

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13426 - L2 Version 3
Chandra X-Ray Center

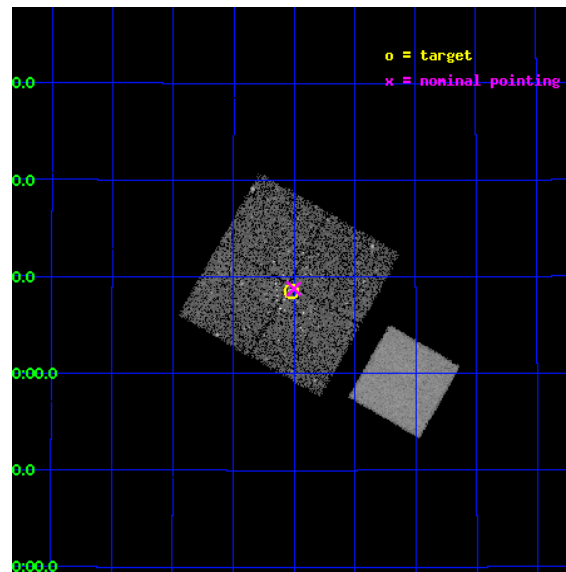
L2 Processing Date : Feb 25 2012

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1 Front

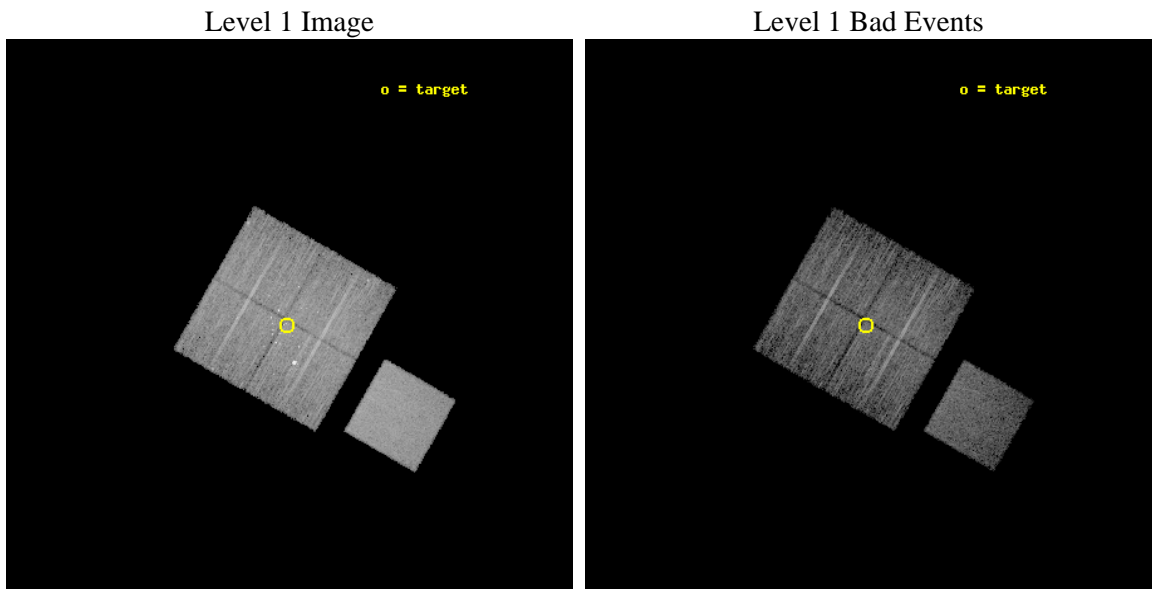
seq_num	200748	Sequence number
obs_id	13426	Observation id
title	Connecting Young Stellar Object Variability Across the Great Observatories: A Combined Spitzer and Chandra Study	Proposal title
observer	Dr. Kevin Flaherty	Principal investigator
object	IC 348	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	56.13125	Observer's specified target RA [deg]
dec_targ	32.142694	Observer's specified target Dec [deg]
ra_nom	56.125738496839	Nominal RA [deg]
dec_nom	32.146067966201	Nominal Dec [deg]
roll_nom	119.74686931999	Nominal Roll [deg]
revision	3	Processing version of data
ontime	10043.963157117	Sum of GTIs [s]
livetime	9912.7313842115	Livetime [s]
ontime0	10043.840037107	Sum of GTIs [s]
ontime1	10043.881077111	Sum of GTIs [s]
ontime2	10043.922117114	Sum of GTIs [s]
ontime3	10043.963157117	Sum of GTIs [s]
ontime7	10044.000077248	Sum of GTIs [s]
l2events	64450	Number of level 2 events



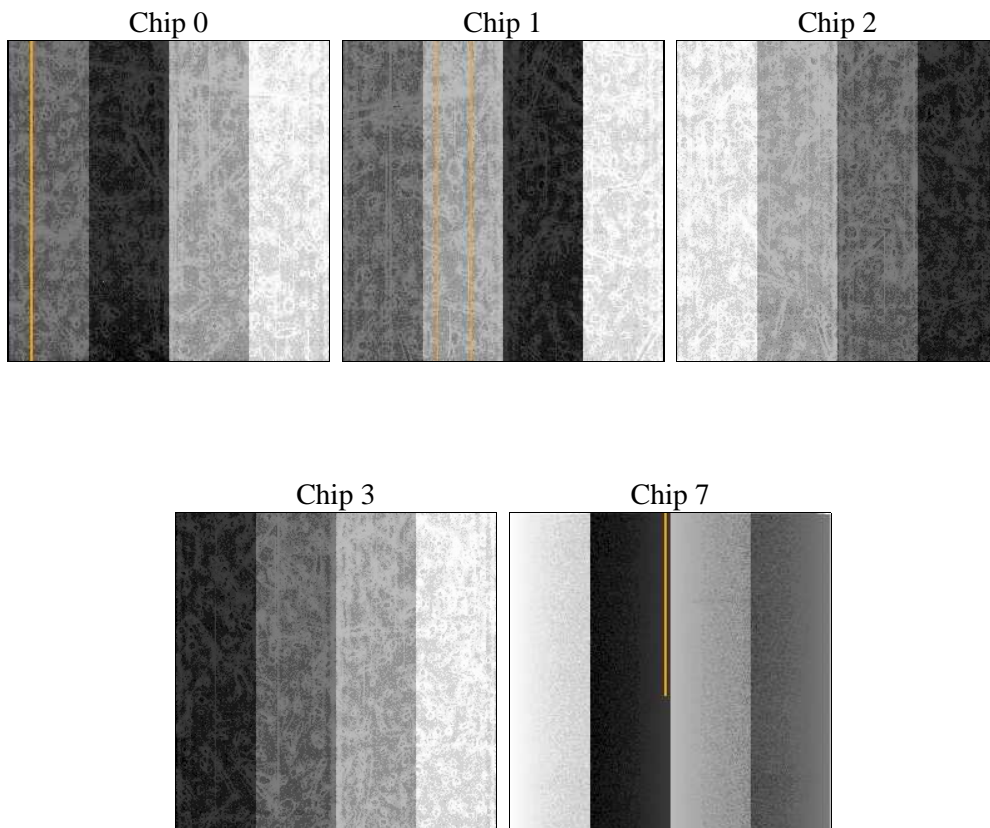
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9999.578000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	10043.963157117	Sum of GTIs [s]
caldsver	4.4.8	 	ontime0	10043.840037107	Sum of GTIs [s]
date	2012-02-25T04:20:59	Date and time of file creation	ontime1	10043.881077111	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	10043.922117114	Sum of GTIs [s]
			ontime3	10043.963157117	Sum of GTIs [s]
			ontime7	10044.000077248	Sum of GTIs [s]
			l1events	326380	Number of level 1 events

2.1.4 Events

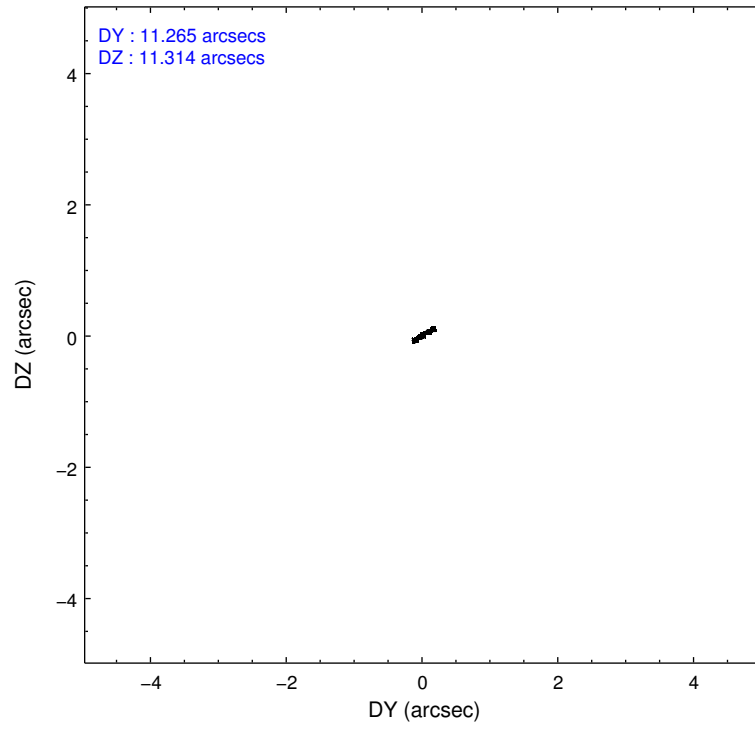
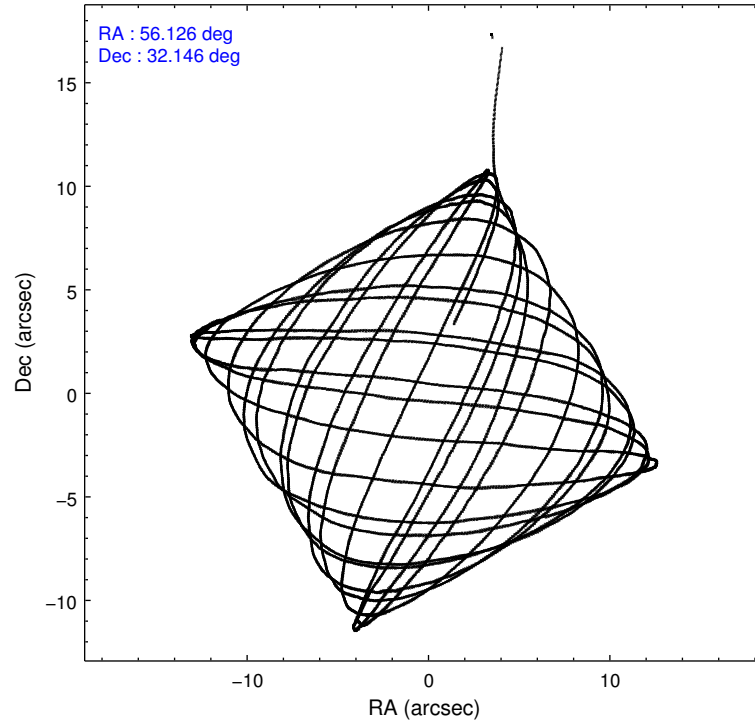
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	59593	57518	63797	65447	80025
rejected events	50365	48153	56067	53431	45116
rejected %	84%	83%	87%	81%	56%

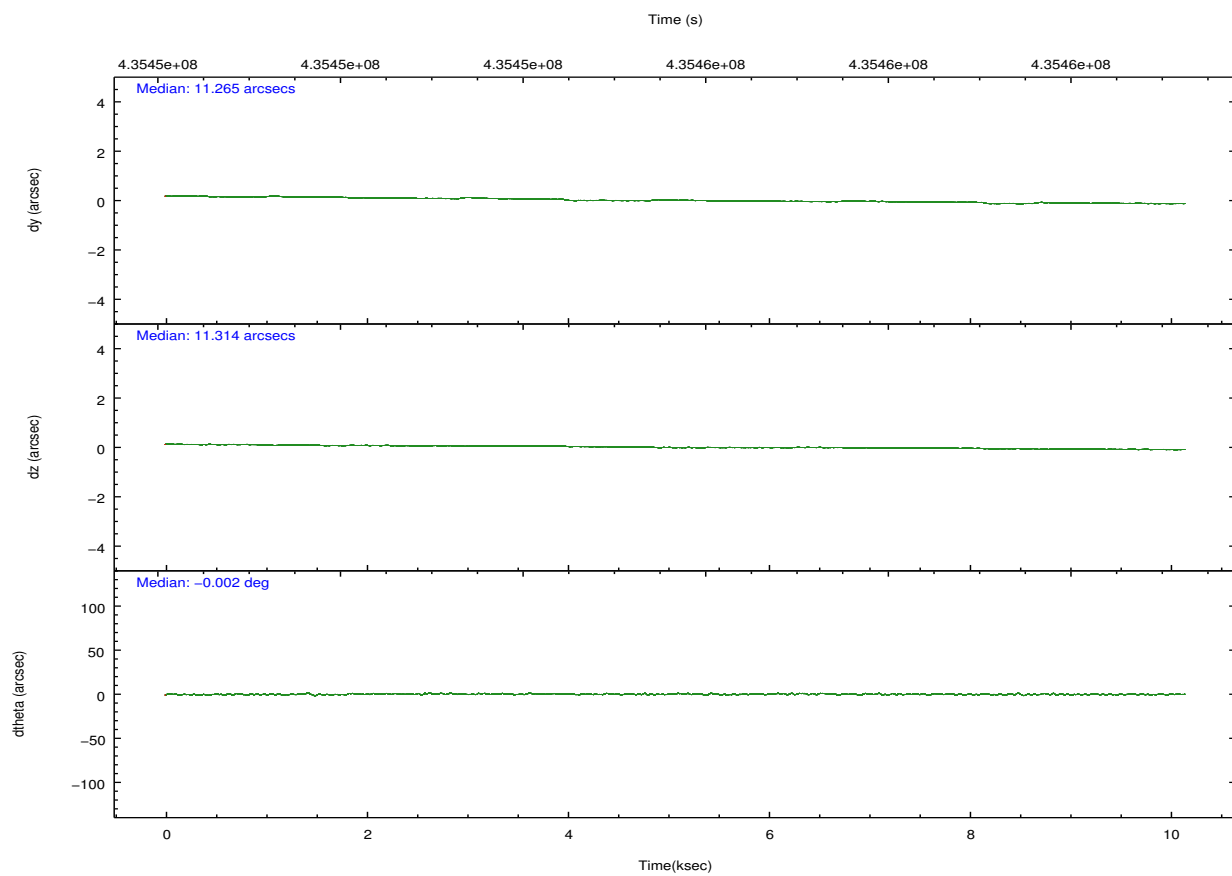
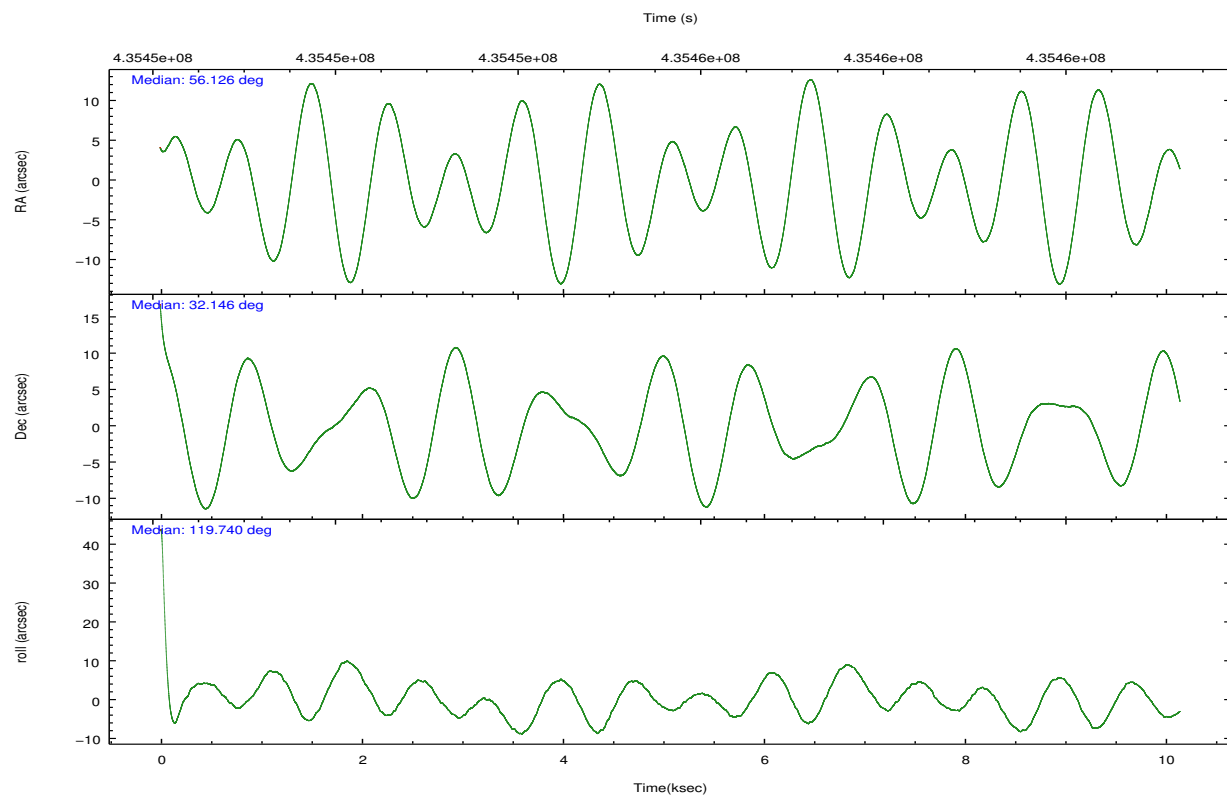
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	4156	3961	3367	7365	2974
	6%	6%	5%	11%	3%
grade 1 events	48	40	35	70	87
	0%	0%	0%	0%	0%
grade 2 events	1963	2033	1654	1677	7040
	3%	3%	2%	2%	8%
grade 3 events	856	858	728	814	2873
	1%	1%	1%	1%	3%
grade 4 events	804	818	731	729	2801
	1%	1%	1%	1%	3%
grade 5 events	2776	2753	2506	2962	8028
	4%	4%	3%	4%	10%
grade 6 events	1450	1697	1255	1433	19234
	2%	2%	1%	2%	24%
grade 7 events	47540	45358	53521	50397	36988
	79%	78%	83%	77%	46%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01237	ACIS-01237	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	56.153834	56.12573849683854	CCD I2 on	Y	Y
[deg] Pointing Dec	32.132262	32.14606796620109	CCD I3 on	Y	Y
[deg] Pointing Roll	119.523168	119.7468693199858	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	N	N
[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)	435450726.184000	435449177.11329	CCD S5 on	N	N
Observation start date	2011-10-19T22:31:00	2011-10-19T22:06:17	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	435460726.184000	435460962.56391	On-chip summing requested	N	N
Observation end date	2011-10-20T01:17:40	2011-10-20T01:22:42	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



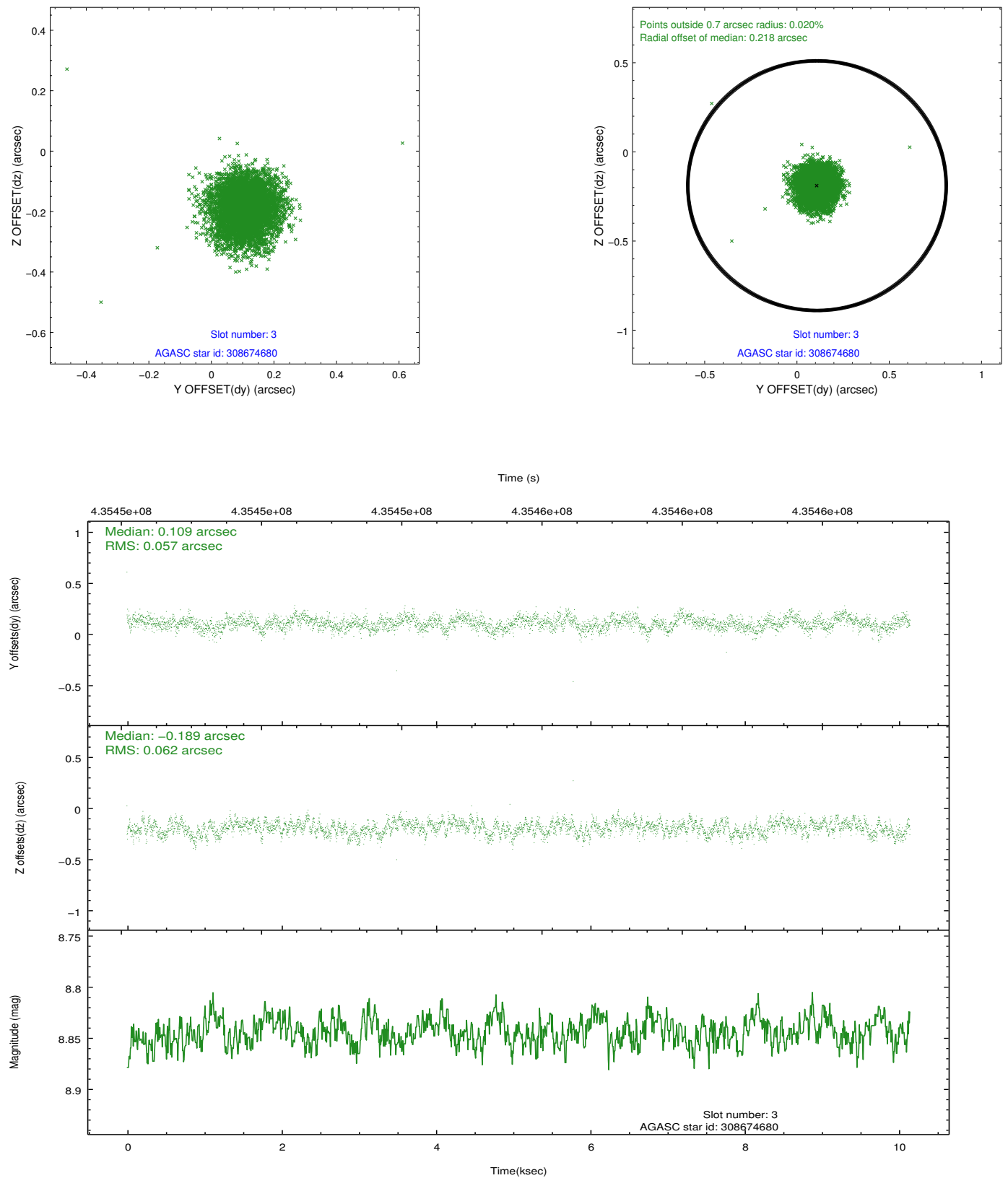


Slot Statistics

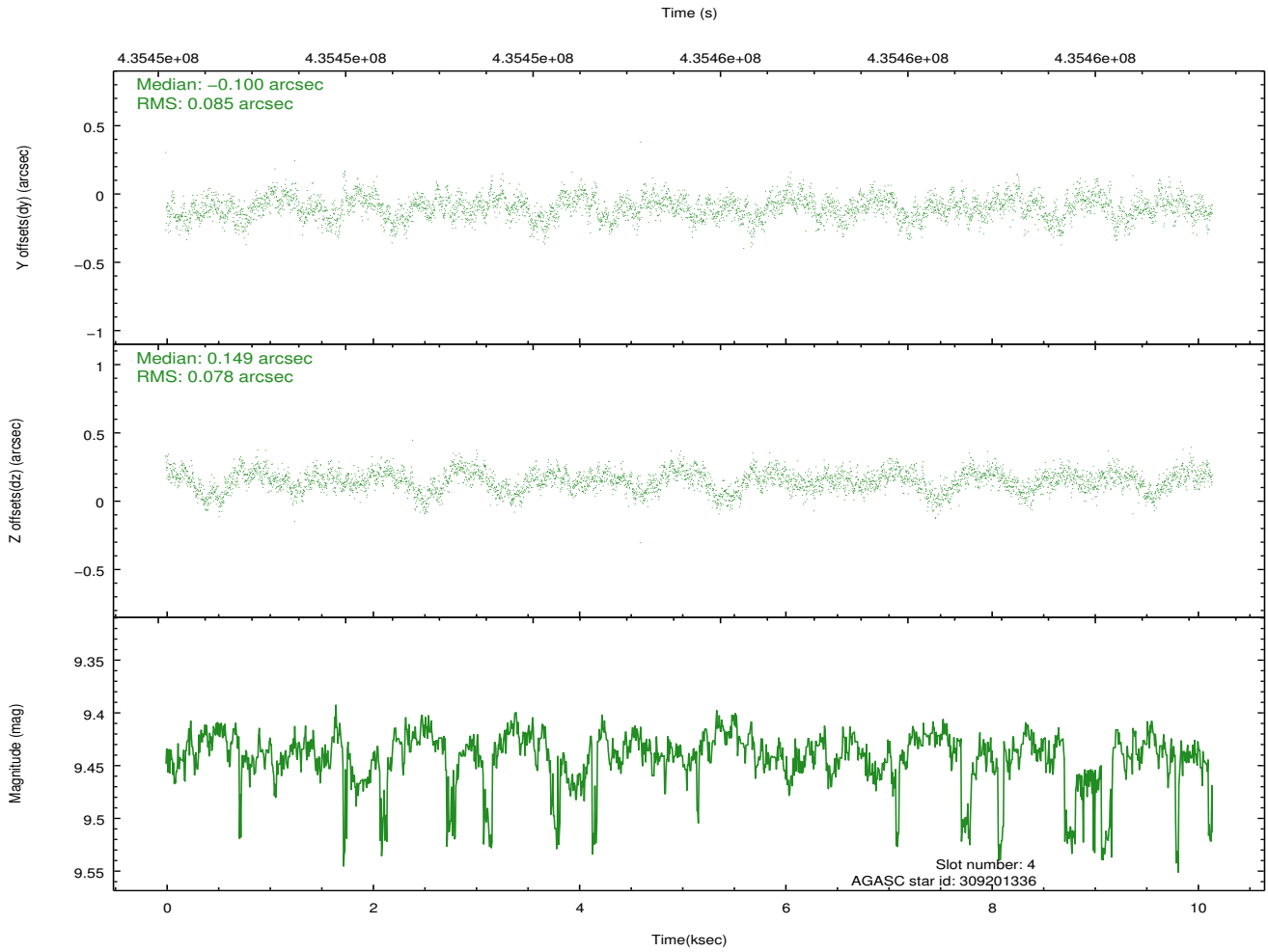
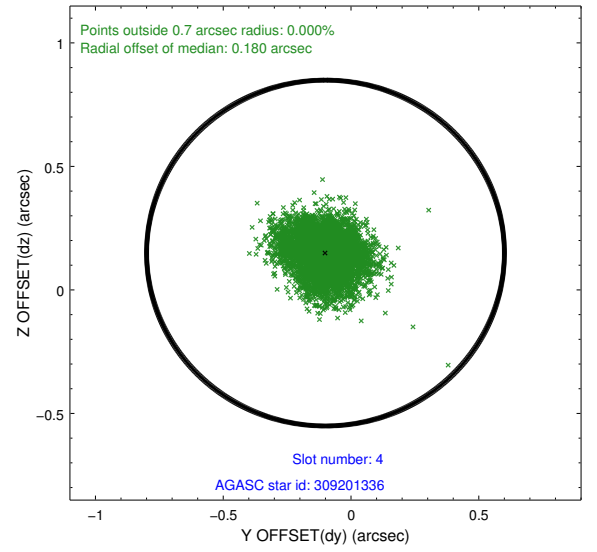
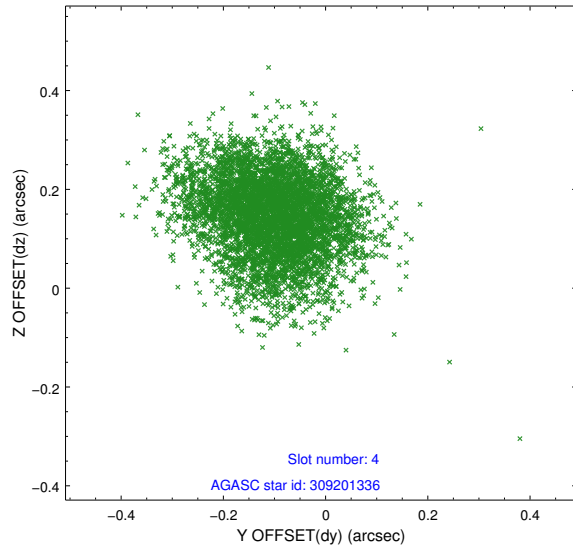
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.15	2475	0.025	-0.068	0.009	0.016	0.000000	0.000000	928.31	-834.90
1	FID	ACIS-I-4	7.07	2476	0.162	0.059	0.010	0.015	0.000000	0.000000	2148.78	1064.76
2	FID	ACIS-I-5	7.14	2475	-0.285	0.080	0.007	0.013	0.000000	0.000000	-1819.32	1063.25
3	GUIDE	308674680	8.84	4941	0.109	-0.189	0.090	0.141	55.747345	31.652644	-886.36	1932.69
4	GUIDE	309201336	9.44	4915	-0.100	0.149	0.123	0.198	55.980135	32.629910	1818.53	-423.91
5	GUIDE	309205288	9.20	4926	-0.058	0.143	0.110	0.174	55.920876	32.625581	1894.22	-260.26
6	GUIDE	309336160	7.08	4949	-0.101	0.160	0.087	0.132	56.670296	32.290187	-275.99	-1649.41
7	GUIDE	308676888	9.12	4946	0.146	-0.249	0.103	0.164	55.566279	31.676245	-537.73	2372.45

2.4 Star Slots

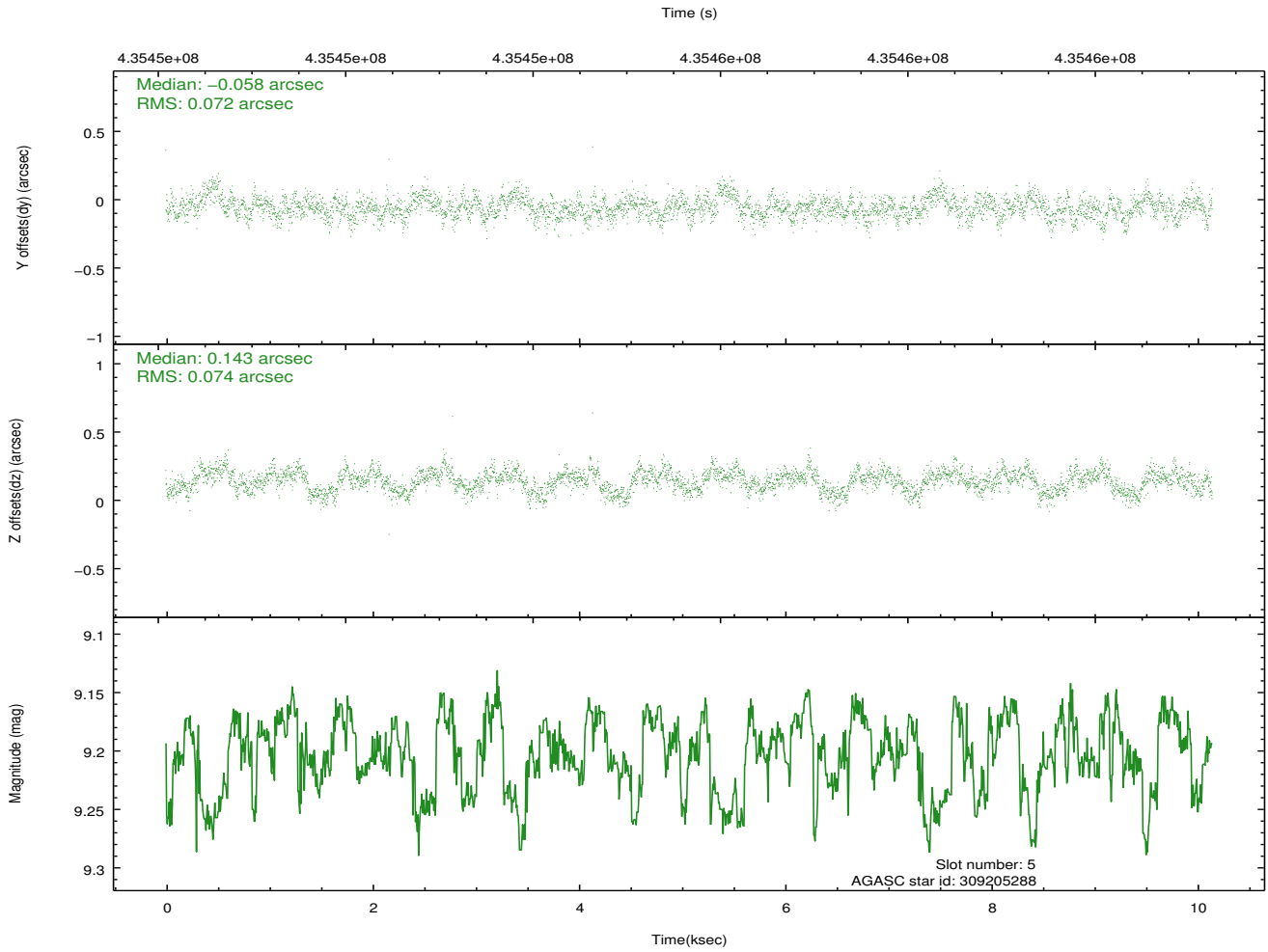
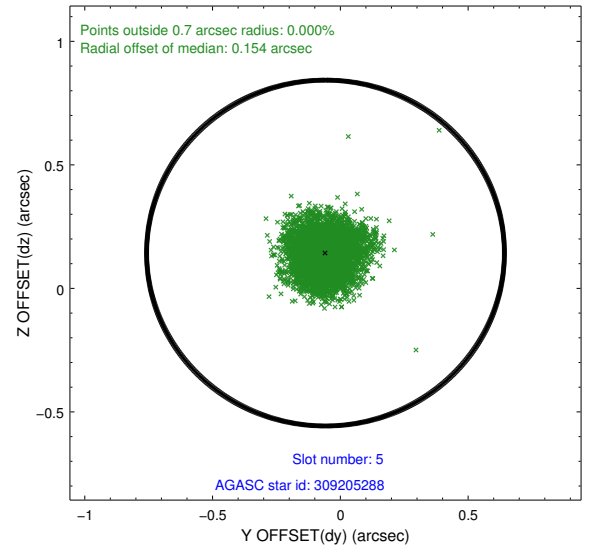
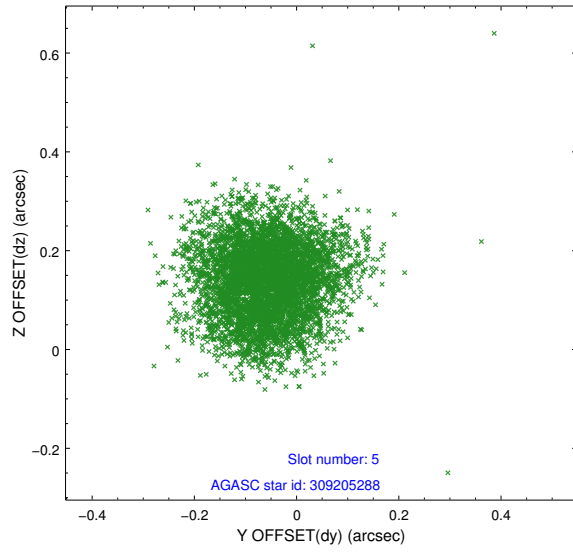
2.4.1 Slot 3



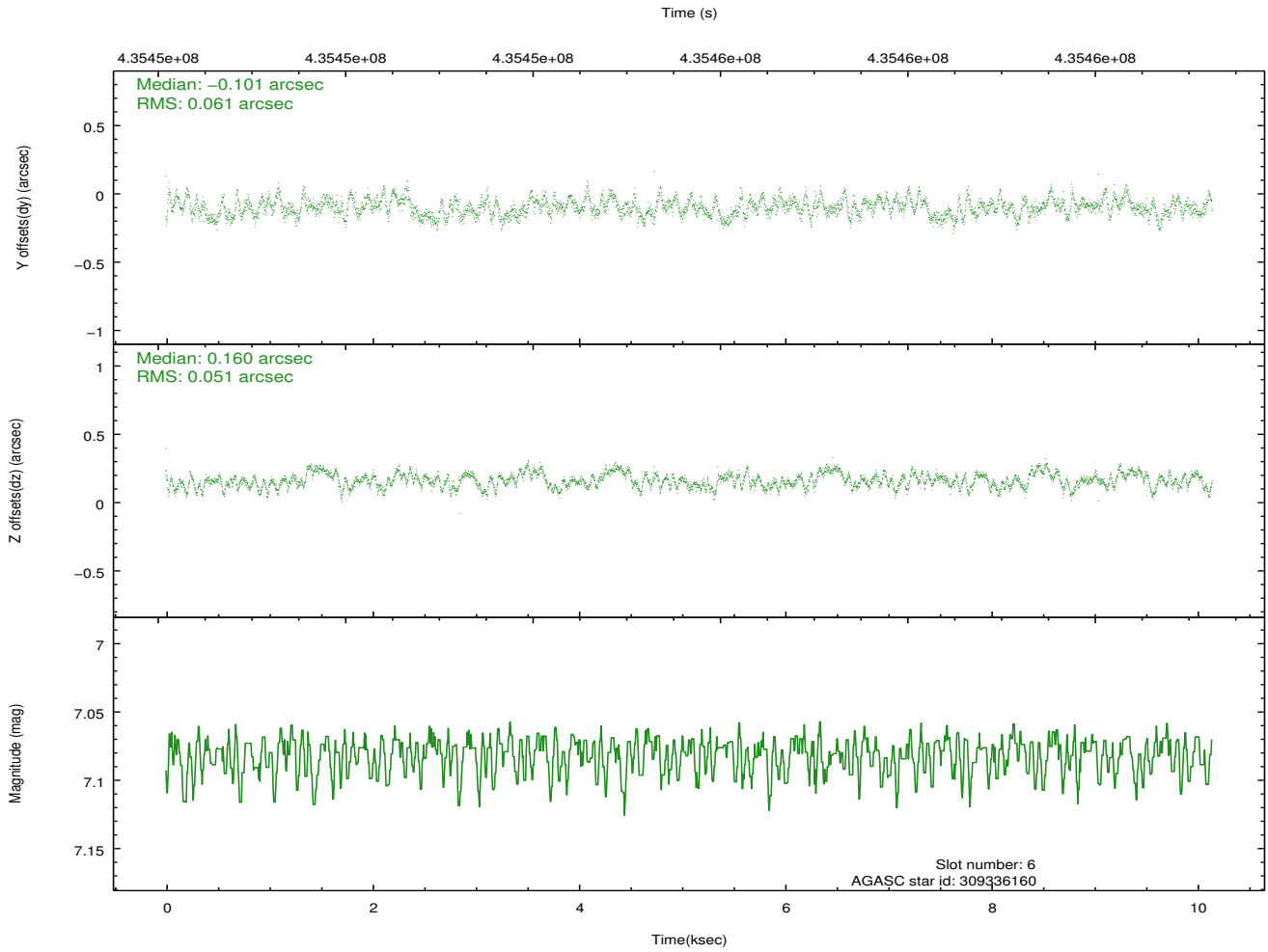
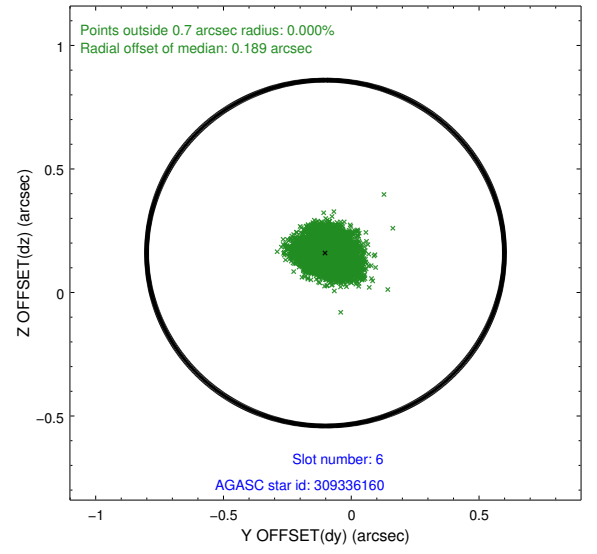
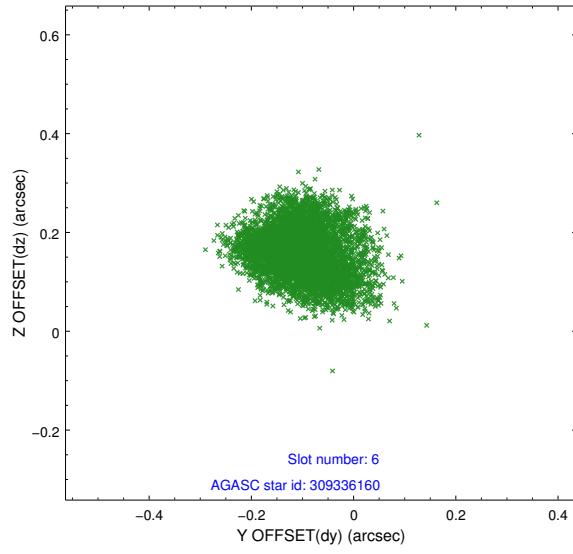
2.4.2 Slot 4



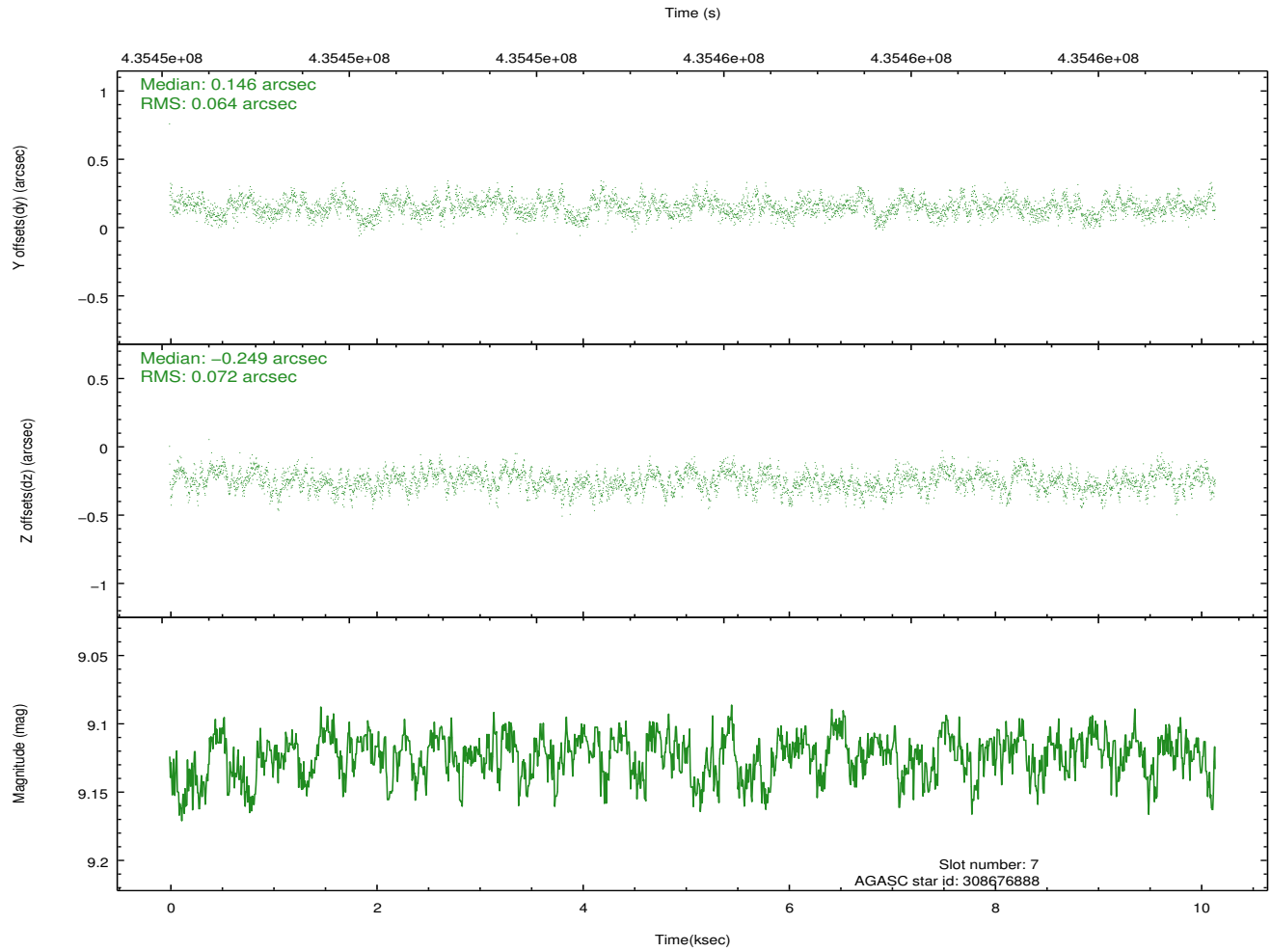
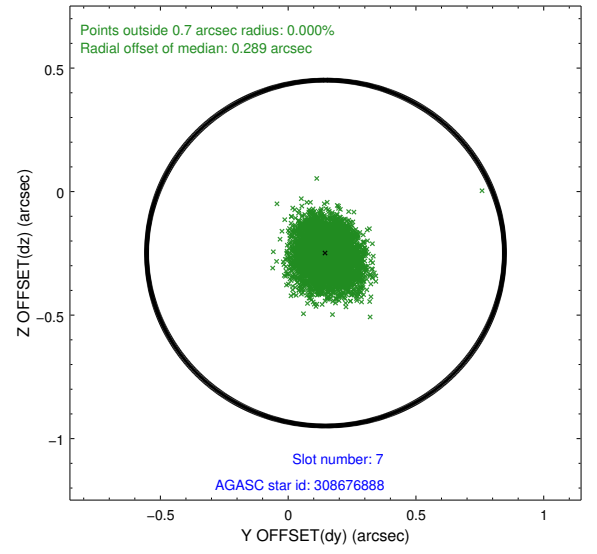
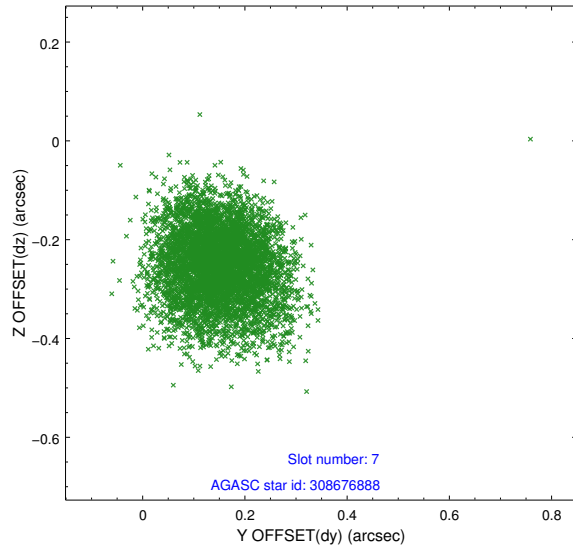
2.4.3 Slot 5



2.4.4 Slot 6

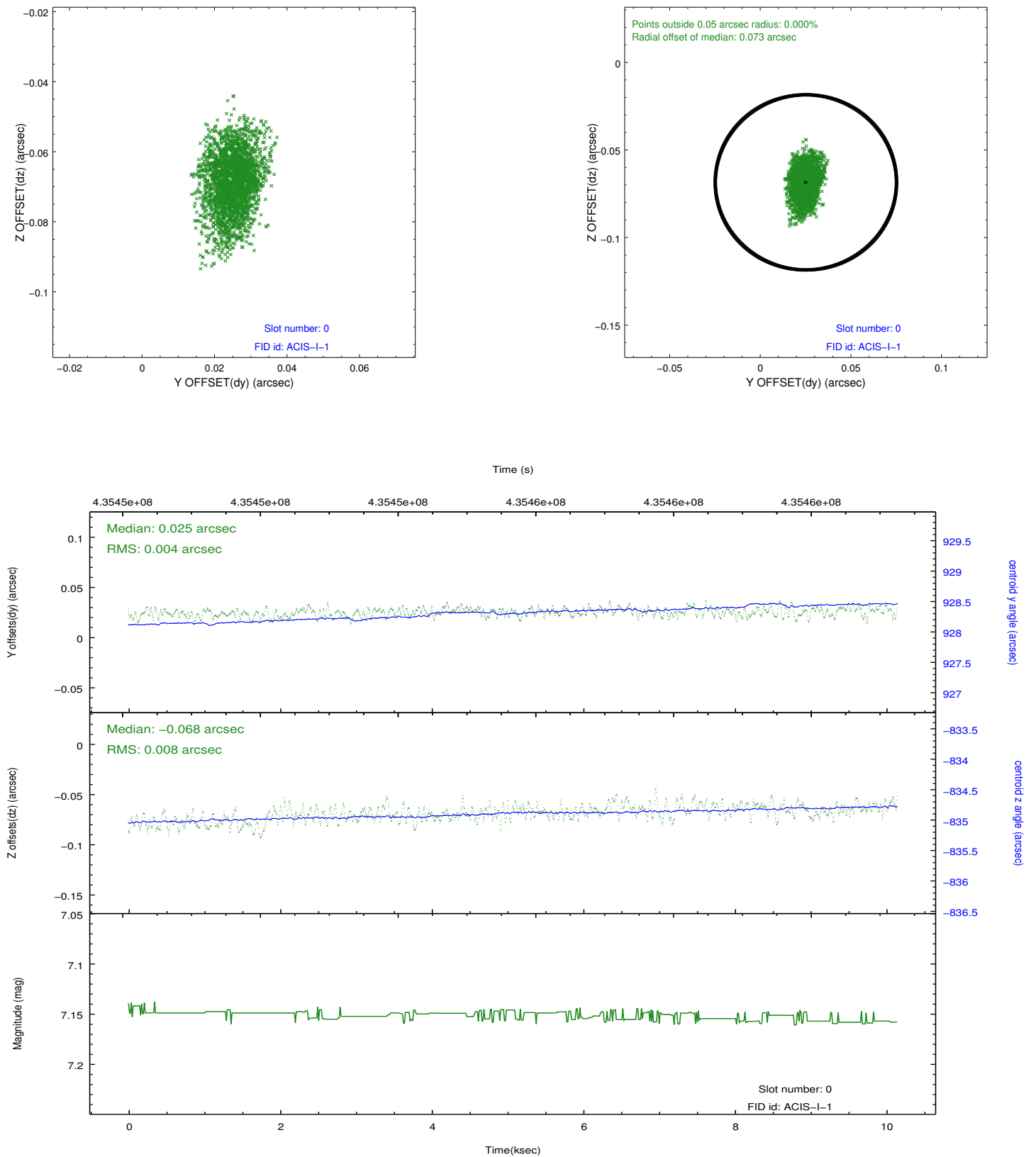


2.4.5 Slot 7

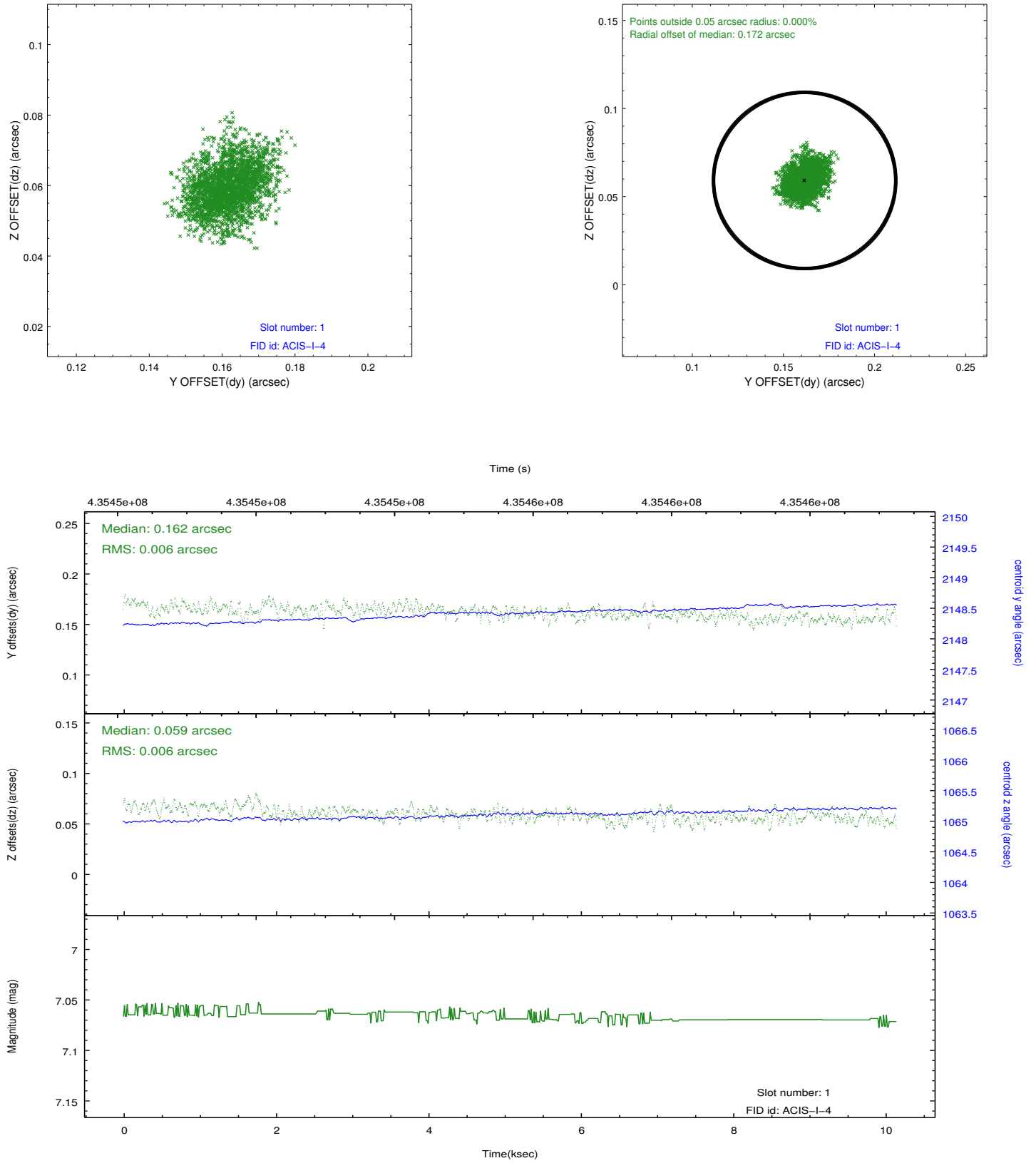


2.5 FID Slots

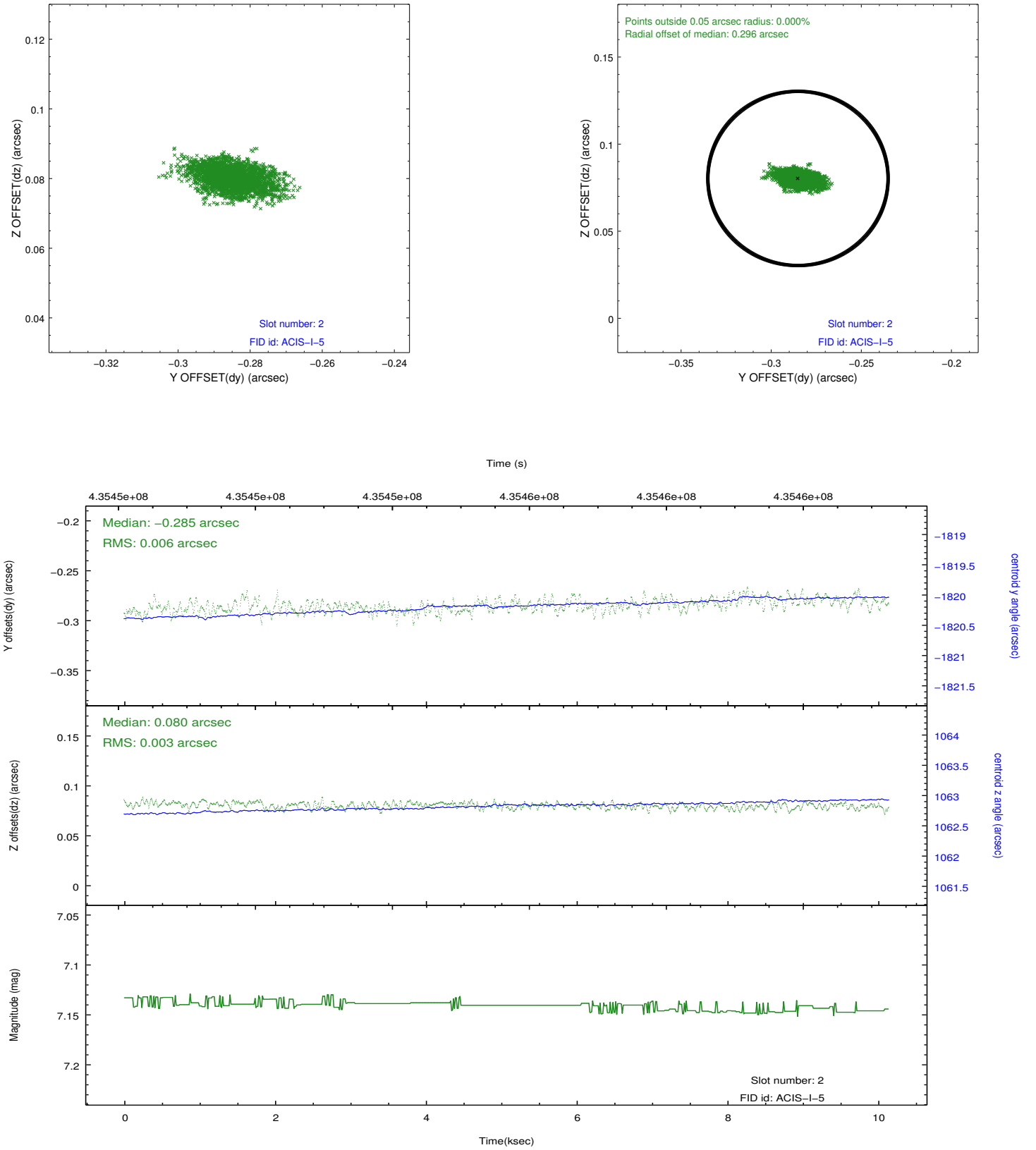
2.5.1 Slot 0



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)	2012.02.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.043963161767

A.2 Comments

Joint Proposal: CXO-Spitzer. Monitor constraint met, follows obs13425 by 3 days.

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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:
(56.17772,32.07242), (56.18037,32.07370), (56.12969,32.14886), (56.12703,32.14758)