

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 16572 - L2 Version 2
Chandra X-Ray Center

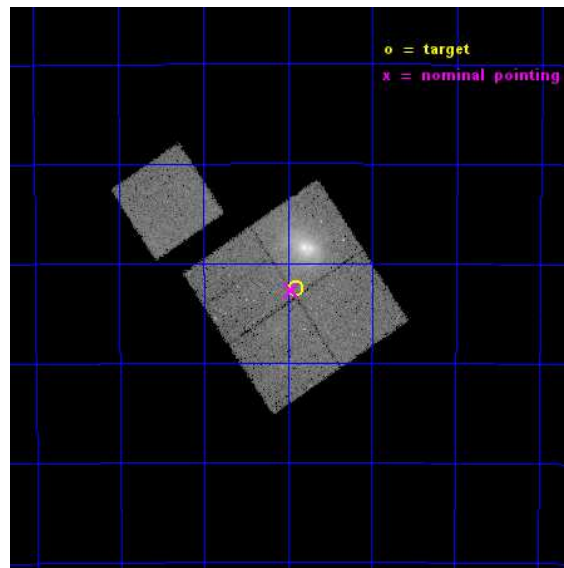
L2 Processing Date : Dec 9 2014

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1 Front

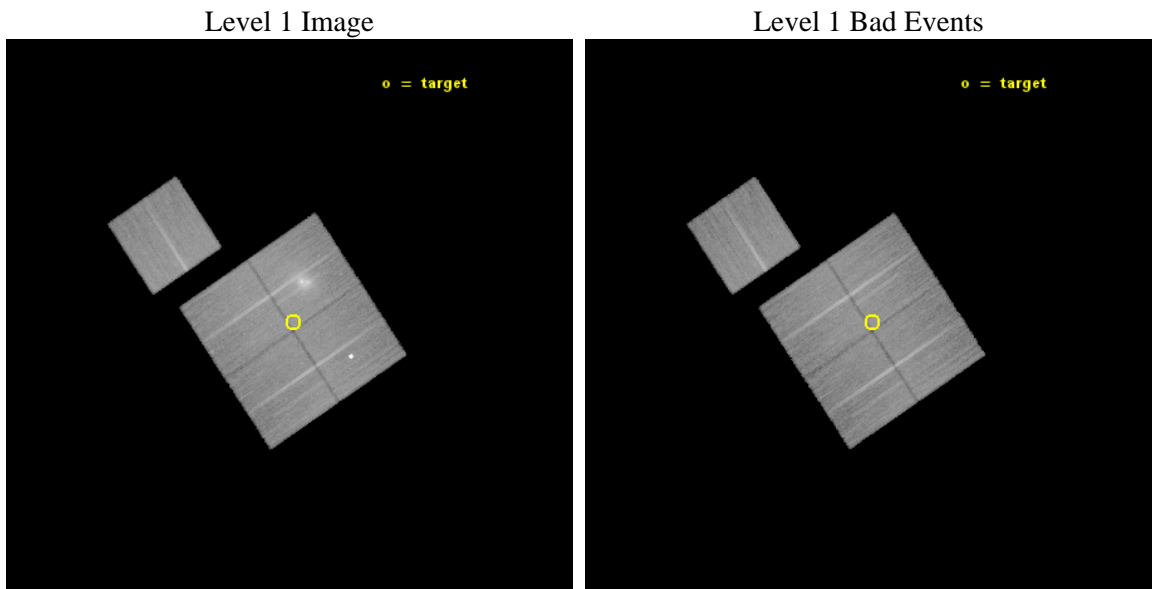
seq_num	801303	Sequence number
obs_id	16572	Observation id
title	Extreme Cluster Mergers - Deep Chandra Follow-up to Two Massive Cluster Mergers at Redshift 0.25 Detected by Planck	Proposal title
observer	Dr Ralph Kraft	Principal investigator
object	Abell S0592	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	99.725923	Observer's specified target RA [deg]
dec_targ	-54.043366	Observer's specified target Dec [deg]
ra_nom	99.739092667964	Nominal RA [deg]
dec_nom	-54.045662035816	Nominal Dec [deg]
roll_nom	326.21934000543	Nominal Roll [deg]
revision	2	Processing version of data
ontime	46912.104742765	Sum of GTIs [s]
livetime	46299.163558112	Livetime [s]
ontime0	46918.263493776	Sum of GTIs [s]
ontime1	46924.586584389	Sum of GTIs [s]
ontime2	46921.486604214	Sum of GTIs [s]
ontime3	46912.104742765	Sum of GTIs [s]
ontime6	46921.363453984	Sum of GTIs [s]
l2events	154601	Number of level 2 events



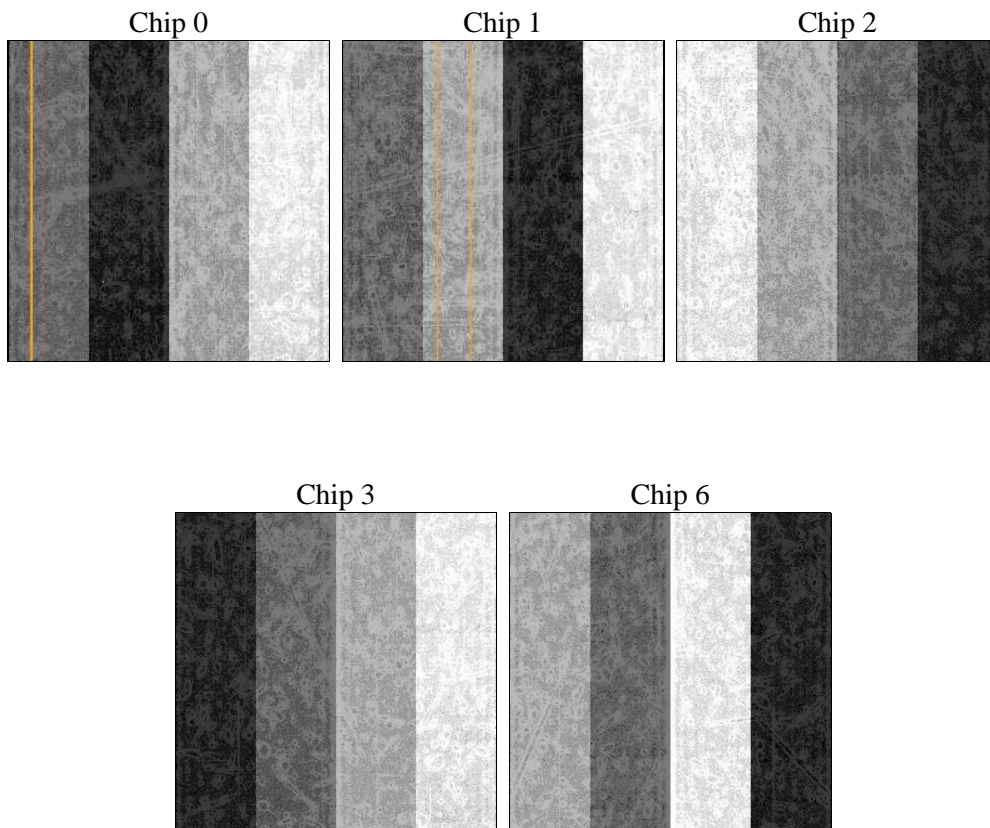
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	46840.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	46912.104742765	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	46918.263493776	Sum of GTIs [s]
date	2014-12-10T02:32:03	Date and time of file creation	ontime1	46924.586584389	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	46921.486604214	Sum of GTIs [s]
			ontime3	46912.104742765	Sum of GTIs [s]
			ontime6	46921.363453984	Sum of GTIs [s]
			l1events	1071354	Number of level 1 events

2.1.4 Events

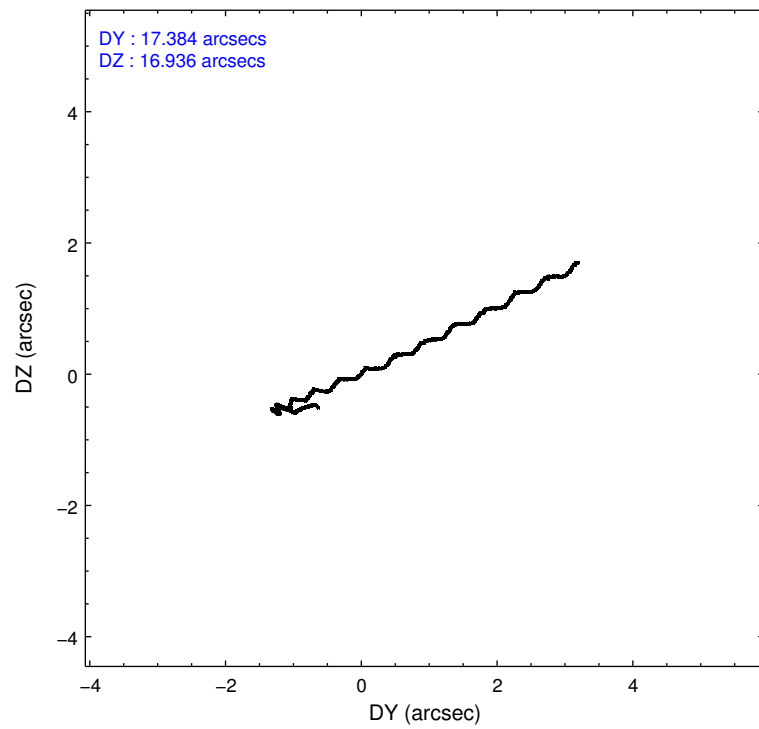
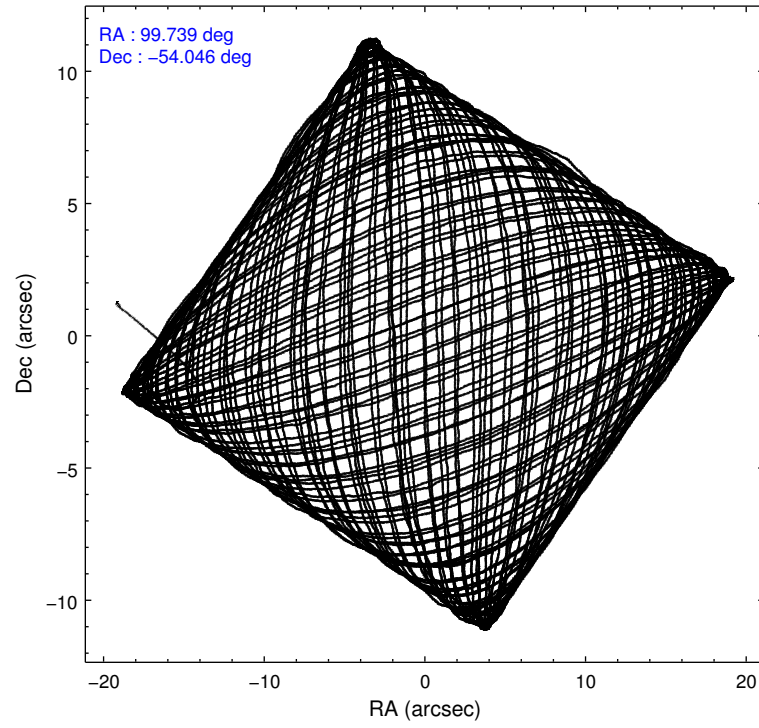
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	191340	211386	210159	254476	203993
rejected events	164746	169601	184091	183749	178038
rejected %	86%	80%	87%	72%	87%

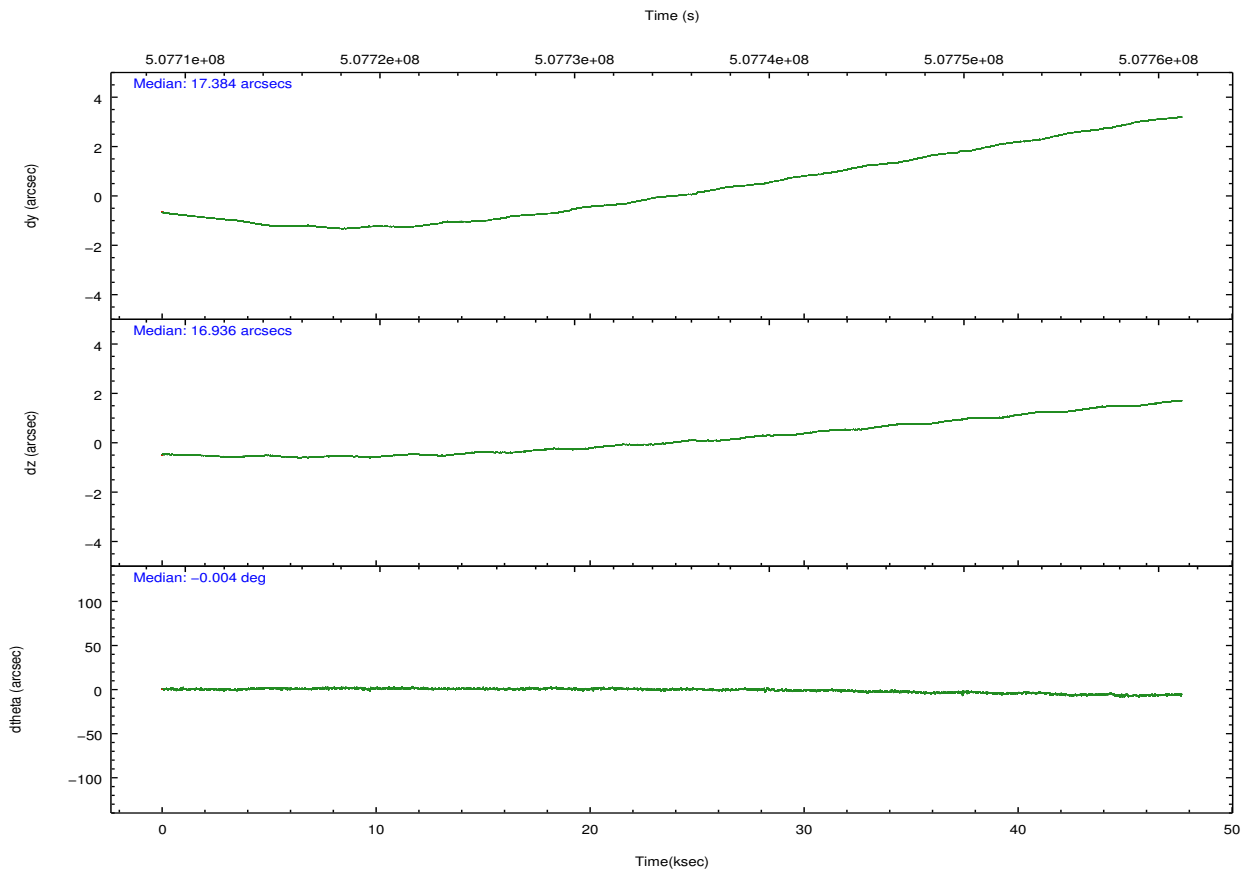
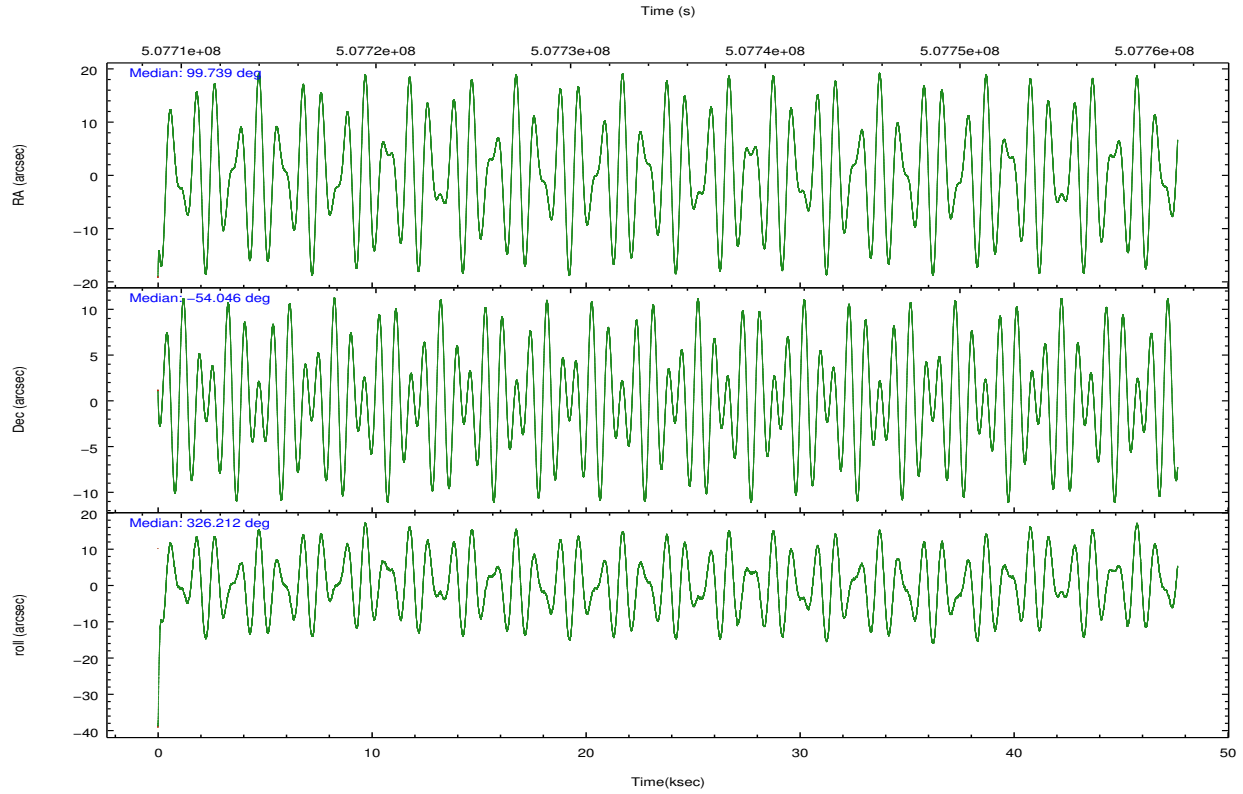
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	9814	9551	10204	46212	9191
	5%	4%	4%	18%	4%
grade 1 events	116	105	110	270	102
	0%	0%	0%	0%	0%
grade 2 events	6574	20880	6271	10323	5852
	3%	9%	2%	4%	2%
grade 3 events	2668	2782	2466	3994	2552
	1%	1%	1%	1%	1%
grade 4 events	2494	2768	2478	4008	2577
	1%	1%	1%	1%	1%
grade 5 events	8652	9265	7921	9837	9113
	4%	4%	3%	3%	4%
grade 6 events	5049	5812	4652	6196	5789
	2%	2%	2%	2%	2%
grade 7 events	155973	160223	176057	173636	168817
	81%	75%	83%	68%	82%

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	99.692383	99.73909266796421	Subarray requested	NONE	NONE
[deg] Pointing Dec	-54.043947	-54.04566203581616	Alternating exposures requested	N	N
[deg] Pointing Roll	325.972852	326.2193400054286	[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)	507711970.184000	507710363.14733			
Observation start date	2014-02-02T07:05:03	2014-02-02T06:39:23			
[s] Observation end time (MET)	507758810.184000	507760107.42507			
Observation end date	2014-02-02T20:05:43	2014-02-02T20:28:27			
Read mode	TIMED	TIMED			

2.3 Aspect





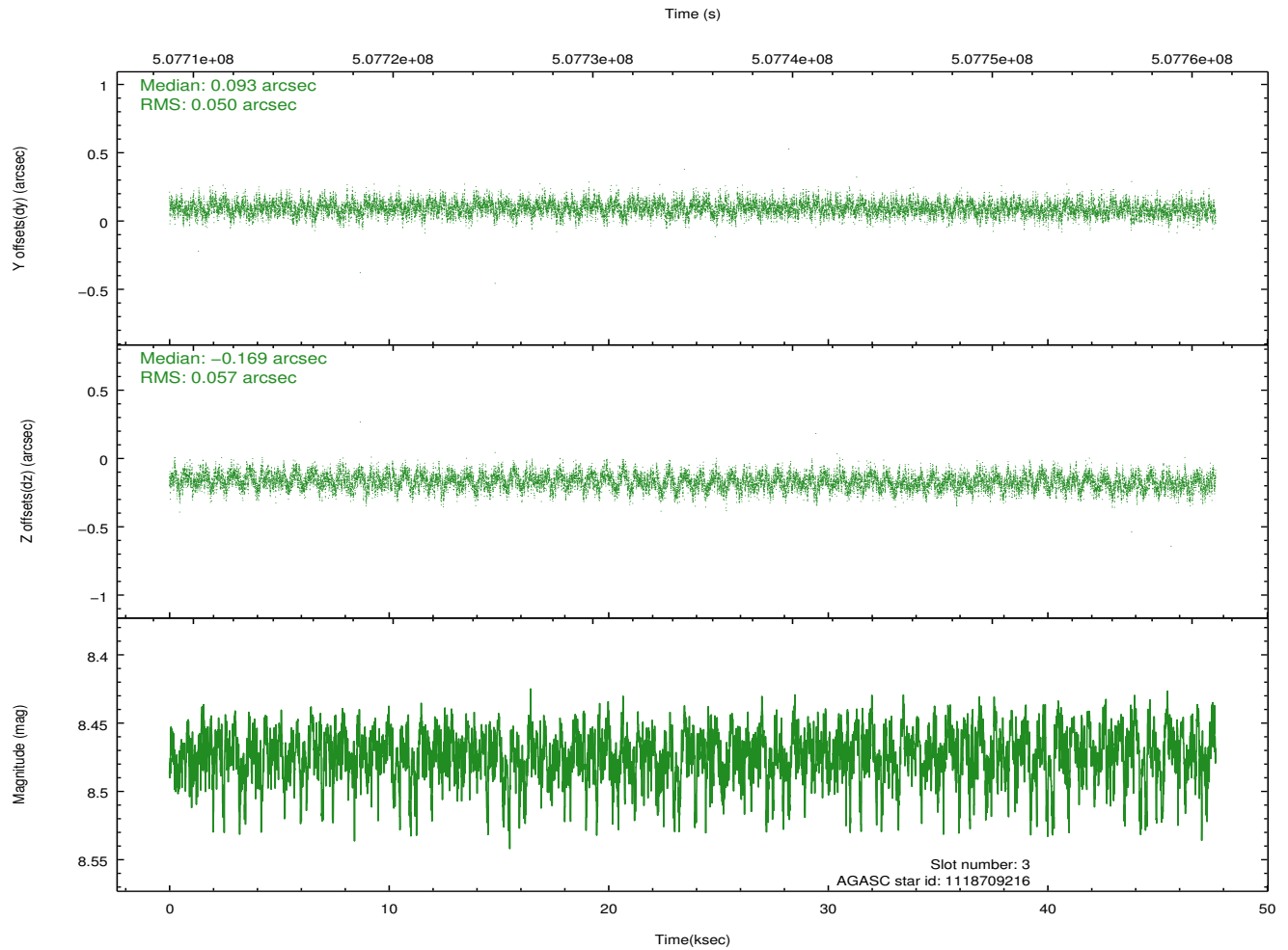
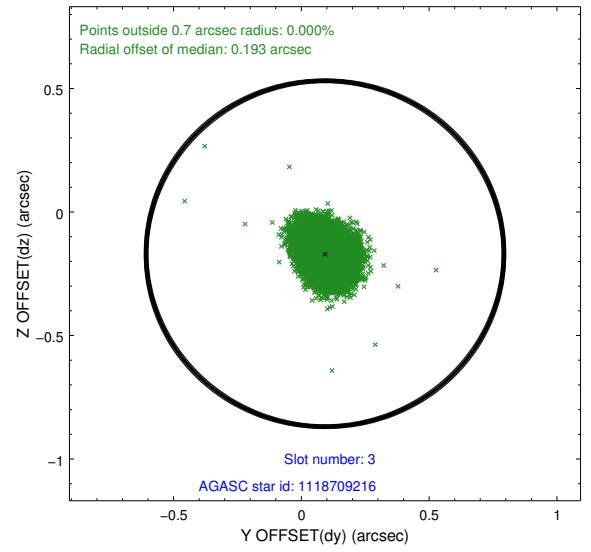
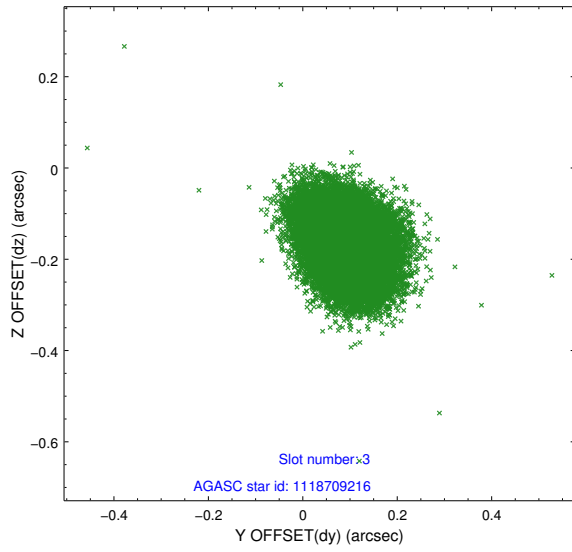
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.02	11622	-0.117	-0.106	0.020	0.031	0.000000	0.000000	-772.61	-847.29
1	FID		ACIS-I-4	7.04	11621	0.270	0.096	0.031	0.042	0.000000	0.000000	2141.78	1059.19
2	FID		ACIS-I-5	7.09	11623	-0.257	0.080	0.032	0.046	0.000000	0.000000	-1826.65	1056.88
3	GUIDE	used	1118709216	8.47	23238	0.093	-0.169	0.080	0.130	99.610405	-53.652137	-934.28	1071.39
4	GUIDE	used	1118712456	7.74	23236	-0.037	-0.421	0.080	0.132	99.930550	-53.451369	-769.88	2053.00
5	GUIDE	used	1119356480	8.29	23237	-0.273	0.151	0.082	0.129	100.106738	-54.468226	1574.72	-782.09
6	GUIDE	used	1118713136	8.51	23236	0.114	0.289	0.084	0.136	98.414415	-54.117213	-2072.84	-1747.38
7	GUIDE	used	1118706464	8.37	23239	0.092	0.151	0.081	0.132	98.232586	-54.266779	-2076.45	-2407.94

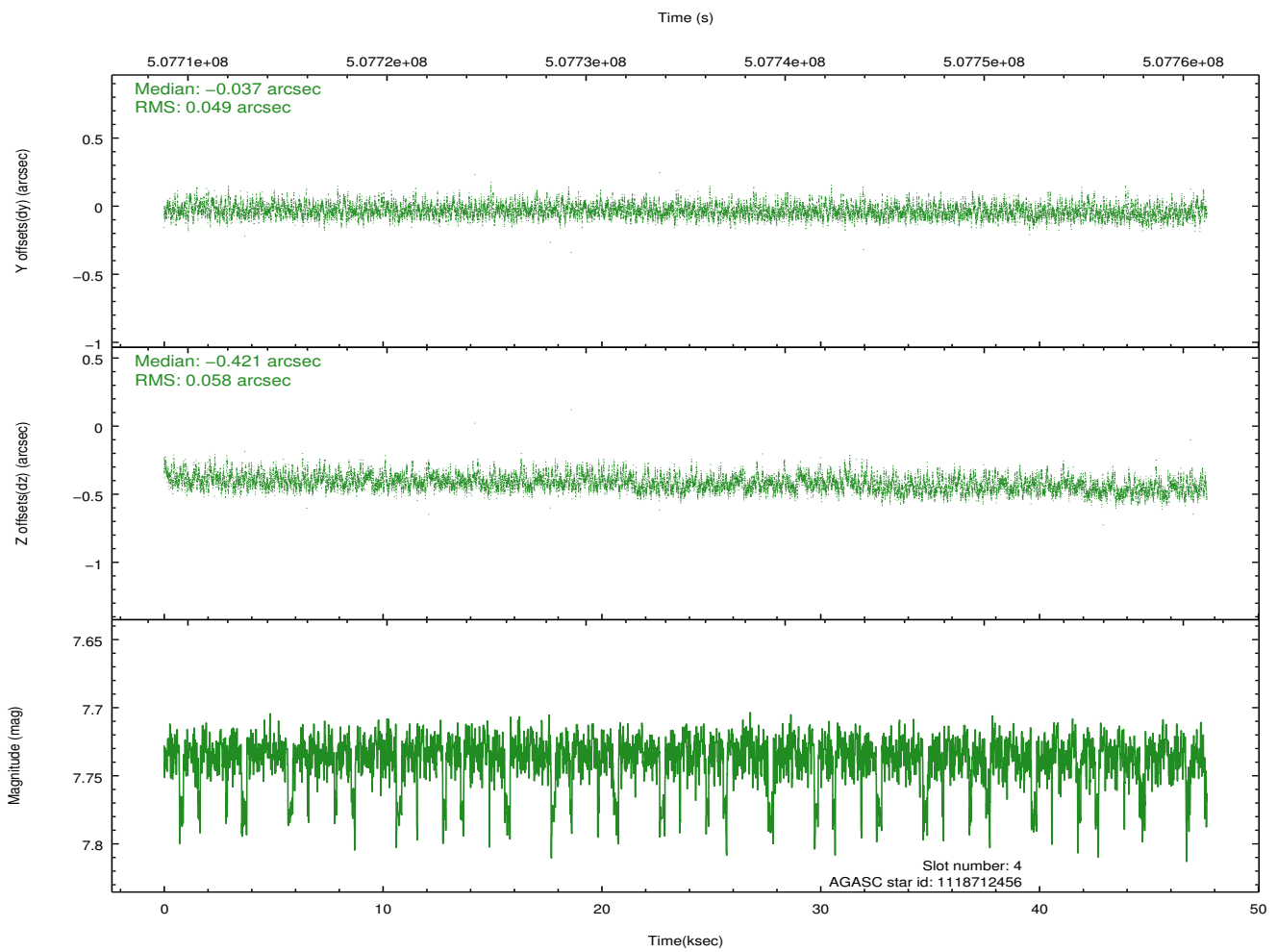
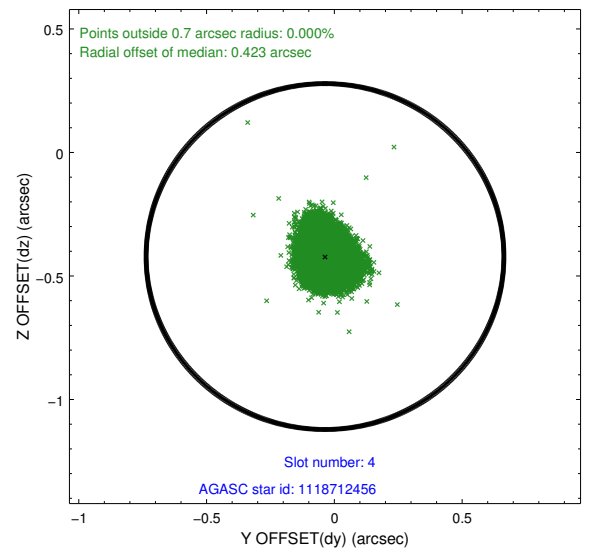
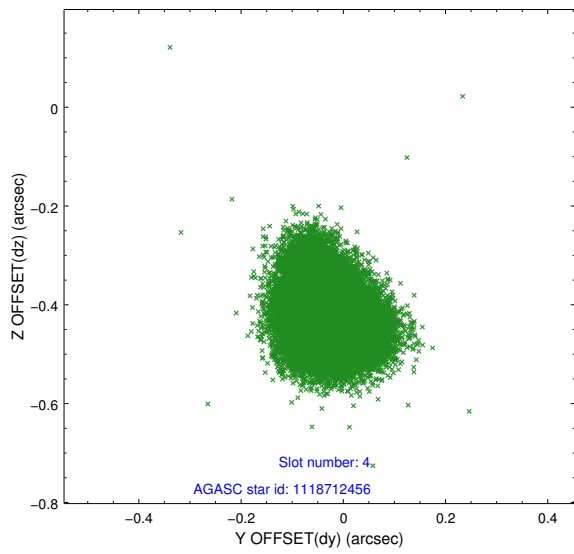
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2.4 Star Slots

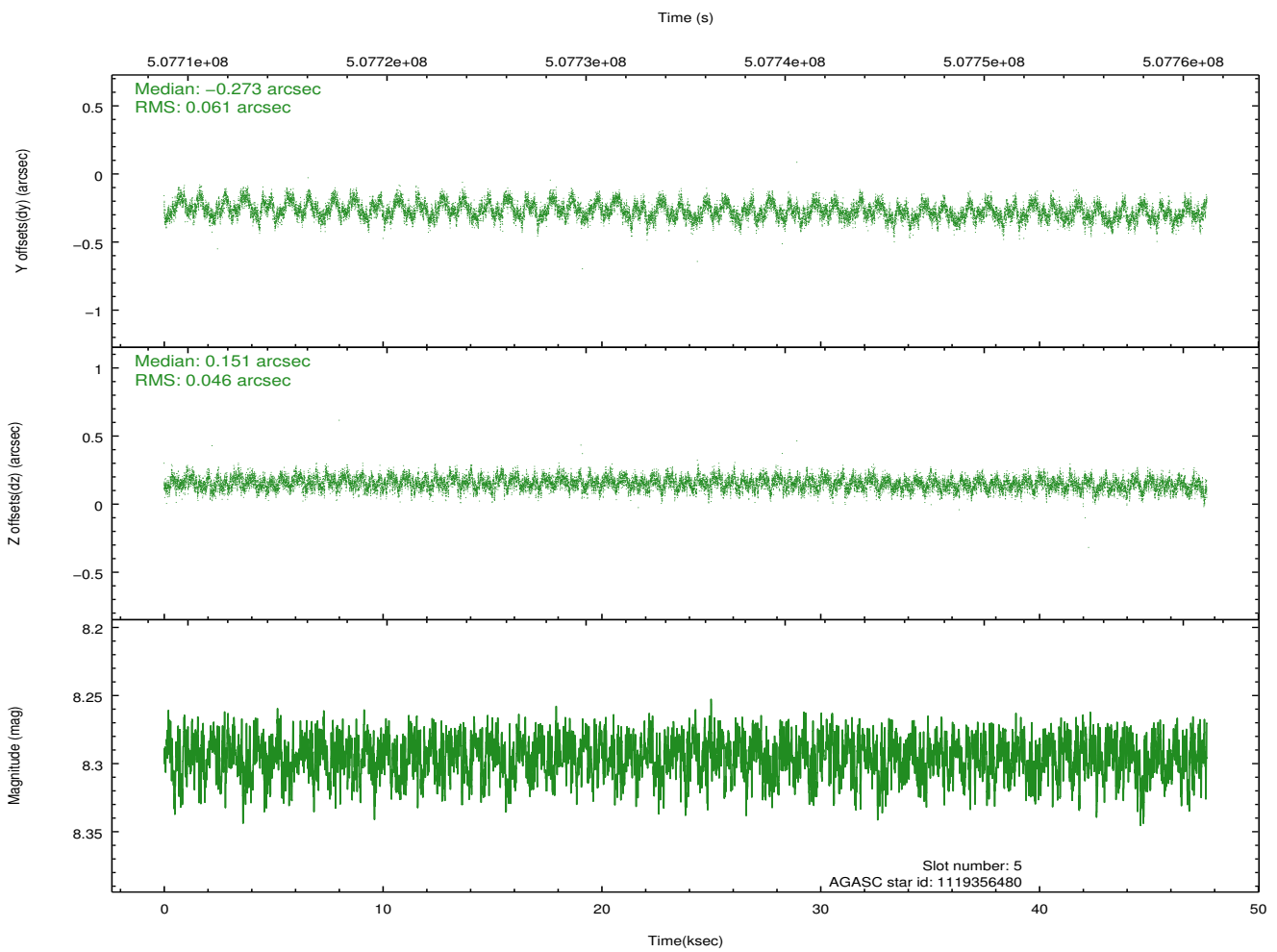
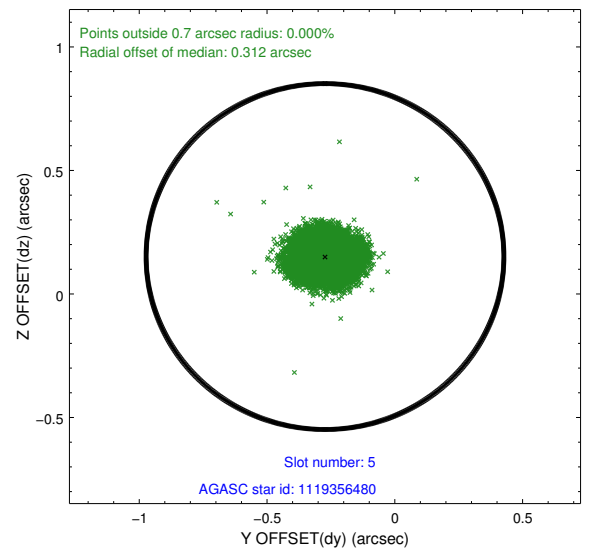
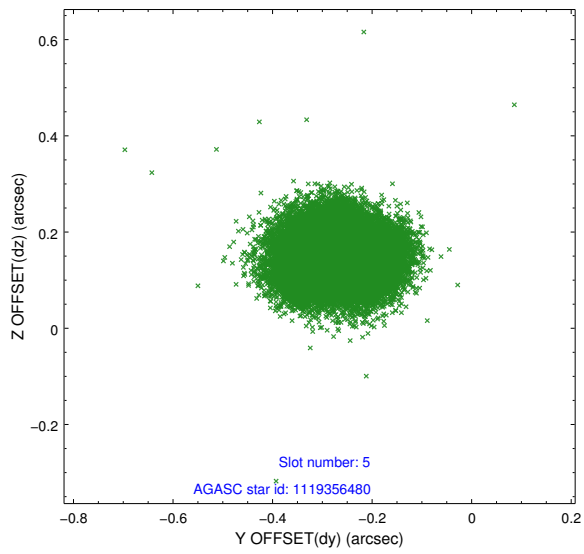
2.4.1 Slot 3



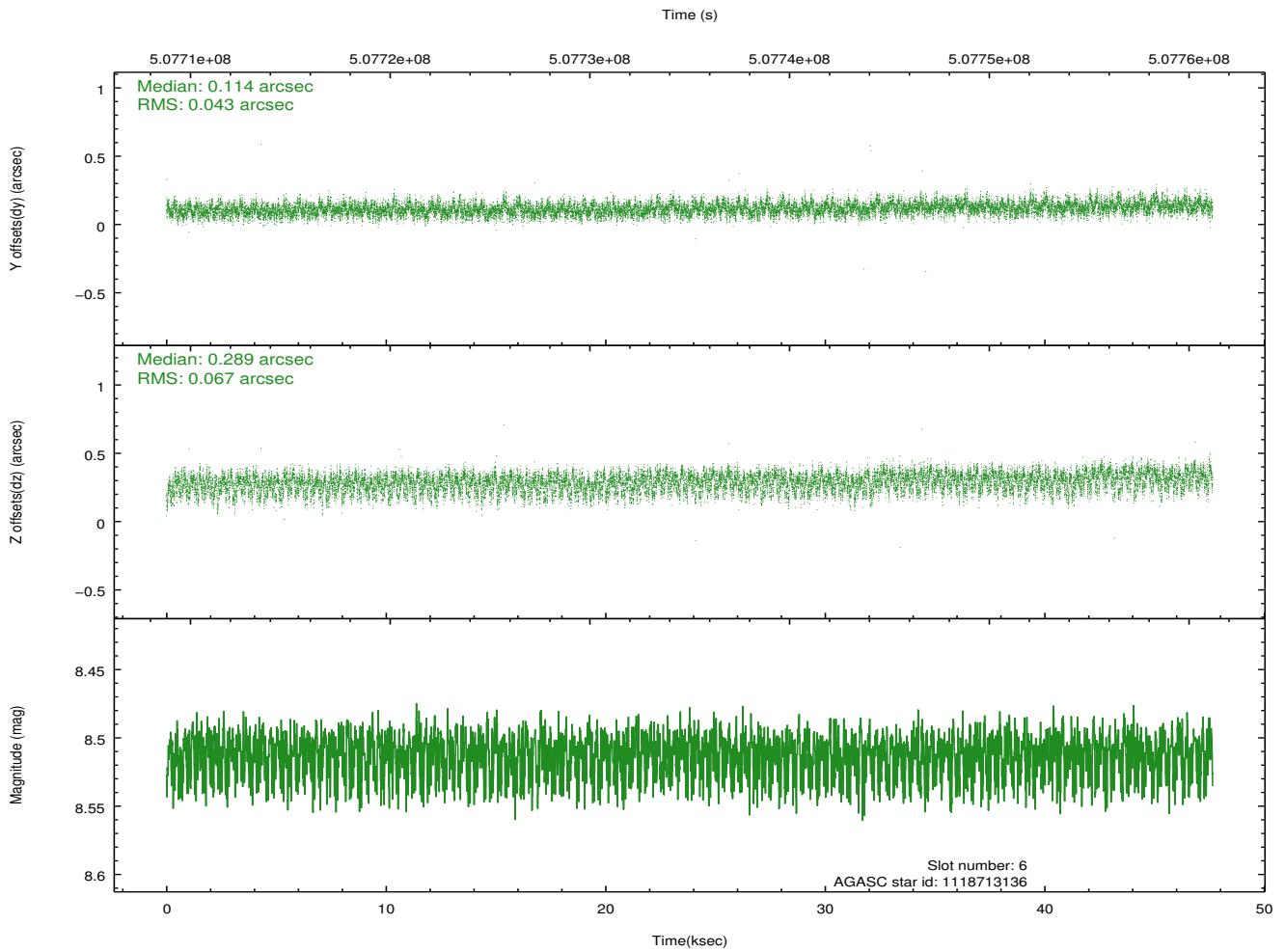
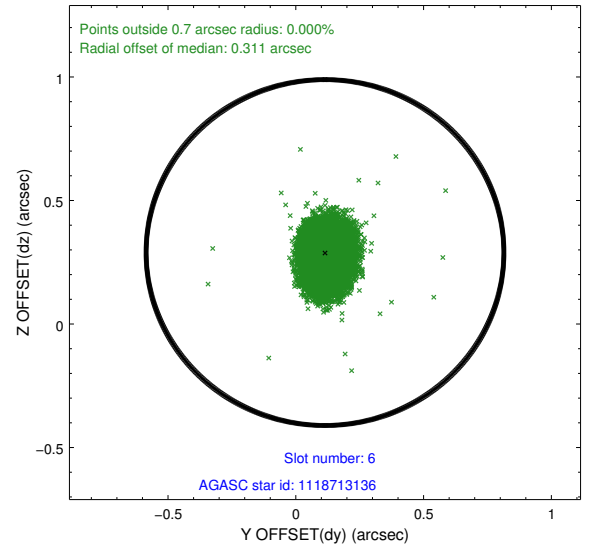
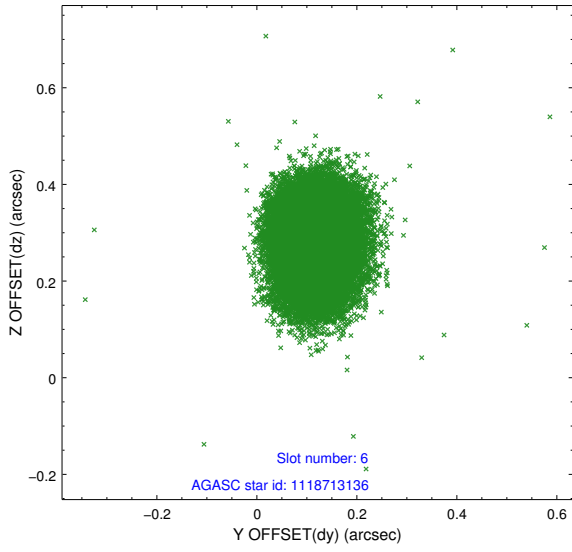
2.4.2 Slot 4



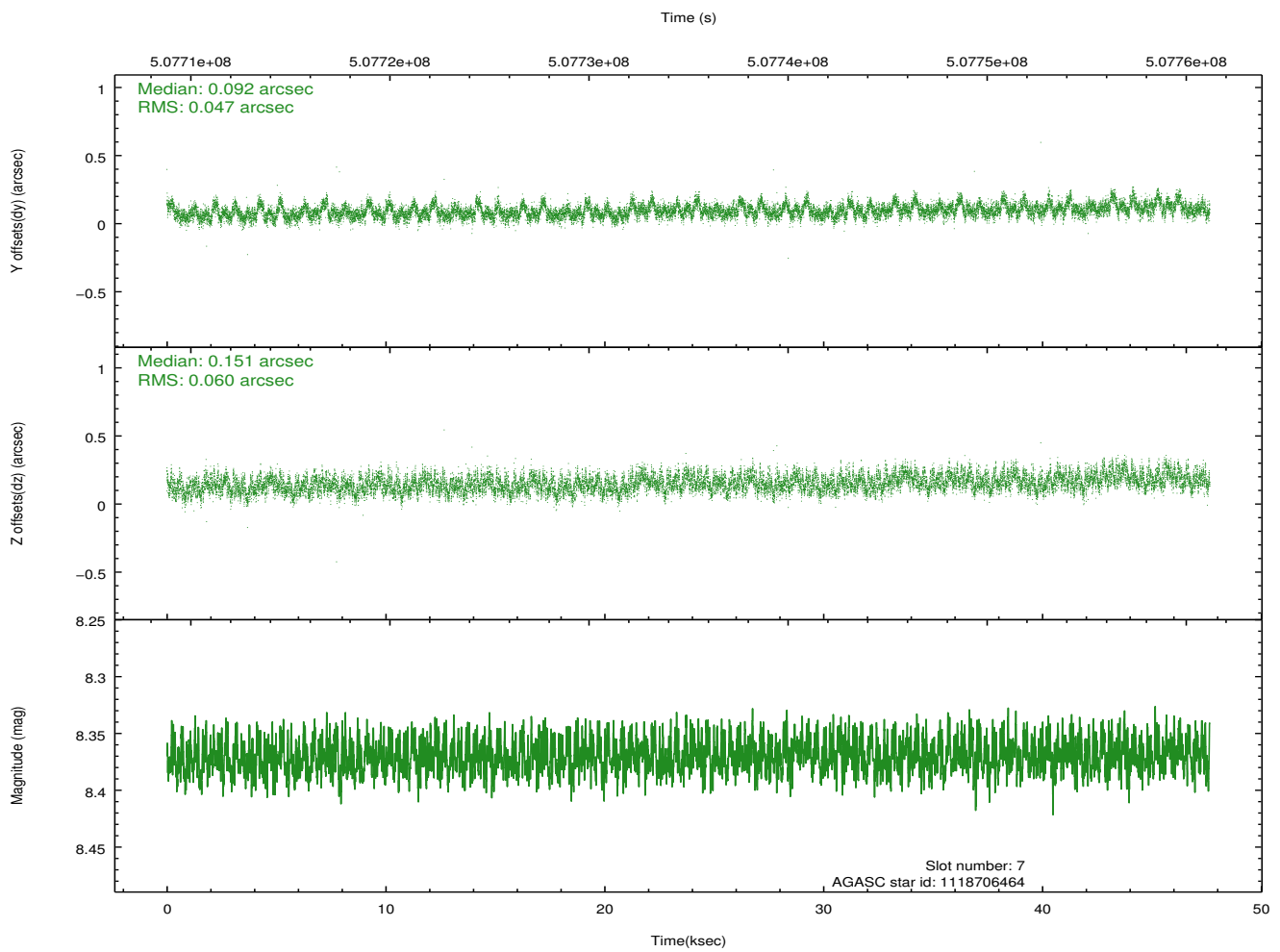
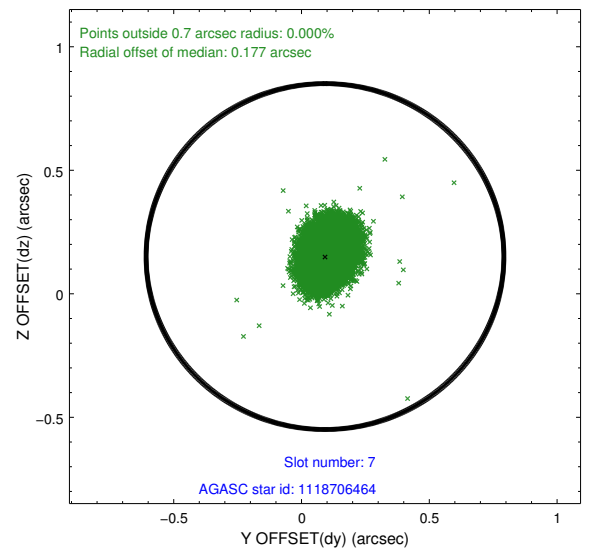
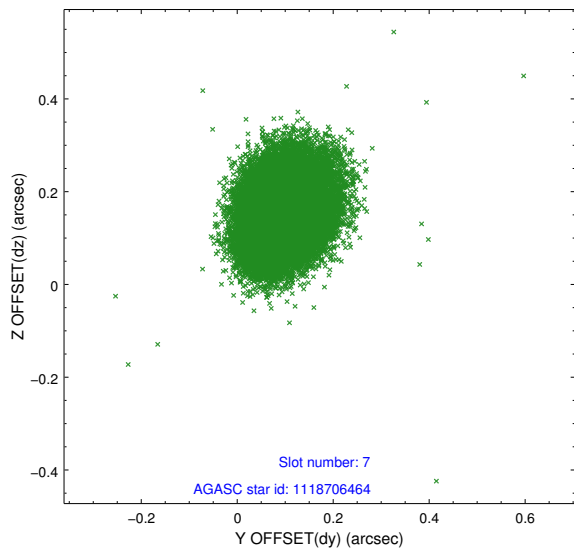
2.4.3 Slot 5



2.4.4 Slot 6

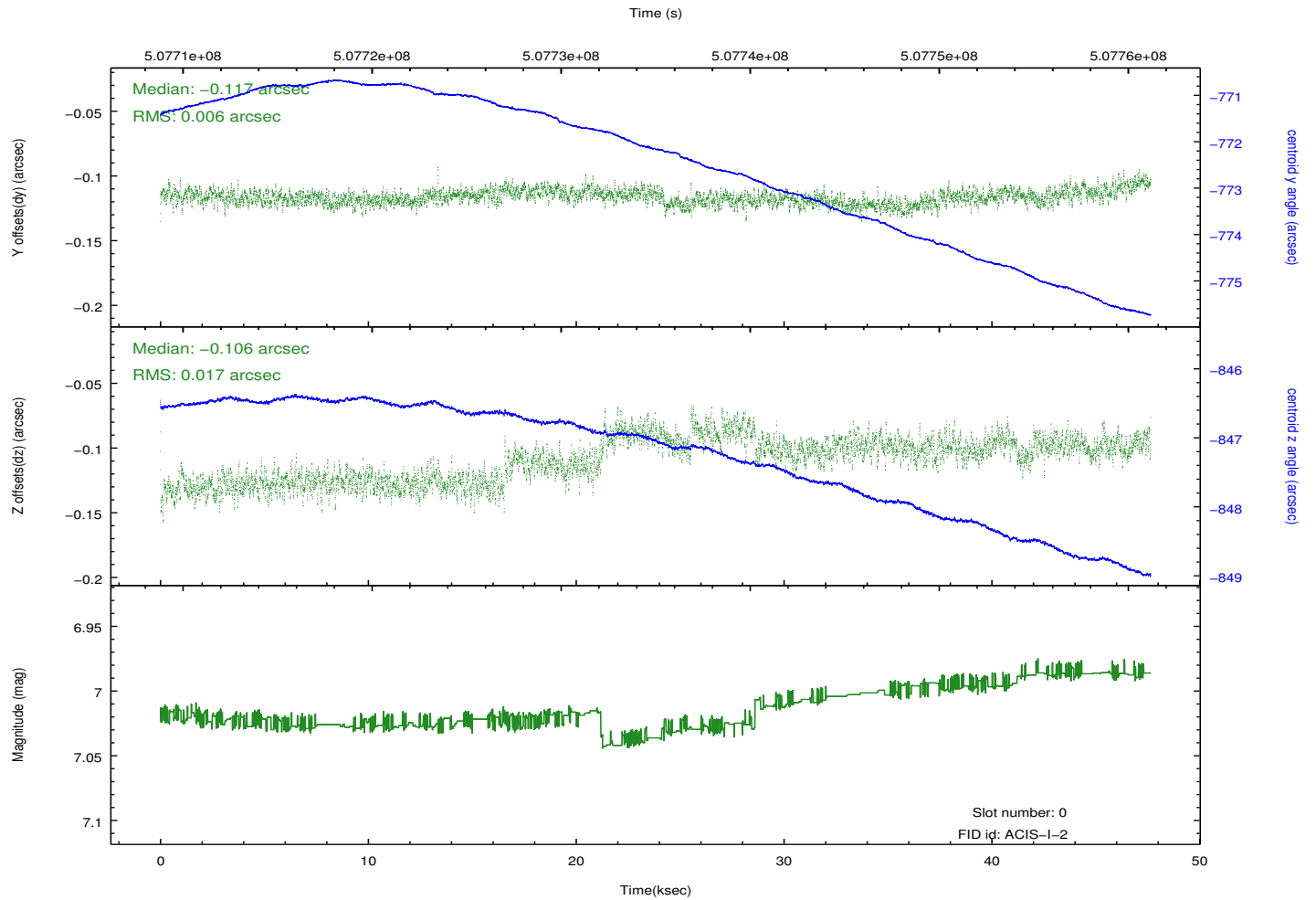
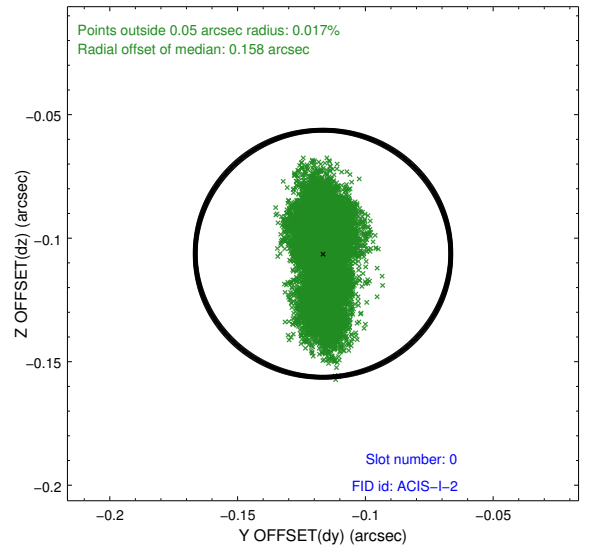
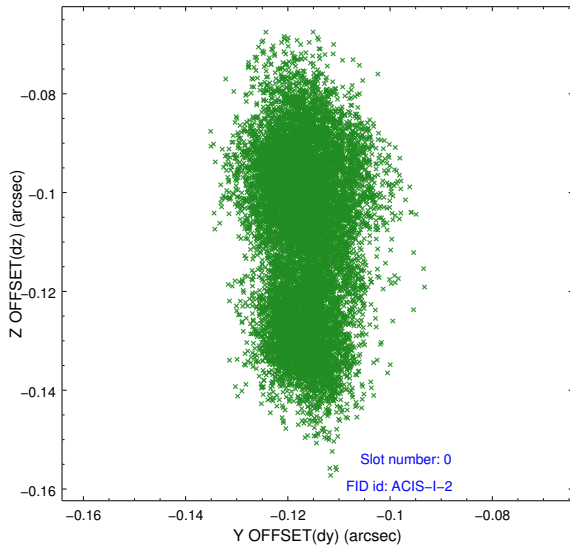


2.4.5 Slot 7

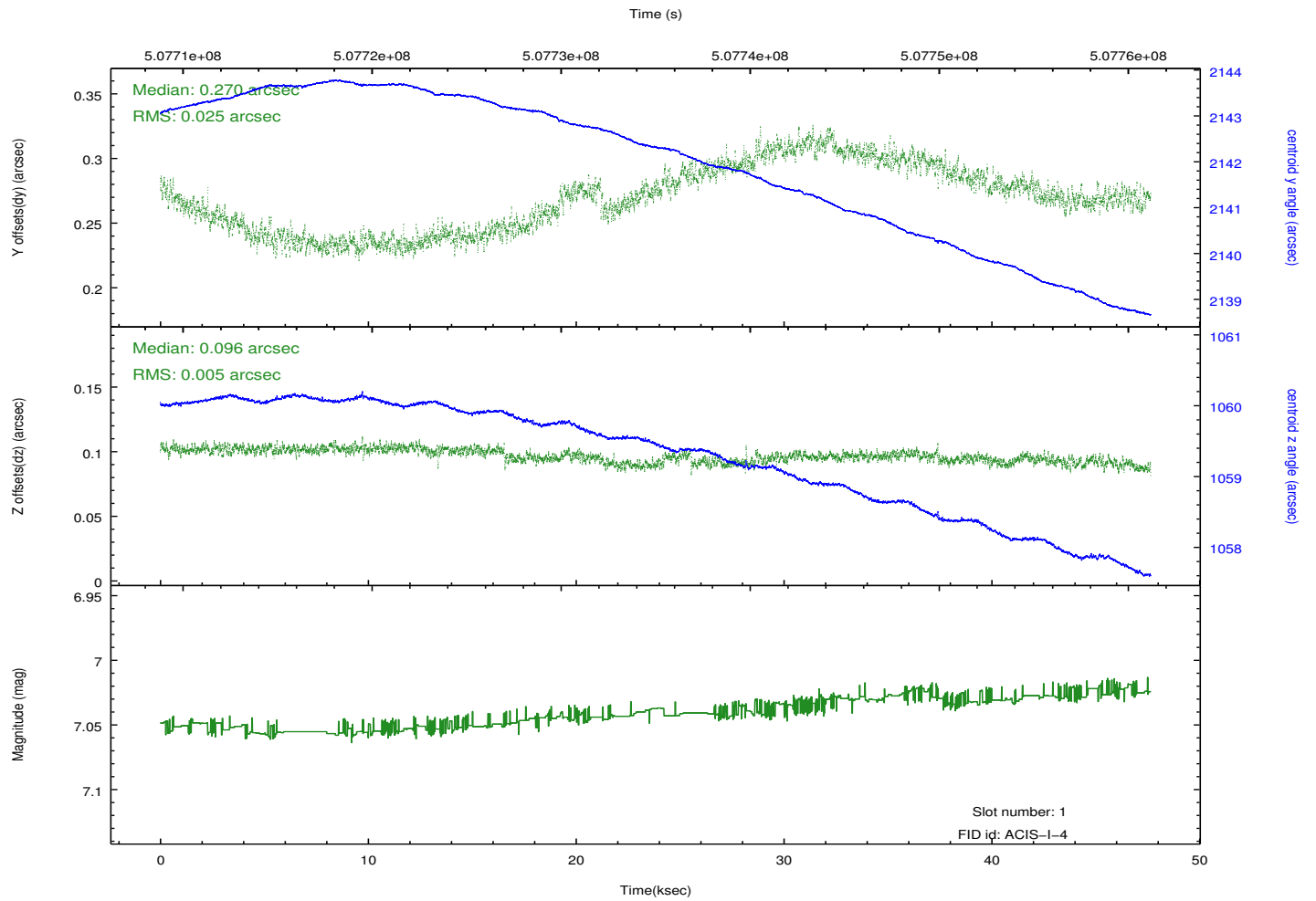
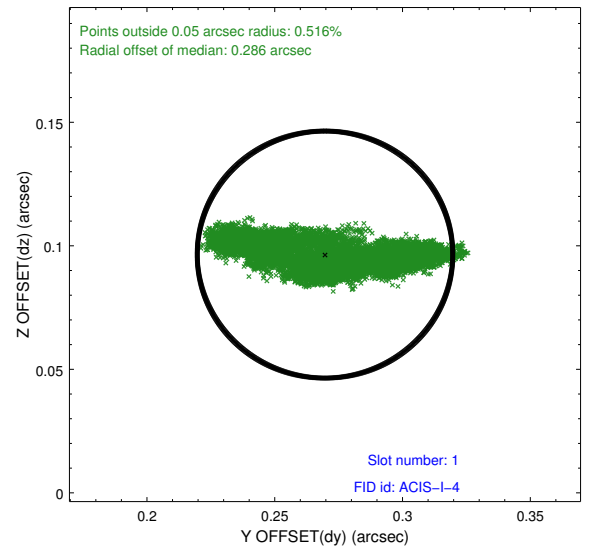
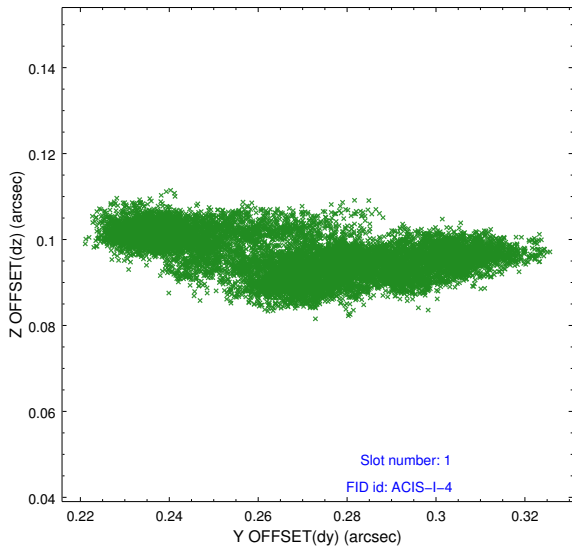


2.5 FID Slots

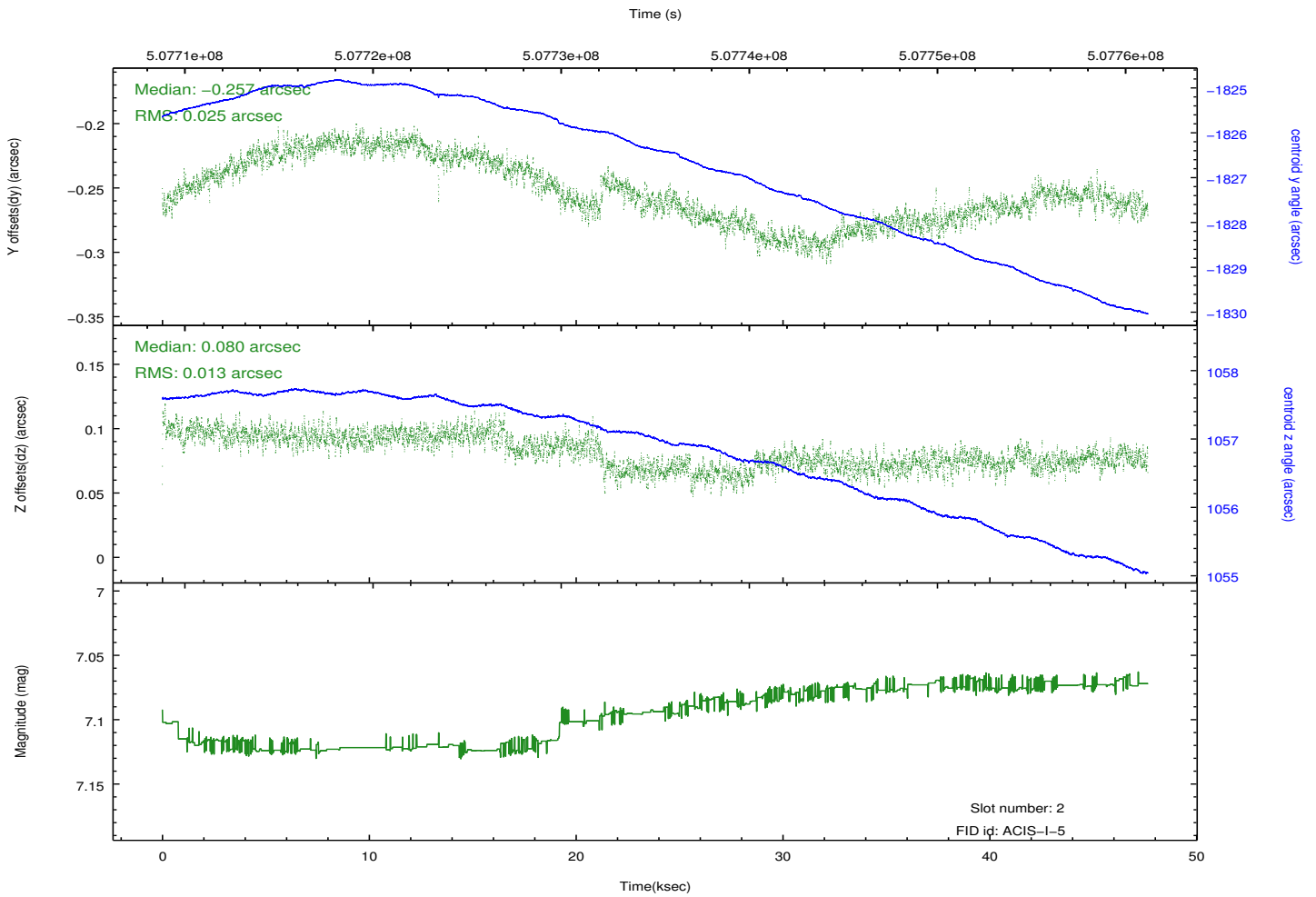
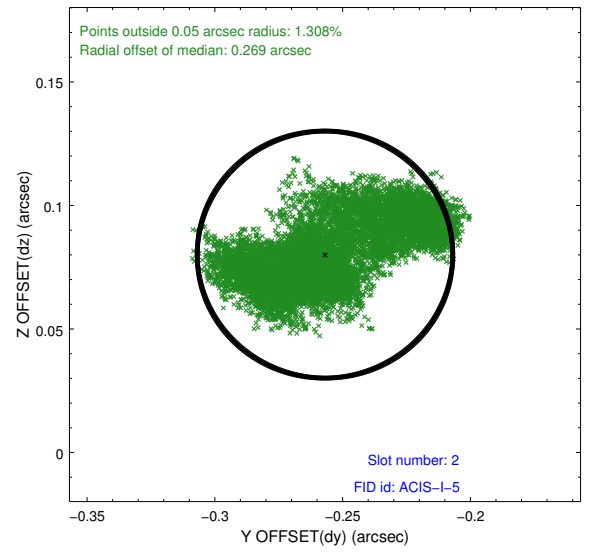
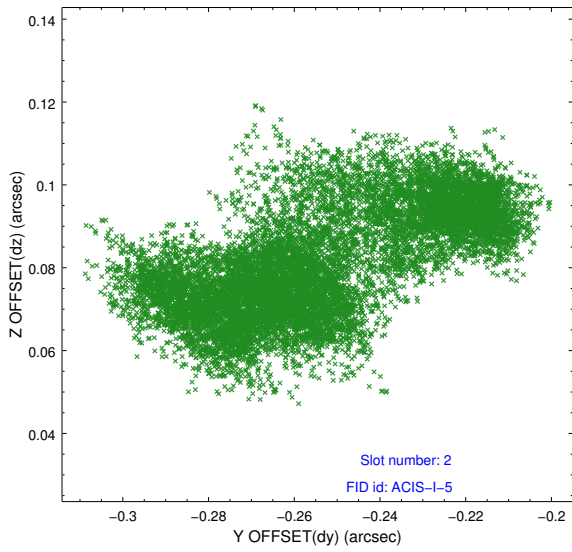
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	46.912104742765

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.