

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 13647 - L2 Version 2
Chandra X-Ray Center

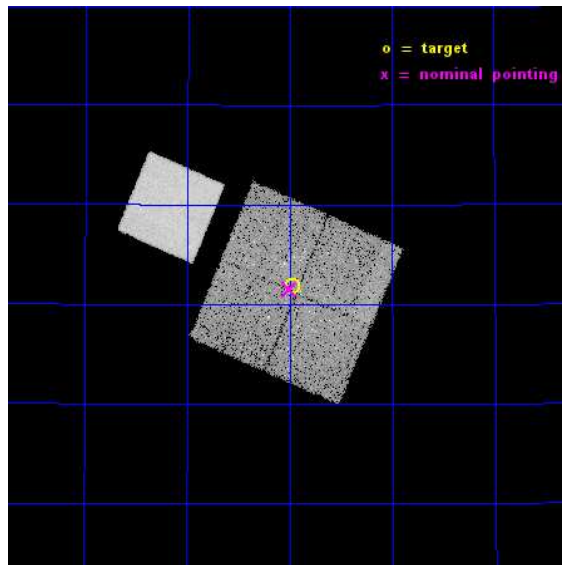
L2 Processing Date : Nov 29 2014

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1 Front

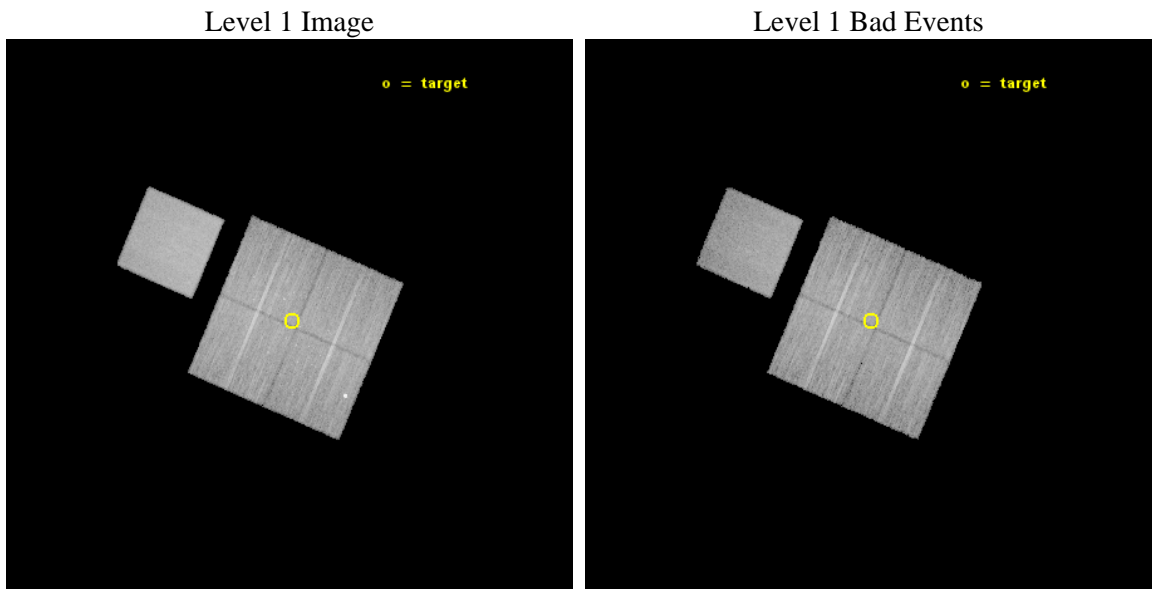
seq_num	200801	Sequence number
obs_id	13647	Observation id
title	Star formation in the NGC7000/IC5070 complex	Proposal title
observer	Dr. Francesco Damiani	Principal investigator
object	NGC7000 Pointing 1	Source name
dtycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	312.743333	Observer's specified target RA [deg]
dec_targ	44.364778	Observer's specified target Dec [deg]
ra_nom	312.75067956915	Nominal RA [deg]
dec_nom	44.358627229982	Nominal Dec [deg]
roll_nom	293.20355177375	Nominal Roll [deg]
revision	2	Processing version of data
ontime	23067.100177407	Sum of GTIs [s]
liveltime	22765.711531837	Livetime [s]
ontime0	23067.100177407	Sum of GTIs [s]
ontime1	23067.100177407	Sum of GTIs [s]
ontime2	23067.100177407	Sum of GTIs [s]
ontime3	23067.100177407	Sum of GTIs [s]
ontime7	23067.100177407	Sum of GTIs [s]
l2events	122452	Number of level 2 events



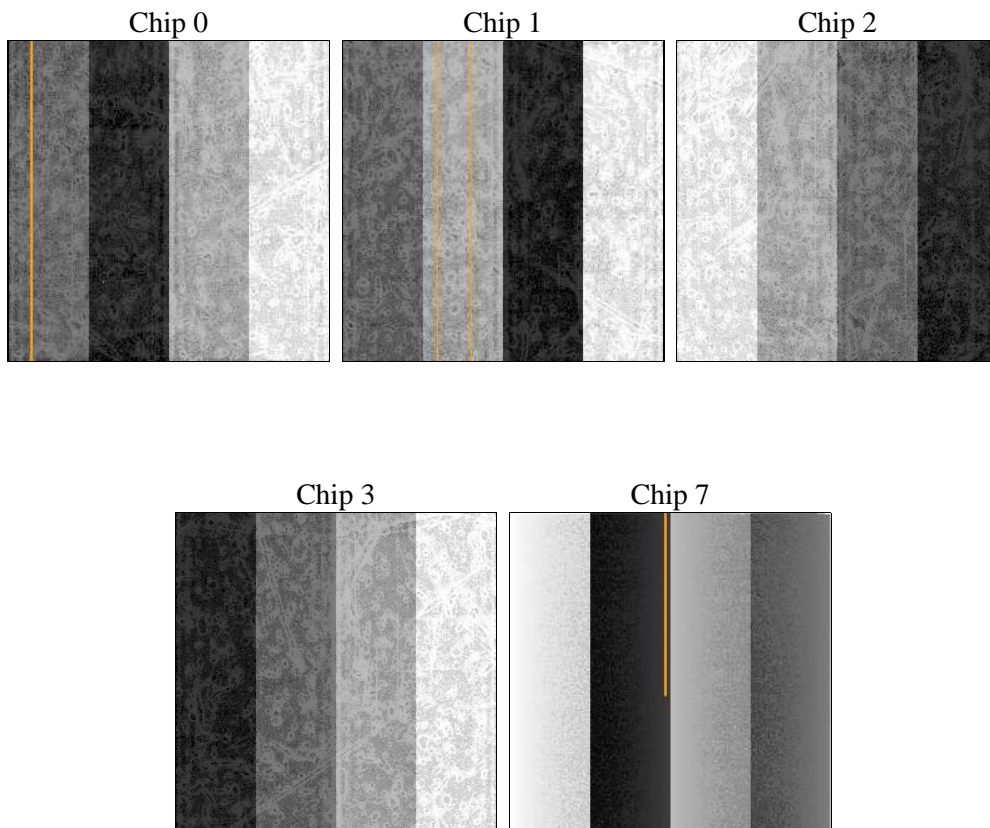
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	23067.100177407	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	23067.100177407	Sum of GTIs [s]
date	2014-11-29T14:36:15	Date and time of file creation	ontime1	23067.100177407	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	23067.100177407	Sum of GTIs [s]
			ontime3	23067.100177407	Sum of GTIs [s]
			ontime7	23067.100177407	Sum of GTIs [s]
			l1events	635669	Number of level 1 events

2.1.4 Events

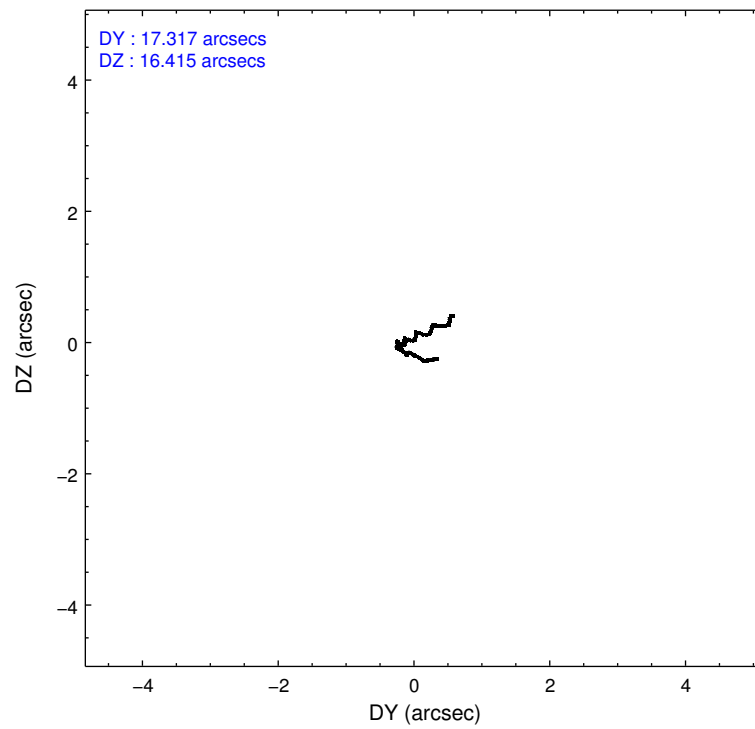
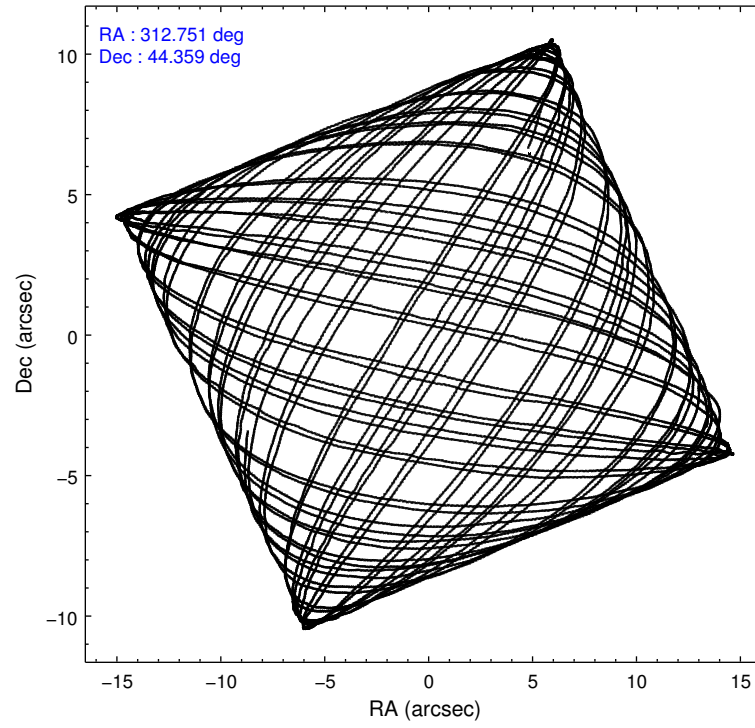
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	113800	114393	122294	119674	165508
rejected events	95420	98004	107539	105183	92717
rejected %	83%	85%	87%	87%	56%

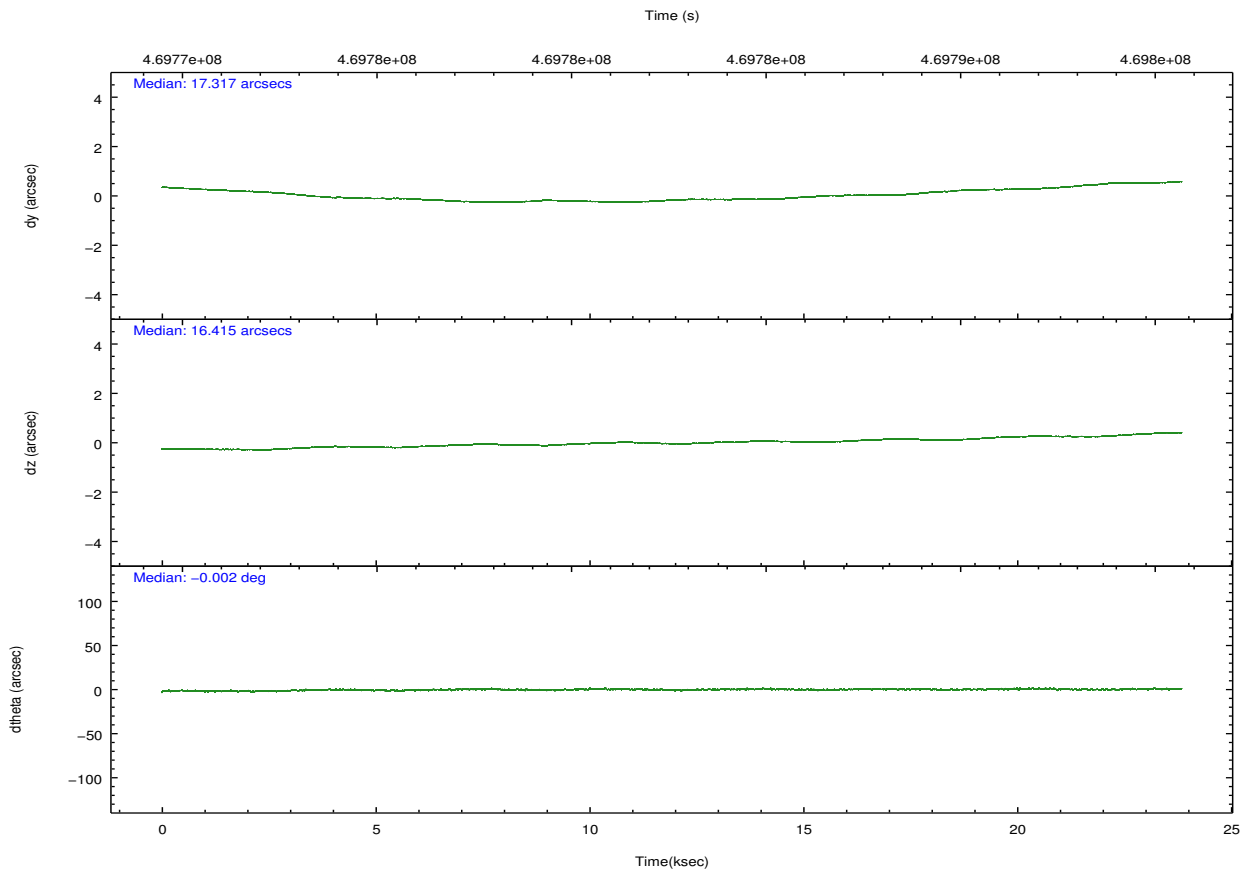
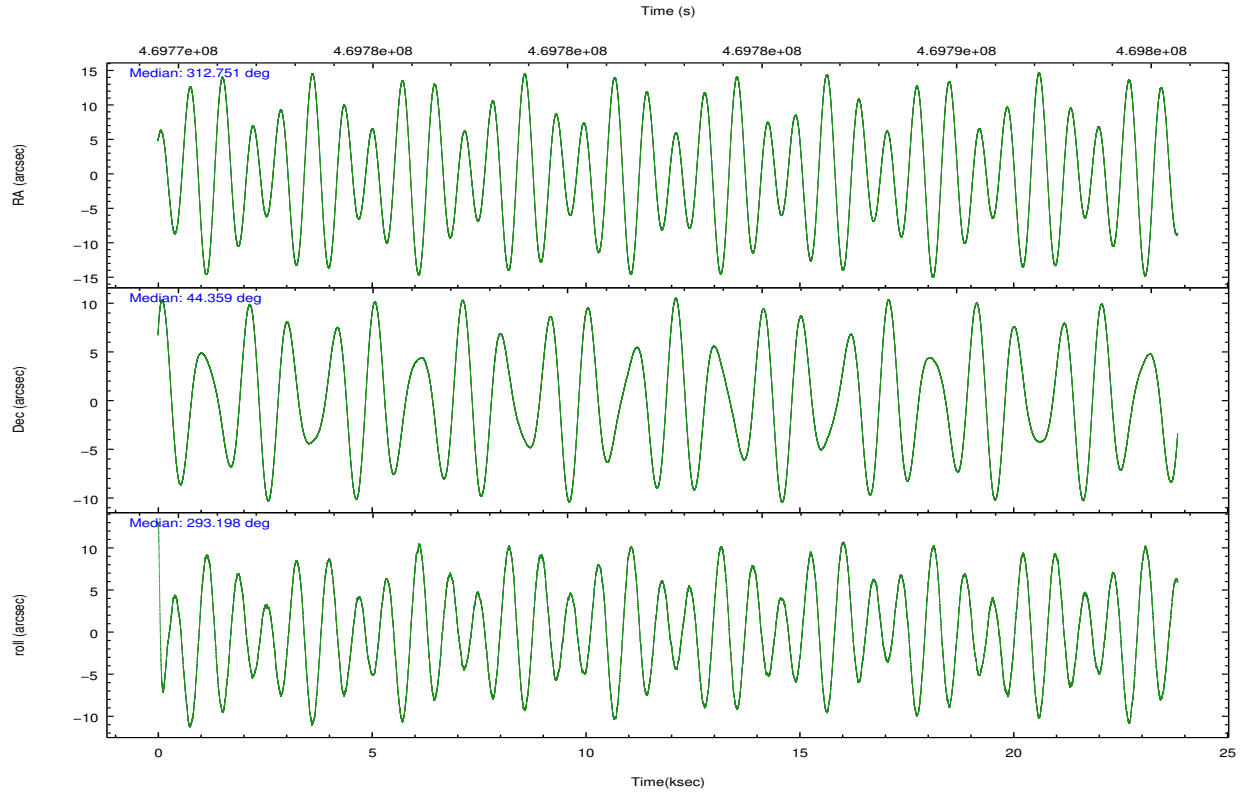
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	5846	5879	5495	5524	6605
	5%	5%	4%	4%	3%
grade 1 events	71	59	78	65	177
	0%	0%	0%	0%	0%
grade 2 events	6526	4000	3487	3107	15073
	5%	3%	2%	2%	9%
grade 3 events	1514	1500	1456	1513	6212
	1%	1%	1%	1%	3%
grade 4 events	1478	1512	1481	1423	6067
	1%	1%	1%	1%	3%
grade 5 events	5623	5813	5374	6157	17005
	4%	5%	4%	5%	10%
grade 6 events	3022	3506	2838	2927	38855
	2%	3%	2%	2%	23%
grade 7 events	89720	92124	102085	98958	75514
	78%	80%	83%	82%	45%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01237	ACIS-01237	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	312.719774	312.750679569146	CCD I2 on	Y	Y
[deg] Pointing Dec	44.375003	44.35862722998164	CCD I3 on	Y	Y
[deg] Pointing Roll	293.016474	293.2035517737533	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	N	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	469771490.184000	469769834.89662	CCD S5 on	N	N
Observation start date	2012-11-20T04:03:43	2012-11-20T03:37:14	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	469794490.184000	469795491.67299	On-chip summing requested	N	N
Observation end date	2012-11-20T10:27:03	2012-11-20T10:44:51	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





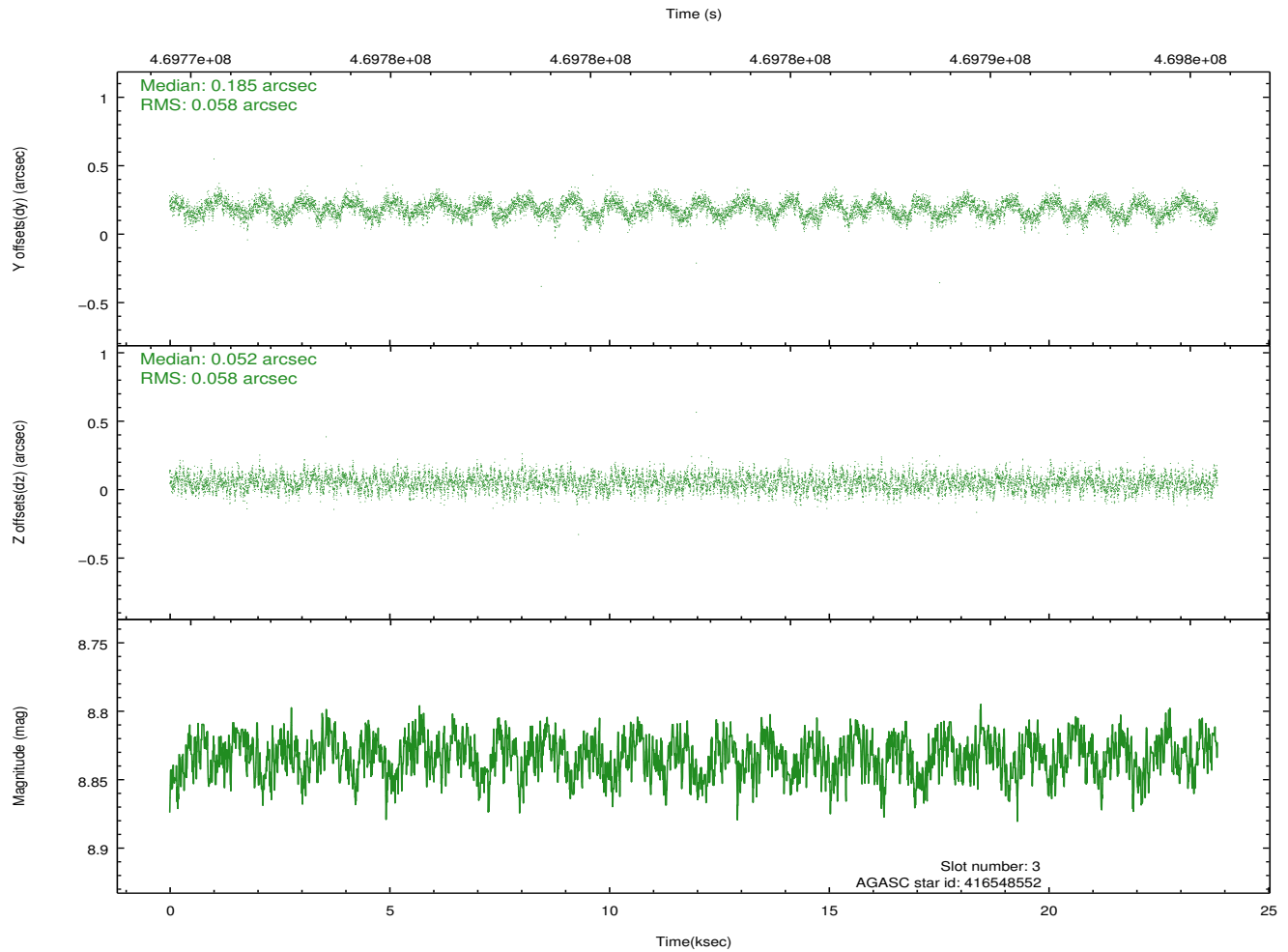
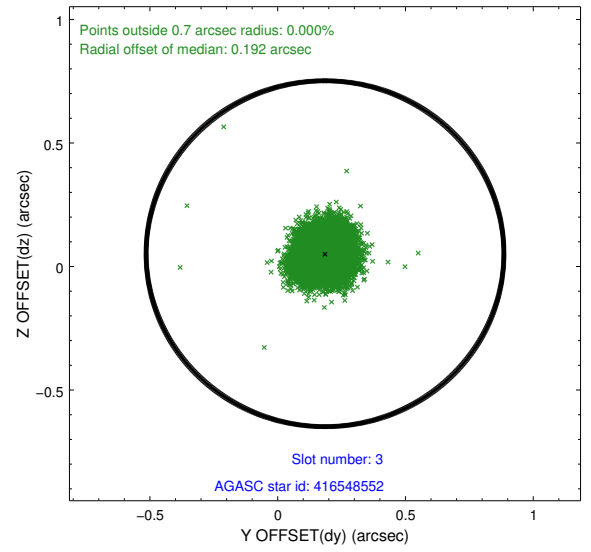
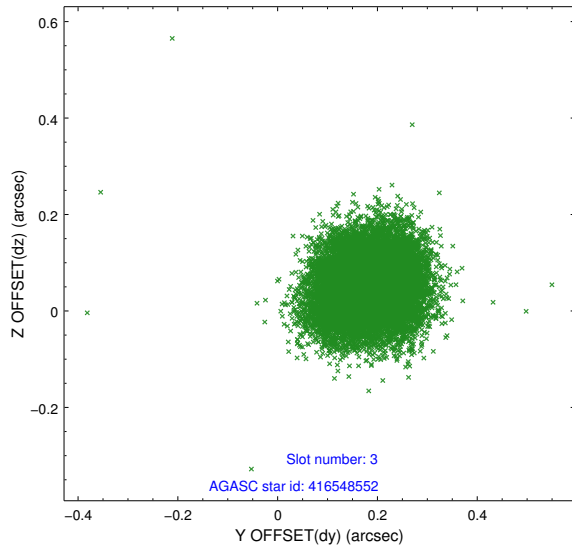
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.13	5815	0.064	-0.034	0.008	0.014	0.000000	0.000000	922.10	-840.09
1	FID		ACIS-I-5	7.12	5816	-0.249	0.056	0.009	0.018	0.000000	0.000000	-1826.25	1057.42
2	FID		ACIS-I-6	7.13	5816	0.093	0.048	0.008	0.013	0.000000	0.000000	387.53	1702.07
3	GUIDE	used	416548552	8.83	11631	0.185	0.052	0.087	0.136	312.162429	44.313259	-360.66	-1405.86
4	GUIDE	used	416548688	8.40	11621	-0.022	0.090	0.063	0.101	312.067937	44.076630	323.75	-1968.88
5	GUIDE	used	416680816	7.22	11631	-0.066	0.154	0.072	0.111	313.473557	44.386409	712.41	1804.65
6	GUIDE	used	416689360	7.95	11630	-0.018	-0.300	0.058	0.092	313.138741	43.952709	1821.64	406.31
7	GUIDE	used	468634672	8.47	11627	-0.074	0.002	0.065	0.108	312.834449	45.045859	-2108.64	1212.88

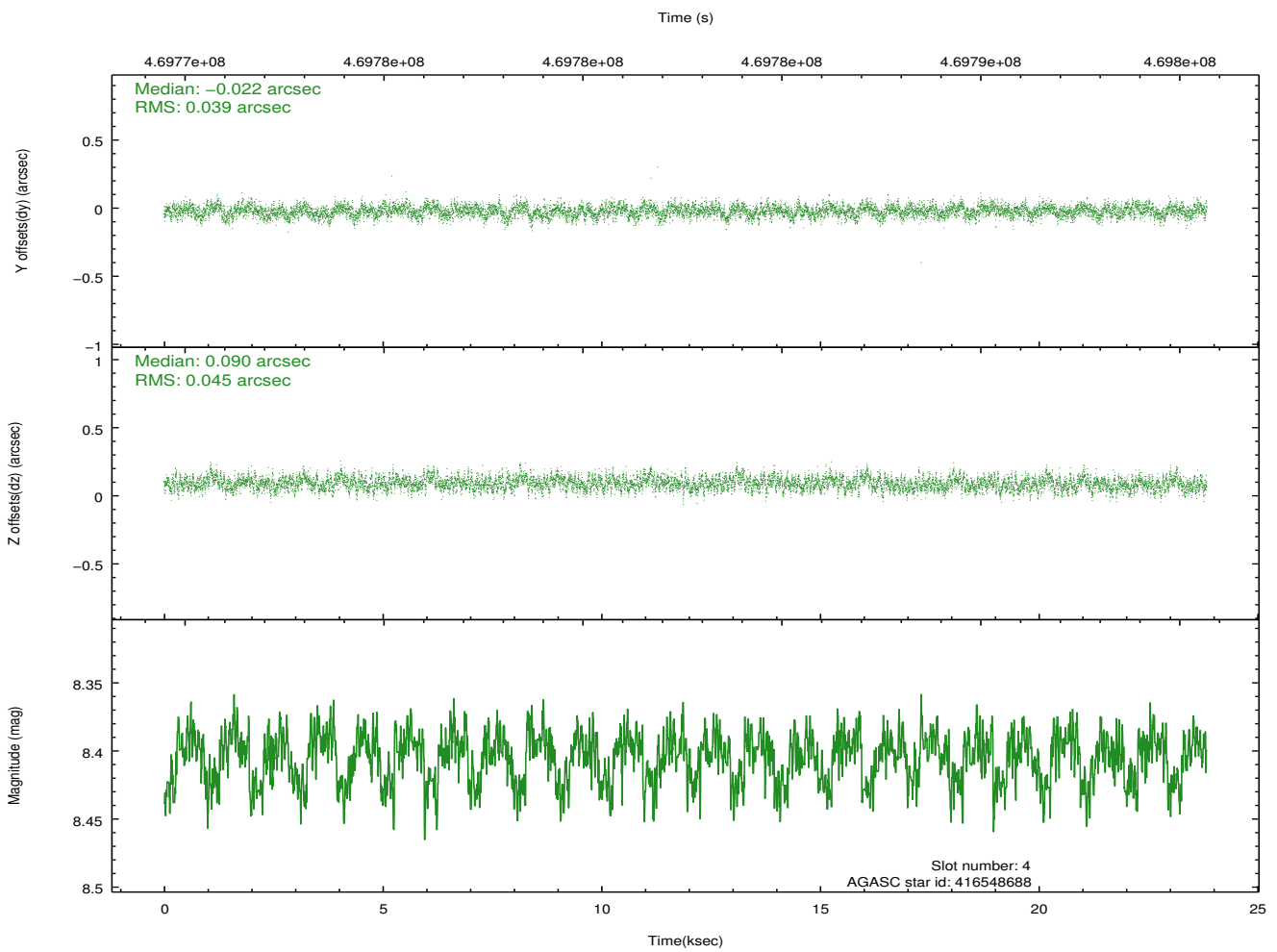
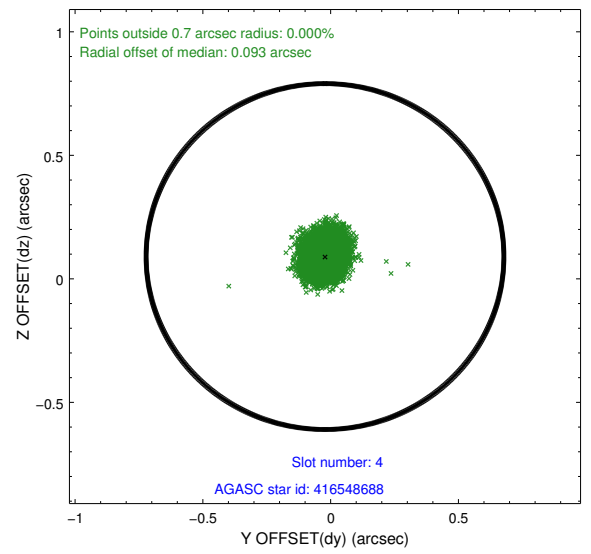
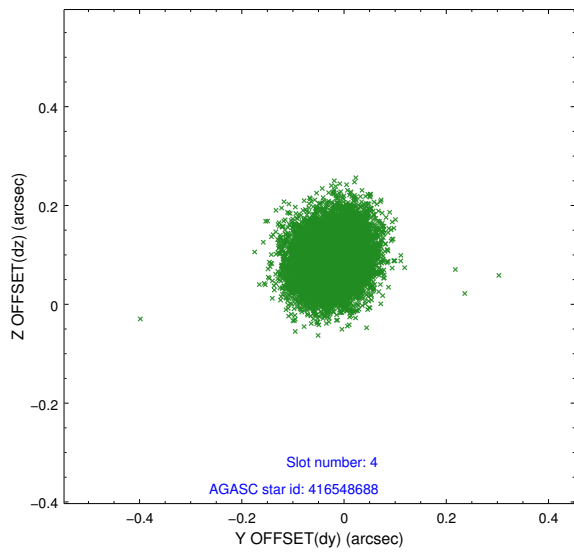
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2.4 Star Slots

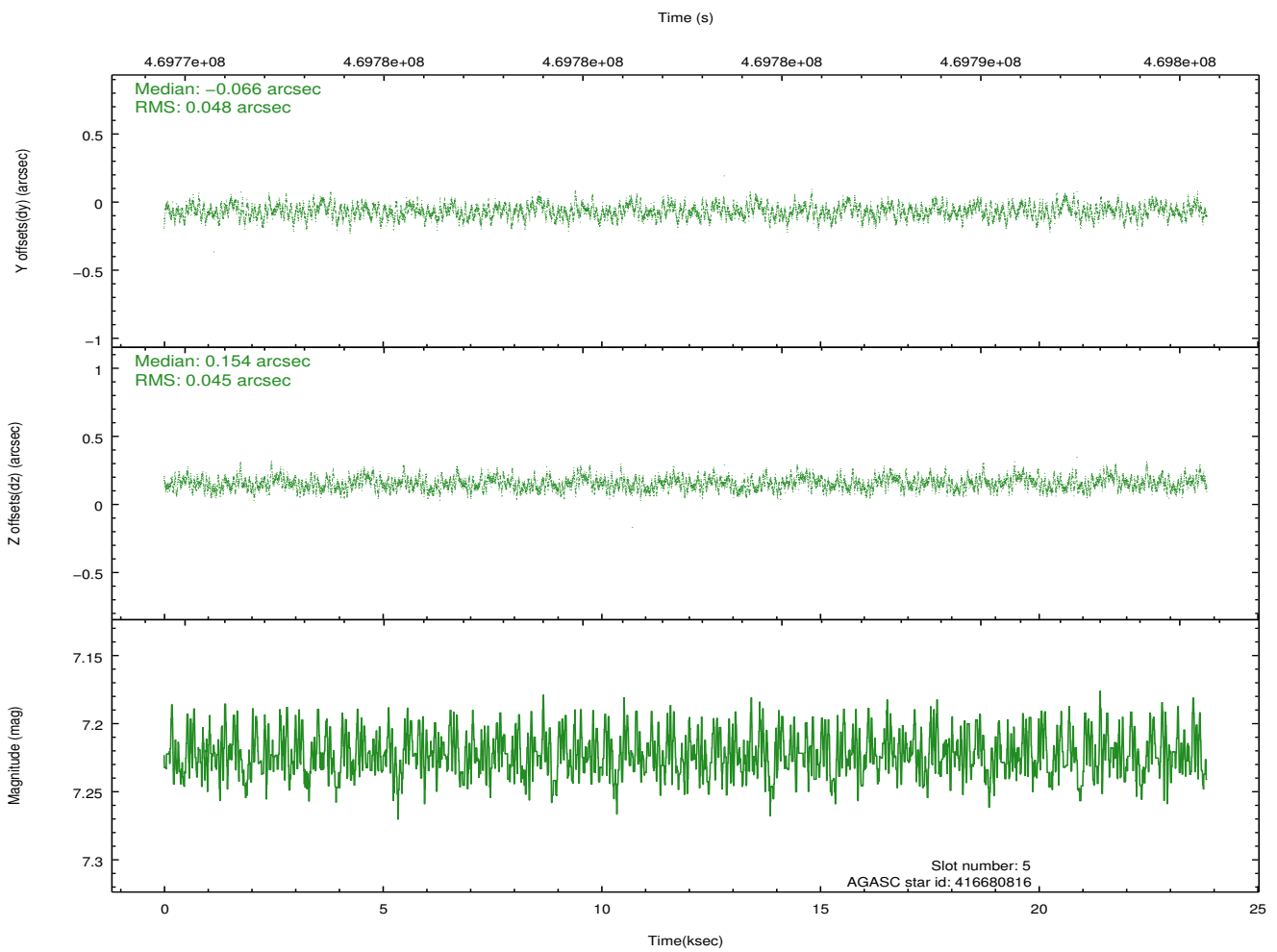
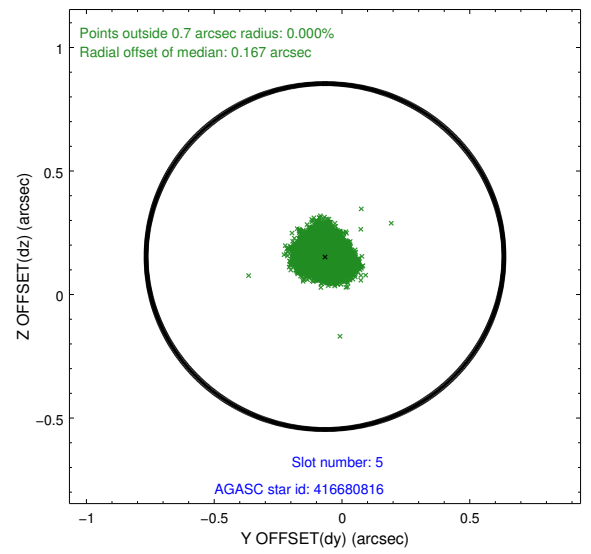
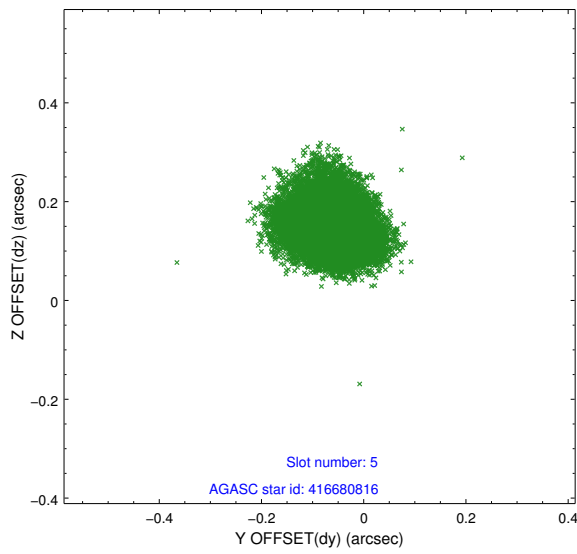
2.4.1 Slot 3



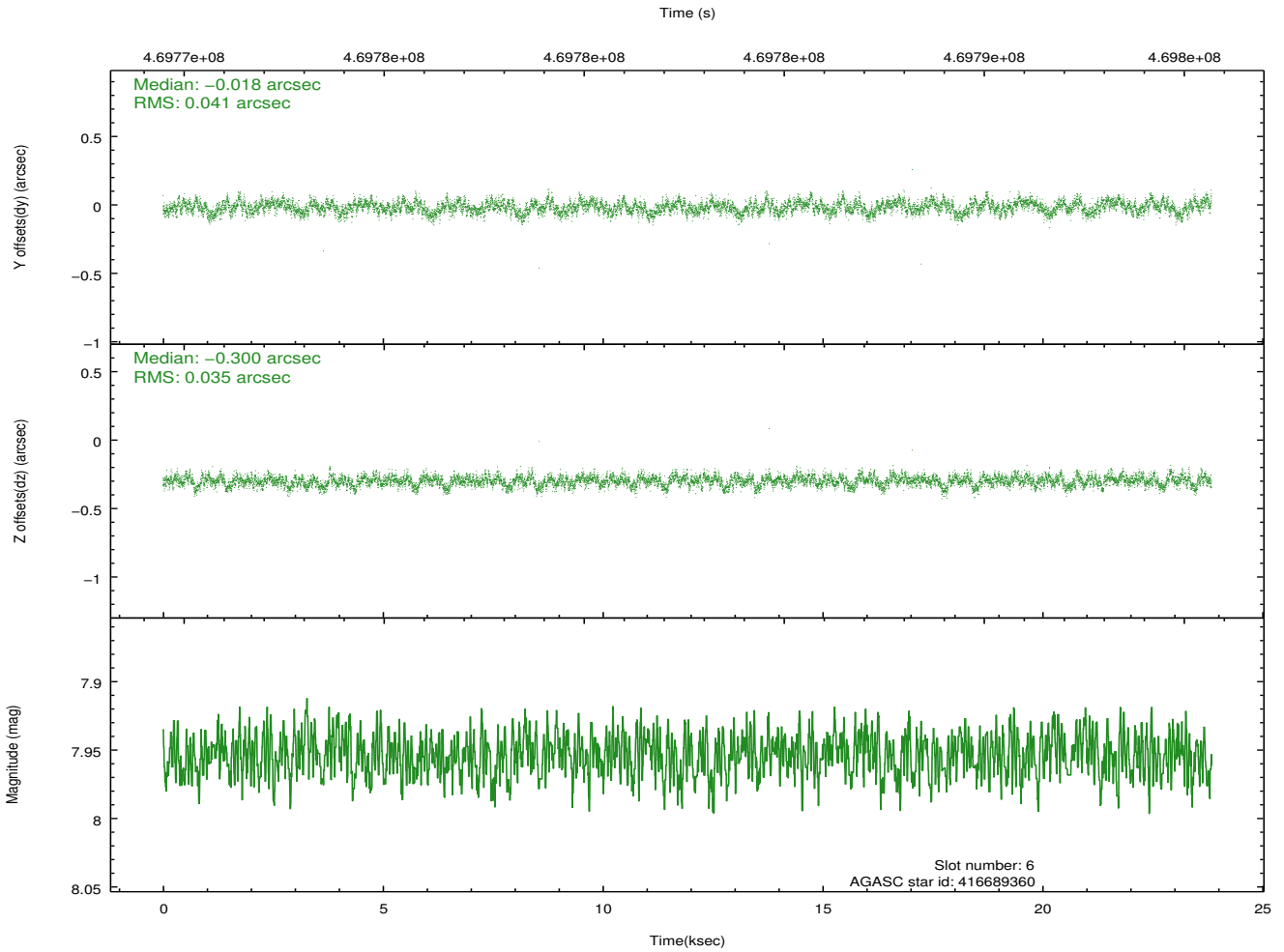
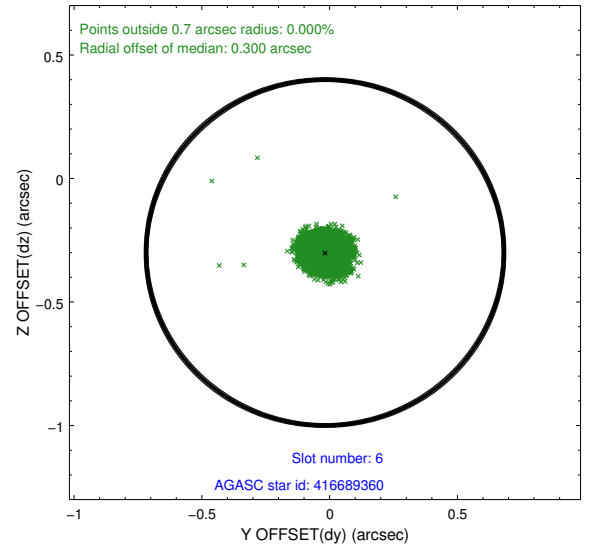
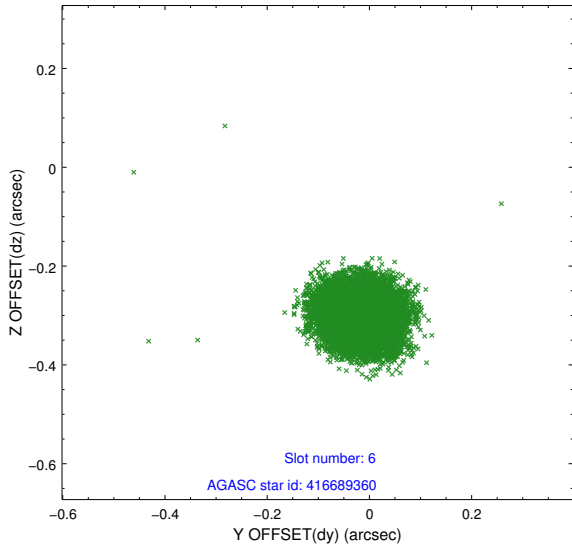
2.4.2 Slot 4



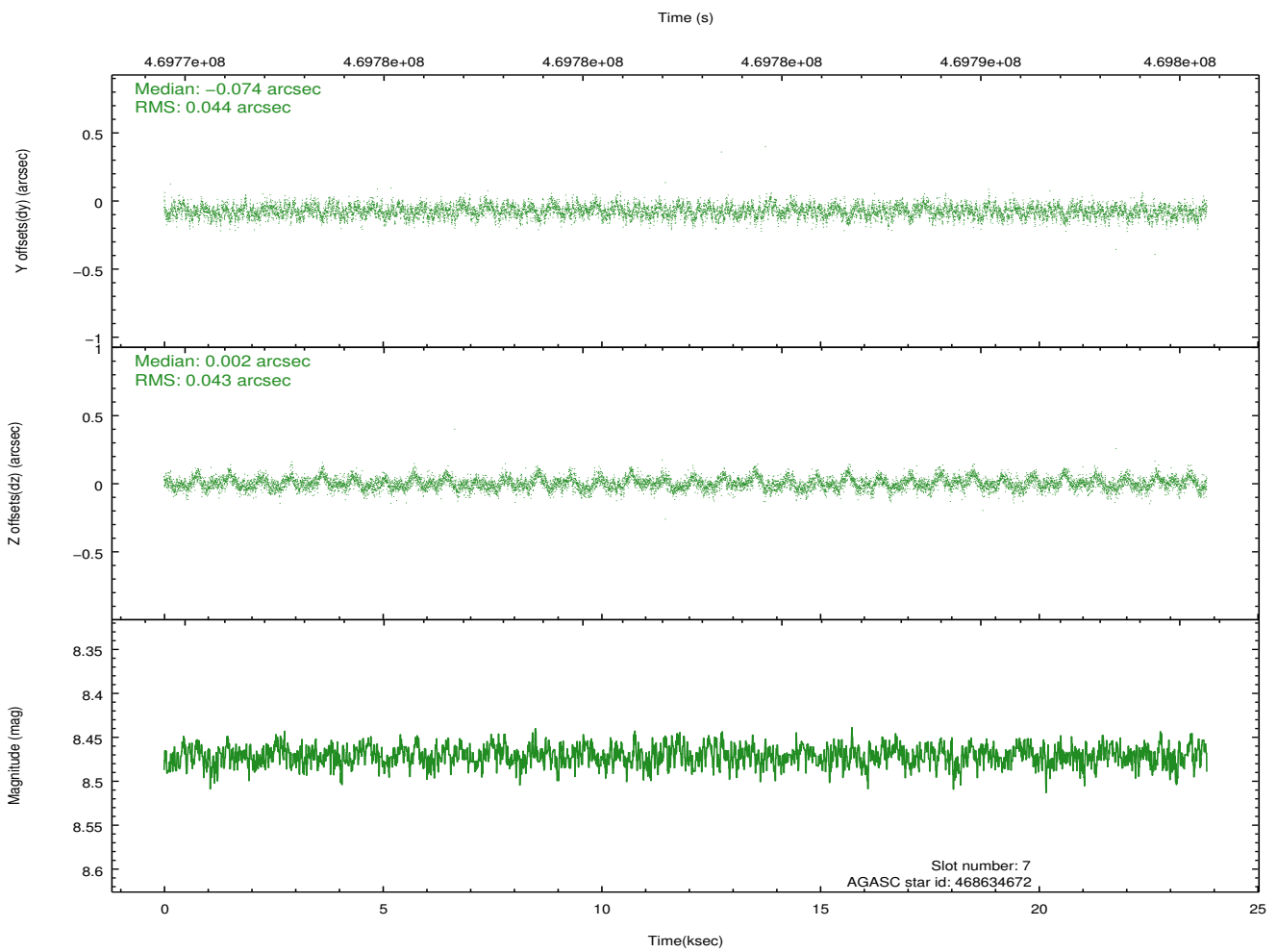
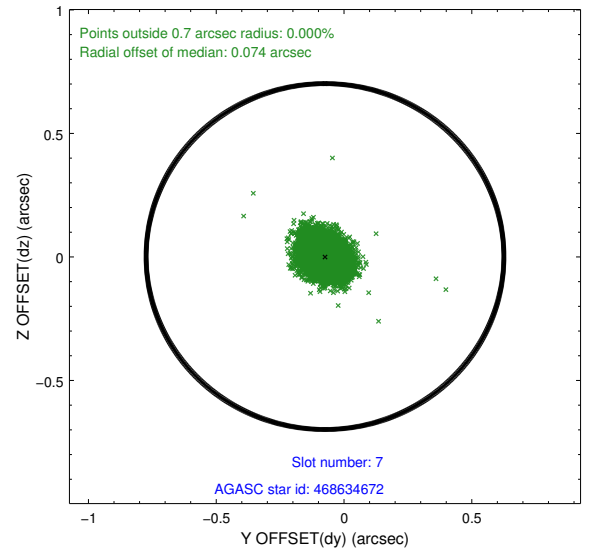
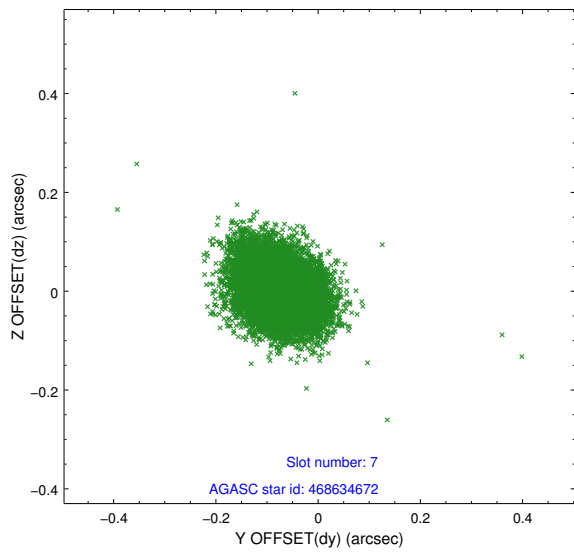
2.4.3 Slot 5



2.4.4 Slot 6

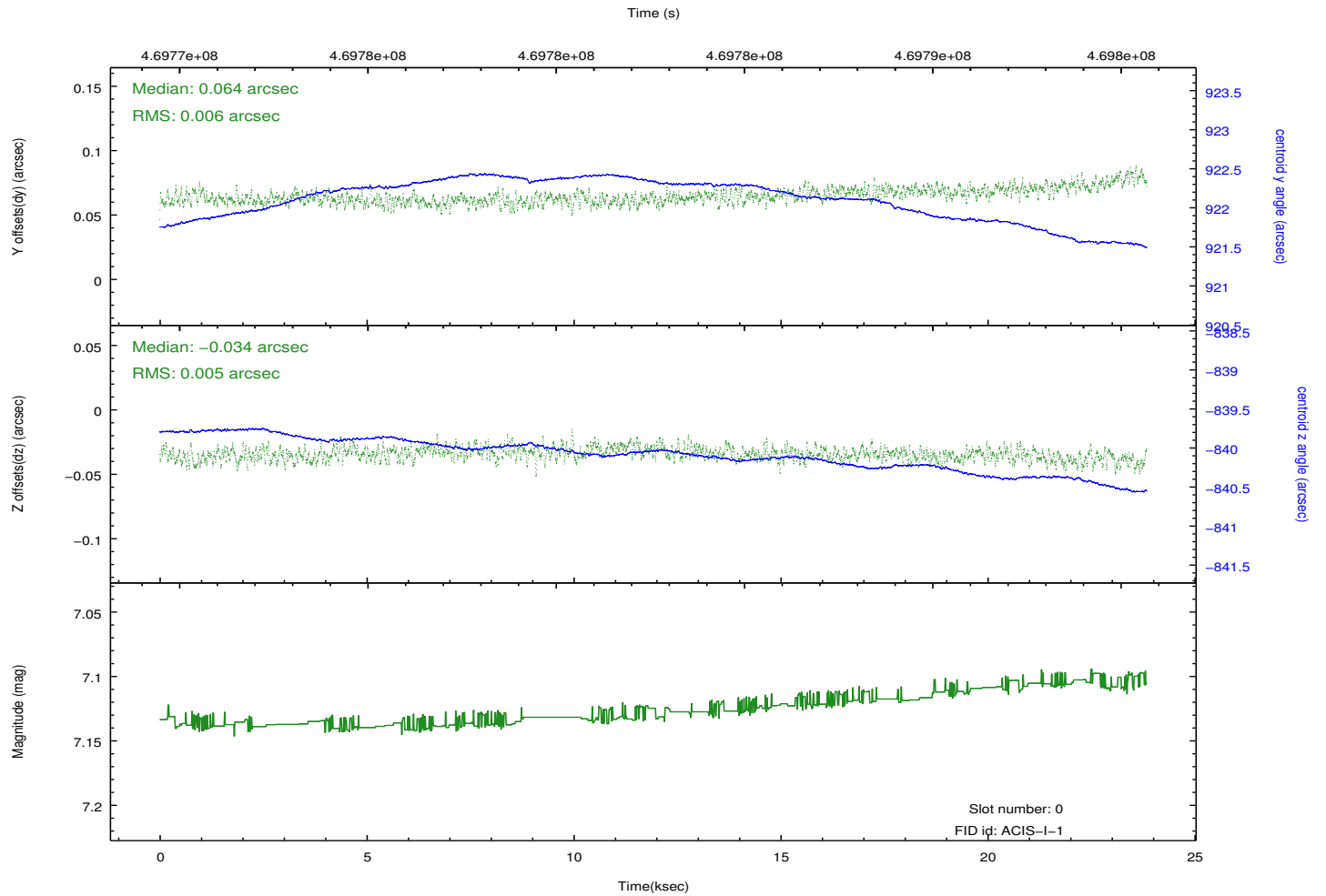
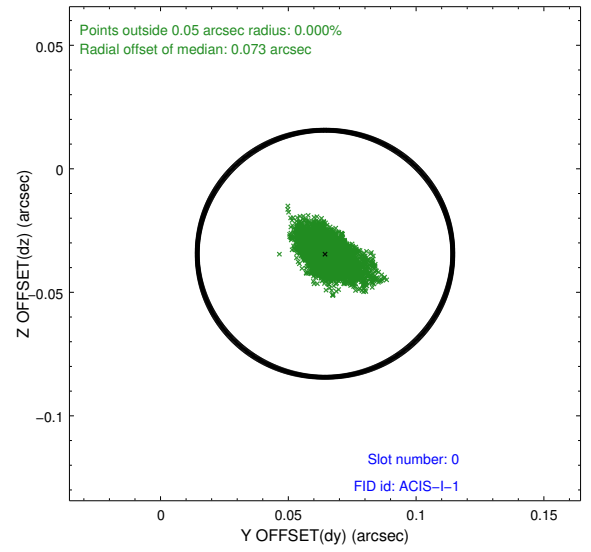
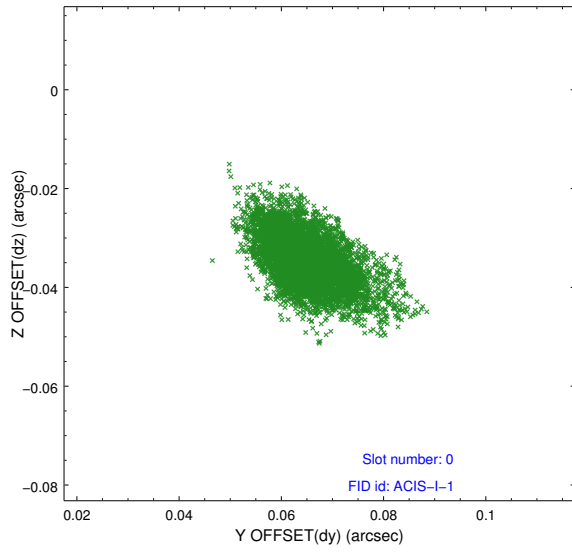


2.4.5 Slot 7

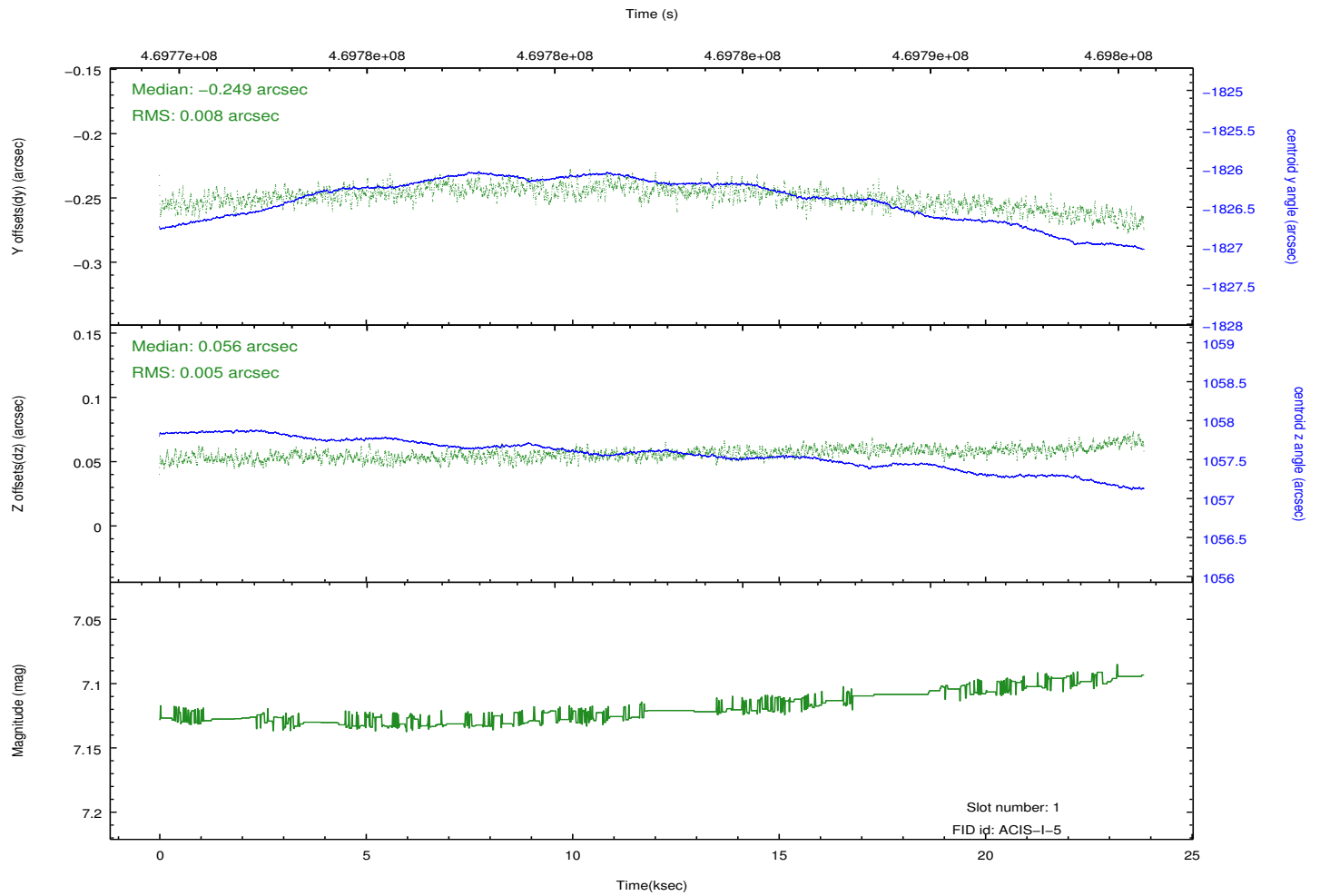
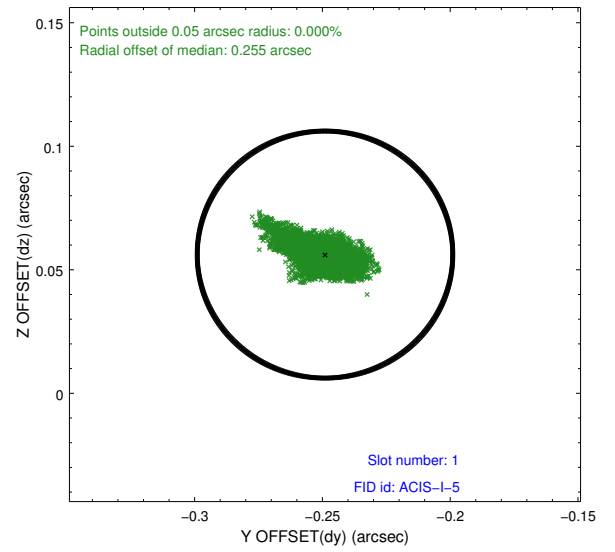
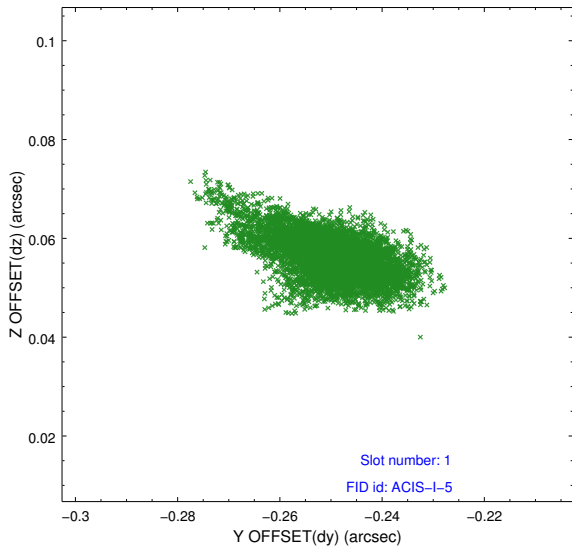


2.5 FID Slots

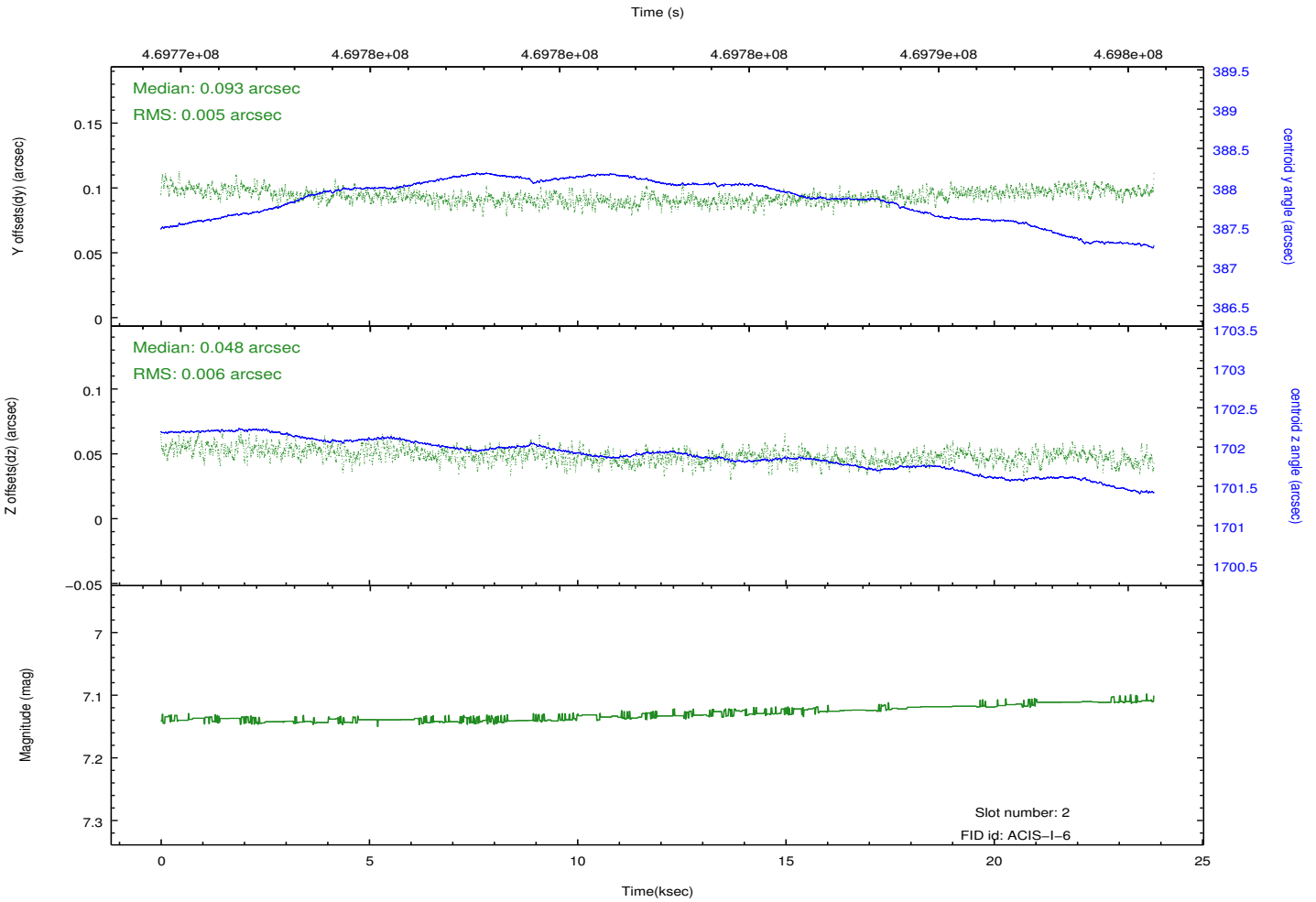
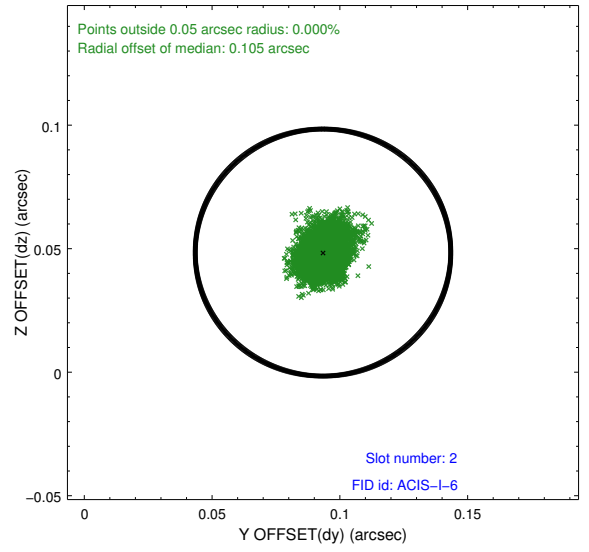
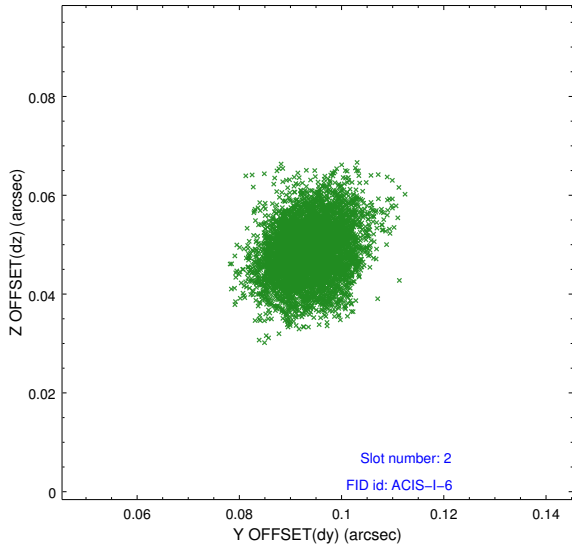
2.5.1 Slot 0



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)	2014.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.067100177407

A.2 Comments

Joint Proposal with XMM.

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These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.