

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11382 - L2 Version 2  
Chandra X-Ray Center

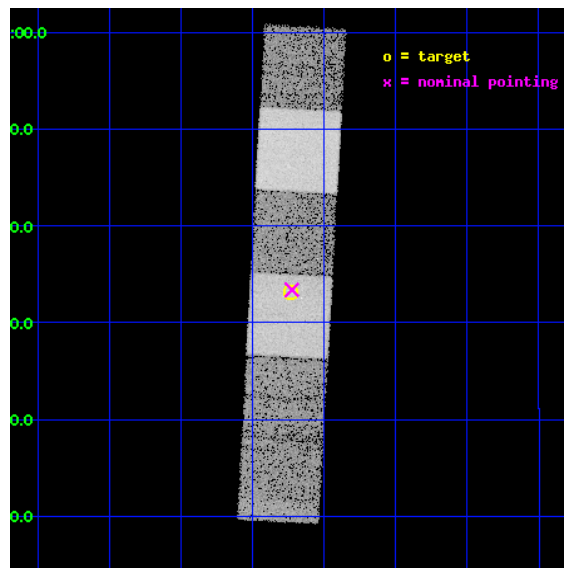
L2 Processing Date : Jun 23 2012

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# 1 Front

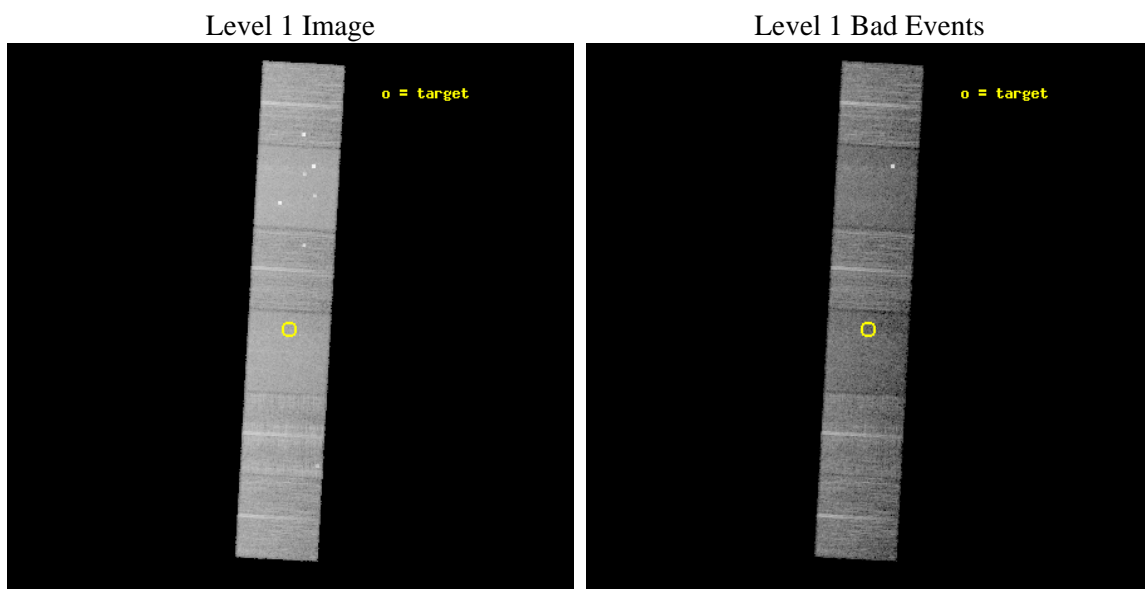
seq_num	600901	Sequence number
obs_id	11382	Observation id
title	Accretion onto nuclear black holes in early type galaxies: comparing field vs. clusters	Proposal title
observer	Elena Gallo	Principal investigator
object	PGC1230503	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	225.934	Observer's specified target RA [deg]
dec_targ	2.55241	Observer's specified target Dec [deg]
ra_nom	225.93119016383	Nominal RA [deg]
dec_nom	2.5563970449653	Nominal Dec [deg]
roll_nom	93.192927480866	Nominal Roll [deg]
revision	2	Processing version of data
ontime	11875.199955821	Sum of GTIs [s]
livetime	11724.829023593	Livetime [s]
ontime4	11871.958945036	Sum of GTIs [s]
ontime5	11875.199955821	Sum of GTIs [s]
ontime6	11875.199955821	Sum of GTIs [s]
ontime7	11875.199955821	Sum of GTIs [s]
ontime8	11875.199955821	Sum of GTIs [s]
ontime9	11871.958925486	Sum of GTIs [s]
l2events	149574	Number of level 2 events



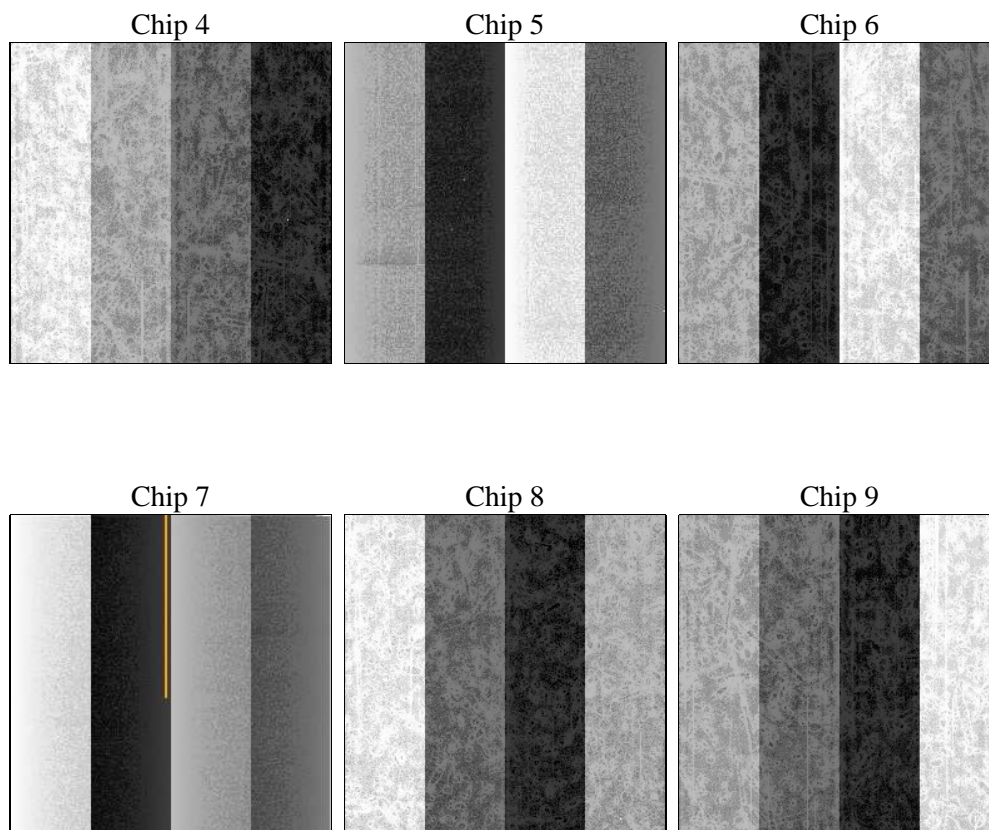
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	11700.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	11875.199955821	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime4	11871.958945036	Sum of GTIs [s]
date	2012-06-23T04:54:43	Date and time of file creation	ontime5	11875.199955821	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	11875.199955821	Sum of GTIs [s]
			ontime7	11875.199955821	Sum of GTIs [s]
			ontime8	11875.199955821	Sum of GTIs [s]
			ontime9	11871.958925486	Sum of GTIs [s]
			l1events	680204	Number of level 1 events

### 2.1.4 Events

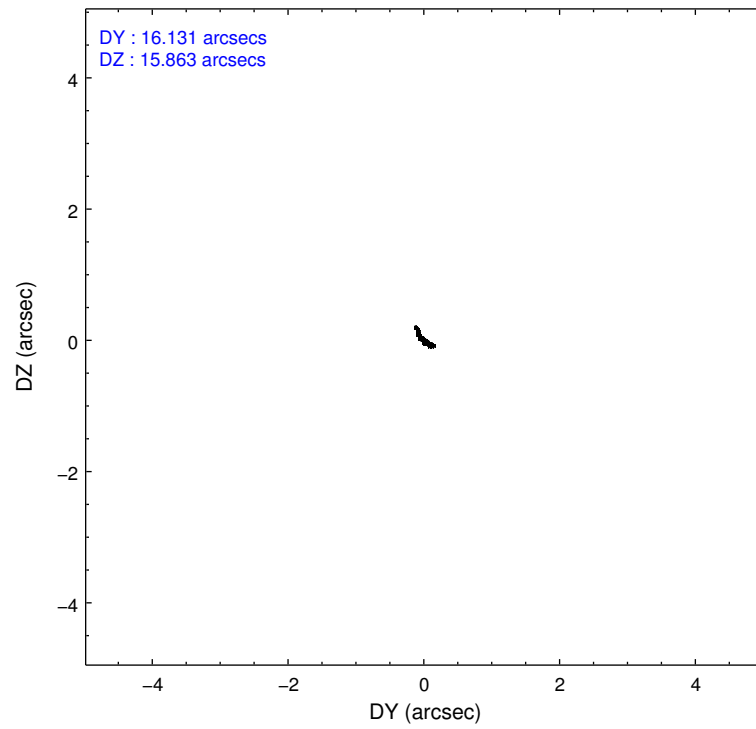
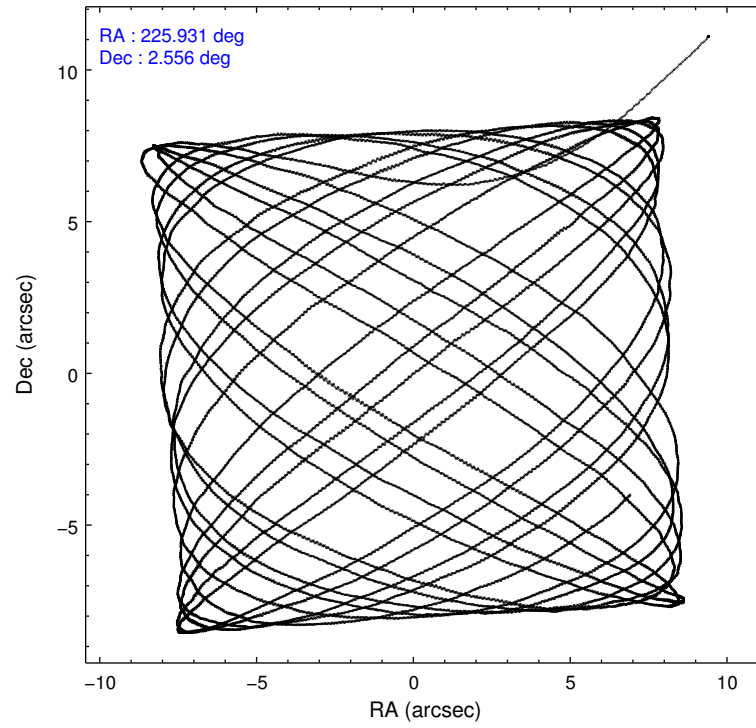
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	112690	143045	97822	112306	120565	93776	grade 0 events	6596	8719	4555	4791	9116	4195
rejected events	99357	71631	86696	61687	90302	82631		5%	6%	4%	4%	7%	4%
rejected %	88%	50%	88%	54%	74%	88%	grade 1 events	116	253	70	146	93	56
								0%	0%	0%	0%	0%	0%
							grade 2 events	2686	21681	2252	10467	6992	2384
								2%	15%	2%	9%	5%	2%
							grade 3 events	1118	2676	1103	4396	3207	1181
								0%	1%	1%	3%	2%	1%
							grade 4 events	1101	2547	1029	4360	2976	1124
								0%	1%	1%	3%	2%	1%
							grade 5 events	4088	10915	4141	11645	5929	4536
								3%	7%	4%	10%	4%	4%
							grade 6 events	1870	35952	2207	26724	8039	2286
								1%	25%	2%	23%	6%	2%
							grade 7 events	95115	60302	82465	49777	84213	78014
								84%	42%	84%	44%	69%	83%

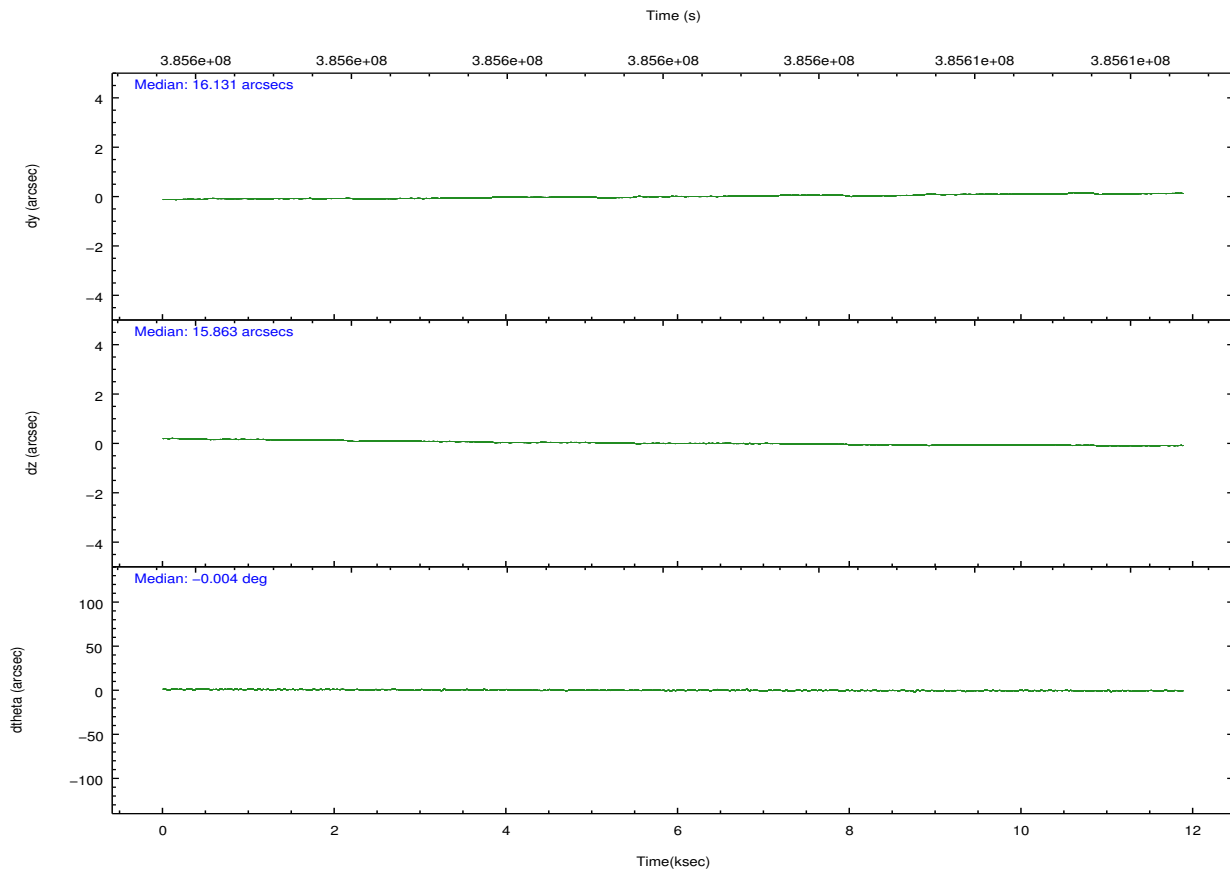
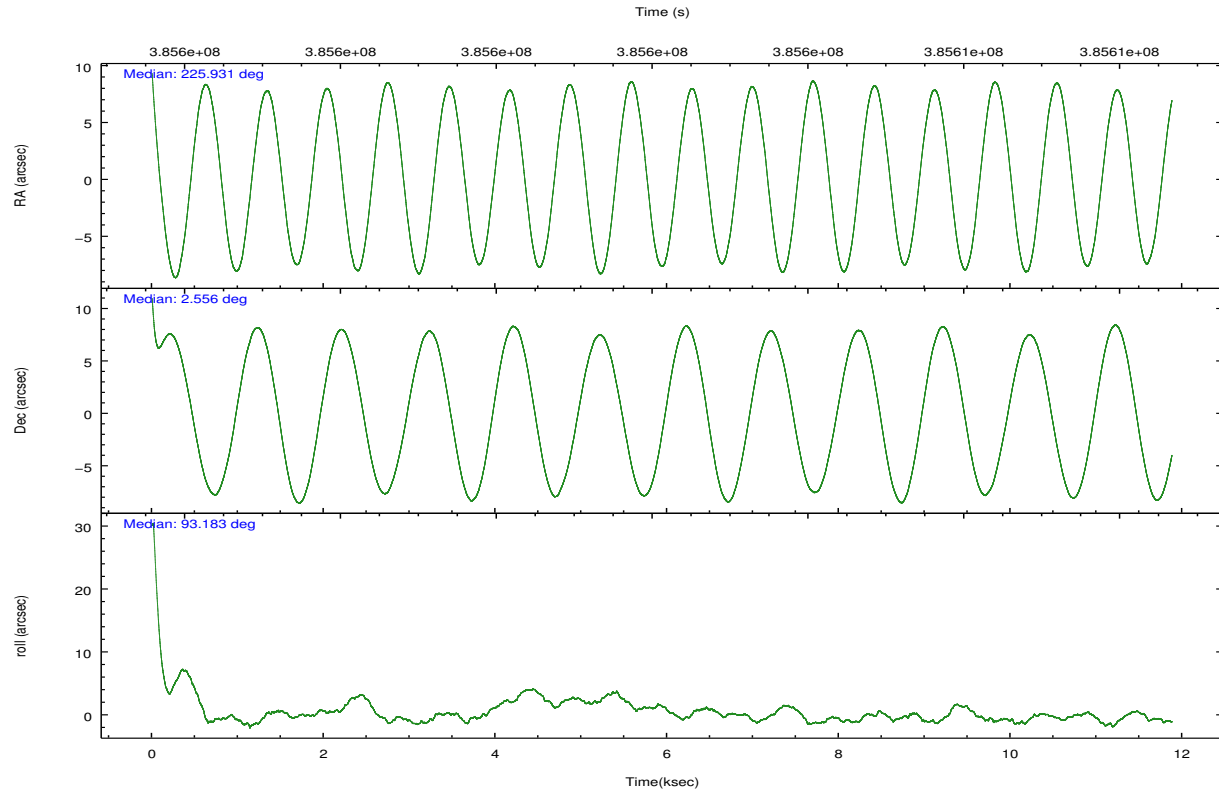


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-456789	ACIS-456789	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	225.946518	225.9311901638315	CCD I2 on	N	N
[deg] Pointing Dec	2.533715	2.556397044965269	CCD I3 on	N	N
[deg] Pointing Roll	93.035599	93.19292748086623	CCD S0 on	O1	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	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	Y	Y
[s] Observation start time (MET)	385596380.184000	385595296.66152	CCD S5 on	O2	Y
Observation start date	2010-03-21T22:05:14	2010-03-21T21:48:16	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	385608080.184000	385608886.11221	On-chip summing requested	N	N
Observation end date	2010-03-22T01:20:14	2010-03-22T01:34:46	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



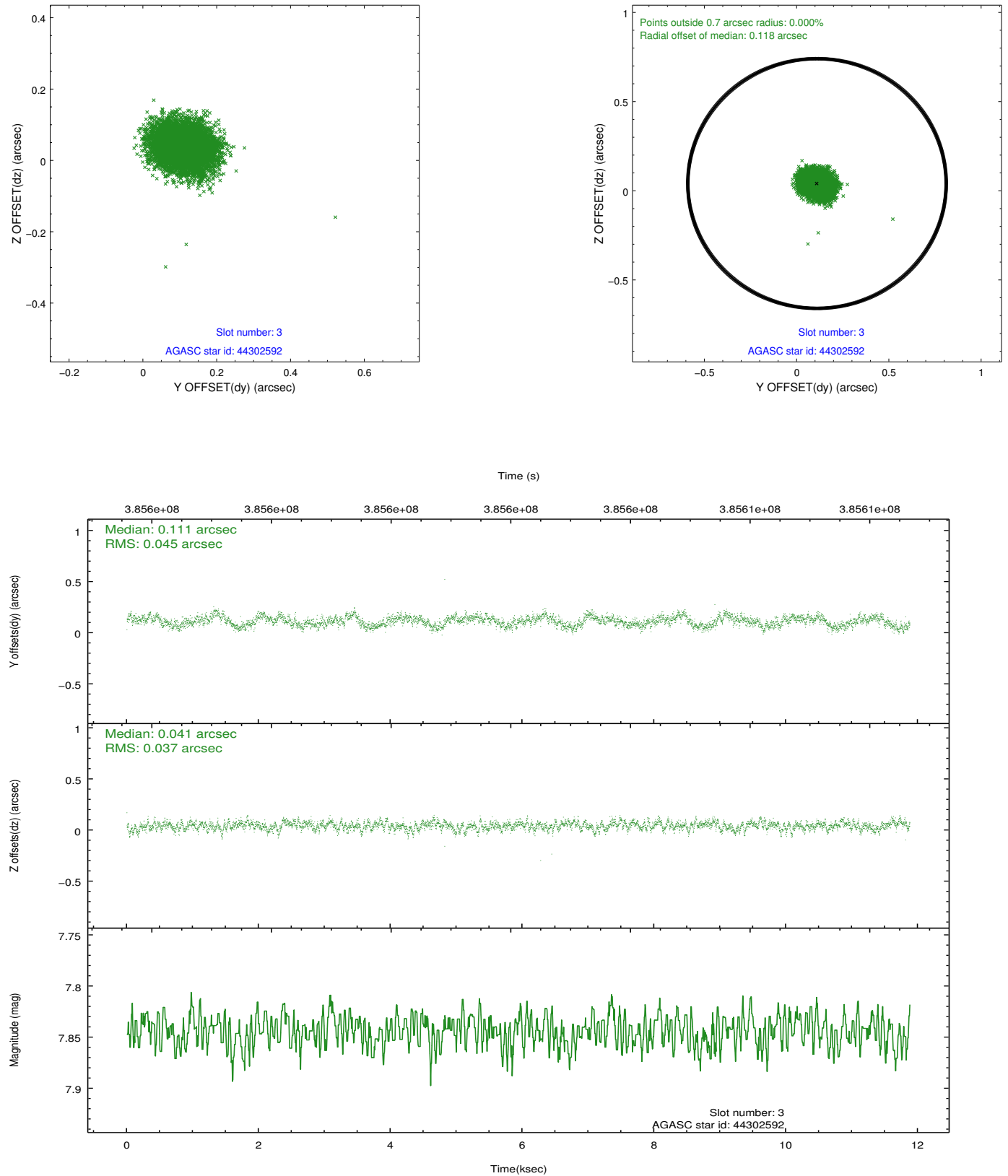


### Slot Statistics

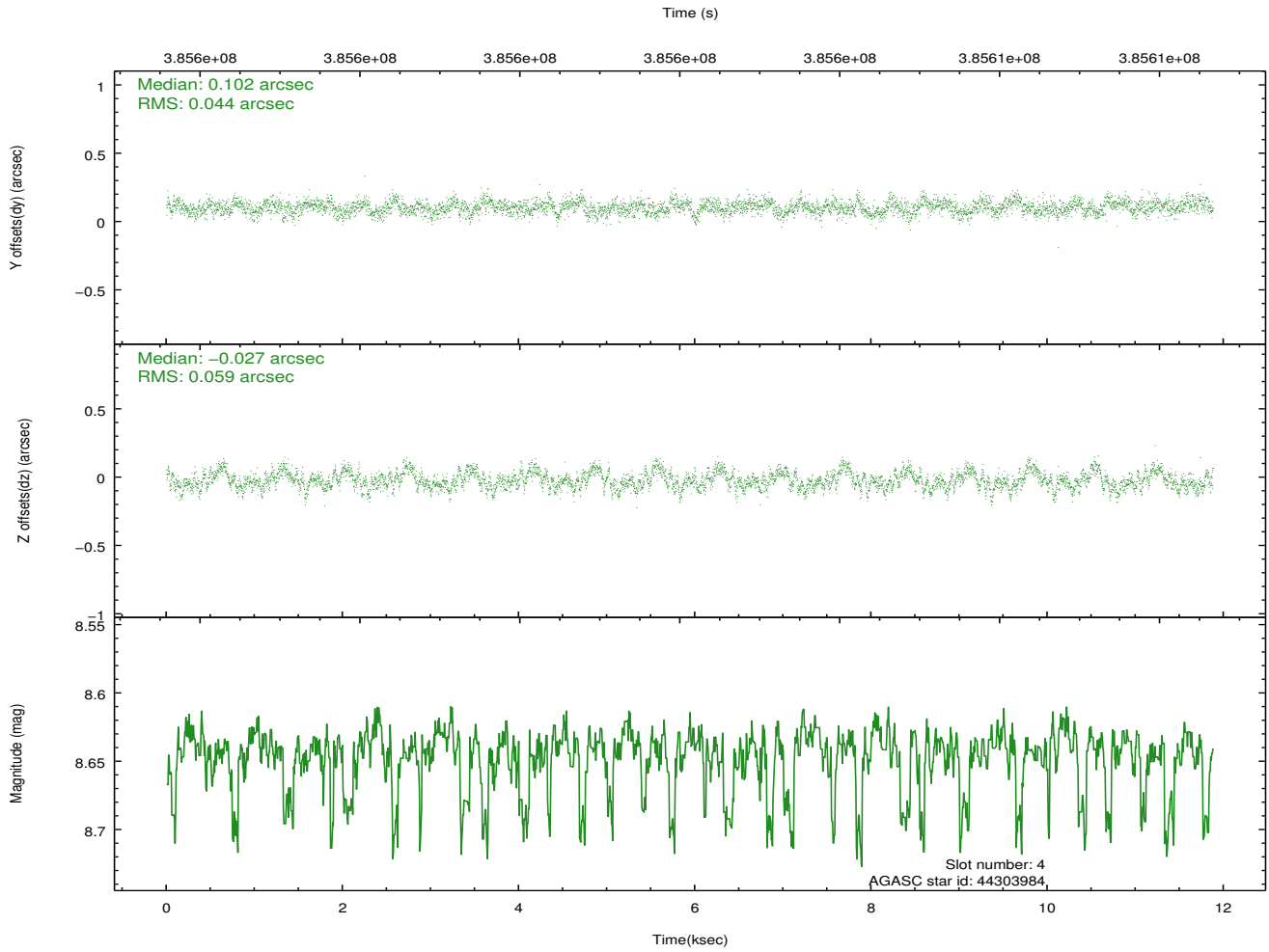
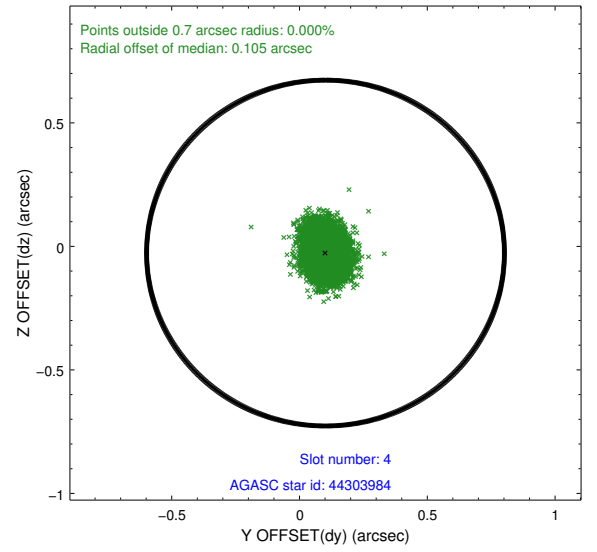
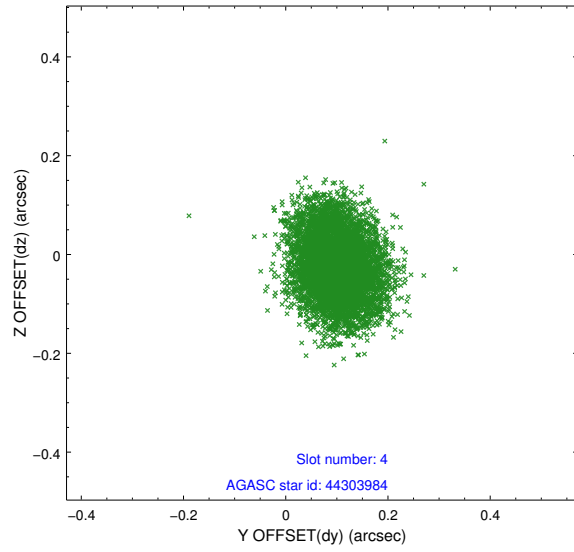
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.93	2898	-0.094	-0.009	0.006	0.010	0.000000	0.000000	-769.22	-1737.25
1	FID	ACIS-S-4	7.02	2898	0.166	0.048	0.005	0.009	0.000000	0.000000	2144.11	170.87
2	FID	ACIS-S-5	7.05	2898	-0.103	-0.030	0.006	0.011	0.000000	0.000000	-1821.54	164.92
3	GUIDE	44302592	7.84	5796	0.111	0.041	0.062	0.098	226.320439	2.016885	-1928.58	-1244.46
4	GUIDE	44303984	8.64	5758	0.102	-0.027	0.079	0.128	225.918266	2.386308	-524.54	129.42
5	GUIDE	44304040	8.09	5794	-0.104	-0.189	0.063	0.103	225.823407	2.372575	-555.82	472.82
6	GUIDE	44305752	8.85	5793	0.023	-0.124	0.074	0.122	225.685277	2.473250	-167.56	950.03
7	GUIDE	44305256	9.13	5778	-0.129	0.292	0.097	0.152	226.603465	2.661871	336.57	-2382.66

## 2.4 Star Slots

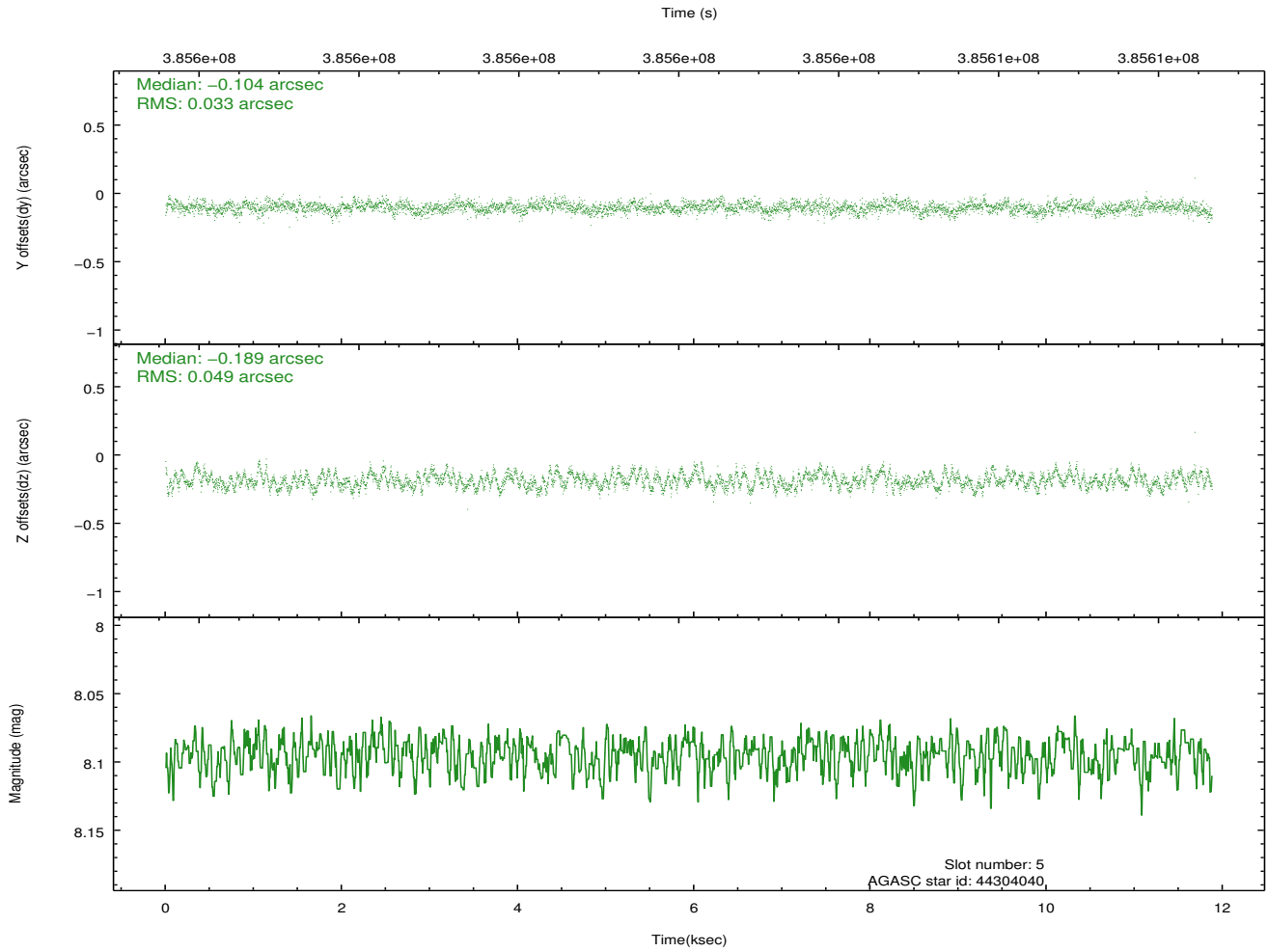
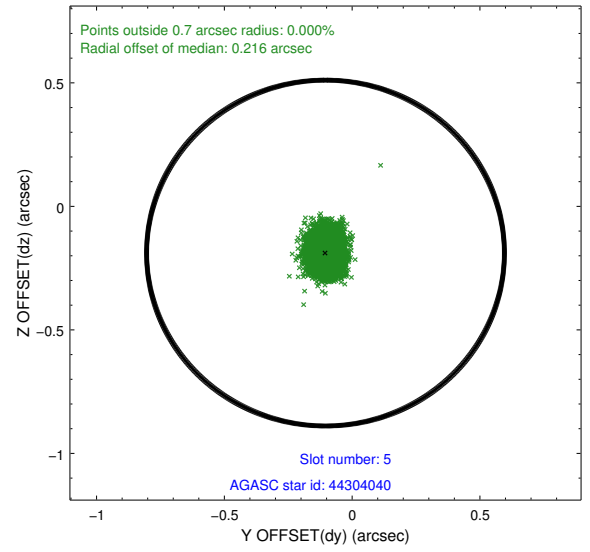
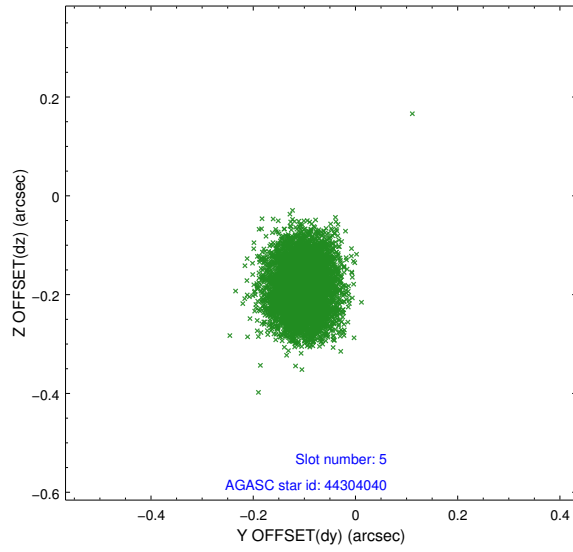
### 2.4.1 Slot 3



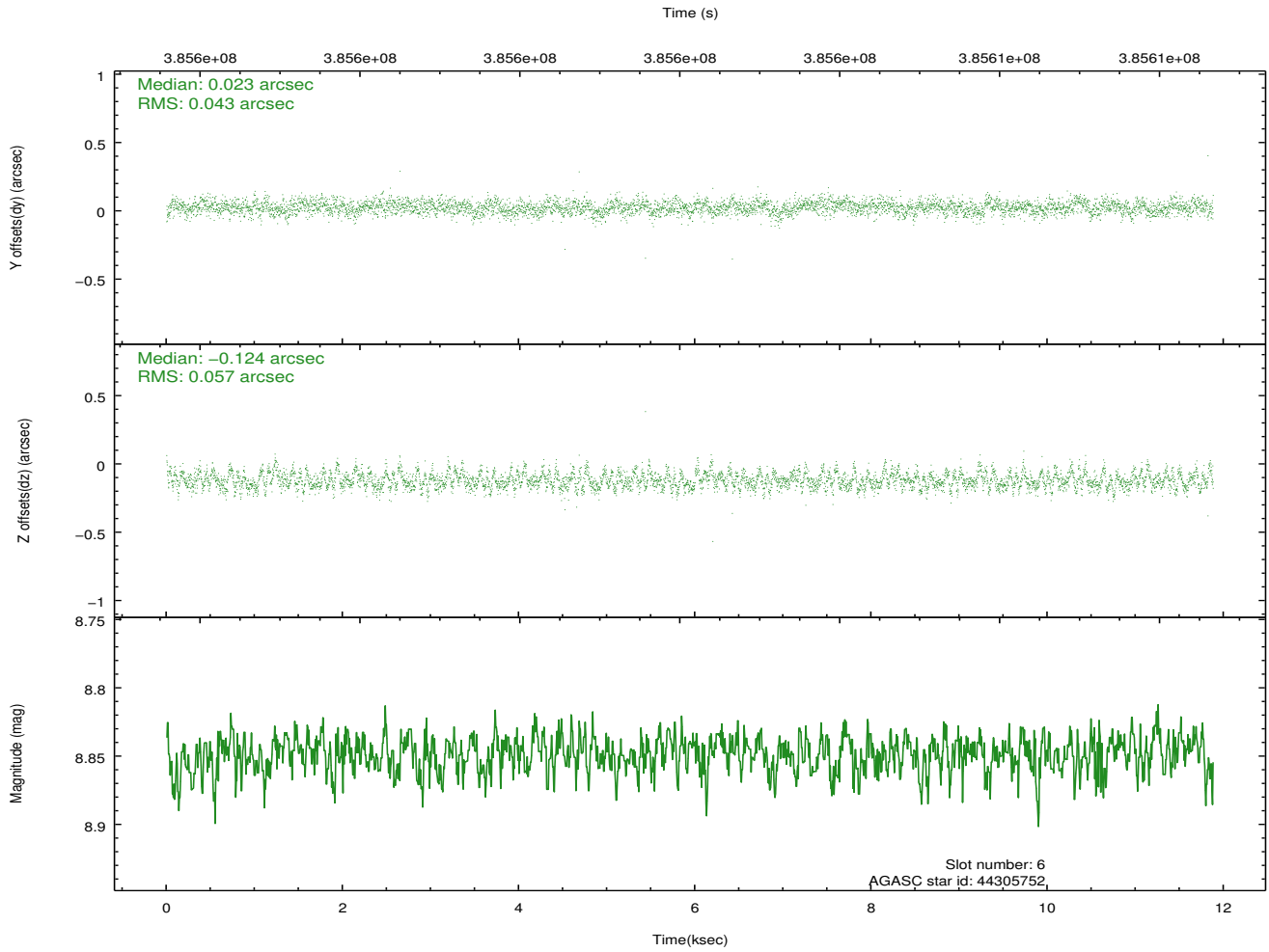
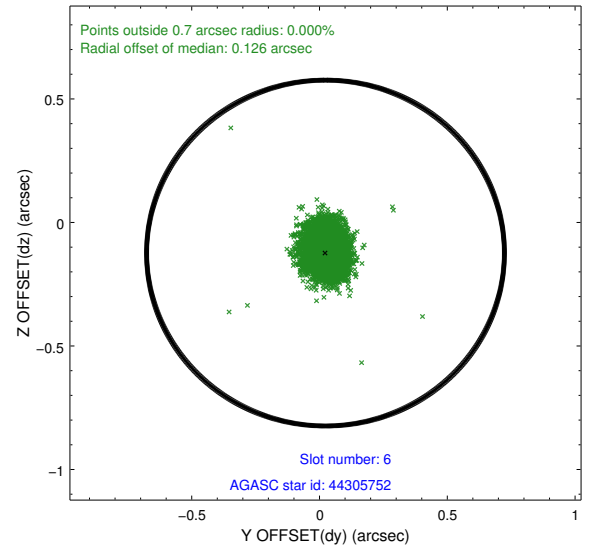
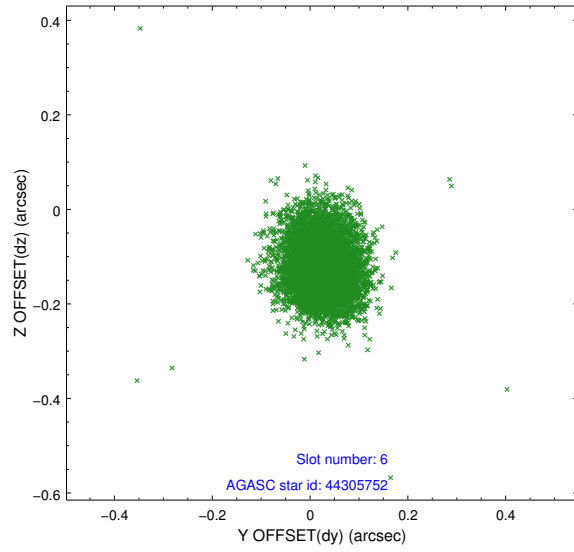
## 2.4.2 Slot 4



### 2.4.3 Slot 5

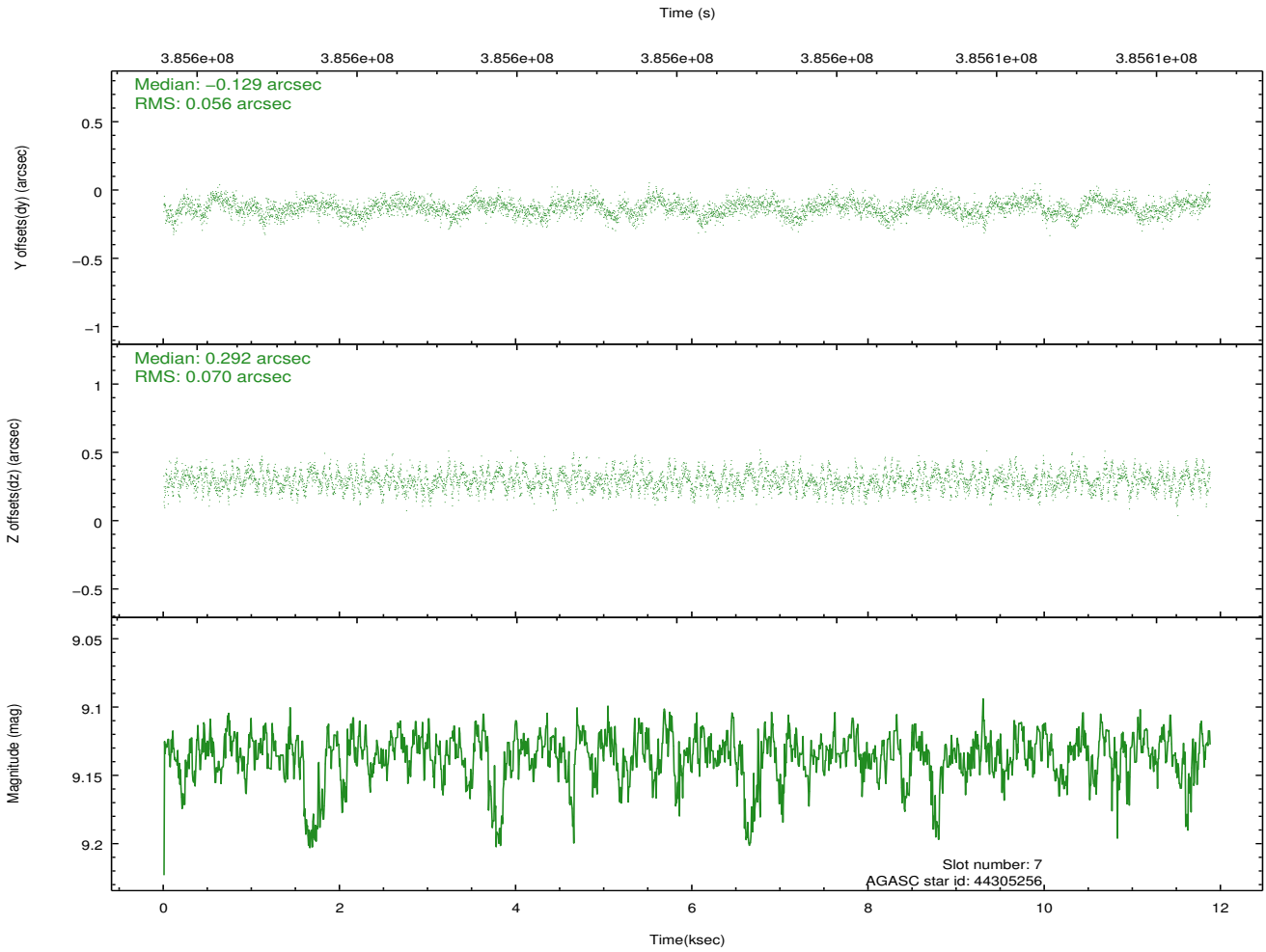
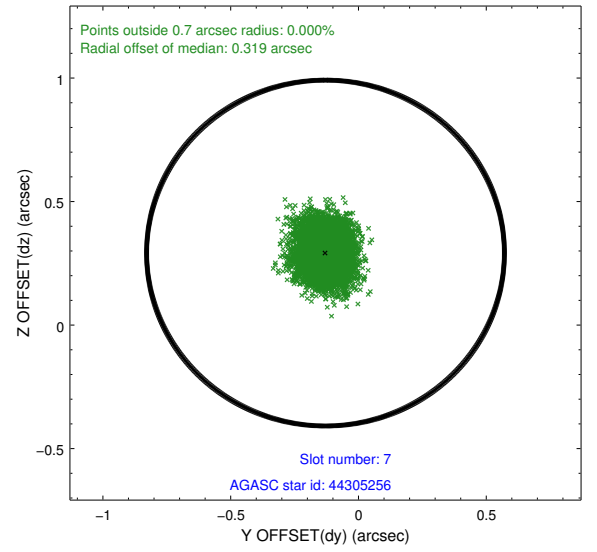
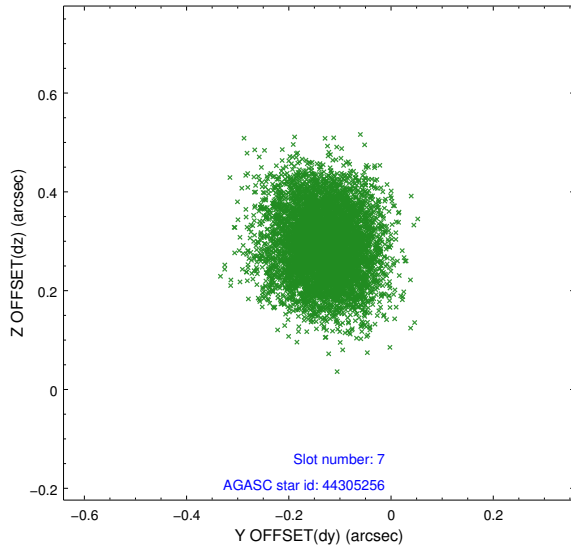


## 2.4.4 Slot 6



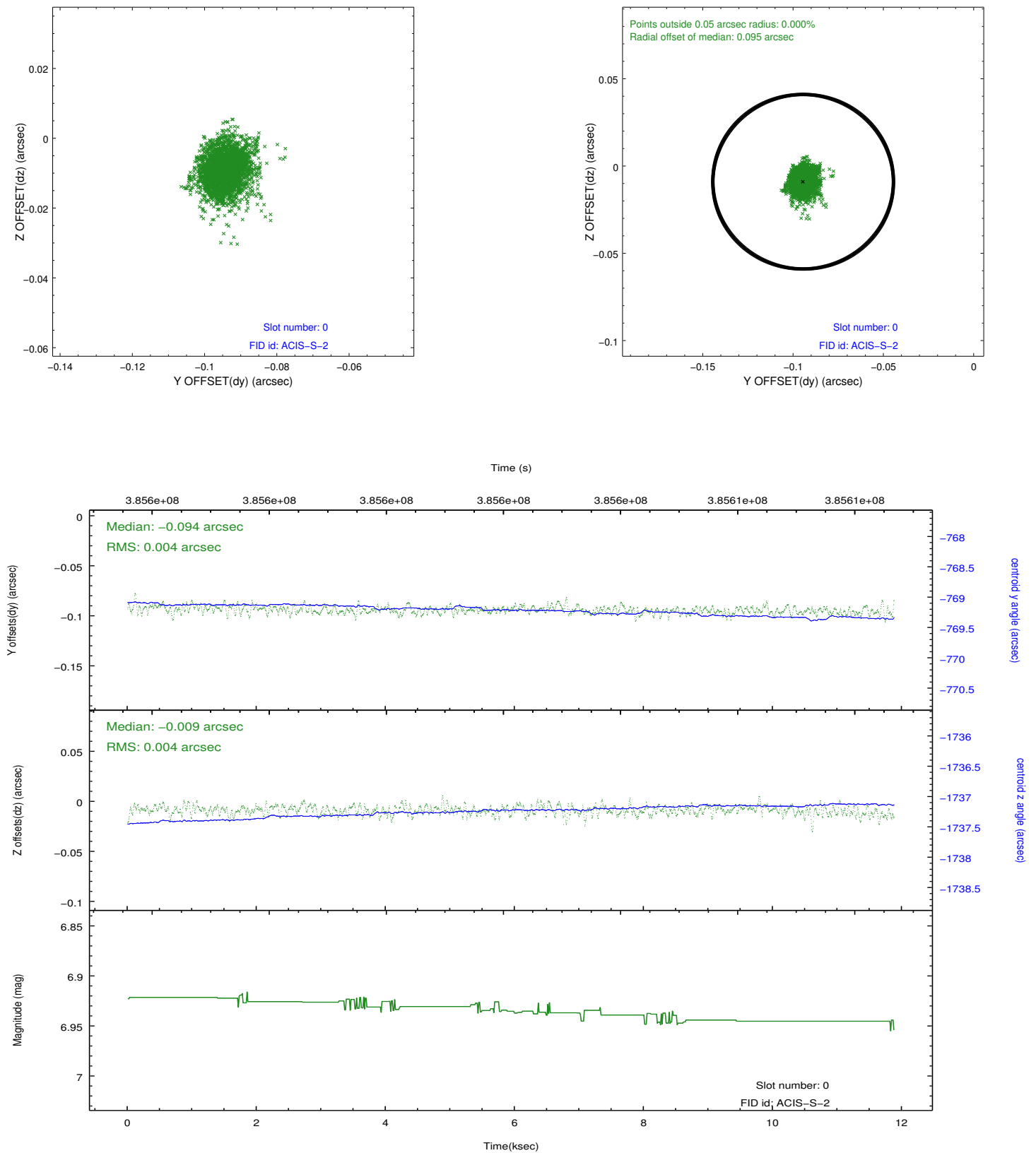


## 2.4.5 Slot 7

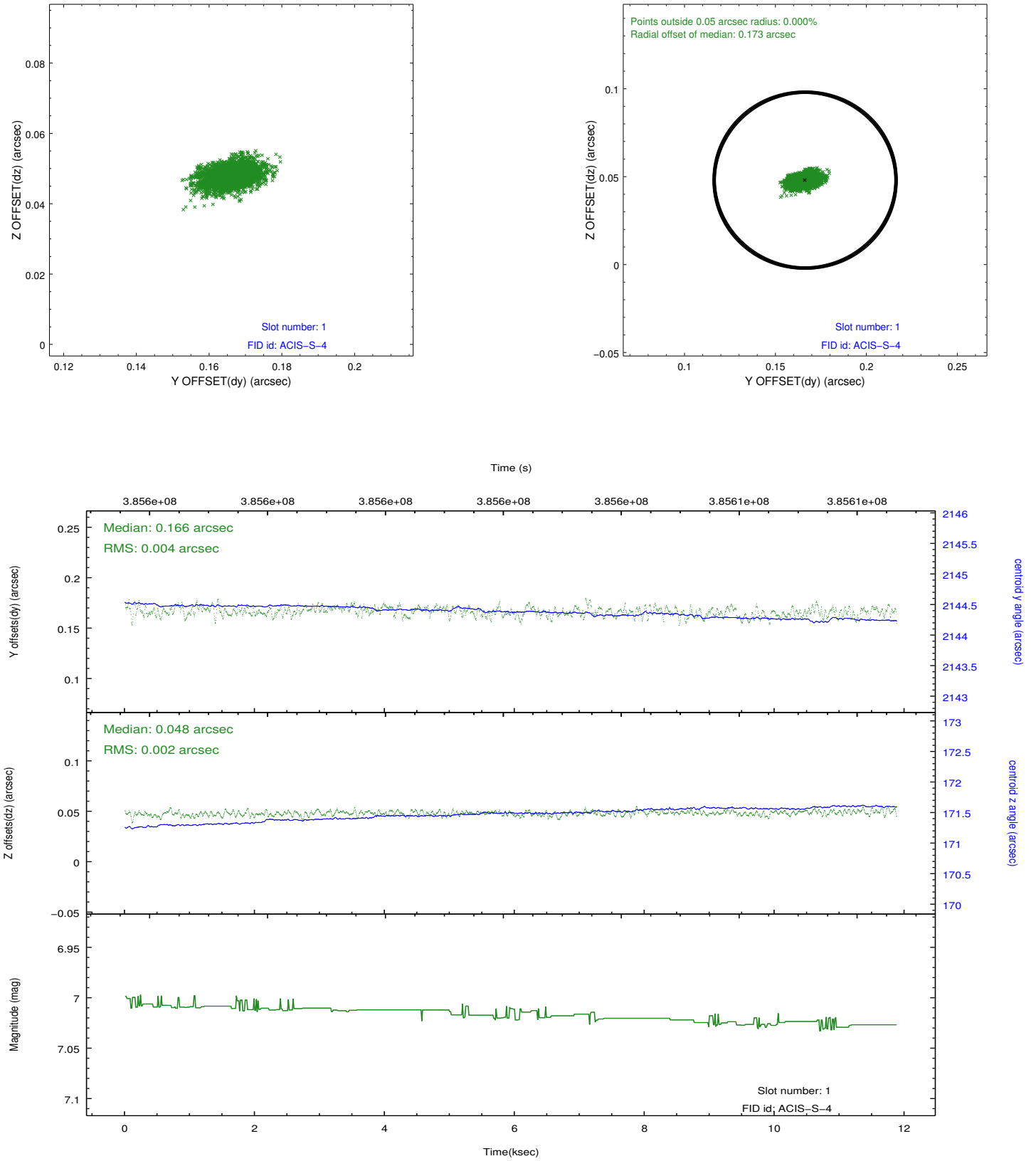


## 2.5 FID Slots

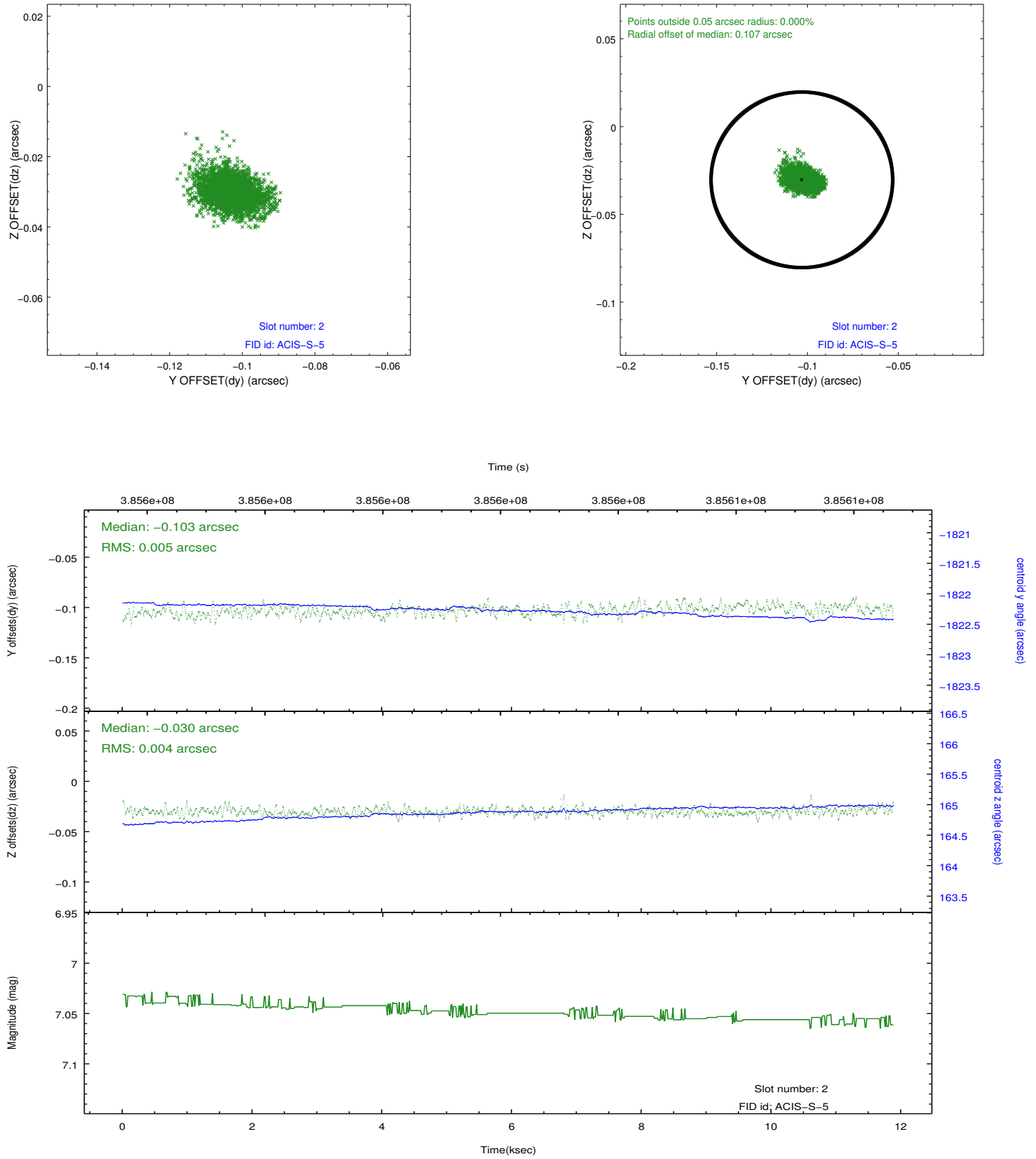
### 2.5.1 Slot 0



## 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)	2012.06.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	11.875199955821

### A.2 Comments