

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 7833 - L2 Version 2  
Chandra X-Ray Center

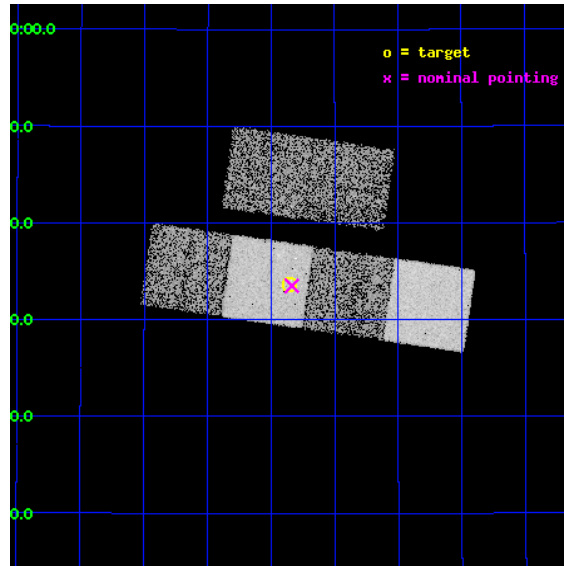
L2 Processing Date : May 12 2012

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# 1 Front

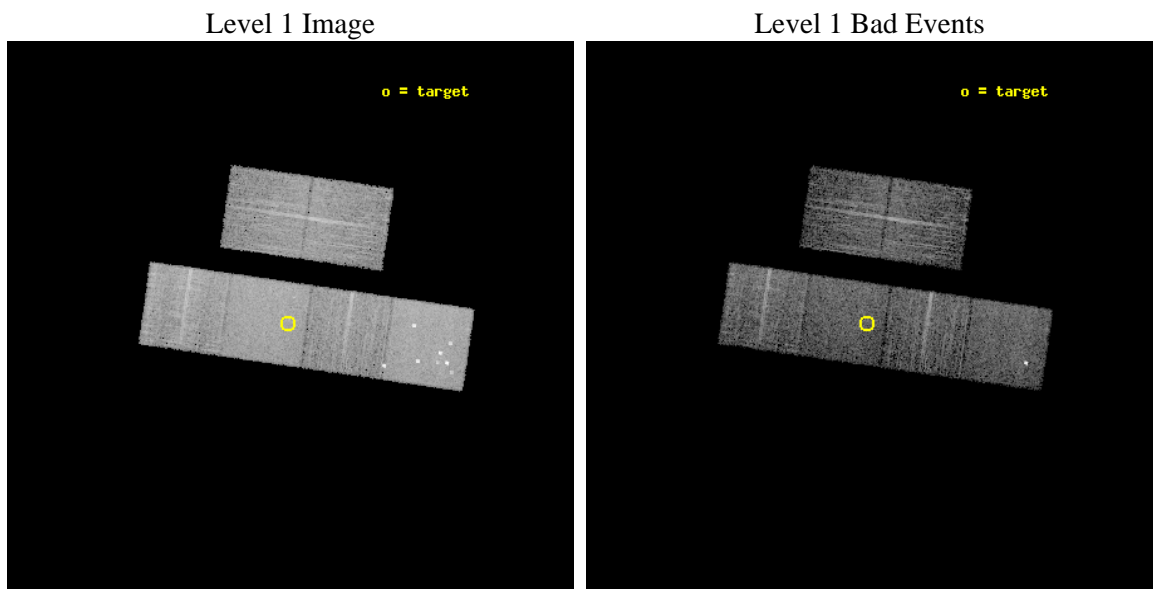
seq_num	701497	Sequence number
obs_id	7833	Observation id
title	Demographics of black holes in the local Universe.	Proposal title
observer	Prof. Smita Mathur	Principal investigator
object	NGC 4393	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	186.463333	Observer's specified target RA [deg]
dec_targ	27.561556	Observer's specified target Dec [deg]
ra_nom	186.45918963294	Nominal RA [deg]
dec_nom	27.558464842341	Nominal Dec [deg]
roll_nom	188.17591217103	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4754.837833643	Sum of GTIs [s]
livetime	4694.6292139738	Livetime [s]
ontime2	4754.8788736463	Sum of GTIs [s]
ontime3	4751.4736933112	Sum of GTIs [s]
ontime5	4754.7967936397	Sum of GTIs [s]
ontime6	4754.7557536364	Sum of GTIs [s]
ontime7	4754.837833643	Sum of GTIs [s]
ontime8	4751.4326236844	Sum of GTIs [s]
l2events	74305	Number of level 2 events



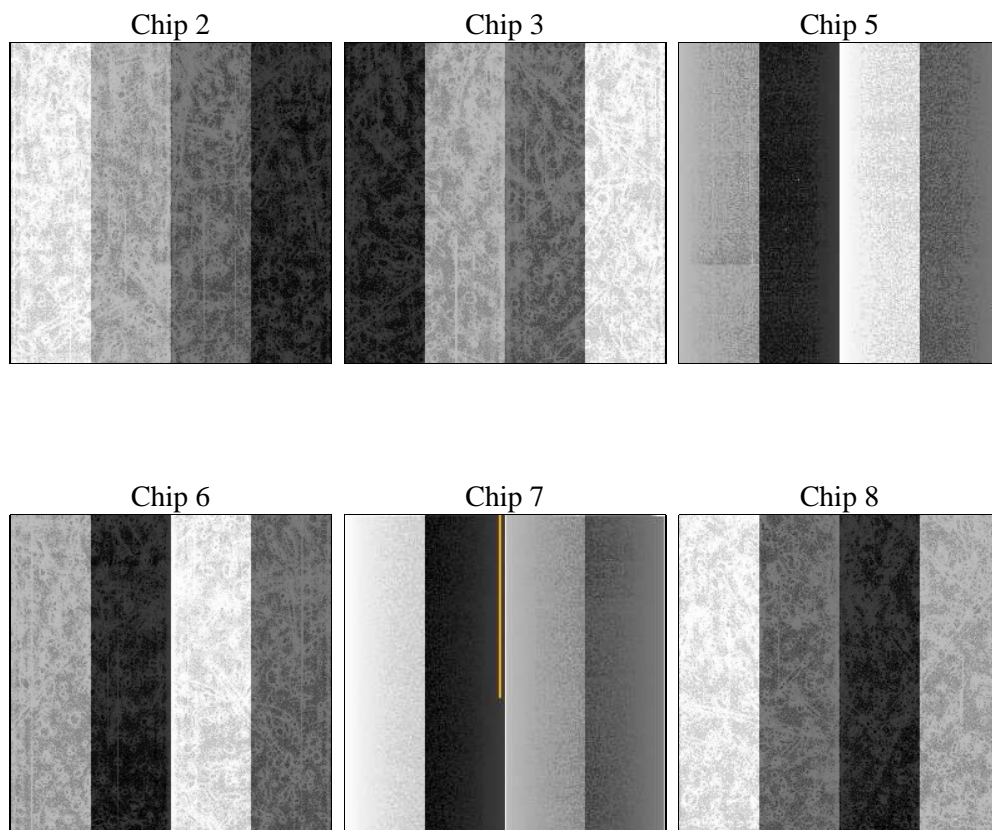
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	4754.837833643	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime2	4754.8788736463	Sum of GTIs [s]
date	2012-05-12T13:01:53	Date and time of file creation	ontime3	4751.4736933112	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	4754.7967936397	Sum of GTIs [s]
			ontime6	4754.7557536364	Sum of GTIs [s]
			ontime7	4754.837833643	Sum of GTIs [s]
			ontime8	4751.4326236844	Sum of GTIs [s]
			l1events	340233	Number of level 1 events

### 2.1.4 Events

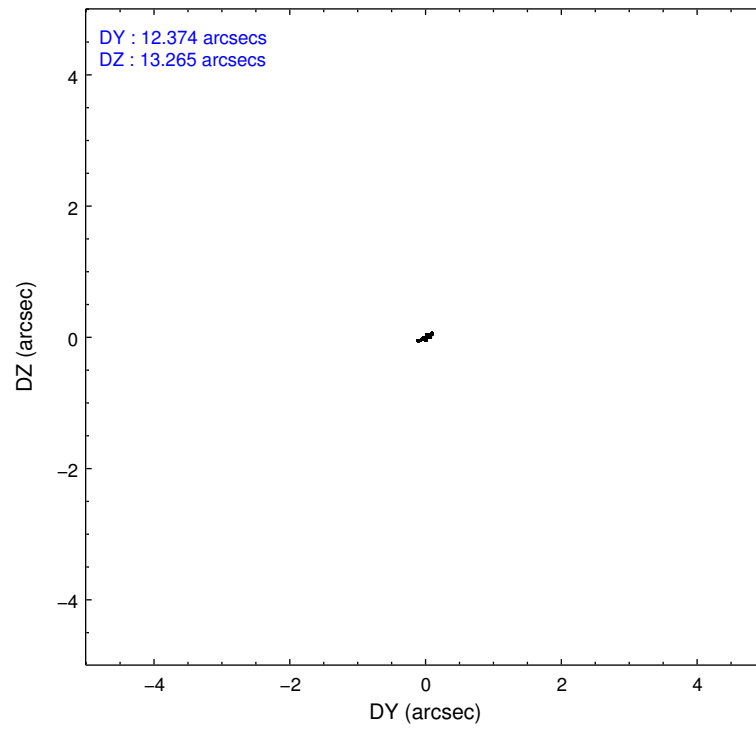
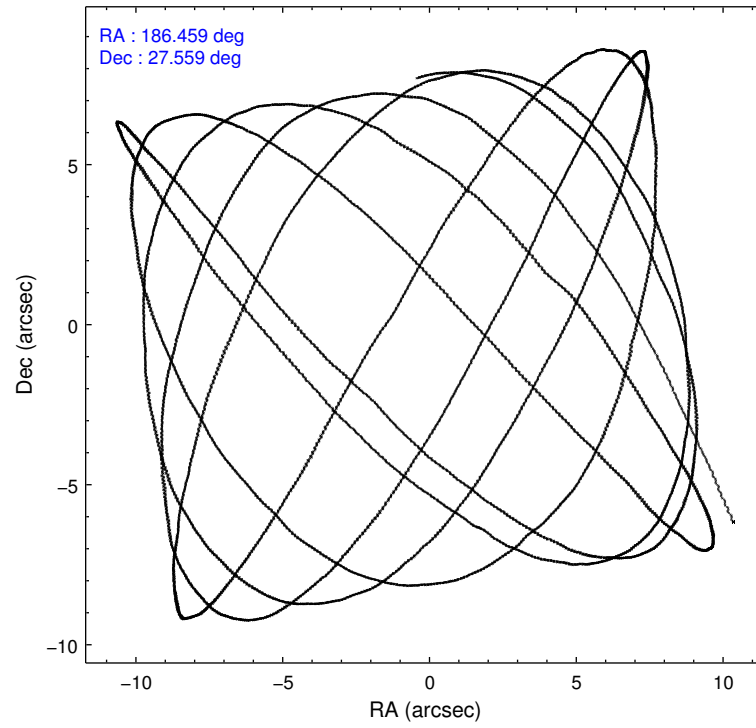
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	46892	44566	77636	46182	63542	61415	grade 0 events	2159	2311	6671	2192	2171	3946
rejected events	41717	39331	39824	40581	37485	48454		4%	5%	8%	4%	3%	6%
rejected %	88%	88%	51%	87%	58%	78%	grade 1 events	19	27	105	22	59	54
								0%	0%	0%	0%	0%	0%
							grade 2 events	1125	1041	10374	1253	5343	2997
								2%	2%	13%	2%	8%	4%
							grade 3 events	512	507	1149	539	2200	1303
								1%	1%	1%	1%	3%	2%
							grade 4 events	492	495	985	497	2054	1160
								1%	1%	1%	1%	3%	1%
							grade 5 events	1826	2036	4692	2124	5817	2850
								3%	4%	6%	4%	9%	4%
							grade 6 events	893	889	18680	1130	14323	3560
								1%	1%	24%	2%	22%	5%
							grade 7 events	39866	37260	34980	38425	31575	45545
								85%	83%	45%	83%	49%	74%

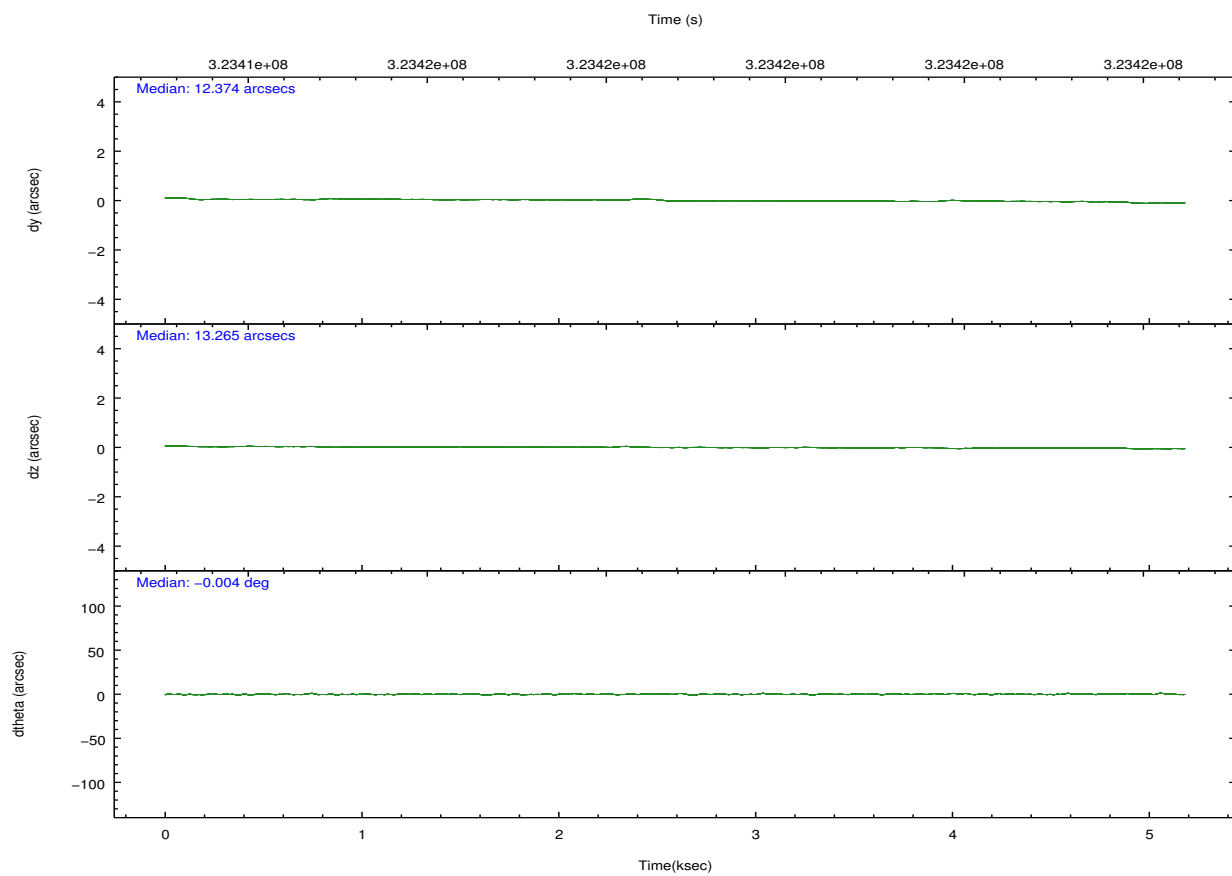
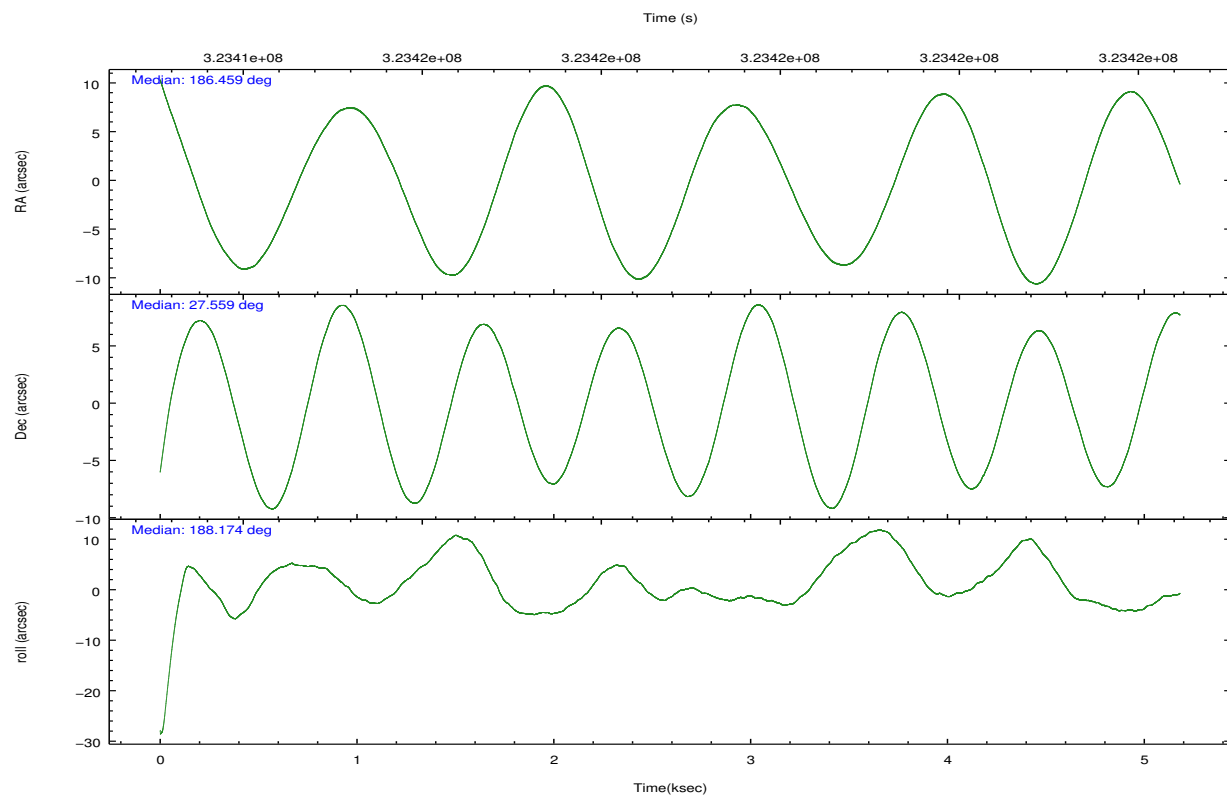


## 2.2 Compared Parameters

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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	186.483123	186.459189632943	Subarray requested	NONE	NONE
[deg] Pointing Dec	27.575635	27.55846484234086	Alternating exposures requested	N	N
[deg] Pointing Roll	188.008266	188.1759121710294	[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	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	323413974.184000	323413107.61042			
Observation start date	2008-04-01T05:11:49	2008-04-01T04:58:27			
[s] Observation end time (MET)	323418974.184000	323420441.48578			
Observation end date	2008-04-01T06:35:09	2008-04-01T07:00:41			
Read mode	TIMED	TIMED			

## 2.3 Aspect



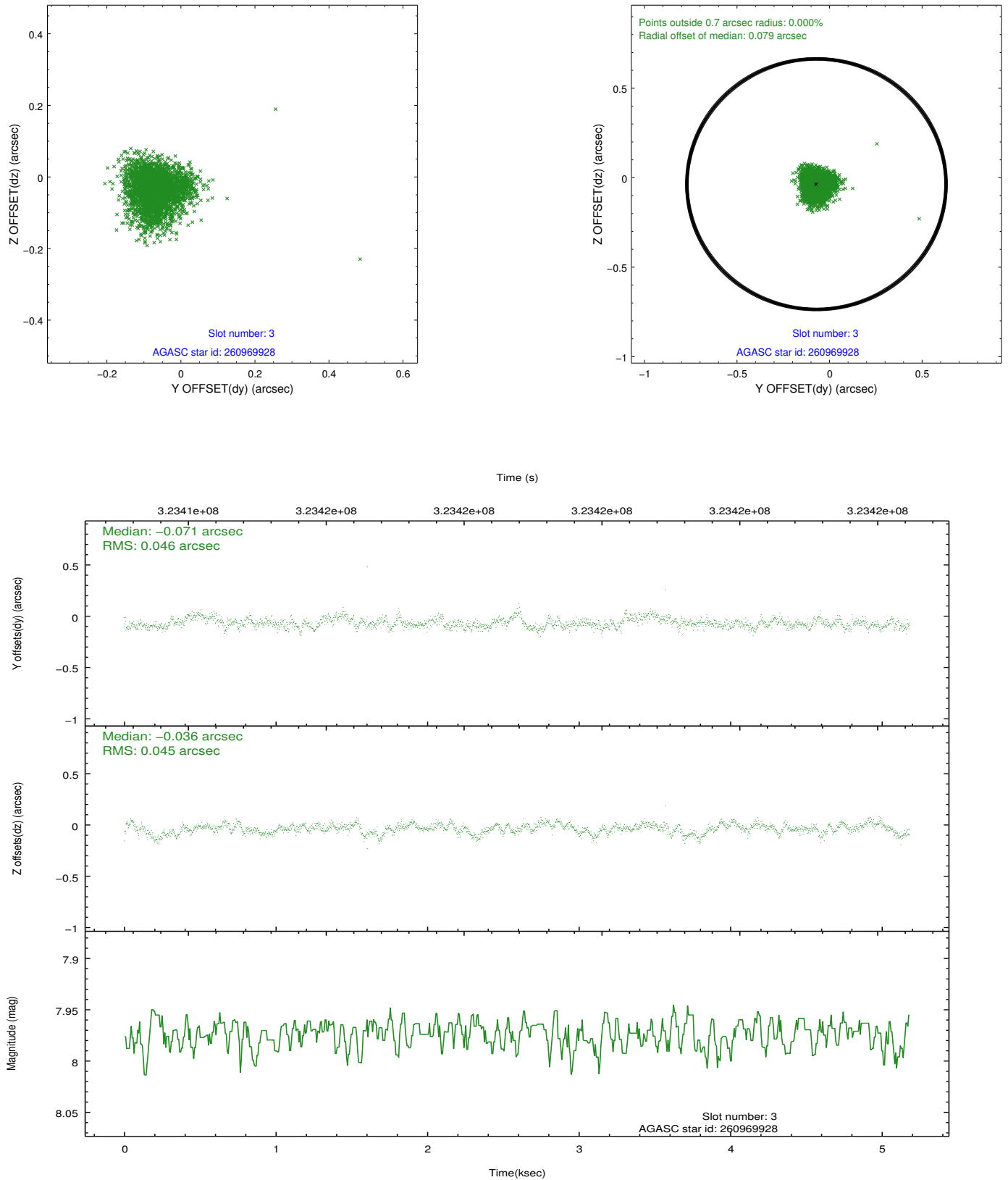


### Slot Statistics

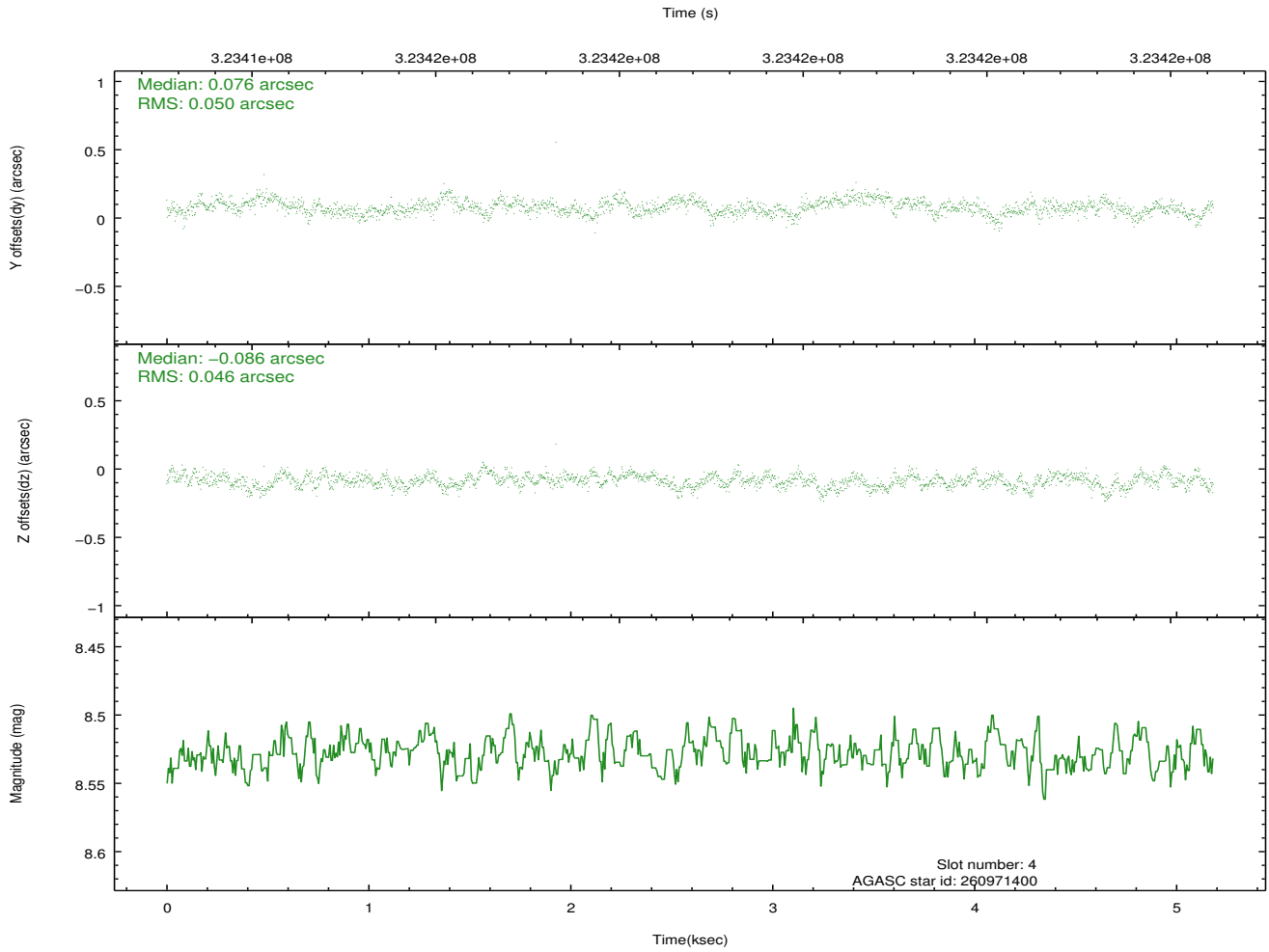
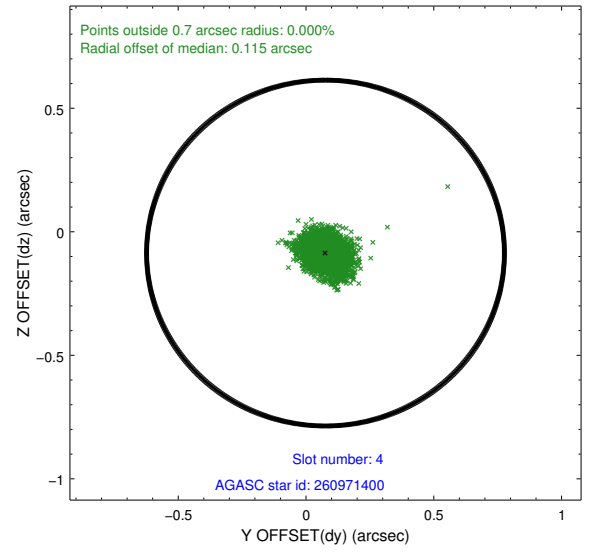
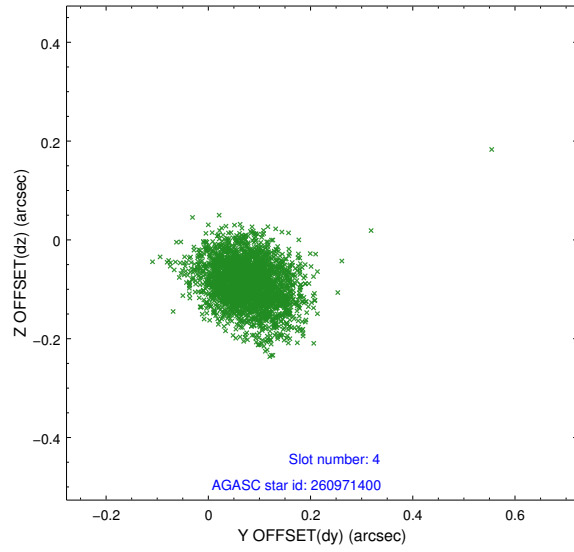
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	1264	-0.027	-0.052	0.007	0.011	0.000000	0.000000	-765.31	-1734.59
1	FID	ACIS-S-4	7.19	1264	0.128	0.027	0.006	0.011	0.000000	0.000000	2147.59	172.75
2	FID	ACIS-S-5	7.24	1264	-0.132	0.034	0.007	0.013	0.000000	0.000000	-1816.75	167.77
3	GUIDE	260969928	7.97	2528	-0.071	-0.036	0.067	0.108	186.942915	27.422766	-1378.09	747.32
4	GUIDE	260971400	8.53	2526	0.076	-0.086	0.071	0.116	185.920870	26.979931	2084.41	1868.98
5	GUIDE	260973048	9.68	2526	-0.036	0.039	0.123	0.200	186.951234	28.194409	-1780.34	-2000.67
6	GUIDE	260973120	9.45	2526	-0.065	0.118	0.120	0.191	186.384093	27.126883	538.76	1555.08
7	GUIDE	260966840	10.31	2526	0.090	-0.034	0.180	0.292	187.087966	28.040552	-2136.23	-1393.44

## 2.4 Star Slots

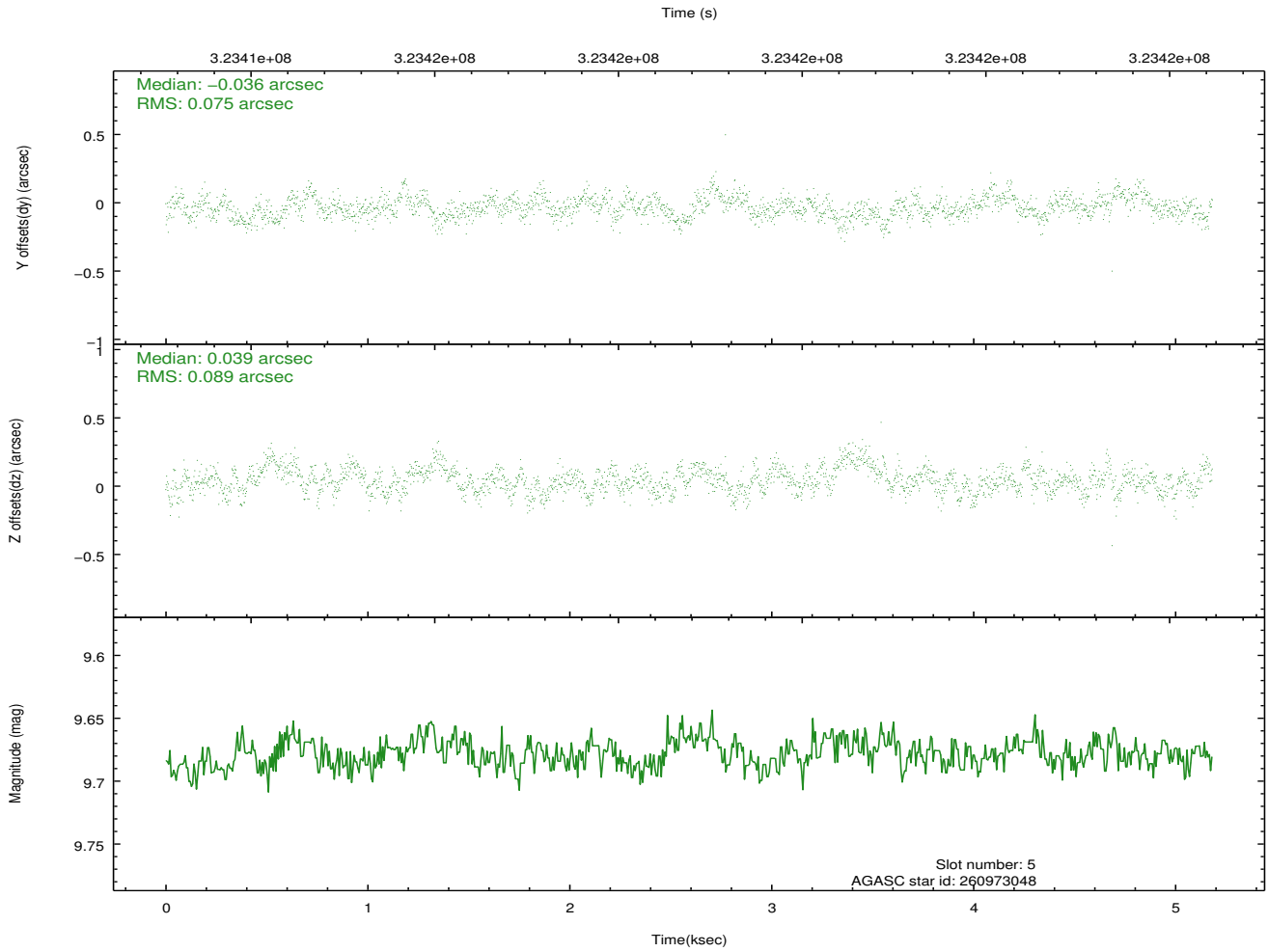
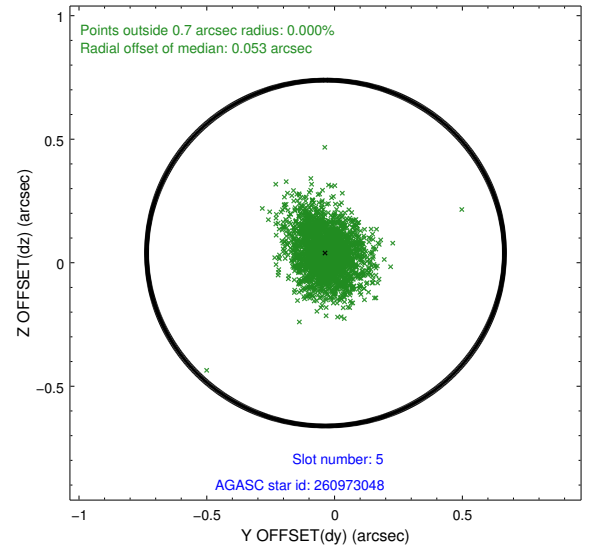
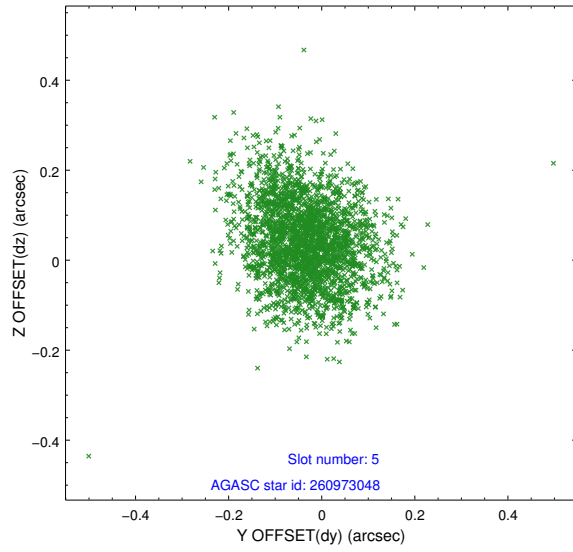
### 2.4.1 Slot 3



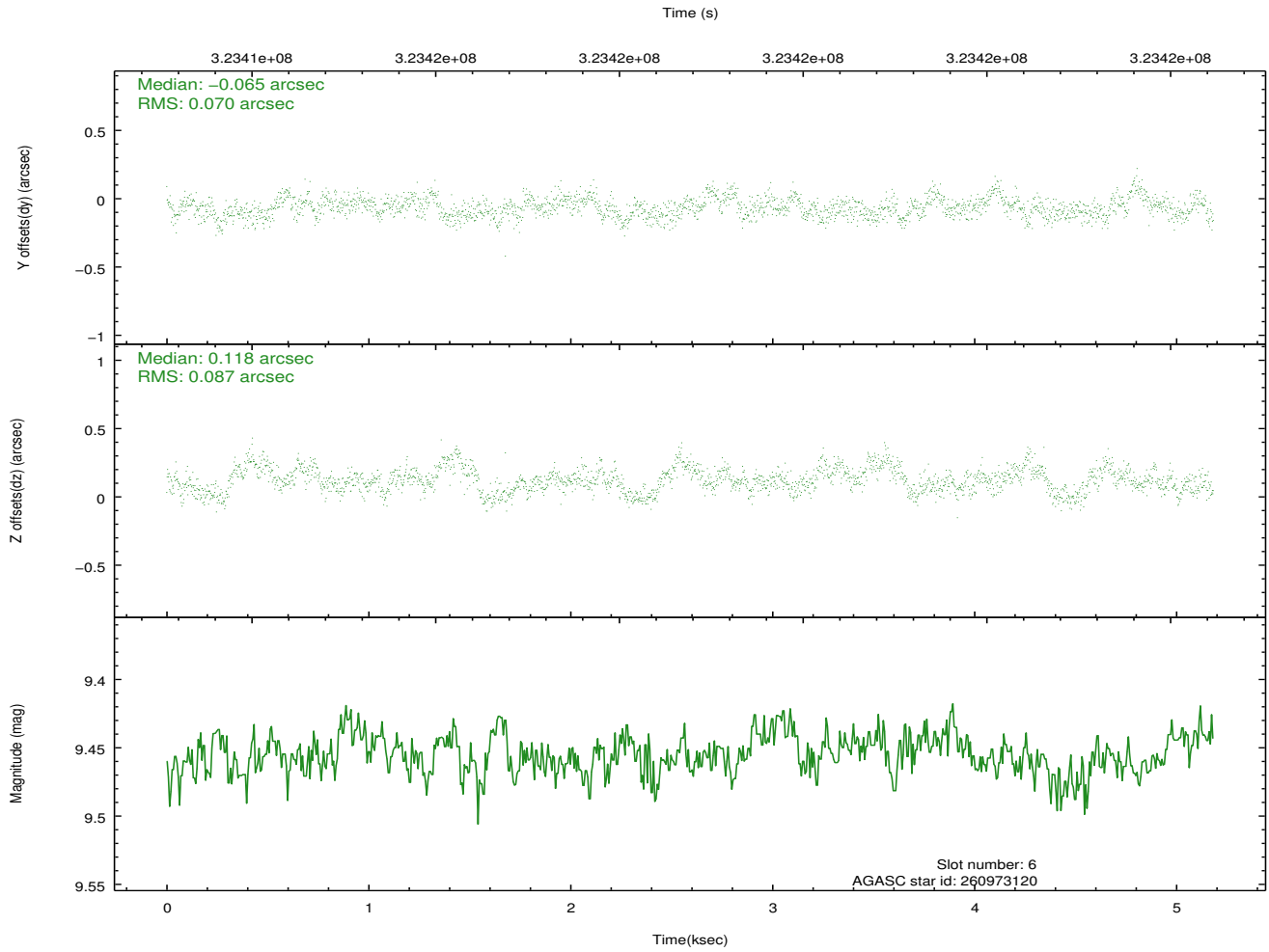
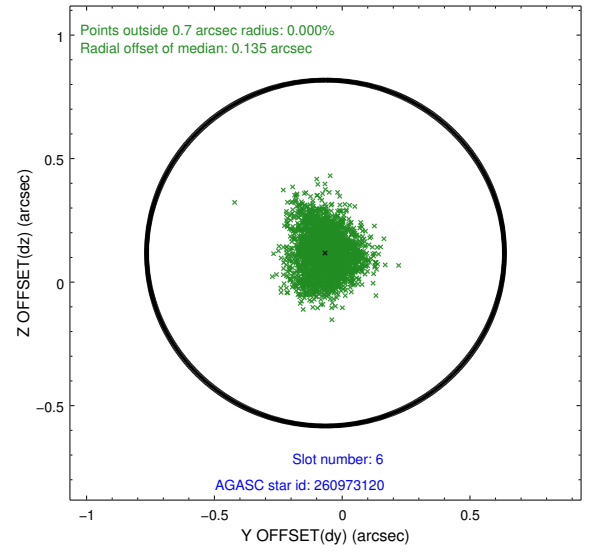
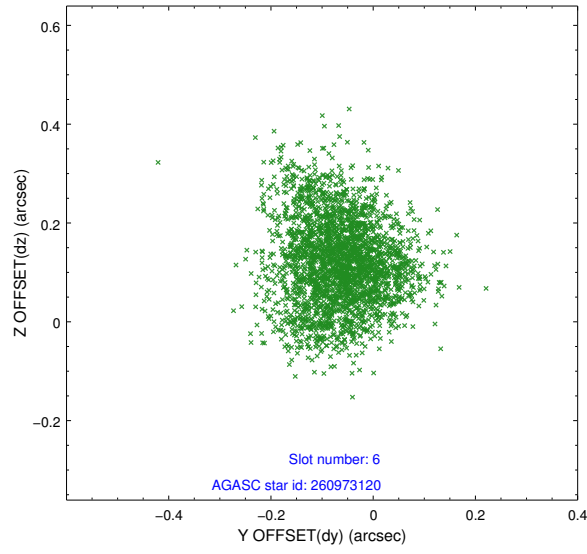
## 2.4.2 Slot 4



### 2.4.3 Slot 5

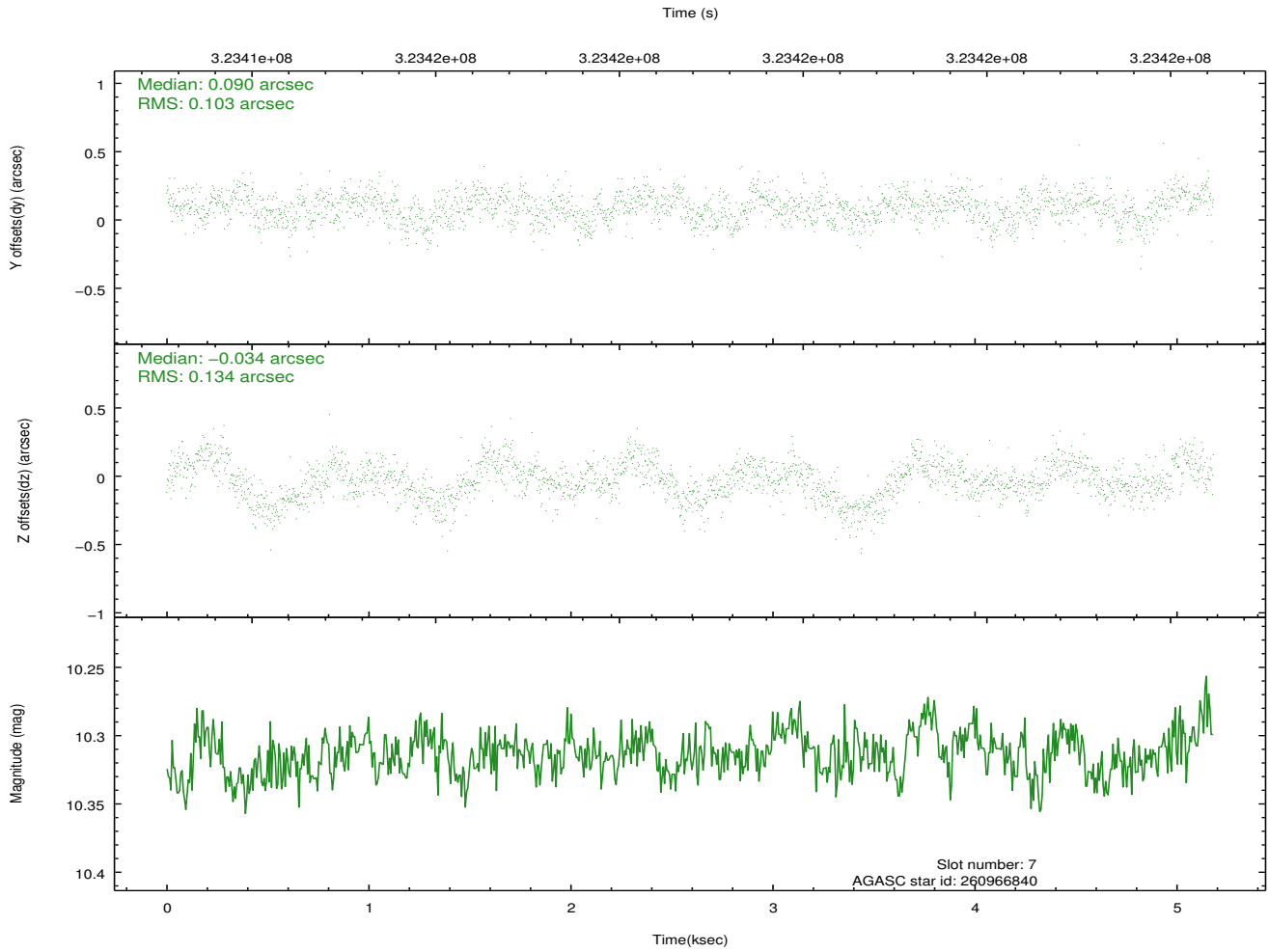
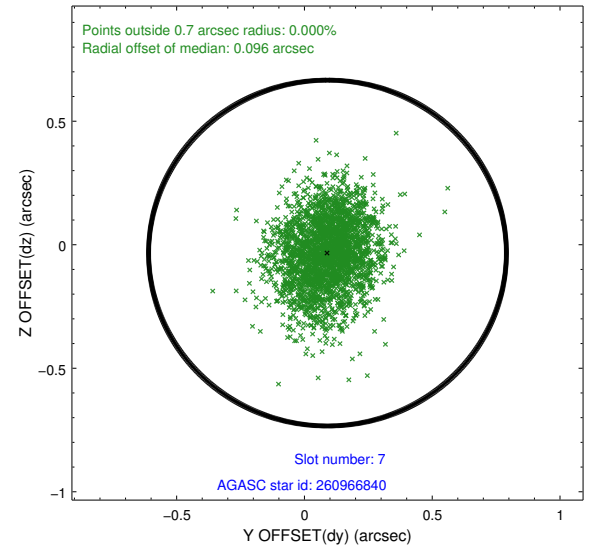
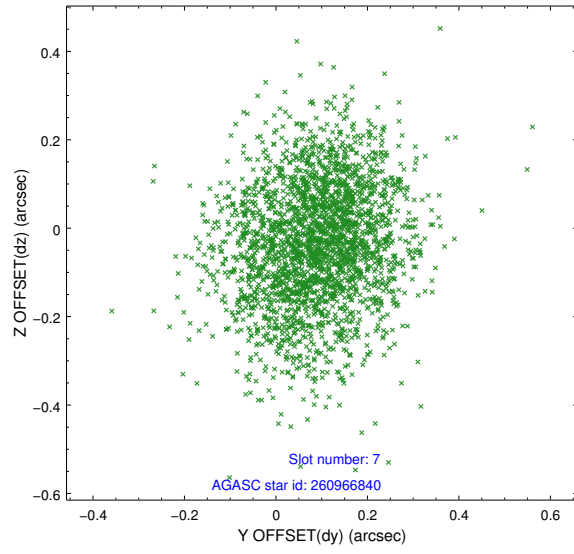


## 2.4.4 Slot 6



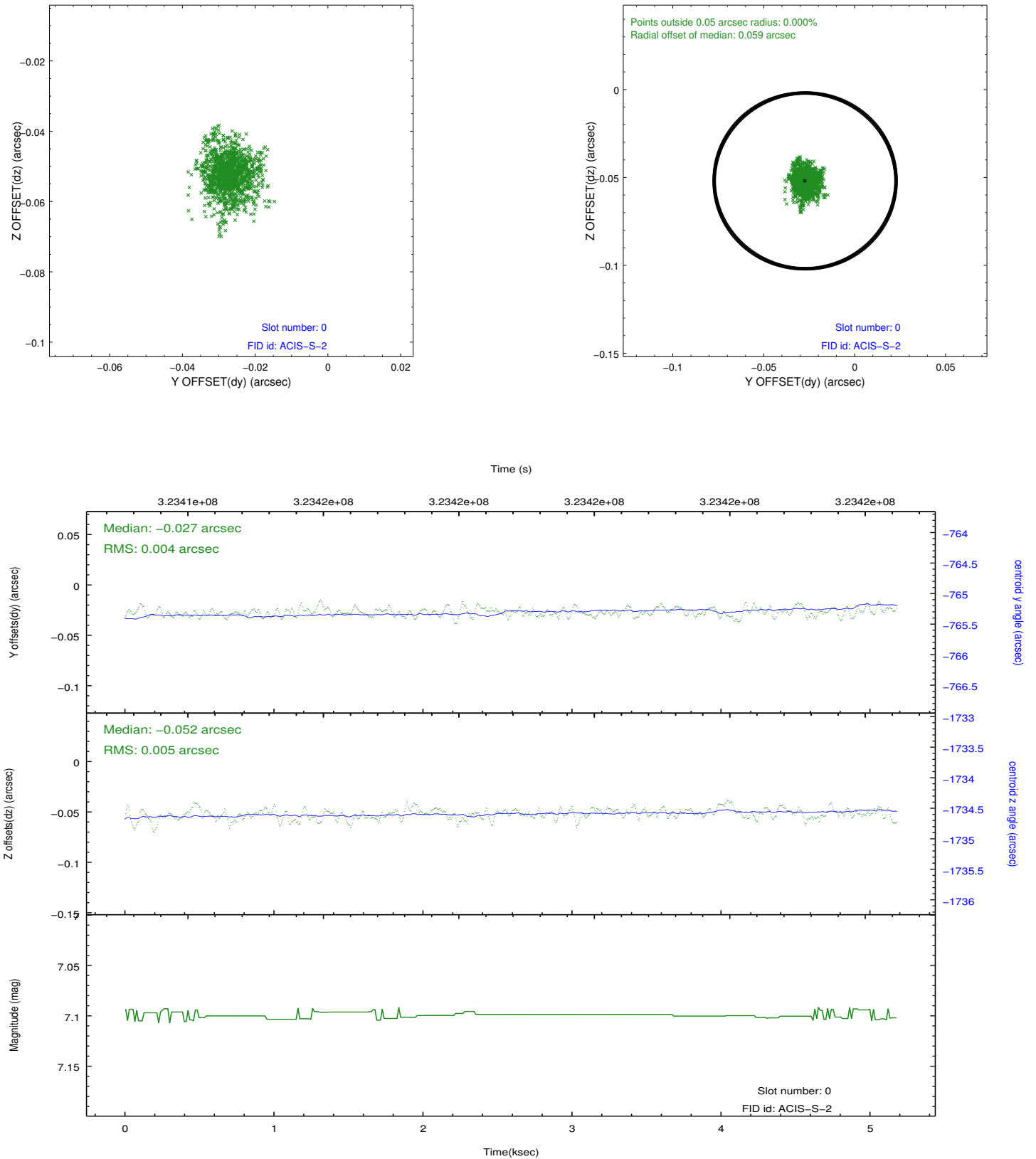


## 2.4.5 Slot 7

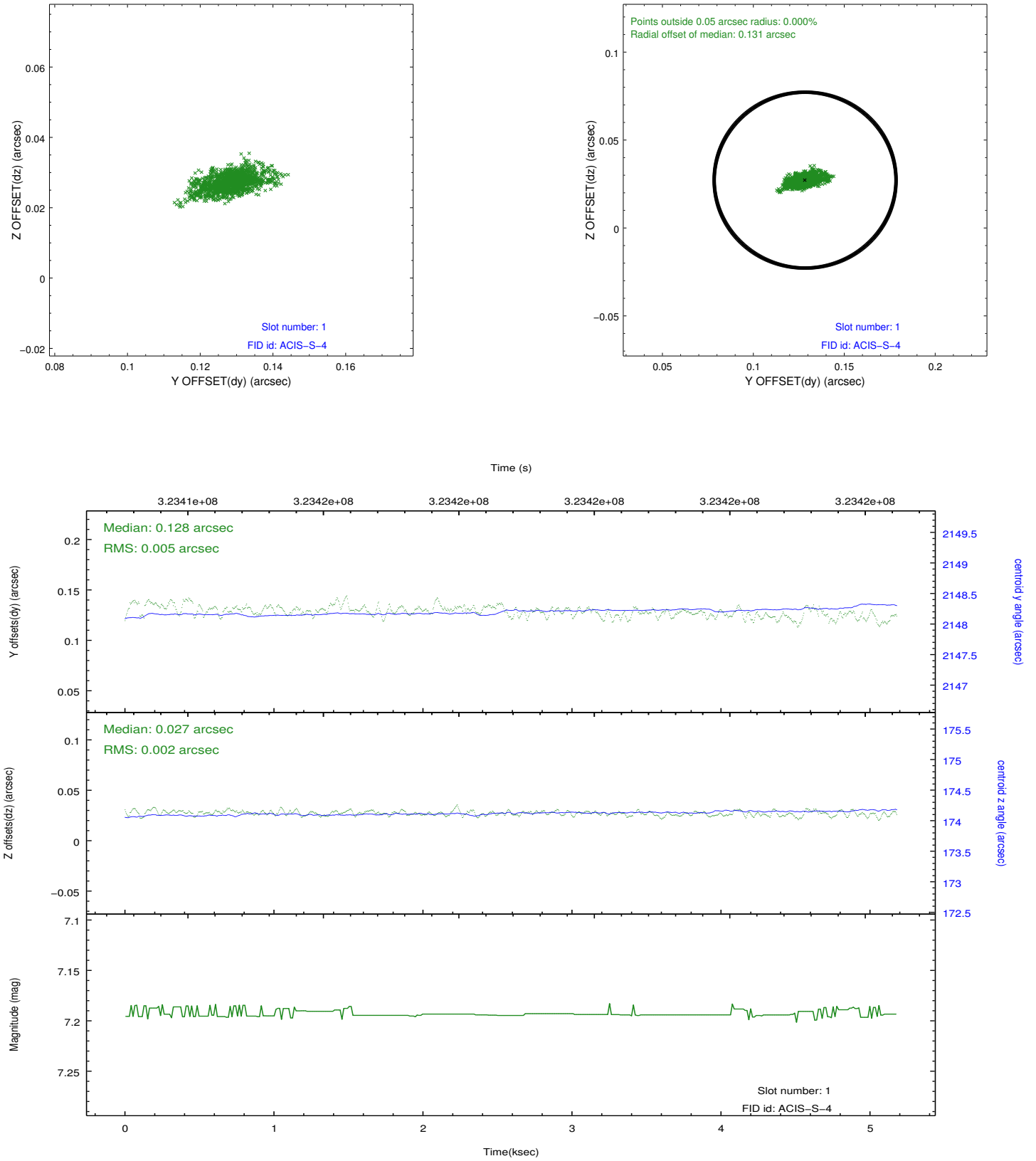


## 2.5 FID Slots

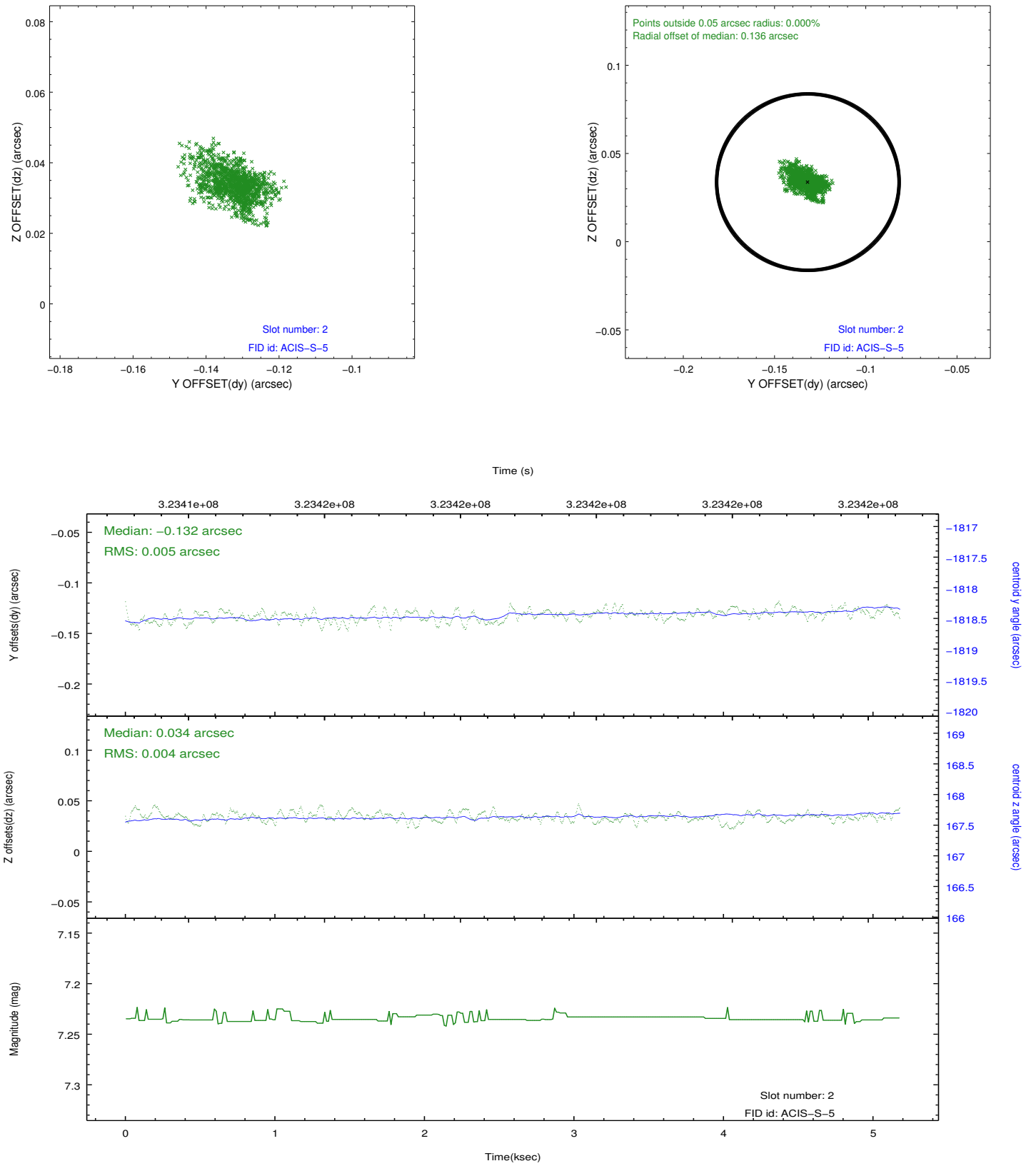
### 2.5.1 Slot 0



## 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)	2012.05.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.75519998

### A.2 Comments