

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4120 - L2 Version 3  
Chandra X-Ray Center

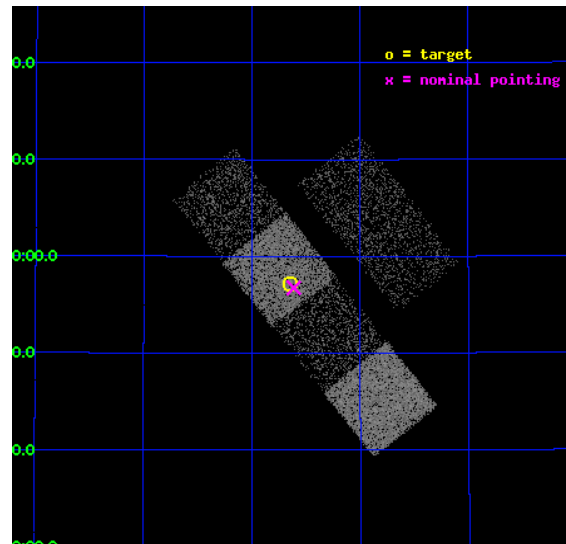
L2 Processing Date : Oct 23 2012

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# 1 Front

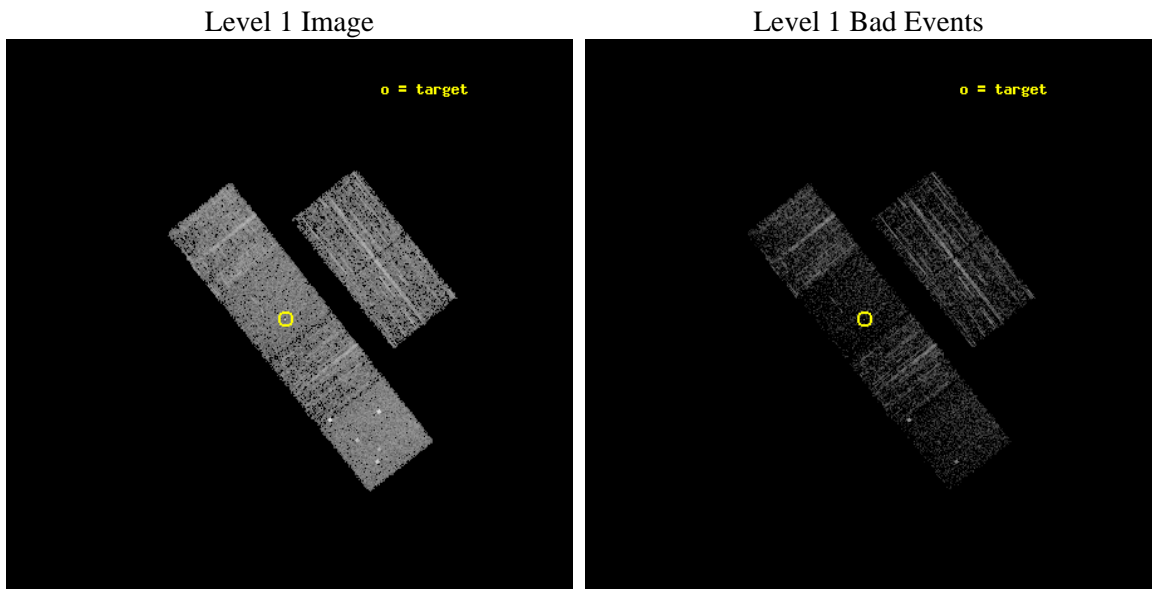
seq_num	700799	Sequence number
obs_id	4120	Observation id
title	WHAT KIND OF JETS DOES NATURE MAKE? X-RAY CHARACTERIZATION OF THE FIRST FLAT SPECTRUM SAMPLE	Proposal title
observer	Dr. Giovanni Fossati	Principal investigator
object	TXS 0821+411	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	126.1625	Observer's specified target RA [deg]
dec_targ	40.952278	Observer's specified target Dec [deg]
ra_nom	126.15290515867	Nominal RA [deg]
dec_nom	40.945888843913	Nominal Dec [deg]
roll_nom	231.61675344066	Nominal Roll [deg]
revision	3	Processing version of data
ontime	2716.7999898791	Sum of GTIs [s]
livetime	2682.3982325467	Livetime [s]
ontime2	2716.7999898791	Sum of GTIs [s]
ontime3	2716.7999898791	Sum of GTIs [s]
ontime5	2716.7999898791	Sum of GTIs [s]
ontime6	2716.7999898791	Sum of GTIs [s]
ontime7	2716.7999898791	Sum of GTIs [s]
ontime8	2713.5590096116	Sum of GTIs [s]
l2events	22706	Number of level 2 events



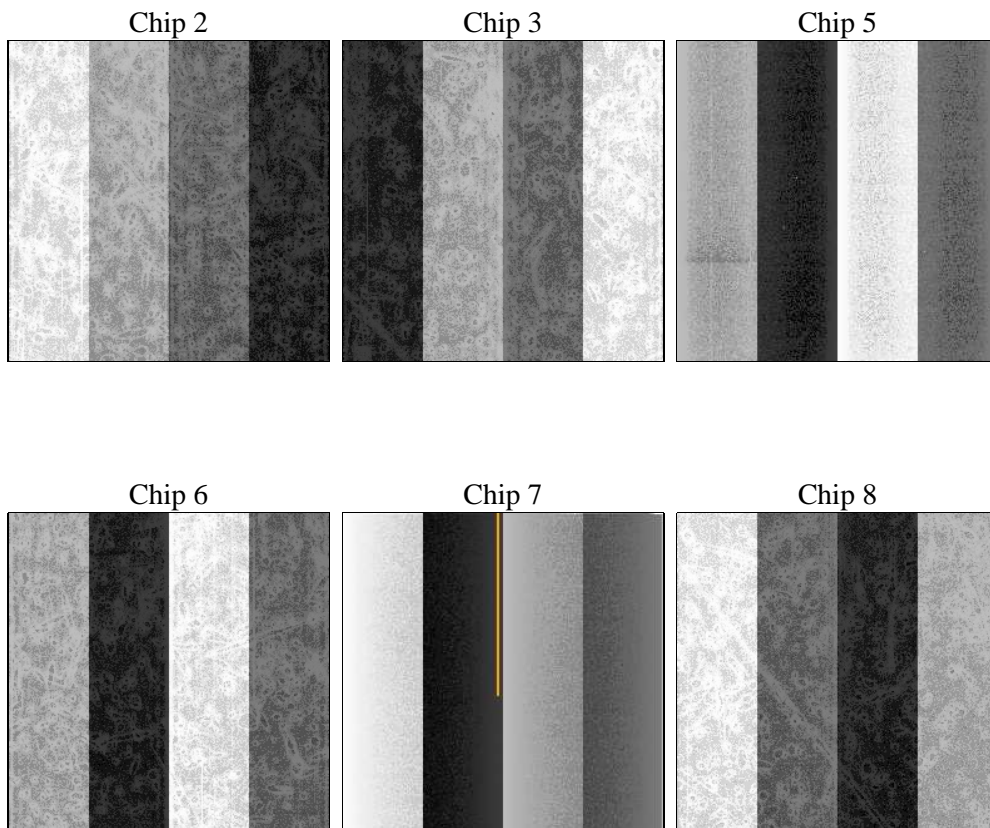
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2962.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	2716.7999898791	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime2	2716.7999898791	Sum of GTIs [s]
date	2012-10-23T11:49:48	Date and time of file creation	ontime3	2716.7999898791	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	2716.7999898791	Sum of GTIs [s]
			ontime6	2716.7999898791	Sum of GTIs [s]
			ontime7	2716.7999898791	Sum of GTIs [s]
			ontime8	2713.5590096116	Sum of GTIs [s]
			l1events	99486	Number of level 1 events

### 2.1.4 Events

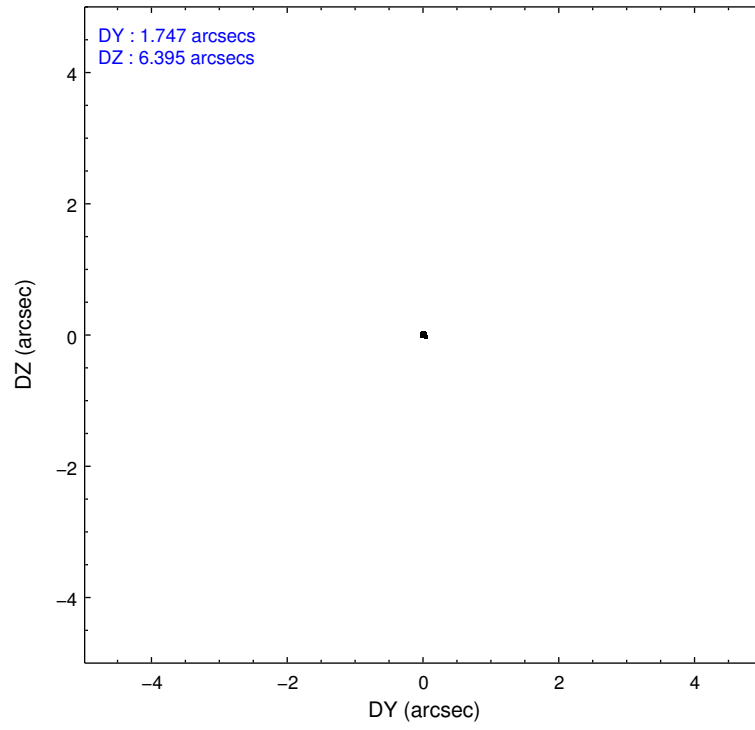
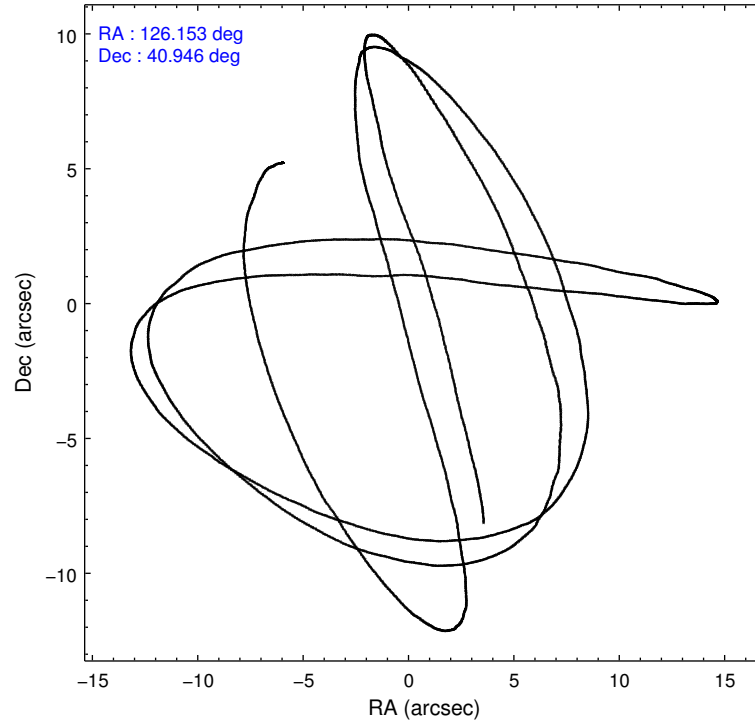
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	15450	14869	20032	14451	14849	19835
rejected events	14149	13589	7940	12906	6522	16010
rejected %	91%	91%	39%	89%	43%	80%

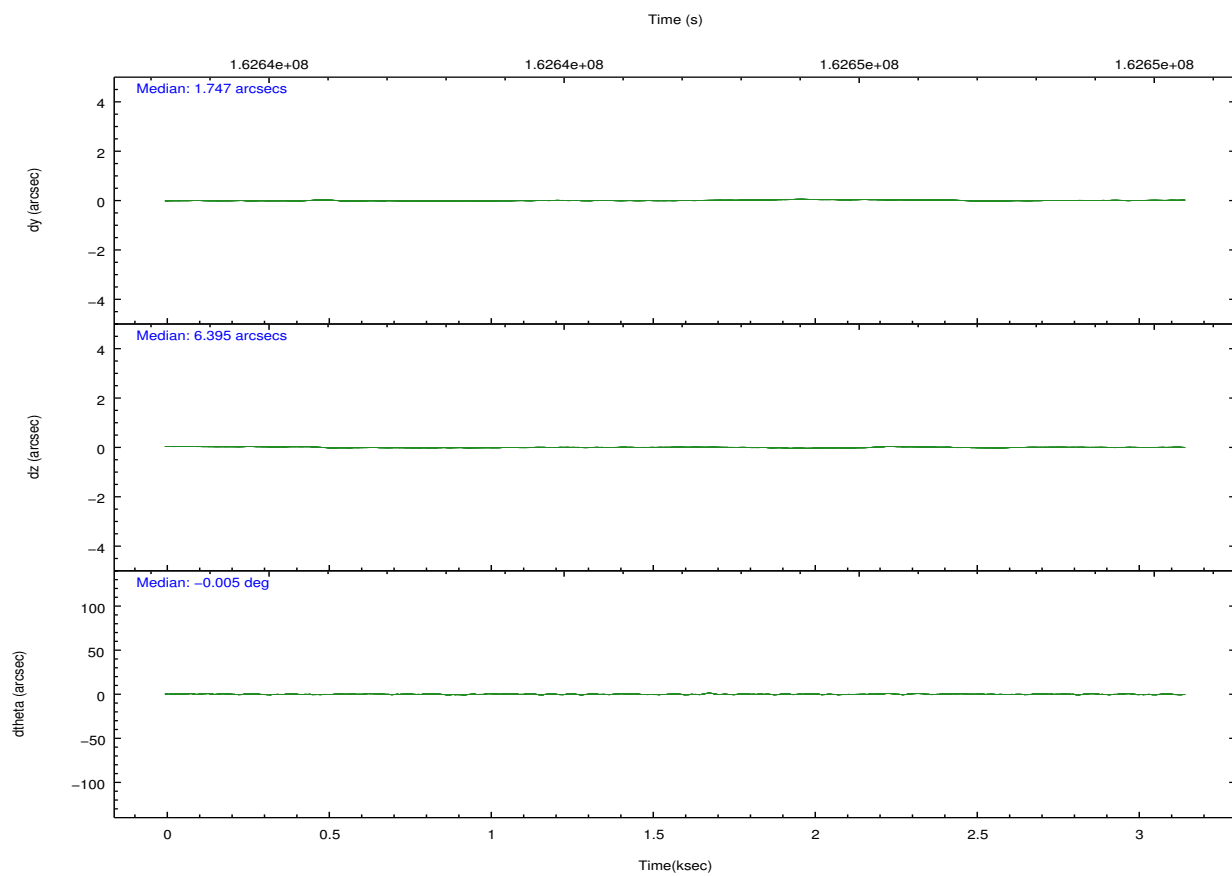
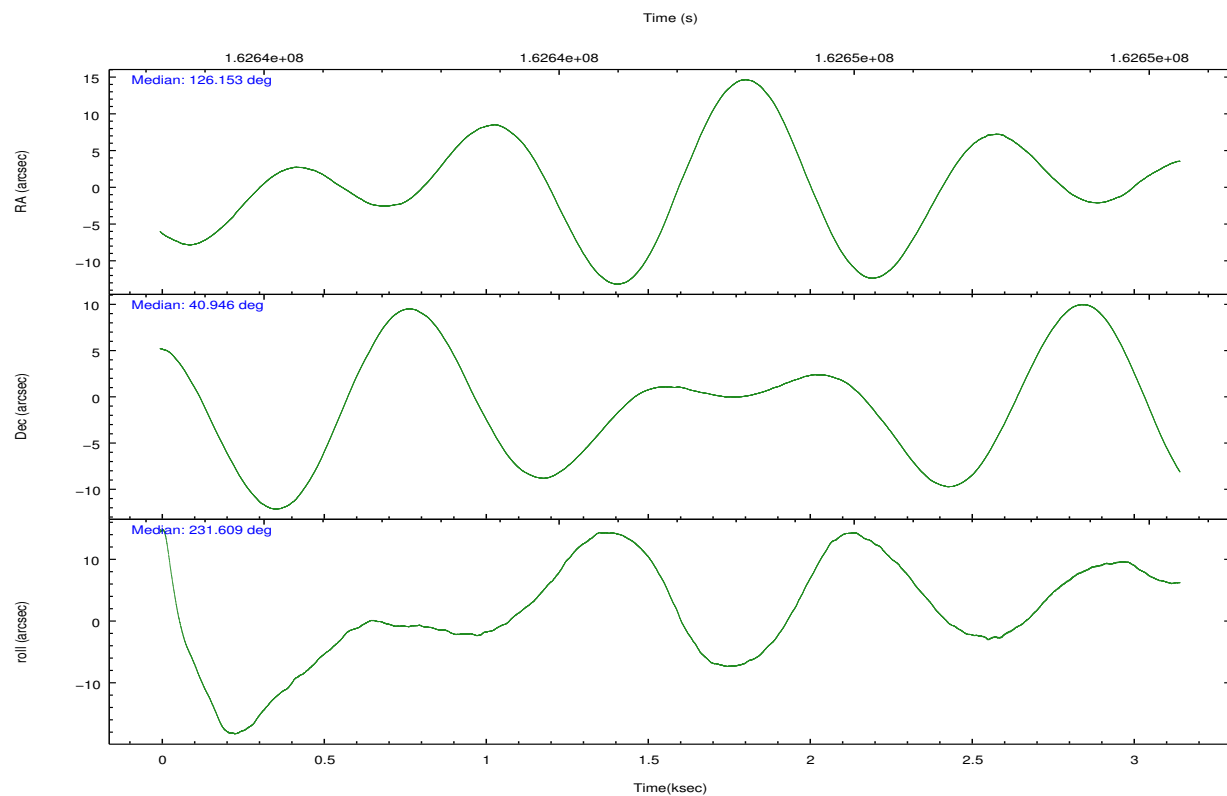
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	484	471	2260	643	1030	1118
	3%	3%	11%	4%	6%	5%
grade 1 events	3	11	58	7	17	20
	0%	0%	0%	0%	0%	0%
grade 2 events	286	257	3408	284	1673	842
	1%	1%	17%	1%	11%	4%
grade 3 events	141	159	599	168	849	415
	0%	1%	2%	1%	5%	2%
grade 4 events	157	149	529	165	780	385
	1%	1%	2%	1%	5%	1%
grade 5 events	363	428	1532	463	1344	661
	2%	2%	7%	3%	9%	3%
grade 6 events	235	246	5318	291	4003	1069
	1%	1%	26%	2%	26%	5%
grade 7 events	13781	13148	6328	12430	5153	15325
	89%	88%	31%	86%	34%	77%

## 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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	126.157692	126.1529051586671	Subarray requested	NONE	NONE
[deg] Pointing Dec	40.972852	40.94588884391253	Alternating exposures requested	N	N
[deg] Pointing Roll	231.456993	231.6167534406614	[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)	162643987.184000	162643477.95927			
Observation start date	2003-02-26T10:52:03	2003-02-26T10:44:37			
[s] Observation end time (MET)	162646949.184000	162647872.64695			
Observation end date	2003-02-26T11:41:25	2003-02-26T11:57:52			
Read mode	TIMED	TIMED			

## 2.3 Aspect





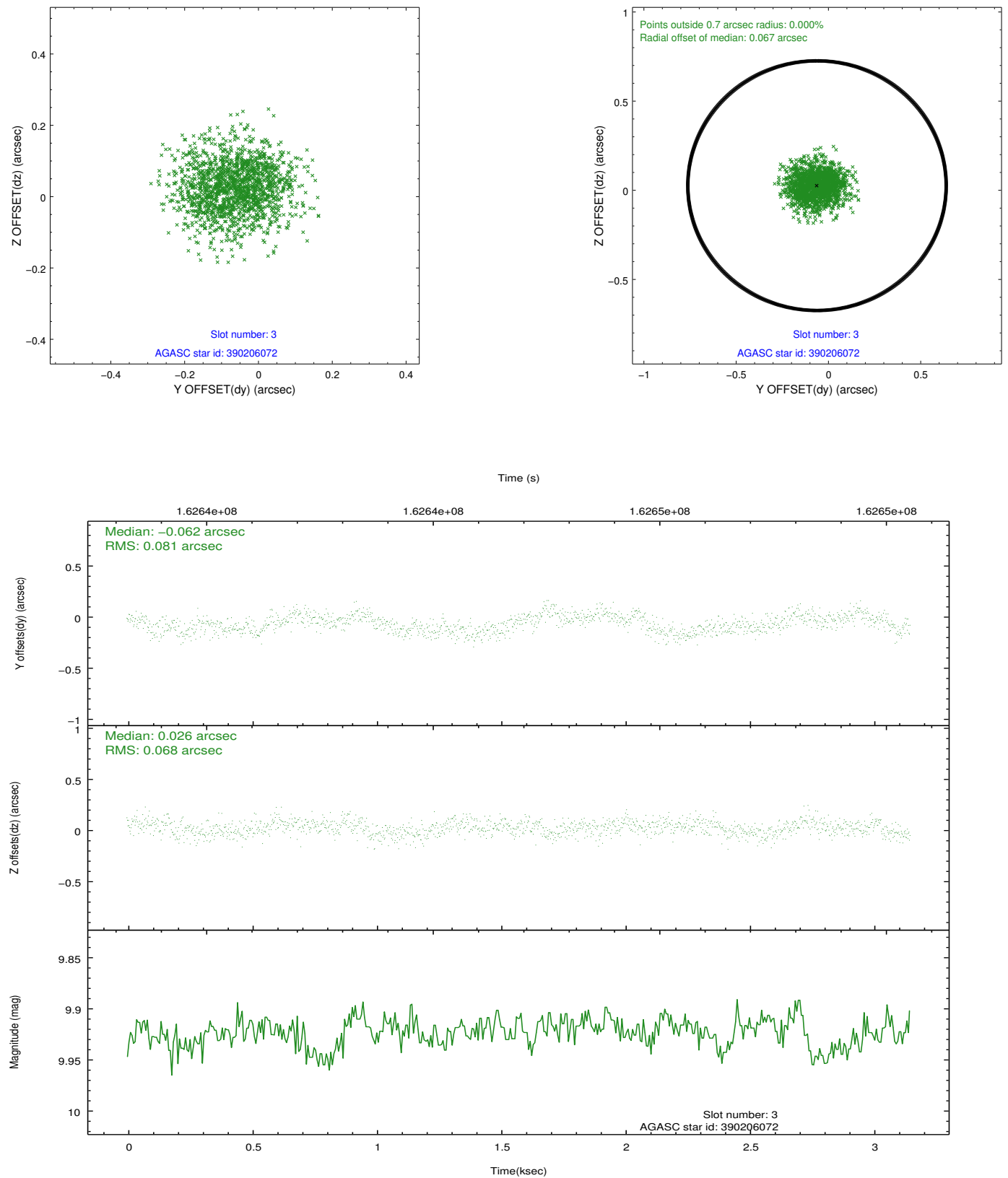
### Slot Statistics

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	768	-0.062	-0.013	0.006	0.011	0.000000	0.000000	-754.38	-1727.57
1	FID	ACIS-S-4	7.21	768	0.024	0.033	0.006	0.010	0.000000	0.000000	2158.03	178.93
2	FID	ACIS-S-5	7.24	768	0.007	-0.011	0.006	0.011	0.000000	0.000000	-1804.59	174.78
3	GUIDE	390206072	9.92	1535	-0.062	0.026	0.114	0.180	126.079424	41.554588	-1506.37	-1469.86
4	GUIDE	390210544	8.29	1536	0.045	-0.108	0.073	0.110	125.909695	40.675004	1259.12	137.26
5	GUIDE	390210672	9.55	1536	0.073	-0.087	0.215	0.288	125.971005	41.444900	-1014.35	-1453.16
6	GUIDE	390215616	7.44	1537	0.008	0.018	0.058	0.100	125.662312	40.443823	2331.98	122.41
7	GUIDE	390341168	9.80	1532	-0.047	0.144	0.099	0.163	126.755299	40.712814	-286.79	1855.74

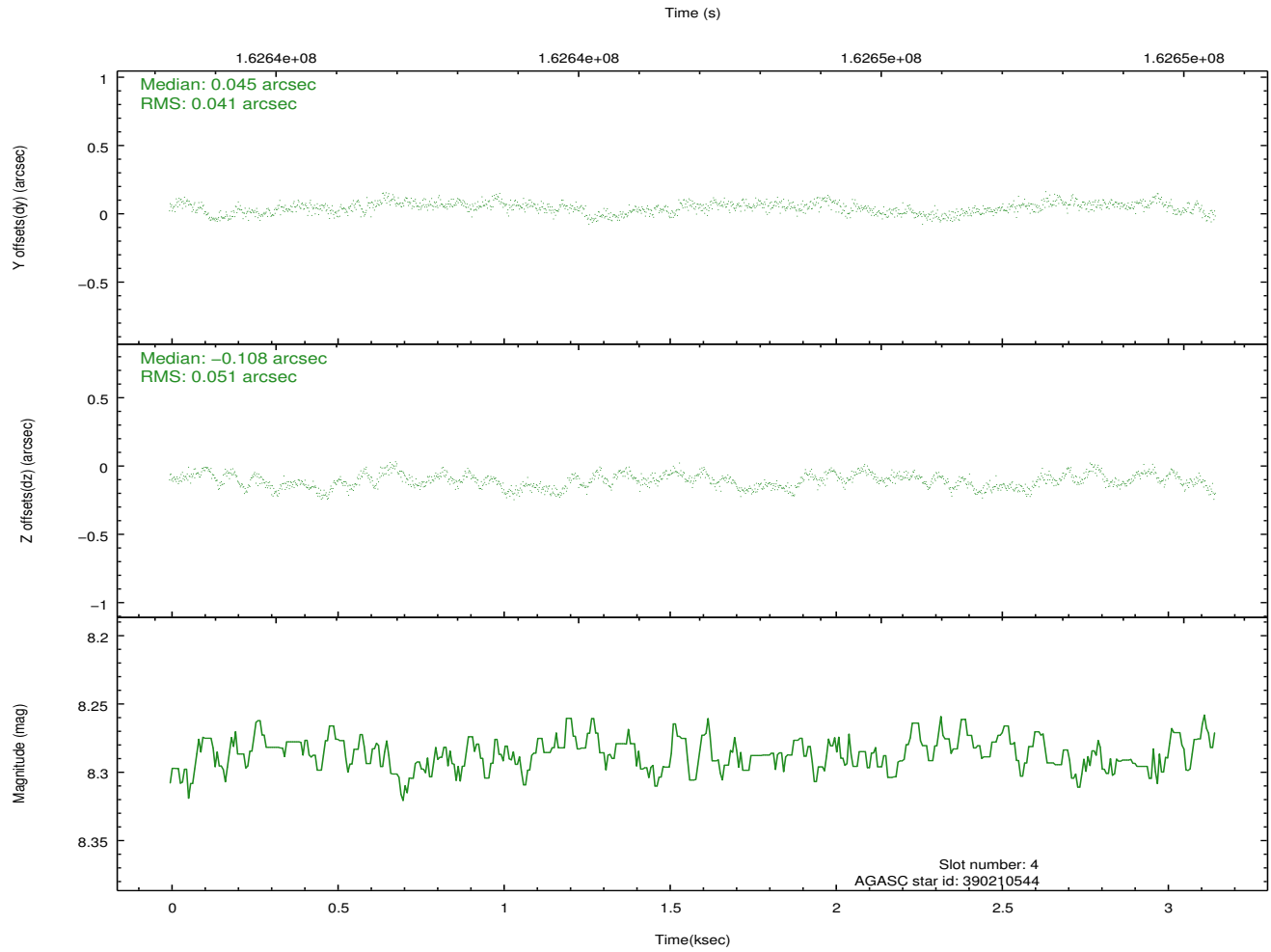
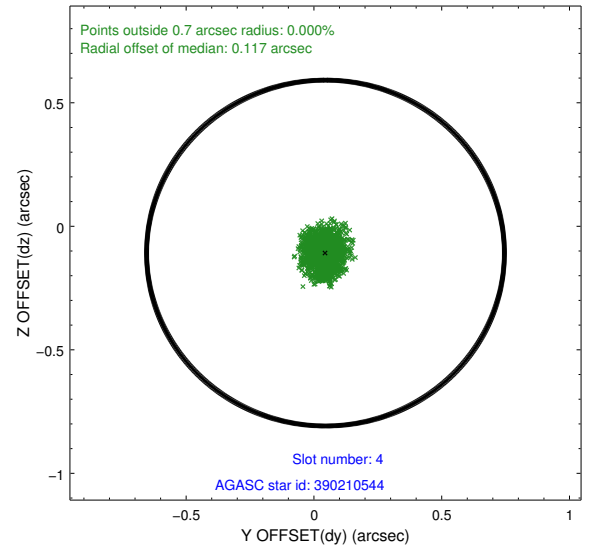
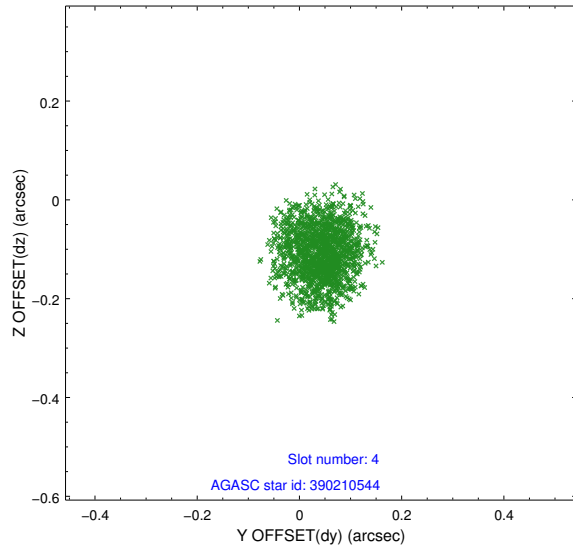


## 2.4 Star Slots

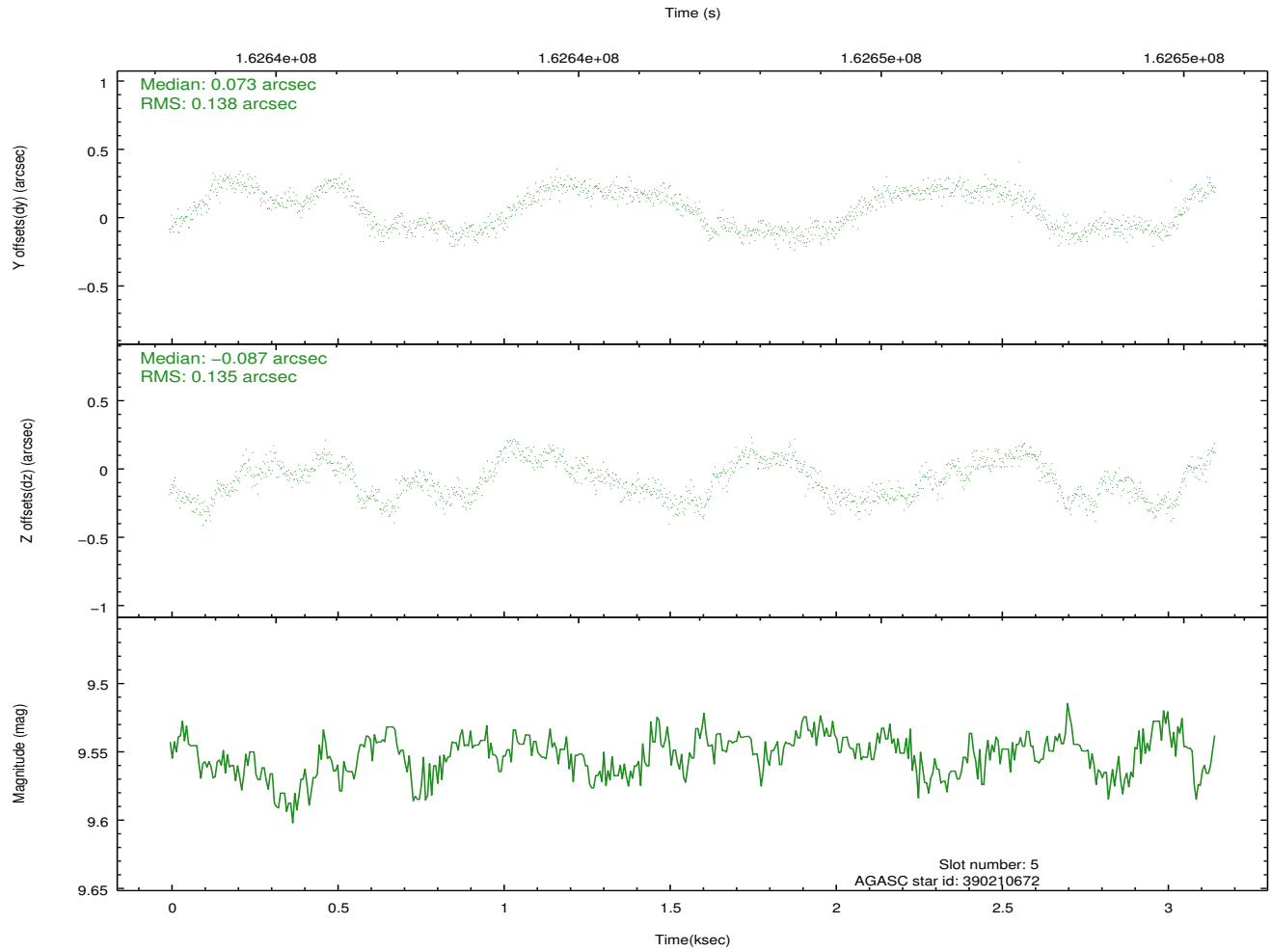
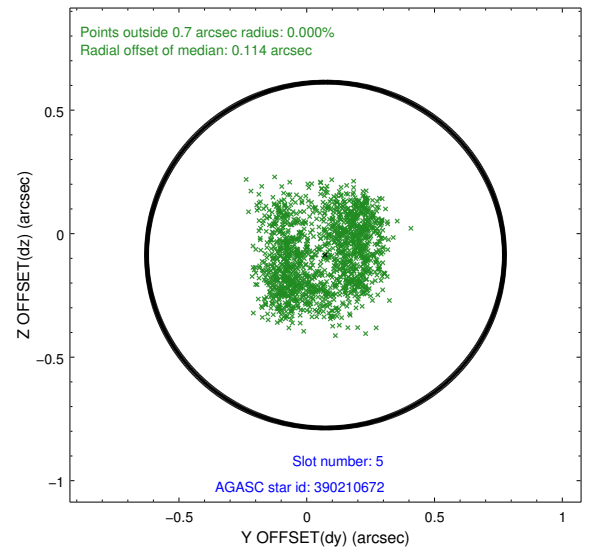
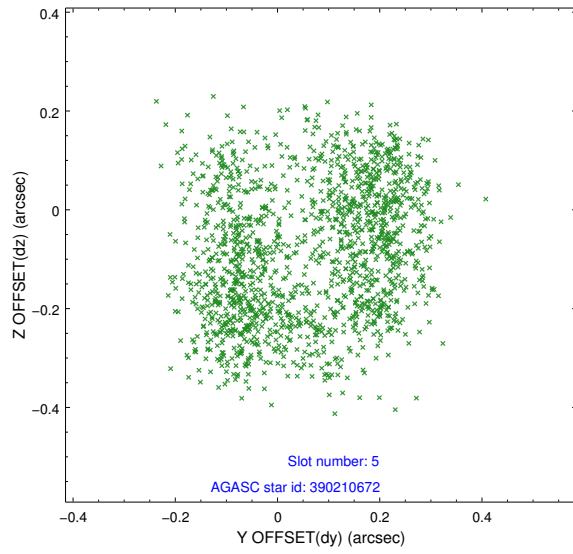
### 2.4.1 Slot 3



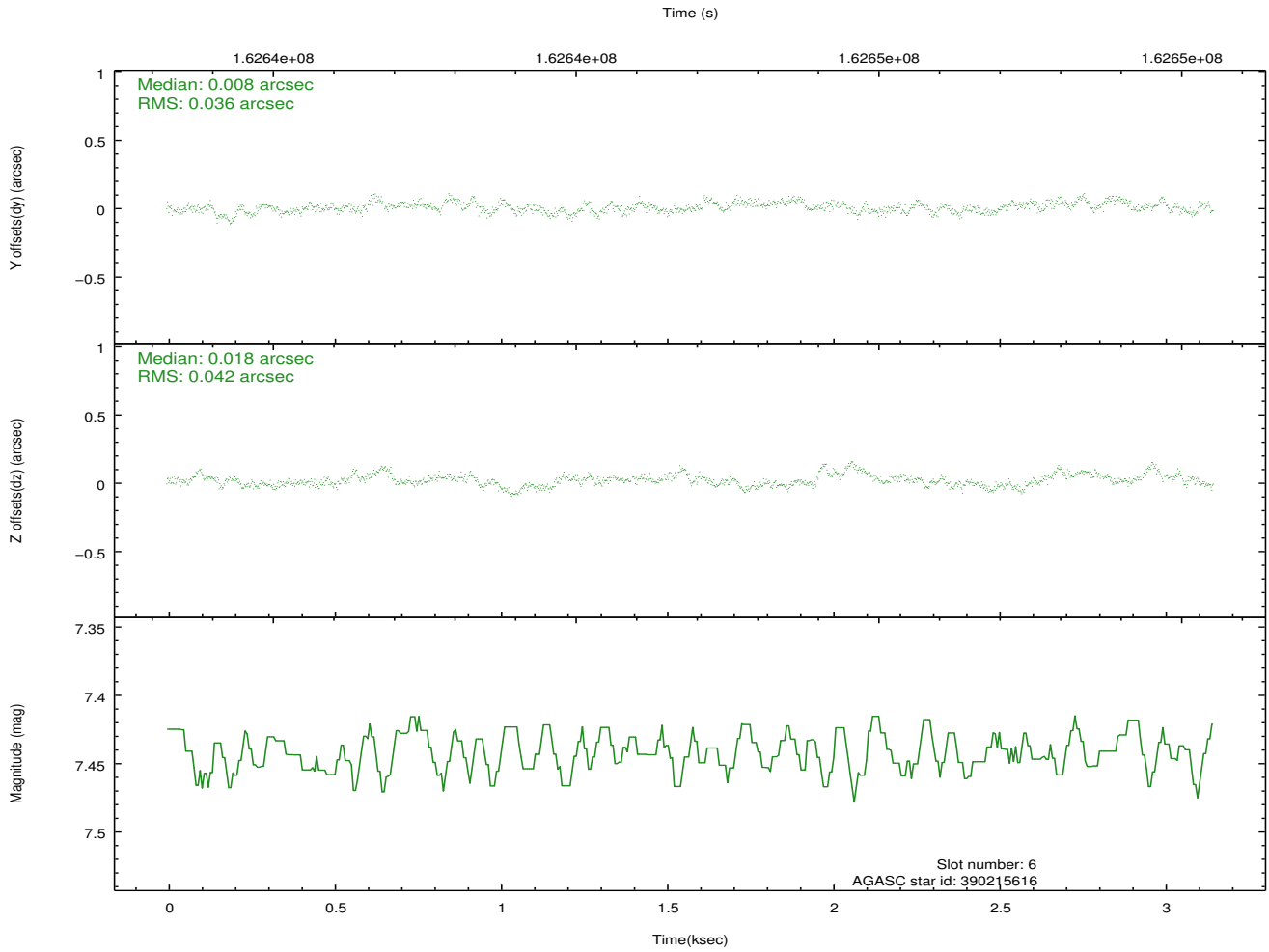
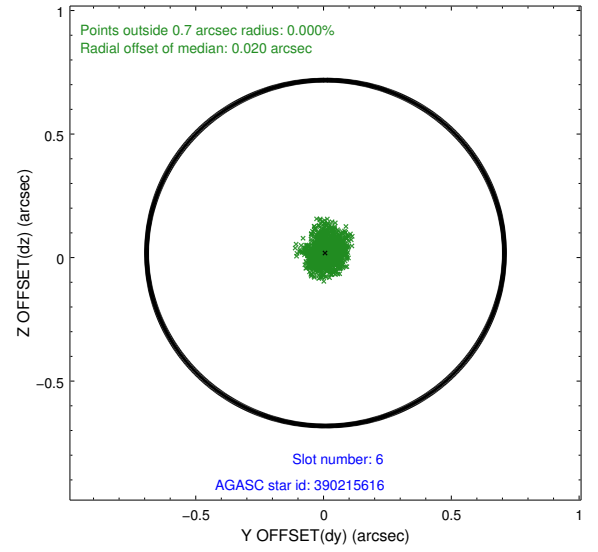
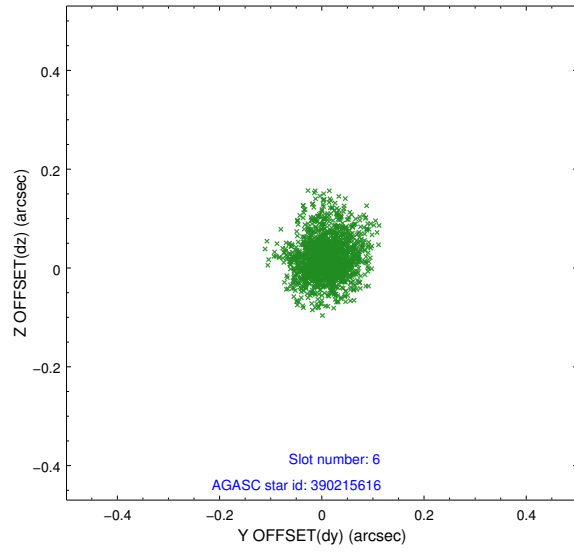
## 2.4.2 Slot 4



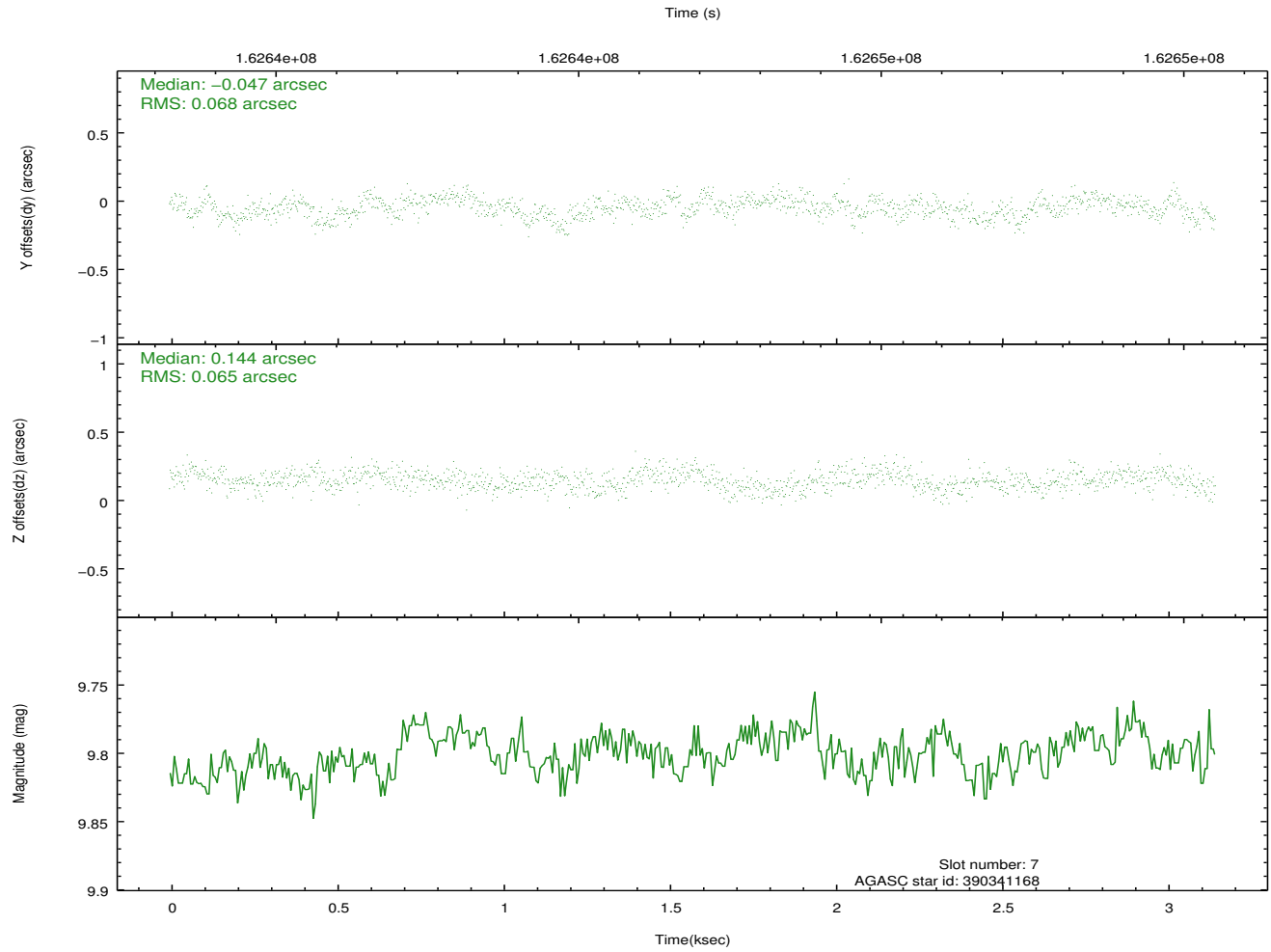
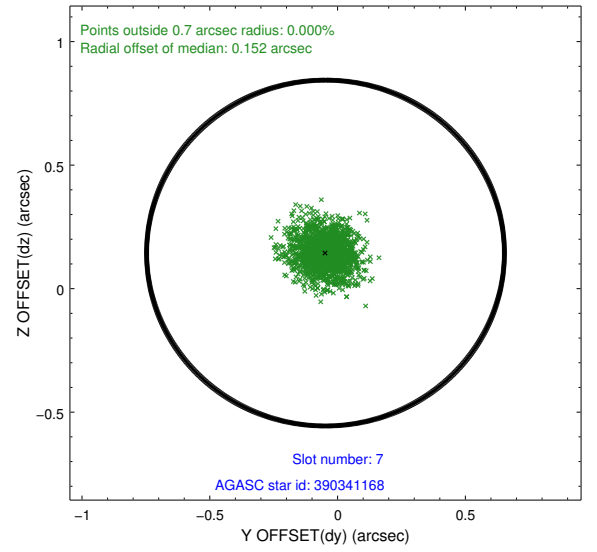
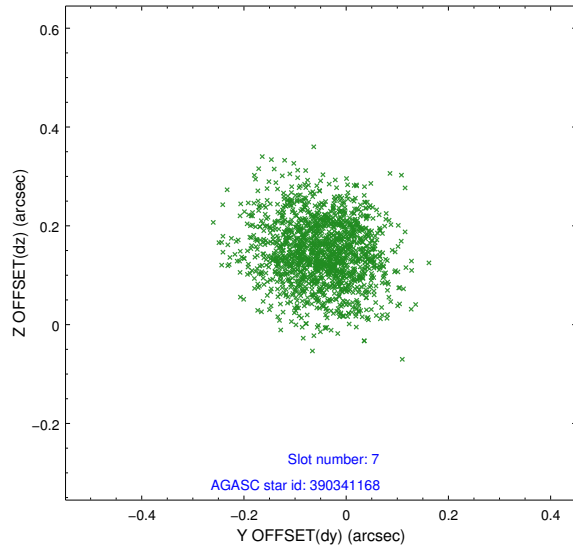
### 2.4.3 Slot 5



## 2.4.4 Slot 6

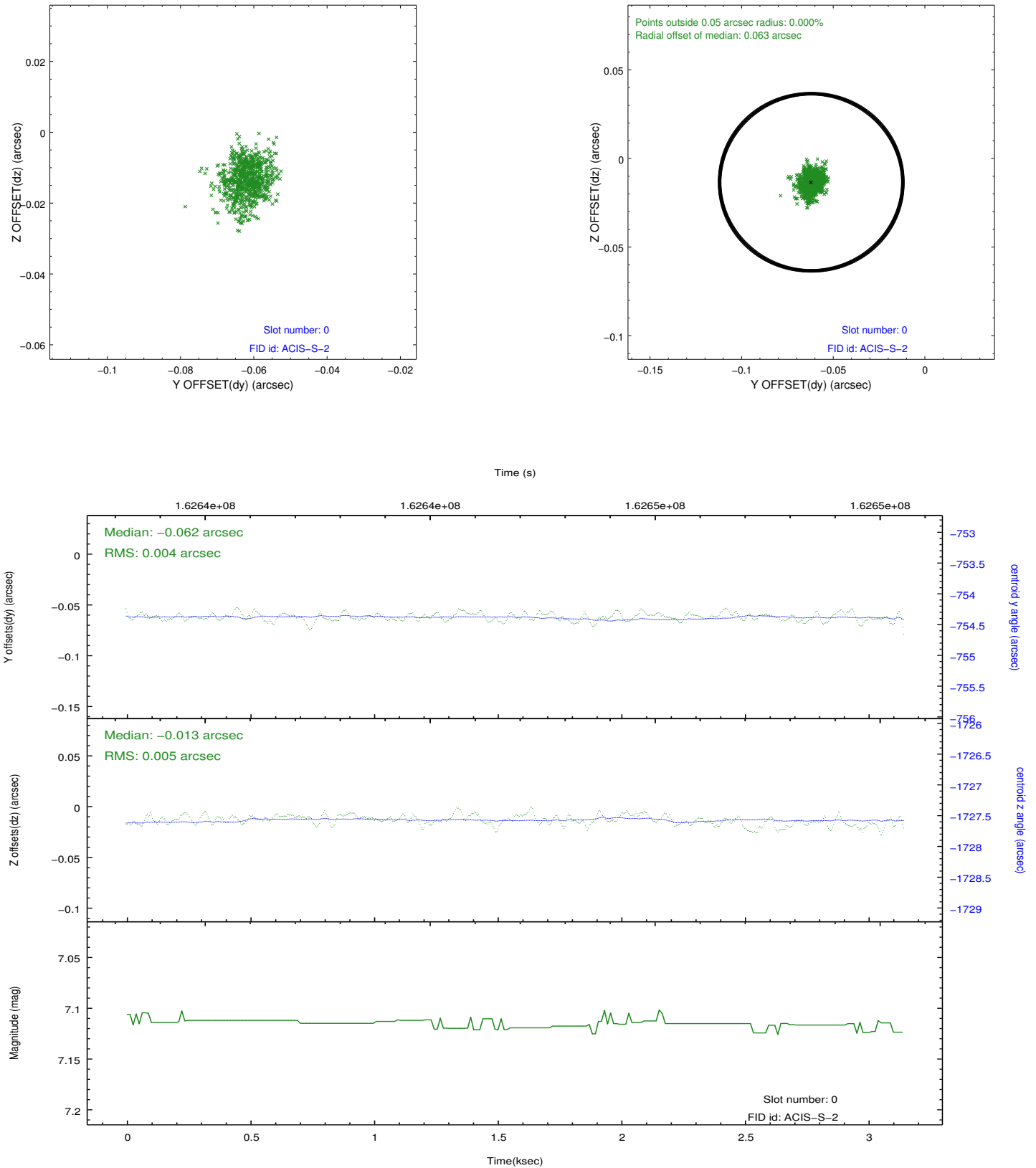


## 2.4.5 Slot 7

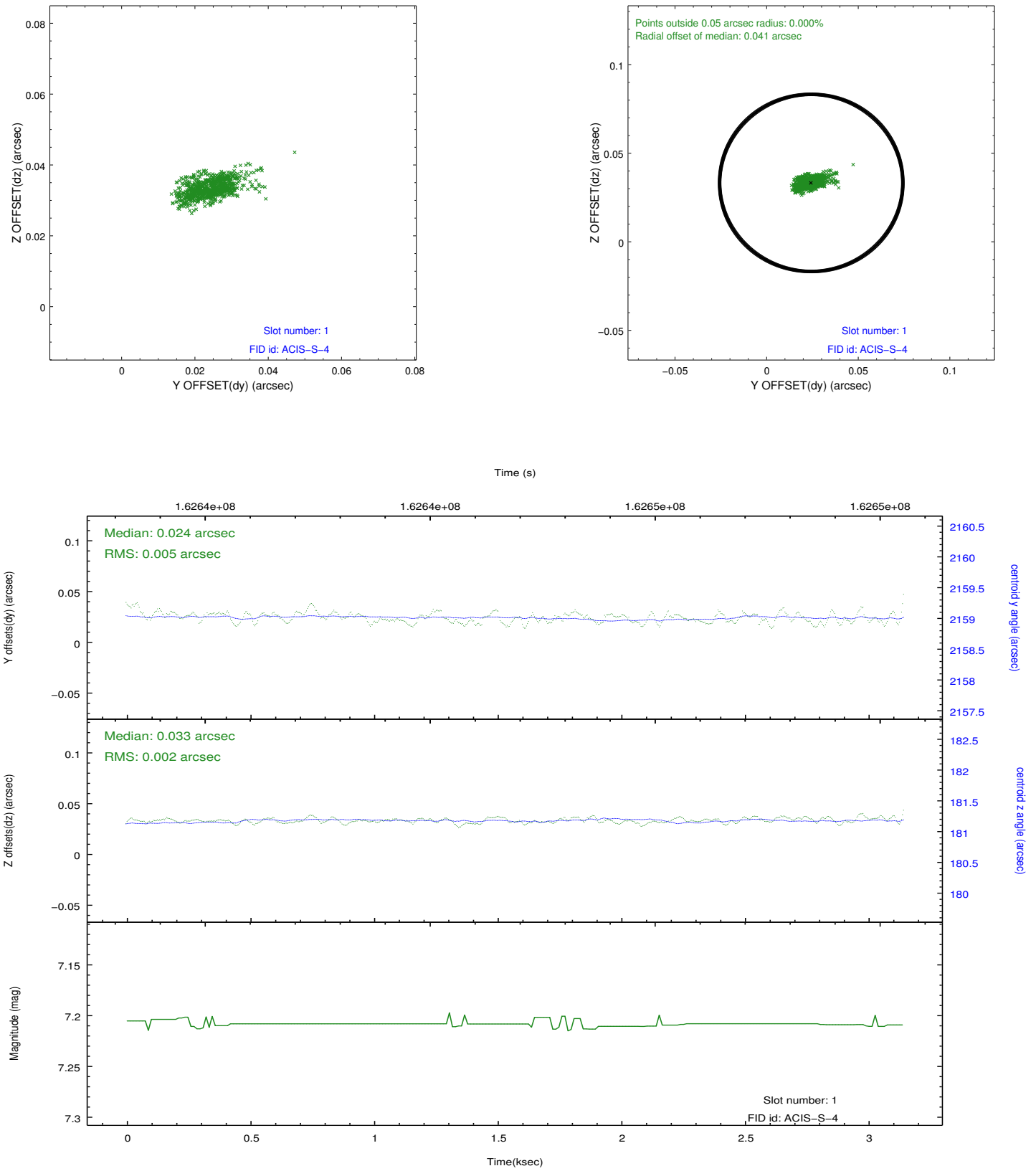


## 2.5 FID Slots

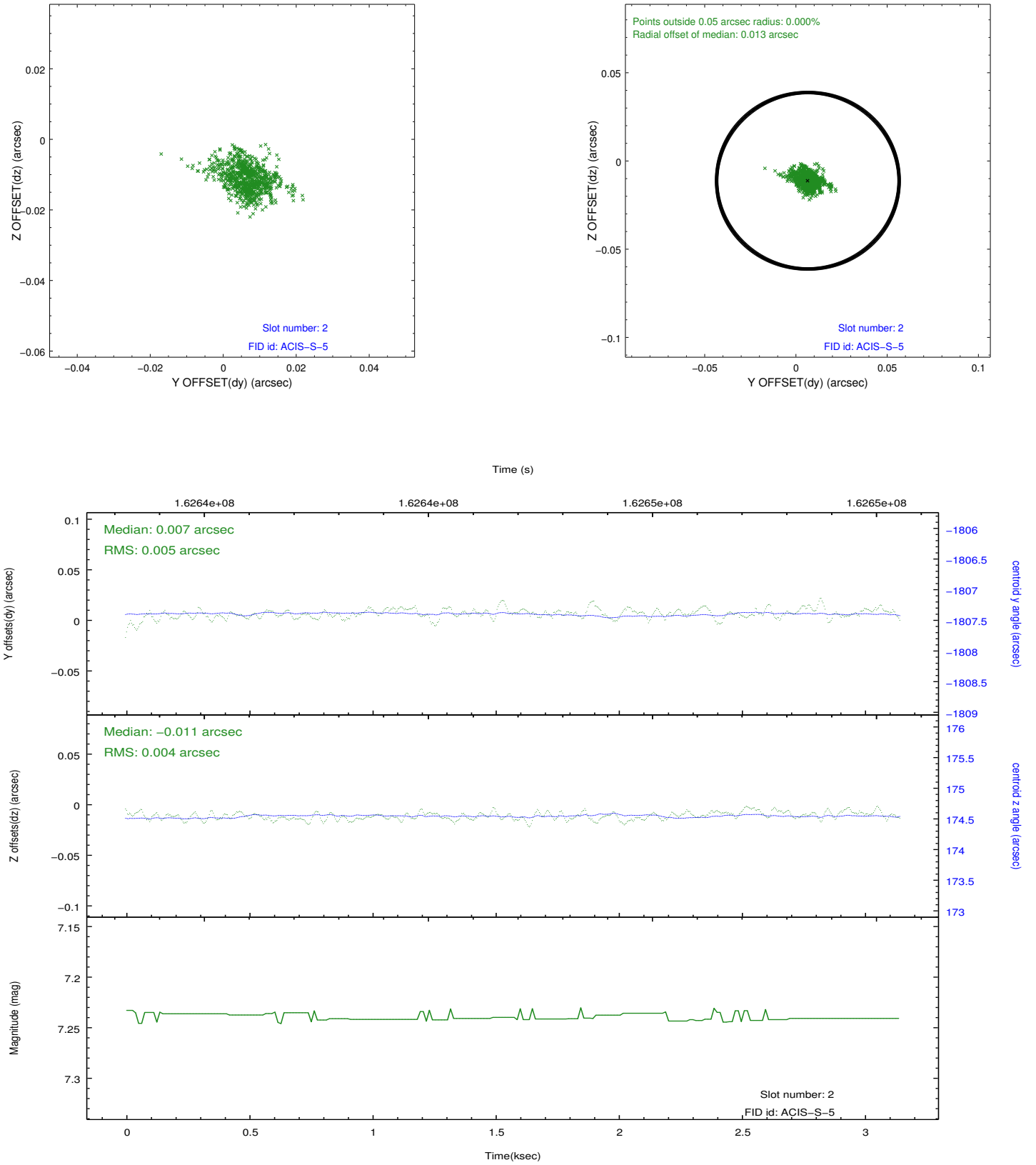
### 2.5.1 Slot 0



## 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)	2012.11.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.72

### **A.2 Comments**