

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 2034 - L2 Version 3
Chandra X-Ray Center

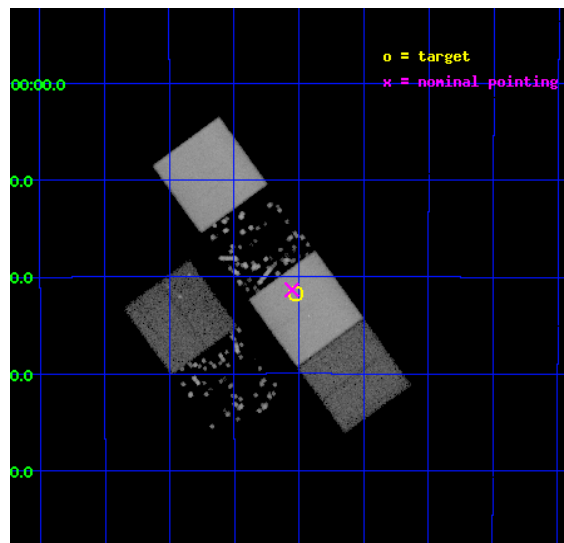
L2 Processing Date : Sep 26 2012

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1 Front

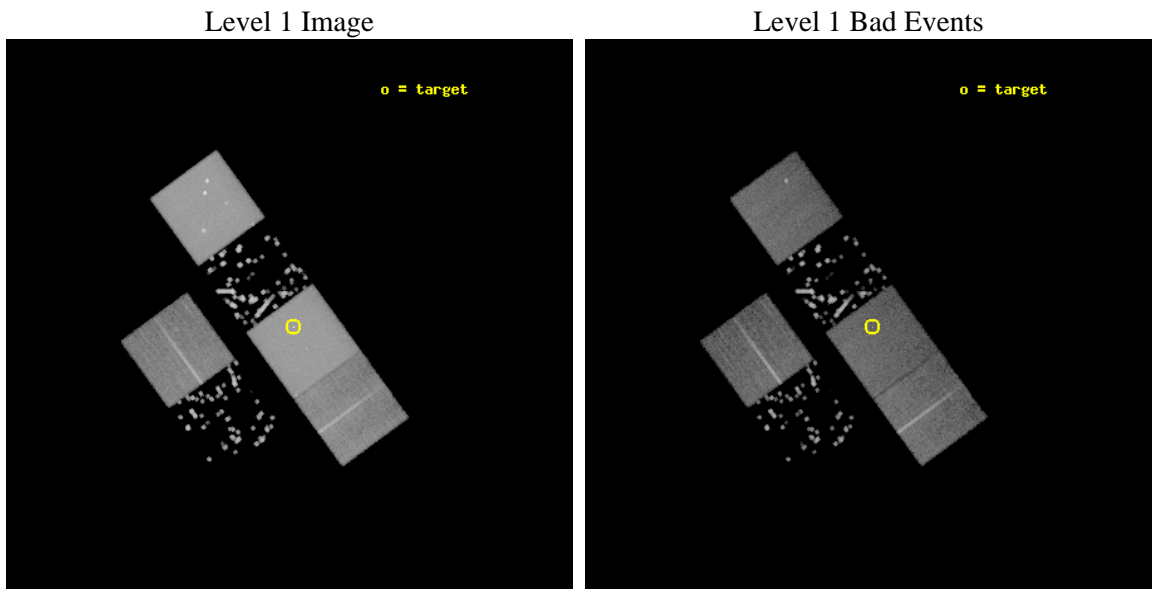
seq_num	600168	Sequence number
obs_id	2034	Observation id
title	THE X-RAY PROPERTIES OF ULTRALUMINOUS GALAXIES: COSMOLOGICAL IMPLICATIONS	Proposal title
observer	Dr. Tim Heckman	Principal investigator
object	IRAS 05189-2524	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	80.255833	Observer's specified target RA [deg]
dec_targ	-25.362472	Observer's specified target Dec [deg]
ra_nom	80.263588049001	Nominal RA [deg]
dec_nom	-25.355758298192	Nominal Dec [deg]
roll_nom	53.975198501788	Nominal Roll [deg]
revision	3	Processing version of data
ontime	19945.600018561	Sum of GTIs [s]
livetime	19693.036821327	Livetime [s]
ontime2	19945.600018561	Sum of GTIs [s]
ontime3	19945.600018561	Sum of GTIs [s]
ontime5	19945.600018561	Sum of GTIs [s]
ontime6	19945.600018561	Sum of GTIs [s]
ontime7	19945.600018561	Sum of GTIs [s]
ontime8	19945.600018561	Sum of GTIs [s]
l2events	486073	Number of level 2 events



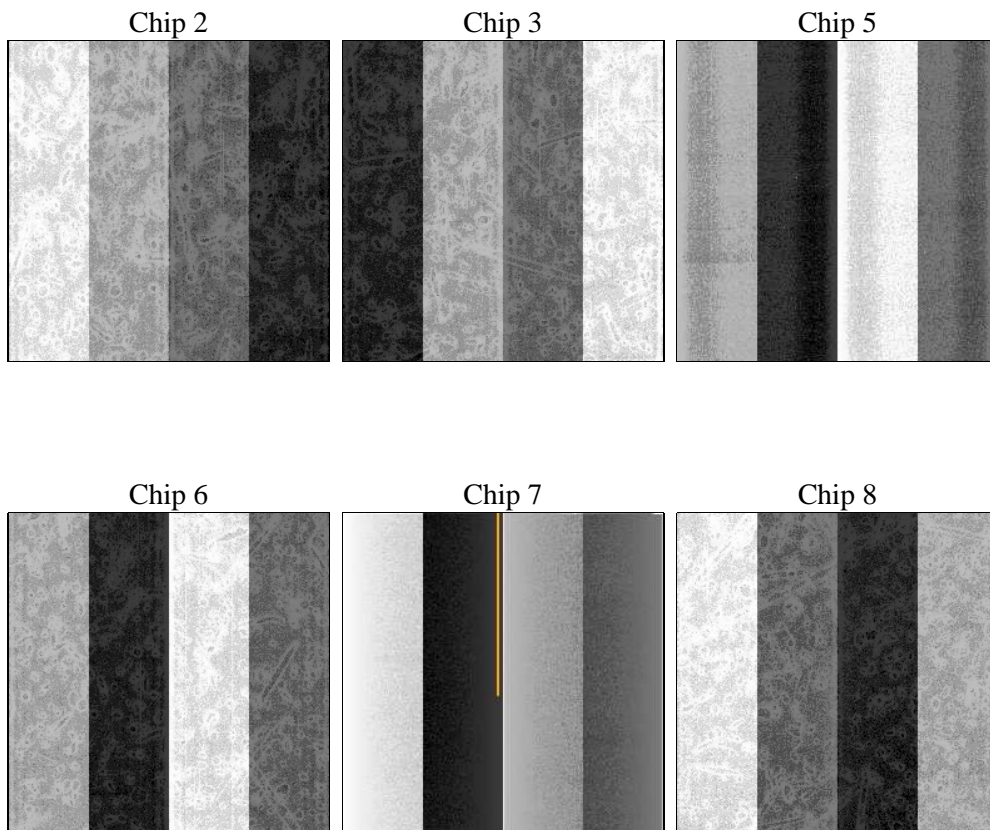
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	19945.600018561	Sum of GTIs [s]
caldbver	4.5.1.1	 	ontime2	19945.600018561	Sum of GTIs [s]
date	2012-09-26T03:00:15	Date and time of file creation	ontime3	19945.600018561	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	19945.600018561	Sum of GTIs [s]
			ontime6	19945.600018561	Sum of GTIs [s]
			ontime7	19945.600018561	Sum of GTIs [s]
			ontime8	19945.600018561	Sum of GTIs [s]
			l1events	1037342	Number of level 1 events

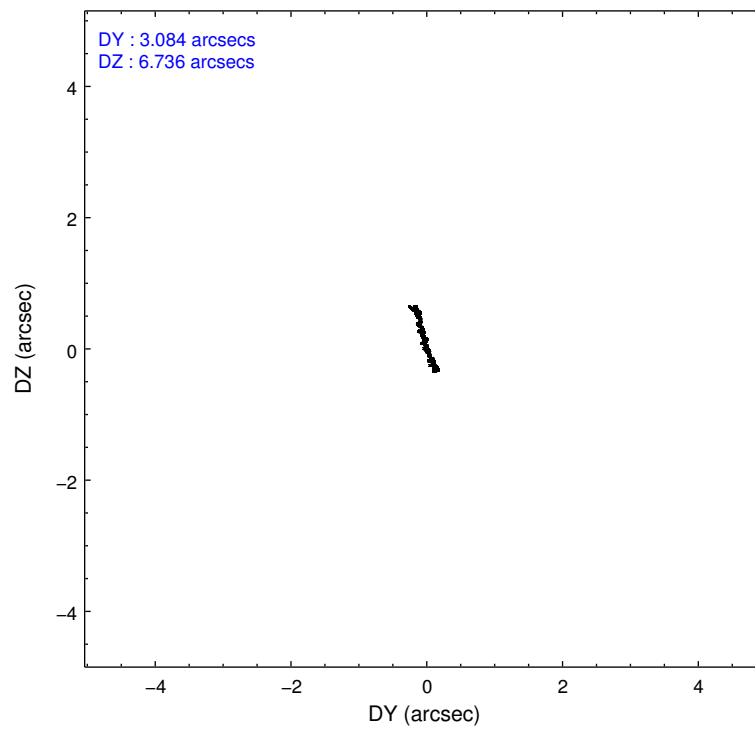
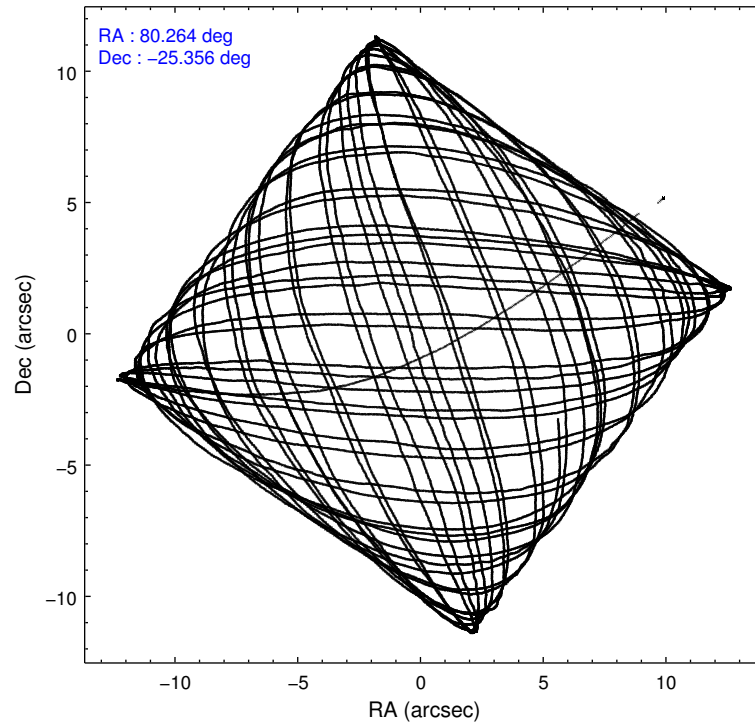
2.1.4 Events

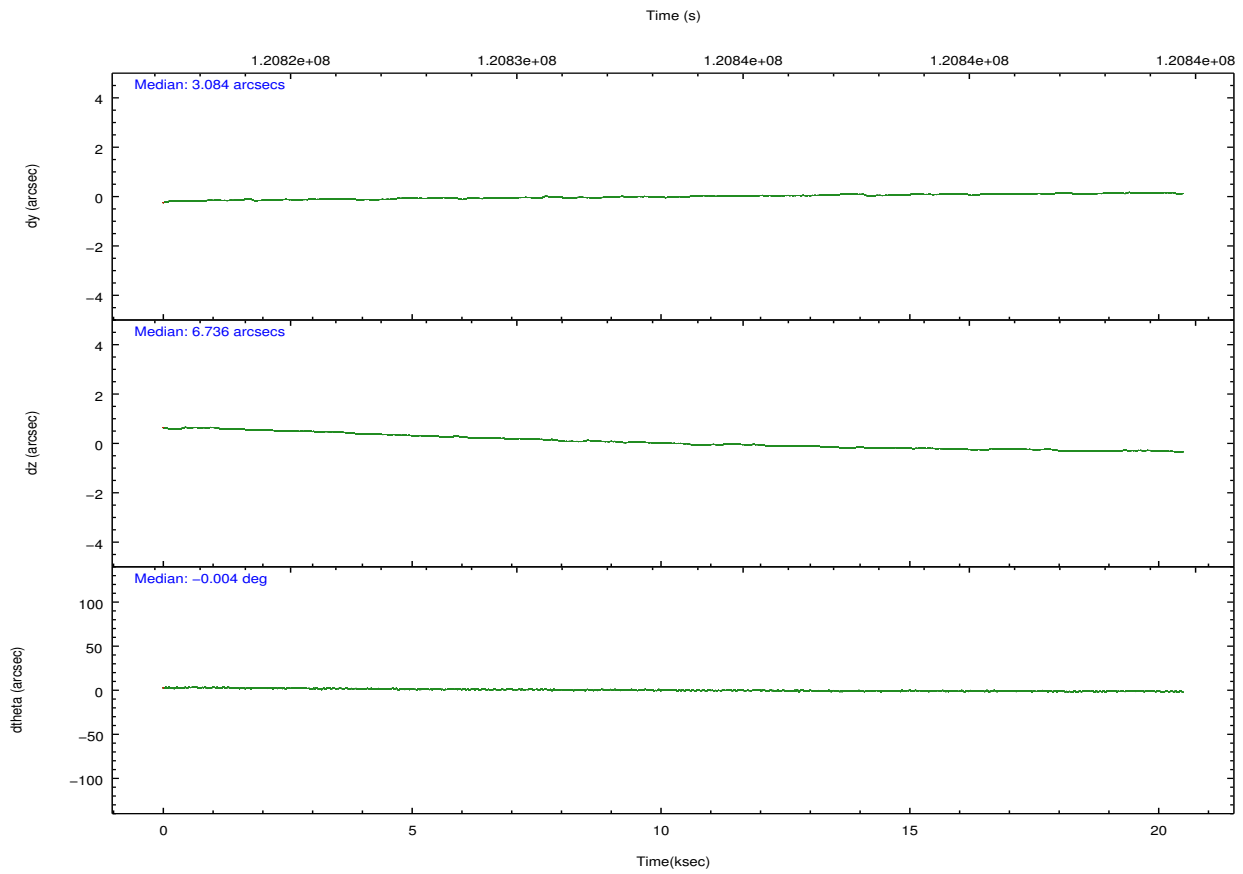
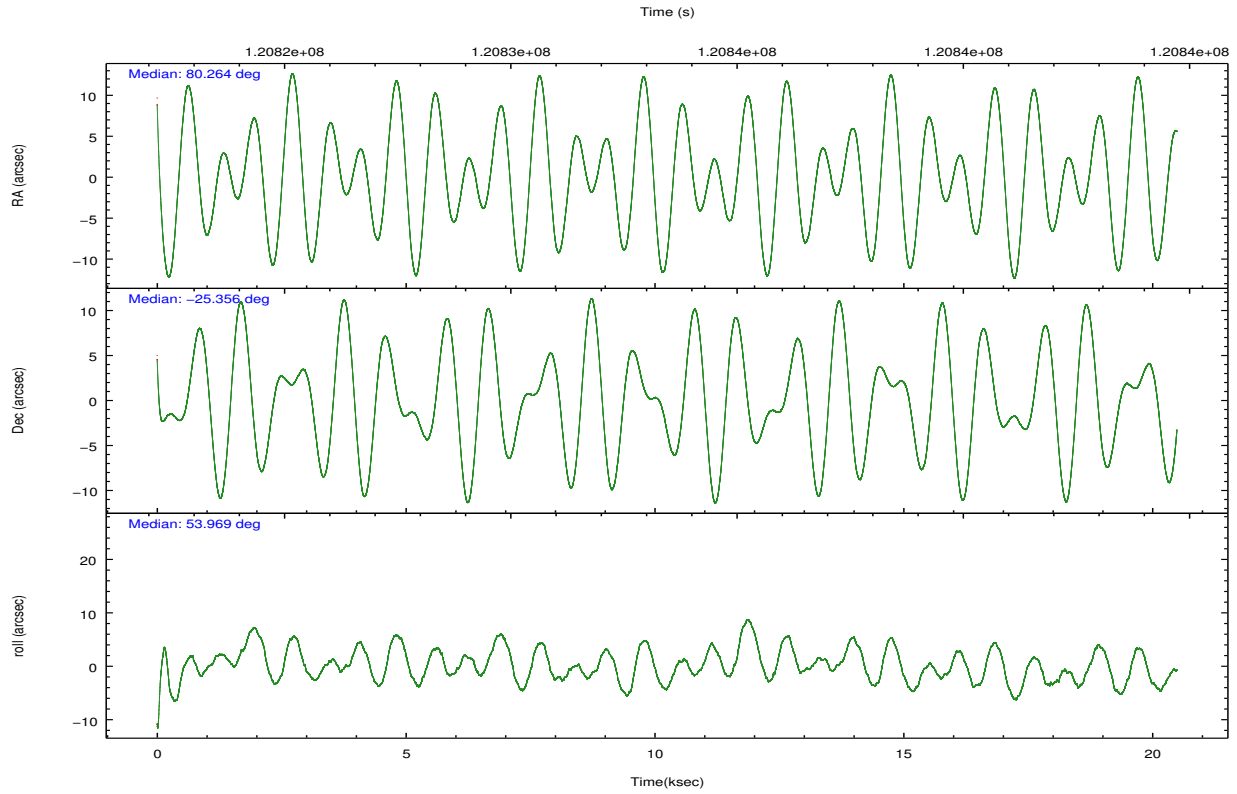
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	134633	35608	327712	63038	306918	169433	grade 0 events	13606	1105	40081	2257	24566	22091
rejected events	111272	26496	105713	46871	96164	122971		10%	3%	12%	3%	8%	13%
rejected %	82%	74%	32%	74%	31%	72%	grade 1 events	84	1709	420	3269	174	125
								0%	4%	0%	5%	0%	0%
							grade 2 events	4002	2759	60707	4781	38368	8233
								2%	7%	18%	7%	12%	4%
							grade 3 events	1478	1991	13035	3389	17277	3918
								1%	5%	3%	5%	5%	2%
							grade 4 events	1512	1430	12556	2382	16977	3771
								1%	4%	3%	3%	5%	2%
							grade 5 events	4333	4300	15046	7732	16097	6531
								3%	12%	4%	12%	5%	3%
							grade 6 events	2775	1832	95648	3361	113613	8456
								2%	5%	29%	5%	37%	4%
							grade 7 events	106843	20482	90219	35867	79846	116308
								79%	57%	27%	56%	26%	68%

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	80.260786	80.26358804900055	Subarray requested	NONE	NONE
[deg] Pointing Dec	-25.382893	-25.3557582981916	Alternating exposures requested	N	N
[deg] Pointing Roll	53.817384	53.97519850178838	[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)	120823611.184000	120822539.90807			
Observation start date	2001-10-30T10:05:47	2001-10-30T09:48:59			
[s] Observation end time (MET)	120843611.184000	120844009.04642			
Observation end date	2001-10-30T15:39:07	2001-10-30T15:46:49			
Read mode	TIMED	TIMED			

2.3 Aspect



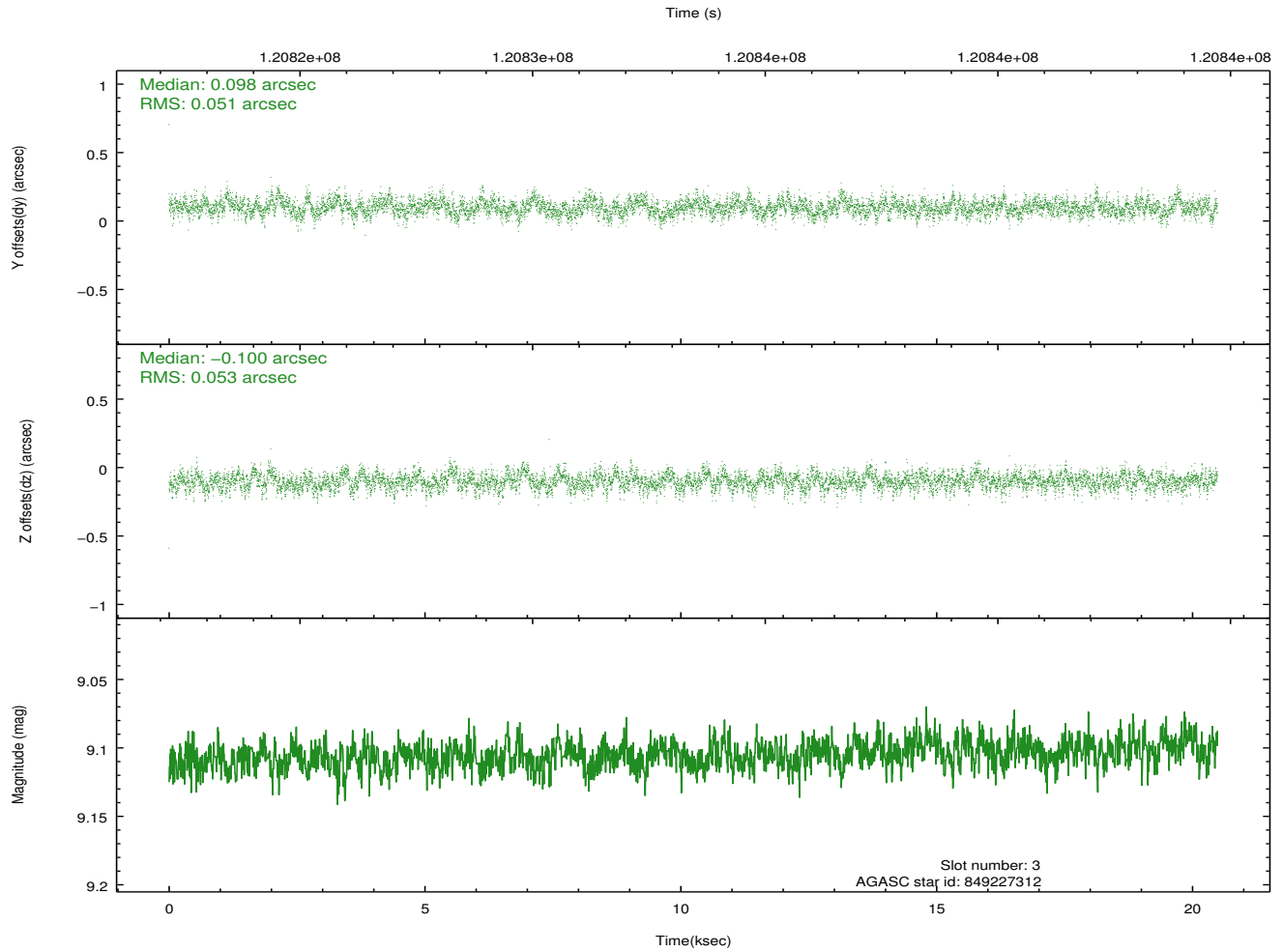
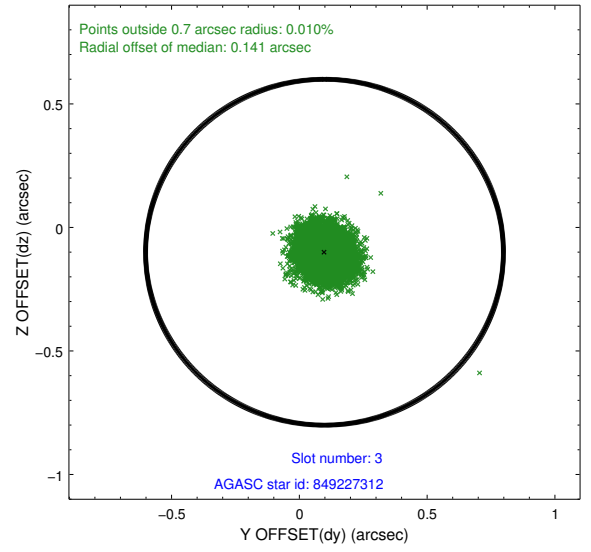
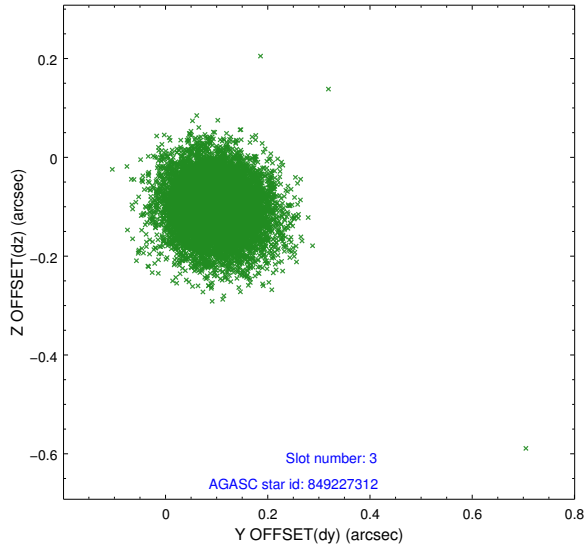


Slot Statistics

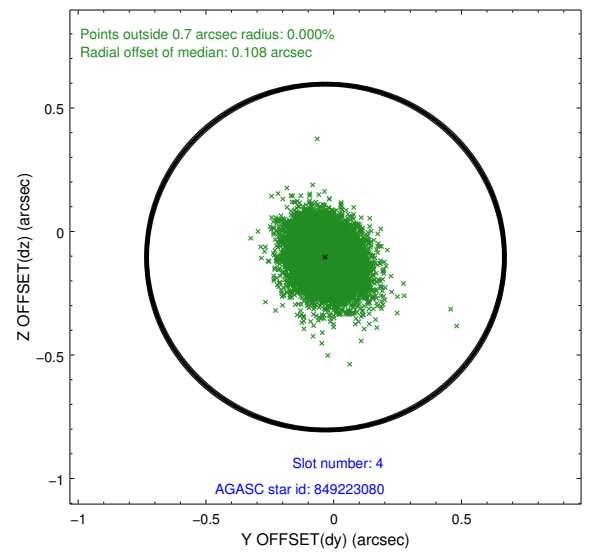
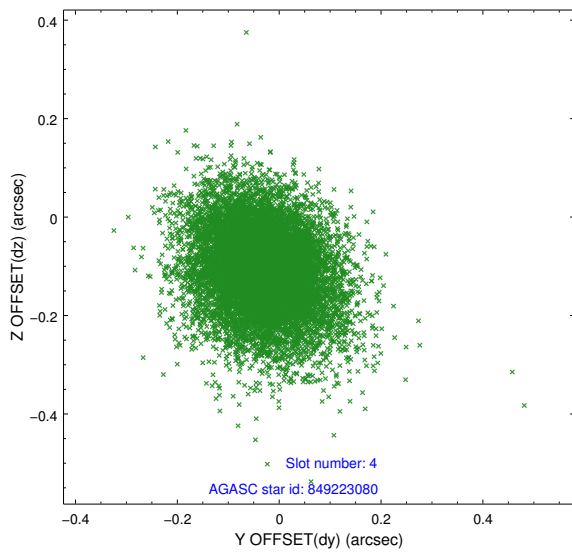
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	4998	-0.016	0.010	0.011	0.017	0.000000	0.000000	-755.73	-1727.90
1	FID	ACIS-S-4	7.20	4996	-0.033	0.005	0.013	0.020	0.000000	0.000000	2157.44	180.41
2	FID	ACIS-S-5	7.24	4997	0.016	-0.006	0.009	0.014	0.000000	0.000000	-1808.32	174.25
3	GUIDE	849227312	9.11	9987	0.098	-0.100	0.078	0.127	79.976215	-25.624425	-1247.65	231.19
4	GUIDE	849223080	9.77	9989	-0.032	-0.104	0.113	0.191	80.051501	-24.976586	776.88	1414.25
5	GUIDE	849226272	8.39	9996	0.020	0.075	0.058	0.093	80.214822	-25.538553	-540.11	-210.40
6	GUIDE	849223784	9.87	9989	0.062	0.052	0.094	0.158	80.444618	-25.367658	397.23	-450.67
7	GUIDE	849221808	9.97	9989	-0.148	0.081	0.117	0.188	81.008696	-25.199789	1965.12	-1581.25

2.4 Star Slots

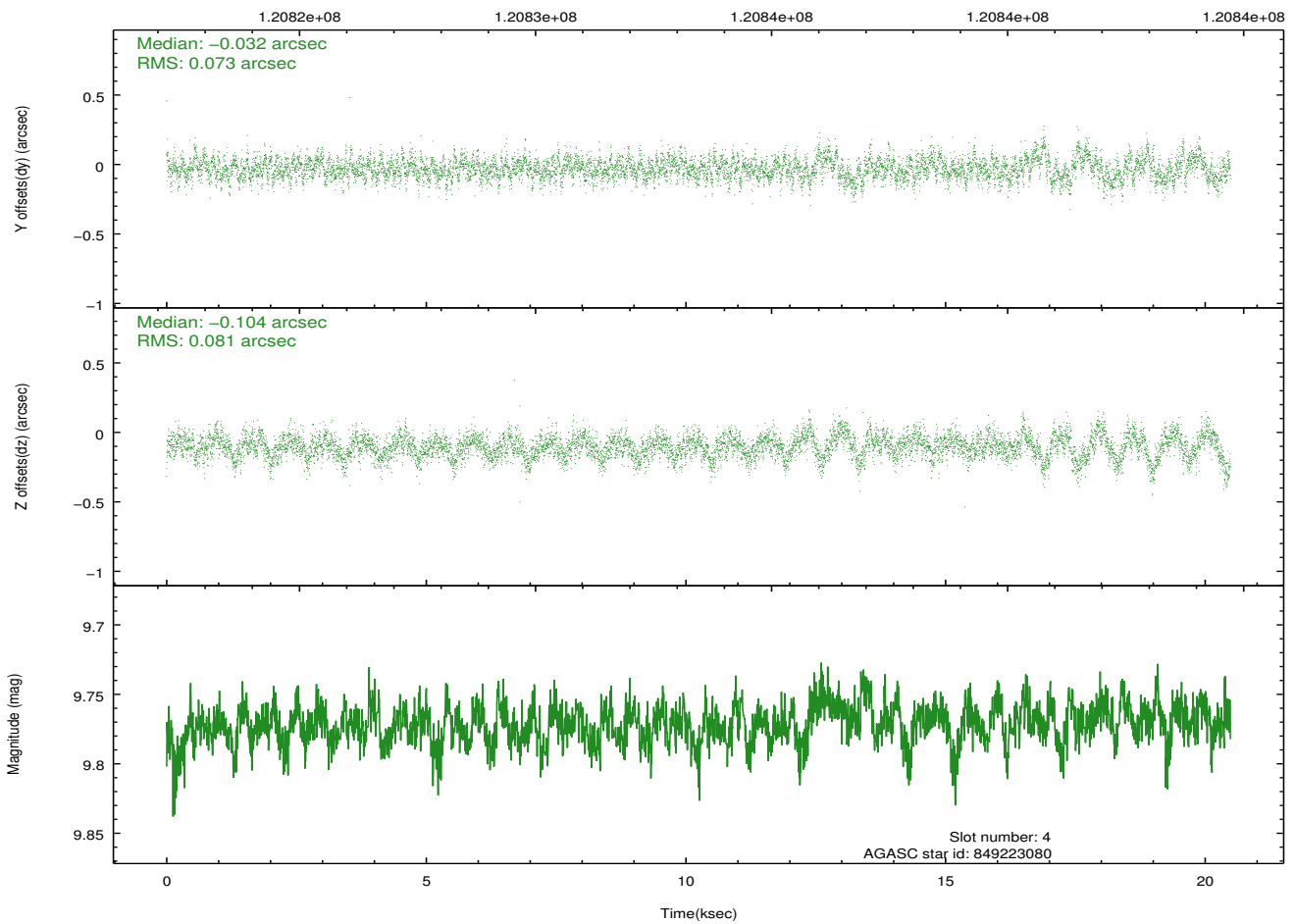
2.4.1 Slot 3



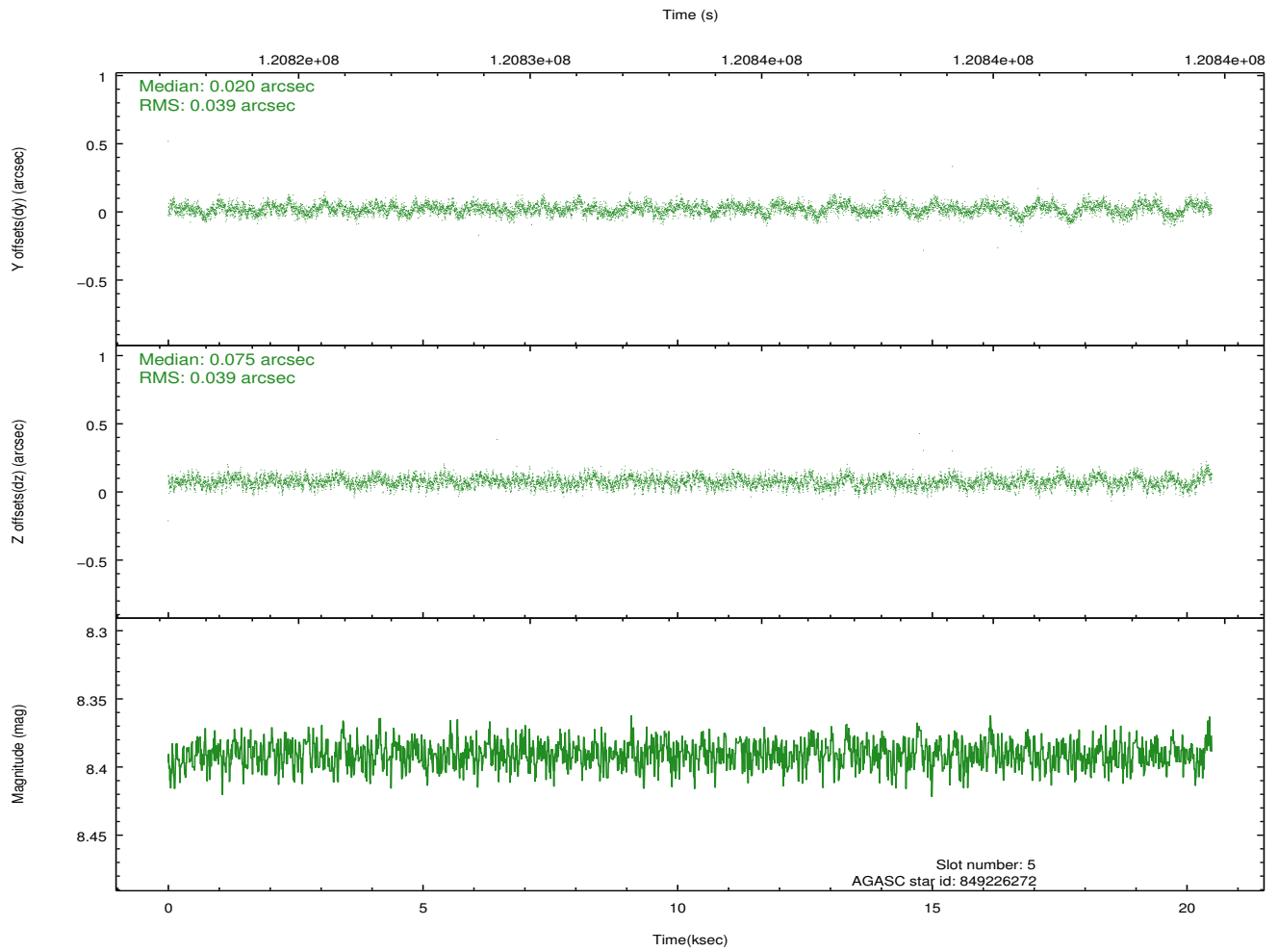
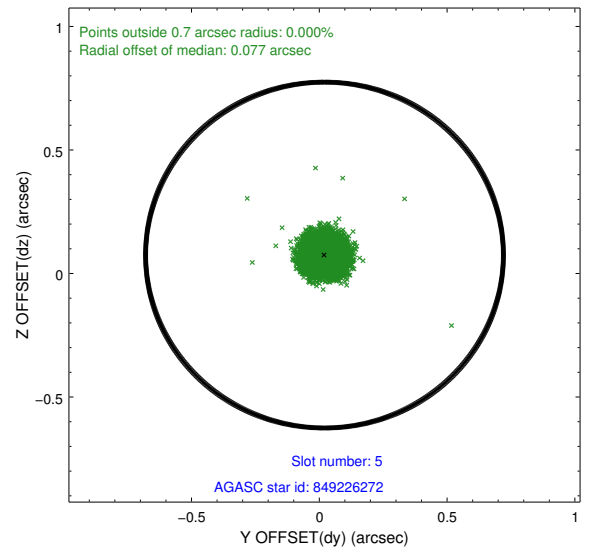
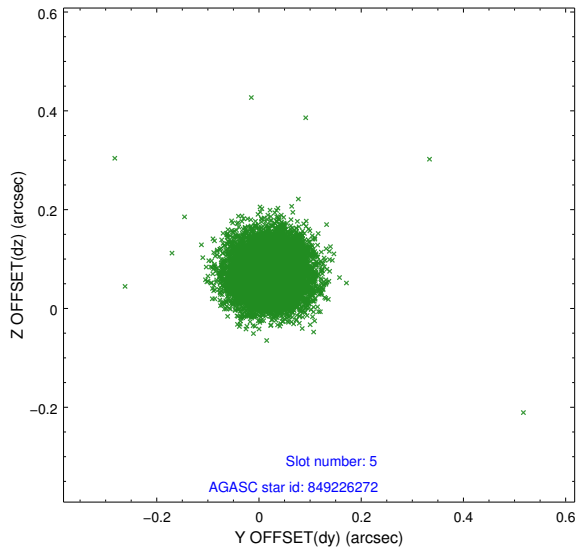
2.4.2 Slot 4



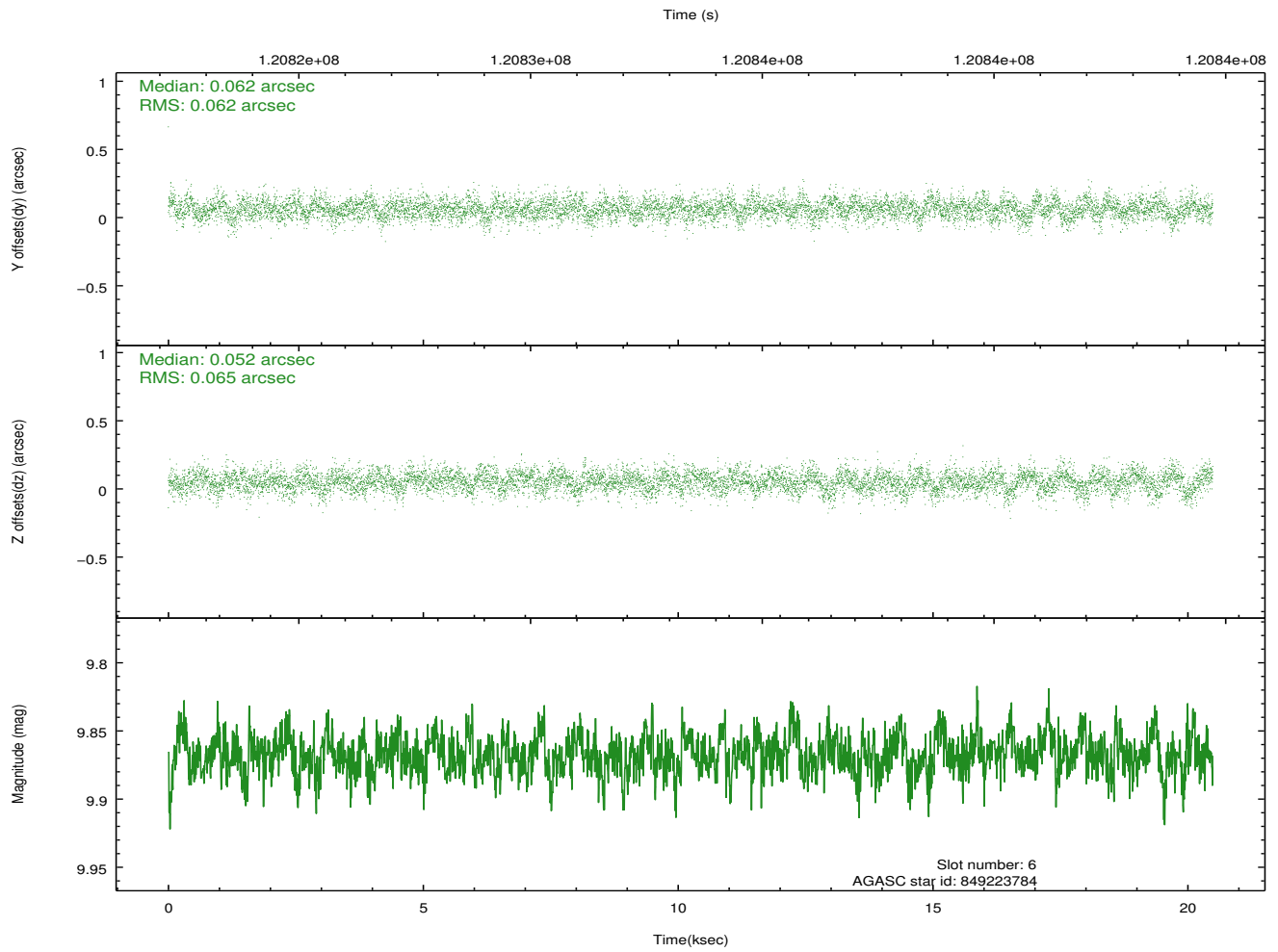
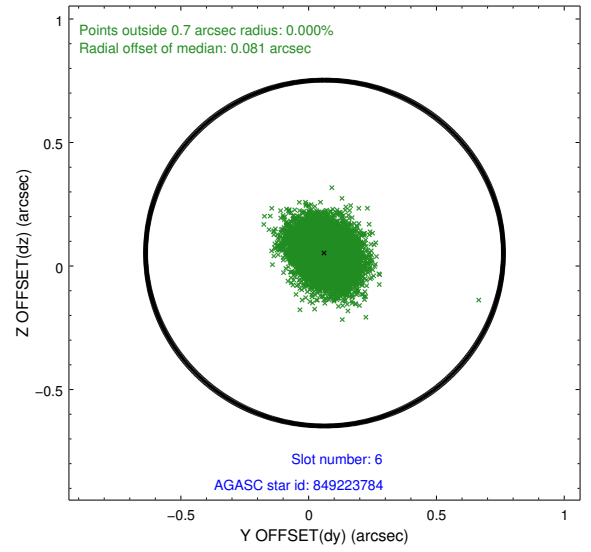
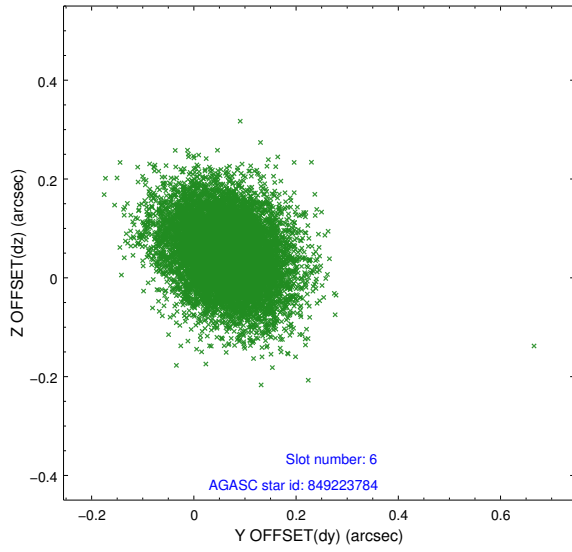
Time (s)



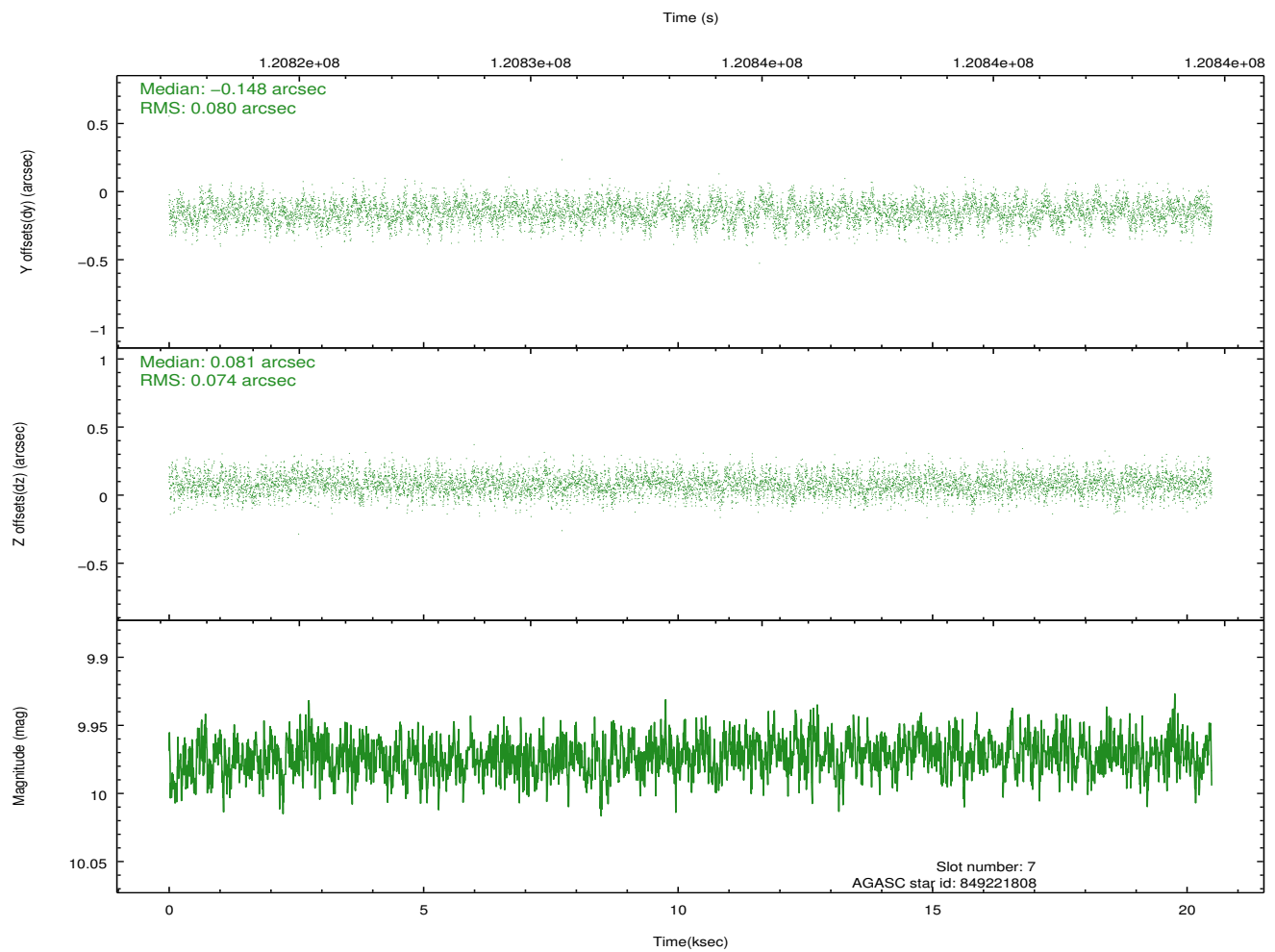
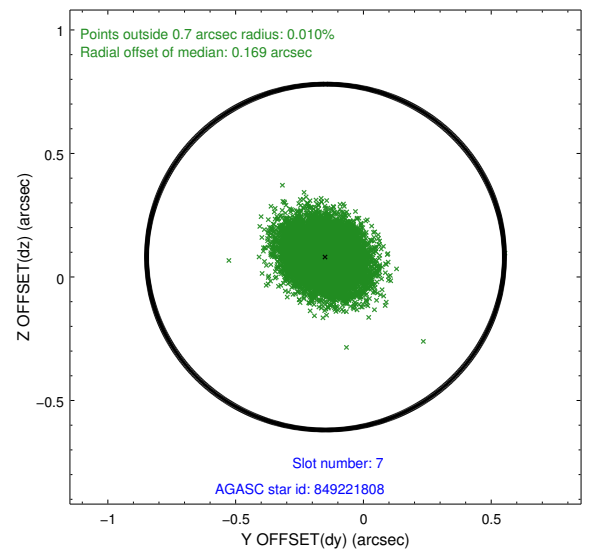
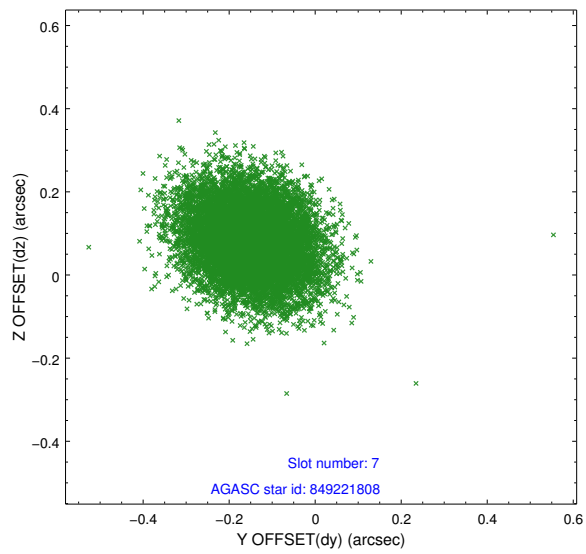
2.4.3 Slot 5



2.4.4 Slot 6

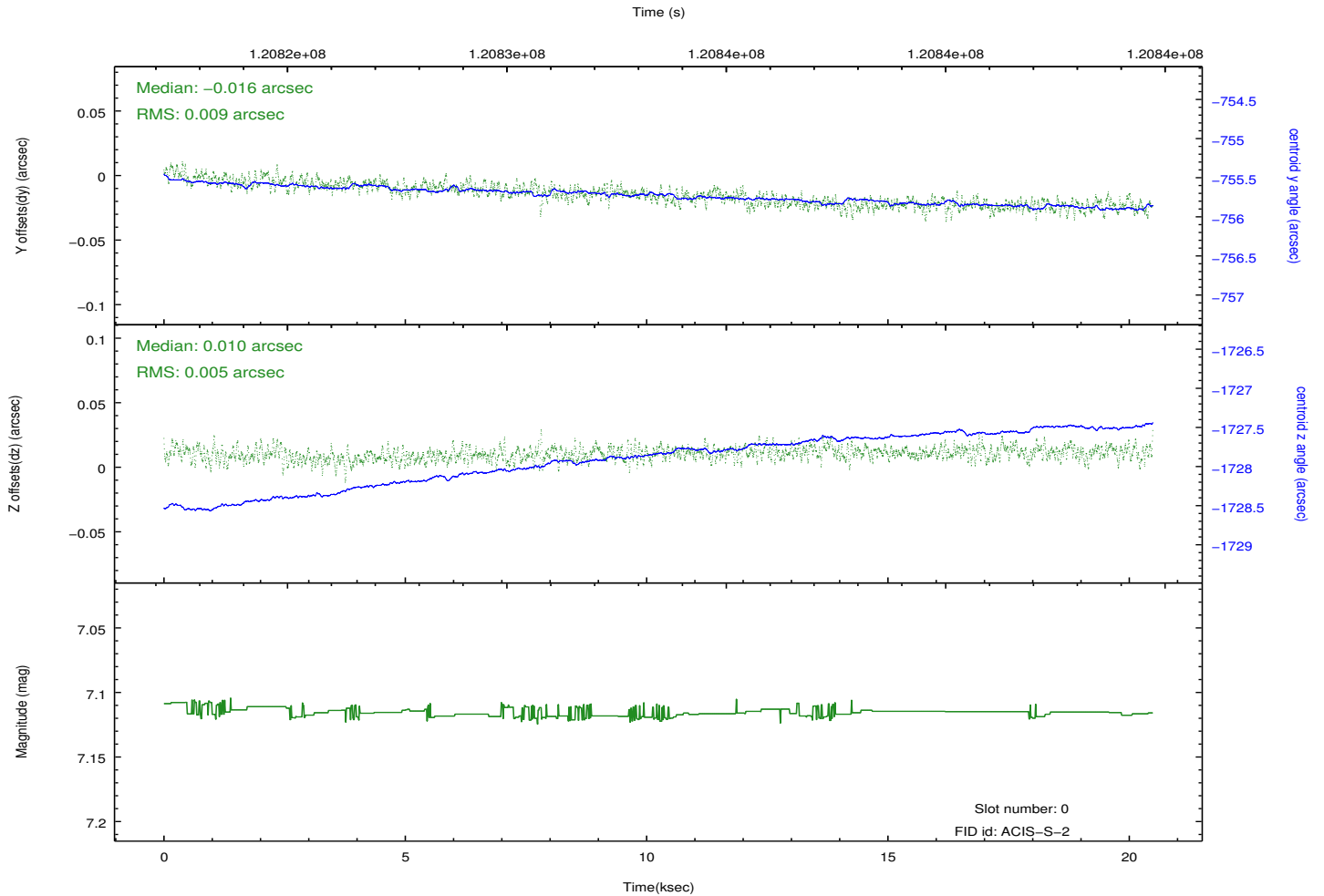
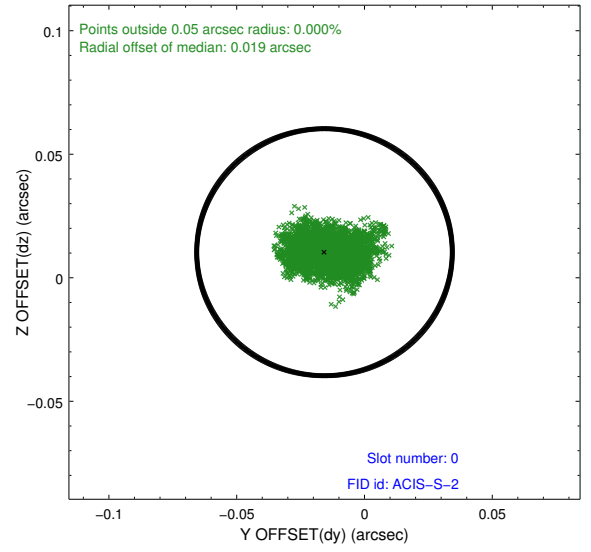
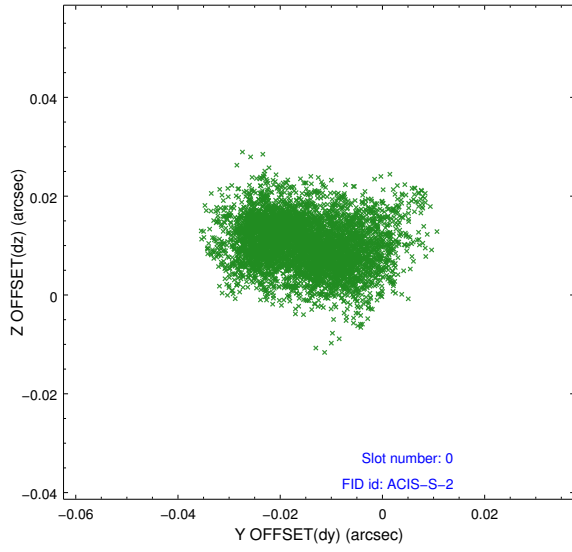


2.4.5 Slot 7

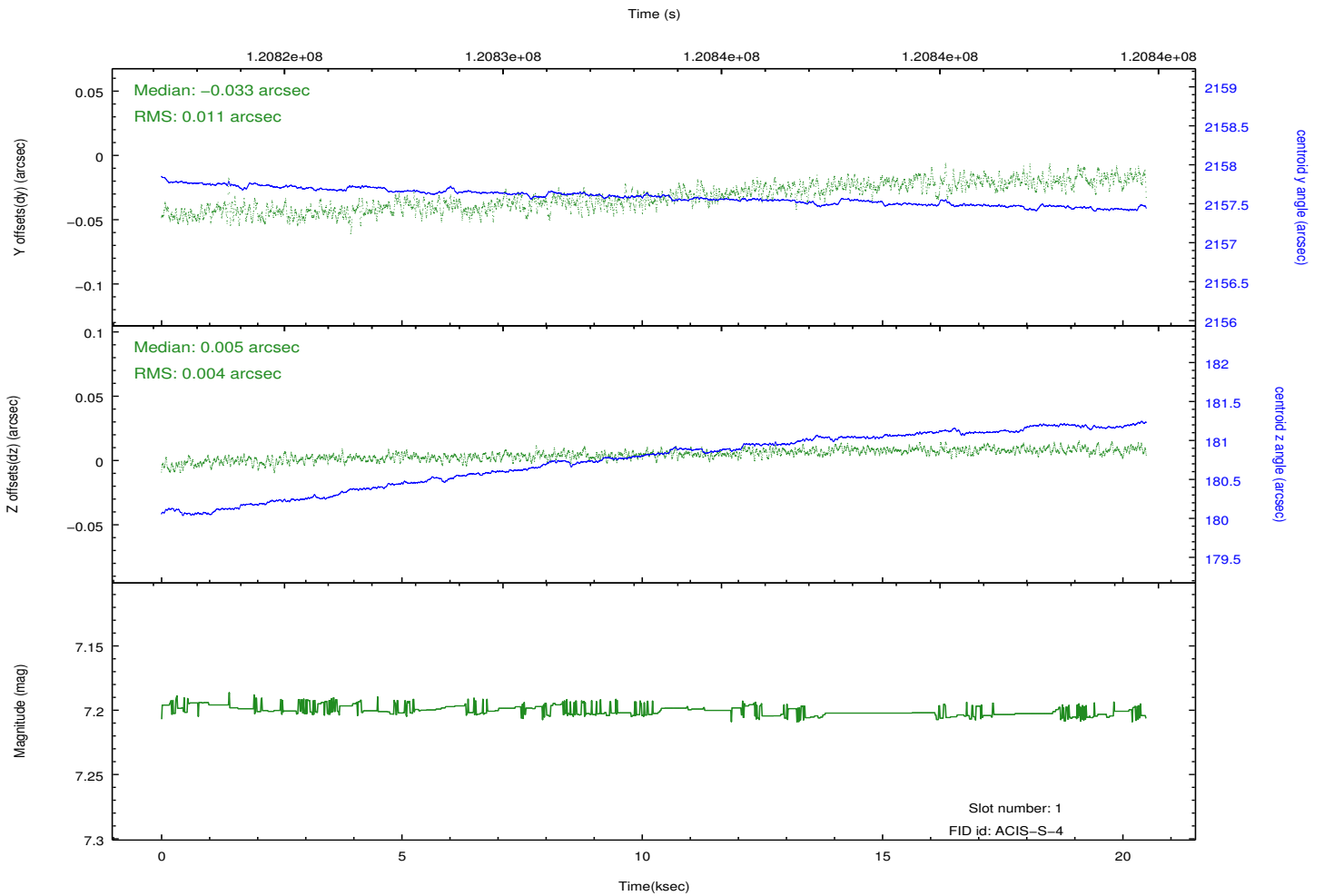
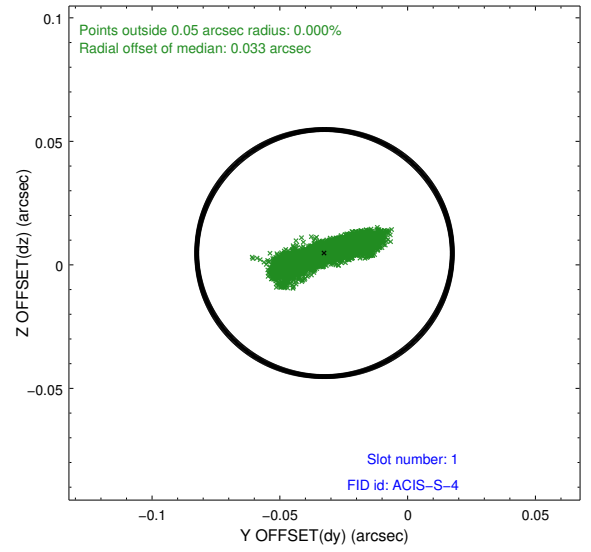
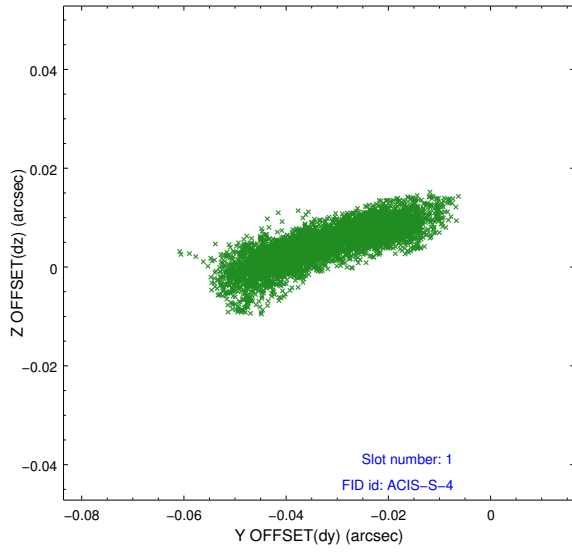


2.5 FID Slots

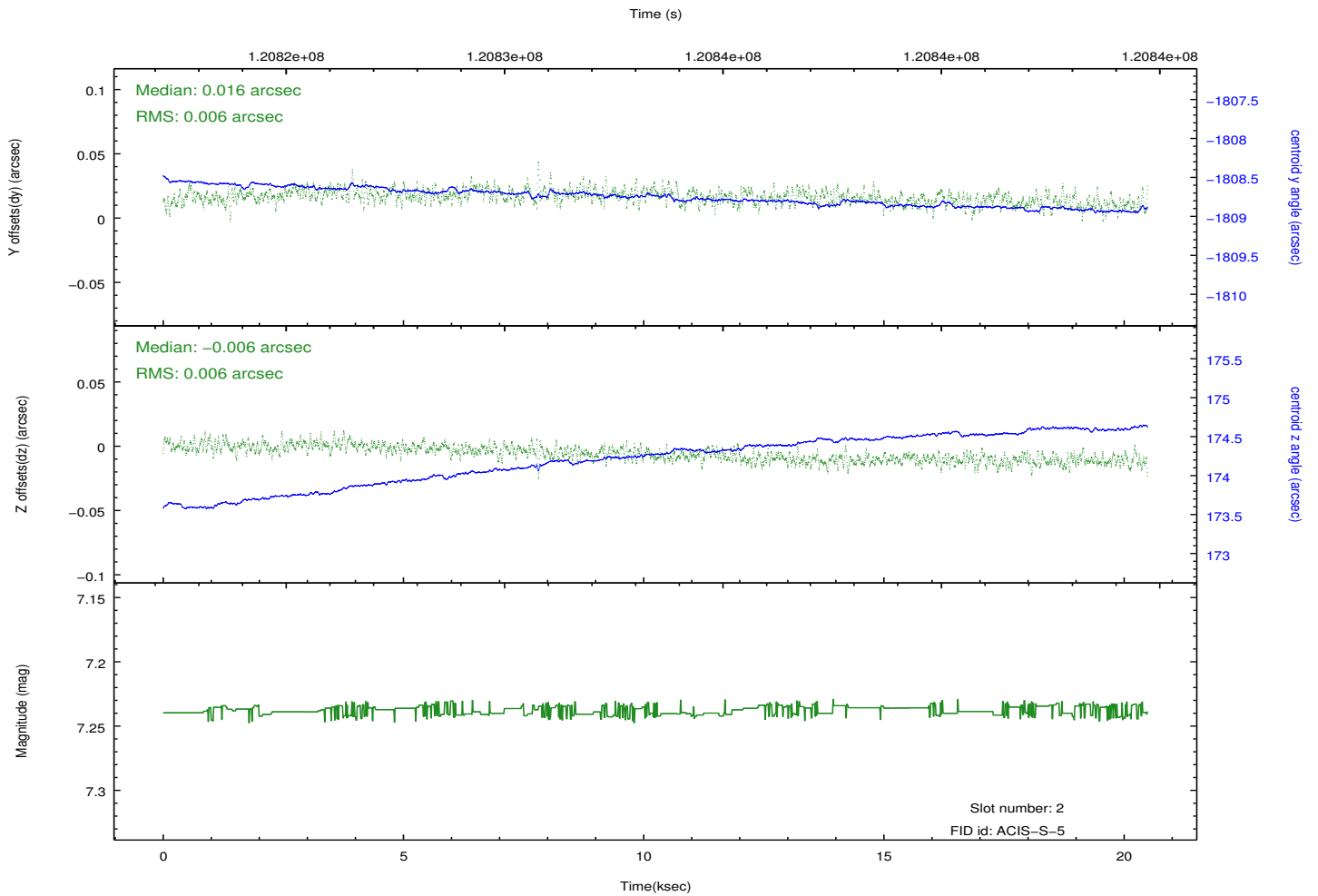
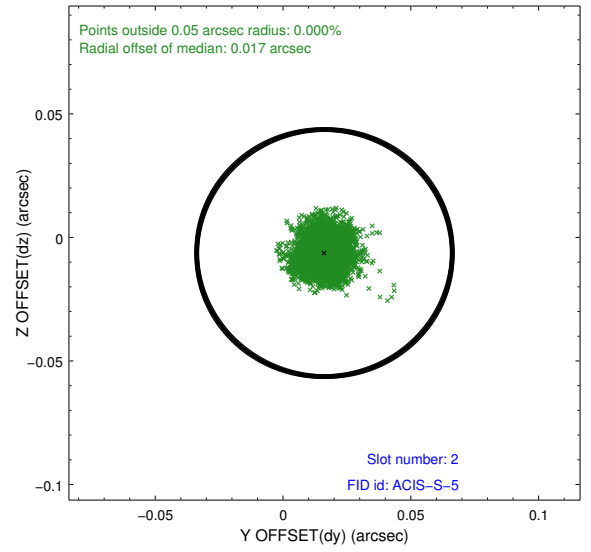
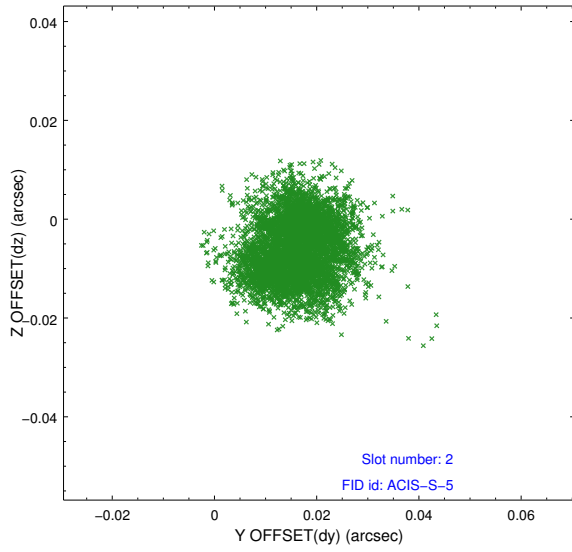
2.5.1 Slot 0



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)	2012.09.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.948

A.2 Comments

During this observation, an ACIS Threshold-Plane Anomaly occurred. The flight s/w is intended to delay 'start events' until after 'end bias dump'. For some unknown reason, it occasionally fails to do so, and if the overlap lasts for more than a minute or so, one or more FEPs experience a firmware latch-up that renders them useless until they are power cycled. The anomaly occurred for chips S2 and I3. No event data were recorded for these chips; the apparent bright patches on these chips are due to known hot pixels. Since the aim-point chip is unaffected, this obsid is deemed acceptable as is and meets the proposer's needs.