

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11556 - L2 Version 2  
Chandra X-Ray Center

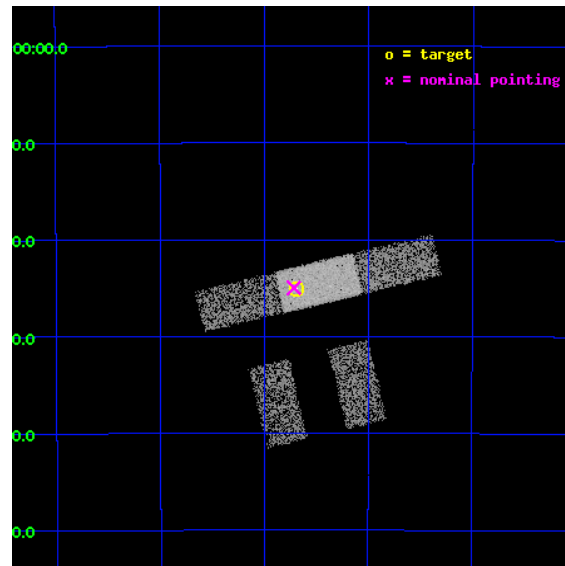
L2 Processing Date : Jun 16 2012

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# 1 Front

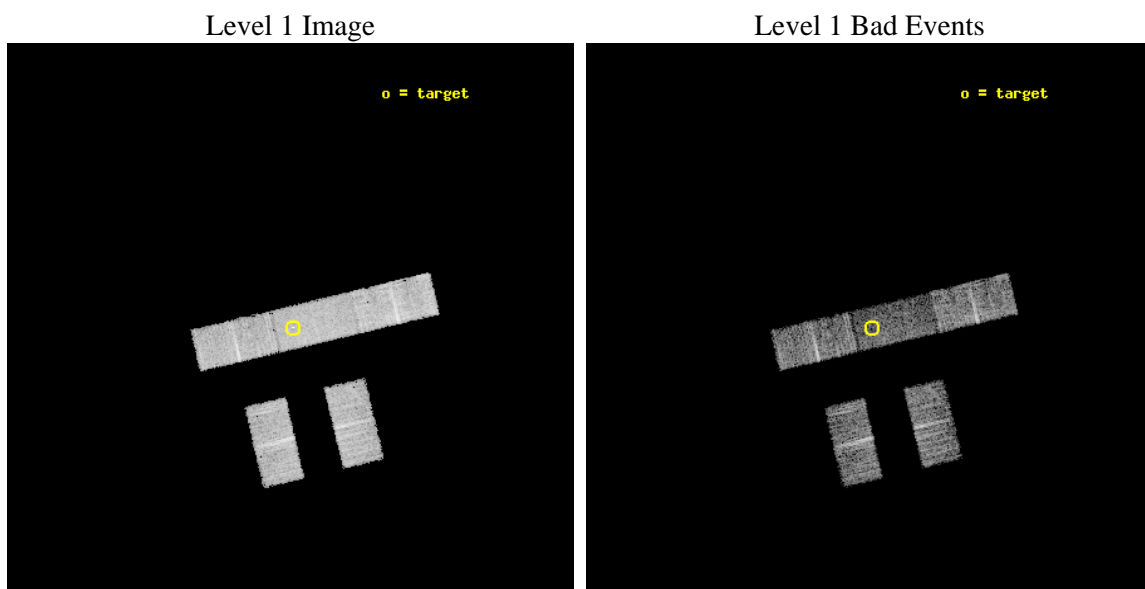
seq_num	702142	Sequence number
obs_id	11556	Observation id
title	The Size of Quasar Non-Thermal/X-ray Emission Regions	Proposal tit
observer	Prof. Christopher Kochanek	Principal investigator
object	QJ0158-4325	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	29.6725	Observer's specified target RA [deg]
dec_targ	-43.417833	Observer's specified target Dec [deg]
ra_nom	29.67882270363	Nominal RA [deg]
dec_nom	-43.416270518311	Nominal Dec [deg]
roll_nom	346.65363362244	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5147.599963963	Sum of GTIs [s]
livetime	5026.2601311499	Livetime [s]
ontime2	5147.599963963	Sum of GTIs [s]
ontime3	5147.599963963	Sum of GTIs [s]
ontime6	5147.599963963	Sum of GTIs [s]
ontime7	5147.599963963	Sum of GTIs [s]
ontime8	5147.599963963	Sum of GTIs [s]
l2events	21129	Number of level 2 events



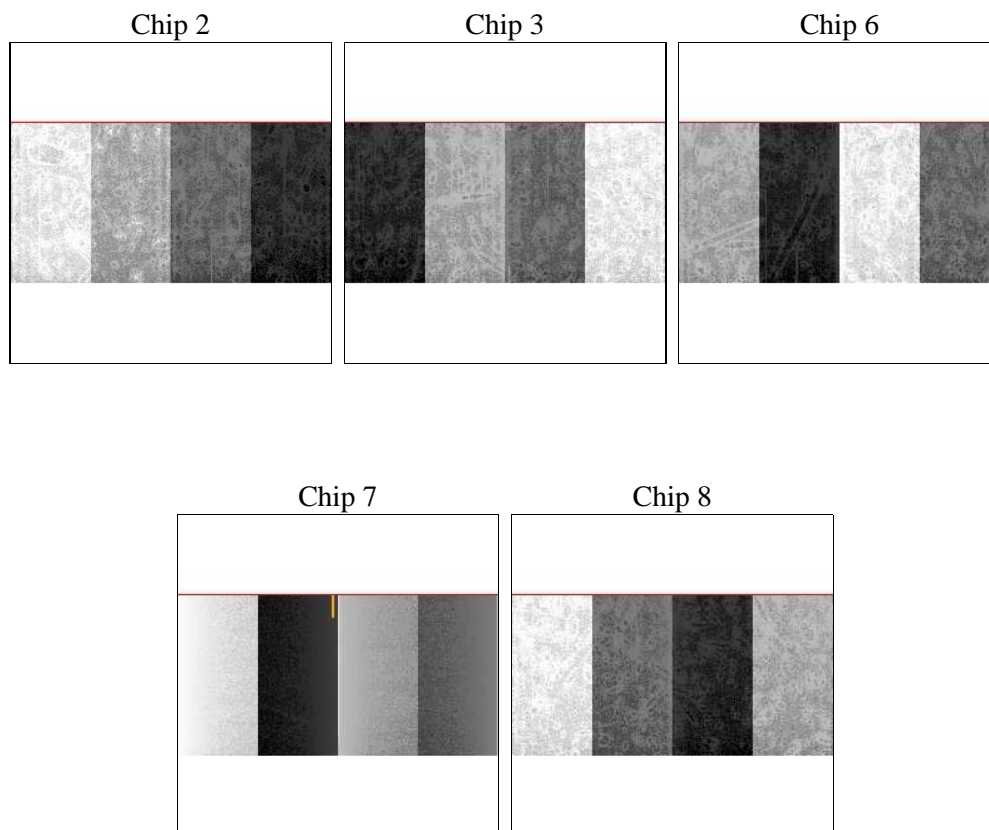
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	5147.599963963	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime2	5147.599963963	Sum of GTIs [s]
date	2012-06-16T02:38:13	Date and time of file creation	ontime3	5147.599963963	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	5147.599963963	Sum of GTIs [s]
			ontime7	5147.599963963	Sum of GTIs [s]
			ontime8	5147.599963963	Sum of GTIs [s]
			l1events	143271	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	26283	25560	26874	29068	35486
rejected events	23750	23277	24289	16455	27548
rejected %	90%	91%	90%	56%	77%

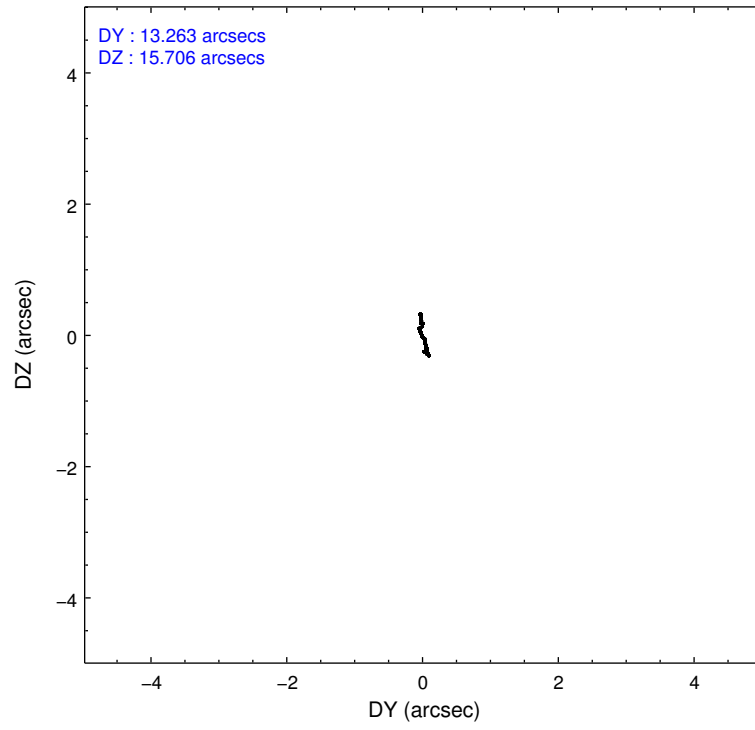
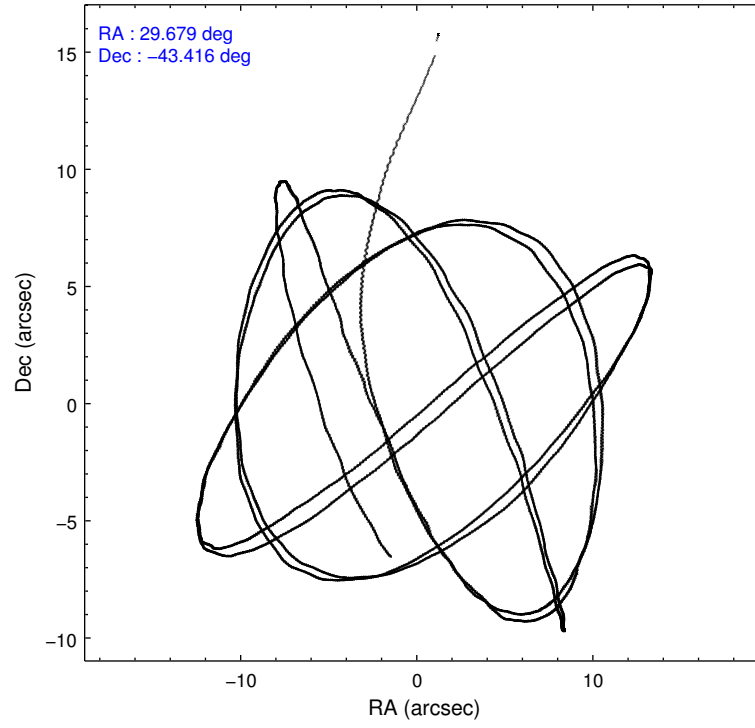
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	903	831	960	1427	2514
	3%	3%	3%	4%	7%
grade 1 events	6	11	9	51	14
	0%	0%	0%	0%	0%
grade 2 events	628	508	584	2940	1880
	2%	1%	2%	10%	5%
grade 3 events	367	340	347	1330	983
	1%	1%	1%	4%	2%
grade 4 events	370	316	352	1388	818
	1%	1%	1%	4%	2%
grade 5 events	826	1087	1042	3069	1457
	3%	4%	3%	10%	4%
grade 6 events	505	474	582	6572	2383
	1%	1%	2%	22%	6%
grade 7 events	22678	21993	22998	12291	25437
	86%	86%	85%	42%	71%

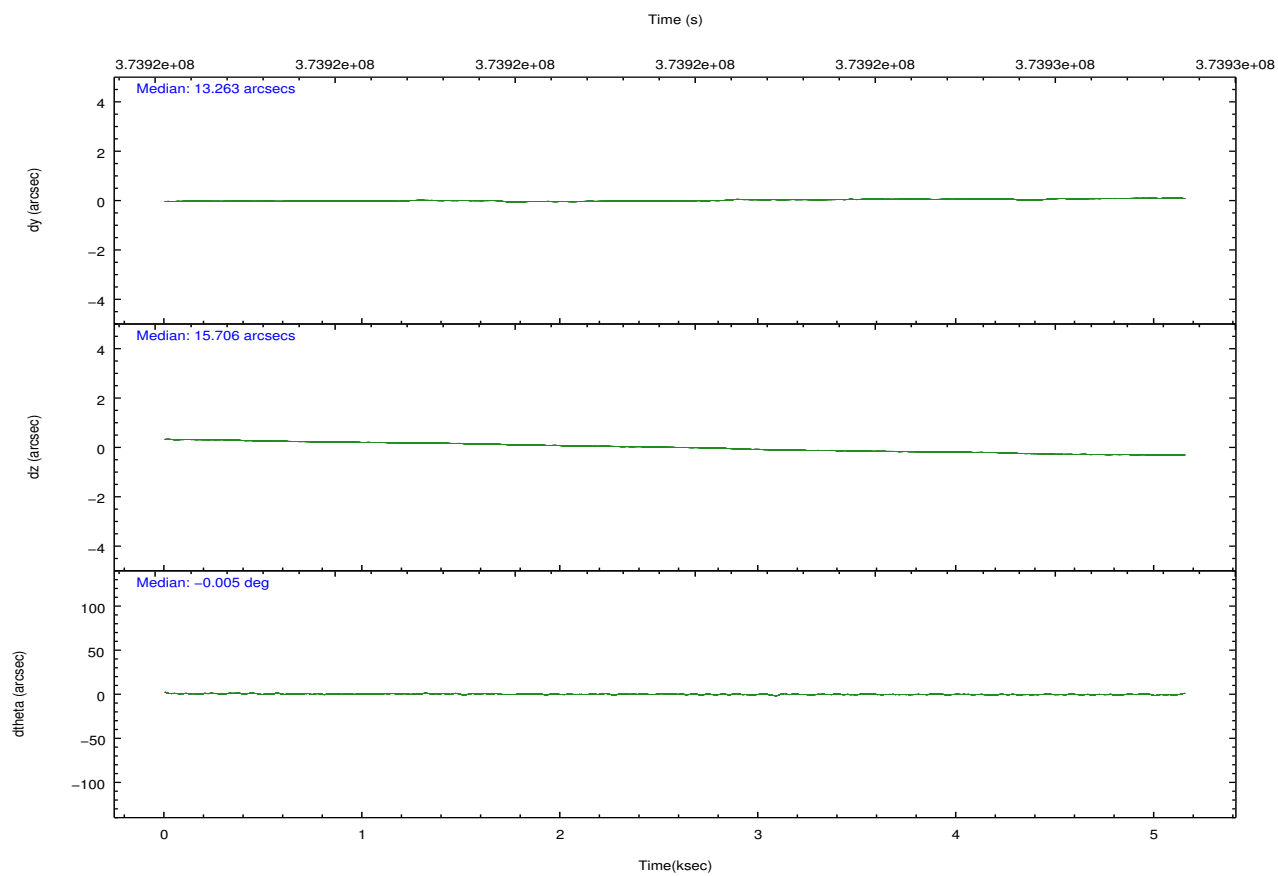
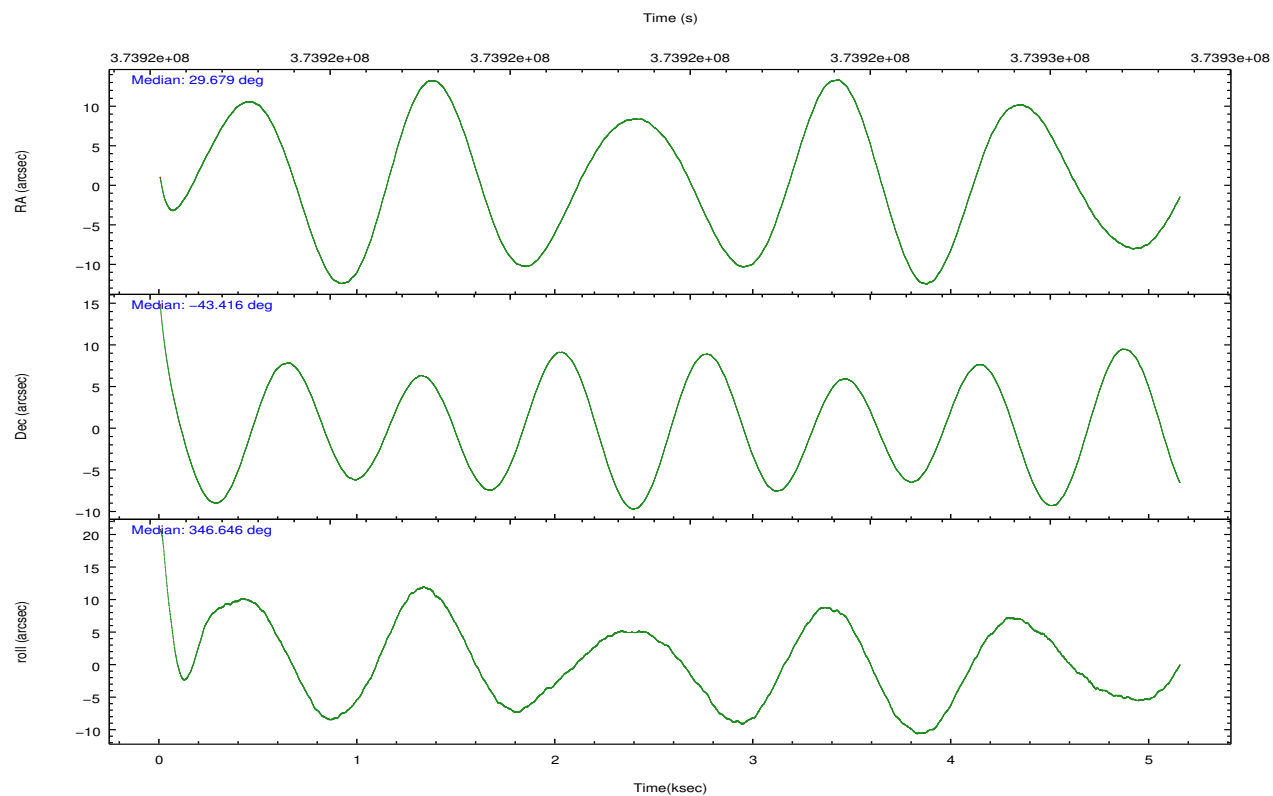


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	29.642910	29.67882270362958	CCD I2 on	O4	Y
[deg] Pointing Dec	-43.424494	-43.4162705183108	CCD I3 on	O3	Y
[deg] Pointing Roll	346.472272	346.6536336224368	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	O2	Y
[s] Observation start time (MET)	373921471.184000	373920448.69593	CCD S5 on	N	N
Observation start date	2009-11-06T19:03:25	2009-11-06T18:47:28	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	373926471.184000	373927037.39626	On-chip summing requested	N	N
Observation end date	2009-11-06T20:26:45	2009-11-06T20:37:17	Subarray requested	CUSTOM	1/2
Read mode	TIMED	TIMED	Subarray start row	257	257
			Subarray row count	512	512
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	1.7

## 2.3 Aspect



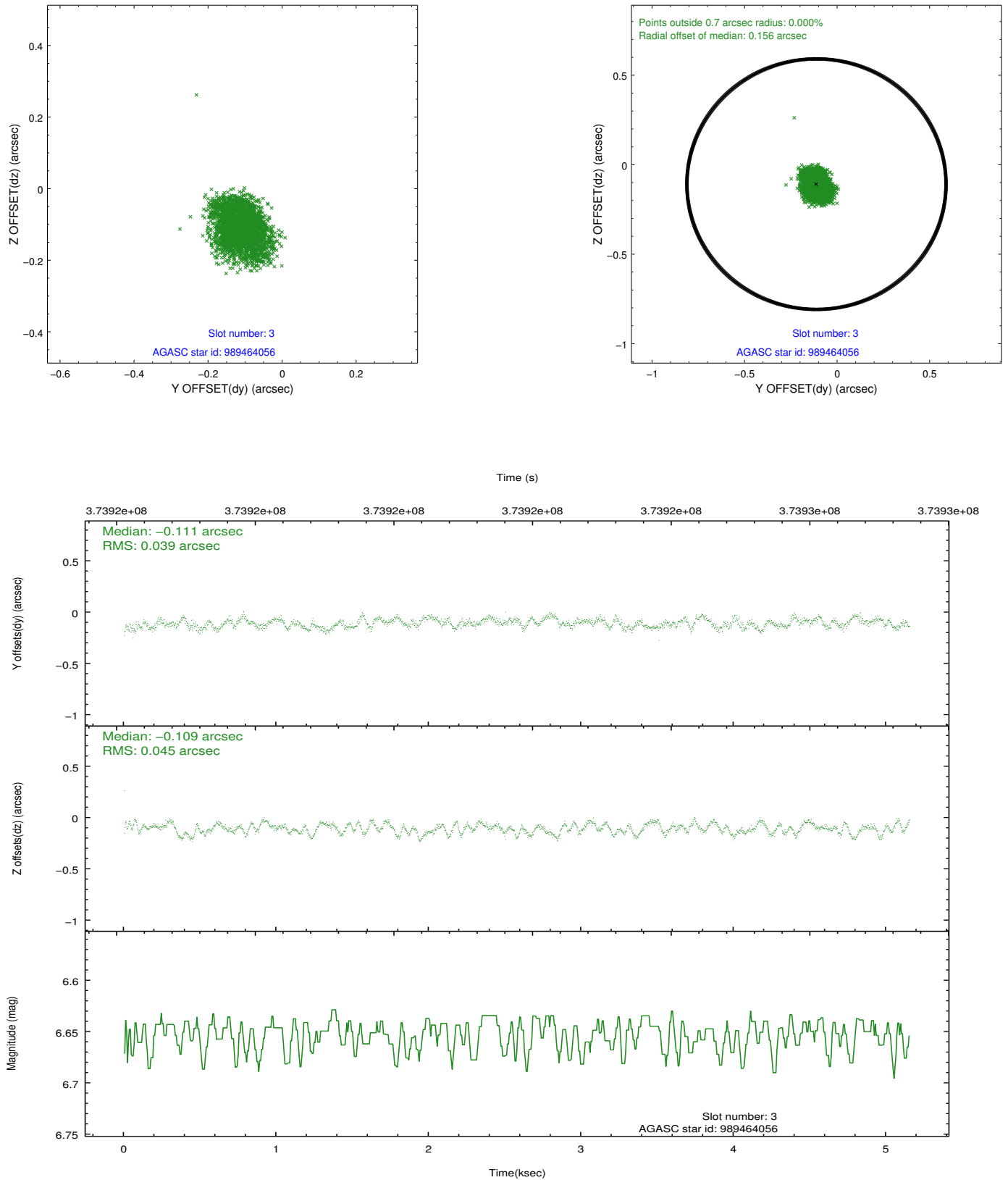


### Slot Statistics

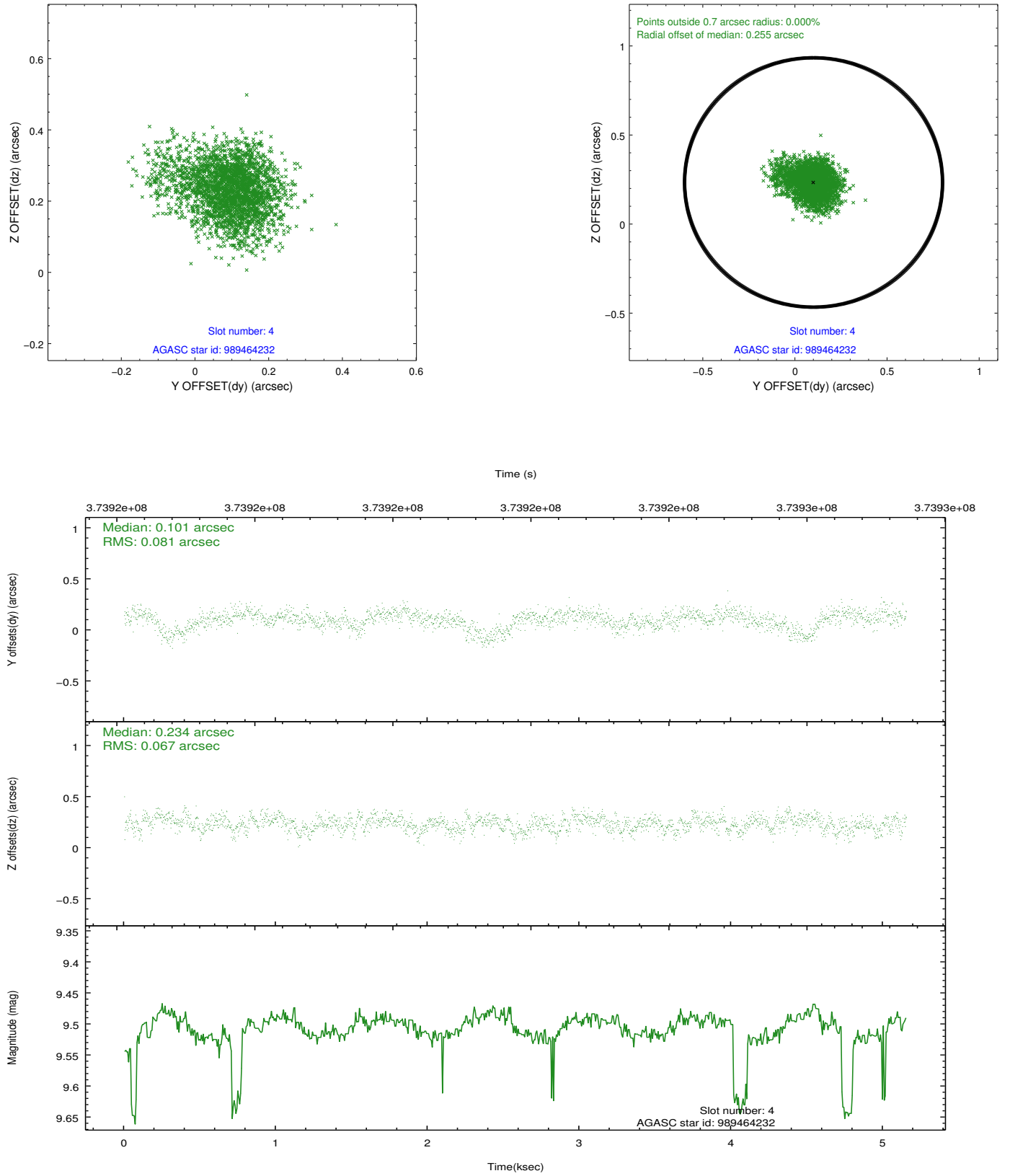
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.88	1257	-0.046	-0.004	0.007	0.013	0.000000	0.000000	-766.22	-1737.06
1	FID	ACIS-S-4	6.97	1257	0.160	0.023	0.007	0.014	0.000000	0.000000	2146.70	170.27
2	FID	ACIS-S-5	6.99	1257	-0.145	-0.010	0.006	0.010	0.000000	0.000000	-1817.68	165.19
3	GUIDE	989464056	6.65	2512	-0.111	-0.109	0.065	0.102	29.735893	-42.949136	-162.19	1720.93
4	GUIDE	989464232	9.51	2494	0.101	0.234	0.110	0.192	29.286358	-43.452579	-882.24	-317.65
5	GUIDE	989464976	9.19	2510	-0.033	0.045	0.097	0.154	28.960994	-43.047006	-2060.80	894.42
6	GUIDE	989467528	8.19	2514	0.023	-0.057	0.064	0.104	29.209436	-43.178151	-1313.38	593.43
7	GUIDE	989470600	9.41	2510	0.027	-0.107	0.097	0.159	29.755442	-43.921156	702.63	-1669.99

## 2.4 Star Slots

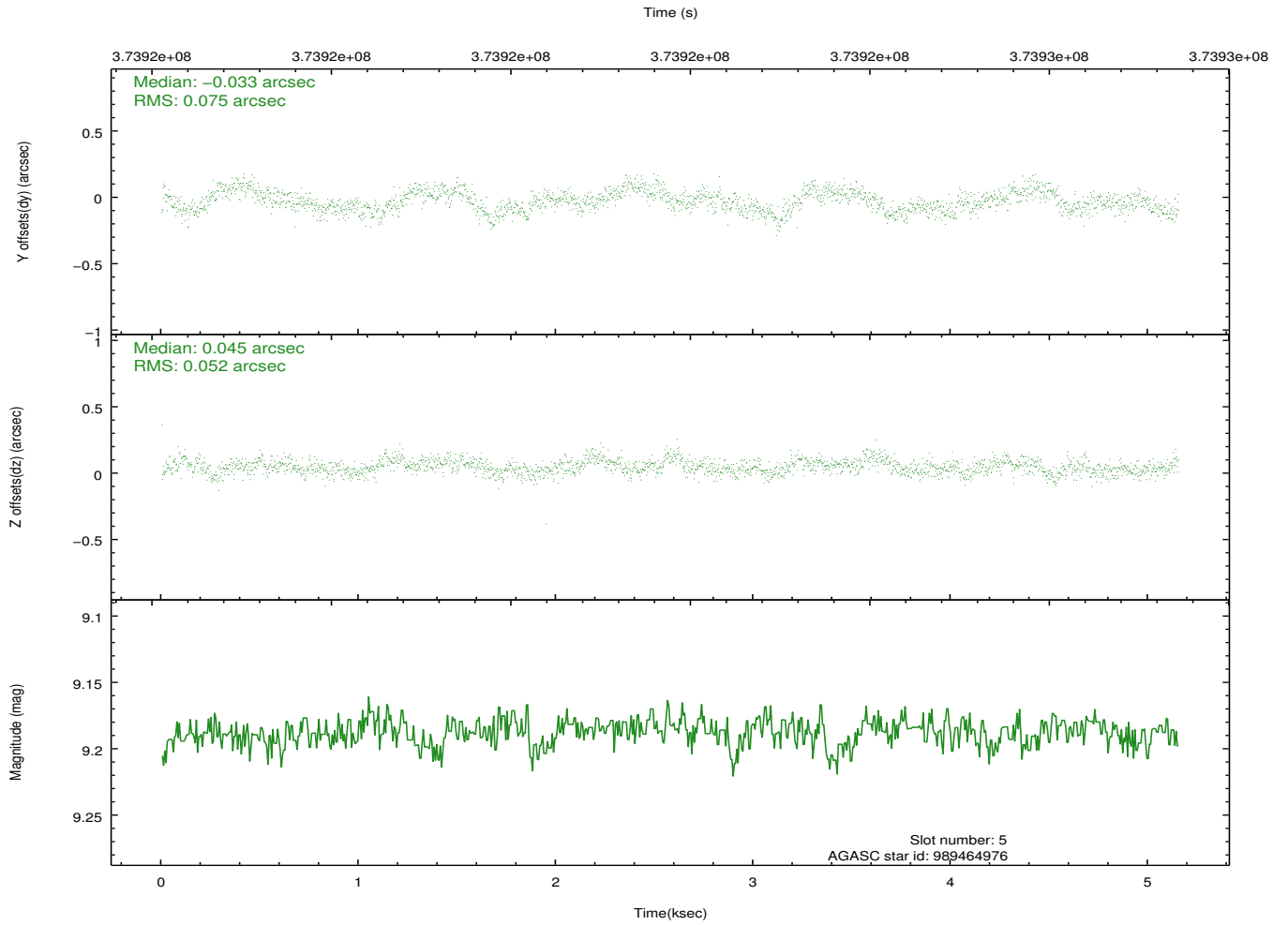
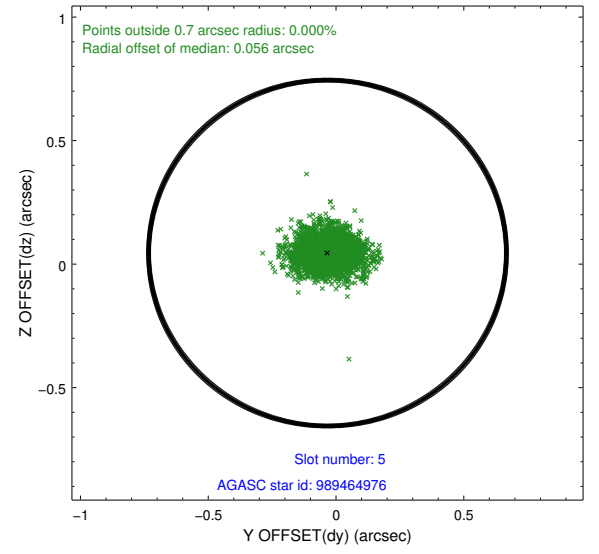
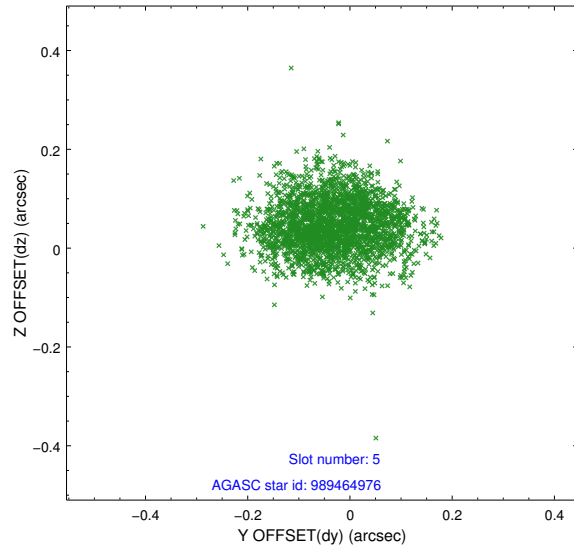
### 2.4.1 Slot 3



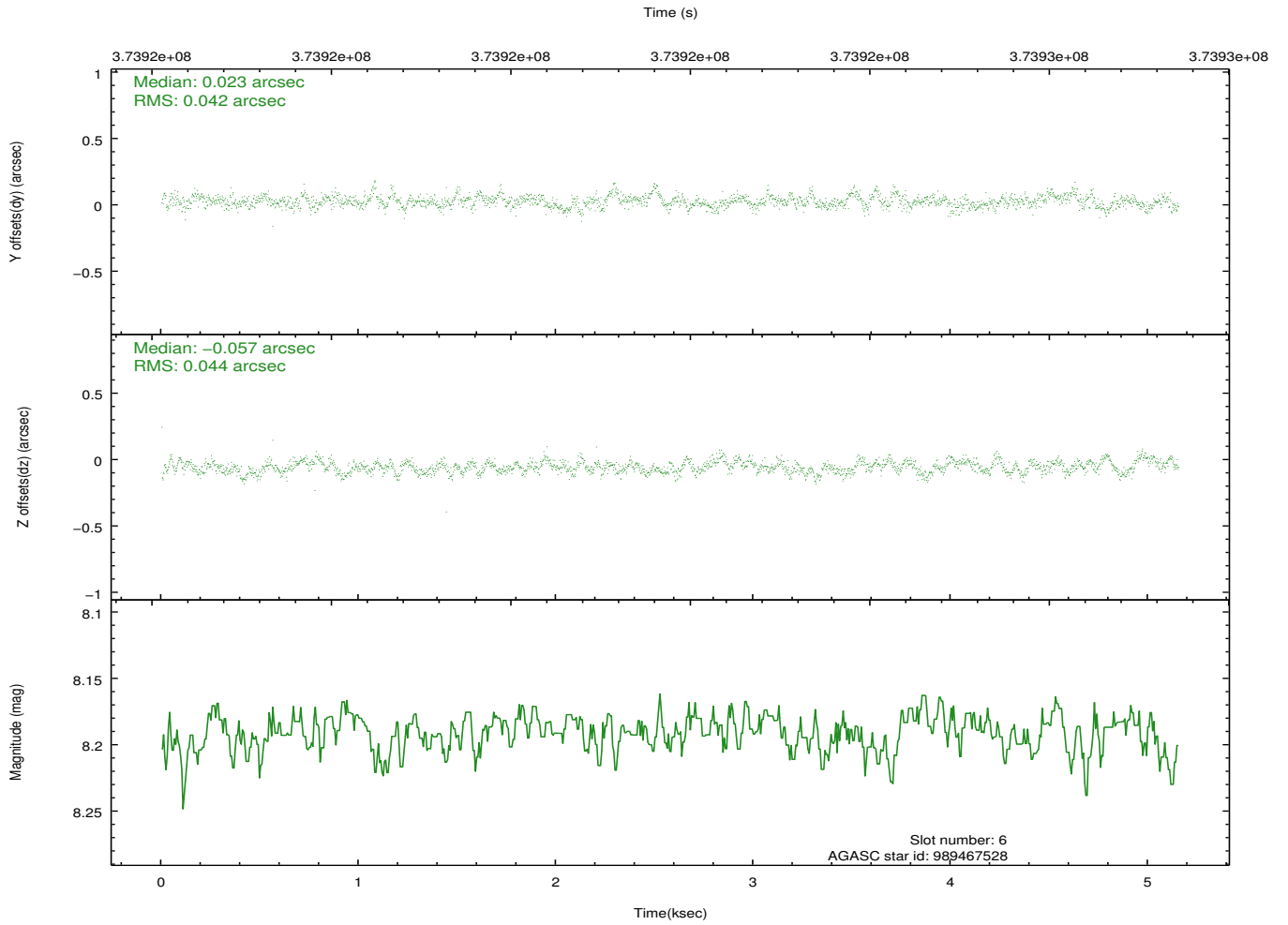
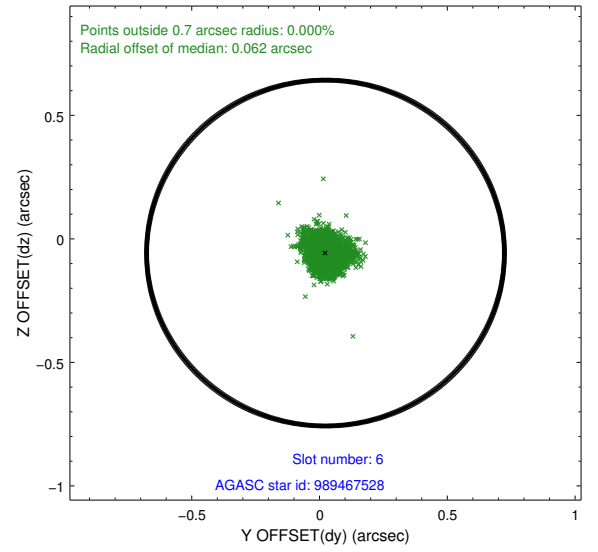
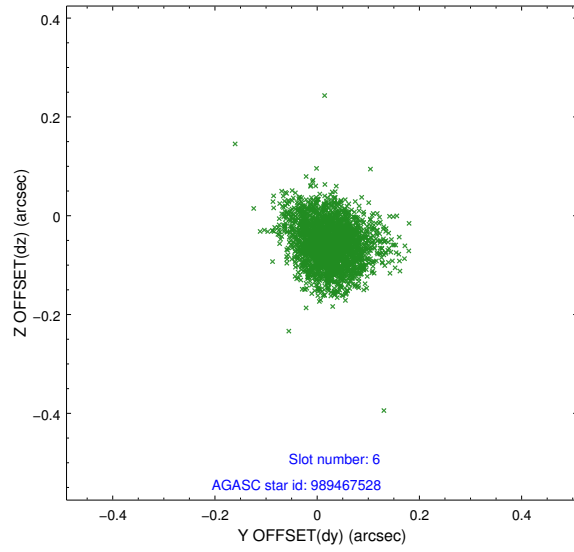
## 2.4.2 Slot 4



### 2.4.3 Slot 5

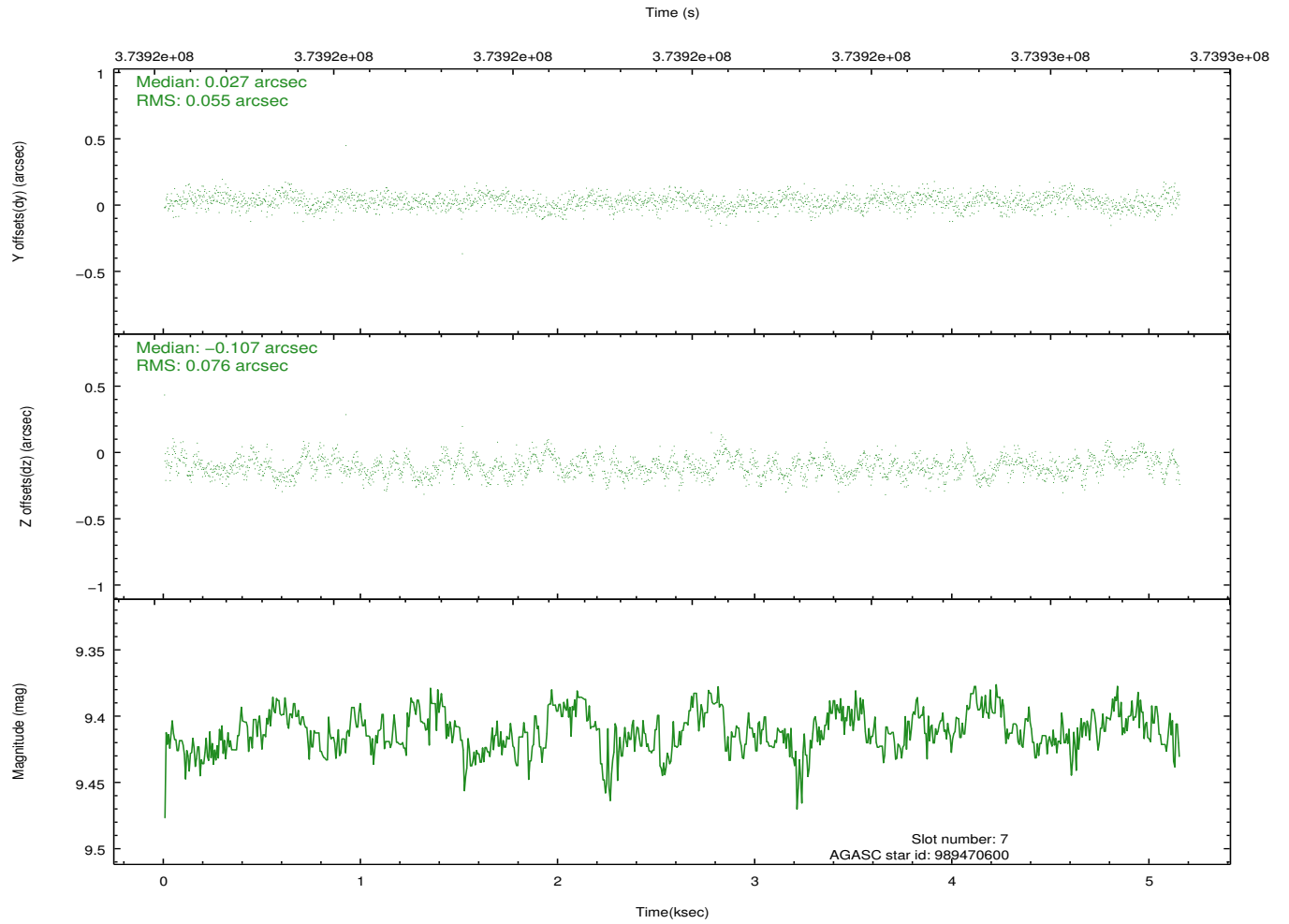
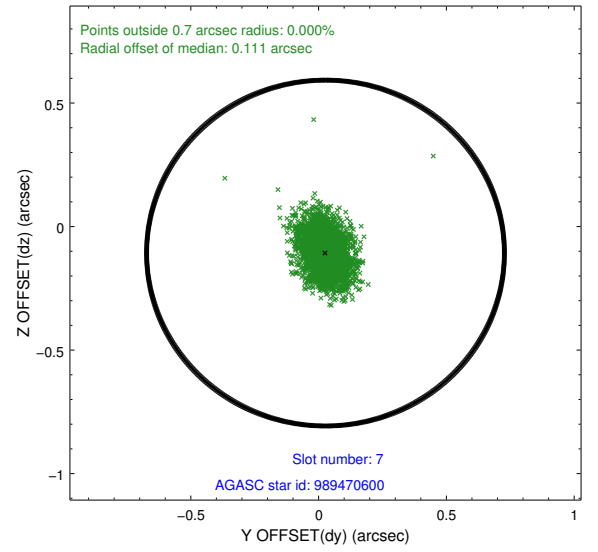
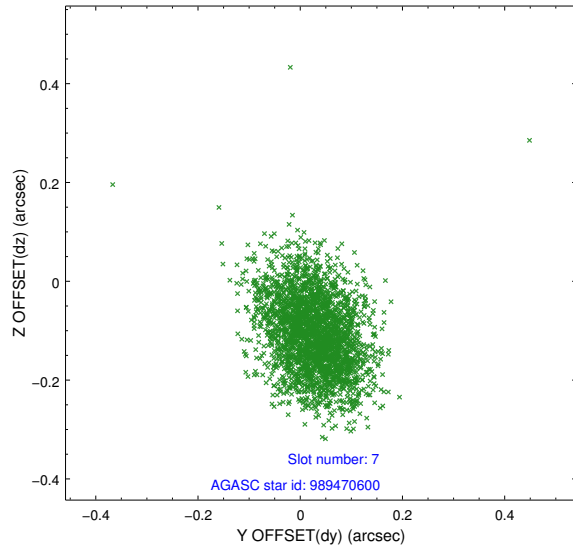


## 2.4.4 Slot 6



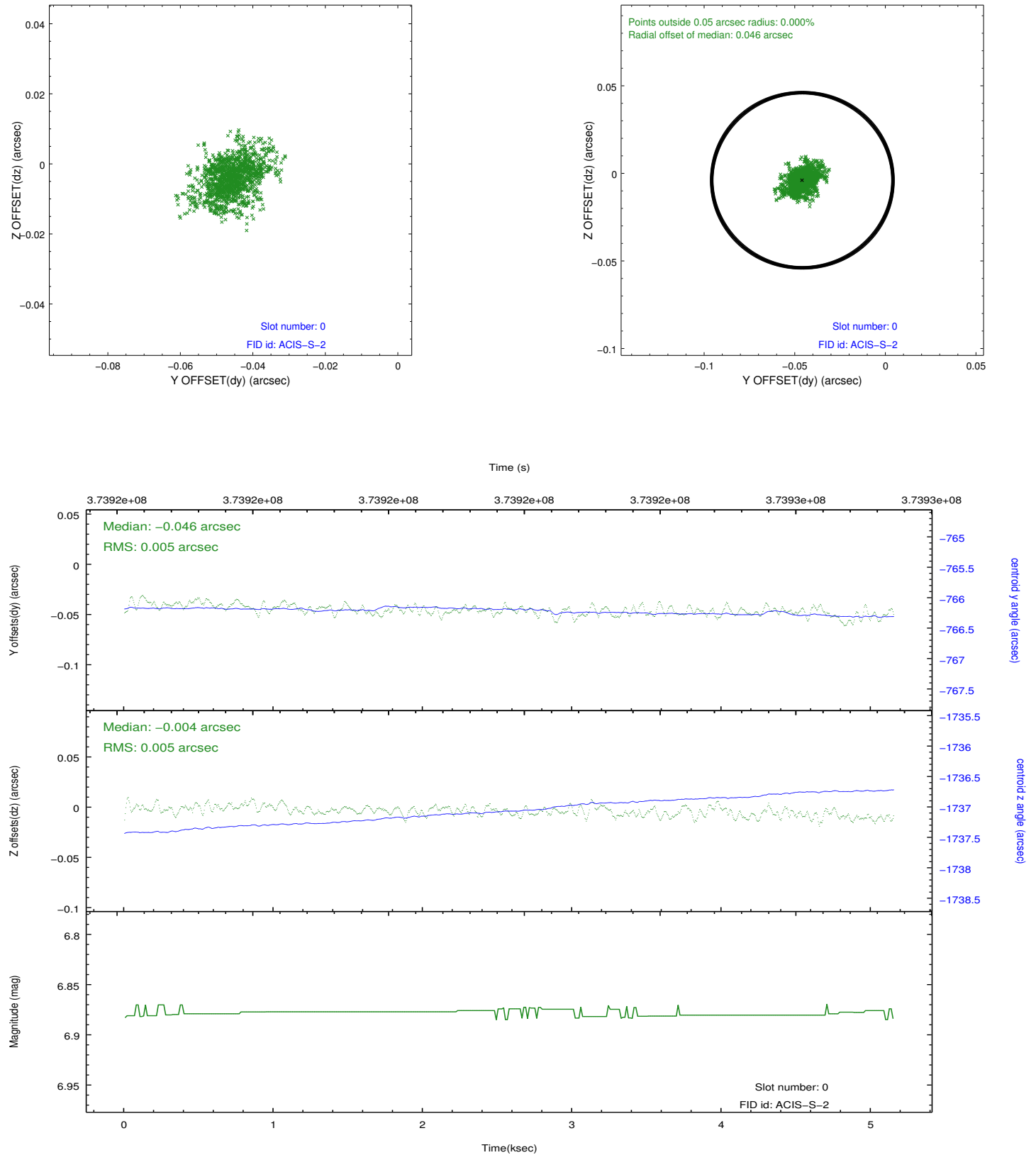


## 2.4.5 Slot 7

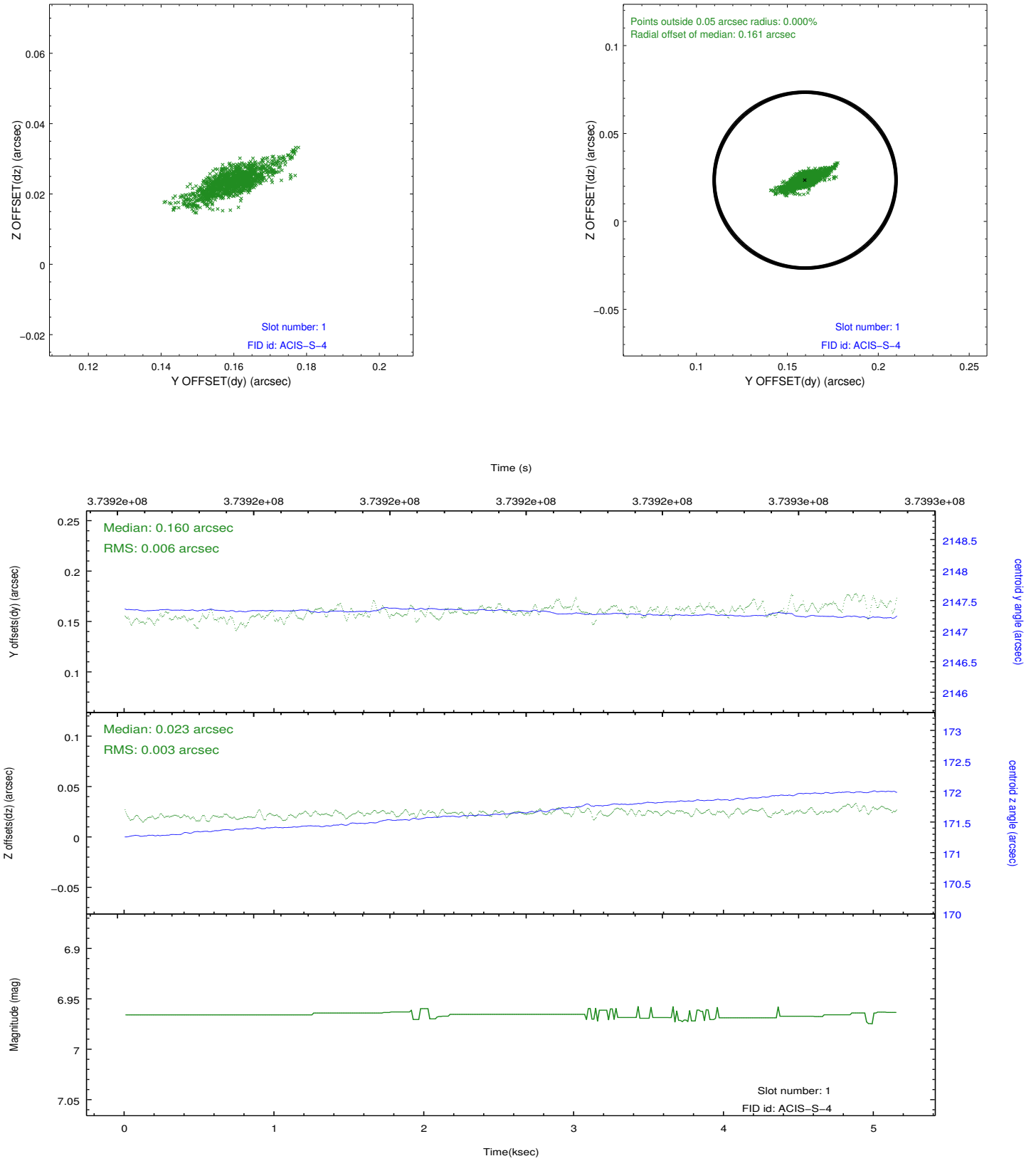


## 2.5 FID Slots

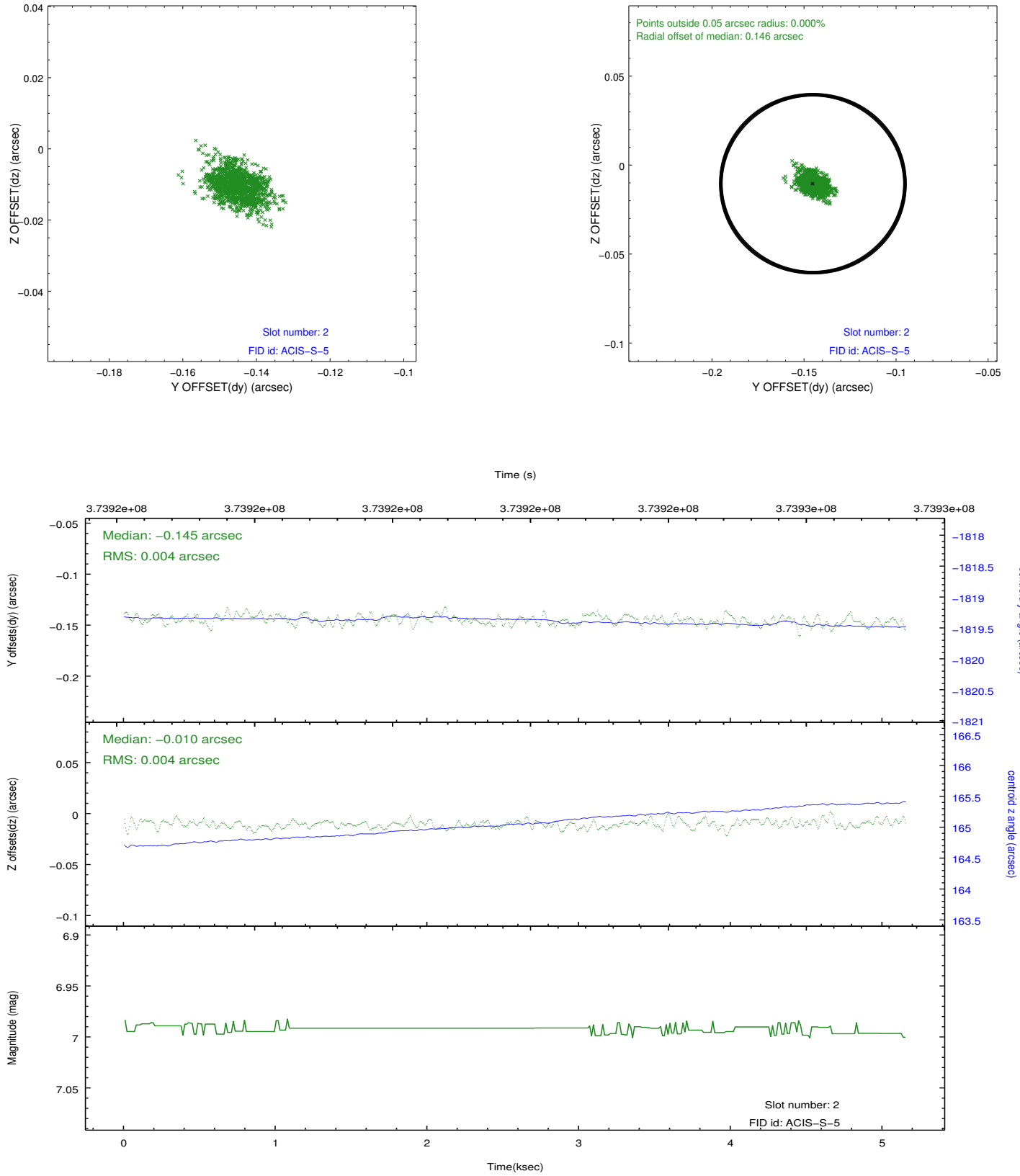
### 2.5.1 Slot 0



## 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)	2012.06.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.147599963963

### A.2 Comments