

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 15085 - L2 Version 2
Chandra X-Ray Center

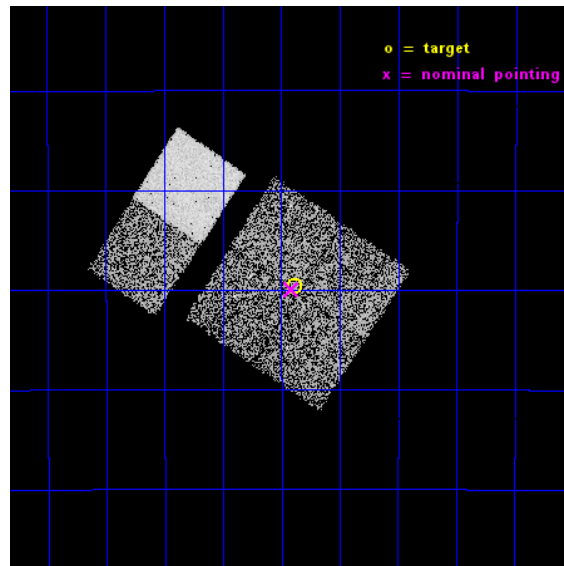
L2 Processing Date : Dec 2 2014

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1 Front

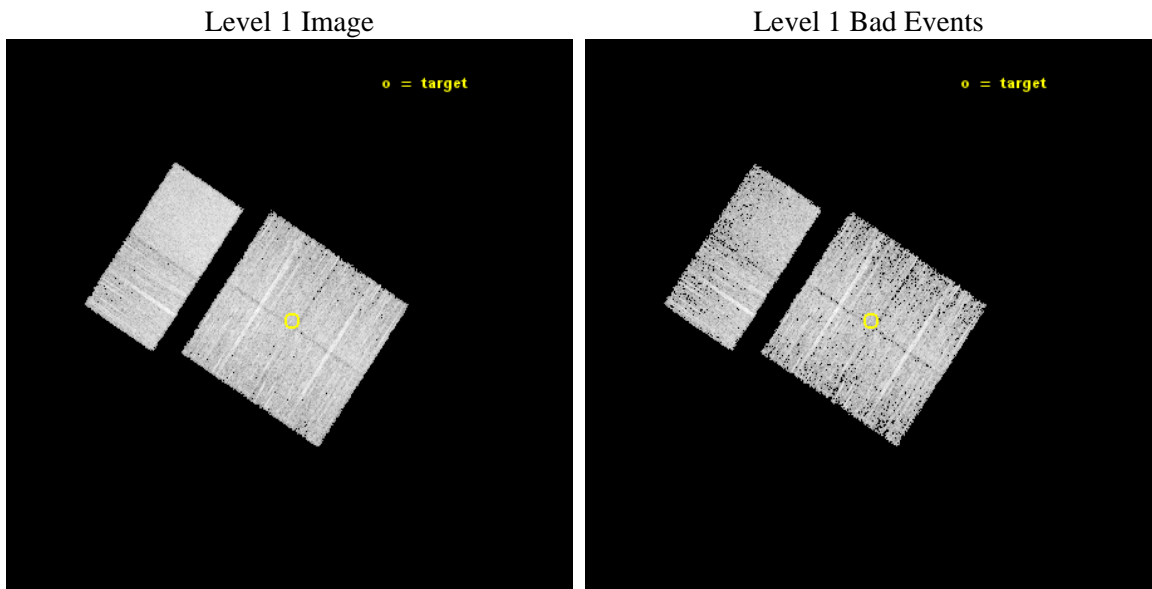
seq_num	801217	Sequence number
obs_id	15085	Observation id
title	Mapping the nearest non-cool core cluster out to R200	Proposal tit
observer	Dr Ka-wah Wong	Principal investigator
object	Antlia Cluster E5	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	159.345833	Observer's specified target RA [deg]
dec_targ	-35.327694	Observer's specified target Dec [deg]
ra_nom	159.35352301636	Nominal RA [deg]
dec_nom	-35.332794466256	Nominal Dec [deg]
roll_nom	303.56570787044	Nominal Roll [deg]
revision	2	Processing version of data
ontime	6971.3962860703	Sum of GTIs [s]
livetime	6883.1202686252	Livetime [s]
ontime0	6971.2731660604	Sum of GTIs [s]
ontime1	6971.3142060637	Sum of GTIs [s]
ontime2	6971.355246067	Sum of GTIs [s]
ontime3	6971.3962860703	Sum of GTIs [s]
ontime6	6971.4783660769	Sum of GTIs [s]
ontime7	6971.4373260736	Sum of GTIs [s]
l2events	40338	Number of level 2 events



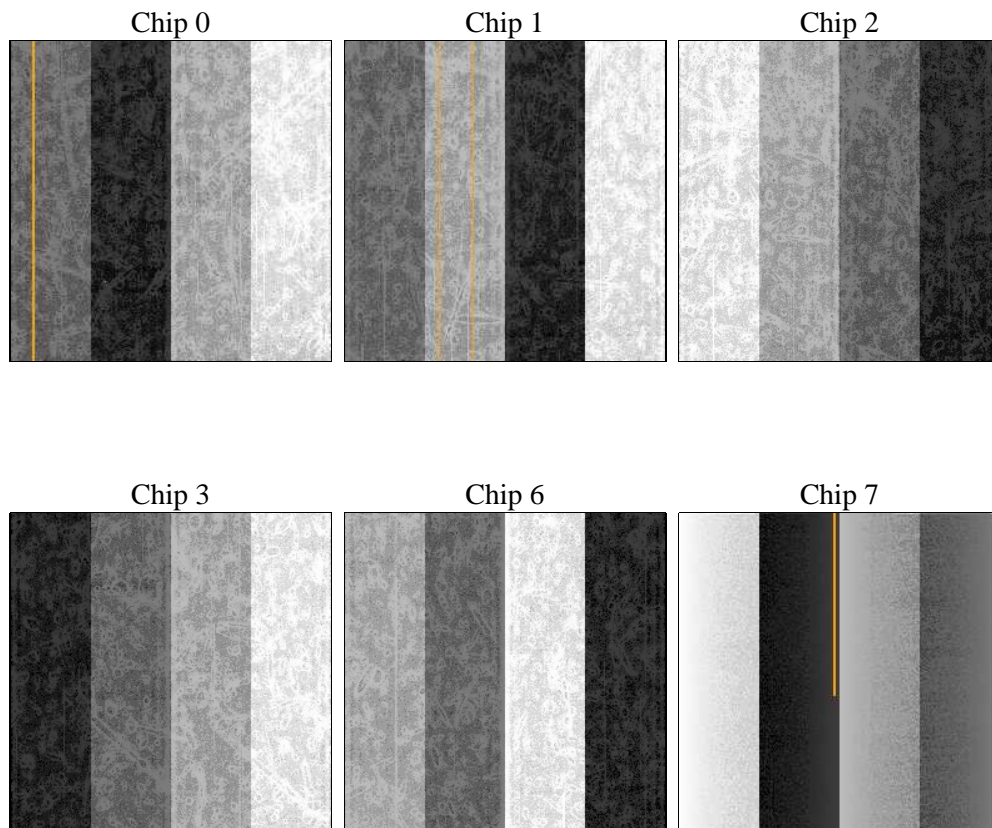
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	6971.3962860703	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	6971.2731660604	Sum of GTIs [s]
date	2014-12-02T16:05:08	Date and time of file creation	ontime1	6971.3142060637	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	6971.355246067	Sum of GTIs [s]
			ontime3	6971.3962860703	Sum of GTIs [s]
			ontime6	6971.4783660769	Sum of GTIs [s]
			ontime7	6971.4373260736	Sum of GTIs [s]
			l1events	236369	Number of level 1 events

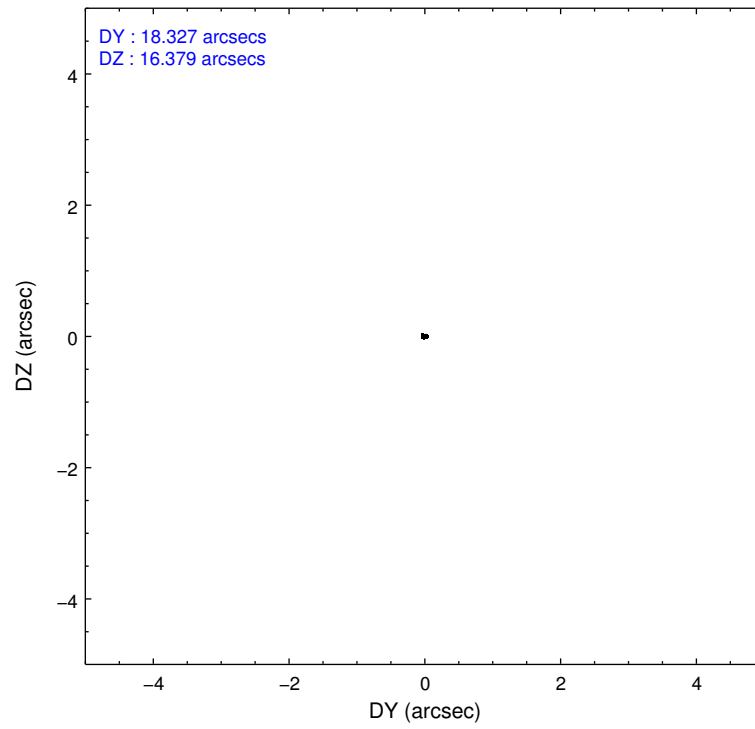
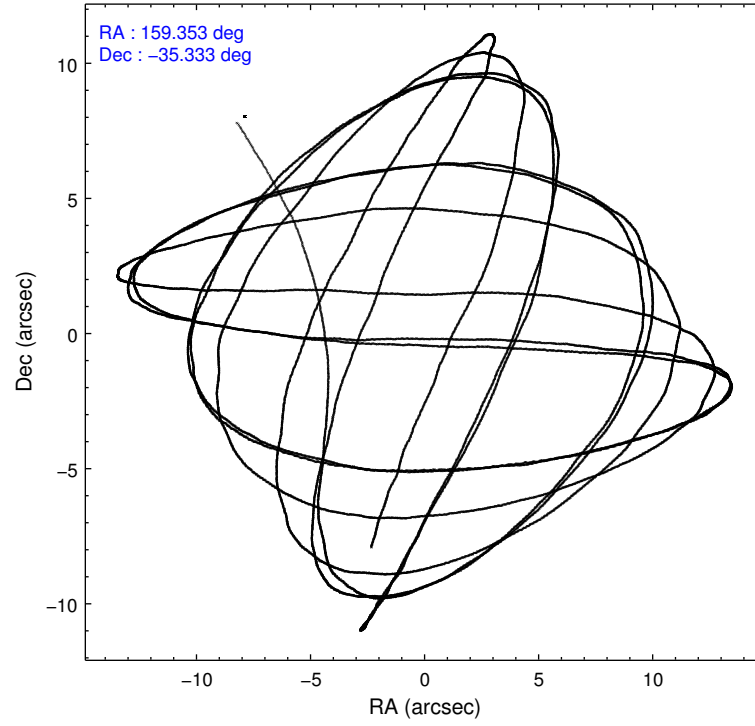
2.1.4 Events

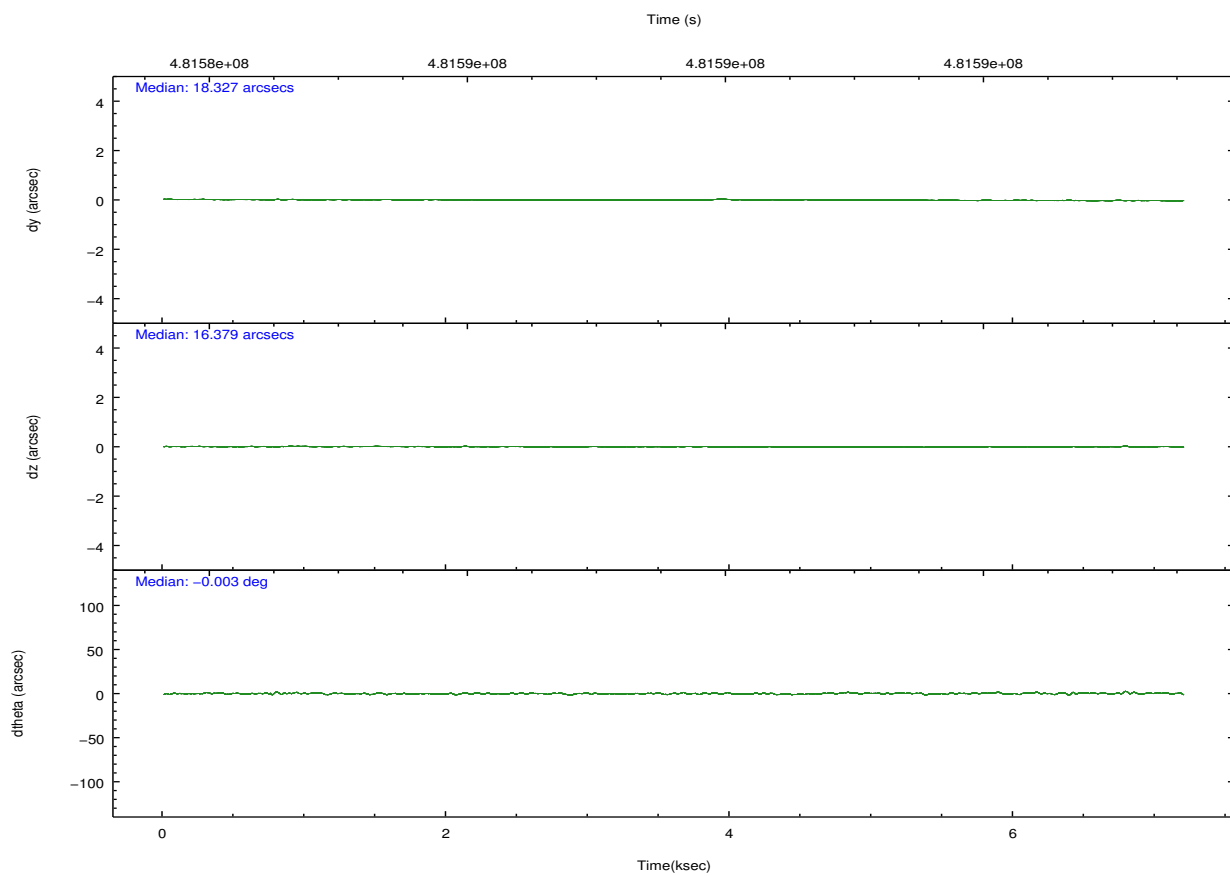
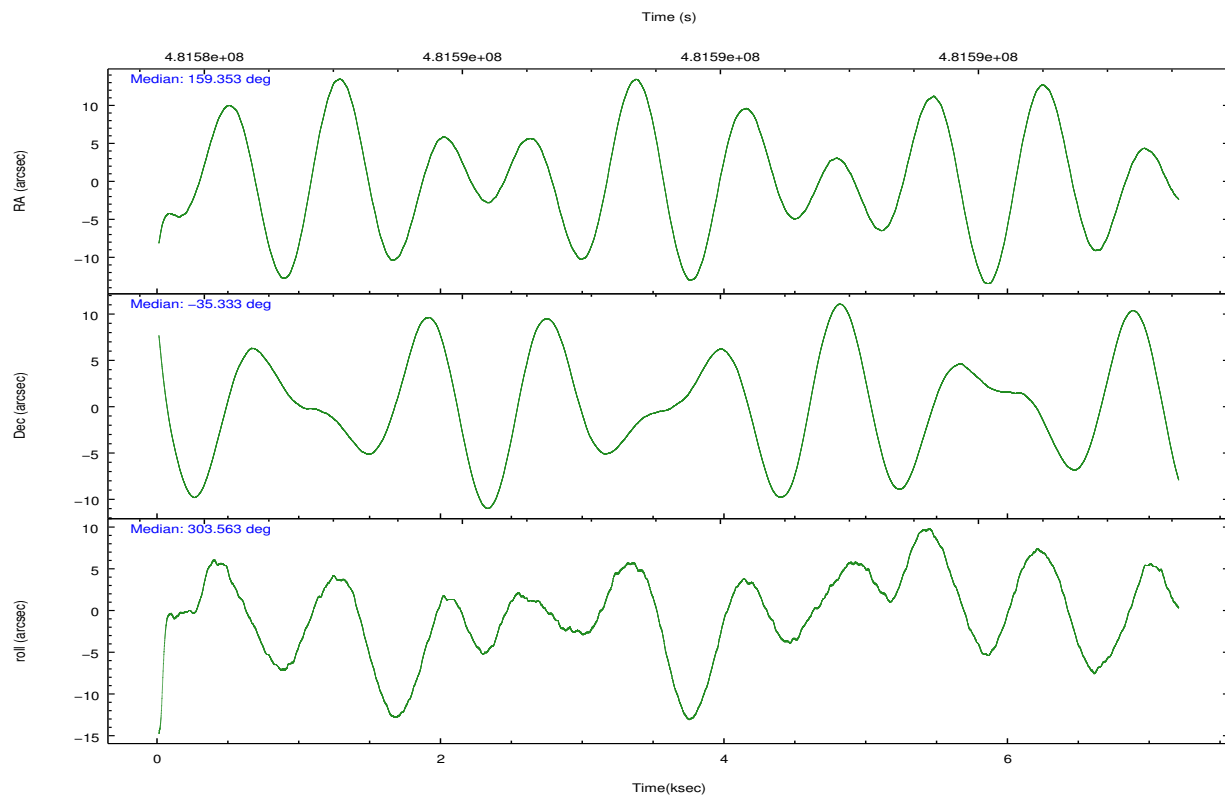
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	35346	37848	38509	35693	37931	51042	grade 0 events	1485	1648	1567	1528	1468	1943
rejected events	31000	33008	34194	31488	33454	28914		4%	4%	4%	4%	3%	3%
rejected %	87%	87%	88%	88%	88%	56%	grade 1 events	19	16	23	25	25	57
								0%	0%	0%	0%	0%	0%
							grade 2 events	1115	1201	1091	925	1037	4500
								3%	3%	2%	2%	2%	8%
							grade 3 events	461	466	440	439	417	1784
								1%	1%	1%	1%	1%	3%
							grade 4 events	403	445	437	423	453	1815
								1%	1%	1%	1%	1%	3%
							grade 5 events	1819	1842	1633	2000	1974	5157
								5%	4%	4%	5%	5%	10%
							grade 6 events	883	1084	781	891	1105	12093
								2%	2%	2%	2%	2%	23%
							grade 7 events	29161	31146	32537	29462	31452	23693
								82%	82%	84%	82%	82%	46%

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	FAINT	FAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	159.323279	159.3535230163587	CCD I2 on	Y	Y
[deg] Pointing Dec	-35.320647	-35.33279446625601	CCD I3 on	Y	Y
[deg] Pointing Roll	303.339553	303.5657078704378	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	-233.592463	-233.5874344608287	CCD S3 on	O2	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	481584209.184000	481583241.38413	CCD S5 on	N	N
Observation start date	2013-04-05T21:22:22	2013-04-05T21:07:21	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	481591209.184000	481591896.4846	On-chip summing requested	N	N
Observation end date	2013-04-05T23:19:02	2013-04-05T23:31:36	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



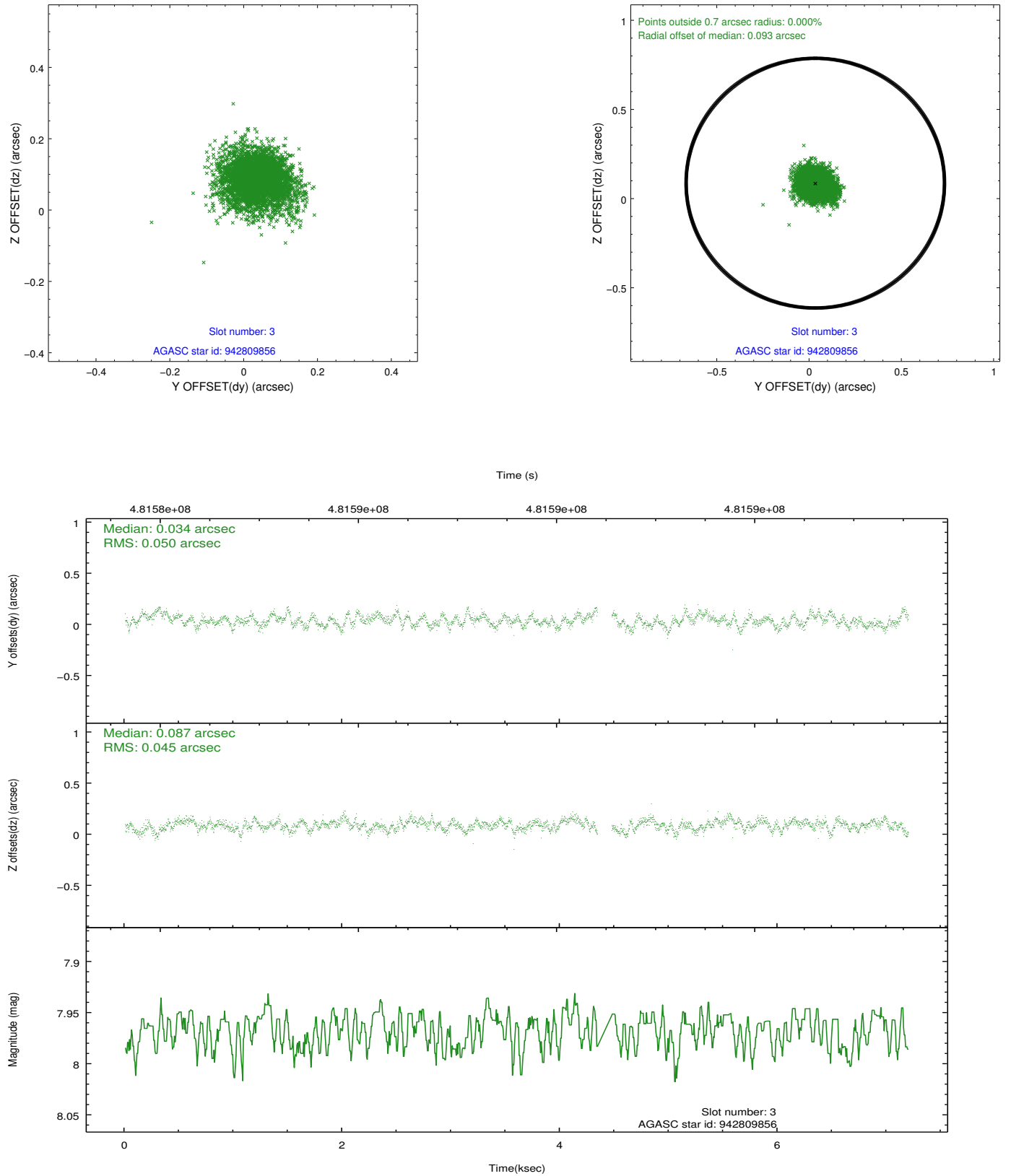


Slot Statistics

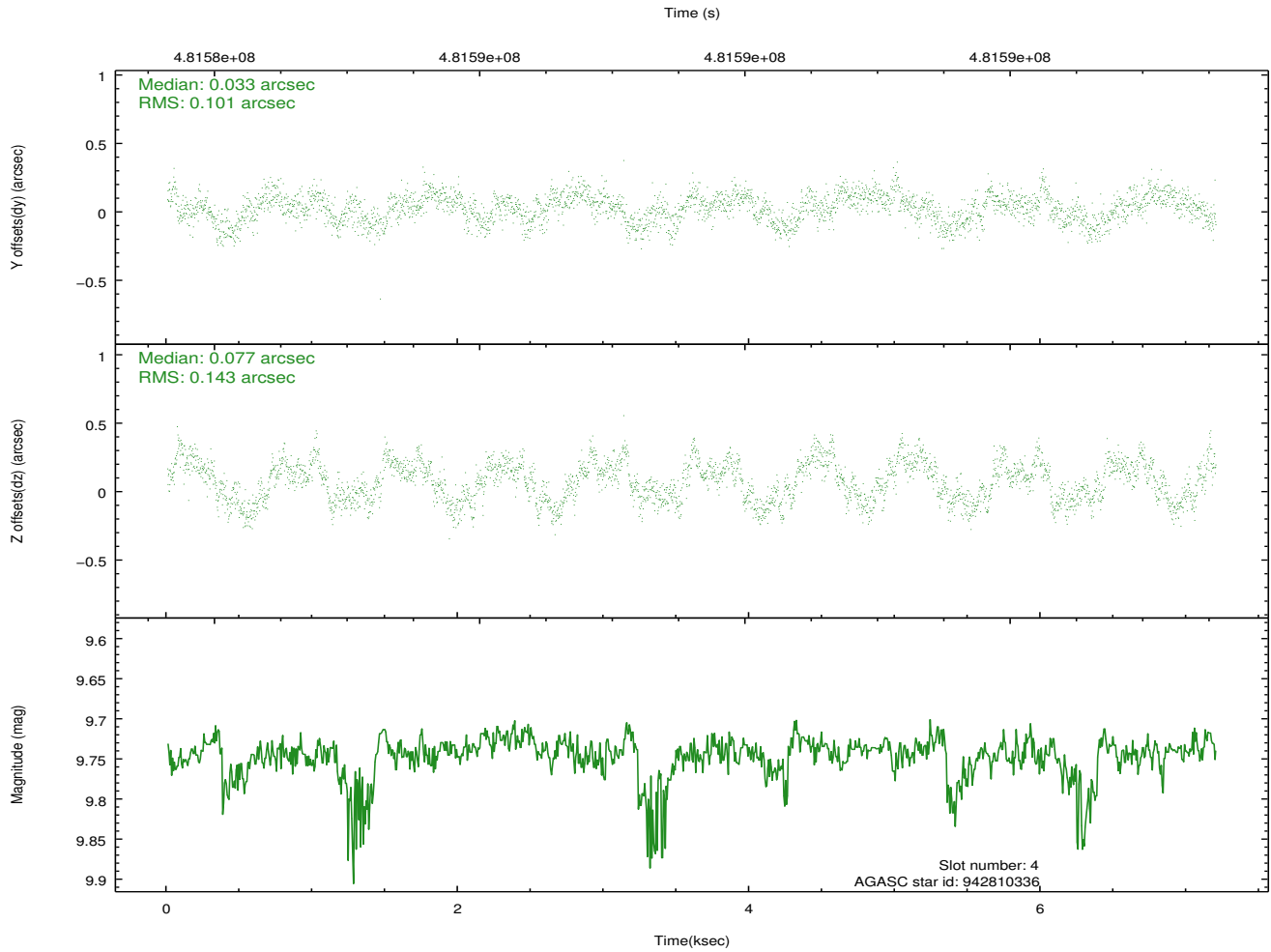
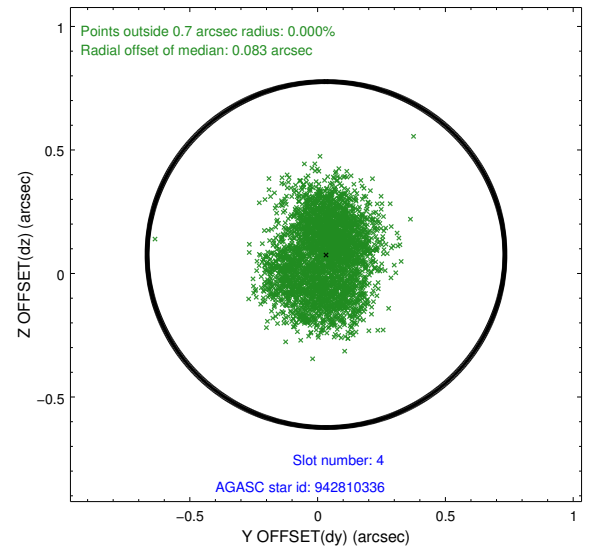
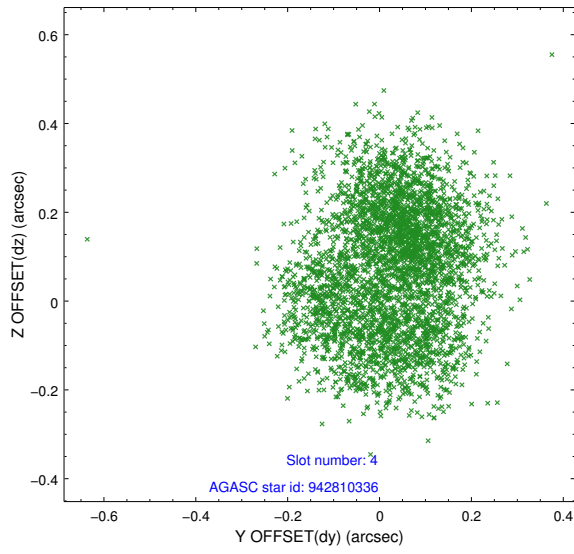
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.15	1755	-0.019	-0.093	0.008	0.015	0.000000	0.000000	921.04	-840.09
1	FID		ACIS-I-4	7.08	1755	0.257	0.098	0.008	0.013	0.000000	0.000000	2141.77	1059.52
2	FID		ACIS-I-5	7.14	1755	-0.336	0.066	0.007	0.013	0.000000	0.000000	-1826.28	1058.20
3	GUIDE	used	942809856	7.97	3447	0.034	0.087	0.071	0.118	158.721337	-35.085088	-1678.78	-1018.54
4	GUIDE	used	942810336	9.74	3494	0.033	0.077	0.190	0.285	158.858021	-34.879376	-2079.74	-276.77
5	GUIDE	used	942814496	8.92	3505	0.228	0.094	0.077	0.125	158.878530	-35.136399	-1271.30	-730.82
6	GUIDE	used	943345760	7.44	3509	0.071	-0.029	0.077	0.130	159.425264	-35.720031	1365.19	-541.24
7	GUIDE	used	942932720	9.56	3481	-0.363	-0.220	0.144	0.222	160.186703	-35.510413	1970.86	1732.24

2.4 Star Slots

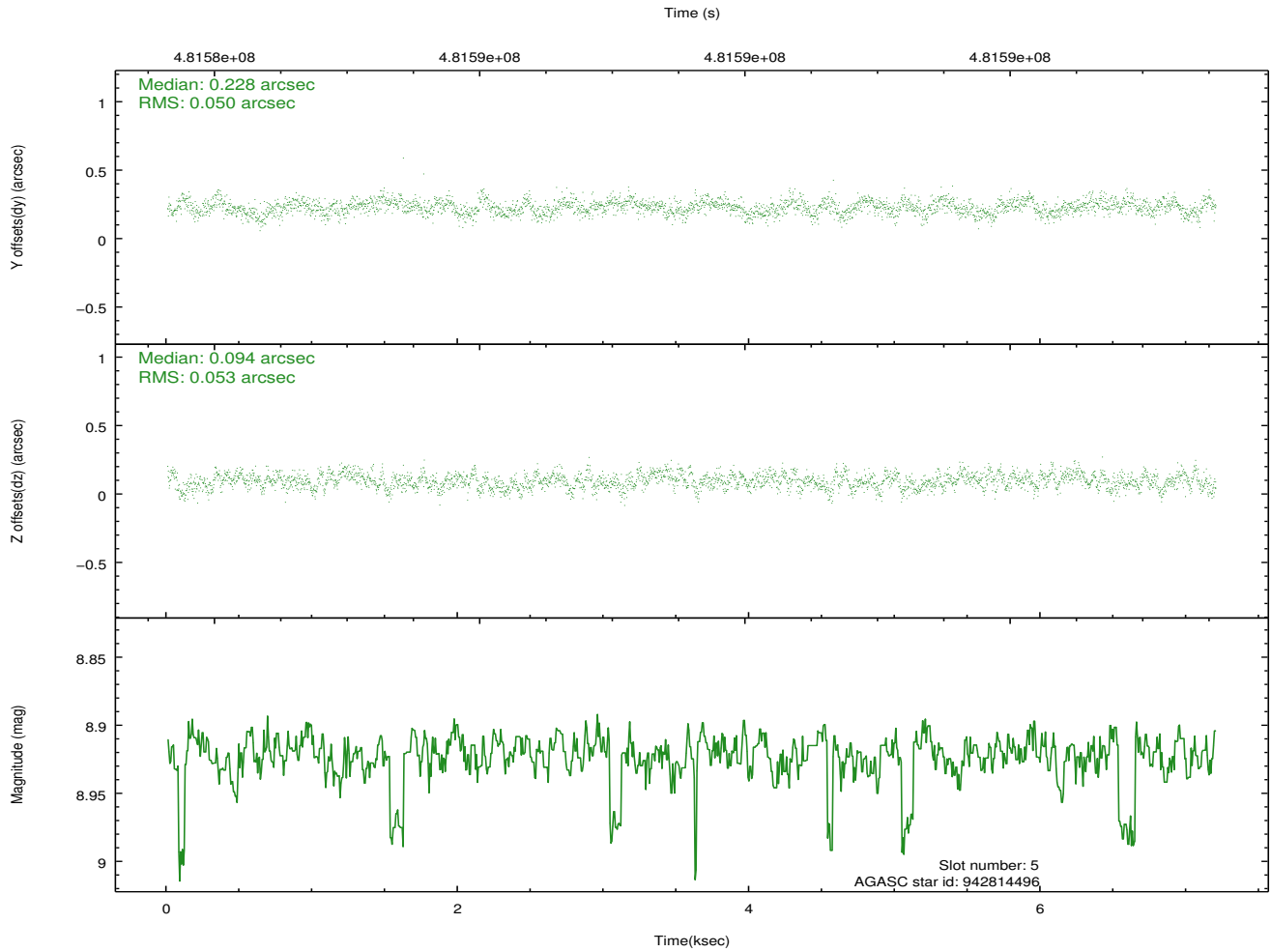
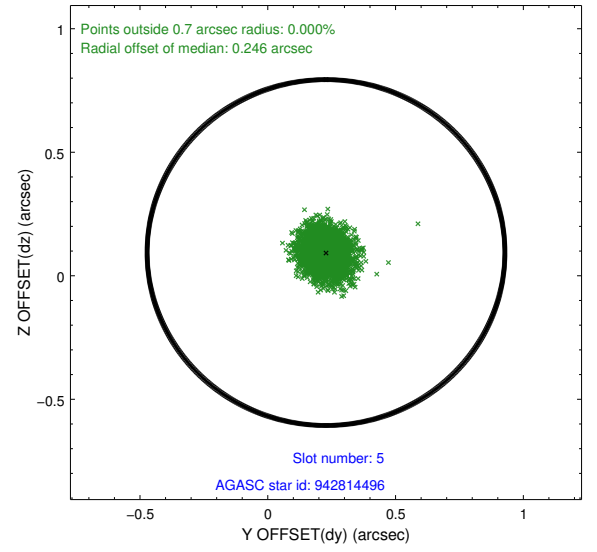
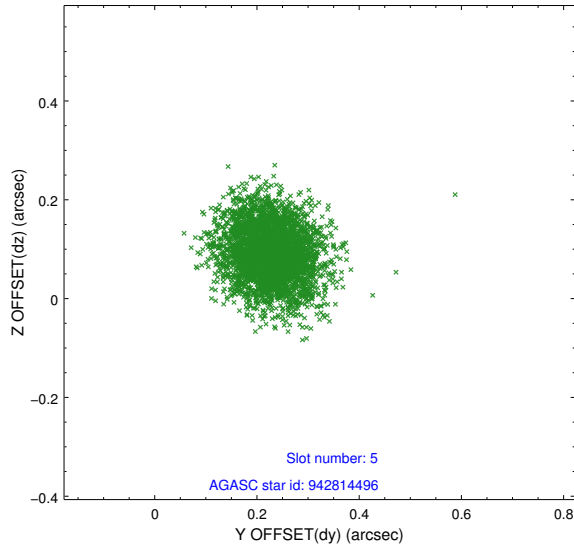
2.4.1 Slot 3



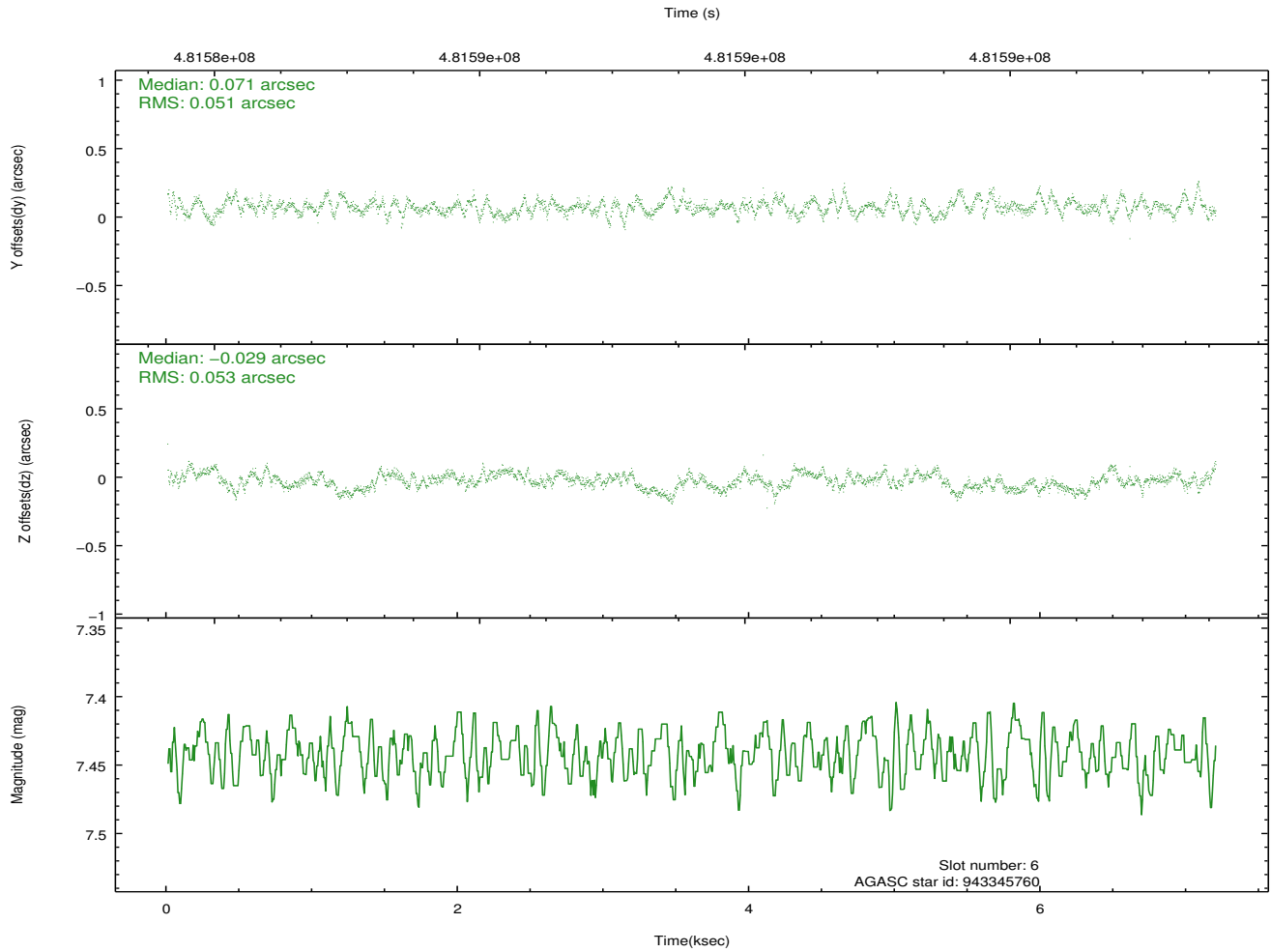
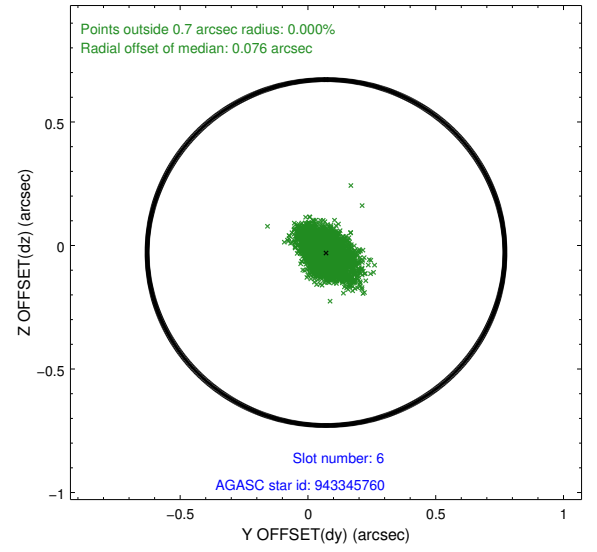
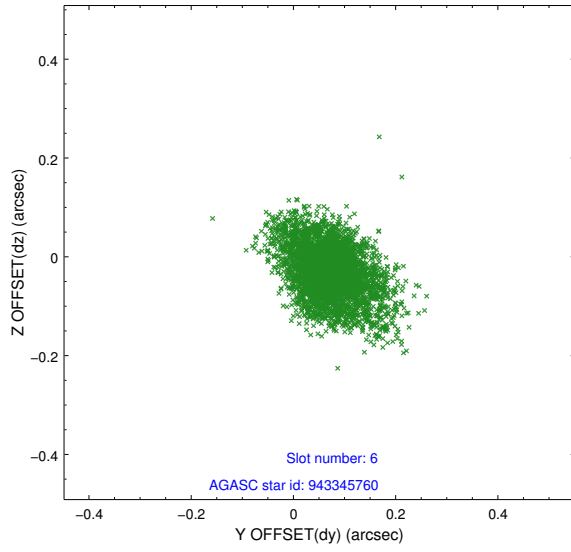
2.4.2 Slot 4



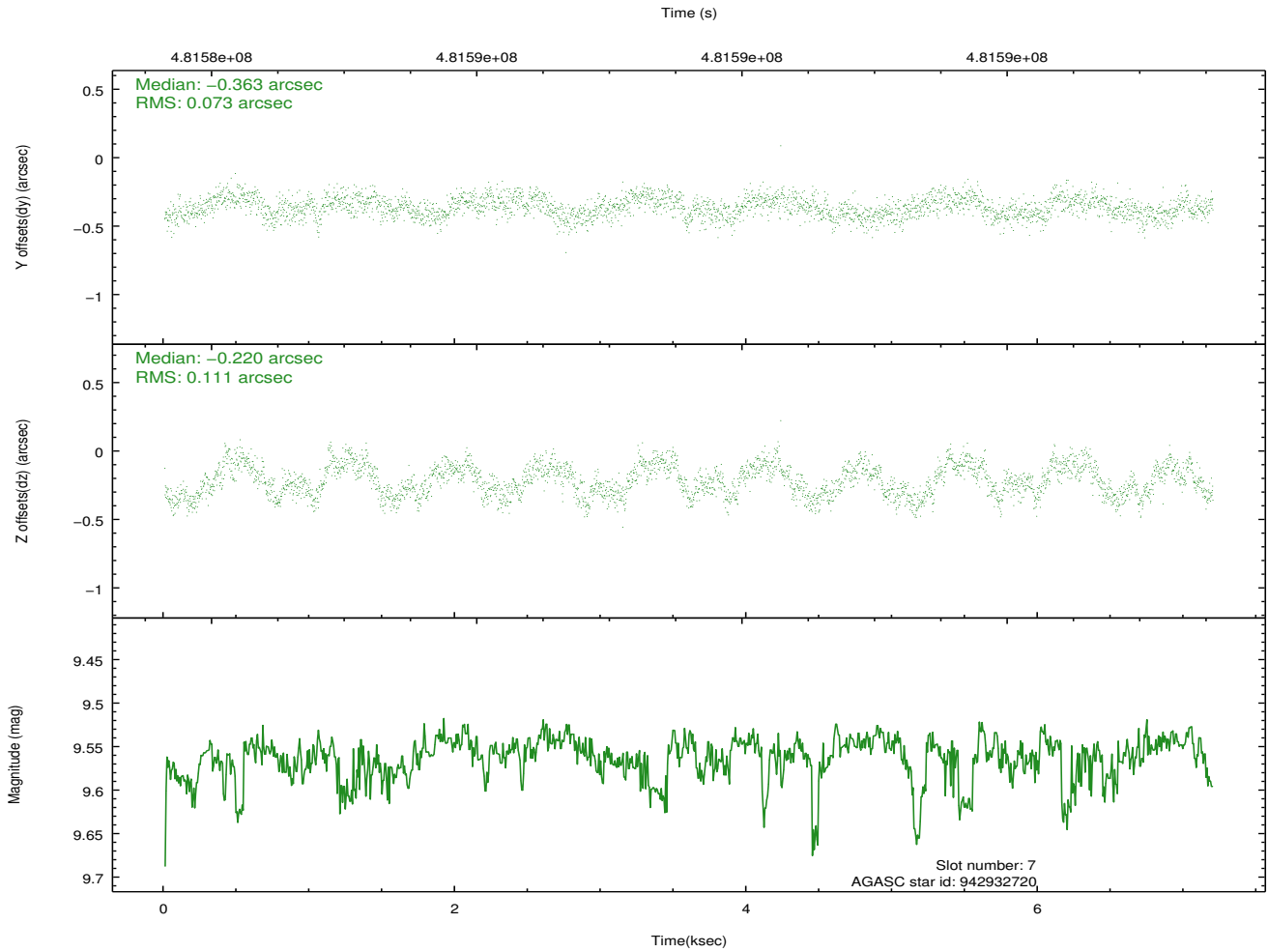
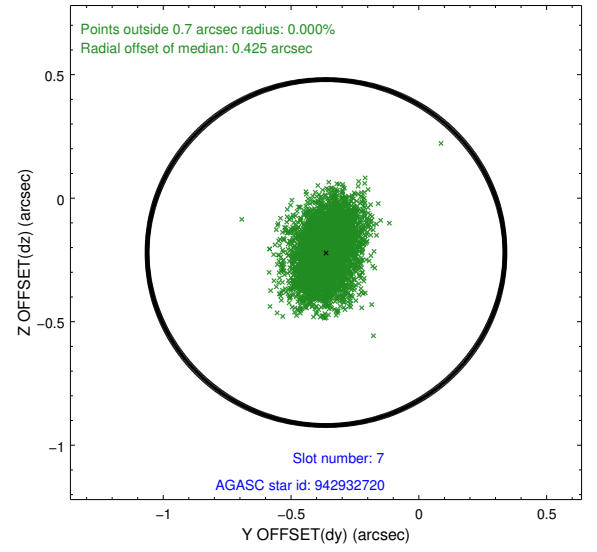
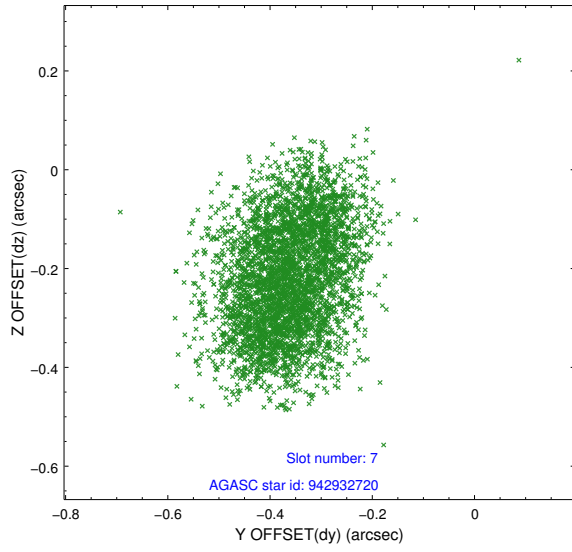
2.4.3 Slot 5



2.4.4 Slot 6

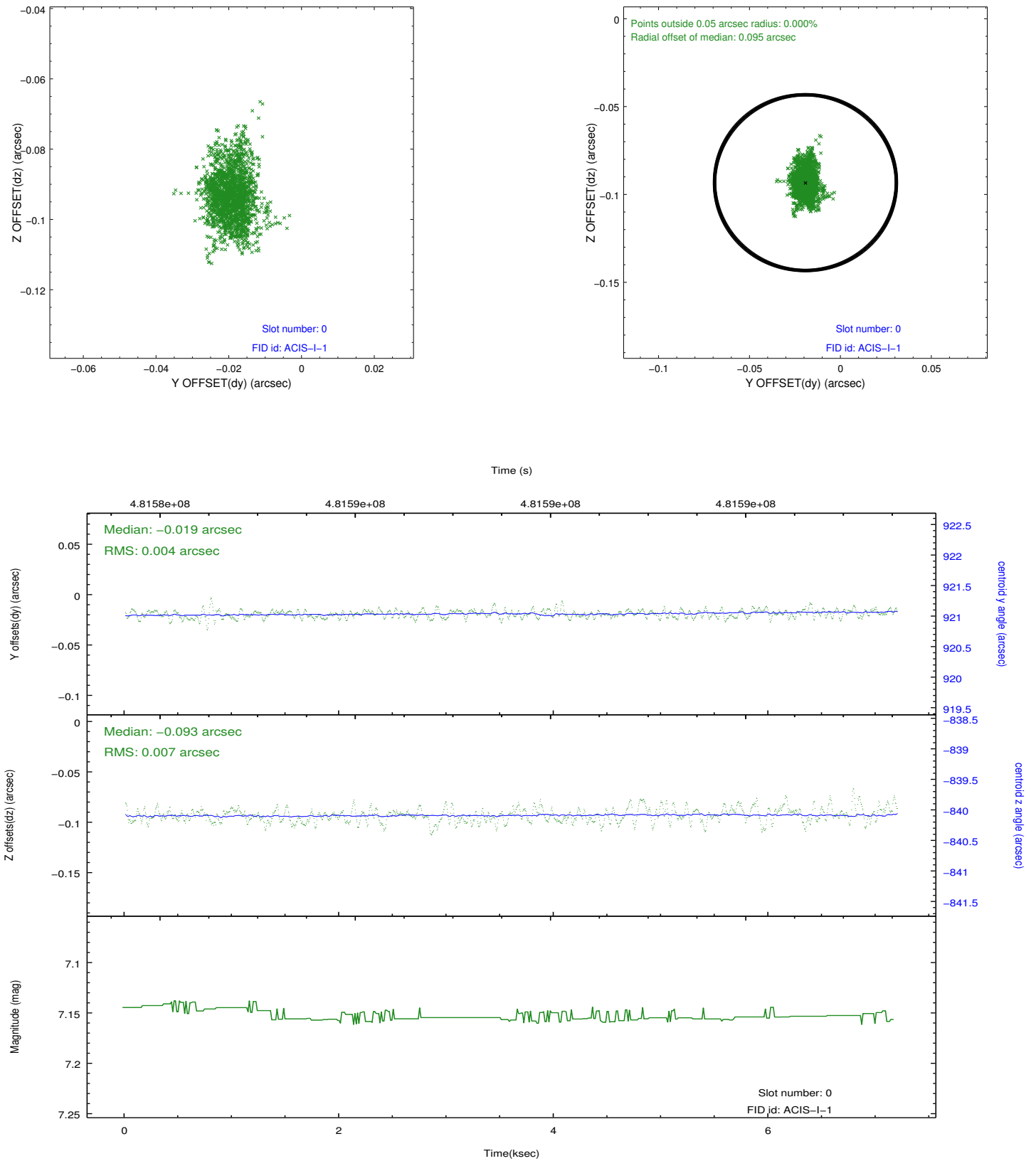


2.4.5 Slot 7

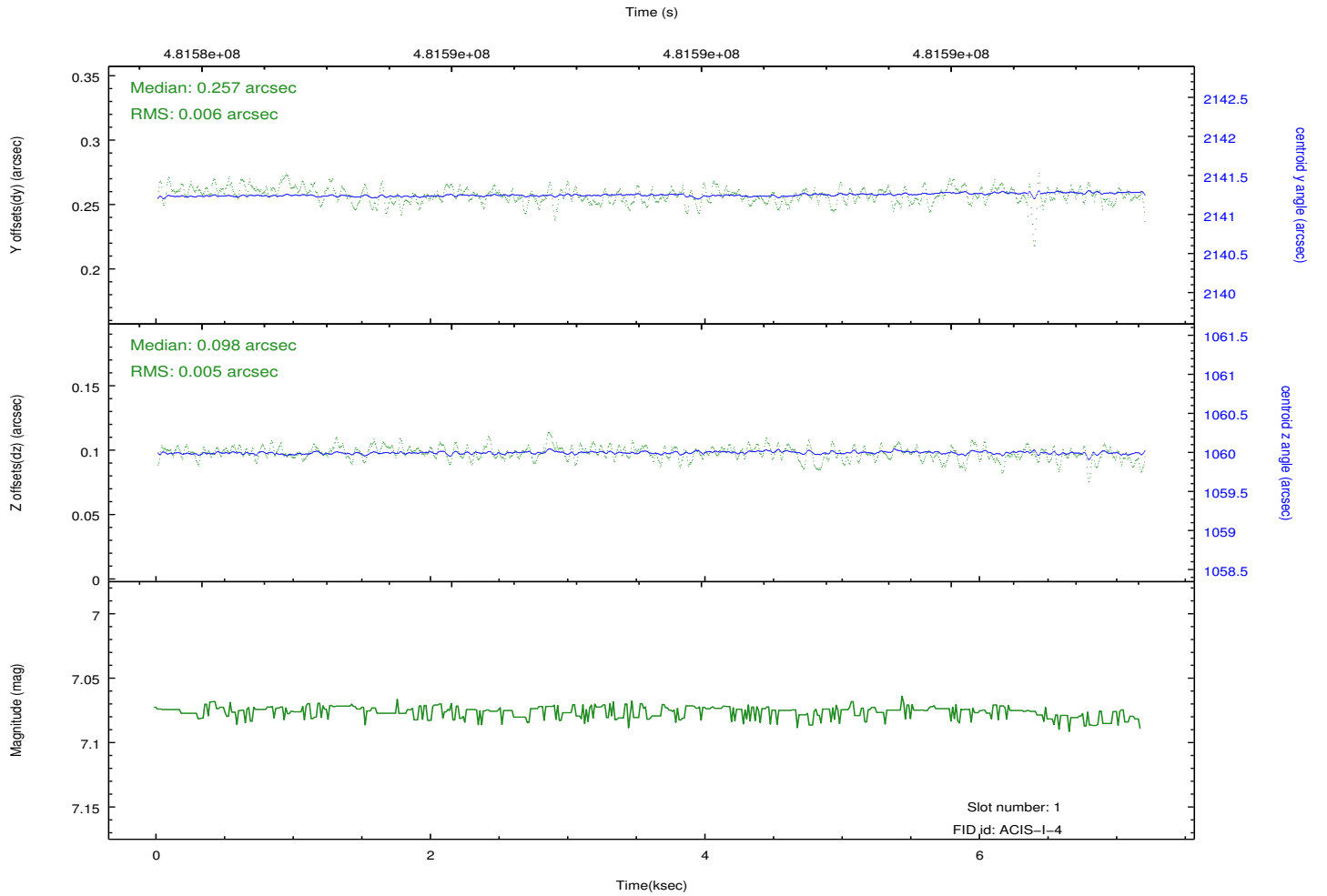
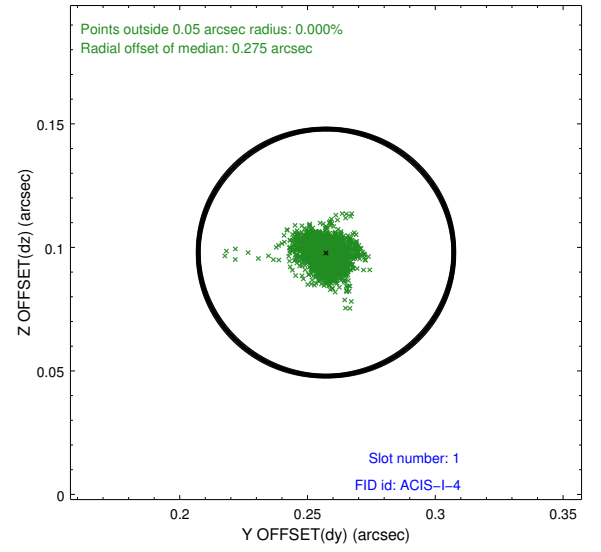
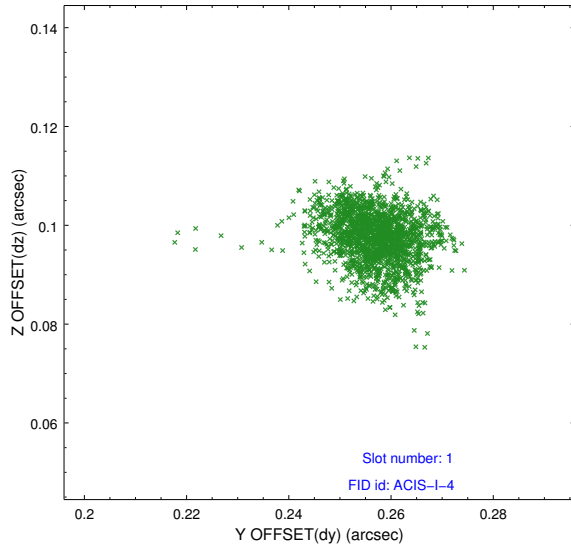


2.5 FID Slots

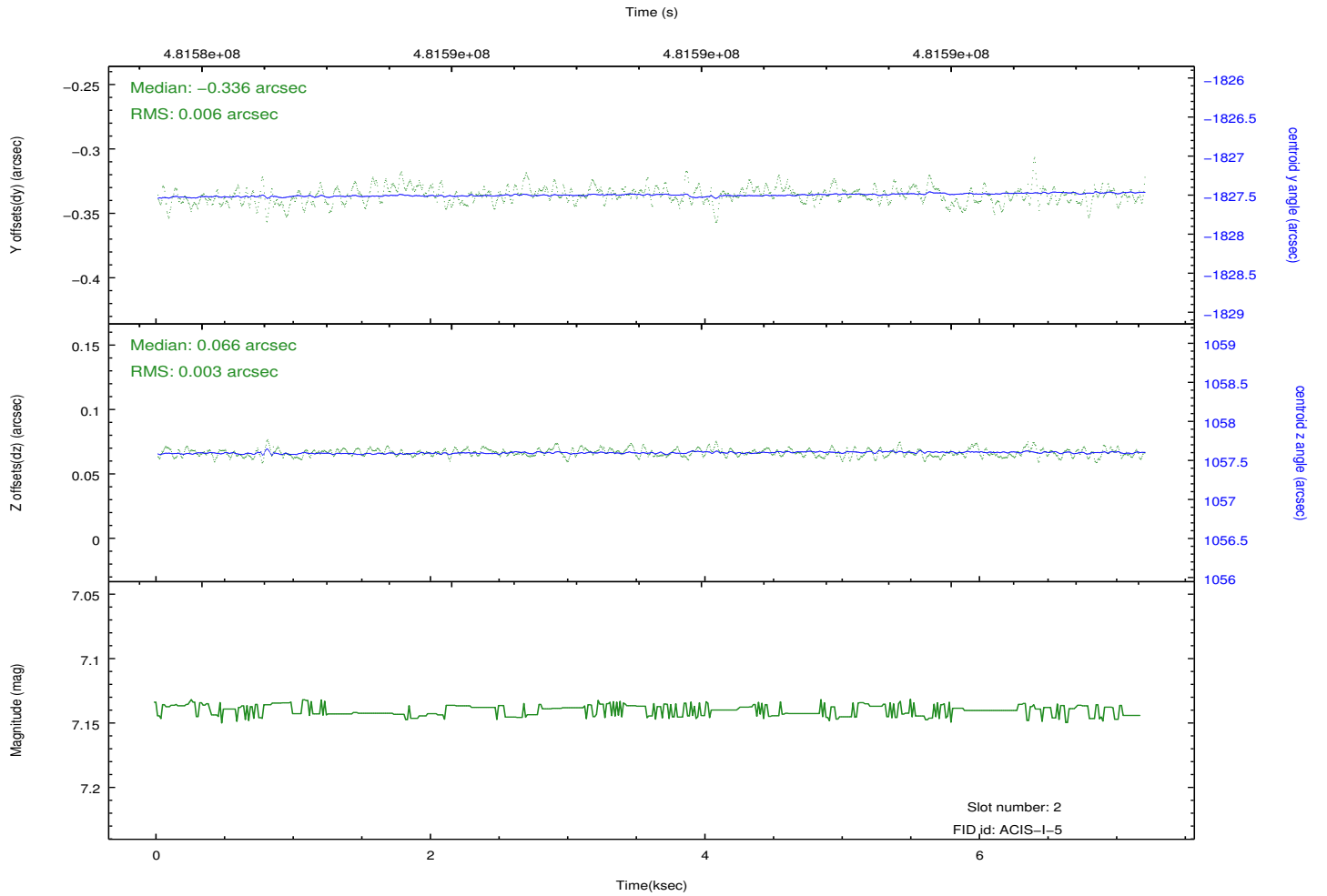
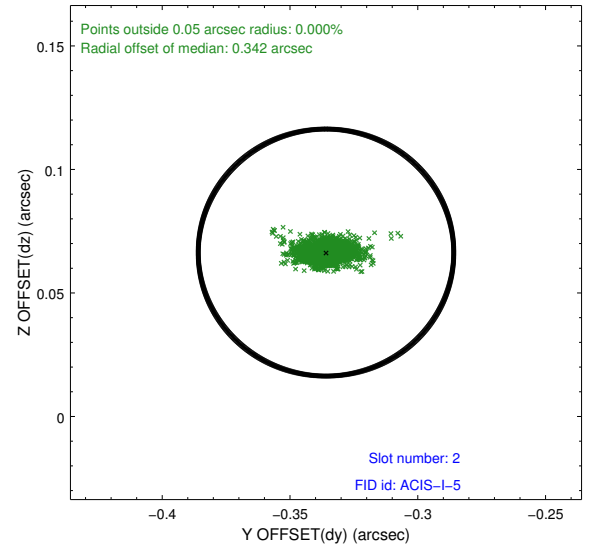
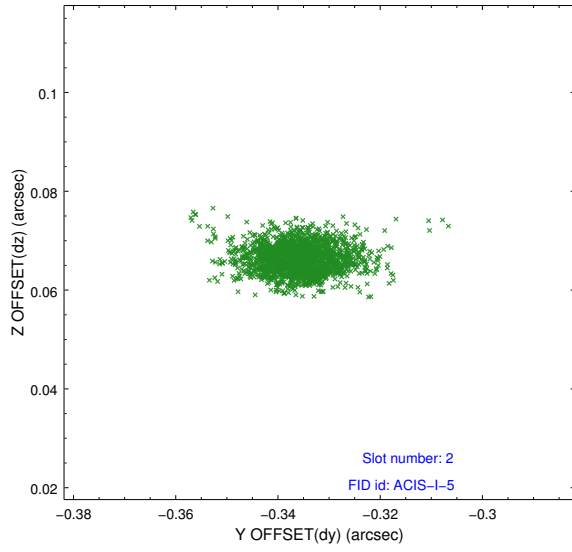
2.5.1 Slot 0



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)	2014.12.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.9713962860703

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.