

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 14221 - L2 Version 2
Chandra X-Ray Center

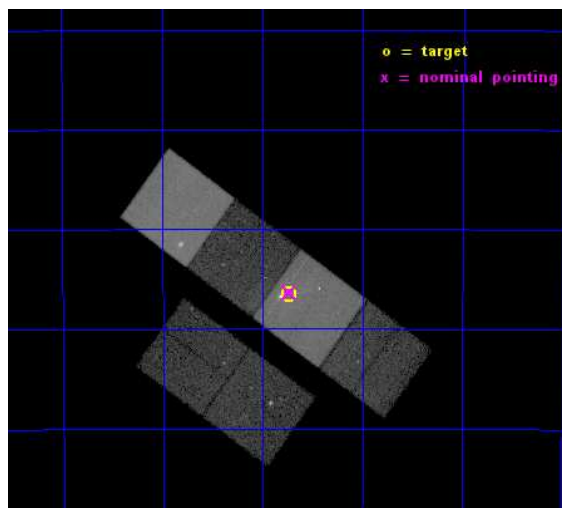
L2 Processing Date : Nov 29 2014

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1 Front

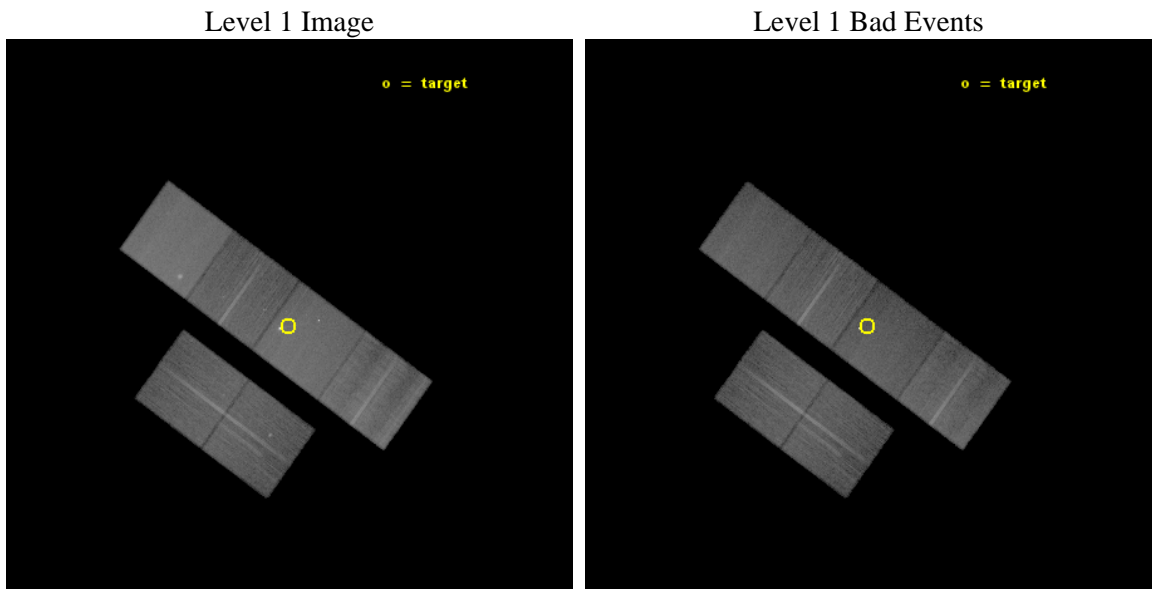
seq_num	702717	Sequence number
obs_id	14221	Observation id
title	Variability and particle acceleration in the jet of Pictor A	Propo
observer	Dr Martin Hardcastle	Principal investigator
object	Pictor A Jet	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	79.933333	Observer's specified target RA [deg]
dec_targ	-45.775556	Observer's specified target Dec [deg]
ra_nom	79.933052633735	Nominal RA [deg]
dec_nom	-45.77253968368	Nominal Dec [deg]
roll_nom	36.156421372848	Nominal Roll [deg]
revision	2	Processing version of data
ontime	37964.471410394	Sum of GTIs [s]
livetime	37483.742413935	Livetime [s]
ontime2	37964.512450397	Sum of GTIs [s]
ontime3	37964.348290384	Sum of GTIs [s]
ontime5	37964.43037039	Sum of GTIs [s]
ontime6	37964.389330387	Sum of GTIs [s]
ontime7	37964.471410394	Sum of GTIs [s]
ontime8	37961.066230118	Sum of GTIs [s]
l2events	372674	Number of level 2 events



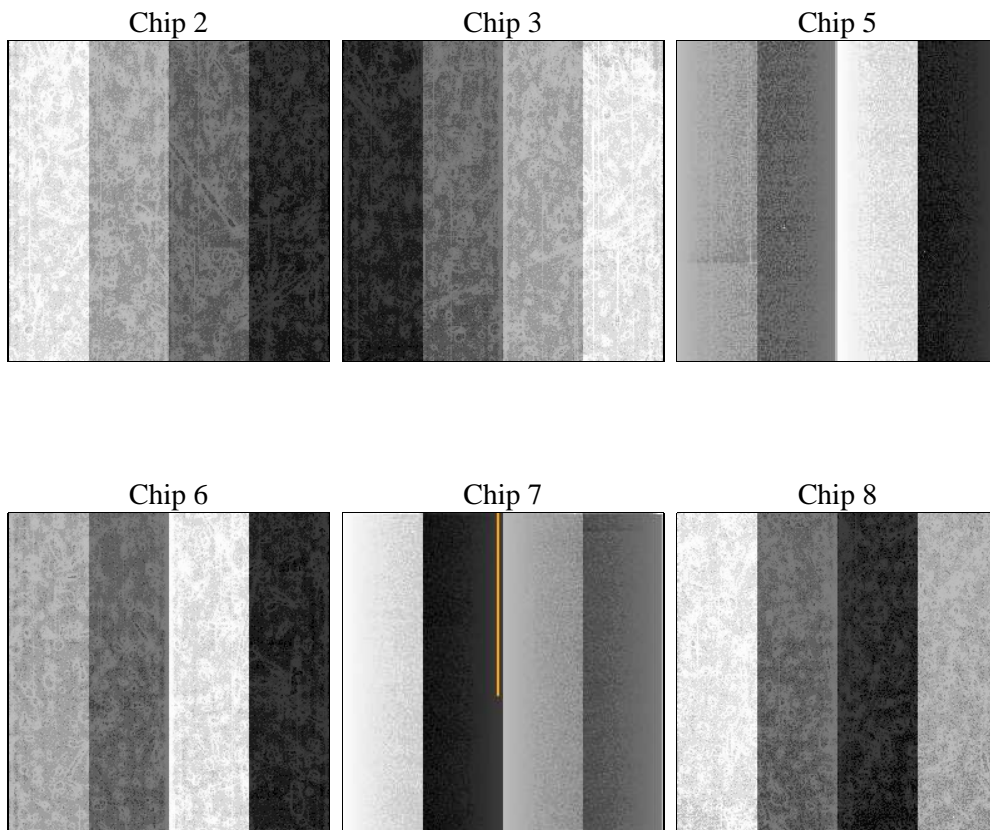
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	38000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	37964.471410394	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	37964.512450397	Sum of GTIs [s]
date	2014-11-29T09:31:46	Date and time of file creation	ontime3	37964.348290384	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	37964.43037039	Sum of GTIs [s]
			ontime6	37964.389330387	Sum of GTIs [s]
			ontime7	37964.471410394	Sum of GTIs [s]
			ontime8	37961.066230118	Sum of GTIs [s]
			l1events	1480947	Number of level 1 events

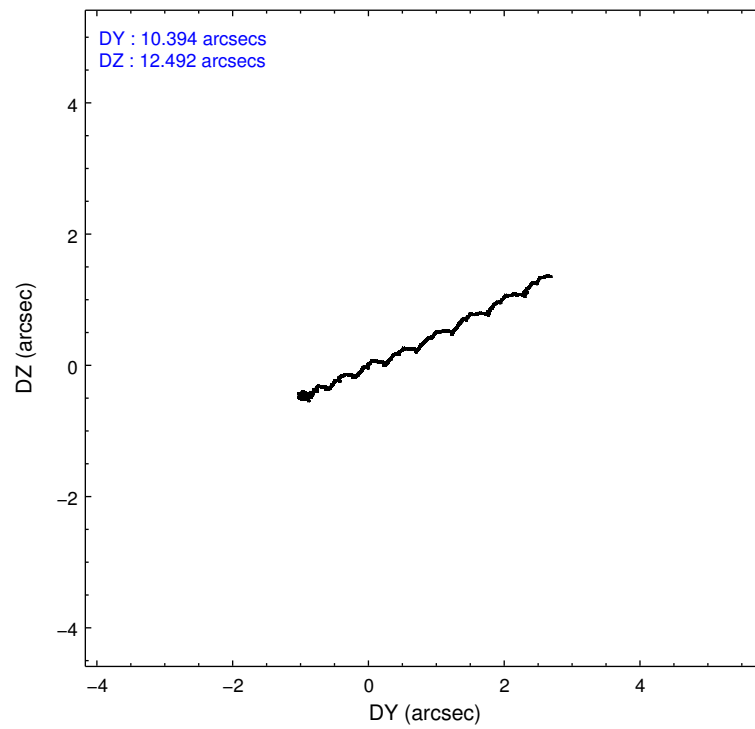
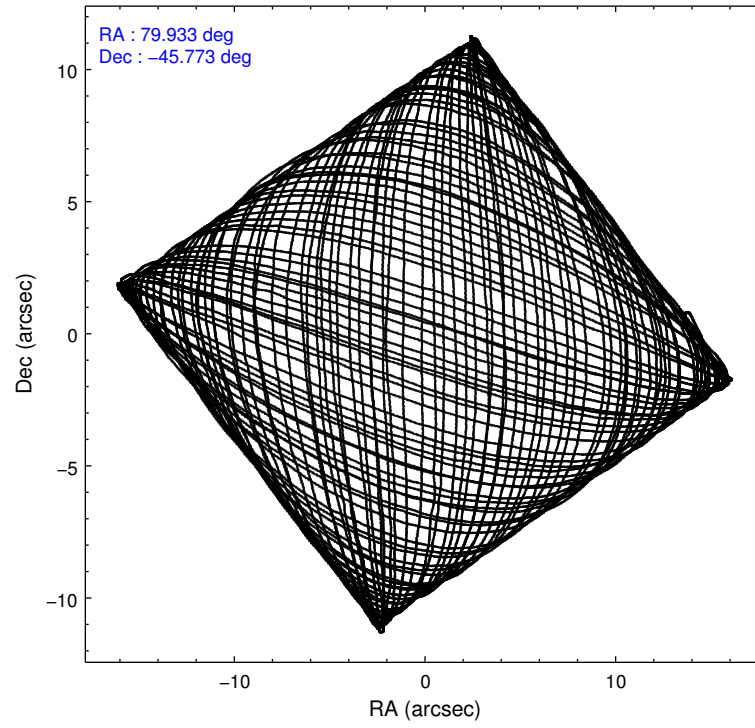
2.1.4 Events

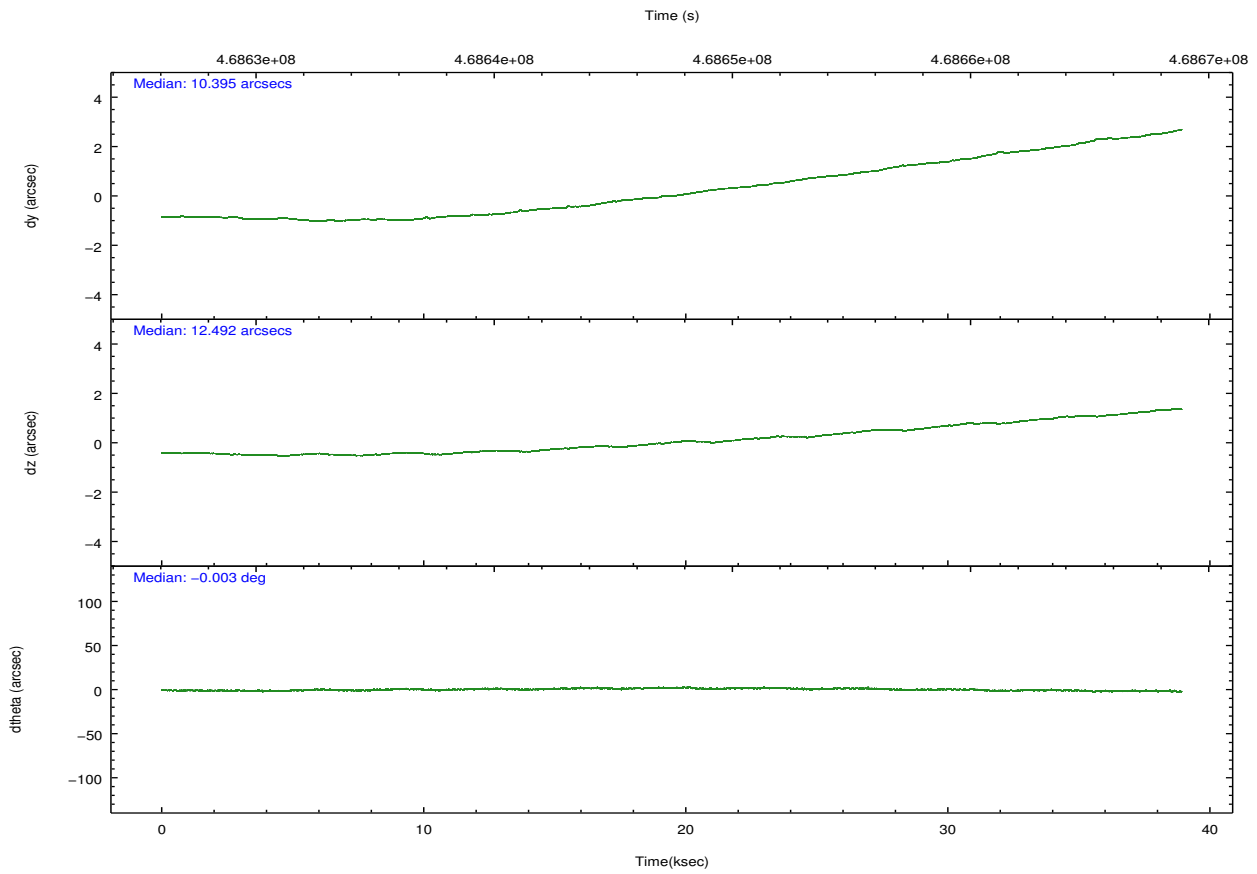
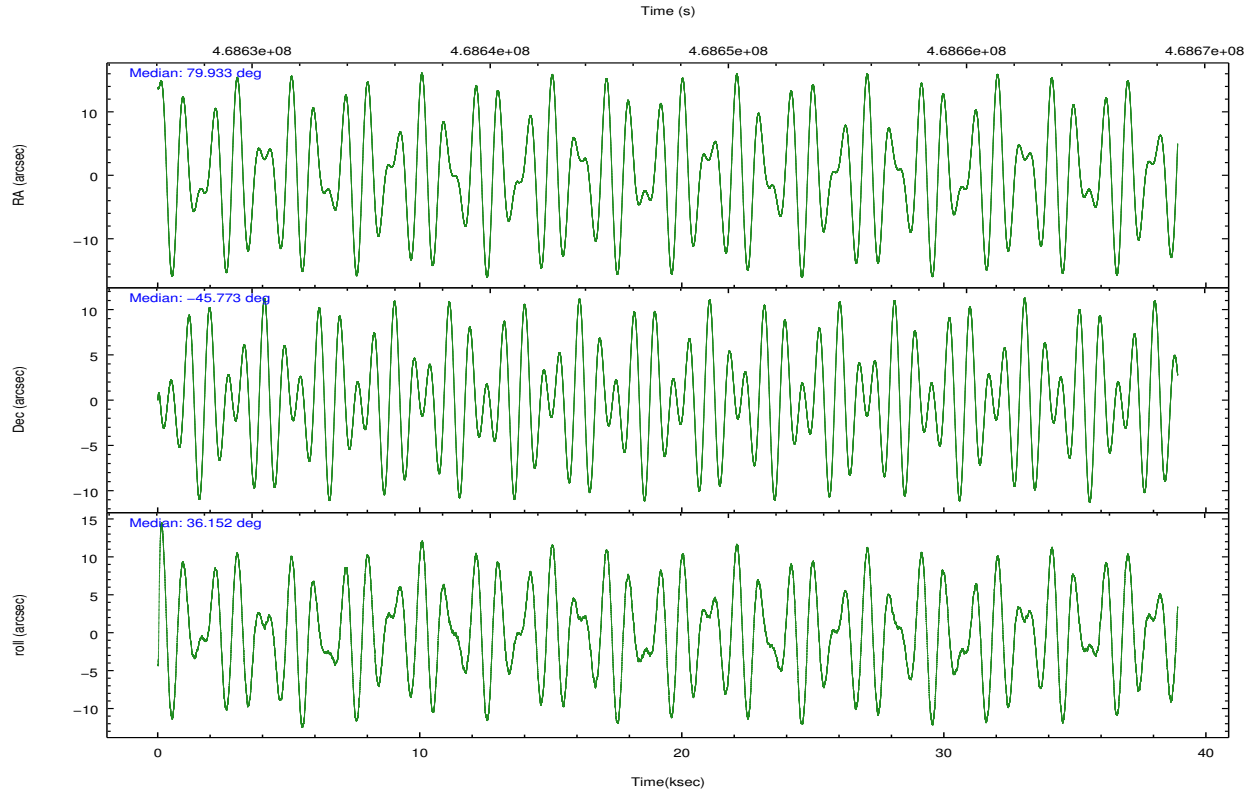
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	199873	188402	327024	202840	297079	265729	grade 0 events	8107	8149	10266	9716	14945	20378
rejected events	176910	165961	171163	176751	160153	194449		4%	4%	3%	4%	5%	7%
rejected %	88%	88%	52%	87%	53%	73%	grade 1 events	137	99	591	104	562	213
								0%	0%	0%	0%	0%	0%
							grade 2 events	5676	4955	48271	5591	28662	17133
								2%	2%	14%	2%	9%	6%
							grade 3 events	2256	2340	5768	2618	11958	7383
								1%	1%	1%	1%	4%	2%
							grade 4 events	2333	2409	5450	2574	11897	6968
								1%	1%	1%	1%	4%	2%
							grade 5 events	9079	10172	24550	10173	29363	14900
								4%	5%	7%	5%	9%	5%
							grade 6 events	4595	4591	86115	5592	69473	19426
								2%	2%	26%	2%	23%	7%
							grade 7 events	167690	155687	146013	166472	130219	179328
								83%	82%	44%	82%	43%	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	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	79.917686	79.93305263373523	CCD I2 on	O3	Y
[deg] Pointing Dec	-45.797685	-45.77253968367975	CCD I3 on	O2	Y
[deg] Pointing Roll	35.988786	36.15642137284841	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O4	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	O1	Y
[s] Observation start time (MET)	468628924.184000	468627301.16023	CCD S5 on	N	N
Observation start date	2012-11-06T22:40:57	2012-11-06T22:15:01	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	468666924.184000	468667828.12491	On-chip summing requested	N	N
Observation end date	2012-11-07T09:14:17	2012-11-07T09:30:28	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect





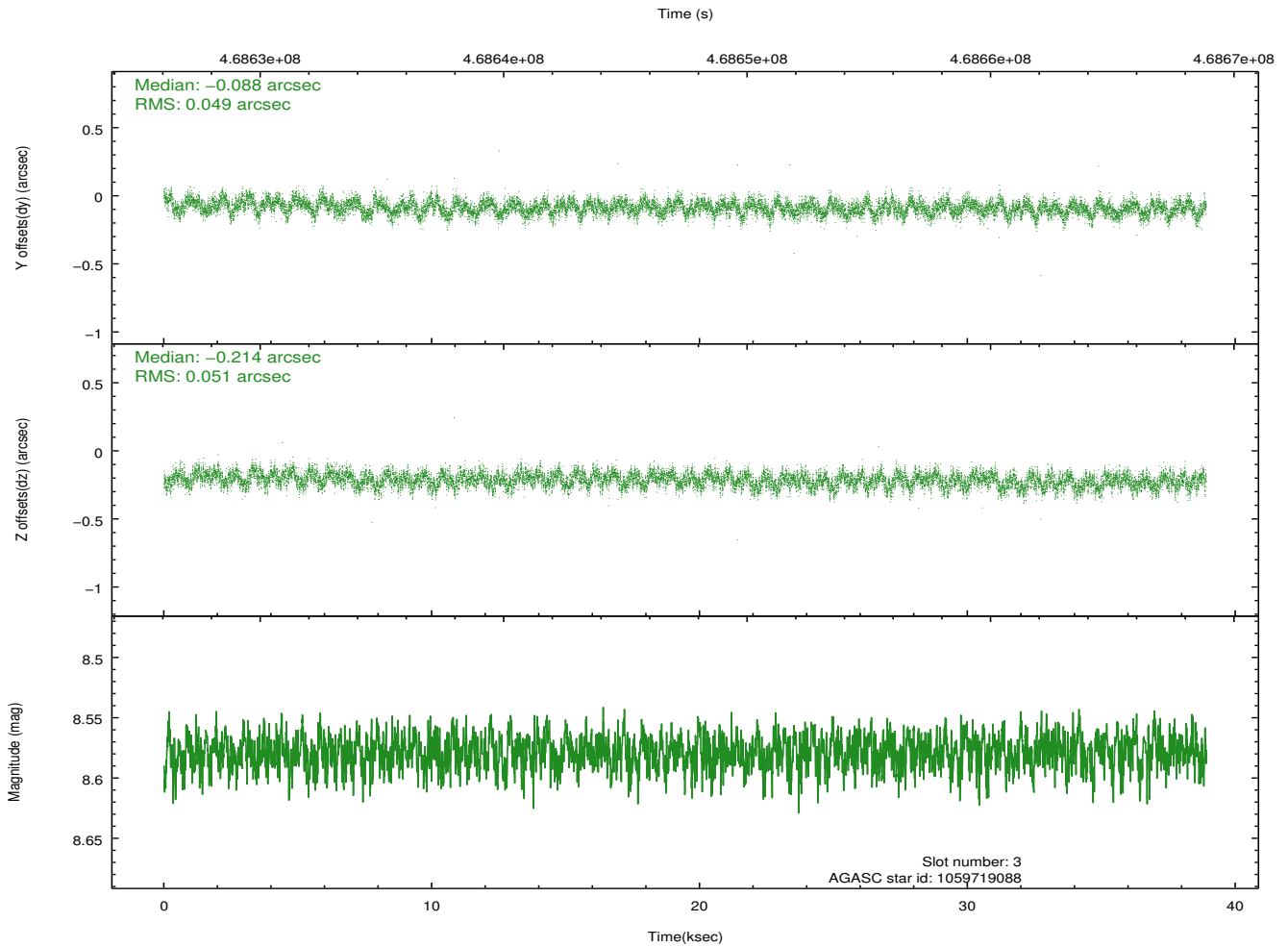
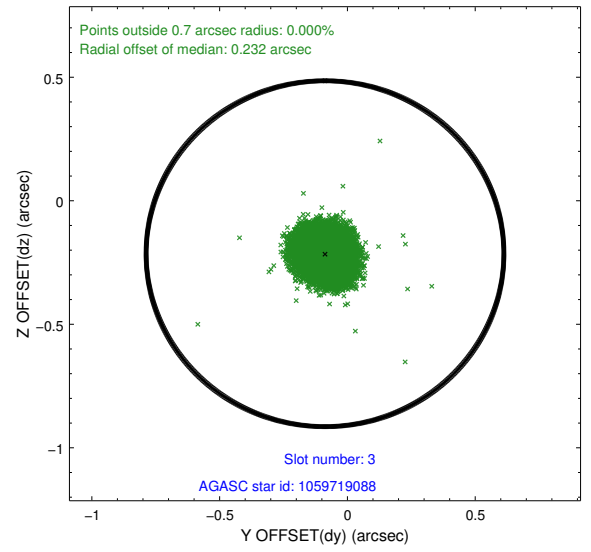
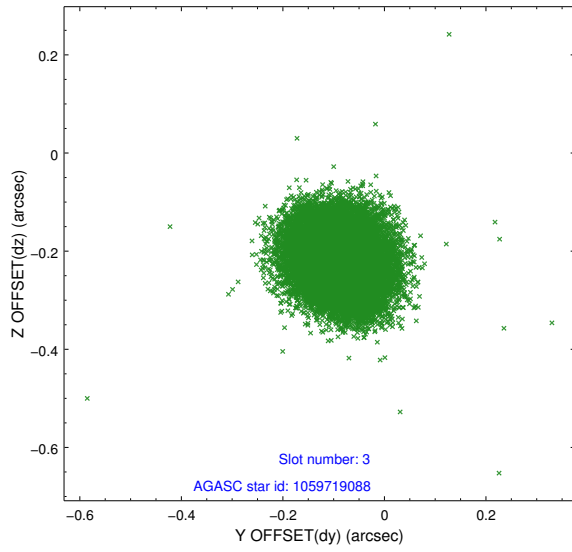
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.97	9492	-0.055	-0.045	0.012	0.018	0.000000	0.000000	-763.62	-1733.98
1	FID		ACIS-S-4	7.06	9492	0.209	0.038	0.021	0.033	0.000000	0.000000	2149.93	174.54
2	FID		ACIS-S-5	7.09	9492	-0.184	0.015	0.018	0.027	0.000000	0.000000	-1816.54	168.25
3	GUIDE	used	1059719088	8.58	18980	-0.088	-0.214	0.075	0.120	80.358941	-45.341185	1867.72	671.60
4	GUIDE	used	1059719224	9.05	18971	-0.143	-0.024	0.123	0.202	80.899888	-45.779497	2025.39	-1408.04
5	GUIDE	used	1059720912	8.91	18974	0.158	0.020	0.100	0.159	80.344072	-46.279067	-160.76	-2027.80
6	GUIDE	used	1059722304	7.52	18982	0.026	0.065	0.089	0.156	79.157586	-45.913736	-1790.85	773.36
7	GUIDE	used	1059718424	8.52	18974	0.040	0.152	0.091	0.152	81.108521	-45.890614	2205.21	-2041.56

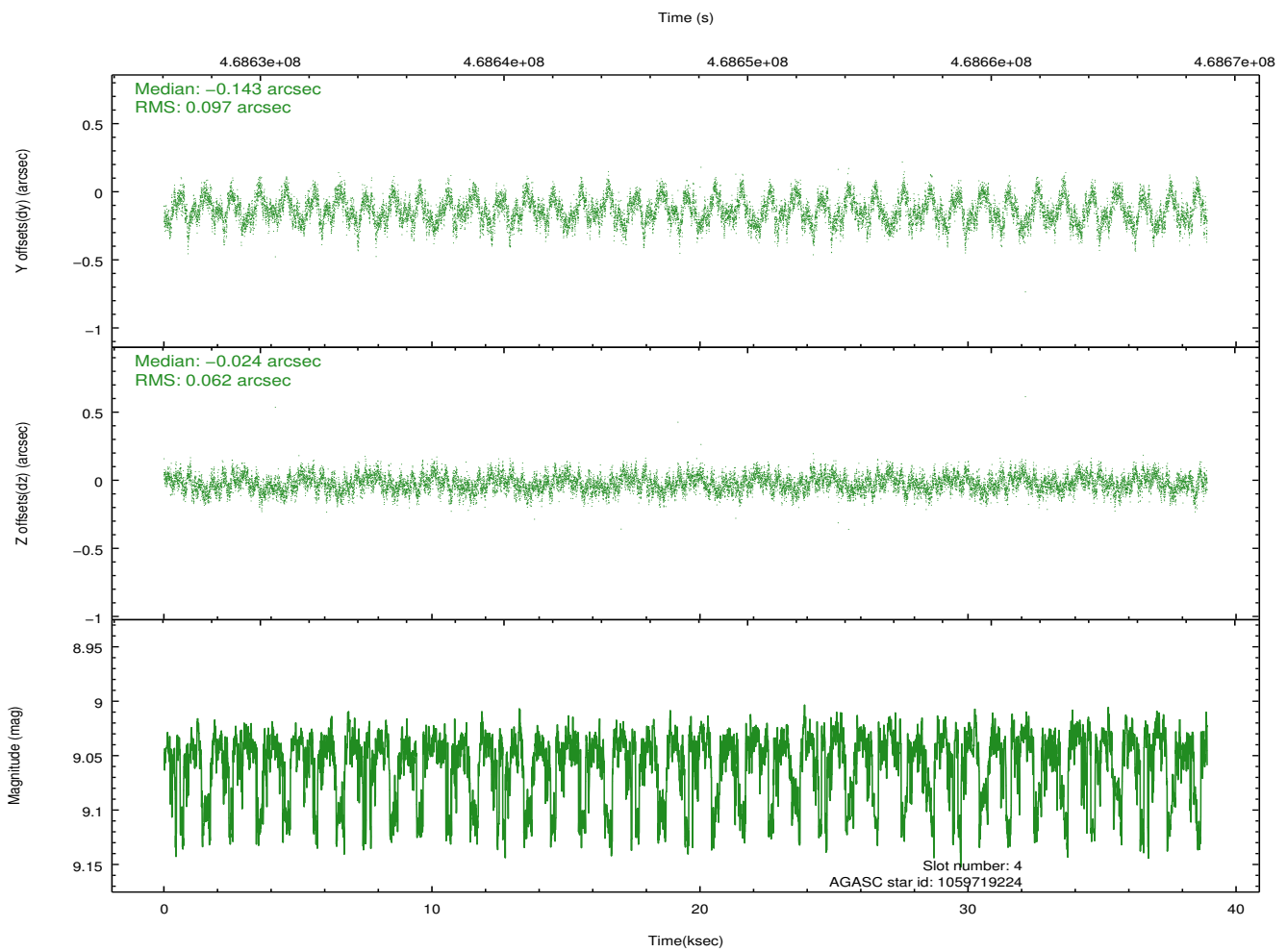
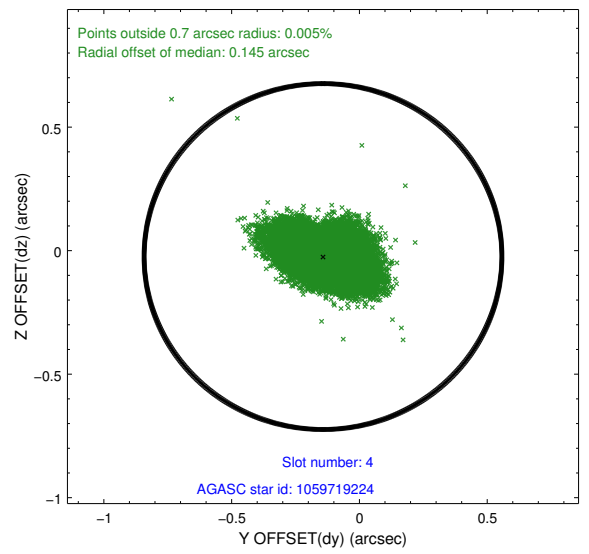
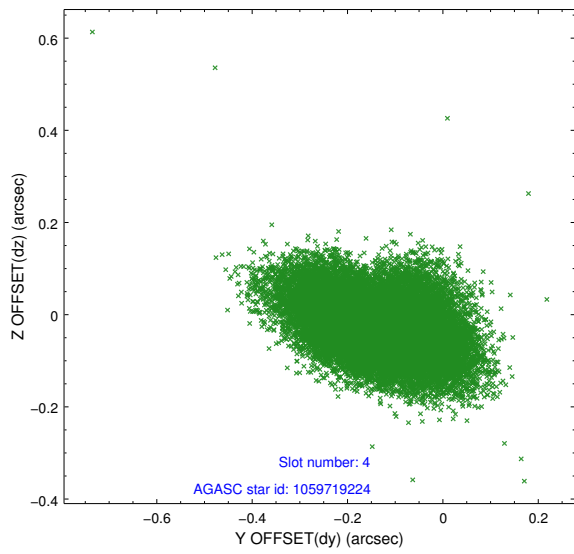
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2.4 Star Slots

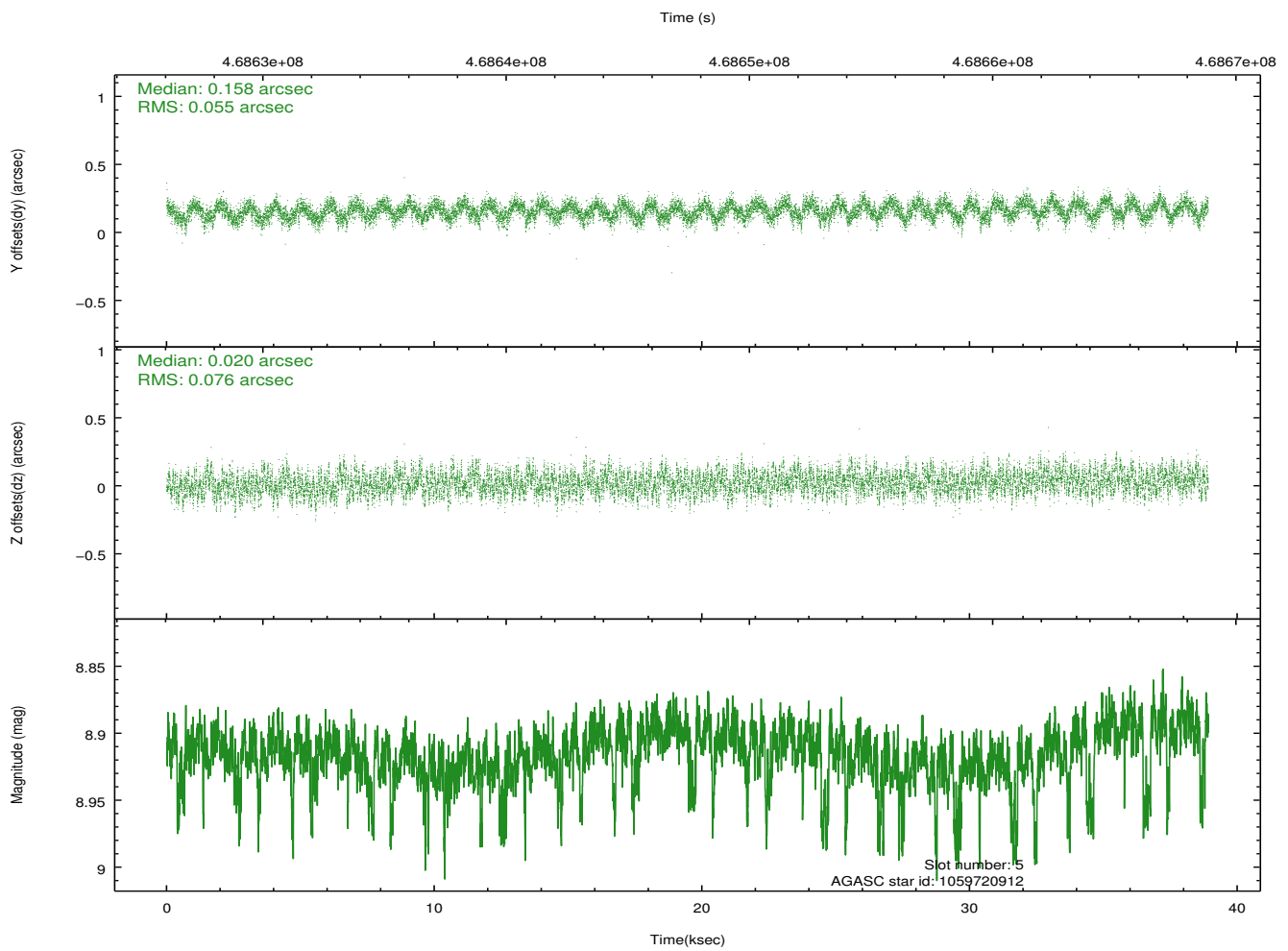
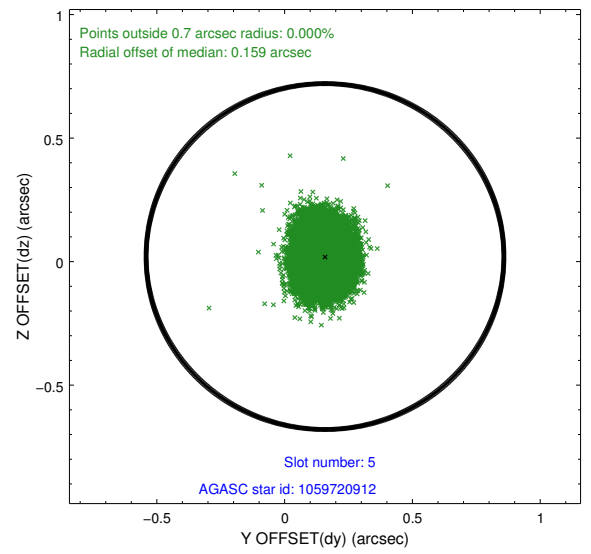
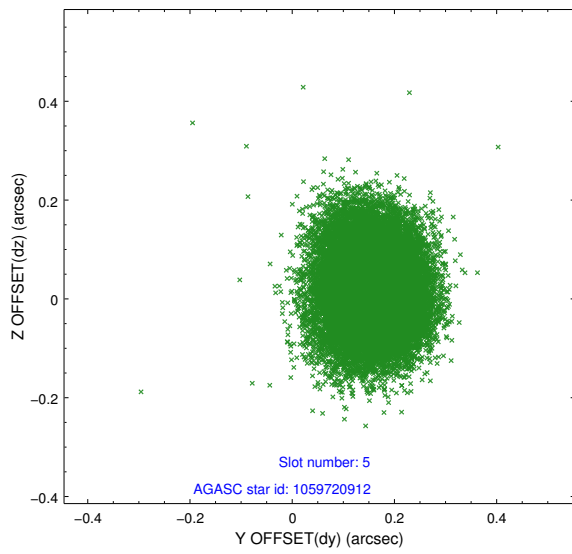
2.4.1 Slot 3



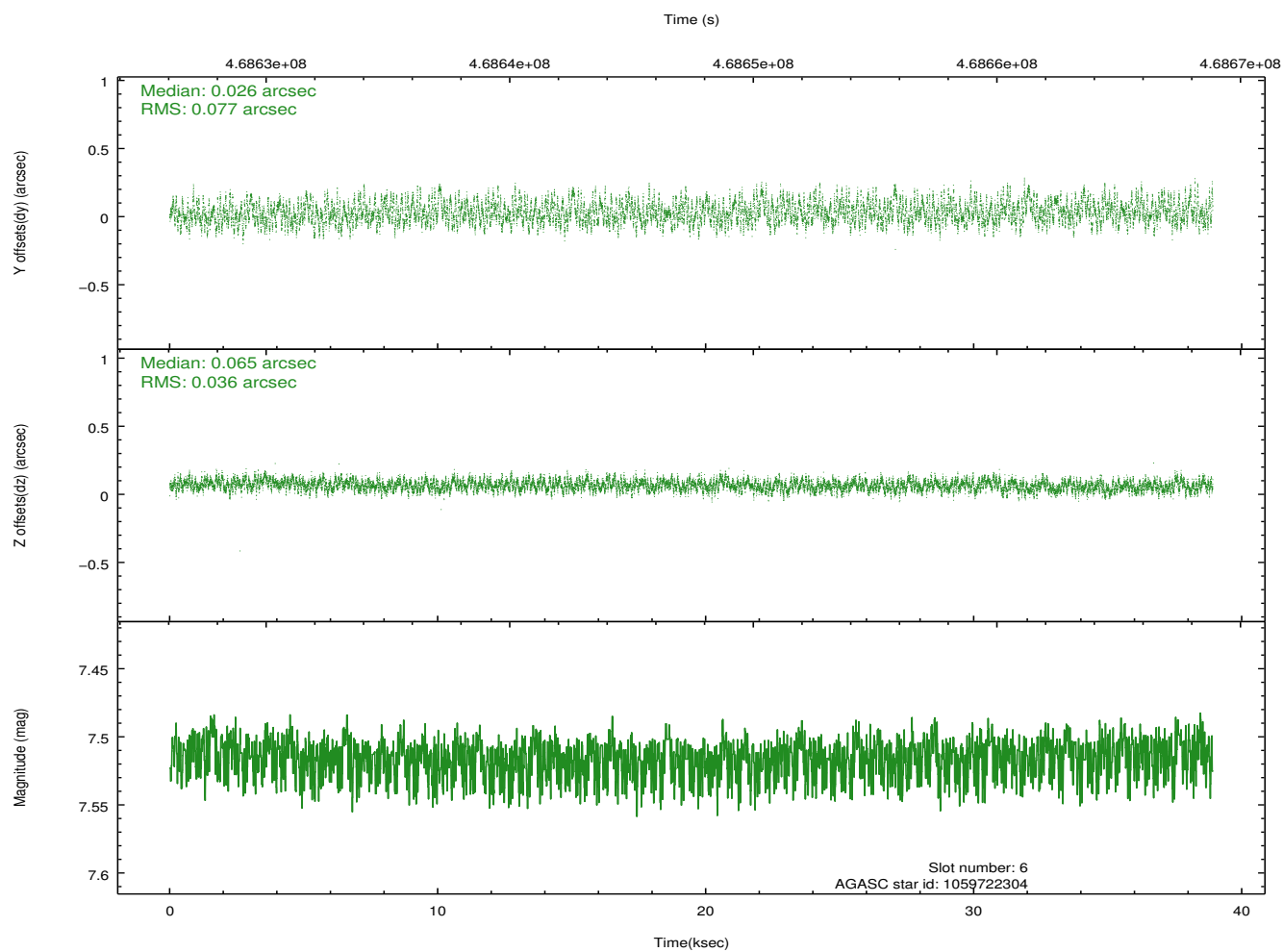
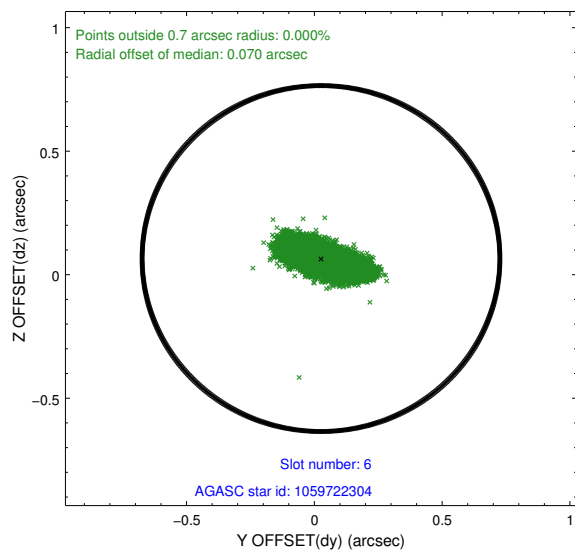
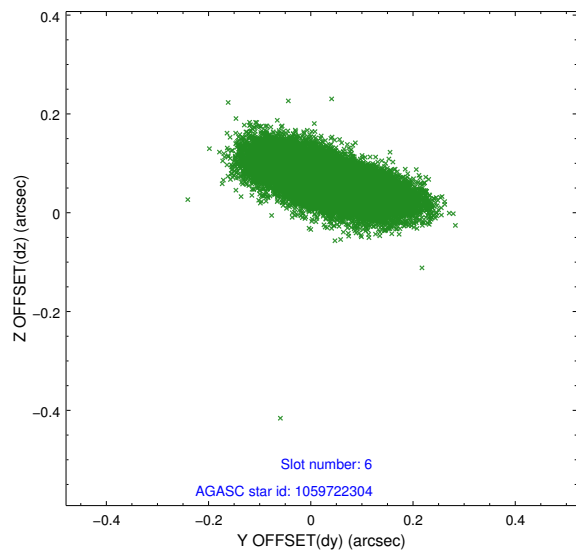
2.4.2 Slot 4



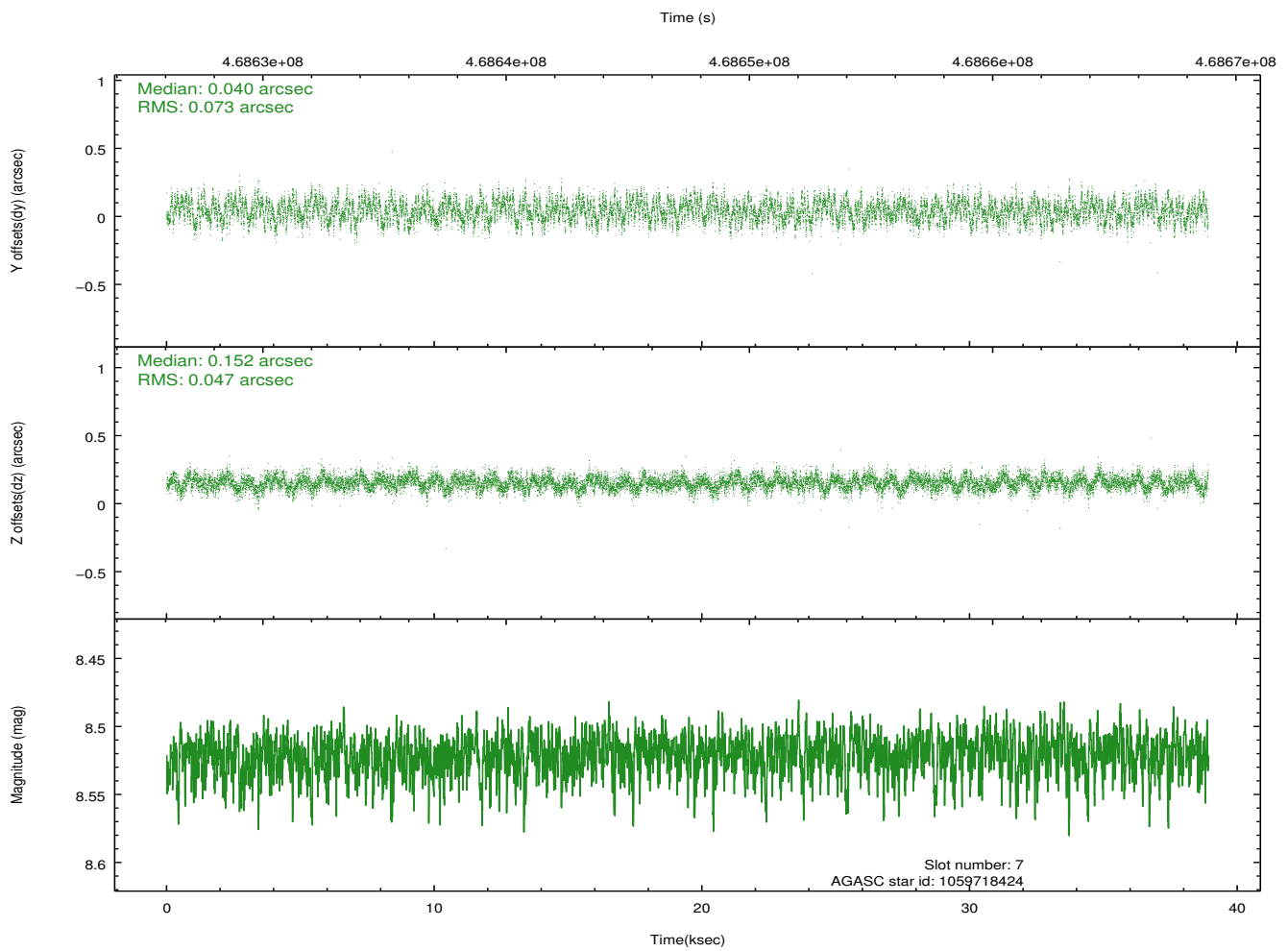
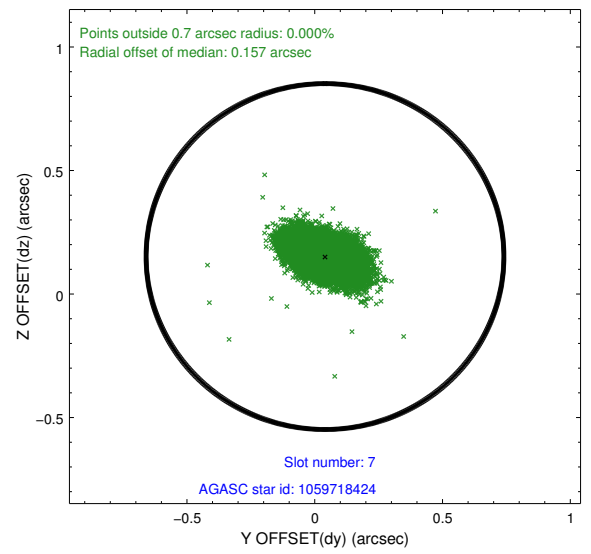
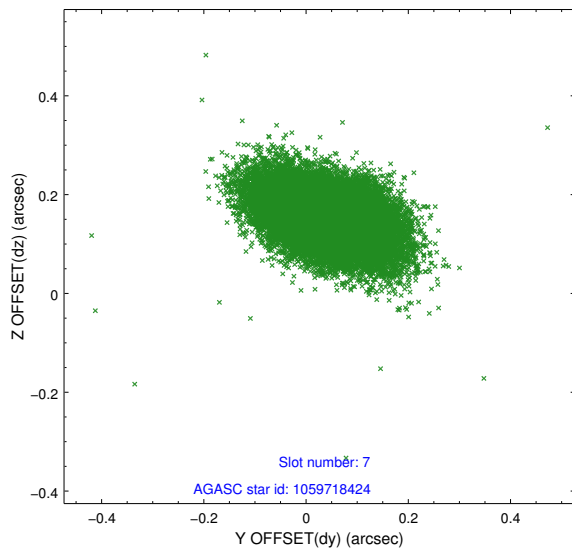
2.4.3 Slot 5



2.4.4 Slot 6

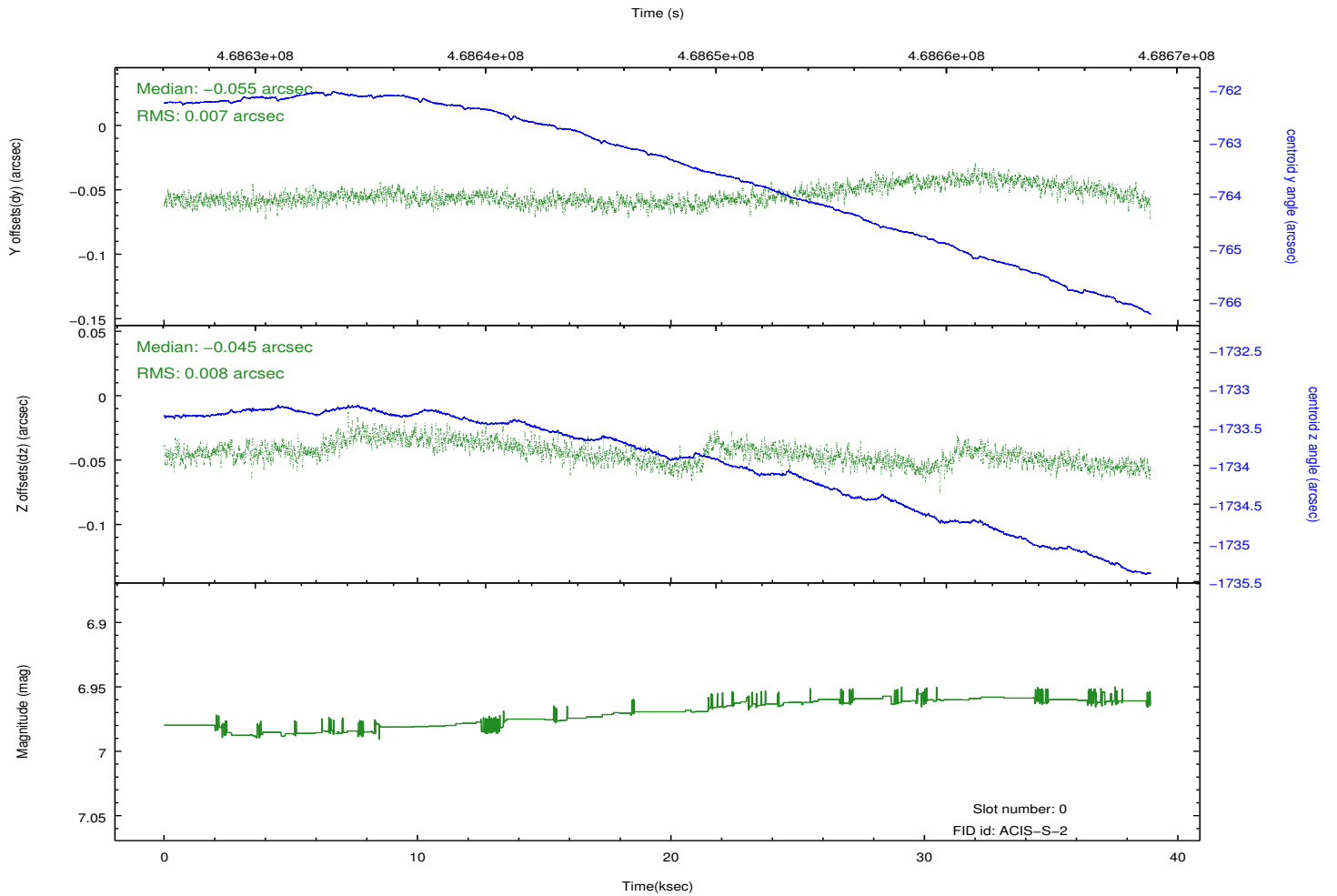
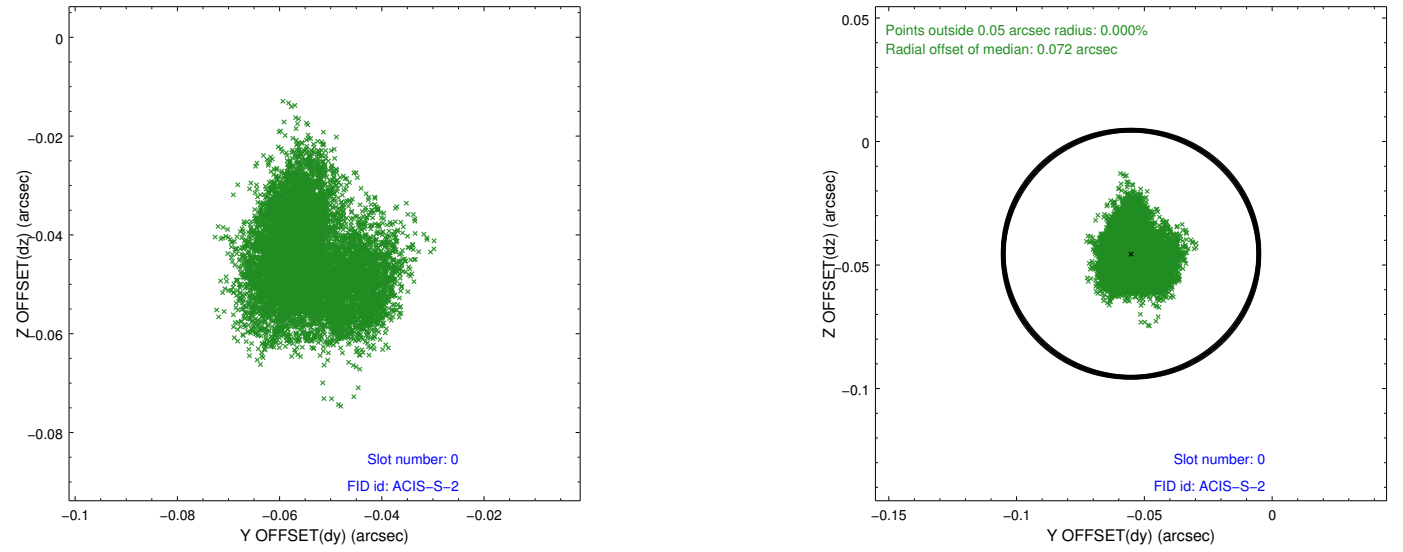


2.4.5 Slot 7

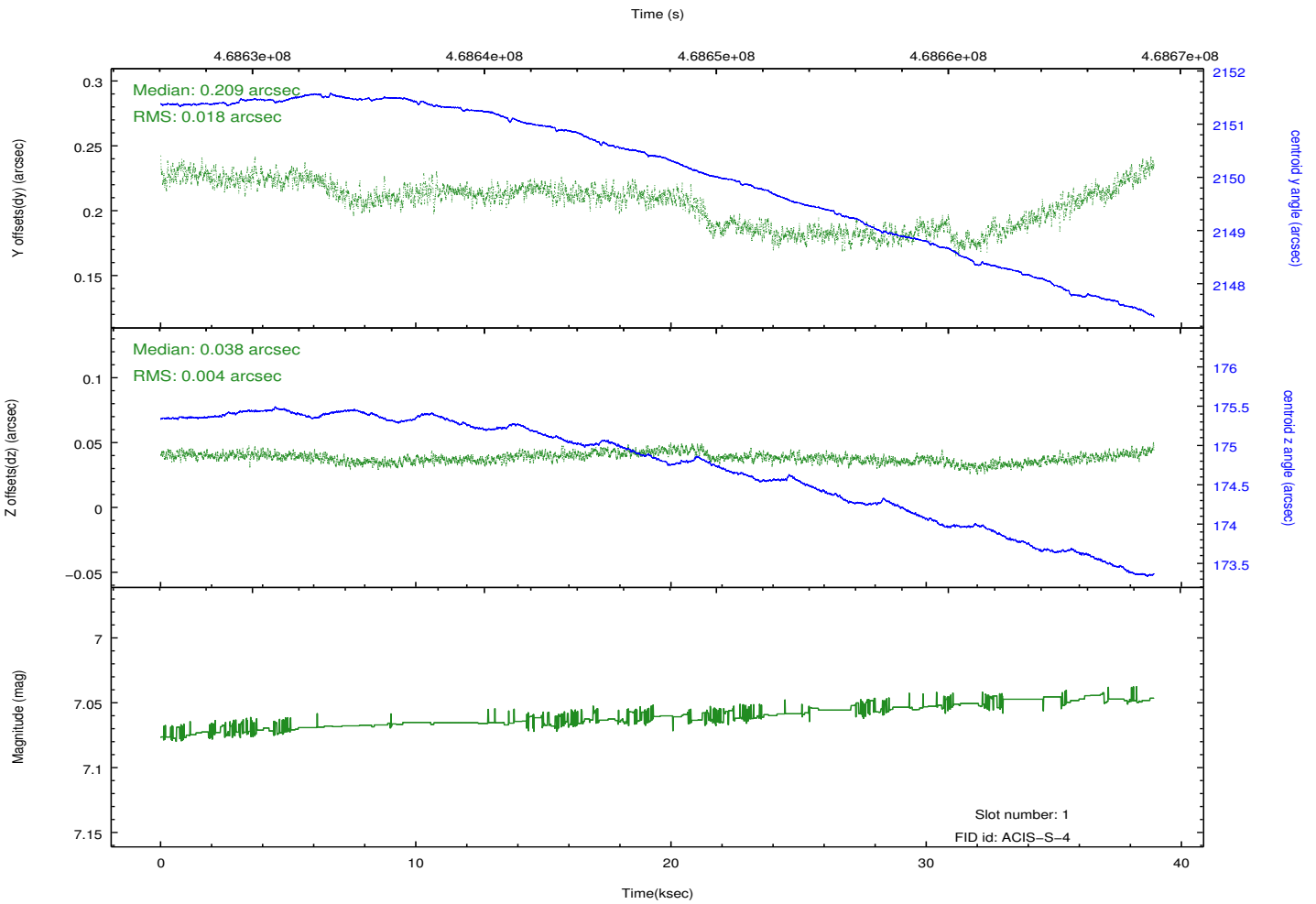
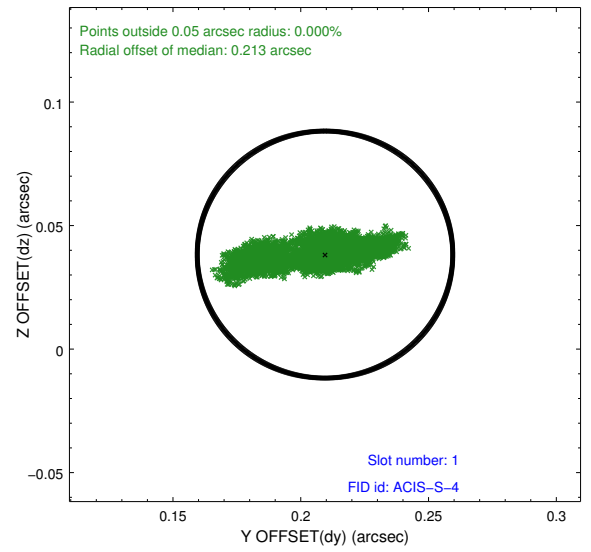
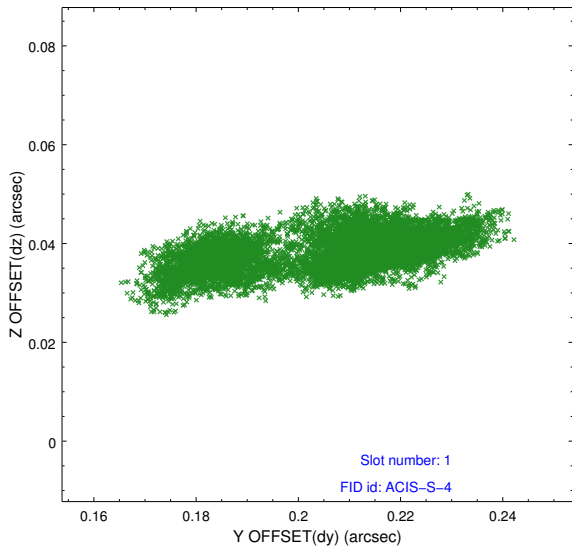


2.5 FID Slots

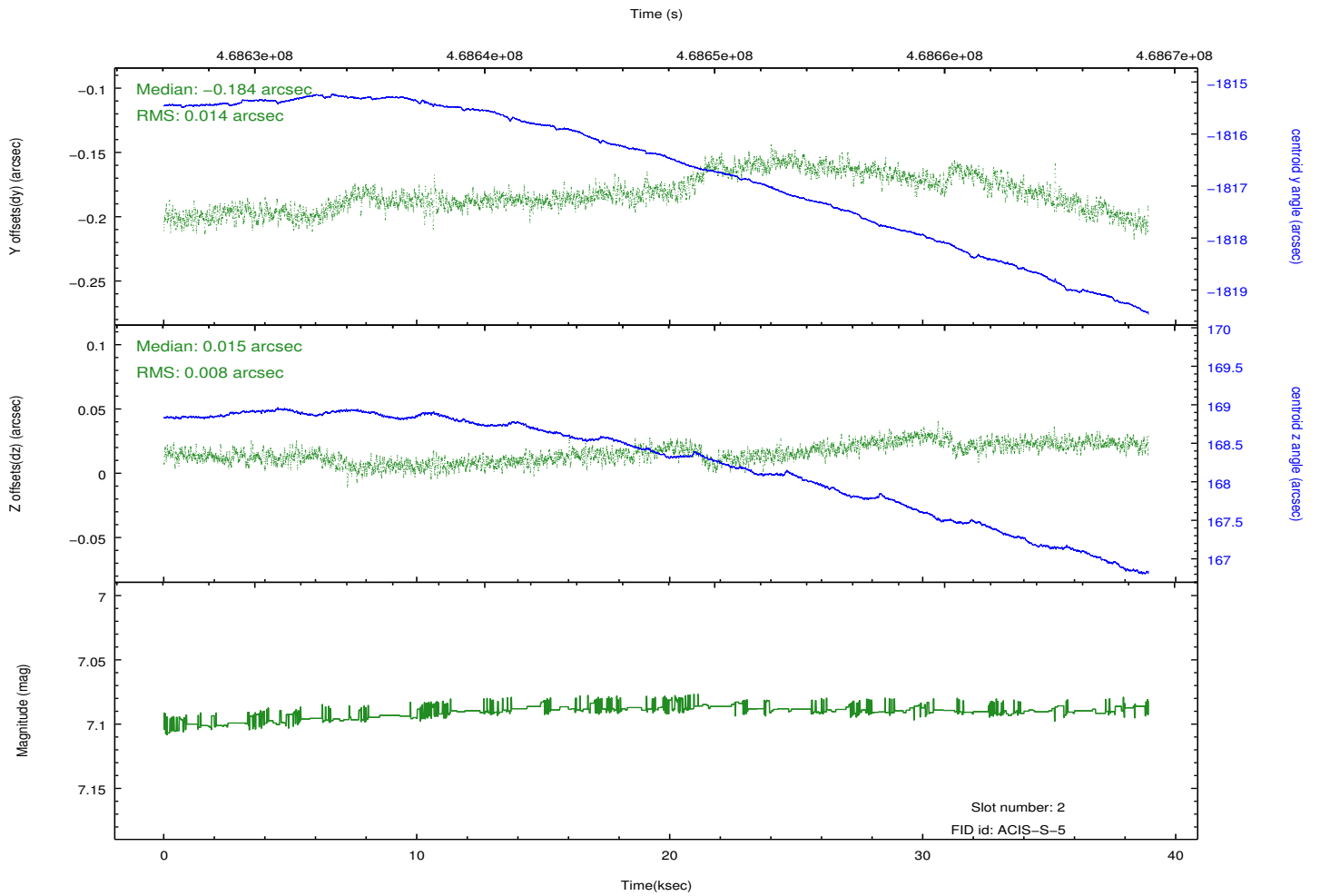
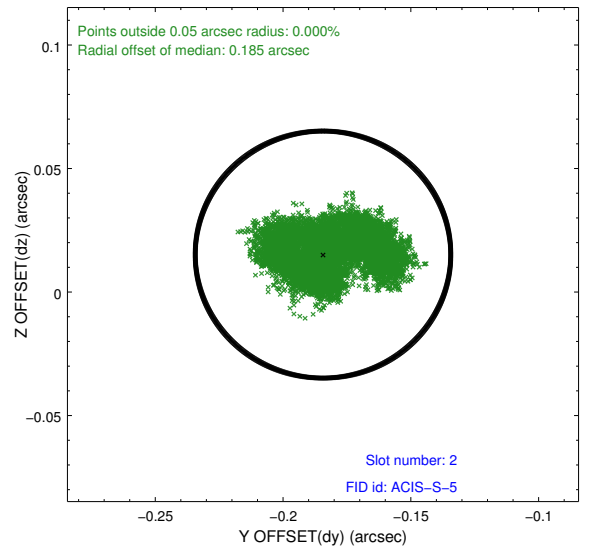
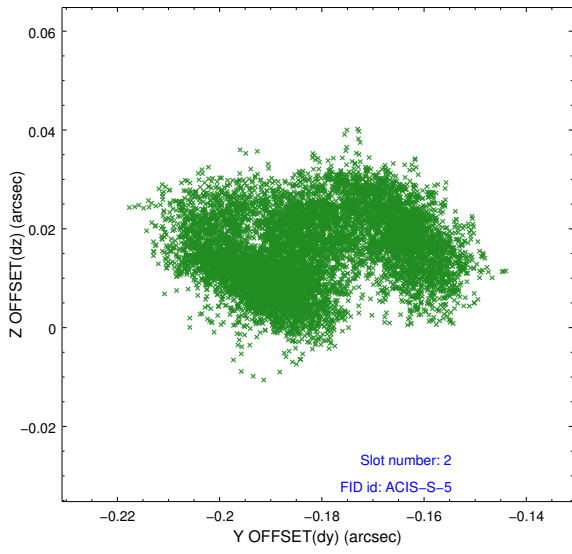
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	37.964471410394

A.2 Comments

Roll preference met.

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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.