

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 12548 - L2 Version 2
Chandra X-Ray Center

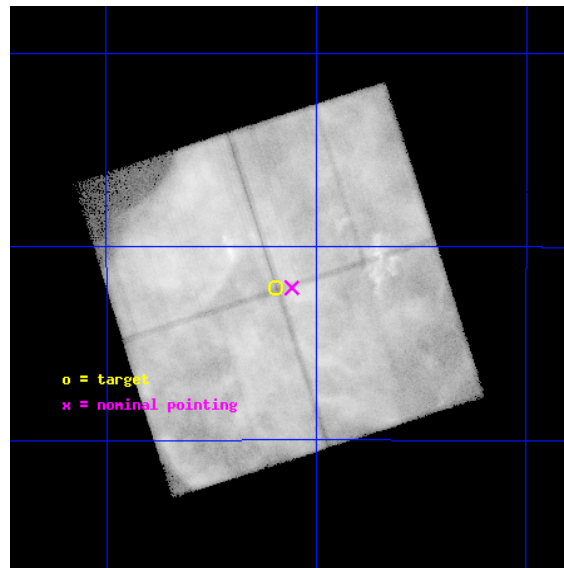
L2 Processing Date : Jul 6 2012

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1 Front

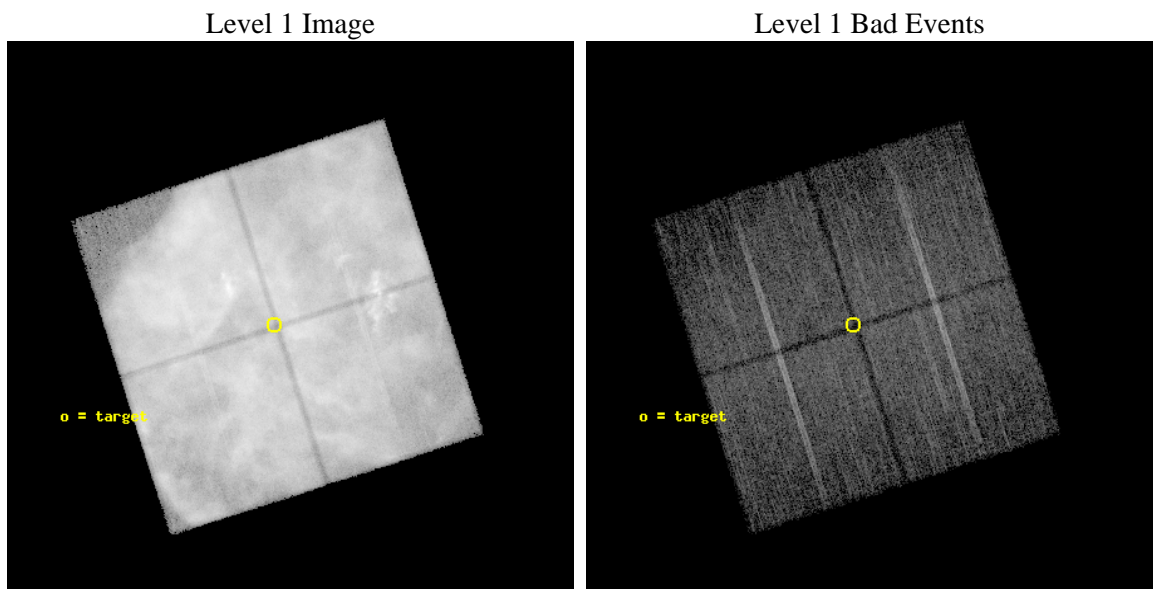
seq_num	501381	Sequence number
obs_id	12548	Observation id
title	X-Ray Time Variability of an Ejecta Filament in Puppis A	Proposal
observer	Dr. Satoru Katsuda	Principal investigator
object	Puppis A NE filament	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	125.7981	Observer's specified target RA [deg]
dec_targ	-42.8692	Observer's specified target Dec [deg]
ra_nom	125.77921126645	Nominal RA [deg]
dec_nom	-42.868888795116	Nominal Dec [deg]
roll_nom	72.195831063185	Nominal Roll [deg]
revision	2	Processing version of data
ontime	16346.129593432	Sum of GTIs [s]
livetime	16132.555376448	Livetime [s]
ontime0	14565.195361018	Sum of GTIs [s]
ontime1	16346.129593432	Sum of GTIs [s]
ontime2	15249.928158879	Sum of GTIs [s]
ontime3	16481.191189528	Sum of GTIs [s]
l2events	3352034	Number of level 2 events



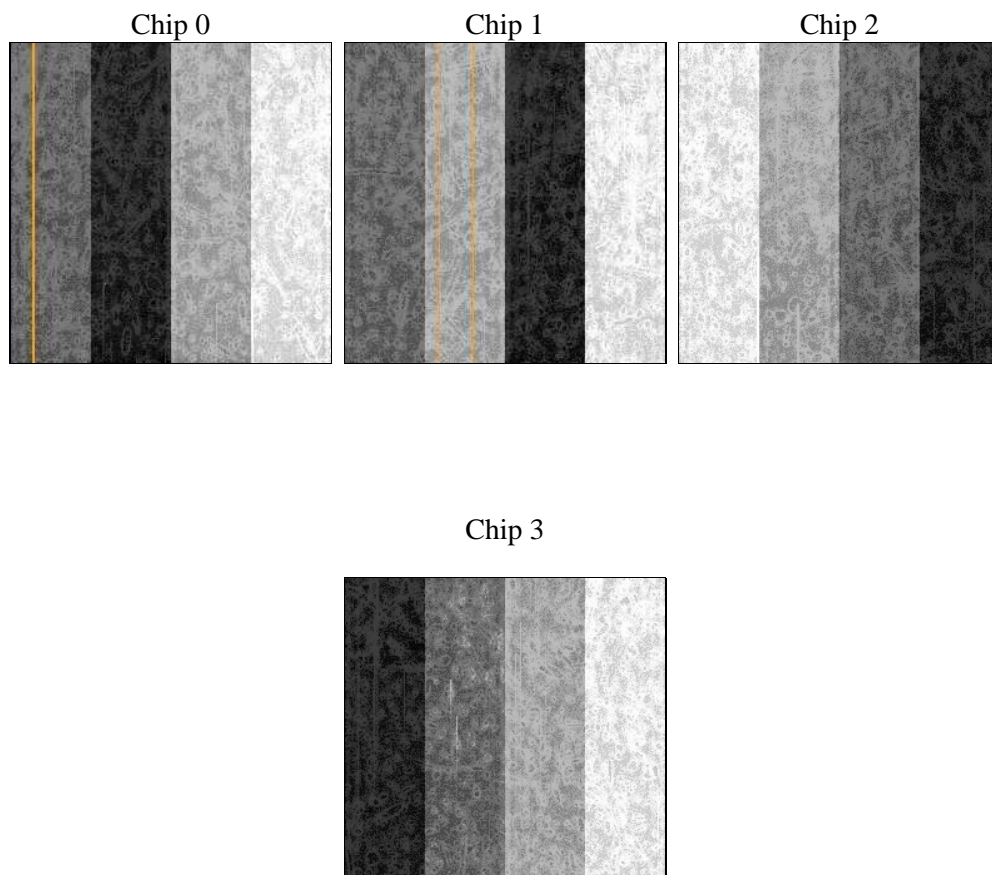
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	22000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	16346.129593432	Sum of GTIs [s]
caldsver	4.5.0	 	ontime0	14565.195361018	Sum of GTIs [s]
date	2012-07-06T14:42:36	Date and time of file creation	ontime1	16346.129593432	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	15249.928158879	Sum of GTIs [s]
			ontime3	16481.191189528	Sum of GTIs [s]
			l1events	4013493	Number of level 1 events

2.1.4 Events

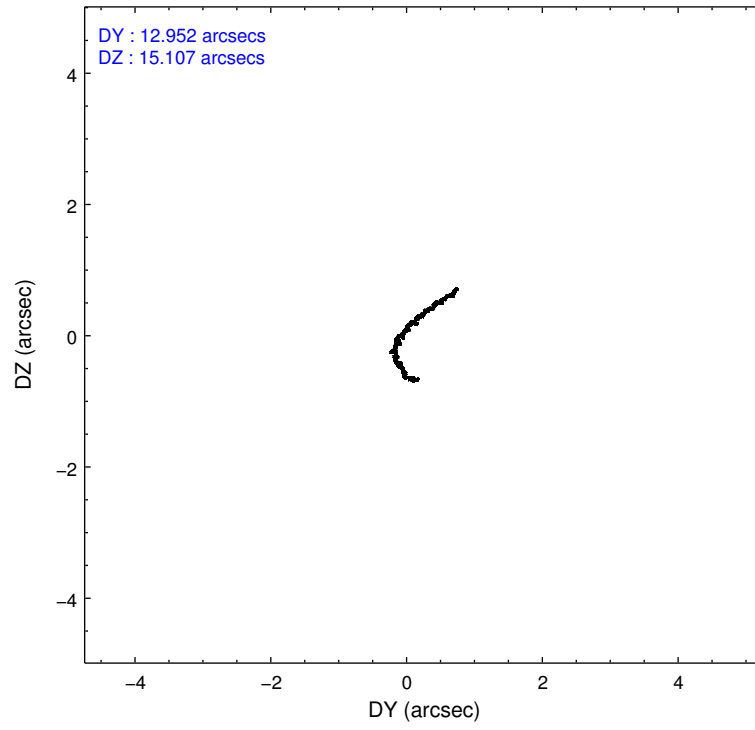
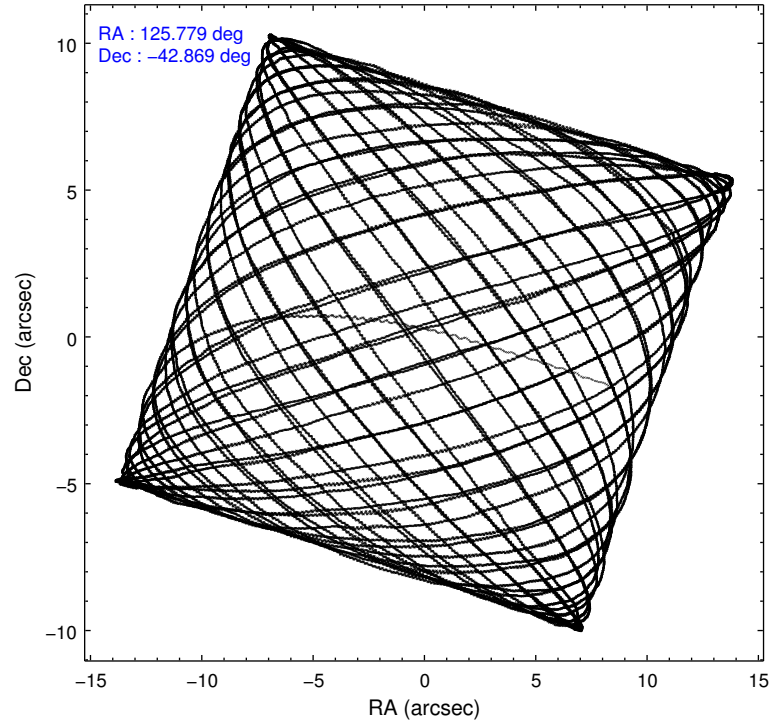
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	1215806	951335	996235	850117
rejected events	105742	111426	115470	118574
rejected %	8%	11%	11%	13%

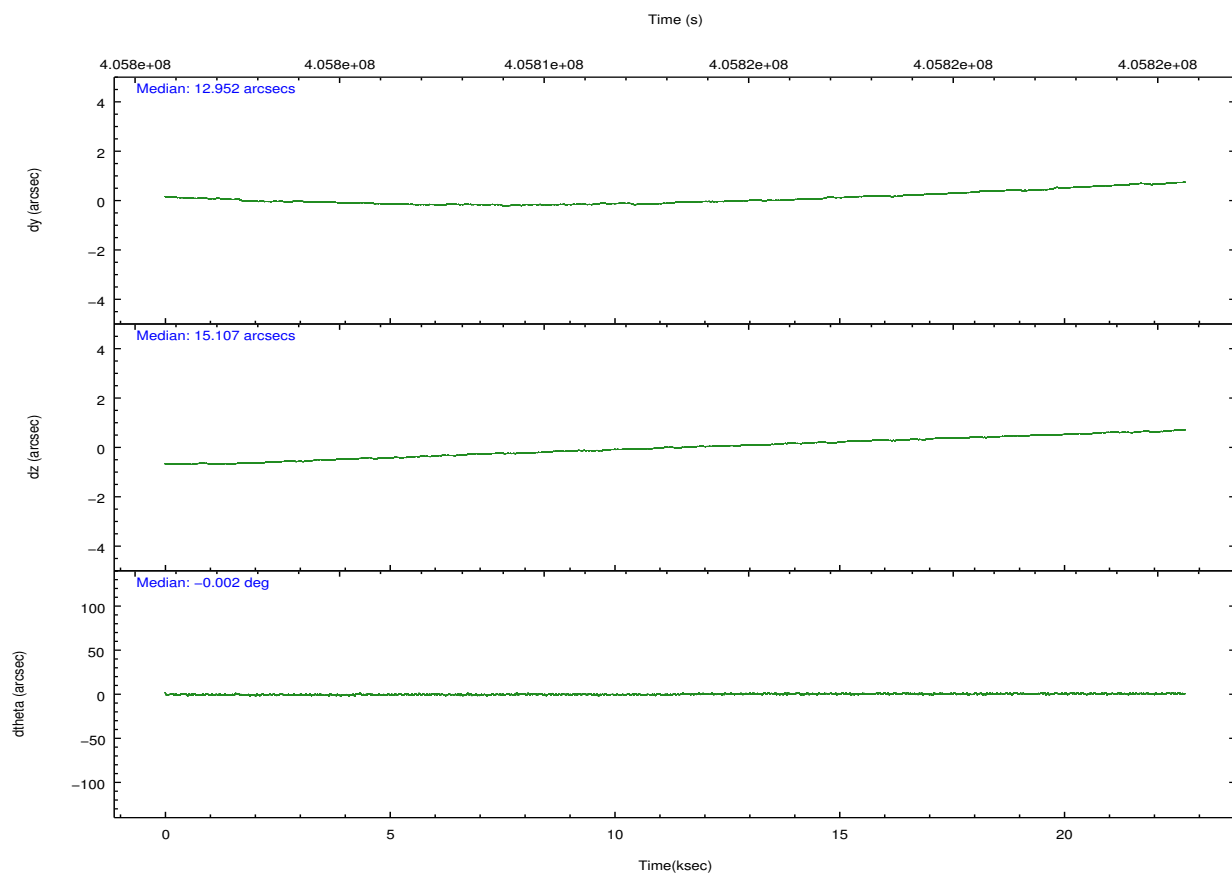
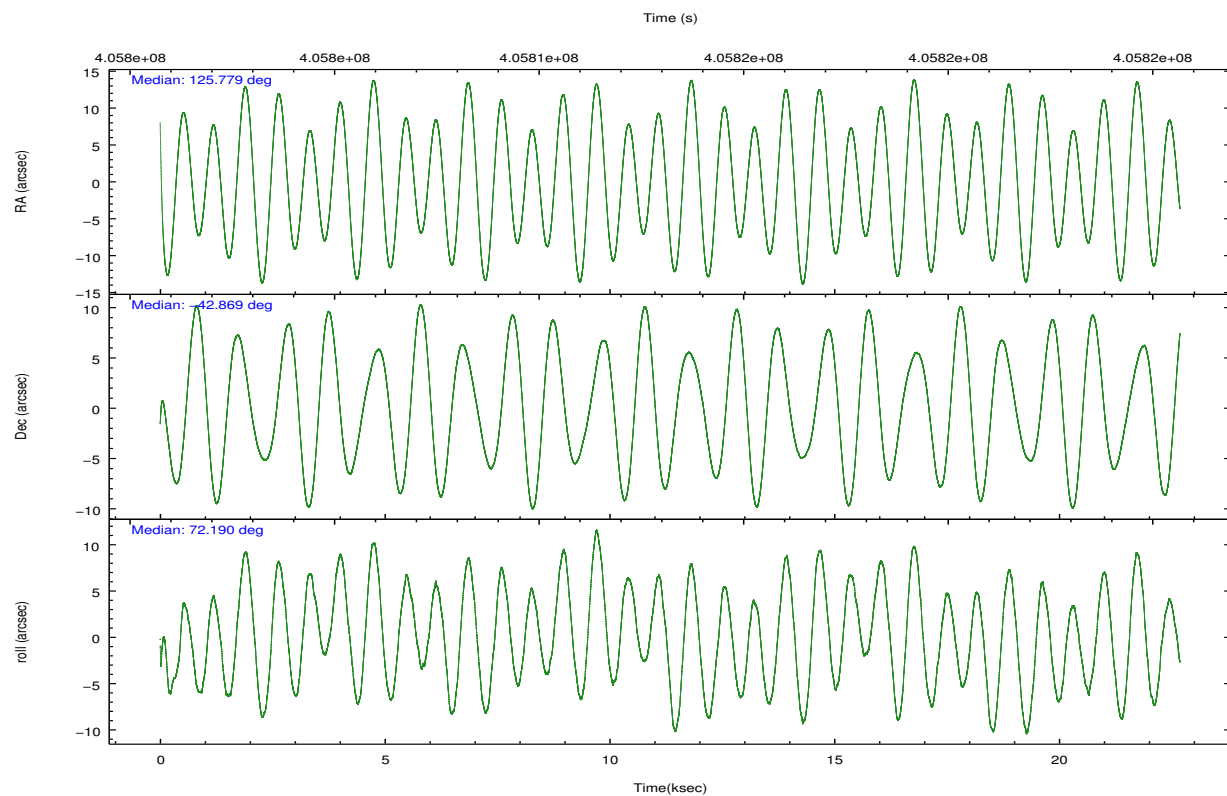
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	968751	735386	773641	643208
	79%	77%	77%	75%
grade 1 events	5172	3420	4376	3485
	0%	0%	0%	0%
grade 2 events	85847	63977	64751	53426
	7%	6%	6%	6%
grade 3 events	22028	15852	17151	13603
	1%	1%	1%	1%
grade 4 events	21938	15849	16746	13818
	1%	1%	1%	1%
grade 5 events	7998	7823	7153	7887
	0%	0%	0%	0%
grade 6 events	11500	8983	8476	7488
	0%	0%	0%	0%
grade 7 events	92572	100045	103941	107202
	7%	10%	10%	12%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	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	125.787299	125.7792112664517	Subarray requested	NONE	NONE
[deg] Pointing Dec	-42.895712	-42.86888879511577	Alternating exposures requested	N	N
[deg] Pointing Roll	71.992654	72.19583106318456	[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	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	405802534.184000	405800915.64431			
Observation start date	2010-11-10T18:54:28	2010-11-10T18:28:35			
[s] Observation end time (MET)	405824534.184000	405825564.33308			
Observation end date	2010-11-11T01:01:08	2010-11-11T01:19:24			
Read mode	TIMED	TIMED			

2.3 Aspect



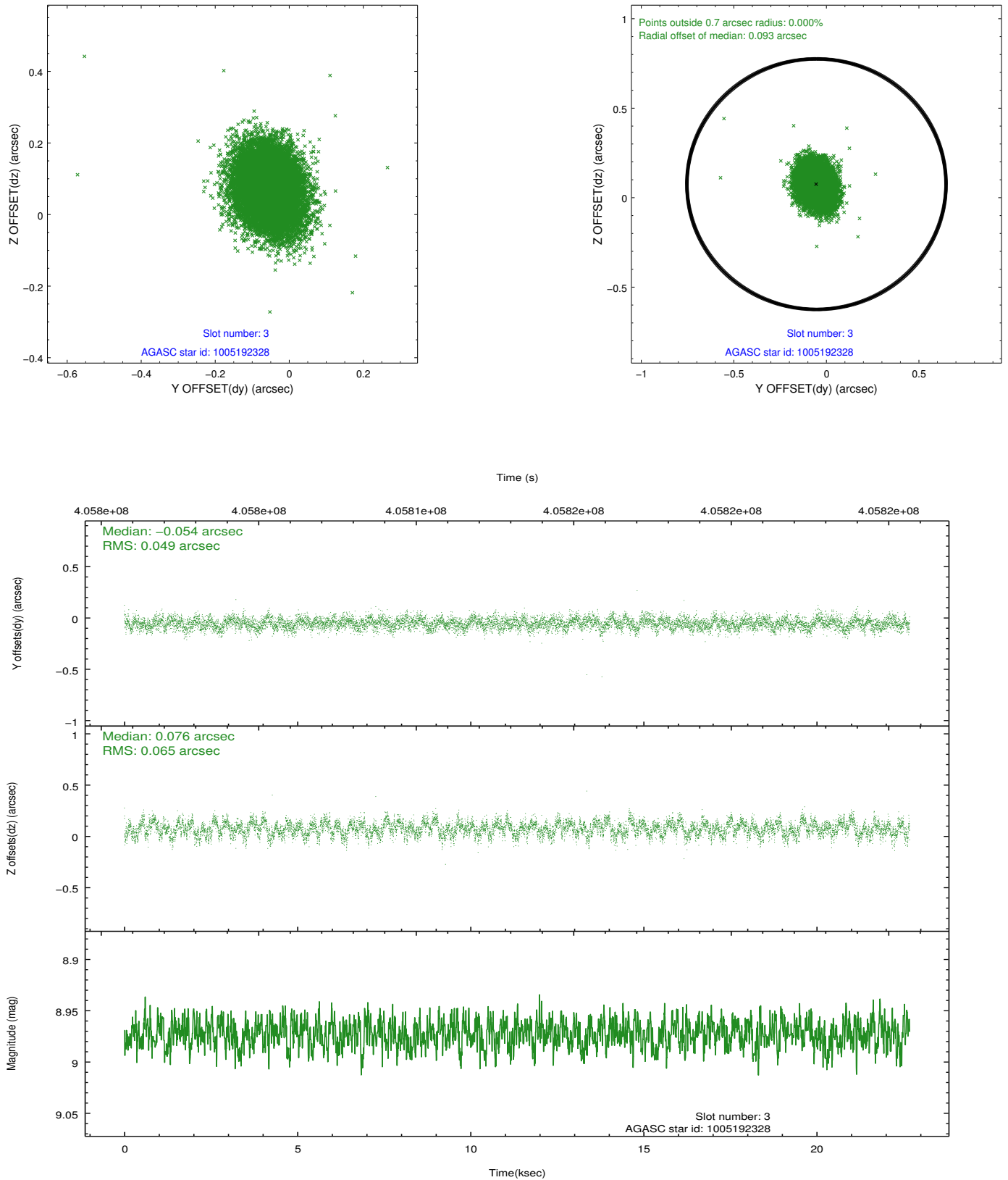


Slot Statistics

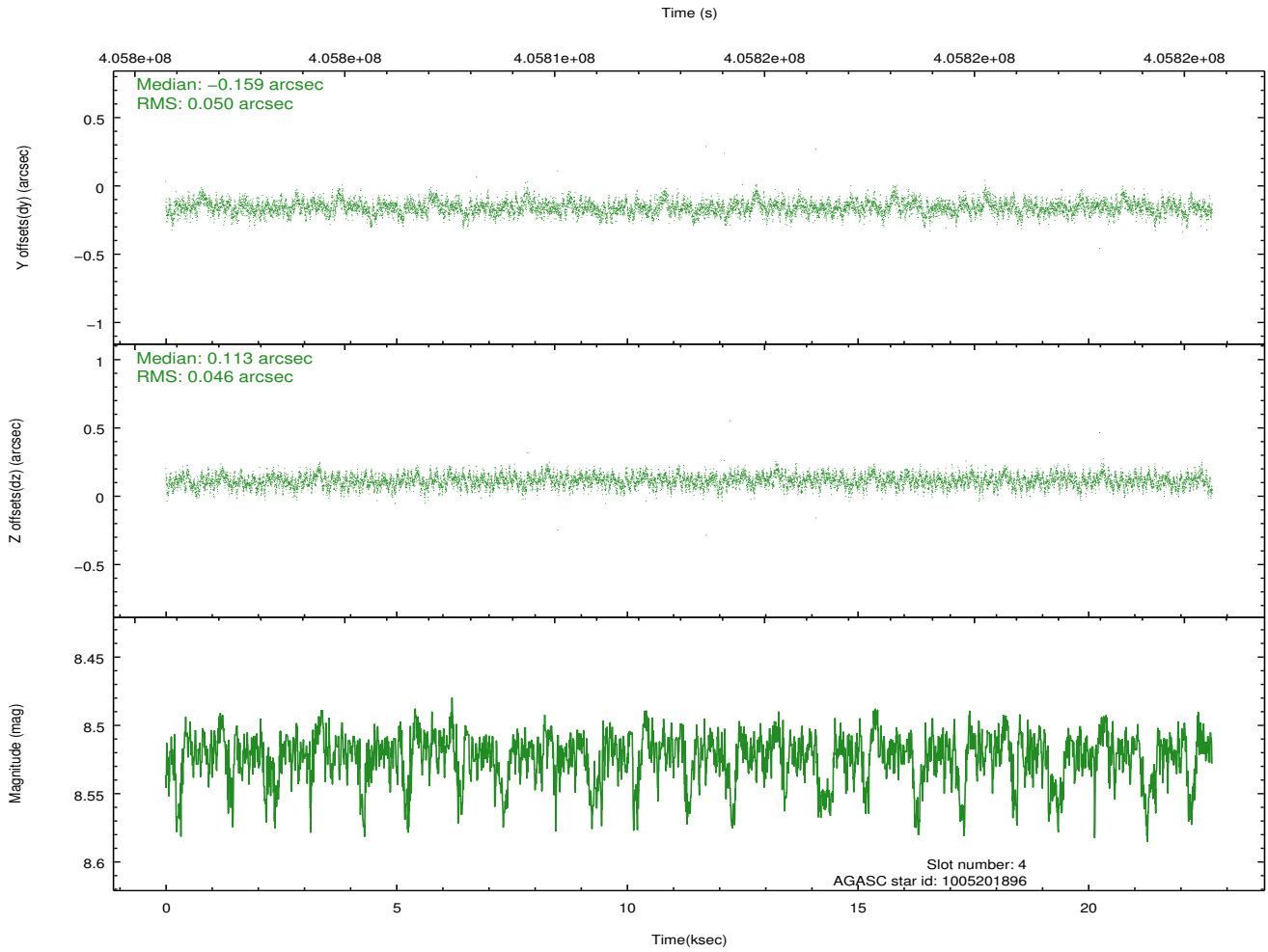
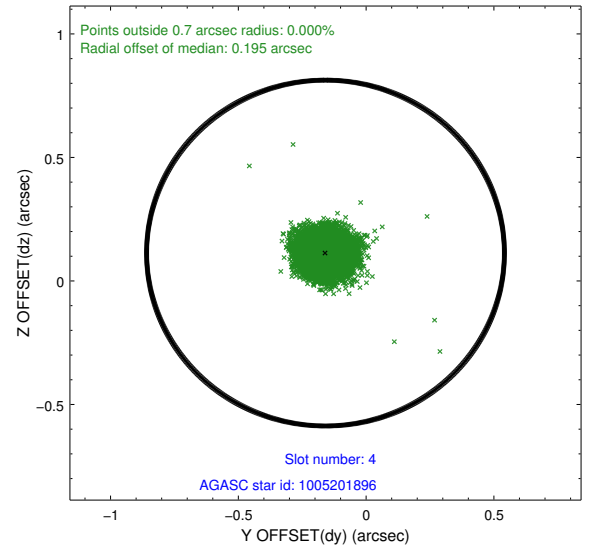
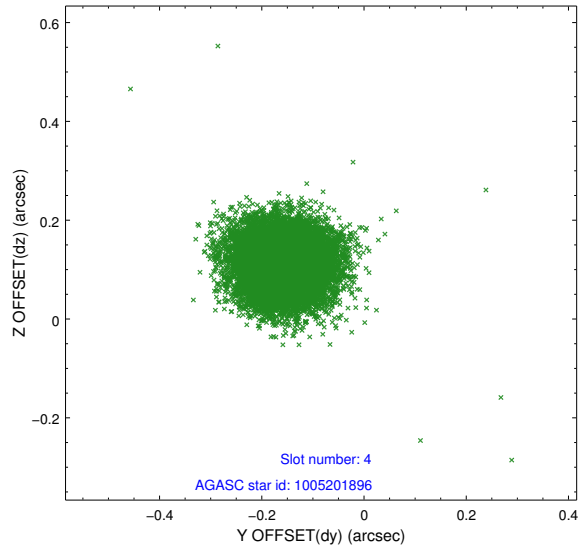
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-4	6.95	5533	0.173	0.024	0.009	0.017	0.000000	0.000000	2146.59	1061.22
1	FID	ACIS-I-5	7.02	5533	-0.278	0.018	0.009	0.016	0.000000	0.000000	-1821.63	1059.06
2	FID	ACIS-I-6	7.02	5531	0.004	0.026	0.011	0.024	0.000000	0.000000	391.84	1703.41
3	GUIDE	1005192328	8.97	11055	-0.054	0.076	0.086	0.139	126.494374	-42.919317	488.63	-1801.20
4	GUIDE	1005201896	8.52	11049	-0.159	0.113	0.071	0.116	126.670468	-42.695868	1395.61	-2003.35
5	GUIDE	1005210304	9.86	10992	-0.111	-0.190	0.137	0.219	125.364534	-42.215893	1976.77	1827.89
6	GUIDE	1005723560	8.42	11058	0.205	-0.009	0.086	0.130	126.279097	-43.364629	-1210.01	-1746.86
7	GUIDE	1005724040	7.61	11062	0.104	0.011	0.084	0.156	125.738175	-43.227880	-1176.57	-247.14

2.4 Star Slots

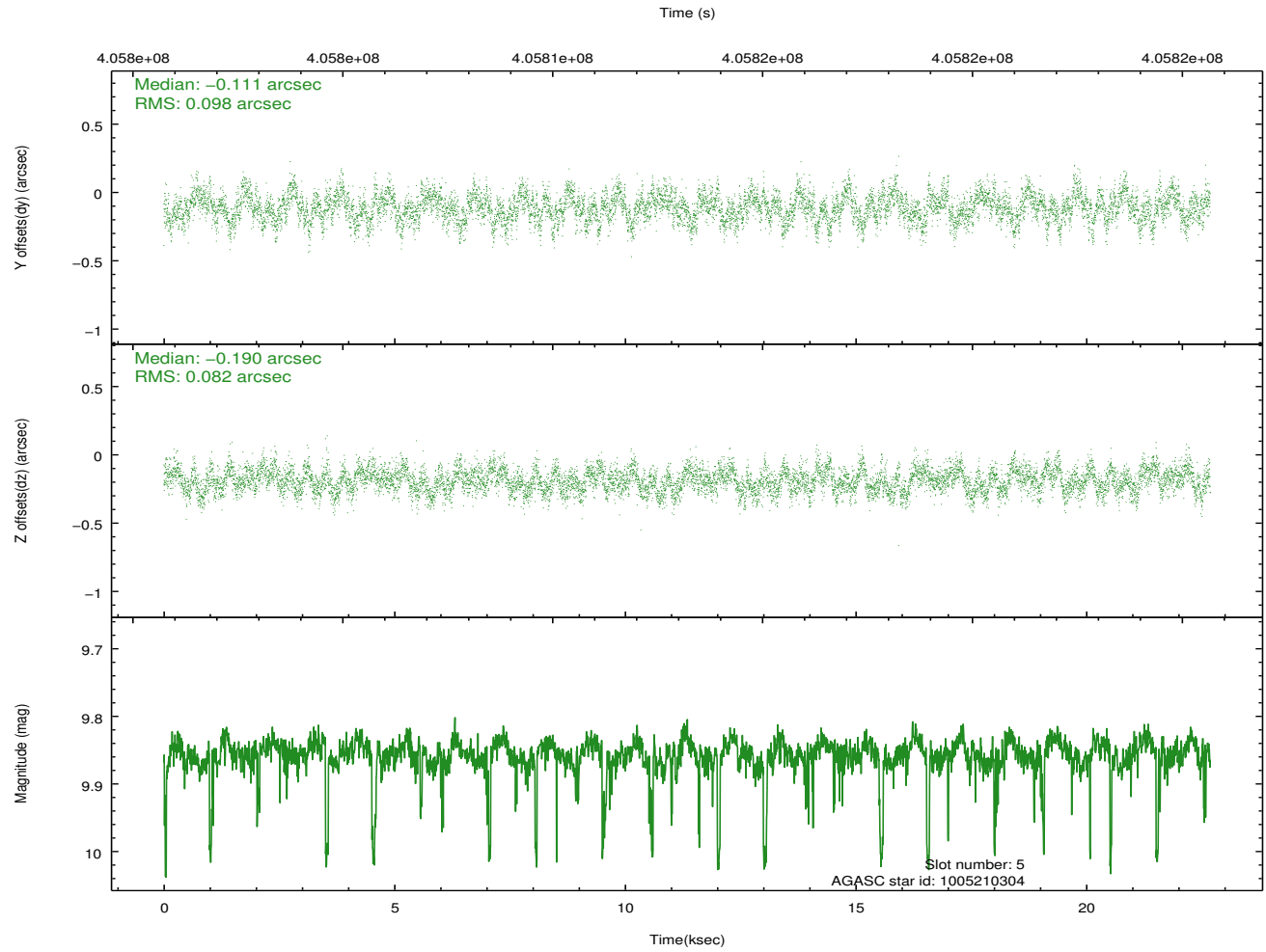
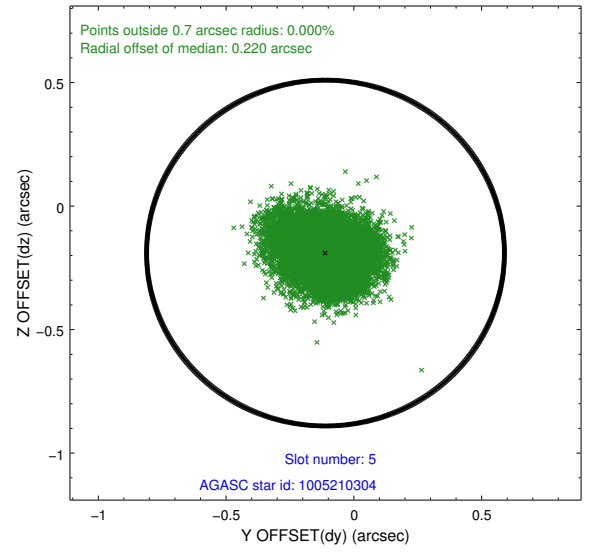
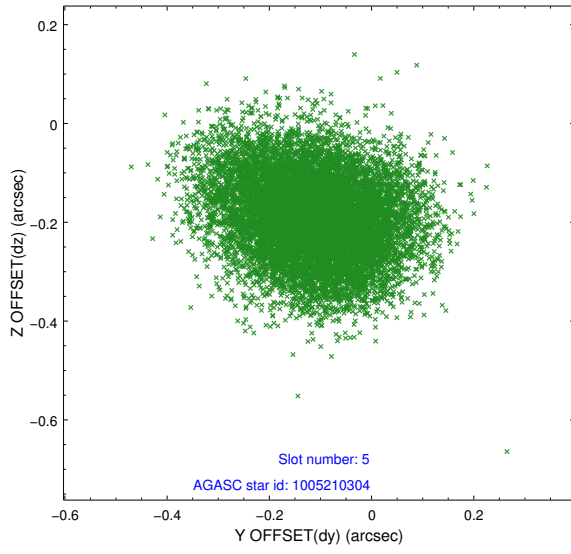
2.4.1 Slot 3



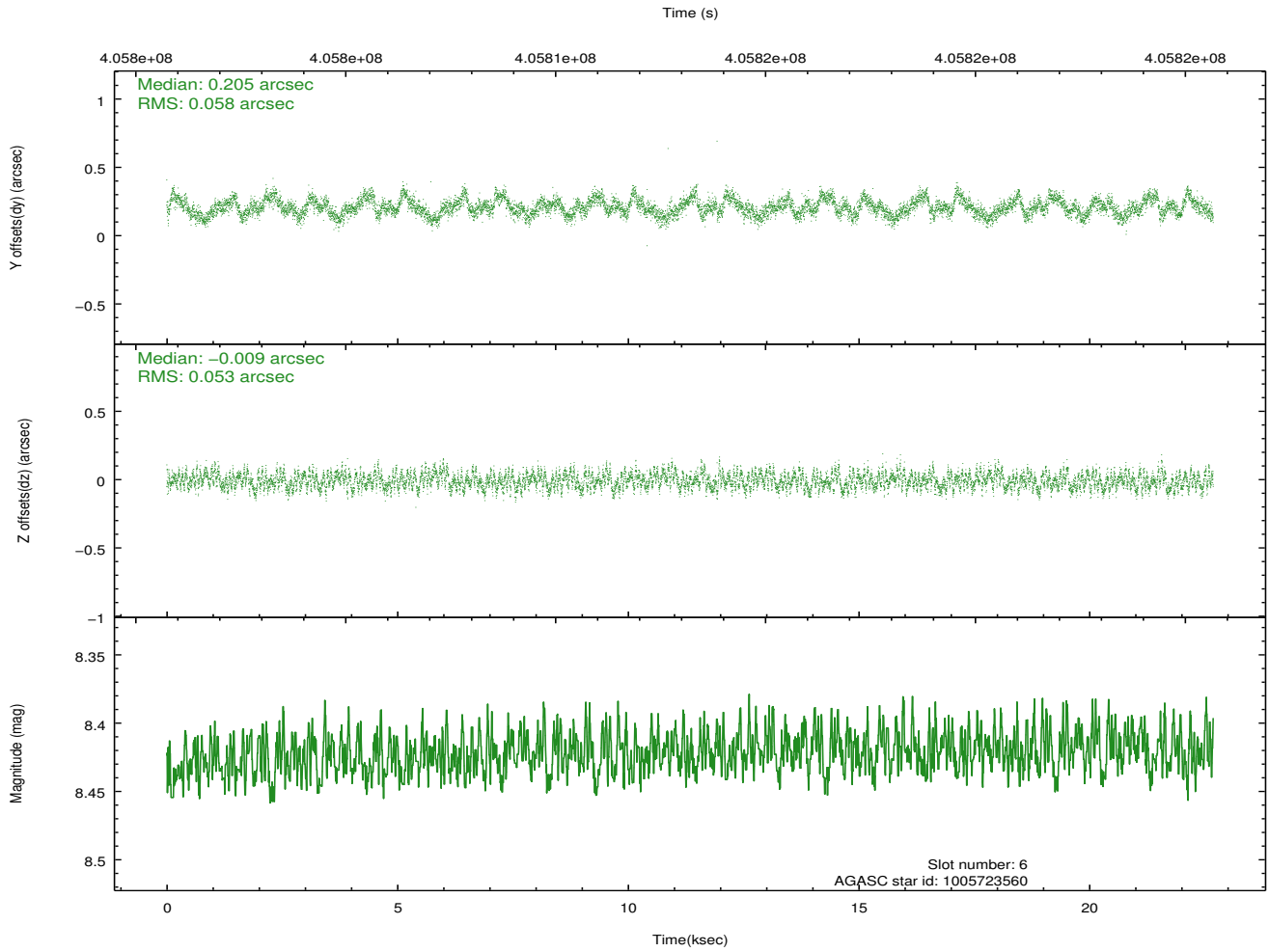
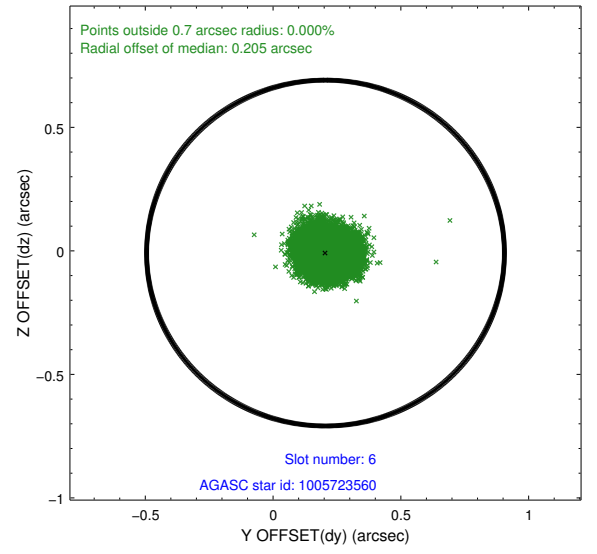
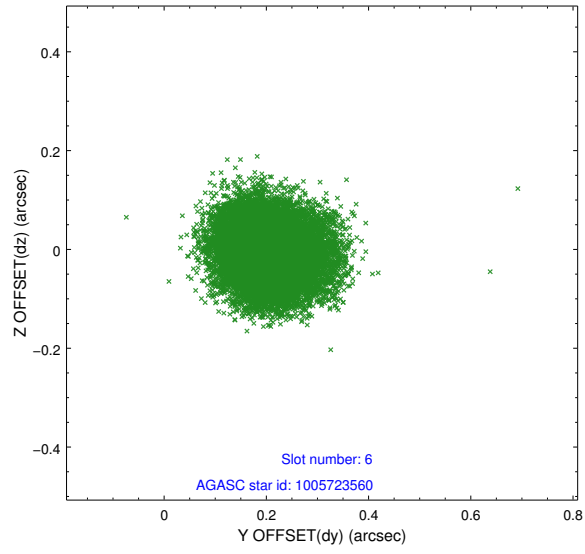
2.4.2 Slot 4



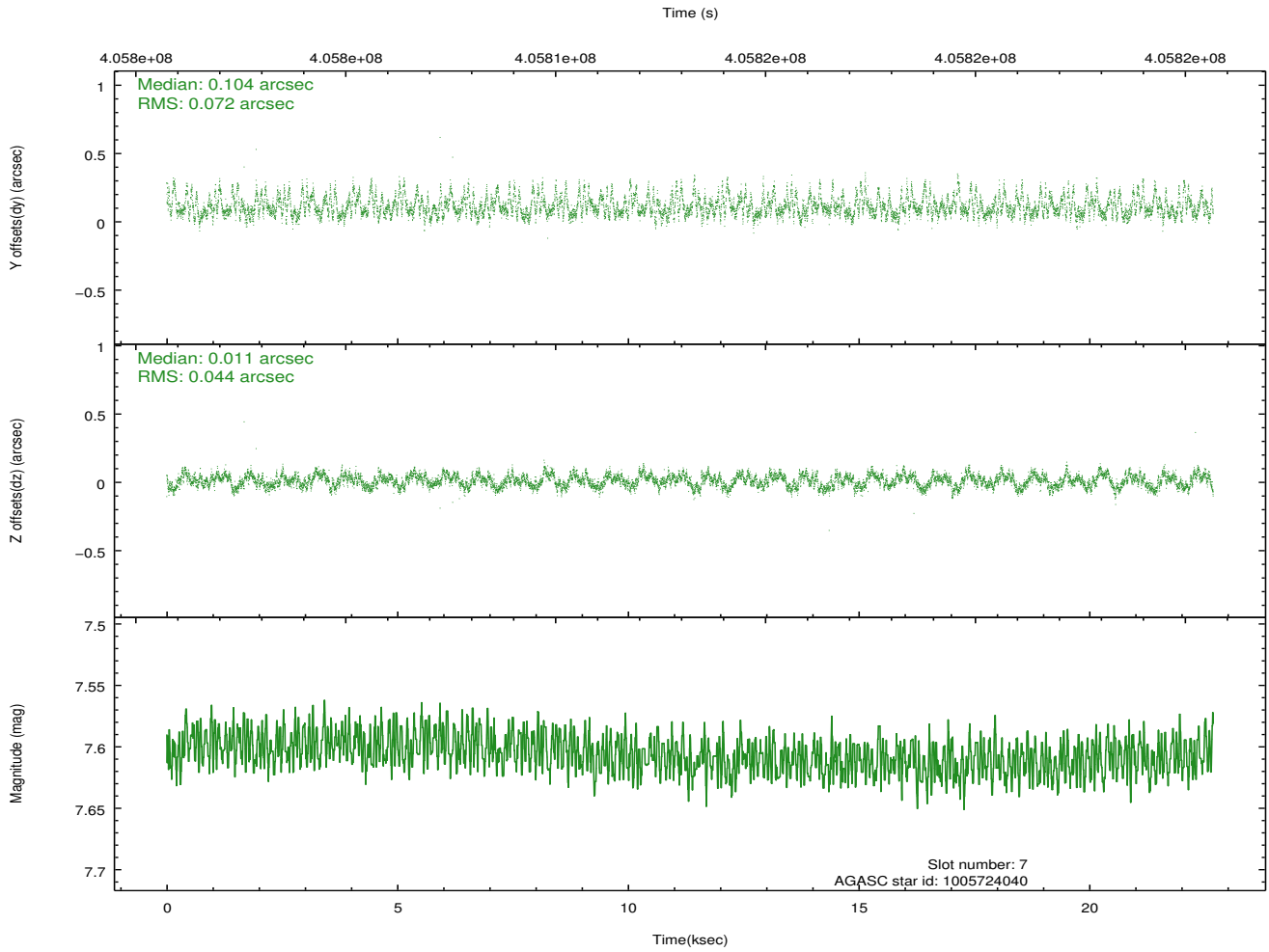
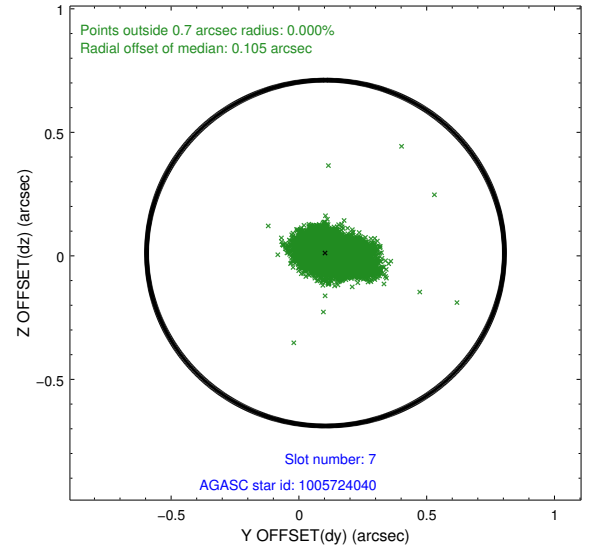
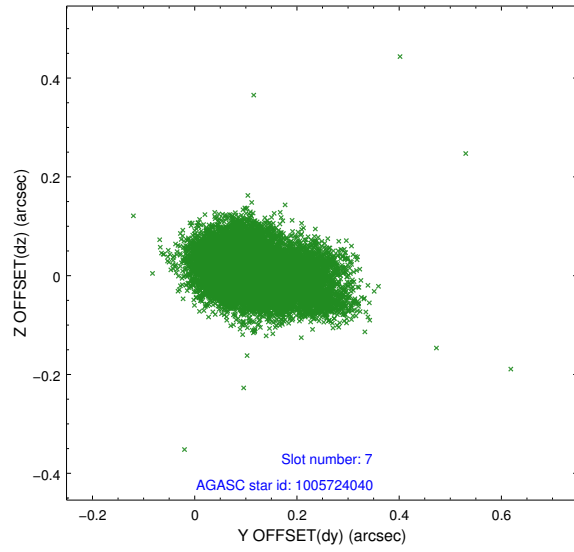
2.4.3 Slot 5



2.4.4 Slot 6

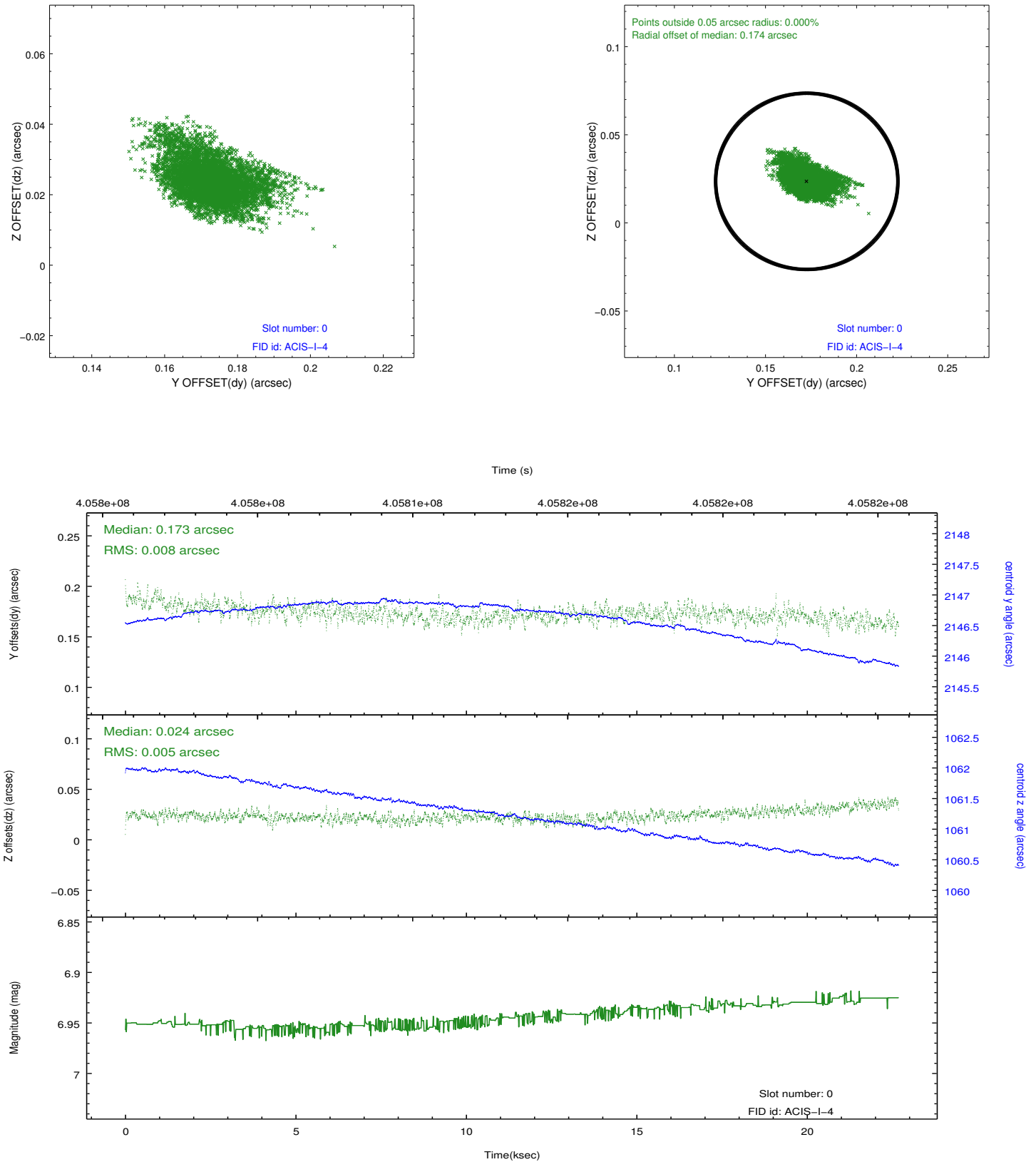


2.4.5 Slot 7

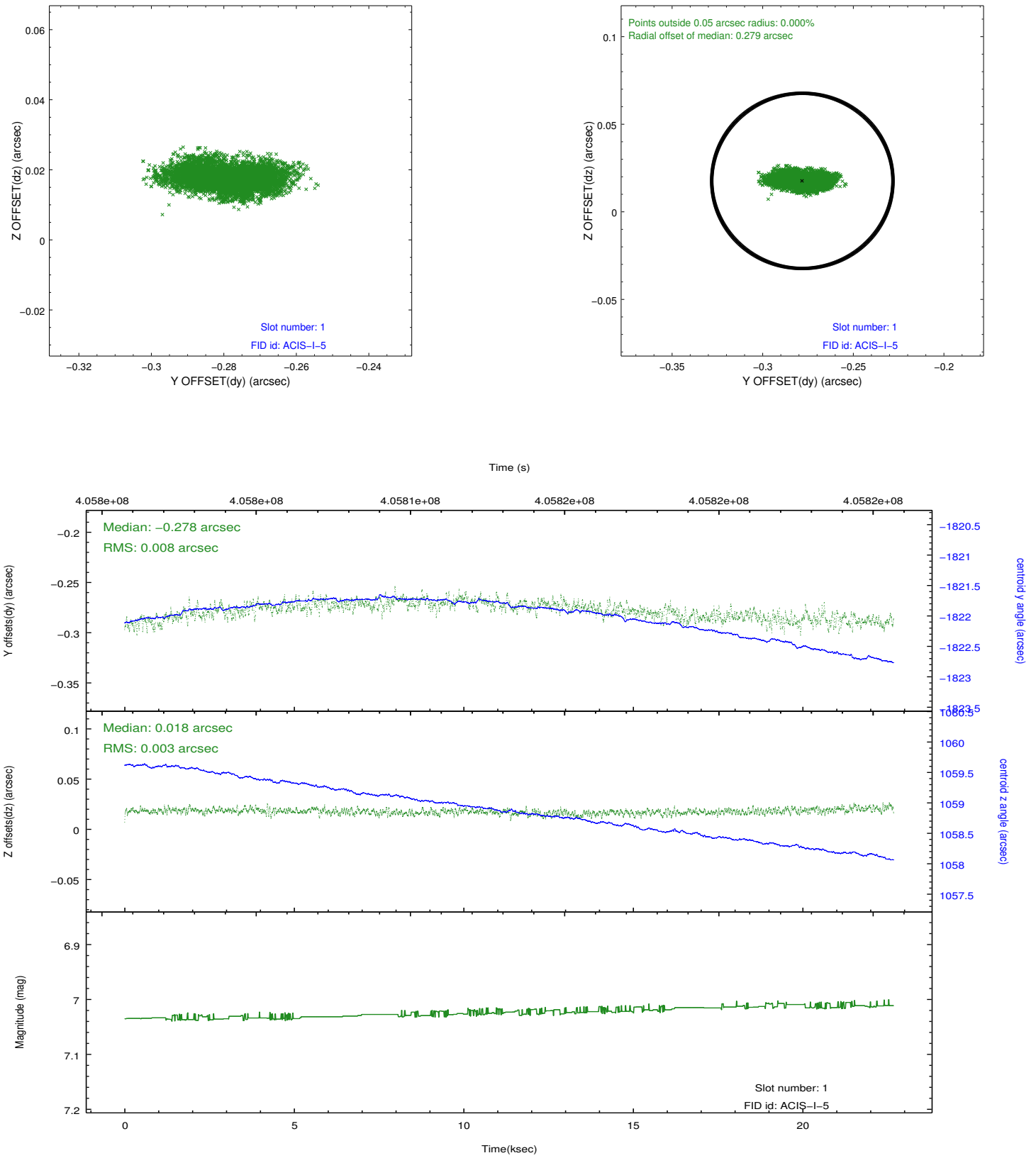


2.5 FID Slots

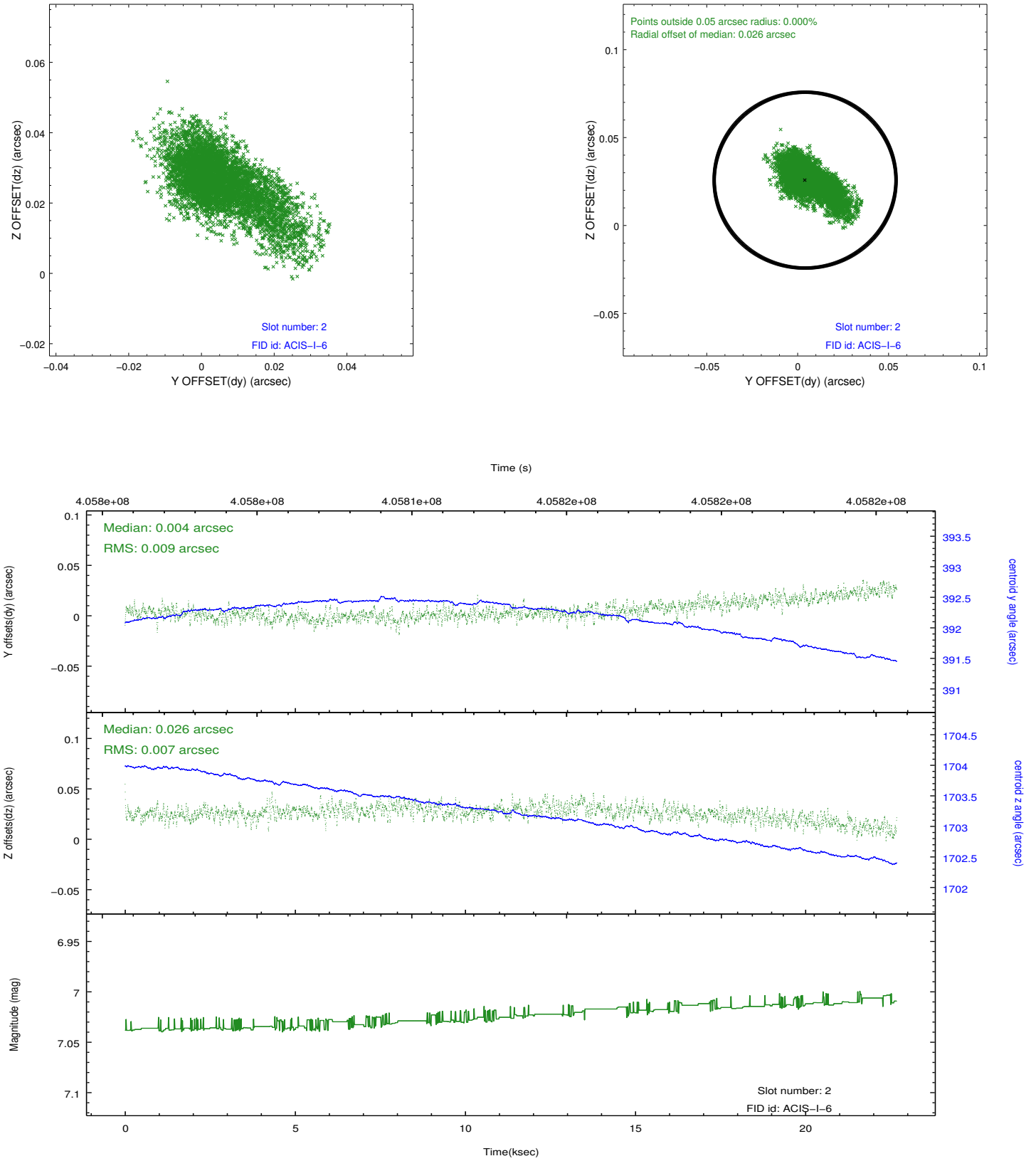
2.5.1 Slot 0



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)	2012.07.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	22

A.2 Comments

ONTIME of 16346.129593432 seconds is less than 85% of expected scheduled time of 22000 seconds. Charge time is set to the scheduled time for this observation, although the ontime is 16346 s, which is significantly less due to telemetry saturation.

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There are several known bad columns on the CCD ACIS-I2. These bad columns, which are recorded in the observation-specific bad-pixel file, lead to dark streaks near the middle of this CCD in the level 2 sky image. The data are fine.