

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2931 - L2 Version 3  
Chandra X-Ray Center

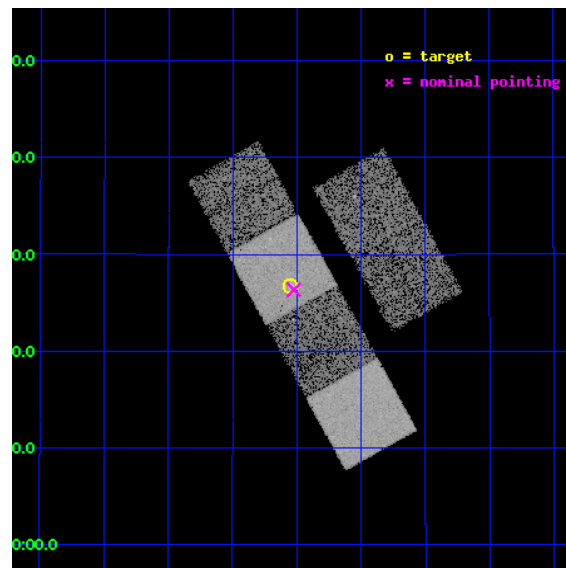
L2 Processing Date : Oct 14 2012

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# 1 Front

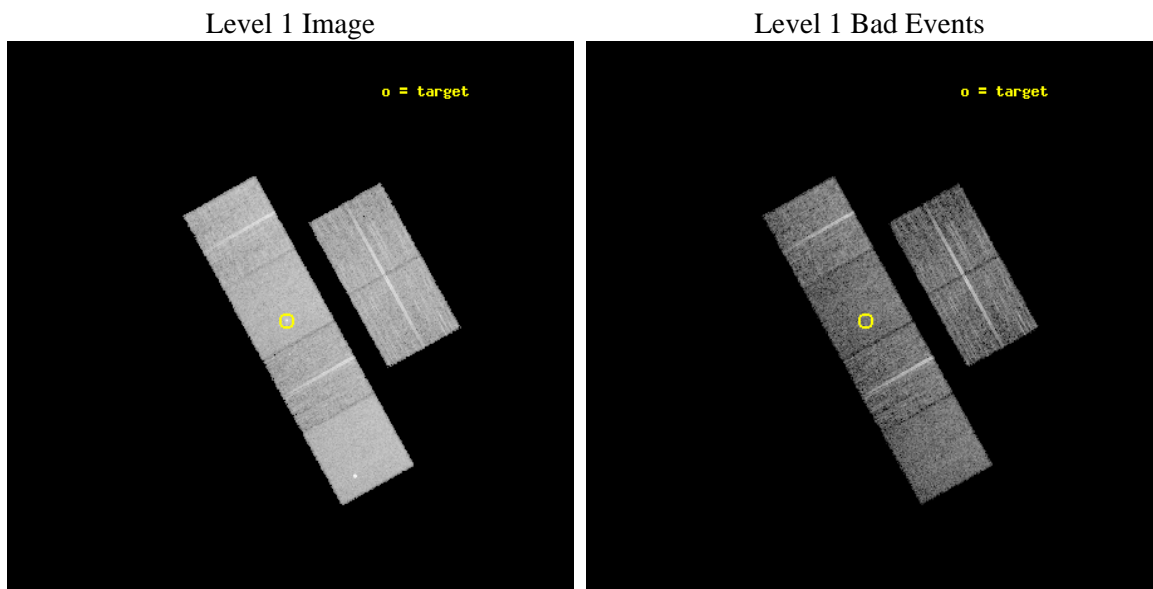
seq_num	600268	Sequence number
obs_id	2931	Observation id
title	CHANDRA SURVEY OF GALAXIES WITH KNOWN BLACK HOLE MASSES	Proposal t
observer	Dr. Andrew Ptak	Principal investigator
object	NGC7052	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	319.6375	Observer's specified target RA [deg]
dec_targ	26.446667	Observer's specified target Dec [deg]
ra_nom	319.6307077323	Nominal RA [deg]
dec_nom	26.439121812593	Nominal Dec [deg]
roll_nom	240.94294397746	Nominal Roll [deg]
revision	3	Processing version of data
ontime	9752.2888143063	Sum of GTIs [s]
livetime	9628.7994612162	Livetime [s]
ontime2	9752.3298543096	Sum of GTIs [s]
ontime3	9752.1656942964	Sum of GTIs [s]
ontime5	9752.247774303	Sum of GTIs [s]
ontime6	9752.2067342997	Sum of GTIs [s]
ontime7	9752.2888143063	Sum of GTIs [s]
ontime8	9748.8835644722	Sum of GTIs [s]
l2events	93788	Number of level 2 events



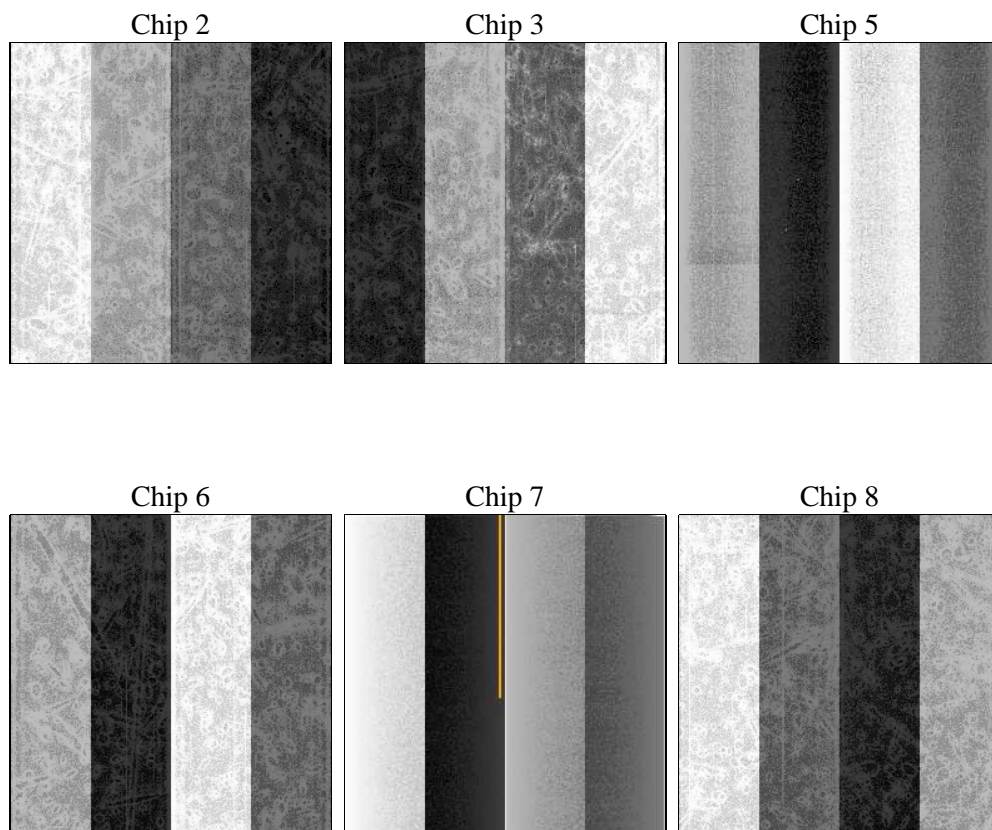
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	9752.2888143063	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime2	9752.3298543096	Sum of GTIs [s]
date	2012-10-14T18:49:01	Date and time of file creation	ontime3	9752.1656942964	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	9752.247774303	Sum of GTIs [s]
			ontime6	9752.2067342997	Sum of GTIs [s]
			ontime7	9752.2888143063	Sum of GTIs [s]
			ontime8	9748.8835644722	Sum of GTIs [s]
			l1events	425389	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	62443	57748	86198	60700	79822	78478	grade 0 events	2849	3007	3602	2791	3278	4905
rejected events	55678	50889	47590	53739	46275	63295		4%	5%	4%	4%	4%	6%
rejected %	89%	88%	55%	88%	57%	80%	grade 1 events	41	25	93	46	68	62
								0%	0%	0%	0%	0%	0%
							grade 2 events	1403	1247	11373	1395	6701	3186
								2%	2%	13%	2%	8%	4%
							grade 3 events	697	707	1667	715	3079	1805
								1%	1%	1%	1%	3%	2%
							grade 4 events	679	650	1487	673	3027	1616
								1%	1%	1%	1%	3%	2%
							grade 5 events	2354	2504	6443	2637	7543	3454
								3%	4%	7%	4%	9%	4%
							grade 6 events	1140	1254	20506	1392	17486	3681
								1%	2%	23%	2%	21%	4%
							grade 7 events	53280	48354	41027	51051	38640	59769
								85%	83%	47%	84%	48%	76%

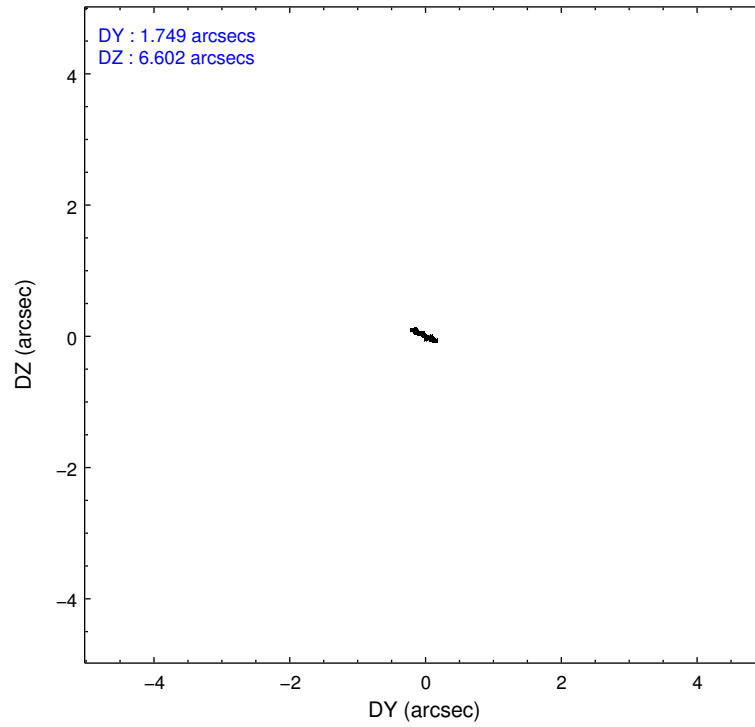
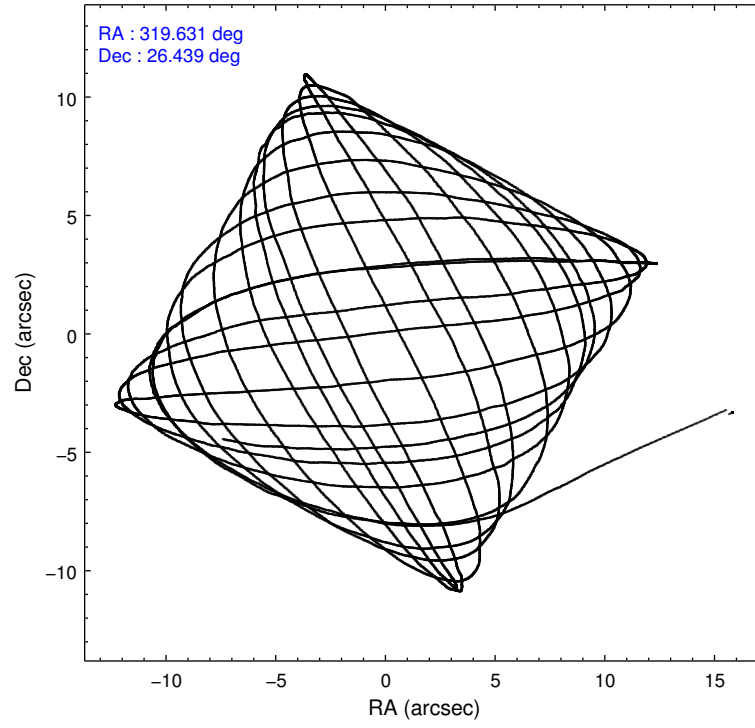


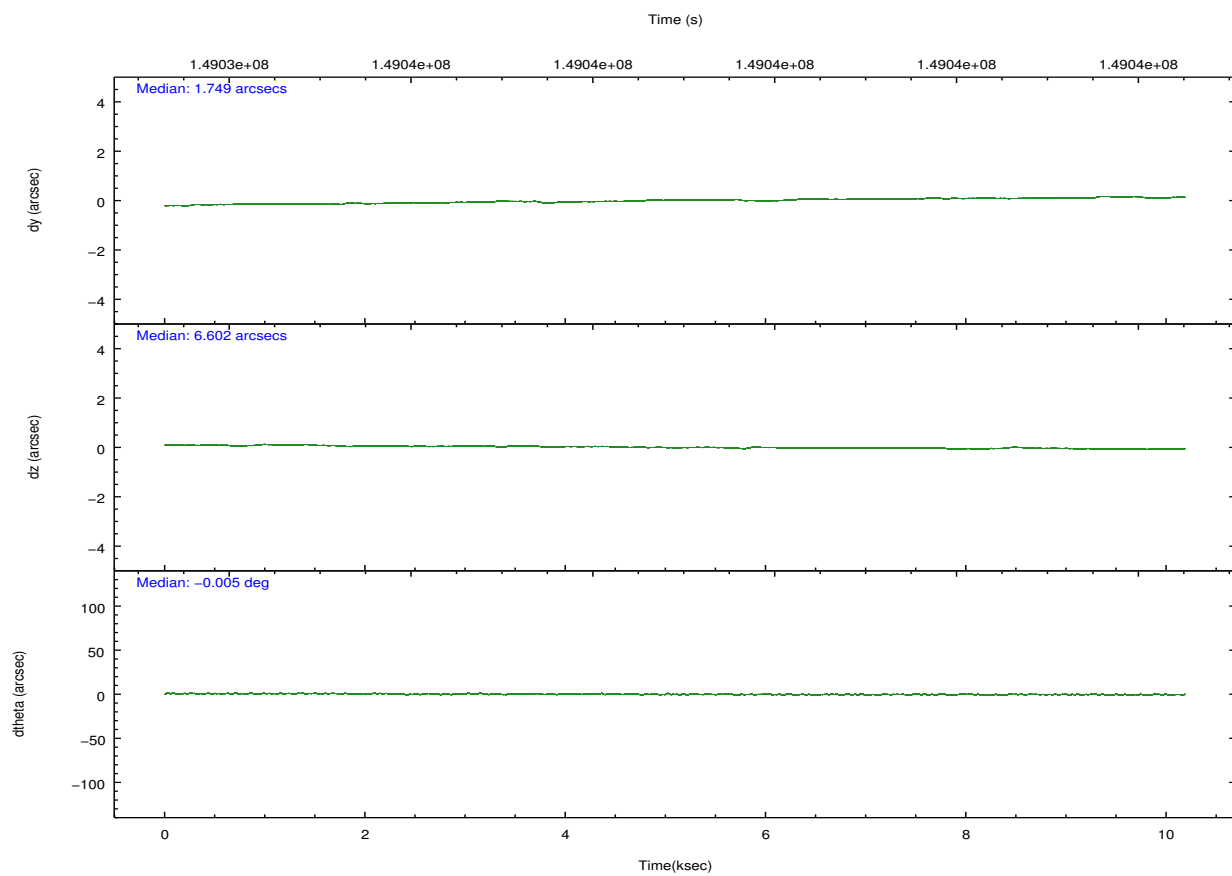
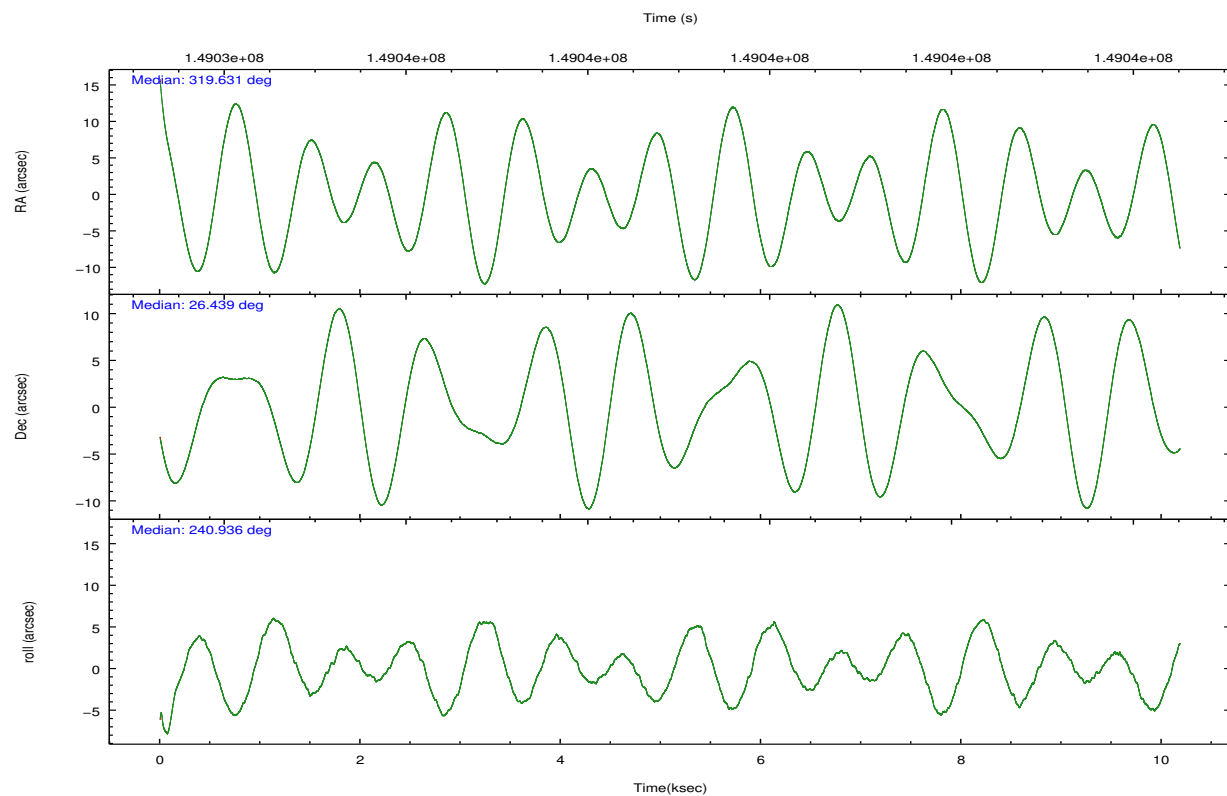
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-235678	ACIS-235678
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	319.629771	319.6307077322993
[deg] Pointing Dec	26.466383	26.43912181259333
[deg] Pointing Roll	240.786727	240.9429439774633
[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)	149033997.184000	149033142.50403
Observation start date	2002-09-21T22:18:53	2002-09-21T22:05:42
[s] Observation end time (MET)	149043997.184000	149044769.07951
Observation end date	2002-09-22T01:05:33	2002-09-22T01:19:29
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



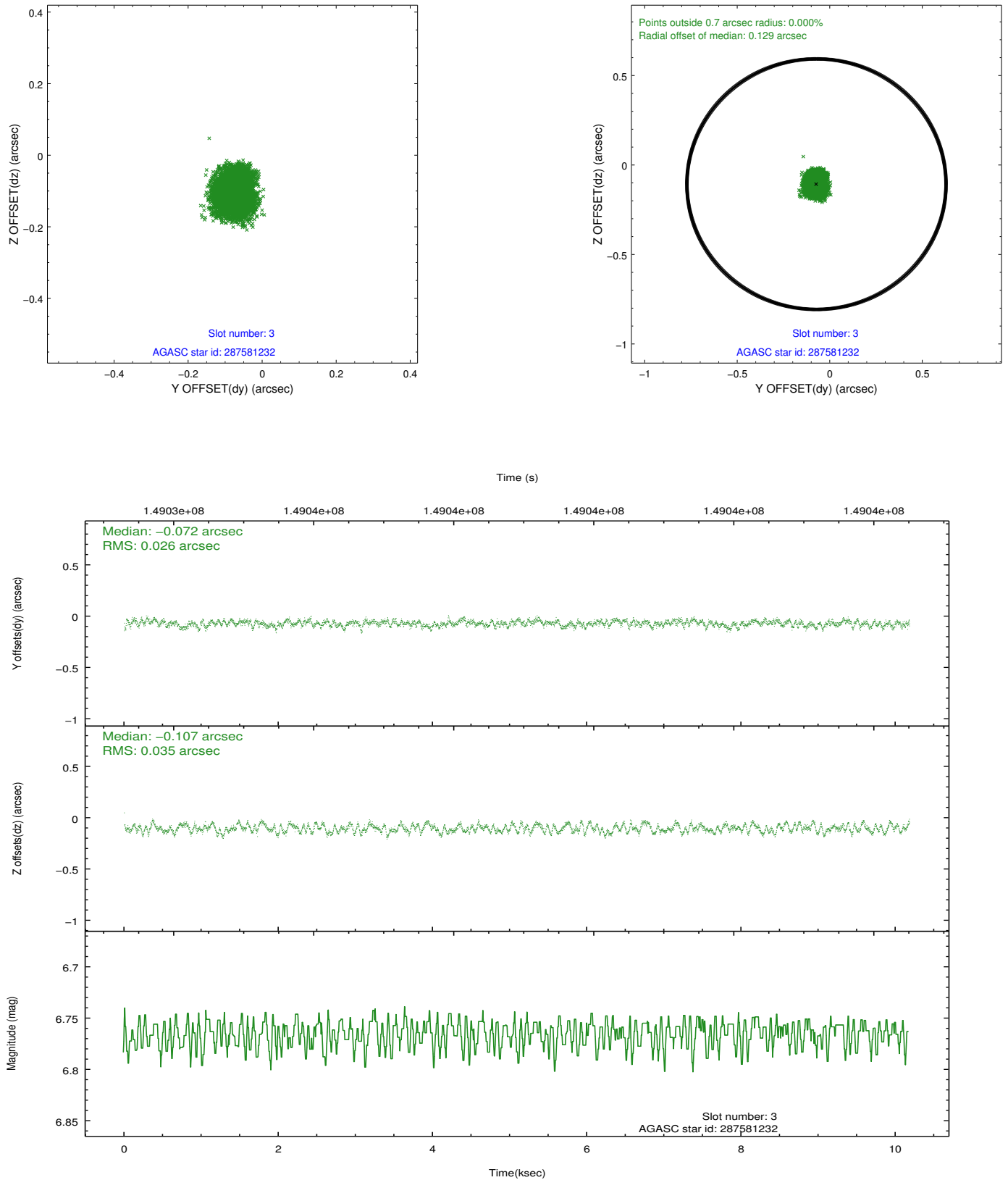


### Slot Statistics

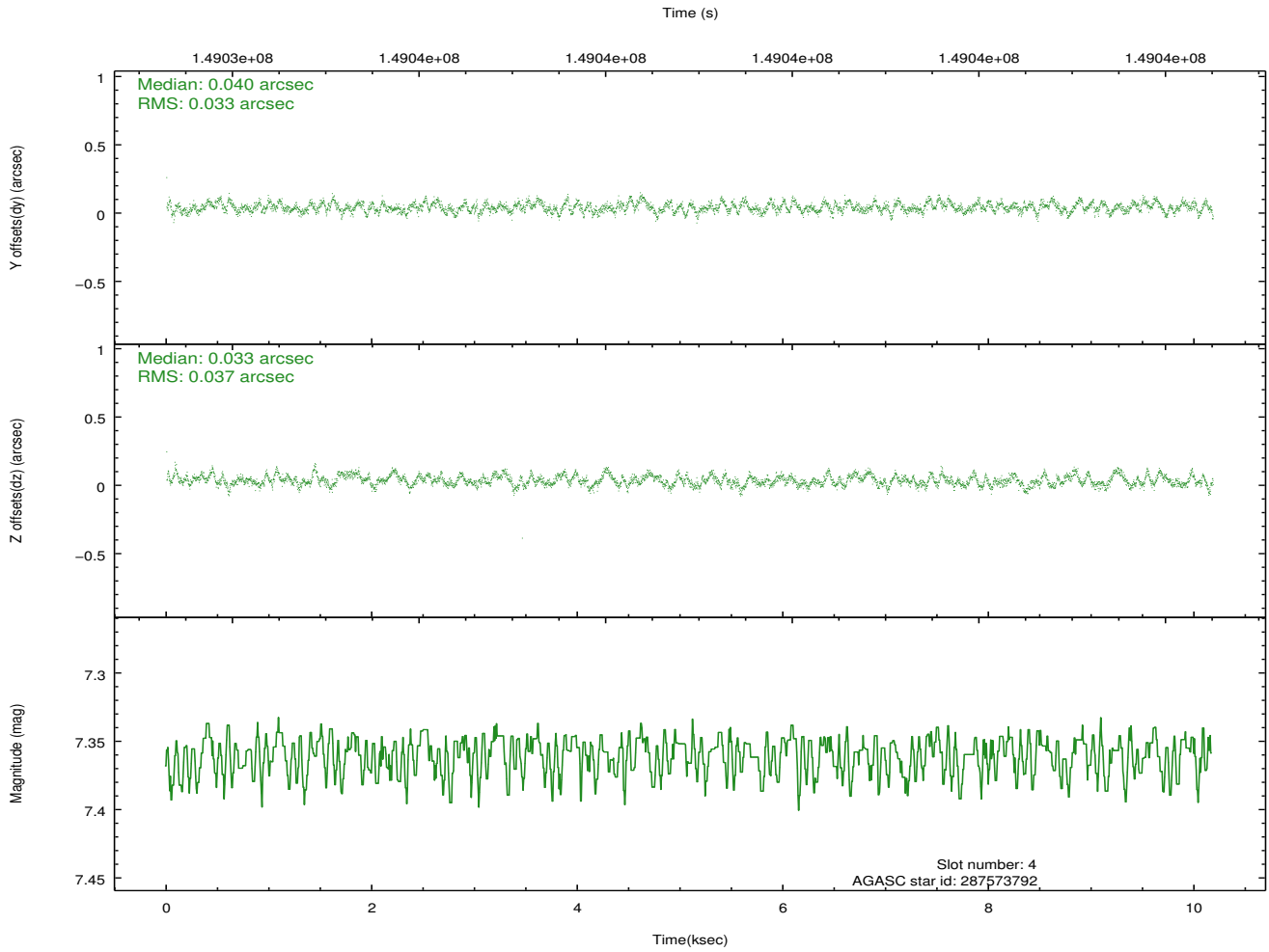
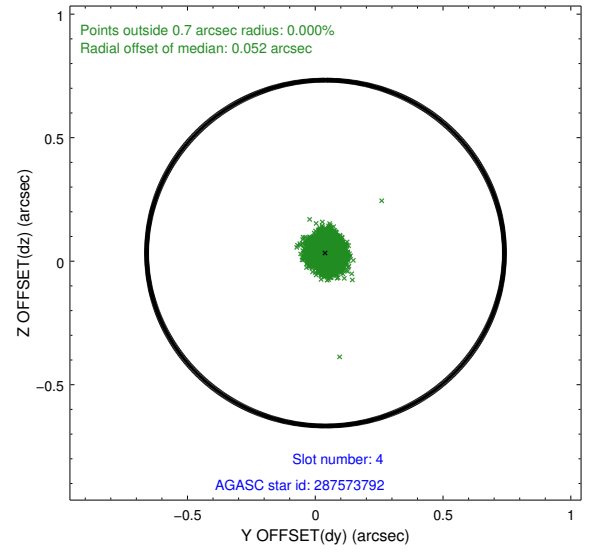
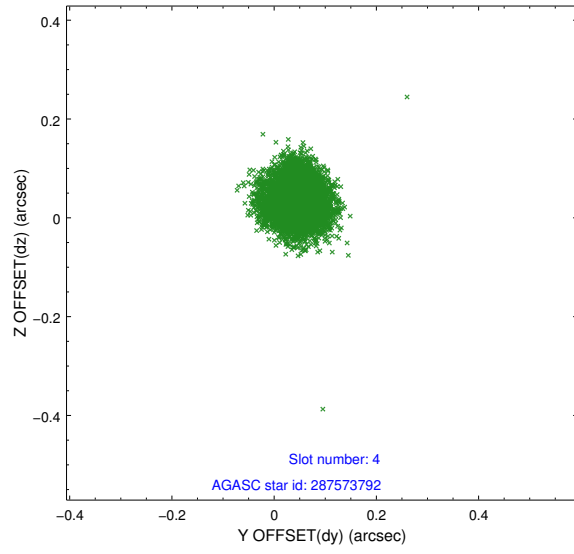
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	2484	-0.048	-0.004	0.007	0.011	0.000000	0.000000	-754.38	-1727.78
1	FID	ACIS-S-4	7.21	2483	0.003	0.024	0.005	0.010	0.000000	0.000000	2158.70	180.22
2	FID	ACIS-S-5	7.24	2484	0.014	-0.011	0.006	0.011	0.000000	0.000000	-1806.51	174.42
3	GUIDE	287581232	6.77	4968	-0.072	-0.107	0.048	0.074	320.158943	26.250130	-156.88	1868.99
4	GUIDE	287573792	7.36	4968	0.040	0.033	0.053	0.082	319.070855	26.350284	1242.32	-1371.47
5	GUIDE	287055368	8.58	4965	0.099	0.008	0.055	0.089	319.750759	26.090042	992.50	1002.03
6	GUIDE	287582424	9.06	4967	-0.067	-0.003	0.068	0.111	319.414036	27.272223	-2194.57	-2019.21
7	GUIDE	287586176	9.39	4963	0.002	0.065	0.090	0.146	319.090977	26.915299	-569.03	-2300.90

## 2.4 Star Slots

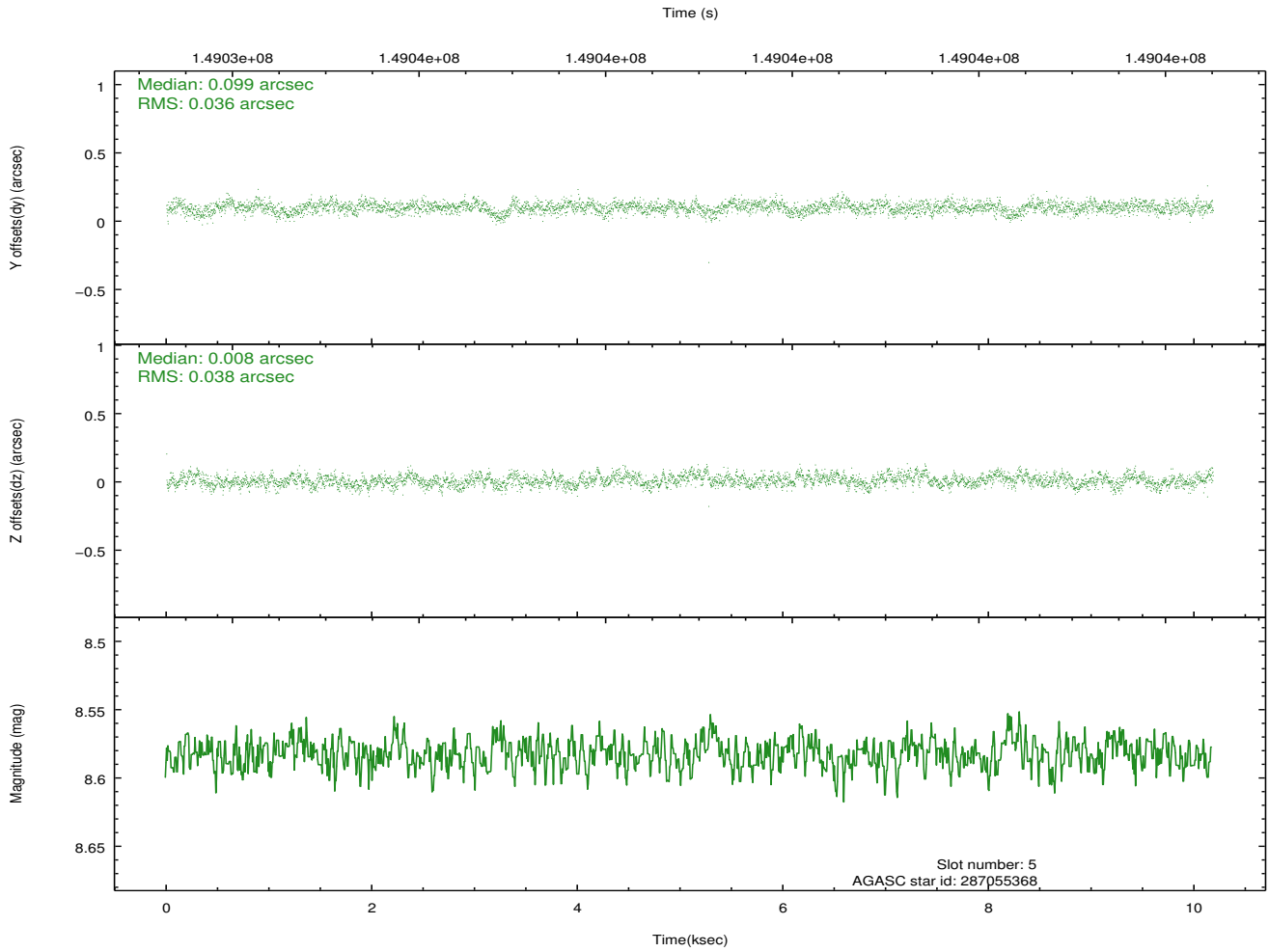
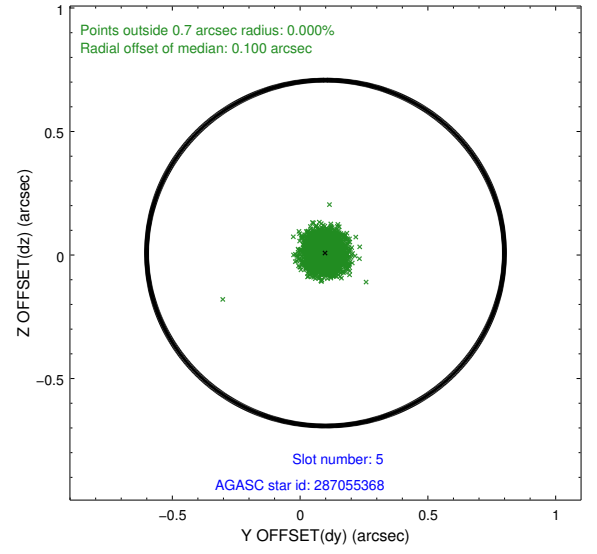
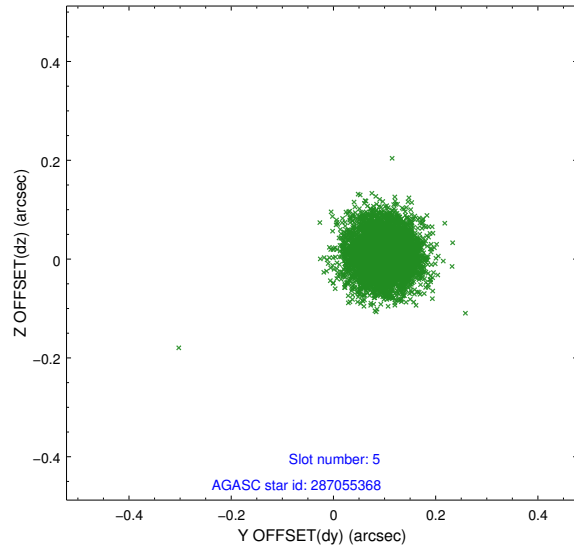
### 2.4.1 Slot 3



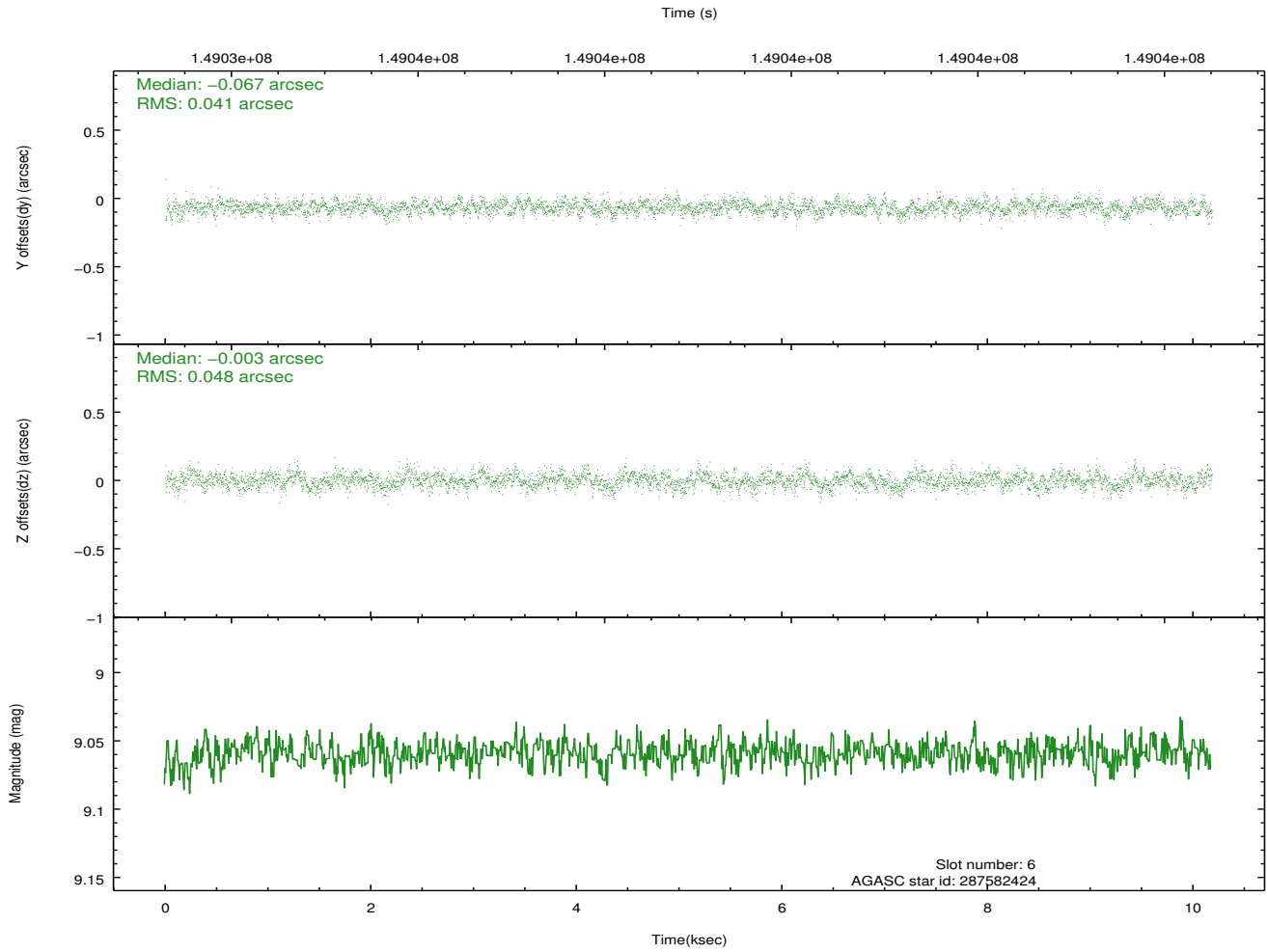
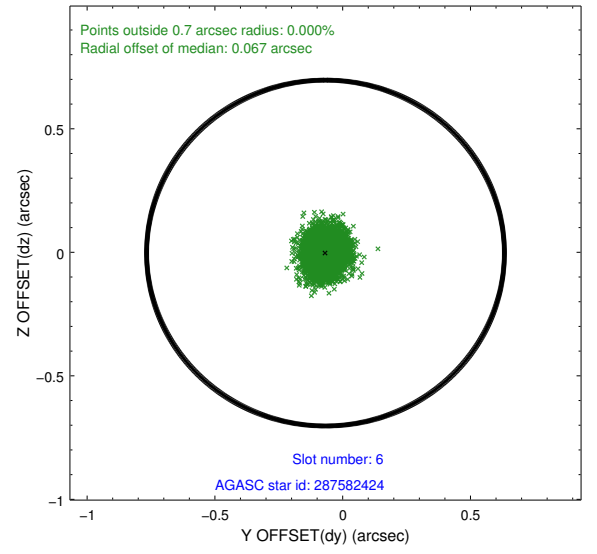
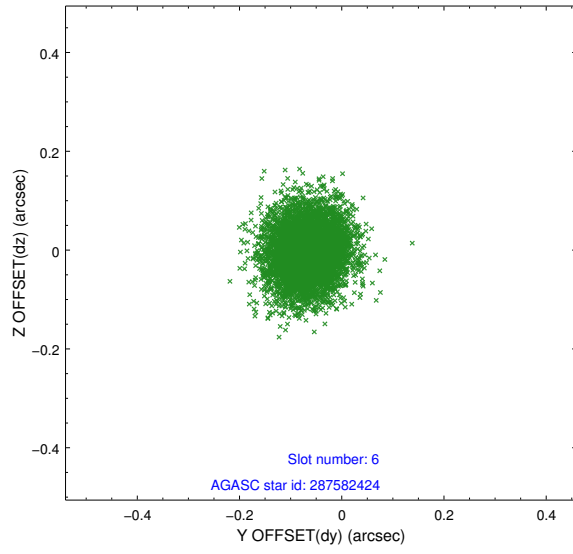
## 2.4.2 Slot 4



### 2.4.3 Slot 5

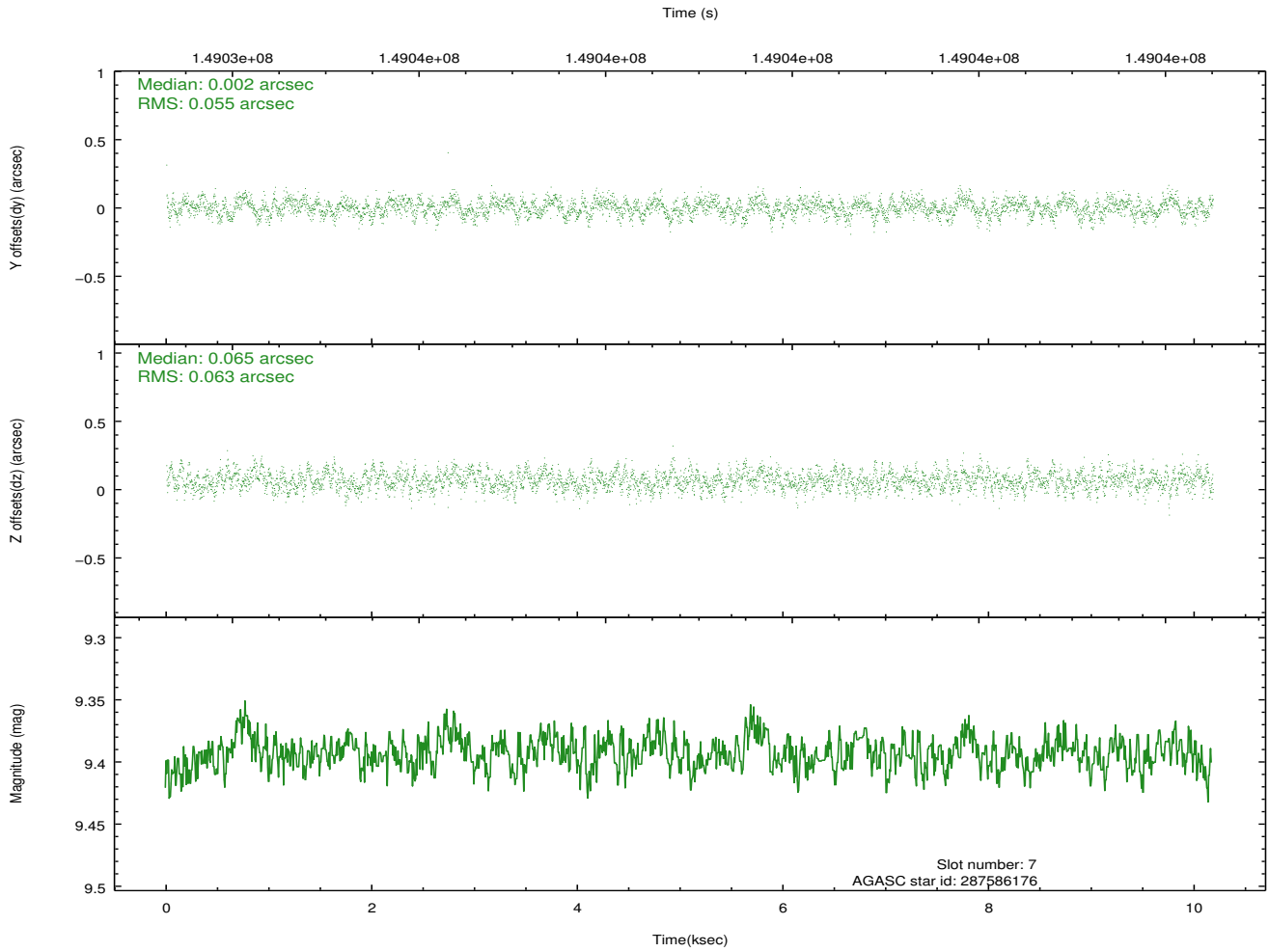
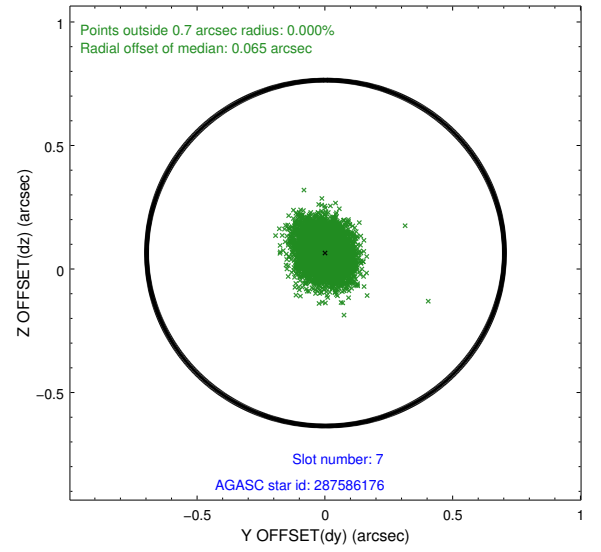
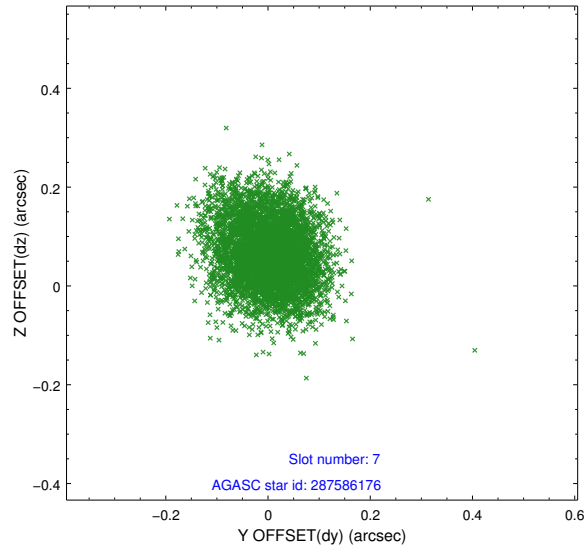


## 2.4.4 Slot 6



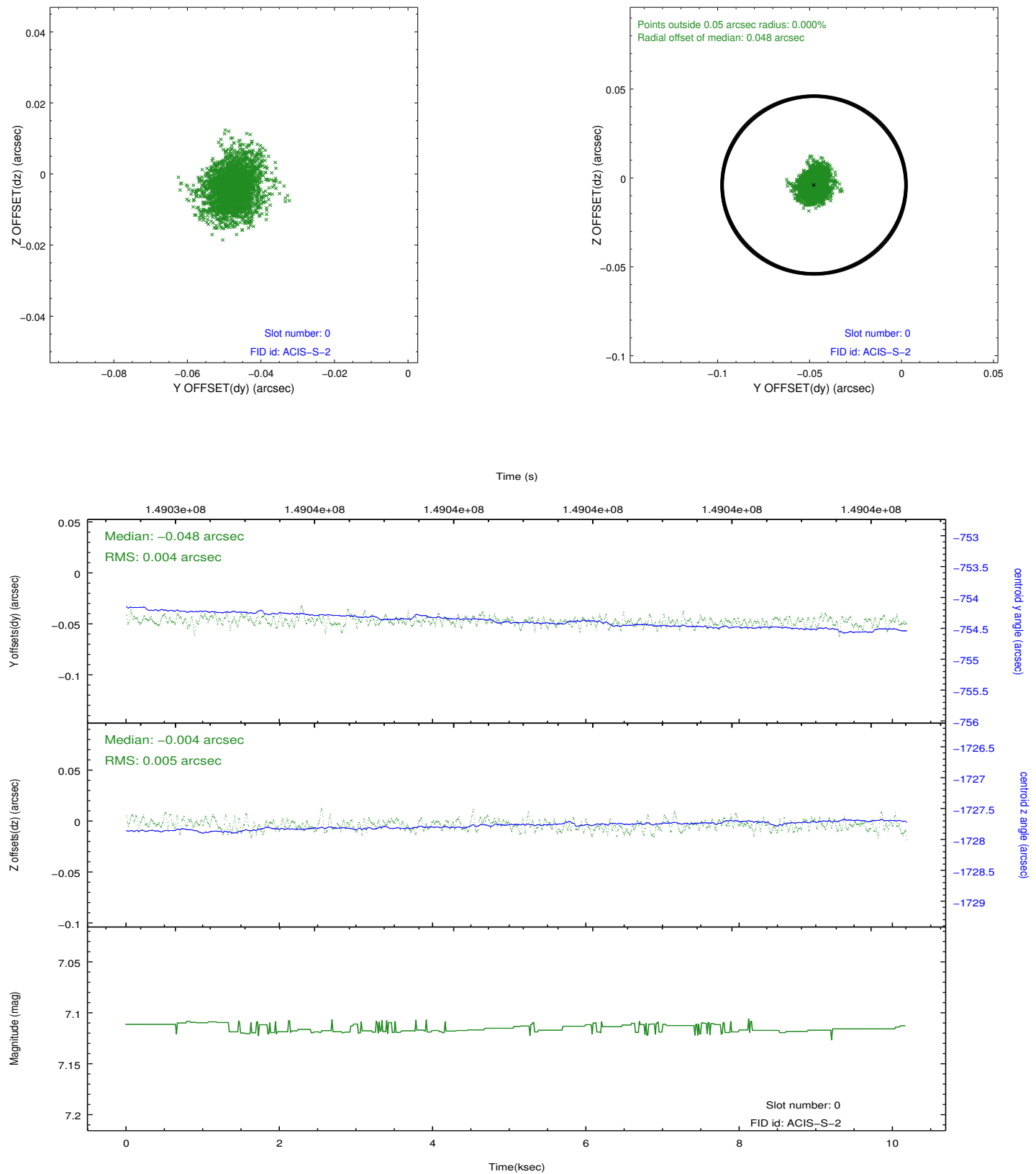


## 2.4.5 Slot 7

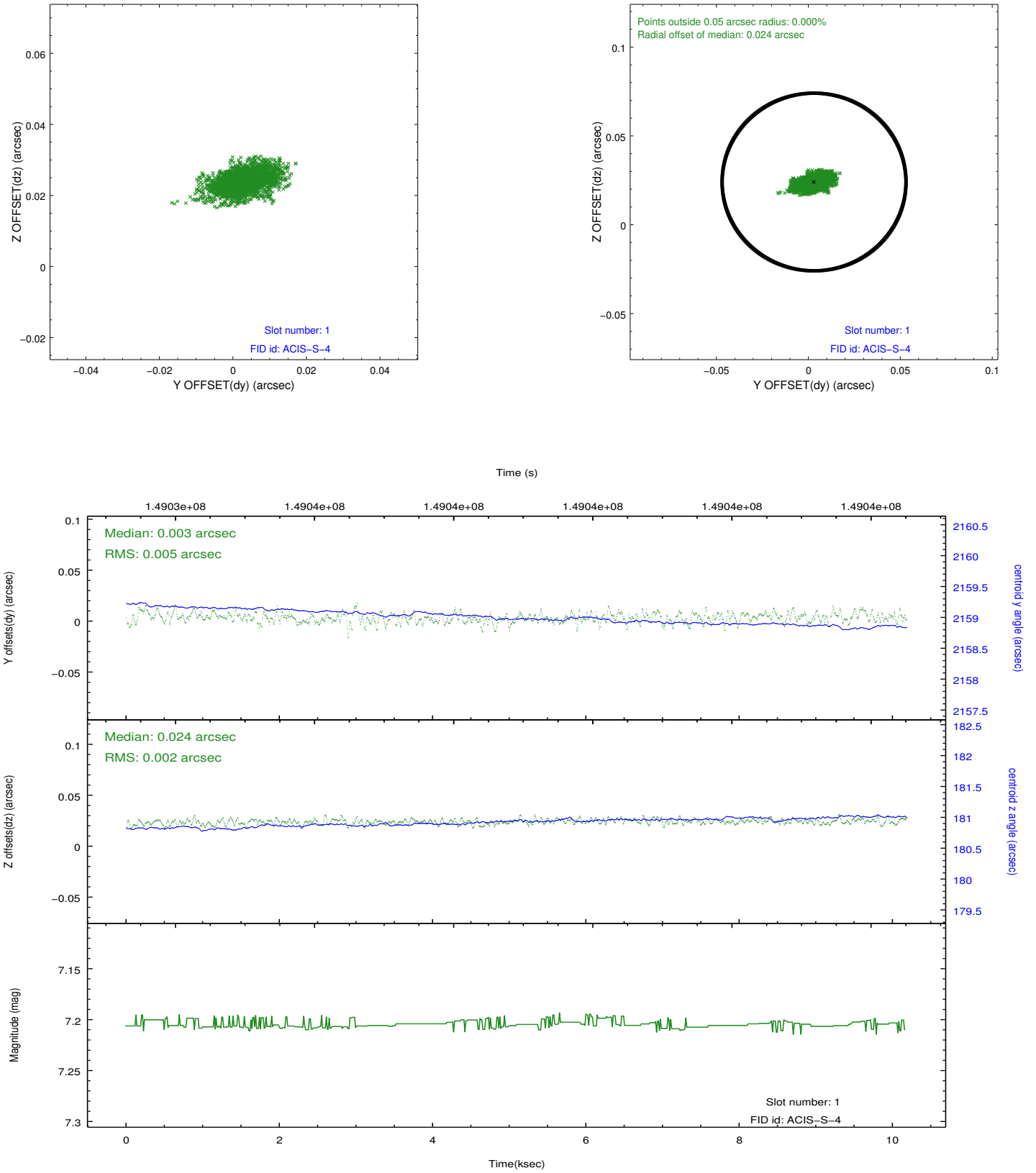


## 2.5 FID Slots

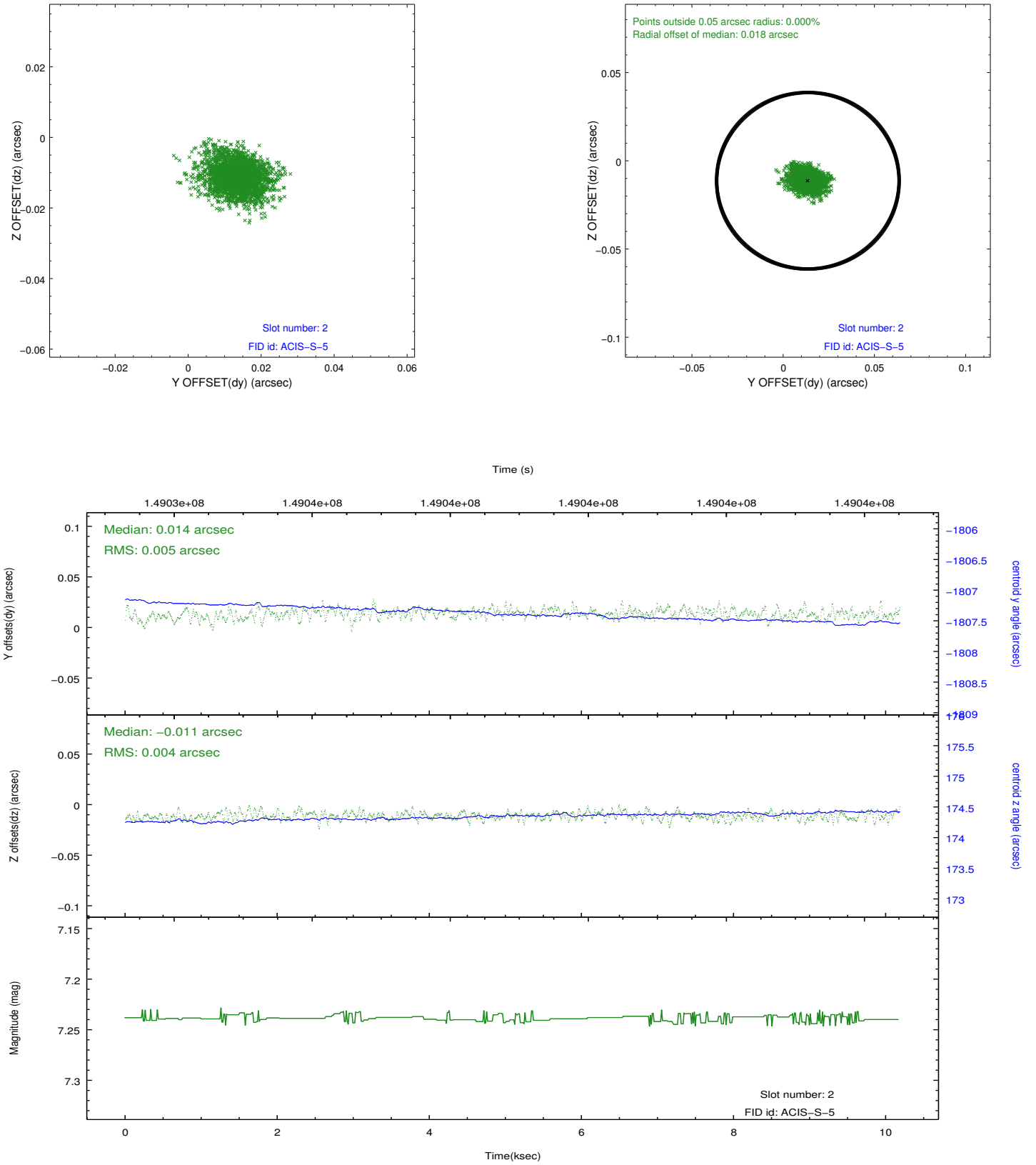
### 2.5.1 Slot 0



## 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)	2012.10.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.753

### A.2 Comments