

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4107 - L2 Version 3  
Chandra X-Ray Center

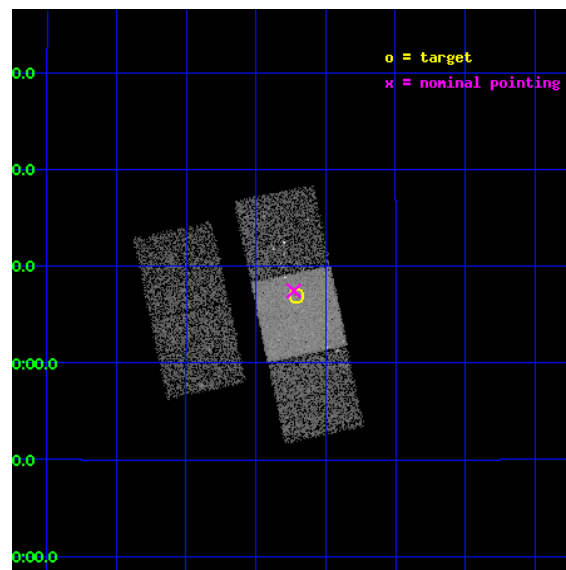
L2 Processing Date : Oct 22 2012

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# 1 Front

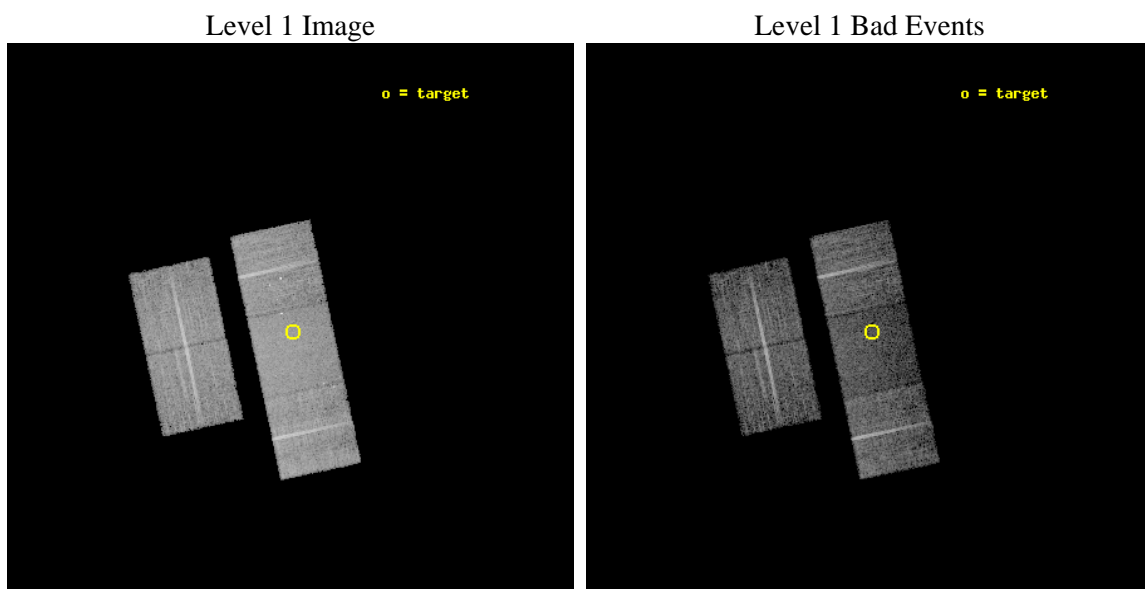
seq_num	700786	Sequence number
obs_id	4107	Observation id
title	THE X-RAY PROPERTIES OF ULTRALUMINOUS INFRARED GALAXIES (ULIGS)	Pr
observer	Professor Andrew Wilson	Principal investigator
object	F10190+1322	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	155.428333	Observer's specified target RA [deg]
dec_targ	13.115361	Observer's specified target Dec [deg]
ra_nom	155.43208816666	Nominal RA [deg]
dec_nom	13.124287041059	Nominal Dec [deg]
roll_nom	77.942117059689	Nominal Roll [deg]
revision	3	Processing version of data
ontime	10130.799980491	Sum of GTIs [s]
livetime	9998.4336205598	Livetime [s]
ontime2	10118.236079544	Sum of GTIs [s]
ontime3	10130.799980491	Sum of GTIs [s]
ontime6	10127.659000278	Sum of GTIs [s]
ontime7	10130.799980491	Sum of GTIs [s]
ontime8	10130.799980491	Sum of GTIs [s]
l2events	48373	Number of level 2 events



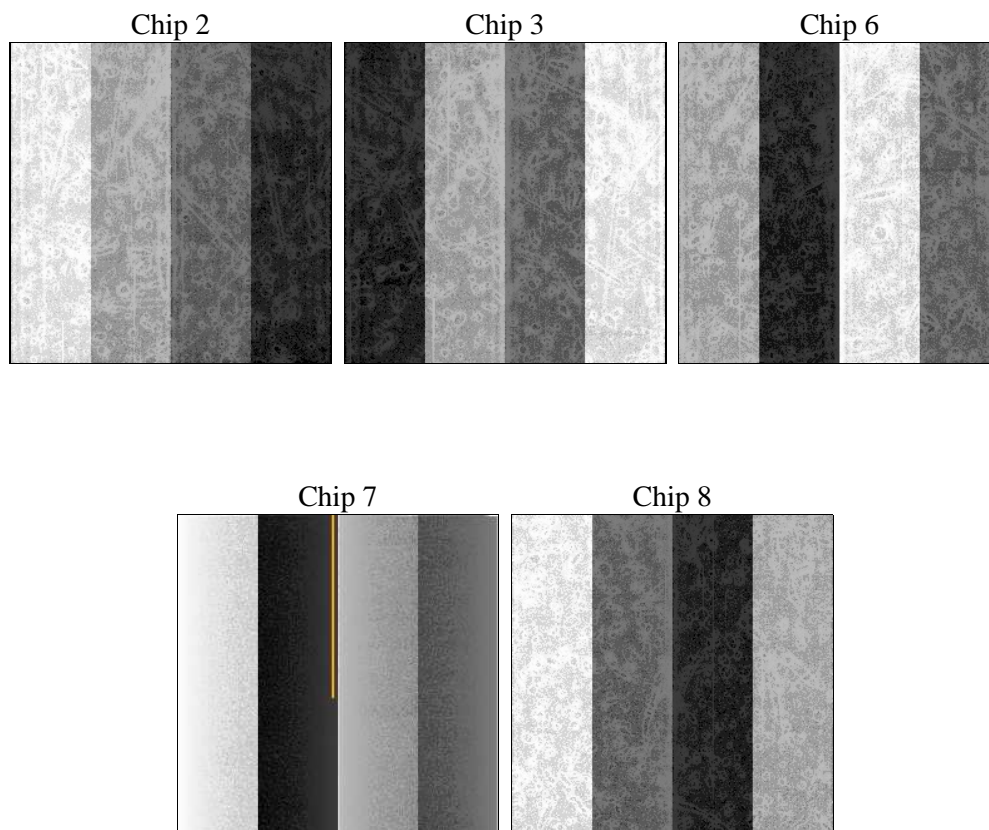
## 2 OBI

### 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	10130.799980491	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime2	10118.236079544	Sum of GTIs [s]
date	2012-10-22T04:01:46	Date and time of file creation	ontime3	10130.799980491	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	10127.659000278	Sum of GTIs [s]
			ontime7	10130.799980491	Sum of GTIs [s]
			ontime8	10130.799980491	Sum of GTIs [s]
			l1events	298602	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	54490	53505	59692	61671	69244
rejected events	49368	48491	52940	32867	54075
rejected %	90%	90%	88%	53%	78%

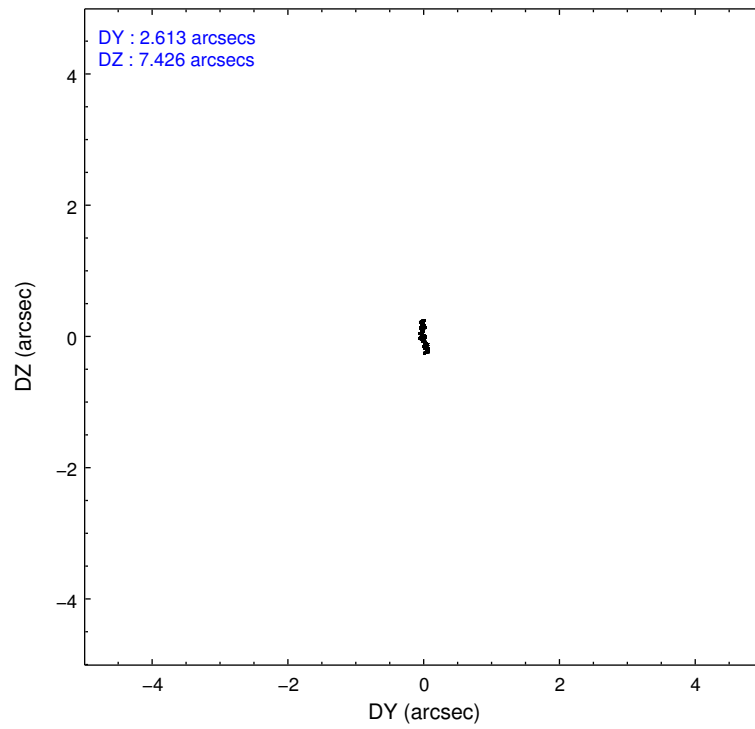
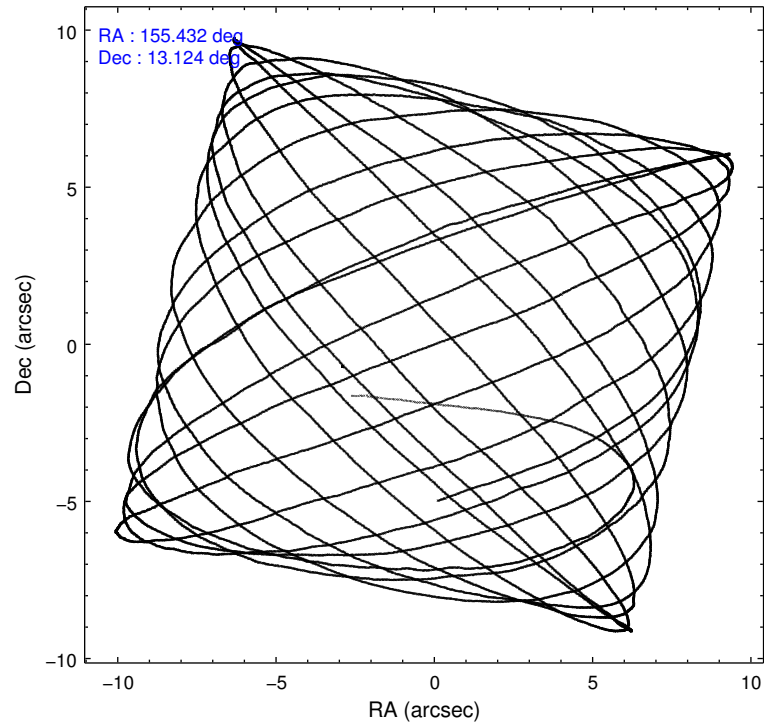
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	1915	1800	2890	2838	4835
	3%	3%	4%	4%	6%
grade 1 events	27	30	36	39	57
	0%	0%	0%	0%	0%
grade 2 events	1167	1063	1302	5919	3305
	2%	1%	2%	9%	4%
grade 3 events	605	606	688	2846	1705
	1%	1%	1%	4%	2%
grade 4 events	598	583	682	2741	1650
	1%	1%	1%	4%	2%
grade 5 events	1682	2020	2241	6377	3090
	3%	3%	3%	10%	4%
grade 6 events	914	1029	1267	14940	3916
	1%	1%	2%	24%	5%
grade 7 events	47582	46374	50586	25971	50686
	87%	86%	84%	42%	73%

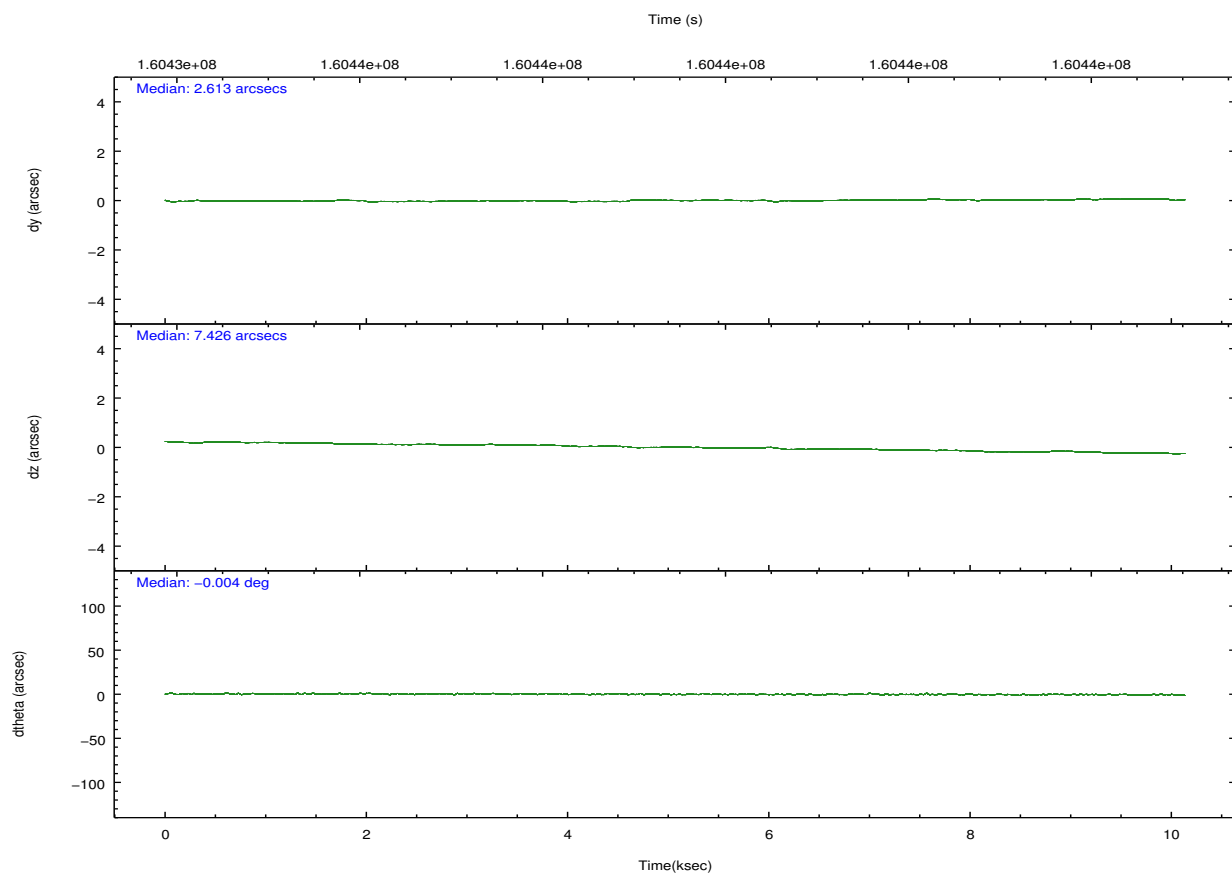
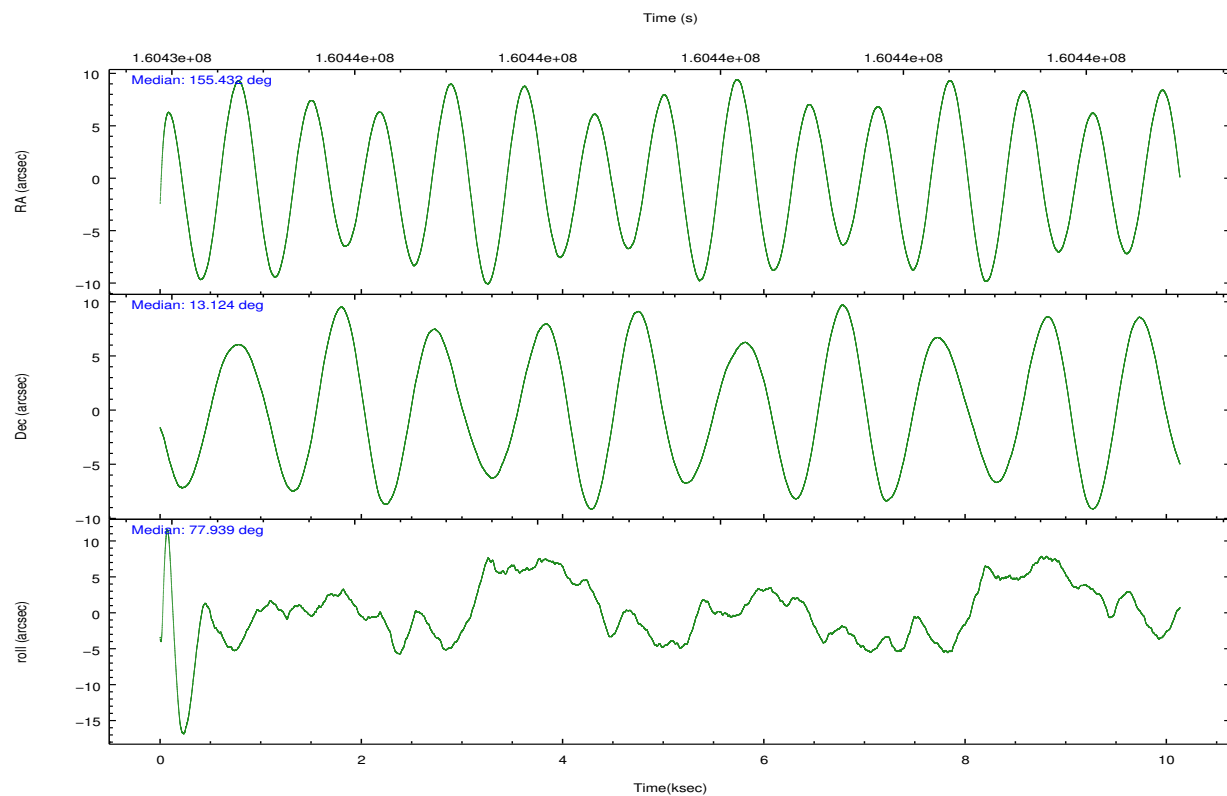


## 2.2 Compared Parameters

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	155.441048	155.4320881666552	Subarray requested	NONE	NONE
[deg] Pointing Dec	13.098526	13.12428704105919	Alternating exposures requested	N	N
[deg] Pointing Roll	77.783480	77.94211705968868	[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)	160434520.184000	160433470.75393			
Observation start date	2003-01-31T21:07:36	2003-01-31T20:51:10			
[s] Observation end time (MET)	160444520.184000	160445090.15441			
Observation end date	2003-01-31T23:54:16	2003-02-01T00:04:50			
Read mode	TIMED	TIMED			

## 2.3 Aspect



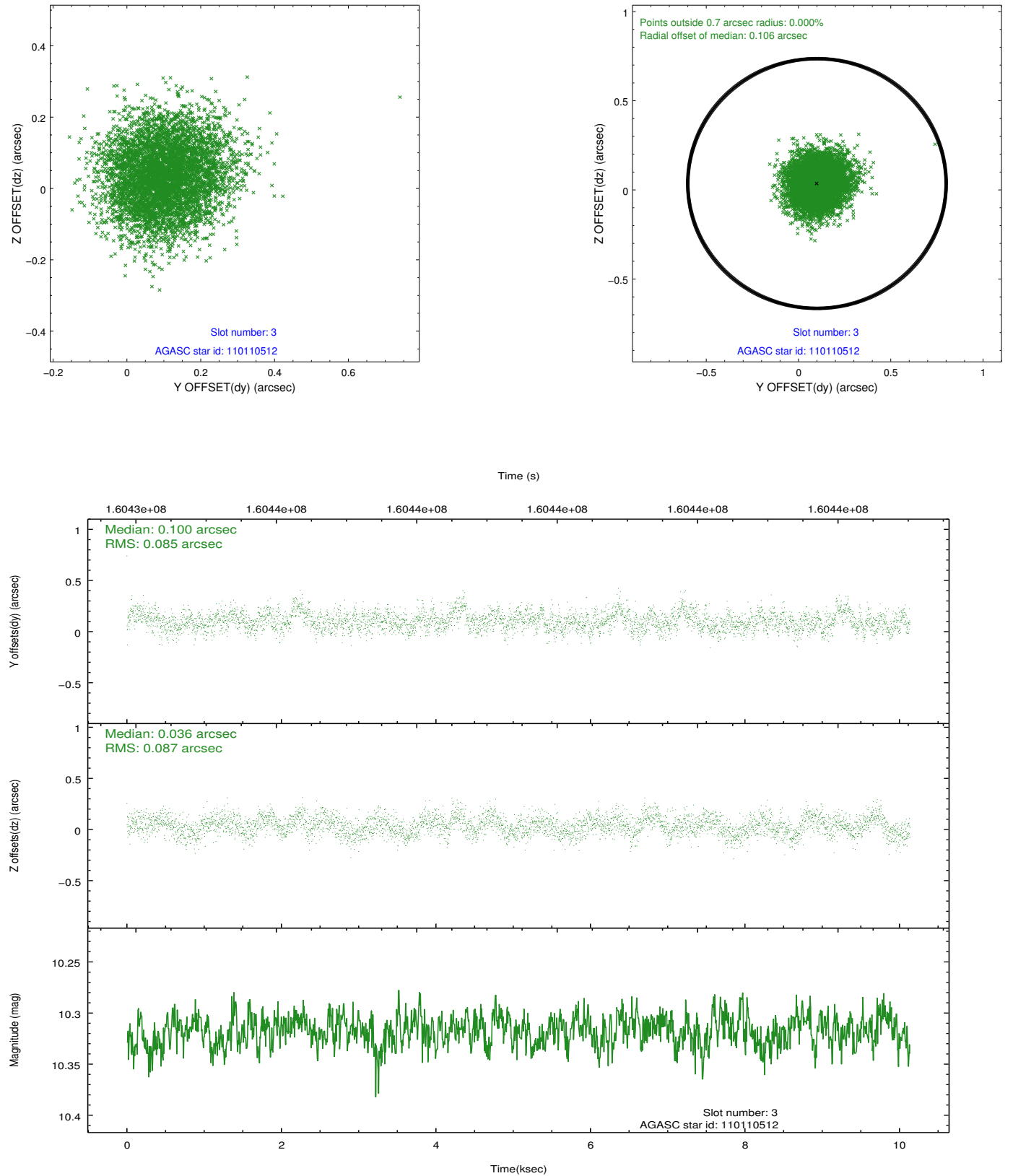


### Slot Statistics

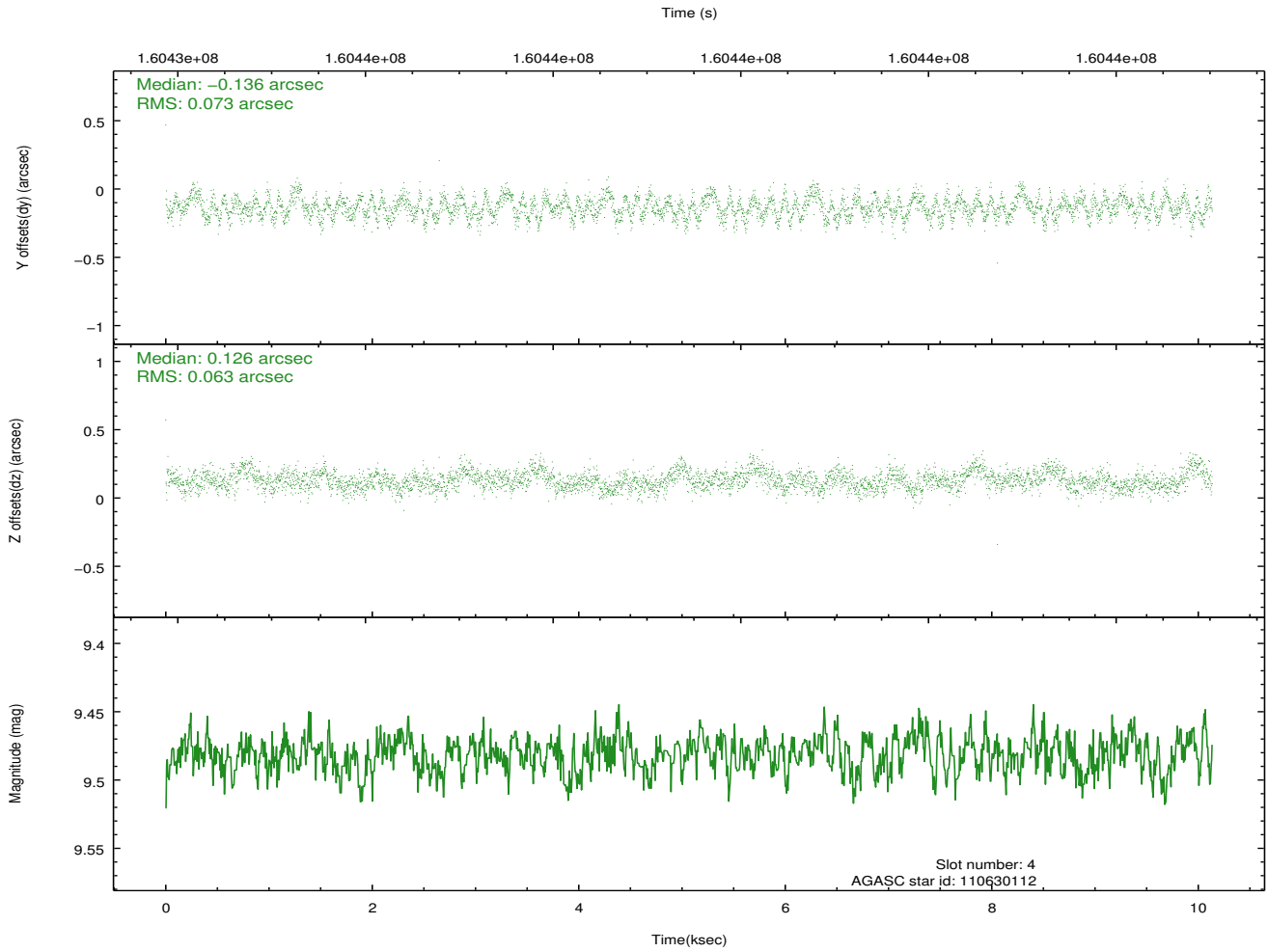
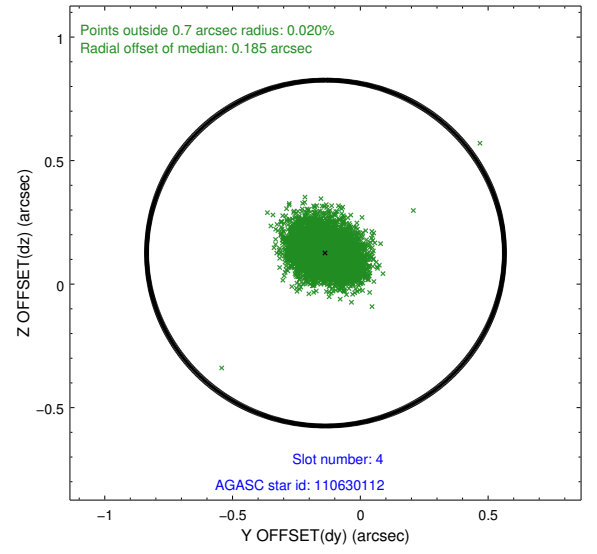
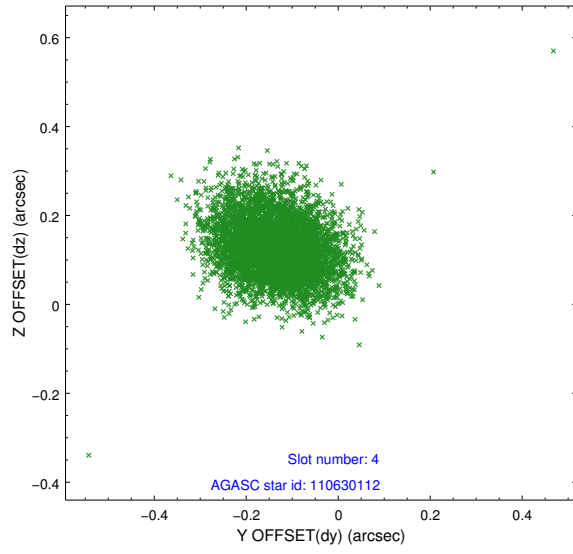
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	2472	-0.016	0.001	0.008	0.012	0.000000	0.000000	-755.26	-1728.60
1	FID	ACIS-S-4	7.20	2472	-0.015	0.008	0.006	0.011	0.000000	0.000000	2157.78	179.35
2	FID	ACIS-S-5	7.23	2472	0.001	0.000	0.007	0.013	0.000000	0.000000	-1807.41	173.61
3	GUIDE	110110512	10.32	4940	0.100	0.036	0.131	0.208	155.729481	12.490843	-1922.45	-1453.39
4	GUIDE	110630112	9.48	4940	-0.136	0.126	0.103	0.163	156.114290	13.274051	1119.88	-2170.94
5	GUIDE	110633832	9.61	4937	-0.061	0.095	0.101	0.162	156.003960	12.948898	-105.81	-2043.83
6	GUIDE	110634680	8.75	4942	-0.030	-0.091	0.104	0.165	156.196398	13.589213	2290.19	-2208.90
7	GUIDE	110111232	9.59	4932	0.122	-0.164	0.094	0.157	155.513352	12.428358	-2303.18	-759.34

## 2.4 Star Slots

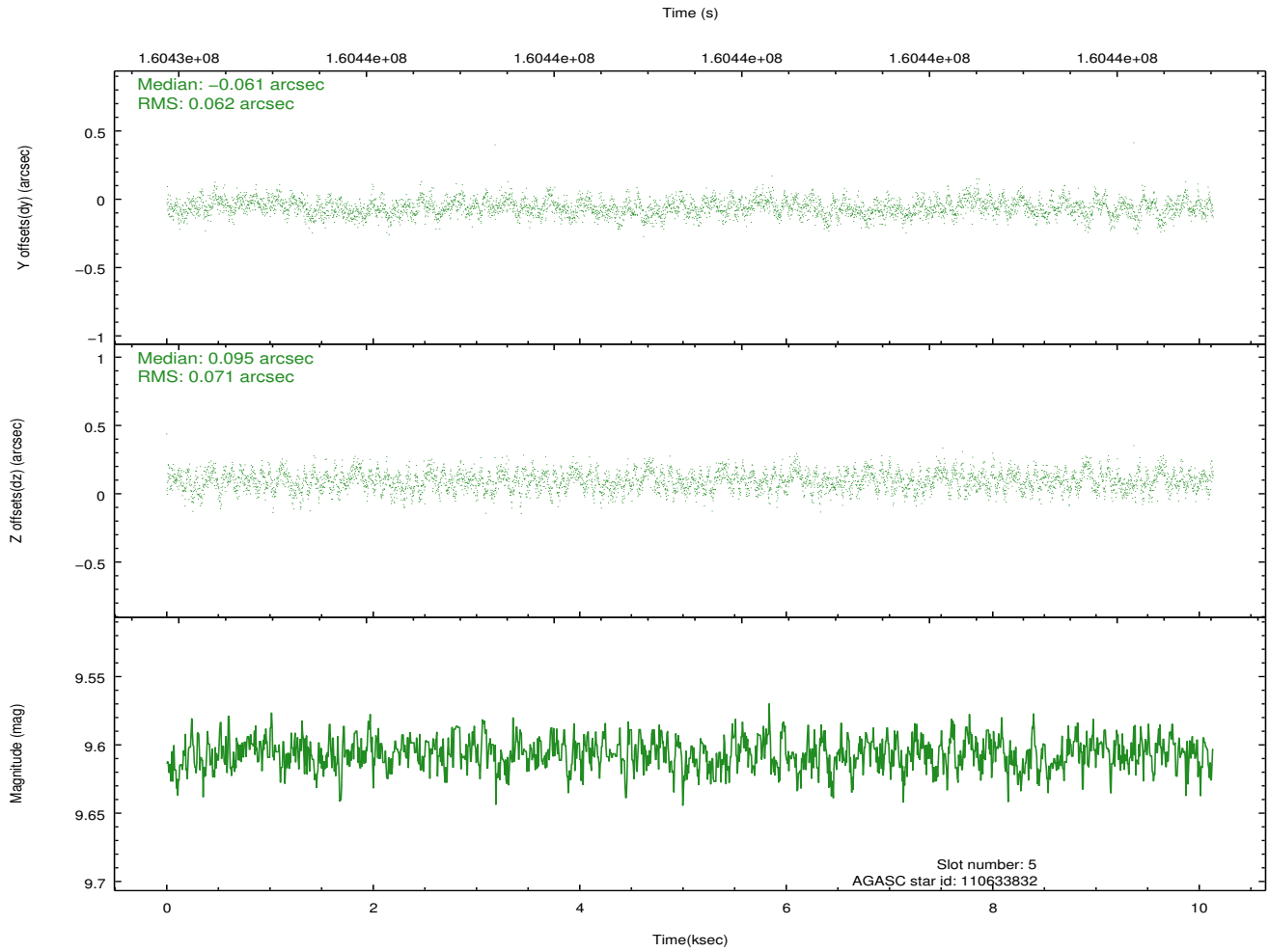
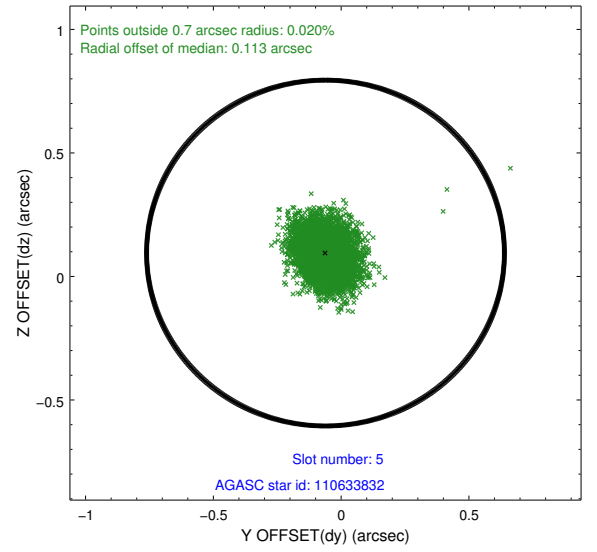
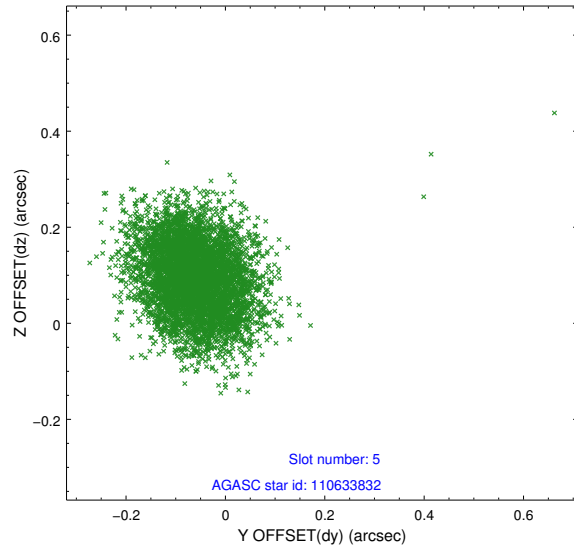
### 2.4.1 Slot 3



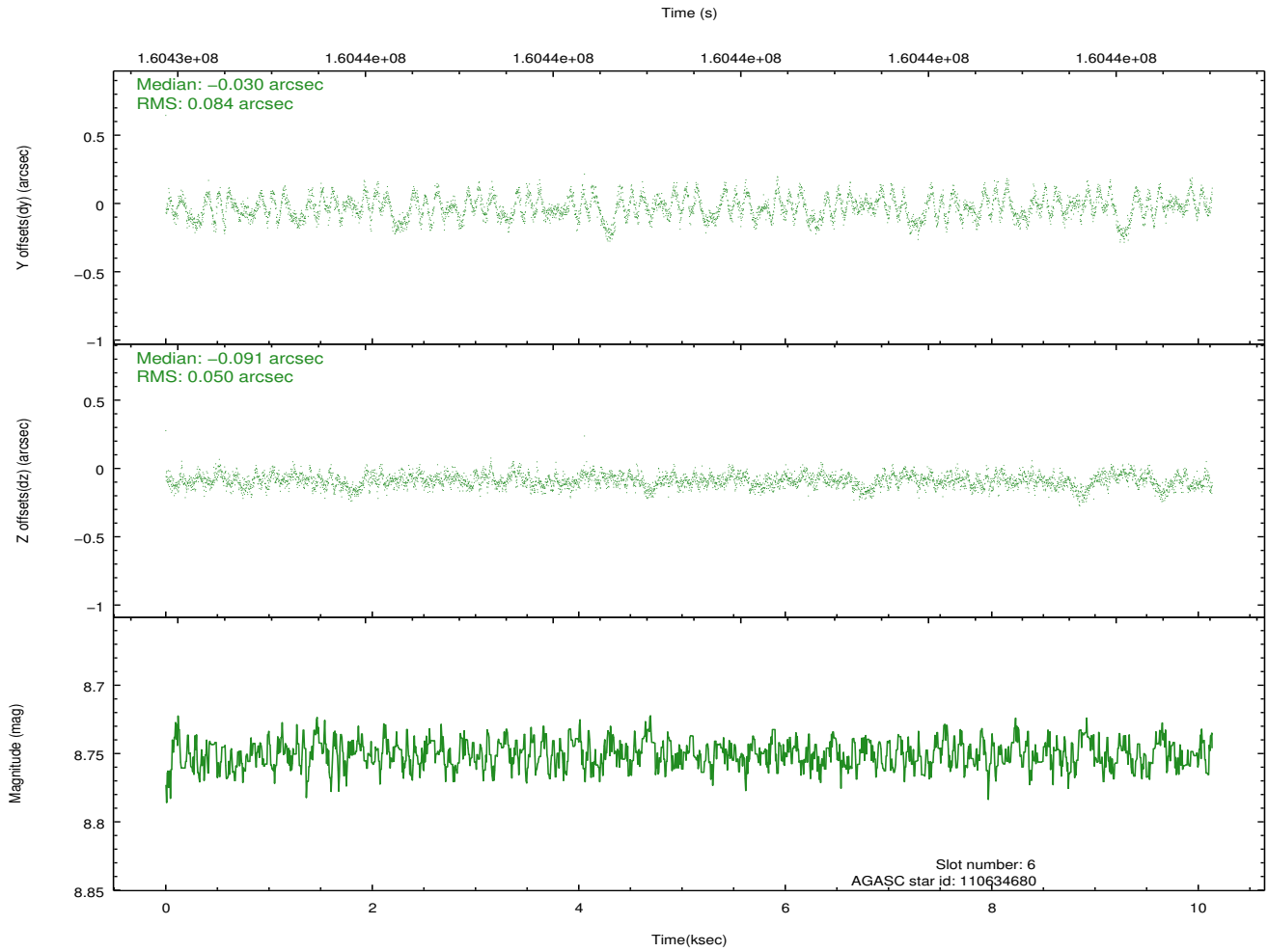
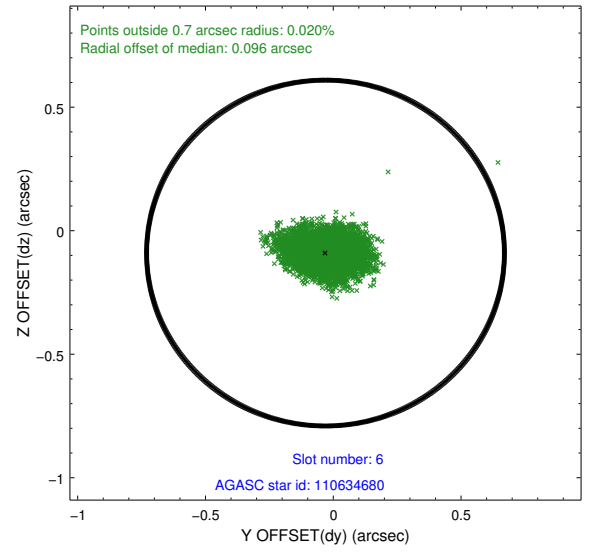
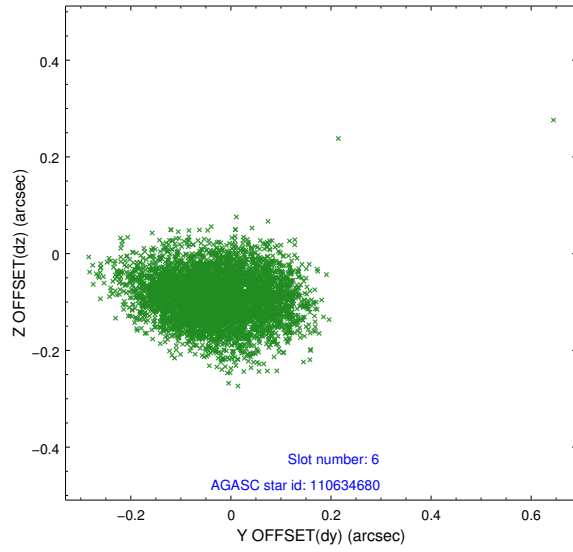
## 2.4.2 Slot 4



### 2.4.3 Slot 5

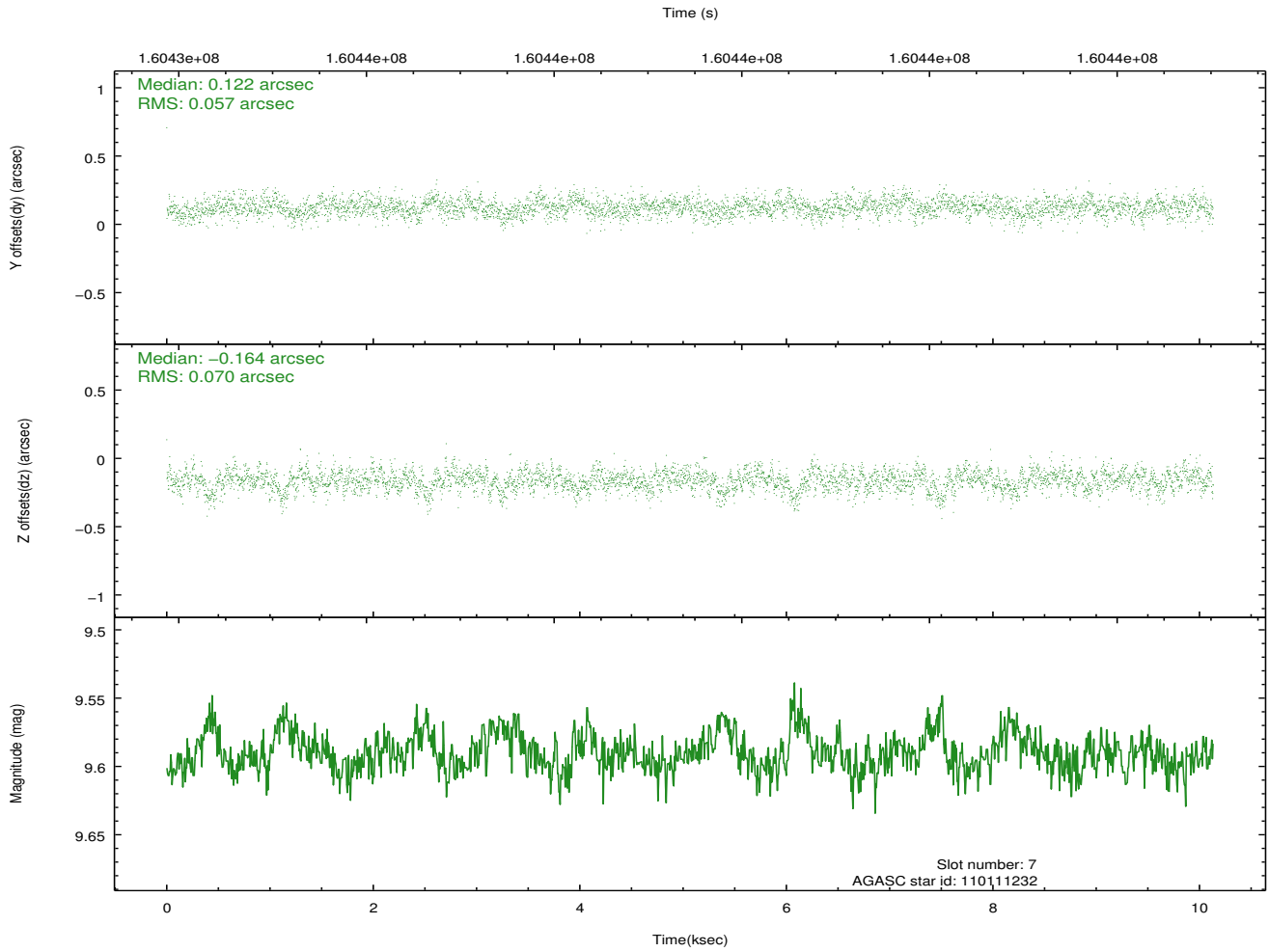
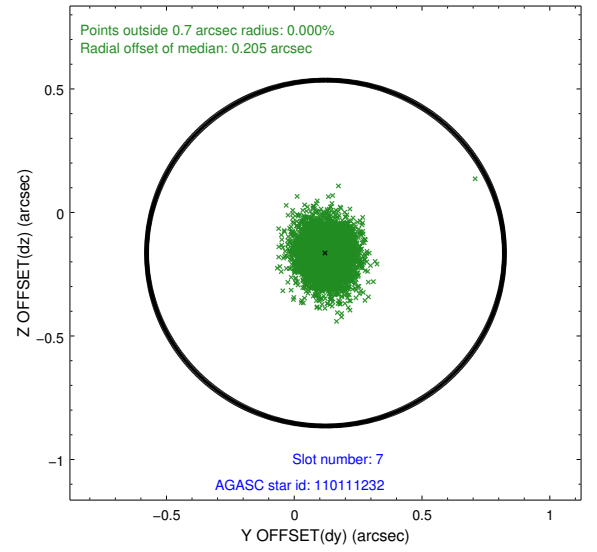
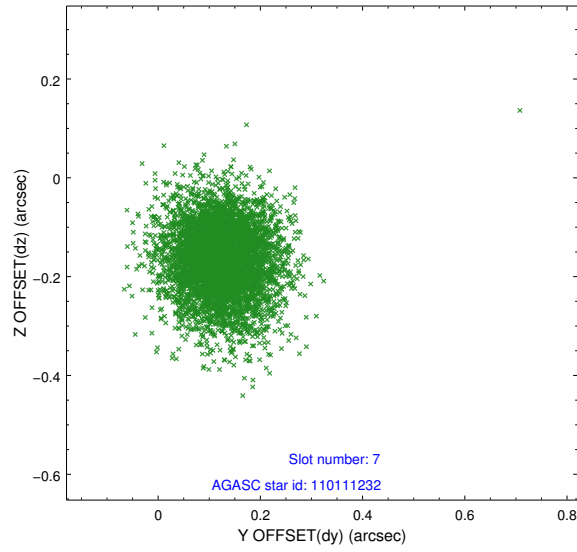


## 2.4.4 Slot 6



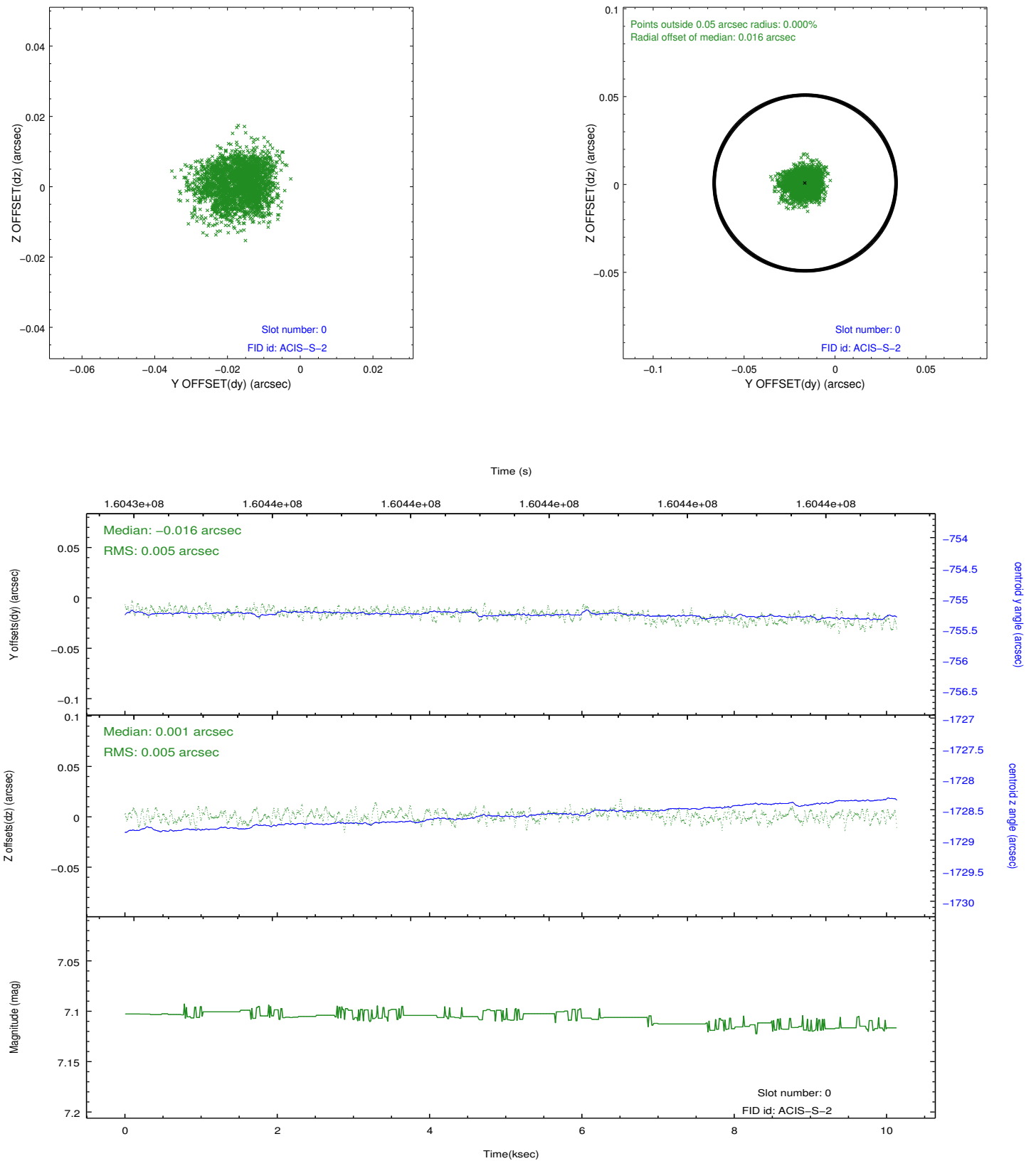


## 2.4.5 Slot 7

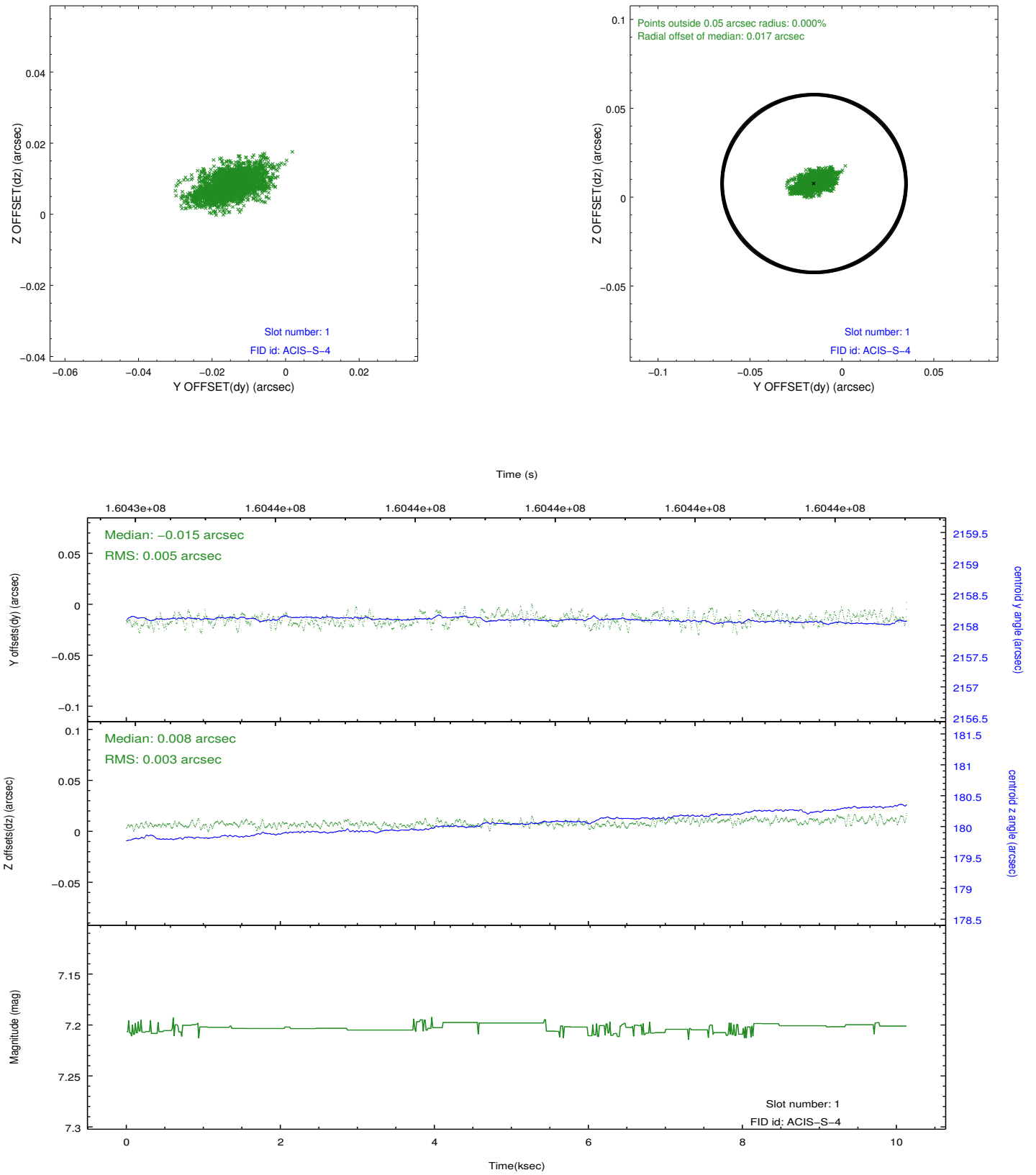


## 2.5 FID Slots

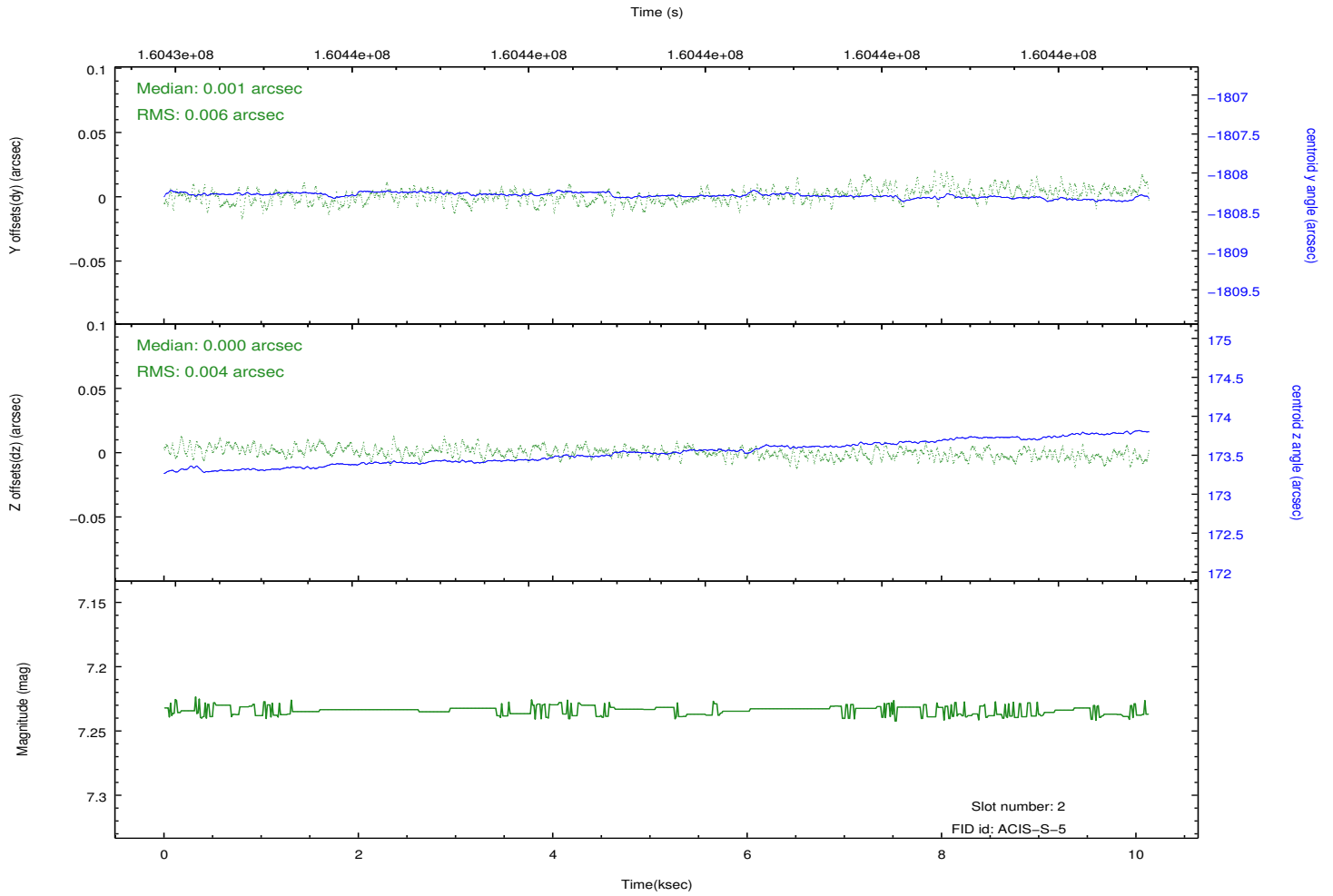
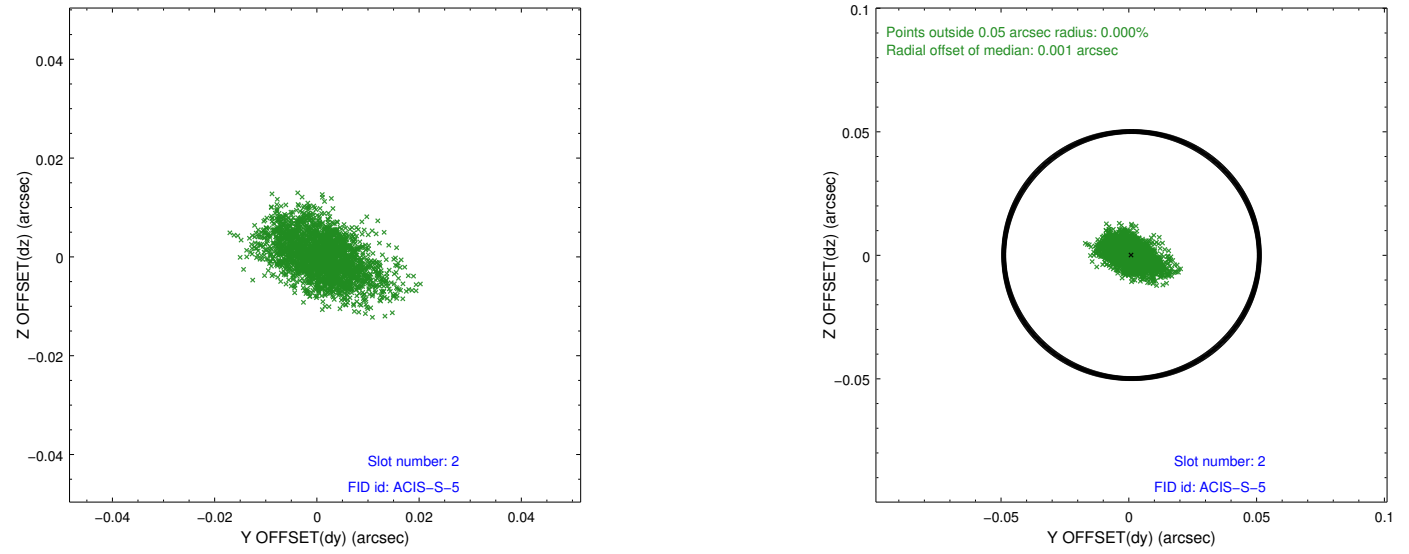
### 2.5.1 Slot 0



## 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)	2012.11.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.13

### **A.2 Comments**