

SALT primary pipeline

Introduction

Raw-to-primary-product data processing

Additional processing

Science data processing

Data distribution

Post processing

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 - High Resolution Spectrograph (HRS)

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Introduction

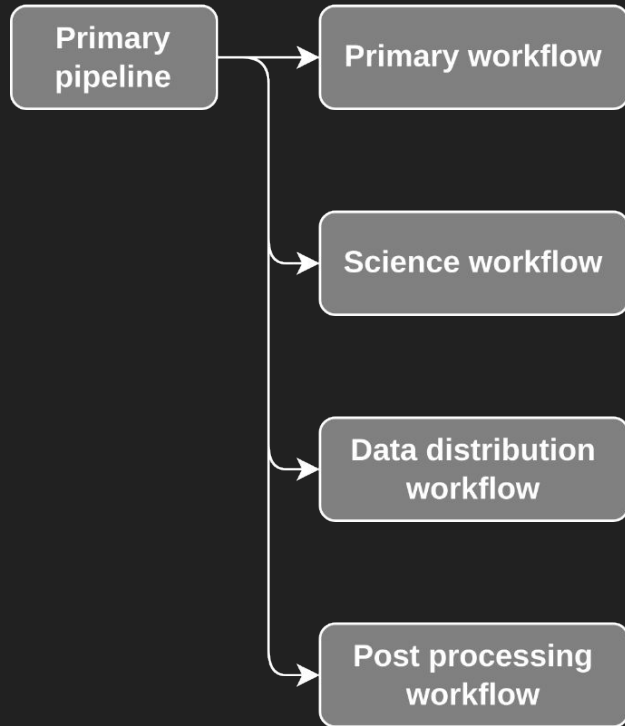
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- Separate workflows for primary data processing, science data processing, data distribution and post processing.
 - Possible to execute science data processing before data distribution, for example, processing the science pipeline for data from HRS precedes the data distribution which means the HRS science products are included in the data distribution.

Introduction

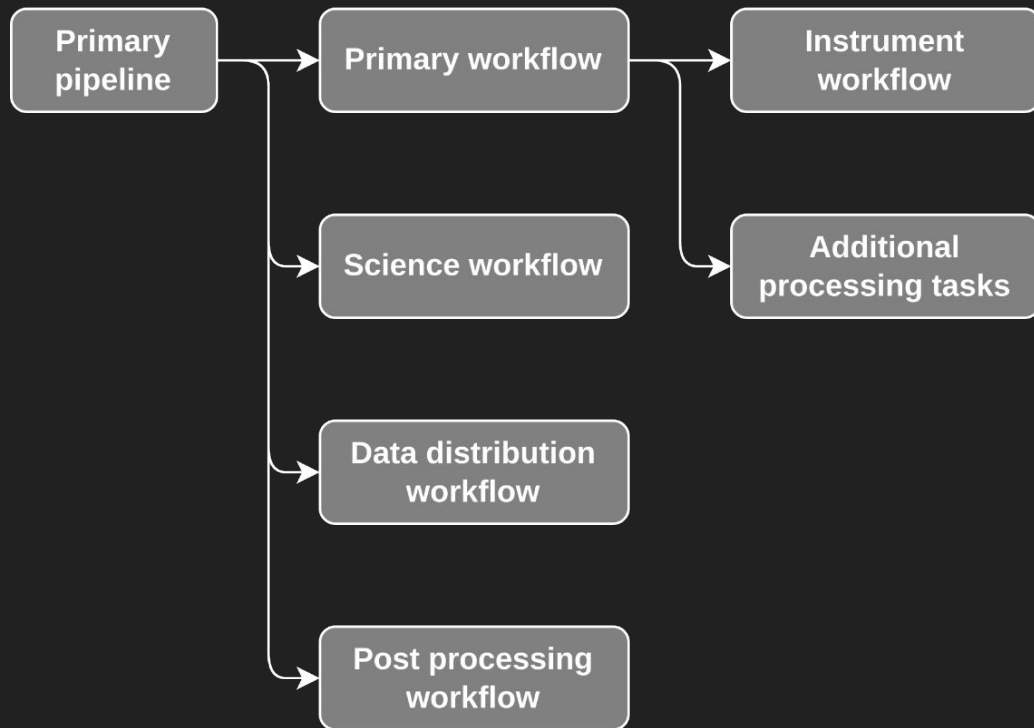
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 - Possible to execute science data processing before data distribution, for example, processing the science pipeline for data from HRS precedes the data distribution which means the HRS science products are included in the data distribution.
- Uses multi-processing (processed-based parallelism) for some tasks (16 central processing units available).

Introduction: Workflows

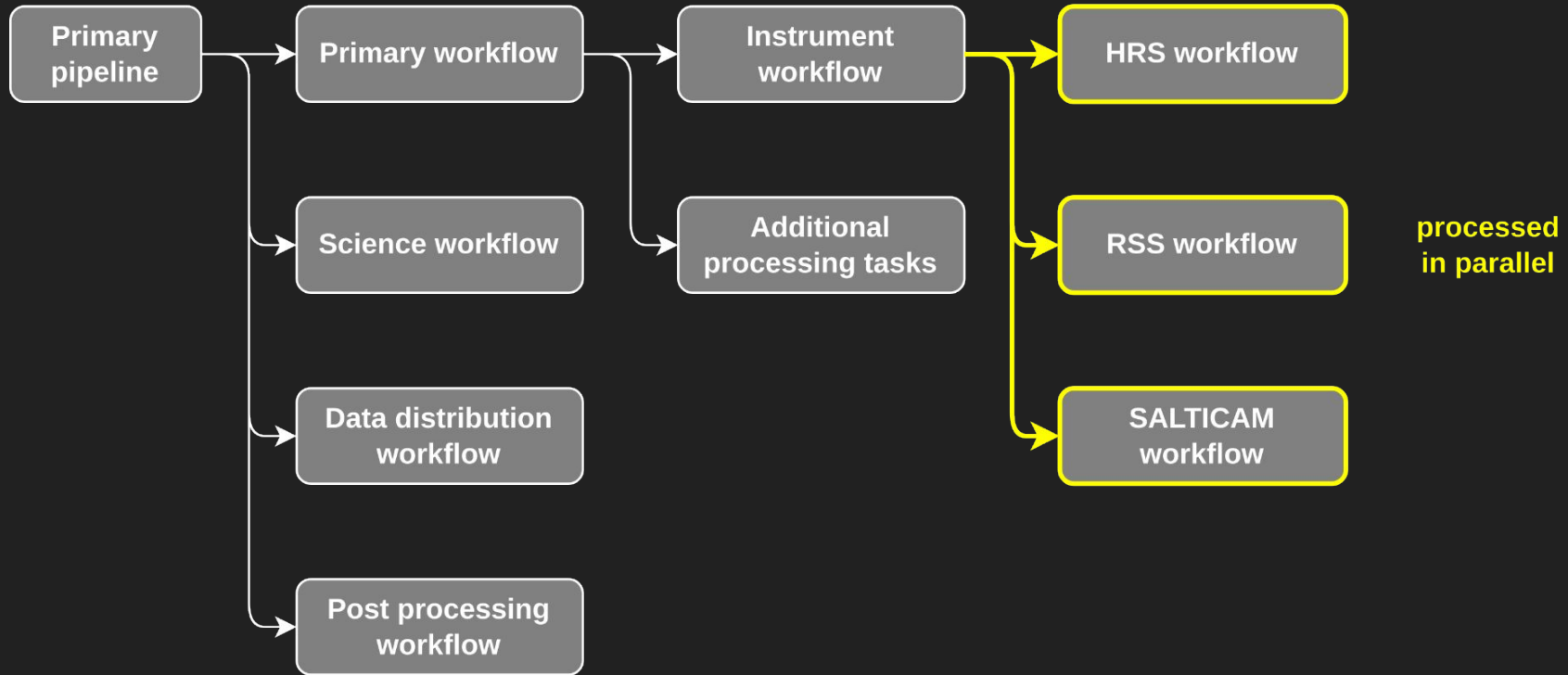
Introduction: Workflows - pipeline



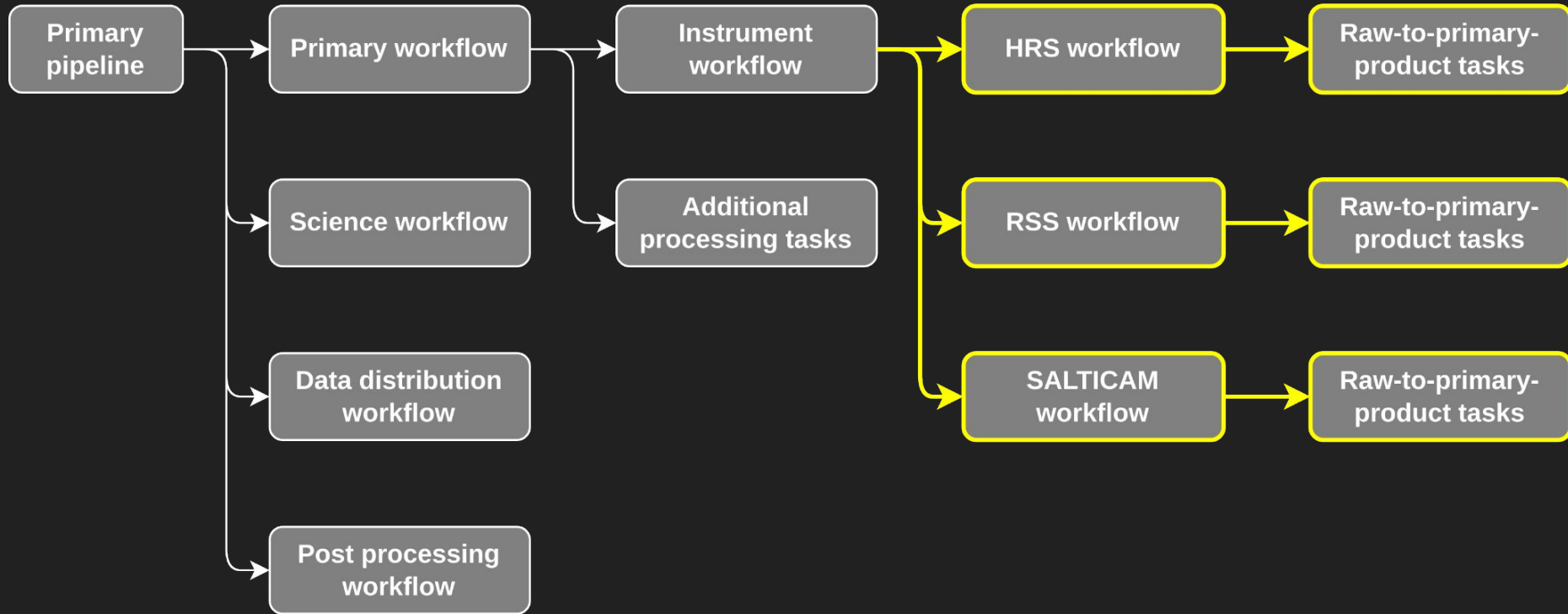
Introduction: Workflows - primary



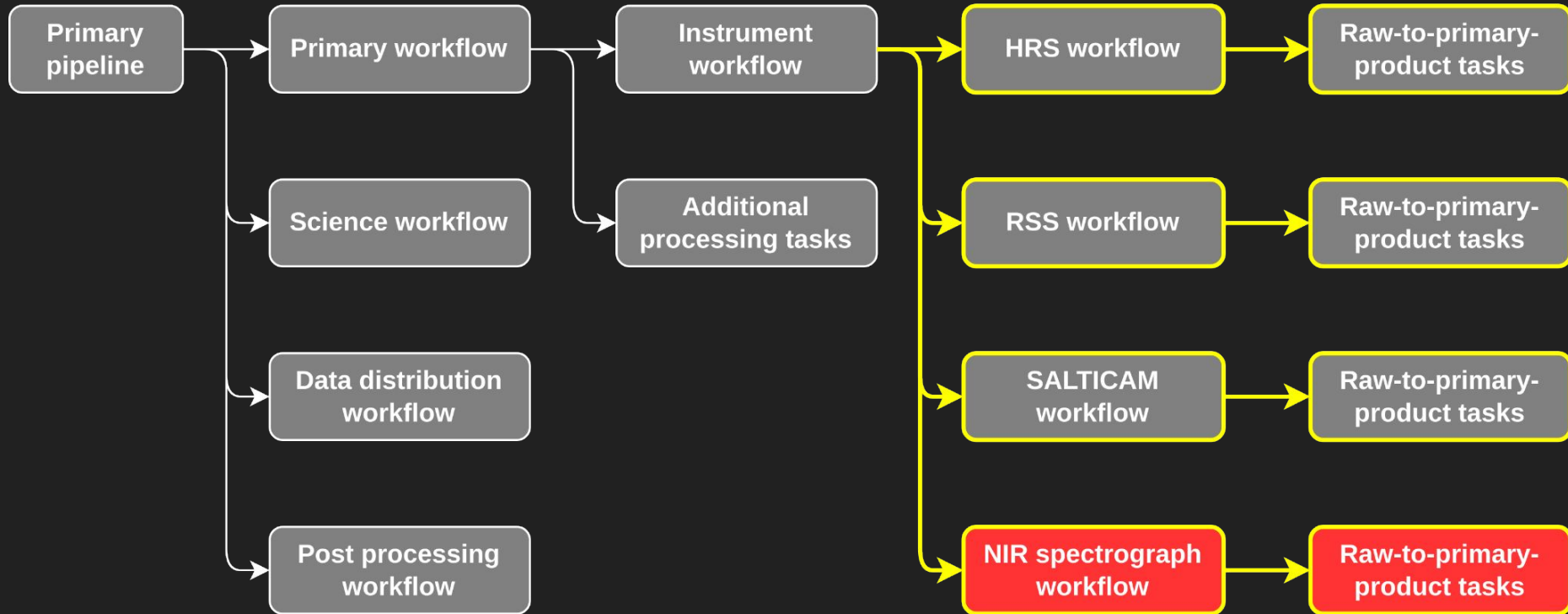
Introduction: Workflows - instrument



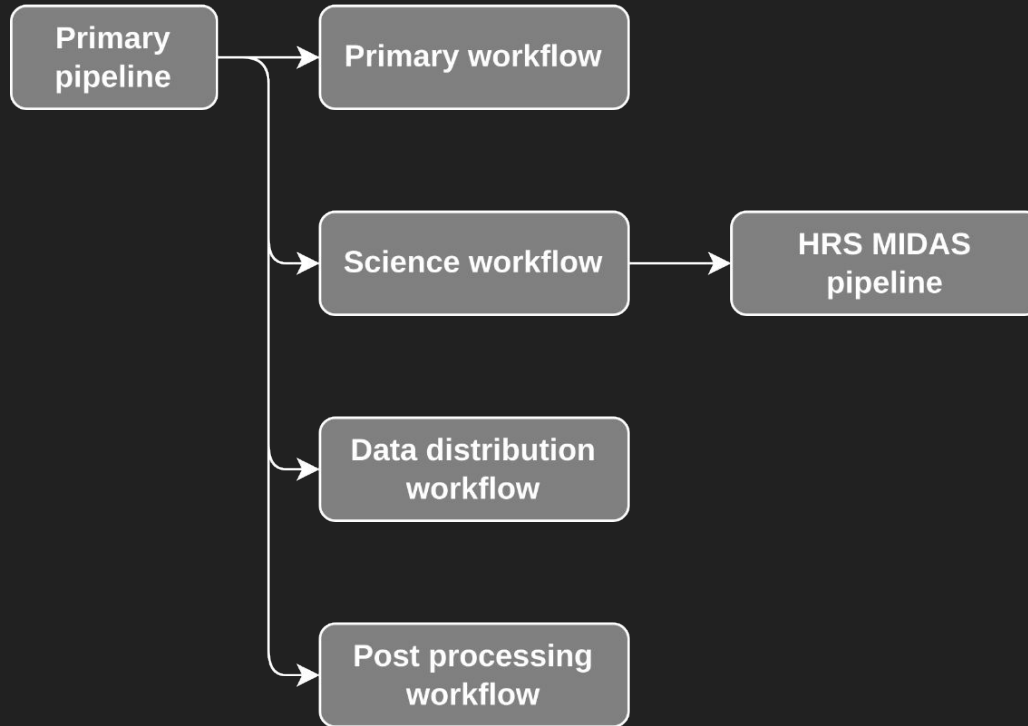
Introduction: Workflows - HRS, RSS, SALTICAM



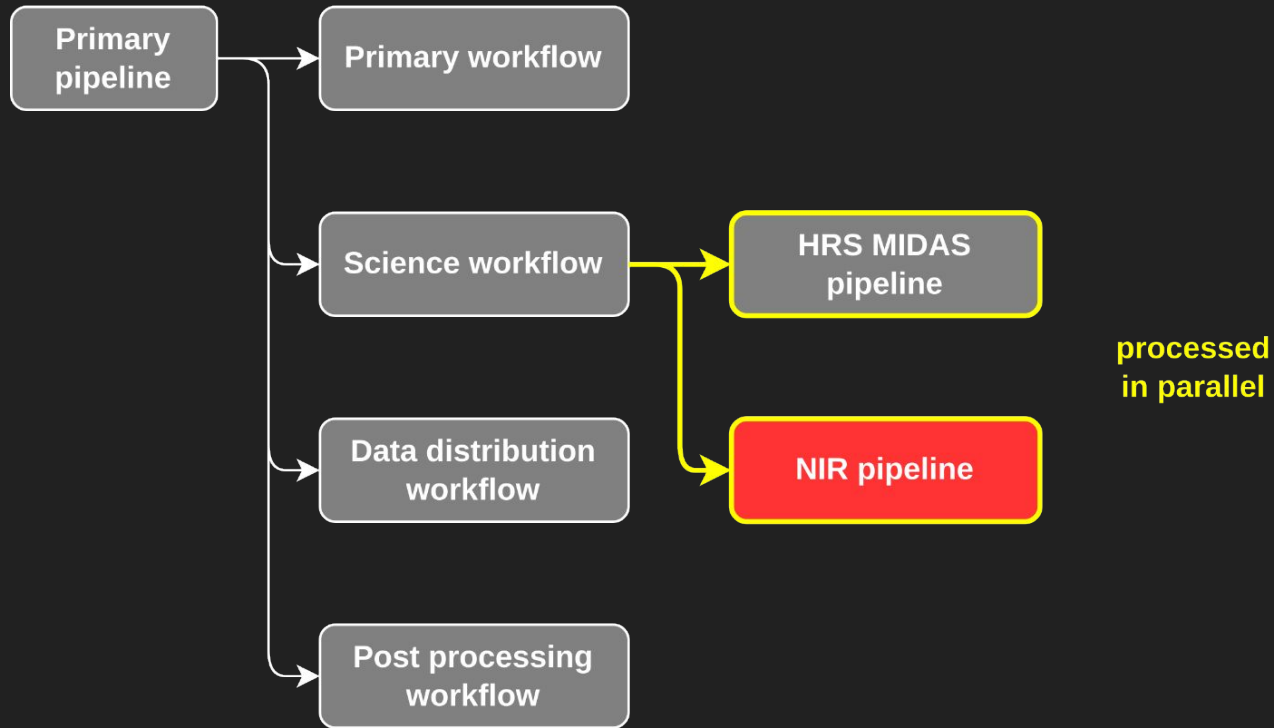
Introduction: Workflows - HRS, RSS, SALTICAM, NIR spectrograph



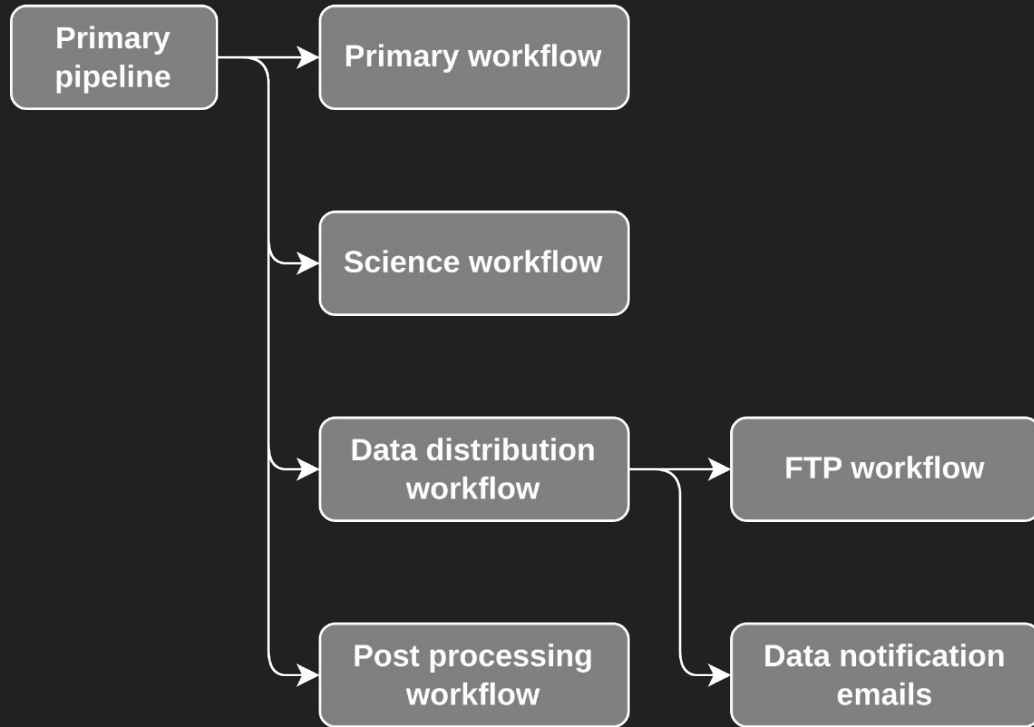
Introduction: Workflows - HRS MIDAS pipeline



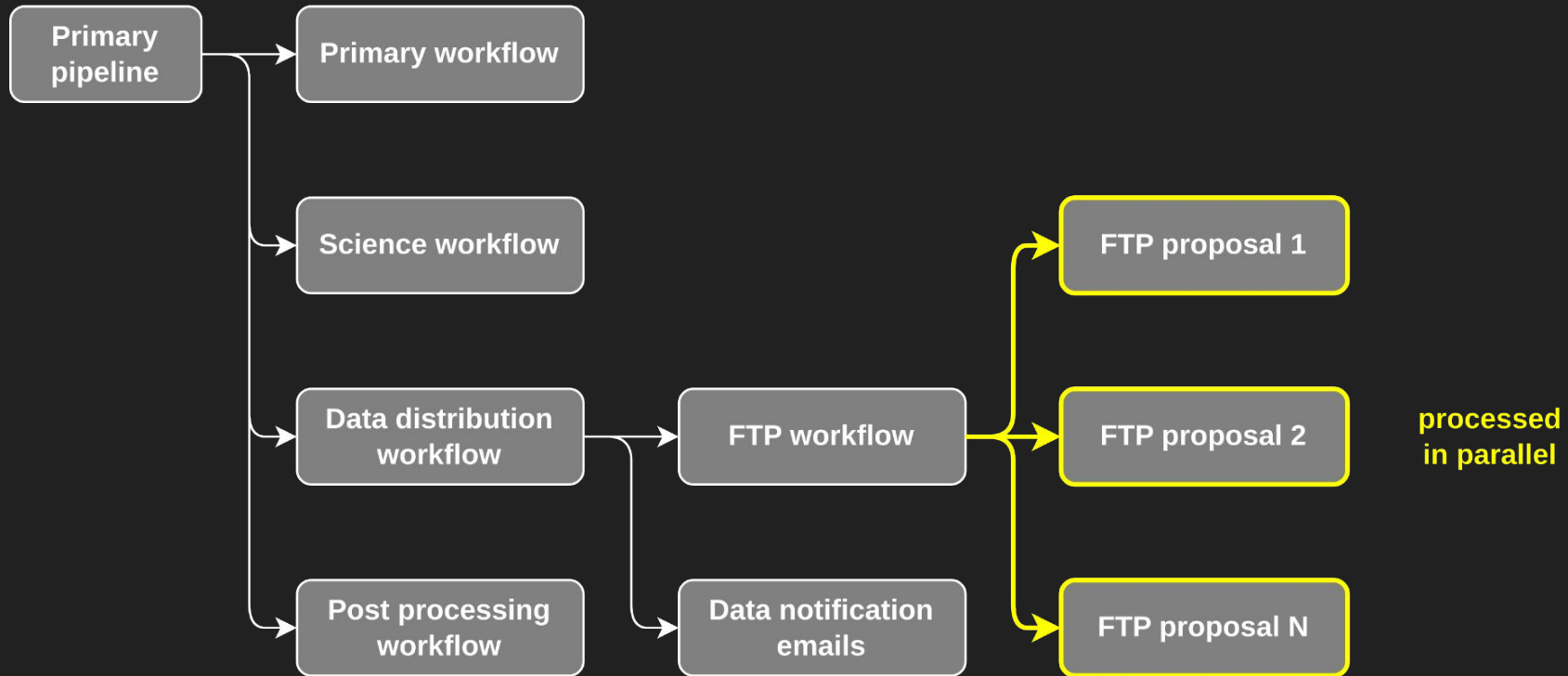
Introduction: Workflows - HRS MIDAS pipeline, NIR pipeline



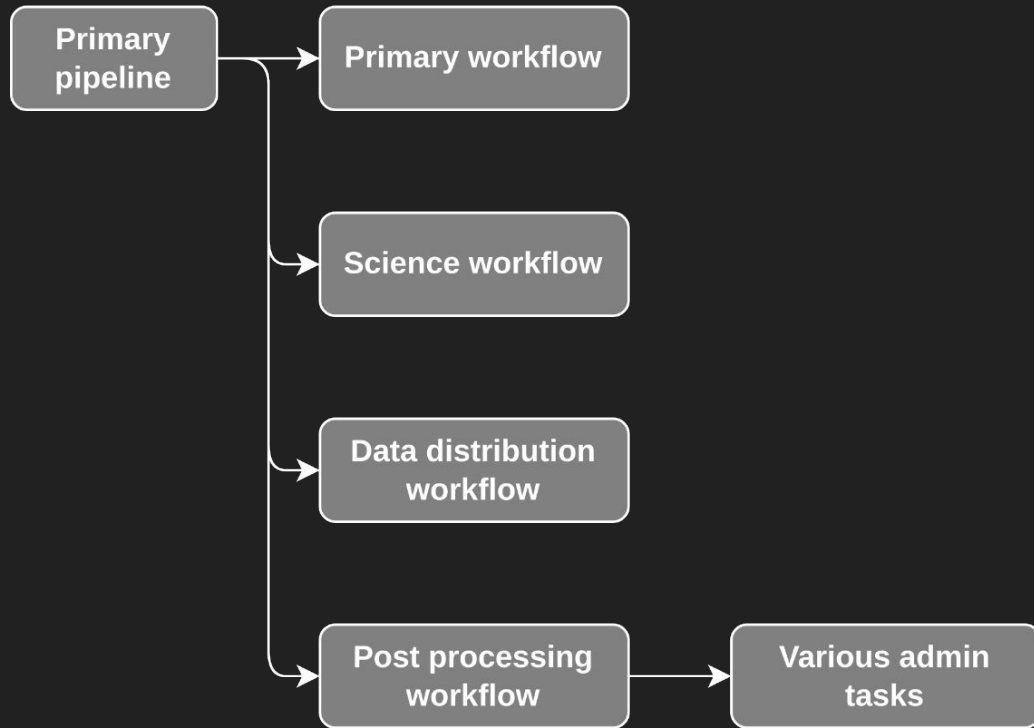
Introduction: Workflows - data distribution



Introduction: Workflows - data distribution



Introduction: Workflows - post processing



Raw-to-primary-product data processing

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- Do preparation
 - Check raw data transfer between detector computers and Cape Town server
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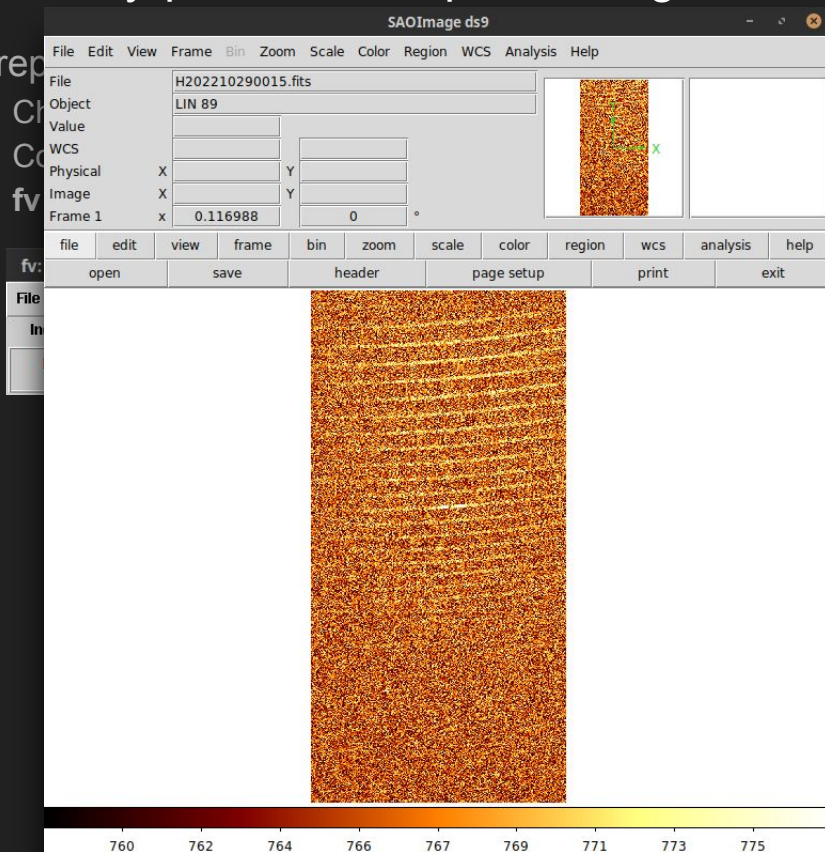
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Raw-to-primary-product data processing

- Do prep

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just Google 'fv FITS Viewer'

Raw-to-primary-product data processing

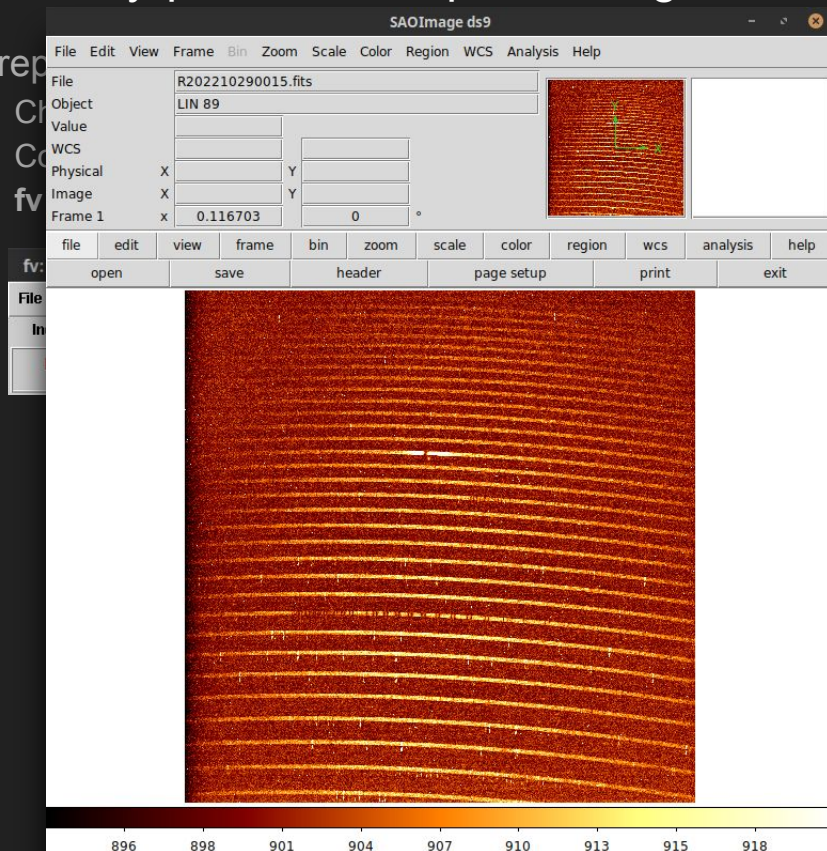
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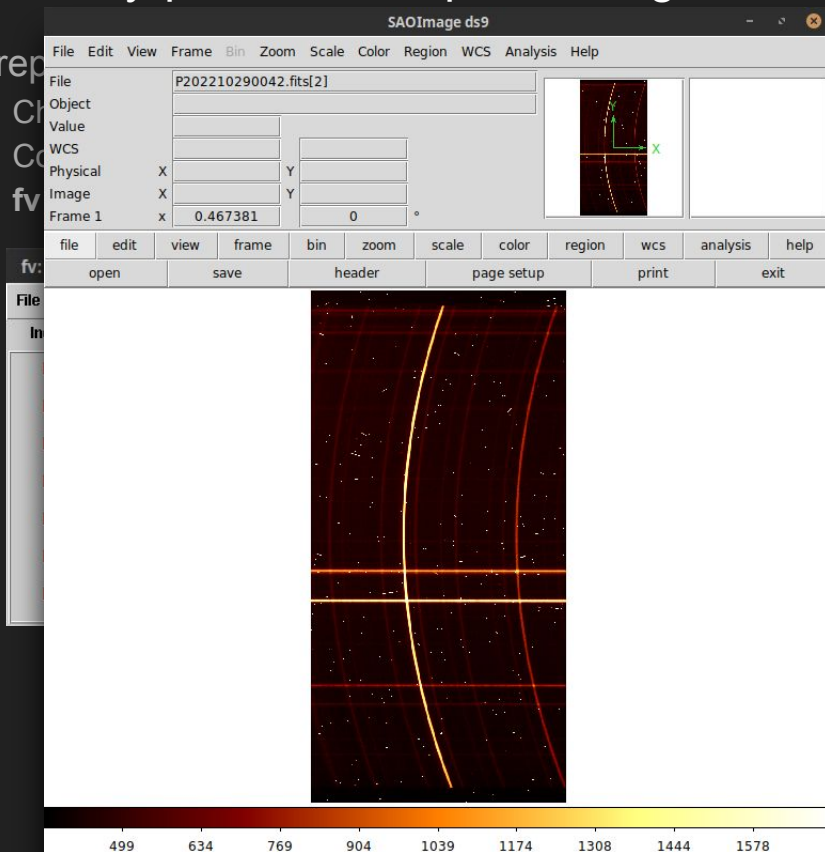
fv: Summary of P202210290042.fits in

File	Edit	Tools	Help			
Index	Extension	Type	Dimension	View		
 0	Primary	Image	0	Header	Image	Table
 1	NoName	Image	562 X 1026	Header	Image	Table
 2	NoName	Image	562 X 1026	Header	Image	Table
 3	NoName	Image	562 X 1026	Header	Image	Table
 4	NoName	Image	562 X 1026	Header	Image	Table
 5	NoName	Image	562 X 1026	Header	Image	Table
 6	NoName	Image	562 X 1026	Header	Image	Table

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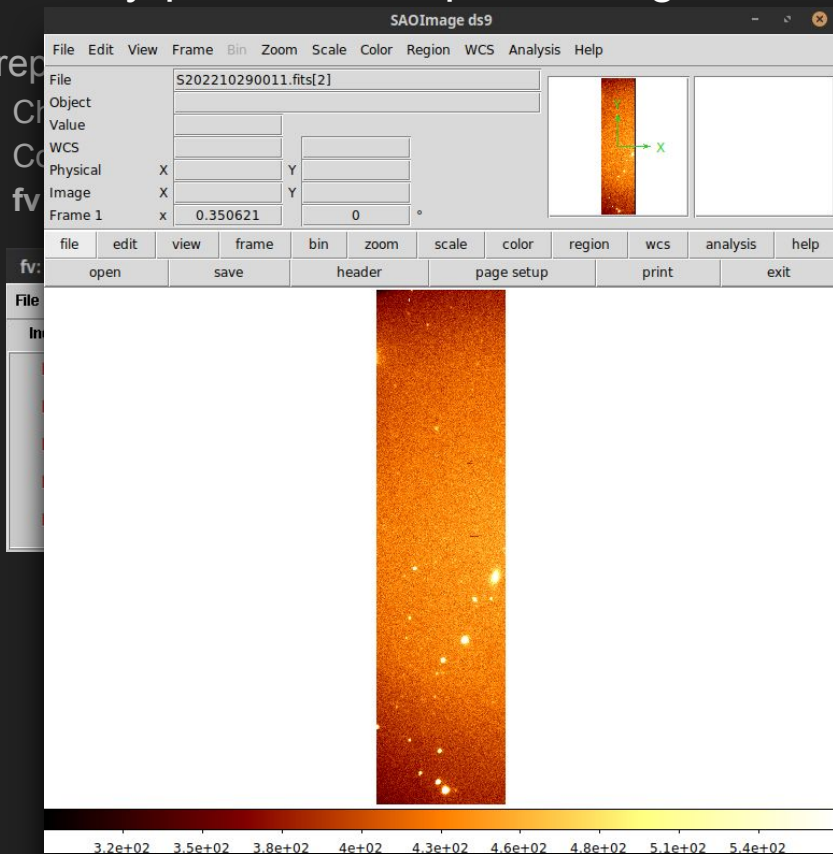
The screenshot shows a web browser window titled "fv: Summary of S202210290011.fits in". The window contains a table with the following columns: Index, Extension, Type, Dimension, and View. The View column contains three buttons: Header, Image, and Table. The table lists five extensions, with the first being 'Primary' and the others being 'NoName'.

Index	Extension	Type	Dimension	View
0	Primary	Image	0	Header Image Table
1	NoName	Image	375 X 1368	Header Image Table
2	NoName	Image	375 X 1368	Header Image Table
3	NoName	Image	375 X 1368	Header Image Table
4	NoName	Image	375 X 1368	Header Image Table

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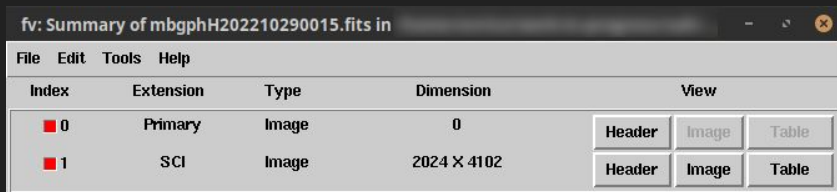
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 - Mosaic amplifier data into one image (all multi-amplifier images)

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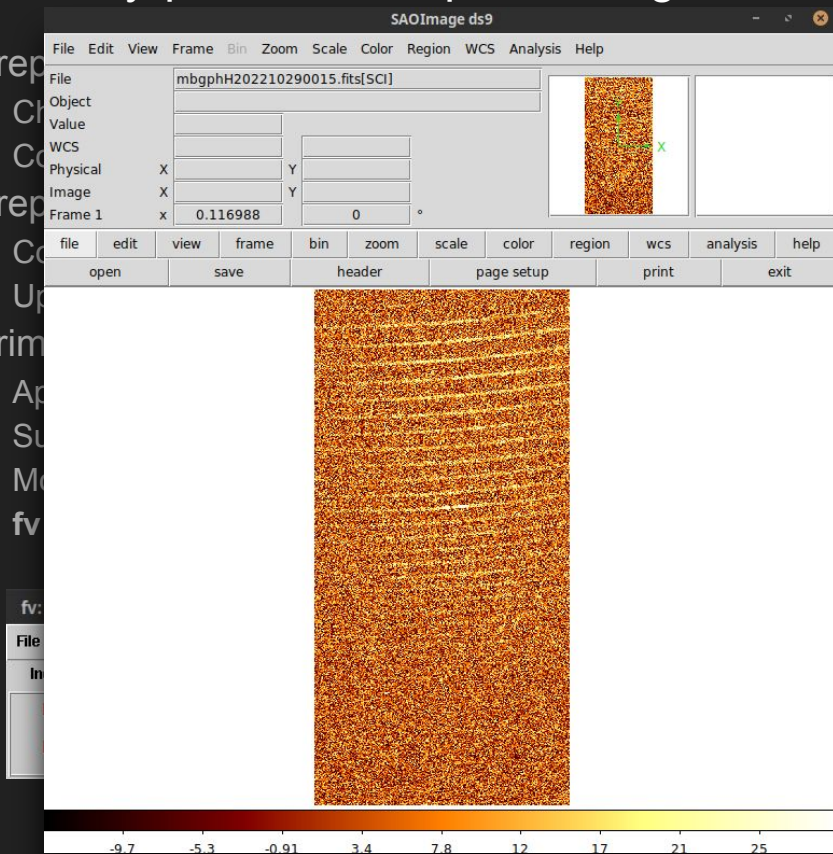
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Index	Extension	Type	Dimension	View
0	Primary	Image	0	Header Image Table
1	SCI	Image	2024 X 4102	Header Image Table

Raw-to-primary-product data processing

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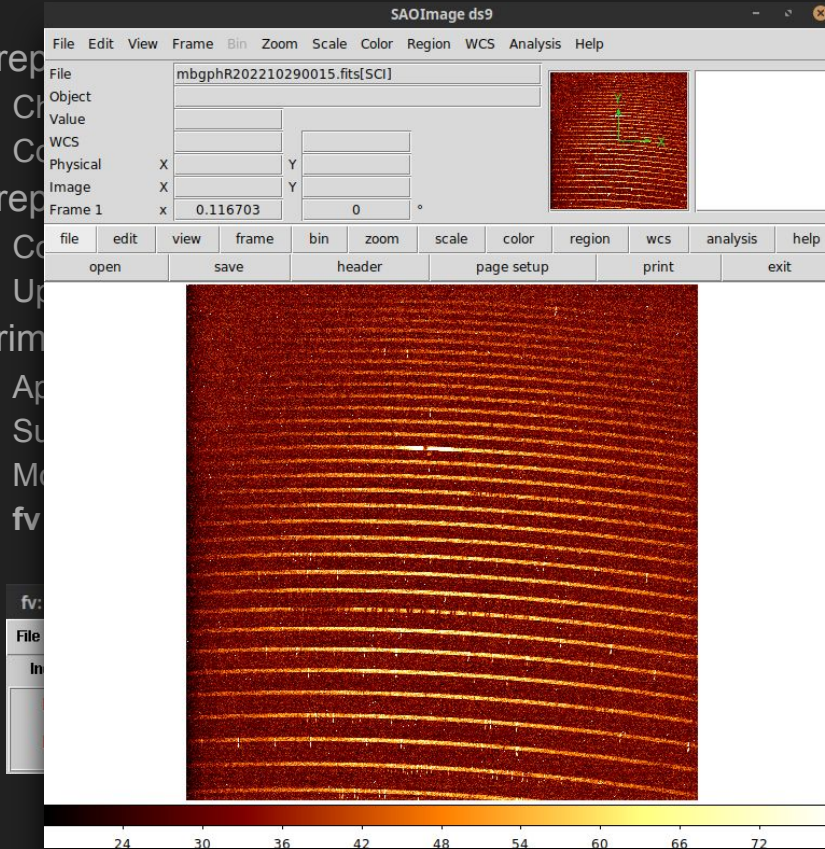
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fv: Summary of mbgphR202210290015.fits in

File Edit Tools Help					
Index	Extension	Type	Dimension	View	
0	Primary	Image	0	Header	Image Table
1	SCI	Image	4072 X 4112	Header	Image Table

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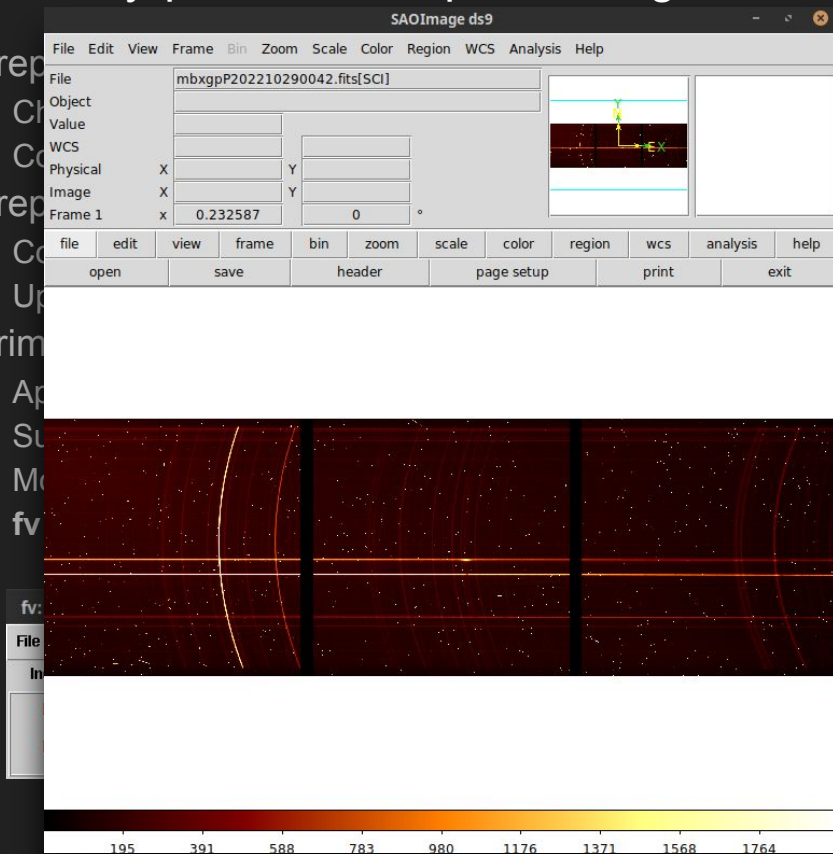
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fv: Summary of mbxgpP202210290042.fits in

File Edit Tools Help					
Index	Extension	Type	Dimension	View	
0	Primary	Image	0	Header	Image Table
1	SCI	Image	3172 X 1026	Header	Image Table

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- Do prim



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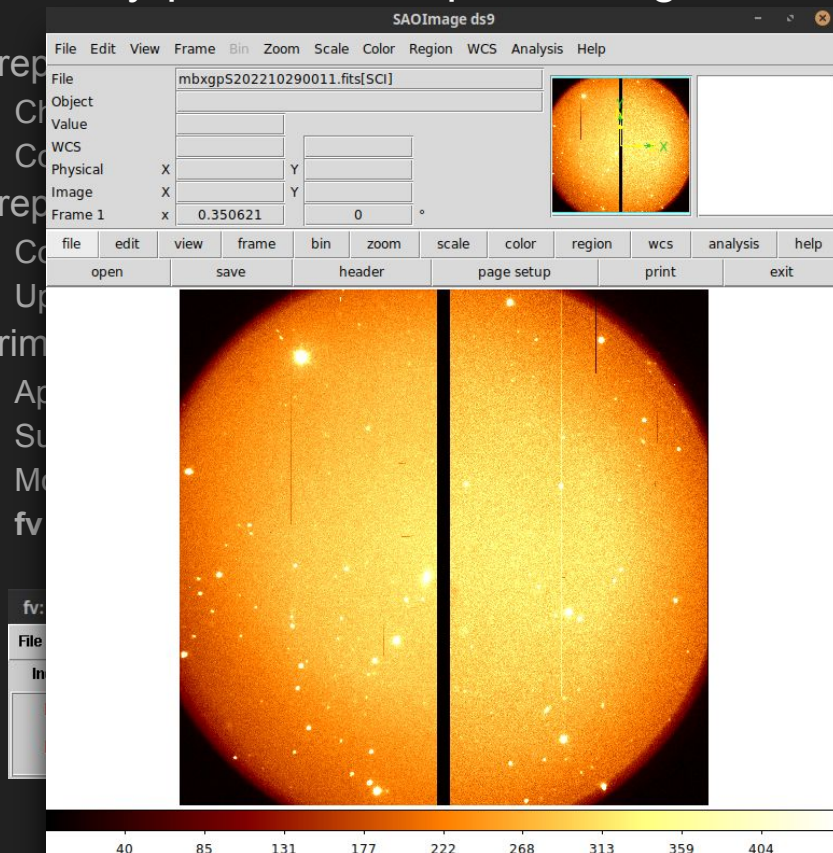
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 - **fv FITS Viewer:** <https://heasarc.gsfc.nasa.gov/ftools/fv/> ... just Google 'fv FITS Viewer'

fv: Summary of mbxgps202210290011.fits in

File Edit Tools Help					
Index	Extension	Type	Dimension	View	
0	Primary	Image	0	Header	Image Table
1	SCI	Image	1402 X 1368	Header	Image Table

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- Load file info into SALT database

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- Write info logs for proposal document (doc) directory
 - AstronomersLogCCYYMMDD.html
 - ObservationSequenceCCYYMMDD.html

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SOUTHERN AFRICAN LARGE TELESCOPE

Astronomer's Log Observation Sequence Cape Town Notes 29 Oct 2022

Night Log 2022-10-29

SA: Alenex
SD: Veronica
Others:

Summary

» Another night with thin clouds and variable seeing. Anyway, many high priority blocks were observed.

Science data taken for:

- 2022-1-MLT-004 P0 RSS (Observations of supernovae, near and far, & submillim.)
- 2022-2-MLT-003 P1 RSS (Tracing the evolution of the most massive galaxies in the universe)
- 2020-1-MLT-000 P1 RSS (Obtaining redshifts for 6437 sources - the brightest radio galaxies in the southern sky)
- 2021-2-MLT-000 P1 HRS (Monitoring the activity of 867 X-ray binaries in the southern hemisphere)
- 2019-1-MLT-000 P1 HRS (x2) (HRS monitoring of yellow symbiotic systems)
- 2022-2-SCI-032 P1 RSS (x2) (Unveiling deeply hidden growing black holes)
- 2021-2-LSP-001 P2 RSS (x2) (Followup of Transients)
- 2022-2-SCI-025 P2 HRS (Identifying chemical tracers of mass transfer for 16 candidate Field Blue Stragglers/Luckners.)

Weather Conditions:	Evening	Midnight	Morning
Comment:	Some thin clouds, variable transparency and seeing.	Thin clouds, variable transparency and seeing.	Thin clouds

Time (SAST):	19:10	23:56	04:10
Knot Dir. 10m:	266A°	246A°	246A°
Wind Speed 10m:	47.6 km/h	36.0 km/h	33.4 km/h
Seeing DDM:	0"	1.4"	1.5"
Relative Humidity Ext:	17.9%	34.2%	35.7%
Temperature 2m:	20.7 A°C	14.1 A°C	11.1 A°C
Dewpoint Delta Ext:	25.3 A°C	15.6 A°C	14.6 A°C

Sum set-rise (SAST): 18:59 05:40
Twilight eve-morn (SAST): 20:28 04:12
Moon (25%) set-rise (SAST): 23:42 09:35

Notes and Messages

No messages tonight.

Time Log

* 20:03
* 20:05 HRS CALIBRATION:
* R/1-11: BIAS



SOUTHERN AFRICAN LARGE TELESCOPE

Astronomer's Log

Observation Sequence

Cape Town Notes

29 Oct 2022

File	Object	RA2000	DEC2000	Ins	Mod	Filter	Bin	Gn	Sp	Grating	G-rang	Ar-ang	Exp	UT	Code	PI
S202210290013	WISEA J025757.01-004136.36	SCM	NO	S55R-S	3x3	FA	SL	UNKNOWN	-999.9	-999.9	15.0	00:17:47	2022-2-SCI-032	Petter		
S202210290014	WISEA J025757.01-004136.36	SCM	NO	S55R-S	3x3	FA	SL	UNKNOWN	-999.9	-999.9	15.0	00:14:42	2022-2-SCI-032	Petter		
P202210290001	WISEA J025757.01-004136.36	RSS	NO	PC04600	2x4	FA	SL	PG9900	18.12	36.23	550.1	00:15:30	2022-2-SCI-032	Petter		
P202210290002	WISEA J025757.01-004136.36	RSS	NO	PC04600	2x4	FA	SL	PG9900	18.12	36.23	550.1	00:24:52	2022-2-SCI-032	Petter		
P202210290003	WISEA J025757.01-004136.36	RSS	NO	PC04600	2x4	FA	SL	PG9900	18.12	36.23	550.1	00:34:15	2022-2-SCI-032	Petter		
P202210290004	ARC	02:57:59.1	-00:41:36	RSS	NO	PC04600	2x4	FA	SL	PG9900	18.12	36.23	2.1	00:44:40	2022-2-SCI-032	Petter
S202210290015	WISEA J051135.4	-01:28:26	SCM	NO	S55R-S	3x3	FA	SL	UNKNOWN	-999.9	-999.9	2.0	00:51:51	2022-2-SCI-032	Petter	
P202210290005	WISEA J051135.4	-01:28:26	RSS	NO	PC04600	2x4	FA	SL	PG9900	18.88	37.73	350.1	00:57:33	2022-2-SCI-032	Petter	
S202210290016	WISEA J051135.4	-01:28:26	SCM	NO	S55R-S	3x3	FA	SL	UNKNOWN	-999.9	-999.9	15.0	00:59:29	2022-2-SCI-032	Petter	
P202210290006	WISEA J051135.4	-01:28:26	RSS	NO	PC04600	2x4	FA	SL	PG9900	18.88	37.73	350.1	01:03:36	2022-2-SCI-032	Petter	
S202210290007	WISEA J051135.4	-01:28:26	RSS	NO	PC04600	2x4	FA	SL	PG9900	18.88	37.72	2.1	01:16:33	2022-2-SCI-032	Petter	
P202210290008	ARC	05:11:35.4	-01:28:26	RSS	NO	PC04600	2x4	FA	SL	PG9900	18.88	37.73	2.1	01:22:42	2022-2-SCI-032	Petter
S202210290017	V529 Mon	06:55:12.4	-01:28:53	SCM	NO	S55R-S	3x3	FA	SL	UNKNOWN	-999.9	-999.9	2.0	01:22:42	2019-1-MLT-008	Townsend
H202210290016	V529 Mon	06:55:12.4	-01:28:53	HRS	NO	UNKNOWN	1x1	SL	40	UNKNOWN	-999.9	-999.9	1400.0	01:27:05	2022-2-MLT-005	Townsend
S202210290018	BX Mon	07:25:22.7	-03:35:50	SCM	NO	S55R-S	3x3	FA	SL	UNKNOWN	-999.9	-999.9	2.0	01:59:12	2019-1-MLT-008	Galan
H202210290017	BX Mon	07:25:22.7	-03:35:50	HRS	NO	UNKNOWN	1x1	SL	40	UNKNOWN	-999.9	-999.9	200.0	02:03:16	2019-1-MLT-008	Galan
R202210290017	BX Mon	07:25:22.7	-03:35:50	HRS	NO	UNKNOWN	1x1	SL	40	UNKNOWN	-999.9	-999.9	200.0	02:03:16	2019-1-MLT-008	Galan
H202210290001	BIAS	UNKNOWN	UNKNOWN	HRS	NO	UNKNOWN	1x1	SL	40	UNKNOWN	-999.9	-999.9	0.0	17:11:50	CAL	BIAS
R202210290001	BIAS	UNKNOWN	UNKNOWN	HRS	NO	UNKNOWN	1x1	SL	40	UNKNOWN	-999.9	-999.9	0.0	17:11:50	CAL	BIAS
UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	HRS	NO	UNKNOWN	1x1	SL	40	UNKNOWN	-999.9	-999.9	0.0	17:12:59	CAL	BIAS
R202210290002	BIAS	UNKNOWN	UNKNOWN	HRS	NO	UNKNOWN	1x1	SL	40	UNKNOWN	-999.9	-999.9	0.0	17:12:59	CAL	BIAS
P202210290001	BIAS	17:43:24.0	-30:00:00	RSS	NO	UNKNOWN	2x2	FA	SL	N/A	1.69	0.00	4.6	17:13:28	CAL	BIAS
P202210290002	BIAS	17:43:24.0	-30:00:00	RSS	NO	UNKNOWN	2x2	FA	SL	N/A	1.69	0.00	4.6	17:13:46	CAL	BIAS
H202210290003	BIAS	UNKNOWN	UNKNOWN	HRS	NO	UNKNOWN	1x1	SL	40	UNKNOWN	-999.9	-999.9	0.0	17:14:06	CAL	BIAS
P202210290003	BIAS	17:43:24.0	-30:00:00	RSS	NO	UNKNOWN	2x2	FA	SL	N/A	1.69	0.00	4.6	17:14:06	CAL	BIAS
R202210290004	BIAS	17:43:24.0	-30:00:00	RSS	NO	UNKNOWN	2x2	FA	SL	N/A	1.69	0.00	4.6	17:14:26	CAL	BIAS
P202210290005	BIAS	17:43:24.0	-30:00:00	RSS	NO	UNKNOWN	2x2	FA	SL	N/A	1.69	0.00	4.6	17:15:06	CAL	BIAS
R202210290004	BIAS	UNKNOWN	UNKNOWN	HRS	NO	UNKNOWN	1x1	SL	40	UNKNOWN	-999.9	-999.9	0.0	17:15:15	CAL	BIAS
R202210290004	BIAS	UNKNOWN	UNKNOWN	HRS	NO	UNKNOWN	1x1	SL	40	UNKNOWN	-999.9	-999.9	0.0	17:15:15	CAL	BIAS
P202210290007	BIAS	17:43:24.0	-30:00:00	RSS	NO	UNKNOWN	2x2	FA	SL	N/A	1.69	0.00	4.6	17:15:27	CAL	BIAS
P202210290008	BIAS	17:43:24.0	-30:00:00	RSS	NO	UNKNOWN	2x2	FA	SL	N/A	1.69	0.00	4.6	17:15:47	CAL	BIAS
P202210290009	BIAS	17:43:24.0	-30:00:00	RSS	NO	UNKNOWN	2x2	FA	SL	N/A	1.69	0.00	4.6	17:16:06	CAL	BIAS
H202210290005	BIAS	UNKNOWN	UNKNOWN	HRS	NO	UNKNOWN	1x1	SL	40	UNKNOWN	-999.9	-999.9	0.0	17:16:24	CAL	BIAS
R202210290005	BIAS	UNKNOWN	UNKNOWN	HRS	NO	UNKNOWN	1x1	SL	40	UNKNOWN	-999.9	-999.9	0.0	17:16:24	CAL	BIAS
P202210290010	BIAS	17:43:24.0	-30:00:00	RSS	NO	UNKNOWN	2x2	FA	SL	N/A	1.69	0.00	4.6	17:16:26	CAL	BIAS
P202210290011	BIAS	17:43:24.0	-30:00:00	RSS	NO	UNKNOWN	2x2	FA	SL	N/A	1.69	0.00	4.6	17:16:46	CAL	BIAS
P202210290012	BIAS	17:43:24.0	-30:00:00	RSS	NO	UNKNOWN	2x4	FA	SL	N/A	1.69	0.00	4.6	17:17:20	CAL	BIAS
H202210290006	BIAS	UNKNOWN	UNKNOWN	HRS	NO	UNKNOWN	1x1	SL	40	UNKNOWN	-999.9	-999.9	0.0	17:17:32	CAL	BIAS
R202210290006	BIAS	UNKNOWN	UNKNOWN	HRS	NO	UNKNOWN	1x1	SL	40	UNKNOWN	-999.9	-999.9	0.0	17:17:32	CAL	BIAS
P202210290013	BIAS	17:43:24.0	-30:00:00	RSS	NO	UNKNOWN	2x4	FA	SL	N/A	1.69	0.00	4.6	17:17:45	CAL	BIAS
P202210290014	BIAS	17:43:24.0	-30:00:00	RSS	NO	UNKNOWN	2x4	FA	SL	N/A	1.69	0.00	4.6	17:17:57	CAL	BIAS
P202210290015	BIAS	17:43:24.0	-30:00:00	RSS	NO	UNKNOWN	2x4	FA	SL	N/A	1.69	0.00	4.6	17:18:10	CAL	BIAS

Additional processing

- Load file info into SALT database
- Write info logs for proposal document (doc) directory
 - AstronomersLogCCYYMMDD.html
 - ObservationSequenceCCYYMMDD.html
- Do data roll-up for observed proposals
 - Add proposal data: doc (info logs), raw and product
 - Add calibration data (standard star) - RSS proposals only

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 - Proposal_BlockId_BlockVisitId_CCYYMMDD_elldata.fits
 - Weather, Seeing and Guider tables

Additional processing

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 - Weather, Seeing and Guider tables
 - **fv FITS Viewer:** <https://heasarc.gsfc.nasa.gov/fv/> ... just Google 'fv FITS Viewer'

fv: Summary of 2021-2-LSP-001_92232_34512_20221029_elsdata.fits in

File Edit Tools Help				
Index	Extension	Type	Dimension	View
0	Primary	Image	0	Header Image Table
1	WEATHER	Binary	15 cols X 32 rows	Header Hist Plot All Select
2	SEEING	Binary	2 cols X 37 rows	Header Hist Plot All Select
3	GUIDER	Binary	12 cols X 41 rows	Header Hist Plot All Select

Additional processing

fv: Binary Table of 2021-2-LSP-001_92232_34512_20221029_elsdata.fits[1] in

File Edit Tools Help

Time Stamp 25A Air Pressure D

Select All Invert Modify Modify

	Time Stamp 25A	Air Pressure D
1	2022-10-29 22:14:53.58138	8.218645019531E+01
2	2022-10-29 22:16:55.39681	8.216831665039E+01
3	2022-10-29 22:17:54.64388	8.216832885742E+01
4	2022-10-29 22:18:55.83235	8.217438964844E+01
5	2022-10-29 22:19:56.65853	8.216834716797E+01
6	2022-10-29 22:20:55.52767	8.218651123047E+01
7	2022-10-29 22:21:54.68294	8.217440795898E+01
8	2022-10-29 22:22:55.94857	8.218046875000E+01
9	2022-10-29 22:25:55.76302	8.217507324219E+01
10	2022-10-29 22:26:56.92903	8.216889038086E+01
11	2022-10-29 22:28:57.32650	8.218132324219E+01
12	2022-10-29 22:29:57.08821	8.216336059570E+01
13	2022-10-29 22:30:56.46419	8.215746459961E+01
14	2022-10-29 22:31:56.47298	8.217562255859E+01
15	2022-10-29 22:32:56.96028	8.217575073242E+01
16	2022-10-29 22:33:58.08528	8.216373901367E+01
17	2022-10-29 22:34:58.09798	8.216987304687E+01
18	2022-10-29 22:35:58.55403	8.216994018555E+01
19	2022-10-29 22:36:58.77767	8.215788574219E+01
20	2022-10-29 22:37:58.62825	8.215792236328E+01

Go to: Edit cell:

fv: Binary Table of 2021-2-LSP-001_92232_34512_...

File Edit Tools Help

Time Stamp 25A Seeing D

Select All Invert Modify Modify

	Time Stamp 25A	Seeing D
1	2022-10-29 22:14:02	1.090000000000E+00
2	2022-10-29 22:15:03	1.090000000000E+00
3	2022-10-29 22:16:02	1.060000000000E+00
4	2022-10-29 22:17:03	1.060000000000E+00
5	2022-10-29 22:18:03	9.900000000000E-01
6	2022-10-29 22:19:03	9.900000000000E-01
7	2022-10-29 22:20:03	1.090000000000E+00
8	2022-10-29 22:21:03	1.090000000000E+00
9	2022-10-29 22:22:03	1.090000000000E+00
10	2022-10-29 22:23:02	1.140000000000E+00
11	2022-10-29 22:24:02	1.140000000000E+00
12	2022-10-29 22:25:03	1.080000000000E+00
13	2022-10-29 22:26:02	1.080000000000E+00
14	2022-10-29 22:27:02	1.080000000000E+00
15	2022-10-29 22:28:02	1.020000000000E+00
16	2022-10-29 22:29:03	1.020000000000E+00
17	2022-10-29 22:30:03	2.040000000000E+00
18	2022-10-29 22:31:02	2.040000000000E+00
19	2022-10-29 22:32:03	1.520000000000E+00
20	2022-10-29 22:33:03	1.320000000000E+00

Go to: Edit cell:

fv: Binary Table of 2021-2-LSP-001_92232_34512_...

File Edit Tools Help

Wind 30m Direction D Wind 10m D Wind 10m Direction D Temperature 2m D Temperature 5m D Temperature 10m D

Modify Modify Modify Modify Modify Modify

	Wind 30m Direction D	Wind 10m D	Wind 10m Direction D	Temperature 2m D	Temperature 5m D	Temperature 10m D
657373046875E+02	8.713199615479E+00	2.513534545898E+02	1.553681182861E+01	1.509705352783E+01	1.519678497314E+01	1.519678497314E+01
606702270508E+02	9.144399642944E+00	2.602243957520E+02	1.543820190430E+01	1.508733367920E+01	1.515655517578E+01	1.515655517578E+01
685085449219E+02	8.967999458313E+00	2.642614135742E+02	1.547113037109E+01	1.501367950439E+01	1.509664916992E+01	1.509664916992E+01
613995056152E+02	9.693199157715E+00	2.667964477539E+02	1.533955383301E+01	1.495838165283E+01	1.501917266846E+01	1.501917266846E+01
695190734863E+02	8.399599075317E+00	2.668440856934E+02	1.530667877197E+01	1.491695404053E+01	1.496667480469E+01	1.496667480469E+01
674077758789E+02	8.605399131775E+00	2.585145263672E+02	1.524089050293E+01	1.480344390869E+01	1.497452545166E+01	1.497452545166E+01
640057983398E+02	9.046399116516E+00	2.646158752441E+02	1.520800781250E+01	1.482553100586E+01	1.496356201172E+01	1.496356201172E+01
669862060547E+02	9.124798774719E+00	2.529071502686E+02	1.527381896973E+01	1.481456756592E+01	1.489456176758E+01	1.489456176758E+01
606511230469E+02	8.556399345398E+00	2.596421203613E+02	1.514415740967E+01	1.474005126953E+01	1.485307312012E+01	1.485307312012E+01
619653230312E+02	8.791599273682E+00	2.639129333496E+02	1.517668914795E+01	1.472911071777E+01	1.477869415283E+01	1.477869415283E+01
588703308105E+02	7.880198955536E+00	2.617800292969E+02	1.501313018799E+01	1.471496582031E+01	1.472598266602E+01	1.472598266602E+01
632601928711E+02	8.928799629211E+00	2.591302490234E+02	1.501371002197E+01	1.455242156982E+01	1.481112670898E+01	1.481112670898E+01
655121765137E+02	8.585799217224E+00	2.542487335205E+02	1.501416778564E+01	1.466342163086E+01	1.470195770264E+01	1.470195770264E+01
626979064941E+02	8.272199630737E+00	2.576058654785E+02	1.501416778564E+01	1.445774078369E+01	1.464455413818E+01	1.464455413818E+01
644569396973E+02	8.046799659729E+00	2.539208984375E+02	1.491583251953E+01	1.461698150635E+01	1.471599578857E+01	1.471599578857E+01
595526428223E+02	9.007199287415E+00	2.605381774902E+02	1.491612243652E+01	1.459172058105E+01	1.476507568359E+01	1.476507568359E+01
637544555664E+02	9.154199600220E+00	2.612436218262E+02	1.498216247559E+01	1.452306365967E+01	1.478166198730E+01	1.478166198730E+01
6474411804199E+02	9.859799385071E+00	2.623007507324E+02	1.498234558105E+01	1.462749481201E+01	1.477062225342E+01	1.477062225342E+01
687078857422E+02	9.399199485779E+00	2.605886840820E+02	1.501540374756E+01	1.463382720947E+01	1.473842620850E+01	1.473842620850E+01
634522705078E+02	9.301198959351E+00	2.577734985352E+02	1.488391113281E+01	1.460149383545E+01	1.481073760986E+01	1.481073760986E+01

Header Hist Plot All Select

Header Hist Plot All Select

Header Hist Plot All Select

Additional processing

fv: Binary Table of 2021-2-LSP-001_92232_34512_20221029_elsdata.fits[1] in

File Edit Tools Help

Time Stamp 25A

All

Invert Modify

Select	Time Stamp	Available FIF / Probe A	Available Probe B	FWHM	EE50	MAG50	Instantaneous error x (m)	Instantaneous error y (m)
All	25A	L	L	D	D	D	D	D
Invert	Modify	Modify	Modify	Modify	Modify	Modify	Modify	Modify
1	2022-10-29 22:14:53.5813							
2	2022-10-29 22:16:55.3968							
3	2022-10-29 22:17:54.6438							
4	2022-10-29 22:18:55.8323							
5	2022-10-29 22:19:56.6585							
6	2022-10-29 22:20:55.5276							
7	2022-10-29 22:21:54.6829							
8	2022-10-29 22:22:55.9485							
9	2022-10-29 22:23:55.7630							
10	2022-10-29 22:24:56.9290							
11	2022-10-29 22:25:57.3265							
12	2022-10-29 22:26:57.0882							
13	2022-10-29 22:27:56.4641							
14	2022-10-29 22:28:56.4729							
15	2022-10-29 22:29:56.9602							
16	2022-10-29 22:30:56.0852							
17	2022-10-29 22:31:56.0979							
18	2022-10-29 22:32:56.5540							
19	2022-10-29 22:33:56.7776							
20	2022-10-29 22:34:56.6282							

Go to: Edit cell:

fv: Binary Table of 2021-2-LSP-001_92232_34512_20221029_elsdata.fits[3] in

File Edit Tools Help

Time Stamp 25A Available FIF / Probe A Available Probe B FWHM EE50 MAG50 Instantaneous error x (m) Instantaneous error y (m)

L L D D D D D D

All

Invert Modify Modify Modify Modify Modify Modify Modify Modify

Select	Time Stamp	Available FIF / Probe A	Available Probe B	FWHM	EE50	MAG50	Instantaneous error x (m)	Instantaneous error y (m)
All	25A	L	L	D	D	D	D	D
Invert	Modify	Modify	Modify	Modify	Modify	Modify	Modify	Modify
1	2022-10-29 22:15:24.94600	F	F	2.294326023721E+00	2.106559005514E+00	1.279494476318E+01	1.228688711041E-04	2.926657158998E-04
2	2022-10-29 22:16:17.24300	T	F	1.111014702996E+00	1.754298413987E+00	1.260259628296E+01	-7.457427660982E-06	4.796299755109E-05
3	2022-10-29 22:17:09.88400	T	T	6.093678947690E-01	2.199149156352E+00	1.397223472595E+01	-9.036467527370E-06	3.074732718058E-05
4	2022-10-29 22:18:01.72800	T	T	1.887331806933E+00	1.933625090658E+00	1.339607620239E+01	-1.177073330604E-05	8.507259957925E-06
5	2022-10-29 22:18:53.79000	T	T	1.722949644361E+00	1.913671327758E+00	1.341108846664E+01	4.208005220001E-06	1.668436989484E-05
6	2022-10-29 22:19:45.25900	T	T	1.967676711119E+00	1.943042475145E+00	1.346927165985E+01	-2.574769375869E-05	3.867020724262E-06
7	2022-10-29 22:21:30.63400	F	F	2.165805580521E+00	2.432129392966E+00	1.339706754684E+01	3.141218568101E-05	2.390409498387E-05
8	2022-10-29 22:22:24.41500	T	T	1.919960660004E+00	1.952988816368E+00	1.346680021286E+01	2.566411808082E-05	1.102802106653E-06
9	2022-10-29 22:22:24.69600	T	T	1.939606414533E+00	2.010462755143E+00	1.345926523209E+01	3.331447708429E-05	1.020884166091E-05
10	2022-10-29 22:23:18.43100	T	T	1.890981730576E+00	1.923931215314E+00	1.346956396103E+01	3.552971878270E-06	1.655749702560E-05
11	2022-10-29 22:23:19.79000	T	T	1.940928439892E+00	1.921494186617E+00	1.347521018982E+01	9.393803546142E-06	3.135485141465E-05
12	2022-10-29 22:24:12.61800	T	T	1.889096461986E+00	1.889255271168E+00	1.345643997192E+01	-4.889078685916E-06	1.379612145634E-05
13	2022-10-29 22:25:05.41500	T	T	1.750454173057E+00	1.972013830596E+00	1.331356763840E+01	-2.618075928386E-05	-1.272930464891E-05
14	2022-10-29 22:25:56.94600	T	T	1.795160993776E+00	1.962930434036E+00	1.333011150360E+01	-2.275263090512E-06	9.890489304957E-07
15	2022-10-29 22:25:58.22800	T	T	1.846543989620E+00	2.038002384739E+00	1.332529592514E+01	3.778880985575E-06	1.222769580841E-07
16	2022-10-29 22:26:50.80600	T	T	1.734314029418E+00	1.957468619788E+00	1.335830640793E+01	1.855907852292E-05	2.356922212482E-05
17	2022-10-29 22:26:51.08700	T	T	1.762225598626E+00	1.964097233599E+00	1.335743284225E+01	1.569745124134E-05	2.077809452379E-05
18	2022-10-29 22:27:43.97800	T	T	1.692445983906E+00	1.916661256729E+00	1.334931230545E+01	2.459714179604E-05	2.925818610671E-05
19	2022-10-29 22:29:29.68100	T	T	1.774608398098E+00	1.942504885704E+00	1.337816619873E+01	7.355166807508E-07	8.085744584279E-06
20	2022-10-29 22:30:22.52500	T	T	1.829298778397E+00	2.017945436590E+00	1.335828733444E+01	-9.420042024725E-07	-1.325751725886E-05

Go to: Edit cell:

Go to: Edit cell: Header Hist Plot All Select

3 GUIDER Binary 12 cols X 41 rows Header Hist Plot All Select

Additional processing

fv: Binary Table of 2021-2-LSP-001_92232_34512_20221029_elsdata.fits[1] in

File Edit Tools Help

Time Stamp 25A

Select ☒ All

Invert Modify

Select	Time Stamp	Available FIF / Probe A	Available Probe B	FWHM	EE50	MAG50	Instantaneous error x (m)	Instantaneous error y (m)
☒ All	25A	L	L	D	D	D	D	D
Invert	Modify	Modify	Modify	Modify	Modify	Modify	Modify	Modify
1	2022-10-29 22:14:53.5813							
2	2022-10-29 22:16:55.3968							
3	2022-10-29 22:17:54.6438							
4	2022-10-29 22:18:55.8323							
5	2022-10-29 22:19:56.6585							
6	2022-10-29 22:20:55.5276							
7	2022-10-29 22:21:54.6829							
8	2022-10-29 22:22:55.9485							
9	2022-10-29 22:25:55.7630							
10	2022-10-29 22:26:56.9290							
11	2022-10-29 22:28:57.3265							
12	2022-10-29 22:29:57.0882							
13	2022-10-29 22:30:56.4641							
14	2022-10-29 22:31:56.4729							
15	2022-10-29 22:32:56.9602							
16	2022-10-29 22:33:58.0852							
17	2022-10-29 22:34:58.0979							
18	2022-10-29 22:35:58.5540							
19	2022-10-29 22:36:58.7776							
20	2022-10-29 22:37:58.6282							

Go to: Edit cell:

fv: Binary Table of 2021-2-LSP-001_92232_34512_20221029_elsdata.fits[3] in

File Edit Tools Help

Time Stamp 25A

Available FIF / Probe A L

Available Probe B L

FWHM D

EE50 D

MAG50 D

Instantaneous error x (m) D

Instantaneous error y (m) D

Select ☒ All

Invert Modify

Select	Time Stamp	Available FIF / Probe A	Available Probe B	FWHM	EE50	MAG50	Instantaneous error x (m)	Instantaneous error y (m)
☒ All	25A	L	L	D	D	D	D	D
Invert	Modify	Modify	Modify	Modify	Modify	Modify	Modify	Modify
1	2022-10-29 22:15:24.94600	F	F	2.294326023721E+00	2.106559005514E+00	1.279494476318E+01	1.228688711041E-04	2.926657158998E-04
2	2022-10-29 22:16:17.24300	T						6299755109E-05
3	2022-10-29 22:17:09.88400	T						4732718058E-05
4	2022-10-29 22:18:01.72800	T						7259957925E-06
5	2022-10-29 22:18:53.79000	T						8436989484E-06
6	2022-10-29 22:19:45.25900	T						7020724262E-05
7	2022-10-29 22:21:30.63400	F						0409498387E-05
8	2022-10-29 22:22:24.41500							1102802106653E-06
9	2022-10-29 22:22:24.69600	T						1.020884166091E-05
10	2022-10-29 22:23:18.43100	T						3.552971878270E-06
11	2022-10-29 22:23:19.79000	T						1.655749702560E-05
12	2022-10-29 22:24:12.61800	T						3.135485141465E-05
13	2022-10-29 22:25:05.41500	T						3.79612145634E-05
14	2022-10-29 22:25:56.94600	T						-4.889078685916E-06
15	2022-10-29 22:25:58.22800	T						-2.618075928386E-05
16	2022-10-29 22:26:50.80600	T						-1.272930464891E-05
17	2022-10-29 22:26:51.08700	T						-2.275263090512E-06
18	2022-10-29 22:27:43.97800	T						9.890489304957E-07
19	2022-10-29 22:29:29.68100	T						3.778880985575E-06
20	2022-10-29 22:30:22.52500	T						1.222769580841E-07

FWHM: Full width at half maximum of the guidance object
EE50: 50% encircled energy radius of the guidance object
MAG50: Stellar magnitude estimate of the guidance object

Go to: Edit cell:

Go to: Edit cell:

Header Hist Plot All Select

Header Hist Plot All Select

Science data processing

Science data processing

- Run science plugin: HRS MIDAS pipeline (10:00 15 Nov by Alexei Kniazev)
 - HRS MIDAS pipeline products added to proposal product data

Science data processing

- Run science plugin: HRS MIDAS pipeline (10:00 15 Nov by Alexei Kniazev)
 - HRS MIDAS pipeline products added to proposal product data
- Run science plugin: Near-infrared pipeline
 - Near-infrared pipeline products added to proposal product data

Data distribution

Data distribution

- Tar and copy proposal data (doc, raw and product) to proposal Principal Contact (PC) ftp directory

Data distribution

- Tar and copy proposal data (doc, raw and product) to proposal Principal Contact (PC) ftp directory
- Send data notification emails to proposal PC email address

Data distribution

- Tar and copy proposal data (done)
- Send data notification emails to Principal Contact (PC) ftp directory

Dear SALT user,

Your data are now available for pickup through ftp:

2021-2-LSP-001: Observing the Transient Universe

Target Name	Block Id	Block Visit Id	Block Visit Status	Rejected Reason
SMC X2 (2)	92232	34512	Accepted	None
WISEA_J042838.77-000	93449	34517	Accepted	None

Raw Data:
ftp://saltdata.salt.ac.za/2021-2-LSP-001.20221029_raw.tar.bz2

Product Data:
ftp://saltdata.salt.ac.za/2021-2-LSP-001.20221029_product.tar.bz2

RSS POLARIMETRY USERS PLEASE NOTE: THE SPEC POL PRODUCT DATA ARE PREREDUCED USING THE METHODOLOGY OF THE POLSALT PACKAGE.

HRS USERS PLEASE NOTE: THE PRODUCT DATA INCLUDE THE HRS MIDAS PIPELINE PRODUCTS.

Documentation:
ftp://saltdata.salt.ac.za/2021-2-LSP-001.20221029_doc.tar.bz2

Or one tarball containing all of the data products:
<ftp://saltdata.salt.ac.za/2021-2-LSP-001.20221029.tar.bz2>

If needed, you can access the SALT Astronomer's nightlog using your WM login and password here:
<https://www.salt.ac.za/sanightlogs/20221029.log>

You will need to login to the ftp server using your PIPT username and password. Due to limitations in storage, the data will only remain available for a maximum of one month of time. For further details on the pipeline reductions, please see:
https://sciencewiki.salt.ac.za/index.php/SALT_Data_Quality

Bandwidth within South Africa is improving but still relatively small. In order to avoid problems caused by download interruptions we recommend using the wget package to download your data rather than standard FTP. A typical execution of wget will look like this:
wget --user=PIPT login --password='PIPT passwd' -b -c -t 100
ftp://saltdata.salt.ac.za/2021-2-LSP-001.20221029_product.tar.bz2

If the connection is broken then the download will restart automatically at the byte where the procedure failed rather than returning to the first byte in the file.

Data is archived in a tar file and compressed with the bzip2 scheme. Data may be extracted from the tar file using:
tar jxvf 2021-2-LSP-001.20221029.tar.bz2

Observation documentation are provided within the doc/ directory contained in the archive. The documentation format is HTML and is best read by opening the file doc/CapeTownNotes20221029.html with your web browser.

For the appropriate acknowledgements and citations for observations with SALT, please see:
<https://astronomers.salt.ac.za/data/acknowledgements/>

Contact the SALT project at salthelp@sao.ac.za if you have any difficulty downloading, inspecting, or analyzing your data.

Sincerely,
The SALT Operations Team

Data distribution

- Tar and copy proposal data (doc, raw and product) to proposal Principal Contact (PC) ftp directory
- Send data notification emails to proposal PC email address
- Archive data: Move temporary work directory to Cape Town server archive directory

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Post processing

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Post processing

- Run other admin plugins

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Post processing

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This is the end...

Questions?

