

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 15366 - L2 Version 2  
Chandra X-Ray Center

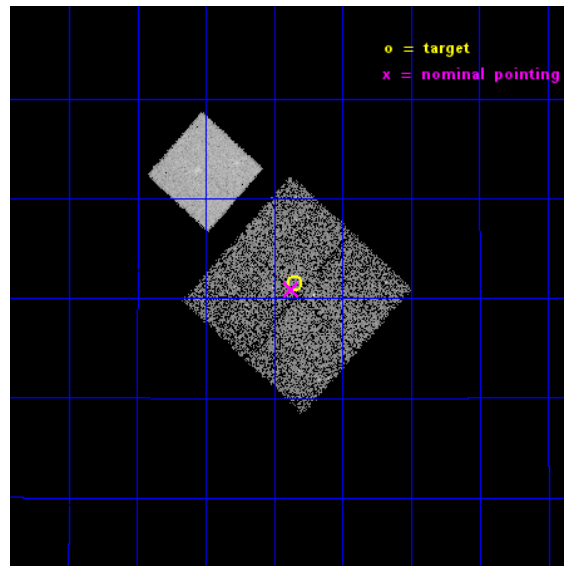
L2 Processing Date : Nov 30 2014

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# 1 Front

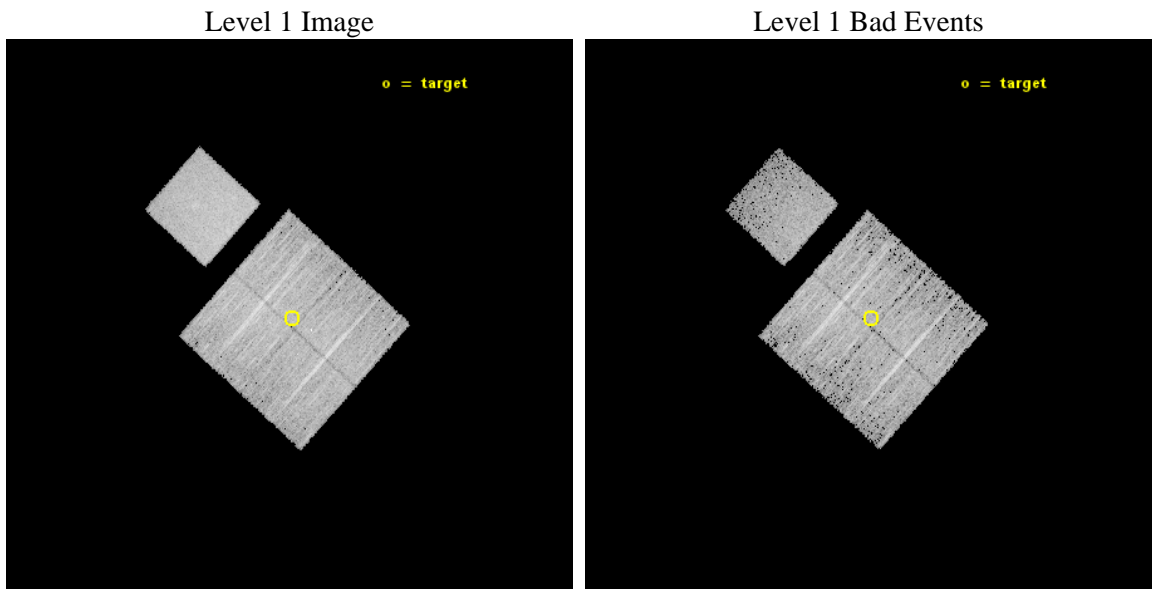
seq_num	502031	Sequence number
obs_id	15366	Observation id
title	Snap-shot survey of galactic gamma-ray sources	Proposal title
observer	Professor Gordon Garmire	Principal investigator
object	PSR J2043+1711	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	310.837083	Observer's specified target RA [deg]
dec_targ	17.191111	Observer's specified target Dec [deg]
ra_nom	310.84344593267	Nominal RA [deg]
dec_nom	17.181717319562	Nominal Dec [deg]
roll_nom	312.02312439428	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10067.814148188	Sum of GTIs [s]
livetime	9936.2707445246	Livetime [s]
ontime0	10067.691028178	Sum of GTIs [s]
ontime1	10067.732068181	Sum of GTIs [s]
ontime2	10064.632147849	Sum of GTIs [s]
ontime3	10067.814148188	Sum of GTIs [s]
ontime7	10067.855188191	Sum of GTIs [s]
l2events	46049	Number of level 2 events



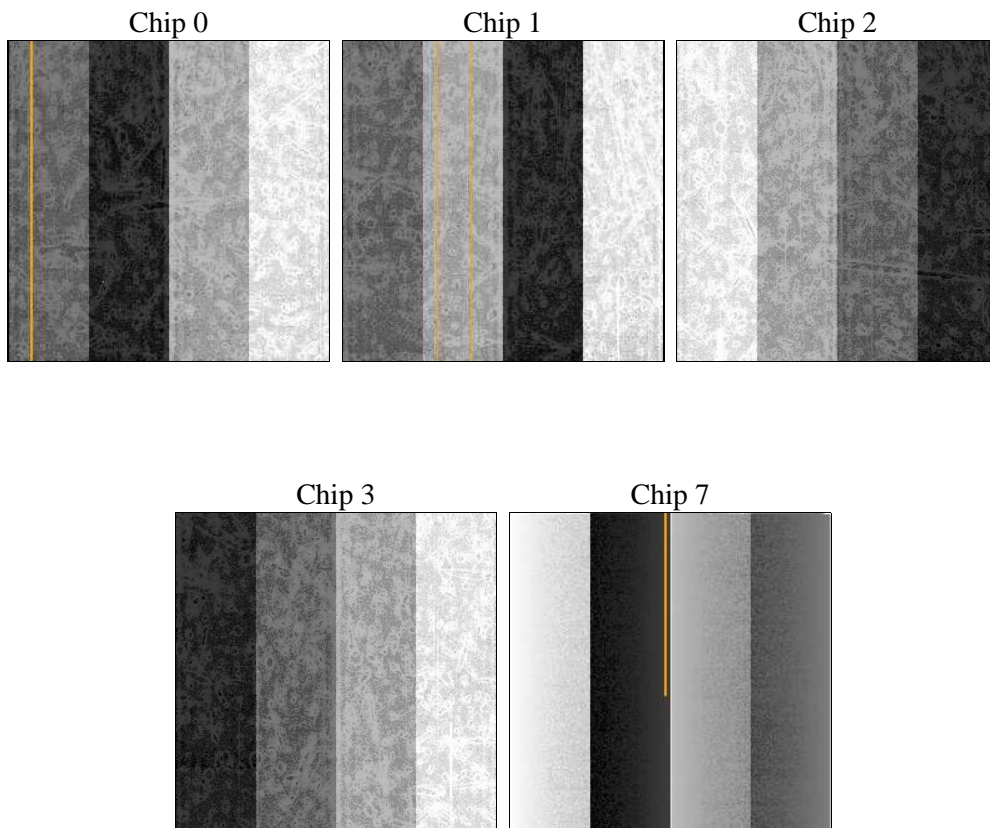
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	10067.814148188	Sum of GTIs [s]
caldbver	4.6.4	&#160	ontime0	10067.691028178	Sum of GTIs [s]
date	2014-11-30T07:31:19	Date and time of file creation	ontime1	10067.732068181	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	10064.632147849	Sum of GTIs [s]
			ontime3	10067.814148188	Sum of GTIs [s]
			ontime7	10067.855188191	Sum of GTIs [s]
			l1events	245352	Number of level 1 events

### 2.1.4 Events

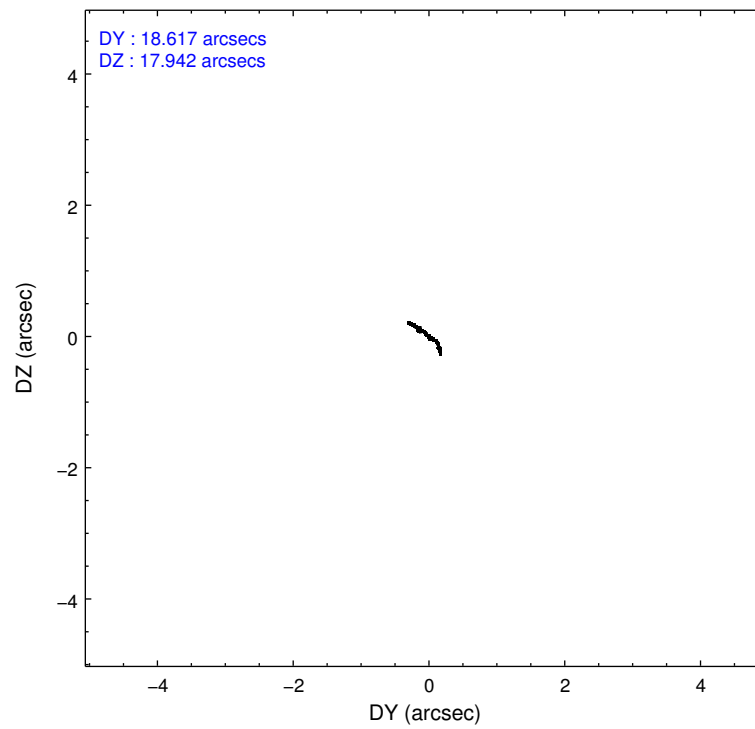
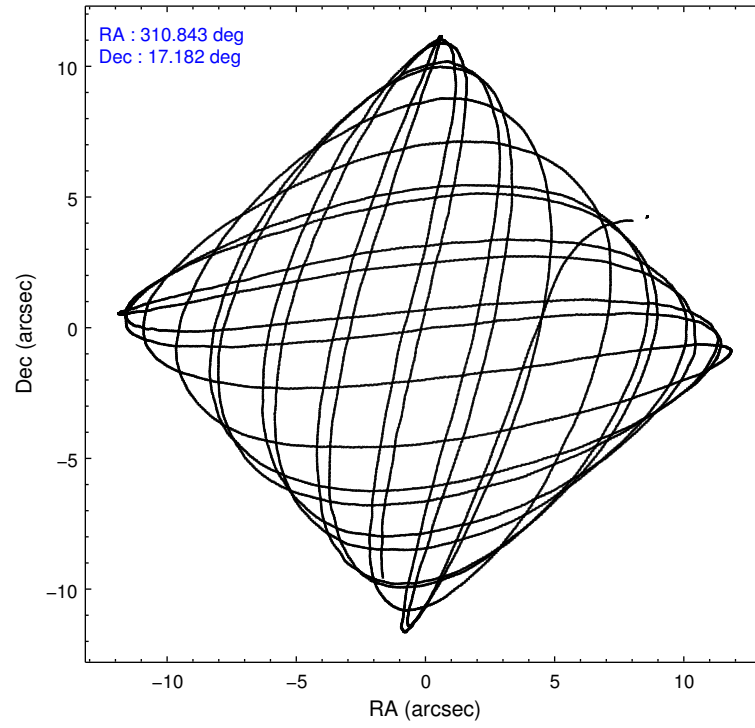
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	43031	45841	51256	47751	57473
rejected events	37120	39703	45485	42263	30009
rejected %	86%	86%	88%	88%	52%

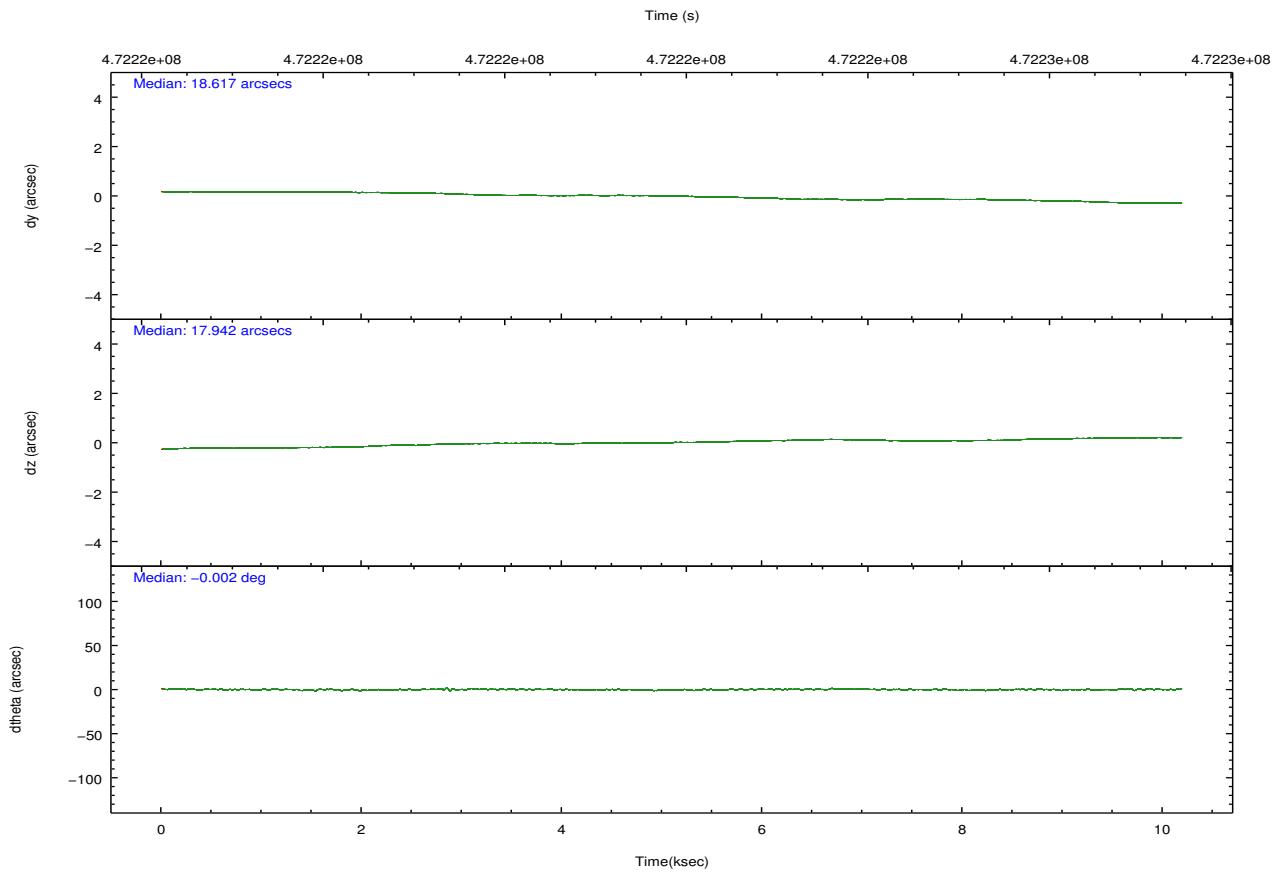
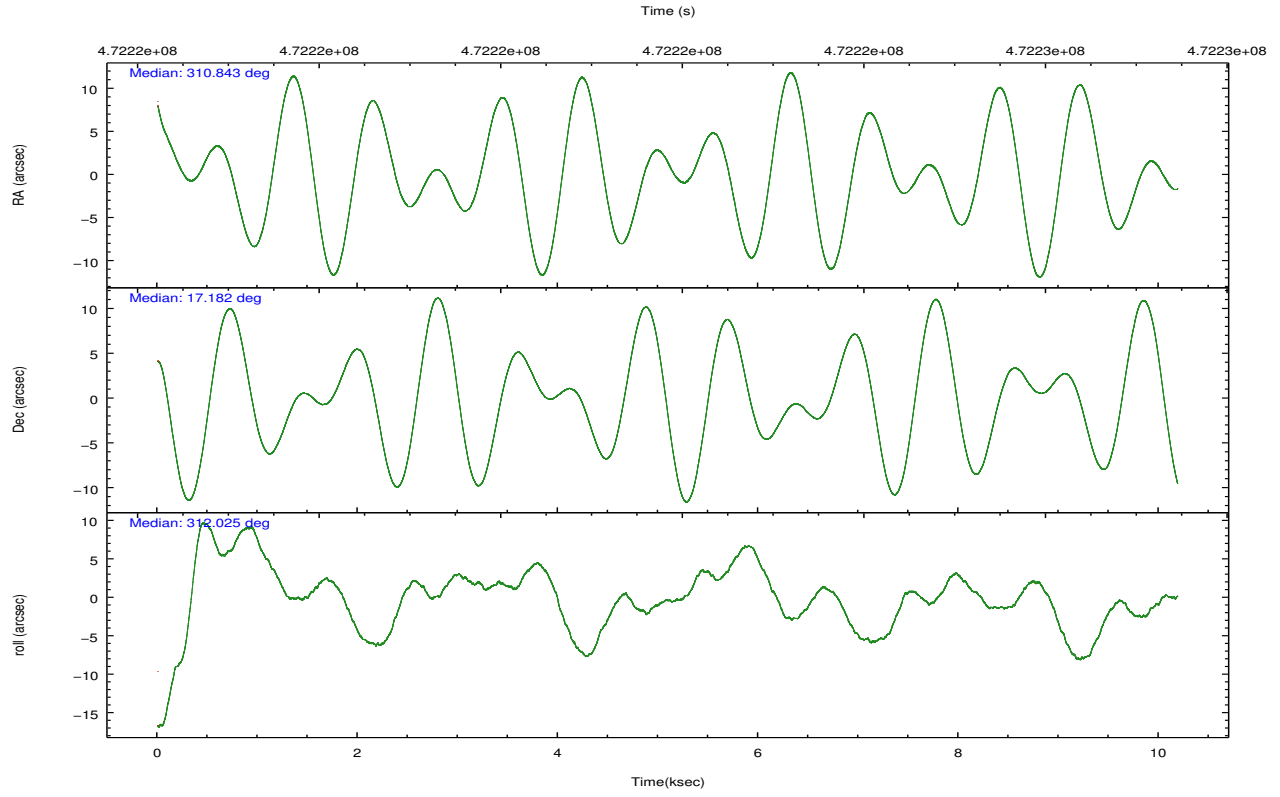
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	2249	2211	2115	1973	2657
	5%	4%	4%	4%	4%
grade 1 events	30	24	23	26	79
	0%	0%	0%	0%	0%
grade 2 events	1469	1390	1434	1244	5797
	3%	3%	2%	2%	10%
grade 3 events	581	636	549	597	2406
	1%	1%	1%	1%	4%
grade 4 events	567	607	594	585	2523
	1%	1%	1%	1%	4%
grade 5 events	1994	2123	1848	2245	6118
	4%	4%	3%	4%	10%
grade 6 events	1052	1299	1080	1094	14089
	2%	2%	2%	2%	24%
grade 7 events	35089	37551	43613	39987	23804
	81%	81%	85%	83%	41%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01237	ACIS-01237	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	310.816019	310.8434459326743	CCD I2 on	Y	Y
[deg] Pointing Dec	17.190103	17.1817173195617	CCD I3 on	Y	Y
[deg] Pointing Roll	311.822552	312.0231243942761	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	N	N
[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)	472216932.184000	472215828.91578	CCD S5 on	N	N
Observation start date	2012-12-18T11:21:05	2012-12-18T11:03:48	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	472226932.184000	472227709.17892	On-chip summing requested	N	N
Observation end date	2012-12-18T14:07:45	2012-12-18T14:21:49	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect





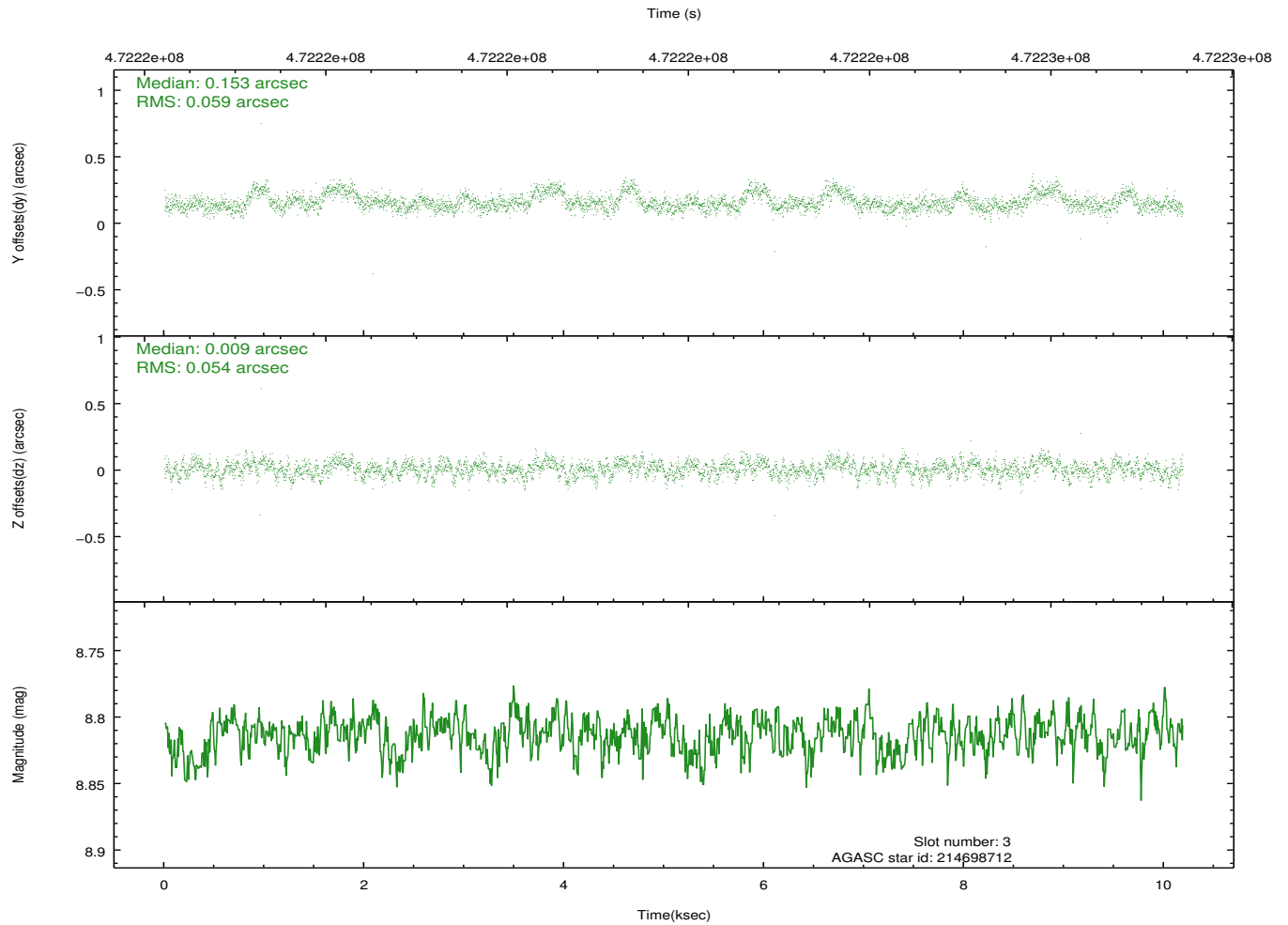
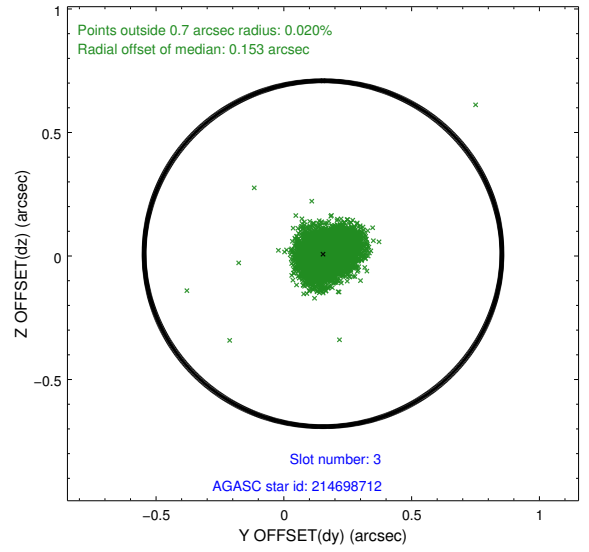
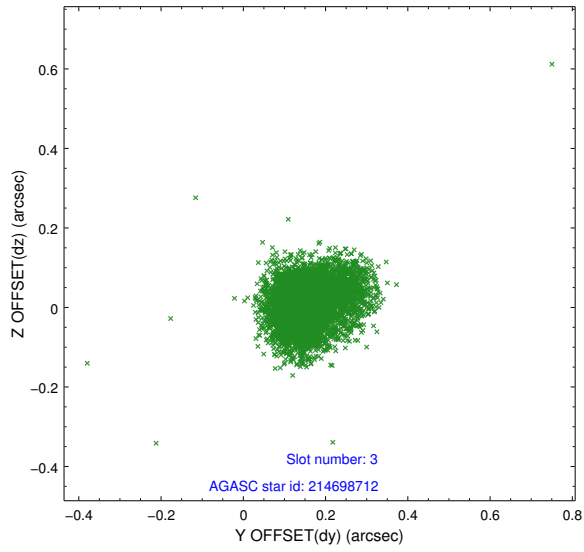
### Slot Statistics

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	2485	0.061	0.014	0.008	0.014	0.000000	0.000000	920.84	-841.60
1	FID		ACIS-I-5	7.10	2485	-0.260	0.060	0.007	0.012	0.000000	0.000000	-1827.32	1055.66
2	FID		ACIS-I-6	7.11	2485	0.108	-0.003	0.007	0.012	0.000000	0.000000	385.85	1700.70
3	GUIDE	used	214698712	8.81	4961	0.153	0.009	0.084	0.138	310.711807	17.240986	-375.07	-144.63
4	GUIDE	used	214699160	7.88	4963	-0.118	0.059	0.093	0.142	310.764628	17.102801	116.37	-341.14
5	GUIDE	used	214701400	8.50	4966	-0.153	-0.178	0.068	0.108	310.703404	17.539444	-1195.02	550.31
6	GUIDE	used	214702928	8.14	4968	0.322	0.331	0.074	0.116	310.403082	17.421902	-1568.46	-498.89
7	GUIDE	used	214705688	9.12	4964	-0.216	-0.220	0.095	0.147	311.185763	17.241364	709.09	1071.04

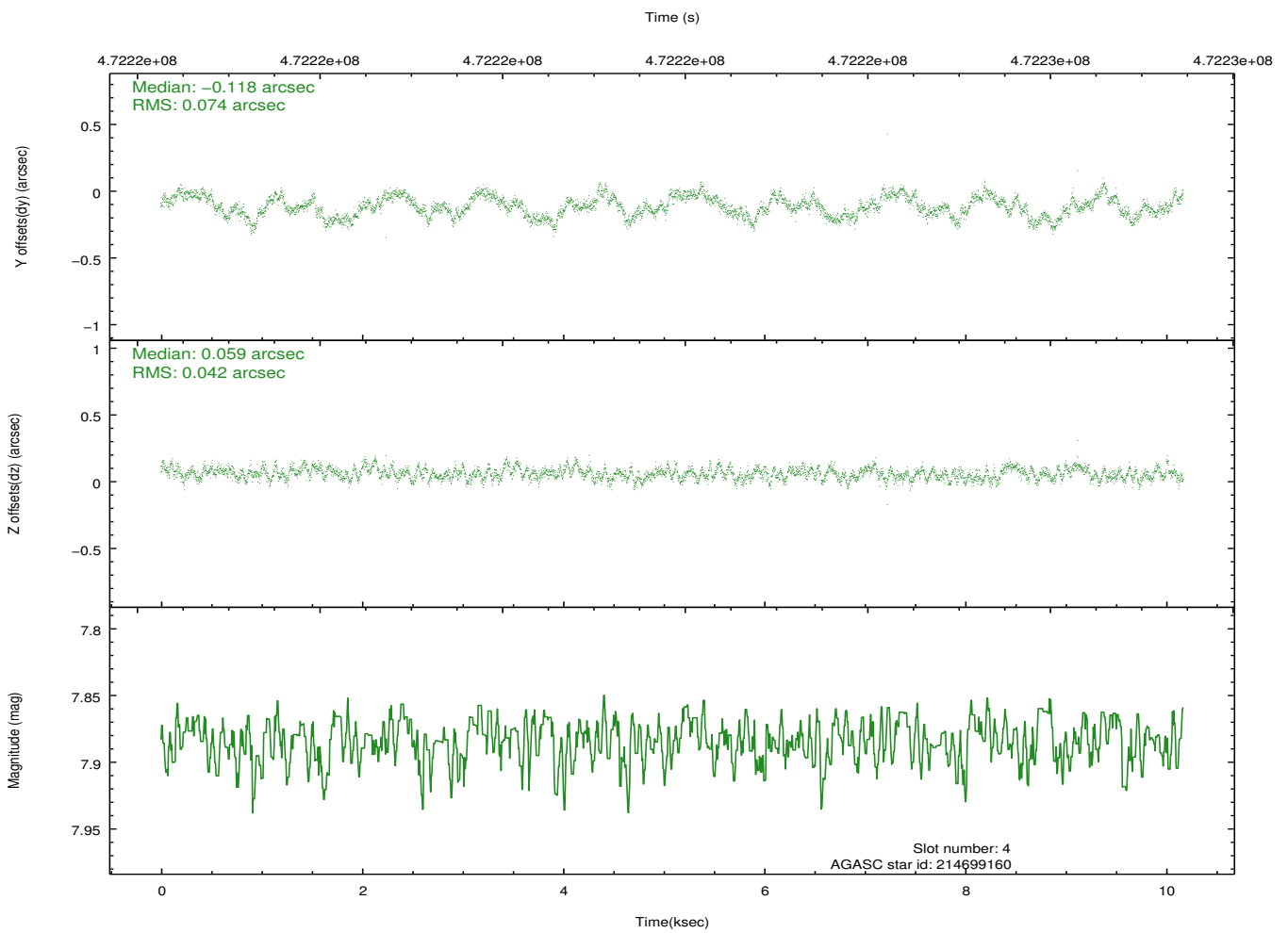
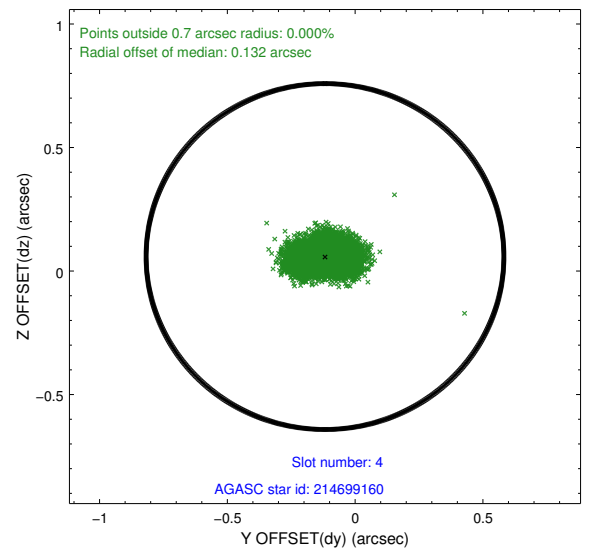
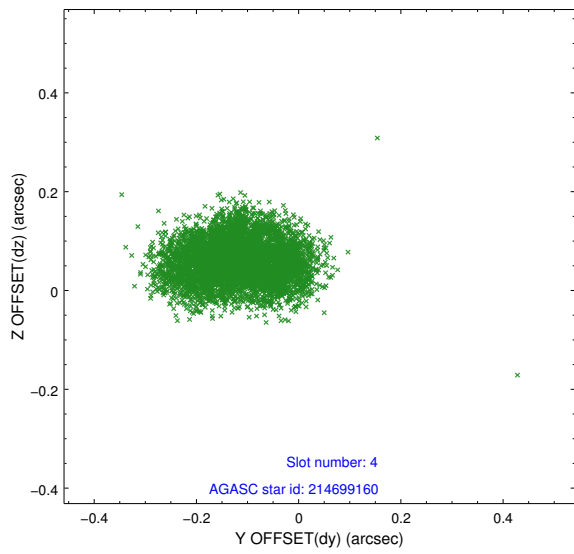
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## 2.4 Star Slots

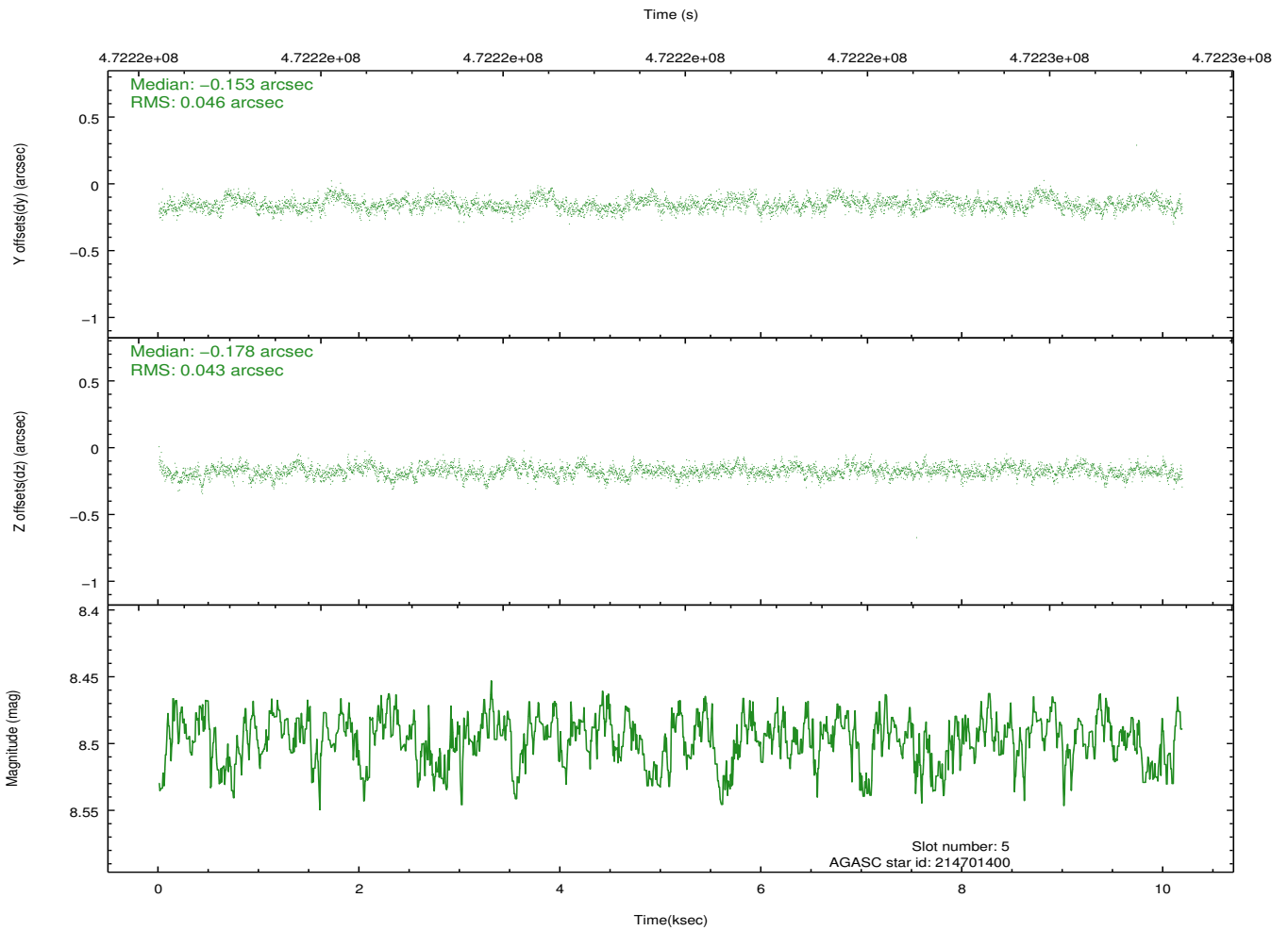
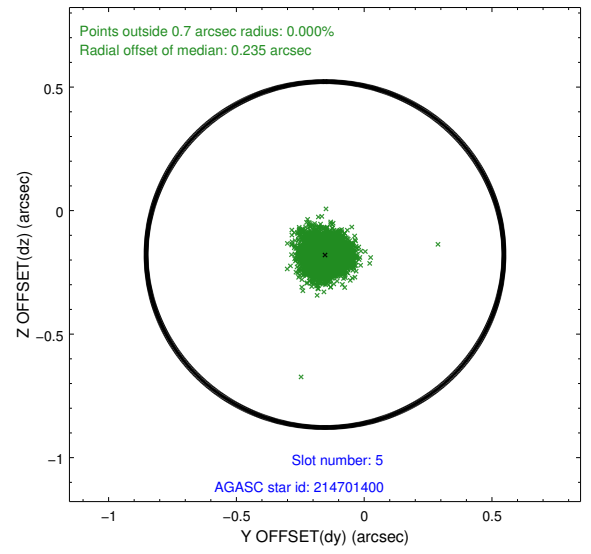
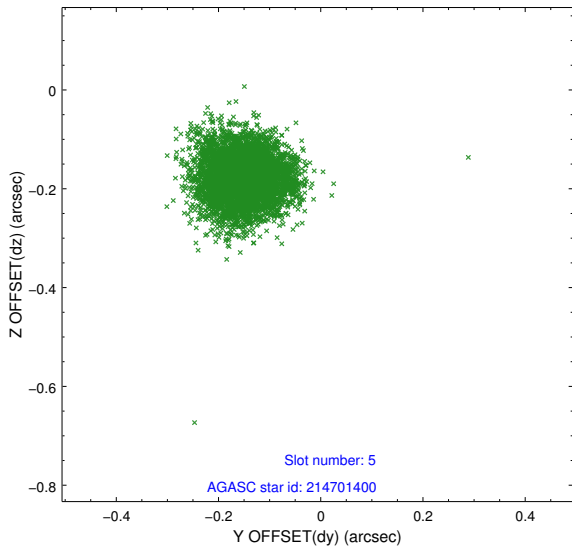
### 2.4.1 Slot 3



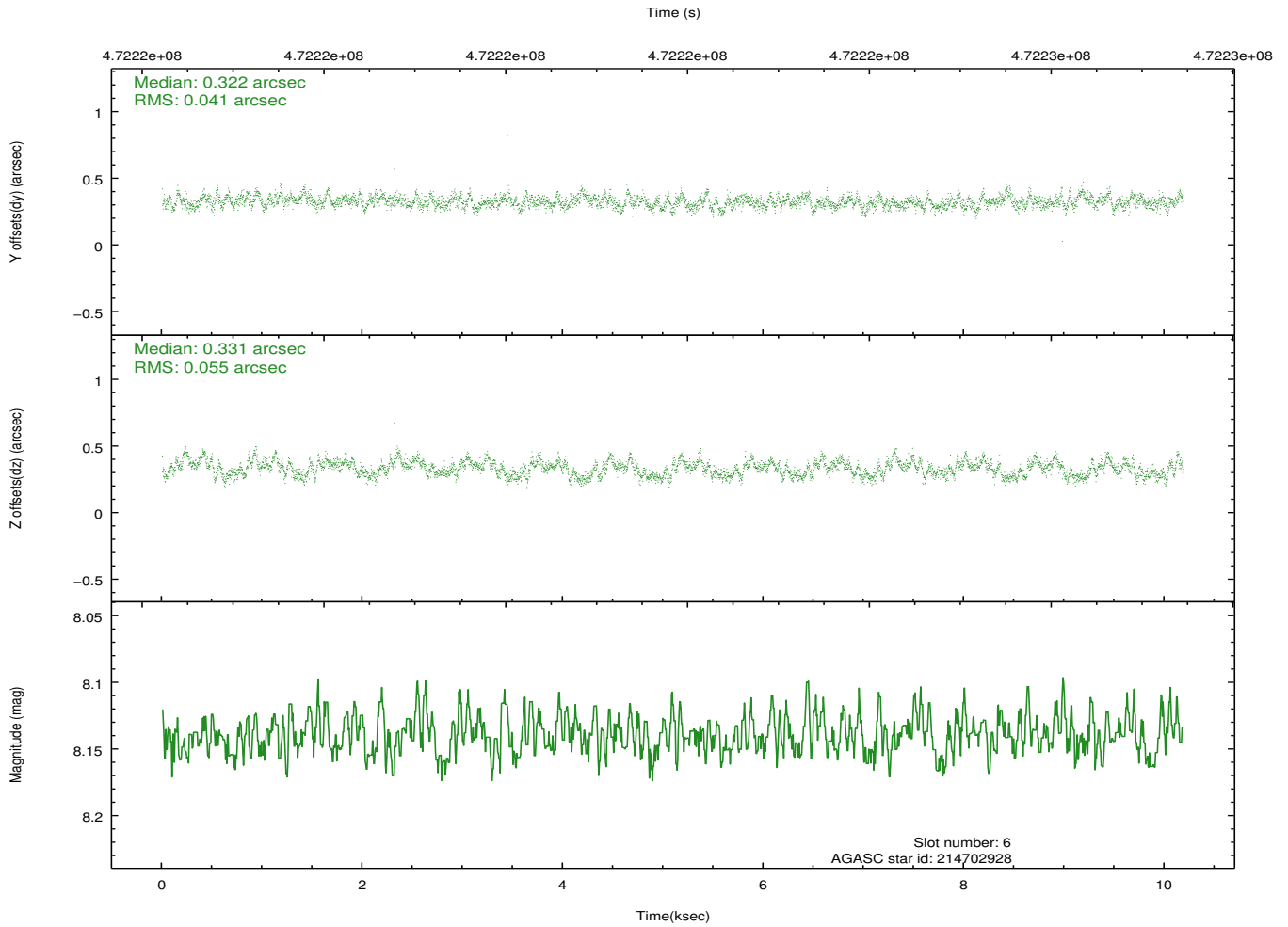
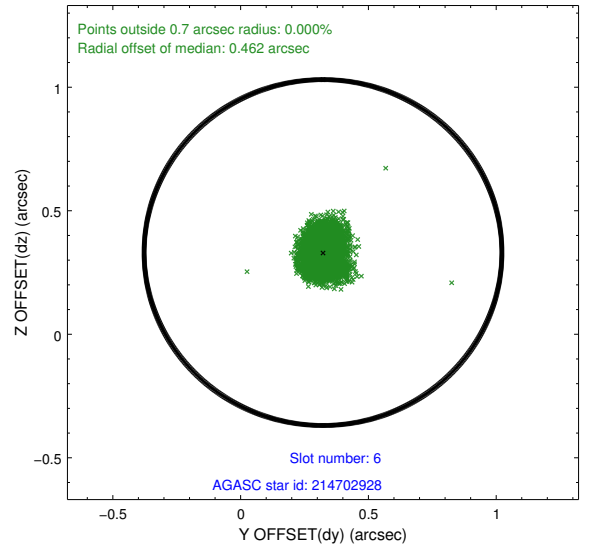
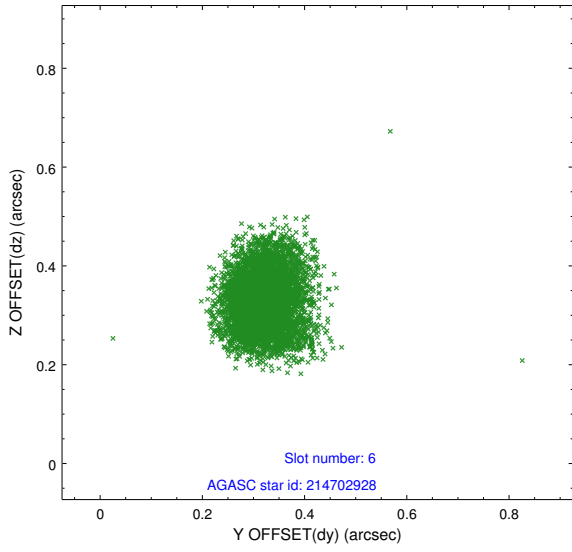
## 2.4.2 Slot 4



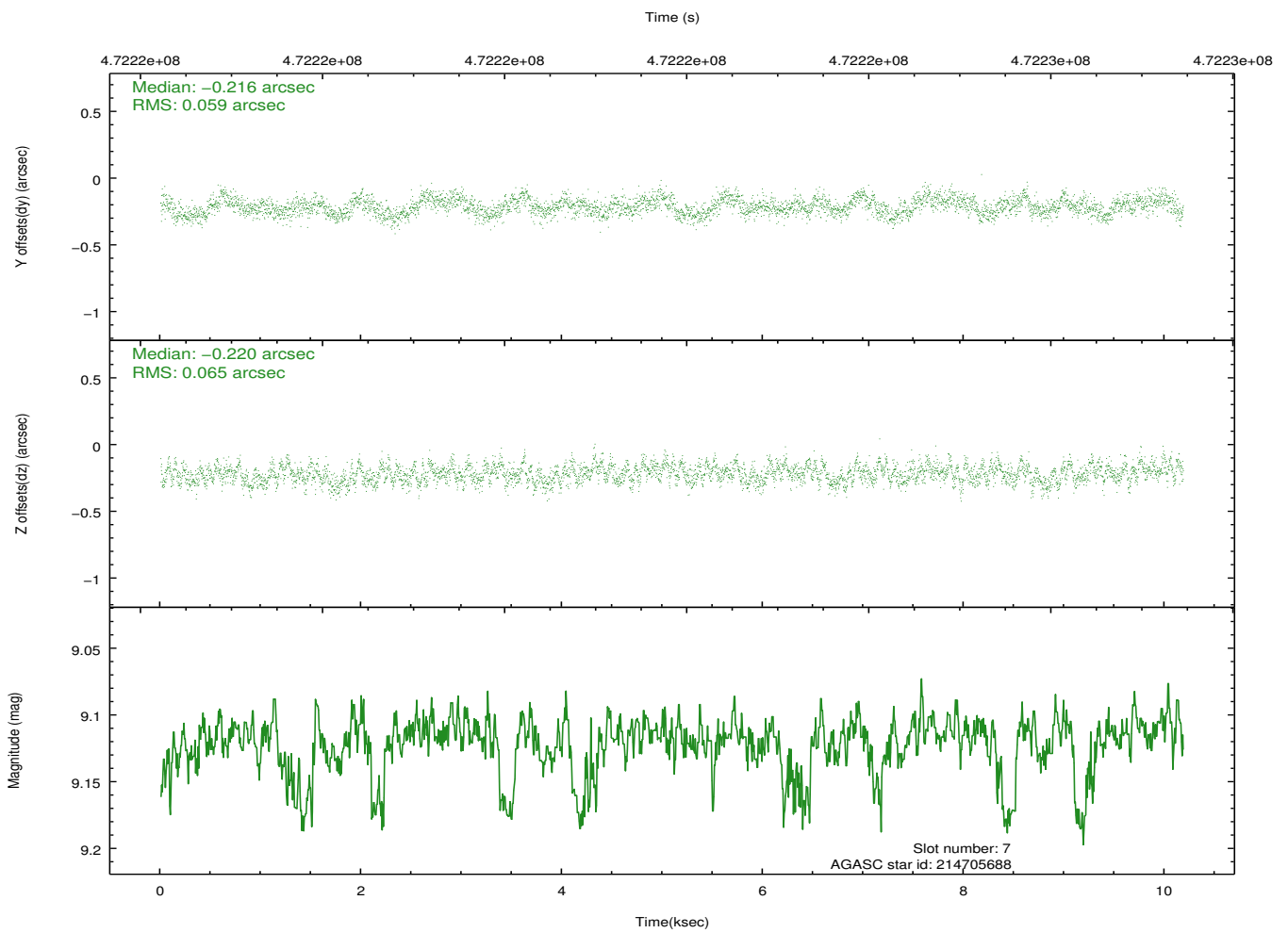
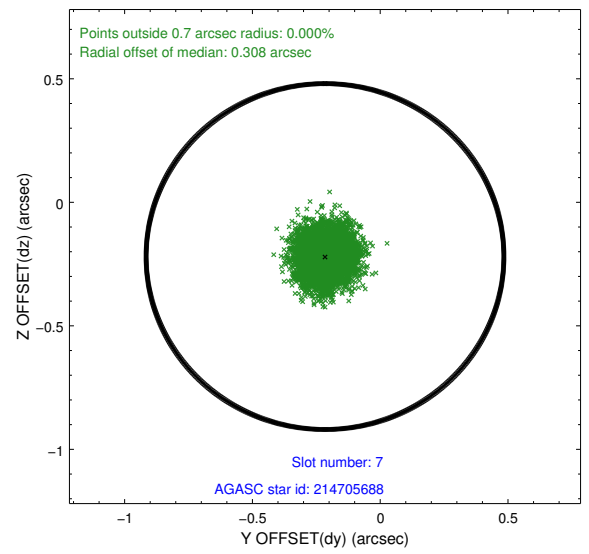
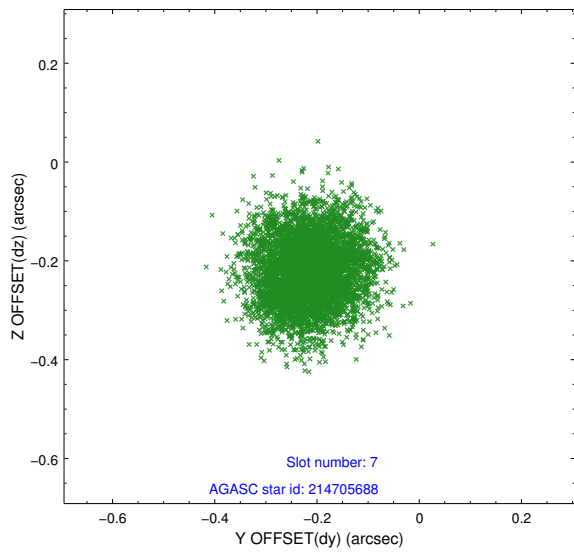
### 2.4.3 Slot 5



### 2.4.4 Slot 6

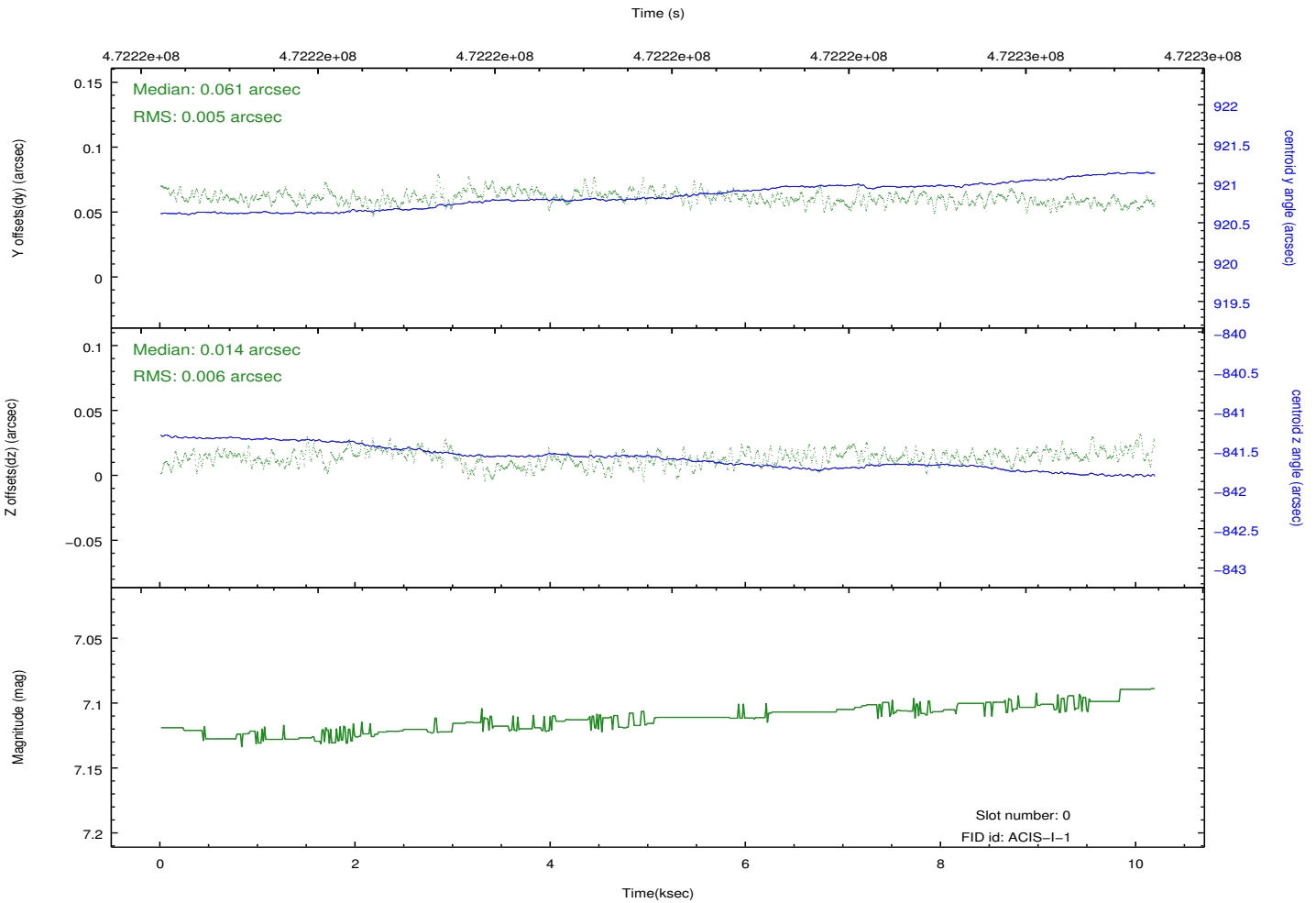
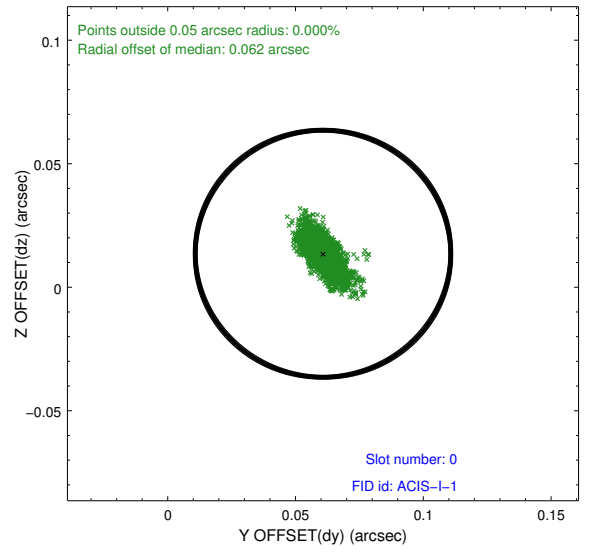
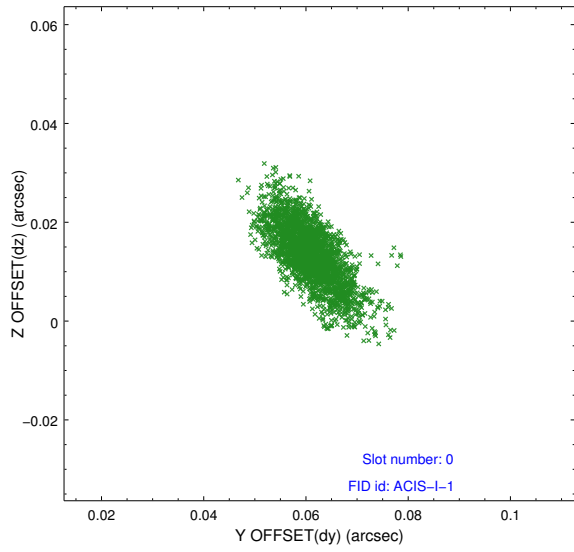


## 2.4.5 Slot 7

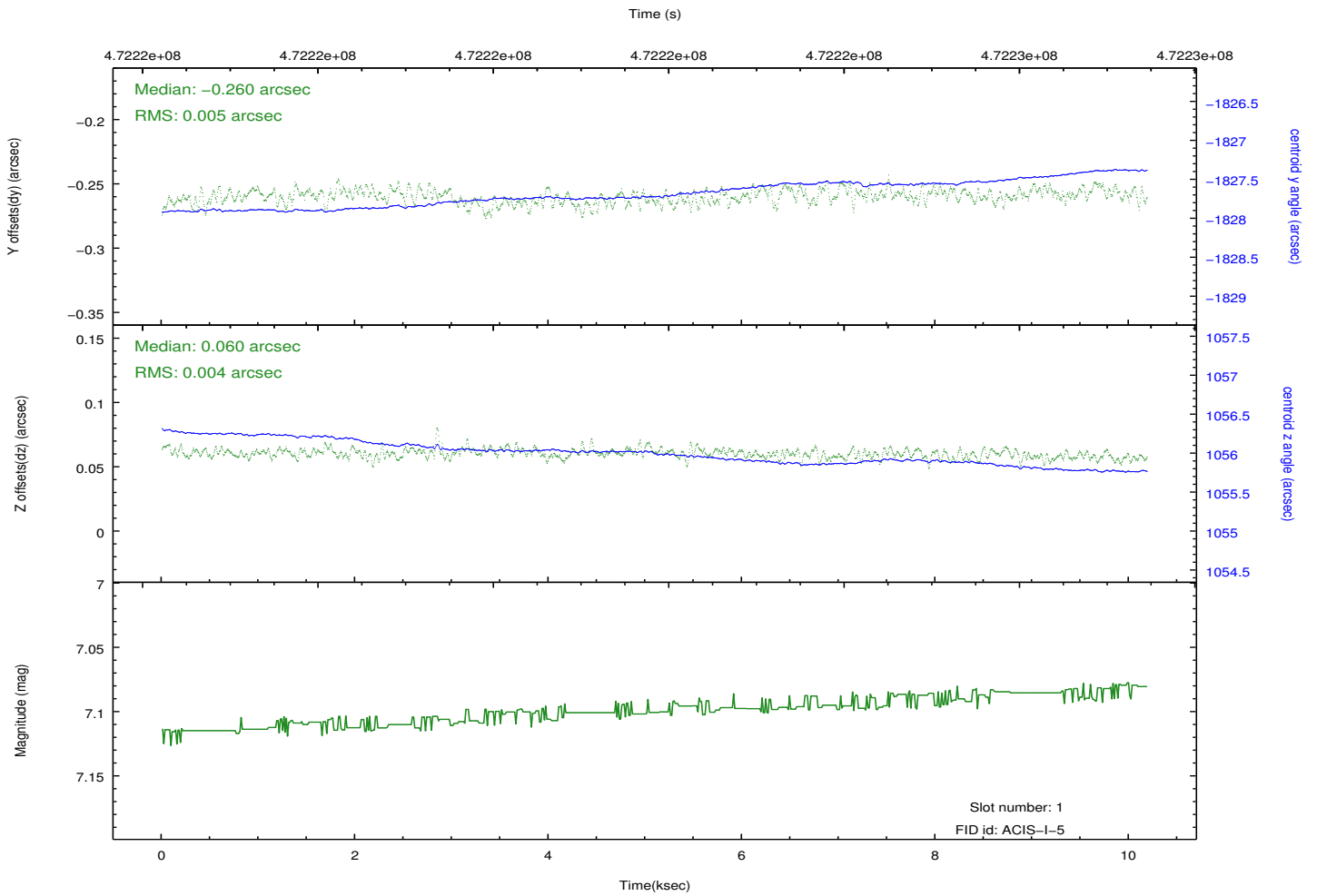
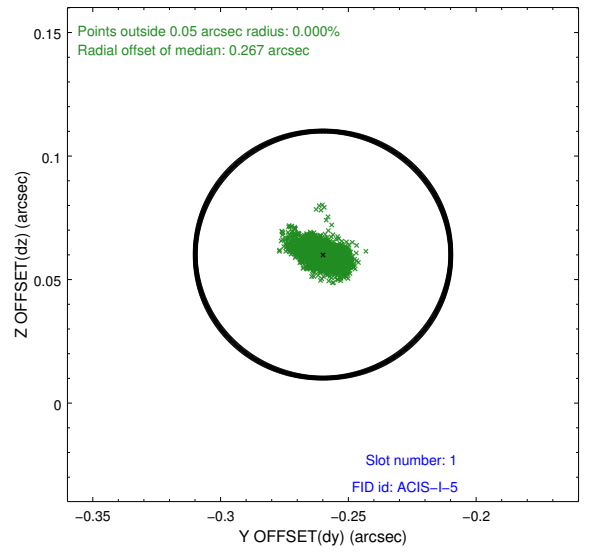
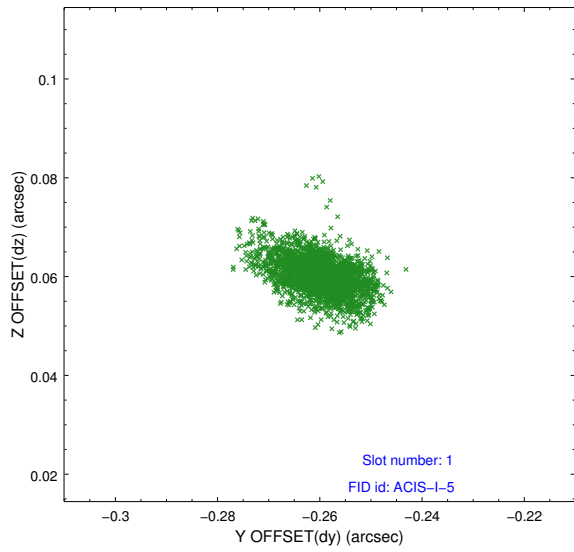


## 2.5 FID Slots

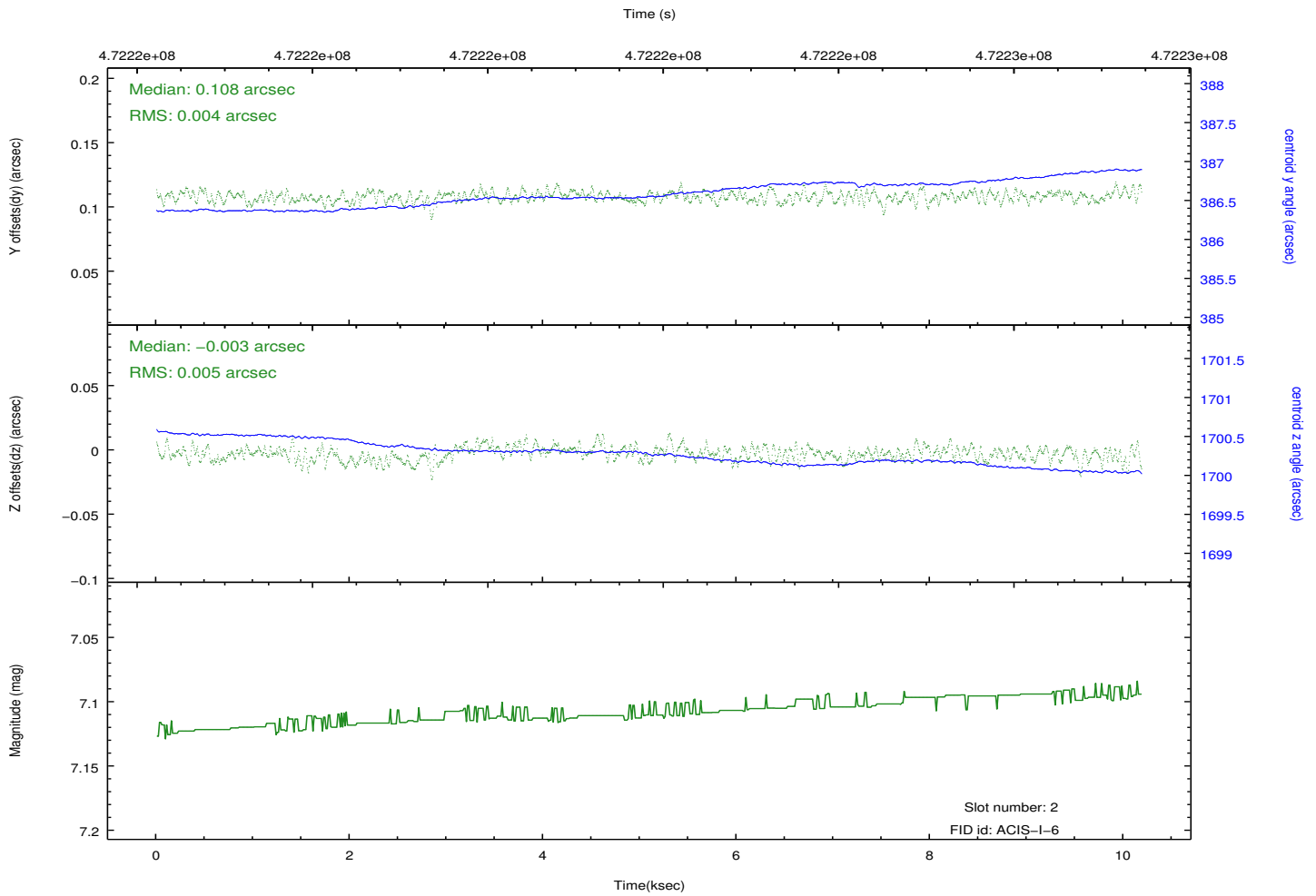
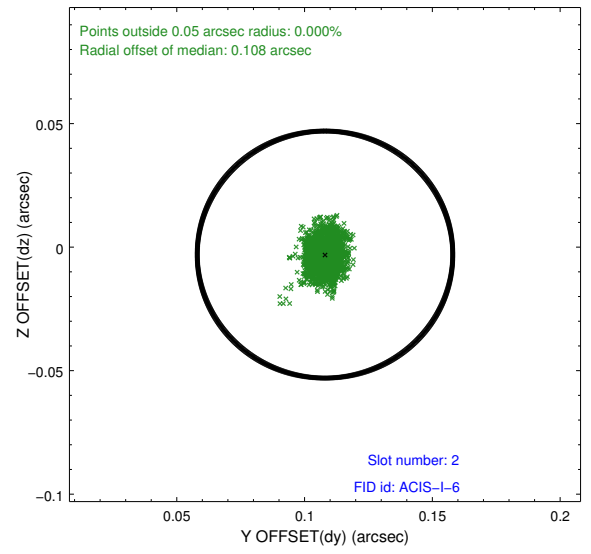
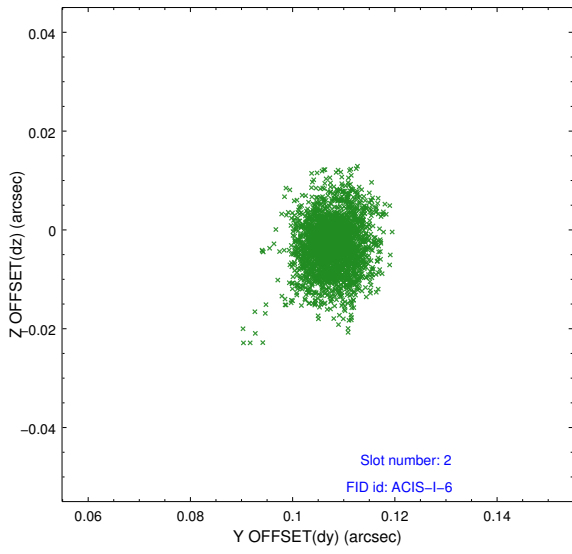
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.12.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.067814148188

## 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.