

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11361 - L2 Version 2  
Chandra X-Ray Center

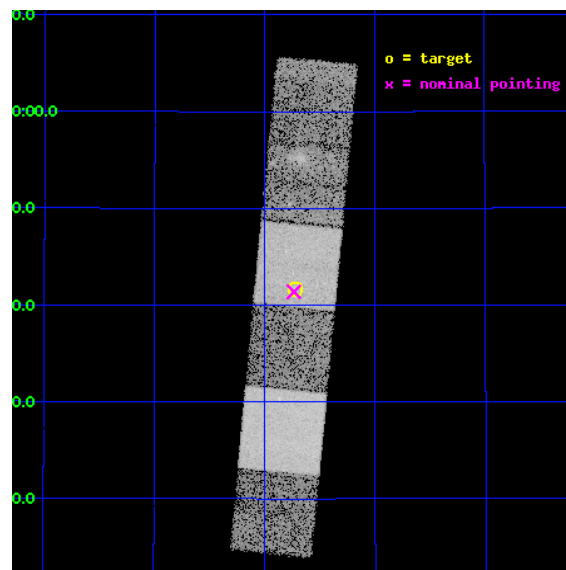
L2 Processing Date : Jul 2 2012

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# 1 Front

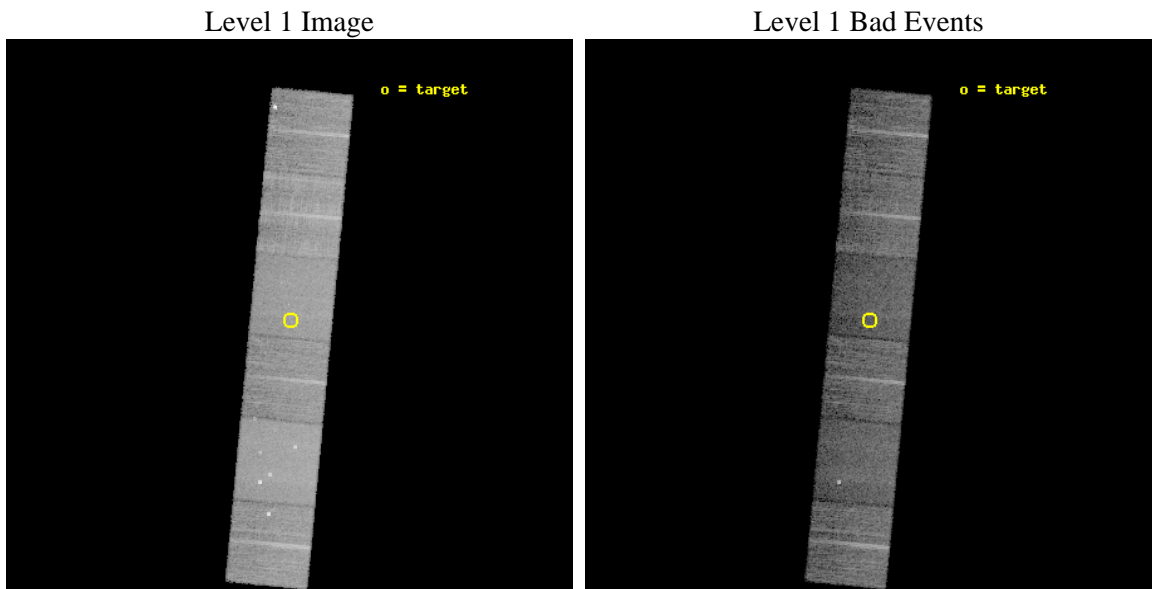
seq_num	600880	Sequence number
obs_id	11361	Observation id
title	Accretion onto nuclear black holes in early type galaxies: comparing field vs. clusters	Proposal title
observer	Elena Gallo	Principal investigator
object	NGC5582	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	215.18	Observer's specified target RA [deg]
dec_targ	39.69358	Observer's specified target Dec [deg]
ra_nom	215.18377706608	Nominal RA [deg]
dec_nom	39.689734725093	Nominal Dec [deg]
roll_nom	275.39756700143	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9545.3914793134	Sum of GTIs [s]
livetime	9424.5219848576	Livetime [s]
ontime4	9545.4325193167	Sum of GTIs [s]
ontime5	9545.3504393101	Sum of GTIs [s]
ontime6	9545.3093993068	Sum of GTIs [s]
ontime7	9545.3914793134	Sum of GTIs [s]
ontime8	9545.2683593035	Sum of GTIs [s]
ontime9	9545.2273193002	Sum of GTIs [s]
l2events	120168	Number of level 2 events



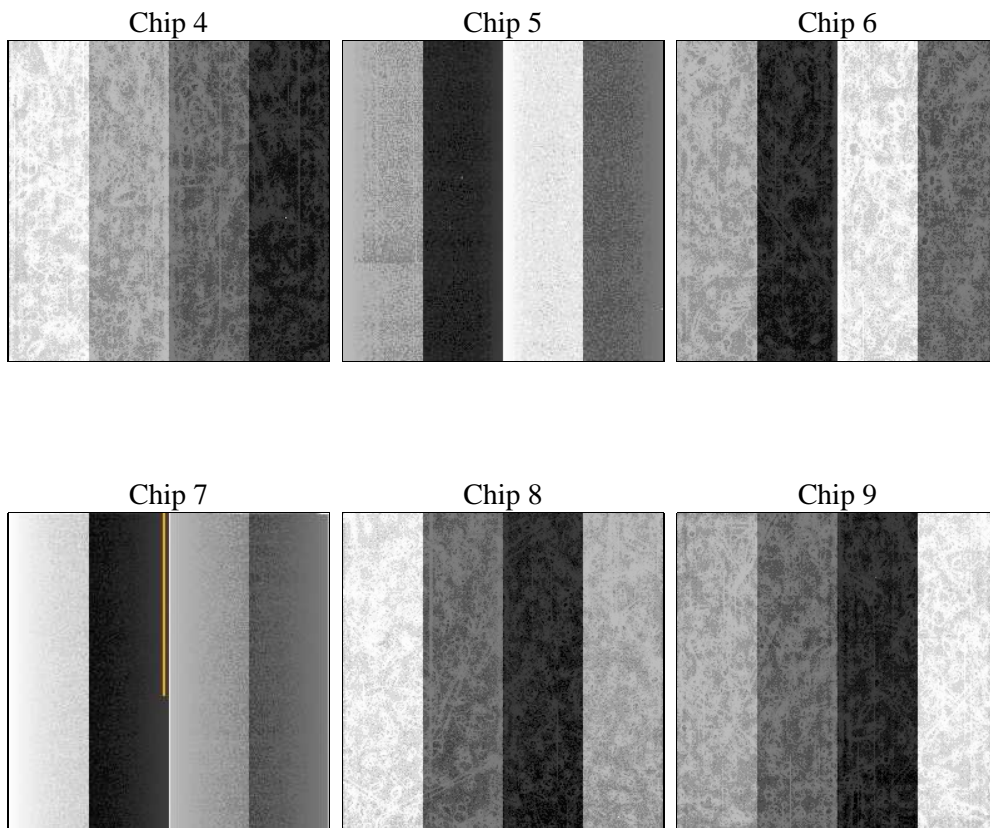
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	9545.3914793134	Sum of GTIs [s]
caldsver	4.5.0	&#160	ontime4	9545.4325193167	Sum of GTIs [s]
date	2012-07-02T05:41:16	Date and time of file creation	ontime5	9545.3504393101	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	9545.3093993068	Sum of GTIs [s]
			ontime7	9545.3914793134	Sum of GTIs [s]
			ontime8	9545.2683593035	Sum of GTIs [s]
			ontime9	9545.2273193002	Sum of GTIs [s]
			l1events	530384	Number of level 1 events

### 2.1.4 Events

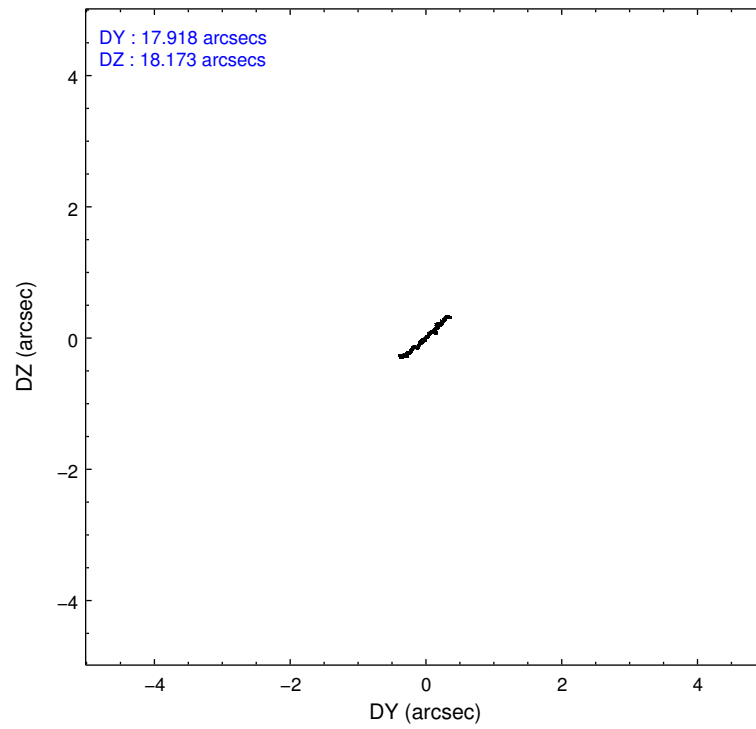
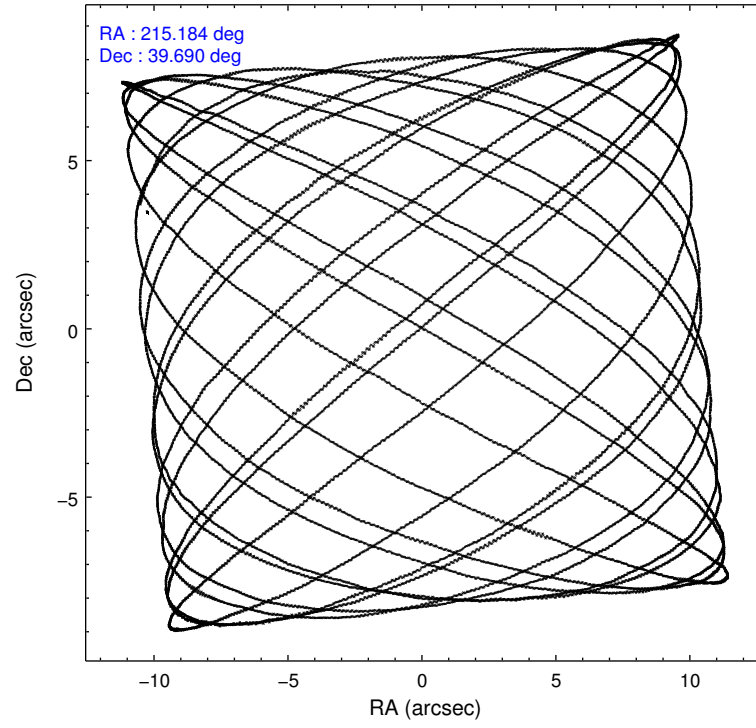
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	85074	110186	72374	88509	99211	75030	grade 0 events	5594	5956	2942	3719	9682	3280
rejected events	74061	55246	64111	48461	70003	63427		6%	5%	4%	4%	9%	4%
rejected %	87%	50%	88%	54%	70%	84%	grade 1 events	92	215	40	120	101	42
								0%	0%	0%	0%	0%	0%
							grade 2 events	2220	16754	1802	8159	6118	1890
								2%	15%	2%	9%	6%	2%
							grade 3 events	895	2268	828	3382	3344	902
								1%	2%	1%	3%	3%	1%
							grade 4 events	911	1959	861	3567	3130	3759
								1%	1%	1%	4%	3%	5%
							grade 5 events	3162	8678	3066	9151	4789	3613
								3%	7%	4%	10%	4%	4%
							grade 6 events	1396	28032	1834	21249	6939	1786
								1%	25%	2%	24%	6%	2%
							grade 7 events	70804	46324	61001	39162	65108	59758
								83%	42%	84%	44%	65%	79%

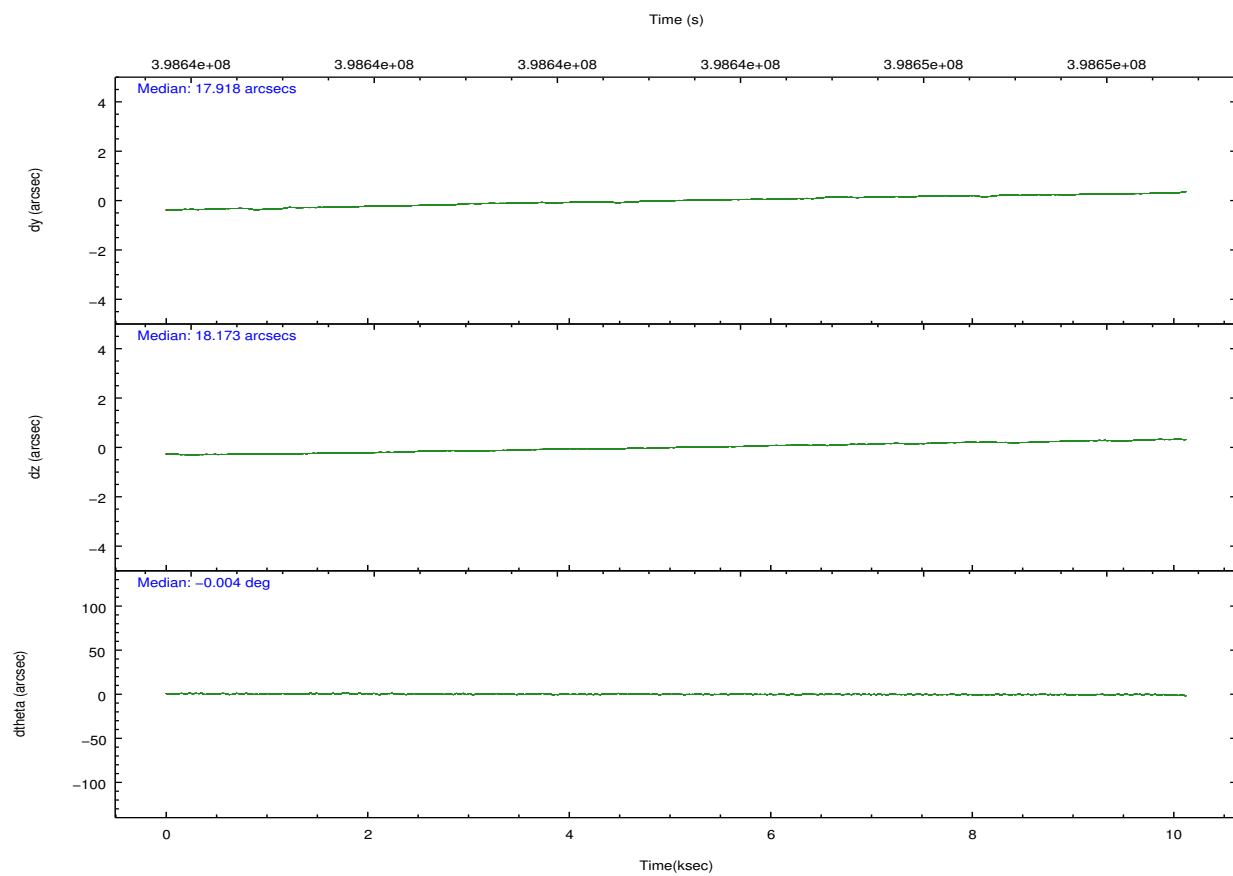
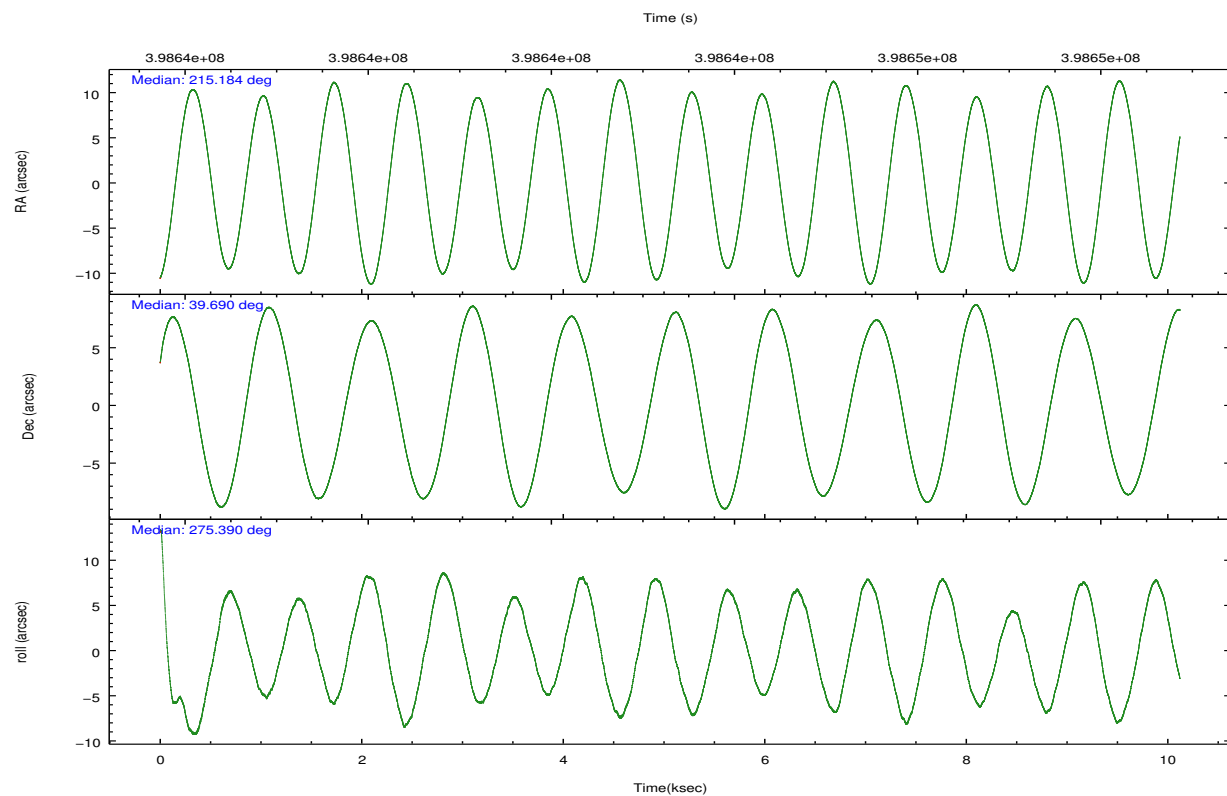


## 2.2 Compared Parameters

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	215.162817	215.1837770660786	CCD I2 on	N	N
[deg] Pointing Dec	39.711785	39.68973472509308	CCD I3 on	N	N
[deg] Pointing Roll	275.254316	275.3975670014322	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)	398638861.184000	398637637.68886	CCD S5 on	O2	Y
Observation start date	2010-08-19T20:59:55	2010-08-19T20:40:37	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	398648361.184000	398649527.17697	On-chip summing requested	N	N
Observation end date	2010-08-19T23:38:15	2010-08-19T23:58:47	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



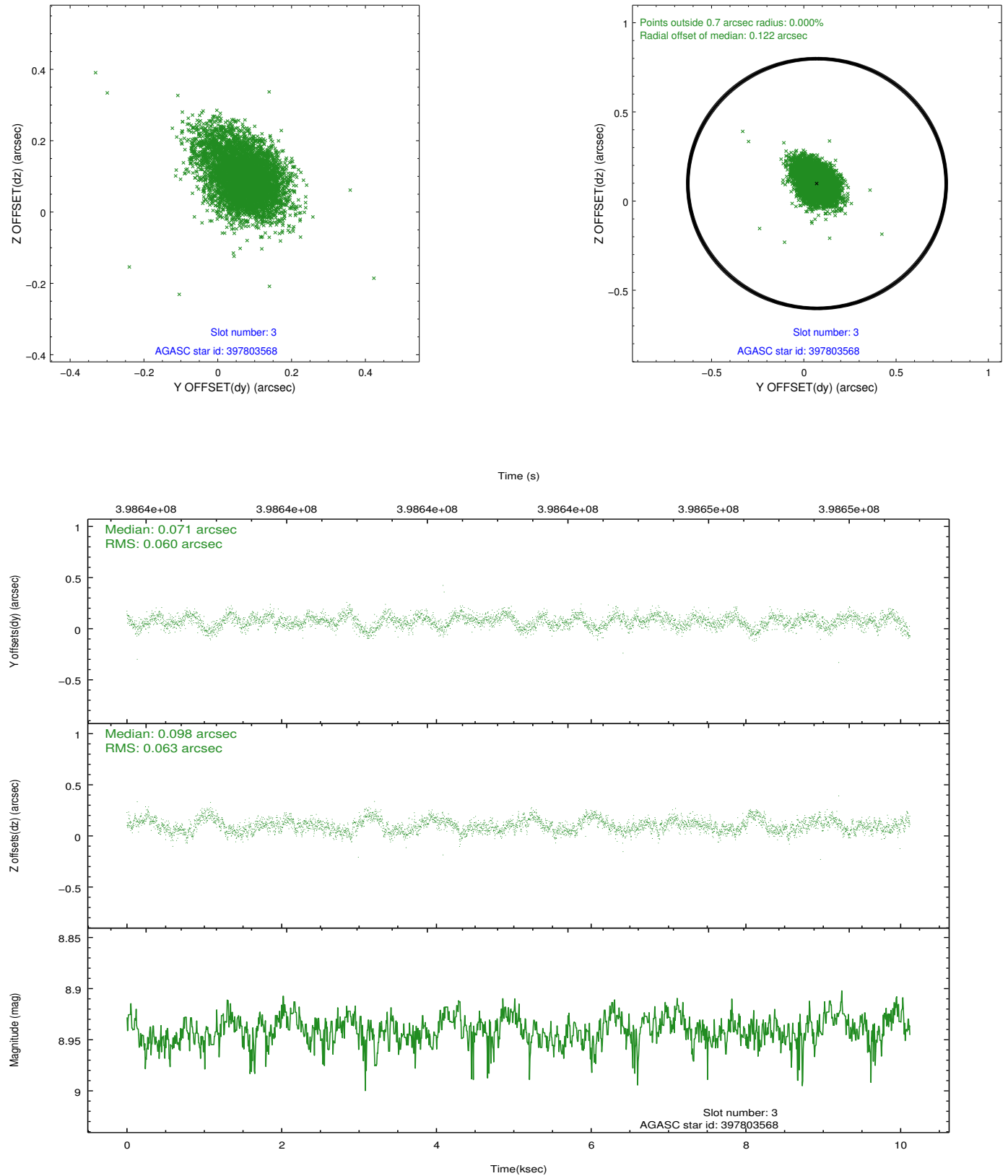


### Slot Statistics

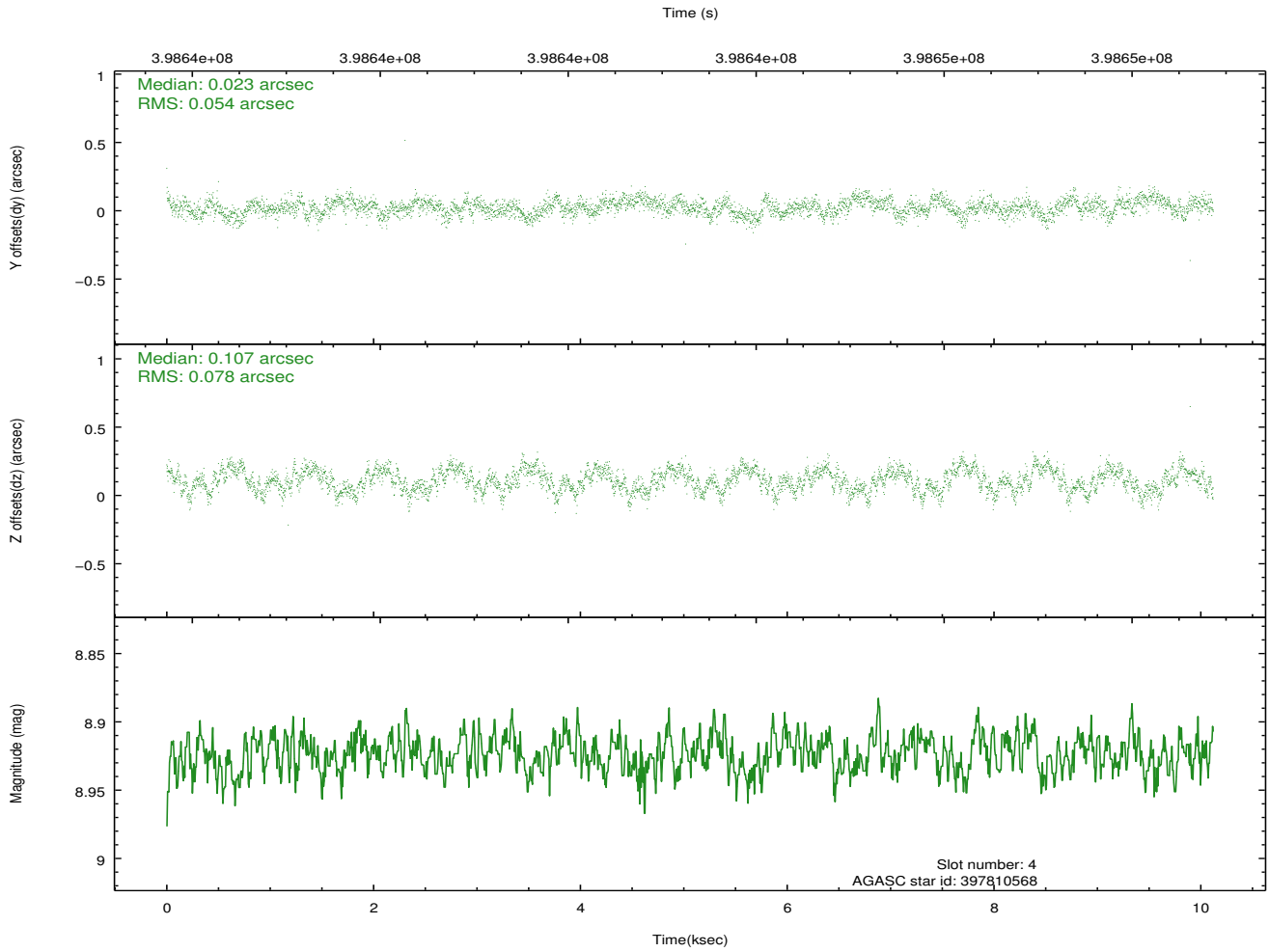
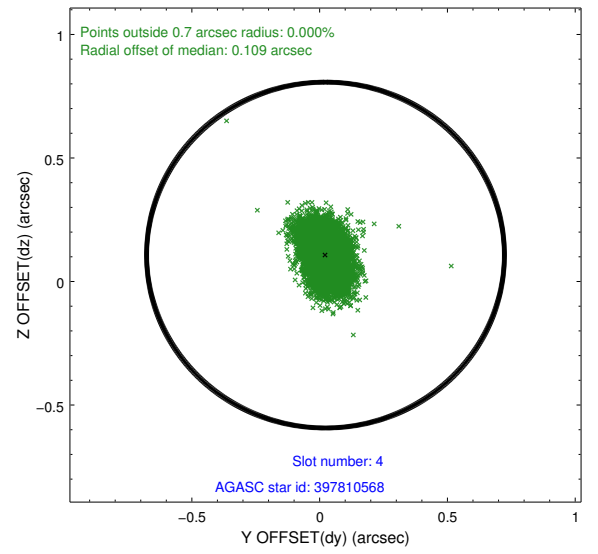
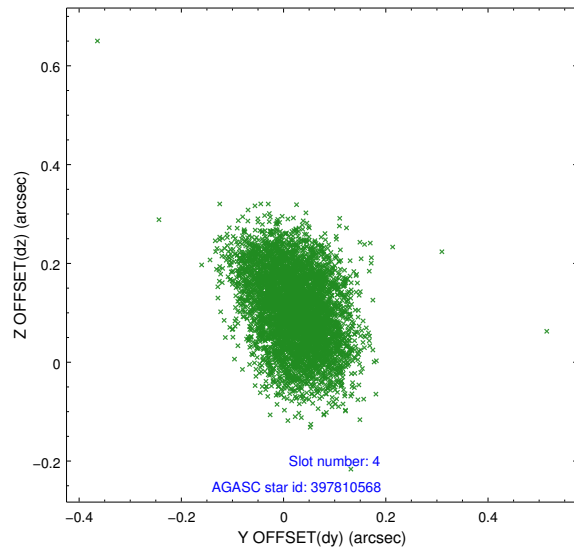
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	6.96	2469	0.087	-0.007	0.010	0.018	0.000000	0.000000	925.13	-1735.24
1	FID	ACIS-S-4	6.96	2468	0.117	-0.032	0.015	0.022	0.000000	0.000000	2142.89	168.34
2	FID	ACIS-S-5	7.00	2469	-0.232	0.052	0.012	0.018	0.000000	0.000000	-1823.36	162.66
3	GUIDE	397803568	8.94	4931	0.071	0.098	0.090	0.151	215.493912	39.914397	-643.90	977.83
4	GUIDE	397810568	8.92	4934	0.023	0.107	0.101	0.161	214.545839	39.953291	-1027.24	-1614.99
5	GUIDE	397811064	9.71	4926	0.007	-0.073	0.126	0.207	214.708726	39.201704	1709.80	-1429.22
6	GUIDE	397811392	7.73	4935	-0.006	-0.028	0.080	0.123	214.491583	39.912672	-896.10	-1779.30
7	GUIDE	398197872	9.59	4931	-0.086	-0.100	0.129	0.203	215.486027	40.308607	-2059.92	1080.09

## 2.4 Star Slots

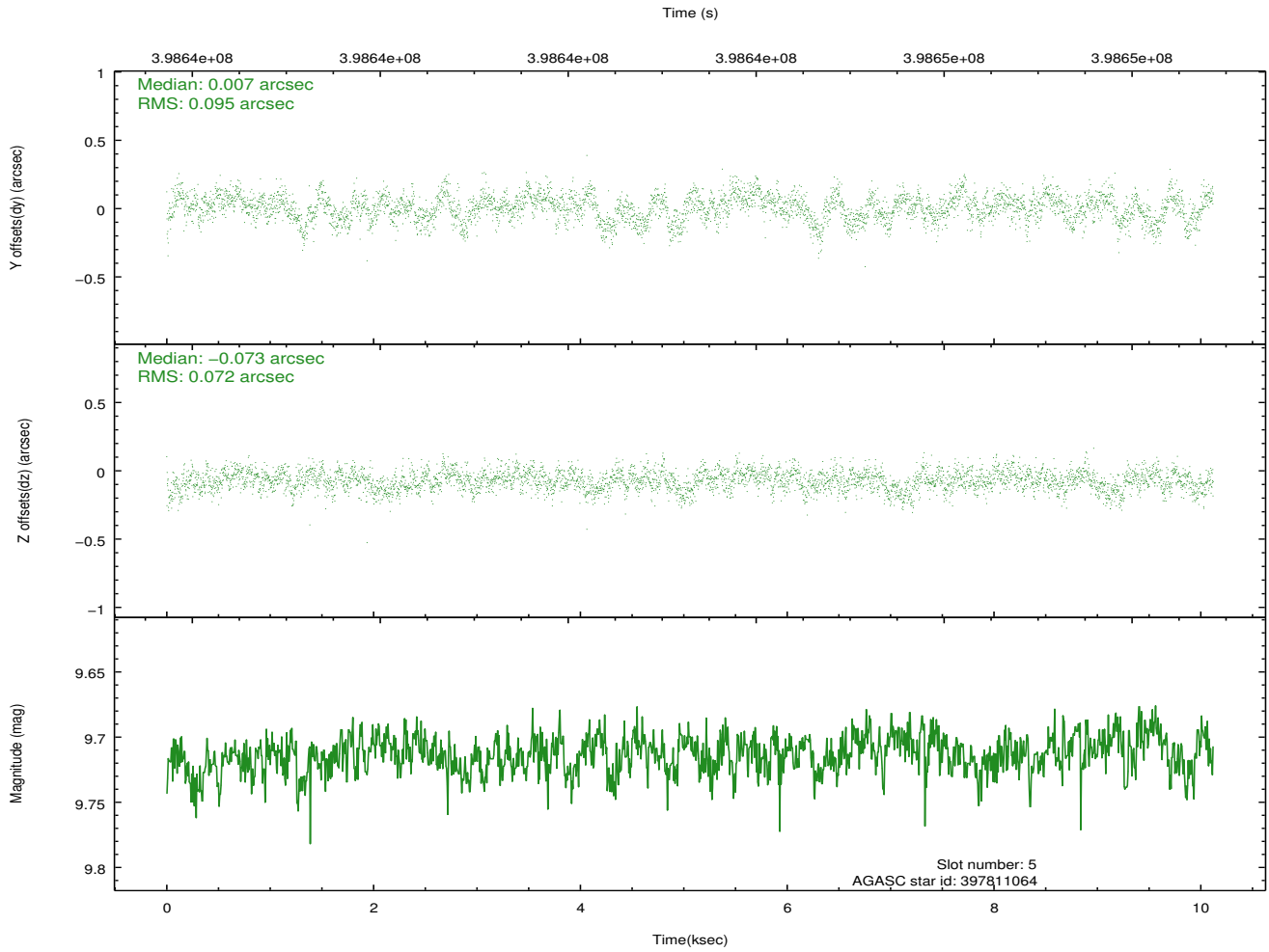
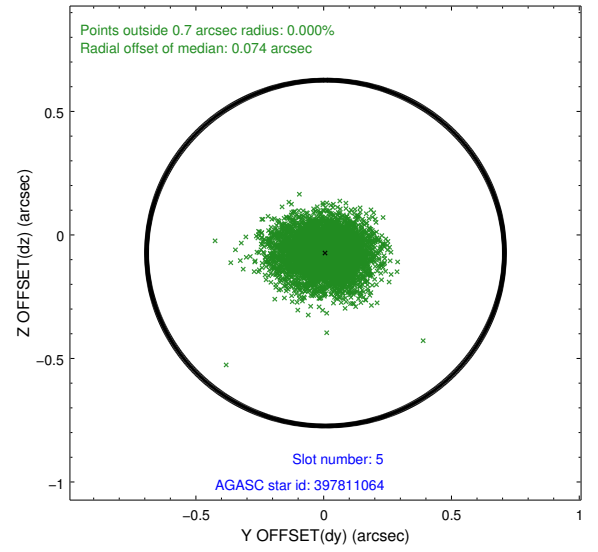
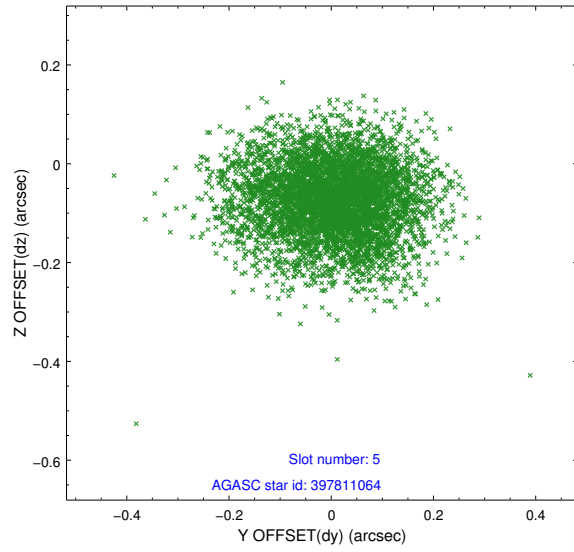
### 2.4.1 Slot 3



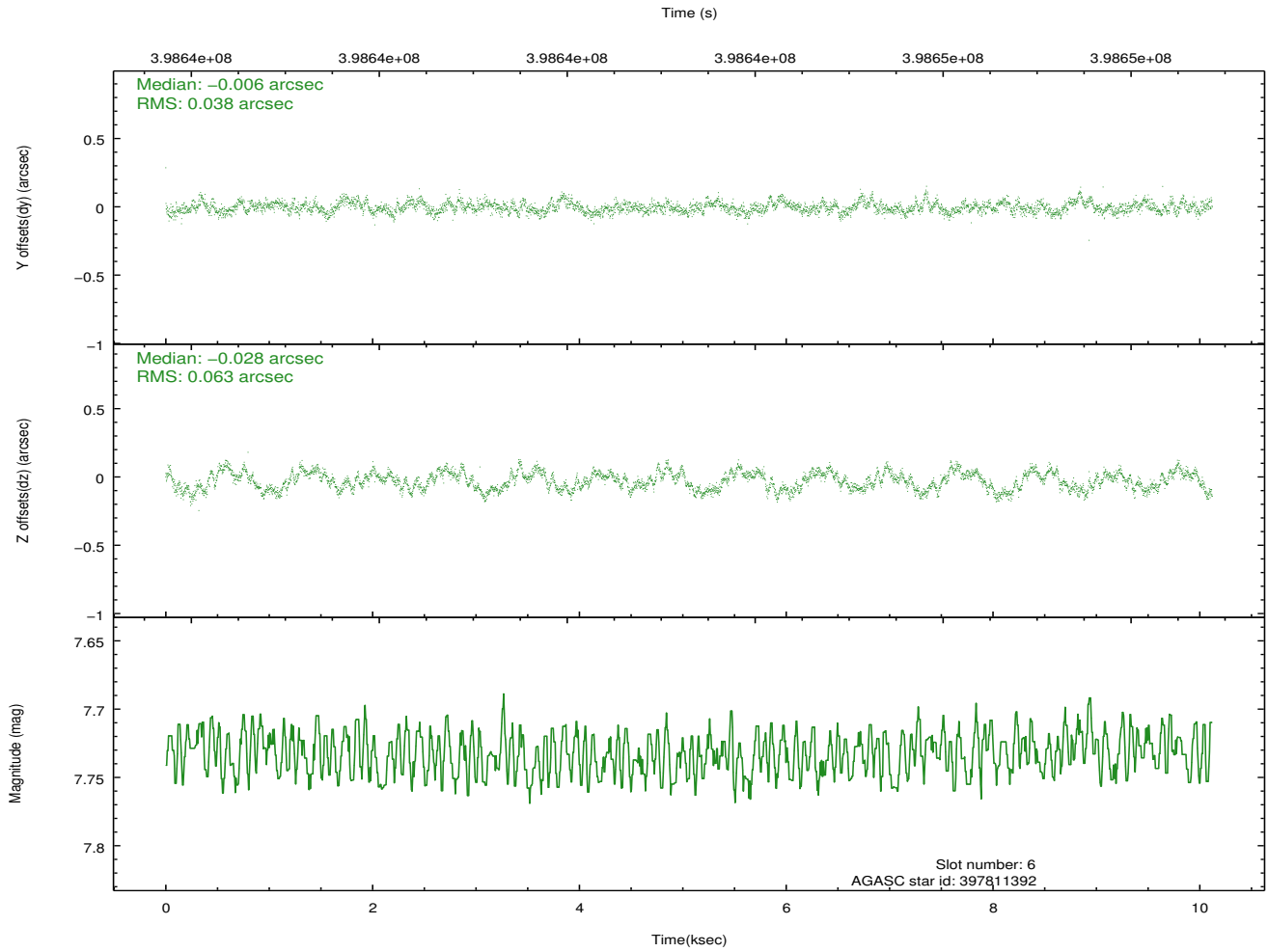
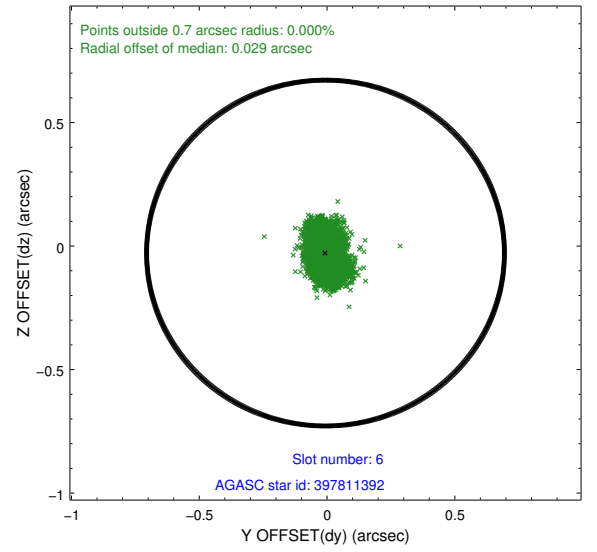
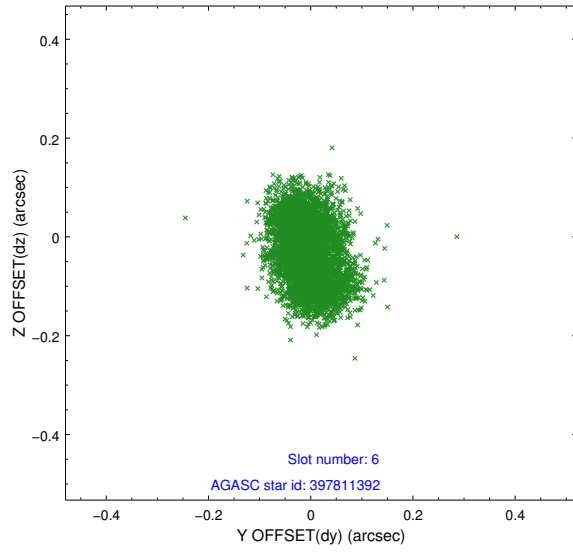
## 2.4.2 Slot 4



### 2.4.3 Slot 5

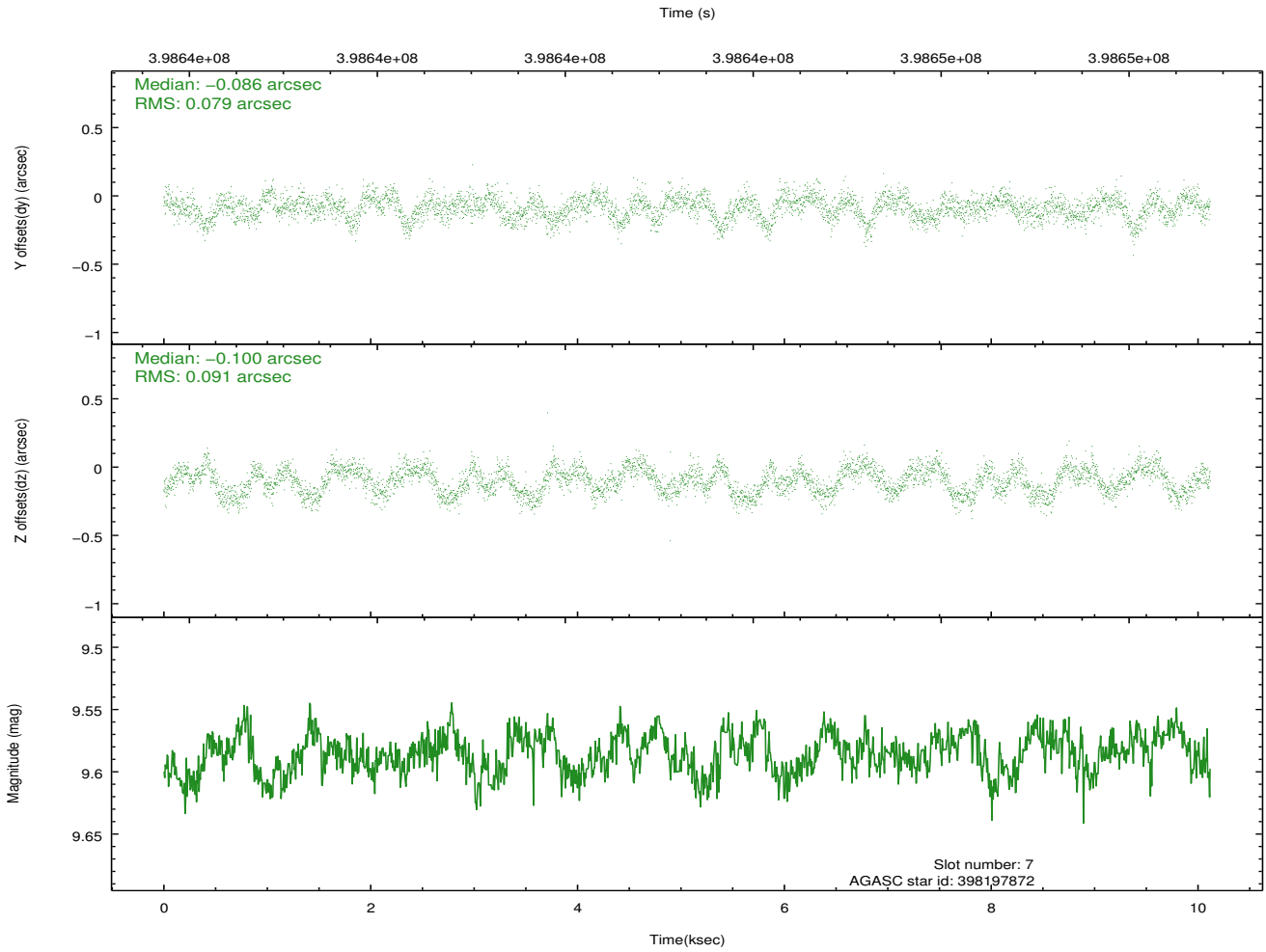
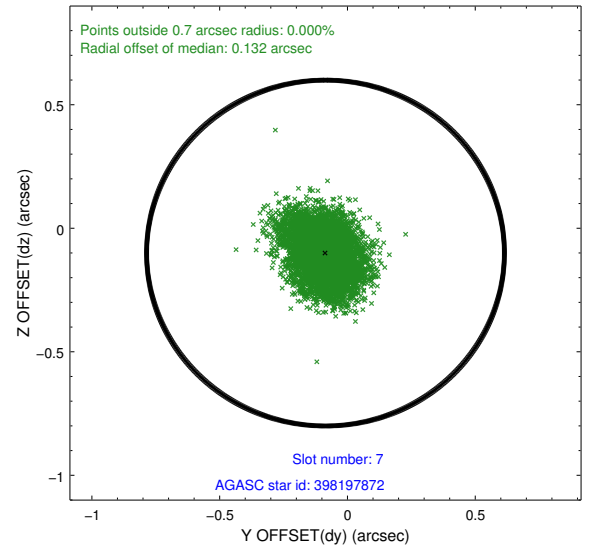
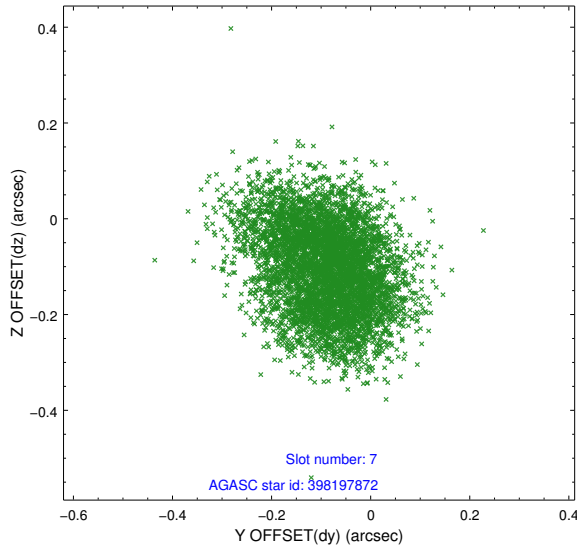


## 2.4.4 Slot 6



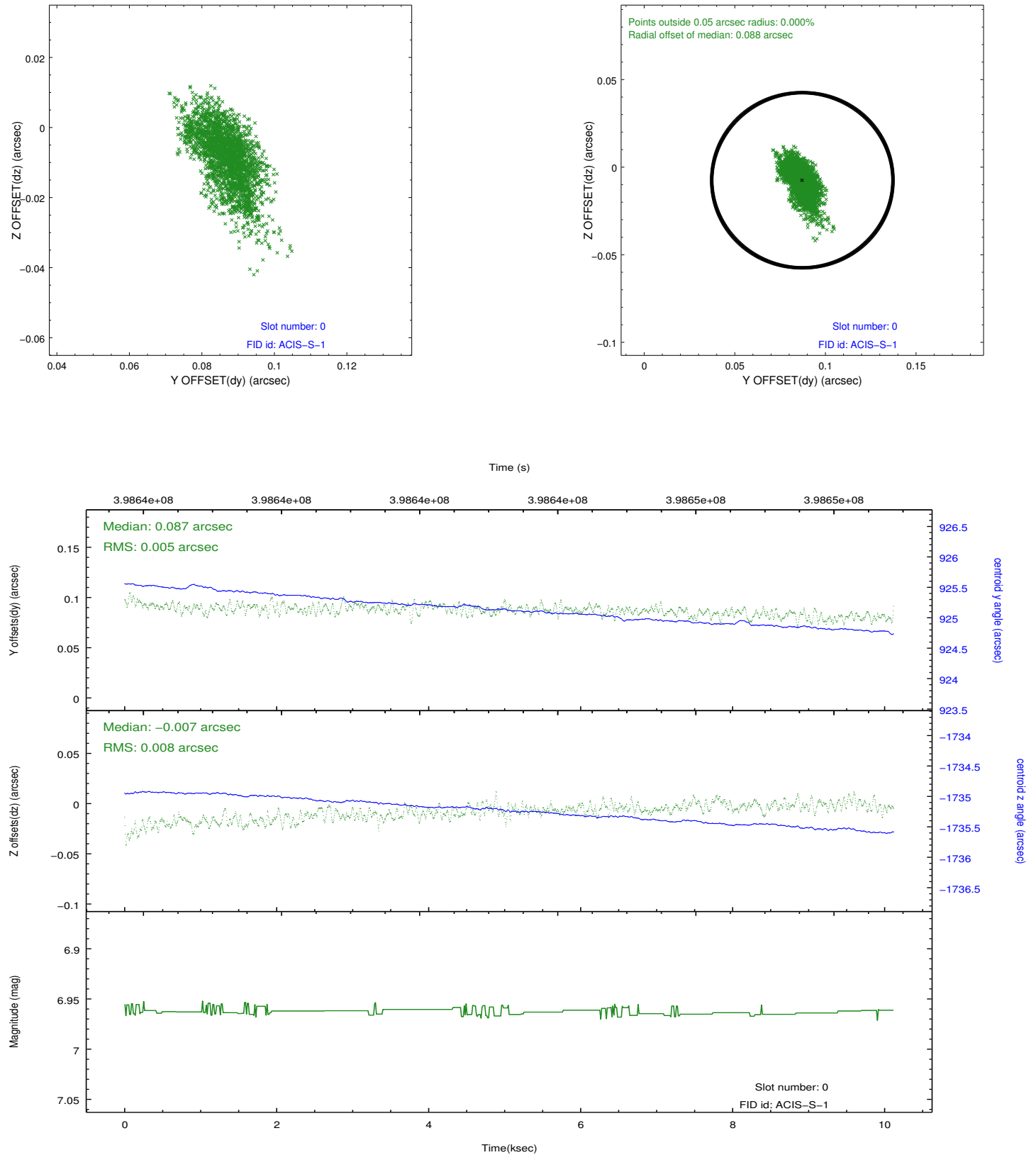


## 2.4.5 Slot 7

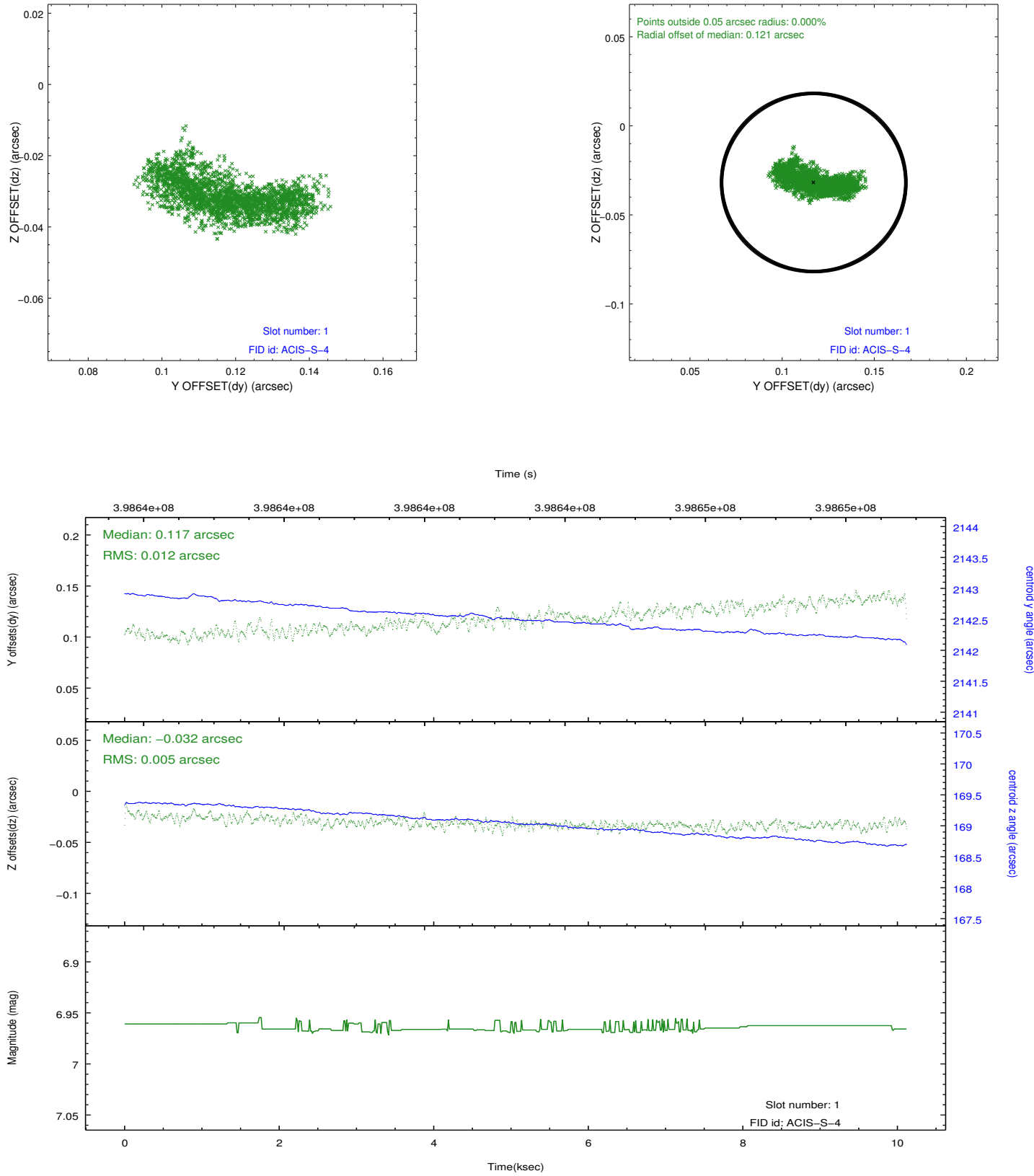


## 2.5 FID Slots

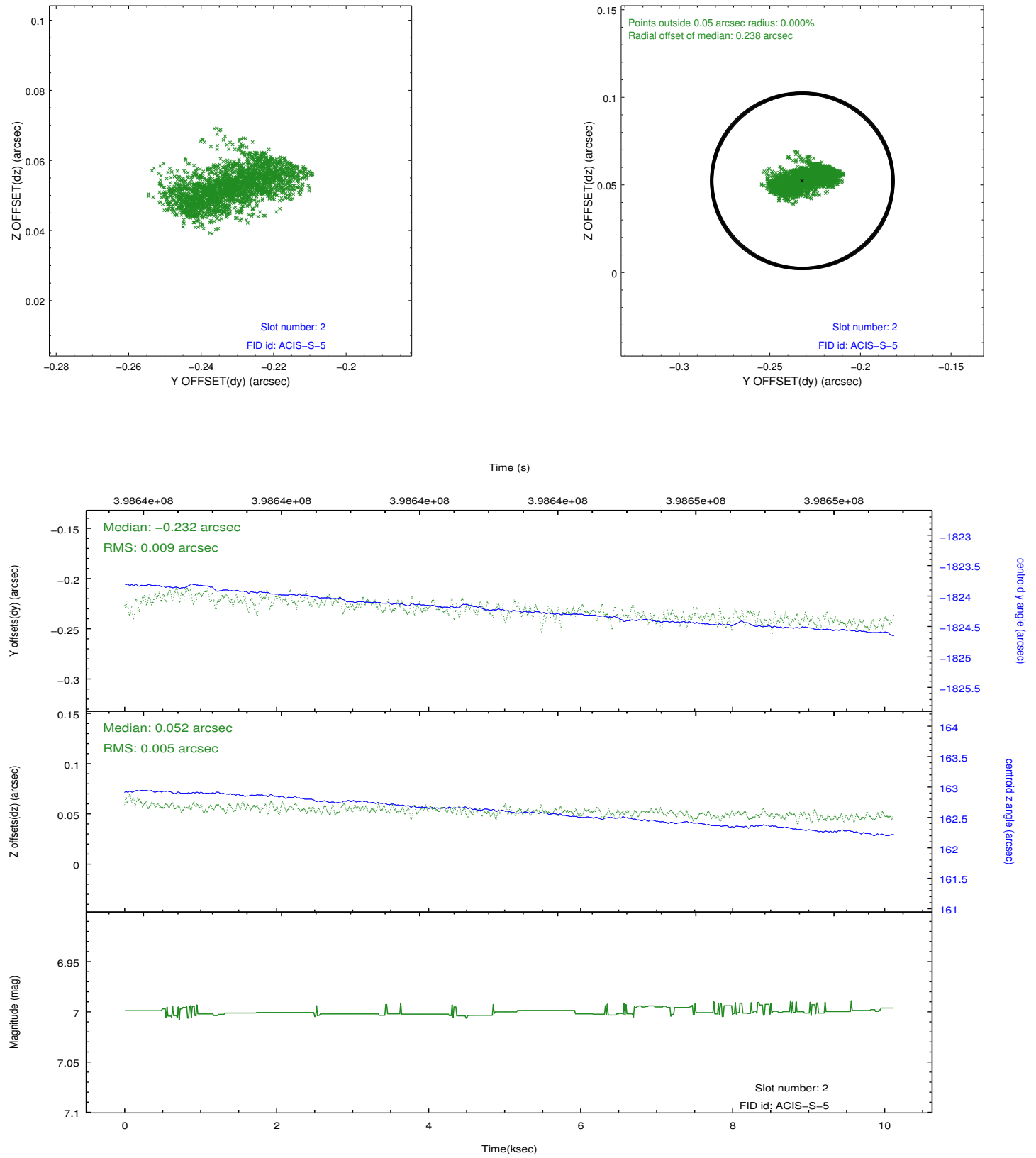
### 2.5.1 Slot 0



## 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)	2012.07.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.5453914806843

### A.2 Comments