

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 10087 - L2 Version 3
Chandra X-Ray Center

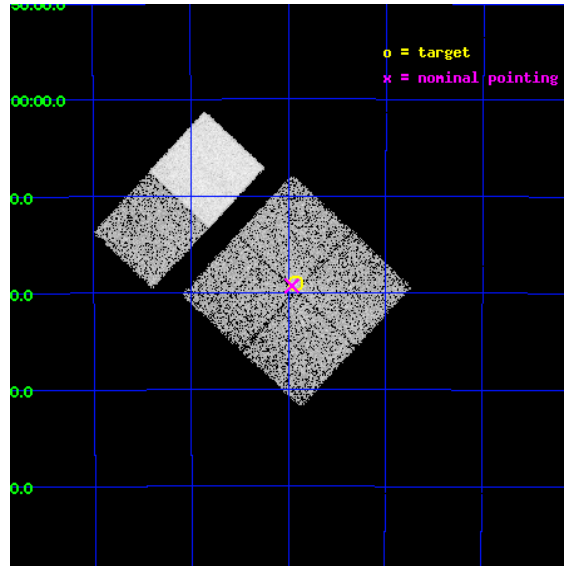
L2 Processing Date : Jun 11 2012

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1 Front

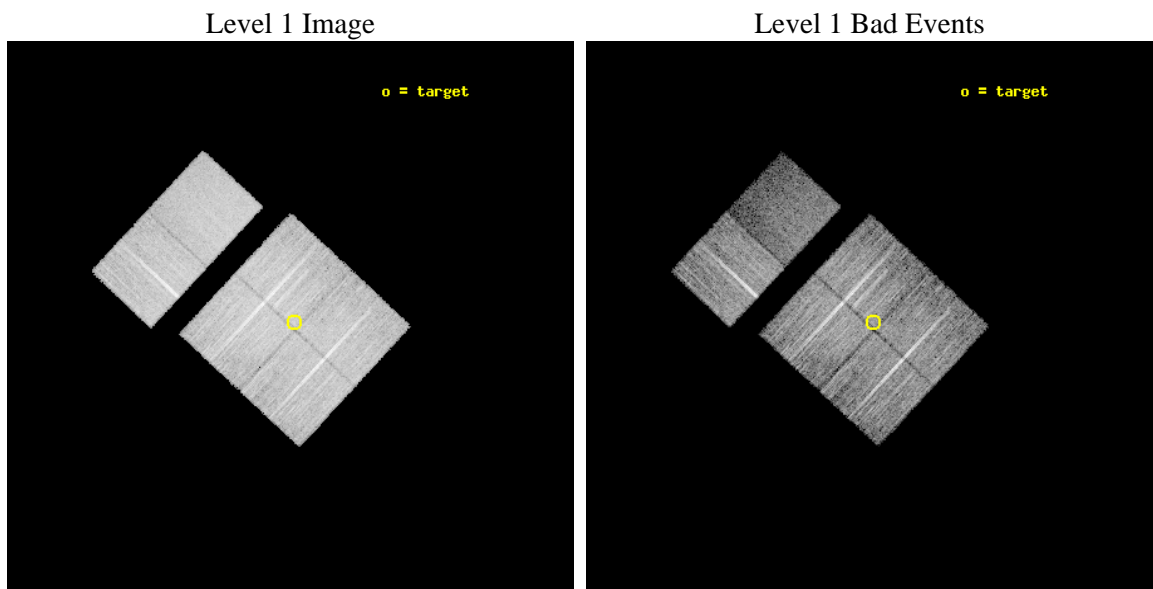
seq_num	501019	Sequence number
obs_id	10087	Observation id
title	New Pulsar Identifications of TeV Gamma-ray Sources	Proposal title
observer	Prof. Jules Halpern	Principal investigator
object	HESS J1634-472	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	248.980417	Observer's specified target RA [deg]
dec_targ	-47.317694	Observer's specified target Dec [deg]
ra_nom	248.9907686626	Nominal RA [deg]
dec_nom	-47.321657924647	Nominal Dec [deg]
roll_nom	313.03338246685	Nominal Roll [deg]
revision	3	Processing version of data
ontime	10156.799962223	Sum of GTIs [s]
livetime	10028.18844541	Livetime [s]
ontime0	10156.799962223	Sum of GTIs [s]
ontime1	10156.799962223	Sum of GTIs [s]
ontime2	10153.558962047	Sum of GTIs [s]
ontime3	10156.799962223	Sum of GTIs [s]
ontime6	10156.799962223	Sum of GTIs [s]
ontime7	10156.799962223	Sum of GTIs [s]
l2events	76006	Number of level 2 events



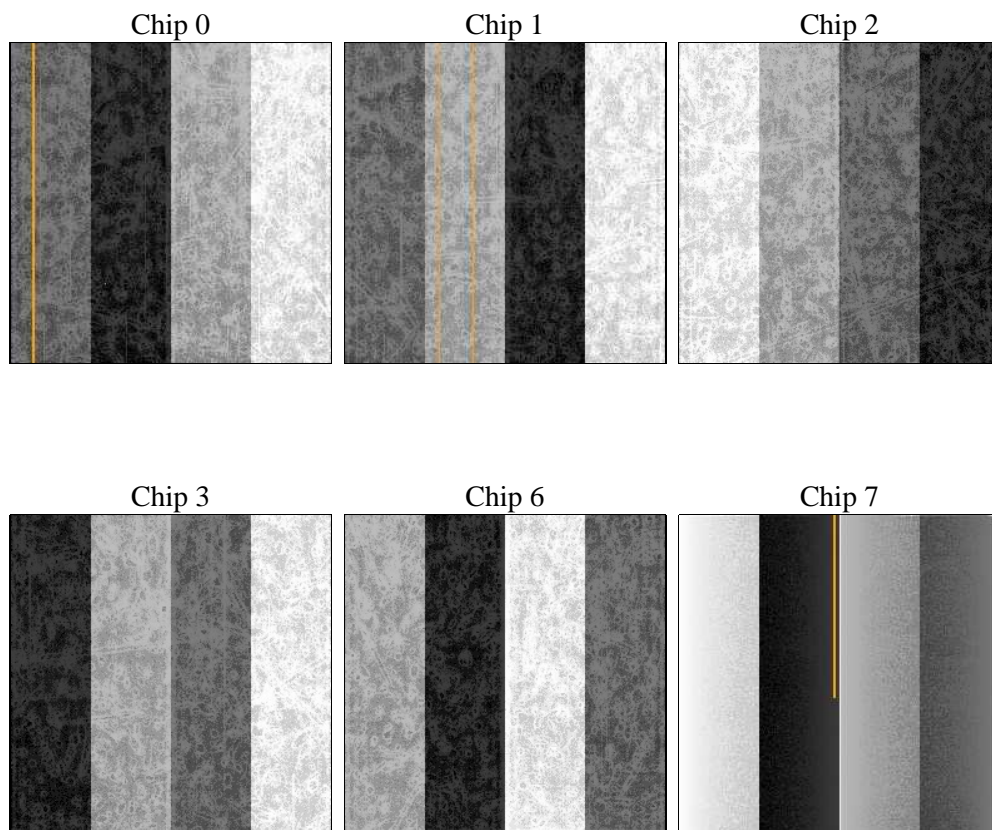
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	10156.799962223	Sum of GTIs [s]
caldsver	4.4.10	 	ontime0	10156.799962223	Sum of GTIs [s]
date	2012-06-11T13:30:20	Date and time of file creation	ontime1	10156.799962223	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	10153.558962047	Sum of GTIs [s]
			ontime3	10156.799962223	Sum of GTIs [s]
			ontime6	10156.799962223	Sum of GTIs [s]
			ontime7	10156.799962223	Sum of GTIs [s]
			l1events	506276	Number of level 1 events

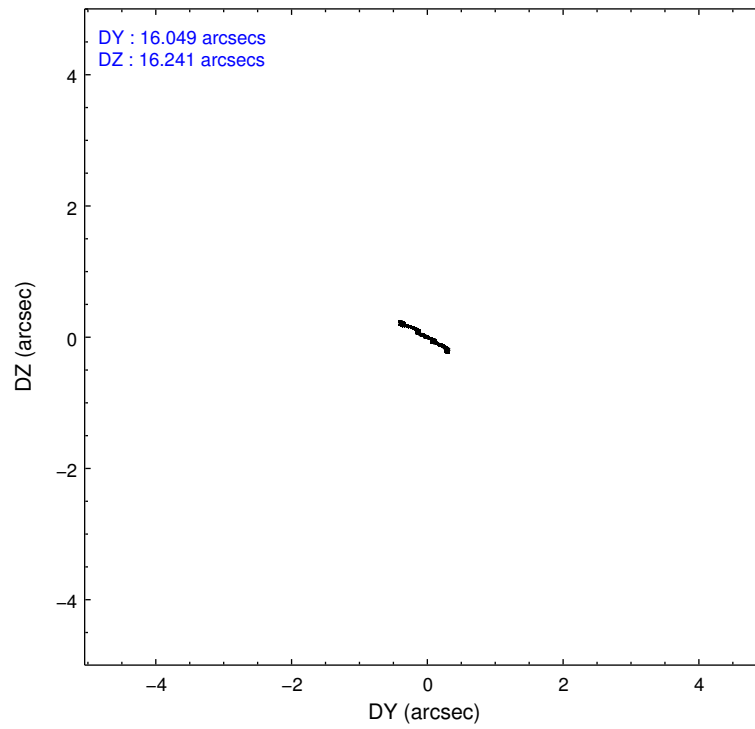
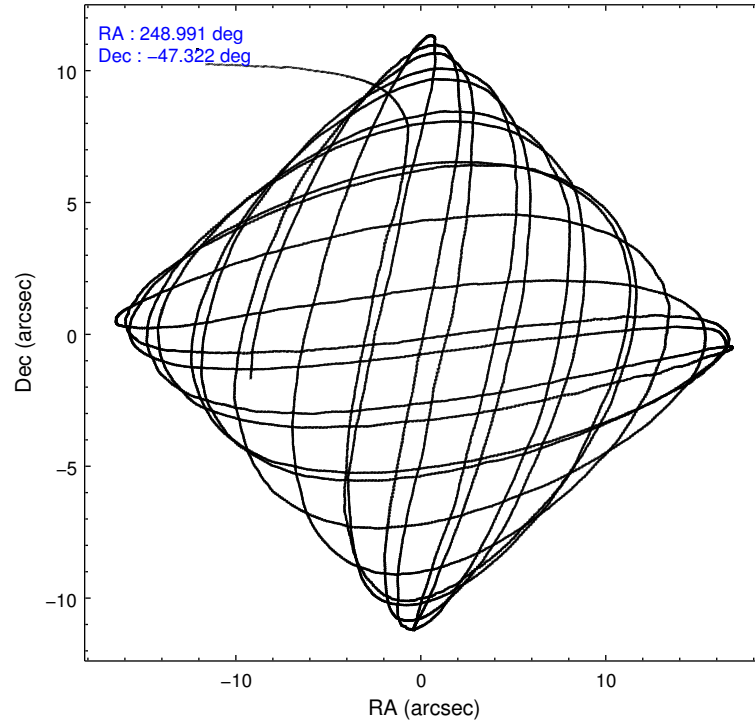
2.1.4 Events

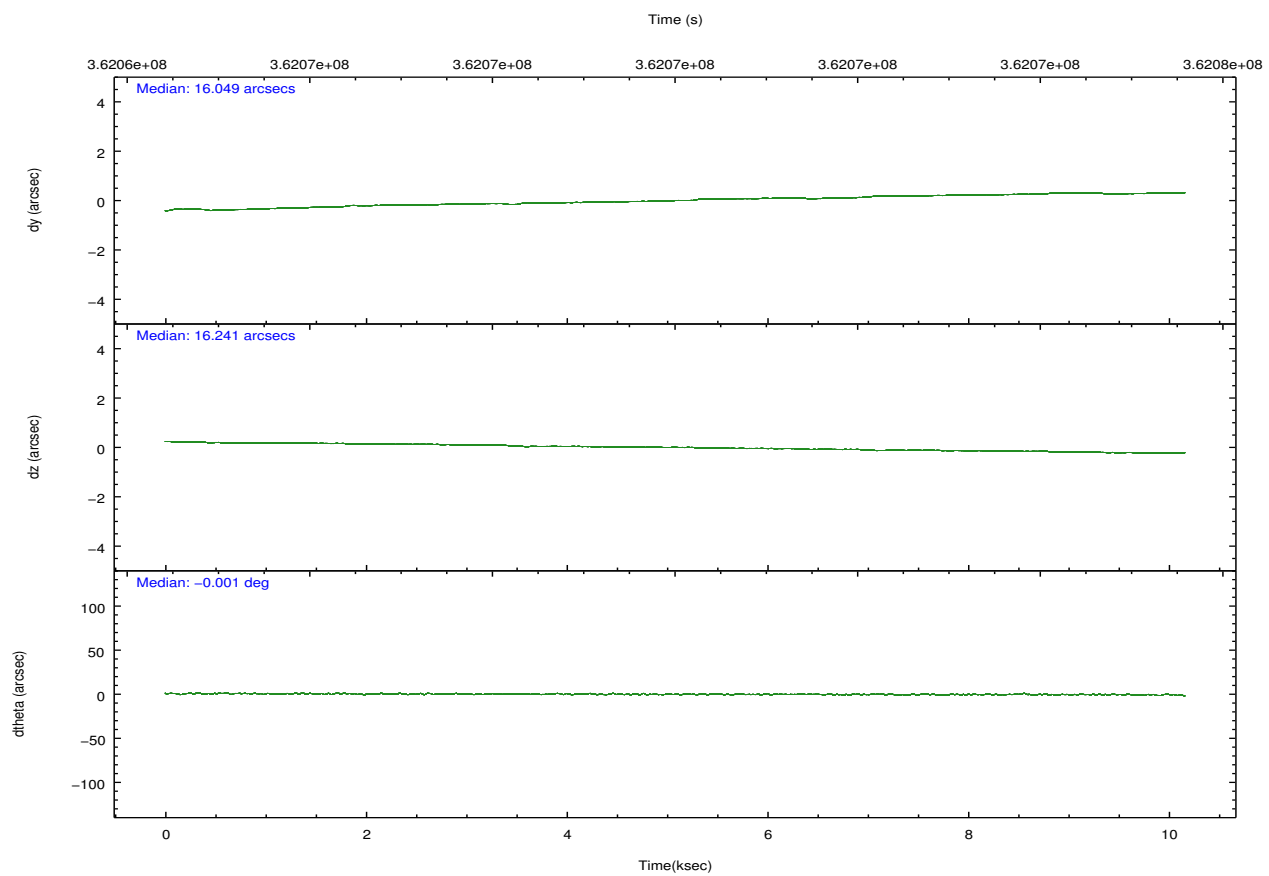
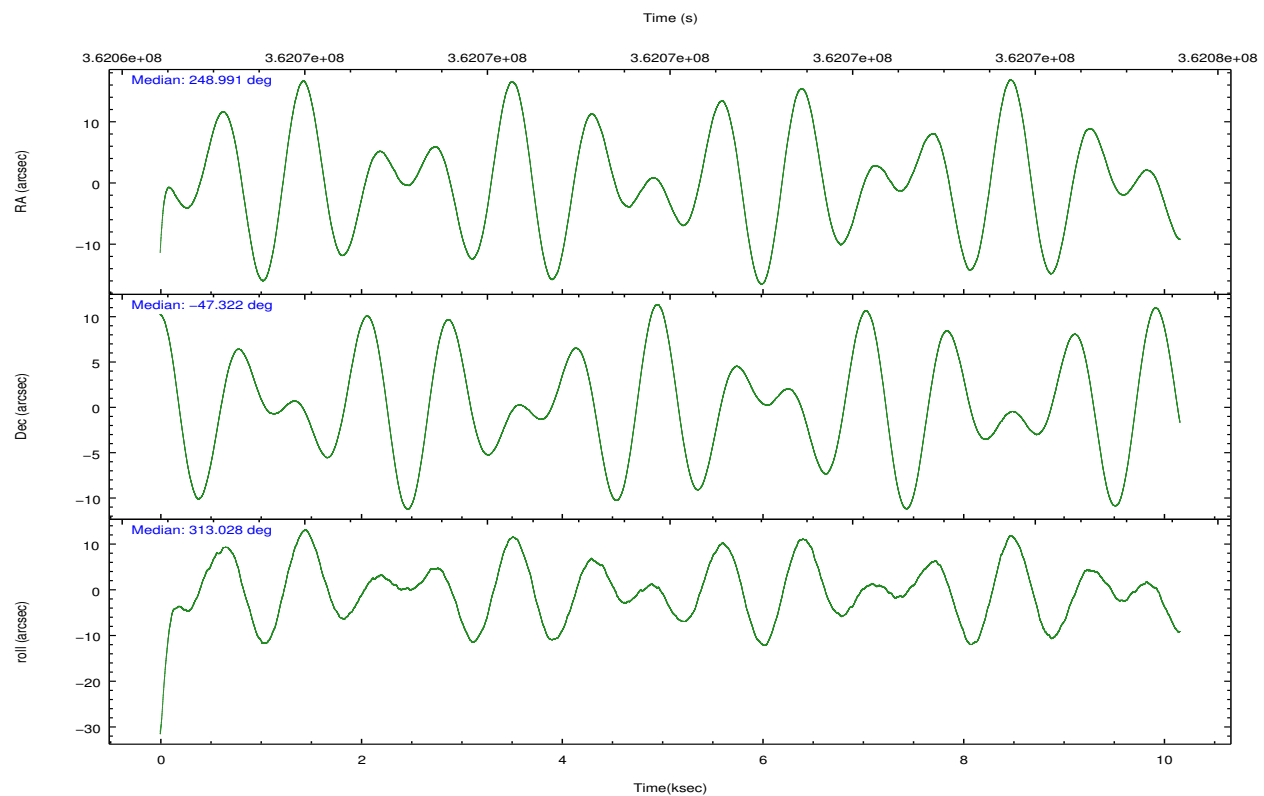
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	79841	78947	91134	85861	86559	83934	grade 0 events	3533	3585	3501	3474	3426	4378
rejected events	71024	69624	82427	77440	77668	43268		4%	4%	3%	4%	3%	5%
rejected %	88%	88%	90%	90%	89%	51%	grade 1 events	50	54	53	58	47	159
								0%	0%	0%	0%	0%	0%
							grade 2 events	2138	2064	2124	1781	1998	9227
								2%	2%	2%	2%	2%	10%
							grade 3 events	971	1030	913	895	917	3827
								1%	1%	1%	1%	1%	4%
							grade 4 events	872	1039	887	907	934	3904
								1%	1%	0%	1%	1%	4%
							grade 5 events	2524	2825	2341	2945	3027	8910
								3%	3%	2%	3%	3%	10%
							grade 6 events	1557	1852	1499	1592	1848	20421
								1%	2%	1%	1%	2%	24%
							grade 7 events	68196	66498	79816	74209	74362	33108
								85%	84%	87%	86%	85%	39%

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	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	248.951940	248.9907686626018	CCD I2 on	Y	Y
[deg] Pointing Dec	-47.313770	-47.3216579246467	CCD I3 on	Y	Y
[deg] Pointing Roll	312.796164	313.0333824668465	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O2	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	362065083.184000	362063883.08869	CCD S5 on	N	N
Observation start date	2009-06-22T13:36:57	2009-06-22T13:18:03	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	362075083.184000	362075224.20176	On-chip summing requested	N	N
Observation end date	2009-06-22T16:23:37	2009-06-22T16:27:04	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



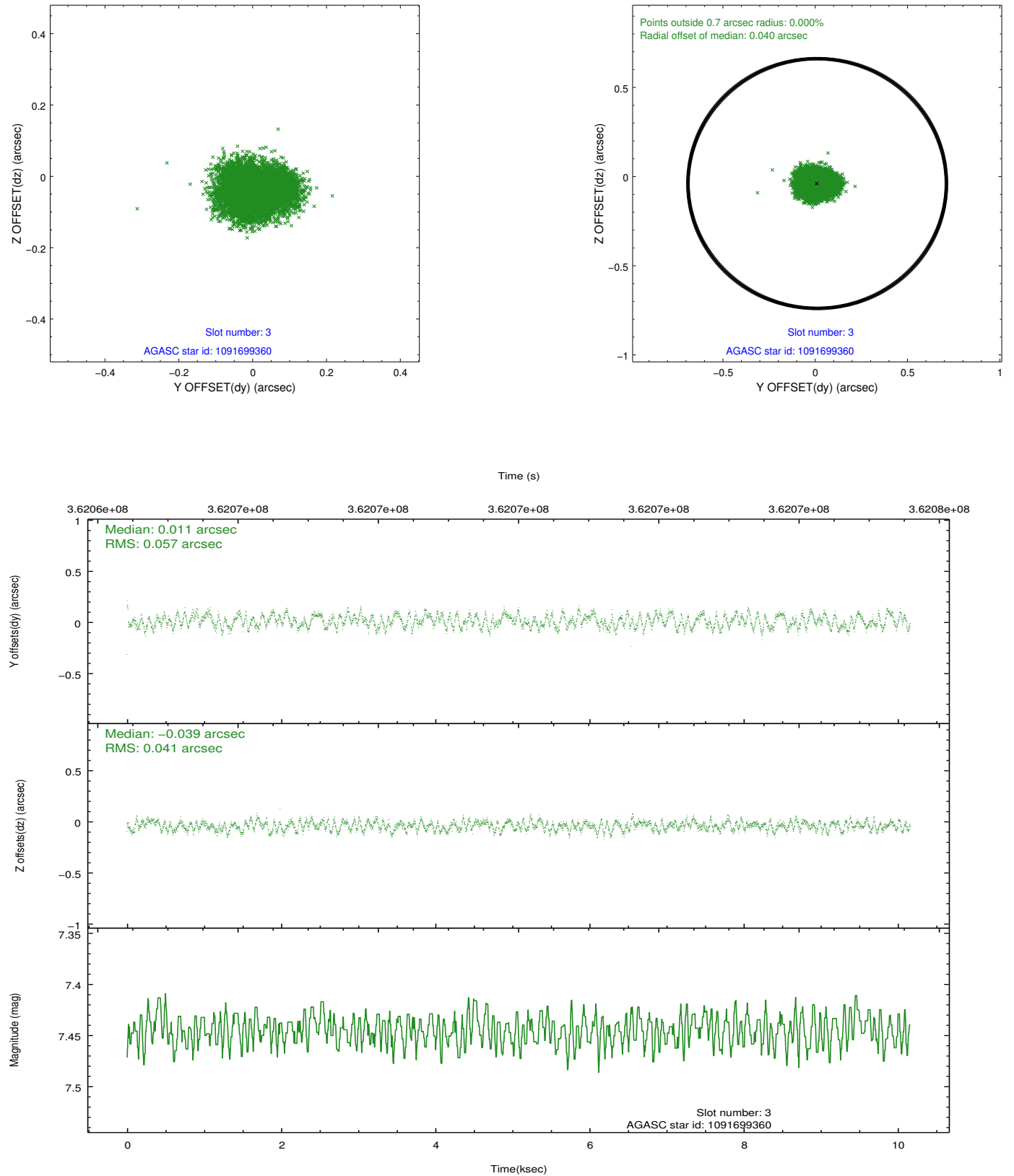


Slot Statistics

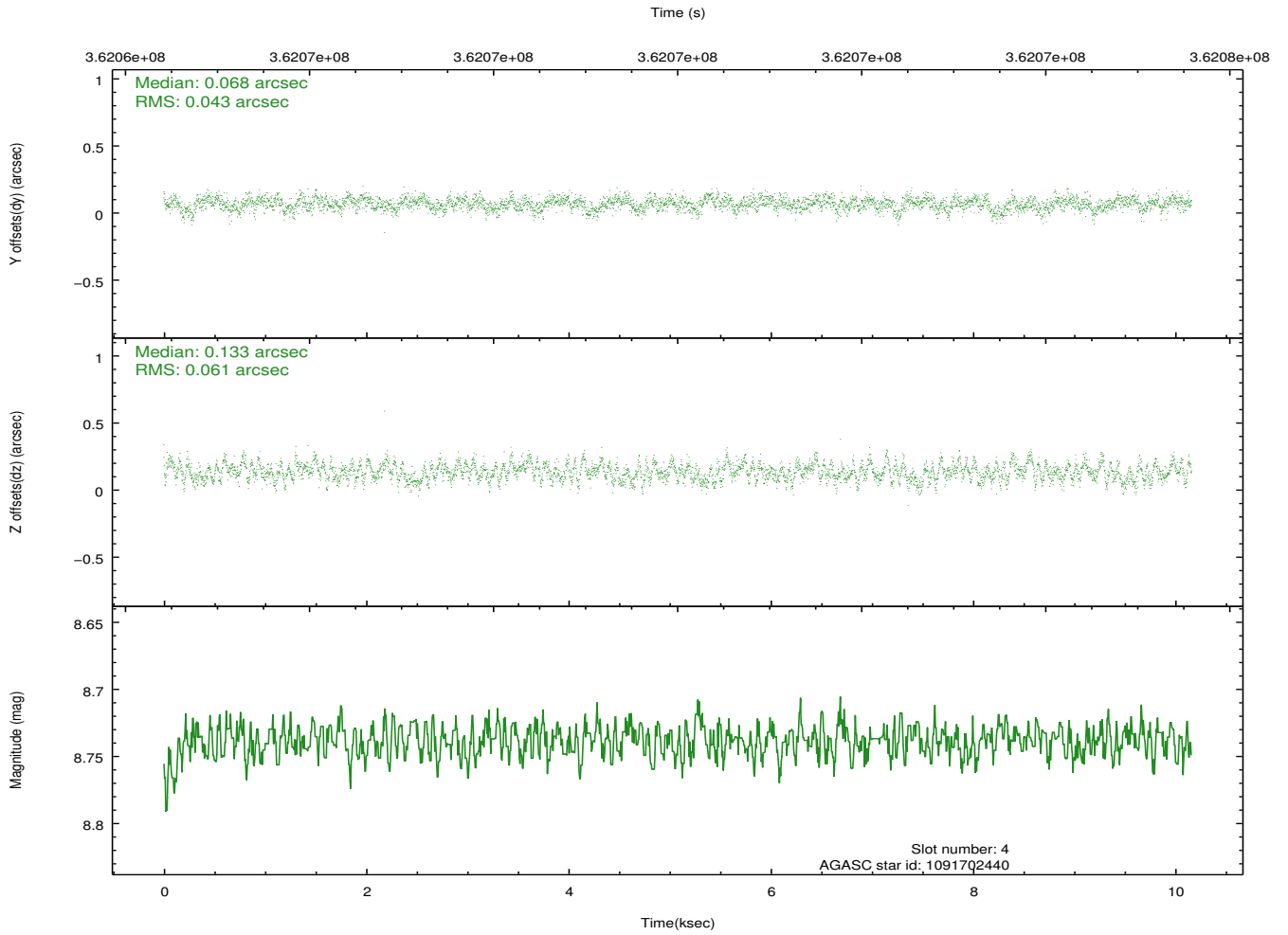
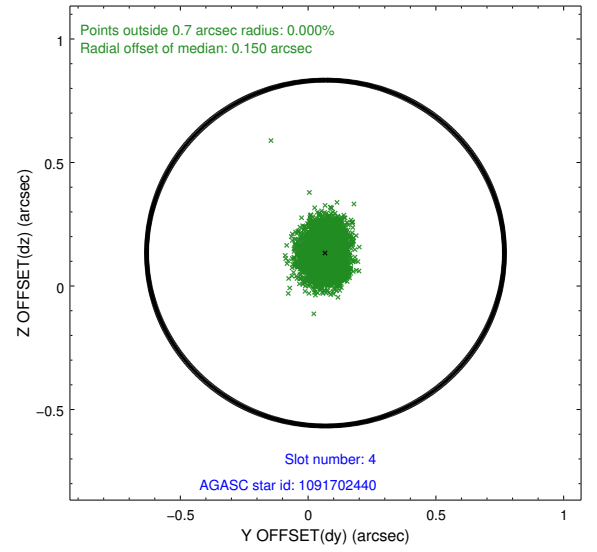
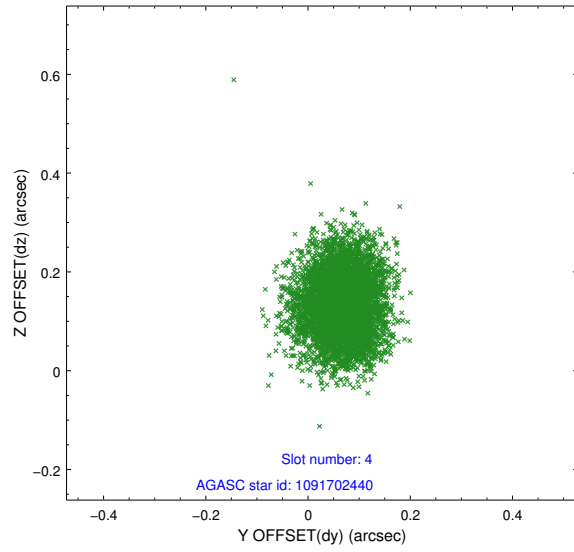
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.02	2479	0.059	-0.045	0.007	0.011	0.000000	0.000000	923.43	-839.93
1	FID	ACIS-I-5	7.01	2479	-0.221	0.055	0.007	0.011	0.000000	0.000000	-1824.64	1057.44
2	FID	ACIS-I-6	7.02	2479	0.070	0.061	0.009	0.014	0.000000	0.000000	388.45	1702.51
3	GUIDE	1091699360	7.44	4957	0.011	-0.039	0.077	0.113	248.660725	-47.004364	-1301.60	231.16
4	GUIDE	1091702440	8.74	4957	0.068	0.133	0.080	0.129	248.295809	-47.683380	-98.55	-2075.35
5	GUIDE	1091705016	7.81	4957	-0.112	-0.223	0.054	0.085	249.888030	-47.558250	2201.13	1061.14
6	GUIDE	1091705224	9.21	4951	-0.012	0.028	0.085	0.140	248.613211	-47.940846	1103.98	-2134.10
7	GUIDE	1091709768	7.71	4953	0.043	0.104	0.057	0.093	249.435228	-47.706899	1837.54	-105.09

2.4 Star Slots

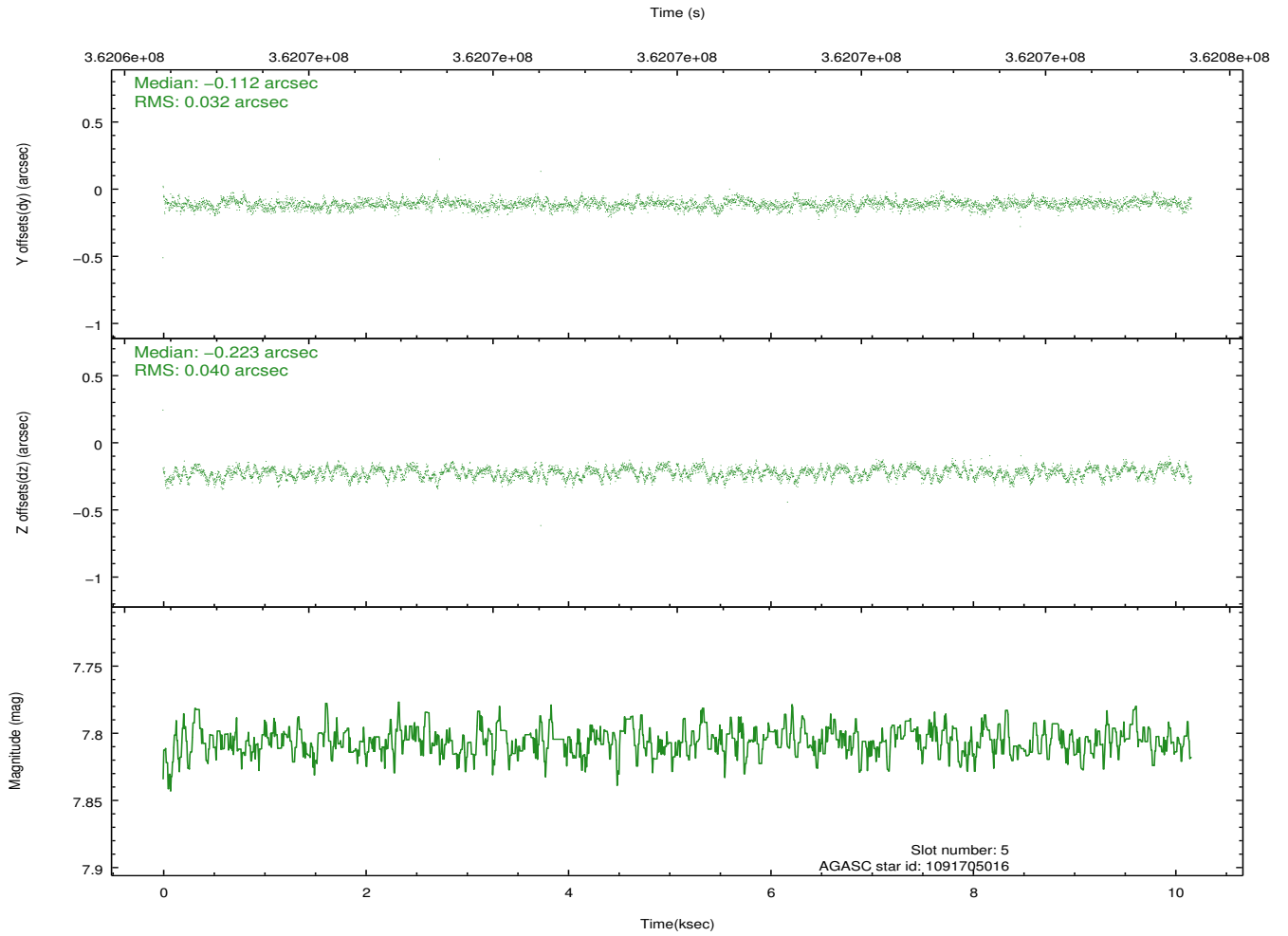
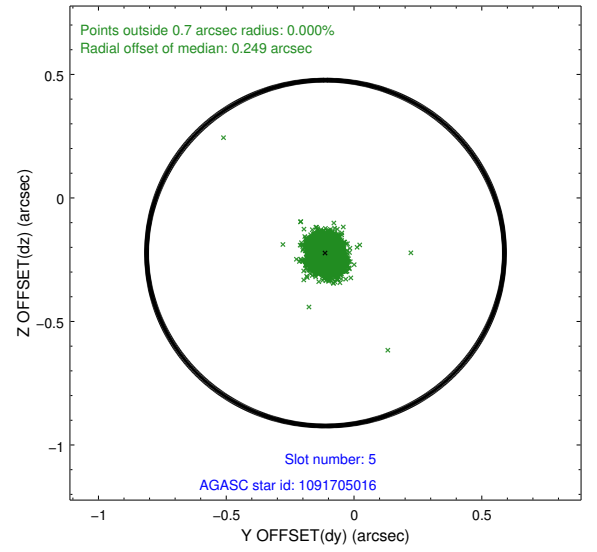
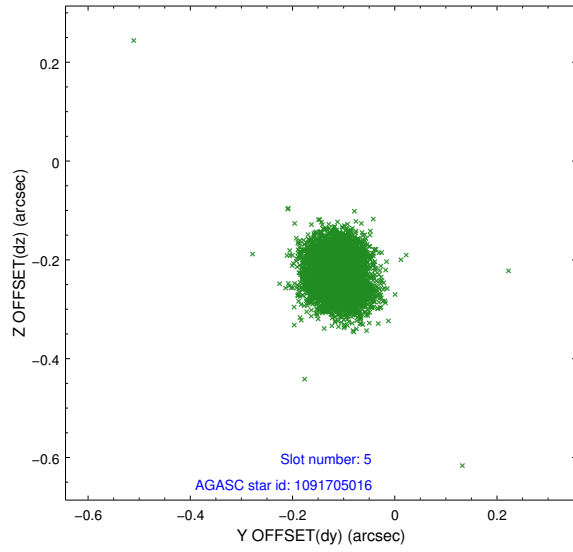
2.4.1 Slot 3



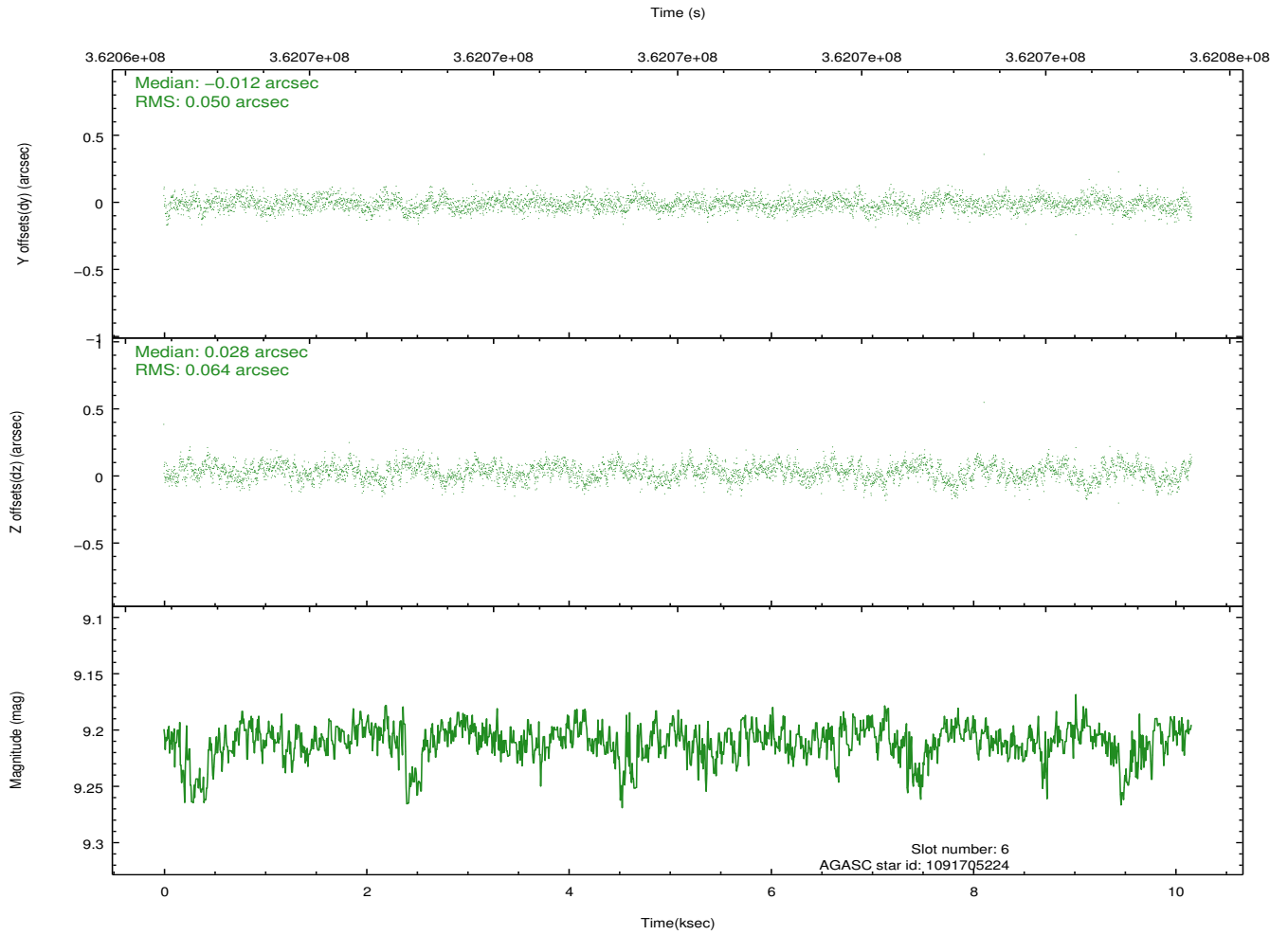
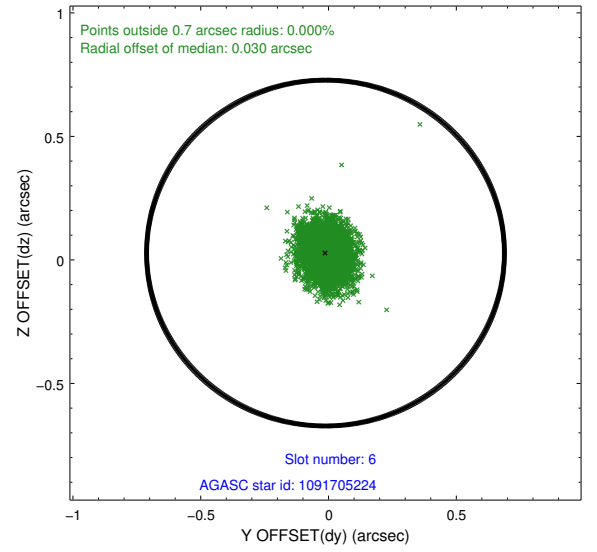
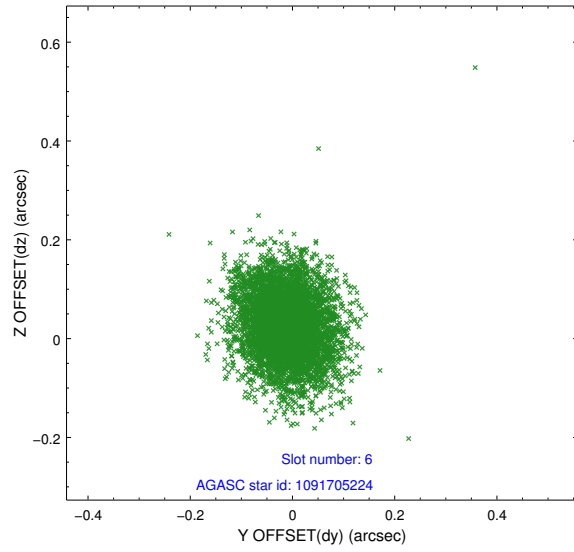
2.4.2 Slot 4



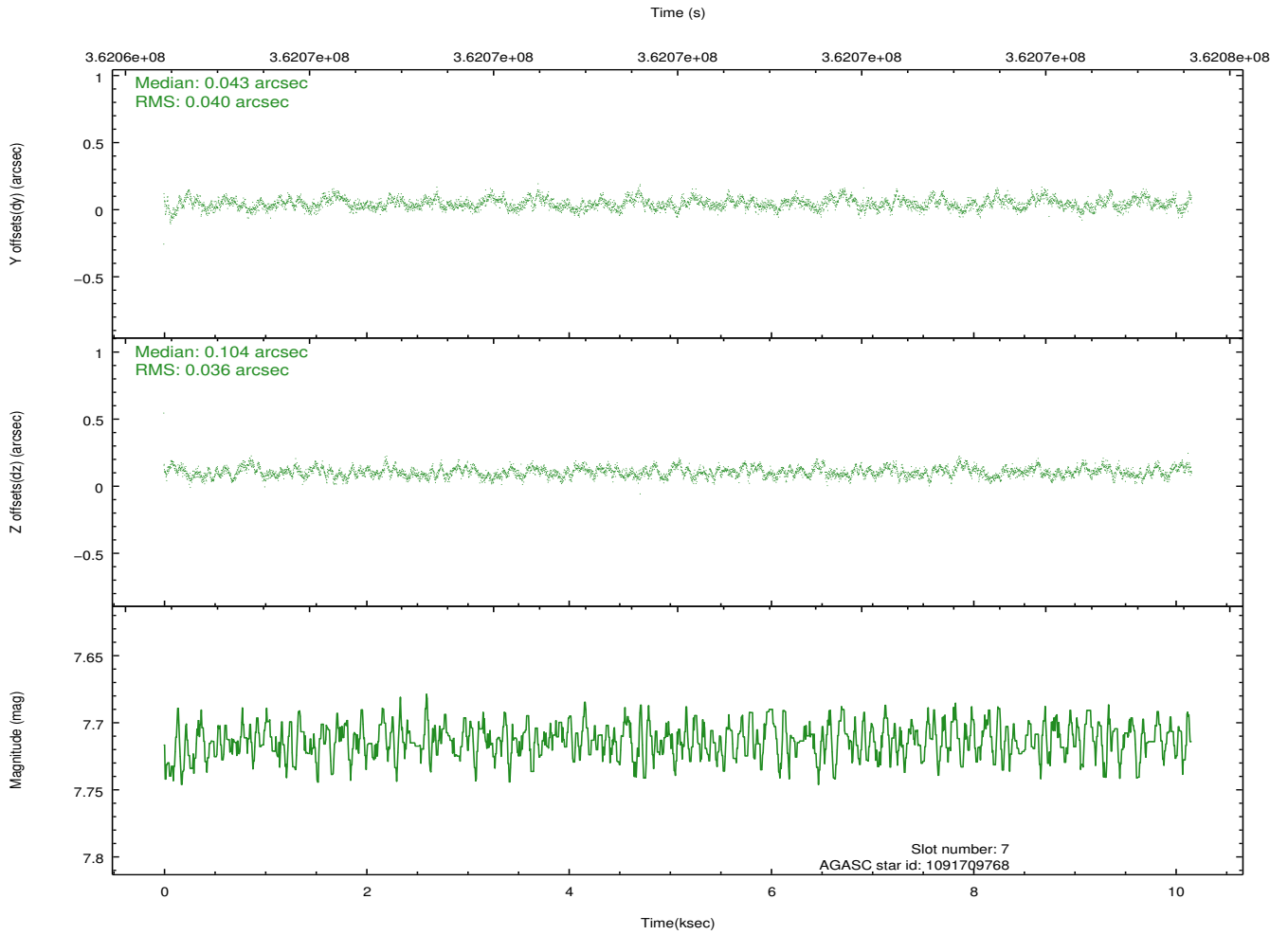
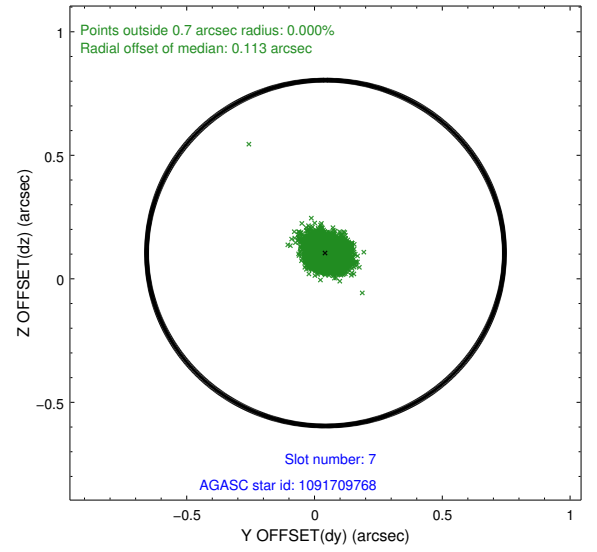
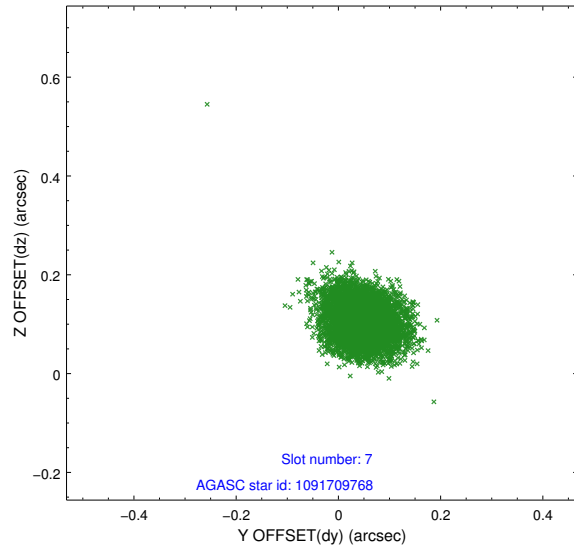
2.4.3 Slot 5



2.4.4 Slot 6

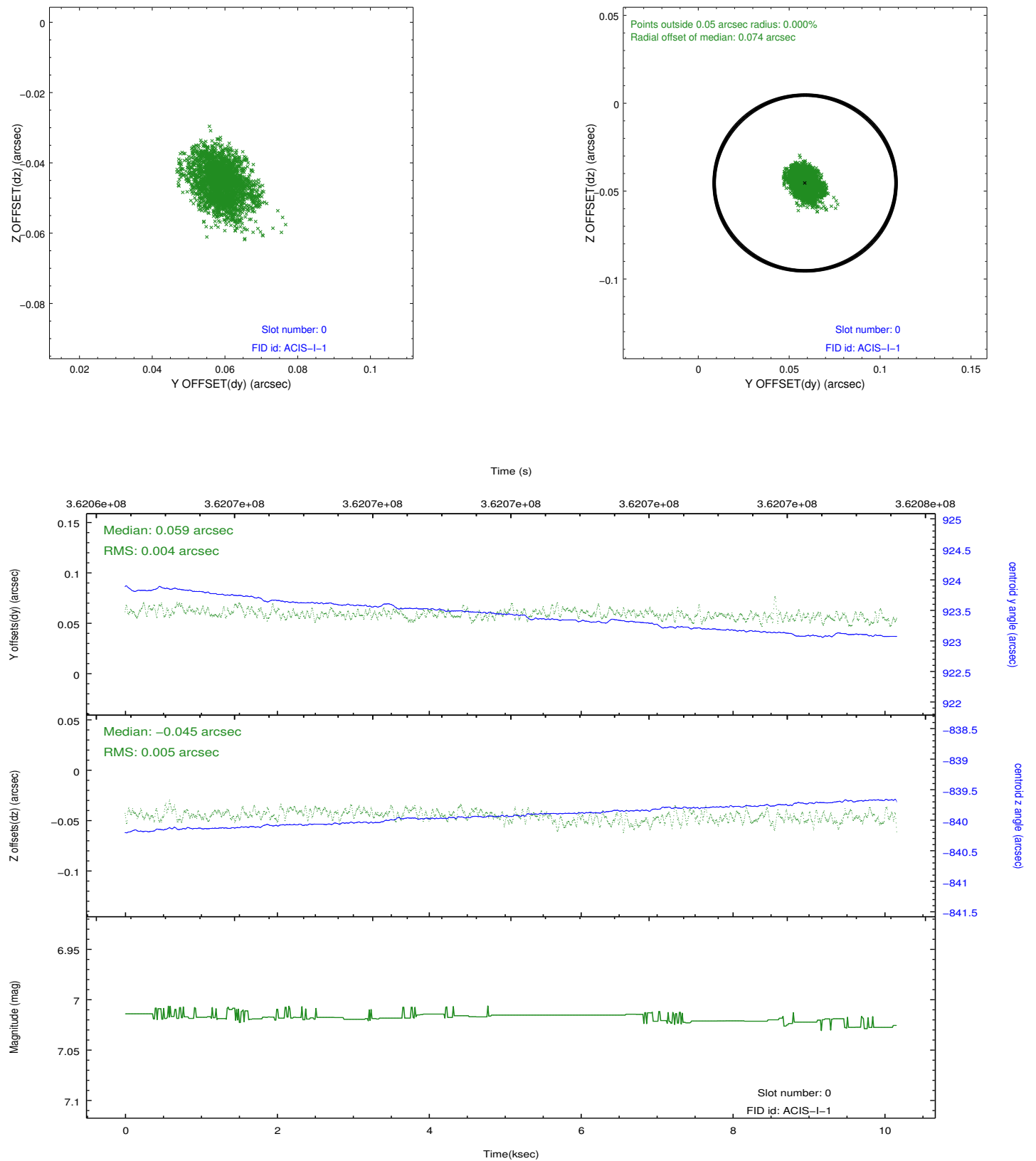


2.4.5 Slot 7

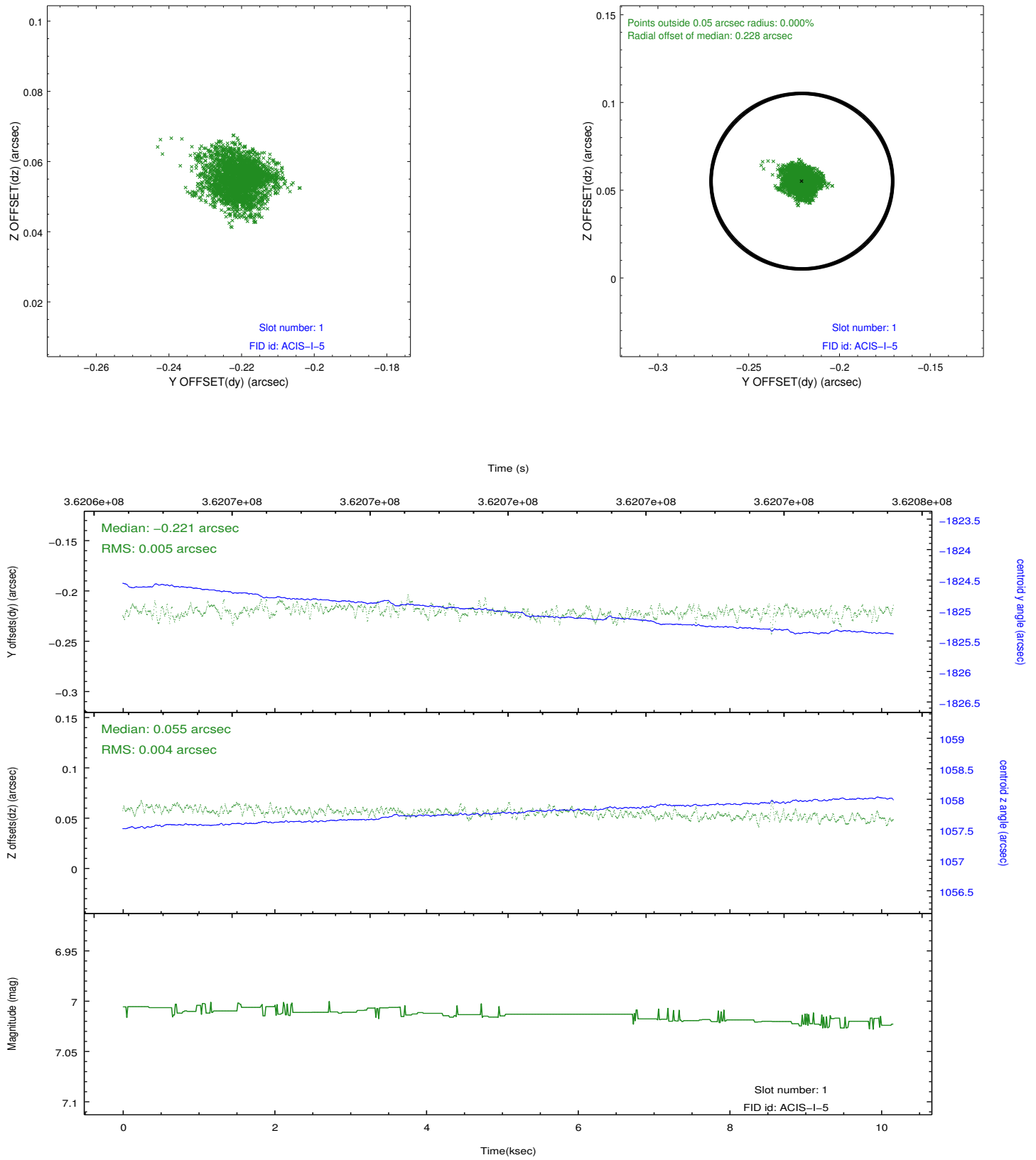


2.5 FID Slots

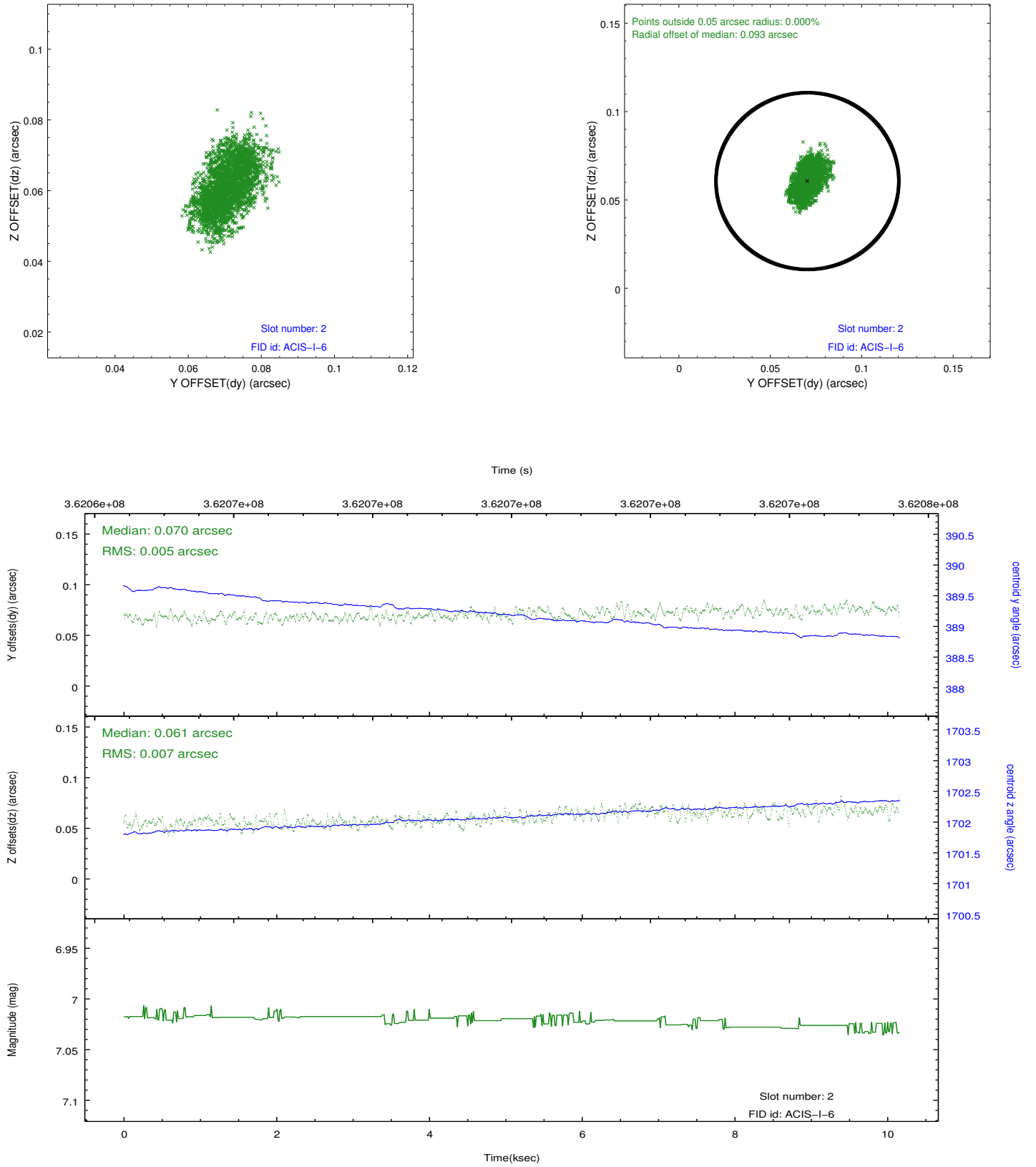
2.5.1 Slot 0



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)	2012.06.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.1567999

A.2 Comments

A spatial region of the original bias map for CCD = 0 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 = 0 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:
(249.07662, -47.46178), (249.08031, -47.45945), (249.03143, -47.42410), (249.02939, -47.42762)