

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2245 - L2 Version 3  
Chandra X-Ray Center

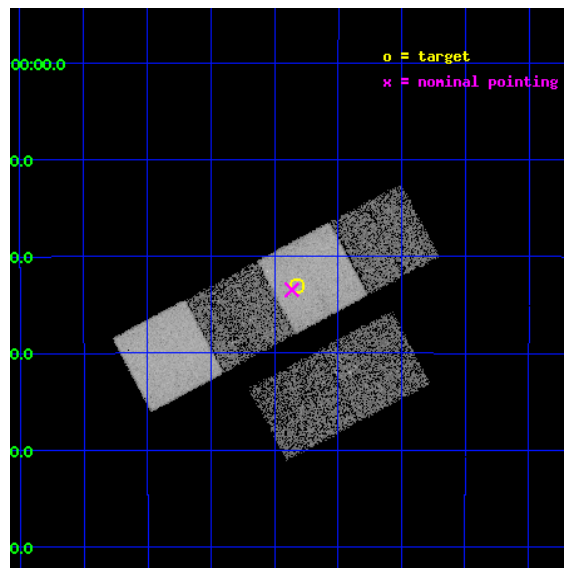
L2 Processing Date : Sep 2 2012

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# 1 Front

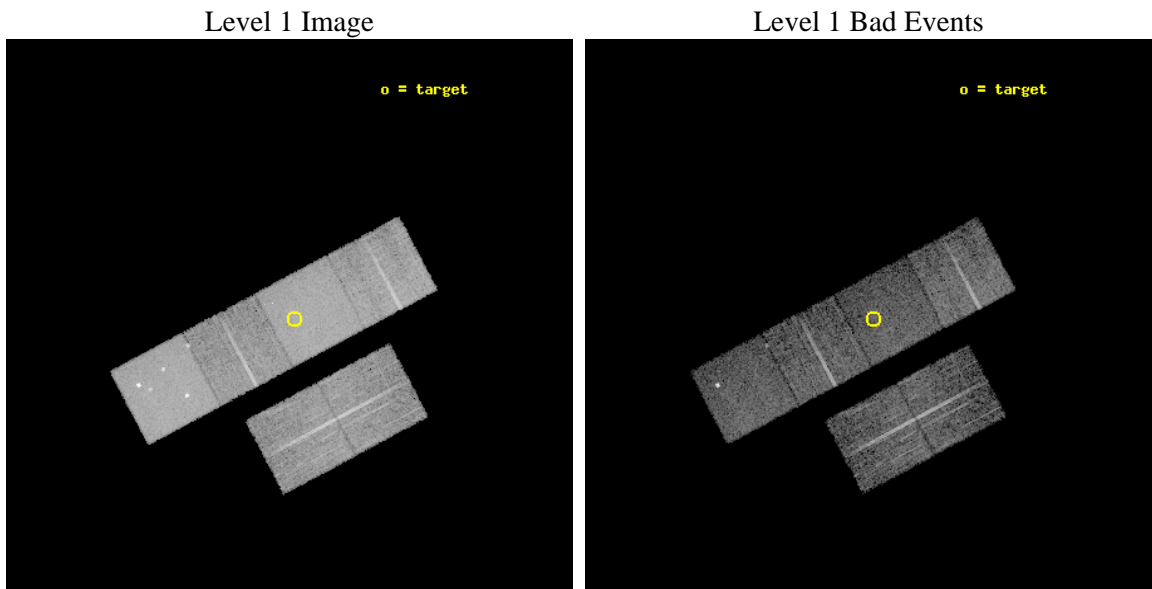
seq_num	900072	Sequence number
obs_id	2245	Observation id
title	THE NATURE OF NARROW-LINE, FIR-LUMINOUS, X-RAY GALAXIES	Proposal t
observer	PROFESSOR TOM SHANKS	Principal investigator
object	GSGP4X:082	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	14.457083	Observer's specified target RA [deg]
dec_targ	-27.385	Observer's specified target Dec [deg]
ra_nom	14.465826232498	Nominal RA [deg]
dec_nom	-27.391085686111	Nominal Dec [deg]
roll_nom	332.00509821062	Nominal Roll [deg]
revision	3	Processing version of data
ontime	8958.6018150002	Sum of GTIs [s]
livetime	8845.1626045962	Livetime [s]
ontime2	8958.6428550035	Sum of GTIs [s]
ontime3	8958.4786950052	Sum of GTIs [s]
ontime5	8958.5607749969	Sum of GTIs [s]
ontime6	8958.5197350085	Sum of GTIs [s]
ontime7	8958.6018150002	Sum of GTIs [s]
ontime8	8958.4375453889	Sum of GTIs [s]
l2events	113330	Number of level 2 events



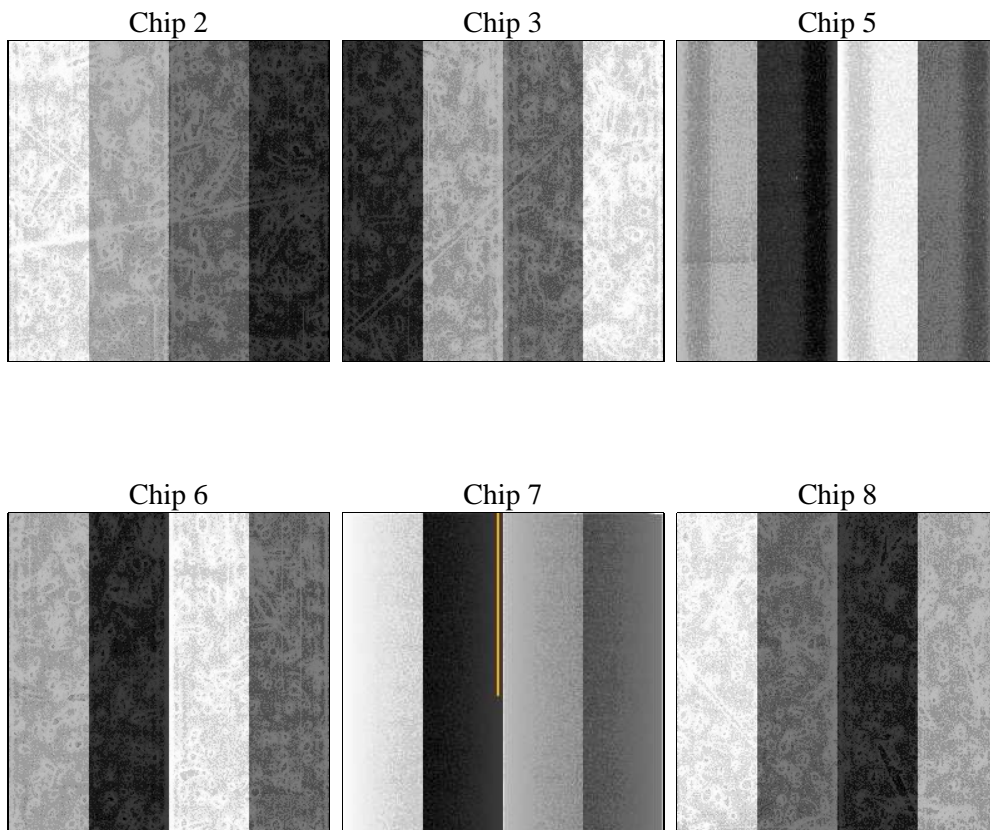
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9200.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	8958.6018150002	Sum of GTIs [s]
caldbver	4.5.1.1	&#160	ontime2	8958.6428550035	Sum of GTIs [s]
date	2012-09-03T00:33:11	Date and time of file creation	ontime3	8958.4786950052	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	8958.5607749969	Sum of GTIs [s]
			ontime6	8958.5197350085	Sum of GTIs [s]
			ontime7	8958.6018150002	Sum of GTIs [s]
			ontime8	8958.4375453889	Sum of GTIs [s]
			l1events	408083	Number of level 1 events

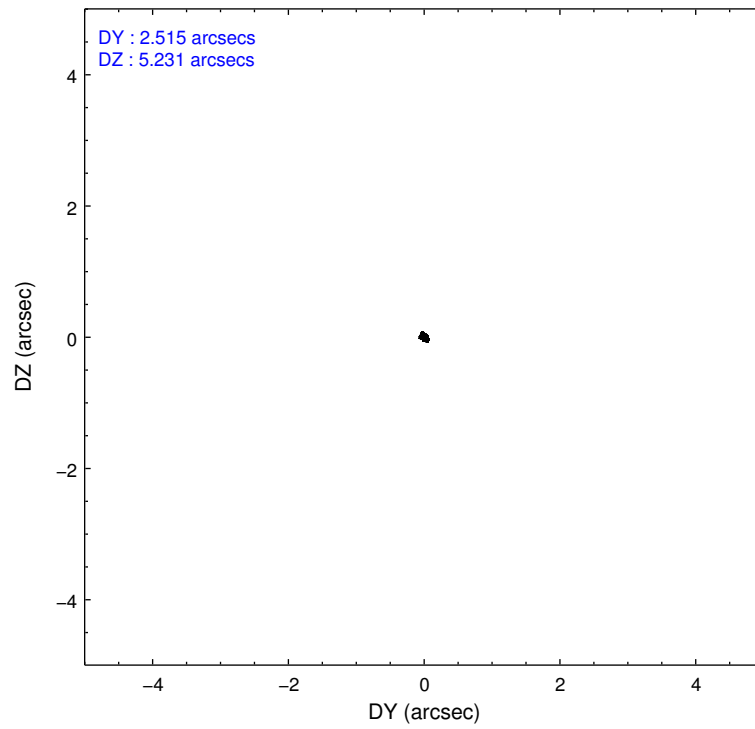
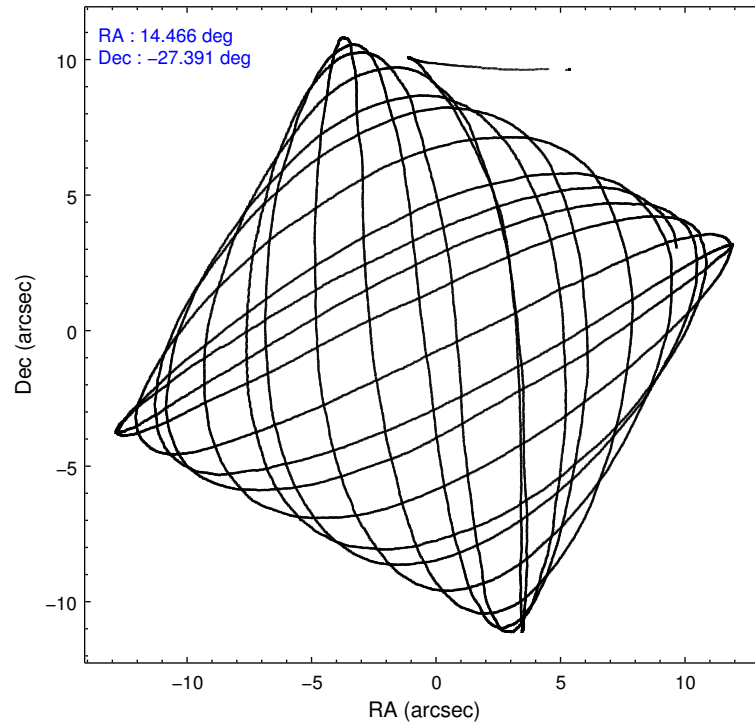
### 2.1.4 Events

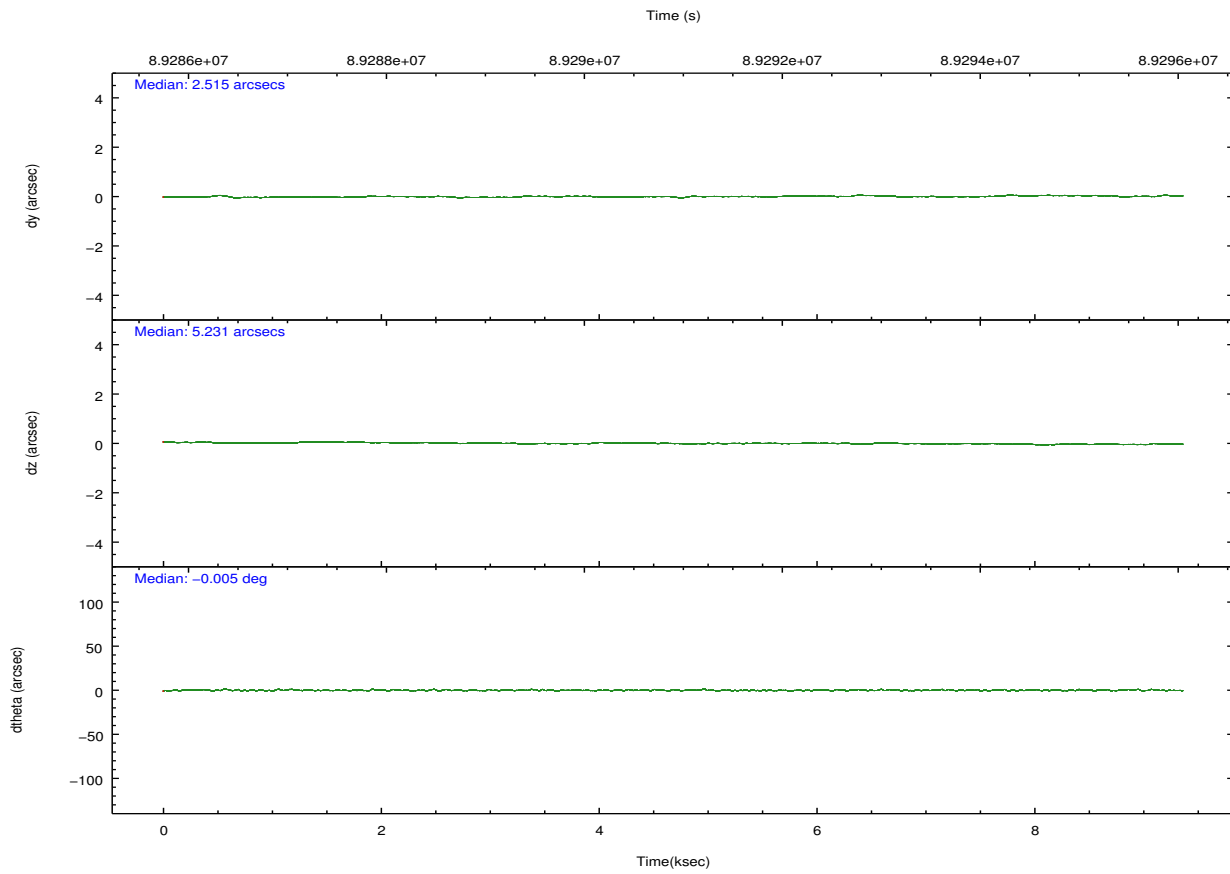
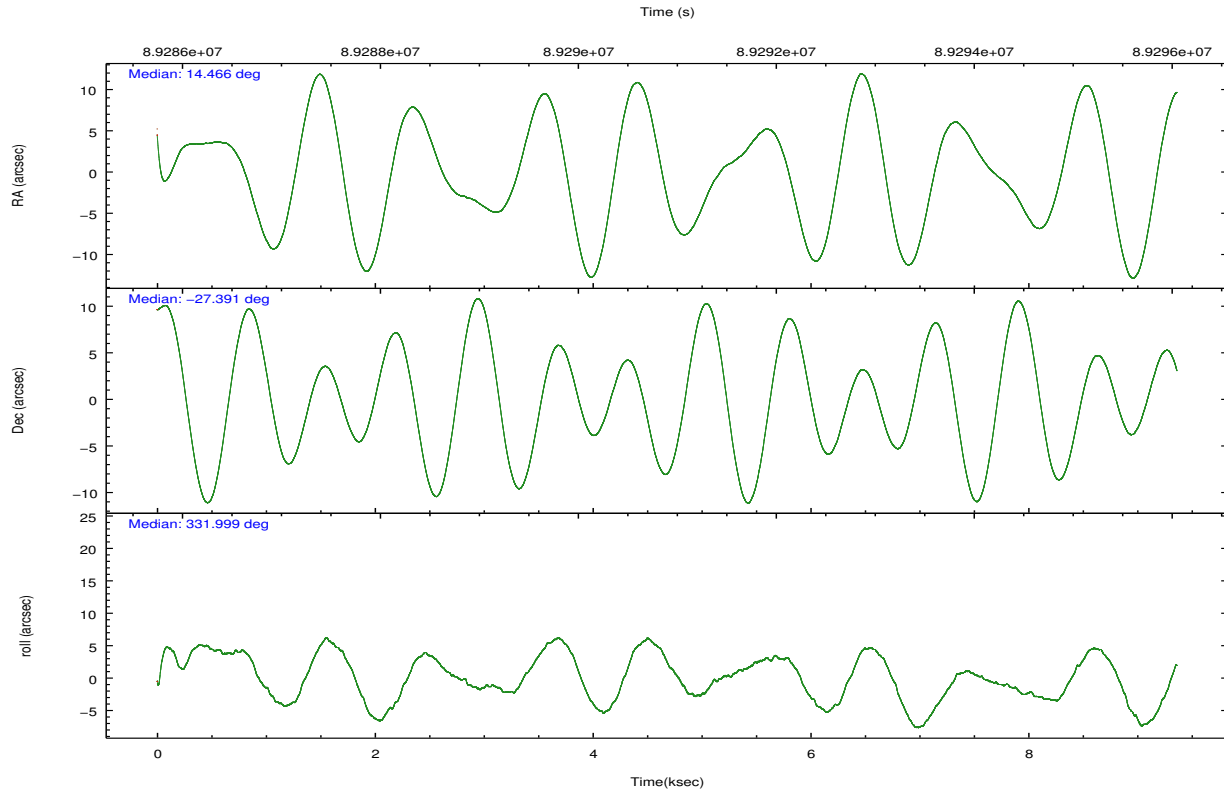
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	54319	51185	93646	53060	84239	71634	grade 0 events	2507	2756	9325	3228	5286	4455
rejected events	48478	45104	41509	46086	39332	57862		4%	5%	9%	6%	6%	6%
rejected %	89%	88%	44%	86%	46%	80%	grade 1 events	22	21	186	26	61	42
								0%	0%	0%	0%	0%	0%
							grade 2 events	1237	1160	14718	1321	8627	2986
								2%	2%	15%	2%	10%	4%
							grade 3 events	539	551	2593	623	3875	1460
								0%	1%	2%	1%	4%	2%
							grade 4 events	529	601	2540	587	3947	1351
								0%	1%	2%	1%	4%	1%
							grade 5 events	1729	1916	6296	2147	6506	2690
								3%	3%	6%	4%	7%	3%
							grade 6 events	1033	1016	23022	1221	23251	3532
								1%	1%	24%	2%	27%	4%
							grade 7 events	46723	43164	34966	43907	32686	55118
								86%	84%	37%	82%	38%	76%

## 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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	14.435024	14.46582623249802	Subarray requested	NONE	NONE
[deg] Pointing Dec	-27.392286	-27.39108568611069	Alternating exposures requested	N	N
[deg] Pointing Roll	331.834302	332.005098210615	[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	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	89286375.184000	89285168.019999			
Observation start date	2000-10-30T09:45:11	2000-10-30T09:26:08			
[s] Observation end time (MET)	89295575.184000	89295709.120397			
Observation end date	2000-10-30T12:18:31	2000-10-30T12:21:49			
Read mode	TIMED	TIMED			

## 2.3 Aspect



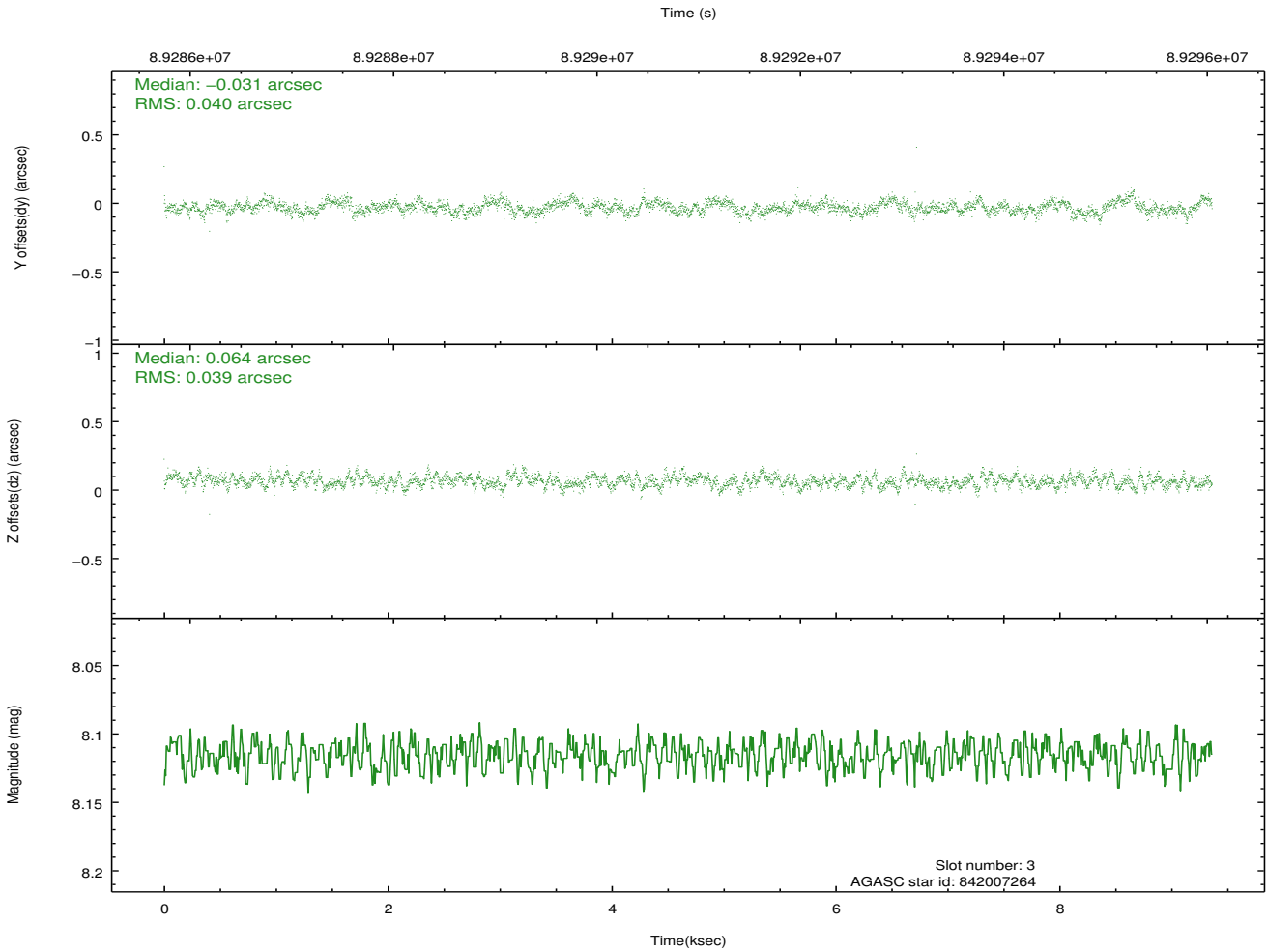
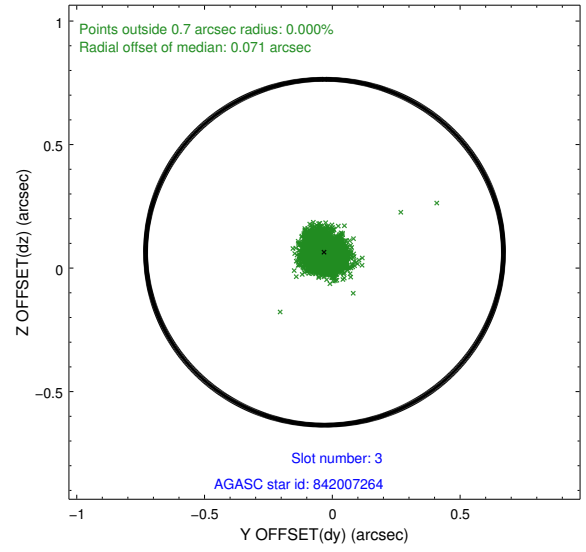
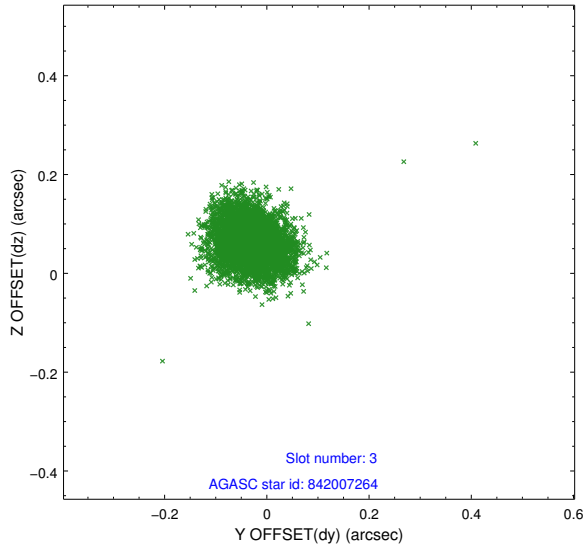


### Slot Statistics

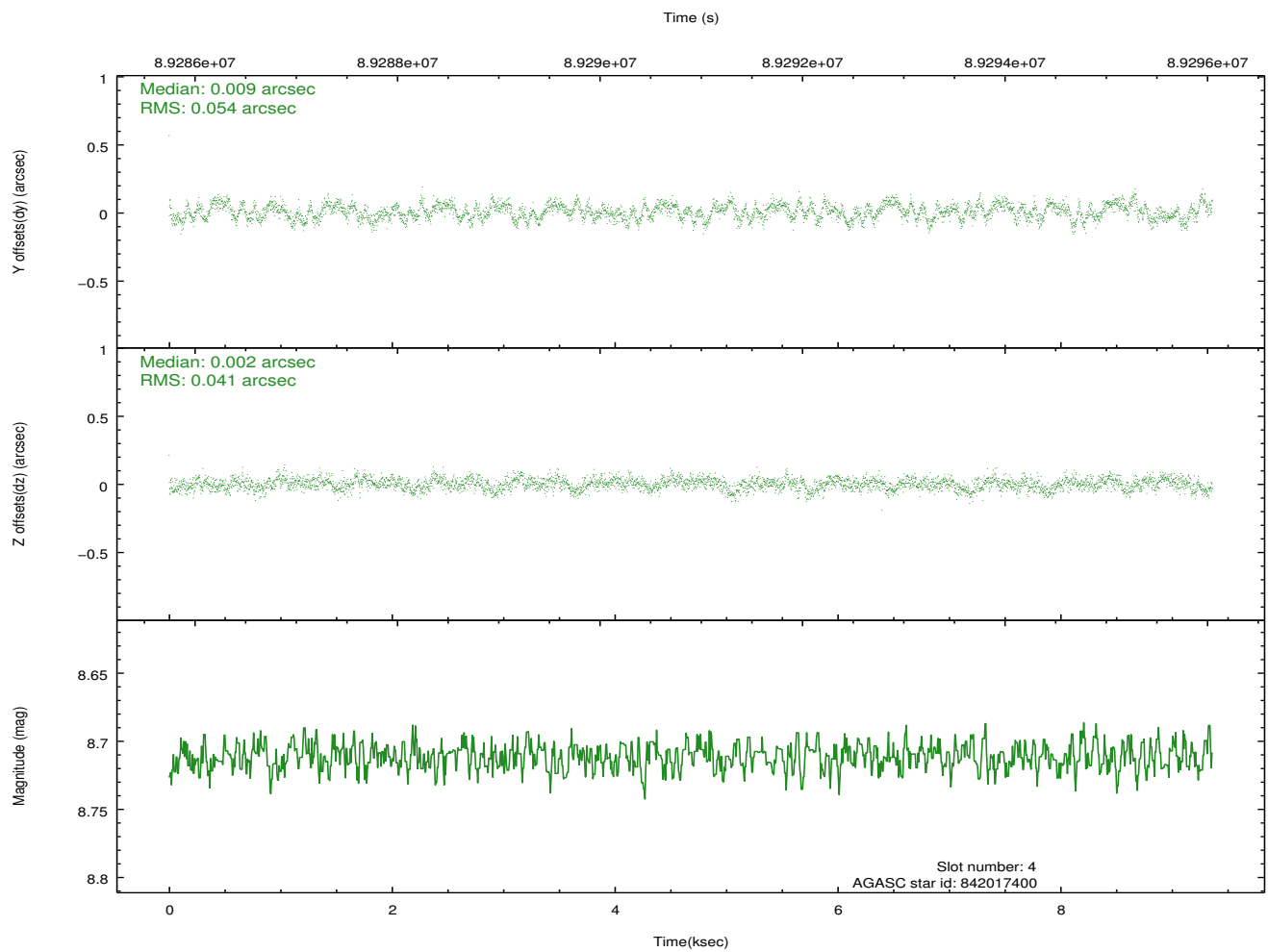
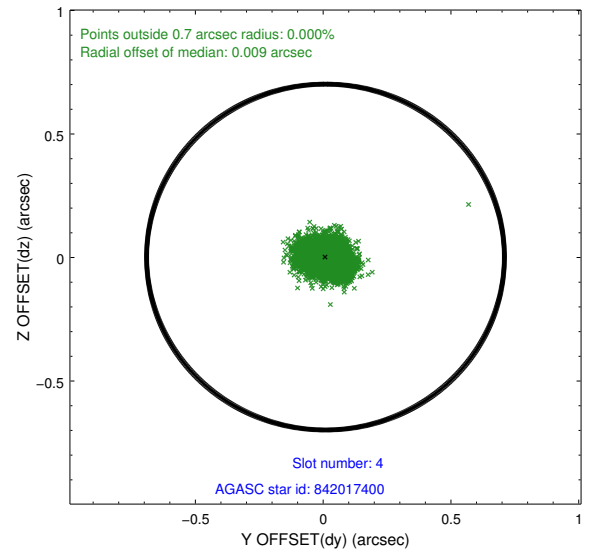
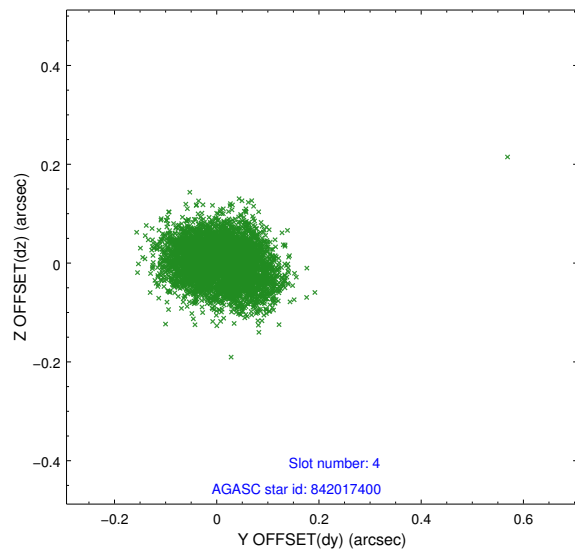
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	2284	-0.034	-0.018	0.004	0.008	0.000000	0.000000	-755.15	-1726.38
1	FID	ACIS-S-4	7.21	2284	0.013	0.021	0.004	0.008	0.000000	0.000000	2157.88	181.59
2	BAD	ACIS-S-5	7.24	333	0.045	-0.016	0.012	0.021	0.000000	0.000000	-1801.64	176.26
3	GUIDE	842007264	8.12	4568	-0.031	0.064	0.059	0.094	14.570692	-27.092422	-125.21	1156.80
4	GUIDE	842017400	8.71	4567	0.009	0.002	0.073	0.114	14.466062	-28.061705	1225.73	-2077.62
5	GUIDE	842015088	9.30	4568	-0.042	0.020	0.110	0.187	13.933025	-27.893682	-553.09	-2348.59
6	GUIDE	842008736	10.39	4563	0.124	-0.034	0.162	0.262	14.870220	-27.799337	1915.74	-640.17
7	GUIDE	842015640	10.04	4567	-0.063	-0.037	0.109	0.174	14.176649	-27.233495	-997.15	112.57

## 2.4 Star Slots

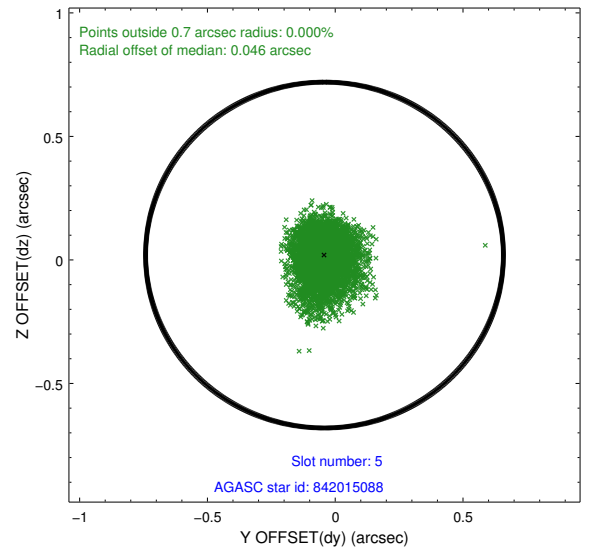
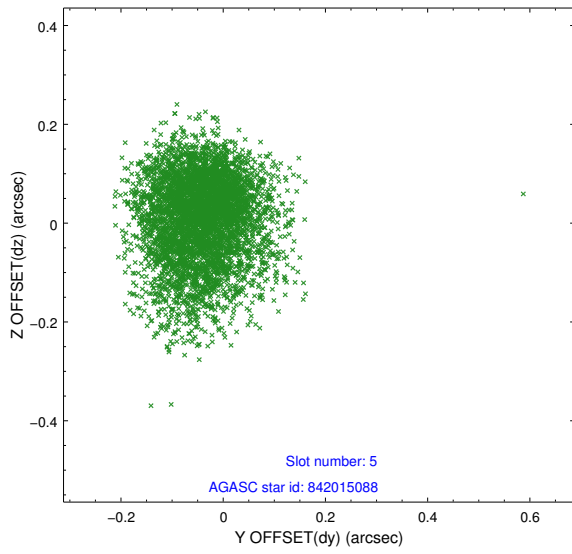
### 2.4.1 Slot 3



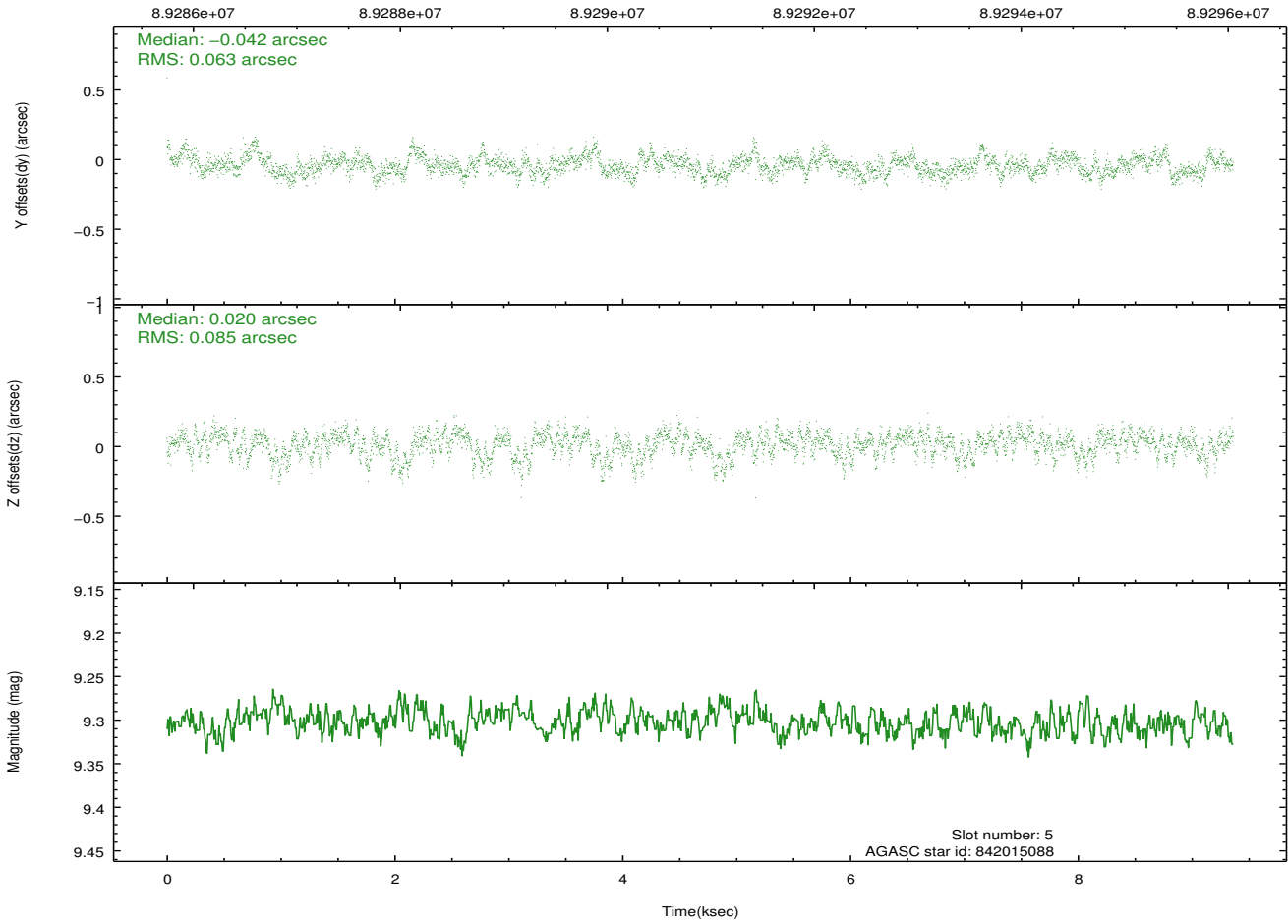
## 2.4.2 Slot 4



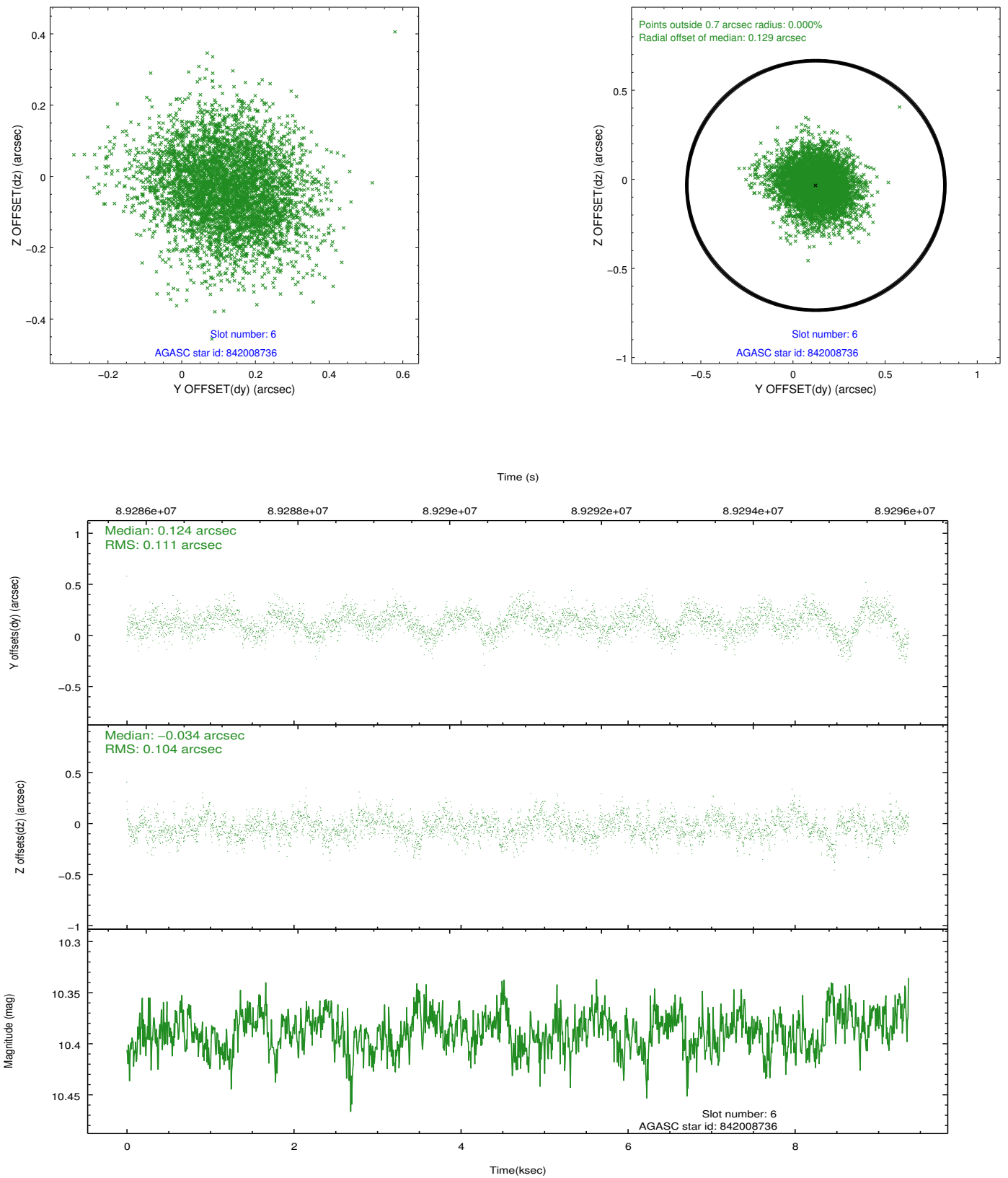
### 2.4.3 Slot 5



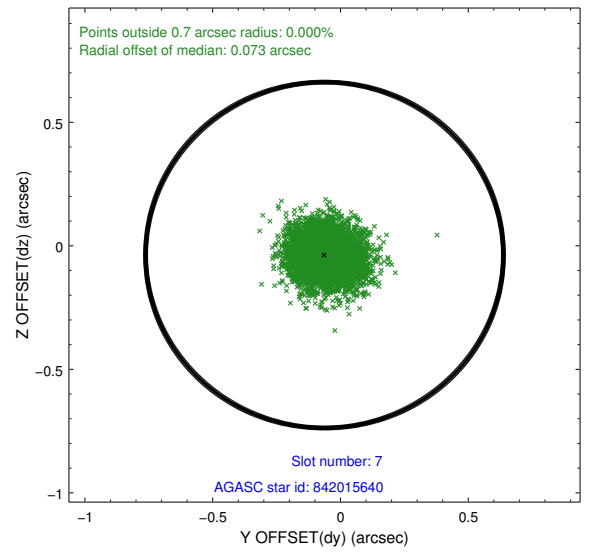
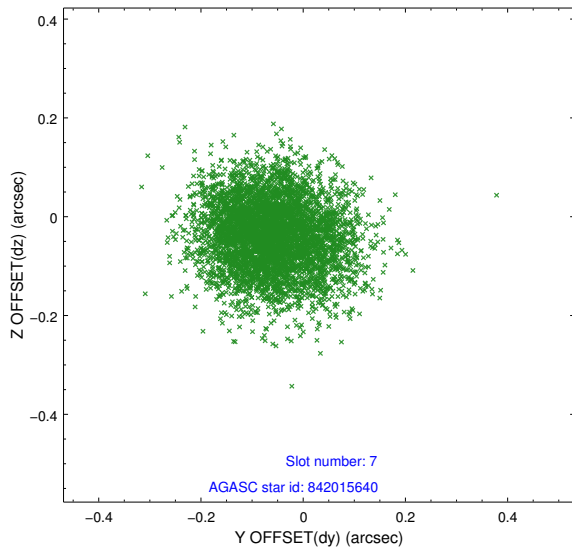
Time (s)



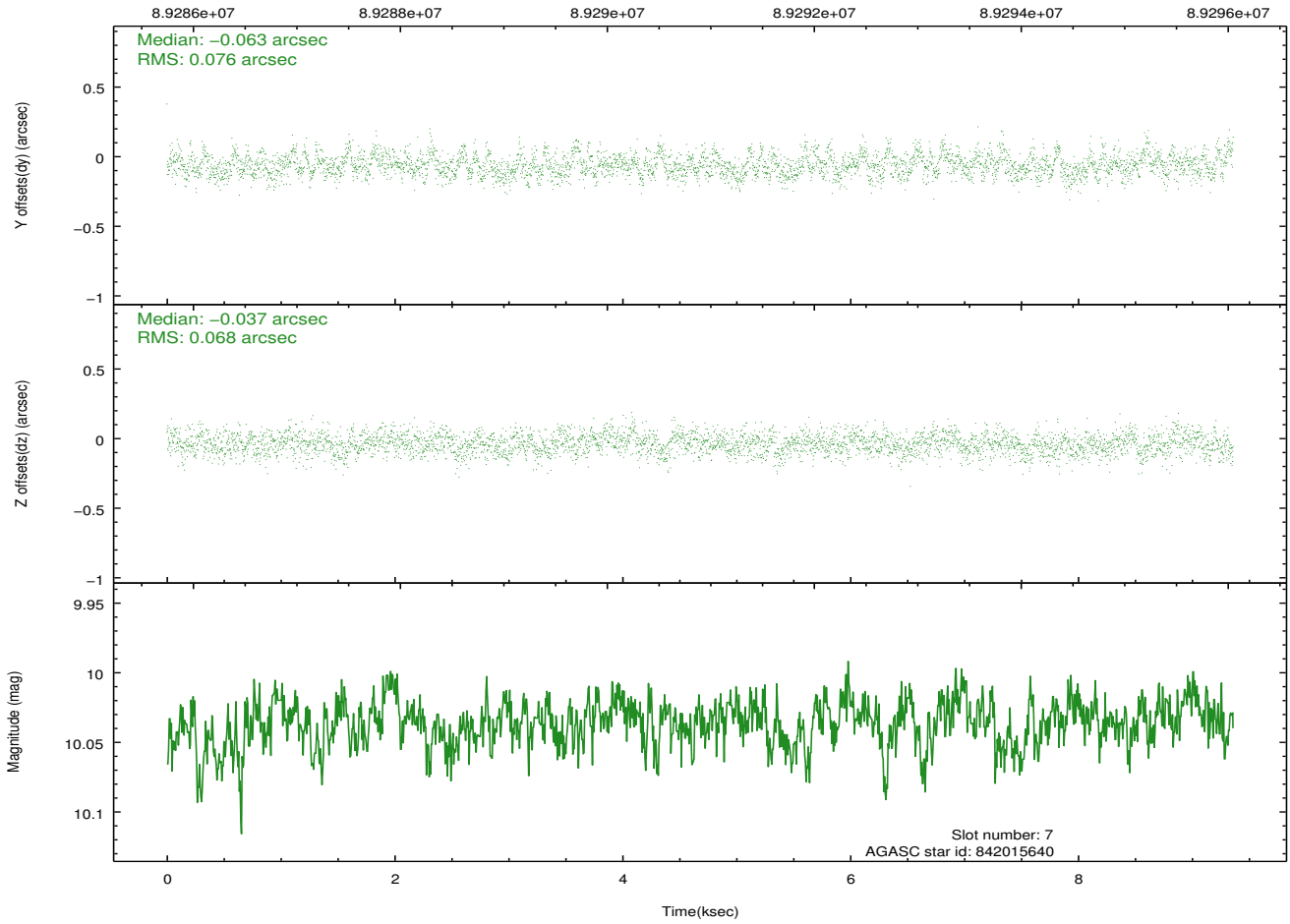
## 2.4.4 Slot 6



## 2.4.5 Slot 7

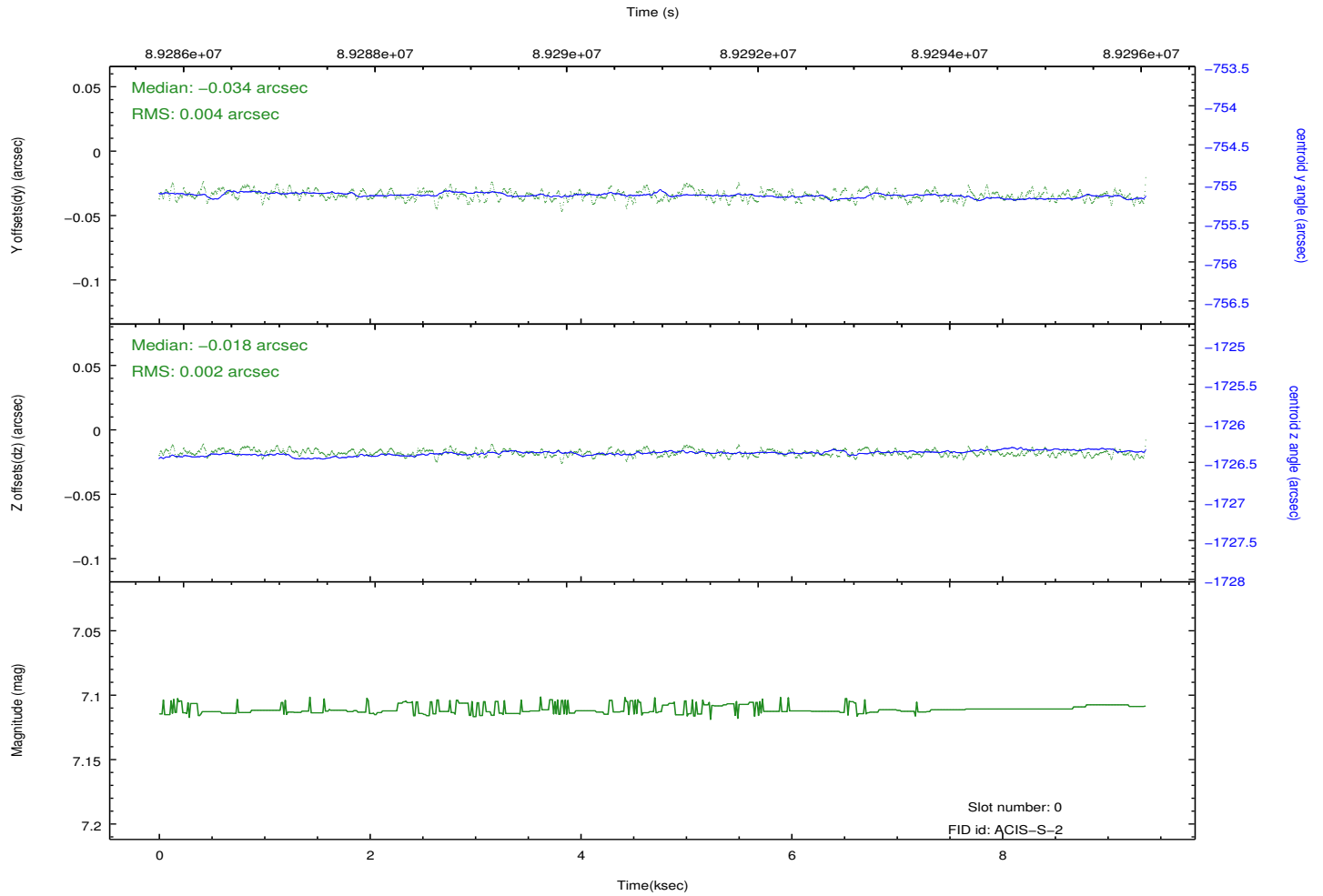
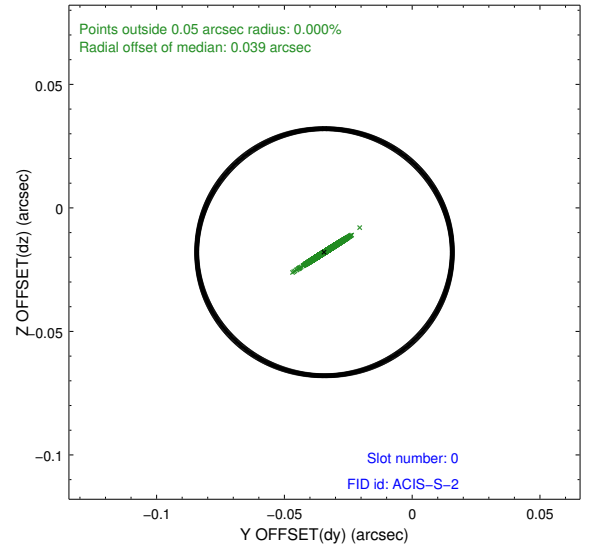
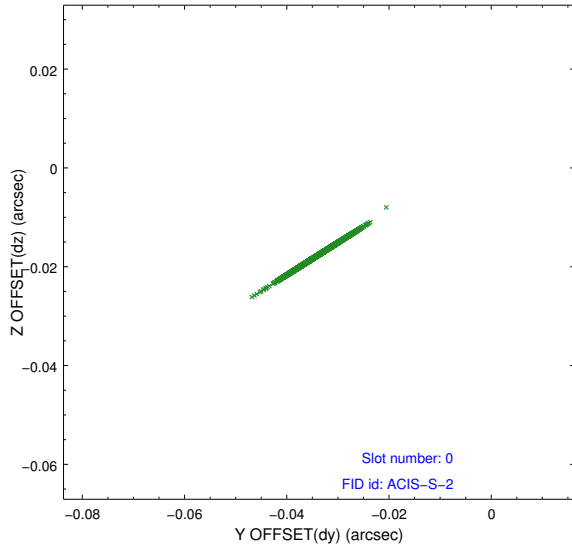


Time (s)

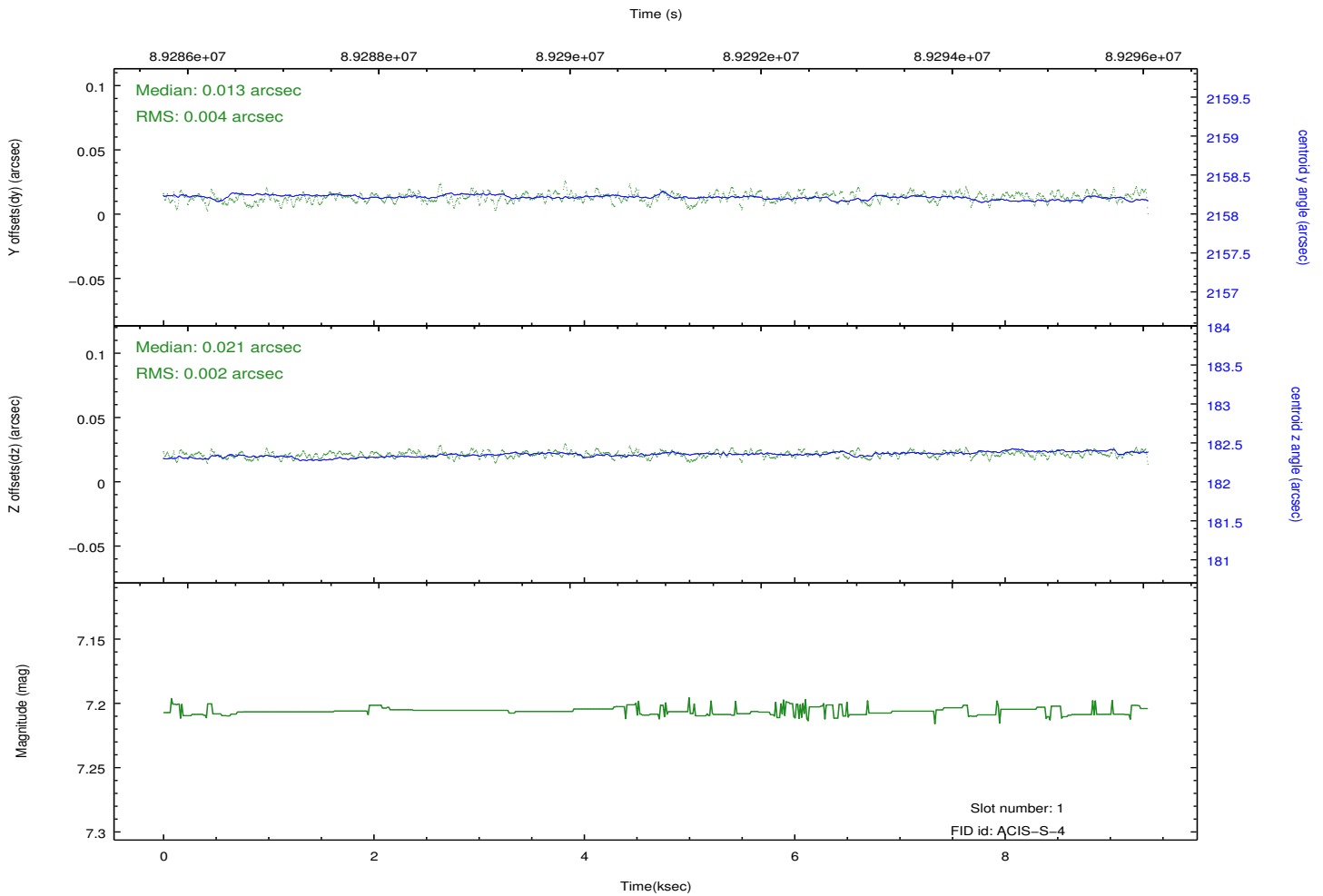
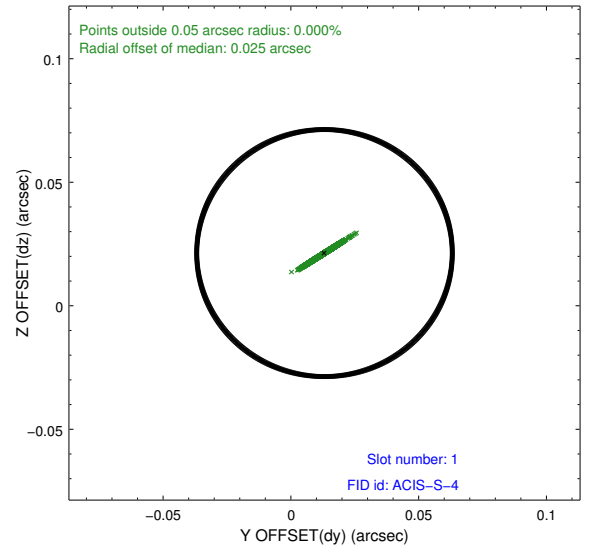
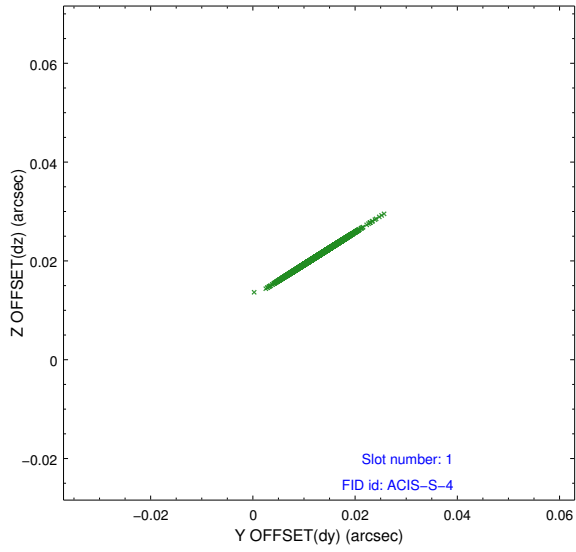


## 2.5 FID Slots

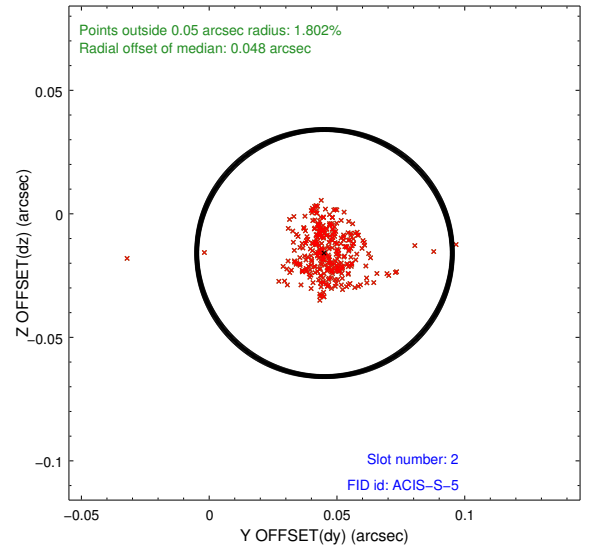
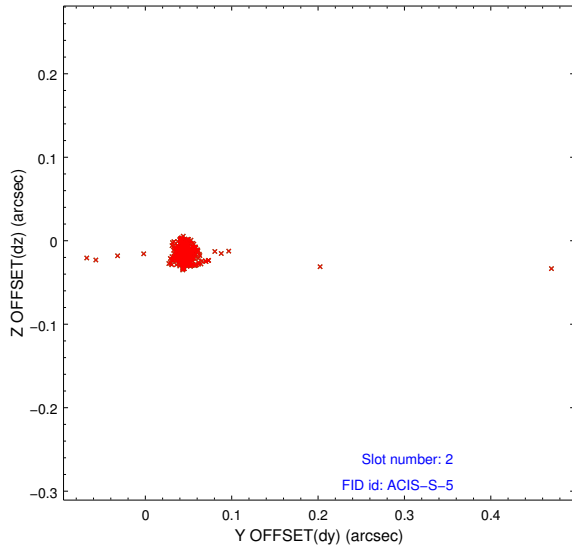
### 2.5.1 Slot 0



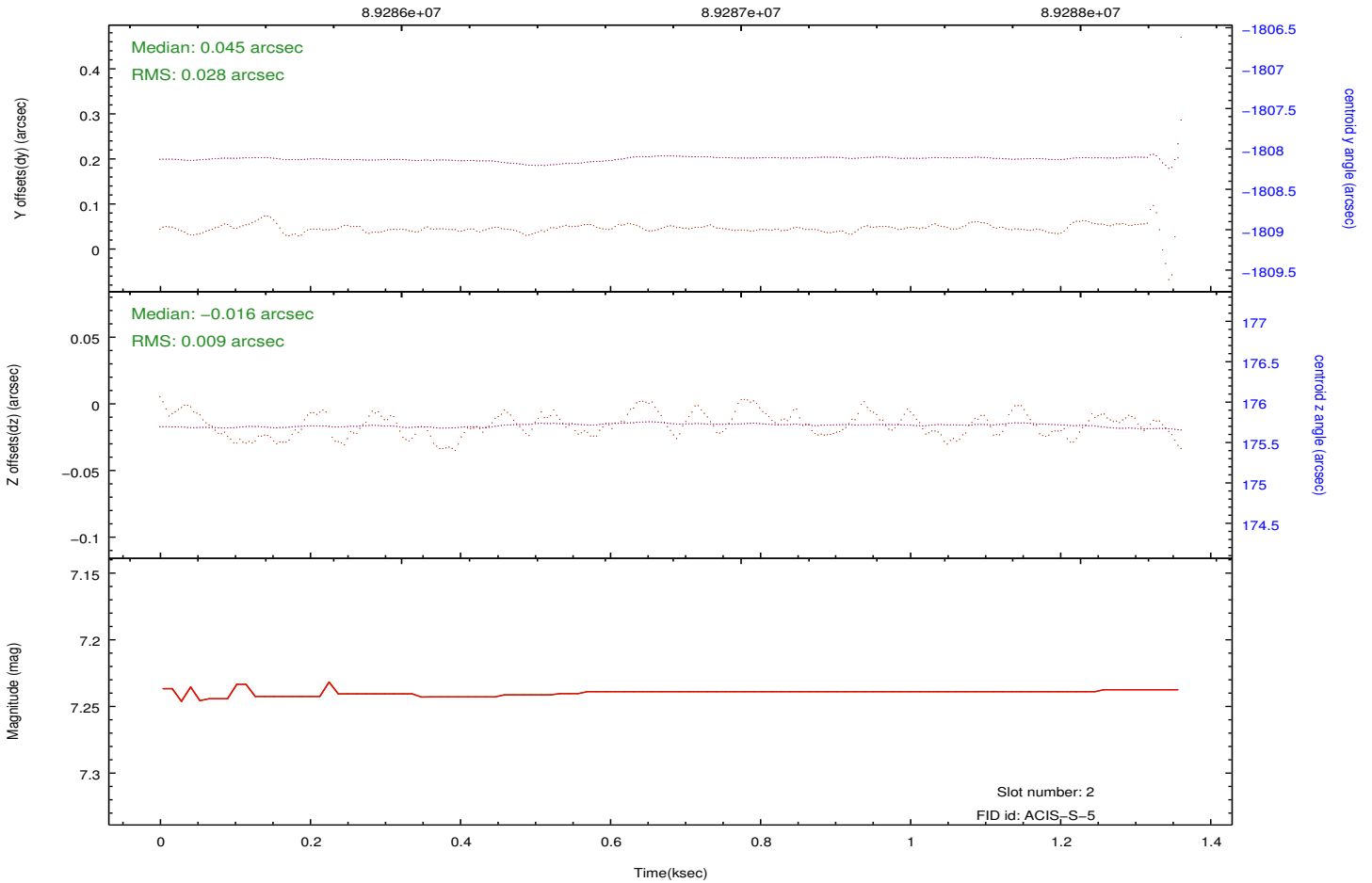
## 2.5.2 Slot 1



### 2.5.3 Slot 2



Time (s)



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.09.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.96

## A.2 Comments

The fid light in slot 2 was automatically removed from the aspect solution due to poor data quality. The aspect solution is not expected to be degraded by removing one fid light from the solution.