

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 7856 - L2 Version 2  
Chandra X-Ray Center

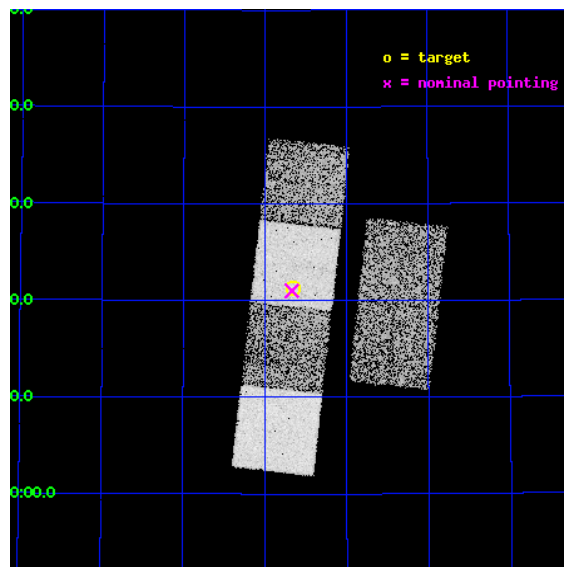
L2 Processing Date : Apr 27 2012

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# 1 Front

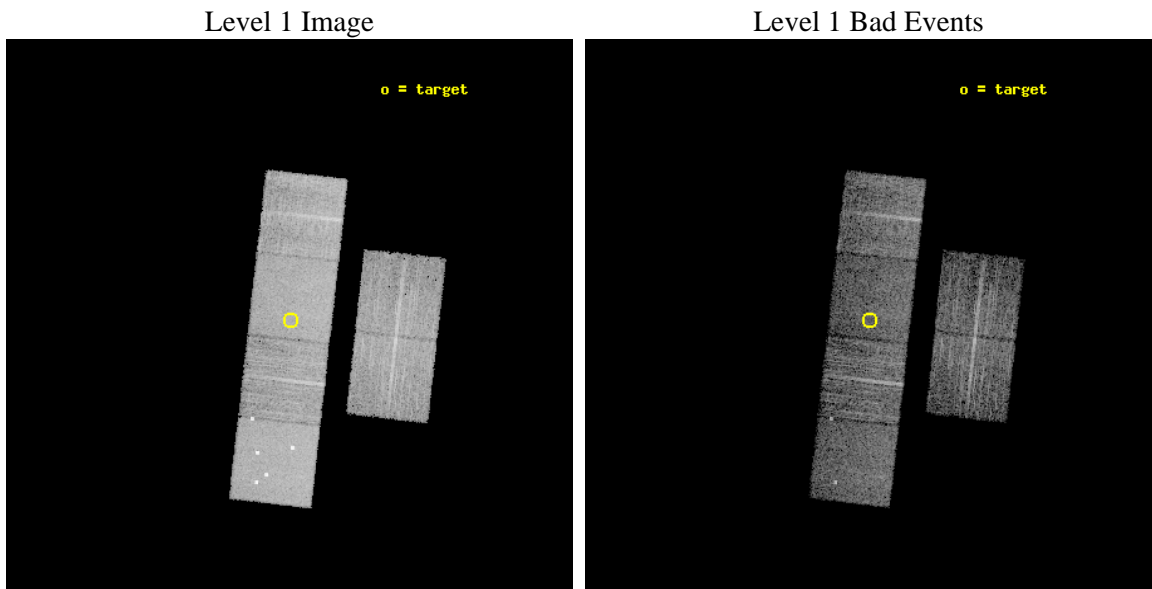
seq_num	701520	Sequence number
obs_id	7856	Observation id
title	Demographics of black holes in the local Universe.	Proposal title
observer	Prof. Smita Mathur	Principal investigator
object	NGC 3913	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	177.662083	Observer's specified target RA [deg]
dec_targ	55.353861	Observer's specified target Dec [deg]
ra_nom	177.66737022663	Nominal RA [deg]
dec_nom	55.350048898917	Nominal Dec [deg]
roll_nom	276.43628241664	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4755.1999823451	Sum of GTIs [s]
livetime	4694.986776931	Livetime [s]
ontime2	4755.1999823451	Sum of GTIs [s]
ontime3	4755.1999823451	Sum of GTIs [s]
ontime5	4755.1999823451	Sum of GTIs [s]
ontime6	4755.1999823451	Sum of GTIs [s]
ontime7	4755.1999823451	Sum of GTIs [s]
ontime8	4748.7180514932	Sum of GTIs [s]
l2events	75847	Number of level 2 events



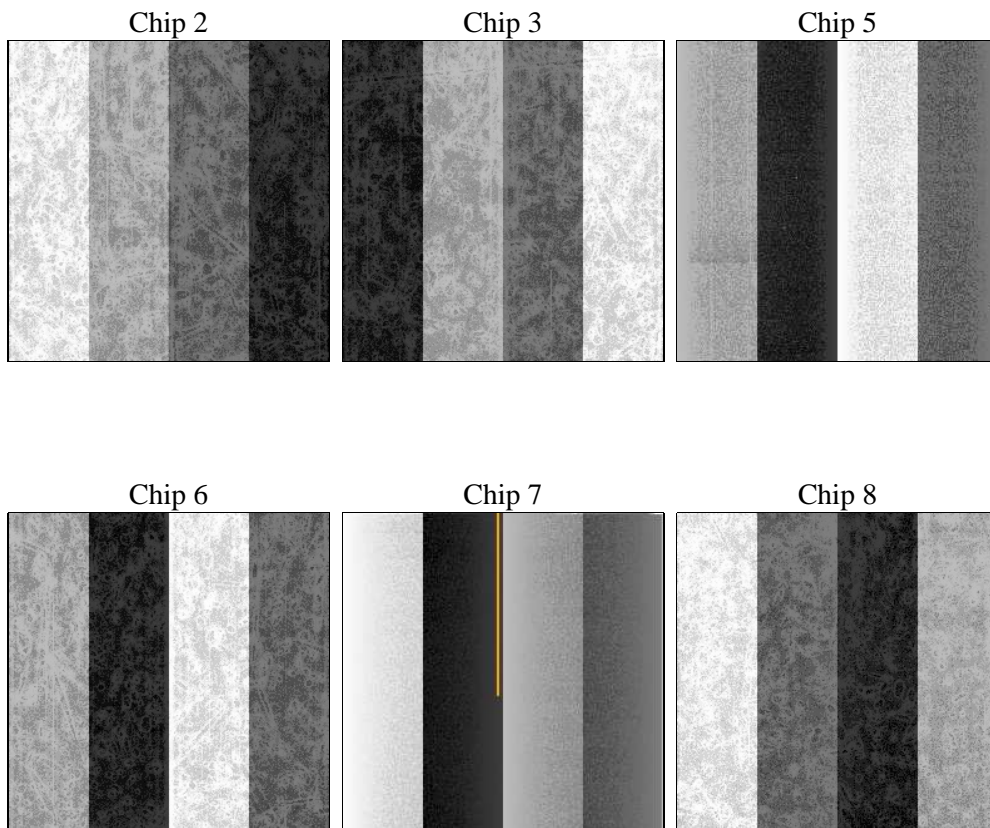
## 2 OBI

### 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	8.4.4	Processing system revision	ontime	4755.1999823451	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime2	4755.1999823451	Sum of GTIs [s]
date	2012-04-28T00:15:46	Date and time of file creation	ontime3	4755.1999823451	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	4755.1999823451	Sum of GTIs [s]
			ontime6	4755.1999823451	Sum of GTIs [s]
			ontime7	4755.1999823451	Sum of GTIs [s]
			ontime8	4748.7180514932	Sum of GTIs [s]
			l1events	337065	Number of level 1 events

### 2.1.4 Events

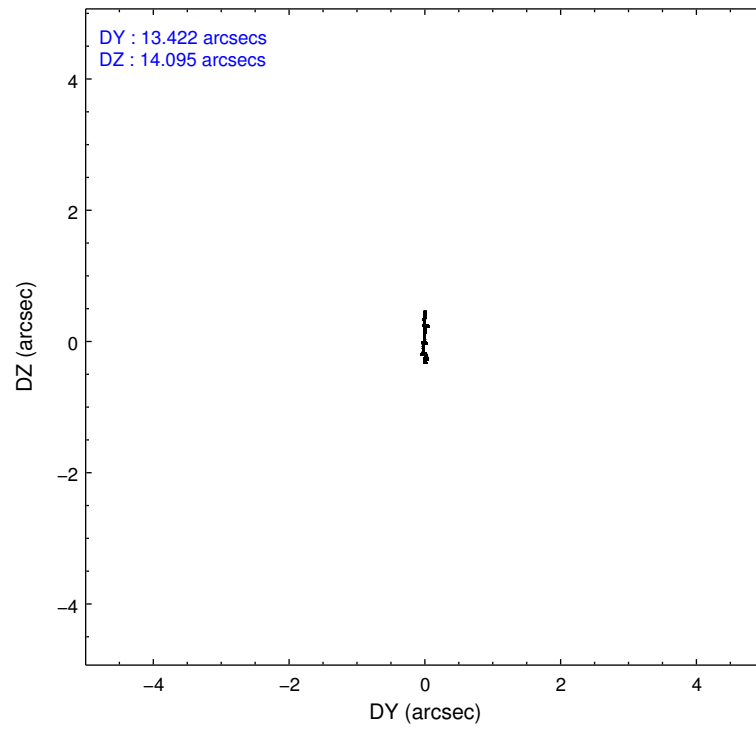
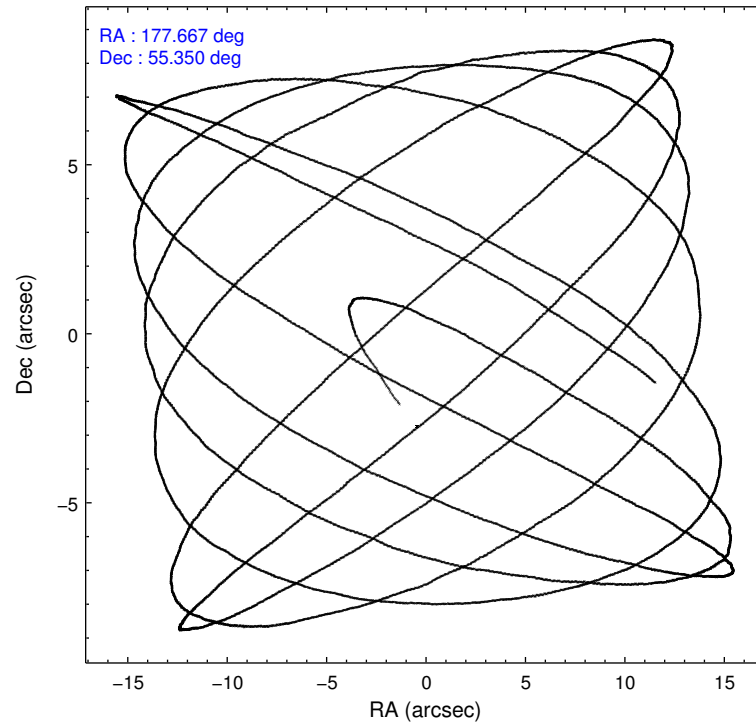
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	46586	42765	74888	48475	62141	62210	grade 0 events	2401	2332	6680	2088	2267	4133
rejected events	41224	37448	38282	43013	36017	49028		5%	5%	8%	4%	3%	6%
rejected %	88%	87%	51%	88%	57%	78%	grade 1 events	28	26	509	29	63	42
								0%	0%	0%	0%	0%	0%
							grade 2 events	1149	1069	10022	1165	5325	3006
								2%	2%	13%	2%	8%	4%
							grade 3 events	488	472	1185	506	2236	1321
								1%	1%	1%	1%	3%	2%
							grade 4 events	482	523	1246	536	2201	1145
								1%	1%	1%	1%	3%	1%
							grade 5 events	1746	2102	5179	2167	5817	2933
								3%	4%	6%	4%	9%	4%
							grade 6 events	847	927	17510	1175	14137	3587
								1%	2%	23%	2%	22%	5%
							grade 7 events	39445	35314	32557	40809	30095	46043
								84%	82%	43%	84%	48%	74%

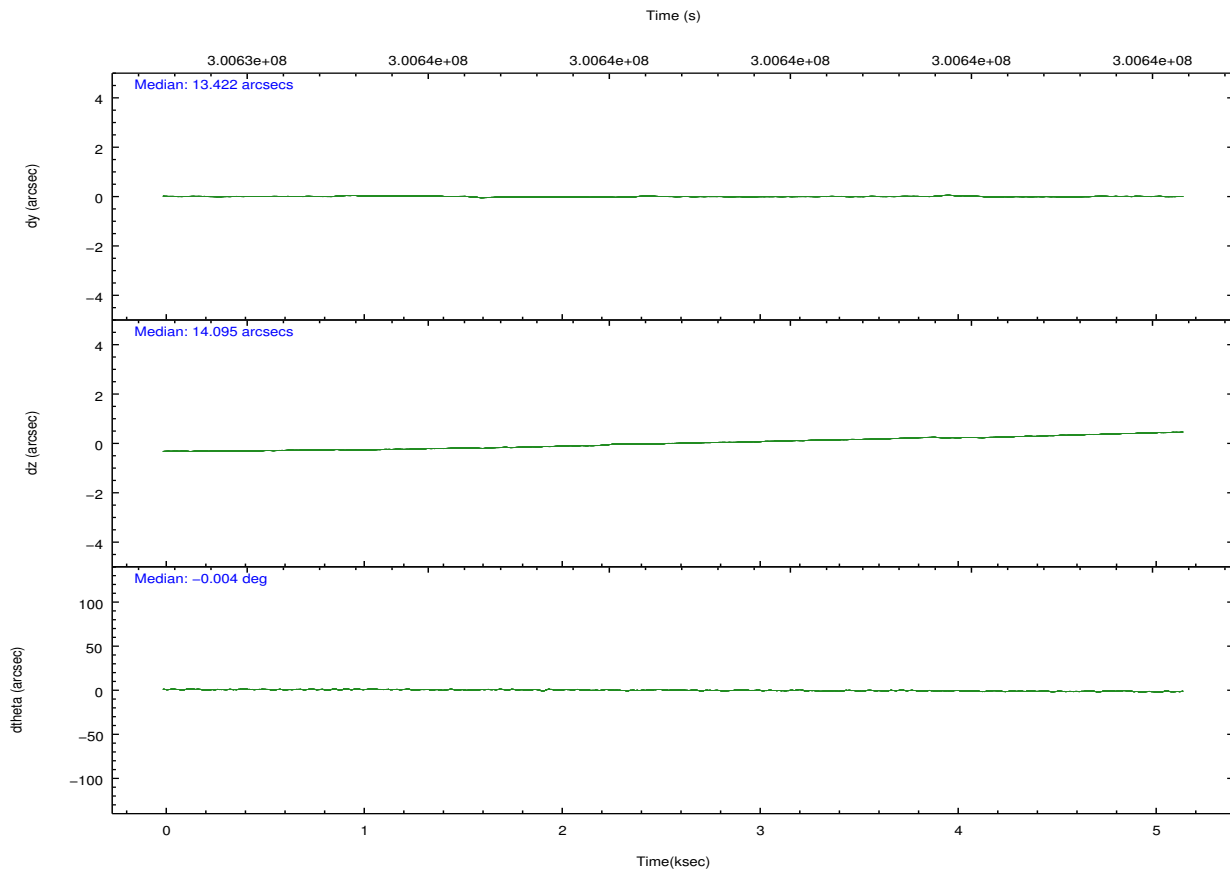
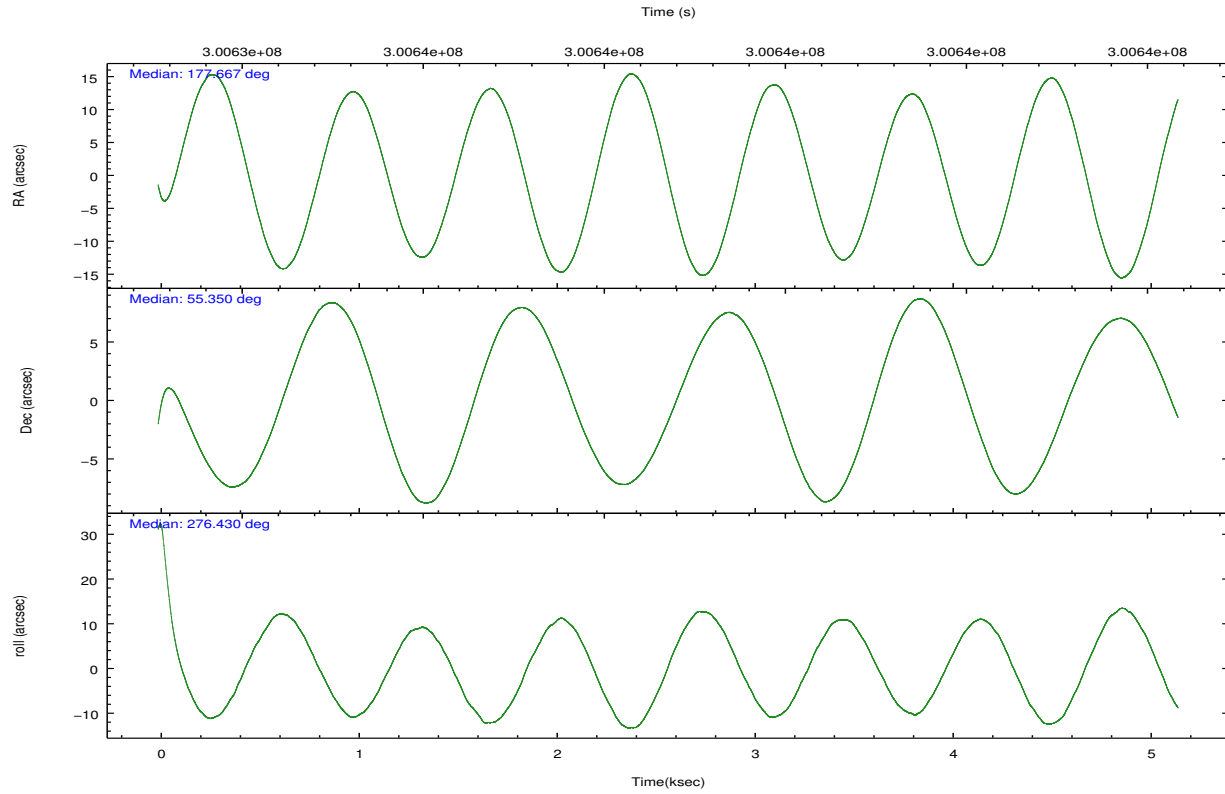


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	177.638244	177.667370226633	Subarray requested	NONE	NONE
[deg] Pointing Dec	55.371811	55.35004889891658	Alternating exposures requested	N	N
[deg] Pointing Roll	276.303558	276.4362824166384	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	300633927.184000	300632707.52258			
Observation start date	2007-07-12T13:24:22	2007-07-12T13:05:07			
[s] Observation end time (MET)	300638927.184000	300639331.07289			
Observation end date	2007-07-12T14:47:42	2007-07-12T14:55:31			
Read mode	TIMED	TIMED			

## 2.3 Aspect



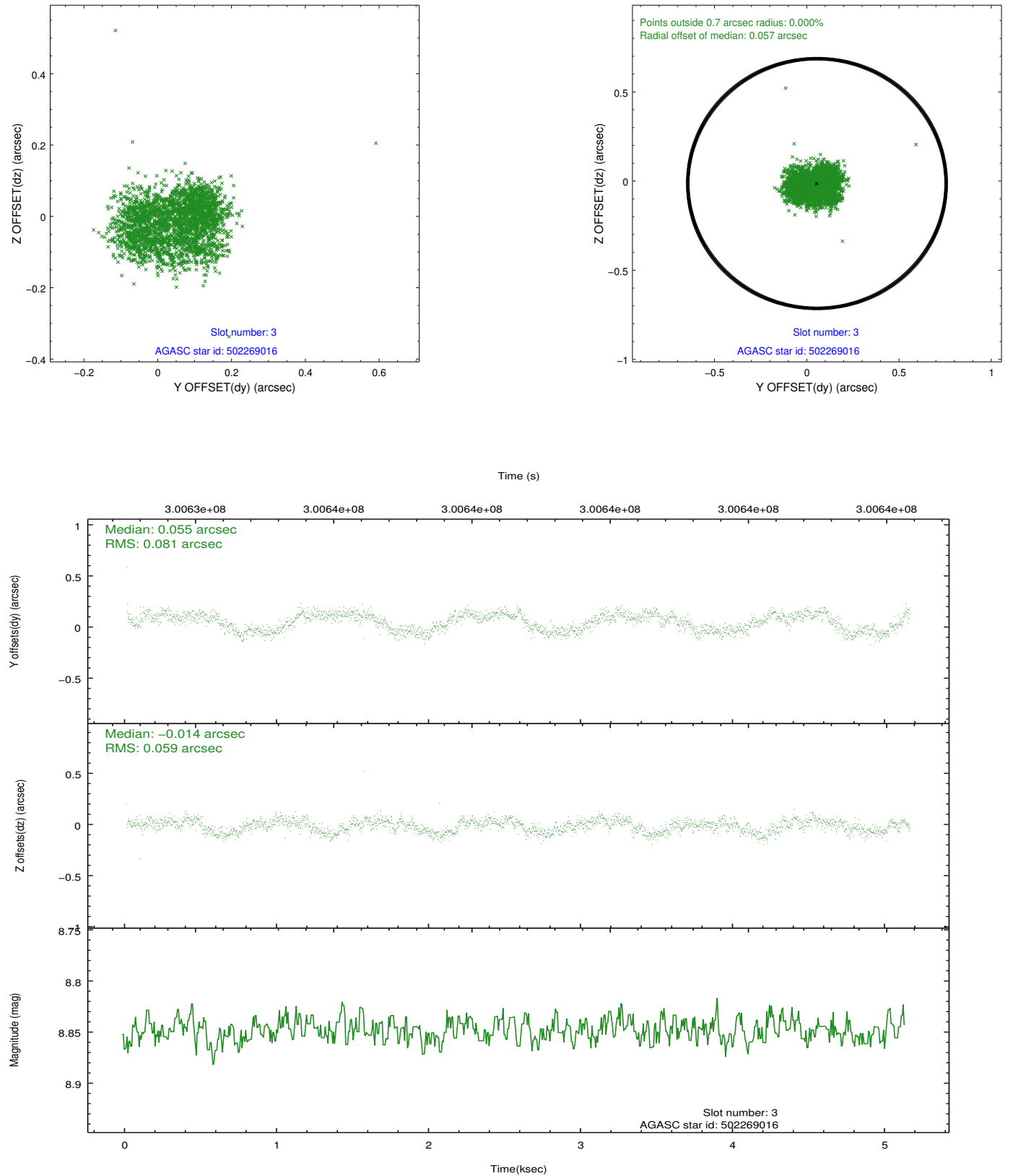


### Slot Statistics

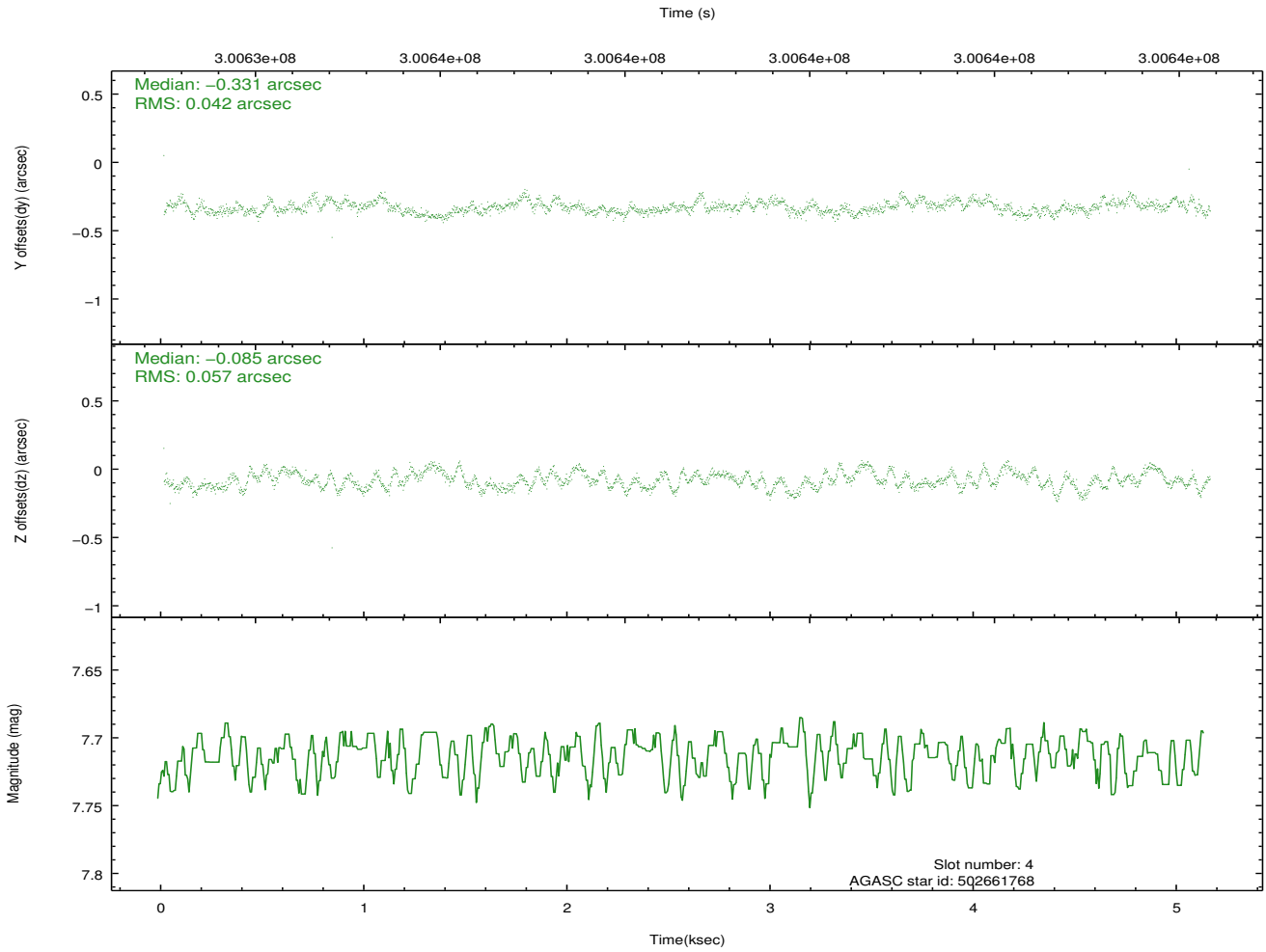
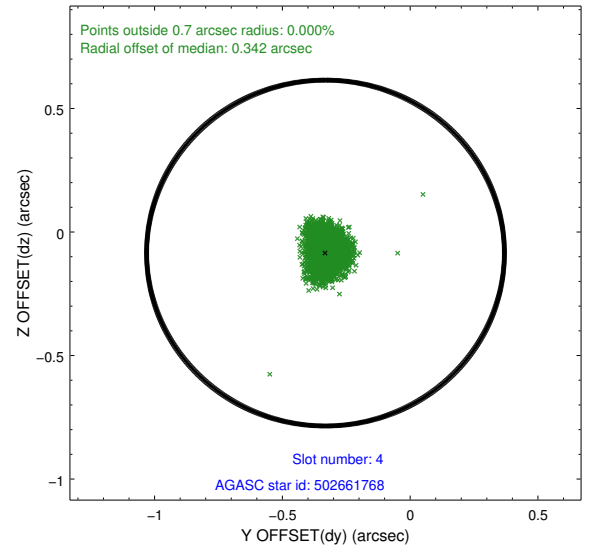
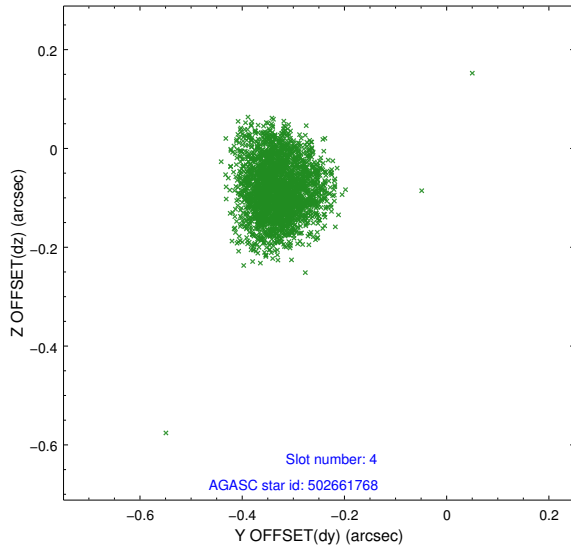
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	1257	-0.055	-0.064	0.009	0.016	0.000000	0.000000	-766.39	-1735.53
1	FID	ACIS-S-4	7.19	1257	0.201	0.044	0.006	0.012	0.000000	0.000000	2146.59	171.86
2	FID	ACIS-S-5	7.22	1257	-0.177	0.029	0.009	0.015	0.000000	0.000000	-1817.86	166.83
3	GUIDE	502269016	8.85	2513	0.055	-0.014	0.109	0.160	177.130457	54.972659	1309.76	-1200.06
4	GUIDE	502661768	7.71	2513	-0.331	-0.085	0.075	0.118	177.146660	55.540024	-714.76	-928.98
5	GUIDE	502669520	8.03	2510	0.067	-0.070	0.062	0.100	176.602956	55.341551	-139.75	-2117.22
6	GUIDE	502793208	9.14	2511	-0.063	-0.133	0.078	0.125	177.980338	55.276529	416.38	658.93
7	GUIDE	502400568	8.68	2509	0.279	0.304	0.065	0.108	178.868651	54.779372	2378.48	2308.21

## 2.4 Star Slots

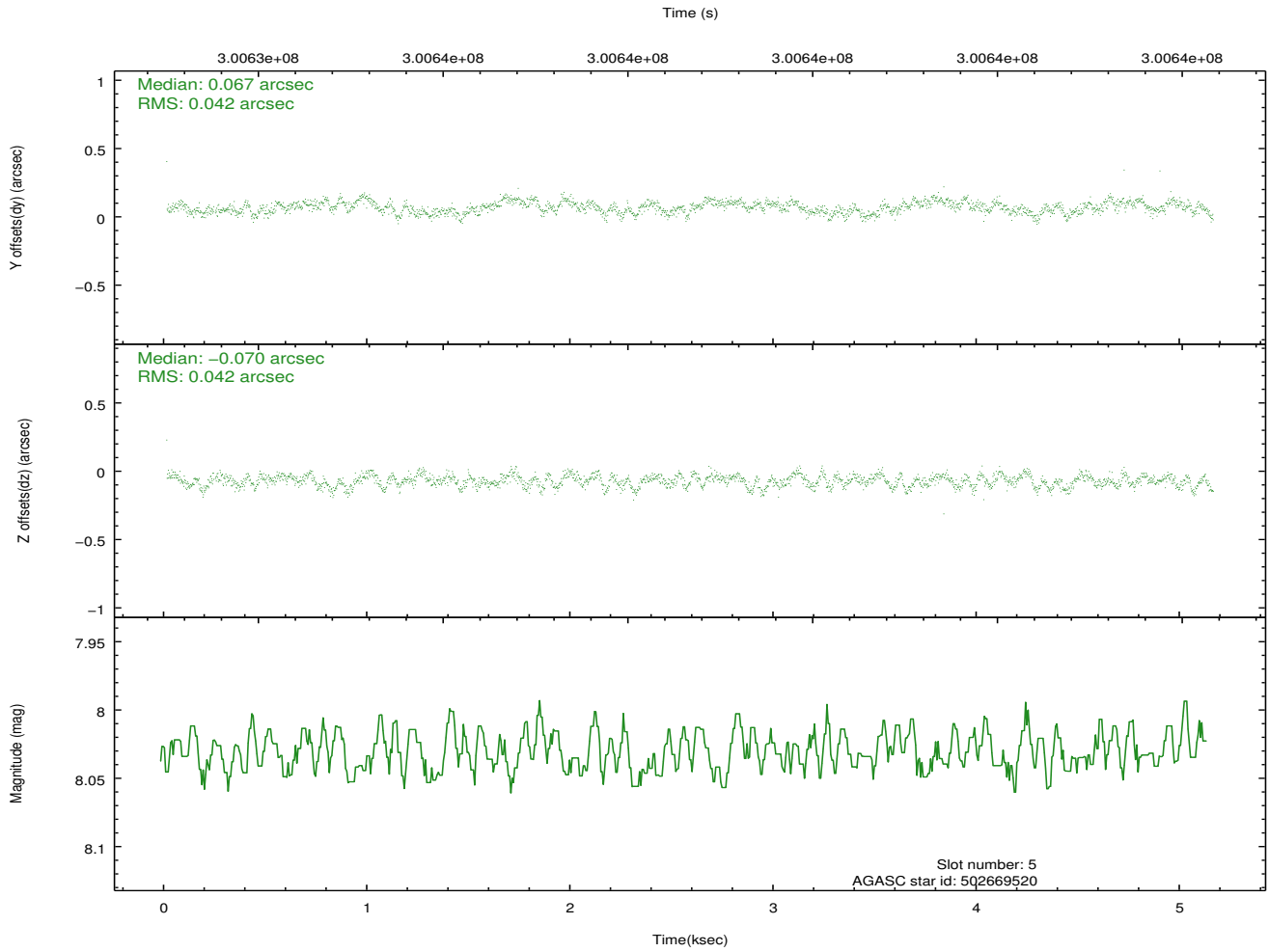
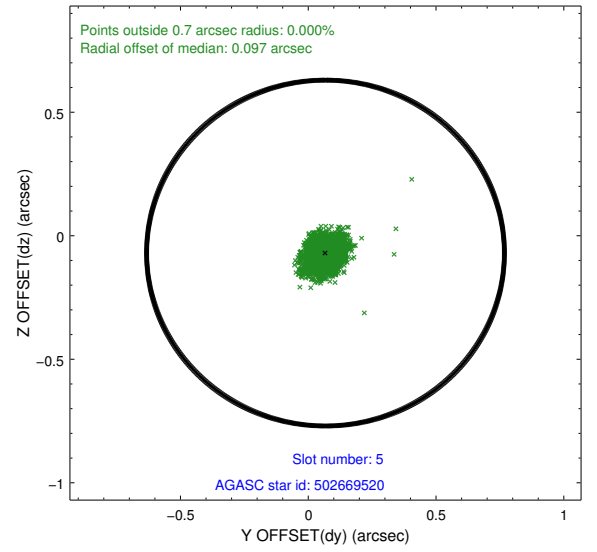
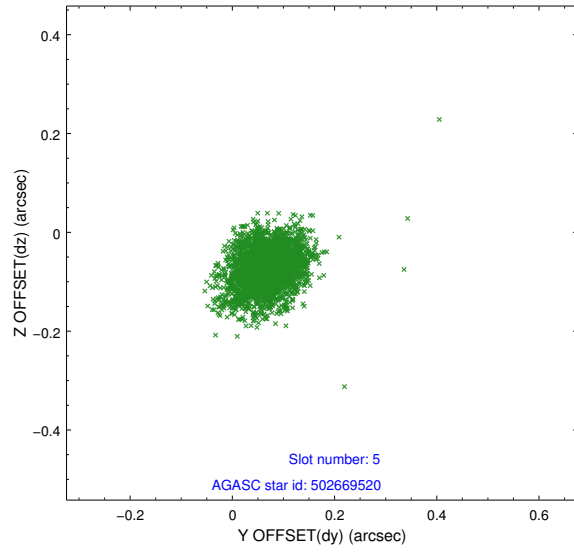
### 2.4.1 Slot 3



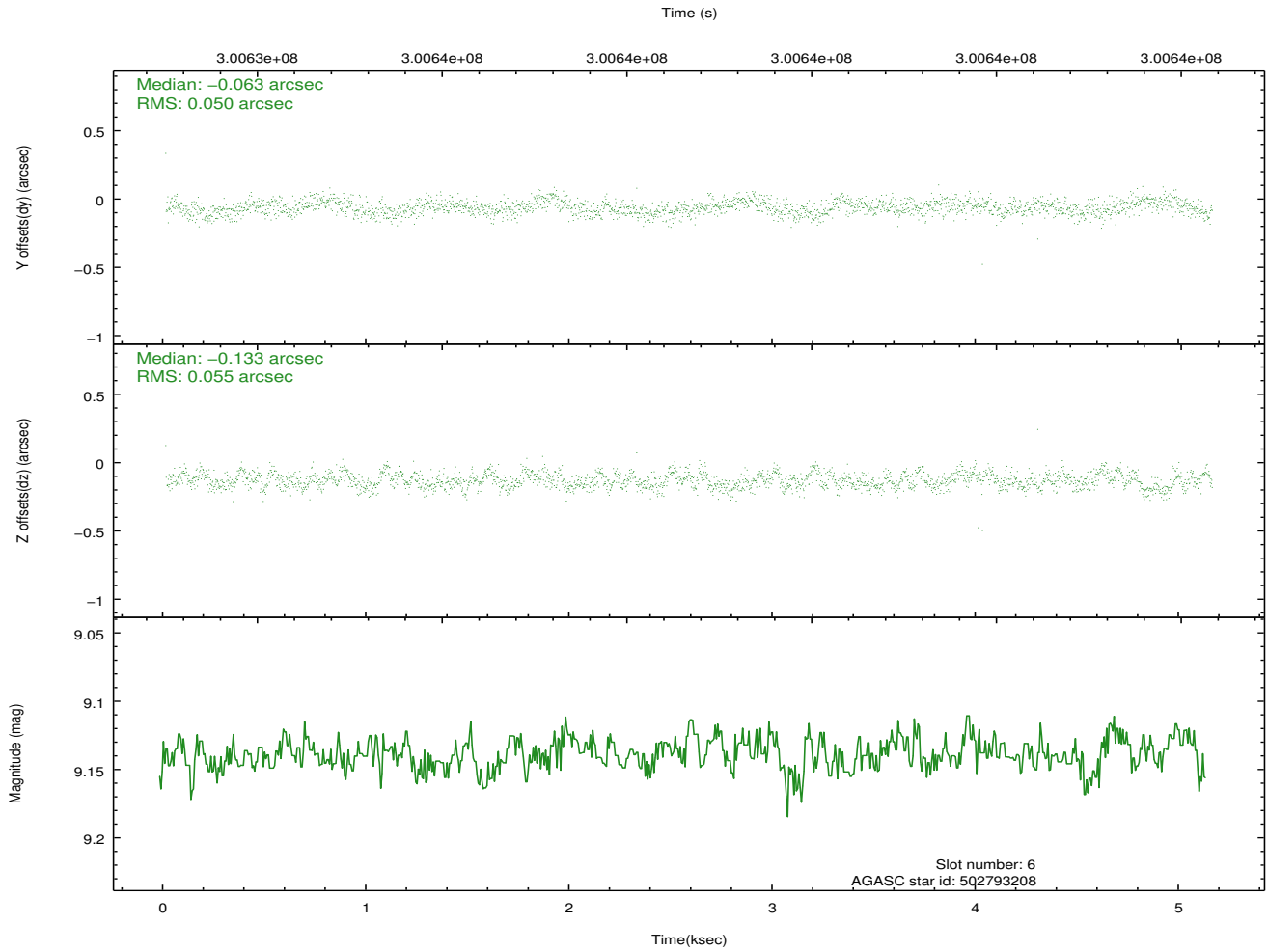
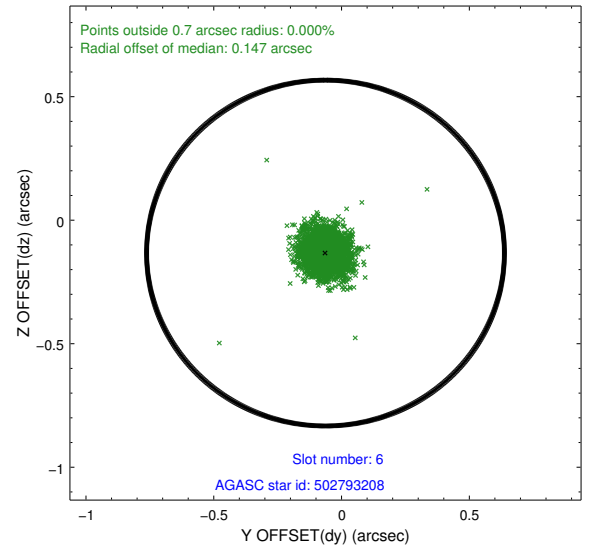
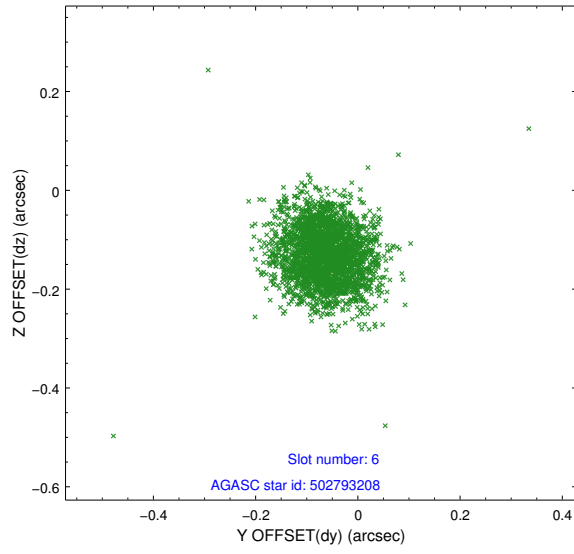
## 2.4.2 Slot 4



### 2.4.3 Slot 5

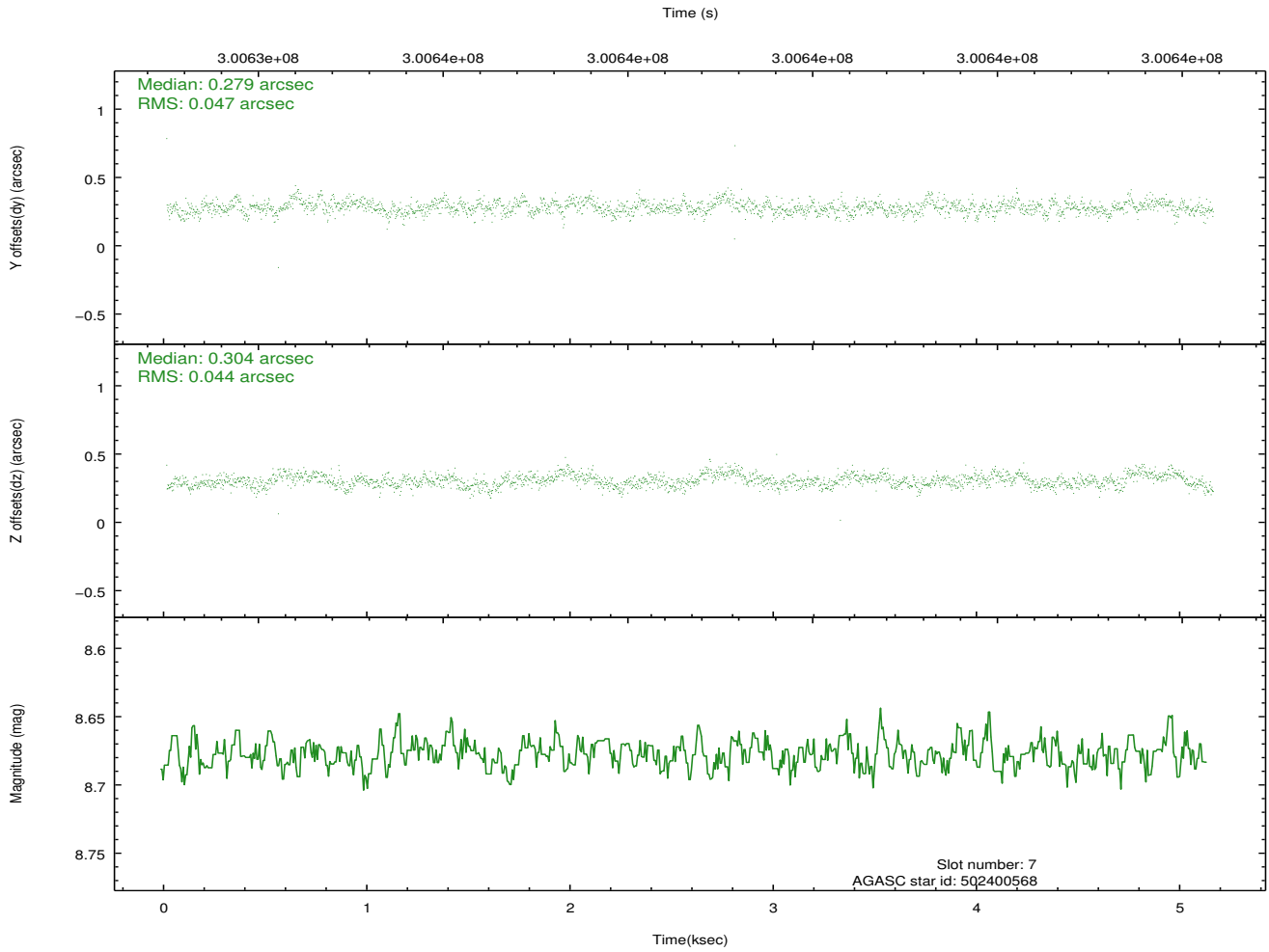
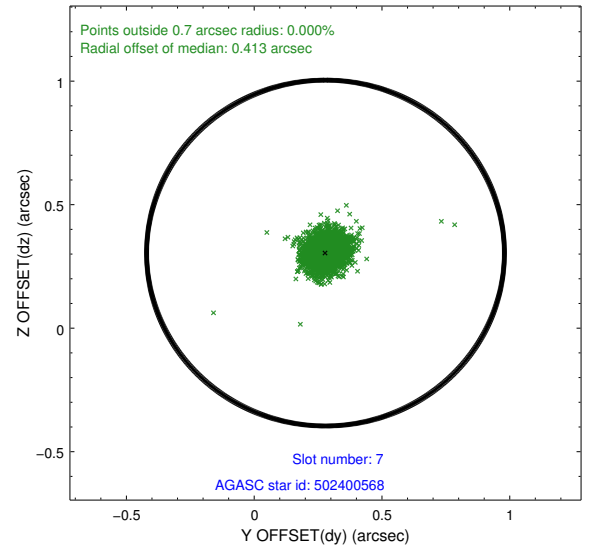
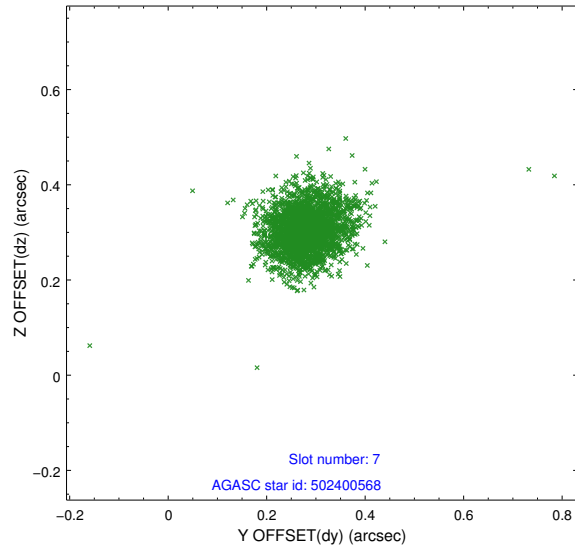


## 2.4.4 Slot 6



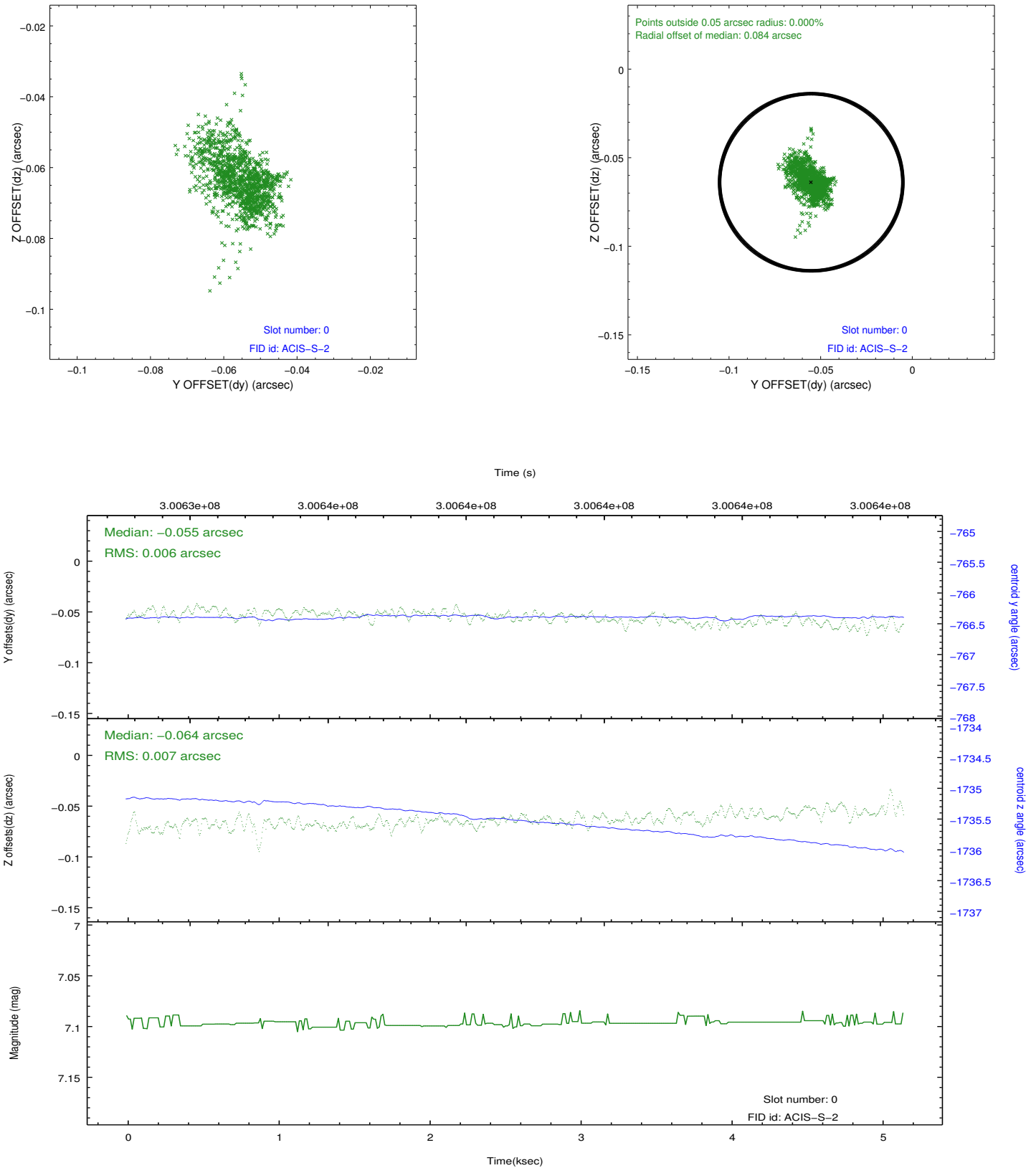


## 2.4.5 Slot 7

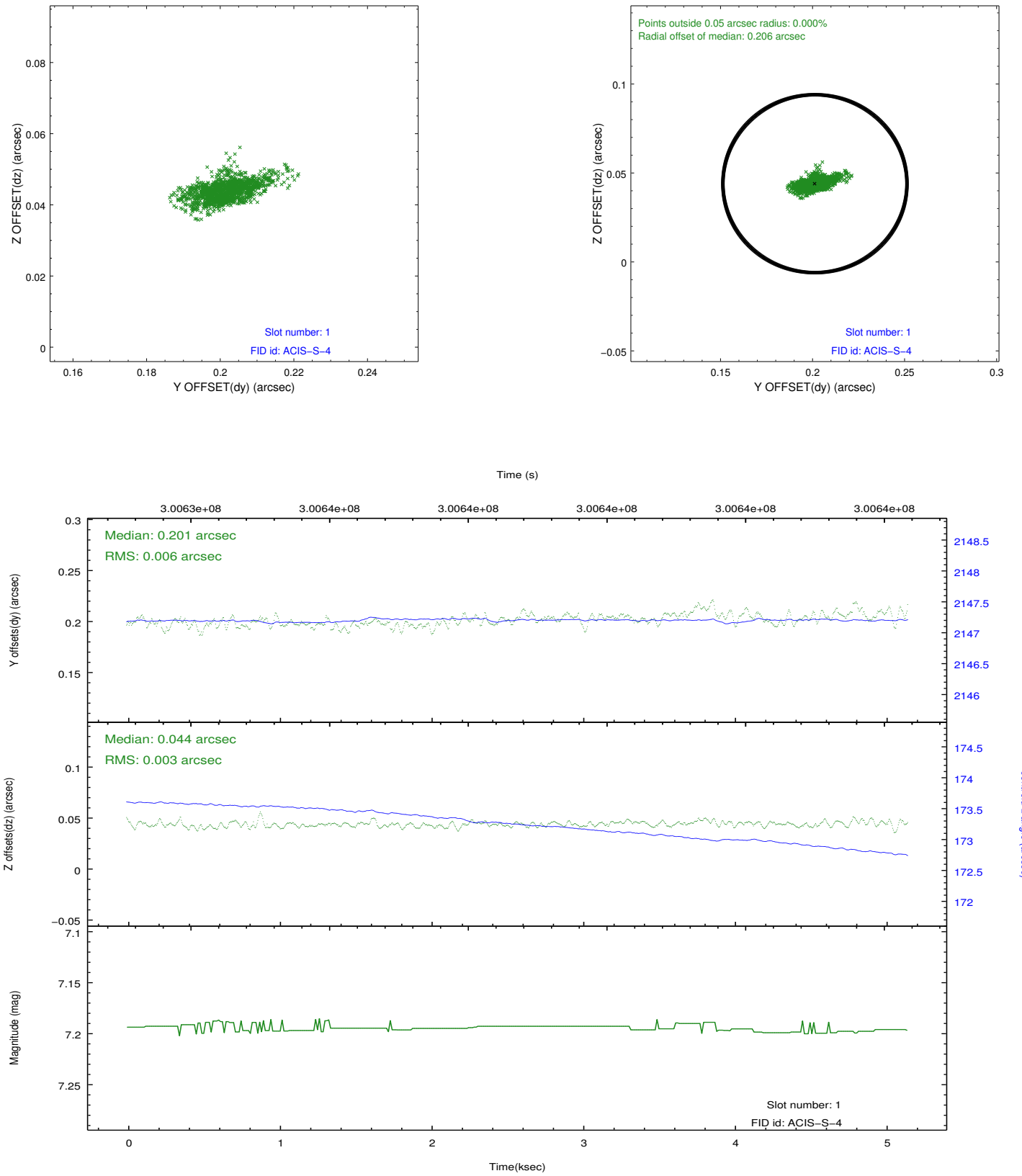


## 2.5 FID Slots

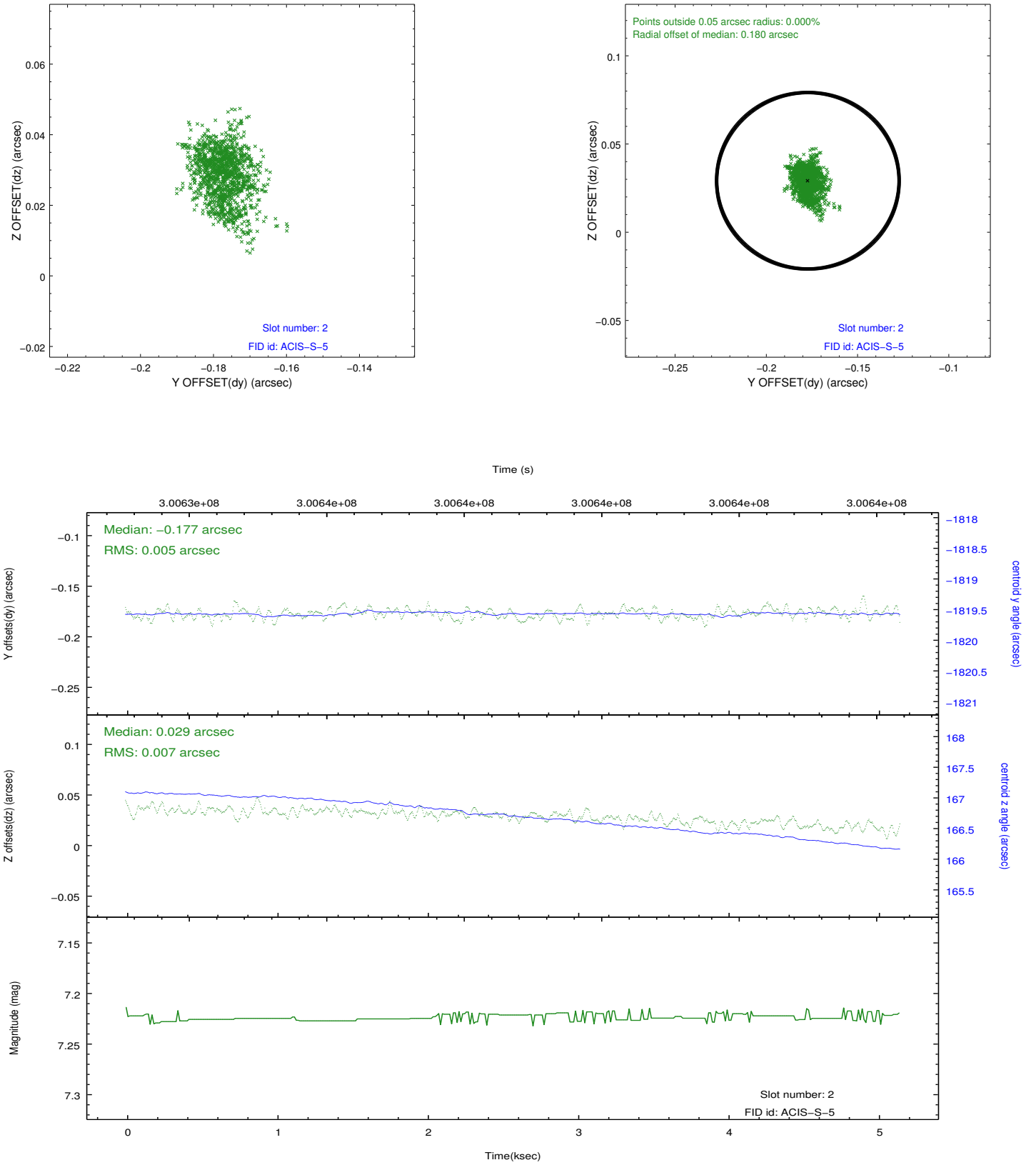
### 2.5.1 Slot 0



## 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)	2012.04.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.75519998

### A.2 Comments