

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 9392 - L2 Version 2  
Chandra X-Ray Center

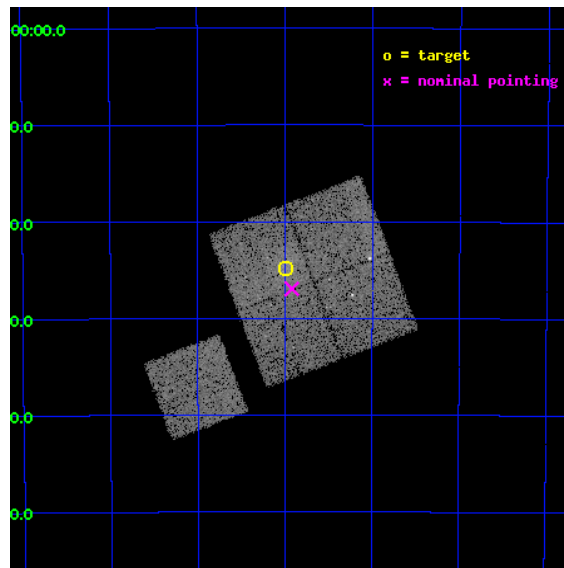
L2 Processing Date : May 10 2012

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# 1 Front

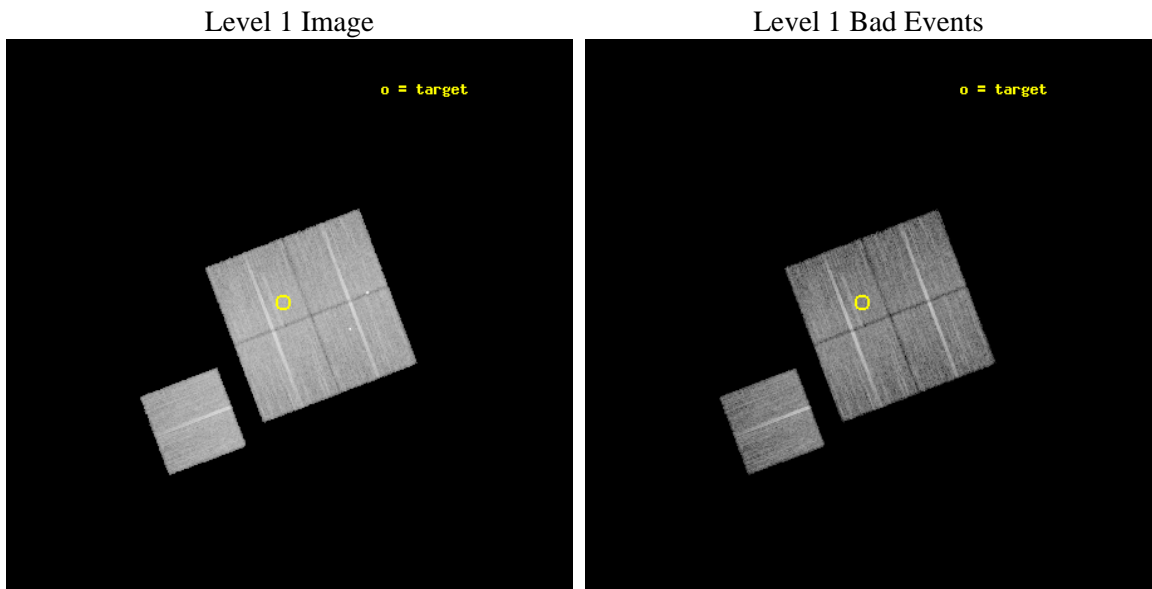
seq_num	800729	Sequence number
obs_id	9392	Observation id
title	SCALING RELATIONS FOR LOW-MASS GALAXY CLUSTERS AND GROUPS	Proposal
observer	Dr. Alexey Vikhlinin	Principal investigator
object	cl0237-5224	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	39.498333	Observer's specified target RA [deg]
dec_targ	-52.413056	Observer's specified target Dec [deg]
ra_nom	39.47986456011	Nominal RA [deg]
dec_nom	-52.449140320318	Nominal Dec [deg]
roll_nom	249.17810243367	Nominal Roll [deg]
revision	2	Processing version of data
ontime	14132.900108695	Sum of GTIs [s]
livetime	13948.243364285	Livetime [s]
ontime0	14132.900108695	Sum of GTIs [s]
ontime1	14132.900108695	Sum of GTIs [s]
ontime2	14132.900108695	Sum of GTIs [s]
ontime3	14132.900108695	Sum of GTIs [s]
ontime6	14132.900108695	Sum of GTIs [s]
l2events	51537	Number of level 2 events



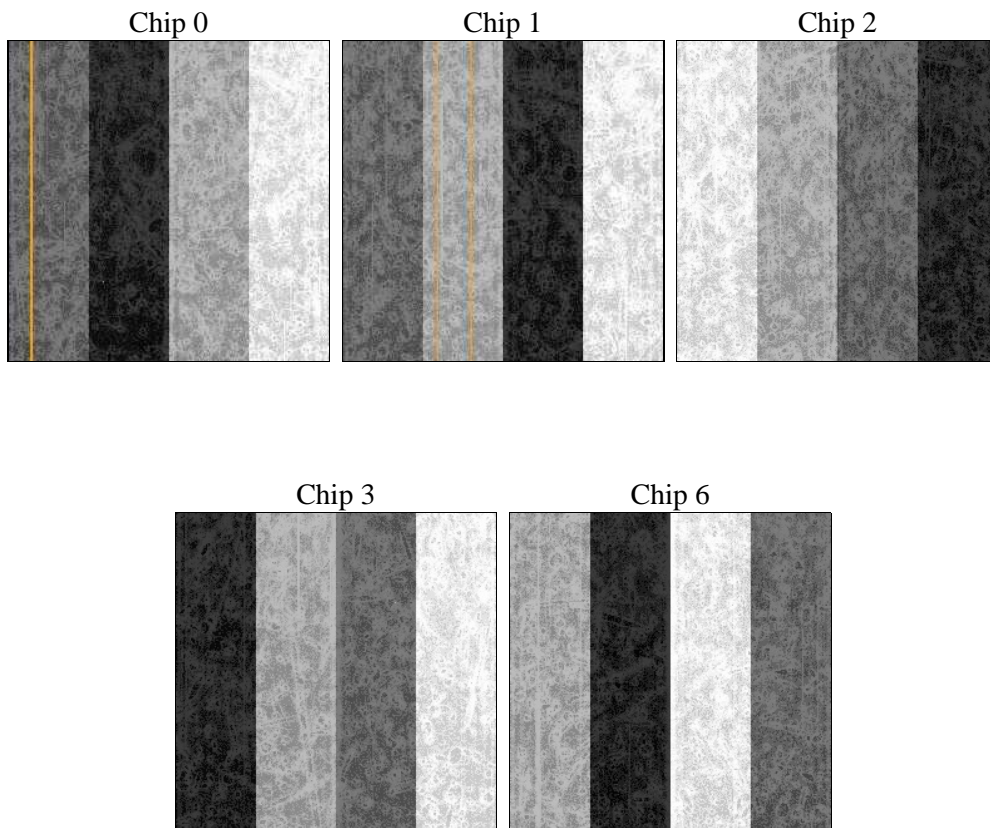
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	14000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	14132.900108695	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime0	14132.900108695	Sum of GTIs [s]
date	2012-05-10T11:11:56	Date and time of file creation	ontime1	14132.900108695	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	14132.900108695	Sum of GTIs [s]
			ontime3	14132.900108695	Sum of GTIs [s]
			ontime6	14132.900108695	Sum of GTIs [s]
			l1events	565959	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	110097	105579	120004	114854	115425
rejected events	97657	91890	108614	102388	103967
rejected %	88%	87%	90%	89%	90%

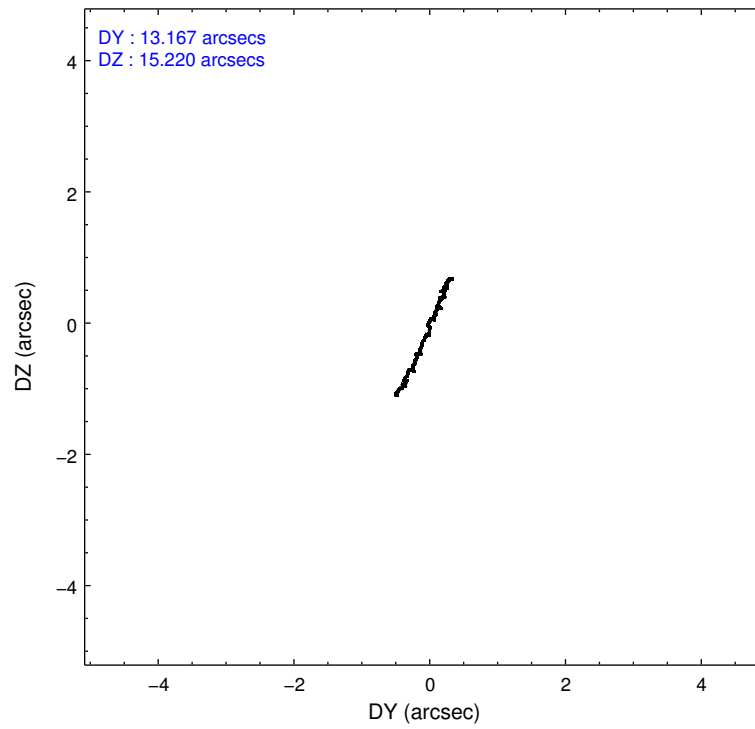
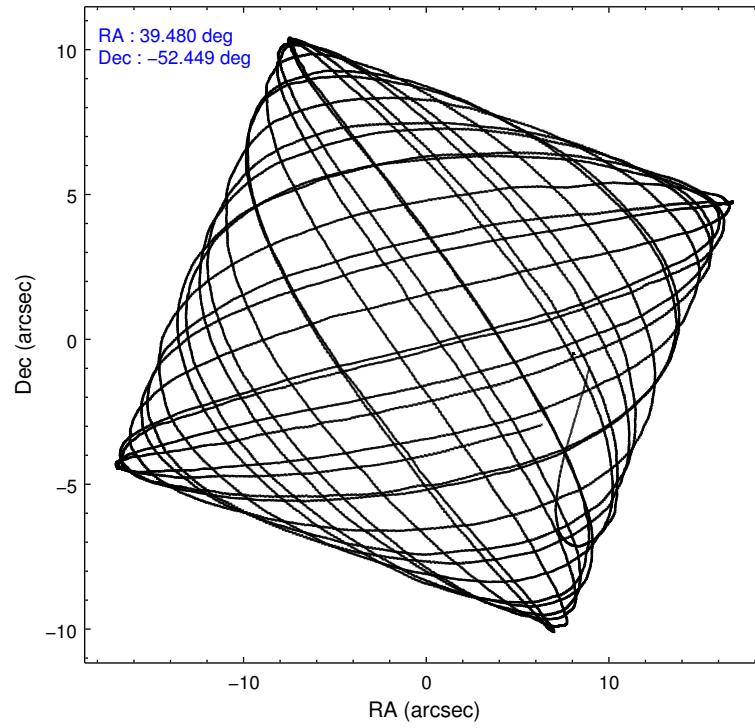
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	4773	5392	4220	5195	3948
	4%	5%	3%	4%	3%
grade 1 events	79	67	73	73	52
	0%	0%	0%	0%	0%
grade 2 events	2981	2976	2645	2581	2649
	2%	2%	2%	2%	2%
grade 3 events	1276	1367	1223	1299	1257
	1%	1%	1%	1%	1%
grade 4 events	1226	1366	1192	1200	1210
	1%	1%	0%	1%	1%
grade 5 events	4053	4488	3798	4821	4510
	3%	4%	3%	4%	3%
grade 6 events	2186	2592	2112	2197	2397
	1%	2%	1%	1%	2%
grade 7 events	93523	87331	104741	97488	99402
	84%	82%	87%	84%	86%

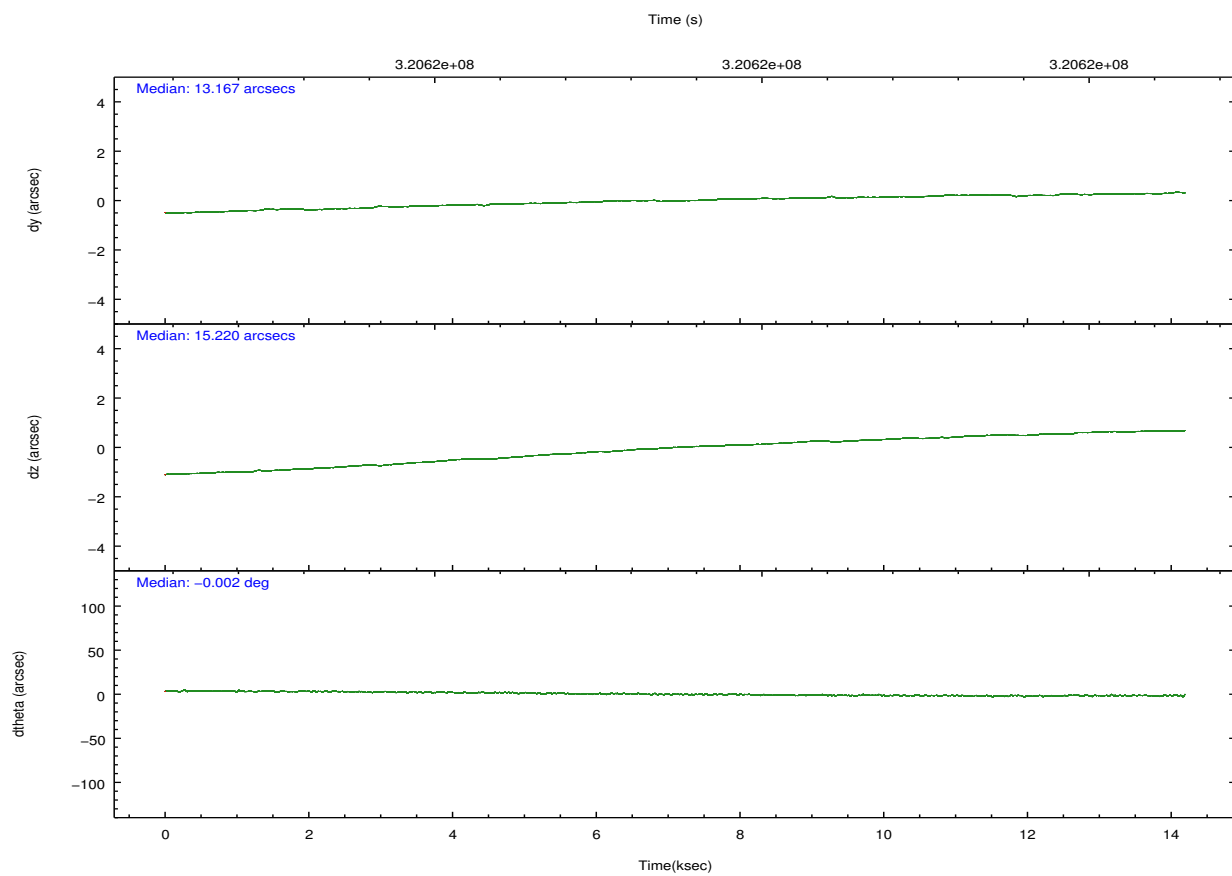
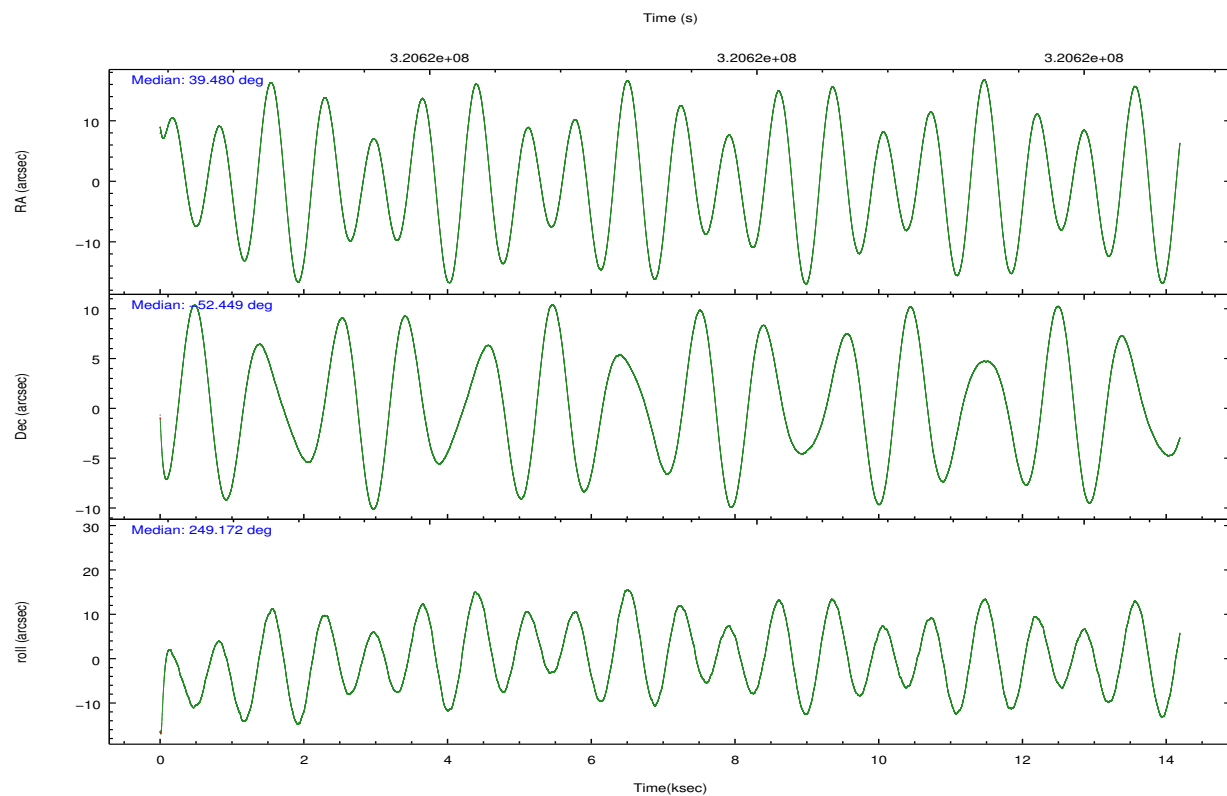


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	39.472504	39.47986456010954	CCD I2 on	Y	Y
[deg] Pointing Dec	-52.422001	-52.44914032031754	CCD I3 on	Y	Y
[deg] Pointing Roll	248.963604	249.1781024336659	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	-228.592463	-228.6015472178352	CCD S3 on	N	N
[mm] SIM translation stage offset	-5	-4.990905785094469	CCD S4 on	N	N
[s] Observation start time (MET)	320611775.184000	320610803.08666	CCD S5 on	N	N
Observation start date	2008-02-28T18:48:30	2008-02-28T18:33:23	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	320625775.184000	320627054.46245	On-chip summing requested	N	N
Observation end date	2008-02-28T22:41:50	2008-02-28T23:04:14	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



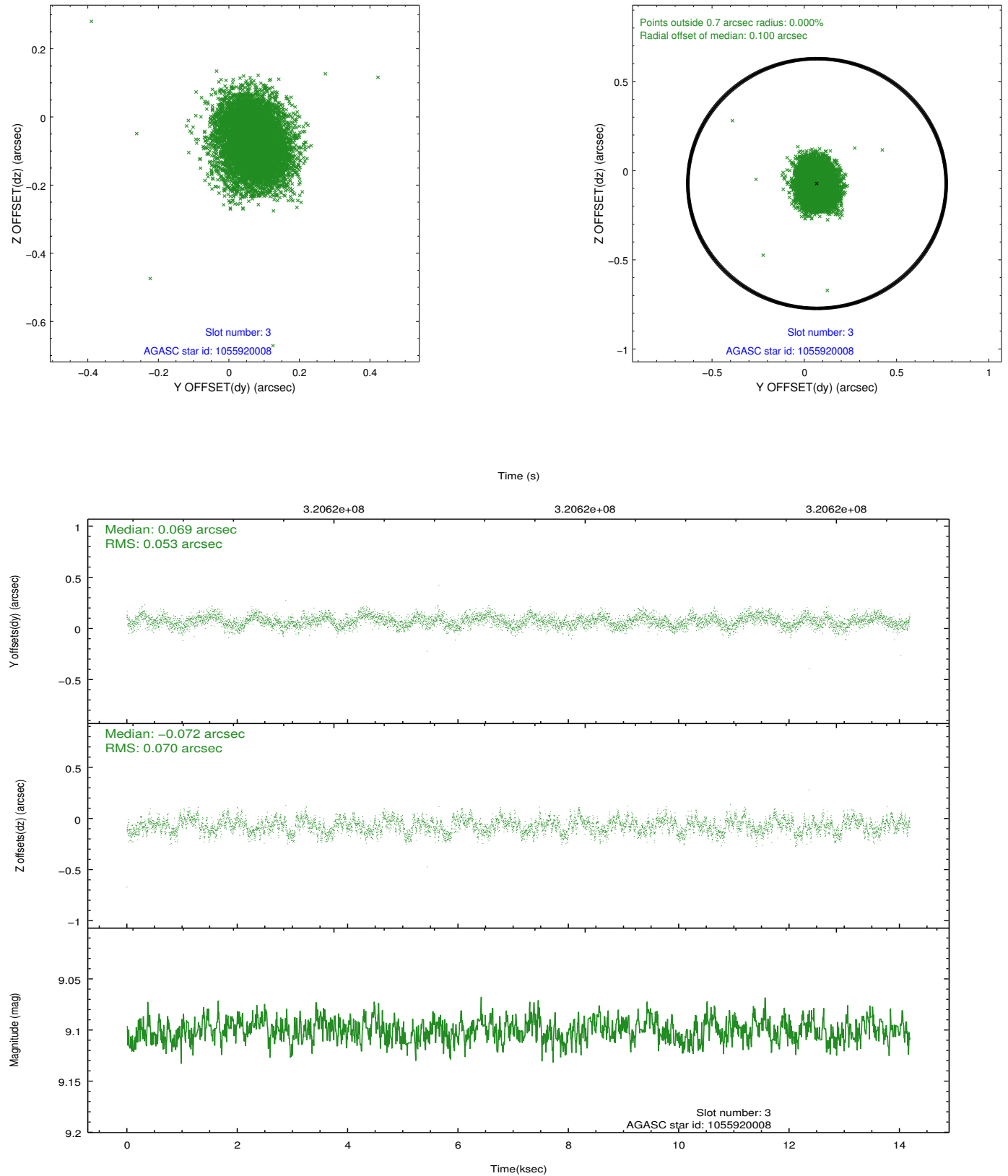


### Slot Statistics

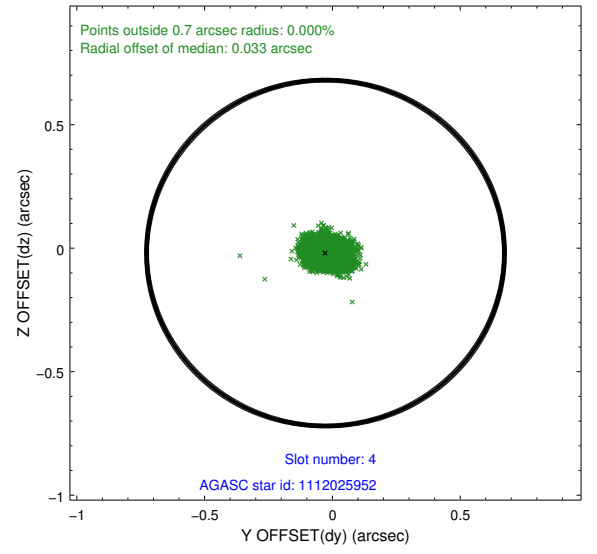
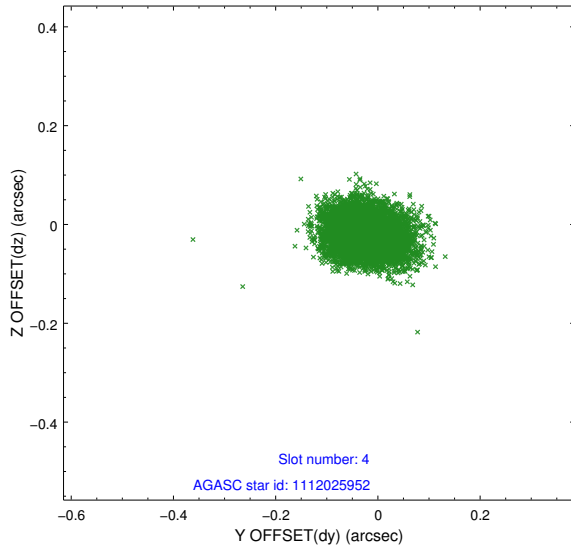
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.23	3462	0.078	-0.019	0.017	0.040	0.000000	0.000000	926.37	-941.16
1	FID	ACIS-I-5	7.21	3461	-0.234	0.080	0.015	0.024	0.000000	0.000000	-1821.88	956.24
2	FID	ACIS-I-6	7.23	3461	0.065	0.011	0.018	0.033	0.000000	0.000000	391.53	1601.05
3	GUIDE	1055920008	9.10	6918	0.069	-0.072	0.094	0.148	39.596271	-52.346490	-350.84	156.42
4	GUIDE	1112025952	7.93	6918	-0.027	-0.020	0.053	0.089	39.769771	-53.148922	2213.47	1539.18
5	GUIDE	1112026128	8.91	6919	-0.023	0.061	0.074	0.119	38.912146	-52.876527	1969.43	-546.55
6	GUIDE	1112026392	7.02	6922	0.019	-0.116	0.063	0.100	39.781517	-52.934809	1483.64	1289.40
7	GUIDE	1112024616	9.09	6917	-0.040	0.150	0.079	0.128	39.290431	-52.557445	598.97	-196.16

## 2.4 Star Slots

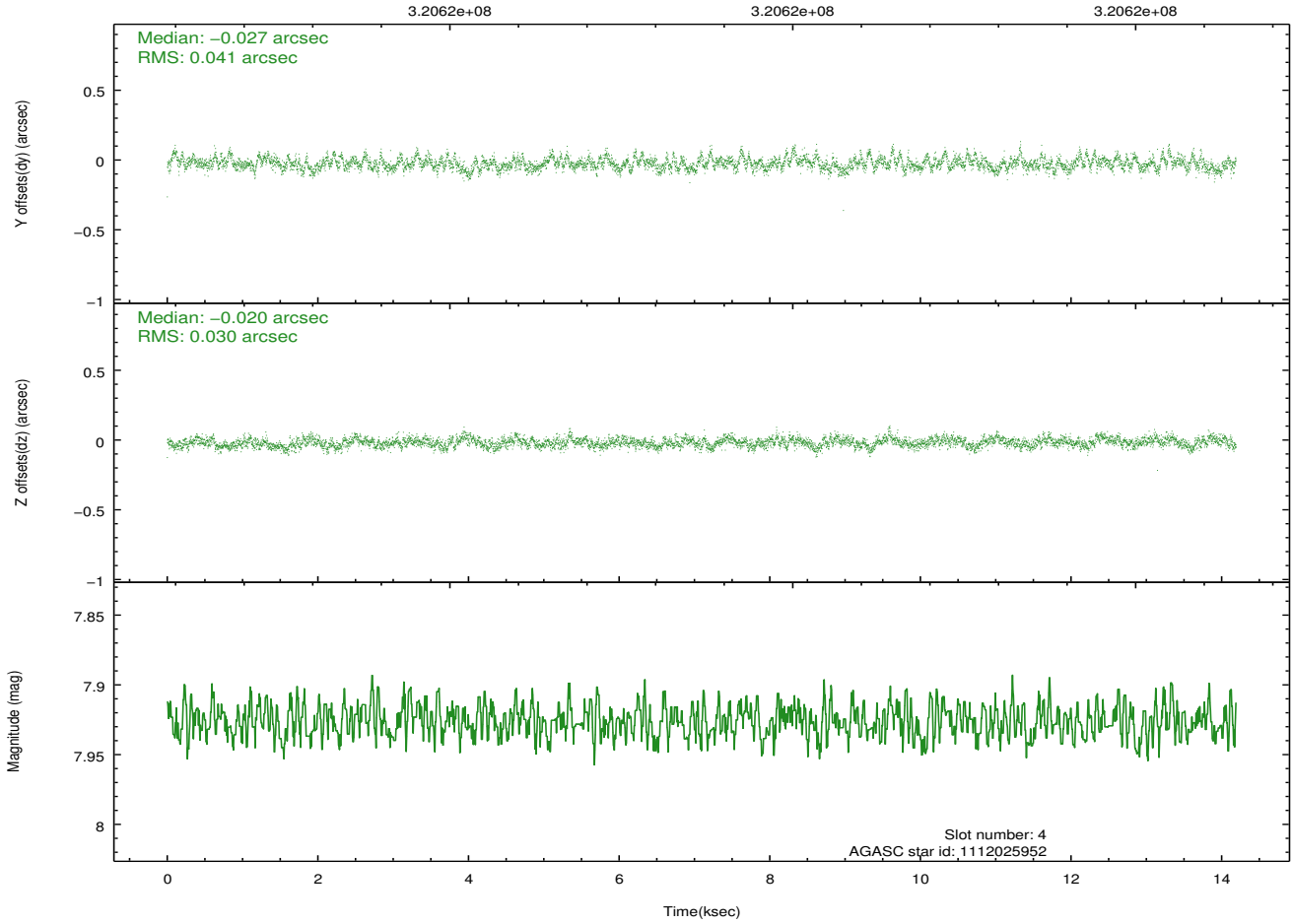
### 2.4.1 Slot 3



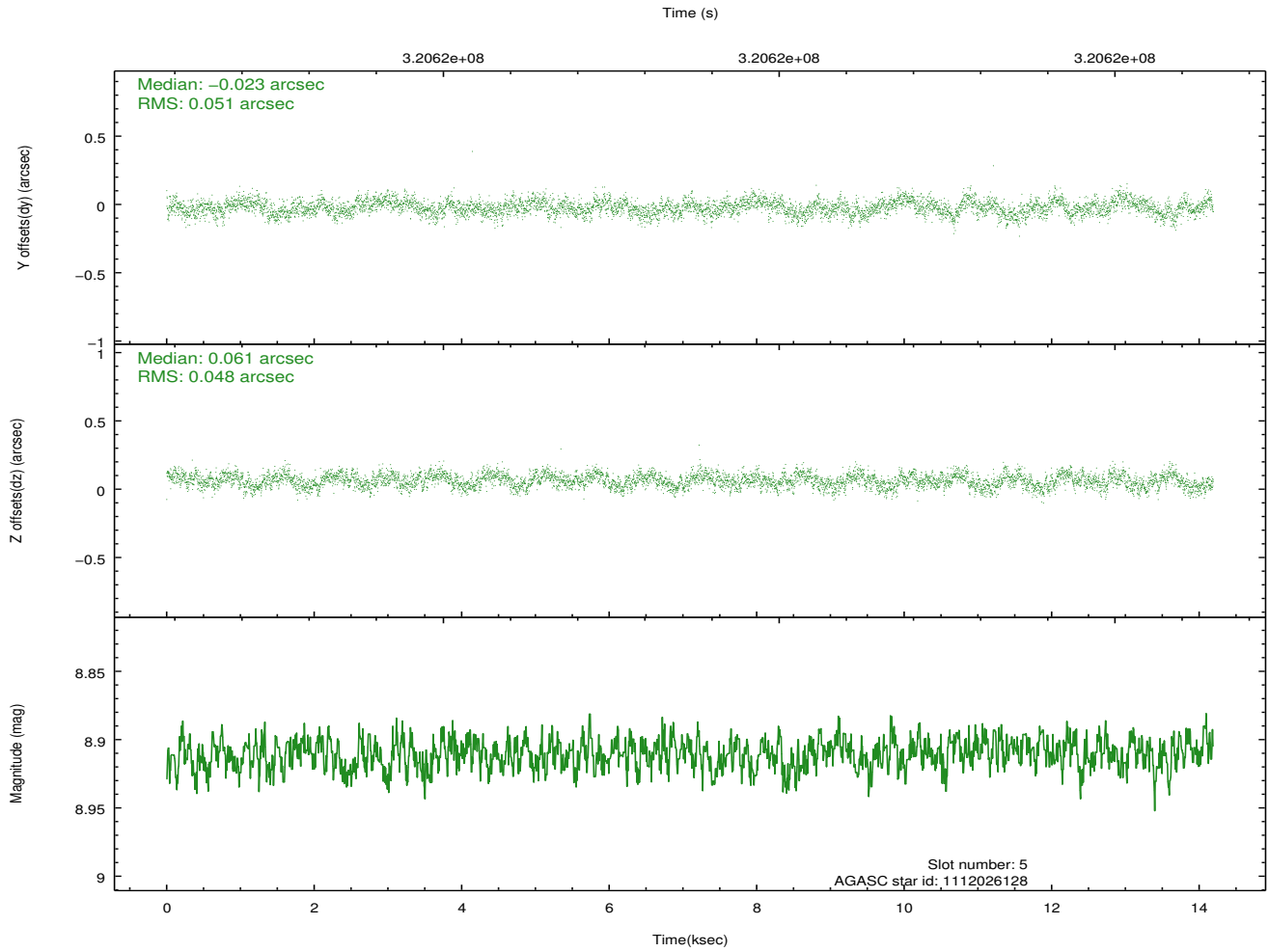
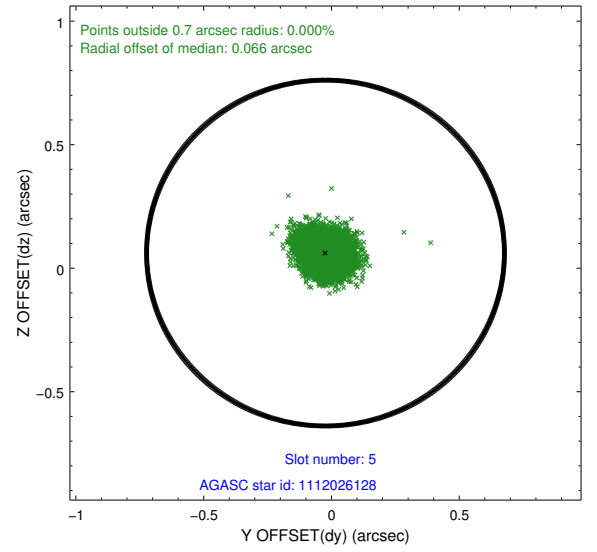
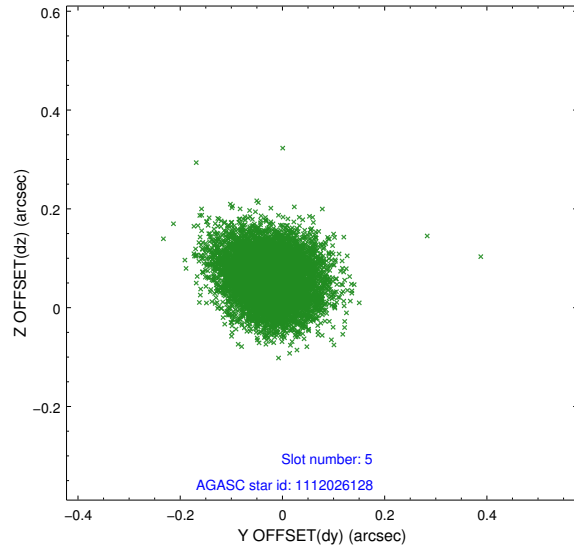
## 2.4.2 Slot 4



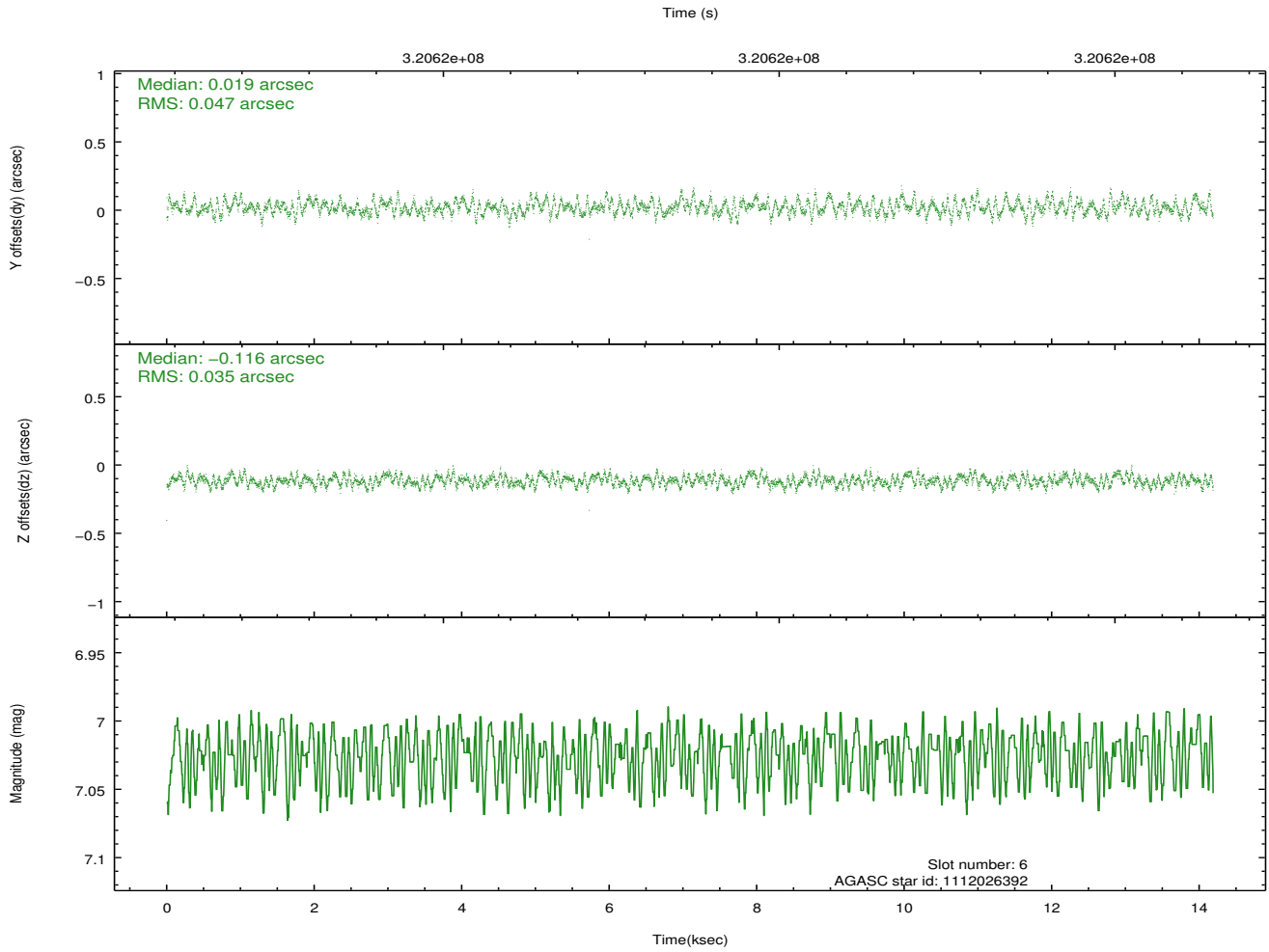
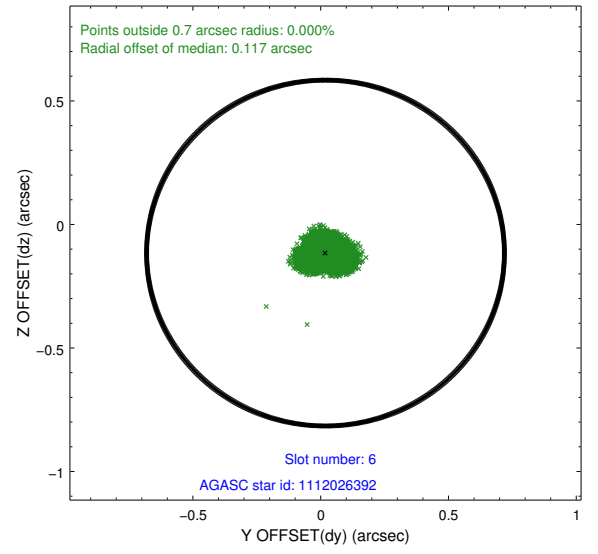
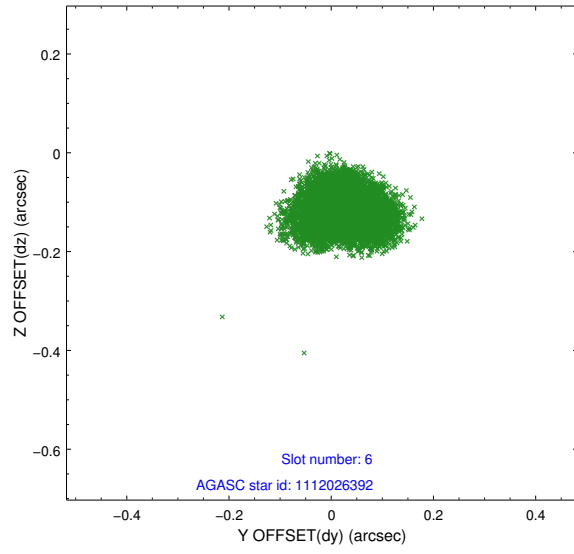
Time (s)



### 2.4.3 Slot 5

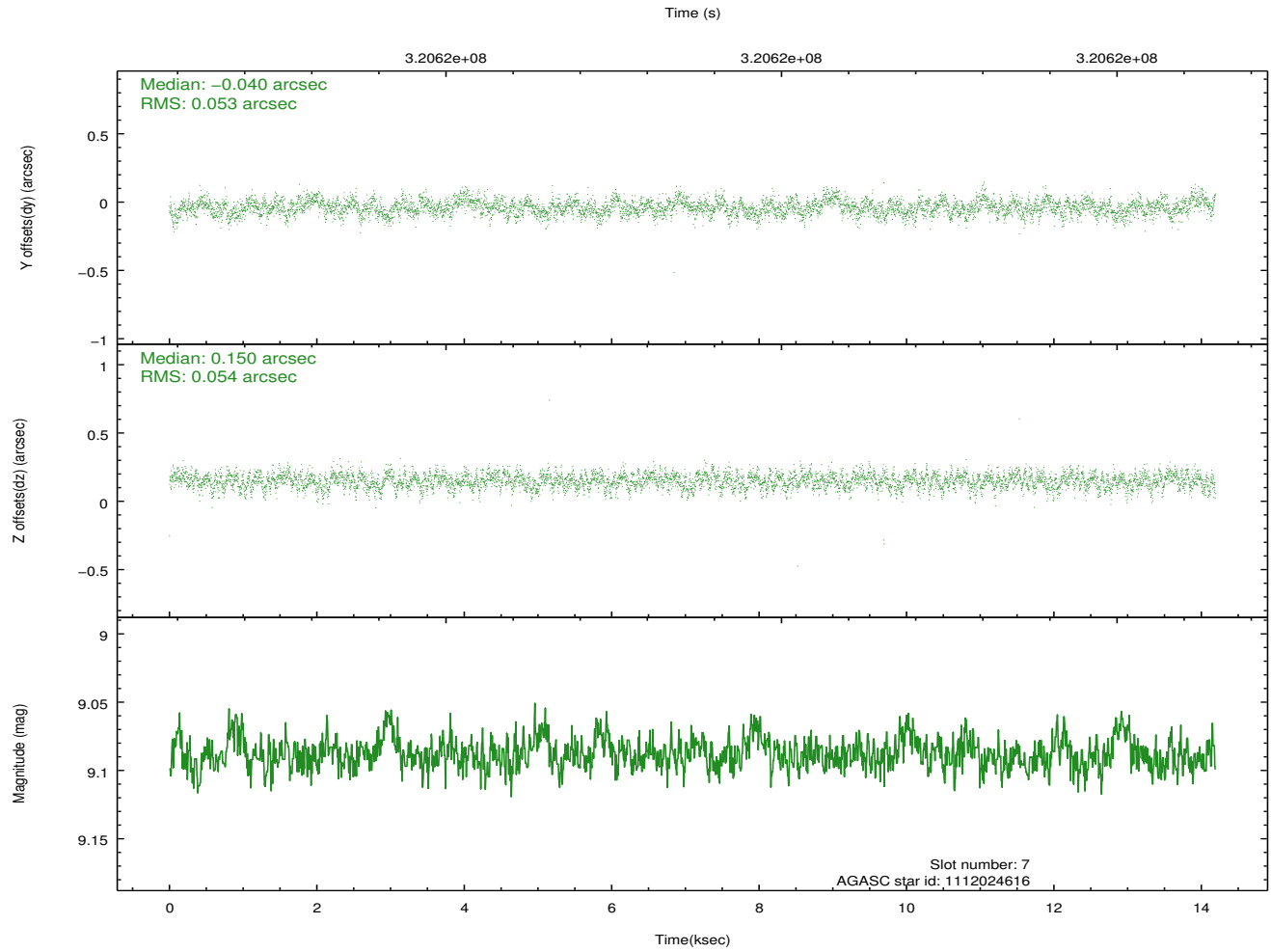
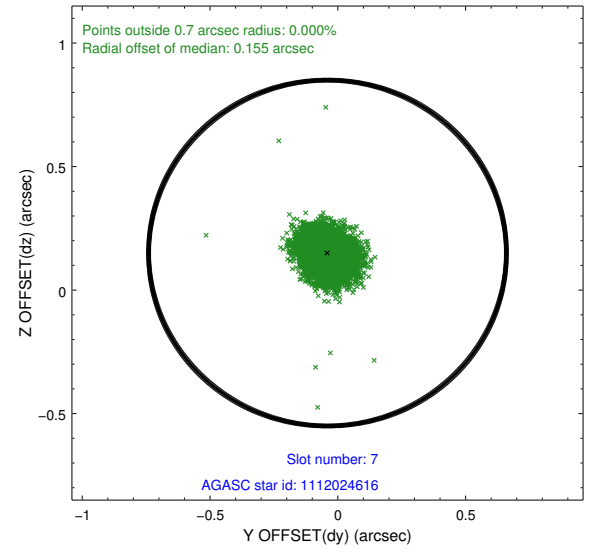
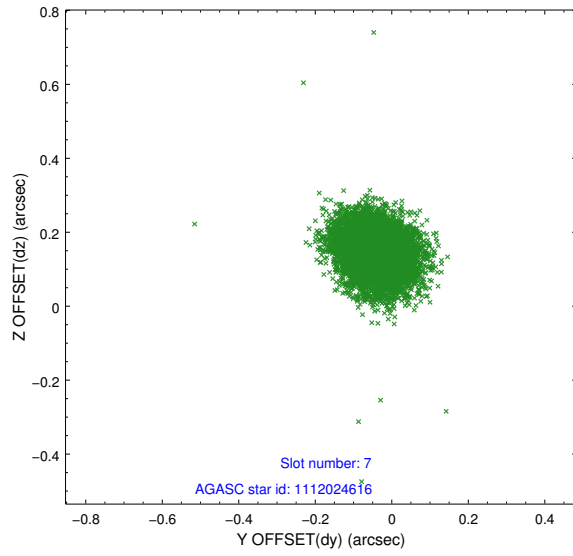


## 2.4.4 Slot 6



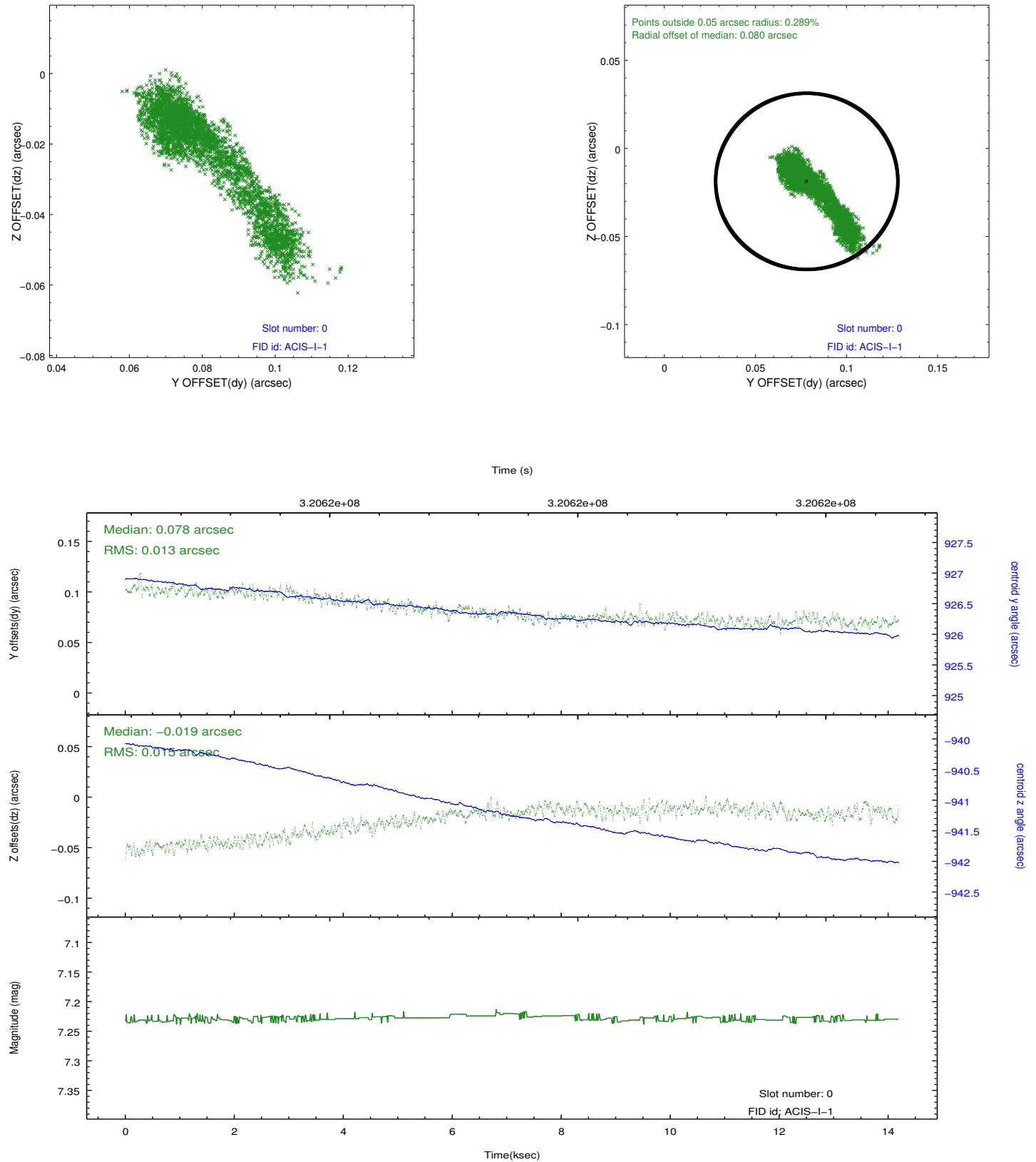


## 2.4.5 Slot 7

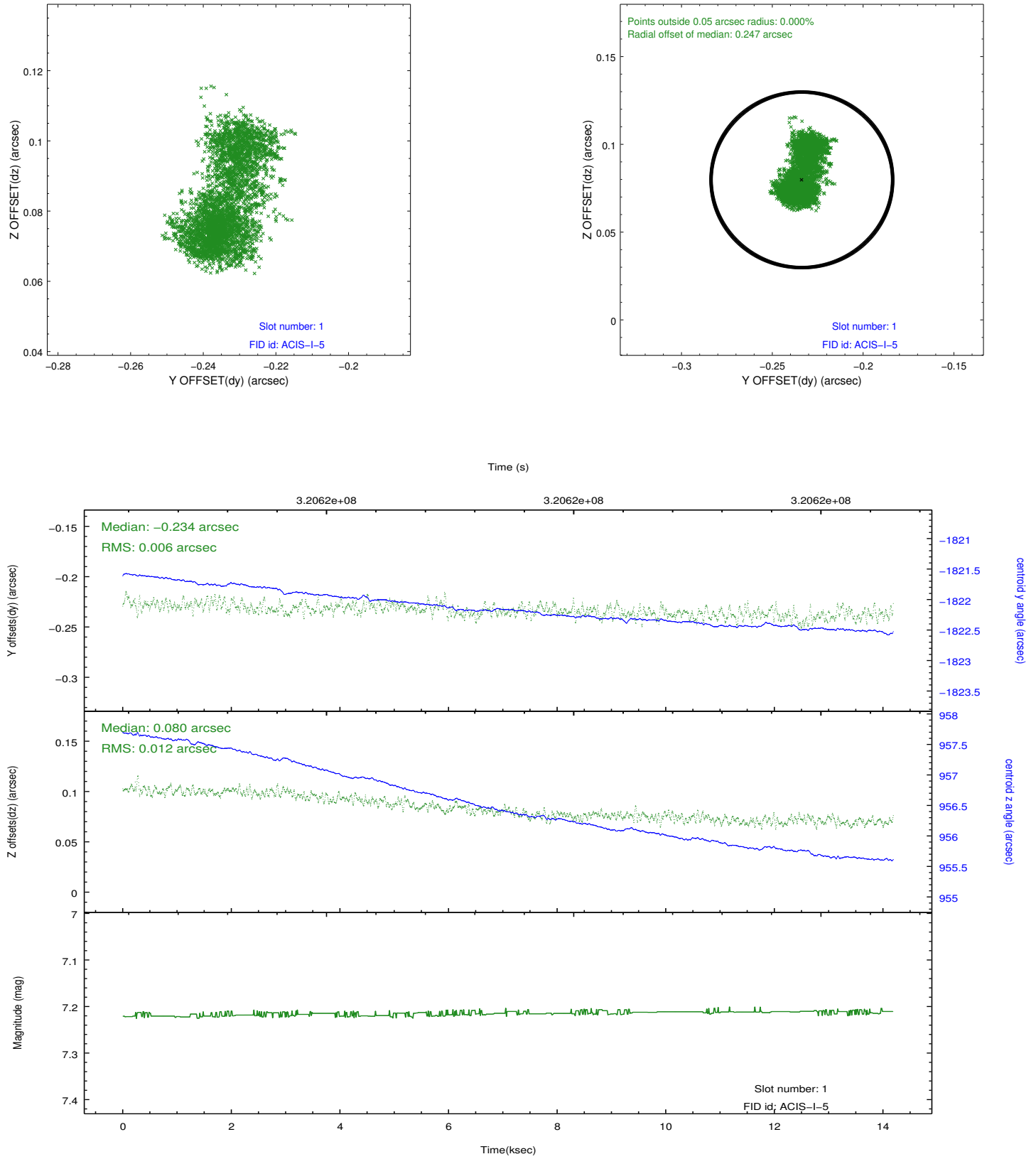


## 2.5 FID Slots

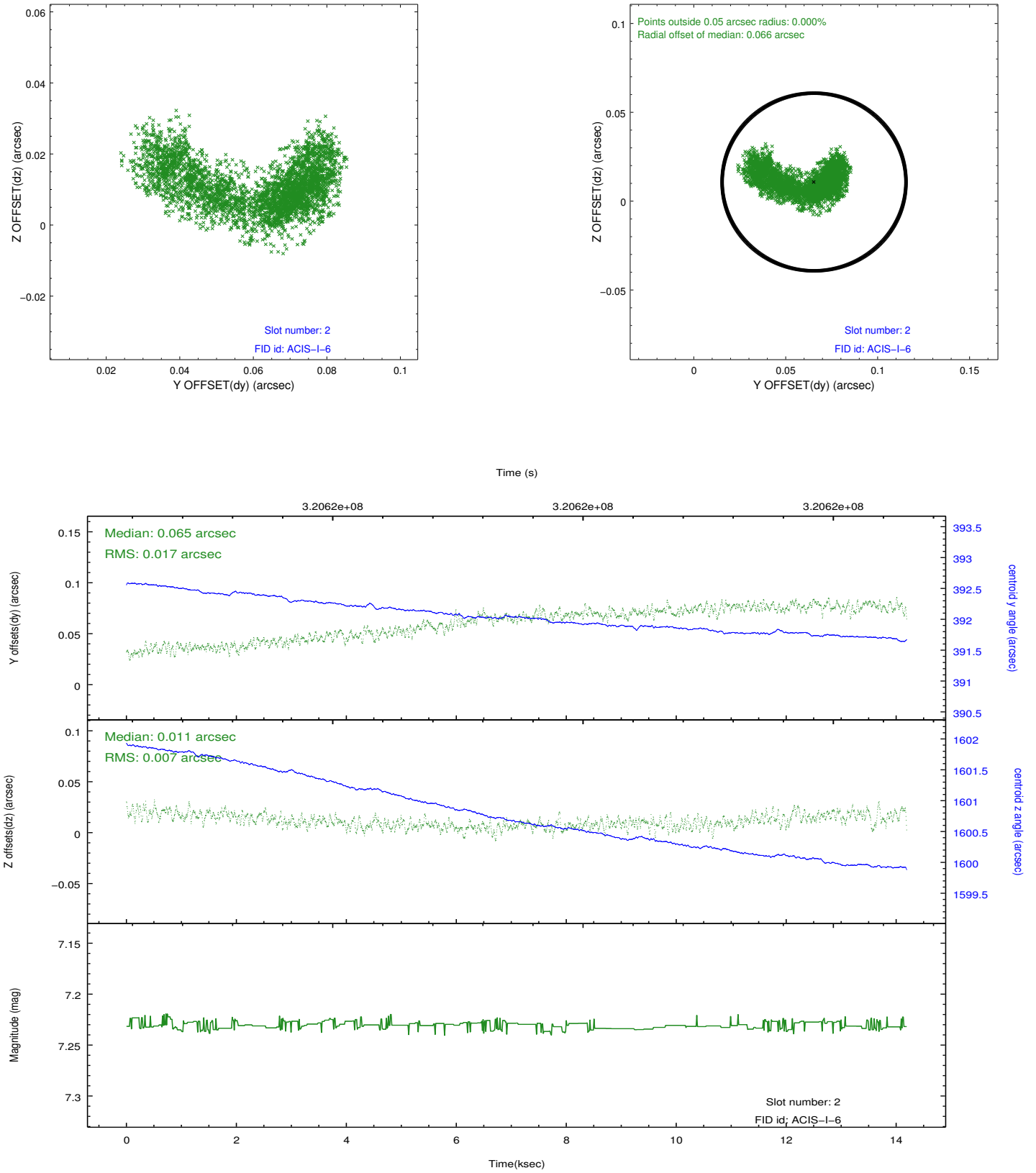
### 2.5.1 Slot 0



## 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)	2012.05.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.1329001

### **A.2 Comments**