

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 5469 - L2 Version 3  
Chandra X-Ray Center

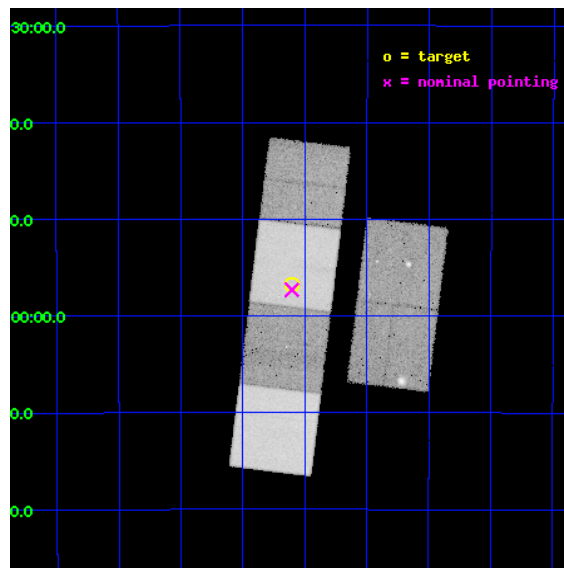
L2 Processing Date : Dec 26 2012

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# 1 Front

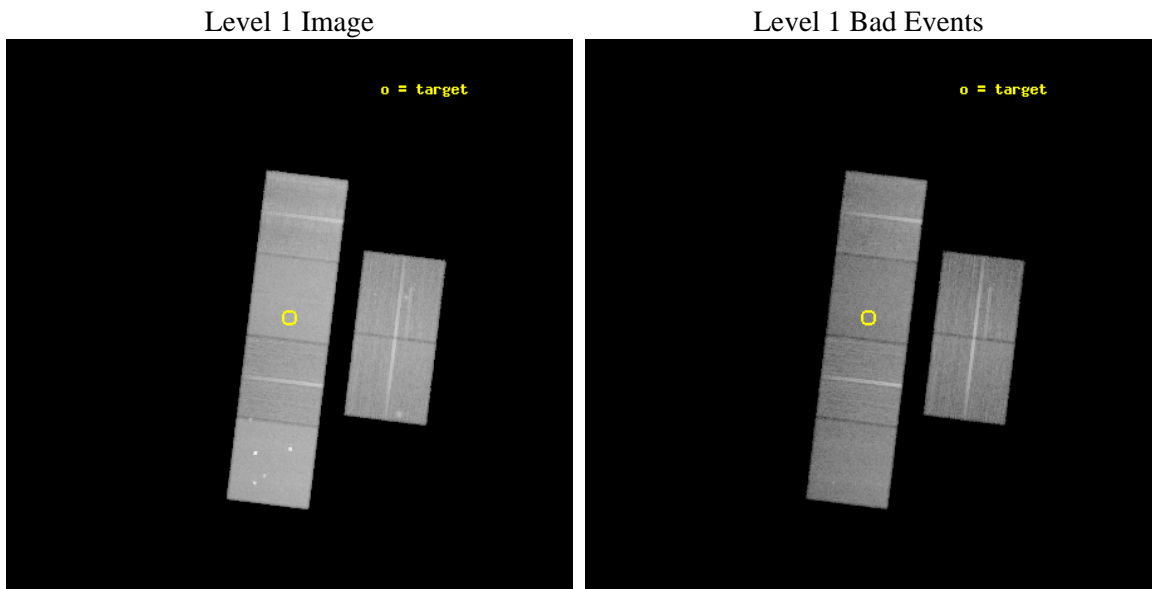
seq_num	400399	Sequence number
obs_id	5469	Observation id
title	Cooling curves of accretion-heated neutron stars	Proposal title
observer	Dr. Rudy Wijnands	Principal investigator
object	MXB 1659-29	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	255.526667	Observer's specified target RA [deg]
dec_targ	-29.945639	Observer's specified target Dec [deg]
ra_nom	255.52608010165	Nominal RA [deg]
dec_nom	-29.955251359267	Nominal Dec [deg]
roll_nom	276.97460696717	Nominal Roll [deg]
revision	3	Processing version of data
ontime	28956.799892128	Sum of GTIs [s]
livetime	28590.131456202	Livetime [s]
ontime2	28956.799892128	Sum of GTIs [s]
ontime3	28956.799892128	Sum of GTIs [s]
ontime5	28956.799892128	Sum of GTIs [s]
ontime6	28956.799892128	Sum of GTIs [s]
ontime7	28956.799892128	Sum of GTIs [s]
ontime8	28953.558891892	Sum of GTIs [s]
l2events	394974	Number of level 2 events



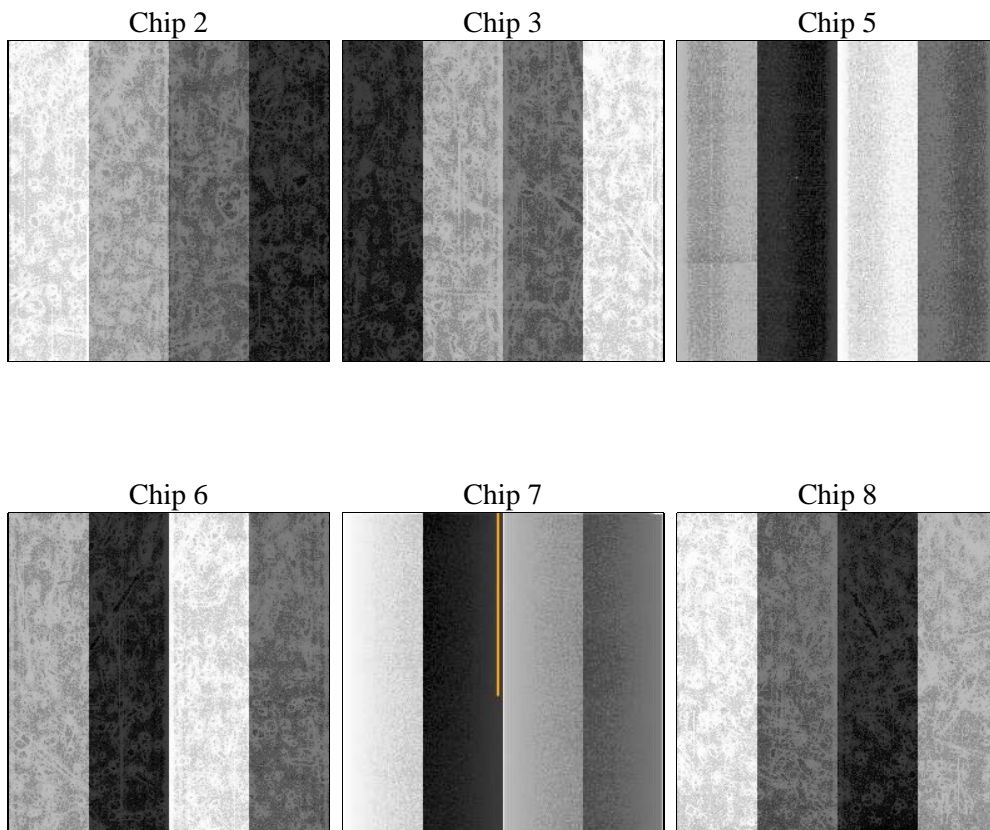
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	29000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	28956.799892128	Sum of GTIs [s]
caldbver	4.5.5	&#160	ontime2	28956.799892128	Sum of GTIs [s]
date	2012-12-26T00:49:18	Date and time of file creation	ontime3	28956.799892128	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	28956.799892128	Sum of GTIs [s]
			ontime6	28956.799892128	Sum of GTIs [s]
			ontime7	28956.799892128	Sum of GTIs [s]
			ontime8	28953.558891892	Sum of GTIs [s]
			l1events	1680877	Number of level 1 events

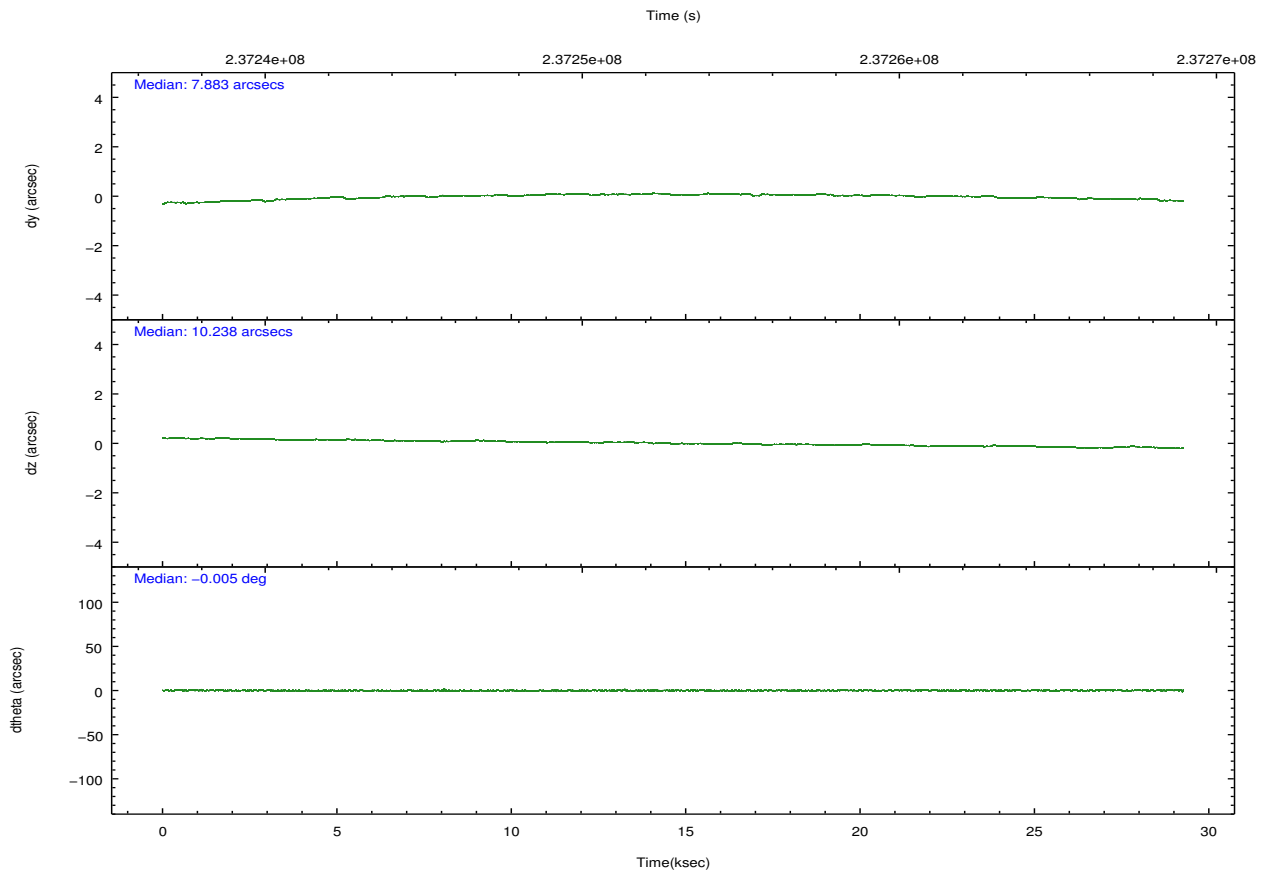
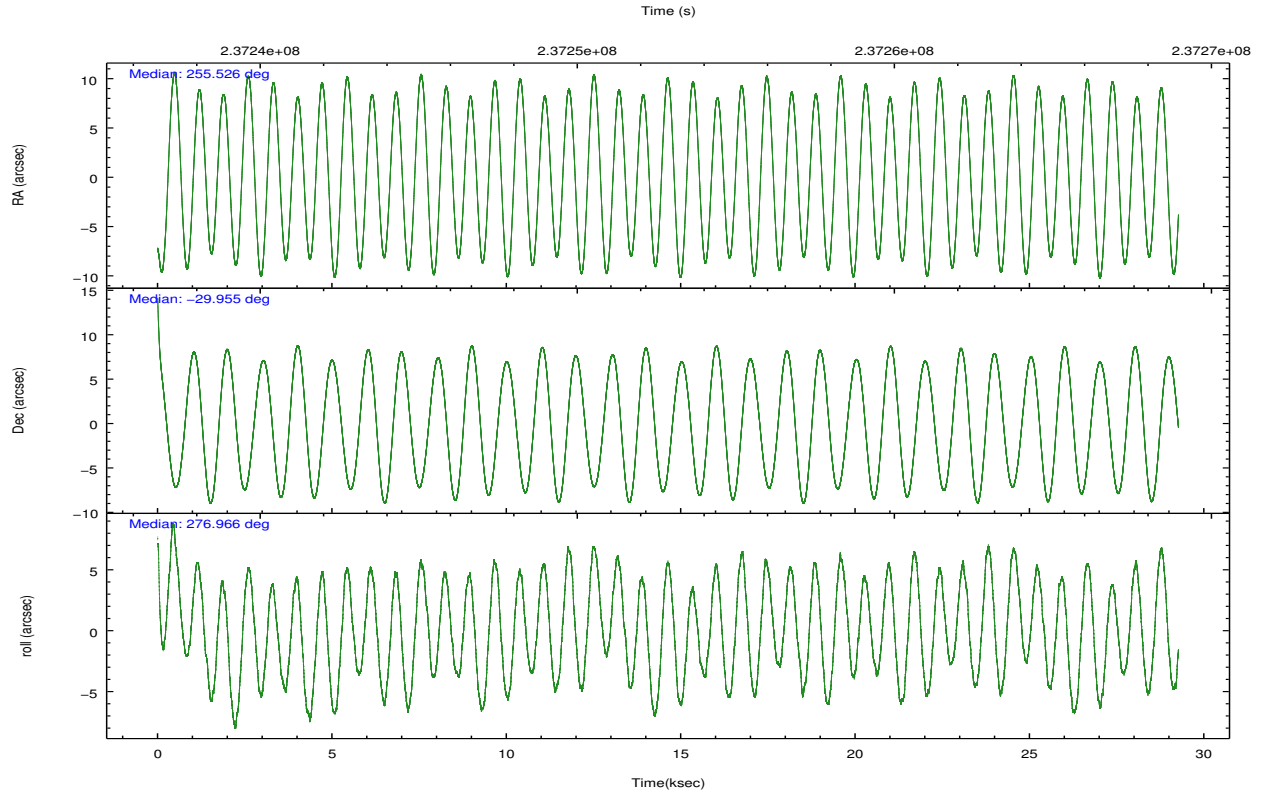
### 2.1.4 Events

	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	237915	227722	361164	238046	318629	297401	grade 0 events	15096	14334	28052	13005	13122	23409
rejected events	206687	197429	188514	207414	183910	229327		6%	6%	7%	5%	4%	7%
rejected %	86%	86%	52%	87%	57%	77%	grade 1 events	136	159	514	116	296	216
								0%	0%	0%	0%	0%	0%
							grade 2 events	6185	5849	48034	6409	27598	14518
								2%	2%	13%	2%	8%	4%
							grade 3 events	2614	2635	6463	2757	11828	7166
								1%	1%	1%	1%	3%	2%
							grade 4 events	2599	2635	6243	2690	11931	6659
								1%	1%	1%	1%	3%	2%
							grade 5 events	9183	10358	25548	10619	29908	14191
								3%	4%	7%	4%	9%	4%
							grade 6 events	4744	4842	83873	5775	70256	16324
								1%	2%	23%	2%	22%	5%
							grade 7 events	197358	186910	162437	196675	153690	214918
								82%	82%	44%	82%	48%	72%

## 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	255.506851	255.5260801016549	Subarray requested	NONE	NONE
[deg] Pointing Dec	-29.933729	-29.9552513592673	Alternating exposures requested	N	N
[deg] Pointing Roll	276.808381	276.9746069671672	[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)	237238497.184000	237237493.9028			
Observation start date	2005-07-08T19:33:53	2005-07-08T19:18:13			
[s] Observation end time (MET)	237267497.184000	237268367.92921			
Observation end date	2005-07-09T03:37:13	2005-07-09T03:52:47			
Read mode	TIMED	TIMED			

## 2.3 Aspect

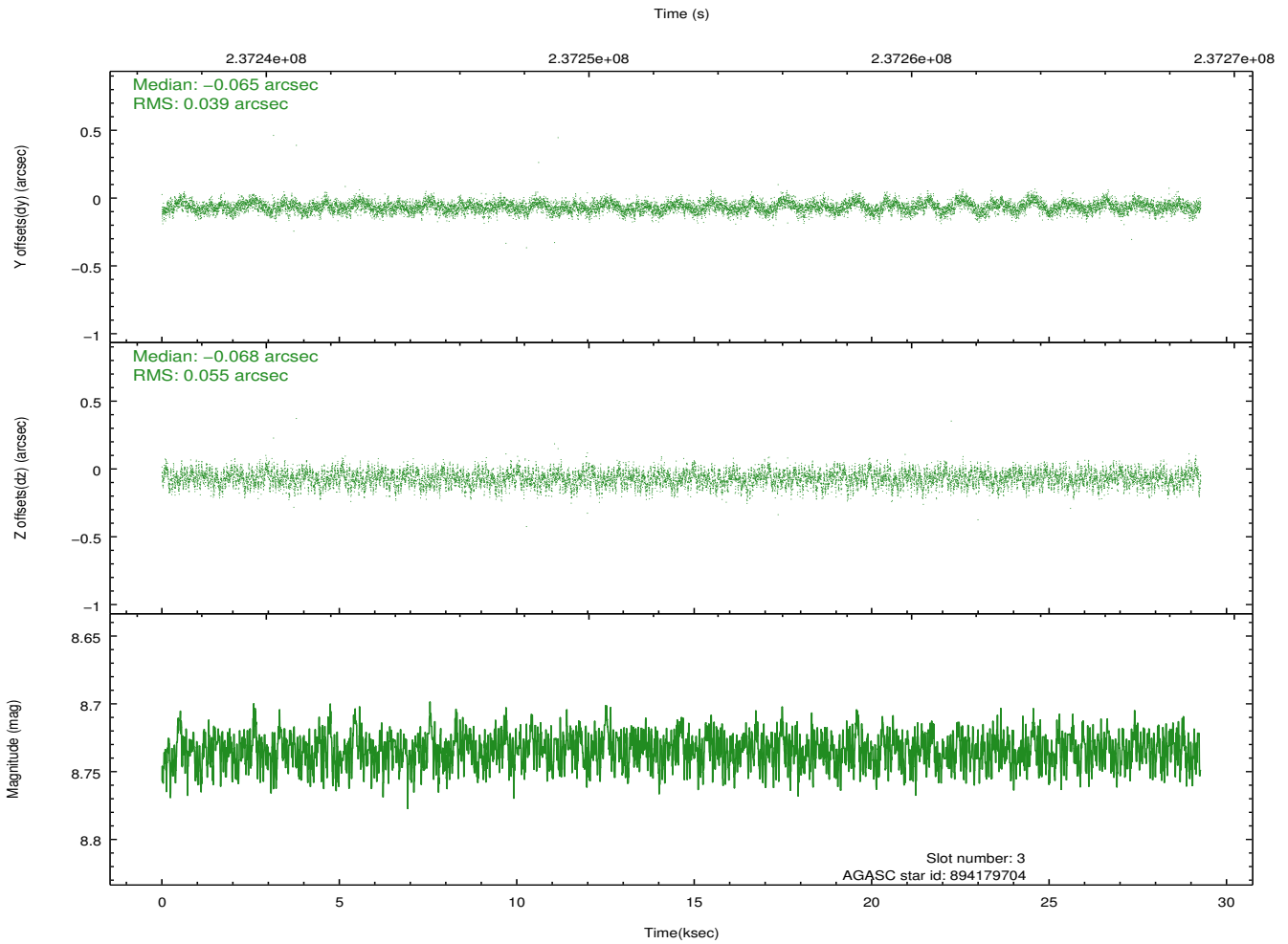
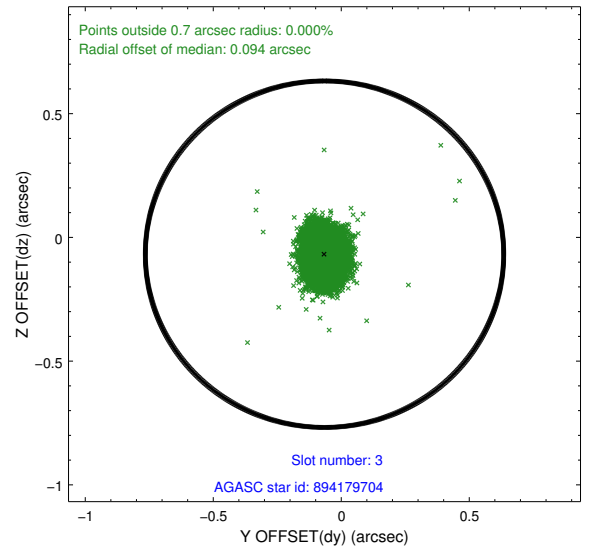
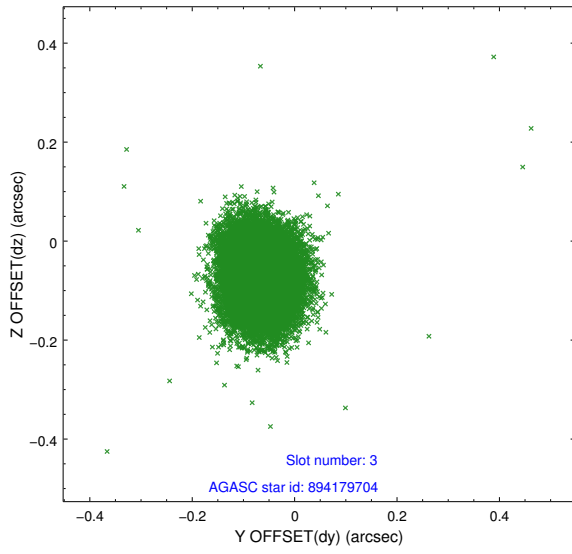


### Slot Statistics

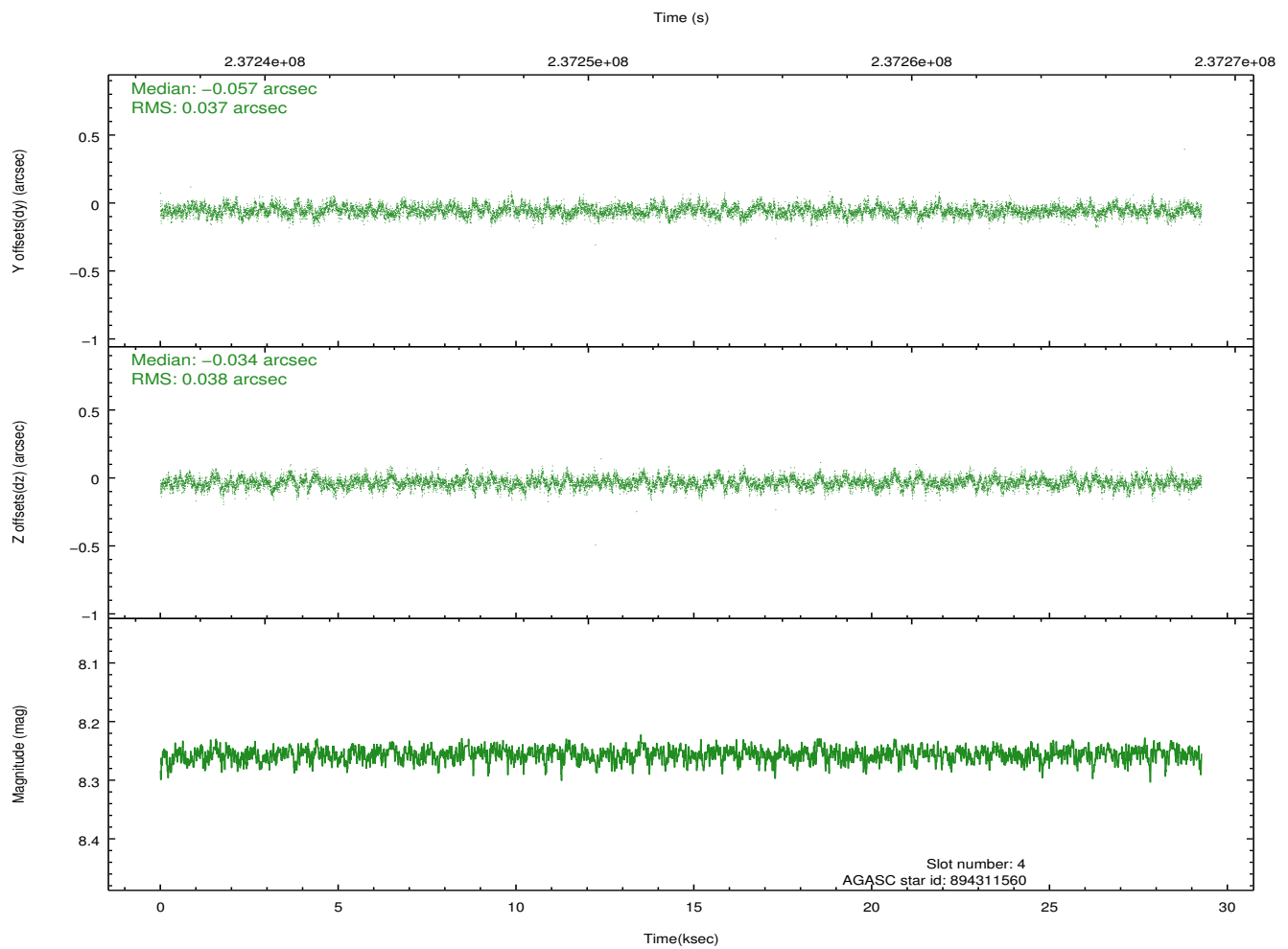
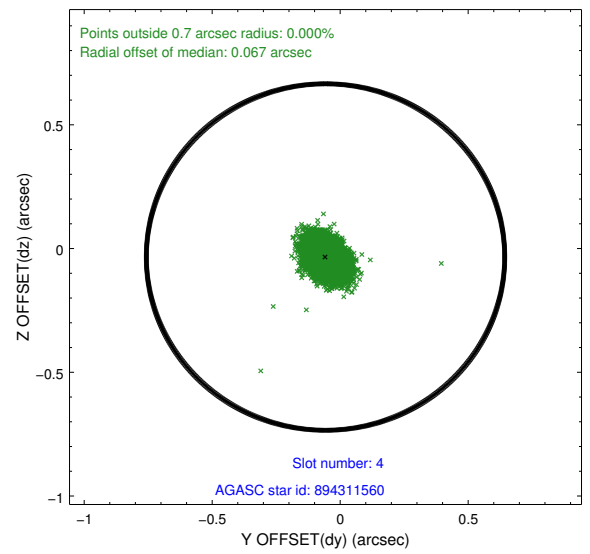
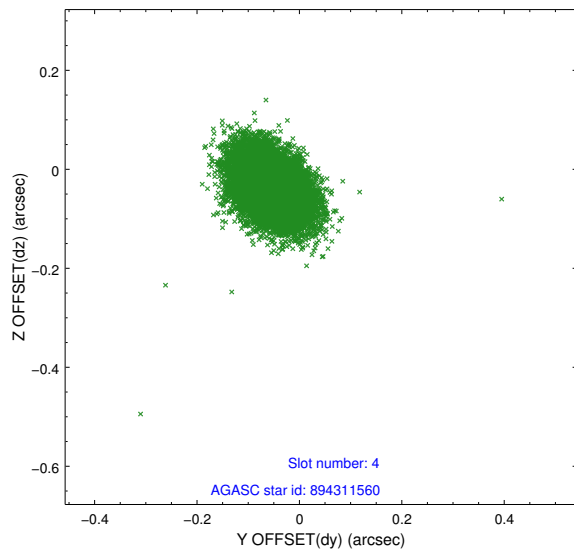
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	7139	-0.043	-0.020	0.008	0.013	0.000000	0.000000	-760.63	-1731.54
1	FID	ACIS-S-4	7.21	7139	0.111	0.026	0.007	0.015	0.000000	0.000000	2152.72	176.98
2	FID	ACIS-S-5	7.23	7139	-0.098	0.003	0.008	0.015	0.000000	0.000000	-1813.47	170.62
3	GUIDE	894179704	8.73	14268	-0.065	-0.068	0.071	0.115	254.813840	-29.808957	-695.61	-2096.98
4	GUIDE	894311560	8.26	14276	-0.057	-0.034	0.056	0.094	255.968048	-29.561250	-1157.45	1592.48
5	GUIDE	894314544	8.58	14272	0.045	-0.032	0.070	0.115	255.921805	-29.699914	-679.60	1388.14
6	GUIDE	964690752	8.80	14277	0.031	0.058	0.076	0.122	255.992274	-30.082811	715.43	1437.93
7	GUIDE	964692016	9.29	14199	0.047	0.074	0.095	0.153	256.158728	-30.198595	1193.25	1900.69

## 2.4 Star Slots

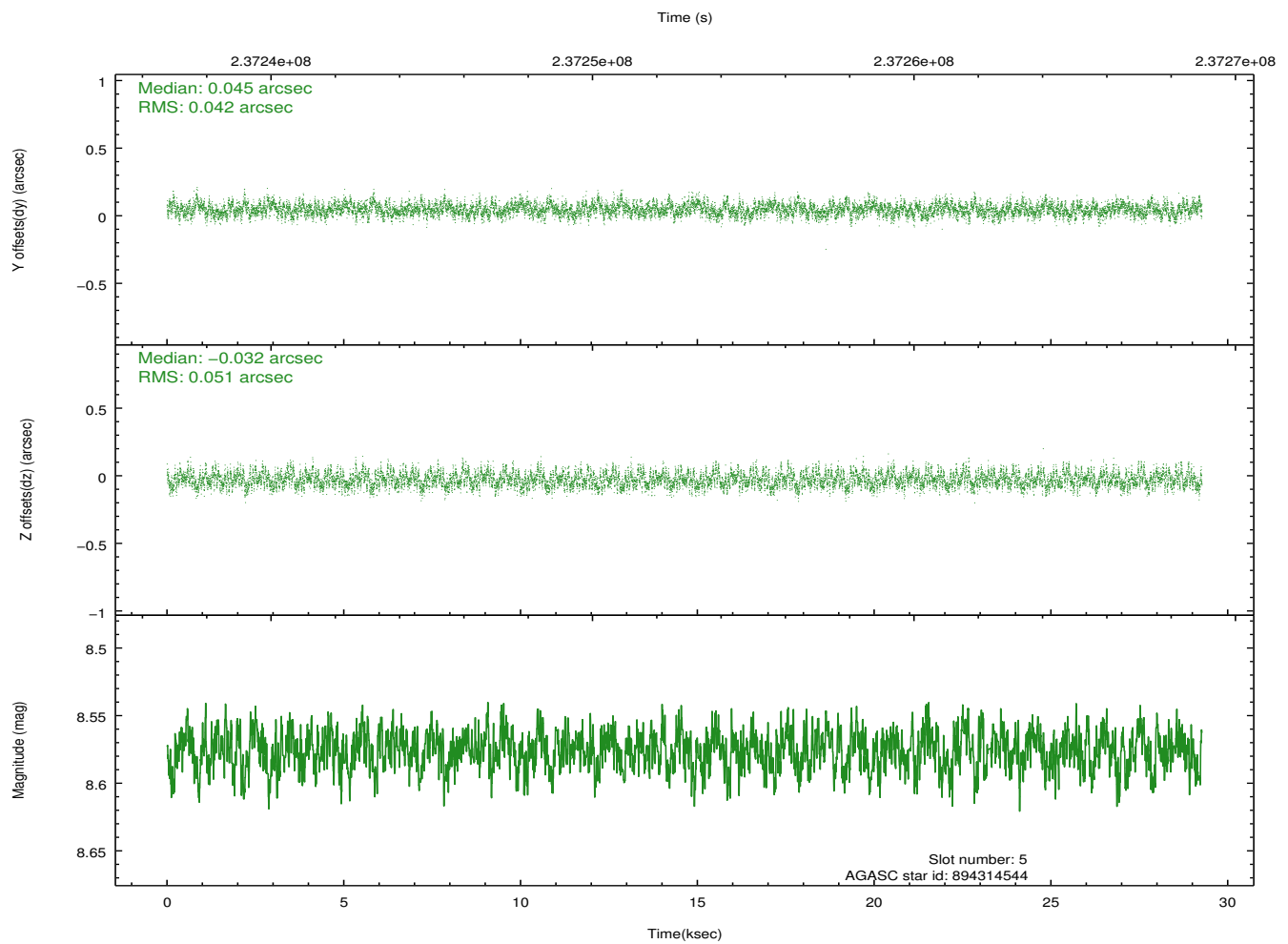
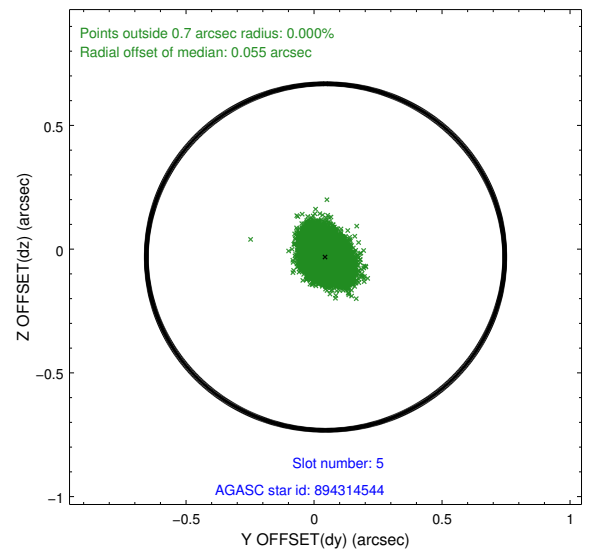
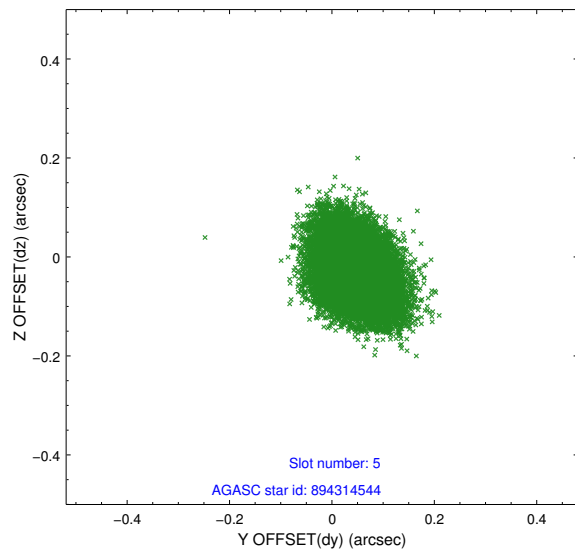
### 2.4.1 Slot 3



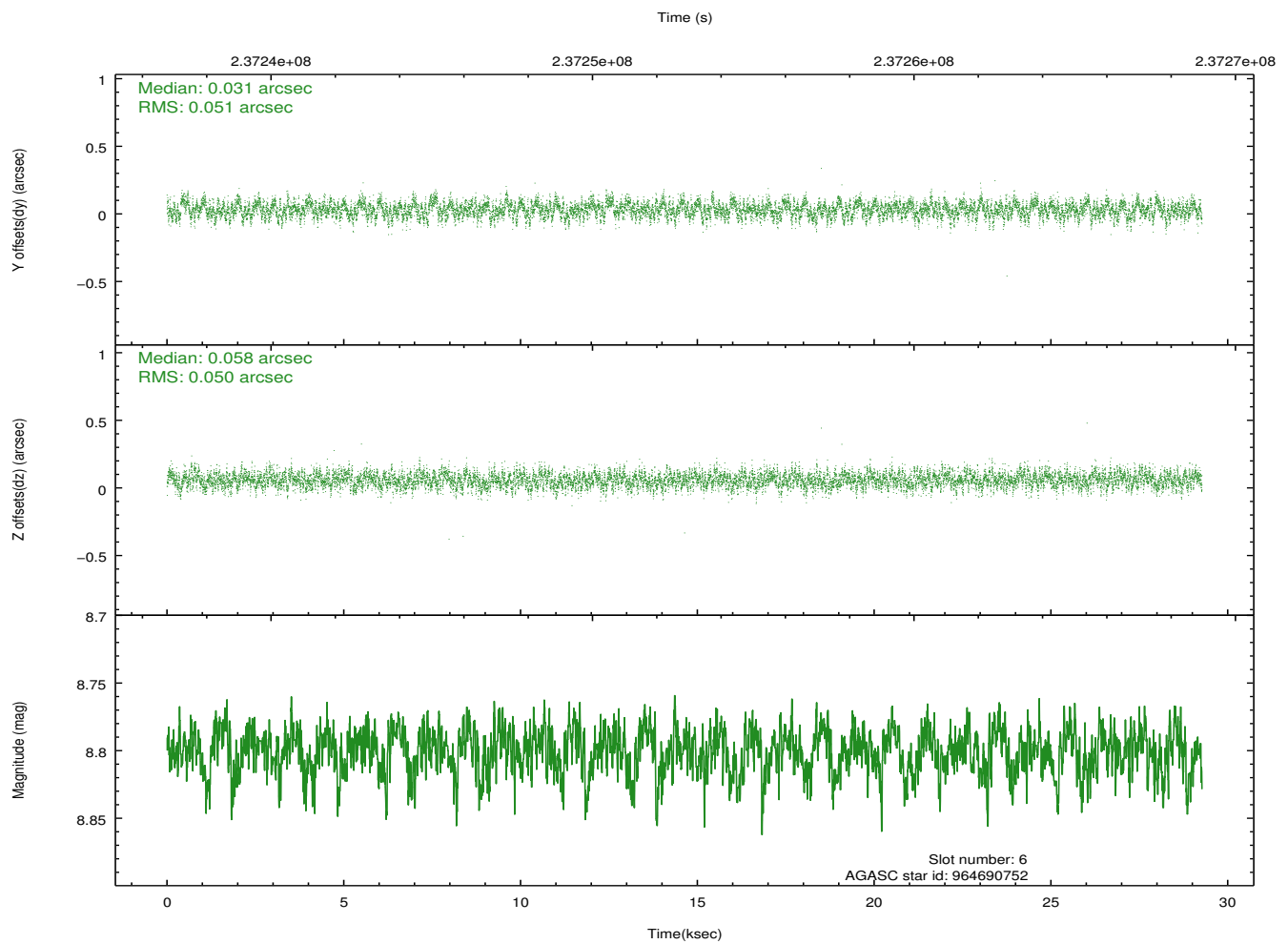
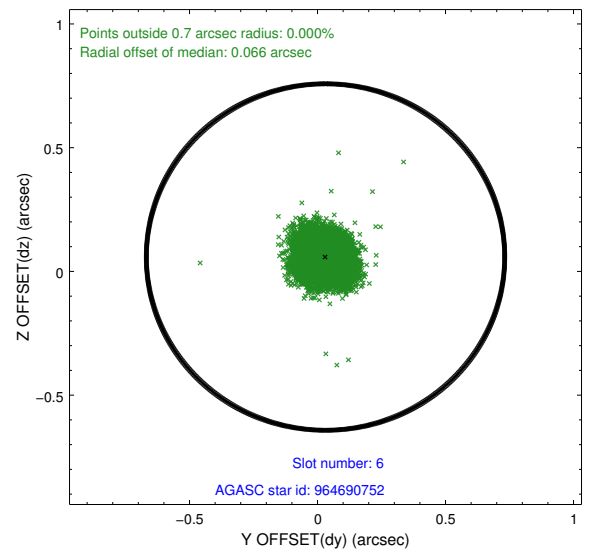
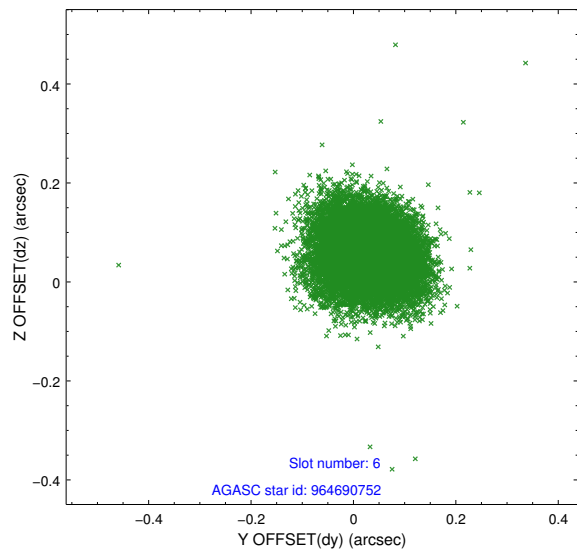
## 2.4.2 Slot 4



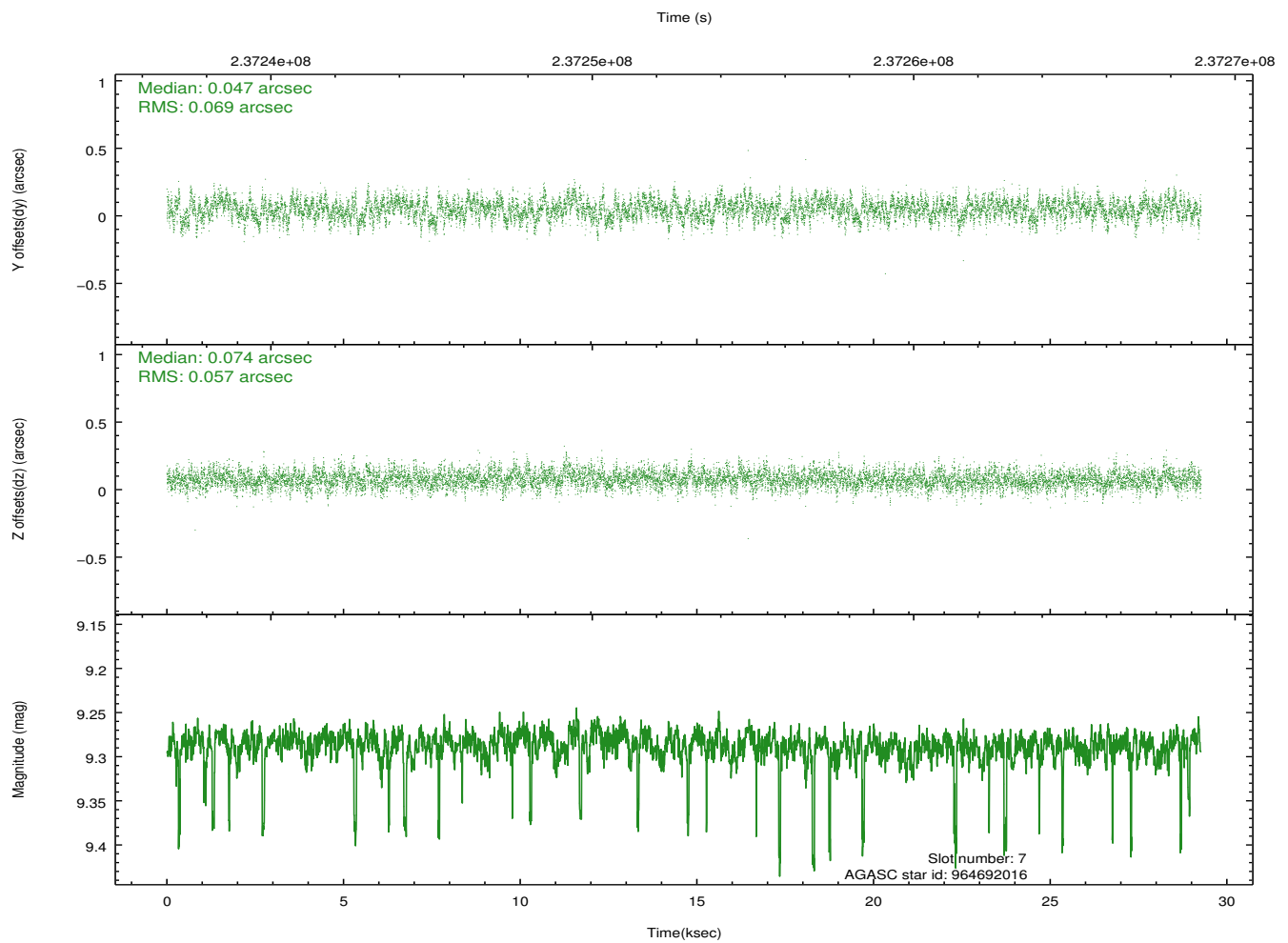
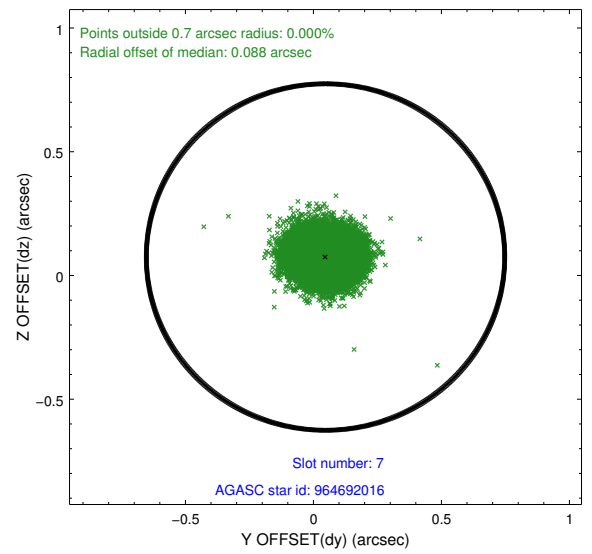
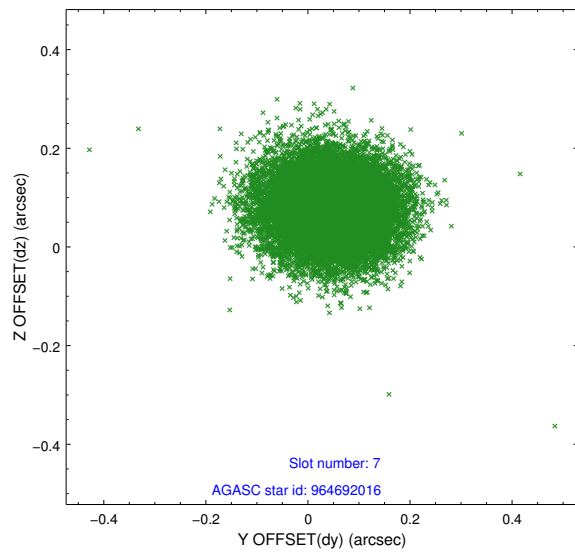
### 2.4.3 Slot 5



## 2.4.4 Slot 6

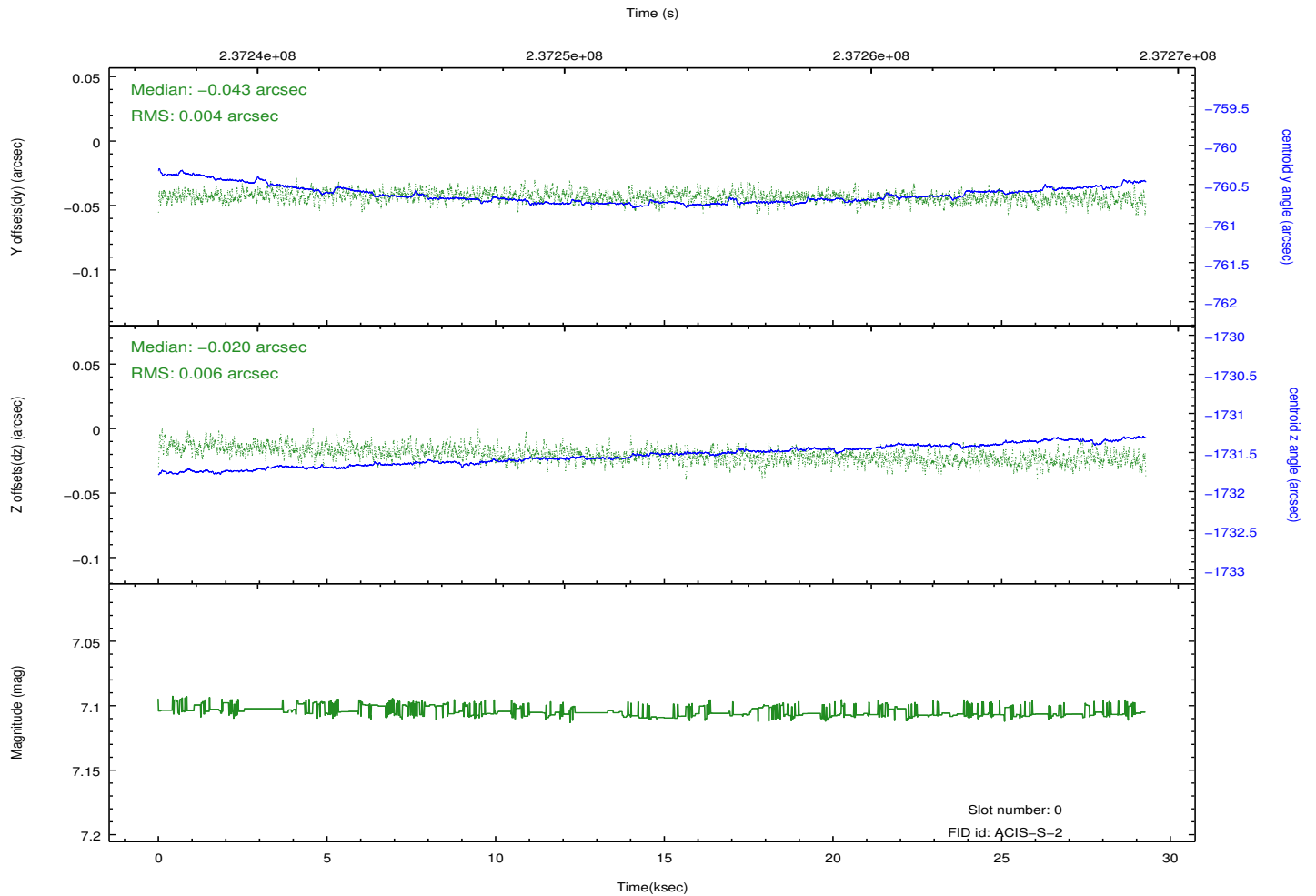
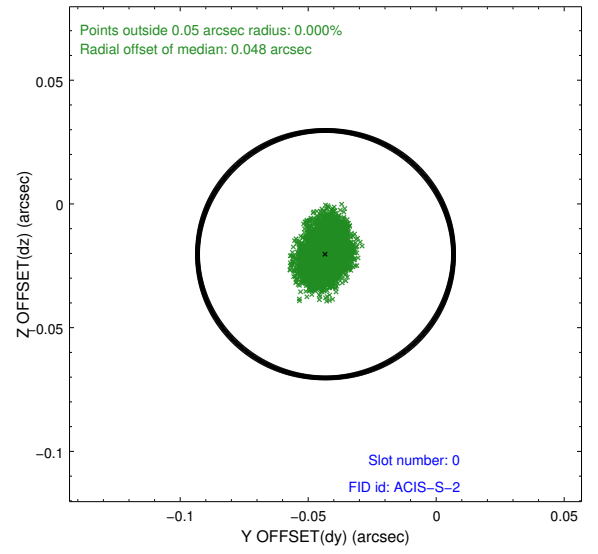
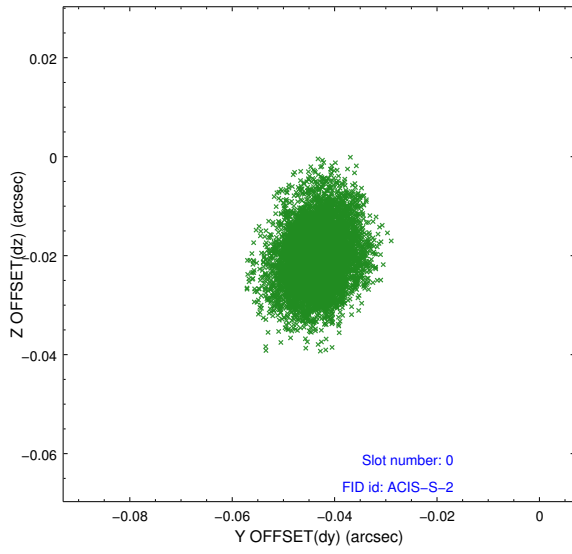


## 2.4.5 Slot 7

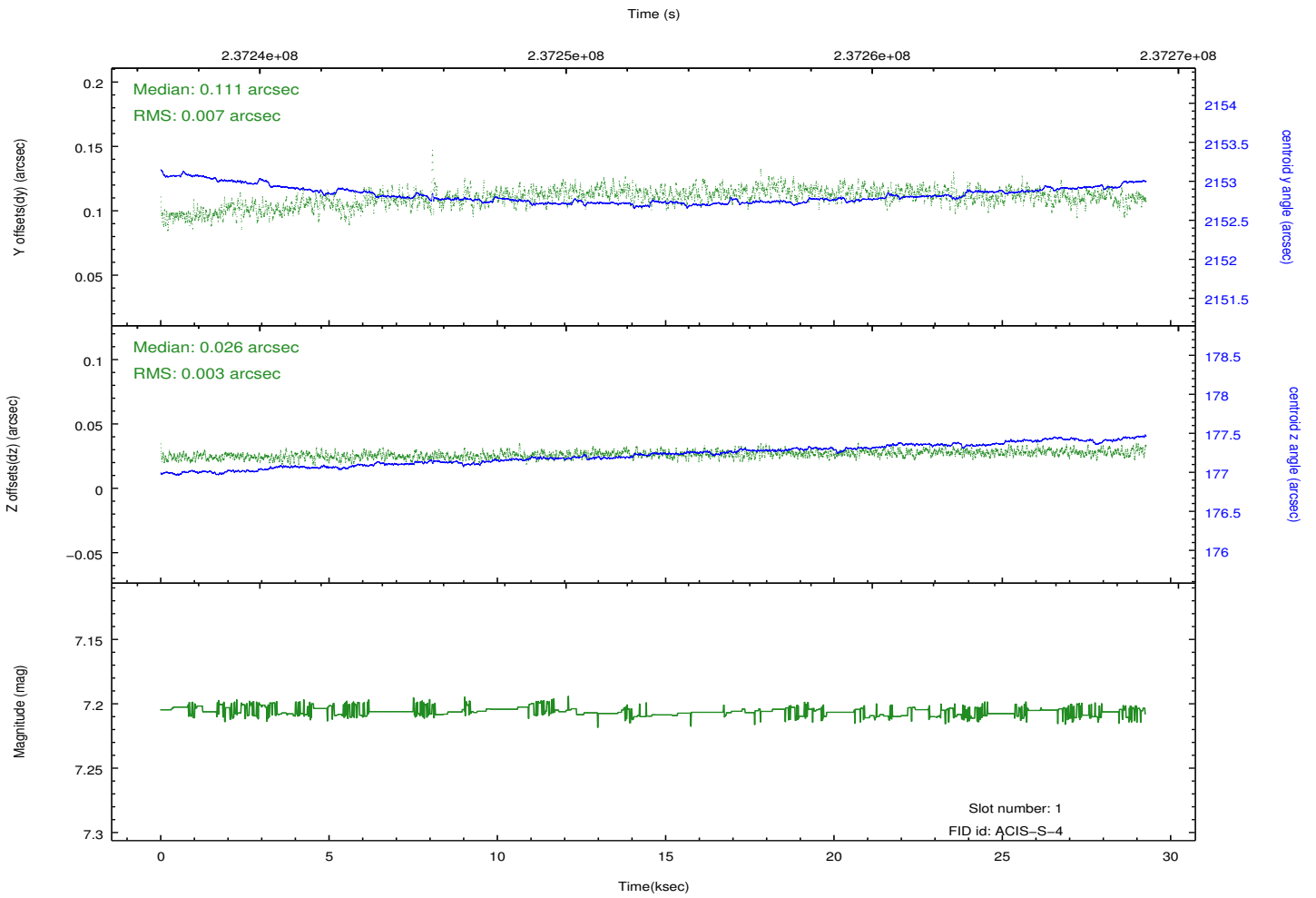
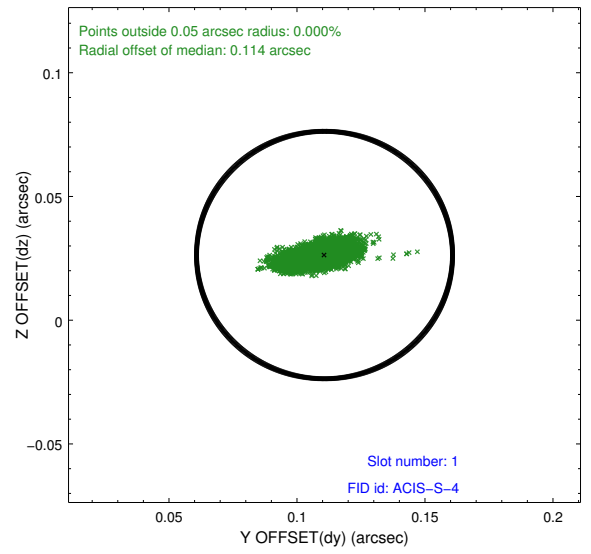
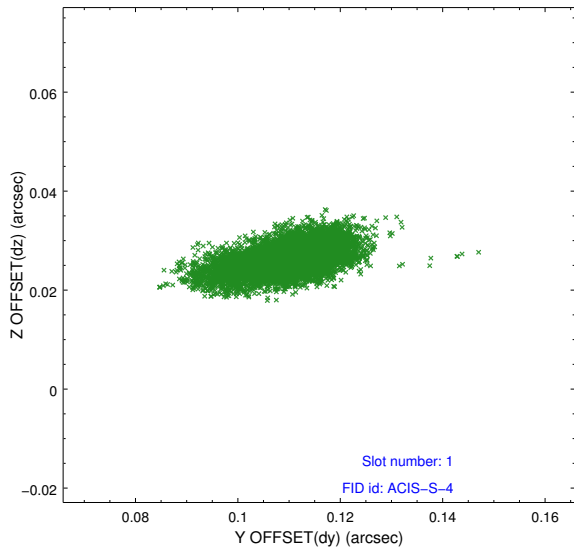


## 2.5 FID Slots

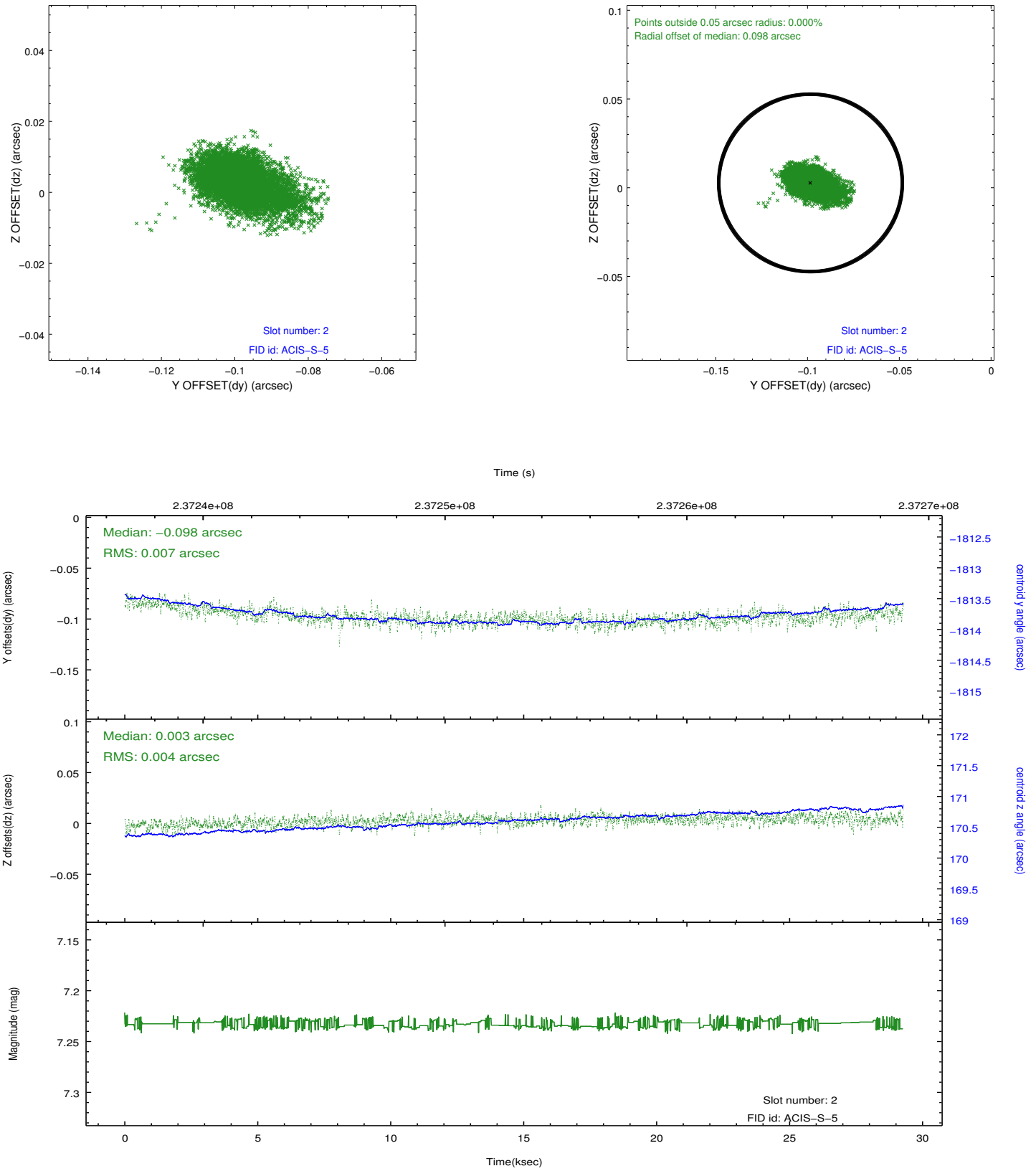
### 2.5.1 Slot 0



## 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)	2013.01.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.95679

### A.2 Comments