

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 8770 - L2 Version 2  
Chandra X-Ray Center

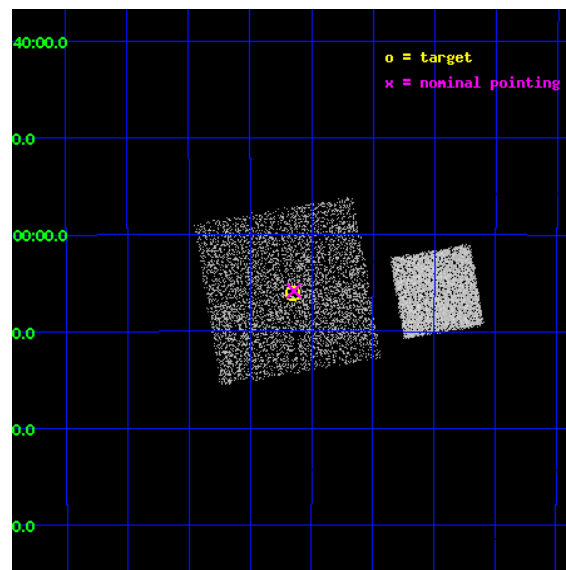
L2 Processing Date : May 14 2012

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# 1 Front

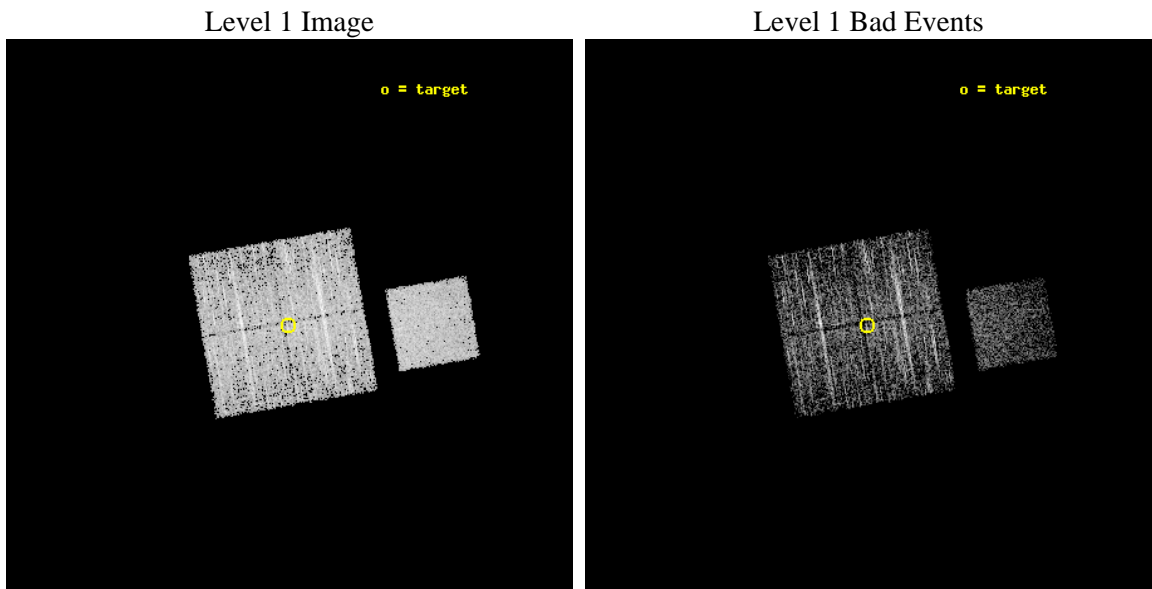
seq_num	400821	Sequence number
obs_id	8770	Observation id
title	The Galactic Bulge Survey: categorising the plethora of faint X-ray sources in the Galactic Bulge	Proposal title
observer	dr Peter Jonker	Principal investigator
object	GBS1	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.912954	Observer's specified target RA [deg]
dec_targ	-31.101843	Observer's specified target Dec [deg]
ra_nom	266.91096239399	Nominal RA [deg]
dec_nom	-31.097064894438	Nominal Dec [deg]
roll_nom	80.207676787335	Nominal Roll [deg]
revision	2	Processing version of data
ontime	2182.4000167847	Sum of GTIs [s]
livetime	2153.8853539059	Livetime [s]
ontime0	2182.4000167847	Sum of GTIs [s]
ontime1	2182.4000167847	Sum of GTIs [s]
ontime2	2182.4000167847	Sum of GTIs [s]
ontime3	2182.4000167847	Sum of GTIs [s]
ontime7	2182.4000167847	Sum of GTIs [s]
l2events	15186	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	2000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	2182.4000167847	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime0	2182.4000167847	Sum of GTIs [s]
date	2012-05-14T21:10:22	Date and time of file creation	ontime1	2182.4000167847	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	2182.4000167847	Sum of GTIs [s]
			ontime3	2182.4000167847	Sum of GTIs [s]
			ontime7	2182.4000167847	Sum of GTIs [s]
			l1events	100137	Number of level 1 events

### 2.1.4 Events

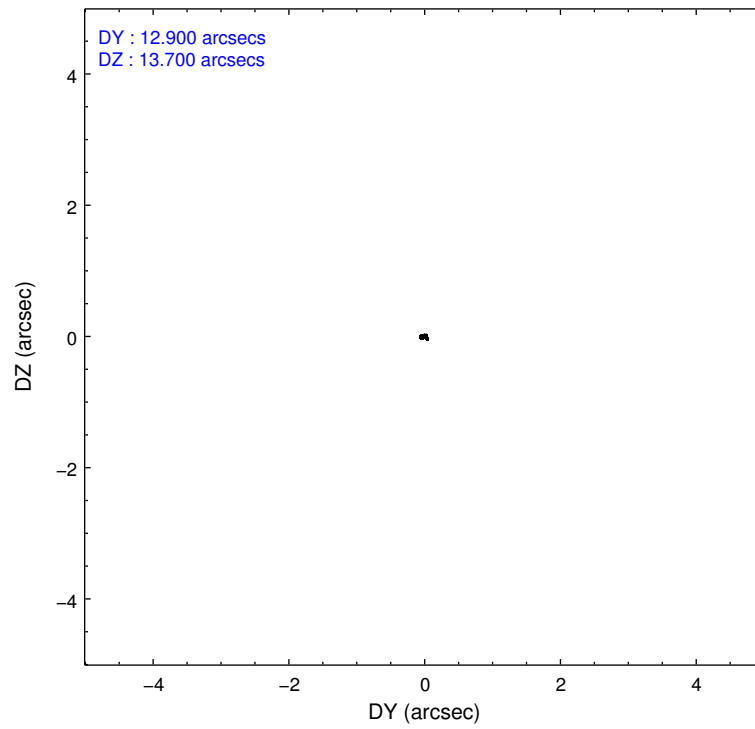
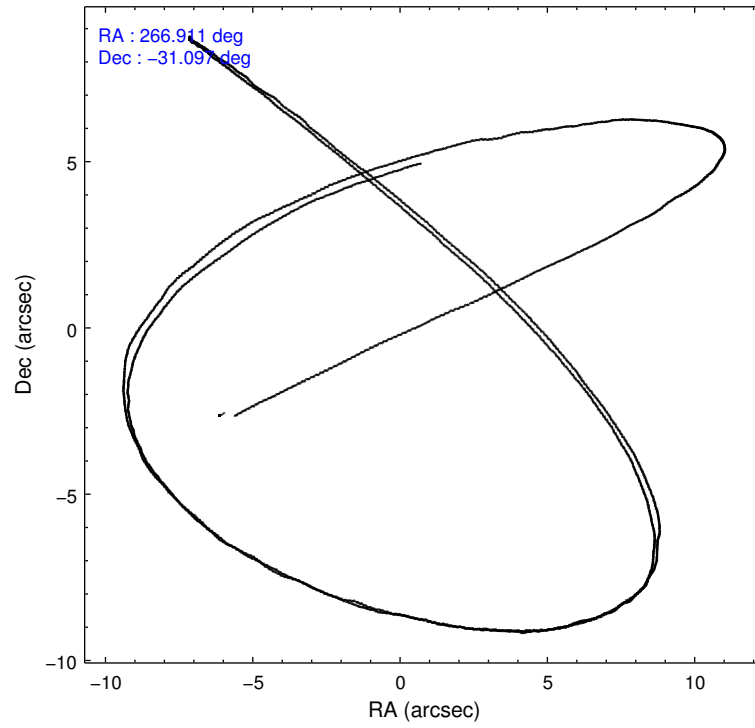
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	18460	18320	21140	20206	22011
rejected events	16585	16166	19148	18349	13124
rejected %	89%	88%	90%	90%	59%

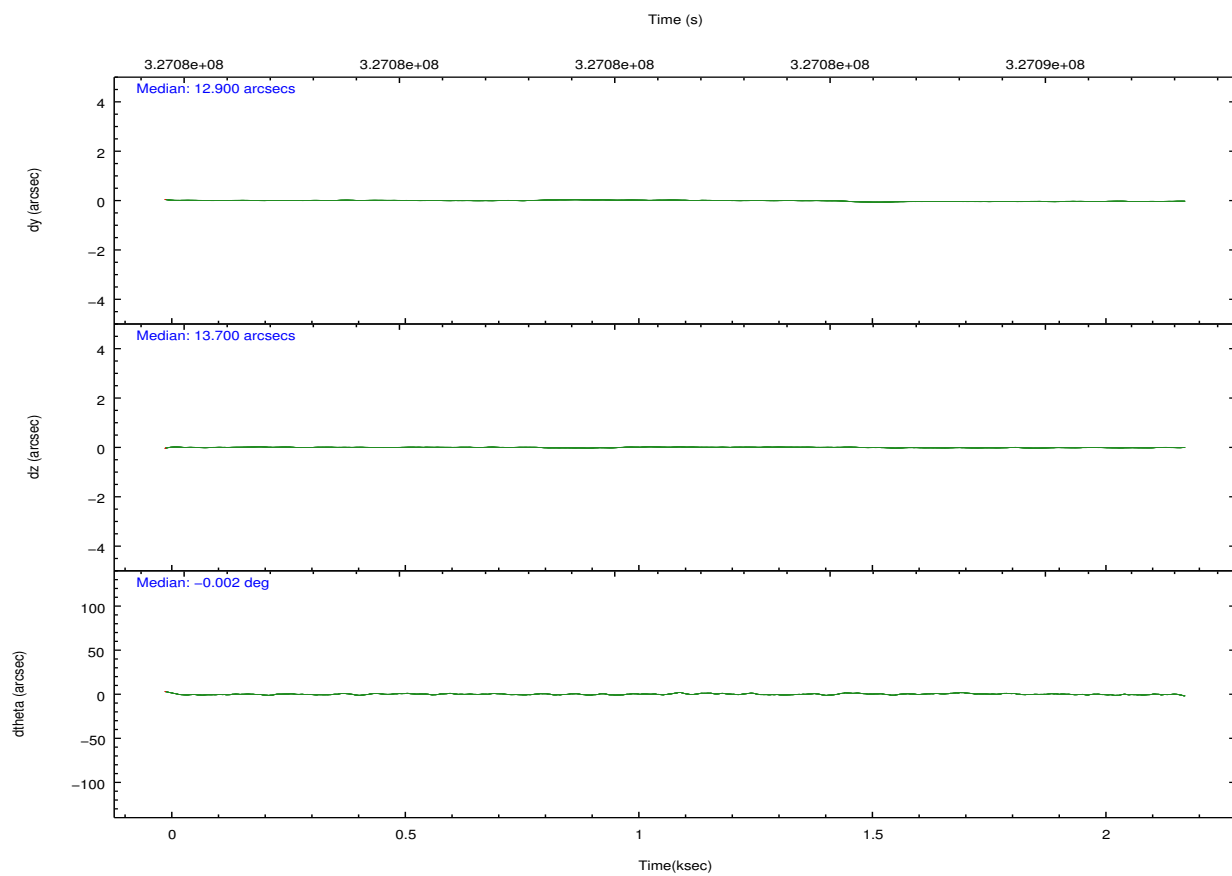
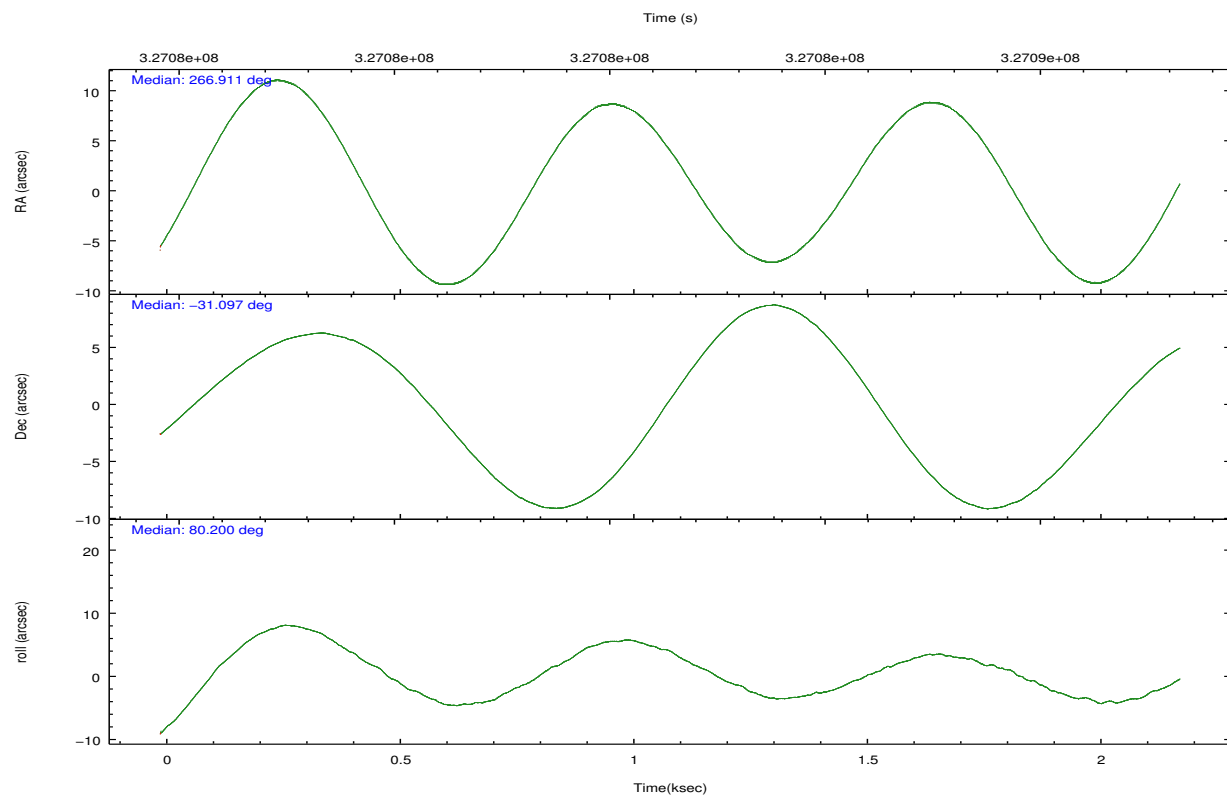
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	898	999	879	786	938
	4%	5%	4%	3%	4%
grade 1 events	9	12	9	9	37
	0%	0%	0%	0%	0%
grade 2 events	472	531	517	450	2107
	2%	2%	2%	2%	9%
grade 3 events	236	225	248	228	993
	1%	1%	1%	1%	4%
grade 4 events	184	252	233	254	951
	0%	1%	1%	1%	4%
grade 5 events	669	705	661	776	2295
	3%	3%	3%	3%	10%
grade 6 events	374	482	419	392	5261
	2%	2%	1%	1%	23%
grade 7 events	15618	15114	18174	17311	9429
	84%	82%	85%	85%	42%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01237	ACIS-01237	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	266.922258	266.910962393993	CCD I2 on	Y	Y
[deg] Pointing Dec	-31.122880	-31.09706489443839	CCD I3 on	Y	Y
[deg] Pointing Roll	80.004806	80.20767678733478	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	N	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	327083722.184000	327083345.78919	CCD S5 on	N	N
Observation start date	2008-05-13T16:34:17	2008-05-13T16:29:05	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	327085722.184000	327085856.01432	On-chip summing requested	N	N
Observation end date	2008-05-13T17:07:37	2008-05-13T17:10:56	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect





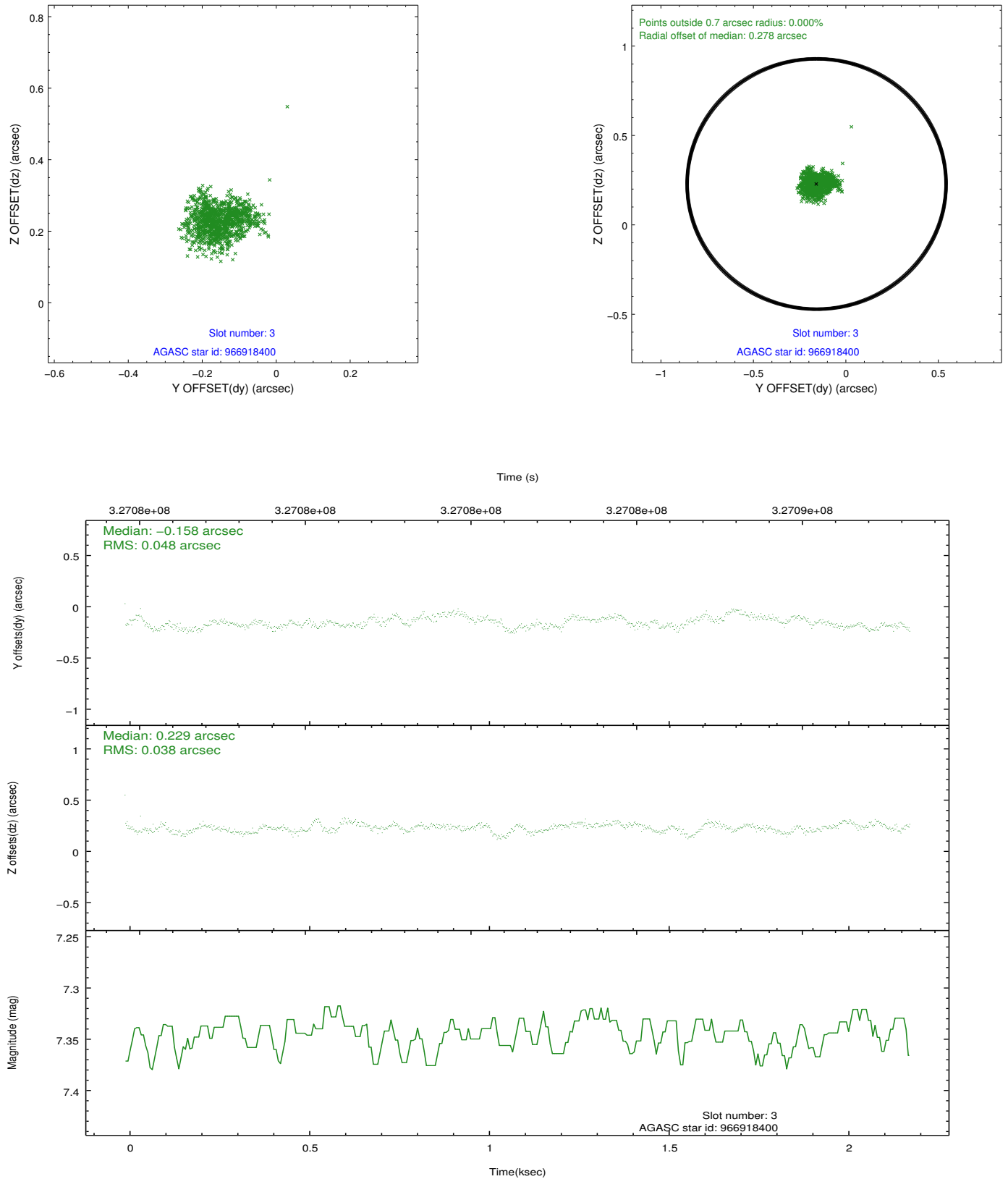
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	6.96	533	-0.075	-0.057	0.008	0.016	0.000000	0.000000	-767.62	-843.68
1	FID	ACIS-I-4	6.99	533	0.172	0.062	0.007	0.014	0.000000	0.000000	2145.32	1061.10
2	FID	ACIS-I-5	7.03	533	-0.198	0.063	0.010	0.015	0.000000	0.000000	-1817.74	1062.36
3	GUIDE	966918400	7.34	1066	-0.158	0.229	0.065	0.101	267.537101	-30.960086	901.55	-1768.23
4	GUIDE	966925512	8.26	1066	0.051	-0.147	0.076	0.128	266.373606	-31.056700	-62.59	1705.08
5	GUIDE	966926896	9.21	1065	0.171	-0.087	0.100	0.151	266.197771	-31.663459	-2309.19	1848.39
6	GUIDE	966923376	8.74	1066	0.083	-0.180	0.078	0.120	266.333558	-31.111316	-280.97	1794.74
7	GUIDE	966920512	8.39	1065	-0.153	0.185	0.065	0.105	267.231170	-30.494681	2391.90	-549.39

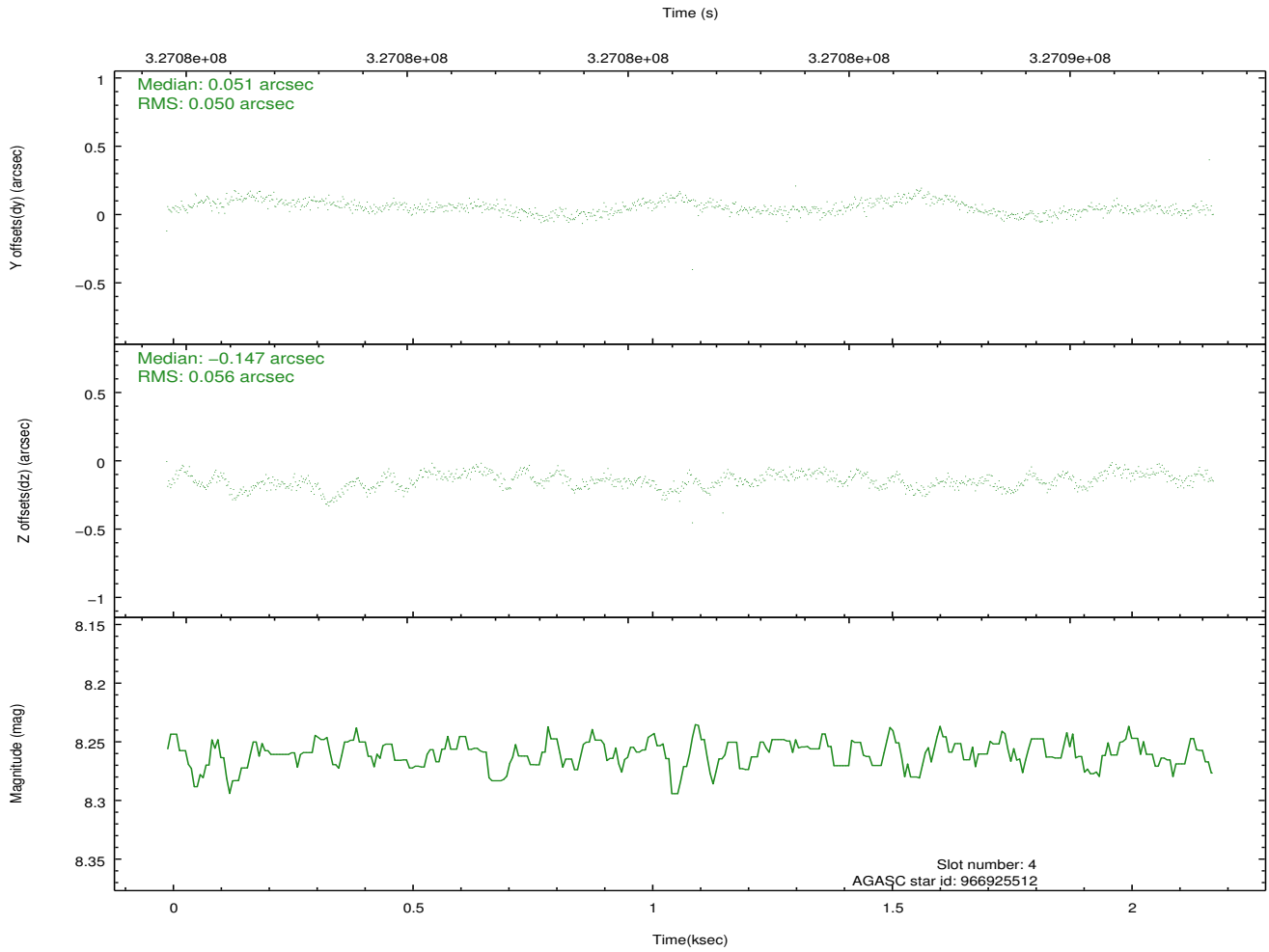
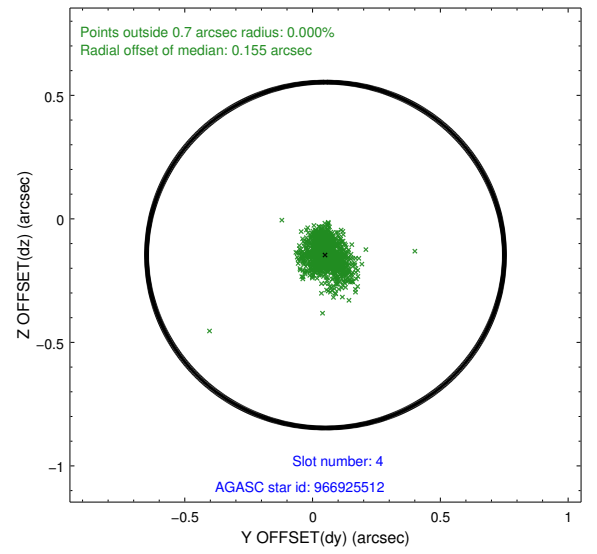
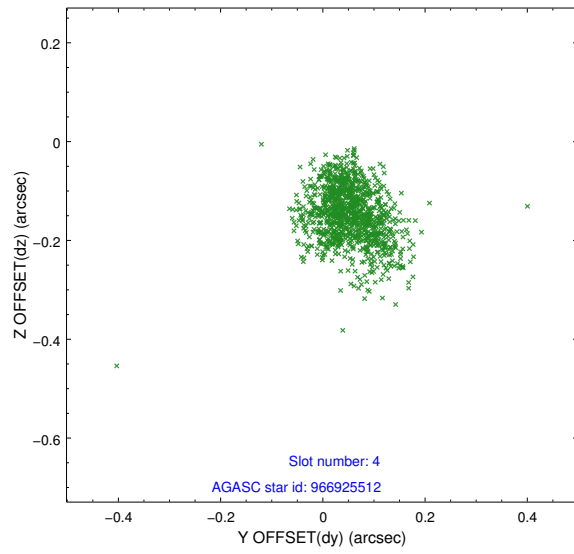


## 2.4 Star Slots

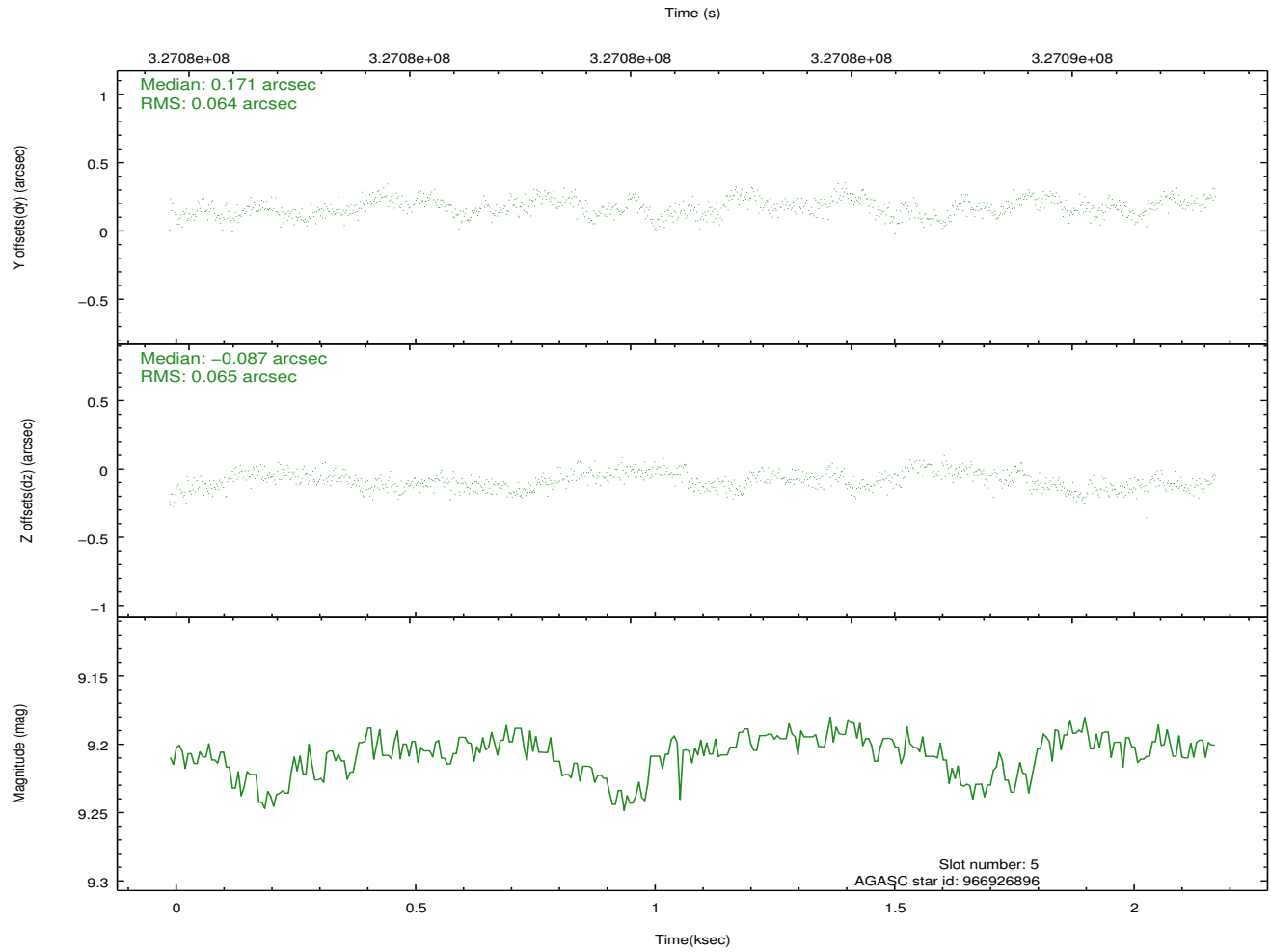
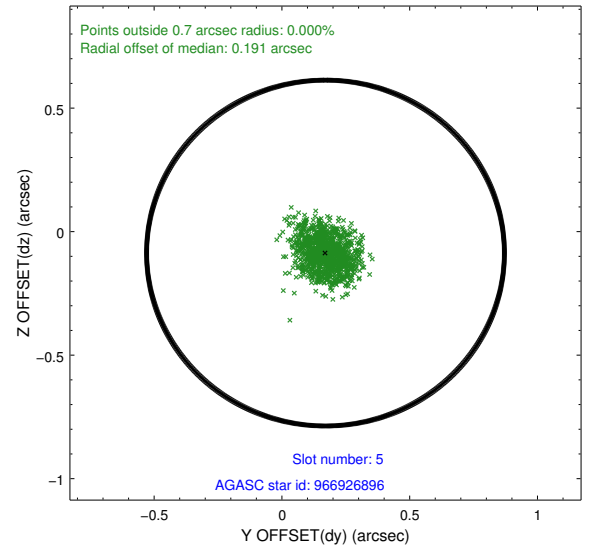
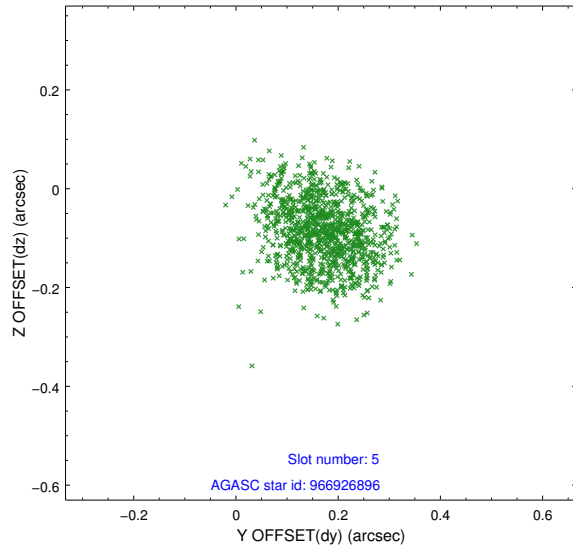
### 2.4.1 Slot 3



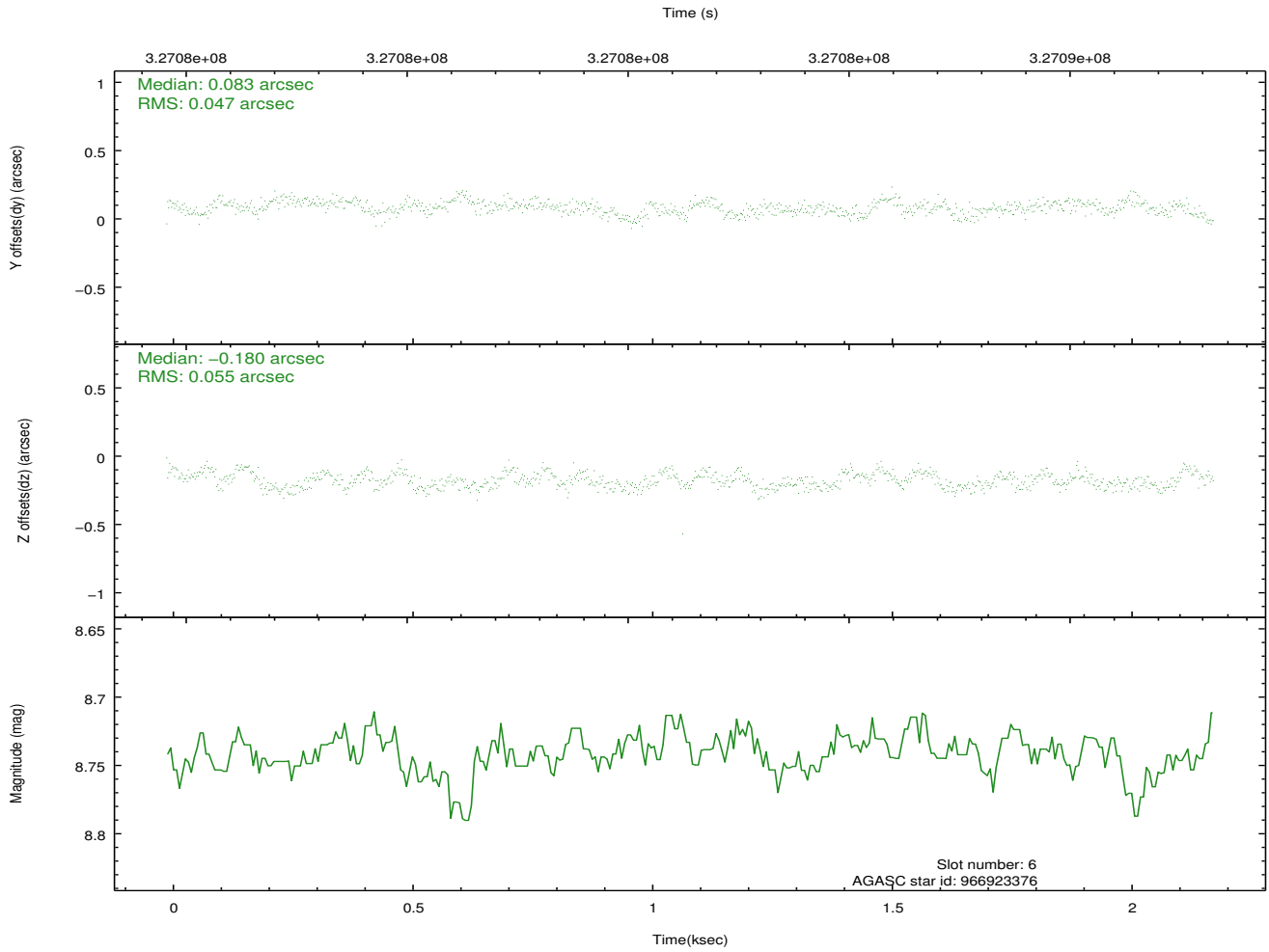
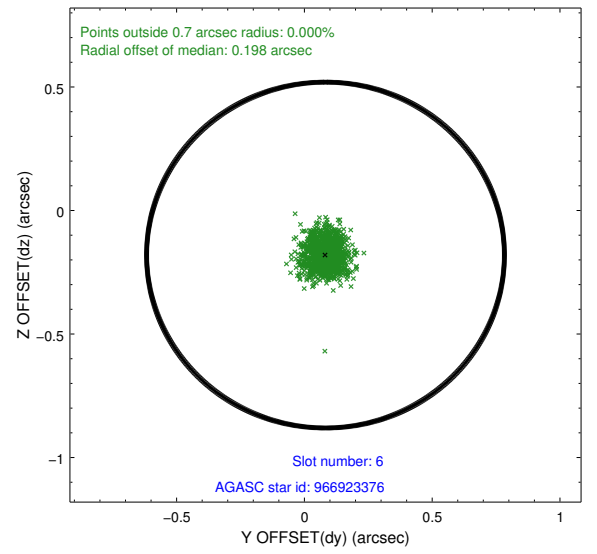
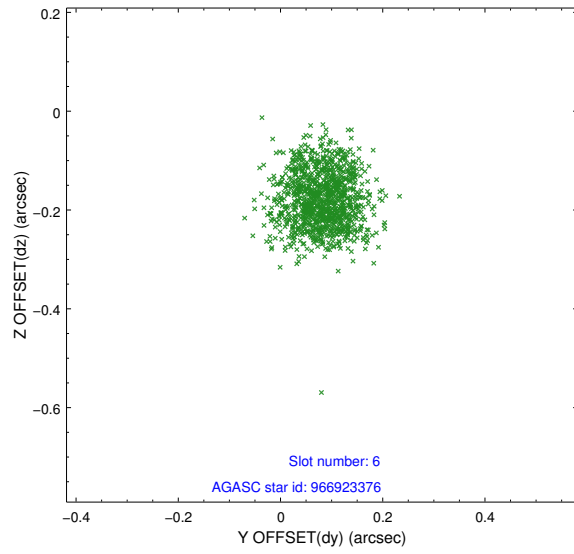
## 2.4.2 Slot 4



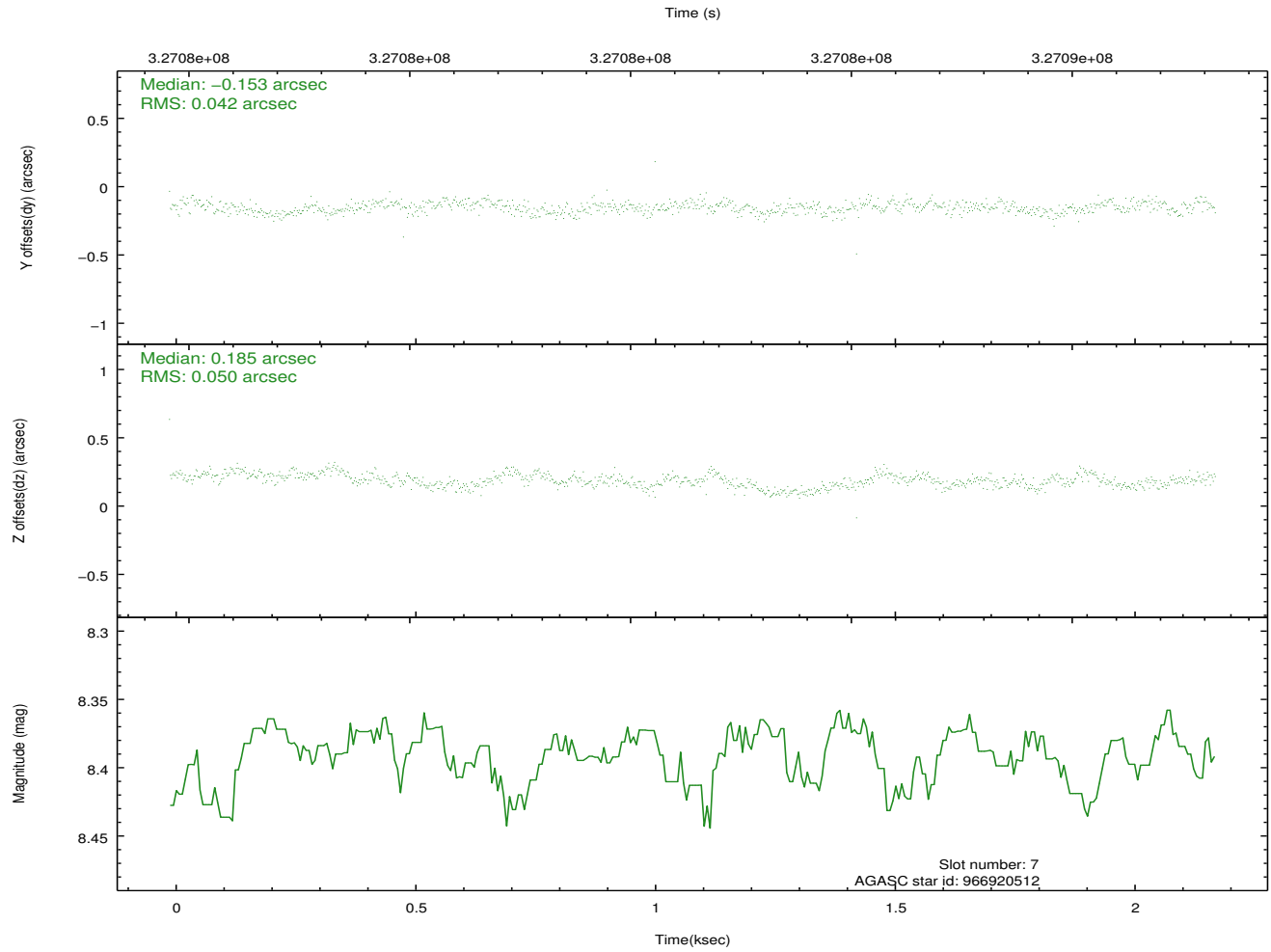
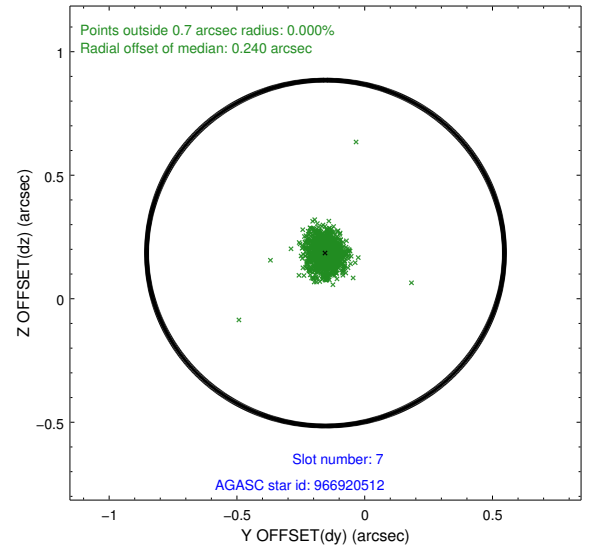
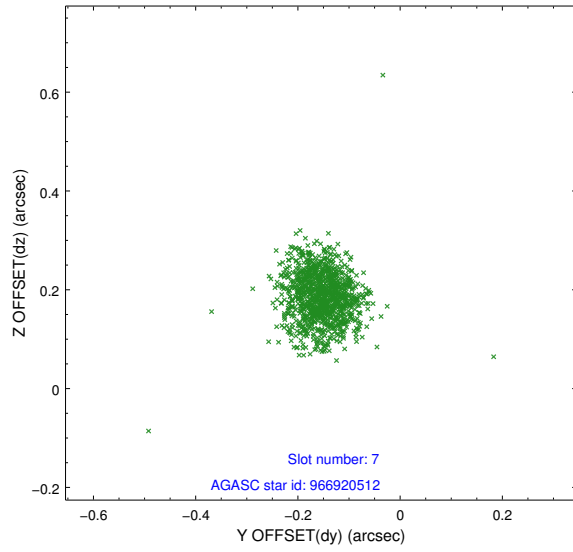
### 2.4.3 Slot 5



## 2.4.4 Slot 6

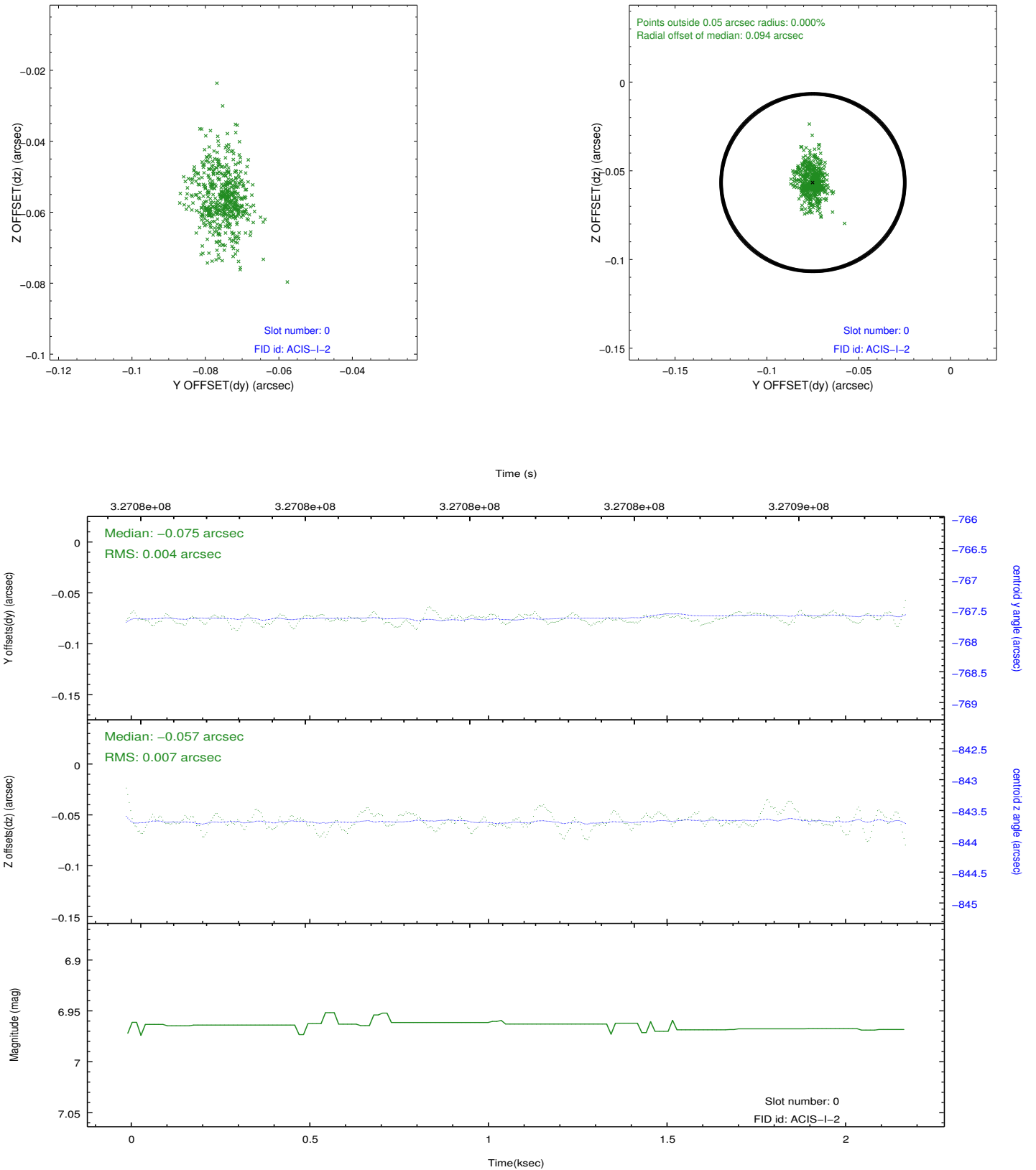


## 2.4.5 Slot 7

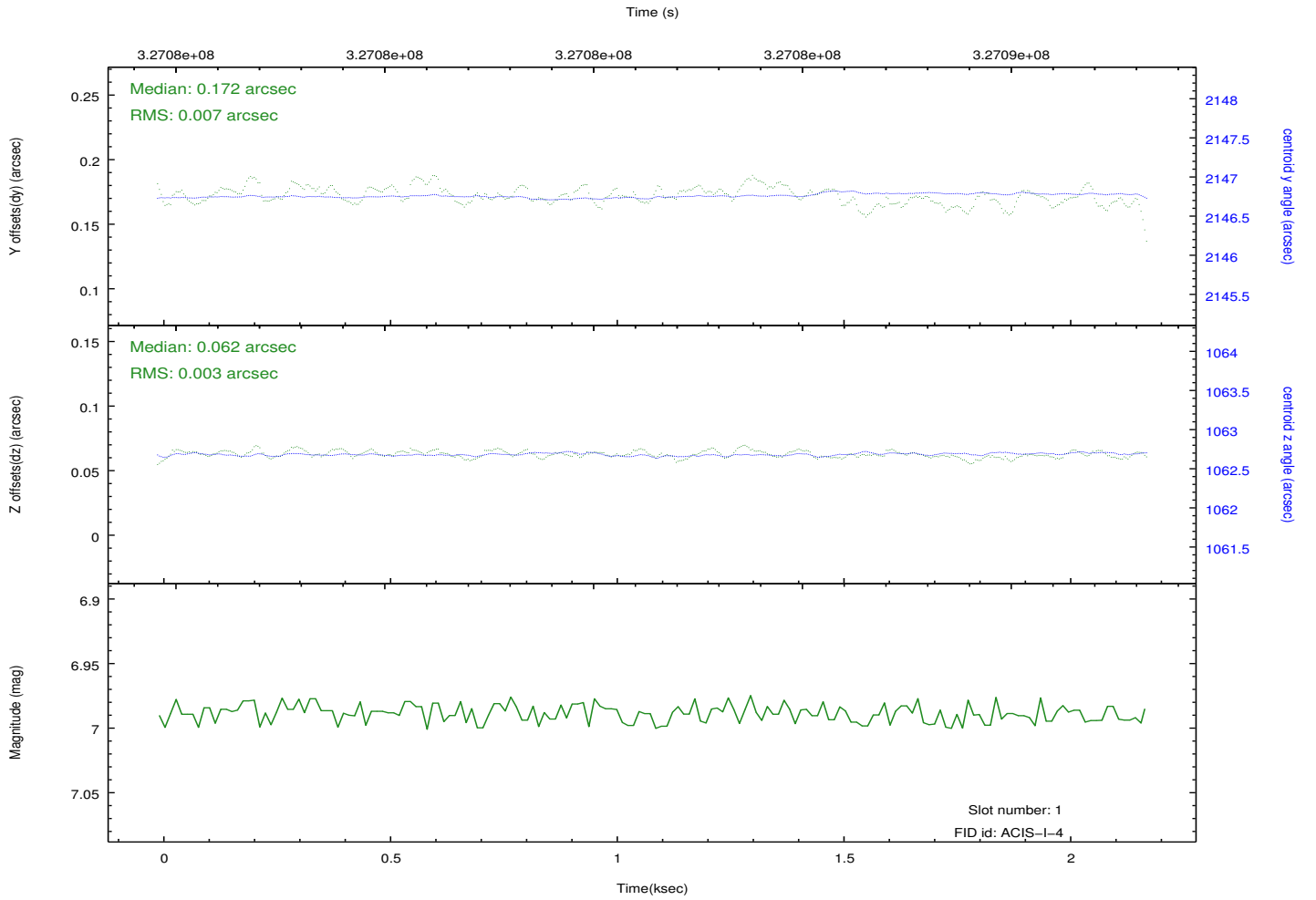
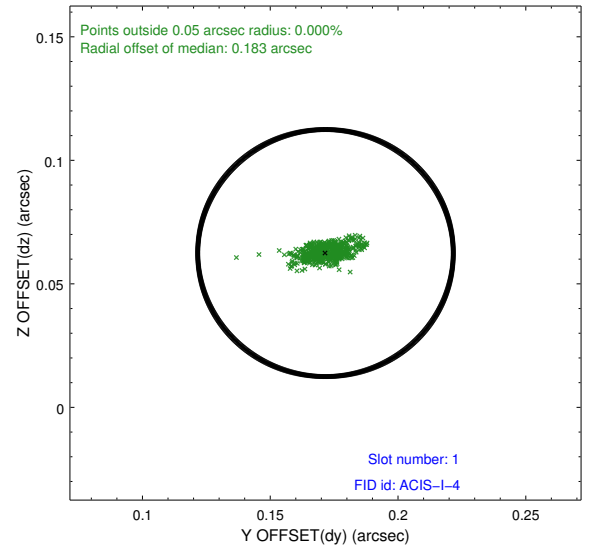
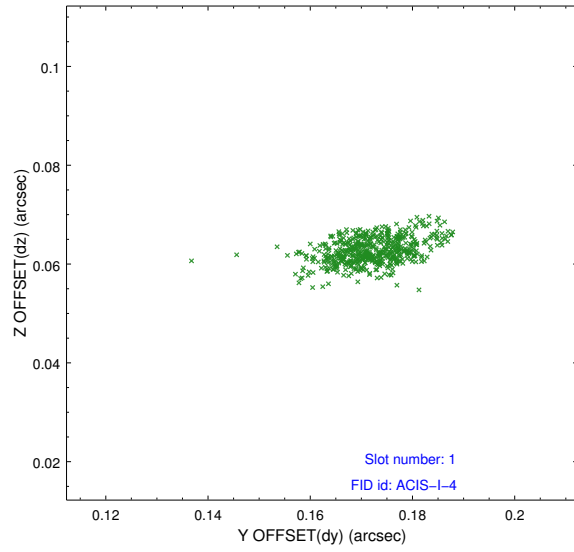


## 2.5 FID Slots

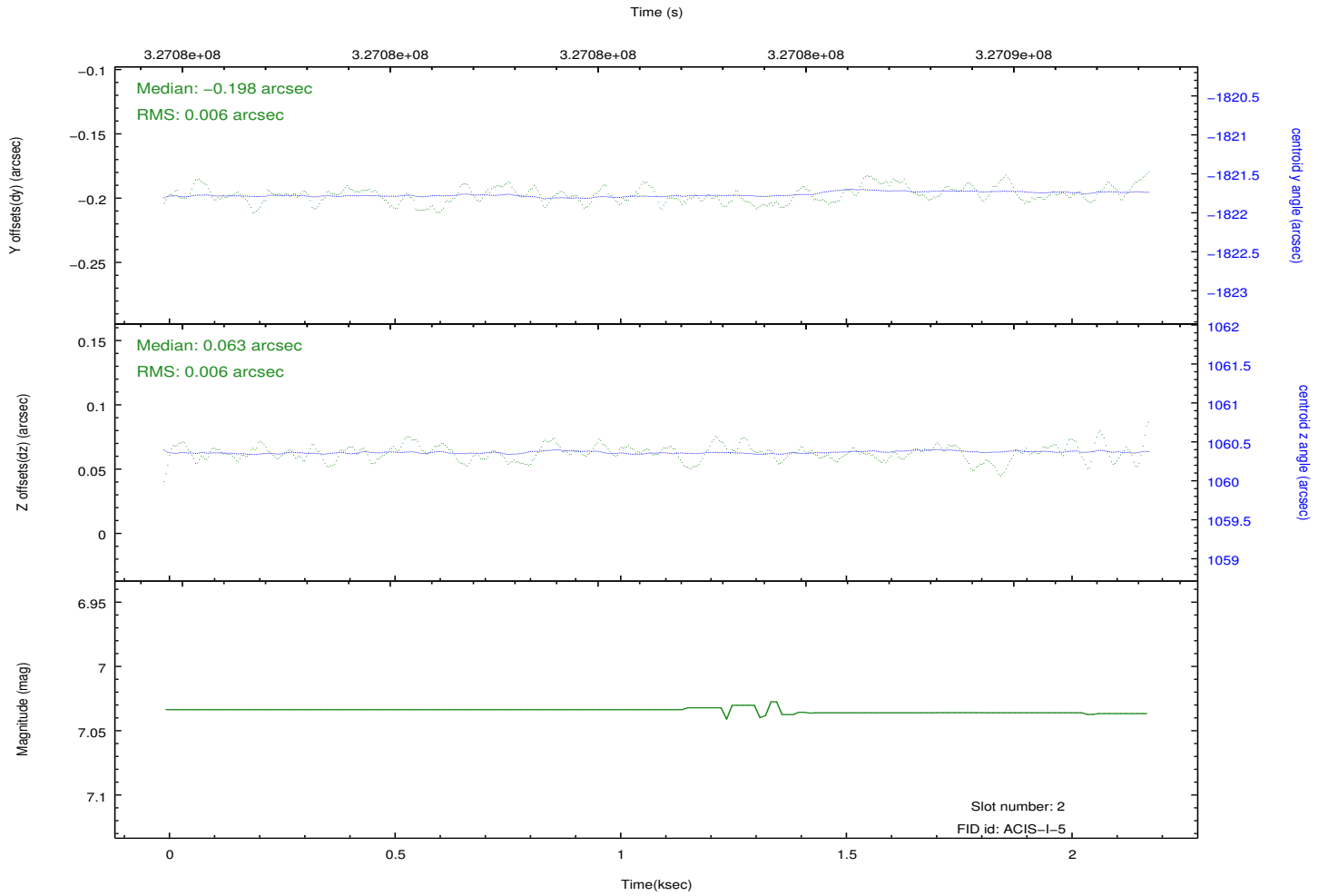
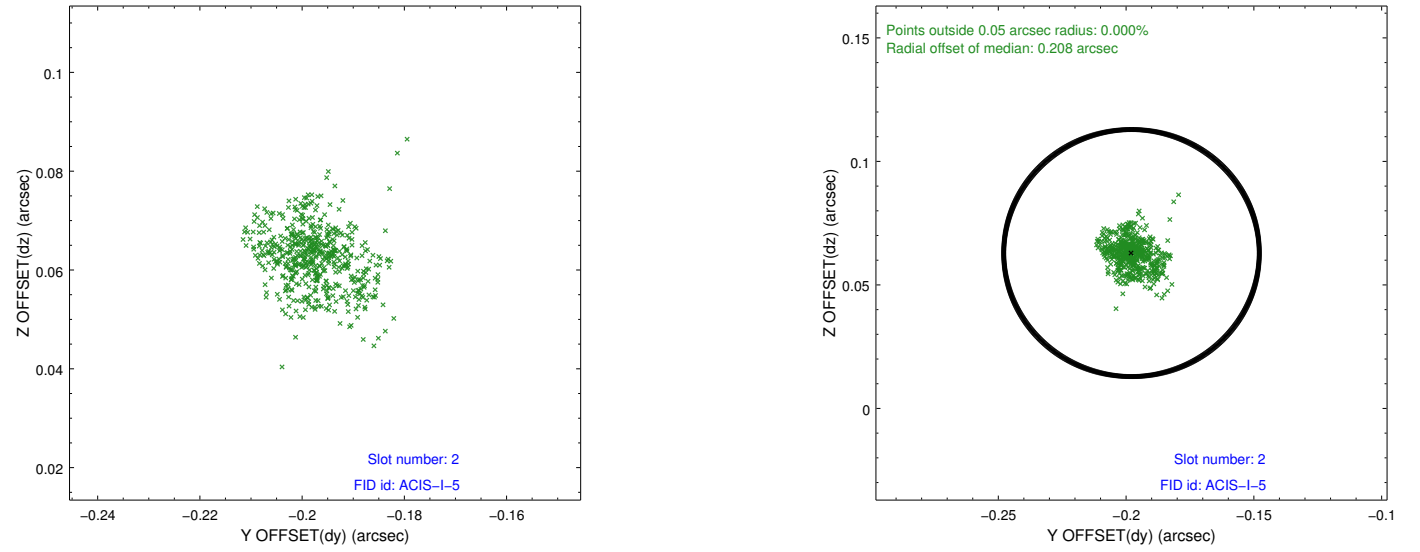
### 2.5.1 Slot 0



## 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)	2012.05.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.18240001

### A.2 Comments

Joint Proposal: NOAO