

V&V Reference Report

L2 ASCDS Version : 10

Observation 14891 - L2 Version 2
Chandra X-Ray Center

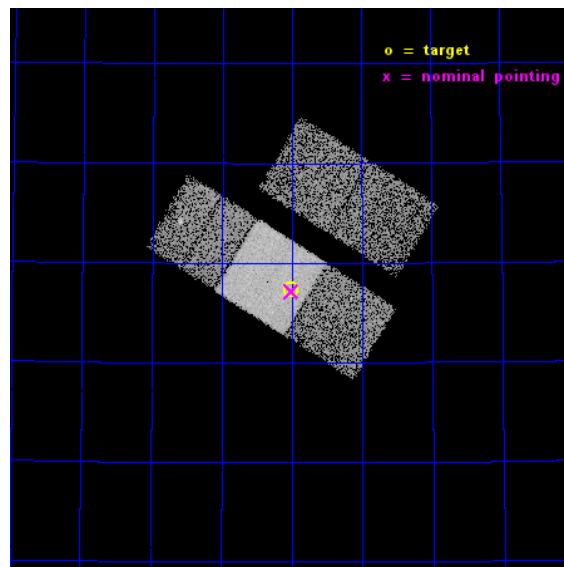
L2 Processing Date : Dec 6 2014

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1 Front

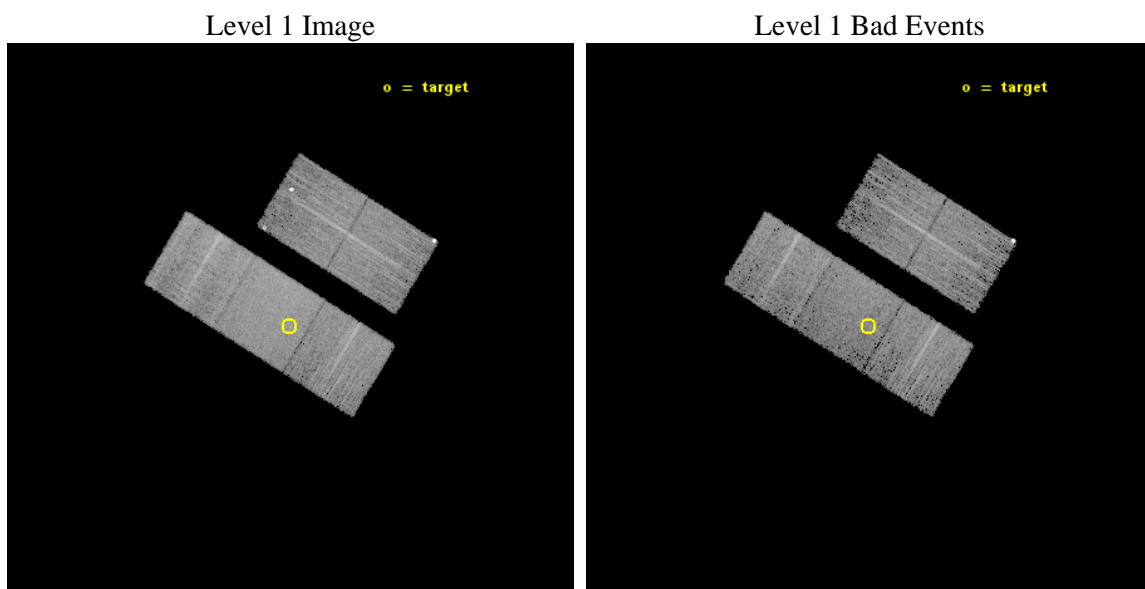
seq_num	502015	Sequence number
obs_id	14891	Observation id
title	Identifying the TeV gamma-ray source MGRO J2228+61, FINALLY!	Propo
observer	Dr. Ester Aliu	Principal investigator
object	Suzaku J2226+6047	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	336.502083	Observer's specified target RA [deg]
dec_targ	60.789028	Observer's specified target Dec [deg]
ra_nom	336.50198532595	Nominal RA [deg]
dec_nom	60.785978630404	Nominal Dec [deg]
roll_nom	211.62473796256	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10459.400080442	Sum of GTIs [s]
livetime	10322.740318293	Livetime [s]
ontime2	10459.400080442	Sum of GTIs [s]
ontime3	10453.117989898	Sum of GTIs [s]
ontime6	10459.400080442	Sum of GTIs [s]
ontime7	10459.400080442	Sum of GTIs [s]
ontime8	10456.259040058	Sum of GTIs [s]
l2events	50531	Number of level 2 events



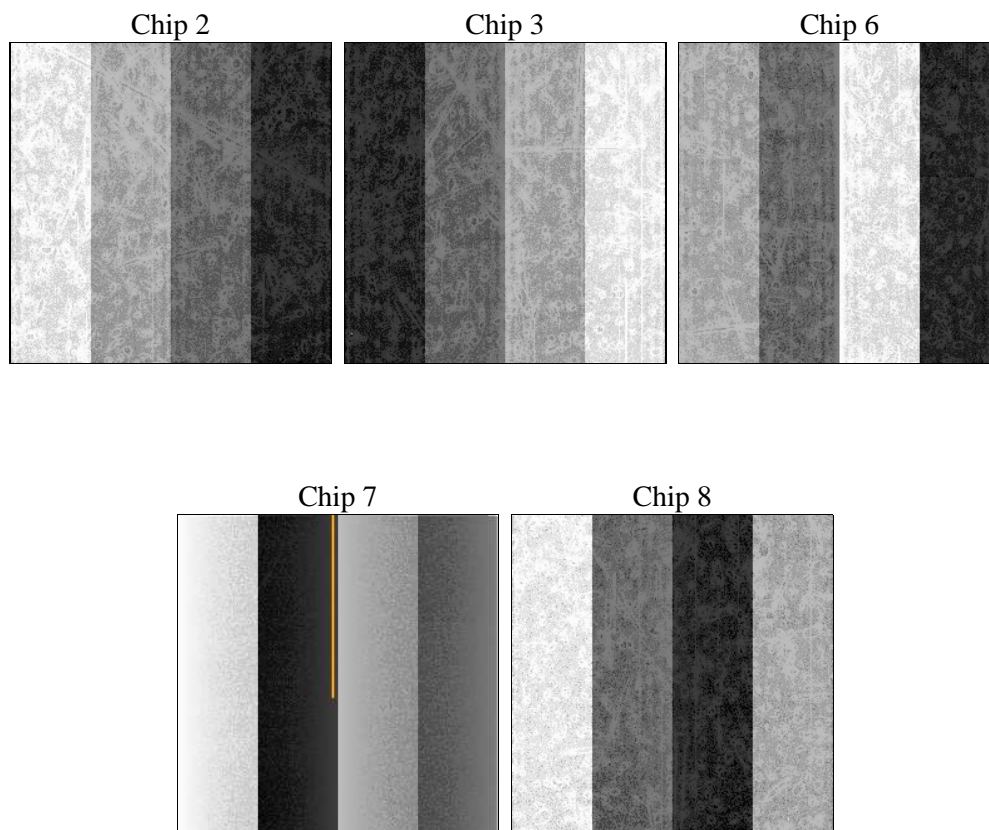
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10394.719000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	10459.400080442	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	10459.400080442	Sum of GTIs [s]
date	2014-12-06T22:07:31	Date and time of file creation	ontime3	10453.117989898	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	10459.400080442	Sum of GTIs [s]
			ontime7	10459.400080442	Sum of GTIs [s]
			ontime8	10456.259040058	Sum of GTIs [s]
			l1events	302154	Number of level 1 events

2.1.4 Events

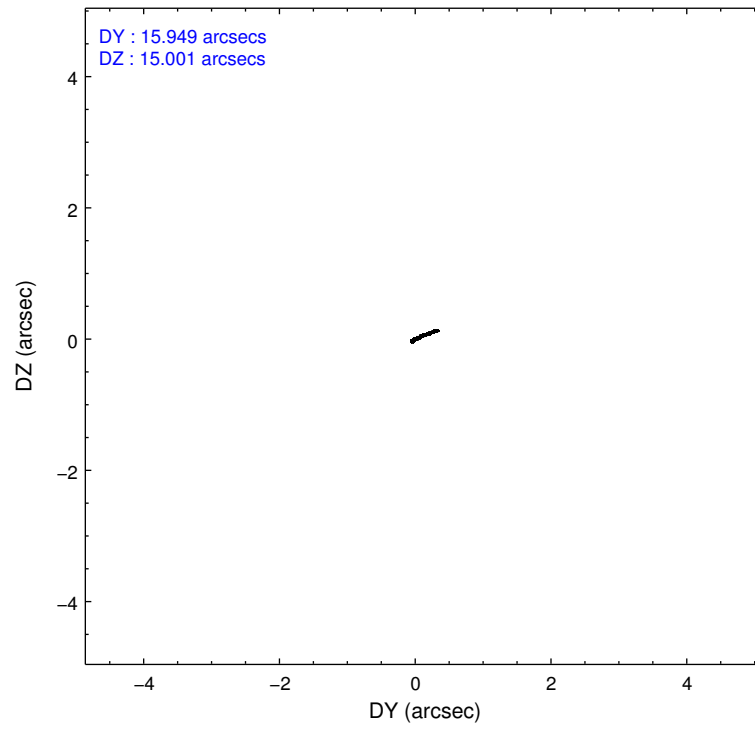
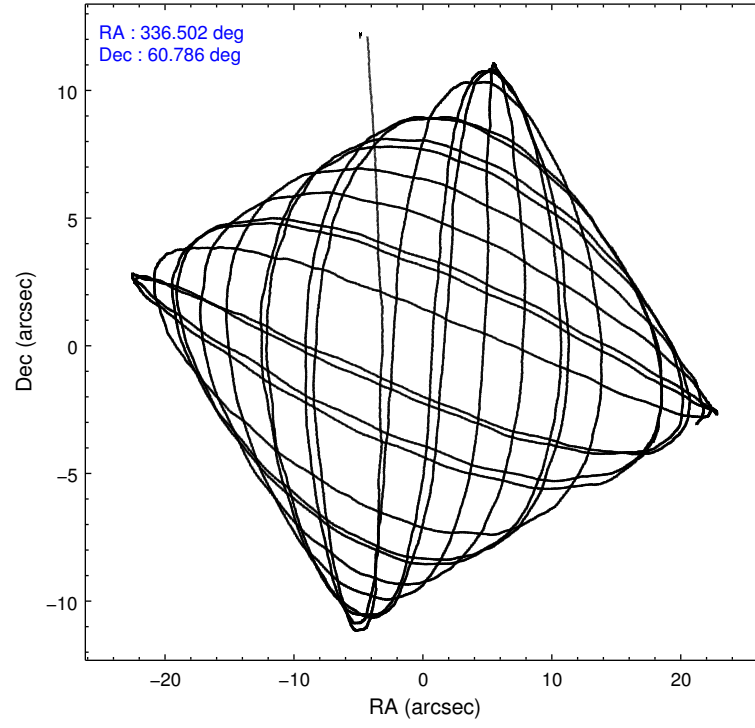
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	55444	52955	54549	71218	67988
rejected events	49987	43498	48263	41115	51048
rejected %	90%	82%	88%	57%	75%

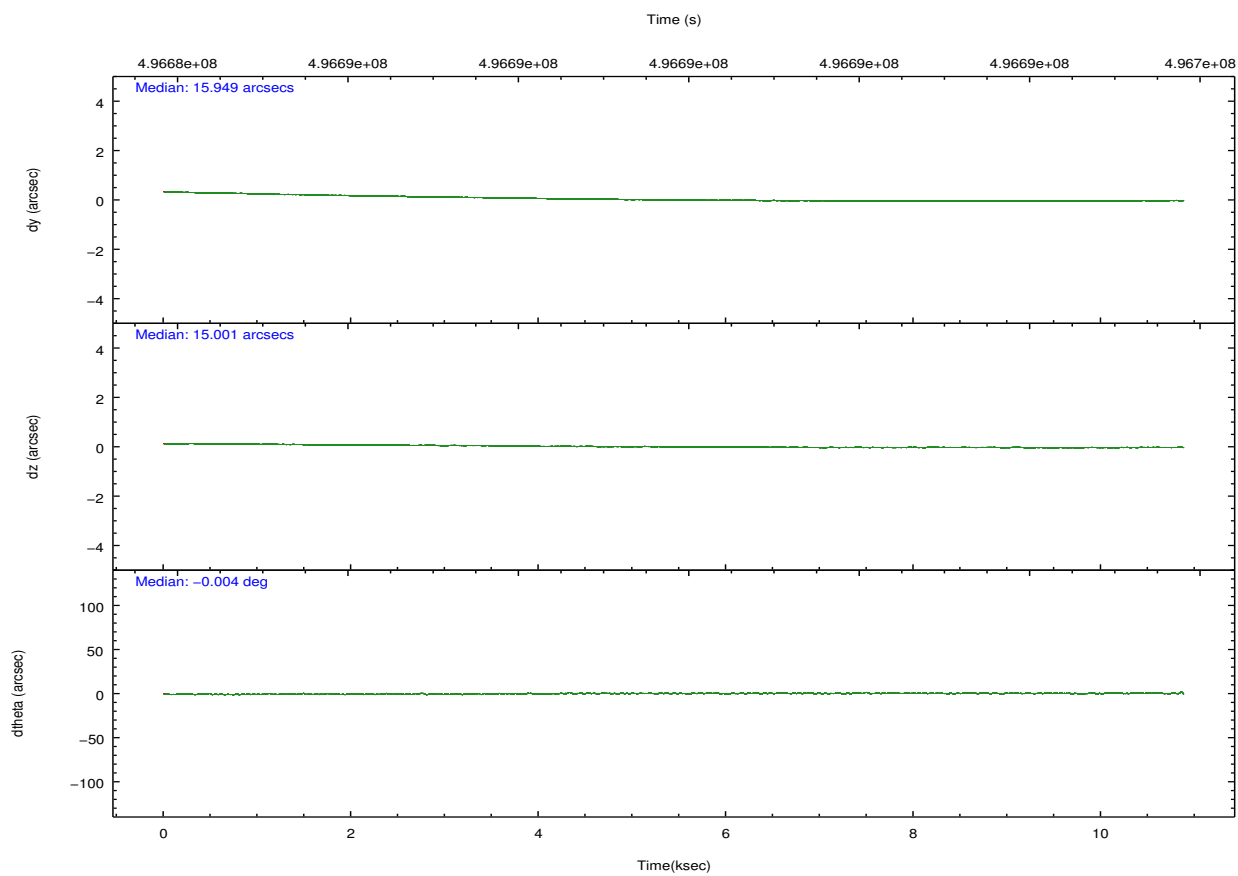
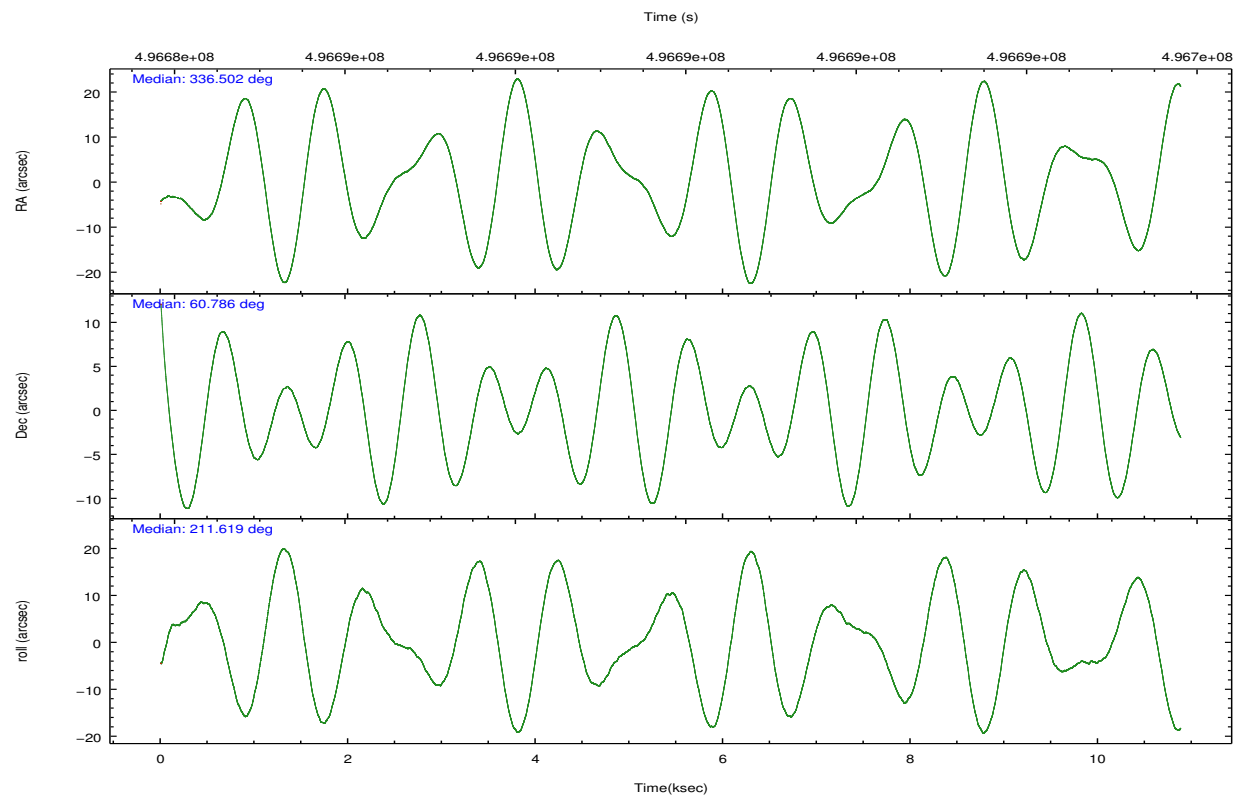
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	1914	5749	2172	2552	4875
	3%	10%	3%	3%	7%
grade 1 events	3316	34	26	86	52
	5%	0%	0%	0%	0%
grade 2 events	1290	1257	1401	6210	4070
	2%	2%	2%	8%	5%
grade 3 events	567	580	627	2357	1740
	1%	1%	1%	3%	2%
grade 4 events	588	620	609	2373	1602
	1%	1%	1%	3%	2%
grade 5 events	2252	2637	2657	7144	3780
	4%	4%	4%	10%	5%
grade 6 events	1099	1261	1482	16627	4690
	1%	2%	2%	23%	6%
grade 7 events	44418	40817	45575	33869	47179
	80%	77%	83%	47%	69%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	336.527966	336.5019853259518	CCD I2 on	Y	Y
[deg] Pointing Dec	60.810232	60.78597863040417	CCD I3 on	Y	Y
[deg] Pointing Roll	211.445438	211.6247379625555	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	O1	Y
[s] Observation start time (MET)	496684876.184000	496683789.23016	CCD S5 on	N	N
Observation start date	2013-09-27T16:00:09	2013-09-27T15:43:09	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	496695271.184000	496695496.7808	On-chip summing requested	N	N
Observation end date	2013-09-27T18:53:24	2013-09-27T18:58:16	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



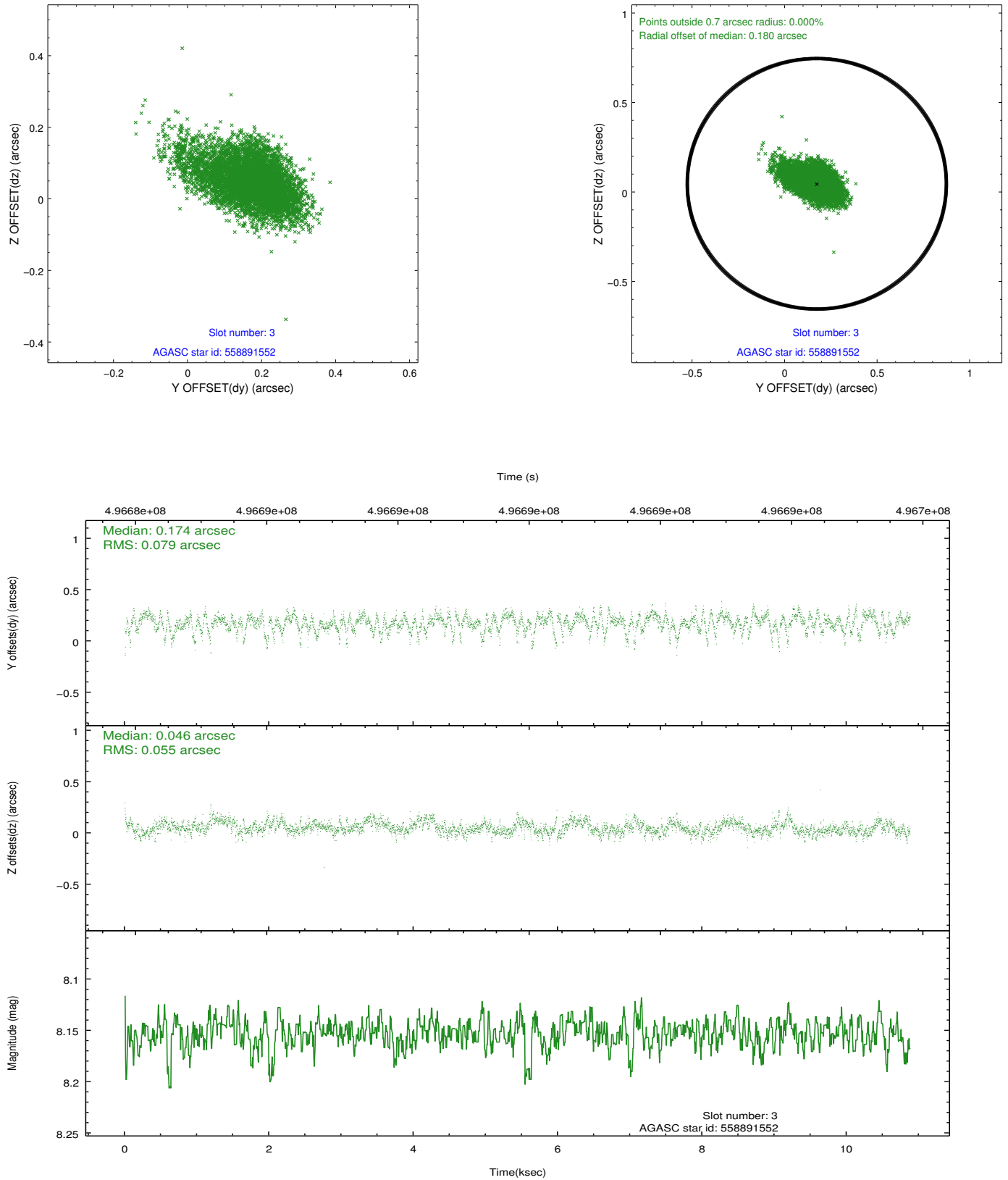


Slot Statistics

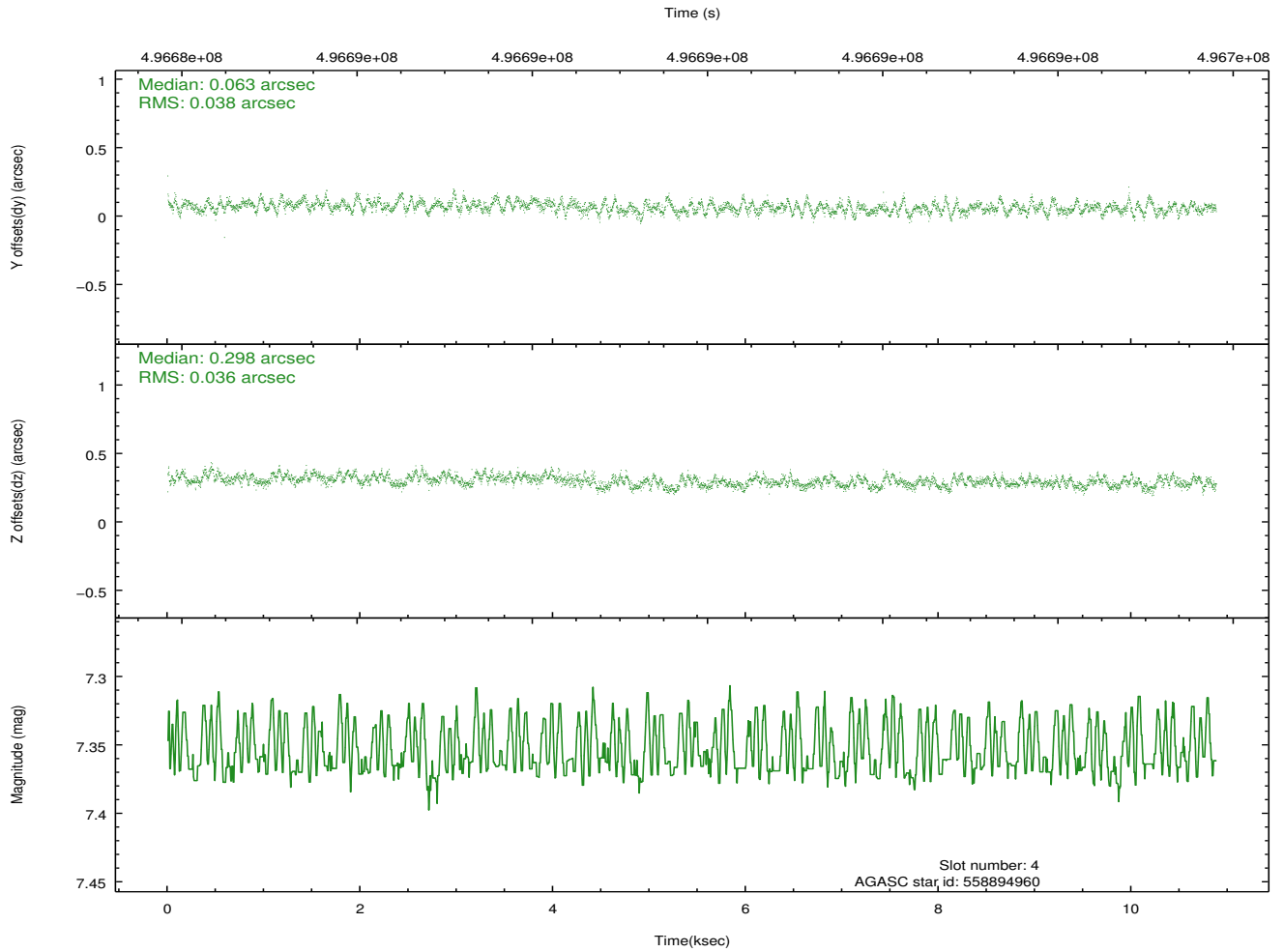
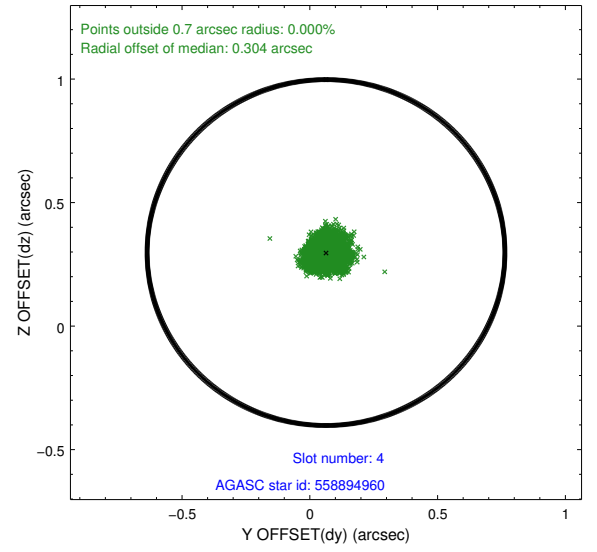
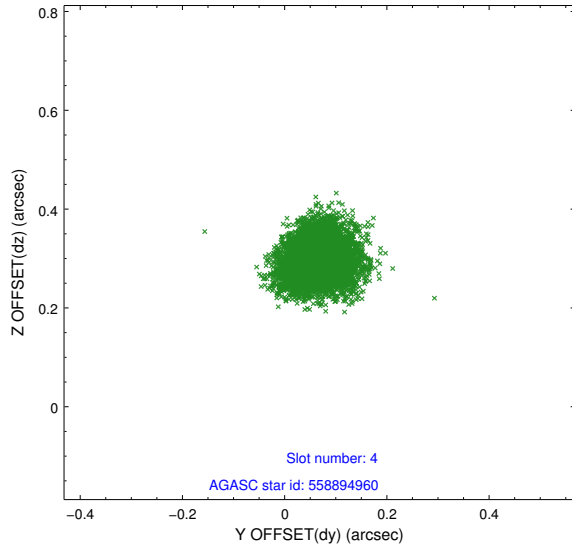
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.07	2654	-0.120	-0.007	0.010	0.017	0.000000	0.000000	-769.10	-1736.36
1	FID		ACIS-S-4	7.16	2653	0.228	0.060	0.008	0.014	0.000000	0.000000	2144.29	171.72
2	FID		ACIS-S-5	7.19	2654	-0.140	-0.044	0.011	0.019	0.000000	0.000000	-1821.37	165.80
3	GUIDE	used	558891552	8.15	5308	0.174	0.046	0.096	0.182	334.799066	61.059602	2080.92	-2370.24
4	GUIDE	used	558894960	7.36	5308	0.063	0.298	0.056	0.089	337.171618	61.455544	-2158.39	-1409.55
5	GUIDE	used	558897568	8.08	5308	0.035	-0.022	0.062	0.097	337.247030	60.671143	-824.25	1082.81
6	GUIDE	used	558901144	8.33	5296	-0.134	0.041	0.075	0.122	337.961491	60.724567	-2006.75	1556.47
7	GUIDE	used	558895336	8.26	5307	-0.135	-0.366	0.077	0.128	336.719690	60.165141	917.66	2160.37

2.4 Star Slots

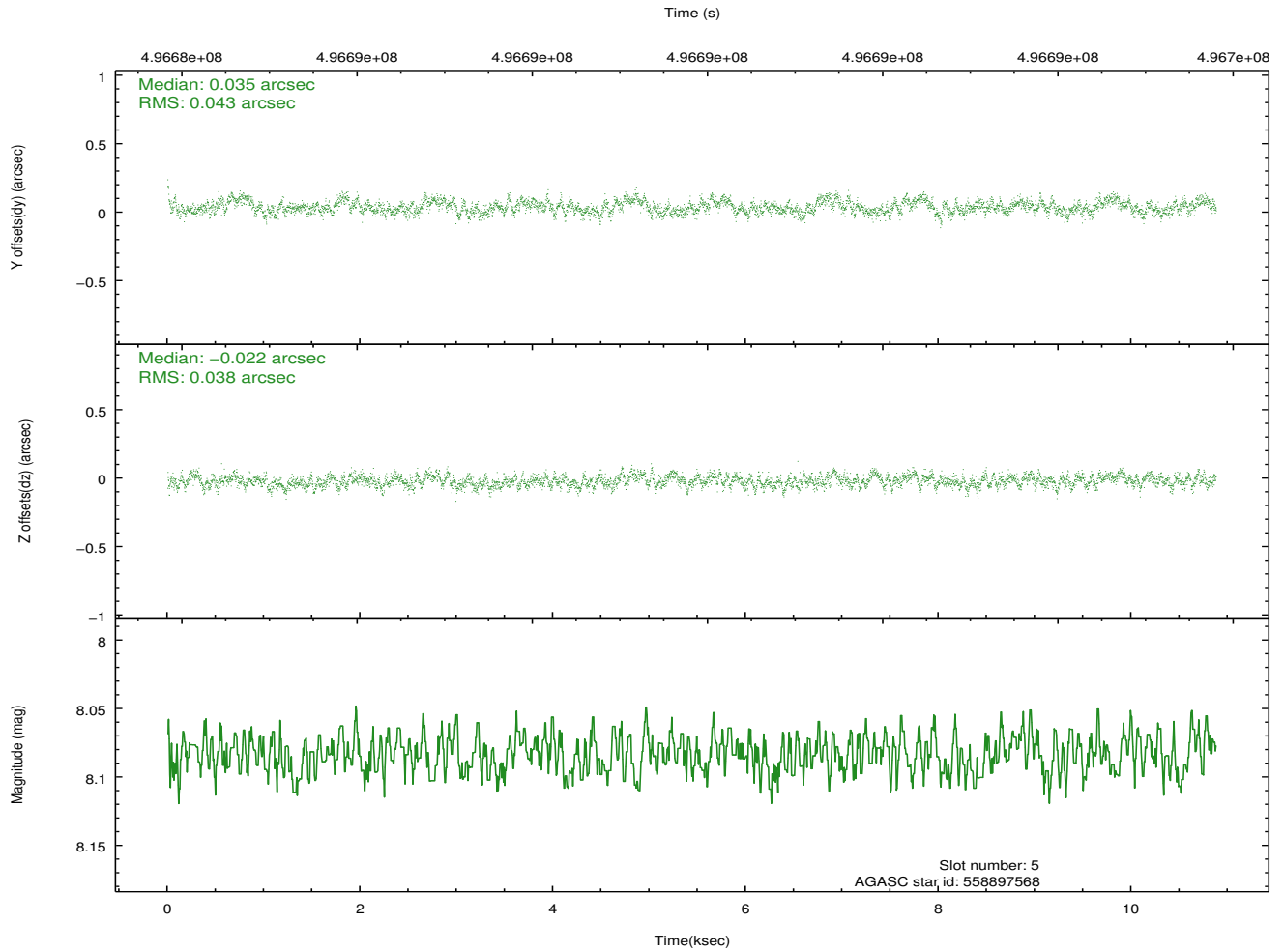
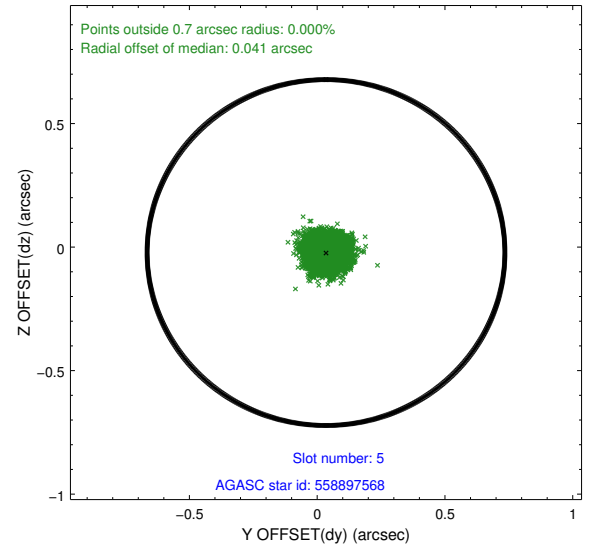
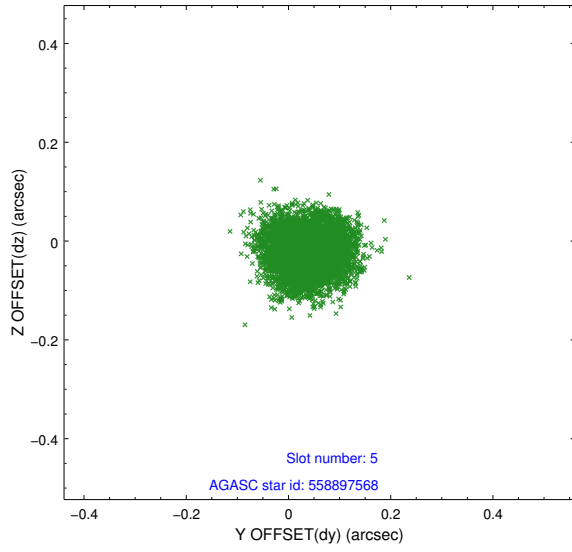
2.4.1 Slot 3



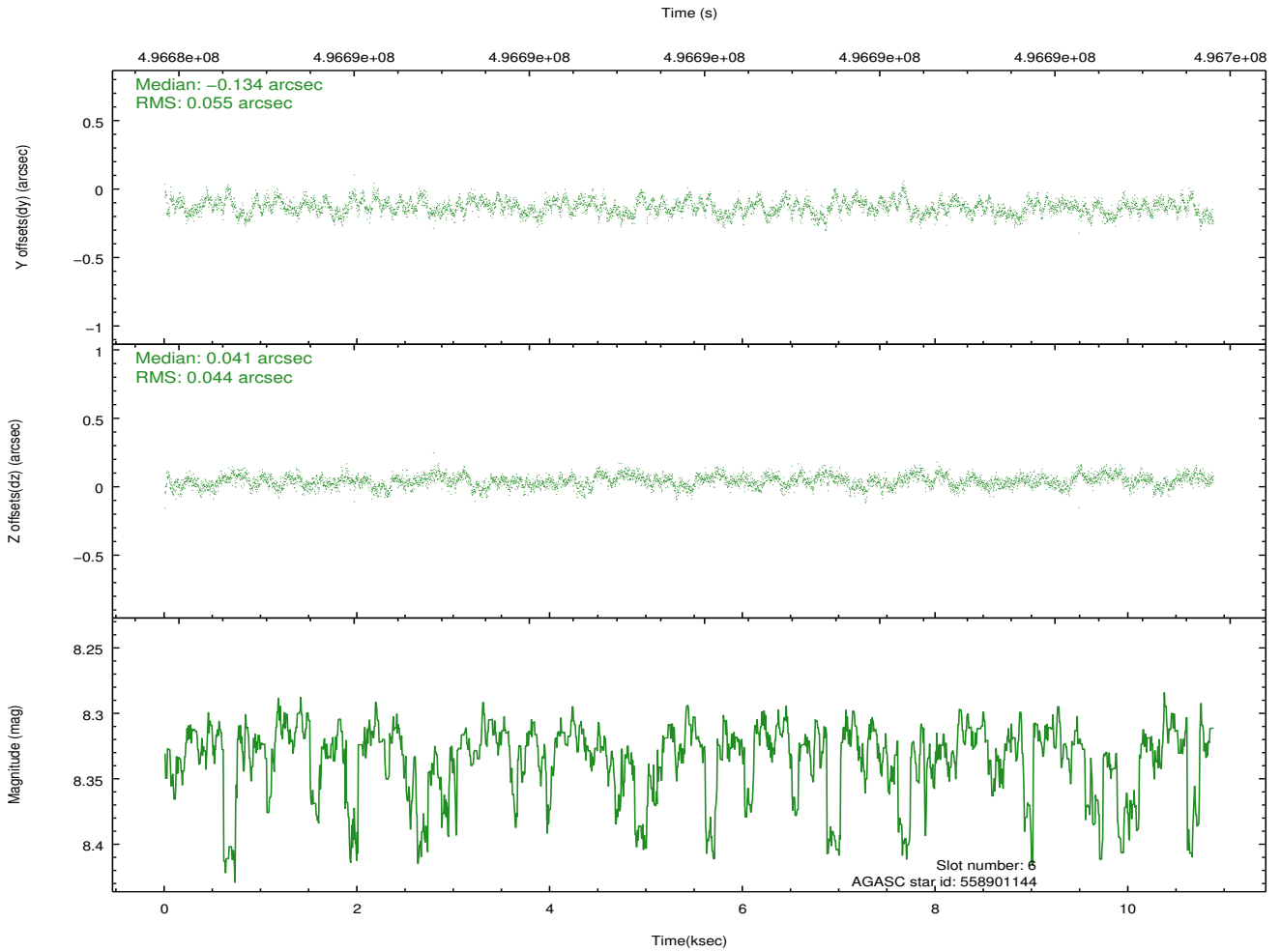
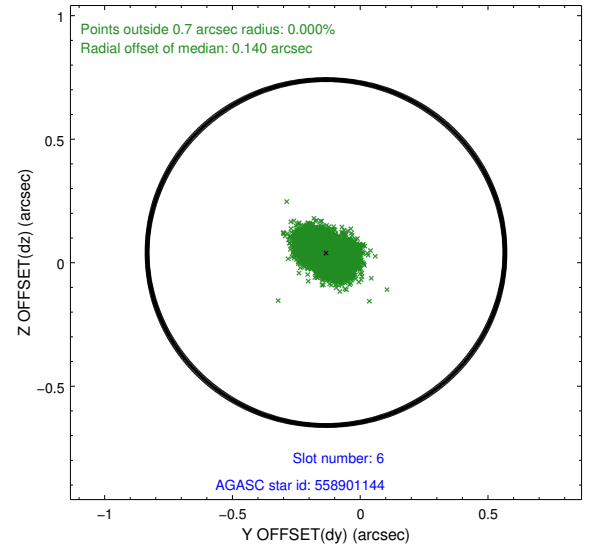
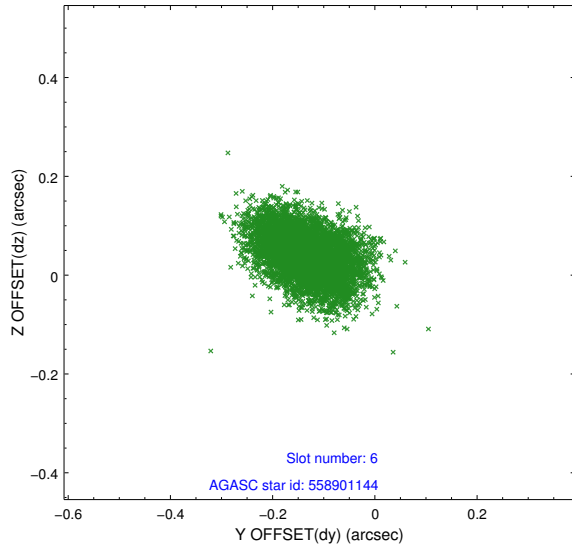
2.4.2 Slot 4



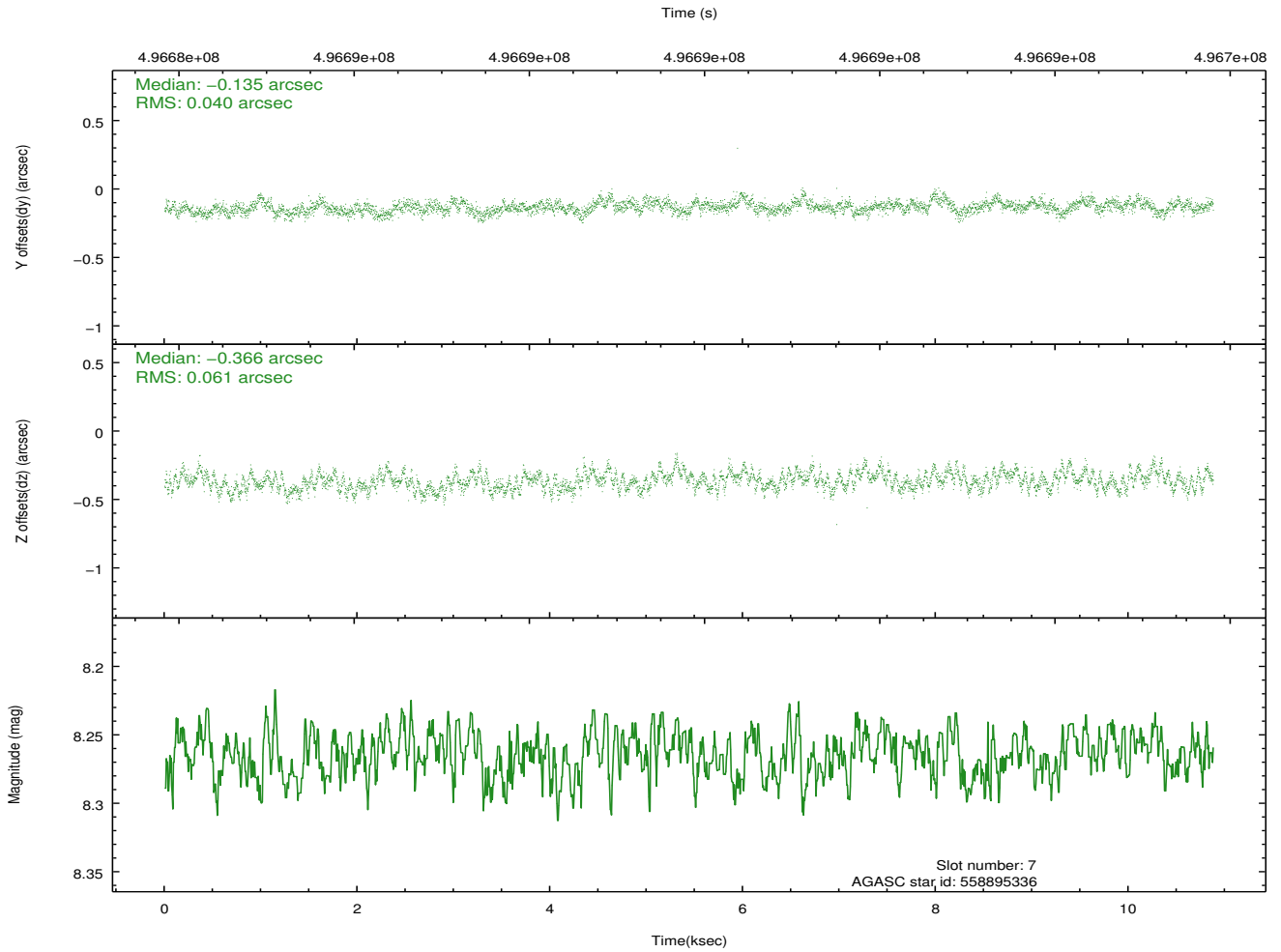
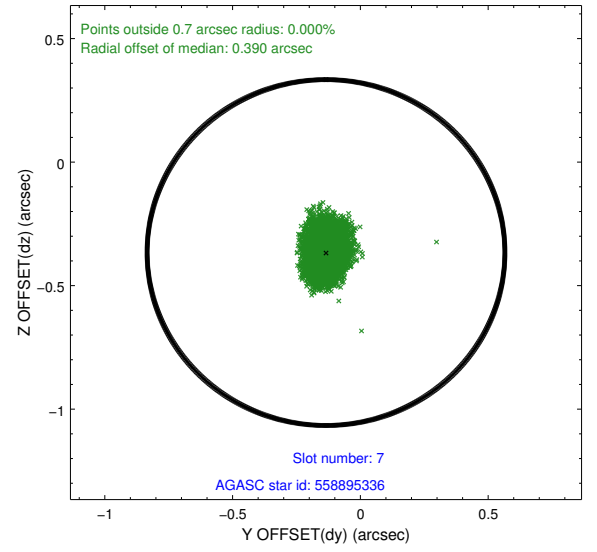
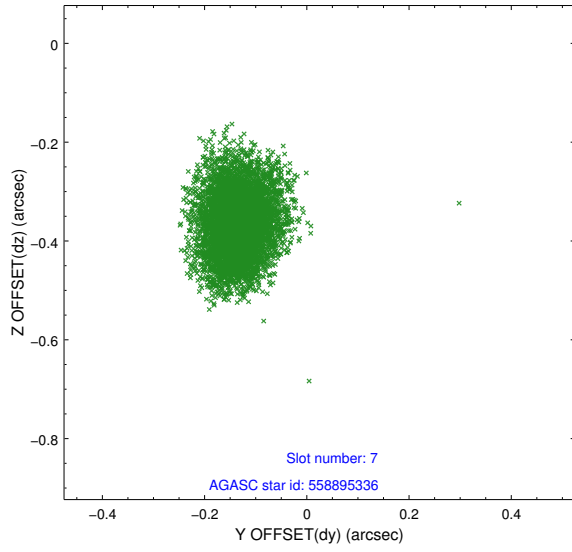
2.4.3 Slot 5



2.4.4 Slot 6

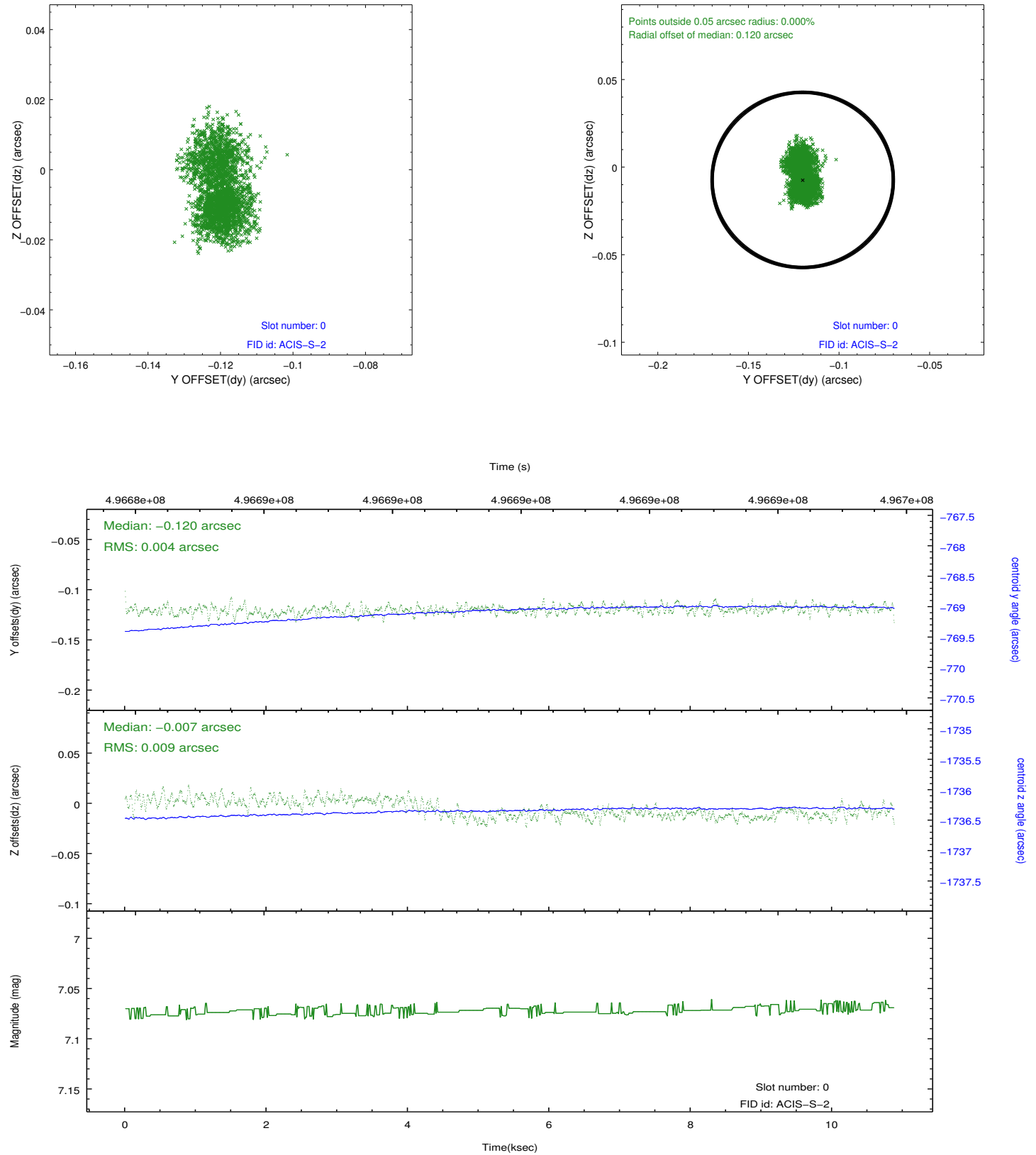


2.4.5 Slot 7

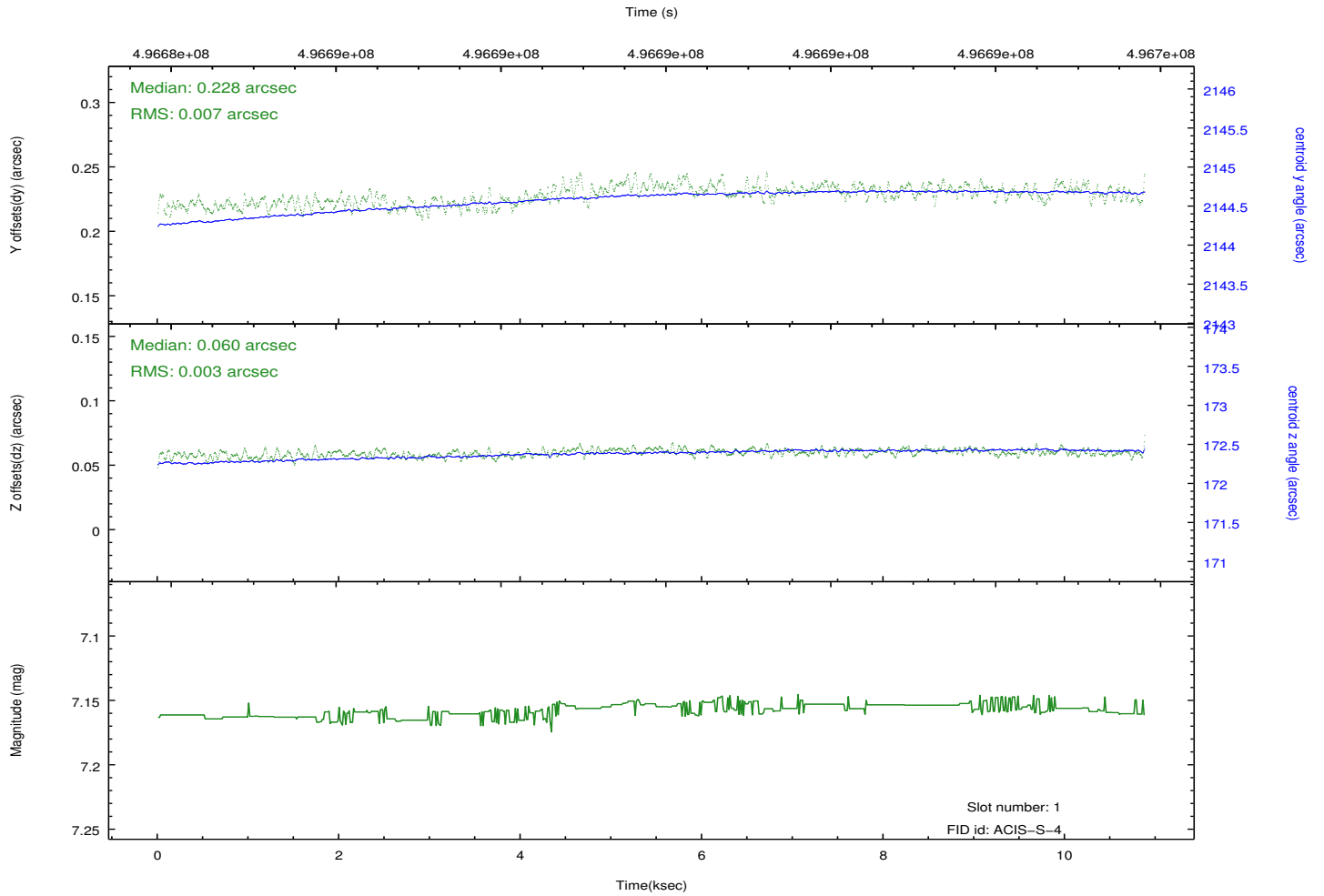
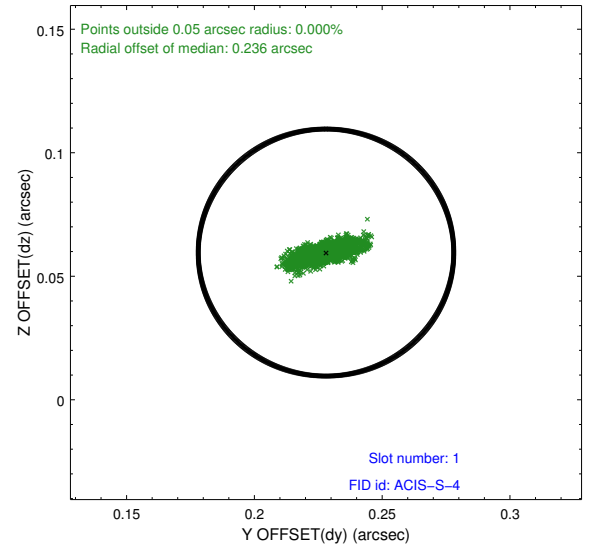
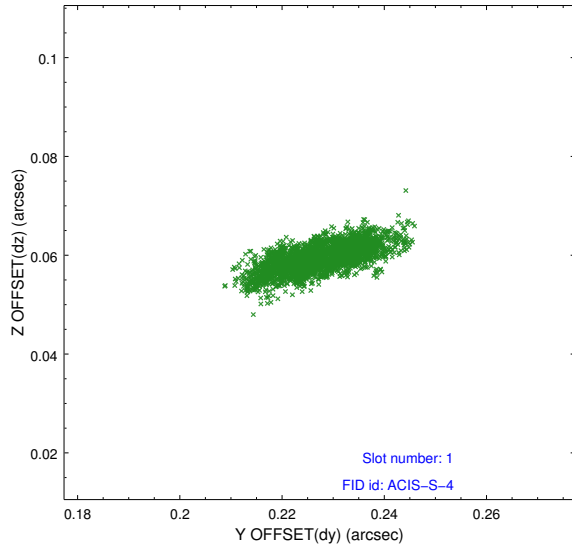


2.5 FID Slots

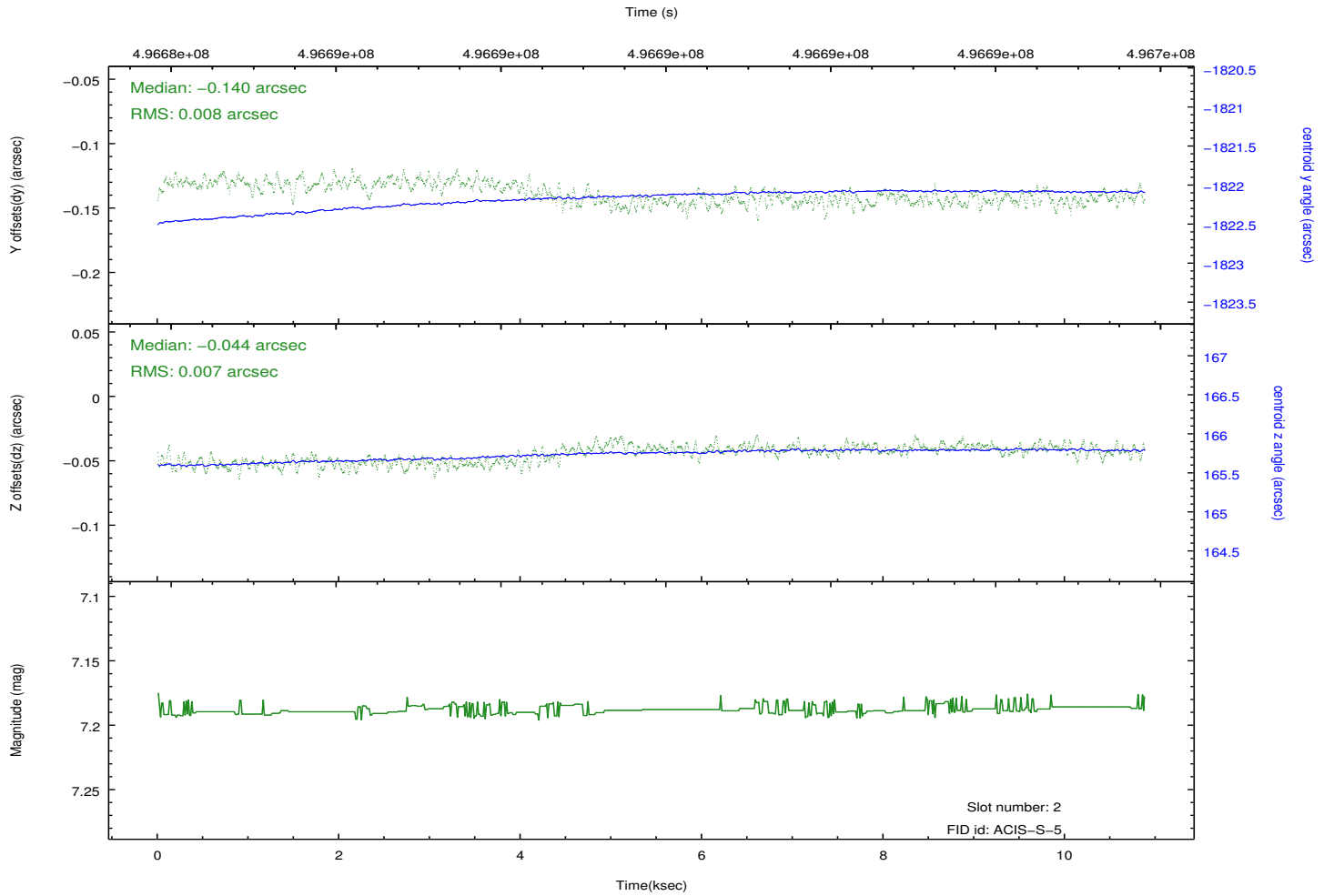
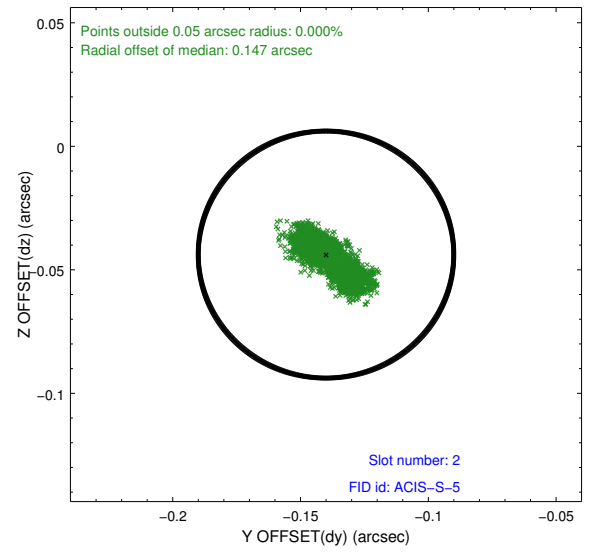
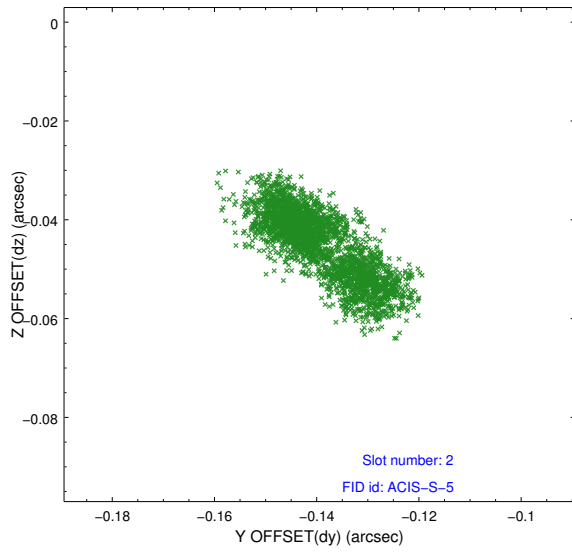
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.459400080442

A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.