

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 9854 - L2 Version 3
Chandra X-Ray Center

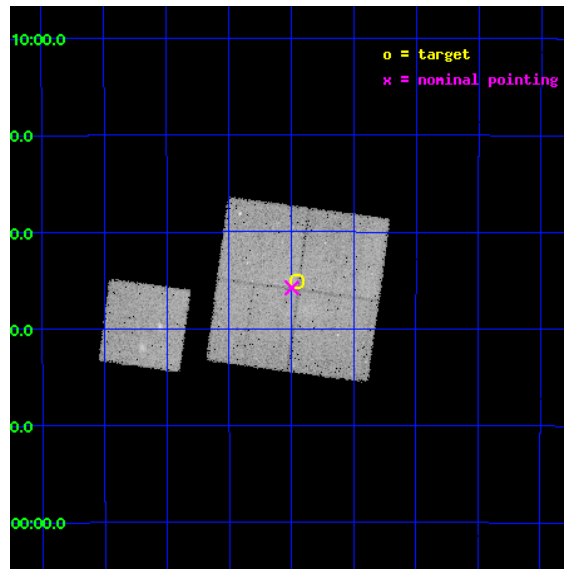
L2 Processing Date : May 21 2012

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1 Front

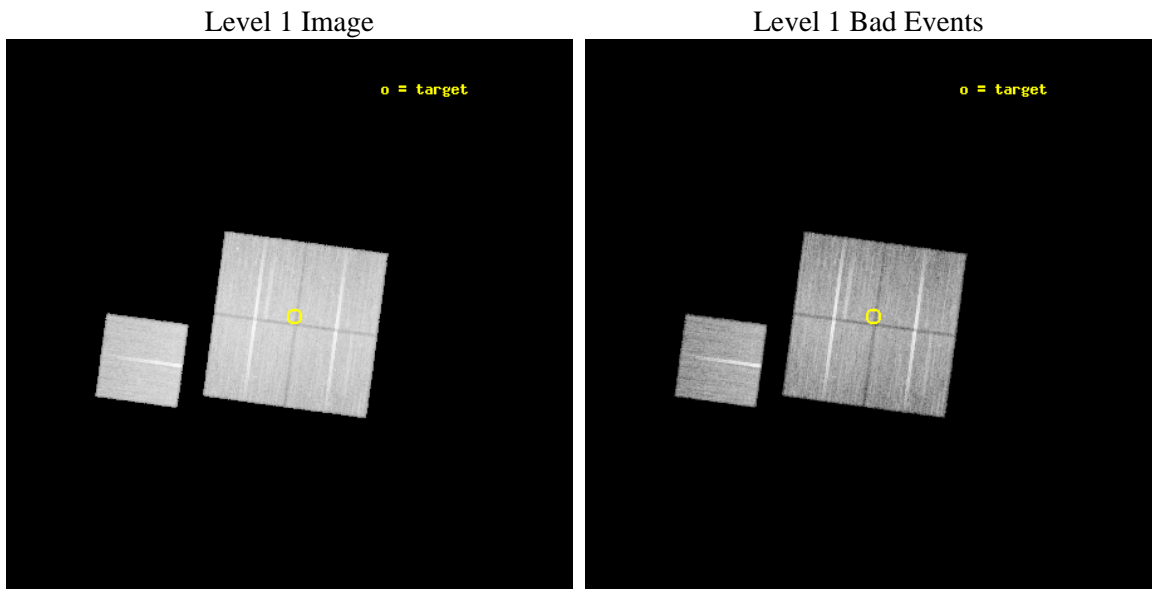
seq_num	900837	Sequence number
obs_id	9854	Observation id
title	THE ORIGIN OF THE GALACTIC RIDGE X-RAY EMISSION	Proposal title
observer	Dr. Mikhail Revnivtsev	Principal investigator
object	1.5deg_window	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	267.86375	Observer's specified target RA [deg]
dec_targ	-29.58475	Observer's specified target Dec [deg]
ra_nom	267.87403966852	Nominal RA [deg]
dec_nom	-29.596303415268	Nominal Dec [deg]
roll_nom	277.71950865839	Nominal Roll [deg]
revision	3	Processing version of data
ontime	23082.55917722	Sum of GTIs [s]
livetime	22780.968548437	Livetime [s]
ontime0	23082.559167266	Sum of GTIs [s]
ontime1	23082.55917722	Sum of GTIs [s]
ontime2	23082.55917716	Sum of GTIs [s]
ontime3	23076.277146757	Sum of GTIs [s]
ontime6	23085.70017755	Sum of GTIs [s]
l2events	120603	Number of level 2 events



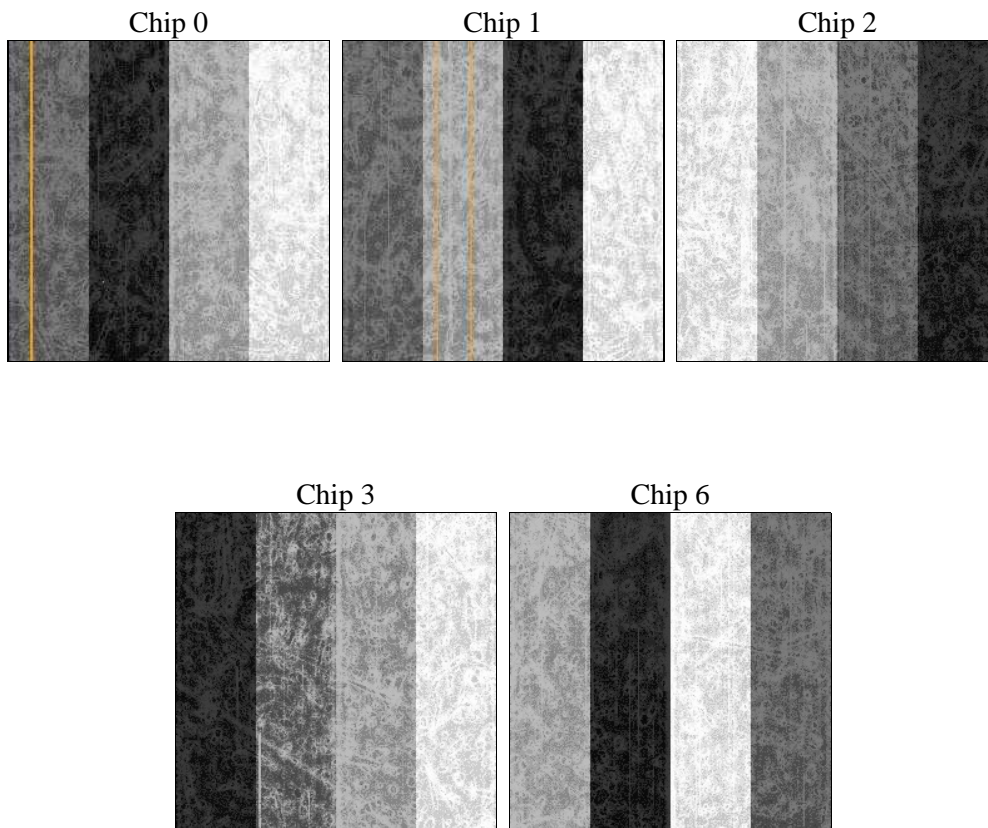
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23043.137000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	23082.55917722	Sum of GTIs [s]
caldsver	4.4.9	 	ontime0	23082.559167266	Sum of GTIs [s]
date	2012-05-21T12:56:55	Date and time of file creation	ontime1	23082.55917722	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	23082.55917716	Sum of GTIs [s]
			ontime3	23076.277146757	Sum of GTIs [s]
			ontime6	23085.70017755	Sum of GTIs [s]
			l1events	963342	Number of level 1 events

2.1.4 Events

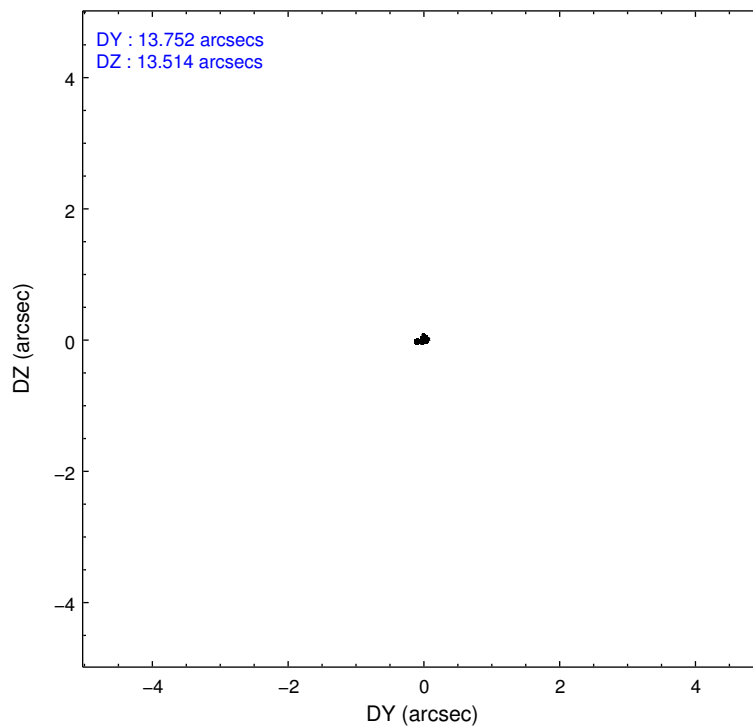
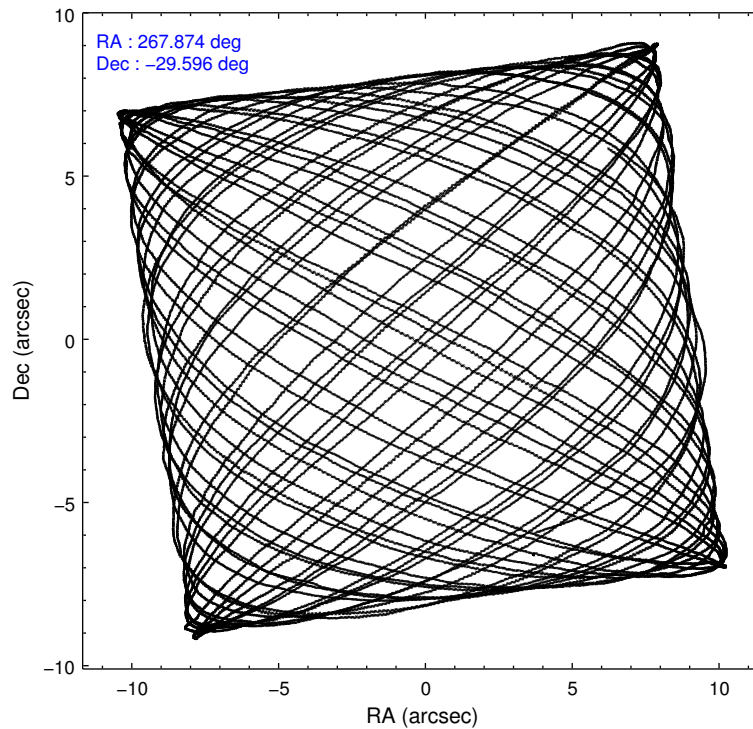
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	182933	181845	205428	197457	195679
rejected events	154941	152570	177026	170749	168897
rejected %	84%	83%	86%	86%	86%

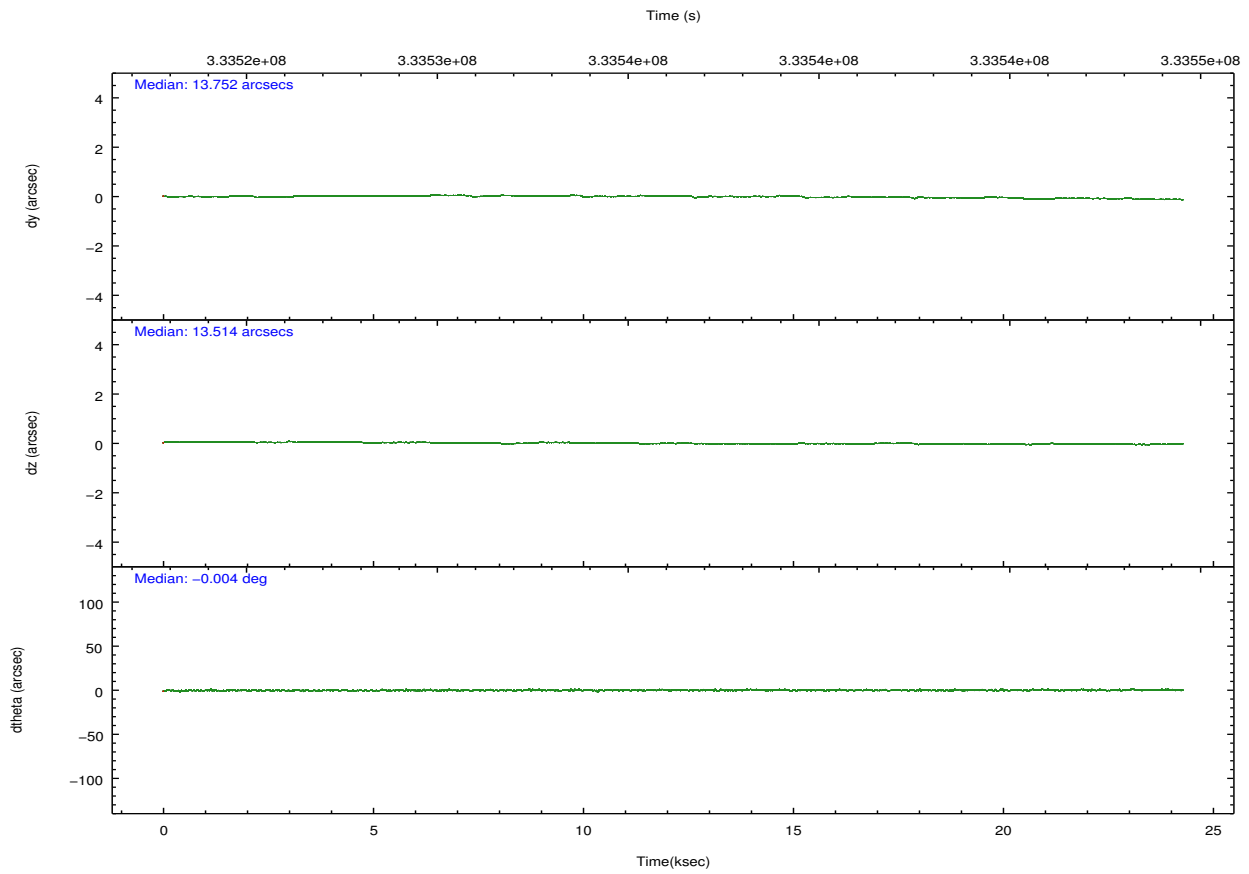
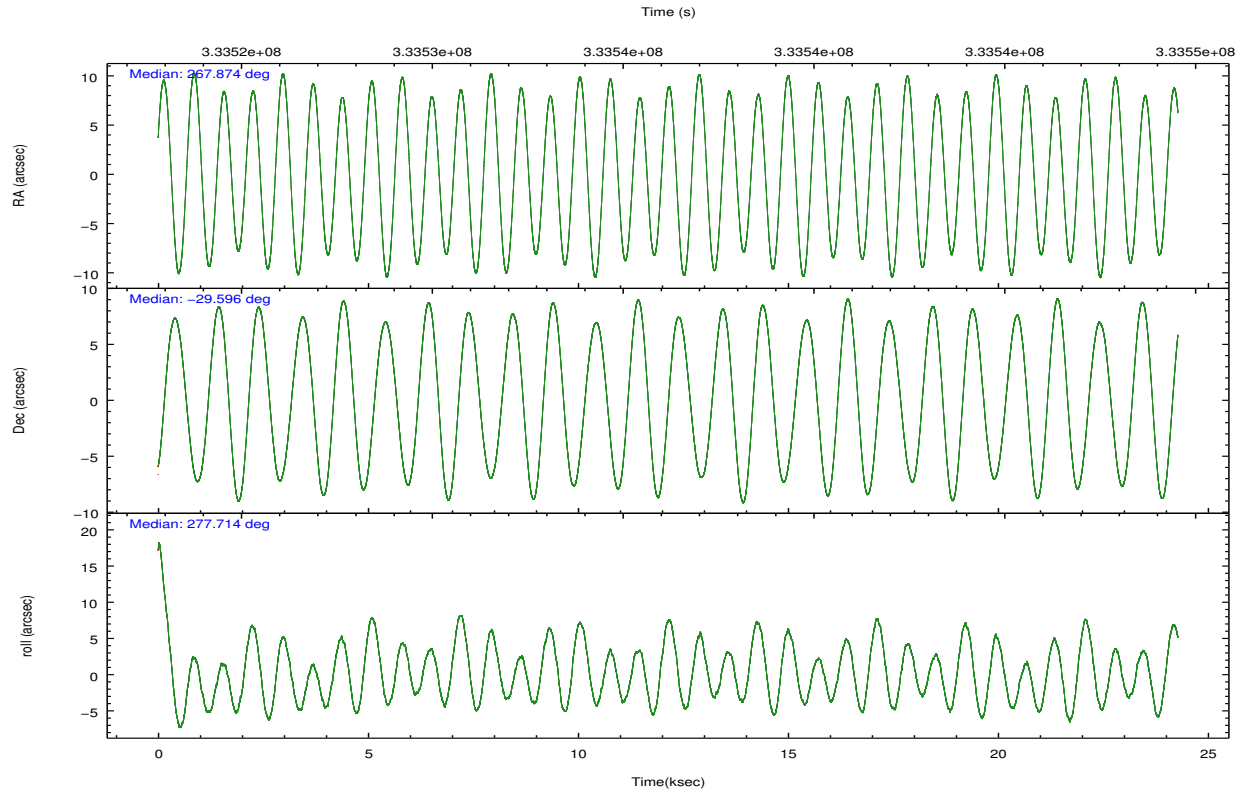
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	14108	14464	14982	13636	12792
	7%	7%	7%	6%	6%
grade 1 events	141	126	174	140	126
	0%	0%	0%	0%	0%
grade 2 events	5445	5511	5277	4774	5011
	2%	3%	2%	2%	2%
grade 3 events	2327	2520	2166	2261	2389
	1%	1%	1%	1%	1%
grade 4 events	2280	2393	2305	2241	2257
	1%	1%	1%	1%	1%
grade 5 events	6739	7446	6321	8032	7788
	3%	4%	3%	4%	3%
grade 6 events	3839	4394	3681	3804	4337
	2%	2%	1%	1%	2%
grade 7 events	148054	144991	170522	162569	160979
	80%	79%	83%	82%	82%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	267.854570	267.8740396685231	CCD I2 on	Y	Y
[deg] Pointing Dec	-29.574613	-29.59630341526787	CCD I3 on	Y	Y
[deg] Pointing Roll	277.501208	277.7195086583934	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	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	333525263.184000	333523809.06654	CCD S5 on	N	N
Observation start date	2008-07-27T05:53:18	2008-07-27T05:30:09	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	333548306.184000	333548543.34275	On-chip summing requested	N	N
Observation end date	2008-07-27T12:17:21	2008-07-27T12:22:23	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



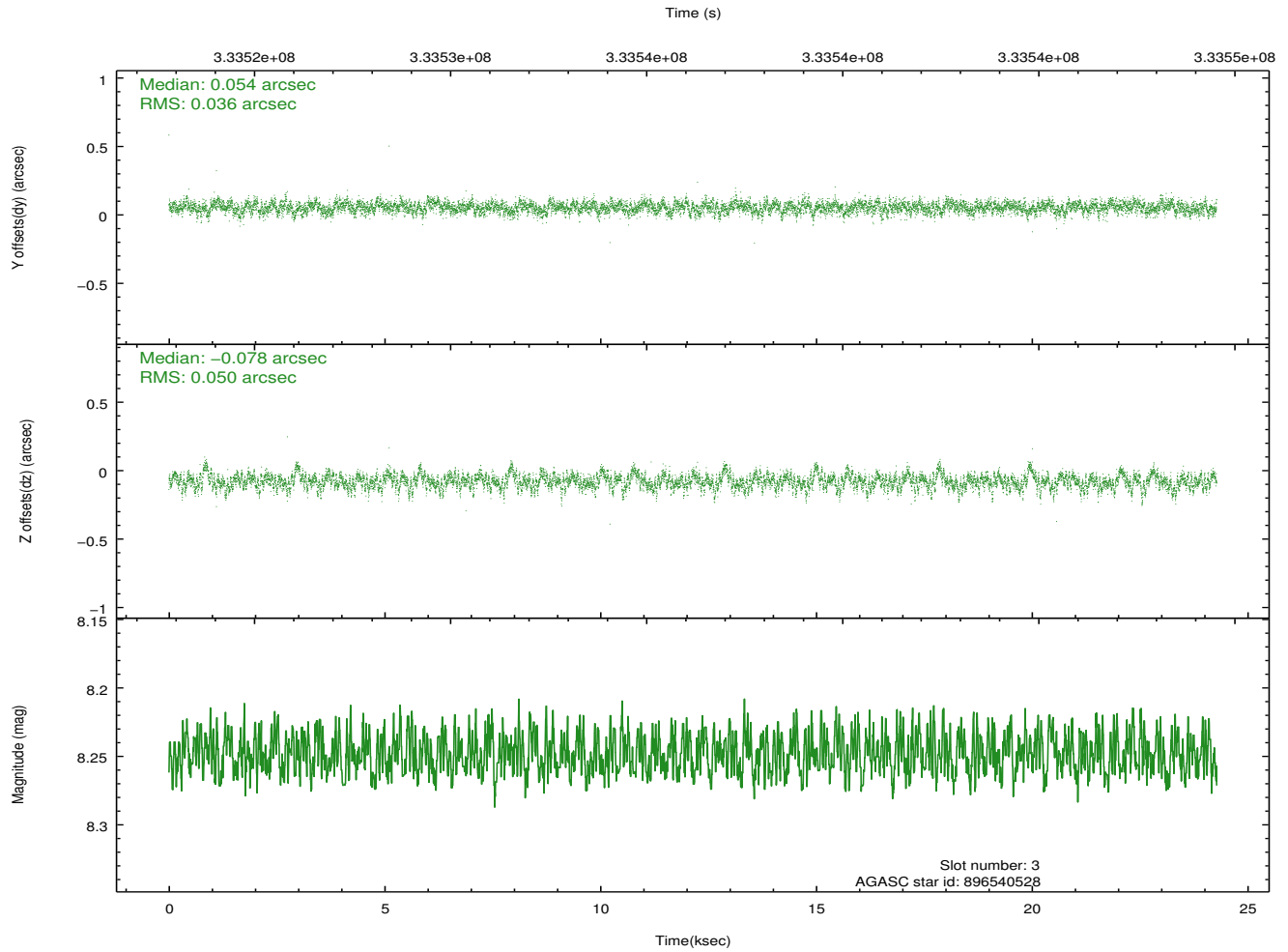
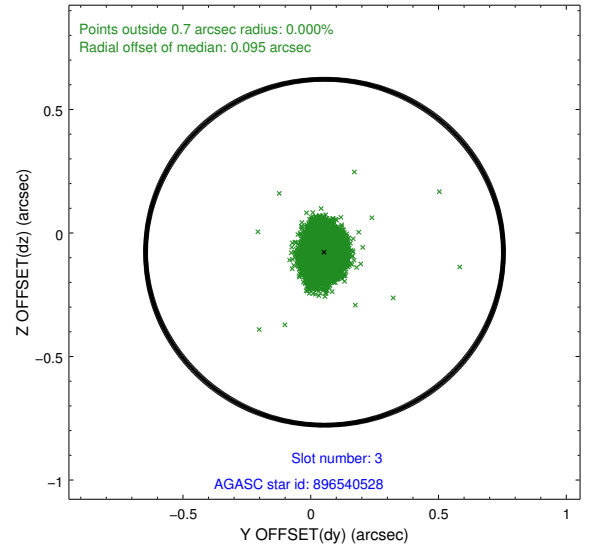
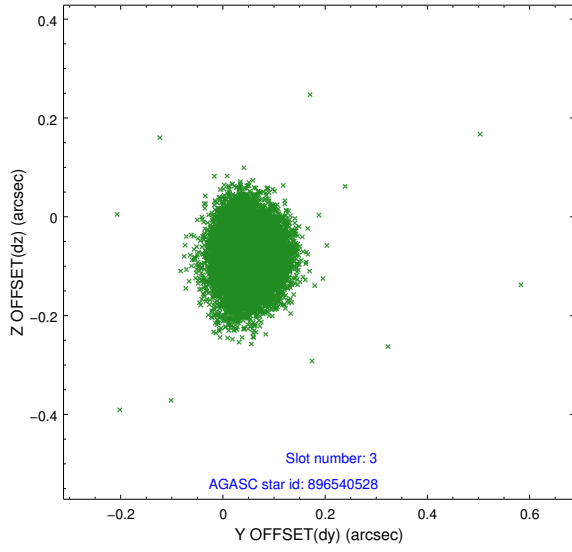


Slot Statistics

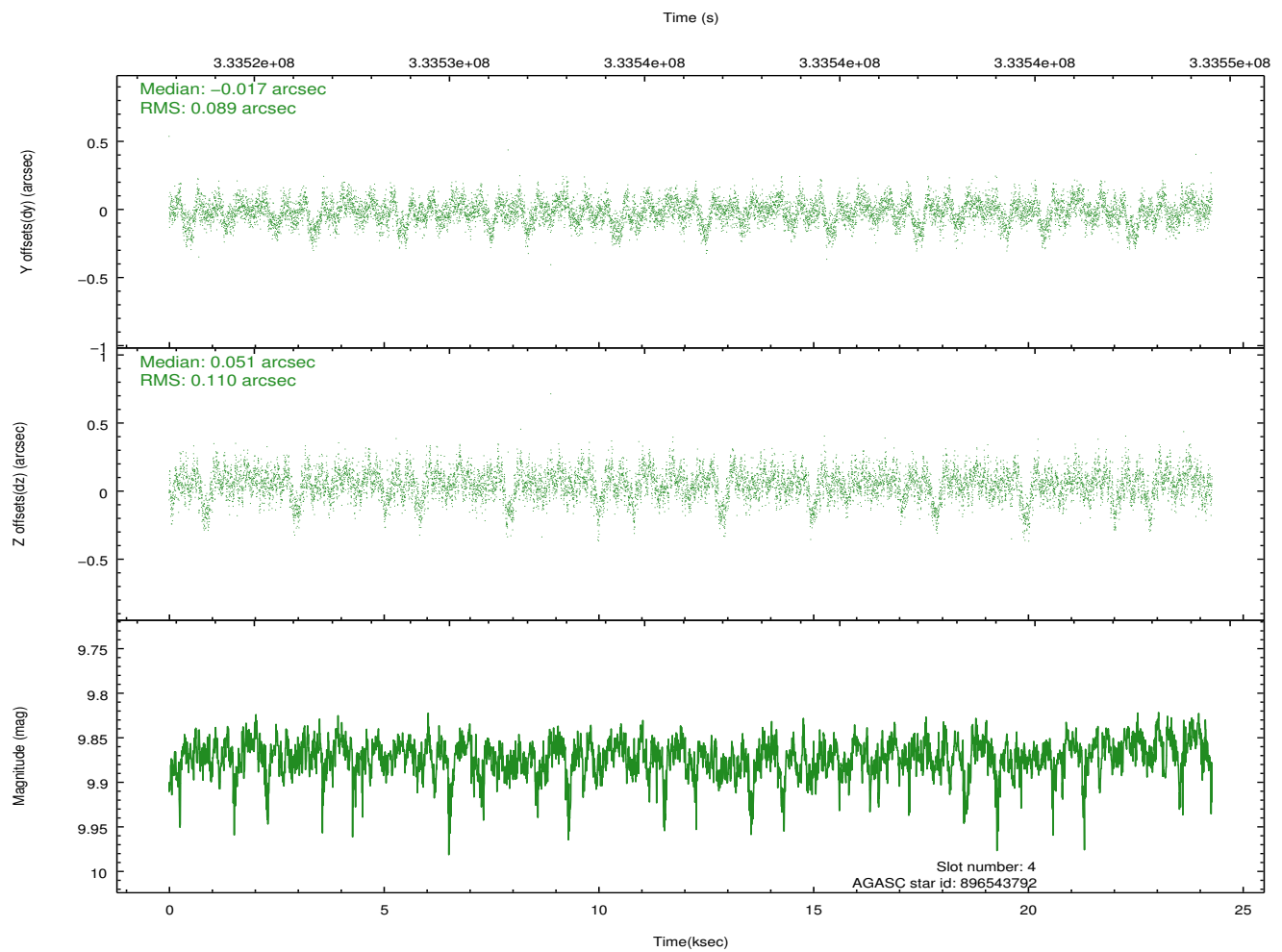
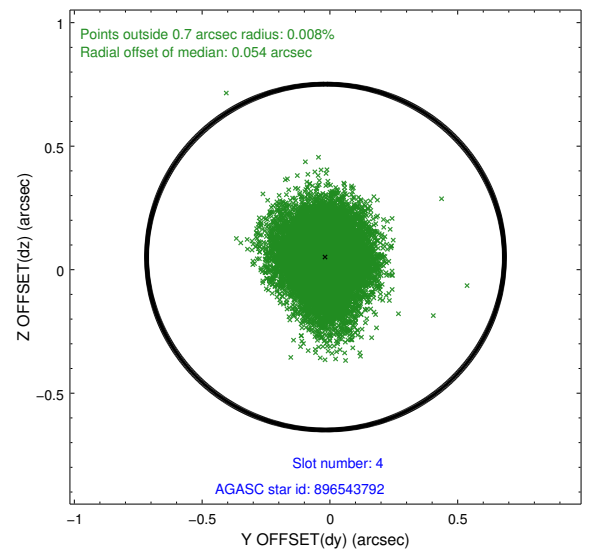
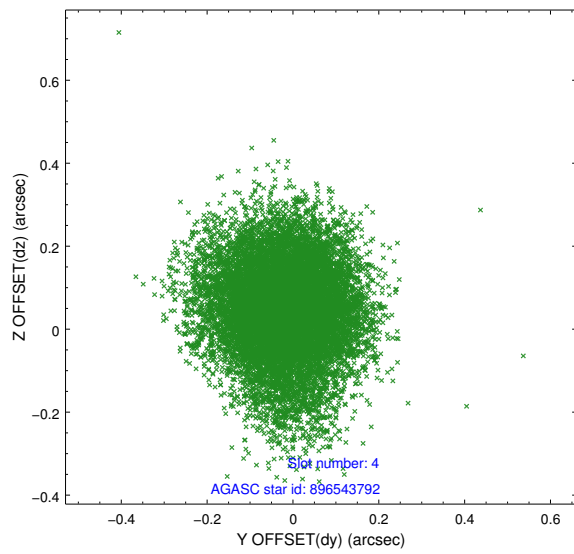
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.06	5923	0.054	0.008	0.007	0.012	0.000000	0.000000	925.85	-837.03
1	FID	ACIS-I-2	6.96	5921	-0.050	-0.053	0.009	0.015	0.000000	0.000000	-768.28	-843.67
2	FID	ACIS-I-5	7.03	5923	-0.096	0.117	0.007	0.012	0.000000	0.000000	-1822.71	1060.38
3	GUIDE	896540528	8.25	11844	0.054	-0.078	0.063	0.107	267.368305	-29.314773	-1122.86	-1391.42
4	GUIDE	896543792	9.87	11829	-0.017	0.051	0.150	0.245	267.148052	-29.957989	1087.82	-2365.77
5	GUIDE	898247688	8.67	11832	-0.156	0.137	0.101	0.167	268.426687	-29.012154	-1768.00	2049.41
6	GUIDE	898248800	8.23	11845	-0.055	-0.133	0.060	0.094	267.977609	-29.931731	1325.03	212.94
7	GUIDE	967053960	9.24	11832	0.173	0.030	0.088	0.145	268.185736	-30.091336	1980.96	779.98

2.4 Star Slots

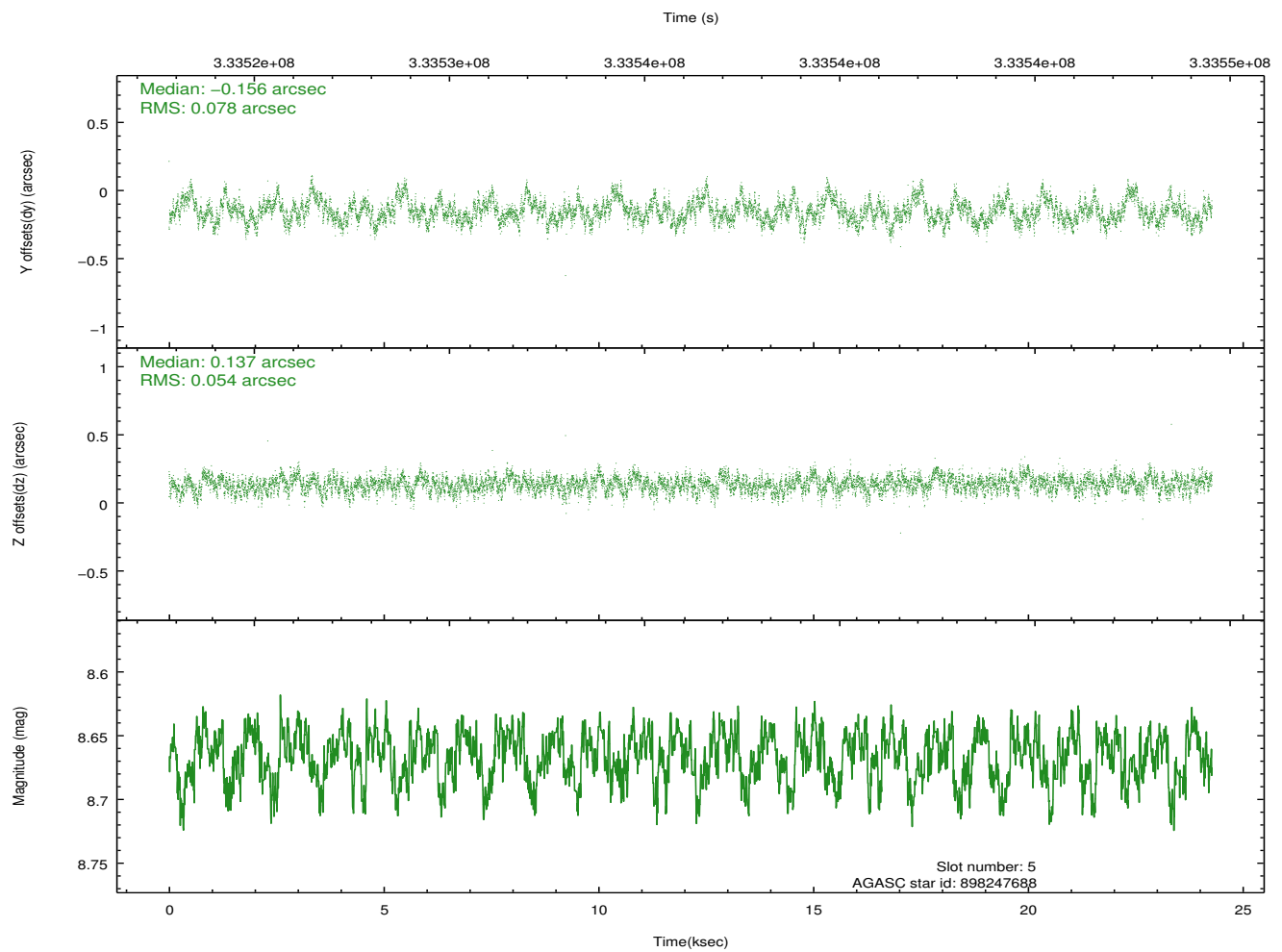
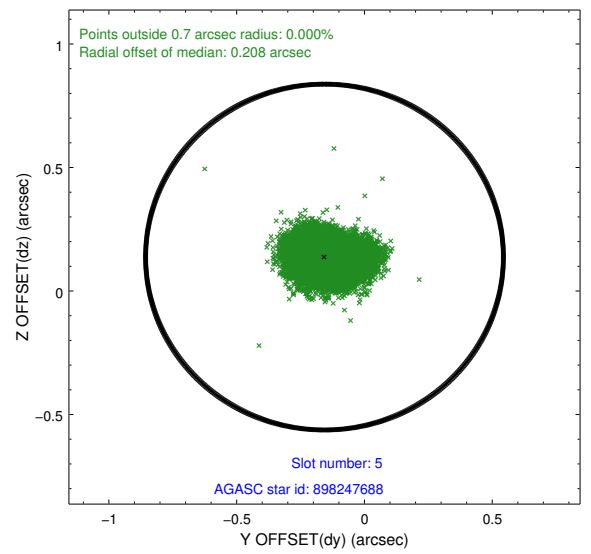
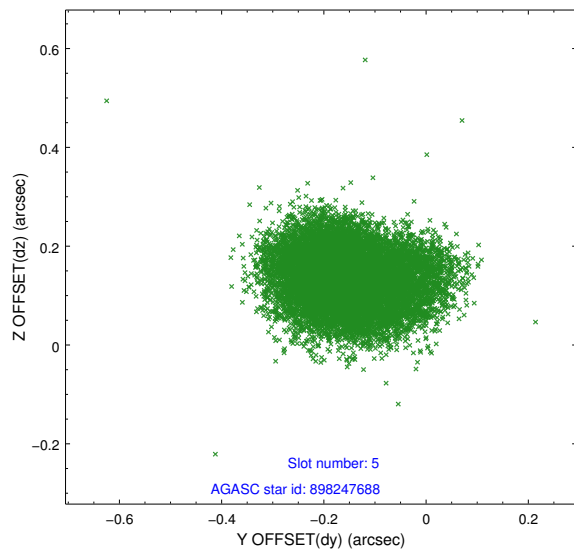
2.4.1 Slot 3



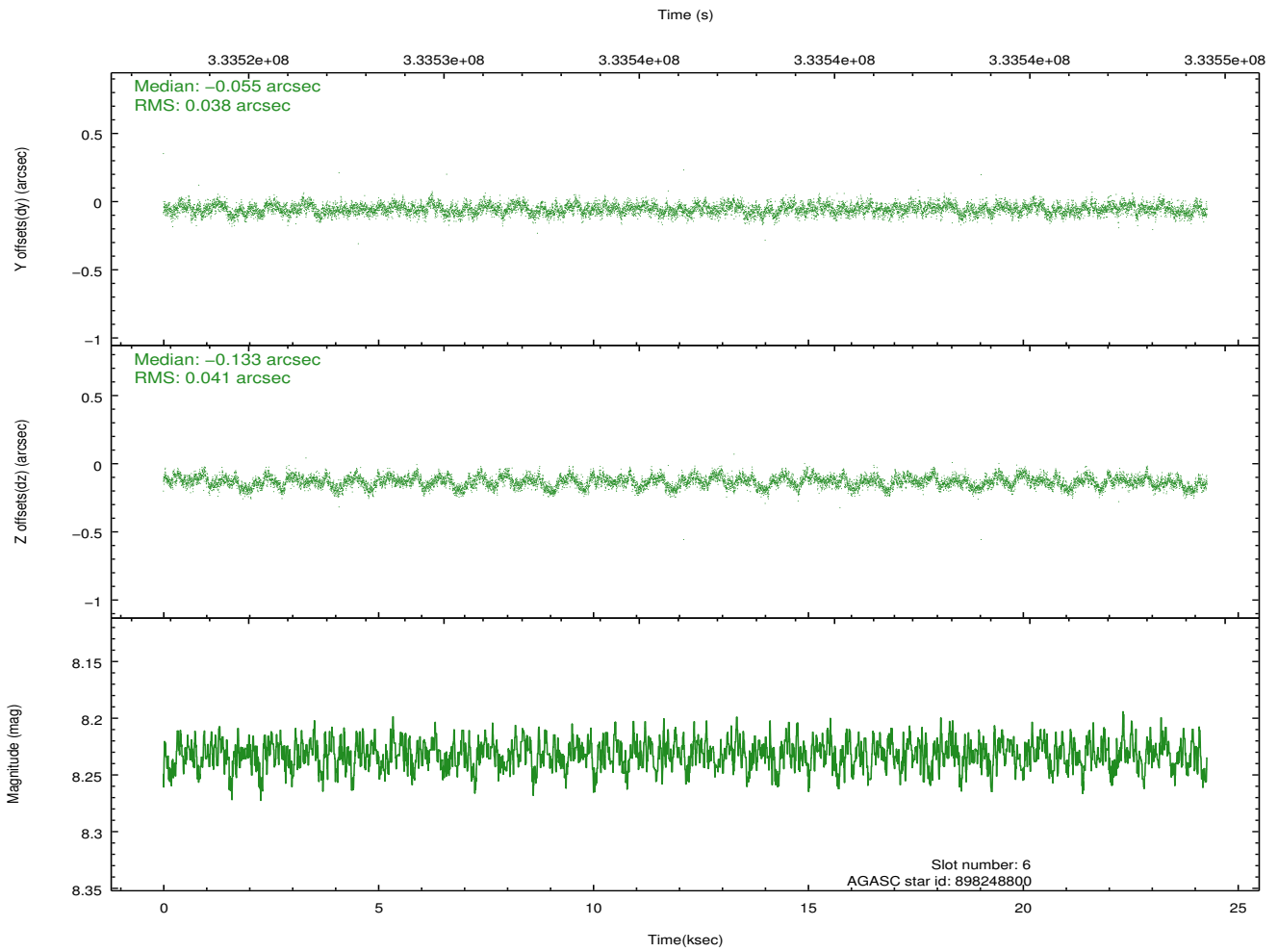
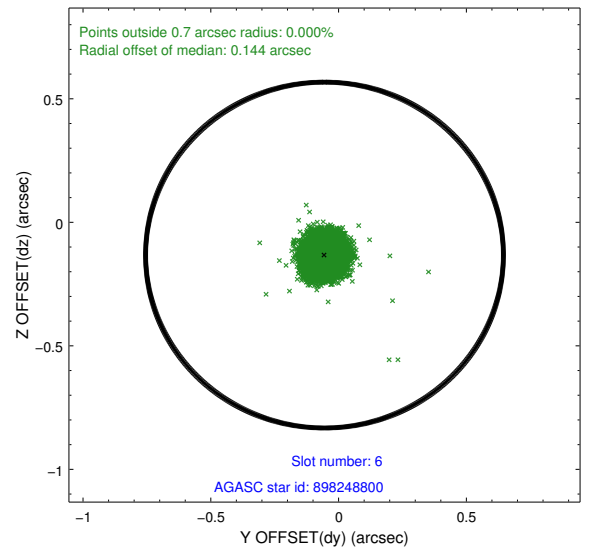
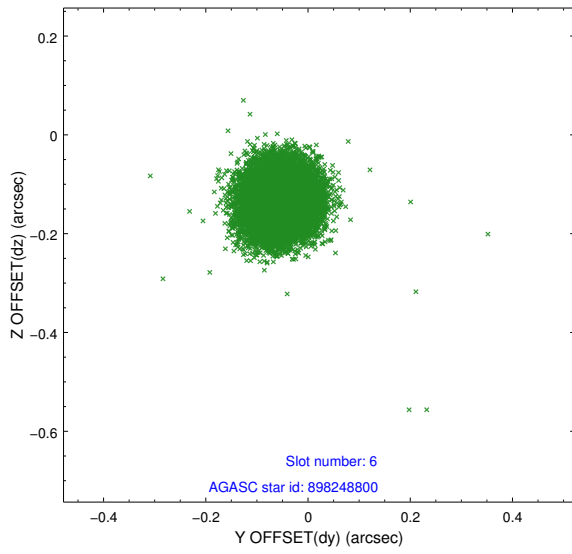
2.4.2 Slot 4



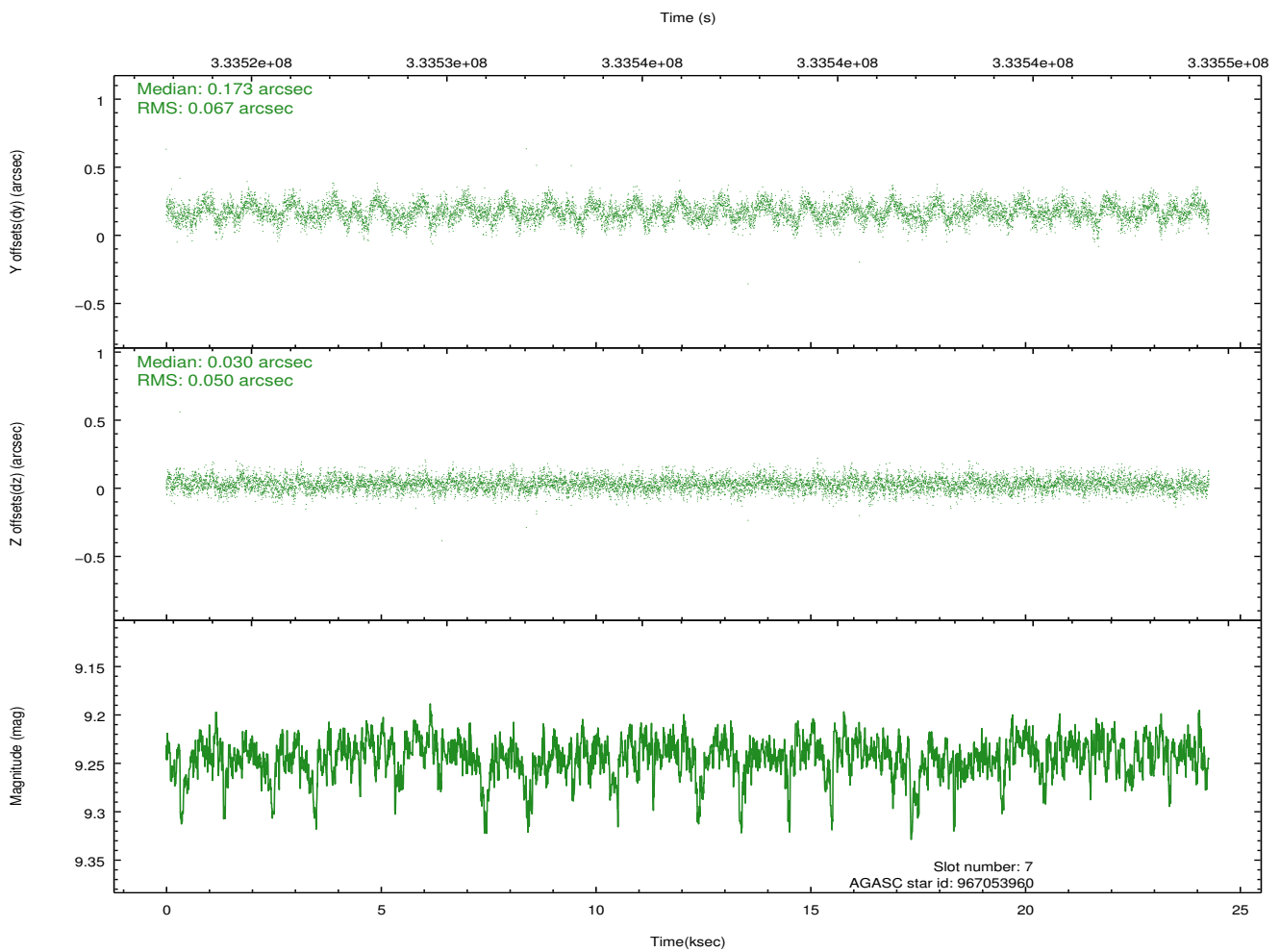
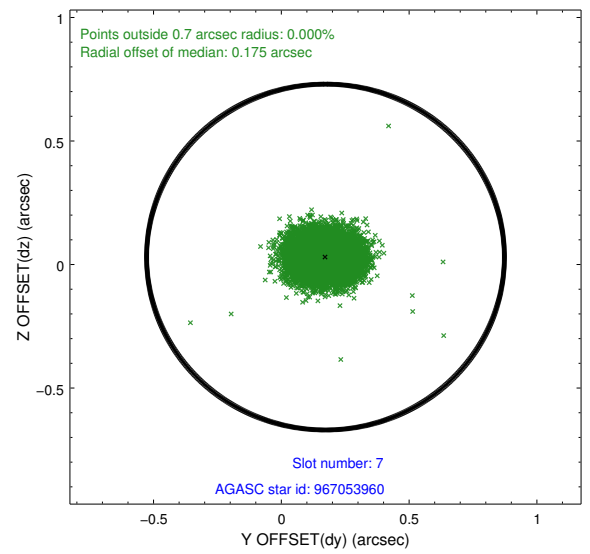
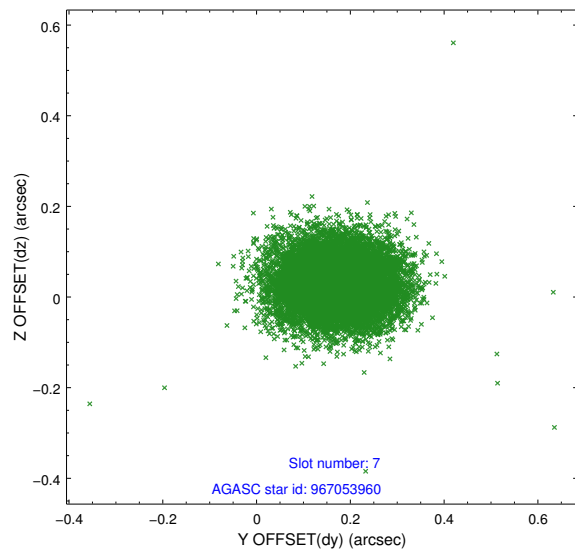
2.4.3 Slot 5



2.4.4 Slot 6

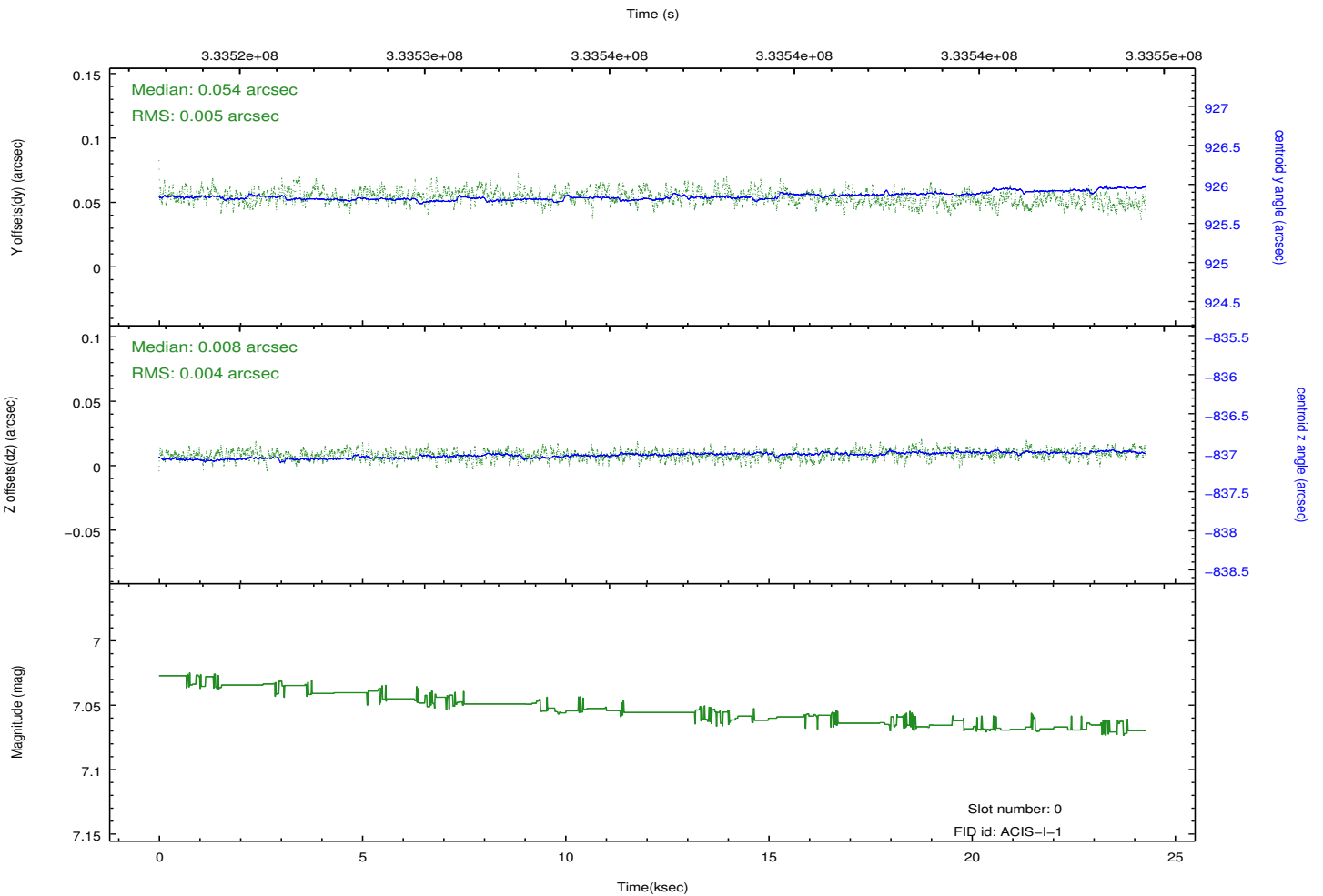
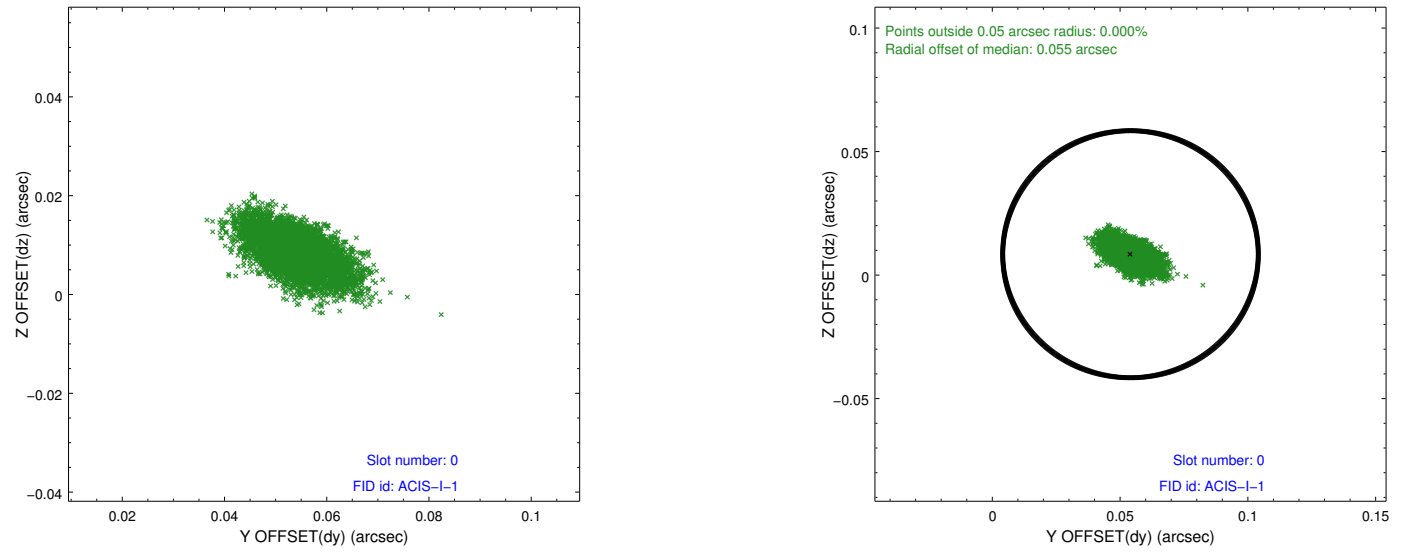


2.4.5 Slot 7

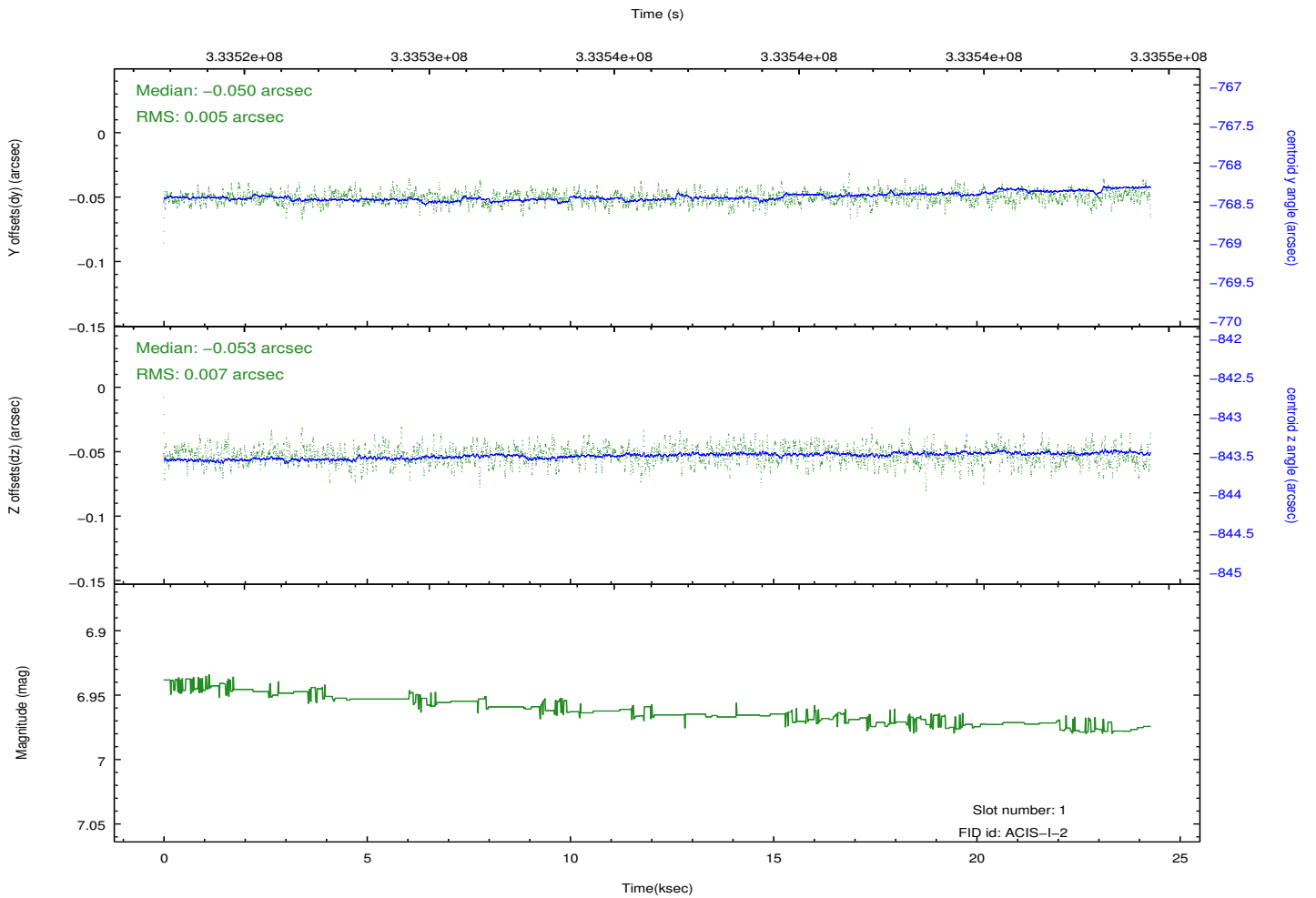
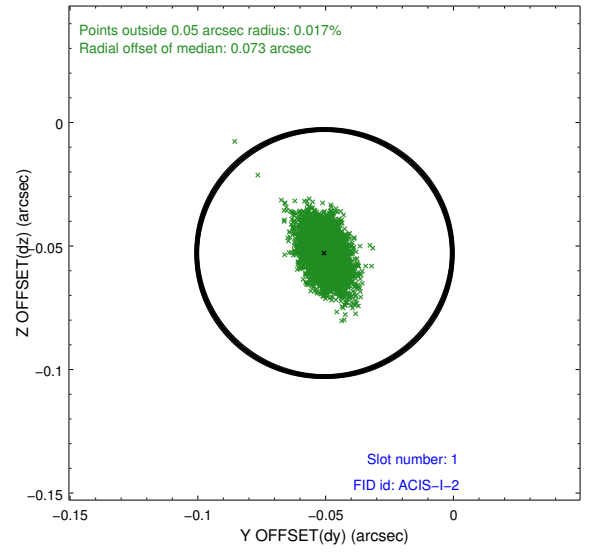
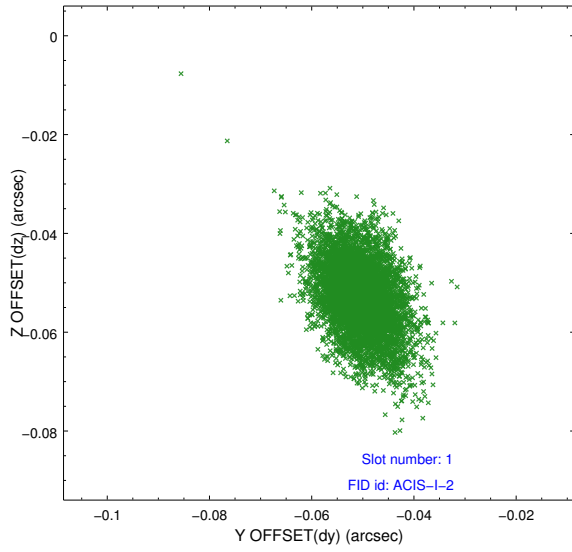


2.5 FID Slots

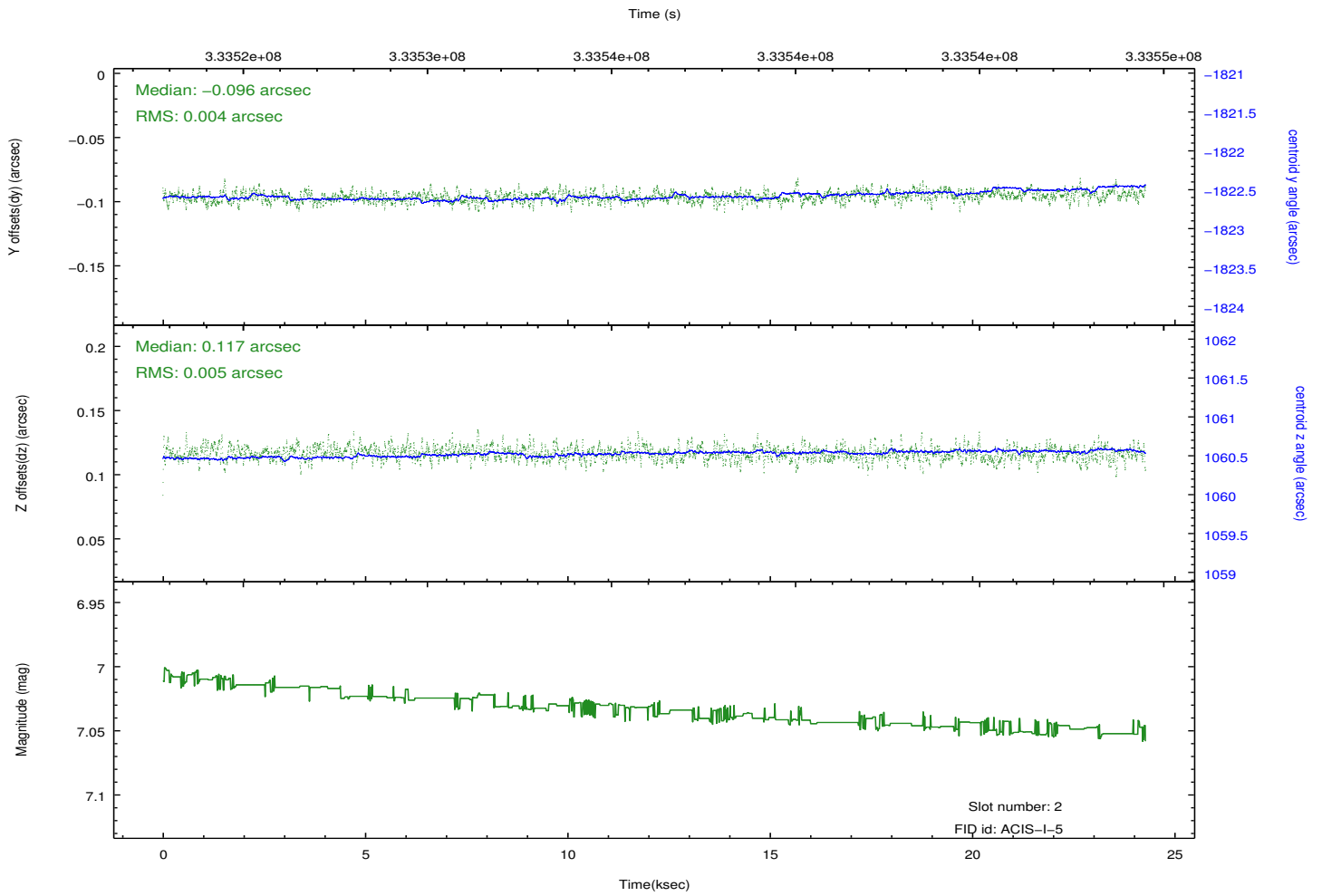
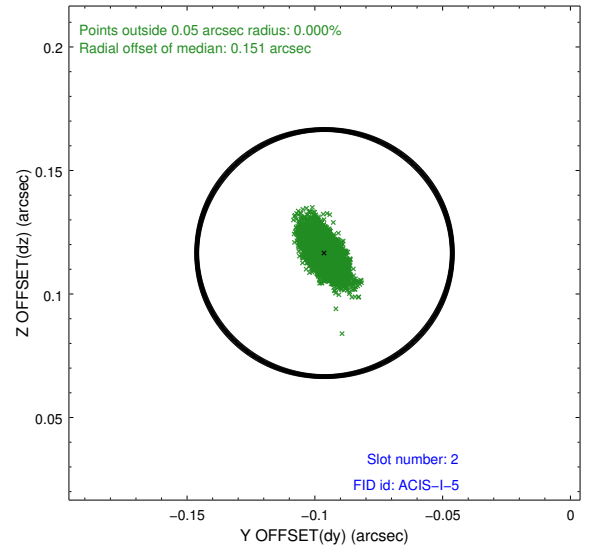
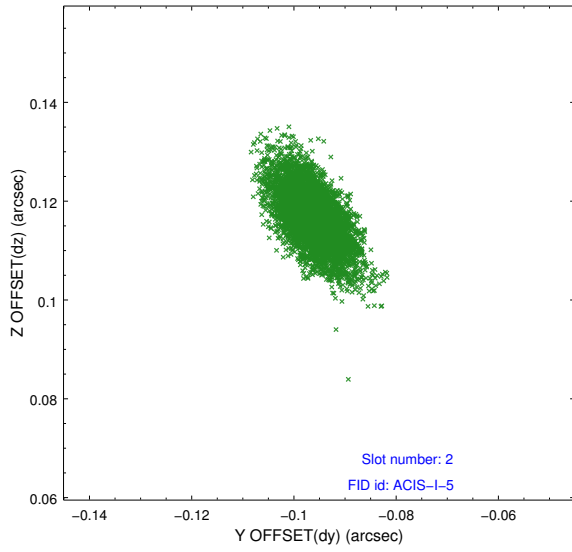
2.5.1 Slot 0



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)	2012.05.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.0825591

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:
(267.91356, -29.71177), (267.91776, -29.71127), (267.90846, -29.65183), (267.90426, -29.65234)