

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 5751 - L2 Version 4
Chandra X-Ray Center

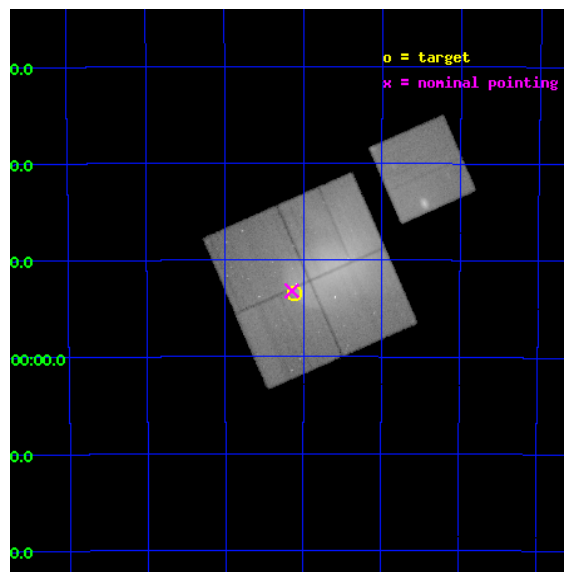
L2 Processing Date : Apr 27 2013

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

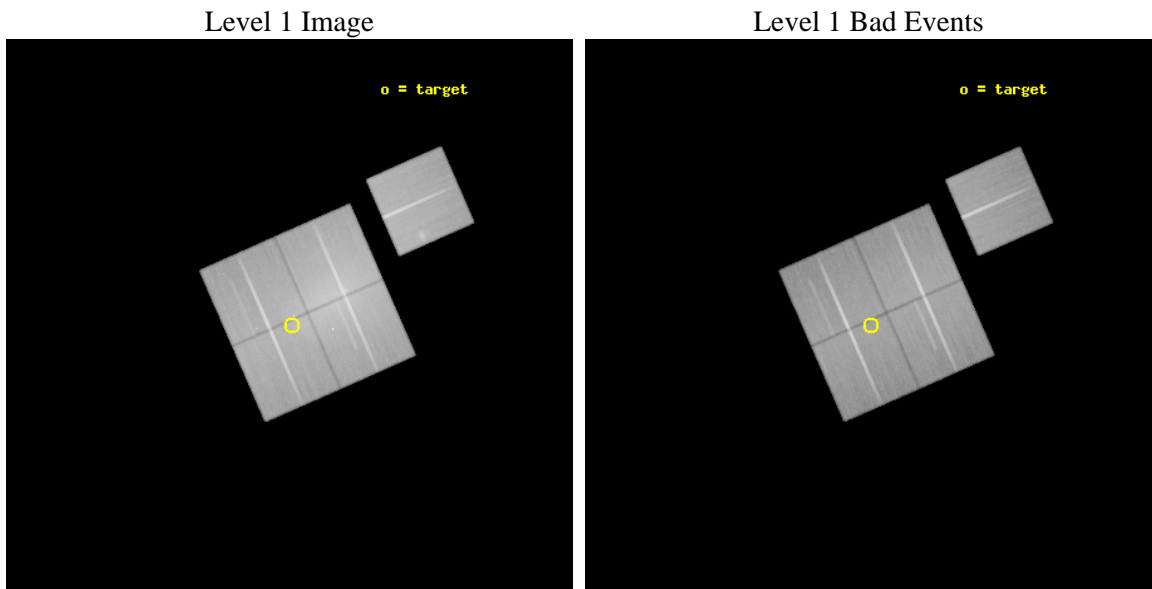
seq_num	800466	Sequence number
obs_id	5751	Observation id
title	A CHANDRA TREASURY OBSERVATION OF THE BEST EXAMPLE OF A CLUSTER COLD FRONT	Proposal title
observer	Dr. Alexey Vikhlinin	Principal investigator
object	Abell 3667	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	303.280208	Observer's specified target RA [deg]
dec_targ	-56.89	Observer's specified target Dec [deg]
ra_nom	303.28638944939	Nominal RA [deg]
dec_nom	-56.886806685824	Nominal Dec [deg]
roll_nom	66.300776110692	Nominal Roll [deg]
revision	4	Processing version of data
ontime	130596.6357879	Sum of GTIs [s]
livetime	128890.29459749	Livetime [s]
ontime0	130590.35384715	Sum of GTIs [s]
ontime1	130596.6357879	Sum of GTIs [s]
ontime2	130574.64889619	Sum of GTIs [s]
ontime3	130580.93085665	Sum of GTIs [s]
ontime6	130596.63583758	Sum of GTIs [s]
l2events	1125193	Number of level 2 events



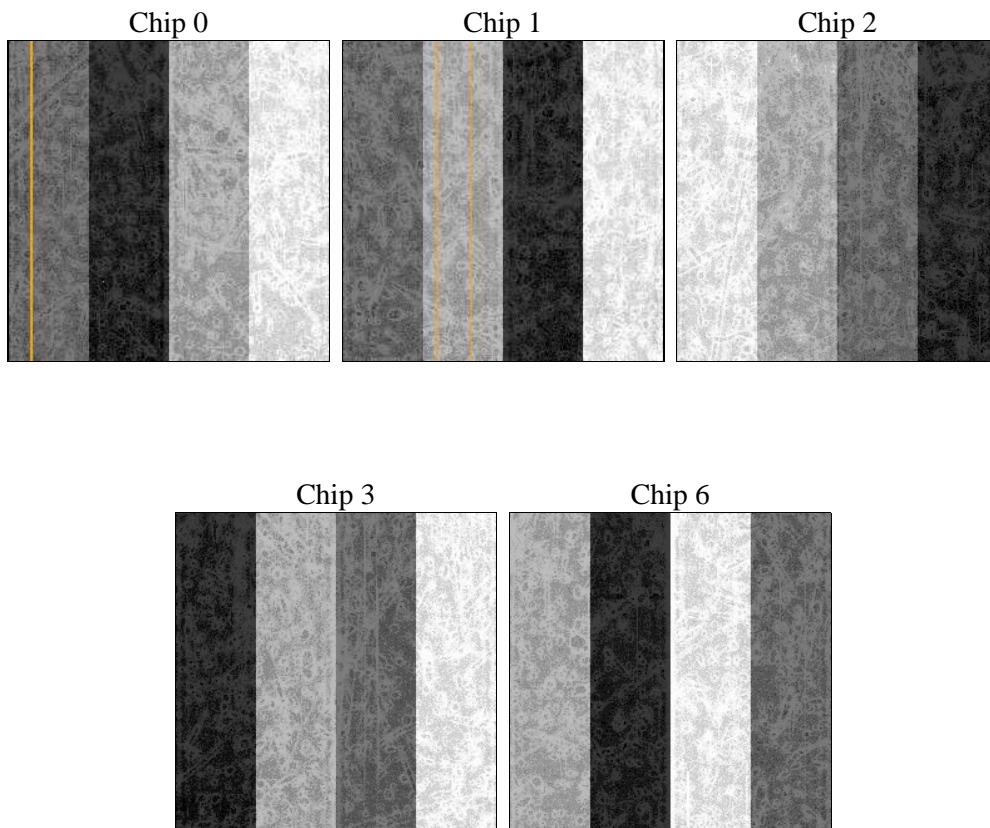
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	130561.030000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	130596.6357879	Sum of GTIs [s]
caldbver	4.5.6	 	ontime0	130590.35384715	Sum of GTIs [s]
date	2013-04-27T13:41:17	Date and time of file creation	ontime1	130596.6357879	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	130574.64889619	Sum of GTIs [s]
			ontime3	130580.93085665	Sum of GTIs [s]
			ontime6	130596.63583758	Sum of GTIs [s]
			l1events	4980341	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	880272	877711	1207239	1080760	934359	grade 0 events	104552	102569	288097	223243	103352
rejected events	702894	699151	808785	763897	758885		11%	11%	23%	20%	11%
rejected %	79%	79%	66%	70%	81%	grade 1 events	835	727	2126	1541	678
							0%	0%	0%	0%	0%
						grade 2 events	29639	28919	49921	39879	27342
							3%	3%	4%	3%	2%
						grade 3 events	12613	13108	18651	16234	12288
							1%	1%	1%	1%	1%
						grade 4 events	11832	12745	18795	16030	12203
							1%	1%	1%	1%	1%
						grade 5 events	30158	32008	29172	34336	33051
							3%	3%	2%	3%	3%
						grade 6 events	18755	21237	23019	21511	20301
							2%	2%	1%	1%	2%
						grade 7 events	671888	666398	777458	727986	725144
							76%	75%	64%	67%	77%

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	303.292081	303.2863894493868	Subarray requested	NONE	NONE
[deg] Pointing Dec	-56.914030	-56.88680668582388	Alternating exposures requested	N	N
[deg] Pointing Roll	66.096856	66.30077611069241	[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	-241.592463	-241.5930143809957			
[mm] SIM translation stage offset	8	8.000561378066038			
[s] Observation start time (MET)	234493397.184000	234492444.86491			
Observation start date	2005-06-07T01:02:13	2005-06-07T00:47:24			
[s] Observation end time (MET)	234623958.184000	234624190.68342			
Observation end date	2005-06-08T13:18:14	2005-06-08T13:23:10			
Read mode	TIMED	TIMED			

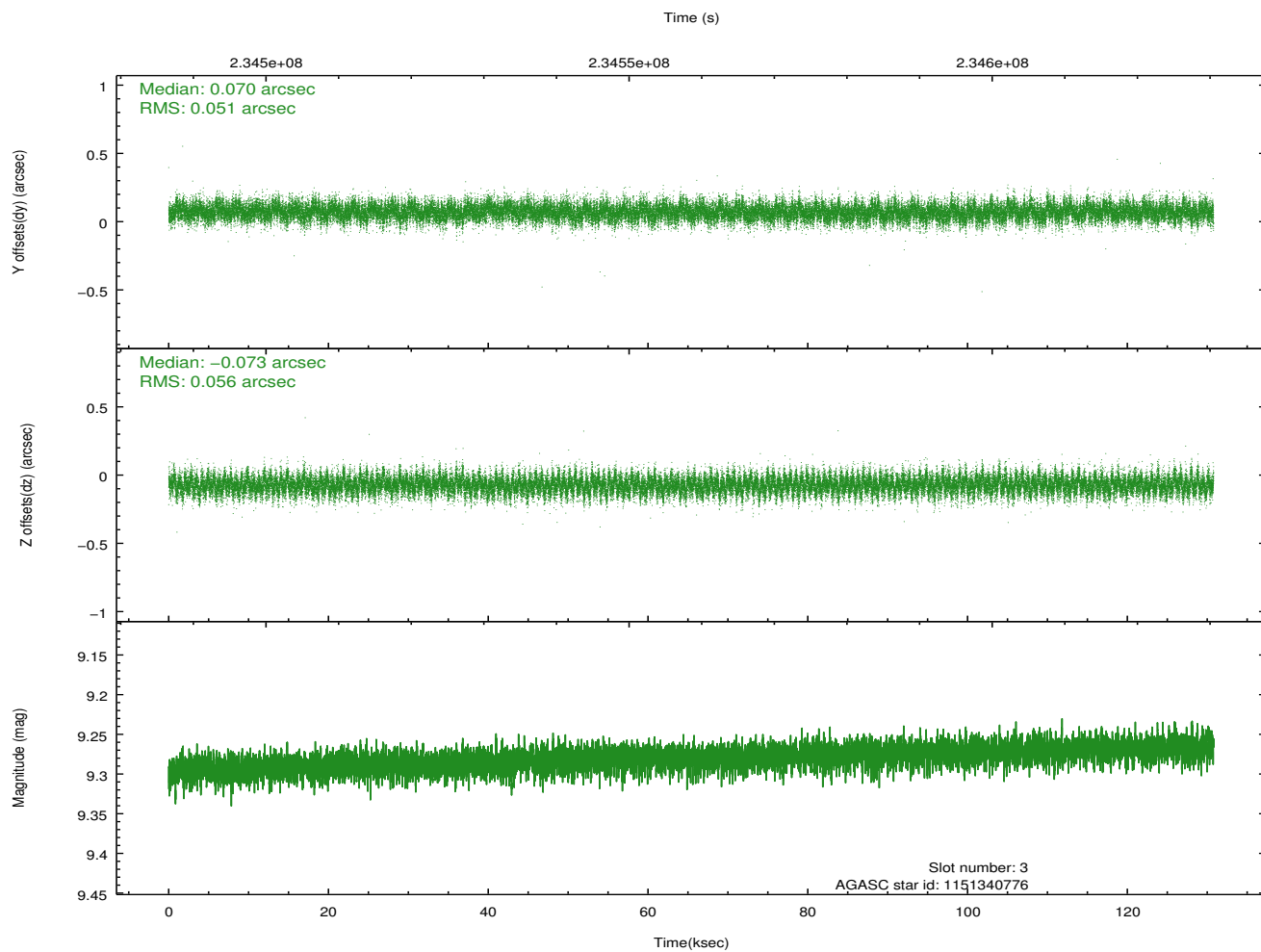
2.3 Aspect

Slot Statistics

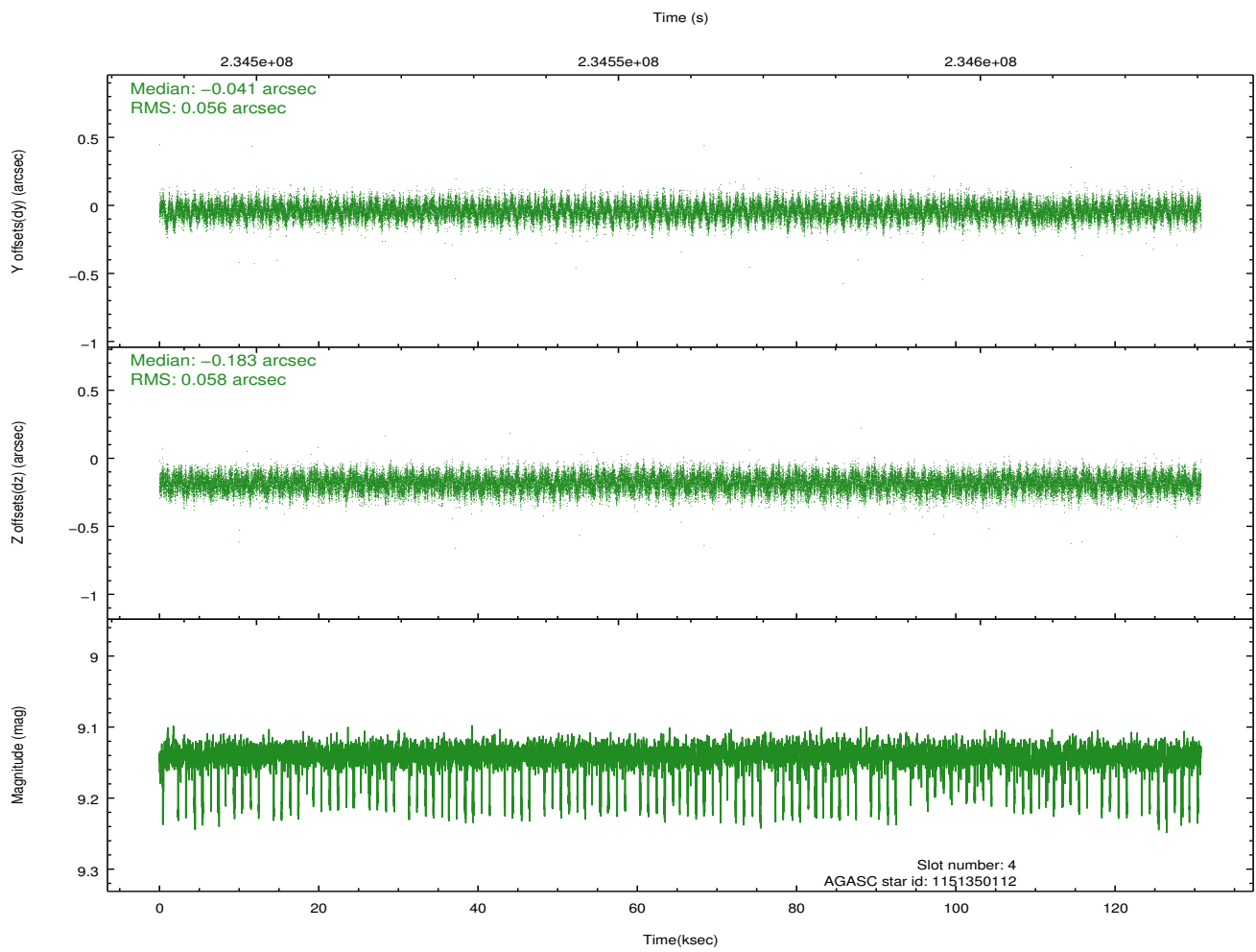
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.17	31898	-0.011	-0.052	0.017	0.039	0.000000	0.000000	-761.99	-675.34
1	FID	ACIS-I-4	7.24	31900	0.181	0.031	0.016	0.048	0.000000	0.000000	2152.35	1231.00
2	FID	ACIS-I-5	7.23	31899	-0.268	0.090	0.018	0.034	0.000000	0.000000	-1816.61	1229.84
3	GUIDE	1151340776	9.28	63748	0.070	-0.073	0.079	0.133	302.320116	-57.331751	-2152.16	1112.06
4	GUIDE	1151350112	9.14	63436	-0.041	-0.183	0.085	0.138	303.241865	-56.846660	181.80	188.89
5	GUIDE	1151467856	9.64	63735	-0.213	0.080	0.107	0.170	303.931677	-56.775960	960.44	-953.85
6	GUIDE	1151472992	9.63	63712	0.007	0.220	0.101	0.168	303.531180	-57.237033	-874.70	-896.84
7	GUIDE	1151471240	9.45	63759	0.177	-0.046	0.095	0.151	303.425045	-57.451391	-1663.94	-1019.23

2.4 Star Slots

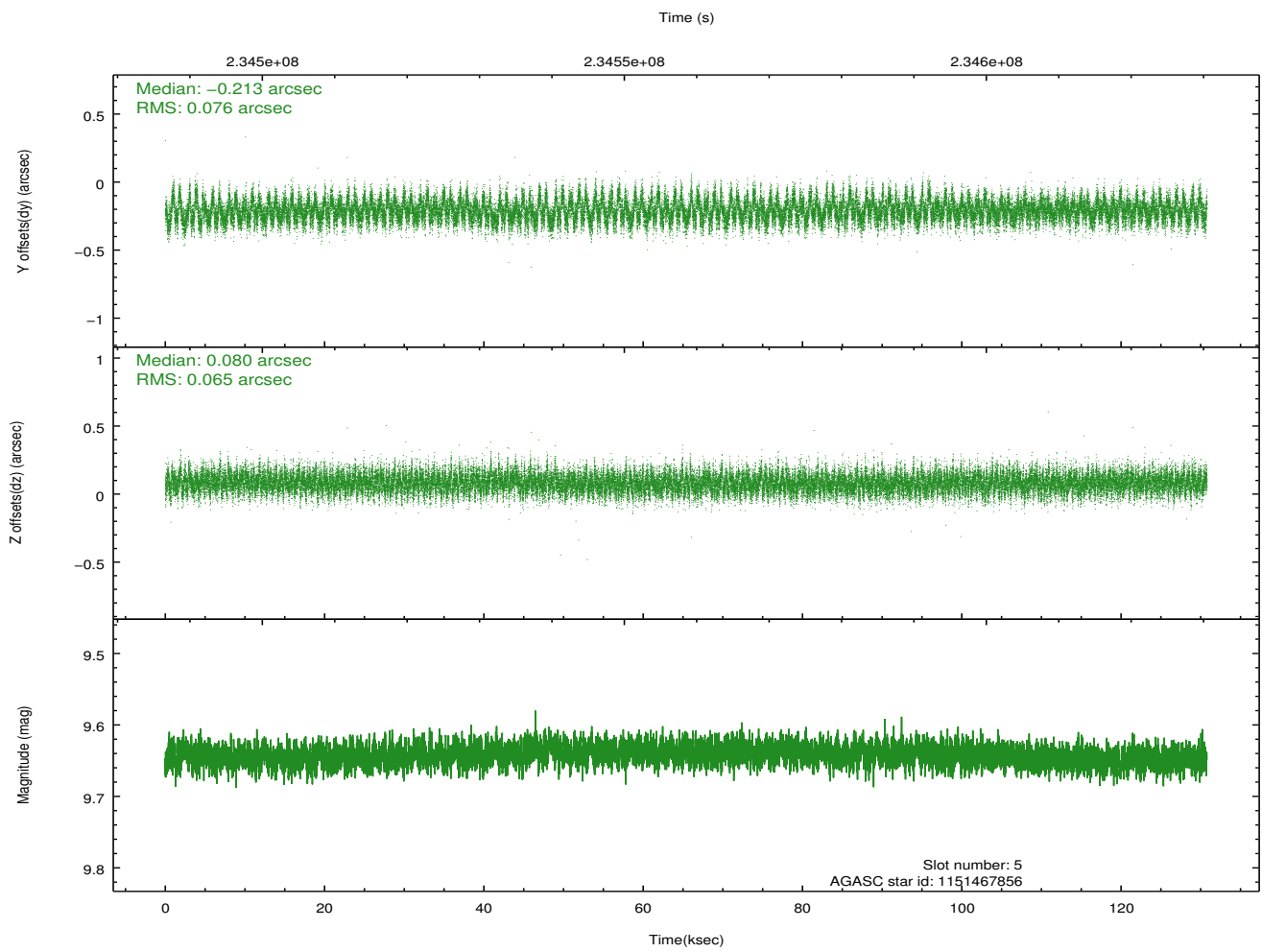
2.4.1 Slot 3



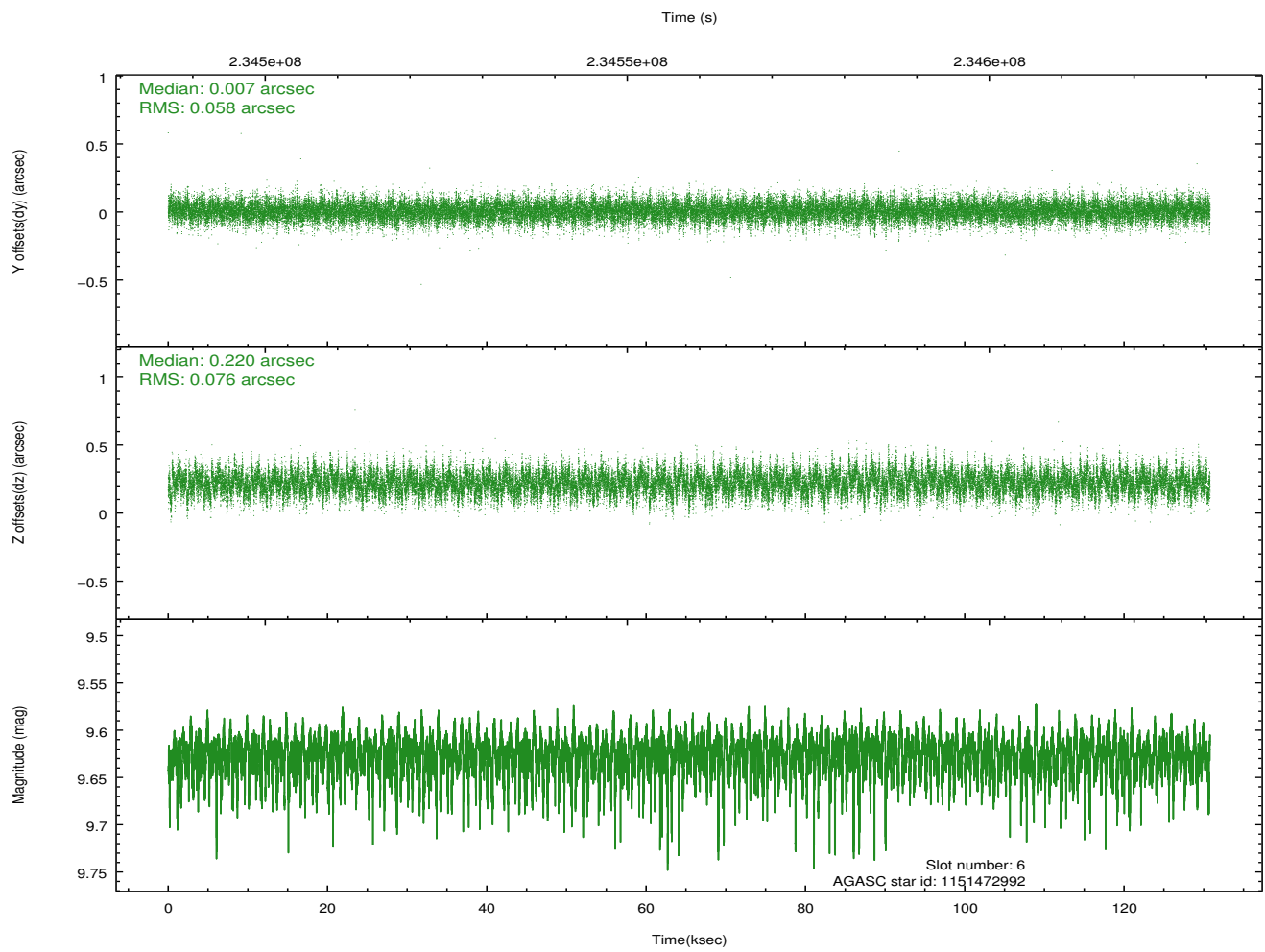
2.4.2 Slot 4



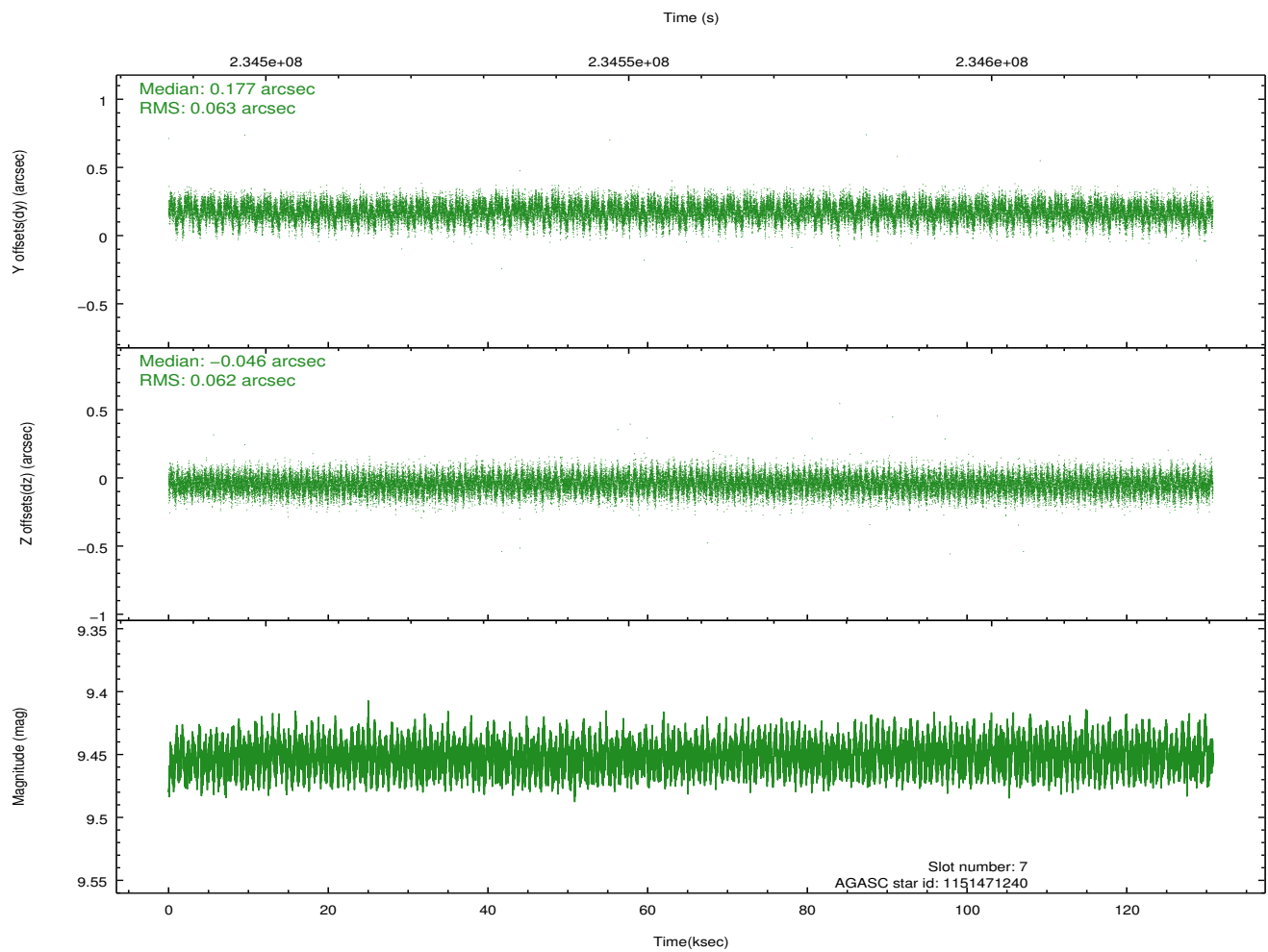
2.4.3 Slot 5



2.4.4 Slot 6

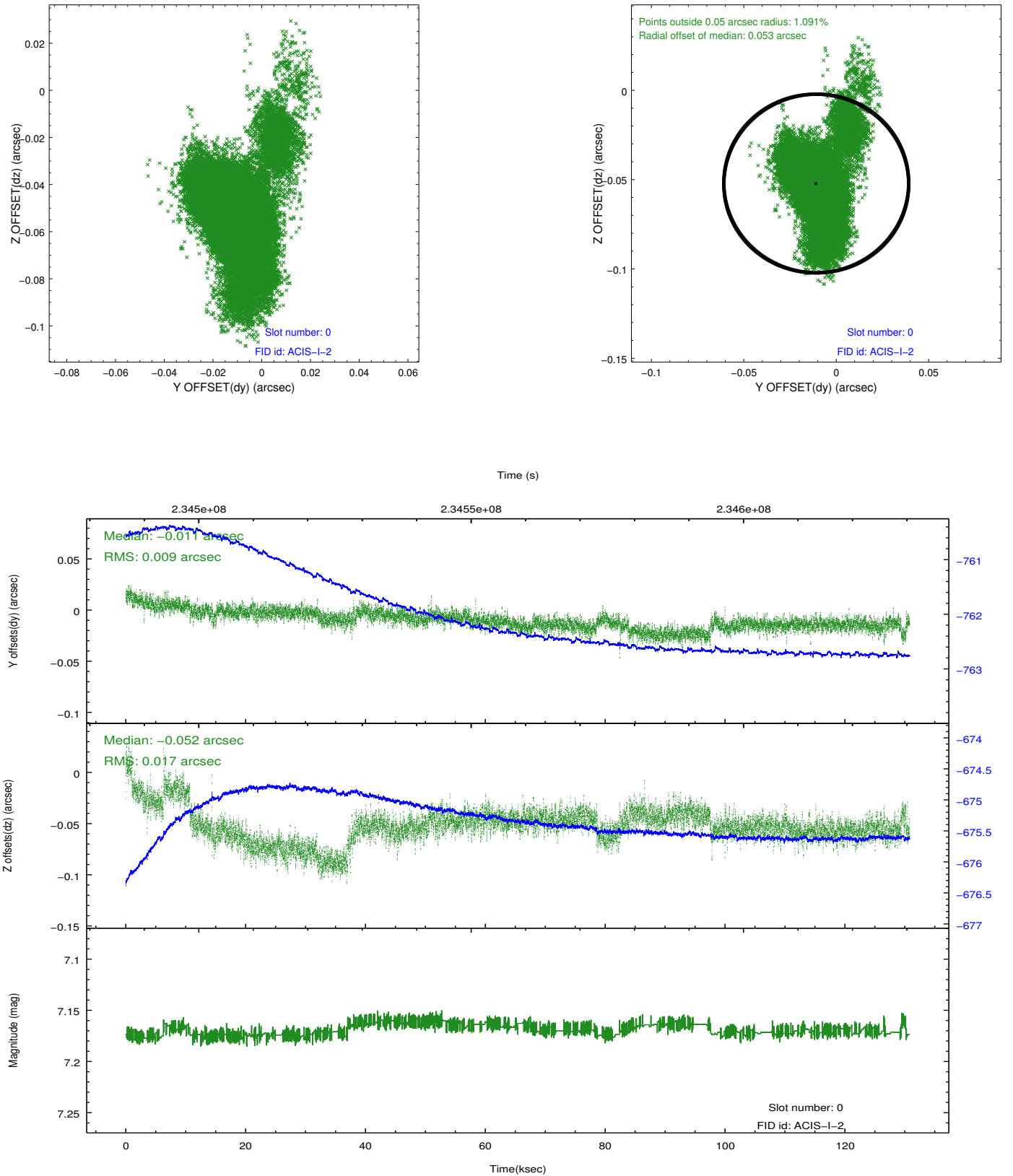


2.4.5 Slot 7

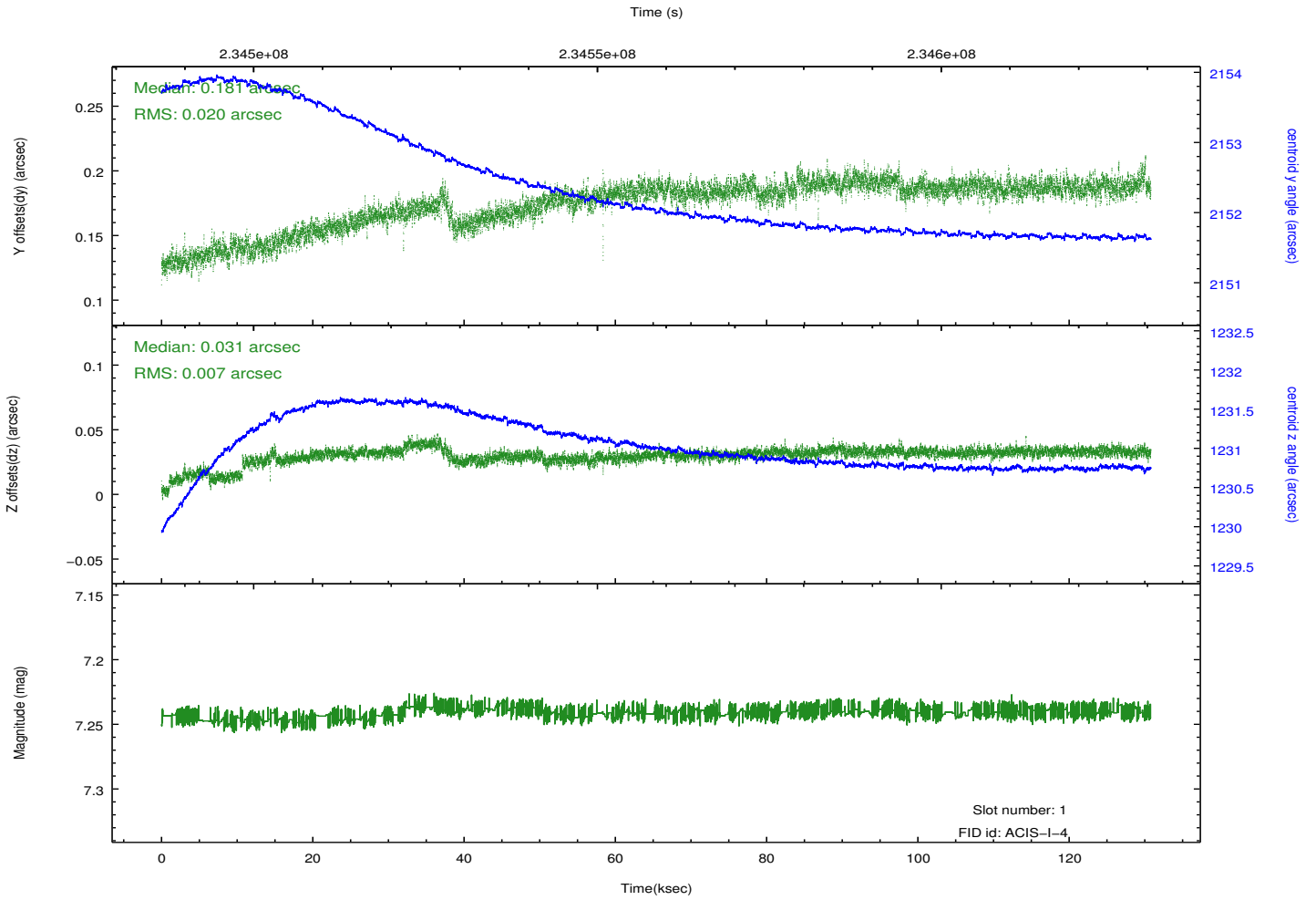
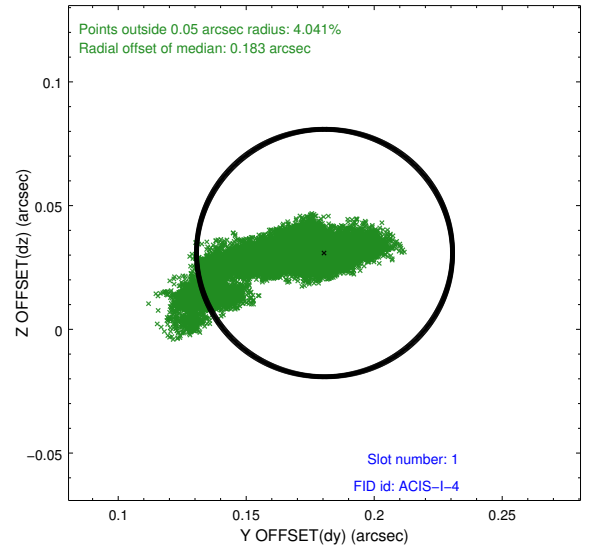
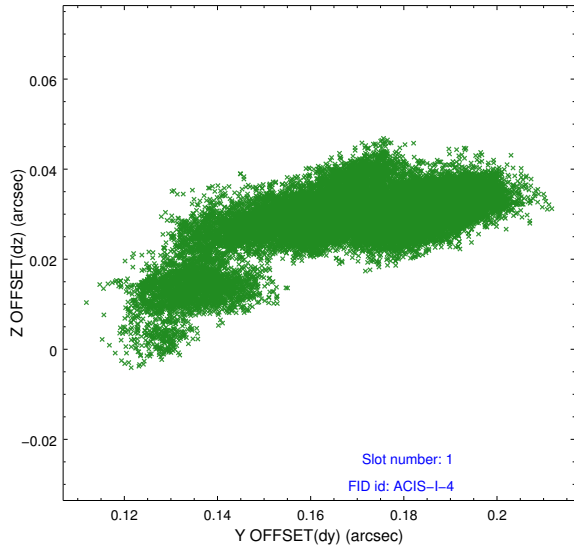


2.5 FID Slots

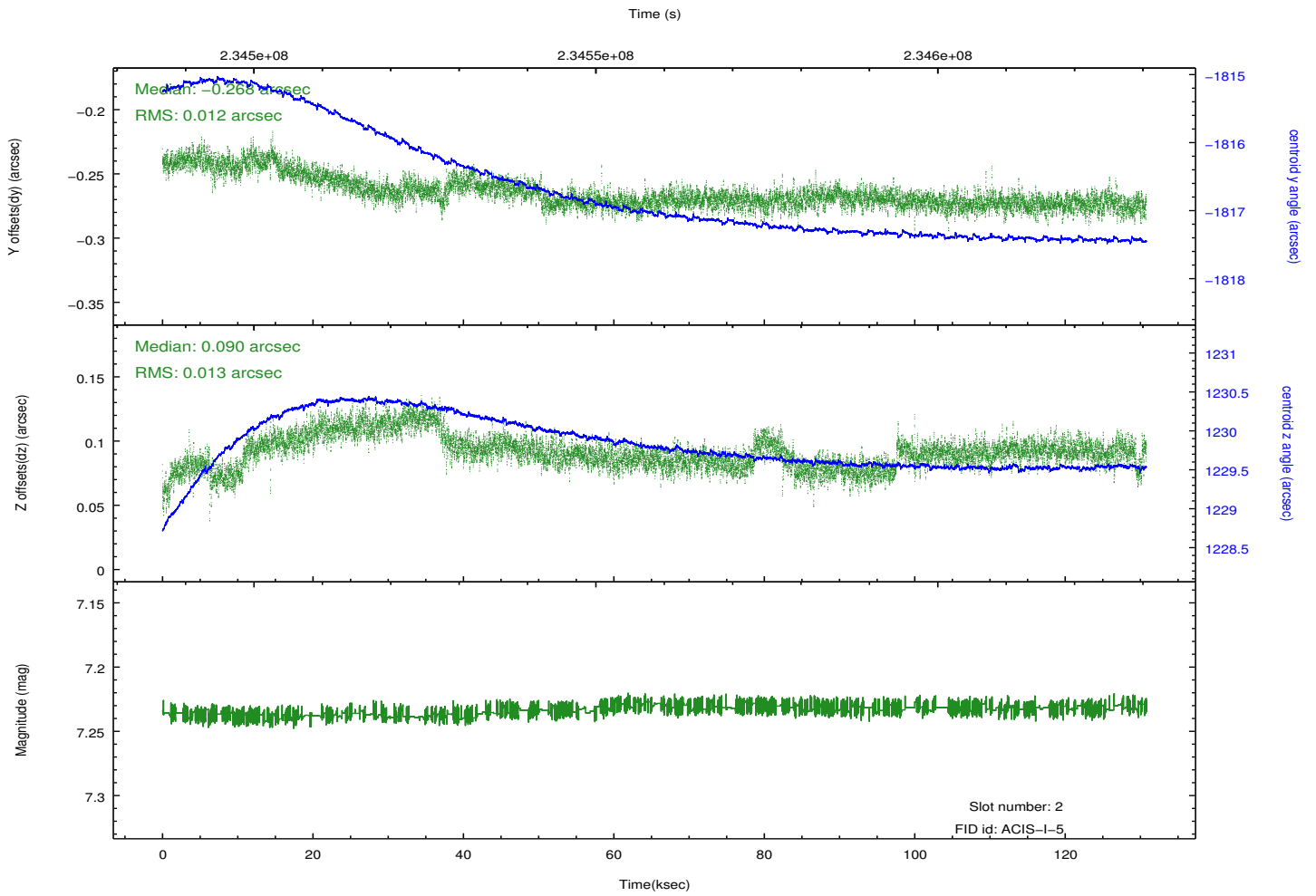
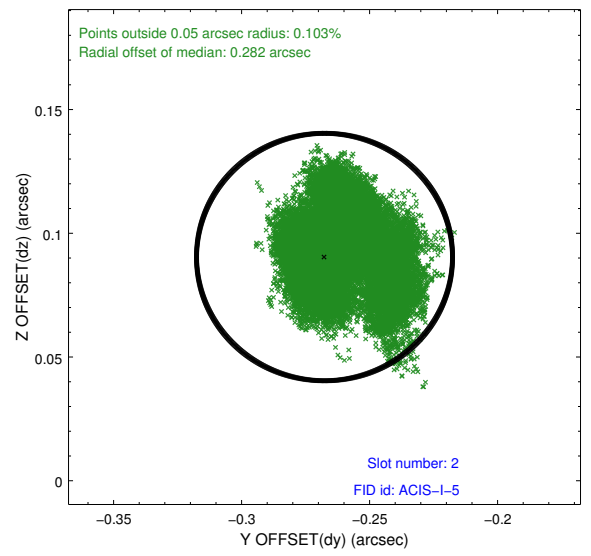
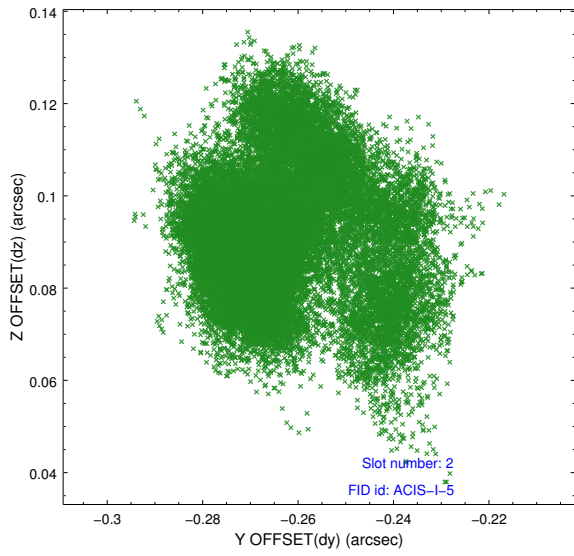
2.5.1 Slot 0



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)	2013.04.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	130.5966

A.2 Comments

A spatial region of the original bias map for CCD = 3 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 = 3 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:

(302.93032, -56.95123), (302.93830, -56.95318), (302.95751, -56.92964), (302.95521, -56.92071)