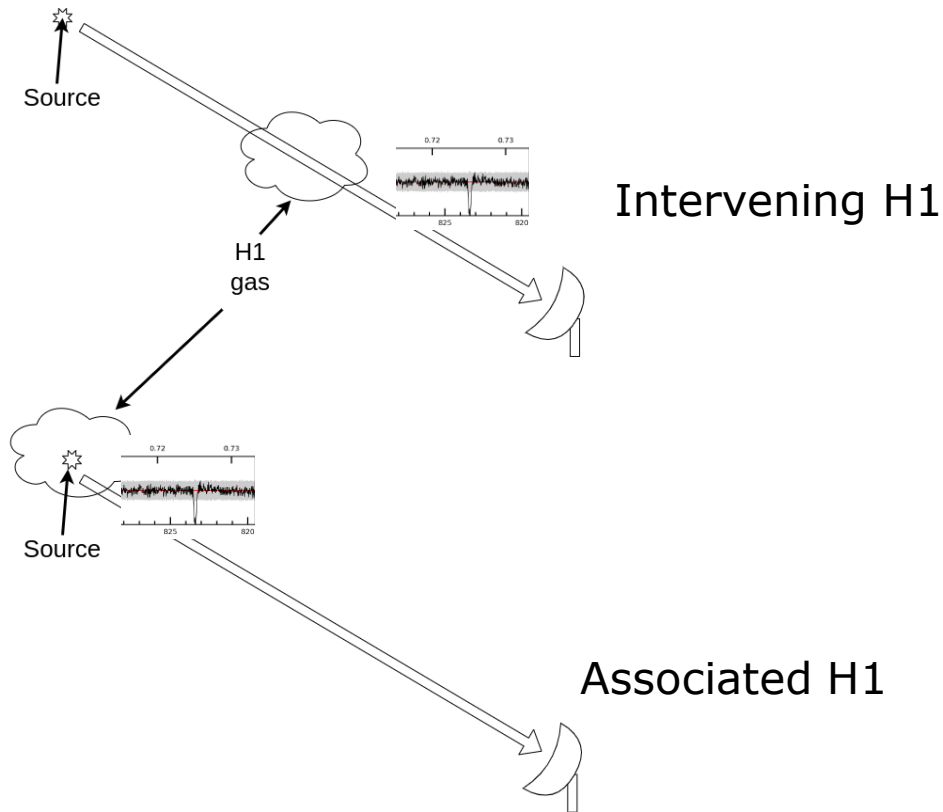
First Large Absorption Survey in H1

Dr Gordon WH German,
Senior Research Engineer,
AusSRC / CSIRO

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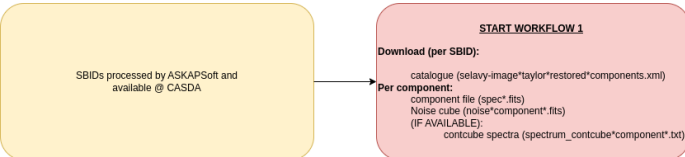
SKAO Regional Centre **Australia**

FLASH Science Background



- Target the poorly explored redshift range $0.4 < z < 1.0$, equating to a lookback time of 4 – 8 Gyr.
- Sources are already identified ($> 30\text{mJ}$).
- Searching for spectral absorption line candidates.
- Uses Rapid ASKAP Continuum Survey catalogue (RACS).

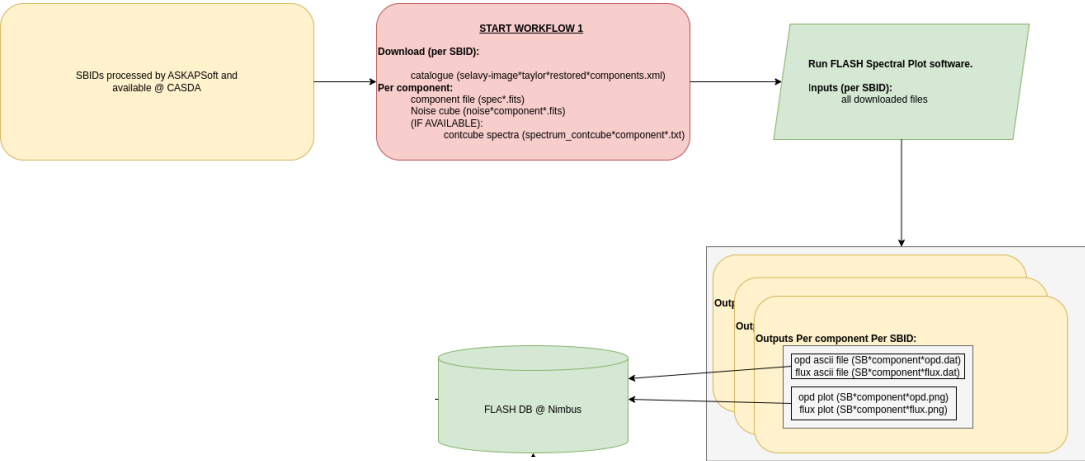
Pipeline Overview



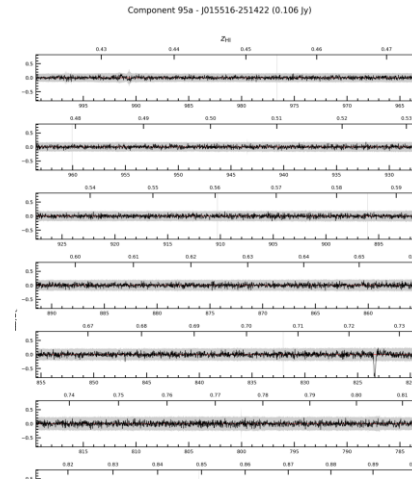
- Check for new data @ CASDA
- Download SBID(s) to Setonix

- Cron (daily) job on Nimbus queries CASDA
- Triggers Bash scripts on Setonix that use python modules to do the queries

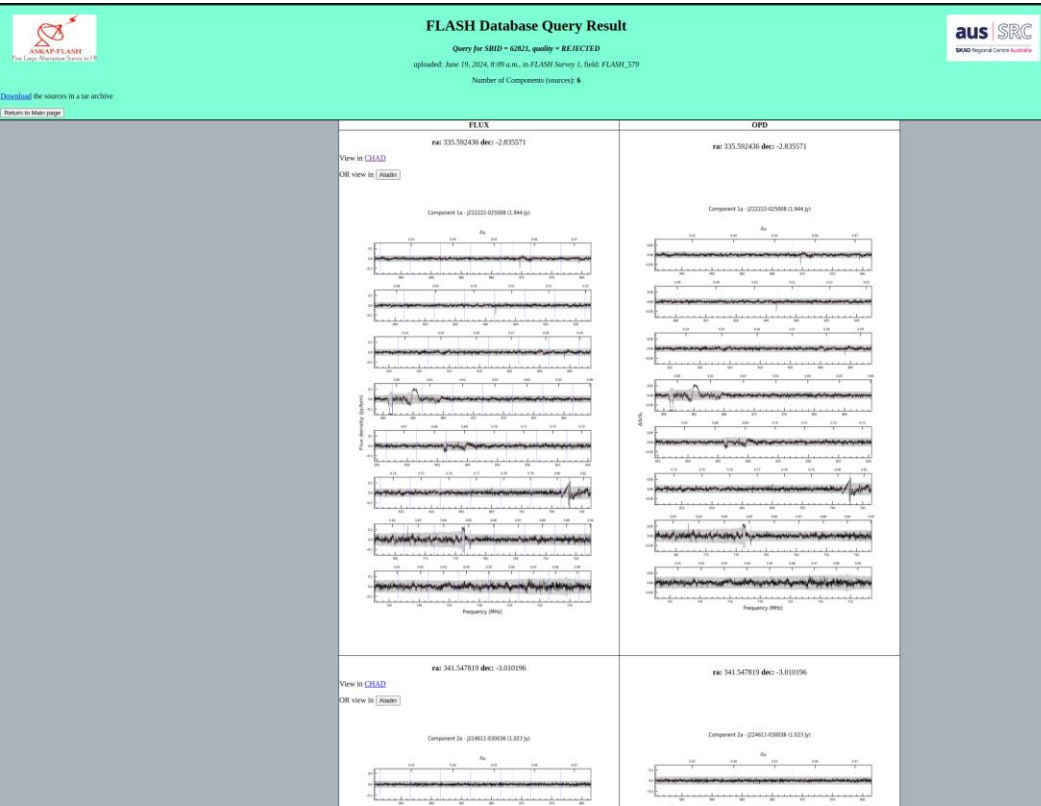
Pipeline Overview



- Check for new data @ CASDA
- Download SBID(s) to Setonix
- Run FLASH Spectral plot software
 - Singularity container(s)
 - outputs plots + ascii files for WF2
 - multi-process python scripts
- Store to FLASHDB @ Nimbus



Pipeline Overview

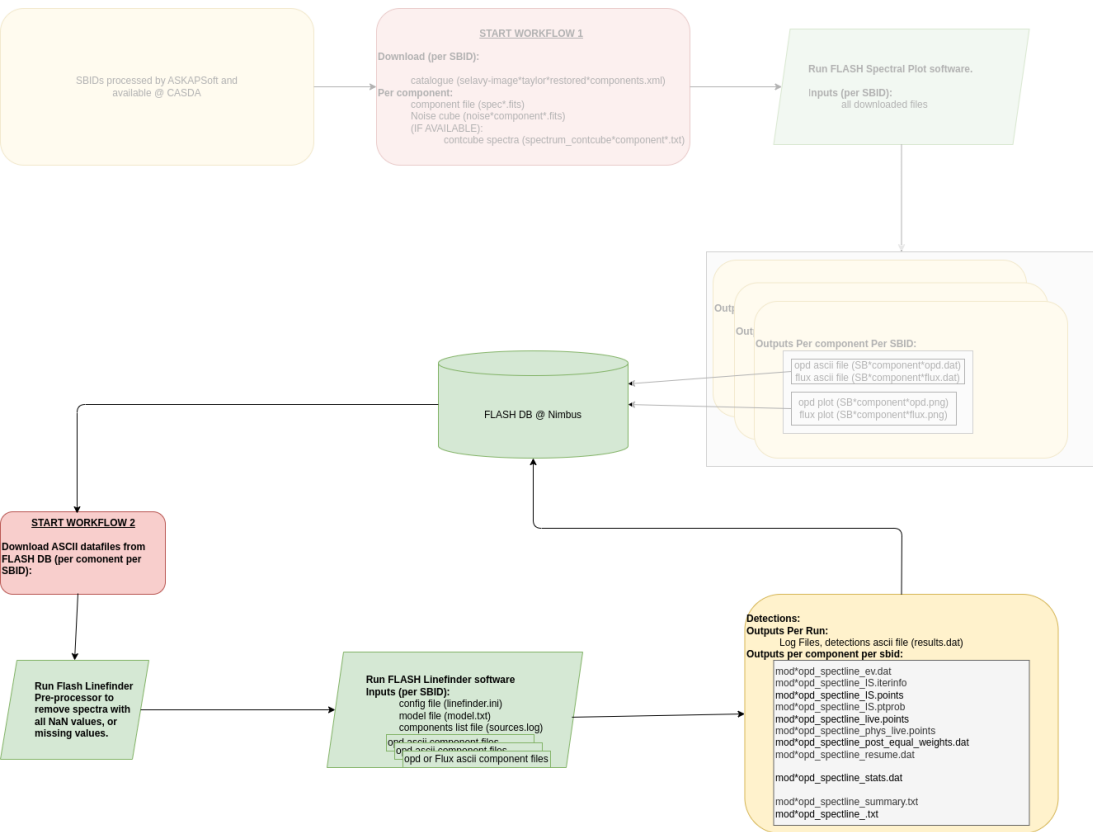


FLASH project scientist will then categorise each SBID based on visual analysis of the plots (using the FLASH science portal) into:

- 1) Good
- 2) Uncertain
- 3) Rejected

They update the “quality” field in CASDA

Pipeline Overview



- An update will trigger WF2, the linefinder:
- based on MultiNest, a C and Fortran-90 Bayesian inference library
- PyMultiNest is a python wrapper for above
- MPI-intensive code
- run on Setonix, each job $1/2 \sim 1$ hrs on 100 cores
- both bare-metal and Singularity versions
- output products stored to FLASHDB @ Nimbus



ASKAP-FLASH
First Large Absorption Survey in HI

FLASH Science portal



Welcome to the FLASH database at AusSRC

Total number of sbids in DB = 367
 Pilot 1 sbids in DB = 40 (40 validated)
 Pilot 2 sbids in DB = 74 (74 validated)
 Survey sbids in DB = 253 (136 validated)



Enter DB password: Show password

Select query type:

- Query sbids in DB
- Get Linefinder outputs
- View and/or download plots for source

Get Linefinder outputs


Enter integer for SBID to query: 63494

Enter integer for *lc_mask* cutoff ('-1' for all values): 0

- Order by *lc_mask*
- Order by *comp_id*
- Reverse sort order

Submit (The last two may take some time to process)





FLASH Database Query Result

Query for SBID = -1

Total number of records returned: 253

date	sbid	Ver	Quality	Tag	Linefinder Run	INVERTED Run	Field	Comment
July 15, 2024, 8:14 a.m.	63519	1	REJECTED	FLASH Survey 1	No	No	FLASH_140	[15/7/2024: CASDA_update]
July 15, 2024, 8:13 a.m.	63517	1	UNCERTAIN	FLASH Survey 1	Run	No	FLASH_549	[15/7/2024: CASDA_update][2/8/2024: linefinder_run]
July 15, 2024, 8:13 a.m.	63516	1	REJECTED	FLASH Survey 1	No	No	FLASH_666	[15/7/2024: CASDA_update]
July 15, 2024, 8:14 a.m.	63513	1	UNCERTAIN	FLASH Survey 1	Run	No	FLASH_535	[15/7/2024: CASDA_update][2/8/2024: linefinder_run]
July 16, 2024, 8:04 a.m.	63512	1	UNCERTAIN	FLASH Survey 1	Run	No	FLASH_470	[16/7/2024: CASDA_update][2/8/2024: linefinder_run]
July 15, 2024, 8:14 a.m.	63511	1	REJECTED	FLASH Survey 1	No	No	FLASH_413	[15/7/2024: CASDA_update]
July 15, 2024, 8:13 a.m.	63499	1	REJECTED	FLASH Survey 1	No	No	FLASH_625	[15/7/2024: CASDA_update]
July 15, 2024, 8:14 a.m.	63494	1	REJECTED	FLASH Survey 1	No	No	FLASH_186	[15/7/2024: CASDA_update]
July 15, 2024, 8:14 a.m.	63487	1	UNCERTAIN	FLASH Survey 1	Run	No	FLASH_374	[15/7/2024: CASDA_update][2/8/2024: linefinder_run]
July 12, 2024, 8:12 a.m.	63484	1	GOOD	FLASH Survey 1	Run	No	FLASH_368	[12/7/2024: CASDA_update][2/8/2024: linefinder_run]
July 12, 2024, 8:12 a.m.	63483	1	UNCERTAIN	FLASH Survey 1	Run	No	FLASH_038	[12/7/2024: CASDA_update][2/8/2024: linefinder_run]
July 12, 2024, 8:13 a.m.	63482	1	UNCERTAIN	FLASH Survey 1	Run	No	FLASH_037	[12/7/2024: CASDA_update][7/8/2024: linefinder_run]
July 12, 2024, 8:13 a.m.	63481	1	UNCERTAIN	FLASH Survey 1	Run	No	FLASH_358	[12/7/2024: CASDA_update][2/8/2024: linefinder_run]
July 12, 2024, 8:13 a.m.	63475	1	GOOD	FLASH Survey 1	Run	No	FLASH_206	[12/7/2024: CASDA_update][7/8/2024: linefinder_run]
July 15, 2024, 8:14 a.m.	63473	1	GOOD	FLASH Survey 1	Run	No	FLASH_505	[15/7/2024: CASDA_update][2/8/2024: linefinder_run]
July 11, 2024, 8:09 a.m.	63447	1	GOOD	FLASH Survey 1	Run	No	FLASH_585	[11/7/2024: CASDA_update][2/8/2024: linefinder_run][22/8/2024: linefinder_rerun]
July 12, 2024, 8:13 a.m.	63446	1	UNCERTAIN	FLASH Survey 1	Run	No	FLASH_468	[12/7/2024: CASDA_update][2/8/2024: linefinder_run]
July 12, 2024, 8:13 a.m.	63434	1	UNCERTAIN	FLASH Survey 1	Run	No	FLASH_326	[12/7/2024: CASDA_update][2/8/2024: linefinder_run]
July 11, 2024, 8:10 a.m.	63433	1	UNCERTAIN	FLASH Survey 1	Run	No	FLASH_270	[11/7/2024: CASDA_update][6/8/2024: linefinder_run]
July 11, 2024, 8:10 a.m.	63432	1	REJECTED	FLASH Survey 1	No	No	FLASH_173	[11/7/2024: CASDA_update]
July 11, 2024, 8:09 a.m.	63431	1	UNCERTAIN	FLASH Survey 1	Run	No	FLASH_421	[11/7/2024: CASDA_update][6/8/2024: linefinder_run]
July 11, 2024, 8:09 a.m.	63426	1	UNCERTAIN	FLASH Survey 1	Run	No	FLASH_036	[11/7/2024: CASDA_update][6/8/2024: linefinder_run]
July 10, 2024, 8:04 a.m.	63425	1	REJECTED	FLASH Survey 1	No	No	FLASH_163	[10/7/2024: CASDA_update]
July 9, 2024, 8:13 a.m.	63411	1	GOOD	FLASH Survey 1	Run	No	FLASH_506	[9/7/2024: CASDA_update][6/8/2024: linefinder_run]



FLASH Science portal



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 Survey sbids in DB = 253 (136 validated)



Enter DB password: Show password

Select query type:

- Query sbids in DB
- Get linefinder outputs
- View and/or download plots for source

Get linefinder outputs

Enter integer for SBID to query:
63484

Enter integer for ln_mean cutoff (-1 for all values):
30

- Order by ln_mean
- Order by comp_id
- Reverse sort order

Submit (The last two may take some time to process)



FLASH Database Linefinder Results


Query for SBID = 63484, ln_mean cutoff = 30

Total number of records returned: 5

component name	component (source)	id	ra_hms_cont	dec_dms_cont	ra_dec_cont	dec_dec_cont	modenum	ln_mean value	Pointing FIELD
J055351-171011	component_2a	05:53:51.4	-17:10:11	88.464215	-17.169931	1	36.3523	FLASH_368	
J054617-172555	component_1b	05:46:17.8	-17:25:55	86.574234	-17.431995	5	36.8162	FLASH_368	
J055351-171014	component_2b	05:53:51.8	-17:10:14	88.465913	-17.170634	1	38.1895	FLASH_368	
J054618-172549	component_1c	05:46:18.0	-17:25:49	86.575094	-17.430524	4	41.338	FLASH_368	
J054617-172553	component_1a	05:46:17.3	-17:25:53	86.572262	-17.431419	1	46.9448	FLASH_368	




FLASH Science portal



Welcome to the FLASH database at AusSRC

Total number of slabs in DB = 367
 Pilot 1 slabs in DB = 40 (40 validated)
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Enter DB password: Show password

Select query type:

- Query slabs in DB
- Get Linefinder outputs
- View and/or download plots for source


Get Linefinder outputs

Enter integer for SBID to query:

Enter integer for ln_mean cutoff (-1 for all values):

- Order by ln_mean
- Order by comp_id
- Reverse sort order

Submit (The last two may take some time to process)




FLASH Database Linefinder Results

For SBID = 63484 and $ln_mean(B)$ minimum = 30:

#Component_name	comp_id	modeium	ra_hms_cont	dec_dms_cont	ra_deg_cont	dec_deg_cont	flux_peak	flux_int	x9_1_maxd	dx_1_maxd	y8_1_maxd	abs_peakz_median	abs_peakz_siglo	abs_peakz_sighi	abs_peakopd_median	abs_peakopd_siglo	abs_peakopd_sighi	abs_intopd_median(km/s)	abs
J055551-171011	component_2a	1	05:53:51.4	-17:10:11	05:464215	-17:109931	675.49	642.571	0.80446471	51.68194008	0.06653254	0.80445919	0.00001020	0.00003356	0.06435257	0.00750839	0.00765750	3.55154193	0.39
J054617-172553	component_1b	5	05:46:17.8	-17:25:55	06:574234	-17:431995	444.882	445.139	0.80447086	49.71796566	0.05041668	0.80440862	0.00001307	0.00000964	0.05068935	0.00570954	0.00575078	2.64903832	0.31
J055351-171014	component_2b	1	05:53:51.8	-17:10:14	08:465913	-17:170634	457.038	428.345	0.80446999	53.44469900	0.09377097	0.80445614	0.00001086	0.00002082	0.09078833	0.01056512	0.01083865	5.12720645	0.57
J054618-172549	component_1c	4	05:46:18.0	-17:25:49	06:575094	-17:430524	429.438	412.863	0.80448276	51.21733178	0.06189474	0.80449096	0.00003424	0.00000838	0.06046080	0.00721092	0.00720874	3.16023869	0.38
J054617-172553	component_1a	1	05:46:17.3	-17:25:53	06:572862	-17:431419	742.579	726.271	0.80448479	52.26853109	0.03648292	0.80449155	0.00003172	0.00000899	0.03512303	0.00380146	0.00402101	1.96469522	0.24
J054617-172553	component_1a	2	05:46:17.3	-17:25:53	06:572262	-17:431419	742.579	726.271	0.92948520	335.14479138	0.01232835	0.92949921	0.00018629	0.00011713	0.01212565	0.00119406	0.00162520	4.20745205	0.49




FLASH Science portal



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Enter DB password: show password

Select query type:

- Query sbids in DB
- Get linefinder outputs
- View and/or download plots for source

Get linefinder outputs

Enter integer for SBID to query:

Enter integer for h_1 mean cutoff ('-1' for all values):

Order by:

- h_1 mean
- comp_id
- Reverse sort order

Submit (The last two may take some time to process)

CHAD Consolidated HI Absorption Database

[Home](#) [About](#) [Admin](#)

Source name:
RACS_0540-18A_2549

Position:

	RA [deg]	Dec [deg]	Galactic lon, lat [deg]
	86.573396 +/- 0.09	-17.430977 +/- 0.05	221.904646, -22.006658

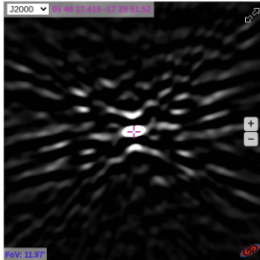
Flux information:


	Total flux gaussian [mJy]	Total flux source [mJy]	Peak flux [mJy]
	1665.9 +/- 118.432	1665.9 +/- 118.432	1599.297 +/- 9.792

Source shape:

	Major axis ["]	Minor axis ["]	Position angle [deg]
	29.2 +/- 0.2	22.31 +/- 0.12	88.06 +/- 0.6
	Deconvolved maj axis ["]	Deconvolved min axis ["]	Deconvolved pa [deg]
	0.0 +/- 0.2	0.0 +/- 0.12	0.0 +/- 0.6

[View island](#)





ASKAP-FLASH
First Large Absorption Survey in HI

FLASH Science portal



Welcome to the FLASH database at AusSRC

Total number of objects in DB = 367



9600 Liverpool Centre Australia



ASKAP-FLASH
First Large Absorption Survey in HI

FLASH Database Query Result

Query for SBID = 63484
Component (source): 1a

Find objects in Aladin [\(astro.swarthmore.edu in new tab\)](#)

ICRS

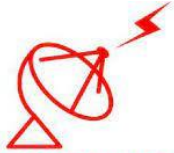


ASKAP-FLASH
First Large Absorption Survey in HI



AusSRC Processing For FLASH*

*First Large Absorption Survey in H1



ASKAP-FLASH

First Large Absorption Survey in H1

THANK YOU

Dr Gordon WH German,
Gordon.German@csiro.au

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SKAO Regional Centre **Australia**

Supporting WALLABY and POSSUM surveys

Austin Shen (austin.shen@csiro.au)
Research software engineer

Contents

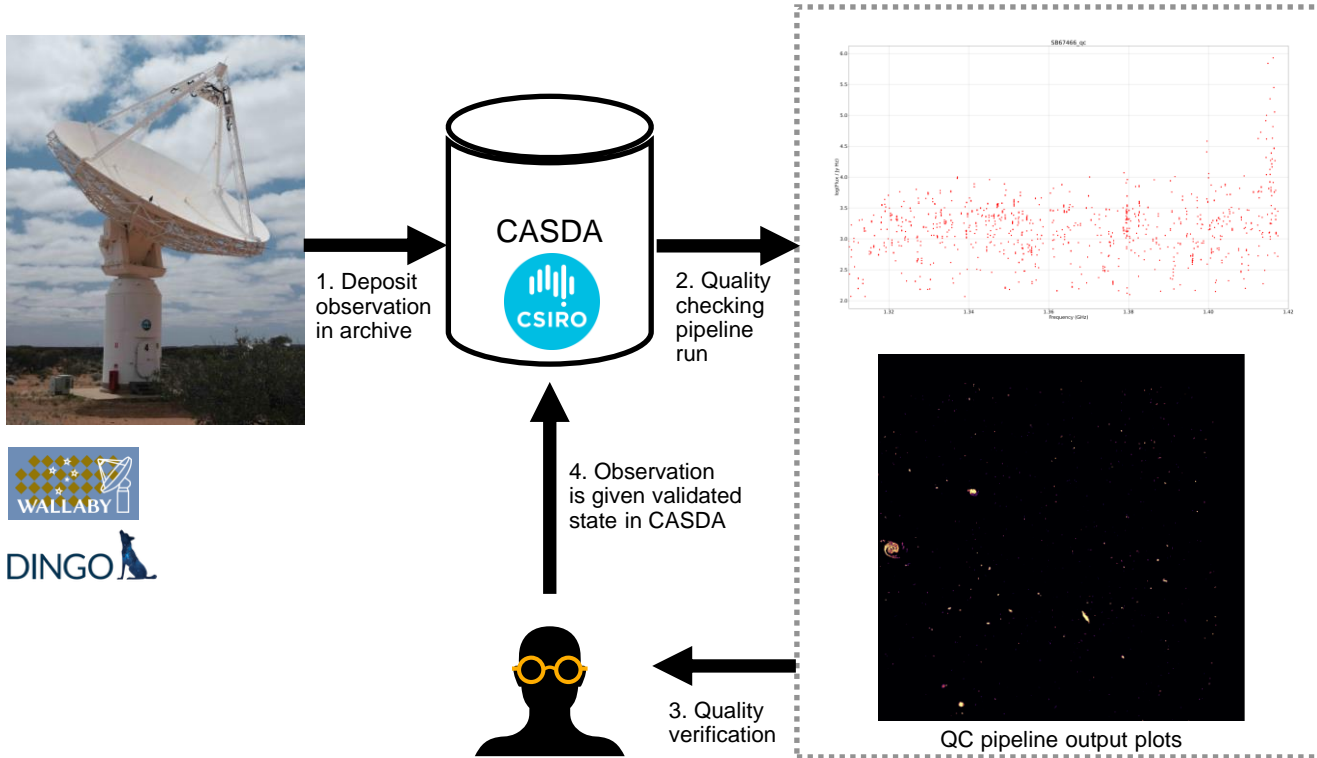
- WALLABY
 - Quality checking
 - Generating data products
 - User access (public and internal)
- POSSUM
 - Pre-processing pipeline
- AusSRC workflows platform

WALLABY

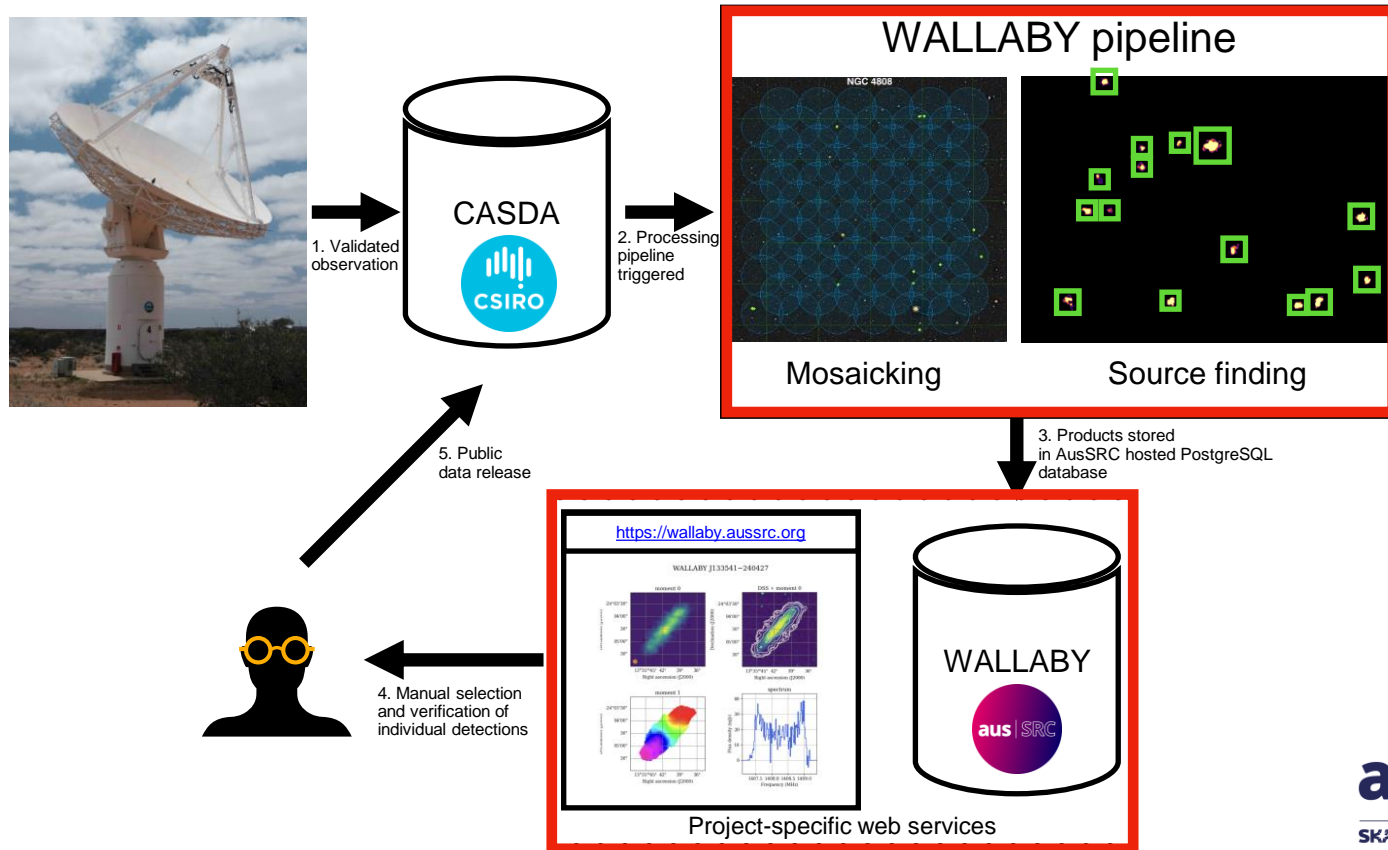
- Wide-field ASKAP L-band Legacy All-sky Blind survey
 - 500 GB cubes, ~ (4296, 4296, 7776)
 - 2 footprints (6x6 degree observations) per field
 - 557 fields
- 1104 ASKAP observations (~1.104 PB of data post-processing)
- Expected to find ~ 200 000 new HI detections (~5 TB)



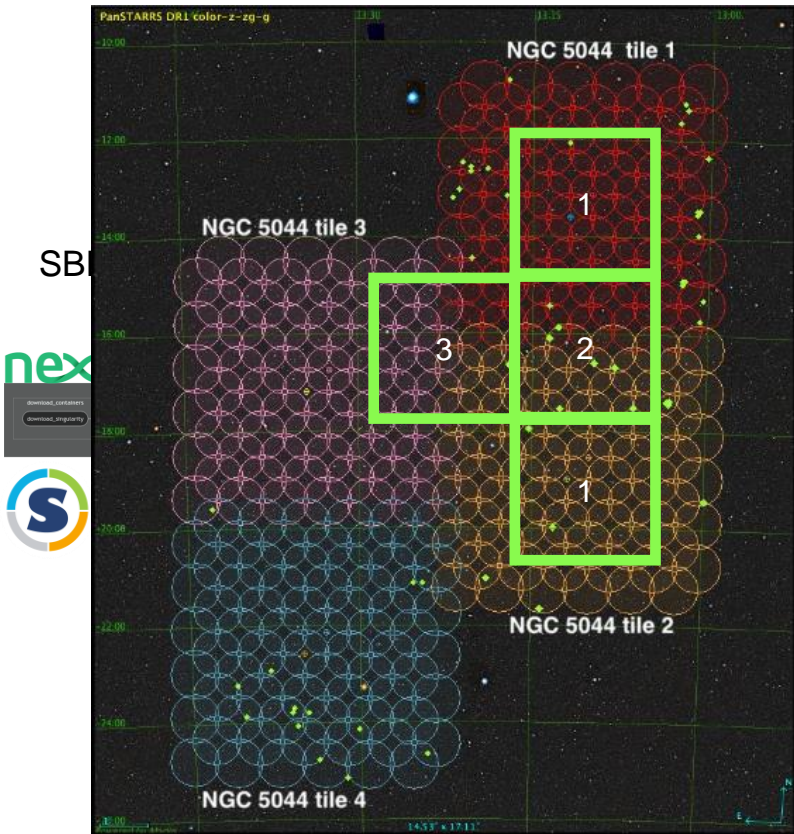
WALLABY: quality checking



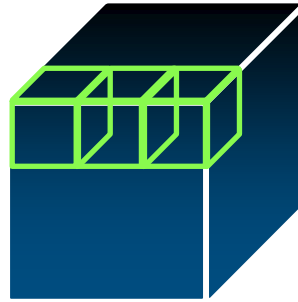
WALLABY: generating products



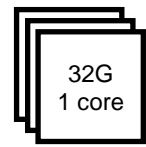
WALLABY: pipeline



SB
nex
download_containers
download_arguments
S



Parallel source finding



32G
1 core

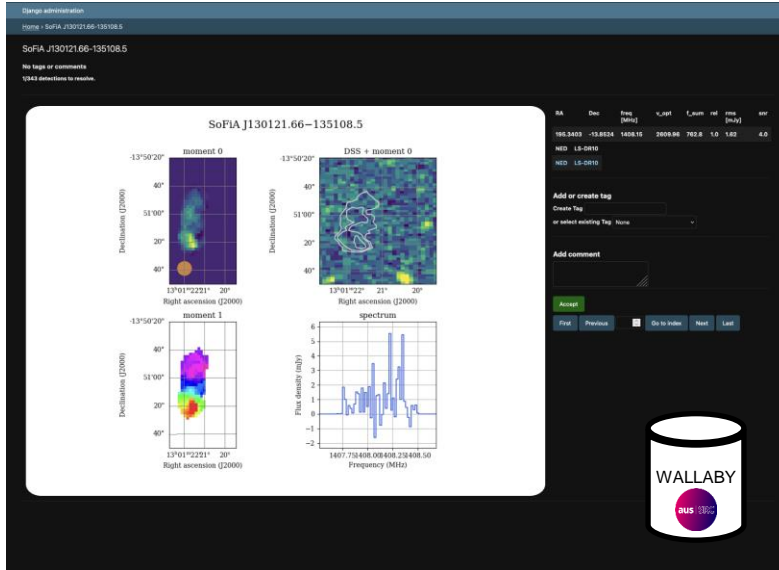
~45 nodes
~1 hr



~ 2 GB
(10 MB/detection)

~ 768 SU

WALLABY: web services



https://github.com/AusSRC/SoFiAX_services



- Manual inspection of raw detections from SoFIA-2
- Cross matching within database to ensure no duplicates
- Tags and comments on detections
- Export internal and external data releases
- Useful for other surveys

WALLABY: data access

Internal data access

WALLABY internal data access science

A notebook pre-filled with cells and scripts for querying the WALLABY internal release data via the public TAP interface. The notebook has the following sections

1. Setup
2. Source finding detection catalog
3. Use kinematic models

1. Setup

```
In [ ]: import os
import tarfile
import requests
import getpass
import pyvo as vo
from pyvo.auth import authsession, securitymethods
from astropy.io.votable import from_table, parse_single_table
```

Authenticate

A Update the call below with your username and enter your password

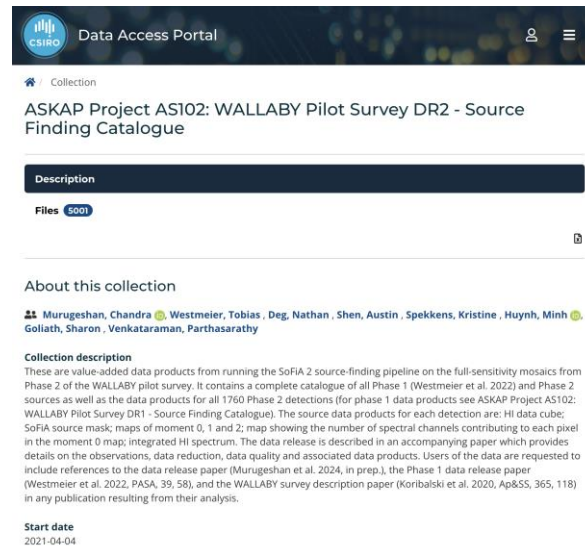
```
In [ ]: # Enter WALLABY user username and password

username = 'wallaby_user'
password = getpass.getpass('Enter your password')
```

```
In [ ]: # Connect with TAP service

URL = "https://wallaby.aussrc.org/tap"
auth = vo.auth.AuthSession()
auth.add_security_method_for_url(URL, vo.auth.securitymethods.BASIC)
auth.credentials.set_password(username, password)
tap = vo.dal.TAPService(URL, session=auth)
```

Public data release



ESIRO Data Access Portal

Collection

ASKAP Project AS102: WALLABY Pilot Survey DR2 - Source Finding Catalogue

Description

Files **5001**

About this collection

Murugesan, Chandra, **Westmeier, Tobias**, **Deg, Nathan**, **Shen, Austin**, **Spekkens, Kristine**, **Huynh, Minh**, **Goliath, Sharon**, **Venkataraman, Parthasarathy**

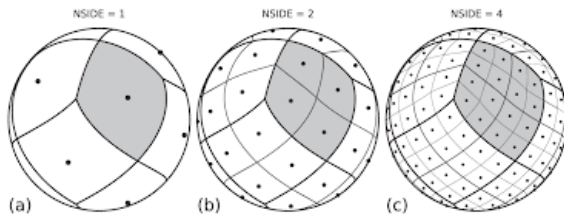
Collection description

These are value-added data products from running the SoFIA 2 source-finding pipeline on the full-sensitivity mosaics from Phase 2 of the WALLABY pilot survey. It contains a complete catalogue of all Phase 1 (Westmeier et al. 2022) and Phase 2 sources as well as the data products for all 1760 Phase 2 detections (for phase 1 data products see ASKAP Project AS102: WALLABY Pilot Survey DR1 - Source Finding Catalogue). The source data products for each detection are: HI data cube; SoFIA source mask; maps of moment 0, 1 and 2; map showing the number of spectral channels contributing to each pixel in the moment 0 map; integrated HI spectrum. The data release is described in an accompanying paper which provides details on the observations, data reduction, data quality and associated data products. Users of the data are requested to include references to the data release paper (Murugesan et al. 2024, in prep.), the Phase 1 data release paper (Westmeier et al. 2022, PASA, 39, 58), and the WALLABY survey description paper (Koribalski et al. 2020, Ap&SS, 365, 118) in any publication resulting from their analysis.

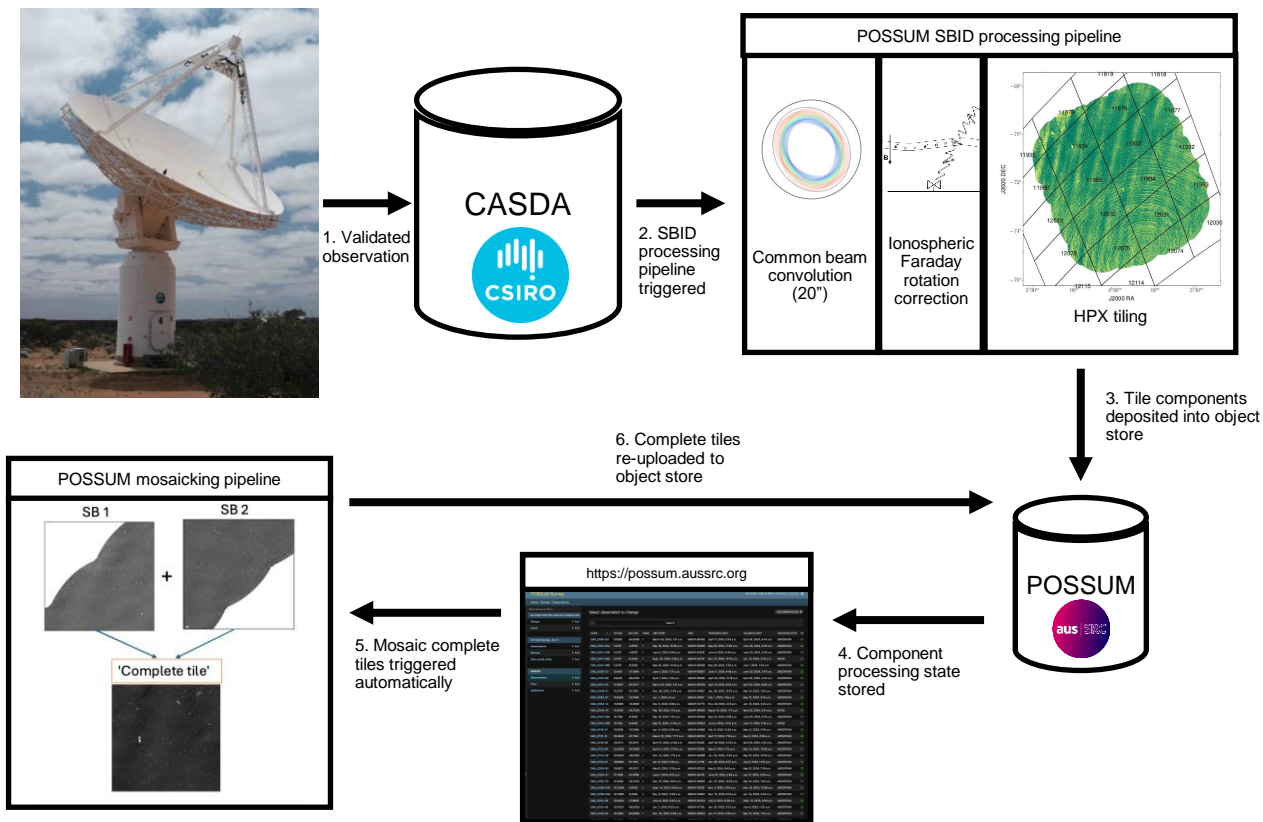
Start date
2021-04-04

POSSUM

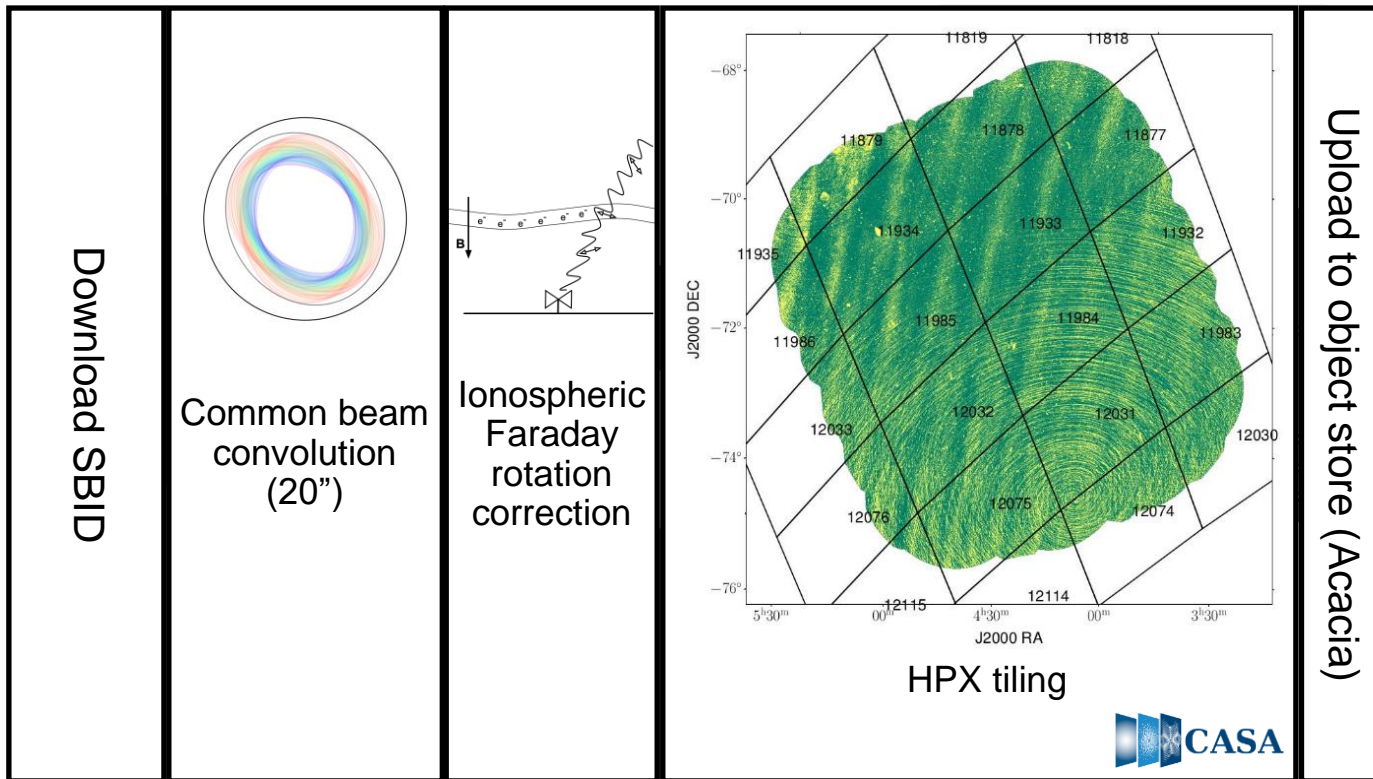
- Polarisation Sky Survey of the Universe's Magnetism (ASKAP)
- Commensal with WALLABY and EMU surveys
- Process 2118 ASKAP observations (cubes and MFS images)
EMU: 1004, WALLABY: 1104
- Produce 6478 complete HPX tiles



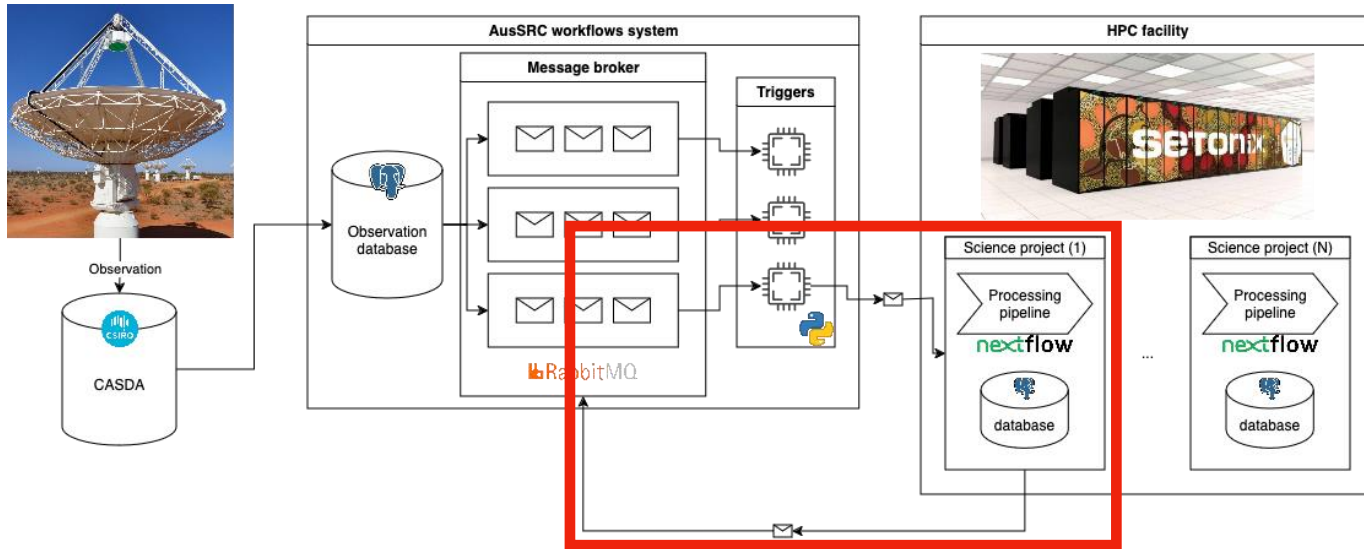
POSSUM: workflow



POSSUM: SBID pre-processing



Workflows platform



Session 2: Time-Domain Science

AWST

- | | |
|--|-------------------------------|
| 11:00 Interplanetary scintillation with ASKAP and CRACO | Rajan Chhetri |
| 11:10 The MWA SMART survey | Ramesh Bhat
& Chia Min Tan |
| 11:25 High-time resolution imaging | Marcin Sokolowski |
| 11:35 Online portal for radio pulsar timing | Emma Carli |
| 11:45 MWA archival search for radio transients | Natasha Hurley-Walker |
| 11:55 – 12:10 Discussion | |

Session 3: Spectral-line science

AWST

12:10 **The GASKAP-OH survey**

Jo Dawson

12:20 **The ASKAP WALLABY survey**

Tobias Westmeier

12:30 **Lunch Break / 15:30 (AEDT) Afternoon Tea Break**

13:15 **The ASKAP DINGO survey**

Richard Dodson

13:25 **MWA wide-area spectral observations**

Nick Seymour

13:35 – 13:45 **Discussion**

Next Steps: EoI overview

- EoIs open ~next week until 31 January
- Email 2-pager, following sections/template provided
- Selected projects invited to consult with AusSRC
 - Evaluate scope & estimate resources required
 - Break into smaller, achievable goals using Agile framework
 - Forms basis of resources & methodology in formal proposal
- Proposals assessed by TAC and awarded fixed-term projects
- Software projects handed to AusSRC ops team to deploy
 - Could be AusSRC or their own computing infrastructure
 - Any further work proposed in next round's submission

Next Steps: EoI overview

- Relating to specific Austrian SKA precursor science project
 - Particularly MWA / ASKAP
 - Or MeerKAT (IDIA) or multi-wavelength (Data Central)
- Select software development or scientific support domains:
 - Workflow / pipeline development (adapting tools)
 - Software development (creating or enhancing tools)
 - Science support (enabling science and wielding tools)
- Align with the scope of AusSRC responsibilities, and where possible, address related technical challenges
- Industry collaborations and translation projects encouraged!

Next Steps: EoI overview

Rough timescales

Step	Date
Eols open	Next week
Eols due	31 January
Consultation	February
Proposals due	March
Proposals awarded	April

Thank you!

We pay respect to the Aboriginal and Torres Strait Islander members of our community by acknowledging the traditional owners of the land on which our AusSRC offices are located, the Whadjuk people of the Nyungar Nation; and the lands of the Wajarri Yamaji, on which the SKA-Low site is hosted.

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