

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11338 - L2 Version 2  
Chandra X-Ray Center

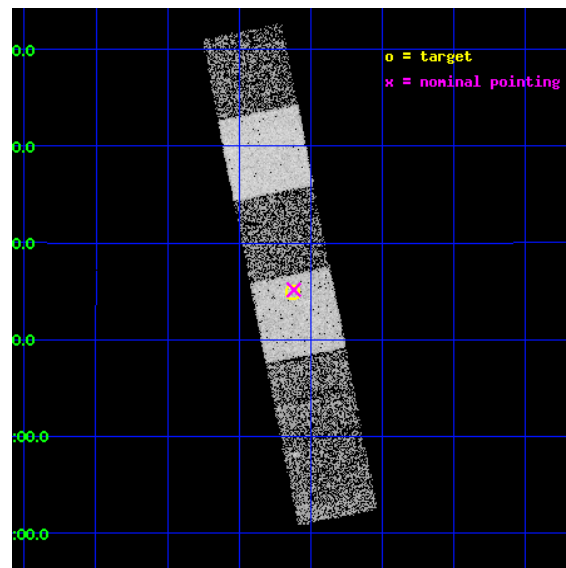
L2 Processing Date : Jun 22 2012

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# 1 Front

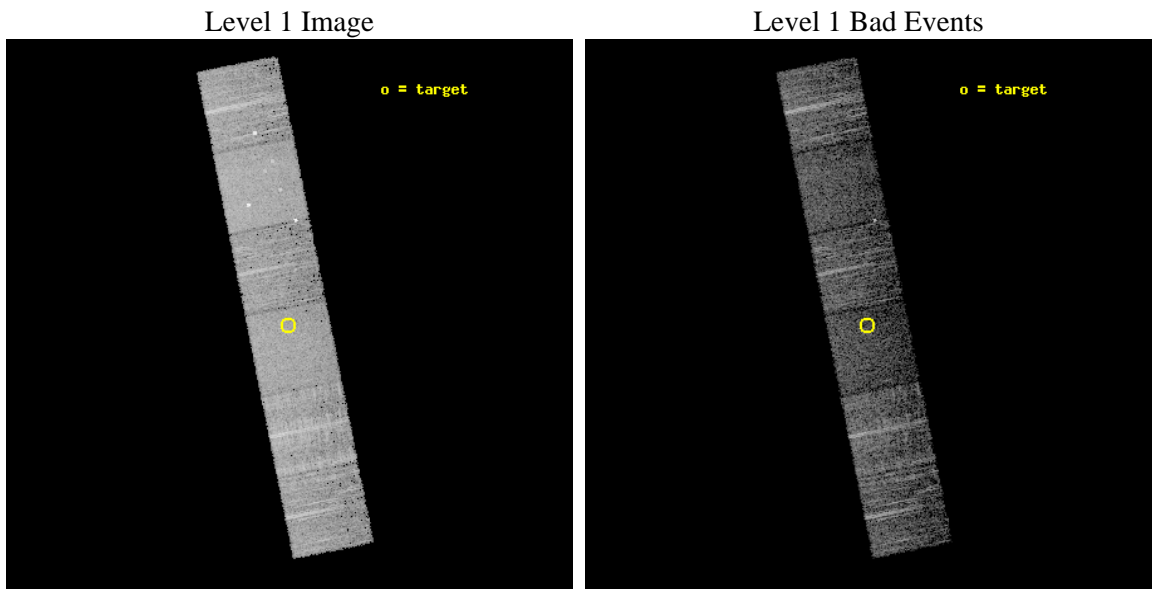
seq_num	600857	Sequence number
obs_id	11338	Observation id
title	Accretion onto nuclear black holes in early type galaxies: comparing field vs. clusters	Proposal title
observer	Elena Gallo	Principal investigator
object	PGC043421	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	192.531	Observer's specified target RA [deg]
dec_targ	2.24802	Observer's specified target Dec [deg]
ra_nom	192.52932129548	Nominal RA [deg]
dec_nom	2.252426751342	Nominal Dec [deg]
roll_nom	78.647478246437	Nominal Roll [deg]
revision	2	Processing version of data
ontime	3955.1999853253	Sum of GTIs [s]
livetime	3905.1168615756	Livetime [s]
ontime4	3955.1999853253	Sum of GTIs [s]
ontime5	3955.1999853253	Sum of GTIs [s]
ontime6	3955.1999853253	Sum of GTIs [s]
ontime7	3955.1999853253	Sum of GTIs [s]
ontime8	3951.9589850307	Sum of GTIs [s]
ontime9	3955.1999853253	Sum of GTIs [s]
l2events	52376	Number of level 2 events



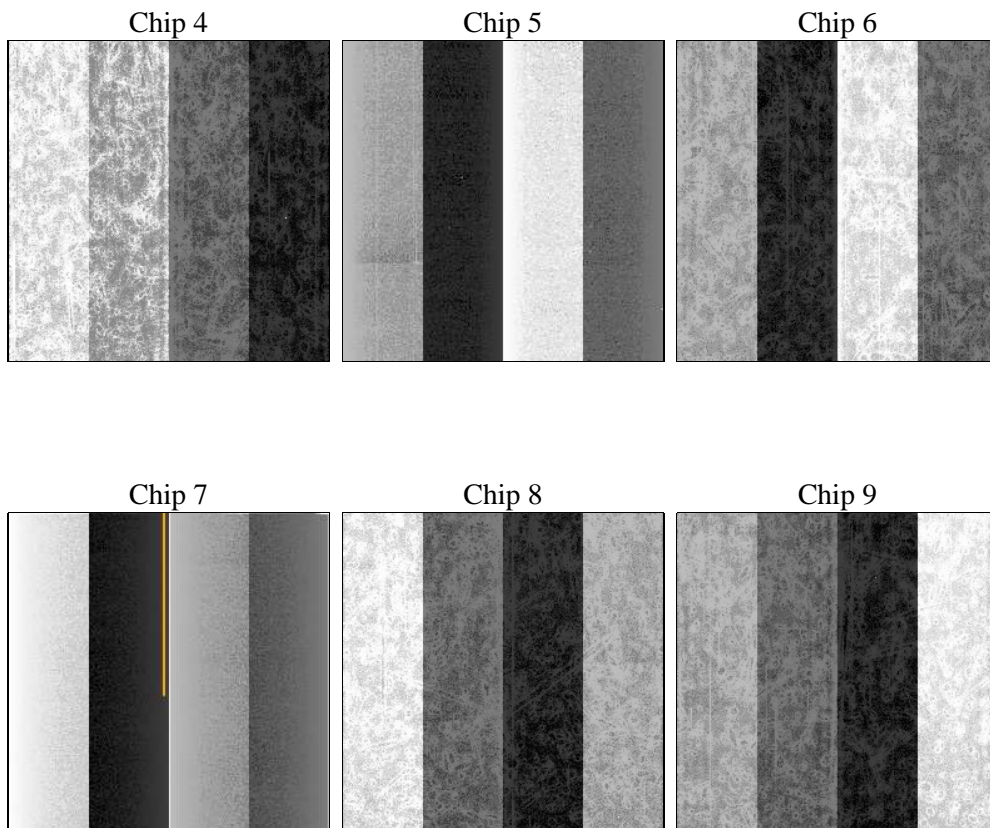
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4200.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	3955.1999853253	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime4	3955.1999853253	Sum of GTIs [s]
date	2012-06-22T03:28:40	Date and time of file creation	ontime5	3955.1999853253	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	3955.1999853253	Sum of GTIs [s]
			ontime7	3955.1999853253	Sum of GTIs [s]
			ontime8	3951.9589850307	Sum of GTIs [s]
			ontime9	3955.1999853253	Sum of GTIs [s]
			l1events	240741	Number of level 1 events

### 2.1.4 Events

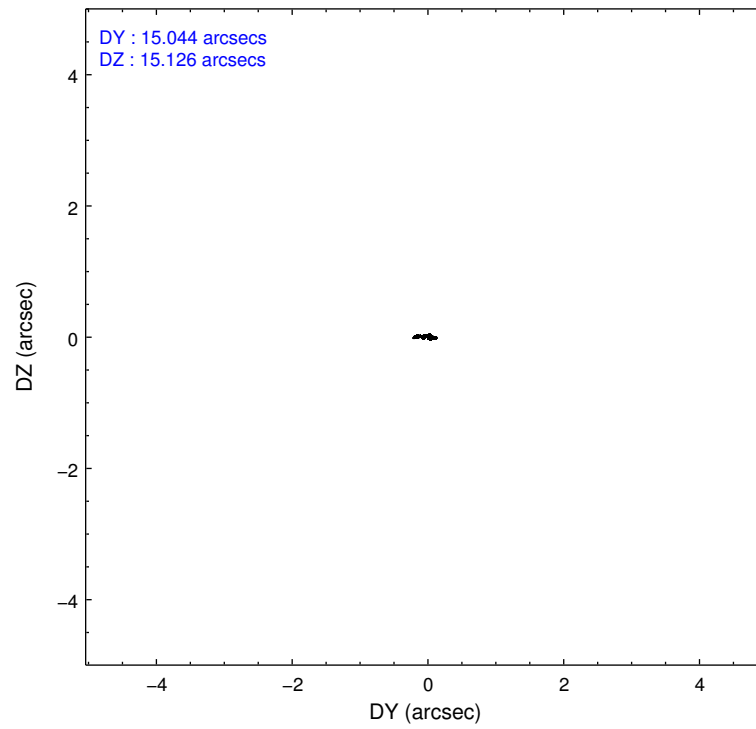
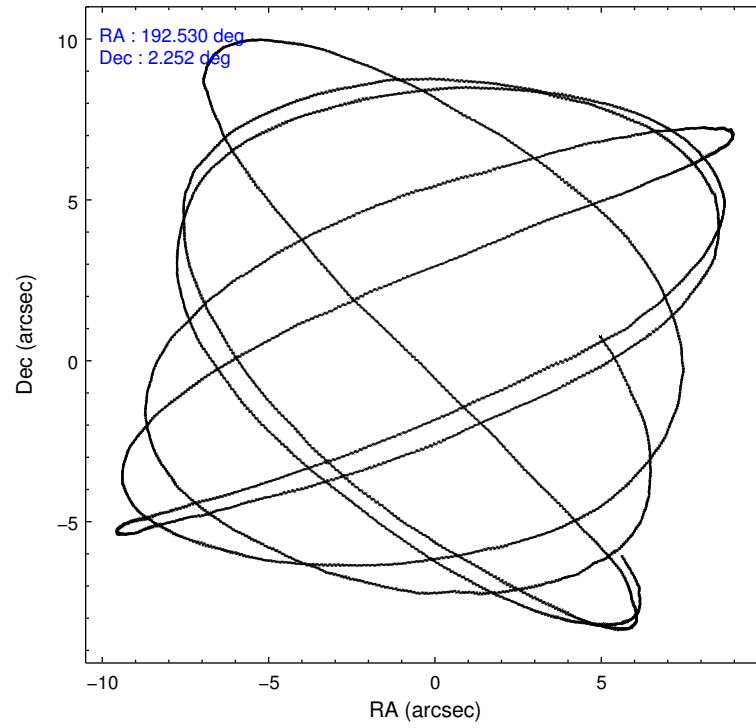
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	40651	49665	32728	38607	46198	32892	grade 0 events	2238	3076	1291	1665	3290	1429
rejected events	36084	24470	29168	20990	35093	29015		5%	6%	3%	4%	7%	4%
rejected %	88%	49%	89%	54%	75%	88%	grade 1 events	31	206	22	50	35	24
								0%	0%	0%	0%	0%	0%
							grade 2 events	888	7285	782	3651	2527	836
								2%	14%	2%	9%	5%	2%
							grade 3 events	407	997	353	1532	1233	401
								1%	2%	1%	3%	2%	1%
							grade 4 events	378	946	385	1475	1147	428
								0%	1%	1%	3%	2%	1%
							grade 5 events	1368	3742	1375	4029	2037	1547
								3%	7%	4%	10%	4%	4%
							grade 6 events	659	12909	757	9303	2913	790
								1%	25%	2%	24%	6%	2%
							grade 7 events	34682	20504	27763	16902	33016	27437
								85%	41%	84%	43%	71%	83%

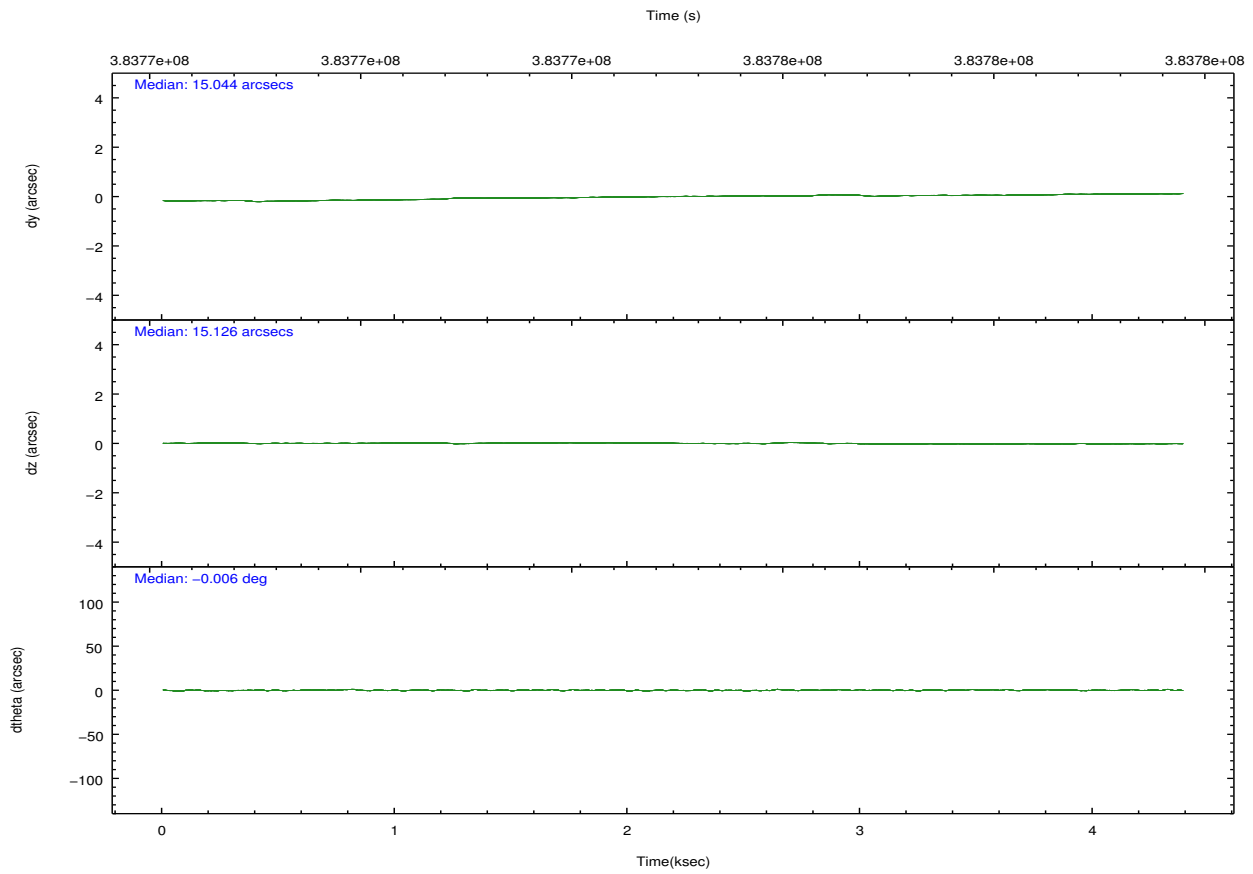
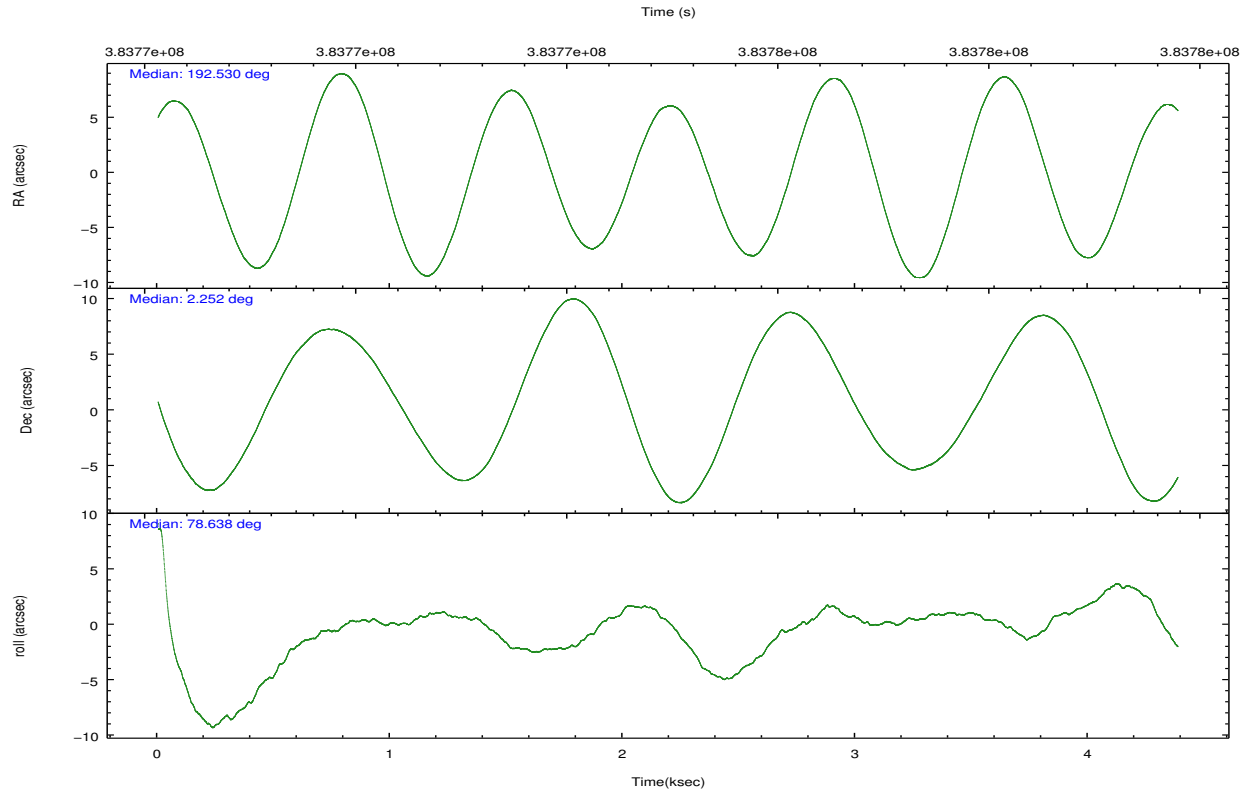


## 2.2 Compared Parameters

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	192.538421	192.5293212954768	CCD I2 on	N	N
[deg] Pointing Dec	2.226784	2.252426751342004	CCD I3 on	N	N
[deg] Pointing Roll	78.490473	78.64747824643719	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	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	383772478.184000	383772006.069	CCD S5 on	O2	Y
Observation start date	2010-02-28T19:26:52	2010-02-28T19:20:06	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	383776678.184000	383777090.06926	On-chip summing requested	N	N
Observation end date	2010-02-28T20:36:52	2010-02-28T20:44:50	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



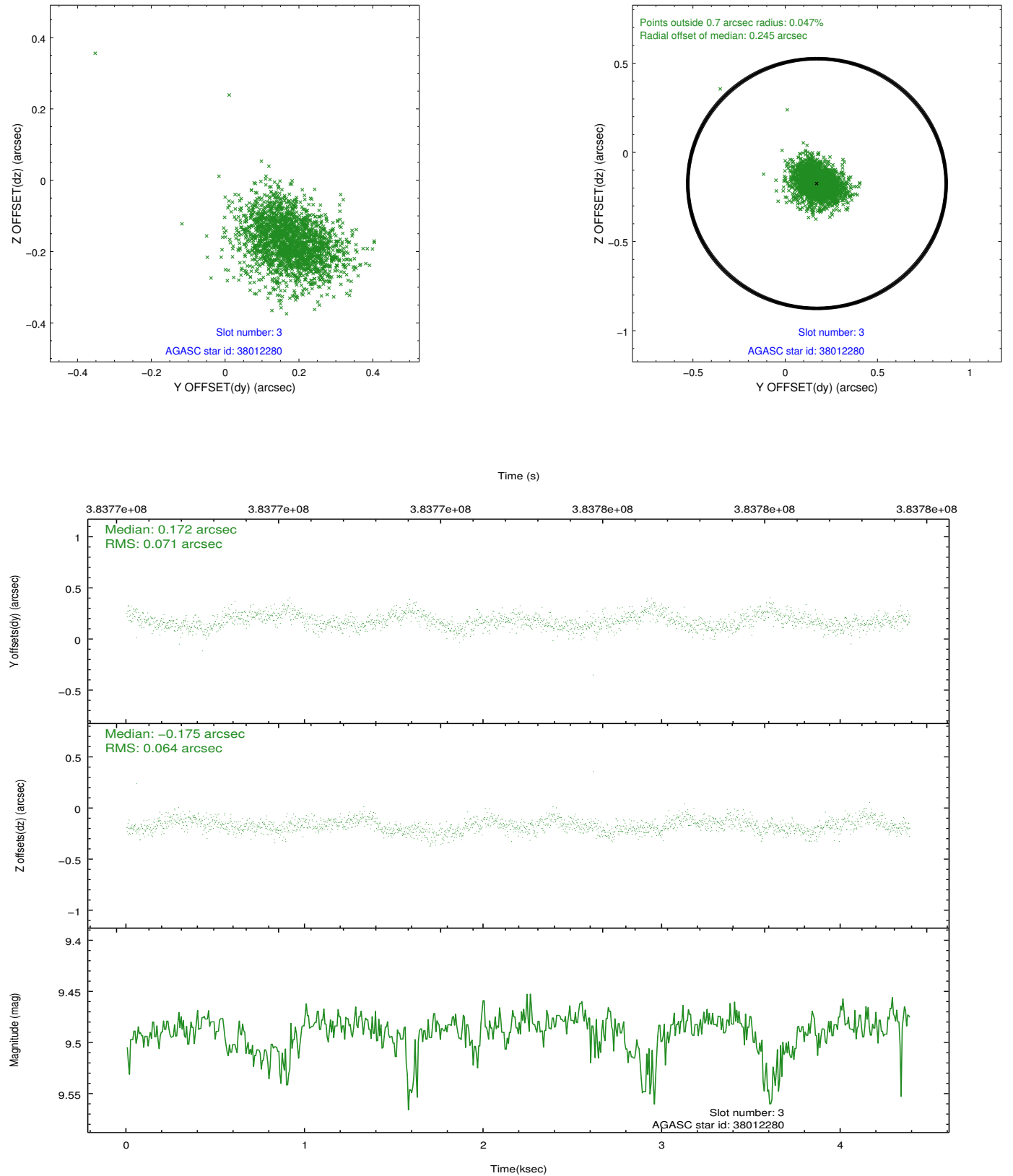


### Slot Statistics

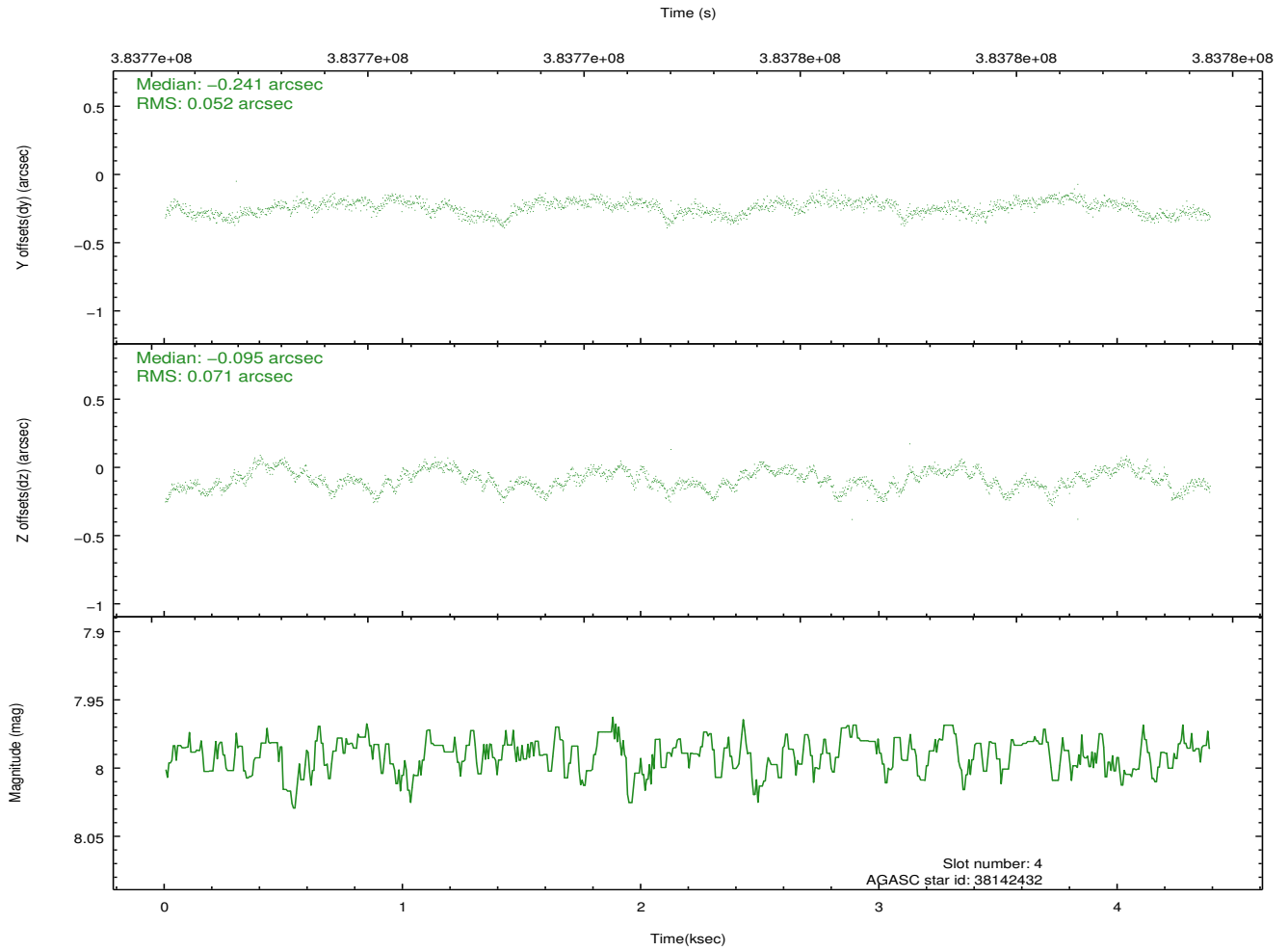
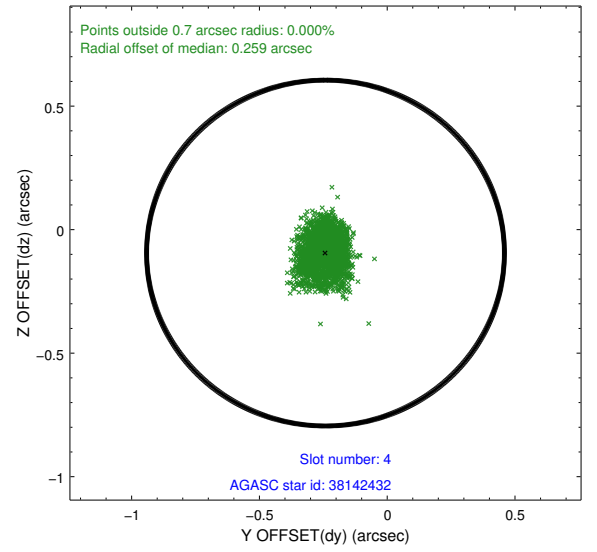
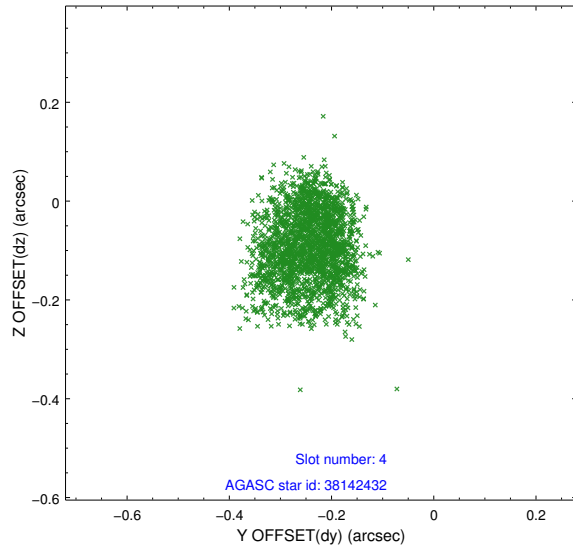
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	6.98	1070	0.020	-0.035	0.007	0.012	0.000000	0.000000	928.07	-1732.17
1	FID	ACIS-S-4	6.99	1070	0.158	0.019	0.007	0.011	0.000000	0.000000	2146.38	170.60
2	FID	ACIS-S-5	7.02	1069	-0.205	0.028	0.006	0.013	0.000000	0.000000	-1819.23	165.76
3	GUIDE	38012280	9.49	2132	0.172	-0.175	0.099	0.165	192.045384	1.767502	-1973.24	1408.80
4	GUIDE	38142432	7.99	2137	-0.241	-0.095	0.096	0.145	192.943156	2.199216	193.23	-1445.19
5	GUIDE	38149872	7.78	2139	-0.033	0.080	0.070	0.117	193.141938	1.943654	-563.87	-2331.28
6	GUIDE	38535424	9.81	2134	-0.119	0.375	0.191	0.289	193.198810	2.544285	1595.17	-2098.98
7	GUIDE	38011272	8.94	2135	0.228	-0.197	0.077	0.129	191.918868	1.685600	-2352.35	1795.19

## 2.4 Star Slots

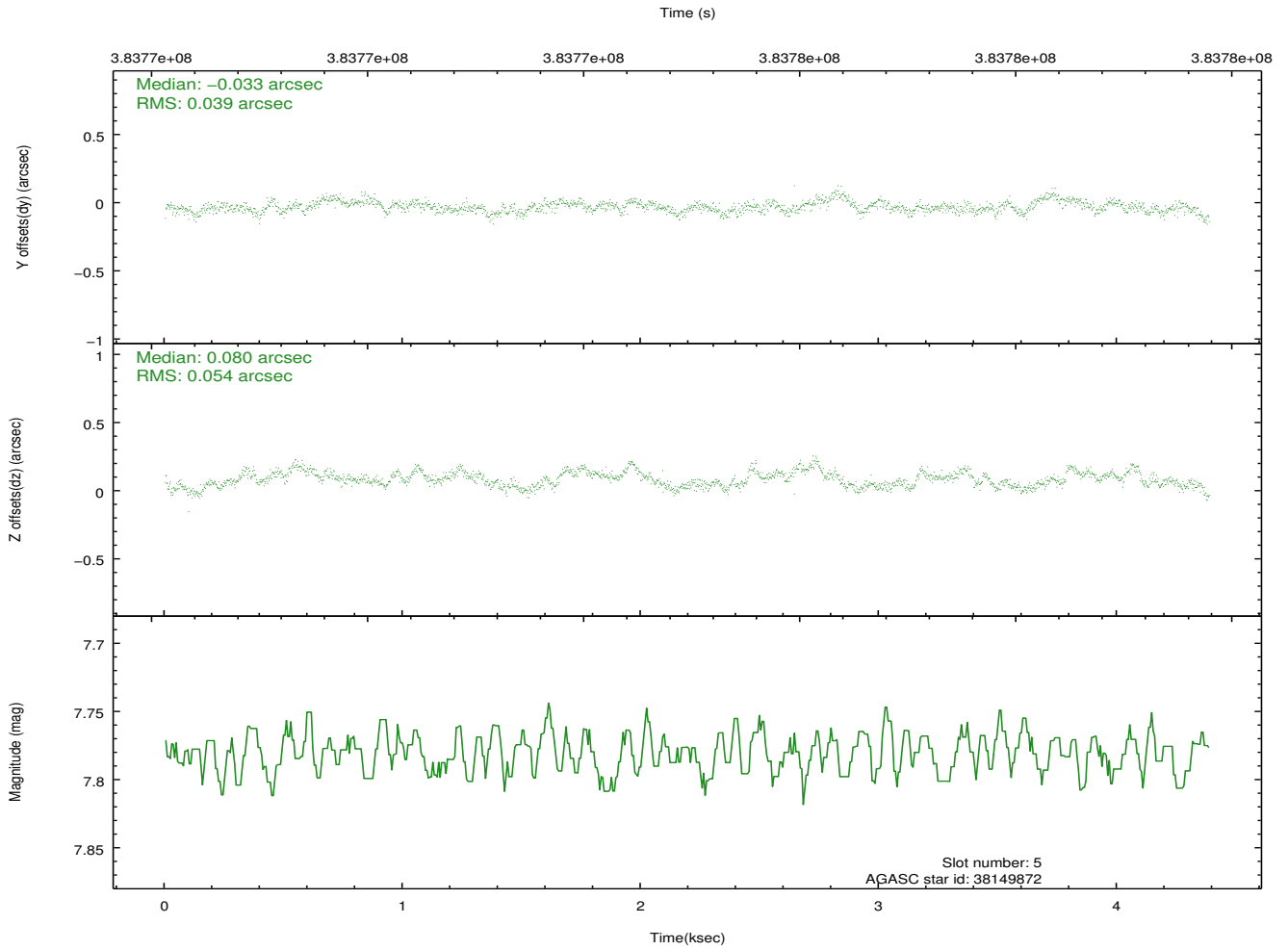
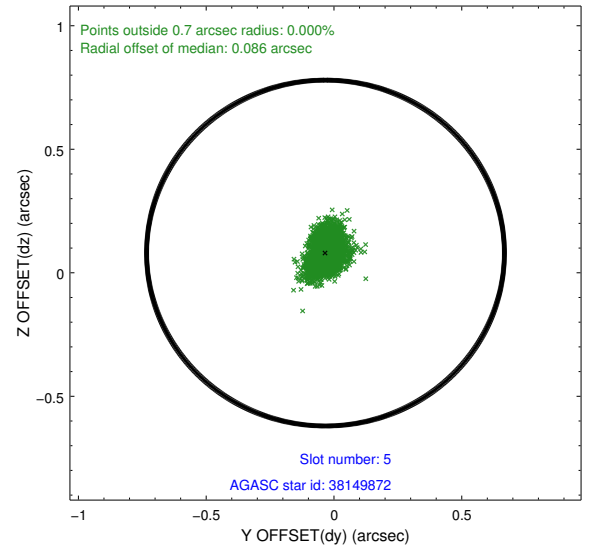
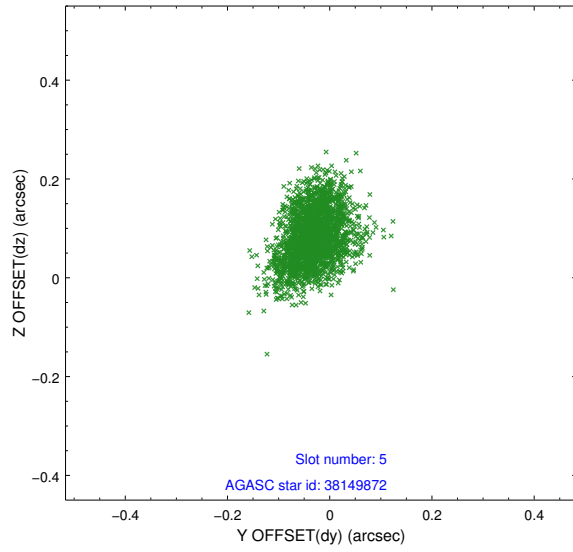
### 2.4.1 Slot 3



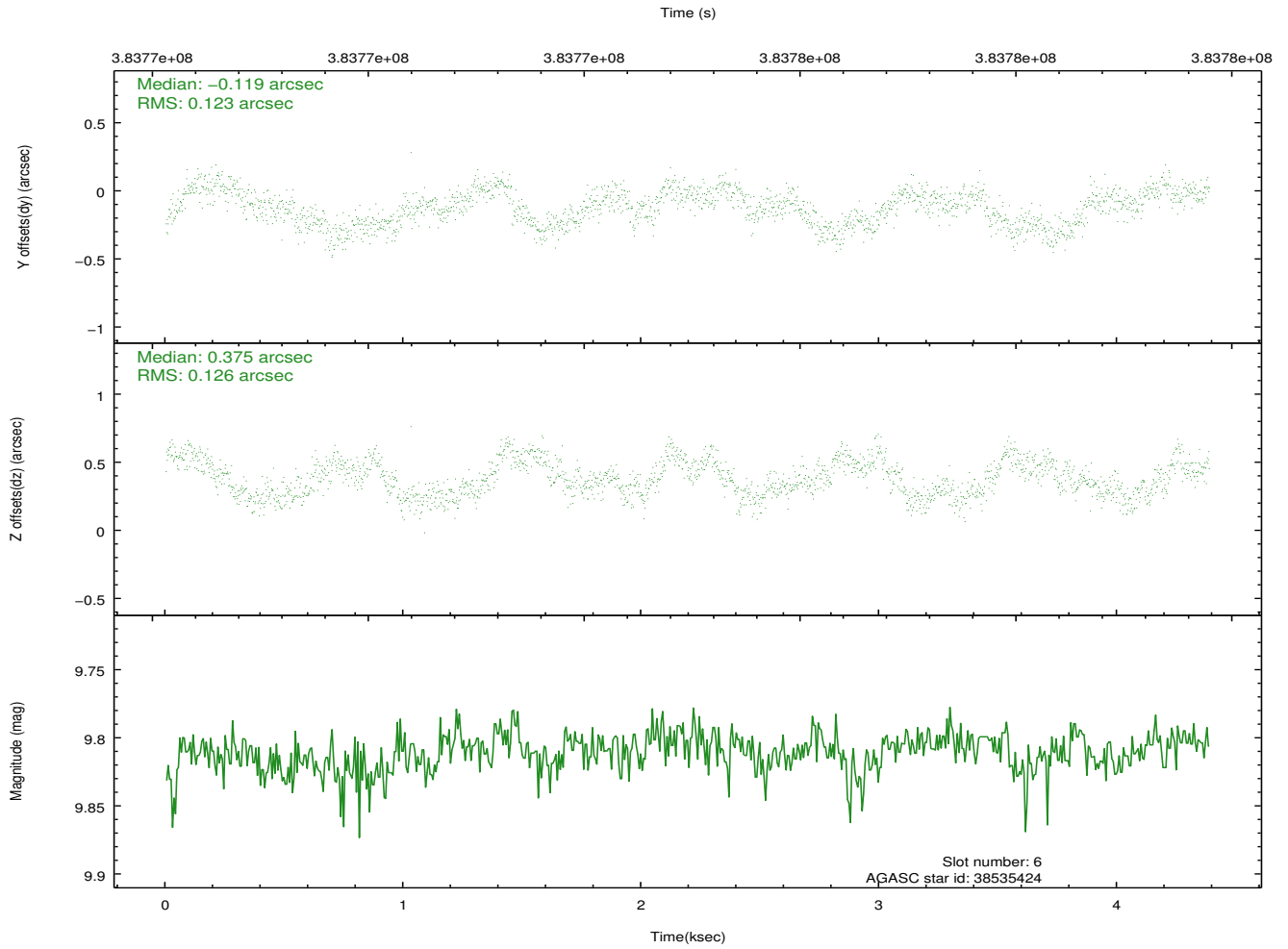
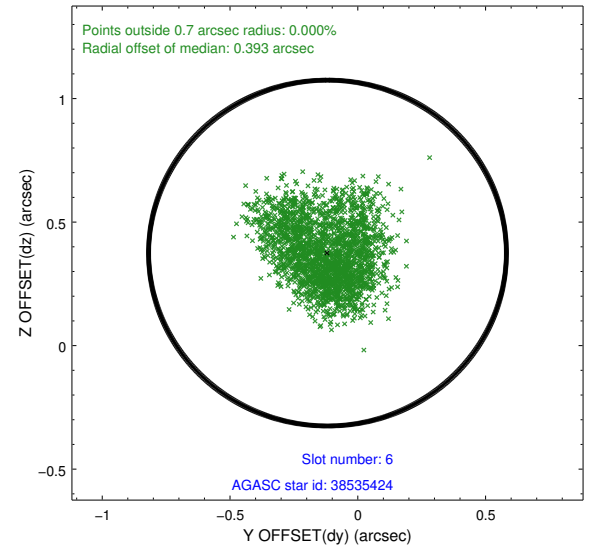
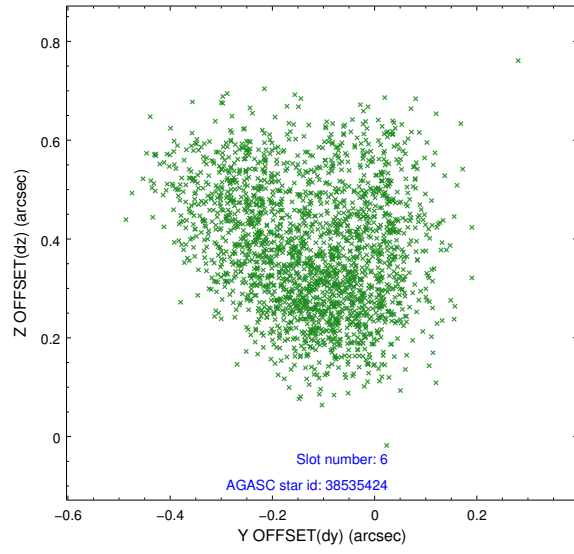
## 2.4.2 Slot 4



### 2.4.3 Slot 5

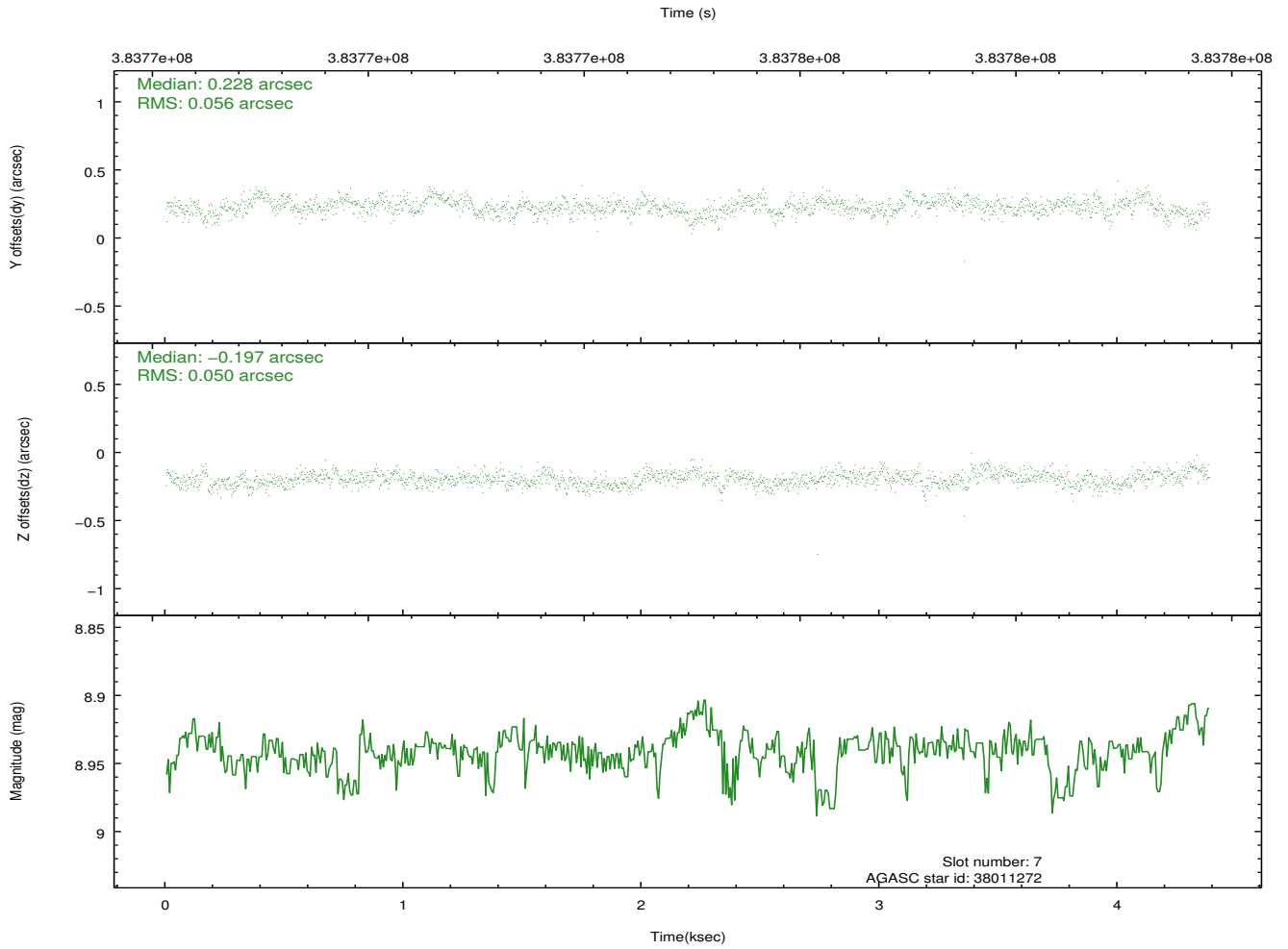
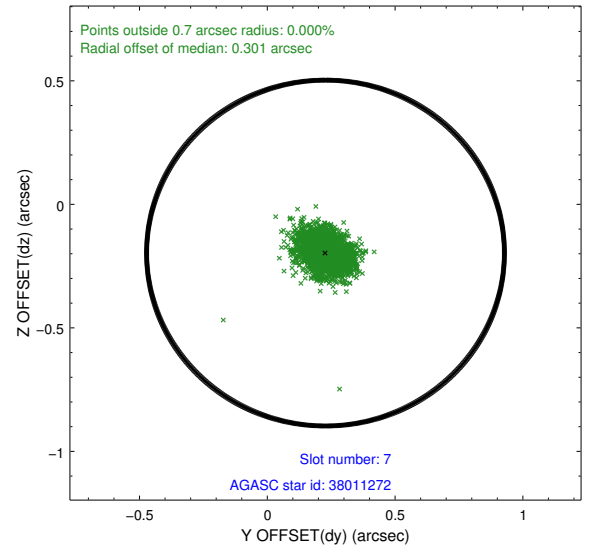
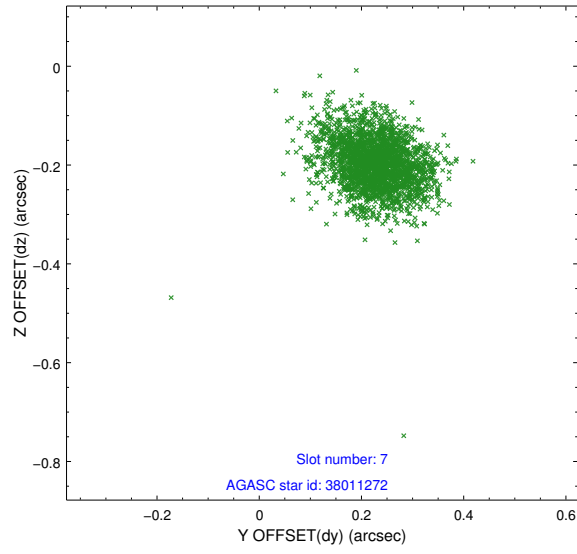


## 2.4.4 Slot 6



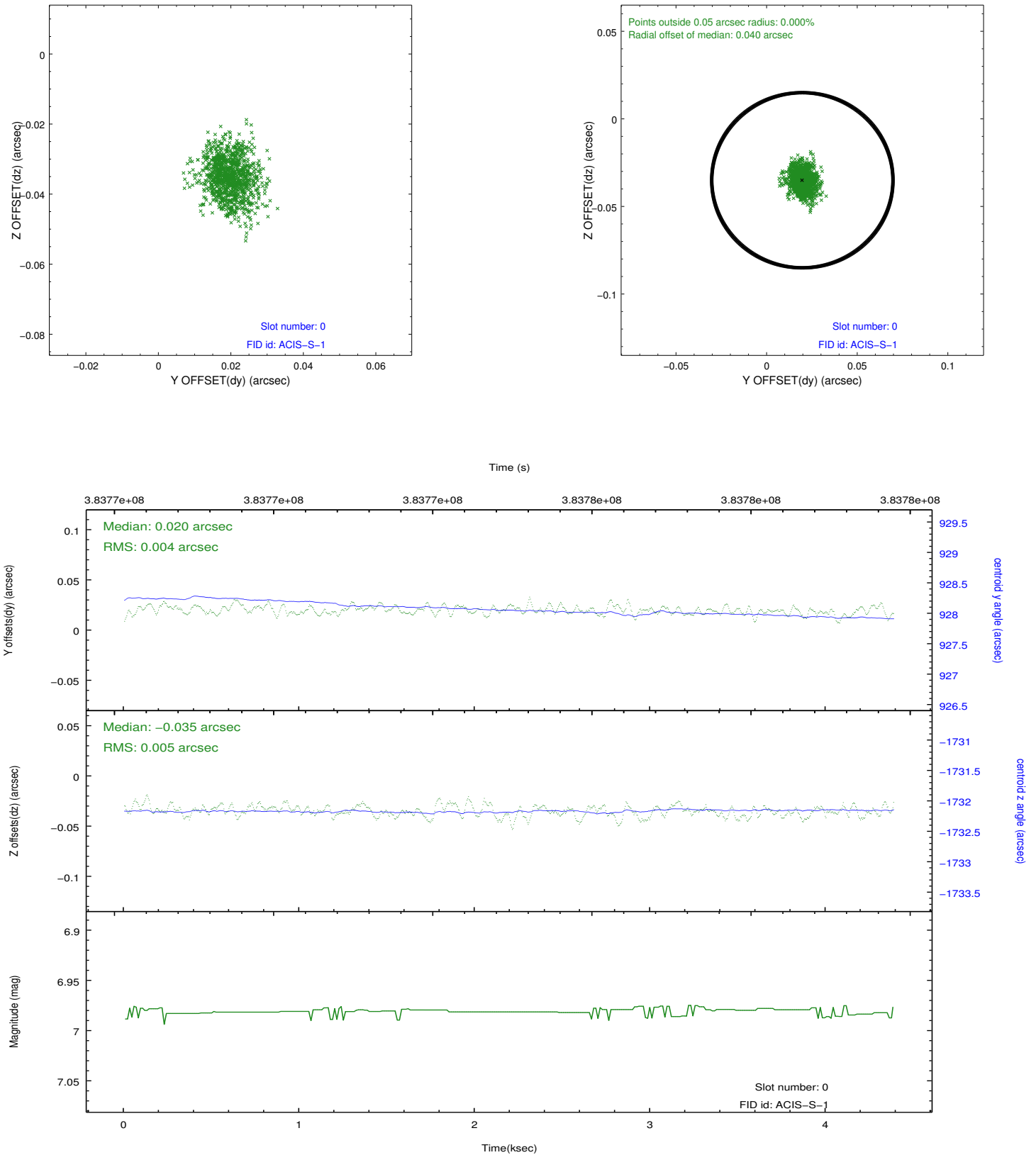


### 2.4.5 Slot 7

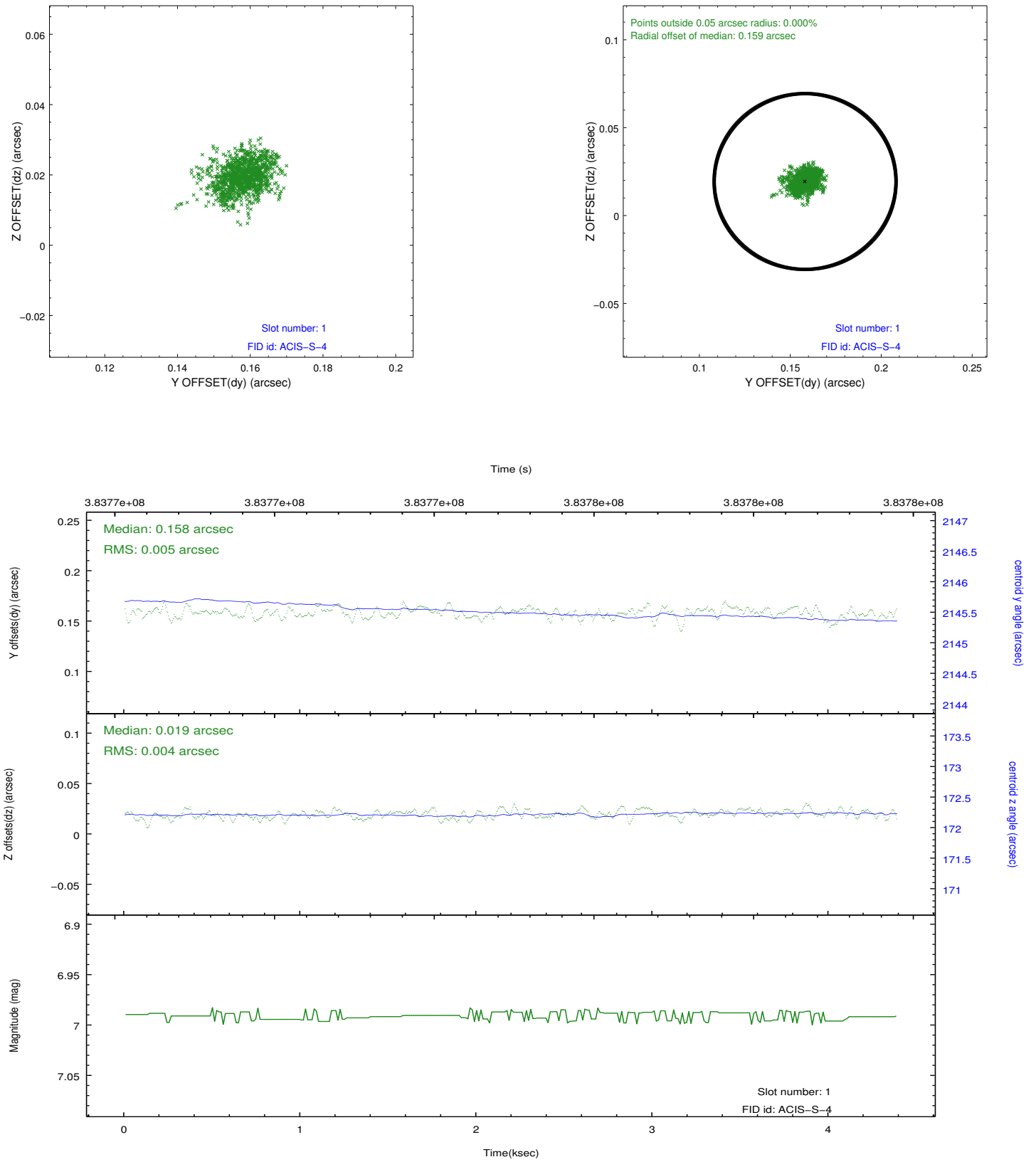


## 2.5 FID Slots

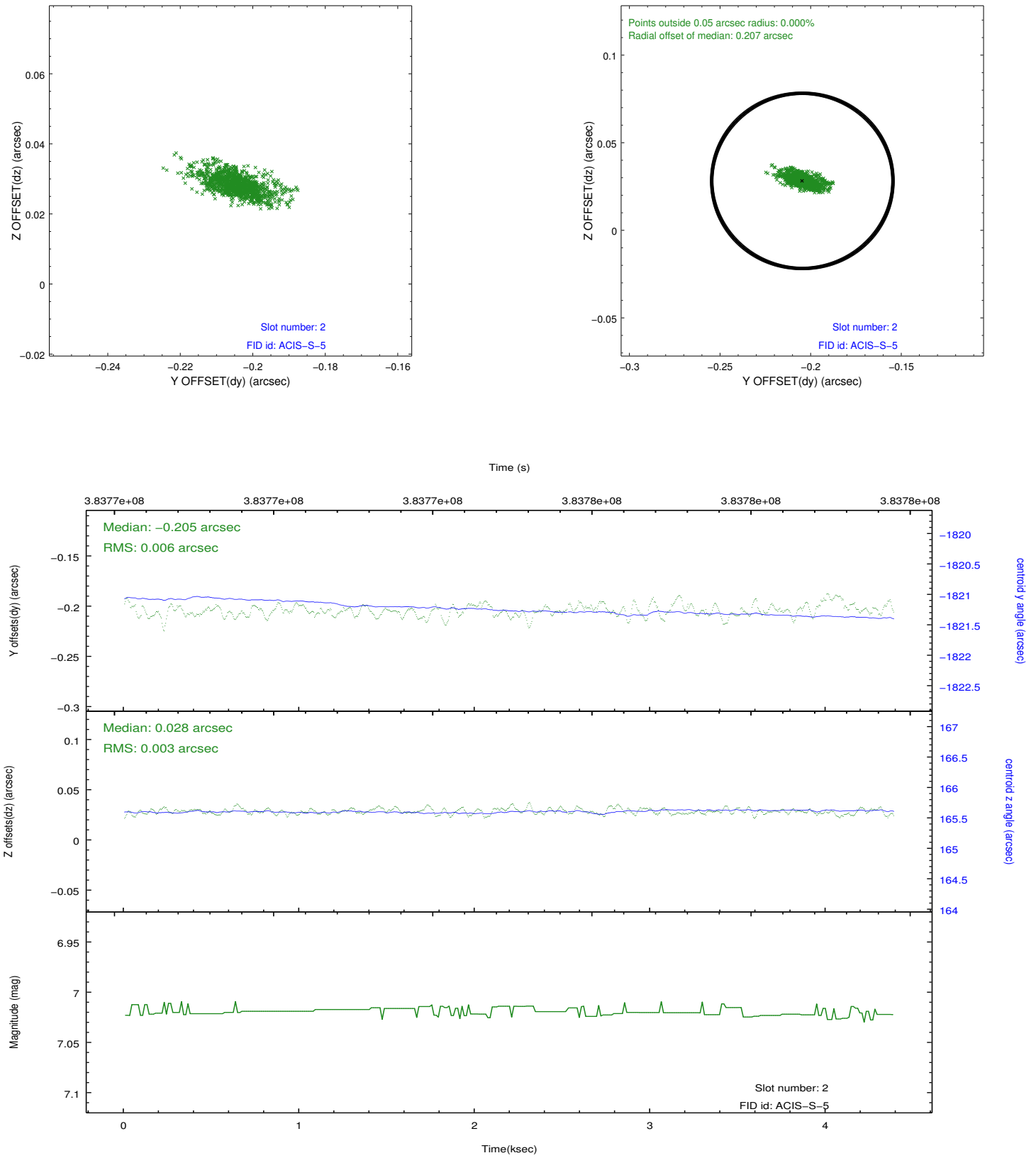
### 2.5.1 Slot 0



## 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	3.9551999853253

### A.2 Comments