

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 15540 - L2 Version 2
Chandra X-Ray Center

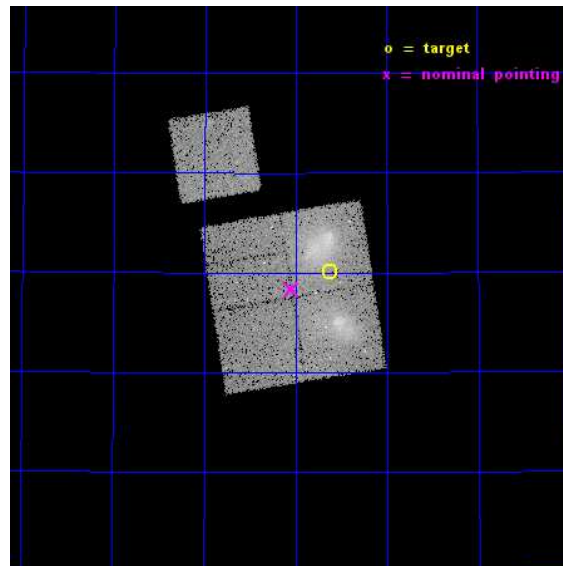
L2 Processing Date : Nov 27 2014

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1 Front

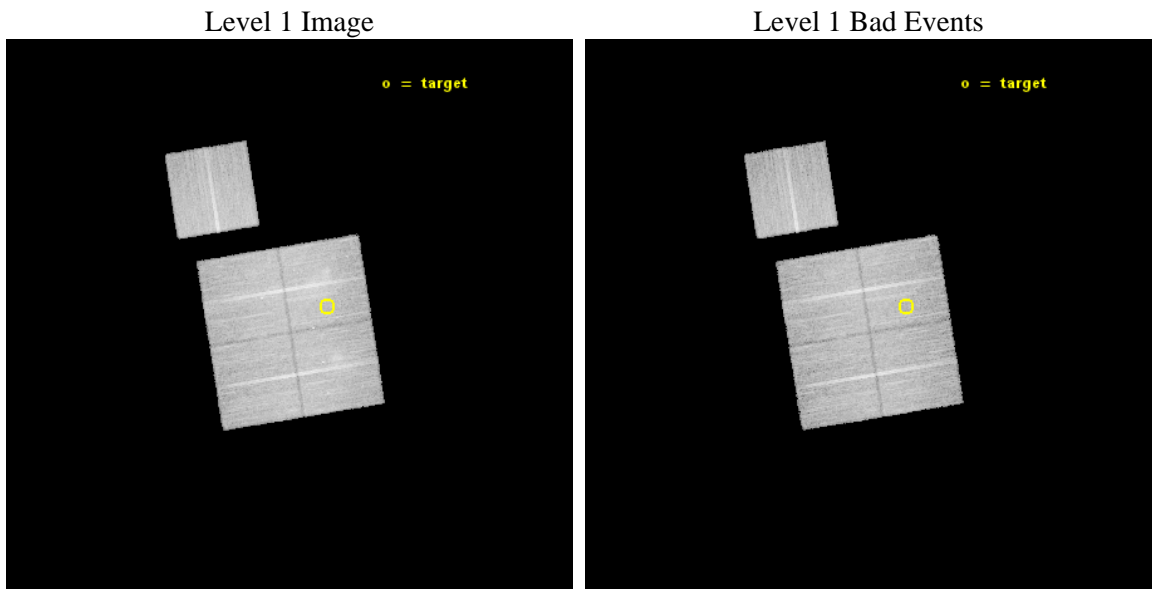
seq_num	801177	Sequence number
obs_id	15540	Observation id
title	The Merging Double Cluster Abell 1758	Proposal title
observer	Dr. Laurence David	Principal investigator
object	Abell 1758	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	203.15625	Observer's specified target RA [deg]
dec_targ	50.501806	Observer's specified target Dec [deg]
ra_nom	203.26174100988	Nominal RA [deg]
dec_nom	50.472122526333	Nominal Dec [deg]
roll_nom	350.84199588177	Nominal Roll [deg]
revision	2	Processing version of data
ontime	27078.459247947	Sum of GTIs [s]
livetime	26724.659243001	Livetime [s]
ontime0	27078.459237933	Sum of GTIs [s]
ontime1	27078.459218025	Sum of GTIs [s]
ontime2	27075.318307519	Sum of GTIs [s]
ontime3	27078.459247947	Sum of GTIs [s]
ontime6	27081.594205379	Sum of GTIs [s]
l2events	85274	Number of level 2 events



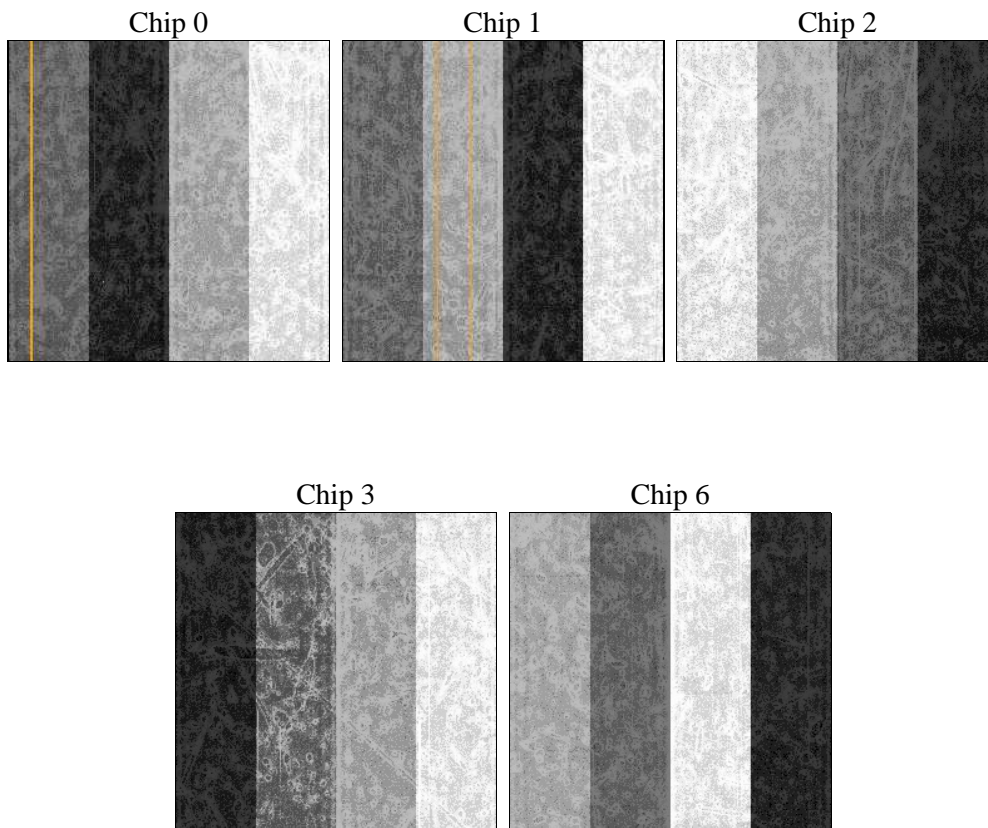
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	27000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	27078.459247947	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	27078.459237933	Sum of GTIs [s]
date	2014-11-27T22:51:25	Date and time of file creation	ontime1	27078.459218025	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	27075.318307519	Sum of GTIs [s]
			ontime3	27078.459247947	Sum of GTIs [s]
			ontime6	27081.594205379	Sum of GTIs [s]
			l1events	641445	Number of level 1 events

2.1.4 Events

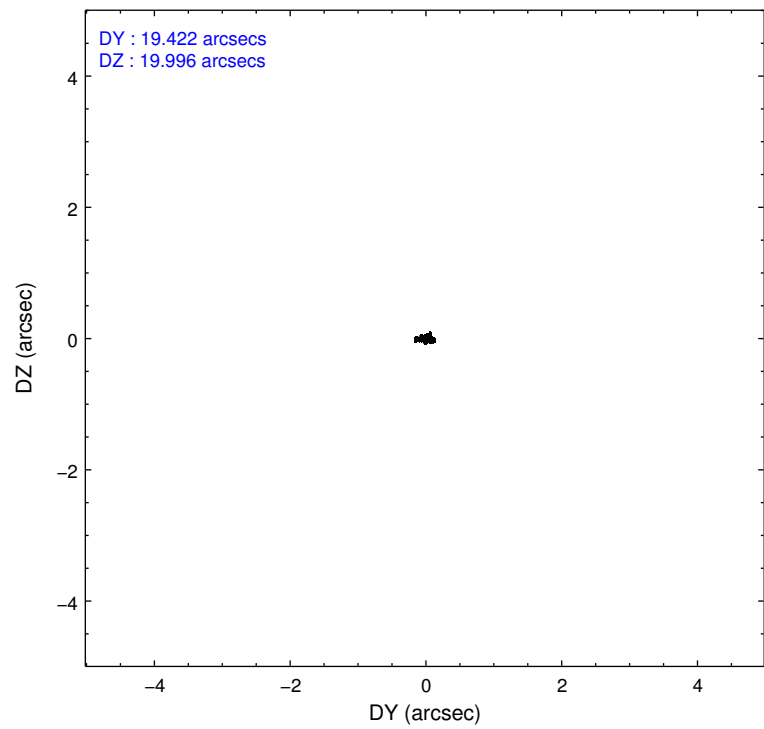
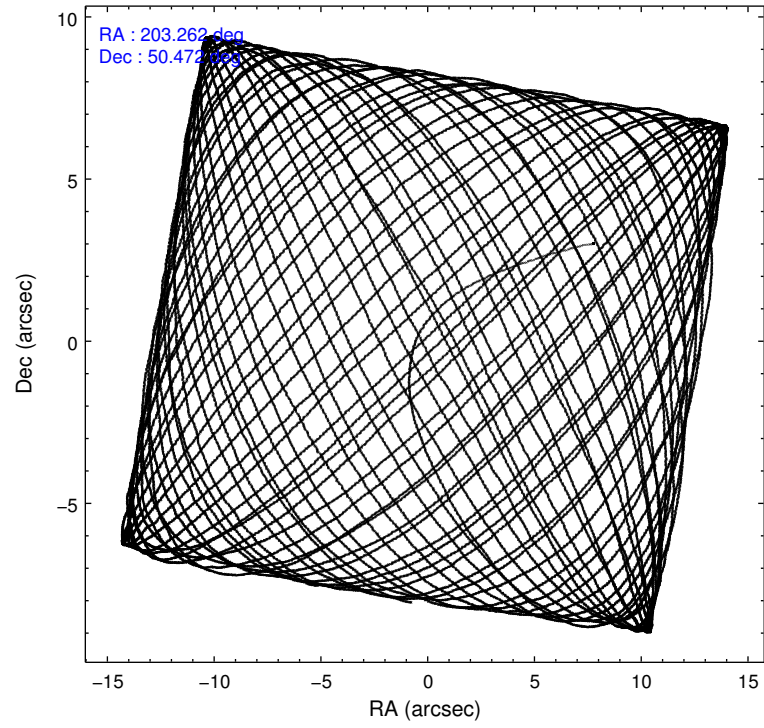
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	118152	128693	129709	139218	125673
rejected events	102726	103723	114241	111306	110137
rejected %	86%	80%	88%	79%	87%

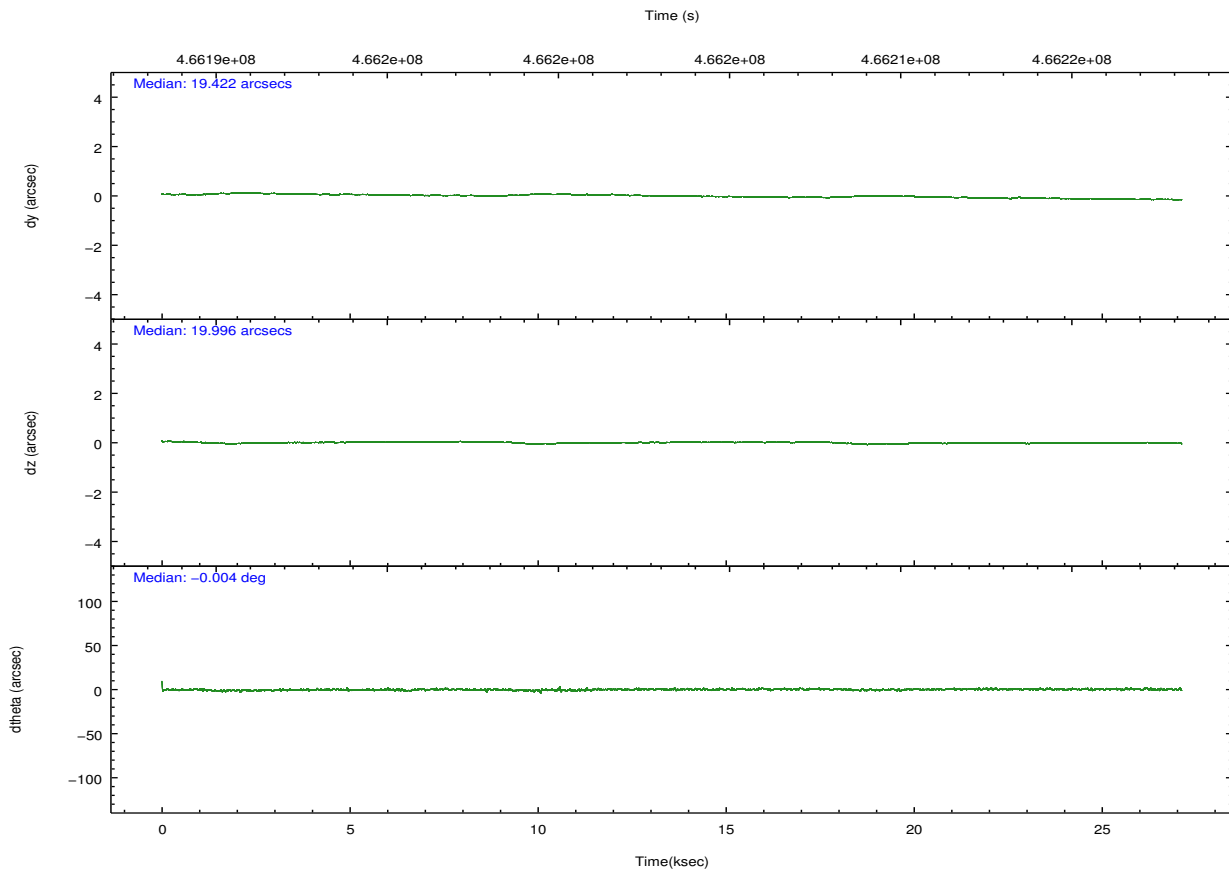
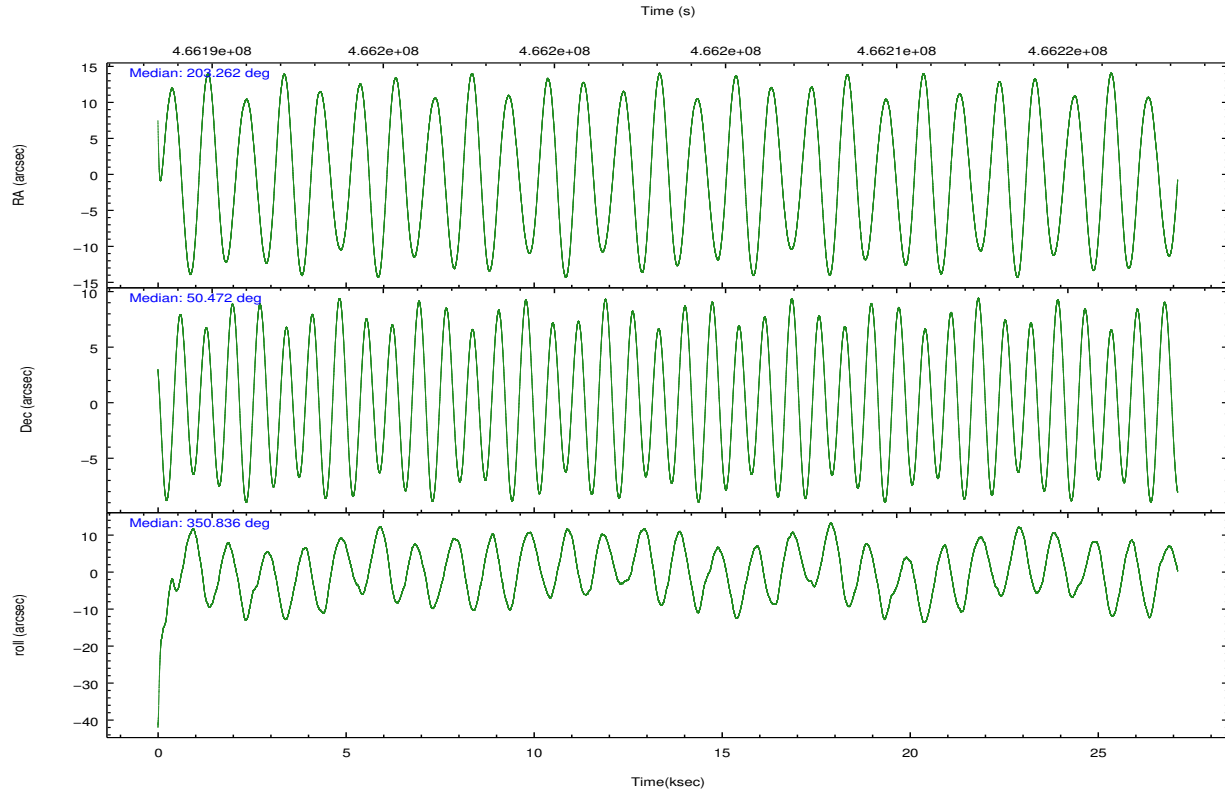
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	5477	12610	5910	16274	5730
	4%	9%	4%	11%	4%
grade 1 events	76	101	60	122	66
	0%	0%	0%	0%	0%
grade 2 events	3897	4790	3740	4647	3335
	3%	3%	2%	3%	2%
grade 3 events	1672	1936	1528	1942	1614
	1%	1%	1%	1%	1%
grade 4 events	1481	1957	1551	1899	1673
	1%	1%	1%	1%	1%
grade 5 events	5127	5686	4737	5894	5518
	4%	4%	3%	4%	4%
grade 6 events	2905	3684	2743	3155	3189
	2%	2%	2%	2%	2%
grade 7 events	97517	97929	109440	105285	104548
	82%	76%	84%	75%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	203.221443	203.2617410098759	Subarray requested	NONE	NONE
[deg] Pointing Dec	50.462239	50.47212252633335	Alternating exposures requested	N	N
[deg] Pointing Roll	350.664401	350.8419958817726	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	466189872.184000	466188181.81671			
Observation start date	2012-10-09T17:10:05	2012-10-09T16:43:01			
[s] Observation end time (MET)	466216872.184000	466217082.71826			
Observation end date	2012-10-10T00:40:05	2012-10-10T00:44:42			
Read mode	TIMED	TIMED			

2.3 Aspect





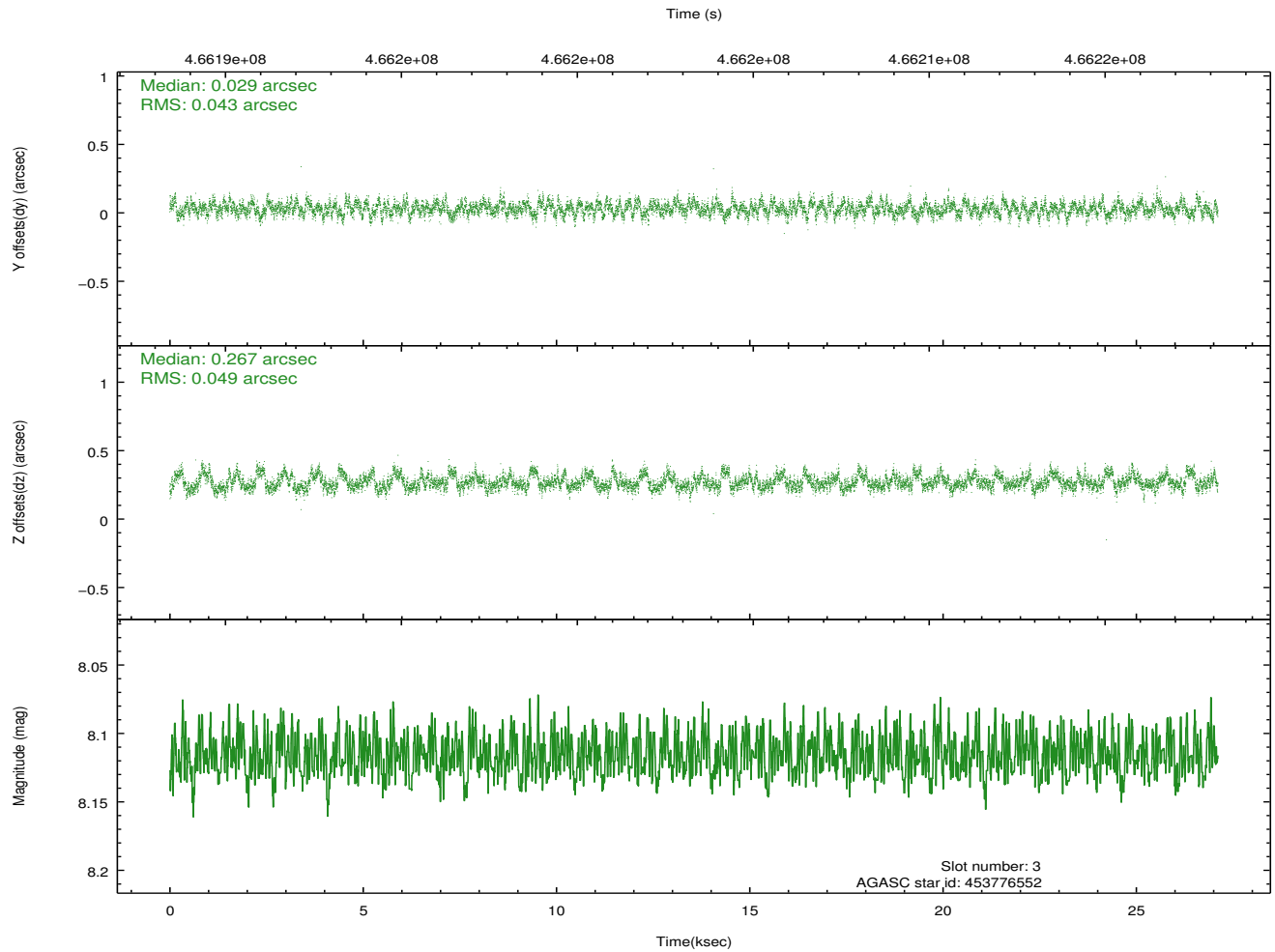
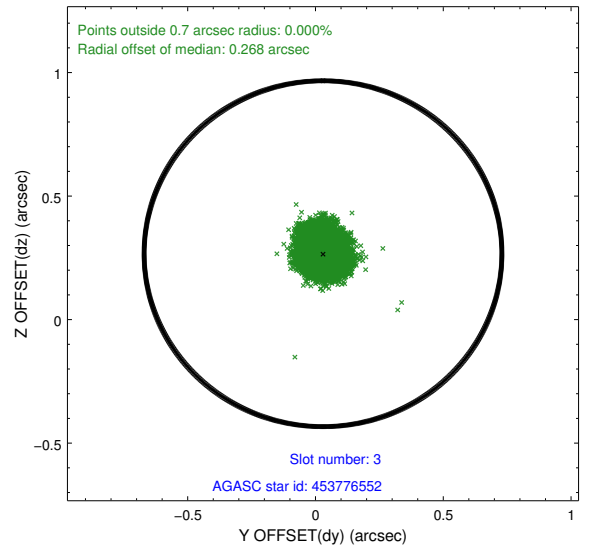
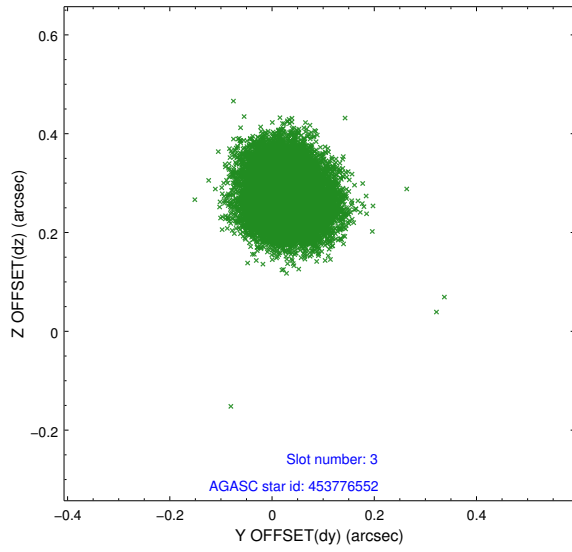
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	6.96	6614	-0.091	-0.052	0.011	0.019	0.000000	0.000000	-774.31	-850.17
1	FID		ACIS-I-4	6.97	6614	0.194	0.070	0.008	0.014	0.000000	0.000000	2139.93	1056.17
2	FID		ACIS-I-5	7.05	6614	-0.204	0.052	0.009	0.016	0.000000	0.000000	-1828.19	1053.99
3	GUIDE	used	453776552	8.12	13226	0.029	0.267	0.071	0.112	202.406739	50.186569	-1693.48	-1273.19
4	GUIDE	used	454692248	9.31	13222	0.153	-0.071	0.122	0.195	202.744066	50.628741	-1173.00	417.88
5	GUIDE	used	454692696	10.28	13106	0.075	-0.070	0.254	0.409	203.805294	50.067231	1561.56	-1178.87
6	GUIDE	used	454692736	9.70	13155	-0.027	0.138	0.211	0.331	203.552835	50.198777	907.38	-809.09
7	GUIDE	used	454694864	7.95	13223	-0.223	-0.258	0.107	0.163	203.458203	50.950289	244.88	1821.21

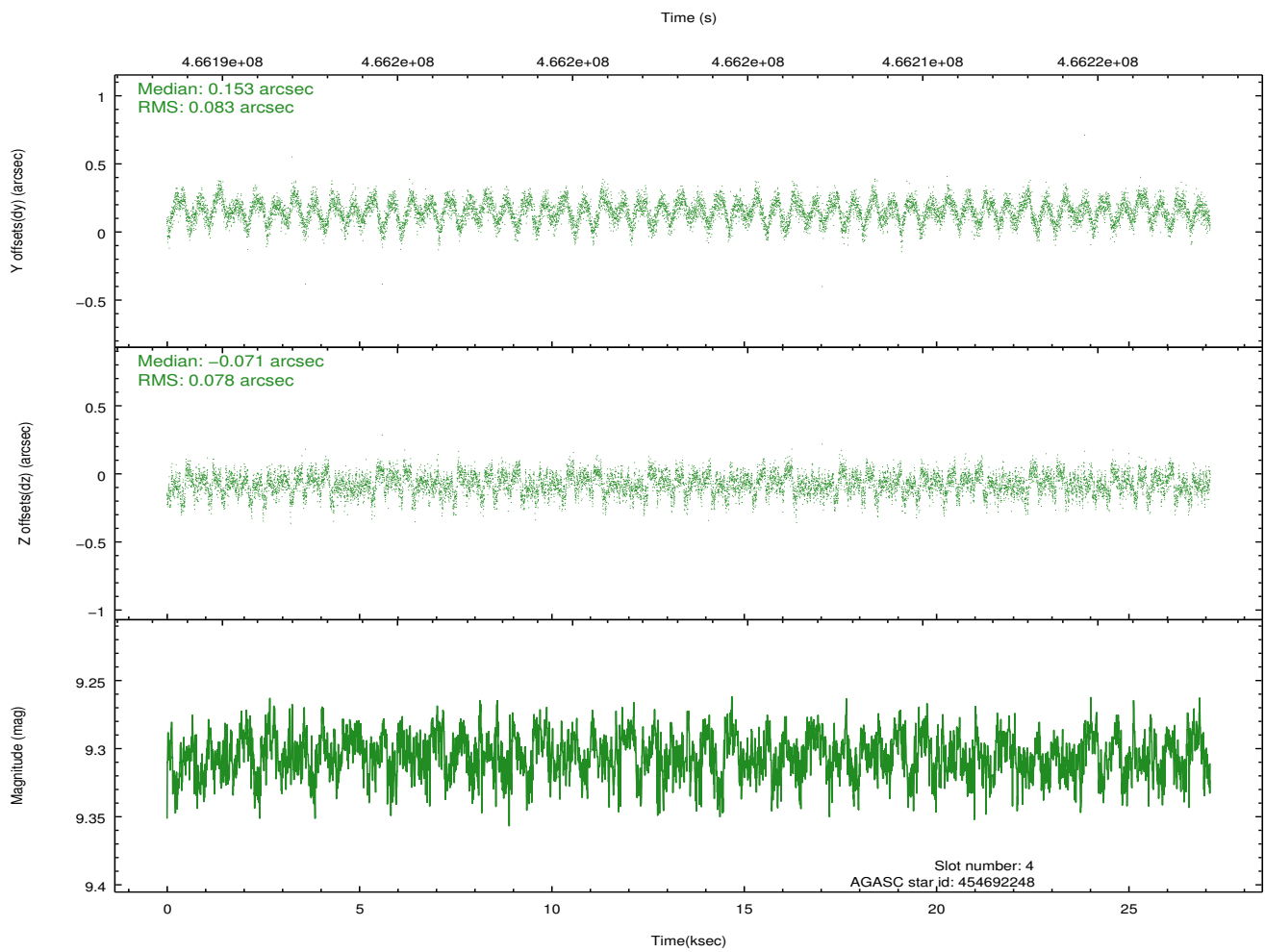
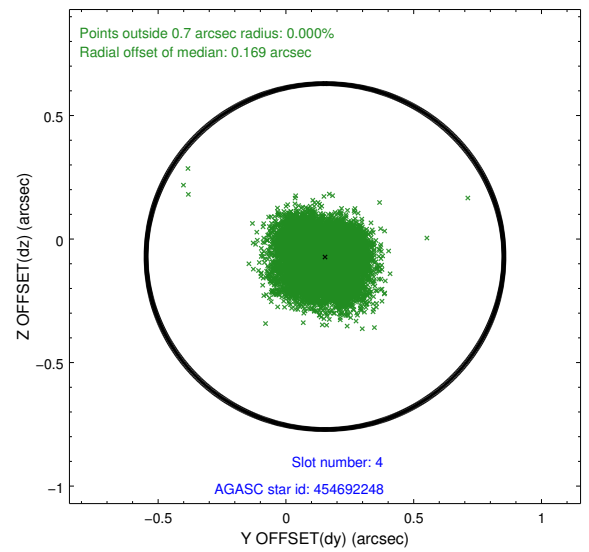
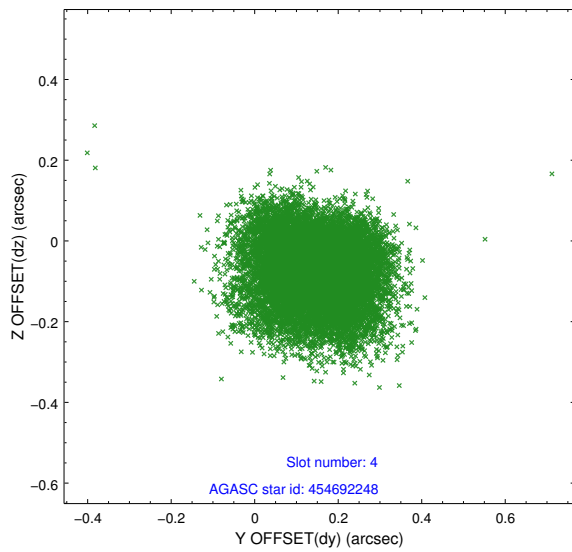
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2.4 Star Slots

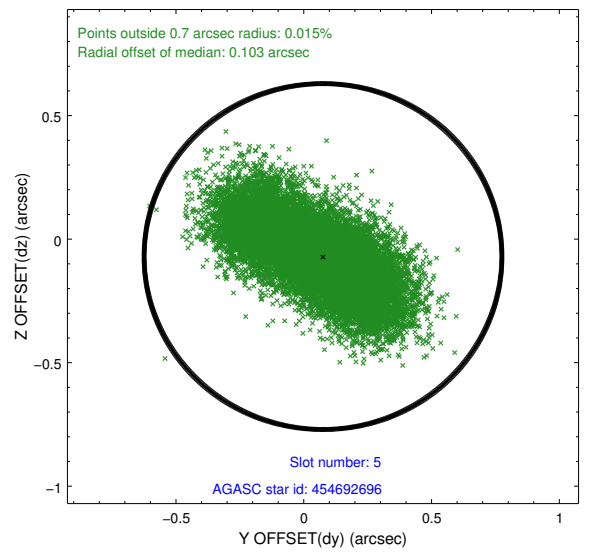
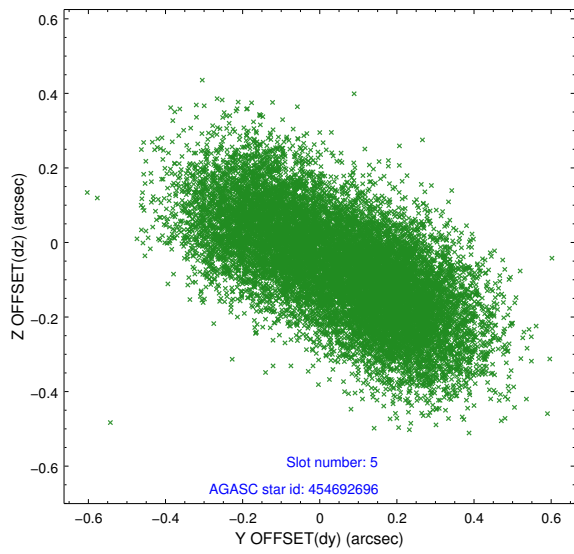
2.4.1 Slot 3



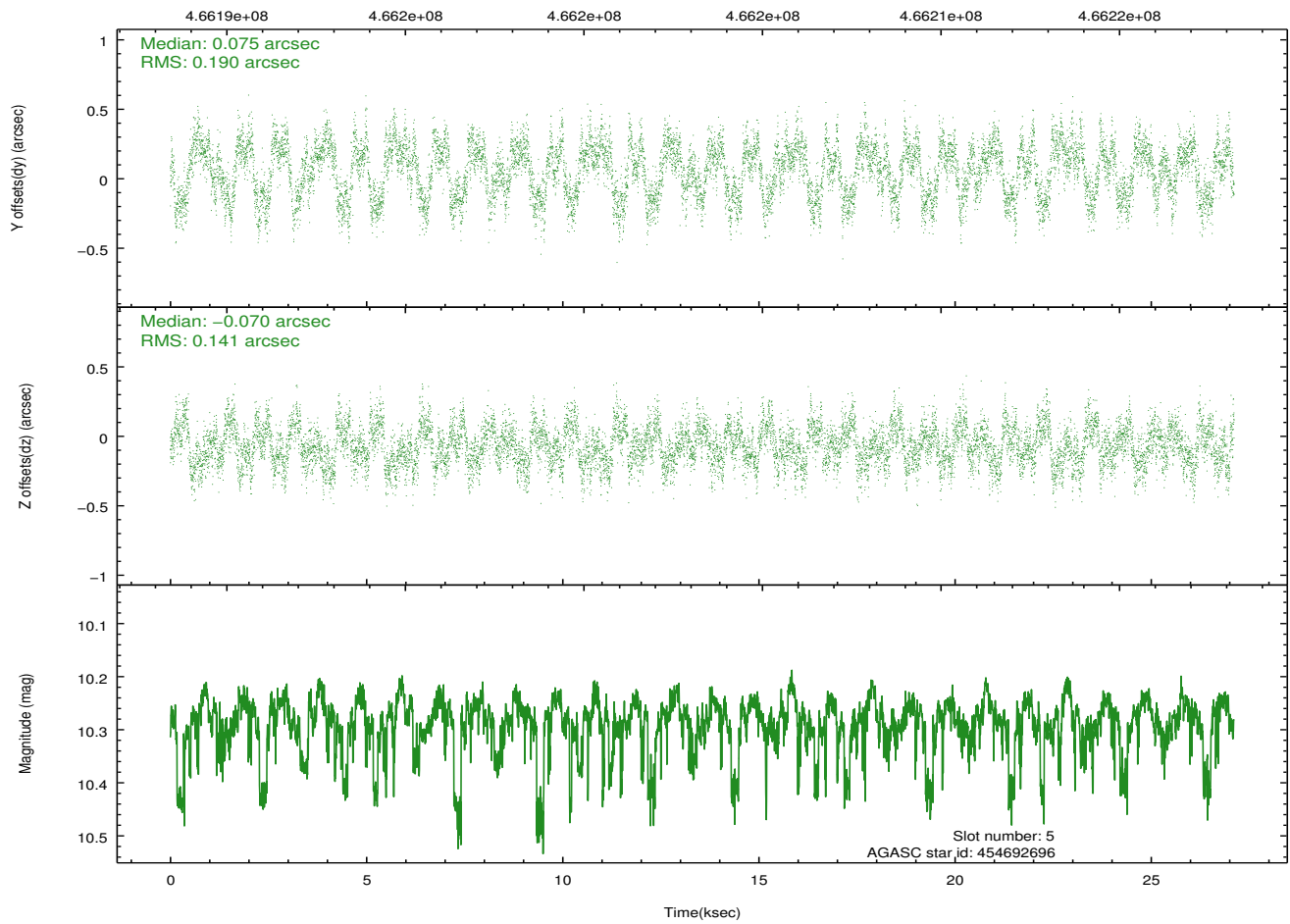
2.4.2 Slot 4



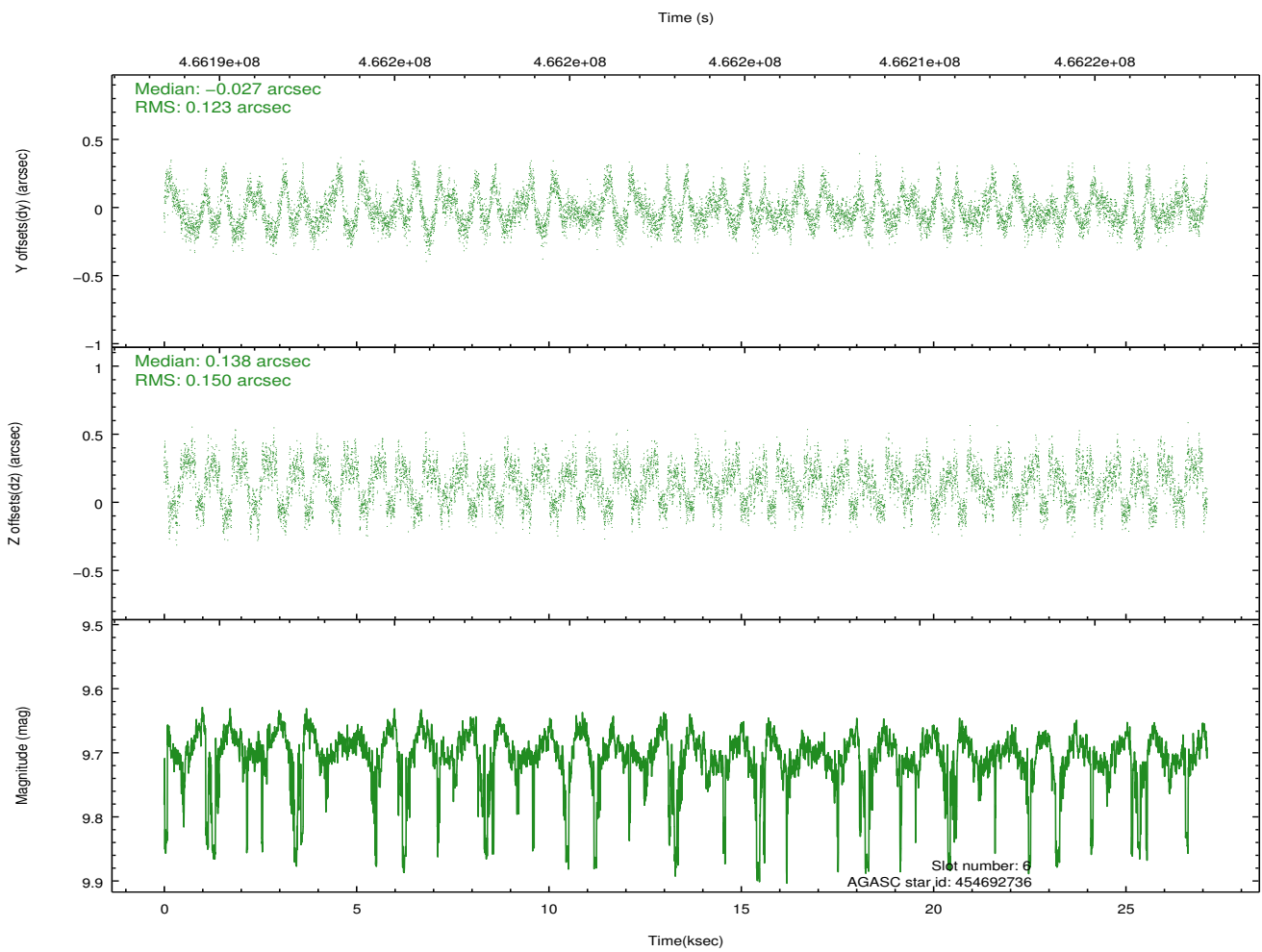
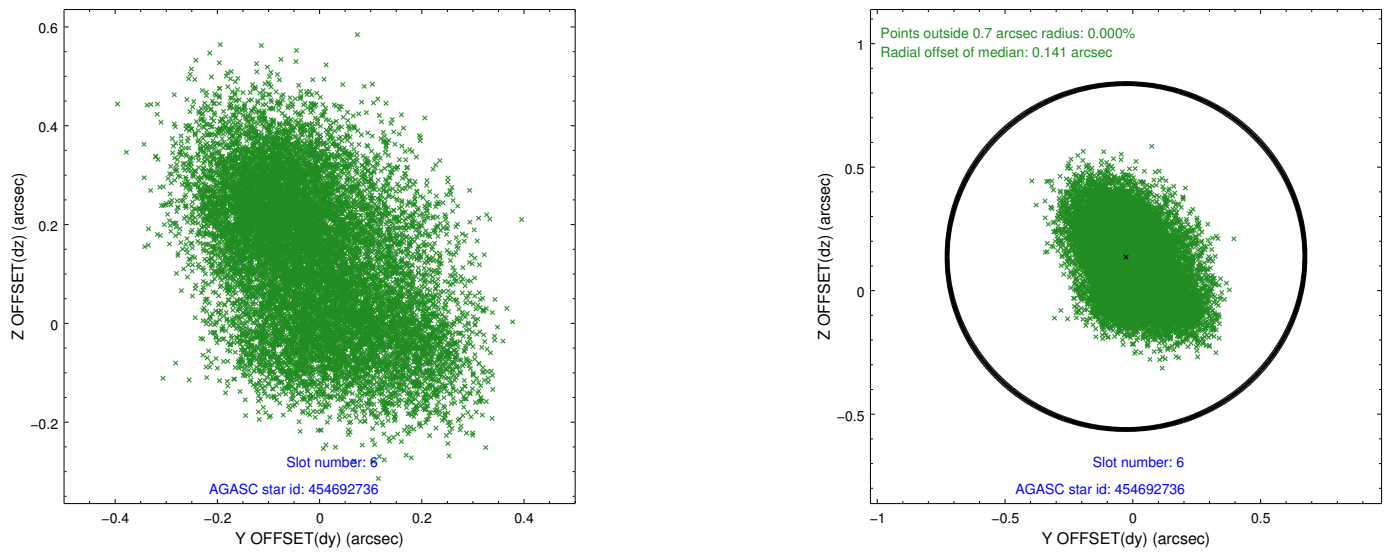
2.4.3 Slot 5



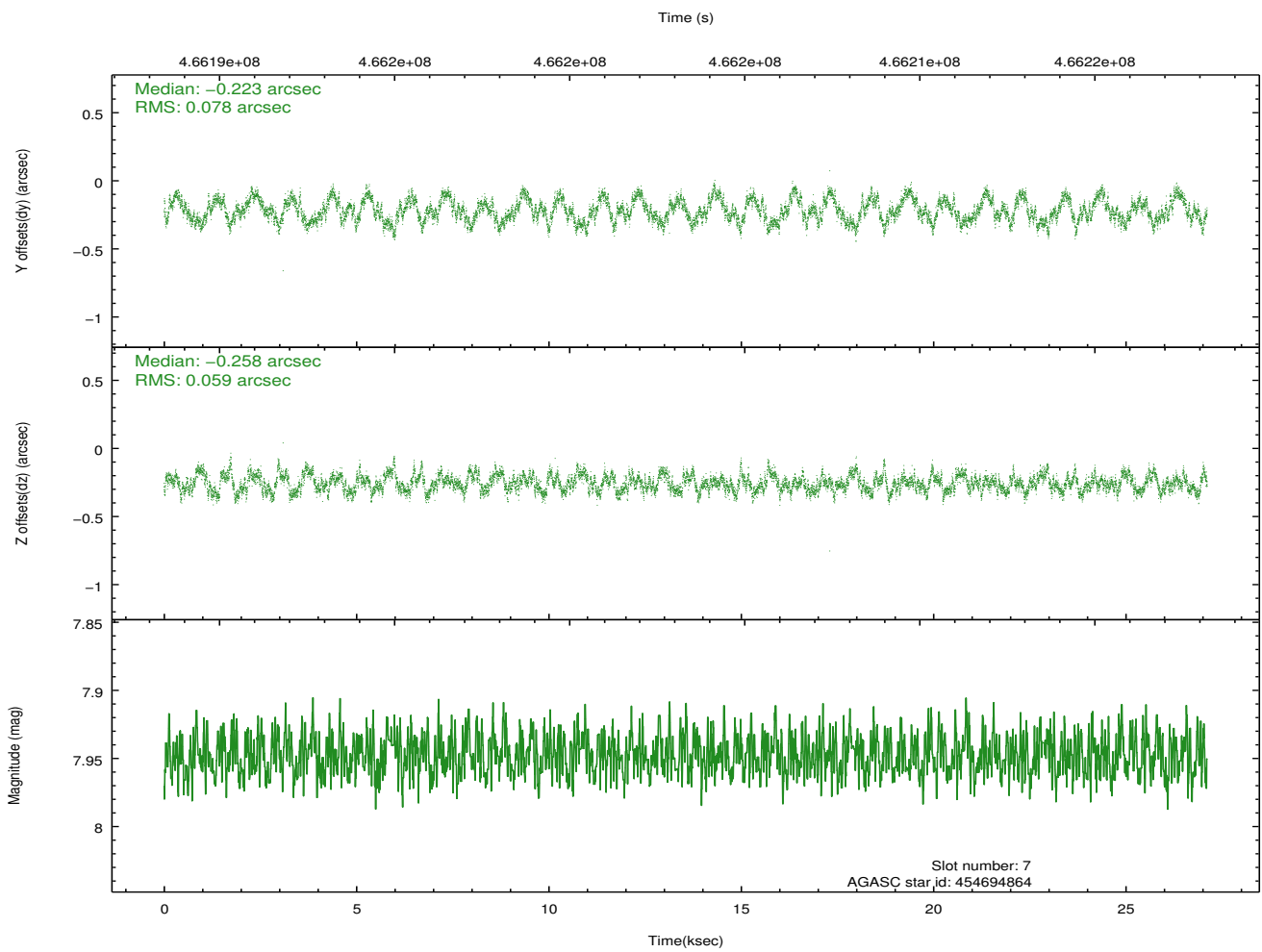
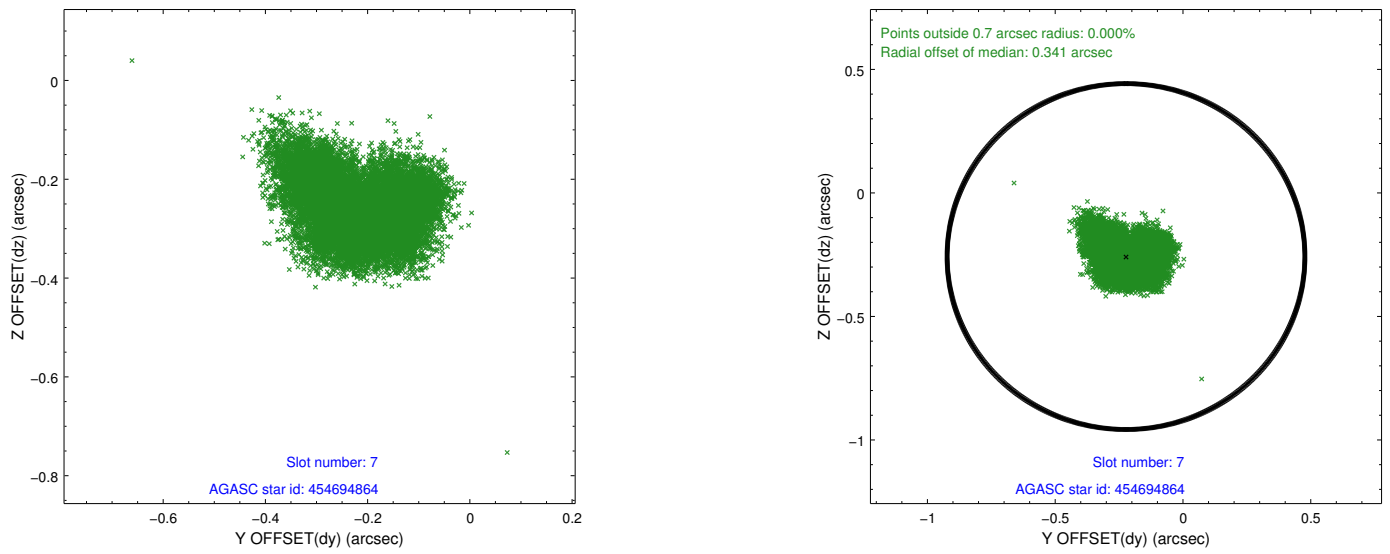
Time (s)



2.4.4 Slot 6

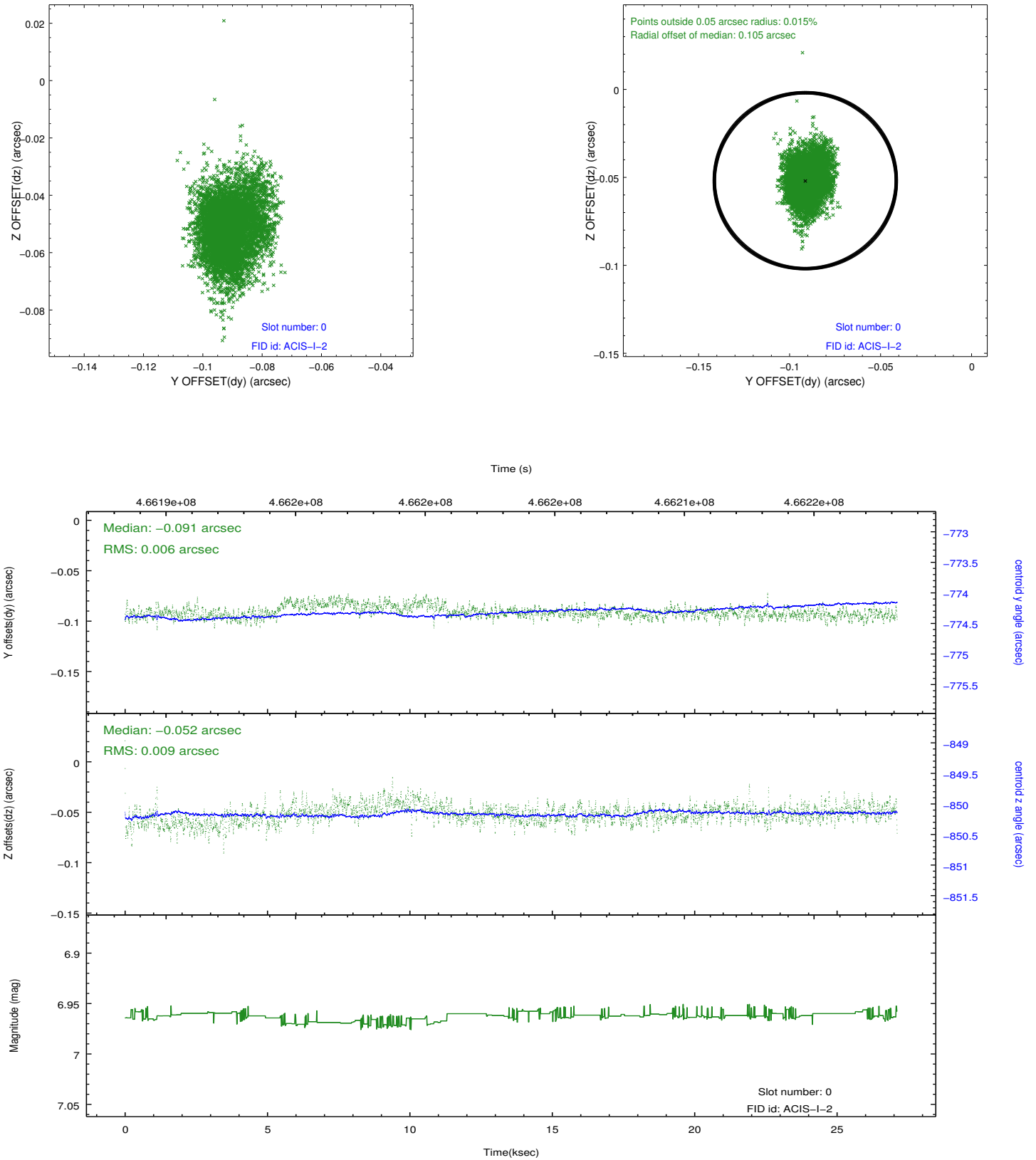


2.4.5 Slot 7

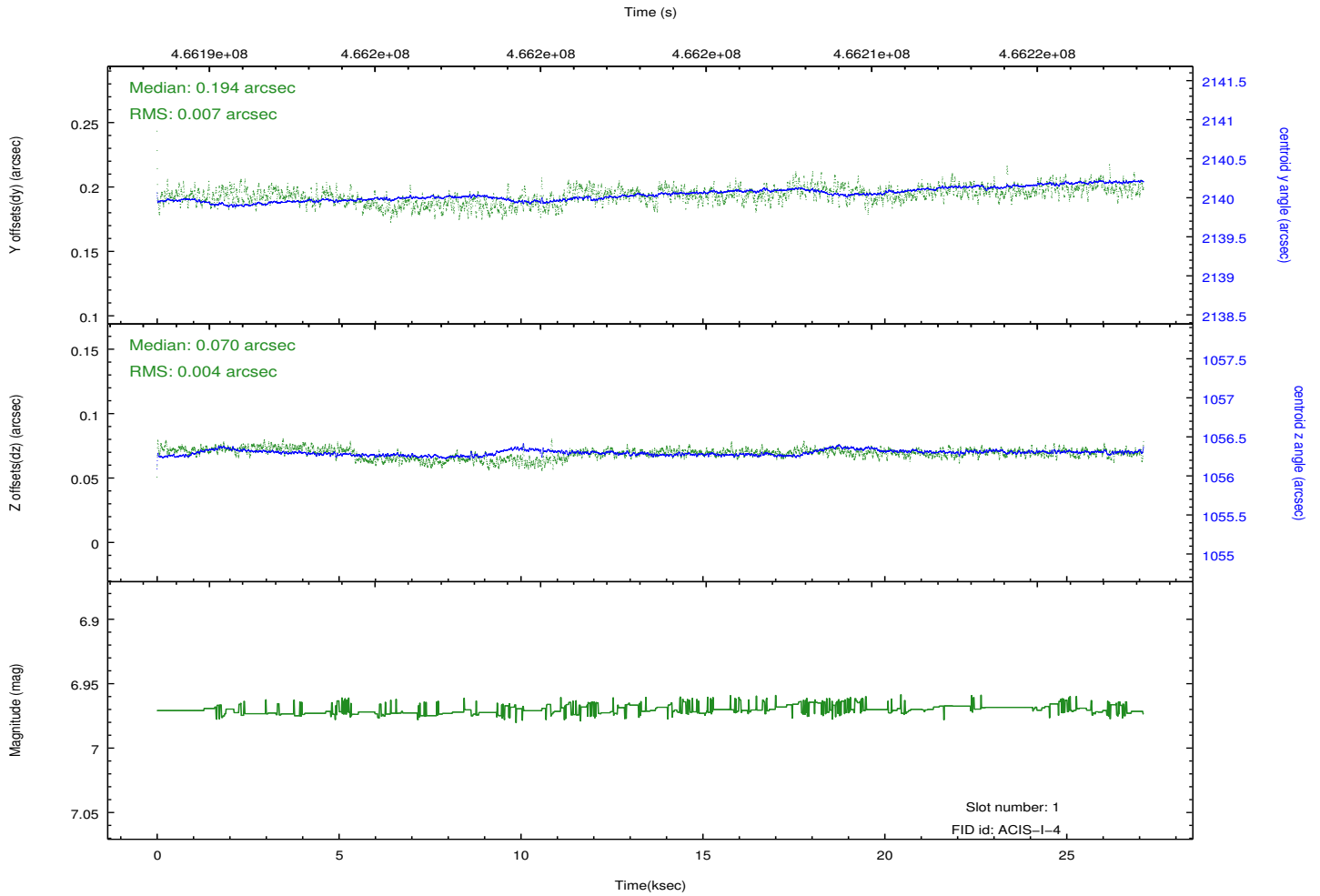
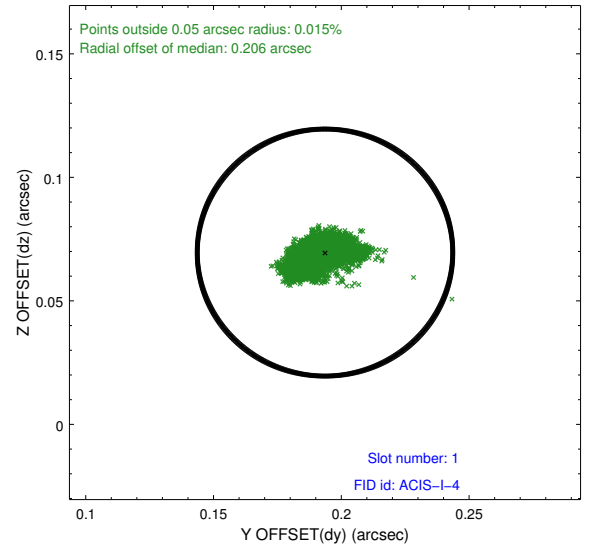
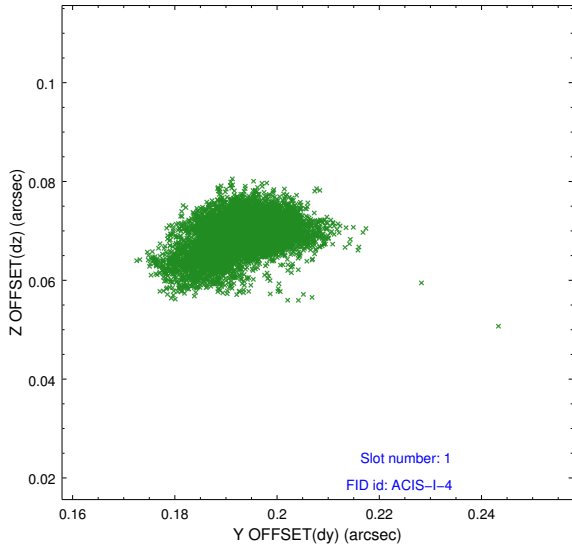


2.5 FID Slots

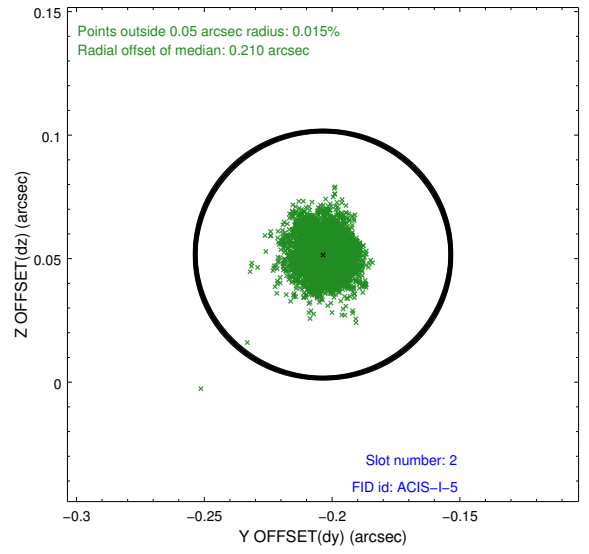
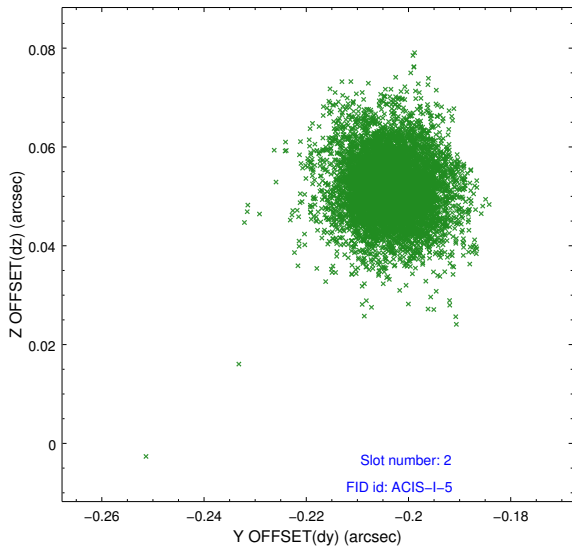
2.5.1 Slot 0



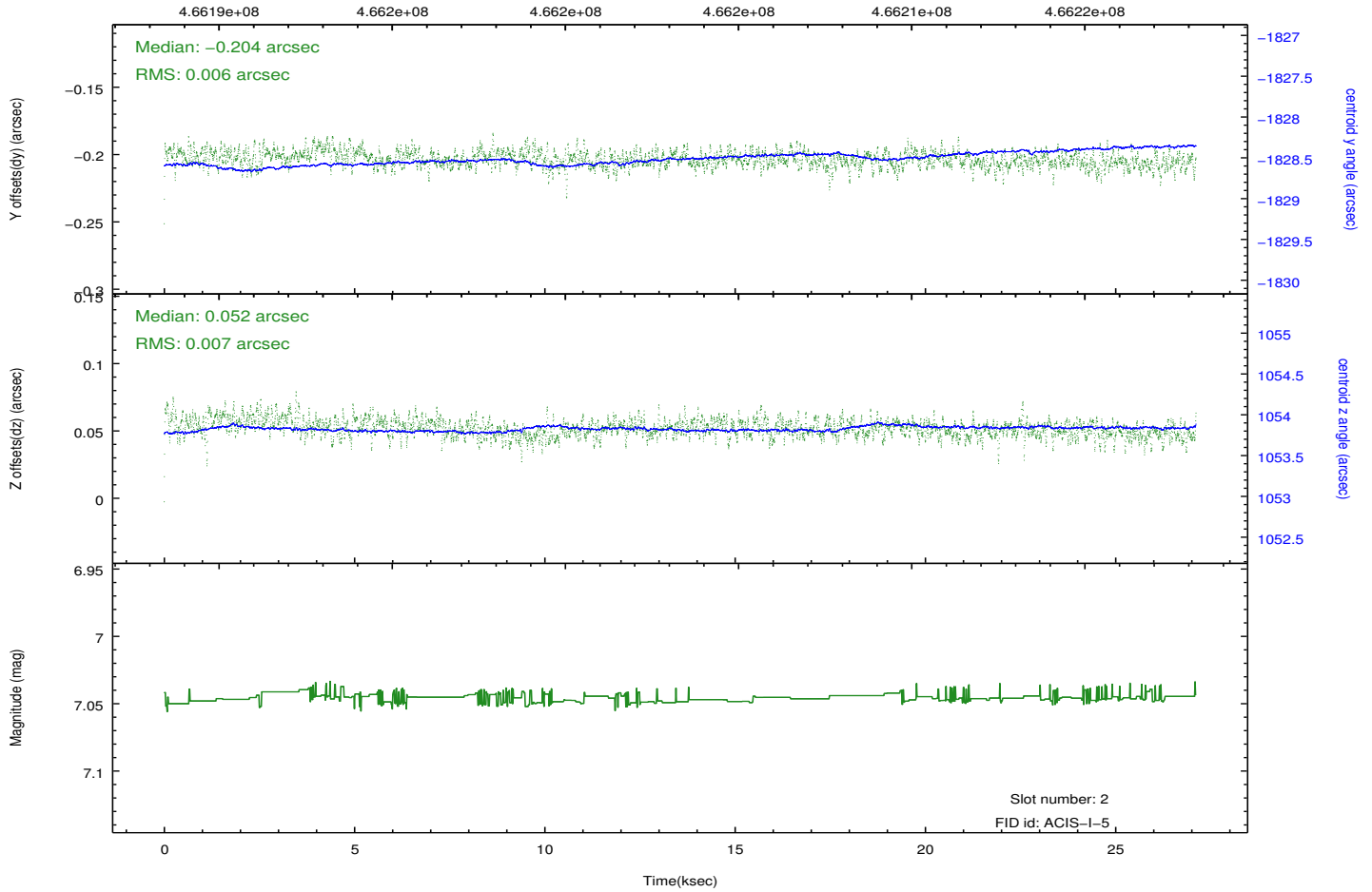
2.5.2 Slot 1



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.078459247947

A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.