

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3523 - L2 Version 3  
Chandra X-Ray Center

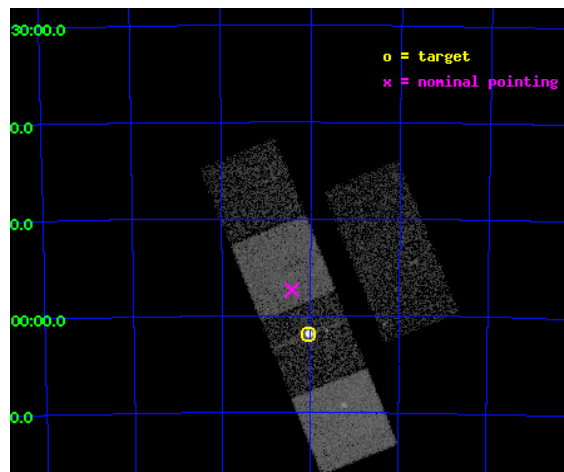
L2 Processing Date : Oct 22 2012

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# 1 Front

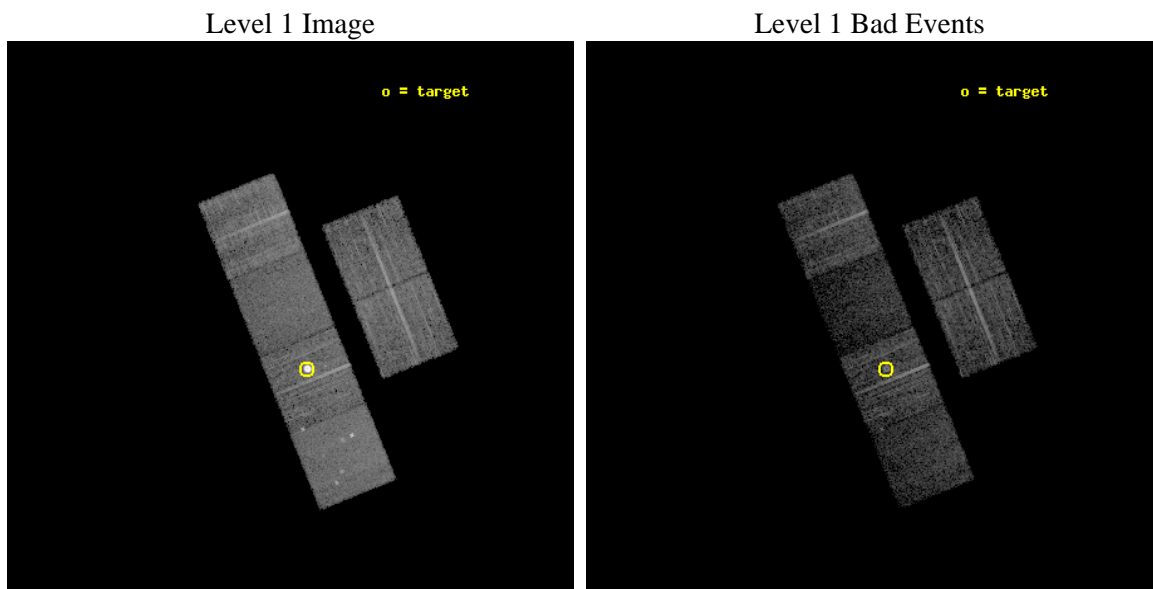
seq_num	590278	Sequence number
obs_id	3523	Observation id
title	AO4A ACIS-S CALIBRATION OBSERVATIONS OF E0102-72	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72[S2,-120,5.15,0,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	16.105407461715	Nominal RA [deg]
dec_nom	-71.955667761463	Nominal Dec [deg]
roll_nom	247.95251811519	Nominal Roll [deg]
revision	3	Processing version of data
ontime	7731.199971199	Sum of GTIs [s]
livetime	7633.302861994	Livetime [s]
ontime2	7731.199971199	Sum of GTIs [s]
ontime3	7731.199971199	Sum of GTIs [s]
ontime5	7731.199971199	Sum of GTIs [s]
ontime6	7731.199971199	Sum of GTIs [s]
ontime7	7731.199971199	Sum of GTIs [s]
ontime8	7724.718020767	Sum of GTIs [s]
l2events	83614	Number of level 2 events



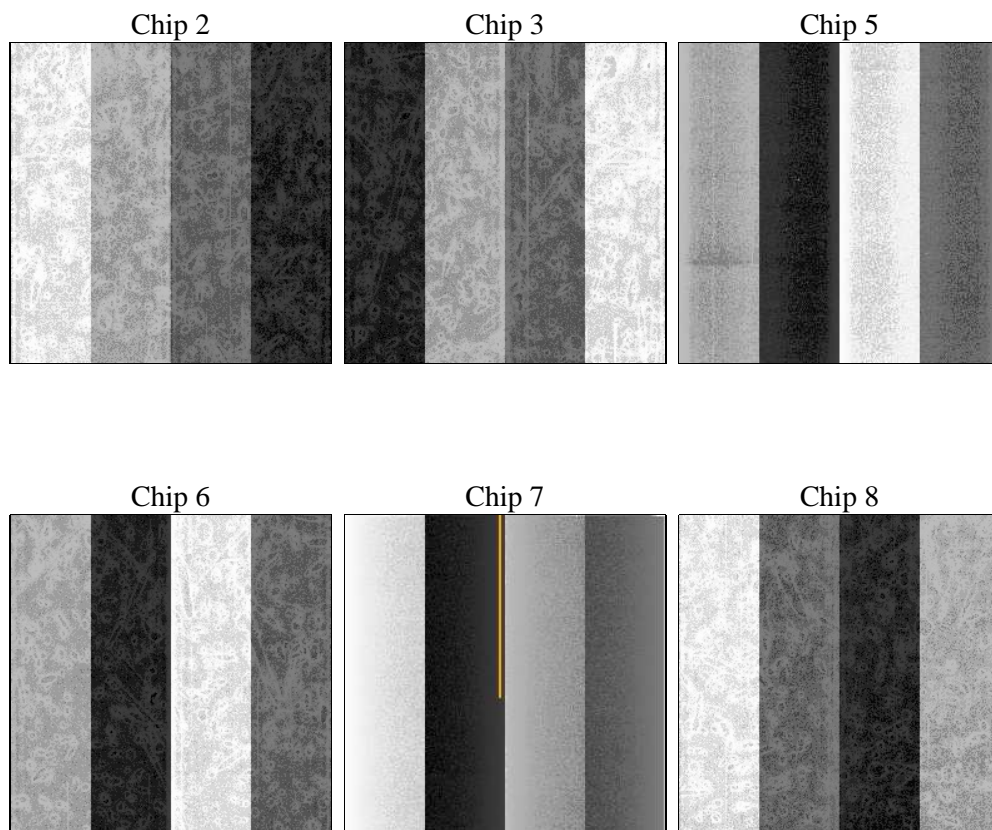
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7973.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	7731.199971199	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime2	7731.199971199	Sum of GTIs [s]
date	2012-10-22T04:02:59	Date and time of file creation	ontime3	7731.199971199	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	7731.199971199	Sum of GTIs [s]
			ontime6	7731.199971199	Sum of GTIs [s]
			ontime7	7731.199971199	Sum of GTIs [s]
			ontime8	7724.718020767	Sum of GTIs [s]
			l1events	283624	Number of level 1 events

### 2.1.4 Events

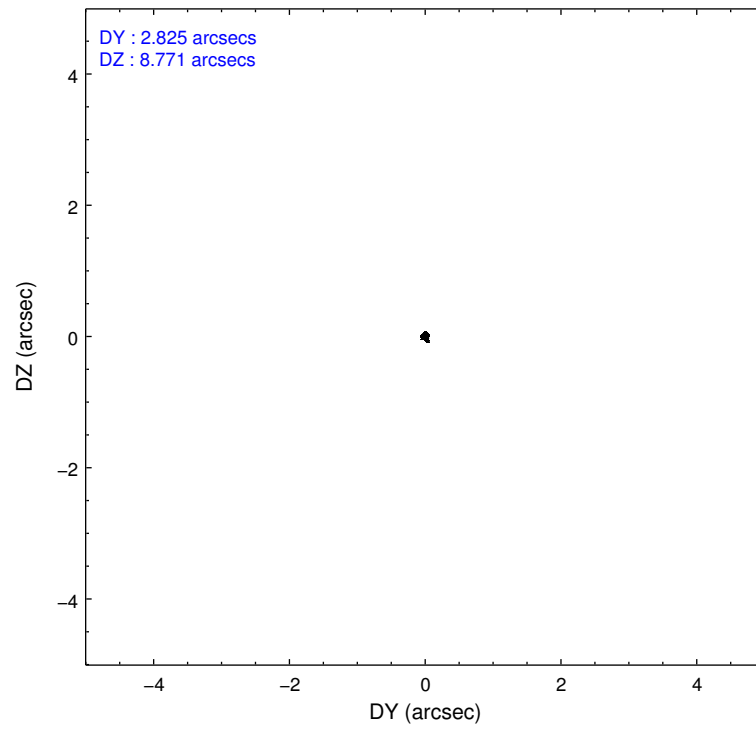
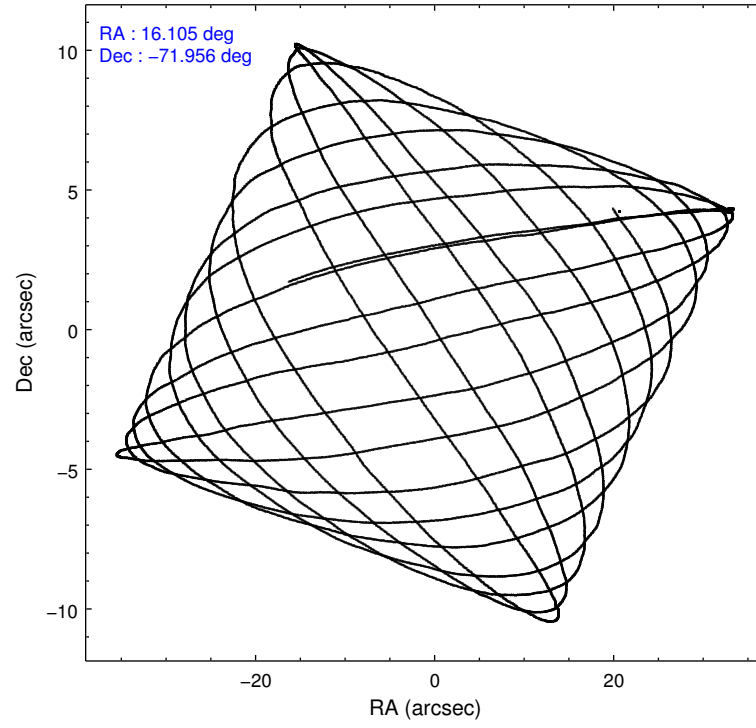
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	42305	37057	48370	70755	35937	49200	grade 0 events	1541	1278	3985	28546	1905	2953
rejected events	38297	33586	21810	36437	17908	38333		3%	3%	8%	40%	5%	6%
rejected %	90%	90%	45%	51%	49%	77%	grade 1 events	20	20	121	224	41	33
								0%	0%	0%	0%	0%	0%
							grade 2 events	949	746	7555	2884	3731	2328
								2%	2%	15%	4%	10%	4%
							grade 3 events	428	402	1298	988	1867	1266
								1%	1%	2%	1%	5%	2%
							grade 4 events	448	431	1203	951	1747	1185
								1%	1%	2%	1%	4%	2%
							grade 5 events	1051	1203	3872	1349	3962	1821
								2%	3%	8%	1%	11%	3%
							grade 6 events	643	614	12532	964	8785	3137
								1%	1%	25%	1%	24%	6%
							grade 7 events	37225	32363	17804	34849	13899	36477
								87%	87%	36%	49%	38%	74%

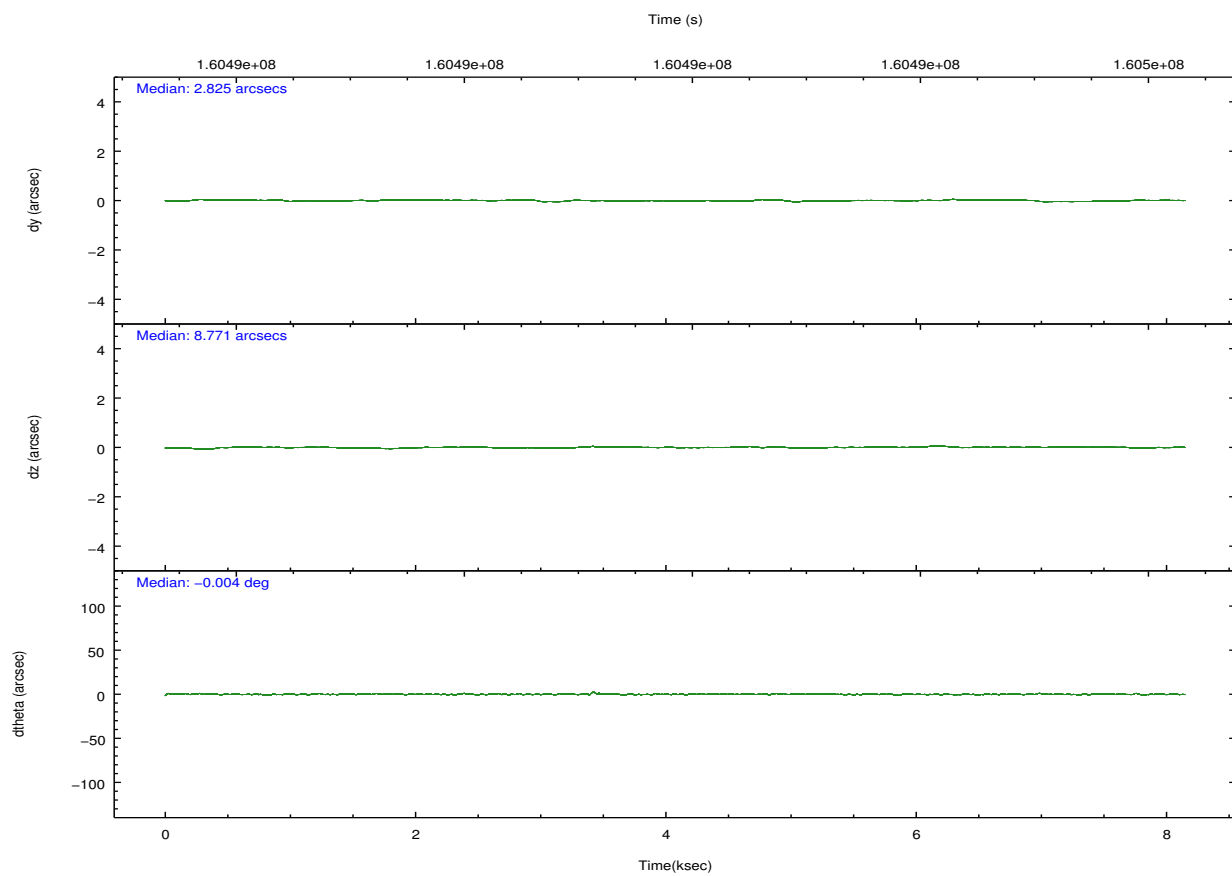
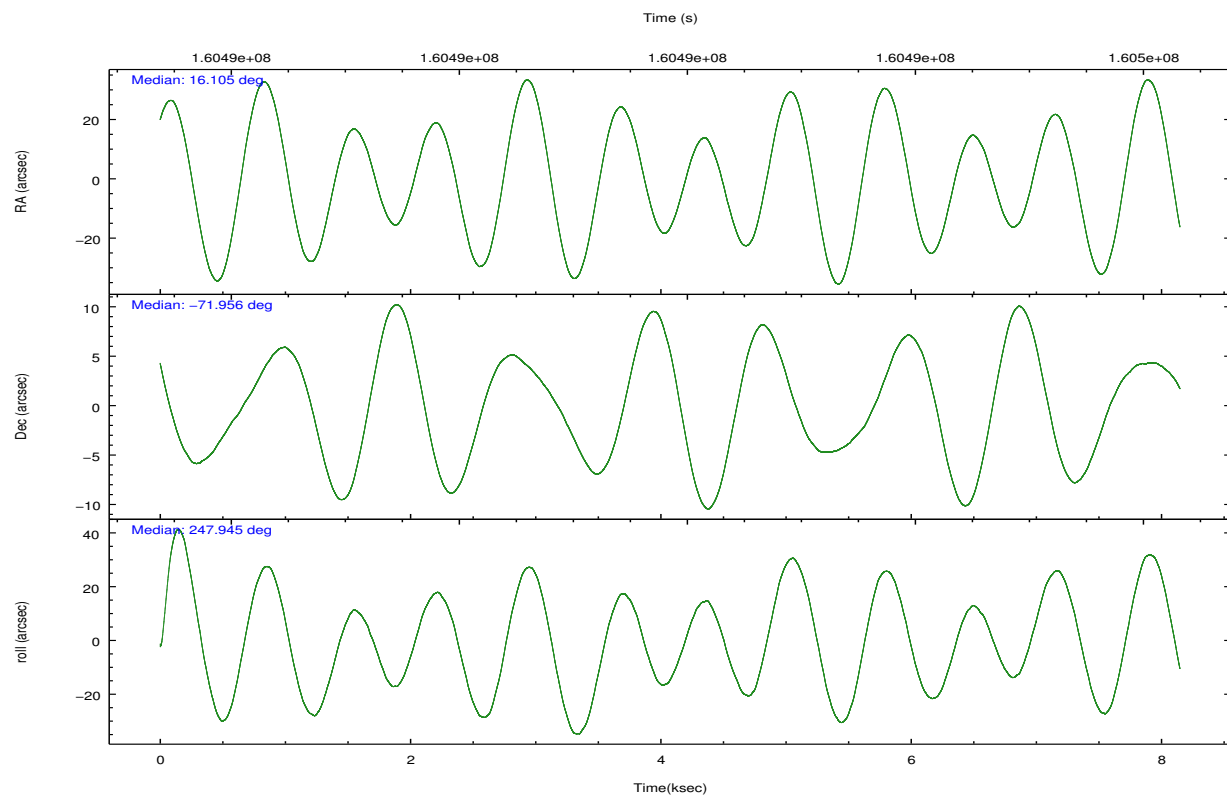


## 2.2 Compared Parameters

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	16.091885	16.10540746171524	Subarray requested	NONE	NONE
[deg] Pointing Dec	-71.928749	-71.95566776146327	Alternating exposures requested	N	N
[deg] Pointing Roll	247.783045	247.9525181151879	[s] Primary exposure time	0.000000	3.2
[s] Window start time (MET)	158976064.184000	158976064.184000			
[s] Window stop time (MET)	161654464.184000	161654464.184000			
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	160487950.184000	160487574.3562			
Observation start date	2003-02-01T11:58:06	2003-02-01T11:52:54			
[s] Observation end time (MET)	160495923.184000	160496057.25655			
Observation end date	2003-02-01T14:10:59	2003-02-01T14:14:17			
Read mode	TIMED	TIMED			

## 2.3 Aspect



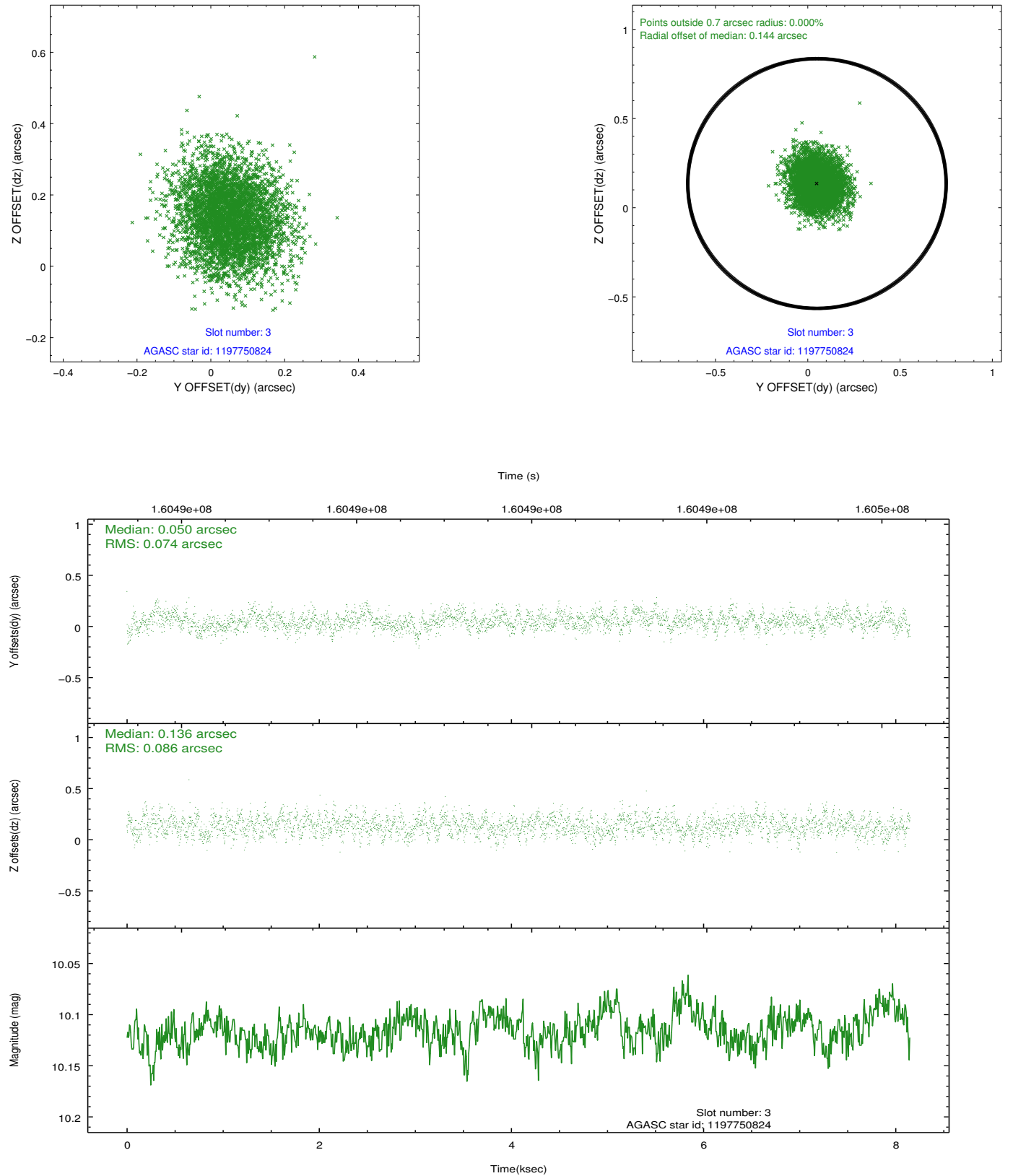


### Slot Statistics

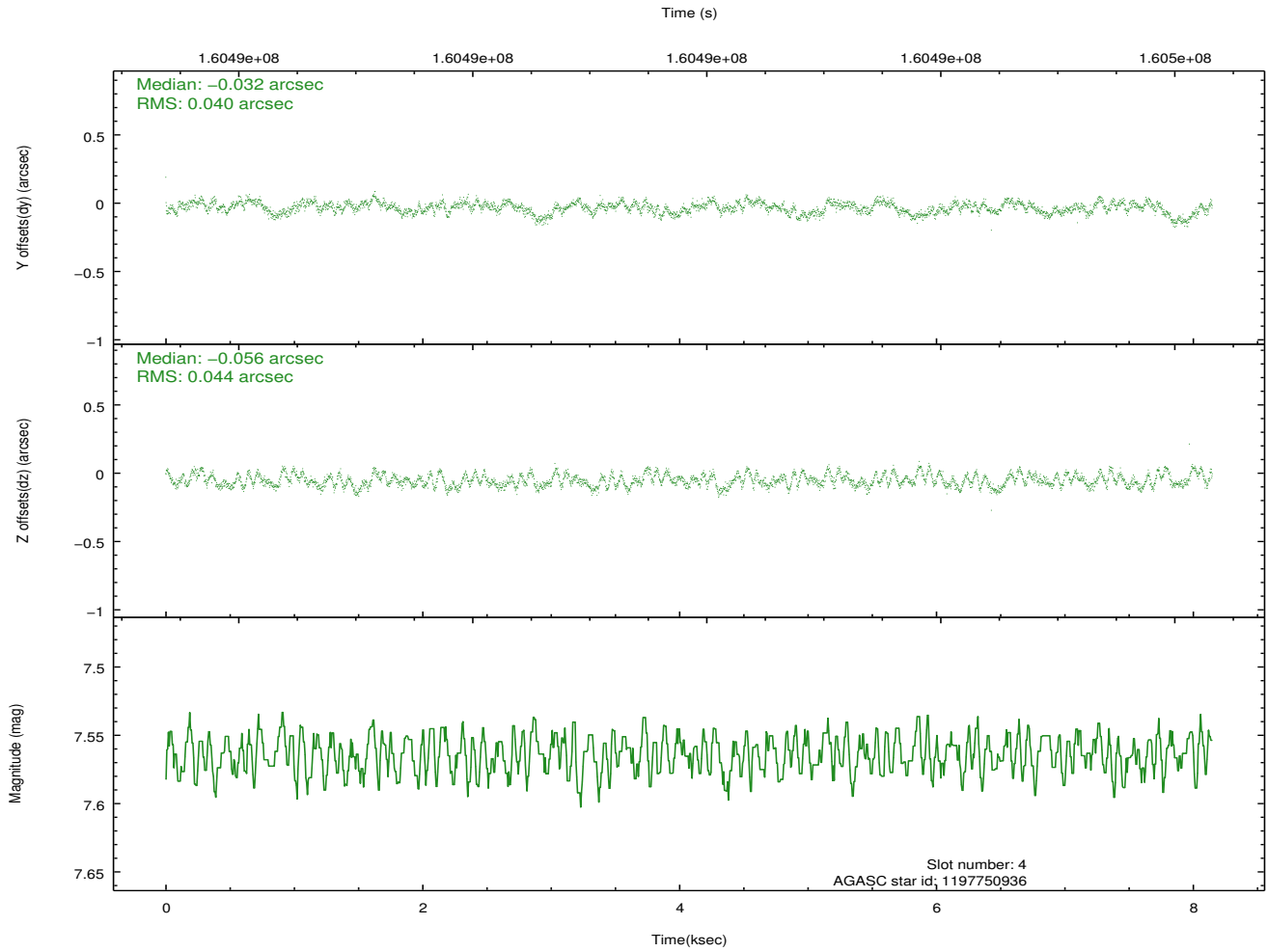
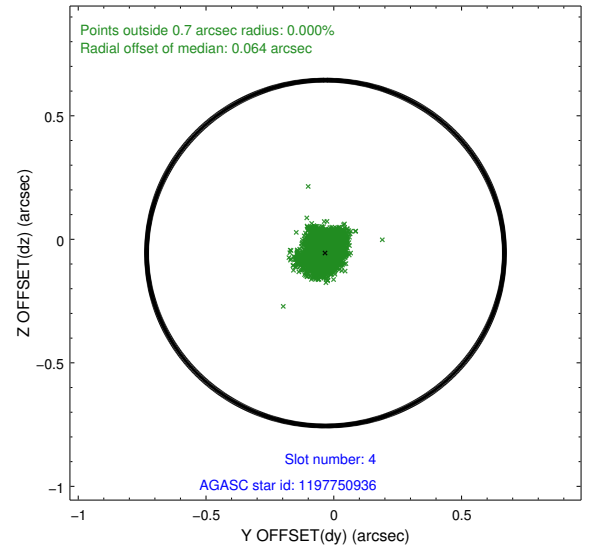
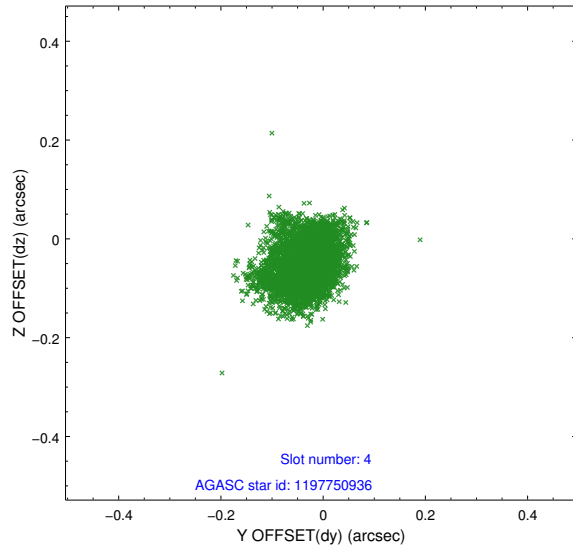
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	1988	-0.021	-0.012	0.006	0.011	0.000000	0.000000	-755.48	-1729.94
1	FID	ACIS-S-4	7.20	1987	-0.005	0.013	0.005	0.010	0.000000	0.000000	2157.50	177.86
2	FID	ACIS-S-5	7.24	1988	-0.005	0.007	0.006	0.011	0.000000	0.000000	-1807.42	172.30
3	GUIDE	1197750824	10.12	3972	0.050	0.136	0.121	0.194	14.791487	-71.393477	-1203.68	-2105.24
4	GUIDE	1197750936	7.56	3976	-0.032	-0.056	0.064	0.101	15.387940	-71.549550	-955.97	-1257.46
5	GUIDE	1197884712	8.30	3975	0.002	-0.077	0.067	0.109	16.087398	-72.252690	1081.46	436.23
6	GUIDE	1198190968	10.01	3970	-0.011	0.049	0.167	0.282	15.749622	-72.545972	2198.24	498.97
7	GUIDE	1197885104	9.36	3972	-0.019	-0.051	0.120	0.187	17.845067	-72.189368	165.49	2152.42

## 2.4 Star Slots

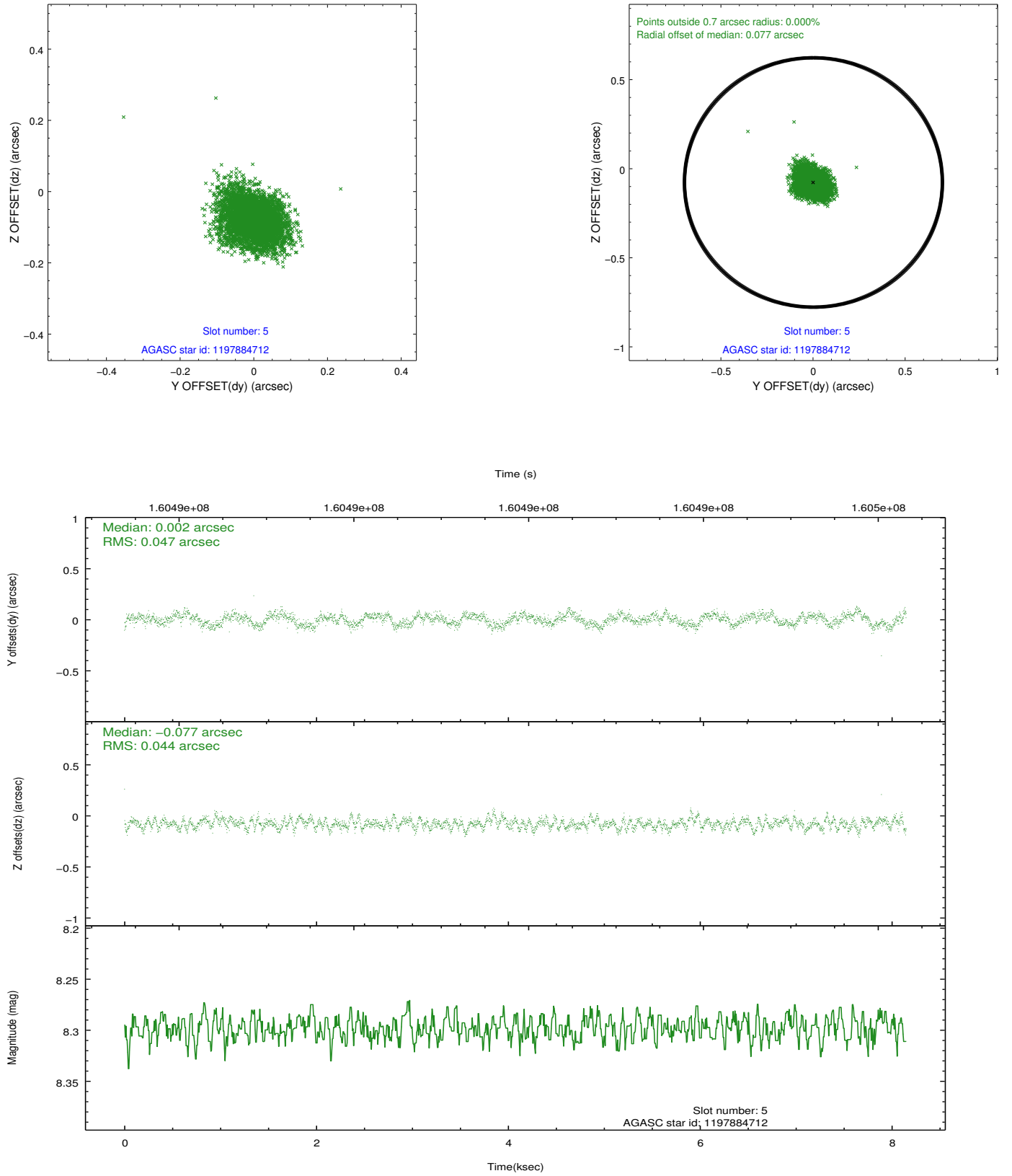
### 2.4.1 Slot 3



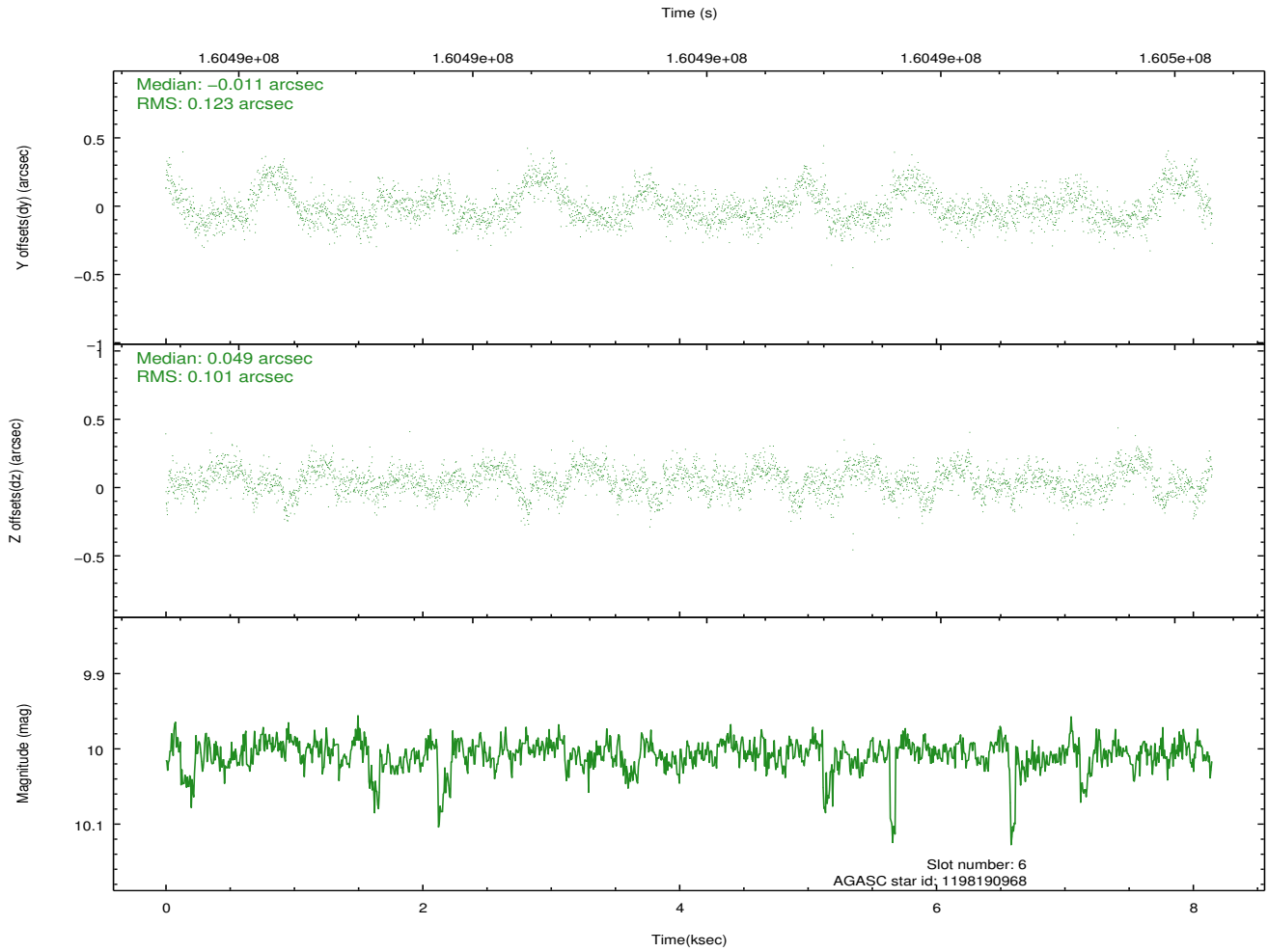
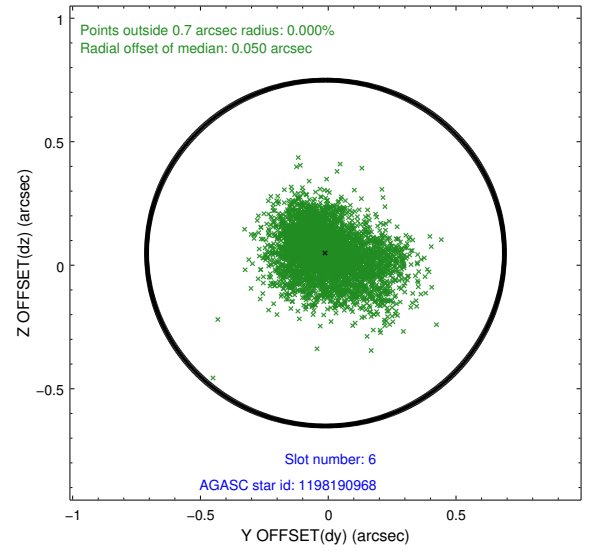
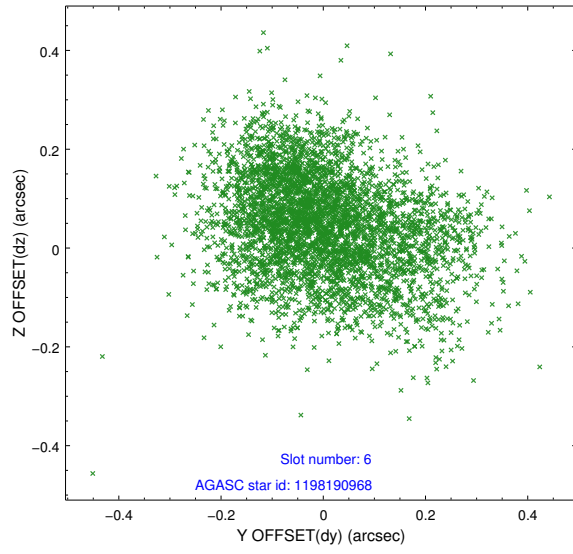
## 2.4.2 Slot 4



### 2.4.3 Slot 5

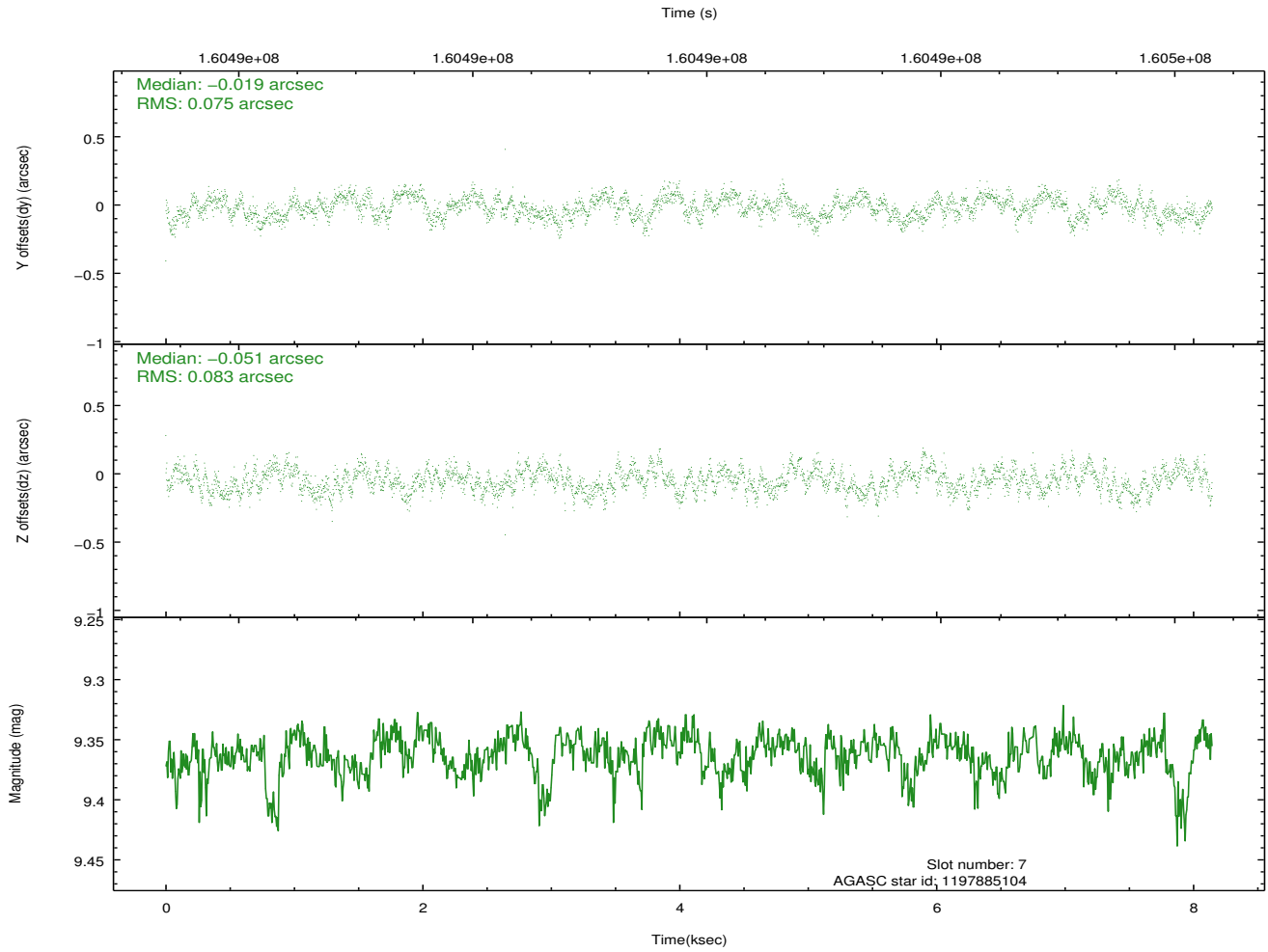
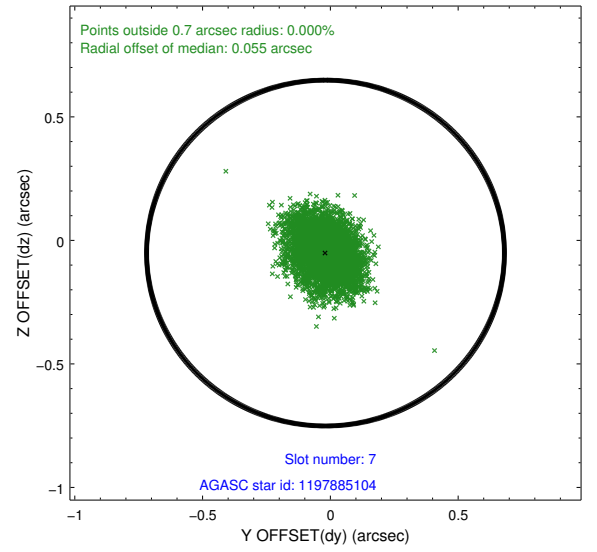
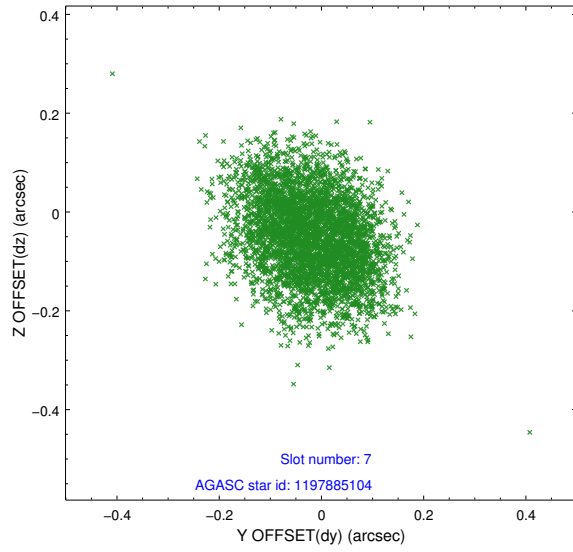


## 2.4.4 Slot 6



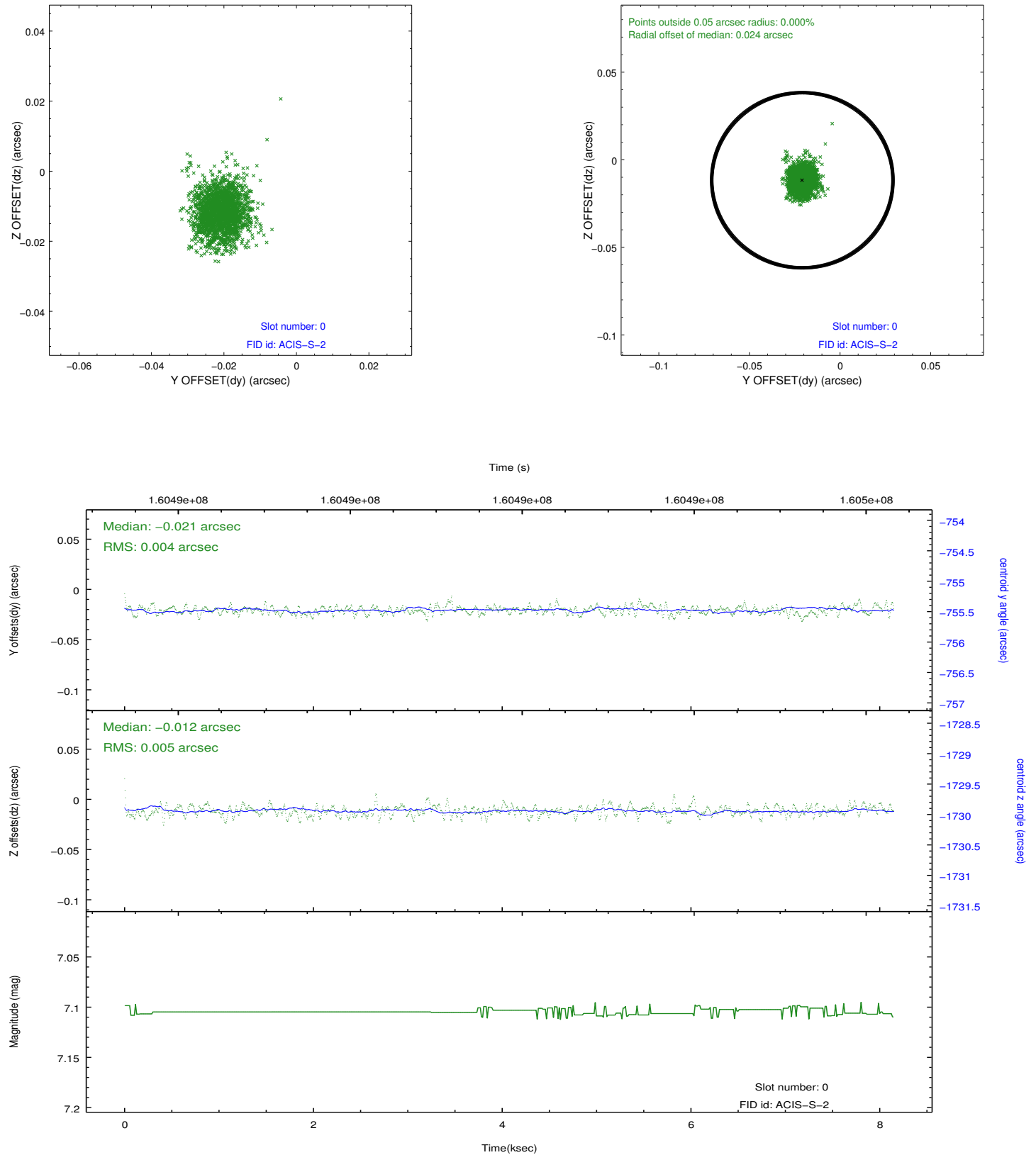


## 2.4.5 Slot 7

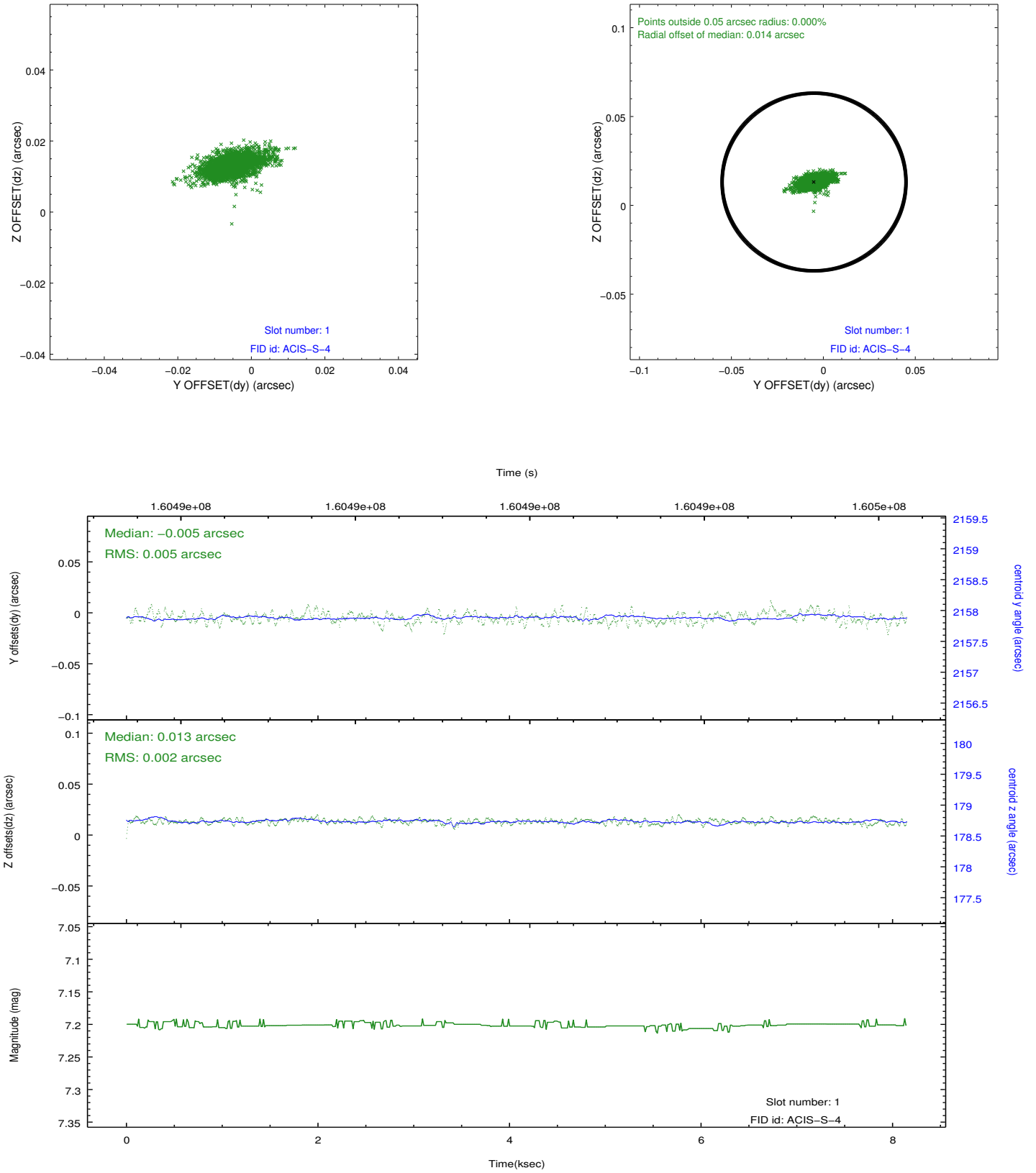


## 2.5 FID Slots

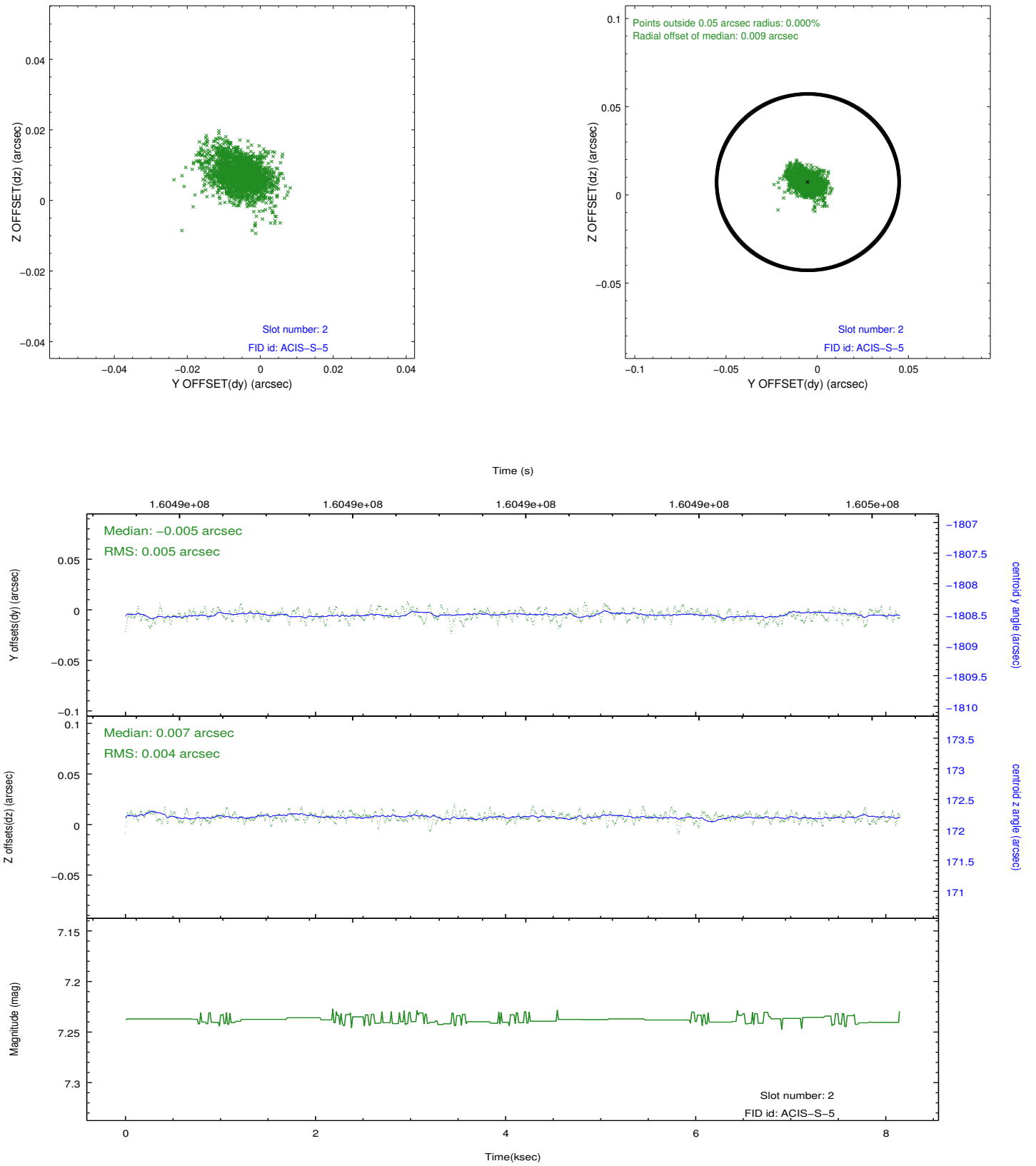
### 2.5.1 Slot 0



## 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	7.735

### A.2 Comments

Window constraint met.