

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 13650 - L2 Version 1  
Chandra X-Ray Center

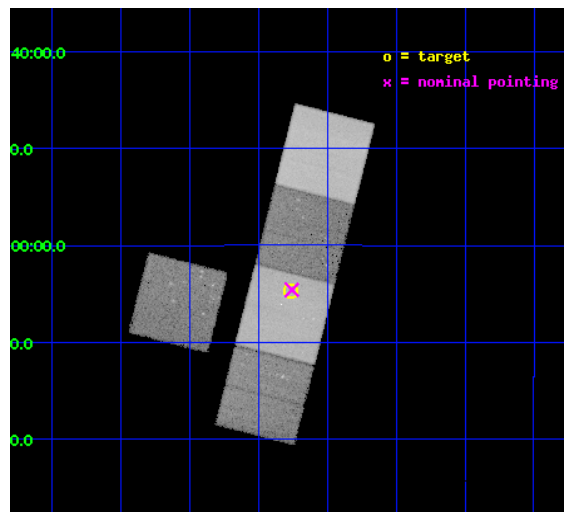
L2 Processing Date : Jun 1 2012

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# 1 Front

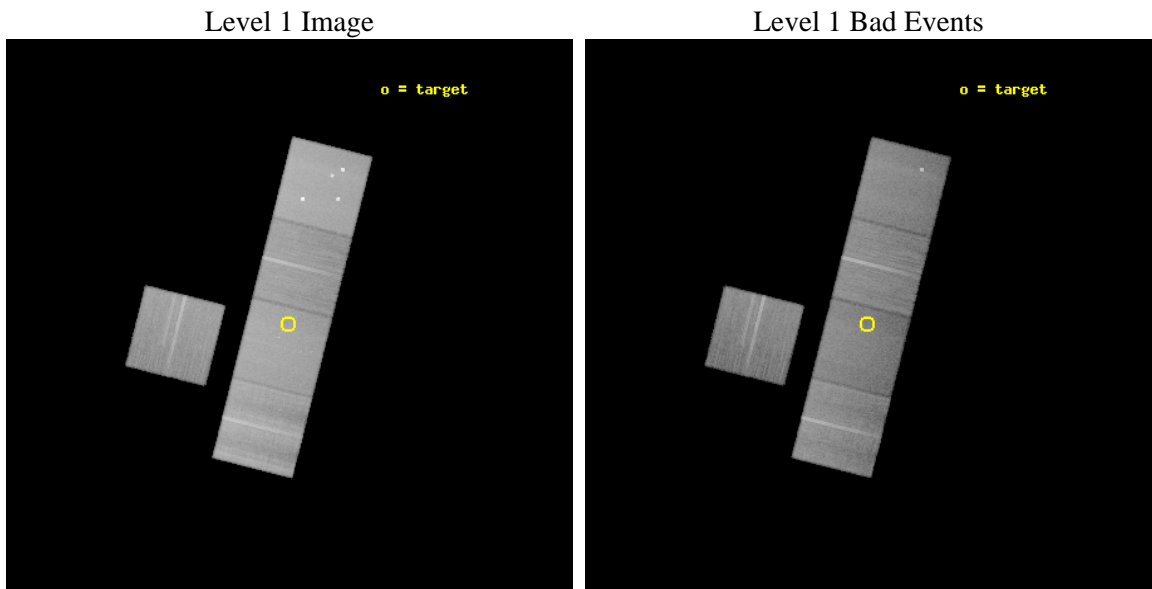
seq_num	200803	Sequence number
obs_id	13650	Observation id
title	A Close Look At Middle-Aged Coronae: The Nearby 2.5 Gyr Old Cluster Ruprecht 147	Proposal title
observer	Dr. Steven Saar	Principal investigator
object	Ruprecht 147	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	289.192667	Observer's specified target RA [deg]
dec_targ	-16.077589	Observer's specified target Dec [deg]
ra_nom	289.18967830875	Nominal RA [deg]
dec_nom	-16.076635589364	Nominal Dec [deg]
roll_nom	104.15580871101	Nominal Roll [deg]
revision	1	Processing version of data
ontime	47850.528135955	Sum of GTIs [s]
livetime	47225.325758813	Livetime [s]
ontime3	47844.122955143	Sum of GTIs [s]
ontime5	47850.487095952	Sum of GTIs [s]
ontime6	47844.164014876	Sum of GTIs [s]
ontime7	47850.528135955	Sum of GTIs [s]
ontime8	47850.363975942	Sum of GTIs [s]
l2events	474423	Number of level 2 events



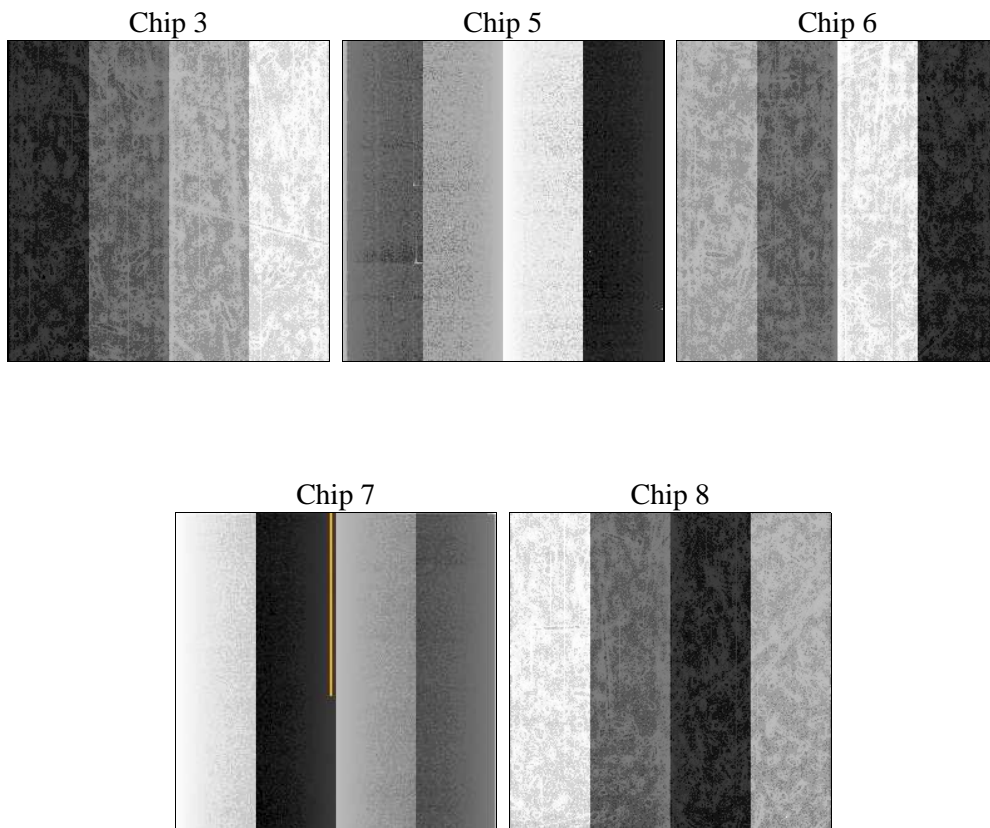
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	49574.638000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	47850.528135955	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime3	47844.122955143	Sum of GTIs [s]
date	2012-06-01T17:04:20	Date and time of file creation	ontime5	47850.487095952	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	47844.164014876	Sum of GTIs [s]
			ontime7	47850.528135955	Sum of GTIs [s]
			ontime8	47850.363975942	Sum of GTIs [s]
			l1events	1853654	Number of level 1 events

### 2.1.4 Events

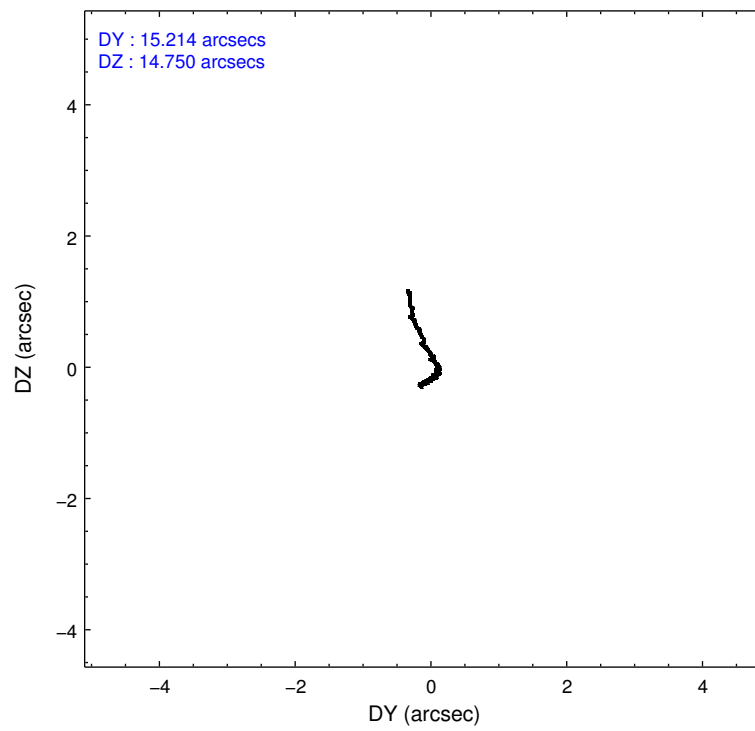
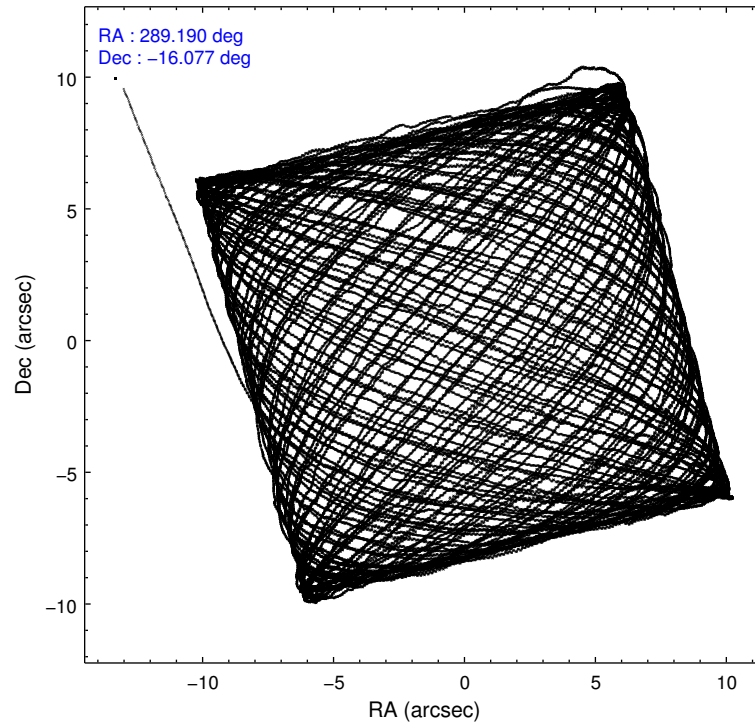
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	277457	489766	305060	380960	400411
rejected events	245491	242645	269741	212076	284106
rejected %	88%	49%	88%	55%	70%

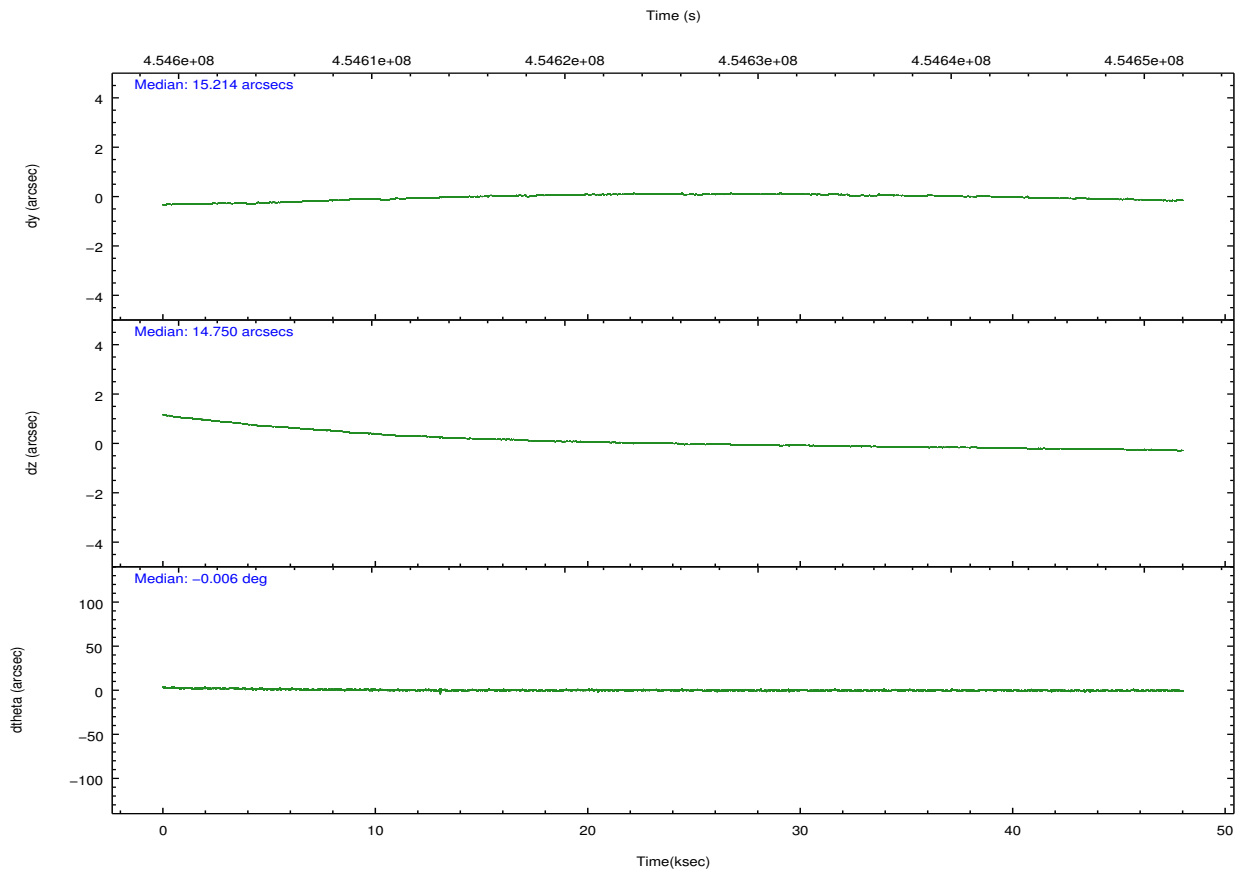
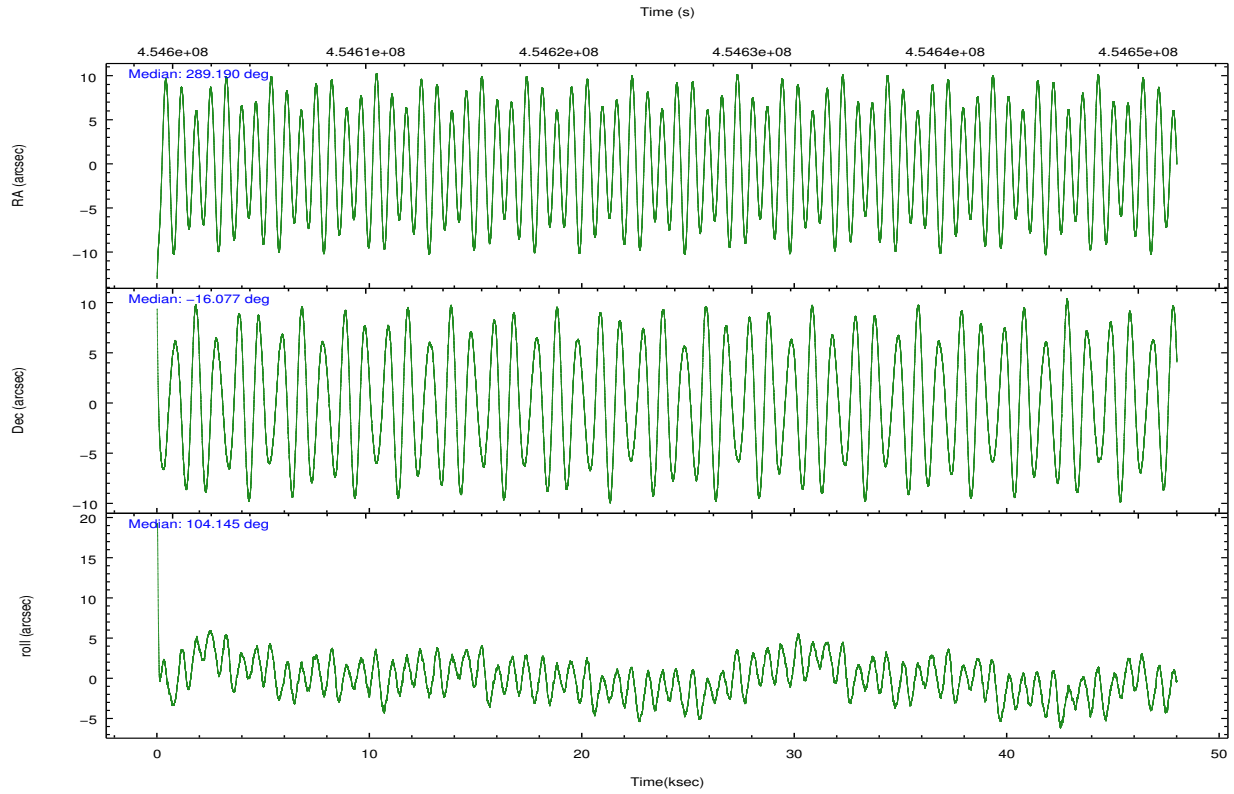
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	11748	38989	12453	15661	33673
	4%	7%	4%	4%	8%
grade 1 events	168	804	166	471	314
	0%	0%	0%	0%	0%
grade 2 events	6999	70593	8118	35012	26242
	2%	14%	2%	9%	6%
grade 3 events	3398	8900	3501	14602	13553
	1%	1%	1%	3%	3%
grade 4 events	3451	8175	3500	14718	12511
	1%	1%	1%	3%	3%
grade 5 events	14188	36411	14753	39153	21395
	5%	7%	4%	10%	5%
grade 6 events	6428	120822	7797	89116	30449
	2%	24%	2%	23%	7%
grade 7 events	231077	205072	254772	172227	262274
	83%	41%	83%	45%	65%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-35678	ACIS-35678	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	289.209780	289.1896783087469	Subarray requested	NONE	NONE
[deg] Pointing Dec	-16.095986	-16.07663558936388	Alternating exposures requested	N	N
[deg] Pointing Roll	104.004741	104.155808711012	[s] Primary exposure time	0.000000	3.1
[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)	454601768.184000	454600437.81367			
Observation start date	2012-05-28T14:15:02	2012-05-28T13:53:57			
[s] Observation end time (MET)	454651343.184000	454649615.77879			
Observation end date	2012-05-29T04:01:17	2012-05-29T03:33:35			
Read mode	TIMED	TIMED			

## 2.3 Aspect



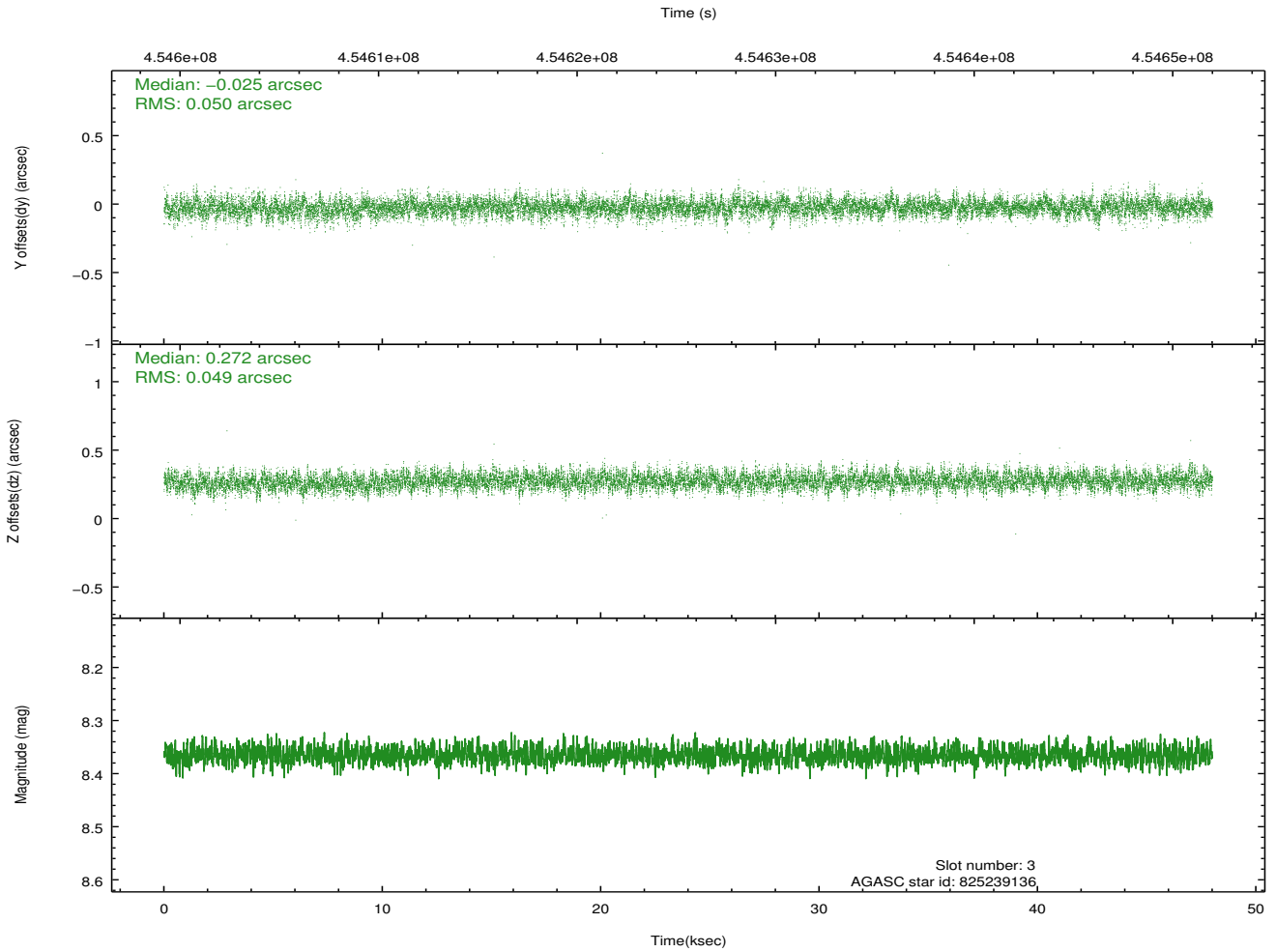
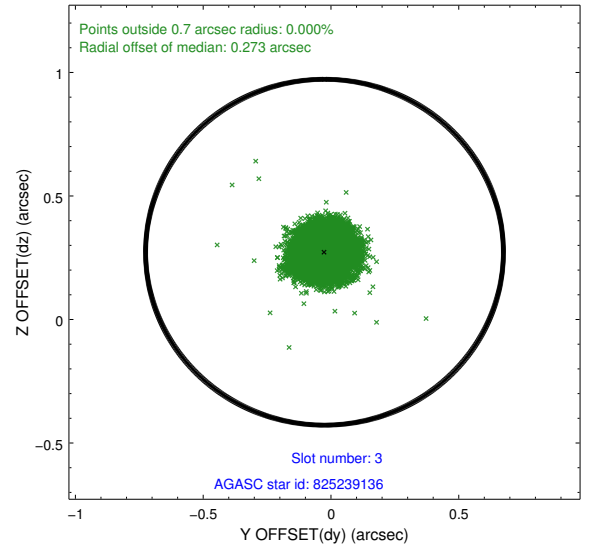
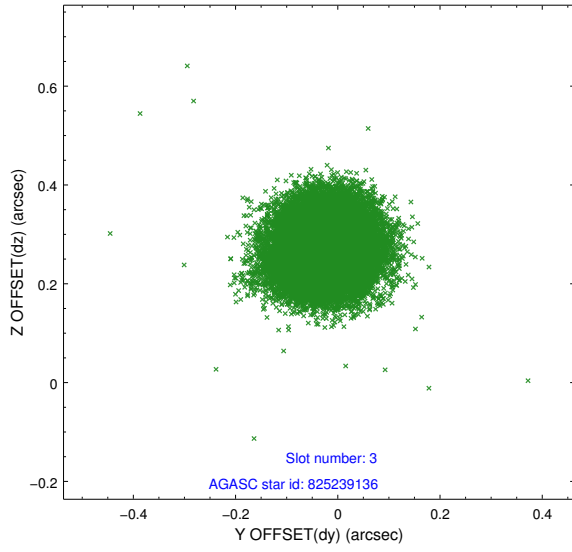


### Slot Statistics

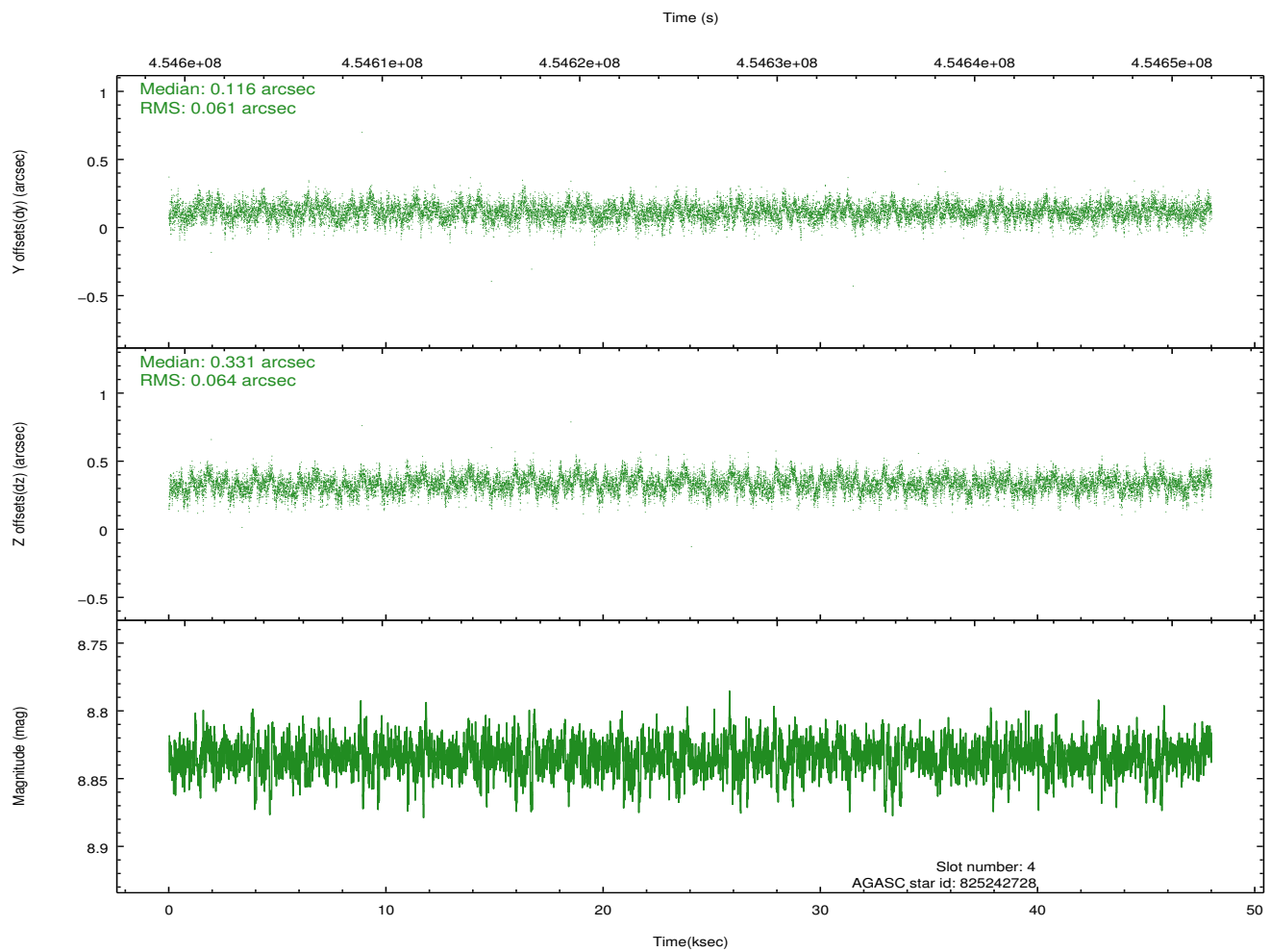
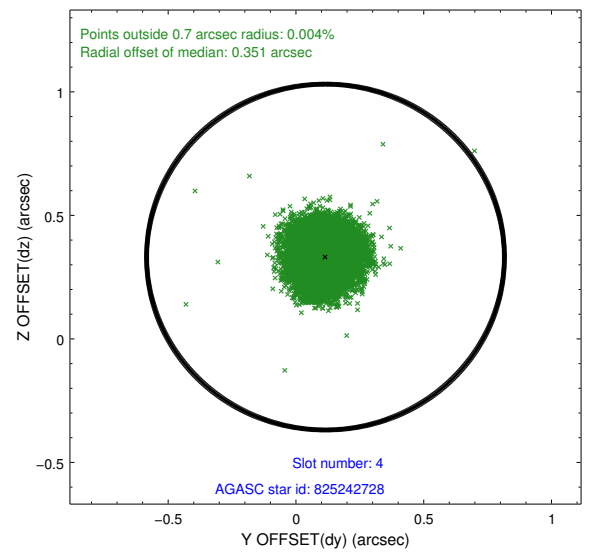
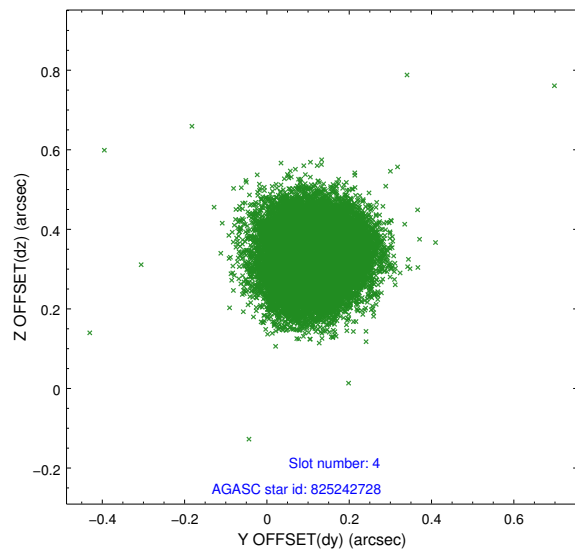
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.03	11708	0.147	-0.034	0.011	0.039	0.000000	0.000000	928.06	-1731.85
1	FID	ACIS-S-2	6.95	11708	-0.111	0.008	0.012	0.030	0.000000	0.000000	-768.11	-1736.36
2	FID	ACIS-S-5	7.07	11708	-0.058	0.034	0.010	0.034	0.000000	0.000000	-1821.33	165.76
3	GUIDE	825239136	8.36	23409	-0.025	0.272	0.074	0.120	289.540762	-16.272873	-895.37	-955.19
4	GUIDE	825242728	8.83	23398	0.116	0.331	0.094	0.152	289.573015	-15.832540	615.09	-1449.31
5	GUIDE	825230776	8.15	23413	-0.263	-0.452	0.084	0.130	288.511386	-15.901592	1259.69	2177.69
6	GUIDE	825232928	7.94	23409	0.207	-0.134	0.078	0.125	288.954641	-16.279448	-427.88	1015.50
7	GUIDE	825233856	8.23	23403	-0.031	-0.018	0.076	0.123	288.963745	-16.299740	-506.66	1002.61

## 2.4 Star Slots

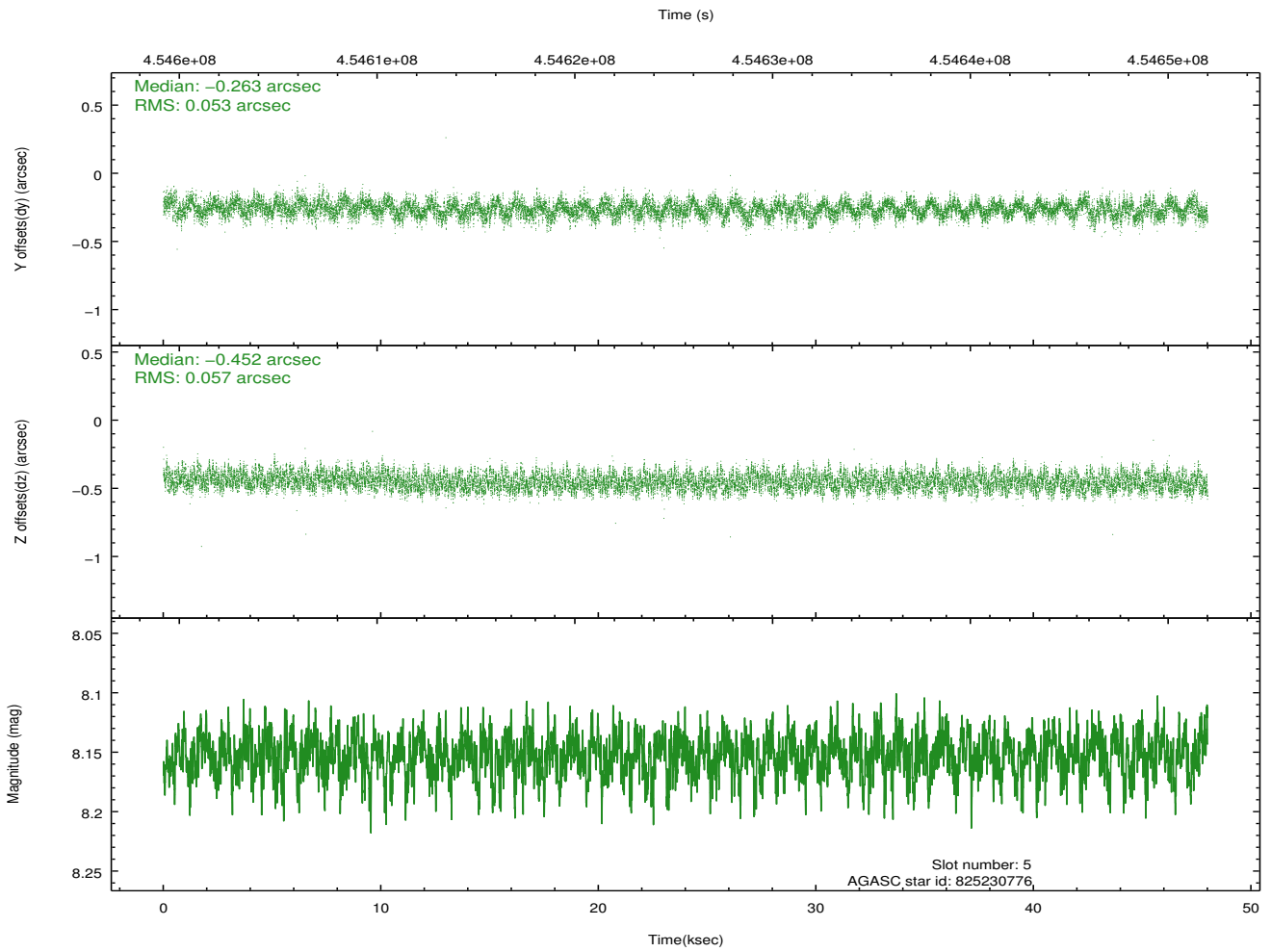
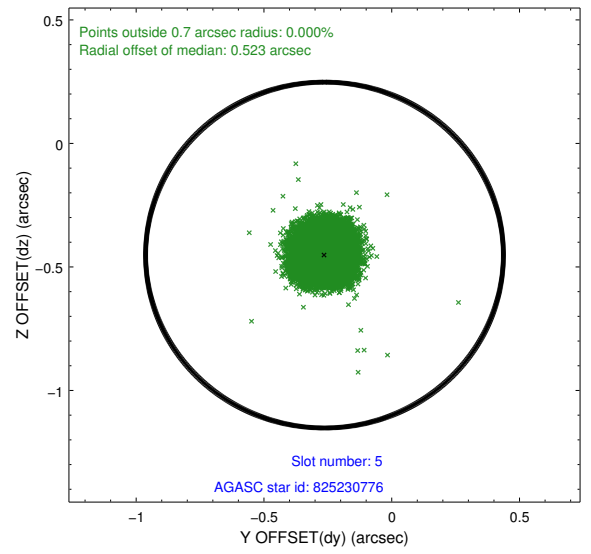
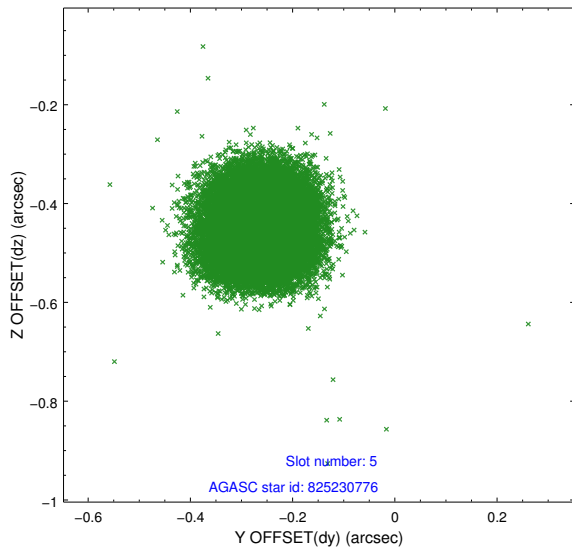
### 2.4.1 Slot 3



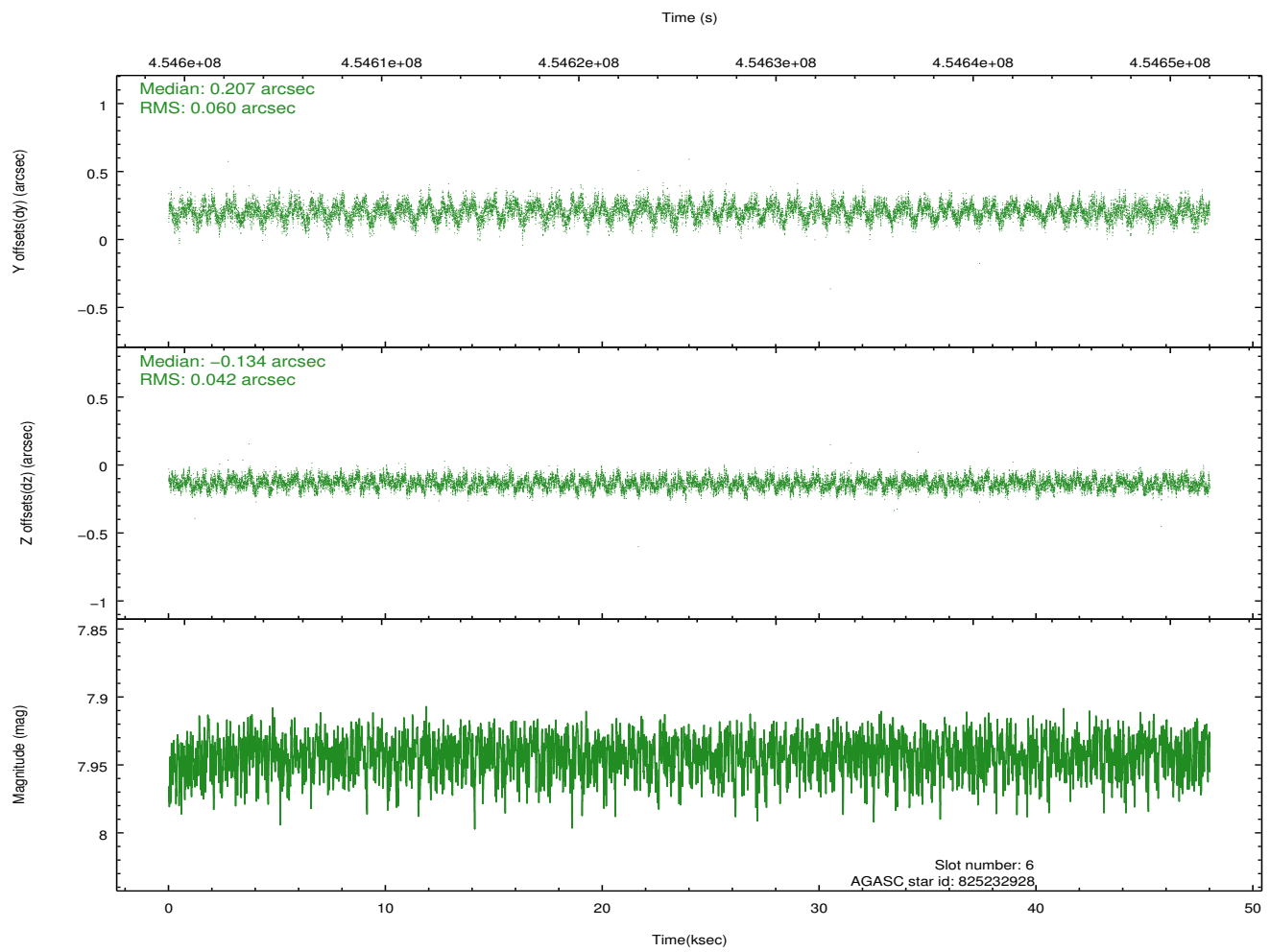
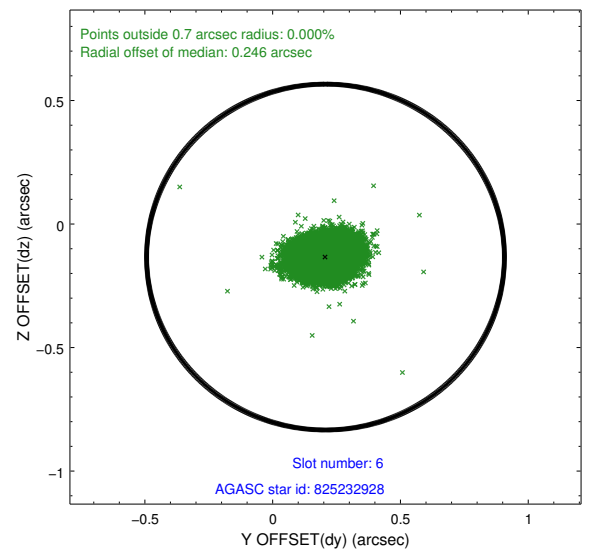
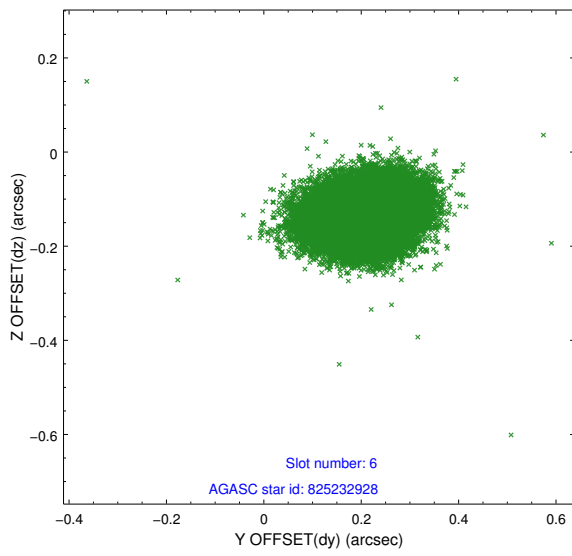
## 2.4.2 Slot 4



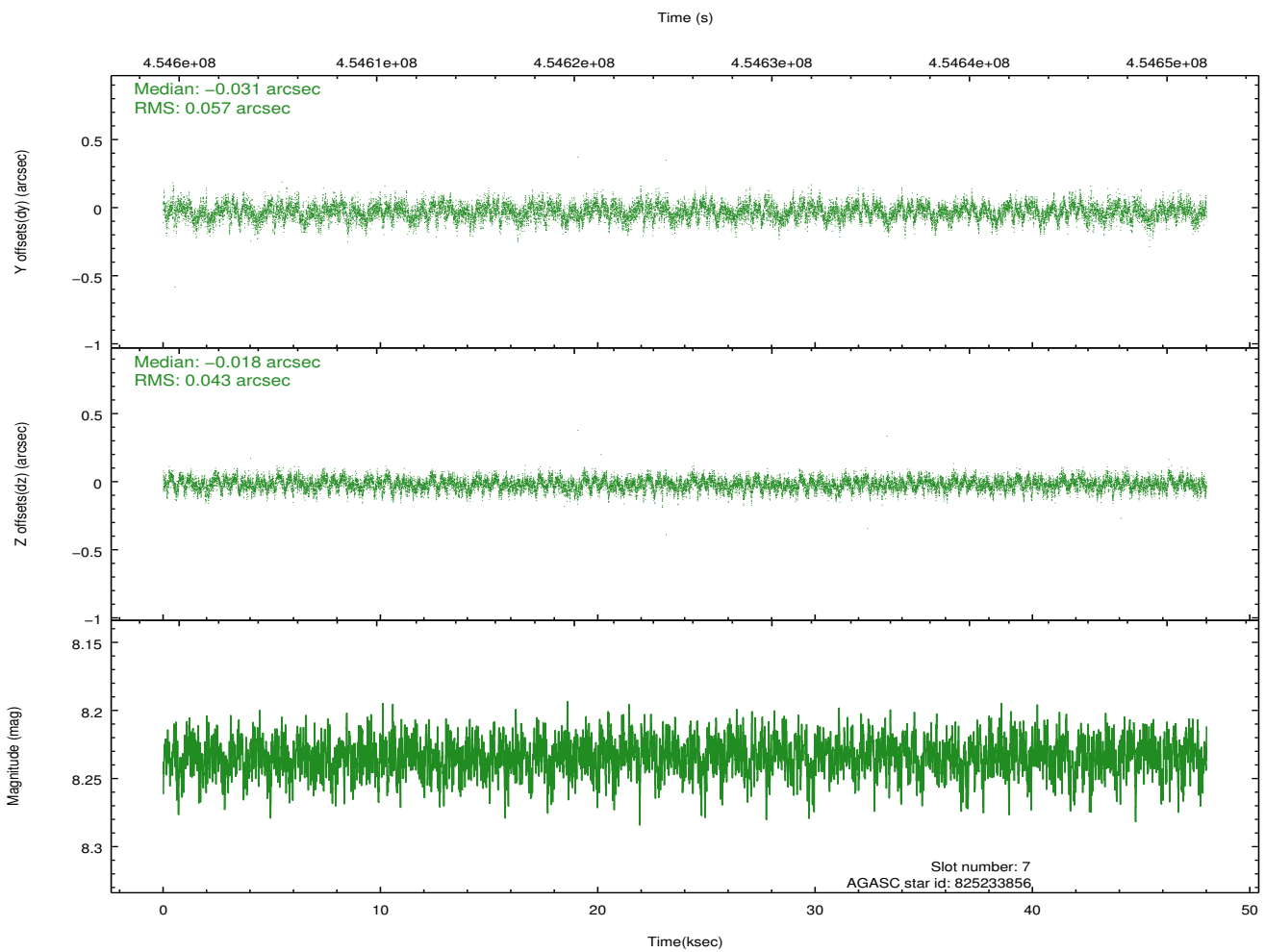
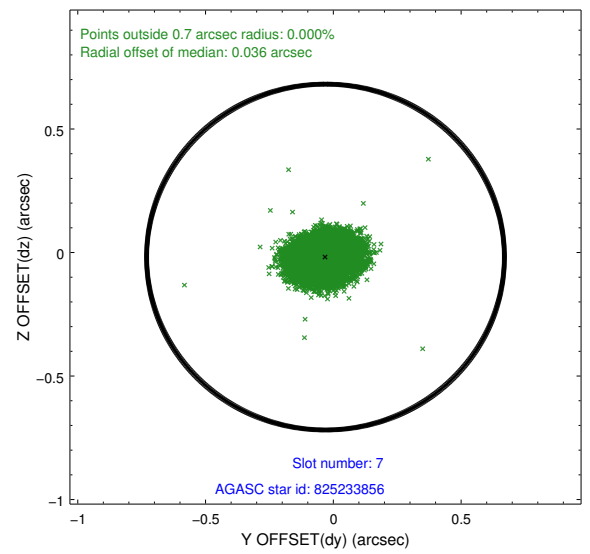
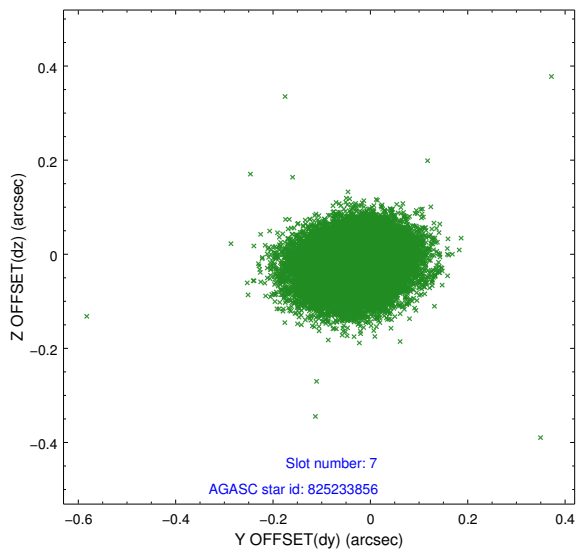
### 2.4.3 Slot 5



## 2.4.4 Slot 6

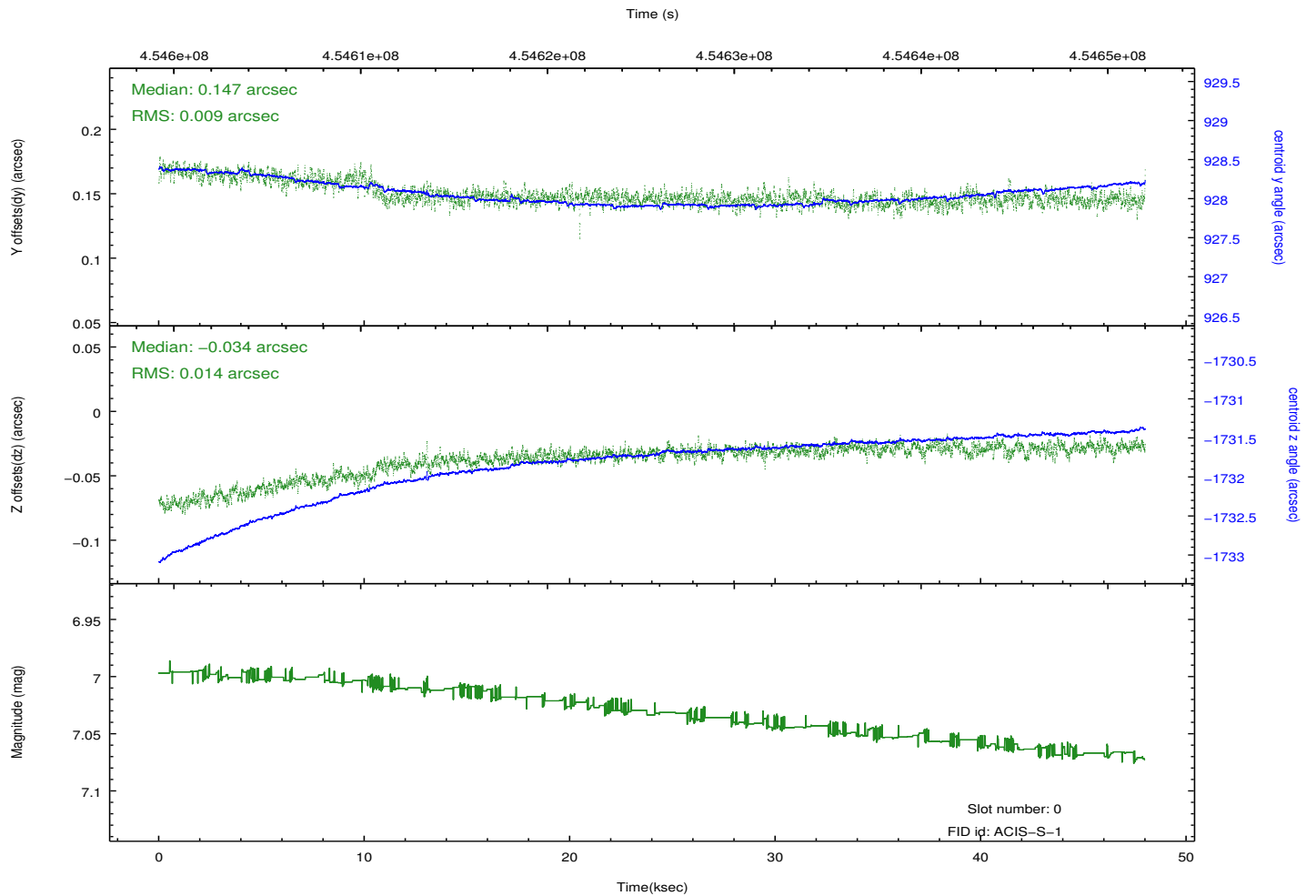
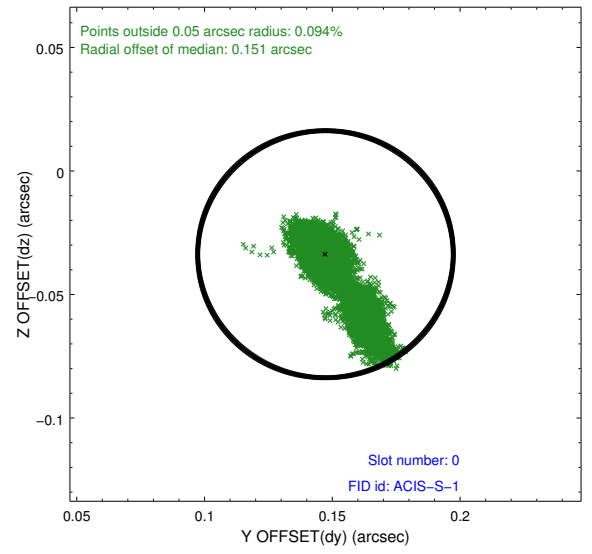
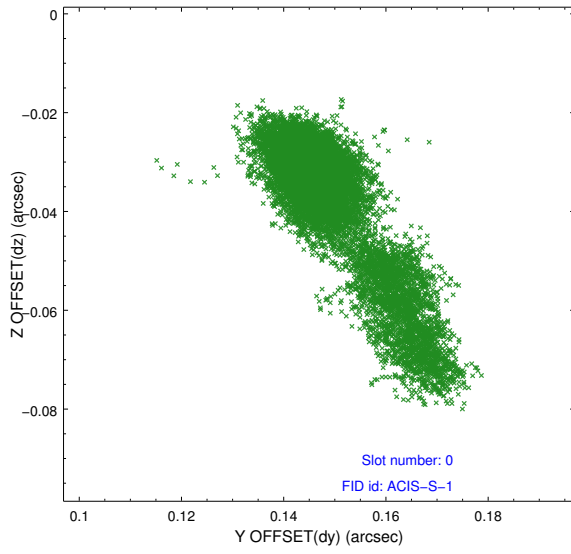


## 2.4.5 Slot 7

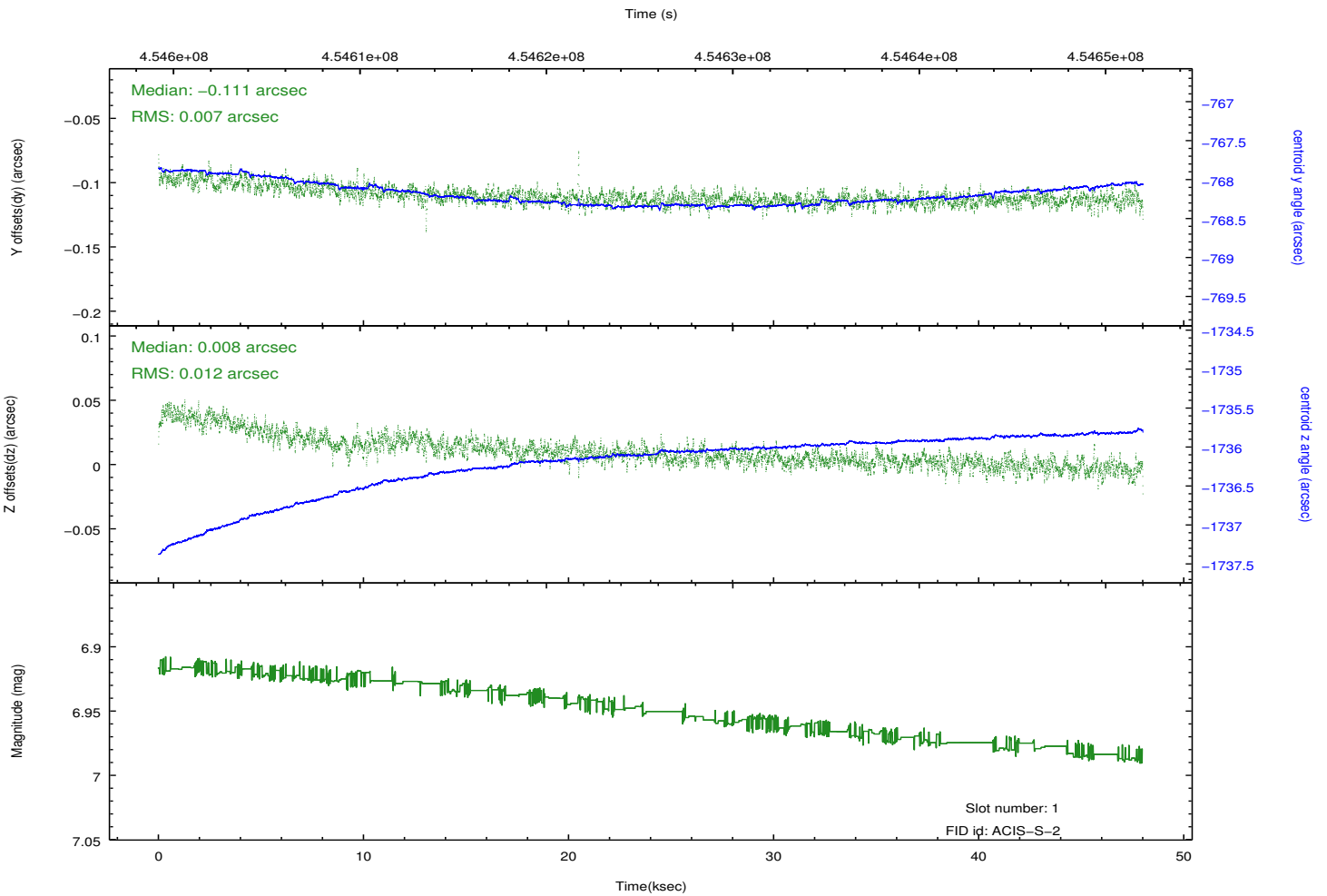
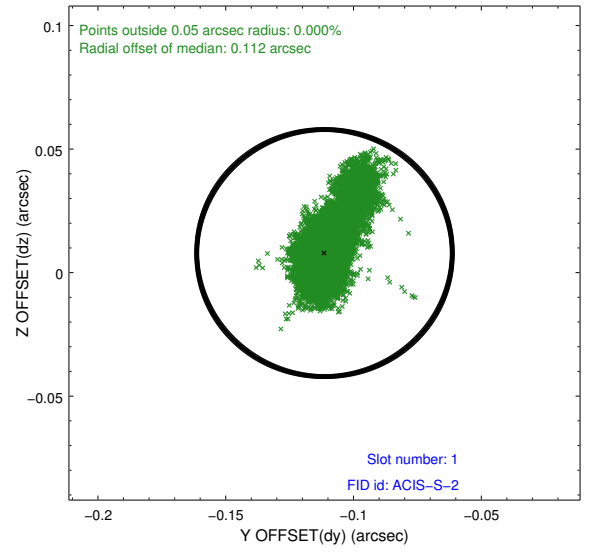
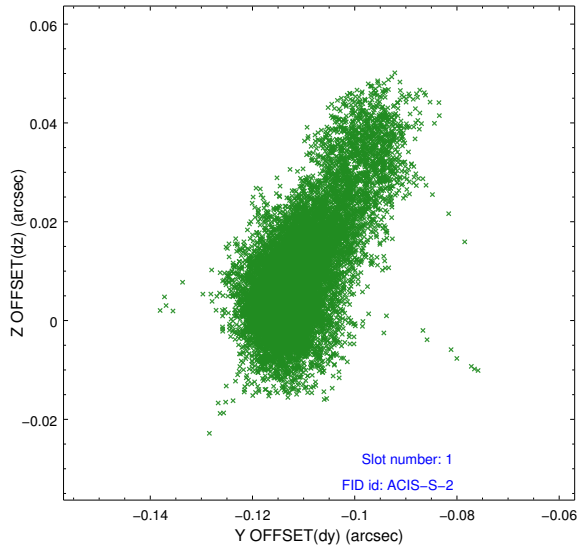


## 2.5 FID Slots

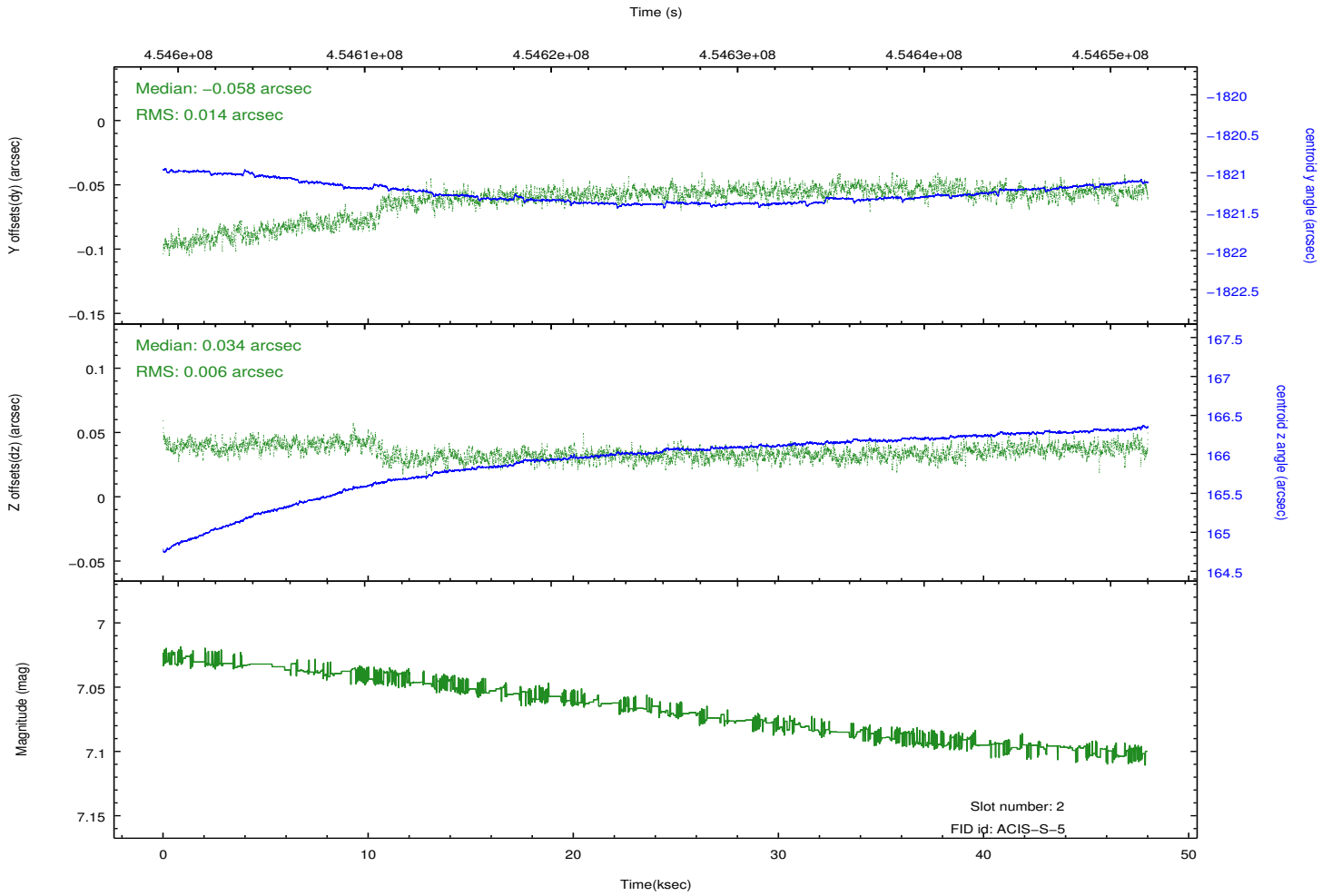
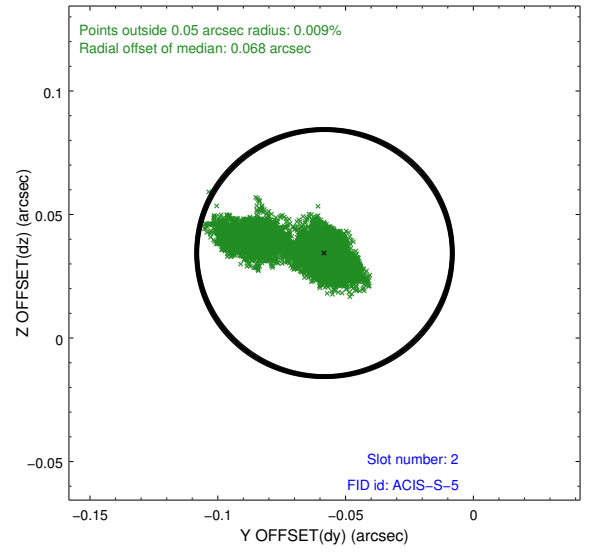
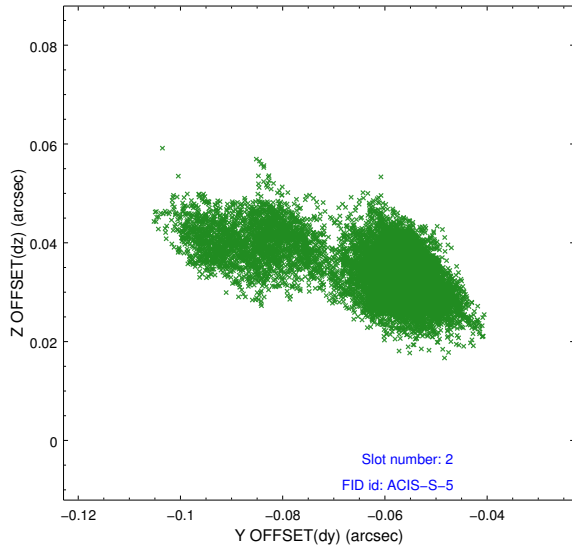
### 2.5.1 Slot 0



## 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)	2012.06.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	47.850528135955

## A.2 Comments

This observation was interrupted by safing of the telescope. The observation was interrupted at 2012-05-29T:03:33:29 GMT, approximately 2 ksec before the scheduled end of the obsid.

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Roll preference met.