

V&V Reference Report

L2 ASCDS Version : 10.0.1

Observation 16440 - L2 Version 3
Chandra X-Ray Center

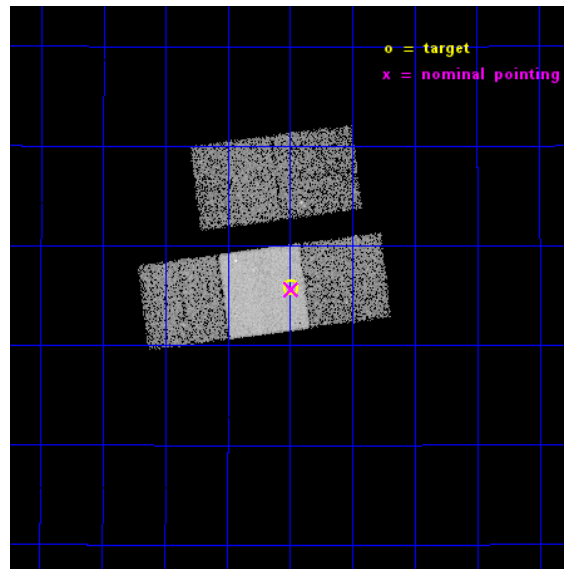
L2 Processing Date : Dec 6 2014

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1 Front

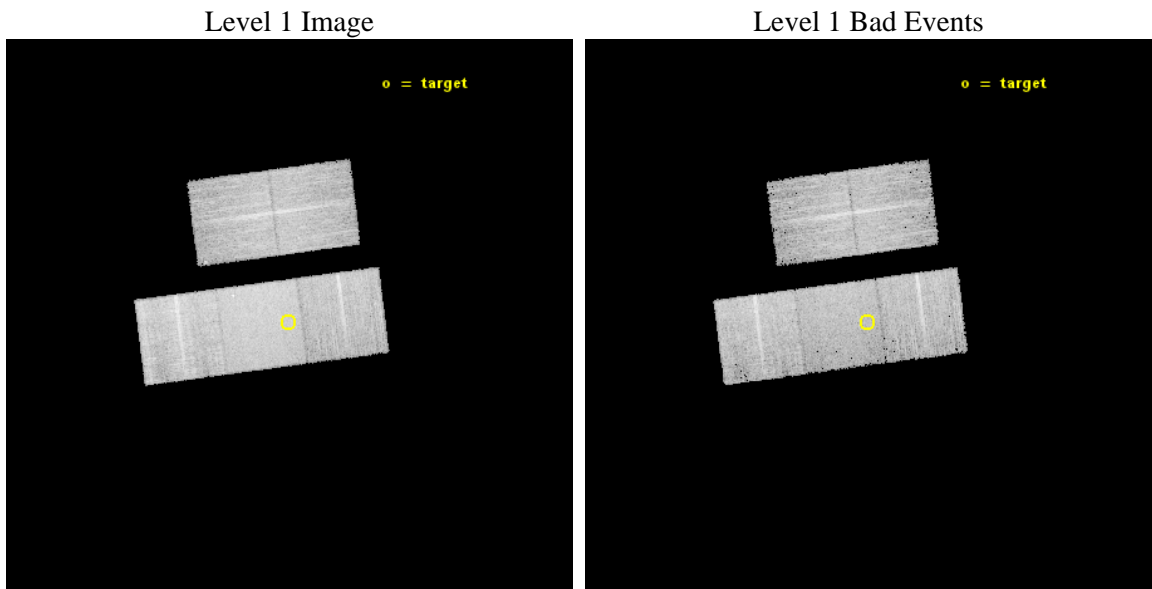
seq_num	502264	Sequence number
obs_id	16440	Observation id
title	GRB130831A: the birth of a magnetar	Proposal title
observer	Dr Massimiliano De Pasquale	Principal investigator
object	GRB130831A	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	358.624583	Observer's specified target RA [deg]
dec_targ	29.4295	Observer's specified target Dec [deg]
ra_nom	358.6223479528	Nominal RA [deg]
dec_nom	29.427179022142	Nominal Dec [deg]
roll_nom	172.54314933675	Nominal Roll [deg]
revision	3	Processing version of data
ontime	14641.300112605	Sum of GTIs [s]
livetime	14450.000747866	Livetime [s]
ontime2	14641.300112605	Sum of GTIs [s]
ontime3	14641.300112605	Sum of GTIs [s]
ontime6	14641.300112605	Sum of GTIs [s]
ontime7	14641.300112605	Sum of GTIs [s]
ontime8	14641.300112605	Sum of GTIs [s]
l2events	69998	Number of level 2 events



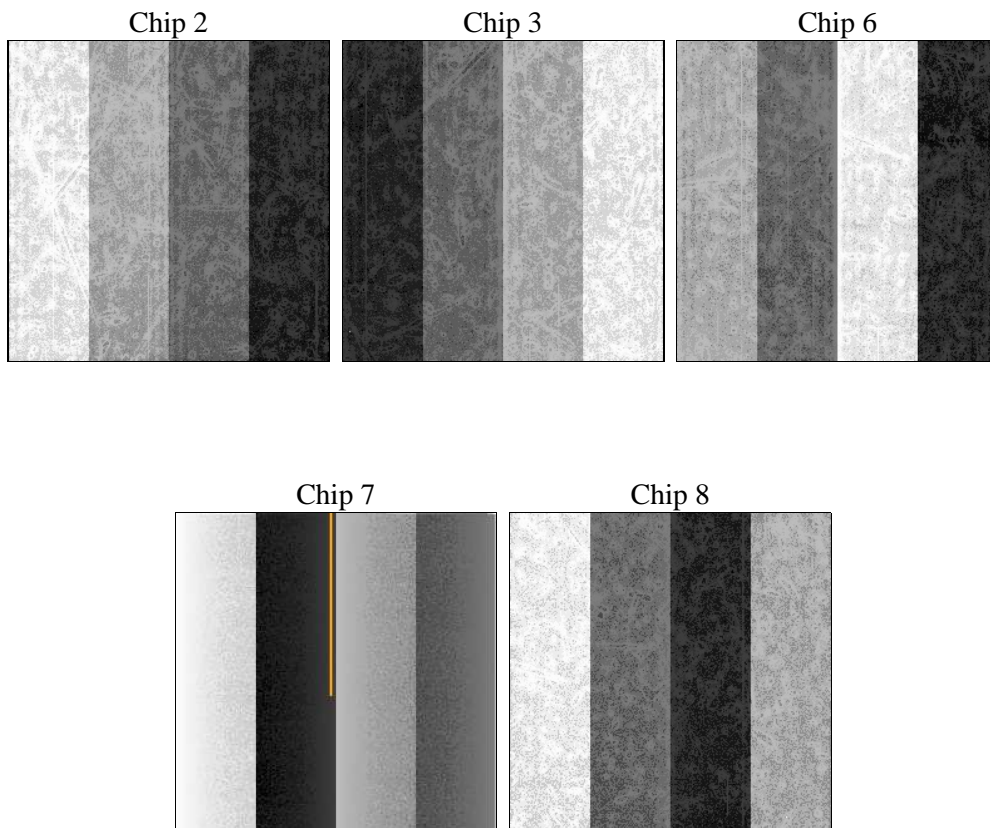
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	14573.890000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	14641.300112605	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	14641.300112605	Sum of GTIs [s]
date	2014-12-06T12:16:29	Date and time of file creation	ontime3	14641.300112605	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	14641.300112605	Sum of GTIs [s]
			ontime7	14641.300112605	Sum of GTIs [s]
			ontime8	14641.300112605	Sum of GTIs [s]
			l1events	397785	Number of level 1 events

2.1.4 Events

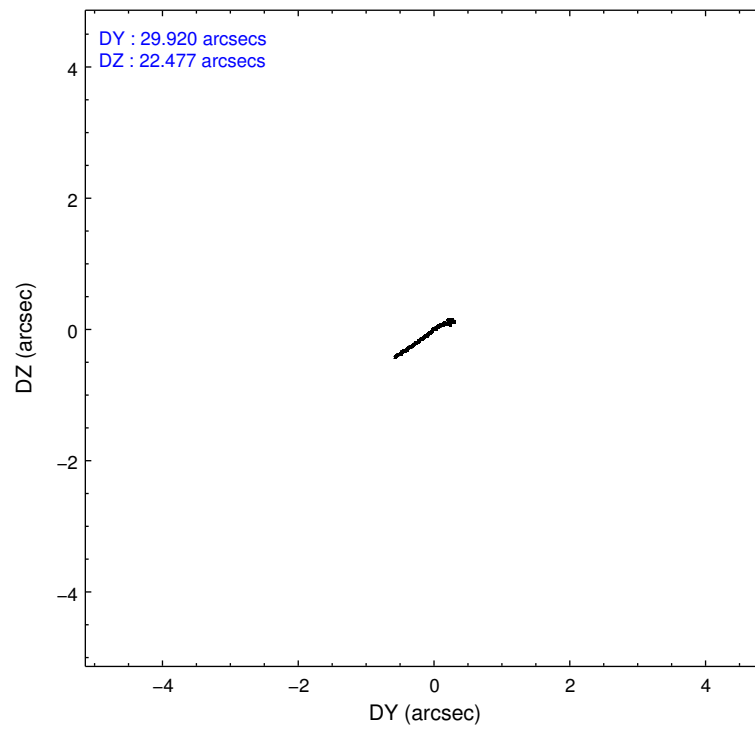
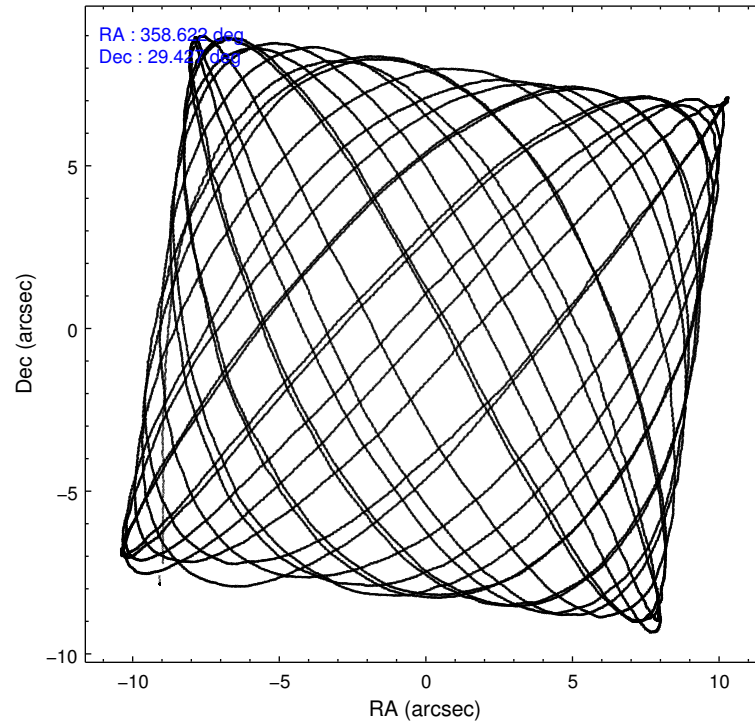
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	68172	66915	71487	97806	93405
rejected events	60474	58940	62852	56043	69161
rejected %	88%	88%	87%	57%	74%

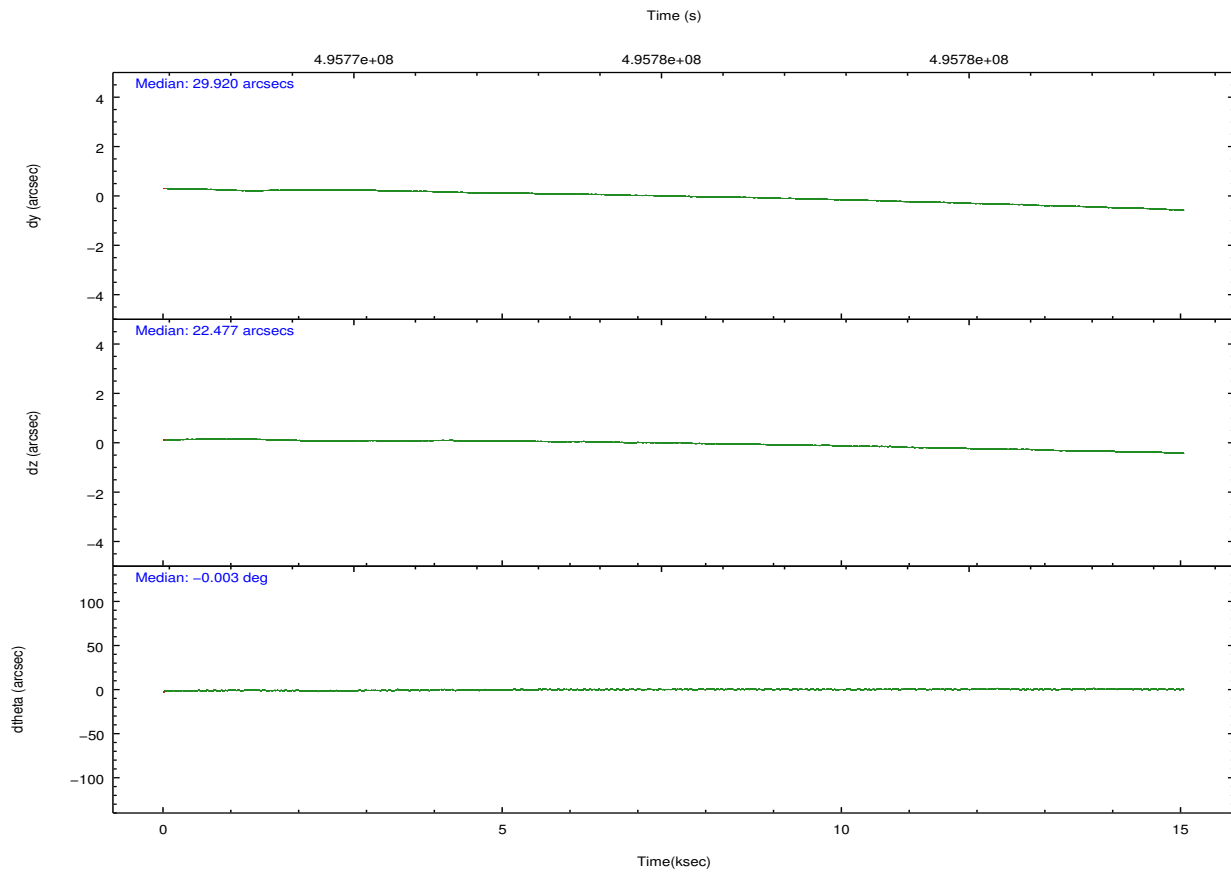
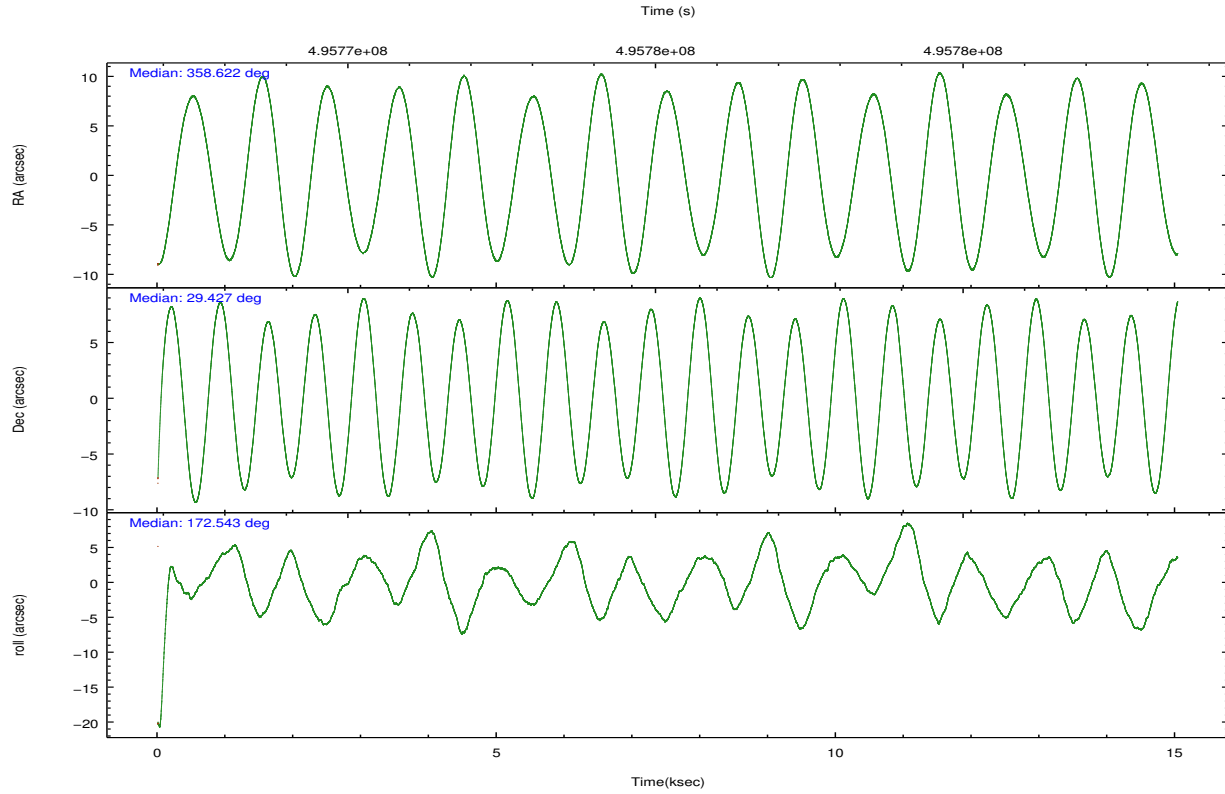
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	2710	2885	2841	3710	6929
	3%	4%	3%	3%	7%
grade 1 events	26	38	27	118	58
	0%	0%	0%	0%	0%
grade 2 events	1809	1592	2026	8554	5499
	2%	2%	2%	8%	5%
grade 3 events	792	840	892	3401	2743
	1%	1%	1%	3%	2%
grade 4 events	813	888	830	3443	2619
	1%	1%	1%	3%	2%
grade 5 events	3034	3906	3656	10060	5384
	4%	5%	5%	10%	5%
grade 6 events	1576	1770	2048	22661	6455
	2%	2%	2%	23%	6%
grade 7 events	57412	54996	59167	45859	63718
	84%	82%	82%	46%	68%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	358.651179	358.6223479527978	Subarray requested	NONE	NONE
[deg] Pointing Dec	29.438007	29.42717902214158	Alternating exposures requested	N	N
[deg] Pointing Roll	172.372364	172.5431493367468	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	495768153.184000	495767076.84257			
Observation start date	2013-09-17T01:21:26	2013-09-17T01:04:36			
[s] Observation end time (MET)	495782727.184000	495782953.06844			
Observation end date	2013-09-17T05:24:20	2013-09-17T05:29:13			
Read mode	TIMED	TIMED			

2.3 Aspect





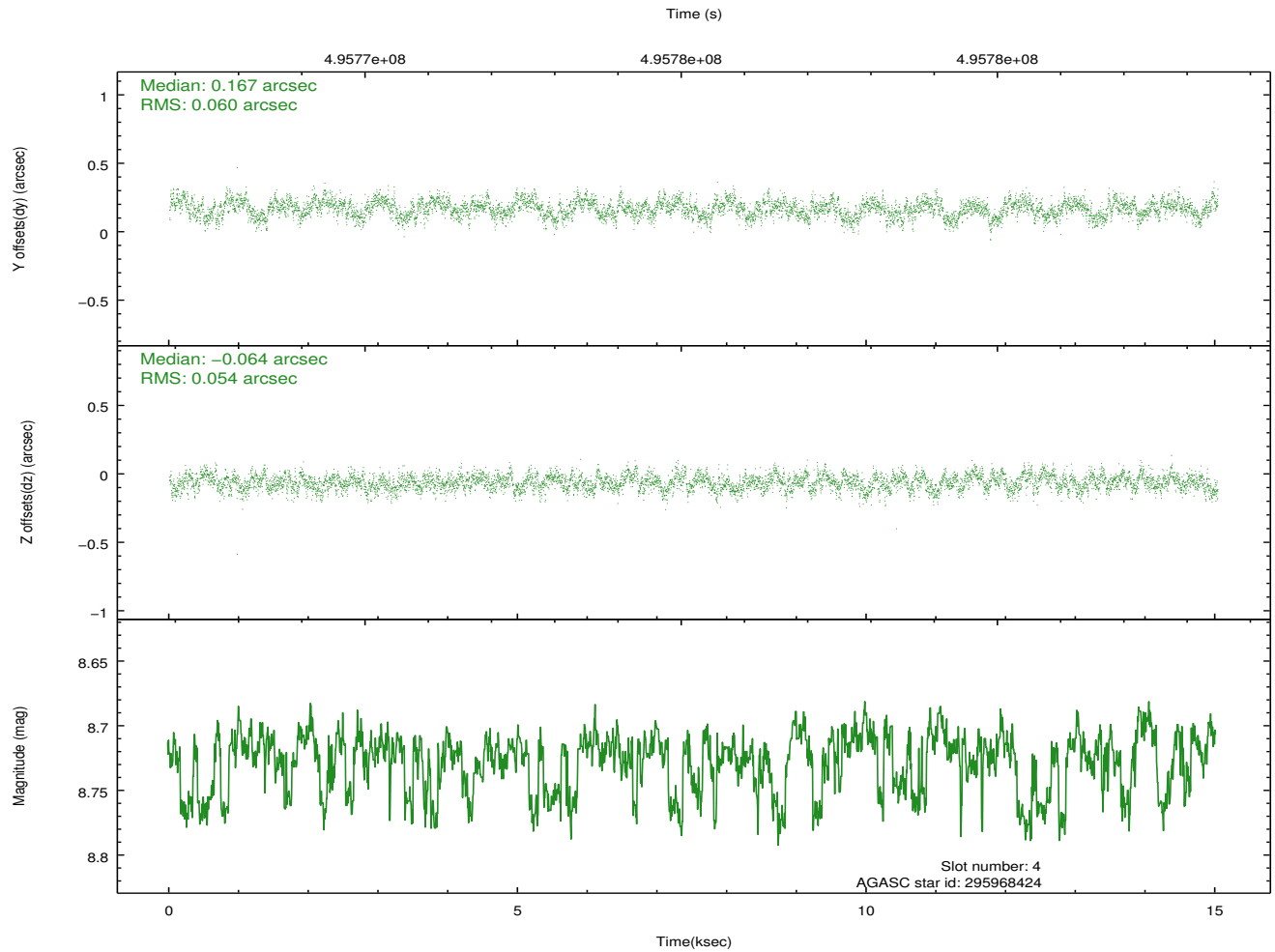
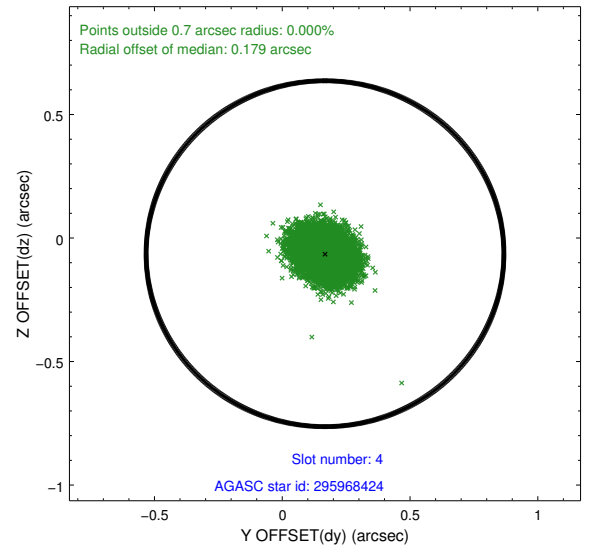
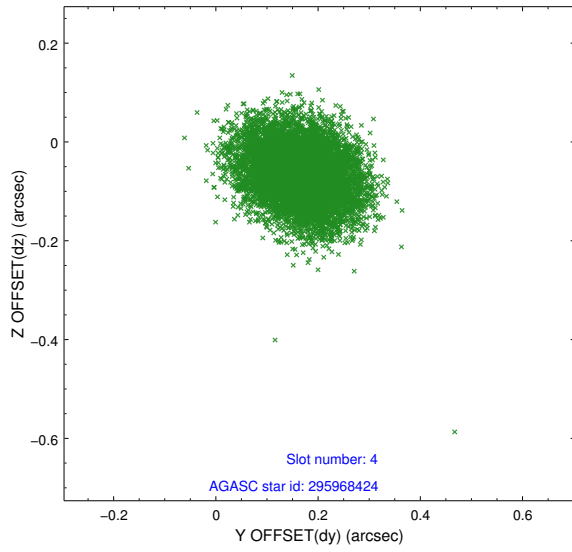
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.98	3667	-0.221	-0.061	0.007	0.012	0.000000	0.000000	-783.48	-1744.04
1	FID		ACIS-S-4	7.07	3667	0.422	0.123	0.006	0.011	0.000000	0.000000	2130.32	164.28
2	FID		ACIS-S-5	7.10	3666	-0.232	-0.053	0.007	0.011	0.000000	0.000000	-1835.93	158.15
3	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
4	GUIDE	used	295968424	8.72	7331	0.167	-0.064	0.086	0.137	359.068741	28.876521	-1572.67	1826.55
5	GUIDE	used	295972328	8.59	7330	-0.175	-0.340	0.091	0.147	358.421579	28.806802	415.94	2347.88
6	GUIDE	used	295980488	8.81	7333	-0.163	-0.162	0.085	0.134	358.139317	28.952243	1366.68	1944.26
7	GUIDE	used	295967040	7.99	7330	0.170	0.565	0.081	0.126	358.755595	29.450493	-317.93	-87.21

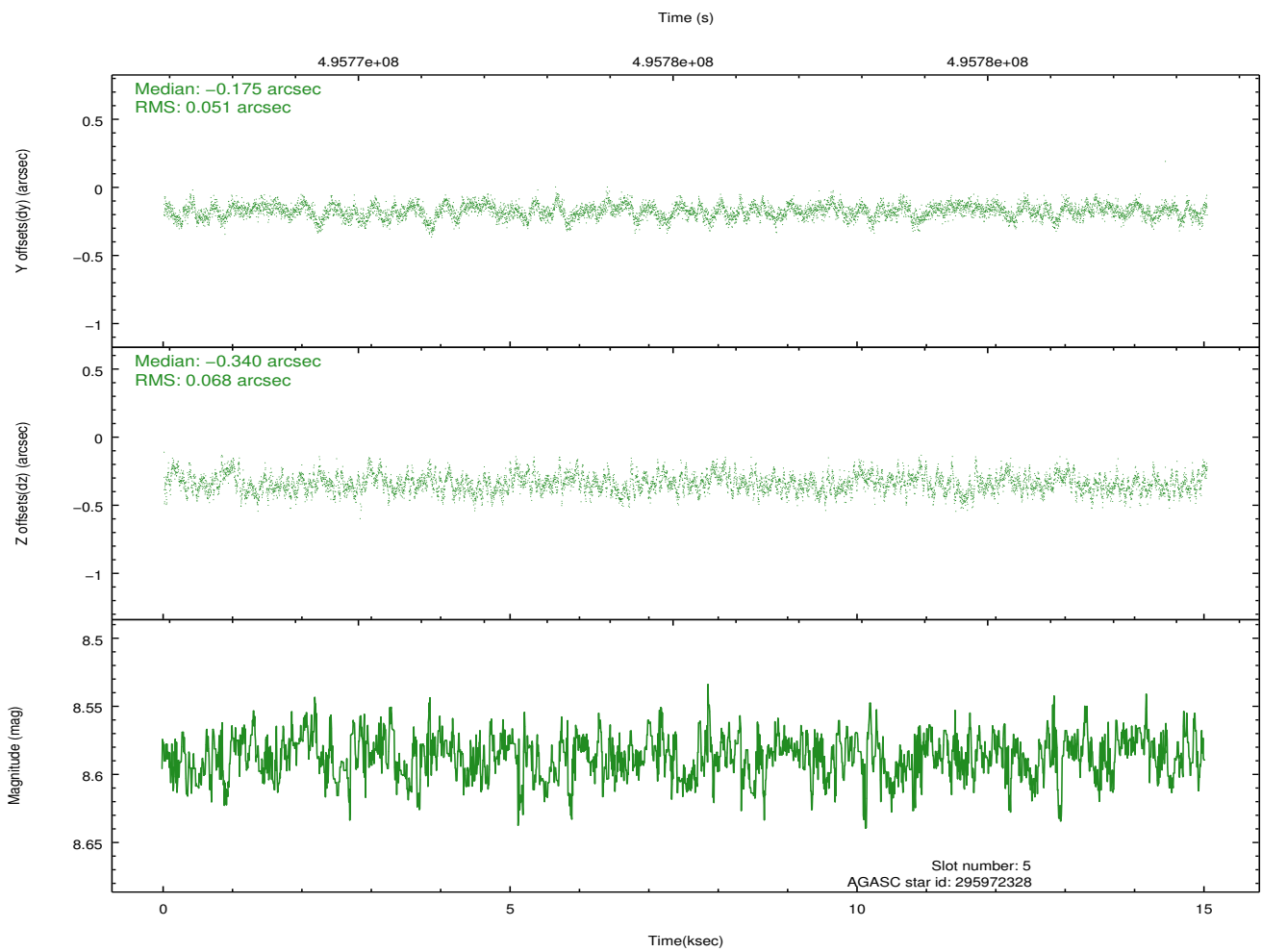
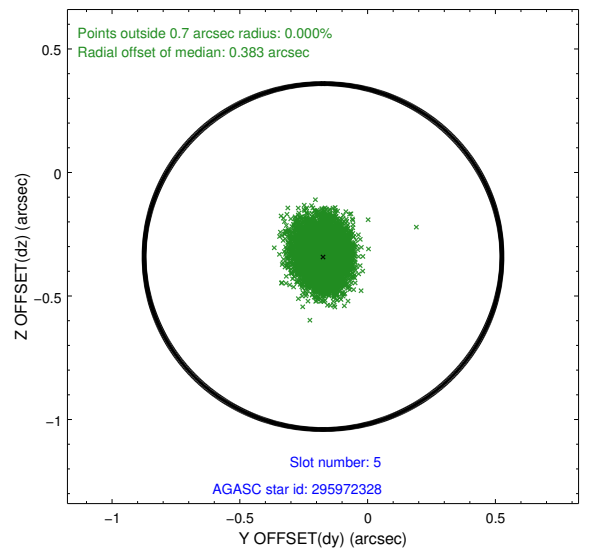
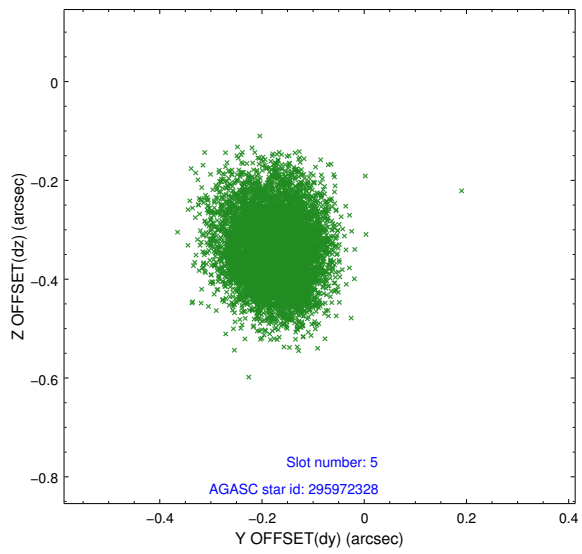
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2.4 Star Slots

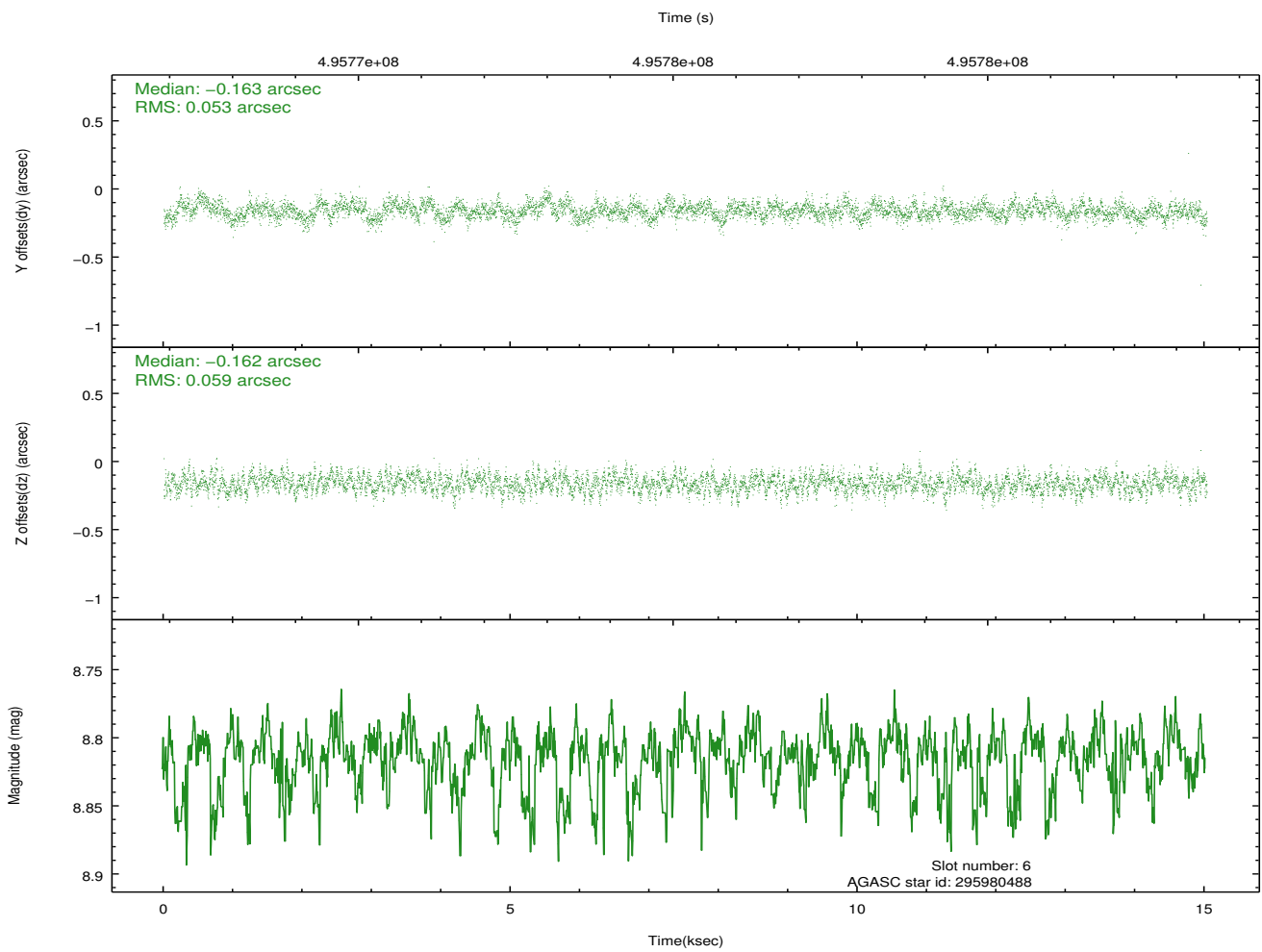
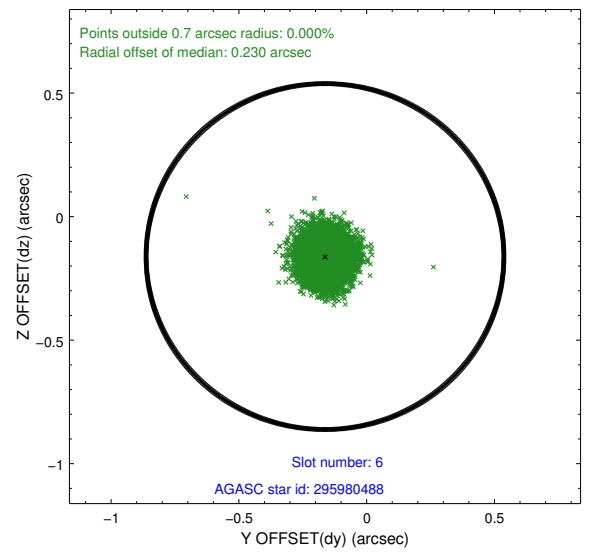
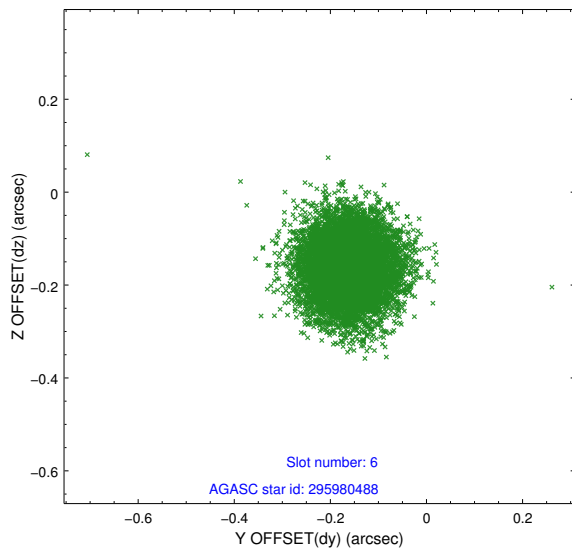
2.4.1 Slot 4



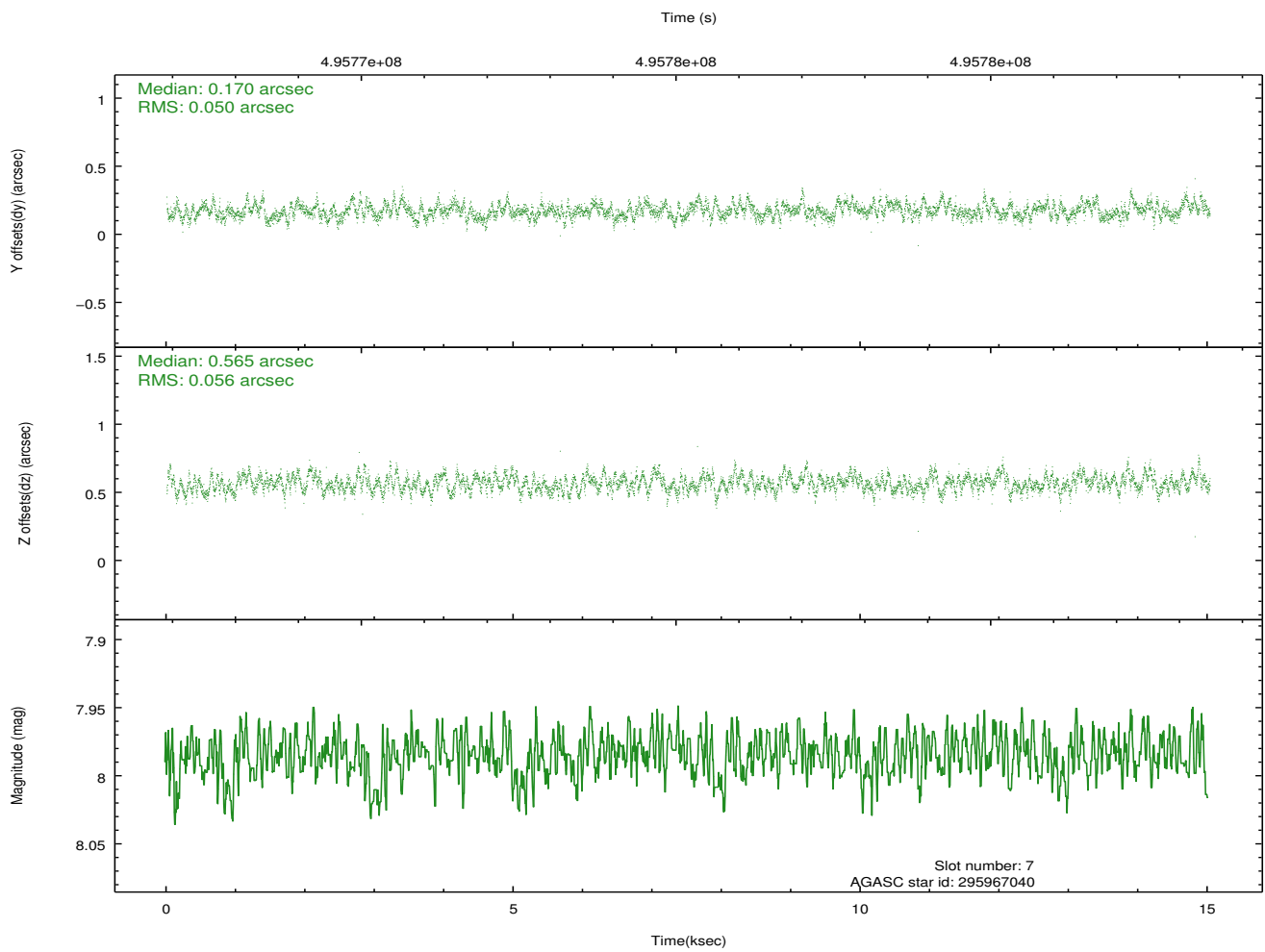
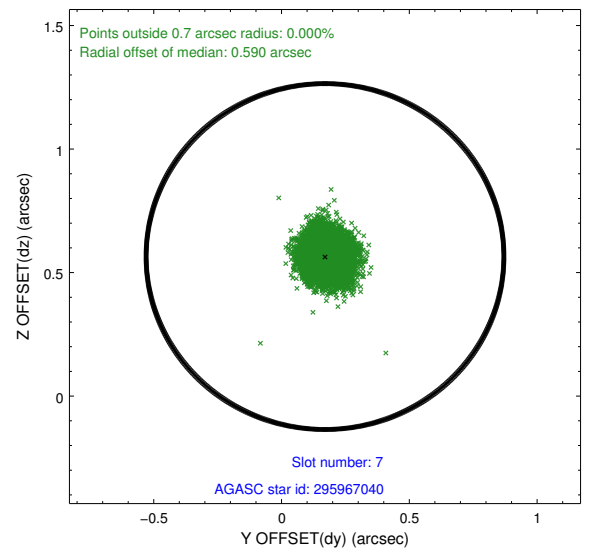
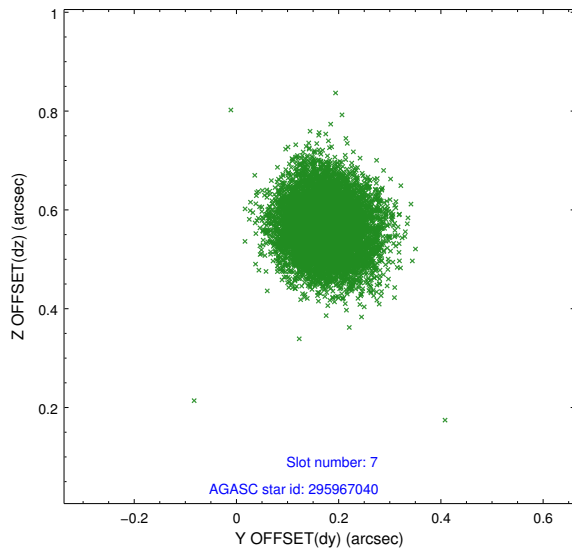
2.4.2 Slot 5



2.4.3 Slot 6

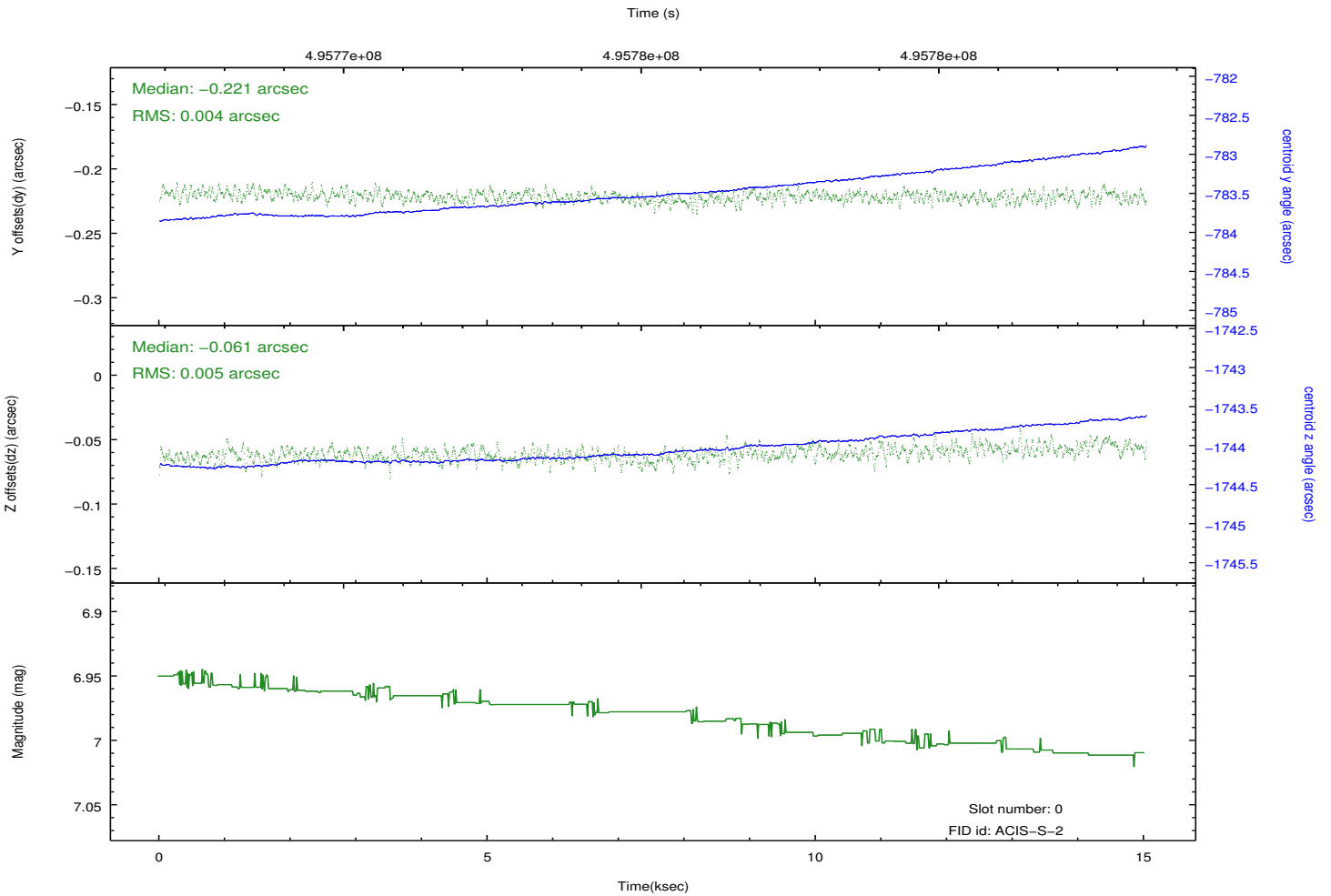
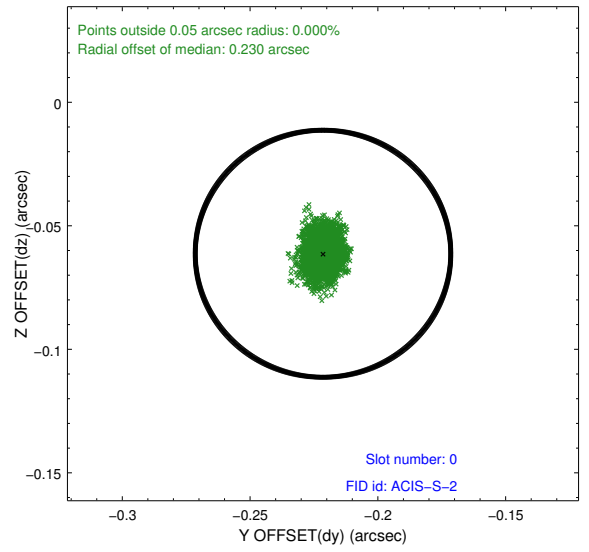
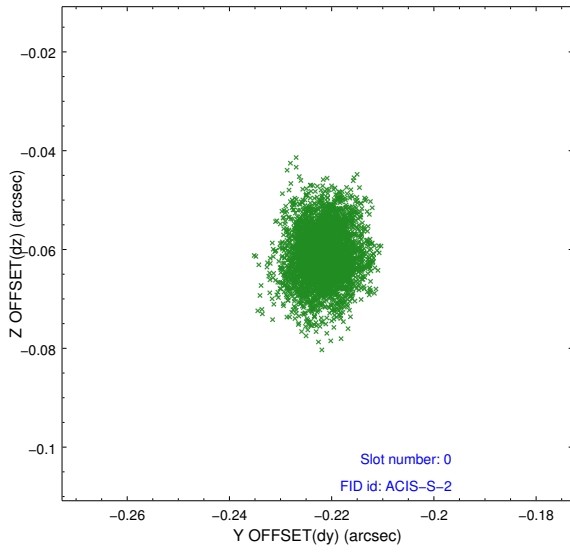


2.4.4 Slot 7

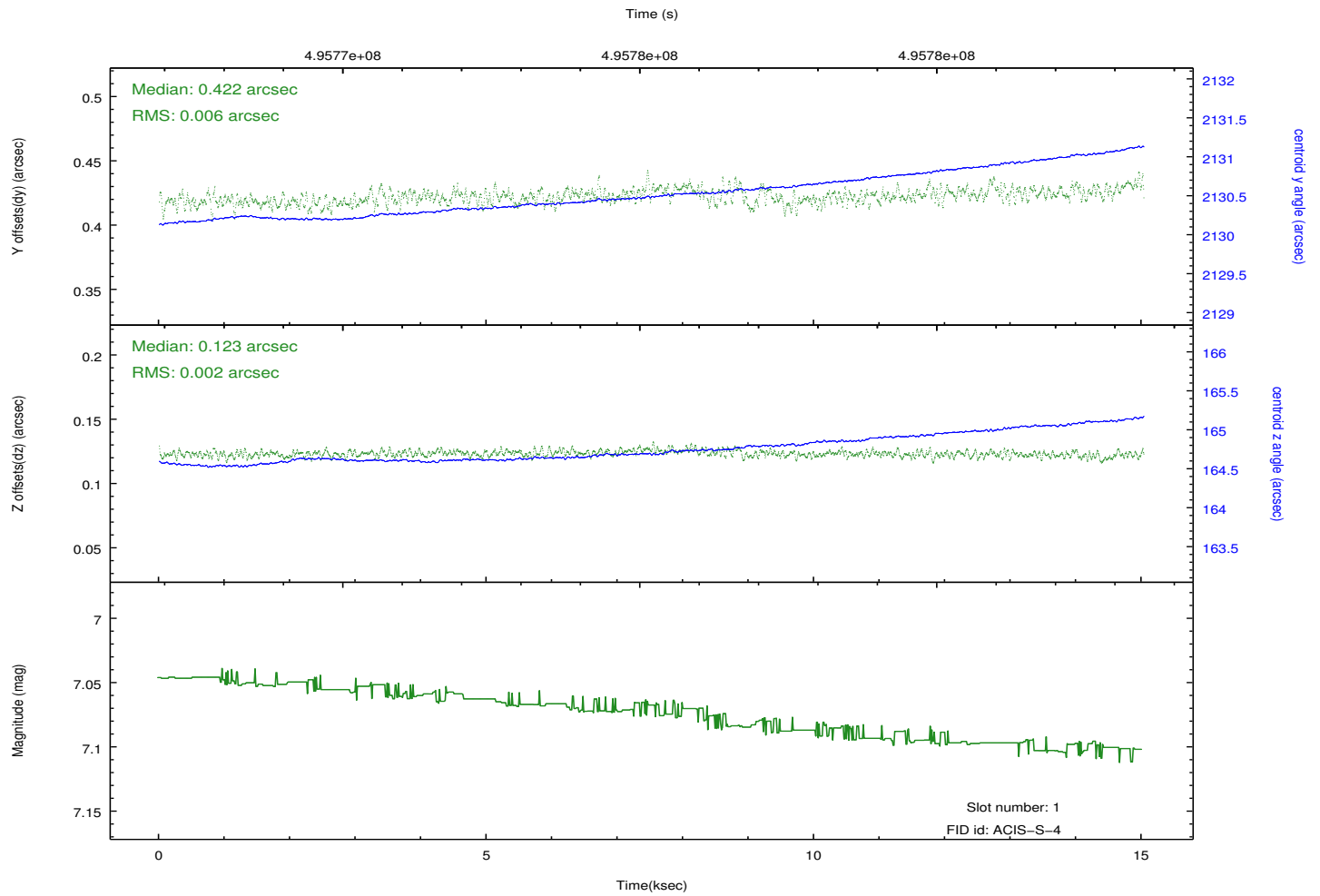
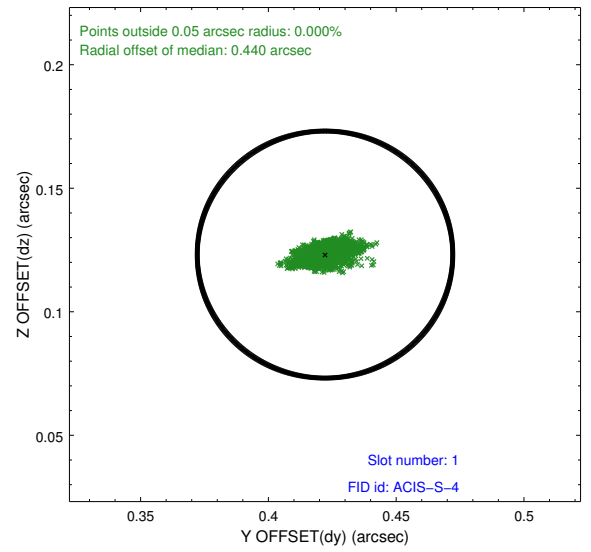
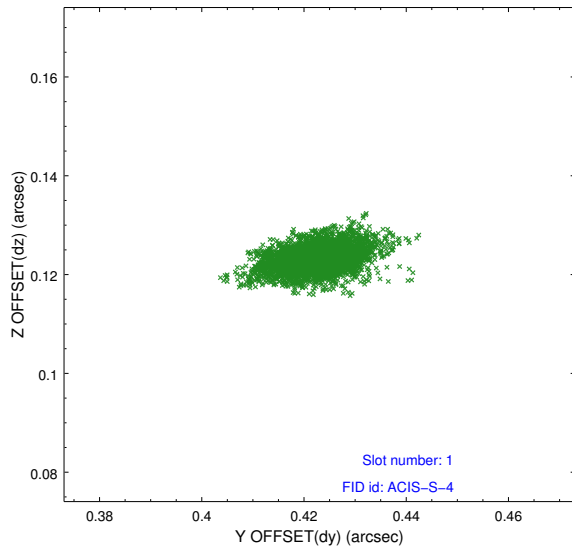


2.5 FID Slots

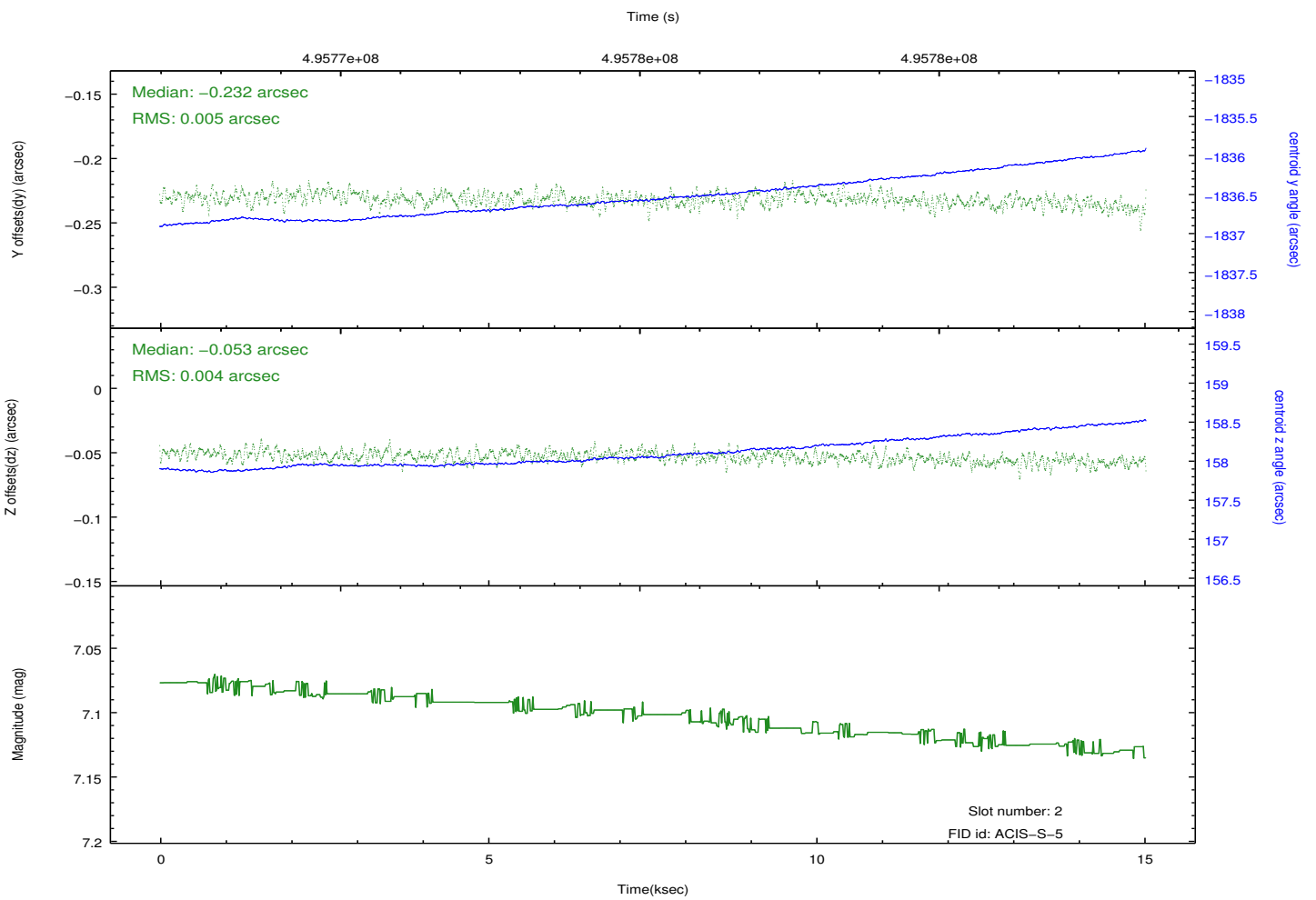
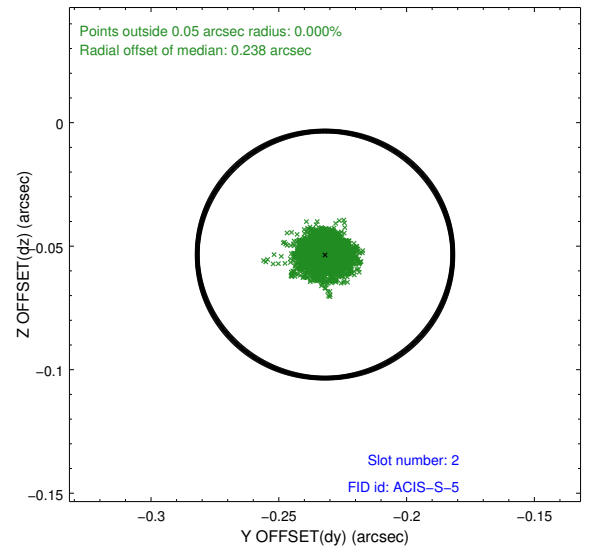
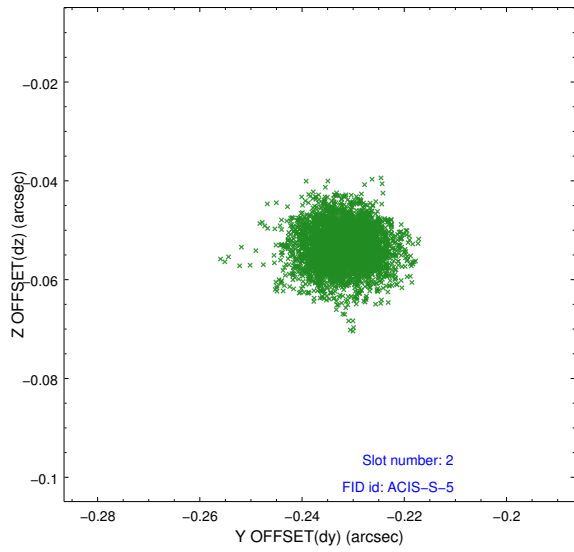
2.5.1 Slot 0



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)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.641300112605

A.2 Comments

The guide star in slot 3 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this star from the solution.

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.