

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 4495 - L2 Version 4
Chandra X-Ray Center

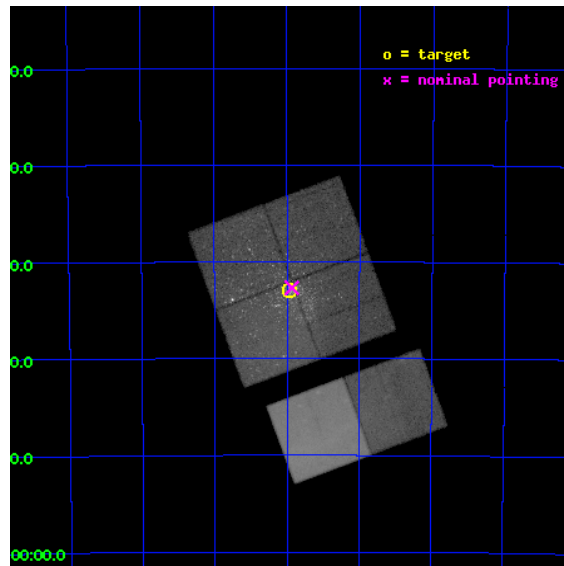
L2 Processing Date : Apr 2 2013

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1 Front

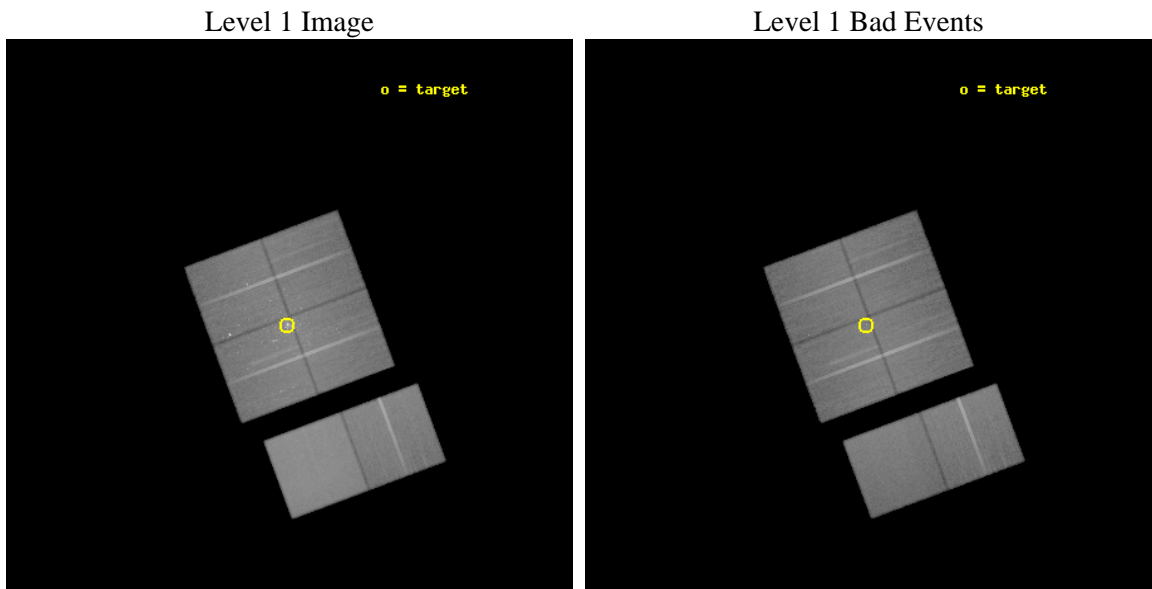
seq_num	200264	Sequence number
obs_id	4495	Observation id
title	Triggered Star Formation and the Remarkable Carina OB Cluster Trumpler 14	Proposal title
observer	Dr. Leisa Townsley	Principal investigator
object	Trumpler 14	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	160.989583	Observer's specified target RA [deg]
dec_targ	-59.548056	Observer's specified target Dec [deg]
ra_nom	160.98292526875	Nominal RA [deg]
dec_nom	-59.544861101795	Nominal Dec [deg]
roll_nom	159.57521895152	Nominal Roll [deg]
revision	4	Processing version of data
ontime	58060.758823425	Sum of GTIs [s]
livetime	57325.558535211	Livetime [s]
ontime0	58057.517823189	Sum of GTIs [s]
ontime1	58060.758813411	Sum of GTIs [s]
ontime2	58051.036052018	Sum of GTIs [s]
ontime3	58060.758823425	Sum of GTIs [s]
ontime6	58060.758813411	Sum of GTIs [s]
ontime7	58063.999783695	Sum of GTIs [s]
l2events	724639	Number of level 2 events



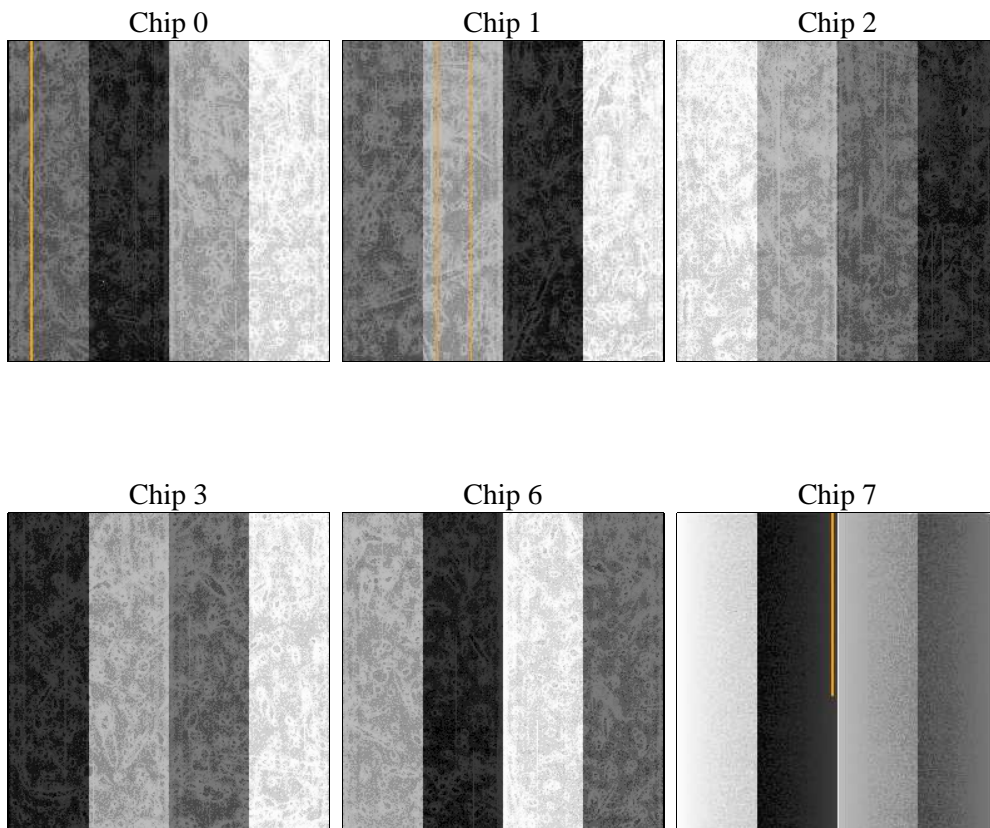
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	58106.987000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	58060.758823425	Sum of GTIs [s]
caldbver	4.5.6	 	ontime0	58057.517823189	Sum of GTIs [s]
date	2013-04-02T17:38:17	Date and time of file creation	ontime1	58060.758813411	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	58051.036052018	Sum of GTIs [s]
			ontime3	58060.758823425	Sum of GTIs [s]
			ontime6	58060.758813411	Sum of GTIs [s]
			ontime7	58063.999783695	Sum of GTIs [s]
			l1events	2882703	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	391218	425293	441760	490995	465126	668311	grade 0 events	31754	52102	43083	87127	48969	52641
rejected events	328167	334395	367441	365524	381748	330583		8%	12%	9%	17%	10%	7%
rejected %	83%	78%	83%	74%	82%	49%	grade 1 events	272	425	385	752	337	534
								0%	0%	0%	0%	0%	0%
							grade 2 events	12158	15582	12517	15999	13335	73386
								3%	3%	2%	3%	2%	10%
							grade 3 events	5098	6139	4937	6446	5206	32602
								1%	1%	1%	1%	1%	4%
							grade 4 events	4925	6073	5146	6398	5191	32388
								1%	1%	1%	1%	1%	4%
							grade 5 events	16740	18044	16404	19051	19552	53498
								4%	4%	3%	3%	4%	8%
							grade 6 events	9119	11004	8636	9504	10680	146727
								2%	2%	1%	1%	2%	21%
							grade 7 events	311152	315924	350652	345718	361856	276535
								79%	74%	79%	70%	77%	41%

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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	161.036174	160.9829252687515	Subarray requested	NONE	NONE
[deg] Pointing Dec	-59.540208	-59.54486110179495	Alternating exposures requested	N	N
[deg] Pointing Roll	159.412434	159.5752189515163	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	212176373.184000	212174938.96947			
Observation start date	2004-09-21T17:51:49	2004-09-21T17:28:58			
[s] Observation end time (MET)	212234480.184000	212234705.69714			
Observation end date	2004-09-22T10:00:16	2004-09-22T10:05:05			
Read mode	TIMED	TIMED			

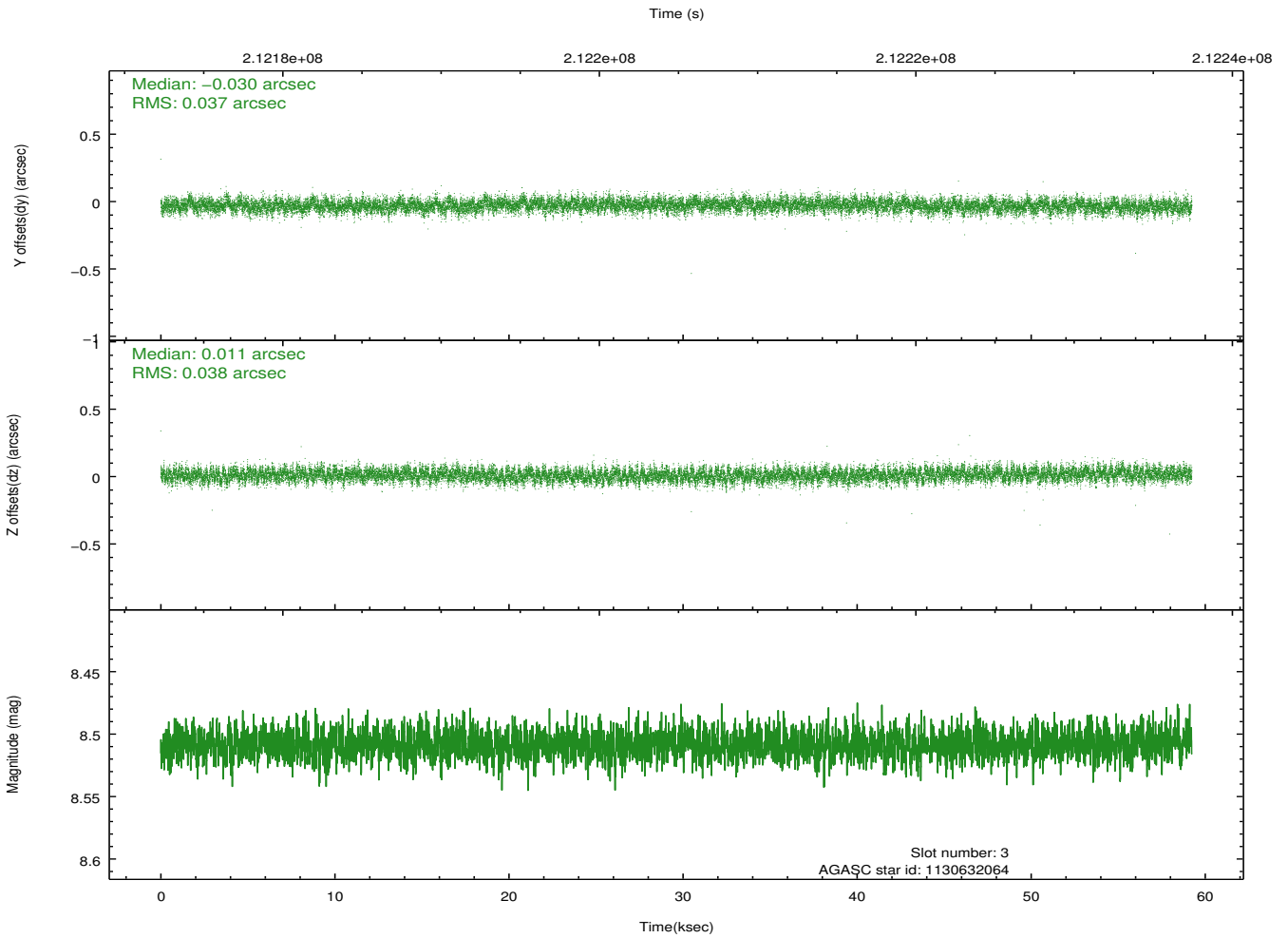
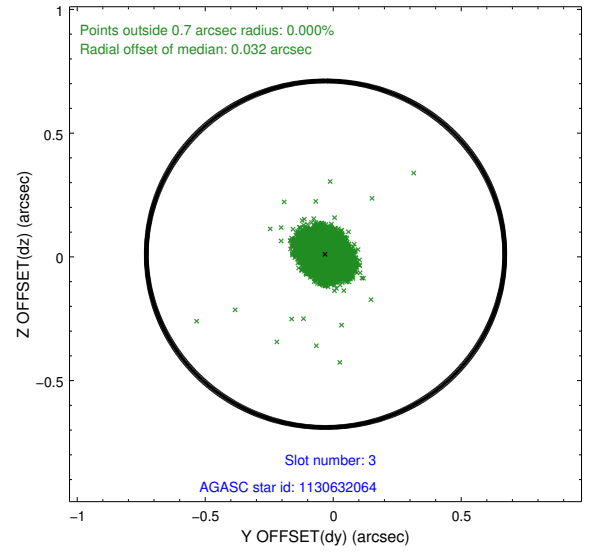
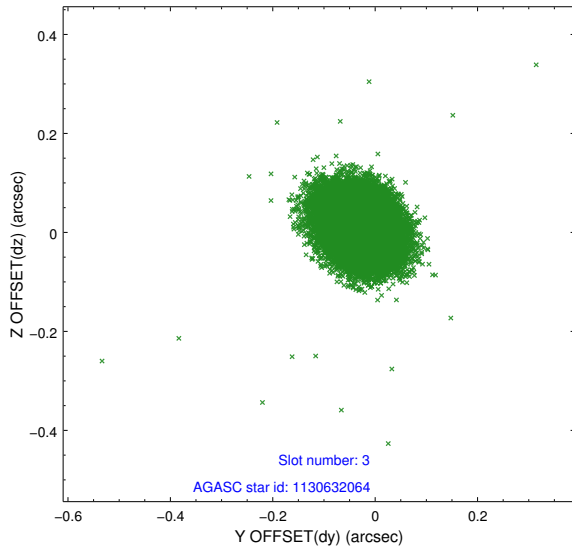
2.3 Aspect

Slot Statistics

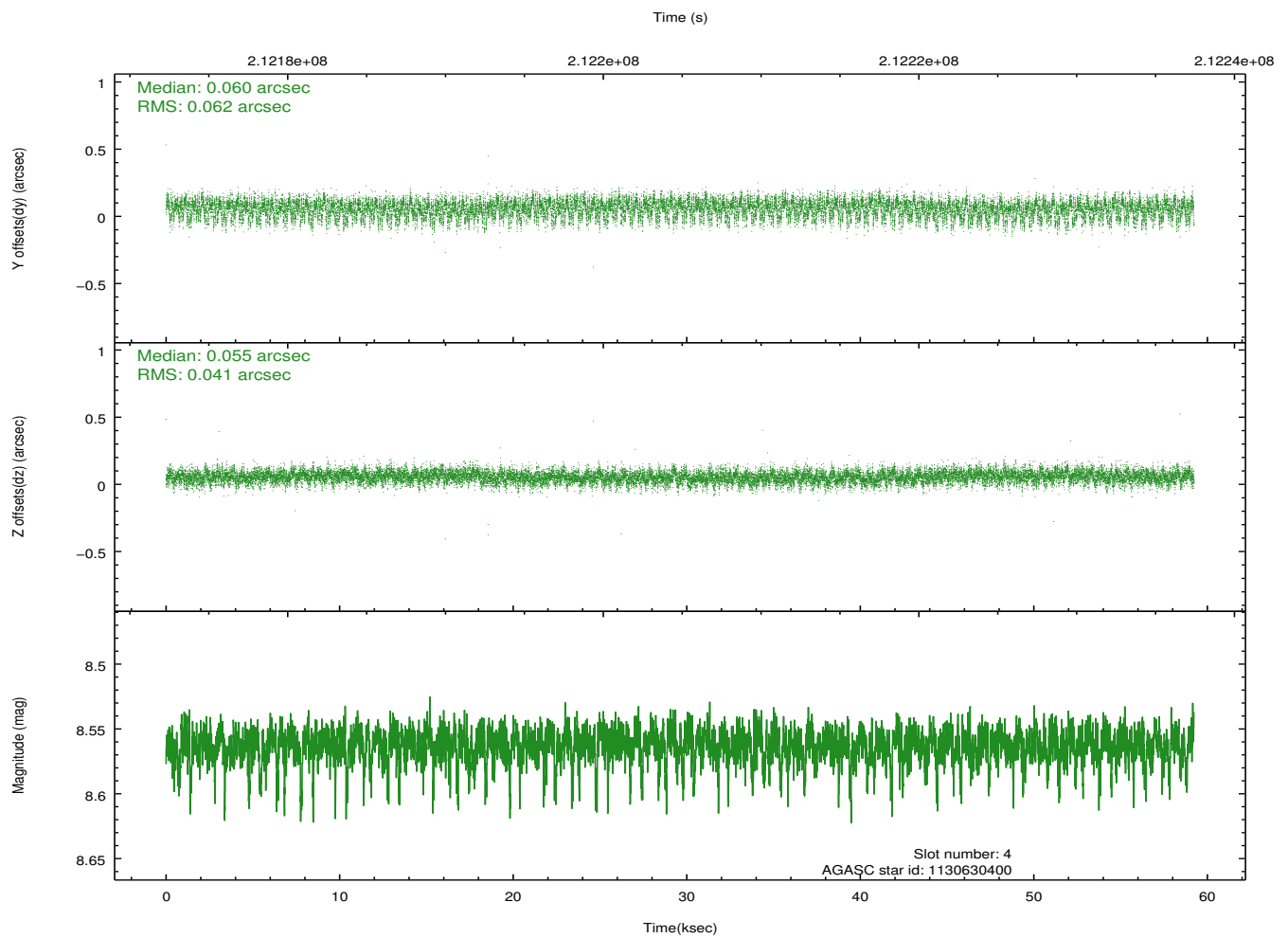
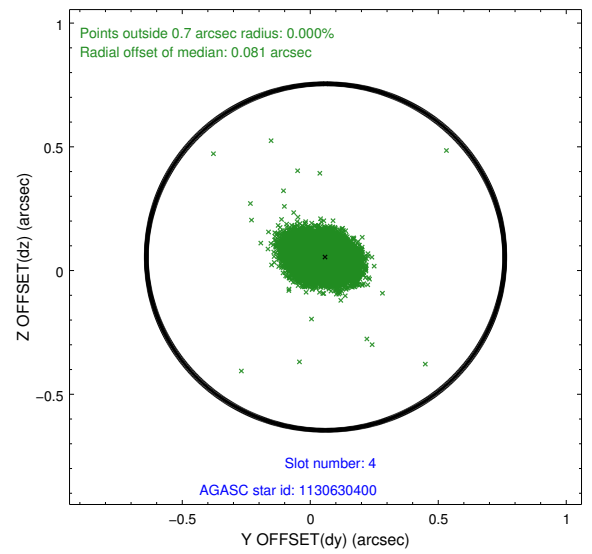
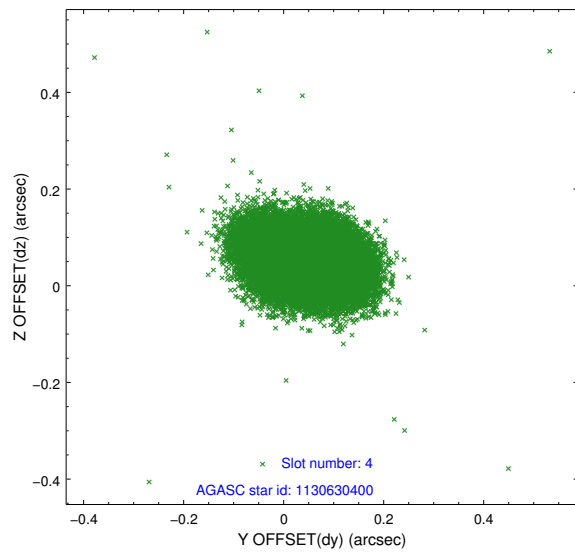
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	14448	-0.044	0.005	0.017	0.061	0.000000	0.000000	933.40	-834.38
1	FID	ACIS-I-2	7.14	14448	-0.115	-0.038	0.016	0.029	0.000000	0.000000	-760.78	-840.88
2	FID	ACIS-I-4	7.17	14448	0.066	0.098	0.016	0.030	0.000000	0.000000	2153.38	1065.55
3	GUIDE	1130632064	8.51	28890	-0.030	0.011	0.056	0.091	160.452382	-59.130948	1526.16	-995.38
4	GUIDE	1130630400	8.56	28889	0.060	0.055	0.078	0.129	160.235909	-58.888840	2215.58	-1663.07
5	GUIDE	1130643264	6.62	28897	0.041	-0.103	0.065	0.113	160.322990	-59.676912	1038.18	923.08
6	GUIDE	1130640672	8.23	28886	-0.028	0.067	0.062	0.100	162.096044	-59.540805	-1816.48	-663.69
7	GUIDE	1174033144	8.52	28885	-0.045	-0.026	0.057	0.091	161.168741	-60.059230	-880.21	1665.57

2.4 Star Slots

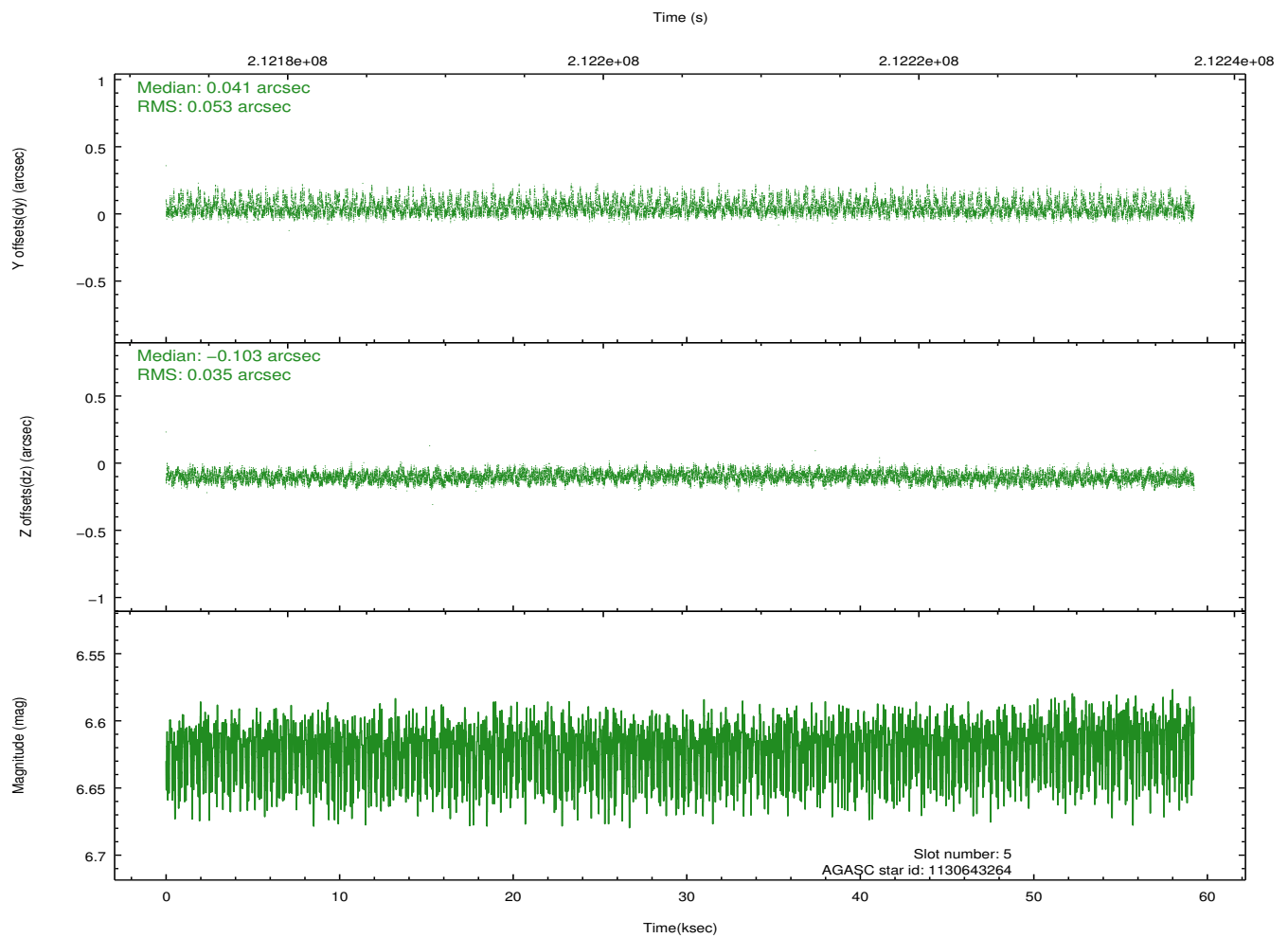
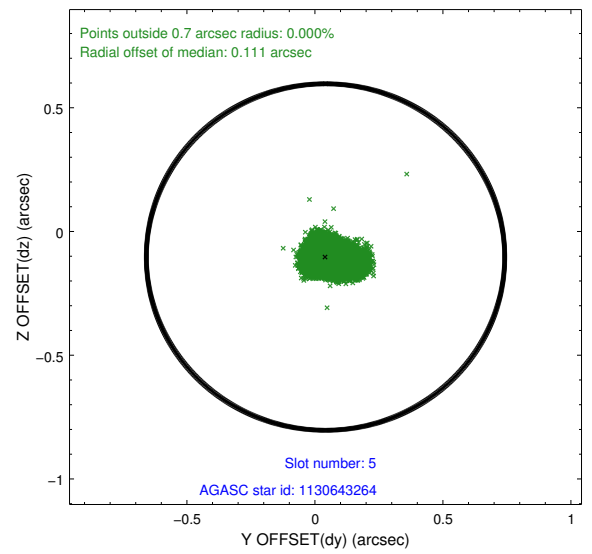
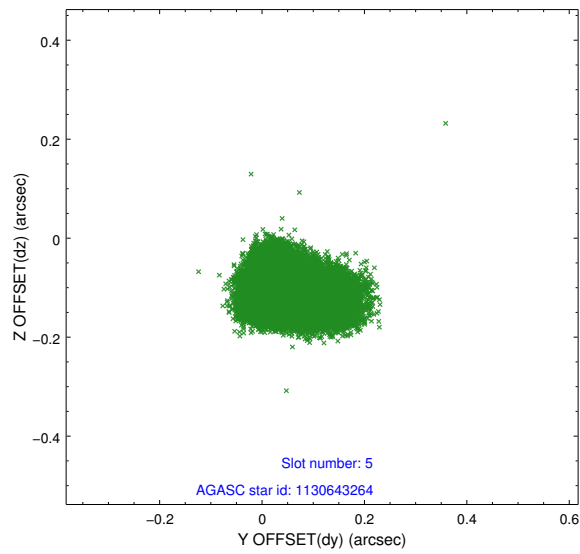
2.4.1 Slot 3



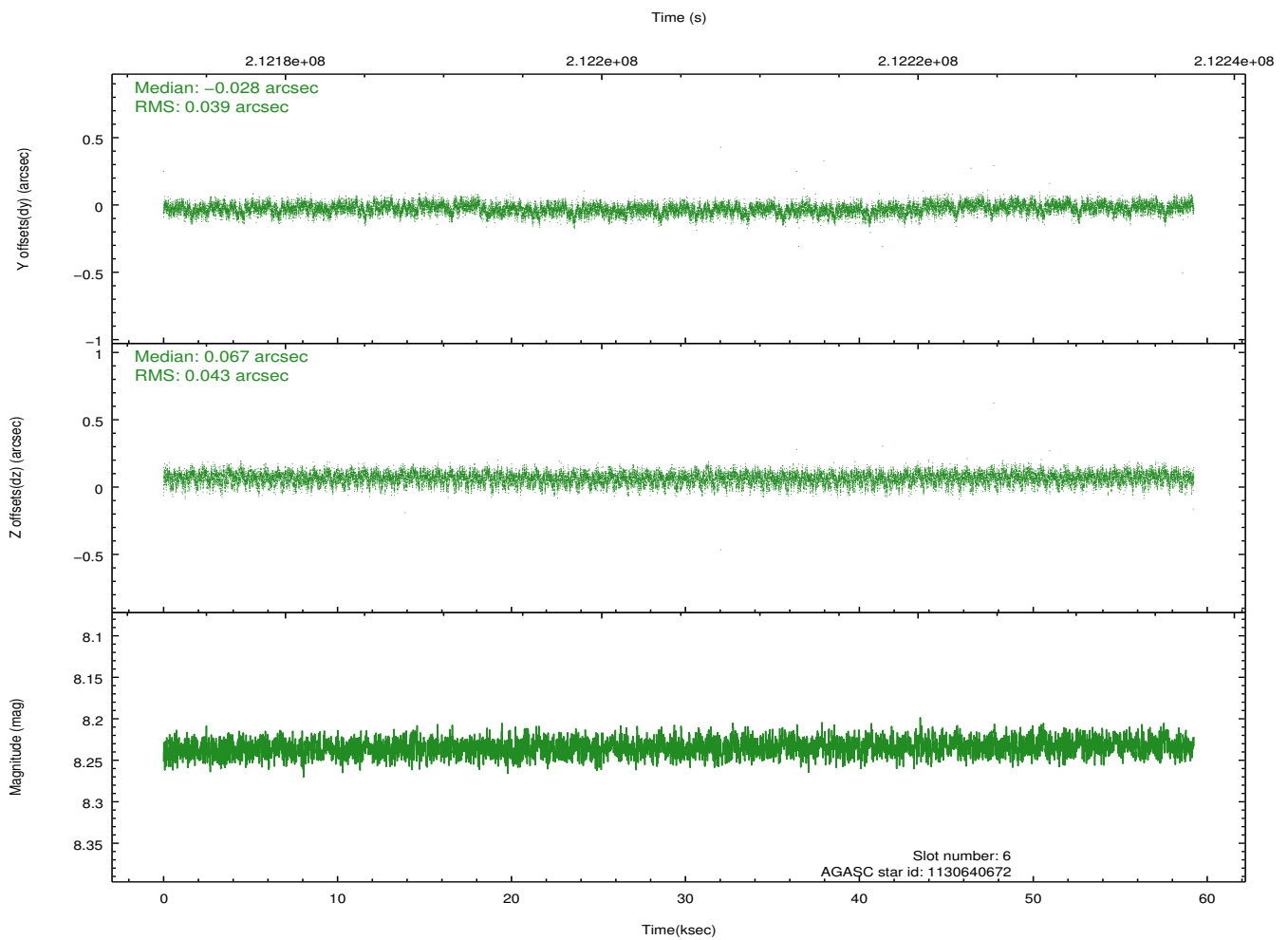
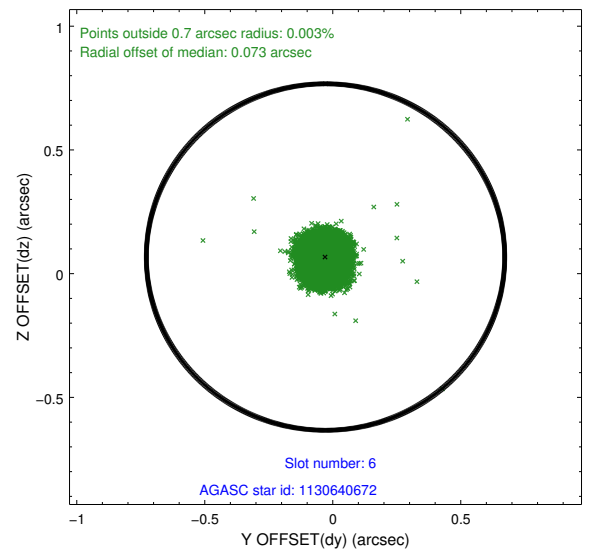
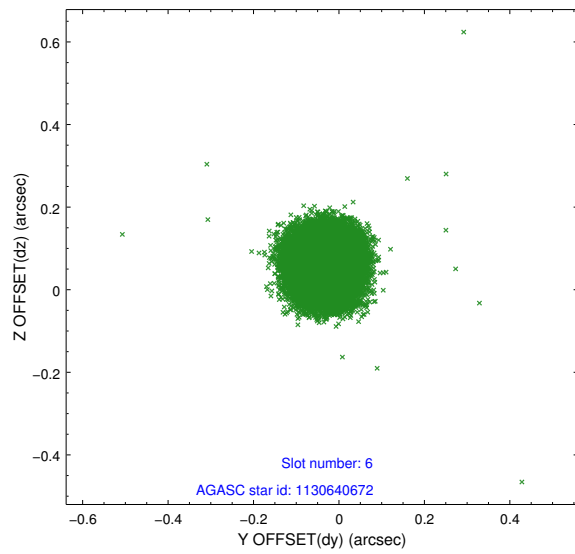
2.4.2 Slot 4



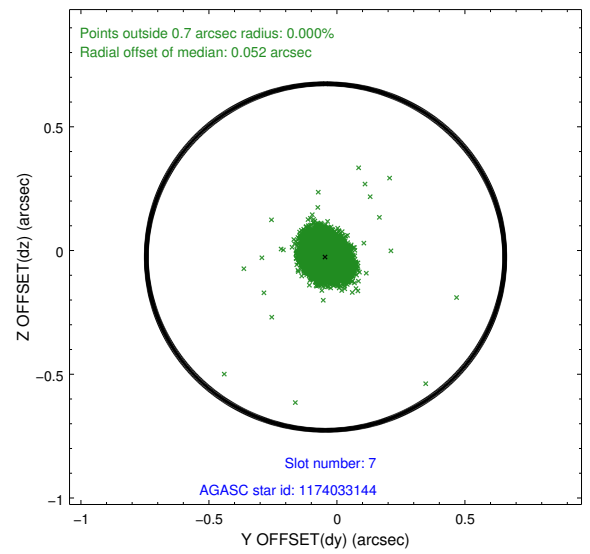
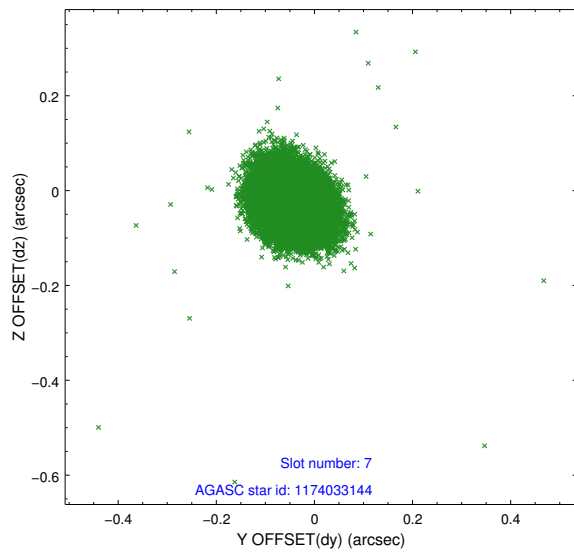
2.4.3 Slot 5



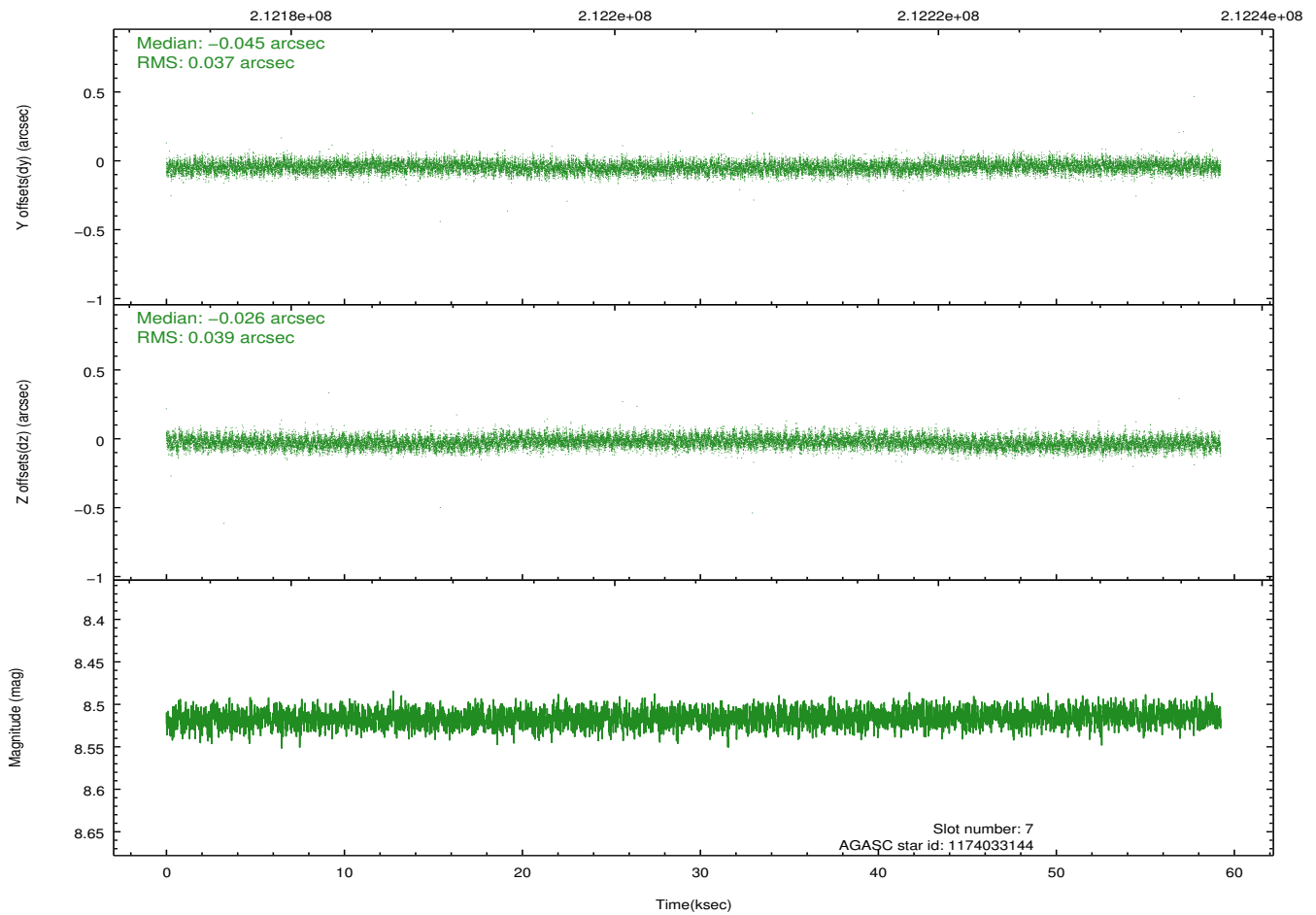
2.4.4 Slot 6



2.4.5 Slot 7

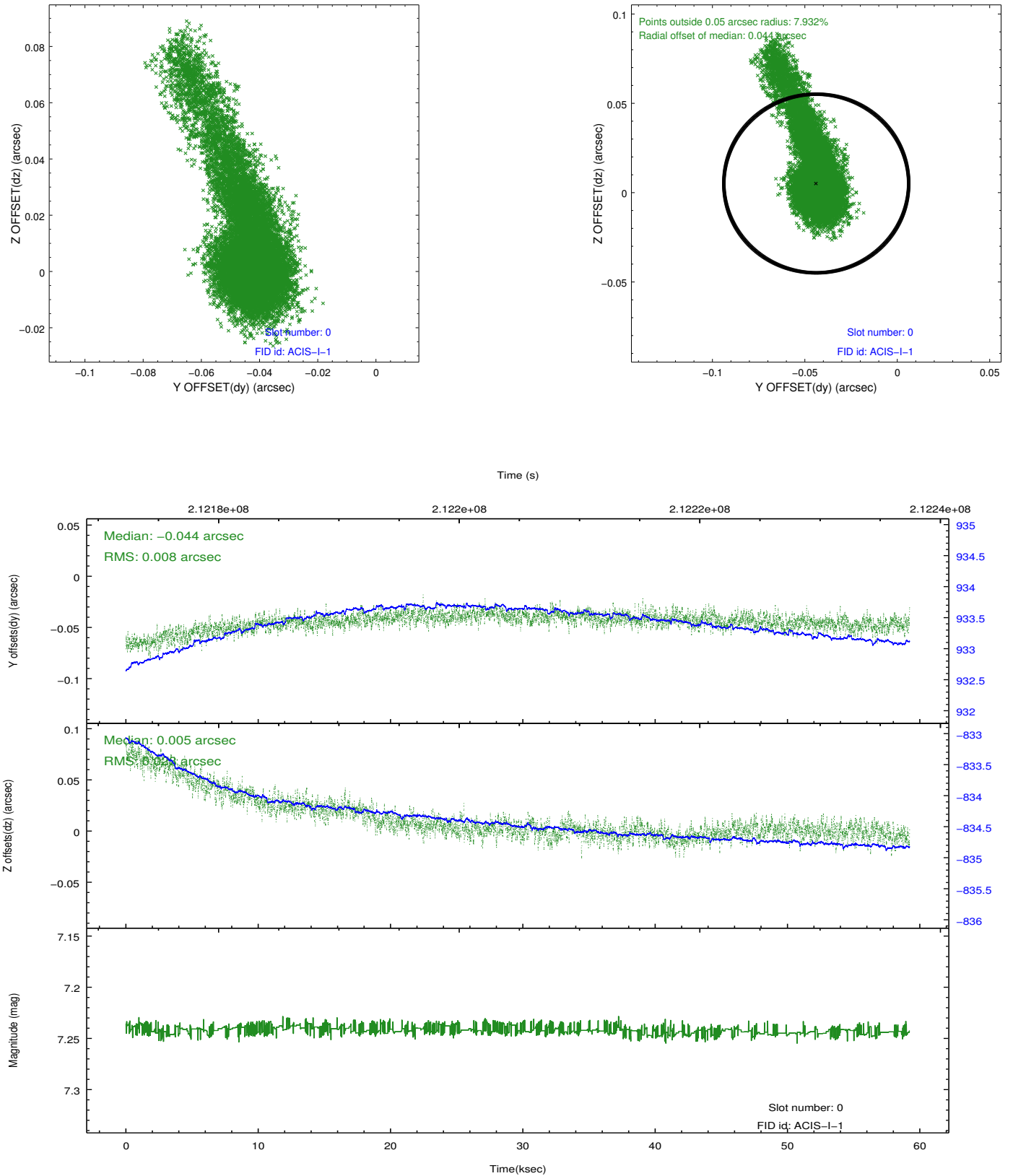


Time (s)

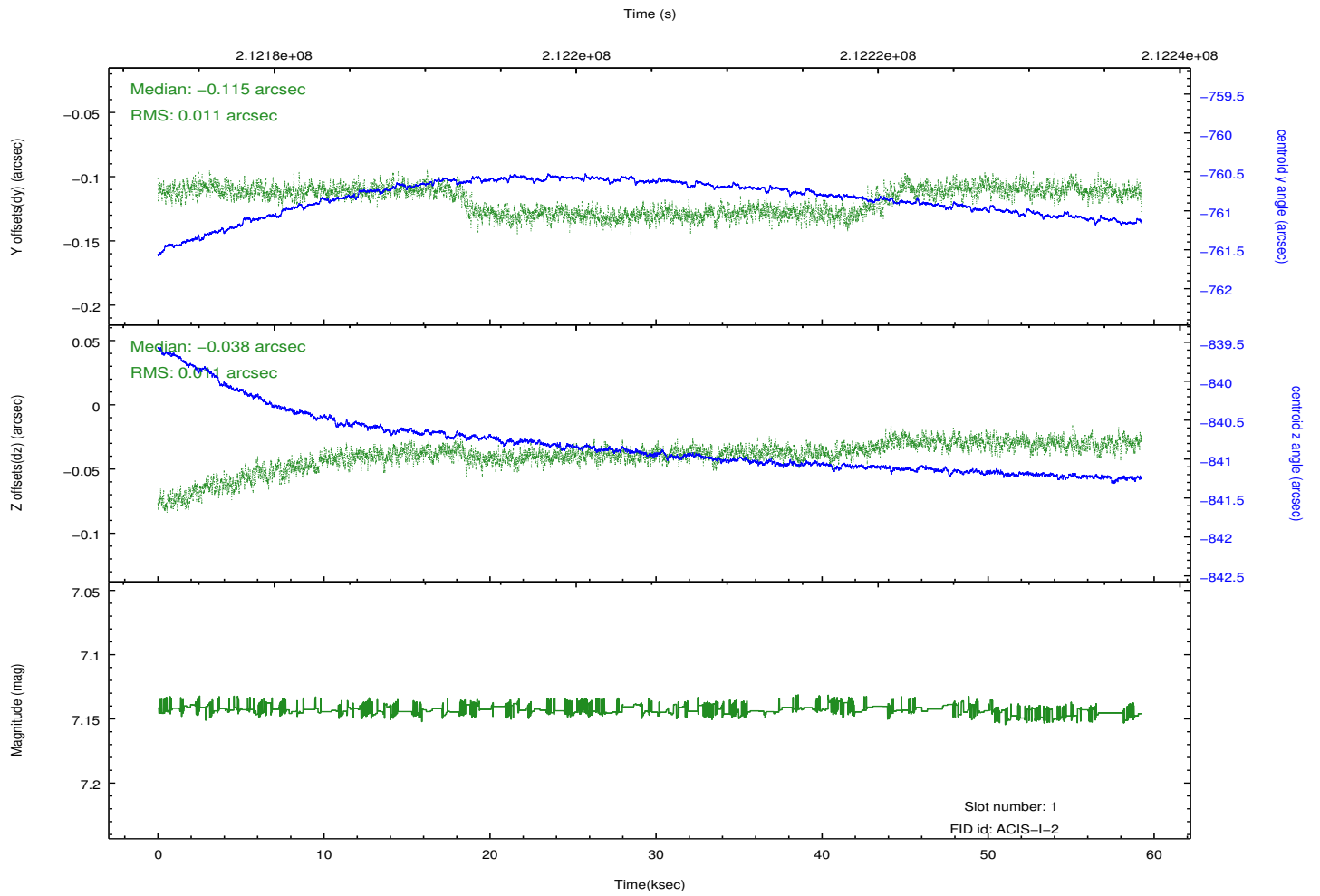
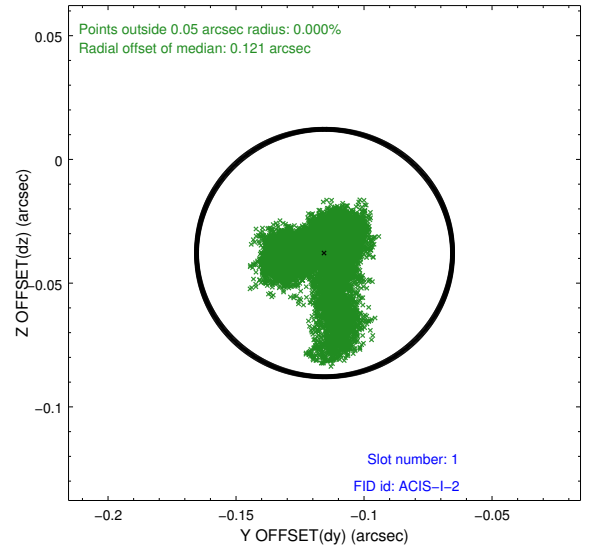
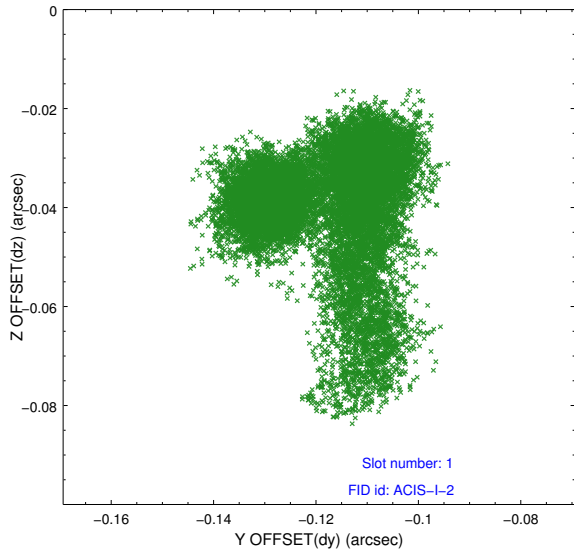


2.5 FID Slots

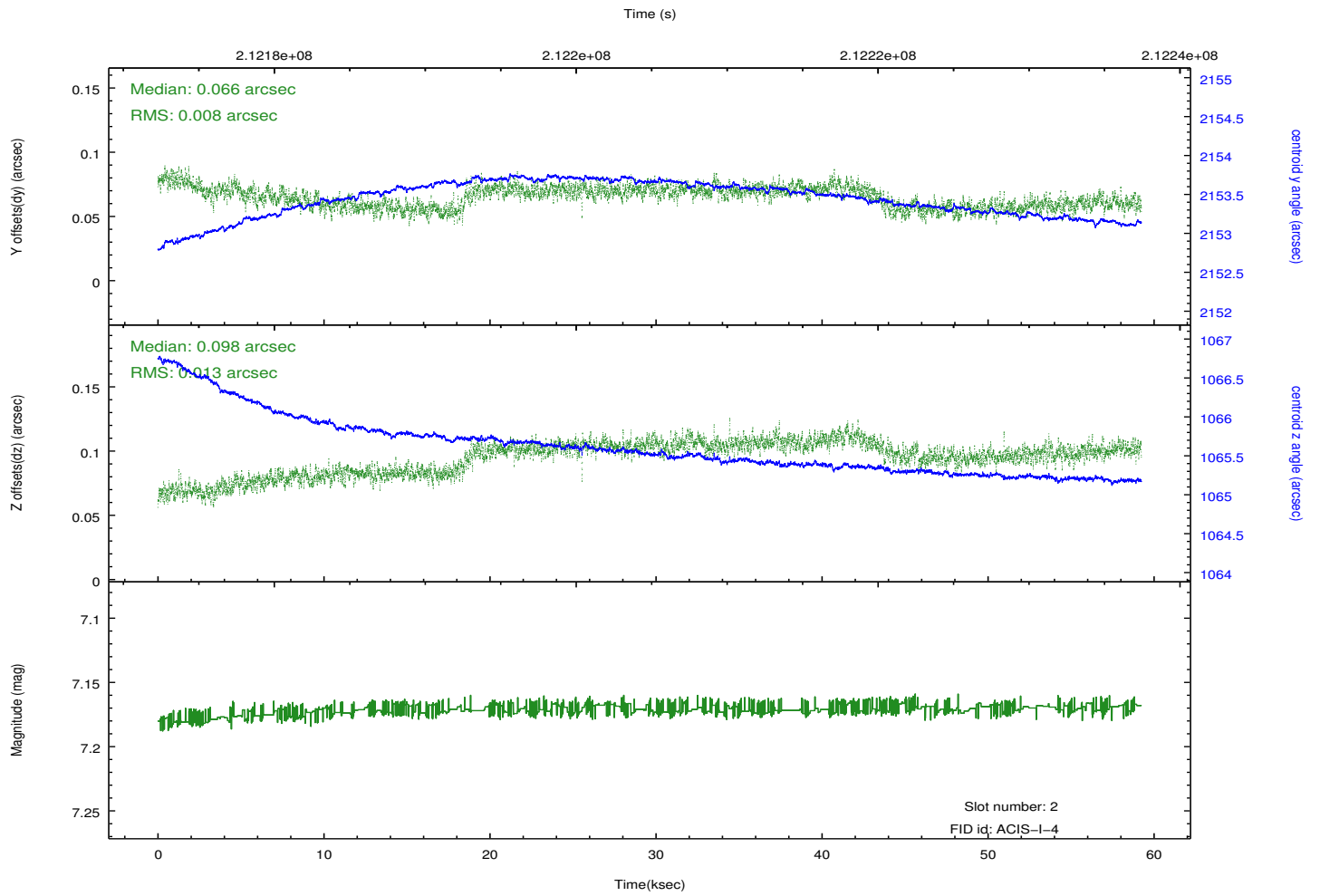
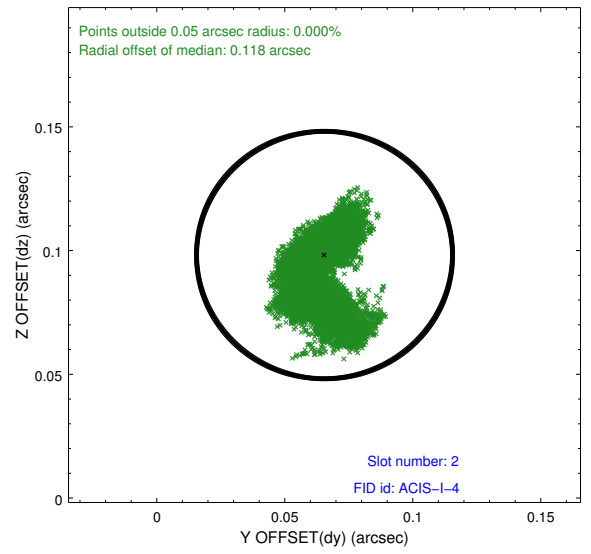
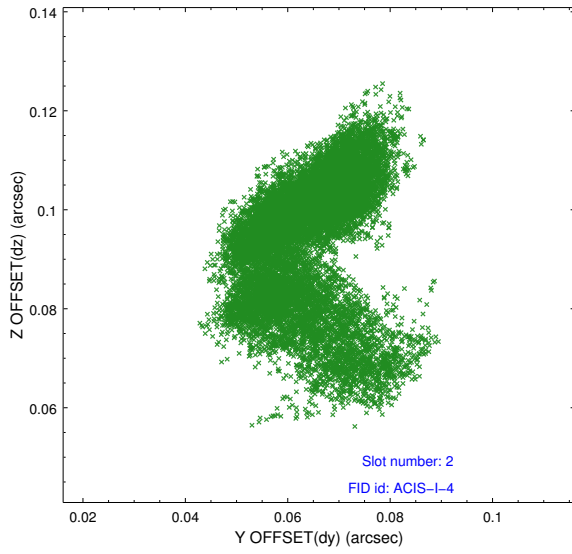
2.5.1 Slot 0



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)	2013.04.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	58.06

A.2 Comments

A spatial region of the original bias map for CCD = 1 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 = 1 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:
(161.32786, -59.46641), (161.32960, -59.46397), (161.30945, -59.46022), (161.30770, -59.46265)