

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12619 - L2 Version 2
Chandra X-Ray Center

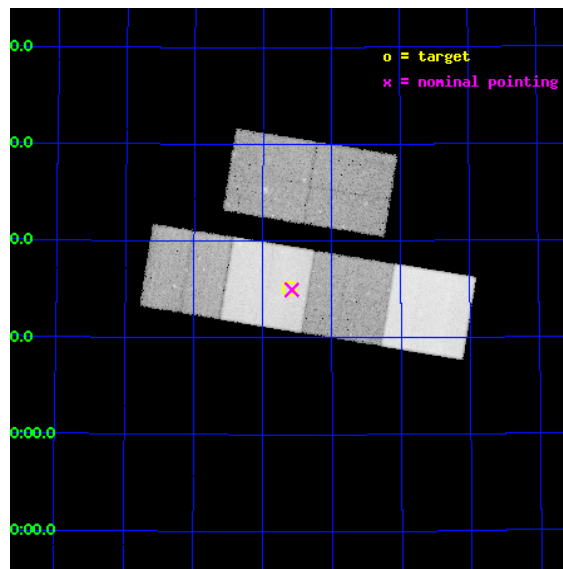
L2 Processing Date : Feb 8 2012

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1 Front

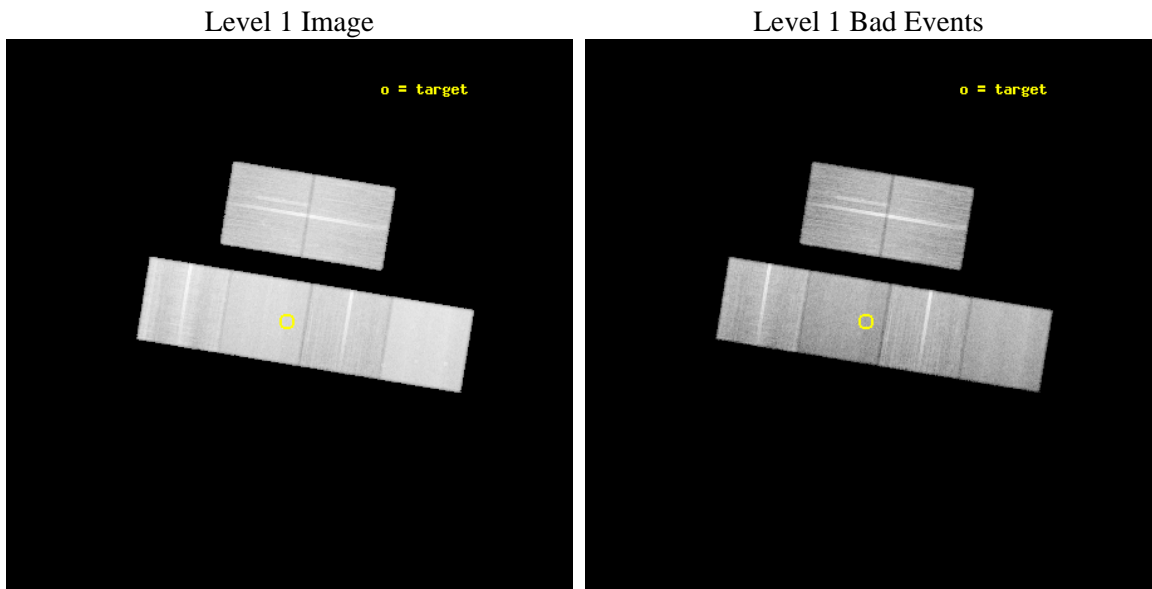
seq_num	501452	Sequence number
obs_id	12619	Observation id
title	Jet-breaks in short GRBs	Proposal title
observer	Dr. Eleonora Troja	Principal investigator
object	GRB110402A	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	197.402667	Observer's specified target RA [deg]
dec_targ	61.252694	Observer's specified target Dec [deg]
ra_nom	197.39505115902	Nominal RA [deg]
dec_nom	61.249511070056	Nominal Dec [deg]
roll_nom	189.26330269061	Nominal Roll [deg]
revision	2	Processing version of data
ontime	48052.889038801	Sum of GTIs [s]
livetime	47444.414423816	Livetime [s]
ontime2	48049.68907845	Sum of GTIs [s]
ontime3	48052.765918791	Sum of GTIs [s]
ontime5	48052.847998798	Sum of GTIs [s]
ontime6	48052.806958795	Sum of GTIs [s]
ontime7	48052.889038801	Sum of GTIs [s]
ontime8	48052.724878788	Sum of GTIs [s]
l2events	517918	Number of level 2 events



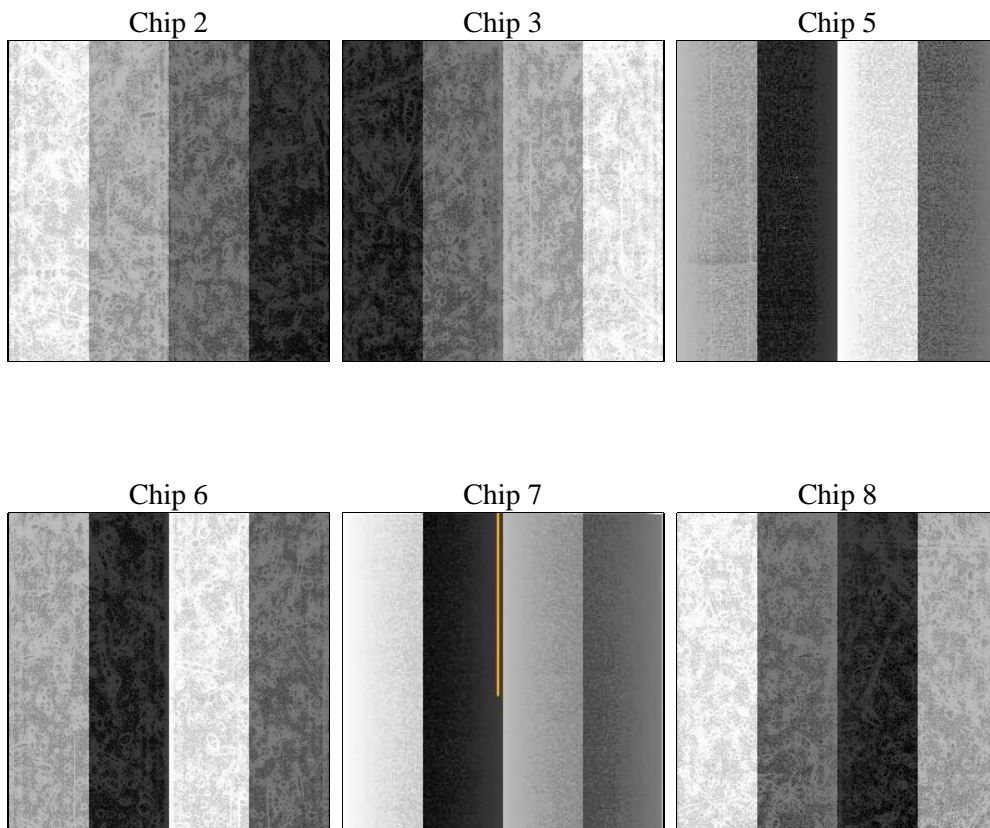
2 OBI

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	8.4.3	Processing system revision	ontime	48052.889038801	Sum of GTIs [s]
caldbver	4.4.7	 	ontime2	48049.68907845	Sum of GTIs [s]
date	2012-02-08T08:10:02	Date and time of file creation	ontime3	48052.765918791	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	48052.847998798	Sum of GTIs [s]
			ontime6	48052.806958795	Sum of GTIs [s]
			ontime7	48052.889038801	Sum of GTIs [s]
			ontime8	48052.724878788	Sum of GTIs [s]
			l1events	2216360	Number of level 1 events

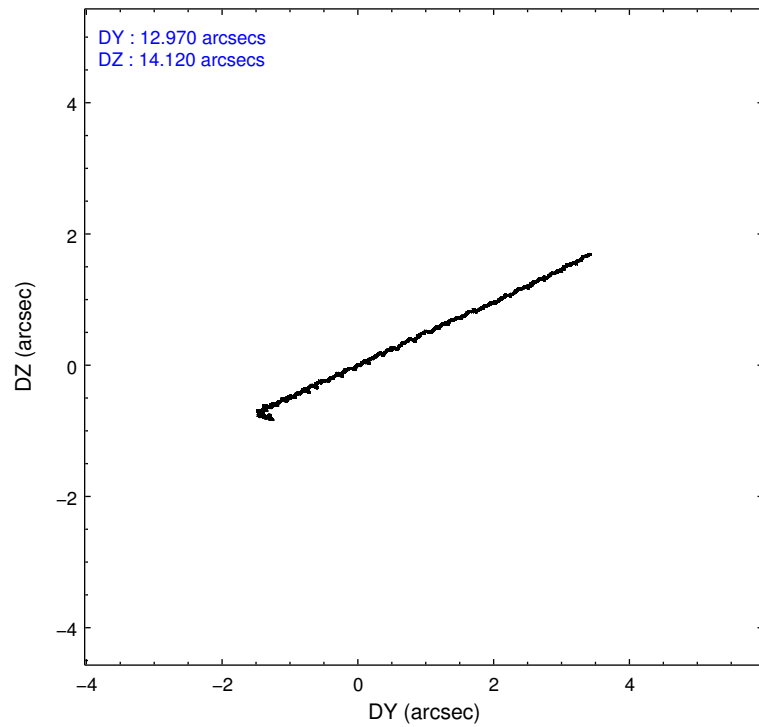
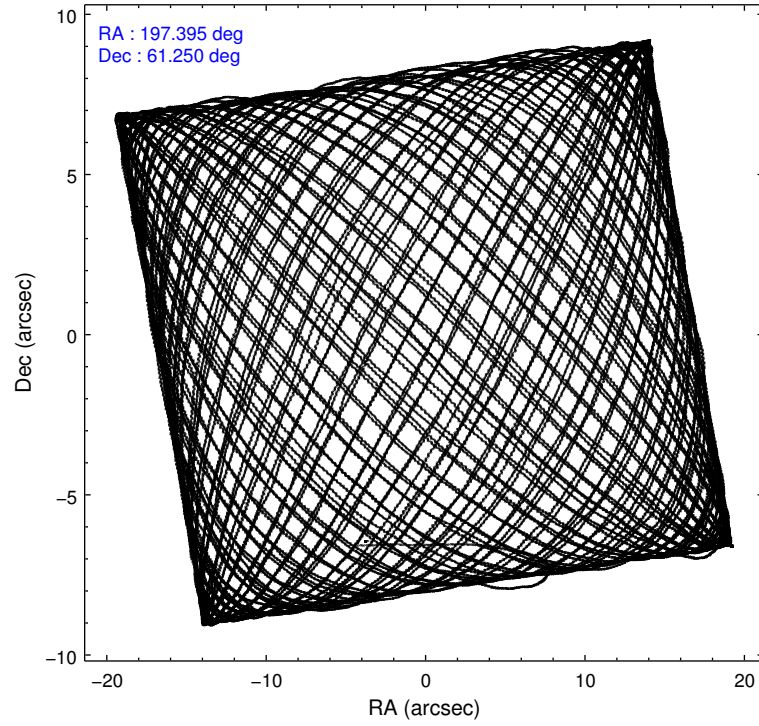
2.1.4 Events

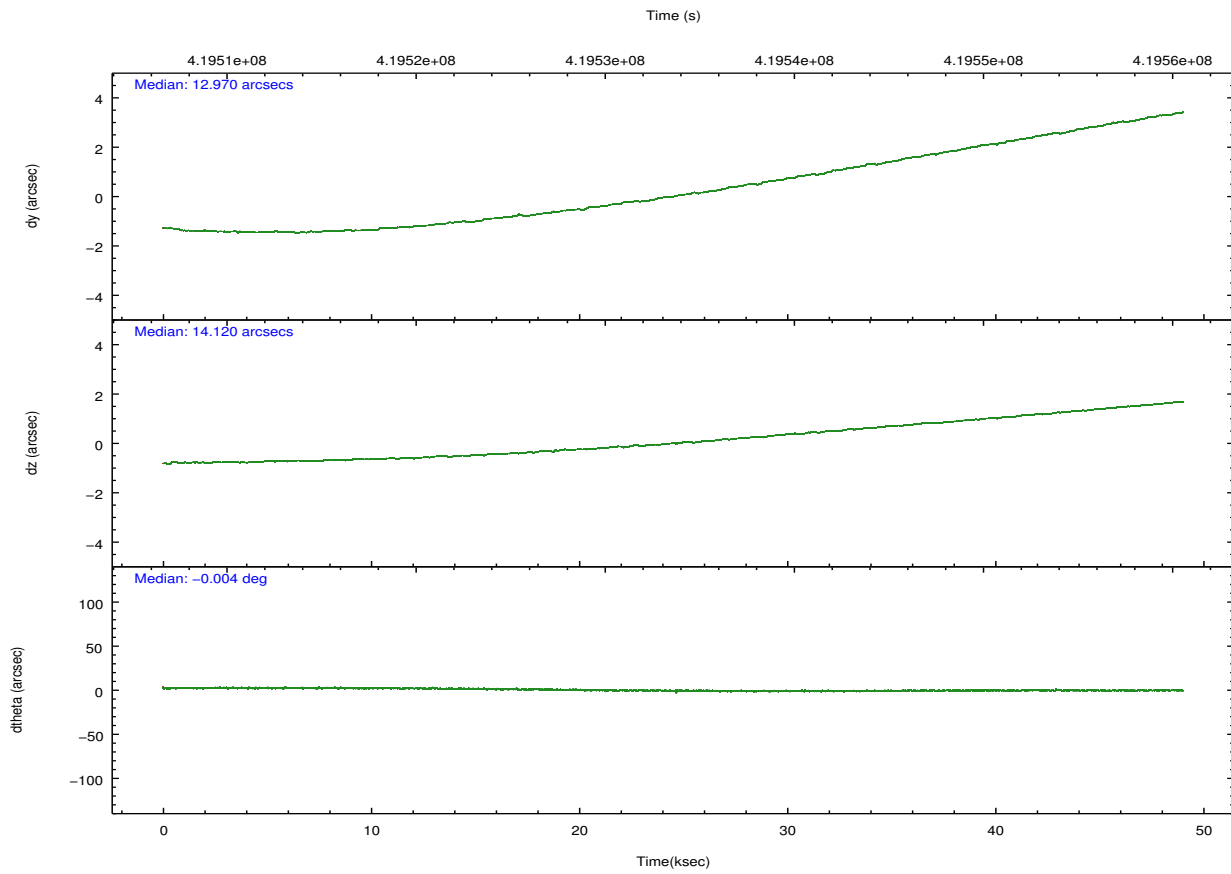
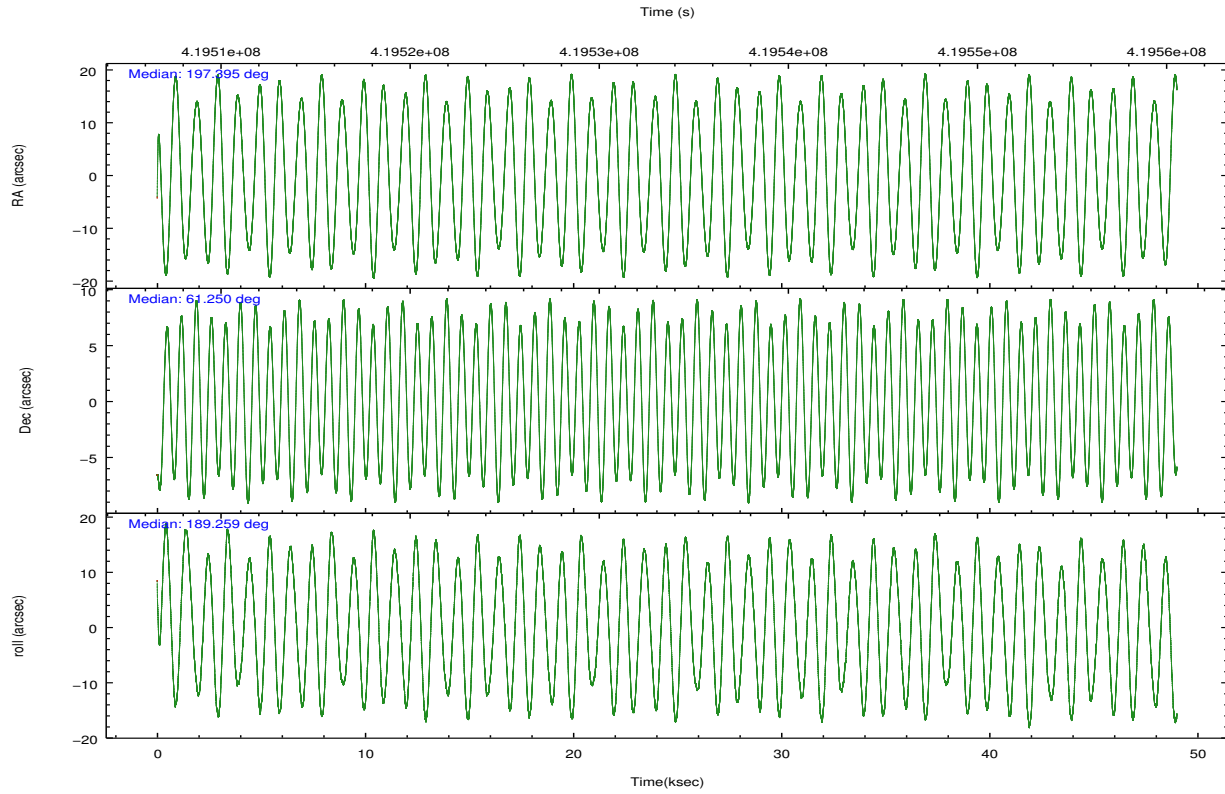
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	326799	307446	473365	312592	392103	404055	grade 0 events	12102	11930	14976	12332	15965	31455
rejected events	292681	274253	245252	276889	216461	296363		3%	3%	3%	3%	4%	7%
rejected %	89%	89%	51%	88%	55%	73%	grade 1 events	174	185	865	144	464	353
								0%	0%	0%	0%	0%	0%
							grade 2 events	8431	7194	70300	8005	35722	25350
								2%	2%	14%	2%	9%	6%
							grade 3 events	3552	3664	8718	3697	15707	11544
								1%	1%	1%	1%	4%	2%
							grade 4 events	3488	3564	8064	3689	15341	10680
								1%	1%	1%	1%	3%	2%
							grade 5 events	12953	14814	36002	14642	40873	21365
								3%	4%	7%	4%	10%	5%
							grade 6 events	6546	6849	126078	7984	92936	28675
								2%	2%	26%	2%	23%	7%
							grade 7 events	279553	259246	208362	262099	175095	274633
								85%	84%	44%	83%	44%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	197.438588	197.3950511590164	CCD I2 on	O1	Y
[deg] Pointing Dec	61.267104	61.2495110700558	CCD I3 on	O2	Y
[deg] Pointing Roll	189.068506	189.2633026906131	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[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	Y	Y
[s] Observation start time (MET)	419510079.184000	419508347.44056	CCD S5 on	N	N
Observation start date	2011-04-18T10:33:33	2011-04-18T10:05:47	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	419558079.184000	419558880.96818	On-chip summing requested	N	N
Observation end date	2011-04-18T23:53:33	2011-04-19T00:08:00	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



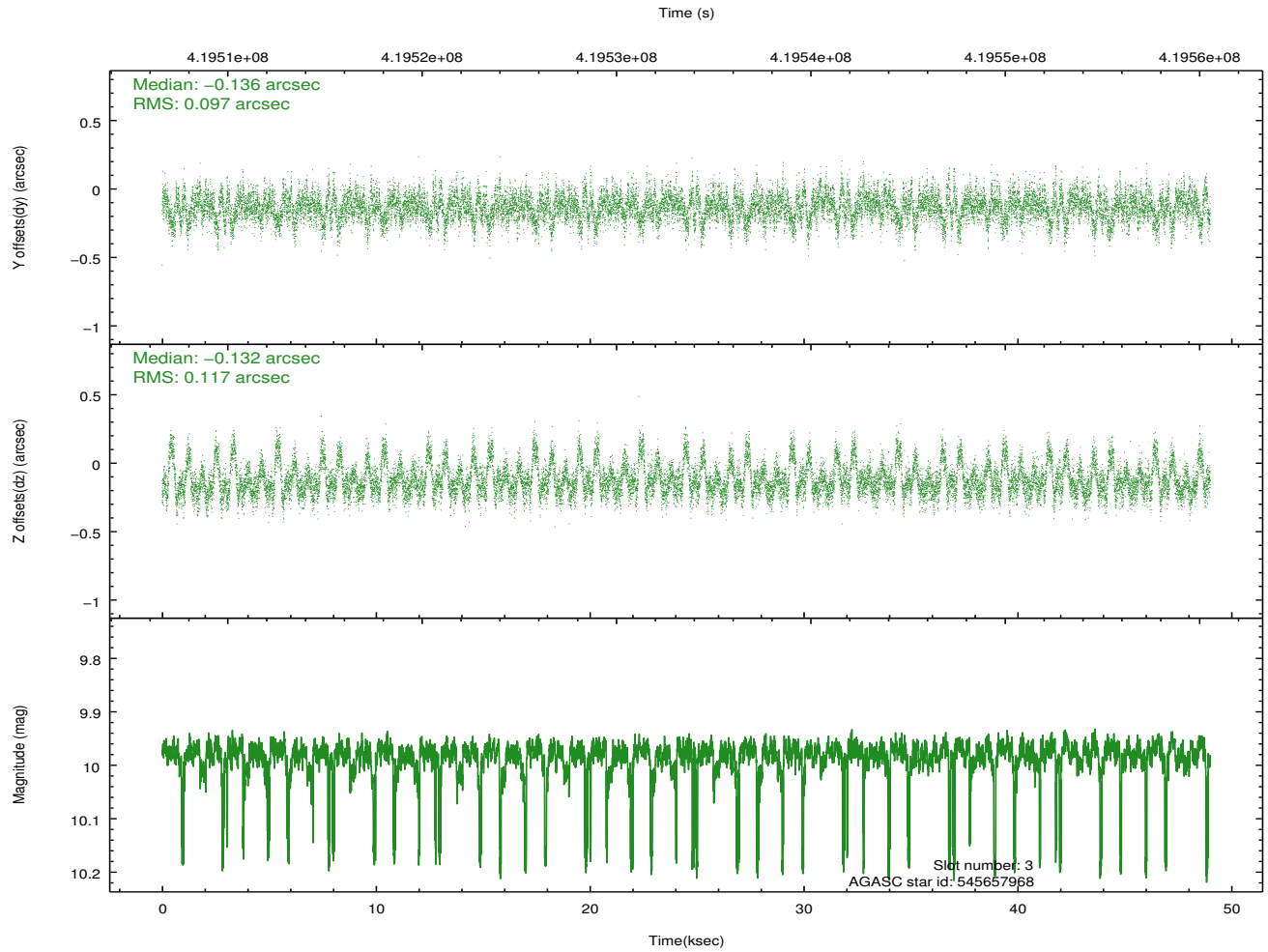
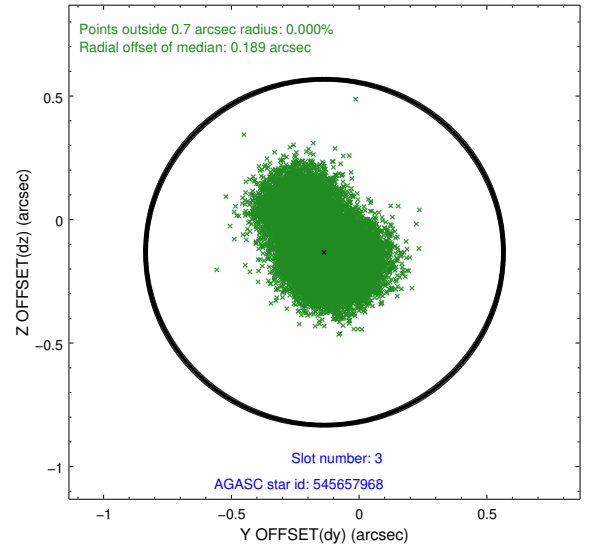
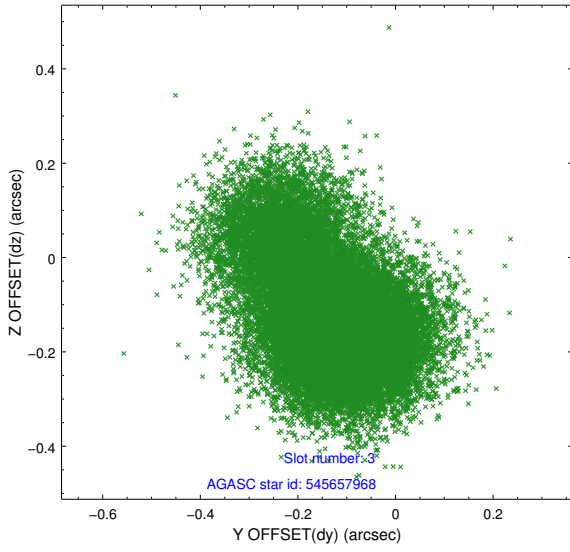


Slot Statistics

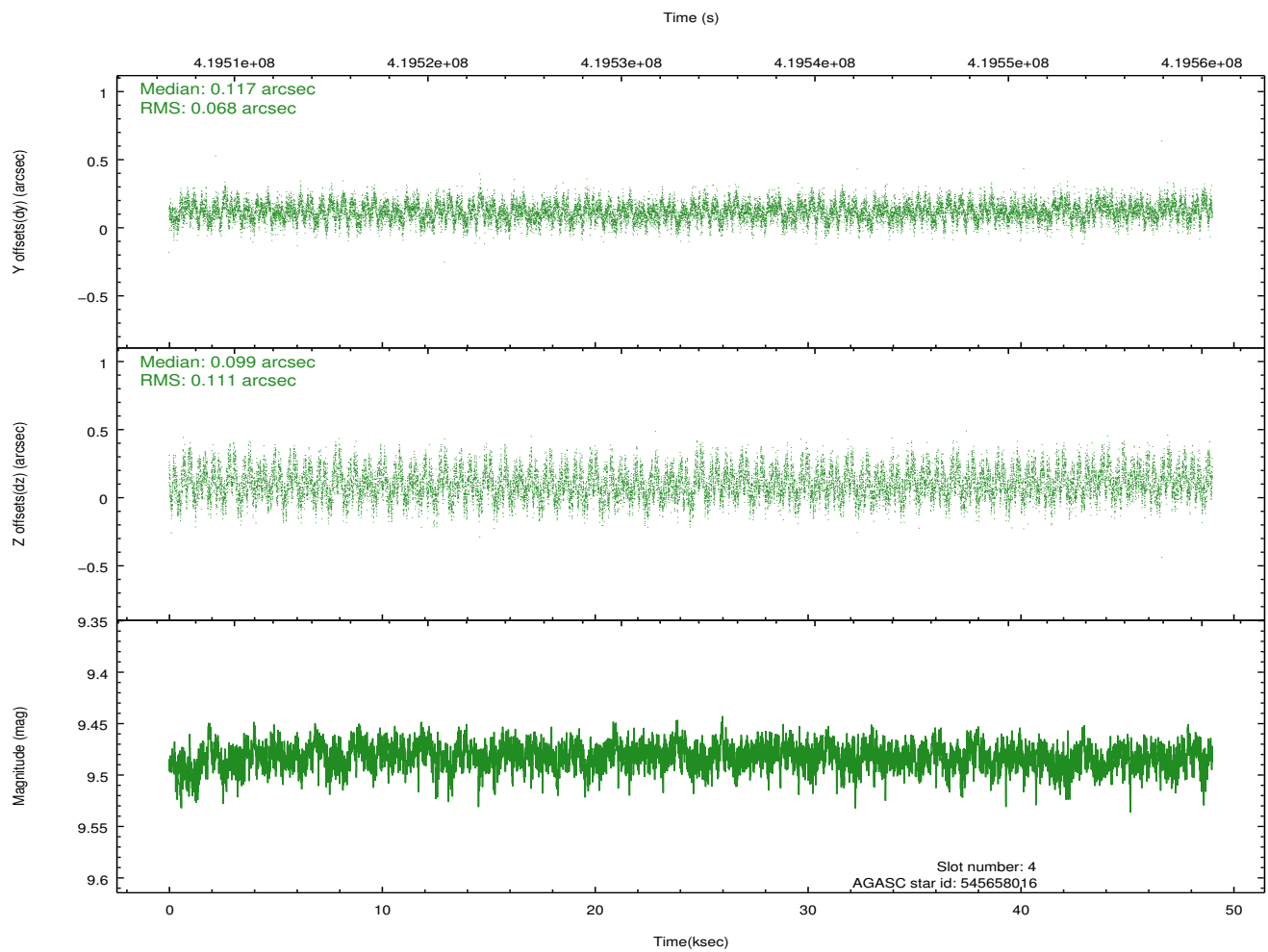
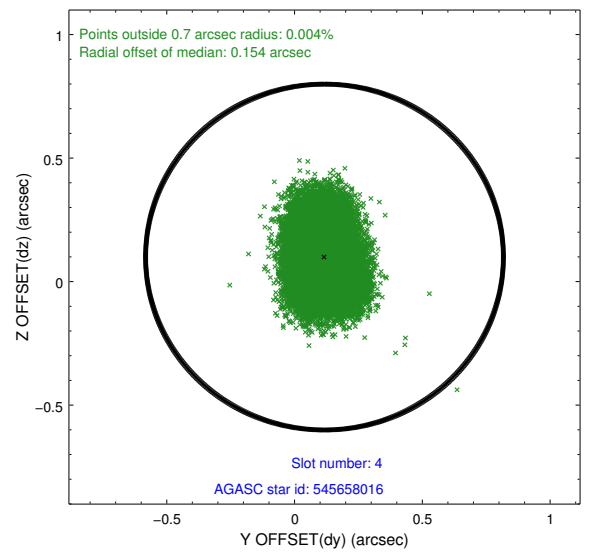
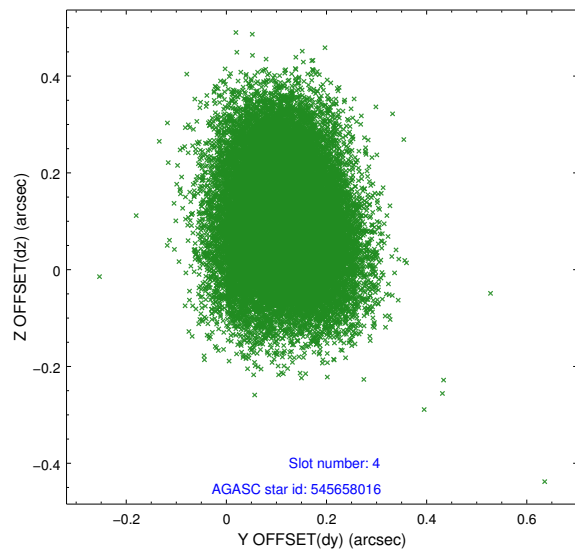
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.94	11953	-0.036	-0.027	0.040	0.068	0.000000	0.000000	-766.28	-1735.66
1	FID	ACIS-S-4	7.02	11952	0.142	0.026	0.045	0.069	0.000000	0.000000	2147.20	172.90
2	FID	ACIS-S-5	7.06	11953	-0.121	0.011	0.033	0.045	0.000000	0.000000	-1819.22	166.51
3	GUIDE	545657968	9.98	23746	-0.136	-0.132	0.157	0.277	196.517873	60.563712	2005.68	2232.80
4	GUIDE	545658016	9.48	23877	0.117	0.099	0.139	0.225	197.493764	61.778515	-382.00	-1802.53
5	GUIDE	545658224	8.74	23883	0.049	-0.005	0.084	0.134	198.640725	60.748548	-1796.98	2157.50
6	GUIDE	545661040	9.50	23806	0.010	0.130	0.106	0.174	197.220924	61.275648	367.60	-89.14
7	GUIDE	545661232	8.08	23897	-0.040	-0.112	0.072	0.112	196.312964	60.860518	2176.57	1117.62

2.4 Star Slots

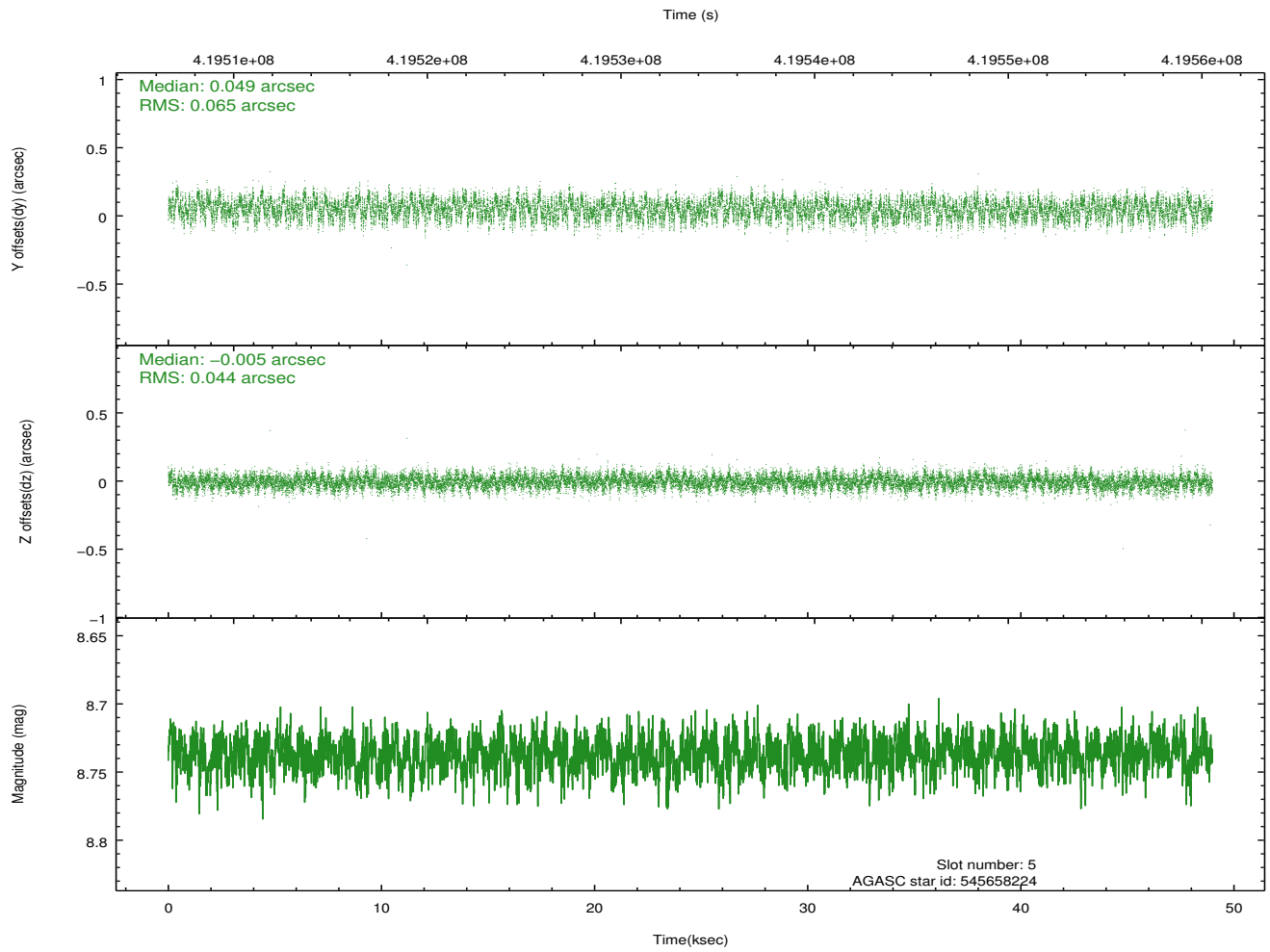
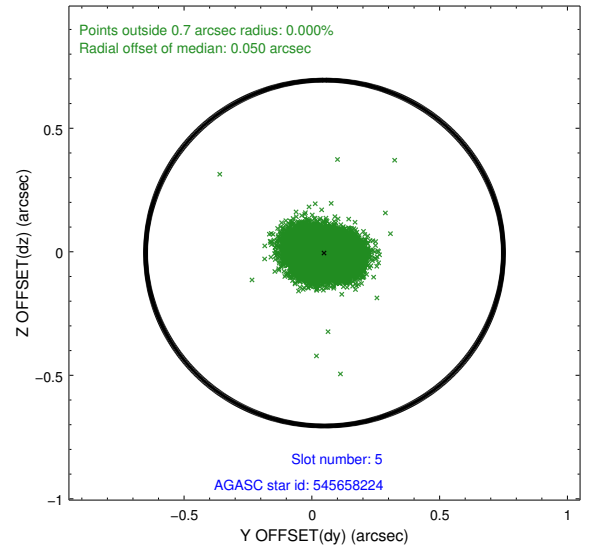
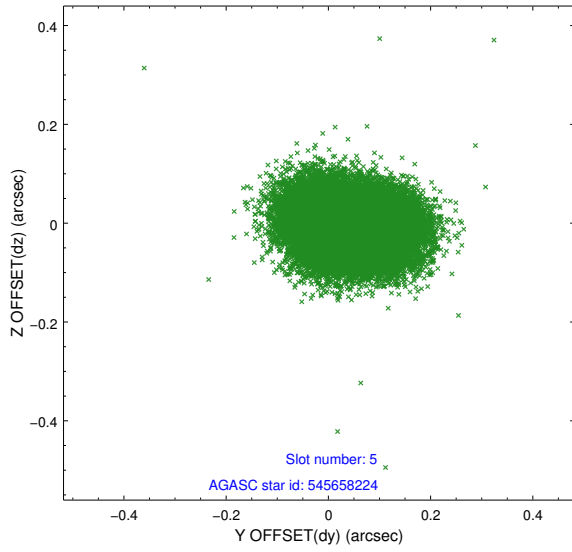
2.4.1 Slot 3



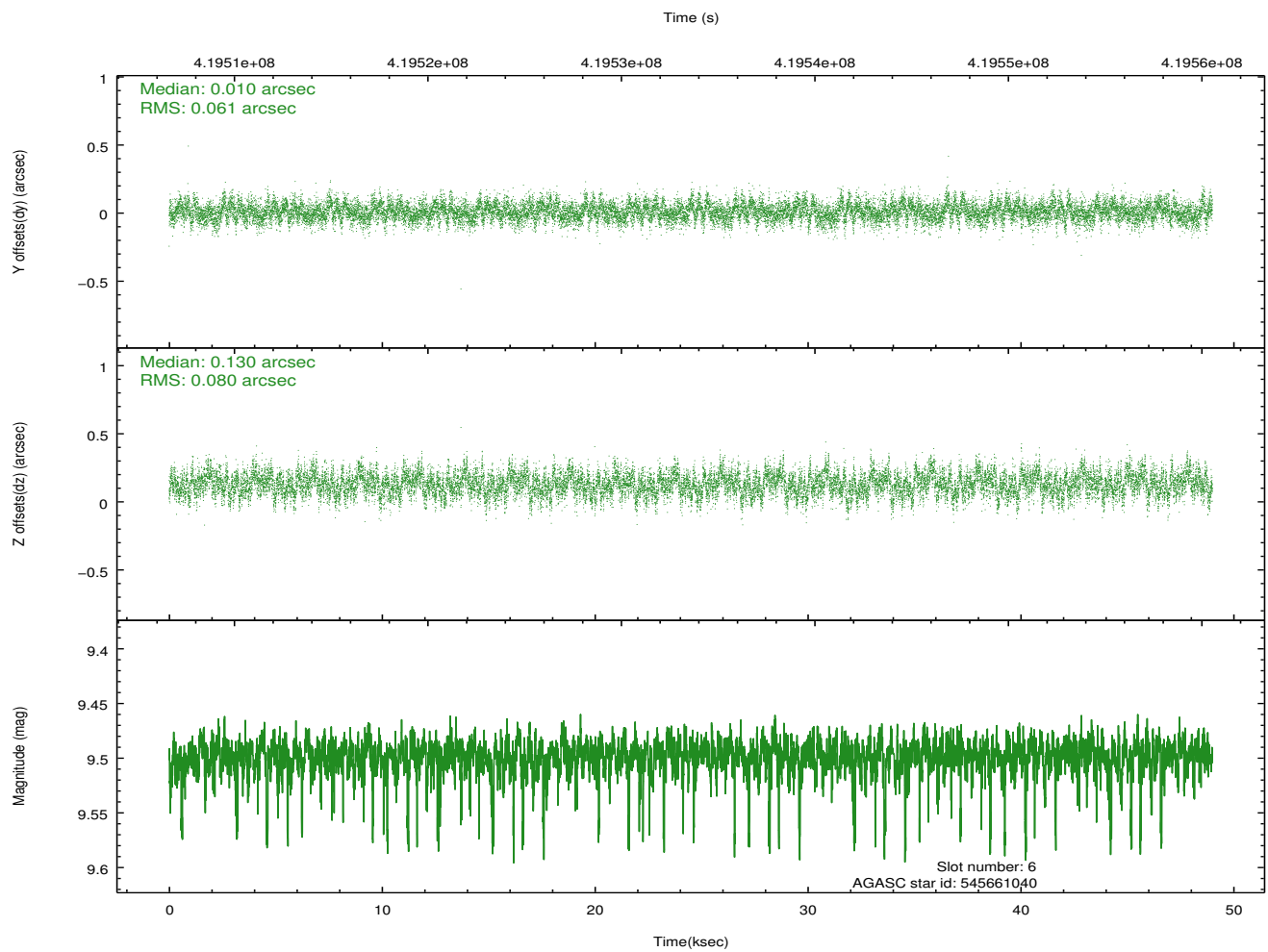
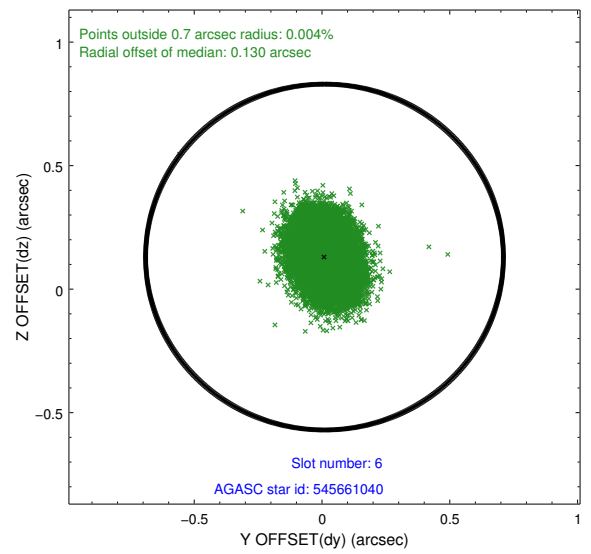
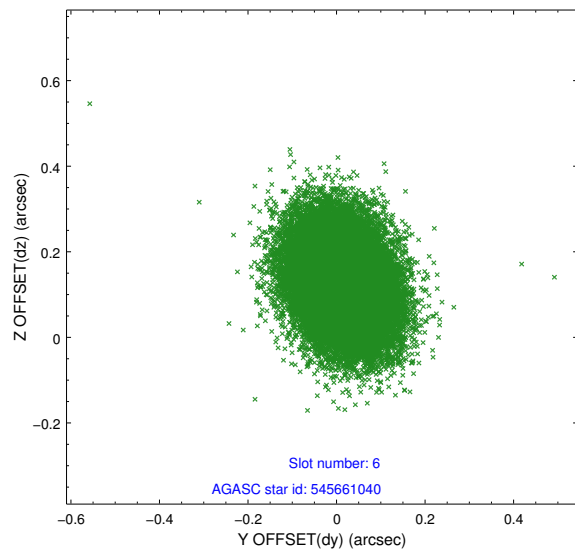
2.4.2 Slot 4



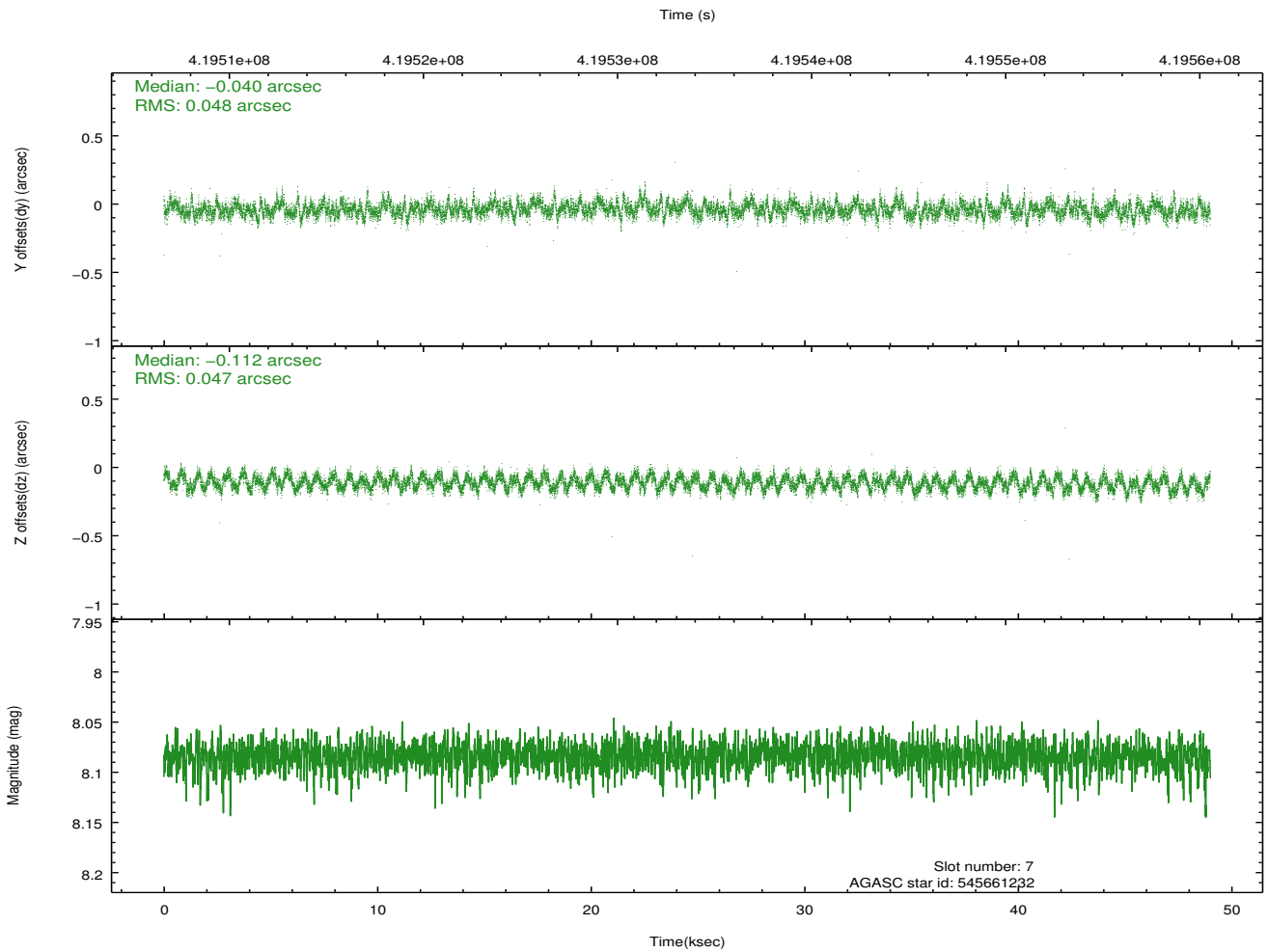
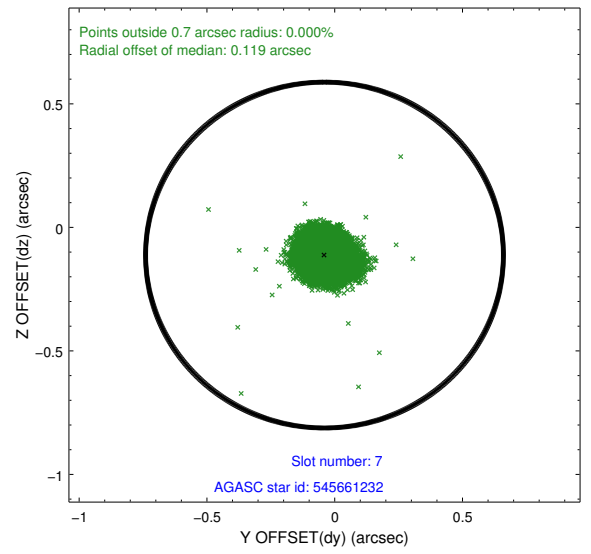
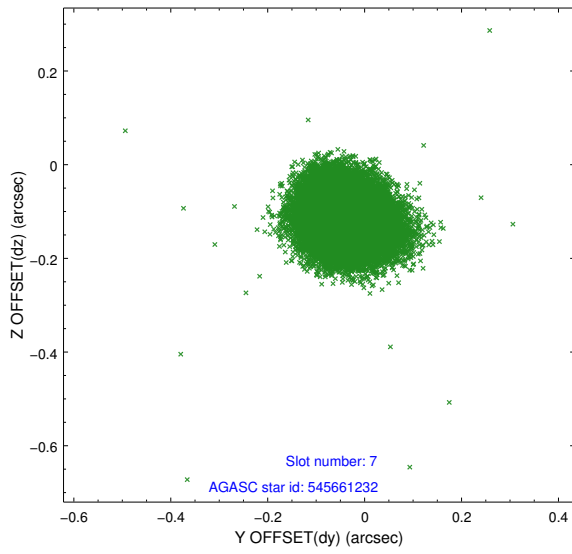
2.4.3 Slot 5



2.4.4 Slot 6

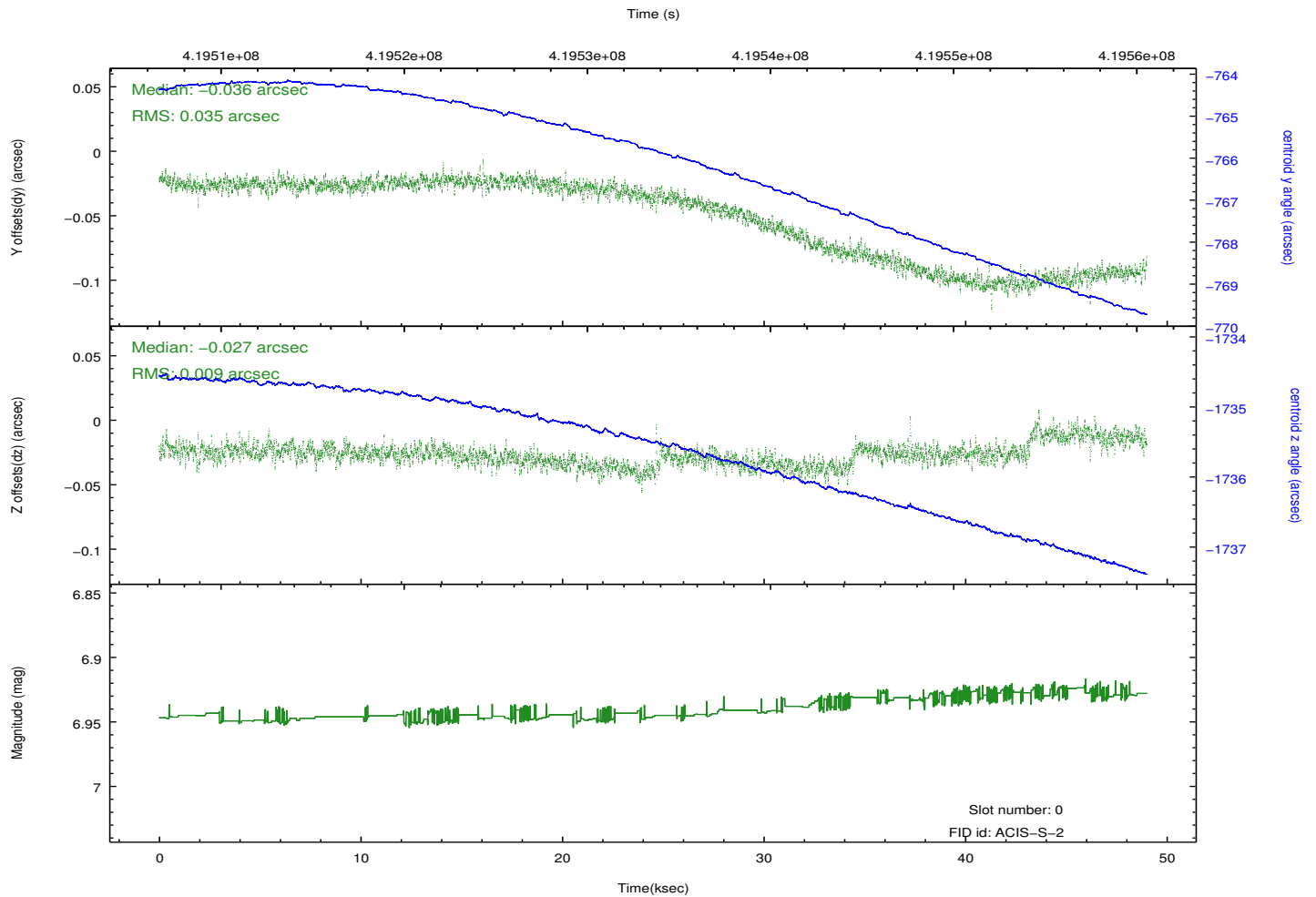
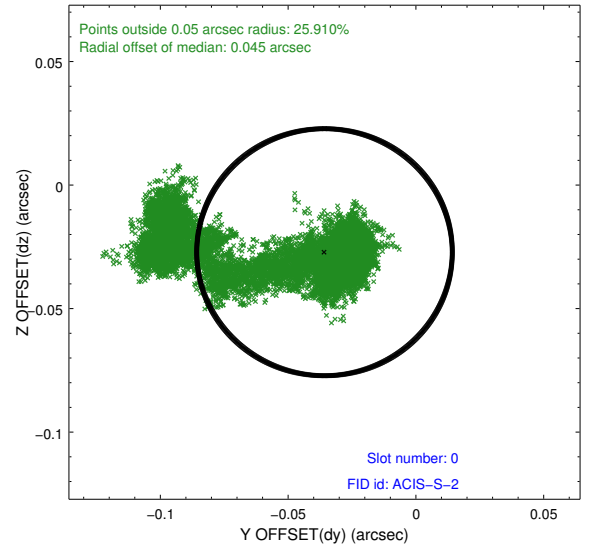
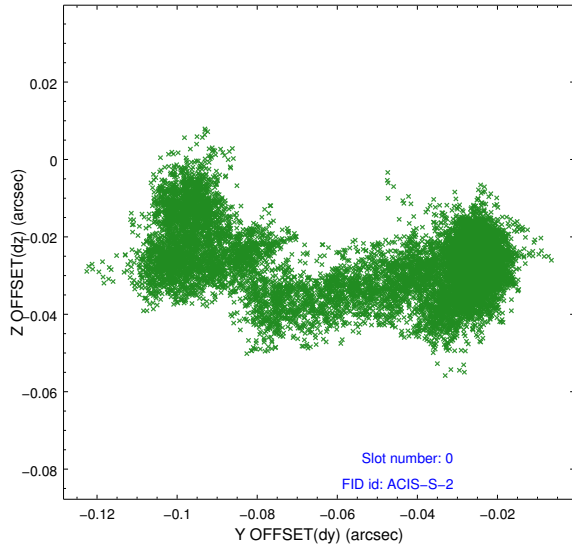


2.4.5 Slot 7

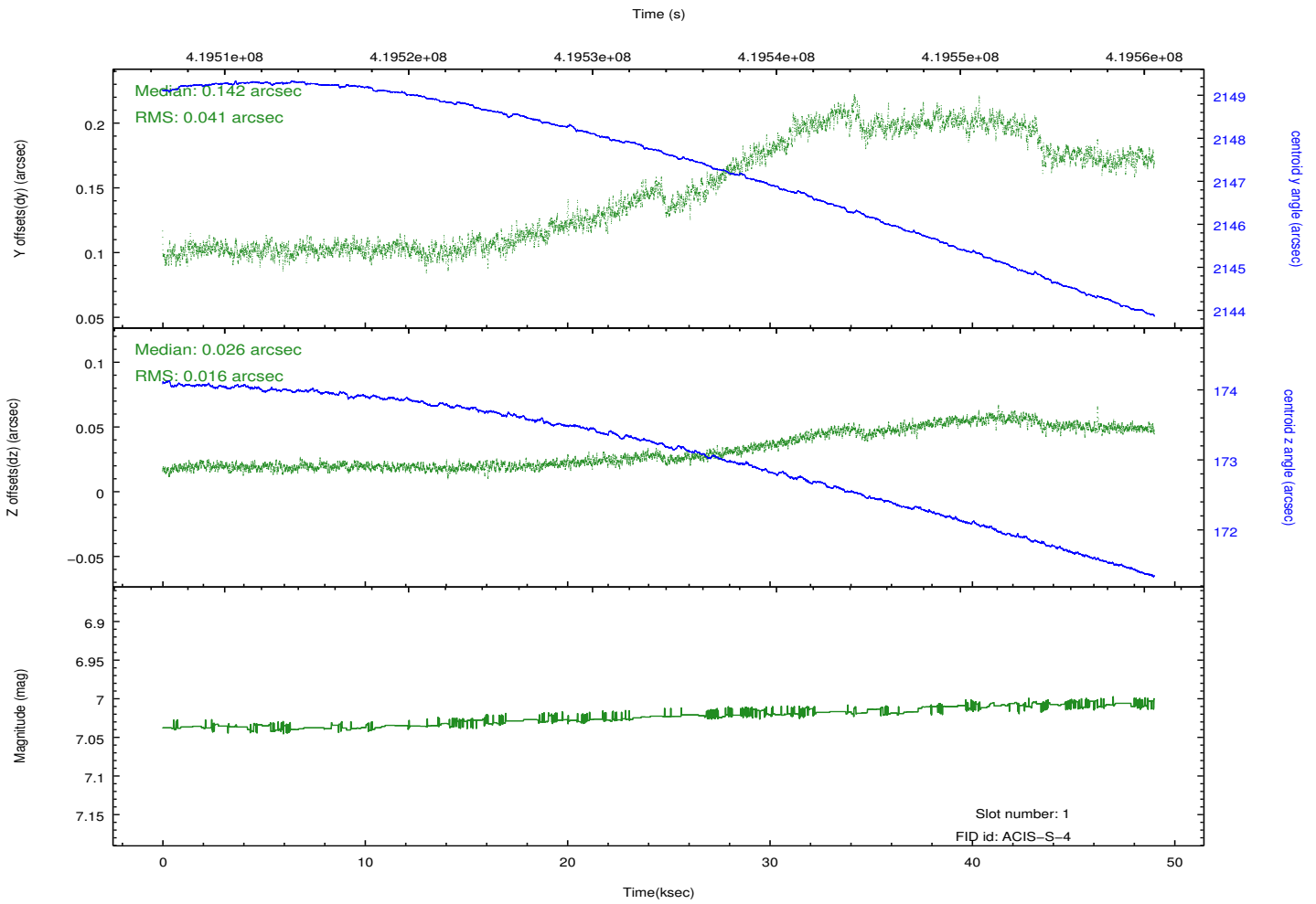
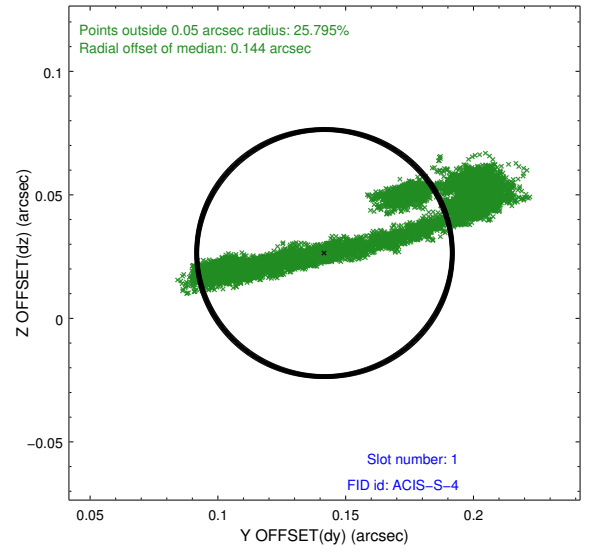
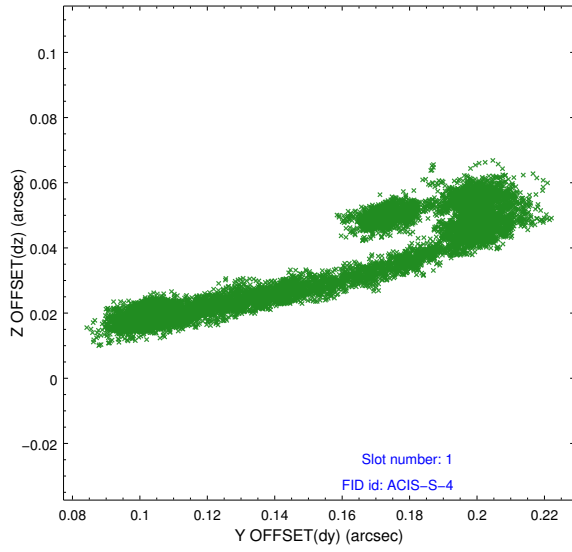


2.5 FID Slots

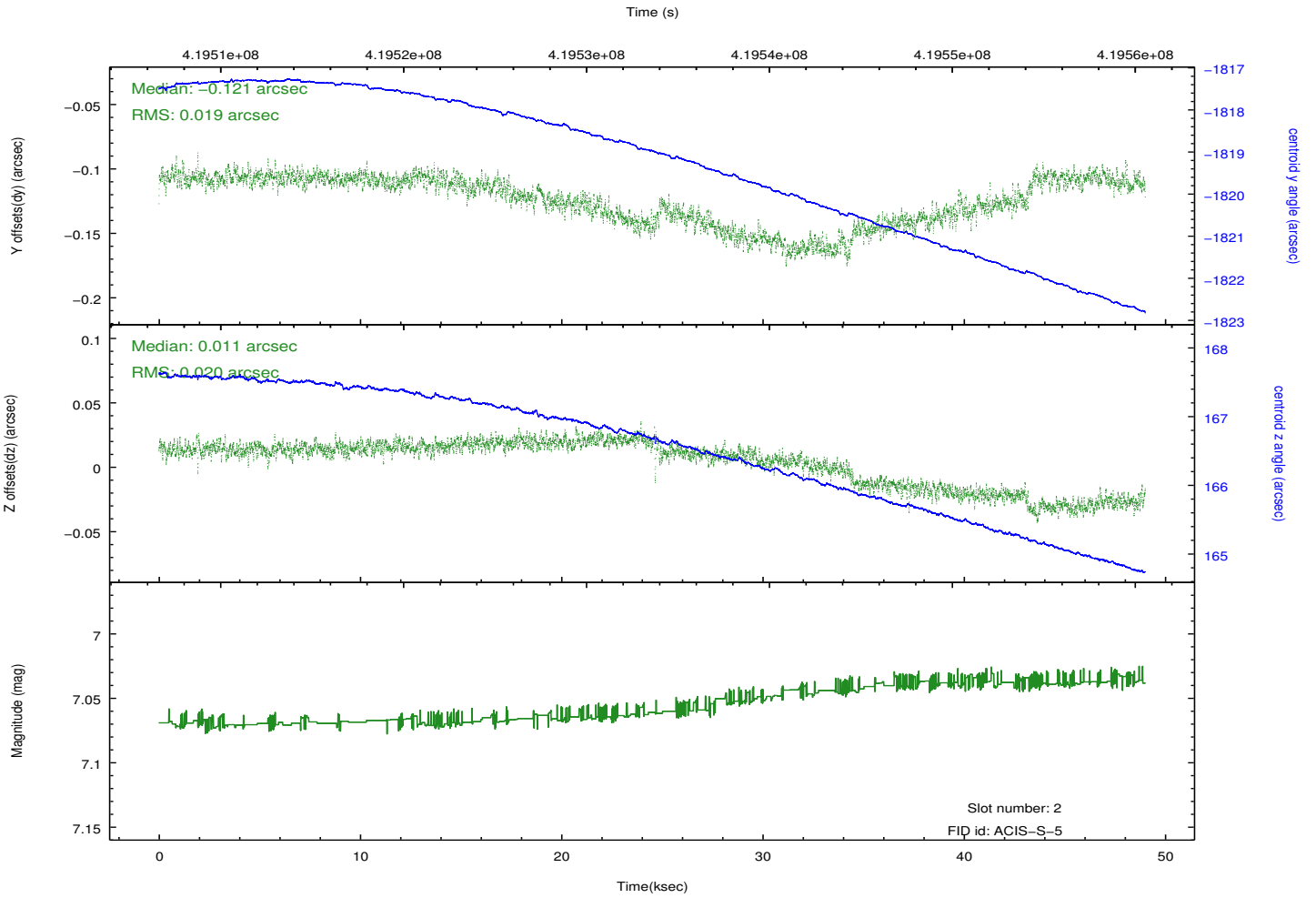
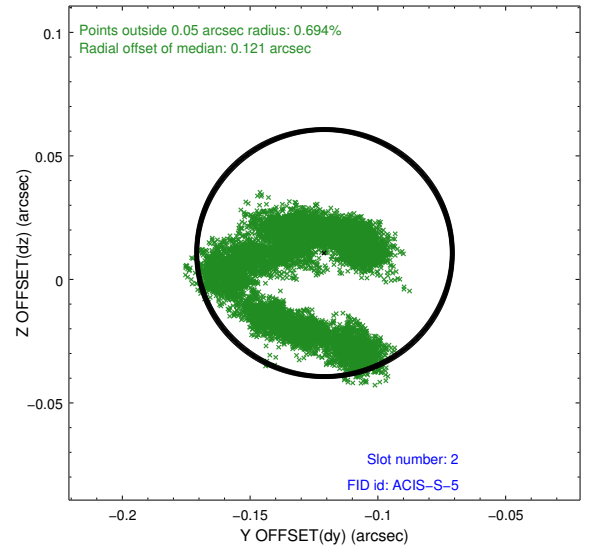
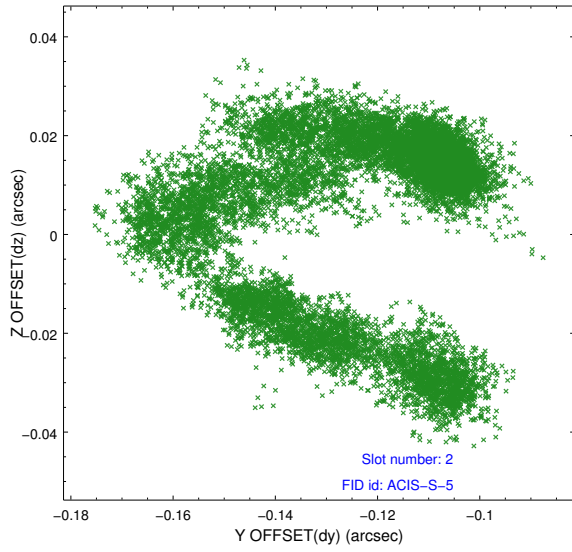
2.5.1 Slot 0



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)	2012.02.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	48.052889041483

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.