

V&V Reference Report

L2 ASCDS Version : 8.1.1

Observation 575 - L2 Version 4
Chandra X-Ray Center

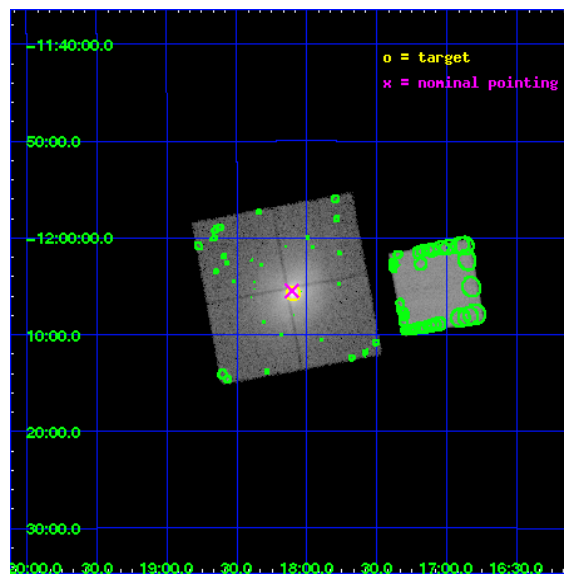
L2 Processing Date : Nov 20 2009

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
3	Point Sources	17
A	Summary	18
A.1	Status	18
A.2	Comments	18

1 Front

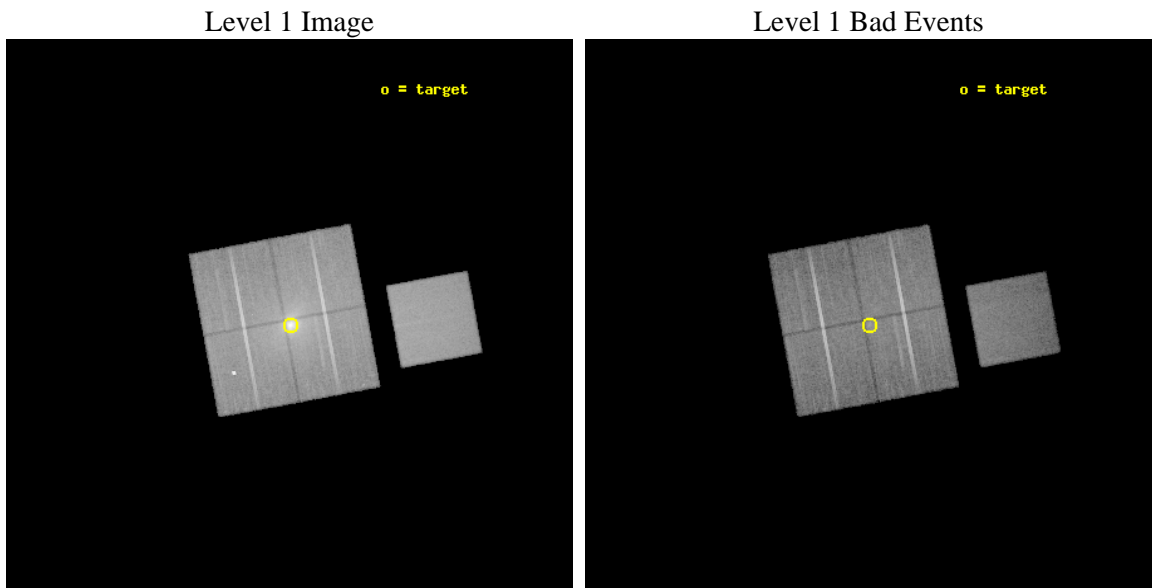
seq_num	890020	Sequence number
obs_id	575	Observation id
title	DEMONSTRATION SPECTRUM OF A COOLING FLOW CLUSTER: HYDRA A	Proposal
observer	Dr. CXC Calibration	Principal investigator
object	HYDRA A	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	139.52375	Observer's specified target RA
dec_targ	-12.095833	Observer's specified target Dec
ra_nom	139.5267299975	Nominal RA
dec_nom	-12.091429885335	Nominal Dec
roll_nom	79.502767187545	Nominal Roll
revision	4	Processing version of data
ontime	24163.064994209	Sum of GTIs [s]
livetime	23857.097716001	Livetime [s]
ontime0	24163.188114204	Sum of GTIs [s]
ontime1	24159.90611399	Sum of GTIs [s]
ontime2	24163.106034204	Sum of GTIs [s]
ontime3	24163.064994209	Sum of GTIs [s]
ontime7	24163.200022504	Sum of GTIs [s]
l2events	325235	Number of level 2 events



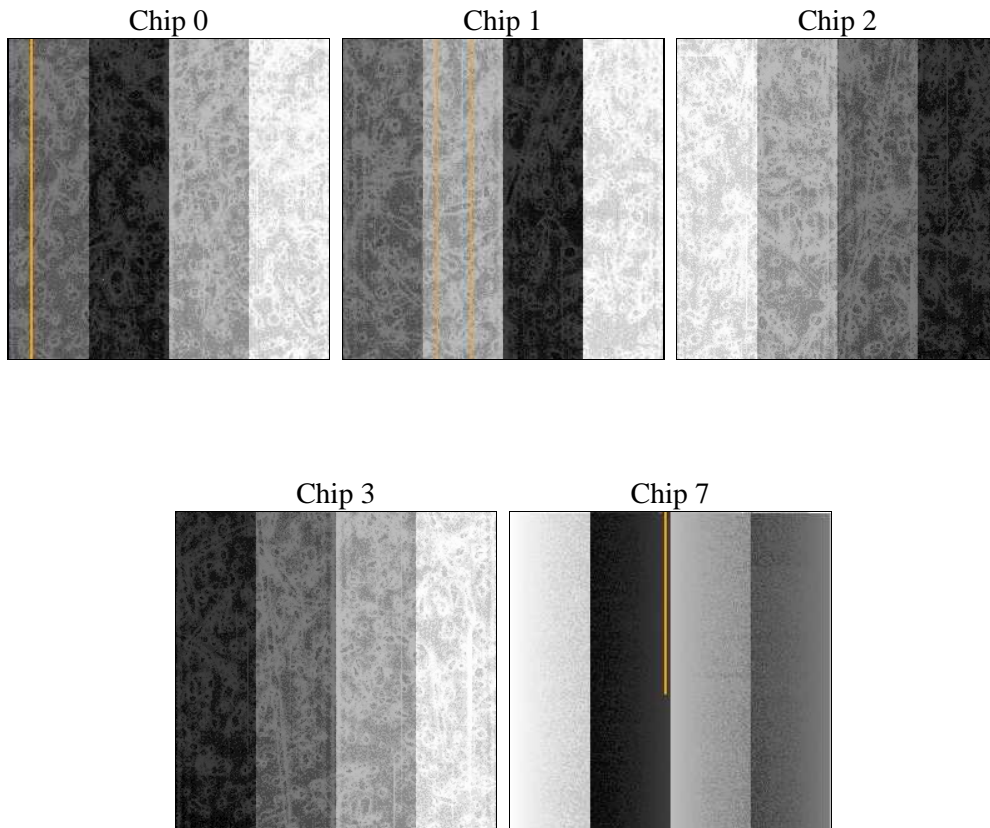
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25000.000000	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	24163.064994209	Sum of GTIs [s]
caldbver	4.1.4	 	ontime0	24163.188114204	Sum of GTIs [s]
date	2009-11-20T19:52:07	Date and time of file creation	ontime1	24159.90611399	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	24163.106034204	Sum of GTIs [s]
			ontime3	24163.064994209	Sum of GTIs [s]
			ontime7	24163.200022504	Sum of GTIs [s]
			l1events	1238852	Number of level 1 events

2.1.4 Events

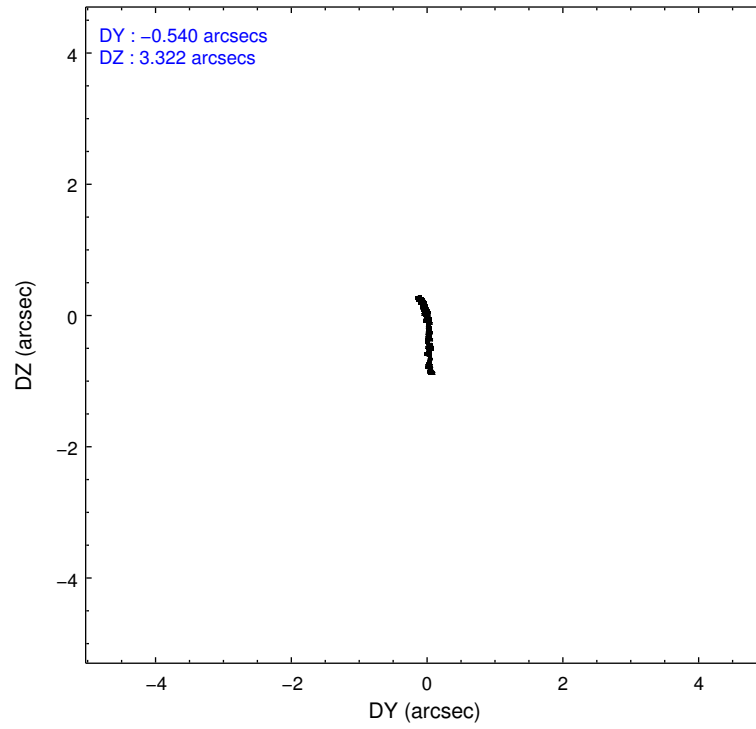
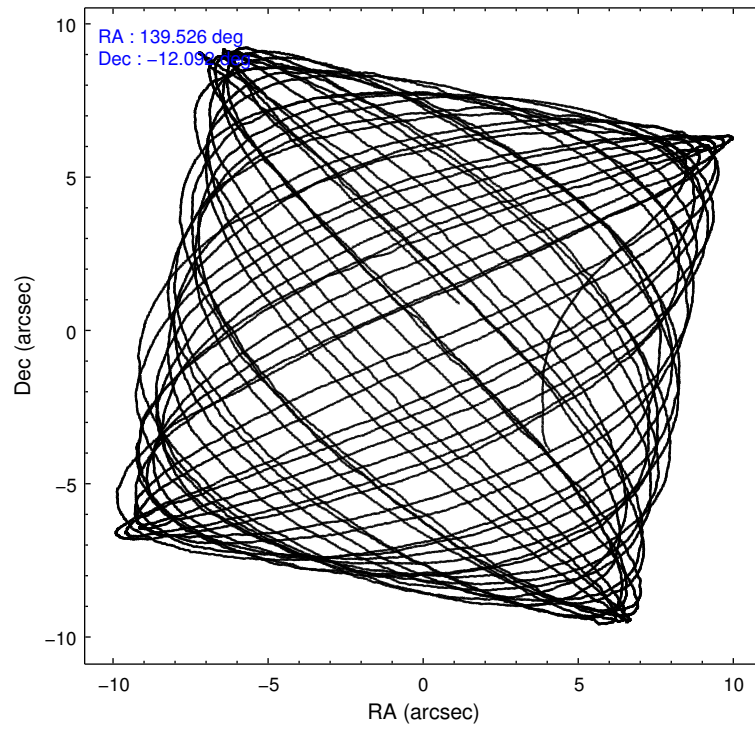
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	214643	237249	249506	290967	246487
rejected events	180448	179152	199144	194289	141471
rejected %	84%	75%	79%	66%	57%

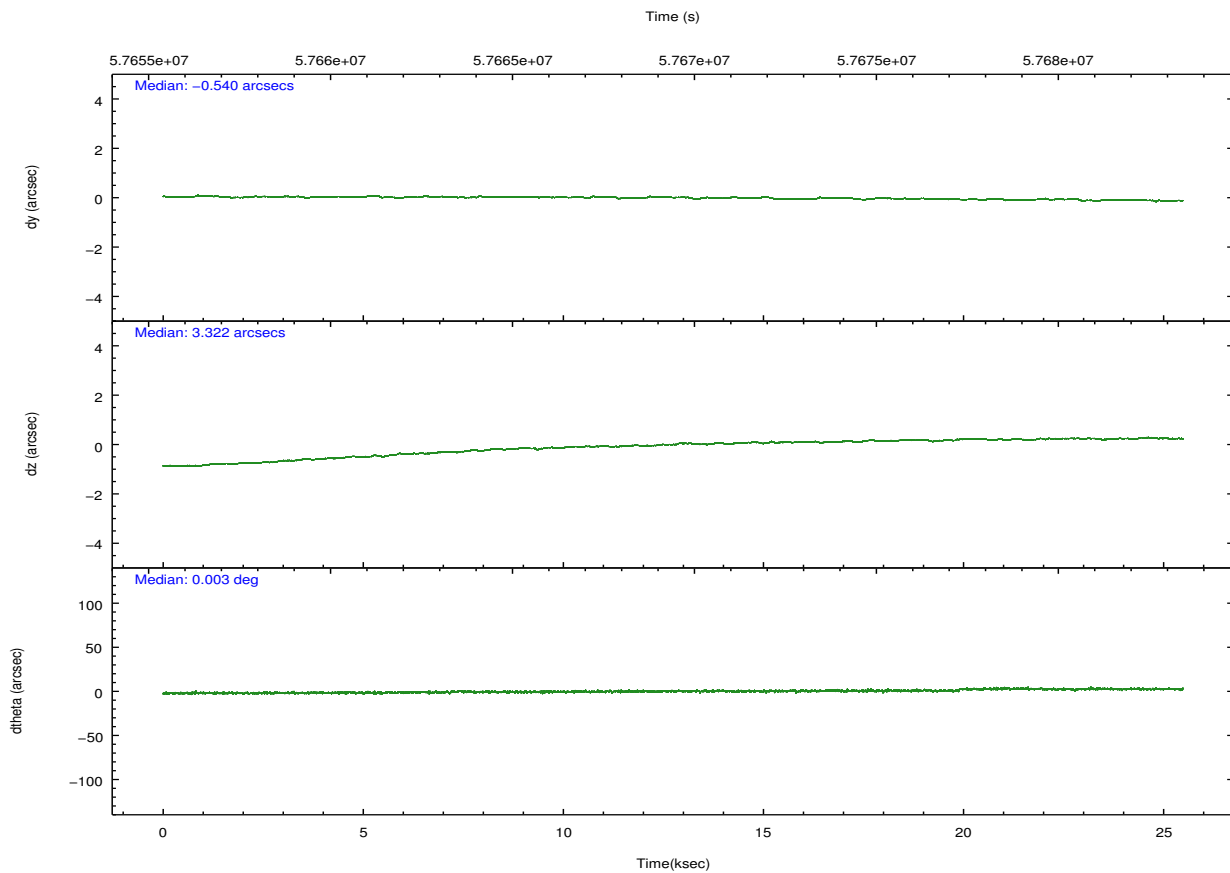
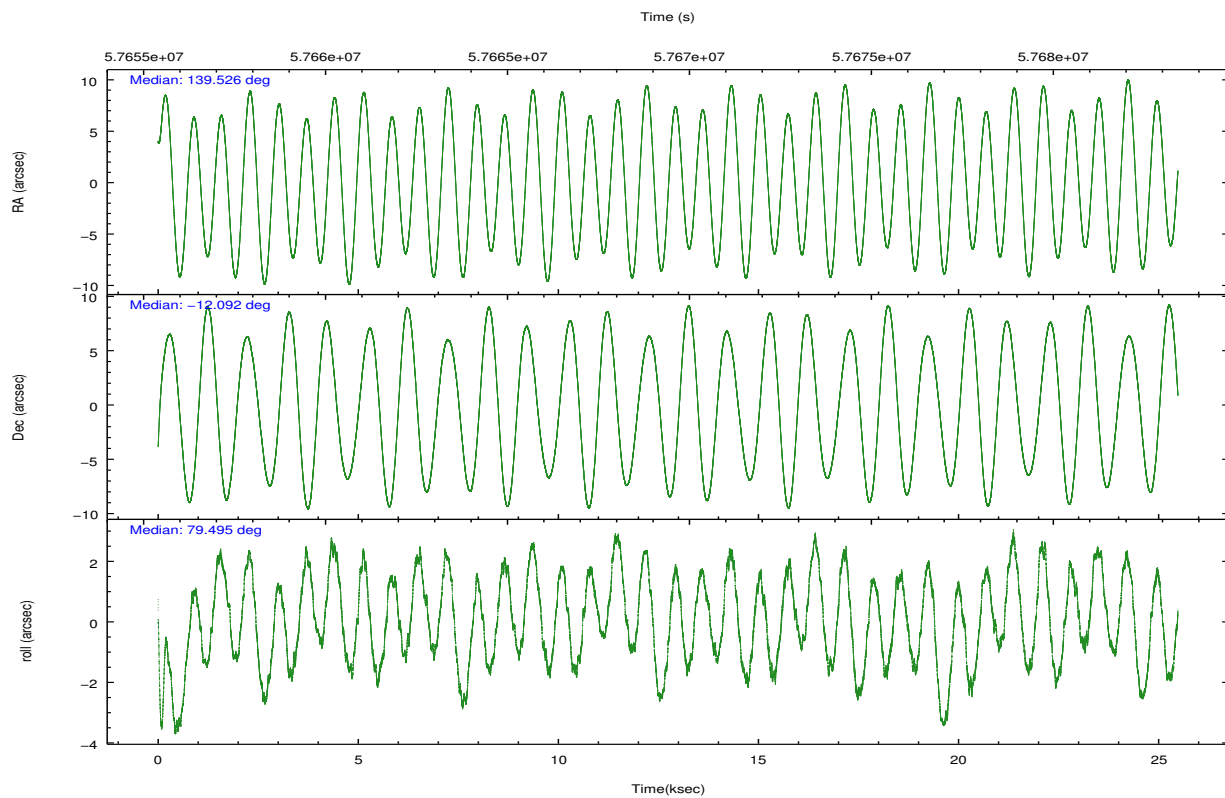
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	13969	31445	21969	48126	8671
	6%	13%	8%	16%	3%
grade 1 events	51	127	73	145	136
	0%	0%	0%	0%	0%
grade 2 events	11509	15620	19199	36397	22523
	5%	6%	7%	12%	9%
grade 3 events	1900	2381	1744	2373	6731
	0%	1%	0%	0%	2%
grade 4 events	1634	2273	1738	2314	6226
	0%	0%	0%	0%	2%
grade 5 events	4119	4391	3843	4521	14227
	1%	1%	1%	1%	5%
grade 6 events	5192	6389	5727	7492	60880
	2%	2%	2%	2%	24%
grade 7 events	176269	174623	195213	189599	127093
	82%	73%	78%	65%	51%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-01237	ACIS-01237	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
Pointing RA	139.535823	139.5267299974961	Subarray requested	NONE	NONE
Pointing Dec	-12.117734	-12.09142988533514	Alternating exposures requested	N	N
Pointing Roll	79.295987	79.50276718754537	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.782348	-0.7809083437167272			
SIM defocus (mm)	0	0.001439871863259334			
SIM translation stage pos (mm)	-233.592463	-233.5874344608287			
SIM translation stage offset (mm)	0	-0.005018542100998502			
Observation start time	57657155.184000	57655742.939508			
Observation start date	1999-10-30T07:51:31	1999-10-30T07:29:02			
Observation end time	57682155.184000	57682365.777968			
Observation end date	1999-10-30T14:48:11	1999-10-30T14:52:45			
Read mode	TIMED	TIMED			

2.3 Aspect



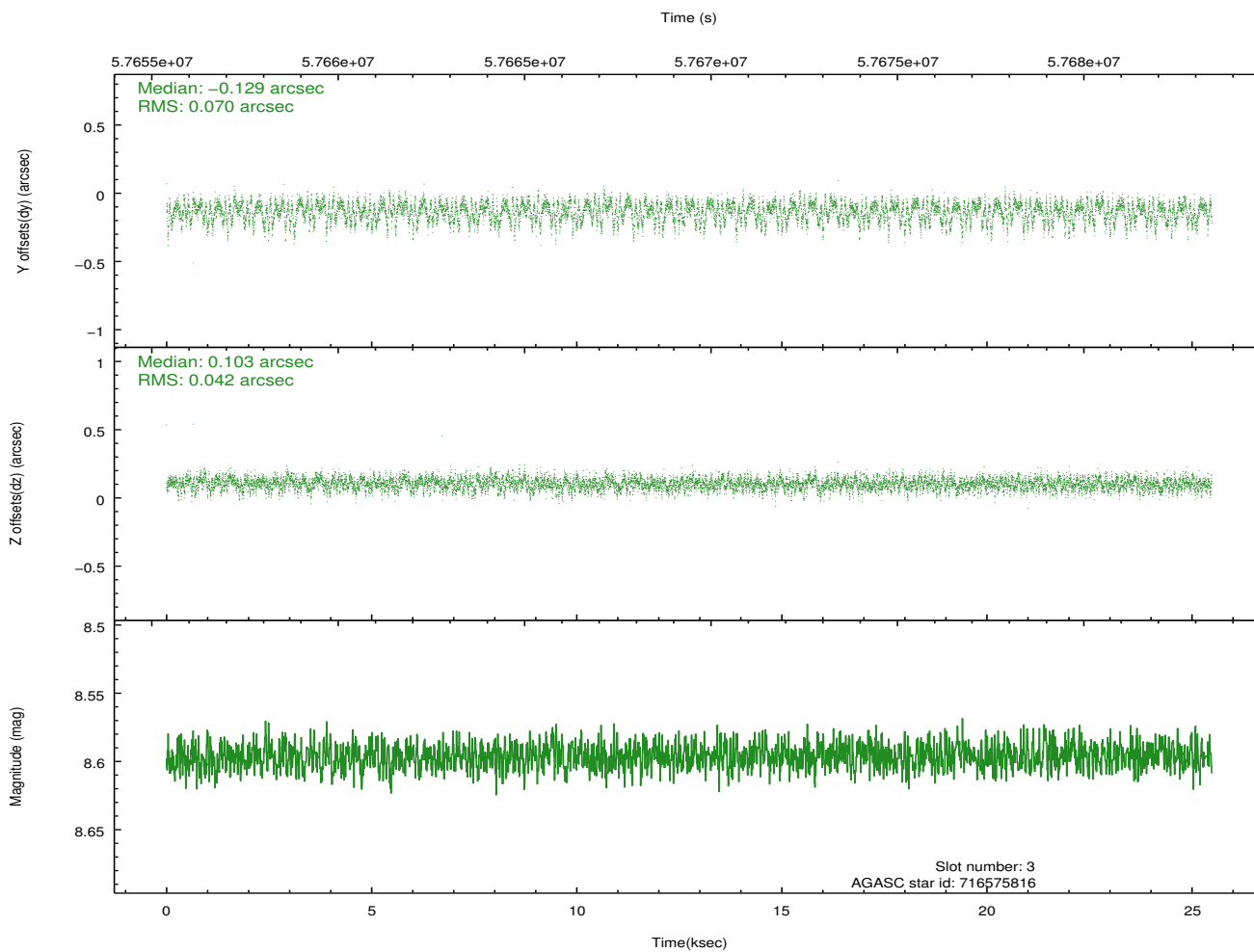
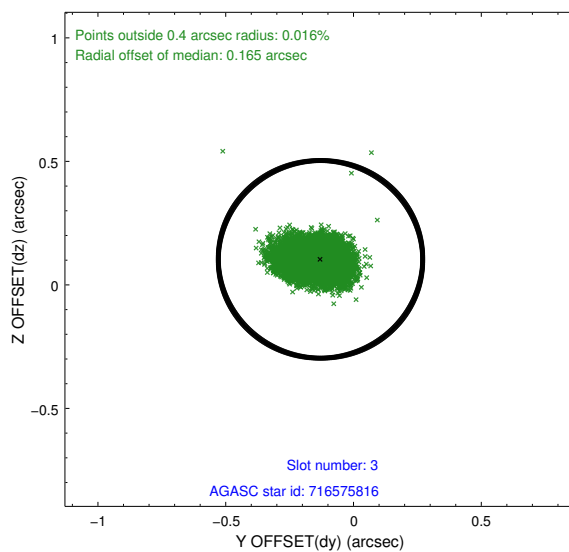
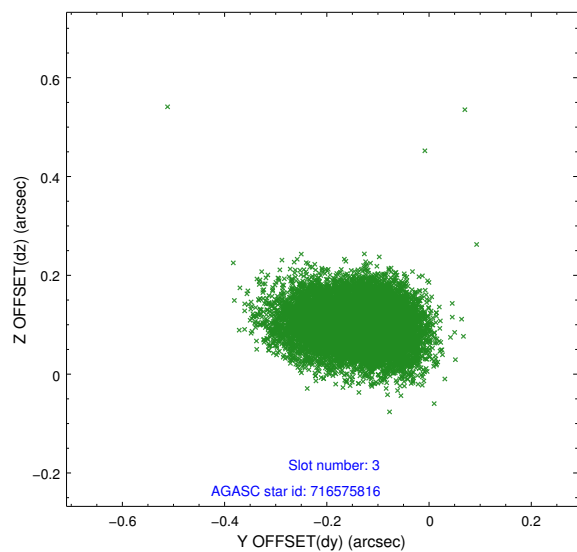


Slot Statistics

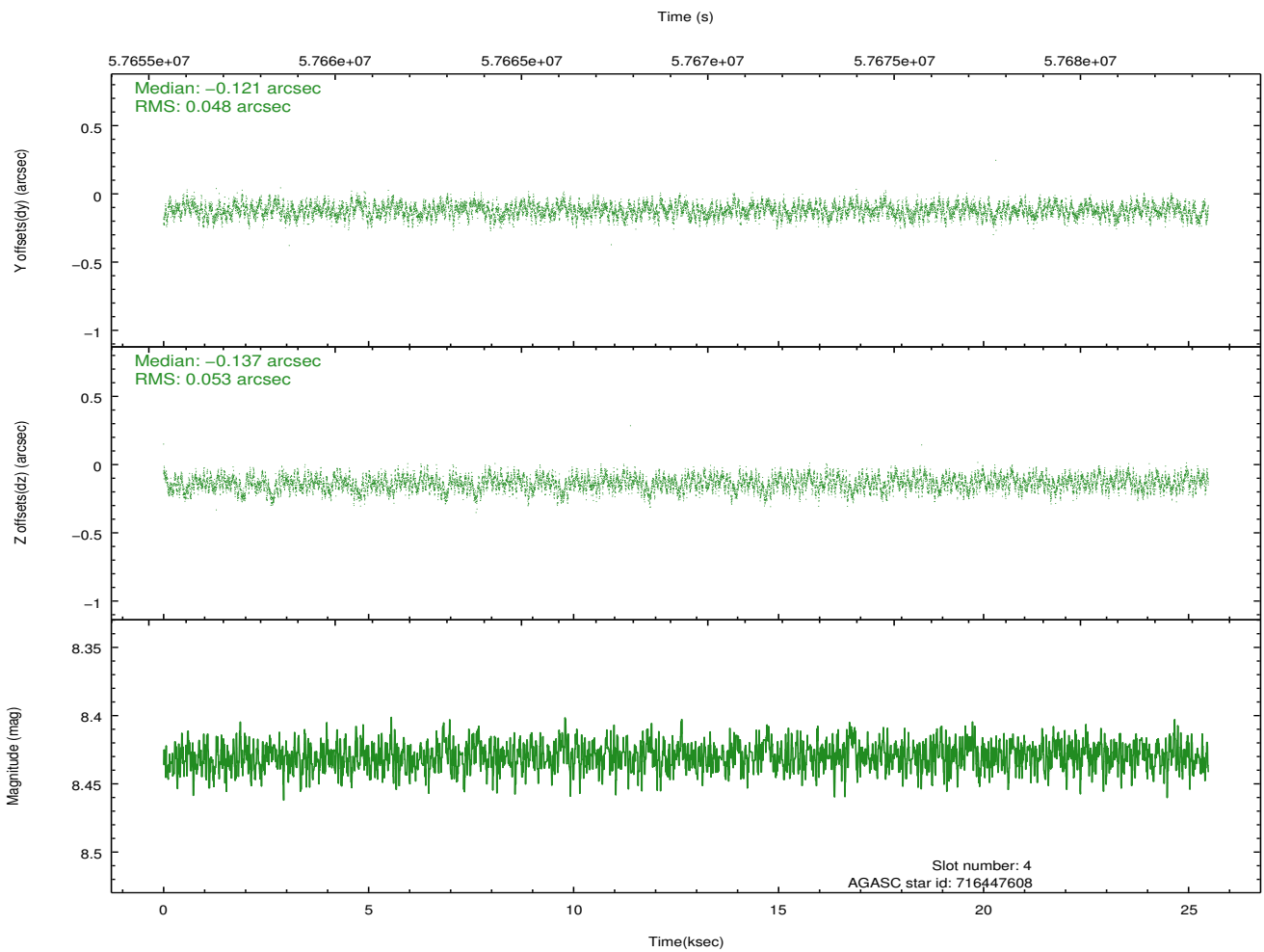
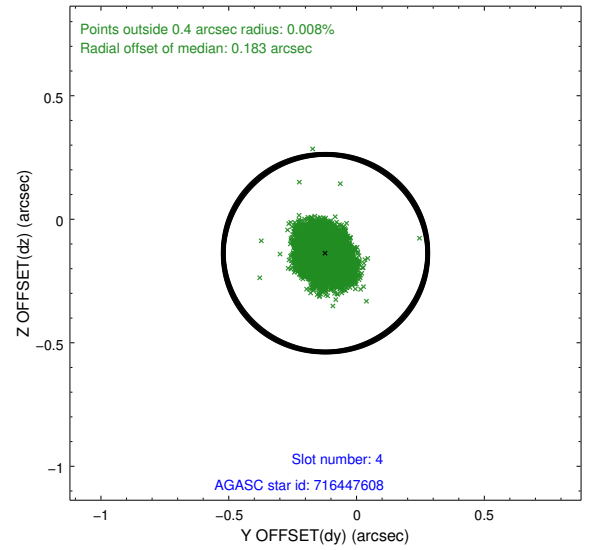
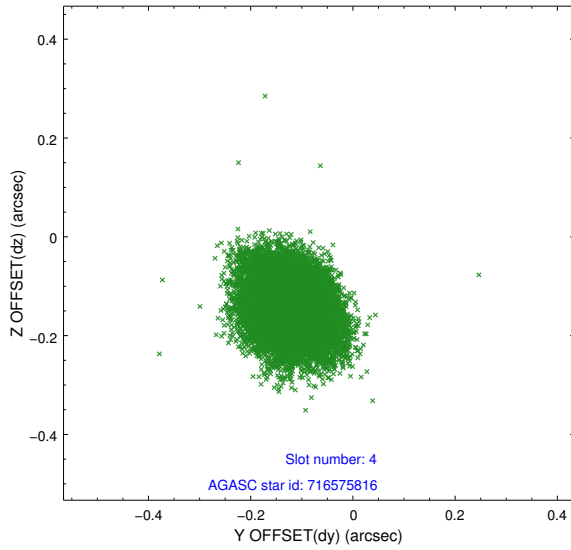
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.20	12429	-0.029	0.077	0.034	0.047	0.000000	0.000000	-753.83	-832.72
1	FID	ACIS-I-4	7.23	12432	0.105	0.004	0.017	0.023	0.000000	0.000000	2160.54	1073.15
2	FID	ACIS-I-5	7.23	12431	-0.173	-0.011	0.019	0.026	0.000000	0.000000	-1807.66	1071.30
3	GUIDE	716575816	8.60	12428	-0.129	0.103	0.085	0.143	140.229272	-11.600909	2280.45	-2058.27
4	GUIDE	716447608	8.43	12426	-0.121	-0.137	0.077	0.120	139.107687	-11.923612	406.12	1610.42
5	GUIDE	716452568	9.31	12421	-0.009	-0.052	0.077	0.127	139.317316	-12.008019	245.64	828.73
6	GUIDE	716448288	9.84	12413	0.117	0.166	0.106	0.180	139.709968	-12.540955	-1382.53	-885.01
7	GUIDE	716450864	9.78	12423	0.154	-0.080	0.094	0.150	139.303975	-12.530567	-1611.21	523.44

2.4 Star Slots

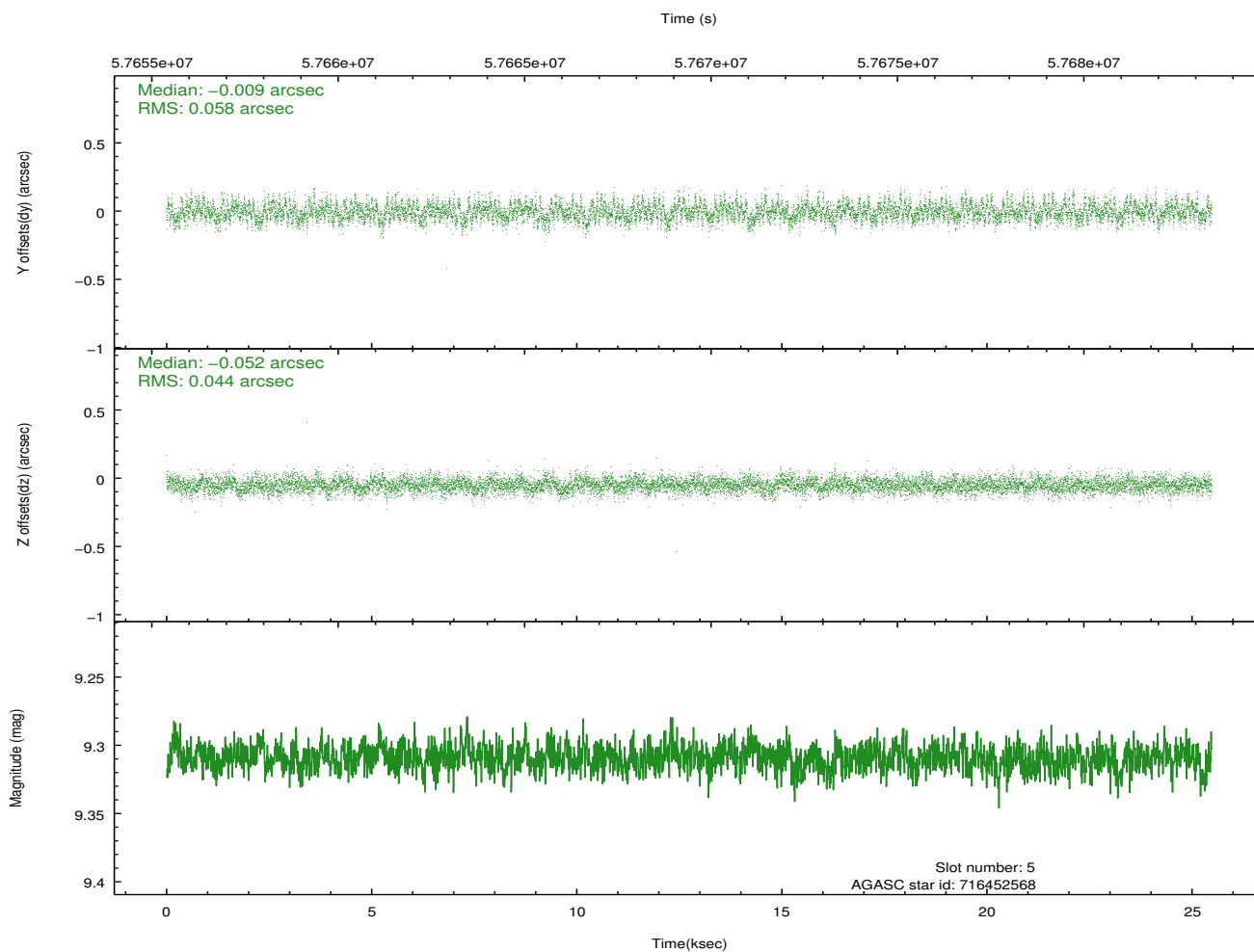
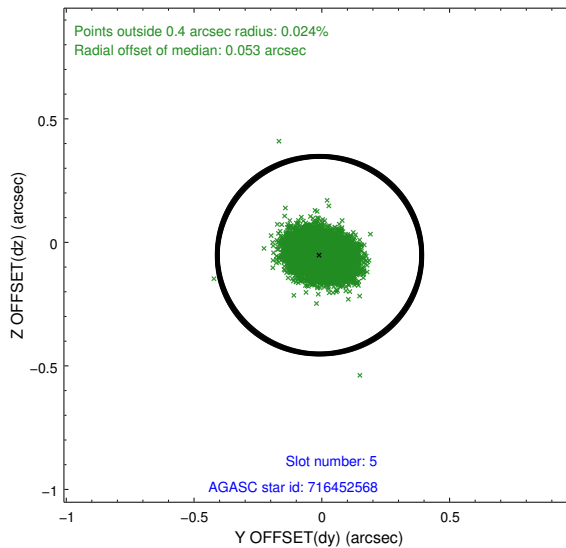
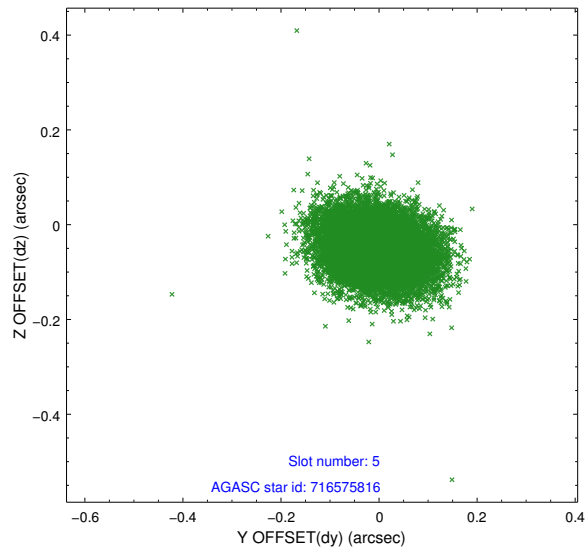
2.4.1 Slot 3



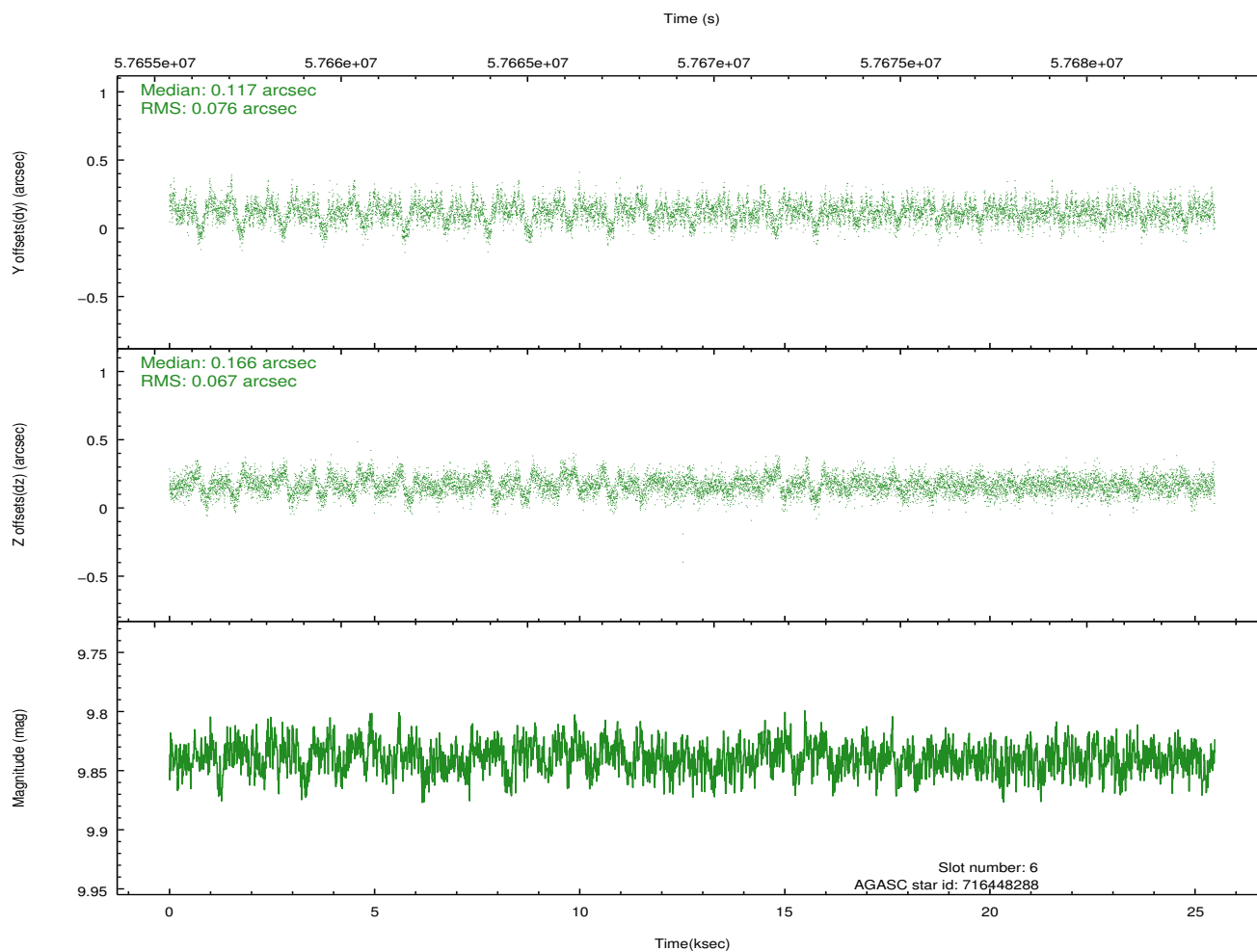
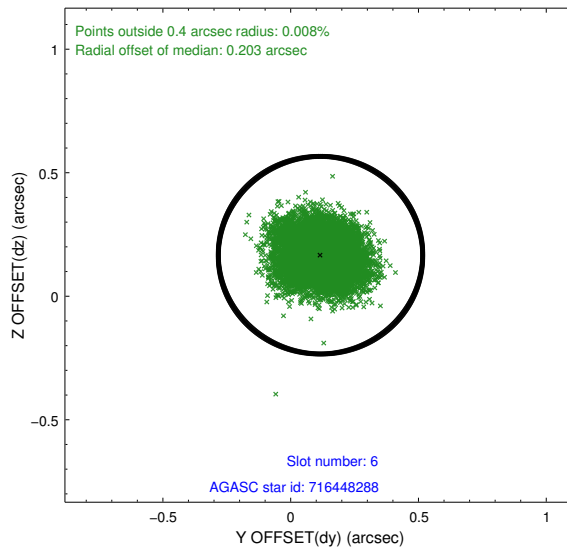
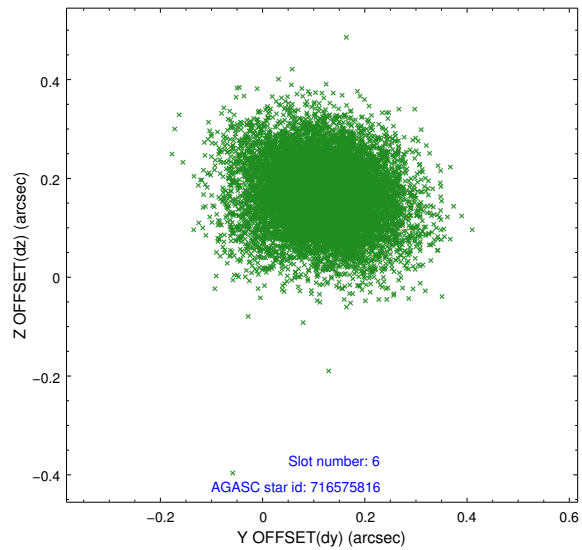
2.4.2 Slot 4



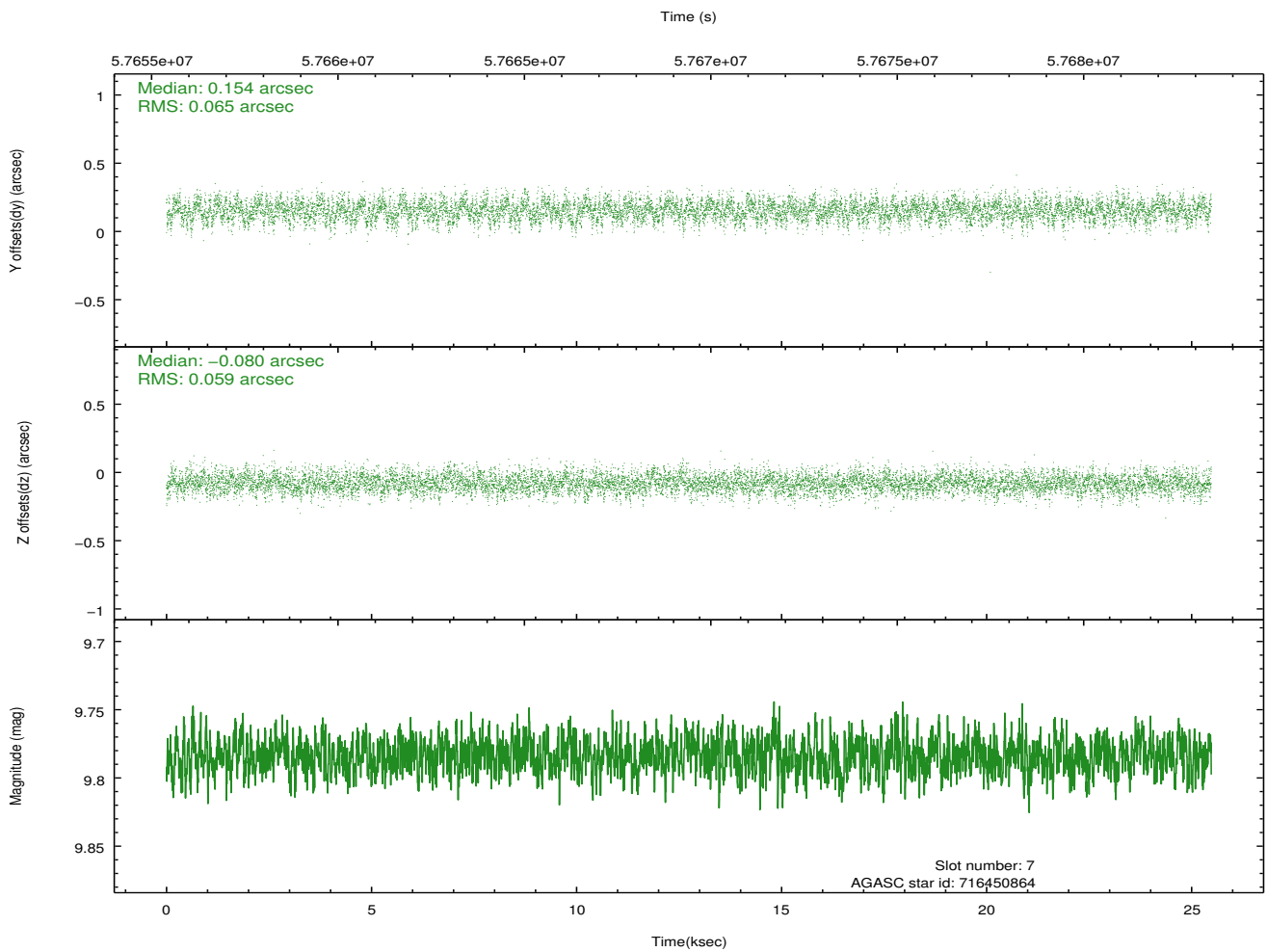
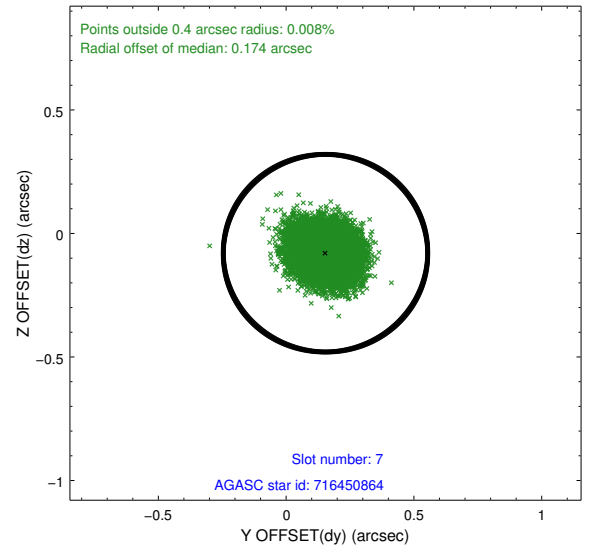
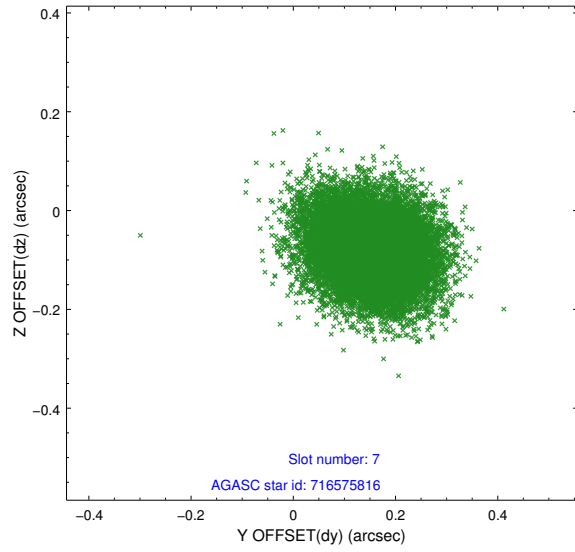
2.4.3 Slot 5



2.4.4 Slot 6

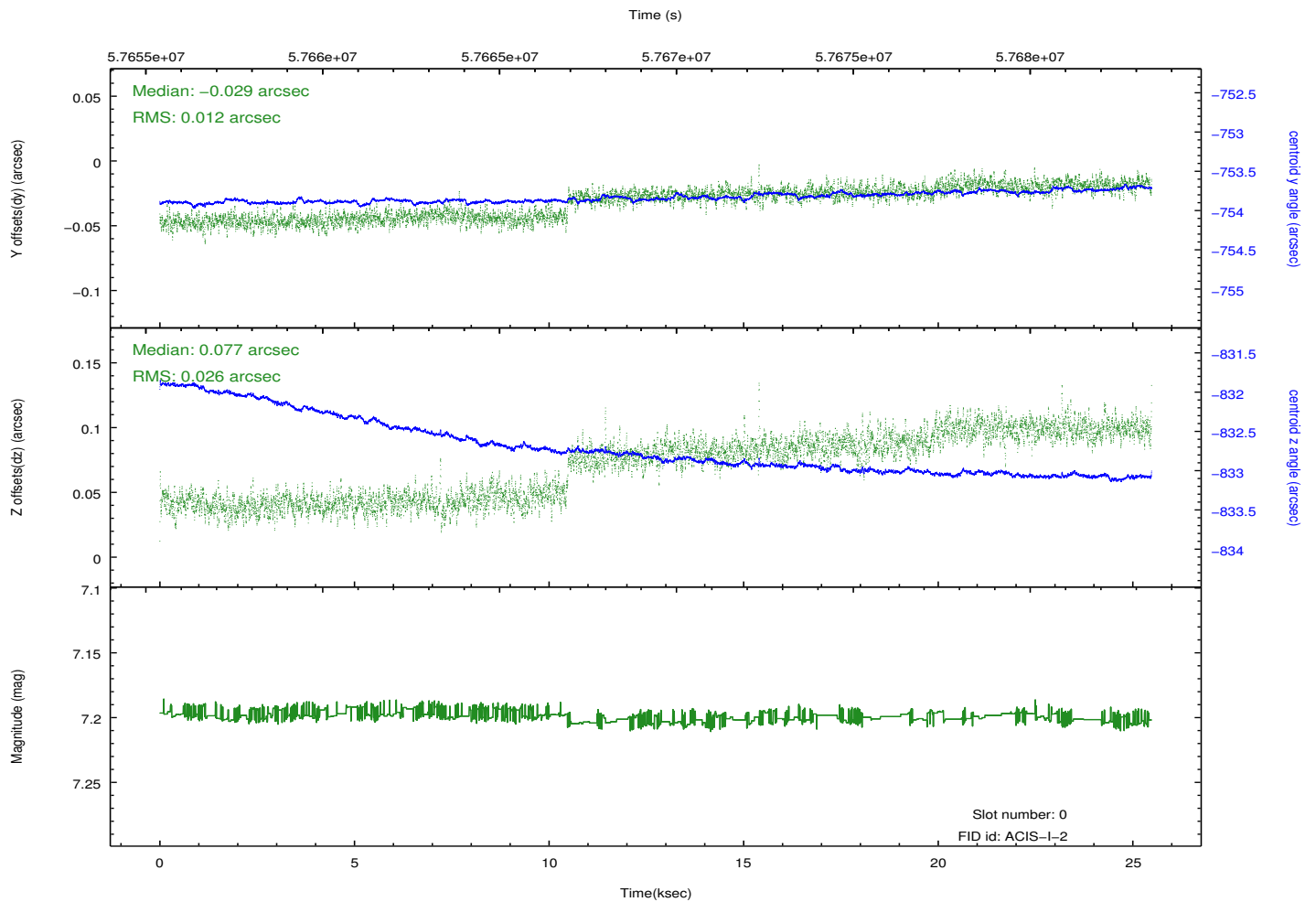
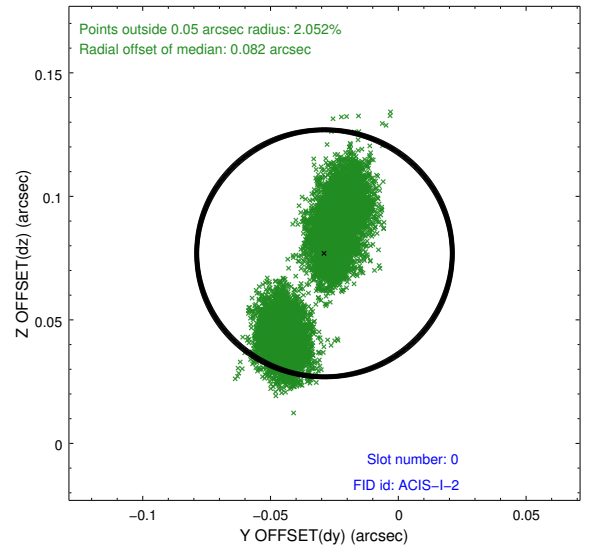
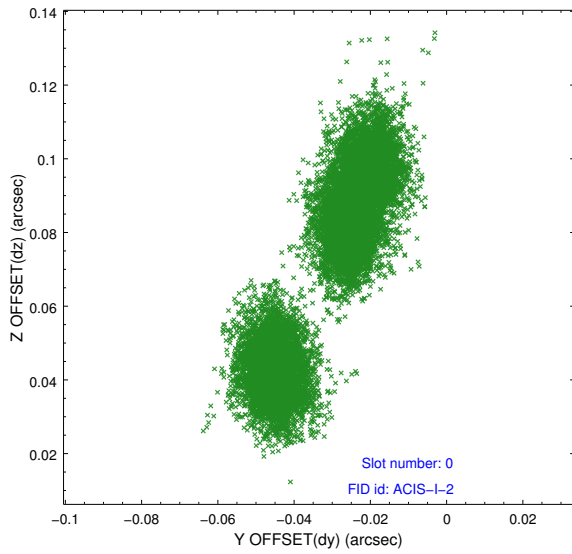


2.4.5 Slot 7

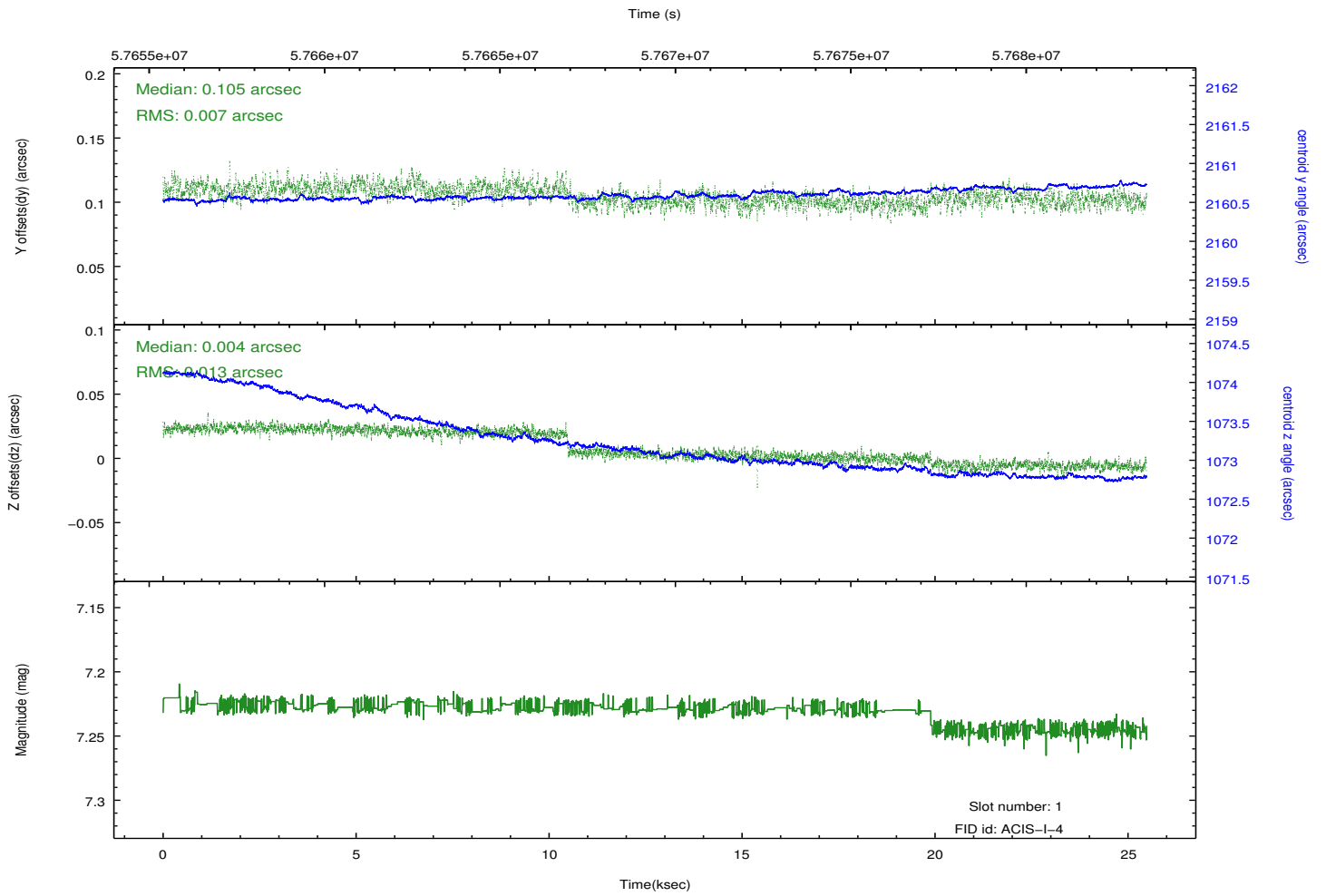
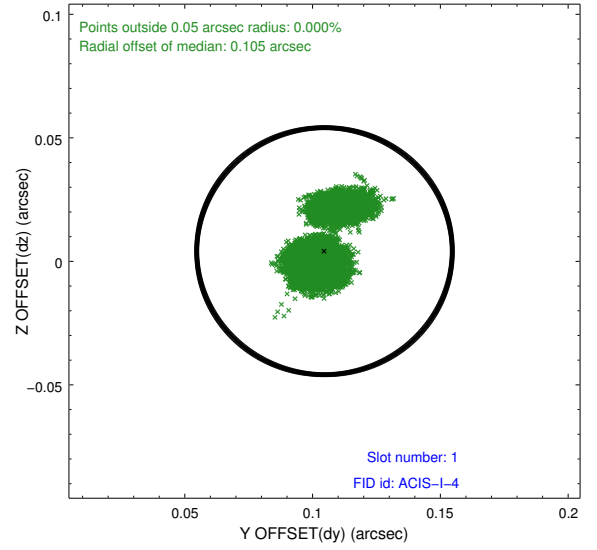
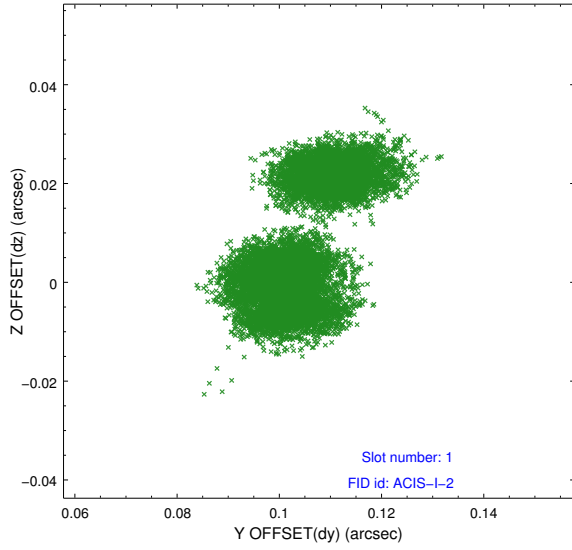


2.5 FID Slots

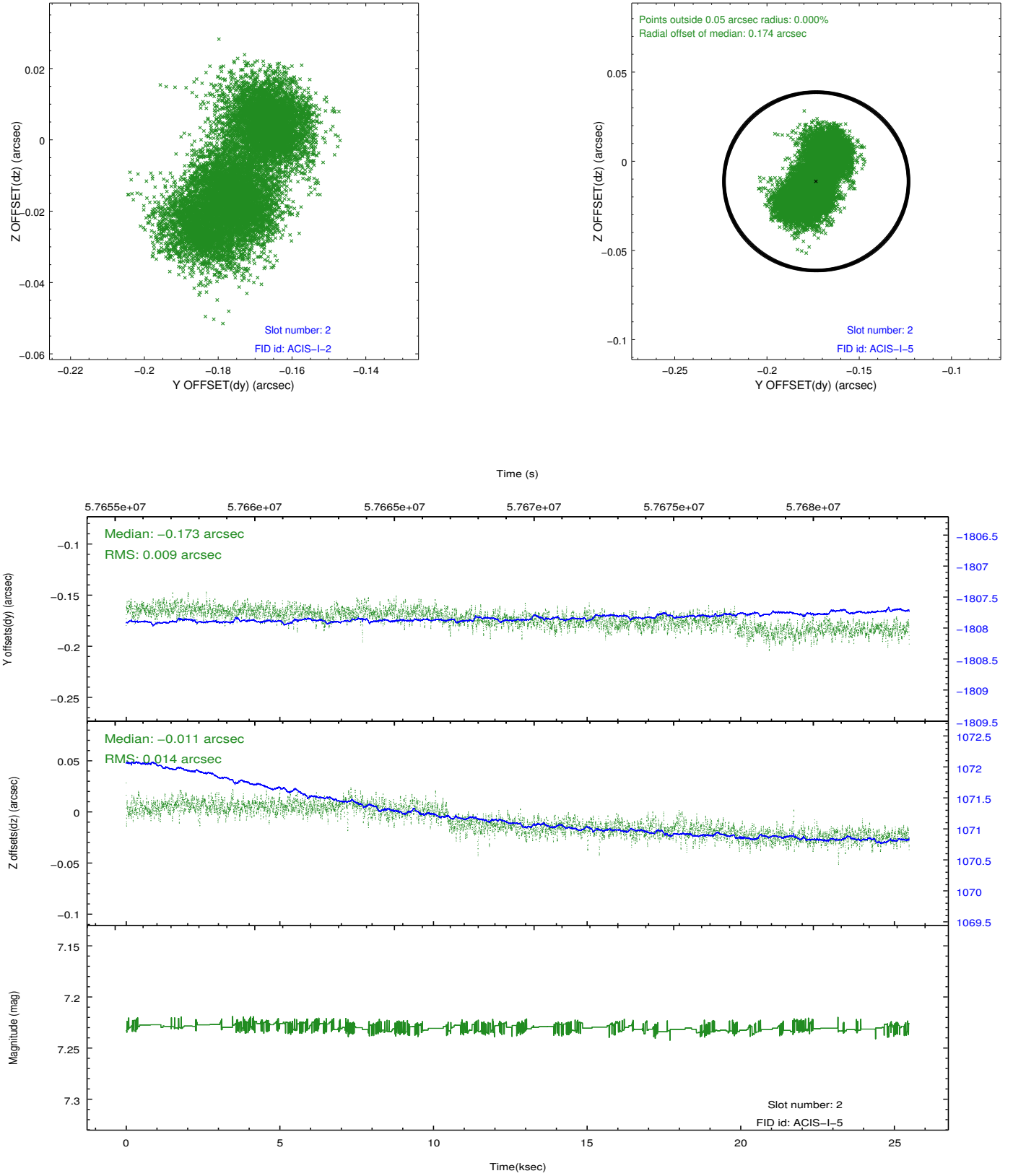
2.5.1 Slot 0



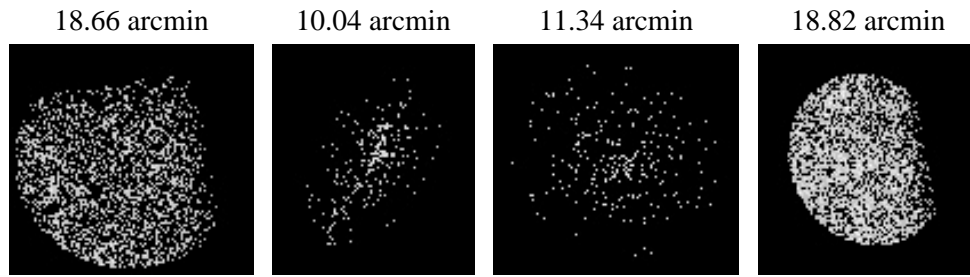
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.05.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.099

A.2 Comments

Charge time for this ObsId remains at previous value of 24.099 ksec, although with the current processing the charge time would have been 24.163 ksec.

===

The focal plane temperature is approximately -110 C during this observation. This reprocessing of the data applies no CTI correction because none is available for this temperature at present.

The ACIS CTI correction has not been calibrated at this temperature, because it was early in the mission, and ACIS had not yet been lowered to the standard -119.7 C. Both front and back illuminated chips are affected. However a T_GAIN correction has been applied to the BI chips (ACIS-5 and ACIS-7) data included here.

The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C. Users whose science objectives depend on the most accurate spectral response (ie: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.