

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 10258 - L2 Version 2  
Chandra X-Ray Center

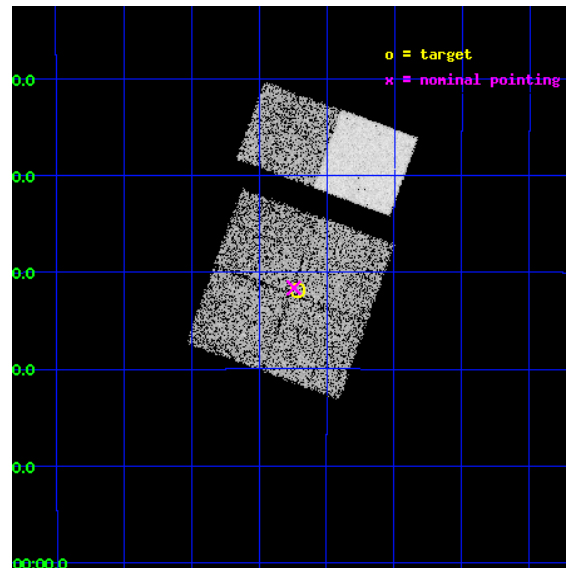
L2 Processing Date : May 30 2012

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# 1 Front

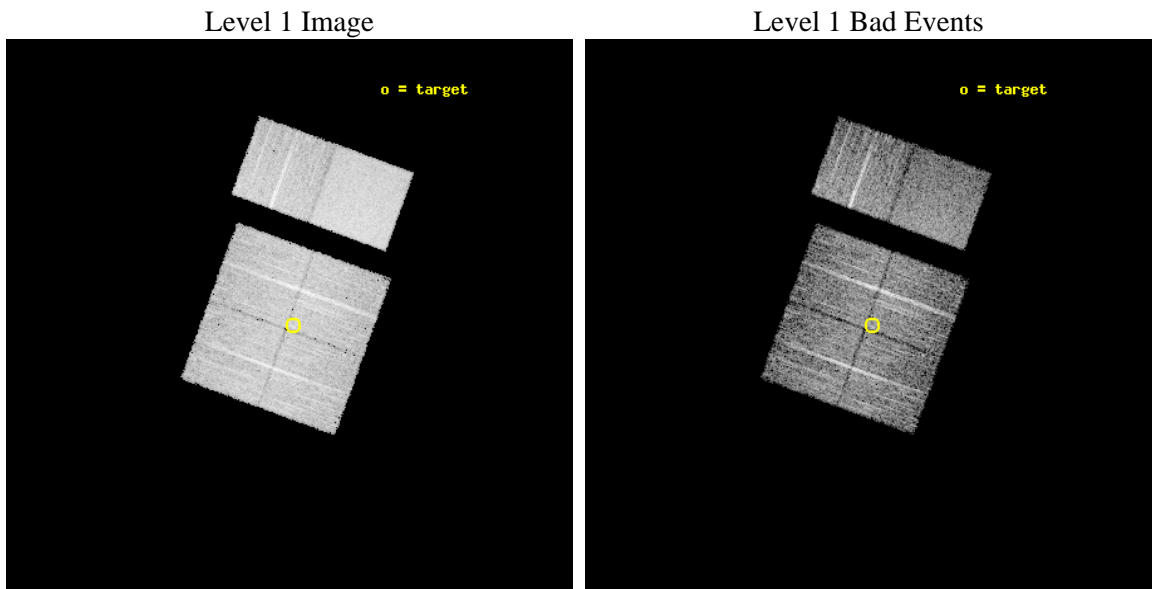
seq_num	701801	Sequence number
obs_id	10258	Observation id
title	Zeroing in on the sources of Ultrahigh Energy Cosmic Rays	Proposal
observer	Prof. Glennys Farrar	Principal investigator
object	ESO 565-G006	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	141.80375	Observer's specified target RA [deg]
dec_targ	-19.531806	Observer's specified target Dec [deg]
ra_nom	141.81047442779	Nominal RA [deg]
dec_nom	-19.526851466563	Nominal Dec [deg]
roll_nom	20.009159005087	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5142.3999809027	Sum of GTIs [s]
livetime	5077.283815963	Livetime [s]
ontime0	5142.3999809027	Sum of GTIs [s]
ontime1	5142.3999809027	Sum of GTIs [s]
ontime2	5142.3999809027	Sum of GTIs [s]
ontime3	5142.3999809027	Sum of GTIs [s]
ontime6	5142.3999809027	Sum of GTIs [s]
ontime7	5142.3999809027	Sum of GTIs [s]
l2events	58015	Number of level 2 events



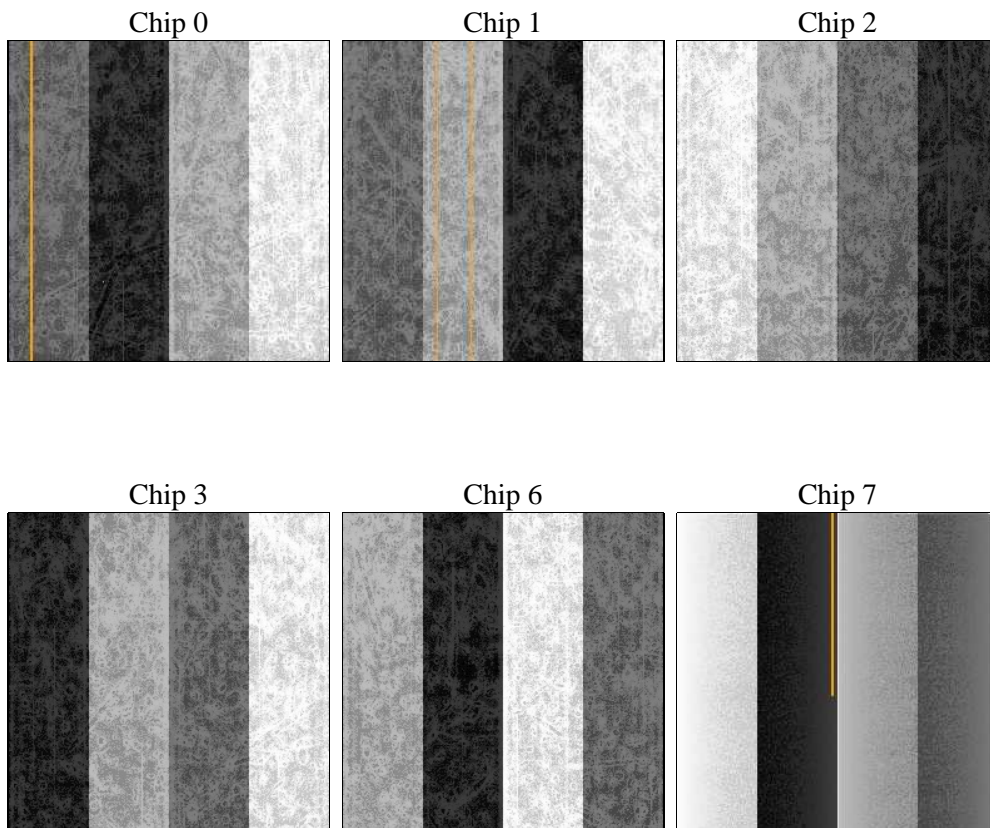
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	5000.877000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	5142.3999809027	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime0	5142.3999809027	Sum of GTIs [s]
date	2012-05-30T05:50:53	Date and time of file creation	ontime1	5142.3999809027	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	5142.3999809027	Sum of GTIs [s]
			ontime3	5142.3999809027	Sum of GTIs [s]
			ontime6	5142.3999809027	Sum of GTIs [s]
			ontime7	5142.3999809027	Sum of GTIs [s]
			l1events	344831	Number of level 1 events

### 2.1.4 Events

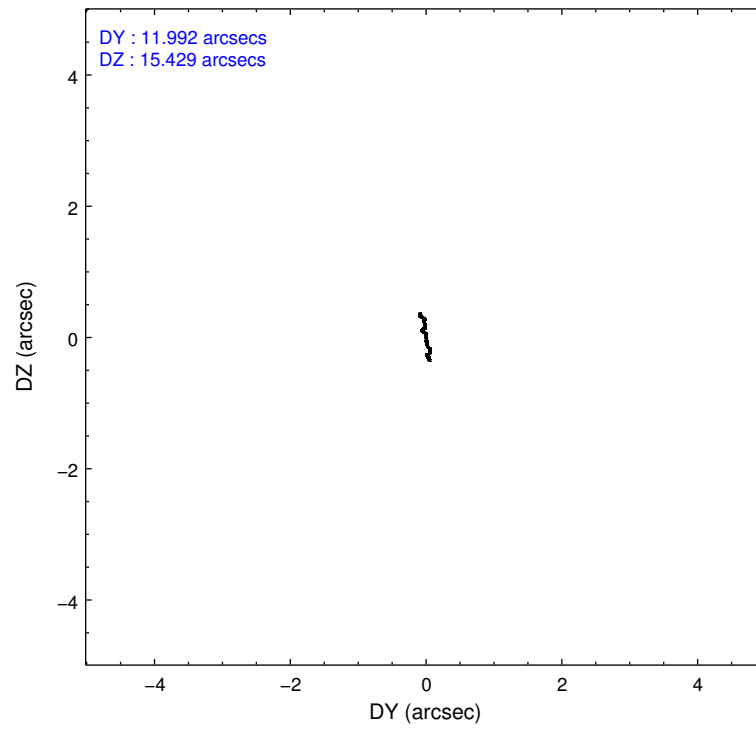
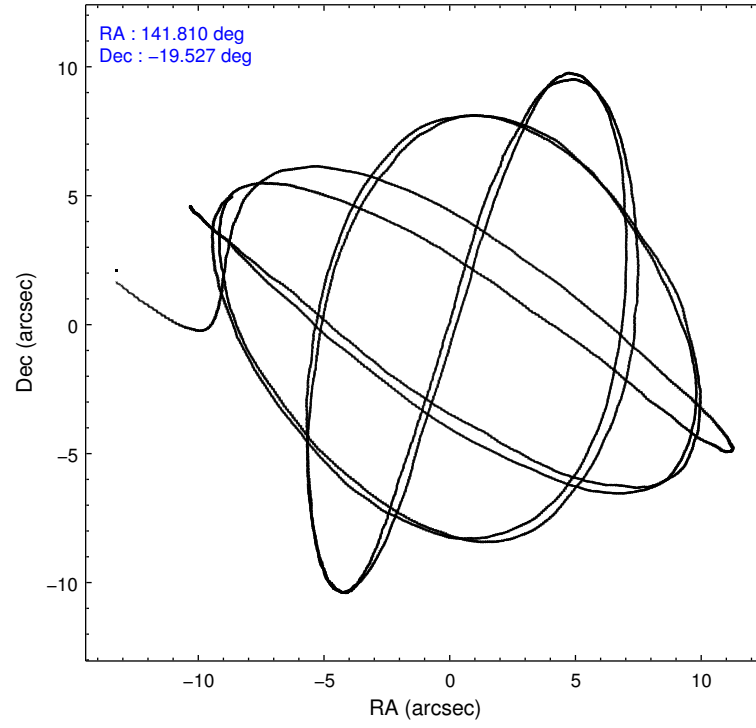
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	52010	51941	53039	54306	56826	76709	grade 0 events	2821	2812	2806	2920	2574	2744
rejected events	45449	44981	46833	47868	50329	46015		5%	5%	5%	5%	4%	3%
rejected %	87%	86%	88%	88%	88%	59%	grade 1 events	36	28	34	45	29	78
								0%	0%	0%	0%	0%	0%
							grade 2 events	1518	1733	1394	1319	1560	6446
								2%	3%	2%	2%	2%	8%
							grade 3 events	718	670	604	648	643	2671
								1%	1%	1%	1%	1%	3%
							grade 4 events	616	661	598	639	592	2682
								1%	1%	1%	1%	1%	3%
							grade 5 events	2334	2375	2265	2700	2738	7209
								4%	4%	4%	4%	4%	9%
							grade 6 events	1180	1392	1096	1188	1409	17533
								2%	2%	2%	2%	2%	22%
							grade 7 events	42787	42270	44242	44847	47281	37346
								82%	81%	83%	82%	83%	48%

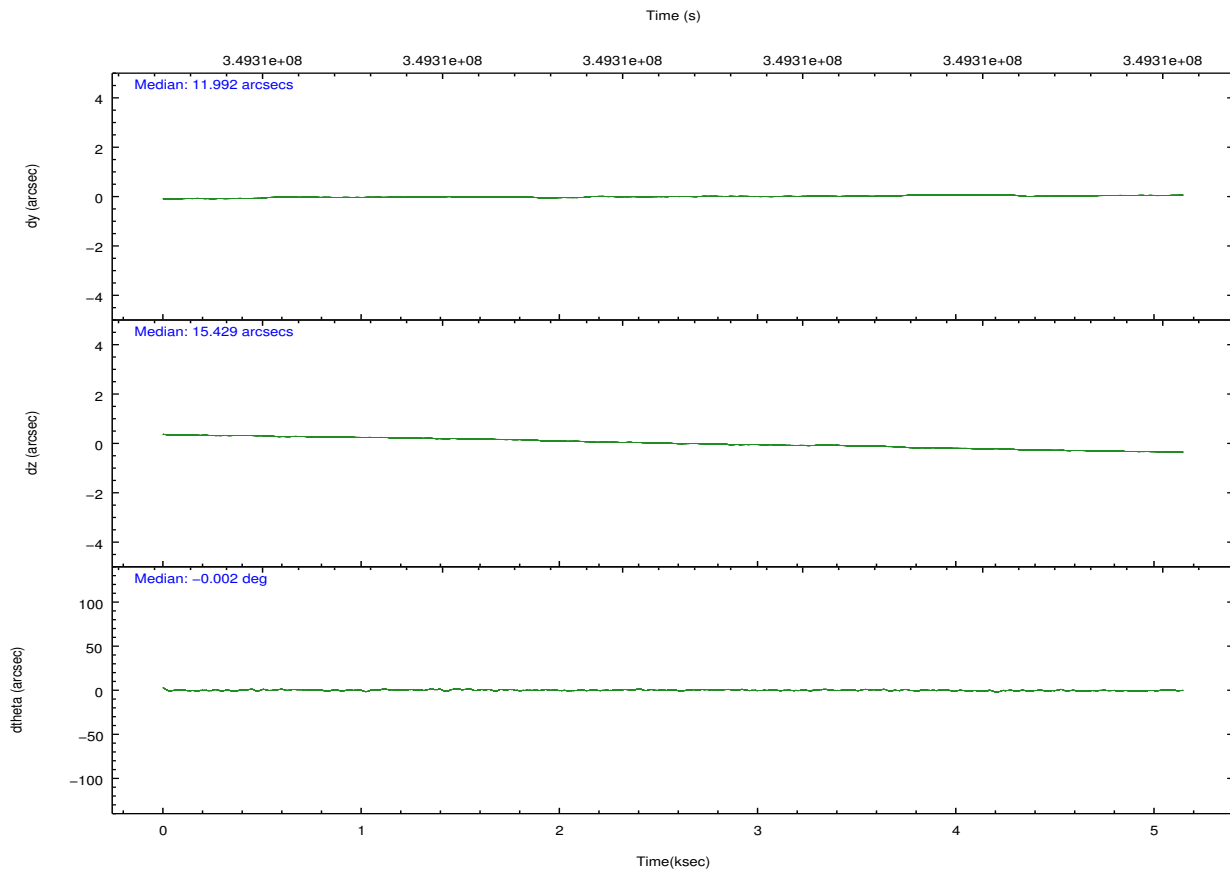
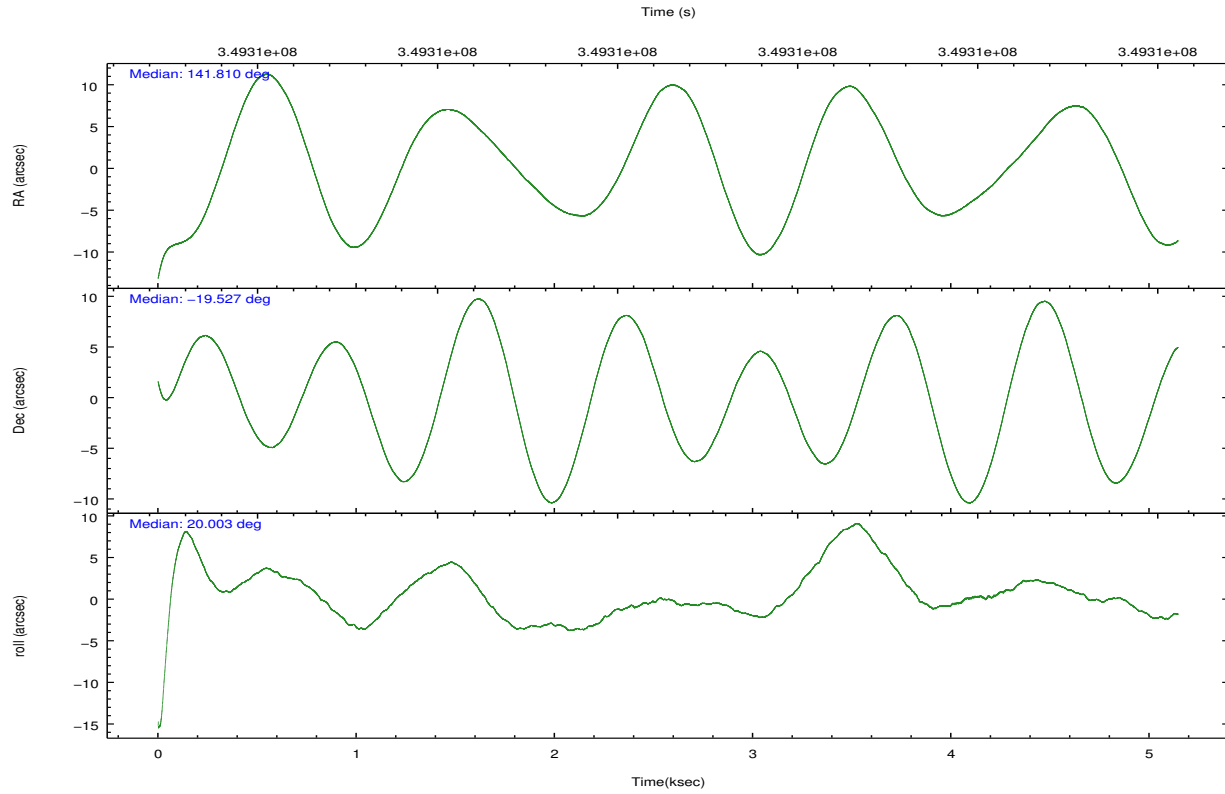


## 2.2 Compared Parameters

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	FAINT	FAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	141.791911	141.8104744277924	CCD I2 on	Y	Y
[deg] Pointing Dec	-19.548048	-19.52685146656323	CCD I3 on	Y	Y
[deg] Pointing Roll	19.794305	20.00915900508742	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O2	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	349308850.184000	349307685.70416	CCD S5 on	N	N
Observation start date	2009-01-25T22:13:04	2009-01-25T21:54:45	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	349313851.184000	349314089.90448	On-chip summing requested	N	N
Observation end date	2009-01-25T23:36:25	2009-01-25T23:41:29	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



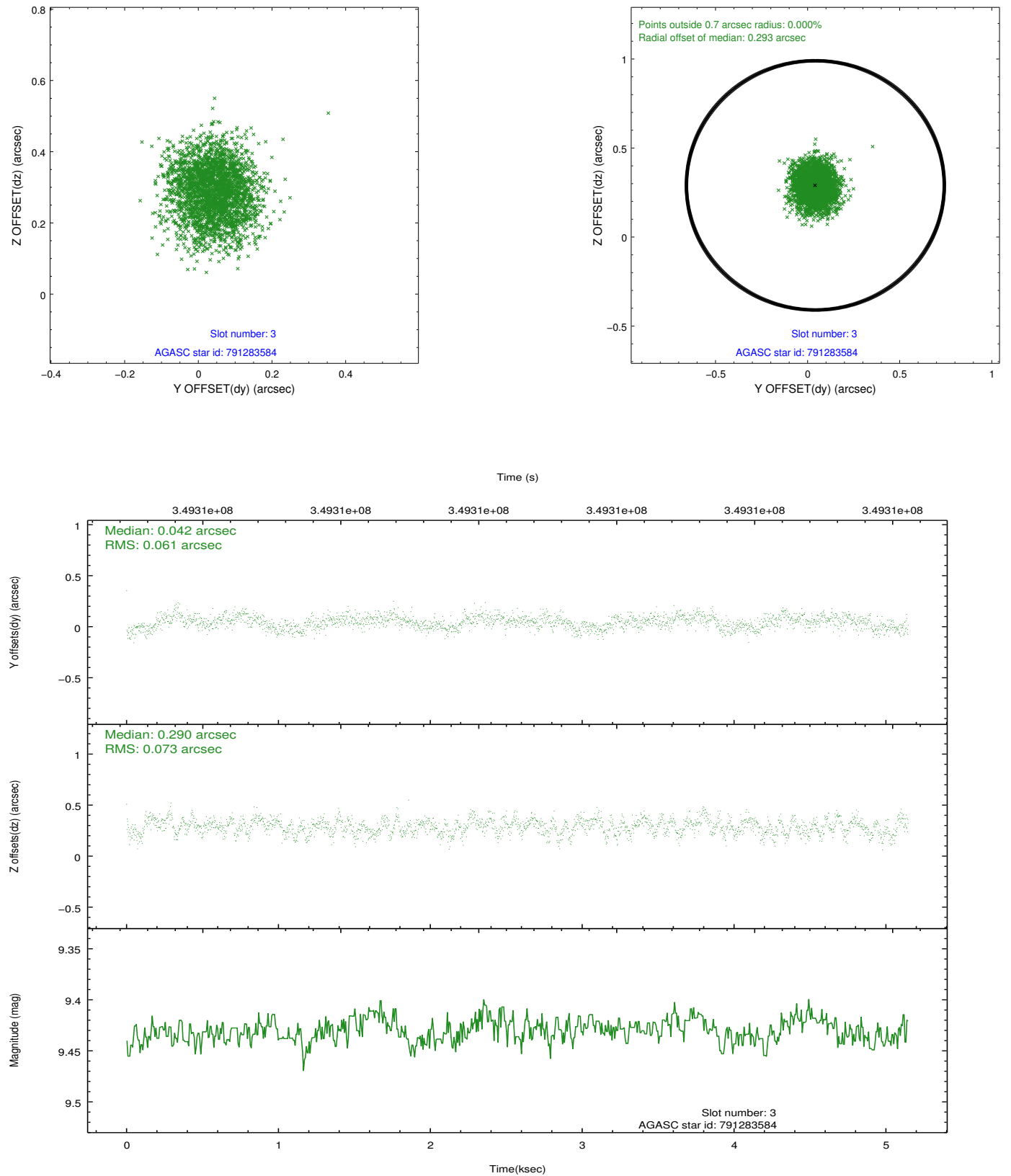


### Slot Statistics

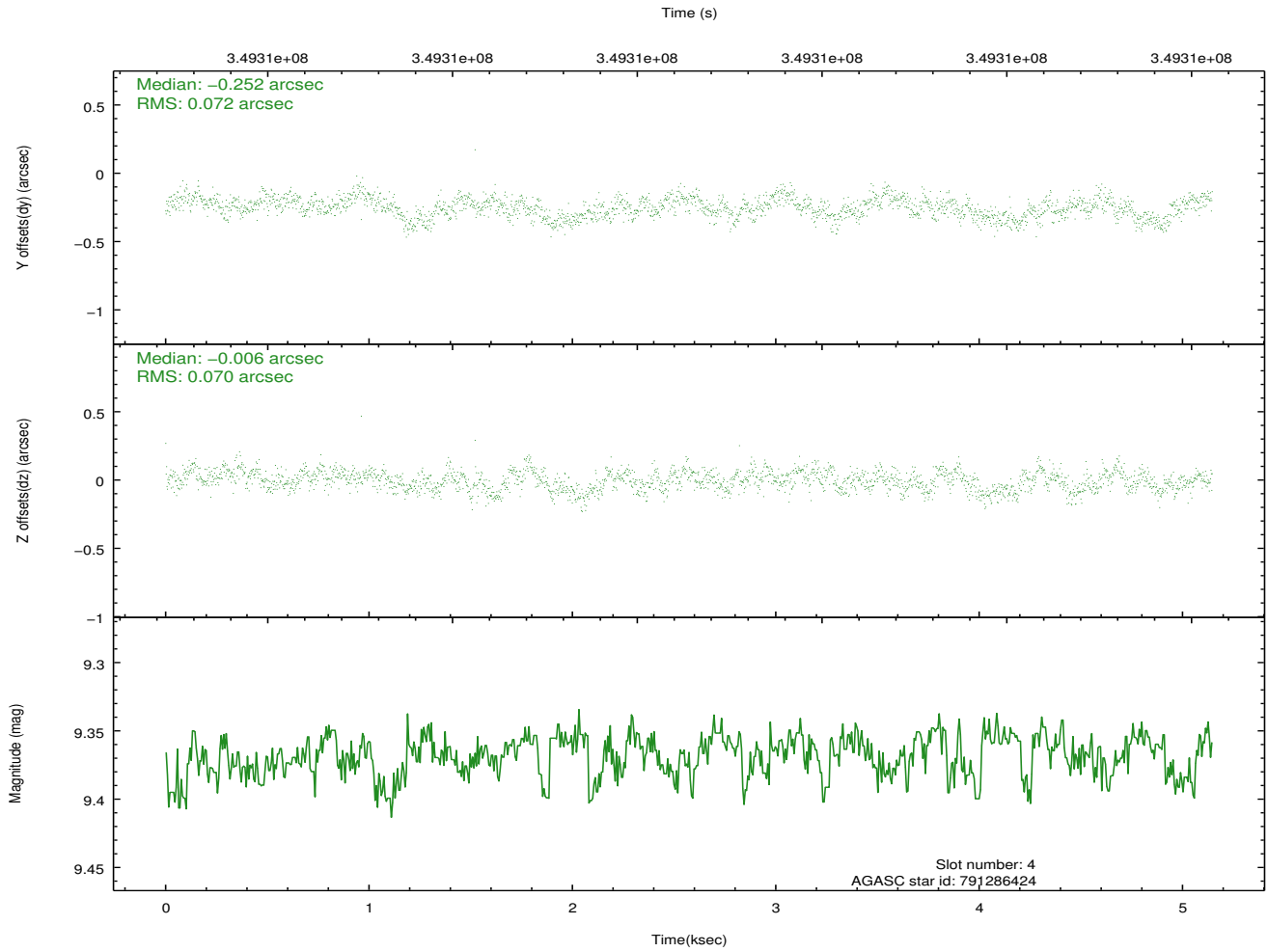
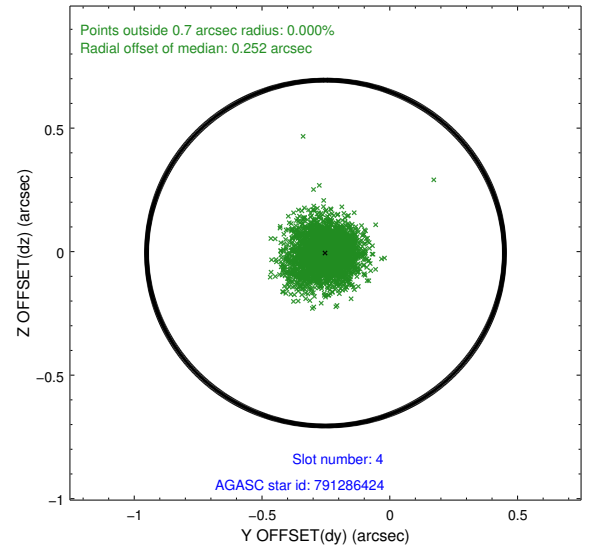
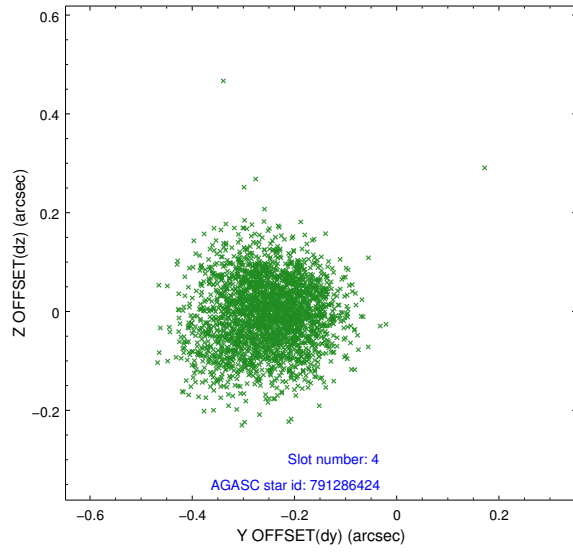
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.01	1255	-0.019	-0.019	0.019	0.033	0.000000	0.000000	927.53	-839.07
1	FID	ACIS-I-4	6.94	1254	0.130	0.046	0.013	0.023	0.000000	0.000000	2148.38	1060.21
2	FID	ACIS-I-5	7.00	1255	-0.208	0.044	0.009	0.015	0.000000	0.000000	-1819.14	1059.40
3	GUIDE	791283584	9.43	2508	0.042	0.290	0.103	0.164	141.727669	-20.112999	-892.39	-1839.95
4	GUIDE	791286424	9.37	2511	-0.252	-0.006	0.107	0.172	141.849192	-19.139782	680.80	1316.25
5	GUIDE	791287320	9.70	2504	0.274	-0.117	0.133	0.228	141.161852	-19.588743	-2060.74	582.35
6	GUIDE	791292888	7.29	2510	-0.059	-0.055	0.075	0.128	141.703794	-19.155124	196.54	1432.56
7	GUIDE	791419312	8.62	2508	-0.021	-0.110	0.095	0.148	142.556928	-19.565537	2418.81	-942.53

## 2.4 Star Slots

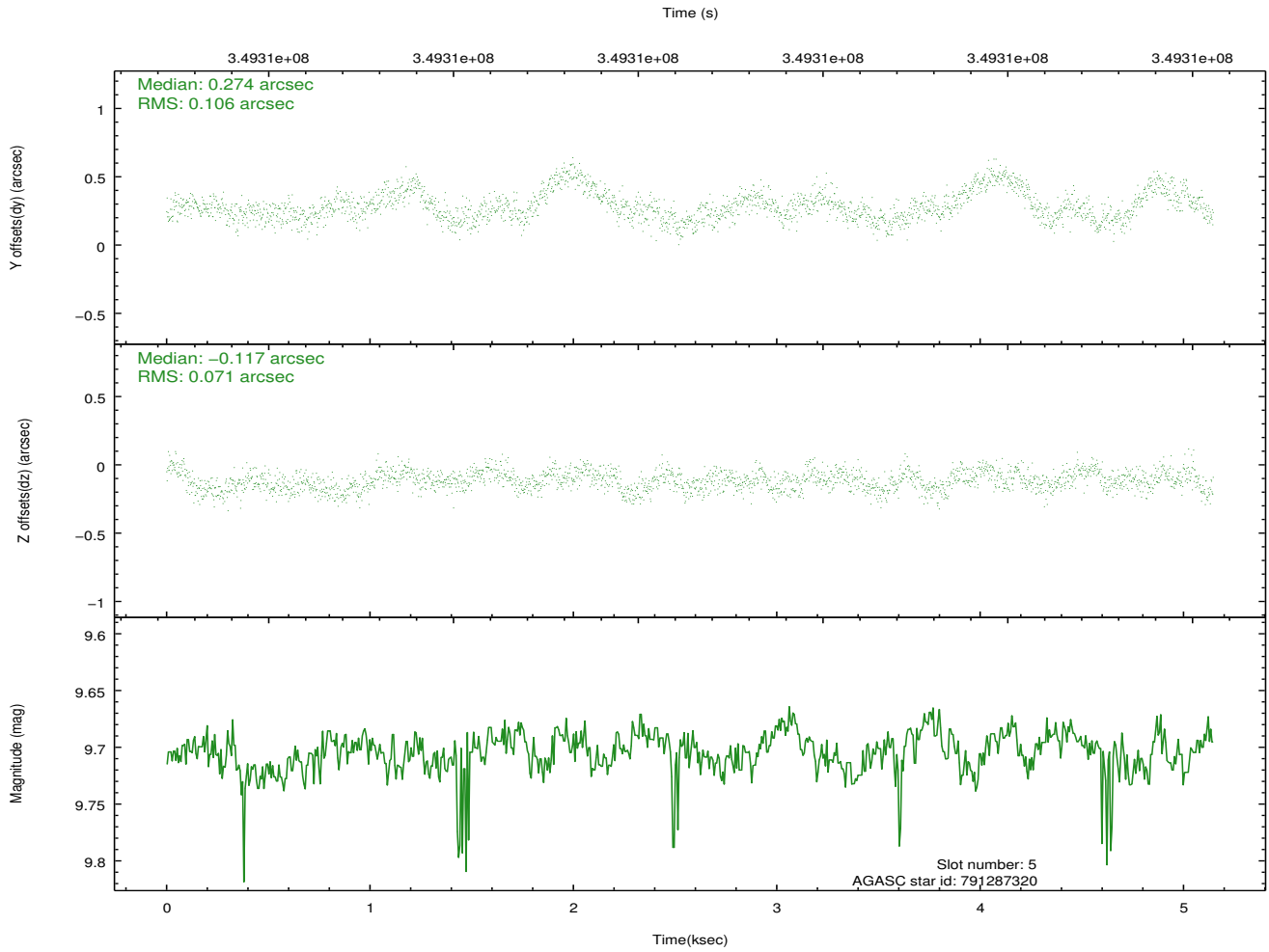
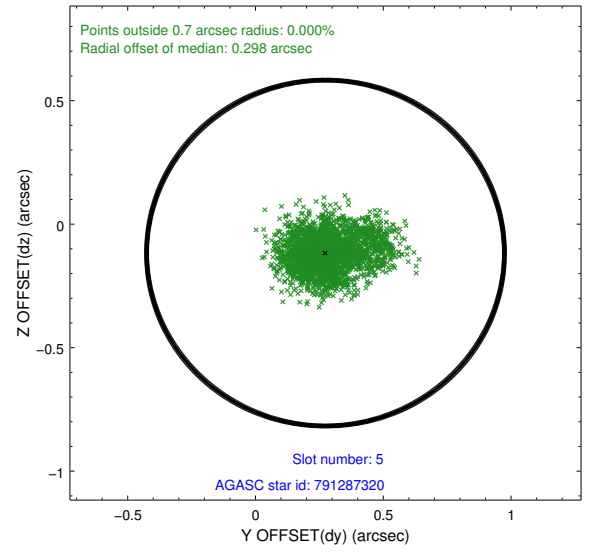
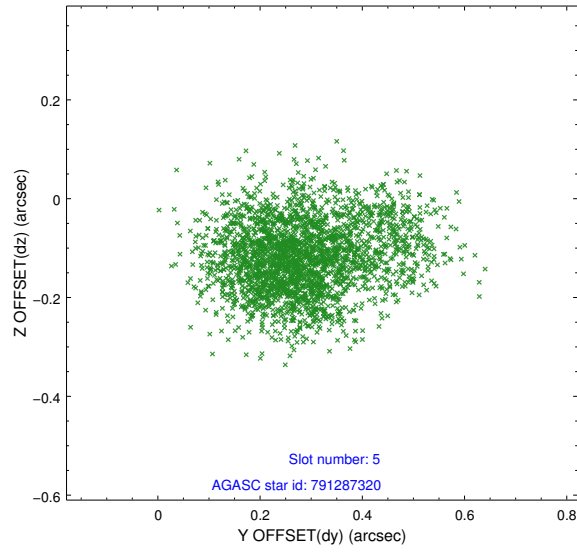
### 2.4.1 Slot 3



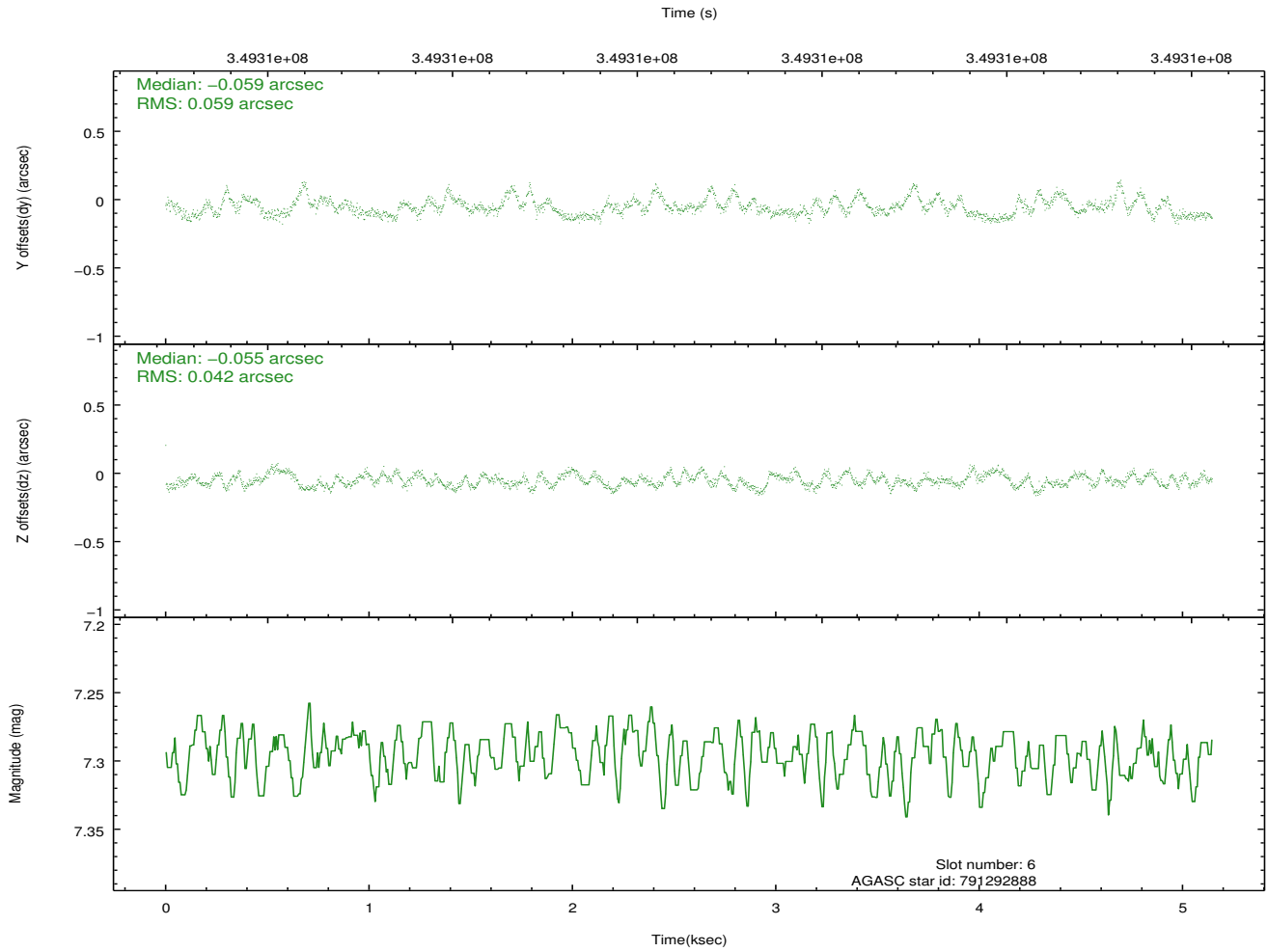
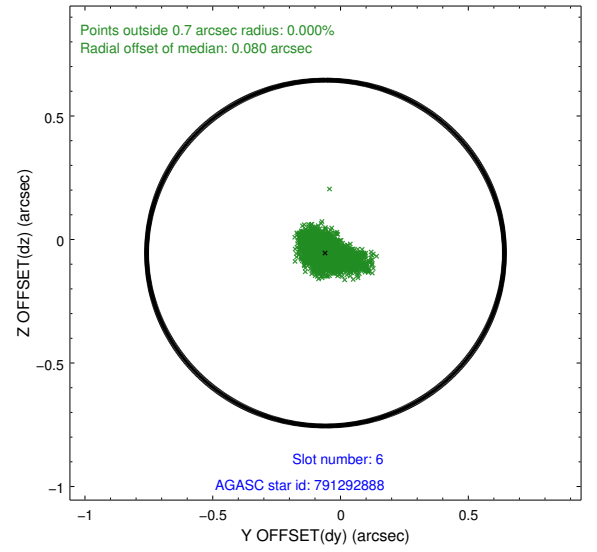
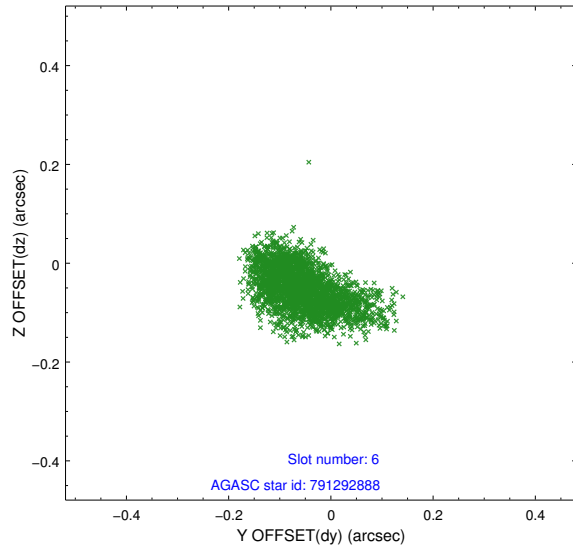
## 2.4.2 Slot 4



### 2.4.3 Slot 5

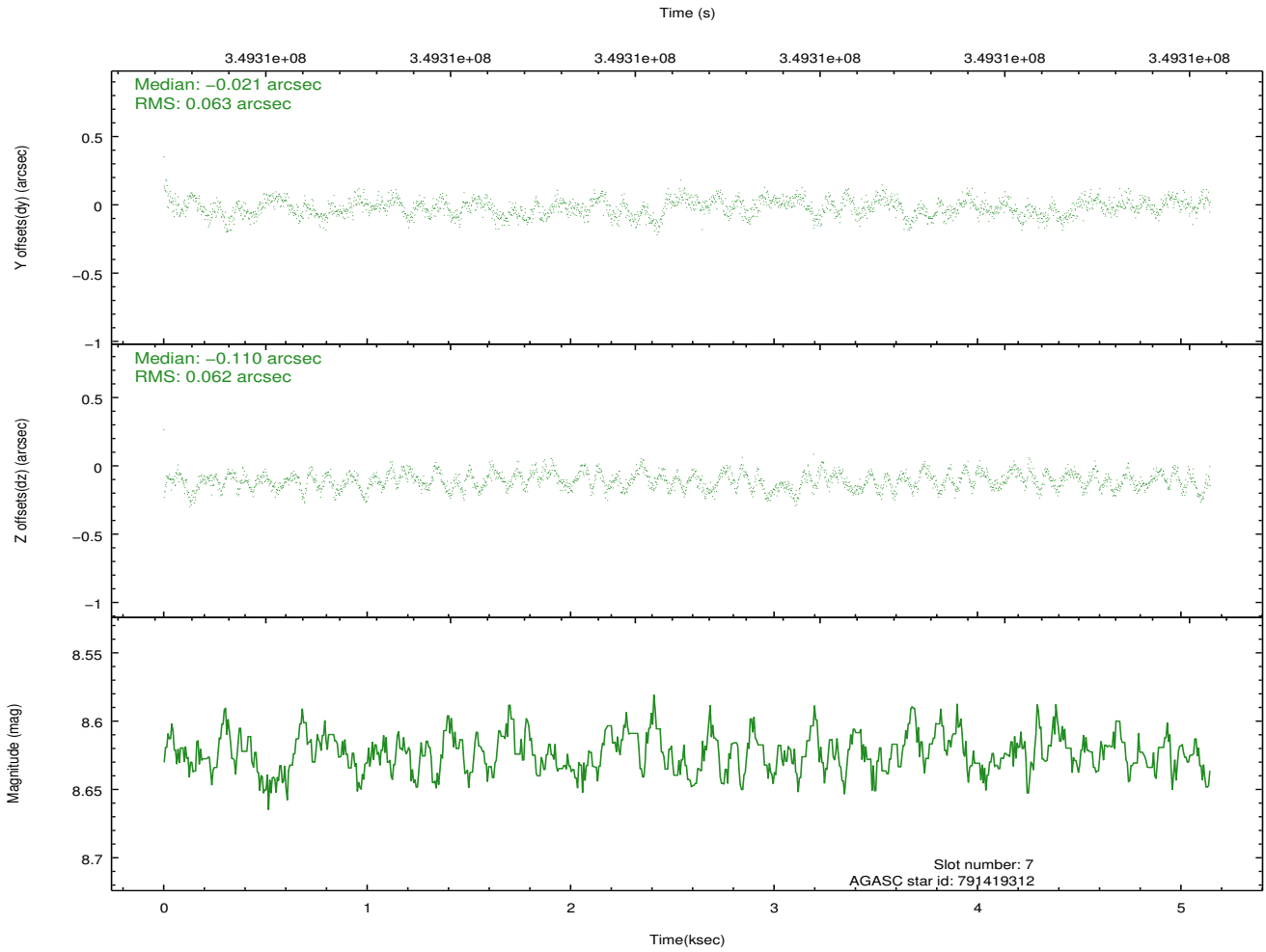
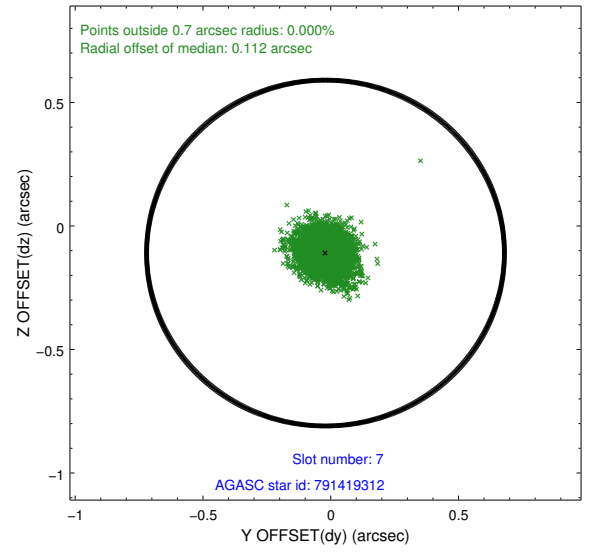
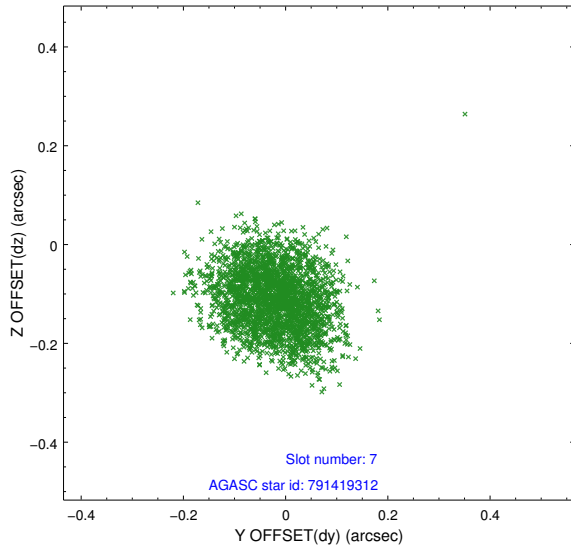


## 2.4.4 Slot 6



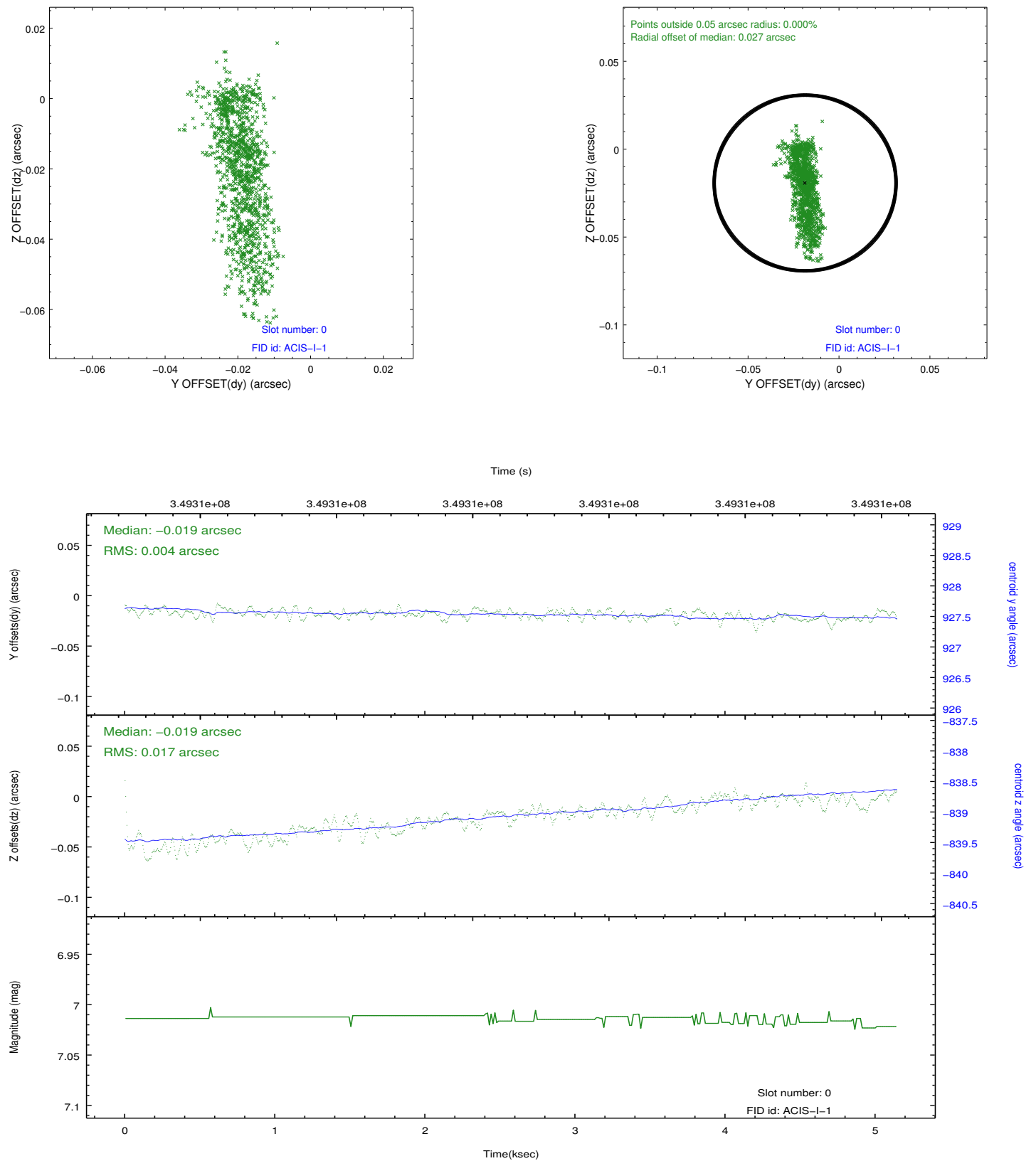


## 2.4.5 Slot 7

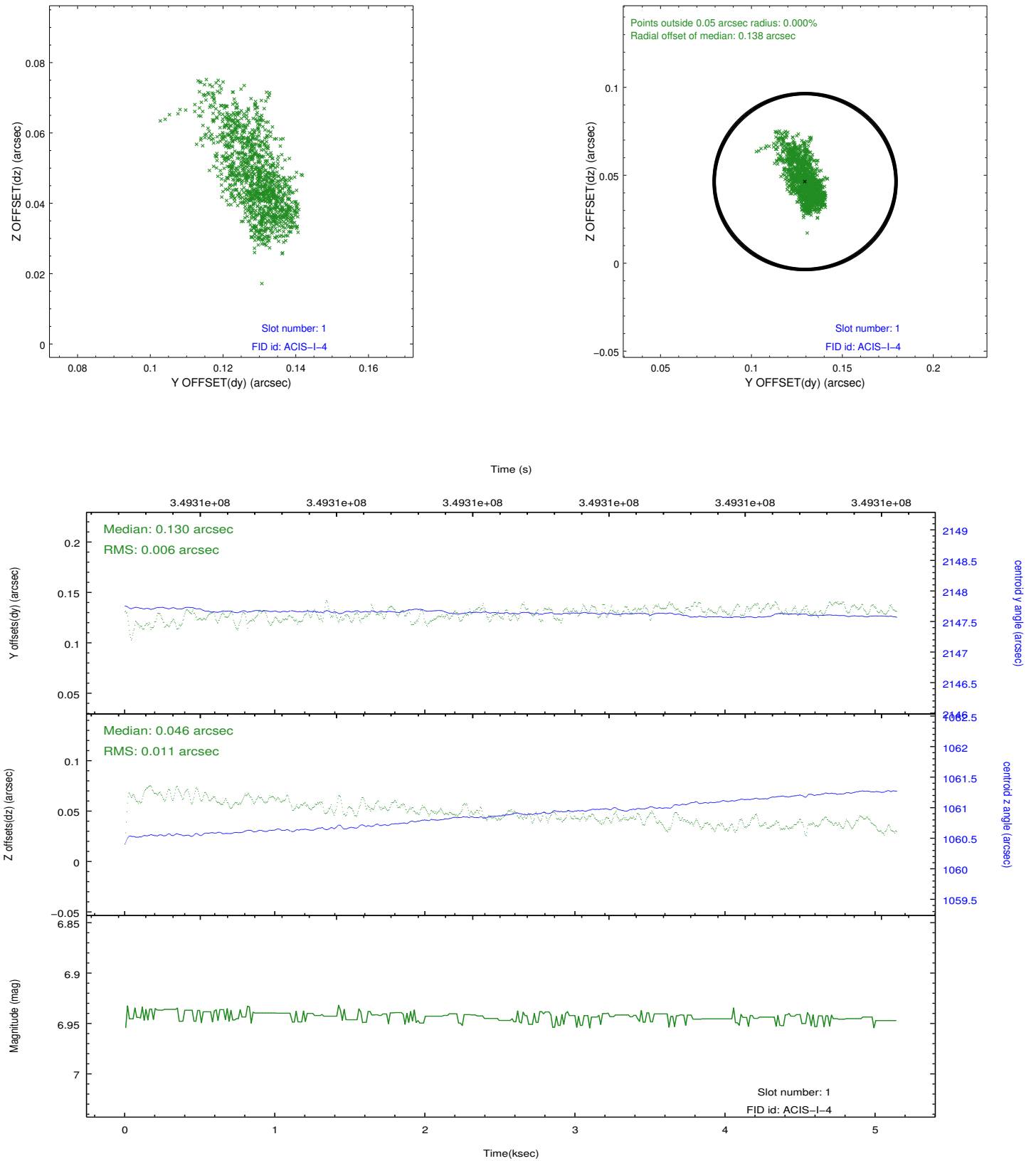


## 2.5 FID Slots

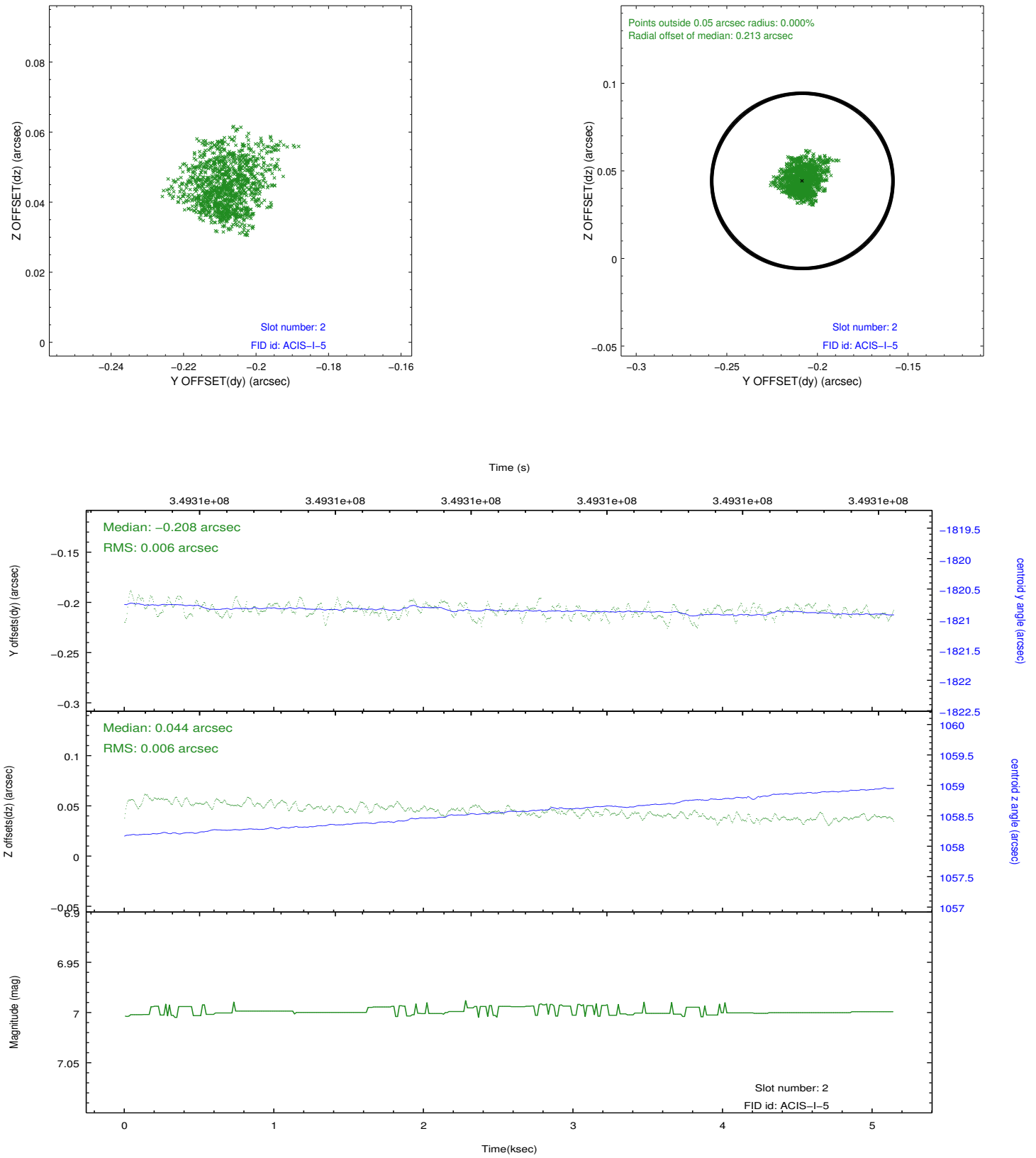
### 2.5.1 Slot 0



## 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)	2012.06.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.14239998

### A.2 Comments