

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 14450 - L2 Version 1  
Chandra X-Ray Center

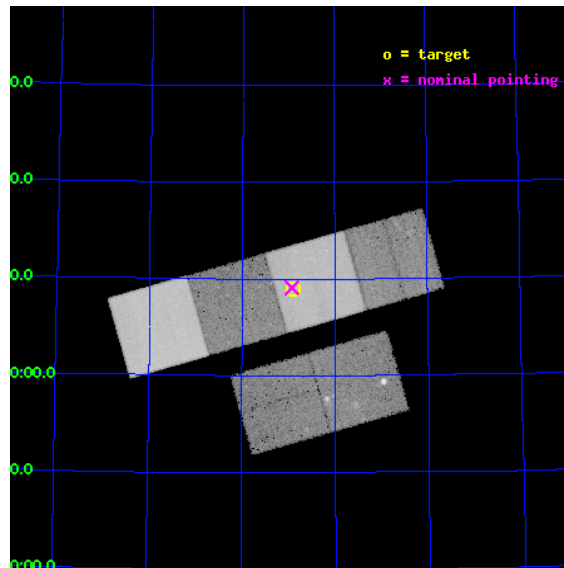
L2 Processing Date : Jun 29 2012

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# 1 Front

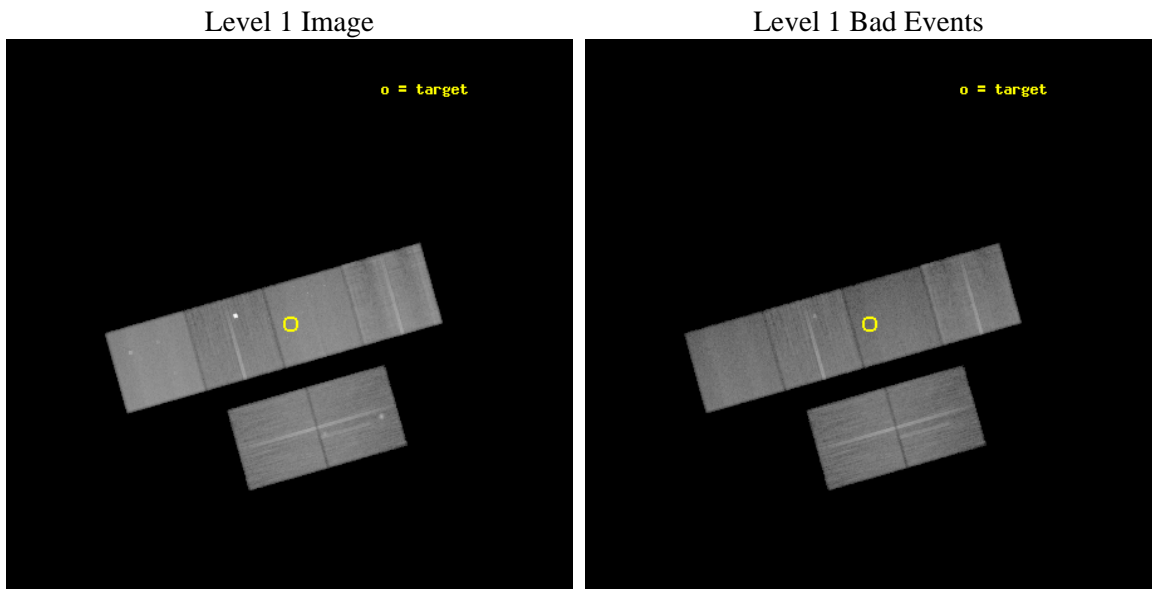
seq_num	801164	Sequence number
obs_id	14450	Observation id
title	The Impact of Brightest Cluster Galaxy Formation on the Intracluster Medium	Proposal title
observer	Dr. John Mulchaey	Principal investigator
object	RXJ0720.8+7109	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	110.225	Observer's specified target RA [deg]
dec_targ	71.149444	Observer's specified target Dec [deg]
ra_nom	110.23199057499	Nominal RA [deg]
dec_nom	71.15144656095	Nominal Dec [deg]
roll_nom	344.15001833033	Nominal Roll [deg]
revision	1	Processing version of data
ontime	44962.424960792	Sum of GTIs [s]
livetime	44393.083662817	Livetime [s]
ontime2	44955.984020352	Sum of GTIs [s]
ontime3	44962.301840782	Sum of GTIs [s]
ontime5	44962.383920789	Sum of GTIs [s]
ontime6	44959.101860404	Sum of GTIs [s]
ontime7	44962.424960792	Sum of GTIs [s]
ontime8	44955.778750122	Sum of GTIs [s]
l2events	451633	Number of level 2 events



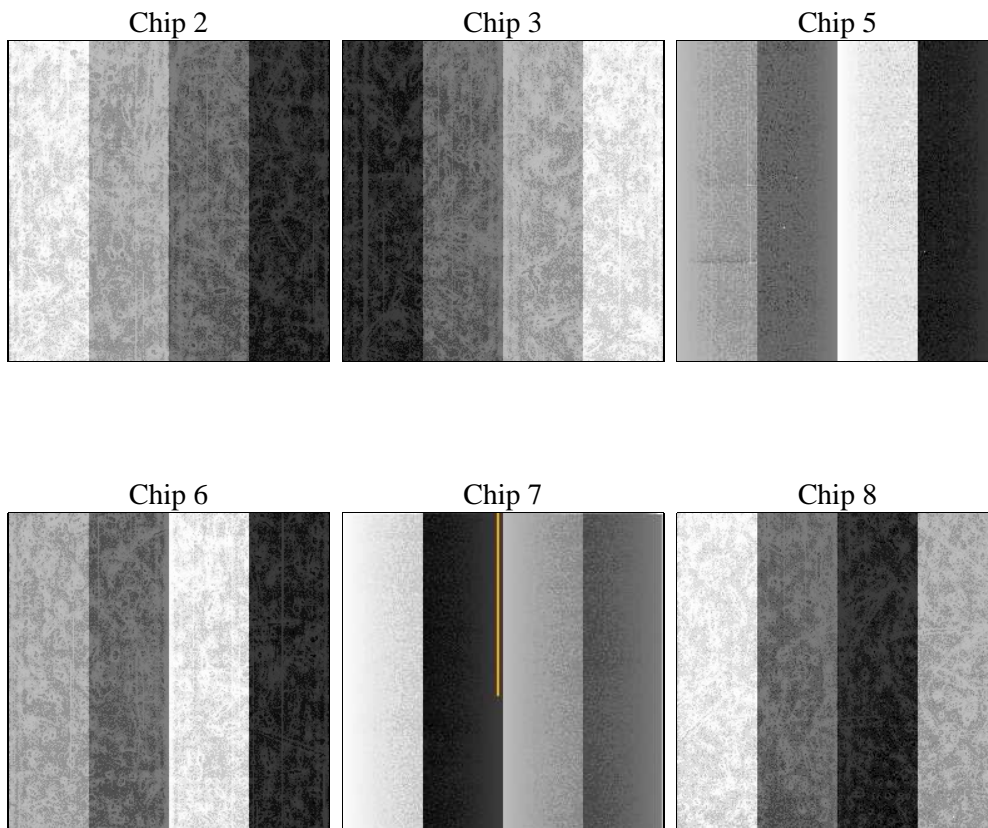
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	45000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	44962.424960792	Sum of GTIs [s]
caldbver	4.5.0	&#160	ontime2	44955.984020352	Sum of GTIs [s]
date	2012-06-29T07:20:16	Date and time of file creation	ontime3	44962.301840782	Sum of GTIs [s]
revision	1	Processing version of data	ontime5	44962.383920789	Sum of GTIs [s]
			ontime6	44959.101860404	Sum of GTIs [s]
			ontime7	44962.424960792	Sum of GTIs [s]
			ontime8	44955.778750122	Sum of GTIs [s]
			l1events	1921923	Number of level 1 events

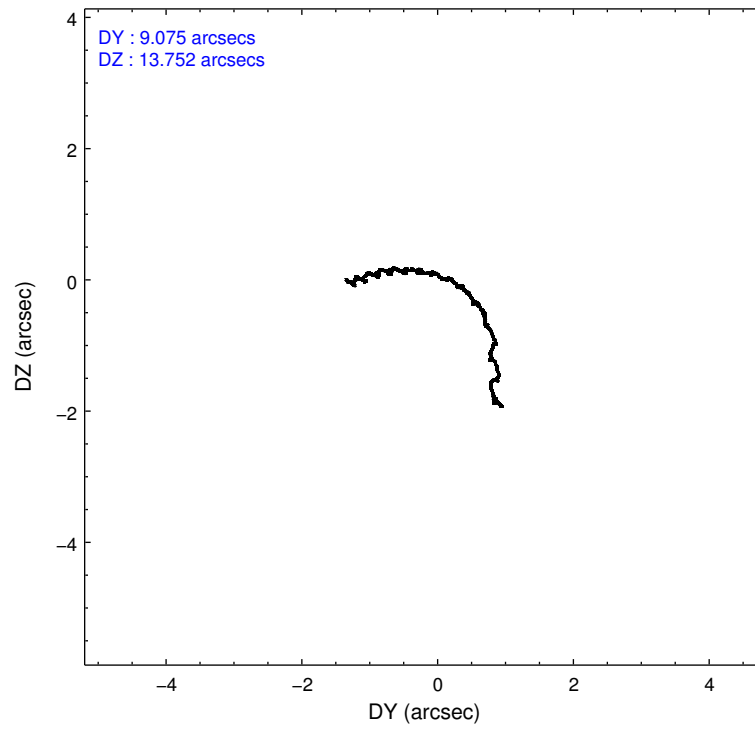
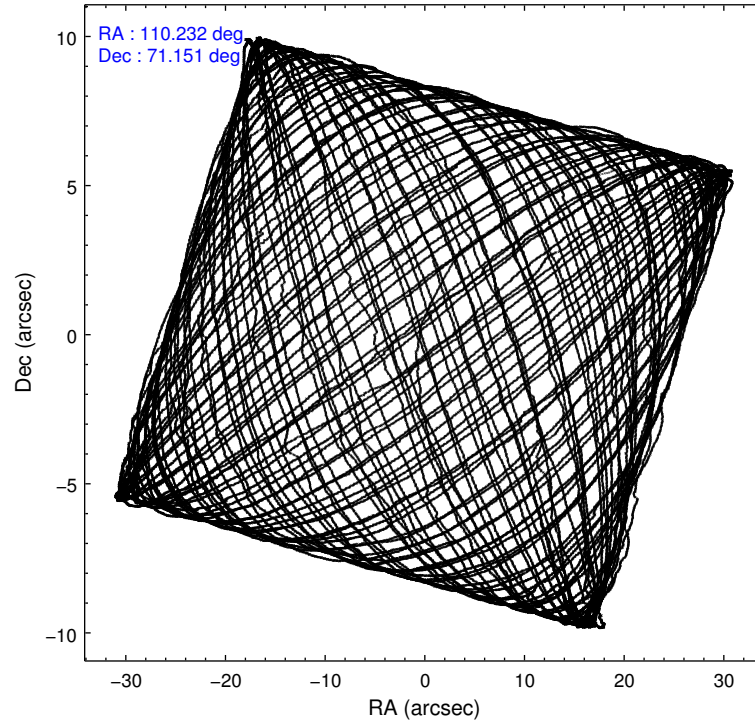
### 2.1.4 Events

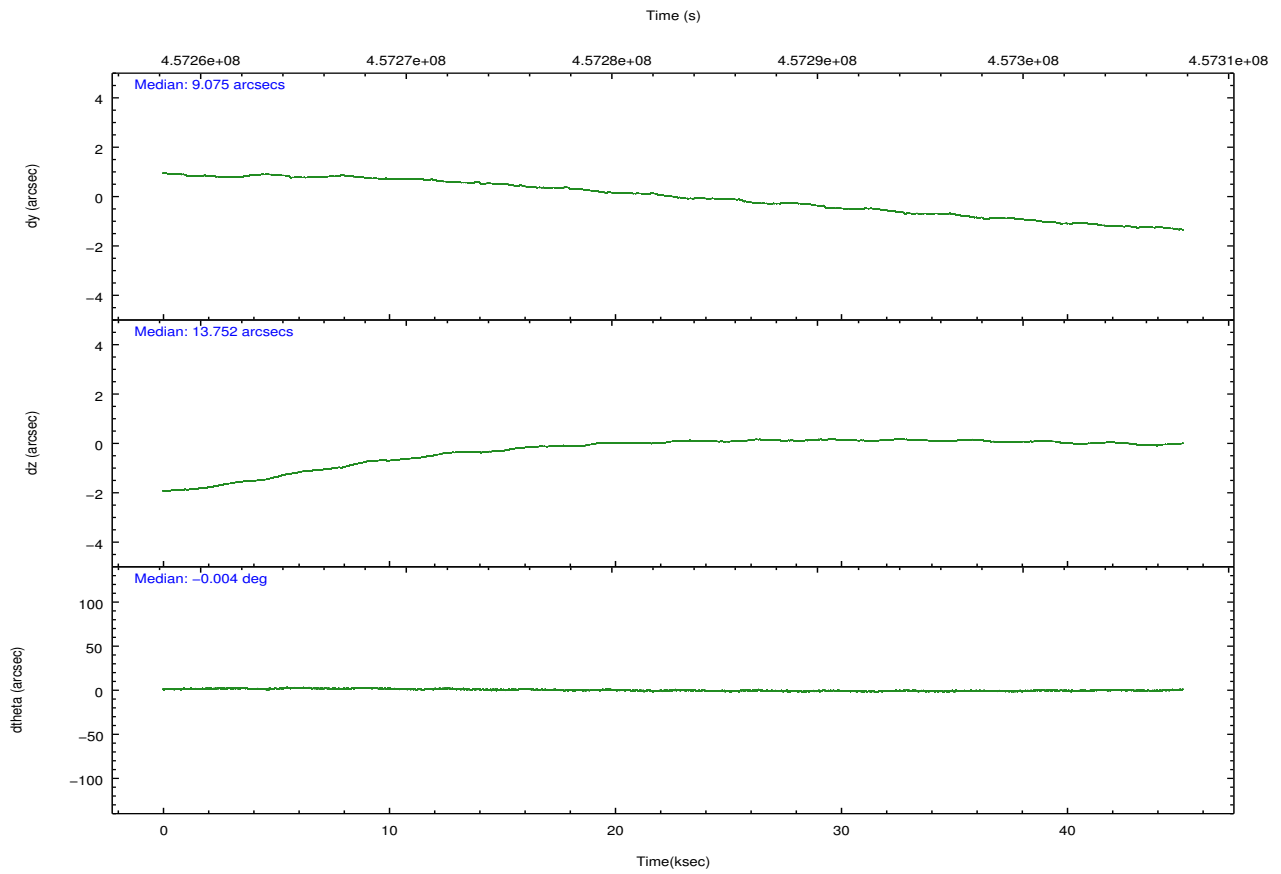
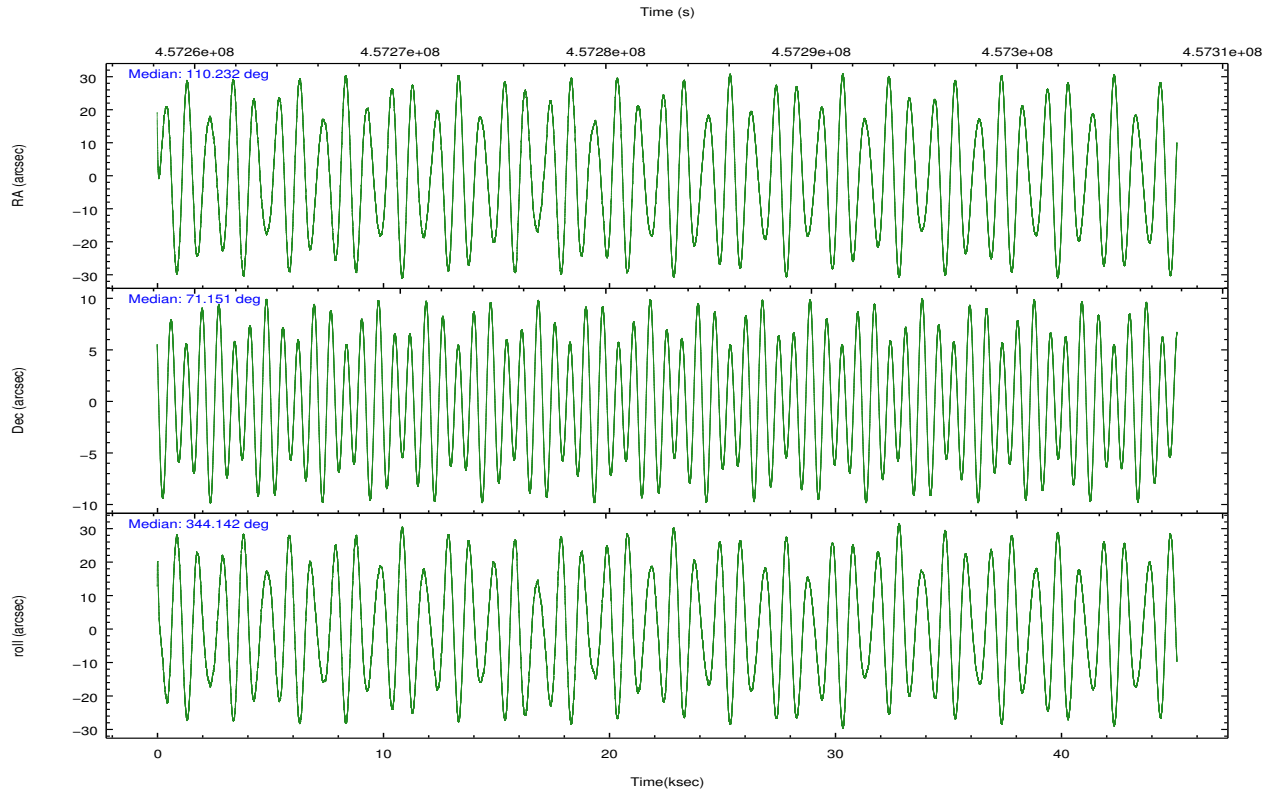
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	272168	249693	409699	305685	344384	340294	grade 0 events	10132	12443	13221	37320	14190	26847
rejected events	243401	218477	212117	234564	190856	249308		3%	4%	3%	12%	4%	7%
rejected %	89%	87%	51%	76%	55%	73%	grade 1 events	176	154	712	300	432	241
								0%	0%	0%	0%	0%	0%
							grade 2 events	7277	6488	60991	20374	31808	21403
								2%	2%	14%	6%	9%	6%
							grade 3 events	2855	3158	7577	3208	13365	9284
								1%	1%	1%	1%	3%	2%
							grade 4 events	2910	3123	7138	3110	13397	8852
								1%	1%	1%	1%	3%	2%
							grade 5 events	11100	12822	31426	12979	35547	18656
								4%	5%	7%	4%	10%	5%
							grade 6 events	5596	6005	108675	7114	80774	24605
								2%	2%	26%	2%	23%	7%
							grade 7 events	232122	205500	179959	221280	154871	230406
								85%	82%	43%	72%	44%	67%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	110.150239	110.2319905749856	CCD I2 on	O3	Y
[deg] Pointing Dec	71.144385	71.15144656095039	CCD I3 on	O4	Y
[deg] Pointing Roll	344.070748	344.150018330329	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O5	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O2	Y
[s] Observation start time (MET)	457260524.184000	457259216.71414	CCD S5 on	N	N
Observation start date	2012-06-28T08:47:38	2012-06-28T08:26:56	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	457305524.184000	457306260.11665	On-chip summing requested	N	N
Observation end date	2012-06-28T21:17:38	2012-06-28T21:31:00	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



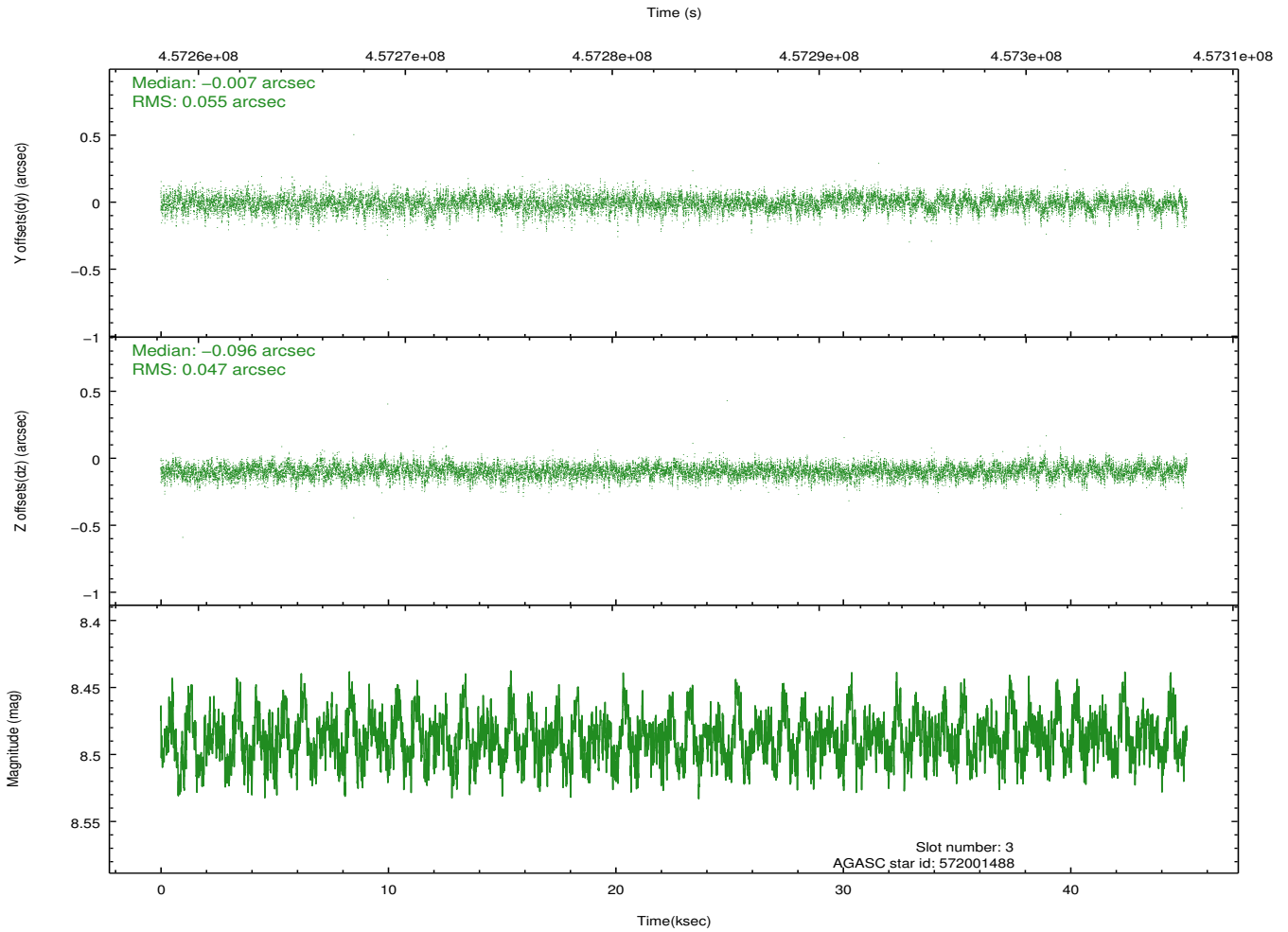
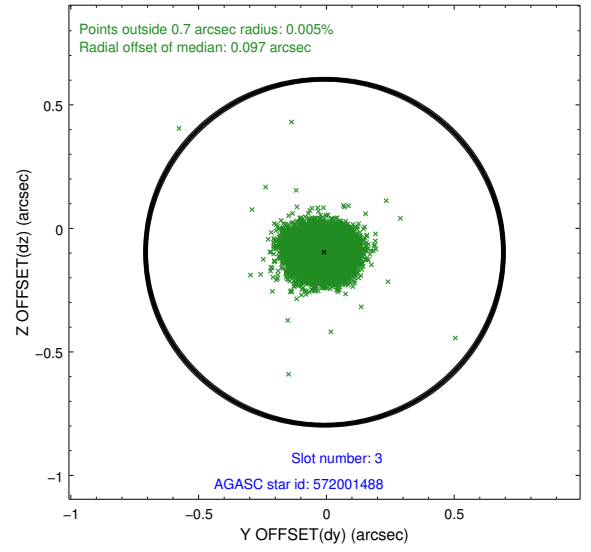
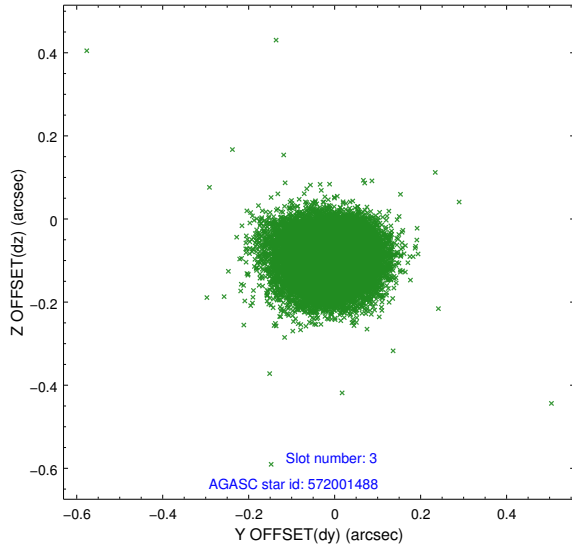


### Slot Statistics

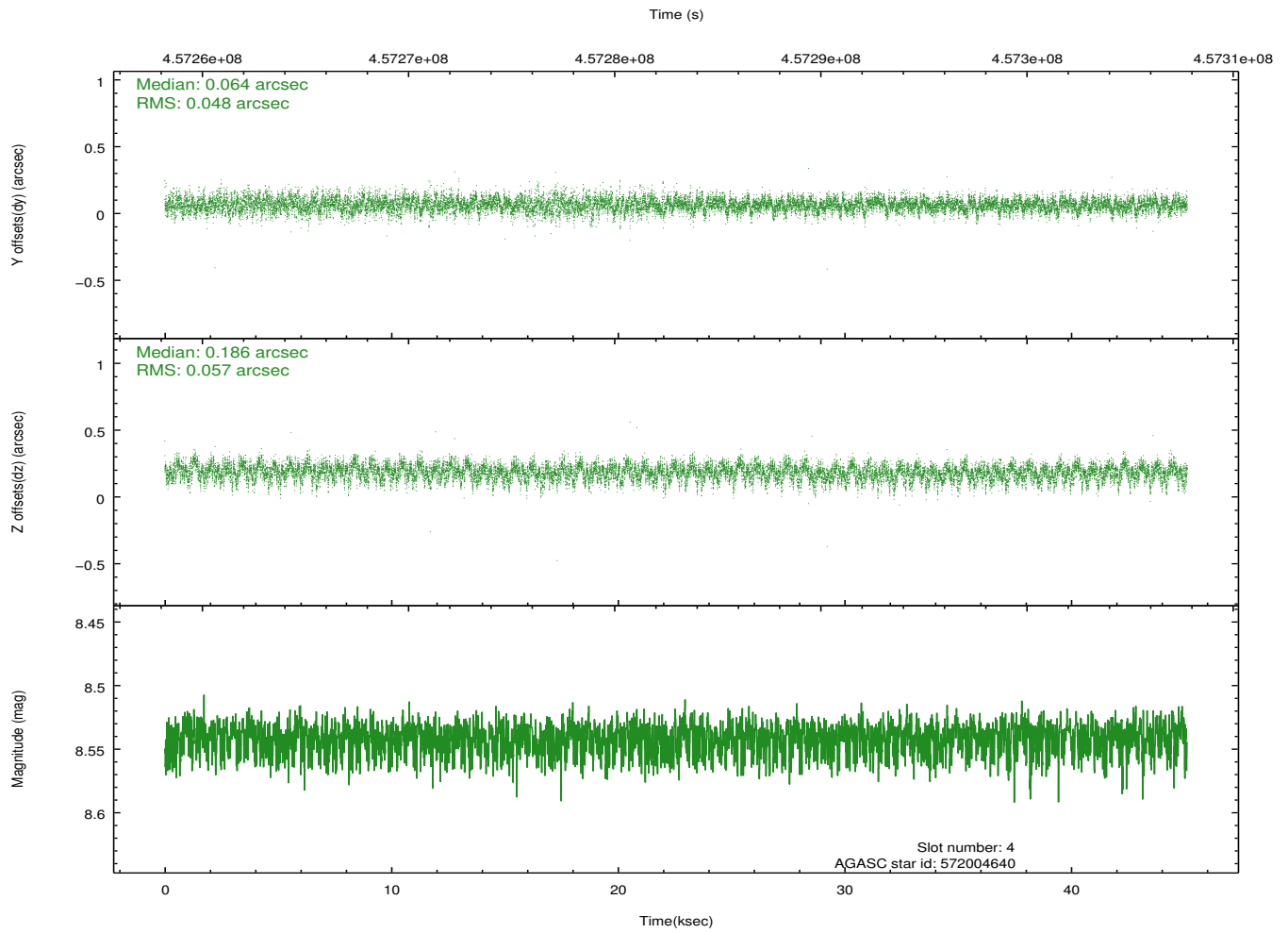
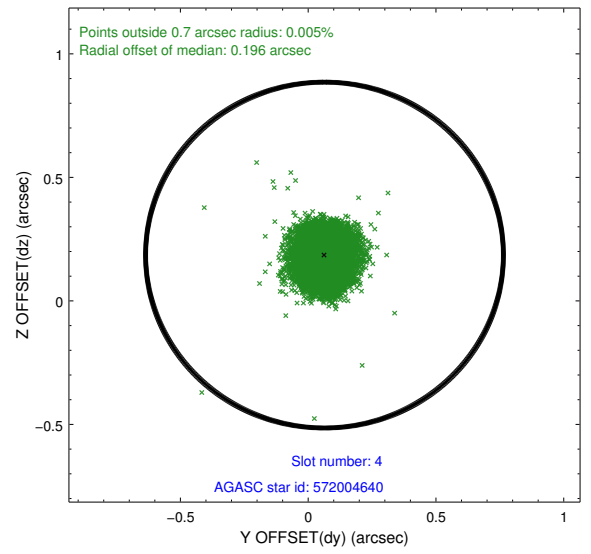
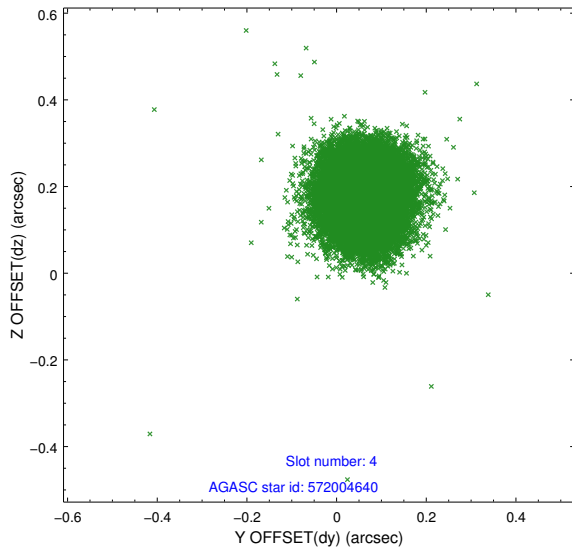
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.97	11006	-0.049	-0.055	0.013	0.026	0.000000	0.000000	-761.90	-1734.82
1	FID	ACIS-S-4	7.05	11006	0.199	0.038	0.017	0.044	0.000000	0.000000	2151.64	173.73
2	FID	ACIS-S-5	7.09	11006	-0.178	0.026	0.018	0.033	0.000000	0.000000	-1814.86	167.42
3	GUIDE	572001488	8.49	21999	-0.007	-0.096	0.075	0.126	111.139482	70.686443	1582.91	-1252.50
4	GUIDE	572004640	8.54	21997	0.064	0.186	0.078	0.129	109.587132	70.919385	-415.18	-957.56
5	GUIDE	572527568	9.06	22002	-0.132	-0.129	0.095	0.153	109.983500	71.809635	-837.81	2251.46
6	GUIDE	572529680	9.30	21994	0.049	0.125	0.097	0.164	109.202854	71.554732	-1445.23	1132.72
7	GUIDE	572531952	8.58	22002	0.028	-0.080	0.089	0.141	110.007920	71.254600	-266.58	336.18

## 2.4 Star Slots

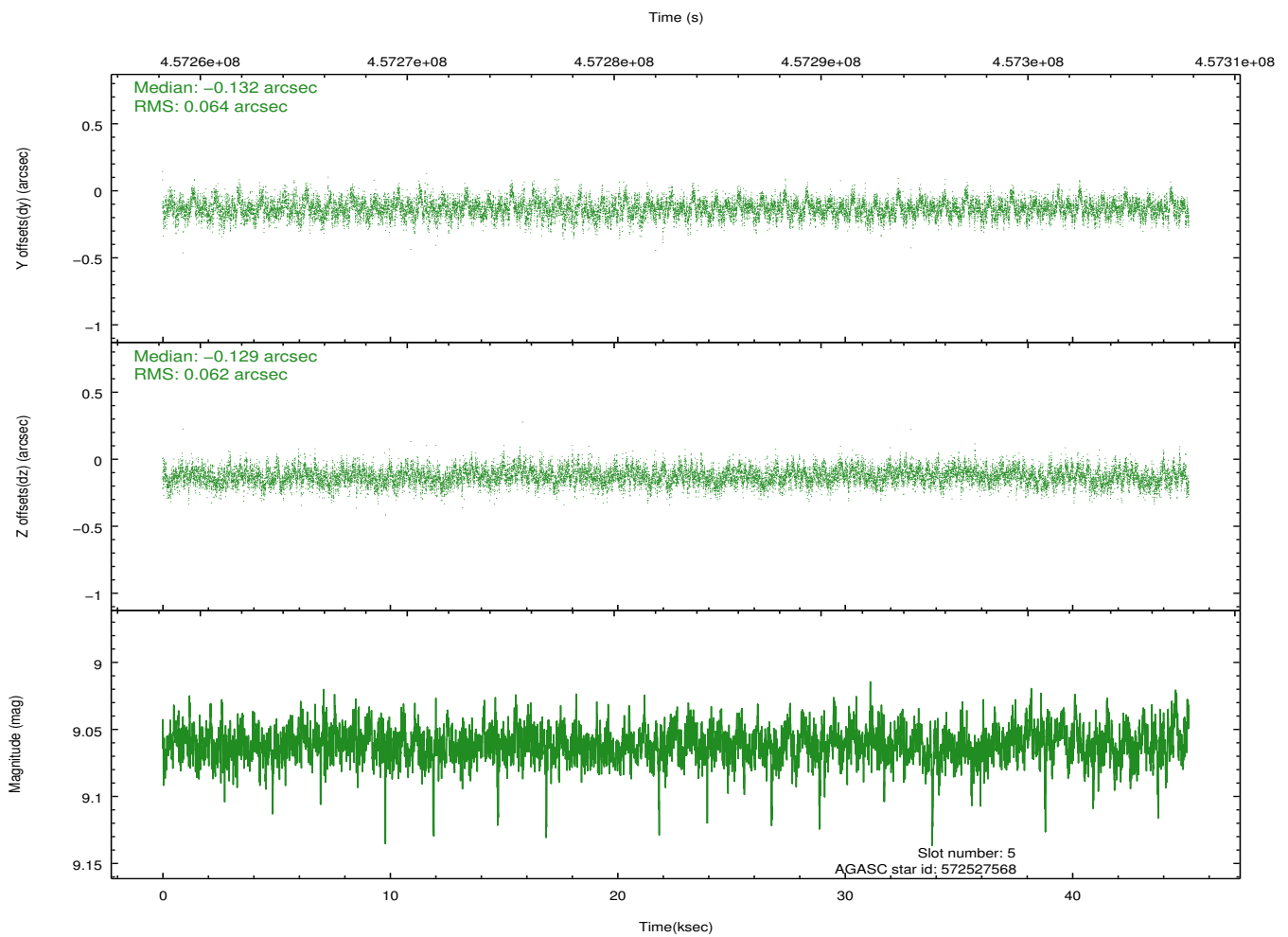
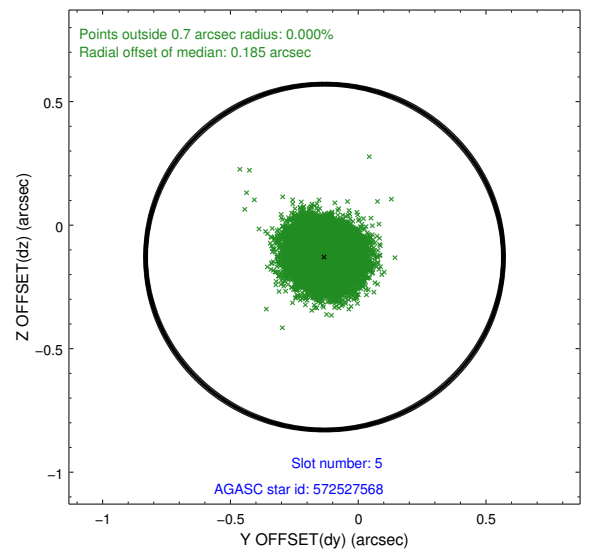
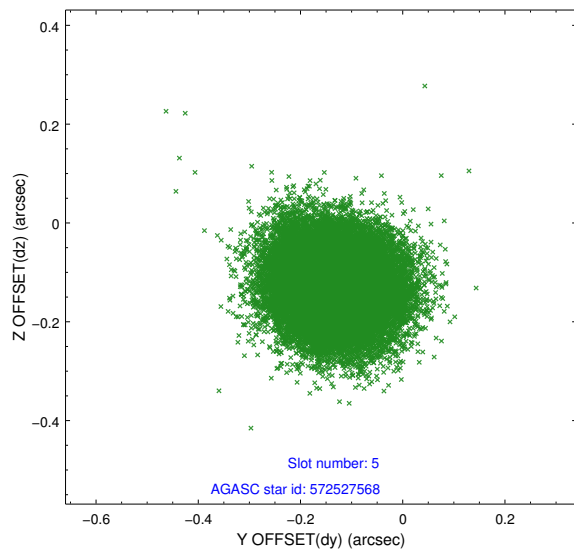
### 2.4.1 Slot 3



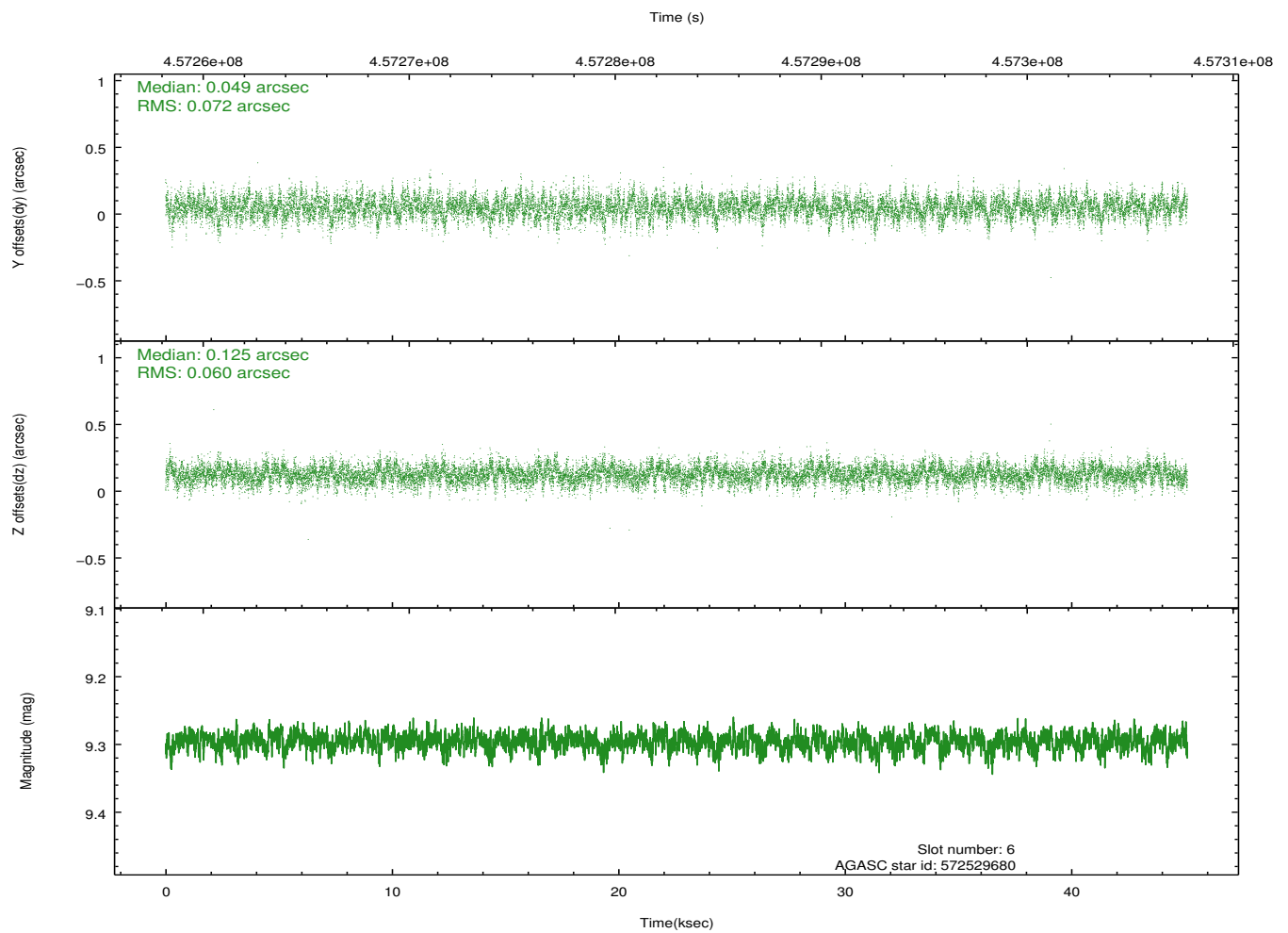
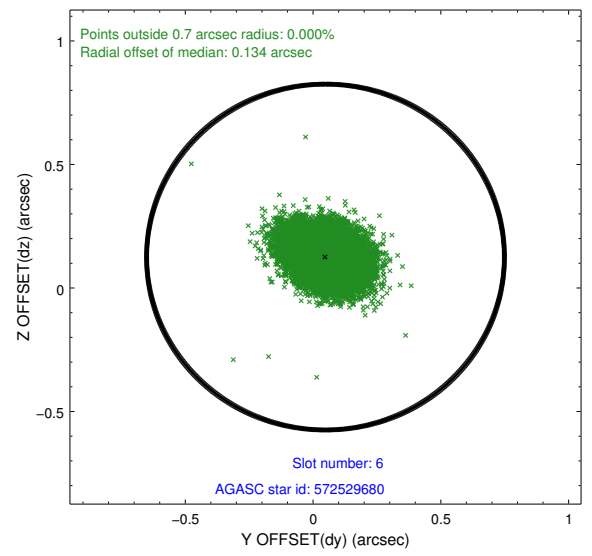
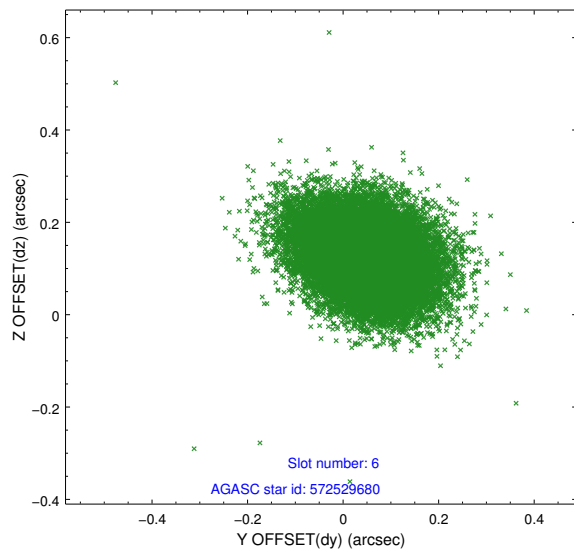
### 2.4.2 Slot 4



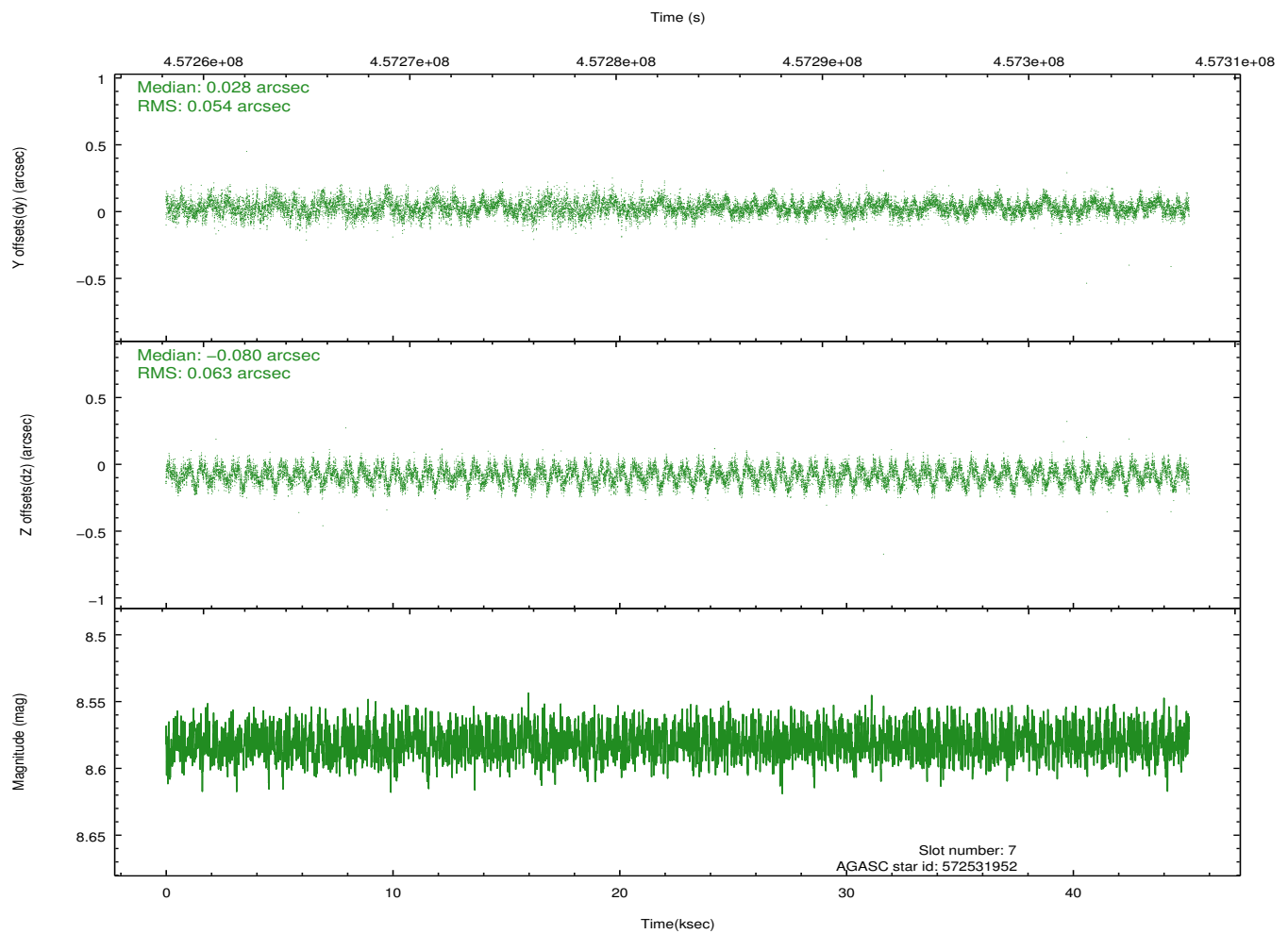
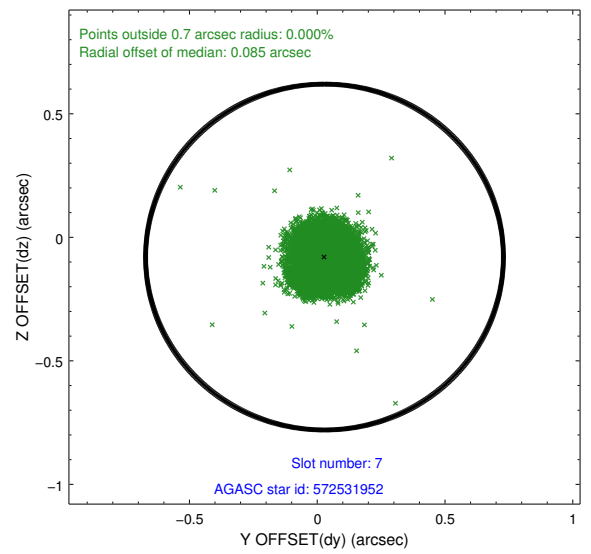
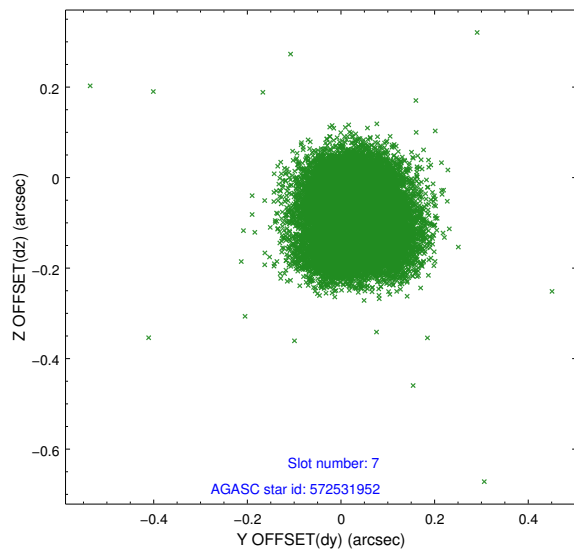
### 2.4.3 Slot 5



### 2.4.4 Slot 6

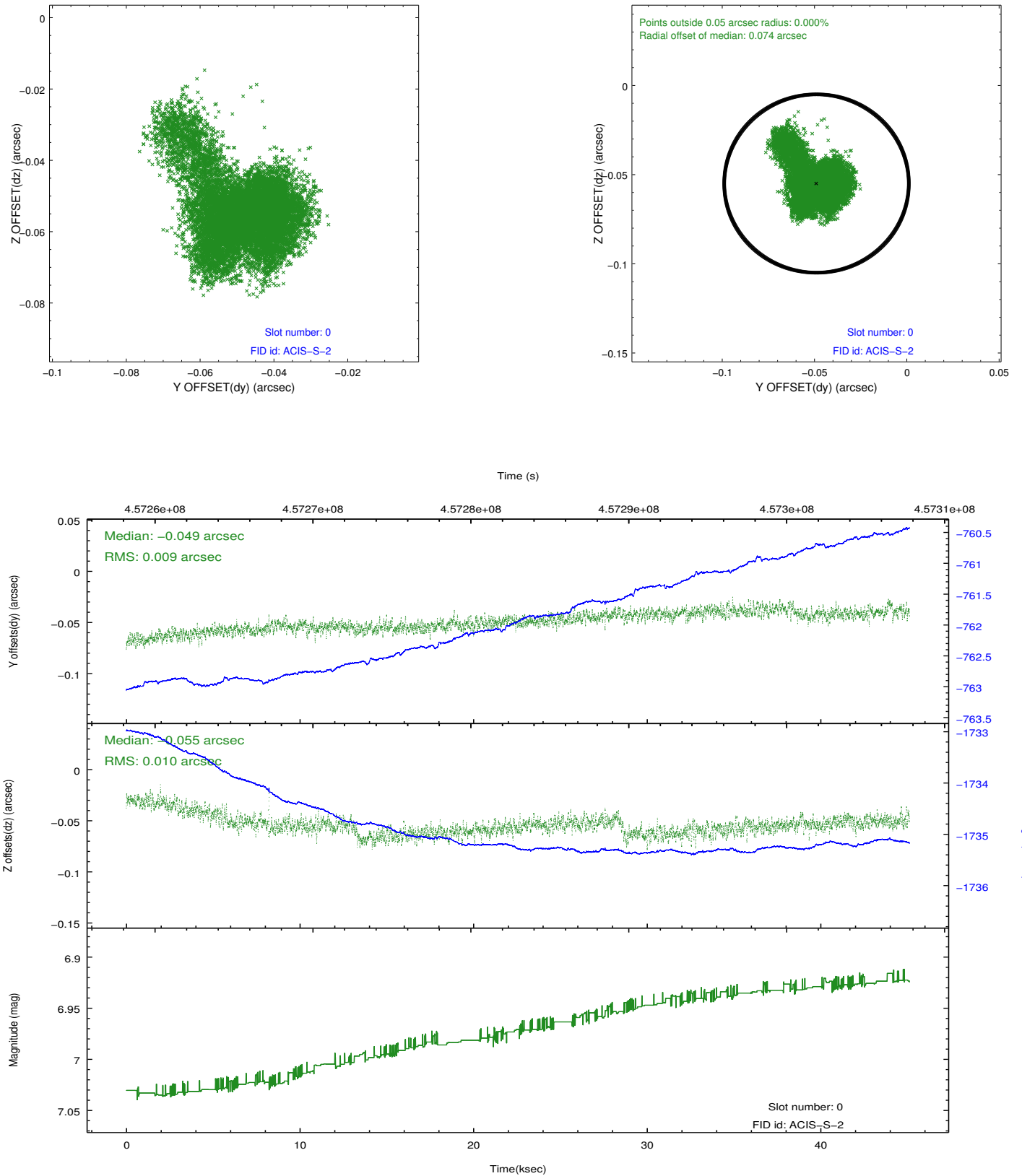


## 2.4.5 Slot 7

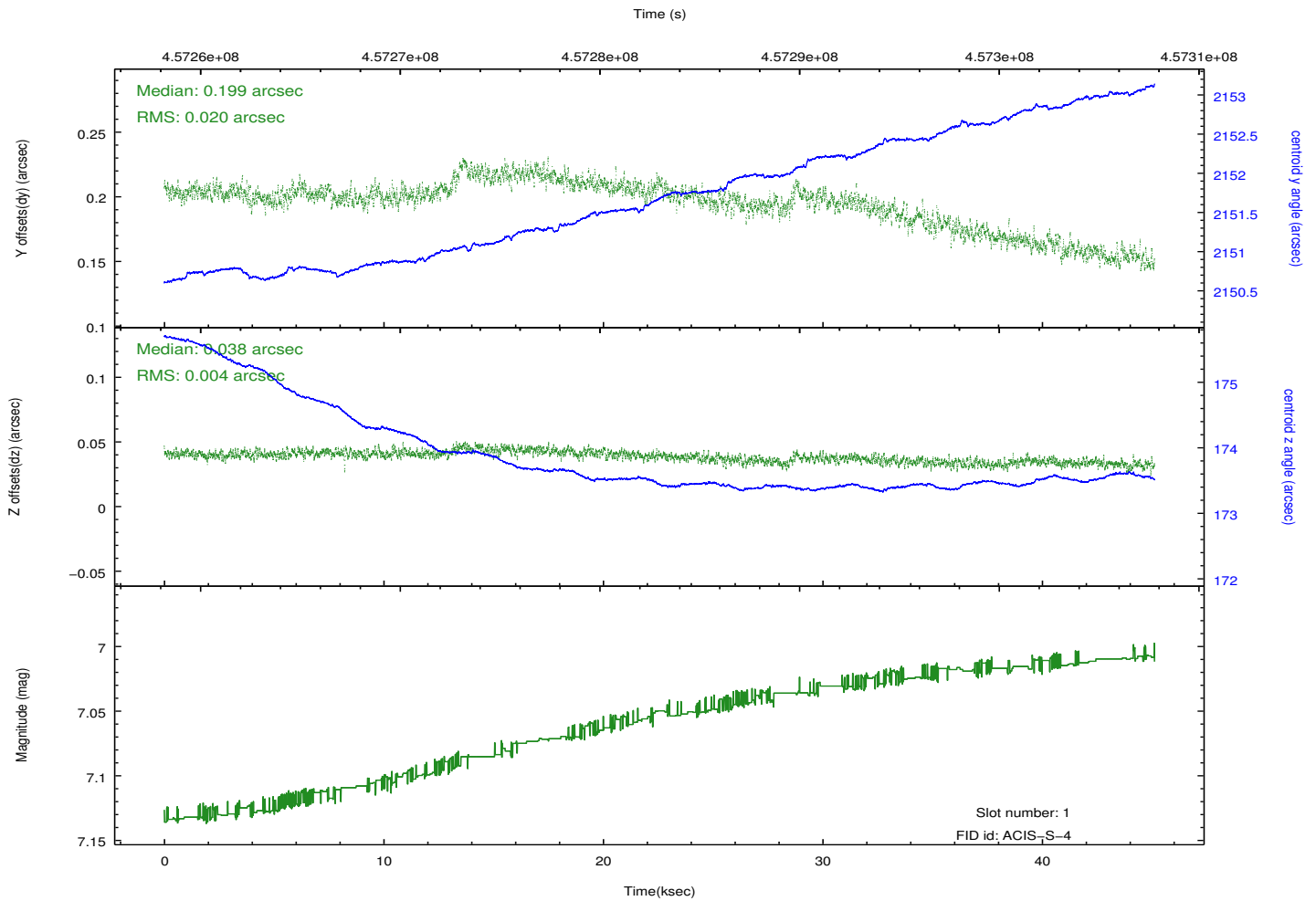
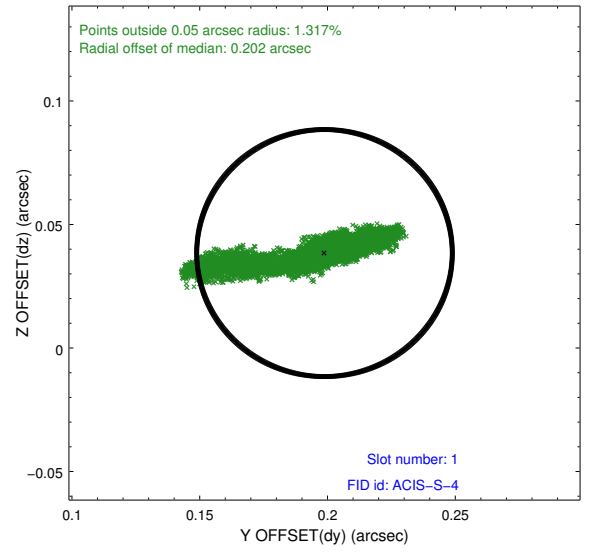
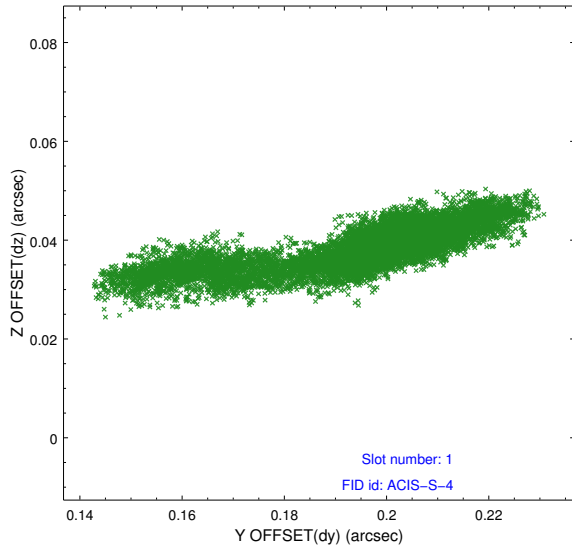


## 2.5 FID Slots

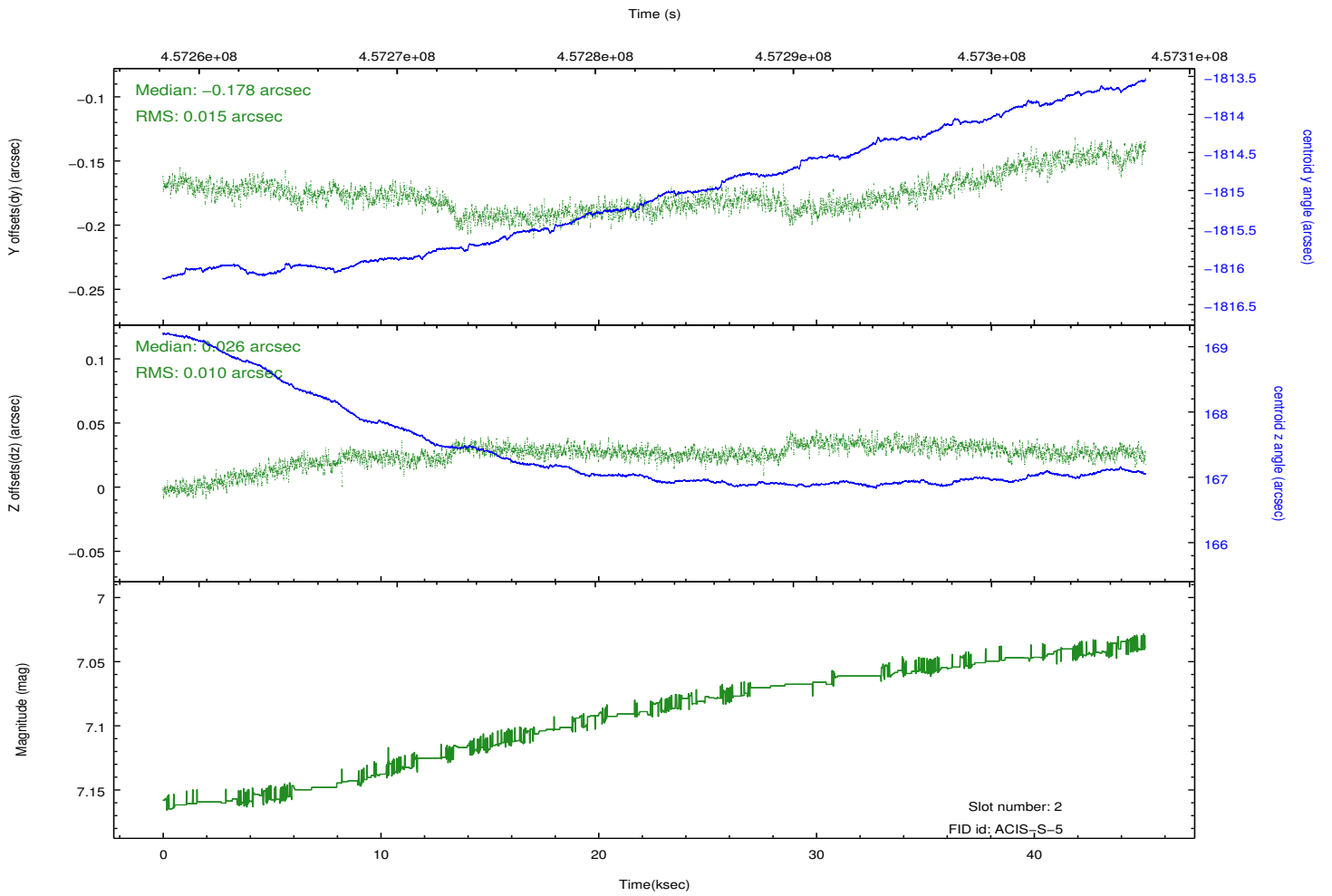
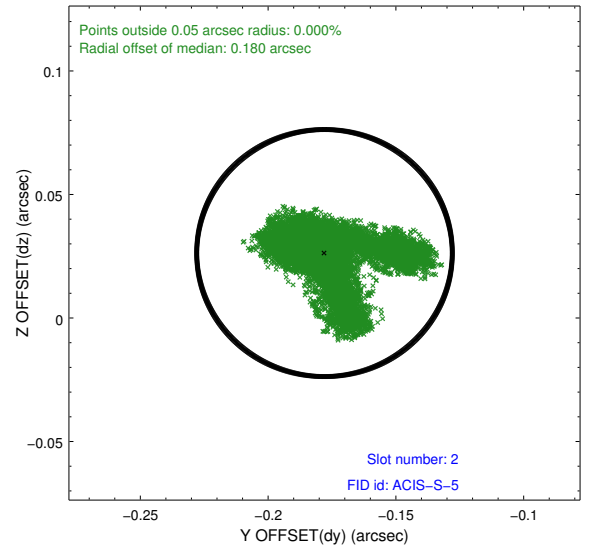
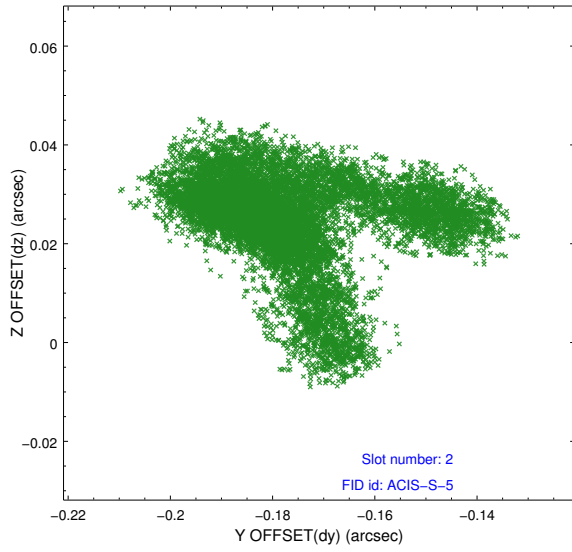
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.06.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	44.962424960792

## A.2 Comments