

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4409 - L2 Version 3  
Chandra X-Ray Center

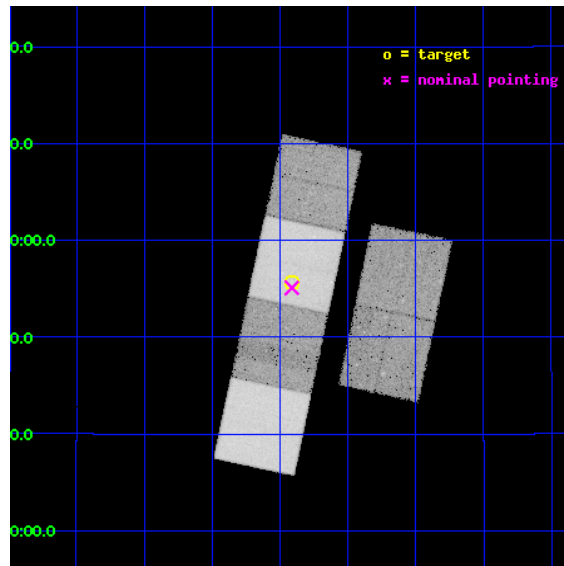
L2 Processing Date : Oct 18 2012

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# 1 Front

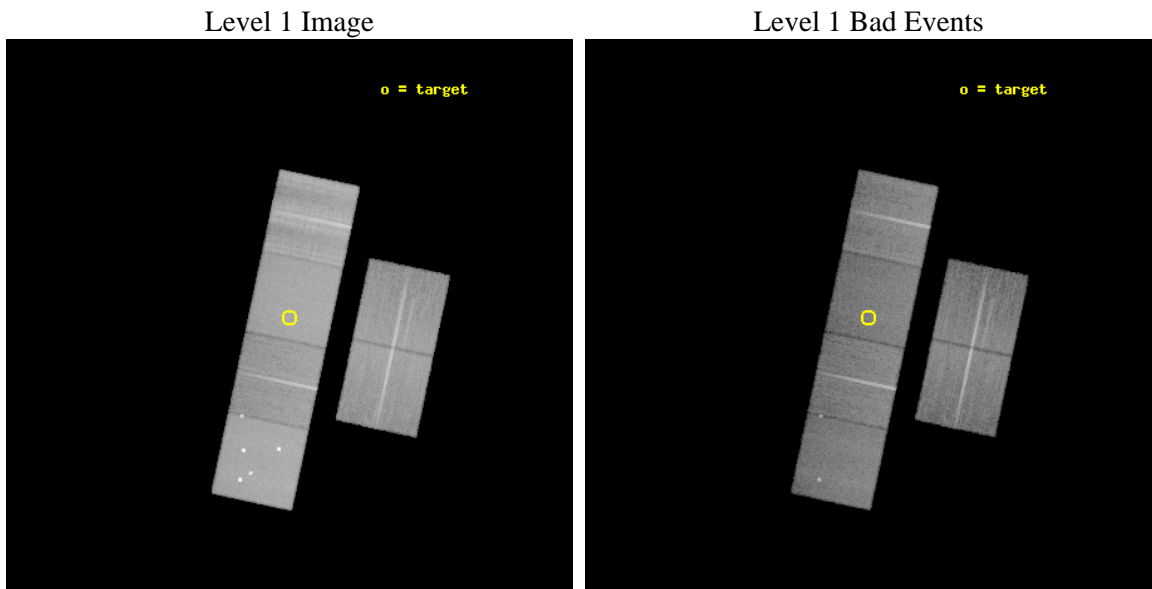
seq_num	500408	Sequence number
obs_id	4409	Observation id
title	THE DECAYING X-RAY AFTERGLOW OF GRB021004	Proposal title
observer	Prof. Masao Sako	Principal investigator
object	GRB021004	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	6.727917	Observer's specified target RA [deg]
dec_targ	18.928139	Observer's specified target Dec [deg]
ra_nom	6.7282401699723	Nominal RA [deg]
dec_nom	18.918485365808	Nominal Dec [deg]
roll_nom	282.02277854667	Nominal Roll [deg]
revision	3	Processing version of data
ontime	30431.999886632	Sum of GTIs [s]
liveltime	30046.651580117	Livetime [s]
ontime2	30428.758906364	Sum of GTIs [s]
ontime3	30431.999886632	Sum of GTIs [s]
ontime5	30428.758906394	Sum of GTIs [s]
ontime6	30431.999886632	Sum of GTIs [s]
ontime7	30431.999886632	Sum of GTIs [s]
ontime8	30428.75889647	Sum of GTIs [s]
l2events	372916	Number of level 2 events



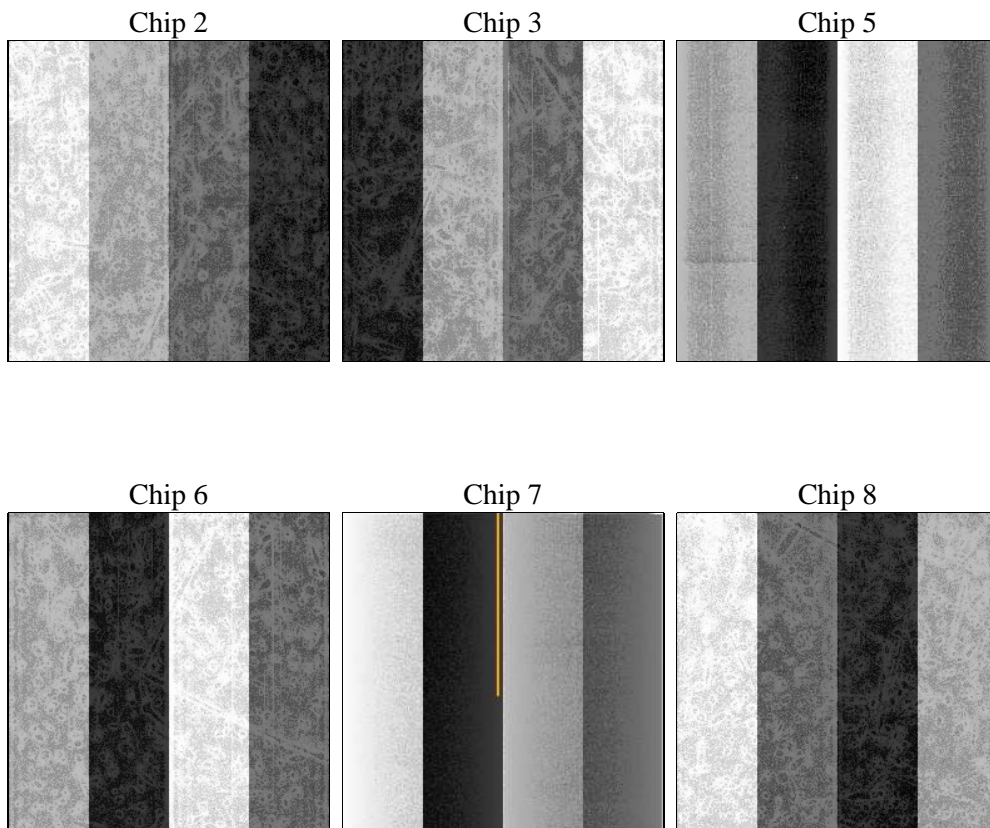
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30389.285000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	30431.999886632	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	30428.758906364	Sum of GTIs [s]
date	2012-10-18T04:48:26	Date and time of file creation	ontime3	30431.999886632	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	30428.758906394	Sum of GTIs [s]
			ontime6	30431.999886632	Sum of GTIs [s]
			ontime7	30431.999886632	Sum of GTIs [s]
			ontime8	30428.75889647	Sum of GTIs [s]
			l1events	1539933	Number of level 1 events

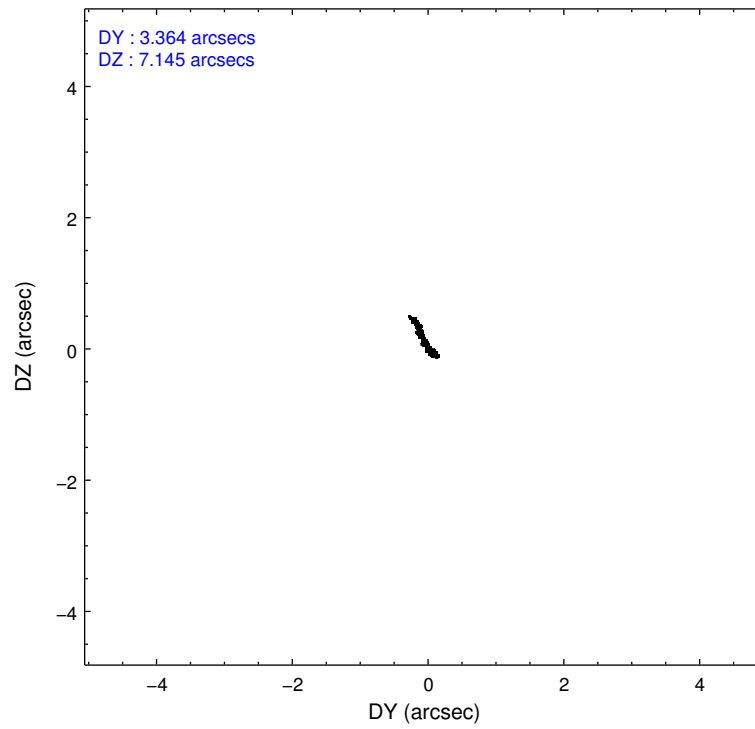
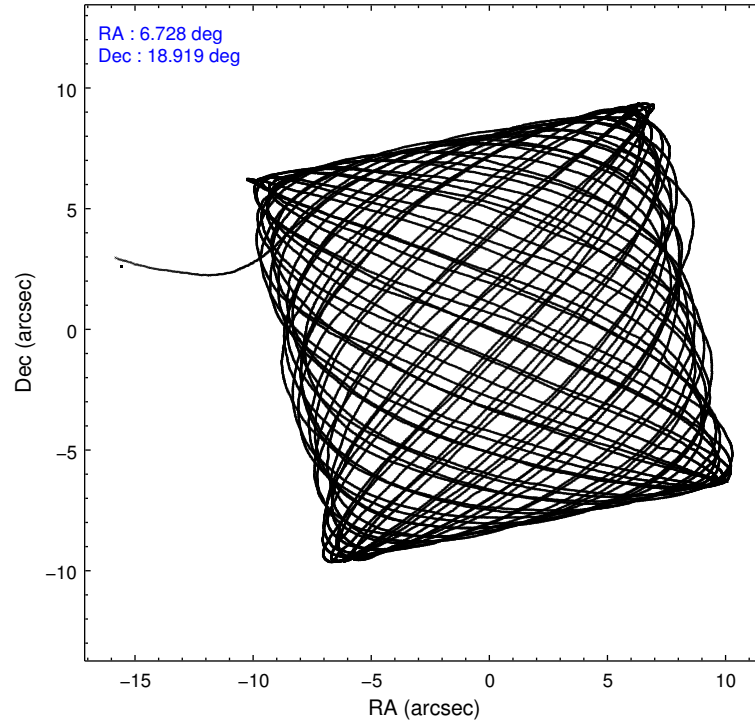
### 2.1.4 Events

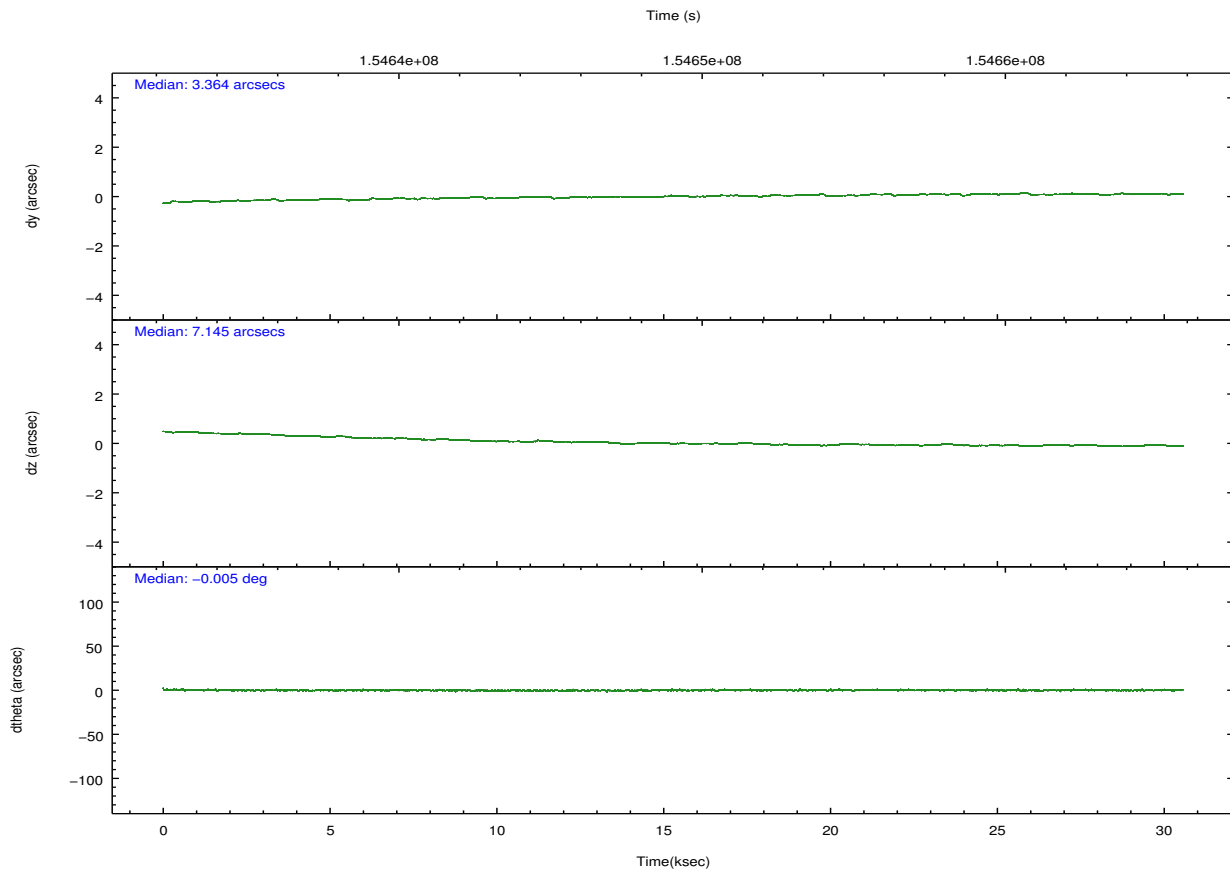
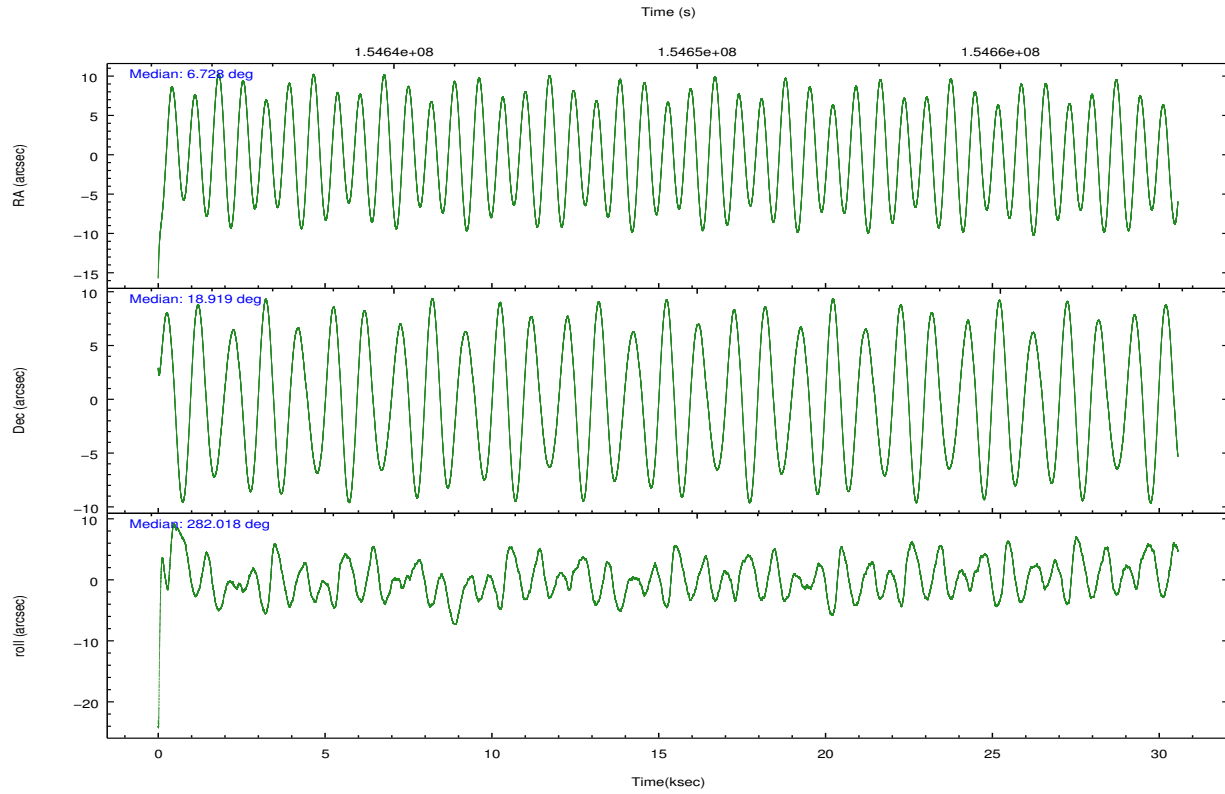
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	209399	195270	335357	206187	279865	313855	grade 0 events	12609	11231	39571	12549	12798	39958
rejected events	181671	169221	155525	177497	148509	200815		6%	5%	11%	6%	4%	12%
rejected %	86%	86%	46%	86%	53%	63%	grade 1 events	125	107	1848	129	269	356
								0%	0%	0%	0%	0%	0%
							grade 2 events	6031	5638	48139	6465	25440	17191
								2%	2%	14%	3%	9%	5%
							grade 3 events	2144	2186	7930	2320	11398	18276
								1%	1%	2%	1%	4%	5%
							grade 4 events	2345	2217	7394	2167	11375	16389
								1%	1%	2%	1%	4%	5%
							grade 5 events	7240	7904	21394	8433	24121	11712
								3%	4%	6%	4%	8%	3%
							grade 6 events	4604	4783	76845	5198	70385	21257
								2%	2%	22%	2%	25%	6%
							grade 7 events	174301	161204	132236	168926	124079	188716
								83%	82%	39%	81%	44%	60%

## 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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	6.708706	6.728240169972253	Subarray requested	NONE	NONE
[deg] Pointing Dec	18.938452	18.91848536580839	Alternating exposures requested	N	N
[deg] Pointing Roll	281.872495	282.0227785466681	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	154633931.184000	154632929.39903			
Observation start date	2002-11-25T17:51:07	2002-11-25T17:35:29			
[s] Observation end time (MET)	154664321.184000	154664635.21285			
Observation end date	2002-11-26T02:17:37	2002-11-26T02:23:55			
Read mode	TIMED	TIMED			

## 2.3 Aspect



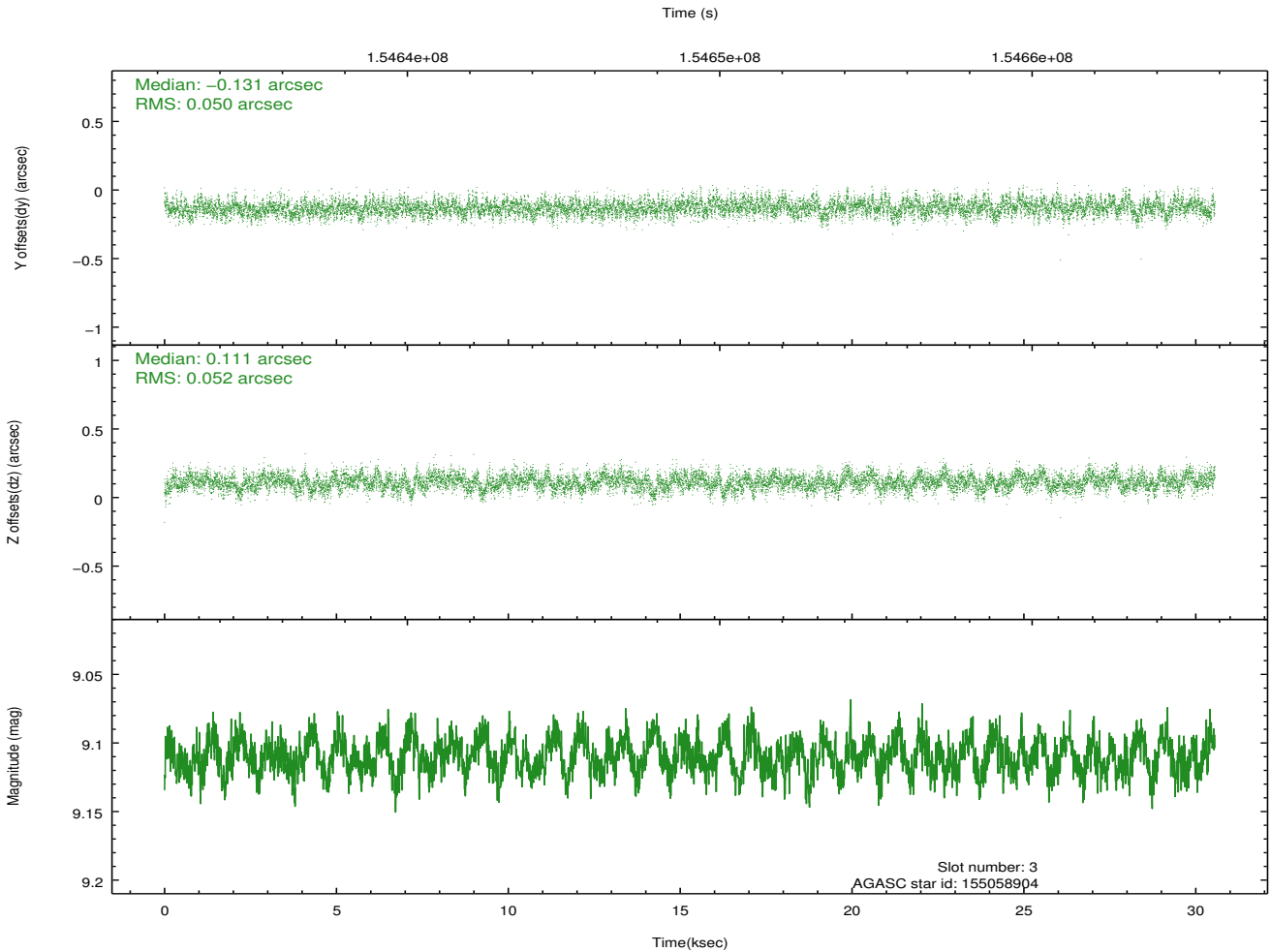
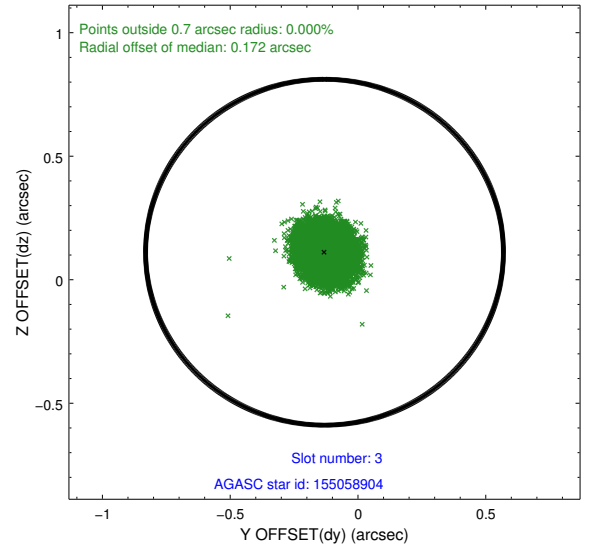
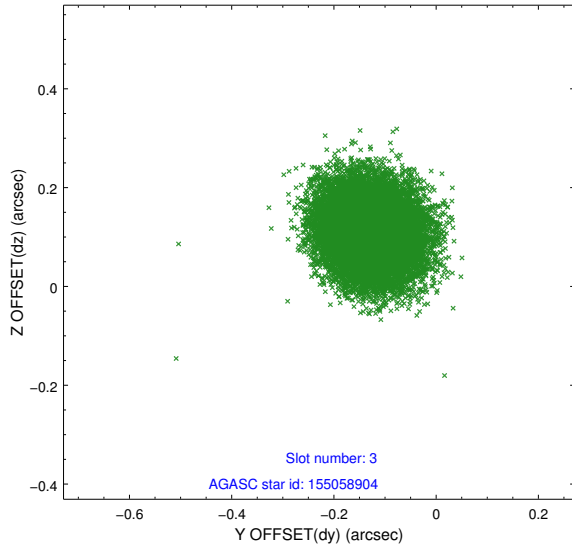


### Slot Statistics

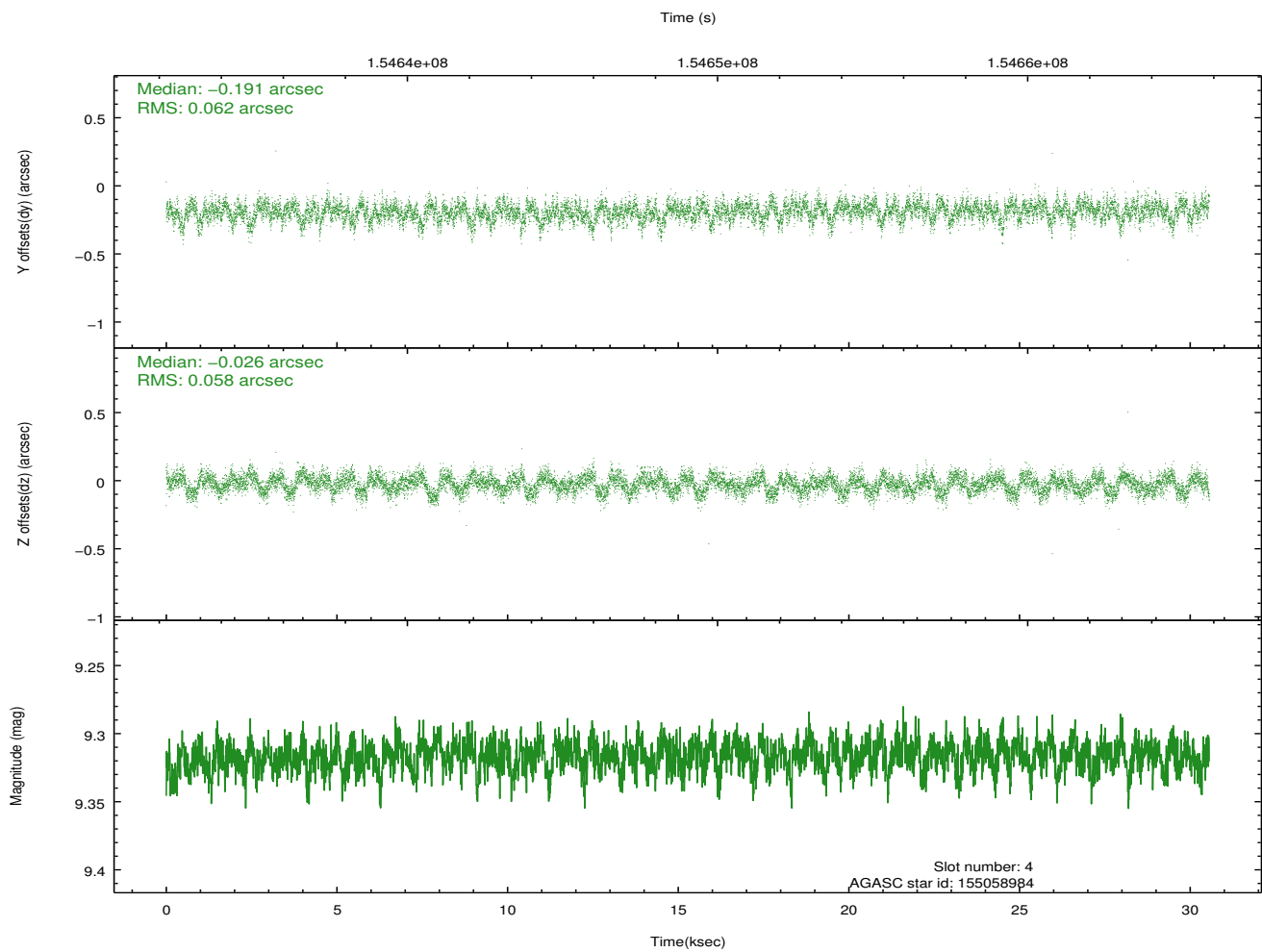
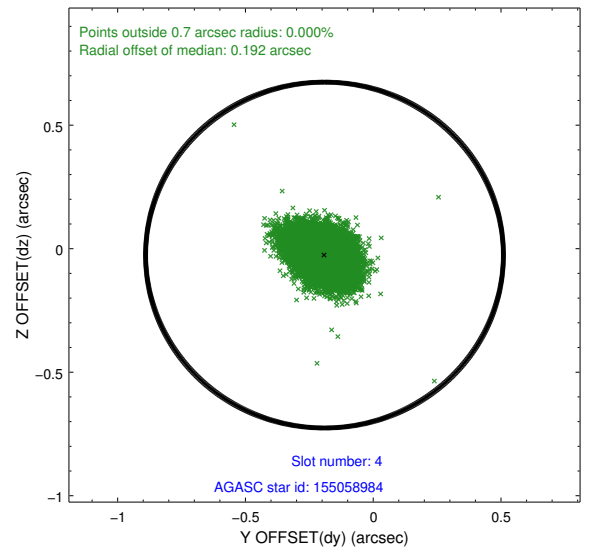
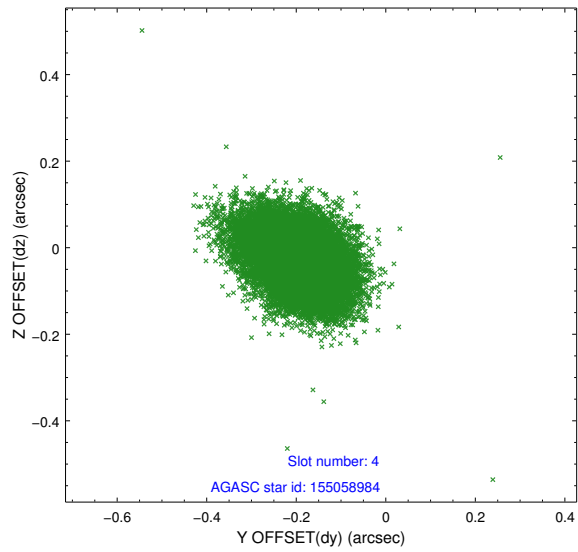
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.20	7455	0.038	-0.044	0.011	0.018	0.000000	0.000000	940.04	-1724.02
1	FID	ACIS-S-5	7.25	7454	-0.037	0.035	0.011	0.017	0.000000	0.000000	-1808.96	173.59
2	FID	ACIS-S-6	7.36	7452	-0.023	0.021	0.009	0.016	0.000000	0.000000	405.50	817.58
3	GUIDE	155058904	9.11	14906	-0.131	0.111	0.076	0.124	6.904184	19.550952	-2020.53	1103.63
4	GUIDE	155058984	9.32	14898	-0.191	-0.026	0.089	0.147	6.828972	19.375406	-1454.39	724.15
5	GUIDE	155069168	8.23	14815	0.212	-0.092	0.081	0.126	6.545753	18.572491	1176.17	-814.23
6	GUIDE	155070392	9.15	14899	0.005	-0.071	0.086	0.141	6.440372	18.435960	1582.85	-1268.15
7	GUIDE	155071624	9.08	14905	0.107	0.079	0.083	0.133	7.410885	18.489377	2072.18	2015.64

## 2.4 Star Slots

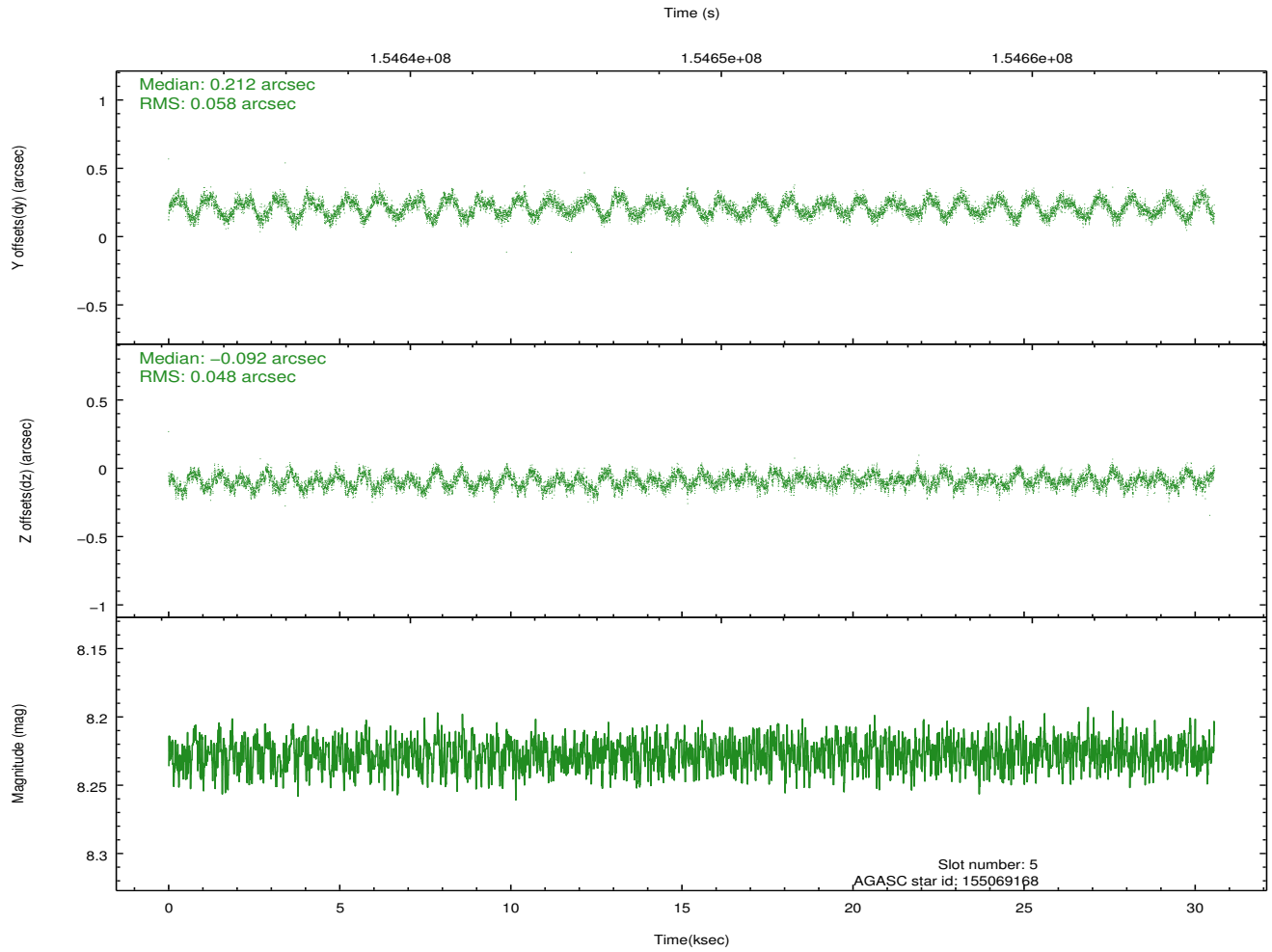
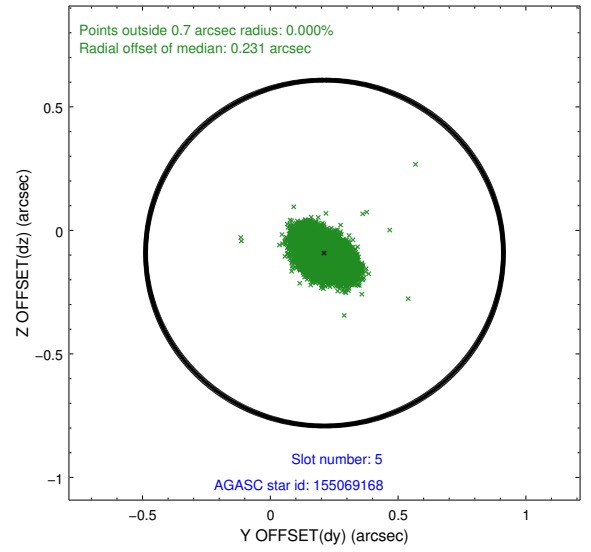
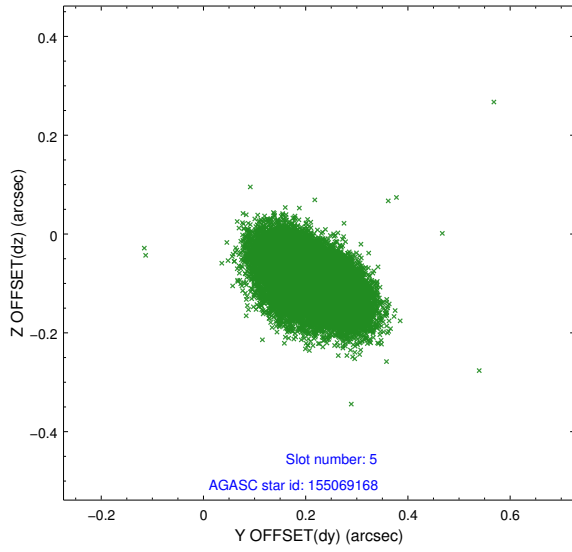
### 2.4.1 Slot 3



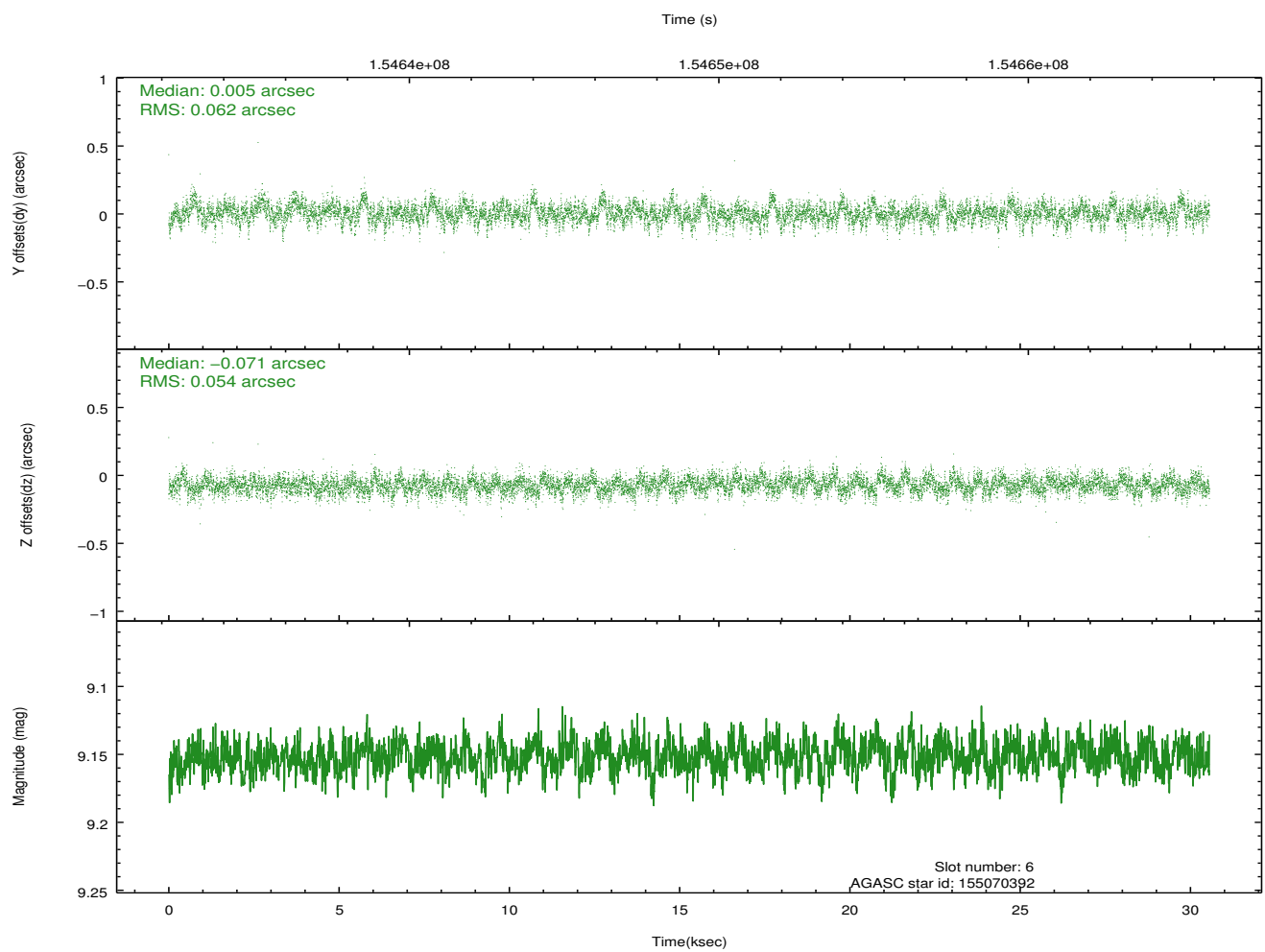
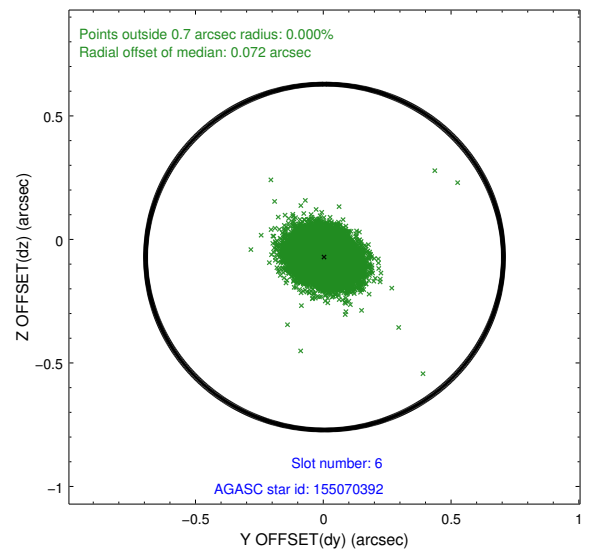
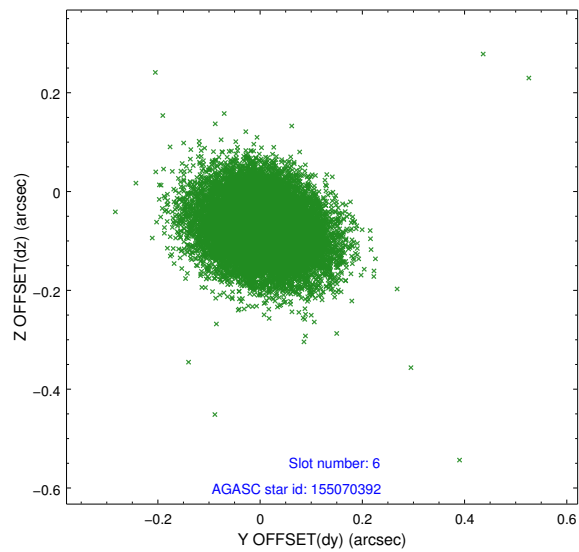
## 2.4.2 Slot 4



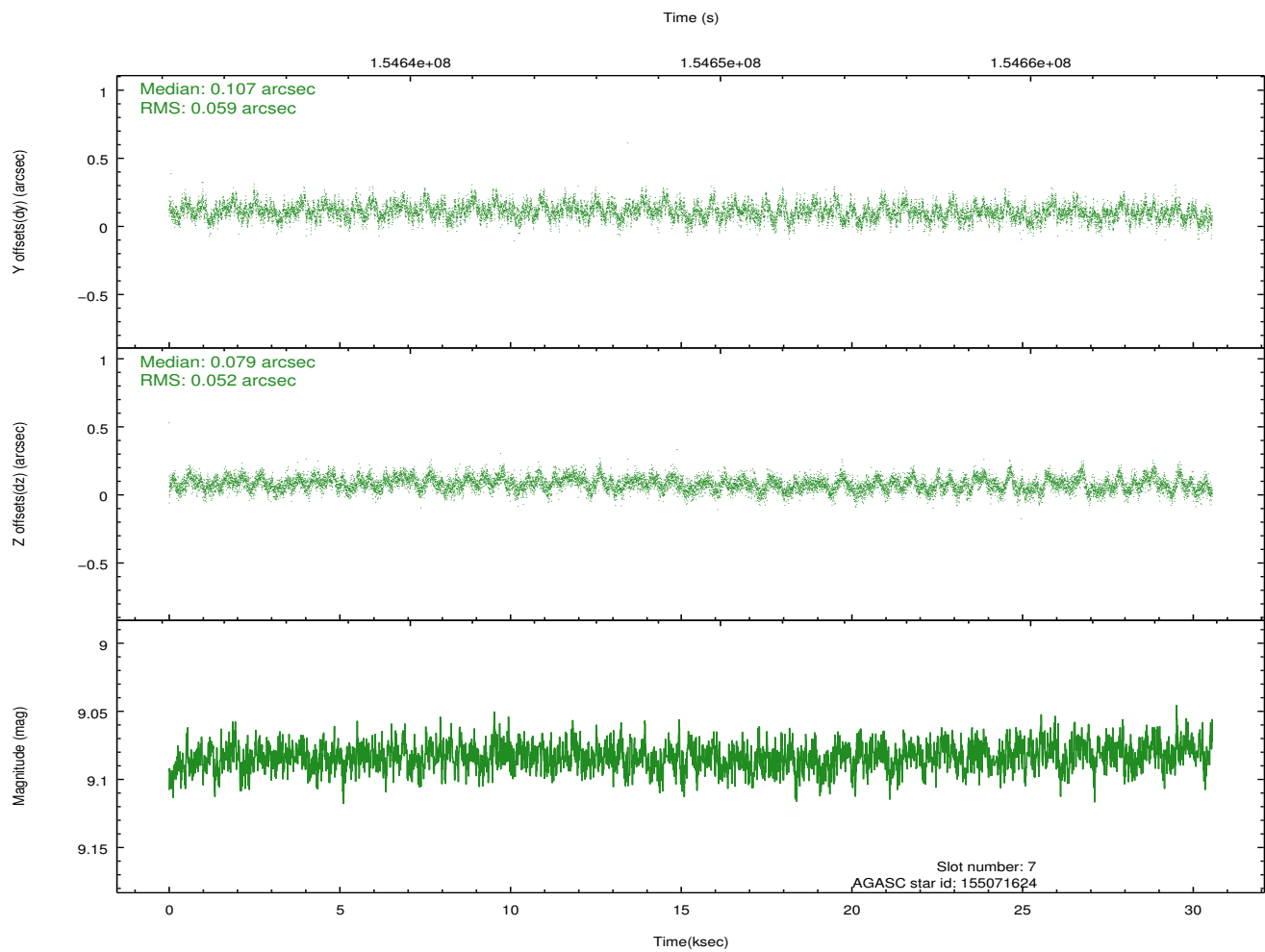
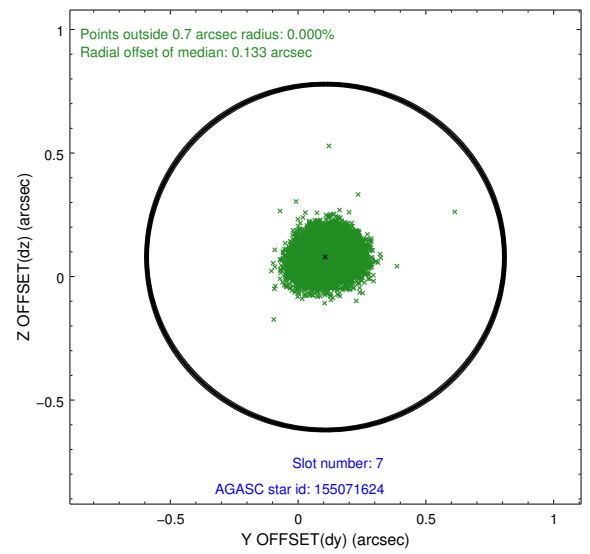
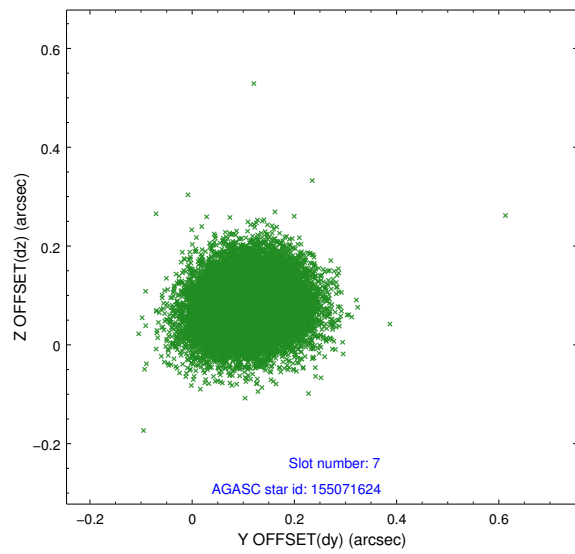
### 2.4.3 Slot 5



## 2.4.4 Slot 6

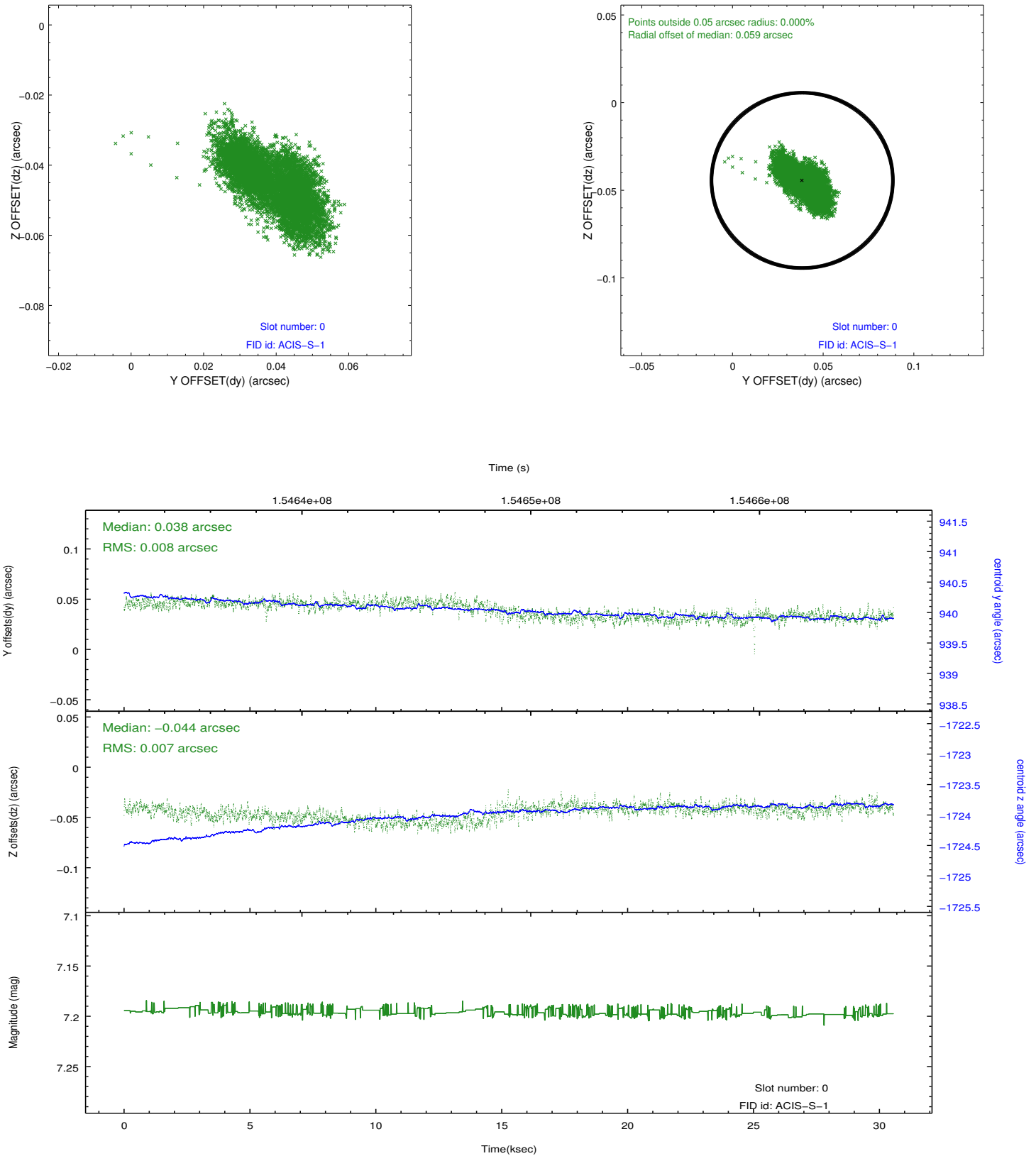


## 2.4.5 Slot 7

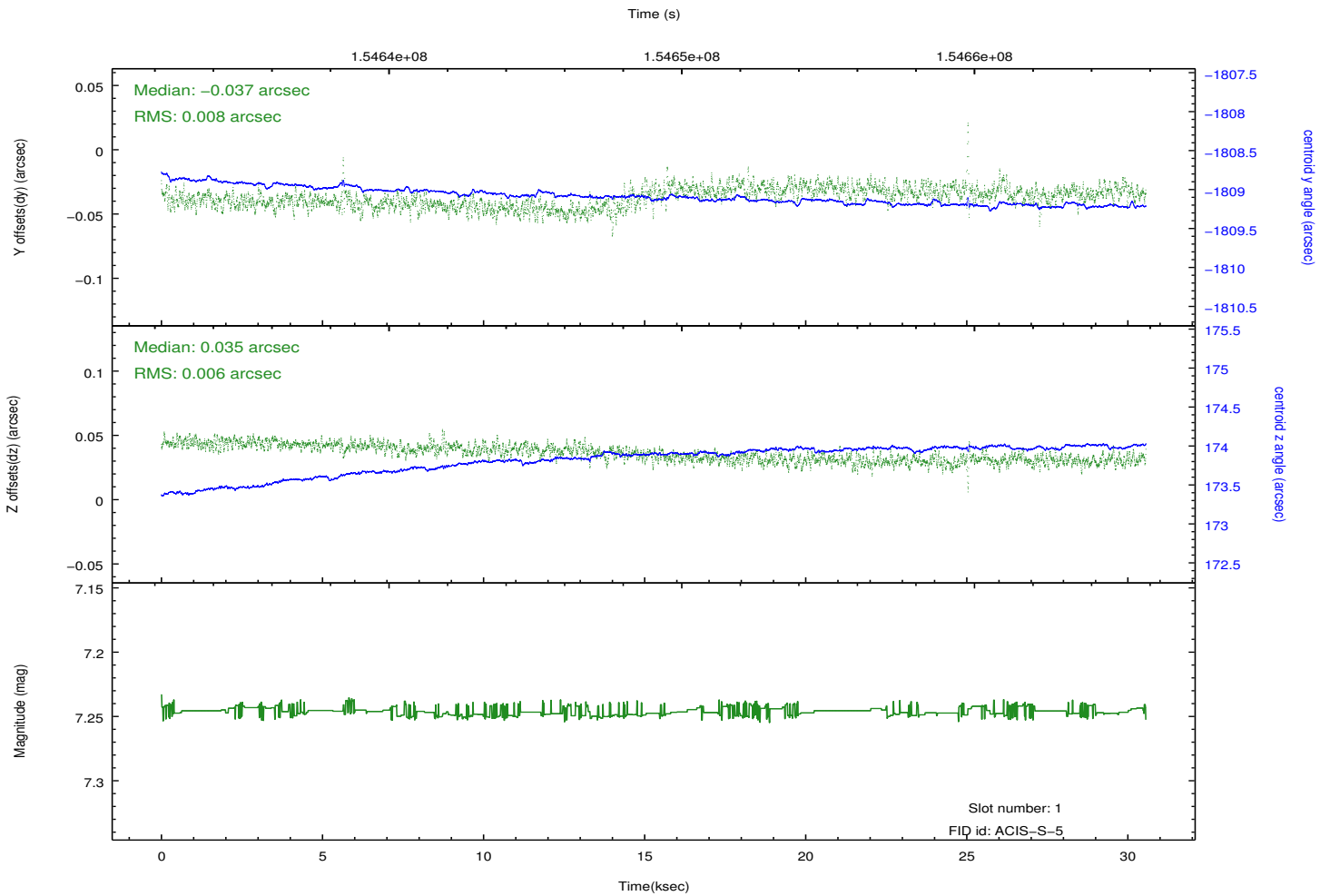
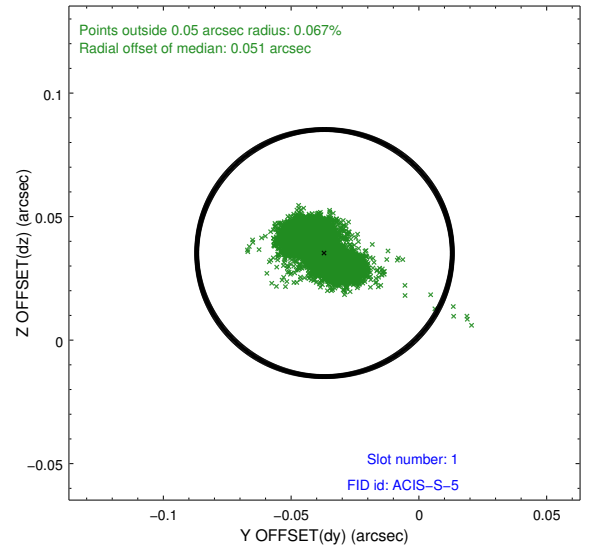
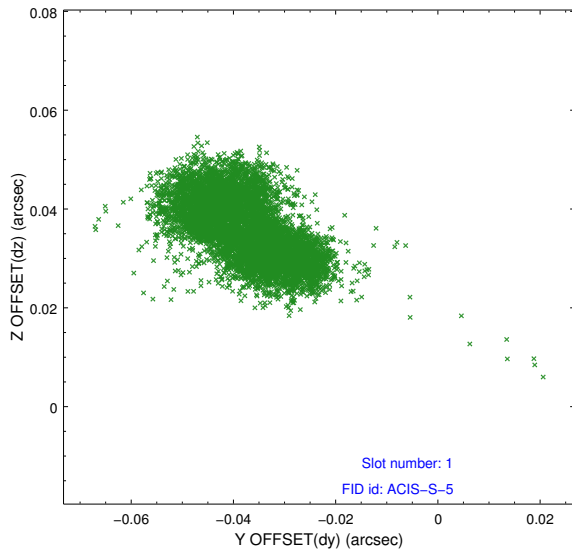


## 2.5 FID Slots

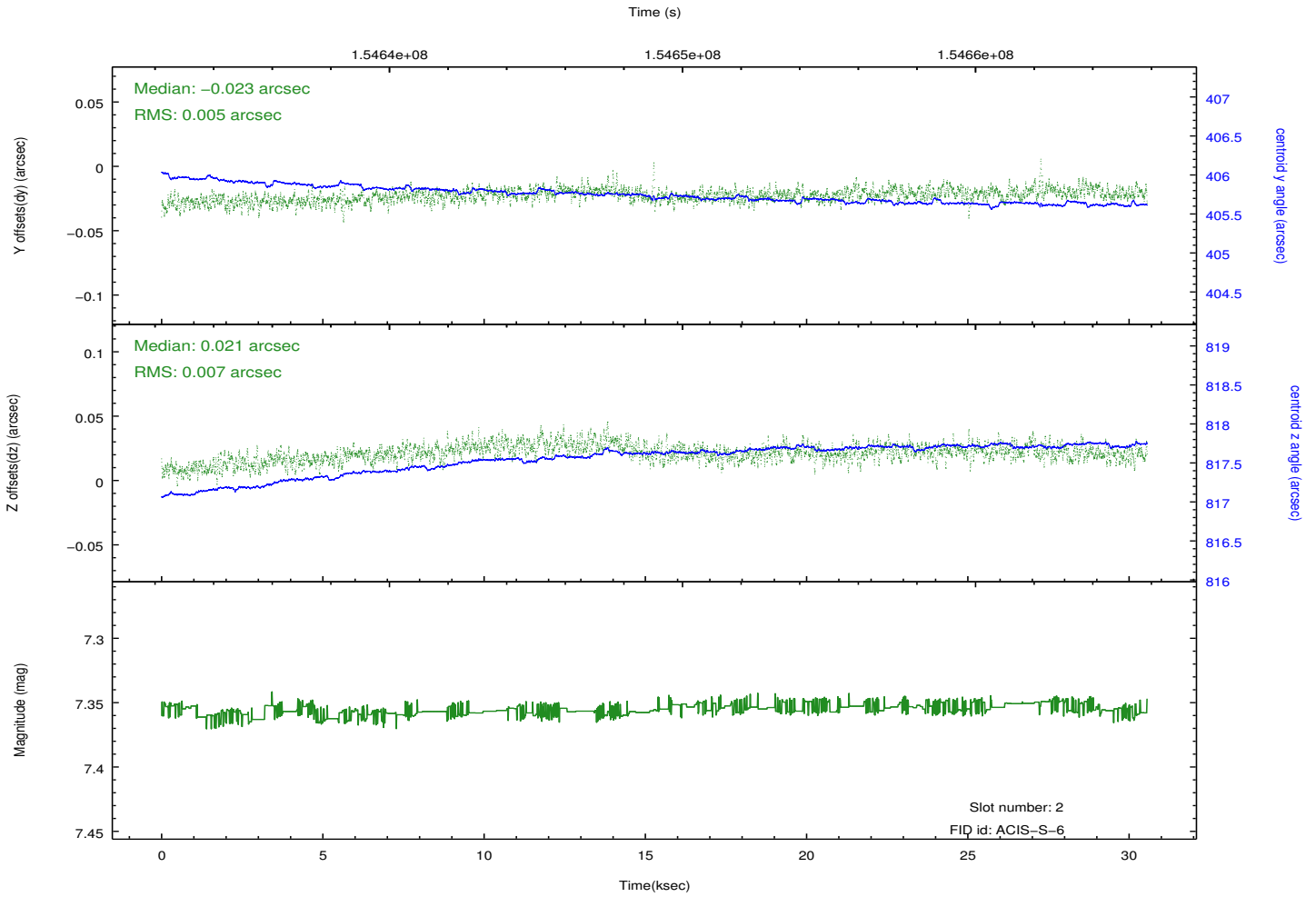
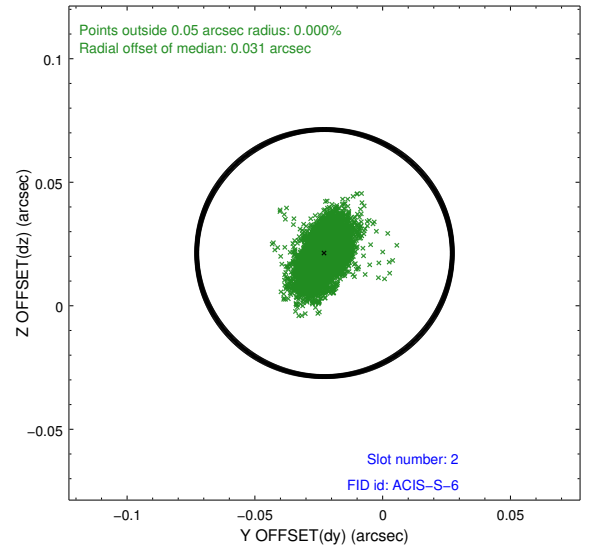
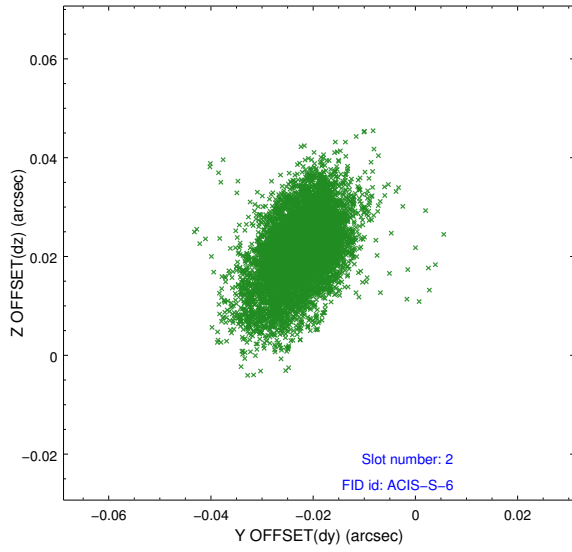
### 2.5.1 Slot 0



## 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)	2012.10.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.431

## A.2 Comments