

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 7493 - L2 Version 2  
Chandra X-Ray Center

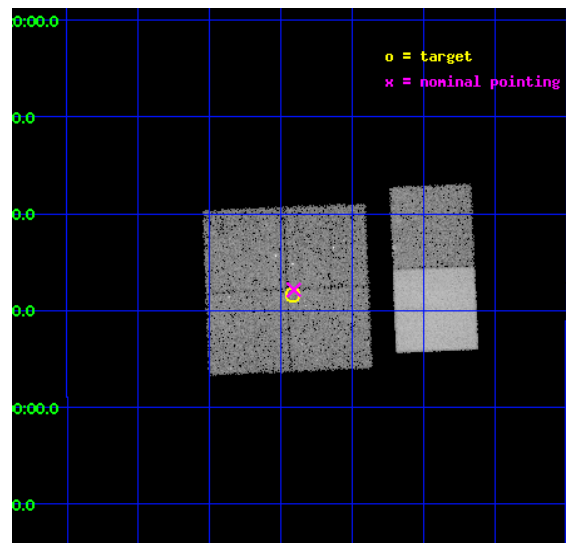
L2 Processing Date : May 10 2012

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# 1 Front

seq_num	400603	Sequence number
obs_id	7493	Observation id
title	Using Chandra to investigate the X-ray properties of the enigmatic, bipolar TeV source HESS J1841-053	Proposal title
observer	Dr. Gerd Puehlhofer	Principal investigator
object	HESS J1841-053-SW	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	279.854167	Observer's specified target RA [deg]
dec_targ	-5.805556	Observer's specified target Dec [deg]
ra_nom	279.85209431242	Nominal RA [deg]
dec_nom	-5.7977592862544	Nominal Dec [deg]
roll_nom	87.637792623031	Nominal Roll [deg]
revision	2	Processing version of data
ontime	19529.558956981	Sum of GTIs [s]
livetime	19282.263922179	Livetime [s]
ontime0	19532.799927294	Sum of GTIs [s]
ontime1	19532.799927294	Sum of GTIs [s]
ontime2	19532.799927294	Sum of GTIs [s]
ontime3	19529.558956981	Sum of GTIs [s]
ontime6	19532.799927294	Sum of GTIs [s]
ontime7	19532.799927294	Sum of GTIs [s]
l2events	142227	Number of level 2 events

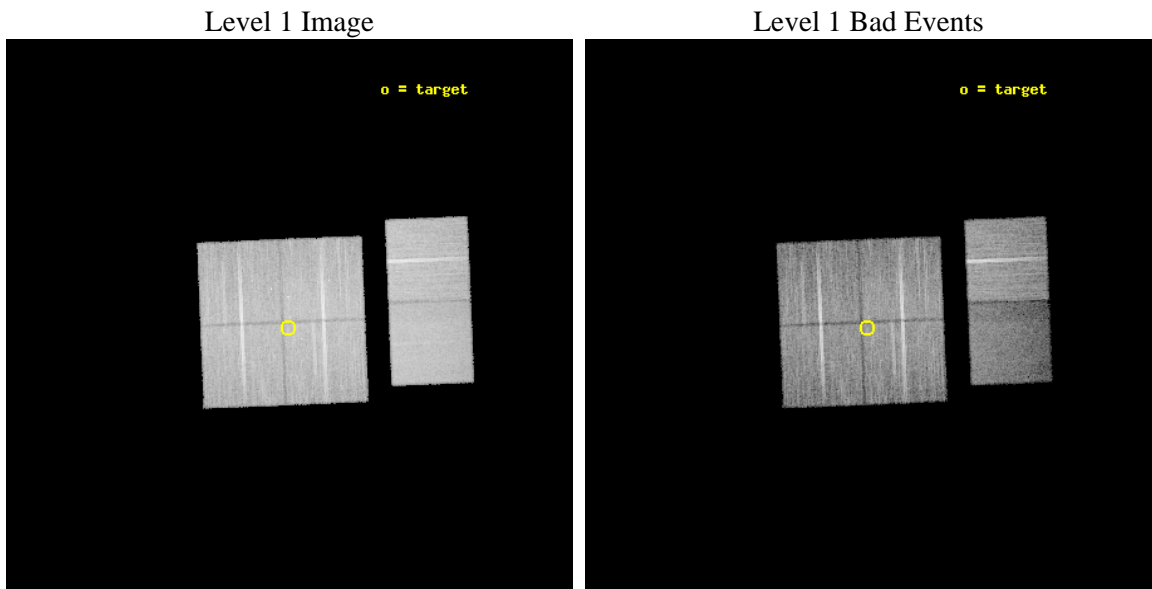




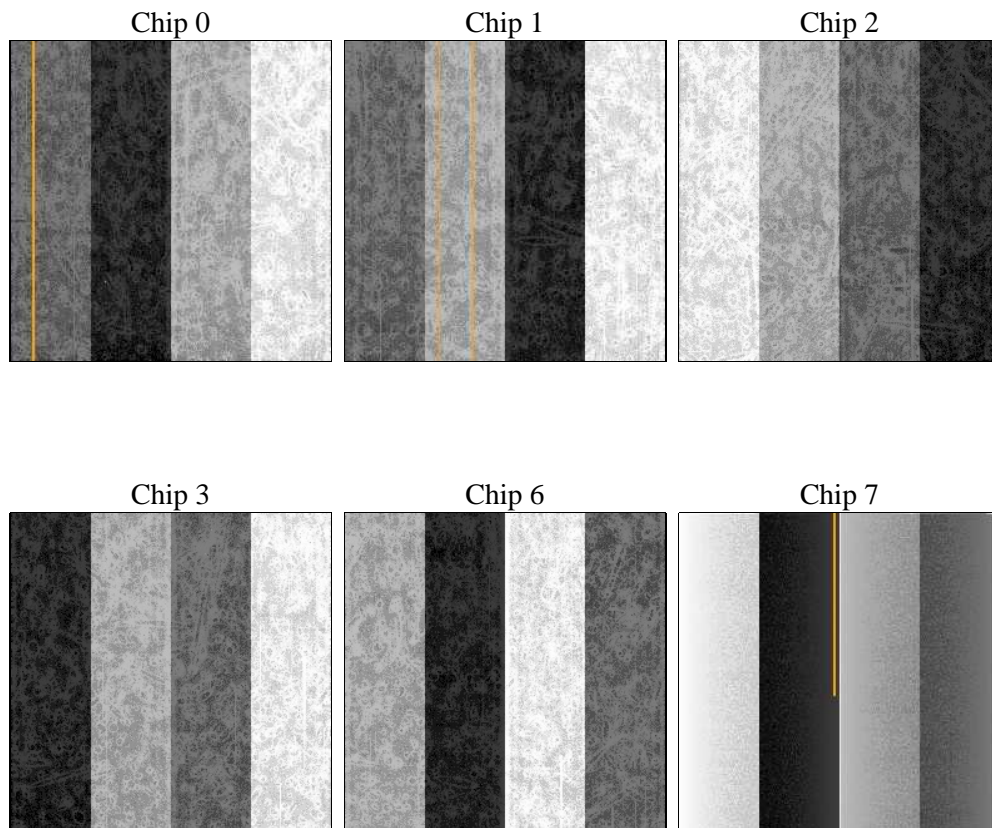
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19396.379000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	19529.558956981	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime0	19532.799927294	Sum of GTIs [s]
date	2012-05-10T23:02:56	Date and time of file creation	ontime1	19532.799927294	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	19532.799927294	Sum of GTIs [s]
			ontime3	19529.558956981	Sum of GTIs [s]
			ontime6	19532.799927294	Sum of GTIs [s]
			ontime7	19532.799927294	Sum of GTIs [s]
			l1events	857209	Number of level 1 events

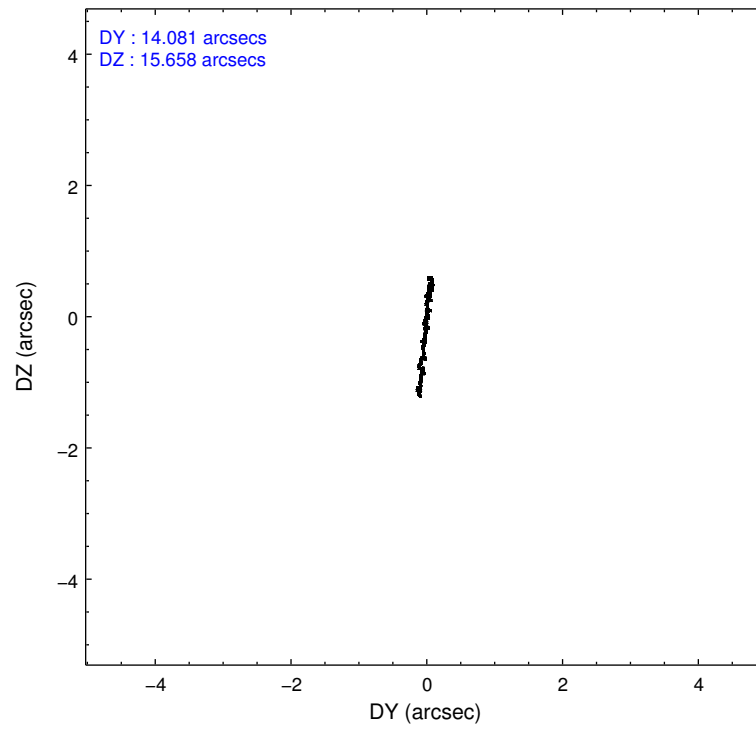
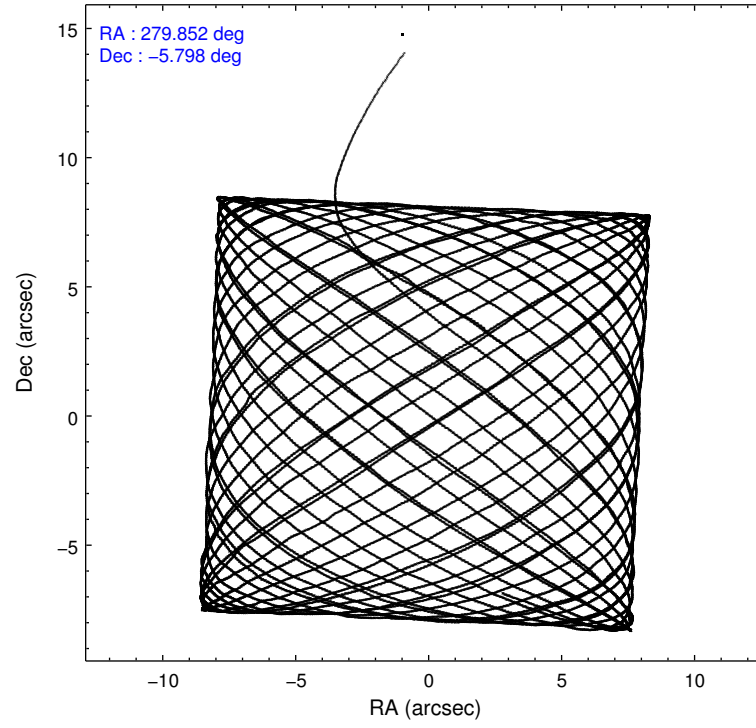
### 2.1.4 Events

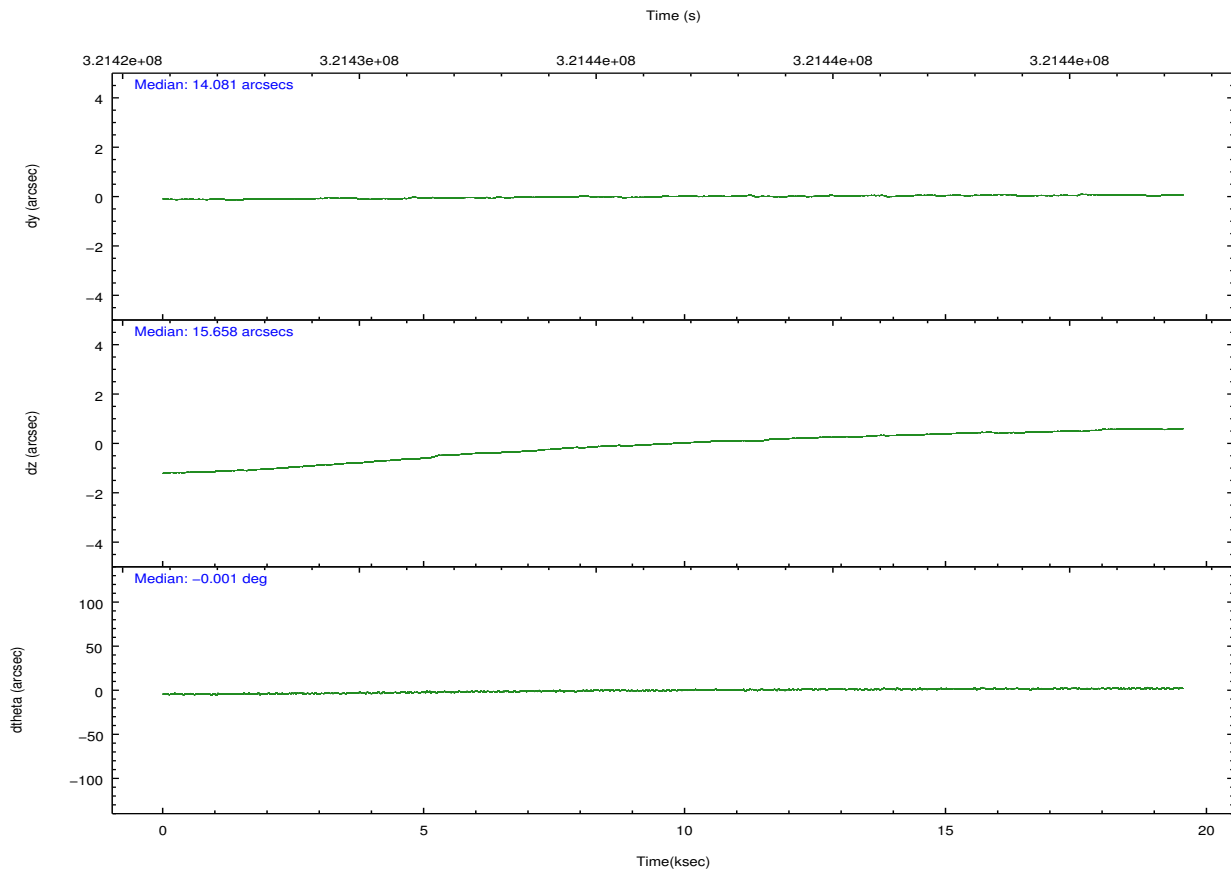
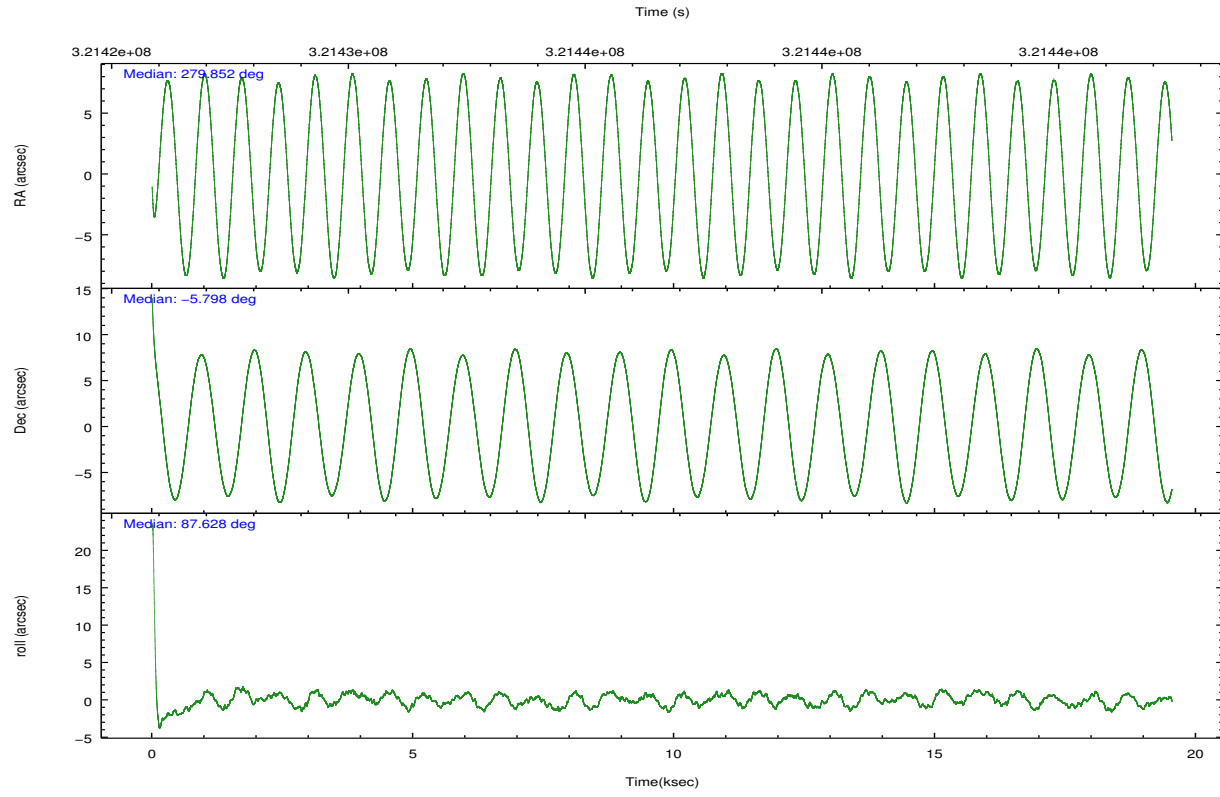
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	134355	130909	154624	142378	151770	143173	grade 0 events	7951	7371	7274	6777	6845	7597
rejected events	116602	113423	137933	126667	135154	69743		5%	5%	4%	4%	4%	5%
rejected %	86%	86%	89%	88%	89%	48%	grade 1 events	103	82	80	100	94	227
								0%	0%	0%	0%	0%	0%
							grade 2 events	3847	3616	3591	3173	3589	15534
								2%	2%	2%	2%	2%	10%
							grade 3 events	1726	1778	1621	1622	1571	7017
								1%	1%	1%	1%	1%	4%
							grade 4 events	1595	1734	1590	1527	1579	6827
								1%	1%	1%	1%	1%	4%
							grade 5 events	4263	4723	3864	5033	5090	14695
								3%	3%	2%	3%	3%	10%
							grade 6 events	2697	3067	2671	2656	3096	36730
								2%	2%	1%	1%	2%	25%
							grade 7 events	112173	108538	133933	121490	129906	54546
								83%	82%	86%	85%	85%	38%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	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	279.864997	279.8520943124199	Subarray requested	NONE	NONE
[deg] Pointing Dec	-5.822061	-5.797759286254379	Alternating exposures requested	N	N
[deg] Pointing Roll	87.430396	87.637792623031	[s] Primary exposure time	0.000000	3.2
[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)	321427001.184000	321425915.41377			
Observation start date	2008-03-09T05:15:36	2008-03-09T04:58:35			
[s] Observation end time (MET)	321446397.184000	321446634.25227			
Observation end date	2008-03-09T10:38:52	2008-03-09T10:43:54			
Read mode	TIMED	TIMED			

## 2.3 Aspect



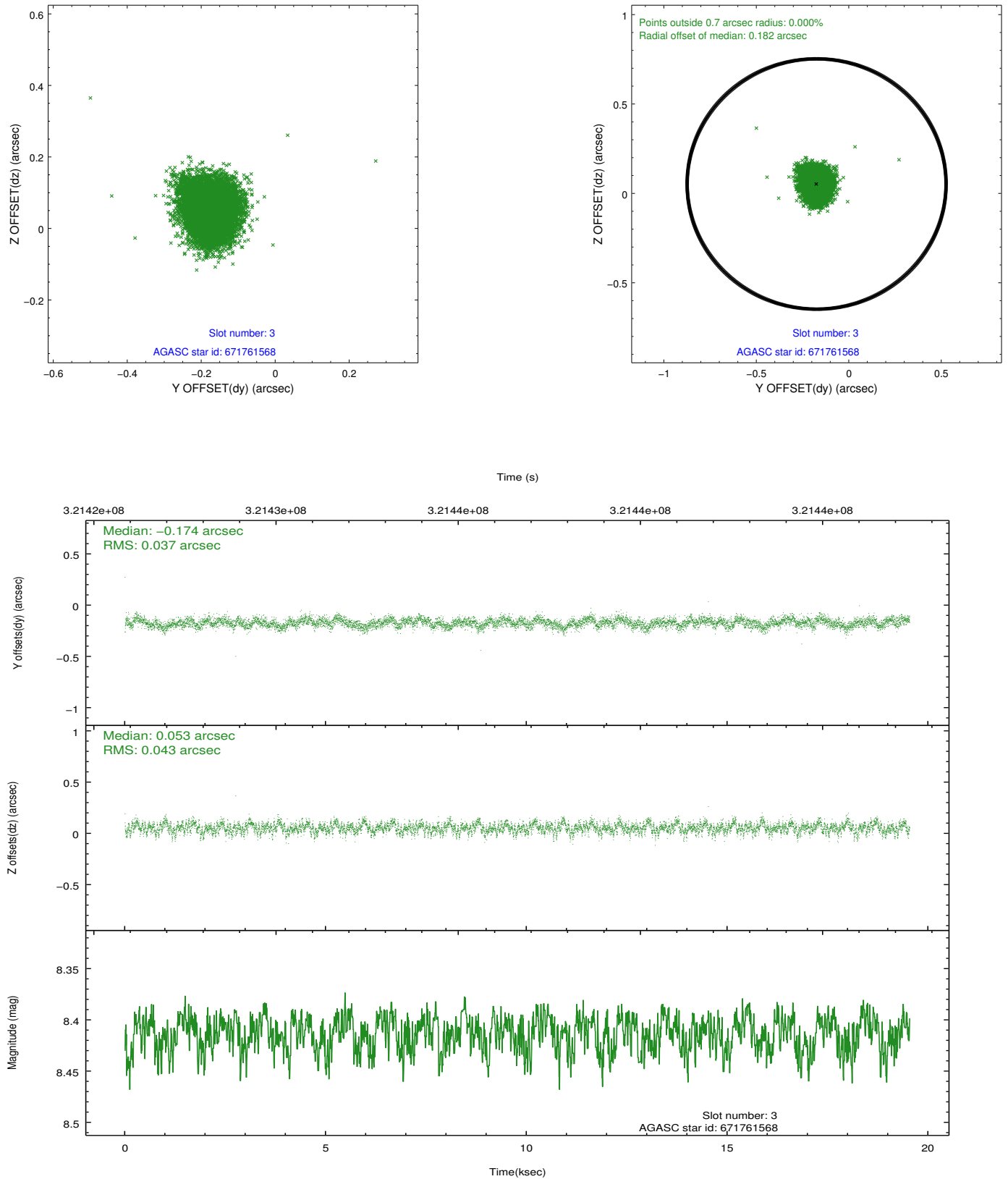


### Slot Statistics

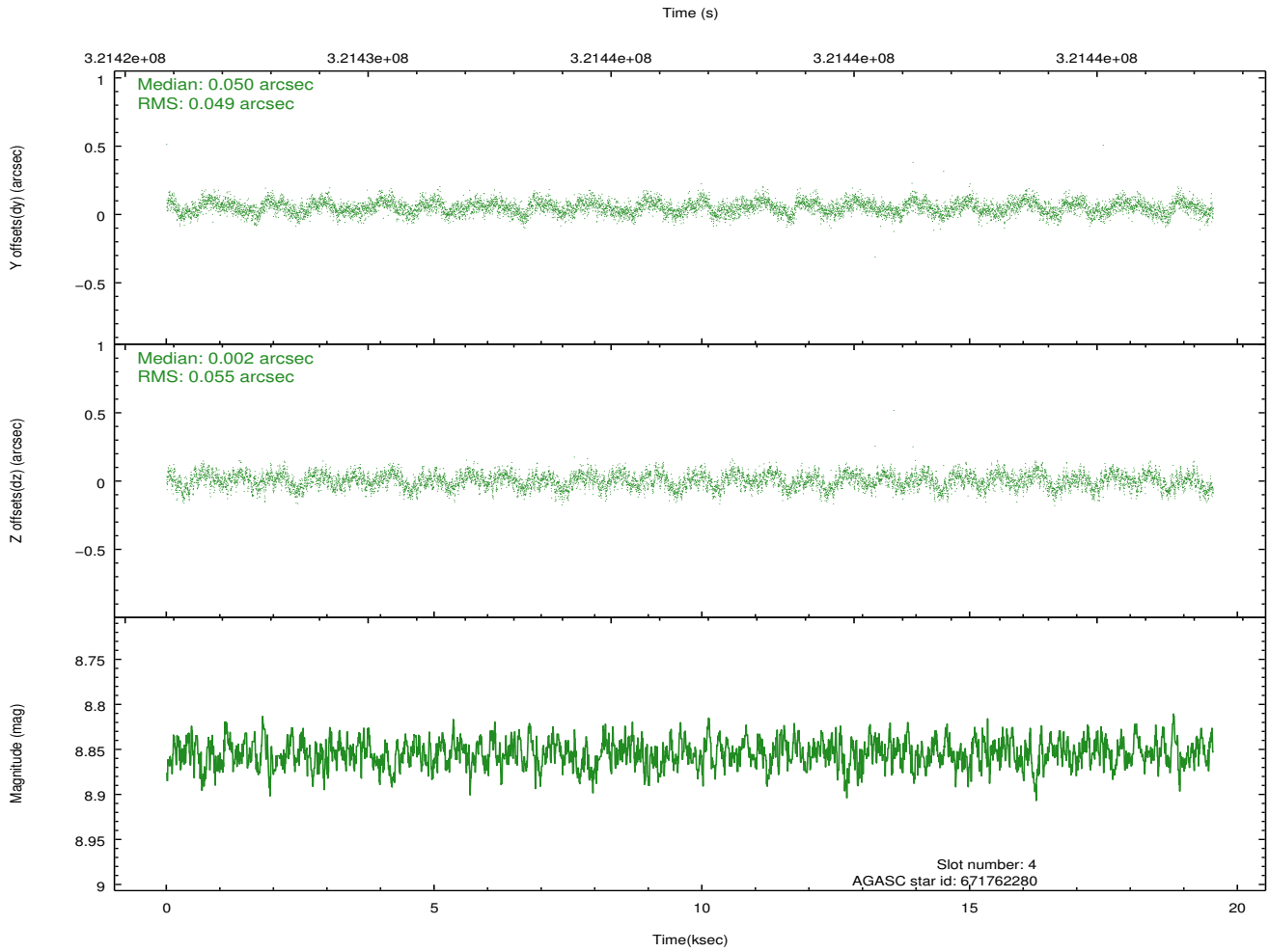
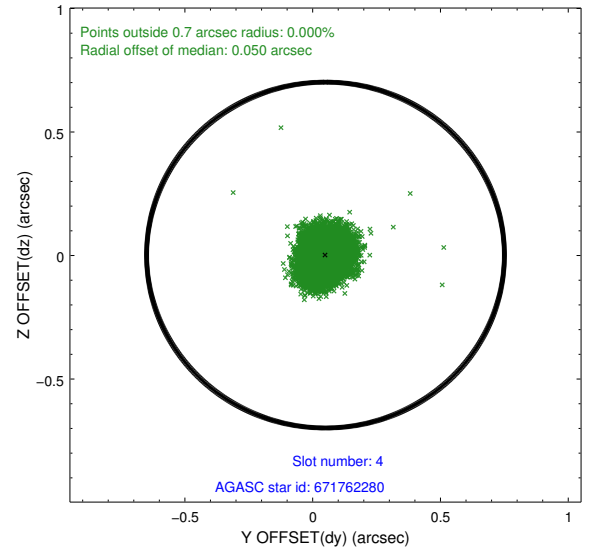
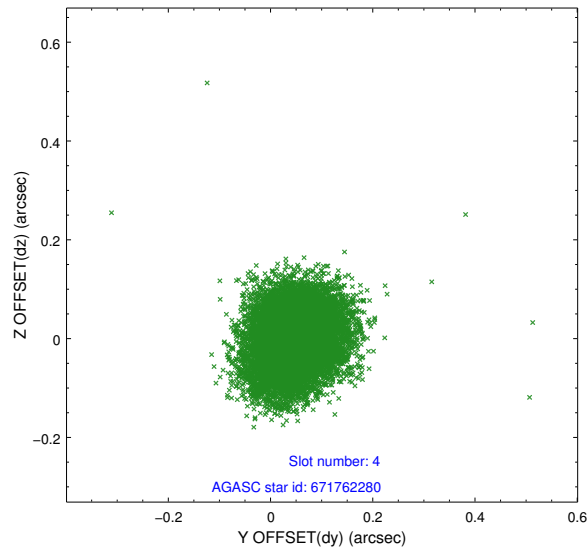
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.23	4766	0.058	-0.055	0.022	0.056	0.000000	0.000000	925.46	-839.20
1	FID	ACIS-I-5	7.22	4766	-0.217	0.052	0.012	0.018	0.000000	0.000000	-1822.79	1058.33
2	FID	ACIS-I-6	7.23	4766	0.069	0.070	0.015	0.038	0.000000	0.000000	390.84	1703.04
3	GUIDE	671761568	8.41	9528	-0.174	0.053	0.060	0.099	280.250283	-5.657644	653.03	-1351.85
4	GUIDE	671762280	8.86	9523	0.050	0.002	0.079	0.125	280.028746	-5.773981	199.08	-578.47
5	GUIDE	671763744	7.52	9533	-0.080	-0.058	0.054	0.087	280.132895	-5.707615	454.73	-939.91
6	GUIDE	671634008	7.20	9533	0.176	-0.320	0.062	0.098	279.178009	-6.421976	-2269.47	2357.72
7	GUIDE	671758624	9.19	9527	0.025	0.322	0.100	0.160	280.543949	-5.927318	-270.57	-2444.89

## 2.4 Star Slots

### 2.4.1 Slot 3

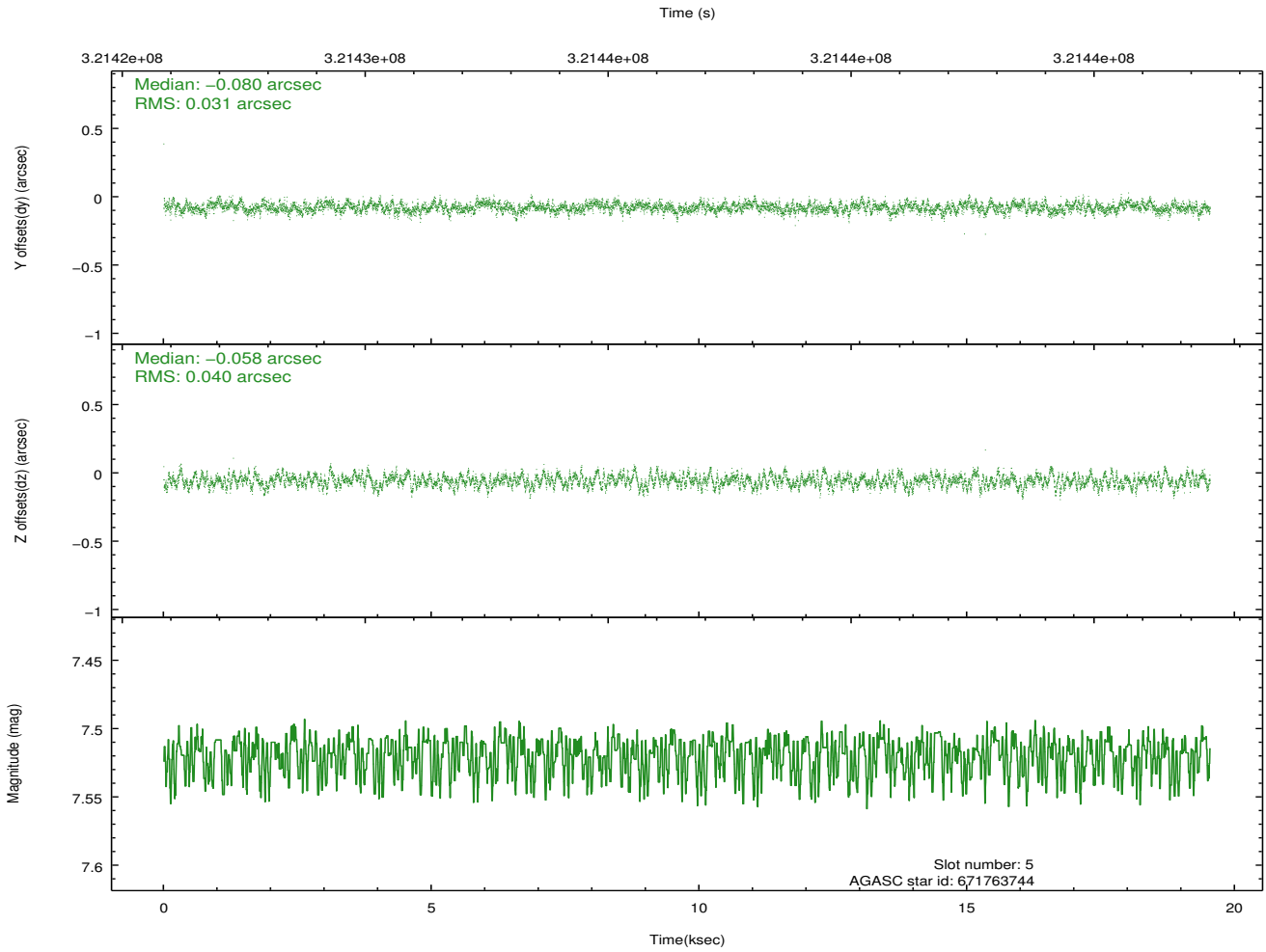
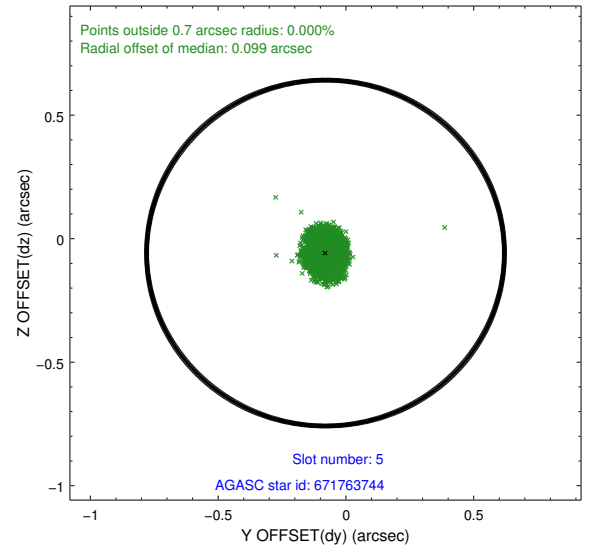
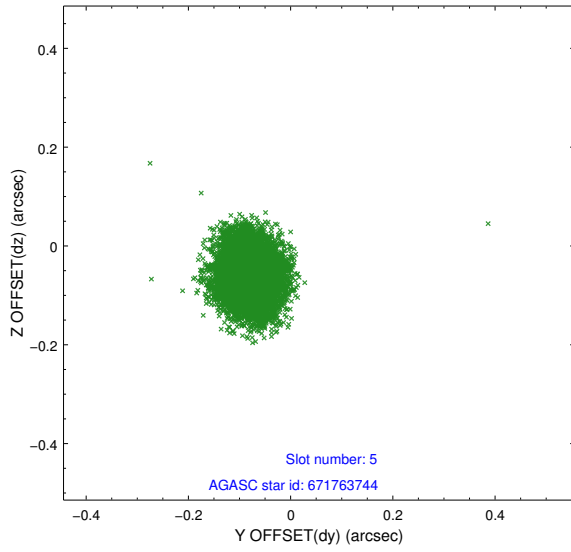


## 2.4.2 Slot 4

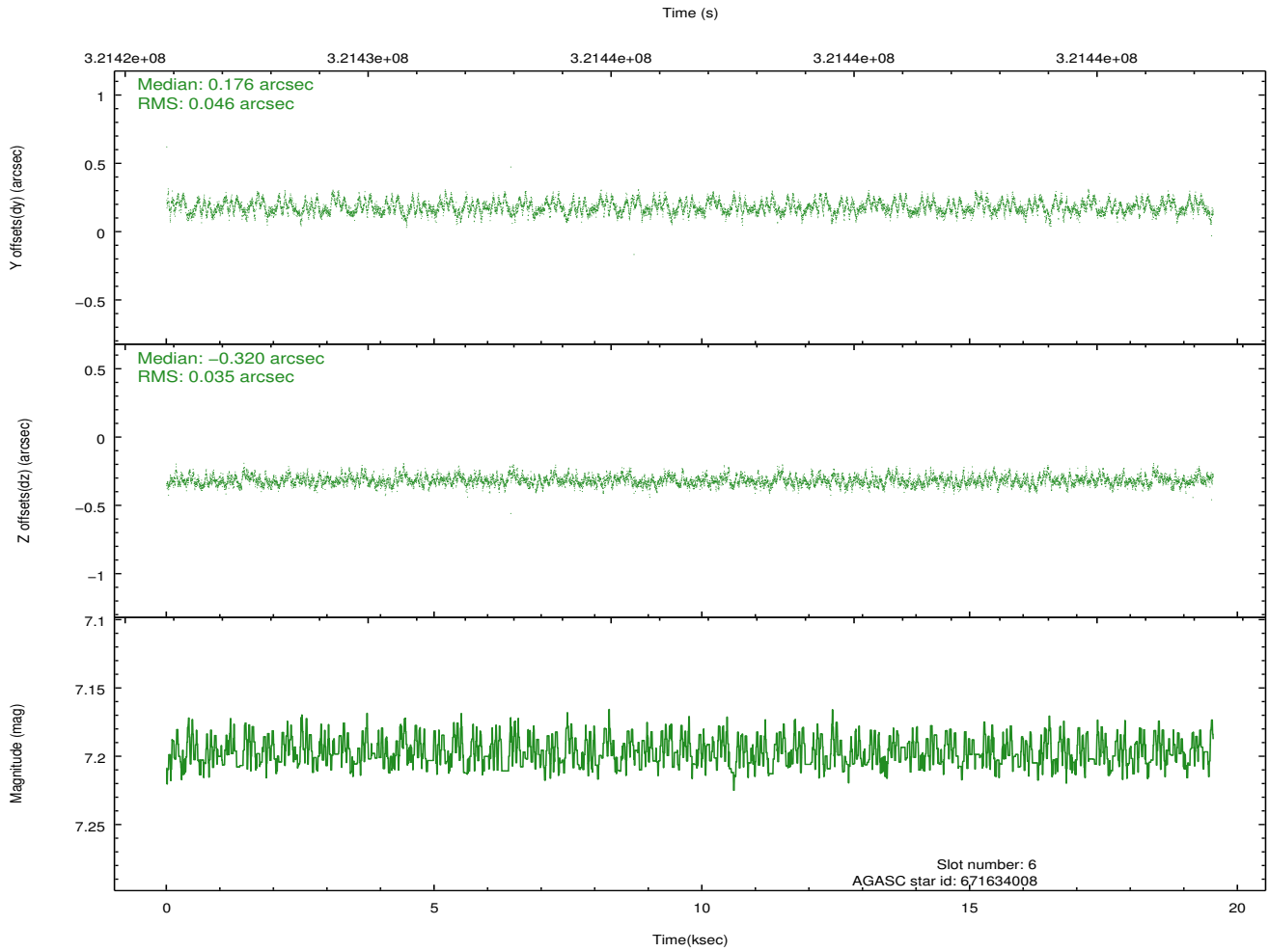
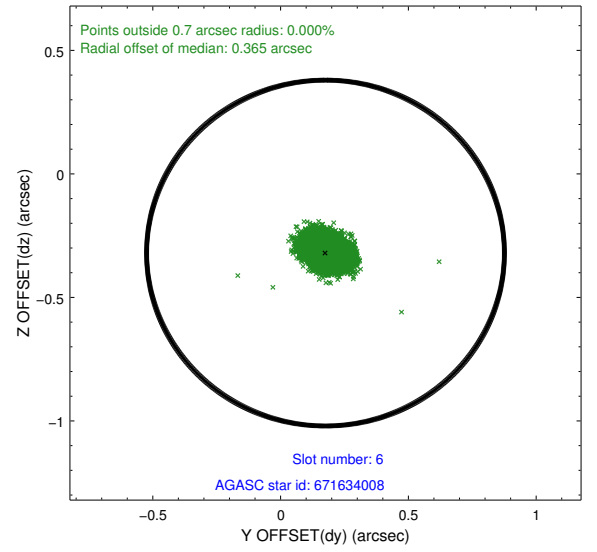
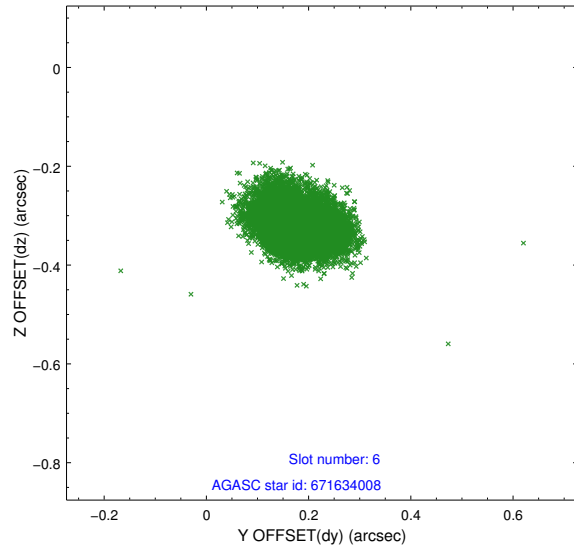




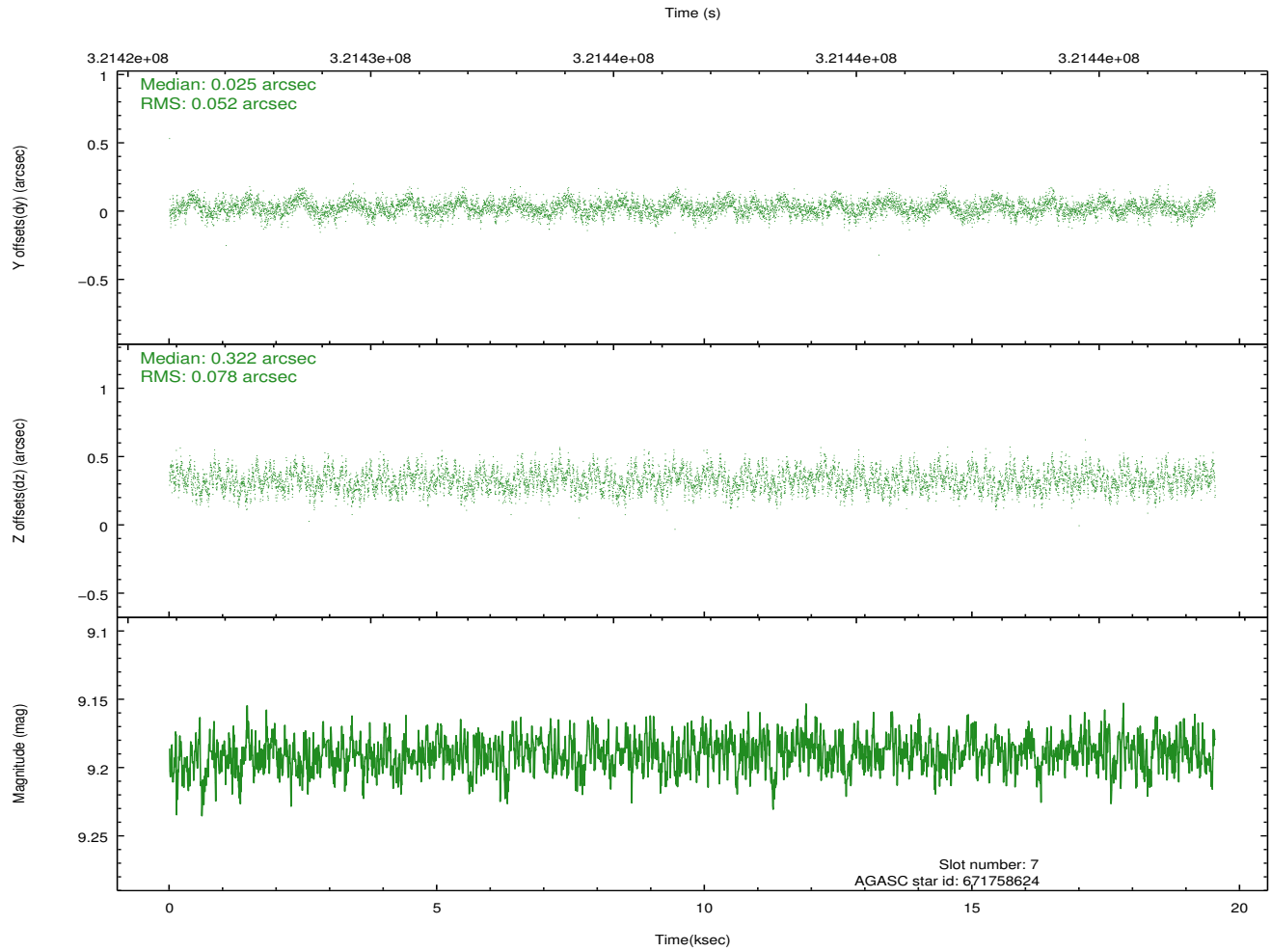
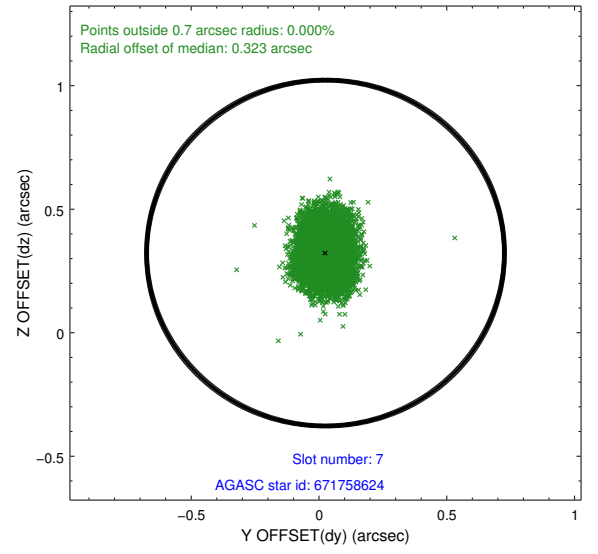
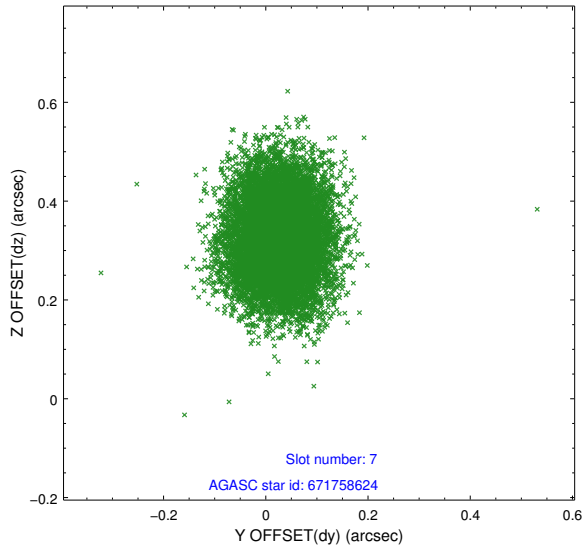
### 2.4.3 Slot 5



## 2.4.4 Slot 6

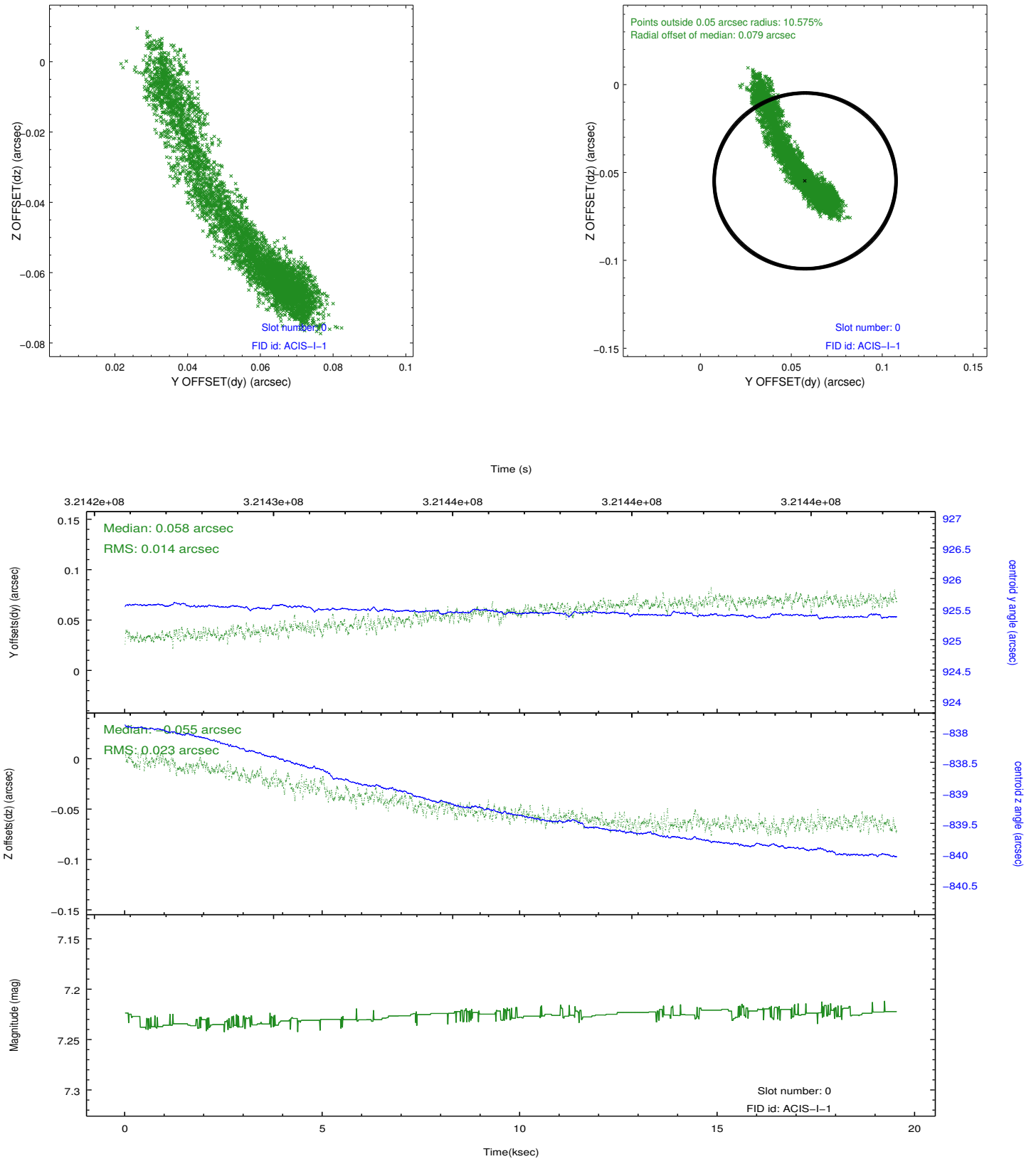


## 2.4.5 Slot 7

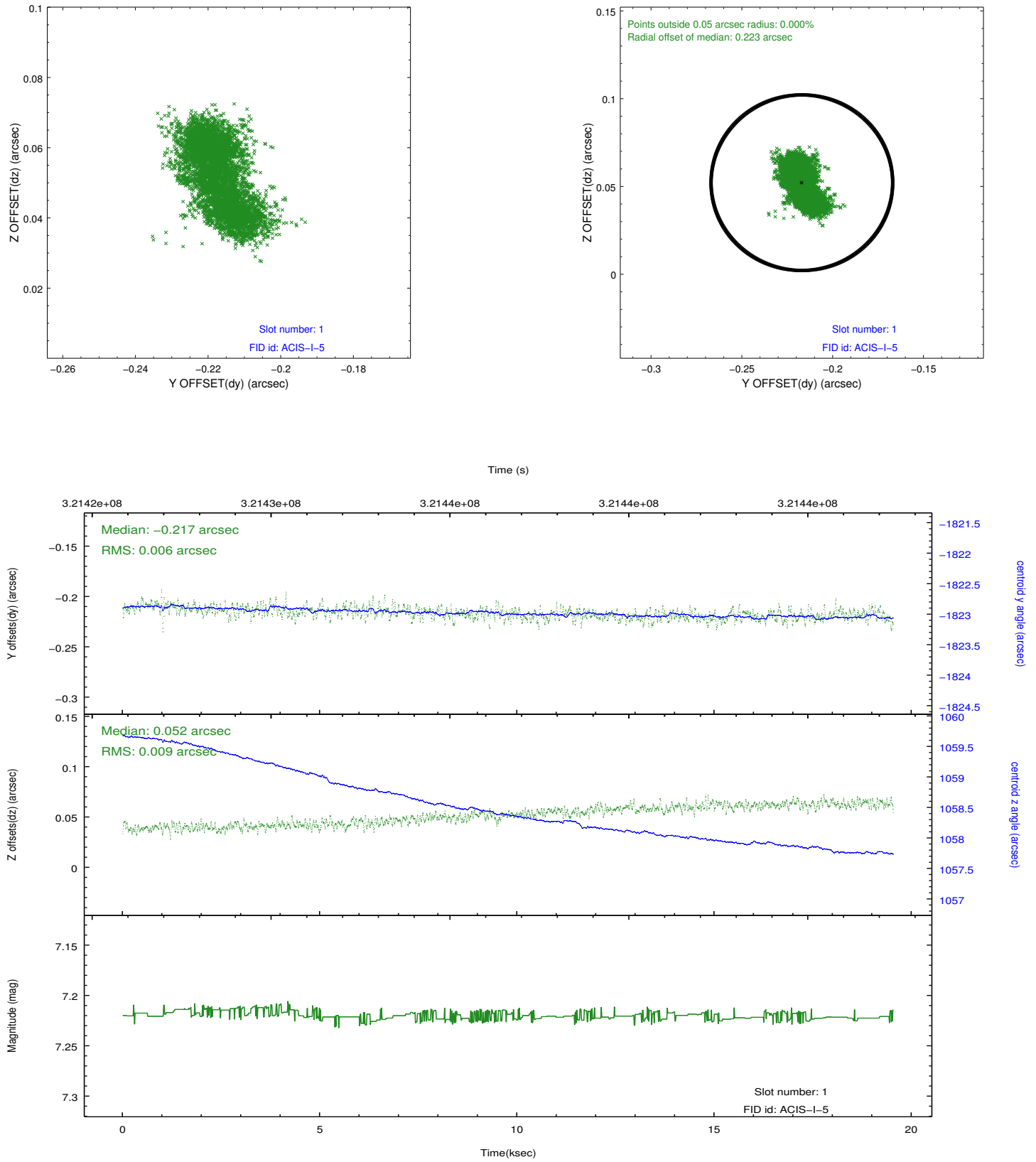


## 2.5 FID Slots

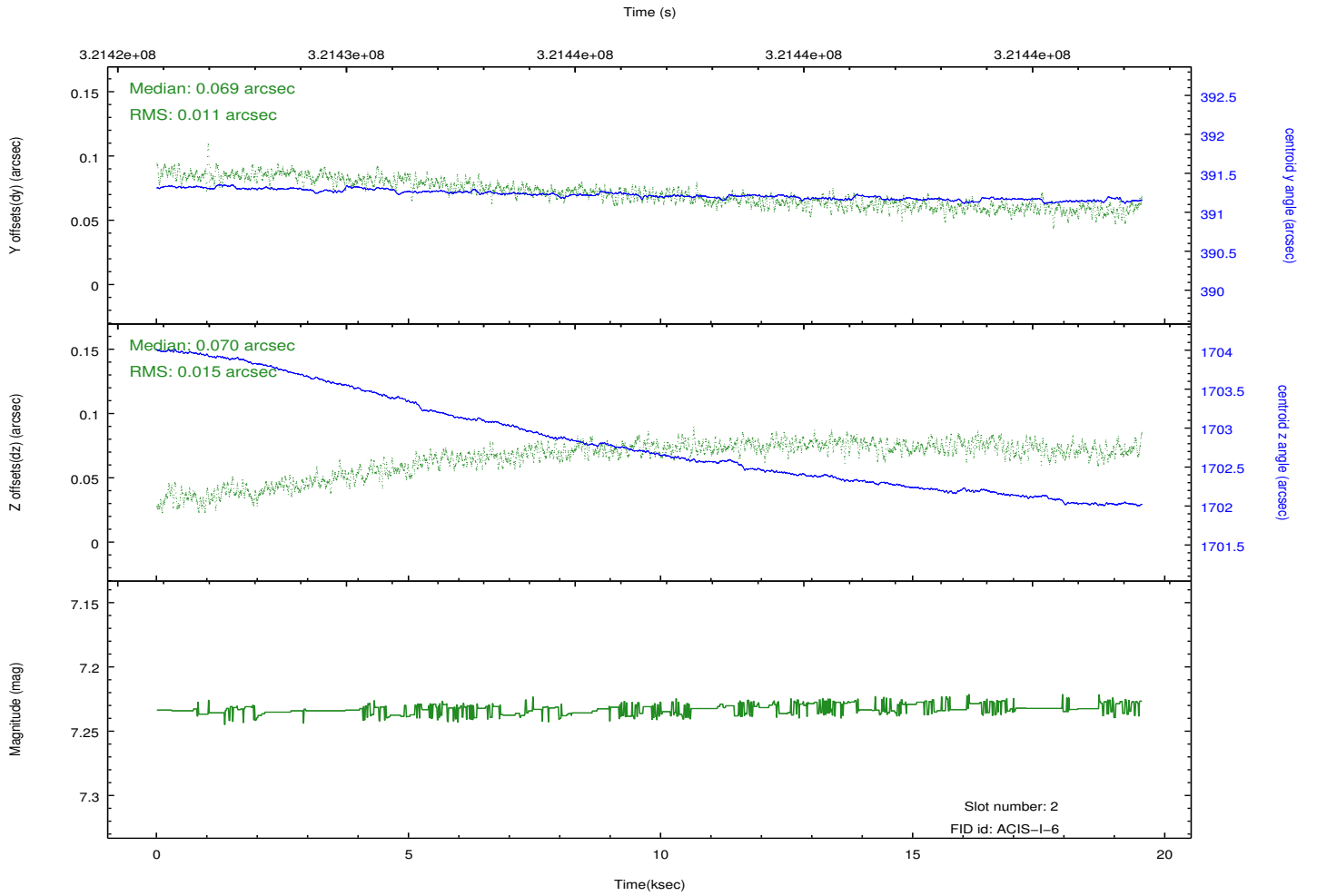
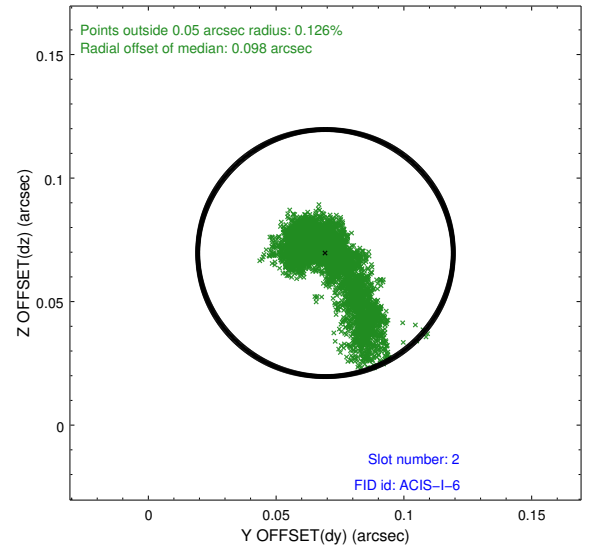
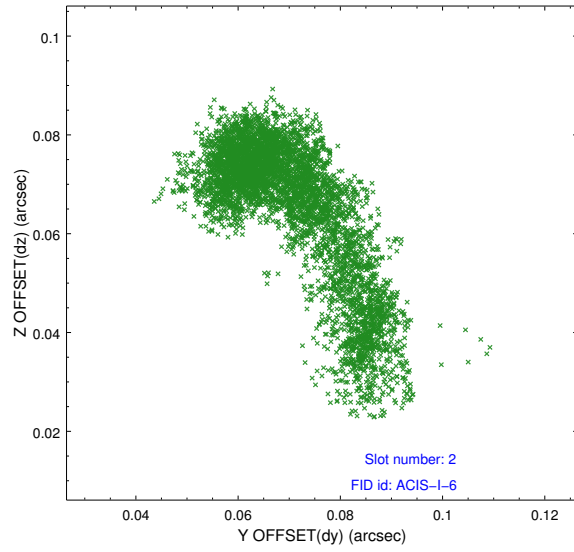
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.05.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.5295589

### A.2 Comments