

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 15385 - L2 Version 2
Chandra X-Ray Center

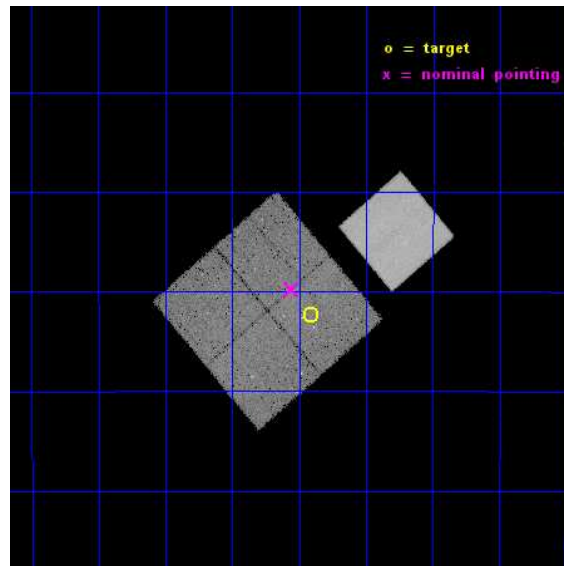
L2 Processing Date : Dec 1 2014

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1 Front

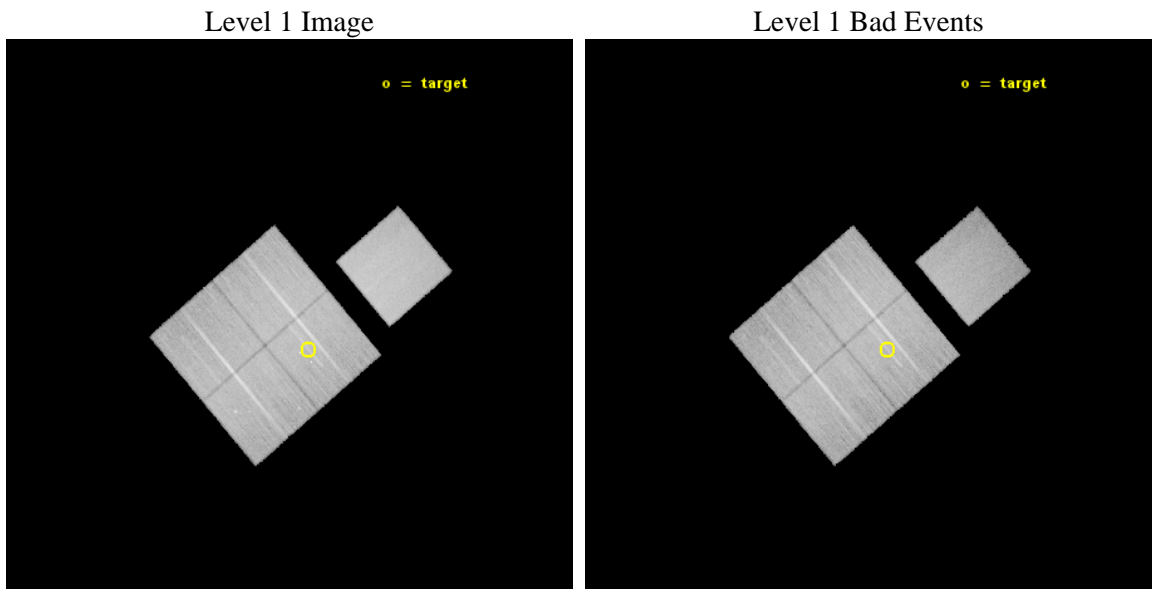
seq_num	601091	Sequence number
obs_id	15385	Observation id
title	Search for evidence of dwarf galaxy collisions in X-rays	Proposal
observer	Professor Gordon Garmire	Principal investigator
object	ngc5068	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	199.728333	Observer's specified target RA [deg]
dec_targ	-21.039167	Observer's specified target Dec [deg]
ra_nom	199.76439155905	Nominal RA [deg]
dec_nom	-20.99638864642	Nominal Dec [deg]
roll_nom	49.457685865221	Nominal Roll [deg]
revision	2	Processing version of data
ontime	48068.600369692	Sum of GTIs [s]
livetime	47440.548718273	Livetime [s]
ontime0	48068.600369692	Sum of GTIs [s]
ontime1	48068.600369692	Sum of GTIs [s]
ontime2	48068.600369692	Sum of GTIs [s]
ontime3	48068.600369692	Sum of GTIs [s]
ontime7	48068.600369692	Sum of GTIs [s]
l2events	218867	Number of level 2 events



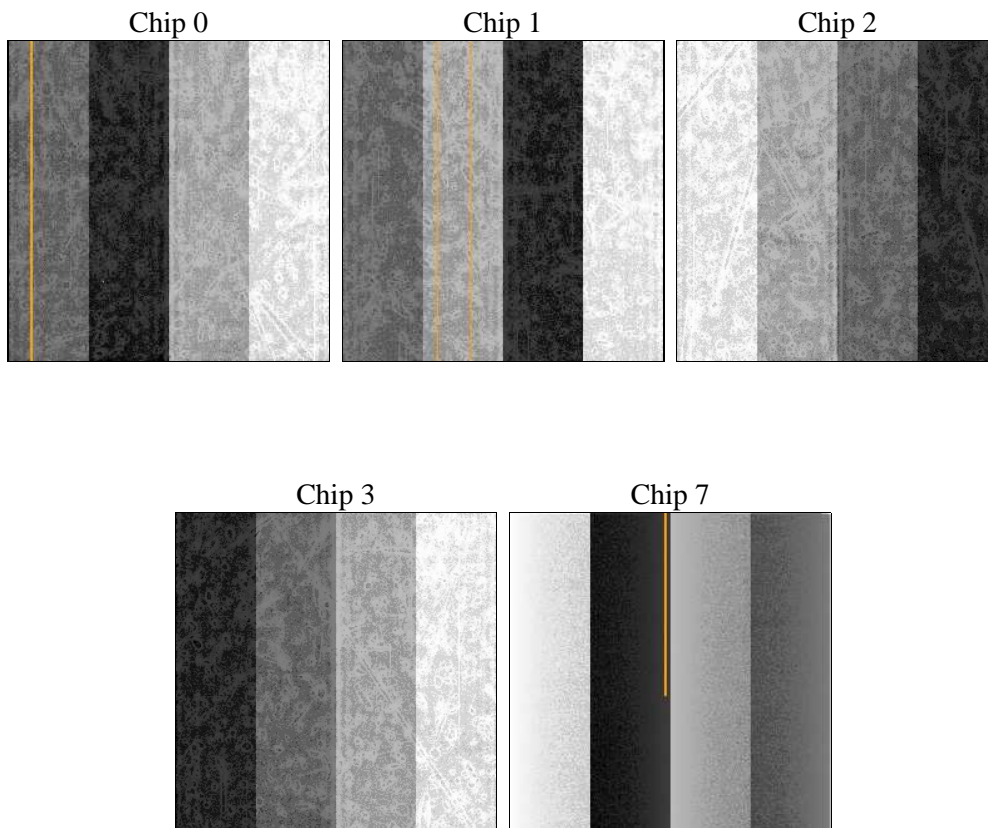
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	48000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	48068.600369692	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	48068.600369692	Sum of GTIs [s]
date	2014-12-02T02:12:48	Date and time of file creation	ontime1	48068.600369692	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	48068.600369692	Sum of GTIs [s]
			ontime3	48068.600369692	Sum of GTIs [s]
			ontime7	48068.600369692	Sum of GTIs [s]
			l1events	1195670	Number of level 1 events

2.1.4 Events

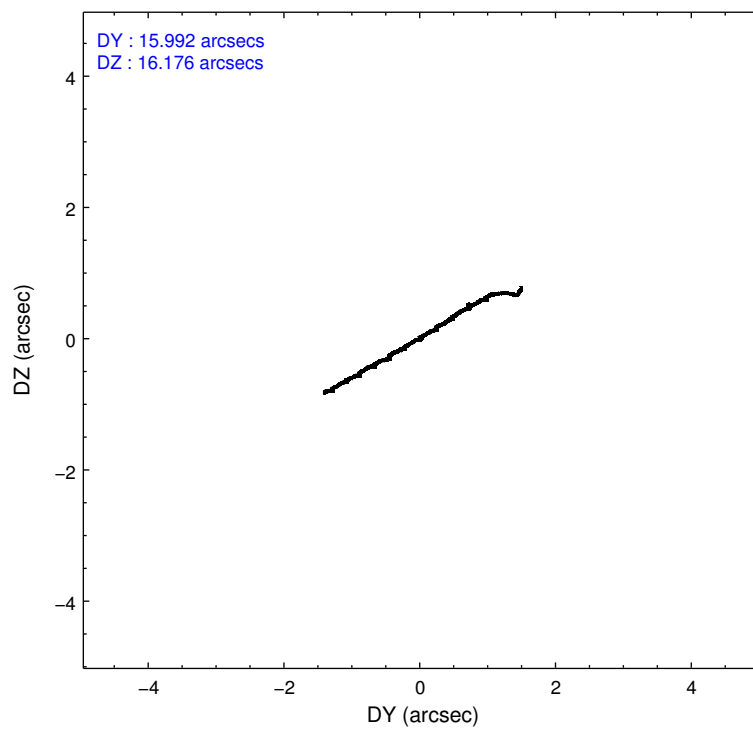
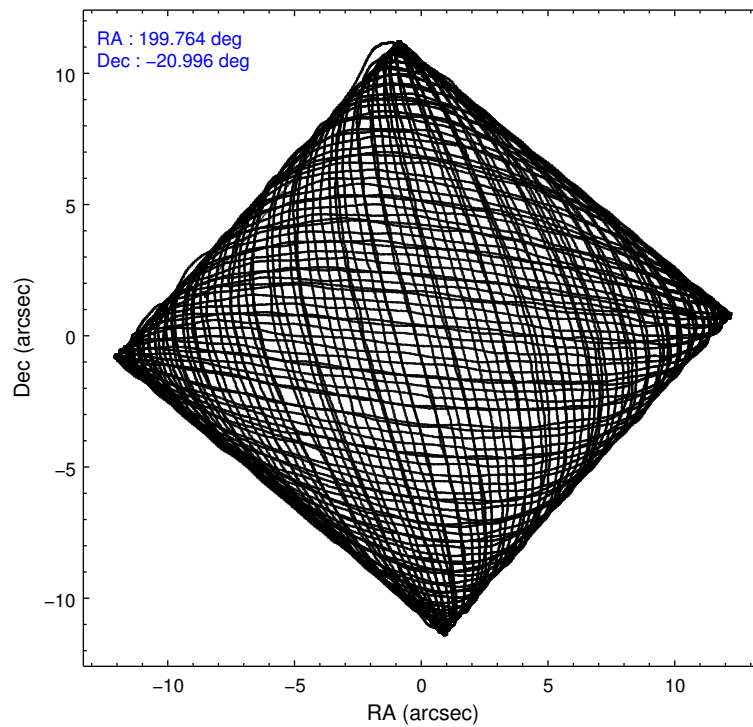
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	211055	223973	244244	236043	280355
rejected events	183650	194339	217539	208658	149658
rejected %	87%	86%	89%	88%	53%

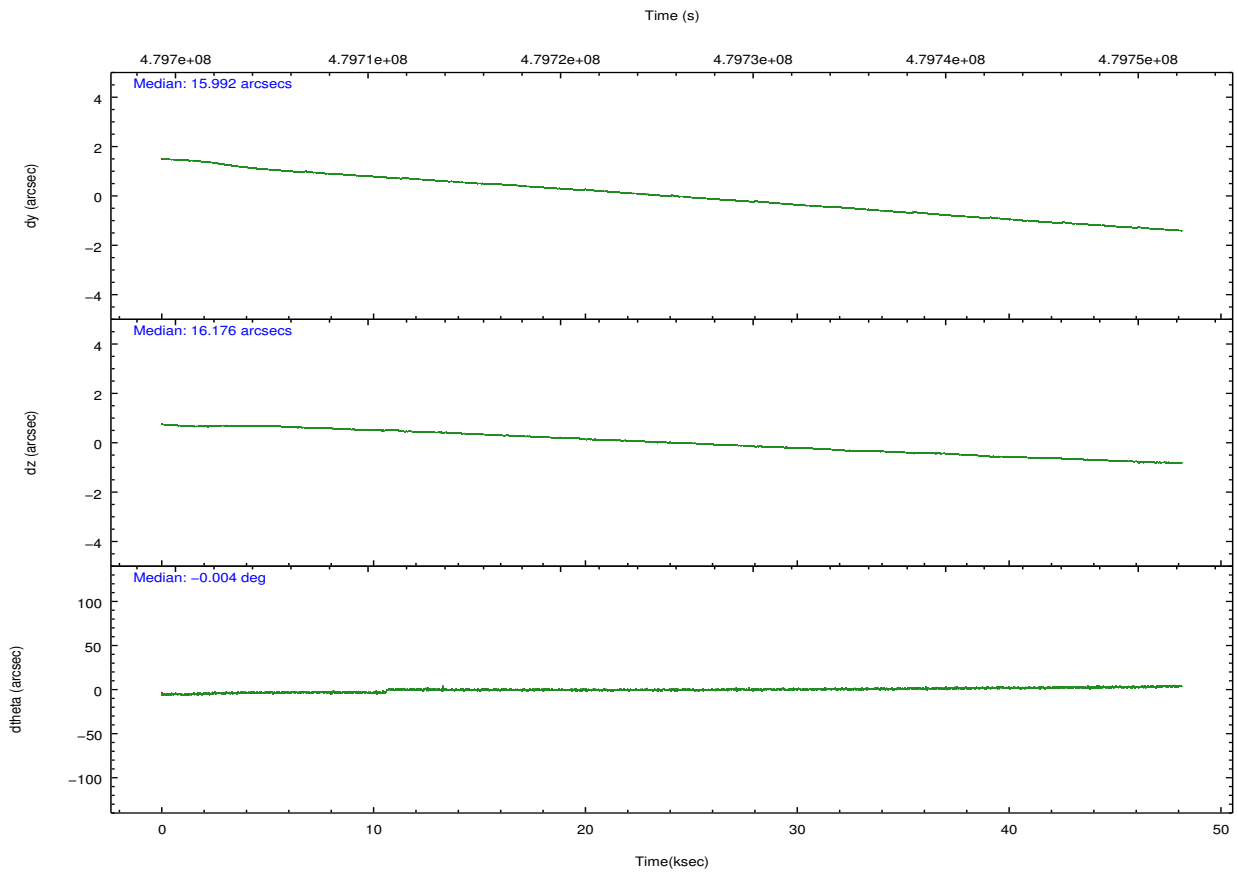
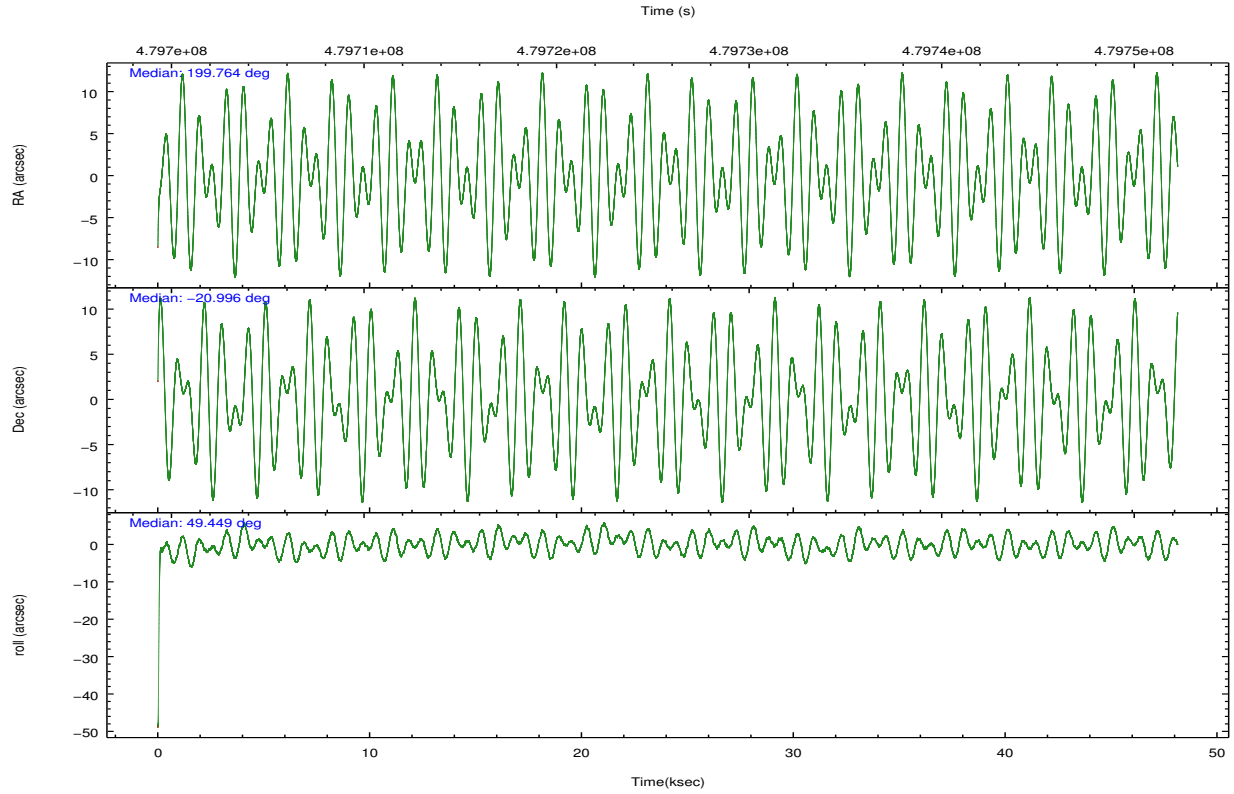
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	9742	10343	9830	10473	12499
	4%	4%	4%	4%	4%
grade 1 events	114	157	151	150	368
	0%	0%	0%	0%	0%
grade 2 events	6757	6709	6367	5921	28049
	3%	2%	2%	2%	10%
grade 3 events	2902	3091	2745	2876	11258
	1%	1%	1%	1%	4%
grade 4 events	2588	3070	2797	2749	11194
	1%	1%	1%	1%	3%
grade 5 events	9412	10397	8656	10989	29353
	4%	4%	3%	4%	10%
grade 6 events	5417	6423	4967	5368	67705
	2%	2%	2%	2%	24%
grade 7 events	174123	183783	208731	197517	119929
	82%	82%	85%	83%	42%

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	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	199.759115	199.7643915590526	CCD I2 on	Y	Y
[deg] Pointing Dec	-21.023441	-20.99638864642002	CCD I3 on	Y	Y
[deg] Pointing Roll	49.247114	49.45768586522089	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	O1	N
[mm] SIM translation stage pos	-225.992463	-225.9841449889113	CCD S3 on	O2	Y
[mm] SIM translation stage offset	-7.6	-7.608308014018434	CCD S4 on	N	N
[s] Observation start time (MET)	479701842.184000	479700614.04478	CCD S5 on	N	N
Observation start date	2013-03-15T02:29:35	2013-03-15T02:10:14	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	479749842.184000	479750629.94748	On-chip summing requested	N	N
Observation end date	2013-03-15T15:49:35	2013-03-15T16:03:49	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





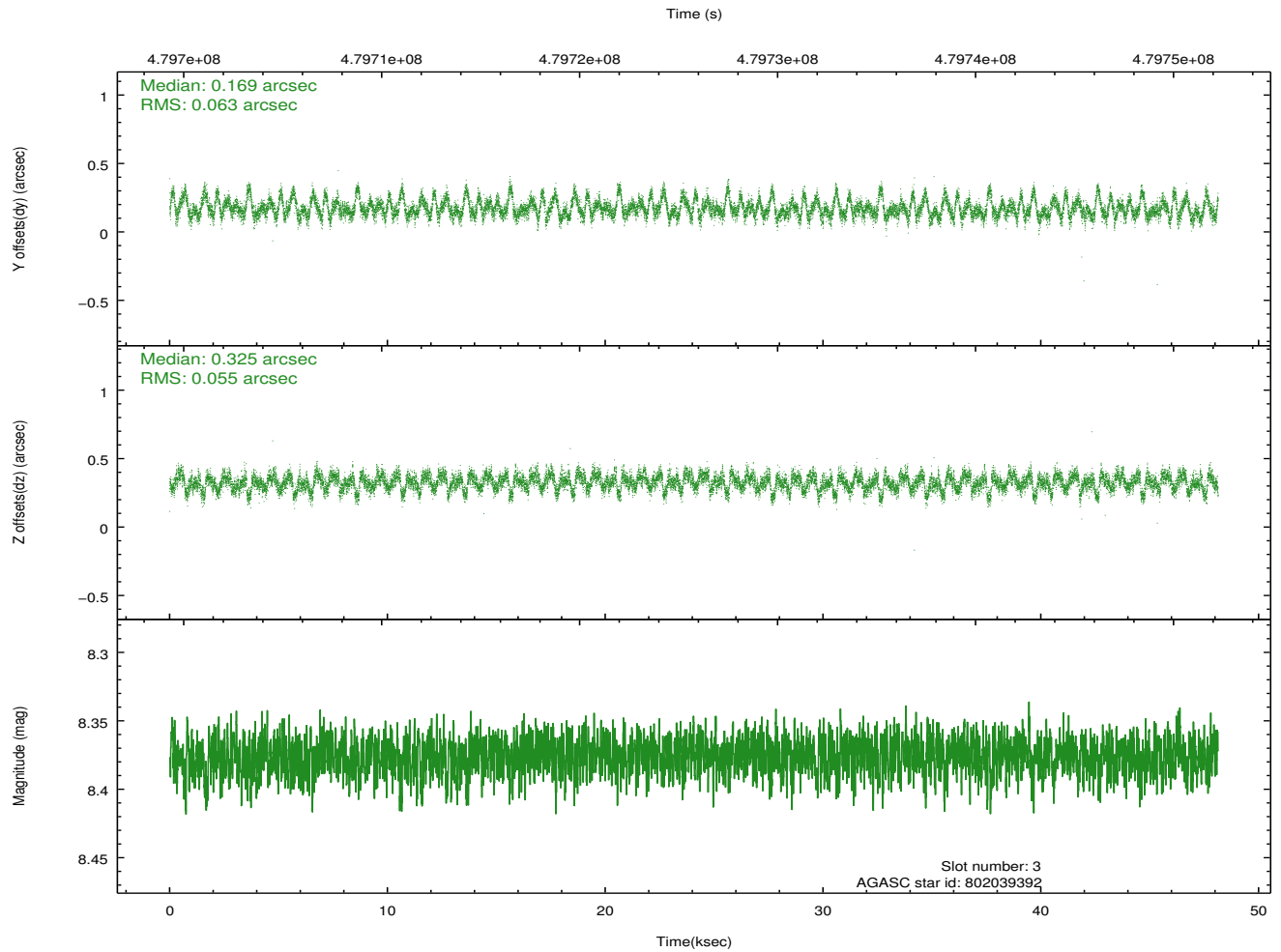
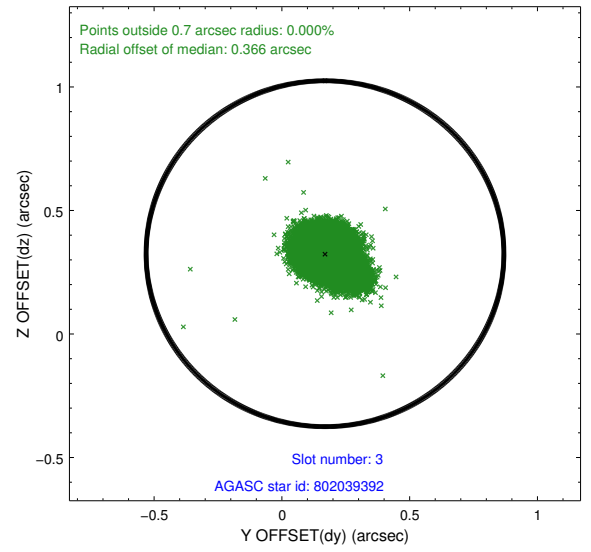
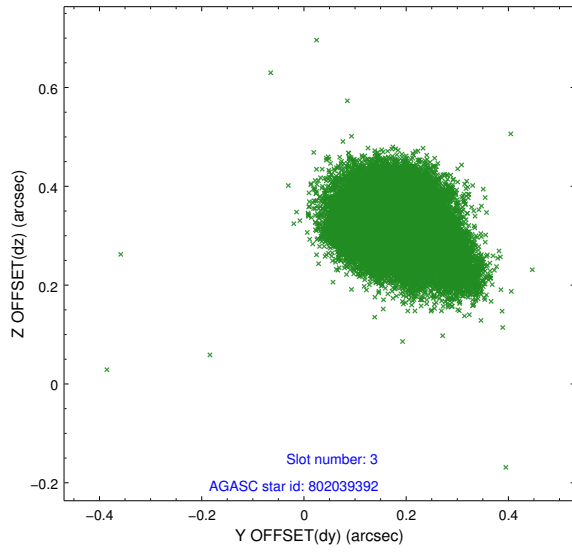
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.16	11742	0.101	-0.078	0.029	0.041	0.000000	0.000000	923.45	-996.03
1	FID		ACIS-I-4	7.05	11742	0.133	0.033	0.028	0.045	0.000000	0.000000	2143.02	904.88
2	FID		ACIS-I-5	7.14	11742	-0.336	0.115	0.019	0.028	0.000000	0.000000	-1825.08	901.70
3	GUIDE	used	802039392	8.38	23476	0.169	0.325	0.087	0.150	199.895767	-21.228025	-258.64	-827.63
4	GUIDE	used	802040912	8.91	23455	0.281	-0.140	0.089	0.142	198.983932	-20.928874	-1447.91	2191.44
5	GUIDE	used	803736416	7.78	23481	-0.069	0.130	0.064	0.106	200.127231	-20.880901	1196.05	-604.65
6	GUIDE	used	803738064	8.92	23464	-0.123	0.053	0.113	0.191	200.576865	-20.861507	2232.53	-1707.18
7	GUIDE	used	802039312	8.43	23424	-0.266	-0.367	0.078	0.124	199.408712	-20.510040	627.56	2100.43

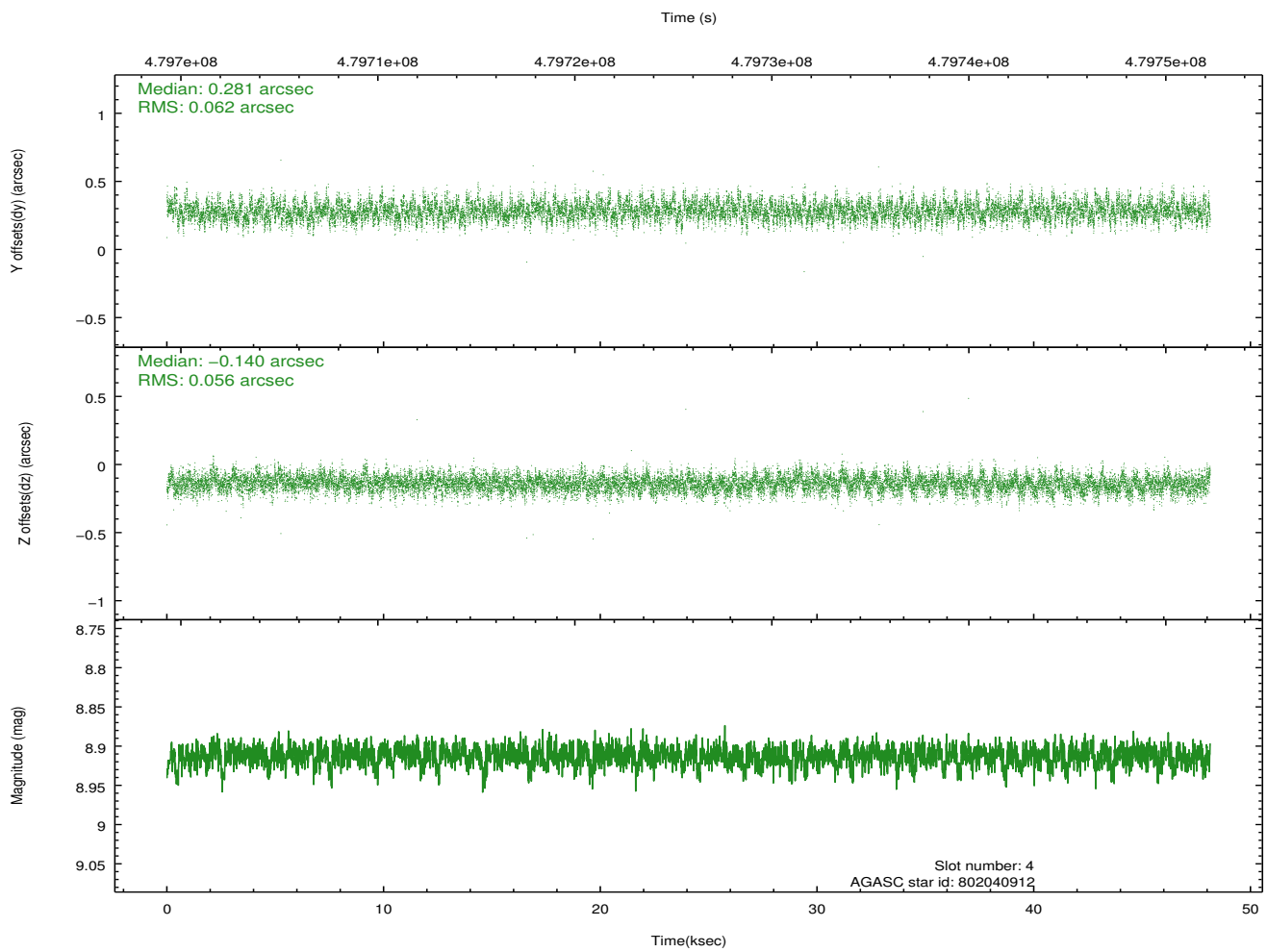
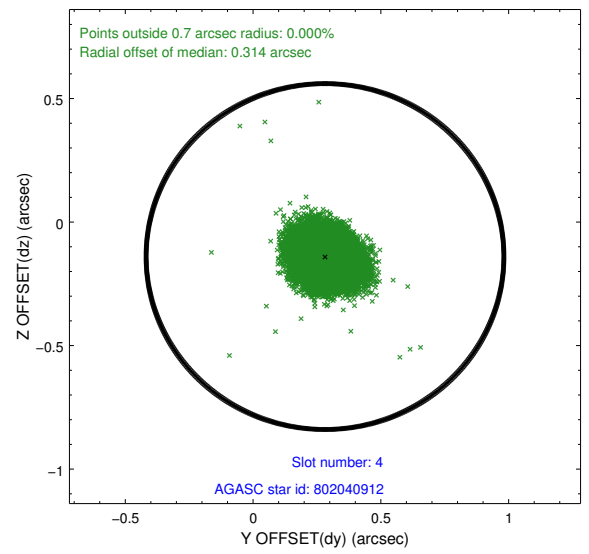
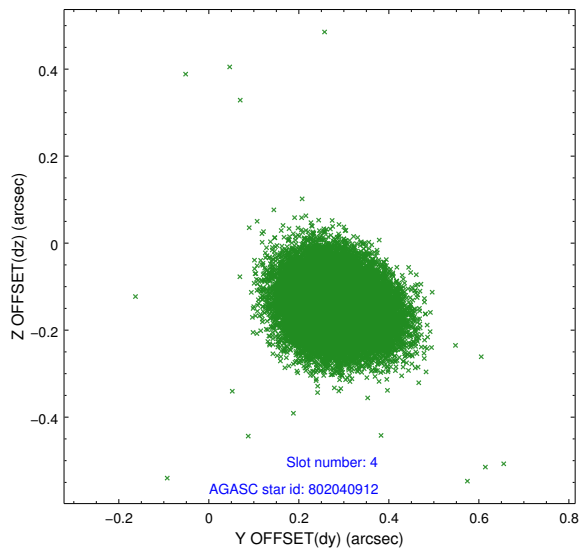
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2.4 Star Slots

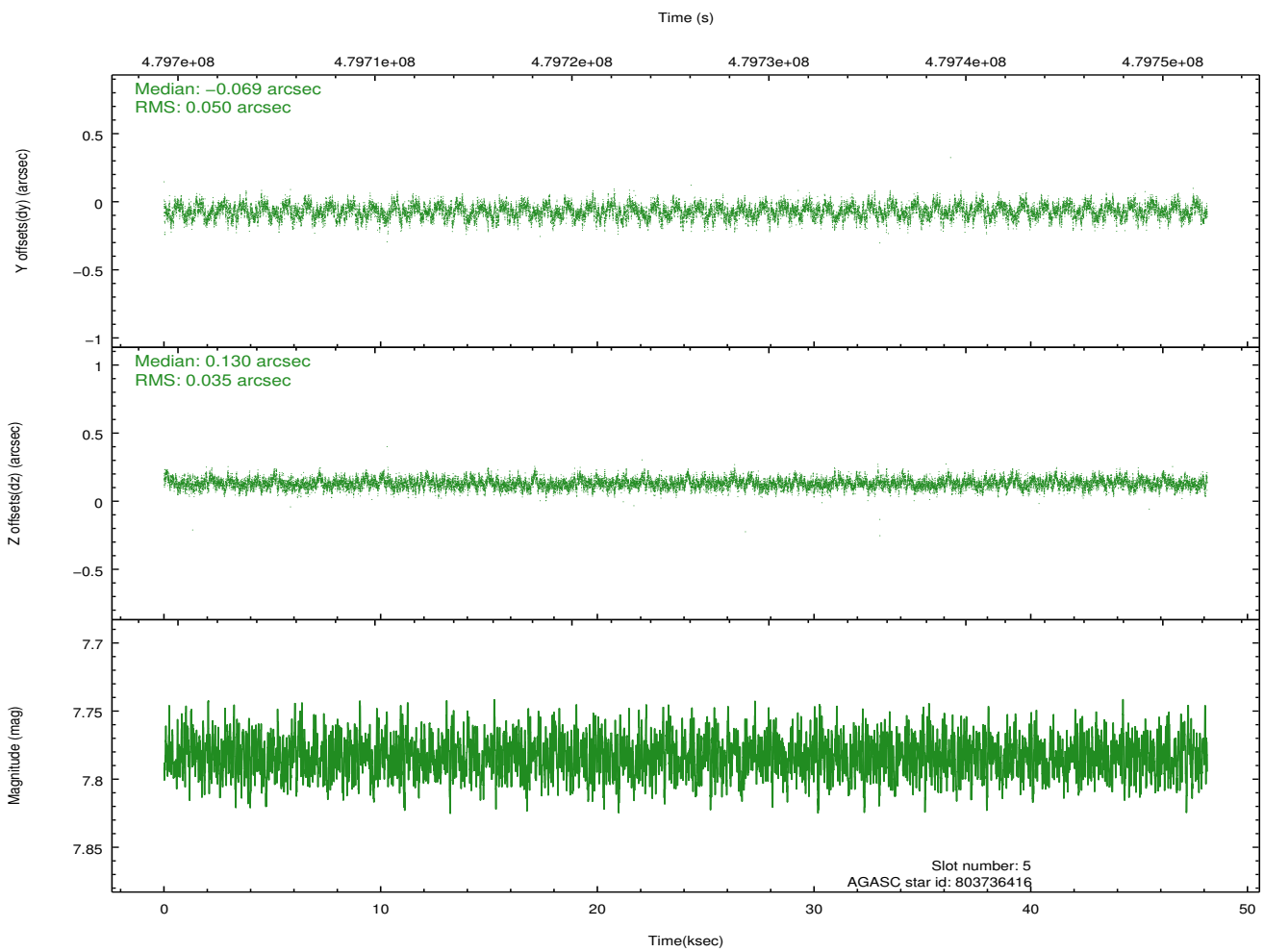
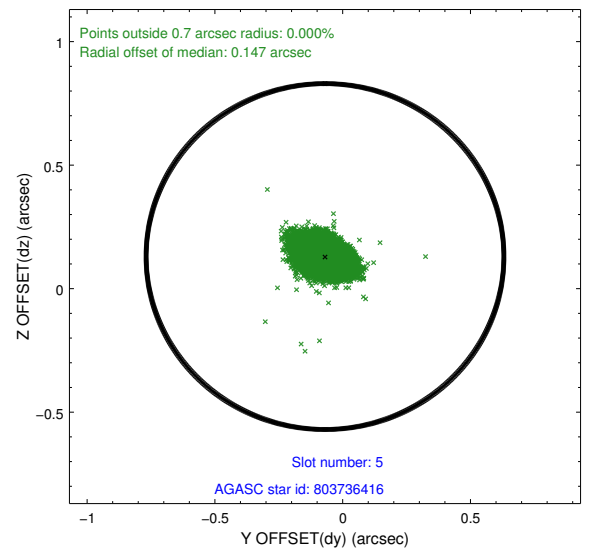
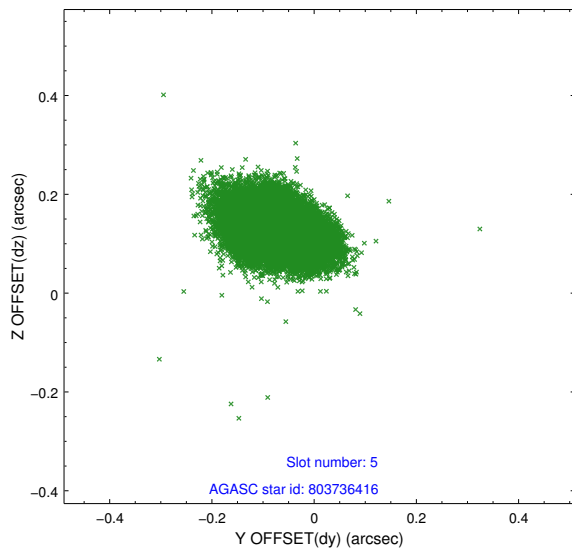
2.4.1 Slot 3



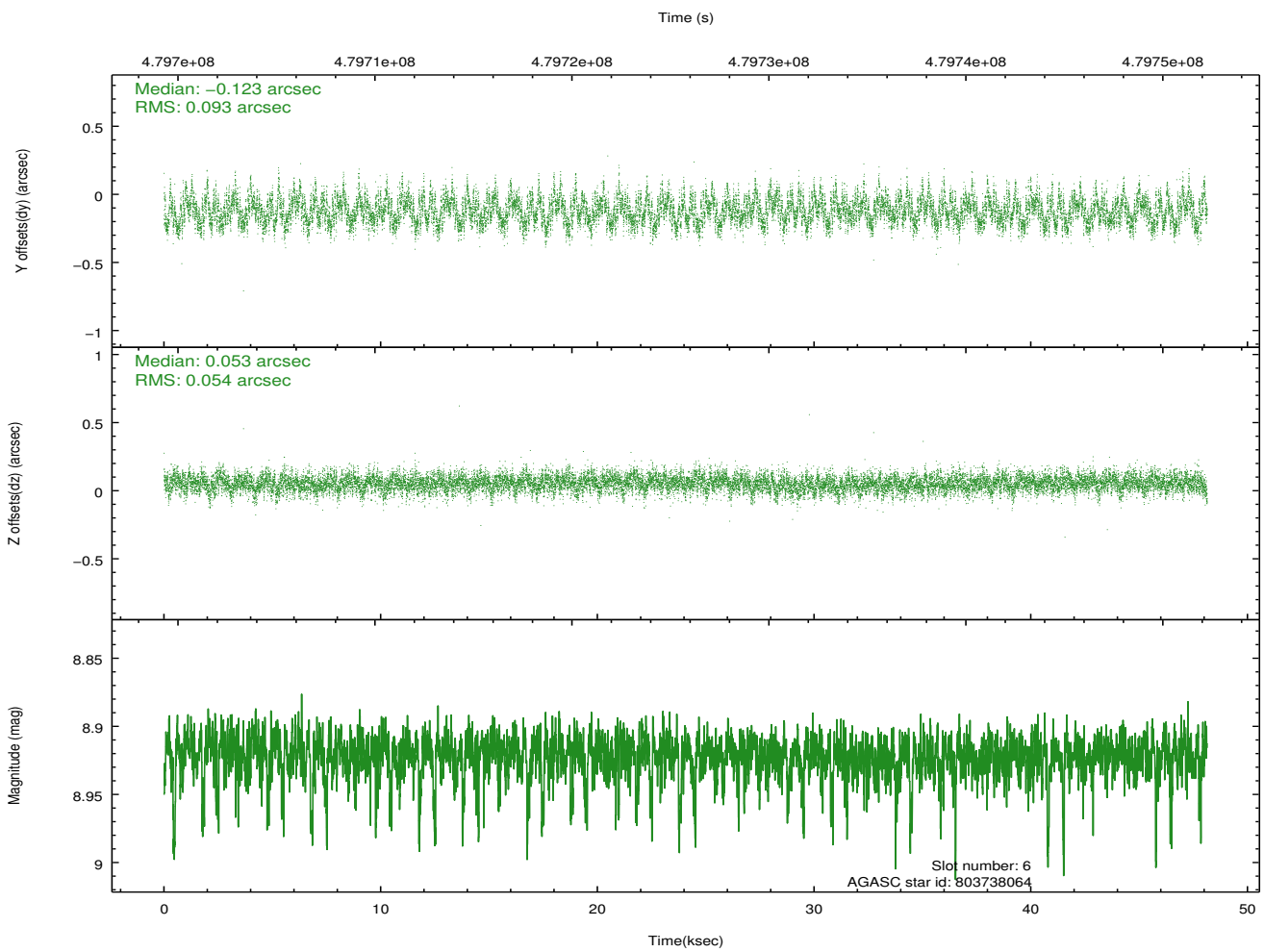
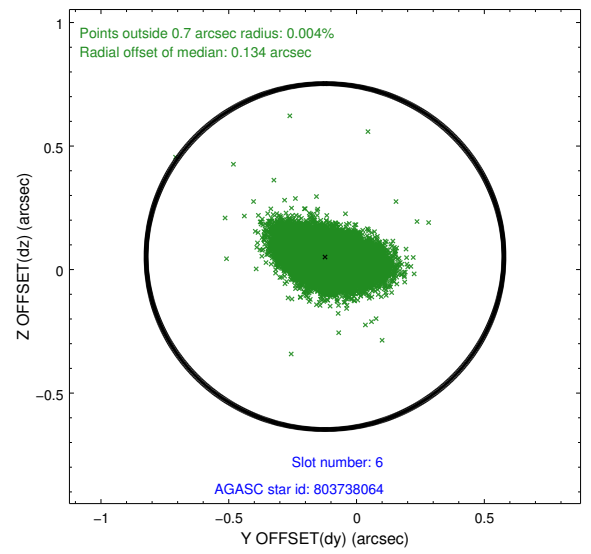
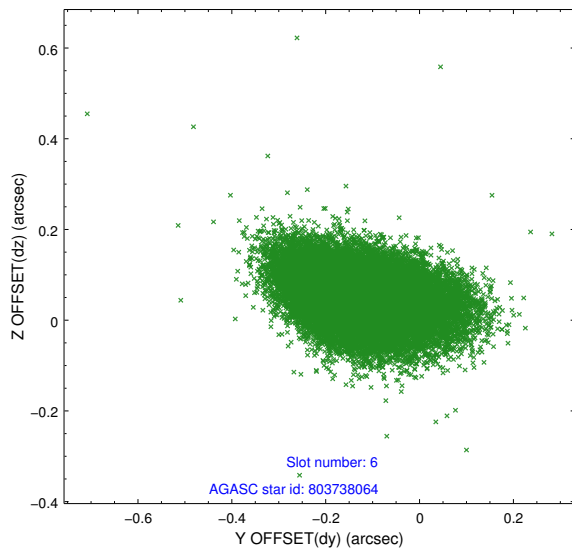
2.4.2 Slot 4



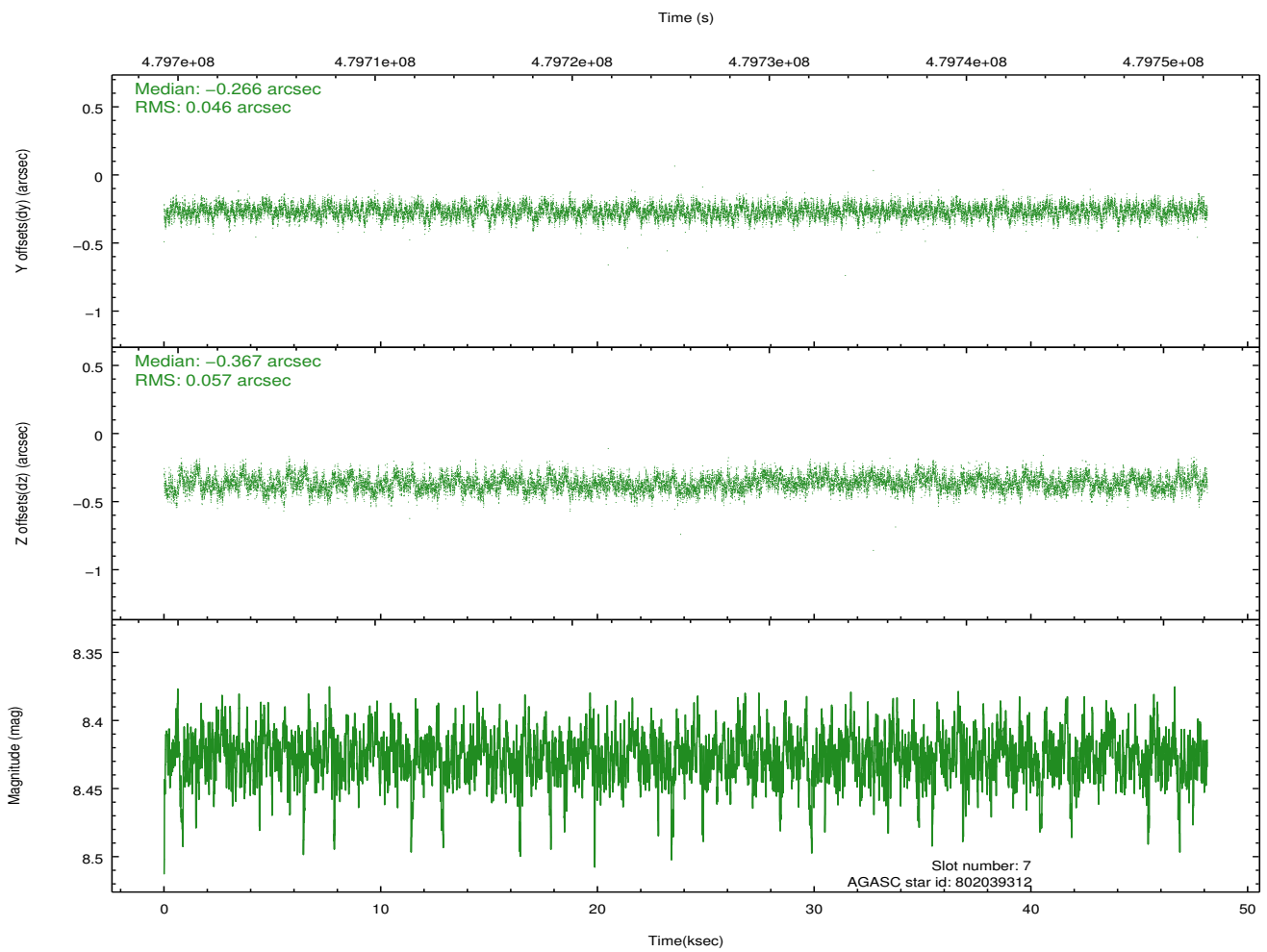
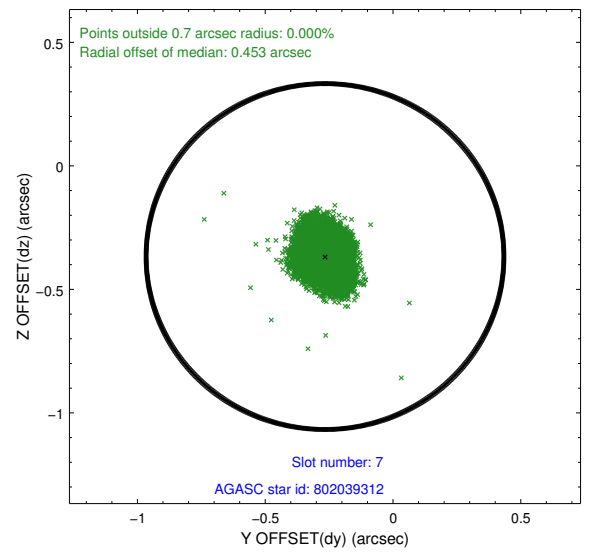
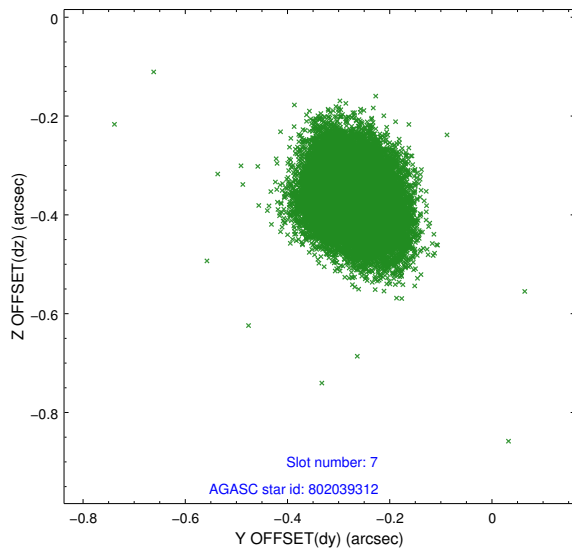
2.4.3 Slot 5



2.4.4 Slot 6

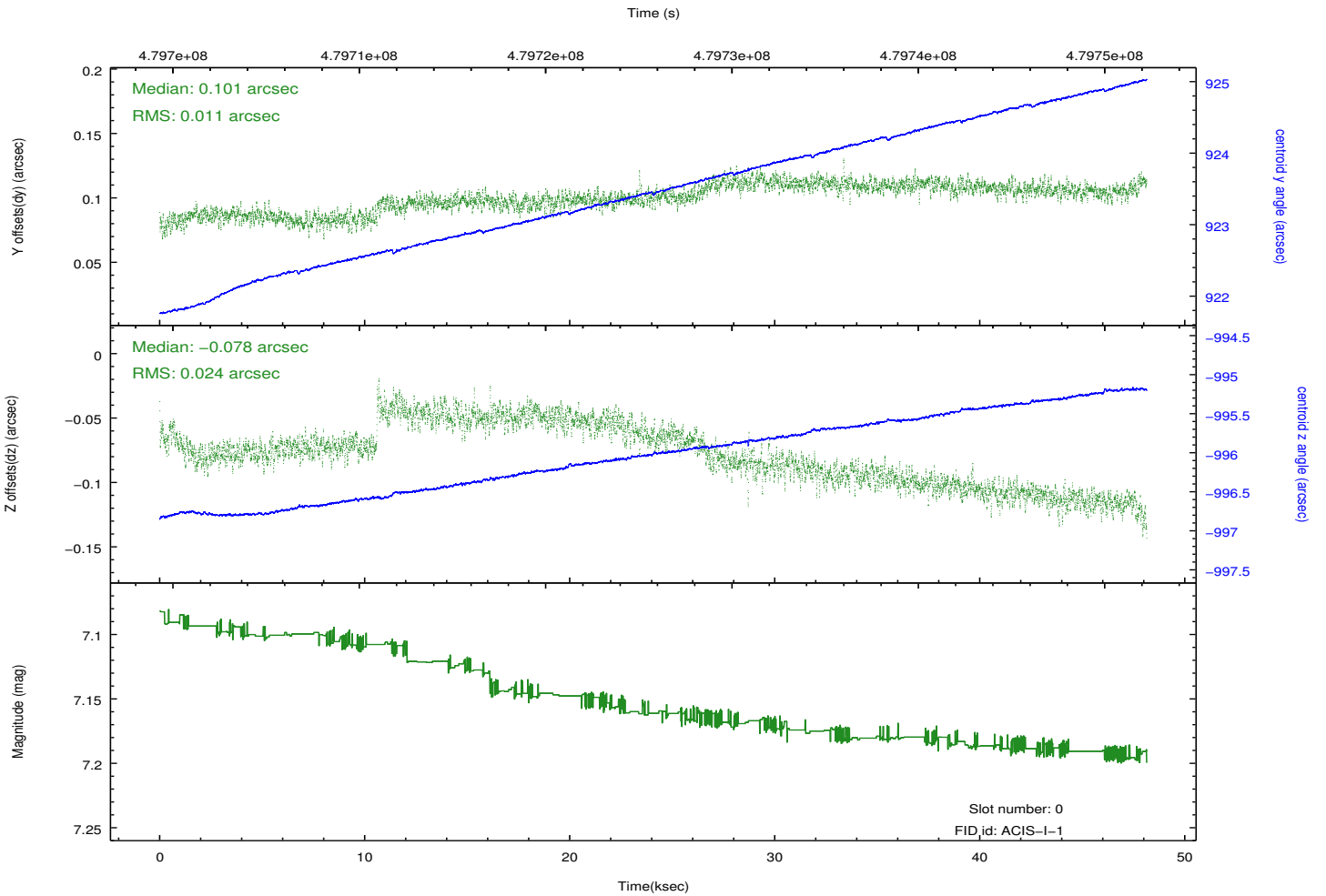
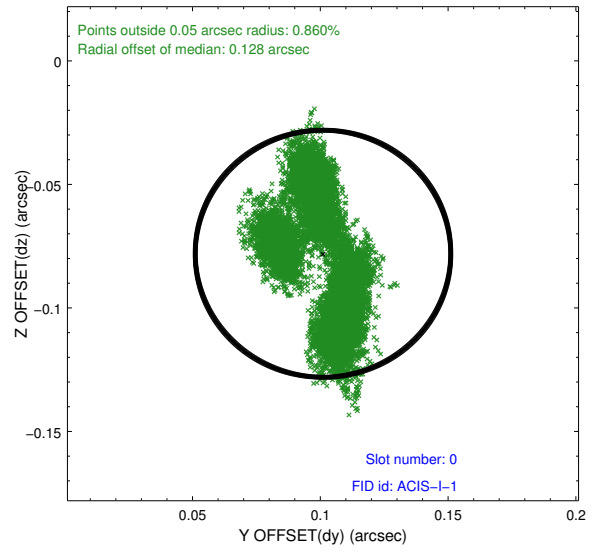
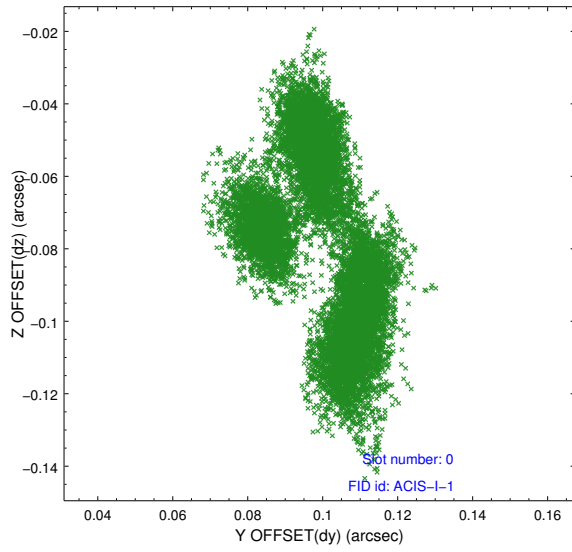


2.4.5 Slot 7

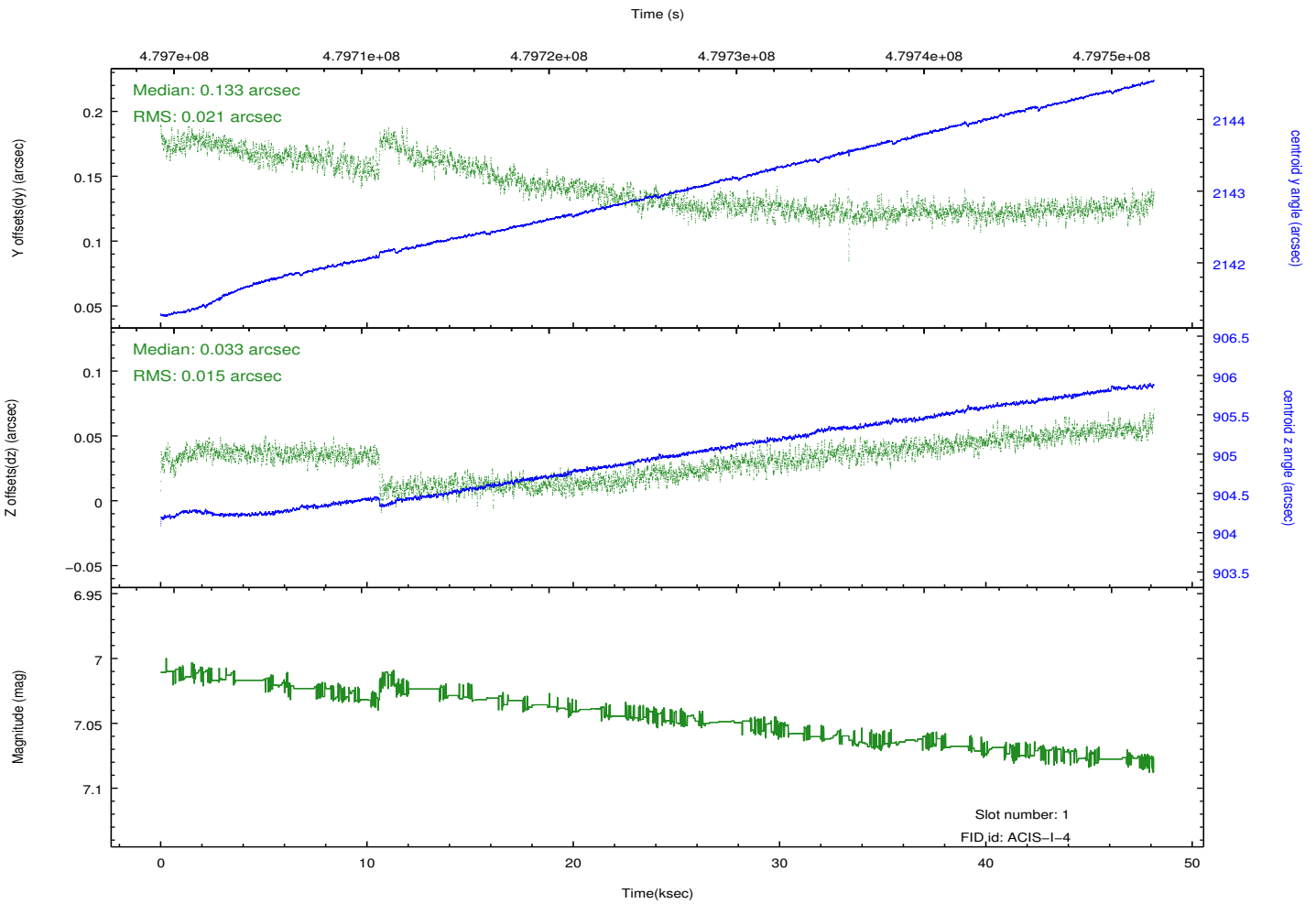
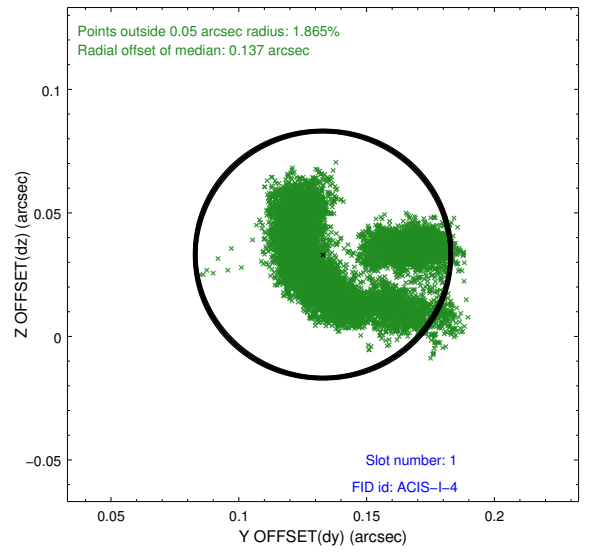
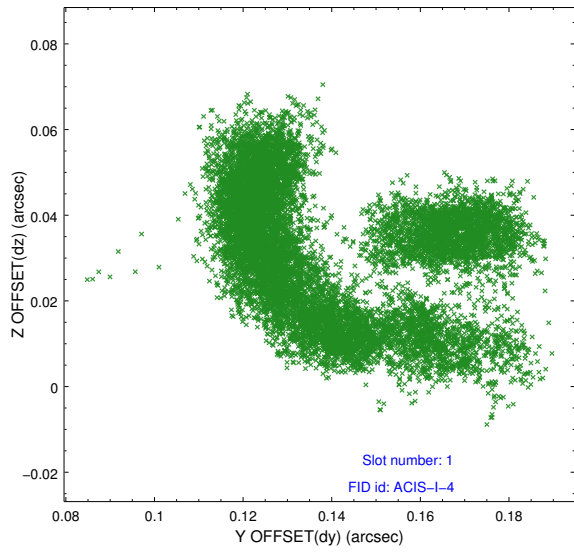


2.5 FID Slots

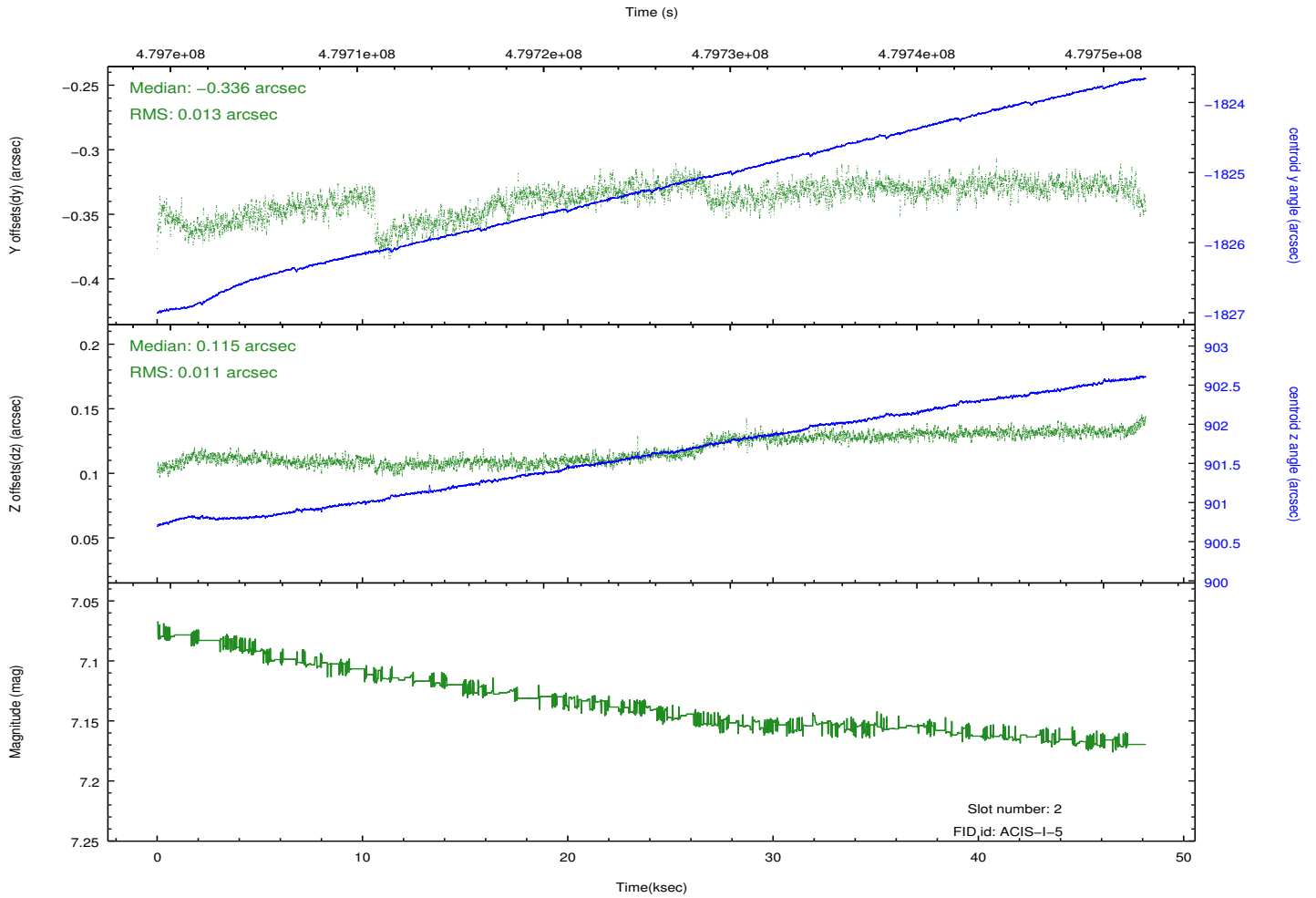
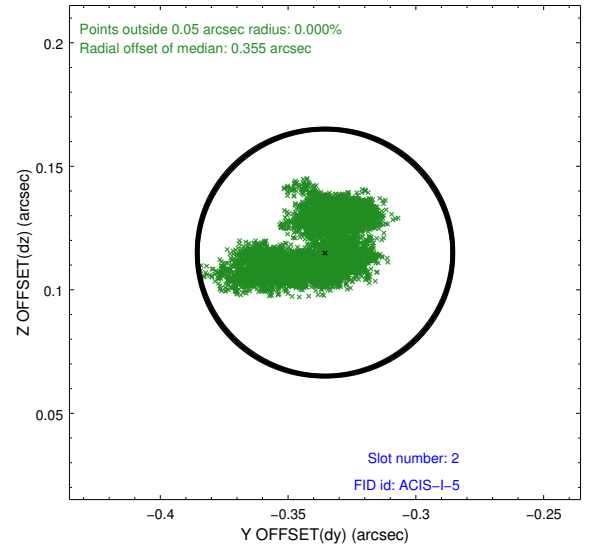
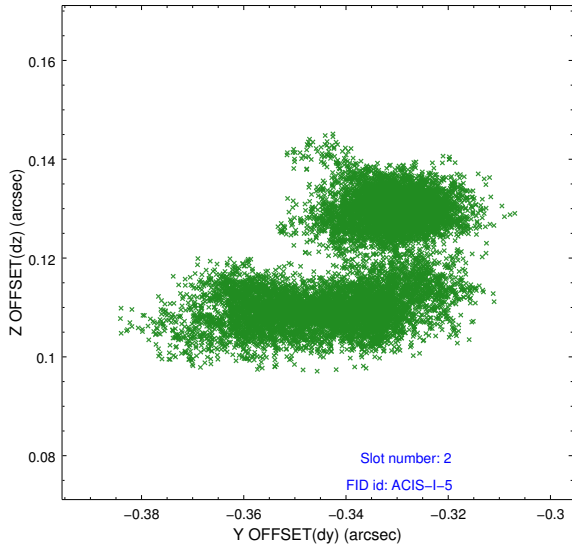
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	48.068600369692

A.2 Comments

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.