

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 7184 - L2 Version 5
Chandra X-Ray Center

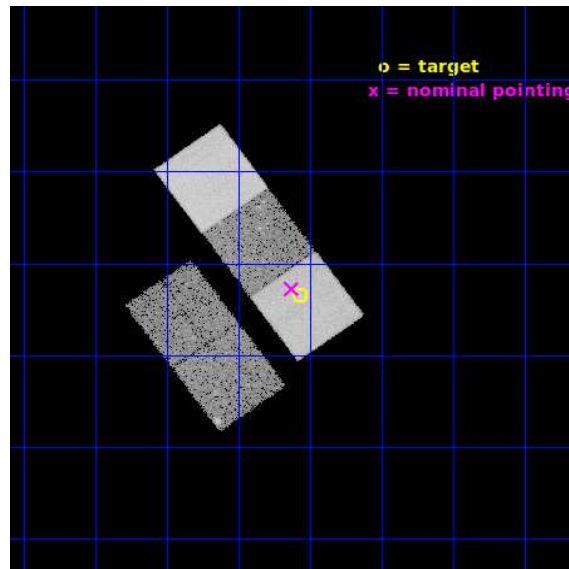
L2 Processing Date : Oct 10 2020

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1 Front

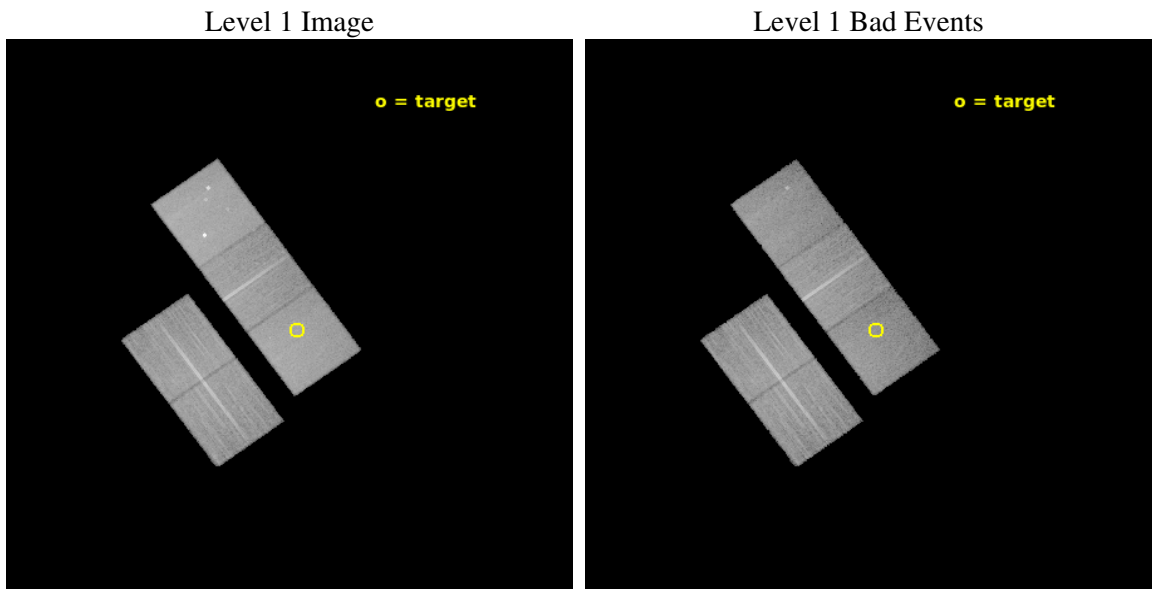
seq_num	800500	Sequence number
obs_id	7184	Observation id
title	A detailed study of a z>1 galaxy cluster	Proposal title
observer	Dr Laurence Jones	Principal investigator
object	2XLSSd J022404.2-041331	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	36.017083	Observer's specified target RA [deg]
dec_targ	-4.224694	Observer's specified target Dec [deg]
ra_nom	36.031885151238	Nominal RA [deg]
dec_nom	-4.2124326193929	Nominal Dec [deg]
roll_nom	54.162727756472	Nominal Roll [deg]
revision	5	Processing version of data
ontime	22980.299955785	Sum of GTIs [s]
livetime	22680.045419012	Livetime [s]
ontime2	22977.158955634	Sum of GTIs [s]
ontime3	22977.158965617	Sum of GTIs [s]
ontime5	22980.299955785	Sum of GTIs [s]
ontime6	22980.299955785	Sum of GTIs [s]
ontime7	22980.299955785	Sum of GTIs [s]
l2events	200691	Number of level 2 events



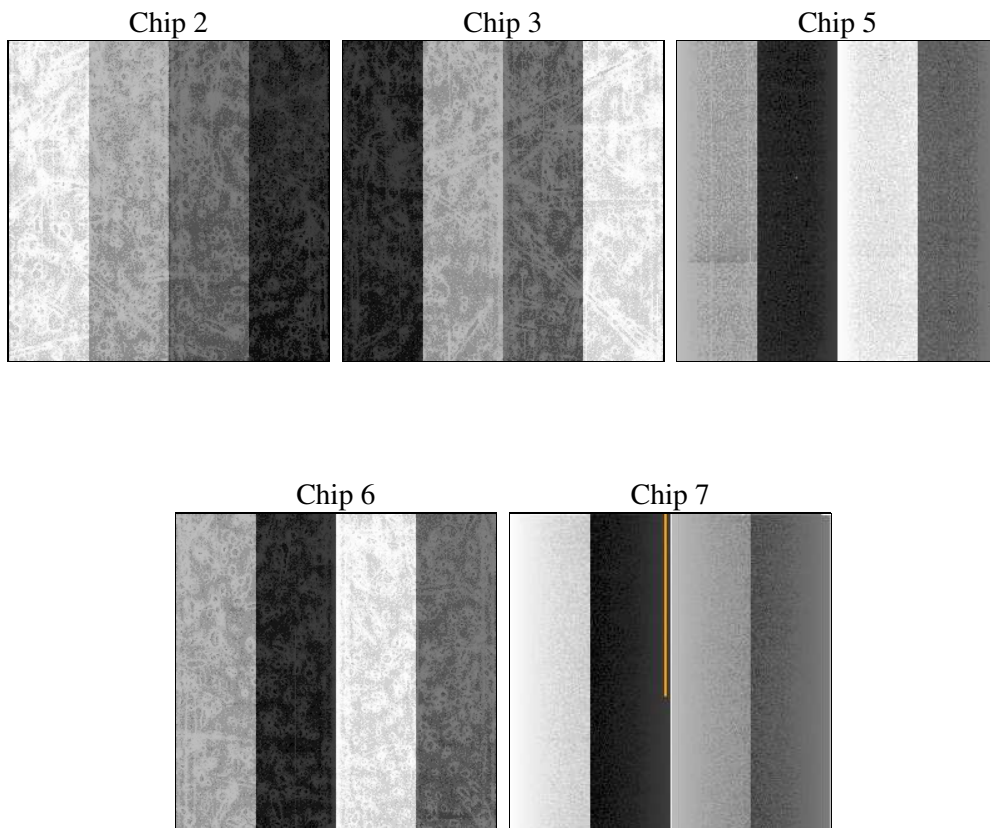
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	22800.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	22980.299955785	Sum of GTIs [s]
caldbver	4.9.2	 	ontime2	22977.158955634	Sum of GTIs [s]
date	2020-10-11T02:27:33	Date and time of file creation	ontime3	22977.158965617	Sum of GTIs [s]
revision	5	Processing version of data	ontime5	22980.299955785	Sum of GTIs [s]
			ontime6	22980.299955785	Sum of GTIs [s]
			ontime7	22980.299955785	Sum of GTIs [s]
			l1events	846521	Number of level 1 events

2.1.4 Events

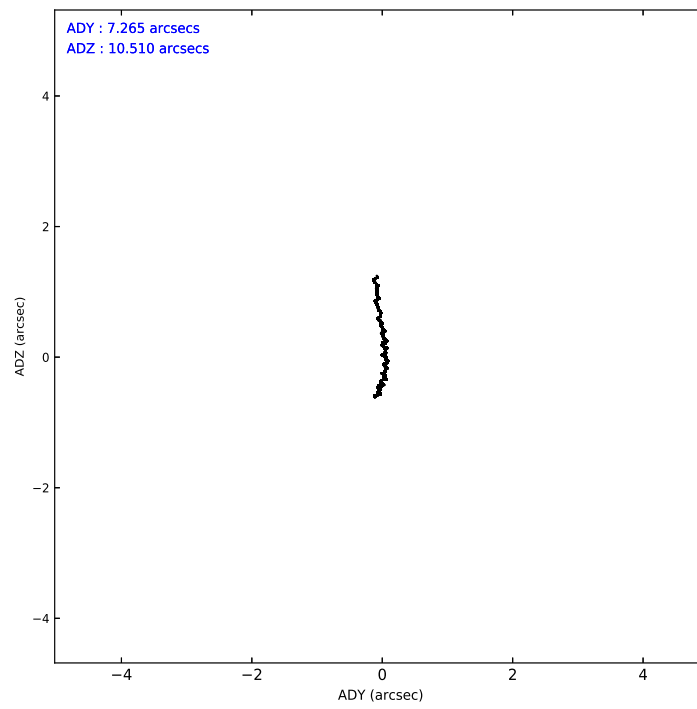
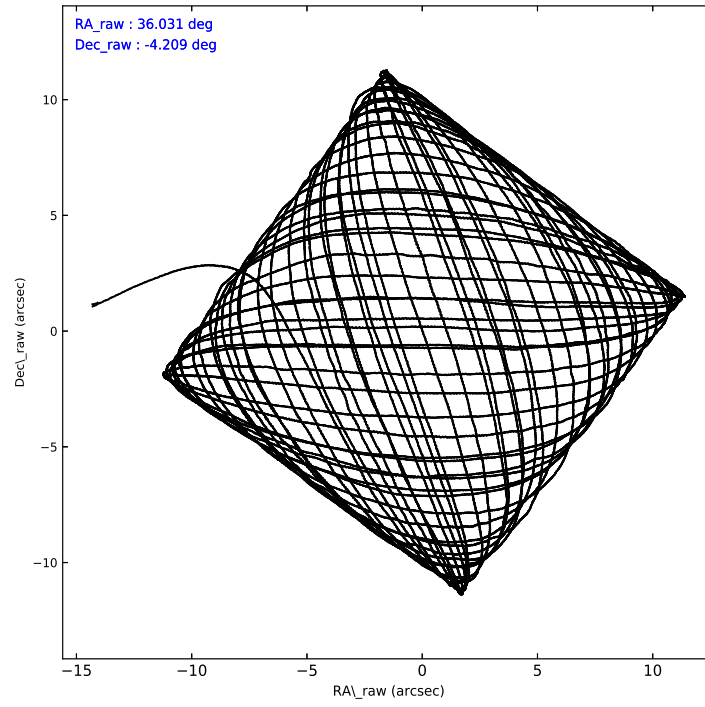
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	159429	149059	213937	151373	172723
rejected events	145476	135159	110982	136107	98482
rejected %	91%	90%	51%	89%	57%

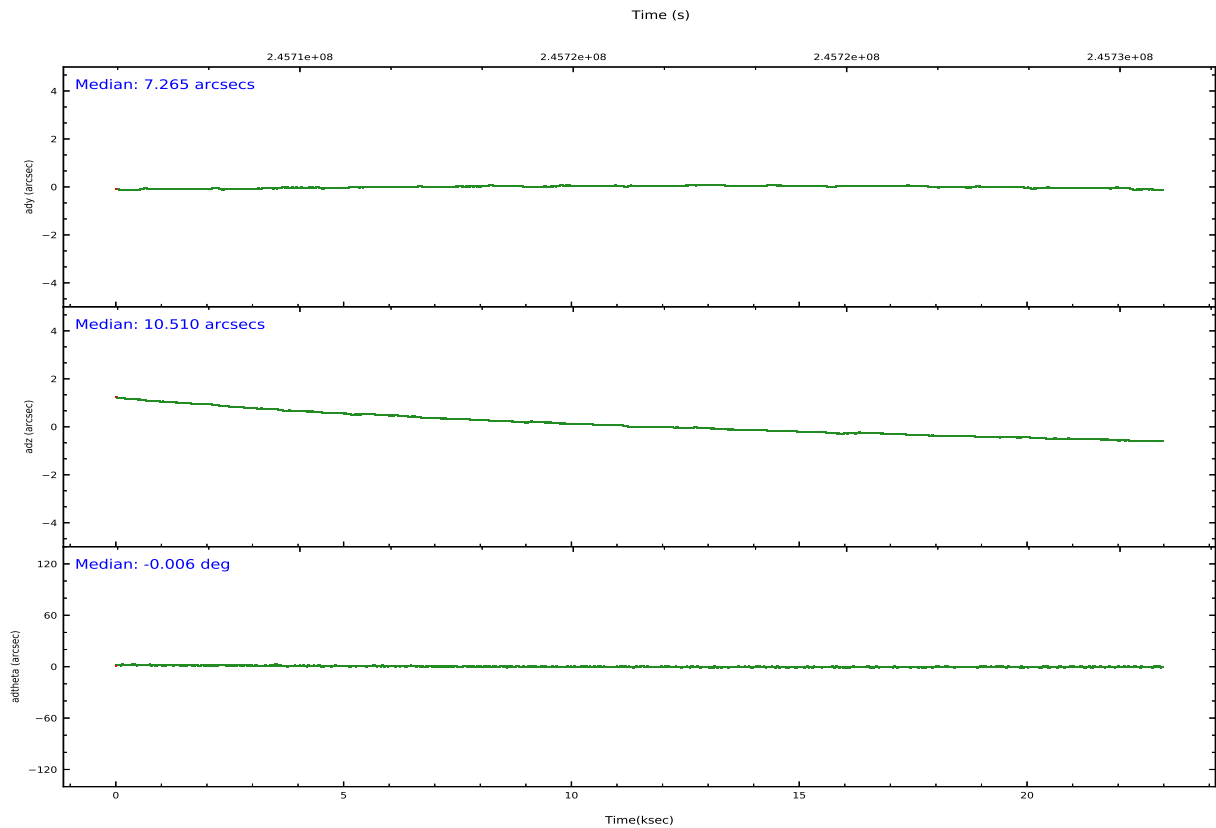
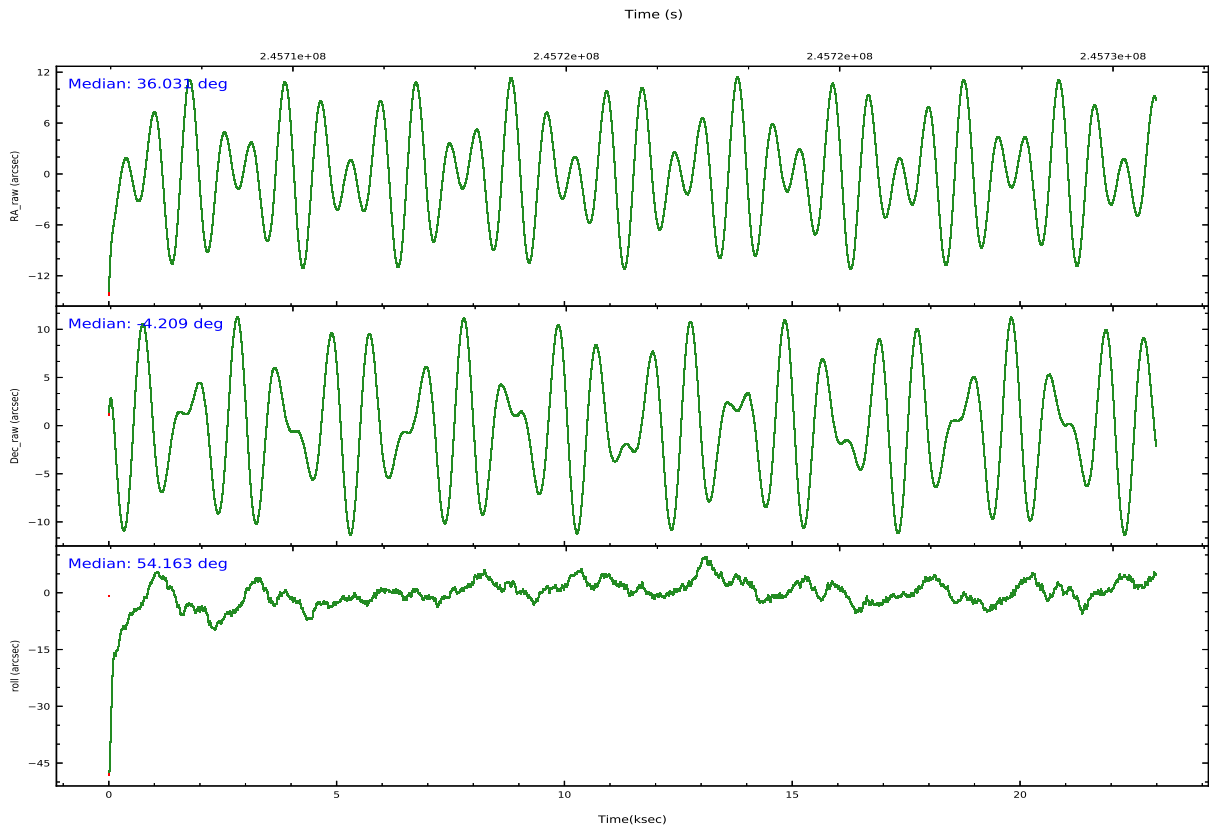
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	5110	5328	13098	5553	6646
	3%	3%	6%	3%	3%
grade 1 events	83	63	176	77	156
	0%	0%	0%	0%	0%
grade 2 events	3510	3027	30810	3405	15369
	2%	2%	14%	2%	8%
grade 3 events	1583	1635	4675	1772	7404
	0%	1%	2%	1%	4%
grade 4 events	1678	1666	4342	1738	7106
	1%	1%	2%	1%	4%
grade 5 events	4920	6033	17337	6227	18300
	3%	4%	8%	4%	10%
grade 6 events	2632	2792	54329	3433	40803
	1%	1%	25%	2%	23%
grade 7 events	139913	128515	89170	129168	76939
	87%	86%	41%	85%	44%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-23567	ACIS-23567	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	36.028223	36.031885151238	Subarray requested	NONE	NONE
[deg] Pointing Dec	-4.236056	-4.2124326193929	Alternating exposures requested	N	N
[deg] Pointing Roll	54.000825	54.162727756472	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	245706146.184000	245704678.99139			
Observation start date	2005-10-14T19:41:22	2005-10-14T19:17:58			
[s] Observation end time (MET)	245728946.184000	245730174.84256			
Observation end date	2005-10-15T02:01:22	2005-10-15T02:22:54			
Read mode	TIMED	TIMED			

2.3 Aspect





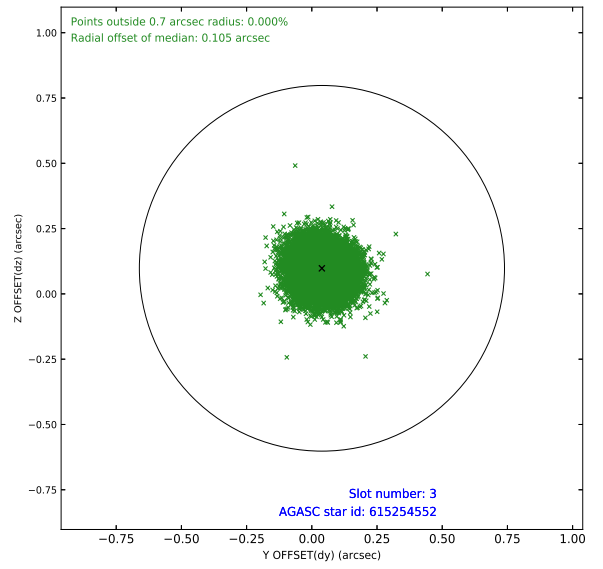
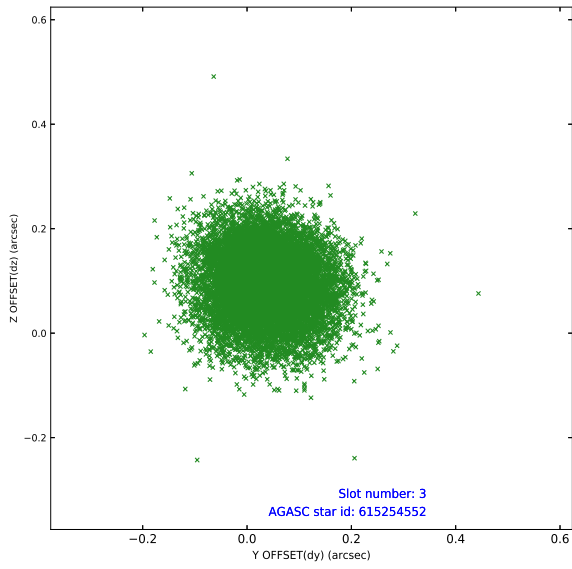
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	5607	1.000	-0.114	-0.095	0.008	0.016	0.000000	0.000000	-760.08	-1731
1	FID		ACIS-S-4	7.21	5606	1.000	0.104	0.052	0.009	0.016	0.000000	0.000000	2153.30	176
2	FID		ACIS-S-6	7.35	5607	1.000	-0.018	0.051	0.010	0.017	0.000000	0.000000	402.11	814
3	GUIDE	used	615254552	9.22	11201	1.000	0.039	0.098	0.097	0.156	36.600600	-3.877551	2252.04	-904
4	GUIDE	used	615256360	7.78	11208	1.000	-0.119	-0.201	0.076	0.123	36.286608	-3.875886	1594.72	10
5	GUIDE	used	615256944	9.79	11180	1.000	0.184	0.012	0.131	0.257	35.497386	-4.510719	-1919.85	959
6	GUIDE	used	615260160	9.70	11198	1.000	-0.006	0.073	0.144	0.225	35.737387	-3.921265	302.24	1510
7	GUIDE	used	615260392	7.63	11212	1.000	-0.105	0.017	0.061	0.102	35.914136	-3.376682	2261.97	2150

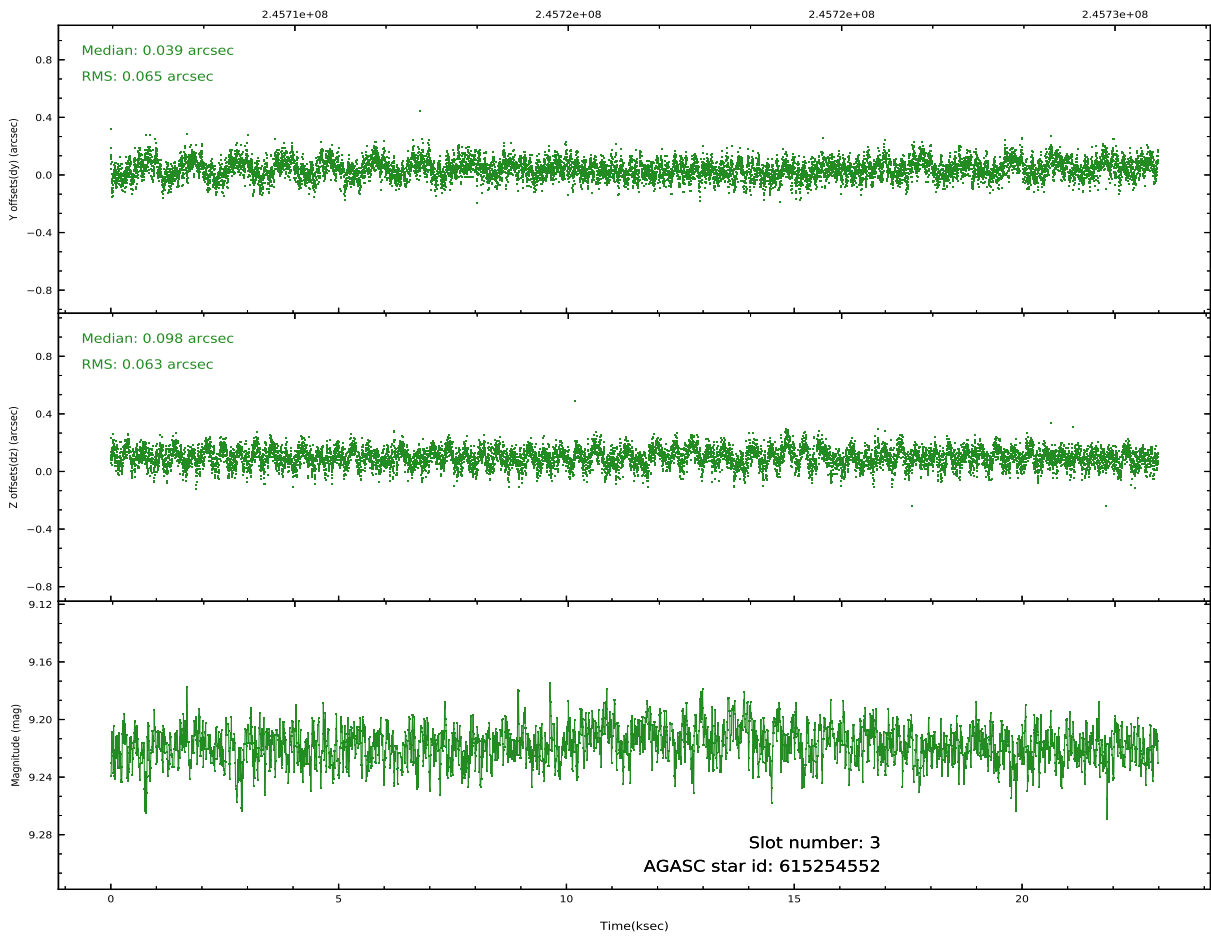
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2.4 Star Slots

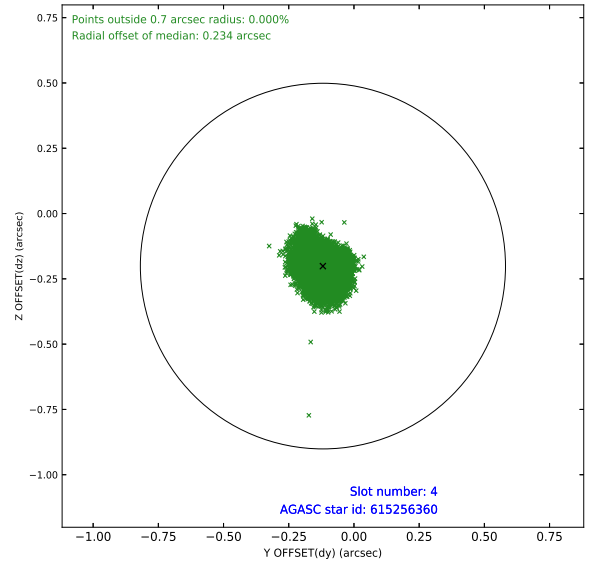
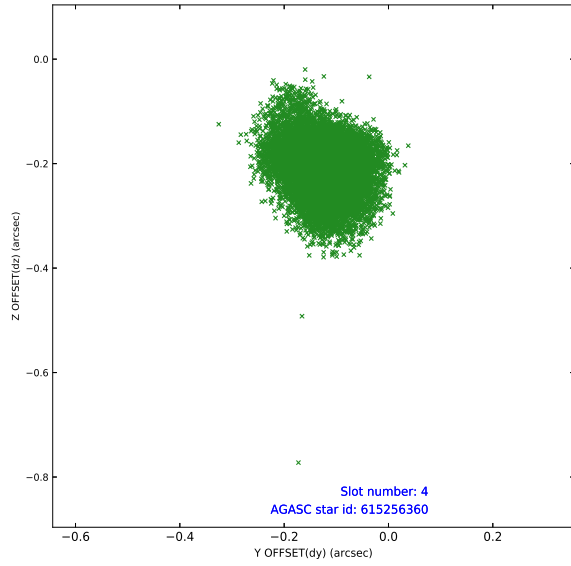
2.4.1 Slot 3



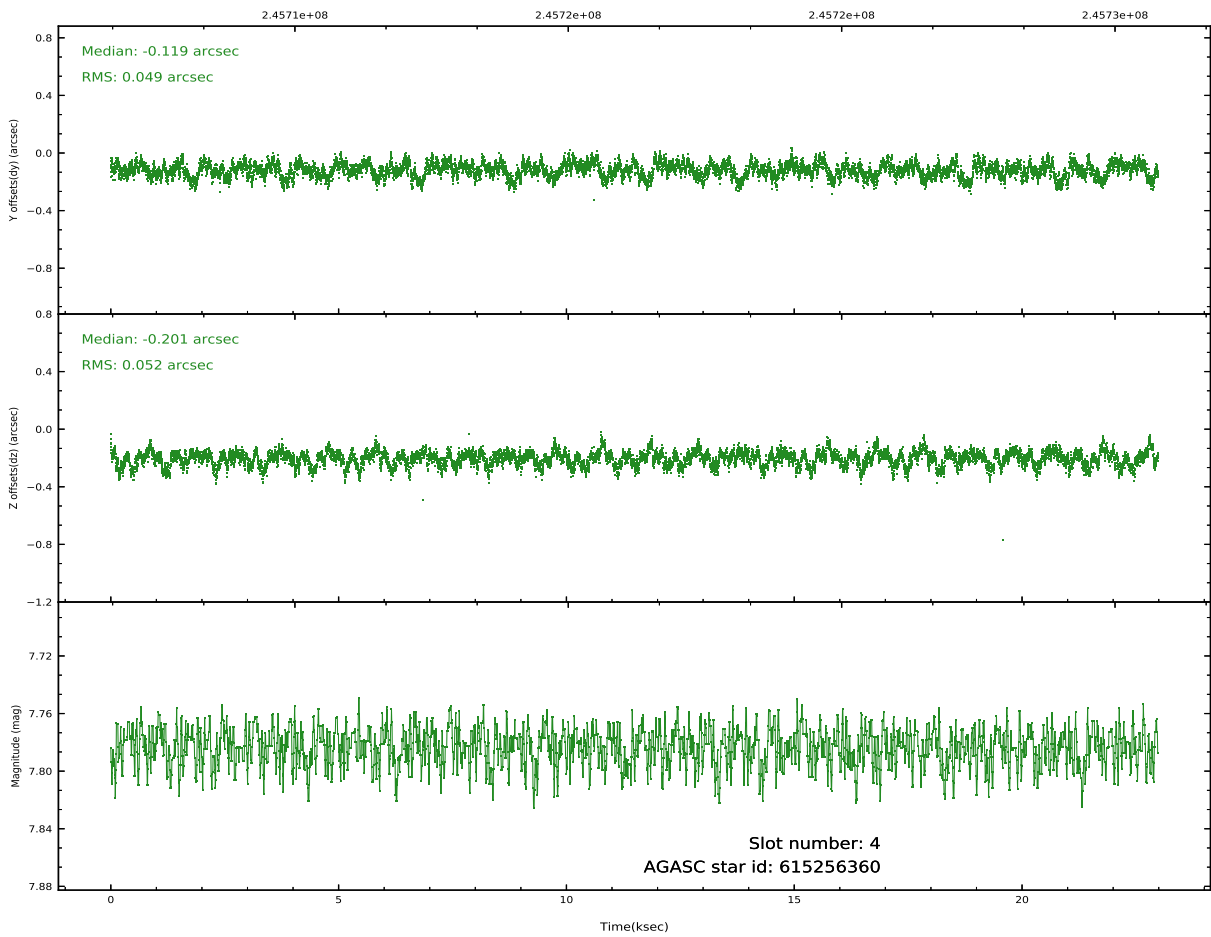
Time (s)



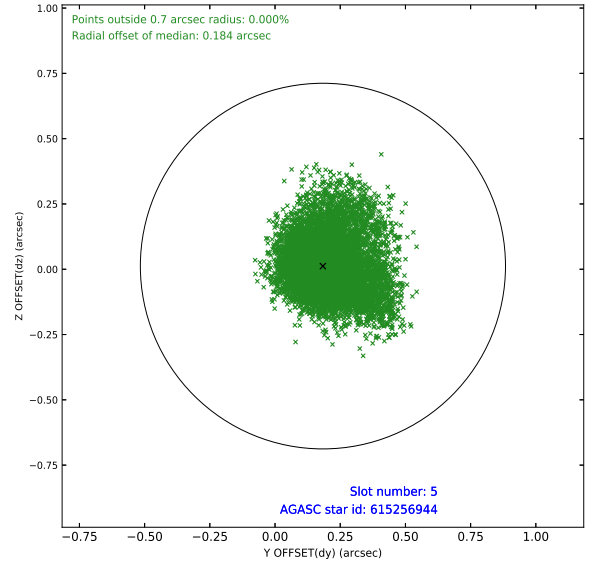
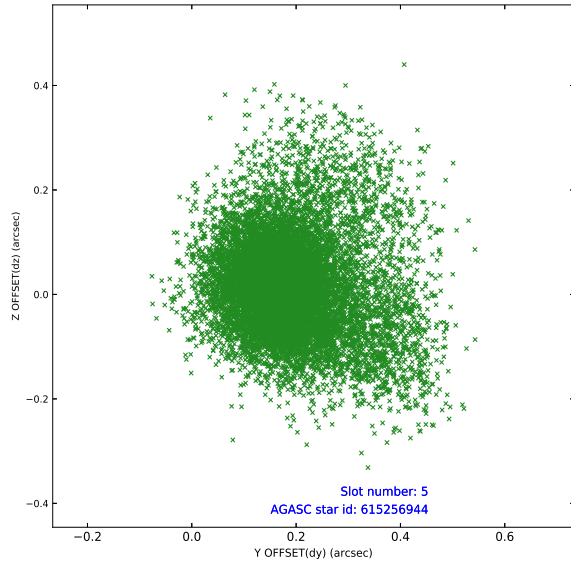
2.4.2 Slot 4



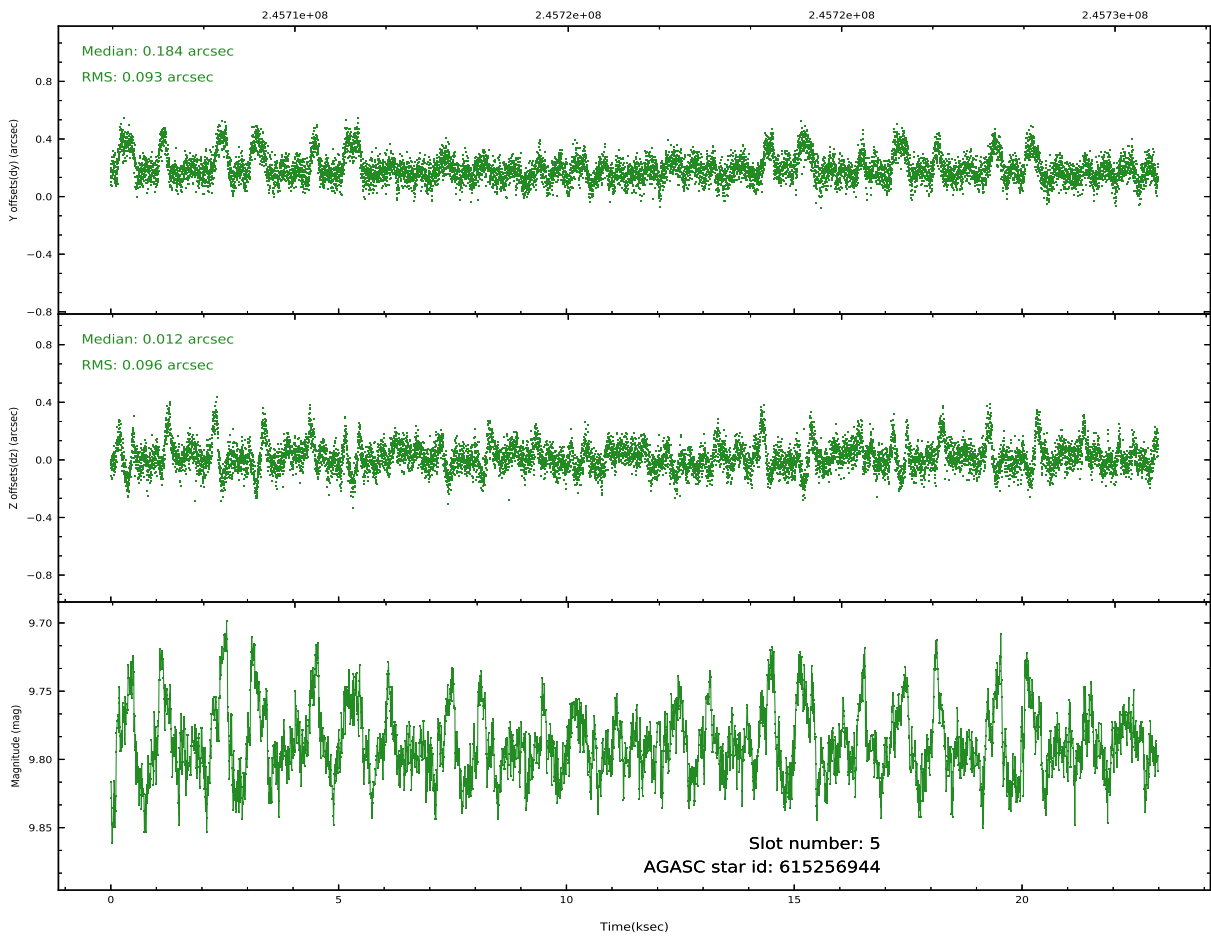
Time (s)



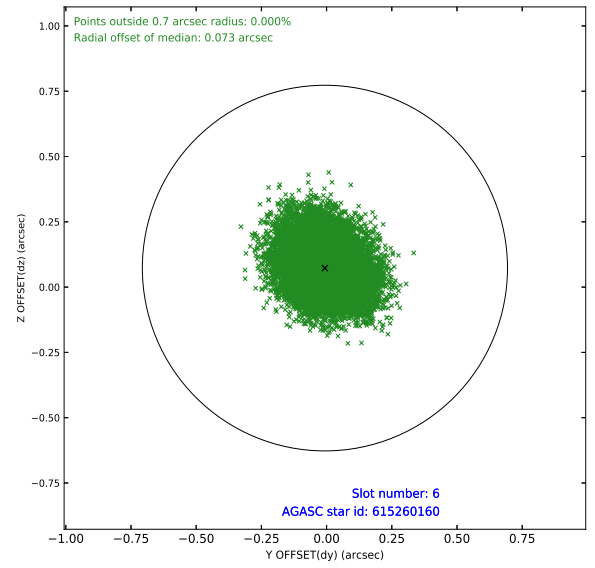
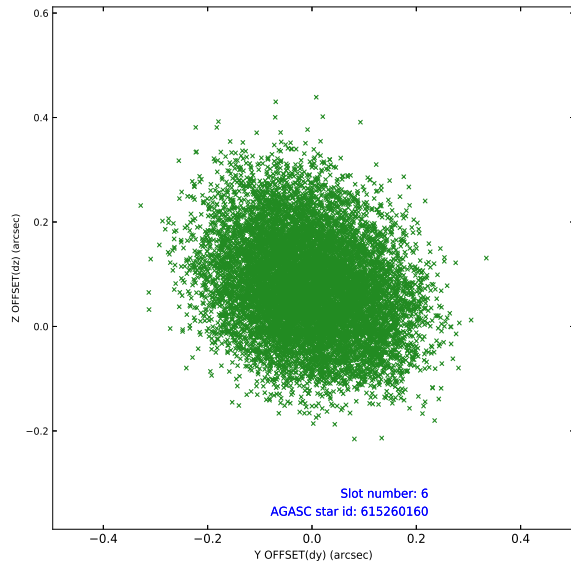
2.4.3 Slot 5



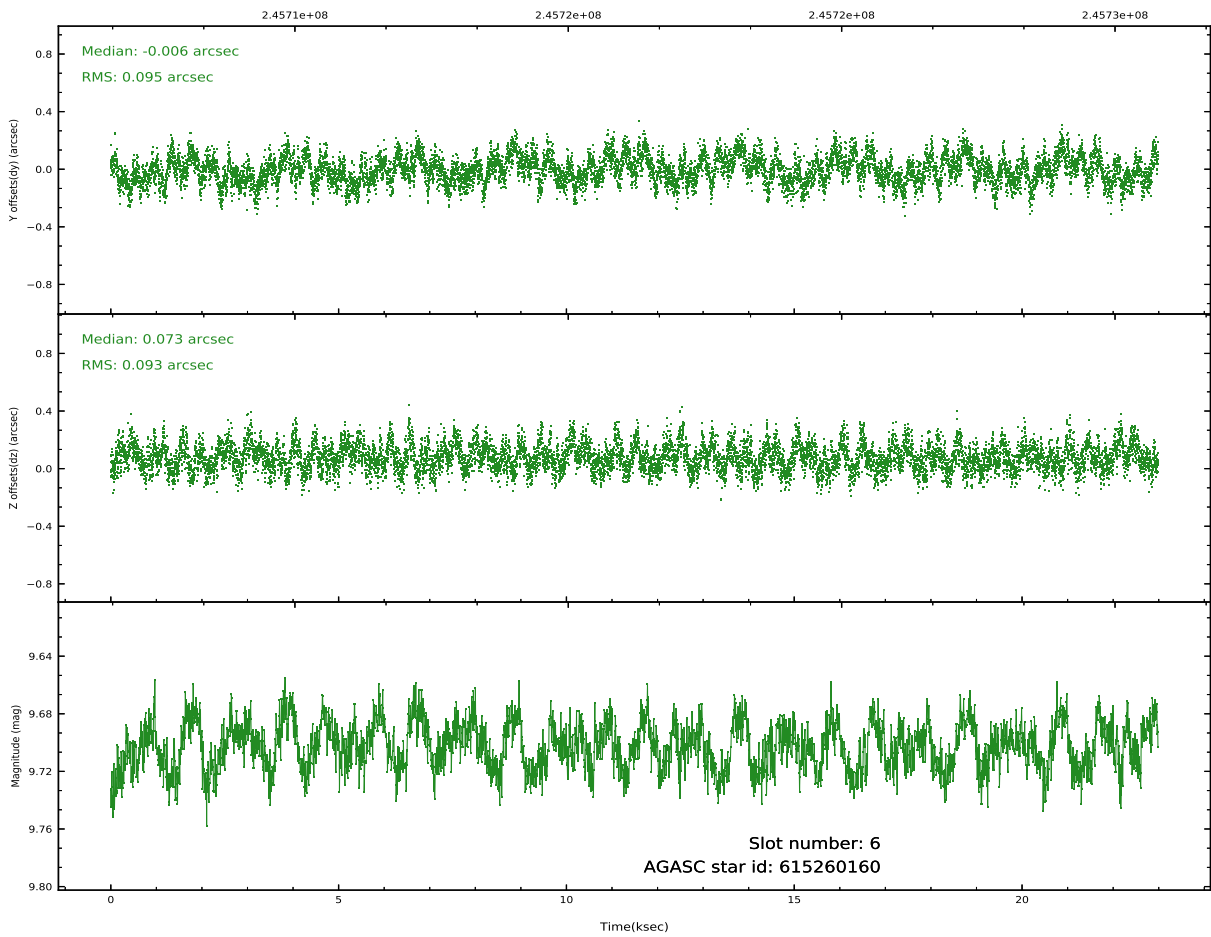
Time (s)



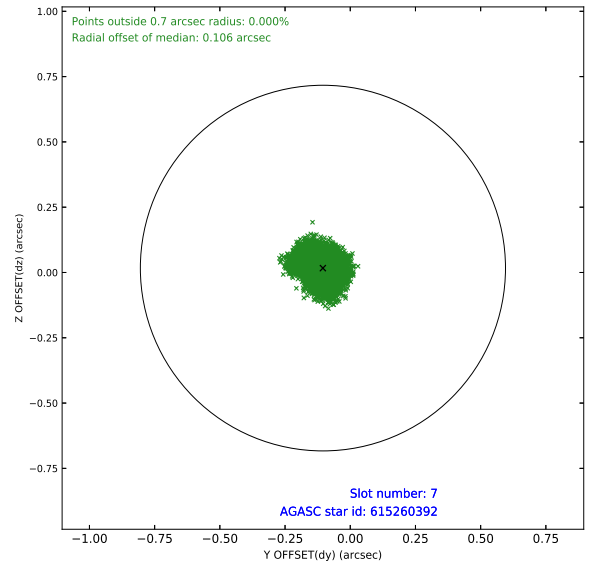
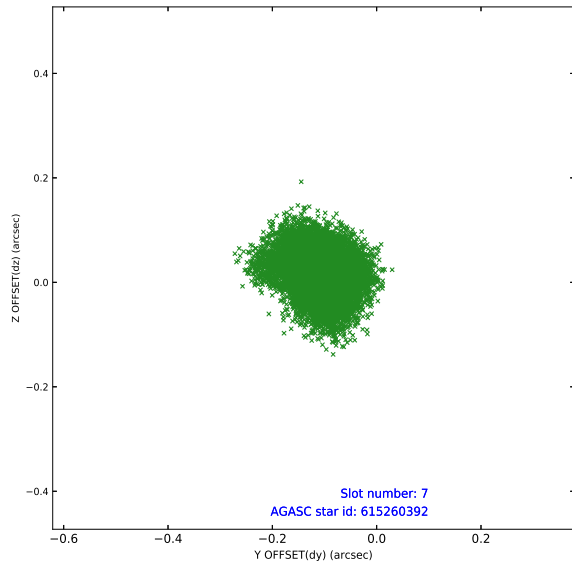
2.4.4 Slot 6



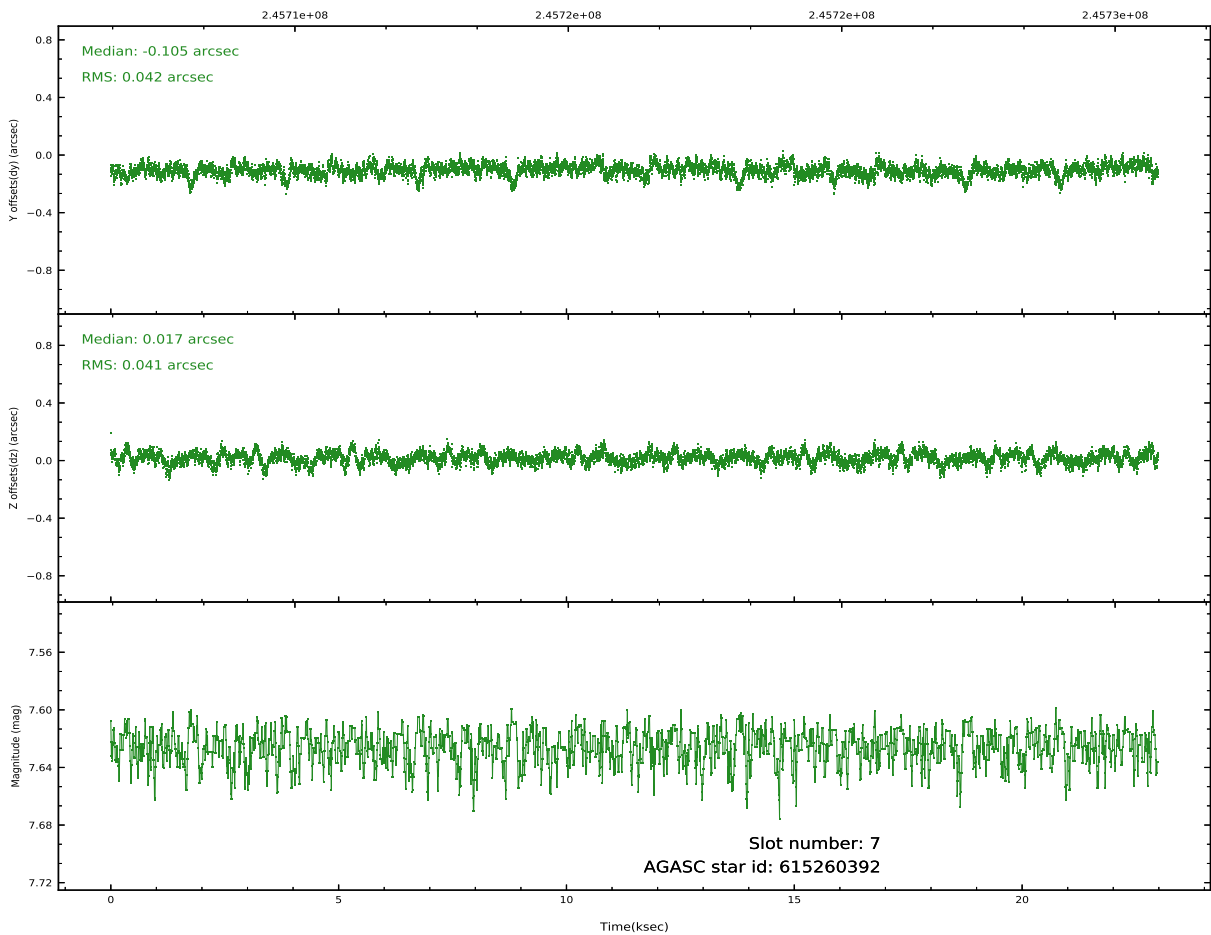
Time (s)



2.4.5 Slot 7

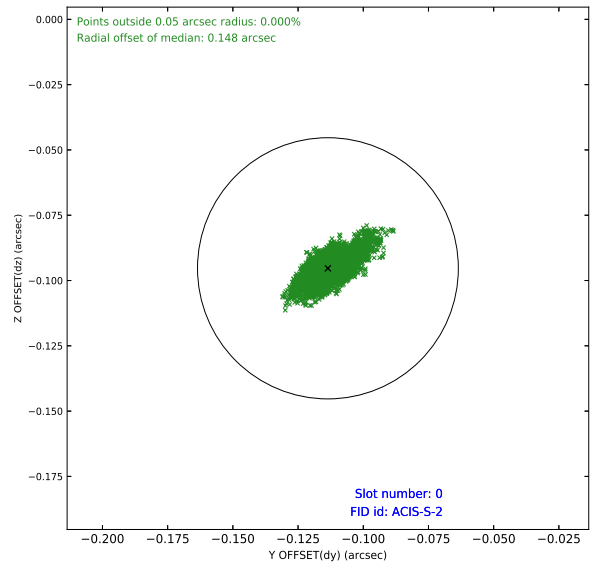
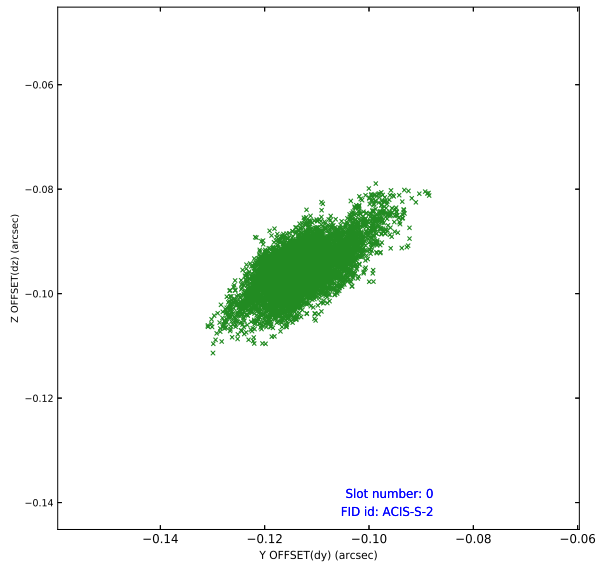


Time (s)

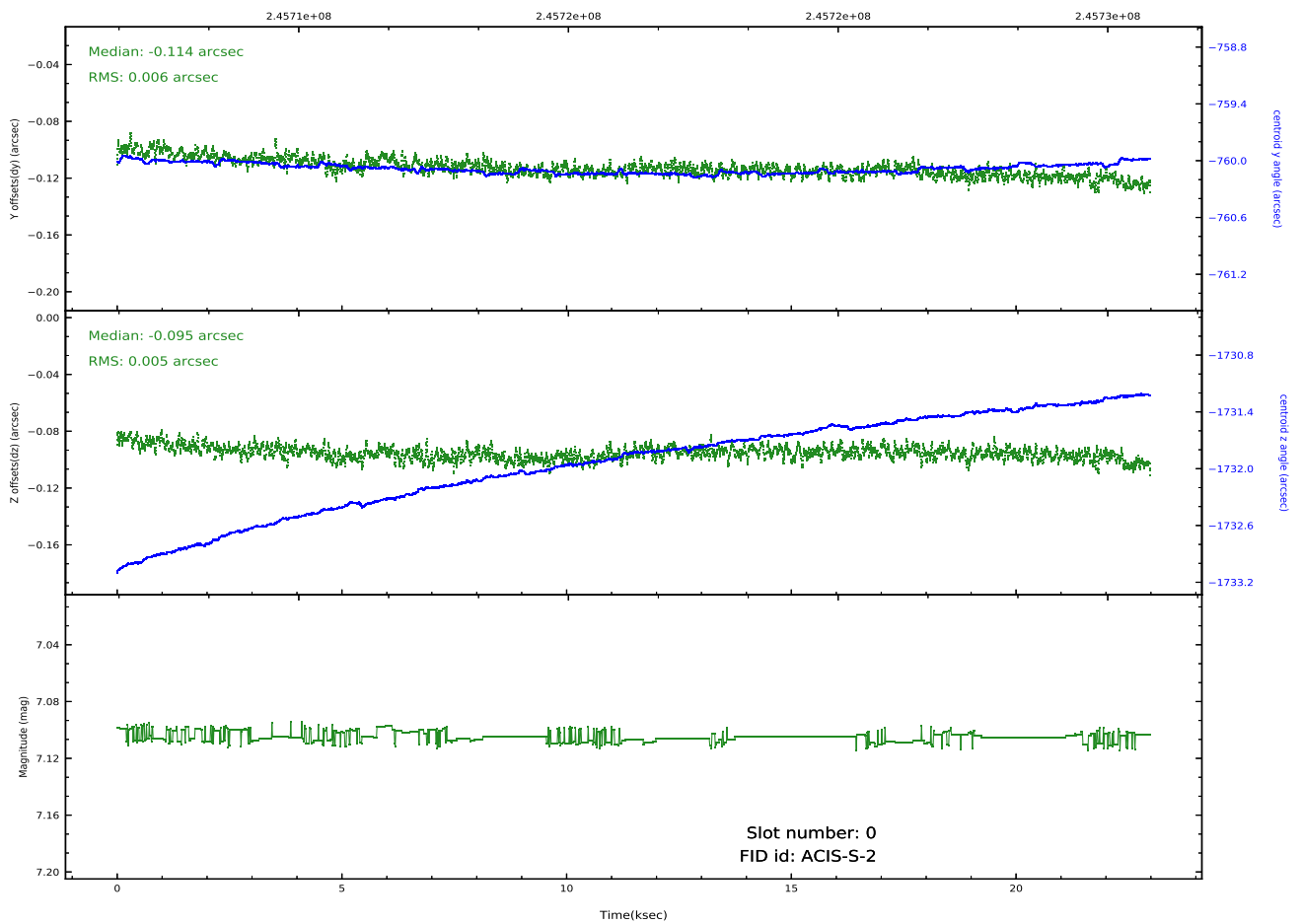


2.5 FID Slots

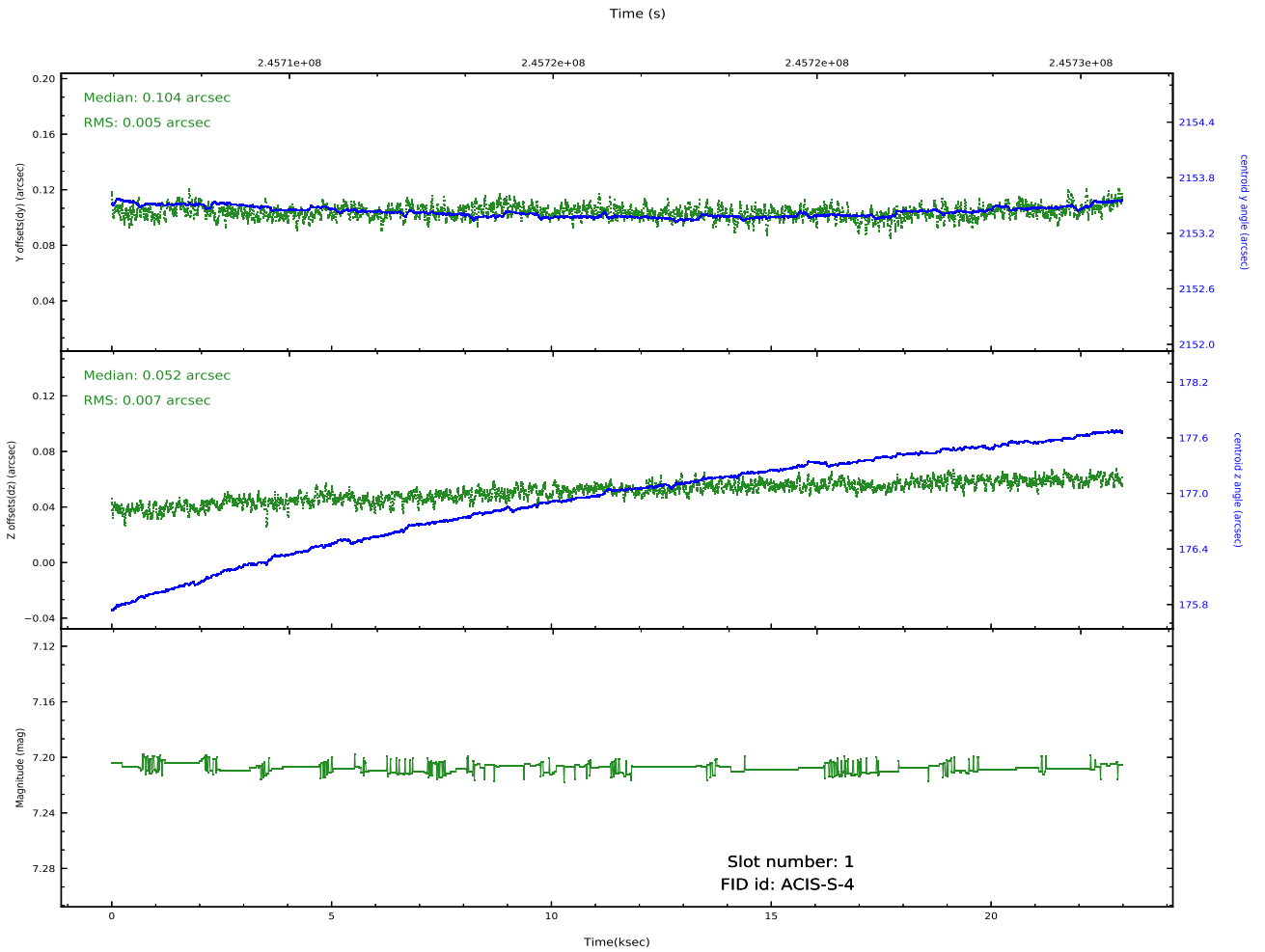
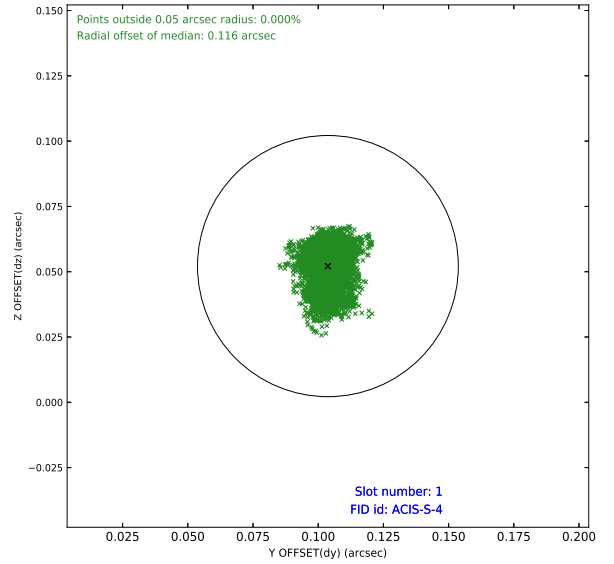
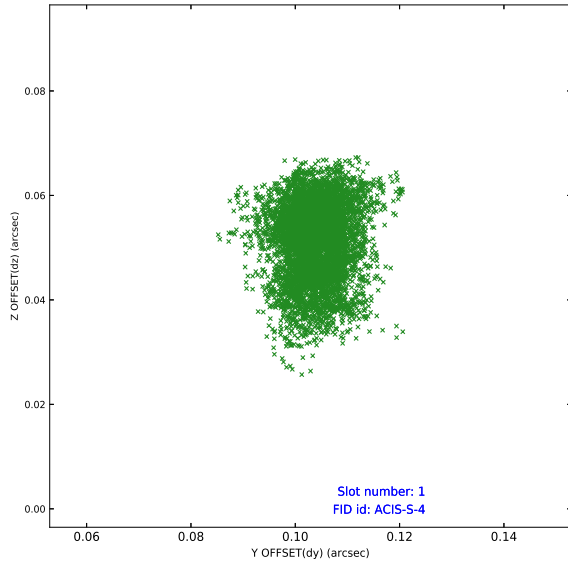
2.5.1 Slot 0



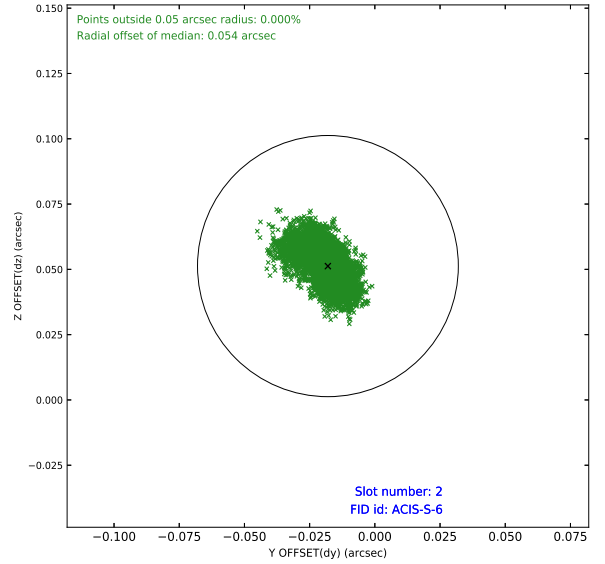
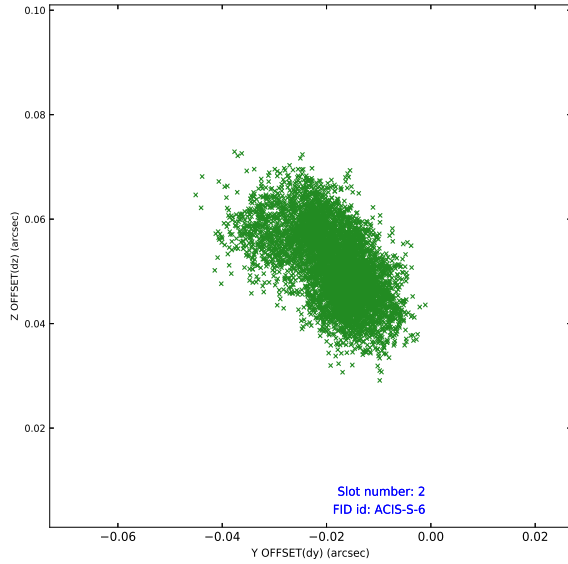
Time (s)



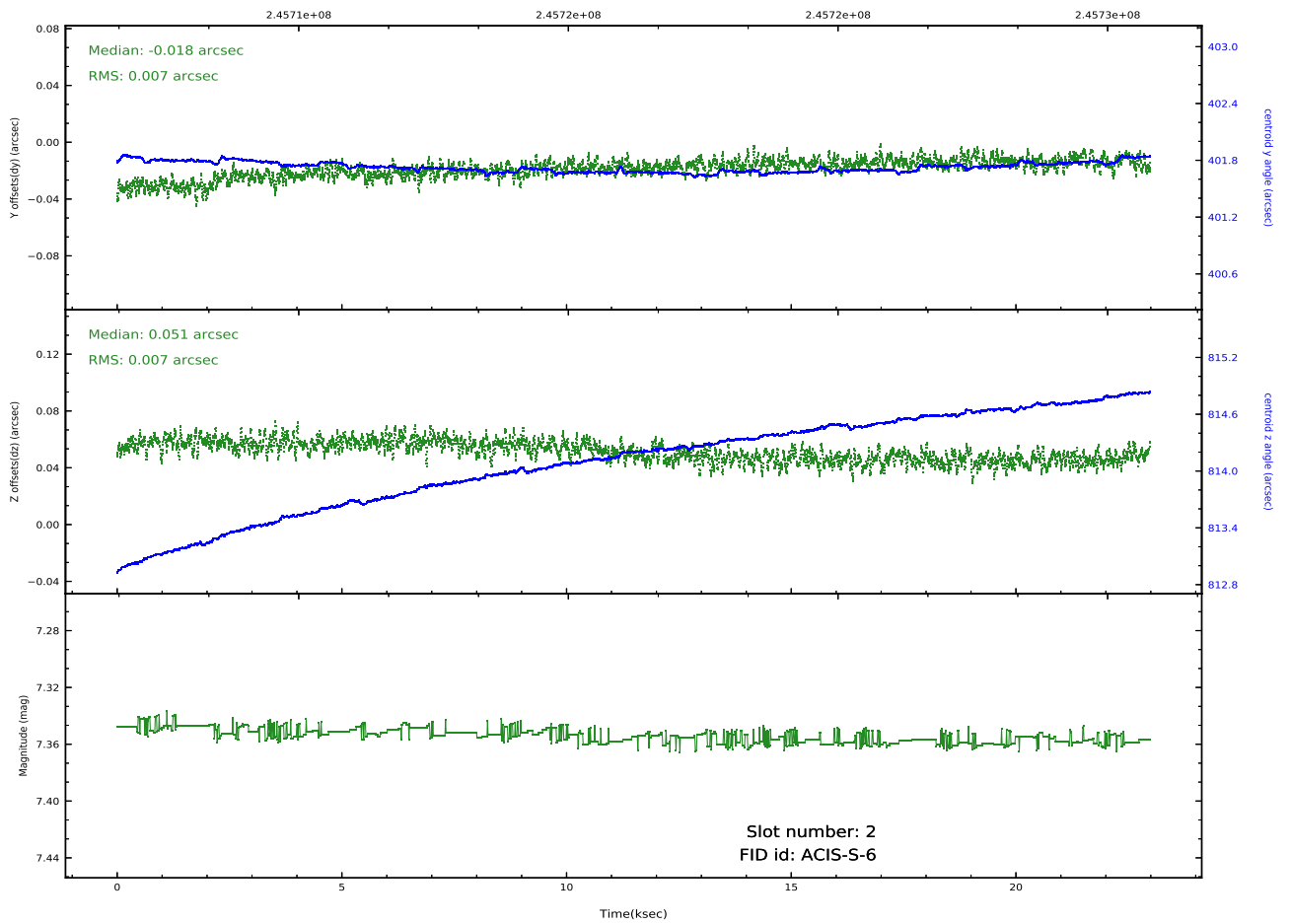
2.5.2 Slot 1



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	22.98029

A.2 Comments

Joint proposal with XMM.

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As a consequence of the DEA-A shutdown anomaly on Sep 15th (DOY258), the reported value of the ACIS FP temperature was ~1.3 degrees warmer than the actual temperature. The value for FP temperature reported in the headers of the Level 2 event file and the Mission Timeline files ARE INCORRECT by this amount for this processing. However, the temperature is corrected in the processing in order to obtain the correct temperature for the CTI correction. So the calibrated data are correct.