

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 13196 - L2 Version 3
Chandra X-Ray Center

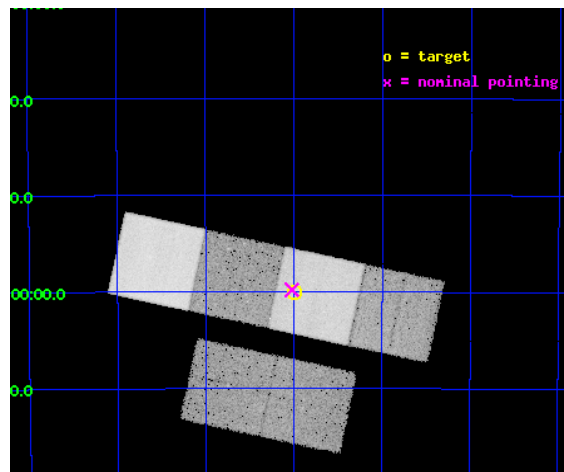
L2 Processing Date : Jul 9 2012

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1 Front

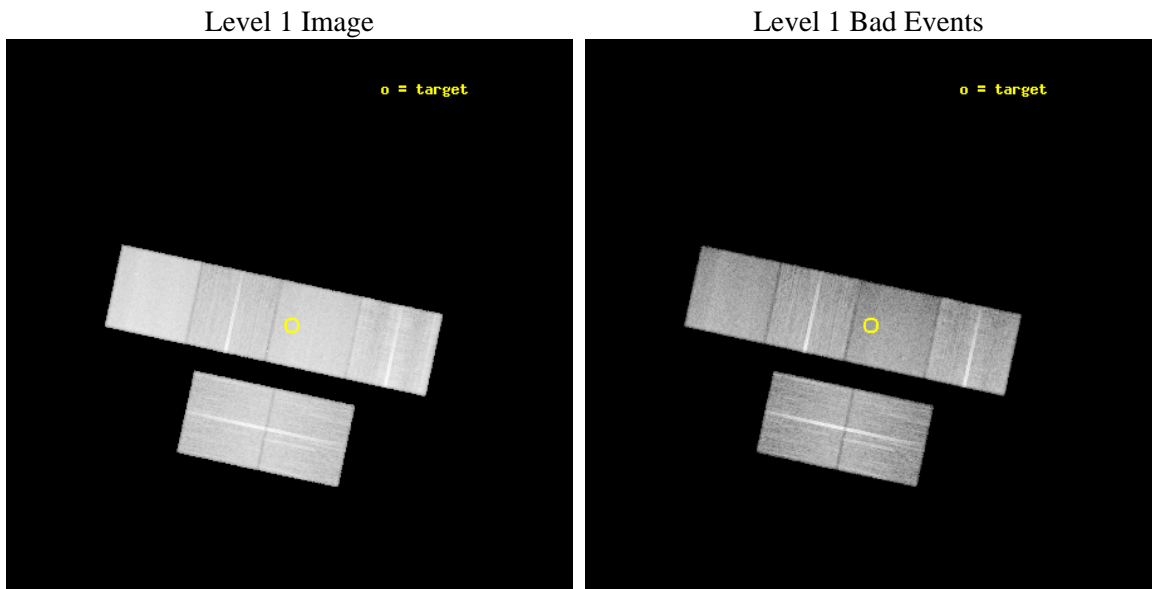
seq_num	900956	Sequence number
obs_id	13196	Observation id
title	Properties of the Warm-Hot Intergalactic Medium Using X-ray/SZ Cross-Correlation	Proposal title
observer	Dr. Massimiliano Galeazzi	Principal investigator
object	Blanco Cosmological Survey	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	79.25	Observer's specified target RA [deg]
dec_targ	-52.0	Observer's specified target Dec [deg]
ra_nom	79.255723785119	Nominal RA [deg]
dec_nom	-51.996640011889	Nominal Dec [deg]
roll_nom	12.111121104189	Nominal Roll [deg]
revision	3	Processing version of data
ontime	28047.55923152	Sum of GTIs [s]
livetime	27692.404148318	Livetime [s]
ontime2	28047.600271523	Sum of GTIs [s]
ontime3	28047.43611151	Sum of GTIs [s]
ontime5	28047.518191516	Sum of GTIs [s]
ontime6	28047.477151513	Sum of GTIs [s]
ontime7	28047.55923152	Sum of GTIs [s]
ontime8	28047.395071507	Sum of GTIs [s]
l2events	324557	Number of level 2 events



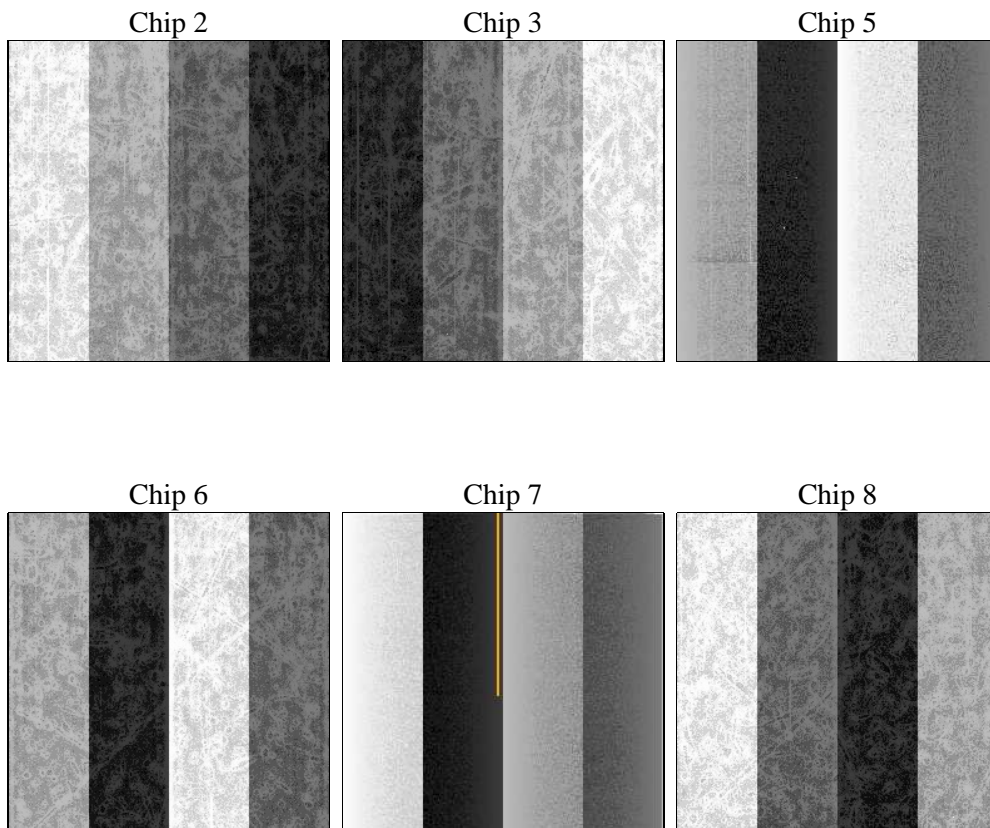
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	28000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	28047.55923152	Sum of GTIs [s]
caldsver	4.5.0	 	ontime2	28047.600271523	Sum of GTIs [s]
date	2012-07-09T14:15:35	Date and time of file creation	ontime3	28047.43611151	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	28047.518191516	Sum of GTIs [s]
			ontime6	28047.477151513	Sum of GTIs [s]
			ontime7	28047.55923152	Sum of GTIs [s]
			ontime8	28047.395071507	Sum of GTIs [s]
			l1events	1398131	Number of level 1 events

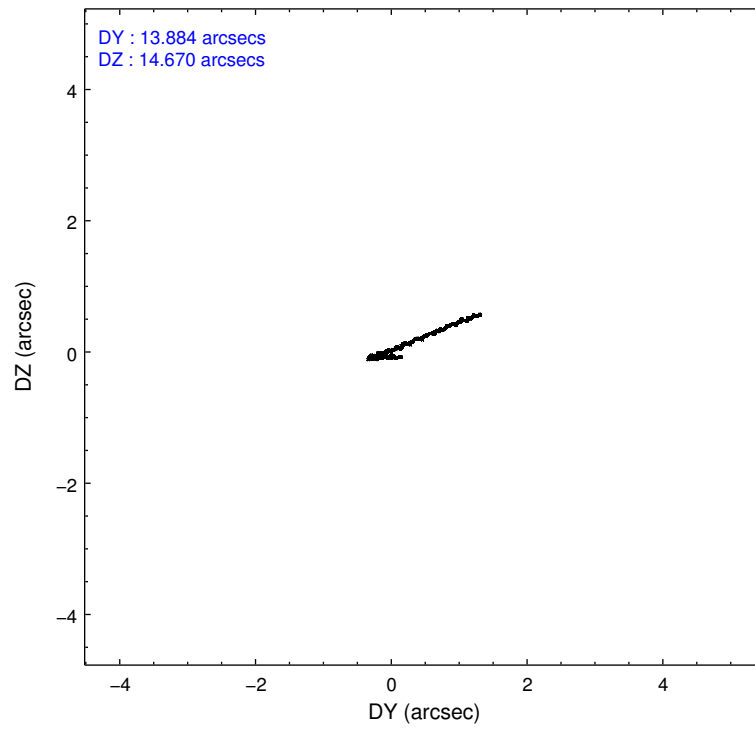
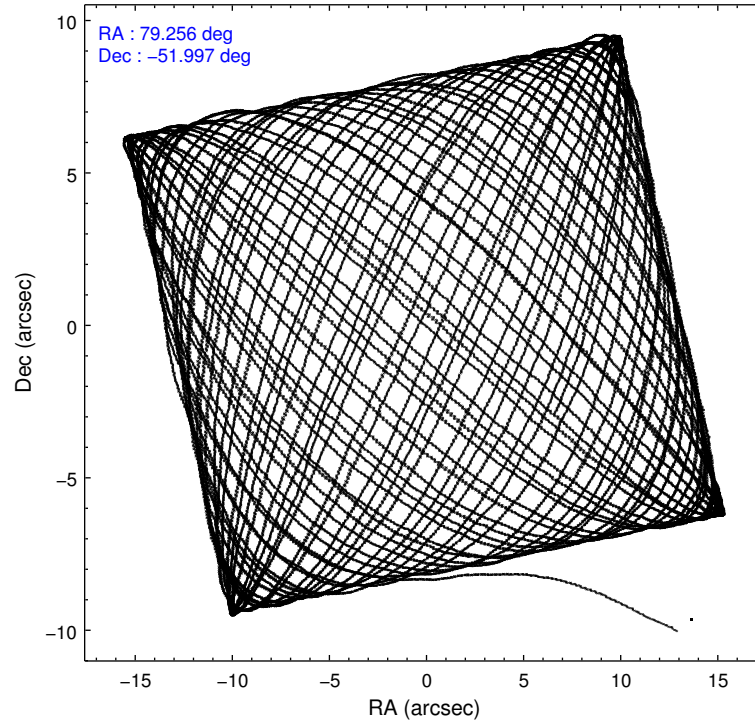
2.1.4 Events

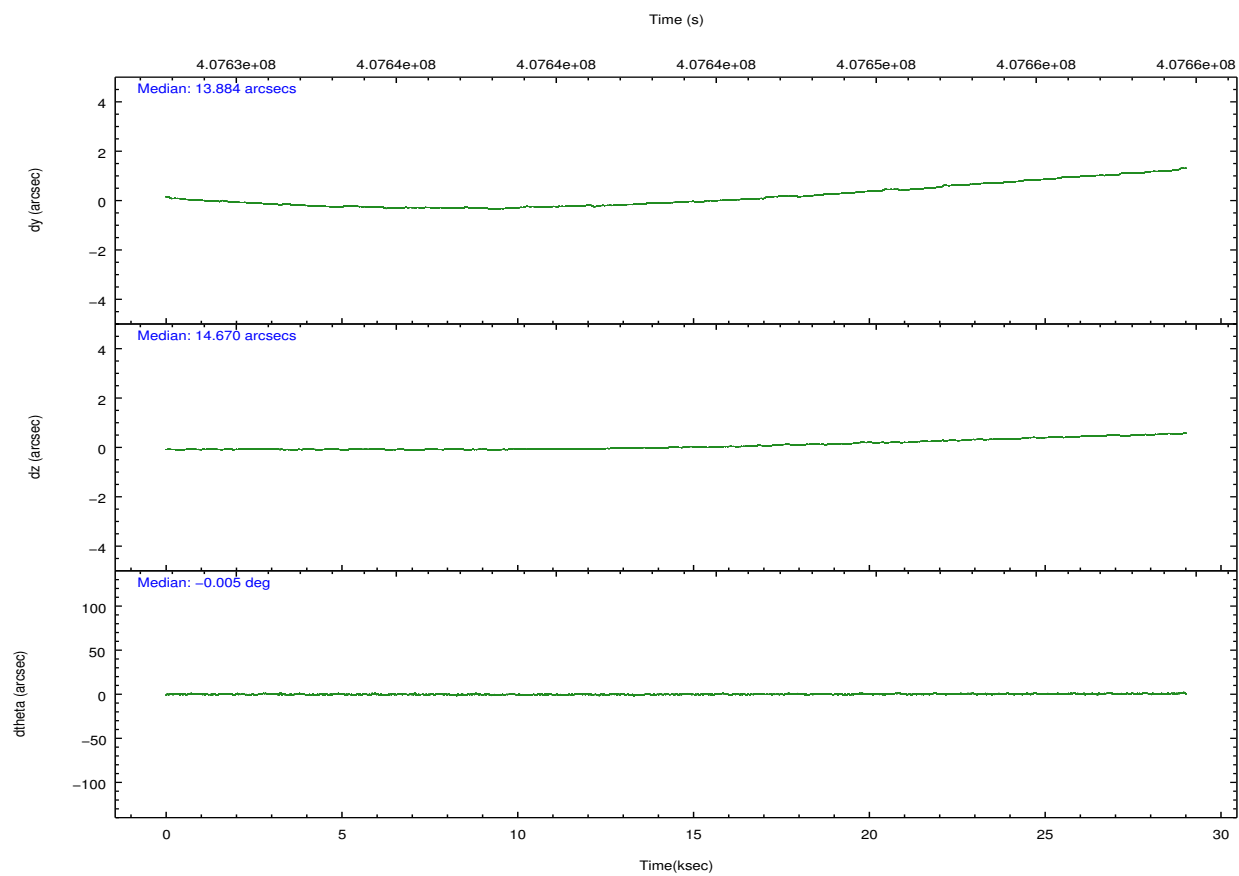
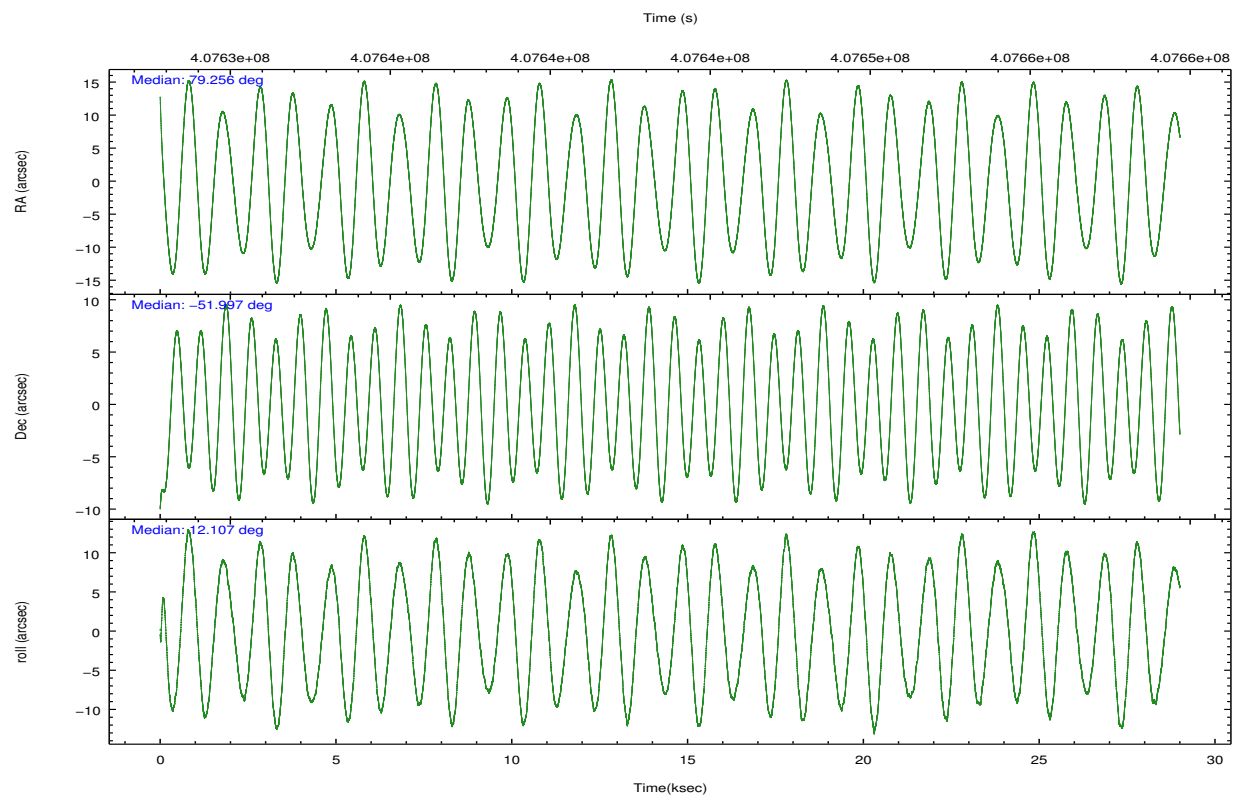
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	203728	194828	297672	202525	243870	255508	grade 0 events	7668	6844	9004	7872	9753	20028
rejected events	182032	174990	154275	180164	135049	188075		3%	3%	3%	3%	3%	7%
rejected %	89%	89%	51%	88%	55%	73%	grade 1 events	144	110	508	101	320	219
								0%	0%	0%	0%	0%	0%
							grade 2 events	5298	4348	44202	4961	22088	15799
								2%	2%	14%	2%	9%	6%
							grade 3 events	2292	2219	5542	2275	9557	7420
								1%	1%	1%	1%	3%	2%
							grade 4 events	2262	2227	5286	2293	9343	6836
								1%	1%	1%	1%	3%	2%
							grade 5 events	8301	8943	22859	9128	25417	13061
								4%	4%	7%	4%	10%	5%
							grade 6 events	4177	4202	79380	4966	58096	17375
								2%	2%	26%	2%	23%	6%
							grade 7 events	173586	165935	130891	170929	109296	174770
								85%	85%	43%	84%	44%	68%

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	79.223136	79.25572378511899	CCD I2 on	O1	Y
[deg] Pointing Dec	-52.015248	-51.99664001188879	CCD I3 on	Y	Y
[deg] Pointing Roll	11.928829	12.1111211041885	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)	407630252.184000	407628437.95099	CCD S5 on	N	N
Observation start date	2010-12-01T22:36:26	2010-12-01T22:07:17	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	407658252.184000	407659057.26507	On-chip summing requested	N	N
Observation end date	2010-12-02T06:23:06	2010-12-02T06:37:37	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



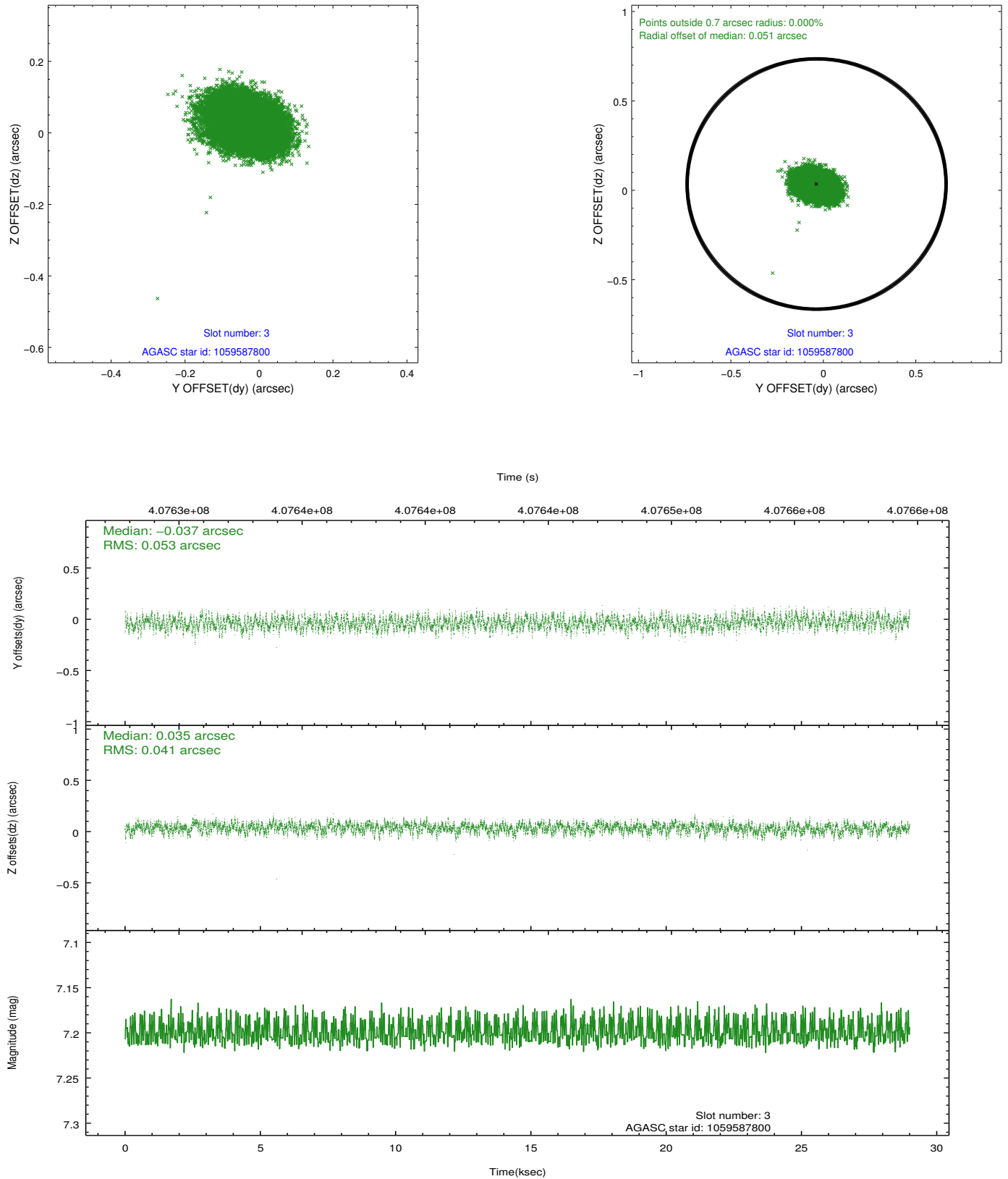


Slot Statistics

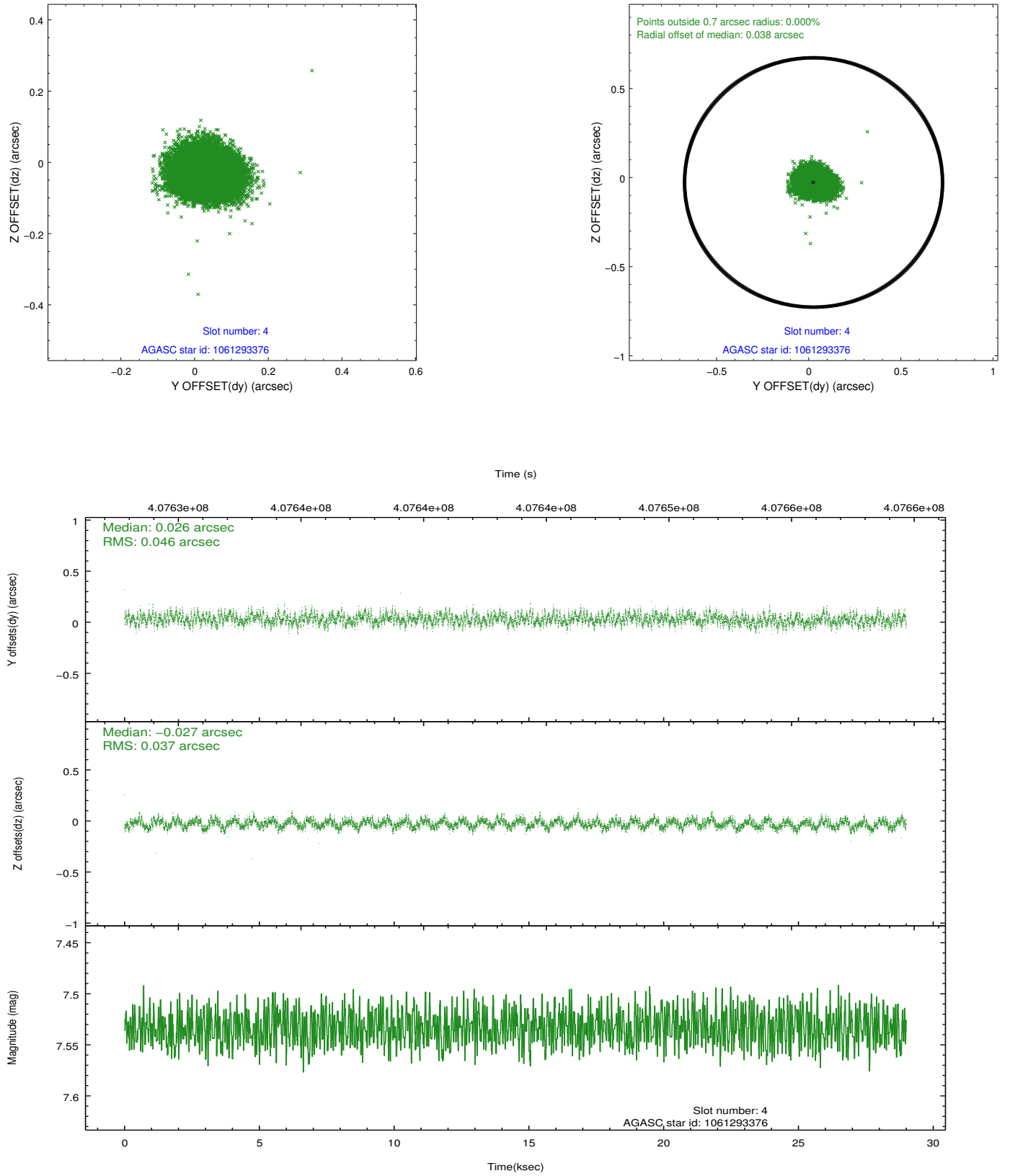
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.97	7073	-0.078	-0.047	0.014	0.033	0.000000	0.000000	-767.07	-1736.19
1	FID	ACIS-S-4	7.05	7074	0.223	0.051	0.011	0.021	0.000000	0.000000	2146.45	172.33
2	FID	ACIS-S-5	7.07	7073	-0.177	0.006	0.012	0.040	0.000000	0.000000	-1819.92	166.00
3	GUIDE	1059587800	7.20	14147	-0.037	0.035	0.071	0.115	78.091709	-51.550118	-2135.77	2143.16
4	GUIDE	1061293376	7.53	14147	0.026	-0.027	0.063	0.100	79.729126	-51.579452	1431.01	1297.62
5	GUIDE	1061294448	9.22	14102	0.002	-0.153	0.101	0.164	79.302052	-51.902274	255.74	361.62
6	GUIDE	1061296568	8.34	14143	-0.035	0.057	0.076	0.120	79.123429	-51.476040	182.13	1945.23
7	GUIDE	1061297288	8.44	14139	0.039	0.092	0.072	0.116	79.226530	-52.452693	-317.93	-1542.07

2.4 Star Slots

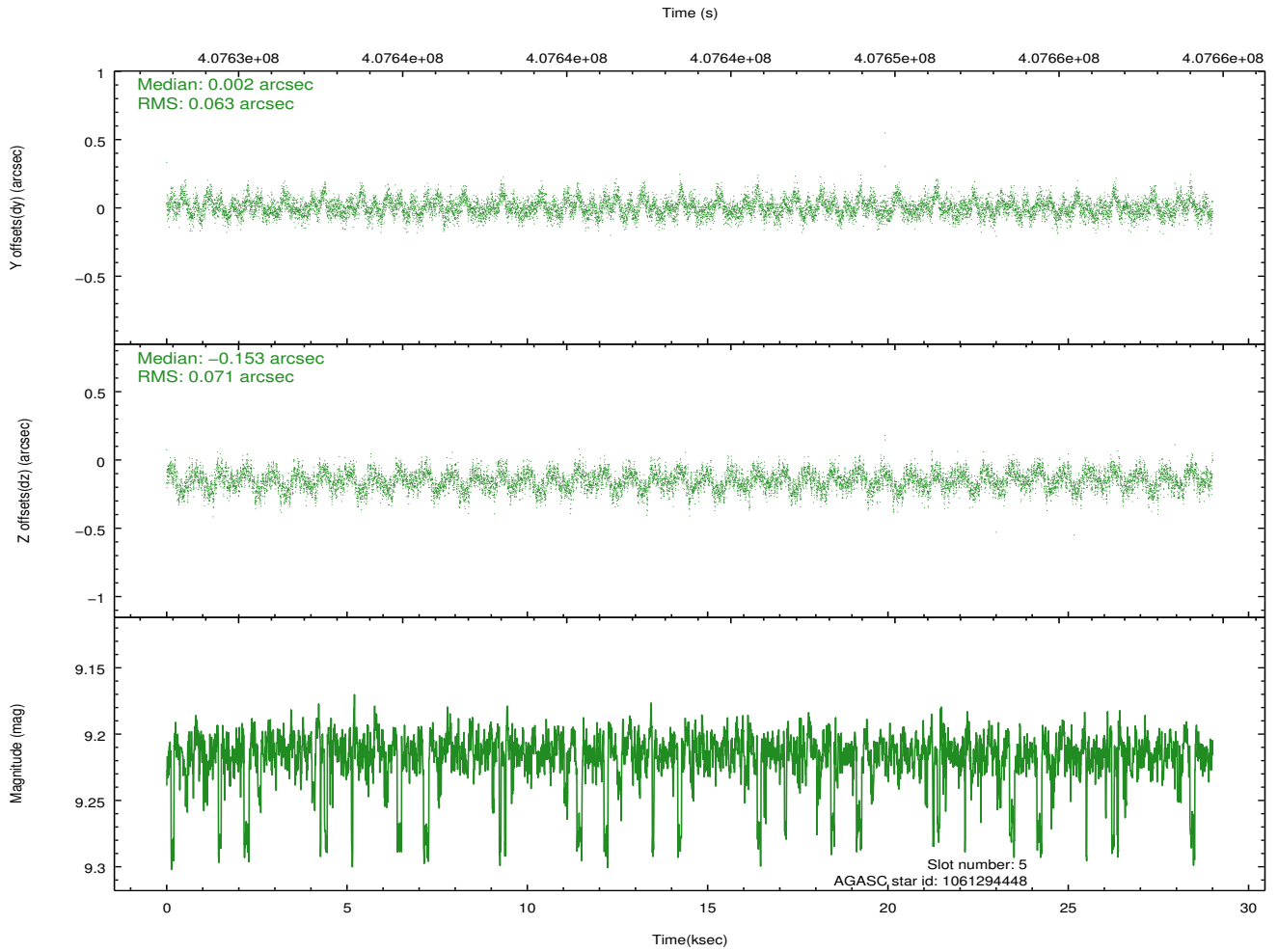
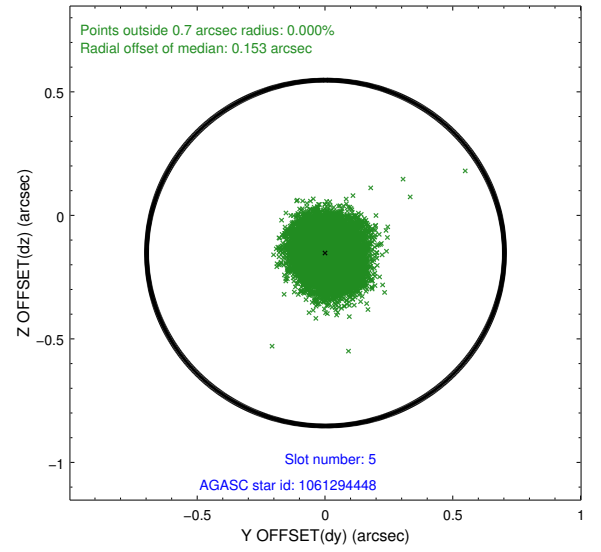
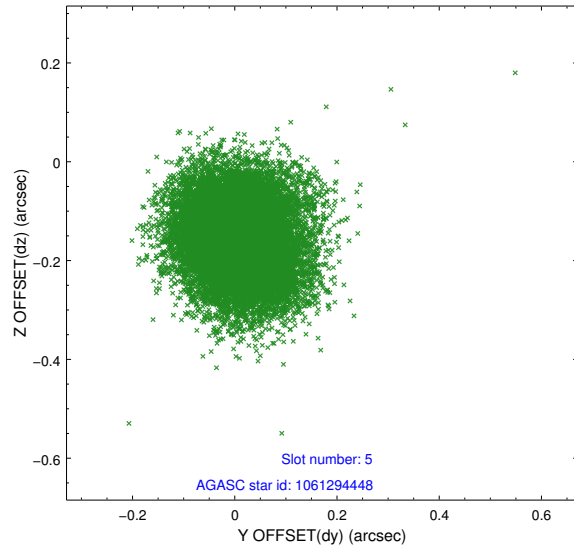
2.4.1 Slot 3



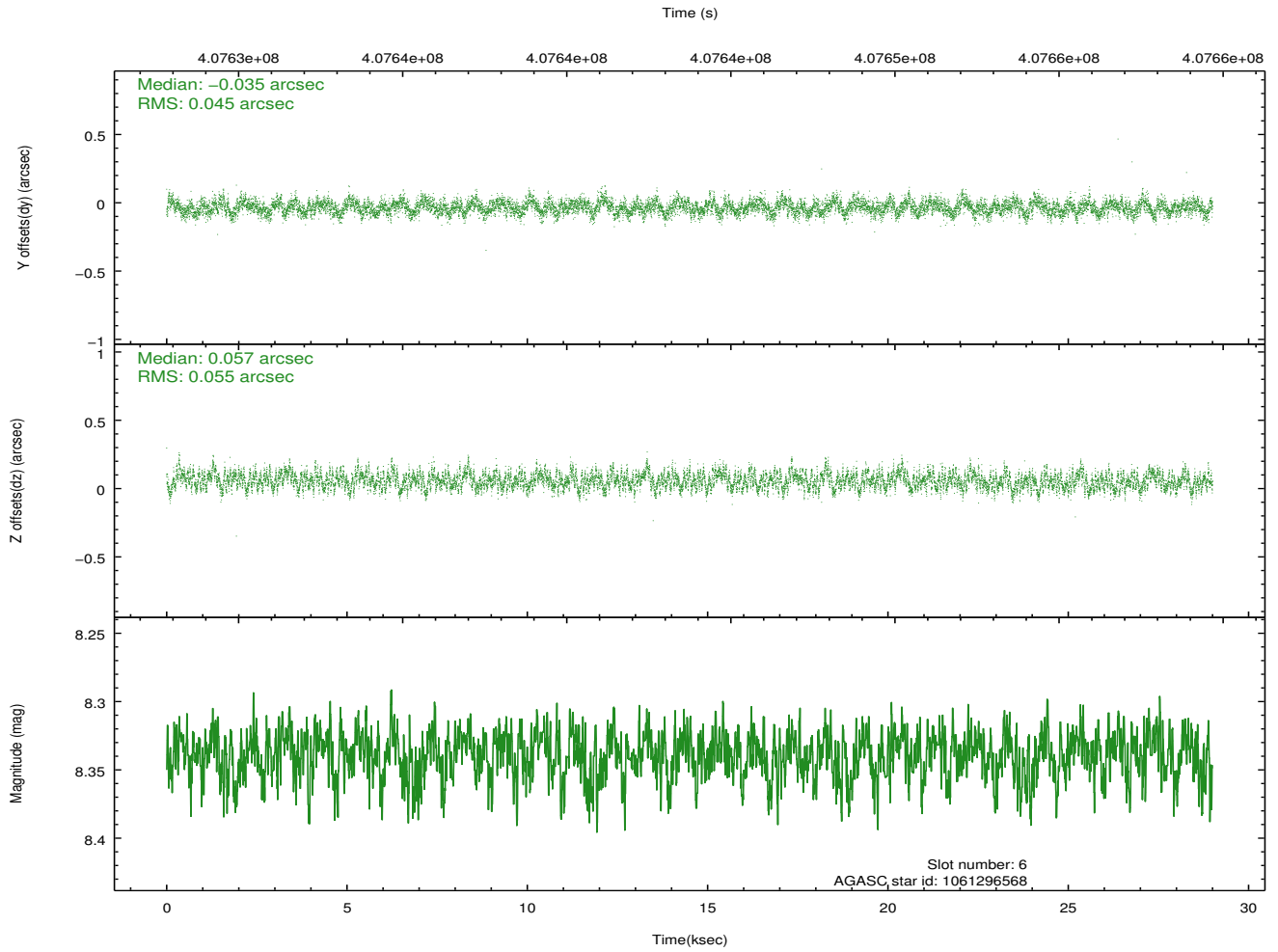
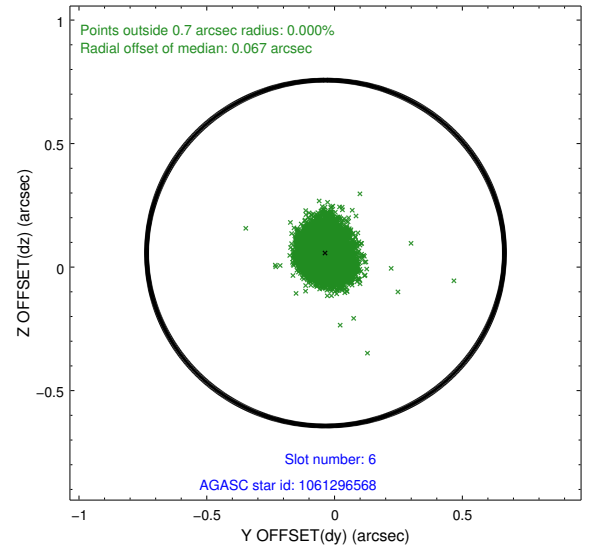
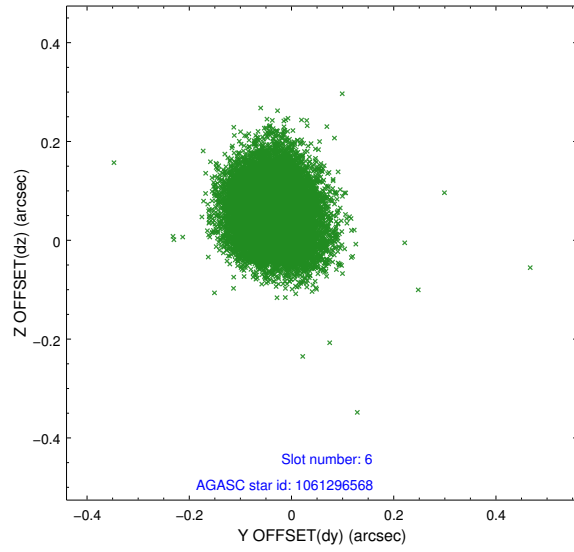
2.4.2 Slot 4



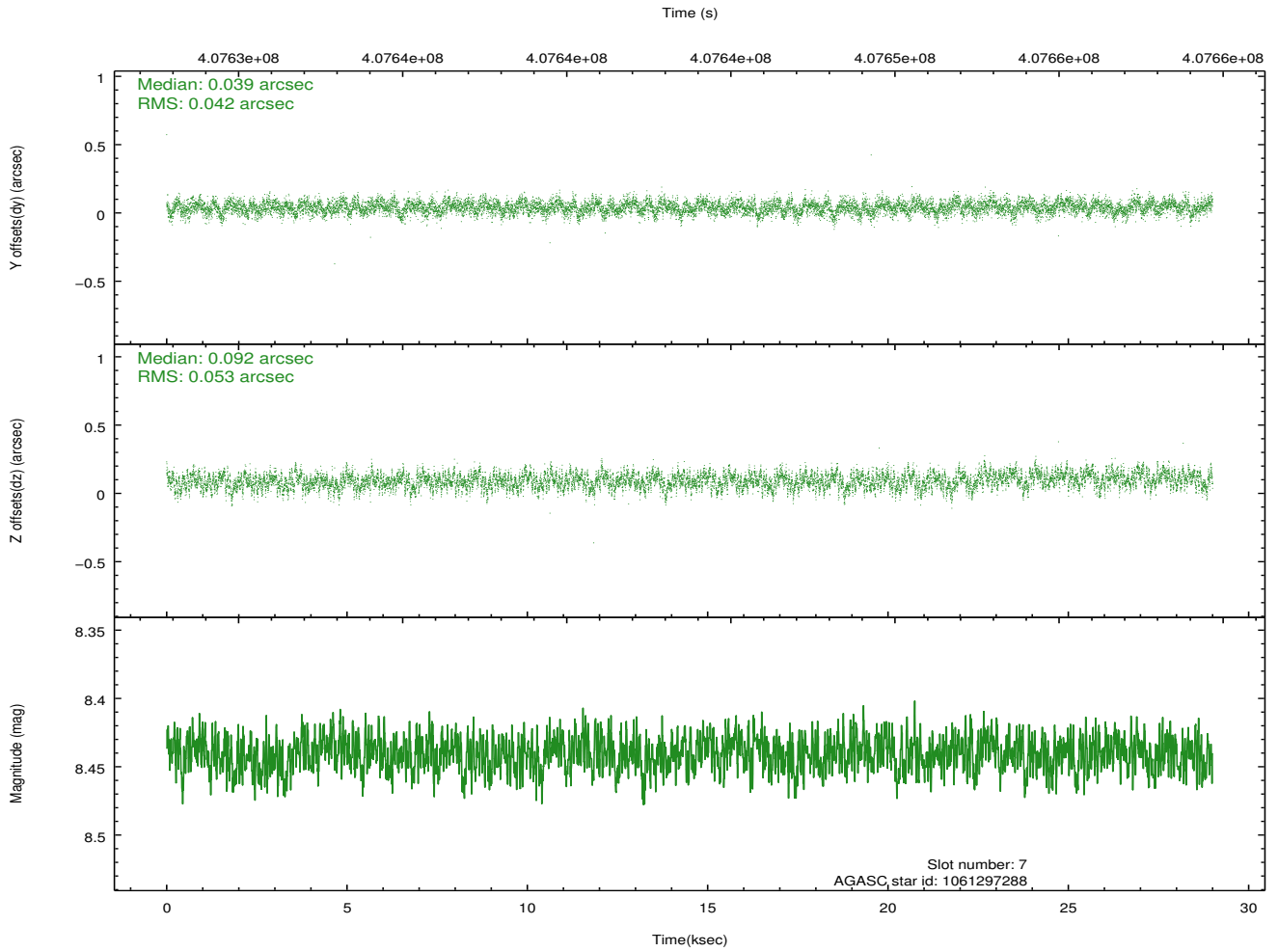
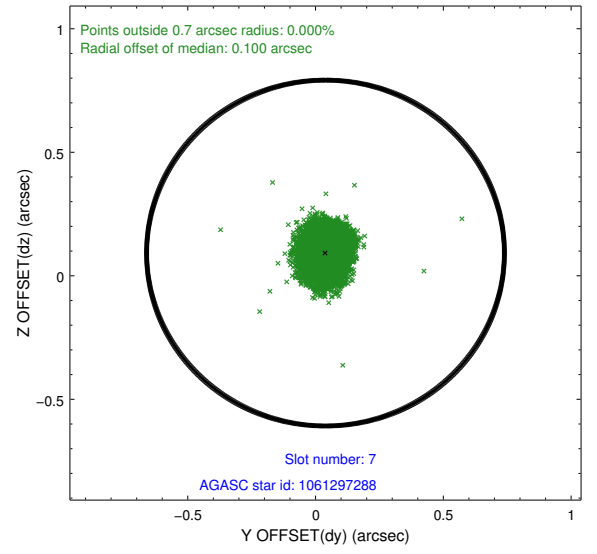
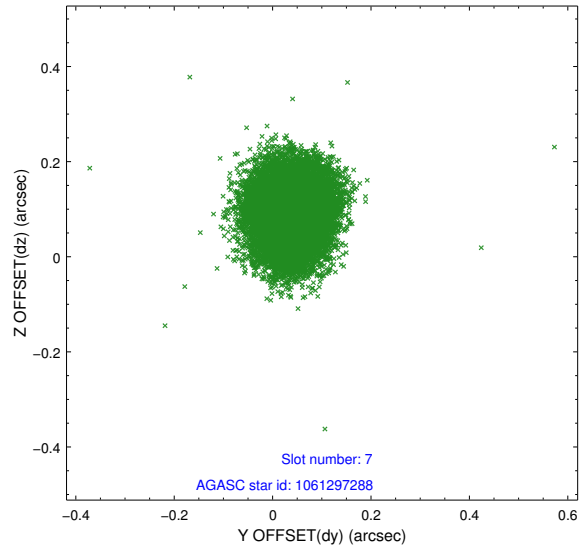
2.4.3 Slot 5



2.4.4 Slot 6

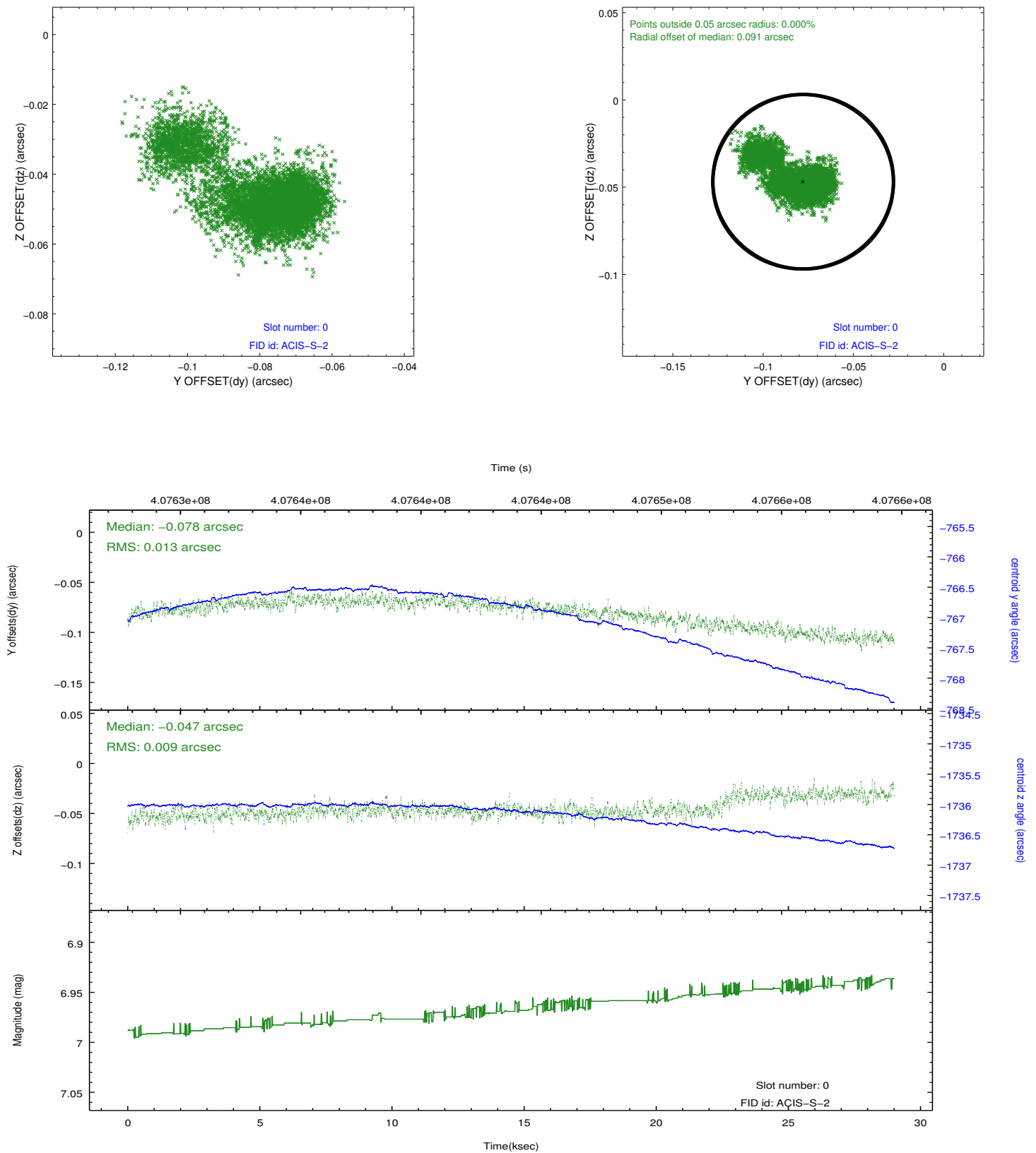


2.4.5 Slot 7

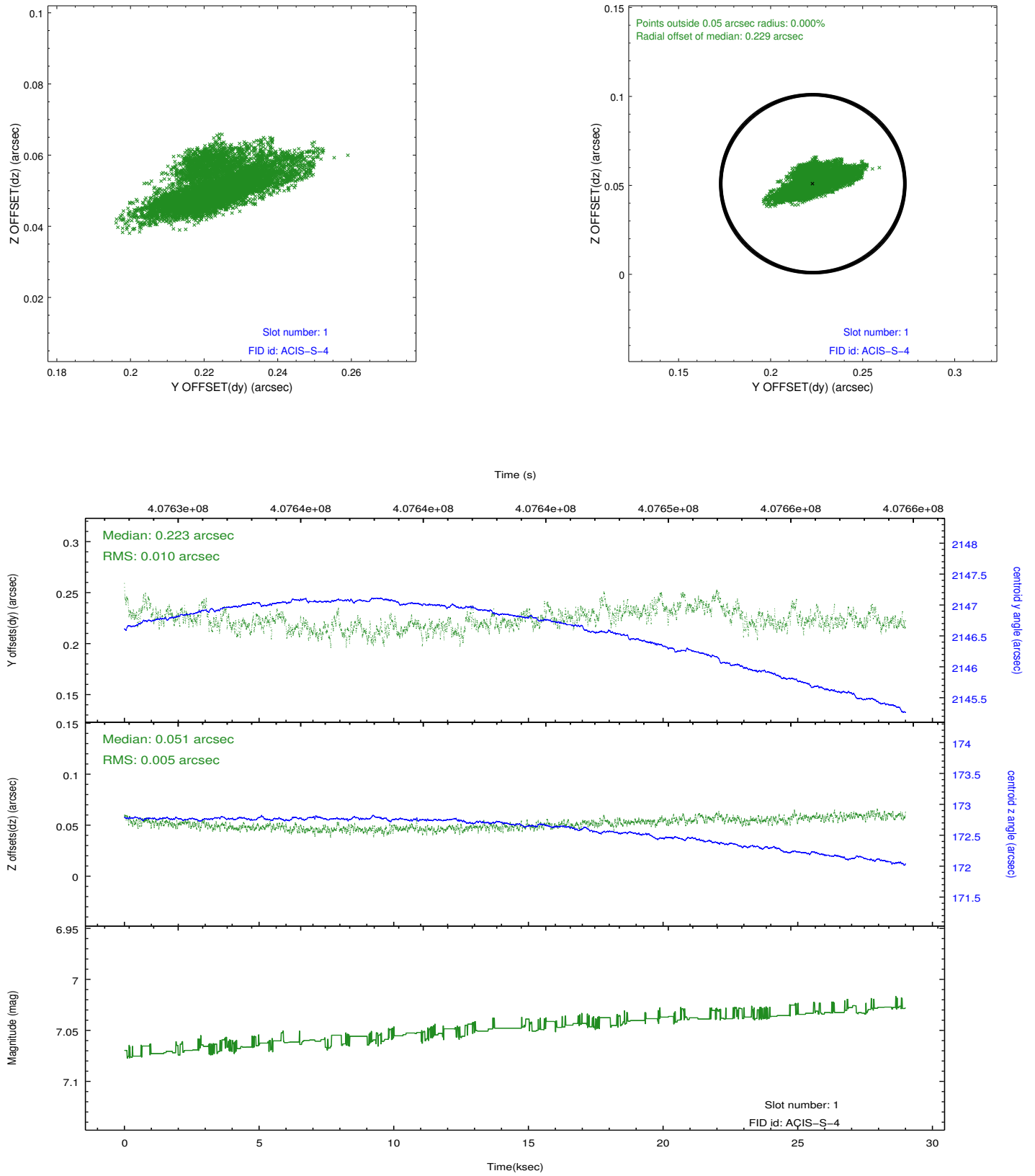


2.5 FID Slots

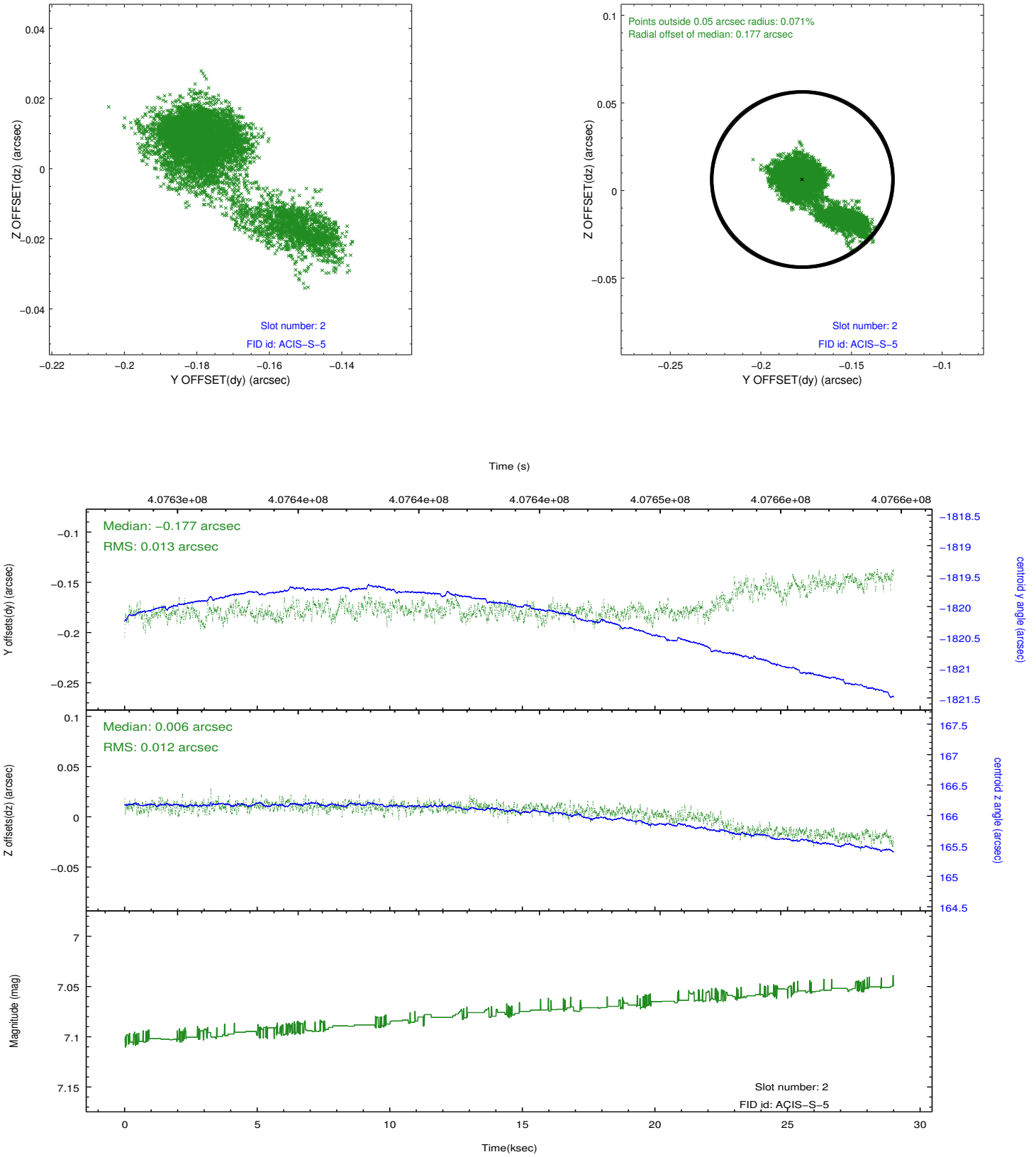
2.5.1 Slot 0



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)	2012.07.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.047559229195

A.2 Comments

A spatial region of the original bias map for CCD = 2 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 = 2 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:
(79.53889,-52.12708),(79.53774,-52.12388),(79.49130,-52.13010),(79.49245,-52.13330)