

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12799 - L2 Version 2
Chandra X-Ray Center

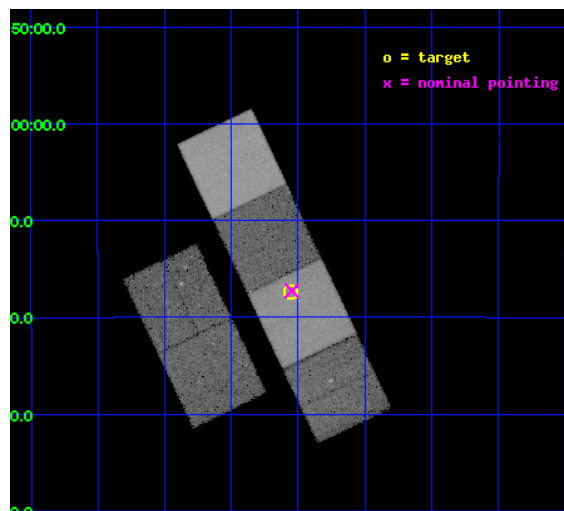
L2 Processing Date : Feb 23 2012

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1 Front

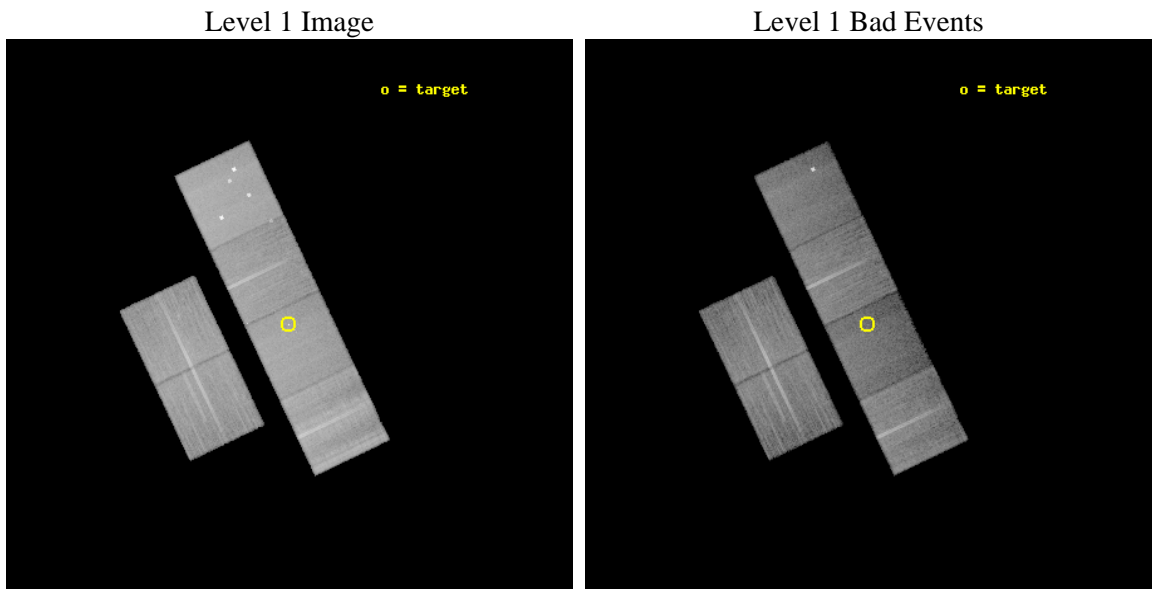
seq_num	702435	Sequence number
obs_id	12799	Observation id
title	Direct Determination of Dark Matter Fractions and M/L in Elliptical Galaxies	Proposal title
observer	David Pooley	Principal investigator
object	HE0230-2130	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	38.138333	Observer's specified target RA [deg]
dec_targ	-21.290444	Observer's specified target Dec [deg]
ra_nom	38.136617039765	Nominal RA [deg]
dec_nom	-21.287879673572	Nominal Dec [deg]
roll_nom	64.572595324038	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30047.709692001	Sum of GTIs [s]
livetime	29667.227499323	Livetime [s]
ontime2	30047.750732005	Sum of GTIs [s]
ontime3	30047.586571991	Sum of GTIs [s]
ontime5	30047.668651998	Sum of GTIs [s]
ontime6	30047.627611995	Sum of GTIs [s]
ontime7	30047.709692001	Sum of GTIs [s]
ontime8	30044.304471135	Sum of GTIs [s]
l2events	317591	Number of level 2 events



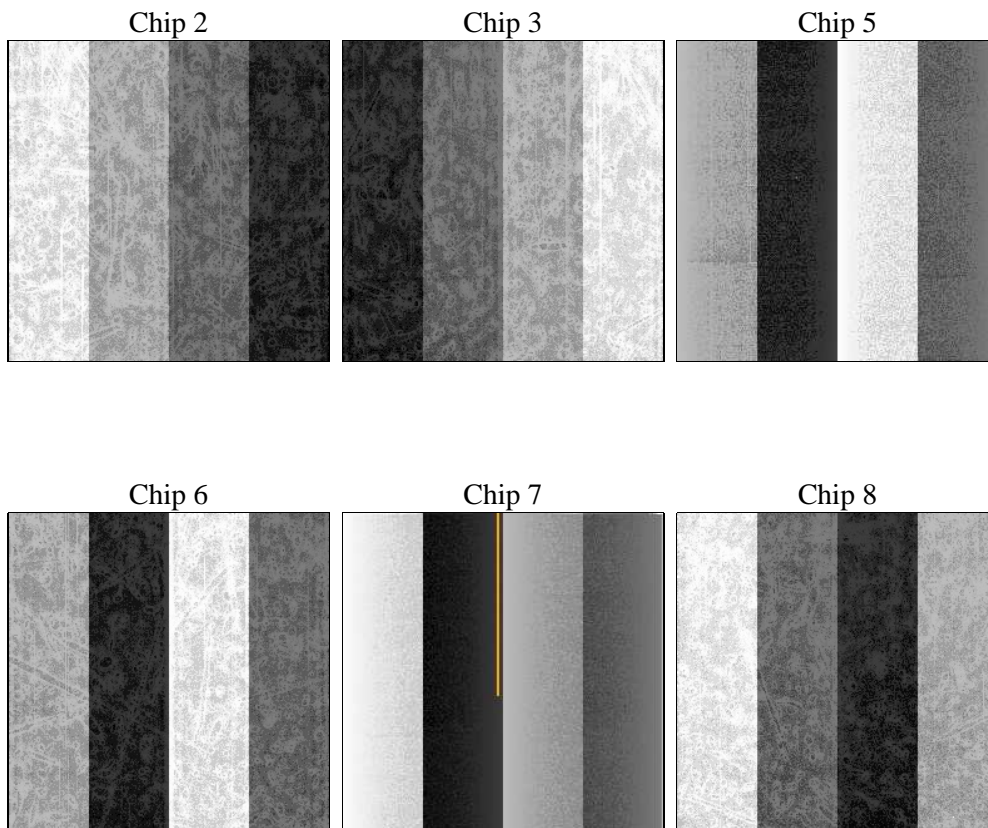
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	30047.709692001	Sum of GTIs [s]
caldbver	4.4.8	 	ontime2	30047.750732005	Sum of GTIs [s]
date	2012-02-23T15:20:45	Date and time of file creation	ontime3	30047.586571991	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	30047.668651998	Sum of GTIs [s]
			ontime6	30047.627611995	Sum of GTIs [s]
			ontime7	30047.709692001	Sum of GTIs [s]
			ontime8	30044.304471135	Sum of GTIs [s]
			l1events	1292499	Number of level 1 events

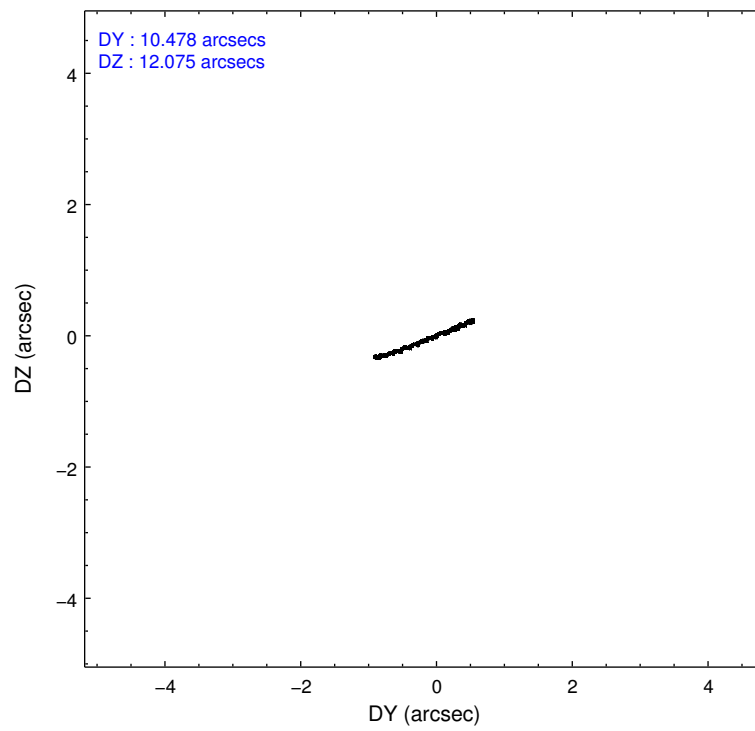
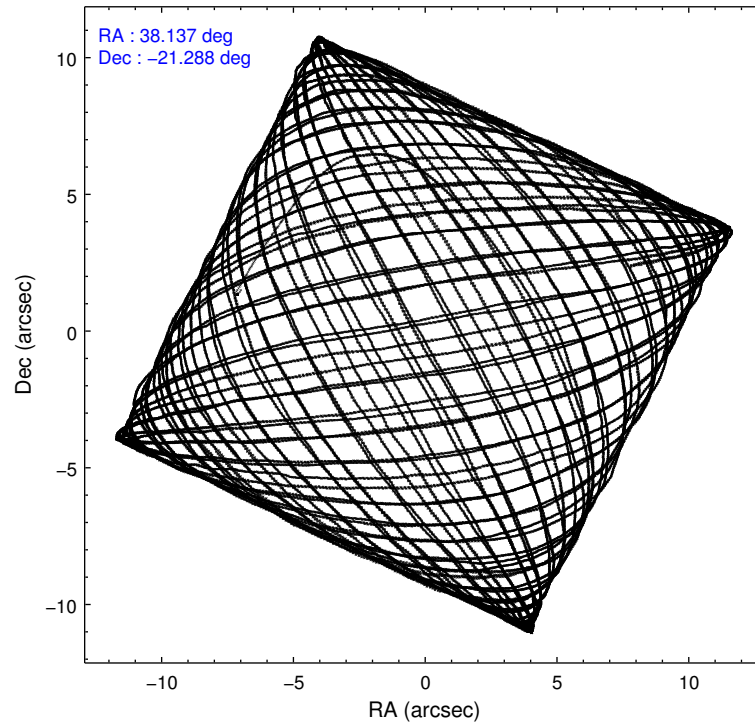
2.1.4 Events

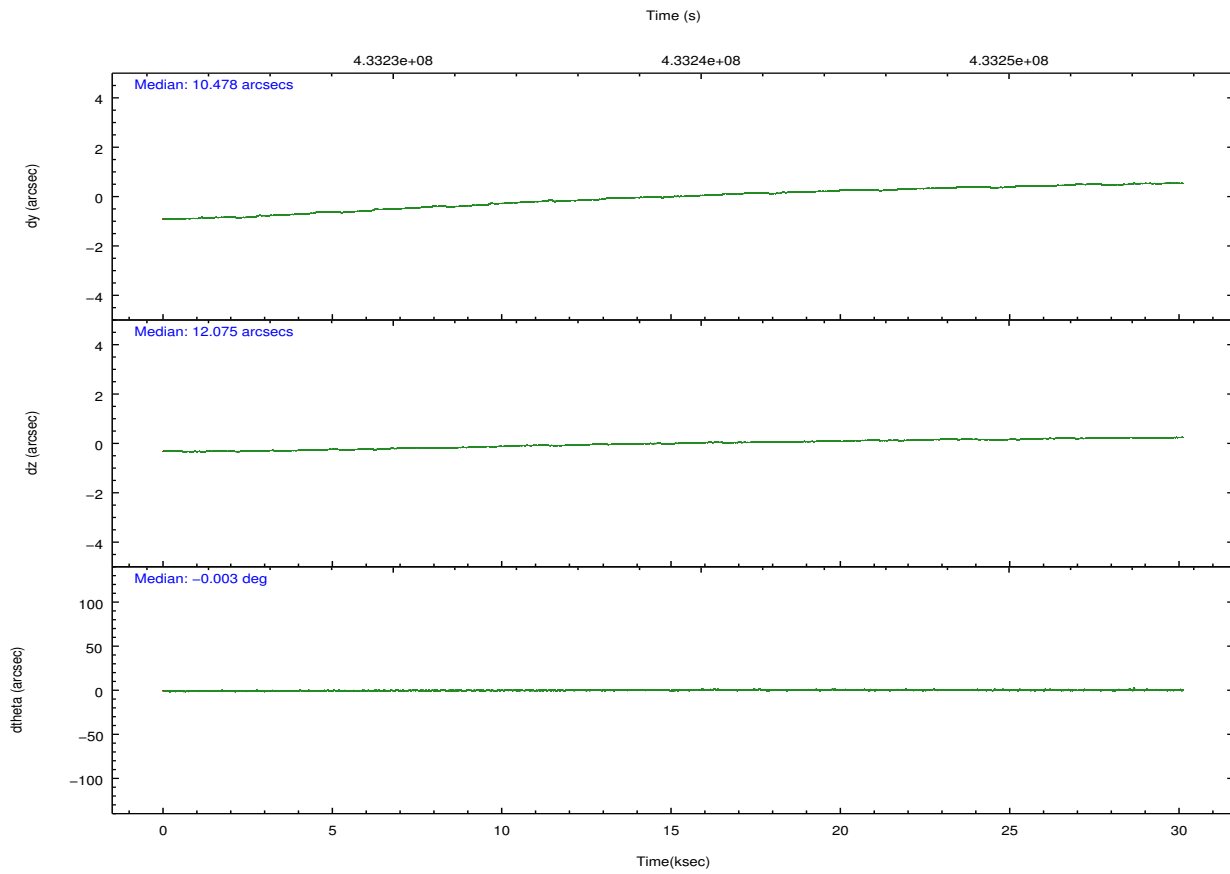
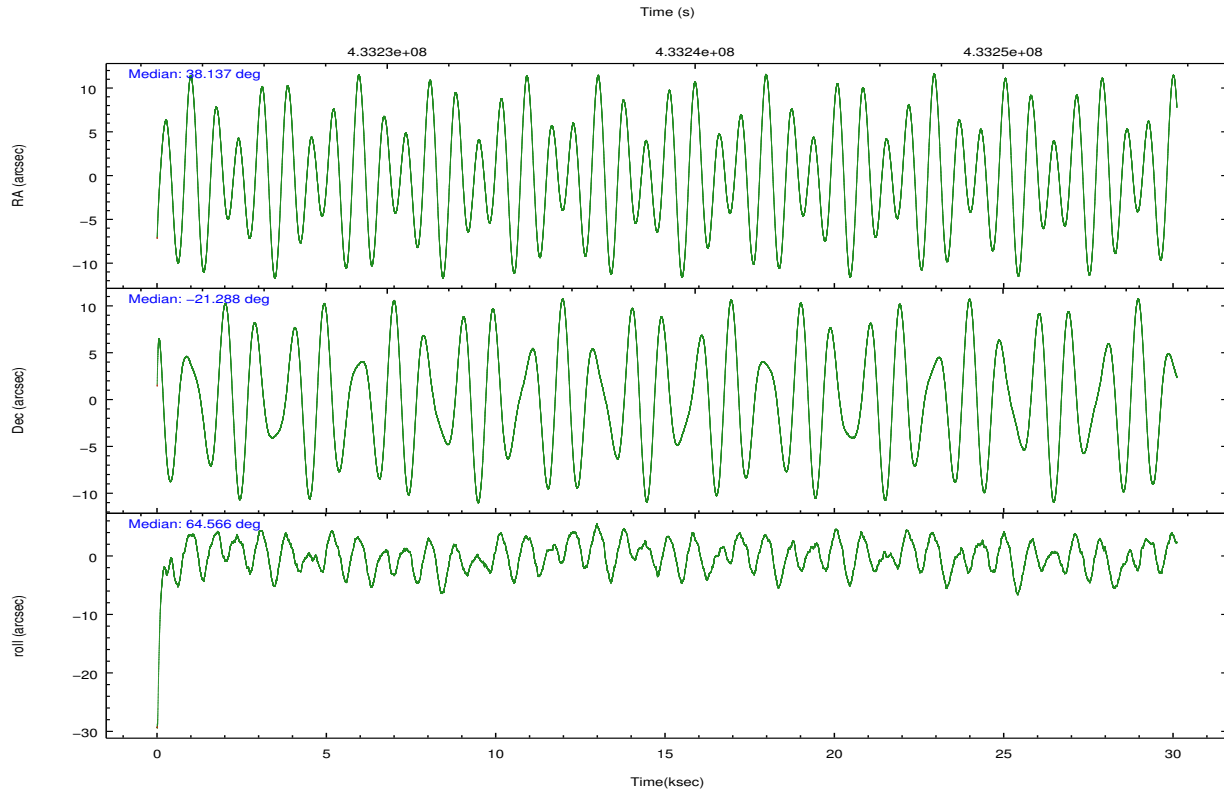
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	195439	181777	276252	186344	202446	250241	grade 0 events	9550	8898	22719	9603	11010	24650
rejected events	170718	158585	126077	160608	100800	167284		4%	4%	8%	5%	5%	9%
rejected %	87%	87%	45%	86%	49%	66%	grade 1 events	138	114	544	123	322	200
								0%	0%	0%	0%	0%	0%
							grade 2 events	5785	4964	46334	5482	21776	18049
								2%	2%	16%	2%	10%	7%
							grade 3 events	2305	2213	5739	2384	9172	9770
								1%	1%	2%	1%	4%	3%
							grade 4 events	2346	2289	5213	2397	9138	9101
								1%	1%	1%	1%	4%	3%
							grade 5 events	6411	7180	20945	7201	20833	11252
								3%	3%	7%	3%	10%	4%
							grade 6 events	4739	4833	70217	5877	50570	21409
								2%	2%	25%	3%	24%	8%
							grade 7 events	164165	151286	104541	153277	79625	155810
								83%	83%	37%	82%	39%	62%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	38.139344	38.13661703976496	CCD I2 on	O1	Y
[deg] Pointing Dec	-21.315101	-21.28787967357209	CCD I3 on	O2	Y
[deg] Pointing Roll	64.416968	64.57259532403751	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	433224147.184000	433222373.72141	CCD S5 on	N	N
Observation start date	2011-09-24T04:01:21	2011-09-24T03:32:53	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	433254147.184000	433254646.8731	On-chip summing requested	N	N
Observation end date	2011-09-24T12:21:21	2011-09-24T12:30:46	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



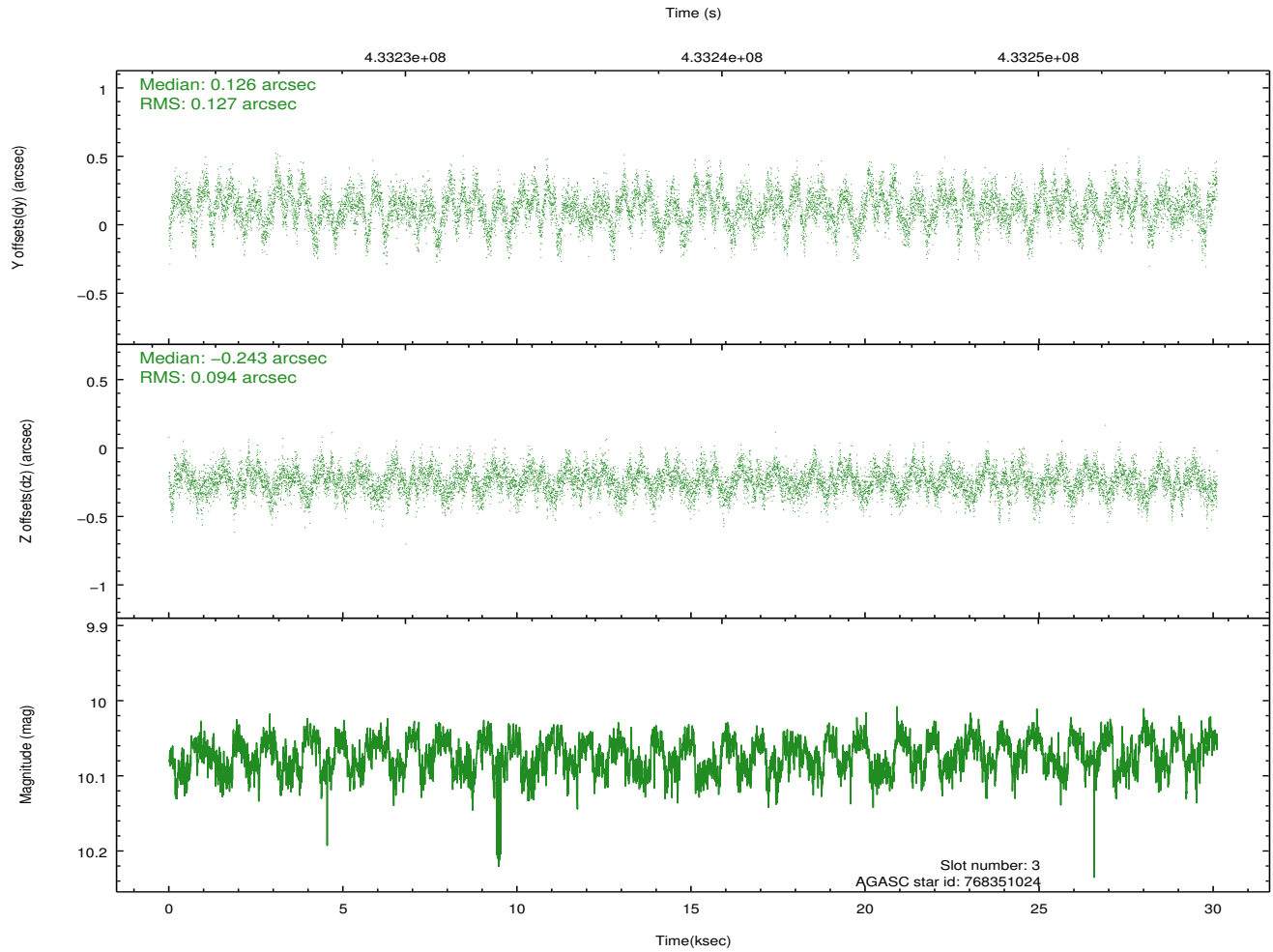
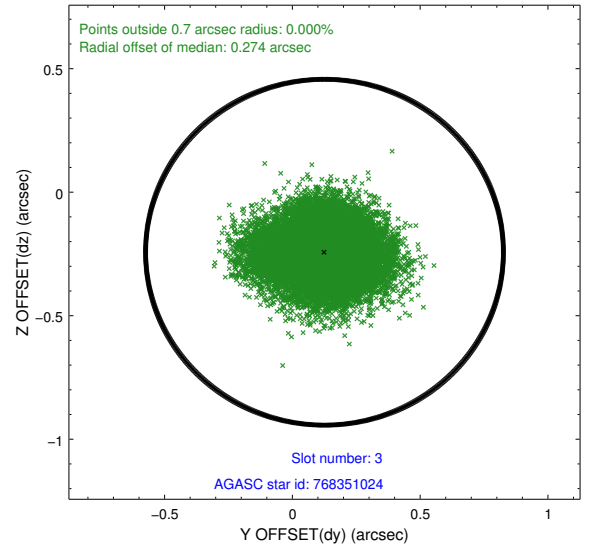
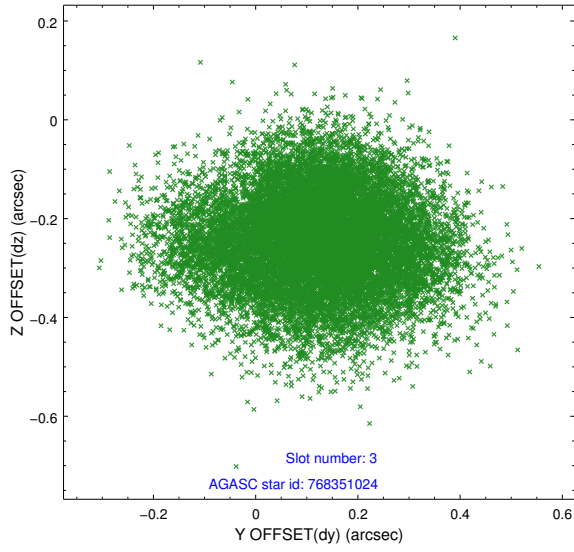


Slot Statistics

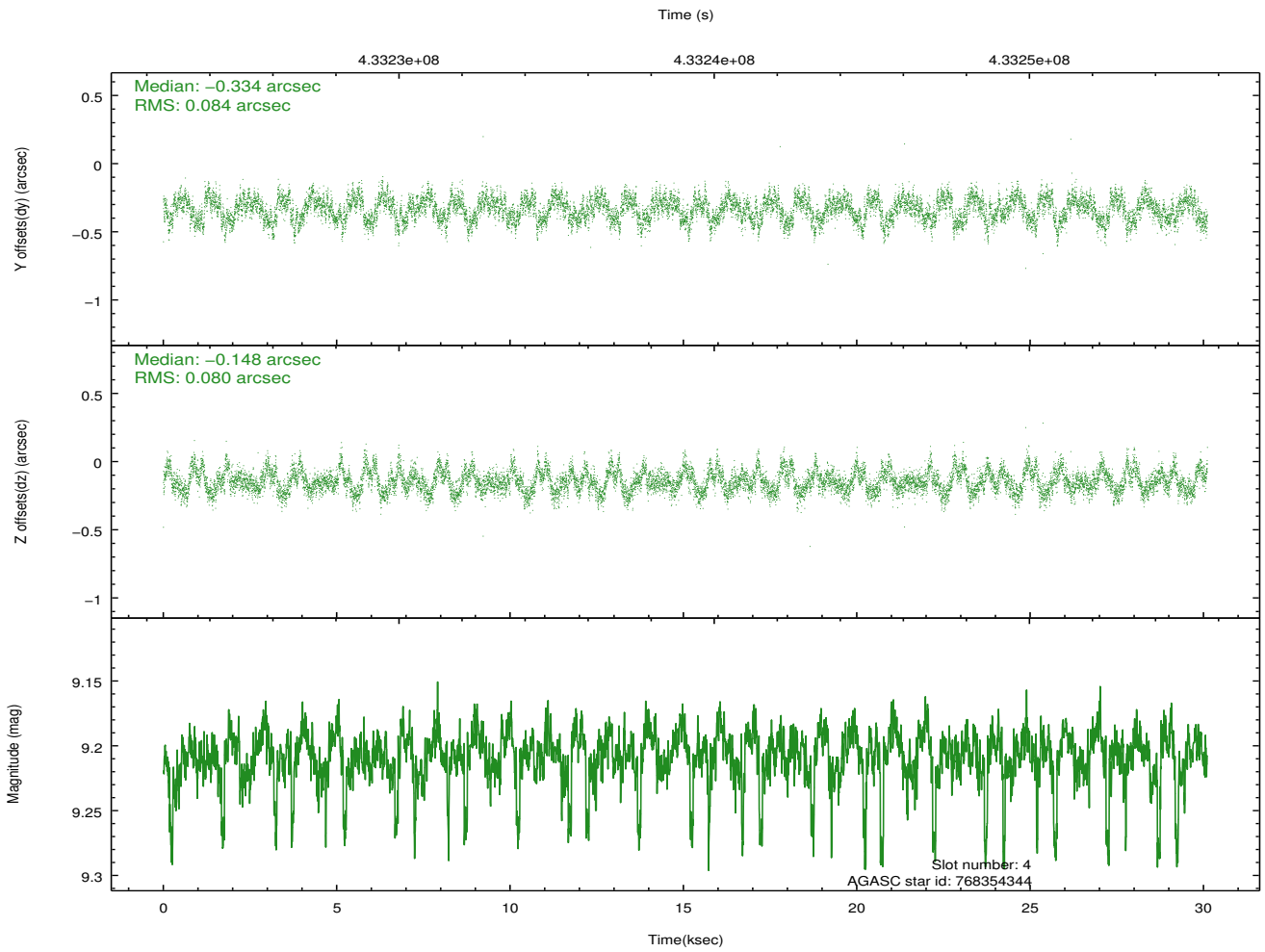
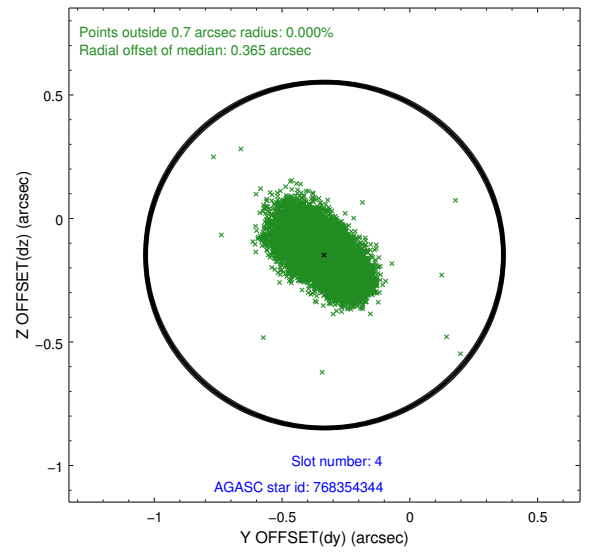
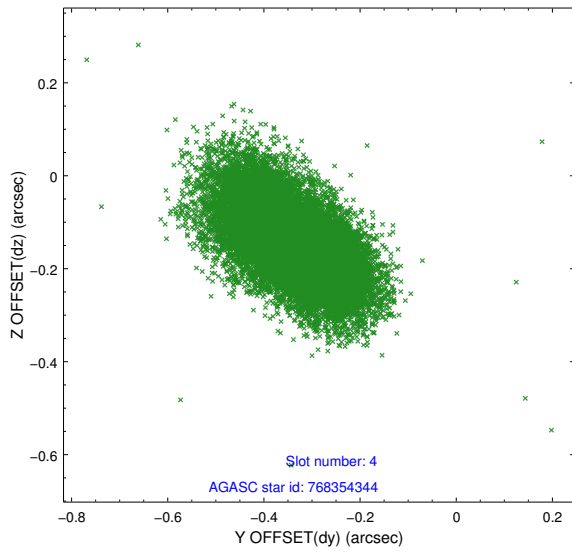
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.95	7345	-0.056	-0.039	0.010	0.017	0.000000	0.000000	-763.33	-1733.38
1	FID	ACIS-S-4	7.04	7345	0.207	0.038	0.011	0.026	0.000000	0.000000	2150.21	175.07
2	FID	ACIS-S-5	7.07	7345	-0.181	0.010	0.013	0.028	0.000000	0.000000	-1816.18	168.85
3	GUIDE	768351024	10.07	14645	0.126	-0.243	0.169	0.272	38.235803	-20.750695	1972.89	584.66
4	GUIDE	768354344	9.21	14595	-0.334	-0.148	0.124	0.203	37.380265	-21.433626	-1489.27	2107.35
5	GUIDE	768355096	9.19	14674	0.186	0.548	0.088	0.144	38.076127	-21.497720	-684.18	-92.85
6	GUIDE	768356008	8.63	14681	-0.093	0.057	0.098	0.163	37.257291	-21.572367	-2118.47	2259.87
7	GUIDE	768352072	9.23	14678	0.121	-0.214	0.099	0.156	37.386397	-21.245869	-871.88	2383.76

2.4 Star Slots

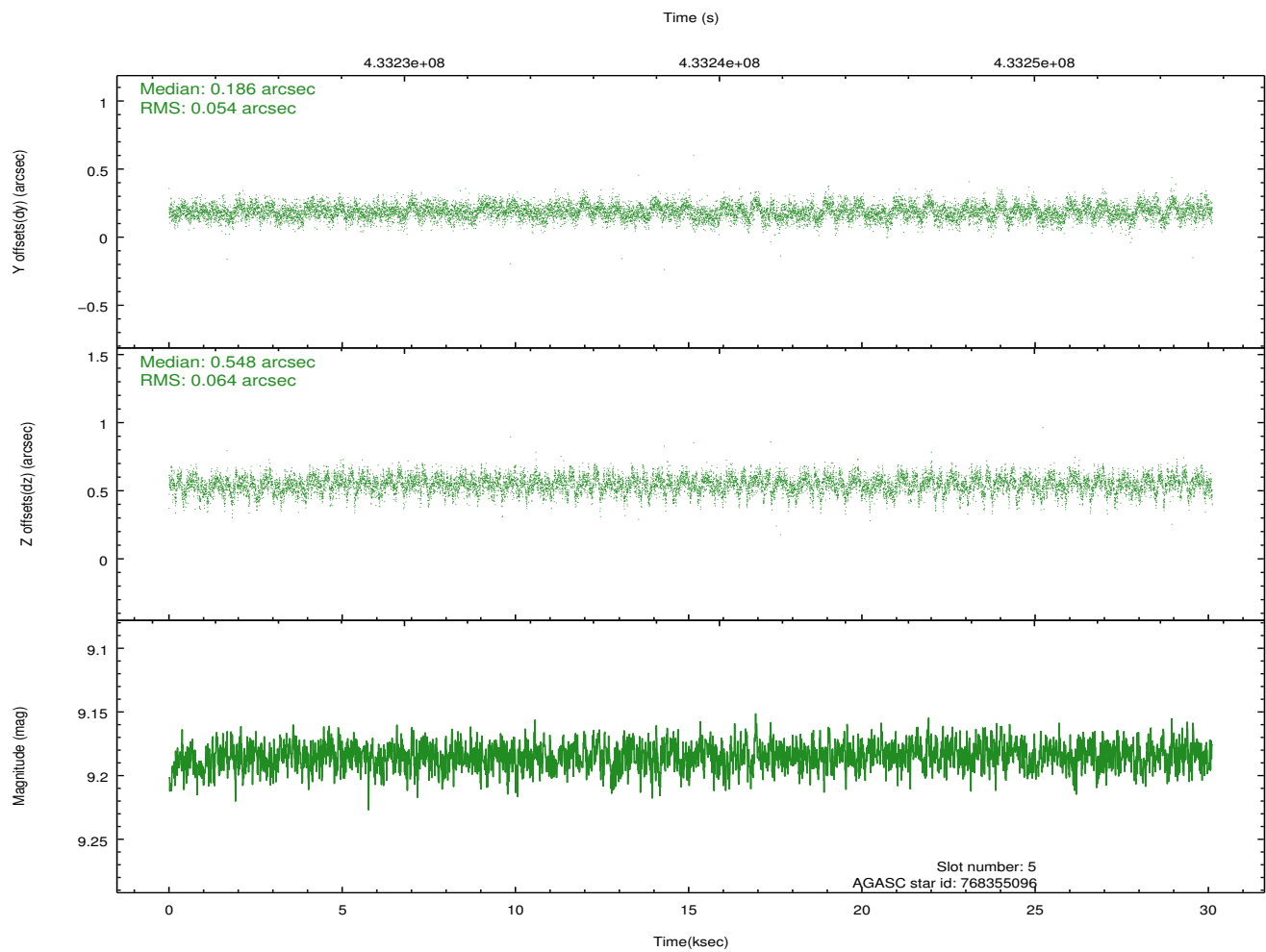
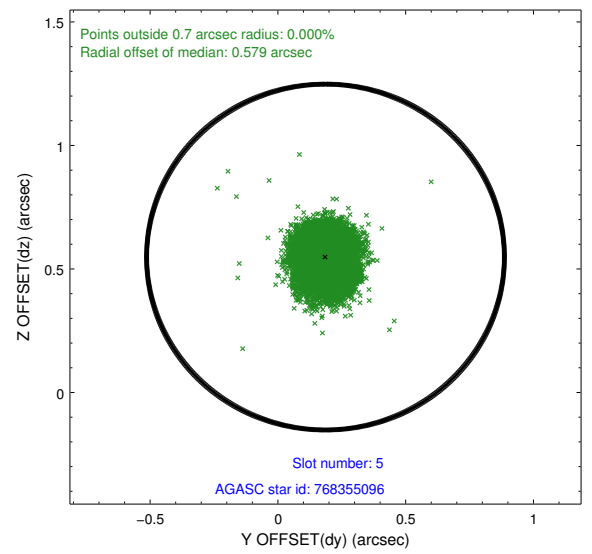
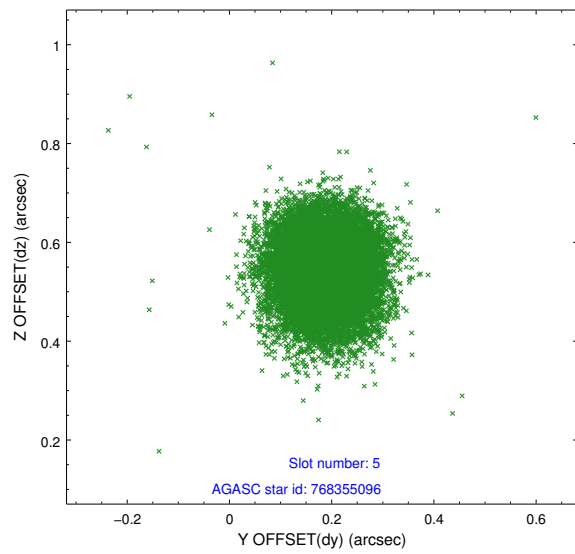
2.4.1 Slot 3



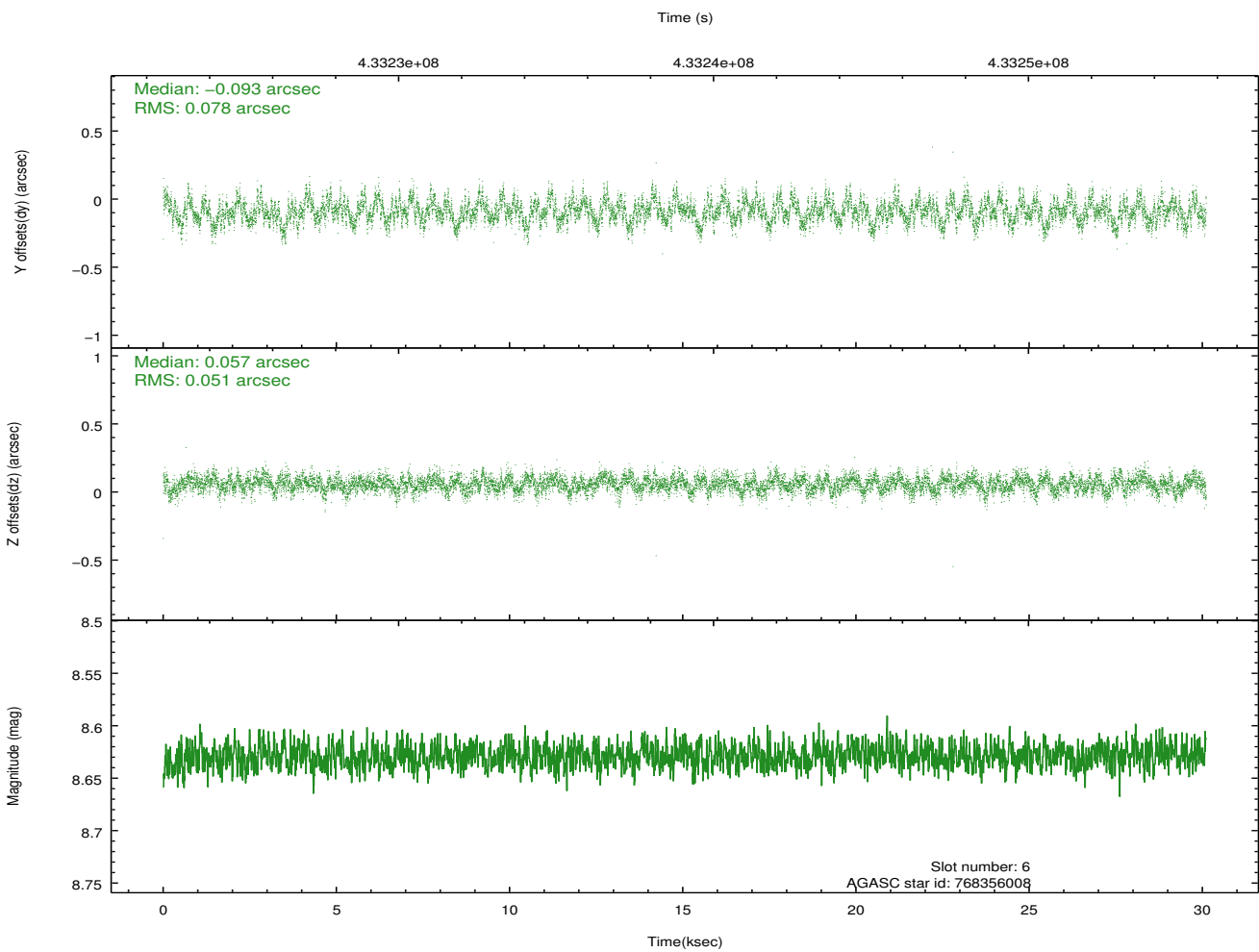
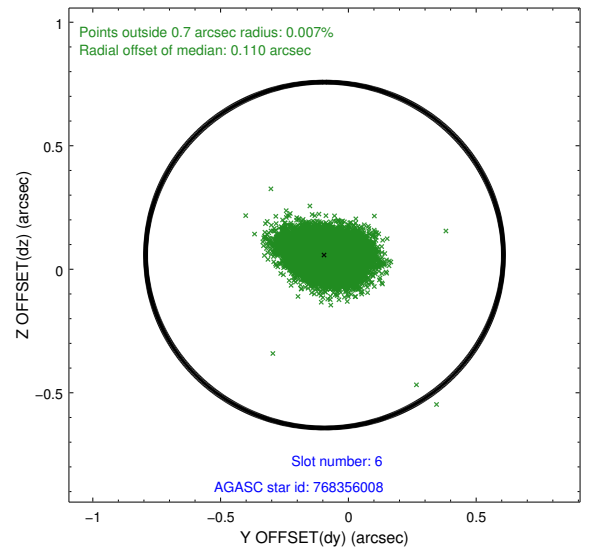
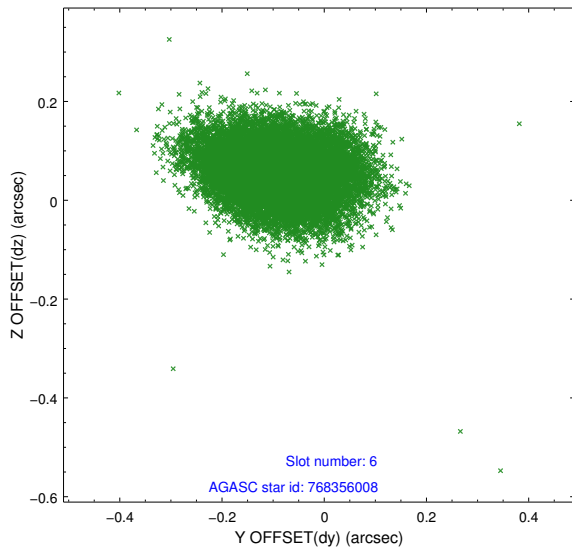
2.4.2 Slot 4



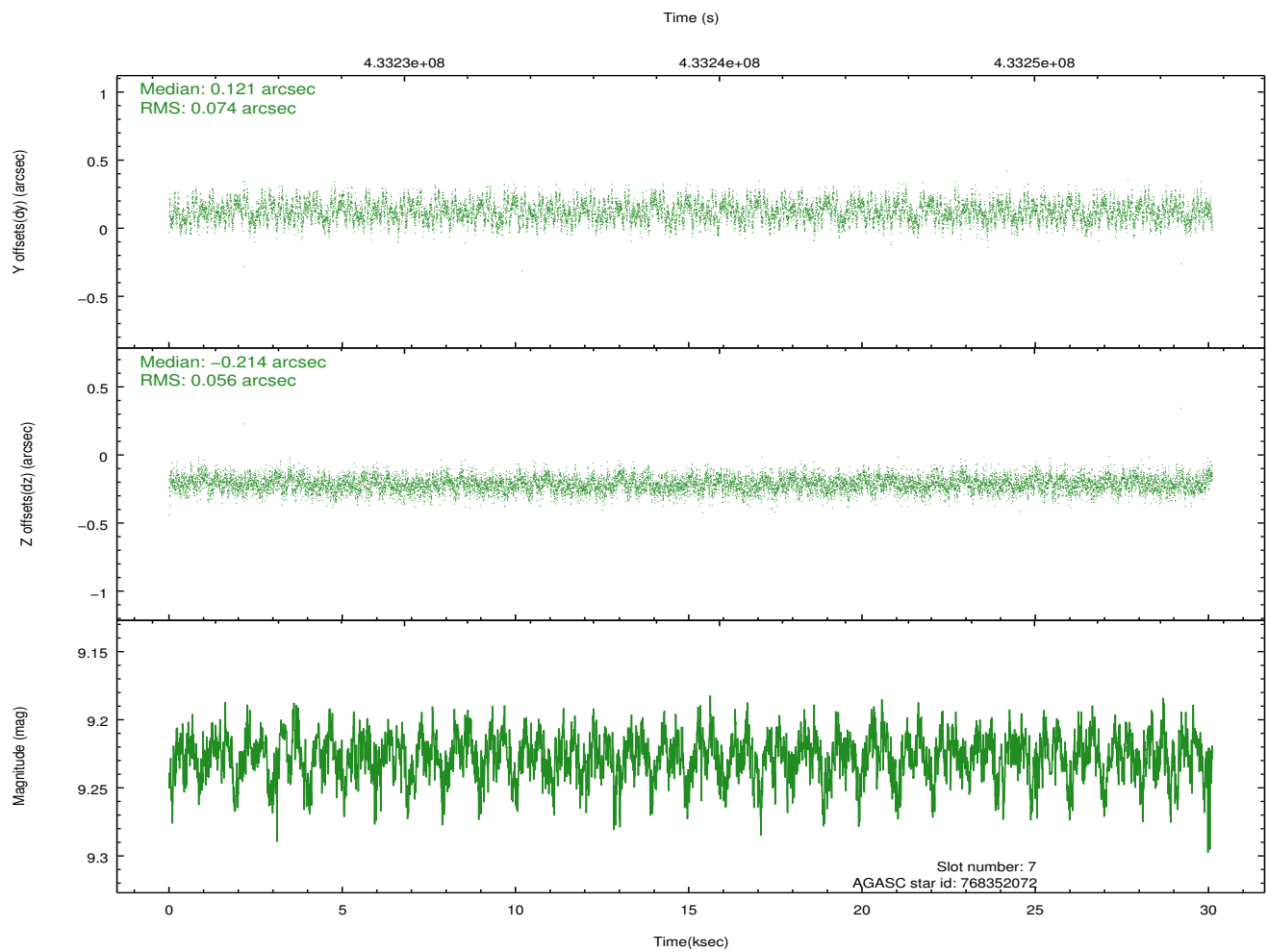
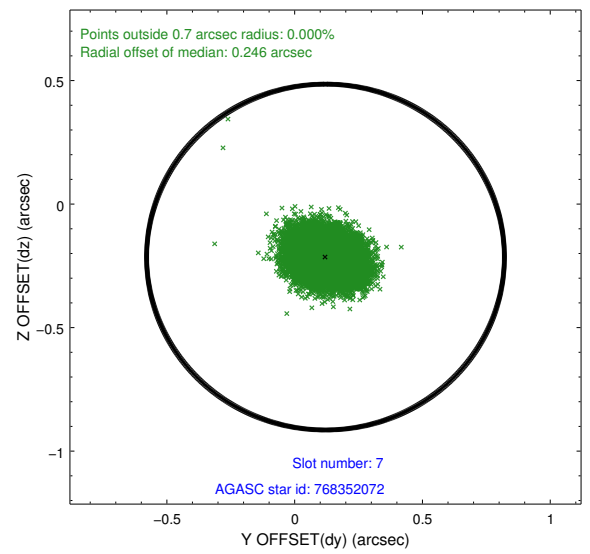
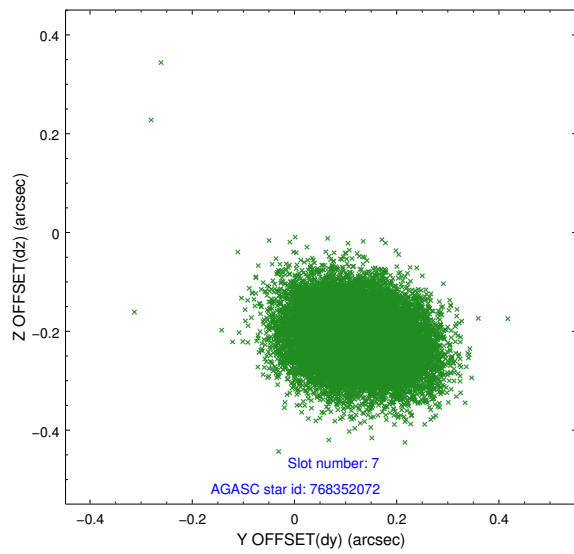
2.4.3 Slot 5



2.4.4 Slot 6

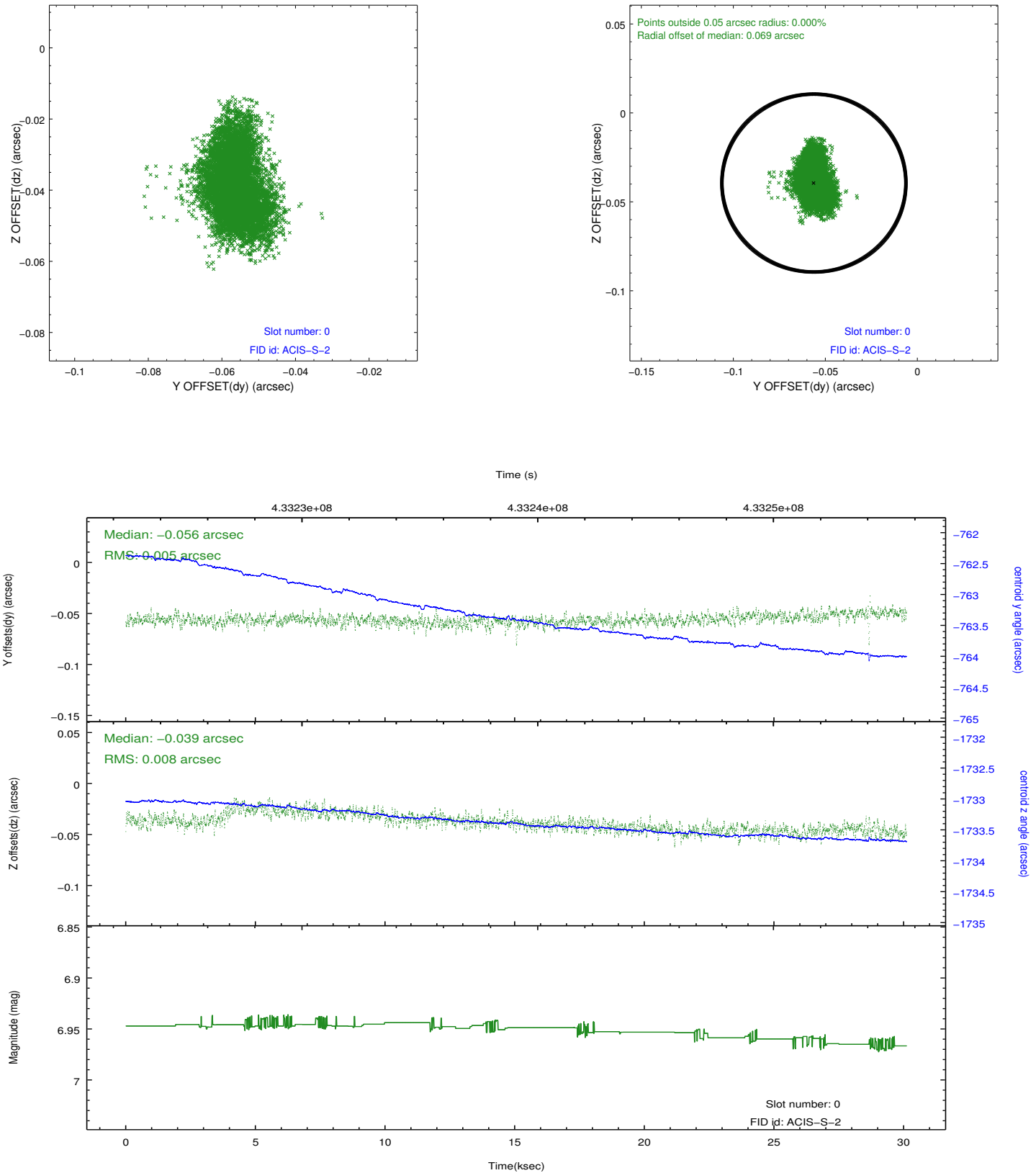


2.4.5 Slot 7

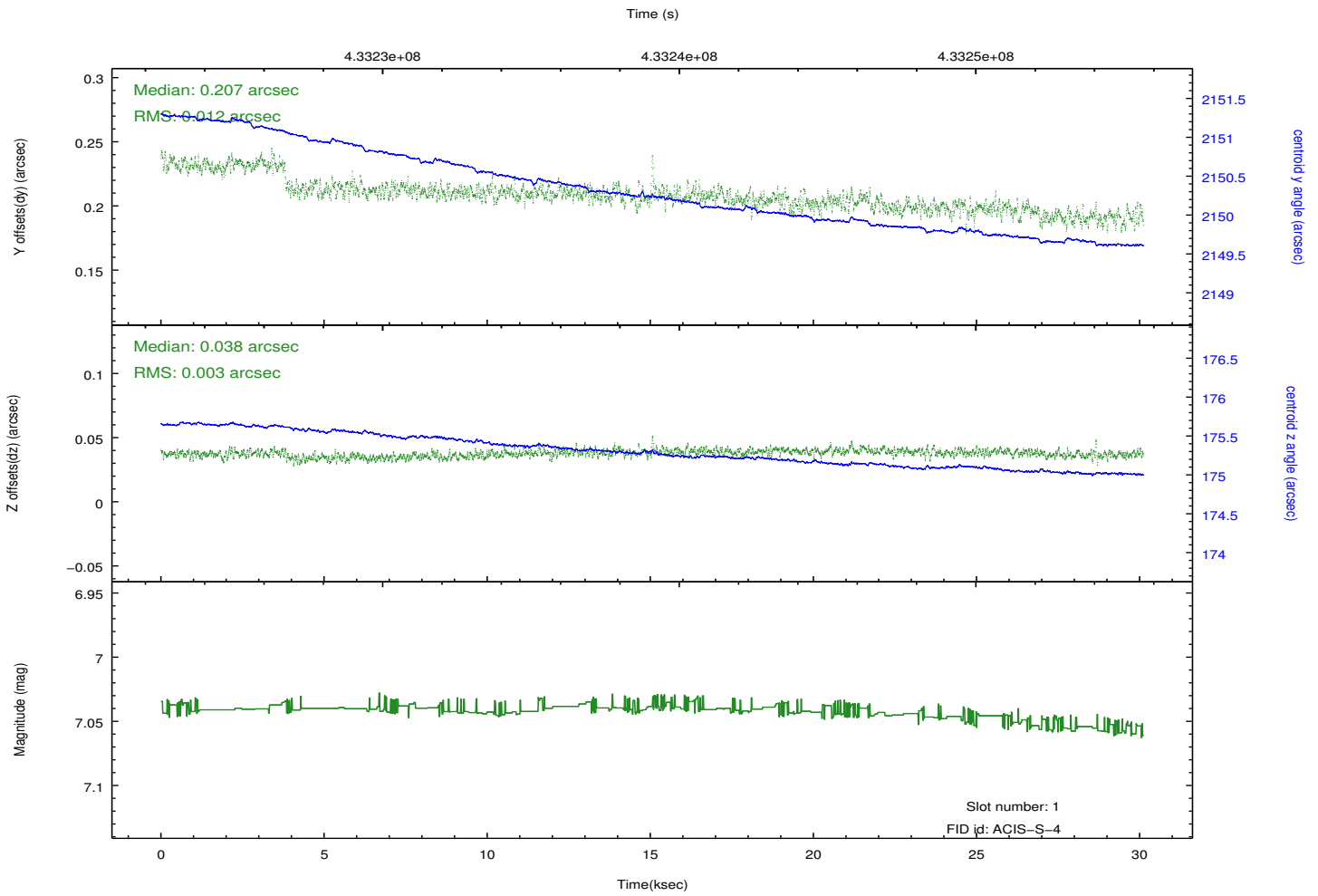
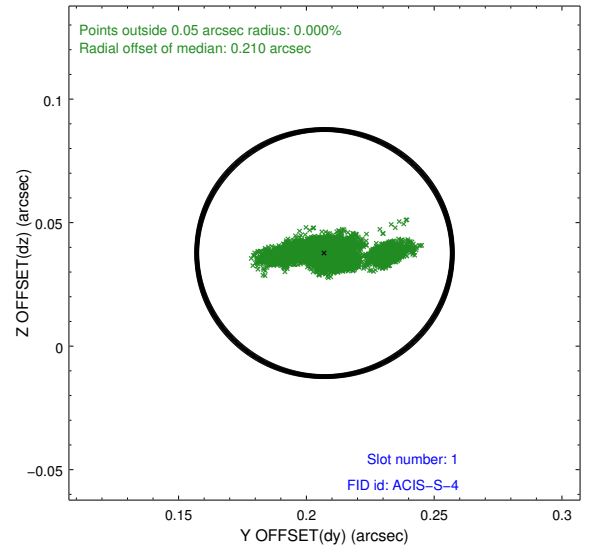
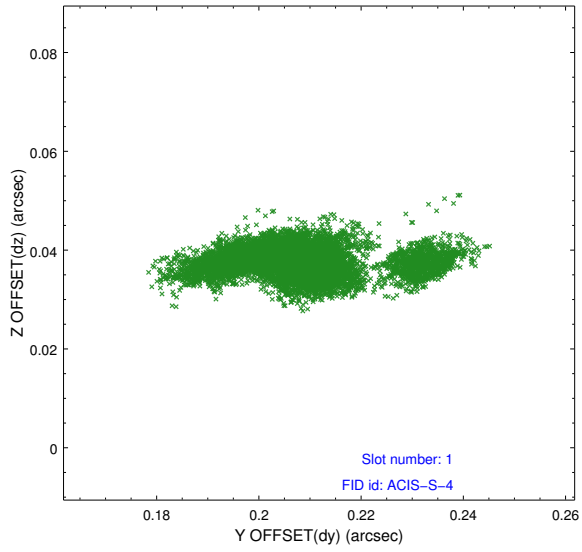


2.5 FID Slots

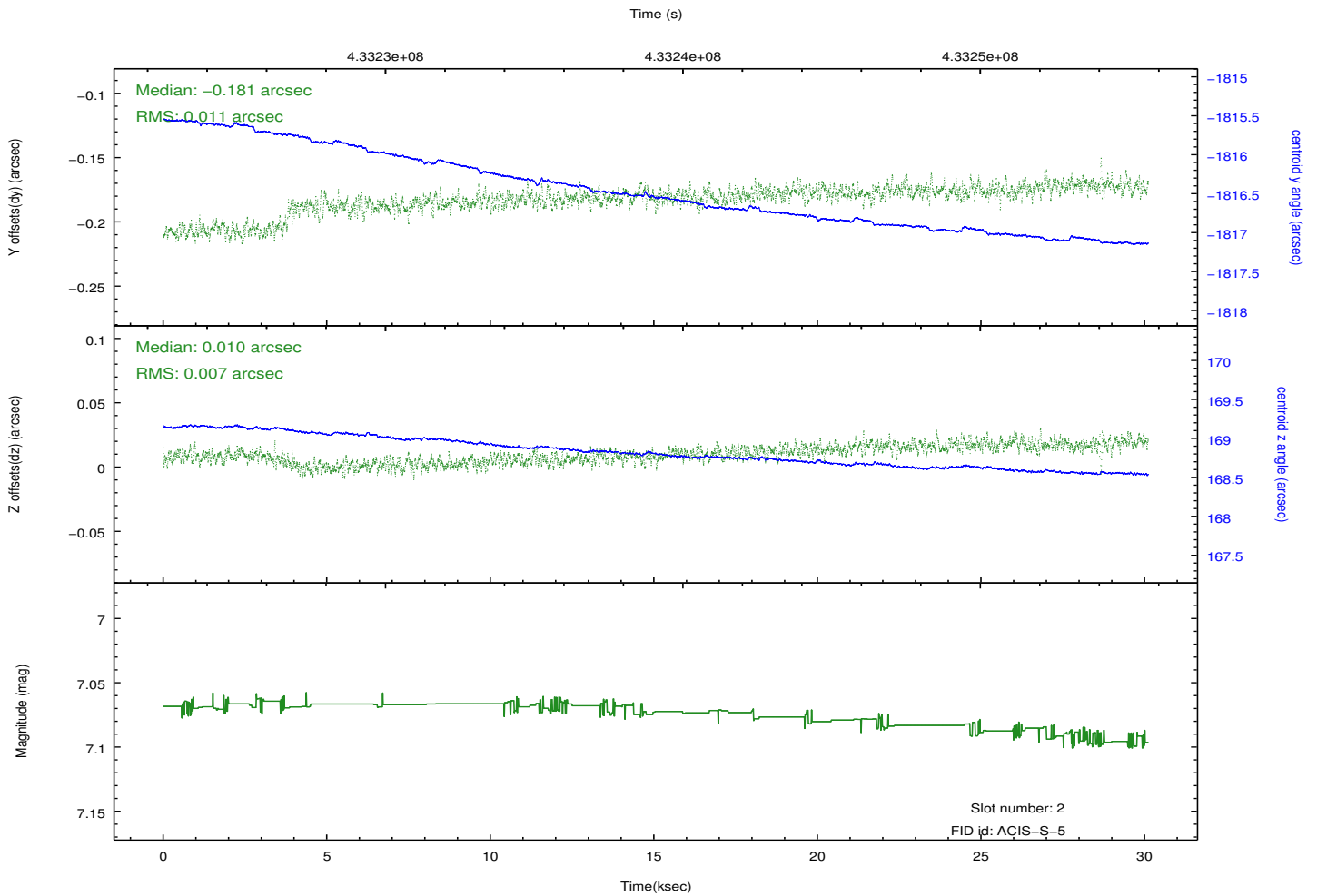
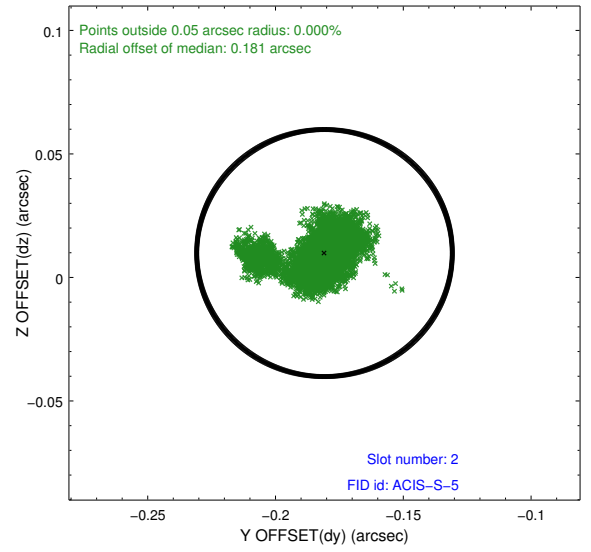
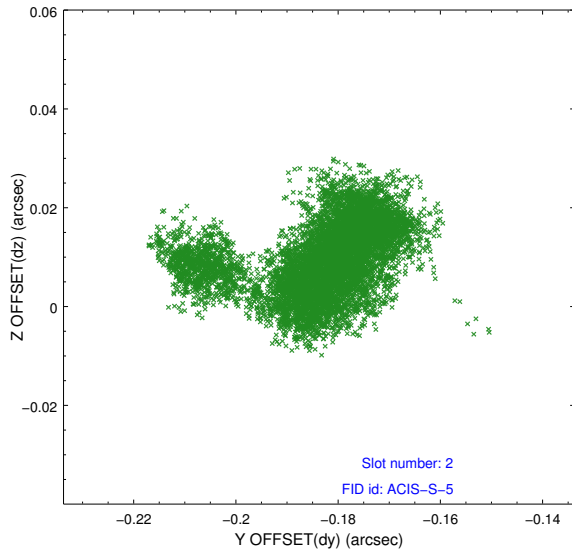
2.5.1 Slot 0



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)	2012.02.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.047709691584

A.2 Comments

Enhanced count rate approximately 20-21 ksec after the start of the exposure is probably due to solar activity, including an X-class flare at the time of the enhanced counts.