

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 14485 - L2 Version 2
Chandra X-Ray Center

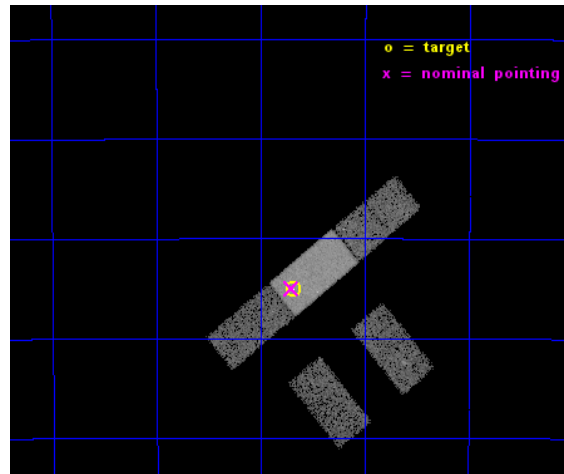
L2 Processing Date : Dec 8 2014

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1 Front

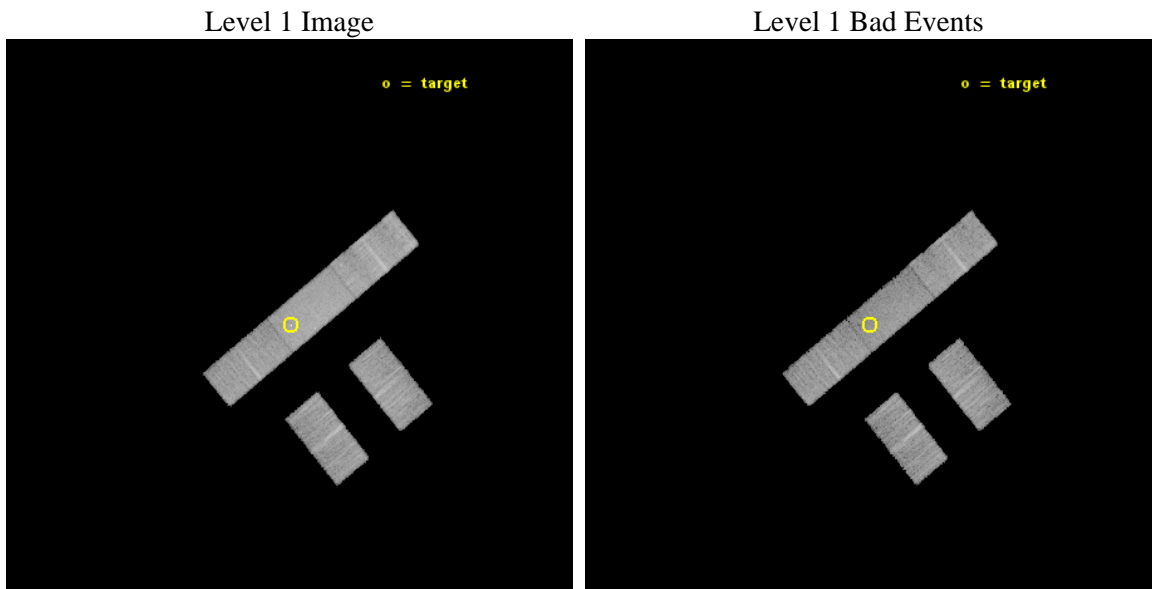
seq_num	702722	Sequence number
obs_id	14485	Observation id
title	ENERGY DEPENDENT X-RAY MICROLENSING AND THE STRUCTURE OF QUASARS	P
observer	Prof. Christopher Kochanek	Principal investigator
object	QJ0158-4325	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	29.6725	Observer's specified target RA [deg]
dec_targ	-43.417833	Observer's specified target Dec [deg]
ra_nom	29.676452680413	Nominal RA [deg]
dec_nom	-43.416887936842	Nominal Dec [deg]
roll_nom	320.55396980158	Nominal Roll [deg]
revision	2	Processing version of data
ontime	19064.82935816	Sum of GTIs [s]
livetime	18615.430954414	Livetime [s]
ontime2	19061.183157921	Sum of GTIs [s]
ontime3	19064.747278154	Sum of GTIs [s]
ontime6	19064.788318157	Sum of GTIs [s]
ontime7	19064.82935816	Sum of GTIs [s]
ontime8	19059.483118176	Sum of GTIs [s]
l2events	49182	Number of level 2 events



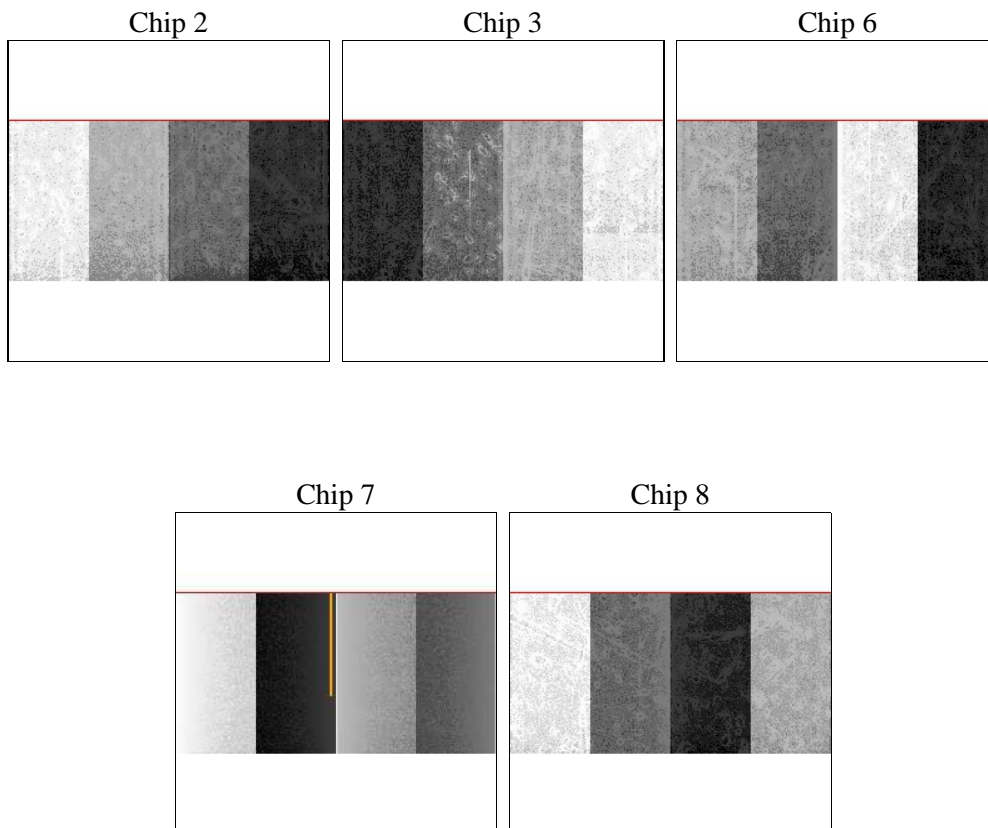
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19000.412000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	19064.82935816	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	19061.183157921	Sum of GTIs [s]
date	2014-12-08T07:54:30	Date and time of file creation	ontime3	19064.747278154	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	19064.788318157	Sum of GTIs [s]
			ontime7	19064.82935816	Sum of GTIs [s]
			ontime8	19059.483118176	Sum of GTIs [s]
			l1events	277181	Number of level 1 events

2.1.4 Events

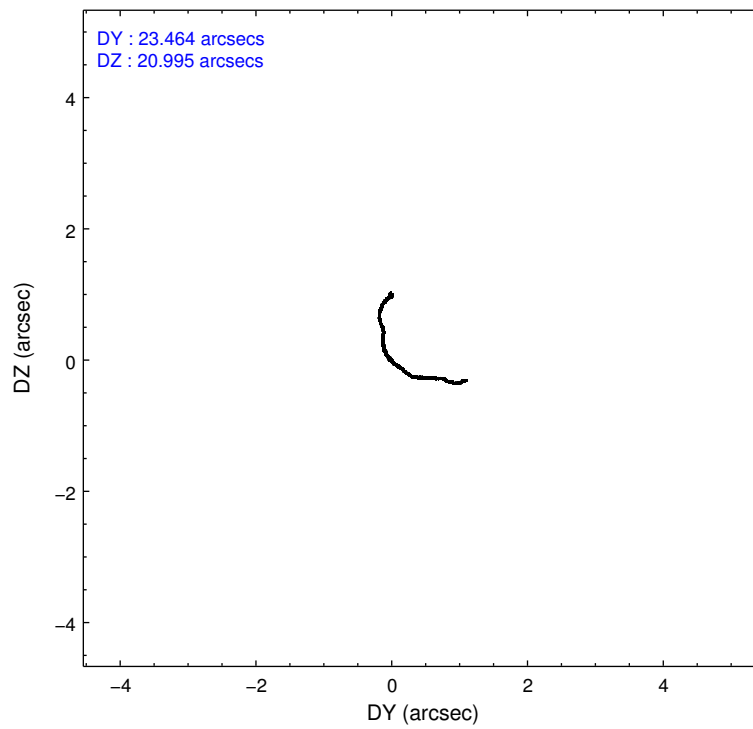
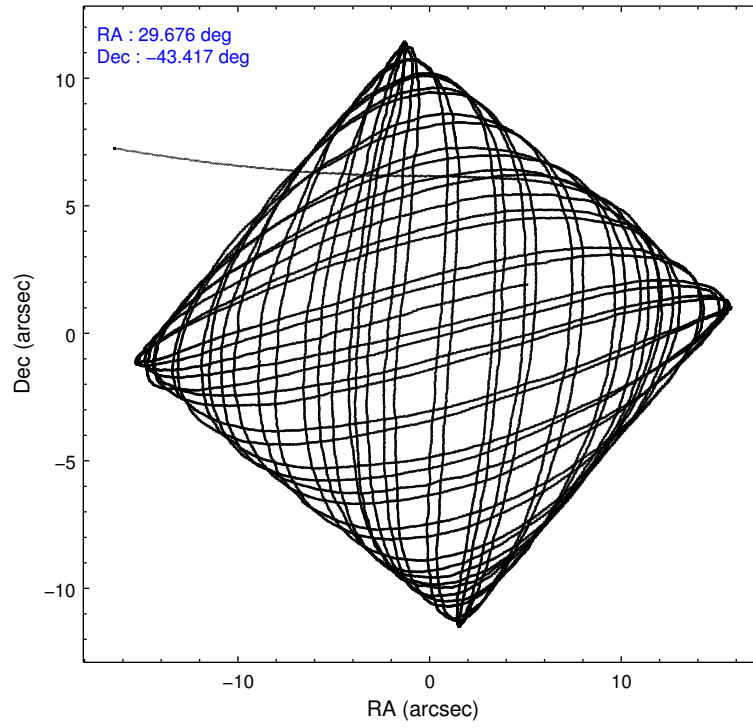
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	47253	48703	49399	65952	65874
rejected events	41842	43289	43531	36309	48799
rejected %	88%	88%	88%	55%	74%

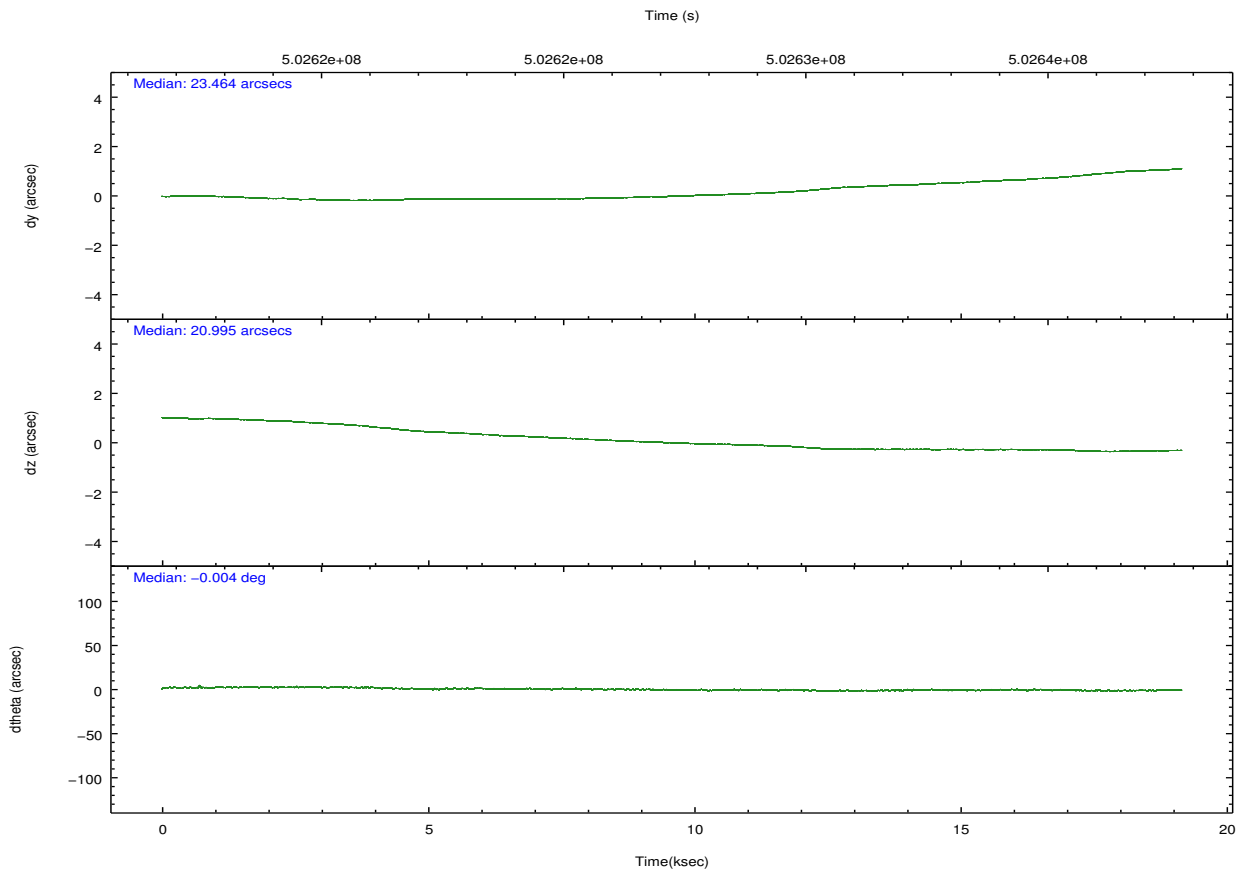
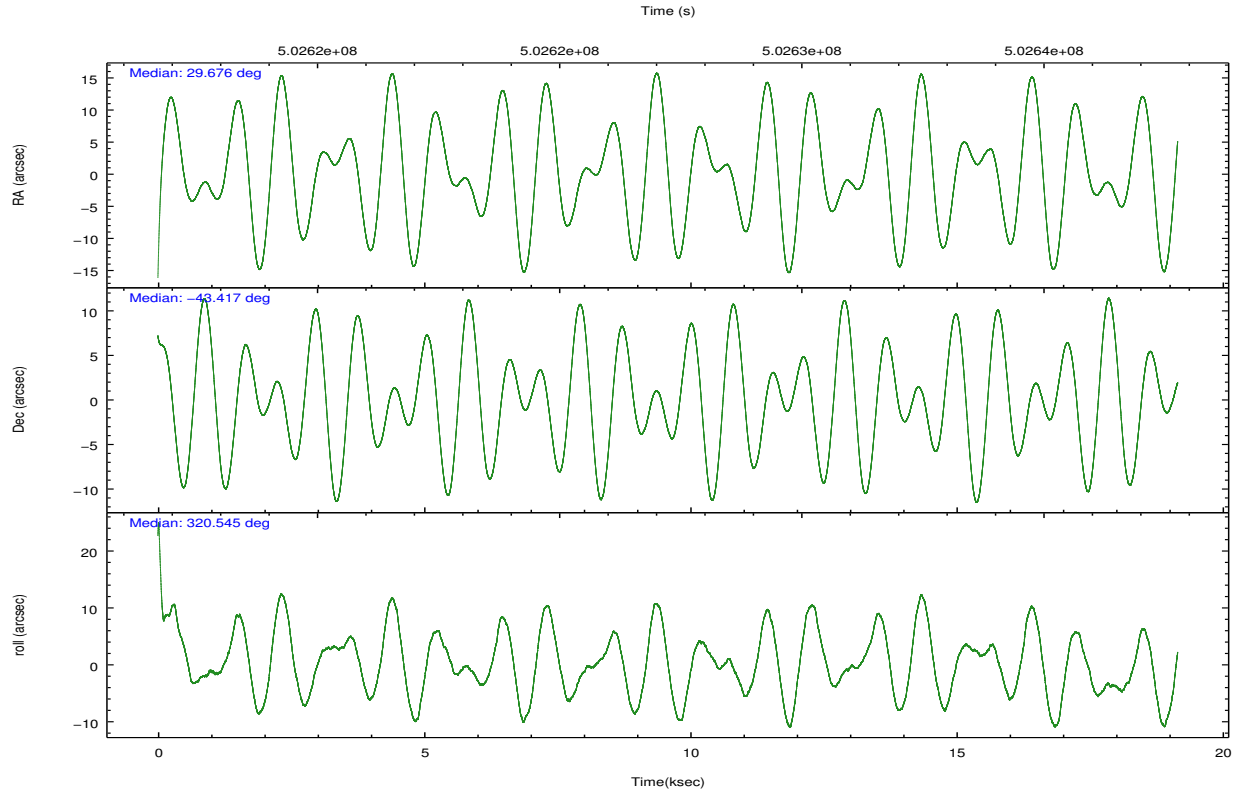
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	1768	1813	1834	3036	4915
	3%	3%	3%	4%	7%
grade 1 events	29	17	24	99	36
	0%	0%	0%	0%	0%
grade 2 events	1234	1142	1285	6298	3979
	2%	2%	2%	9%	6%
grade 3 events	659	682	714	2874	1742
	1%	1%	1%	4%	2%
grade 4 events	725	677	685	2831	1706
	1%	1%	1%	4%	2%
grade 5 events	1922	2448	2545	6959	3441
	4%	5%	5%	10%	5%
grade 6 events	1025	1100	1351	14609	4735
	2%	2%	2%	22%	7%
grade 7 events	39891	40824	40961	29246	45320
	84%	83%	82%	44%	68%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	29.639249	29.67645268041278	CCD I2 on	O4	Y
[deg] Pointing Dec	-43.412773	-43.41688793684243	CCD I3 on	O3	Y
[deg] Pointing Roll	320.371750	320.5539698015819	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	O1	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	O2	Y
[s] Observation start time (MET)	502617806.184000	502616673.54248	CCD S5 on	N	N
Observation start date	2013-12-05T08:02:19	2013-12-05T07:44:33	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	502636807.184000	502637034.1436	On-chip summing requested	N	N
Observation end date	2013-12-05T13:19:00	2013-12-05T13:23:54	Subarray requested	CUSTOM	1/2
Read mode	TIMED	TIMED	Subarray start row	257	257
			Subarray row count	512	512
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	1.7

2.3 Aspect



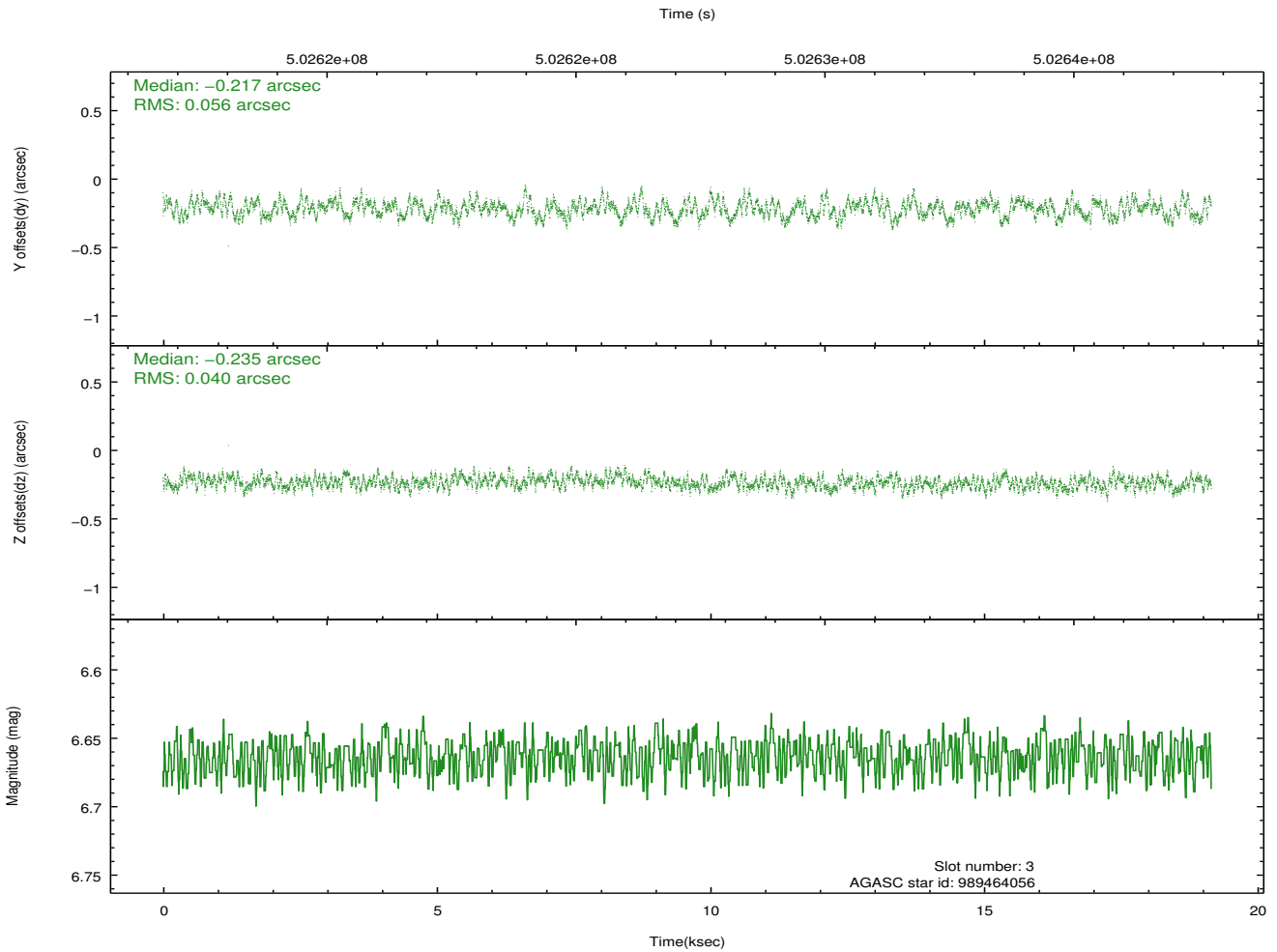
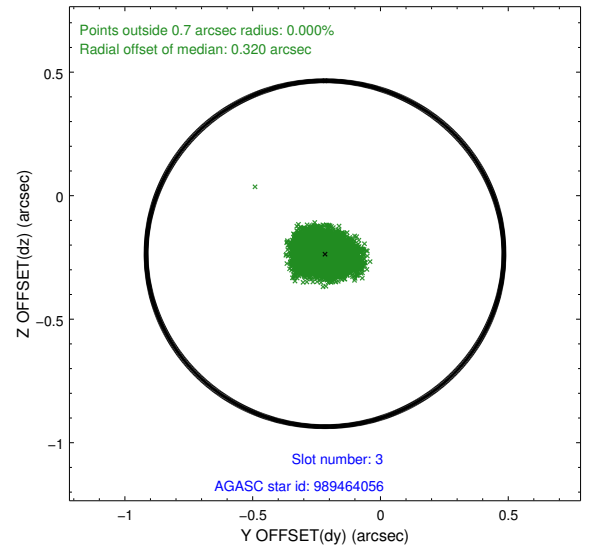
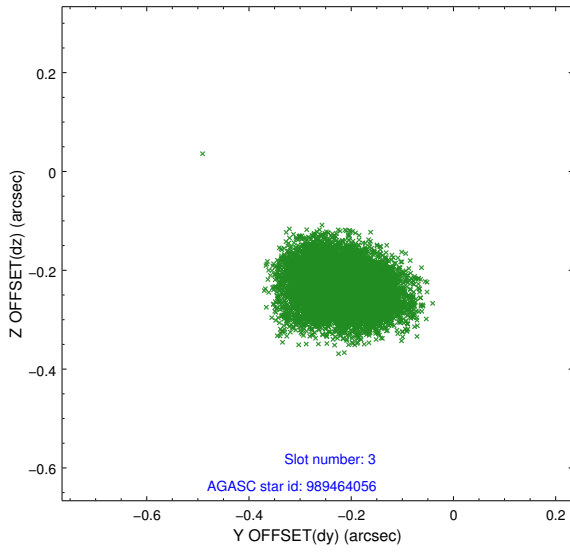


Slot Statistics

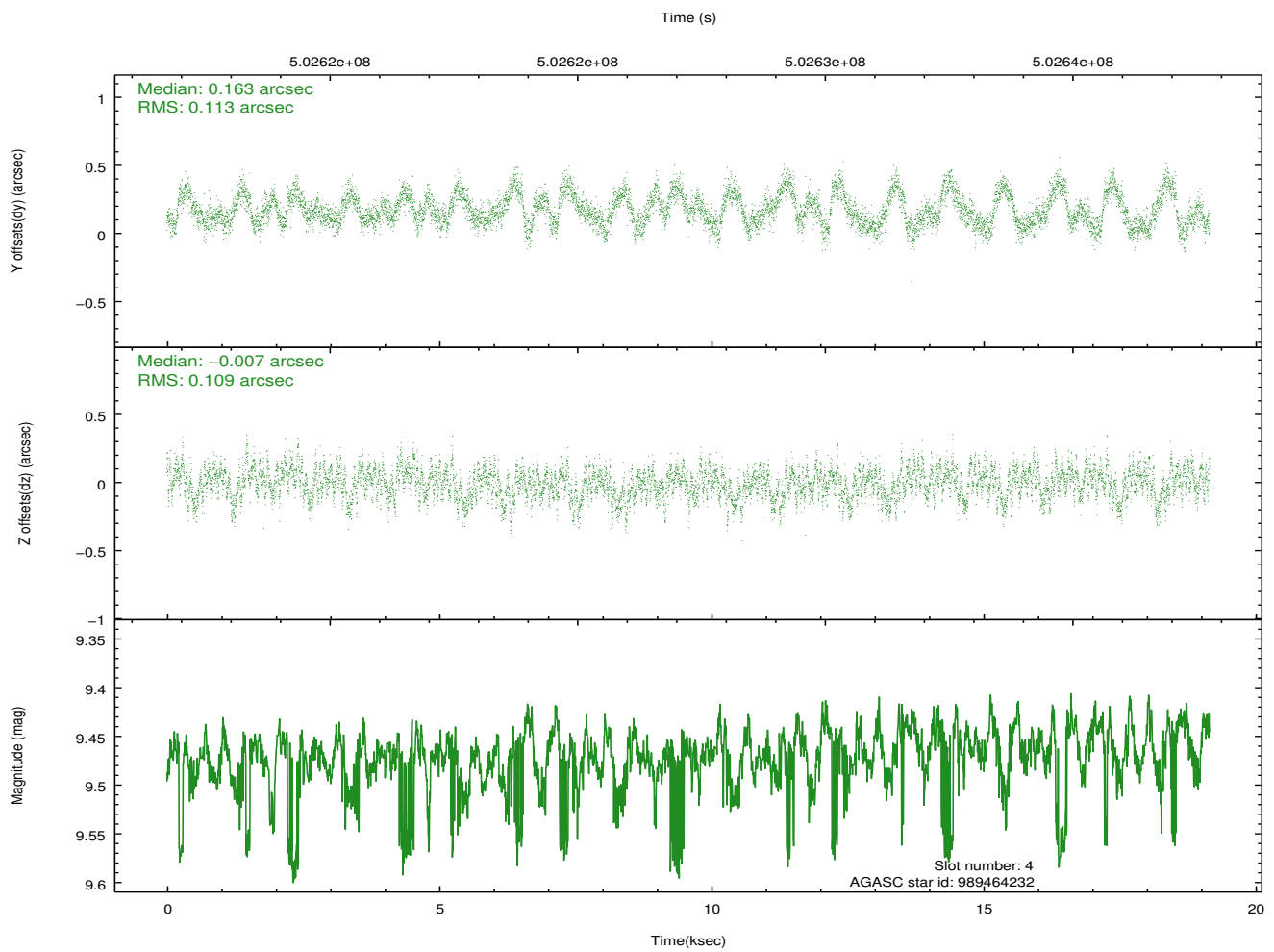
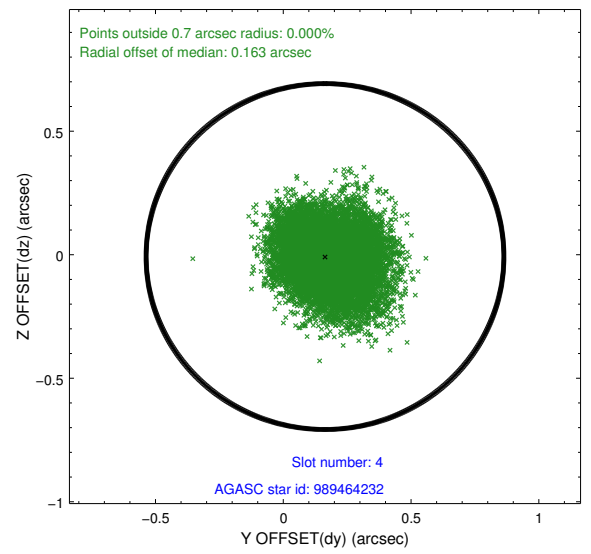
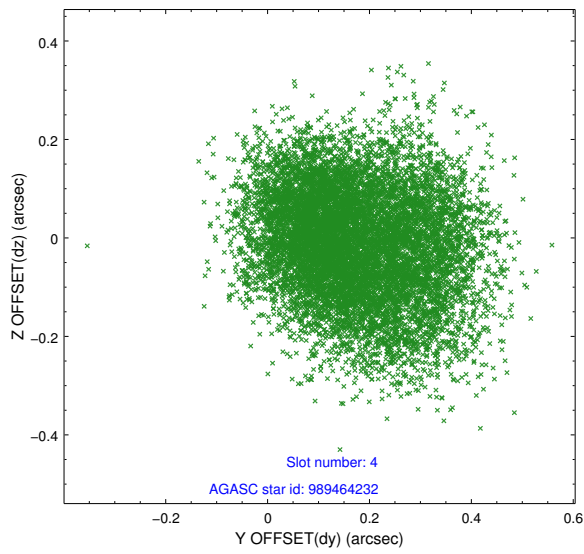
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.94	4673	-0.125	0.009	0.030	0.043	0.000000	0.000000	-777.00	-1742.62
1	FID		ACIS-S-4	7.02	4673	0.289	0.058	0.019	0.029	0.000000	0.000000	2136.61	165.69
2	FID		ACIS-S-5	7.05	4672	-0.195	-0.061	0.024	0.039	0.000000	0.000000	-1829.64	159.49
3	GUIDE	used	989464056	6.66	9346	-0.217	-0.235	0.075	0.118	29.735893	-42.949136	-868.35	1447.68
4	GUIDE	used	989464232	9.47	9335	0.163	-0.007	0.169	0.265	29.286358	-43.452579	-617.65	-700.64
5	GUIDE	used	989464976	9.21	9343	-0.030	0.178	0.123	0.192	28.960994	-43.047006	-2209.39	-129.37
6	GUIDE	used	989467528	8.21	9345	0.025	0.155	0.086	0.139	29.209436	-43.178151	-1405.15	-70.90
7	GUIDE	used	989470600	9.40	9337	0.050	-0.076	0.138	0.218	29.755442	-43.921156	1400.92	-1216.76

2.4 Star Slots

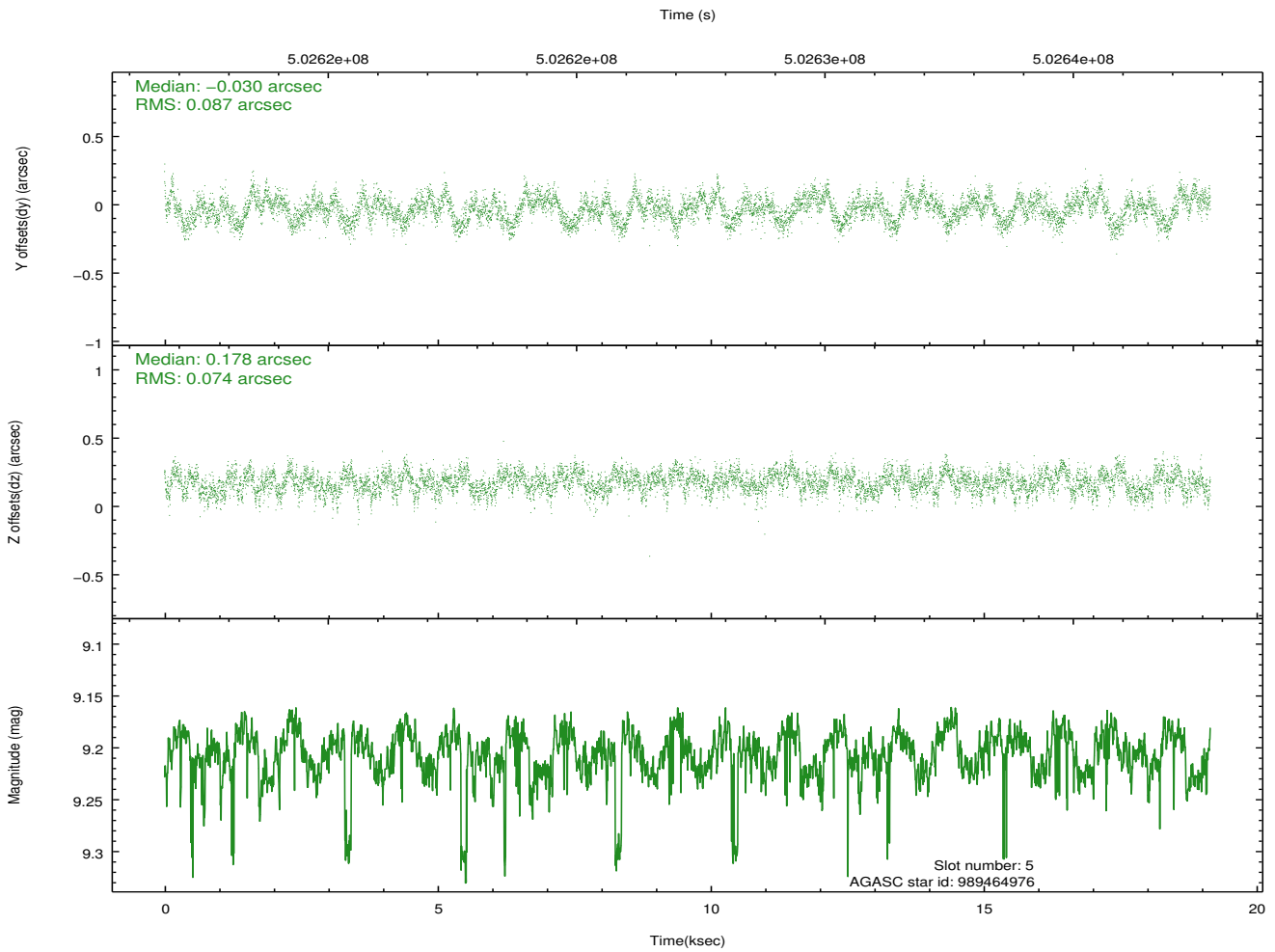
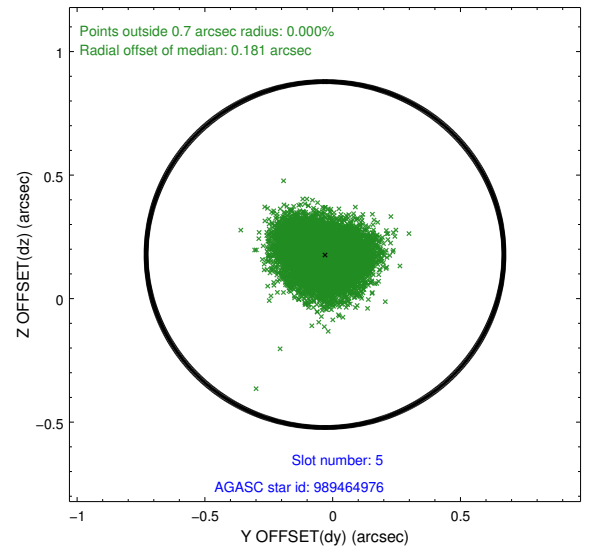
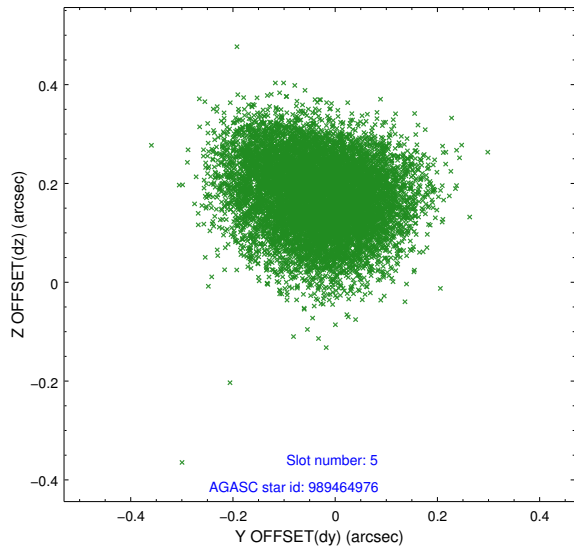
2.4.1 Slot 3



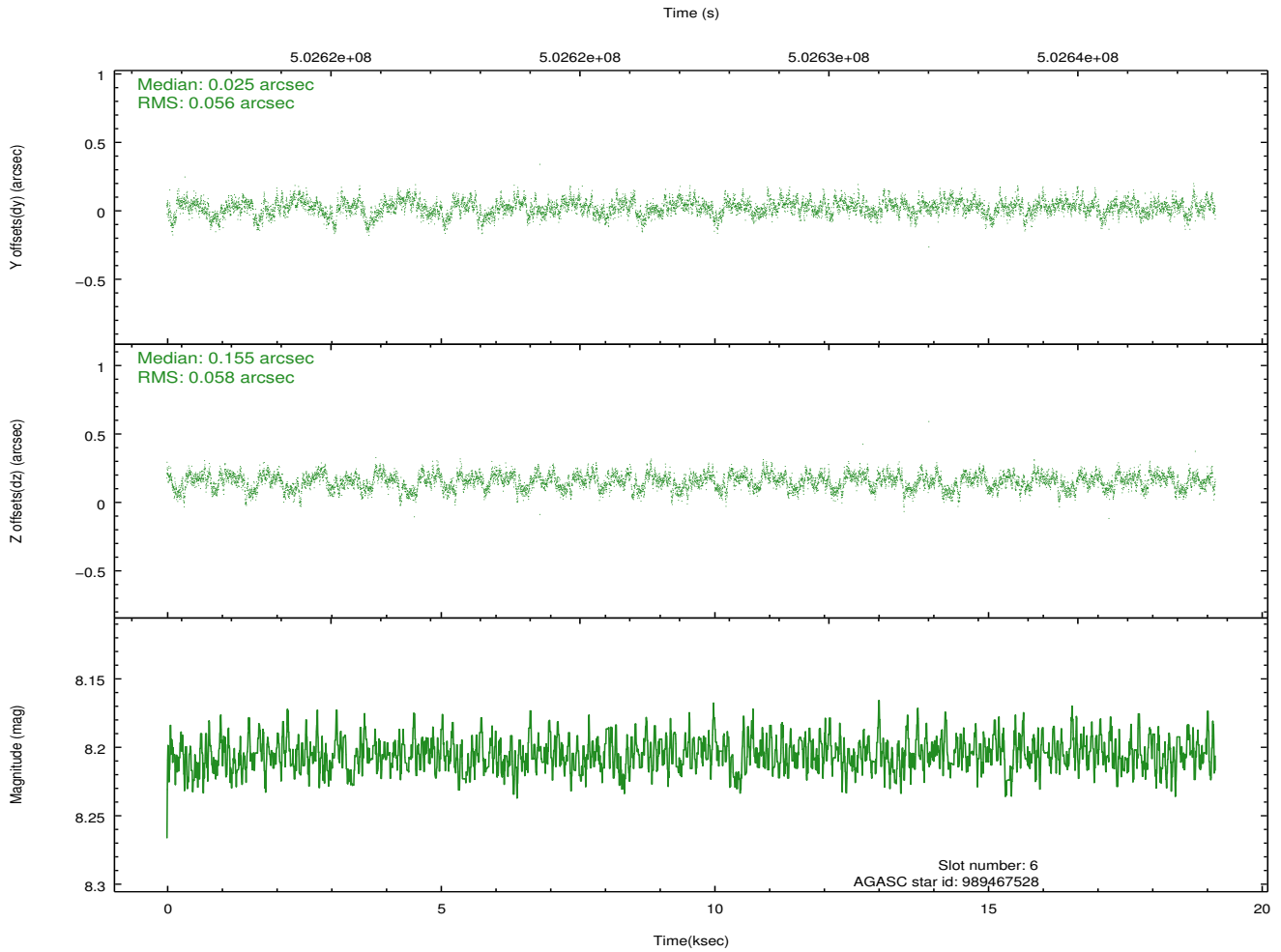
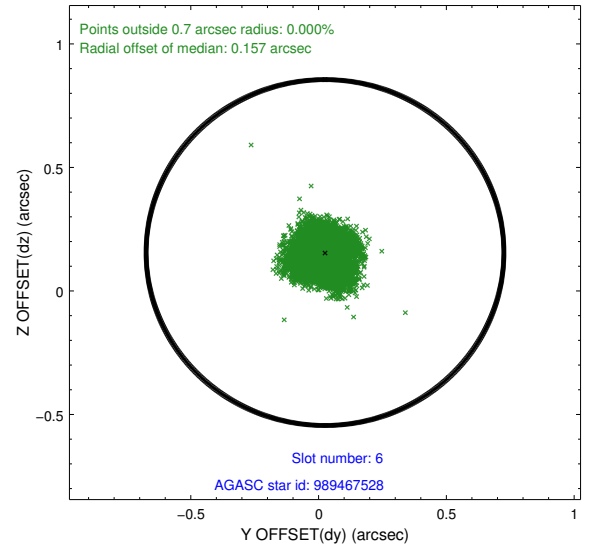
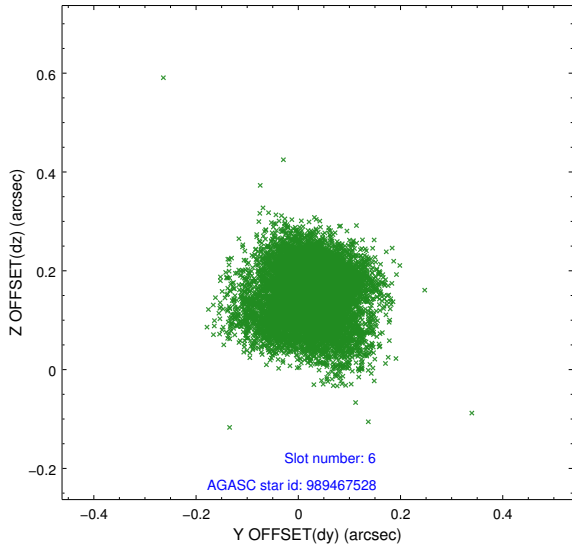
2.4.2 Slot 4



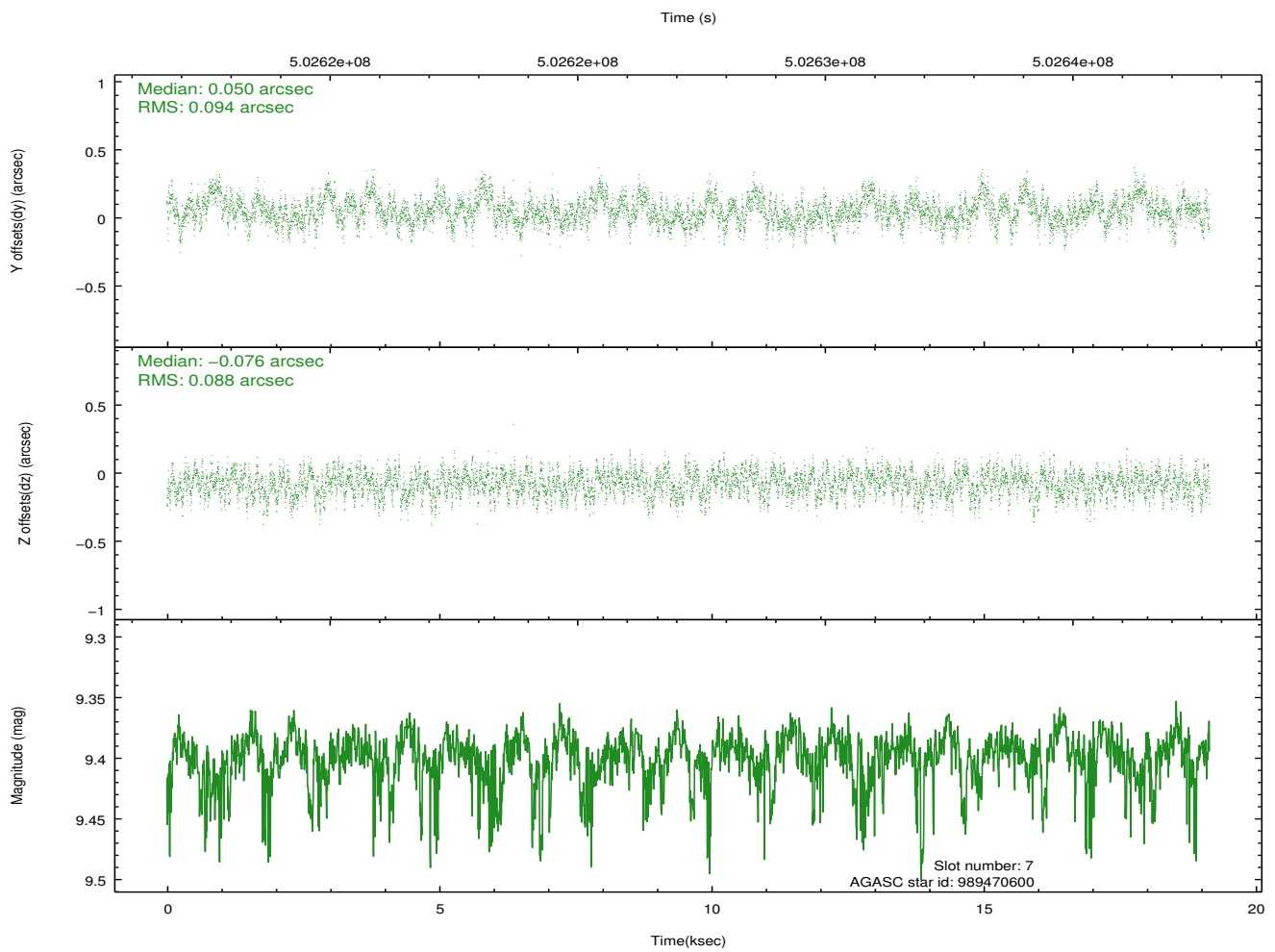
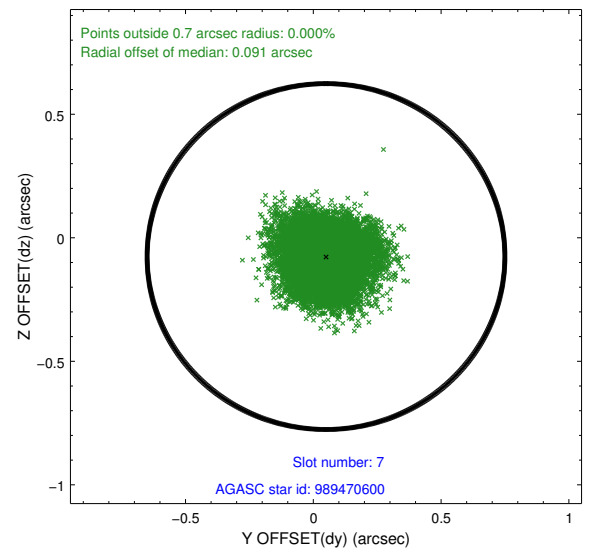
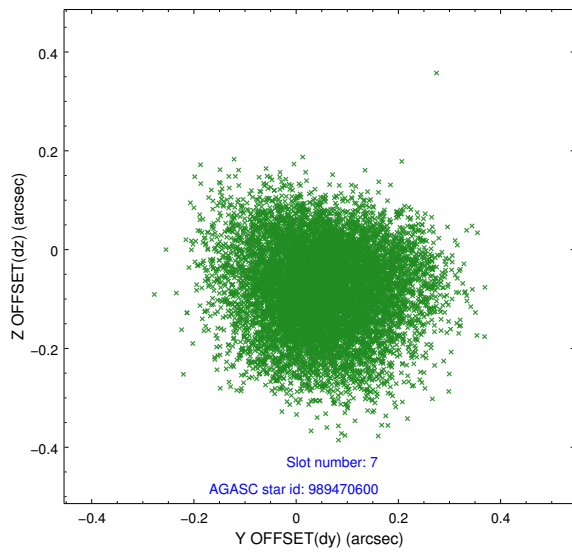
2.4.3 Slot 5



2.4.4 Slot 6

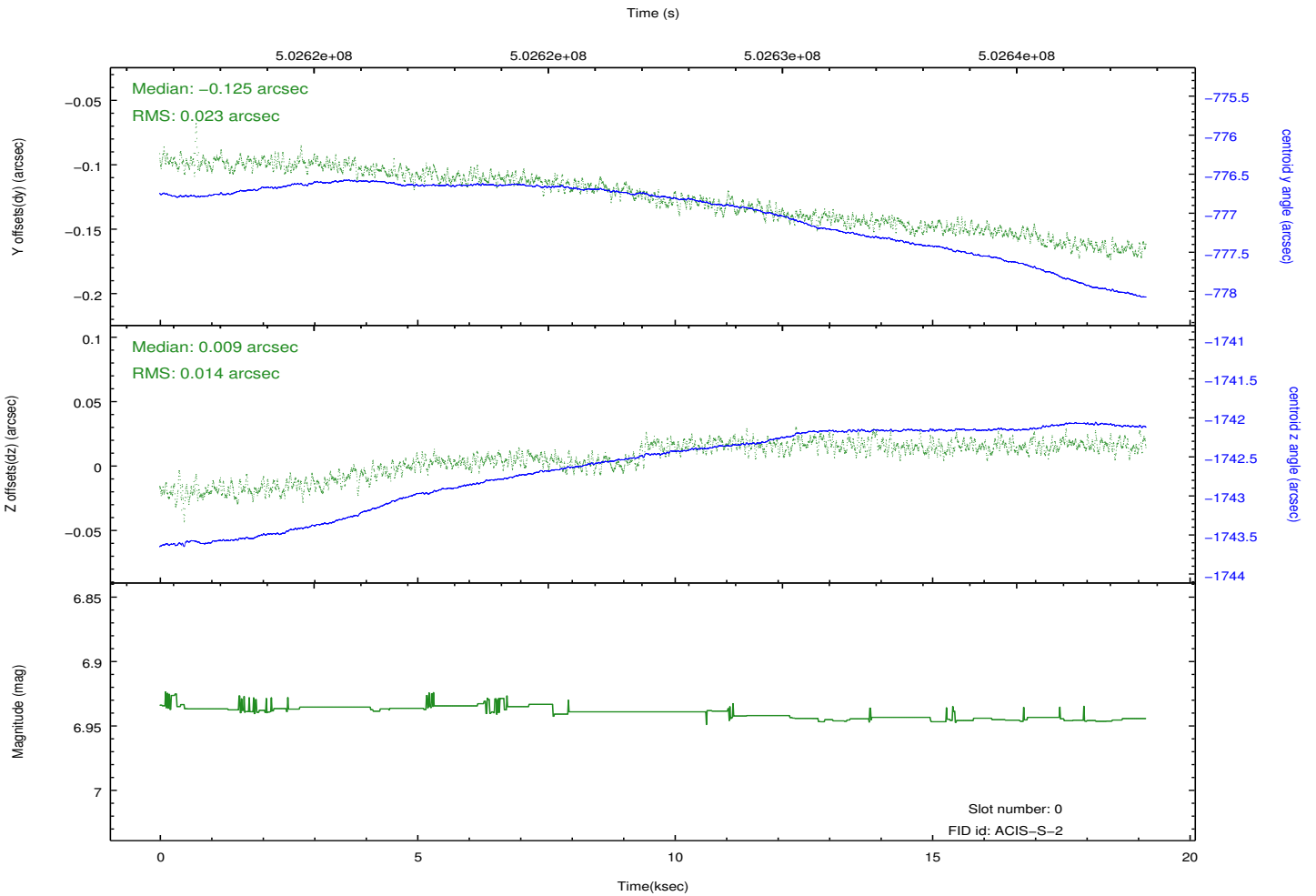
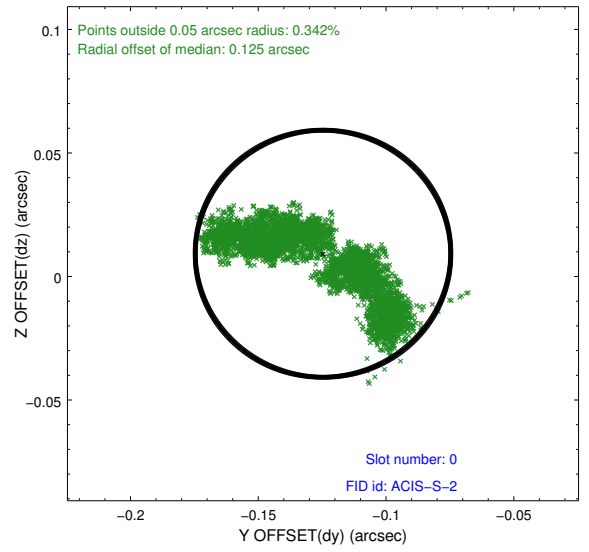
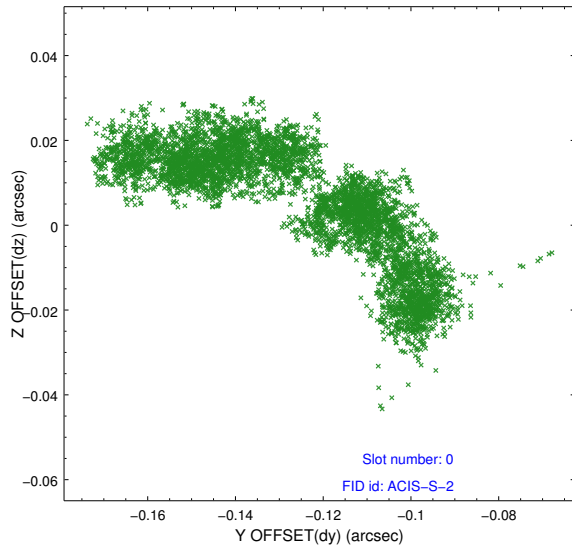


2.4.5 Slot 7

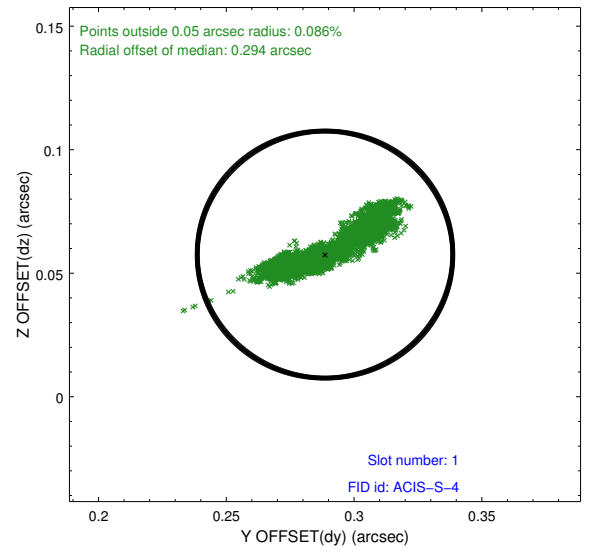
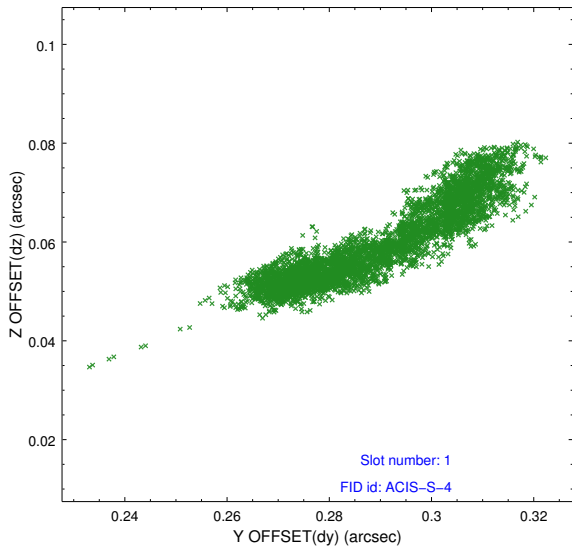


2.5 FID Slots

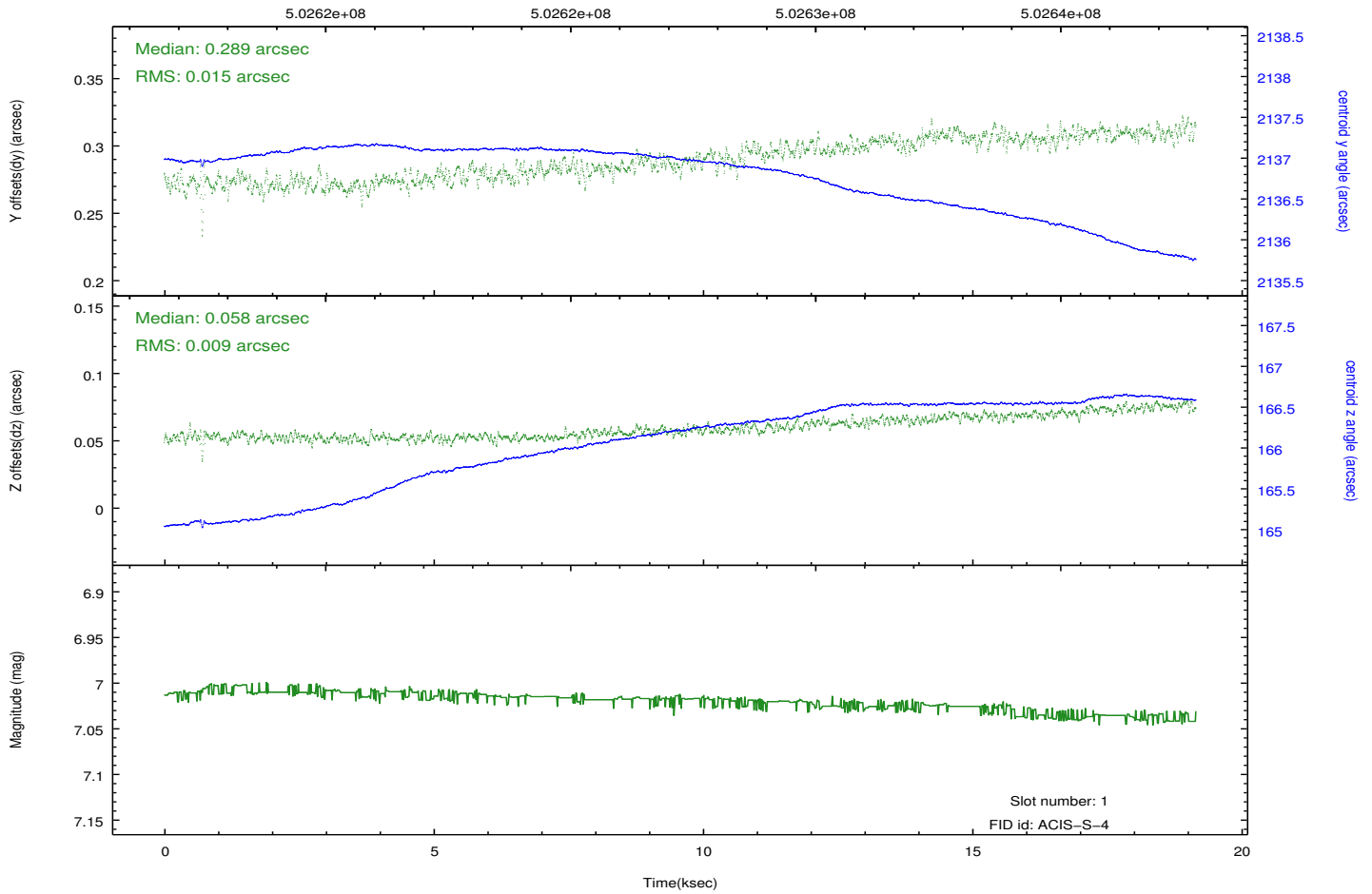
2.5.1 Slot 0



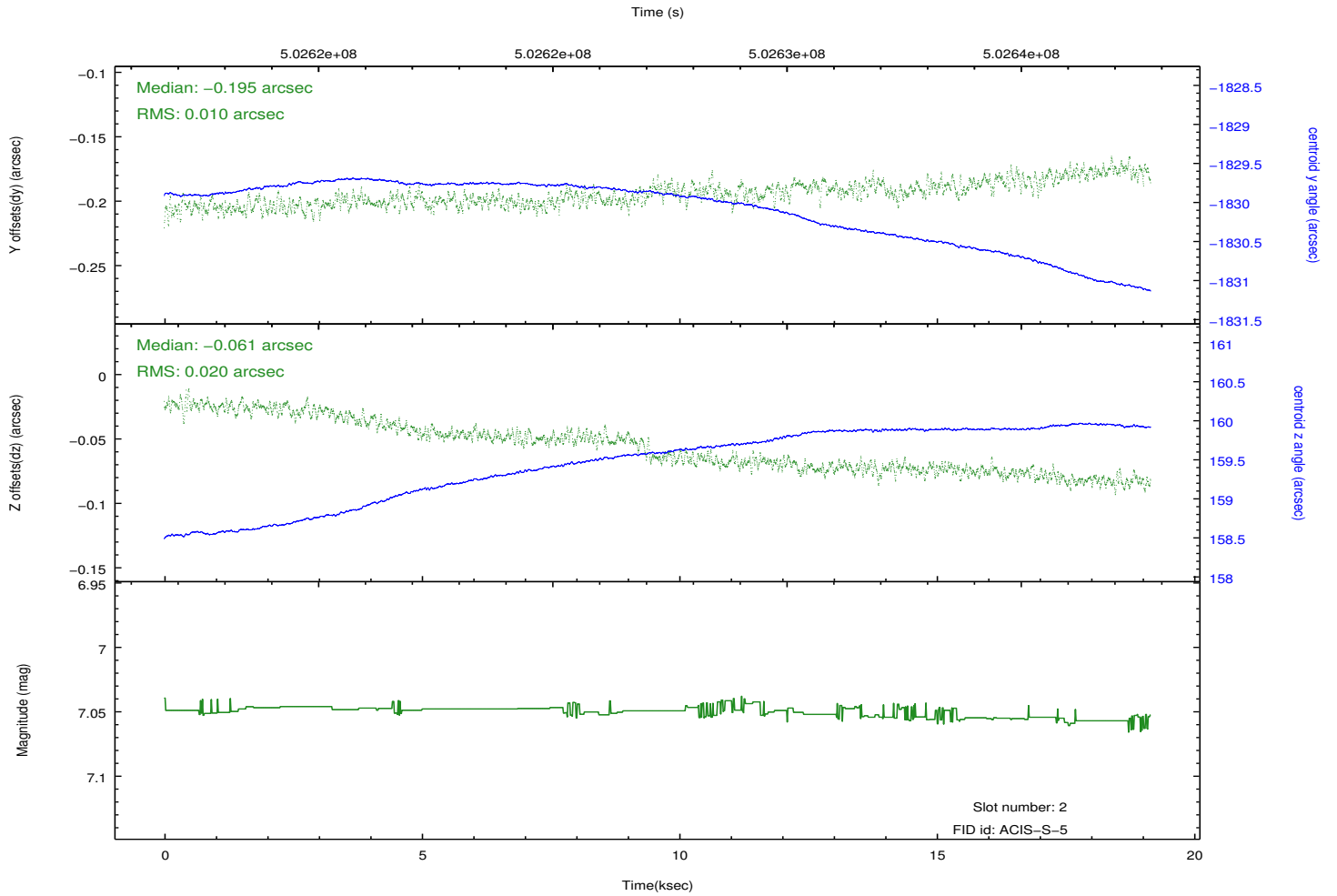
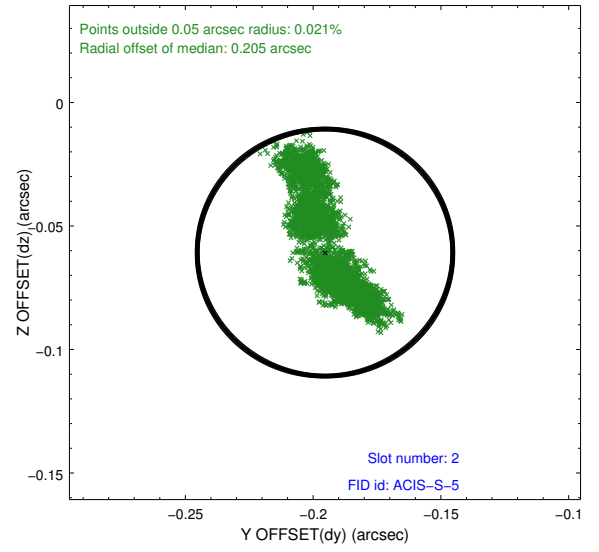
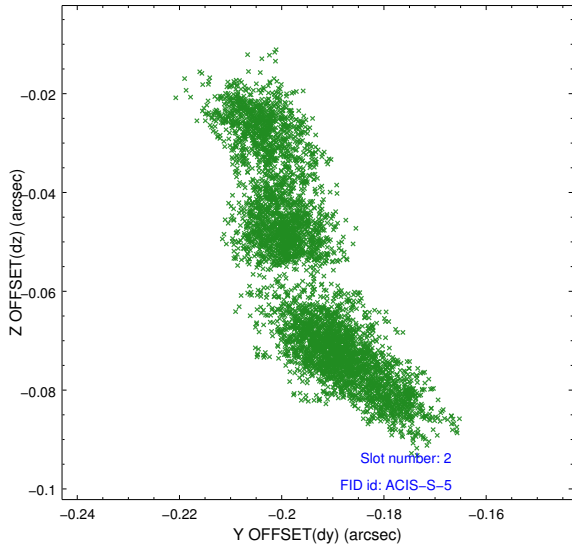
2.5.2 Slot 1



Time (s)



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	19.06482935816

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.