

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 5845 - L2 Version 4
Chandra X-Ray Center

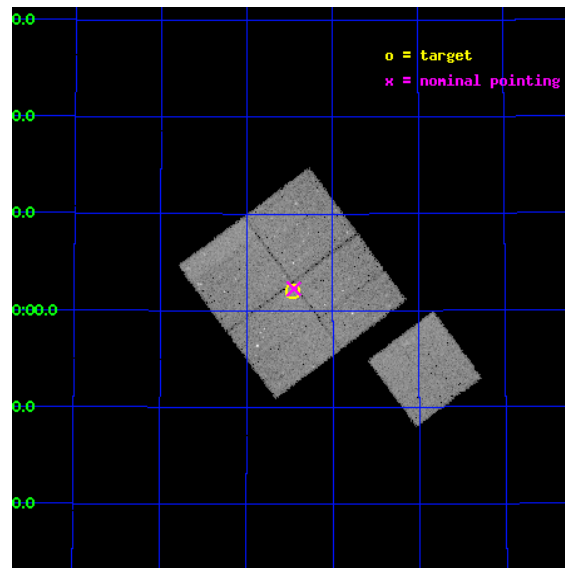
L2 Processing Date : Apr 17 2013

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1 Front

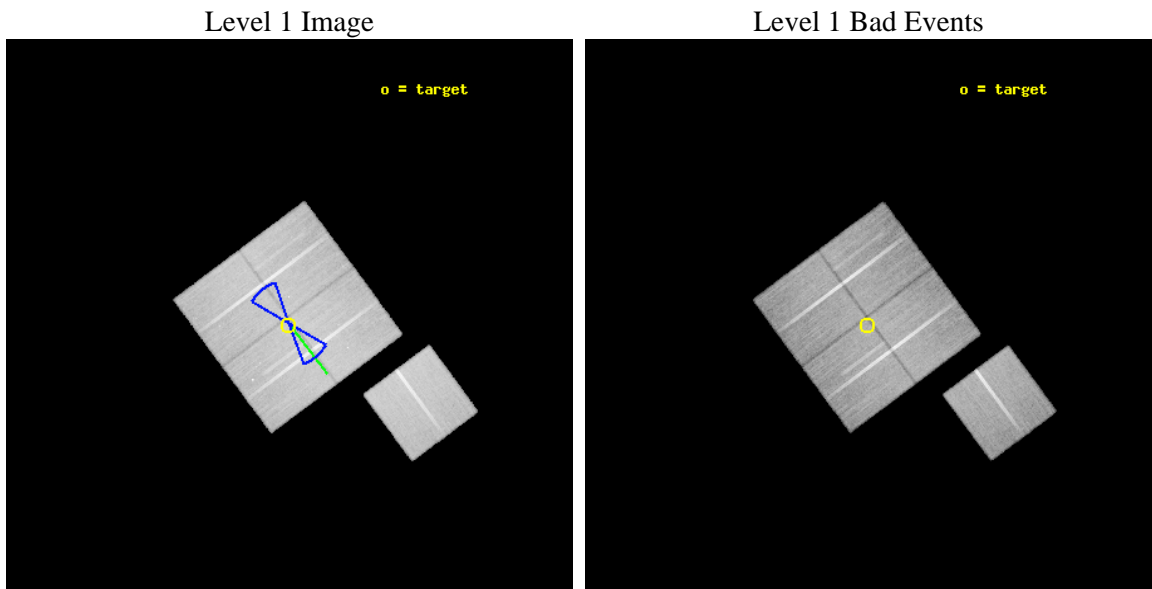
seq_num	900350	Sequence number
obs_id	5845	Observation id
title	Deep Chandra Imaging of the Extended Groth Strip: The Co-evolution of Black Holes and Galaxies	Proposal title
observer	Prof Kirpal Nandra	Principal investigator
object	EGS-3	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	215.116653	Observer's specified target RA [deg]
dec_targ	53.033695	Observer's specified target Dec [deg]
ra_nom	215.11273467375	Nominal RA [deg]
dec_nom	53.037710555518	Nominal Dec [deg]
roll_nom	143.39108819941	Nominal Roll [deg]
revision	4	Processing version of data
ontime	49038.735964715	Sum of GTIs [s]
livetime	48398.008777544	Livetime [s]
ontime0	49041.828339458	Sum of GTIs [s]
ontime1	49048.151339978	Sum of GTIs [s]
ontime2	49041.876945019	Sum of GTIs [s]
ontime3	49038.735964715	Sum of GTIs [s]
ontime6	49051.210260123	Sum of GTIs [s]
l2events	129886	Number of level 2 events



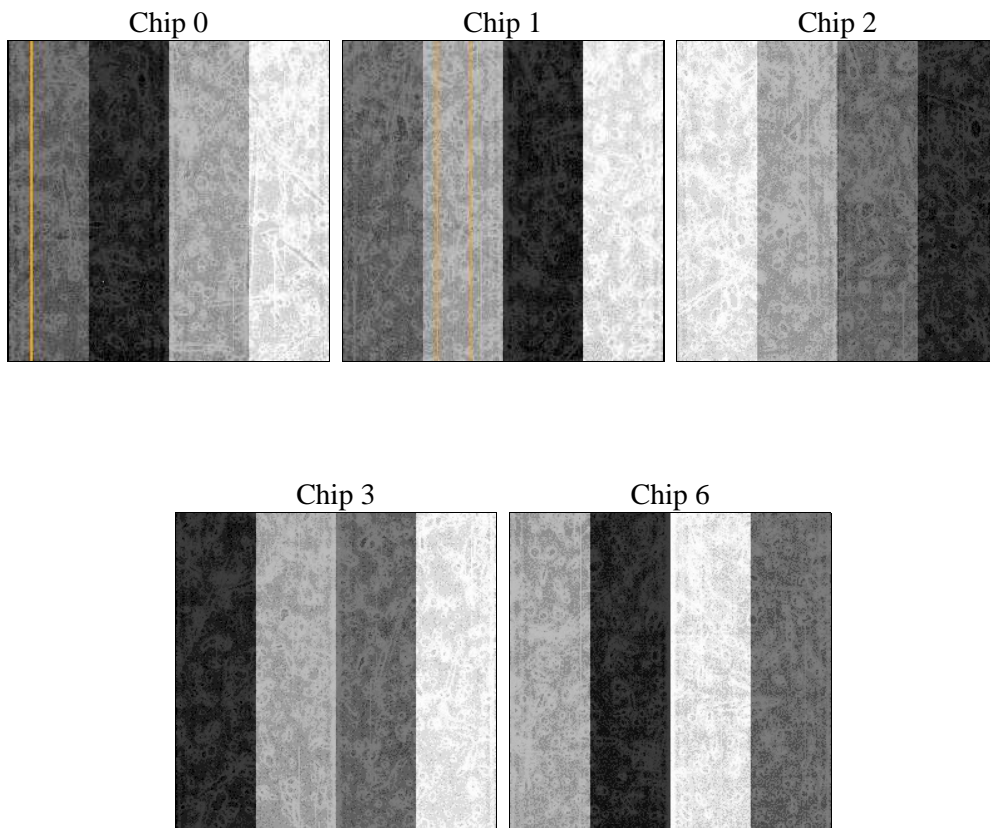
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	49000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	49038.735964715	Sum of GTIs [s]
caldsver	4.5.6	 	ontime0	49041.828339458	Sum of GTIs [s]
date	2013-04-17T03:14:44	Date and time of file creation	ontime1	49048.151339978	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	49041.876945019	Sum of GTIs [s]
			ontime3	49038.735964715	Sum of GTIs [s]
			ontime6	49051.210260123	Sum of GTIs [s]
			l1events	1515304	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	287969	288329	319975	308086	310945
rejected events	256586	254151	289128	278672	280270
rejected %	89%	88%	90%	90%	90%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	11109	12295	11177	10745	10408
	3%	4%	3%	3%	3%
grade 1 events	143	141	154	170	116
	0%	0%	0%	0%	0%
grade 2 events	7274	7447	7283	6231	6626
	2%	2%	2%	2%	2%
grade 3 events	3694	3721	3267	3279	3535
	1%	1%	1%	1%	1%
grade 4 events	3278	3794	3503	3310	3459
	1%	1%	1%	1%	1%
grade 5 events	11052	11905	10438	12536	12208
	3%	4%	3%	4%	3%
grade 6 events	6034	6930	5621	5856	6655
	2%	2%	1%	1%	2%
grade 7 events	245385	242096	278532	265959	267938
	85%	83%	87%	86%	86%

2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-01236	ACIS-01236
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	215.158011	215.1127346737457
[deg] Pointing Dec	53.034643	53.03771055551846
[deg] Pointing Roll	143.146217	143.3910881994144
[deg] Roll angle	50.756000	50.756000
[deg] Roll tolerance	20.000000	20.000000
Roll constraint allows 180D rotation	Y	Y
[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)	228062949.184000	228062011.74728
Observation start date	2005-03-24T14:48:05	2005-03-24T14:33:31
[s] Observation end time (MET)	228111949.184000	228112387.42457
Observation end date	2005-03-25T04:24:45	2005-03-25T04:33:07
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

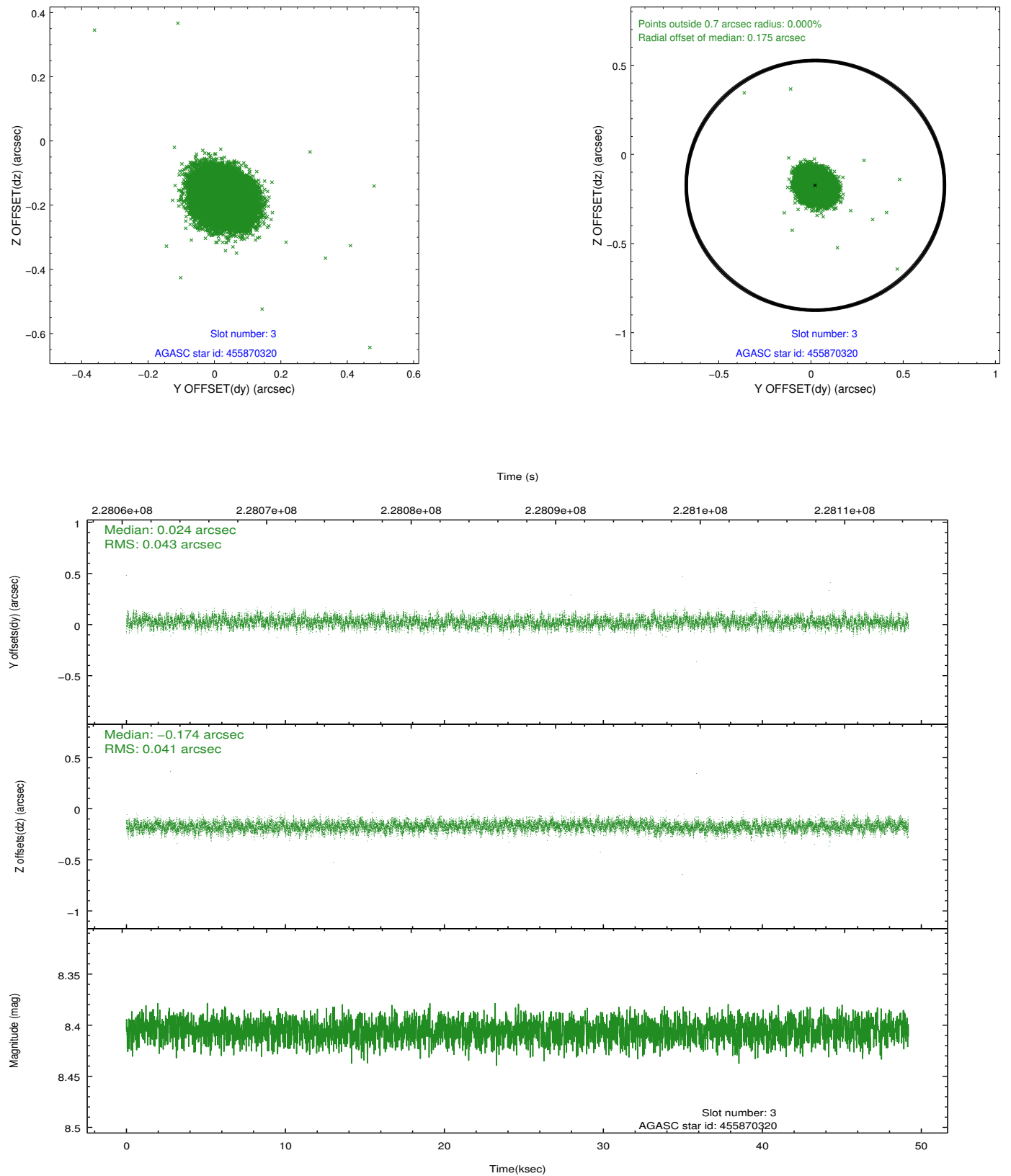
2.3 Aspect

Slot Statistics

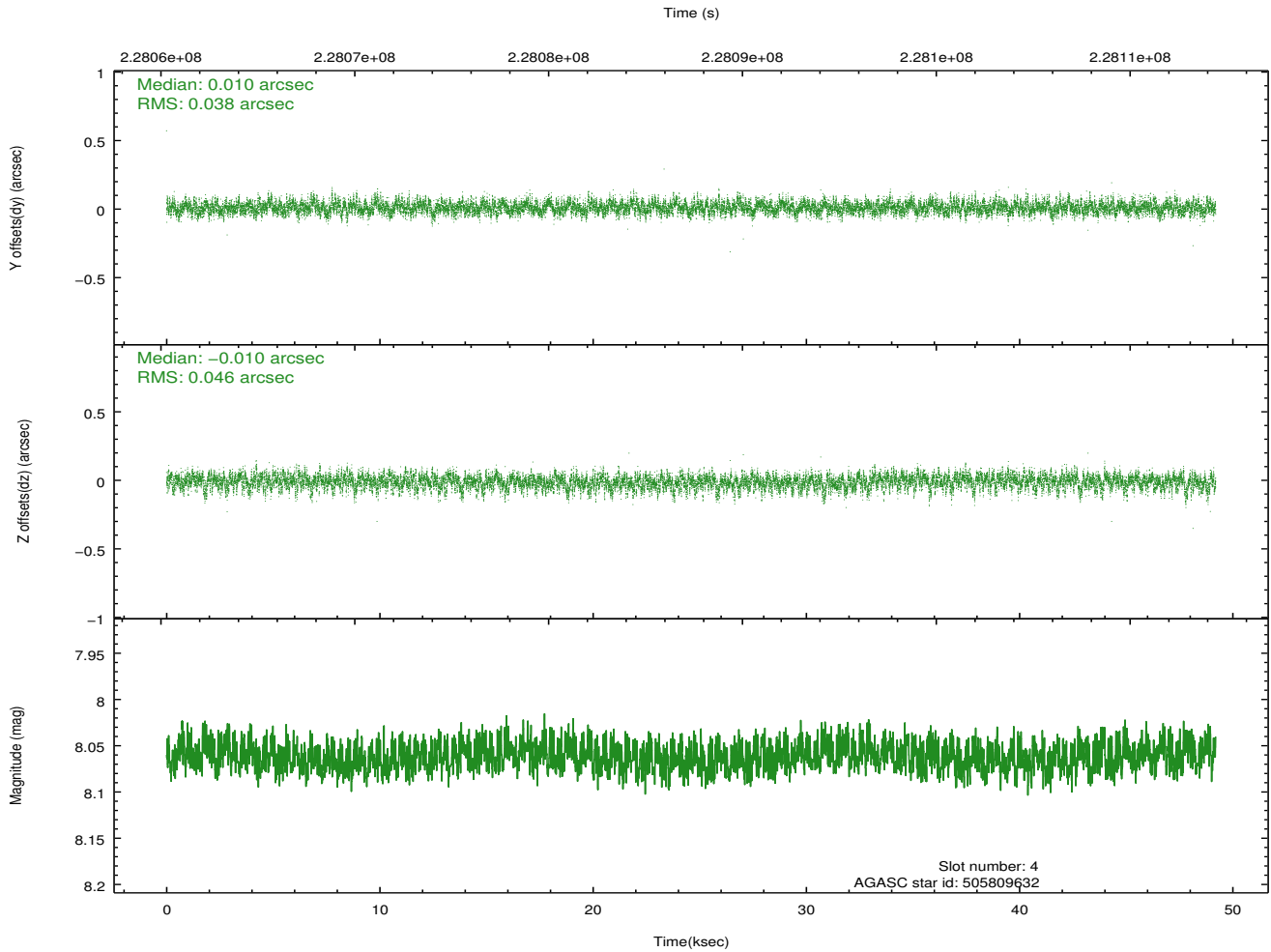
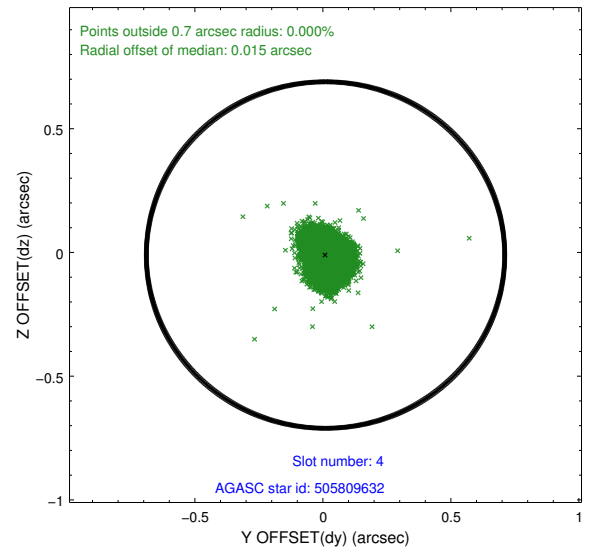
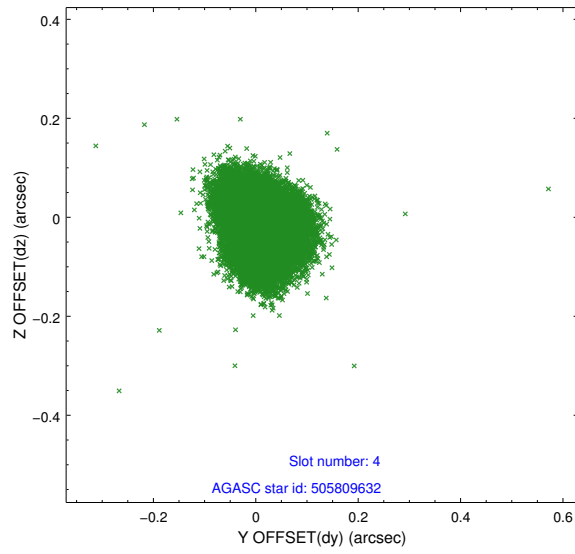
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	12002	0.014	0.035	0.013	0.022	0.000000	0.000000	934.29	-832.56
1	FID	ACIS-I-5	7.23	12002	-0.173	0.036	0.016	0.028	0.000000	0.000000	-1814.02	1064.91
2	FID	ACIS-I-6	7.25	12000	0.067	0.000	0.009	0.015	0.000000	0.000000	399.89	1709.38
3	GUIDE	455870320	8.41	24001	0.024	-0.174	0.062	0.100	214.874440	52.401638	-867.83	2196.04
4	GUIDE	505809632	8.06	24001	0.010	-0.010	0.063	0.104	215.499426	53.521185	467.20	-1840.85
5	GUIDE	505812088	8.18	23998	0.060	0.054	0.072	0.110	214.186617	53.263562	2176.61	584.20
6	GUIDE	505812376	7.61	24001	-0.024	0.036	0.048	0.076	214.039537	52.937930	1744.28	1719.39
7	GUIDE	505815928	8.30	23995	-0.074	0.099	0.073	0.115	216.234742	53.074559	-1766.37	-1525.46

2.4 Star Slots

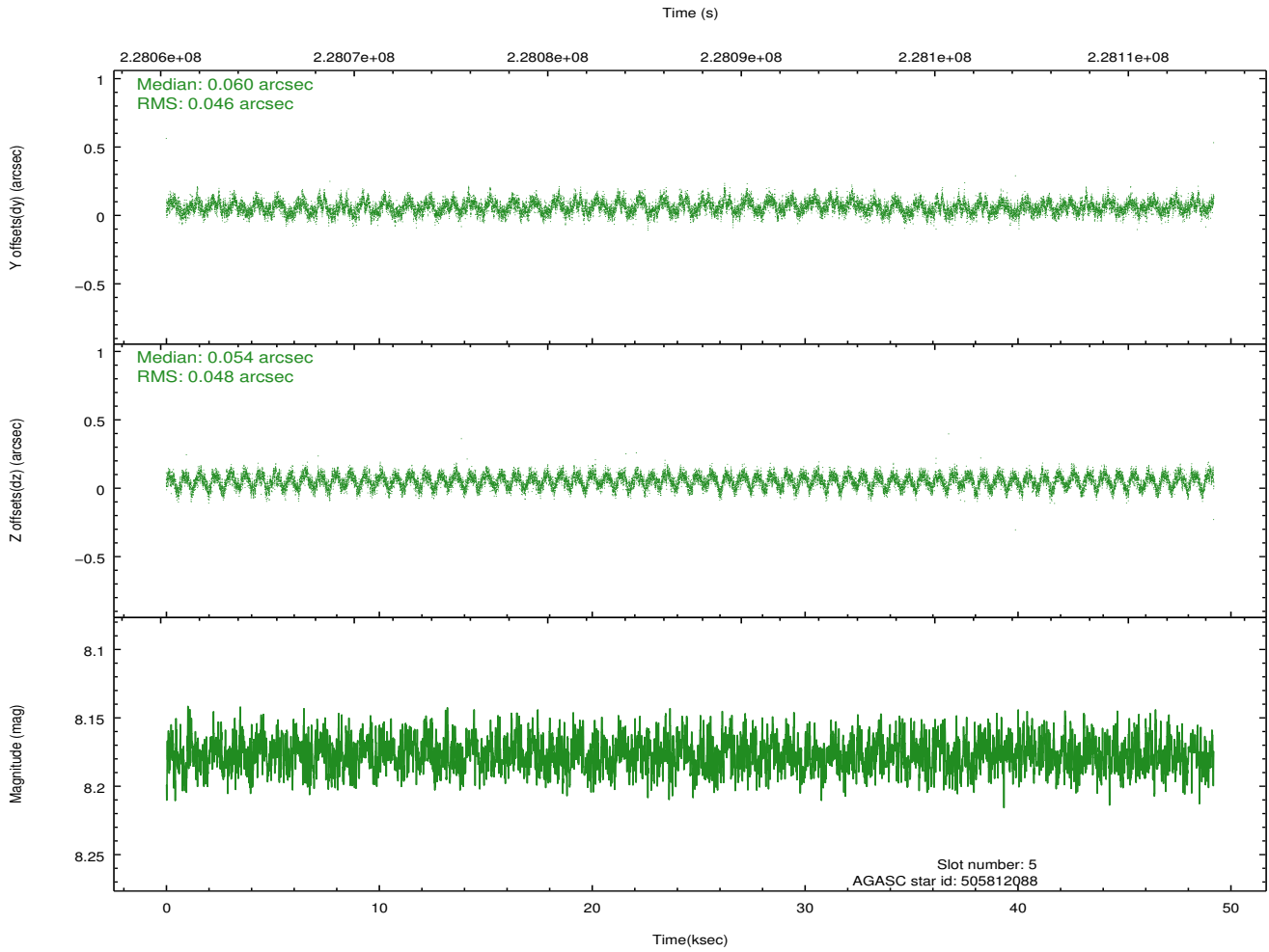
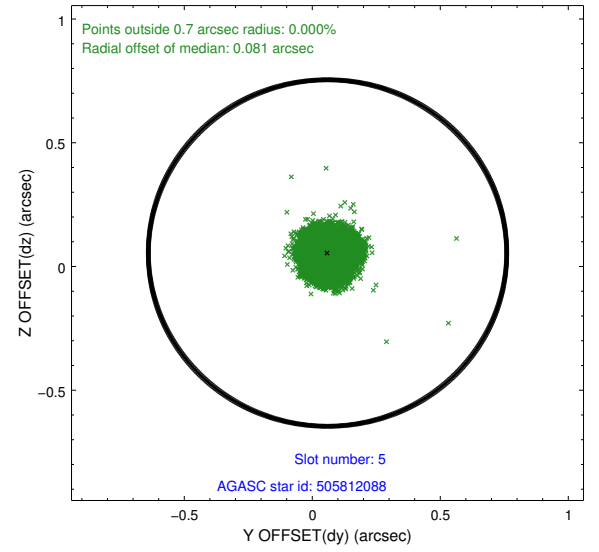
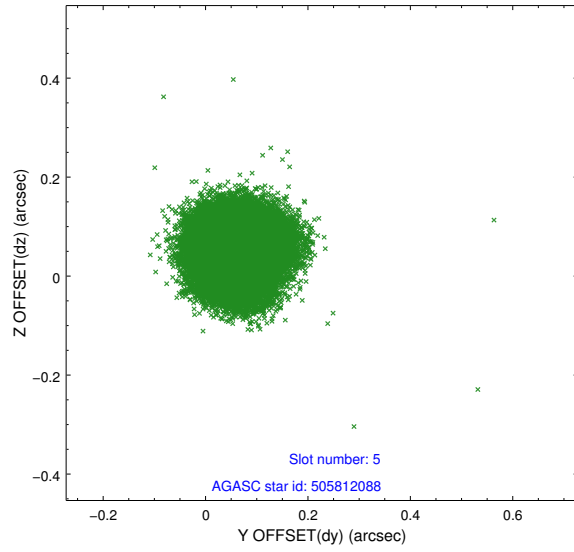
2.4.1 Slot 3



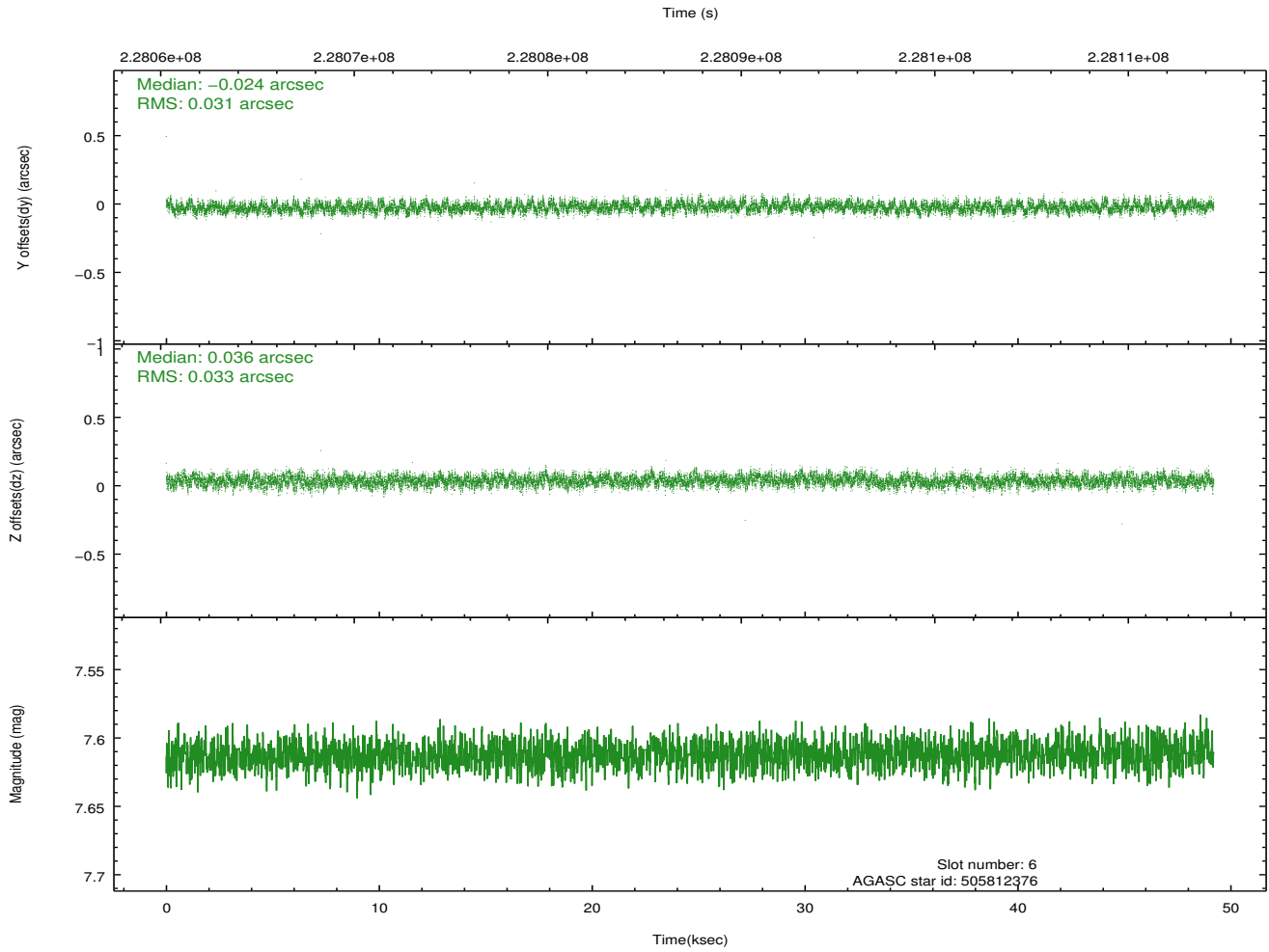
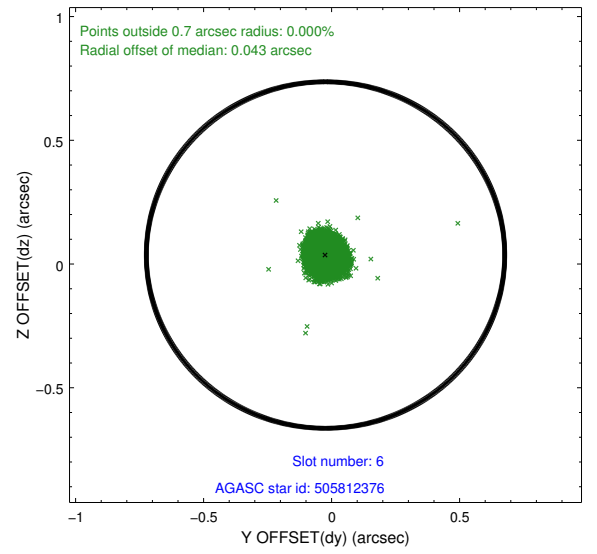
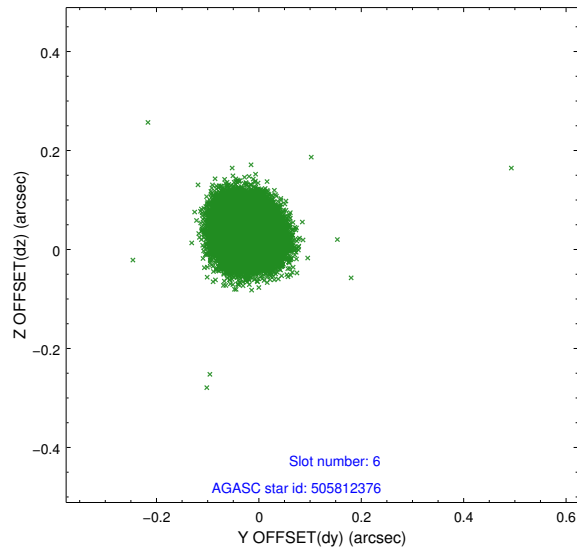
2.4.2 Slot 4



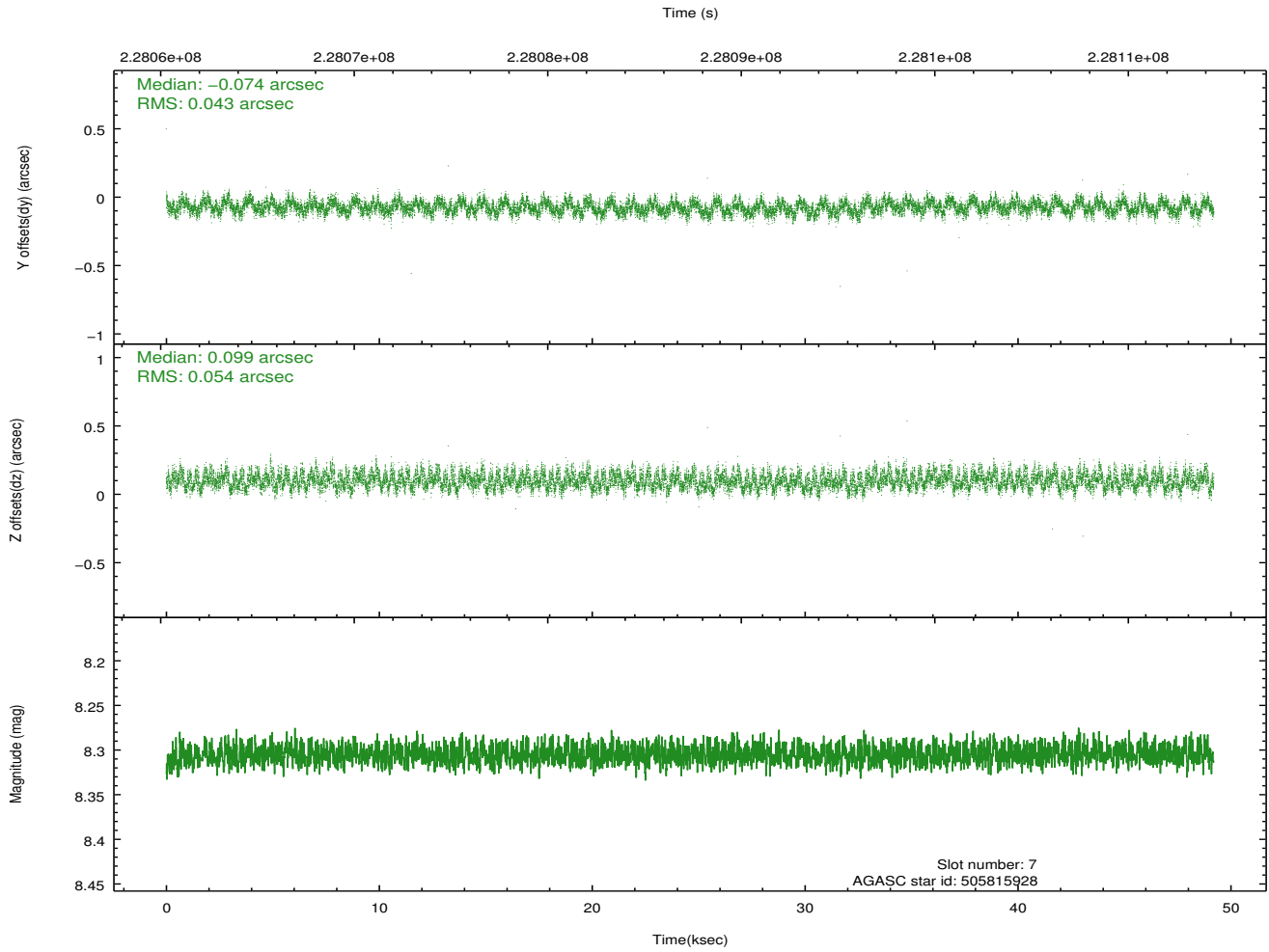
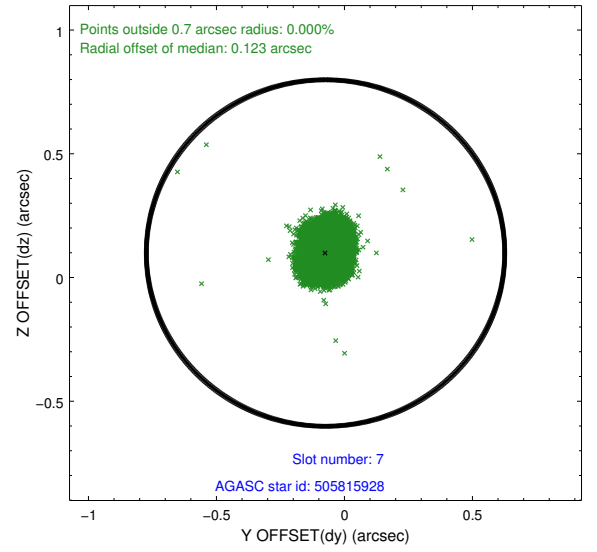
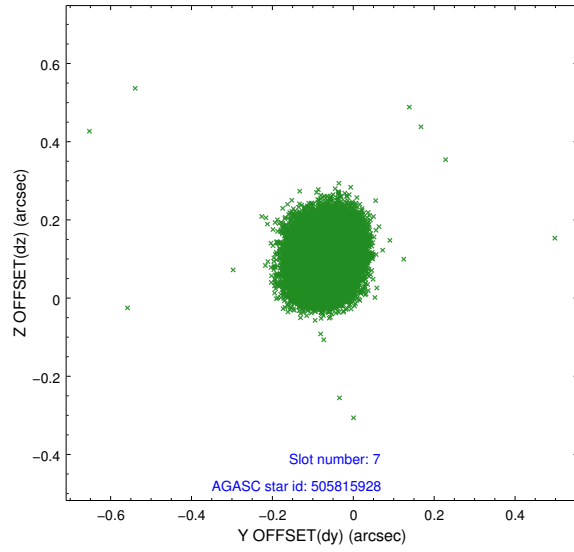
2.4.3 Slot 5



2.4.4 Slot 6

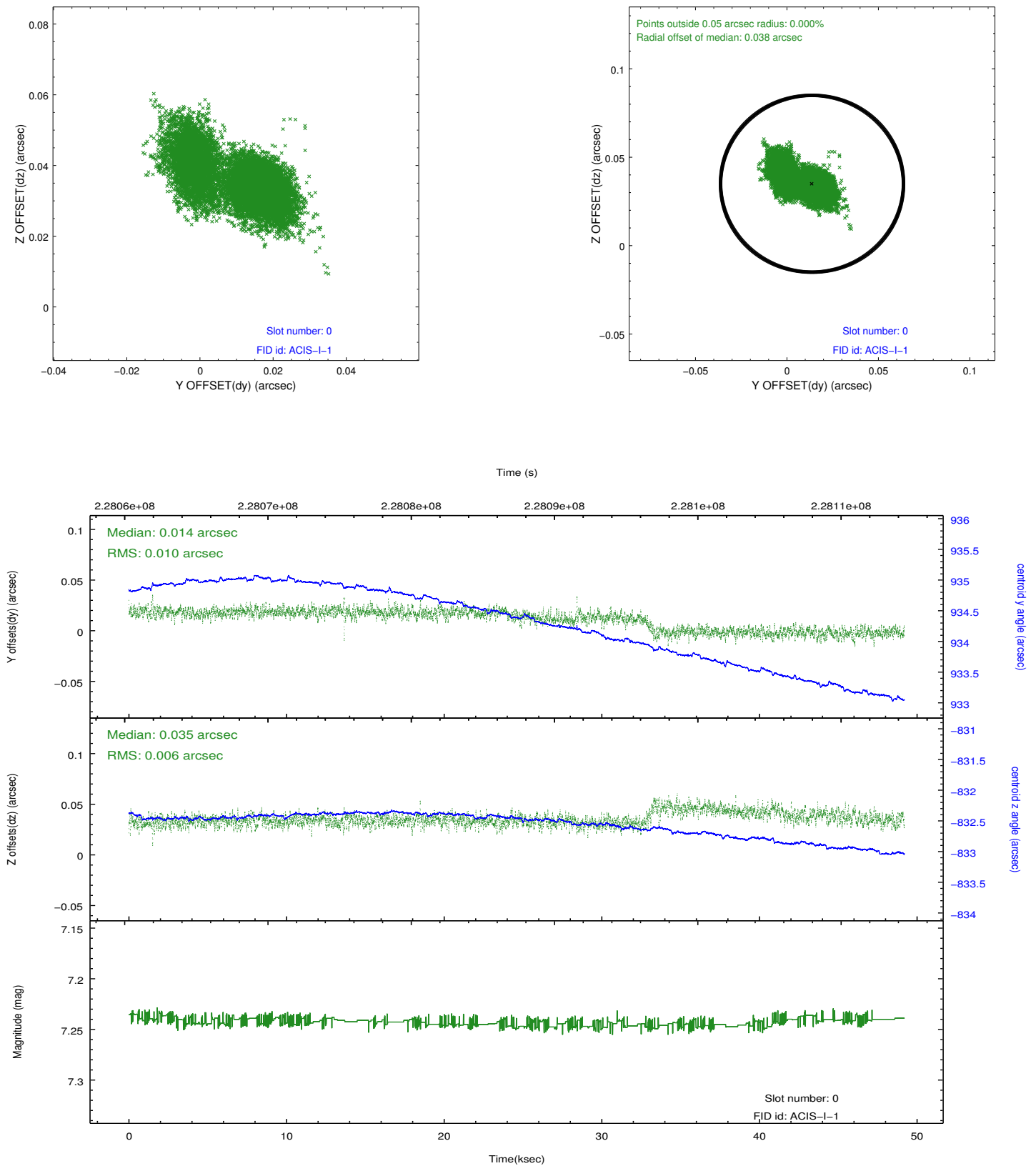


2.4.5 Slot 7

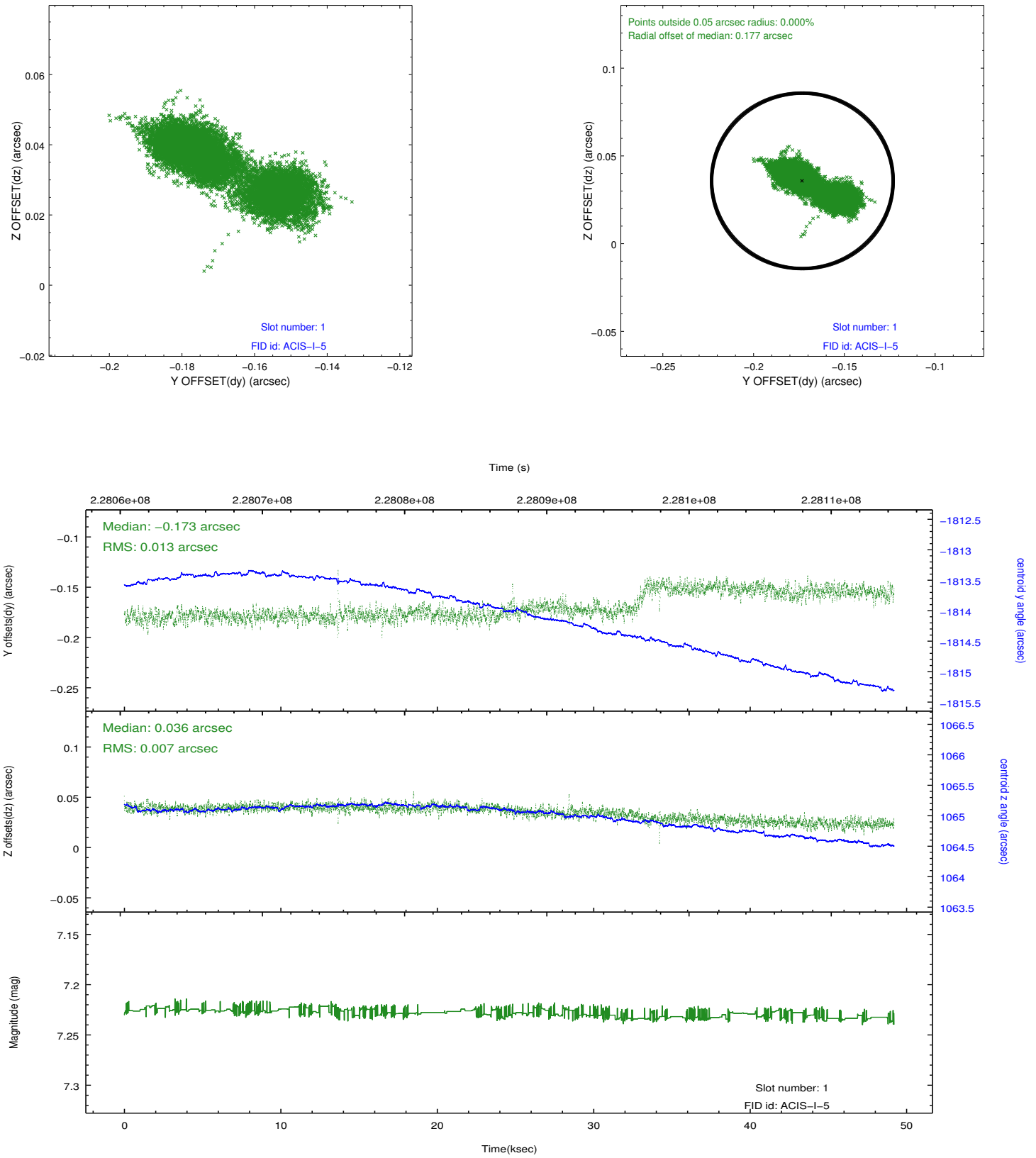


2.5 FID Slots

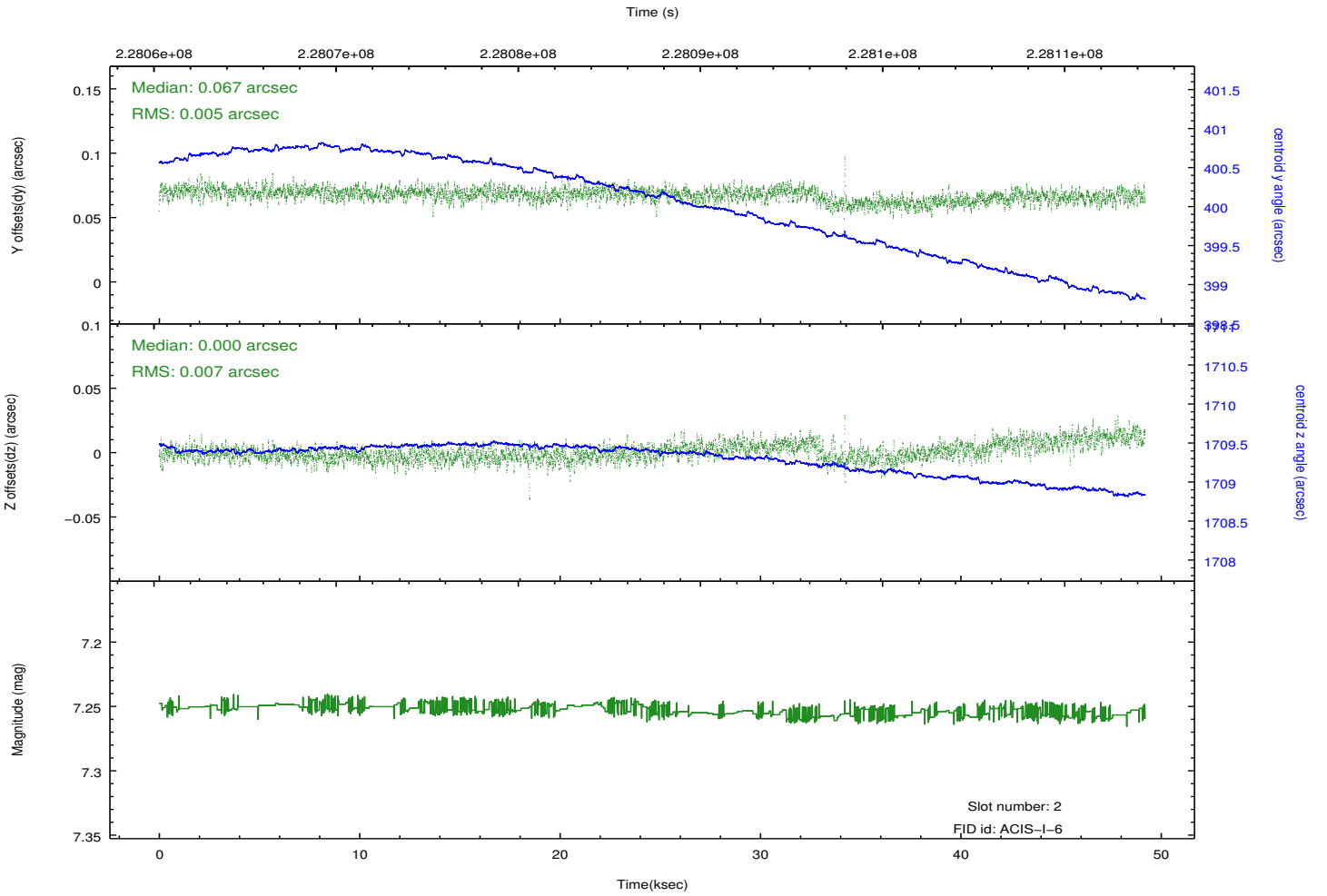
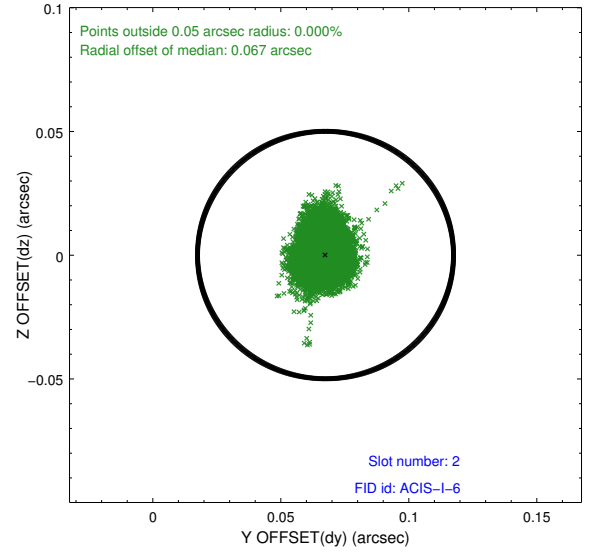
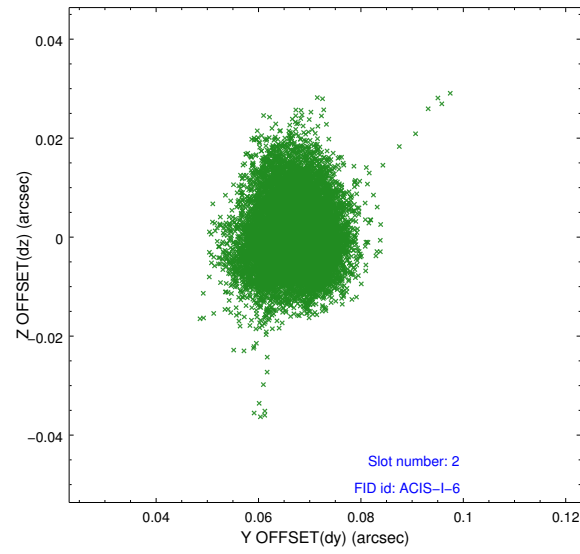
2.5.1 Slot 0



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)	2013.04.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	49.03873

A.2 Comments

Roll constraint met.

=====

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:
(215.31838,52.97442),(215.32297,52.97813),(215.13709,53.06148),(215.13250,53.05775)