

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11313 - L2 Version 2  
Chandra X-Ray Center

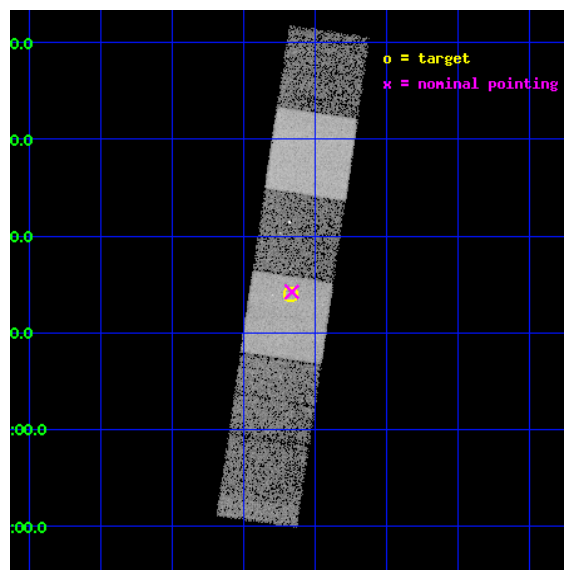
L2 Processing Date : Jun 23 2012

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# 1 Front

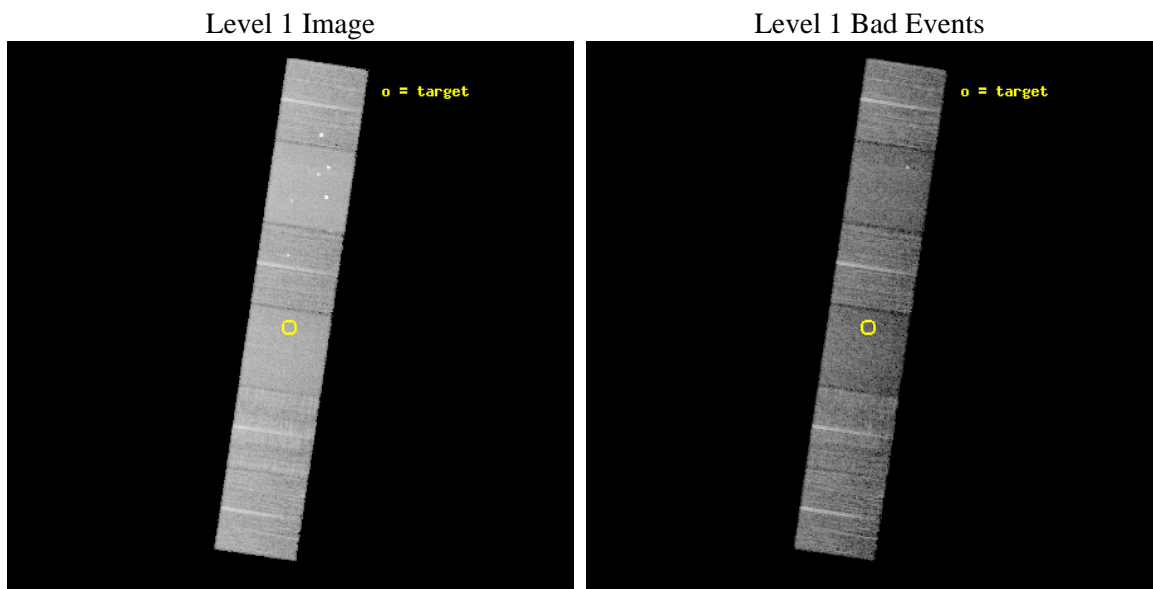
seq_num	600832	Sequence number
obs_id	11313	Observation id
title	Accretion onto nuclear black holes in early type galaxies: comparing field vs. clusters	Proposal title
observer	Elena Gallo	Principal investigator
object	NGC5638	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	217.419	Observer's specified target RA [deg]
dec_targ	3.23352	Observer's specified target Dec [deg]
ra_nom	217.41585714681	Nominal RA [deg]
dec_nom	3.2371782738238	Nominal Dec [deg]
roll_nom	98.509879896869	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10060.79996258	Sum of GTIs [s]
livetime	9933.4040555676	Livetime [s]
ontime4	10054.317942083	Sum of GTIs [s]
ontime5	10060.79996258	Sum of GTIs [s]
ontime6	10060.79996258	Sum of GTIs [s]
ontime7	10060.79996258	Sum of GTIs [s]
ontime8	10057.558952272	Sum of GTIs [s]
ontime9	10060.79996258	Sum of GTIs [s]
l2events	127527	Number of level 2 events



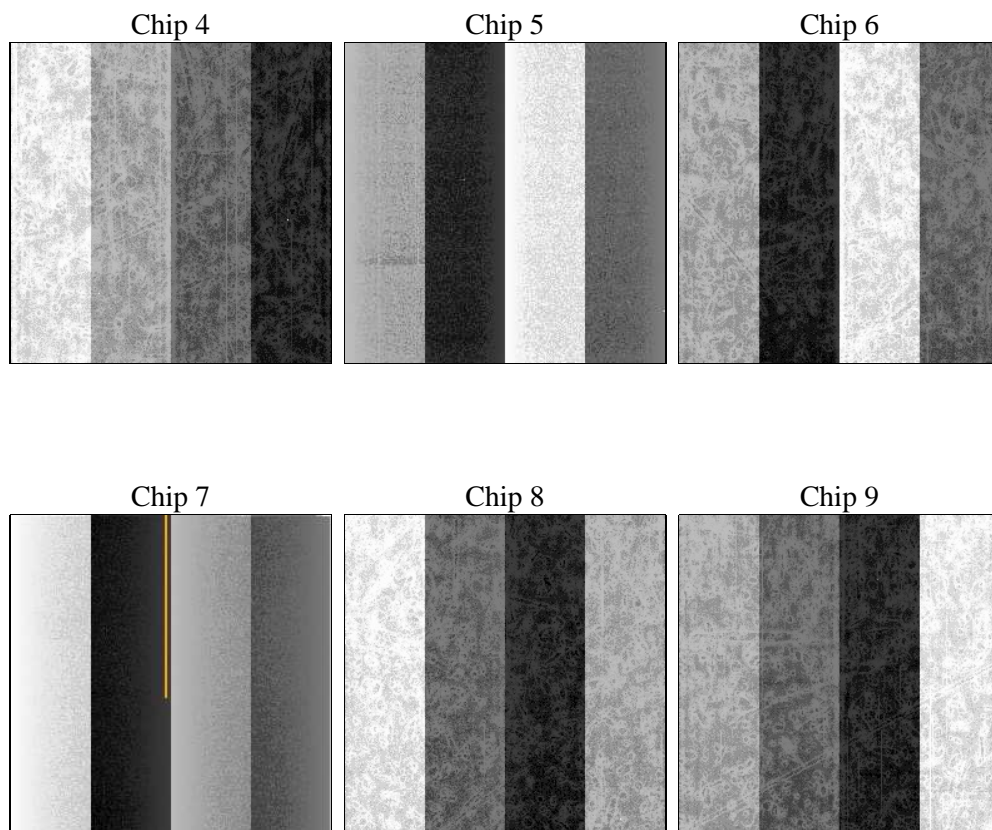
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	10020.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	10060.79996258	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime4	10054.317942083	Sum of GTIs [s]
date	2012-06-23T05:09:21	Date and time of file creation	ontime5	10060.79996258	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	10060.79996258	Sum of GTIs [s]
			ontime7	10060.79996258	Sum of GTIs [s]
			ontime8	10057.558952272	Sum of GTIs [s]
			ontime9	10060.79996258	Sum of GTIs [s]
			l1events	566205	Number of level 1 events

### 2.1.4 Events

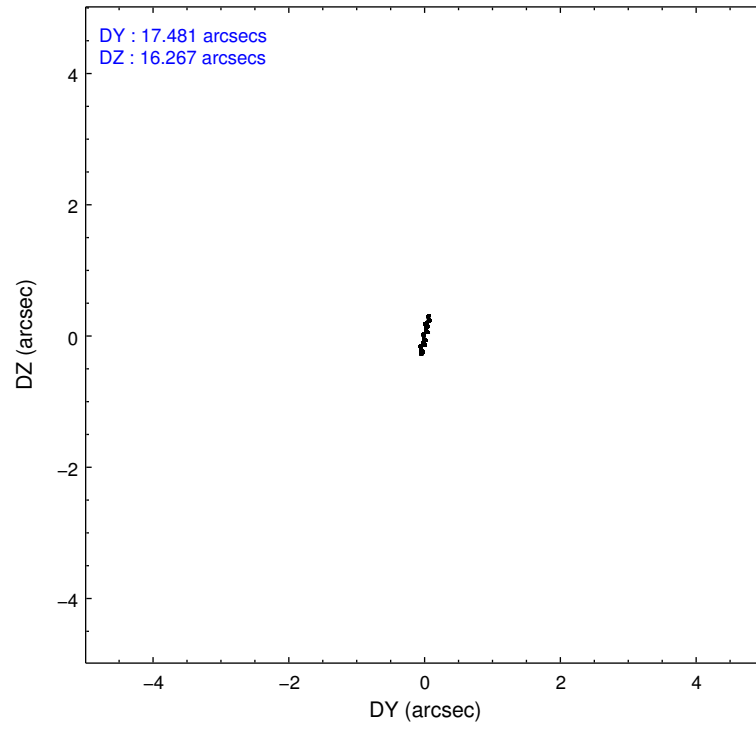
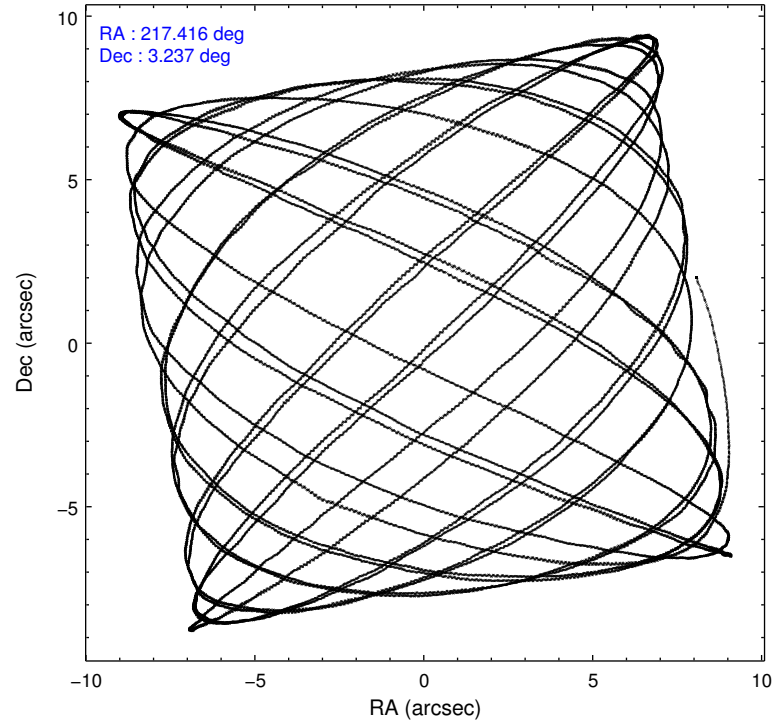
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	93720	118724	79668	93868	99397	80828	grade 0 events	5247	7447	3602	4027	7344	3392
rejected events	82758	58824	70404	51183	73966	71677		5%	6%	4%	4%	7%	4%
rejected %	88%	49%	88%	54%	74%	88%	grade 1 events	83	361	46	129	78	51
								0%	0%	0%	0%	0%	0%
							grade 2 events	2276	17459	2002	8806	6150	2057
								2%	14%	2%	9%	6%	2%
							grade 3 events	973	2344	853	3846	2563	958
								1%	1%	1%	4%	2%	1%
							grade 4 events	970	2233	904	3751	2433	963
								1%	1%	1%	3%	2%	1%
							grade 5 events	3350	9229	3417	9750	5033	3869
								3%	7%	4%	10%	5%	4%
							grade 6 events	1506	30457	1913	22279	6959	1791
								1%	25%	2%	23%	7%	2%
							grade 7 events	79315	49194	66931	41280	68837	67747
								84%	41%	84%	43%	69%	83%

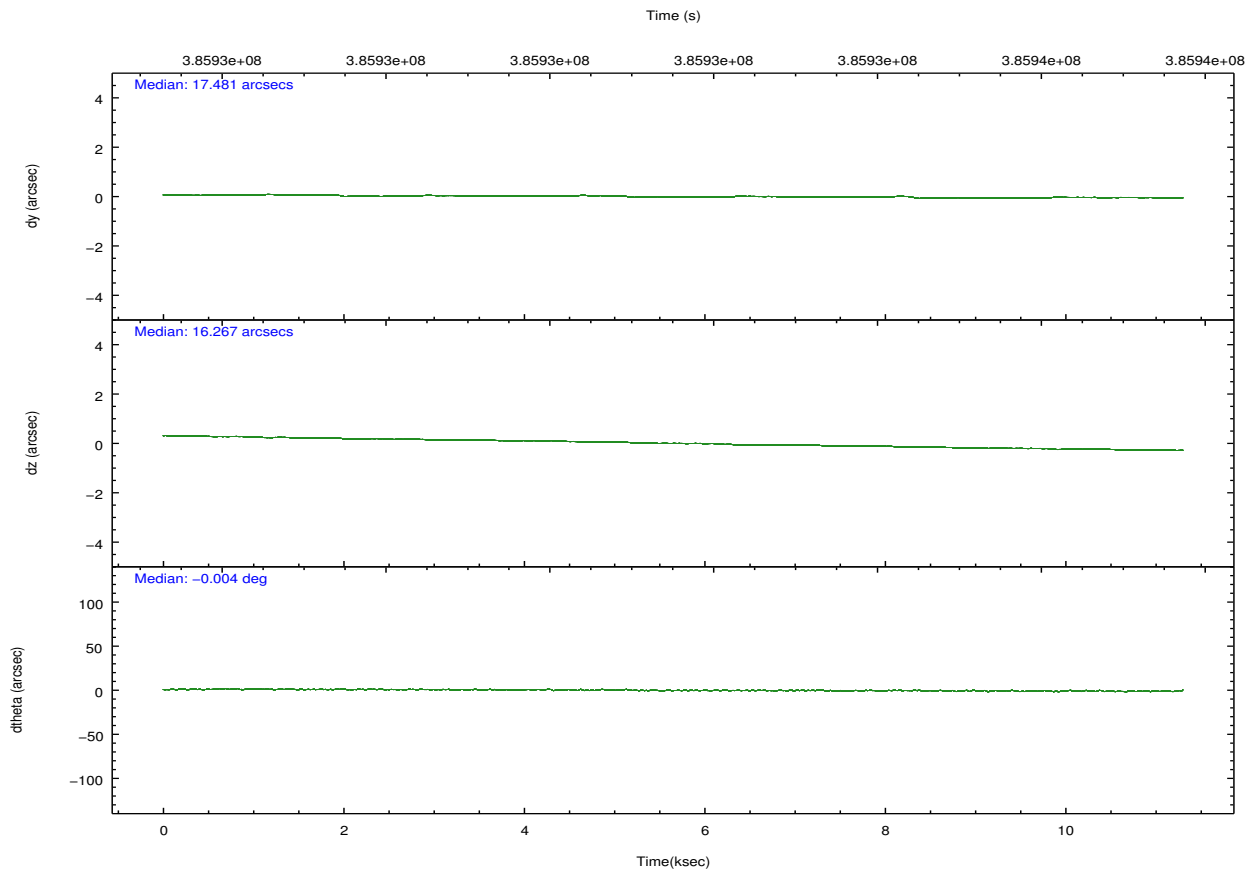
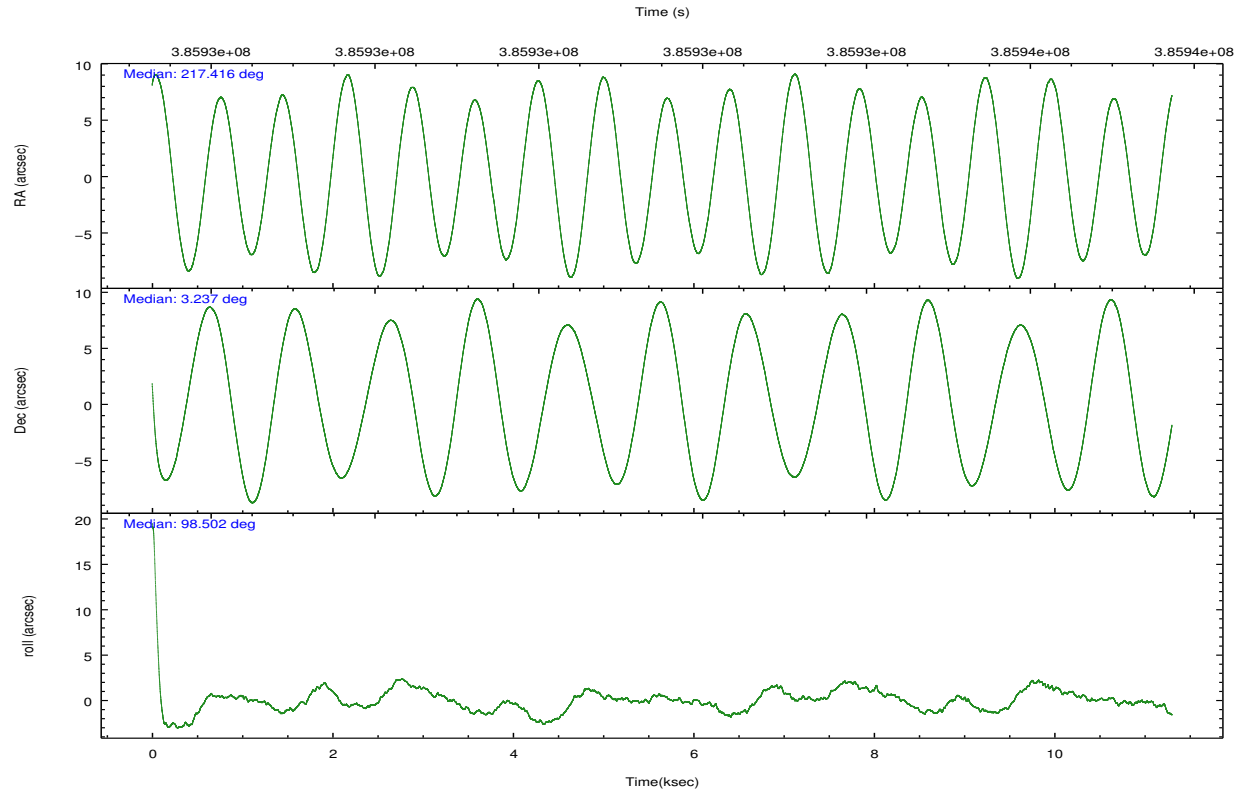


## 2.2 Compared Parameters

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	217.433213	217.4158571468108	CCD I2 on	N	N
[deg] Pointing Dec	3.216061	3.237178273823763	CCD I3 on	N	N
[deg] Pointing Roll	98.352250	98.5098798968686	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)	385926953.184000	385925047.89076	CCD S5 on	O2	Y
Observation start date	2010-03-25T17:54:47	2010-03-25T17:24:07	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	385936973.184000	385937823.49141	On-chip summing requested	N	N
Observation end date	2010-03-25T20:41:47	2010-03-25T20:57:03	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



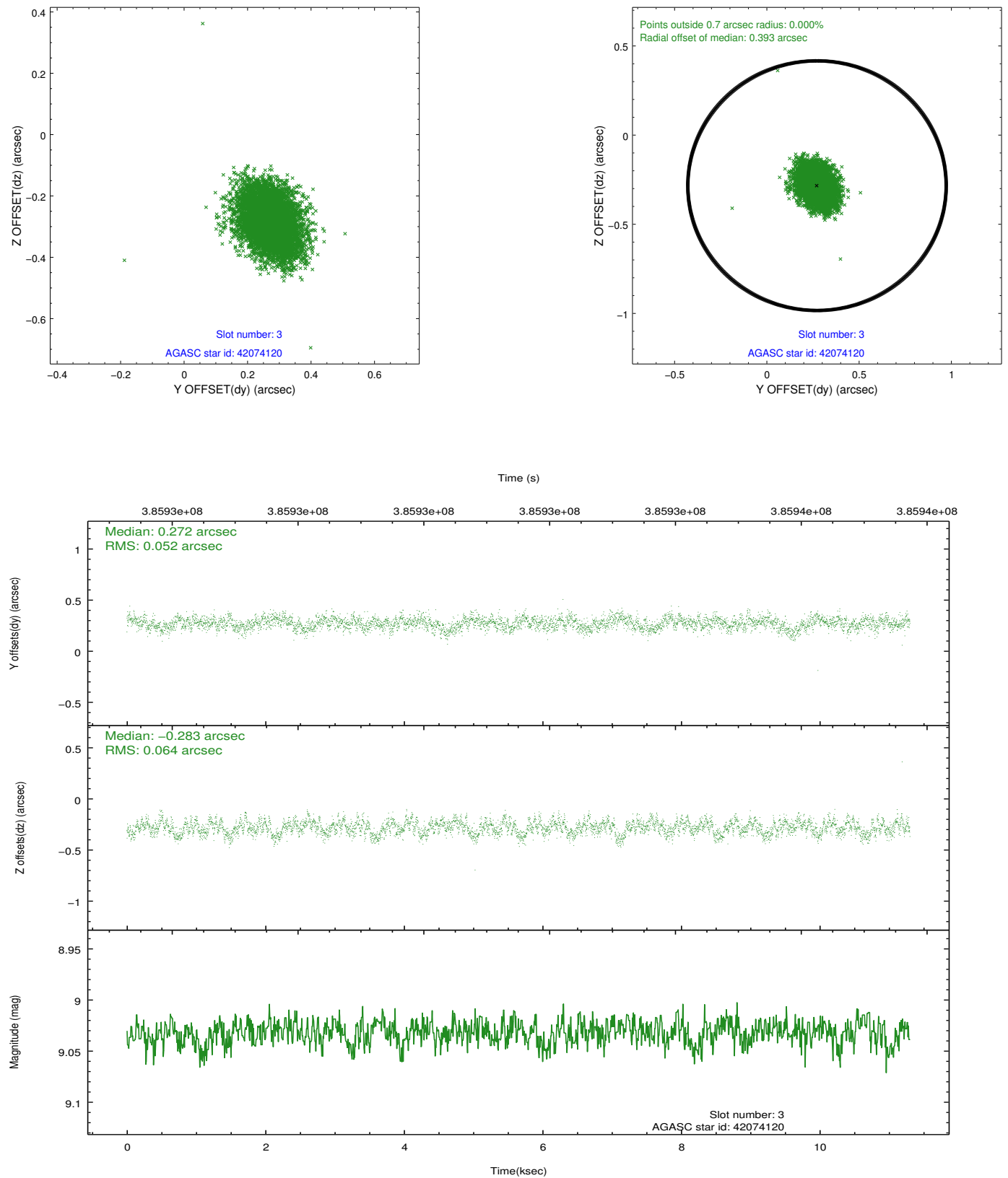


### Slot Statistics

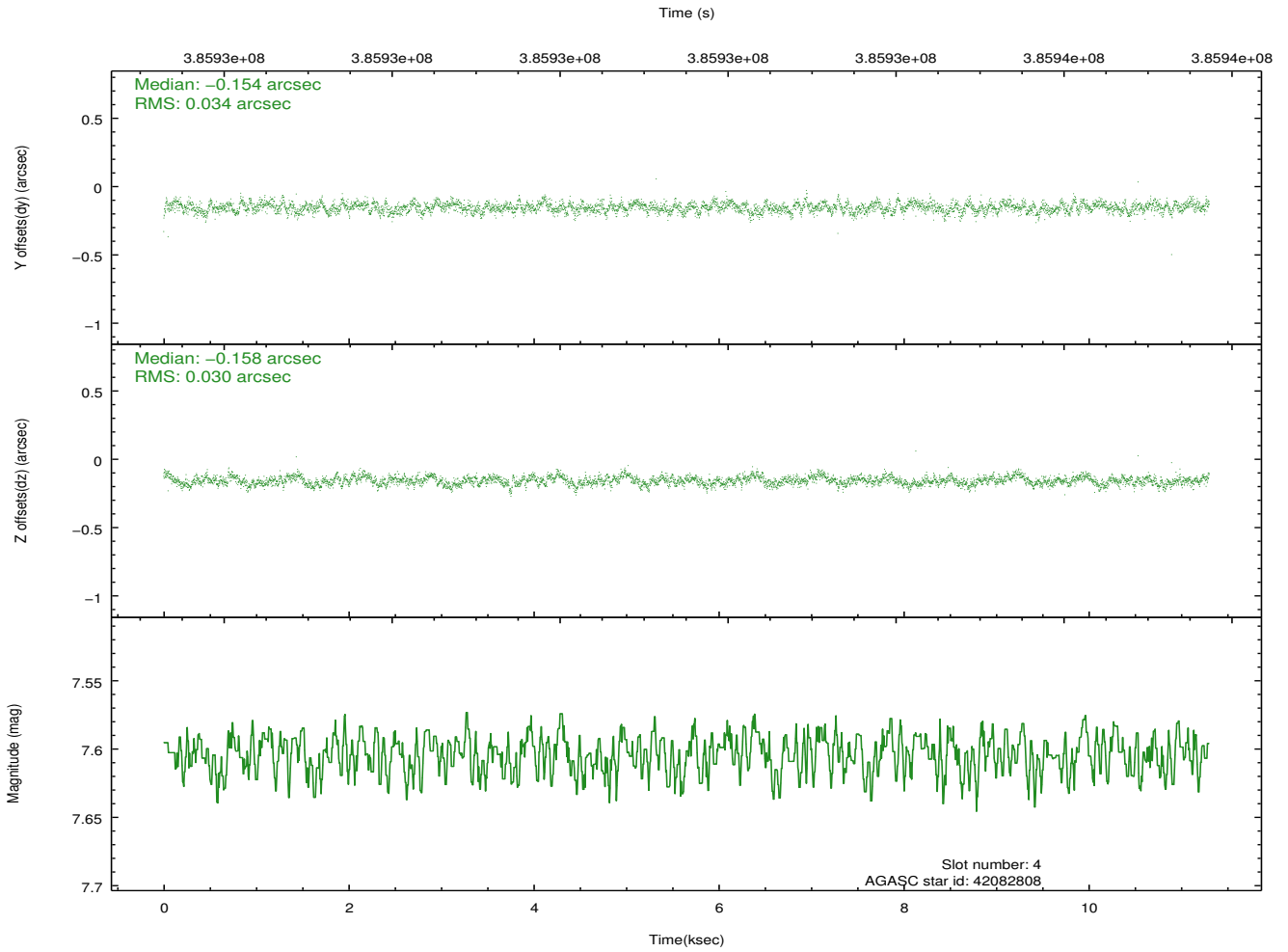
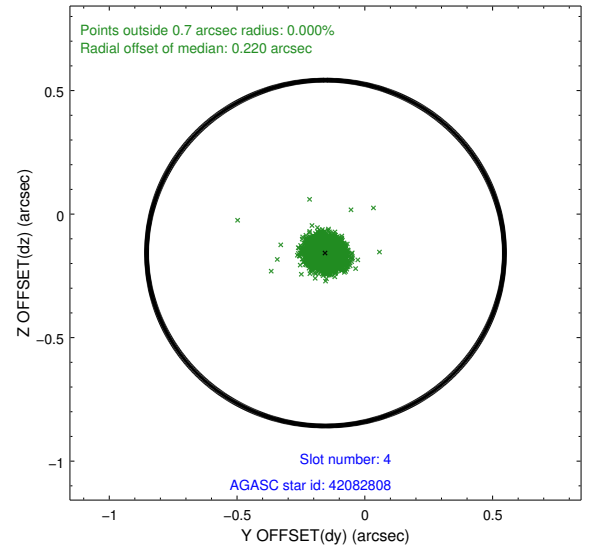
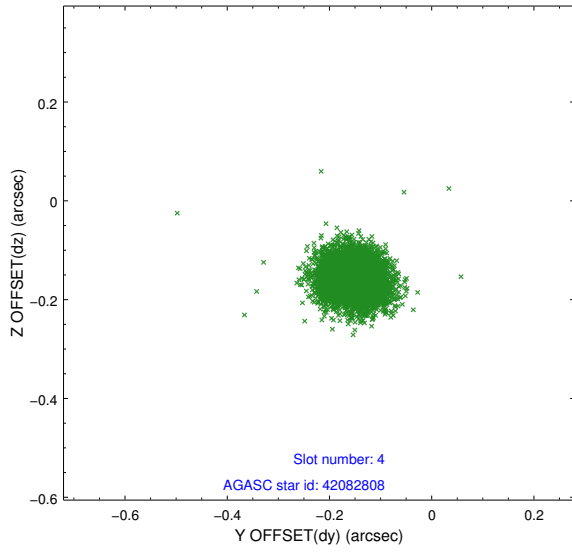
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.90	2757	-0.084	-0.028	0.009	0.014	0.000000	0.000000	-770.60	-1737.72
1	FID	ACIS-S-4	6.97	2757	0.211	0.048	0.006	0.011	0.000000	0.000000	2142.76	170.38
2	FID	ACIS-S-5	7.01	2757	-0.159	-0.011	0.008	0.013	0.000000	0.000000	-1822.94	164.50
3	GUIDE	42074120	9.03	5509	0.272	-0.283	0.087	0.140	216.996695	2.839959	-1110.96	1749.12
4	GUIDE	42082808	7.60	5513	-0.154	-0.158	0.048	0.077	217.146054	3.763210	2098.85	735.08
5	GUIDE	42087160	7.29	5514	0.015	0.068	0.067	0.105	216.944723	3.621427	1699.77	1524.91
6	GUIDE	42992696	8.38	5513	-0.218	0.193	0.074	0.120	217.807530	3.501863	823.52	-1479.65
7	GUIDE	43005456	7.80	5513	0.074	0.181	0.076	0.124	218.000245	3.698855	1425.01	-2268.11

## 2.4 Star Slots

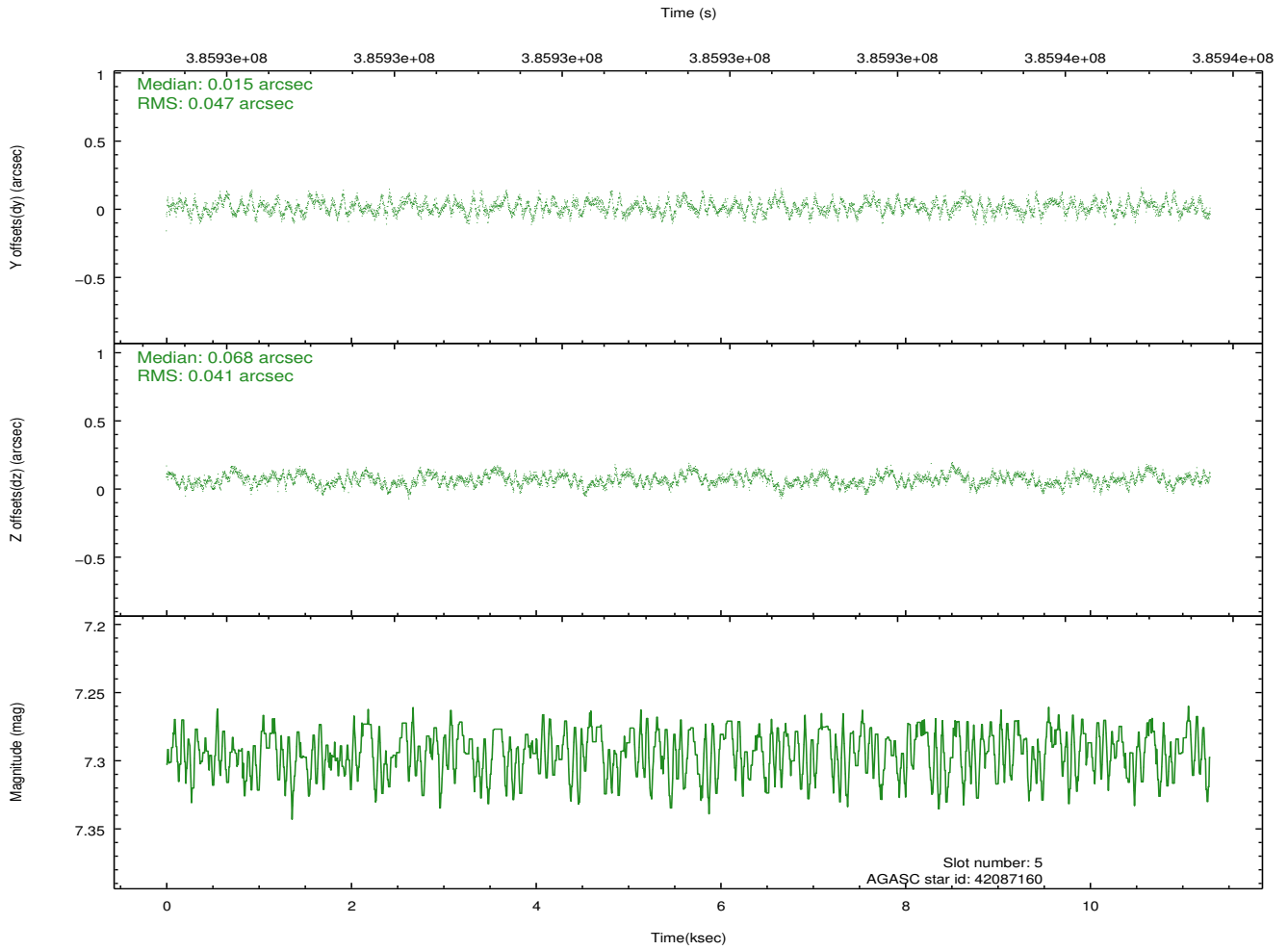
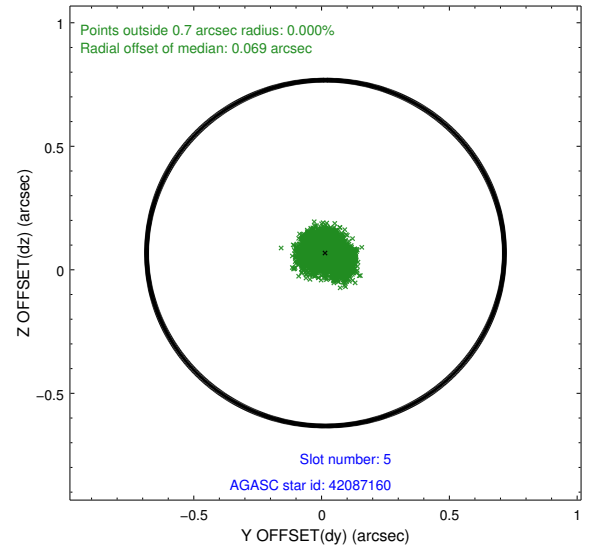
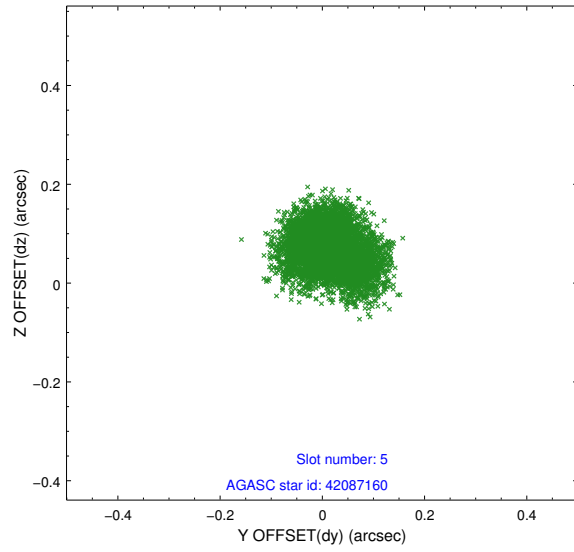
### 2.4.1 Slot 3



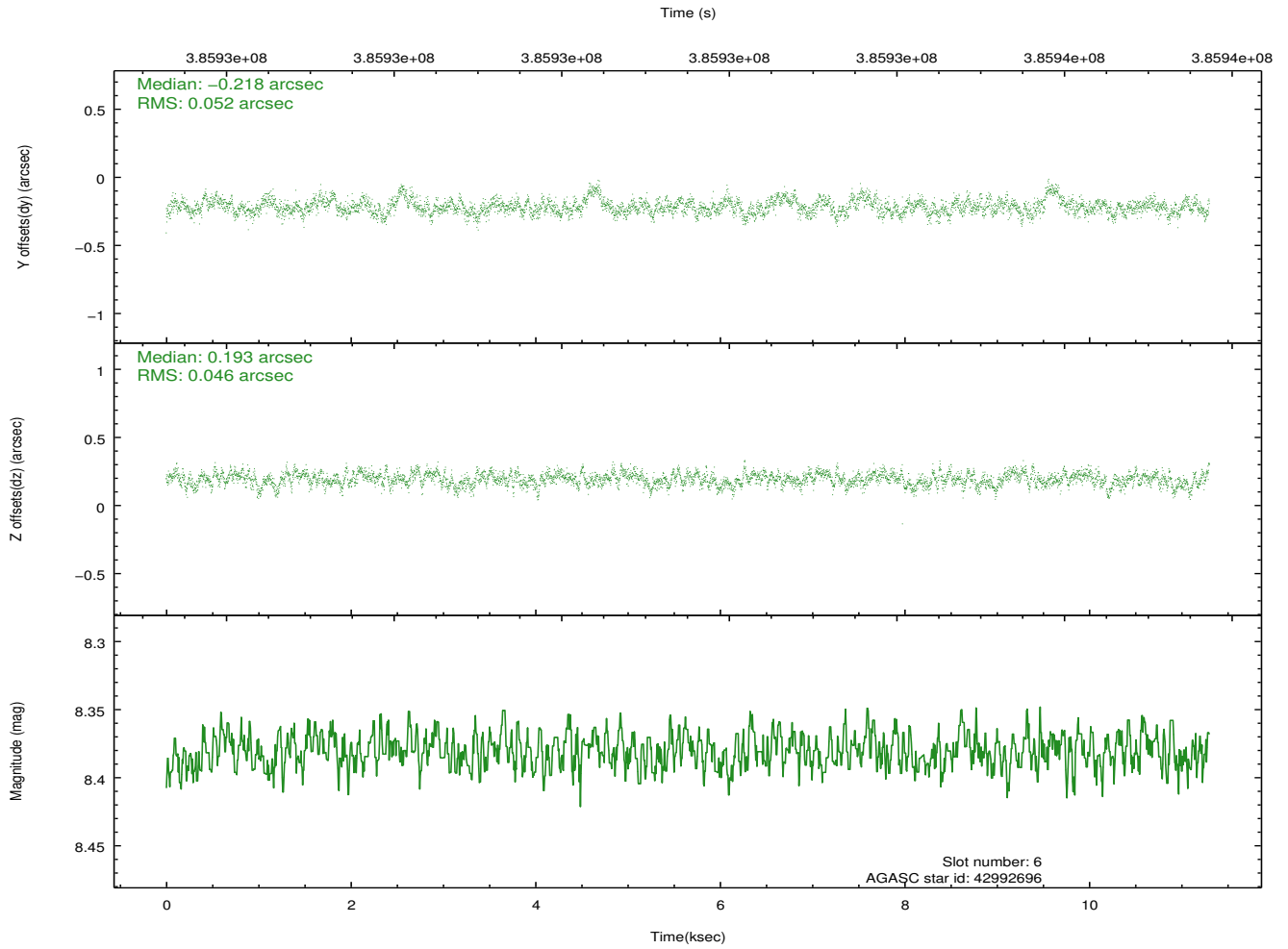
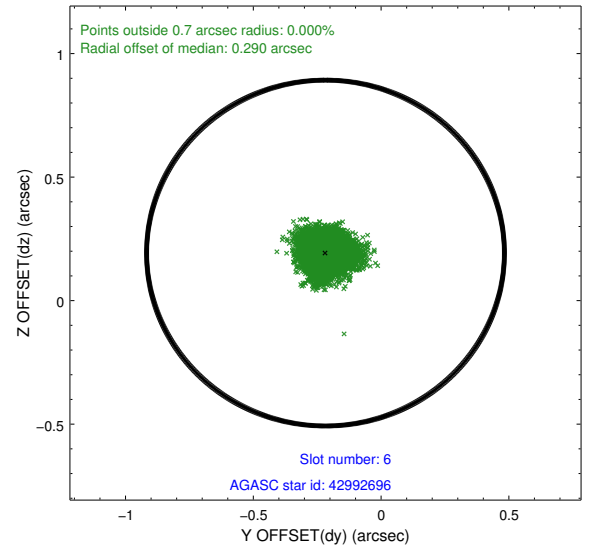
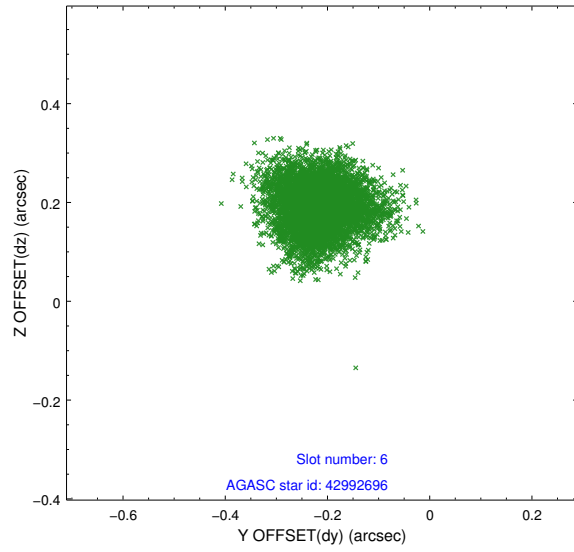
## 2.4.2 Slot 4



### 2.4.3 Slot 5

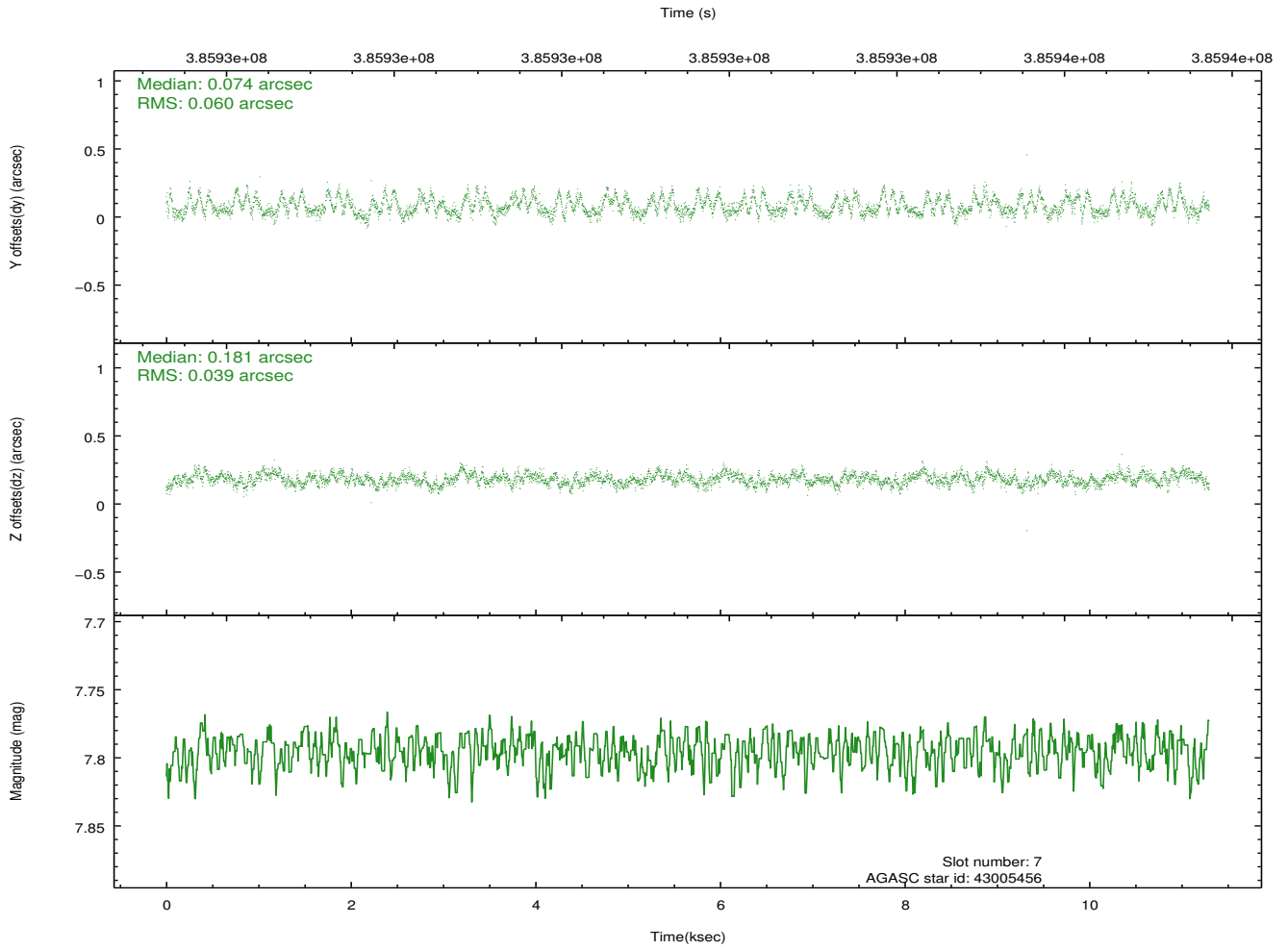
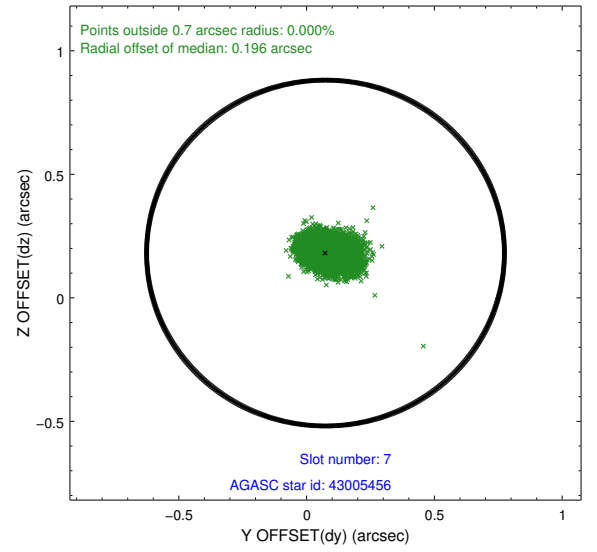
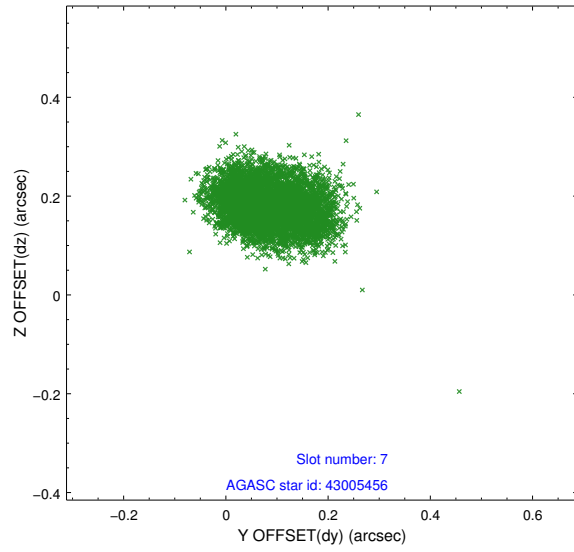


## 2.4.4 Slot 6



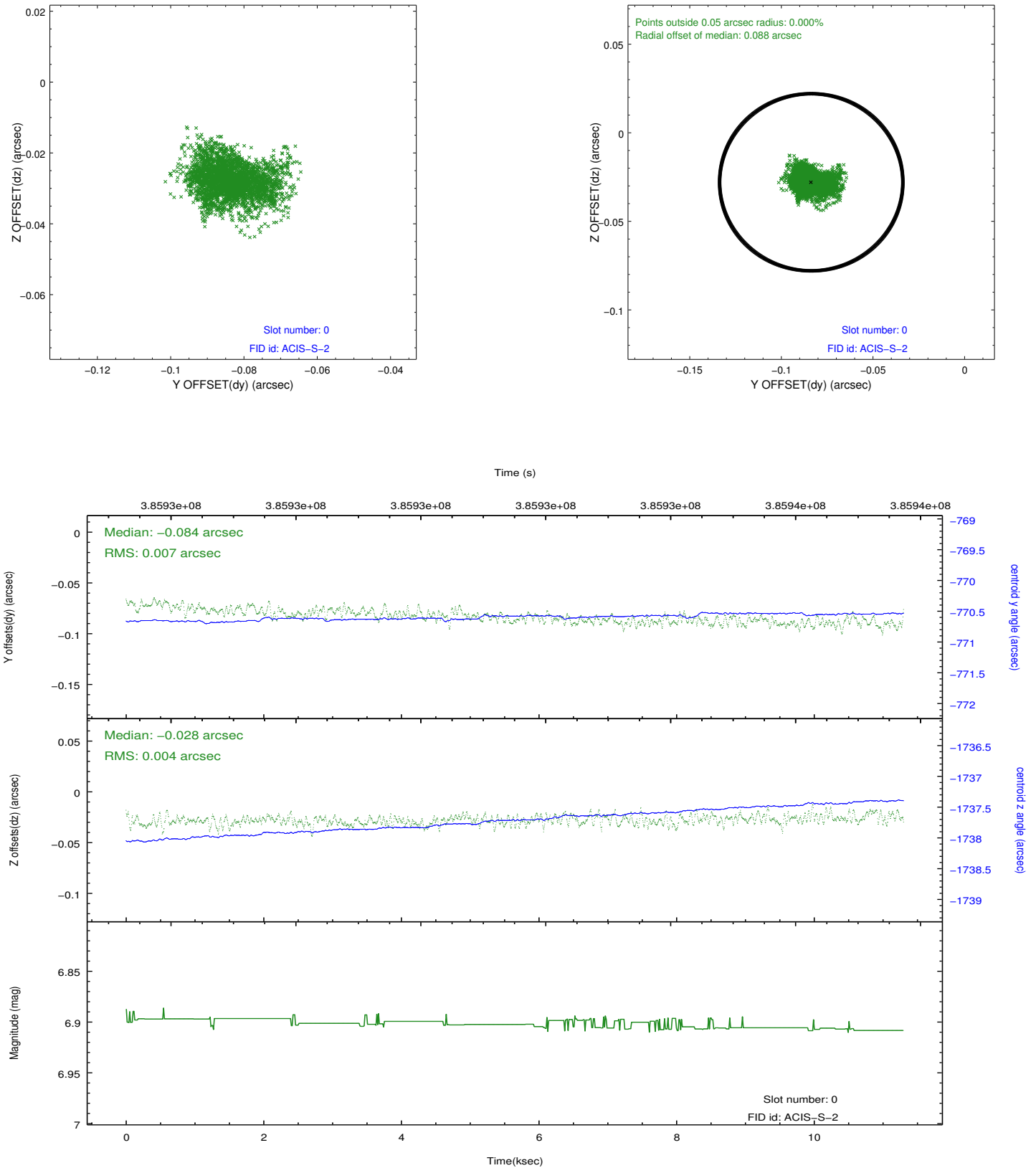


## 2.4.5 Slot 7

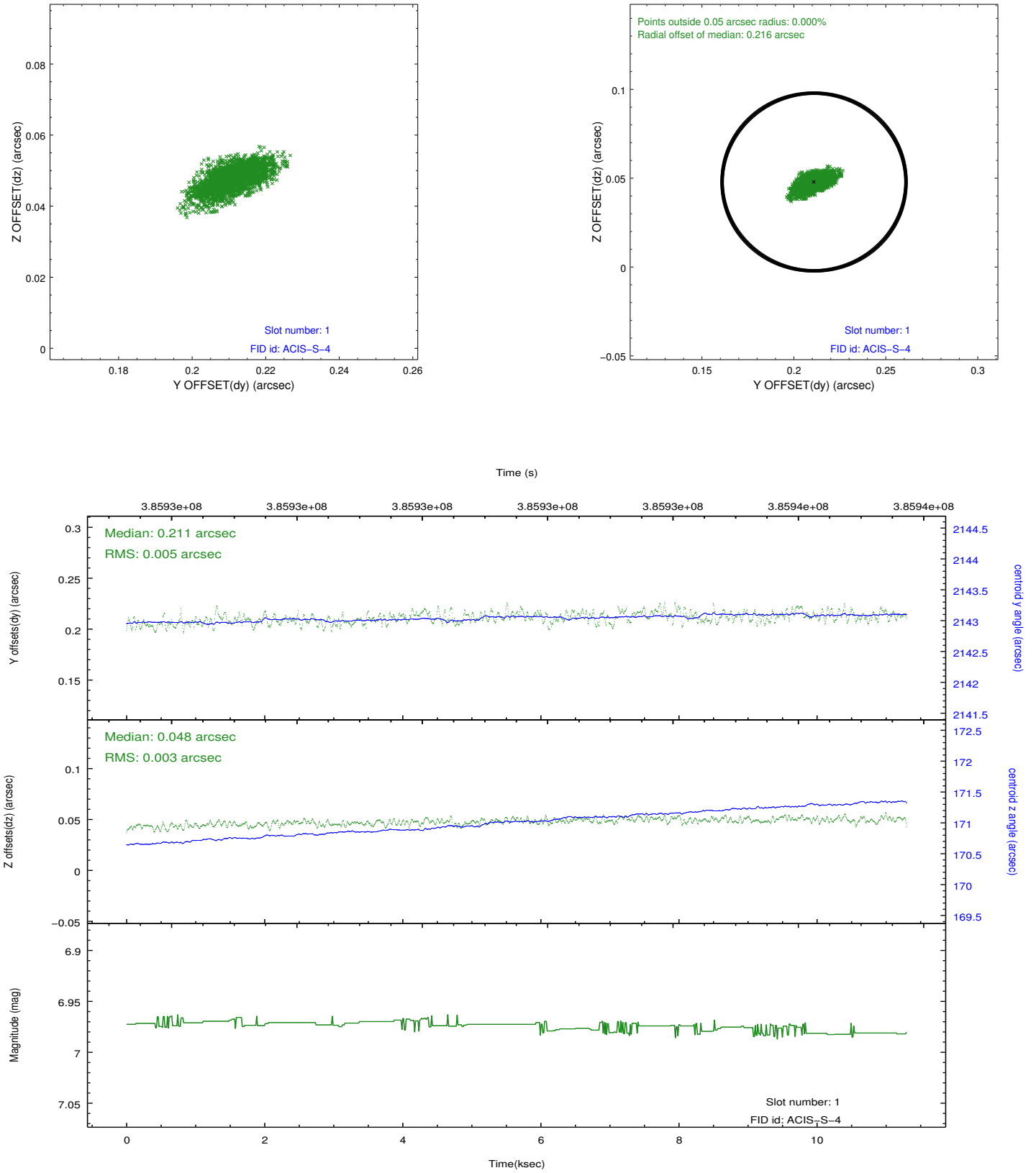


## 2.5 FID Slots

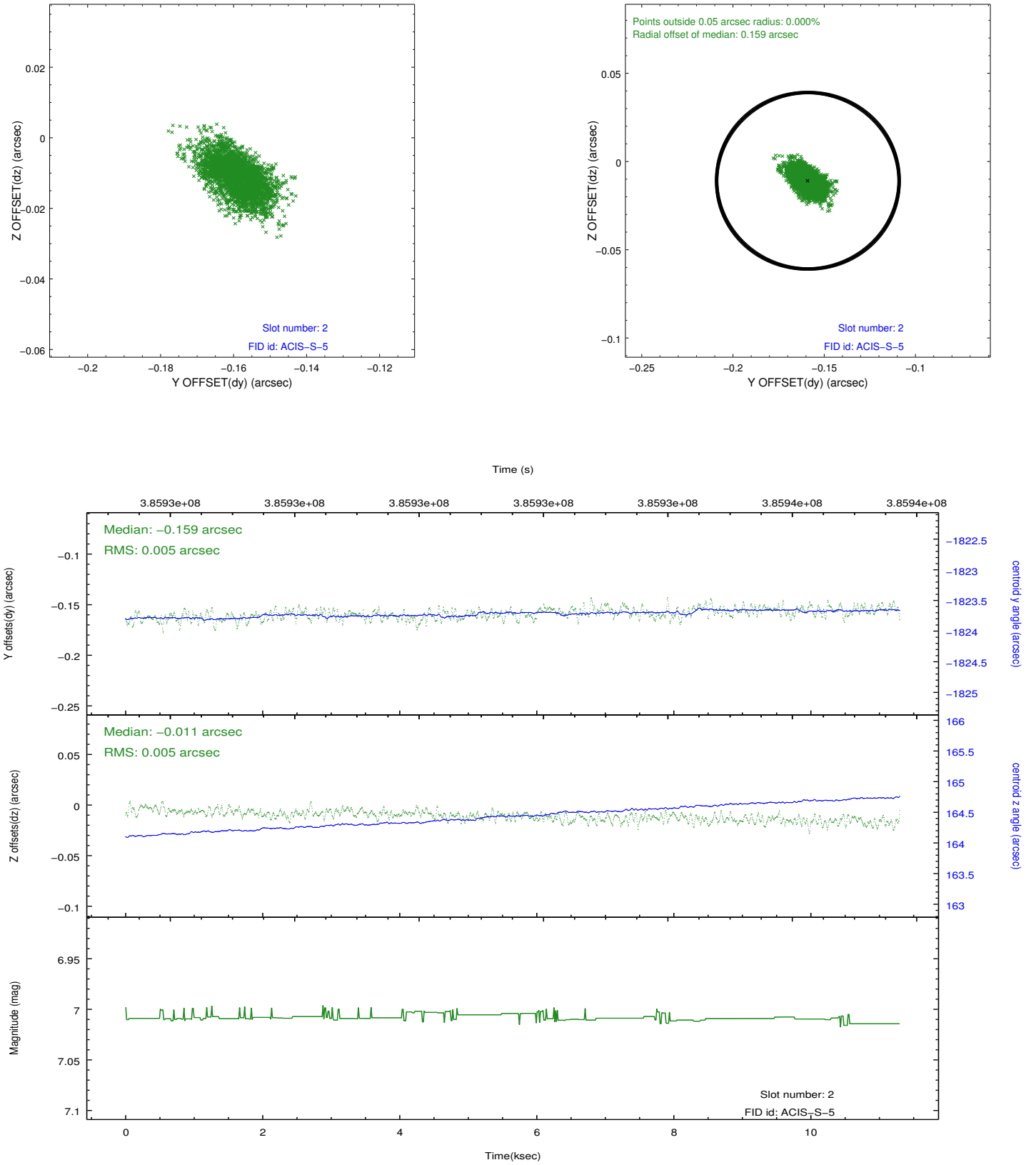
### 2.5.1 Slot 0



## 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)	2012.06.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.06079996258

### A.2 Comments