

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 15383 - L2 Version 2
Chandra X-Ray Center

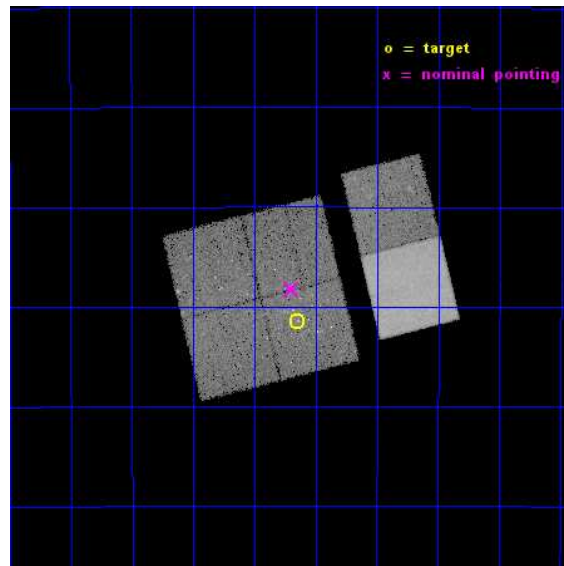
L2 Processing Date : Dec 7 2014

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1 Front

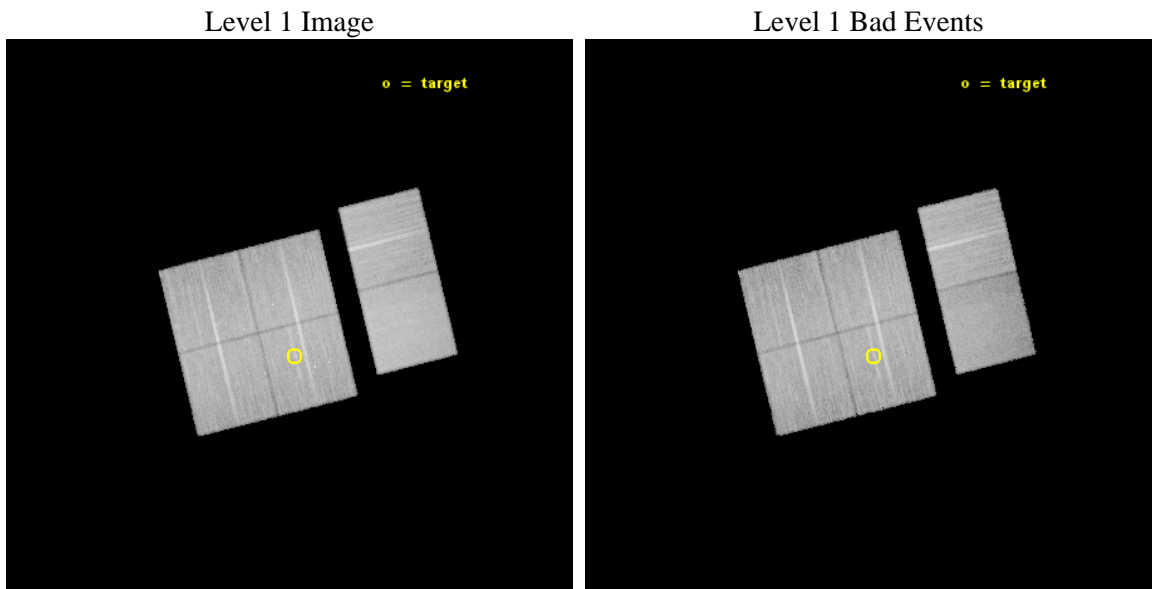
seq_num	601089	Sequence number
obs_id	15383	Observation id
title	Search for evidence of dwarf galaxy collisions in X-rays	Proposal
observer	Professor Gordon Garmire	Principal investigator
object	ngc2997	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	146.411667	Observer's specified target RA [deg]
dec_targ	-31.191111	Observer's specified target Dec [deg]
ra_nom	146.42434057502	Nominal RA [deg]
dec_nom	-31.137785019635	Nominal Dec [deg]
roll_nom	76.154031382935	Nominal Roll [deg]
revision	2	Processing version of data
ontime	46102.243014157	Sum of GTIs [s]
livetime	45518.468653674	Livetime [s]
ontime0	46102.119894147	Sum of GTIs [s]
ontime1	46102.16093415	Sum of GTIs [s]
ontime2	46102.201974154	Sum of GTIs [s]
ontime3	46102.243014157	Sum of GTIs [s]
ontime6	46102.325094163	Sum of GTIs [s]
ontime7	46102.28405416	Sum of GTIs [s]
l2events	212993	Number of level 2 events



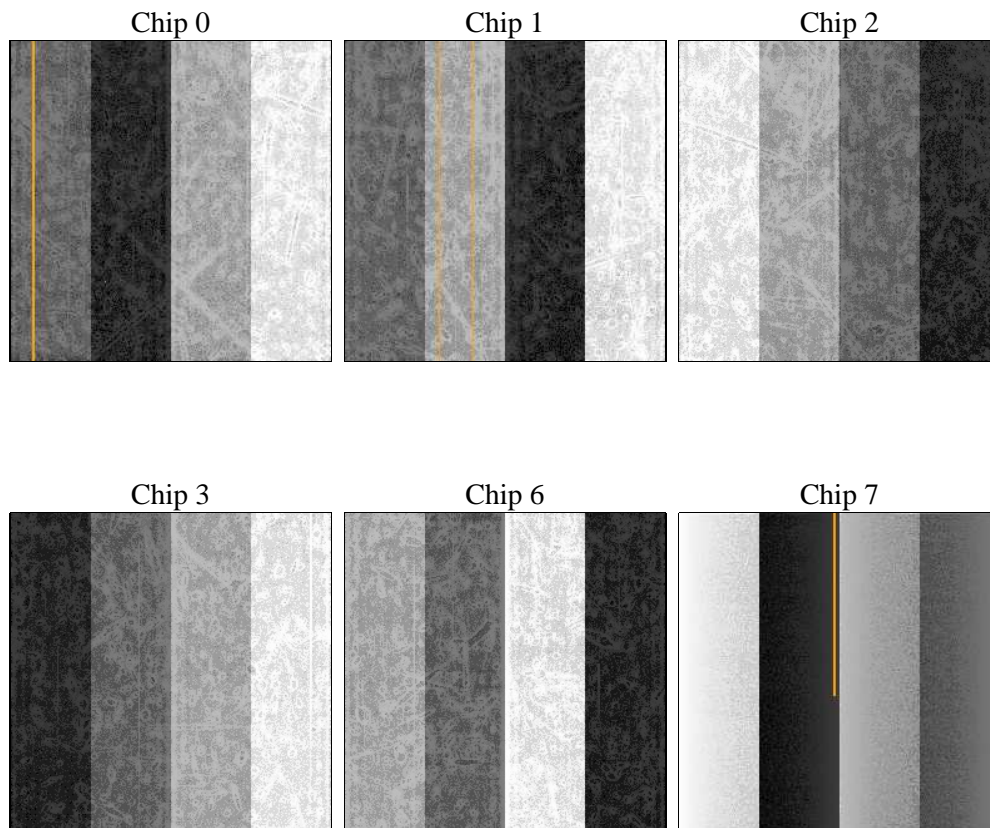
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	46130.750000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	46102.243014157	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	46102.119894147	Sum of GTIs [s]
date	2014-12-08T02:16:57	Date and time of file creation	ontime1	46102.16093415	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	46102.201974154	Sum of GTIs [s]
			ontime3	46102.243014157	Sum of GTIs [s]
			ontime6	46102.325094163	Sum of GTIs [s]
			ontime7	46102.28405416	Sum of GTIs [s]
			l1events	1195716	Number of level 1 events

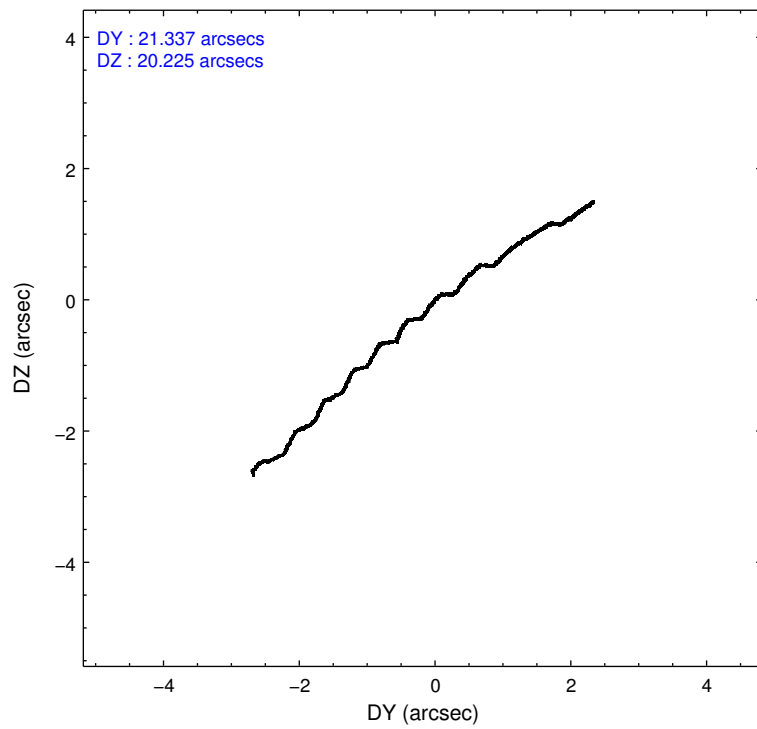
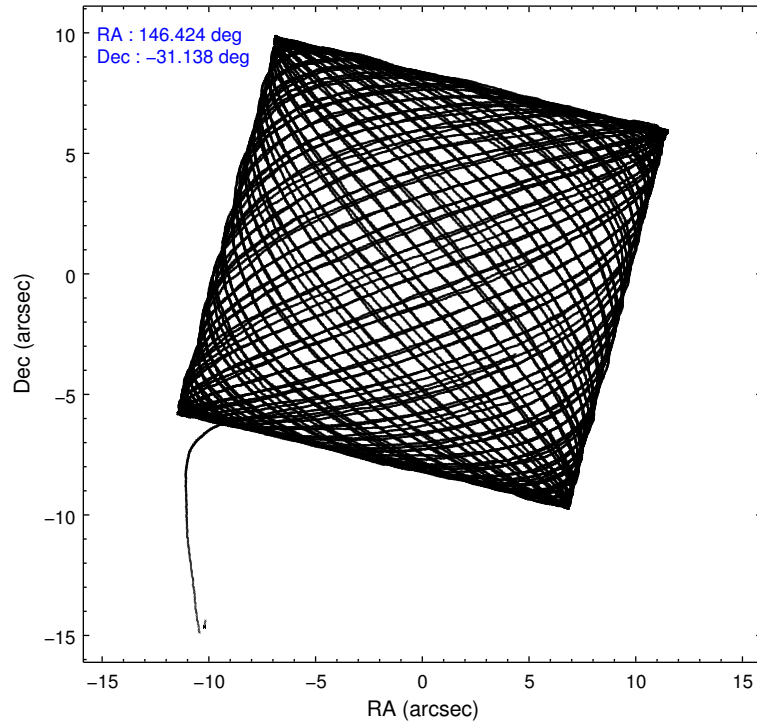
2.1.4 Events

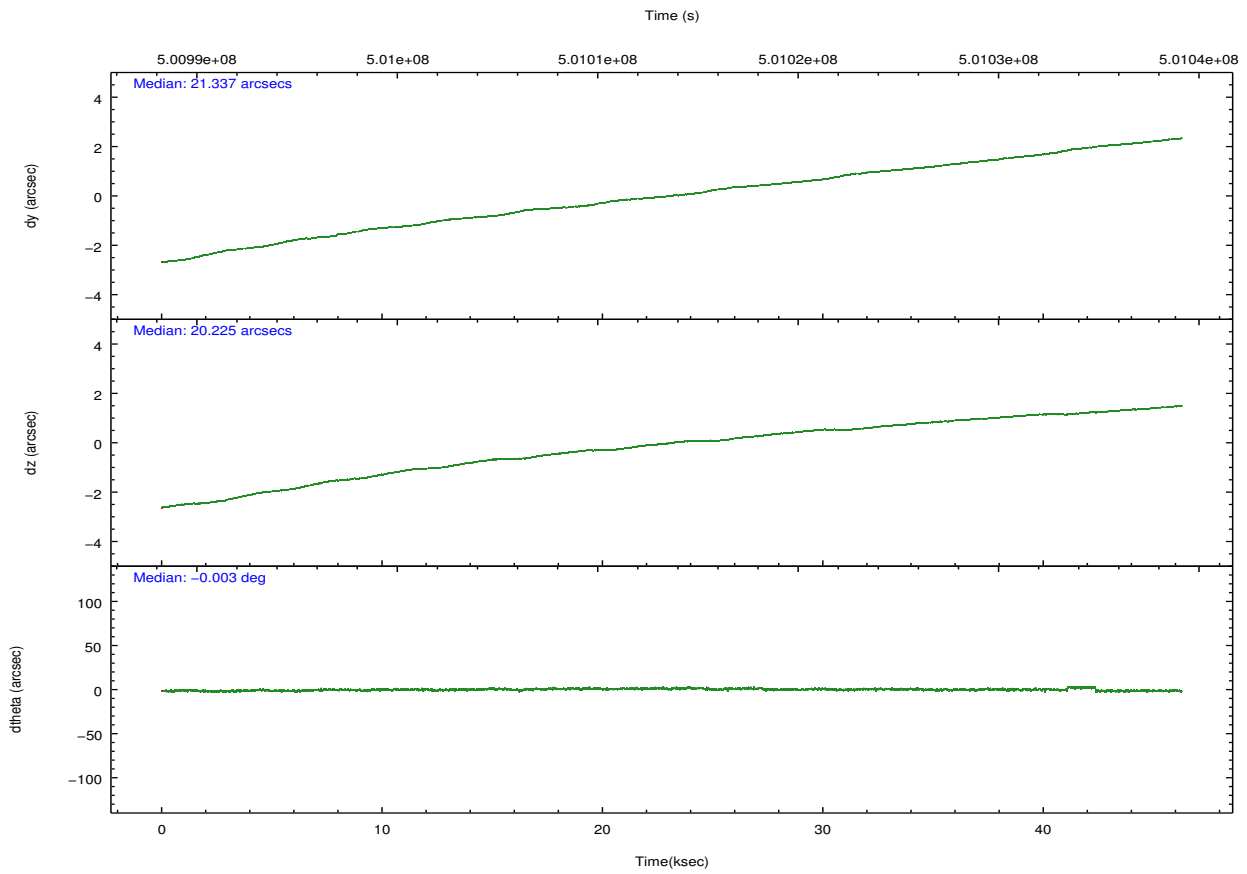
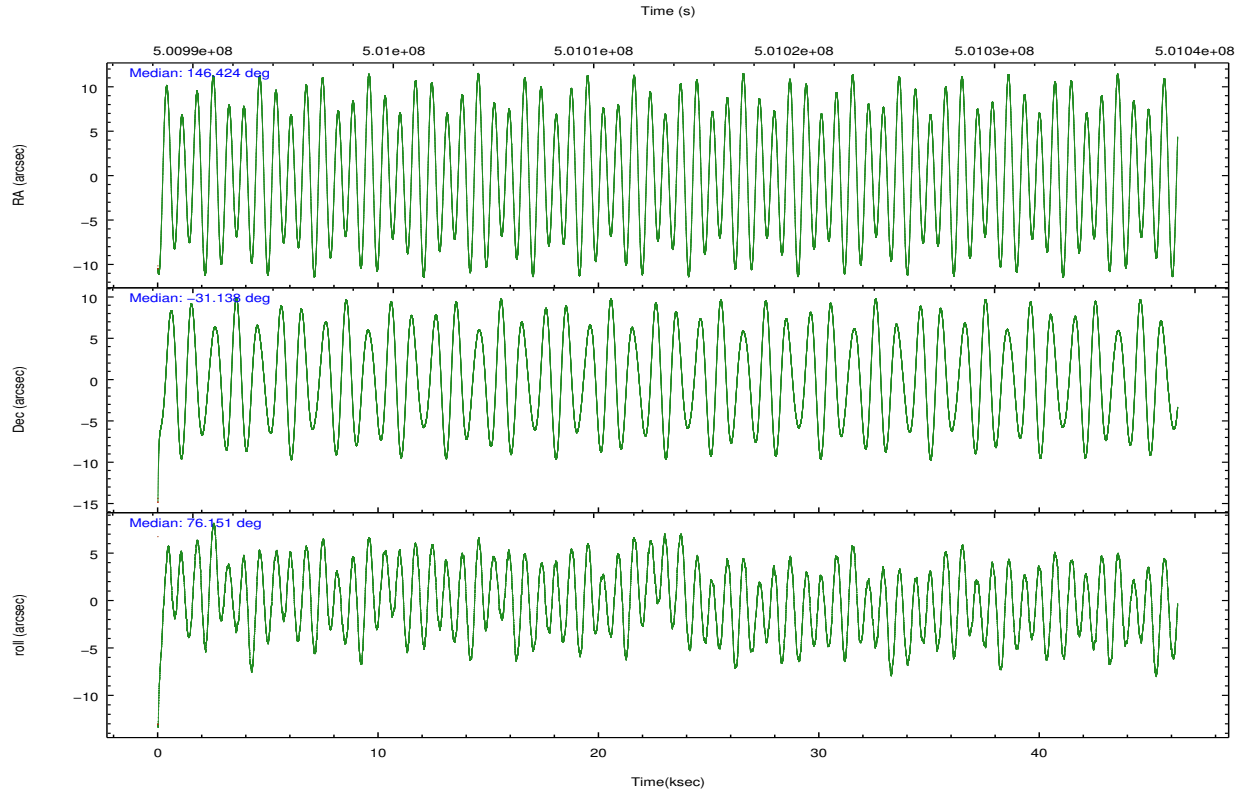
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	180555	182816	198182	192363	203191	238609	grade 0 events	8978	8068	8472	11208	9034	10688
rejected events	156437	158667	175373	166216	178124	125424		4%	4%	4%	5%	4%	4%
rejected %	86%	86%	88%	86%	87%	52%	grade 1 events	97	100	128	134	114	332
								0%	0%	0%	0%	0%	0%
							grade 2 events	5948	5733	5610	5419	5723	24442
								3%	3%	2%	2%	2%	10%
							grade 3 events	2443	2554	2247	2488	2519	10072
								1%	1%	1%	1%	1%	4%
							grade 4 events	2223	2490	2260	2436	2501	10002
								1%	1%	1%	1%	1%	4%
							grade 5 events	8022	8706	7250	9304	9551	25369
								4%	4%	3%	4%	4%	10%
							grade 6 events	4527	5308	4222	4598	5292	57986
								2%	2%	2%	2%	2%	24%
							grade 7 events	148317	149857	167993	156776	168457	99718
								82%	81%	84%	81%	82%	41%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	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	146.433410	146.4243405750242	CCD I2 on	Y	Y
[deg] Pointing Dec	-31.164155	-31.13778501963548	CCD I3 on	Y	Y
[deg] Pointing Roll	75.950046	76.15403138293544	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	Y
[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)	500990710.184000	500989640.21583	CCD S5 on	N	N
Observation start date	2013-11-16T12:04:03	2013-11-16T11:47:20	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	501036841.184000	501037077.21843	On-chip summing requested	N	N
Observation end date	2013-11-17T00:52:54	2013-11-17T00:57:57	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



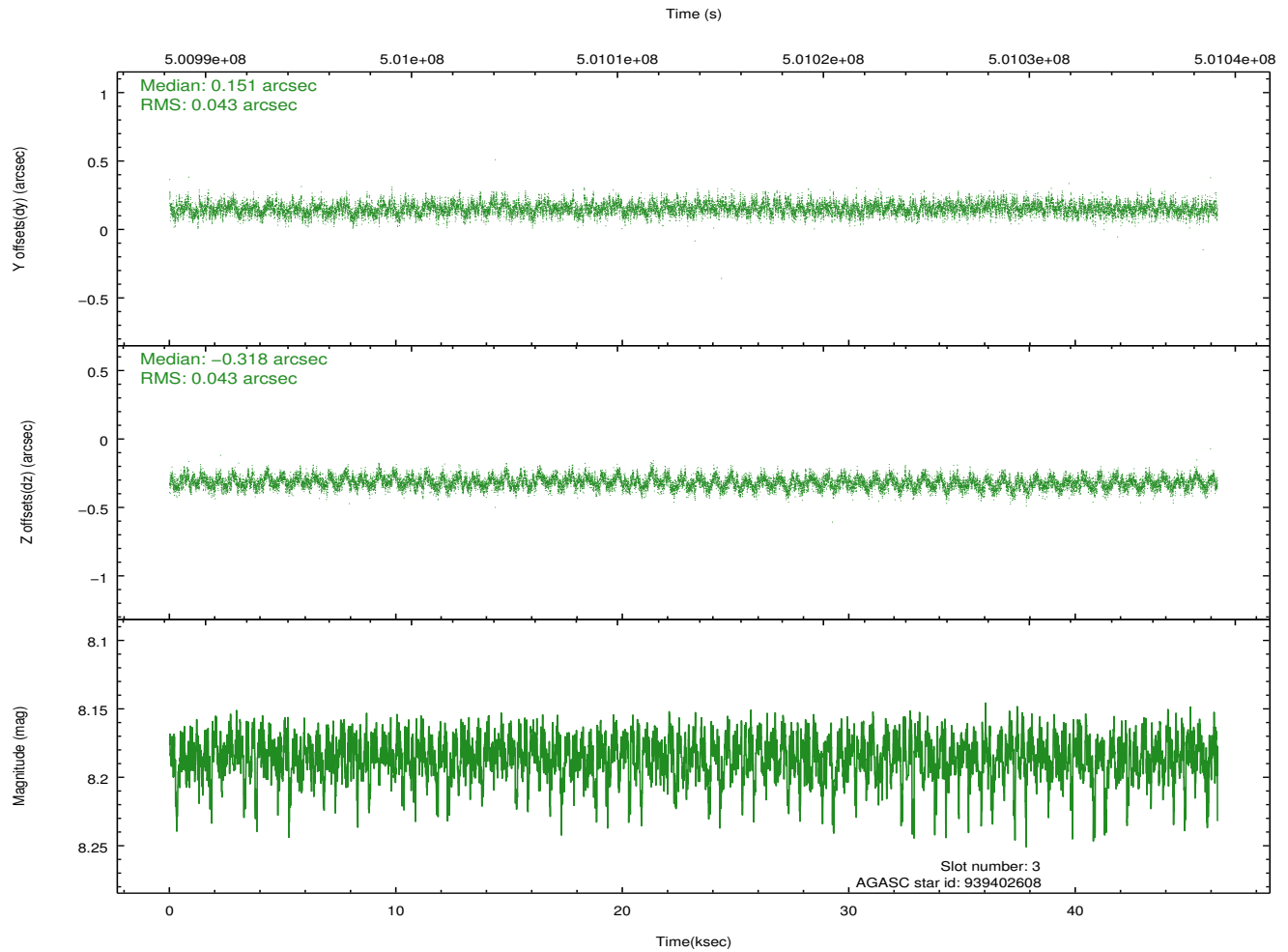
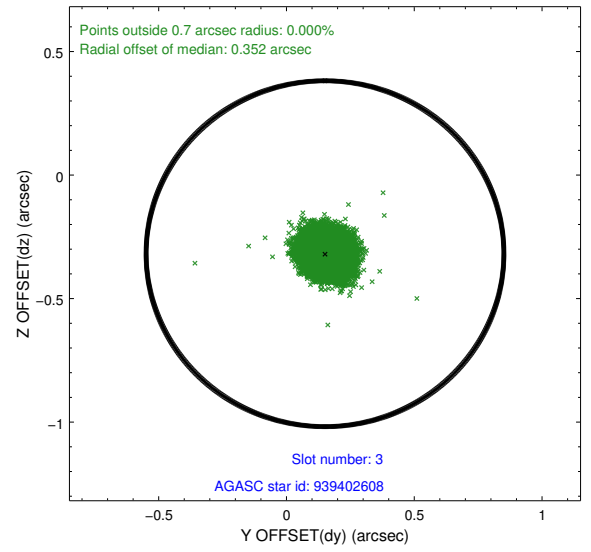
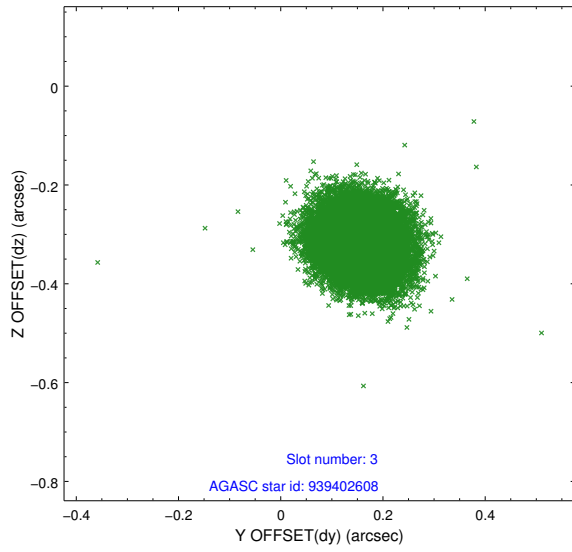


Slot Statistics

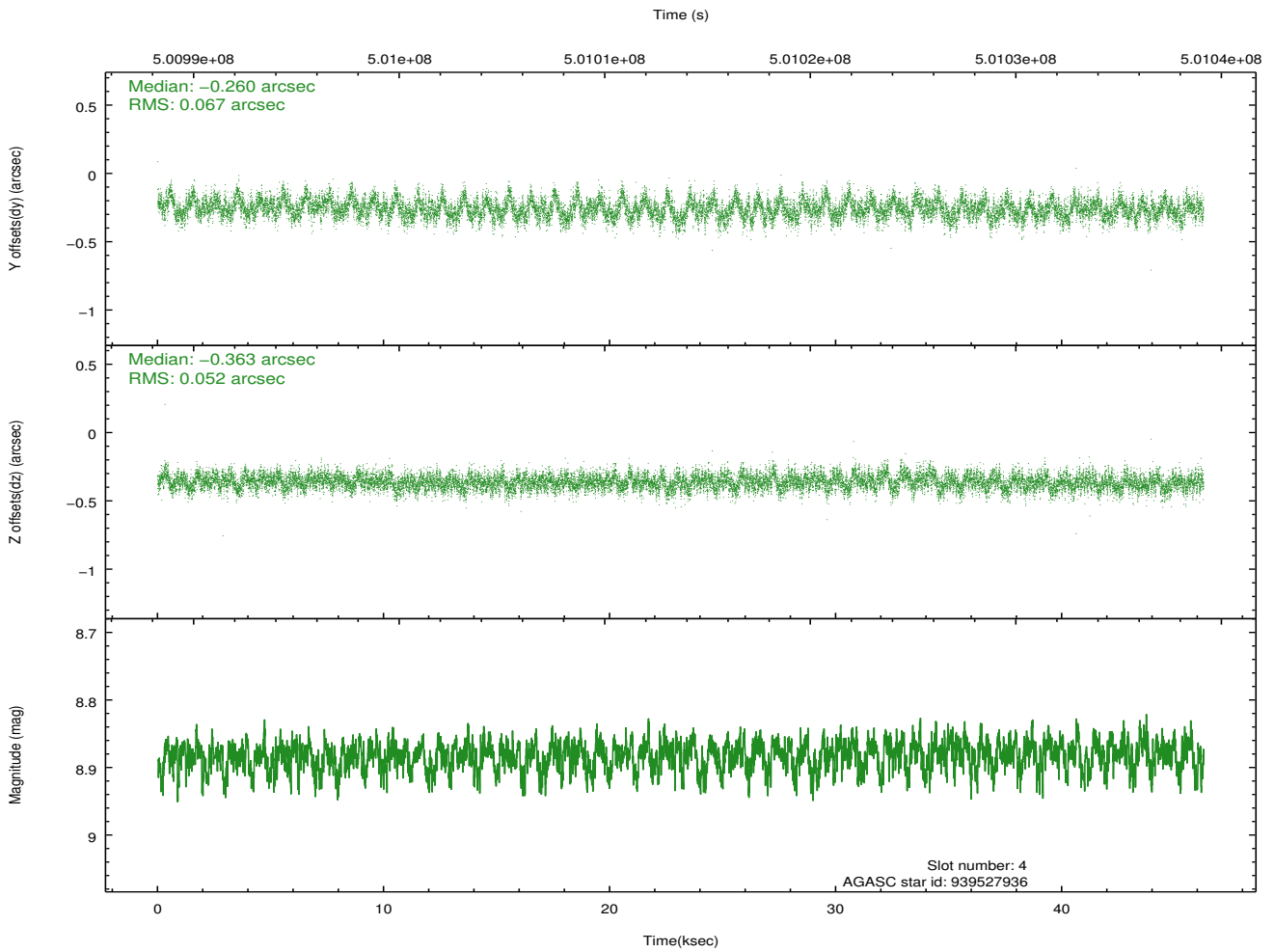
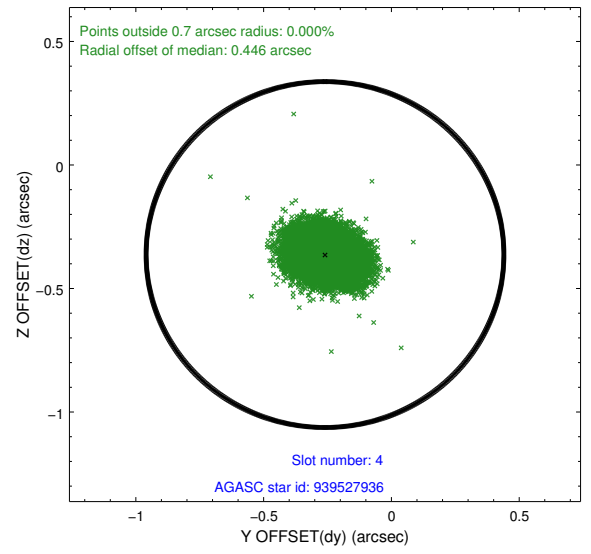
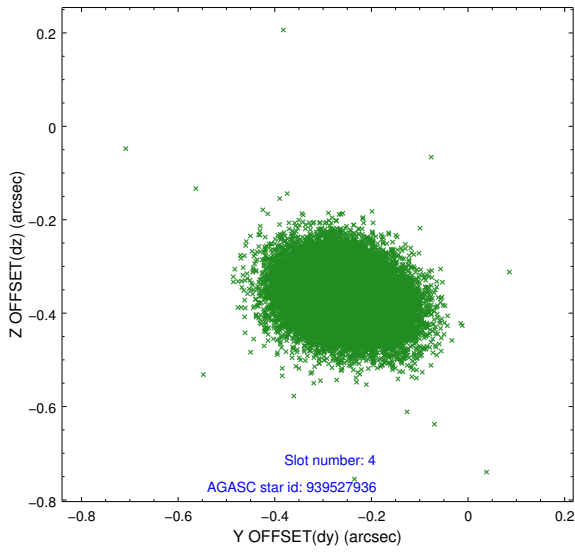
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.04	11285	-0.161	-0.046	0.034	0.055	0.000000	0.000000	-776.89	-1005.33
1	FID		ACIS-I-4	6.98	11283	0.274	0.098	0.065	0.088	0.000000	0.000000	2137.56	900.94
2	FID		ACIS-I-5	7.06	11285	-0.224	0.018	0.043	0.069	0.000000	0.000000	-1830.43	897.71
3	GUIDE	used	939402608	8.18	22566	0.151	-0.318	0.065	0.104	145.825397	-31.568637	-1869.52	1454.62
4	GUIDE	used	939527936	8.88	22564	-0.260	-0.363	0.090	0.147	146.559458	-30.580866	2131.92	131.11
5	GUIDE	used	939531400	8.75	22562	-0.017	0.269	0.103	0.171	147.054370	-30.976548	1115.88	-1696.14
6	GUIDE	used	939531496	7.89	22563	-0.010	0.000	0.071	0.116	146.759515	-30.973615	908.41	-809.71
7	GUIDE	used	939534344	7.44	22567	0.124	0.406	0.093	0.147	146.766481	-31.268117	-115.12	-1084.94

2.4 Star Slots

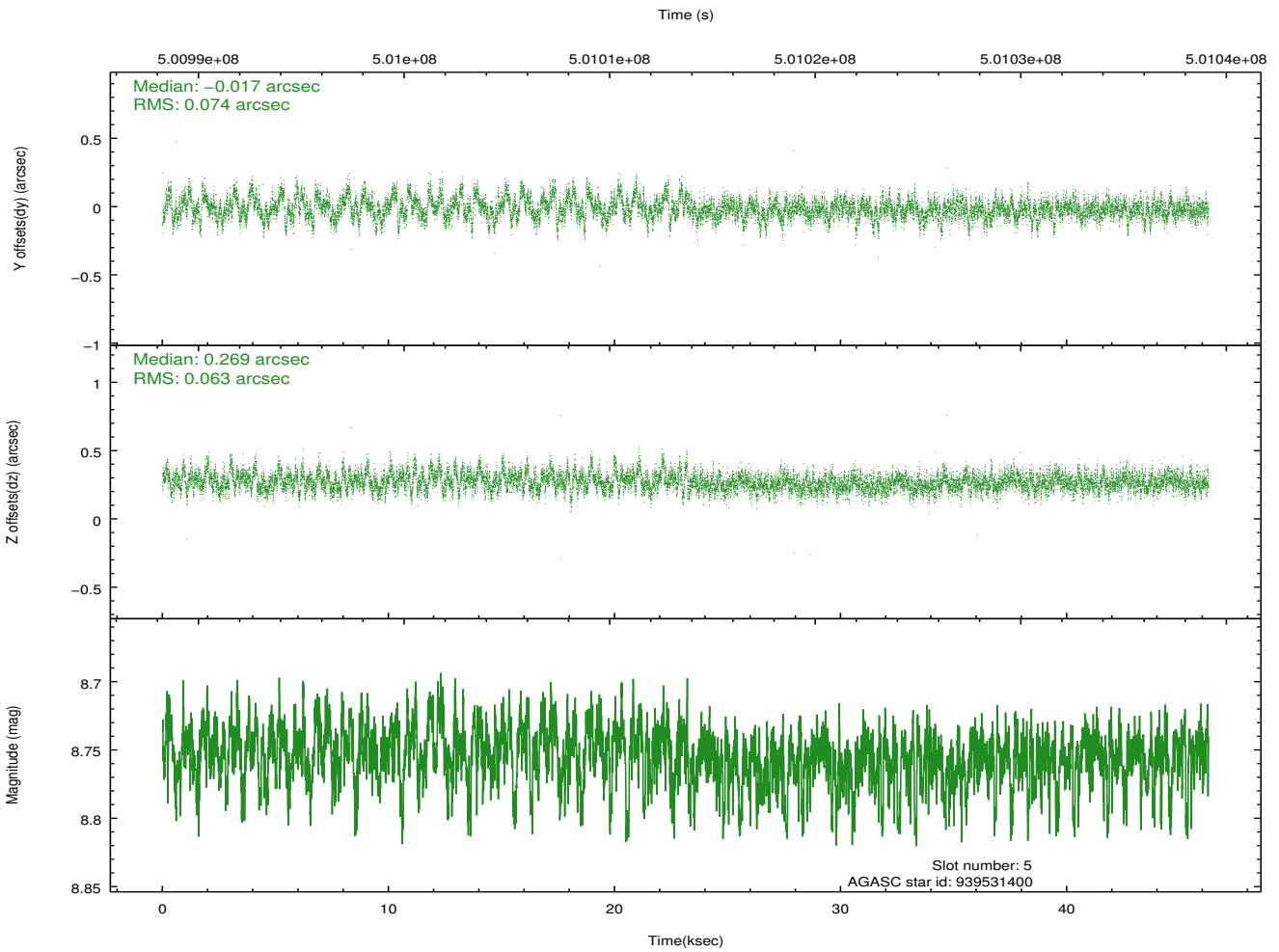
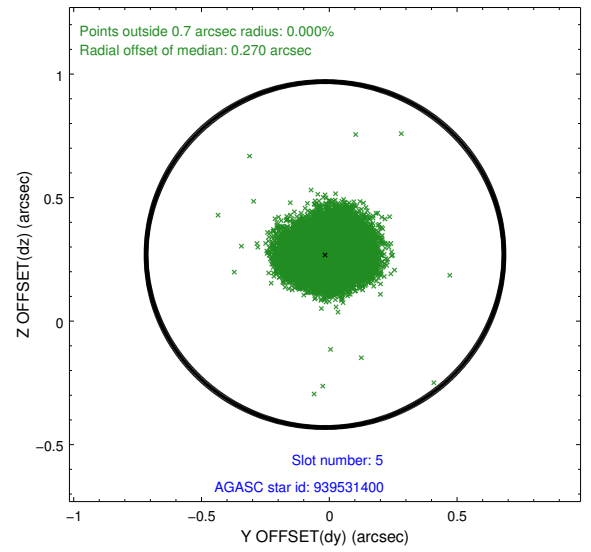
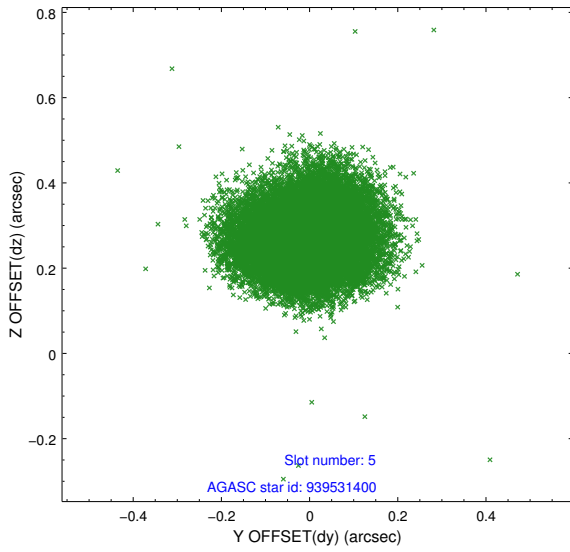
2.4.1 Slot 3



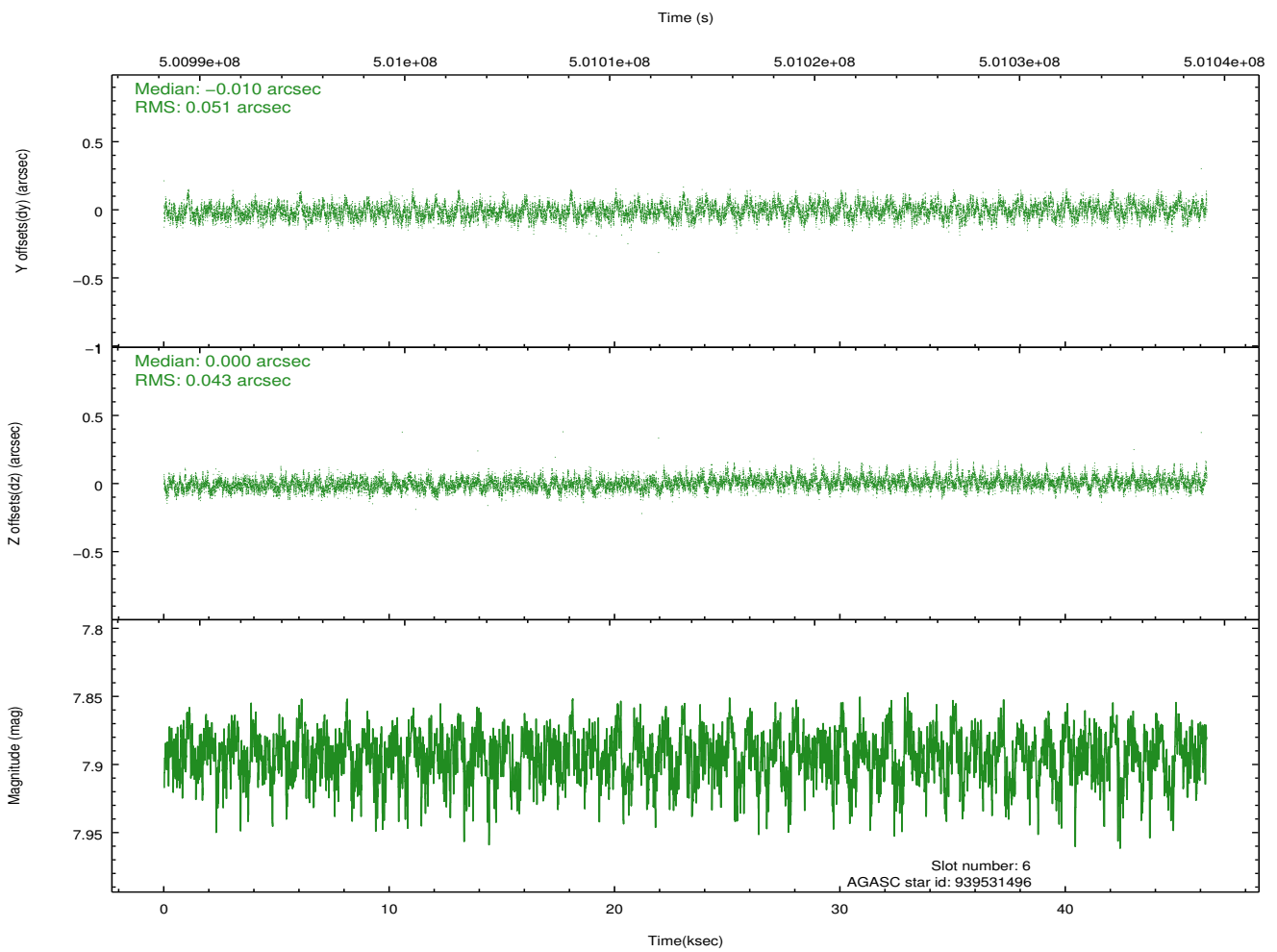
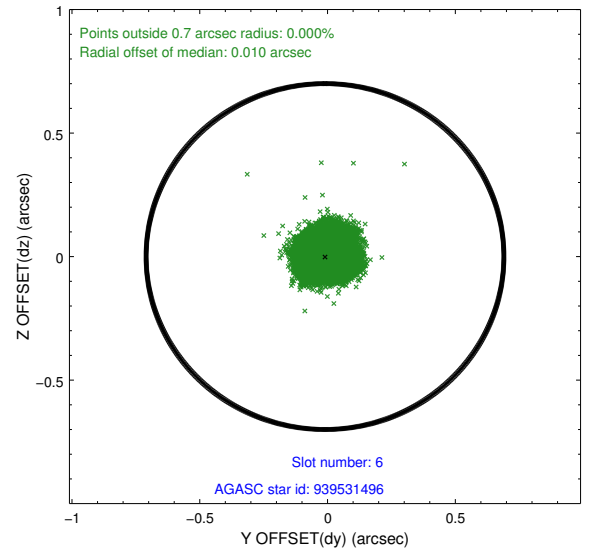
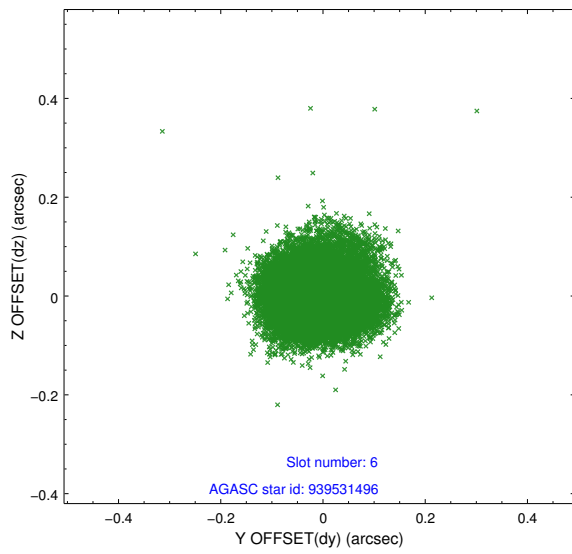
2.4.2 Slot 4



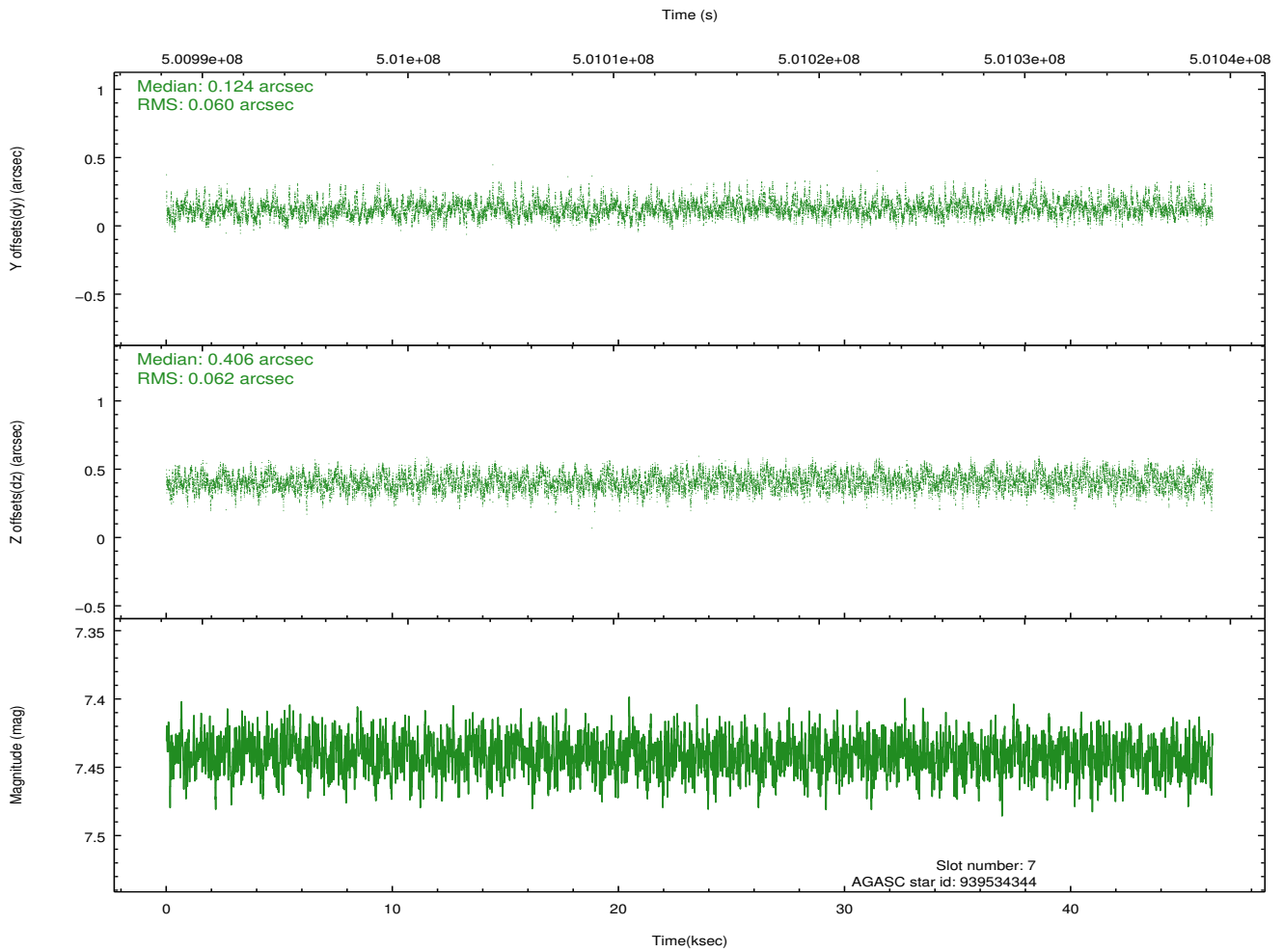
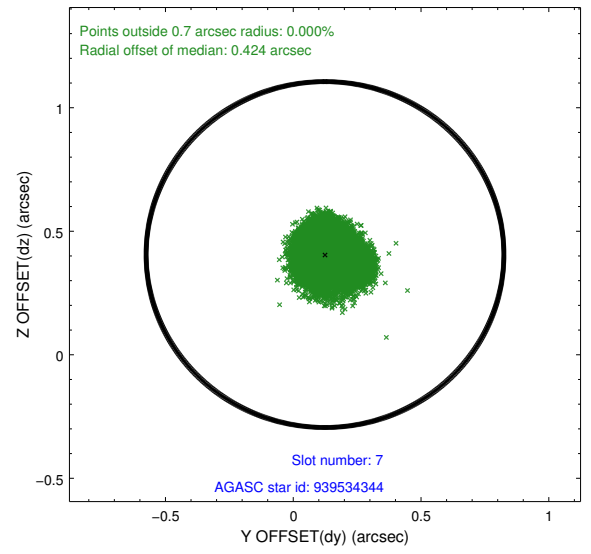
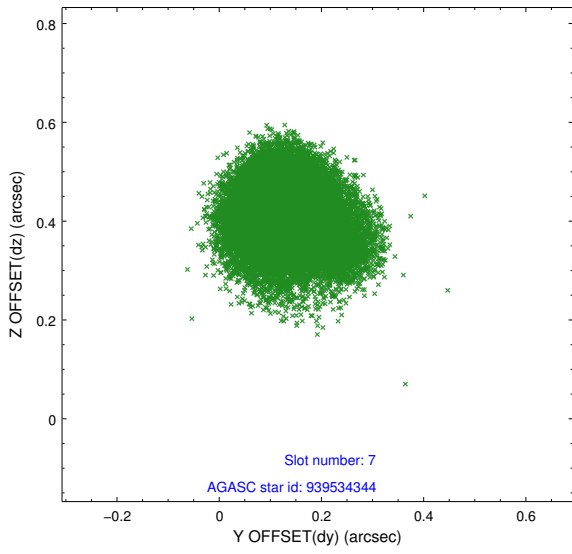
2.4.3 Slot 5



2.4.4 Slot 6

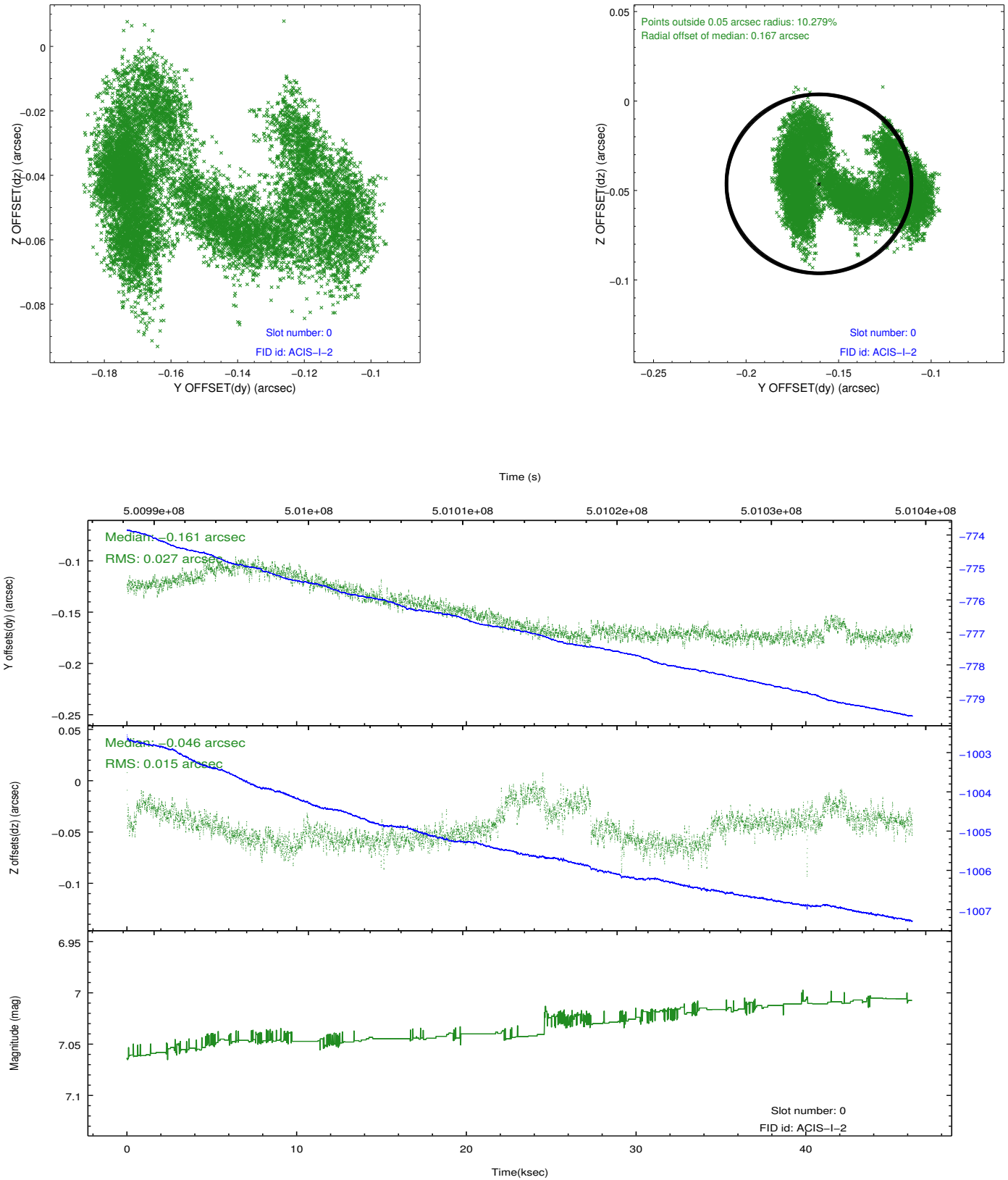


2.4.5 Slot 7

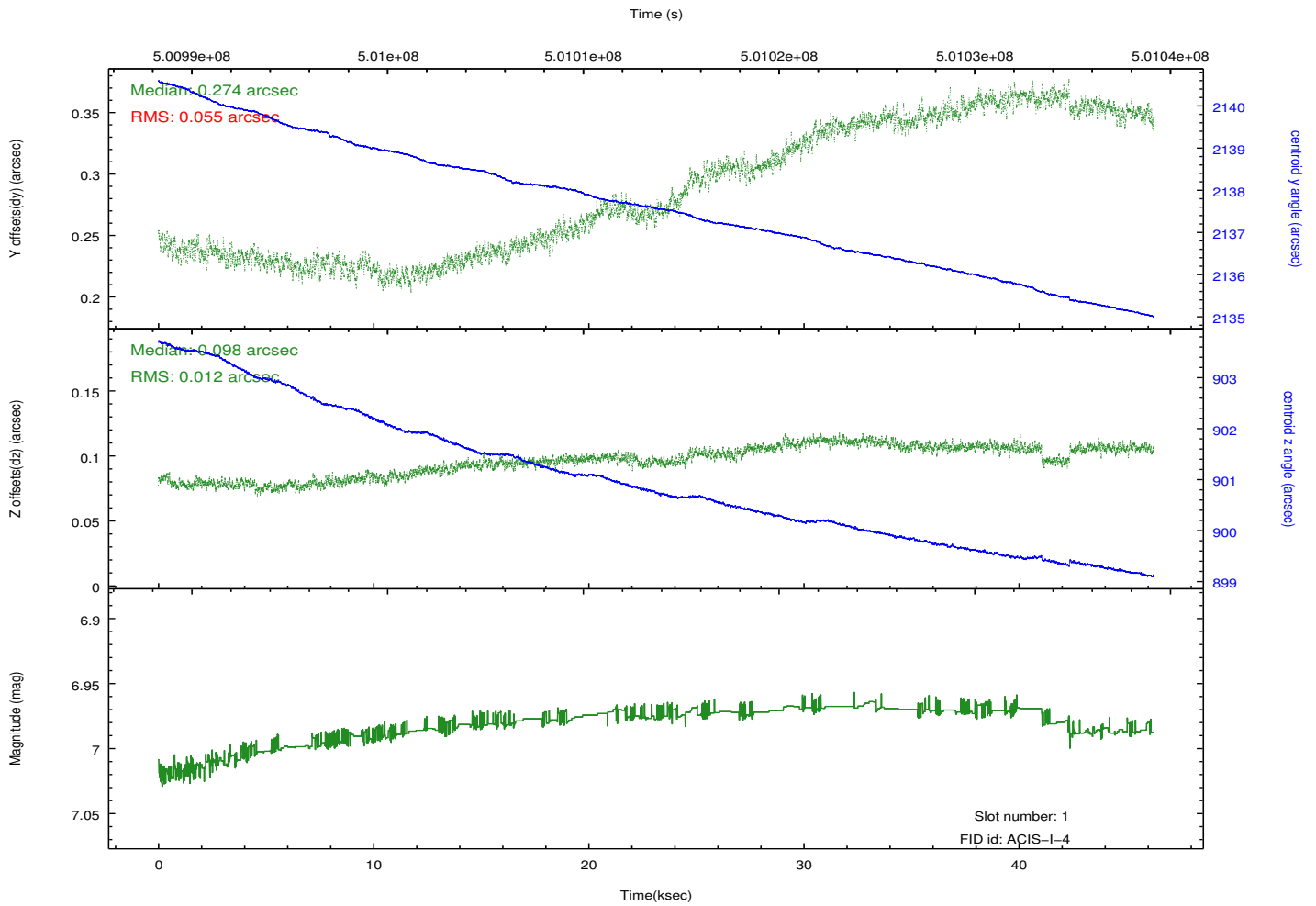
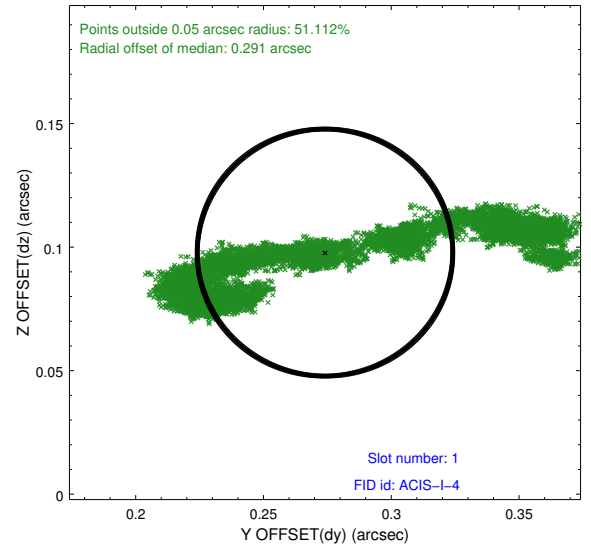
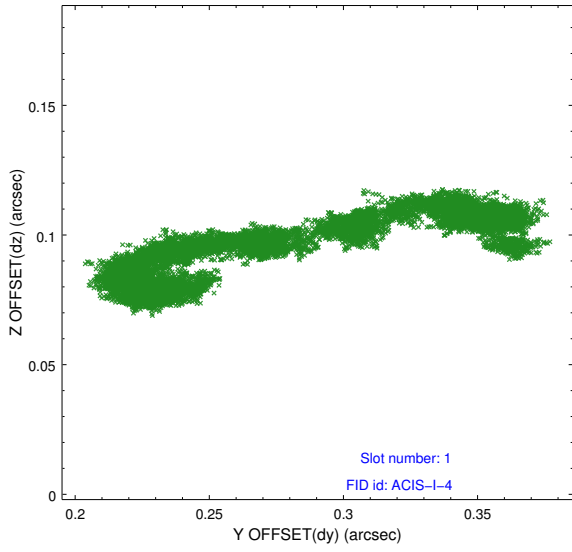


2.5 FID Slots

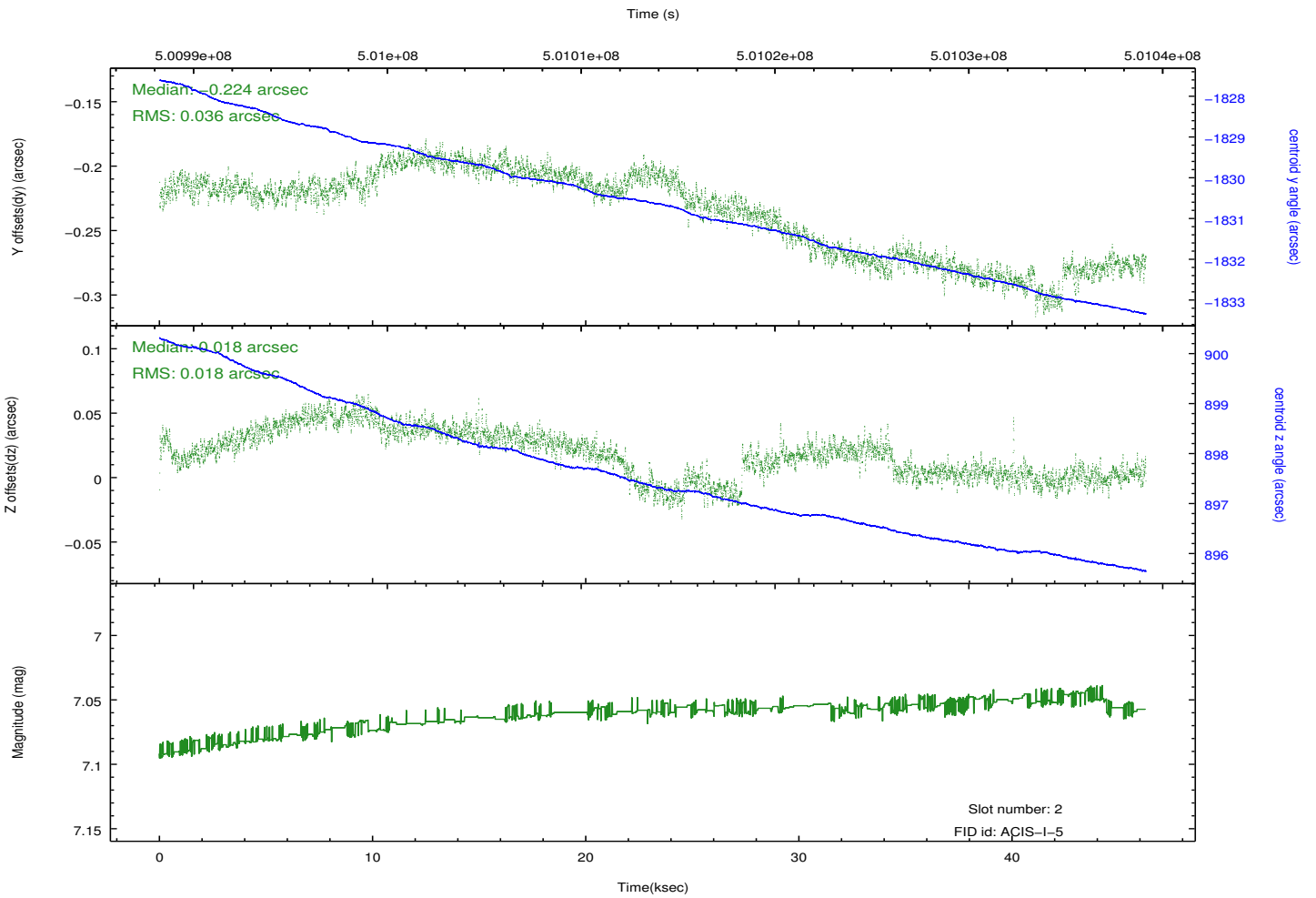
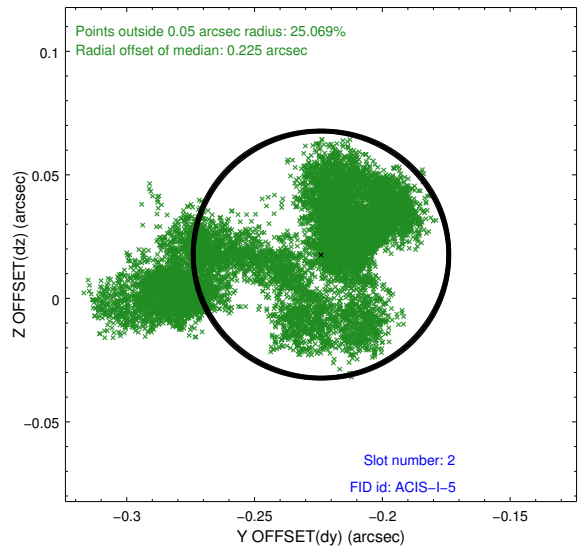
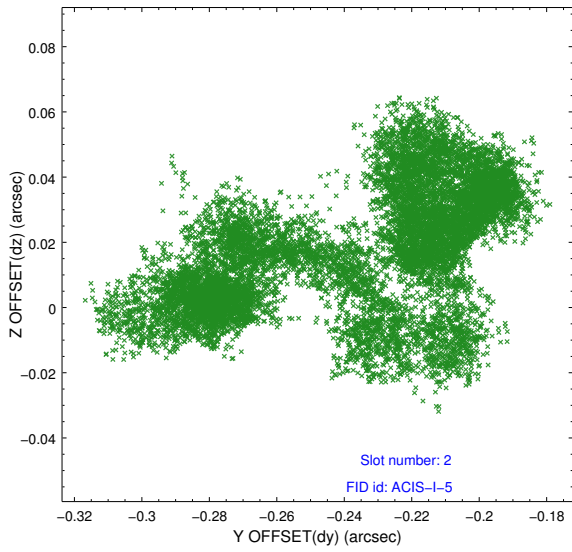
2.5.1 Slot 0



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)	2014.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	46.102243014157

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.