

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 1711 - L2 Version 4  
Chandra X-Ray Center

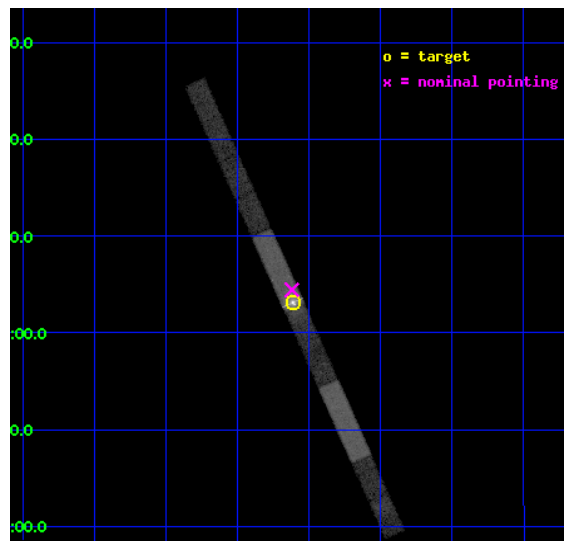
L2 Processing Date : Aug 29 2012

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# 1 Front

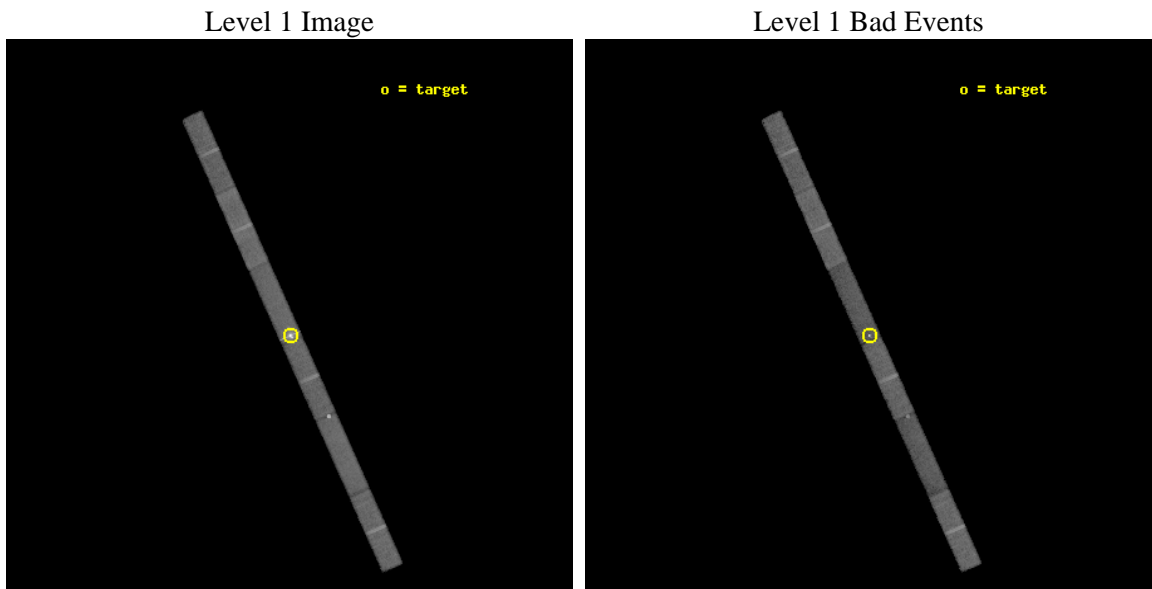
seq_num	790053	Sequence number
obs_id	1711	Observation id
title	IN FLIGHT CALIBRATION OF THE HETGS EFFECTIVE AREA AND CROSS DISPERSION PROFILE	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	3C 273	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.277917	Observer's specified target RA [deg]
dec_targ	2.052389	Observer's specified target Dec [deg]
ra_nom	187.27977932655	Nominal RA [deg]
dec_nom	2.0742407325628	Nominal Dec [deg]
roll_nom	245.81536790806	Nominal Roll [deg]
revision	4	Processing version of data
ontime	28130.299847573	Sum of GTIs [s]
livetime	27118.532069279	Livetime [s]
ontime4	28130.299847573	Sum of GTIs [s]
ontime5	28130.299847573	Sum of GTIs [s]
ontime6	28130.299847573	Sum of GTIs [s]
ontime7	28130.299847573	Sum of GTIs [s]
ontime8	28130.299847573	Sum of GTIs [s]
ontime9	28130.299847573	Sum of GTIs [s]
l2events	116780	Number of level 2 events



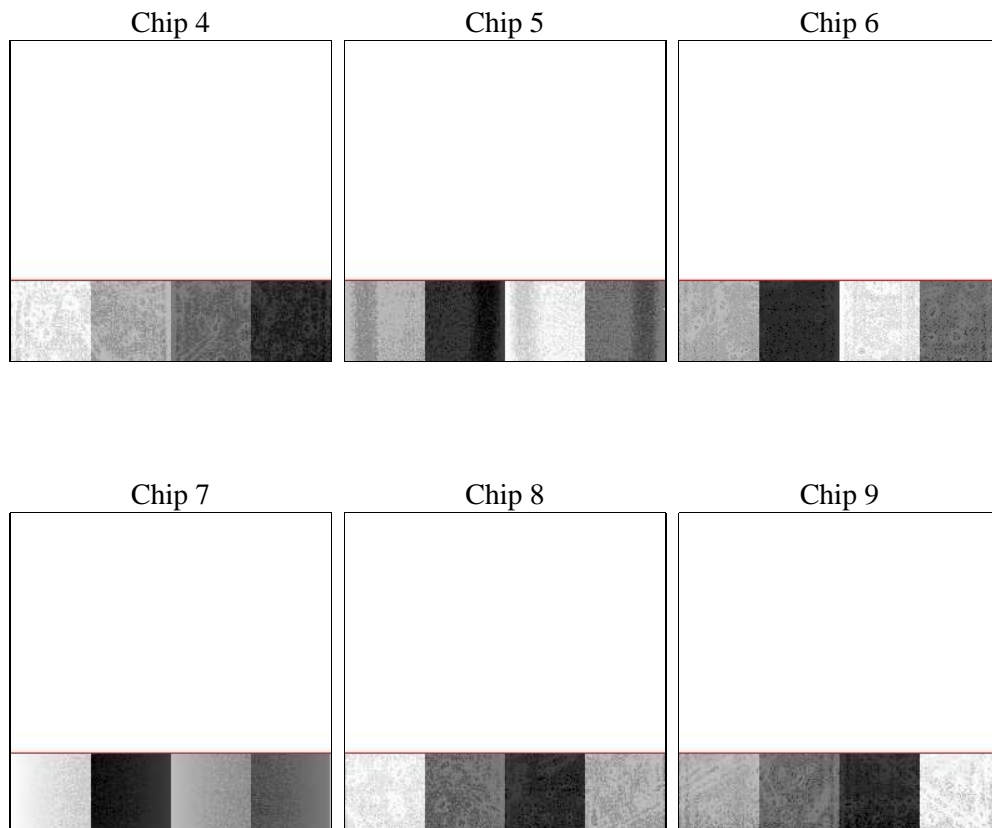
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	28000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	28130.299847573	Sum of GTIs [s]
caldbver	4.5.1.1	&#160	ontime4	28130.299847573	Sum of GTIs [s]
date	2012-08-29T08:18:50	Date and time of file creation	ontime5	28130.299847573	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	28130.299847573	Sum of GTIs [s]
			ontime7	28130.299847573	Sum of GTIs [s]
			ontime8	28130.299847573	Sum of GTIs [s]
			ontime9	28130.299847573	Sum of GTIs [s]
			l1events	433615	Number of level 1 events

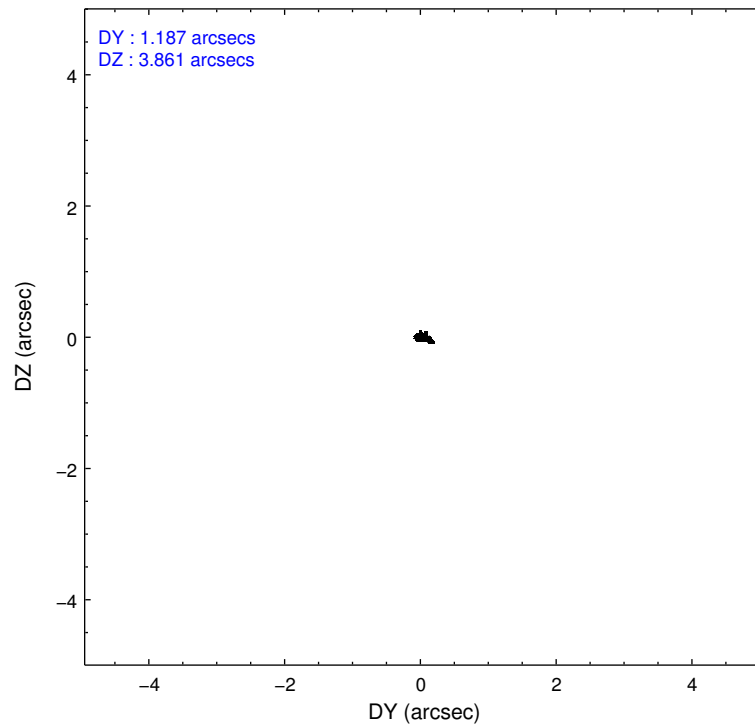
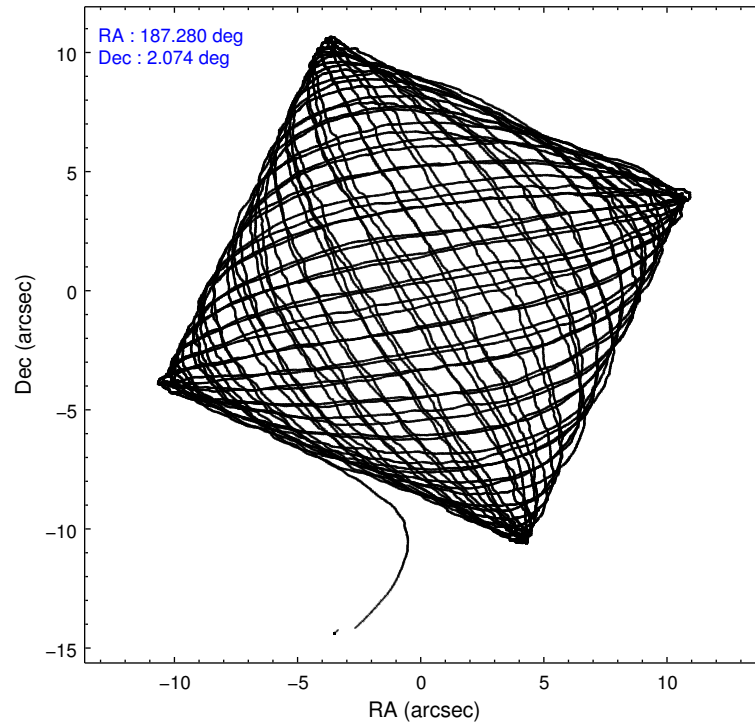
### 2.1.4 Events

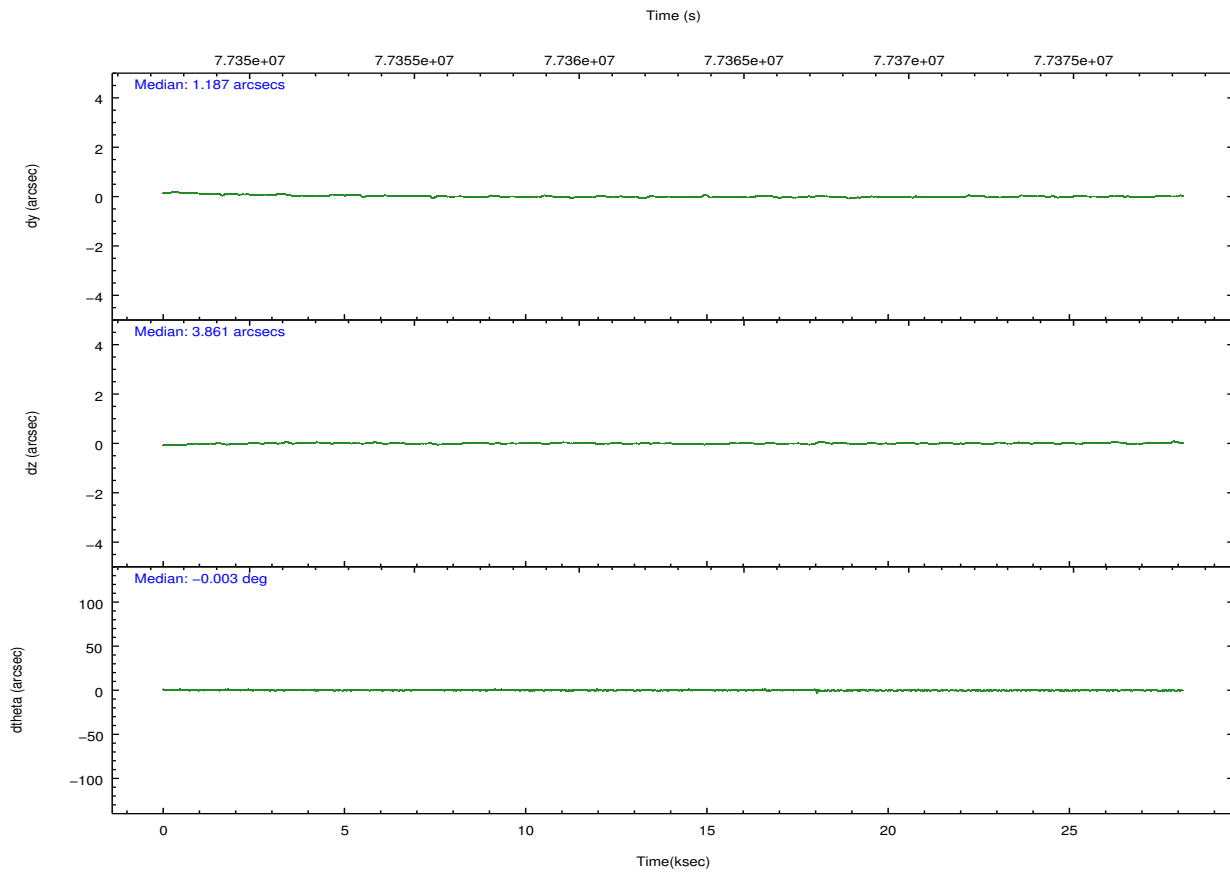
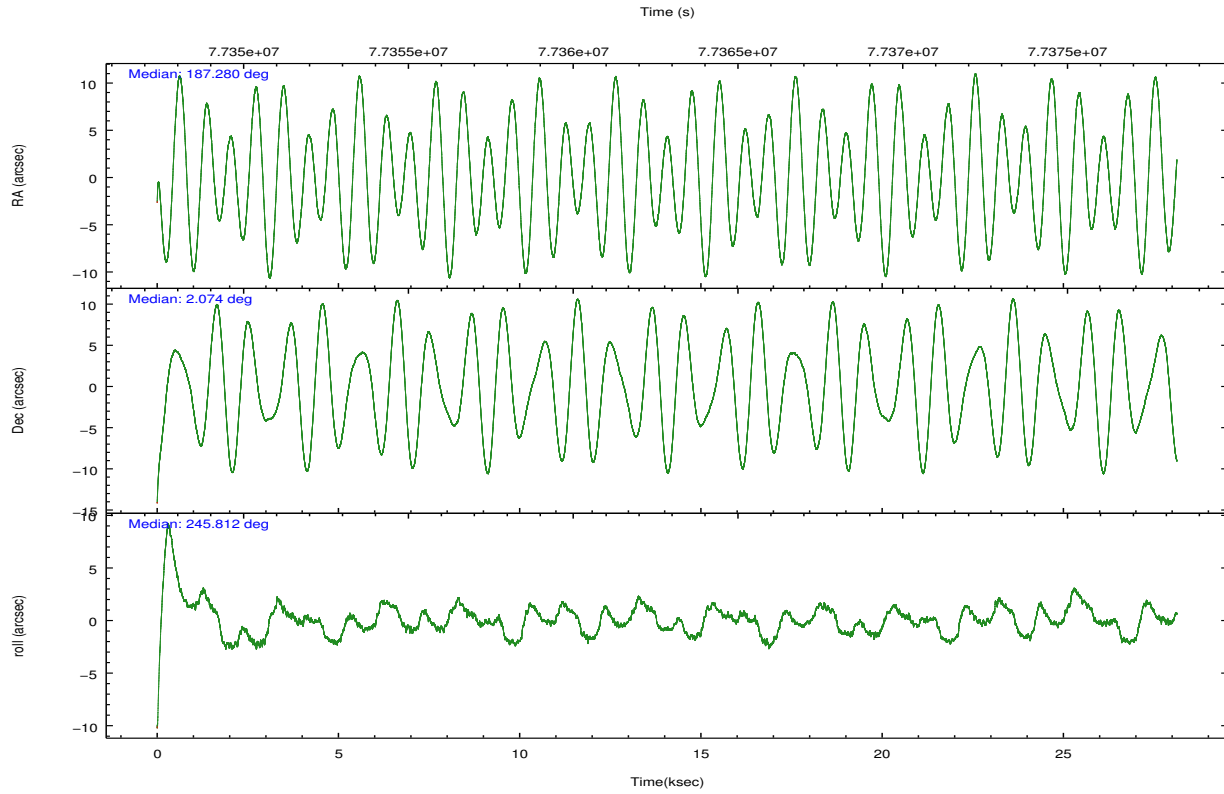
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	66085	69506	59310	108819	76503	53392	grade 0 events	3190	7219	3472	14964	5491	2807
rejected events	59047	35864	52169	40186	61210	47127		4%	10%	5%	13%	7%	5%
rejected %	89%	51%	87%	36%	80%	88%	grade 1 events	23	780	41	695	31	17
								0%	1%	0%	0%	0%	0%
							grade 2 events	1472	9534	1232	16091	2746	1129
								2%	13%	2%	14%	3%	2%
							grade 3 events	946	2717	983	7547	2491	908
								1%	3%	1%	6%	3%	1%
							grade 4 events	909	2572	954	7483	2241	872
								1%	3%	1%	6%	2%	1%
							grade 5 events	1393	5966	1666	7312	2012	1627
								2%	8%	2%	6%	2%	3%
							grade 6 events	1113	14741	1121	24405	3848	1042
								1%	21%	1%	22%	5%	1%
							grade 7 events	57039	25977	49841	30322	57643	44990
								86%	37%	84%	27%	75%	84%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	187.276903	187.2797793265492	Subarray requested	CUSTOM	1/4
[deg] Pointing Dec	2.101500	2.074240732562799	Subarray start row	1	1
[deg] Pointing Roll	245.658851	245.8153679080586	Subarray row count	256	256
[s] Window start time (MET)	77155264.184000	77155264.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	77587264.184000	77587264.184000	[s] Primary exposure time	0.000000	1.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-182.132523	-182.1370004450064			
[mm] SIM translation stage offset	-8	-7.995522138001405			
[s] Observation start time (MET)	77348917.184000	77346862.911301			
Observation start date	2000-06-14T05:47:33	2000-06-14T05:14:22			
[s] Observation end time (MET)	77376917.184000	77377470.949928			
Observation end date	2000-06-14T13:34:13	2000-06-14T13:44:30			
Read mode	TIMED	TIMED			

## 2.3 Aspect



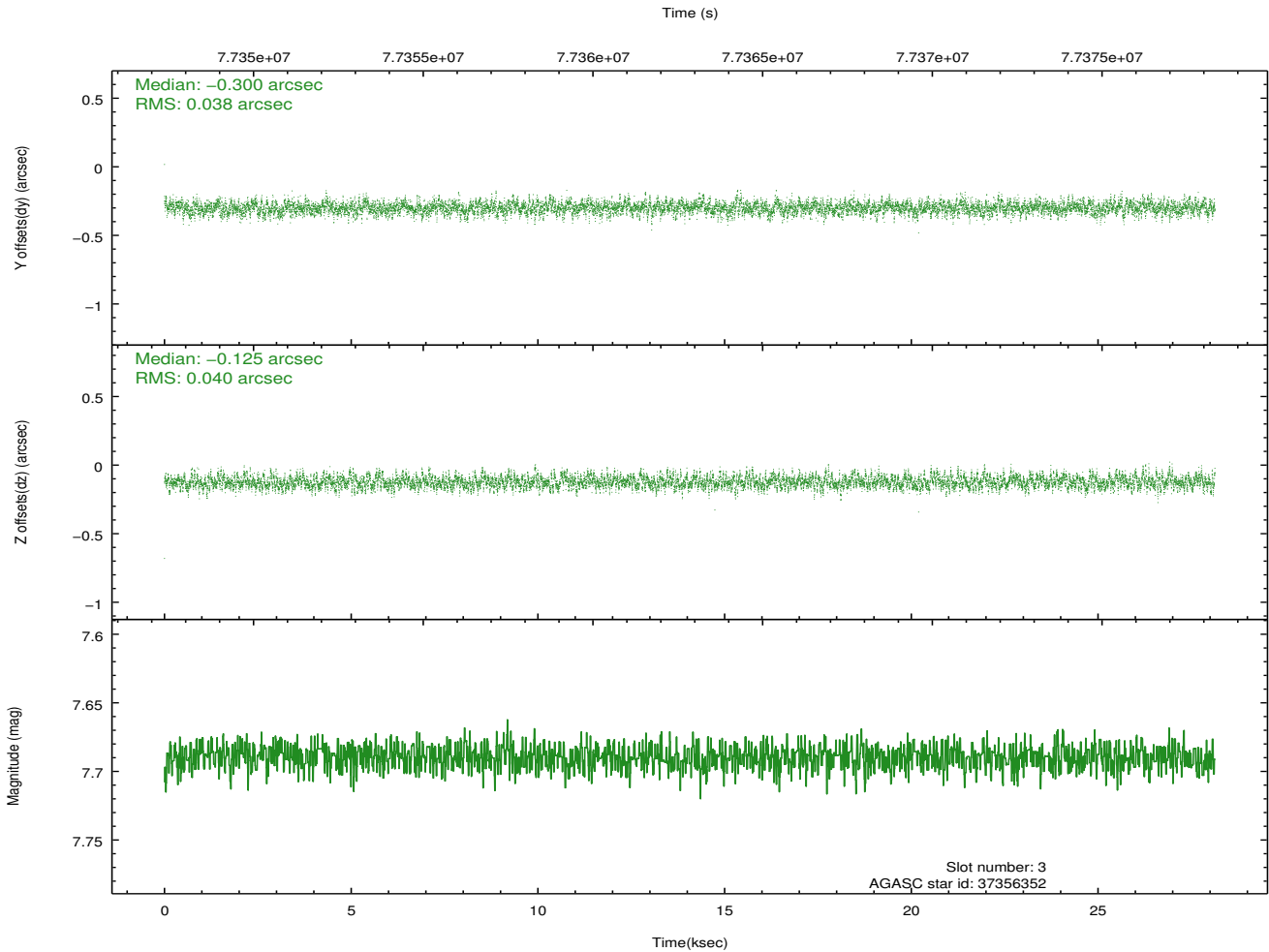
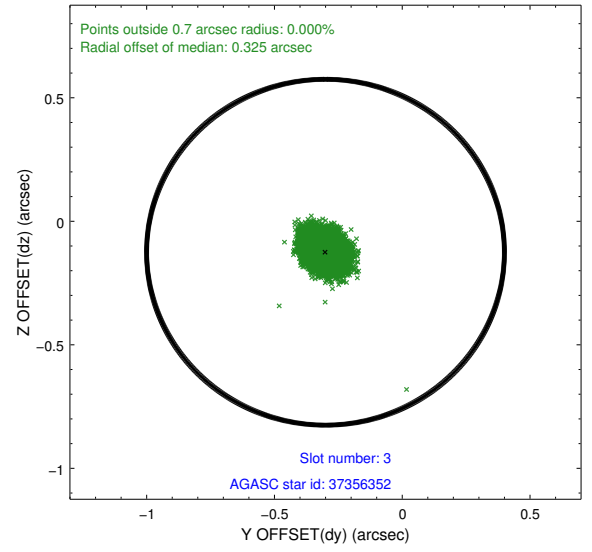
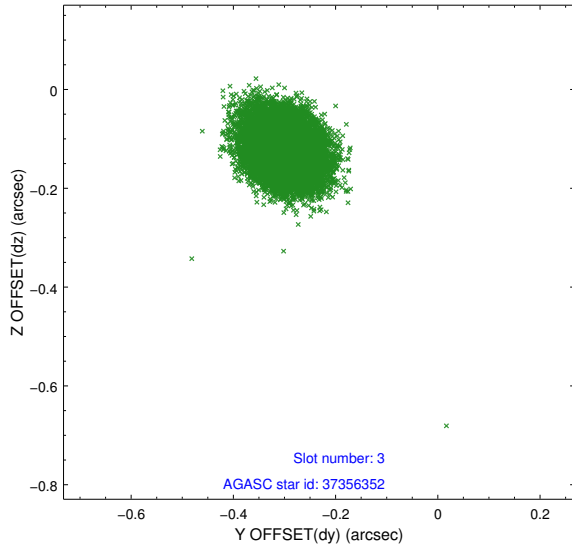


### Slot Statistics

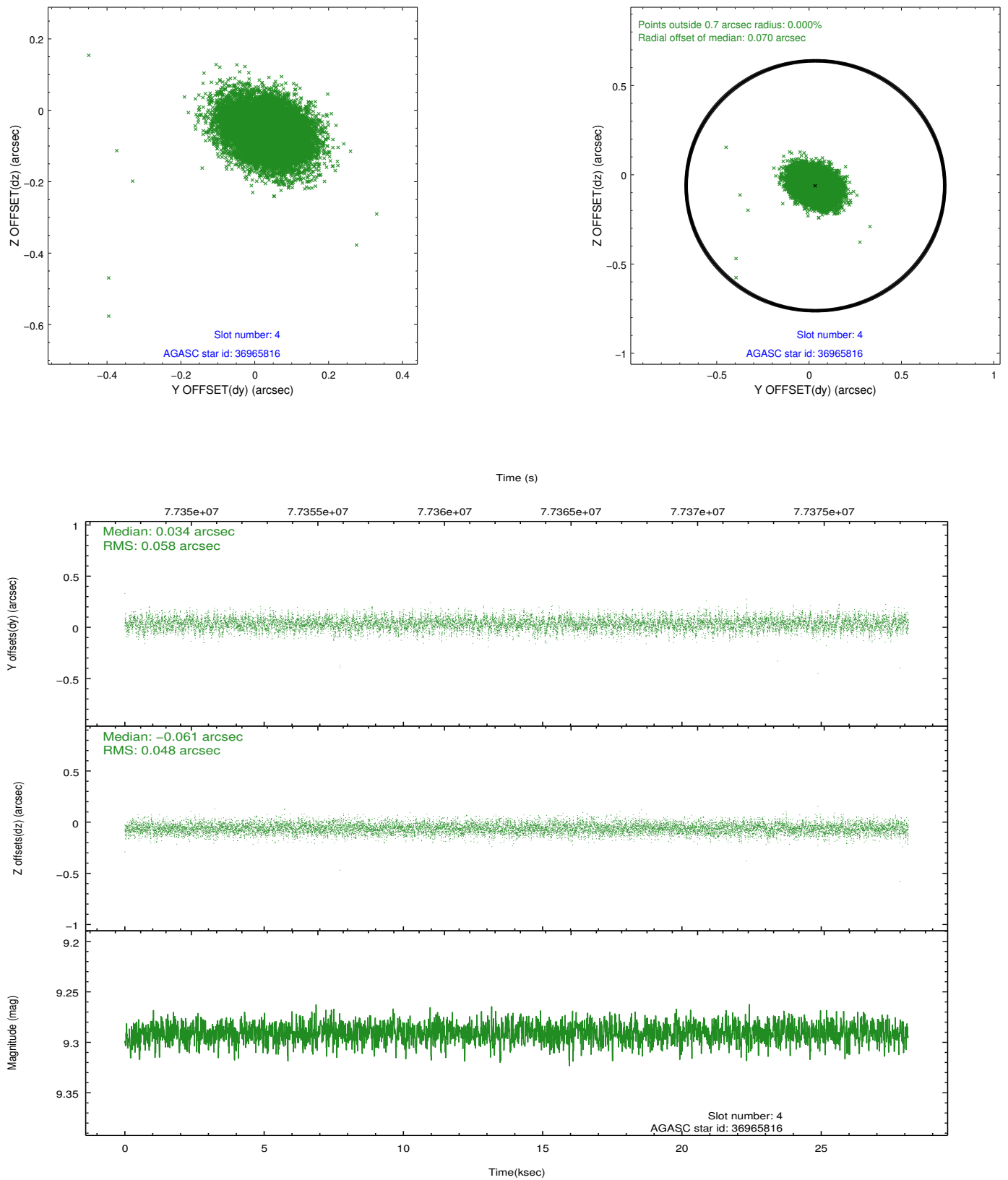
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	6861	-0.054	-0.107	0.007	0.011	0.000000	0.000000	-753.32	-1889.74
1	FID	ACIS-S-4	7.18	6861	0.067	0.054	0.006	0.010	0.000000	0.000000	2160.09	18.70
2	FID	ACIS-S-5	7.22	6862	-0.045	0.060	0.007	0.011	0.000000	0.000000	-1805.99	12.58
3	GUIDE	37356352	7.69	13723	-0.300	-0.125	0.058	0.094	187.433784	2.618460	-1928.11	-253.10
4	GUIDE	36965816	9.29	13716	0.034	-0.061	0.079	0.133	186.823353	1.771455	1755.34	-997.12
5	GUIDE	36965296	9.08	13716	0.119	-0.075	0.095	0.156	186.926292	1.837429	1386.67	-757.54
6	GUIDE	37883040	10.04	13709	0.354	0.217	0.118	0.197	187.575516	1.280402	2250.92	2198.11
7	GUIDE	37880408	10.07	13649	-0.212	0.039	0.128	0.214	187.758191	2.290324	-1332.89	1297.41

## 2.4 Star Slots

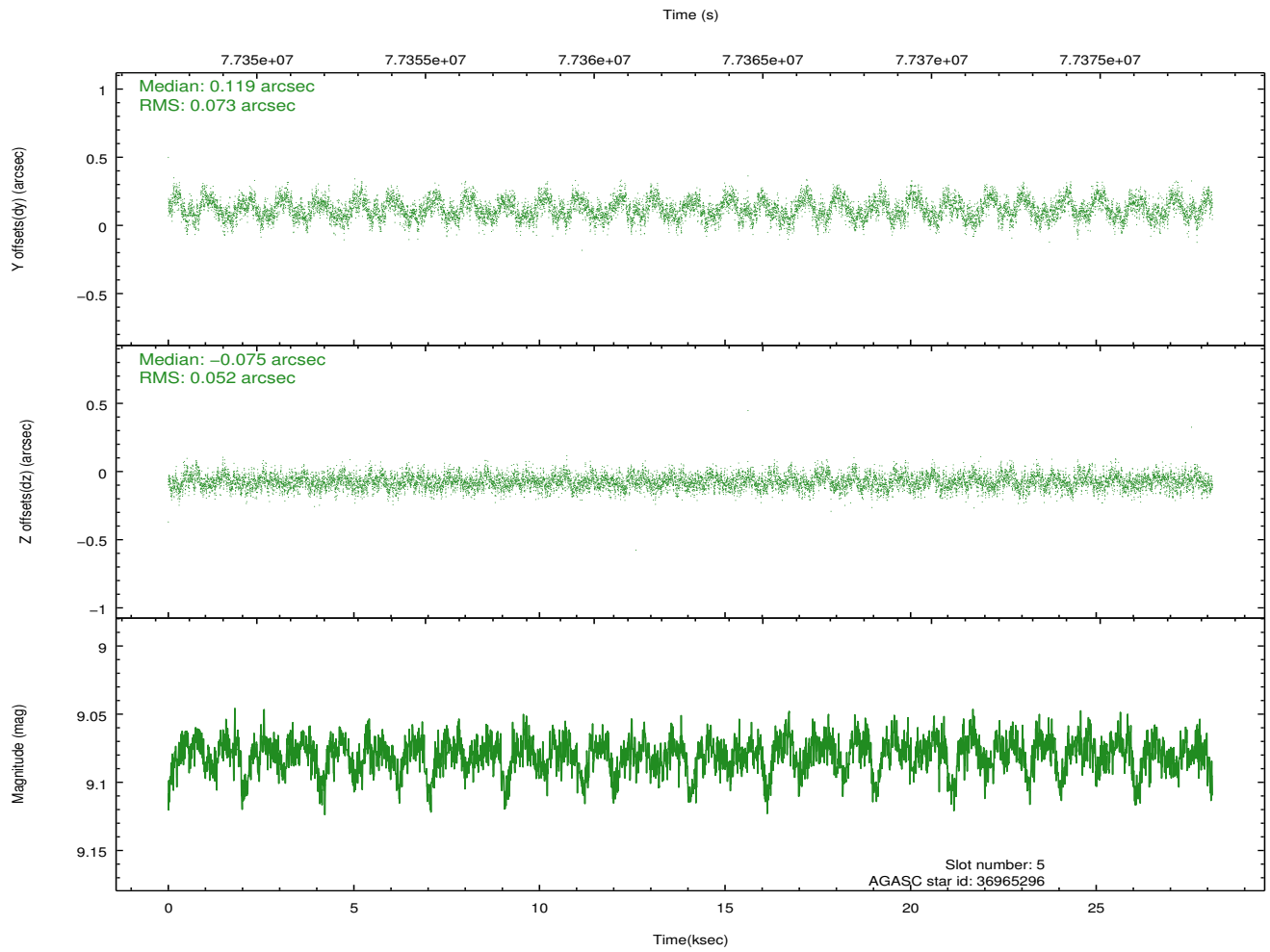
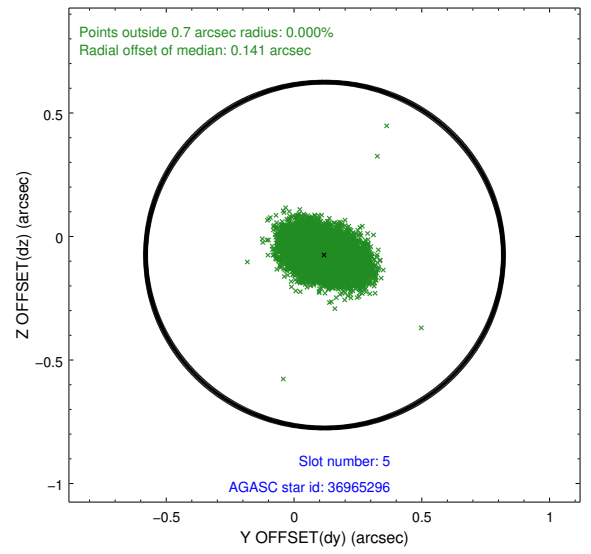
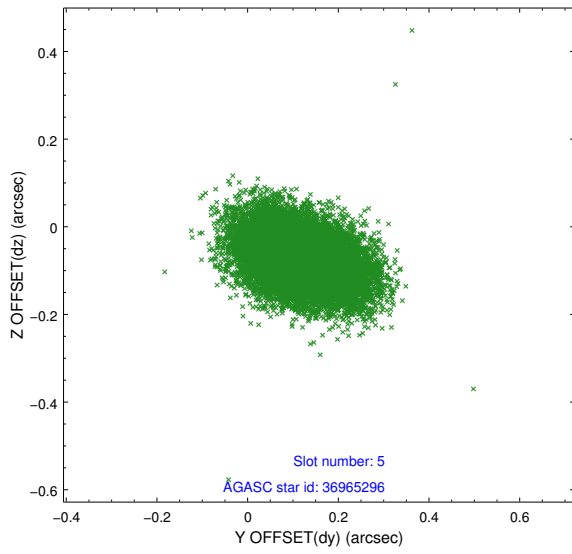
### 2.4.1 Slot 3



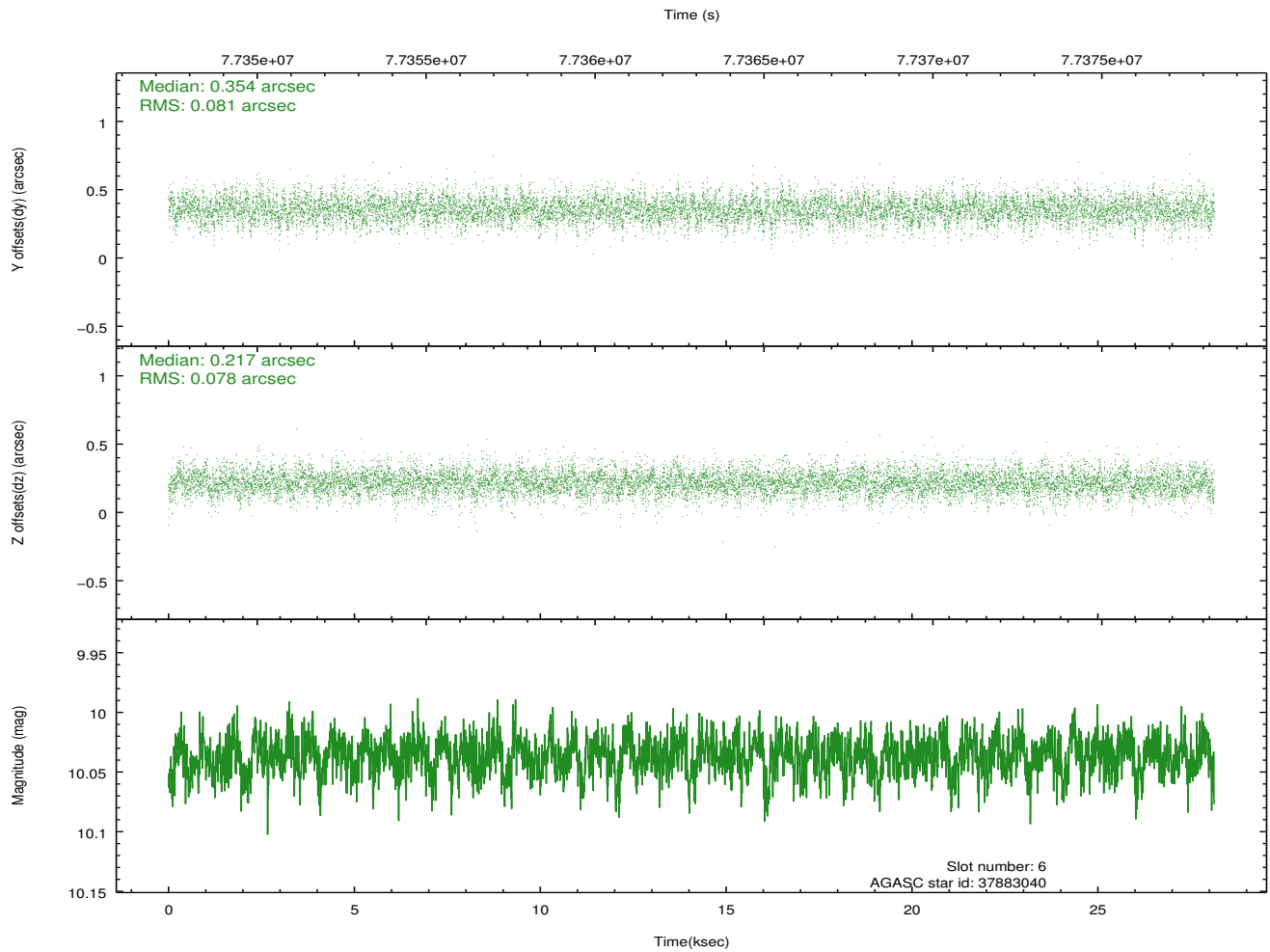
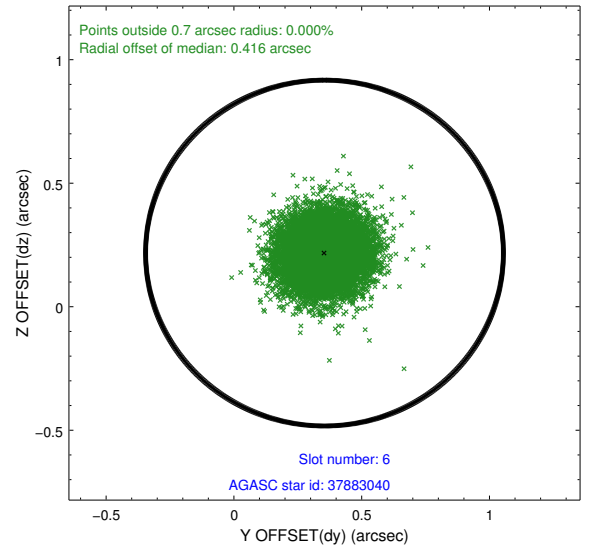
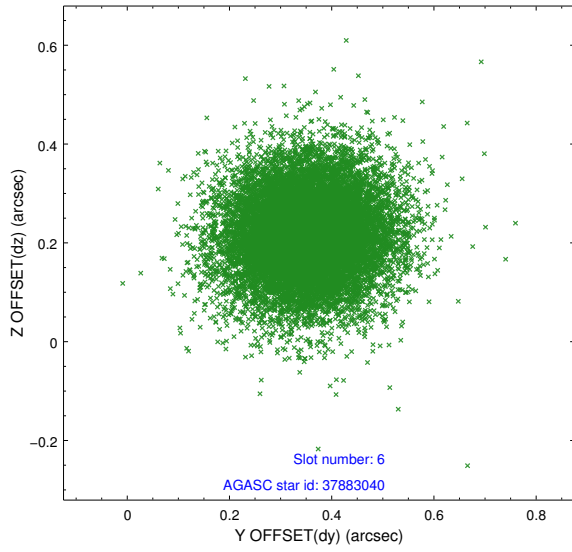
## 2.4.2 Slot 4



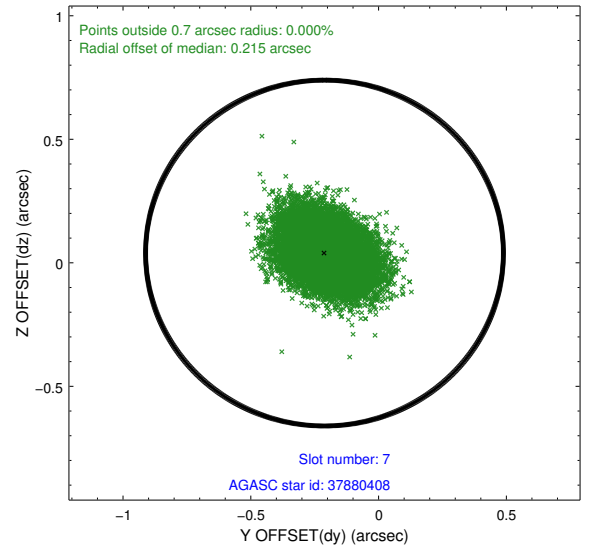
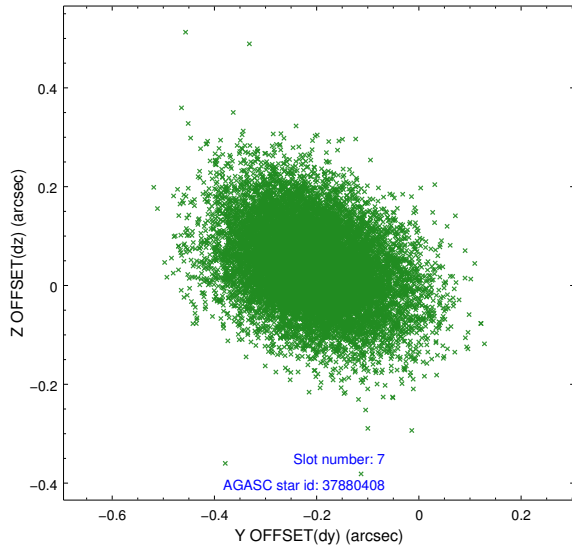
### 2.4.3 Slot 5



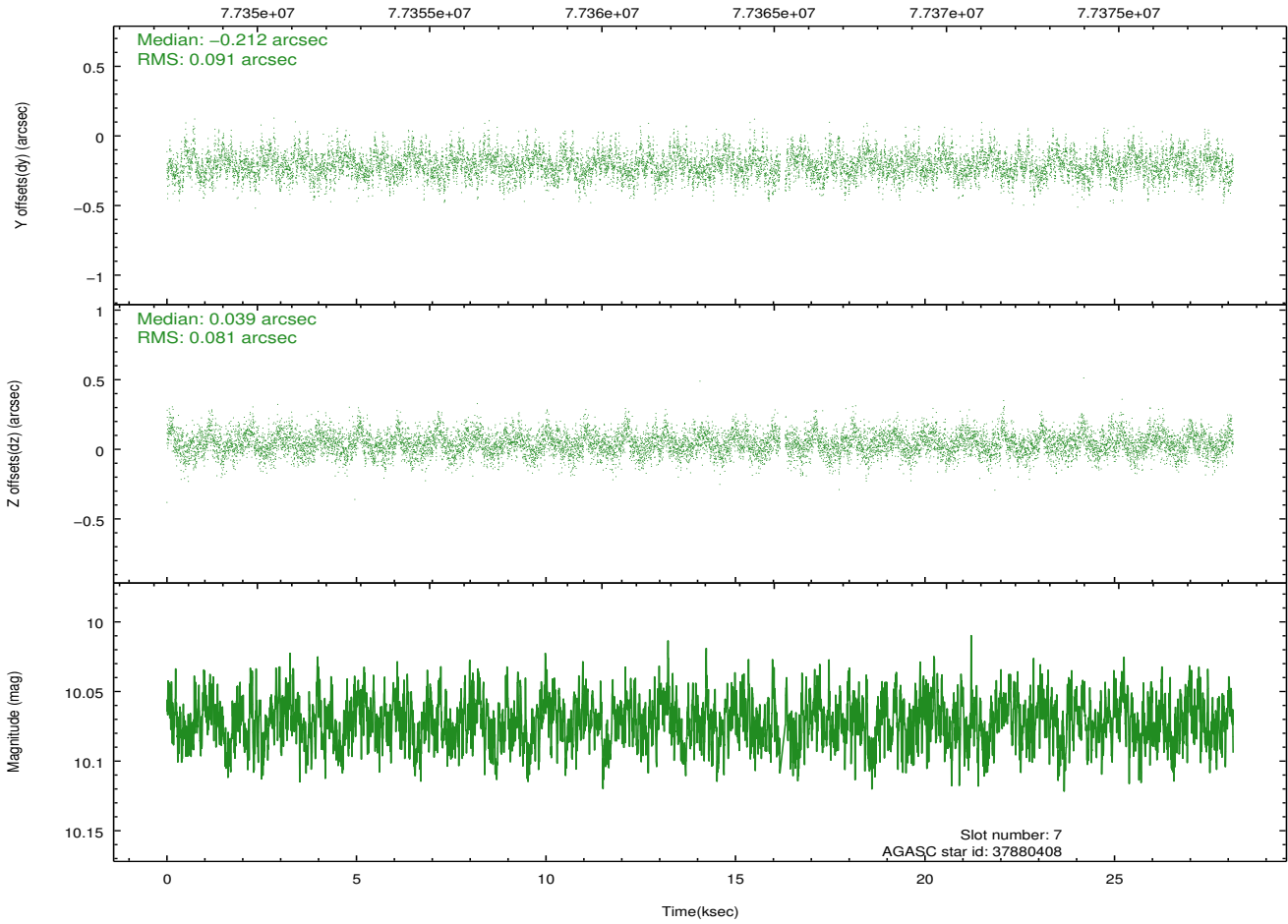
## 2.4.4 Slot 6



## 2.4.5 Slot 7

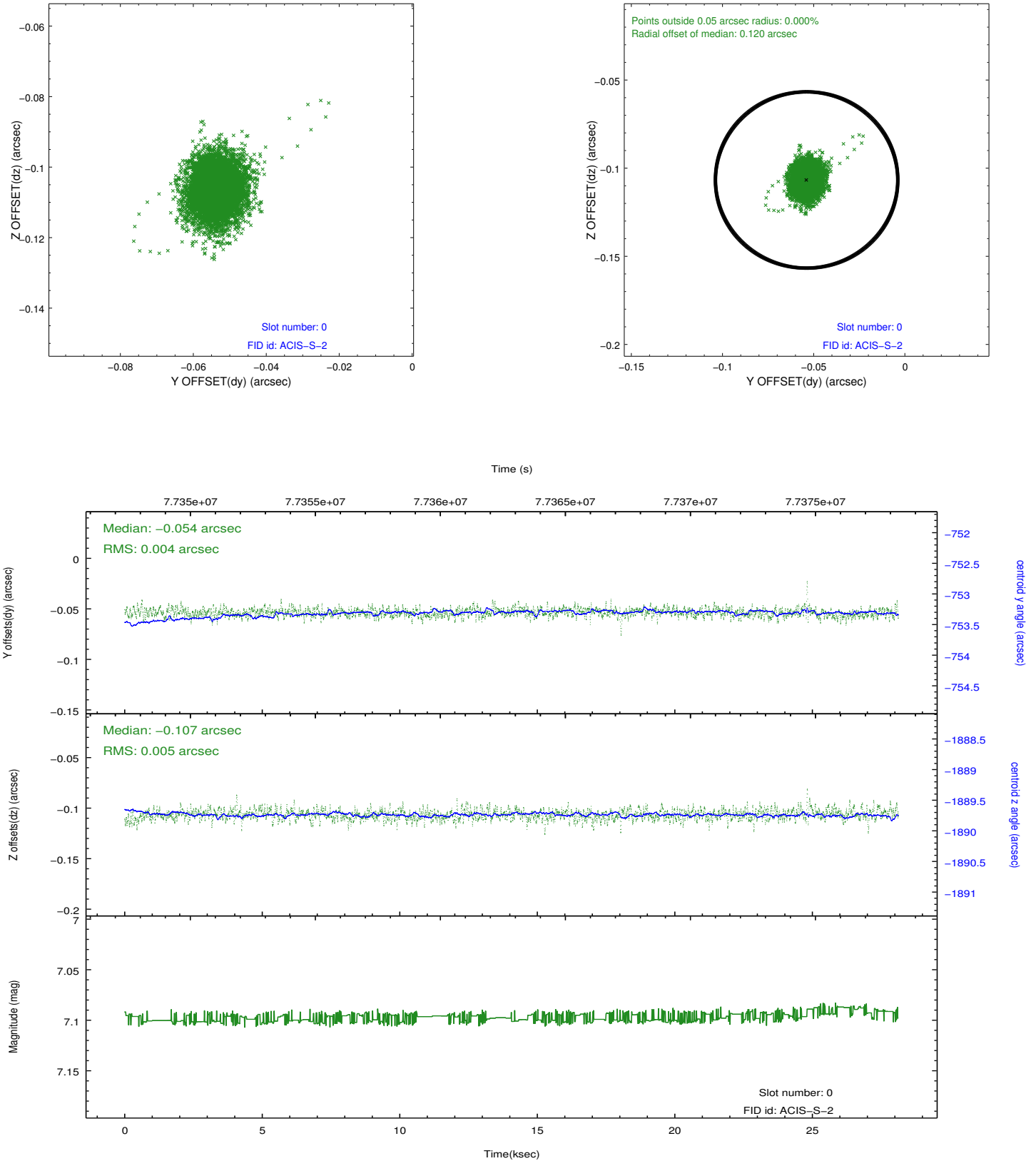


Time (s)

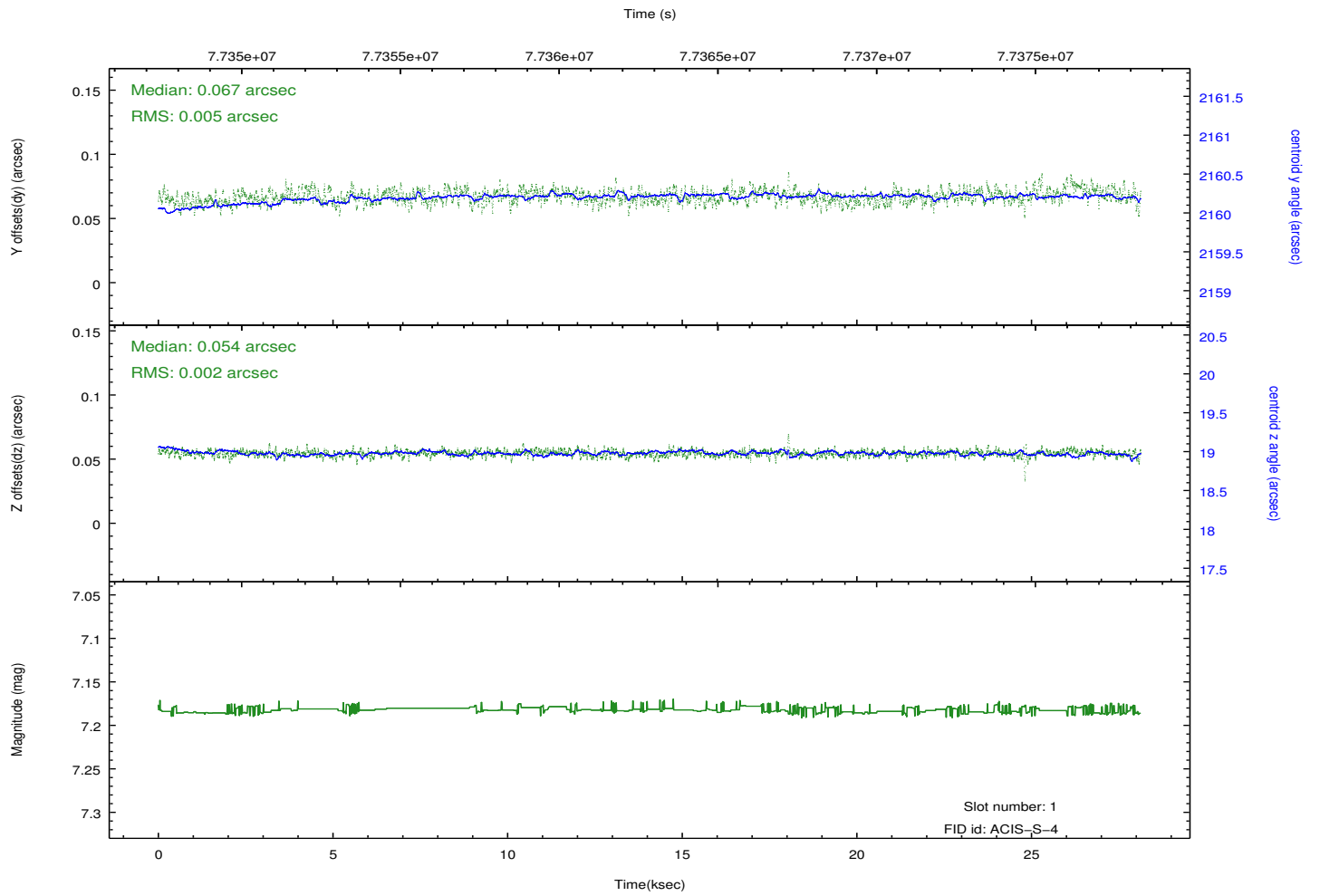
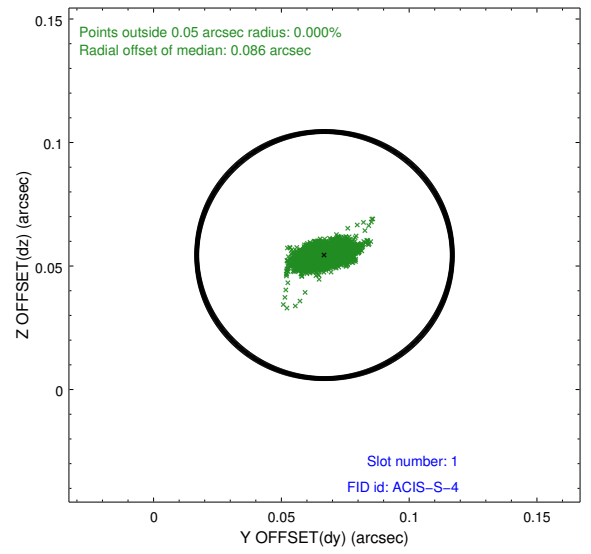
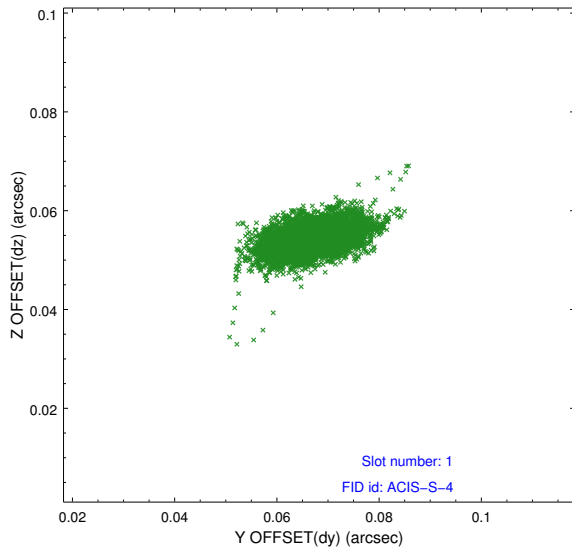


## 2.5 FID Slots

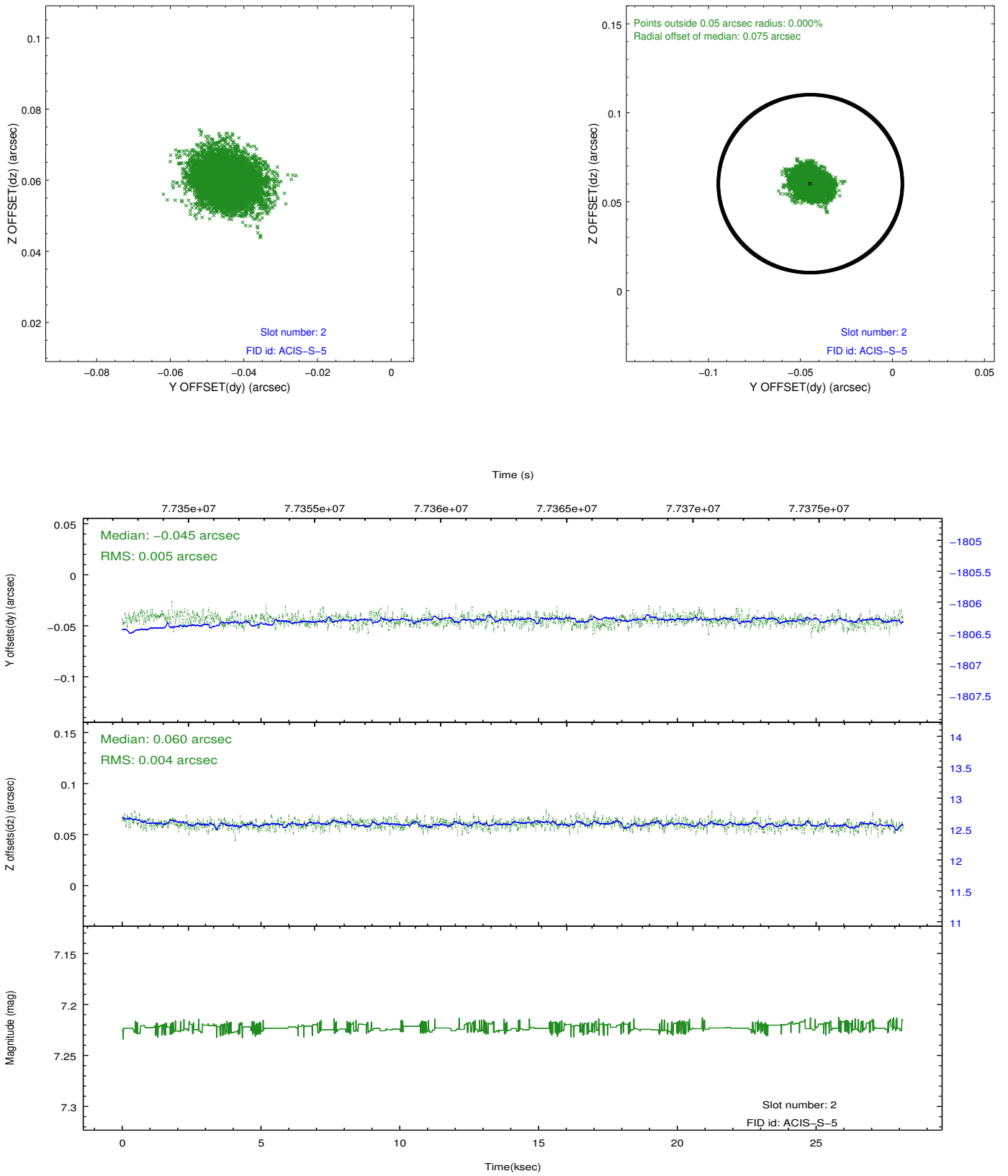
### 2.5.1 Slot 0



## 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)	2012.08.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.095

## A.2 Comments

Charge time for this ObsId remains at previous value of 28.095 ks although with the current processing the charge time would have been 28.13 ksec.

=====

LETG insertion failure--this observation was originally intended to use LETG. Window constraint met.