

# V&V Reference Report

## L2 ASCDS Version : 8.5

Observation 4632 - L2 Version 3  
Chandra X-Ray Center

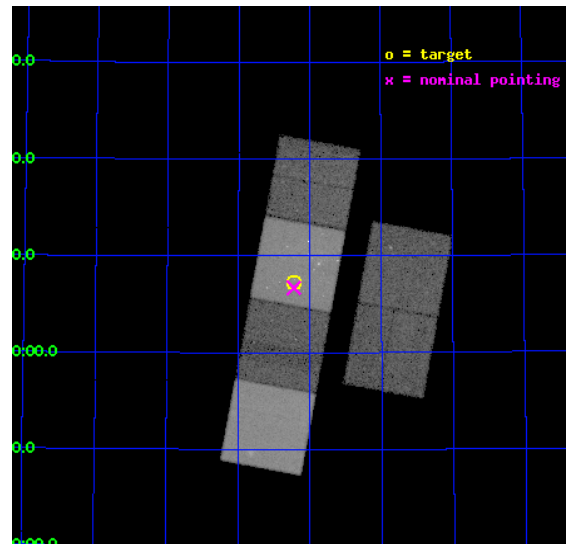
L2 Processing Date : Dec 11 2012

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# 1 Front

seq_num	500457	Sequence number
obs_id	4632	Observation id
title	Prompt Chandra Observations of Nearby Supernovae	Proposal title
observer	Prof. Walter Lewin	Principal investigator
object	SN 2004et	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	308.805833	Observer's specified target RA [deg]
dec_targ	60.121556	Observer's specified target Dec [deg]
ra_nom	308.80596628738	Nominal RA [deg]
dec_nom	60.111889172575	Nominal Dec [deg]
roll_nom	280.48615469808	Nominal Roll [deg]
revision	3	Processing version of data
ontime	28339.199894428	Sum of GTIs [s]
livetime	27980.351881547	Livetime [s]
ontime2	28339.199894428	Sum of GTIs [s]
ontime3	28335.958914131	Sum of GTIs [s]
ontime5	28339.199894428	Sum of GTIs [s]
ontime6	28339.199894428	Sum of GTIs [s]
ontime7	28339.199894428	Sum of GTIs [s]
ontime8	28339.199894428	Sum of GTIs [s]
l2events	377956	Number of level 2 events

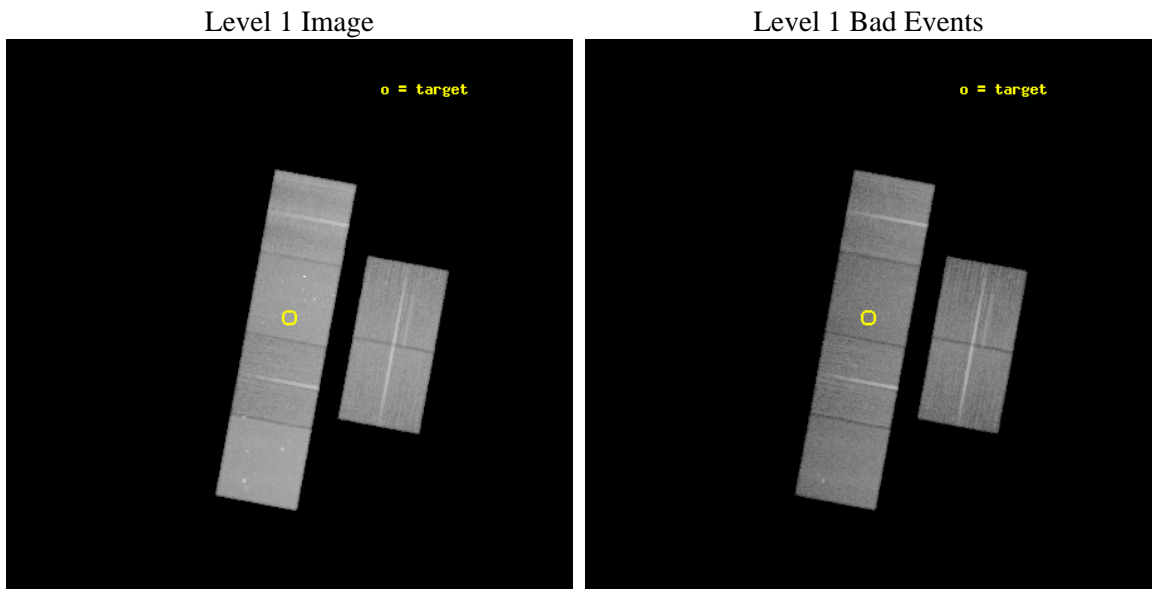




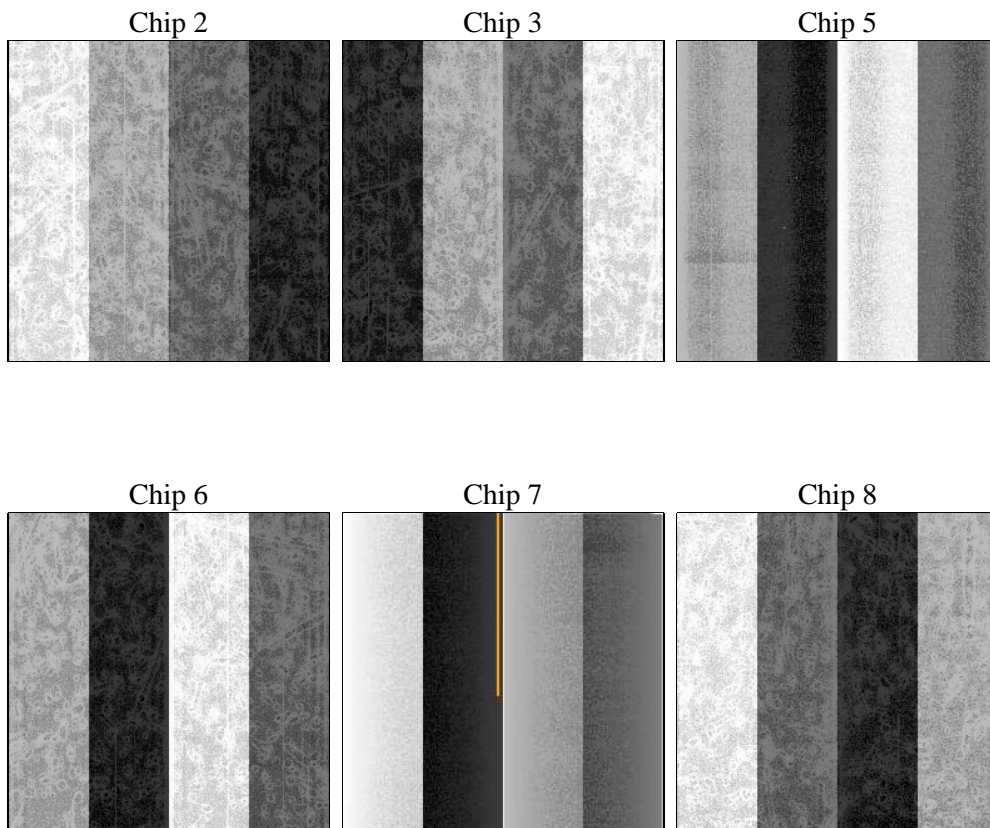
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	28162.024000	[s] Scheduled observation exposure time
ascdsver	8.5	Processing system revision	ontime	28339.199894428	Sum of GTIs [s]
caldsver	4.5.4	&#160	ontime2	28339.199894428	Sum of GTIs [s]
date	2012-12-11T01:09:45	Date and time of file creation	ontime3	28335.958914131	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	28339.199894428	Sum of GTIs [s]
			ontime6	28339.199894428	Sum of GTIs [s]
			ontime7	28339.199894428	Sum of GTIs [s]
			ontime8	28339.199894428	Sum of GTIs [s]
			l1events	1619037	Number of level 1 events

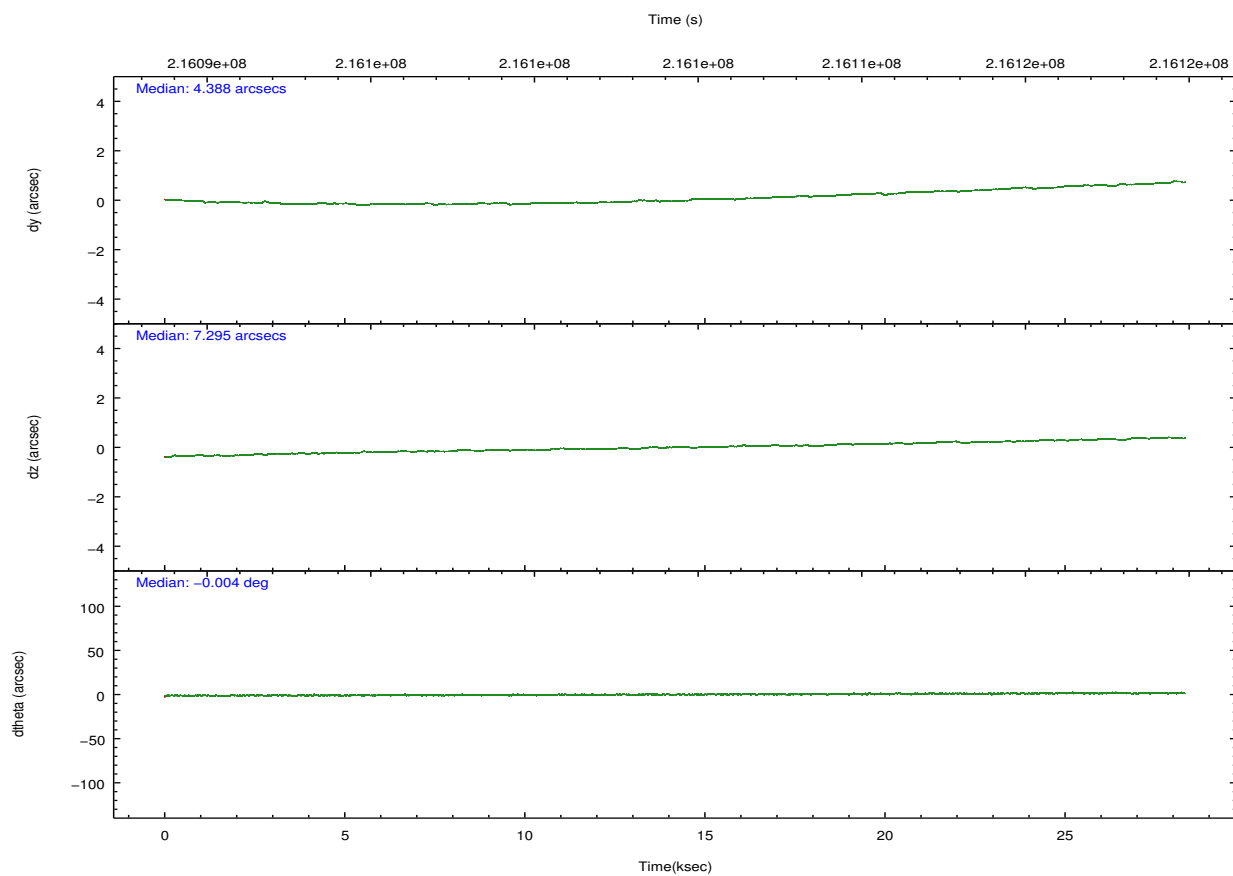
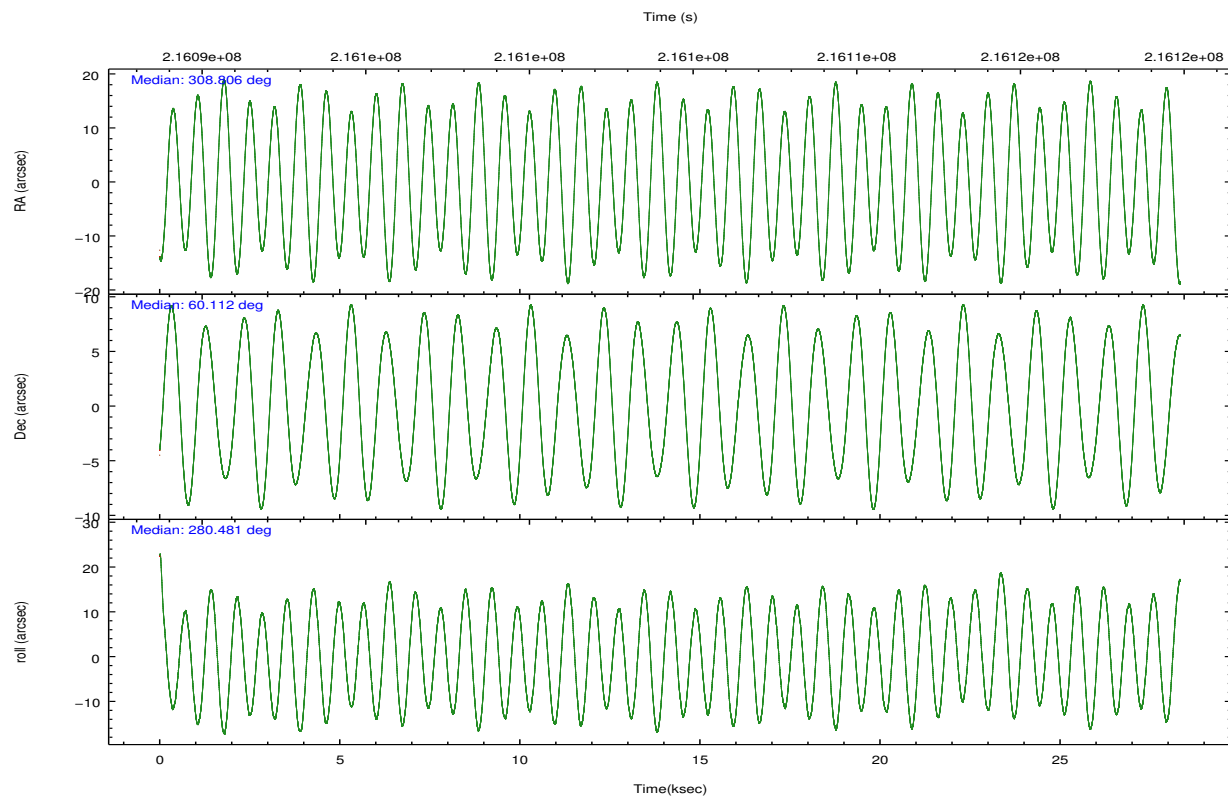
### 2.1.4 Events

	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	232364	222896	327080	230843	307790	298064	grade 0 events	13012	12503	11735	11423	13752	25214
rejected events	202927	193859	179170	201621	175002	222921		5%	5%	3%	4%	4%	8%
rejected %	87%	86%	54%	87%	56%	74%	grade 1 events	150	133	544	100	296	253
								0%	0%	0%	0%	0%	0%
							grade 2 events	6265	6126	45255	6620	26849	14860
								2%	2%	13%	2%	8%	4%
							grade 3 events	2489	2617	5663	2606	11583	9162
								1%	1%	1%	1%	3%	3%
							grade 4 events	2615	2642	5417	2582	11692	8371
								1%	1%	1%	1%	3%	2%
							grade 5 events	8694	9790	23269	9998	28129	13480
								3%	4%	7%	4%	9%	4%
							grade 6 events	5084	5196	80000	6020	69041	17599
								2%	2%	24%	2%	22%	5%
							grade 7 events	194055	183889	155197	191494	146448	209125
								83%	82%	47%	82%	47%	70%

## 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	308.769904	308.8059662873823	Subarray requested	NONE	NONE
[deg] Pointing Dec	60.132348	60.11188917257543	Alternating exposures requested	N	N
[deg] Pointing Roll	280.360800	280.4861546980816	[s] Primary exposure time	0.000000	3.2
[deg] Roll angle	310.000000	310.000000			
[deg] Roll tolerance	50.000000	50.000000			
Roll constraint allows 180D rotation	N	N			
[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)	216090310.184000	216089228.61961			
Observation start date	2004-11-06T01:04:06	2004-11-06T00:47:08			
[s] Observation end time (MET)	216118472.184000	216118693.78343			
Observation end date	2004-11-06T08:53:28	2004-11-06T08:58:13			
Read mode	TIMED	TIMED			

## 2.3 Aspect

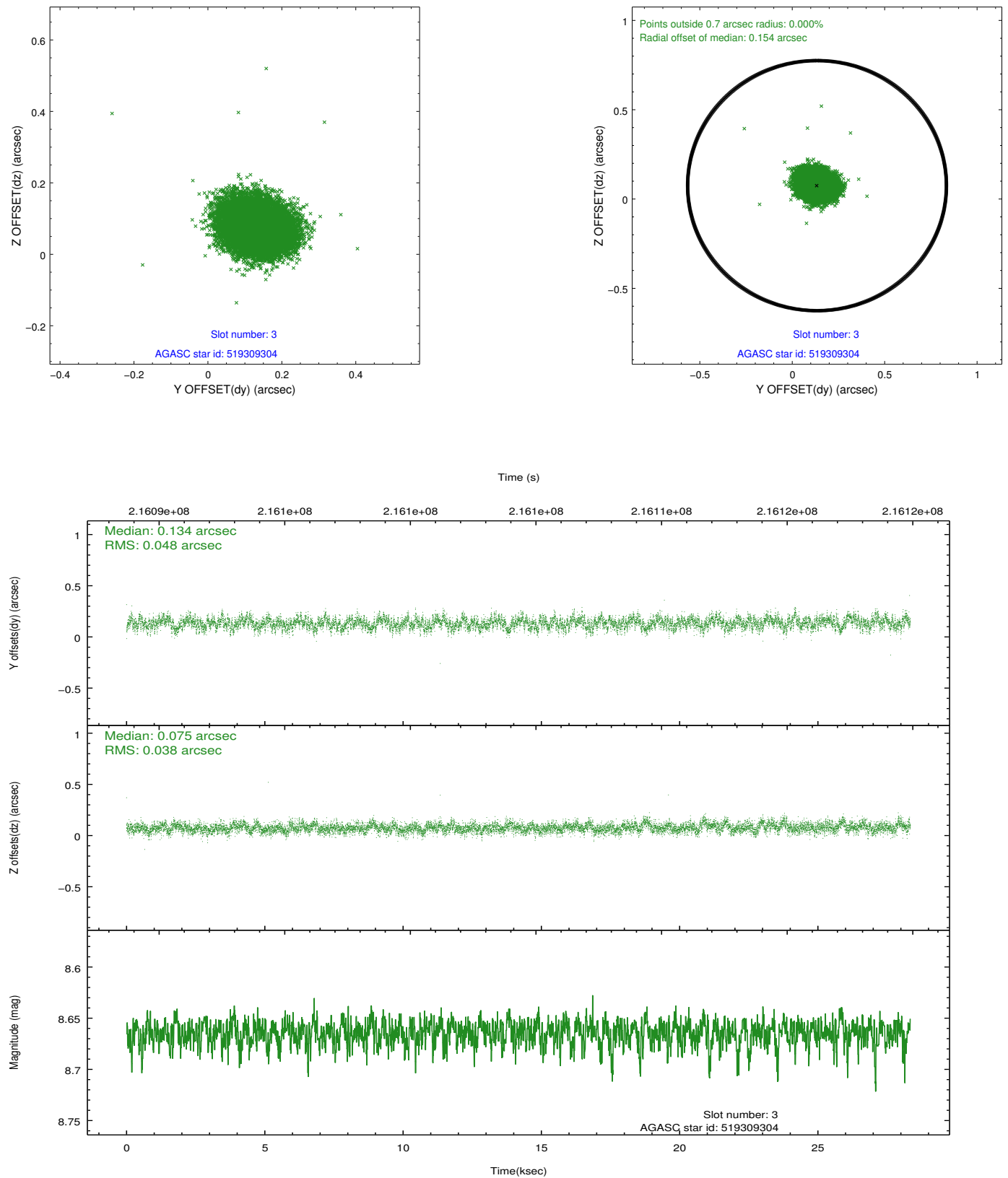


Slot Statistics

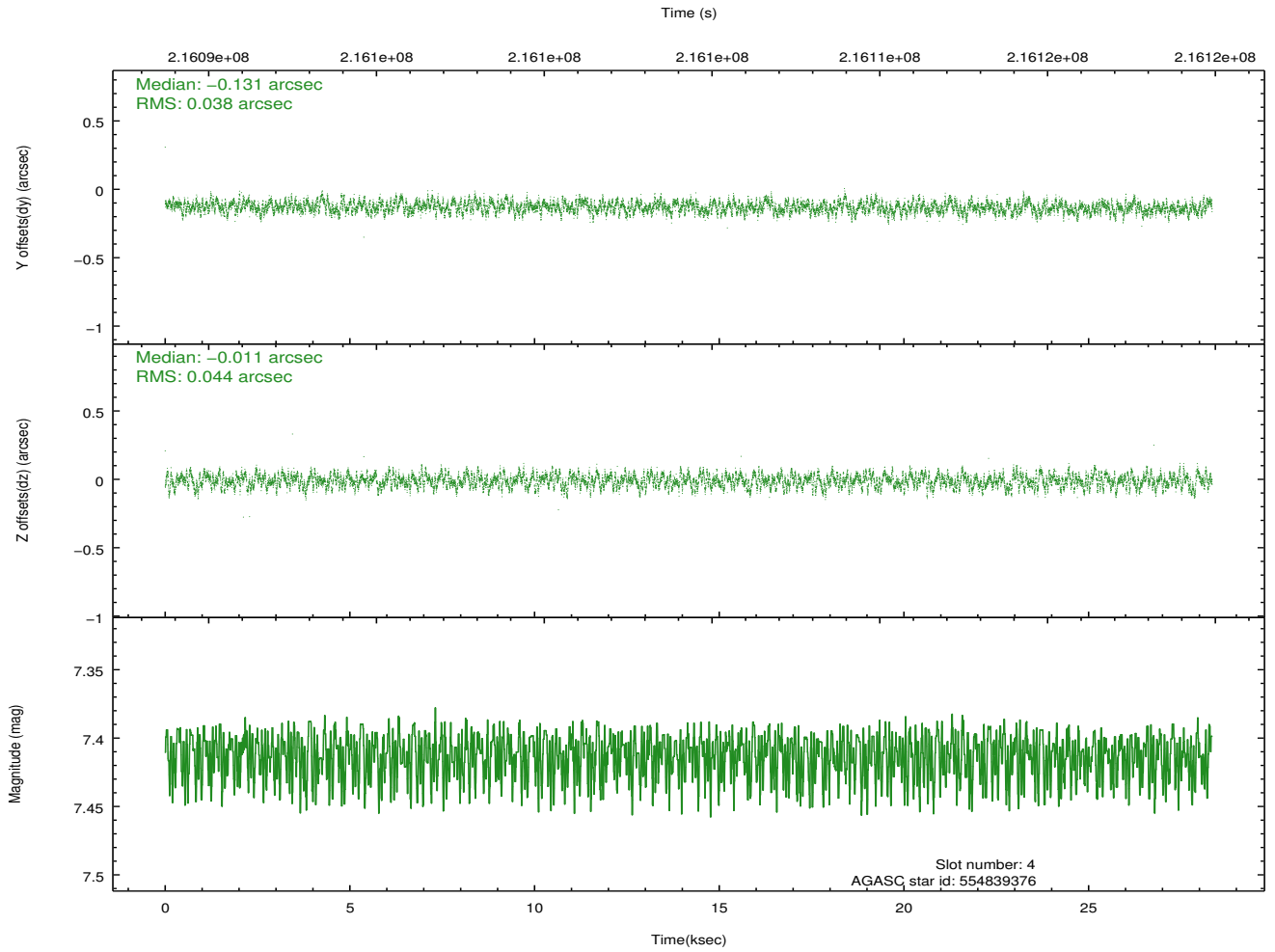
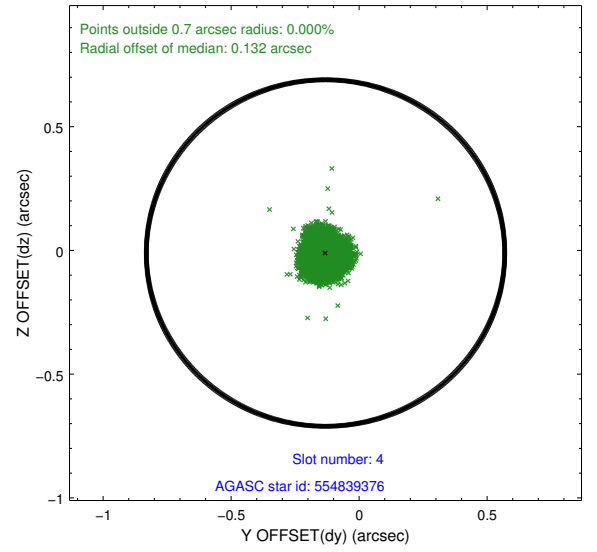
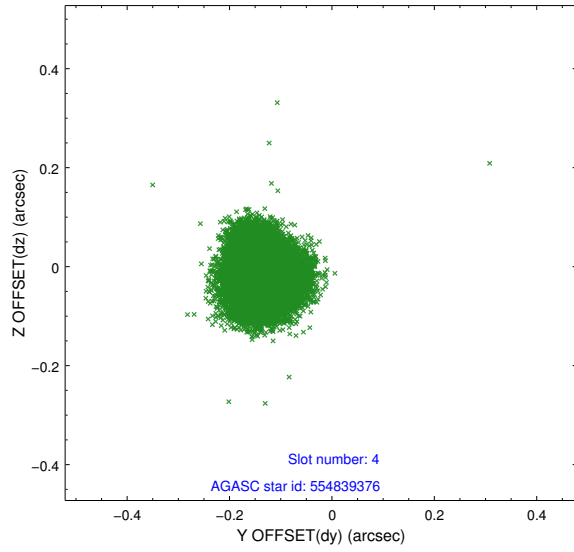
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	6913	0.037	-0.082	0.008	0.013	0.000000	0.000000	938.84	-1724.15
1	FID	ACIS-S-4	7.20	6914	0.076	0.043	0.008	0.013	0.000000	0.000000	2156.37	180.02
2	FID	ACIS-S-5	7.23	6913	-0.140	0.051	0.007	0.013	0.000000	0.000000	-1810.06	173.79
3	GUIDE	519309304	8.66	13824	0.134	0.075	0.064	0.105	309.978425	59.702936	1896.10	1884.96
4	GUIDE	554839376	7.41	13822	-0.131	-0.011	0.063	0.096	308.018563	60.422364	-1273.74	-1124.09
5	GUIDE	554842440	8.18	13825	0.005	-0.044	0.067	0.112	307.970960	60.063321	-21.90	-1454.86
6	GUIDE	556537192	9.21	13818	-0.073	-0.052	0.094	0.152	309.975880	60.344309	-383.49	2253.69
7	GUIDE	519311352	8.74	13822	0.066	0.035	0.073	0.118	309.050952	59.661888	1757.30	198.80

## 2.4 Star Slots

### 2.4.1 Slot 3

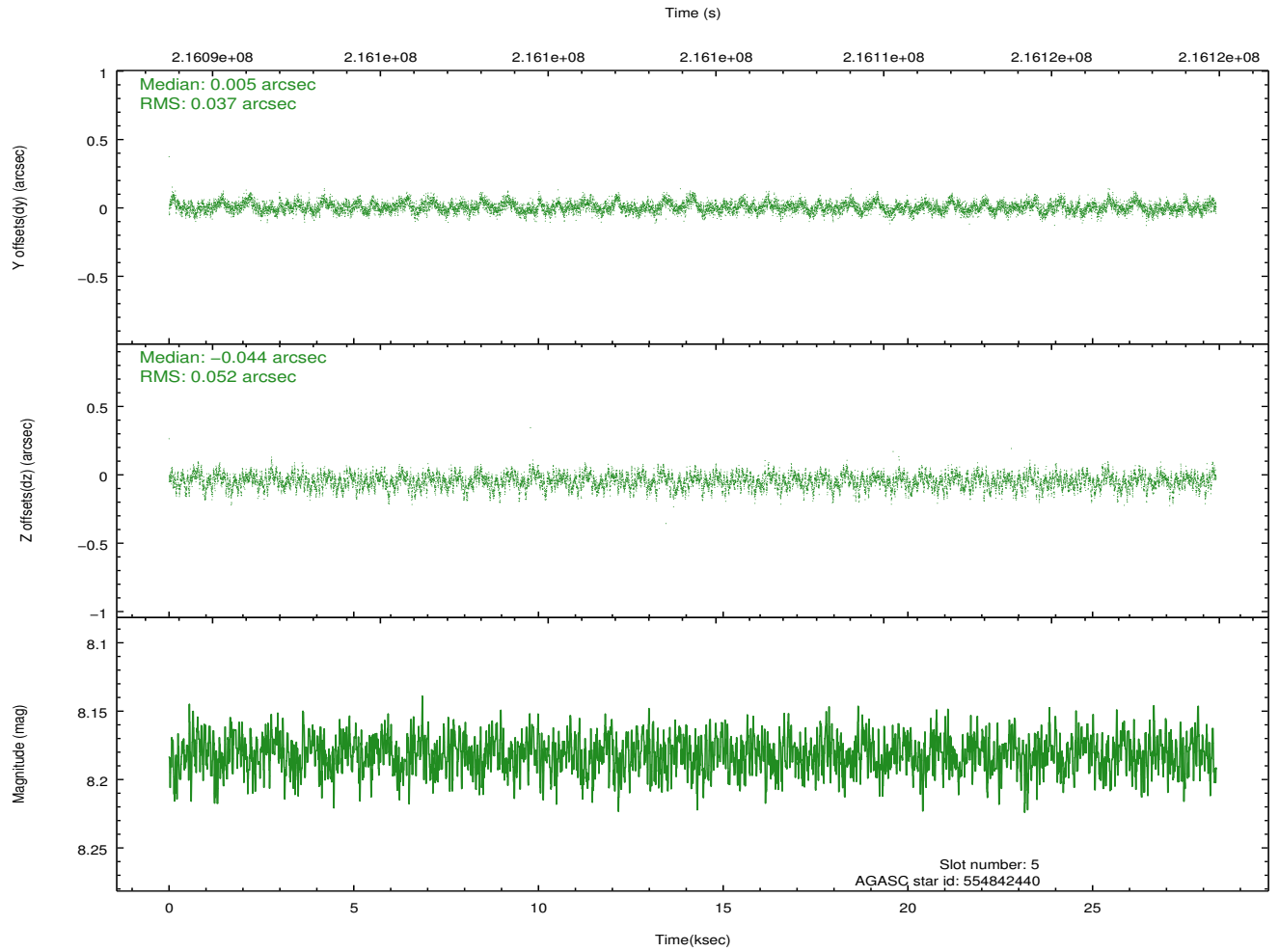
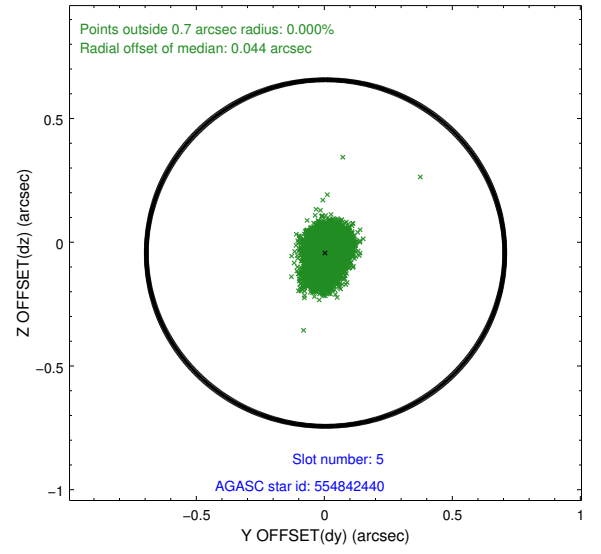
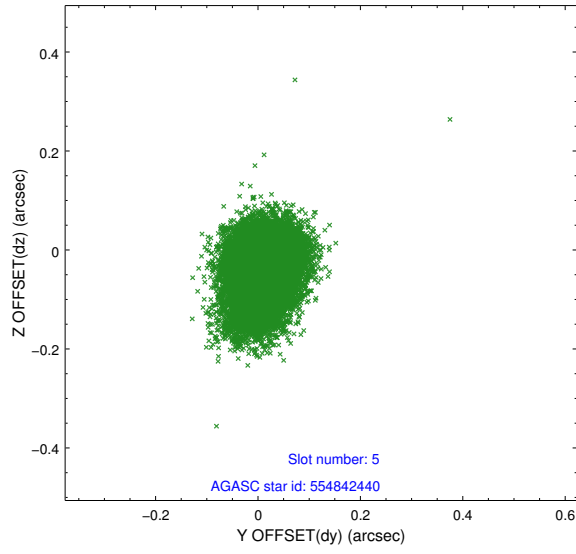


## 2.4.2 Slot 4

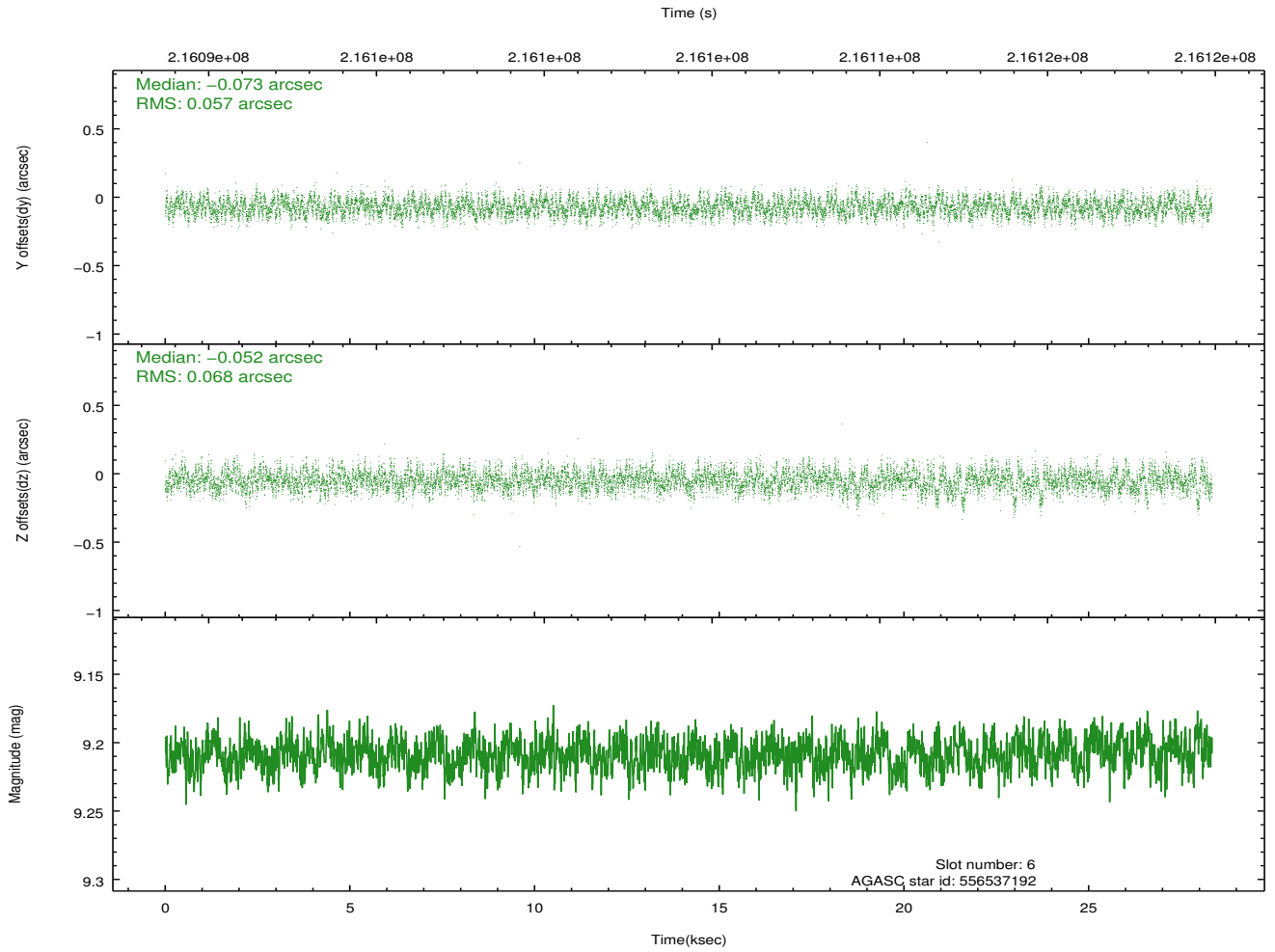
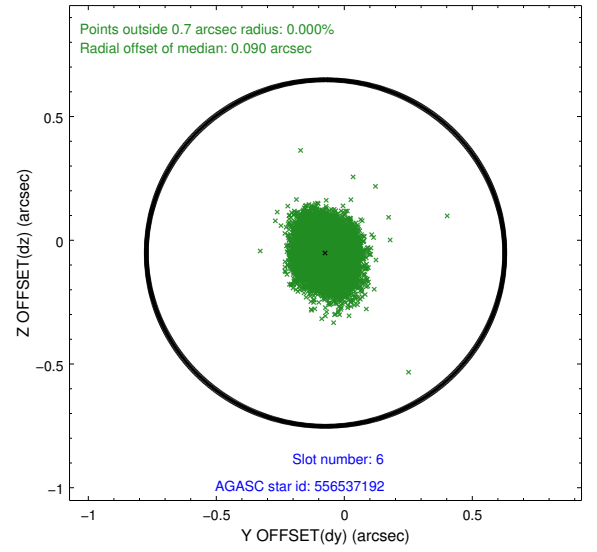
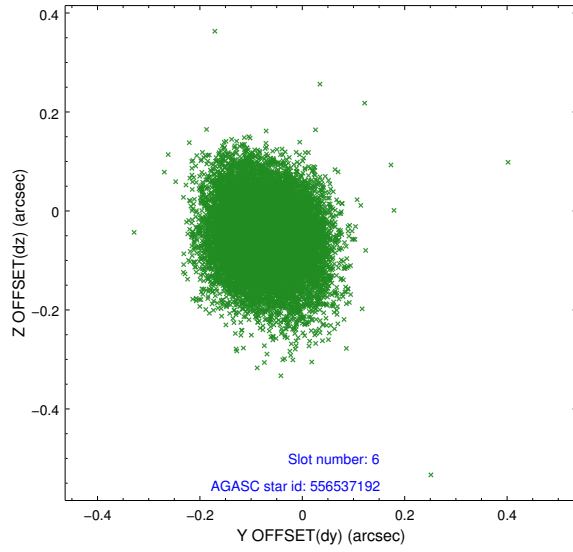




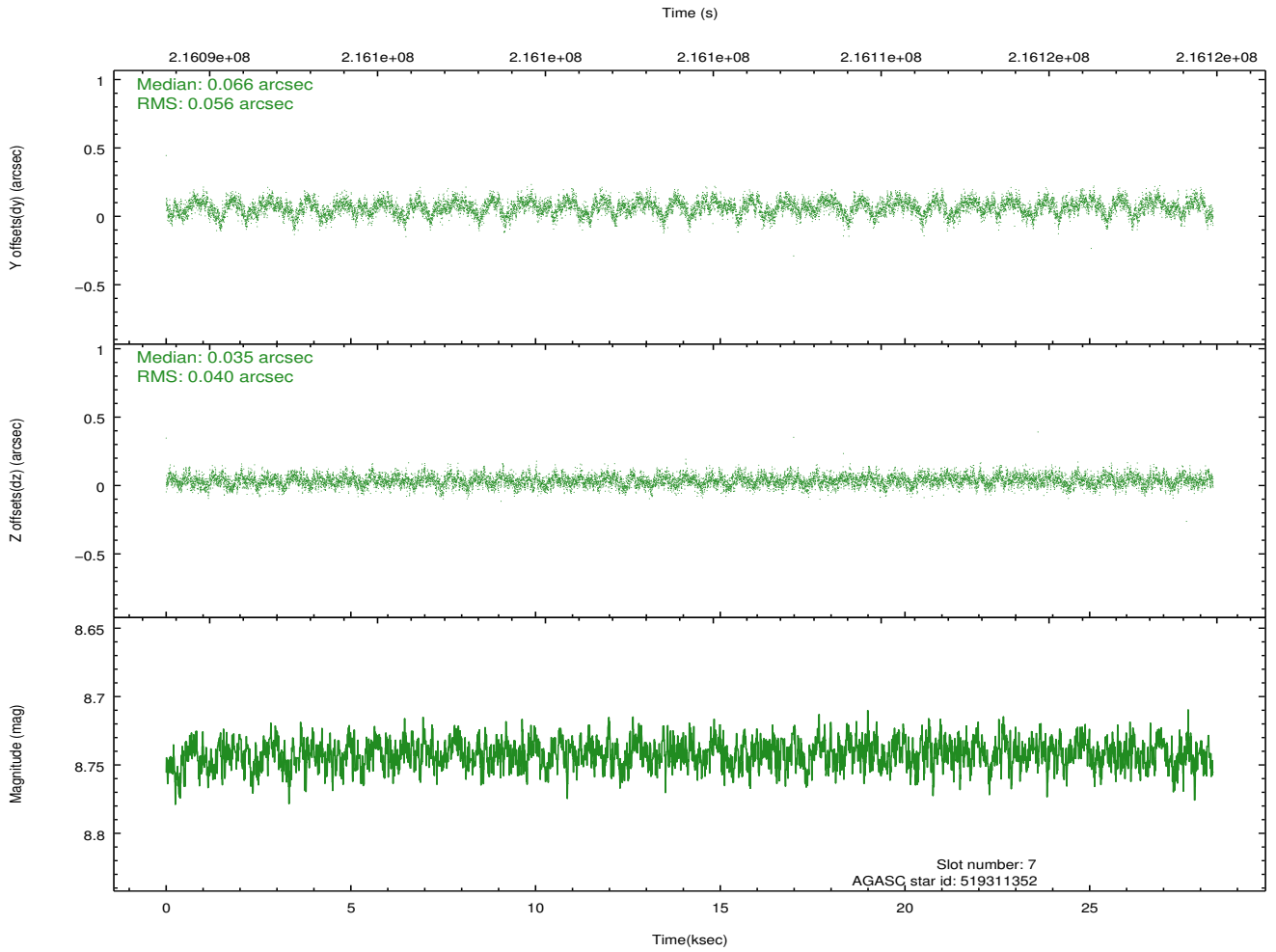
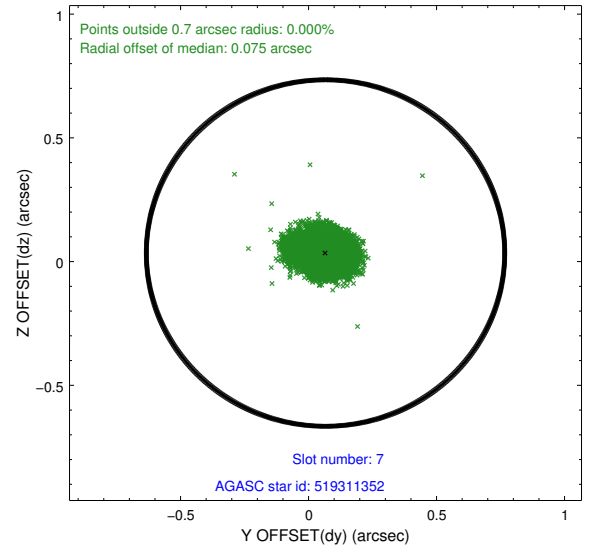
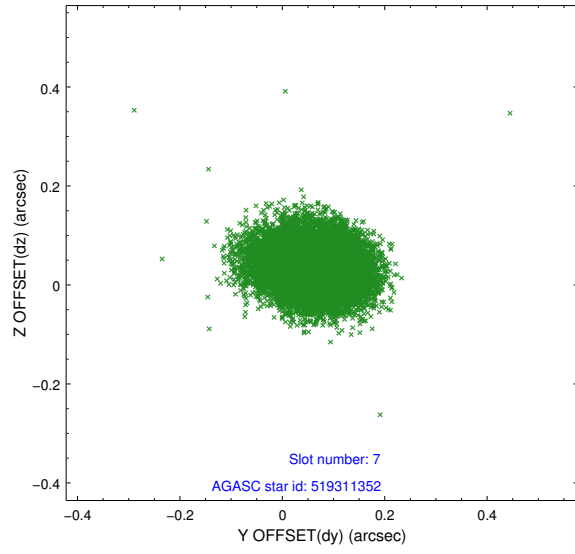
### 2.4.3 Slot 5



## 2.4.4 Slot 6

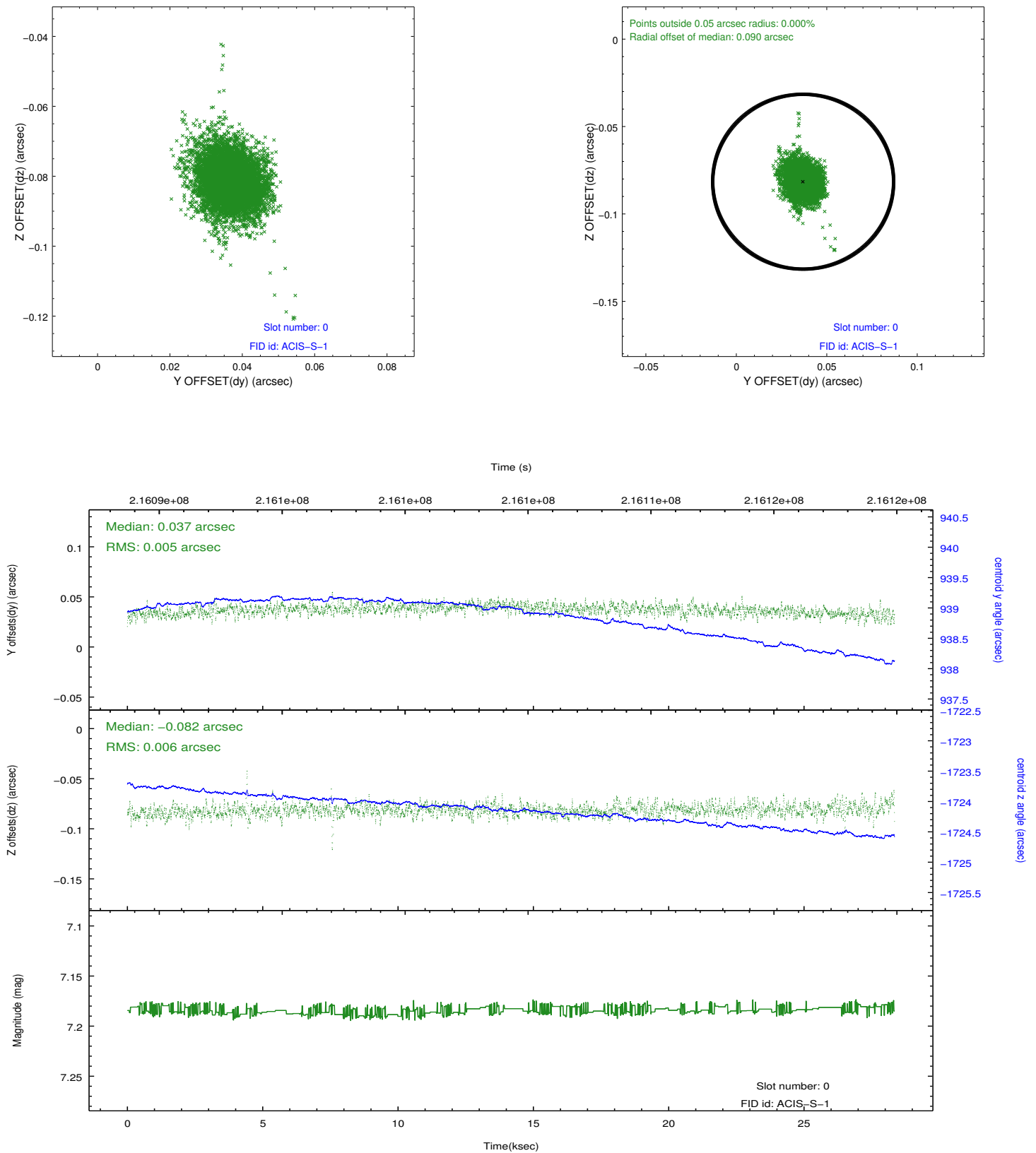


## 2.4.5 Slot 7

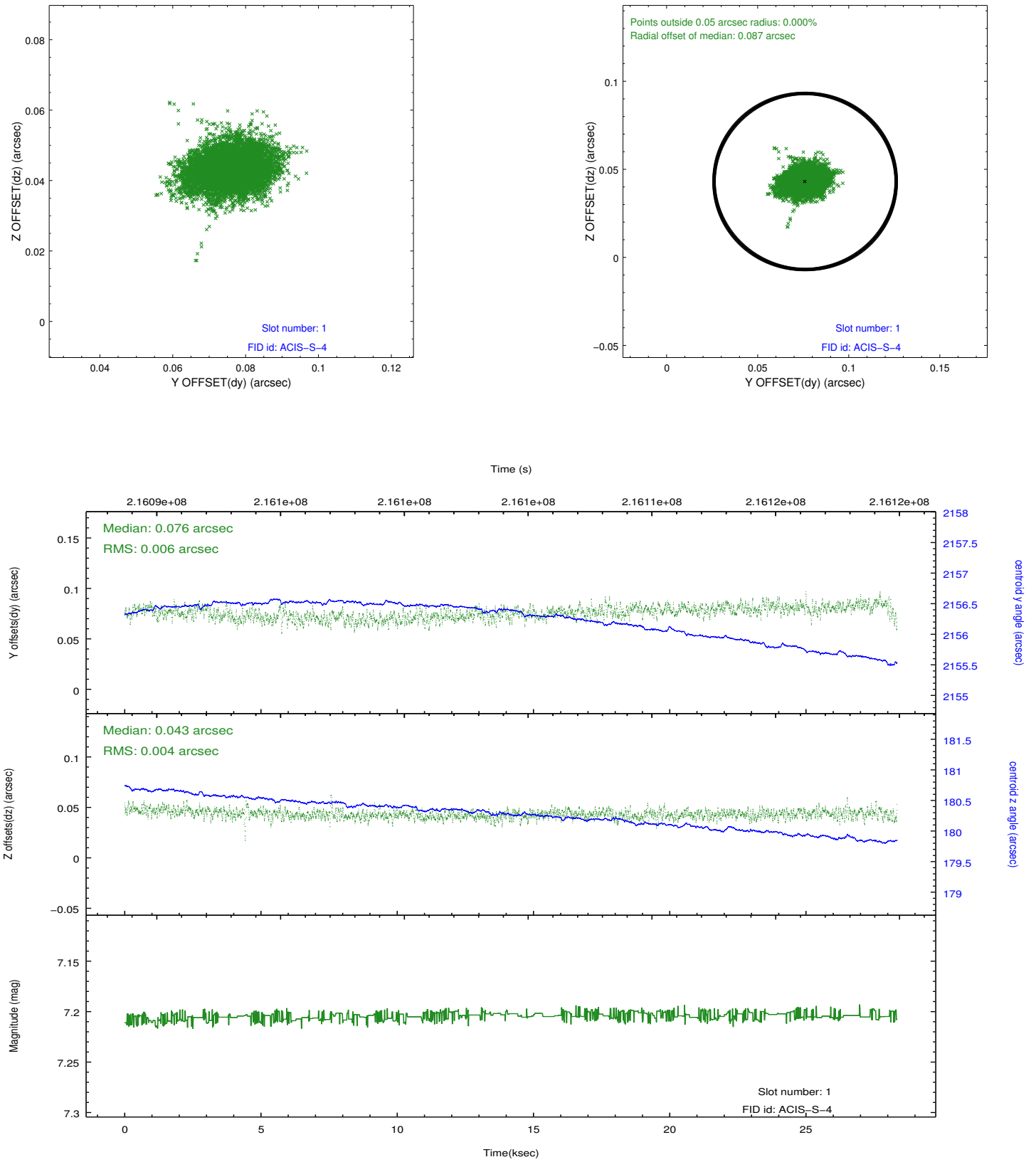


## 2.5 FID Slots

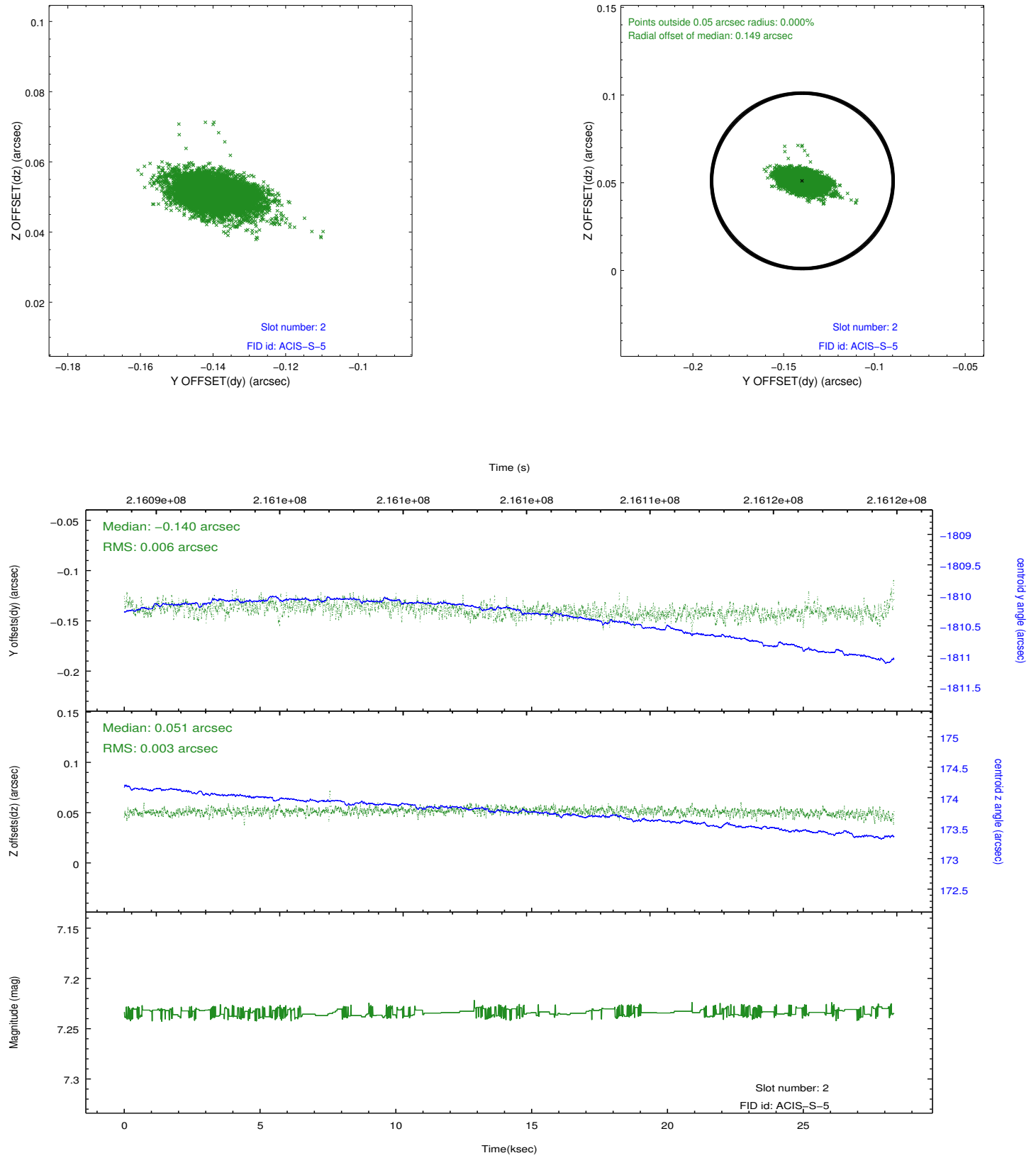
### 2.5.1 Slot 0



## 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)	2013.01.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.339

### A.2 Comments

Roll constraint met. Monitor constraint met.