

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 6076 - L2 Version 4
Chandra X-Ray Center

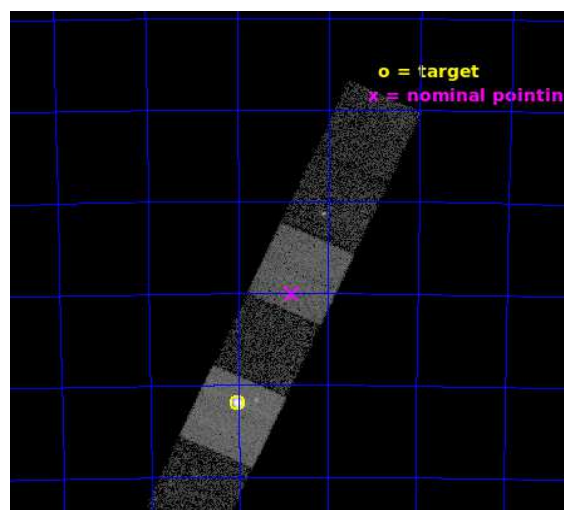
L2 Processing Date : Oct 5 2020

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1 Front

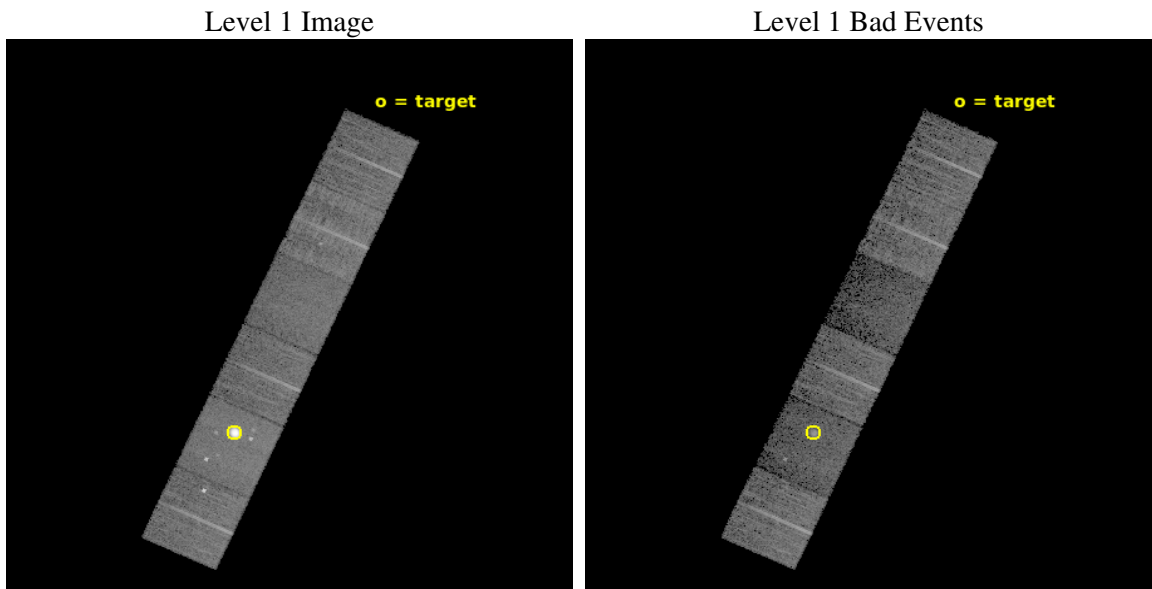
seq_num	590403	Sequence number
obs_id	6076	Observation id
title	AO6A ACIS-S Calibration Observations of E0102-72	Proposal title
observer	CXC Calibration	Principal investigator
object	E0102-72.3	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	15.701929423181	Nominal RA [deg]
dec_nom	-71.834028669747	Nominal Dec [deg]
roll_nom	294.50165924973	Nominal Roll [deg]
revision	4	Processing version of data
ontime	7951.9999703765	Sum of GTIs [s]
livetime	7851.3069586321	Livetime [s]
ontime4	7948.7590000927	Sum of GTIs [s]
ontime5	7951.9999703765	Sum of GTIs [s]
ontime6	7951.9999703765	Sum of GTIs [s]
ontime7	7951.9999703765	Sum of GTIs [s]
ontime8	7951.9999703765	Sum of GTIs [s]
ontime9	7951.9999703765	Sum of GTIs [s]
l2events	110676	Number of level 2 events



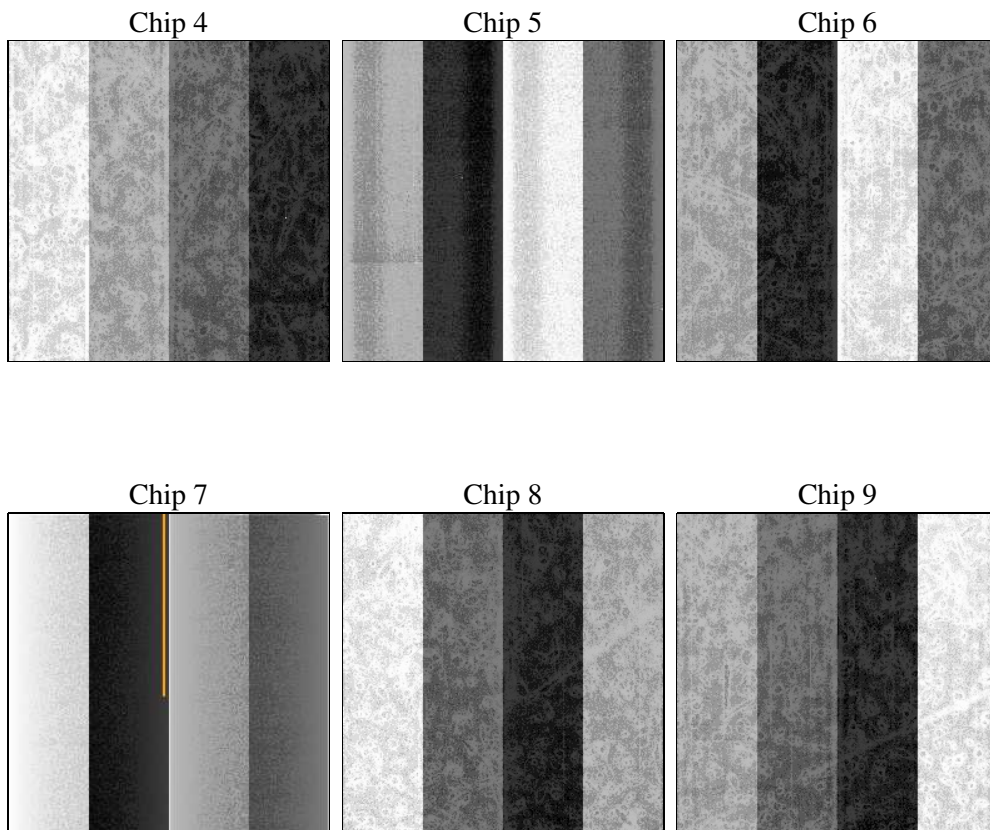
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	7951.9999703765	Sum of GTIs [s]
caldbver	4.9.2	 	ontime4	7948.7590000927	Sum of GTIs [s]
date	2020-10-05T17:57:00	Date and time of file creation	ontime5	7951.9999703765	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	7951.9999703765	Sum of GTIs [s]
			ontime7	7951.9999703765	Sum of GTIs [s]
			ontime8	7951.9999703765	Sum of GTIs [s]
			ontime9	7951.9999703765	Sum of GTIs [s]
			l1events	364727	Number of level 1 events

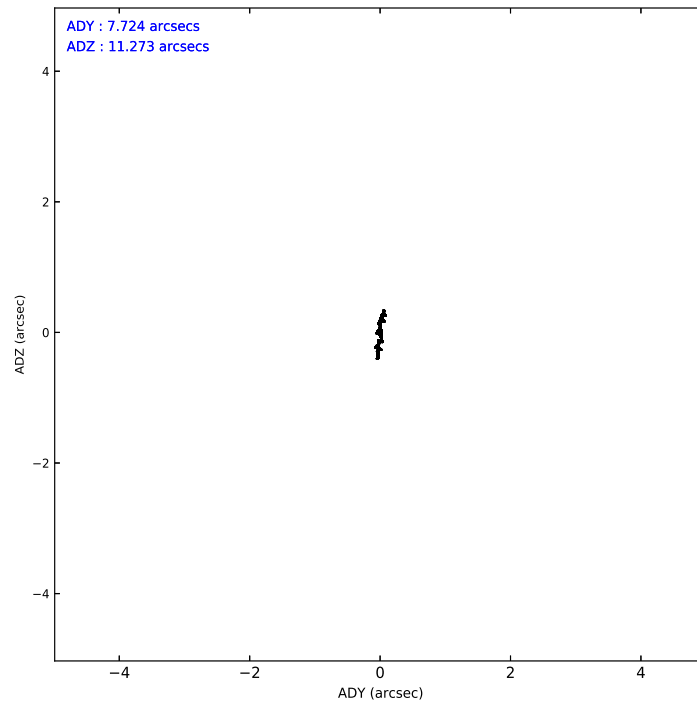
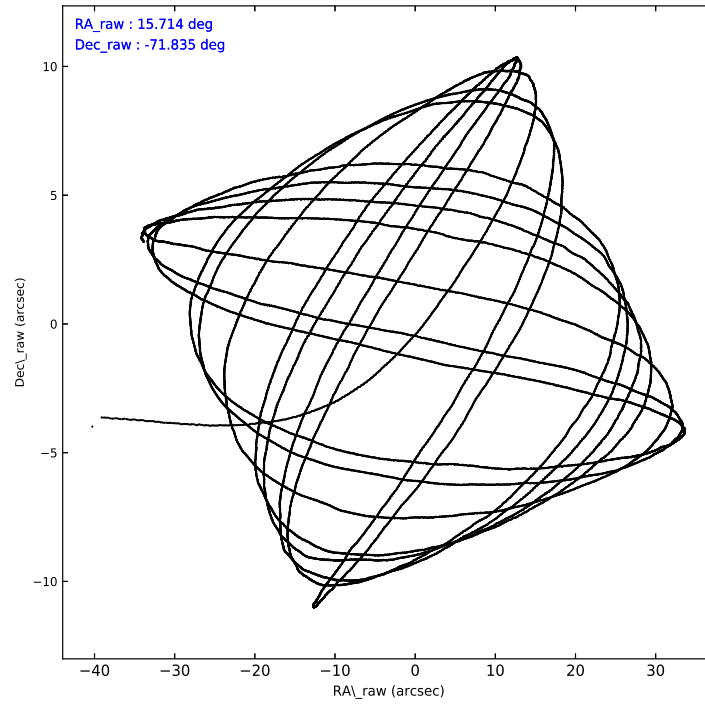
2.1.4 Events

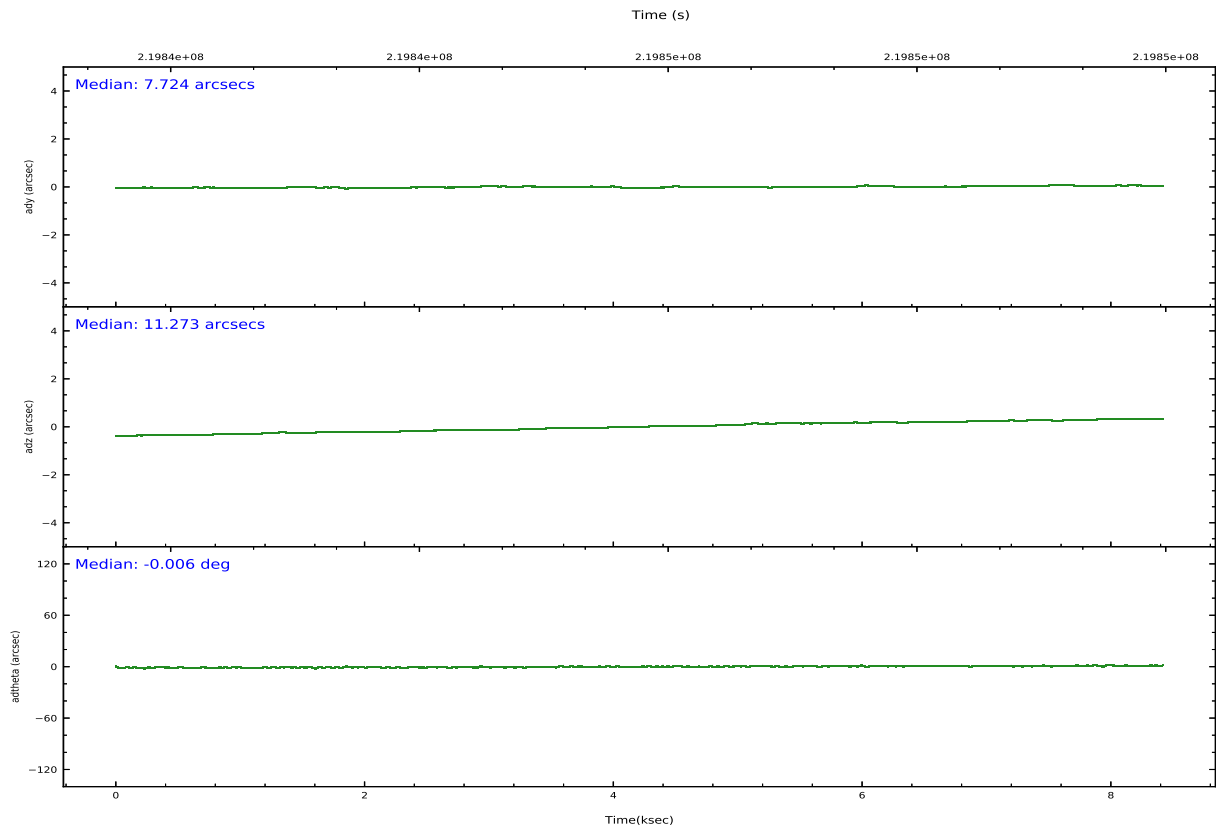
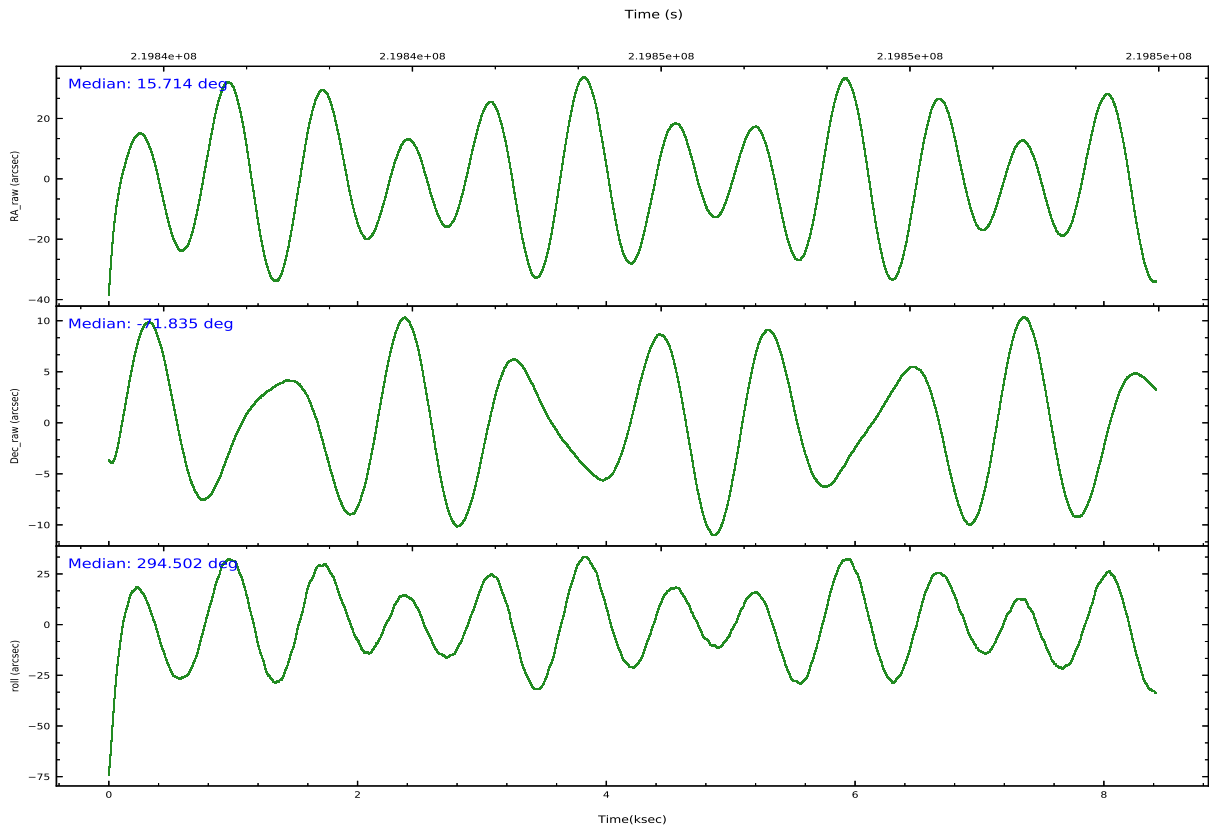
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	57705	105884	48279	44845	60779	47235	grade 0 events	4584	25609	1977	2260	3837	1791
rejected events	49959	28514	43181	22824	46798	42351		7%	24%	4%	5%	6%	3%
rejected %	86%	26%	89%	50%	76%	89%	grade 1 events	60	399	21	40	38	24
								0%	0%	0%	0%	0%	0%
							grade 2 events	1186	21647	1008	4526	3257	1026
								2%	20%	2%	10%	5%	2%
							grade 3 events	589	5394	560	2088	1507	556
								1%	5%	1%	4%	2%	1%
							grade 4 events	569	5583	537	2166	1441	535
								0%	5%	1%	4%	2%	1%
							grade 5 events	1567	5599	1611	4849	2554	1839
								2%	5%	3%	10%	4%	3%
							grade 6 events	821	19208	1017	10996	3942	981
								1%	18%	2%	24%	6%	2%
							grade 7 events	48329	22445	41548	17920	44203	40483
								83%	21%	86%	39%	72%	85%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	15.642791	15.701929423181	Subarray requested	NONE	NONE
[deg] Pointing Dec	-71.819267	-71.834028669747	Alternating exposures requested	N	N
[deg] Pointing Roll	294.271184	294.50165924973	[s] Primary exposure time	0.000000	3.2
[s] Window start time (MET)	215654464.184000	215654464.184000			
[s] Window stop time (MET)	220838464.184000	220838464.184000			
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	219841980.184000	219840899.45067			
Observation start date	2004-12-19T11:11:56	2004-12-19T10:54:59			
[s] Observation end time (MET)	219849980.184000	219850114.20109			
Observation end date	2004-12-19T13:25:16	2004-12-19T13:28:34			
Read mode	TIMED	TIMED			

2.3 Aspect





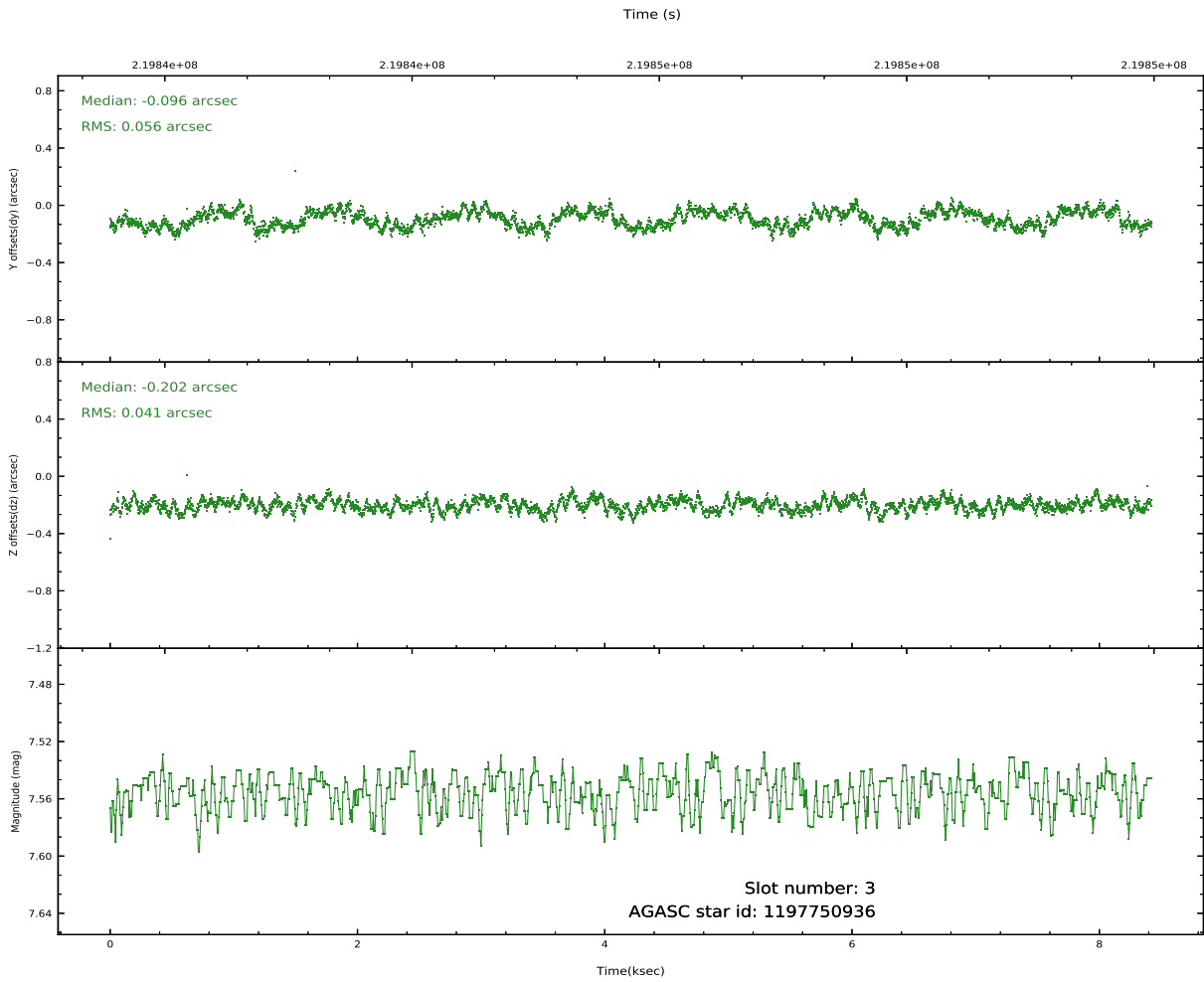
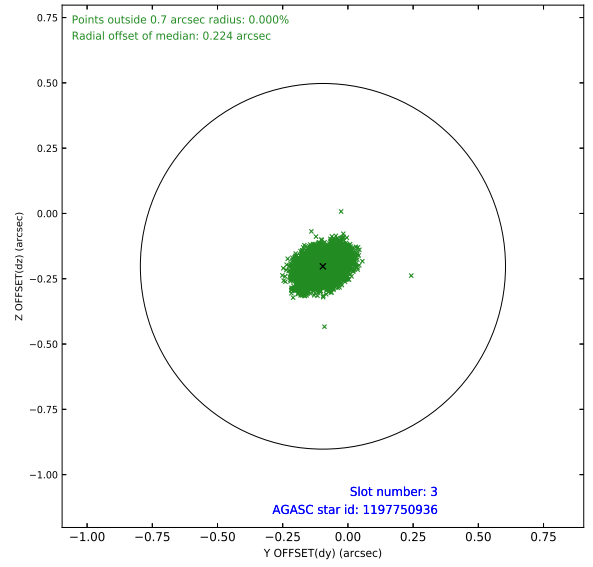
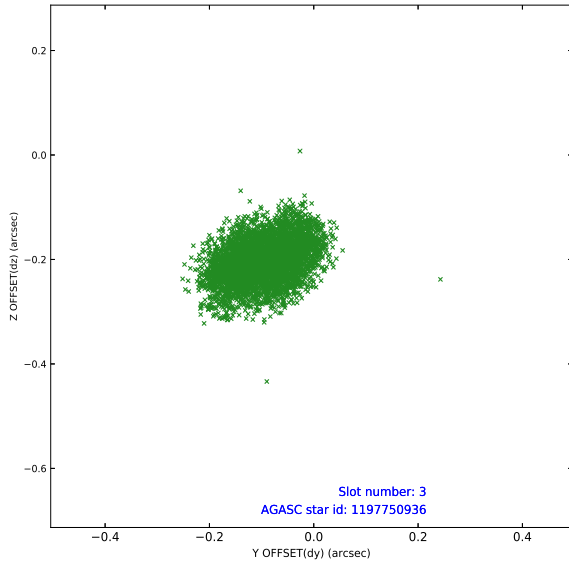
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-2	7.10	2054	1.000	-0.064	-0.049	0.009	0.014	0.000000	0.000000	-760.50	-1732
1	FID		ACIS-S-4	7.20	2054	1.000	0.146	0.044	0.008	0.013	0.000000	0.000000	2152.62	175
2	FID		ACIS-S-5	7.23	2054	1.000	-0.113	0.014	0.007	0.012	0.000000	0.000000	-1812.61	169
3	GUIDE	used	1197750936	7.55	4107	1.000	-0.096	-0.202	0.076	0.115	15.387940	-71.549550	-1003.34	134
4	GUIDE	used	1197884536	8.49	4109	1.000	0.016	0.079	0.063	0.100	17.160729	-71.835289	772.54	1520
5	GUIDE	used	1197884712	8.31	4108	1.000	0.144	0.101	0.059	0.096	16.087398	-72.252690	1625.45	-196
6	GUIDE	used	1197885104	9.36	4044	1.000	0.171	0.102	0.111	0.179	17.845067	-72.189368	2252.98	1644
7	GUIDE	used	1197750896	9.81	4102	1.000	-0.235	-0.079	0.106	0.176	12.910875	-71.532544	-2156.13	-2443

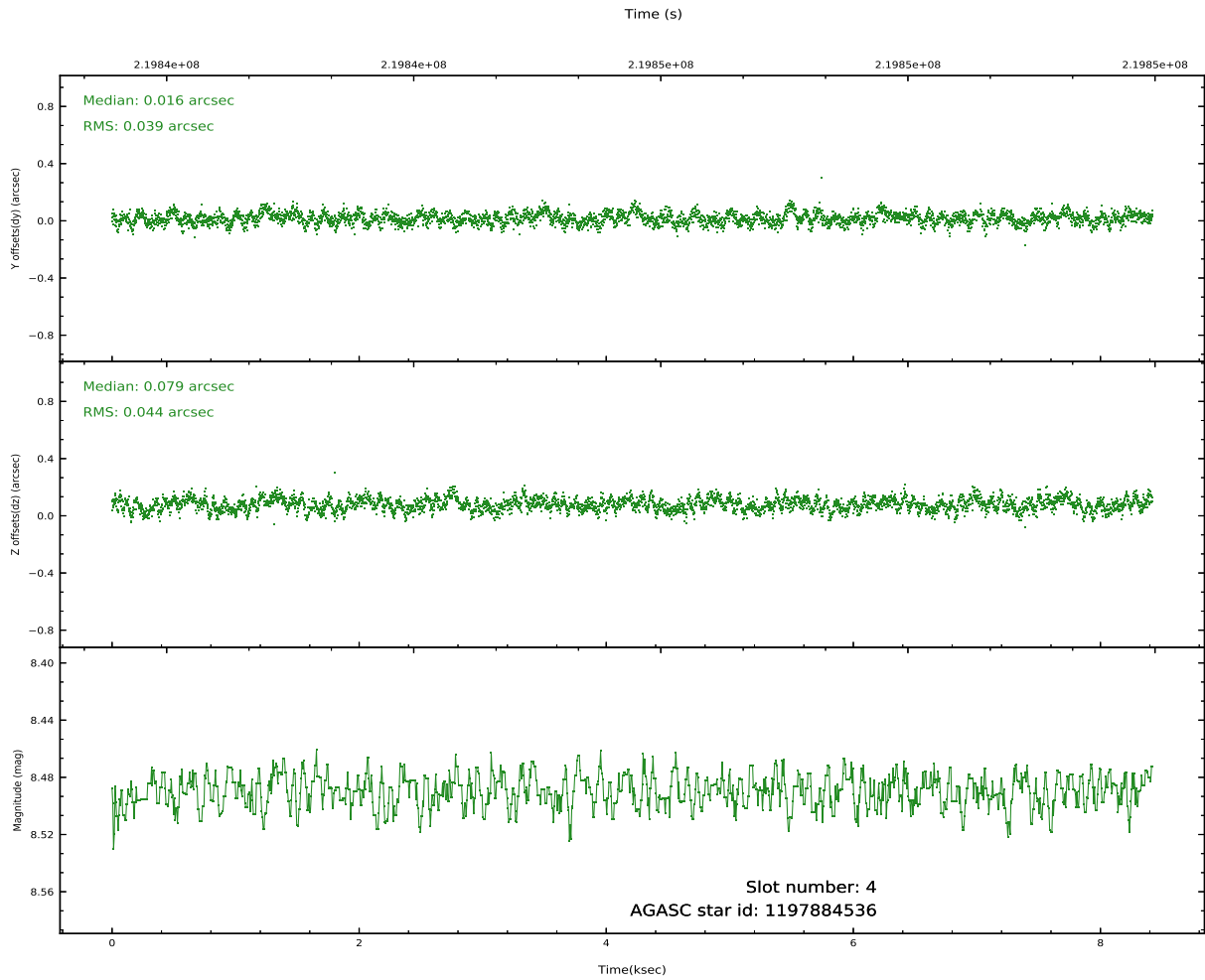
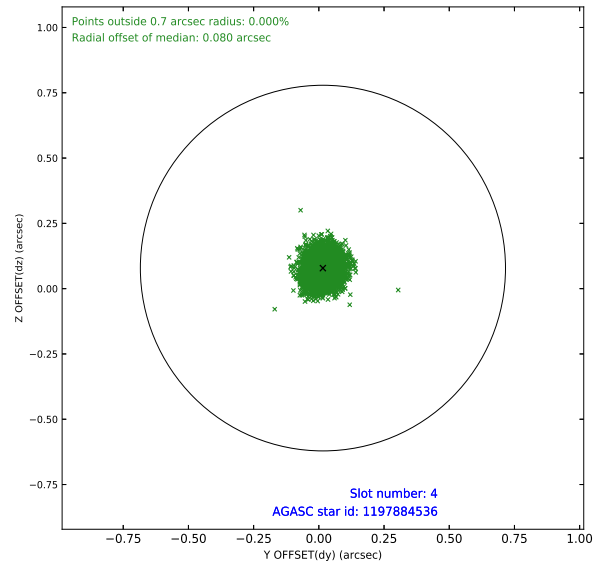
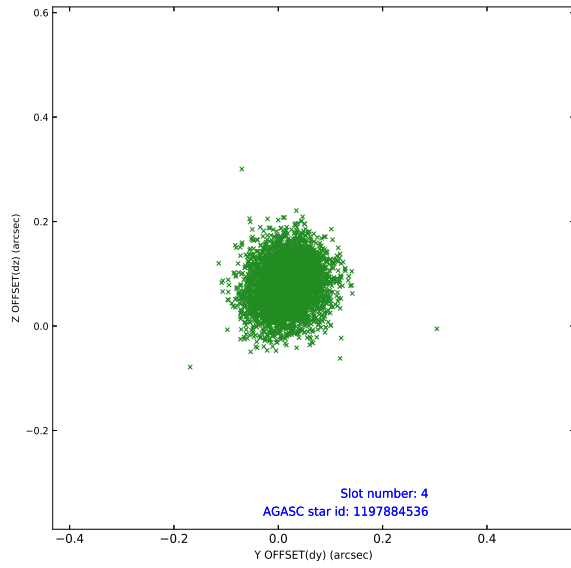
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2.4 Star Slots

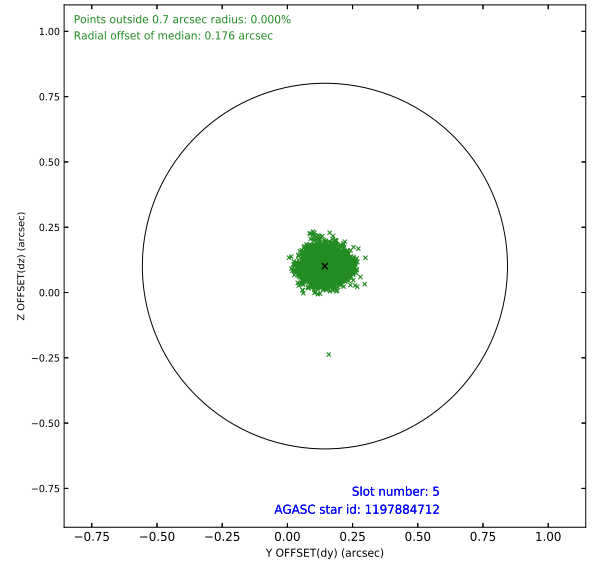
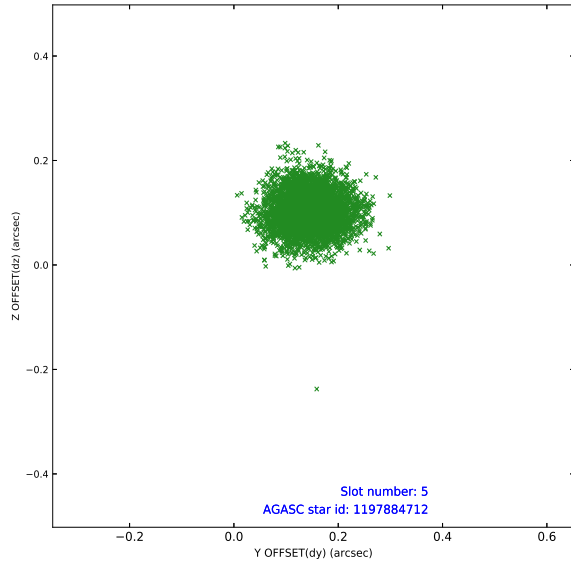
2.4.1 Slot 3



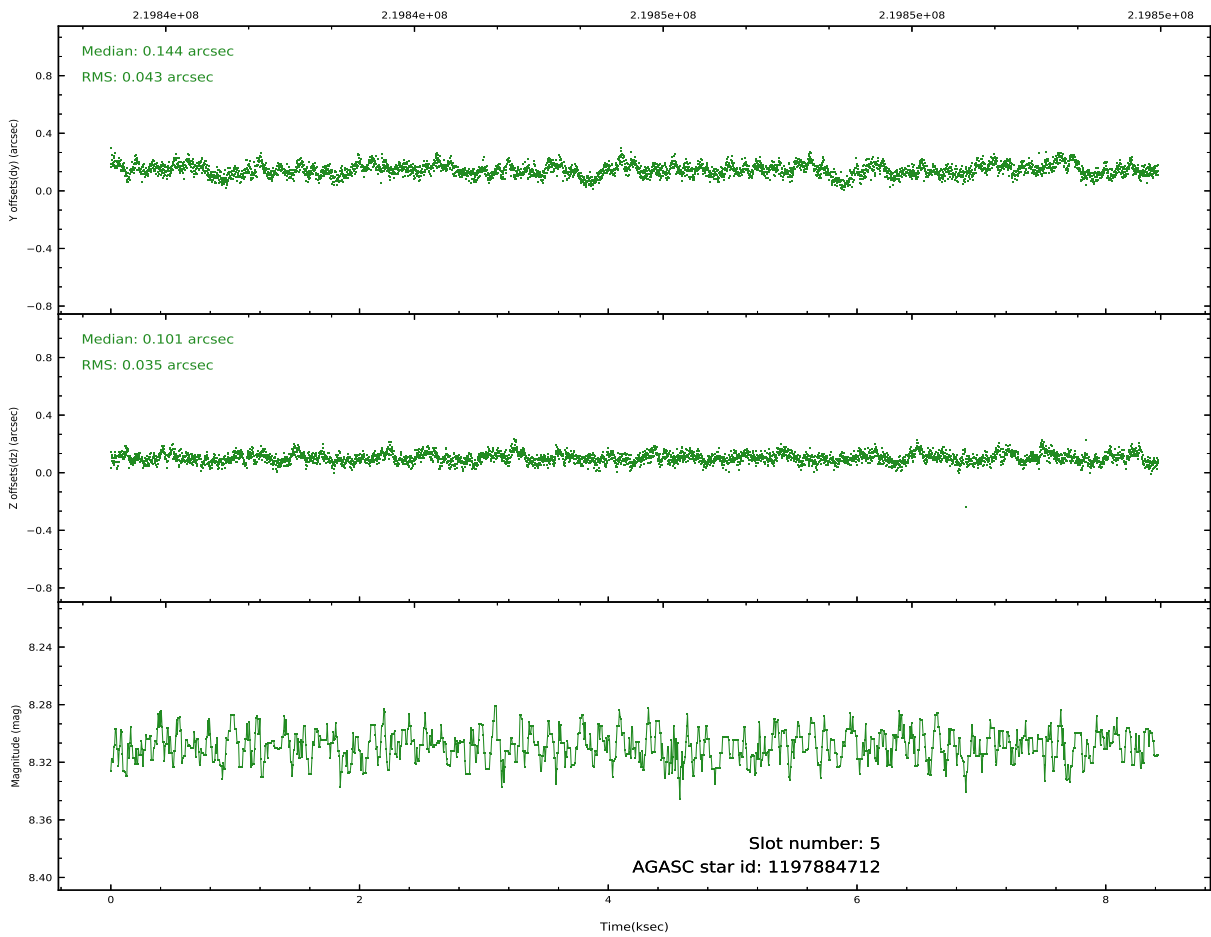
2.4.2 Slot 4



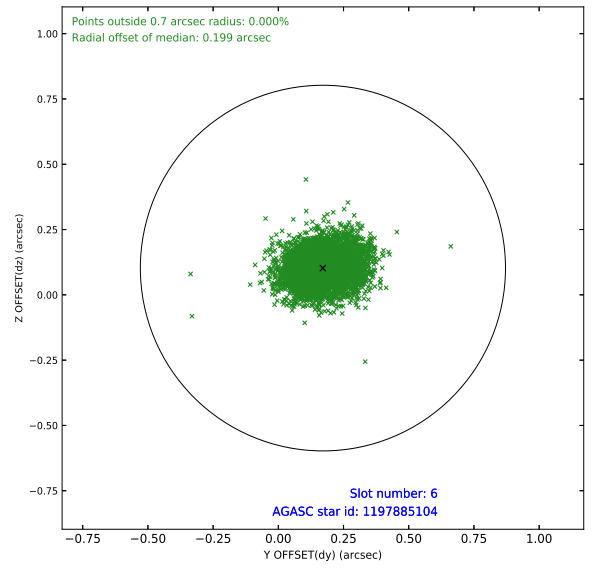
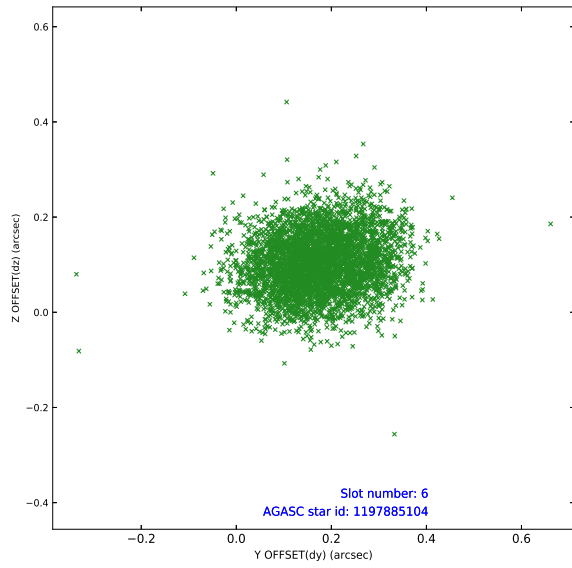
2.4.3 Slot 5



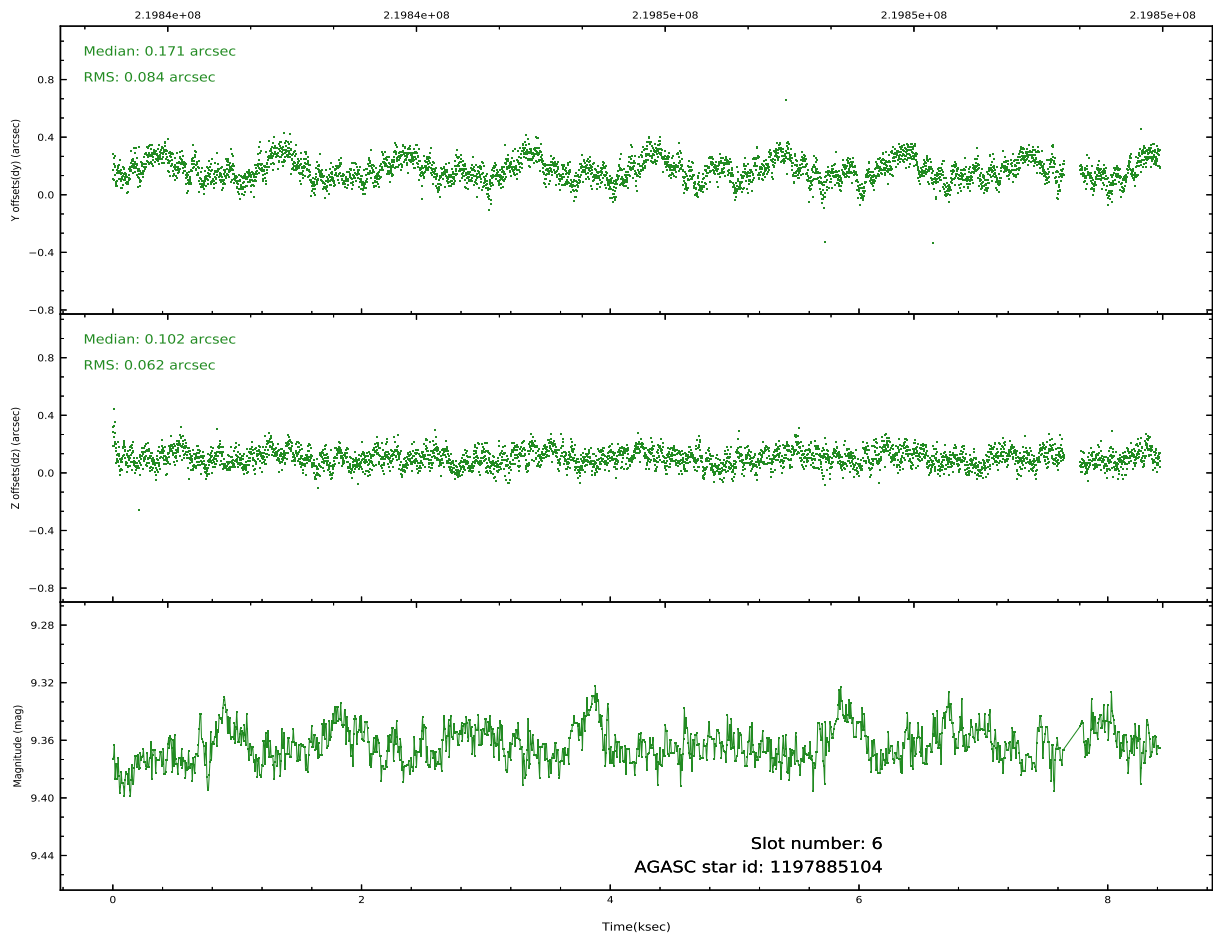
Time (s)



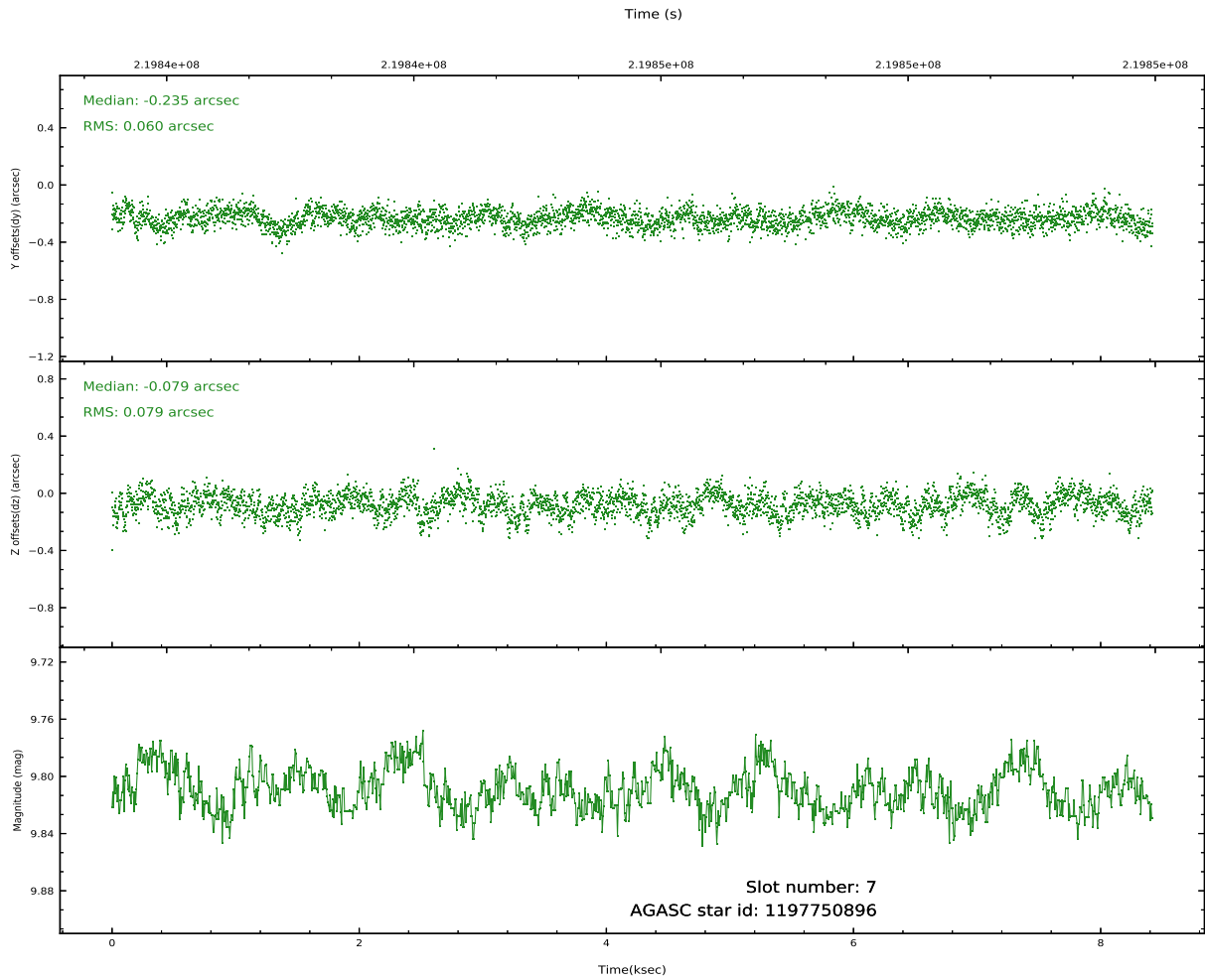
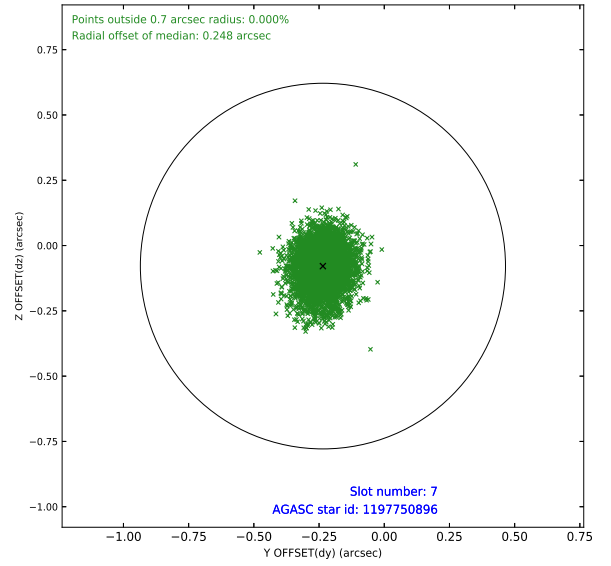
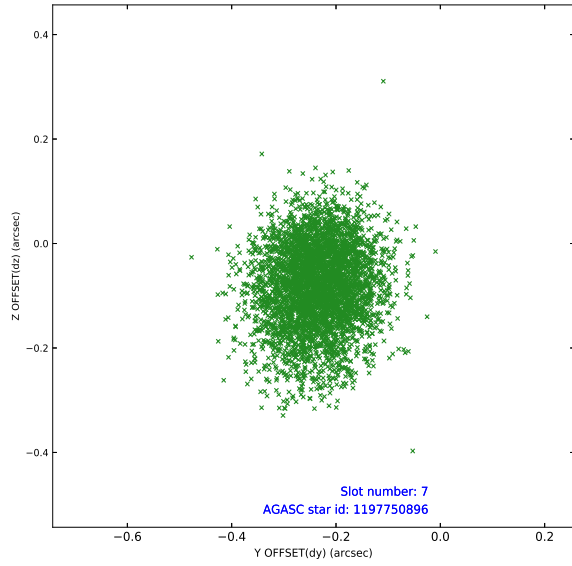
2.4.4 Slot 6



Time (s)

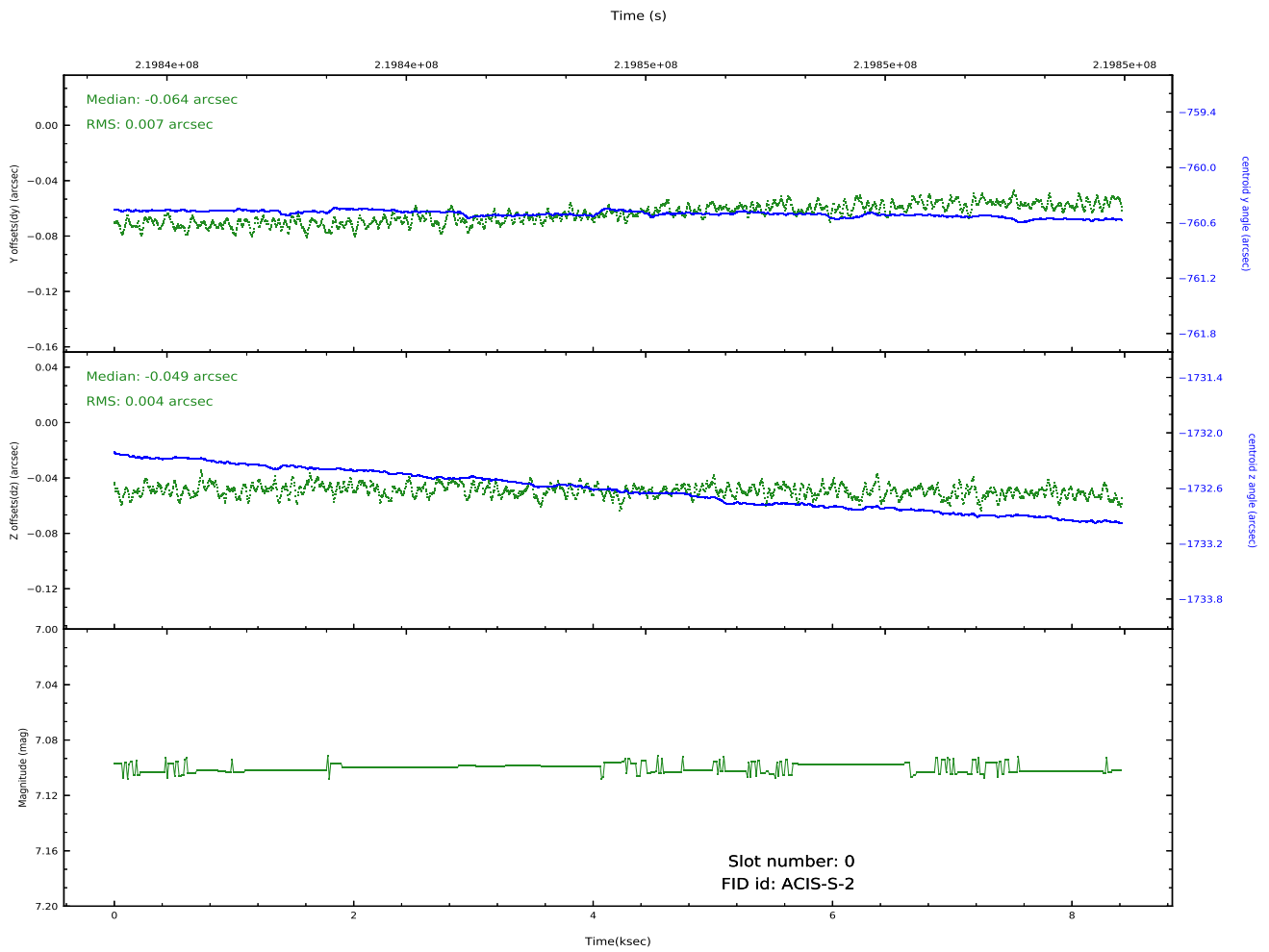
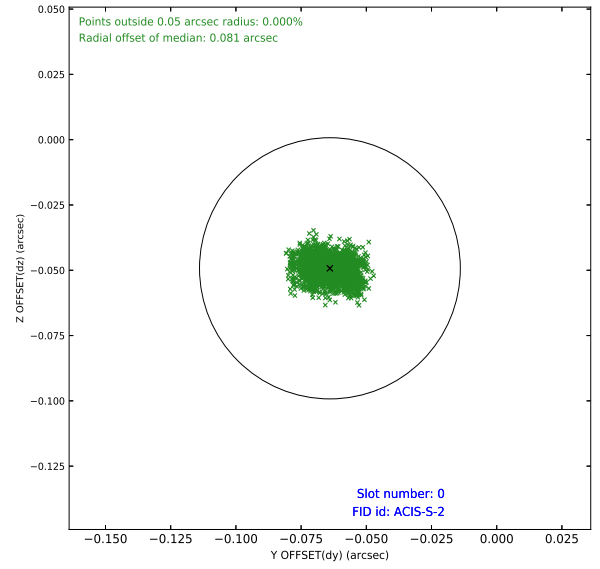
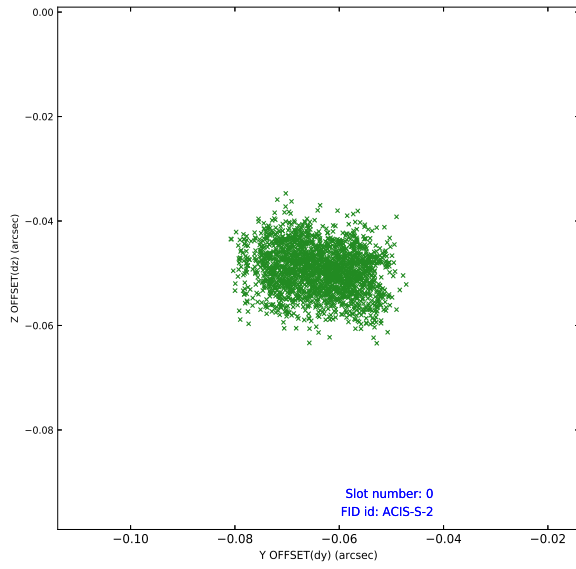


2.4.5 Slot 7

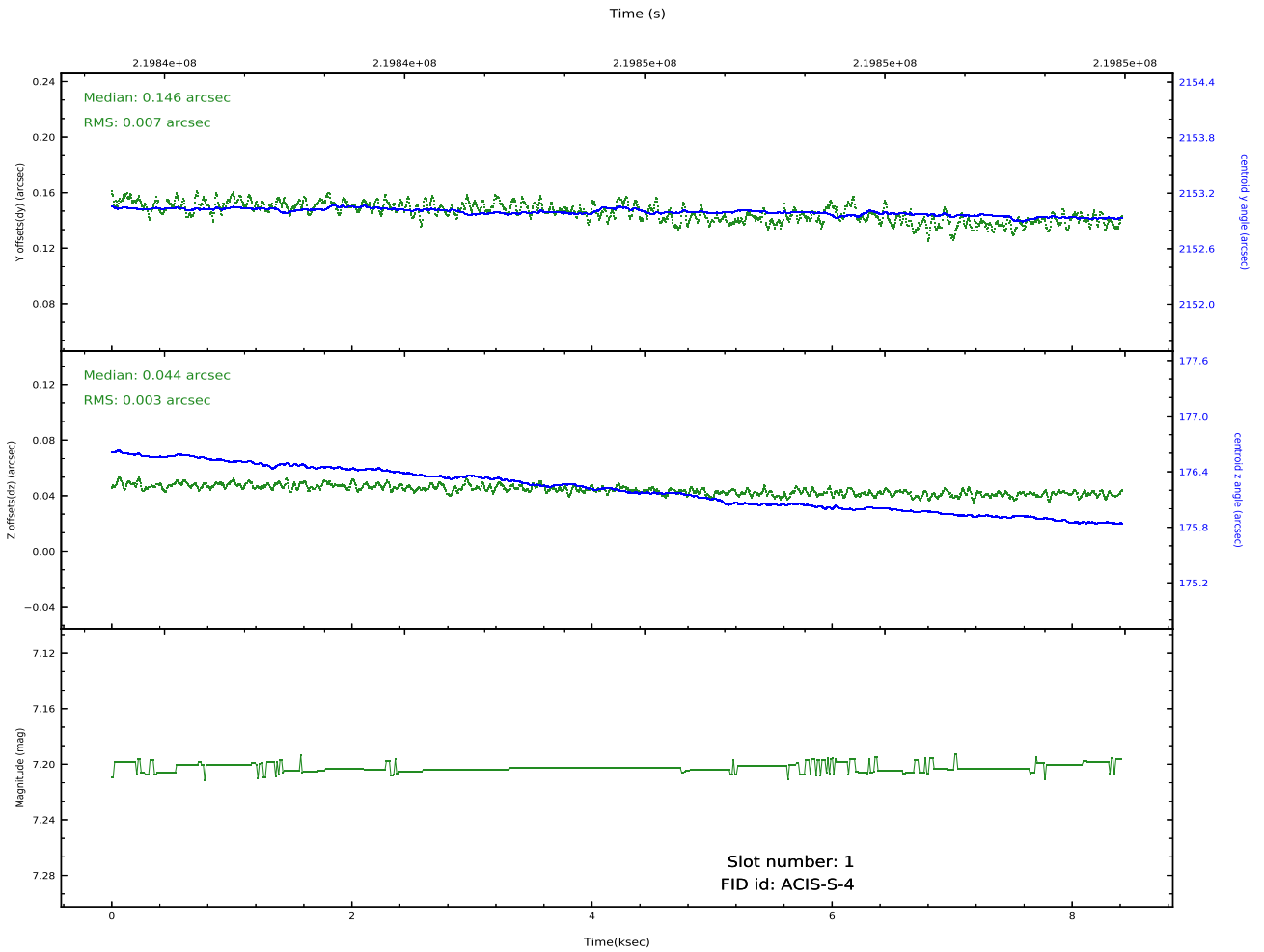
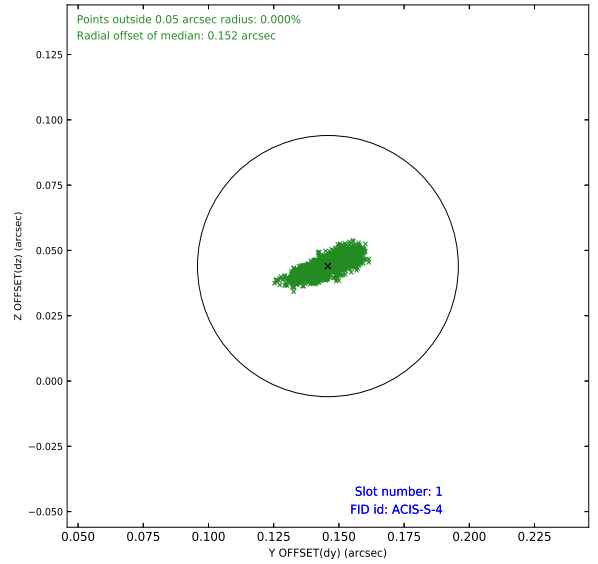
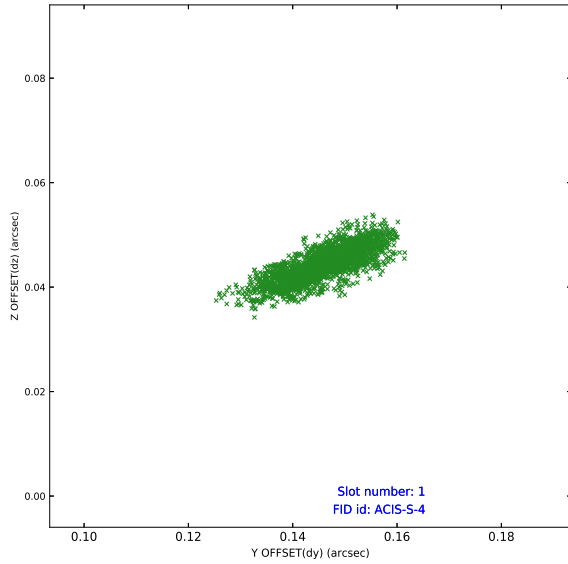


2.5 FID Slots

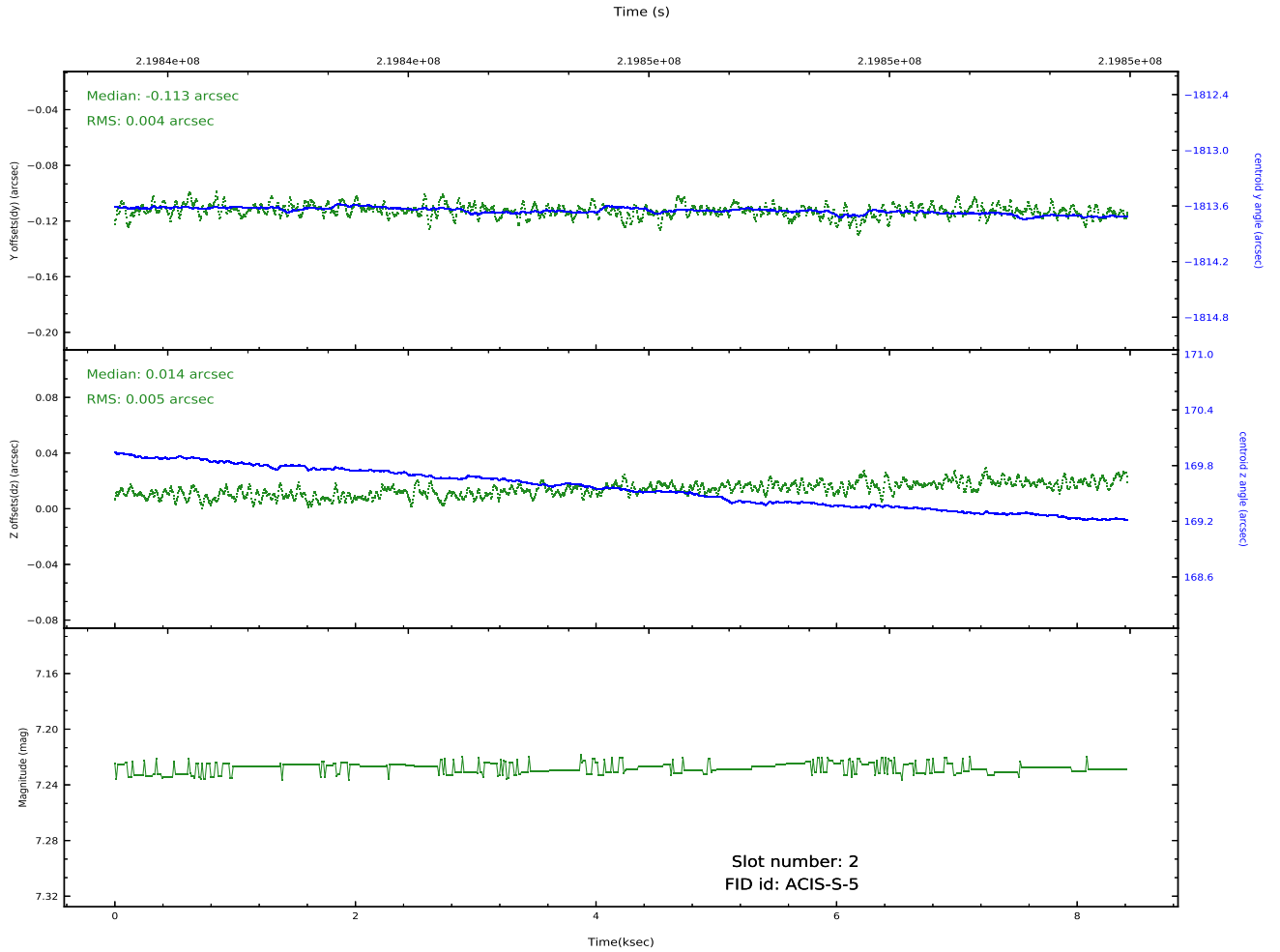
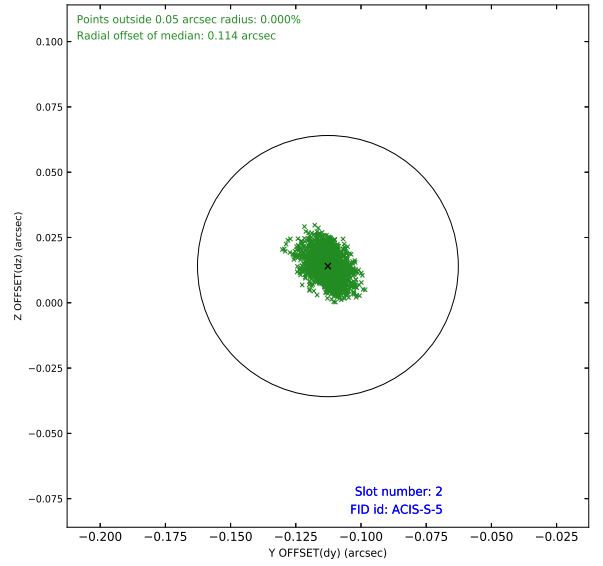
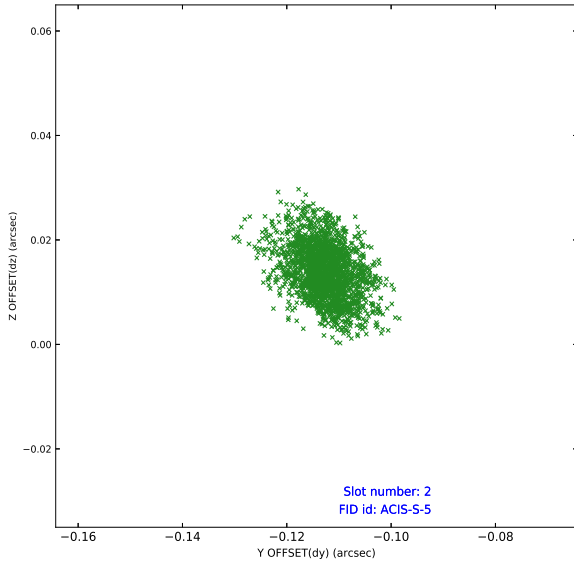
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.951999

A.2 Comments

Window constraint met.