

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4119 - L2 Version 3  
Chandra X-Ray Center

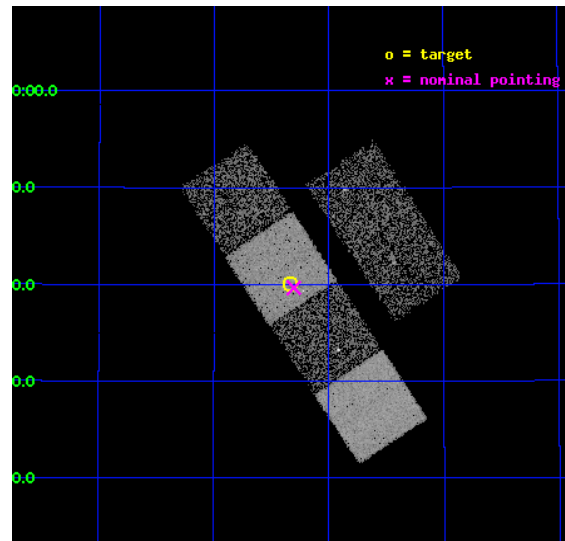
L2 Processing Date : Oct 23 2012

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# 1 Front

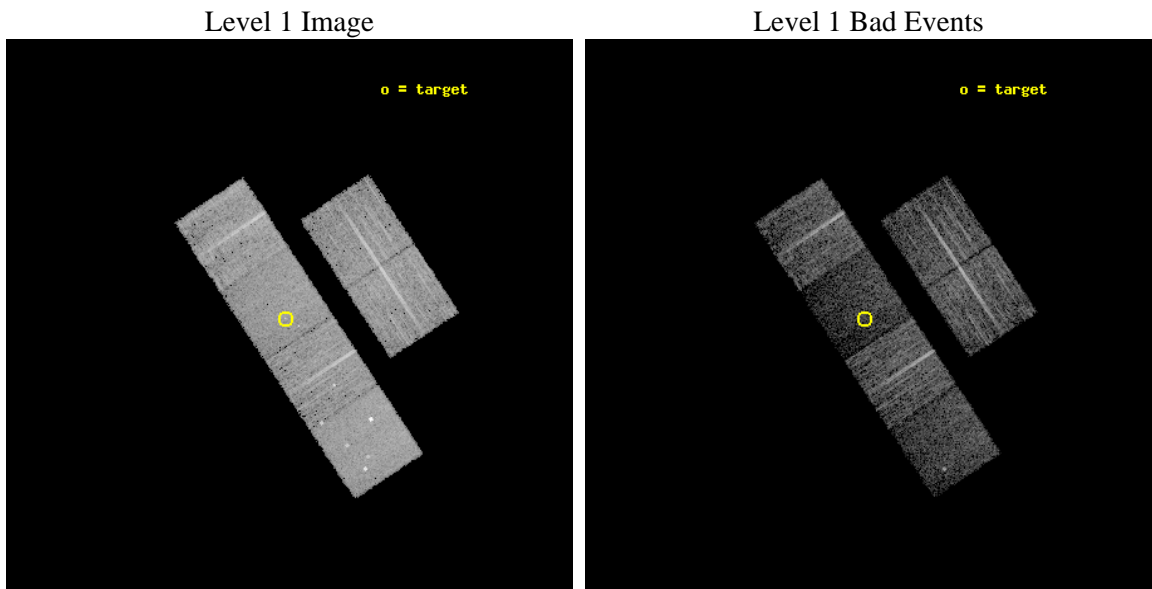
seq_num	700798	Sequence number
obs_id	4119	Observation id
title	WHAT KIND OF JETS DOES NATURE MAKE? X-RAY CHARACTERIZATION OF THE FIRST FLAT SPECTRUM SAMPLE	Proposal title
observer	Dr. Giovanni Fossati	Principal investigator
object	FIRST J0820+3640	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	125.084167	Observer's specified target RA [deg]
dec_targ	36.668	Observer's specified target Dec [deg]
ra_nom	125.07584375287	Nominal RA [deg]
dec_nom	36.661015547274	Nominal Dec [deg]
roll_nom	236.55962268059	Nominal Roll [deg]
revision	3	Processing version of data
ontime	7369.5999725461	Sum of GTIs [s]
livetime	7276.2816602534	Livetime [s]
ontime2	7369.5999725461	Sum of GTIs [s]
ontime3	7369.5533013046	Sum of GTIs [s]
ontime5	7369.5999725461	Sum of GTIs [s]
ontime6	7369.5943413079	Sum of GTIs [s]
ontime7	7369.5999725461	Sum of GTIs [s]
ontime8	7369.5122613311	Sum of GTIs [s]
l2events	52637	Number of level 2 events



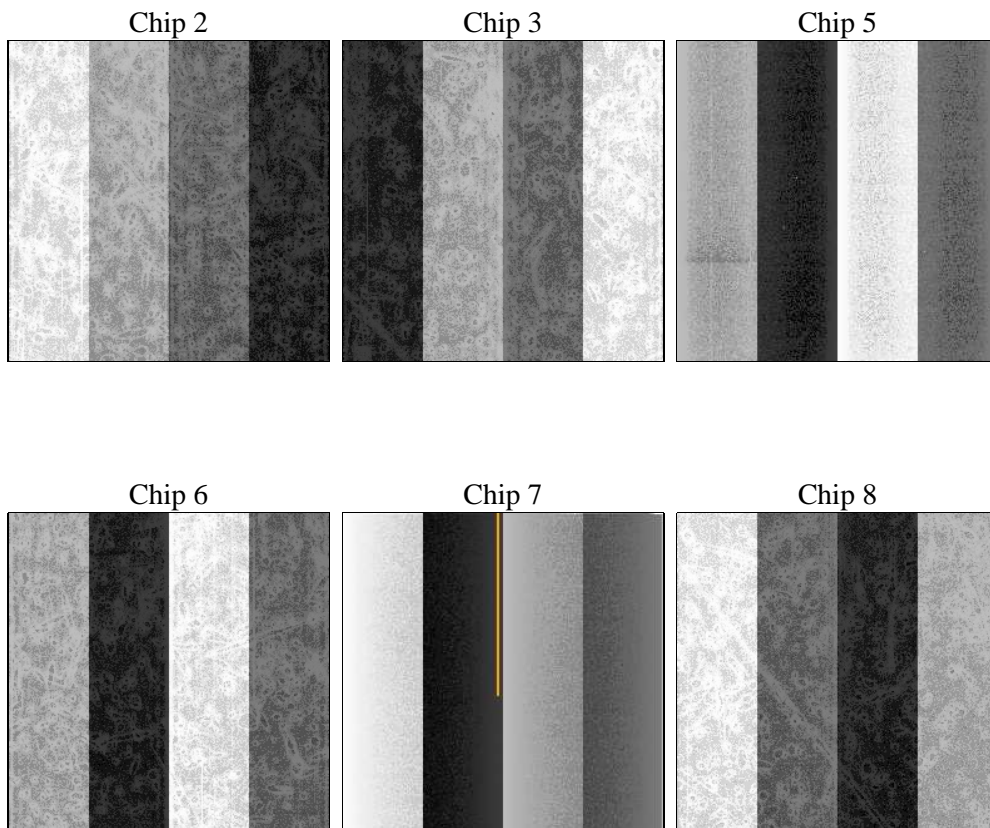
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7407.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	7369.5999725461	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	7369.5999725461	Sum of GTIs [s]
date	2012-10-23T12:16:11	Date and time of file creation	ontime3	7369.5533013046	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	7369.5999725461	Sum of GTIs [s]
			ontime6	7369.5943413079	Sum of GTIs [s]
			ontime7	7369.5999725461	Sum of GTIs [s]
			ontime8	7369.5122613311	Sum of GTIs [s]
			l1events	241294	Number of level 1 events

### 2.1.4 Events

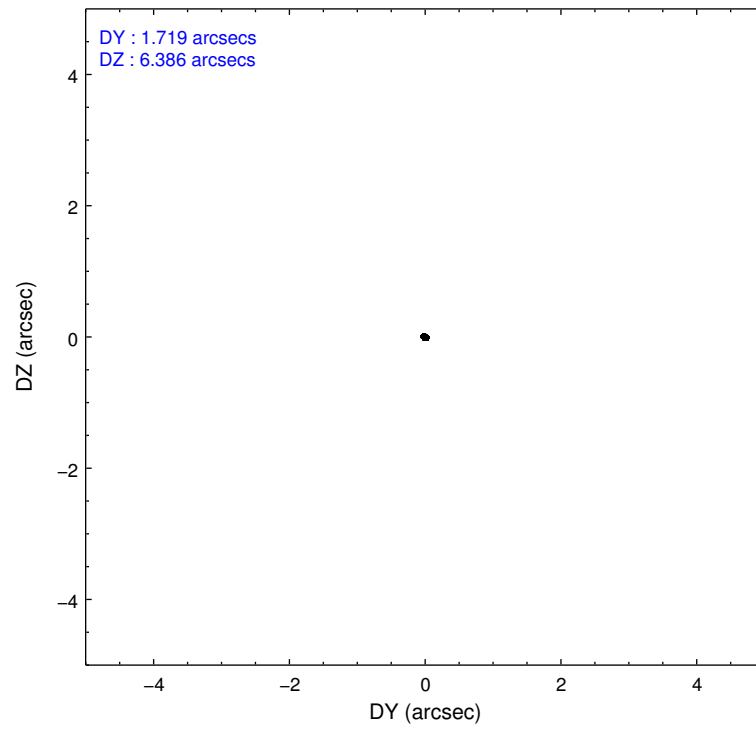
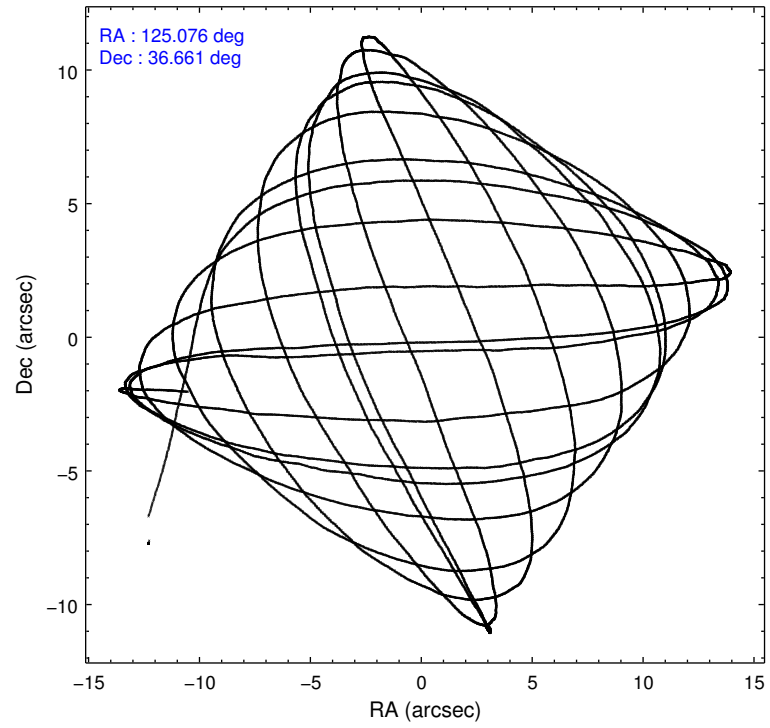
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	40253	35027	47355	38762	35725	44172	grade 0 events	1290	1256	4595	1617	2025	2728
rejected events	36706	31705	21048	34816	17259	34098		3%	3%	9%	4%	5%	6%
rejected %	91%	90%	44%	89%	48%	77%	grade 1 events	16	23	75	10	34	37
								0%	0%	0%	0%	0%	0%
							grade 2 events	808	696	7531	782	3845	2447
								2%	1%	15%	2%	10%	5%
							grade 3 events	378	403	1237	446	1895	1191
								0%	1%	2%	1%	5%	2%
							grade 4 events	412	389	1174	444	1840	1053
								1%	1%	2%	1%	5%	2%
							grade 5 events	1012	1201	3792	1230	3765	1713
								2%	3%	8%	3%	10%	3%
							grade 6 events	662	580	11789	660	8870	2665
								1%	1%	24%	1%	24%	6%
							grade 7 events	35675	30479	17162	33573	13451	32338
								88%	87%	36%	86%	37%	73%

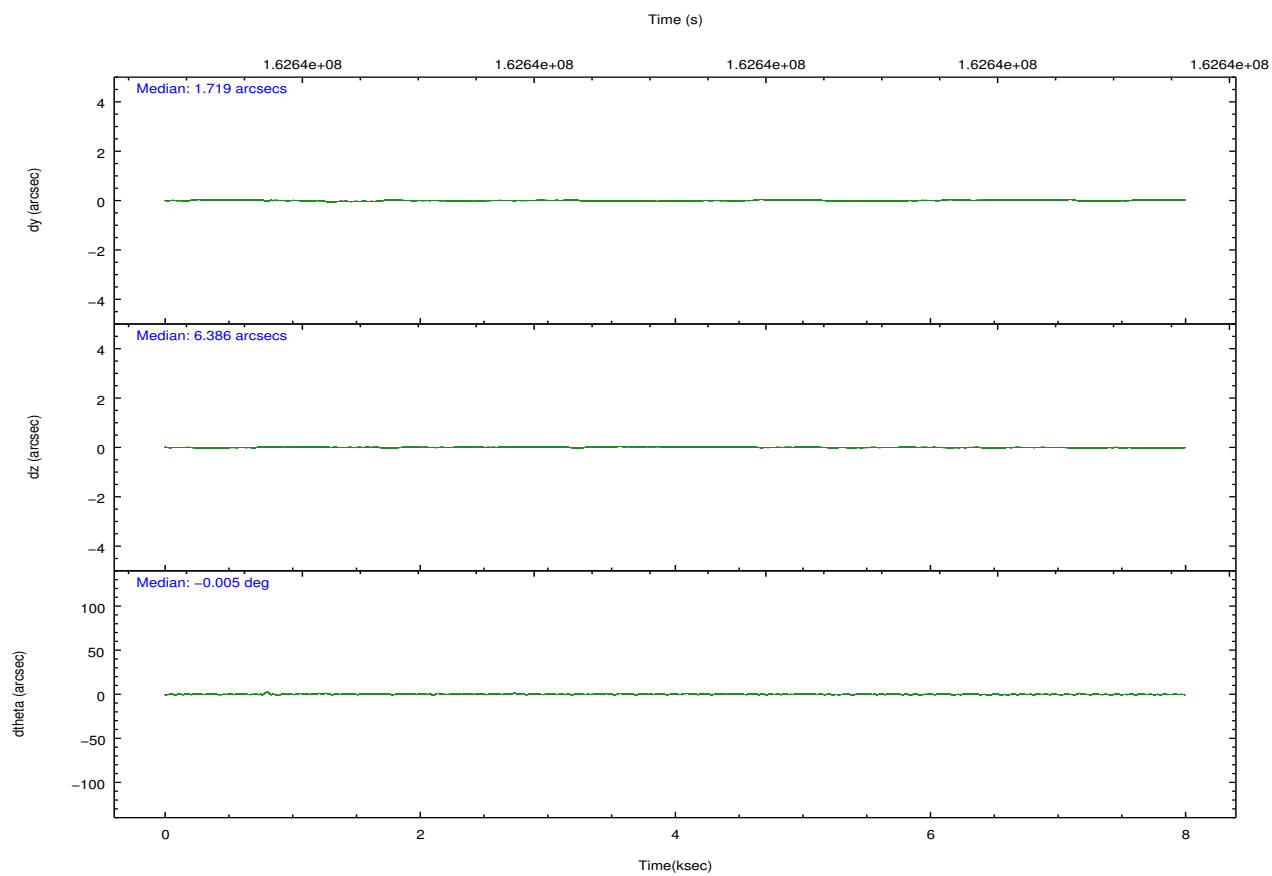
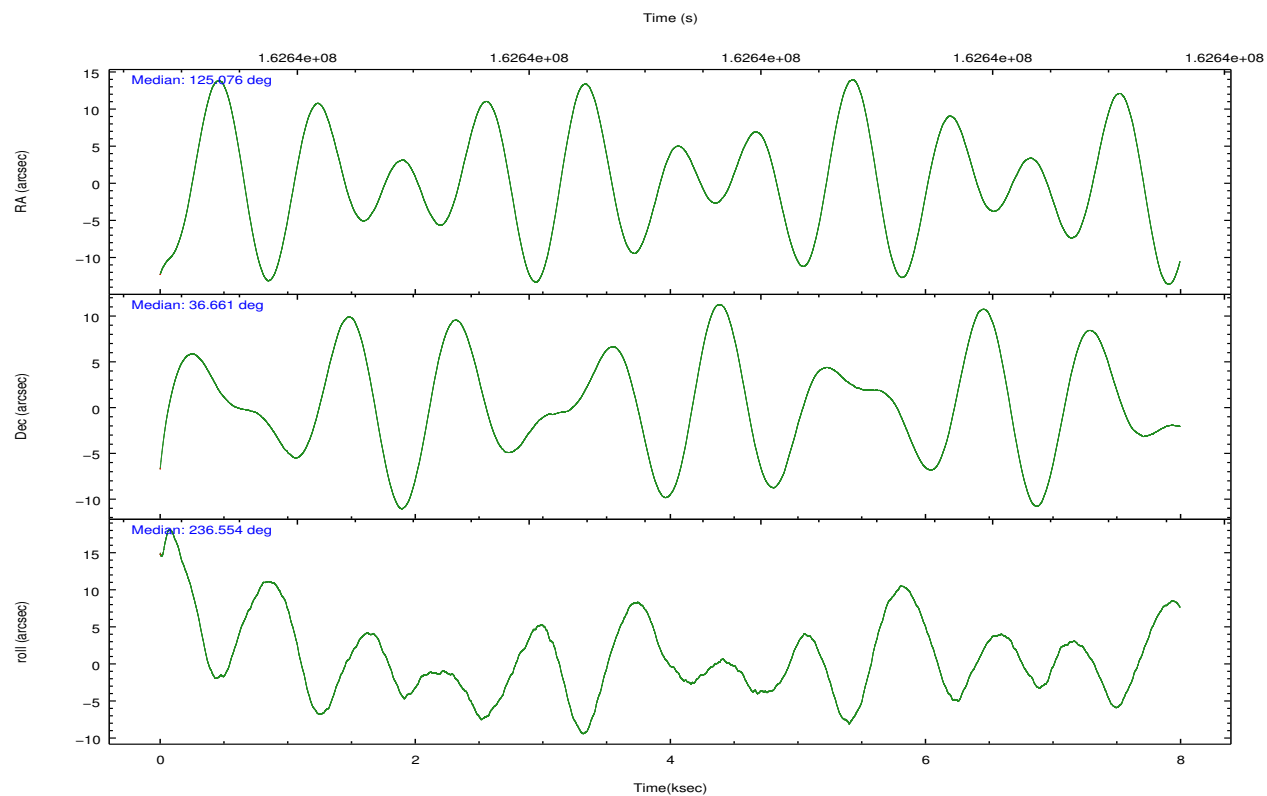


## 2.2 Compared Parameters

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	125.077441	125.0758437528657	Subarray requested	NONE	NONE
[deg] Pointing Dec	36.688185	36.66101554727408	Alternating exposures requested	N	N
[deg] Pointing Roll	236.402046	236.5596226805894	[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)	162635804.184000	162634639.3839			
Observation start date	2003-02-26T08:35:40	2003-02-26T08:17:19			
[s] Observation end time (MET)	162643211.184000	162643477.95927			
Observation end date	2003-02-26T10:39:07	2003-02-26T10:44:37			
Read mode	TIMED	TIMED			

## 2.3 Aspect



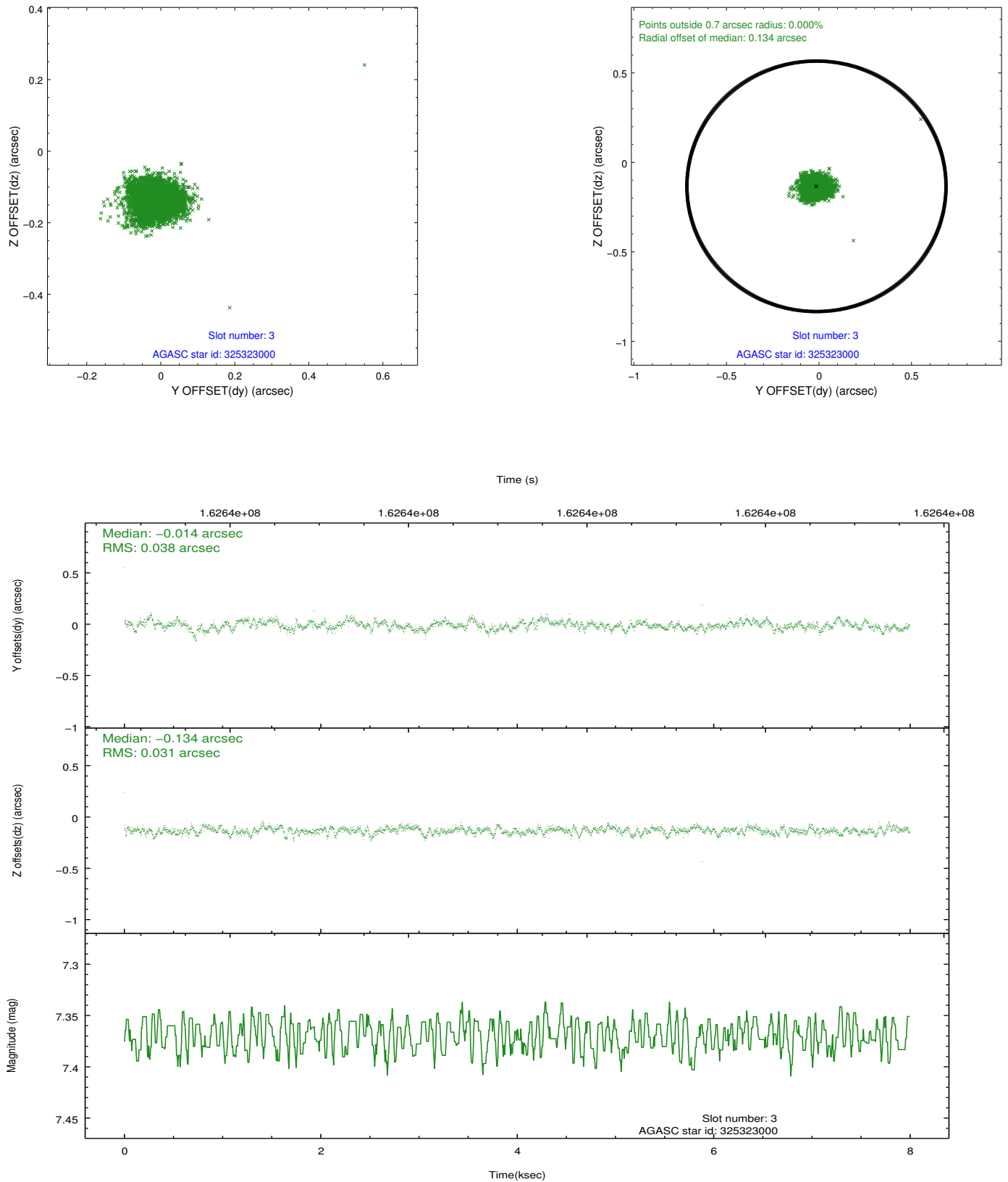


### Slot Statistics

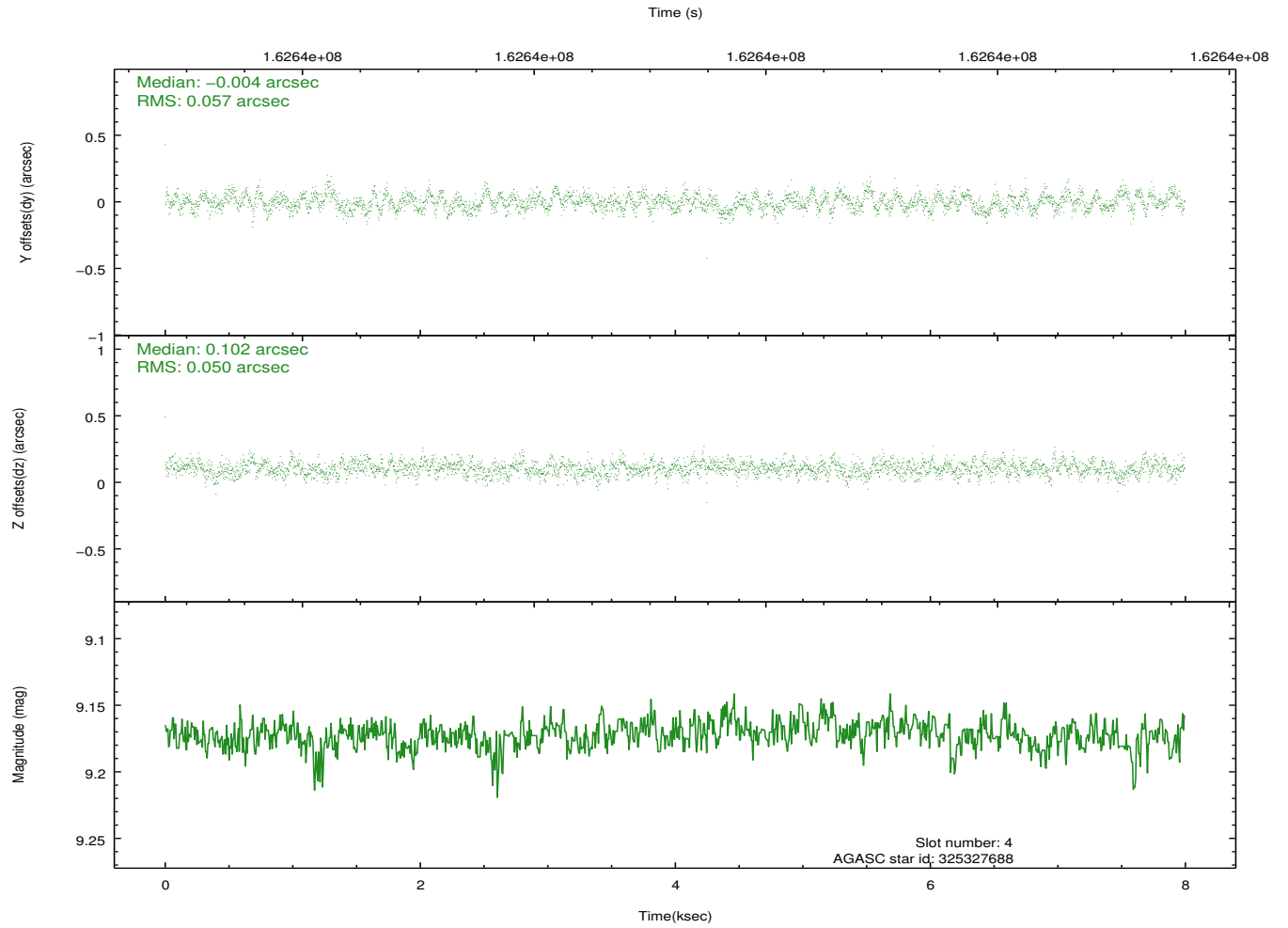
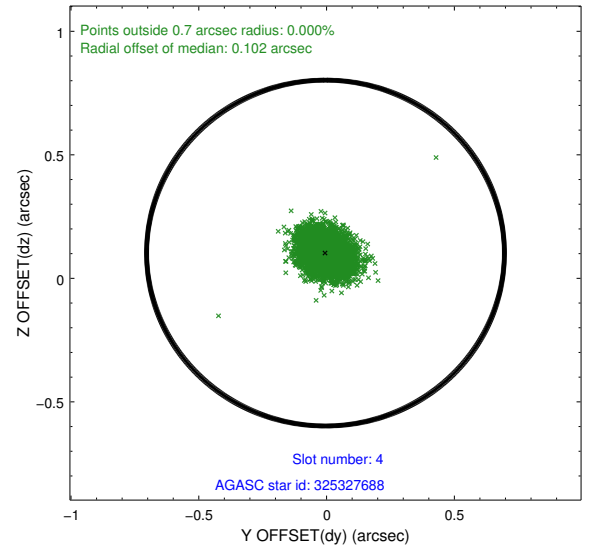
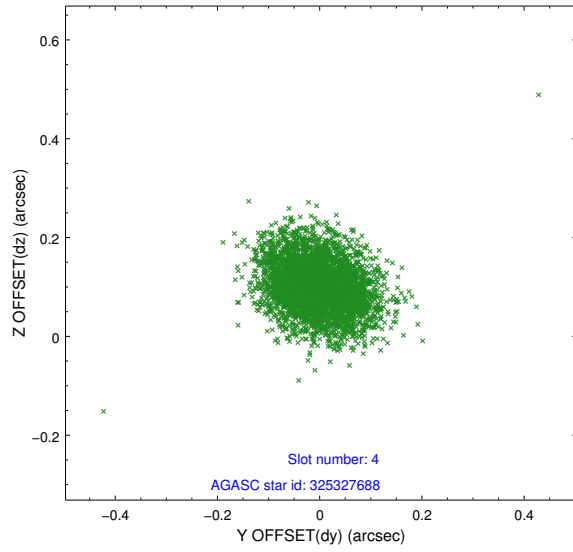
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	1951	-0.062	-0.012	0.007	0.011	0.000000	0.000000	-754.35	-1727.56
1	FID	ACIS-S-4	7.21	1951	0.024	0.033	0.006	0.010	0.000000	0.000000	2158.65	180.30
2	FID	ACIS-S-5	7.24	1950	0.008	-0.013	0.006	0.011	0.000000	0.000000	-1806.26	174.65
3	GUIDE	325323000	7.37	3901	-0.014	-0.134	0.050	0.082	124.596770	37.056165	-341.73	-1885.08
4	GUIDE	325327688	9.17	3901	-0.004	0.102	0.079	0.128	125.333169	36.318381	697.67	1353.97
5	GUIDE	325328184	9.77	3897	-0.092	-0.041	0.105	0.172	124.978246	37.418938	-2034.02	-1691.69
6	GUIDE	325323760	9.26	3898	0.064	-0.002	0.101	0.162	124.711537	36.081292	2406.94	321.21
7	GUIDE	325320736	9.25	3899	0.045	0.072	0.104	0.162	125.455366	36.056506	1284.40	2173.95

## 2.4 Star Slots

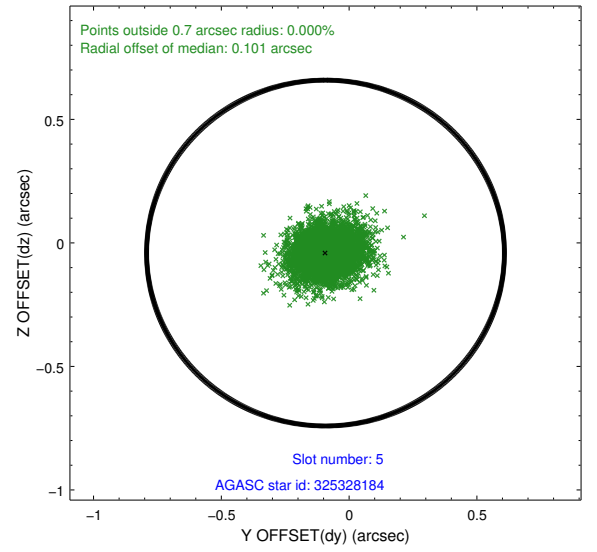
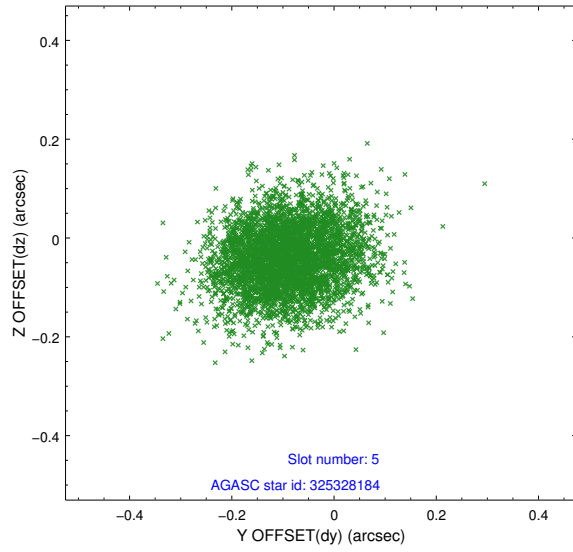
### 2.4.1 Slot 3



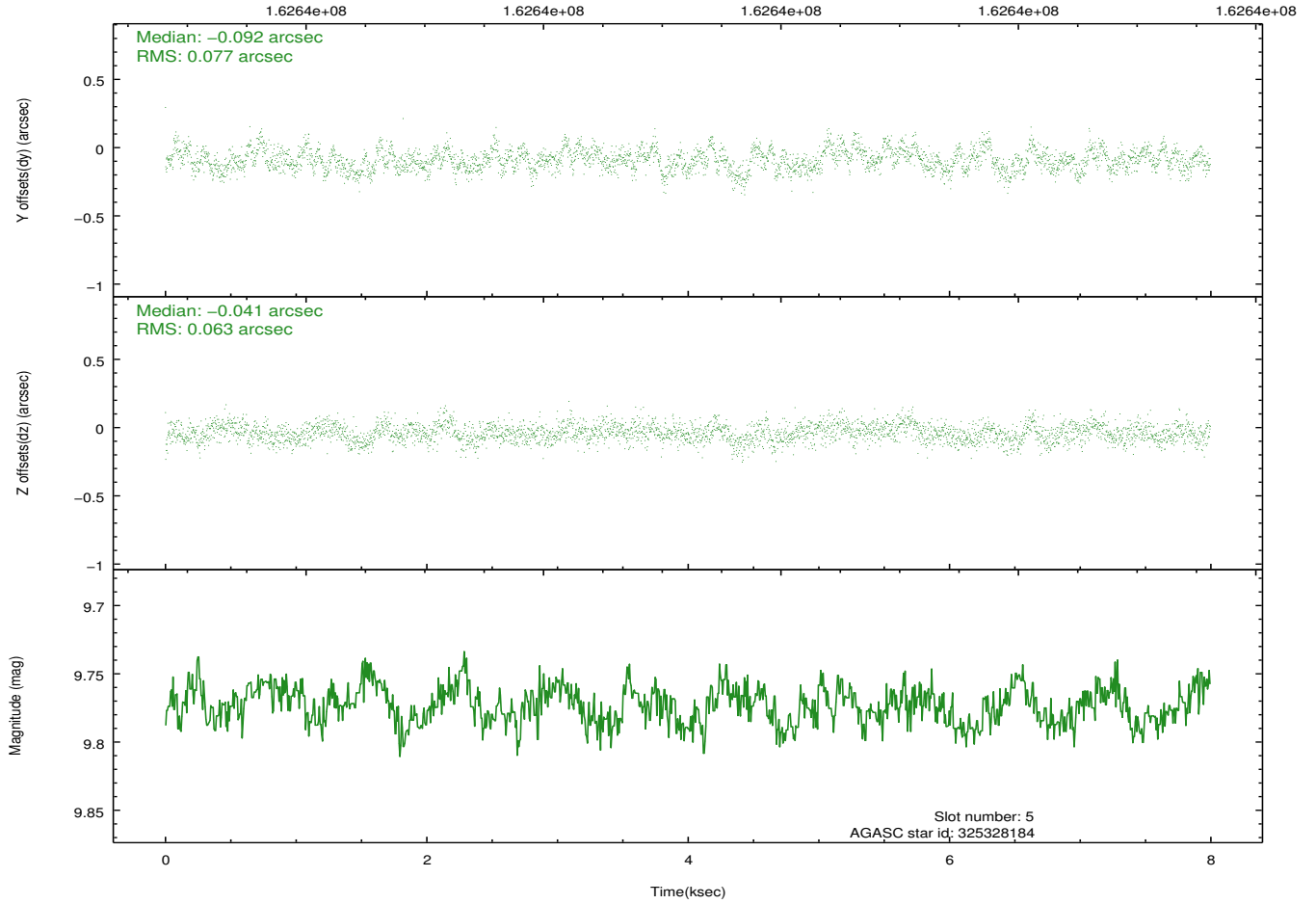
## 2.4.2 Slot 4



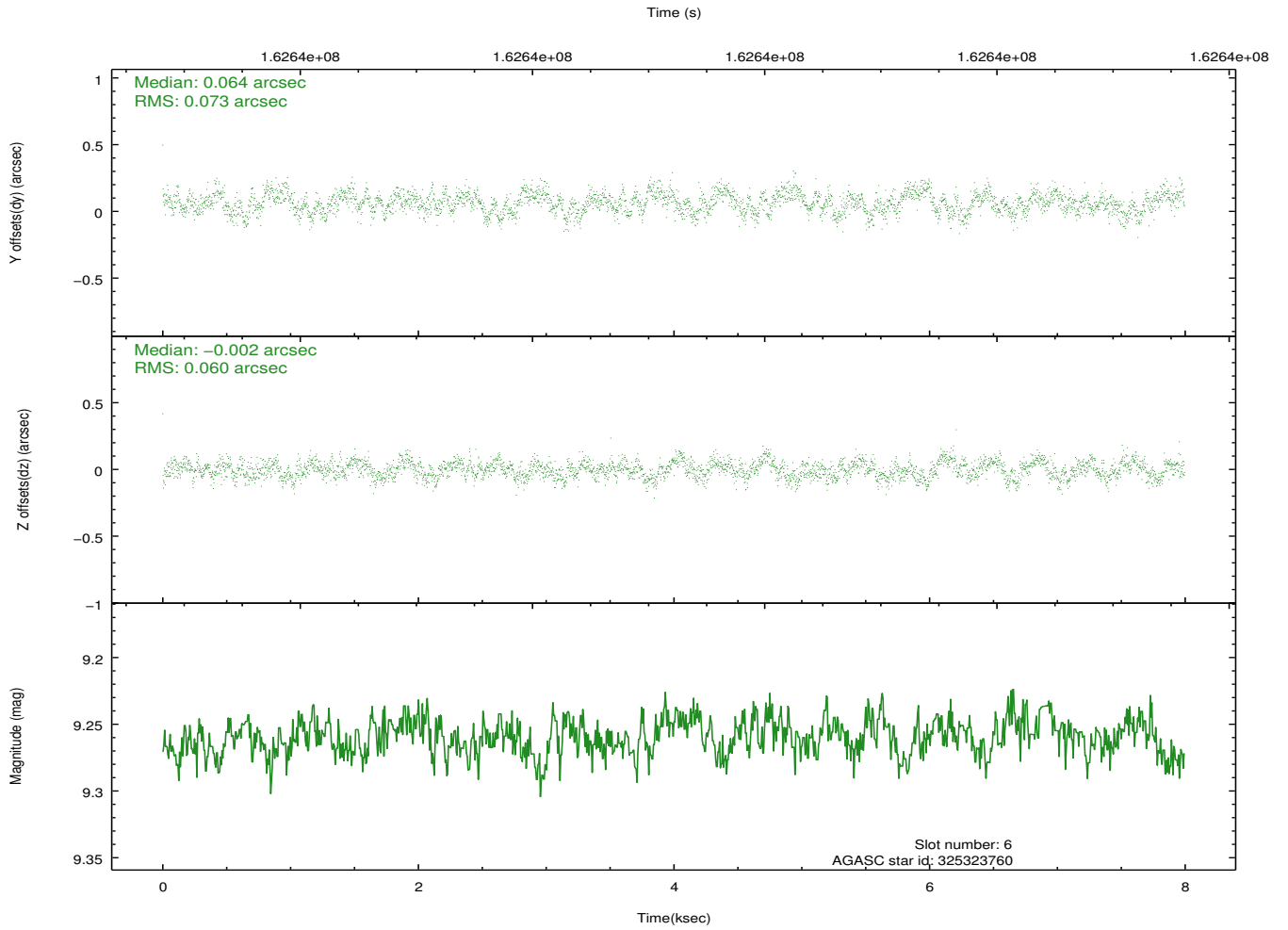
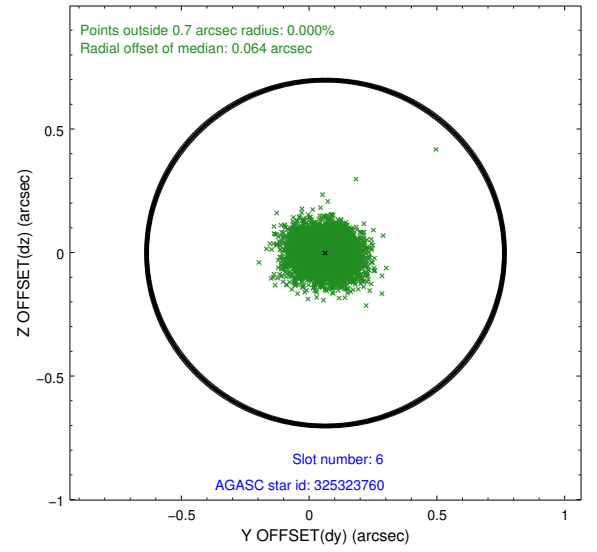
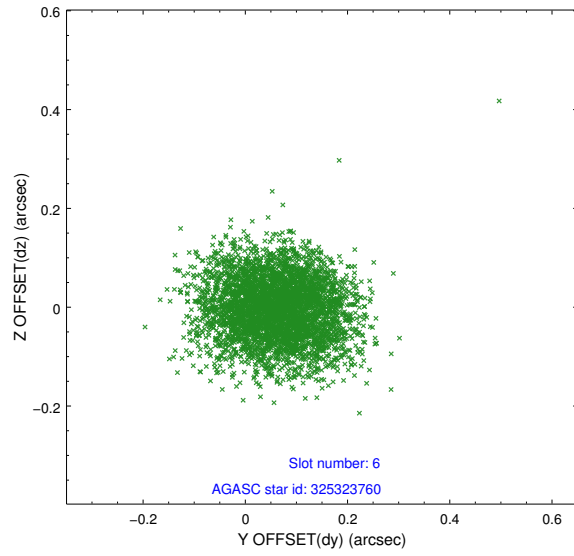
### 2.4.3 Slot 5



Time (s)

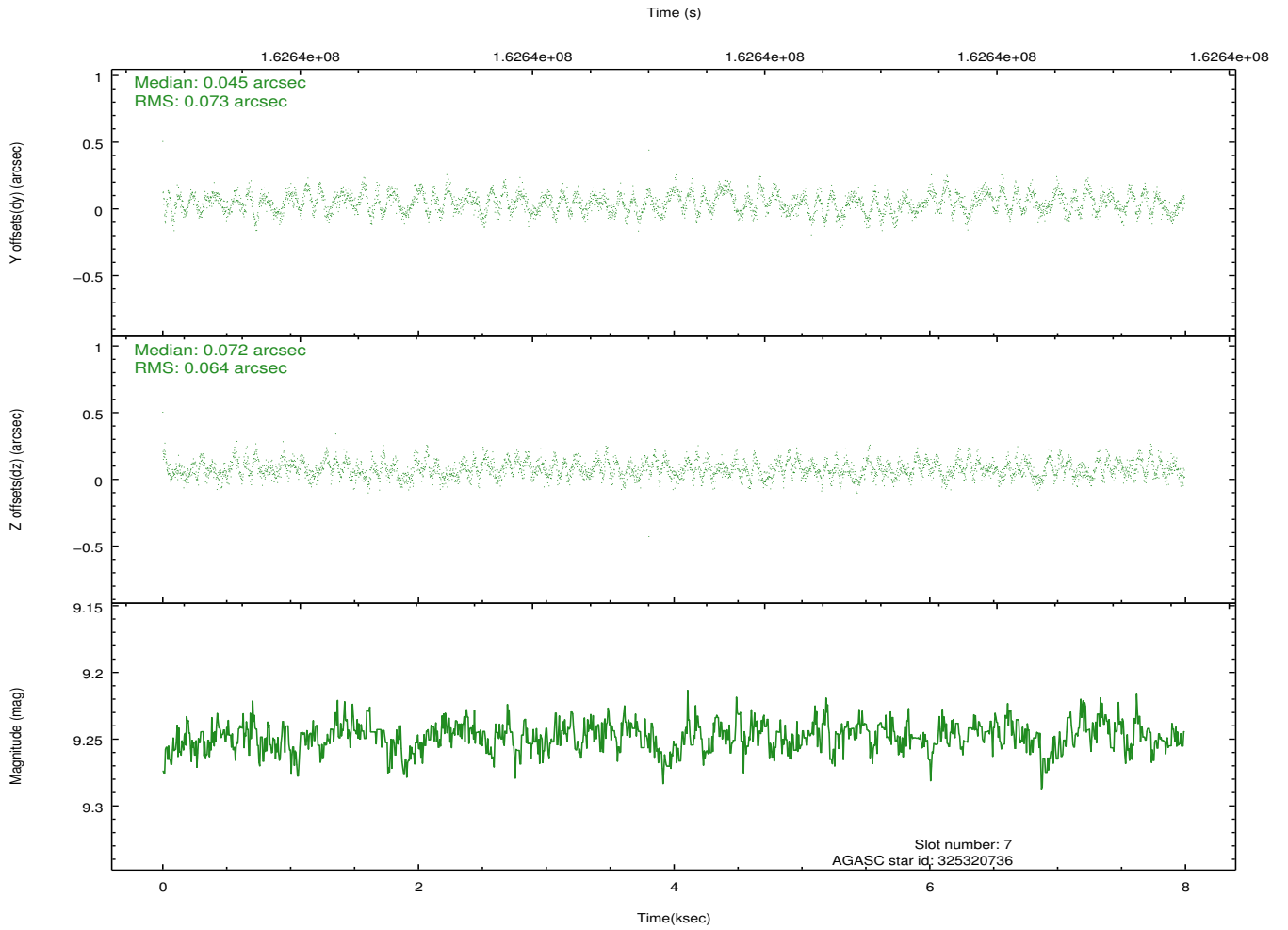
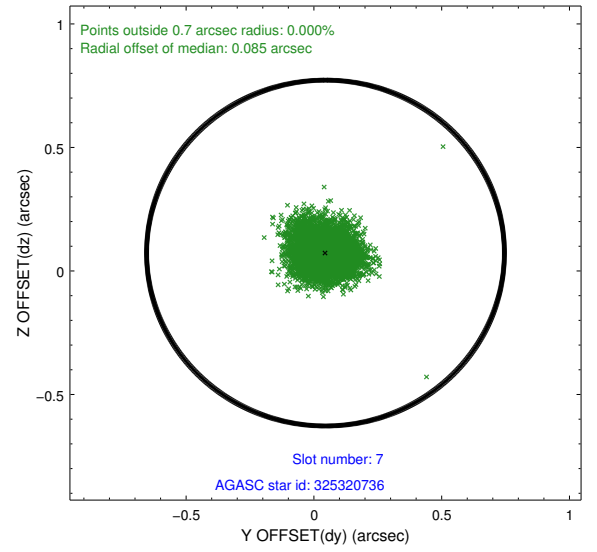
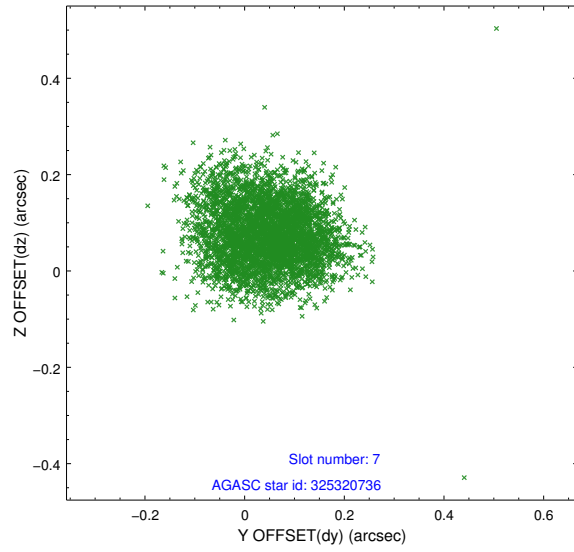


## 2.4.4 Slot 6



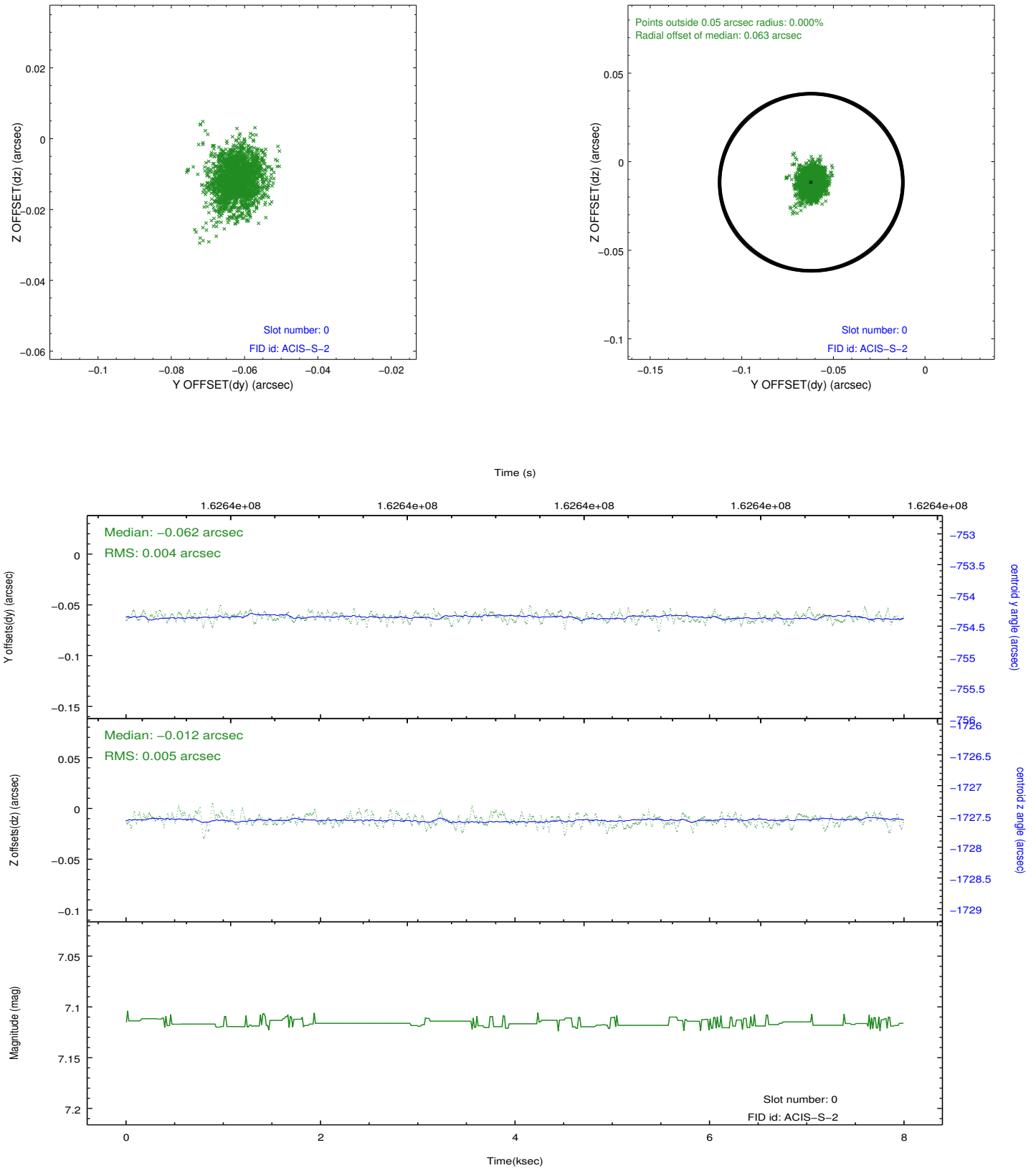


## 2.4.5 Slot 7

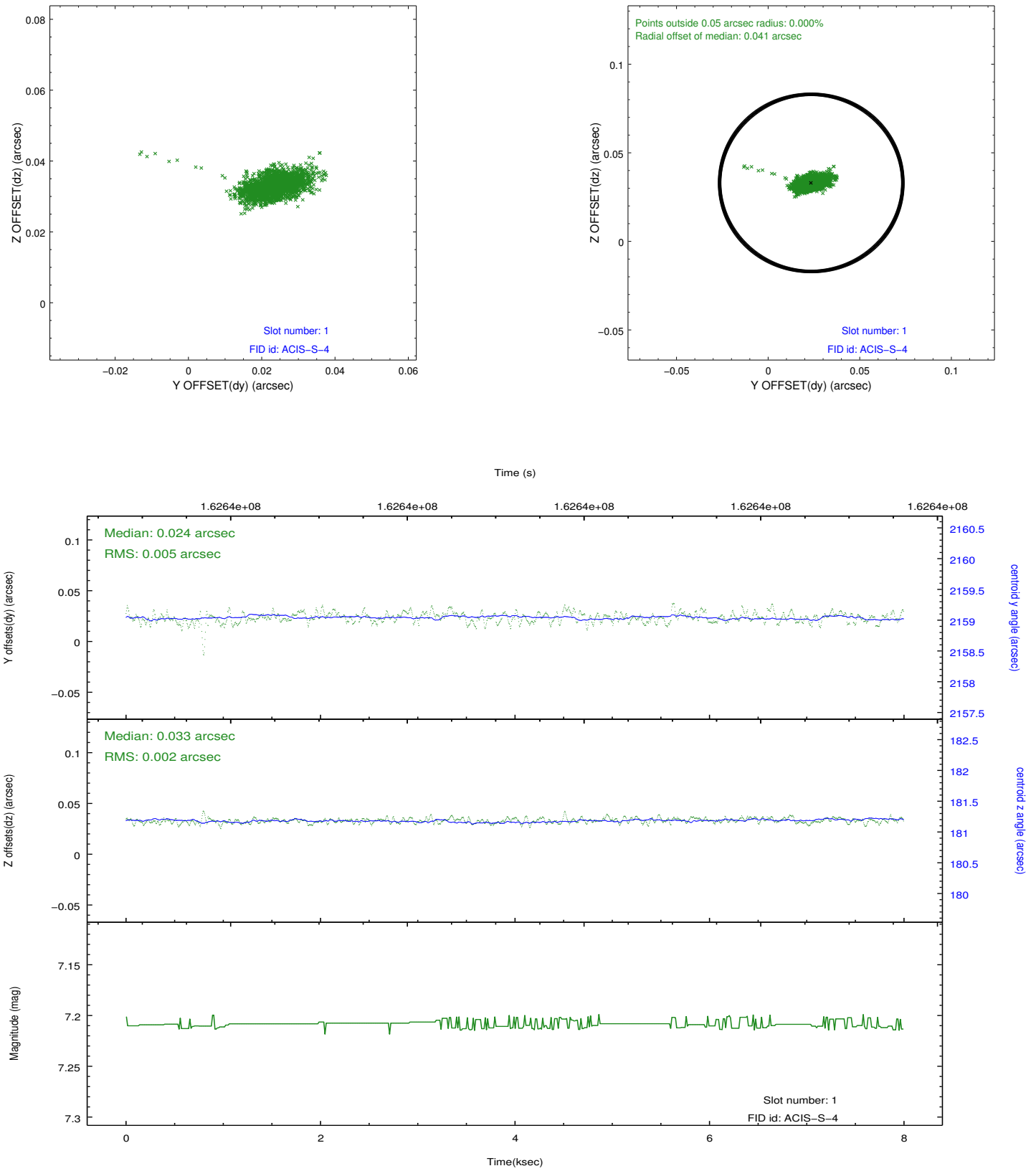


## 2.5 FID Slots

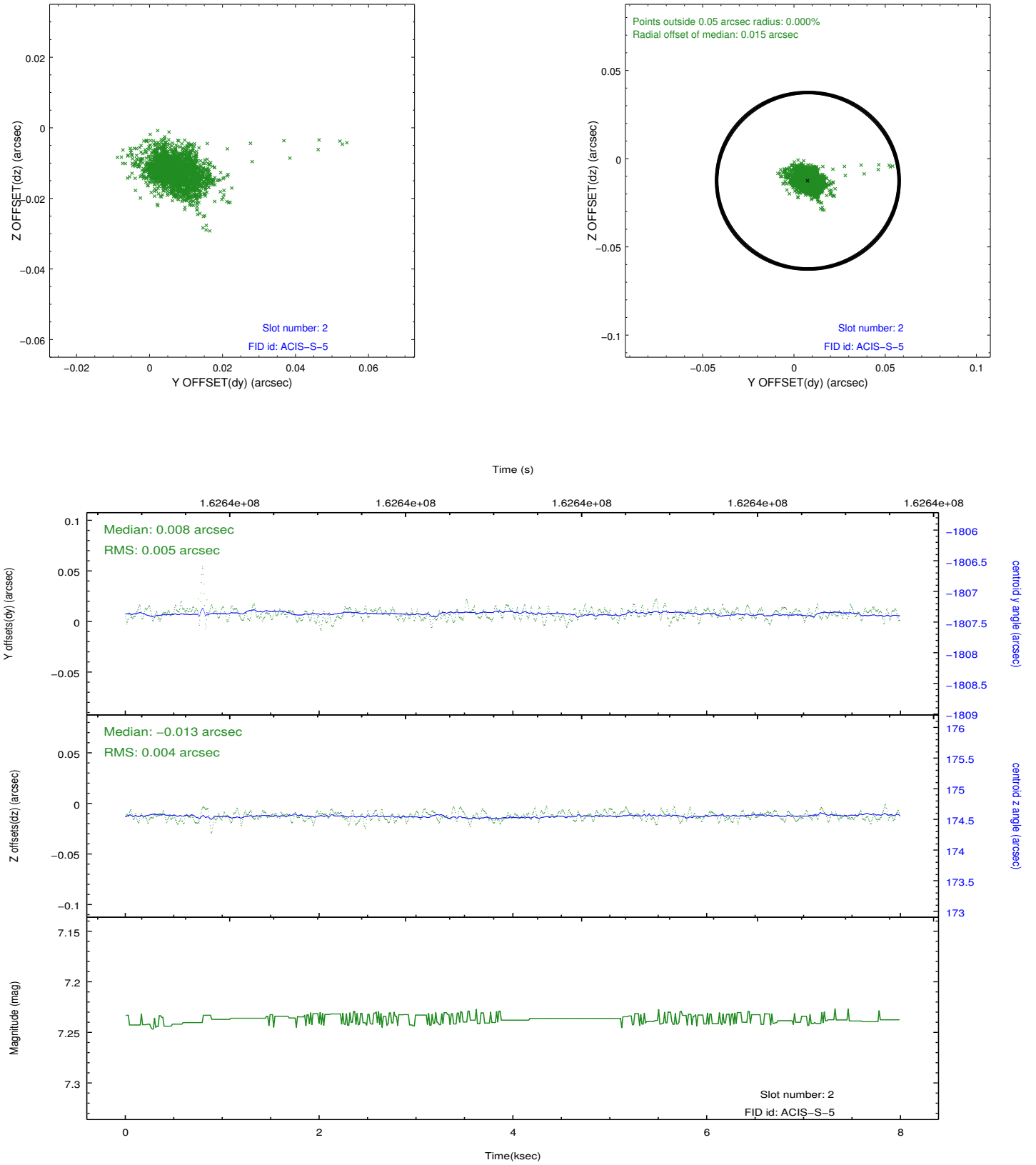
### 2.5.1 Slot 0



## 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)	2012.11.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.372

### A.2 Comments