

V&V Reference Report

L2 ASCDS Version : 8.2.1

Observation 10939 - L2 Version 2

Chandra X-Ray Center

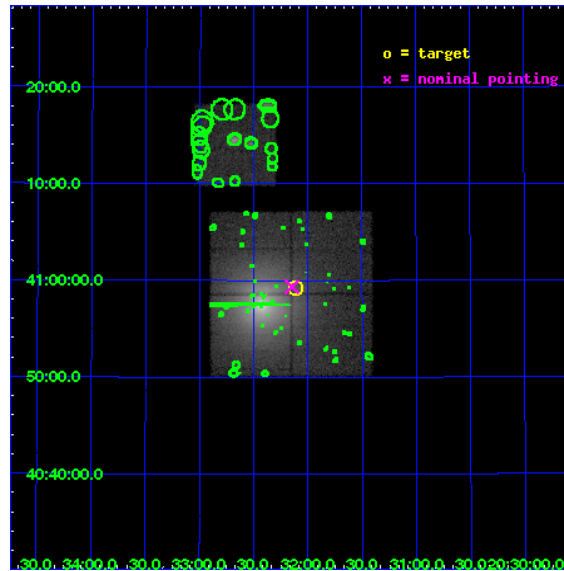
L2 Processing Date : Jan 28 2010

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1 Front

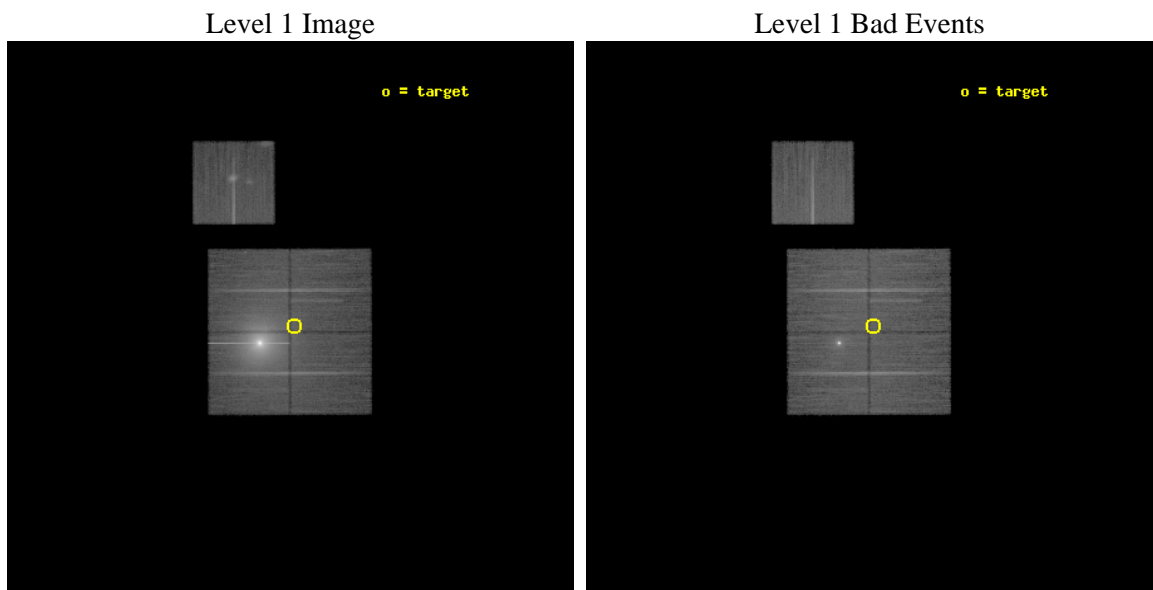
seq_num	200571	Sequence number
obs_id	10939	Observation id
title	The Chandra Cygnus OB2 Survey	Proposal title
observer	Dr. Jeremy Drake	Principal investigator
object	Cygnus OB2	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	308.026986	Observer's specified target RA
dec_targ	40.986751	Observer's specified target Dec
ra_nom	308.0372081066	Nominal RA
dec_nom	40.98913387003	Nominal Dec
roll_nom	359.84441070324	Nominal Roll
revision	2	Processing version of data
ontime	24384.559197366	Sum of GTIs [s]
livetime	24065.956979801	Livetime [s]
ontime0	24384.559097707	Sum of GTIs [s]
ontime1	24381.418137431	Sum of GTIs [s]
ontime2	24387.700187564	Sum of GTIs [s]
ontime3	24384.559197366	Sum of GTIs [s]
ontime6	24378.277425945	Sum of GTIs [s]
l2events	654900	Number of level 2 events



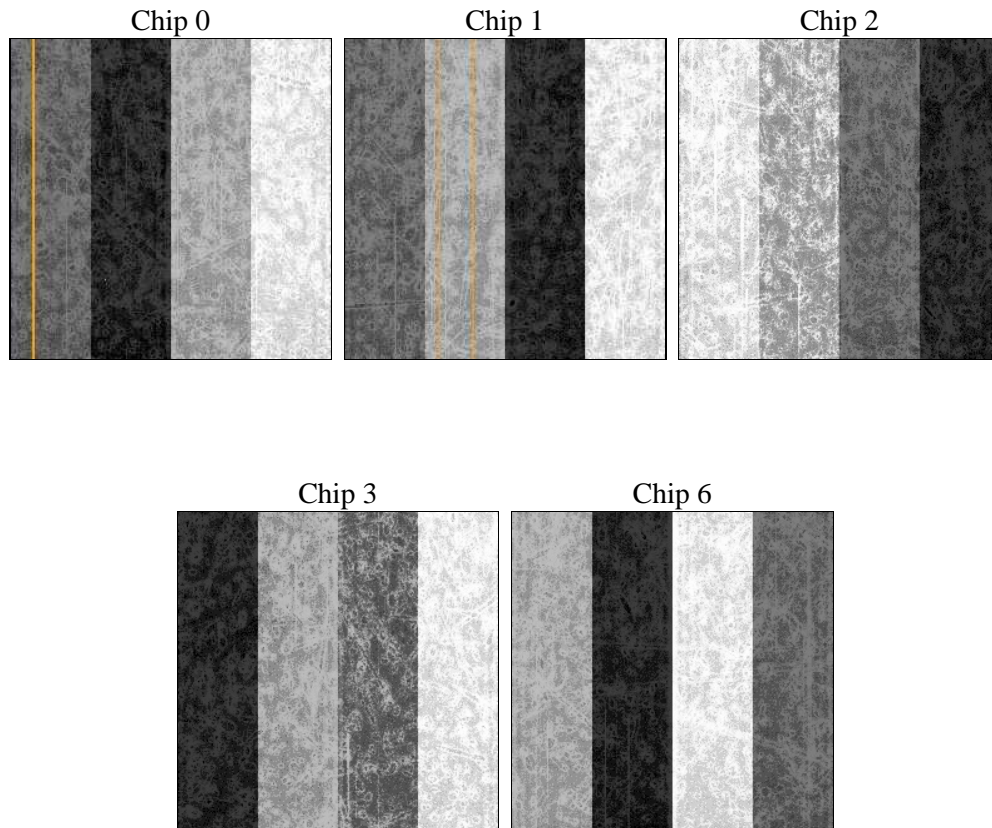
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	32989.519000	Scheduled observation exposure time
ascdsver	8.2.1	ASCDS version number	ontime	24384.559197366	Sum of GTIs [s]
caldsver	4.1.5	 	ontime0	24384.559097707	Sum of GTIs [s]
date	2010-01-27T23:36:42	Date and time of file creation	ontime1	24381.418137431	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	24387.700187564	Sum of GTIs [s]
			ontime3	24384.559197366	Sum of GTIs [s]
			ontime6	24378.277425945	Sum of GTIs [s]
			l1events	1627441	Number of level 1 events

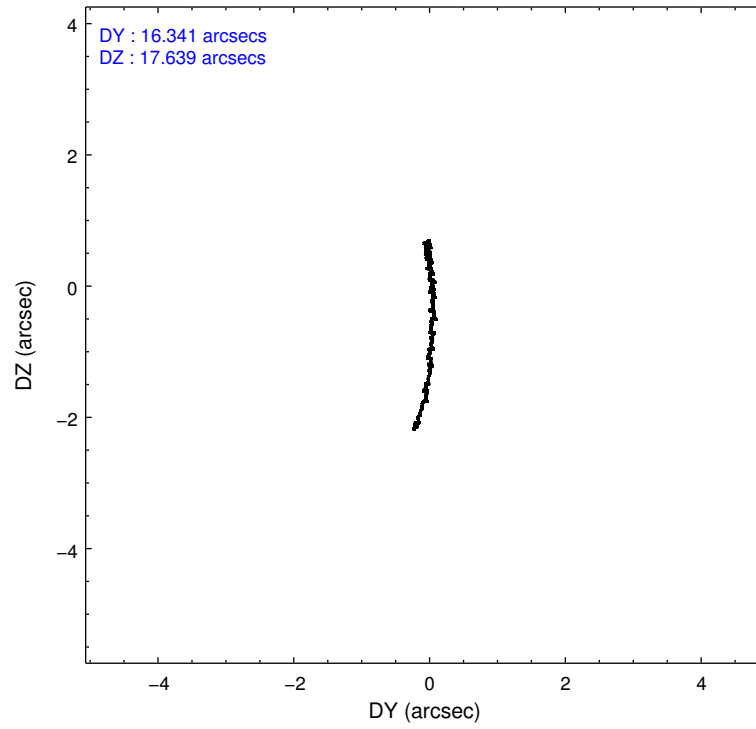
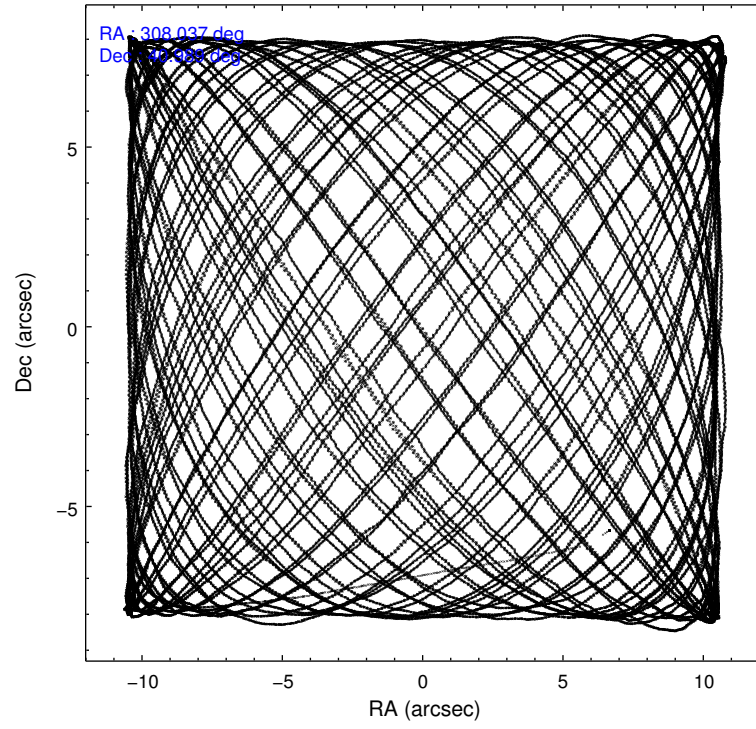
2.1.4 Events

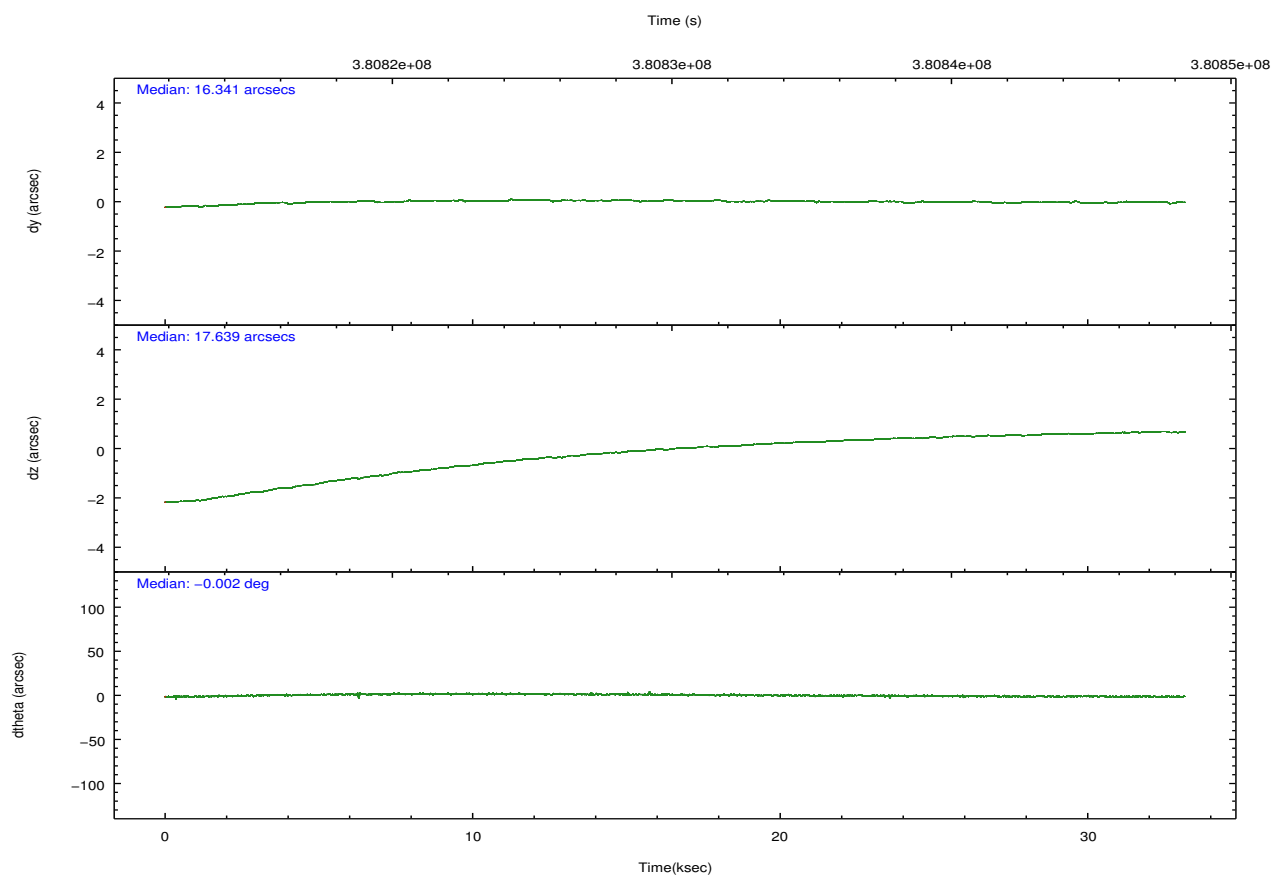
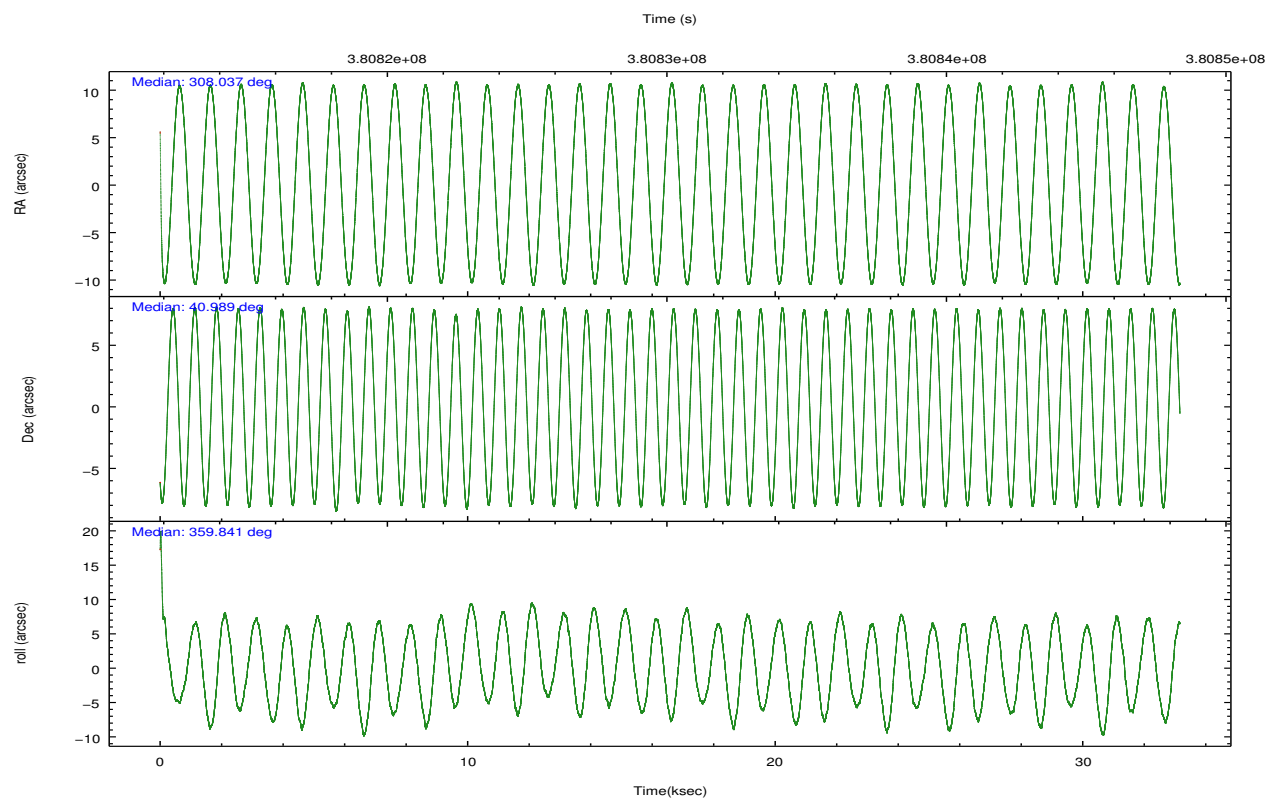
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	690017	209474	299724	212931	215295	grade 0 events	327825	24363	73789	19058	18586
rejected events	206249	165254	190979	177835	181073		47%	11%	24%	8%	8%
rejected %	29%	78%	63%	83%	84%	grade 1 events	5778	197	660	225	160
							0%	0%	0%	0%	0%
						grade 2 events	71479	7887	15683	6245	6151
							10%	3%	5%	2%	2%
						grade 3 events	24177	3351	5873	2857	2762
							3%	1%	1%	1%	1%
						grade 4 events	24668	3340	5932	2865	2655
							3%	1%	1%	1%	1%
						grade 5 events	12879	6934	6459	7094	6839
							1%	3%	2%	3%	3%
						grade 6 events	39326	5753	8216	4476	4503
							5%	2%	2%	2%	2%
						grade 7 events	183885	157649	183112	170111	173639
							26%	75%	61%	79%	80%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
Pointing RA	308.005701	308.0372081066031	CCD I2 on	Y	Y
Pointing Dec	40.975355	40.98913387002985	CCD I3 on	Y	Y
Pointing Roll	359.656380	359.8444107032375	CCD S0 on	N	N
SIM focus pos (mm)	-0.782348	-0.7809083437167272	CCD S1 on	N	N
SIM defocus (mm)	0	0.001439871863259334	CCD S2 on	O1	Y
SIM translation stage pos (mm)	-233.592463	-233.5874344608287	CCD S3 on	N	N
SIM translation stage offset (mm)	0	-0.005018542100998502	CCD S4 on	N	N
Observation start time	380813708.184000	380812546.48153	CCD S5 on	N	N
Observation start date	2010-01-25T13:34:02	2010-01-25T13:15:46	Number of optional ACIS chips dropped	0	0
Observation end time	380846697.184000	380846939.33327	On-chip summing requested	N	N
Observation end date	2010-01-25T22:43:51	2010-01-25T22:48:59	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			Primary exposure time	0.000000	3.1

2.3 Aspect



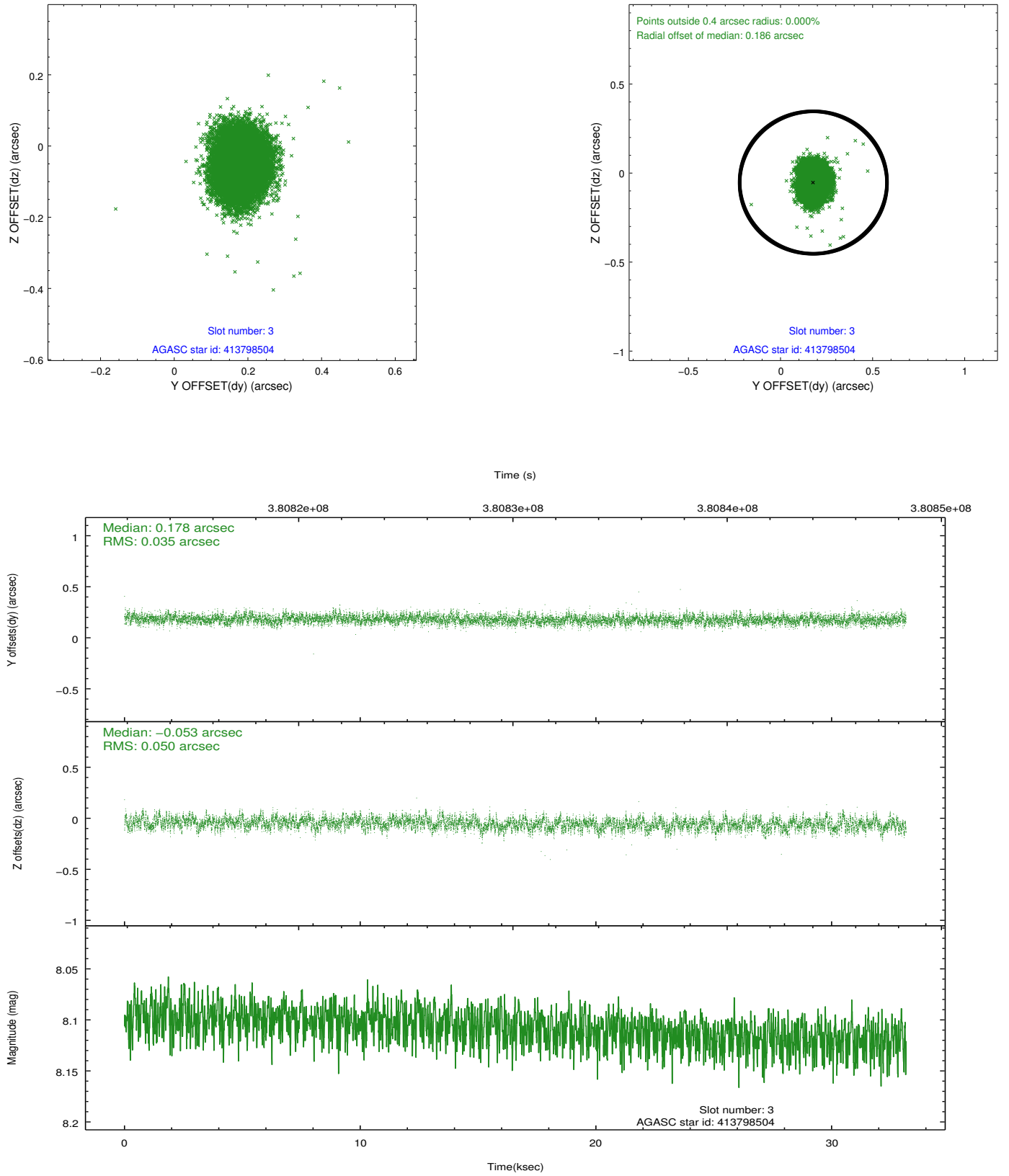


Slot Statistics

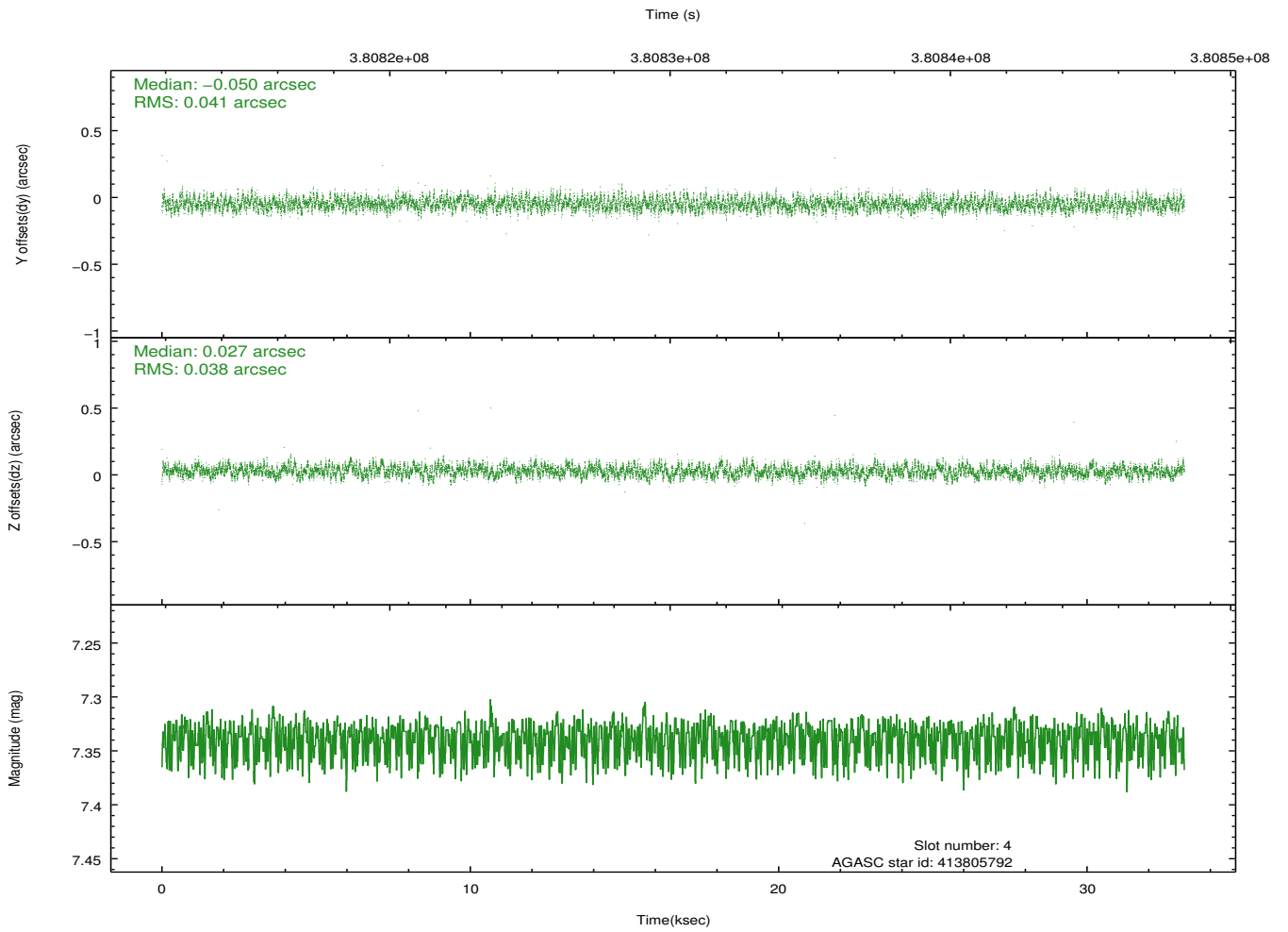
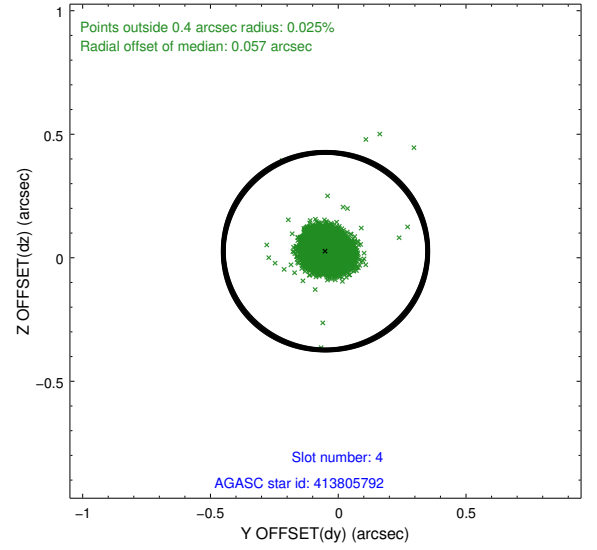
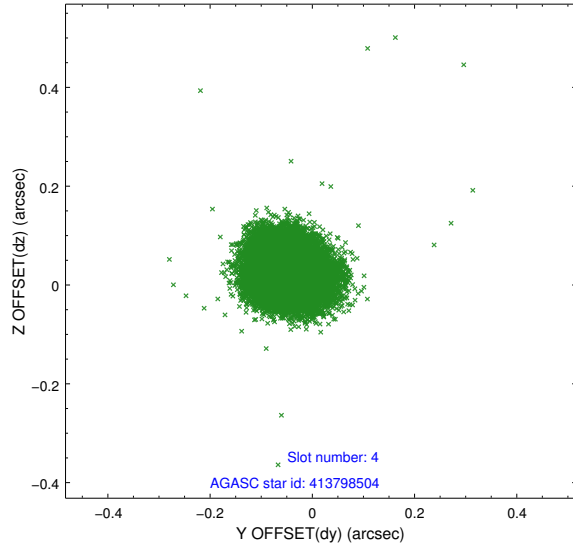
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.03	8088	0.044	-0.001	0.018	0.026	0.000000	0.000000	923.13	-841.02
1	FID	ACIS-I-5	7.03	8087	-0.205	0.053	0.011	0.024	0.000000	0.000000	-1825.19	1056.51
2	FID	ACIS-I-6	7.05	8088	0.072	0.016	0.017	0.032	0.000000	0.000000	388.66	1701.03
3	GUIDE	413798504	8.11	16166	0.178	-0.053	0.065	0.106	307.761525	40.426565	-656.78	-1978.66
4	GUIDE	413805792	7.34	16172	-0.050	0.027	0.060	0.093	307.778748	40.858024	-615.14	-424.89
5	GUIDE	414326136	7.35	16172	-0.181	-0.165	0.075	0.112	308.256176	41.473642	664.95	1799.15
6	GUIDE	414328464	9.18	16124	-0.026	-0.039	0.075	0.123	308.778827	41.333671	2082.24	1312.08
7	GUIDE	413674208	8.34	16170	0.073	0.229	0.065	0.109	307.139504	40.901877	-2354.85	-266.70

2.4 Star Slots

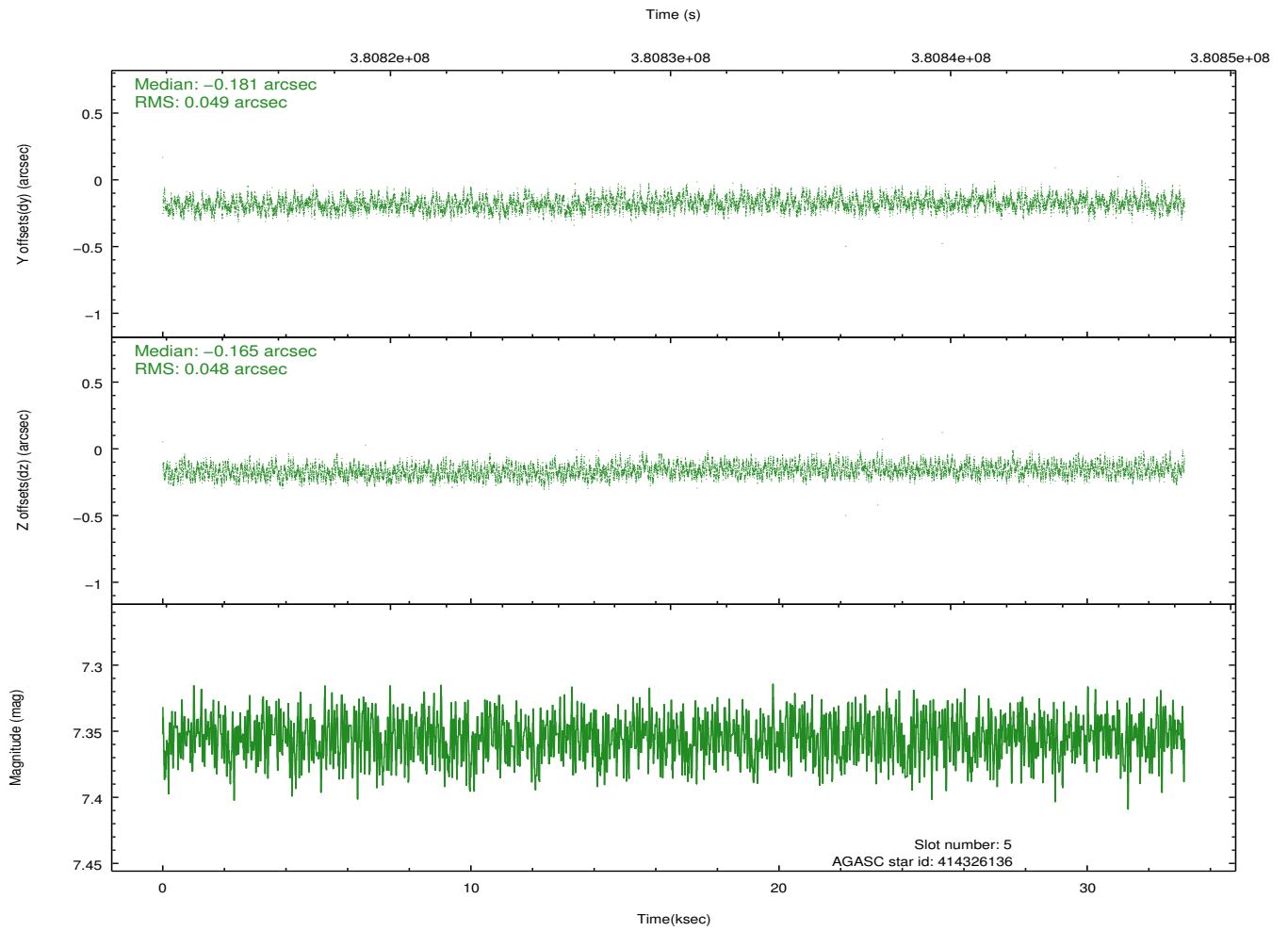
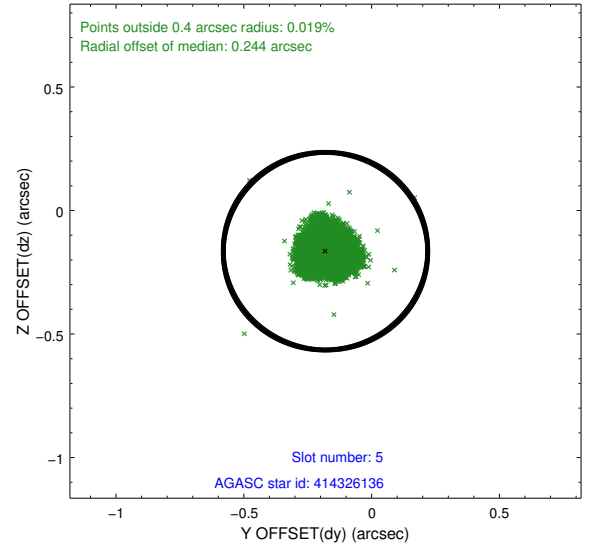
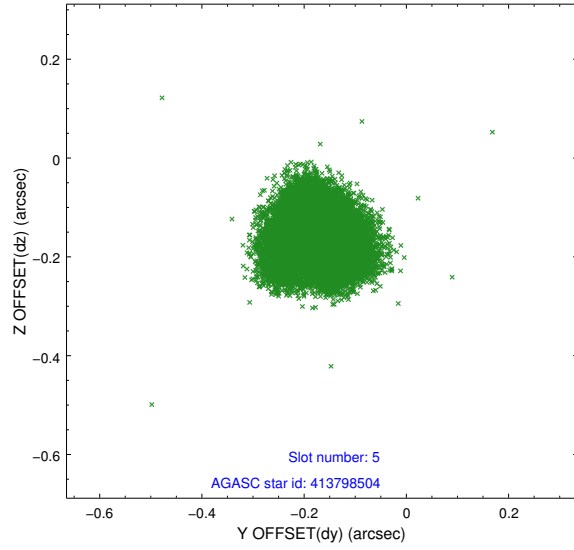
2.4.1 Slot 3



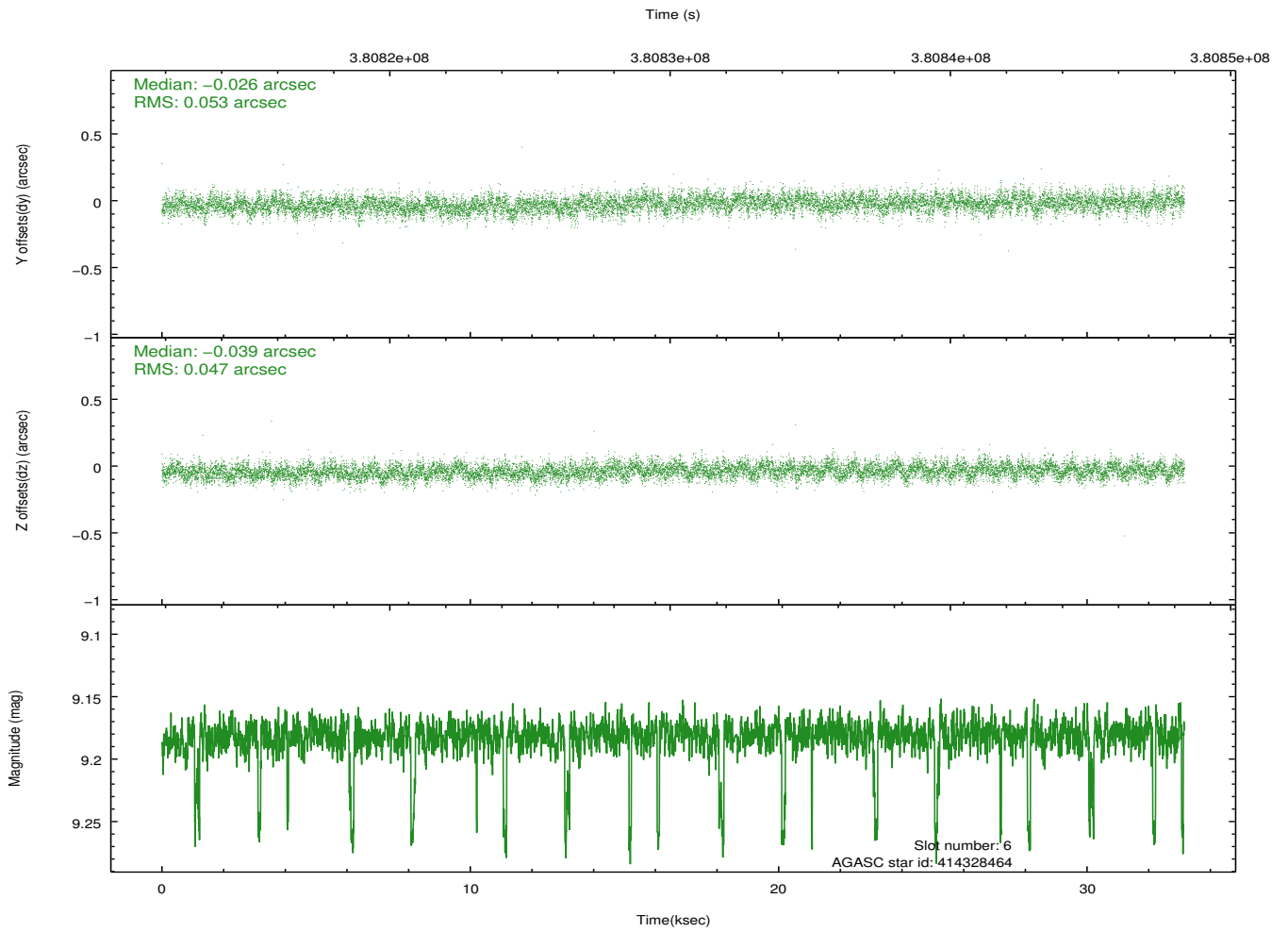
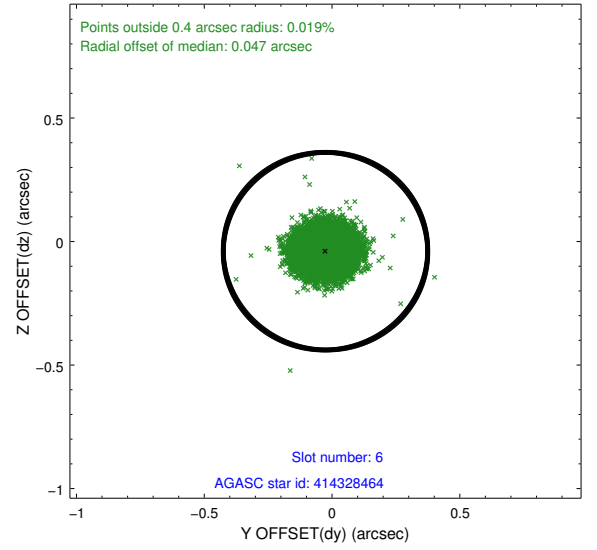
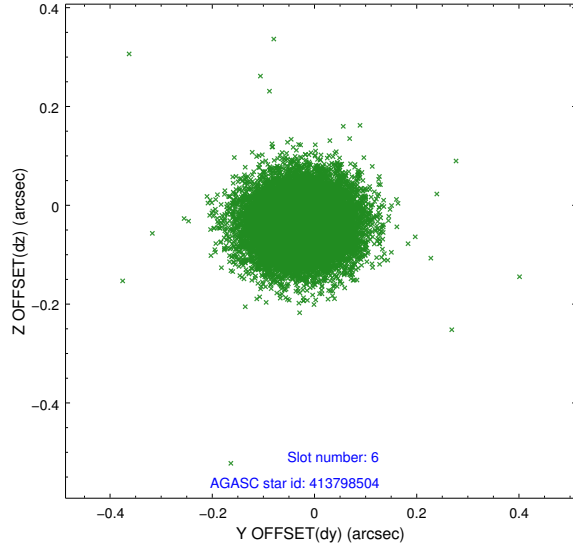
2.4.2 Slot 4



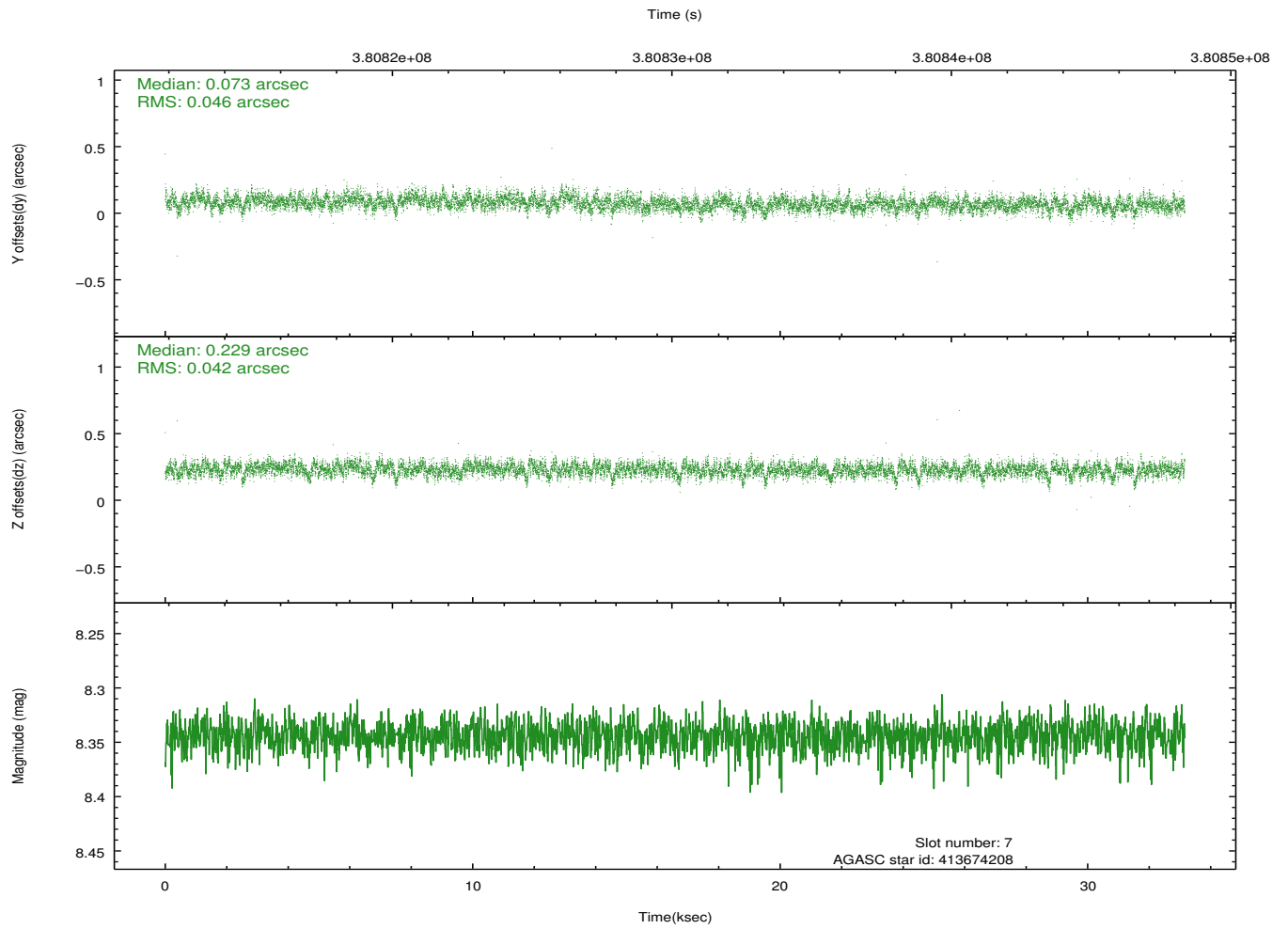
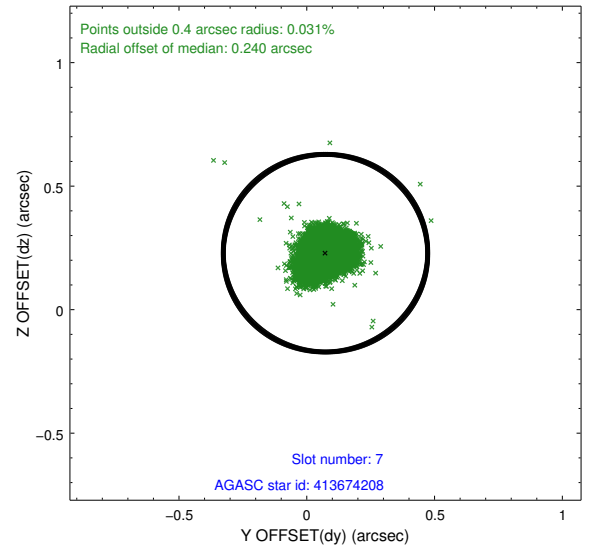
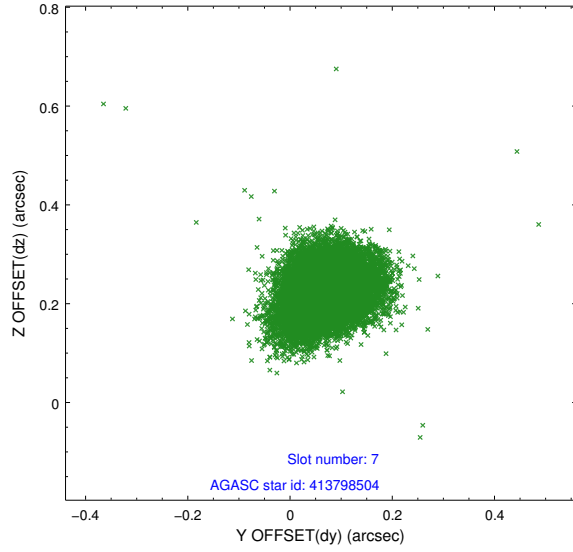
2.4.3 Slot 5



2.4.4 Slot 6

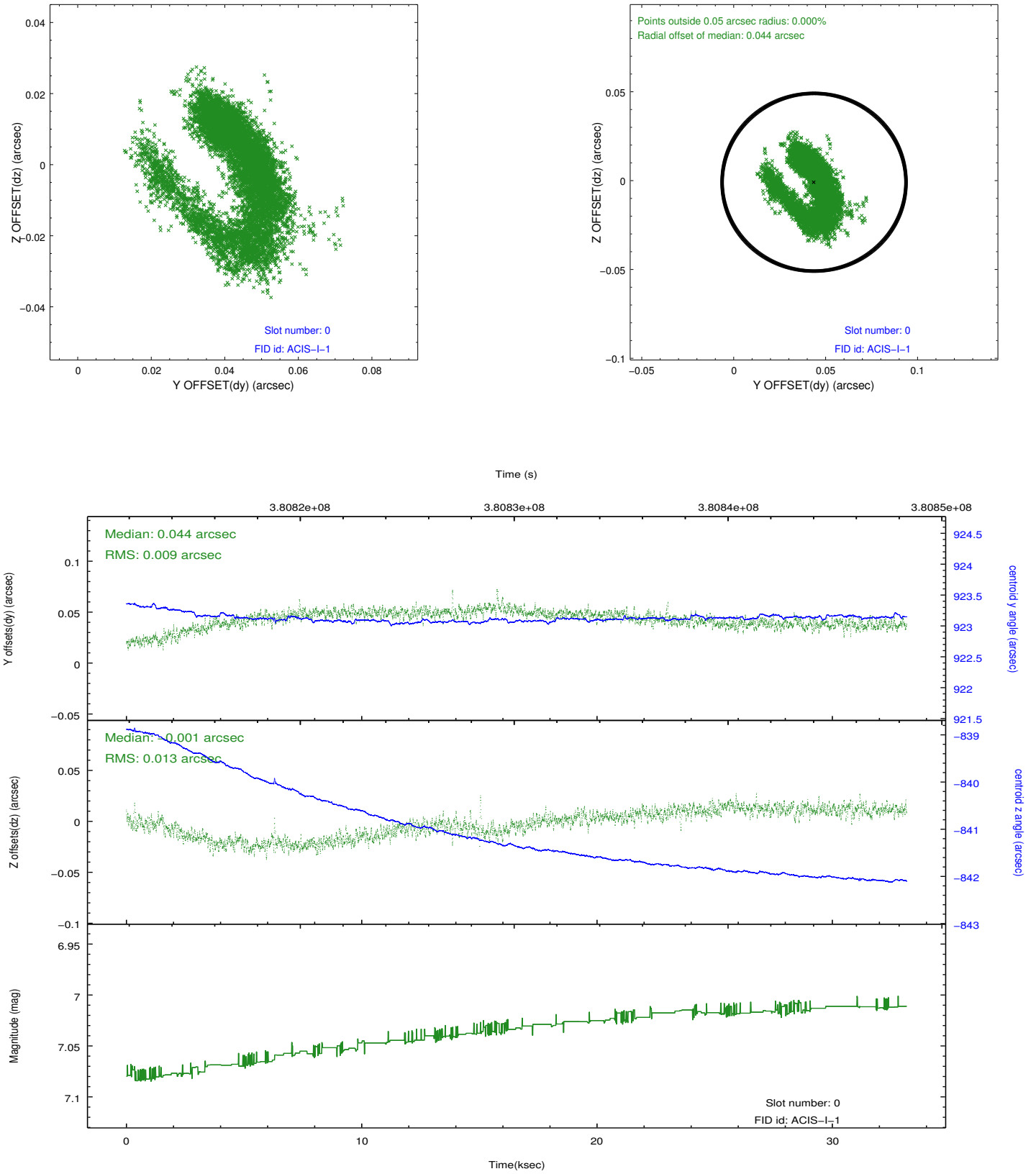


2.4.5 Slot 7

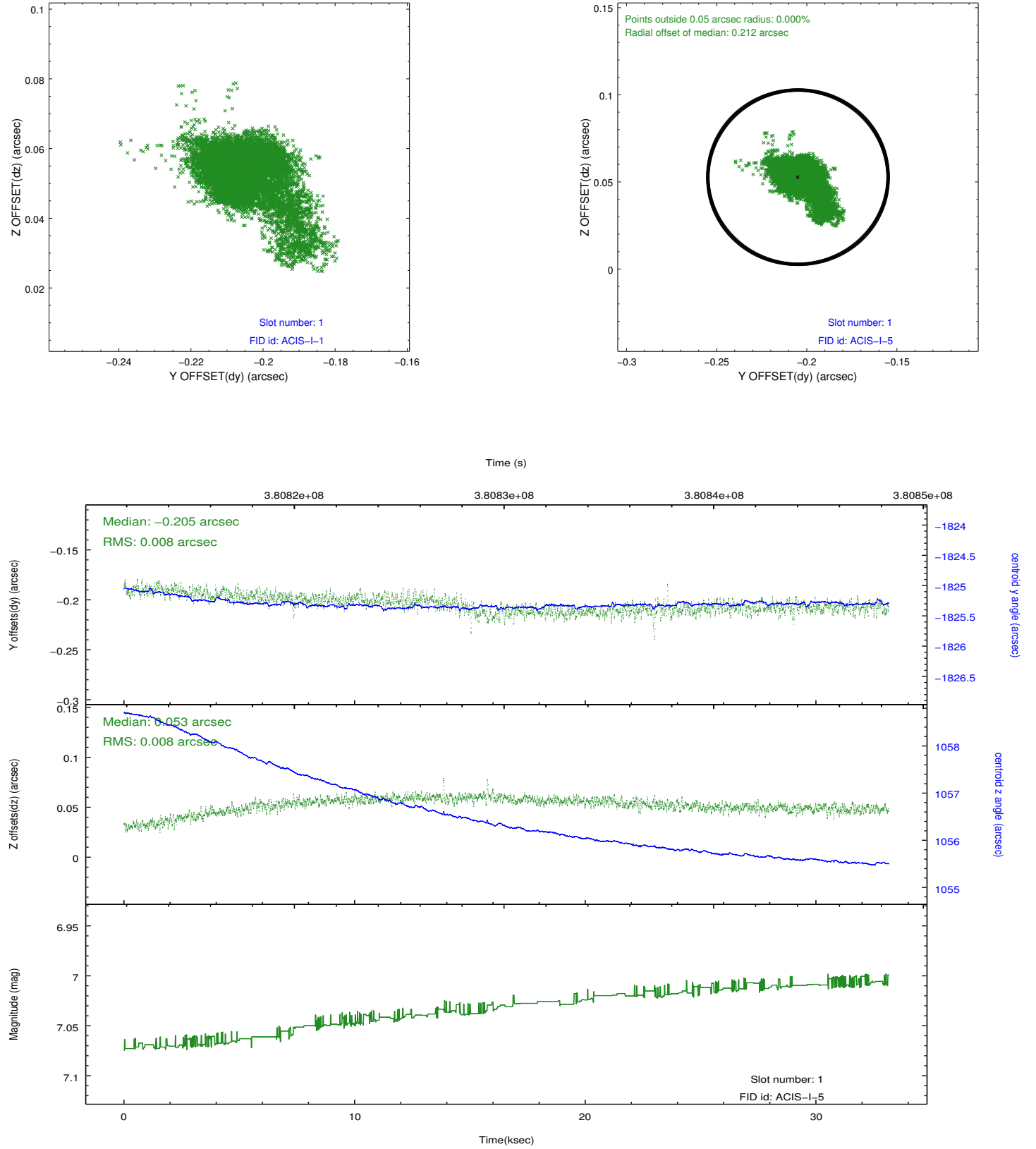


2.5 FID Slots

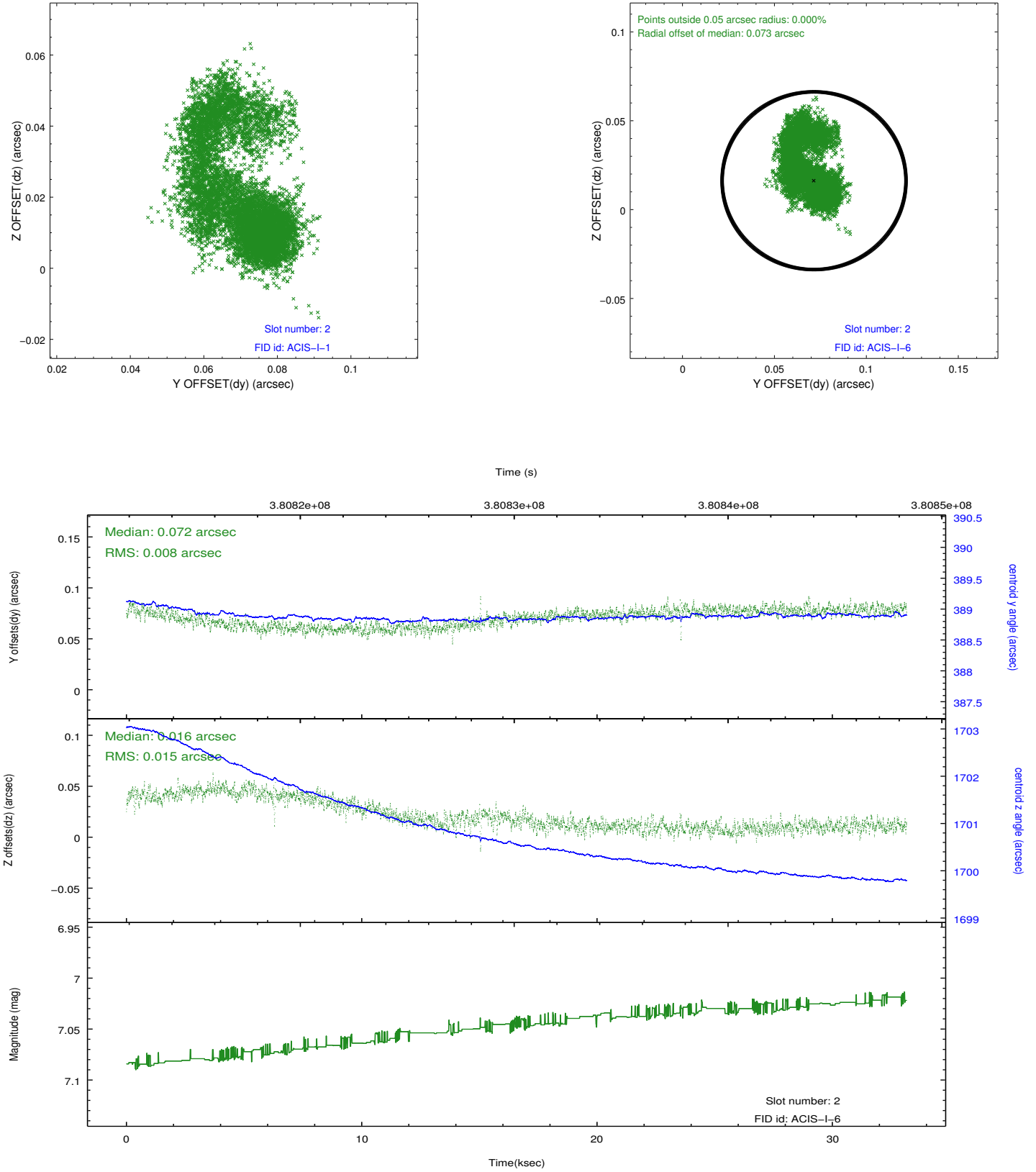
2.5.1 Slot 0



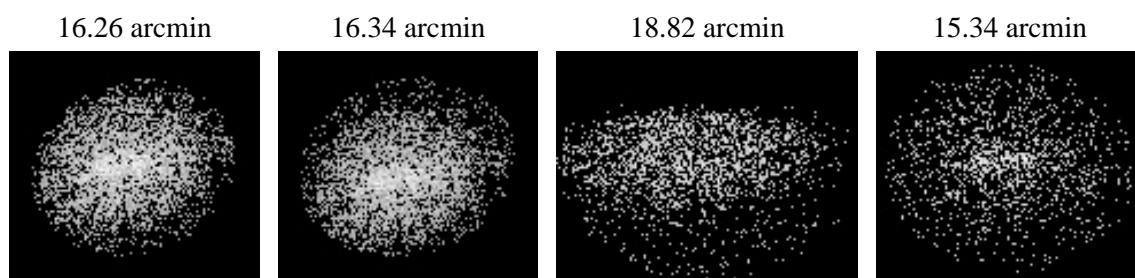
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.01.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.384559197366

A.2 Comments

Before this observation began, ACIS had a software reboot. This observation was then performed using the original ACIS flight s/w version. The data are good. The only problem was that the housekeeping files did not contain the focal plane temperature in a useful format. Manual intervention resolved this issue. The observation was terminated a little early to allow the ACIS team to correct the flight software version in realtime. The focal plane temperature is not reliable.