

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 20857 - L2 Version 2
Chandra X-Ray Center

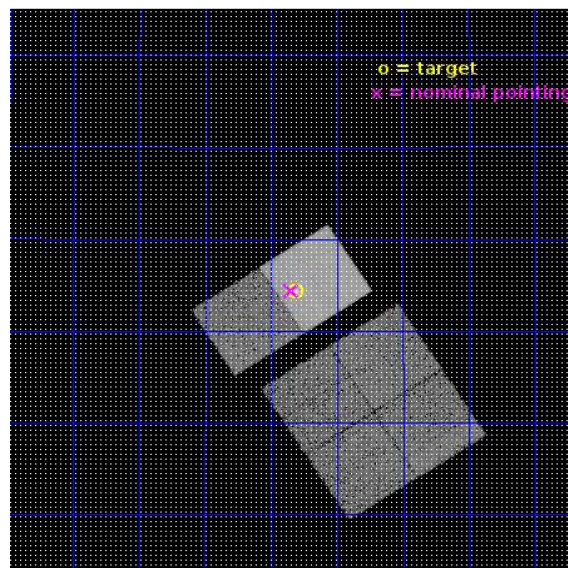
L2 Processing Date : Nov 30 2017

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1 Front

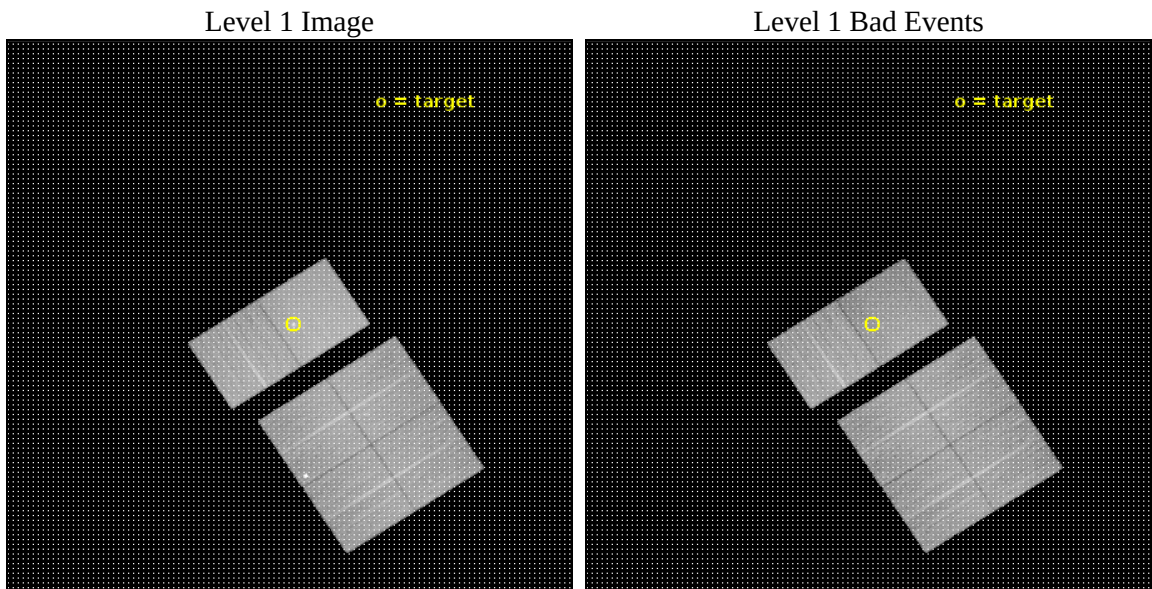
seq_num	801674	Sequence number
obs_id	20857	Observation id
title	The Unusually High Concentration of the Fossil Group NGC 6482	Prop
observer	David Buote	Principal investigator
object	NGC 6482	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	267.953333	Observer's specified target RA [deg]
dec_targ	23.071944	Observer's specified target Dec [deg]
ra_nom	267.96127999498	Nominal RA [deg]
dec_nom	23.07330730149	Nominal Dec [deg]
roll_nom	327.15353132015	Nominal Roll [deg]
revision	2	Processing version of data
ontime	23248.000346422	Sum of GTIs [s]
livetime	22953.620167771	Livetime [s]
ontime0	23248.000346422	Sum of GTIs [s]
ontime1	23244.759365916	Sum of GTIs [s]
ontime2	23244.759345889	Sum of GTIs [s]
ontime3	23244.759385824	Sum of GTIs [s]
ontime6	23248.000346422	Sum of GTIs [s]
ontime7	23248.000346422	Sum of GTIs [s]
l2events	172995	Number of level 2 events



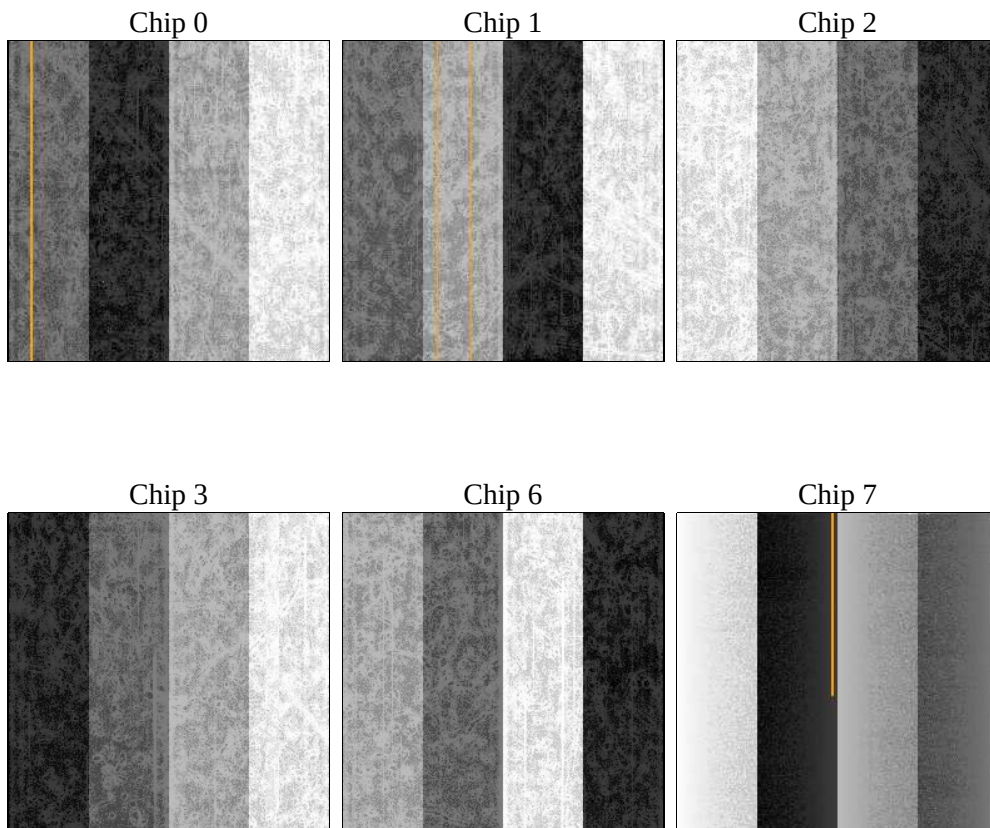
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23300.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	23248.000346422	Sum of GTIs [s]
caldsver	4.7.6	 	ontime0	23248.000346422	Sum of GTIs [s]
date	2017-11-30T22:49:31	Date and time of file creation	ontime1	23244.759365916	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	23244.759345889	Sum of GTIs [s]
			ontime3	23244.759385824	Sum of GTIs [s]
			ontime6	23248.000346422	Sum of GTIs [s]
			ontime7	23248.000346422	Sum of GTIs [s]
			l1events	1077851	Number of level 1 events

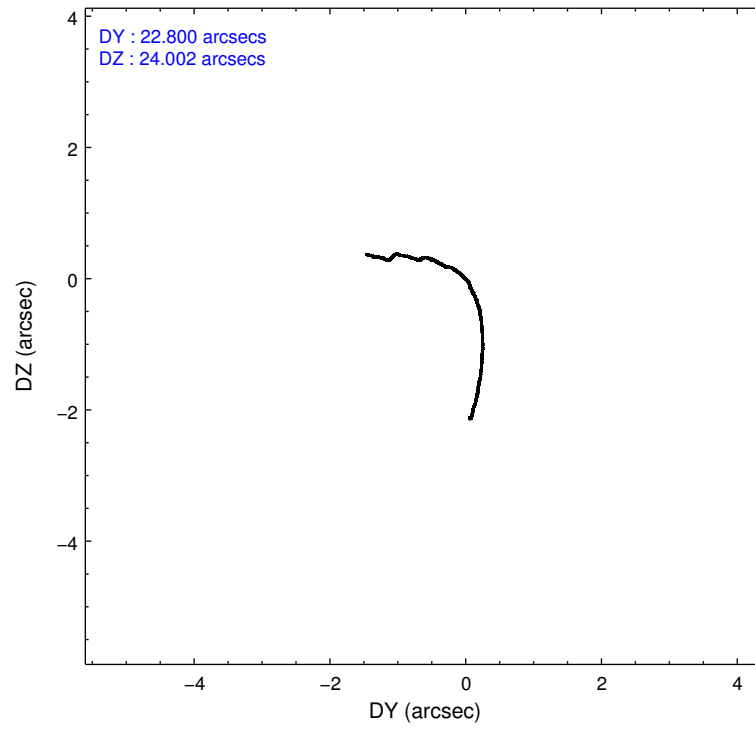
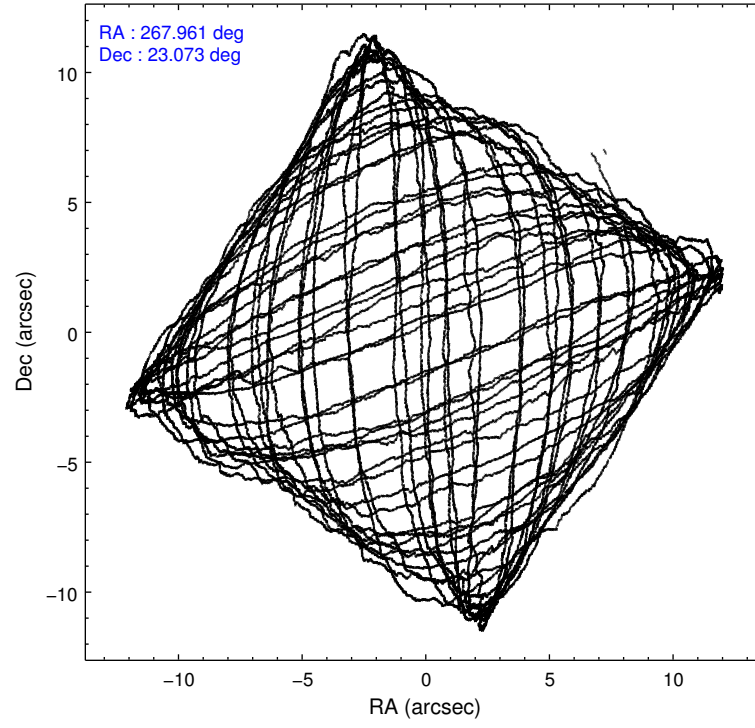
2.1.4 Events

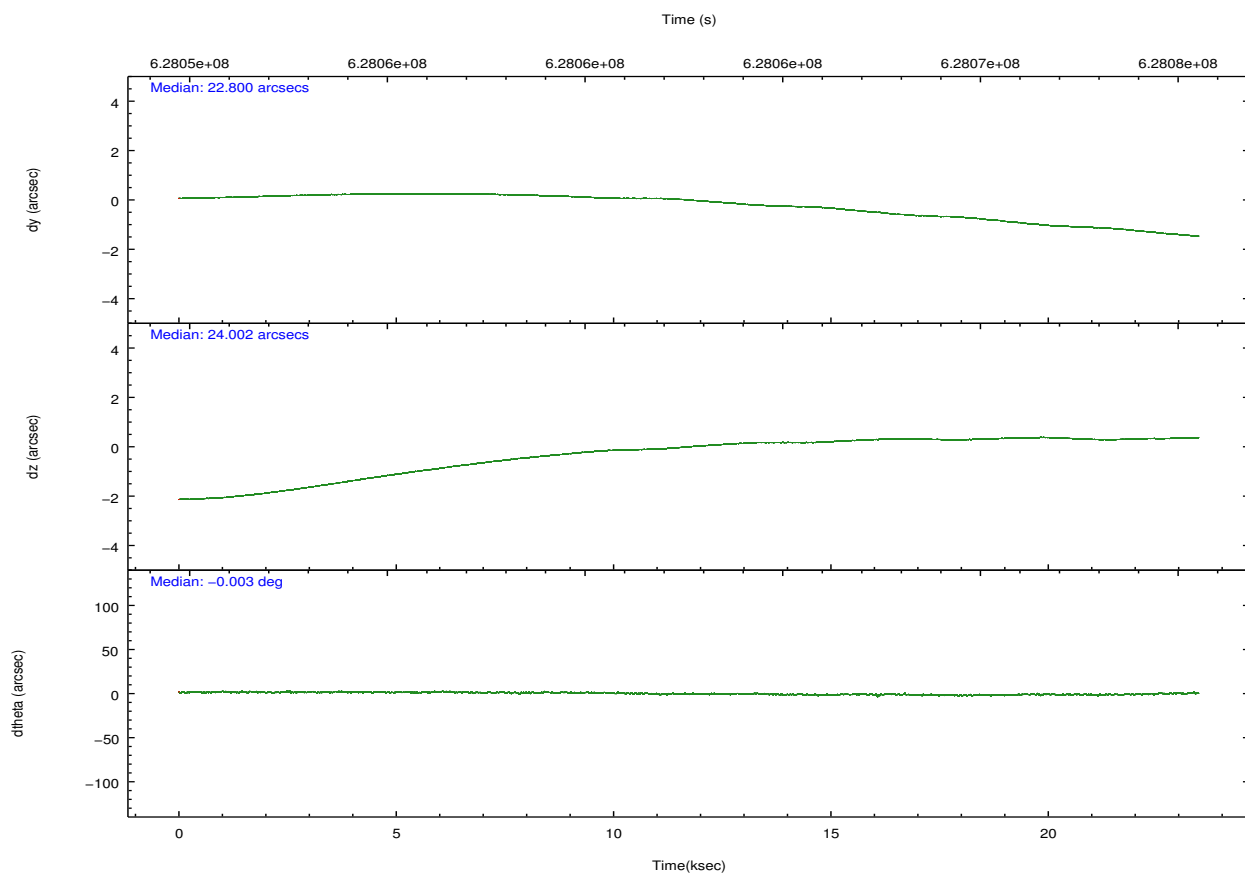
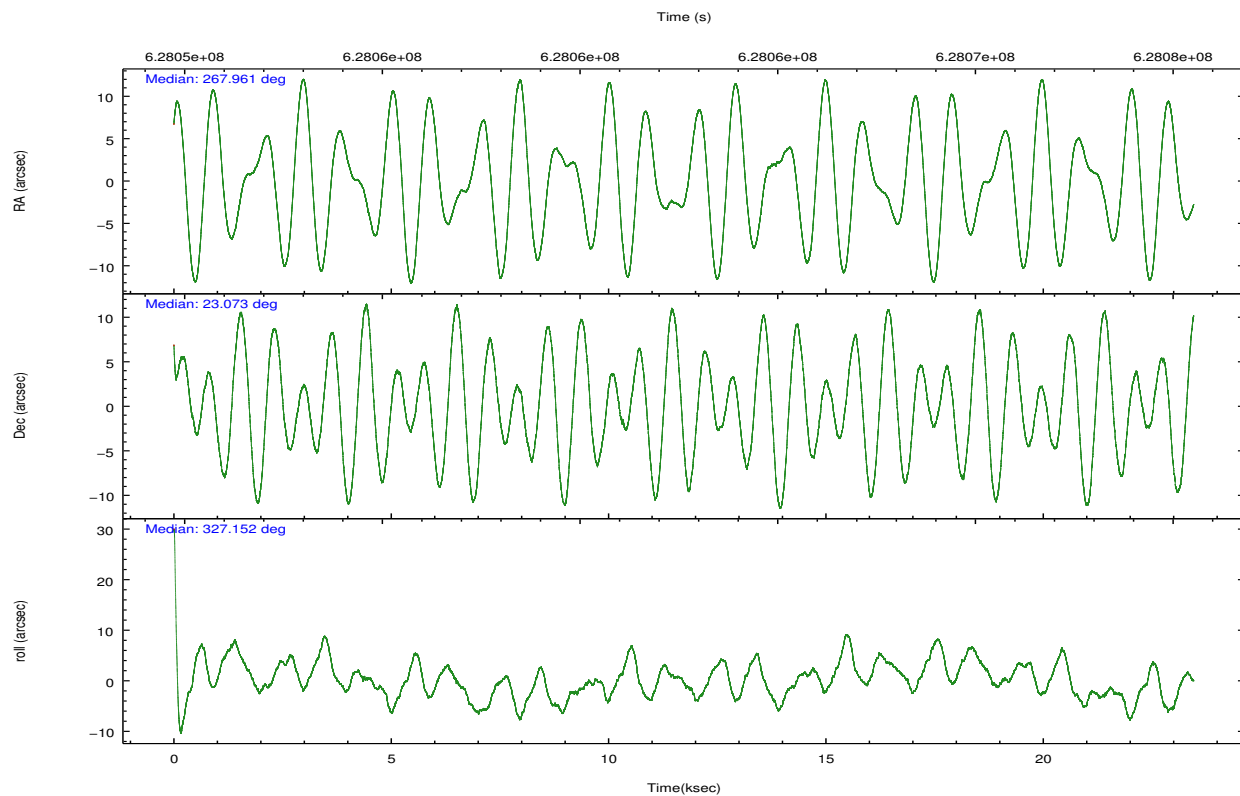
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	166636	162185	176834	171129	182280	218787	grade 0 events	6292	6516	12943	6200	6101	9258
rejected events	147818	141954	152751	153950	162816	121395		3%	4%	7%	3%	3%	4%
rejected %	88%	87%	86%	89%	89%	55%	grade 1 events	89	91	142	125	71	320
								0%	0%	0%	0%	0%	0%
							grade 2 events	4839	5337	4159	3741	4836	20468
								2%	3%	2%	2%	2%	9%
							grade 3 events	1853	1793	1804	1755	1738	8098
								1%	1%	1%	1%	0%	3%
							grade 4 events	1763	1842	1778	1814	1732	7713
								1%	1%	1%	1%	0%	3%
							grade 5 events	7021	6979	6259	7752	7516	21170
								4%	4%	3%	4%	4%	9%
							grade 6 events	4079	4755	3404	3671	5062	51884
								2%	2%	1%	2%	2%	23%
							grade 7 events	140700	134872	146345	146071	155224	99876
								84%	83%	82%	85%	85%	45%

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	VFAINT	VFAINT	CCD I0 on	O2	Y
Observation mode	POINTING	POINTING	CCD I1 on	O1	Y
[deg] Pointing RA	267.931473	267.9612799949786	CCD I2 on	Y	Y
[deg] Pointing Dec	23.074296	23.07330730149008	CCD I3 on	Y	Y
[deg] Pointing Roll	327.008572	327.1535313201535	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	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	N	N
[s] Observation start time (MET)	628051031.184000	628049870.96978	CCD S5 on	N	N
Observation start date	2017-11-26T02:36:02	2017-11-26T02:17:50	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	628074331.184000	628075376.04627	On-chip summing requested	N	N
Observation end date	2017-11-26T09:04:22	2017-11-26T09:22:56	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



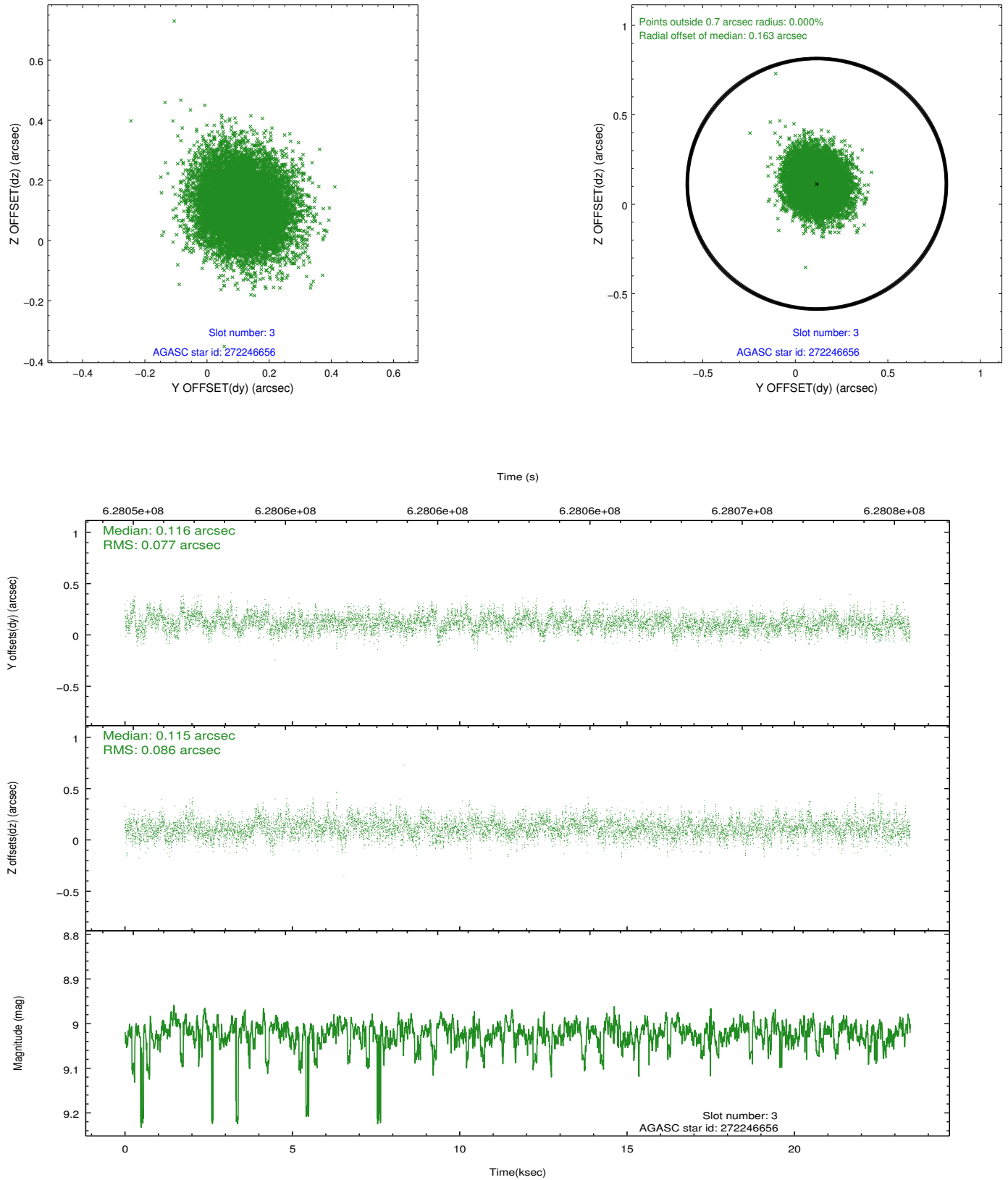


Slot Statistics

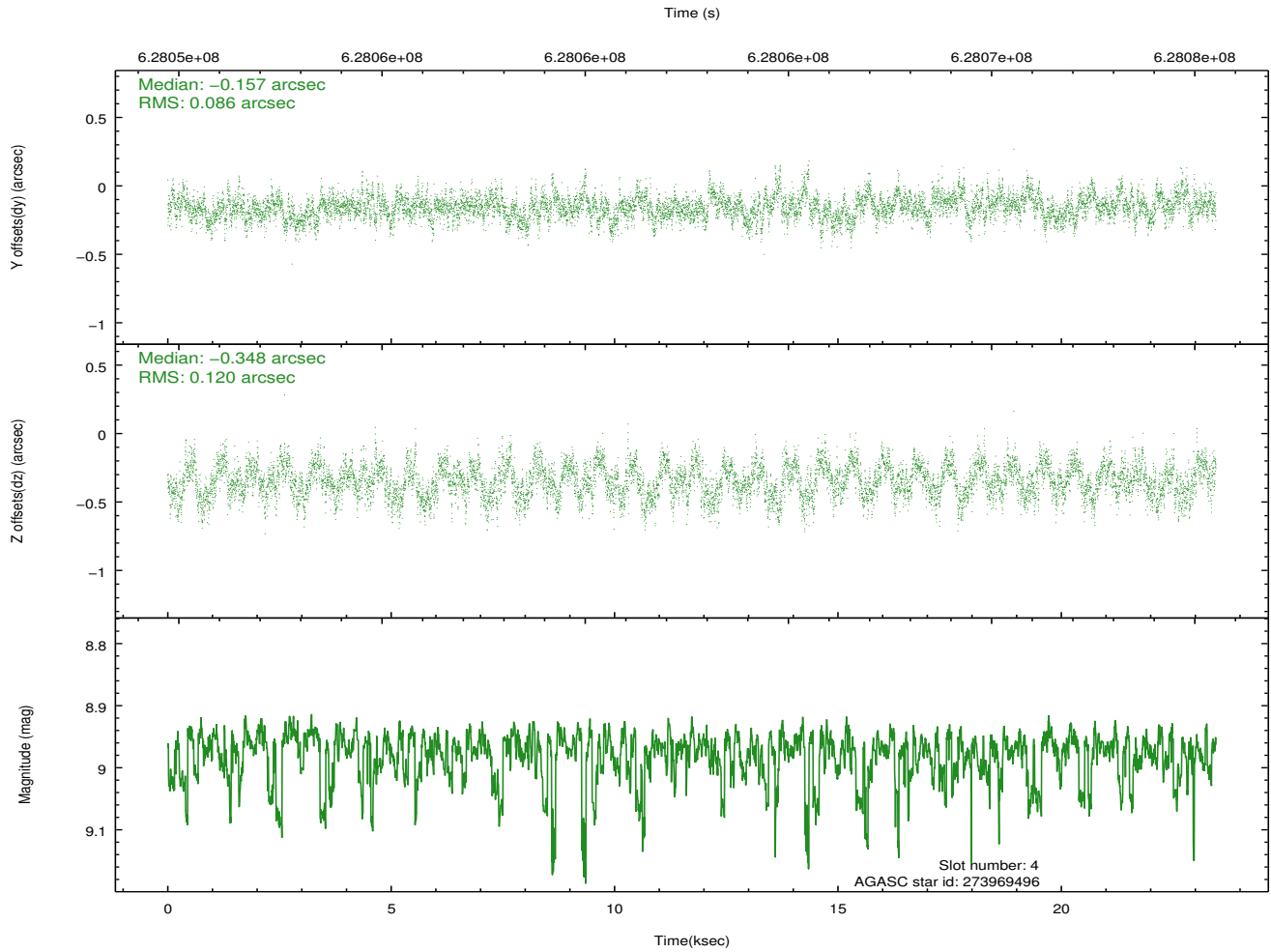
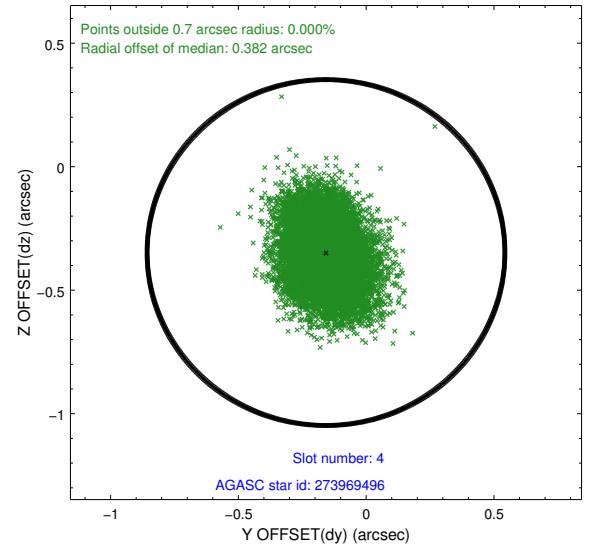
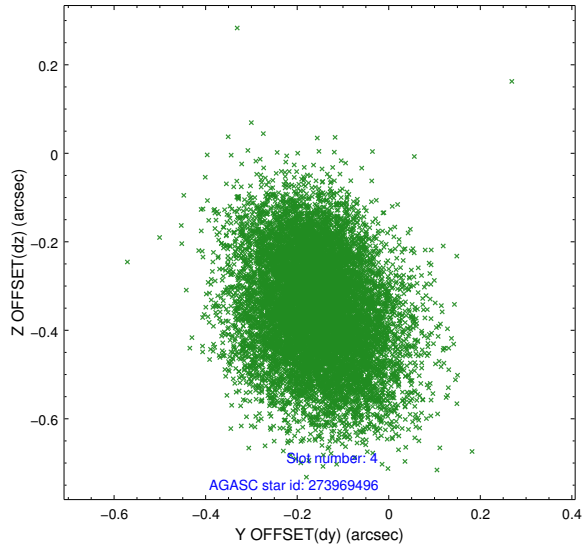
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.13	5723	-0.367	-0.250	0.036	0.047	0.000000	0.000000	-776.11	-1745.43
1	FID		ACIS-S-4	7.23	5721	0.390	0.205	0.022	0.035	0.000000	0.000000	2137.90	163.29
2	FID		ACIS-S-6	7.40	5721	-0.053	0.045	0.023	0.056	0.000000	0.000000	386.42	800.73
3	GUIDE	used	272246656	9.02	11432	0.116	0.115	0.123	0.199	267.382064	23.354712	-2074.48	-138.87
4	GUIDE	used	273969496	8.97	11438	-0.157	-0.348	0.157	0.255	268.396476	22.968275	1500.43	520.69
5	GUIDE	used	273976672	8.94	11422	-0.169	0.381	0.182	0.302	267.916715	22.762899	569.72	-966.15
6	GUIDE	used	272261632	8.32	11439	0.566	0.204	0.109	0.179	267.202505	22.973470	-1831.04	-1615.05
7	GUIDE	used	273948672	8.84	11430	-0.360	-0.343	0.128	0.206	268.631849	23.232305	1630.61	1743.15

2.4 Star Slots

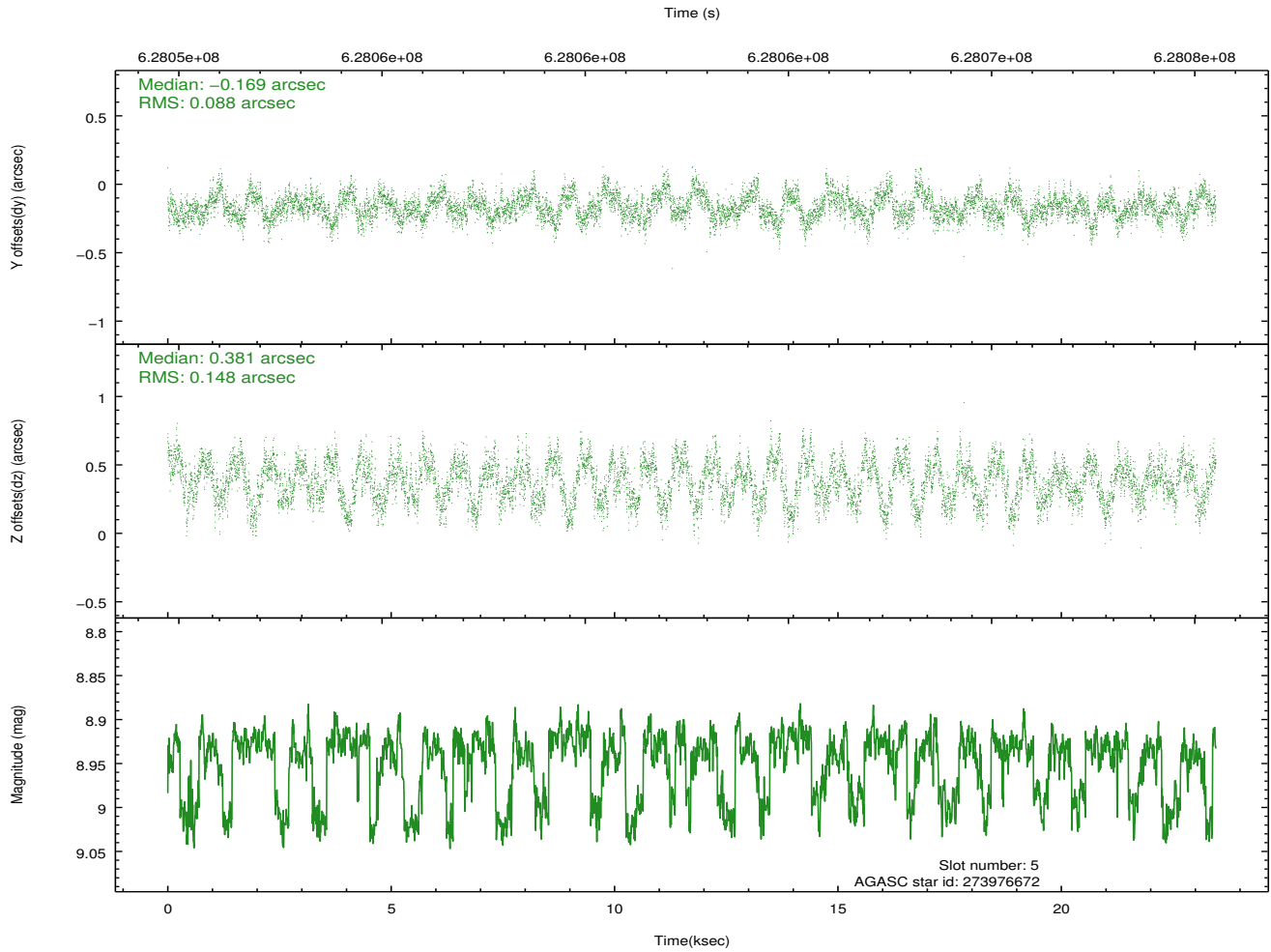
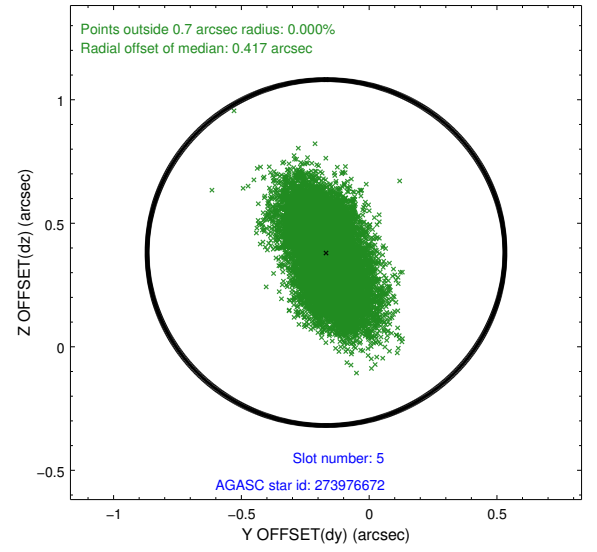
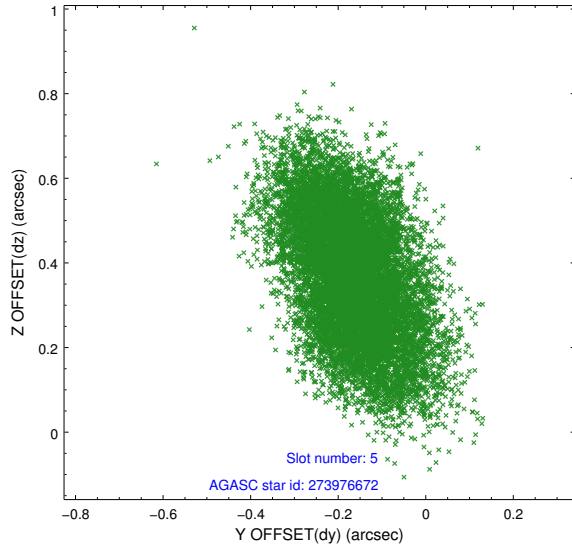
2.4.1 Slot 3



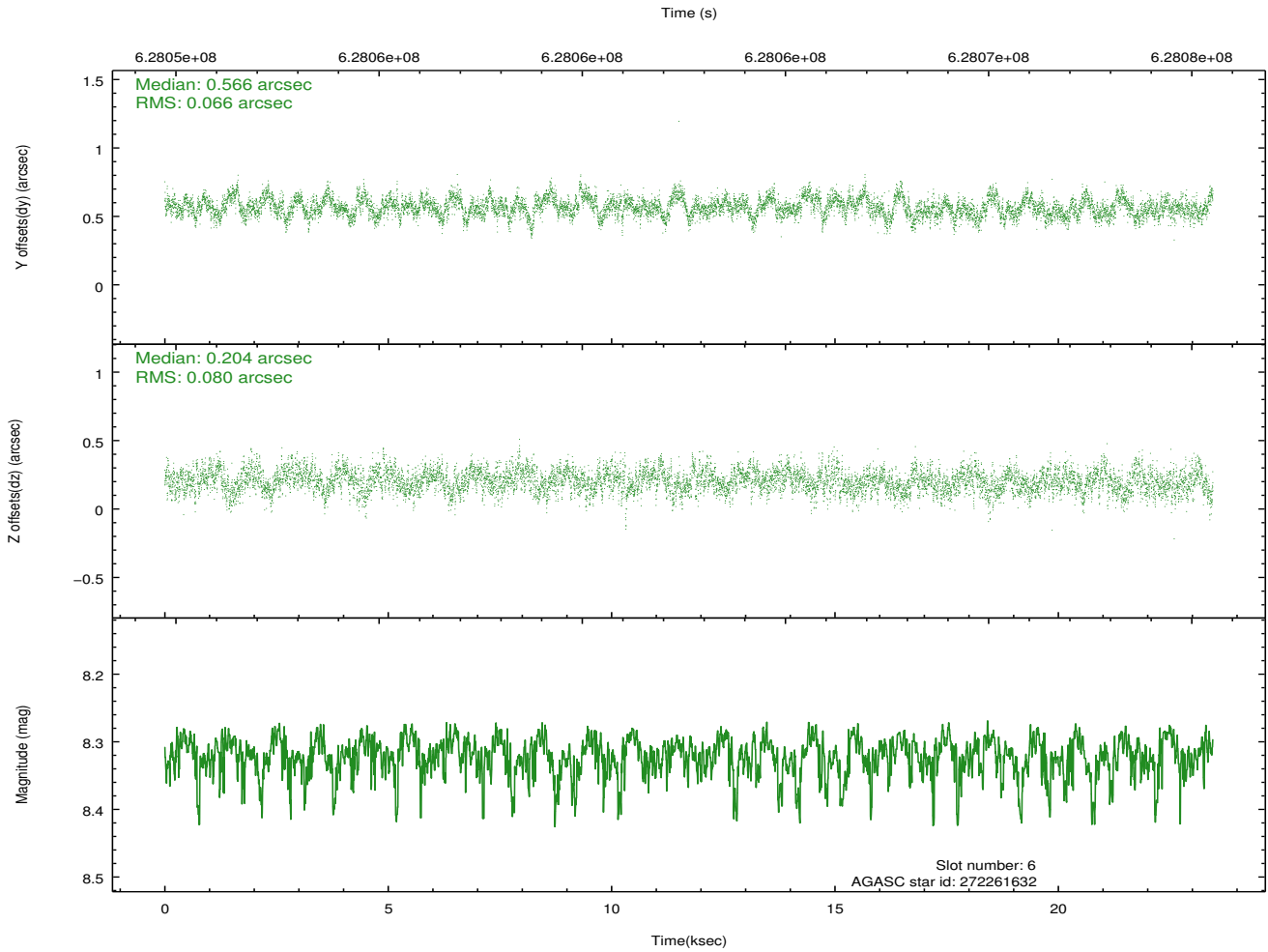
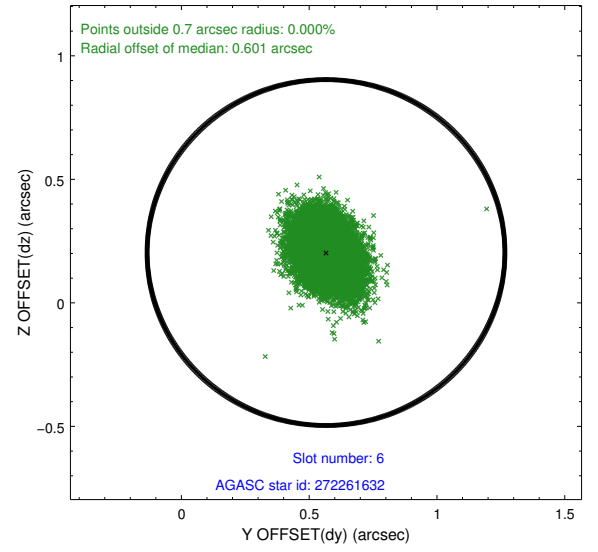
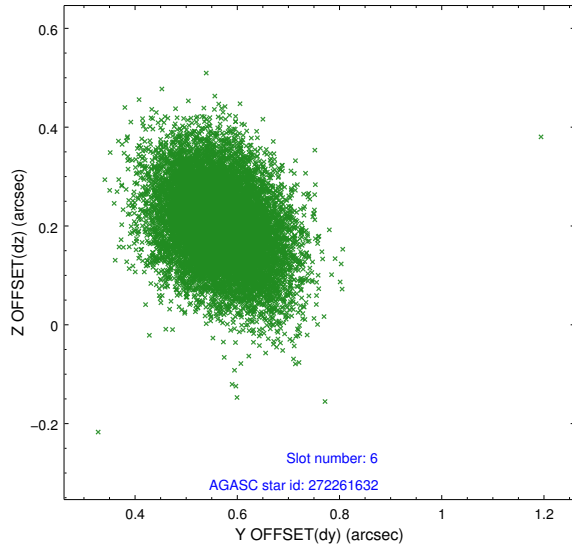
2.4.2 Slot 4



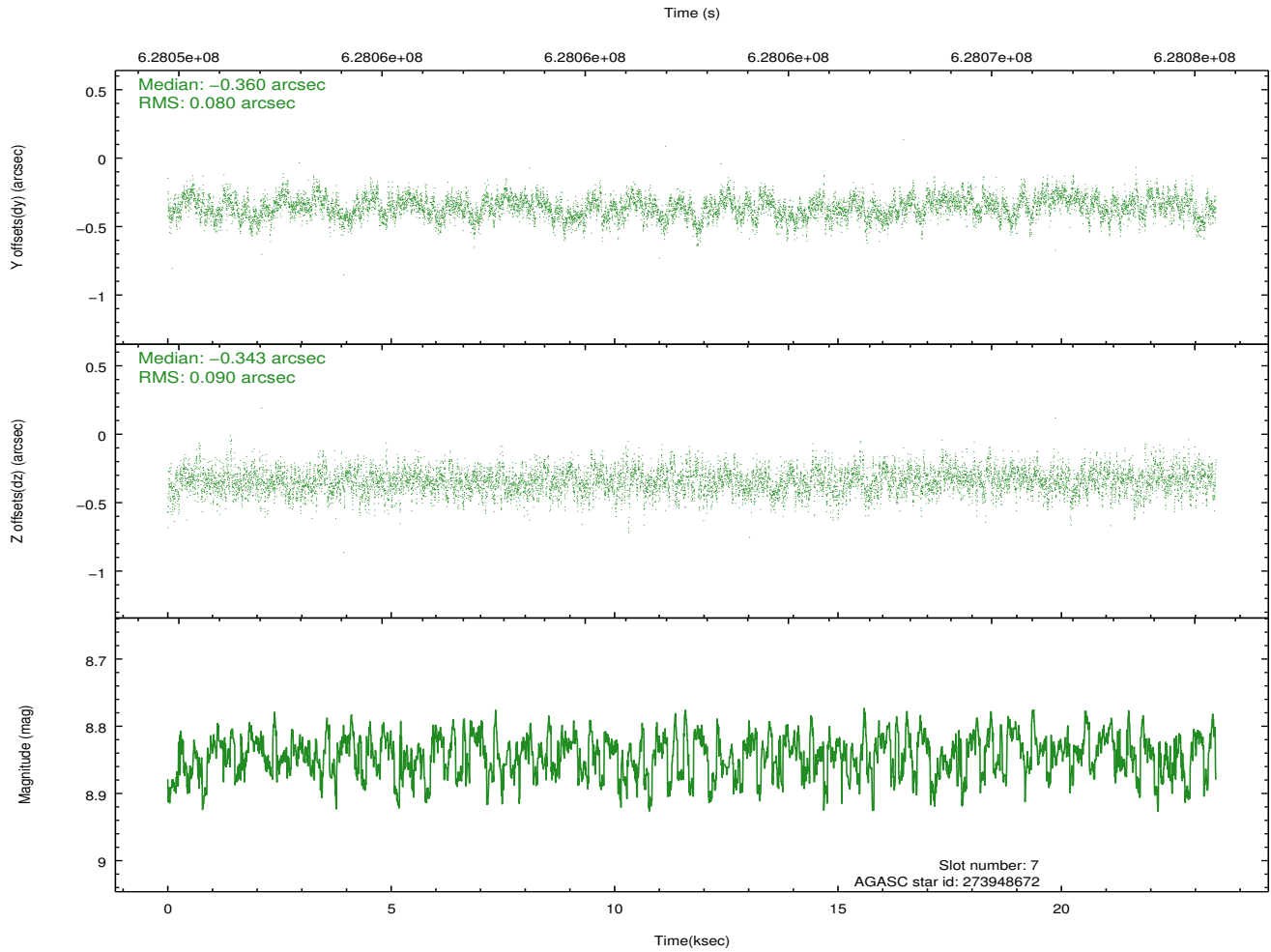
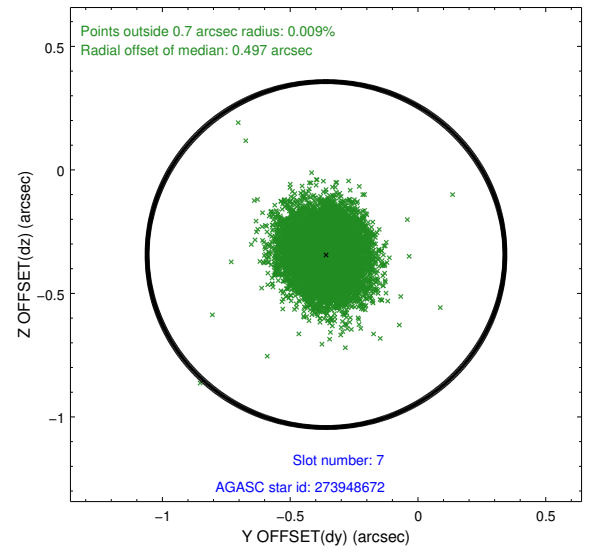
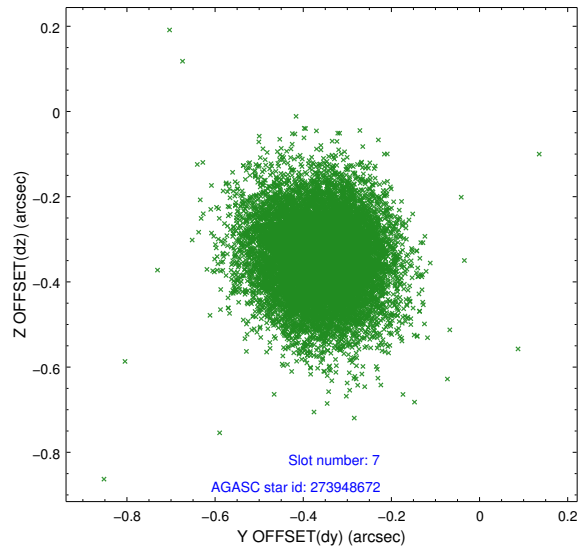
2.4.3 Slot 5



2.4.4 Slot 6

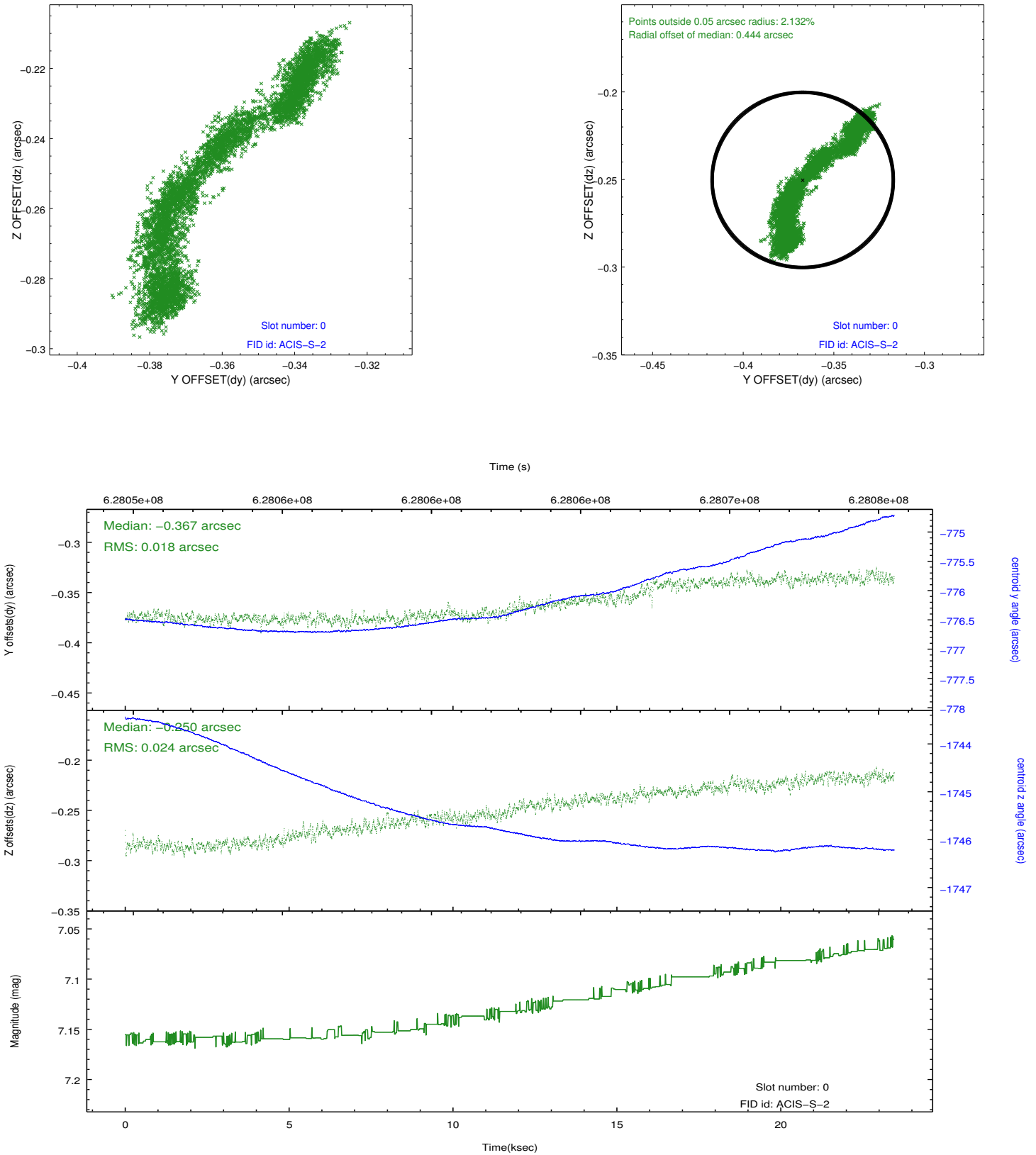


2.4.5 Slot 7

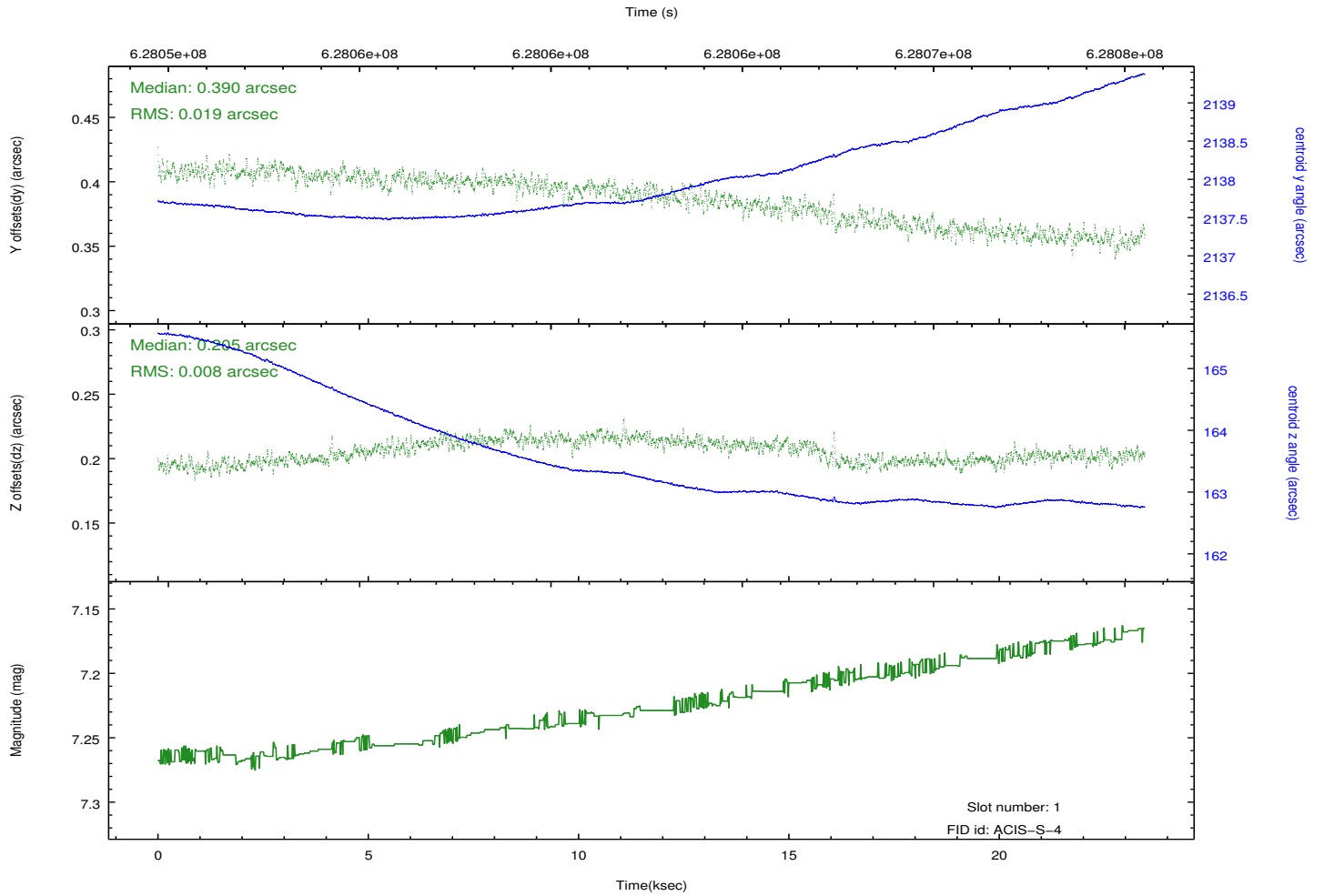
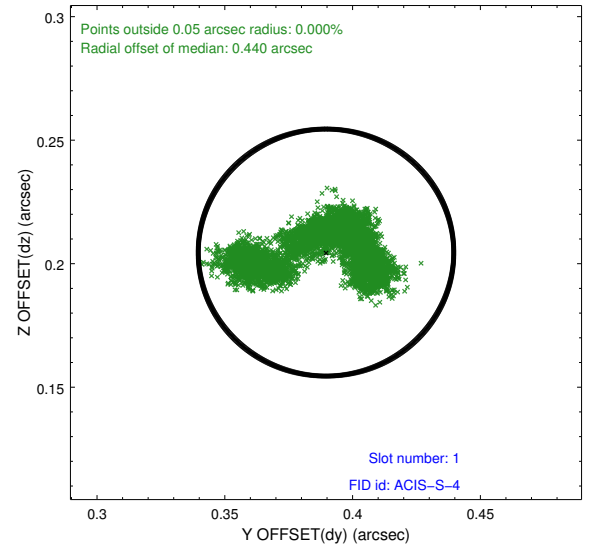
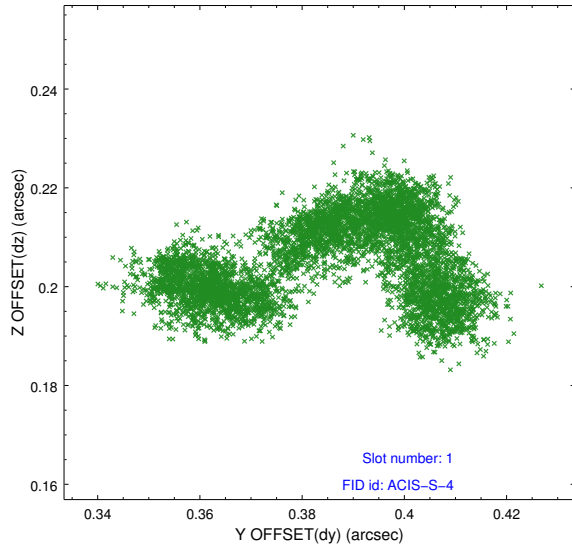


2.5 FID Slots

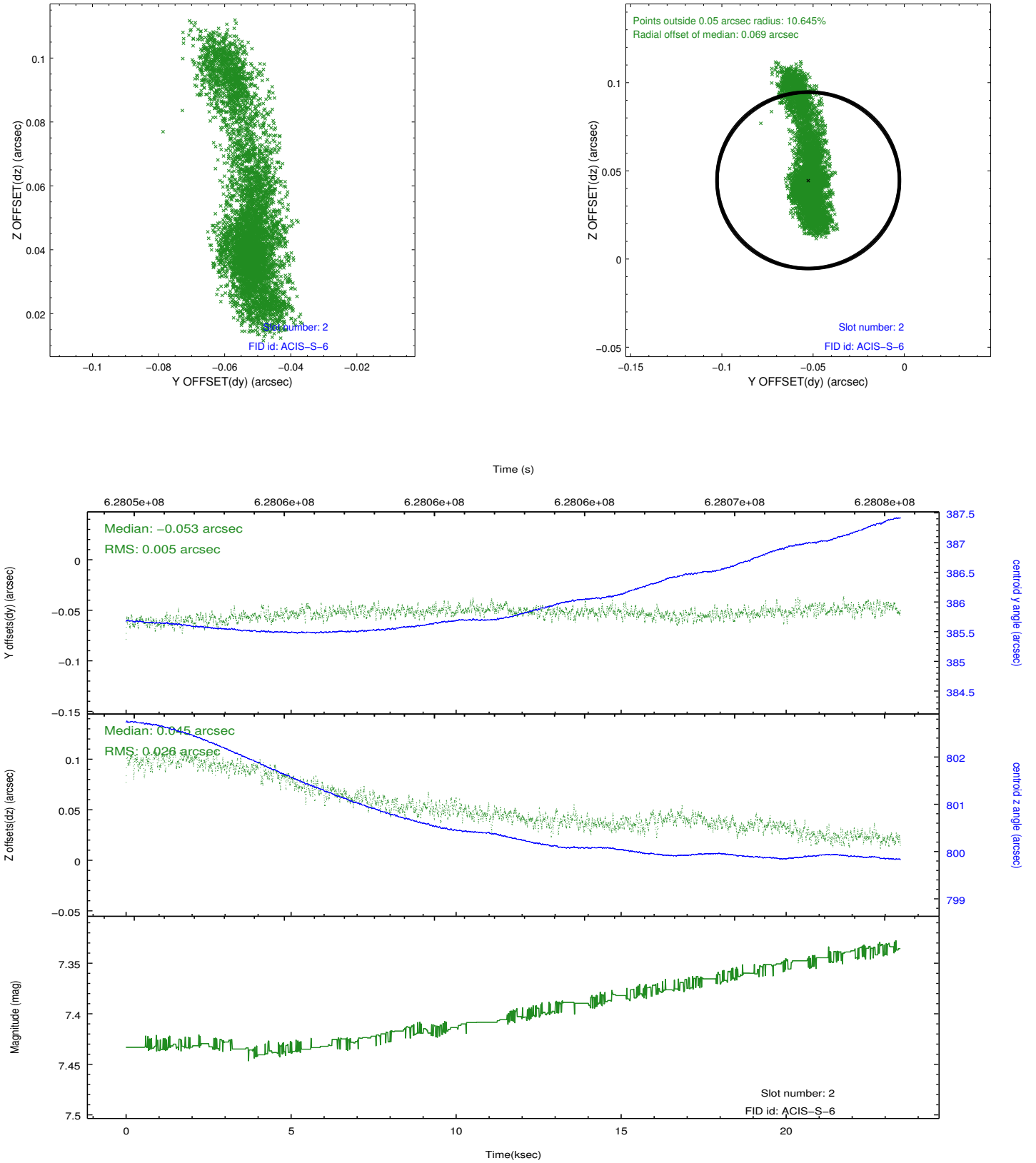
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Francesca Civano
V&V Date (YYYY-MM-DD)	2017.12.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.248000346422

A.2 Comments

A spatial region of the original bias map for CCD = 3 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 3 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords: (267.69523,22.95511), (267.69194,22.95042), (267.80758,22.88191), (267.80802,22.88829)