

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4110 - L2 Version 3  
Chandra X-Ray Center

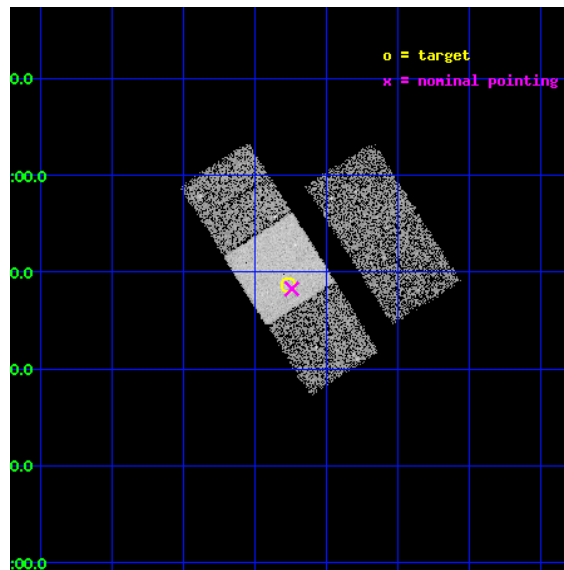
L2 Processing Date : Oct 26 2012

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# 1 Front

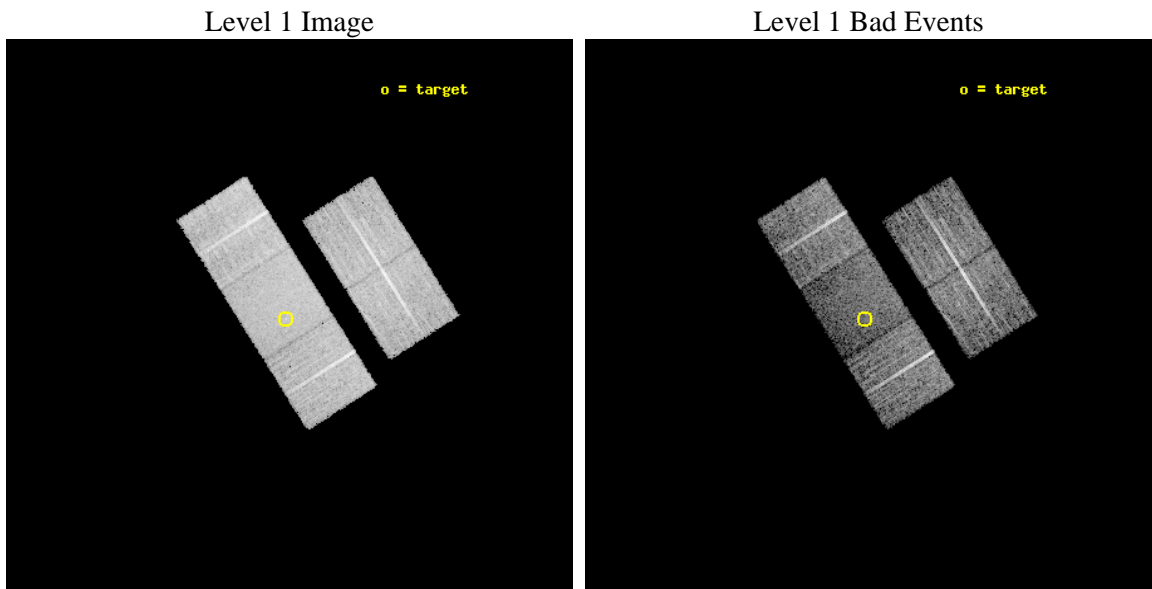
seq_num	700789	Sequence number
obs_id	4110	Observation id
title	THE X-RAY PROPERTIES OF ULTRALUMINOUS INFRARED GALAXIES (ULIGS)	Pr
observer	Professor Andrew Wilson	Principal investigator
object	F12112+0305	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	183.442083	Observer's specified target RA [deg]
dec_targ	2.811778	Observer's specified target Dec [deg]
ra_nom	183.43554250622	Nominal RA [deg]
dec_nom	2.8046431279906	Nominal Dec [deg]
roll_nom	237.6730659685	Nominal Roll [deg]
revision	3	Processing version of data
ontime	10161.799980432	Sum of GTIs [s]
livetime	10029.028582679	Livetime [s]
ontime2	10161.799980432	Sum of GTIs [s]
ontime3	10158.659020185	Sum of GTIs [s]
ontime6	10161.799980432	Sum of GTIs [s]
ontime7	10161.799980432	Sum of GTIs [s]
ontime8	10161.799980432	Sum of GTIs [s]
l2events	44697	Number of level 2 events



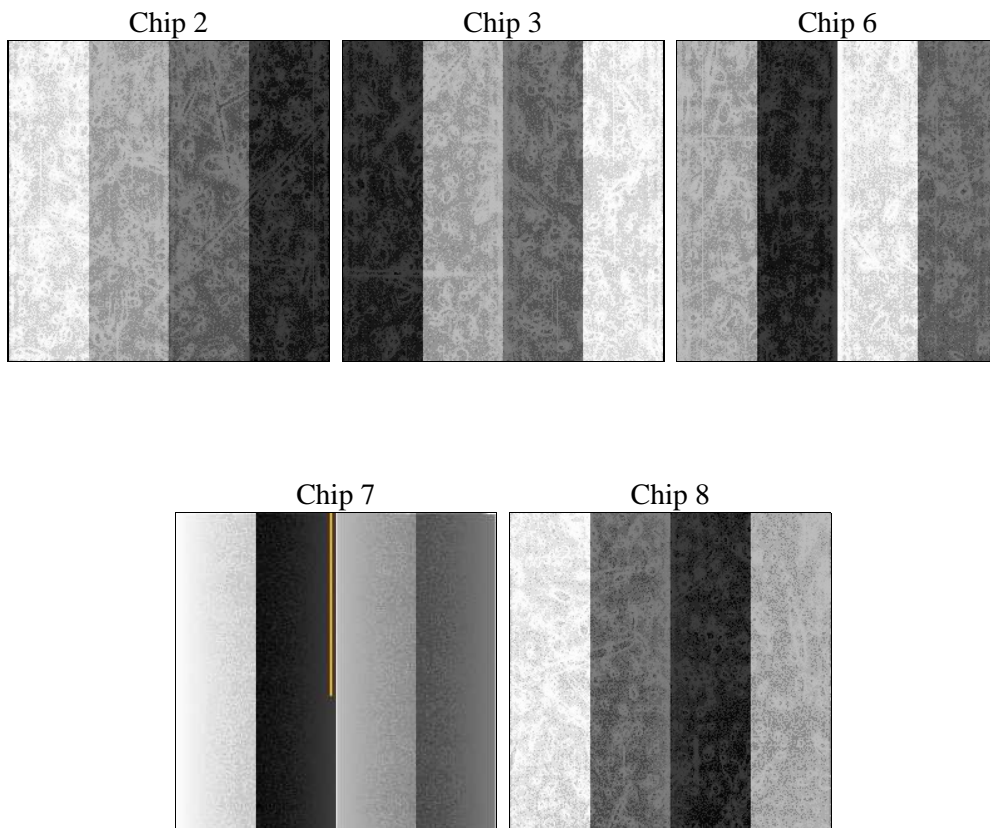
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	10161.799980432	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	10161.799980432	Sum of GTIs [s]
date	2012-10-26T16:54:25	Date and time of file creation	ontime3	10158.659020185	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	10161.799980432	Sum of GTIs [s]
			ontime7	10161.799980432	Sum of GTIs [s]
			ontime8	10161.799980432	Sum of GTIs [s]
			l1events	298988	Number of level 1 events

### 2.1.4 Events

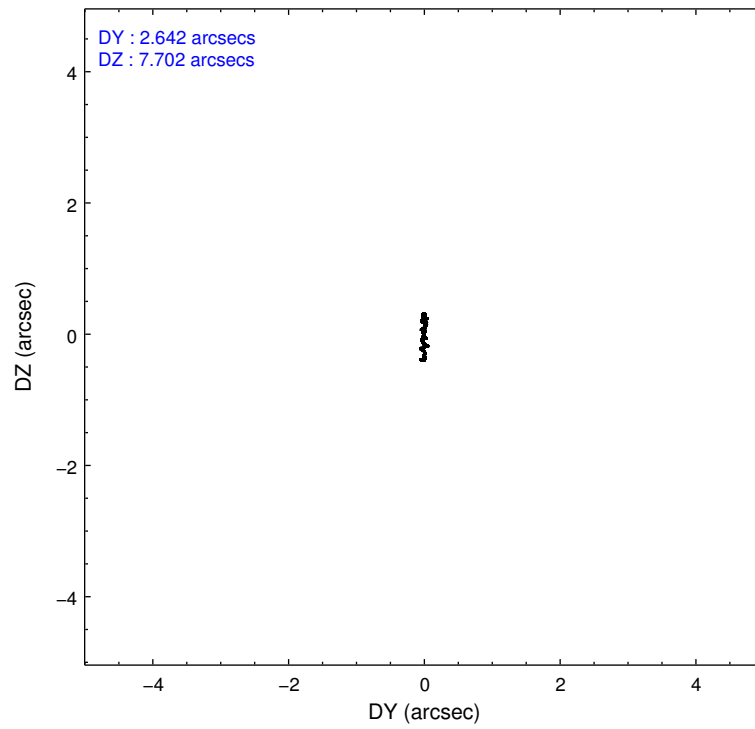
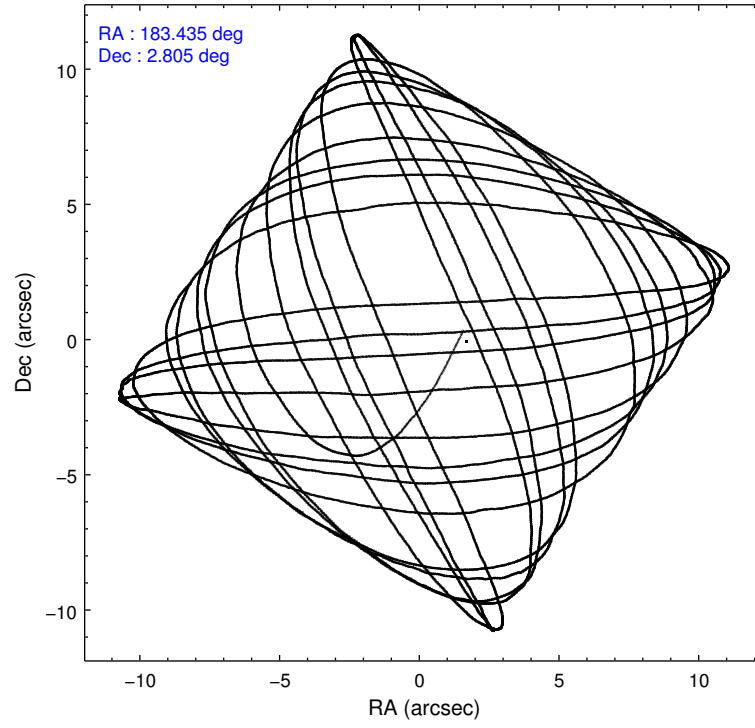
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	55596	56018	56991	60887	69496
rejected events	50466	51078	51502	34409	54965
rejected %	90%	91%	90%	56%	79%

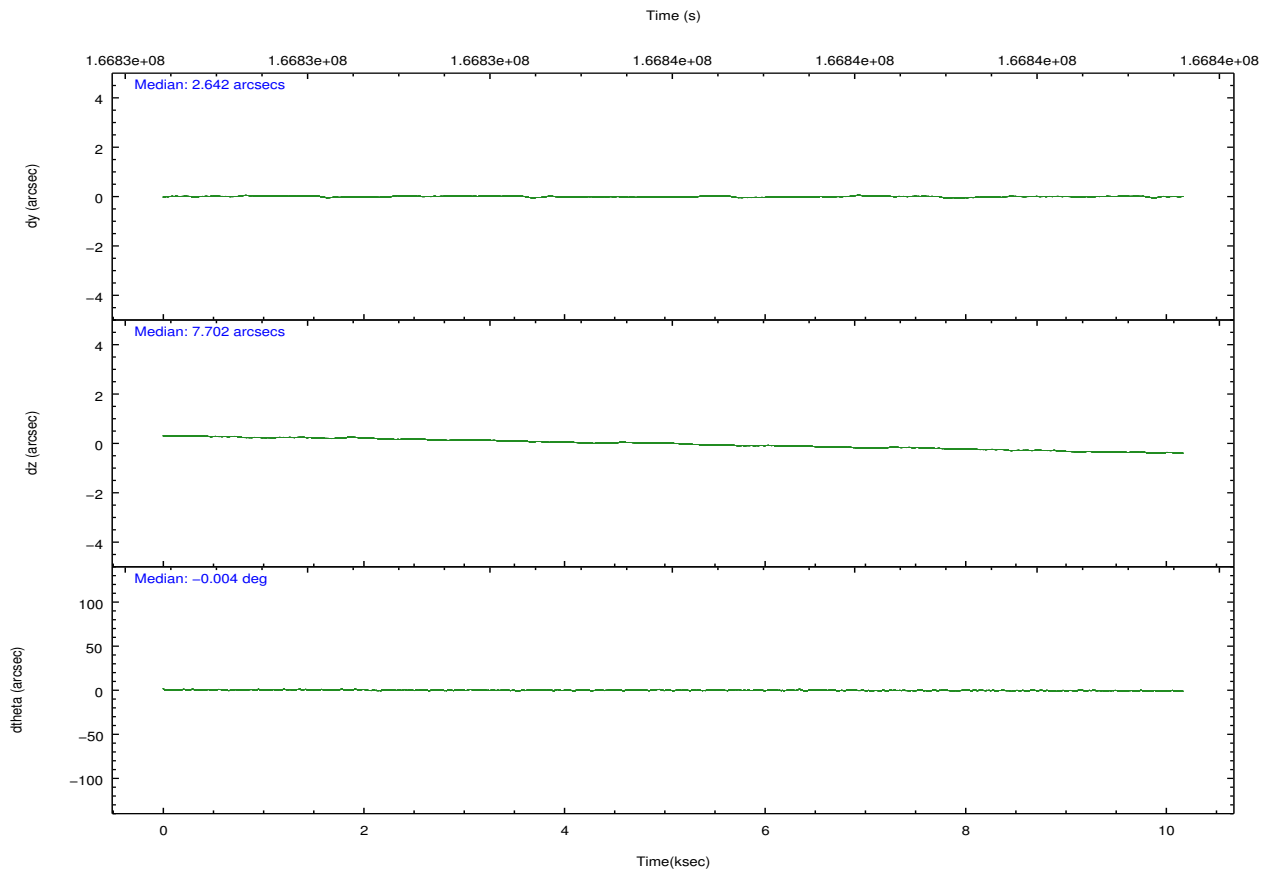
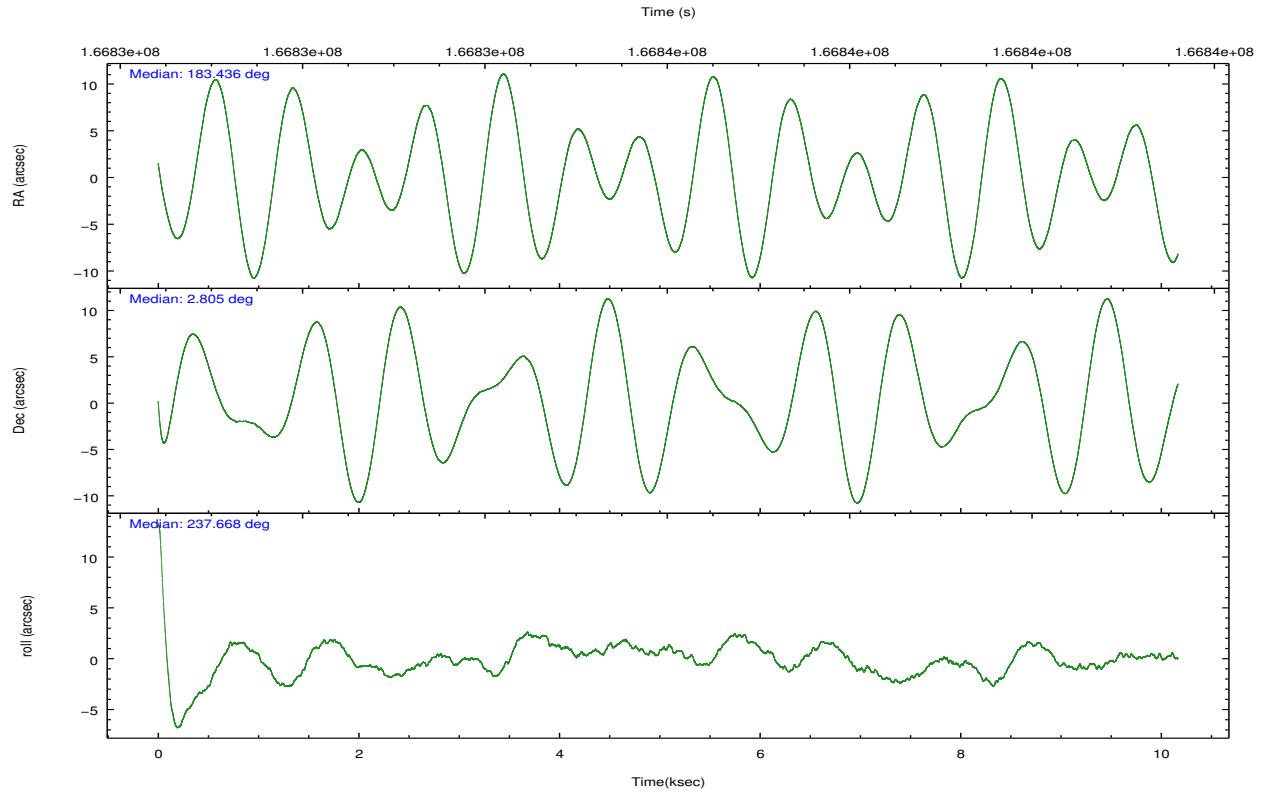
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	1911	1902	2041	2628	4829
	3%	3%	3%	4%	6%
grade 1 events	23	29	22	52	37
	0%	0%	0%	0%	0%
grade 2 events	1243	1051	1233	5719	3363
	2%	1%	2%	9%	4%
grade 3 events	654	603	670	2749	1861
	1%	1%	1%	4%	2%
grade 4 events	617	586	651	2703	1646
	1%	1%	1%	4%	2%
grade 5 events	1759	2024	2175	6435	3013
	3%	3%	3%	10%	4%
grade 6 events	934	1024	1183	13940	3796
	1%	1%	2%	22%	5%
grade 7 events	48455	48799	49016	26661	50951
	87%	87%	86%	43%	73%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	183.436290	183.4355425062248	Subarray requested	NONE	NONE
[deg] Pointing Dec	2.831867	2.804643127990631	Alternating exposures requested	N	N
[deg] Pointing Roll	237.516389	237.6730659685042	[s] Primary exposure time	0.000000	3.1
[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)	166831093.184000	166829869.2357			
Observation start date	2003-04-15T21:57:09	2003-04-15T21:37:49			
[s] Observation end time (MET)	166841093.184000	166841719.7737			
Observation end date	2003-04-16T00:43:49	2003-04-16T00:55:19			
Read mode	TIMED	TIMED			

## 2.3 Aspect



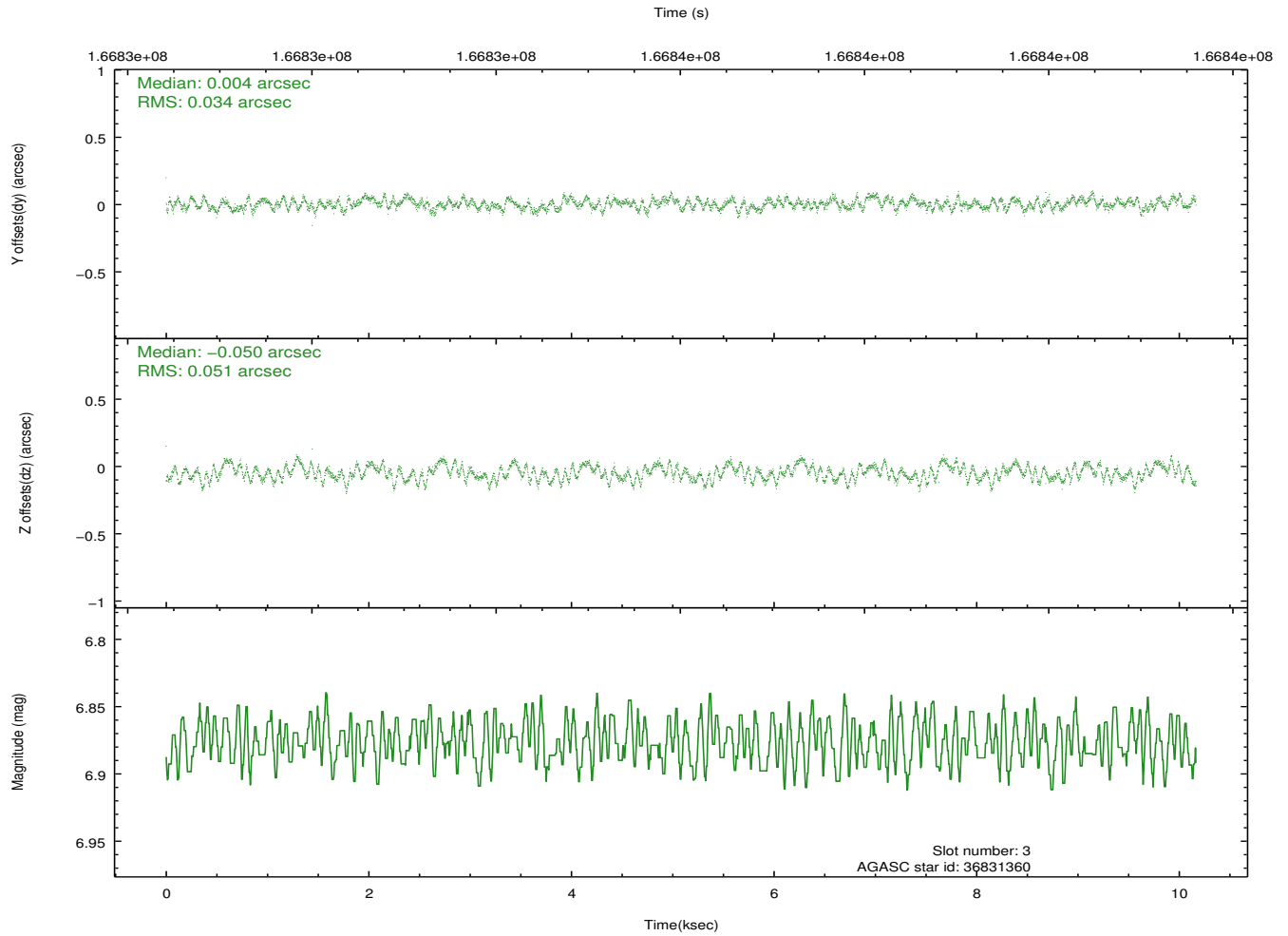
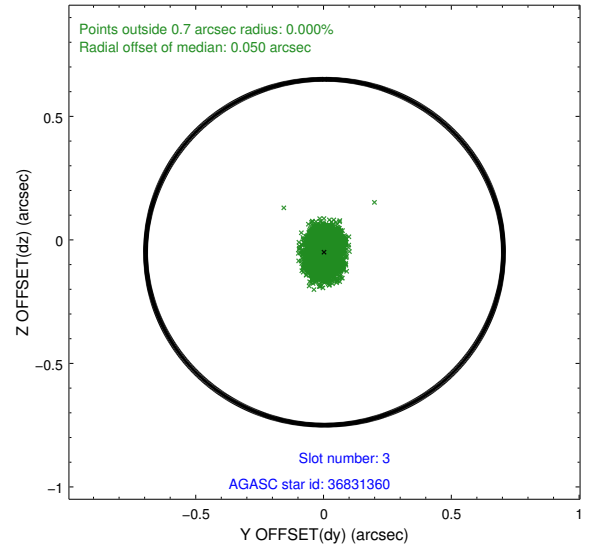
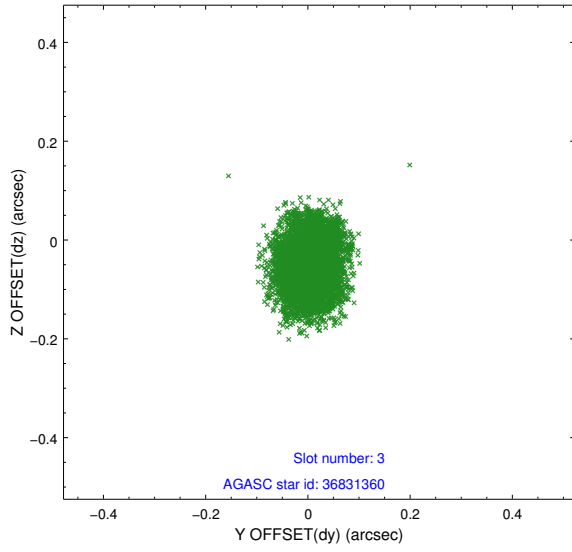


### Slot Statistics

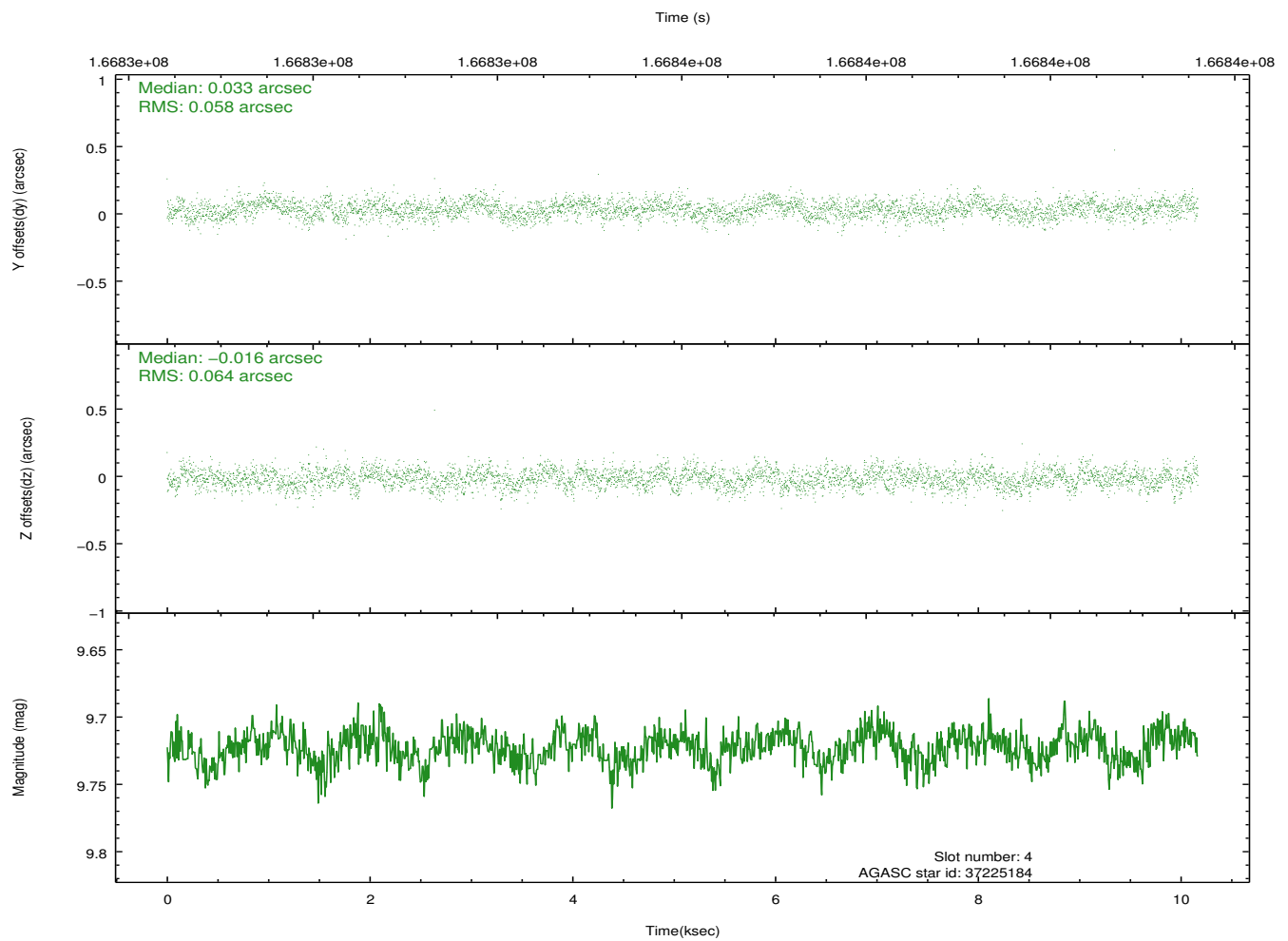
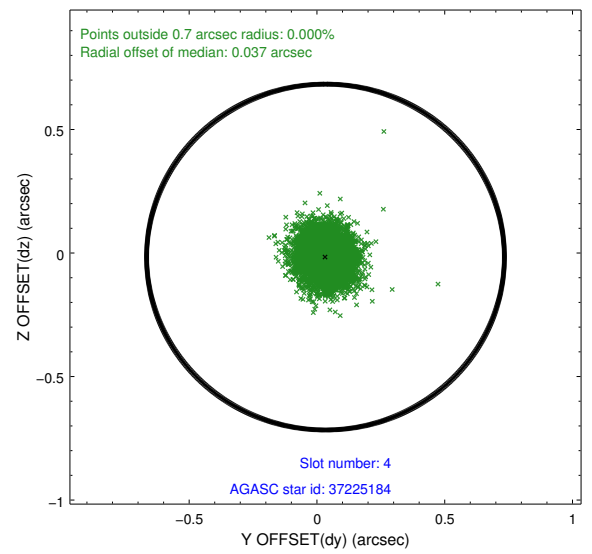
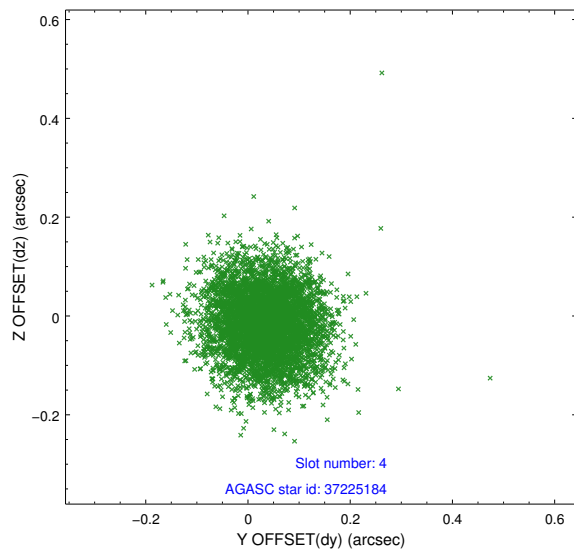
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	2480	-0.014	-0.002	0.007	0.011	0.000000	0.000000	-755.29	-1728.86
1	FID	ACIS-S-4	7.20	2480	-0.015	0.008	0.005	0.010	0.000000	0.000000	2157.76	179.10
2	FID	ACIS-S-5	7.24	2480	-0.002	0.003	0.007	0.013	0.000000	0.000000	-1807.45	173.35
3	GUIDE	36831360	6.88	4961	0.004	-0.050	0.067	0.101	183.482386	2.260219	1647.18	1245.30
4	GUIDE	37225184	9.72	4956	0.033	-0.016	0.091	0.148	183.322910	3.026545	-371.61	-719.84
5	GUIDE	37225816	8.32	4959	-0.008	0.096	0.099	0.147	182.886175	2.608011	1742.17	-1235.96
6	GUIDE	37226768	9.31	4955	0.018	-0.025	0.093	0.145	183.991879	3.019779	-1643.37	1321.16
7	GUIDE	37230440	7.75	4960	-0.051	-0.004	0.060	0.100	183.124640	3.404103	-1136.38	-2051.07

## 2.4 Star Slots

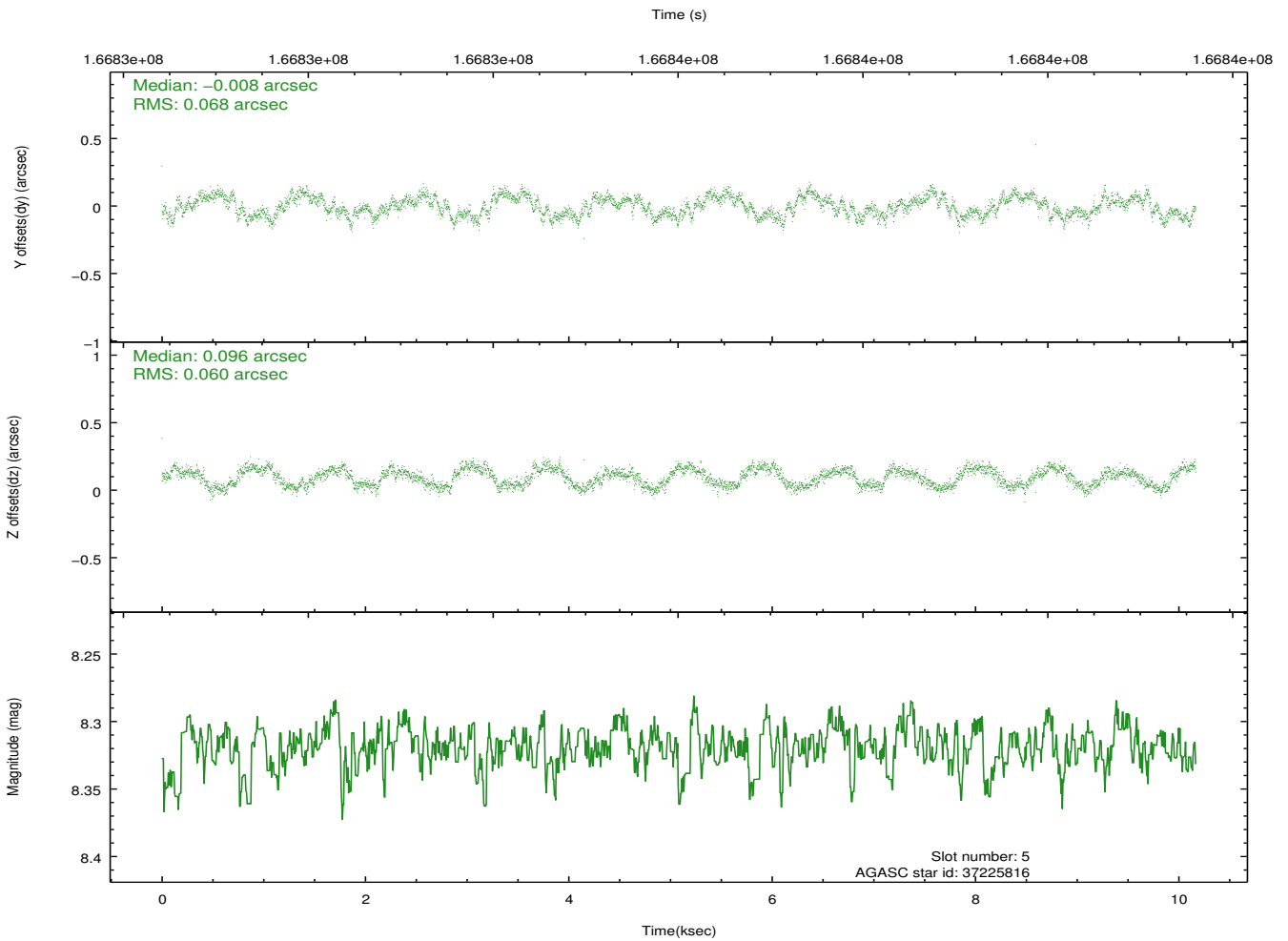
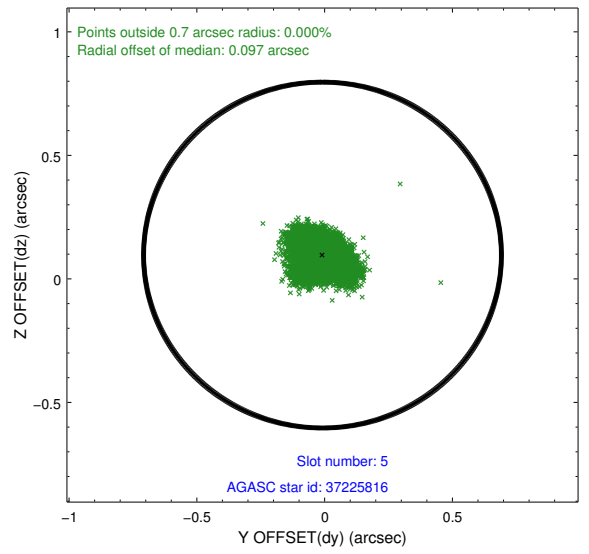
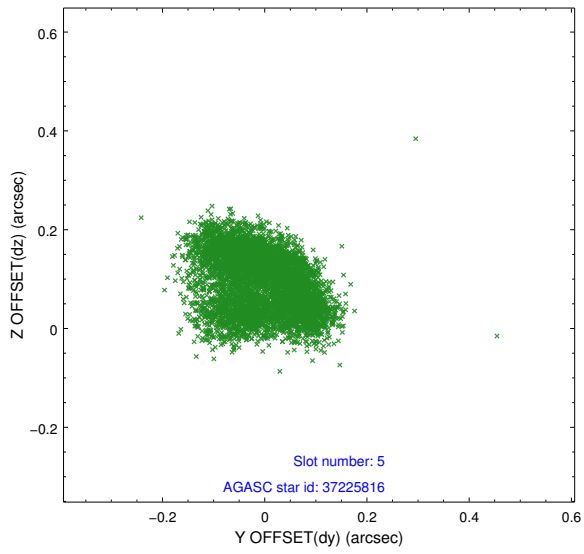
### 2.4.1 Slot 3



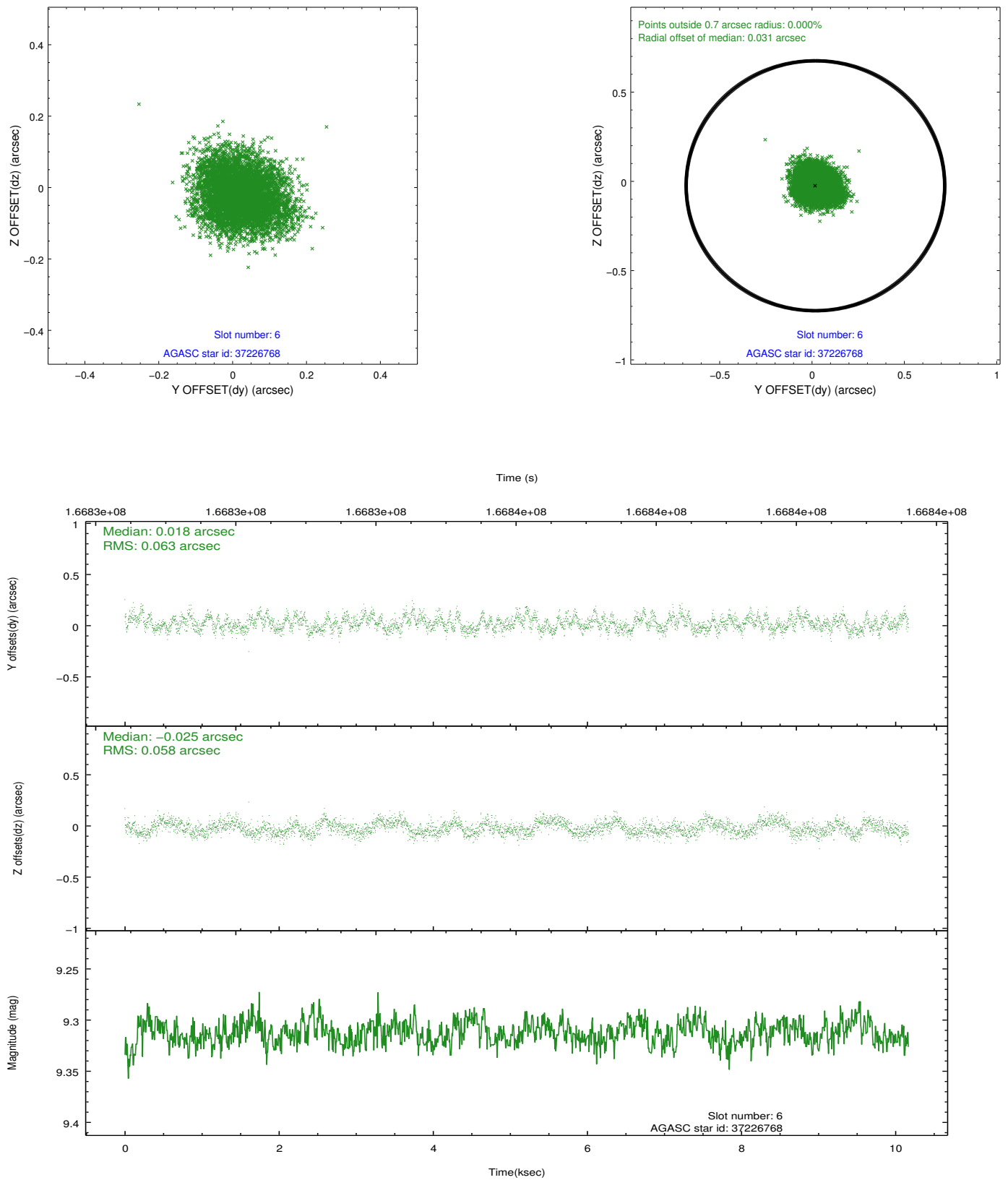
## 2.4.2 Slot 4



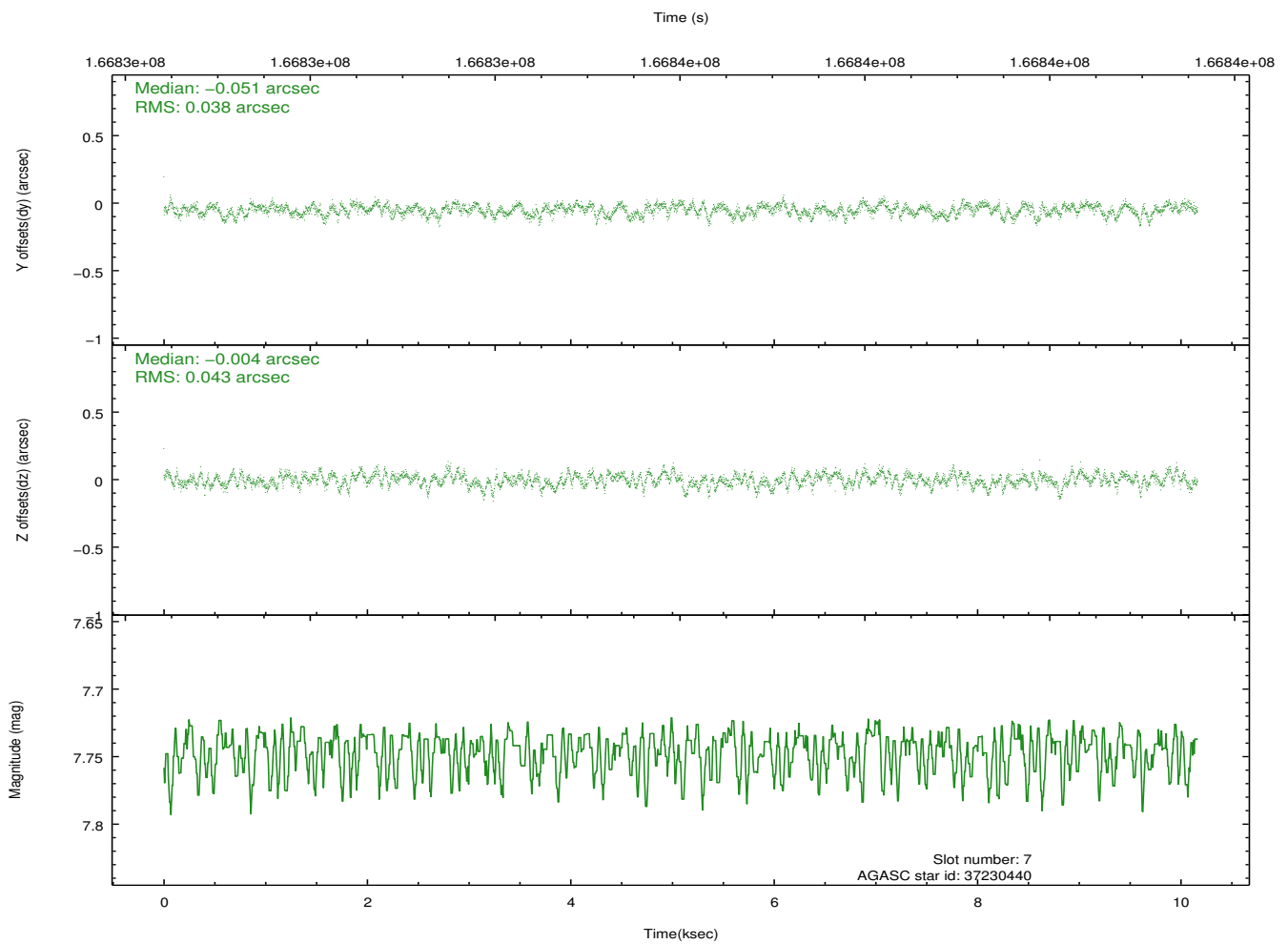
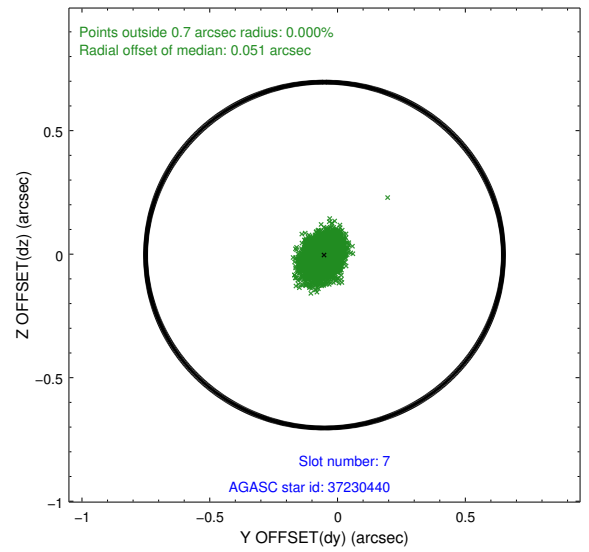
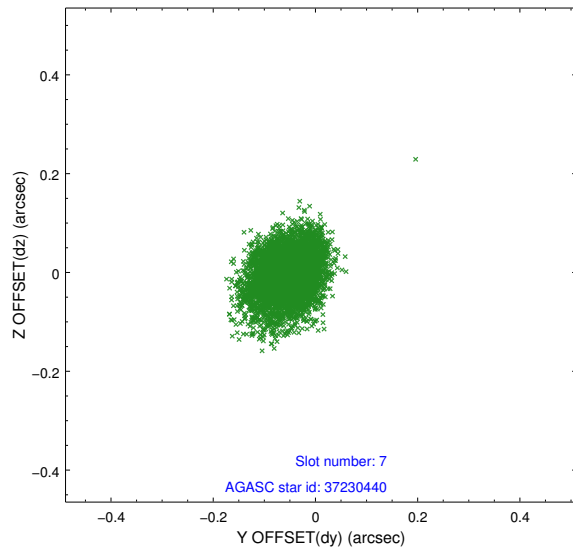
### 2.4.3 Slot 5



## 2.4.4 Slot 6

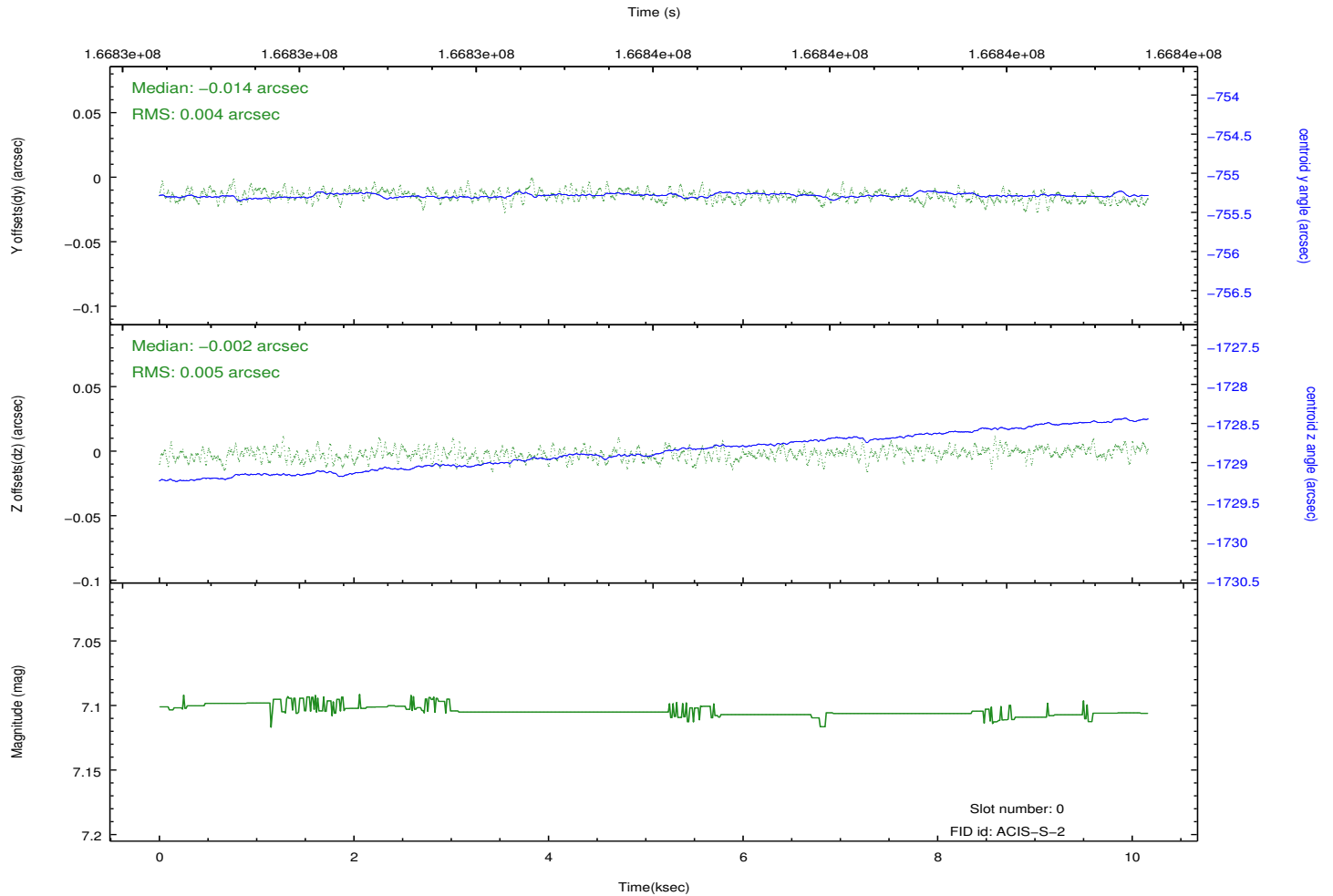
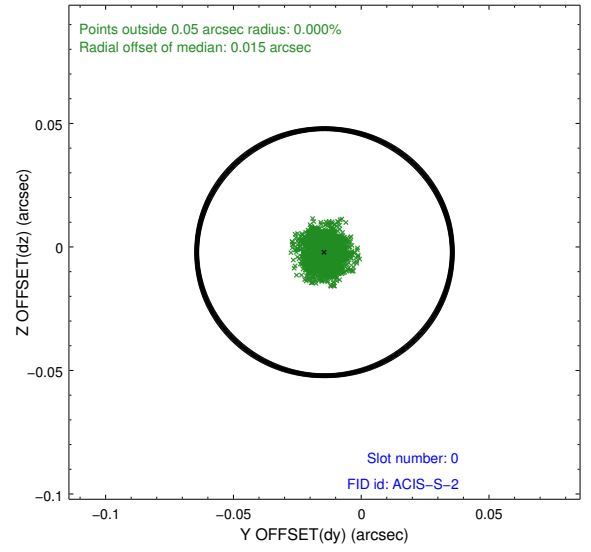
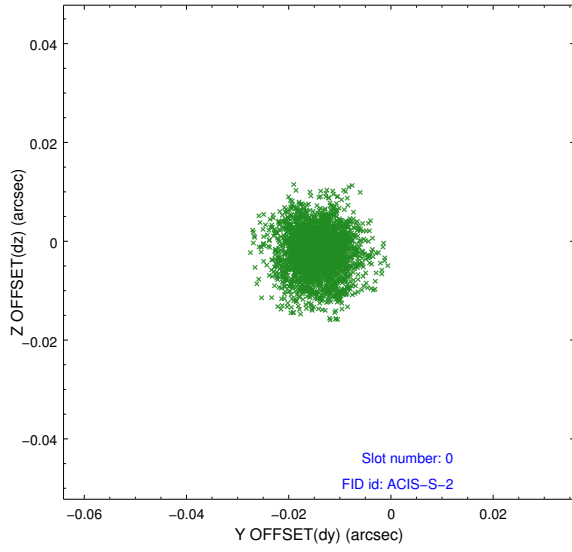


## 2.4.5 Slot 7

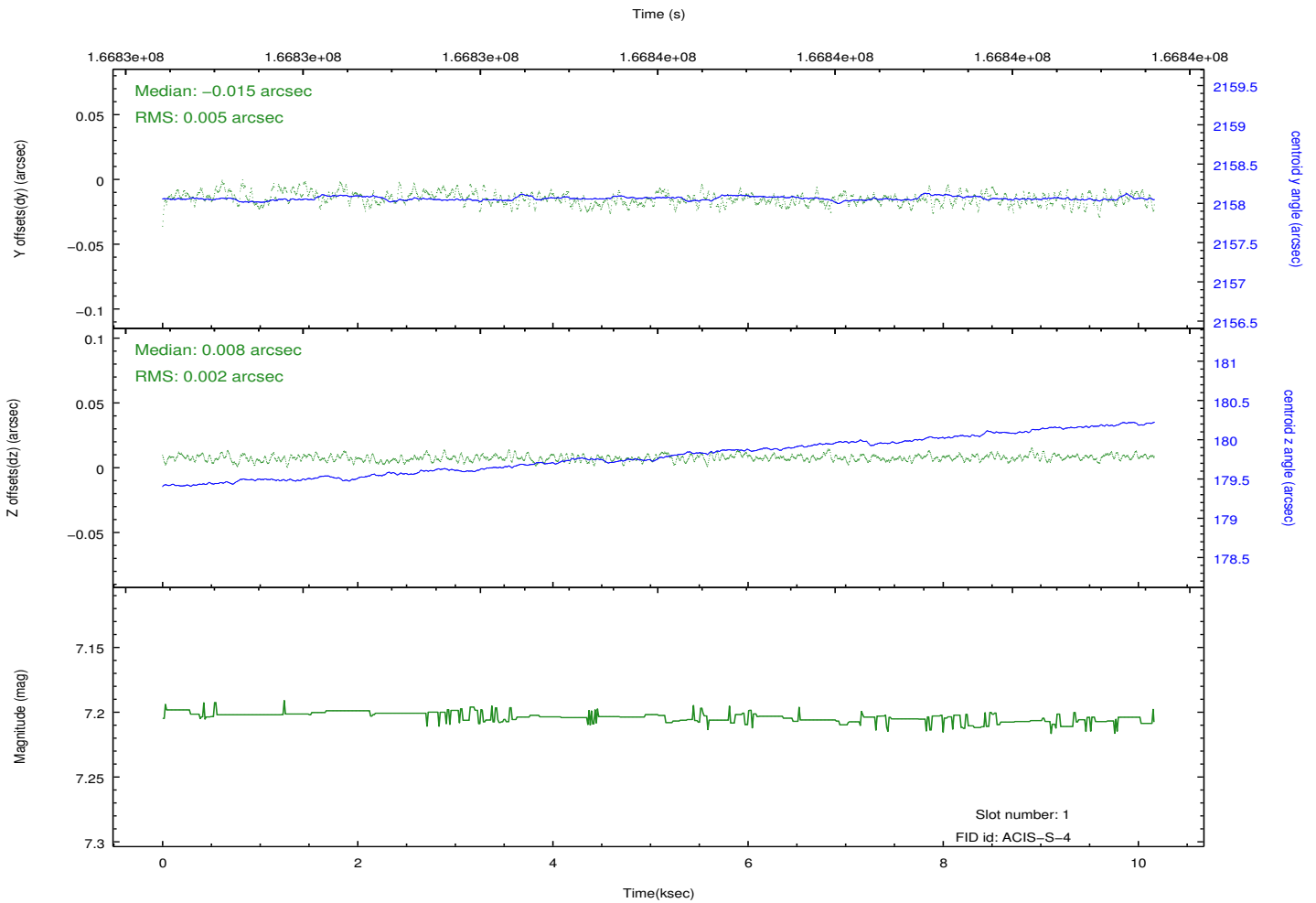
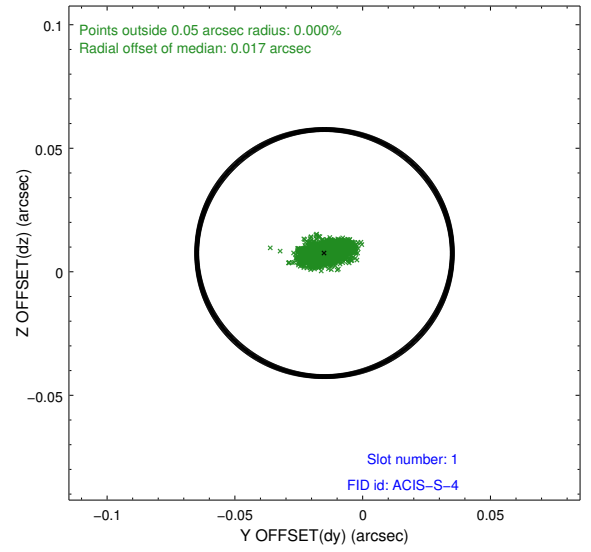
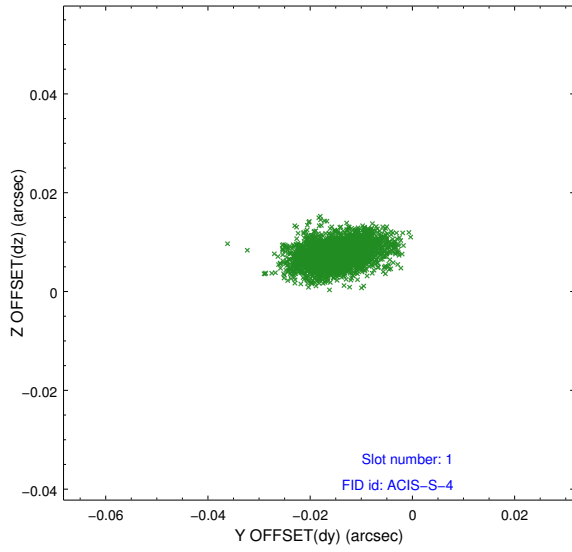


## 2.5 FID Slots

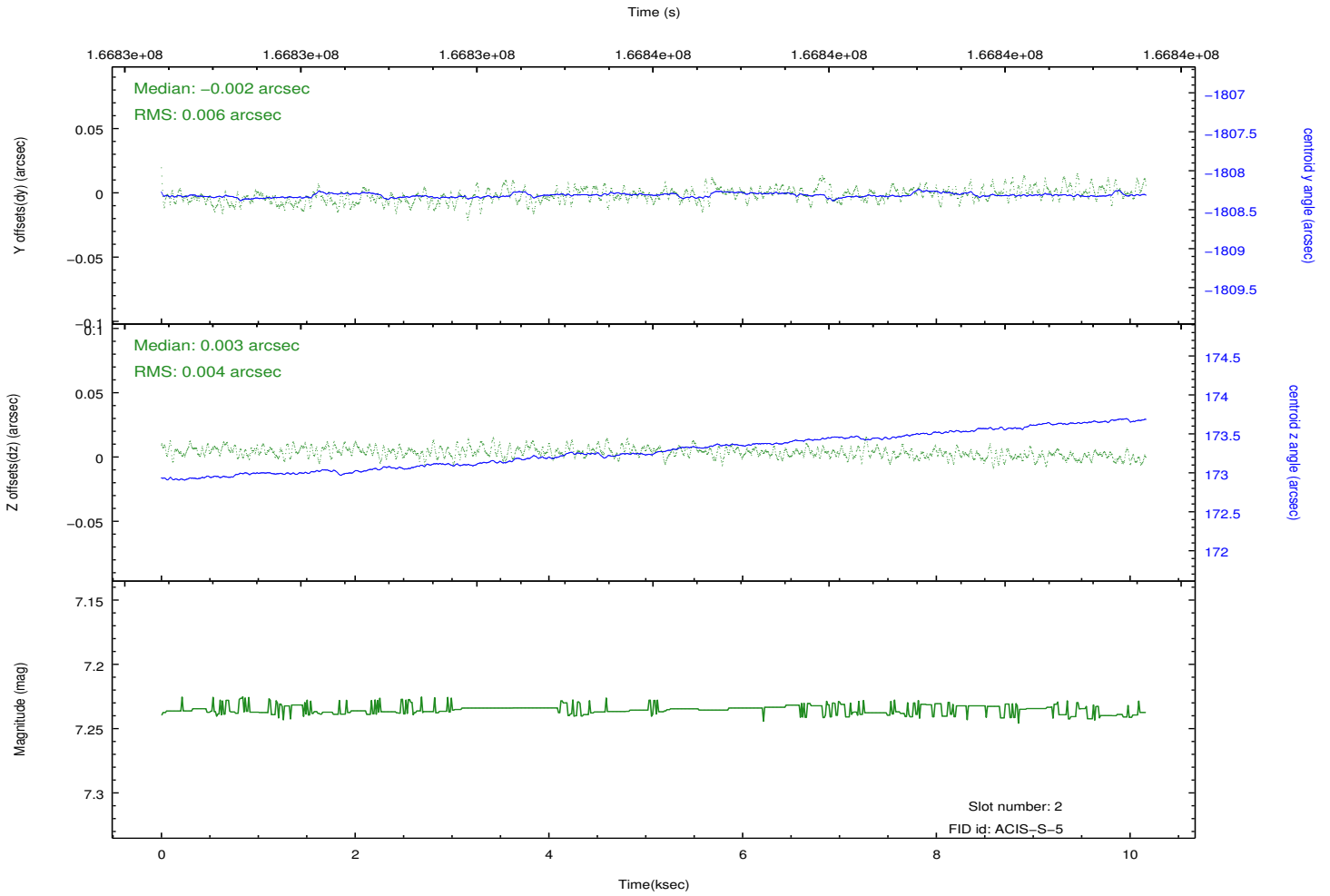
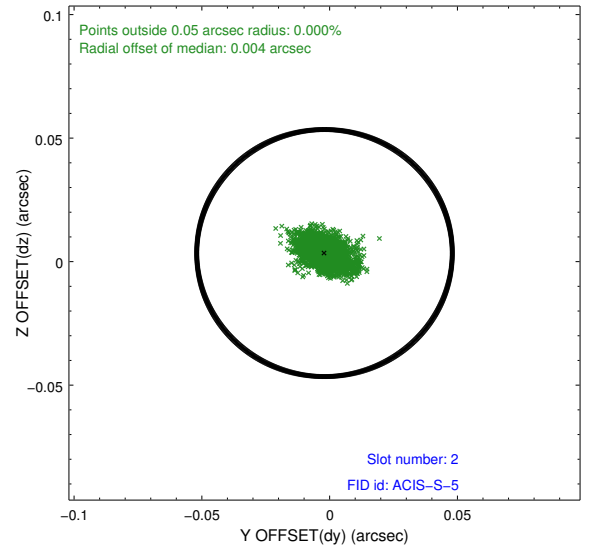
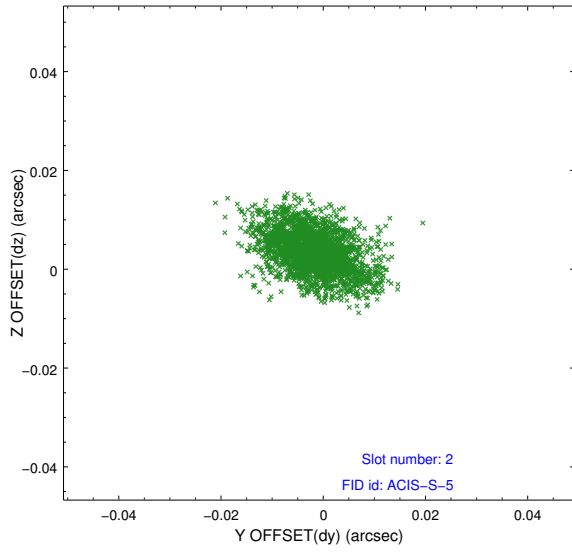
### 2.5.1 Slot 0



## 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)	2012.11.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.161

## A.2 Comments