

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 6110 - L2 Version 3
Chandra X-Ray Center

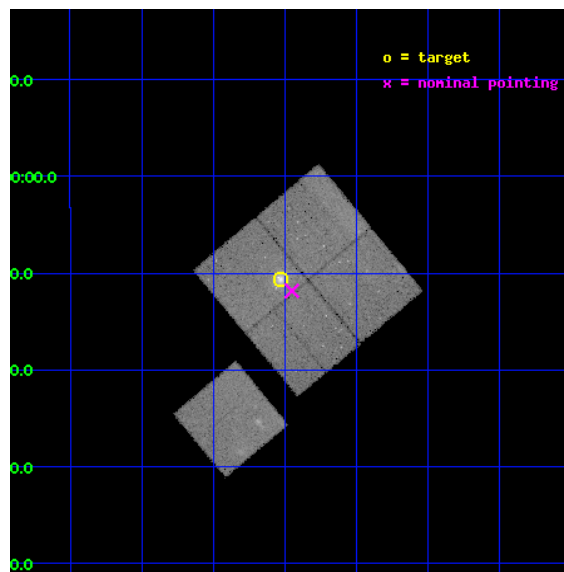
L2 Processing Date : Dec 22 2012

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1 Front

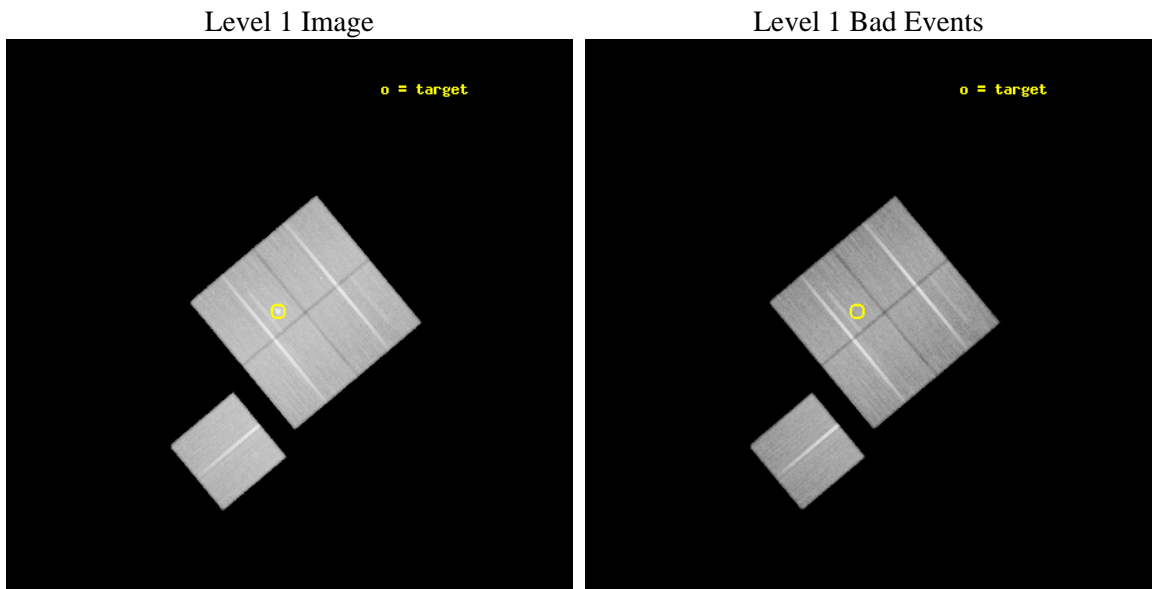
seq_num	800558	Sequence number
obs_id	6110	Observation id
title	Probing dark energy using the X-ray gas mass fraction in dynamically relaxed galaxy clusters	Proposal title
observer	Prof. Steven Allen	Principal investigator
object	MACS1311.0-0311	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	197.756667	Observer's specified target RA [deg]
dec_targ	-3.177222	Observer's specified target Dec [deg]
ra_nom	197.73748061246	Nominal RA [deg]
dec_nom	-3.1972061739429	Nominal Dec [deg]
roll_nom	230.133440296	Nominal Roll [deg]
revision	3	Processing version of data
ontime	64042.817876488	Sum of GTIs [s]
livetime	63206.051313295	Livetime [s]
ontime0	64049.099876821	Sum of GTIs [s]
ontime1	64039.676916152	Sum of GTIs [s]
ontime2	64045.958896577	Sum of GTIs [s]
ontime3	64042.817876488	Sum of GTIs [s]
ontime6	64042.817896336	Sum of GTIs [s]
l2events	182822	Number of level 2 events



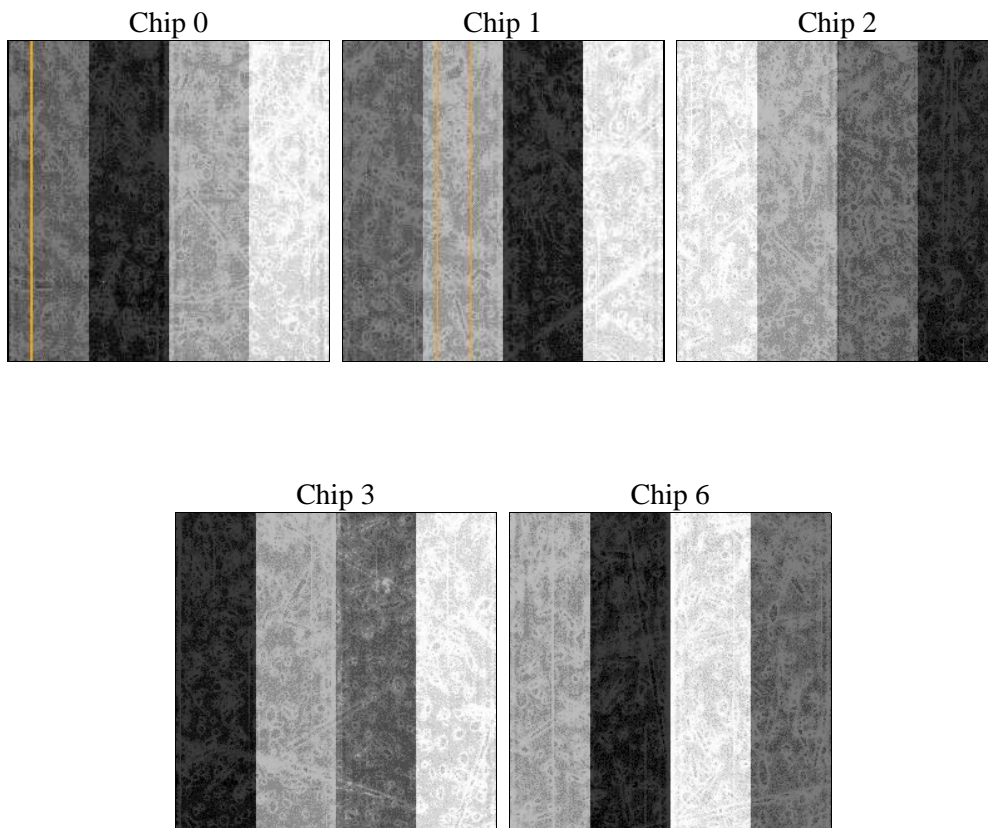
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	64000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	64042.817876488	Sum of GTIs [s]
caldbver	4.5.5	 	ontime0	64049.099876821	Sum of GTIs [s]
date	2012-12-22T16:17:08	Date and time of file creation	ontime1	64039.676916152	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	64045.958896577	Sum of GTIs [s]
			ontime3	64042.817876488	Sum of GTIs [s]
			ontime6	64042.817896336	Sum of GTIs [s]
			l1events	2063581	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	386042	392384	439300	420656	425199
rejected events	344917	346192	399258	372064	382636
rejected %	89%	88%	90%	88%	89%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	14282	16837	14552	22035	15164
	3%	4%	3%	5%	3%
grade 1 events	181	197	221	264	160
	0%	0%	0%	0%	0%
grade 2 events	9591	9844	9224	9225	9131
	2%	2%	2%	2%	2%
grade 3 events	4944	5119	4434	4786	4708
	1%	1%	1%	1%	1%
grade 4 events	4441	5001	4521	4637	4705
	1%	1%	1%	1%	1%
grade 5 events	14456	15432	13805	16719	16216
	3%	3%	3%	3%	3%
grade 6 events	7868	9394	7315	7912	8859
	2%	2%	1%	1%	2%
grade 7 events	330279	330560	385228	355078	366256
	85%	84%	87%	84%	86%

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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	197.742080	197.7374806124596	Subarray requested	NONE	NONE
[deg] Pointing Dec	-3.170192	-3.197206173942885	Alternating exposures requested	N	N
[deg] Pointing Roll	229.925002	230.133440295995	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-229.442463	-229.4438428438578			
[mm] SIM translation stage offset	-4.15	-4.148610159071865			
[s] Observation start time (MET)	230343900.184000	230342524.61337			
Observation start date	2005-04-20T00:23:56	2005-04-20T00:02:04			
[s] Observation end time (MET)	230407900.184000	230408999.4539			
Observation end date	2005-04-20T18:10:36	2005-04-20T18:29:59			
Read mode	TIMED	TIMED			

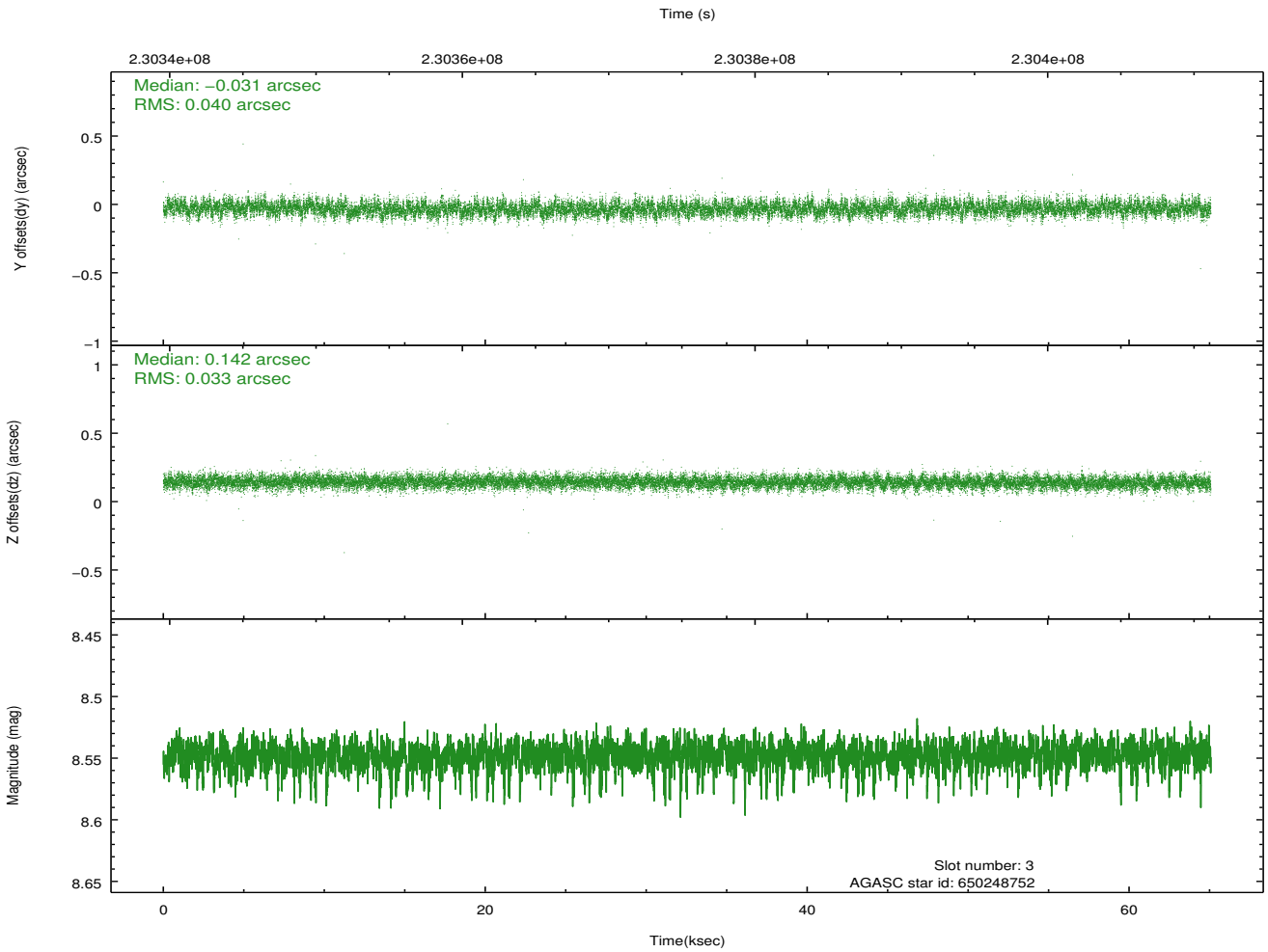
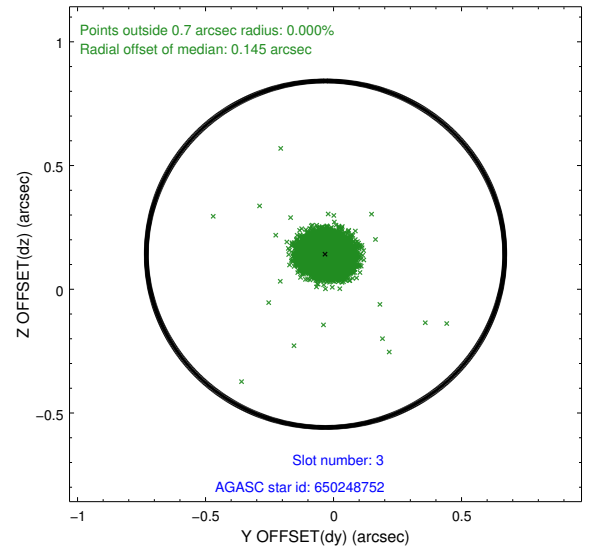
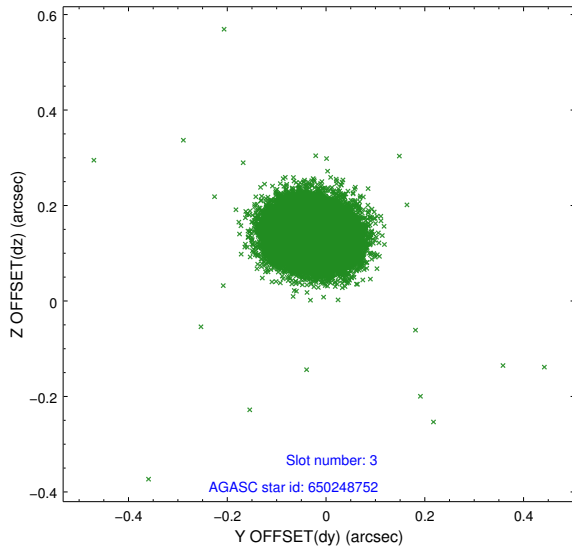
2.3 Aspect

Slot Statistics

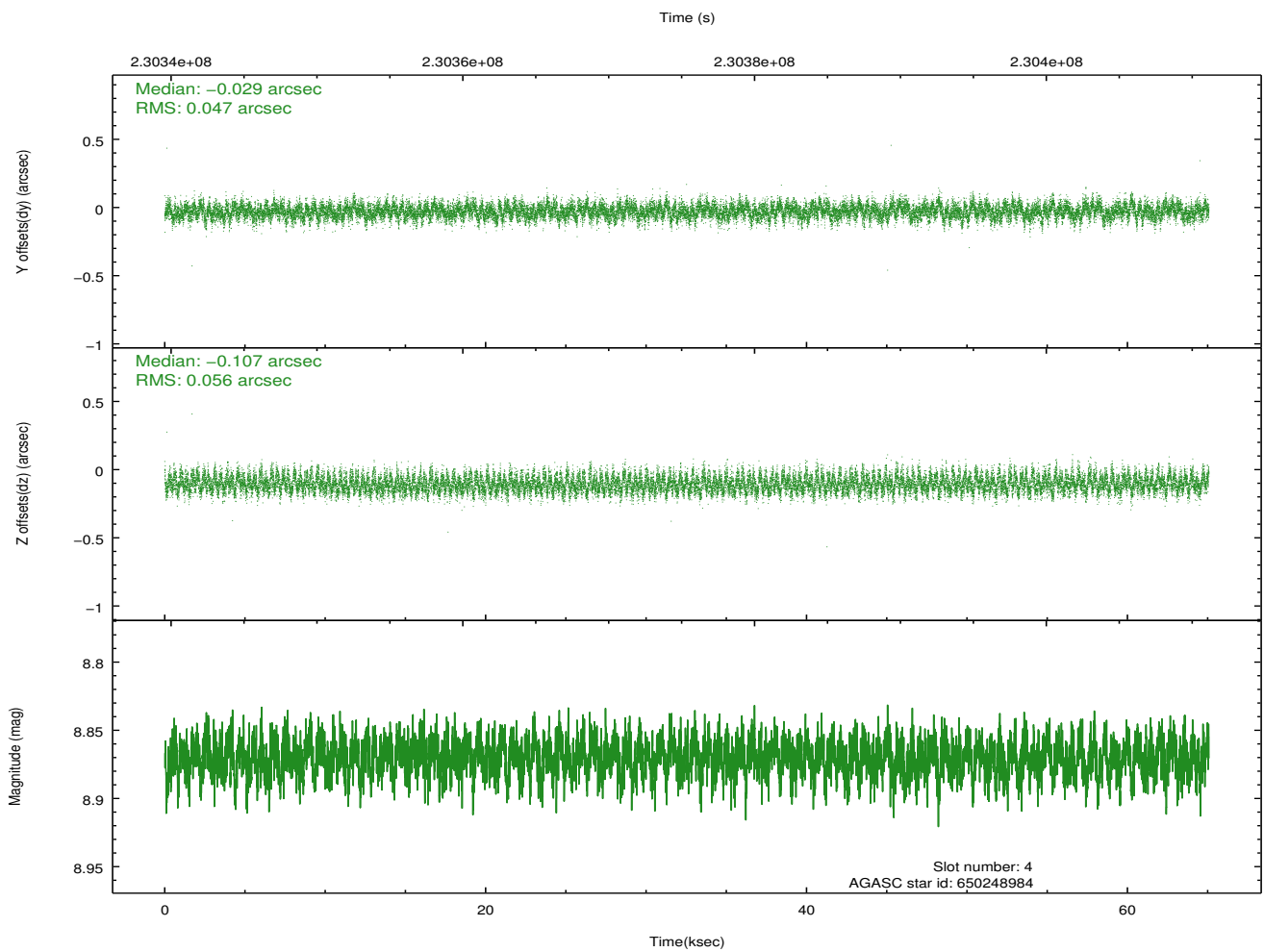
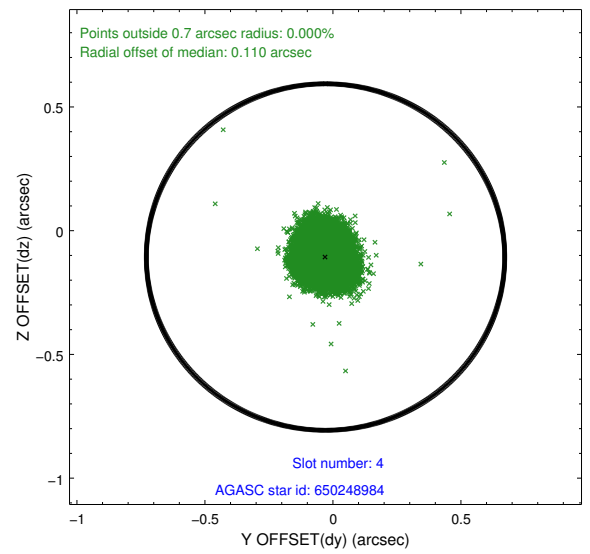
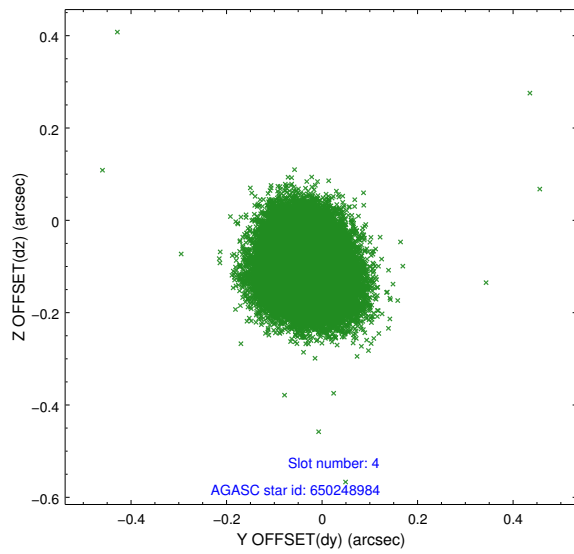
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.15	15874	-0.065	-0.106	0.022	0.034	0.000000	0.000000	-759.55	-923.19
1	FID	ACIS-I-4	7.17	15871	0.136	0.071	0.019	0.046	0.000000	0.000000	2154.66	983.23
2	FID	ACIS-I-5	7.22	15874	-0.170	0.104	0.016	0.034	0.000000	0.000000	-1813.38	980.42
3	GUIDE	650248752	8.55	31734	-0.031	0.142	0.054	0.089	198.299876	-3.058510	-1598.16	1275.98
4	GUIDE	650248984	8.87	31732	-0.029	-0.107	0.078	0.125	197.683115	-3.291898	471.66	120.59
5	GUIDE	650249040	9.32	31718	0.070	0.056	0.086	0.141	197.994714	-3.007393	-1032.87	317.71
6	GUIDE	650251064	8.36	31741	-0.015	0.109	0.062	0.098	197.822546	-3.915433	1866.91	1948.66
7	GUIDE	650254416	6.89	31745	0.007	-0.200	0.053	0.086	198.338645	-3.494561	-486.06	2392.49

2.4 Star Slots

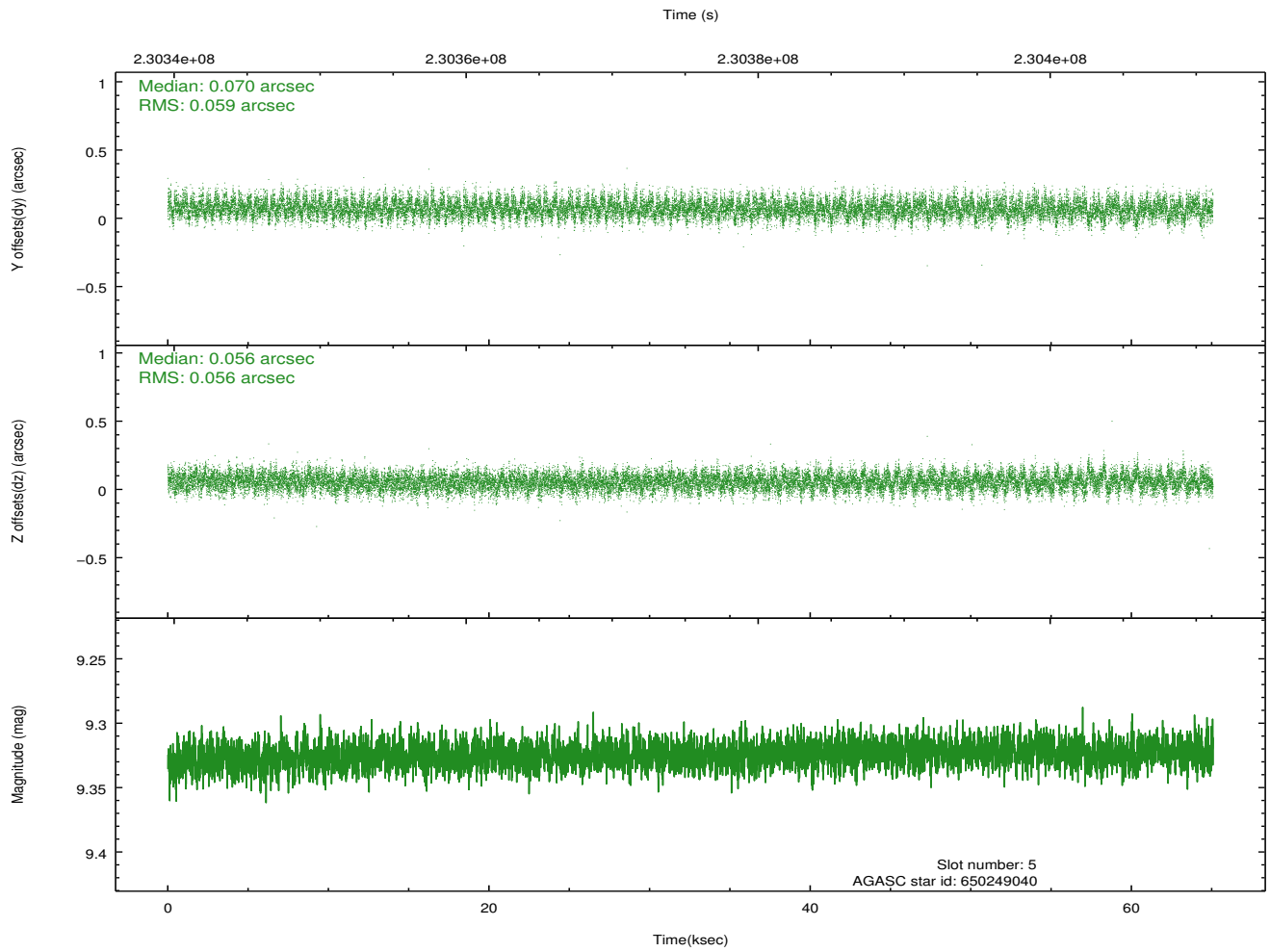
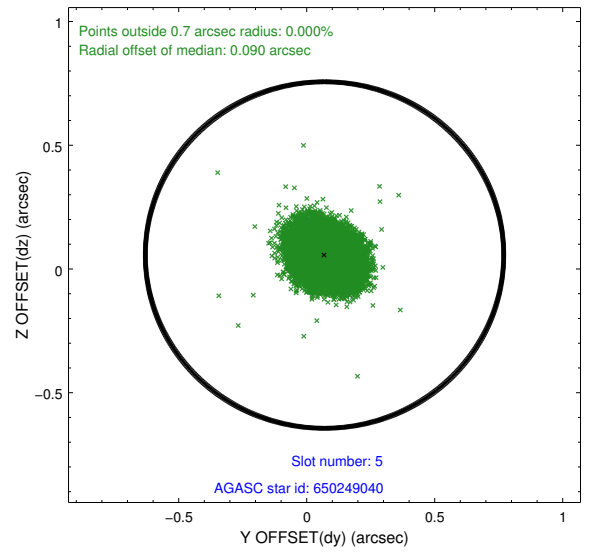
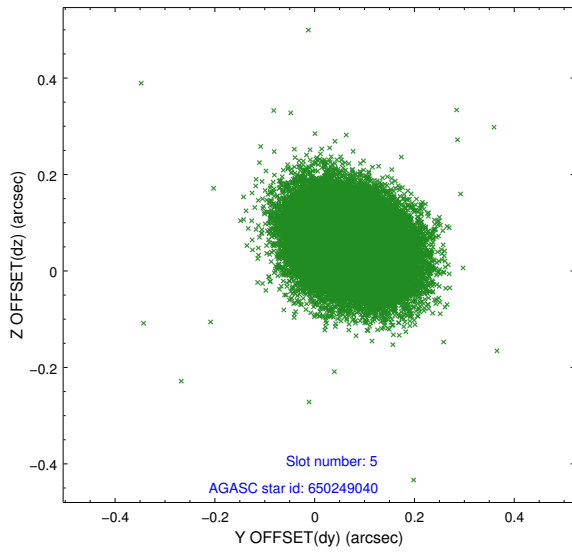
2.4.1 Slot 3



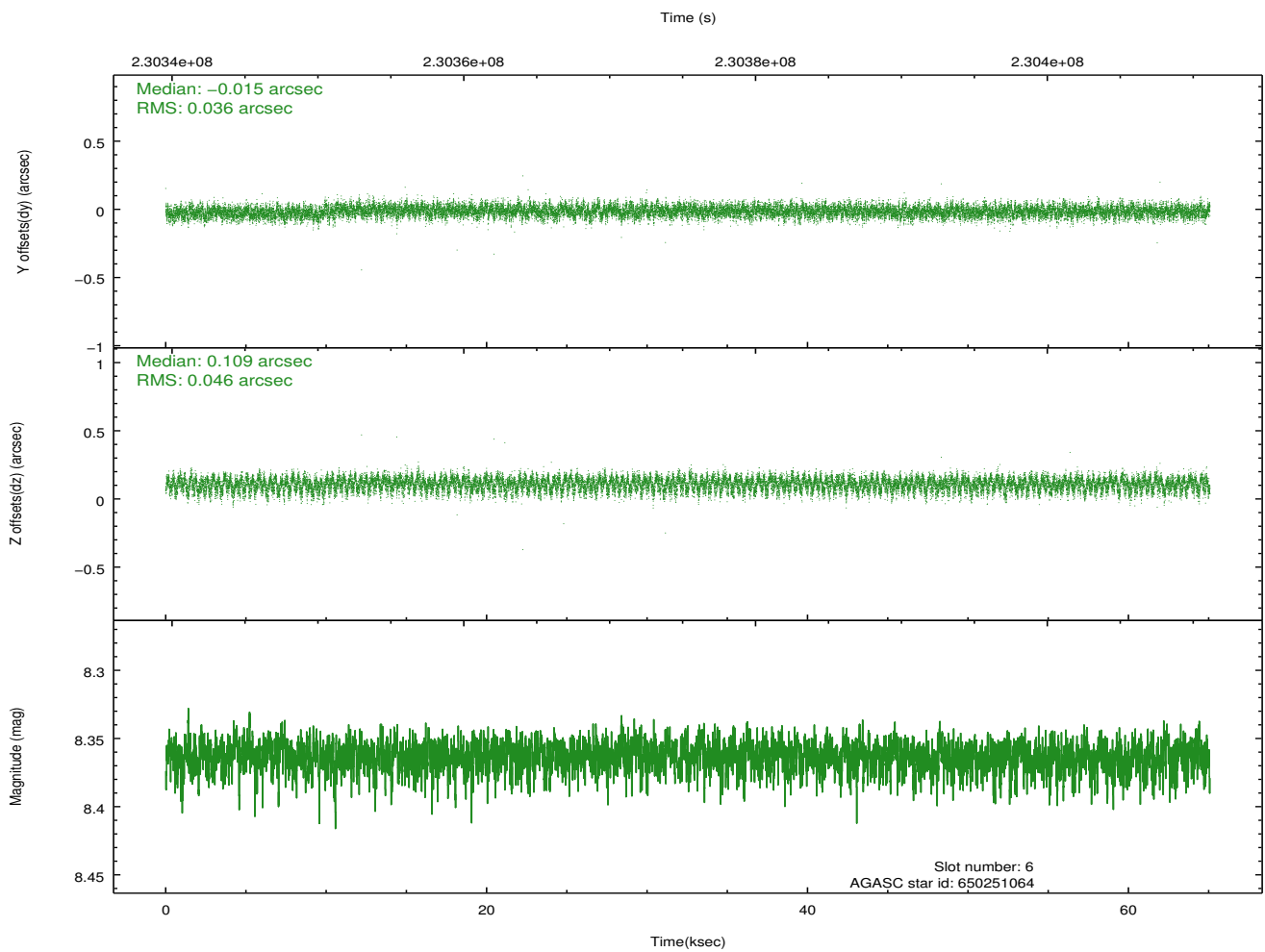
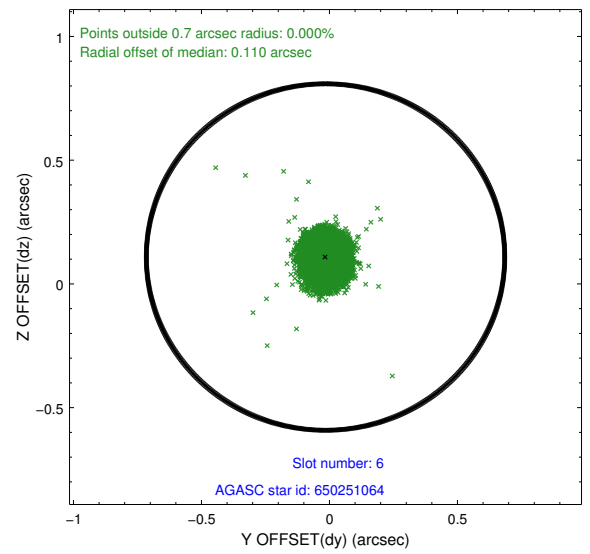
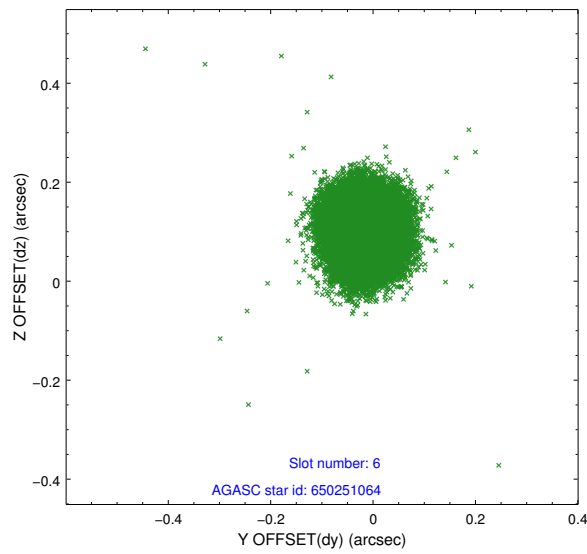
2.4.2 Slot 4



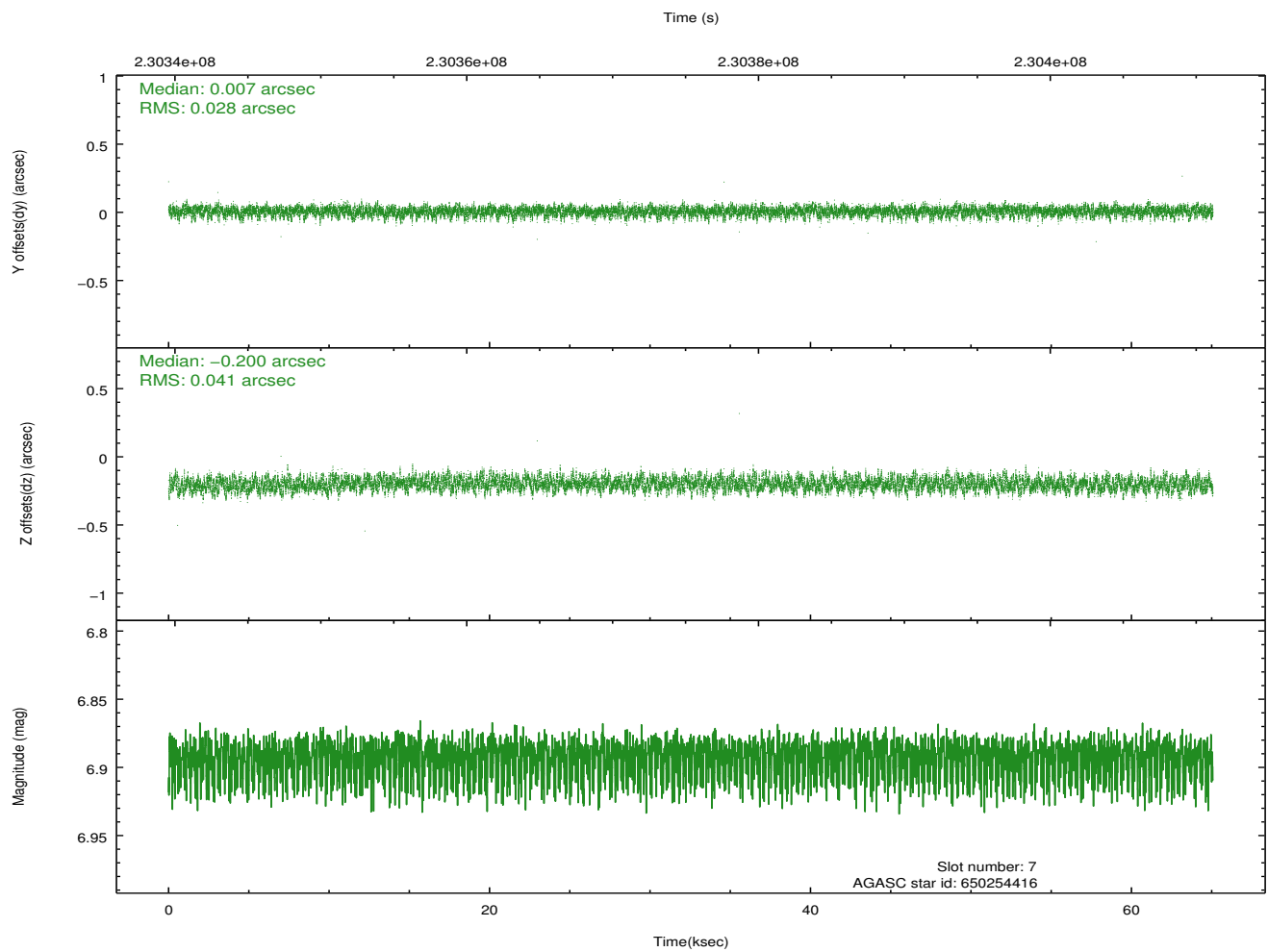
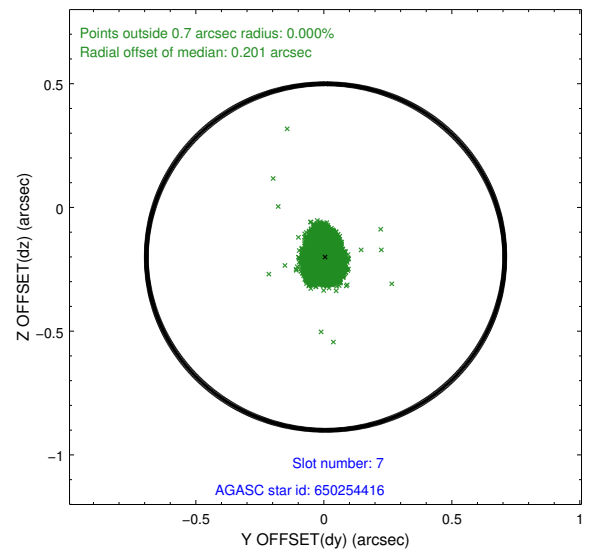
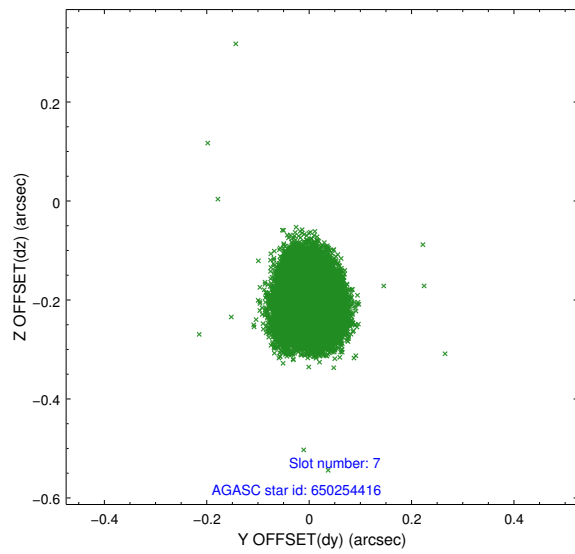
2.4.3 Slot 5



2.4.4 Slot 6

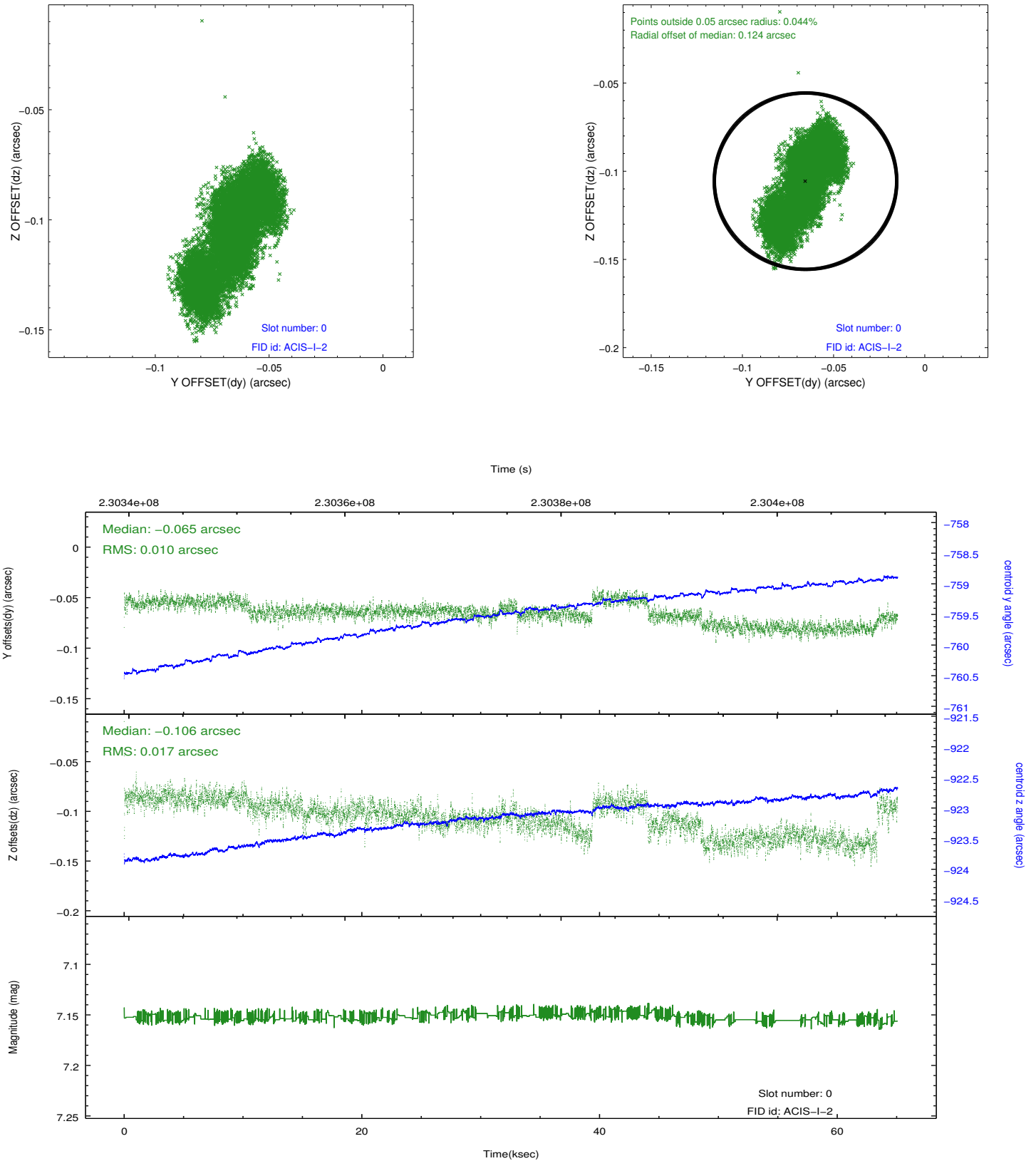


2.4.5 Slot 7

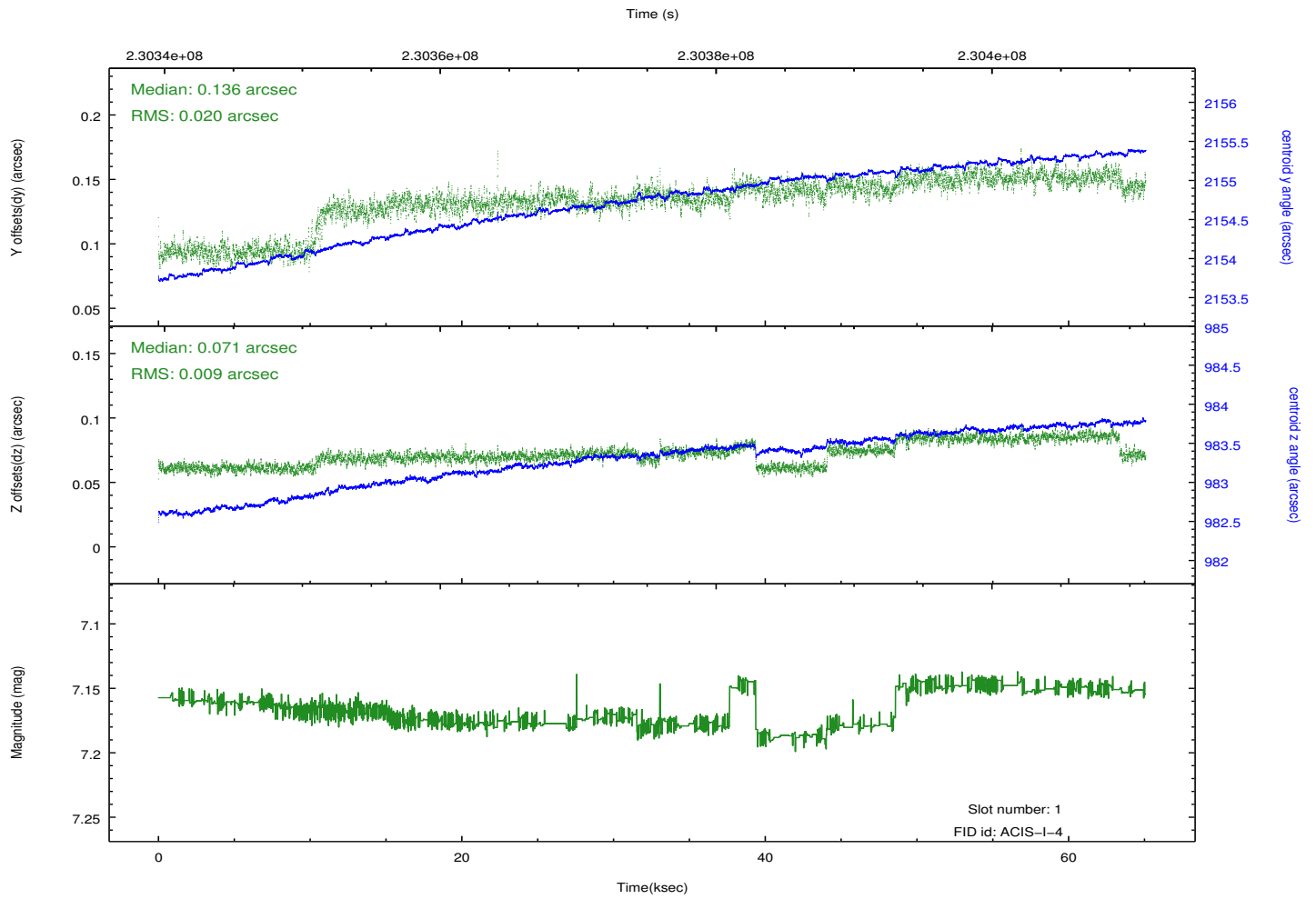
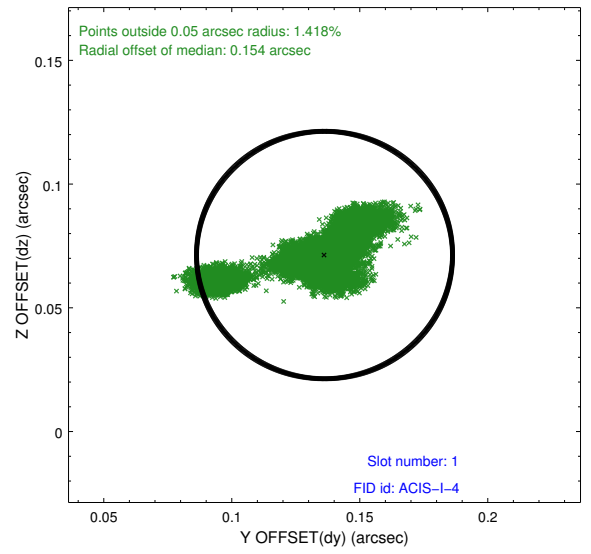
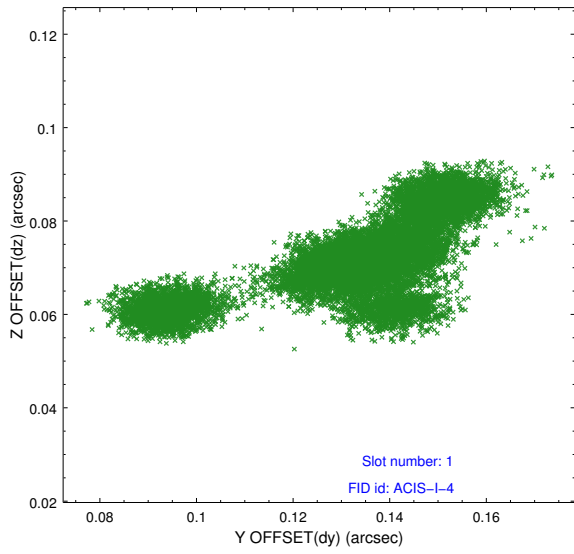


2.5 FID Slots

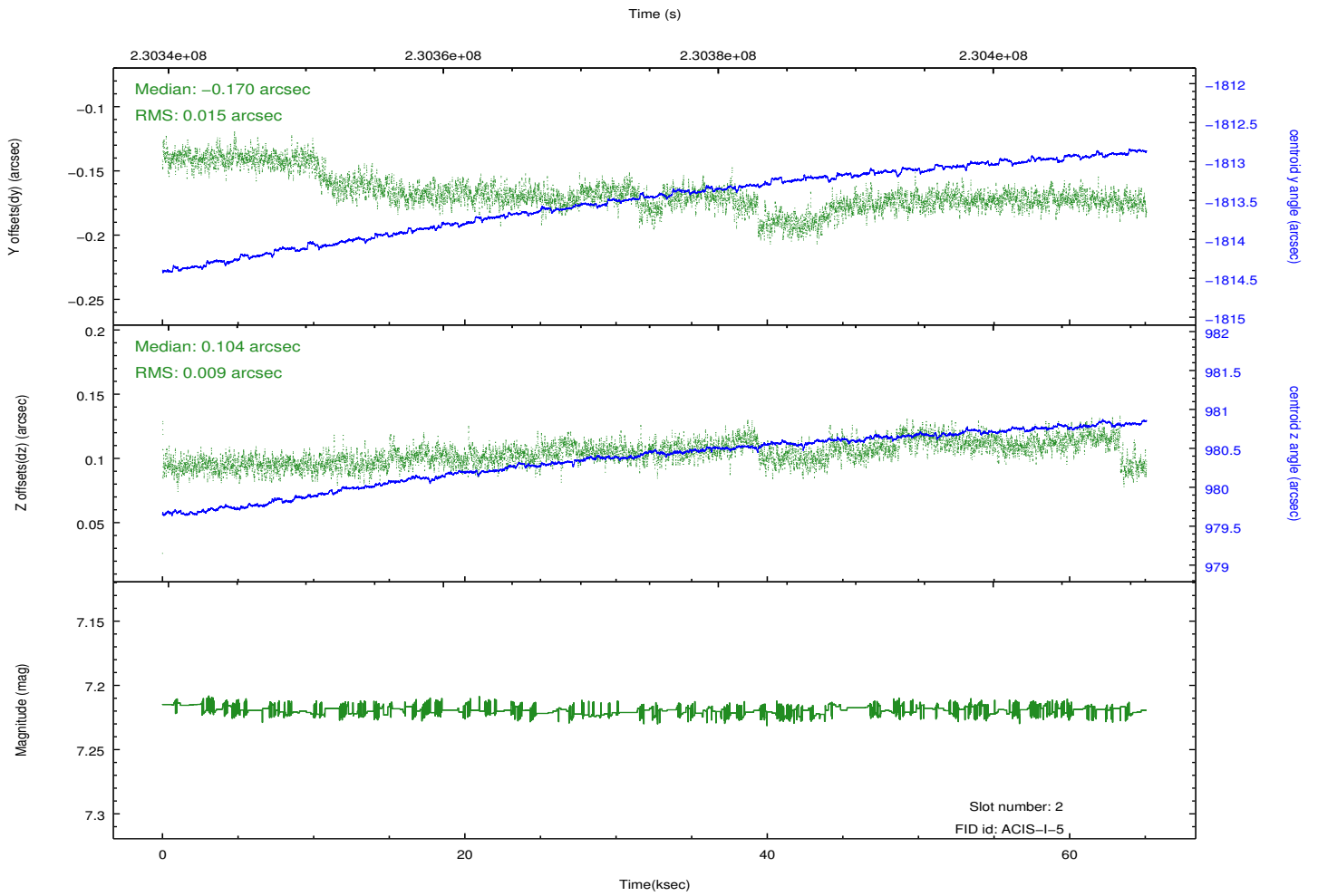
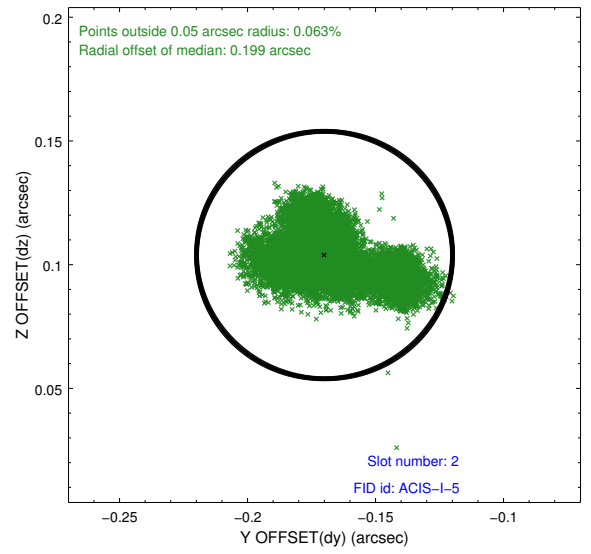
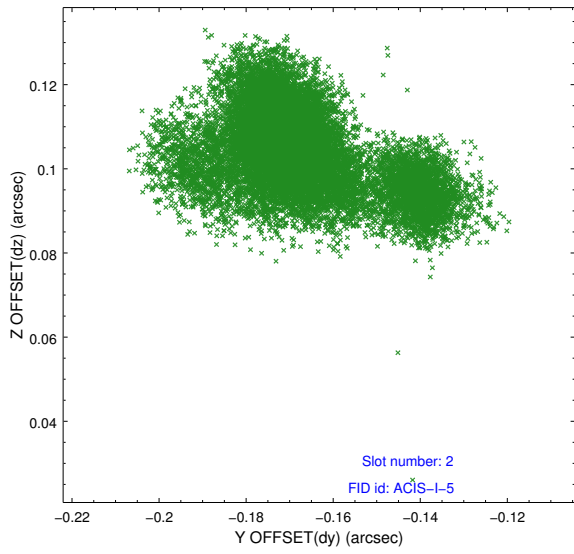
2.5.1 Slot 0



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)	2013.01.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	64.04281

A.2 Comments