

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 13982 - L2 Version 4
Chandra X-Ray Center

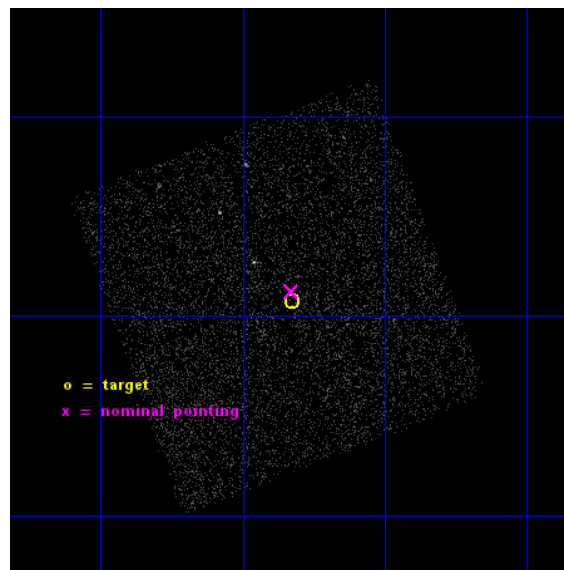
L2 Processing Date : Nov 30 2014

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1 Front

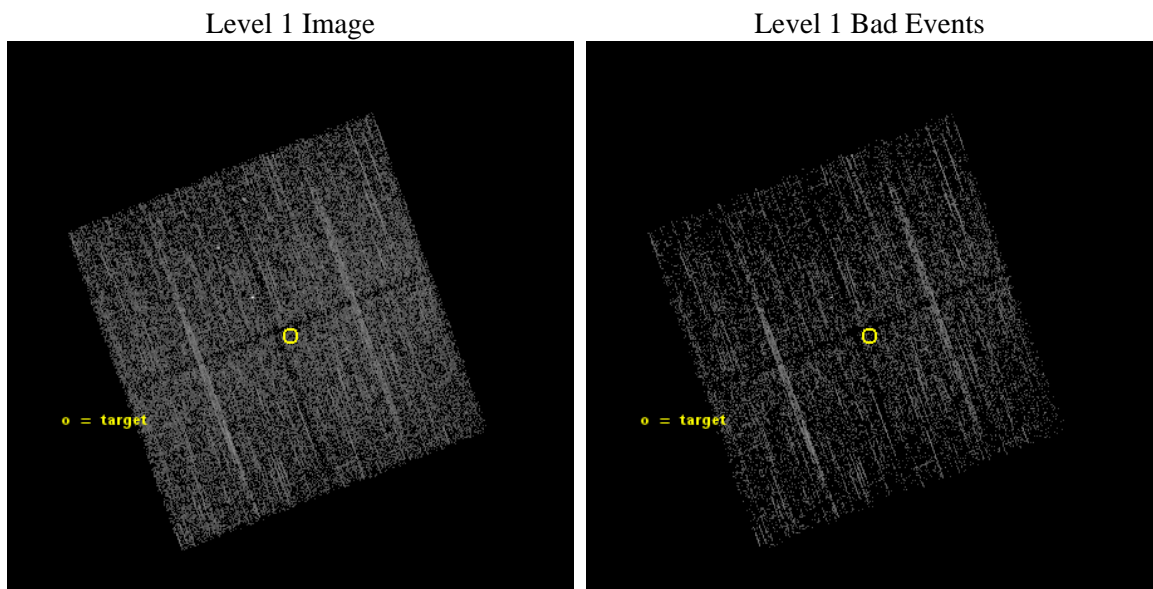
seq_num	702703	Sequence number
obs_id	13982	Observation id
title	Chandra observations of the faintest hard X-ray sources in the SIX survey	Proposal title
observer	Dr Eugenio Bottacini	Principal investigator
object	six-15	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.956667	Observer's specified target RA [deg]
dec_targ	-7.821	Observer's specified target Dec [deg]
ra_nom	187.95715311051	Nominal RA [deg]
dec_nom	-7.8128347529104	Nominal Dec [deg]
roll_nom	69.317916812145	Nominal Roll [deg]
revision	4	Processing version of data
ontime	5088.9291362762	Sum of GTIs [s]
livetime	5022.4385306957	Livetime [s]
ontime0	5088.8060162663	Sum of GTIs [s]
ontime1	5088.8470562696	Sum of GTIs [s]
ontime2	5088.8880962729	Sum of GTIs [s]
ontime3	5088.9291362762	Sum of GTIs [s]
l2events	11835	Number of level 2 events



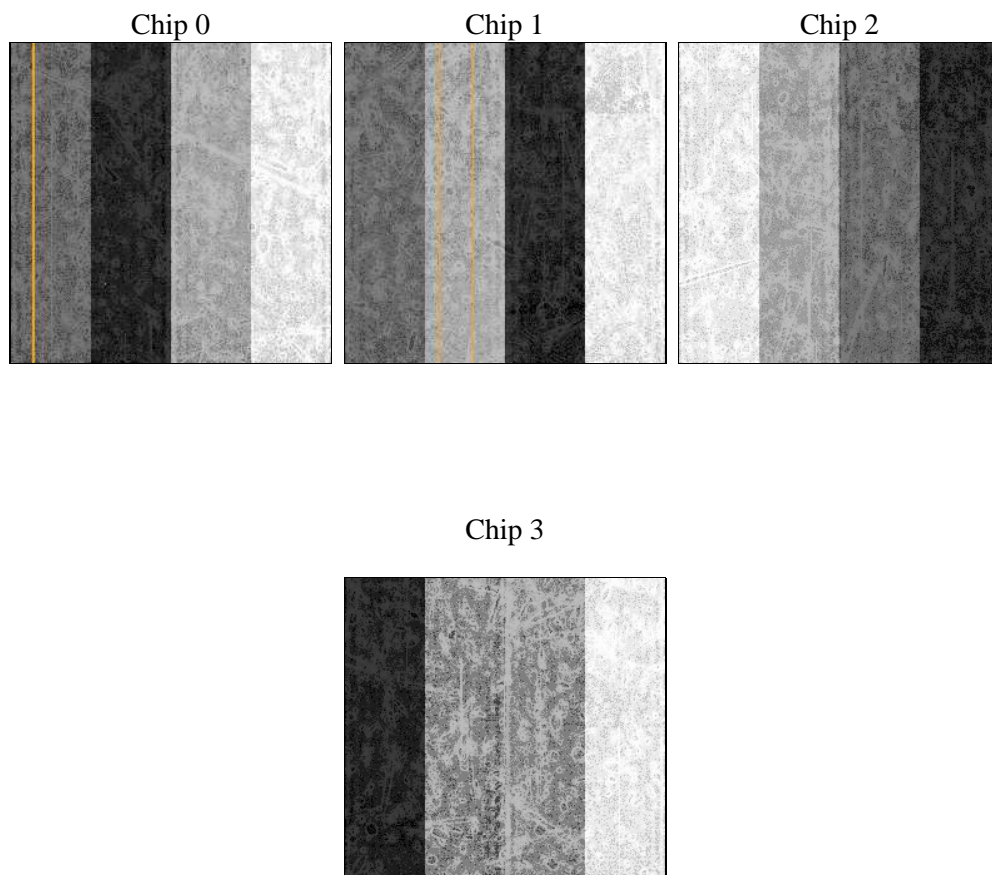
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	5088.9291362762	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	5088.8060162663	Sum of GTIs [s]
date	2014-11-30T23:48:24	Date and time of file creation	ontime1	5088.8470562696	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	5088.8880962729	Sum of GTIs [s]
			ontime3	5088.9291362762	Sum of GTIs [s]
			l1events	99946	Number of level 1 events

2.1.4 Events

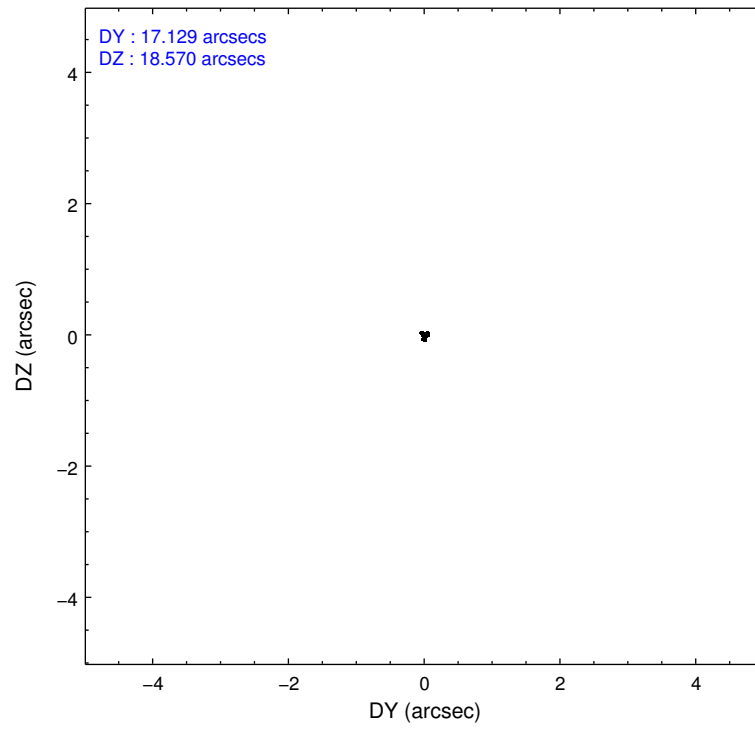
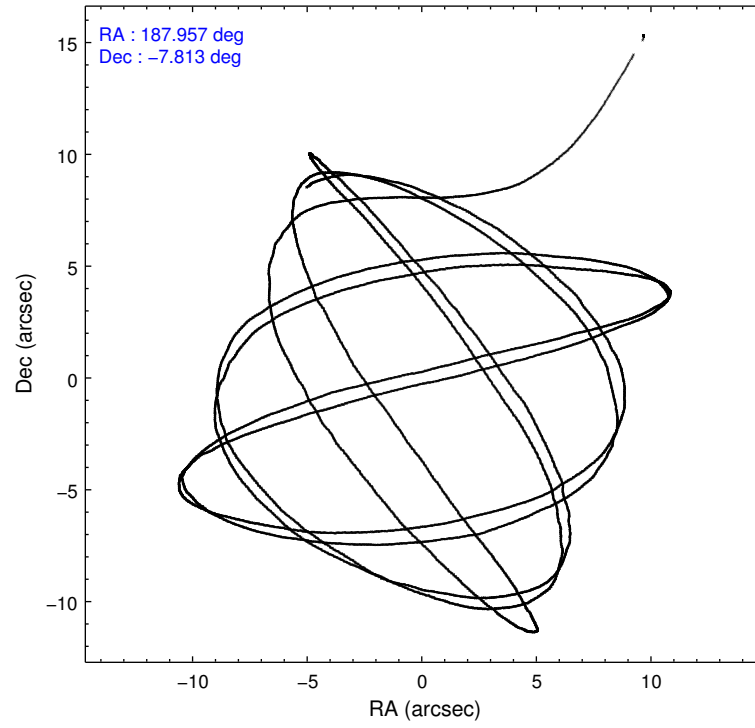
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	23859	24704	26012	25371
rejected events	19548	21280	22860	22300
rejected %	81%	86%	87%	87%

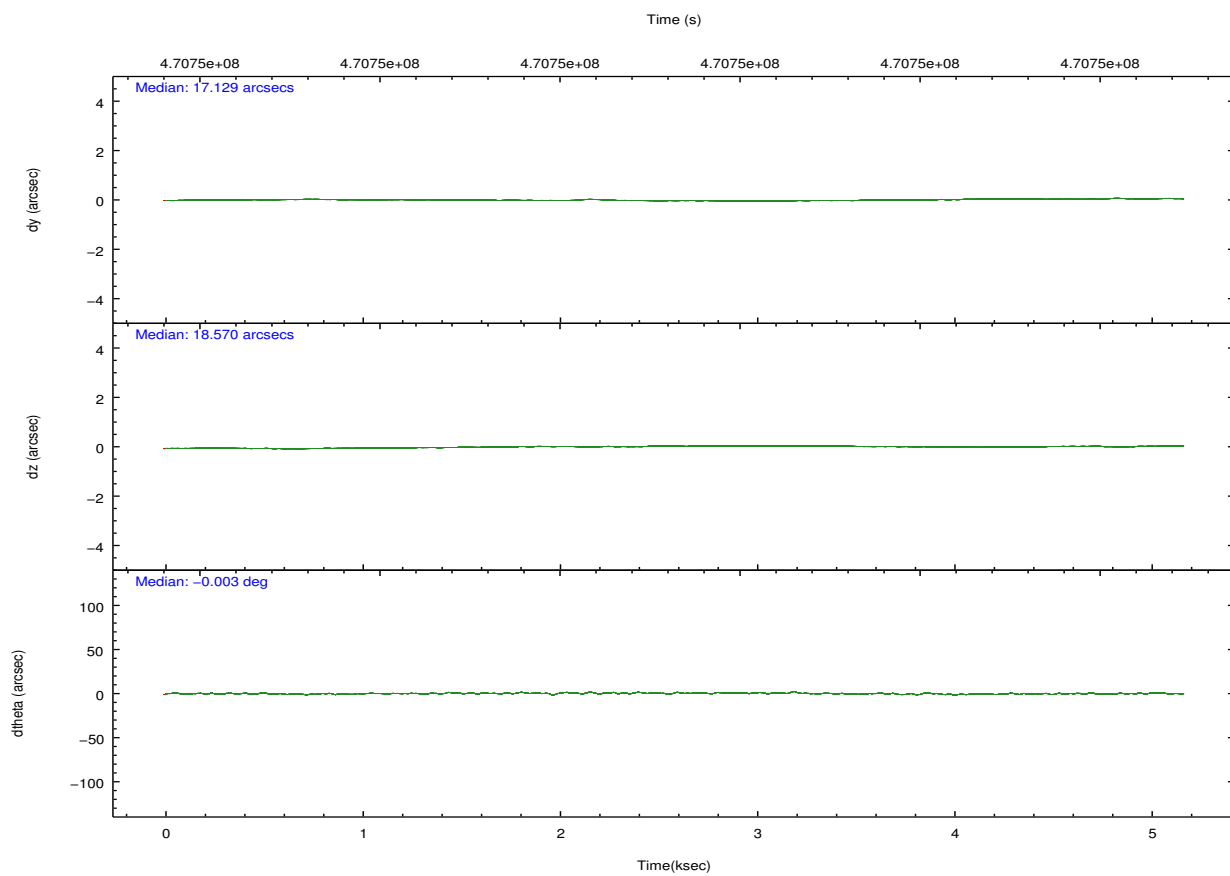
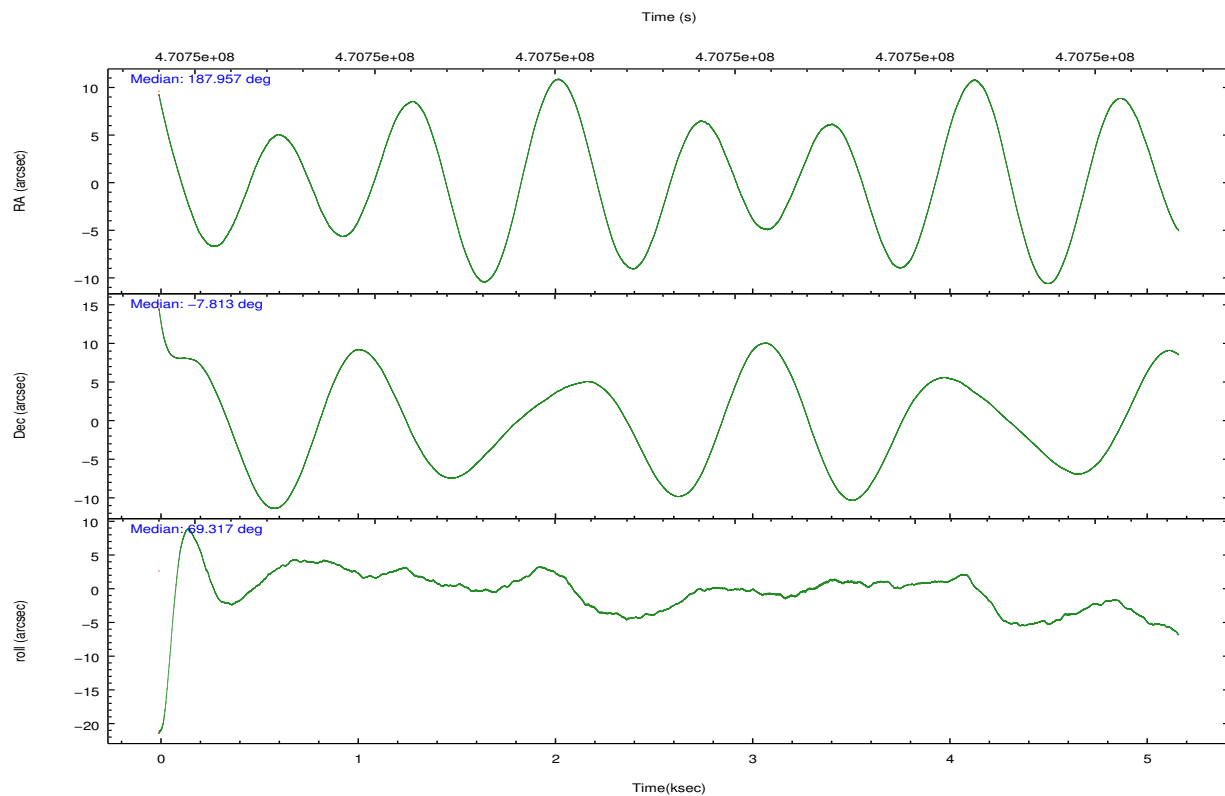
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	2000	1139	1207	1110
	8%	4%	4%	4%
grade 1 events	83	18	17	14
	0%	0%	0%	0%
grade 2 events	921	853	764	667
	3%	3%	2%	2%
grade 3 events	353	342	291	338
	1%	1%	1%	1%
grade 4 events	382	340	307	331
	1%	1%	1%	1%
grade 5 events	1227	1276	1121	1283
	5%	5%	4%	5%
grade 6 events	657	752	587	629
	2%	3%	2%	2%
grade 7 events	18236	19984	21718	20999
	76%	80%	83%	82%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	187.961758	187.9571531105134	Subarray requested	NONE	NONE
[deg] Pointing Dec	-7.840048	-7.812834752910362	Alternating exposures requested	N	N
[deg] Pointing Roll	69.109941	69.31791681214474	[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	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	470749216.184000	470748274.32425			
Observation start date	2012-12-01T11:39:09	2012-12-01T11:24:34			
[s] Observation end time (MET)	470754216.184000	470755172.57462			
Observation end date	2012-12-01T13:02:29	2012-12-01T13:19:32			
Read mode	TIMED	TIMED			

2.3 Aspect



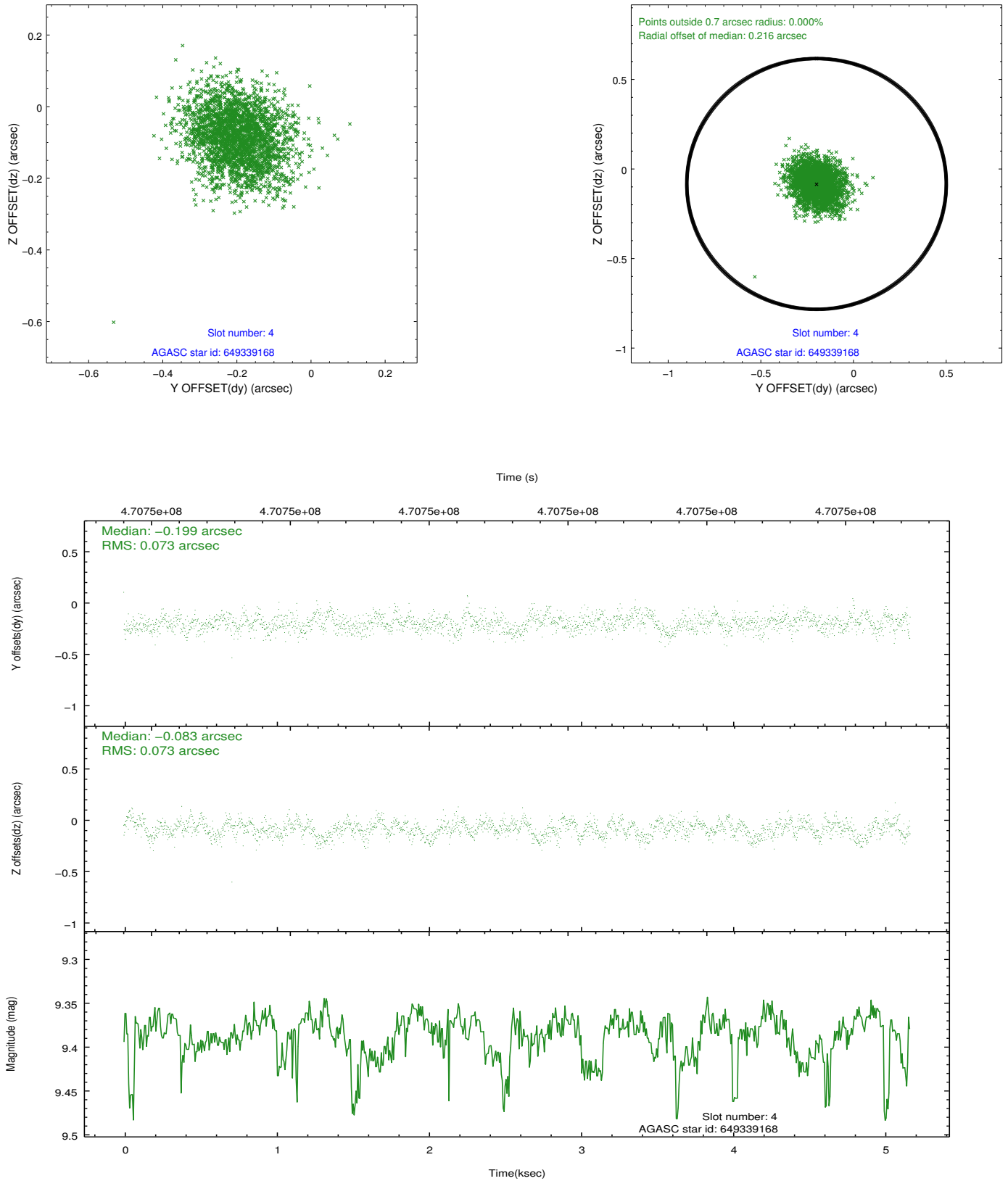


Slot Statistics

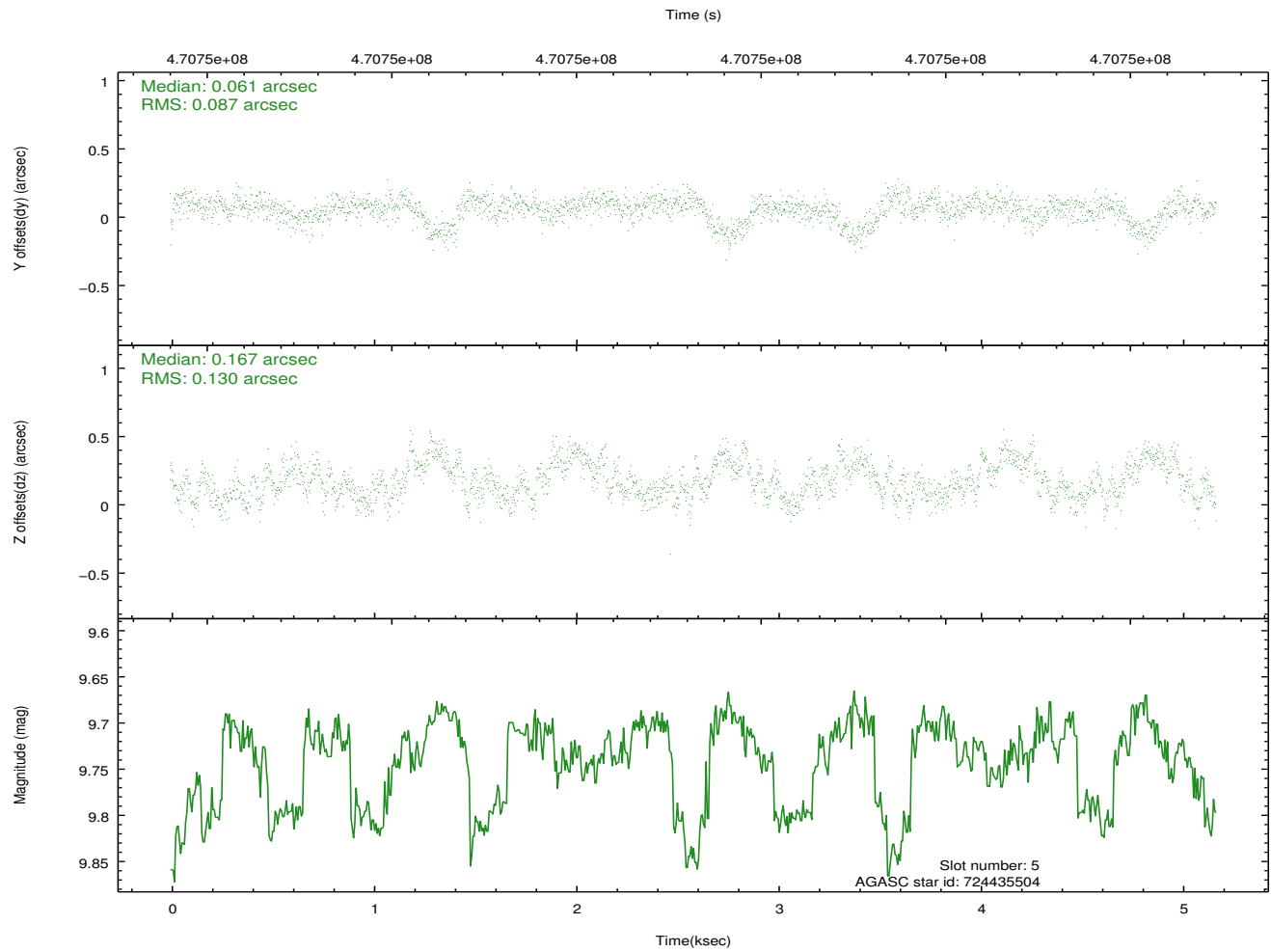
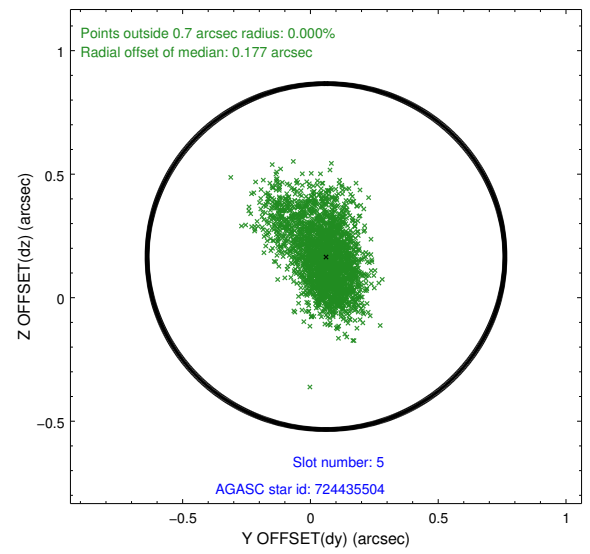
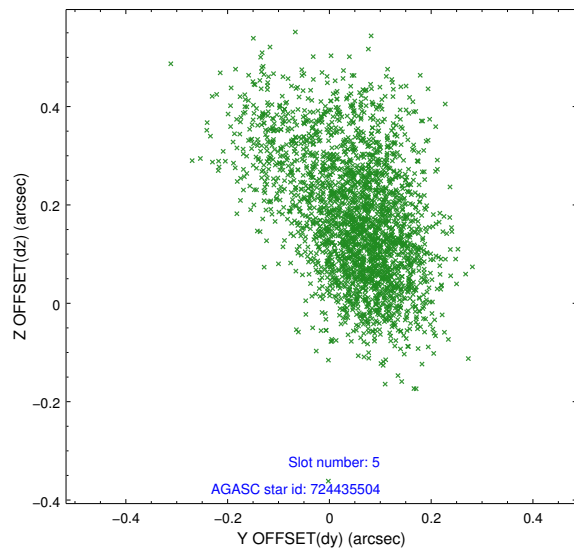
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.03	1261	-0.053	0.014	0.008	0.012	0.000000	0.000000	922.24	-842.22
1	FID		ACIS-I-4	6.98	1262	0.211	0.039	0.007	0.011	0.000000	0.000000	2143.15	1057.05
2	FID		ACIS-I-5	7.02	1262	-0.257	0.018	0.006	0.012	0.000000	0.000000	-1824.51	1056.13
3	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
4	GUIDE	used	649339168	9.39	2515	-0.199	-0.083	0.110	0.179	188.299767	-7.268145	2352.27	-393.38
5	GUIDE	used	724435504	9.73	2513	0.061	0.167	0.164	0.282	188.510066	-7.941206	356.78	-1956.60
6	GUIDE	used	724436464	8.70	2514	0.144	-0.089	0.109	0.173	187.862768	-8.158474	-1196.59	-80.13
7	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

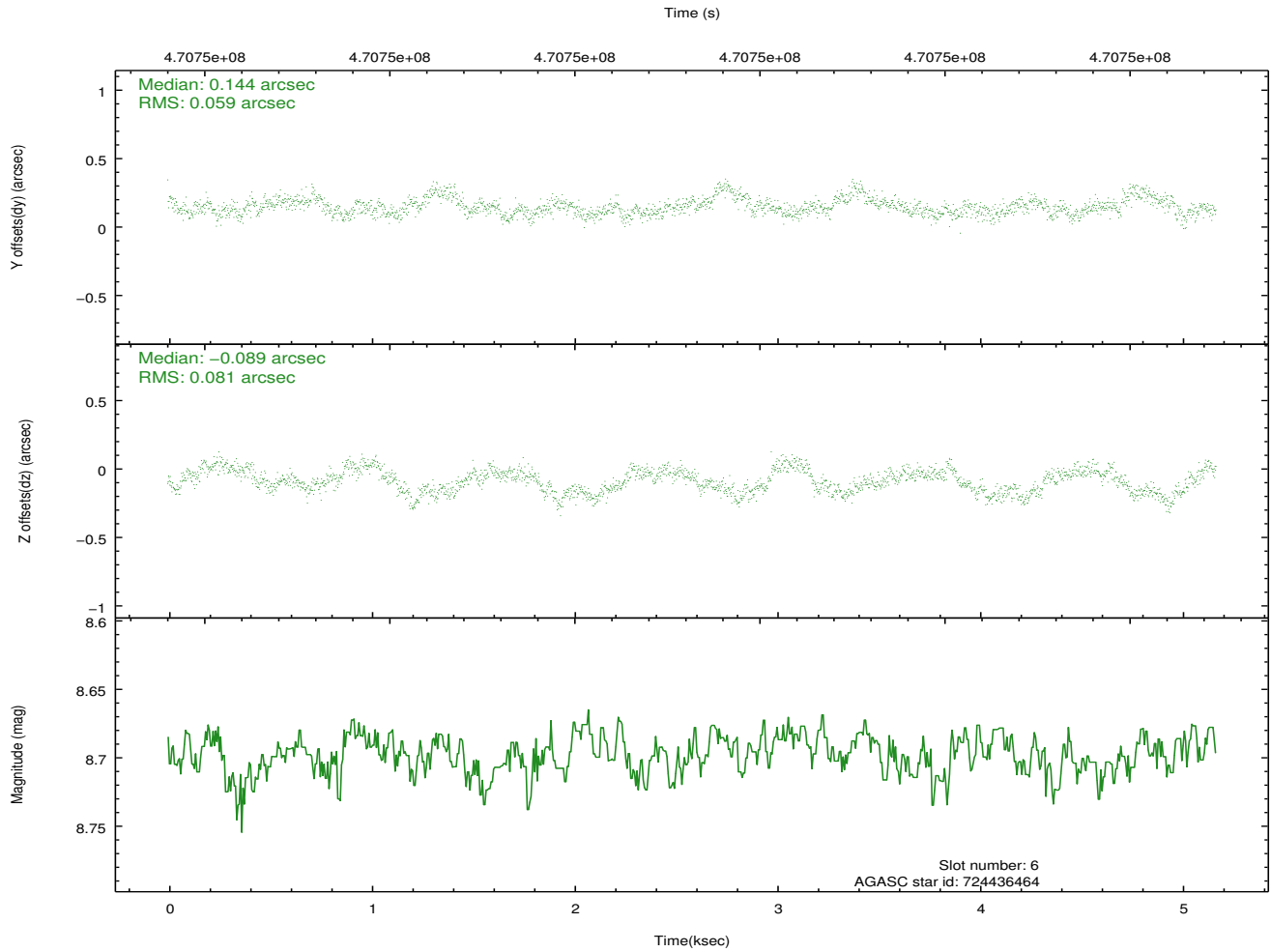
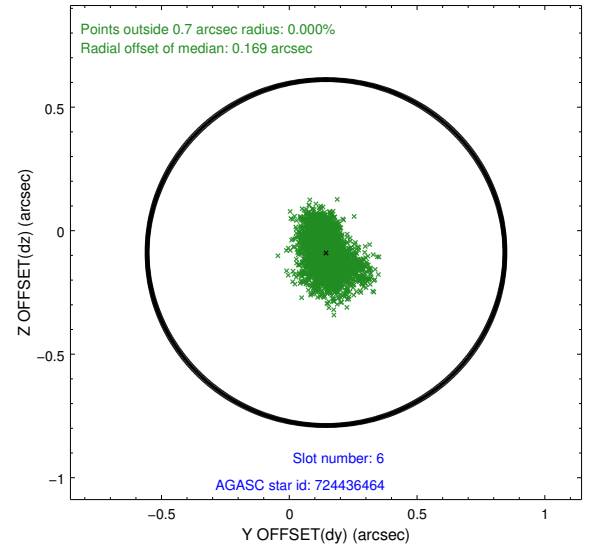
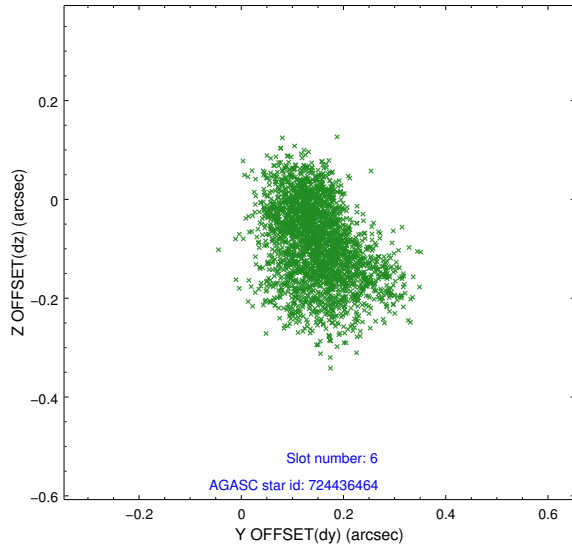
2.4.1 Slot 4



2.4.2 Slot 5

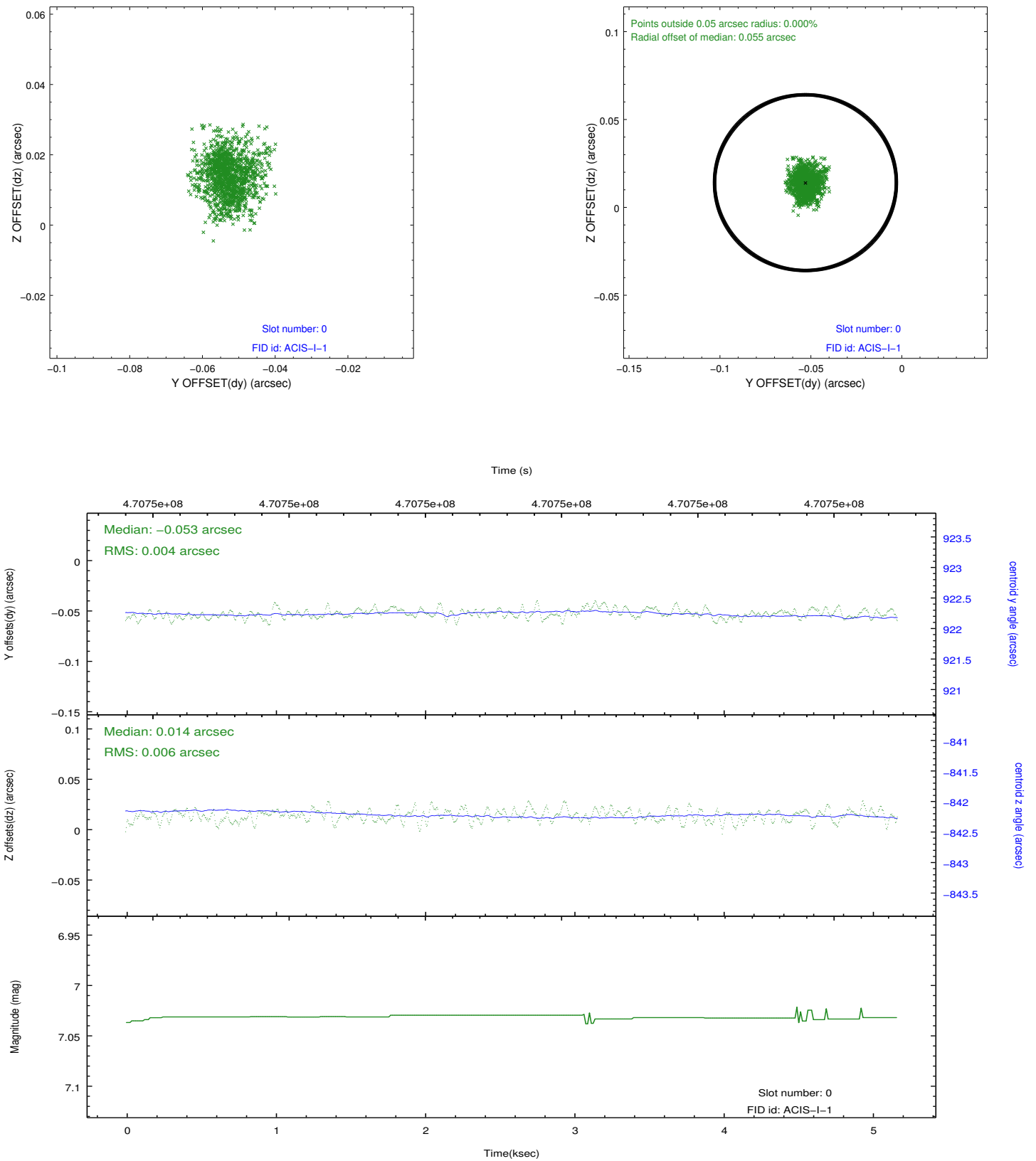


2.4.3 Slot 6

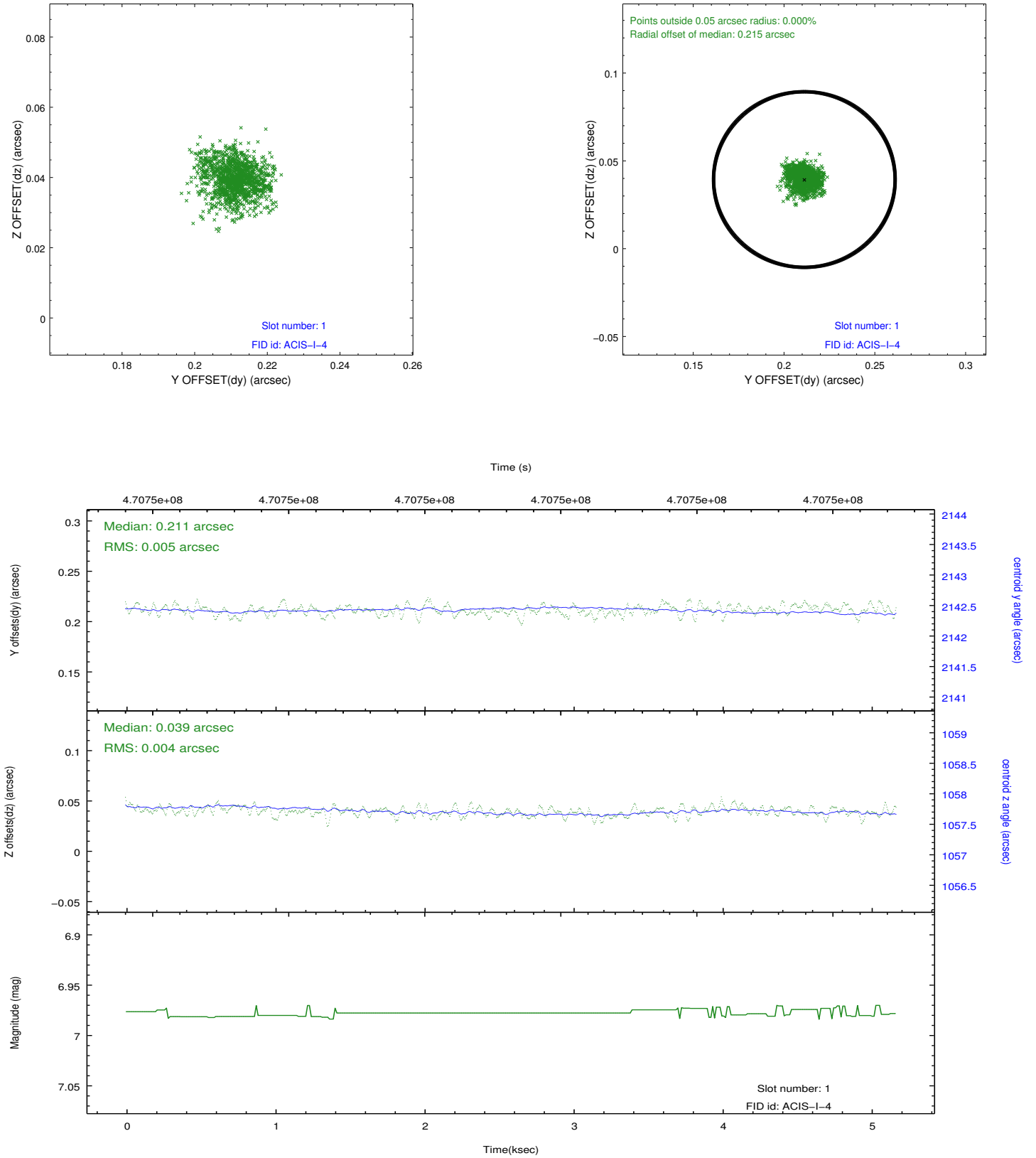


2.5 FID Slots

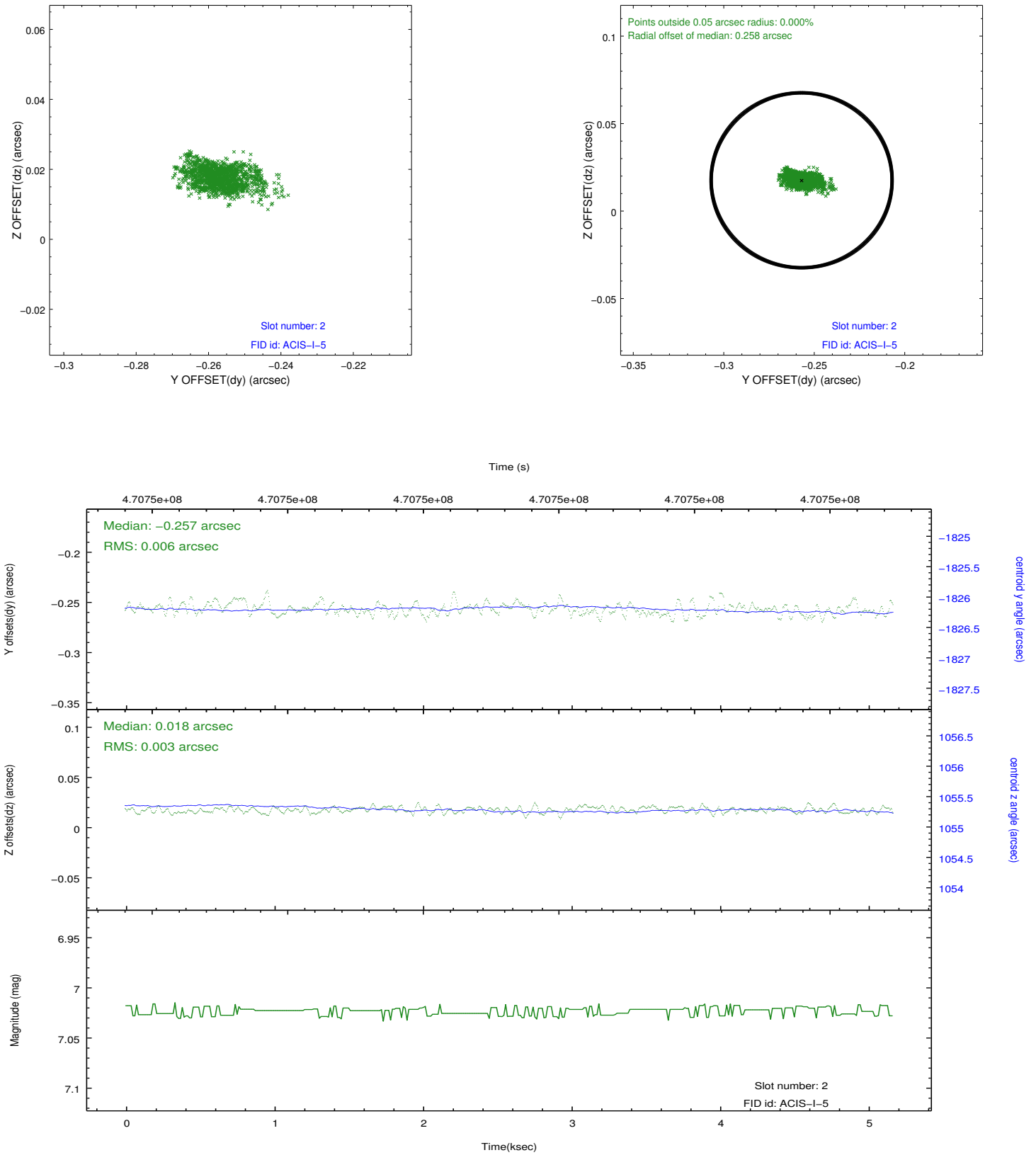
2.5.1 Slot 0



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)	2014.12.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.0889291362762

A.2 Comments

The guide stars in slot 3 and 7 were removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of these guide stars from the solution.

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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.