

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 14011 - L2 Version 2  
Chandra X-Ray Center

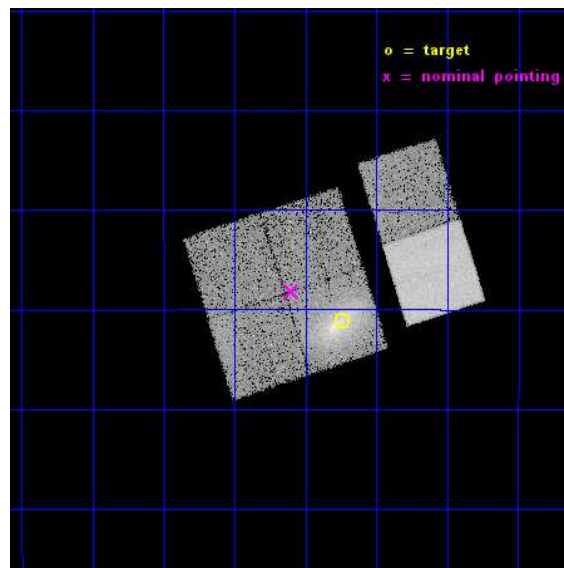
L2 Processing Date : Nov 28 2014

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# 1 Front

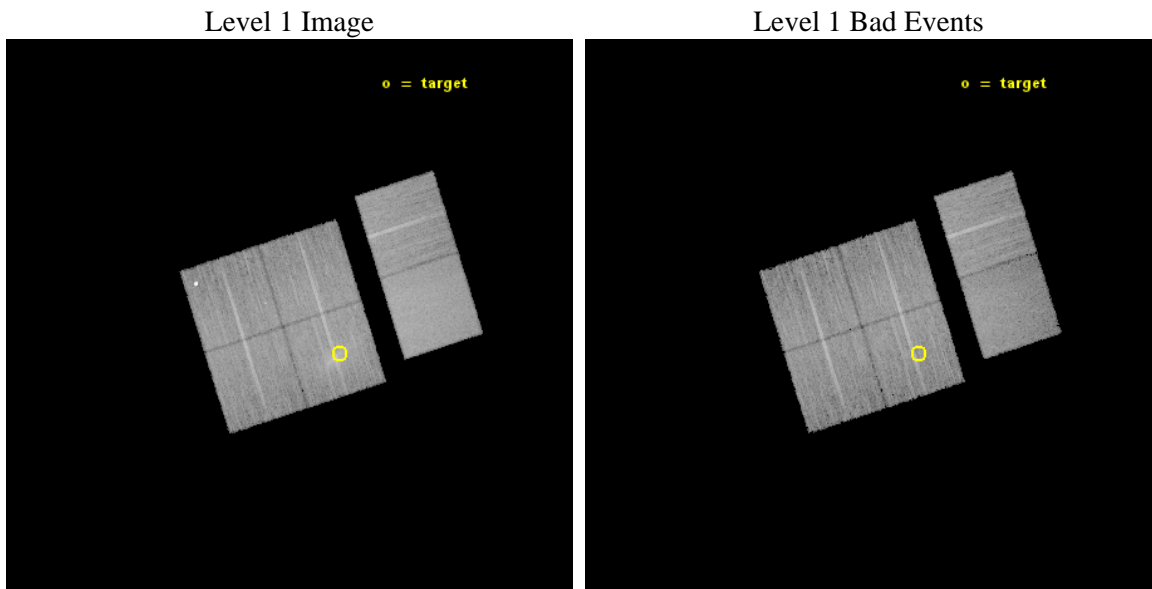
seq_num	801191	Sequence number
obs_id	14011	Observation id
title	Understanding the connection between radio halos and cluster mergers	&#160
observer	Dr Rossella Cassano	Principal investigator
object	RXCJ0510.7-0801	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	77.68625	Observer's specified target RA [deg]
dec_targ	-8.018333	Observer's specified target Dec [deg]
ra_nom	77.77483829138	Nominal RA [deg]
dec_nom	-7.9694514085002	Nominal Dec [deg]
roll_nom	72.267562264539	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20969.599921942	Sum of GTIs [s]
livetime	20704.070221353	Livetime [s]
ontime0	20966.358881652	Sum of GTIs [s]
ontime1	20969.599921942	Sum of GTIs [s]
ontime2	20969.599921942	Sum of GTIs [s]
ontime3	20969.599921942	Sum of GTIs [s]
ontime6	20969.599921942	Sum of GTIs [s]
ontime7	20969.599921942	Sum of GTIs [s]
l2events	132287	Number of level 2 events



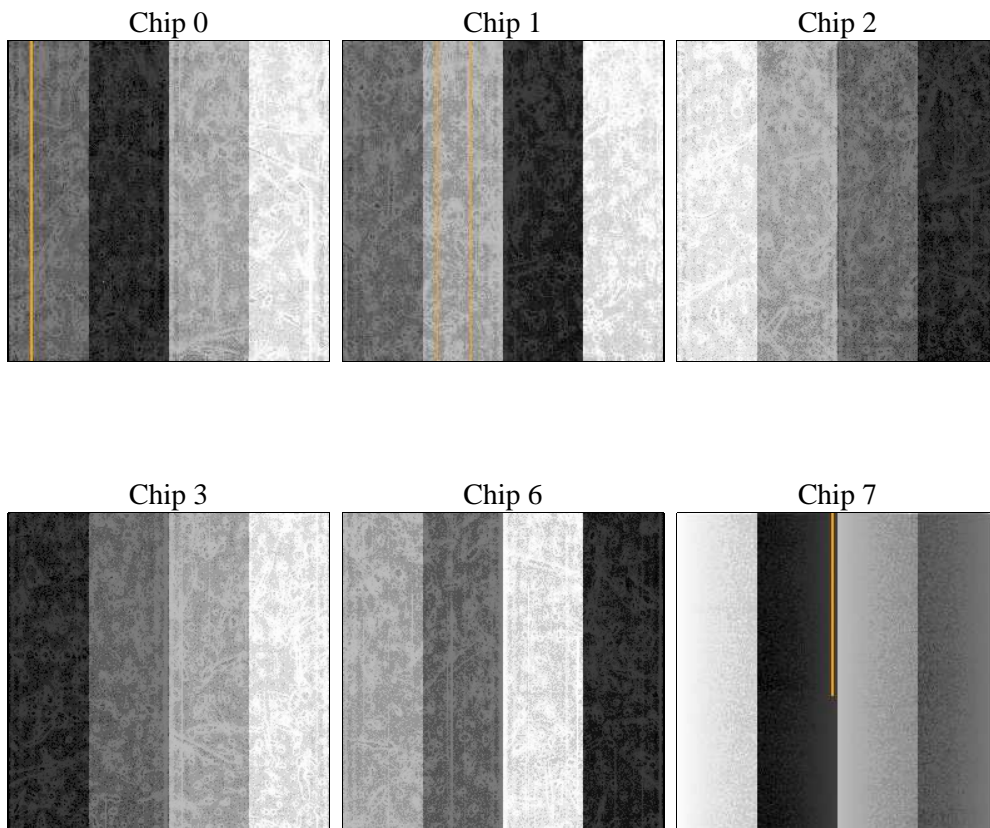
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	21000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	20969.599921942	Sum of GTIs [s]
caldbver	4.6.4	&#160	ontime0	20966.358881652	Sum of GTIs [s]
date	2014-11-28T18:55:26	Date and time of file creation	ontime1	20969.599921942	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	20969.599921942	Sum of GTIs [s]
			ontime3	20969.599921942	Sum of GTIs [s]
			ontime6	20969.599921942	Sum of GTIs [s]
			ontime7	20969.599921942	Sum of GTIs [s]
			l1events	685975	Number of level 1 events

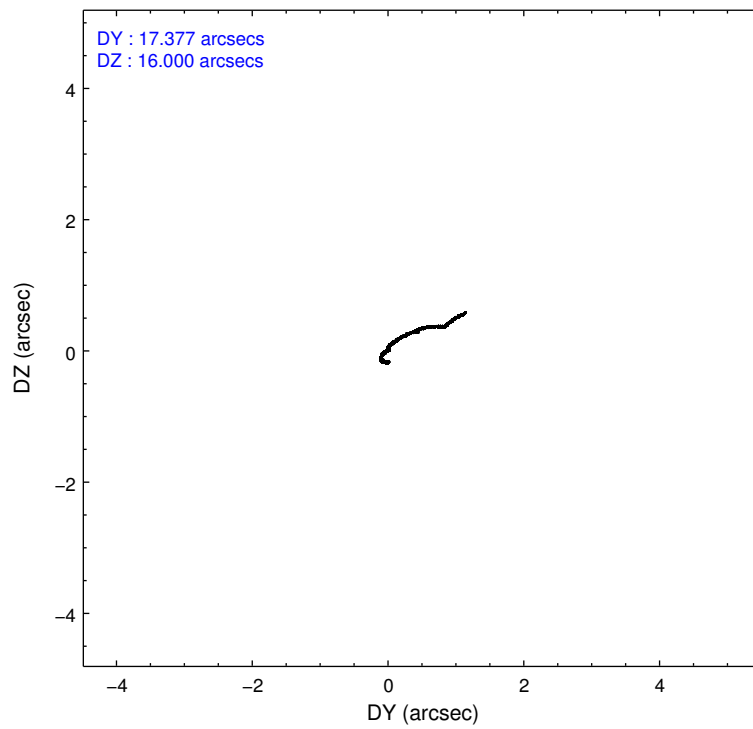
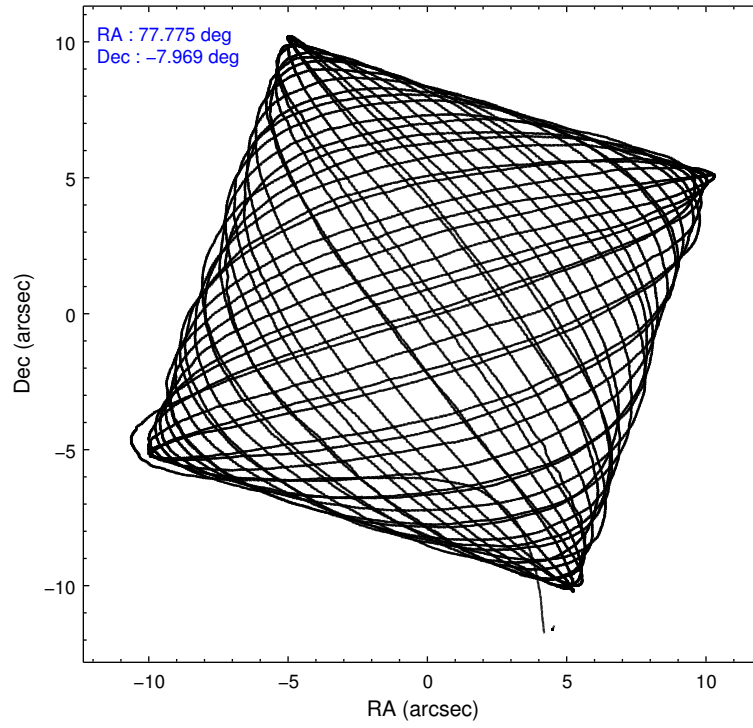
### 2.1.4 Events

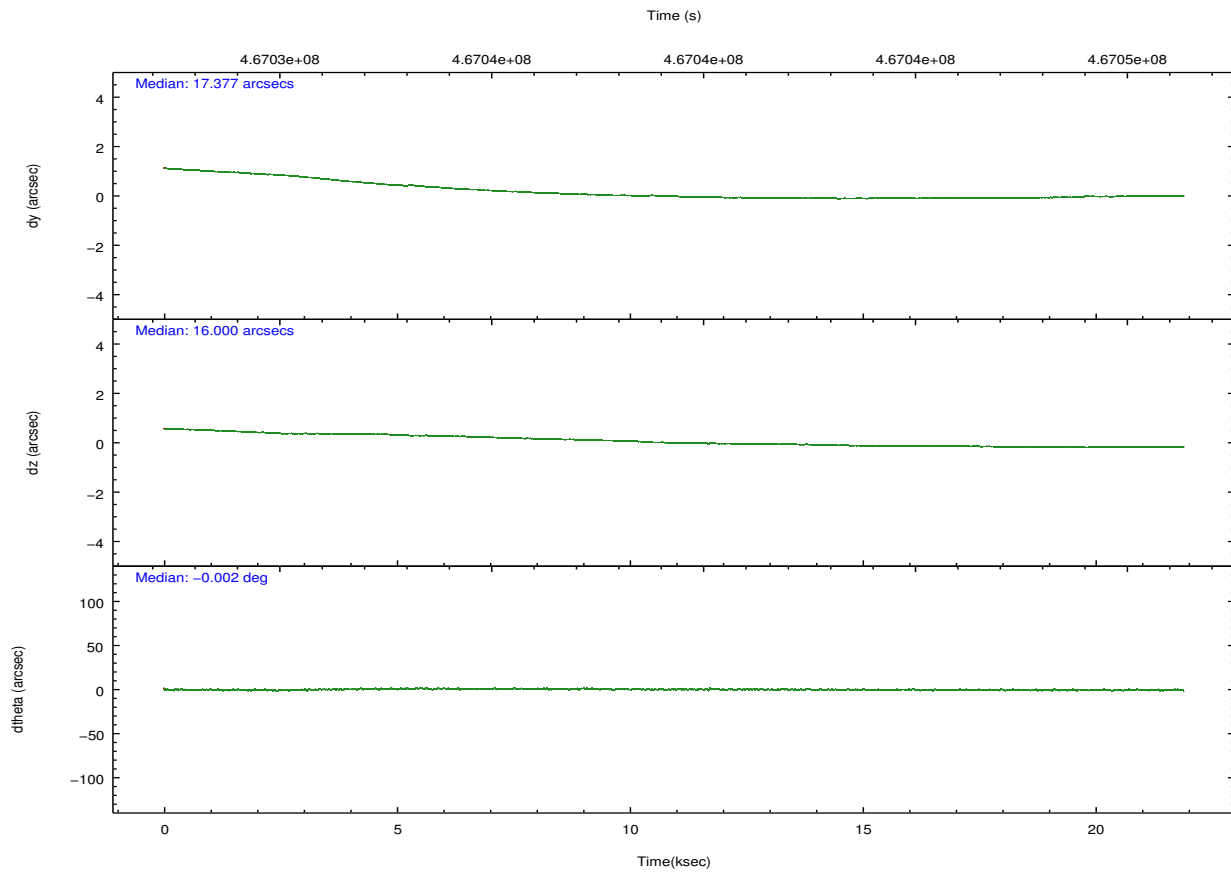
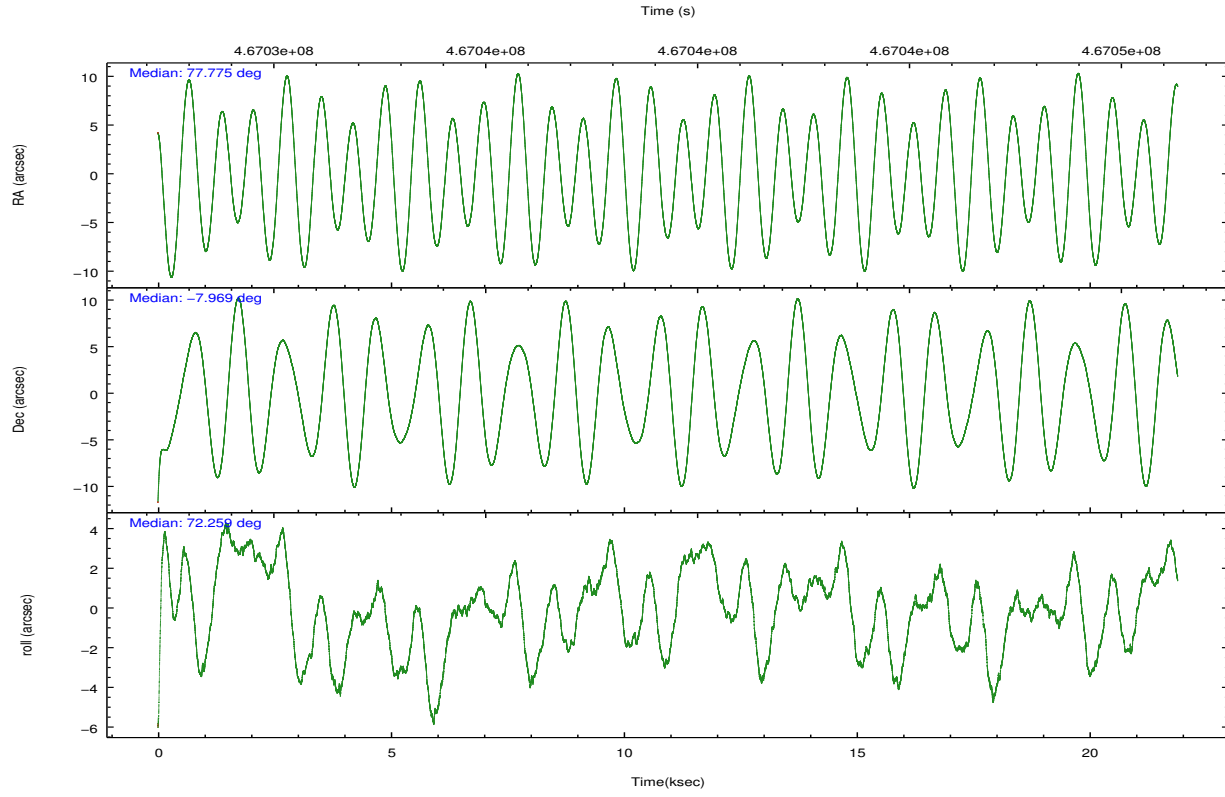
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	103782	97878	104402	121730	112804	145379	grade 0 events	4267	5120	4581	17424	4332	5517
rejected events	86127	83727	91936	93247	99629	82214		4%	5%	4%	14%	3%	3%
rejected %	82%	85%	88%	76%	88%	56%	grade 1 events	56	53	57	117	62	170
								0%	0%	0%	0%	0%	0%
							grade 2 events	8248	3319	2889	4462	3094	12865
								7%	3%	2%	3%	2%	8%
							grade 3 events	1357	1350	1276	1852	1320	5473
								1%	1%	1%	1%	1%	3%
							grade 4 events	1255	1416	1306	1866	1292	5354
								1%	1%	1%	1%	1%	3%
							grade 5 events	5143	5281	4770	5633	5704	14986
								4%	5%	4%	4%	5%	10%
							grade 6 events	2535	2952	2417	2891	3141	33977
								2%	3%	2%	2%	2%	23%
							grade 7 events	80921	78387	87106	87485	93859	67037
								77%	80%	83%	71%	83%	46%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	77.780859	77.77483829137988	CCD I2 on	Y	Y
[deg] Pointing Dec	-7.996298	-7.969451408500214	CCD I3 on	Y	Y
[deg] Pointing Roll	72.059719	72.267562264539	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O2	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	467029232.184000	467027677.36181	CCD S5 on	N	N
Observation start date	2012-10-19T10:19:25	2012-10-19T09:54:37	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	467050232.184000	467051108.35057	On-chip summing requested	N	N
Observation end date	2012-10-19T16:09:25	2012-10-19T16:25:08	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect





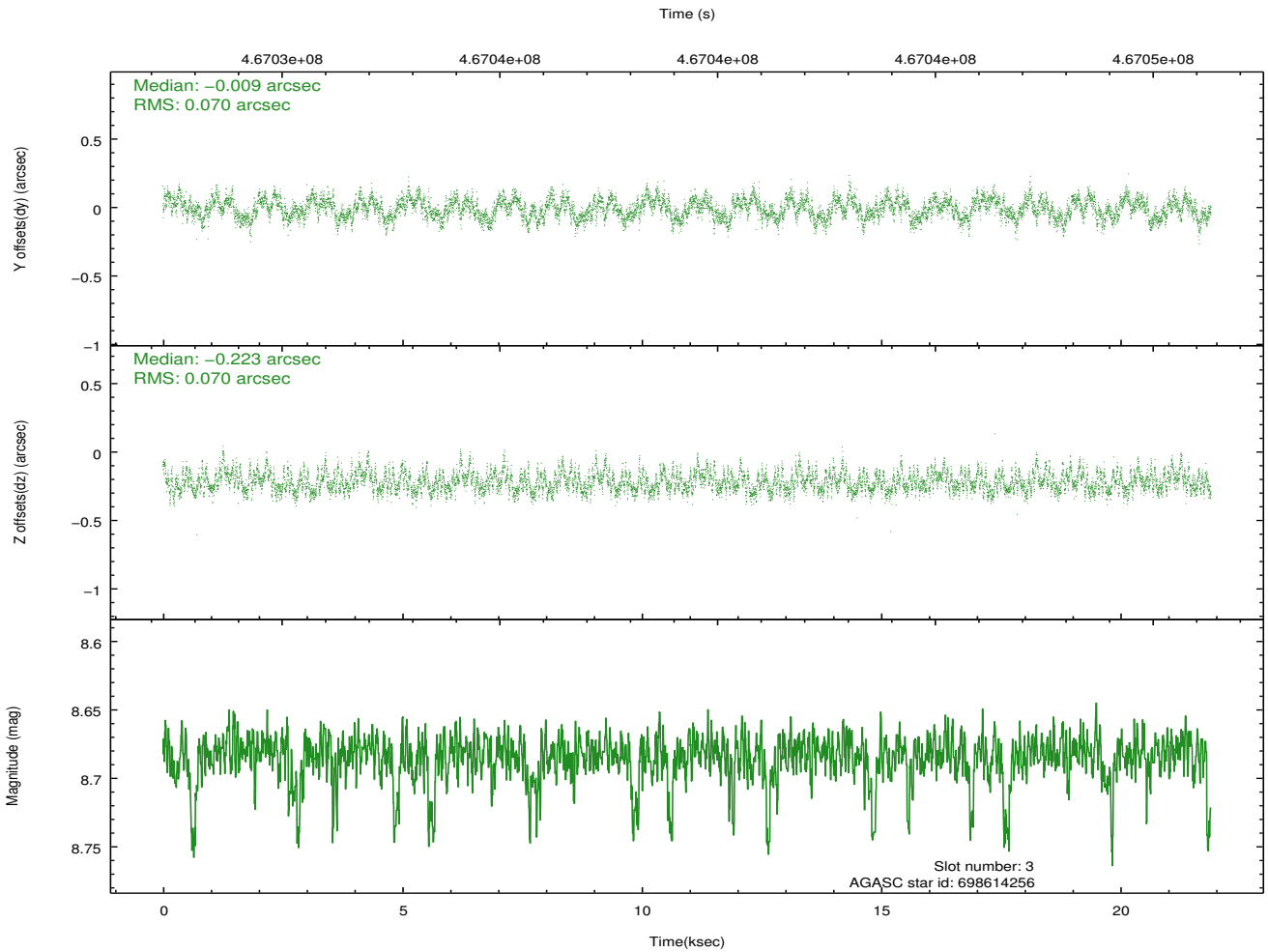
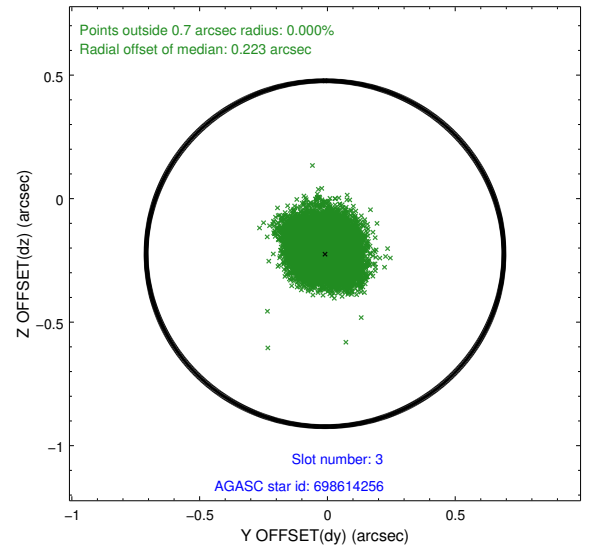
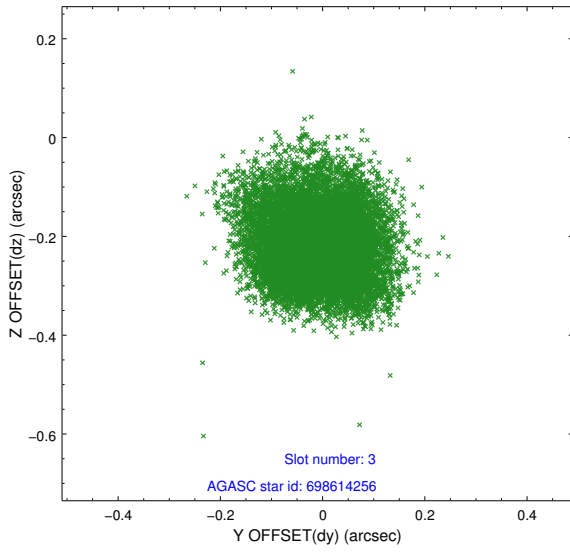
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.11	5341	0.061	-0.041	0.015	0.027	0.000000	0.000000	921.88	-839.75
1	FID		ACIS-I-5	7.11	5341	-0.262	0.047	0.013	0.028	0.000000	0.000000	-1826.47	1057.75
2	FID		ACIS-I-6	7.12	5341	0.109	0.064	0.006	0.010	0.000000	0.000000	387.29	1702.45
3	GUIDE	used	698614256	8.68	10676	-0.009	-0.223	0.106	0.168	77.900820	-7.817758	743.56	-208.92
4	GUIDE	used	698615192	8.63	10675	-0.070	0.071	0.090	0.141	78.241802	-8.064608	271.82	-1638.78
5	GUIDE	used	698621864	9.14	10675	0.144	0.416	0.100	0.167	78.120916	-8.637716	-1824.29	-1862.71
6	GUIDE	used	698627520	6.92	10680	-0.073	0.115	0.097	0.155	78.388657	-8.147765	147.30	-2228.90
7	GUIDE	used	698617152	8.30	10678	0.005	-0.385	0.086	0.139	76.958515	-8.415808	-2341.84	2319.49

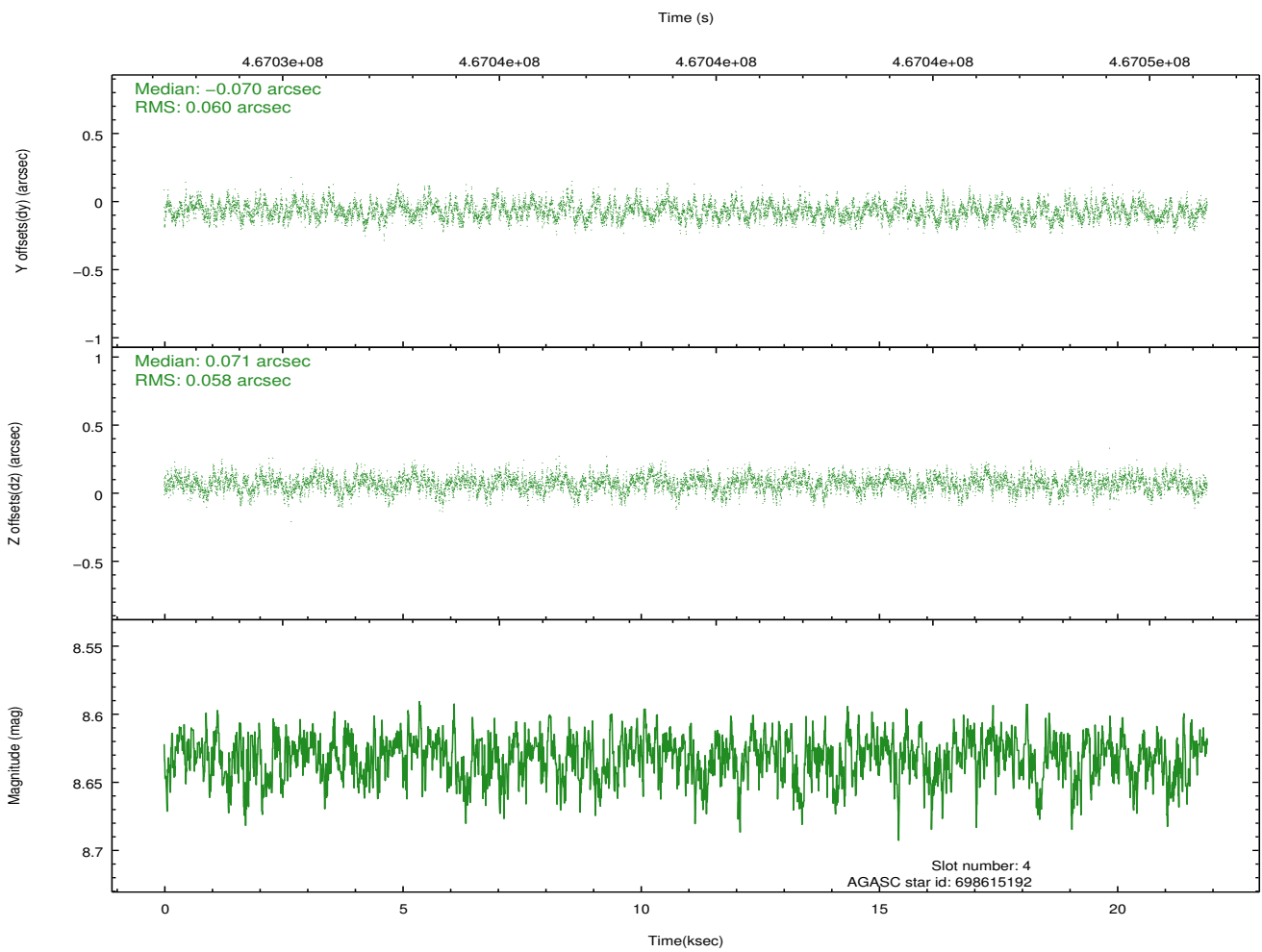
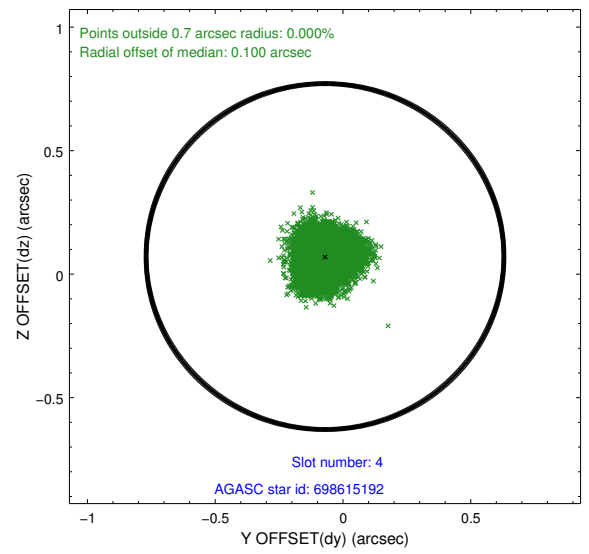
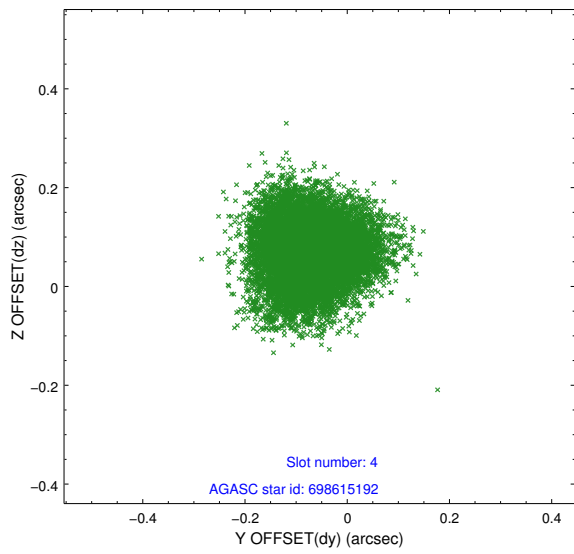
∞

## 2.4 Star Slots

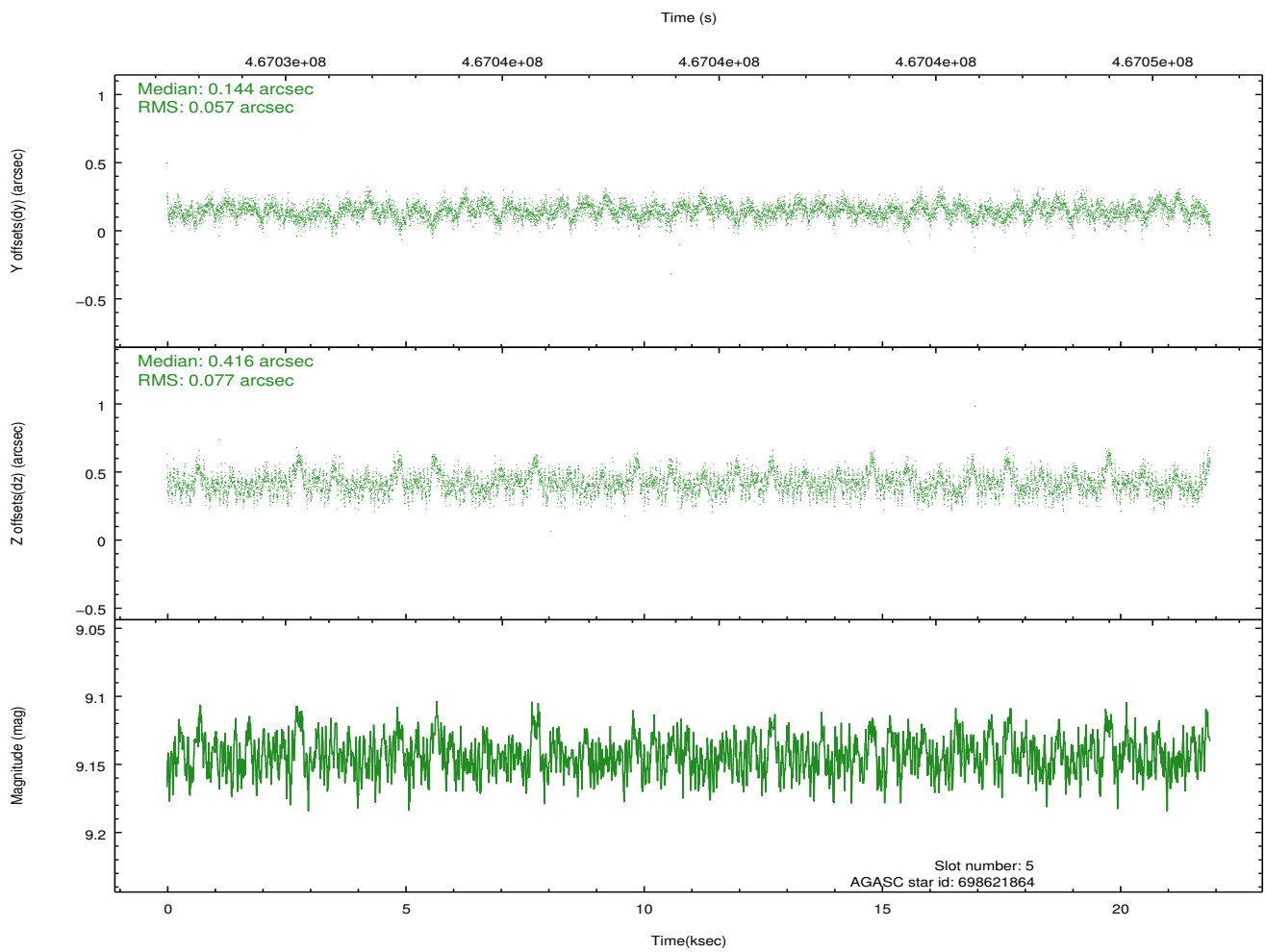
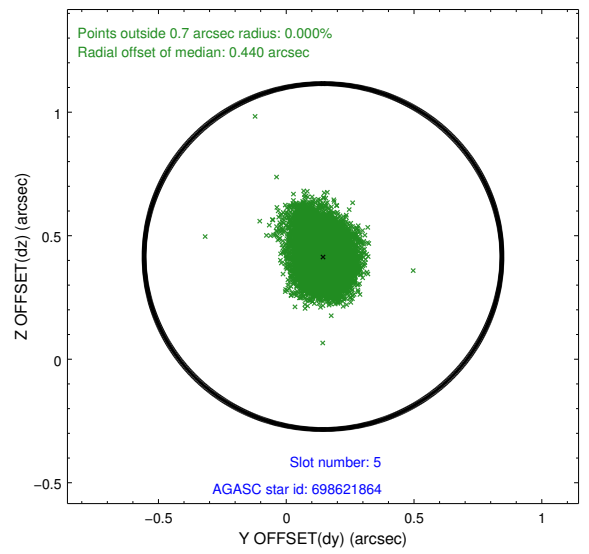
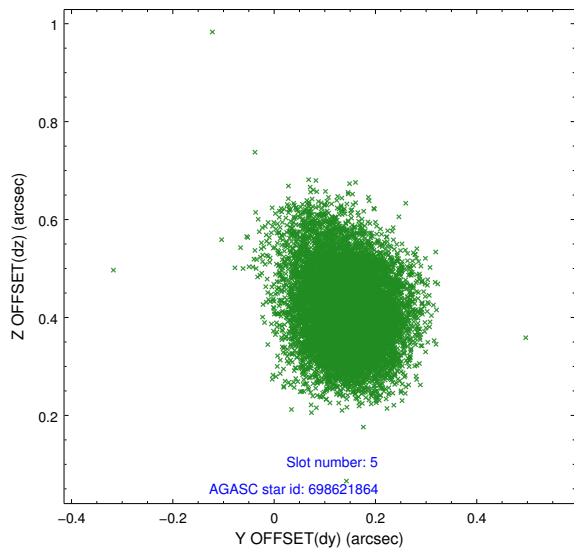
### 2.4.1 Slot 3



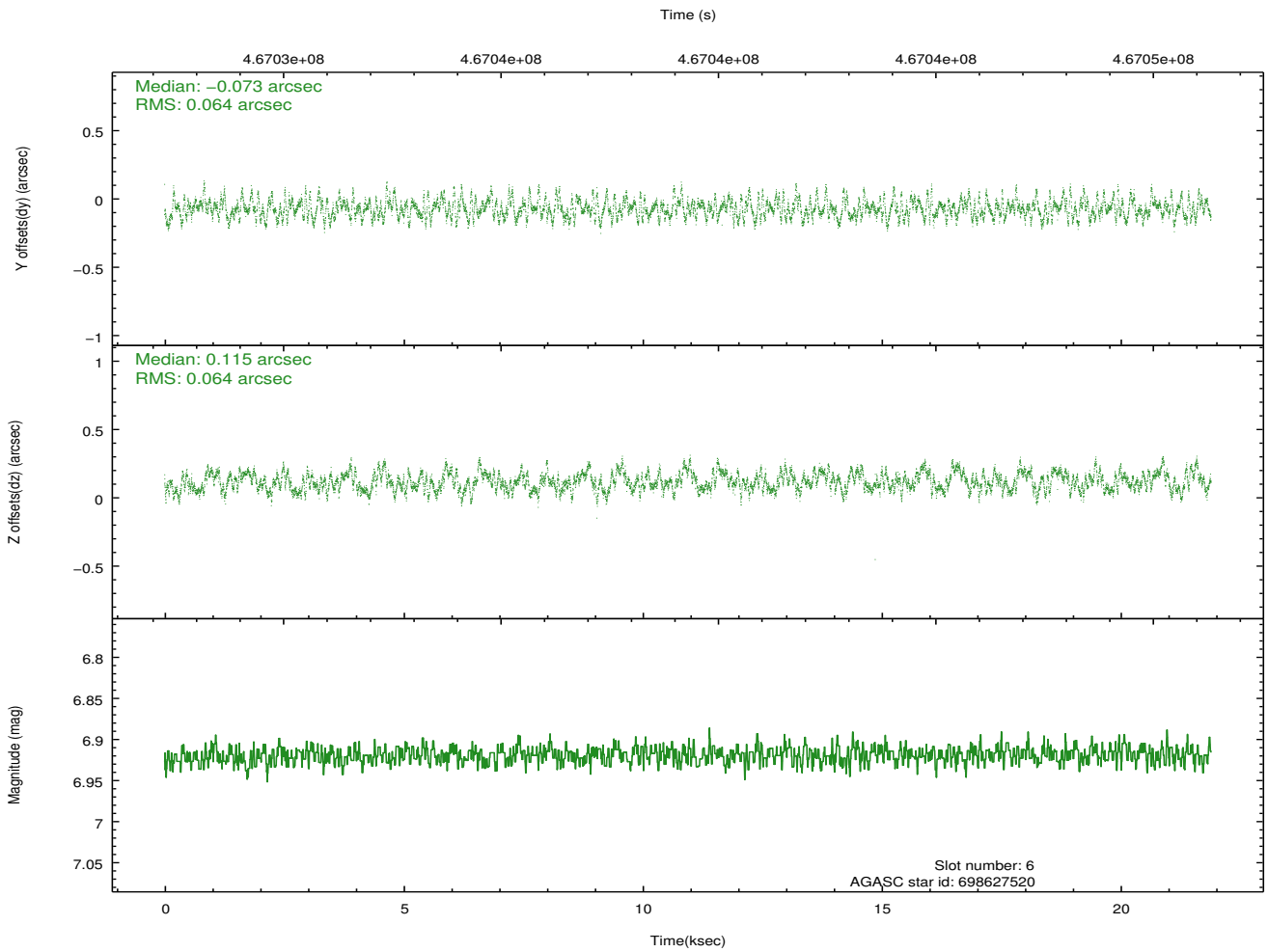
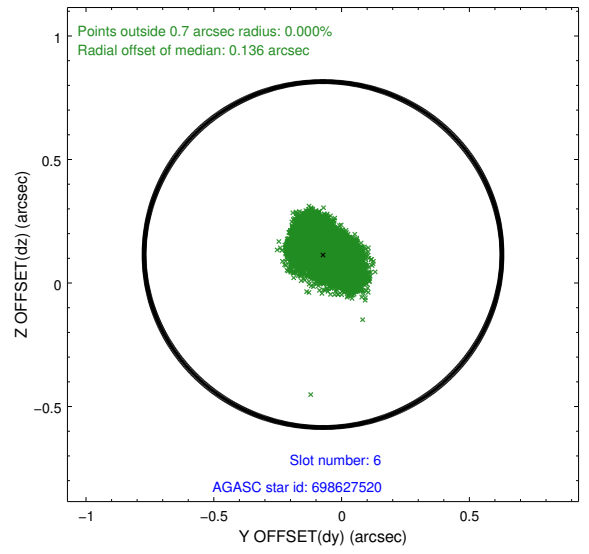
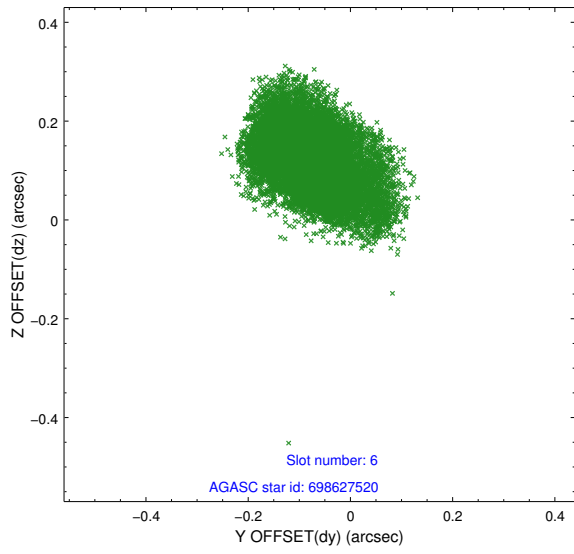
## 2.4.2 Slot 4



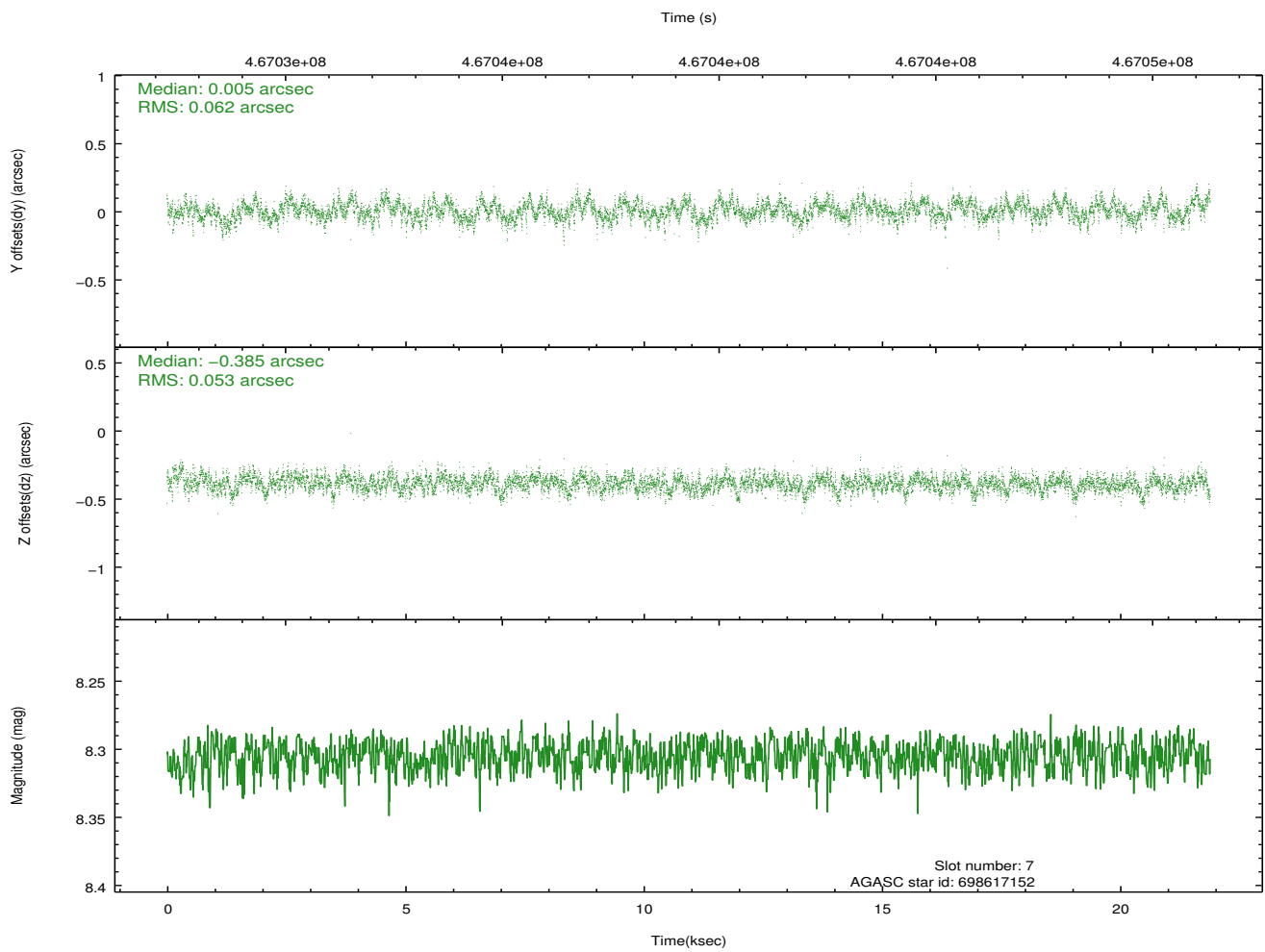
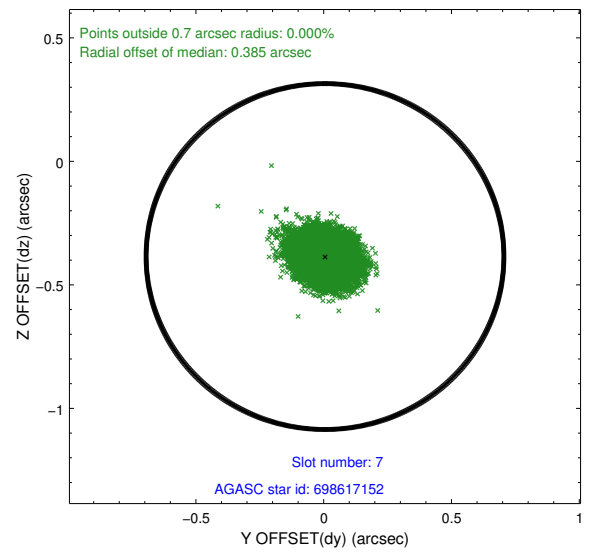
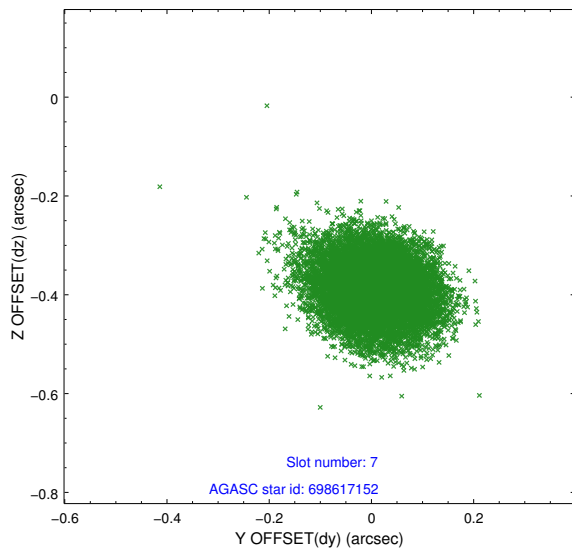
### 2.4.3 Slot 5



## 2.4.4 Slot 6

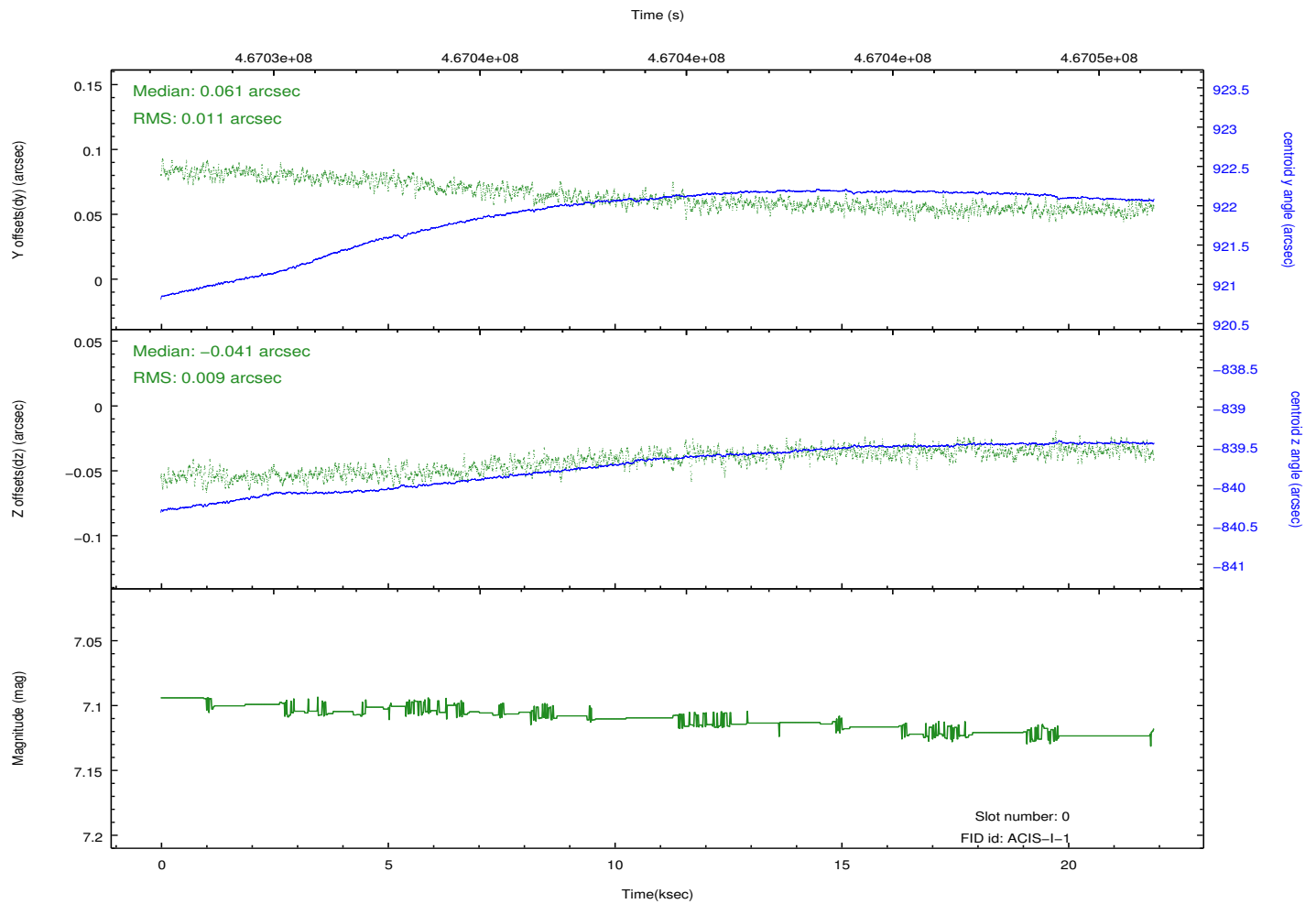
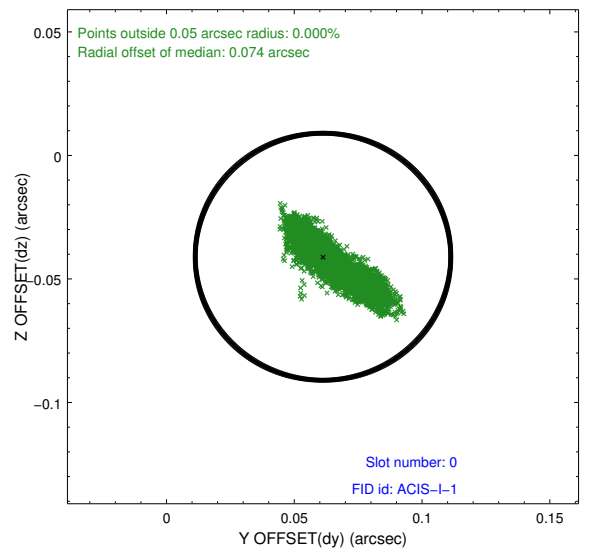
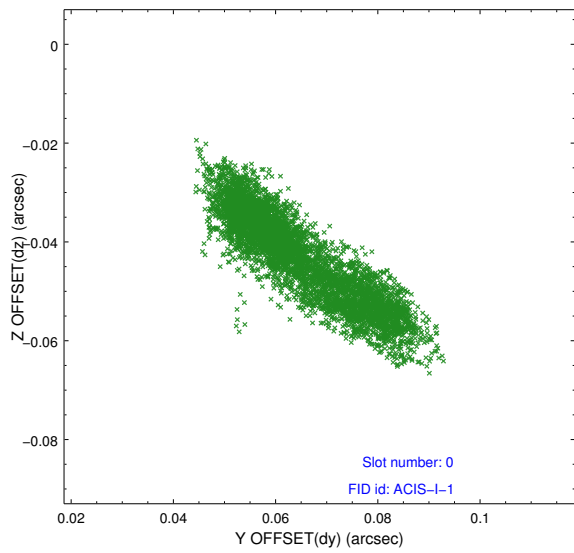


## 2.4.5 Slot 7

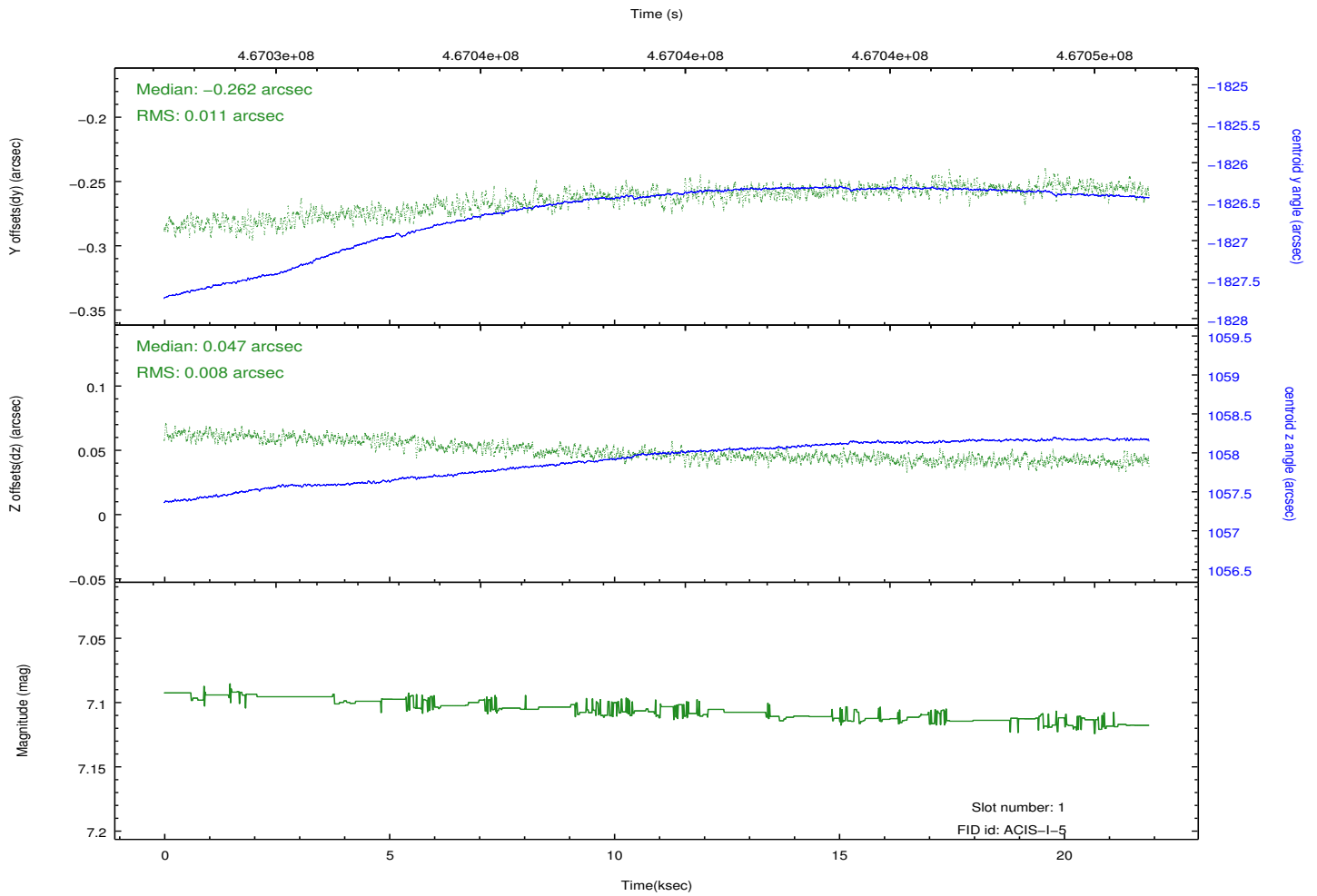
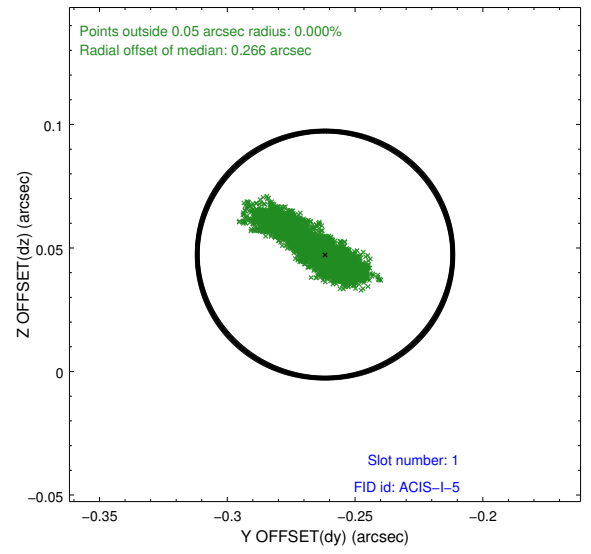
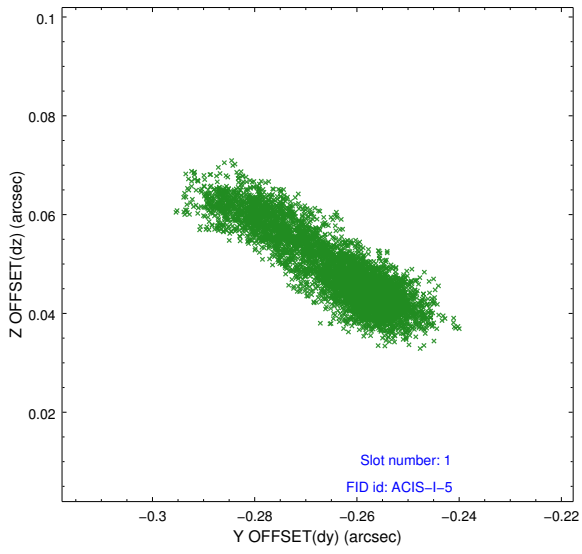


## 2.5 FID Slots

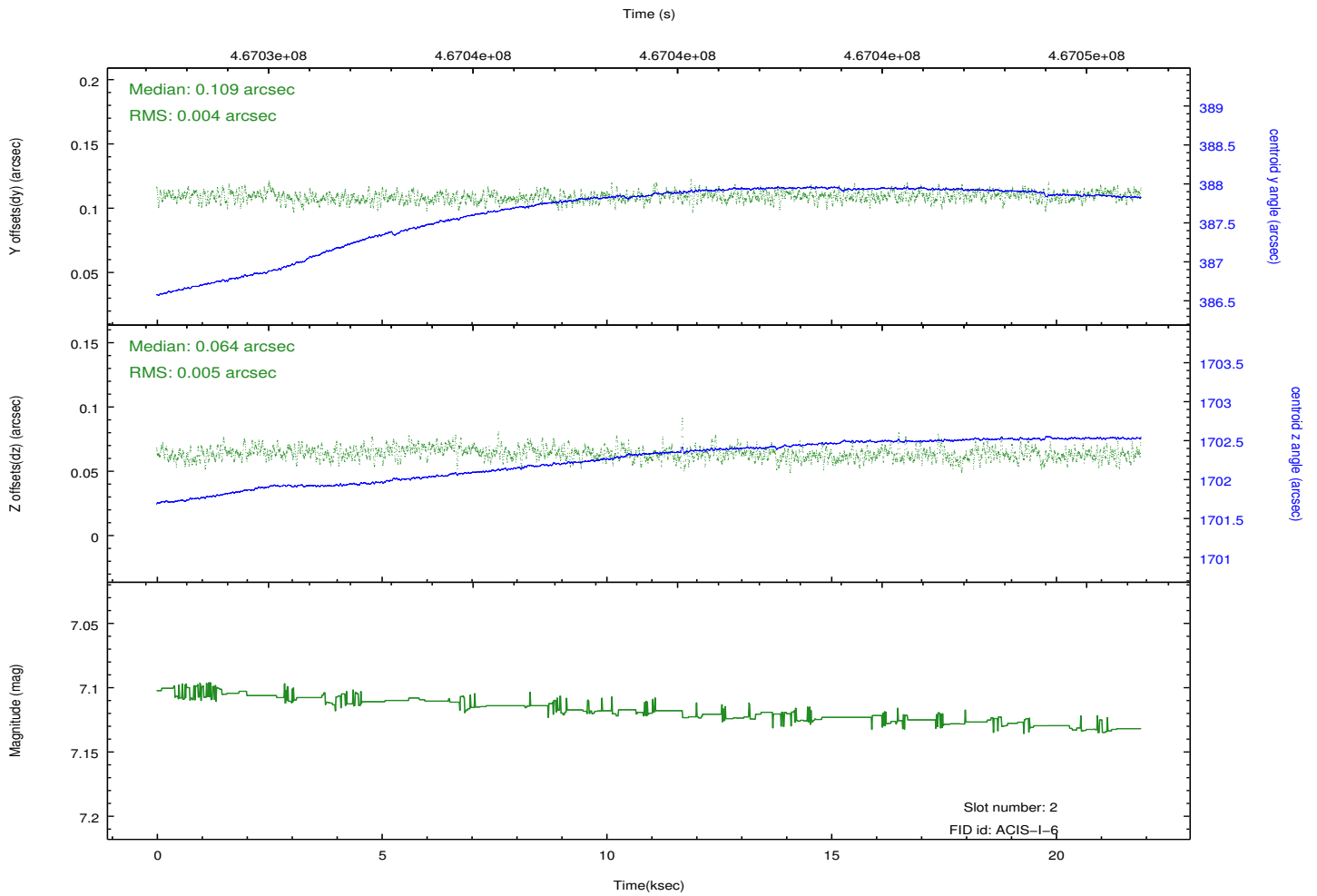
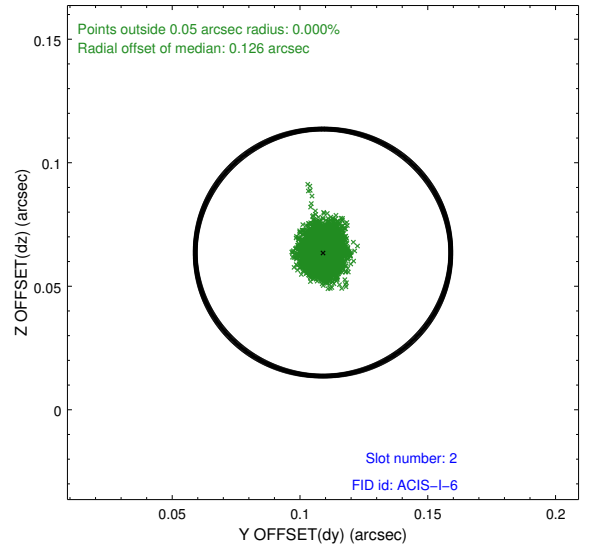
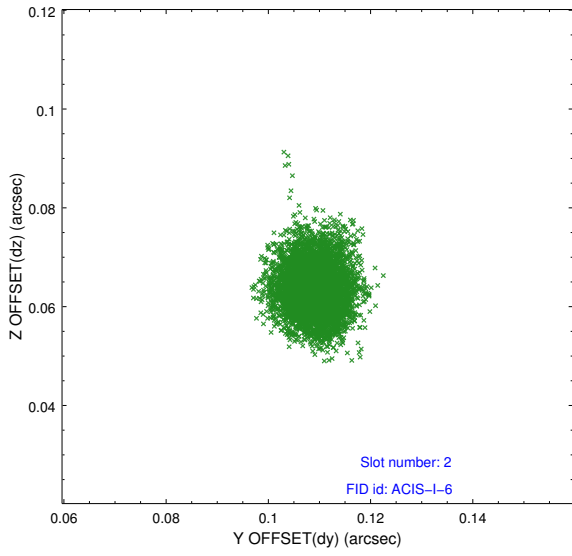
### 2.5.1 Slot 0



## 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)	2014.12.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.969599921942

## 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.