

# V&V Reference Report

## L2 ASCDS Version : 8.5

Observation 15600 - L2 Version 2  
Chandra X-Ray Center

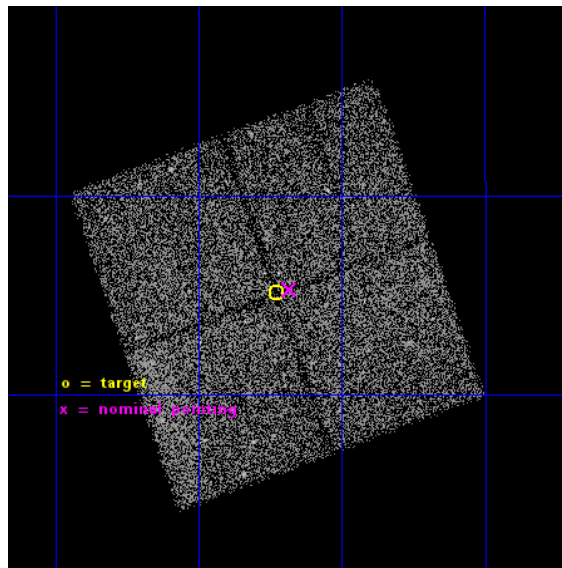
L2 Processing Date : Nov 29 2014

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# 1 Front

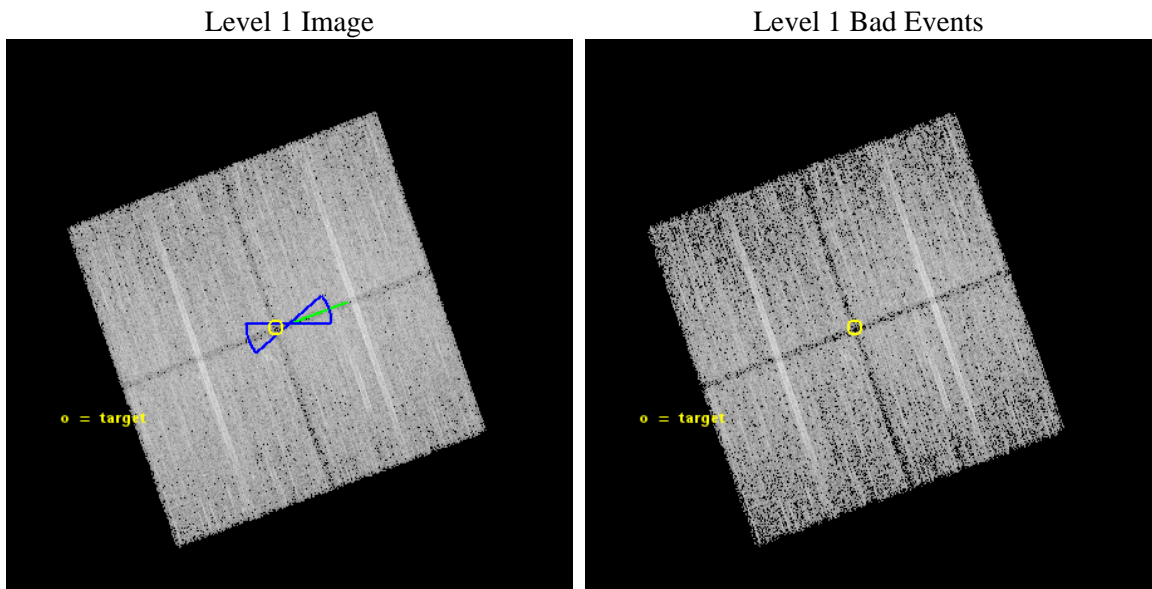
seq_num	901039	Sequence number
obs_id	15600	Observation id
title	The COSMOS Legacy Survey	Proposal title
observer	Dr Francesca Civano	Principal investigator
object	COSMOS Legacy	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	150.30715	Observer's specified target RA [deg]
dec_targ	2.585492	Observer's specified target Dec [deg]
ra_nom	150.29574781139	Nominal RA [deg]
dec_nom	2.588106797069	Nominal Dec [deg]
roll_nom	70.209211335527	Nominal Roll [deg]
revision	2	Processing version of data
ontime	22084.359129667	Sum of GTIs [s]
livetime	21795.81071937	Livetime [s]
ontime0	22087.500169873	Sum of GTIs [s]
ontime1	22084.359129667	Sum of GTIs [s]
ontime2	22084.359169543	Sum of GTIs [s]
ontime3	22087.500169873	Sum of GTIs [s]
l2events	45097	Number of level 2 events



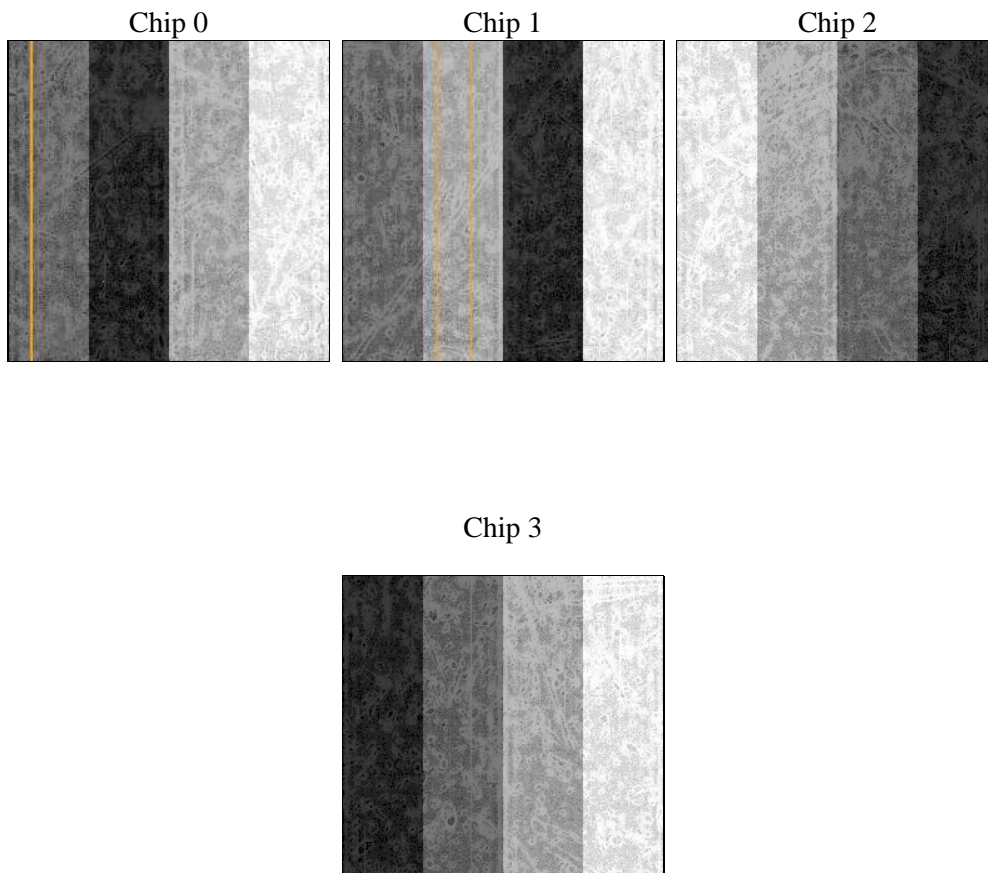
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	22000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	22084.359129667	Sum of GTIs [s]
caldsver	4.6.4	&#160	ontime0	22087.500169873	Sum of GTIs [s]
date	2014-11-30T07:37:37	Date and time of file creation	ontime1	22084.359129667	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	22084.359169543	Sum of GTIs [s]
			ontime3	22087.500169873	Sum of GTIs [s]
			l1events	431636	Number of level 1 events

### 2.1.4 Events

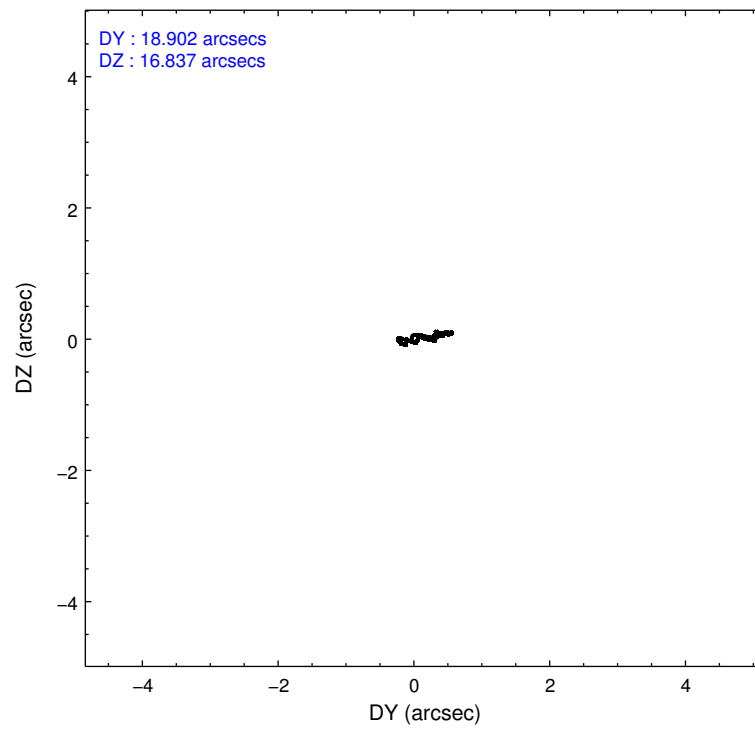
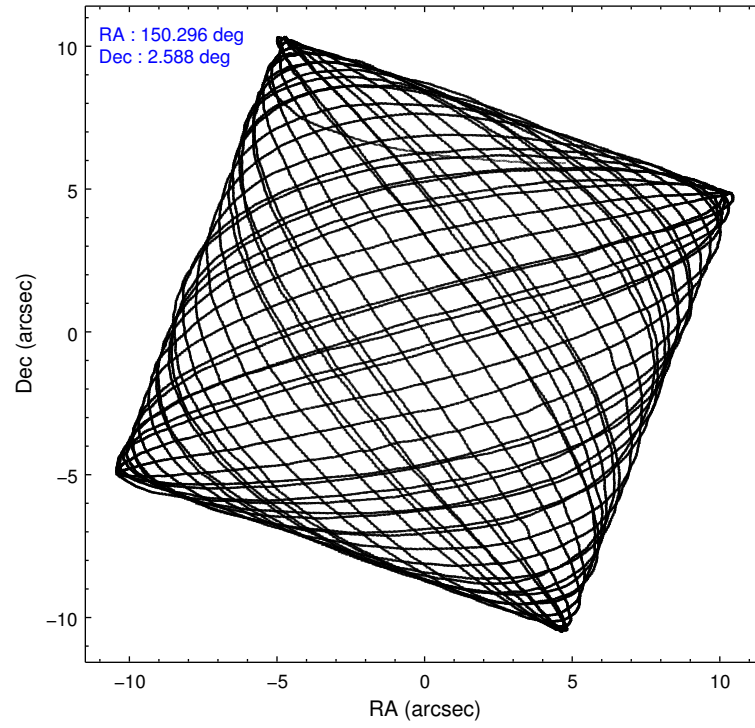
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	102801	105342	112639	110854
rejected events	89319	90310	99769	98344
rejected %	86%	85%	88%	88%

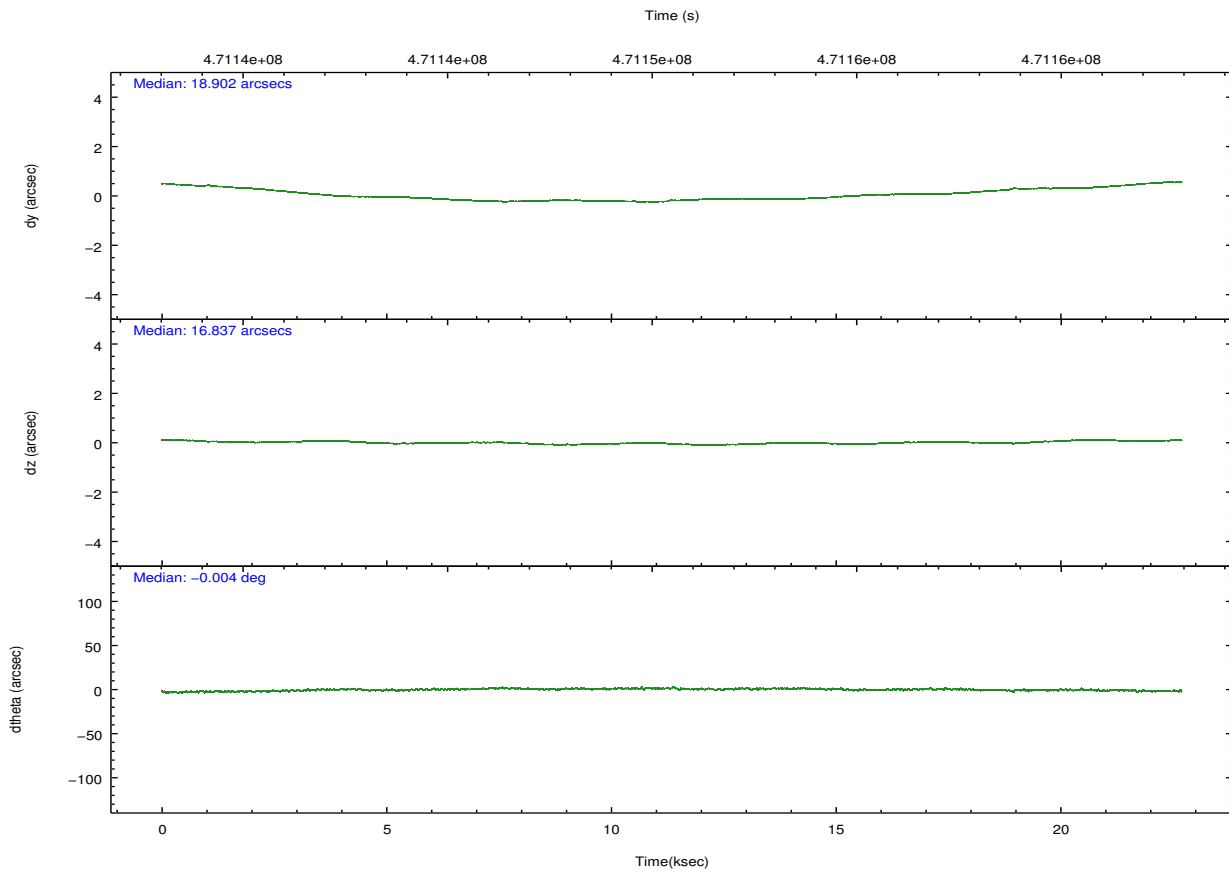
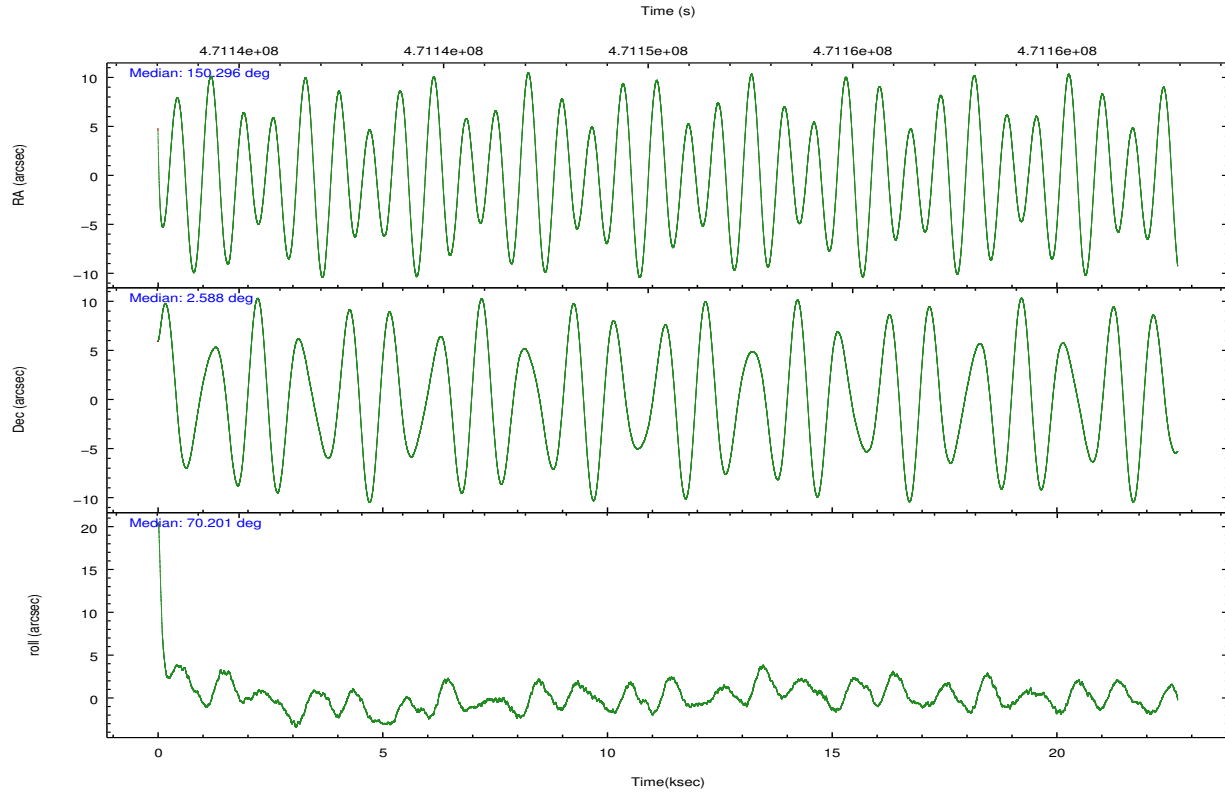
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	4651	5345	4464	4283
	4%	5%	3%	3%
grade 1 events	64	52	71	66
	0%	0%	0%	0%
grade 2 events	3390	3568	3290	2796
	3%	3%	2%	2%
grade 3 events	1440	1438	1295	1335
	1%	1%	1%	1%
grade 4 events	1319	1422	1298	1378
	1%	1%	1%	1%
grade 5 events	5163	5610	4947	6077
	5%	5%	4%	5%
grade 6 events	2686	3263	2527	2721
	2%	3%	2%	2%
grade 7 events	84088	84644	94747	92198
	81%	80%	84%	83%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	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	150.300729	150.2957478113888	Subarray requested	NONE	NONE
[deg] Pointing Dec	2.561045	2.588106797069019	Alternating exposures requested	N	N
[deg] Pointing Roll	70.000288	70.20921133552689	[s] Primary exposure time	0.000000	3.1
[deg] Roll angle	250.000000	250.000000			
[deg] Roll tolerance	20.000000	20.000000			
Roll constraint allows 180D rotation	Y	Y			
[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)	471139824.184000	471138322.20773			
Observation start date	2012-12-06T00:09:17	2012-12-05T23:45:22			
[s] Observation end time (MET)	471161824.184000	471162968.33406			
Observation end date	2012-12-06T06:15:57	2012-12-06T06:36:08			
Read mode	TIMED	TIMED			

## 2.3 Aspect





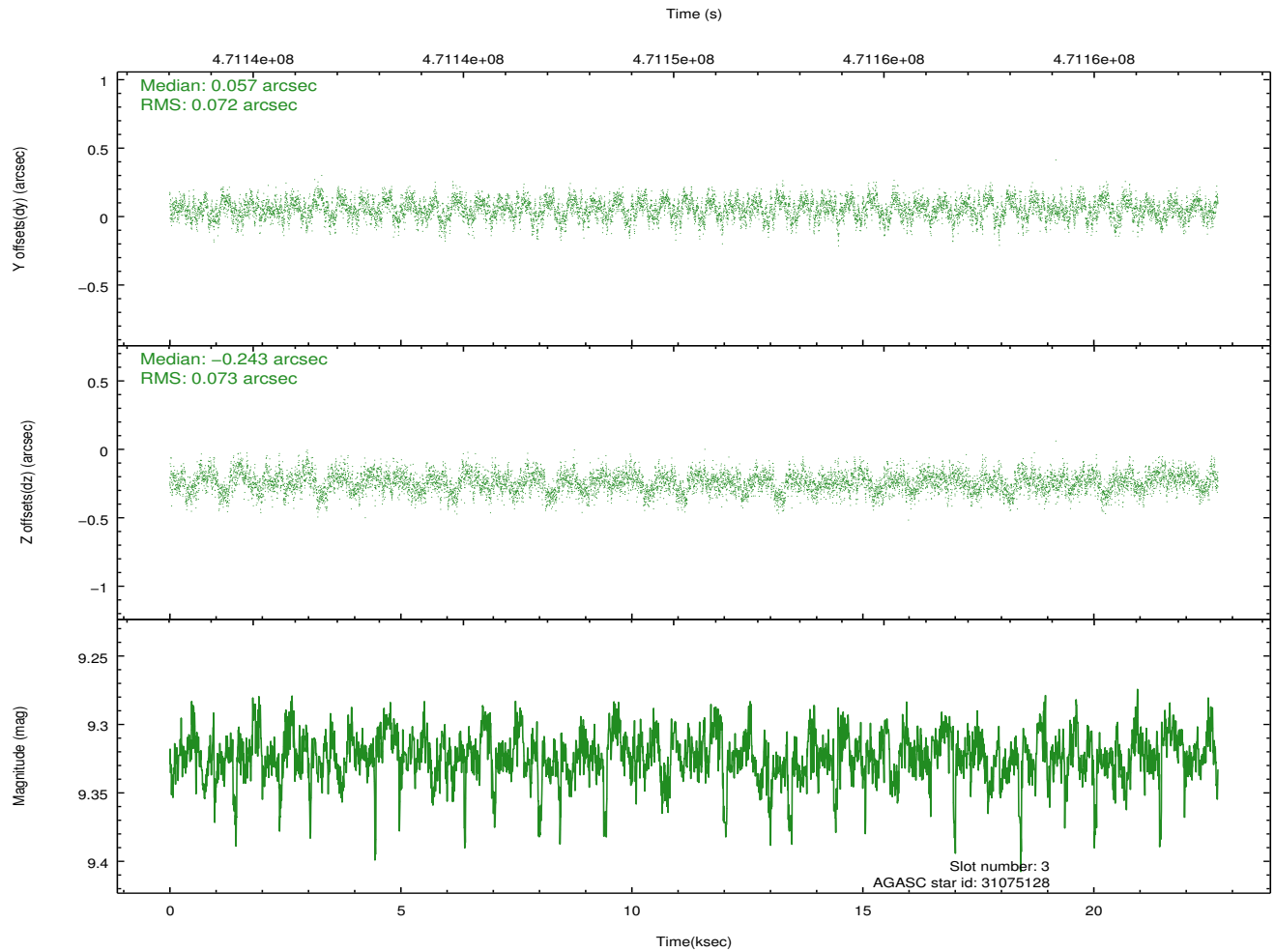
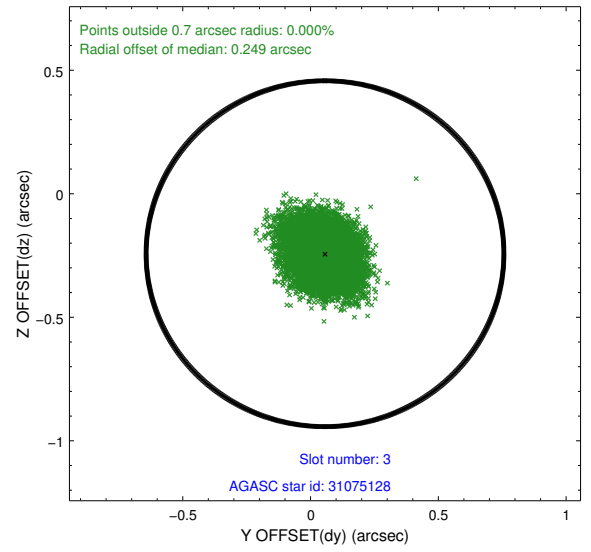
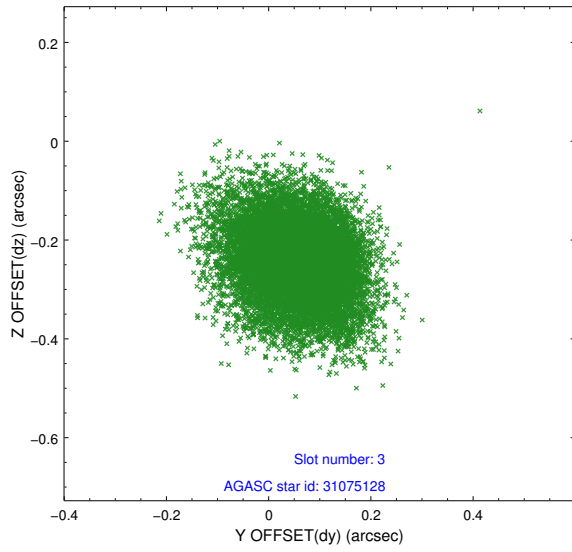
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.09	5535	-0.027	-0.099	0.010	0.017	0.000000	0.000000	920.39	-840.56
1	FID		ACIS-I-4	7.00	5535	0.230	0.105	0.010	0.016	0.000000	0.000000	2140.72	1059.41
2	FID		ACIS-I-5	7.07	5535	-0.301	0.064	0.008	0.013	0.000000	0.000000	-1827.75	1057.28
3	GUIDE	used	31075128	9.32	11061	0.057	-0.243	0.108	0.176	149.584516	2.364347	-1545.91	2178.70
4	GUIDE	used	31475336	7.01	11070	-0.428	-0.482	0.093	0.147	149.929497	3.384805	2330.05	2269.28
5	GUIDE	used	31983336	8.60	11040	0.492	0.244	0.096	0.153	150.429924	2.291234	-752.74	-768.31
6	GUIDE	used	32374896	9.21	11060	-0.163	0.242	0.124	0.195	150.682269	2.512794	306.23	-1348.51
7	GUIDE	used	31986152	9.01	11049	0.041	0.233	0.119	0.194	150.840314	2.057585	-1038.59	-2443.26

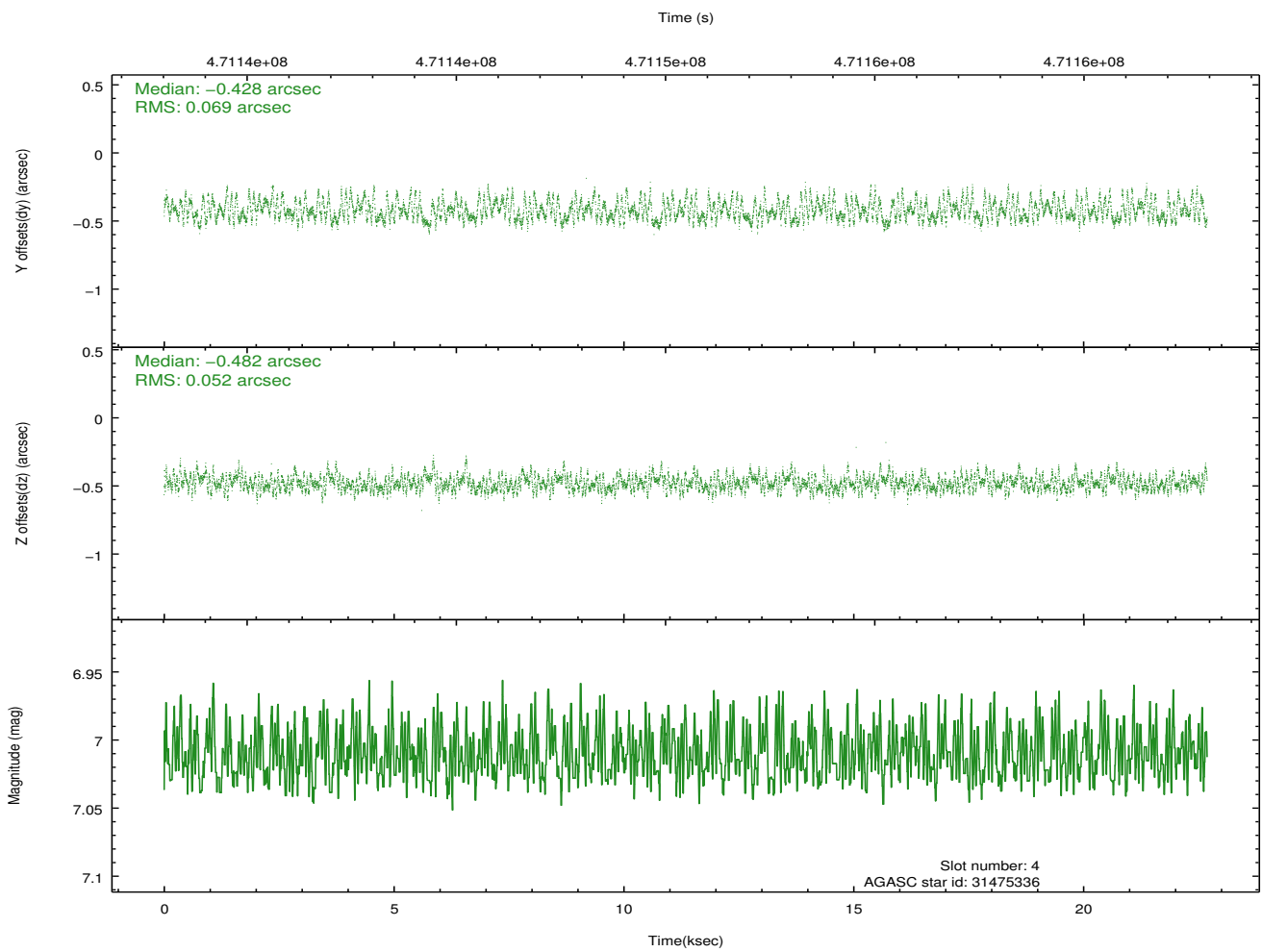
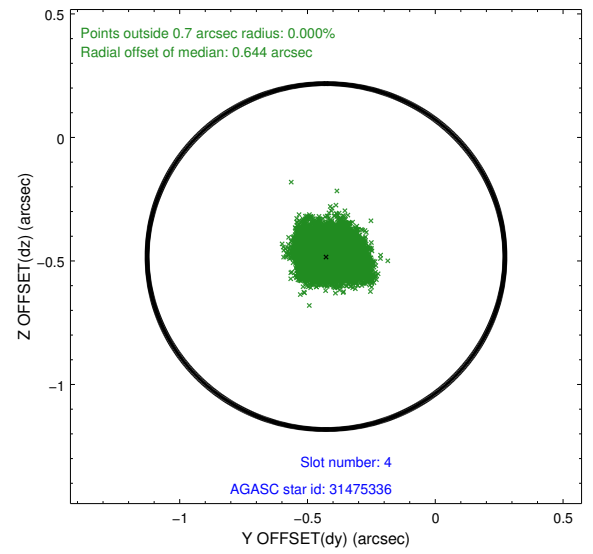
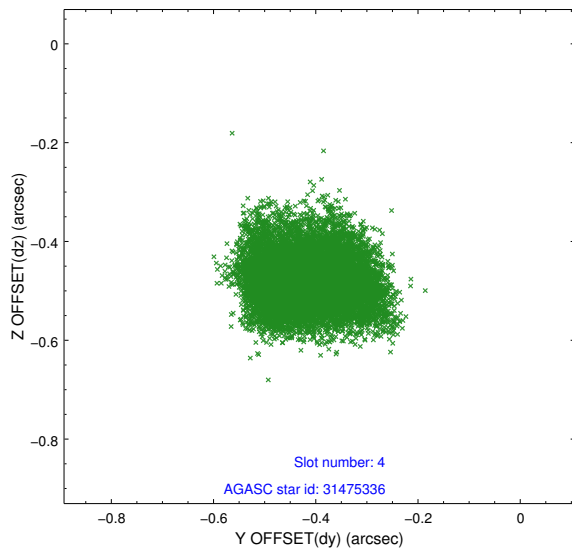
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## 2.4 Star Slots

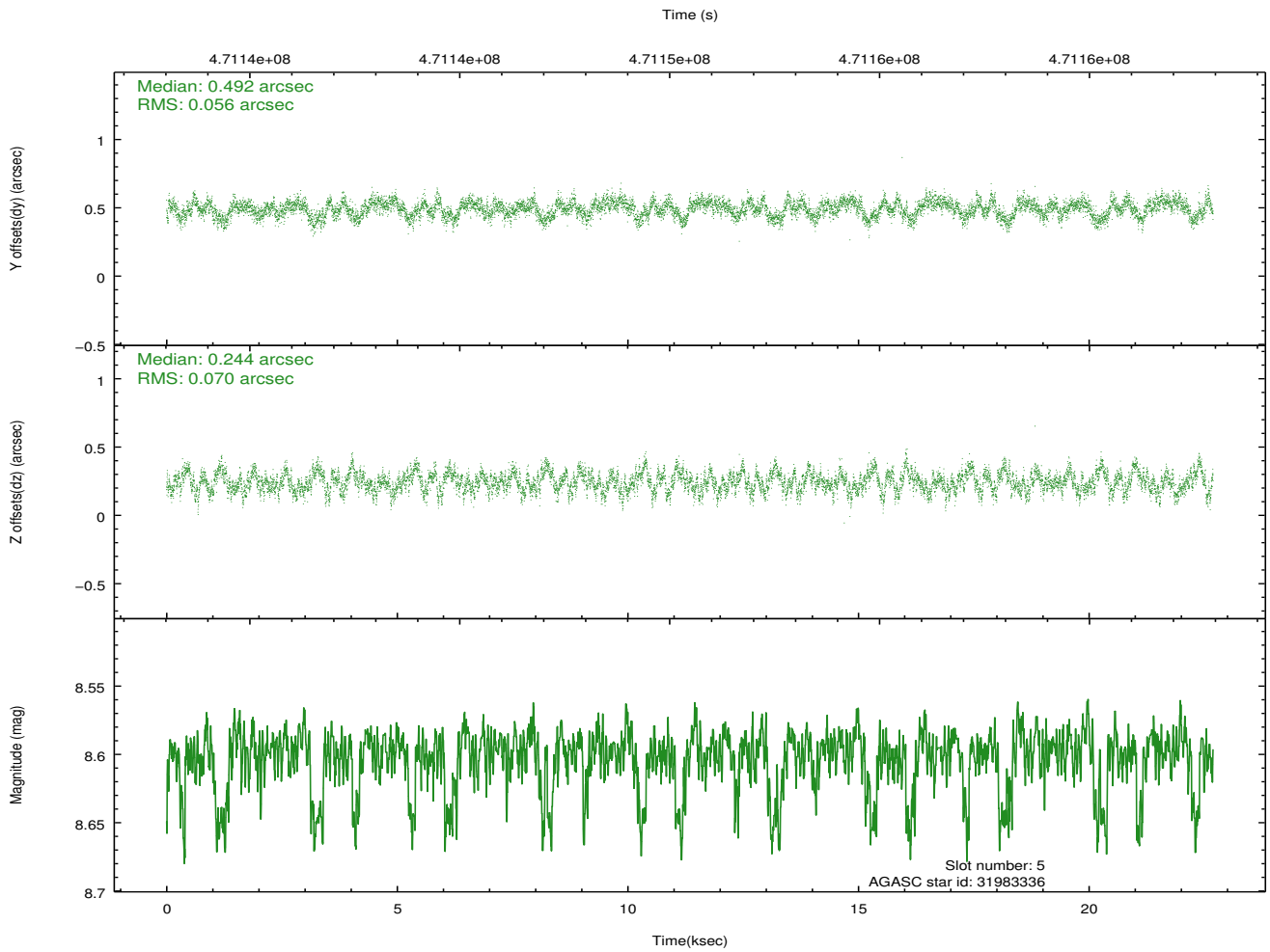
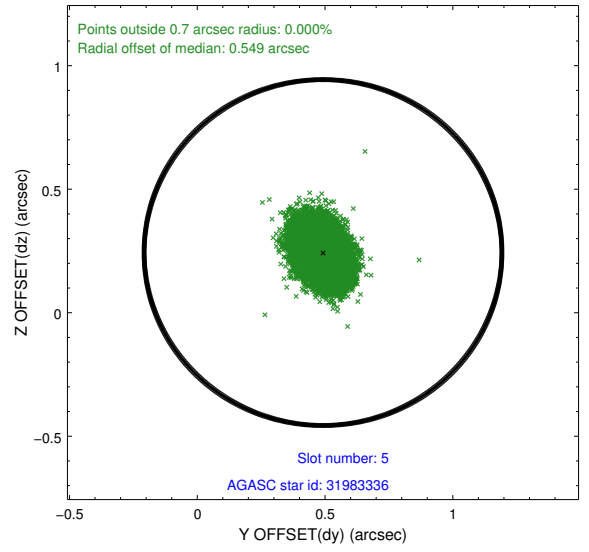
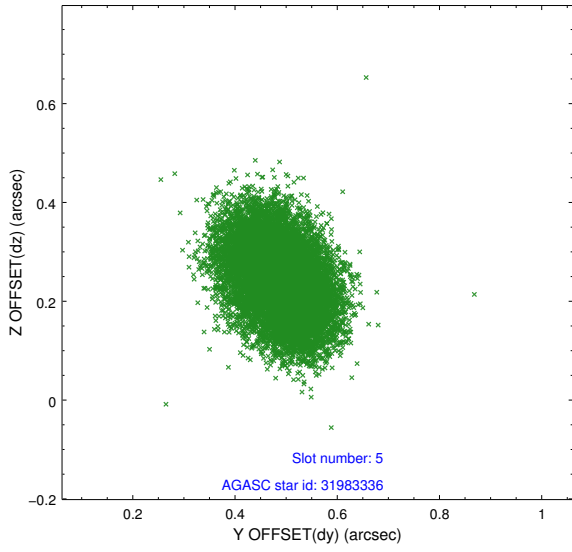
### 2.4.1 Slot 3



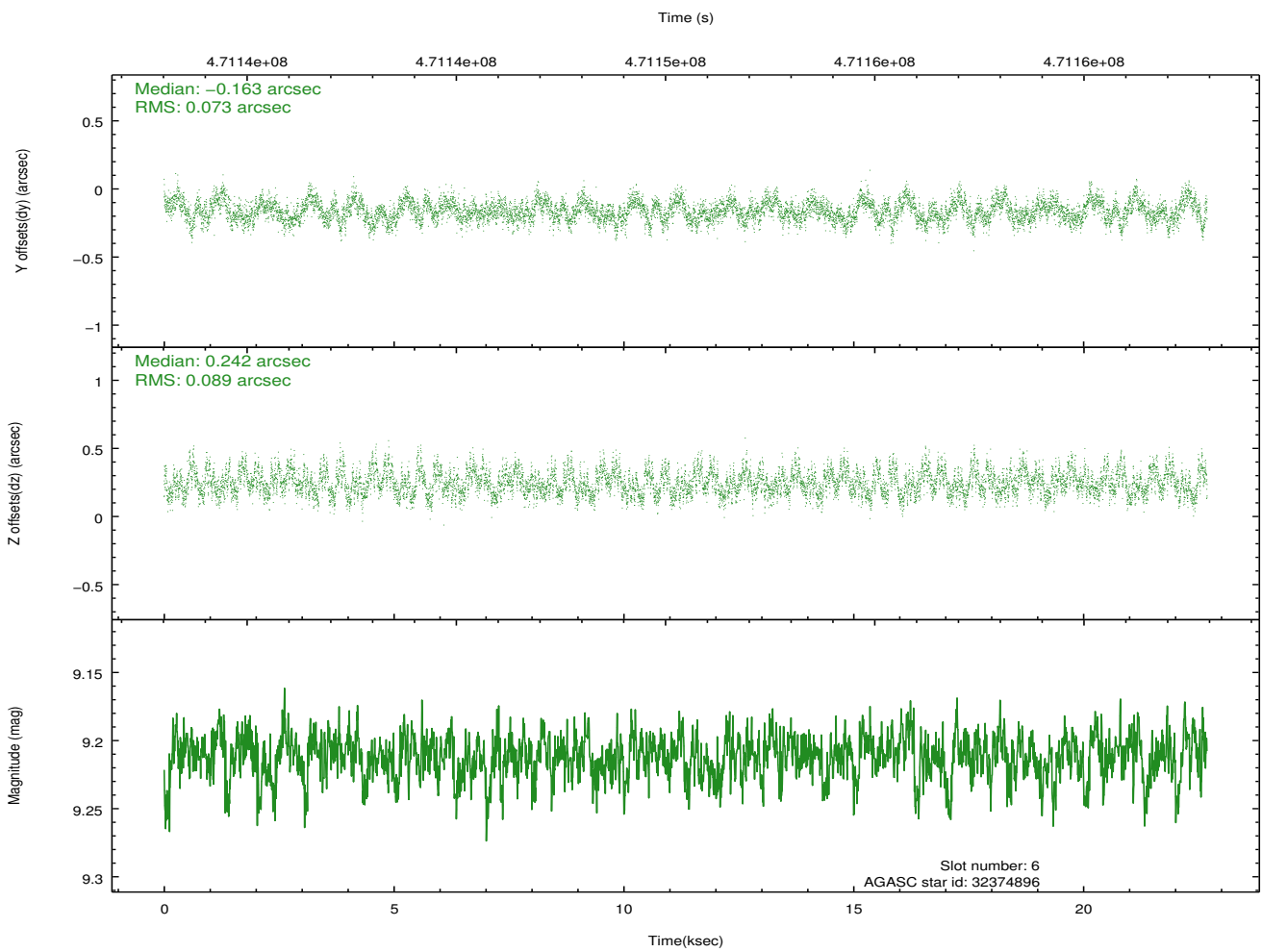
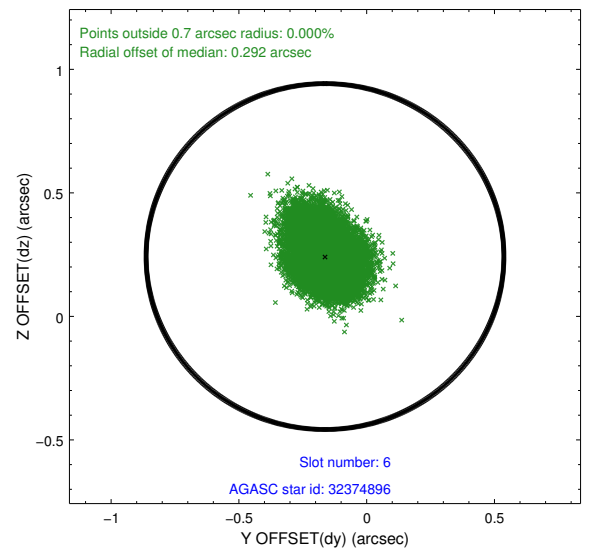
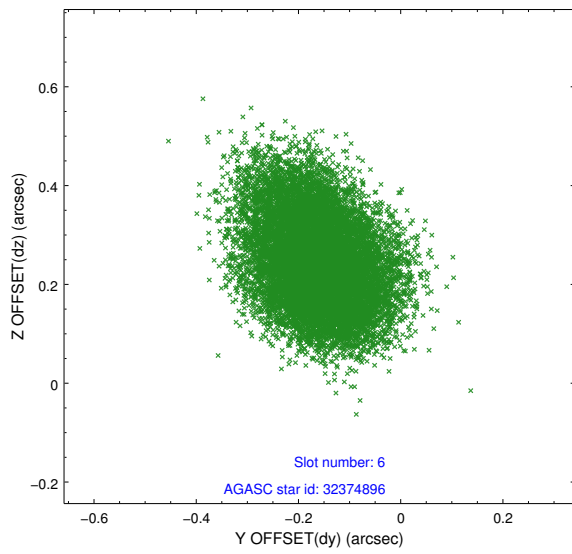
## 2.4.2 Slot 4



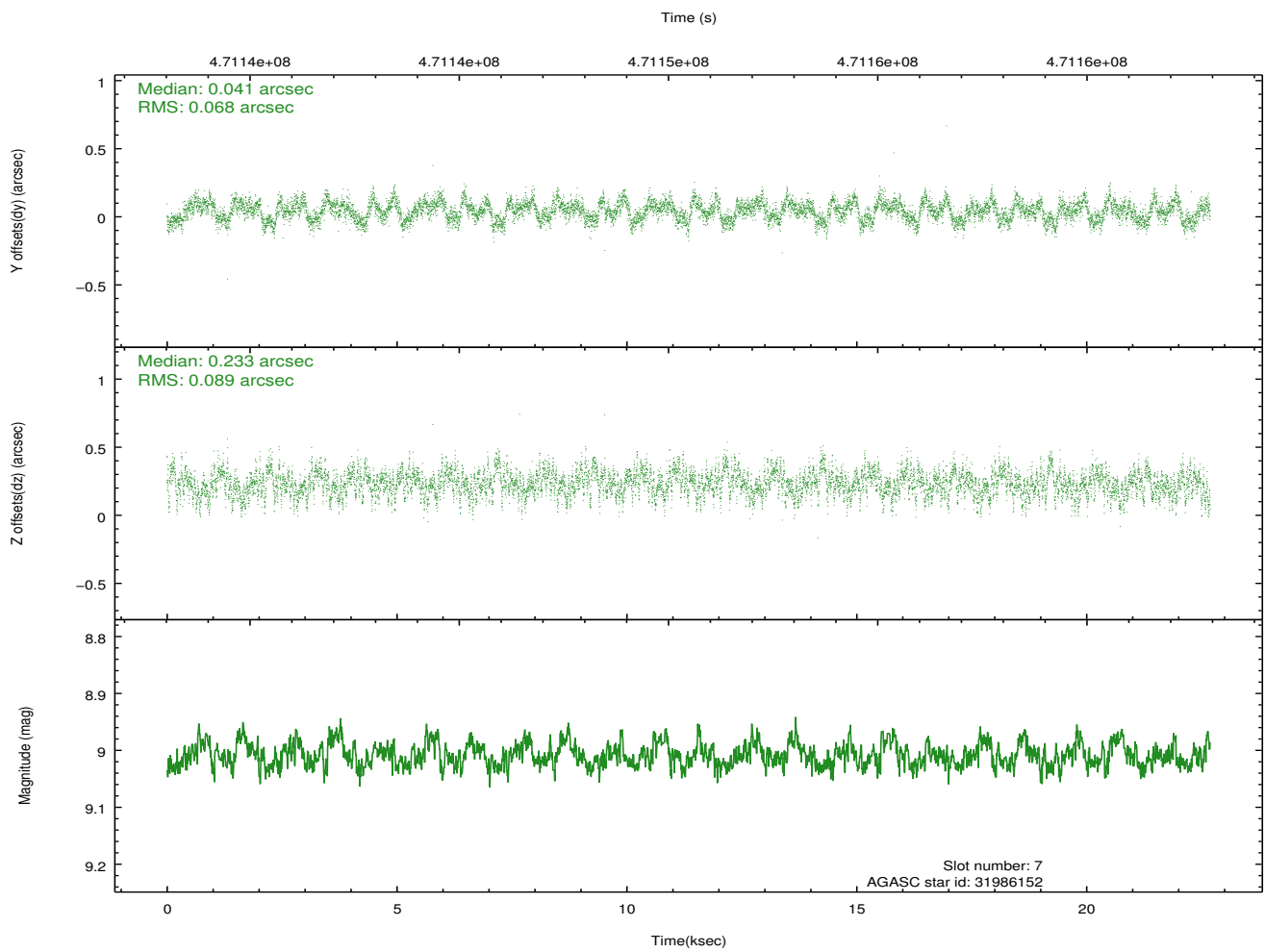
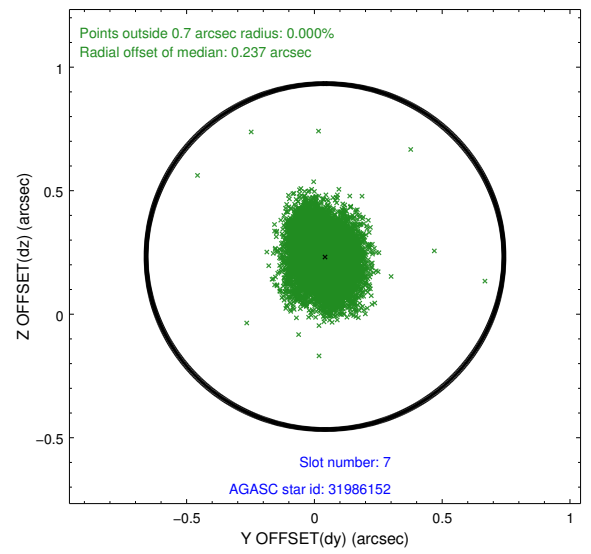
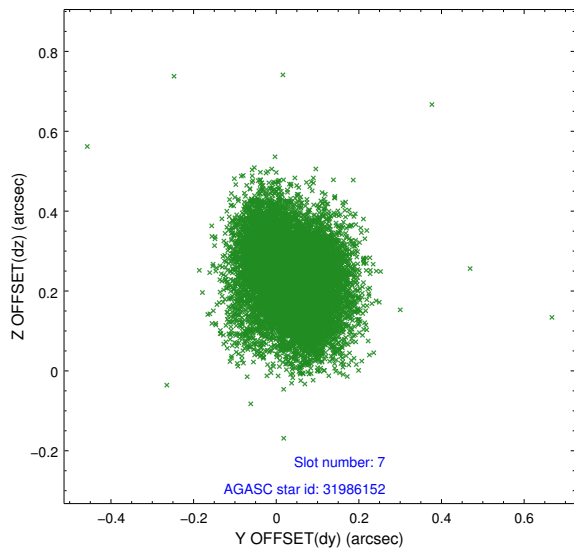
### 2.4.3 Slot 5



## 2.4.4 Slot 6

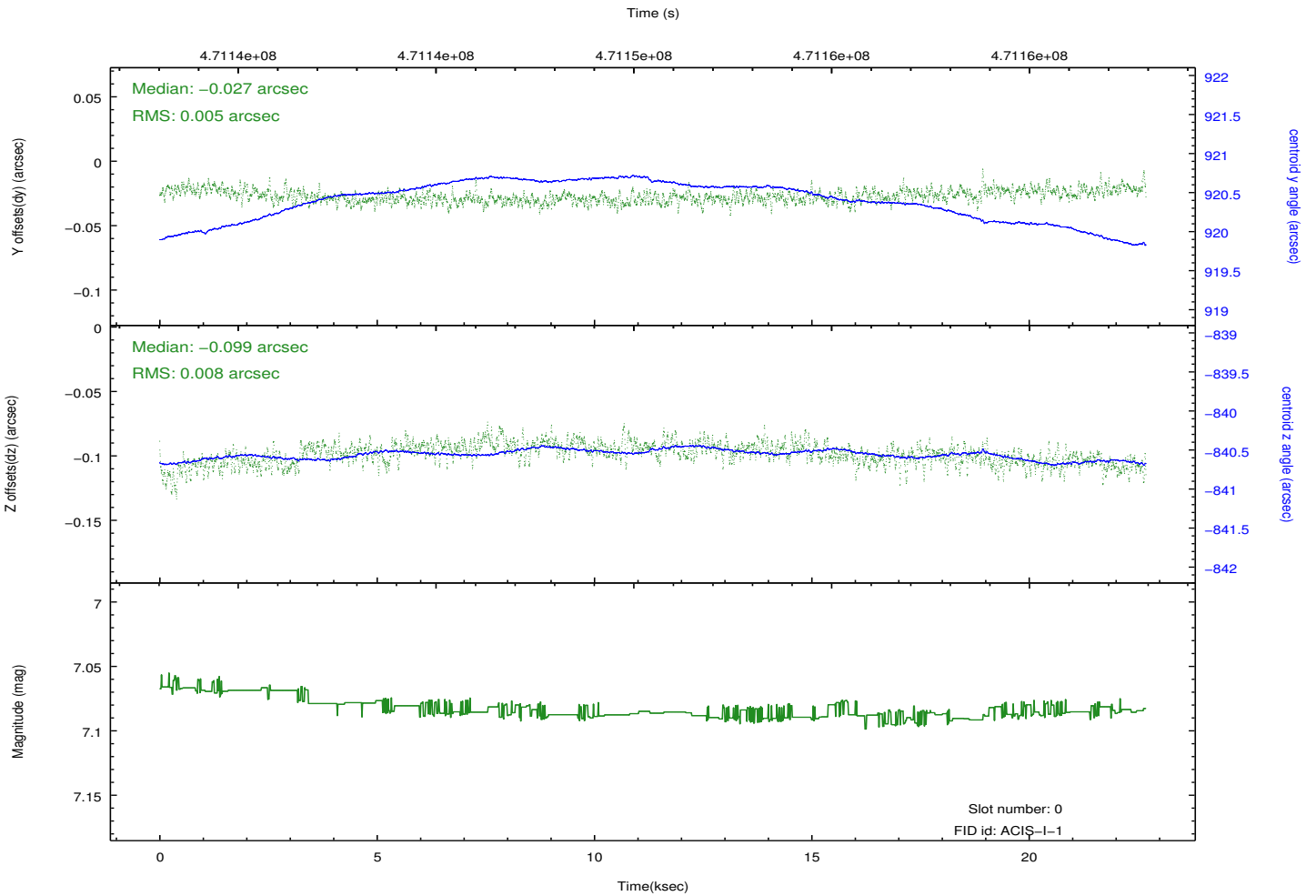
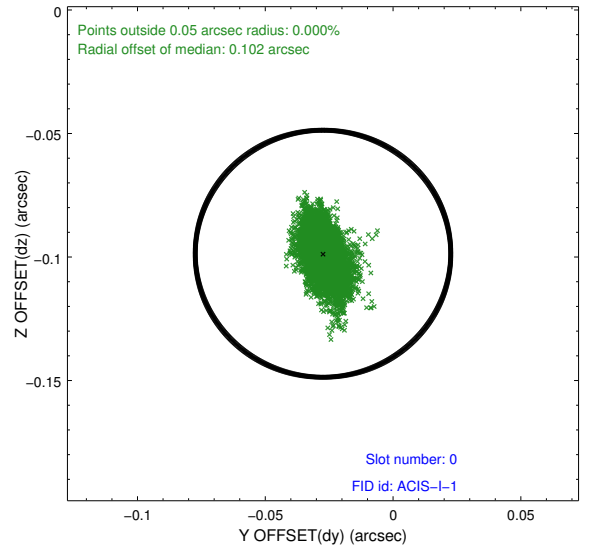
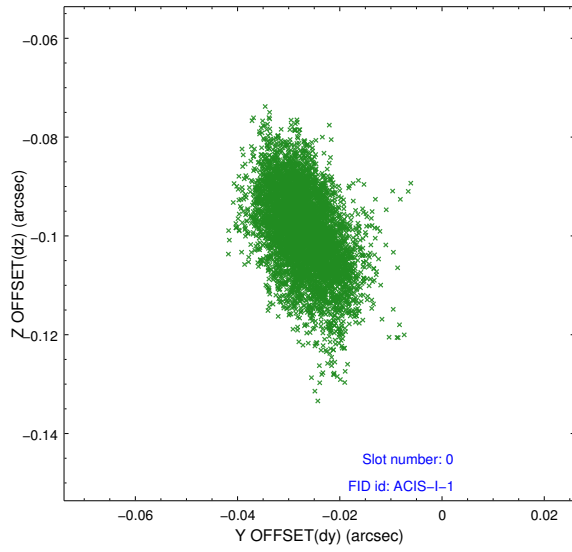


## 2.4.5 Slot 7

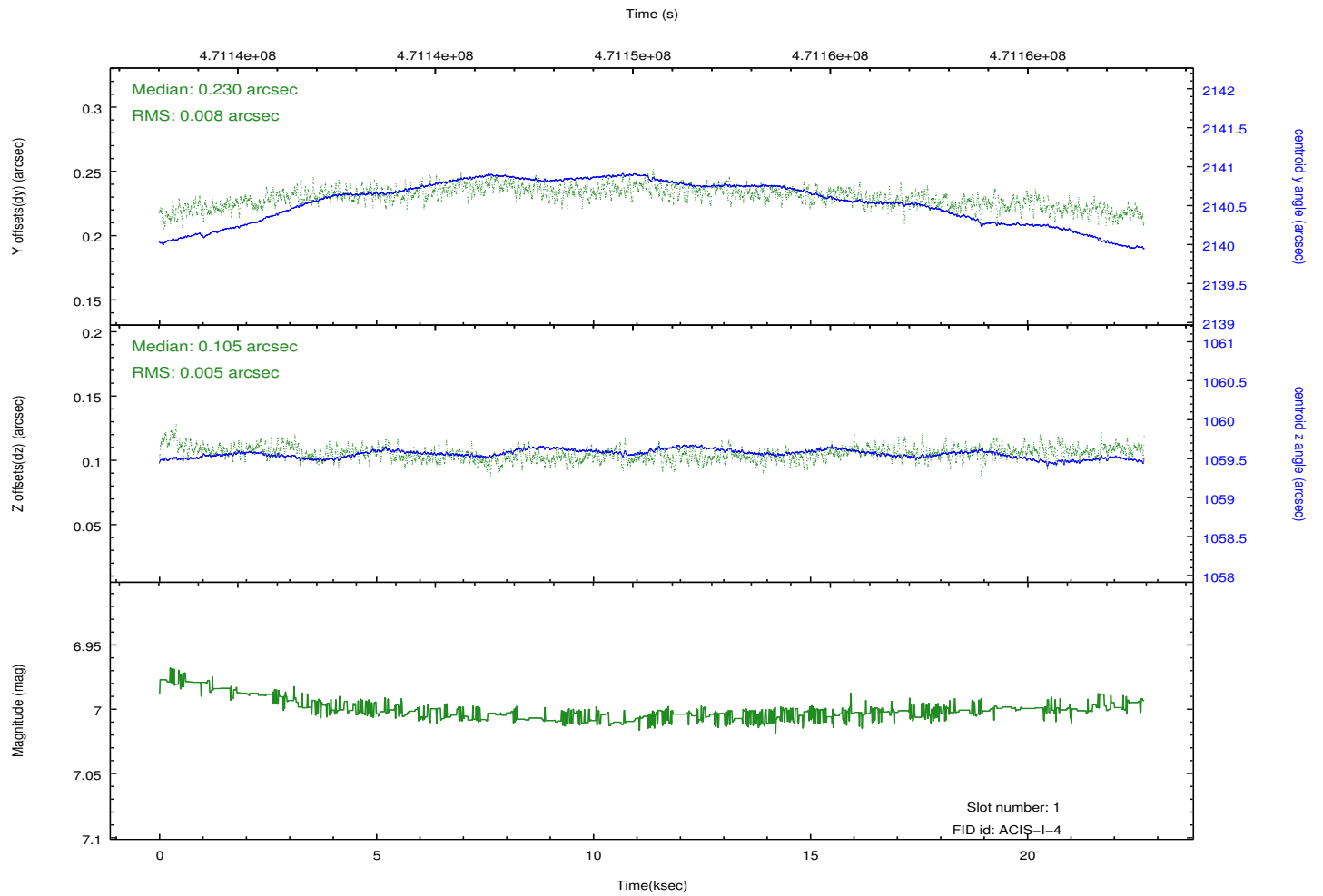
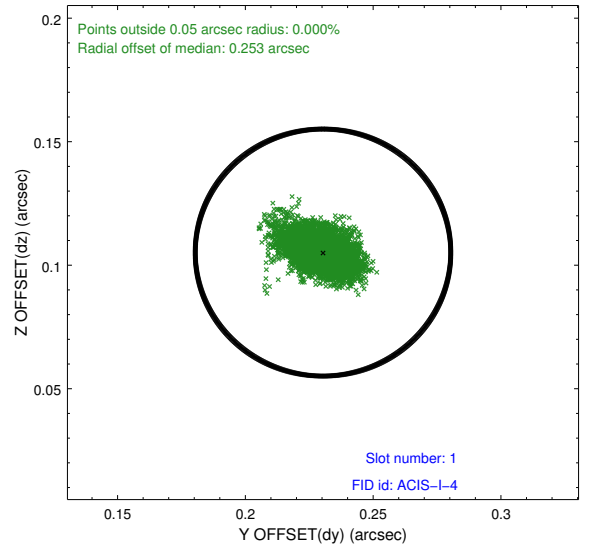
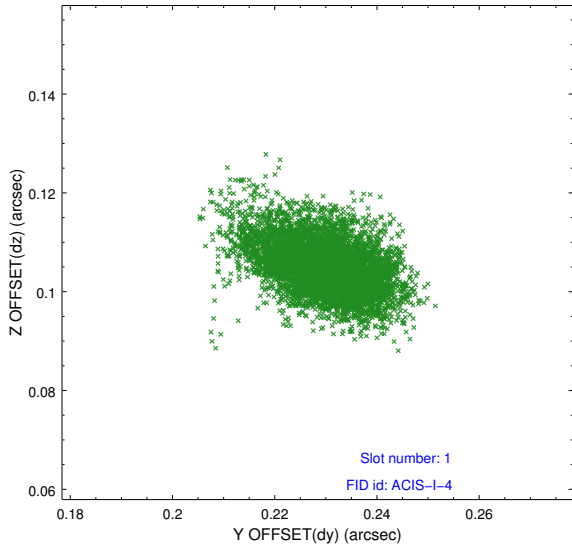


## 2.5 FID Slots

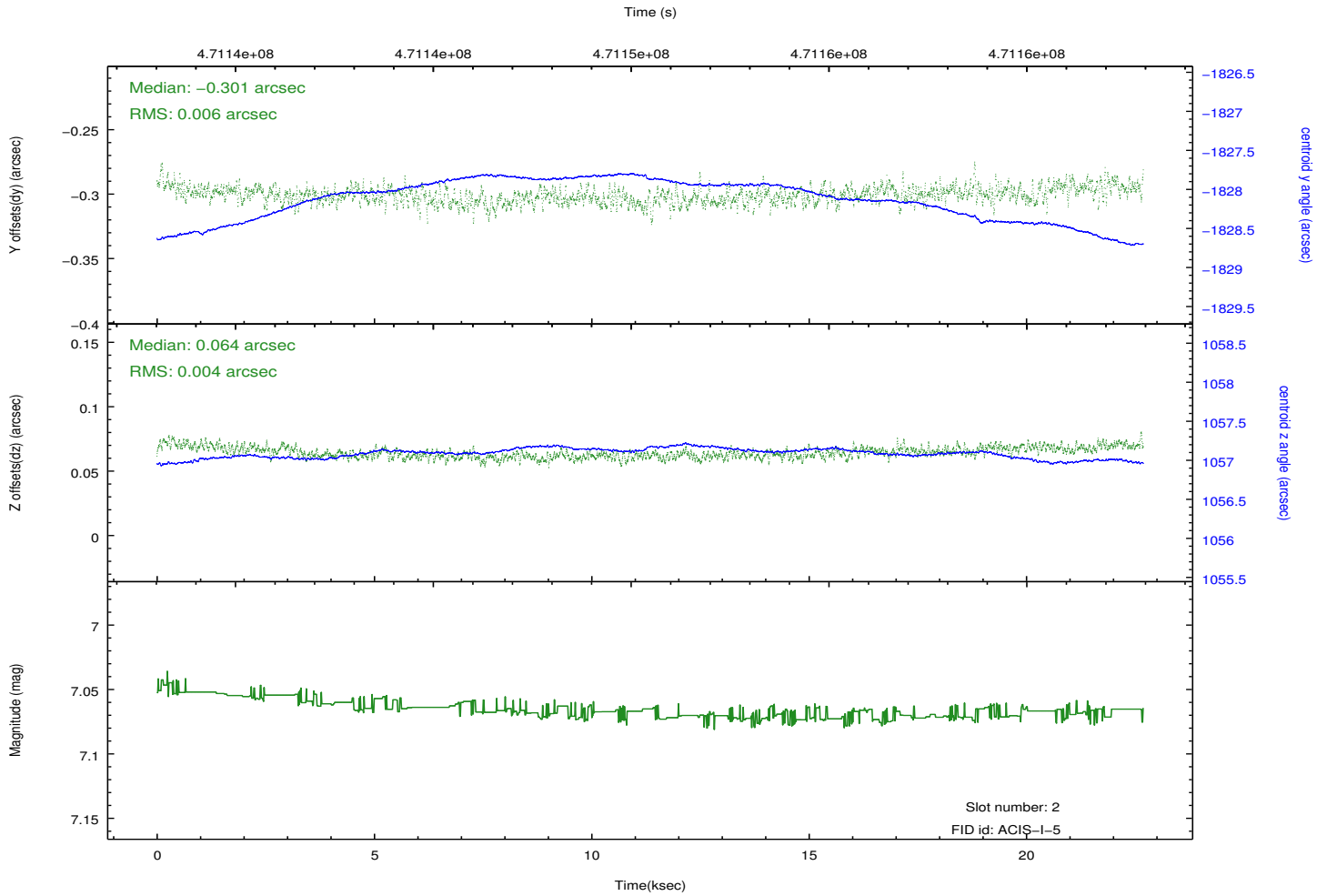
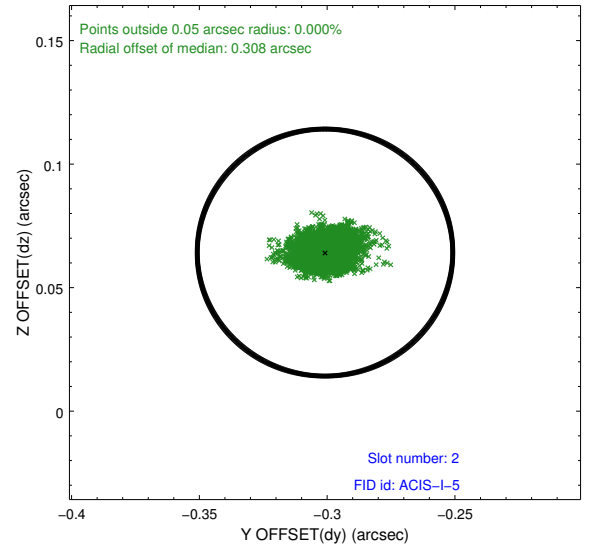
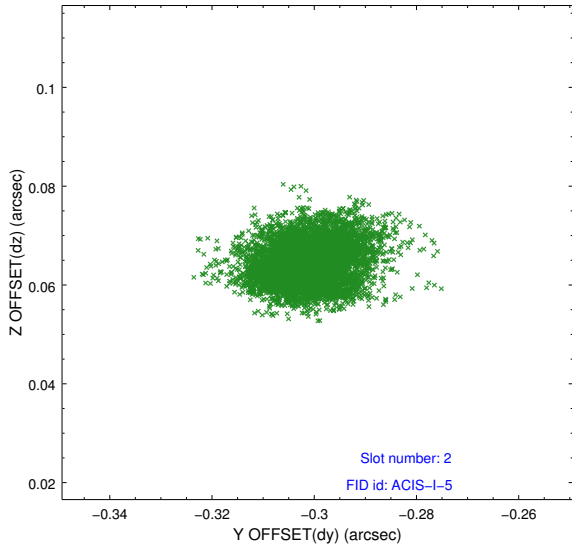
### 2.5.1 Slot 0



## 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)	2014.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	22.084359129667

## 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.