

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11557 - L2 Version 2  
Chandra X-Ray Center

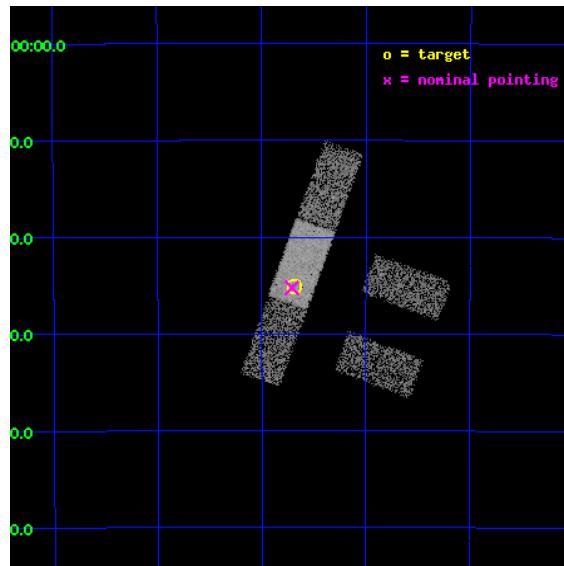
L2 Processing Date : Jun 19 2012

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# 1 Front

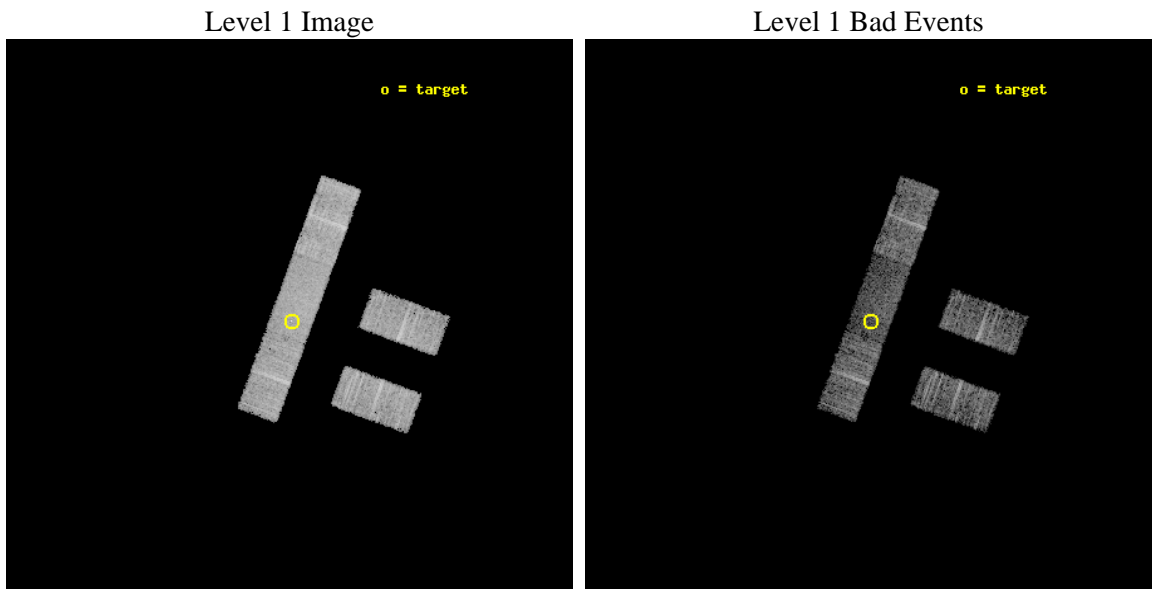
seq_num	702143	Sequence number
obs_id	11557	Observation id
title	The Size of Quasar Non-Thermal/X-ray Emission Regions	Proposal tit
observer	Prof. Christopher Kochanek	Principal investigator
object	QJ0158-4325	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	29.6725	Observer's specified target RA [deg]
dec_targ	-43.417833	Observer's specified target Dec [deg]
ra_nom	29.677681058753	Nominal RA [deg]
dec_nom	-43.420769770472	Nominal Dec [deg]
roll_nom	290.18576937053	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5137.3999640346	Sum of GTIs [s]
liveltime	5016.3005668214	Livetime [s]
ontime2	5137.3999640346	Sum of GTIs [s]
ontime3	5137.3999640346	Sum of GTIs [s]
ontime6	5137.3999640346	Sum of GTIs [s]
ontime7	5137.3999640346	Sum of GTIs [s]
ontime8	5137.3999640346	Sum of GTIs [s]
l2events	21675	Number of level 2 events



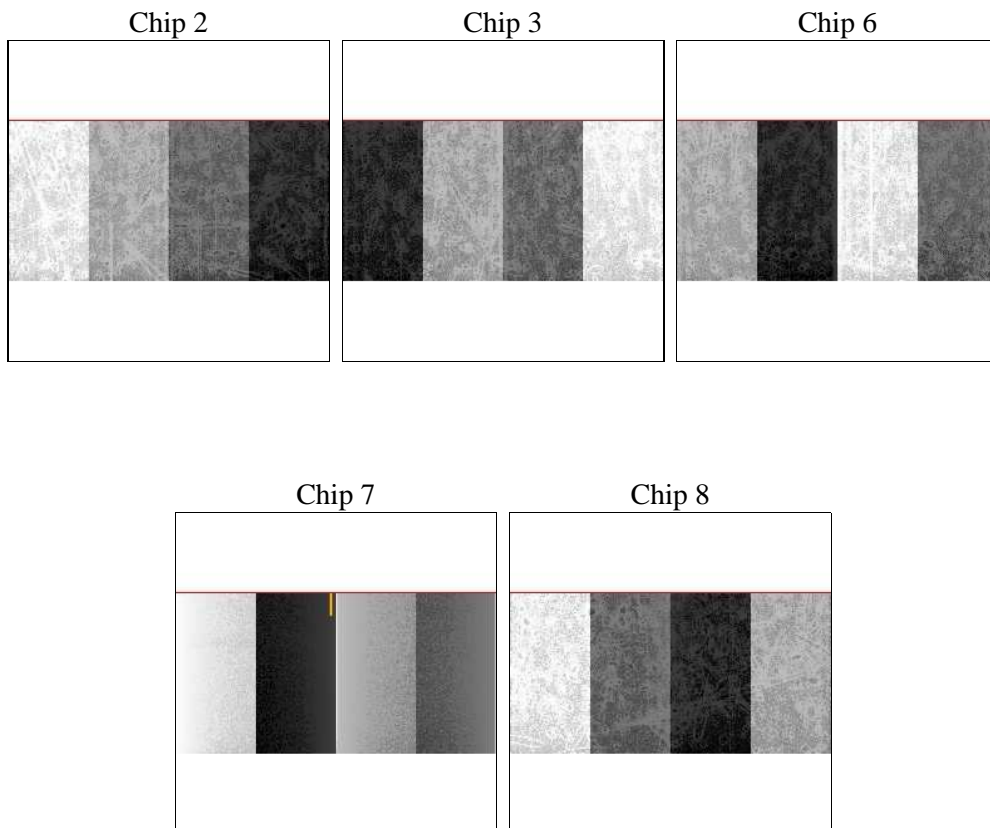
## 2 OBI

### 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	5137.3999640346	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime2	5137.3999640346	Sum of GTIs [s]
date	2012-06-19T21:37:14	Date and time of file creation	ontime3	5137.3999640346	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	5137.3999640346	Sum of GTIs [s]
			ontime7	5137.3999640346	Sum of GTIs [s]
			ontime8	5137.3999640346	Sum of GTIs [s]
			l1events	146986	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	26352	25297	28474	30100	36763
rejected events	23867	22969	25799	17168	28854
rejected %	90%	90%	90%	57%	78%

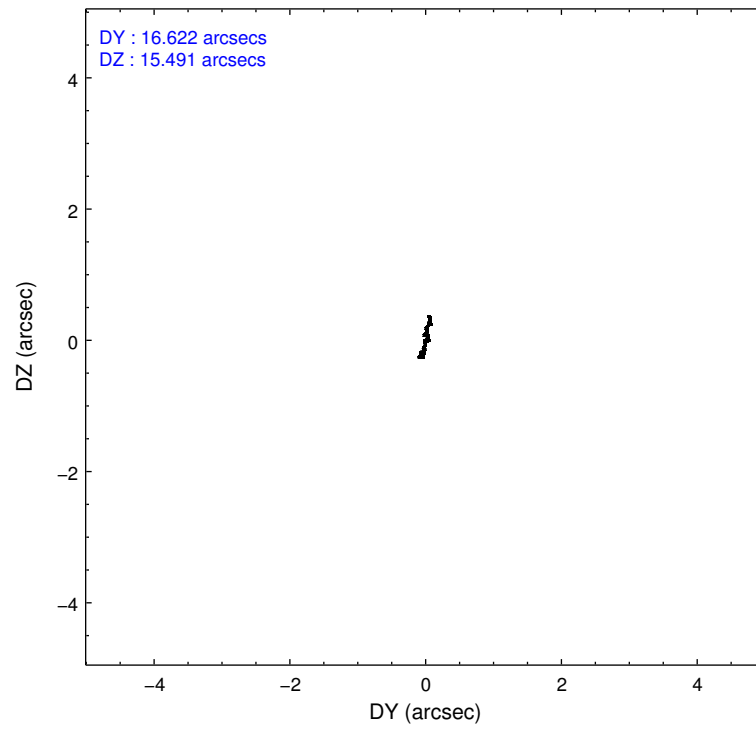
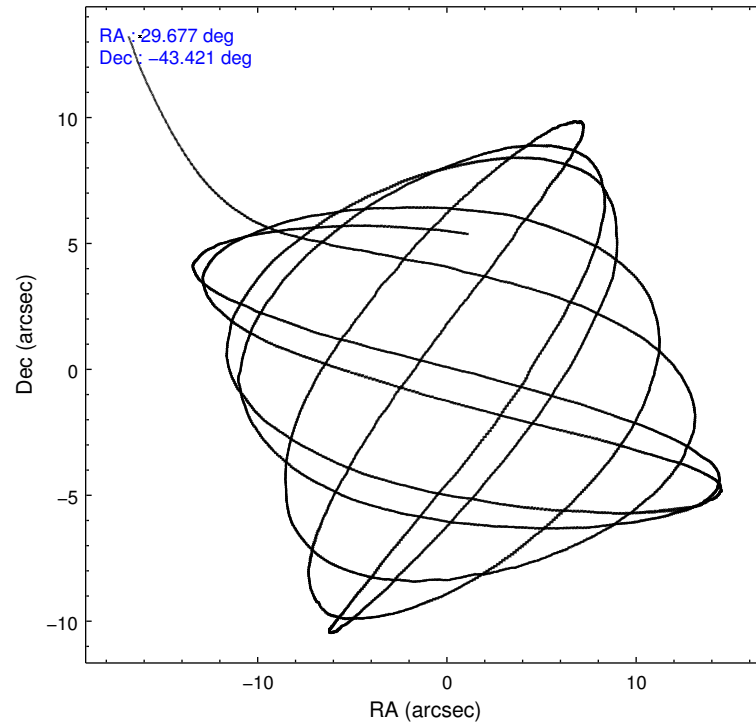
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	963	916	1024	1413	2477
	3%	3%	3%	4%	6%
grade 1 events	14	16	8	41	22
	0%	0%	0%	0%	0%
grade 2 events	563	549	598	3087	2066
	2%	2%	2%	10%	5%
grade 3 events	363	332	371	1502	791
	1%	1%	1%	4%	2%
grade 4 events	372	351	388	1471	721
	1%	1%	1%	4%	1%
grade 5 events	948	1068	1106	3152	1624
	3%	4%	3%	10%	4%
grade 6 events	517	449	586	6875	2556
	1%	1%	2%	22%	6%
grade 7 events	22612	21616	24393	12559	26506
	85%	85%	85%	41%	72%

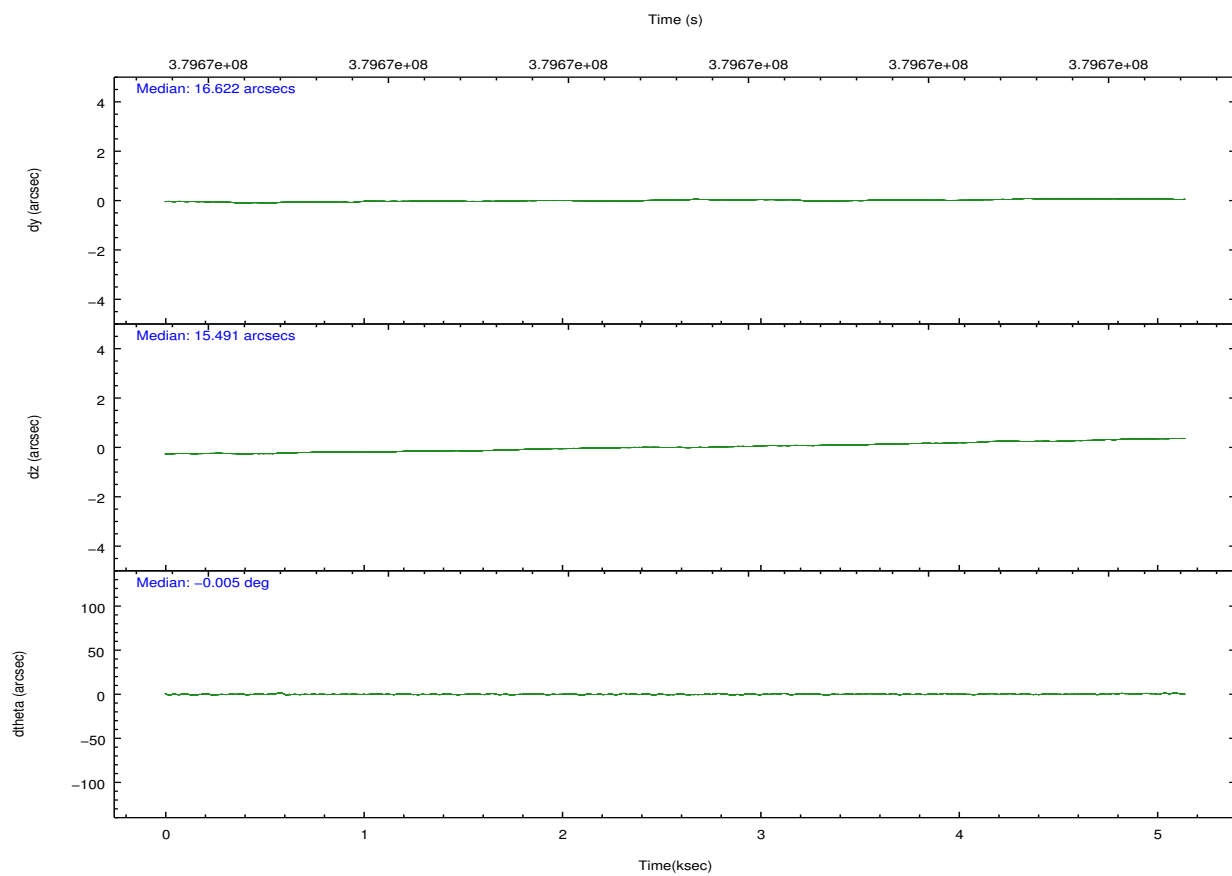
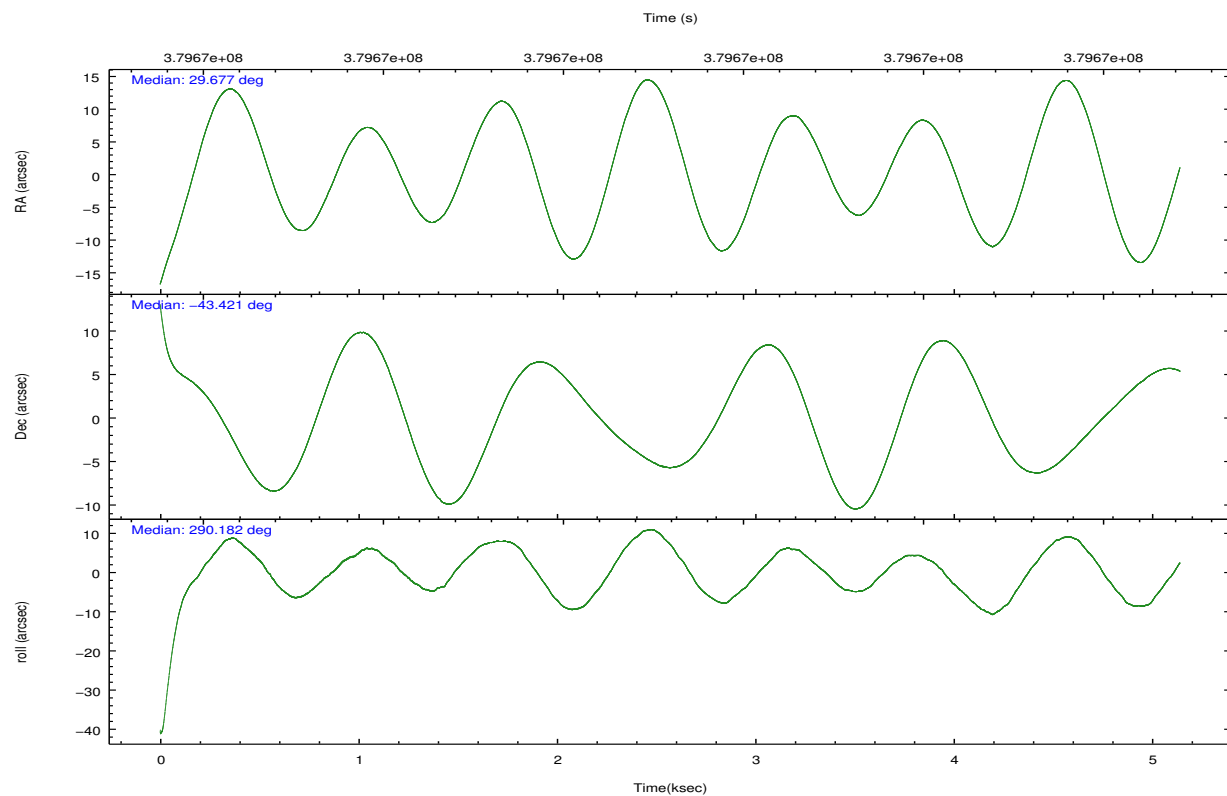


## 2.2 Compared Parameters

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	29.648518	29.6776810587528	CCD I2 on	O4	Y
[deg] Pointing Dec	-43.403605	-43.42076977047159	CCD I3 on	O3	Y
[deg] Pointing Roll	290.009179	290.1857693705302	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)	379666154.184000	379665077.88594	CCD S5 on	N	N
Observation start date	2010-01-12T06:48:08	2010-01-12T06:31:17	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	379671154.184000	379672024.82379	On-chip summing requested	N	N
Observation end date	2010-01-12T08:11:28	2010-01-12T08:27:04	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



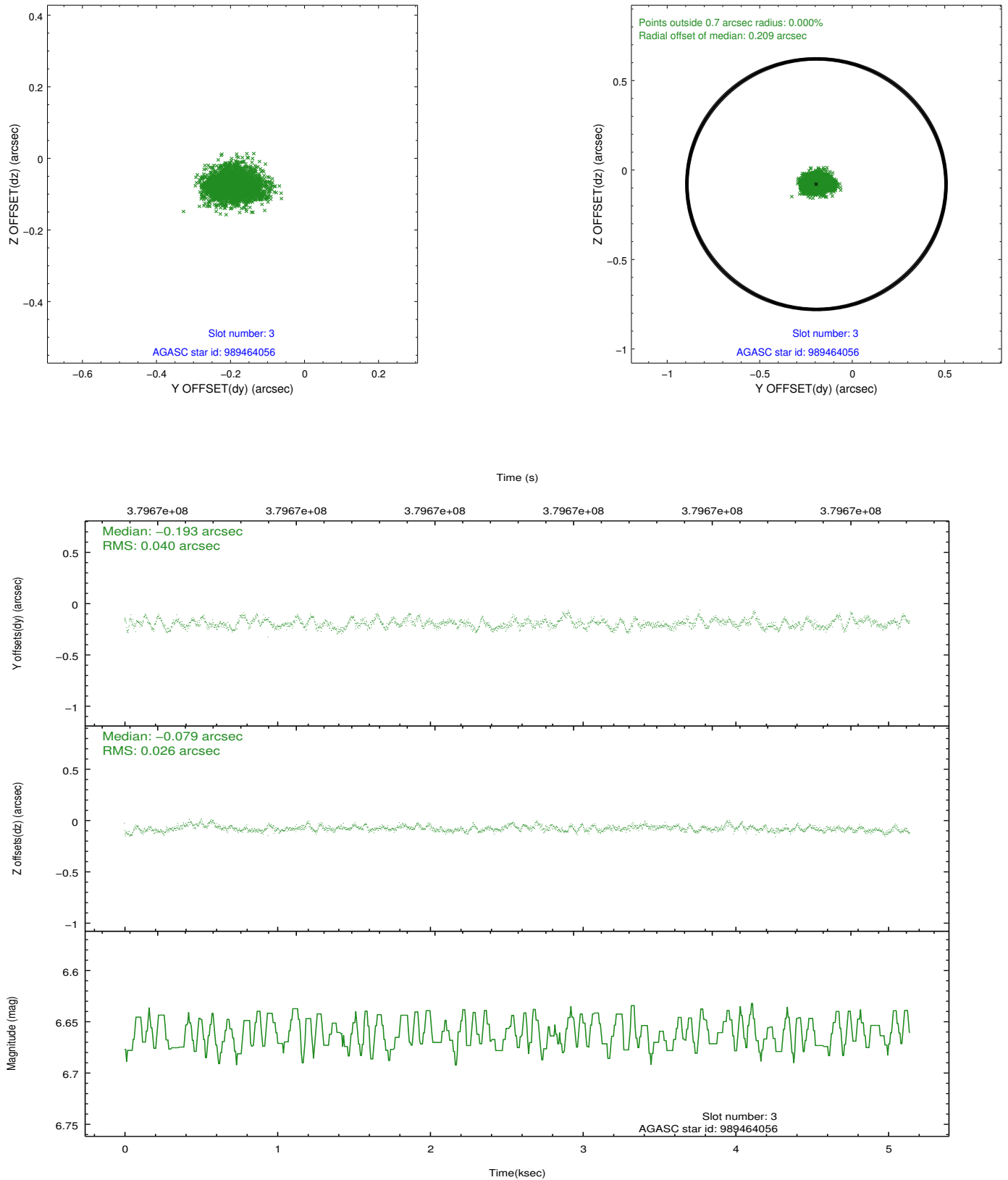


### Slot Statistics

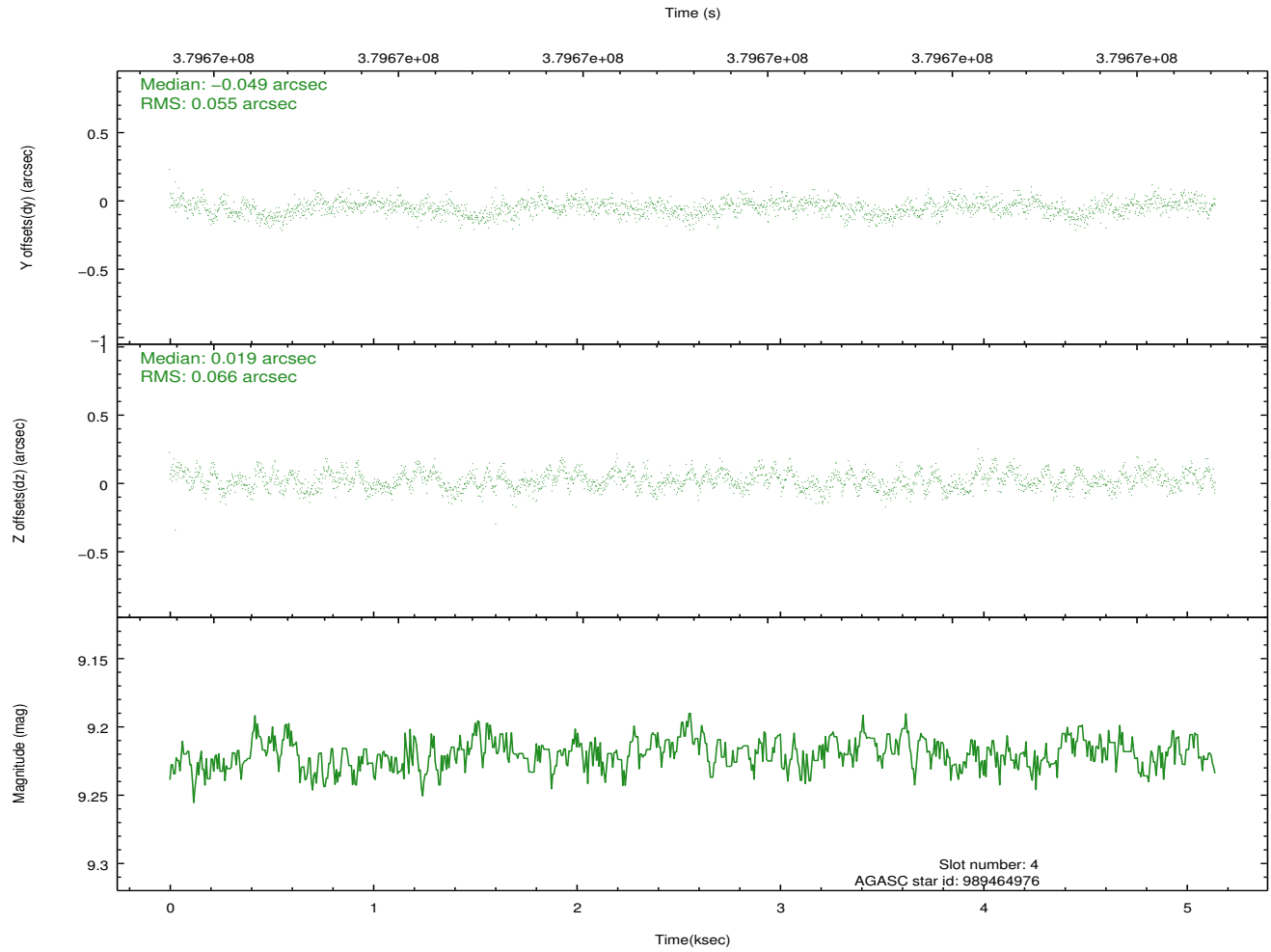
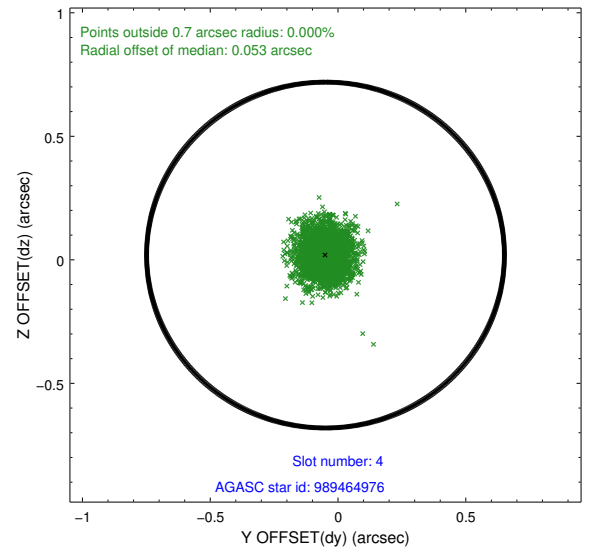
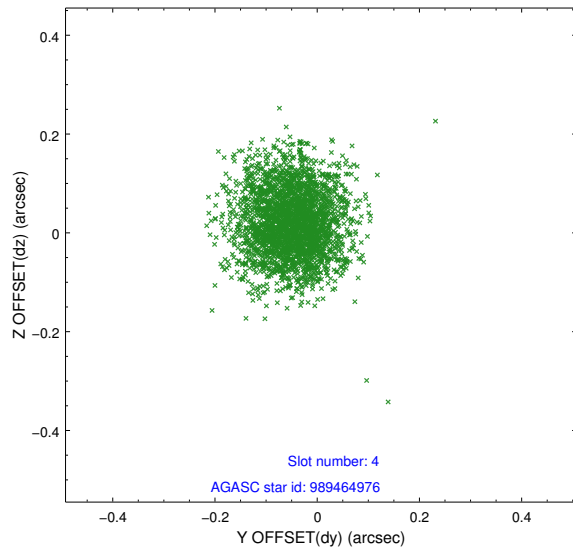
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.91	1254	-0.101	-0.028	0.007	0.013	0.000000	0.000000	-769.71	-1736.89
1	FID	ACIS-S-4	7.00	1254	0.213	0.056	0.006	0.012	0.000000	0.000000	2143.31	170.50
2	FID	ACIS-S-5	7.03	1254	-0.143	-0.020	0.007	0.012	0.000000	0.000000	-1821.11	165.38
3	GUIDE	989464056	6.66	2508	-0.193	-0.079	0.051	0.084	29.735893	-42.949136	-1457.96	776.24
4	GUIDE	989464976	9.22	2508	-0.049	0.019	0.092	0.148	28.960994	-43.047006	-1818.23	-1262.37
5	GUIDE	989467528	8.19	2507	0.003	0.059	0.086	0.132	29.209436	-43.178151	-1153.96	-806.27
6	GUIDE	989469232	8.76	2507	-0.087	0.008	0.088	0.134	28.685830	-43.208230	-1511.31	-2137.92
7	GUIDE	989470600	9.41	2498	0.325	-0.011	0.119	0.185	29.755442	-43.921156	1846.59	-376.90

## 2.4 Star Slots

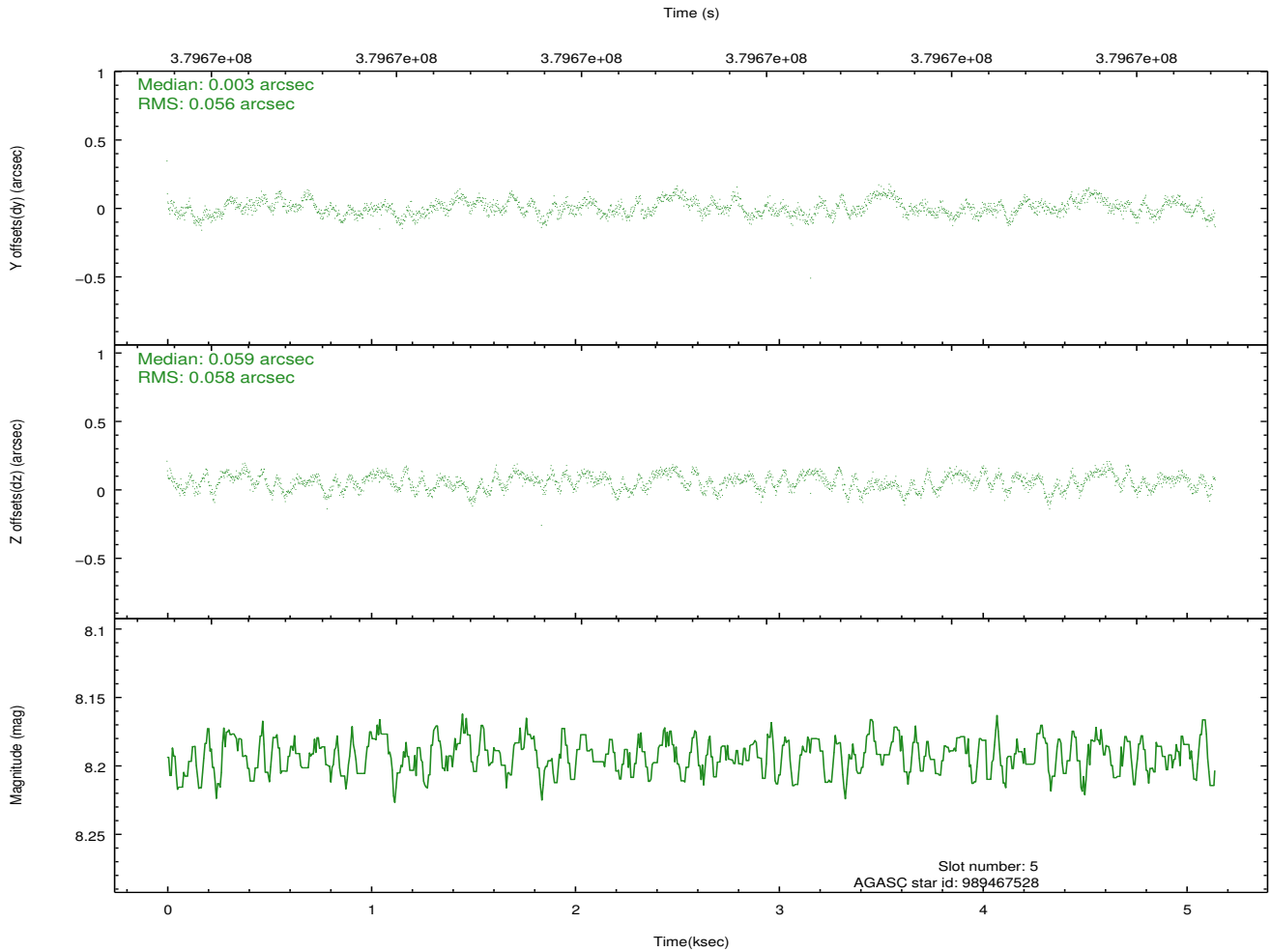
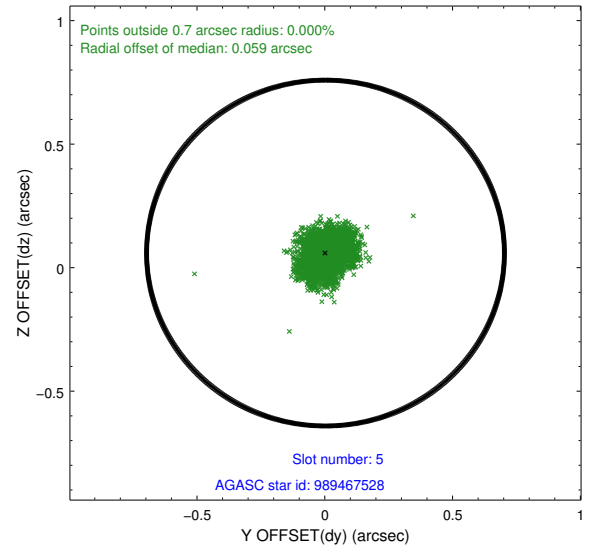
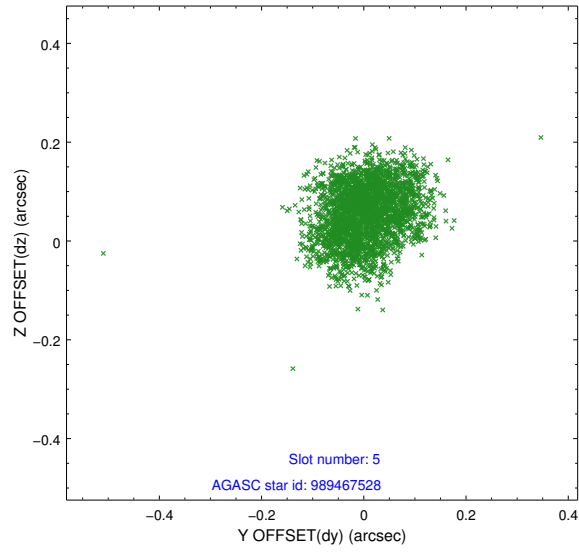
### 2.4.1 Slot 3



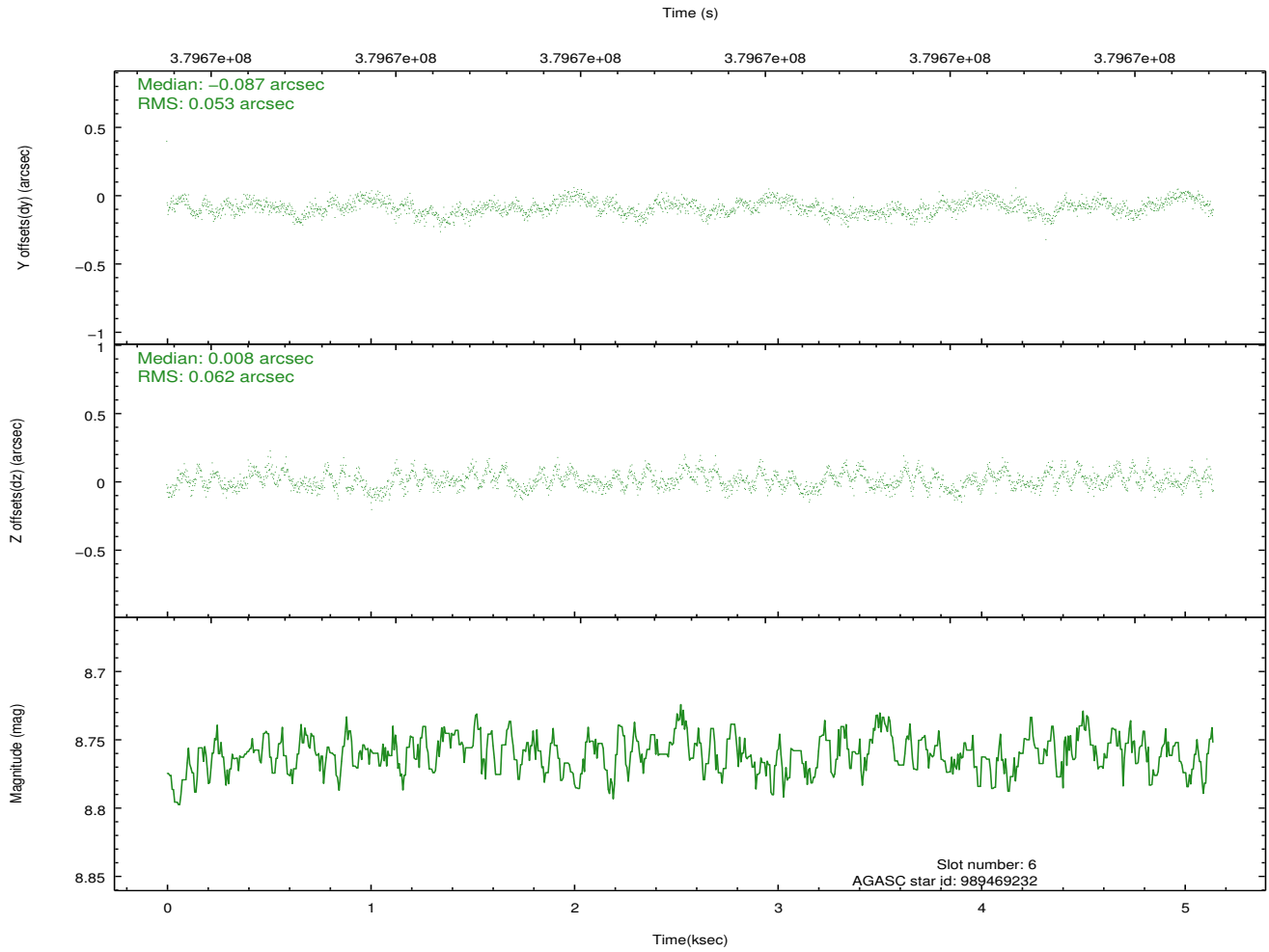
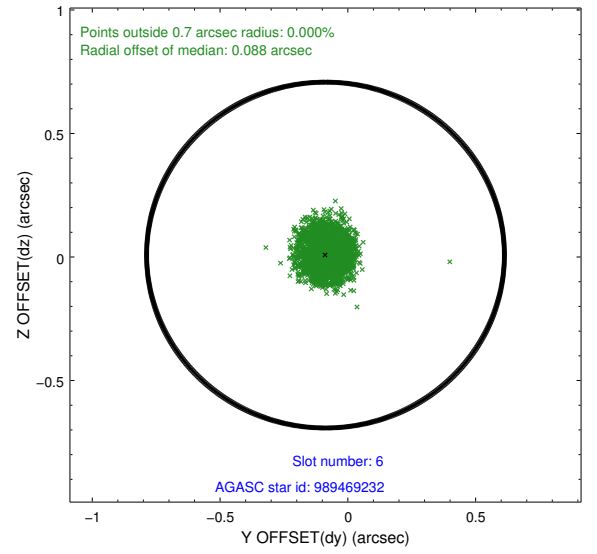
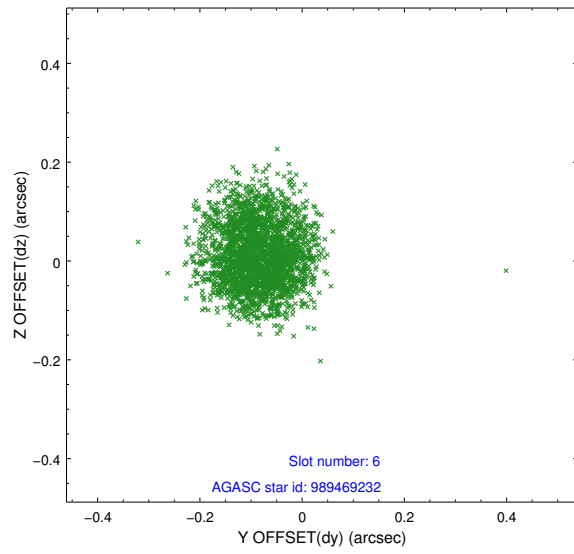
## 2.4.2 Slot 4



### 2.4.3 Slot 5

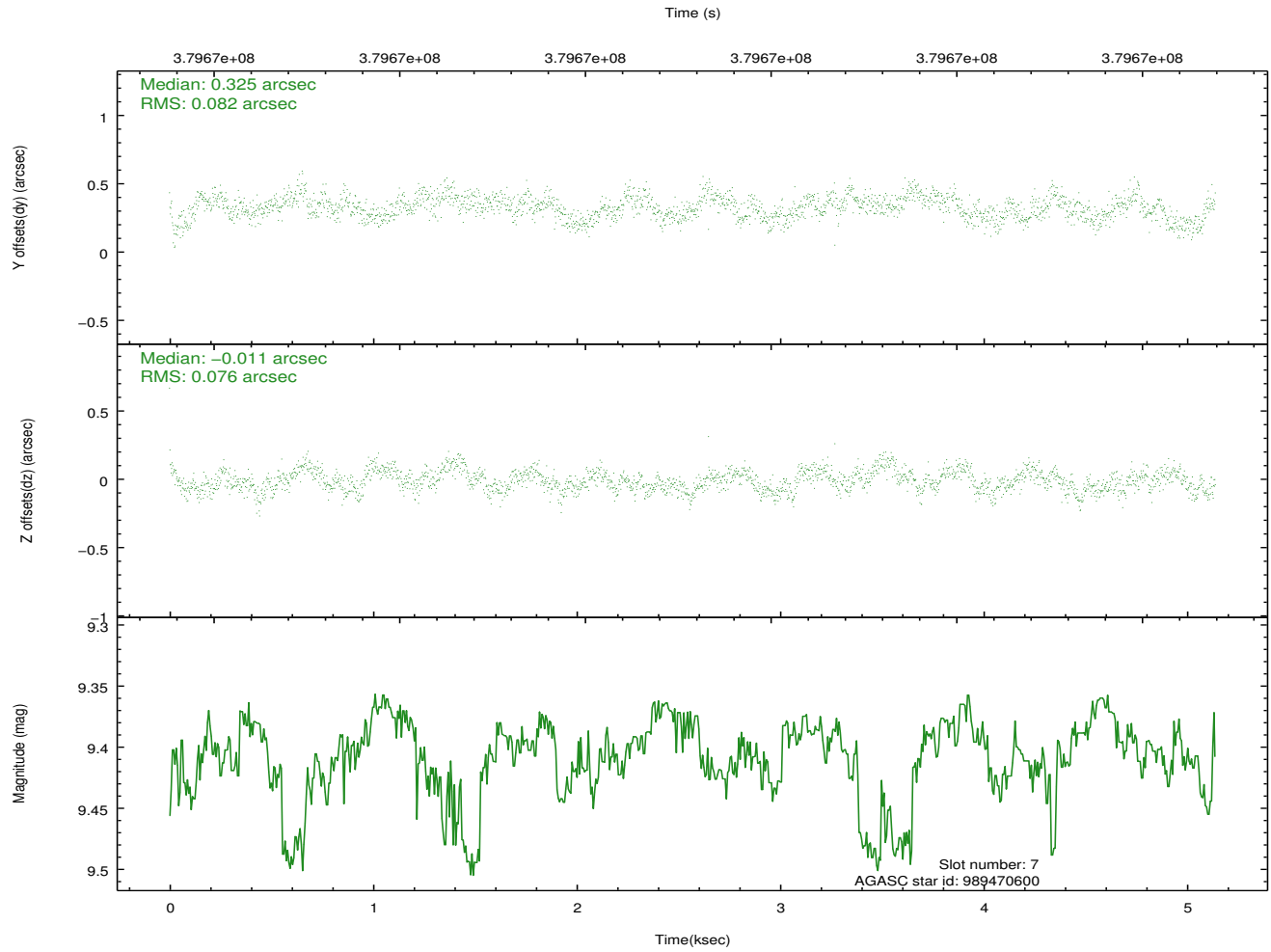
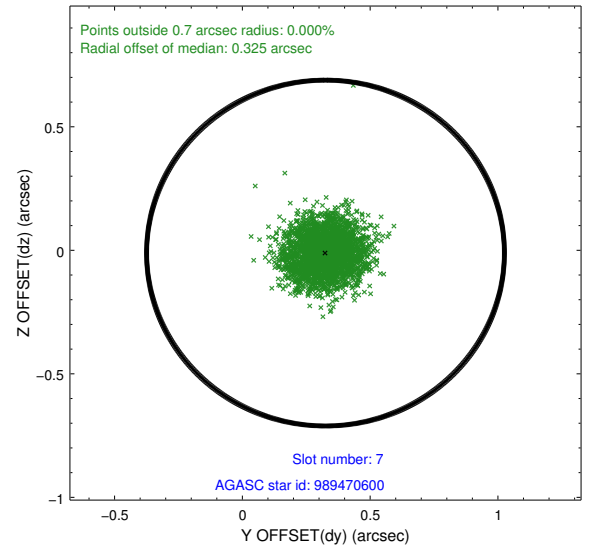
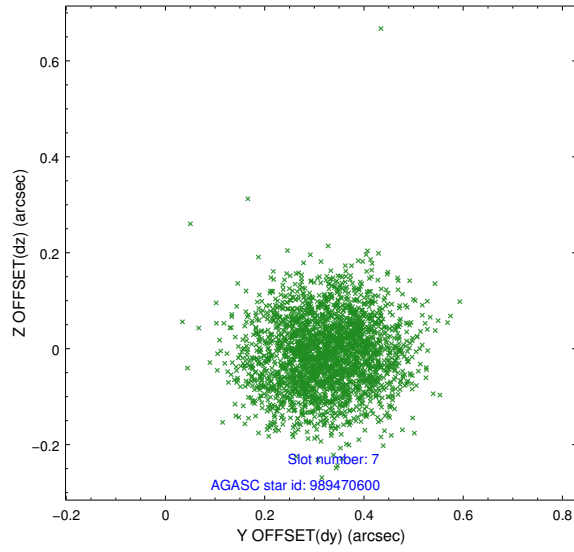


## 2.4.4 Slot 6



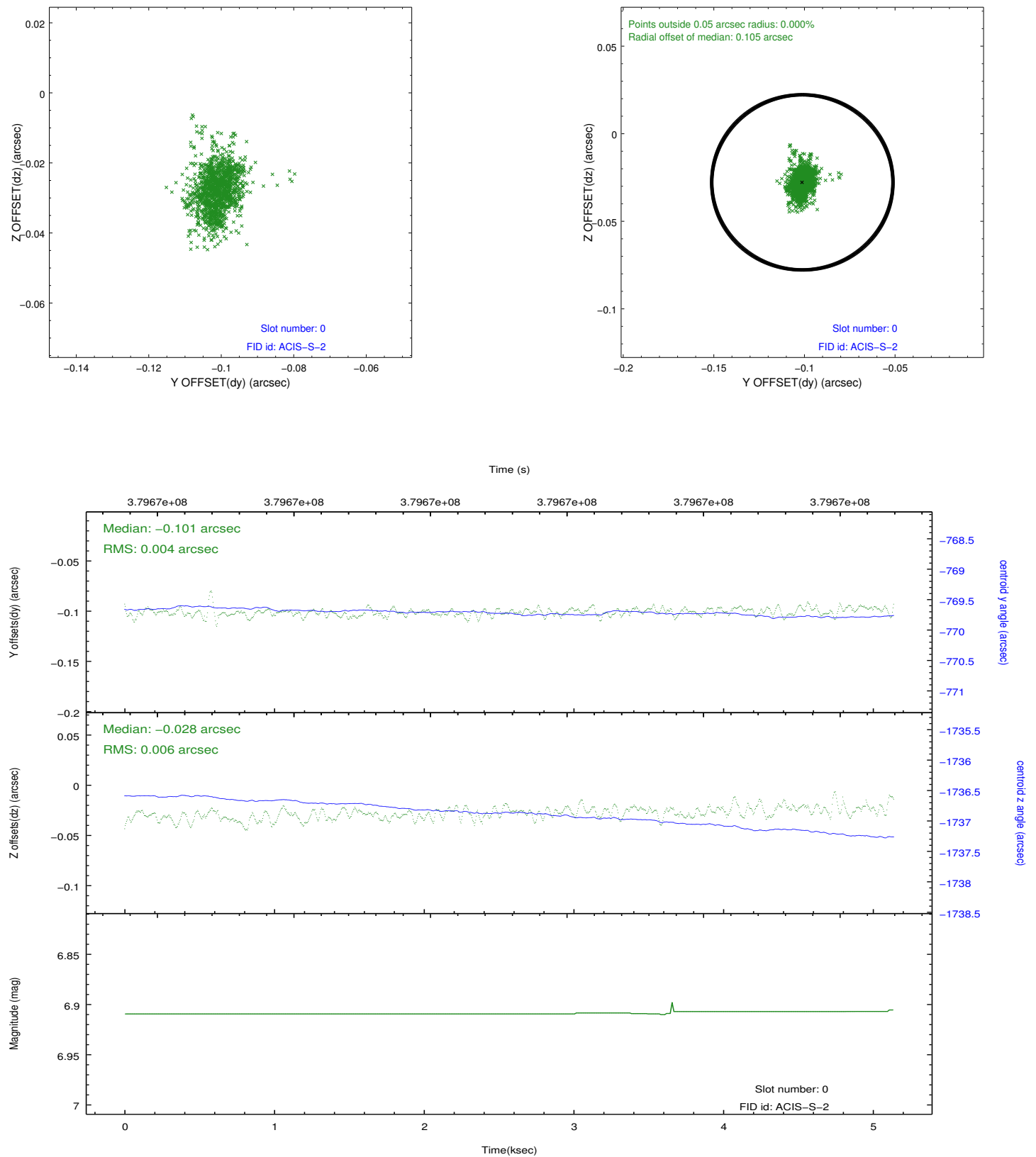


## 2.4.5 Slot 7

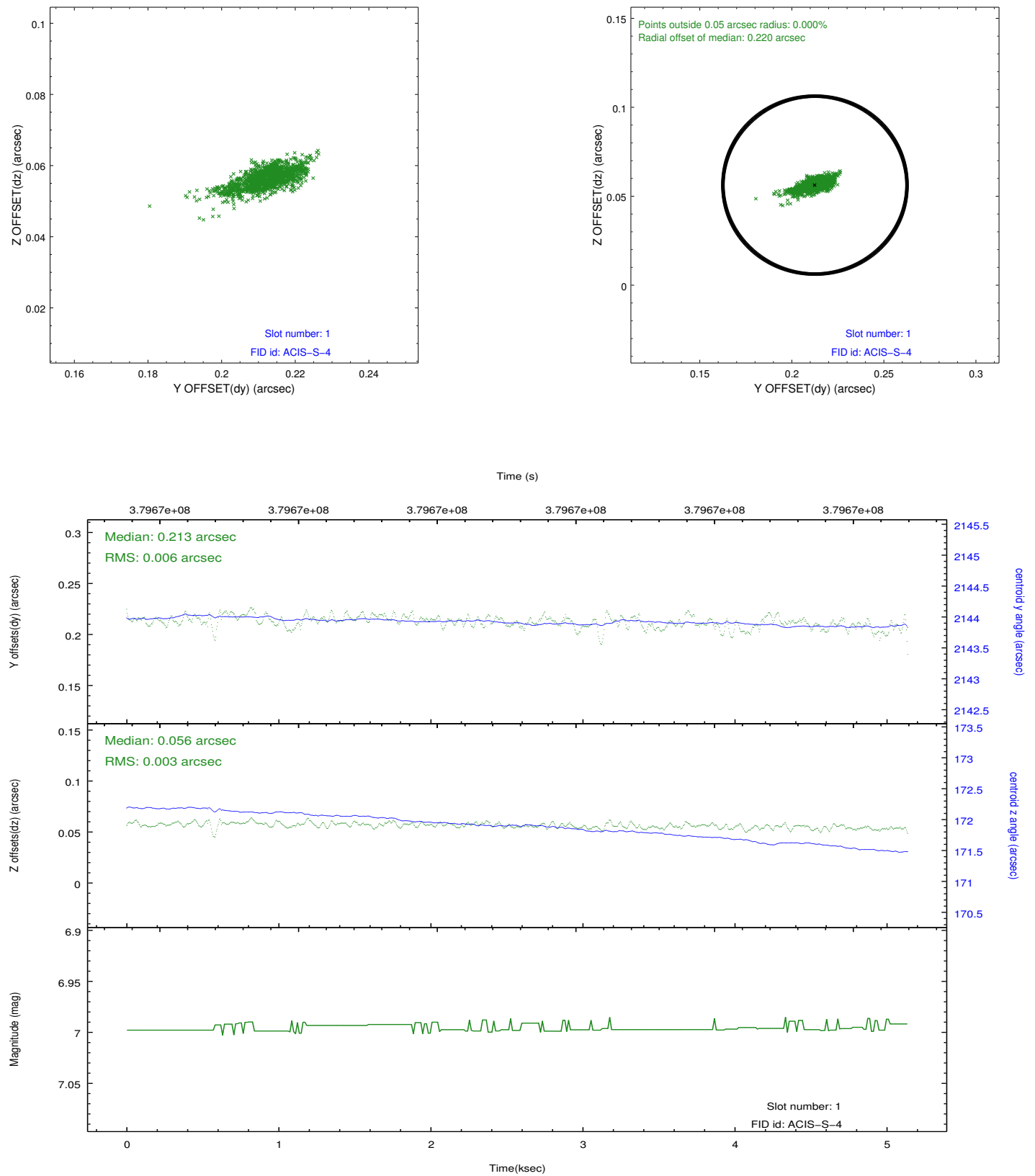


## 2.5 FID Slots

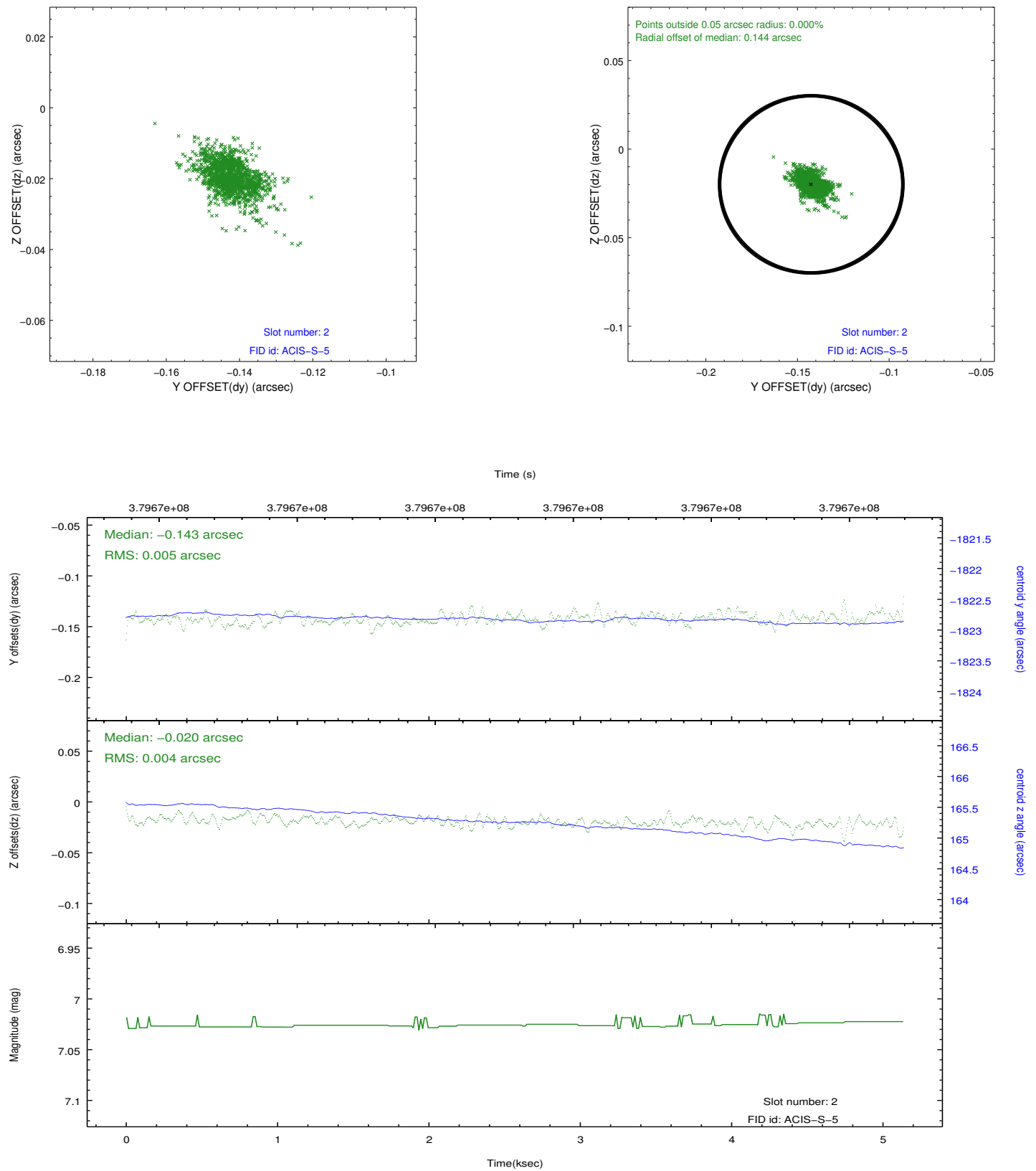
### 2.5.1 Slot 0



## 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)	2012.06.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.1373999640346

### A.2 Comments