

# V&V Reference Report

## L2 ASCDS Version : 8.5.1

Observation 5766 - L2 Version 3  
Chandra X-Ray Center

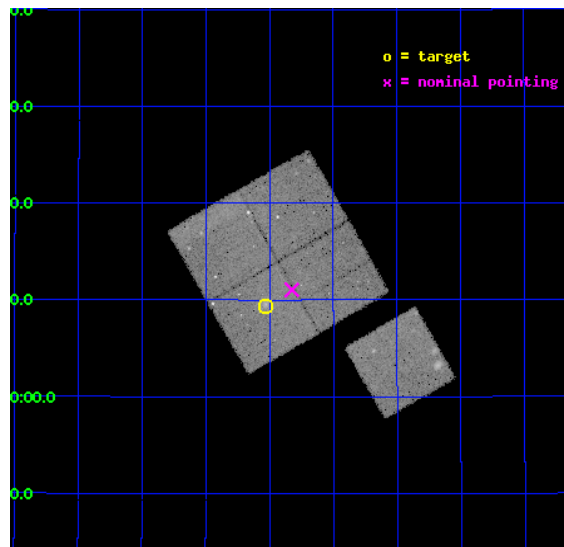
L2 Processing Date : Dec 18 2012

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# 1 Front

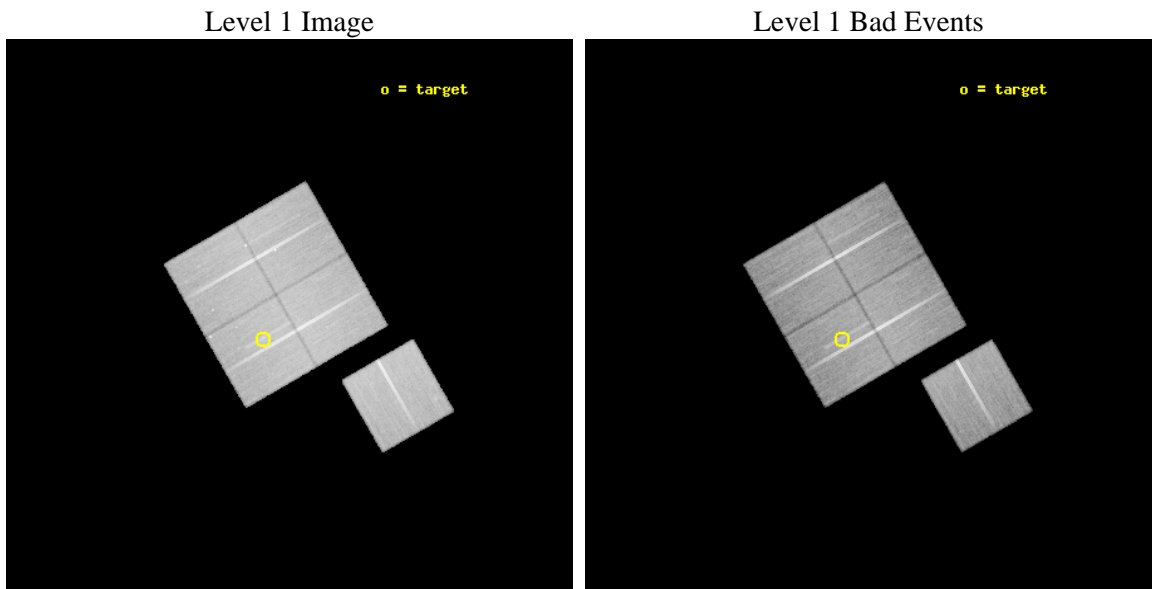
seq_num	800479	Sequence number
obs_id	5766	Observation id
title	DARK ENERGY WITH X-RAY CLUSTERS: CHANDRA OBSERVATIONS OF 41 HIGH-REDSHIFT CLUSTERS FROM THE 400 deg^2 ROSAT PSPC SURVEY	Proposal titl
observer	Dr. Alexey Vikhlinin	Principal investigator
object	cl1222+2709	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	185.507917	Observer's specified target RA [deg]
dec_targ	27.155278	Observer's specified target Dec [deg]
ra_nom	185.45615059568	Nominal RA [deg]
dec_nom	27.184099261586	Nominal Dec [deg]
roll_nom	150.07150728543	Nominal Roll [deg]
revision	3	Processing version of data
ontime	49767.358933926	Sum of GTIs [s]
livetime	49117.111751257	Livetime [s]
ontime0	49761.076923579	Sum of GTIs [s]
ontime1	49764.21792379	Sum of GTIs [s]
ontime2	49764.21792379	Sum of GTIs [s]
ontime3	49767.358933926	Sum of GTIs [s]
ontime6	49764.217913836	Sum of GTIs [s]
l2events	133865	Number of level 2 events



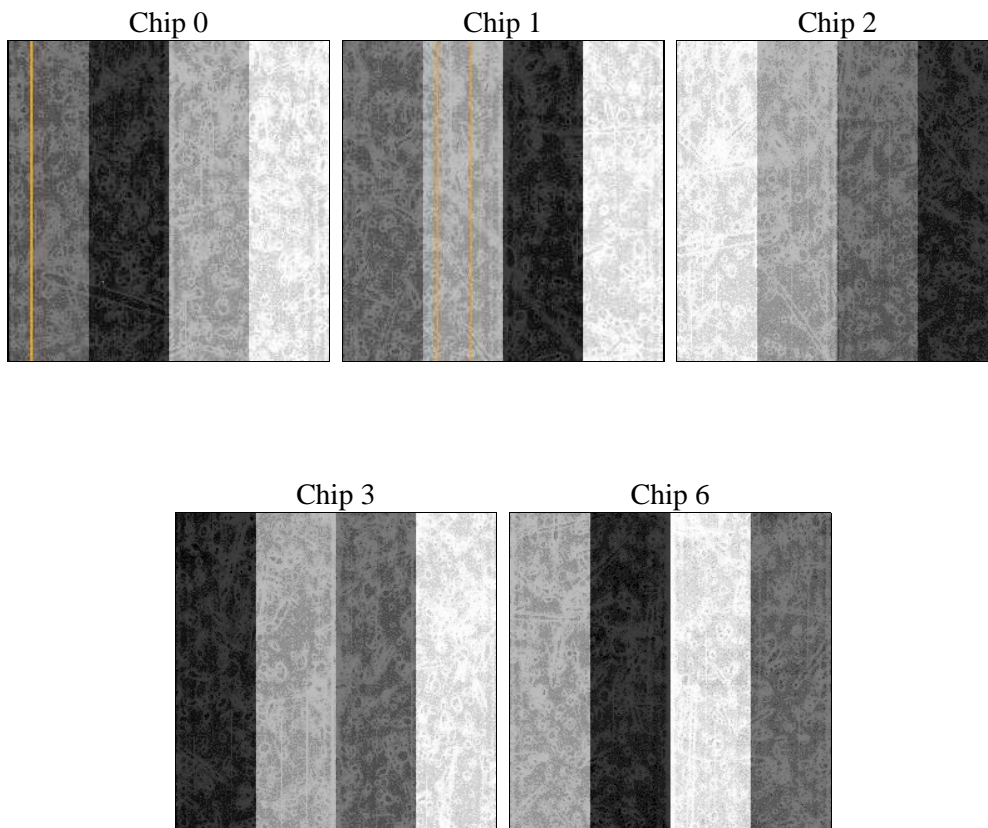
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	50000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1	Processing system revision	ontime	49767.358933926	Sum of GTIs [s]
caldbver	4.5.5	&#160	ontime0	49761.076923579	Sum of GTIs [s]
date	2012-12-18T08:32:03	Date and time of file creation	ontime1	49764.21792379	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	49764.21792379	Sum of GTIs [s]
			ontime3	49767.358933926	Sum of GTIs [s]
			ontime6	49764.217913836	Sum of GTIs [s]
			l1events	1538010	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	289873	295159	328659	311863	312456
rejected events	258919	259037	298484	280667	279929
rejected %	89%	87%	90%	89%	89%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	11036	13820	10749	12067	11962
	3%	4%	3%	3%	3%
grade 1 events	144	121	145	164	122
	0%	0%	0%	0%	0%
grade 2 events	7239	7756	7134	6434	6680
	2%	2%	2%	2%	2%
grade 3 events	3627	3784	3282	3498	3508
	1%	1%	0%	1%	1%
grade 4 events	3234	3778	3273	3260	3573
	1%	1%	0%	1%	1%
grade 5 events	11241	11754	10491	12641	11996
	3%	3%	3%	4%	3%
grade 6 events	5822	6984	5739	5942	6811
	2%	2%	1%	1%	2%
grade 7 events	247530	247162	287846	267857	267804
	85%	83%	87%	85%	85%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	185.486964	185.4561505956828	Subarray requested	NONE	NONE
[deg] Pointing Dec	27.184237	27.18409926158618	Alternating exposures requested	N	N
[deg] Pointing Roll	149.848741	150.0715072854319	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-225.840463	-225.8433433320239			
[mm] SIM translation stage offset	-7.752	-7.749109670905796			
[s] Observation start time (MET)	226987709.184000	226986731.3485			
Observation start date	2005-03-12T04:07:25	2005-03-12T03:52:11			
[s] Observation end time (MET)	227037709.184000	227038062.32583			
Observation end date	2005-03-12T18:00:45	2005-03-12T18:07:42			
Read mode	TIMED	TIMED			

## 2.3 Aspect

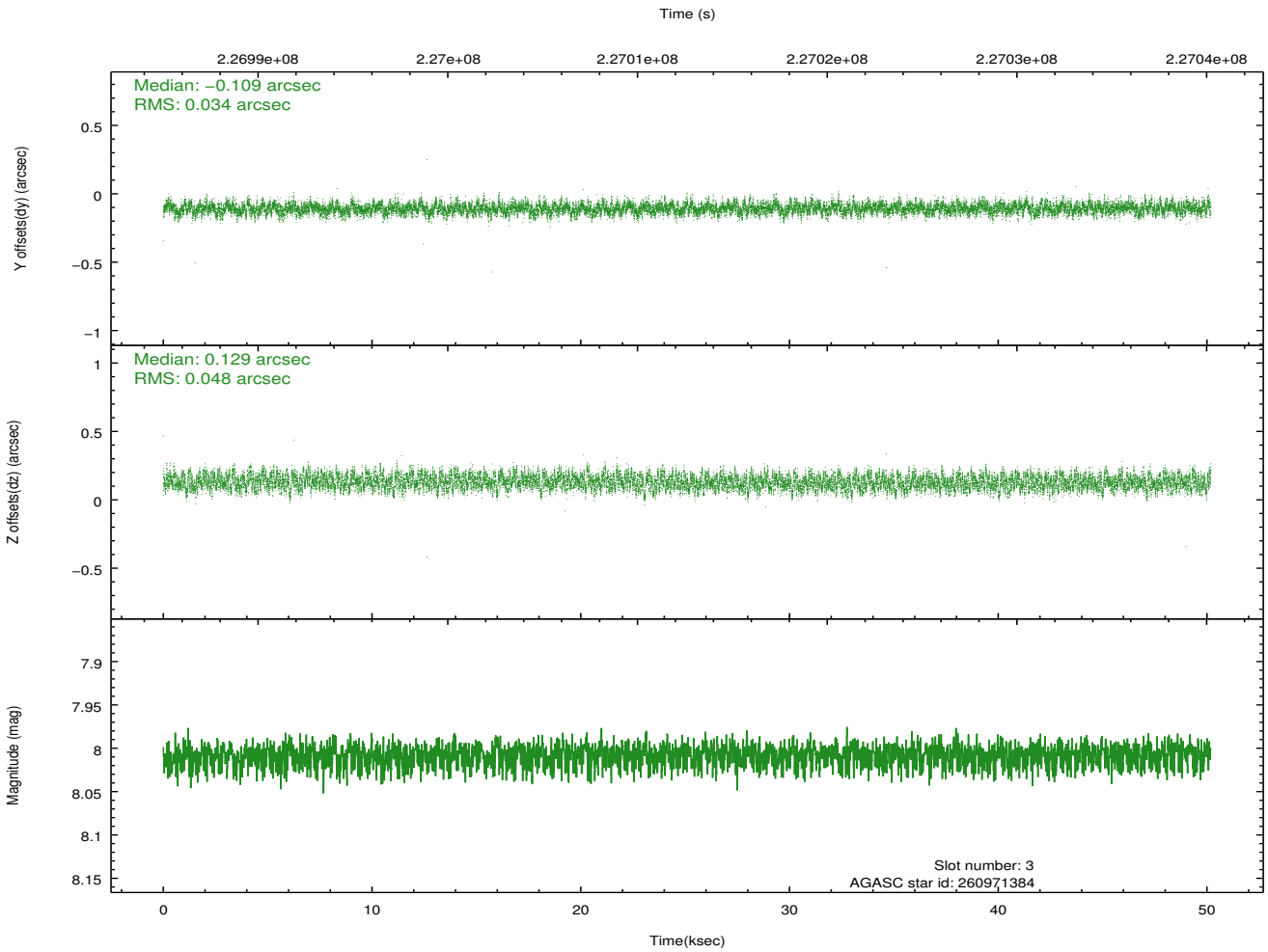
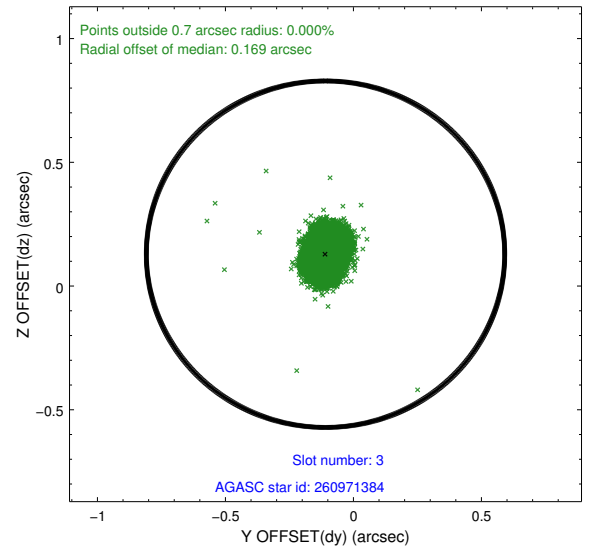
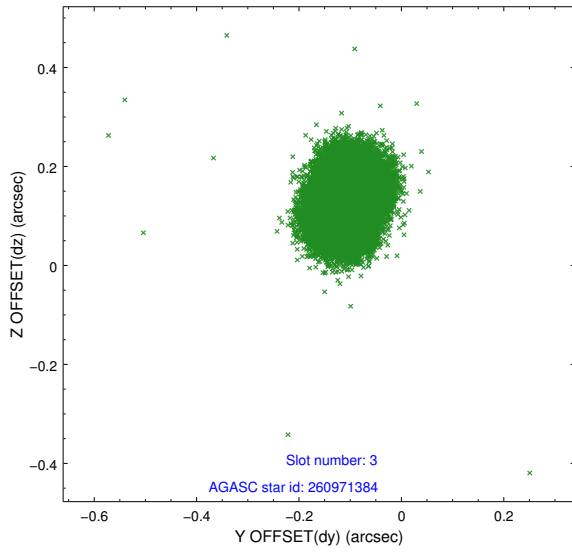


### Slot Statistics

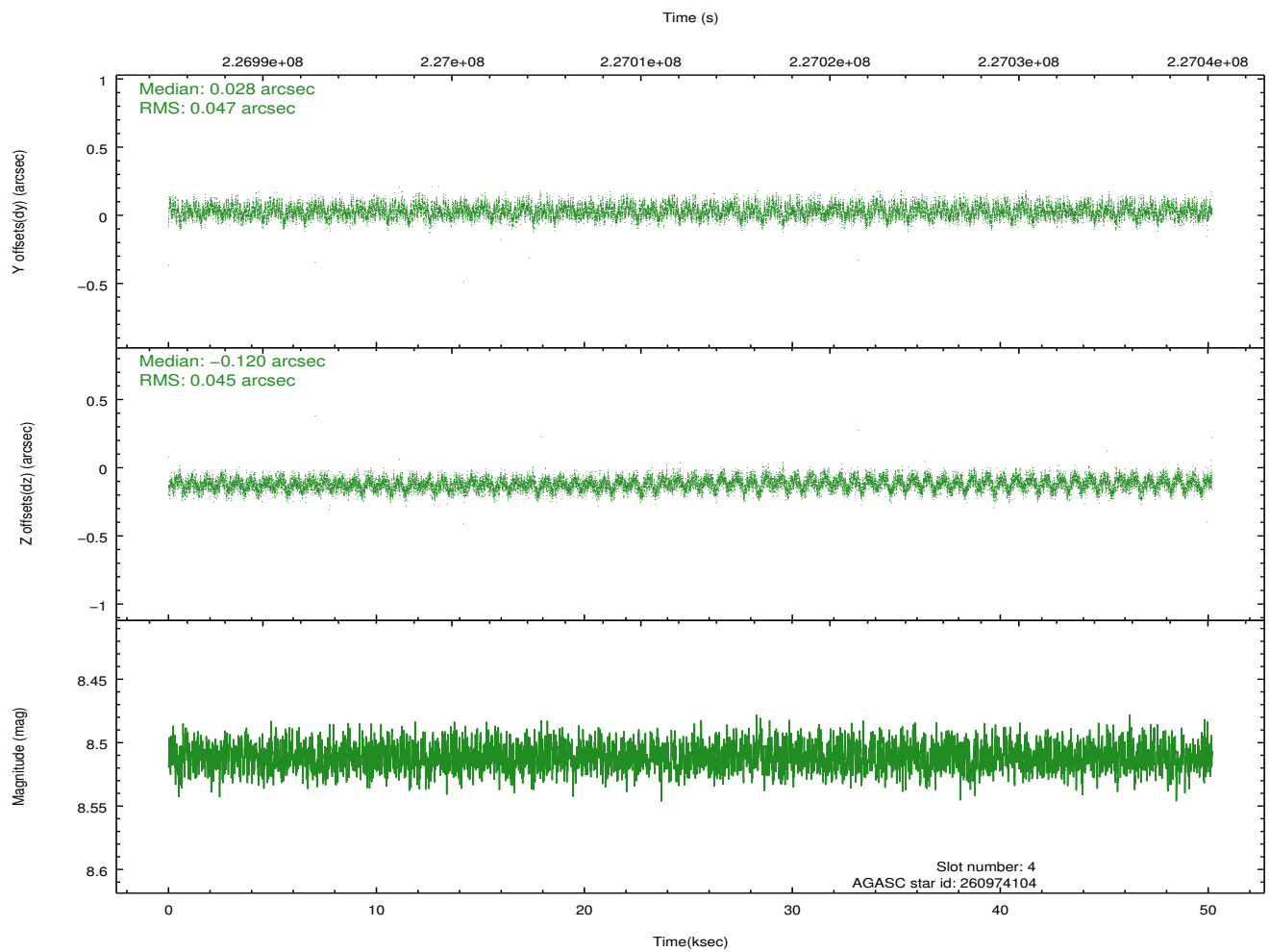
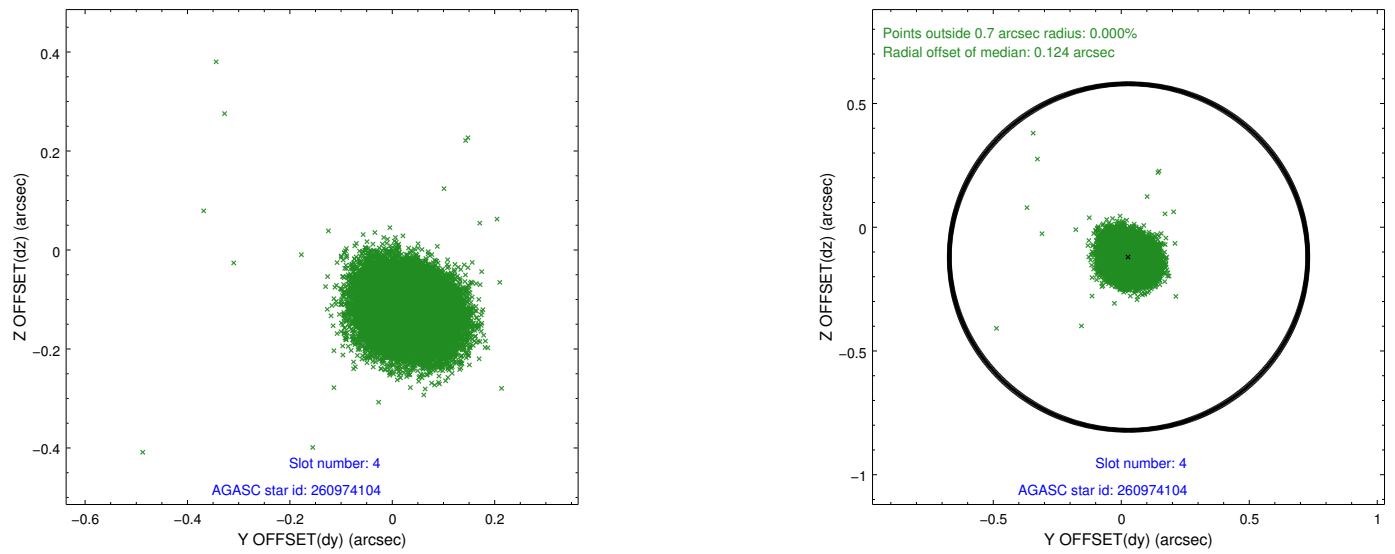
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	12239	0.090	-0.081	0.009	0.015	0.000000	0.000000	933.39	-992.07
1	FID	ACIS-I-5	7.22	12241	-0.240	0.078	0.021	0.029	0.000000	0.000000	-1815.06	905.56
2	FID	ACIS-I-6	7.25	12241	0.056	0.074	0.016	0.022	0.000000	0.000000	398.91	1550.05
3	GUIDE	260971384	8.01	24475	-0.109	0.129	0.063	0.101	185.663575	27.133385	-581.06	-125.87
4	GUIDE	260974104	8.51	24473	0.028	-0.120	0.069	0.109	185.434163	26.608928	-893.44	1876.28
5	GUIDE	260974120	9.23	24470	0.073	-0.010	0.092	0.146	185.874305	26.565737	-2196.03	1297.37
6	GUIDE	260974536	8.66	24463	0.034	0.035	0.062	0.101	185.484020	27.309502	234.72	-384.68
7	GUIDE	260974856	7.47	24480	-0.025	-0.033	0.050	0.085	185.643318	26.621538	-1452.57	1498.90

## 2.4 Star Slots

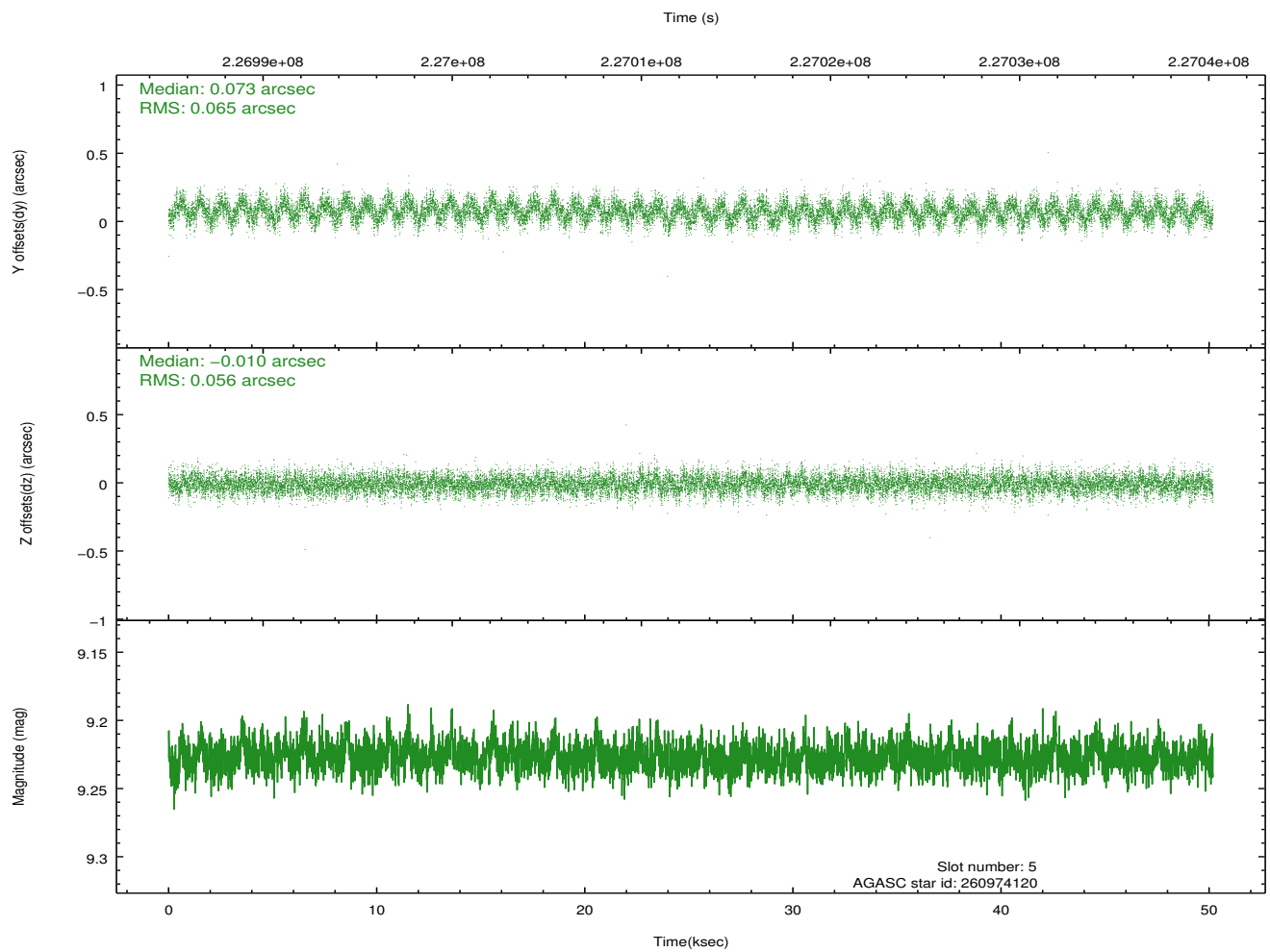
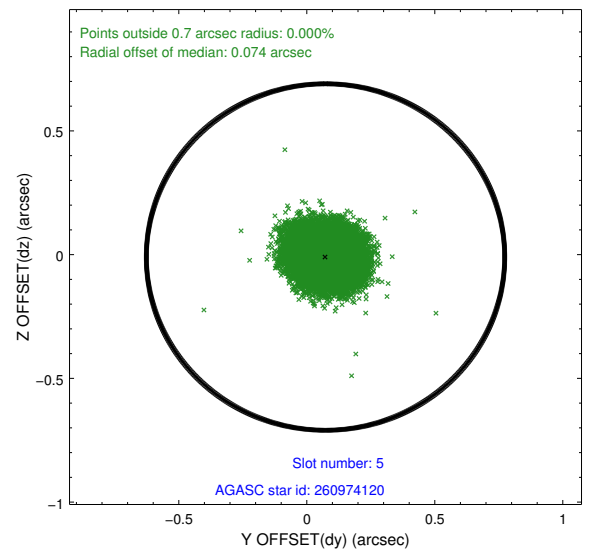
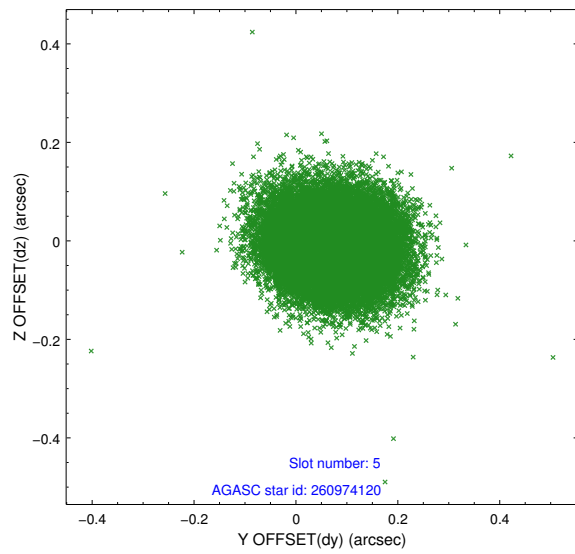
### 2.4.1 Slot 3



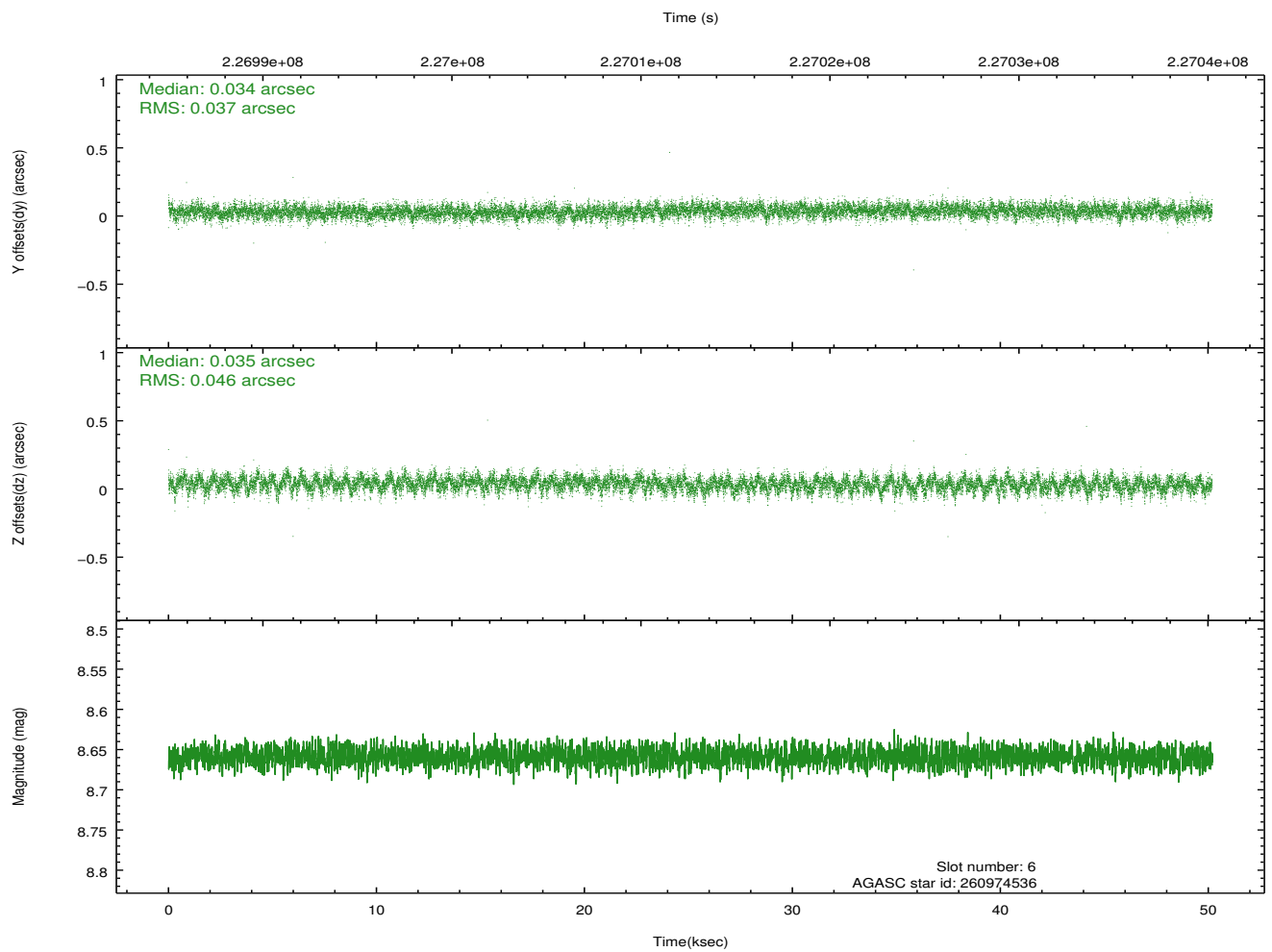
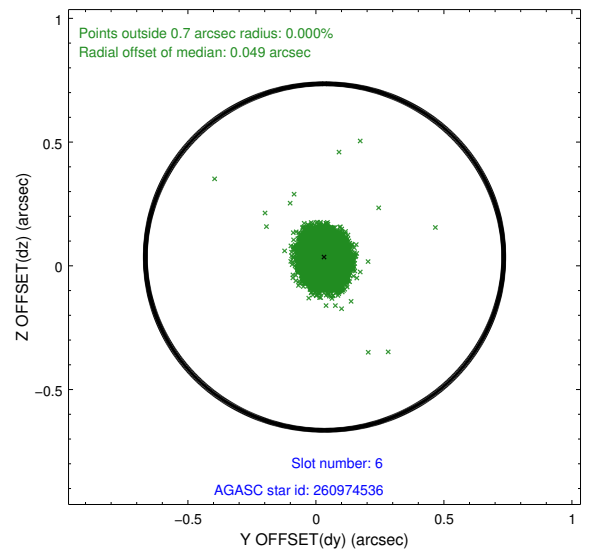
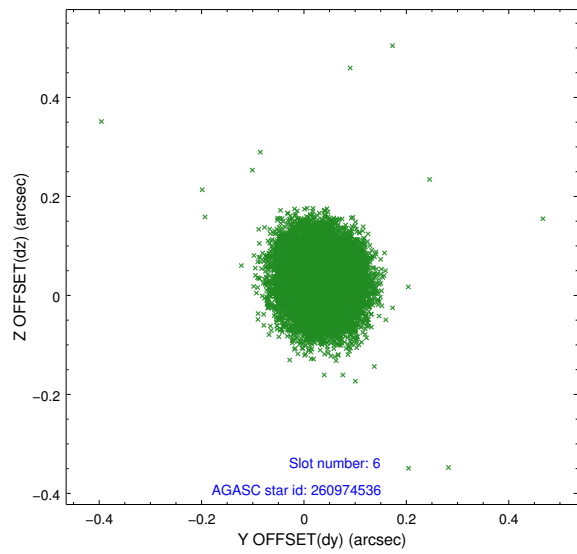
## 2.4.2 Slot 4



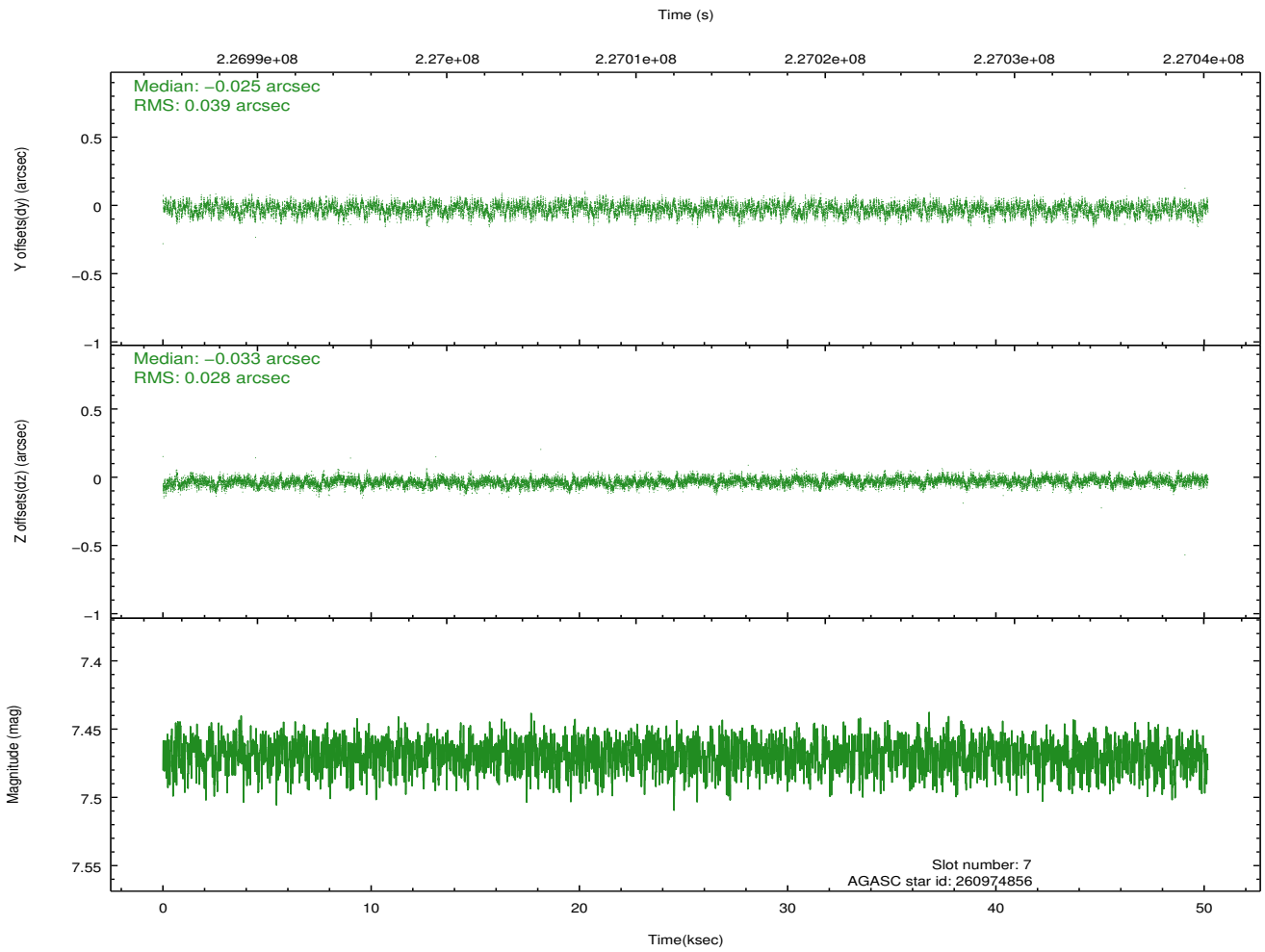
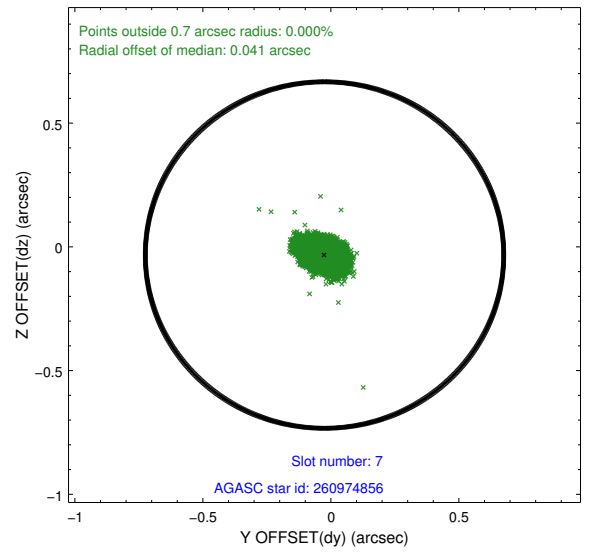
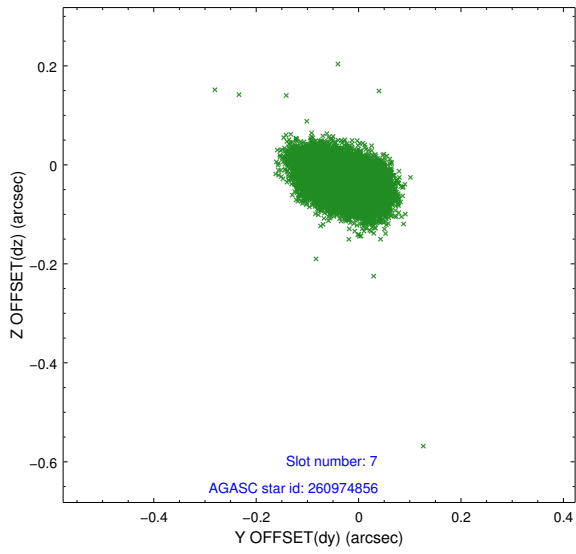
### 2.4.3 Slot 5



### 2.4.4 Slot 6

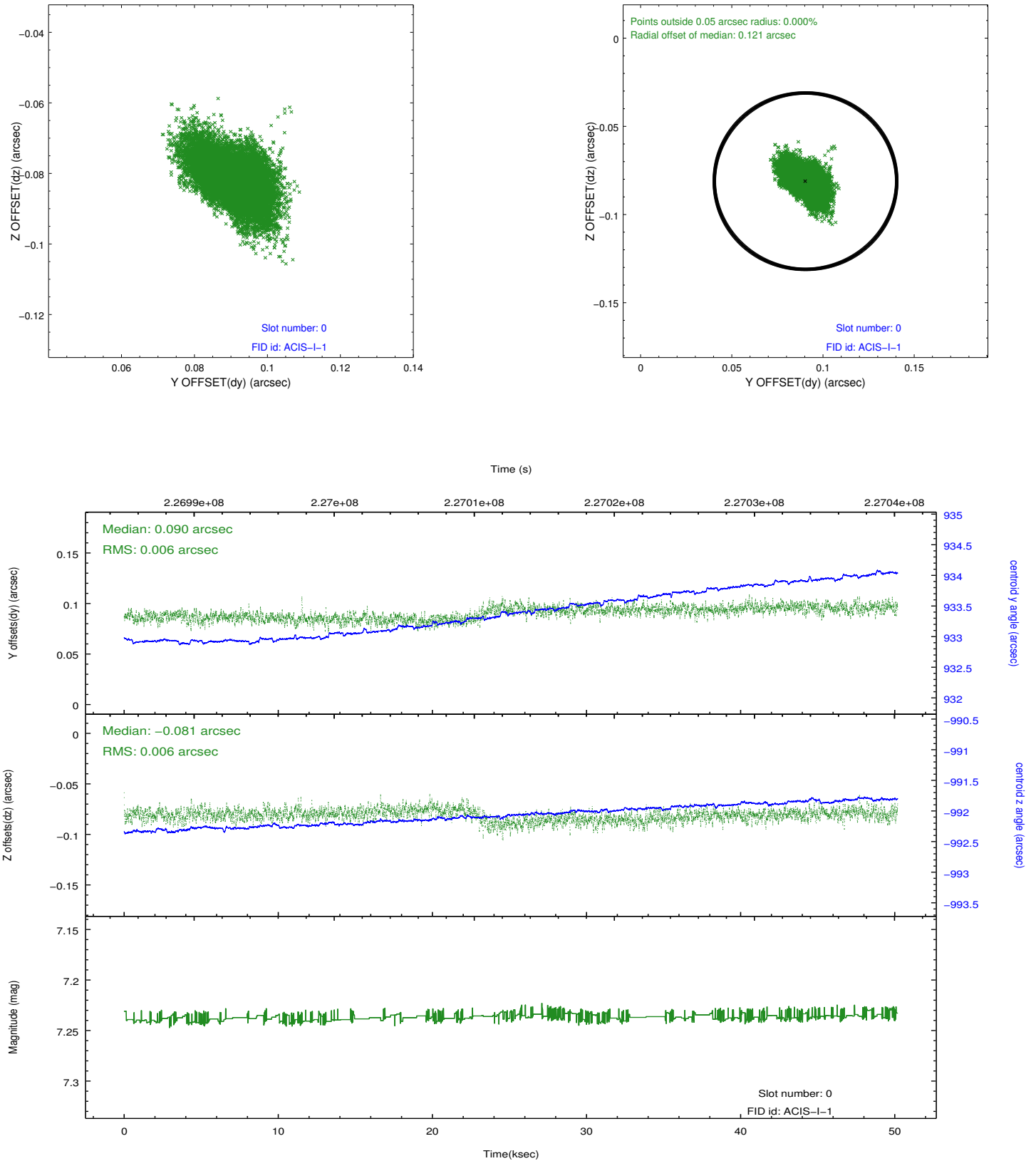


### 2.4.5 Slot 7

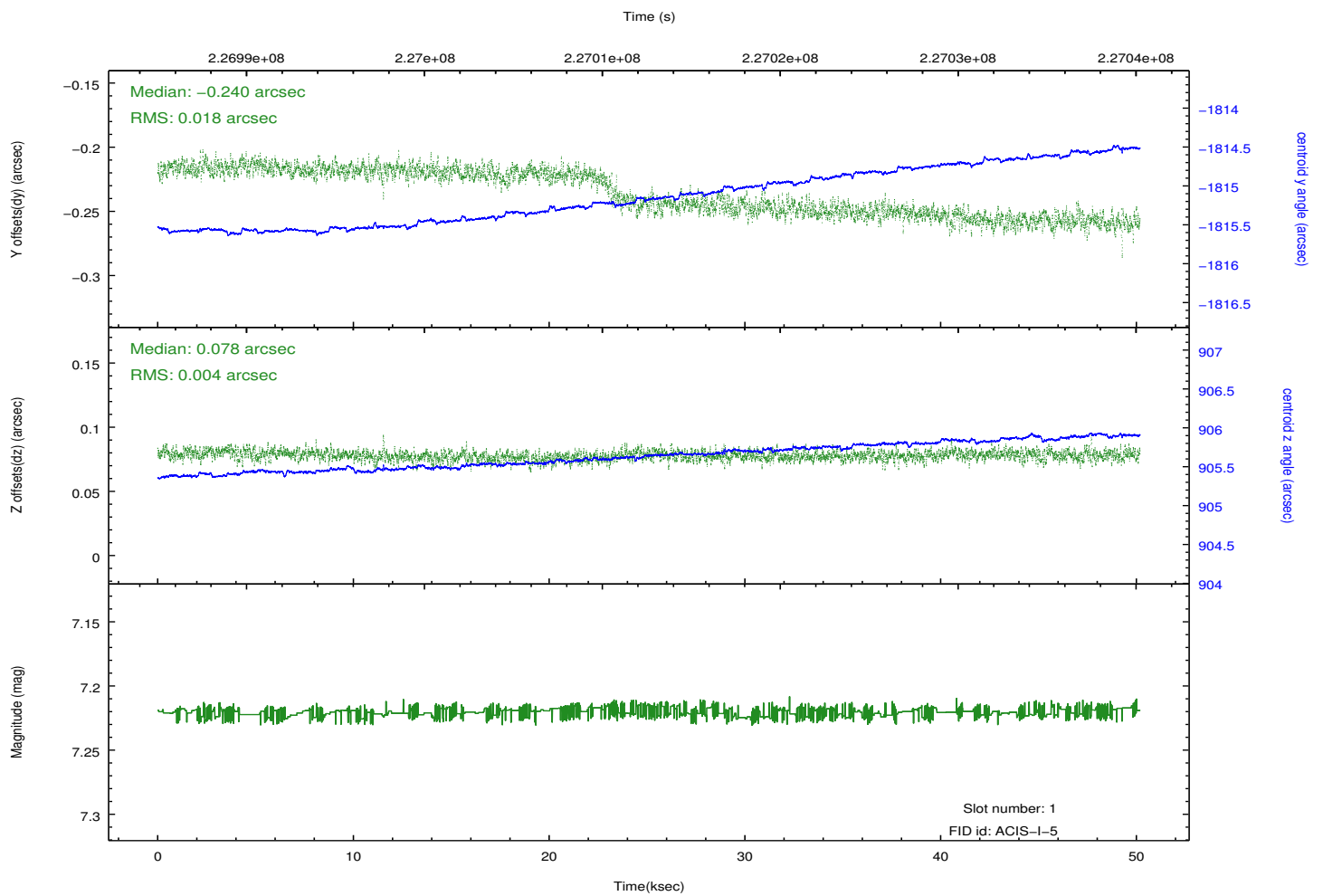
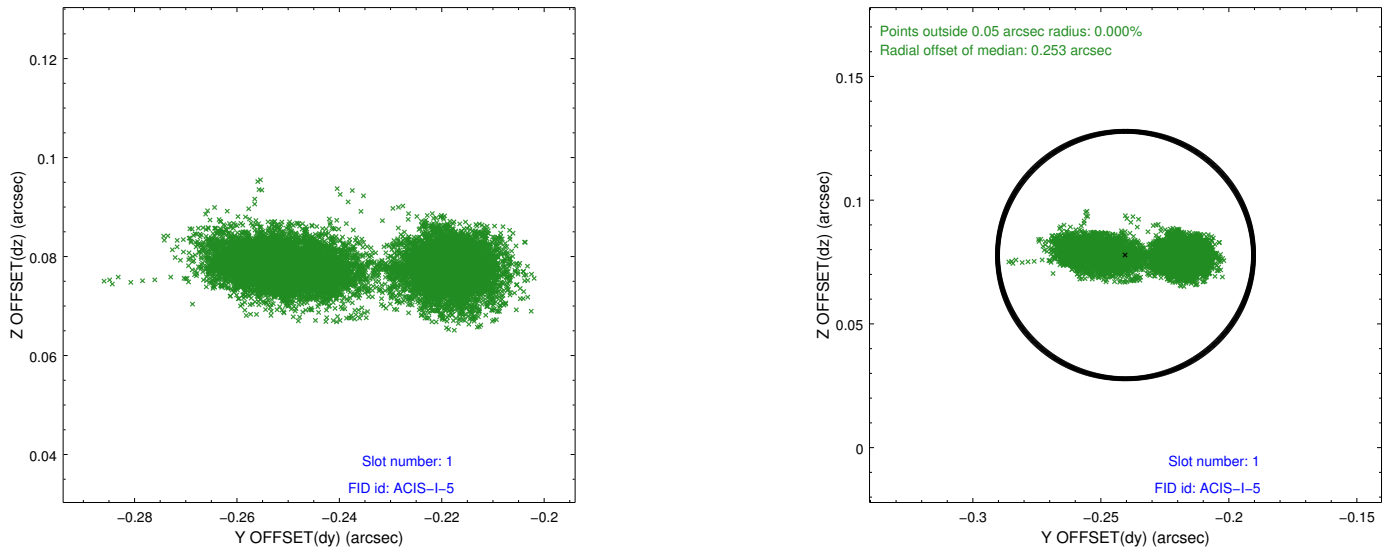


## 2.5 FID Slots

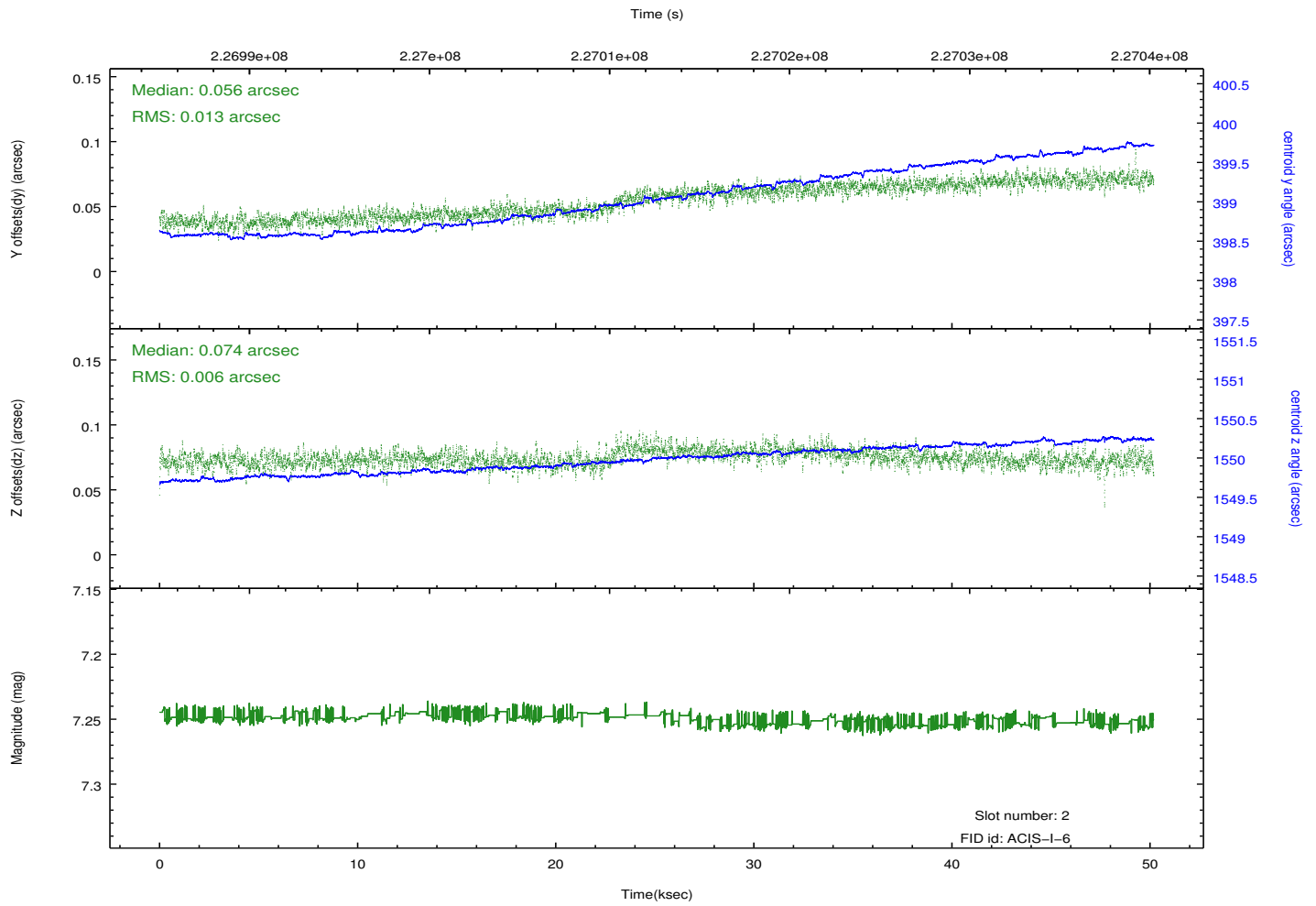
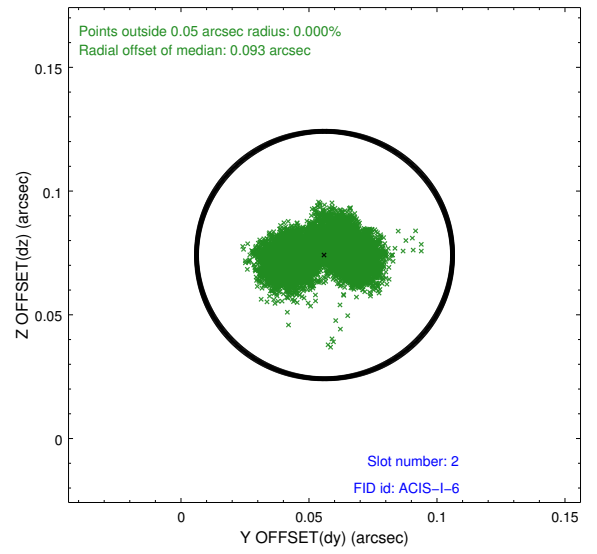
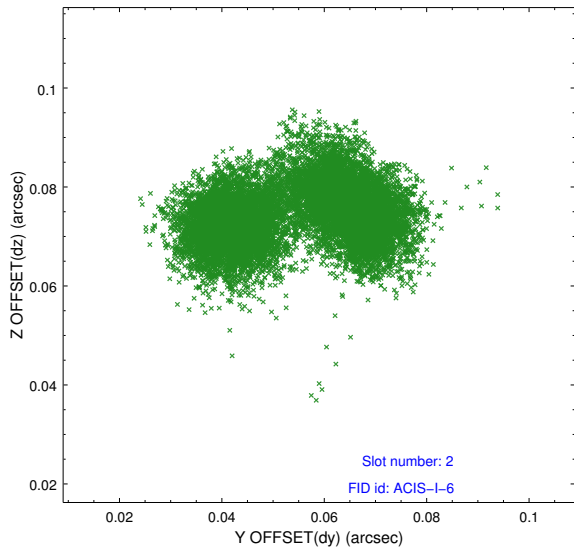
### 2.5.1 Slot 0



## 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)	2013.01.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	49.76735

## A.2 Comments