

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12730 - L2 Version 2
Chandra X-Ray Center

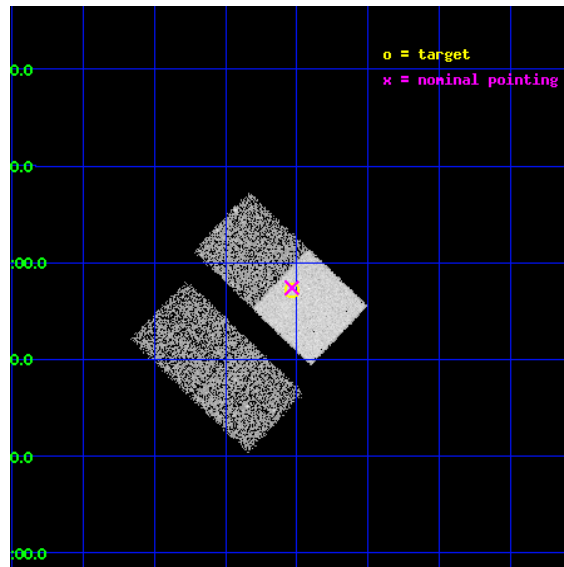
L2 Processing Date : Feb 1 2012

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

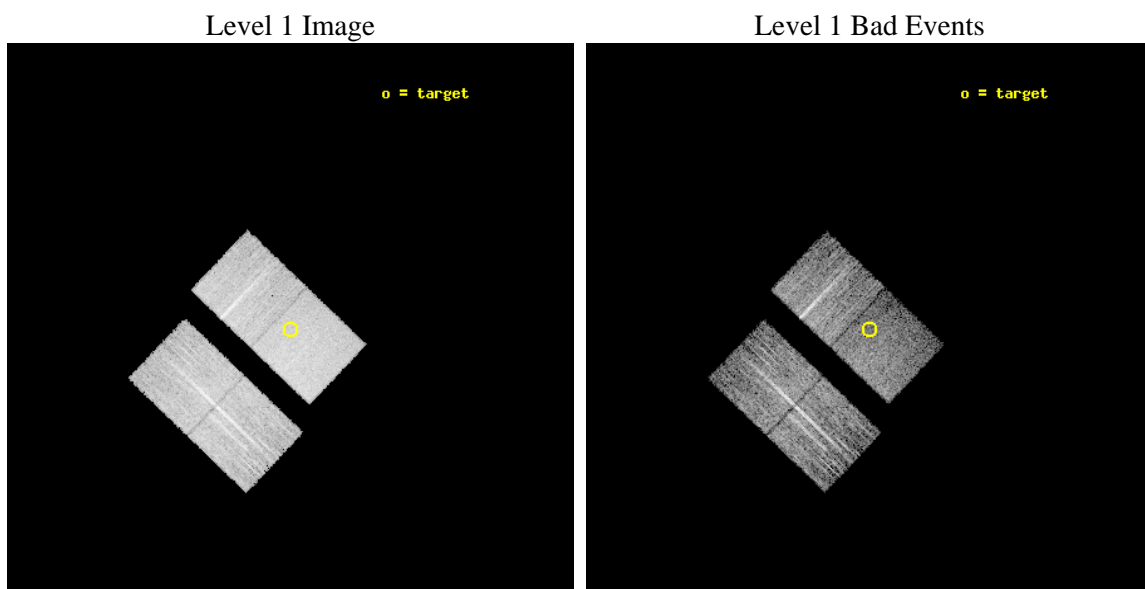
seq_num	702366	Sequence number
obs_id	12730	Observation id
title	Completing the Chandra 3C Snapshot Survey: Extragalactic Radio Sources with $z < 0.3$	Proposal title
observer	Dr. Daniel Harris	Principal investigator
object	3C 198	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	125.6325	Observer's specified target RA [deg]
dec_targ	5.952194	Observer's specified target Dec [deg]
ra_nom	125.63366716704	Nominal RA [deg]
dec_nom	5.9568646345896	Nominal Dec [deg]
roll_nom	43.677551002721	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8050.7000619173	Sum of GTIs [s]
livetime	7945.5117387692	Livetime [s]
ontime2	8050.7000619173	Sum of GTIs [s]
ontime3	8050.7000619173	Sum of GTIs [s]
ontime6	8050.7000619173	Sum of GTIs [s]
ontime7	8050.7000619173	Sum of GTIs [s]
l2events	46454	Number of level 2 events



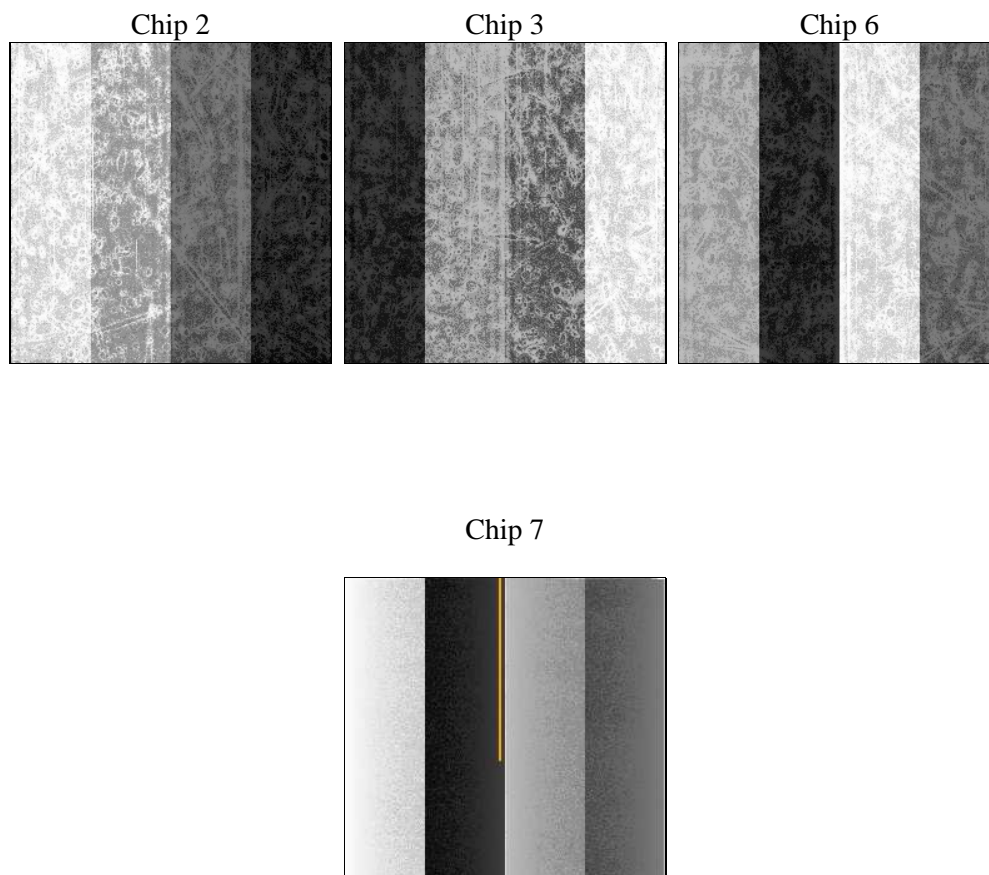
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	8050.7000619173	Sum of GTIs [s]
caldsver	4.4.7	 	ontime2	8050.7000619173	Sum of GTIs [s]
date	2012-02-01T08:30:20	Date and time of file creation	ontime3	8050.7000619173	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	8050.7000619173	Sum of GTIs [s]
			ontime7	8050.7000619173	Sum of GTIs [s]
			l1events	236691	Number of level 1 events

2.1.4 Events

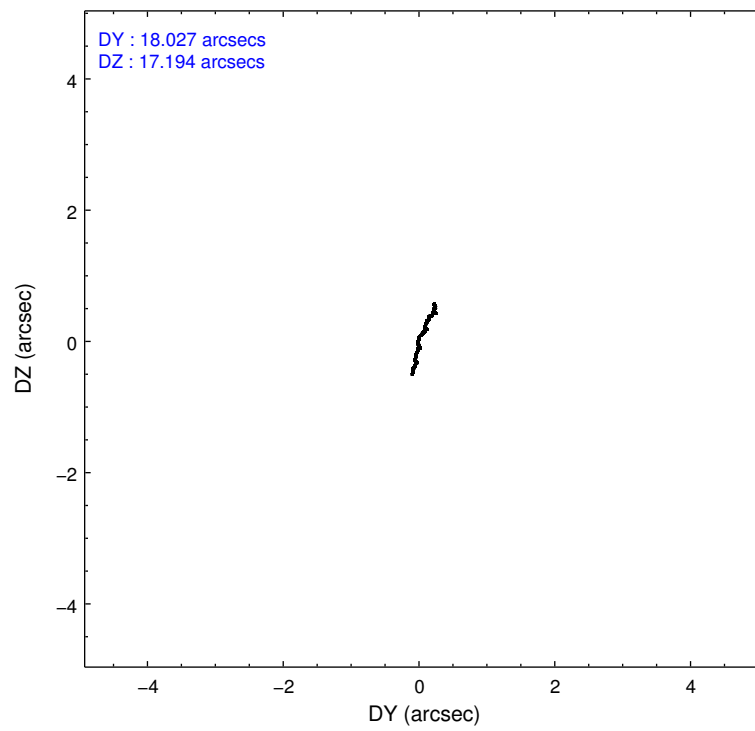
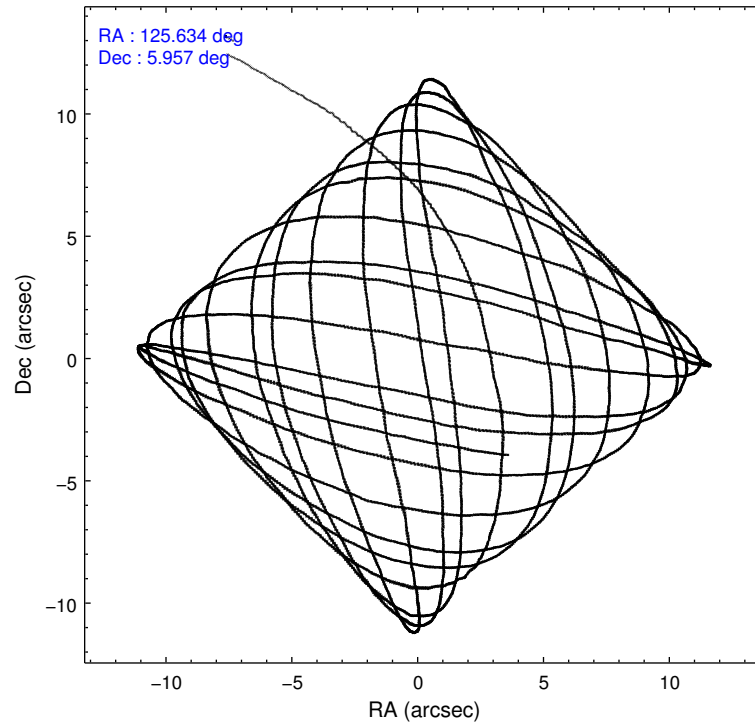
	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	53967	55546	57278	69900
rejected events	47986	49656	50709	38443
rejected %	88%	89%	88%	54%

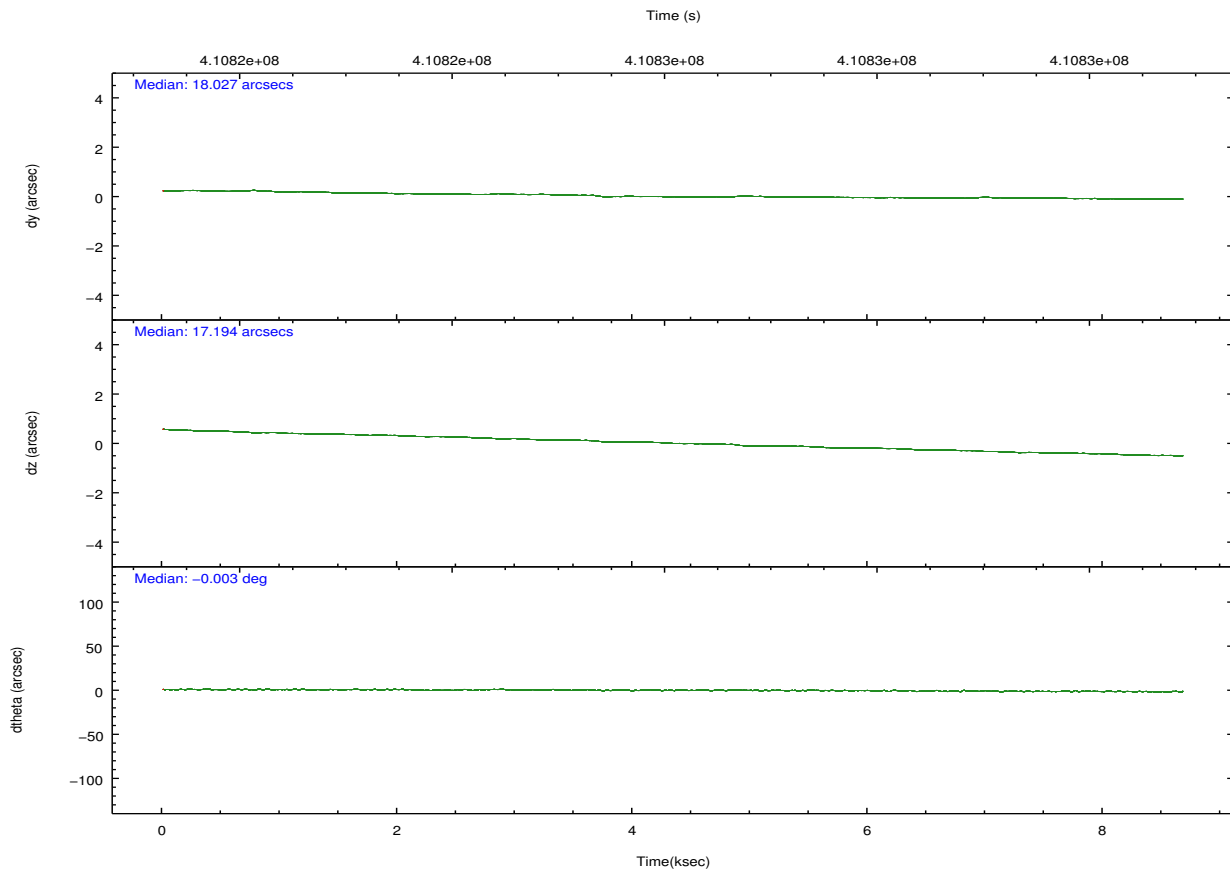
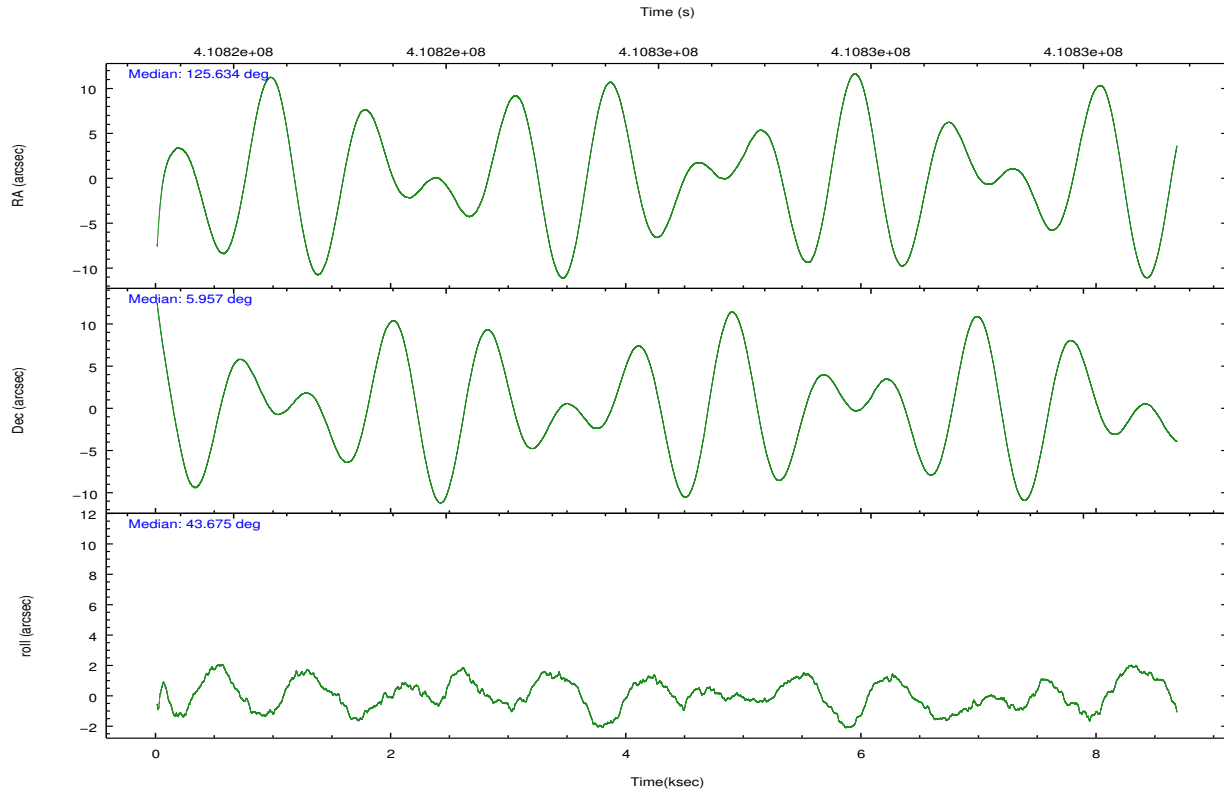
	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	2043	2176	2356	2885
	3%	3%	4%	4%
grade 1 events	28	45	25	108
	0%	0%	0%	0%
grade 2 events	1443	1293	1508	6506
	2%	2%	2%	9%
grade 3 events	635	608	663	2816
	1%	1%	1%	4%
grade 4 events	694	596	662	2763
	1%	1%	1%	3%
grade 5 events	2260	2552	2534	7302
	4%	4%	4%	10%
grade 6 events	1170	1220	1383	16513
	2%	2%	2%	23%
grade 7 events	45694	47056	48147	31007
	84%	84%	84%	44%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-2367	ACIS-2367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	125.626363	125.6336671670445	CCD I2 on	O1	Y
[deg] Pointing Dec	5.930542	5.956864634589612	CCD I3 on	O2	Y
[deg] Pointing Roll	43.521672	43.6775510027214	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	N	N
[s] Observation start time (MET)	410822416.184000	410820553.07823	CCD S5 on	N	N
Observation start date	2011-01-07T21:19:10	2011-01-07T20:49:13	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	410830416.184000	410831235.62878	On-chip summing requested	N	N
Observation end date	2011-01-07T23:32:30	2011-01-07T23:47:15	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



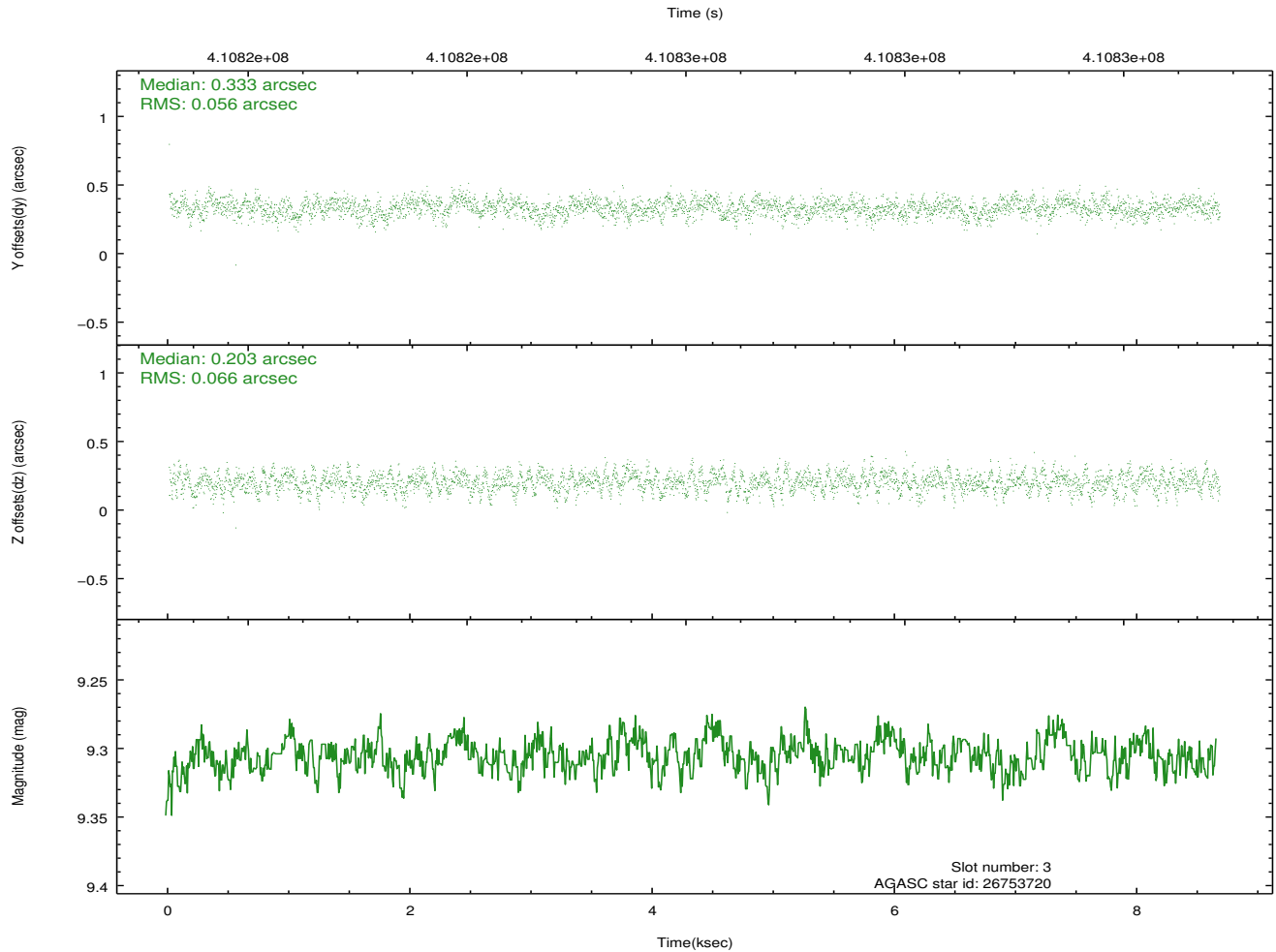
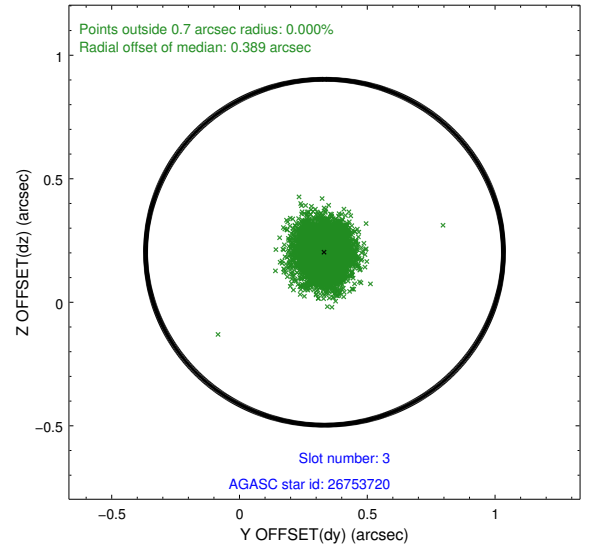
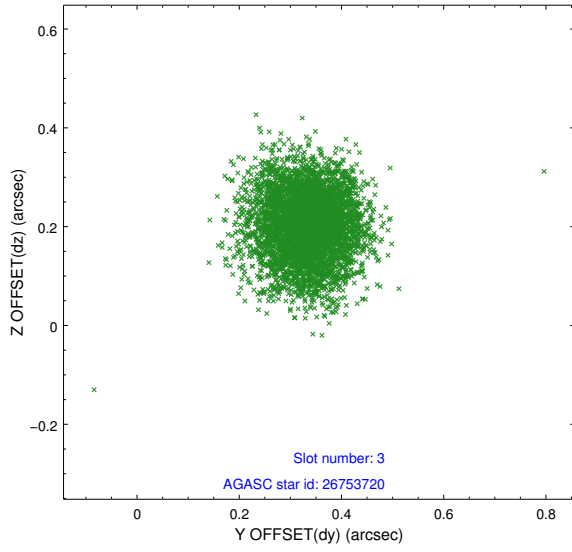


Slot Statistics

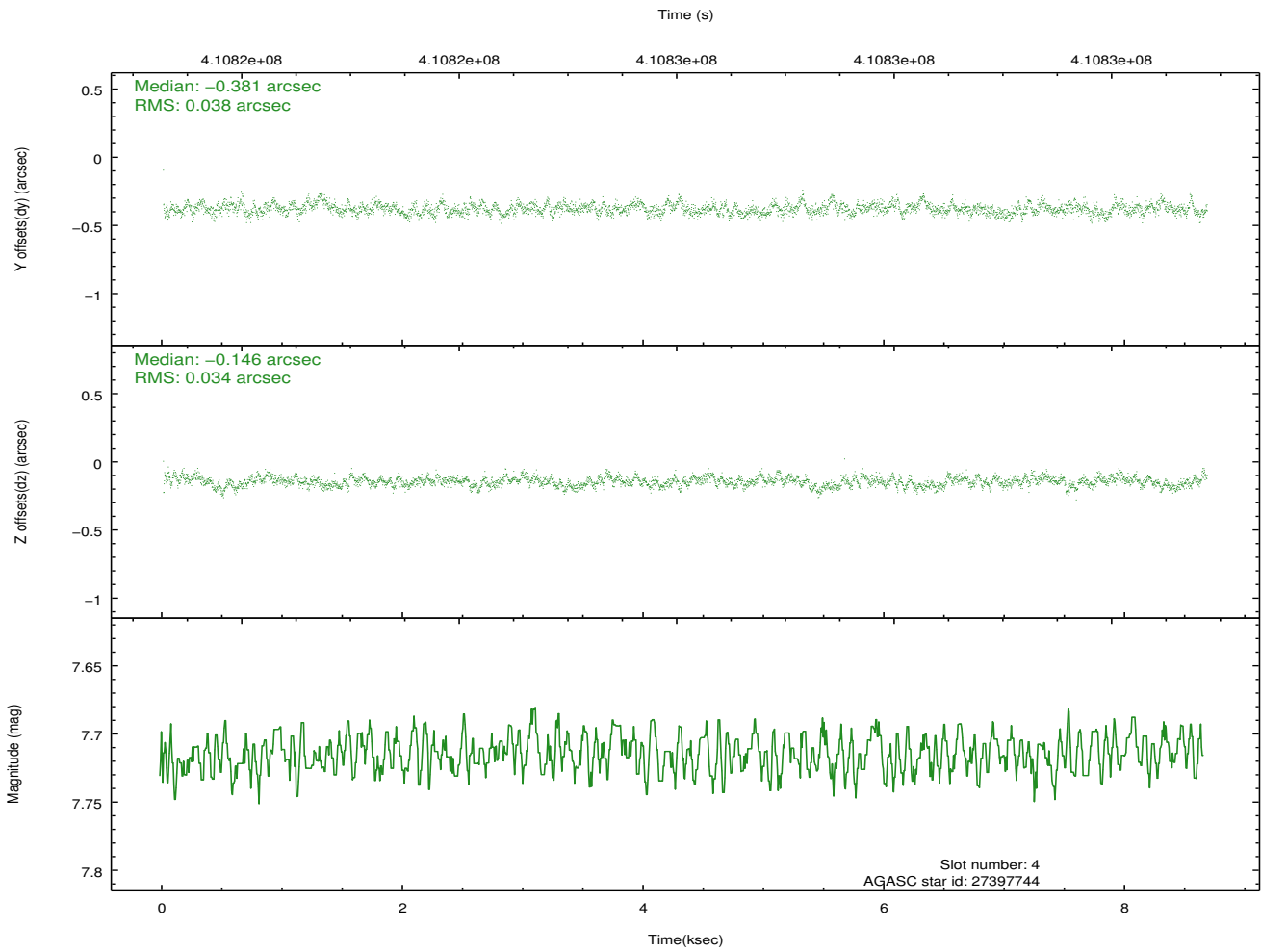
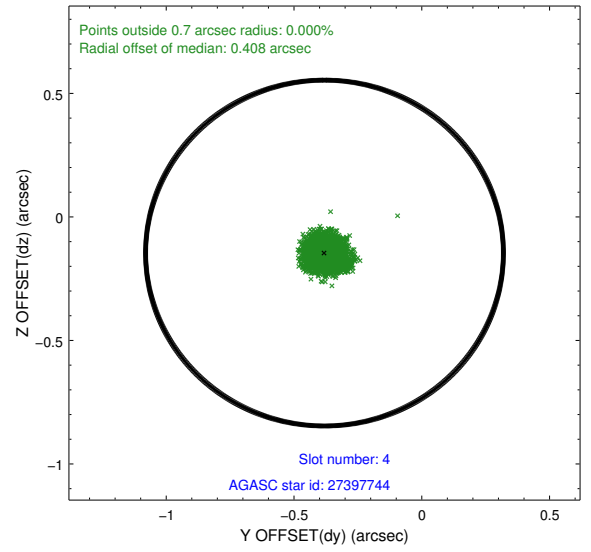
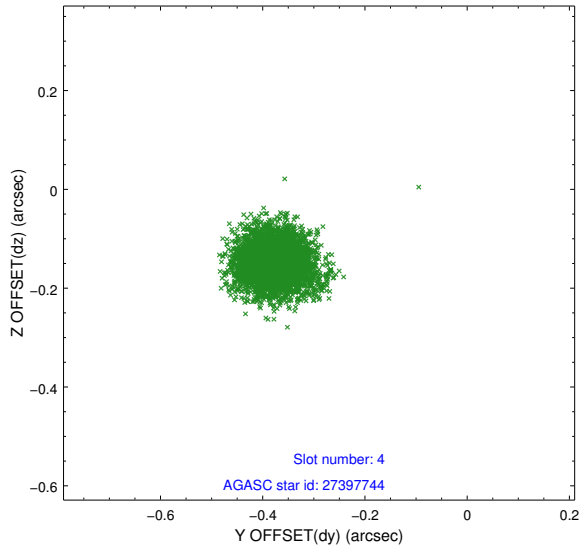
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.91	2116	-0.070	-0.046	0.012	0.018	0.000000	0.000000	-771.22	-1738.68
1	FID	ACIS-S-4	6.98	2116	0.221	0.047	0.006	0.012	0.000000	0.000000	2142.09	169.19
2	FID	ACIS-S-5	7.02	2116	-0.181	0.009	0.011	0.017	0.000000	0.000000	-1823.33	163.61
3	GUIDE	26753720	9.31	4230	0.333	0.203	0.093	0.146	125.592094	5.359779	-1503.05	-1405.49
4	GUIDE	27397744	7.72	4231	-0.381	-0.146	0.053	0.088	125.638677	6.712092	1969.11	2009.52
5	GUIDE	27406160	8.22	4231	-0.130	-0.113	0.056	0.090	125.741609	6.157976	863.71	310.08
6	GUIDE	26749712	6.94	4227	-0.122	0.093	0.075	0.118	125.613257	5.016077	-2300.56	-2354.81
7	GUIDE	27271328	8.90	4227	0.301	-0.033	0.076	0.119	125.255669	5.744169	-1424.37	427.51

2.4 Star Slots

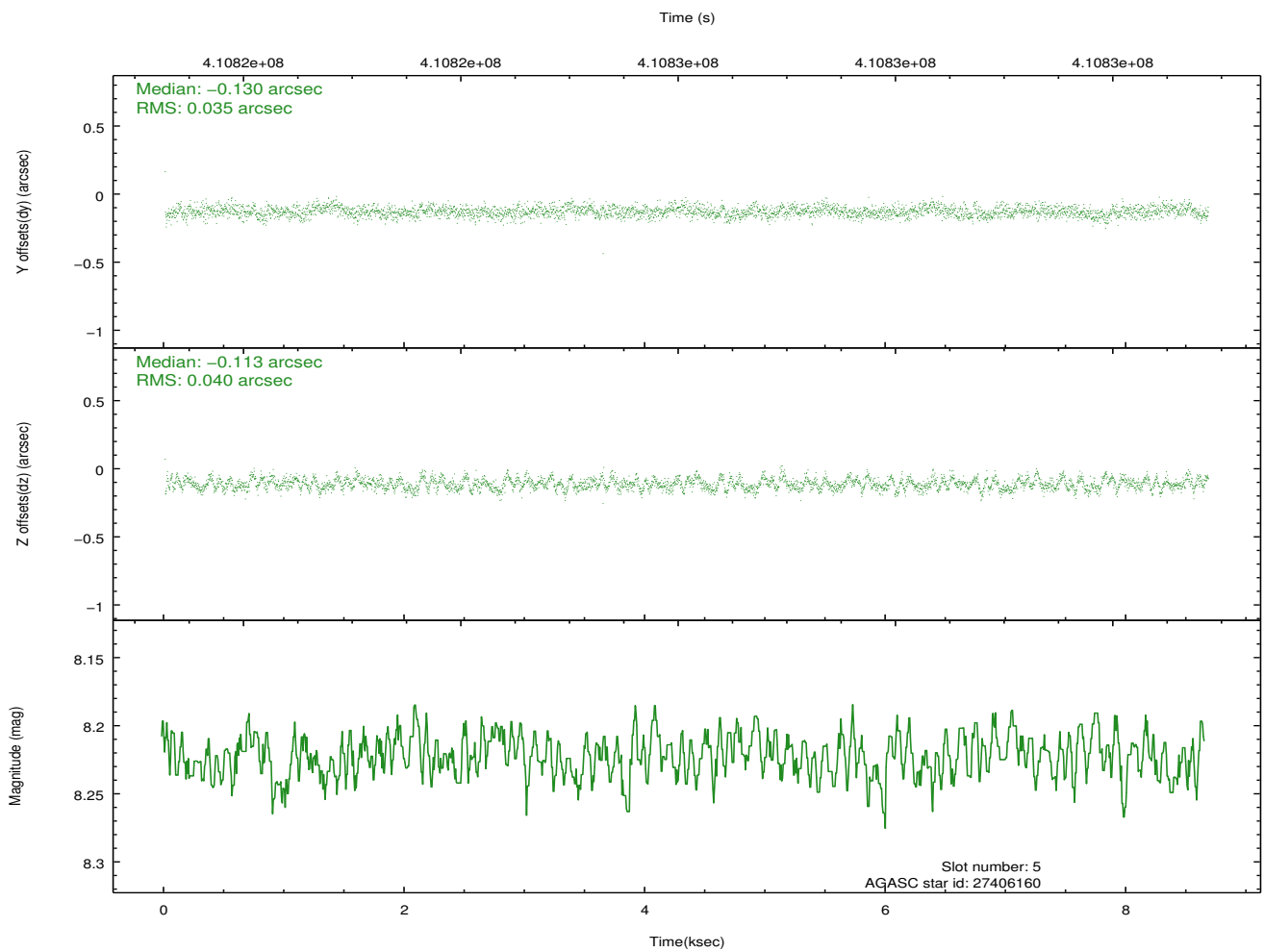
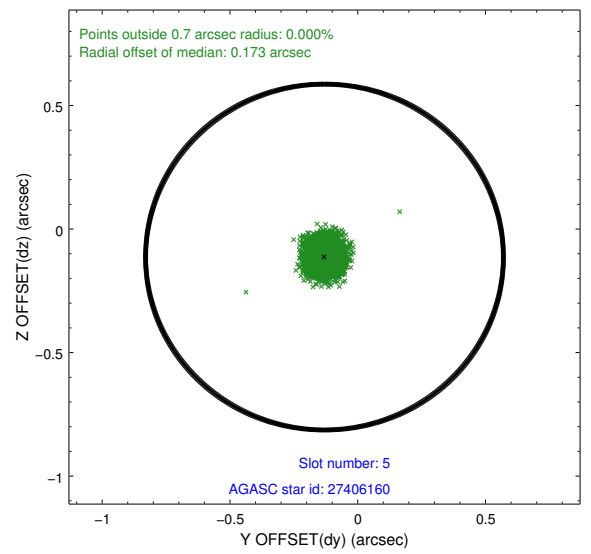
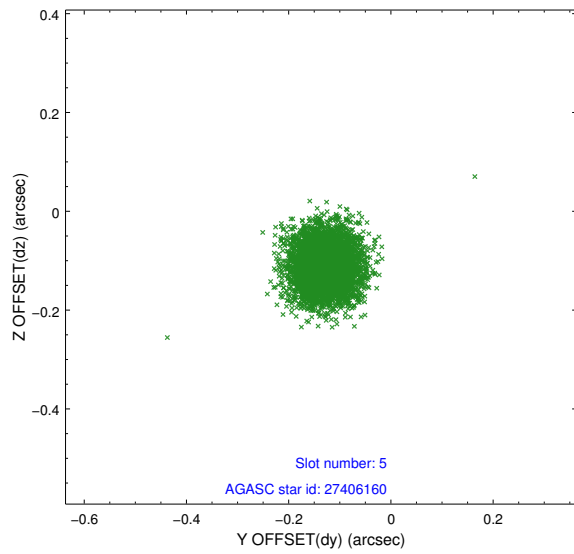
2.4.1 Slot 3



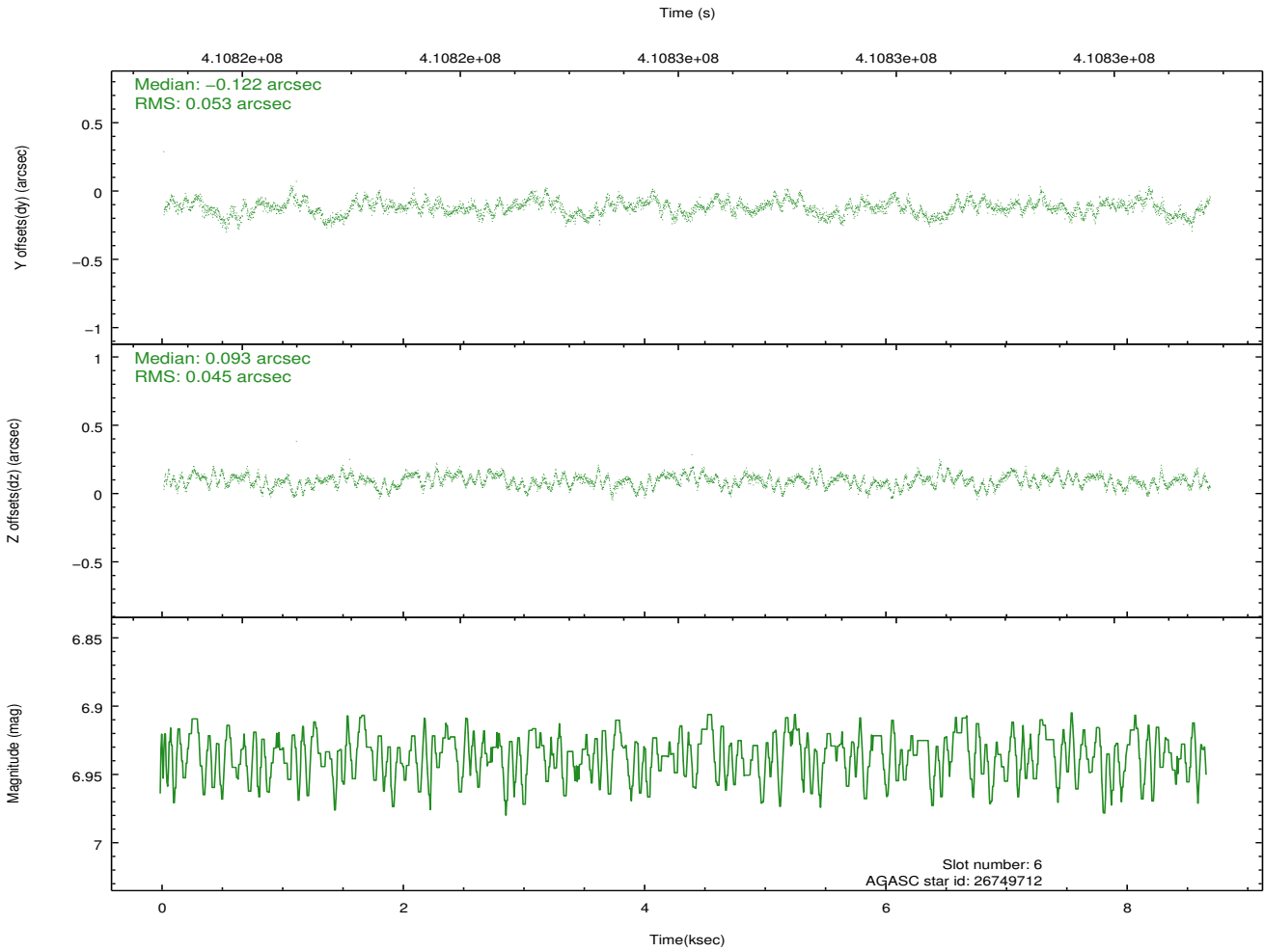
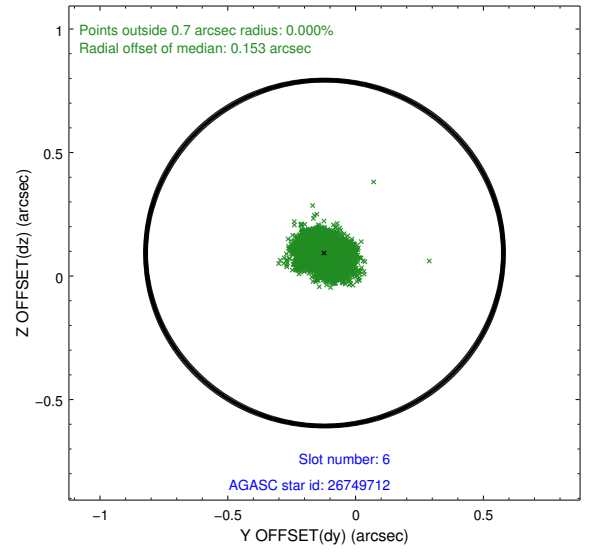
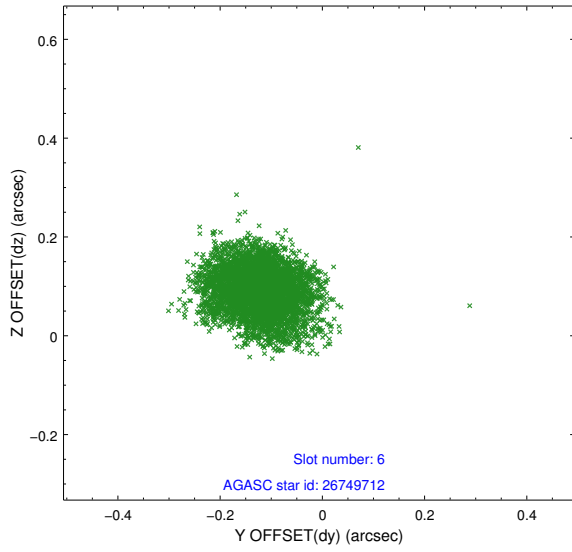
2.4.2 Slot 4



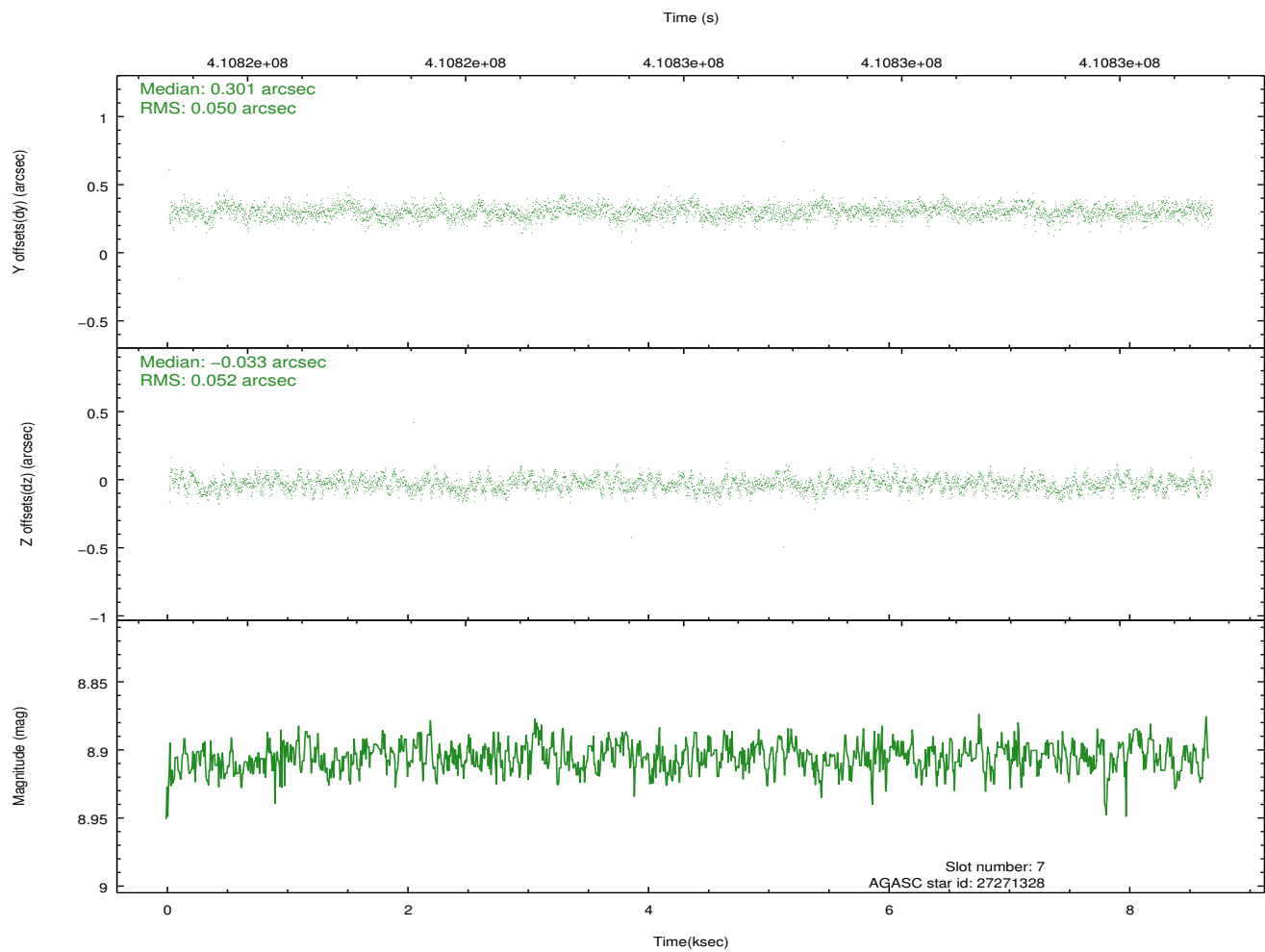
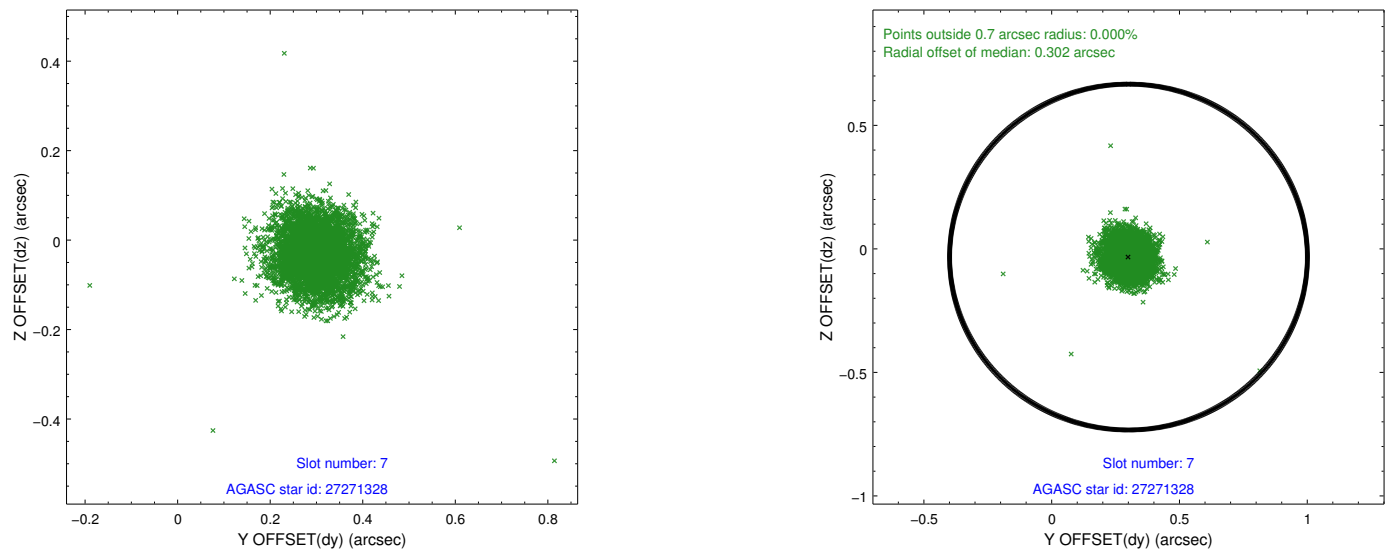
2.4.3 Slot 5



2.4.4 Slot 6

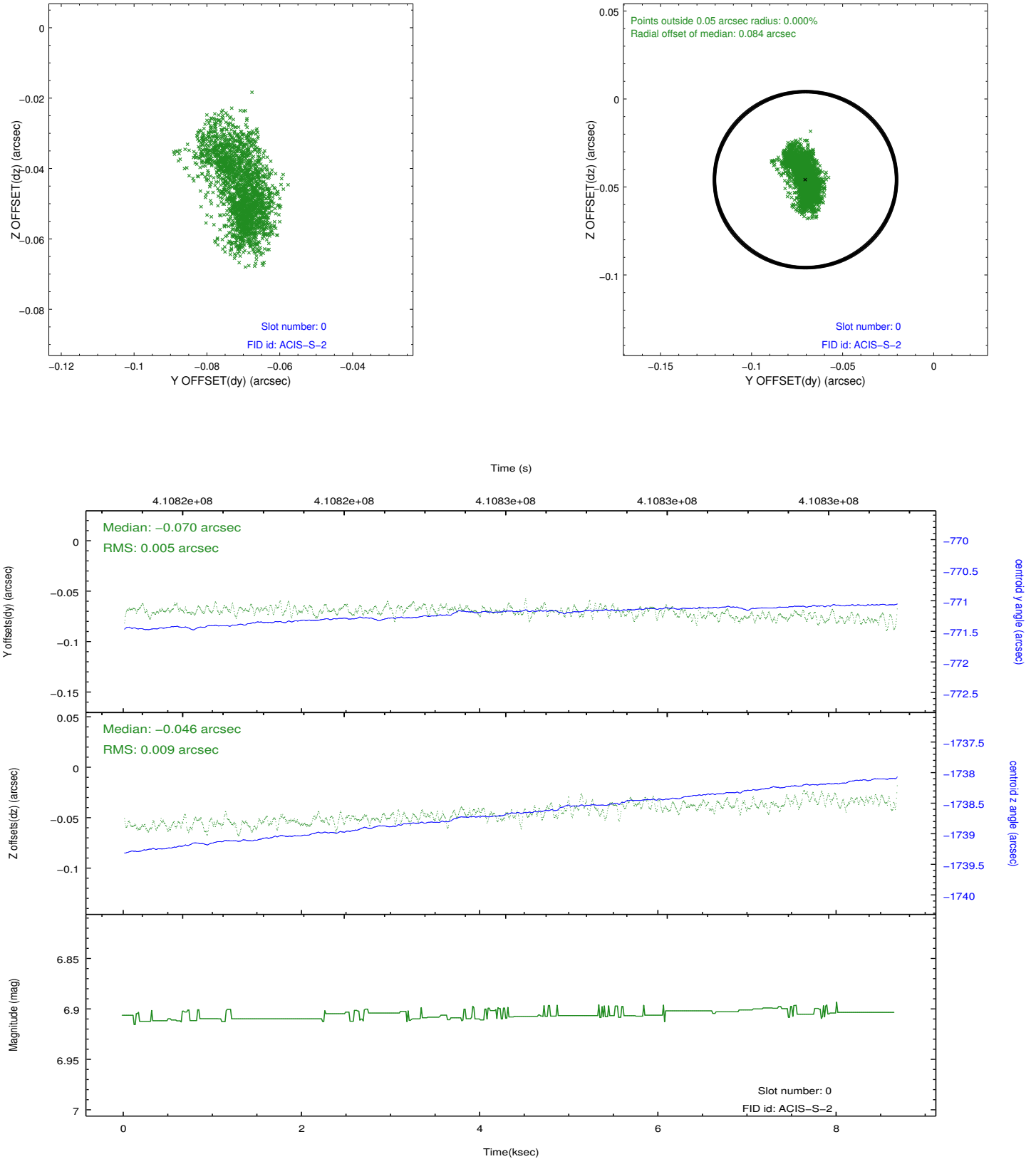


2.4.5 Slot 7

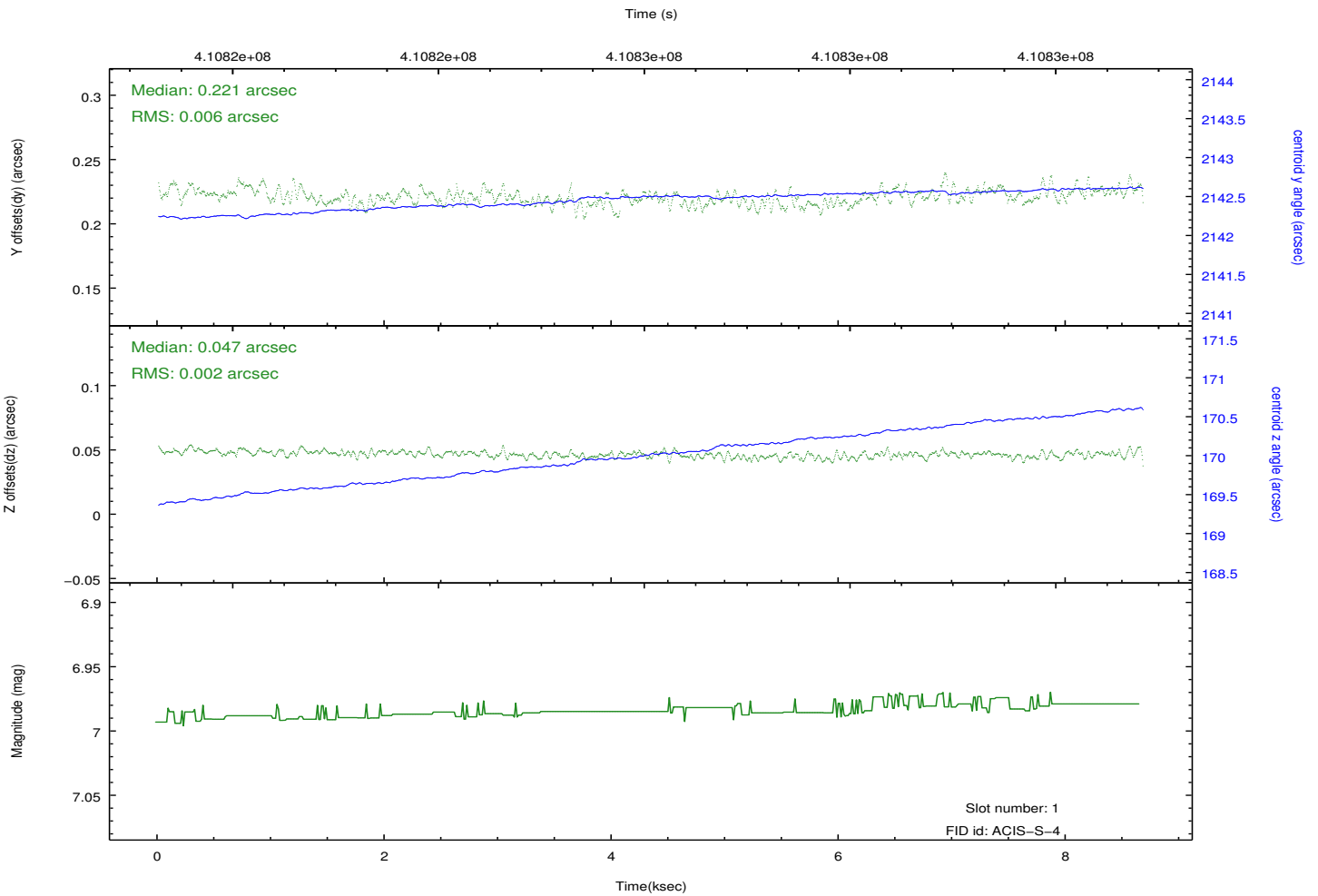
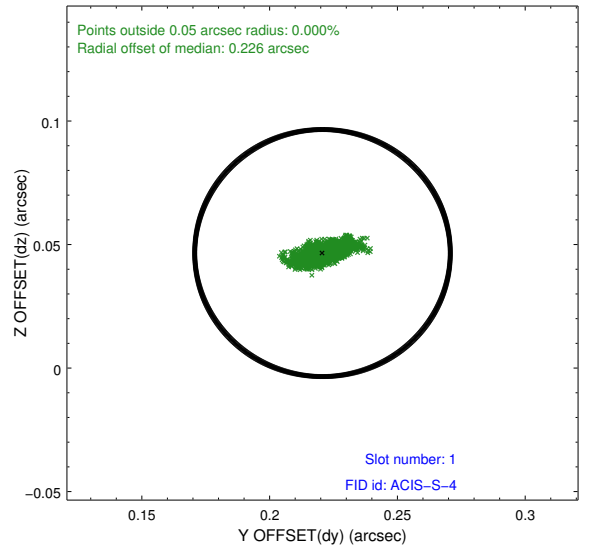
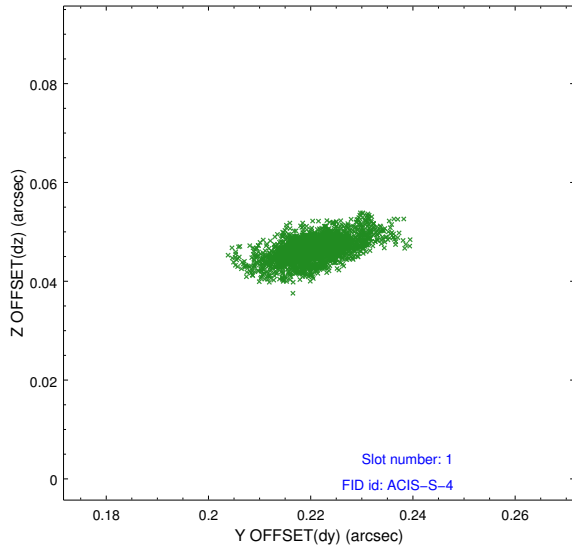


2.5 FID Slots

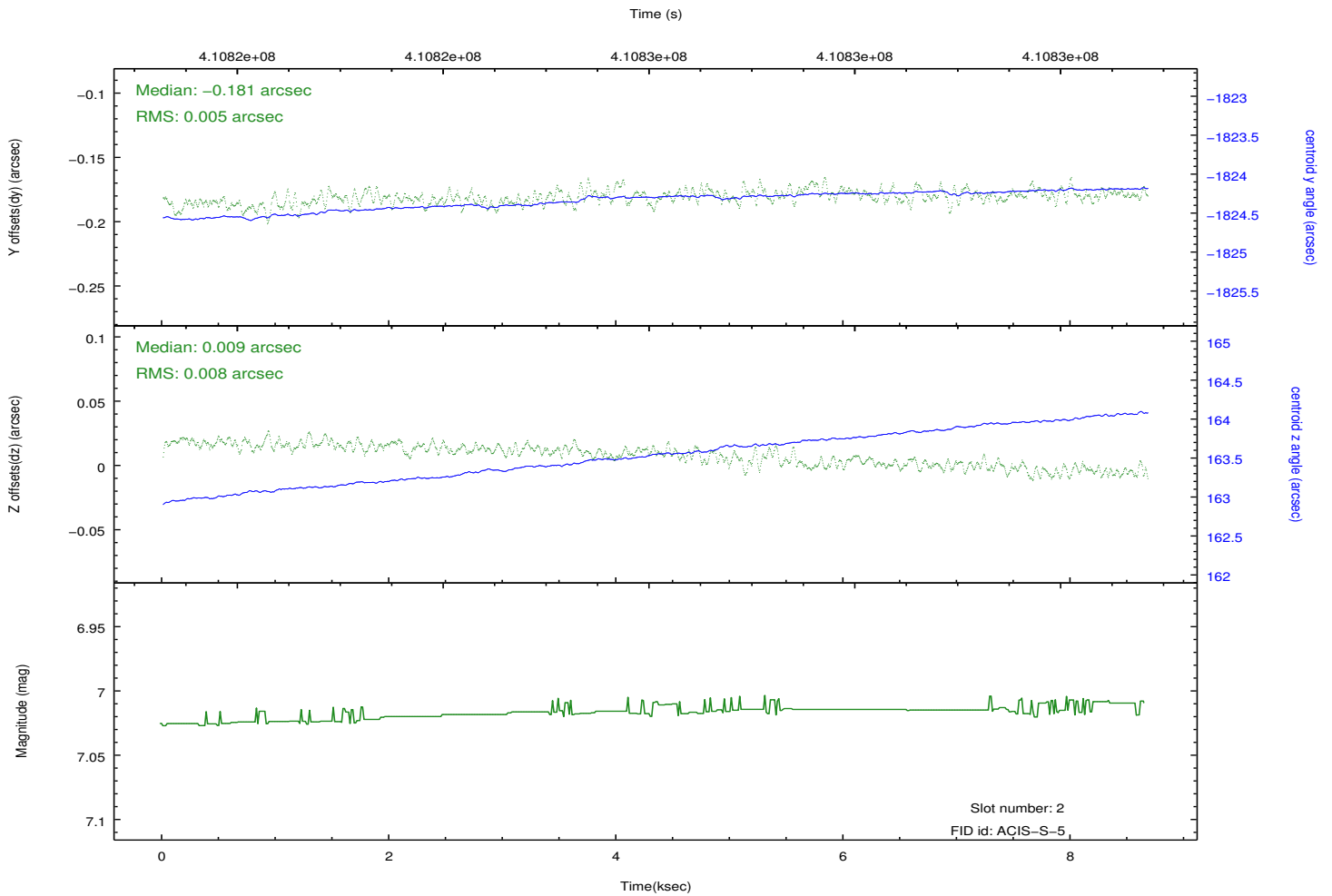
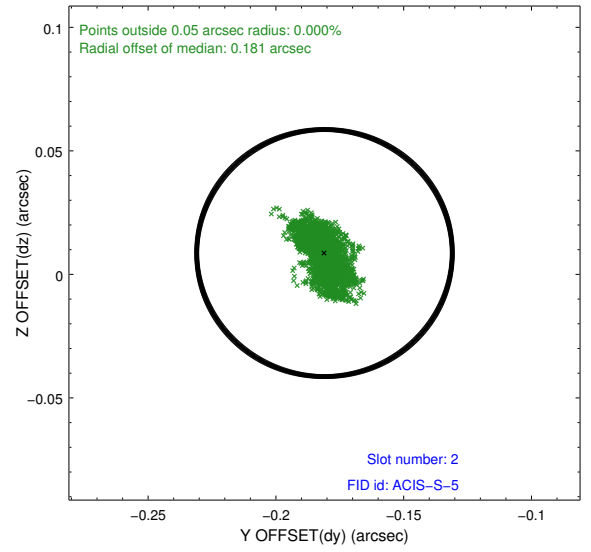
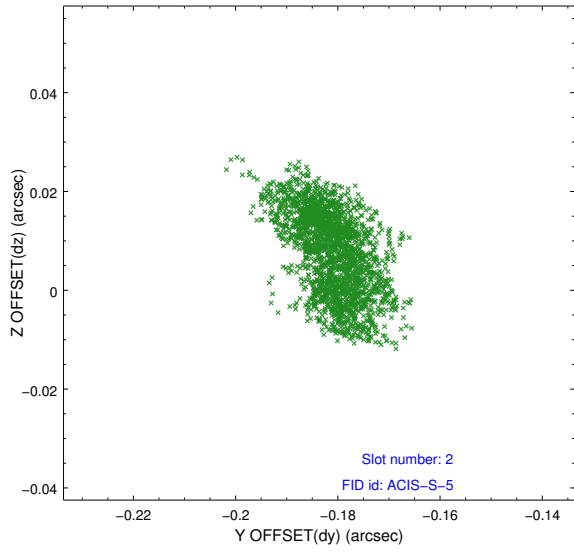
2.5.1 Slot 0



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)	2012.02.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.0507000619173

A.2 Comments

The data for this observation have been processed using the 'EDSER' sub-pixel event-repositioning algorithm of Li et al. (2004, ApJ, 610, 1204). Small-scale features should become sharper for sources near the aim point. The improvement will be less noticeable for off-axis sources where the size of the point-spread function is comparable to or larger than the size of an ACIS pixel. To take full advantage of the improvement, images should be binned on spatial scales smaller than the size of an ACIS pixel. Note that, at present, the point-spread function has not been calibrated for data to which the EDSEr algorithm has been applied. If dither was disabled for the observation, then the algorithm can introduce artificial aliasing effects on spatial scales smaller than a pixel. If you would prefer to use no sub-pixel adjustment or to apply a coordinate randomization, then use `acis_process_events` to reprocess the data with the parameter `pix_adj=NONE` or `RANDOMIZE`, respectively.