

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 14959 - L2 Version 2
Chandra X-Ray Center

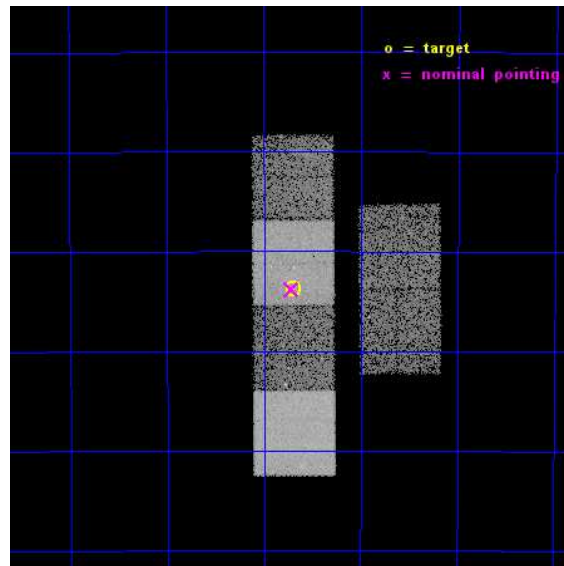
L2 Processing Date : Nov 29 2014

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1 Front

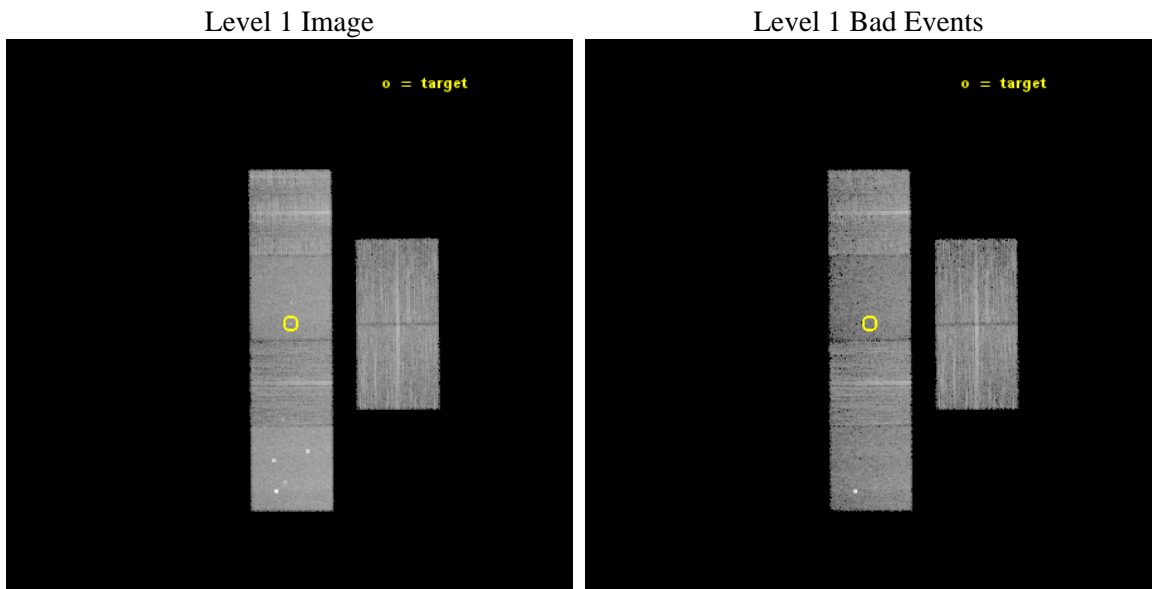
seq_num	702768	Sequence number
obs_id	14959	Observation id
title	Determination of Dark Matter Fractions and M/L in Elliptical Galaxies	Proposal title
observer	Prof. David Pooley	Principal investigator
object	WFI J2033-4723	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	308.425417	Observer's specified target RA [deg]
dec_targ	-47.395278	Observer's specified target Dec [deg]
ra_nom	308.429187488	Nominal RA [deg]
dec_nom	-47.396935143934	Nominal Dec [deg]
roll_nom	269.58160503419	Nominal Roll [deg]
revision	2	Processing version of data
ontime	14965.054117024	Sum of GTIs [s]
livetime	14775.55759092	Livetime [s]
ontime2	14965.095157027	Sum of GTIs [s]
ontime3	14964.930997014	Sum of GTIs [s]
ontime5	14965.013077021	Sum of GTIs [s]
ontime6	14964.972037017	Sum of GTIs [s]
ontime7	14965.054117024	Sum of GTIs [s]
ontime8	14964.889957011	Sum of GTIs [s]
l2events	122017	Number of level 2 events



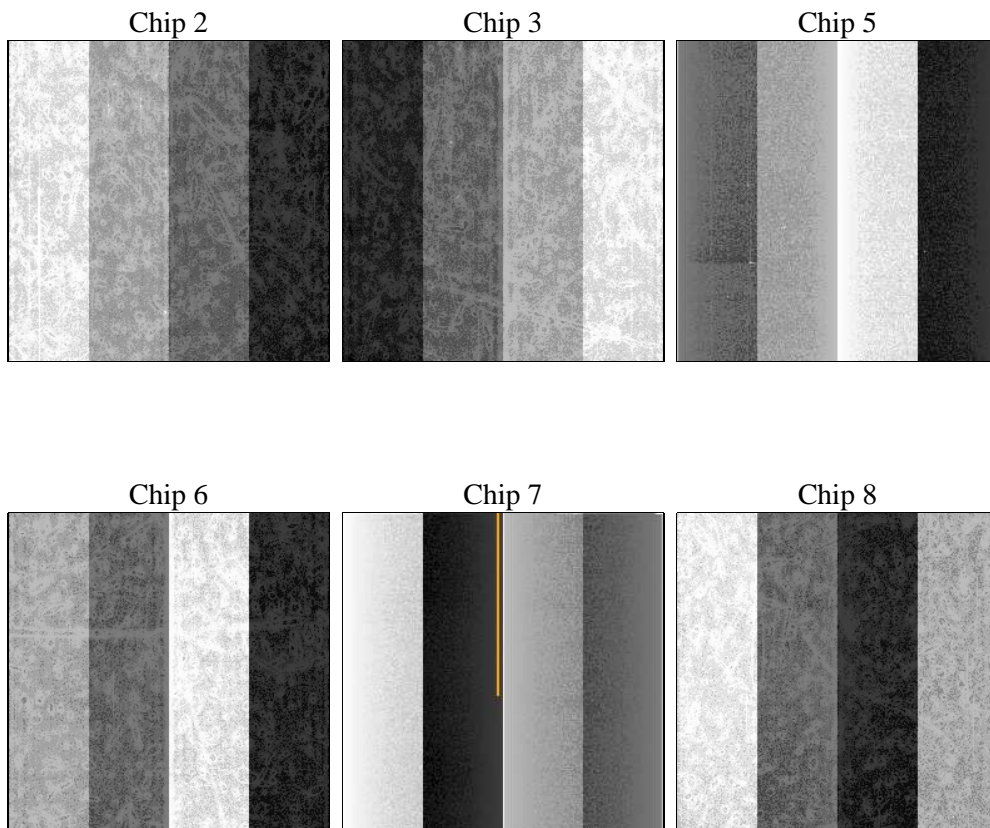
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	14965.054117024	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	14965.095157027	Sum of GTIs [s]
date	2014-11-29T20:28:11	Date and time of file creation	ontime3	14964.930997014	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	14965.013077021	Sum of GTIs [s]
			ontime6	14964.972037017	Sum of GTIs [s]
			ontime7	14965.054117024	Sum of GTIs [s]
			ontime8	14964.889957011	Sum of GTIs [s]
			l1events	504057	Number of level 1 events

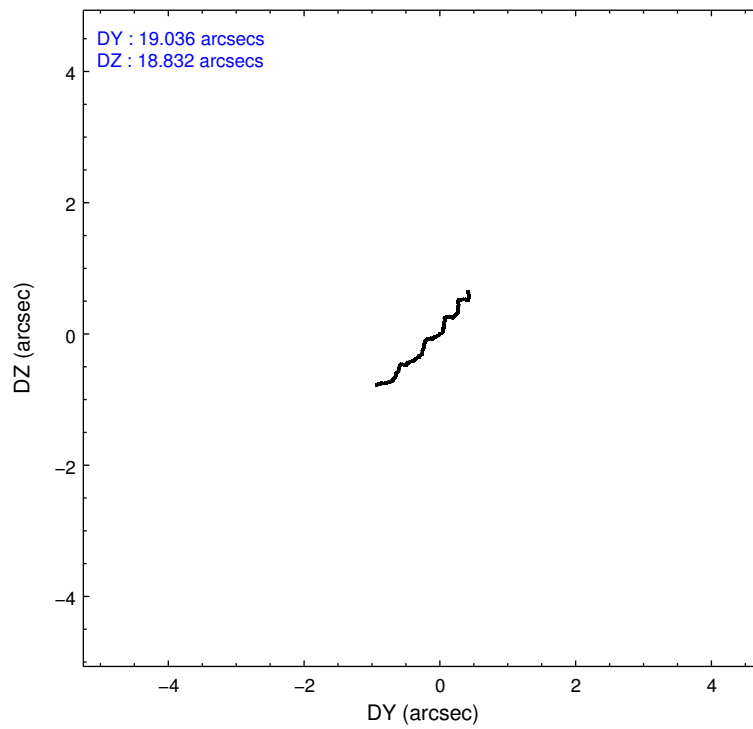
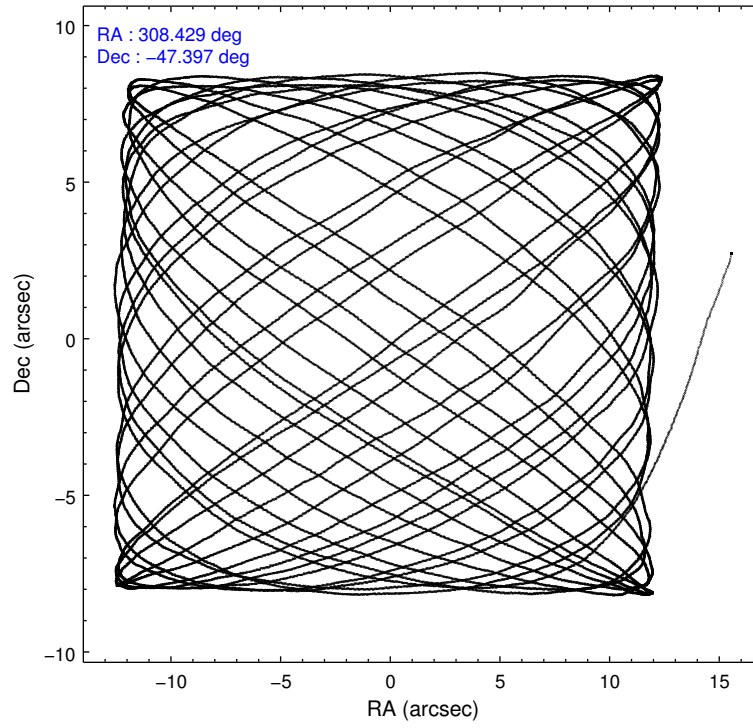
2.1.4 Events

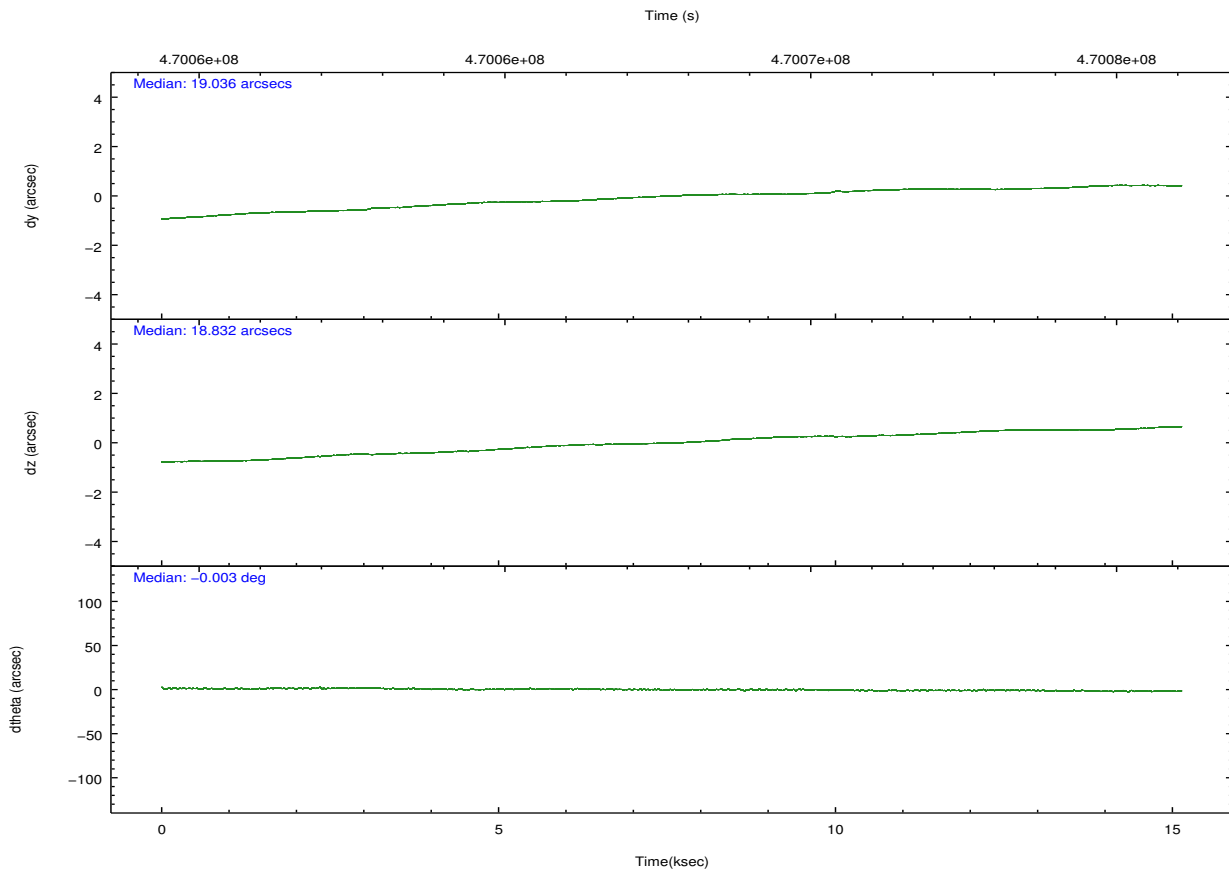
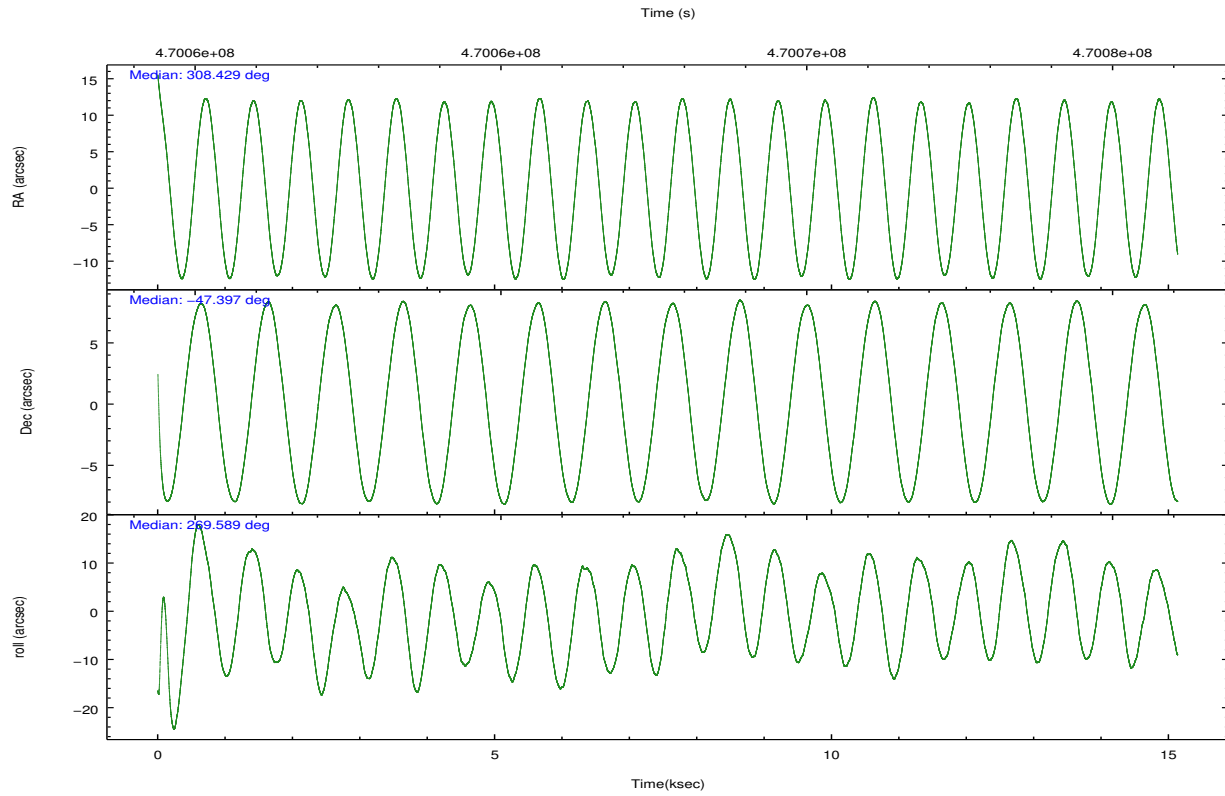
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	74430	66181	115580	71479	83945	92442	grade 0 events	3071	2792	8002	3319	4132	7523
rejected events	66085	58505	55650	62564	43651	65781		4%	4%	6%	4%	4%	8%
rejected %	88%	88%	48%	87%	51%	71%	grade 1 events	51	40	216	35	132	75
								0%	0%	0%	0%	0%	0%
							grade 2 events	2102	1680	18837	1988	8772	6292
								2%	2%	16%	2%	10%	6%
							grade 3 events	807	875	2136	884	3568	2916
								1%	1%	1%	1%	4%	3%
							grade 4 events	825	777	2038	866	3597	2804
								1%	1%	1%	1%	4%	3%
							grade 5 events	2733	3149	9027	3115	8767	4736
								3%	4%	7%	4%	10%	5%
							grade 6 events	1543	1558	28936	1863	20245	7135
								2%	2%	25%	2%	24%	7%
							grade 7 events	63298	55310	46388	59409	34732	60961
								85%	83%	40%	83%	41%	65%

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	308.408772	308.4291874879957	CCD I2 on	O5	Y
[deg] Pointing Dec	-47.373328	-47.39693514393362	CCD I3 on	O4	Y
[deg] Pointing Roll	269.409985	269.5816050341882	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O3	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	O2	Y
[s] Observation start time (MET)	470060297.184000	470058776.26218	CCD S5 on	N	N
Observation start date	2012-11-23T12:17:10	2012-11-23T11:52:56	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	470075297.184000	470076229.96312	On-chip summing requested	N	N
Observation end date	2012-11-23T16:27:10	2012-11-23T16:43:49	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect





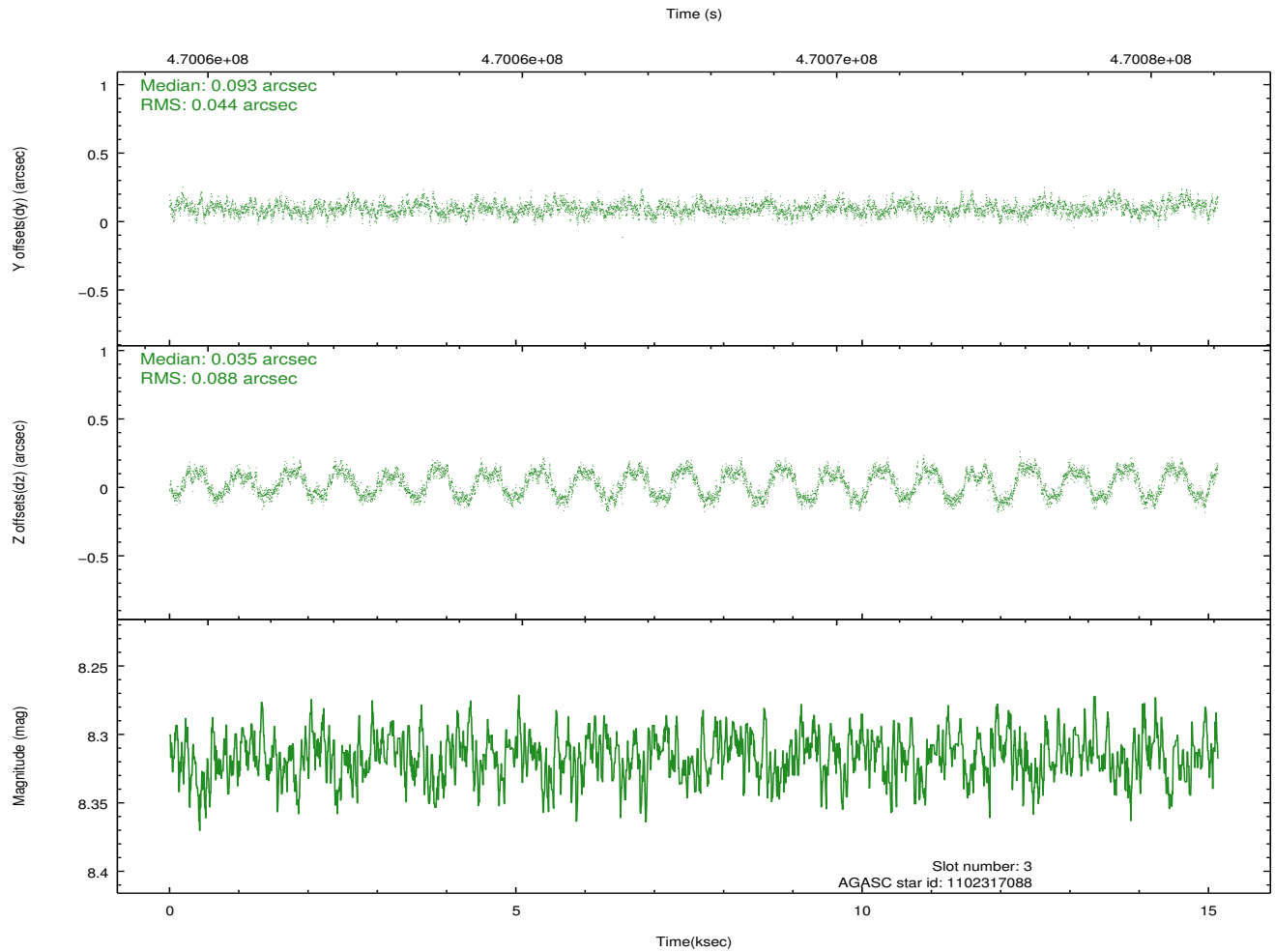
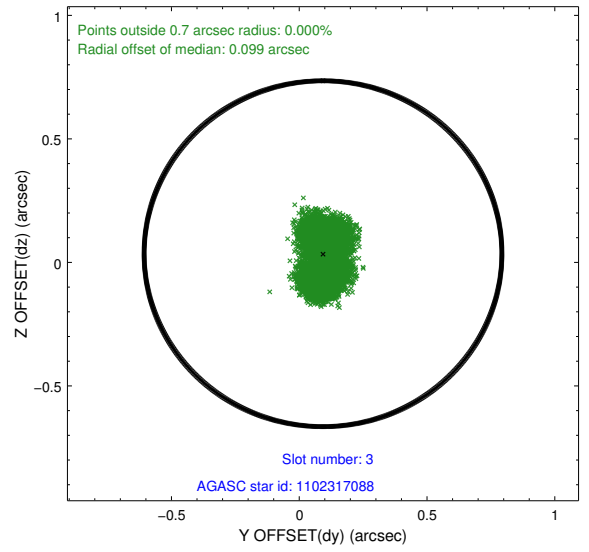
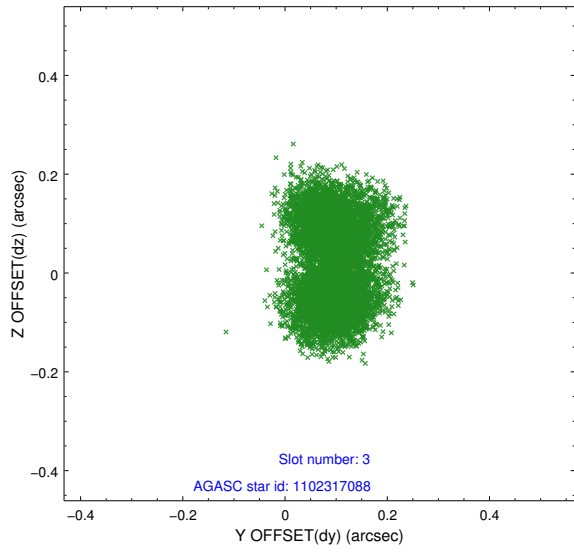
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.93	3692	-0.107	-0.046	0.018	0.030	0.000000	0.000000	-772.14	-1740.28
1	FID		ACIS-S-4	7.01	3692	0.268	0.065	0.013	0.035	0.000000	0.000000	2141.39	167.97
2	FID		ACIS-S-5	7.03	3692	-0.190	-0.006	0.013	0.028	0.000000	0.000000	-1824.66	161.95
3	GUIDE	used	1102317088	8.32	7380	0.093	0.035	0.110	0.157	308.152391	-47.242863	-461.68	-631.10
4	GUIDE	used	1102318568	8.81	7383	0.034	0.006	0.104	0.167	308.543219	-47.837250	1667.22	341.88
5	GUIDE	used	1102320272	10.40	7373	0.123	0.328	0.260	0.407	308.118346	-47.073457	-1070.34	-722.50
6	GUIDE	used	1102320984	9.59	7359	0.072	0.017	0.154	0.235	308.522962	-47.889644	1858.18	296.13
7	GUIDE	used	1102322720	9.72	7374	-0.329	-0.373	0.157	0.258	309.031649	-47.554650	643.57	1519.72

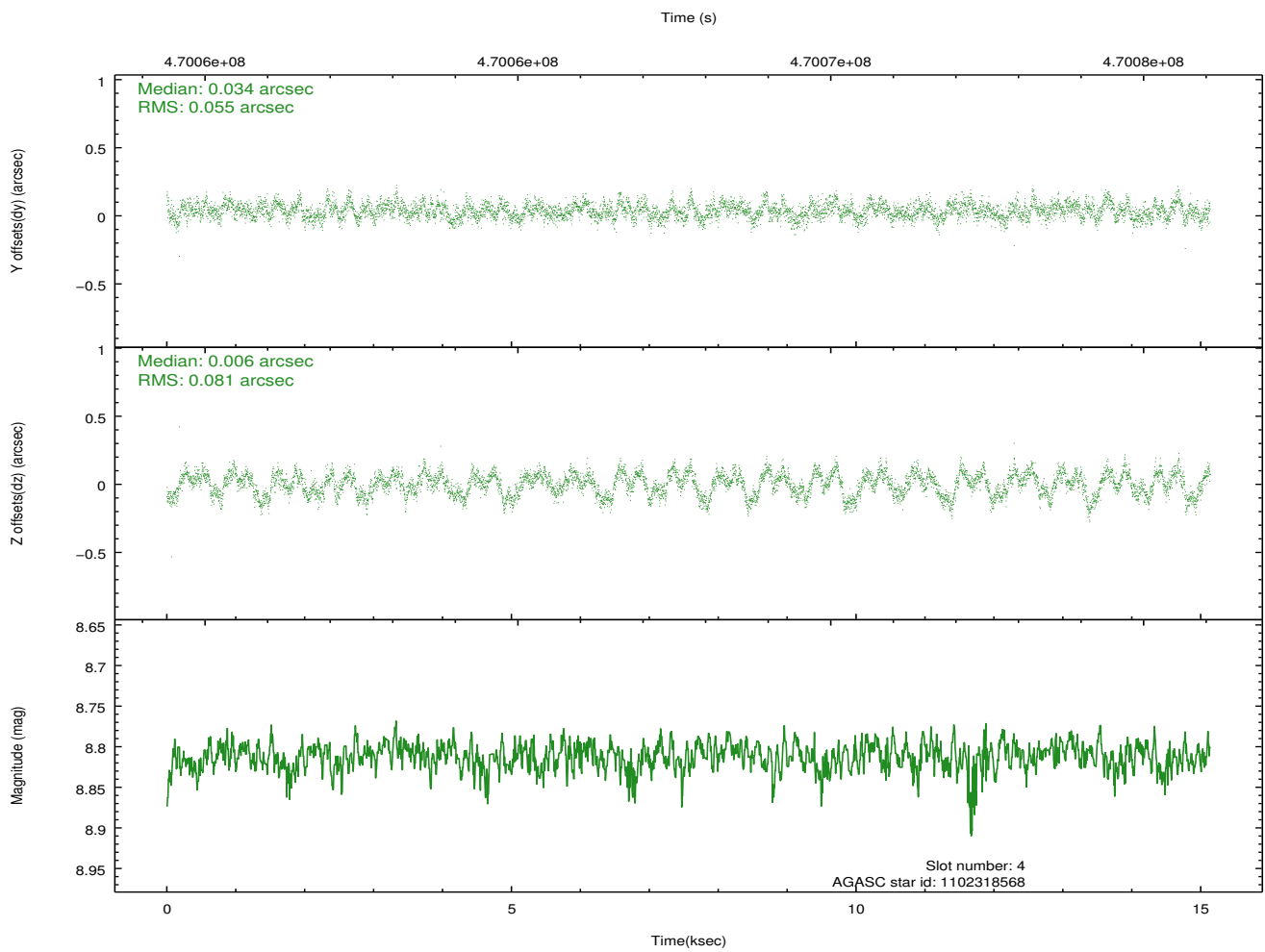
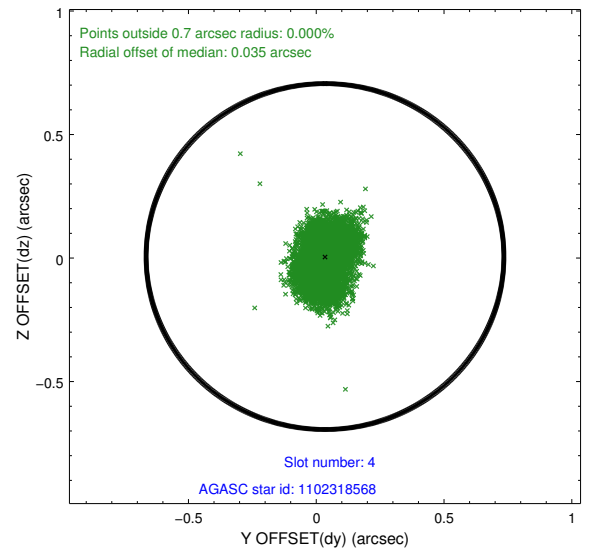
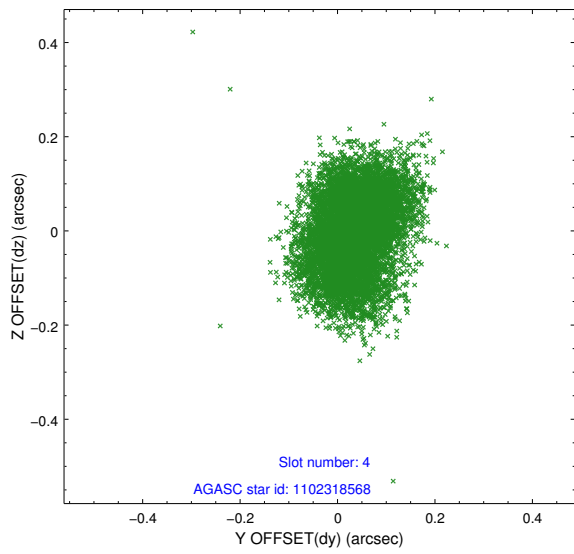
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2.4 Star Slots

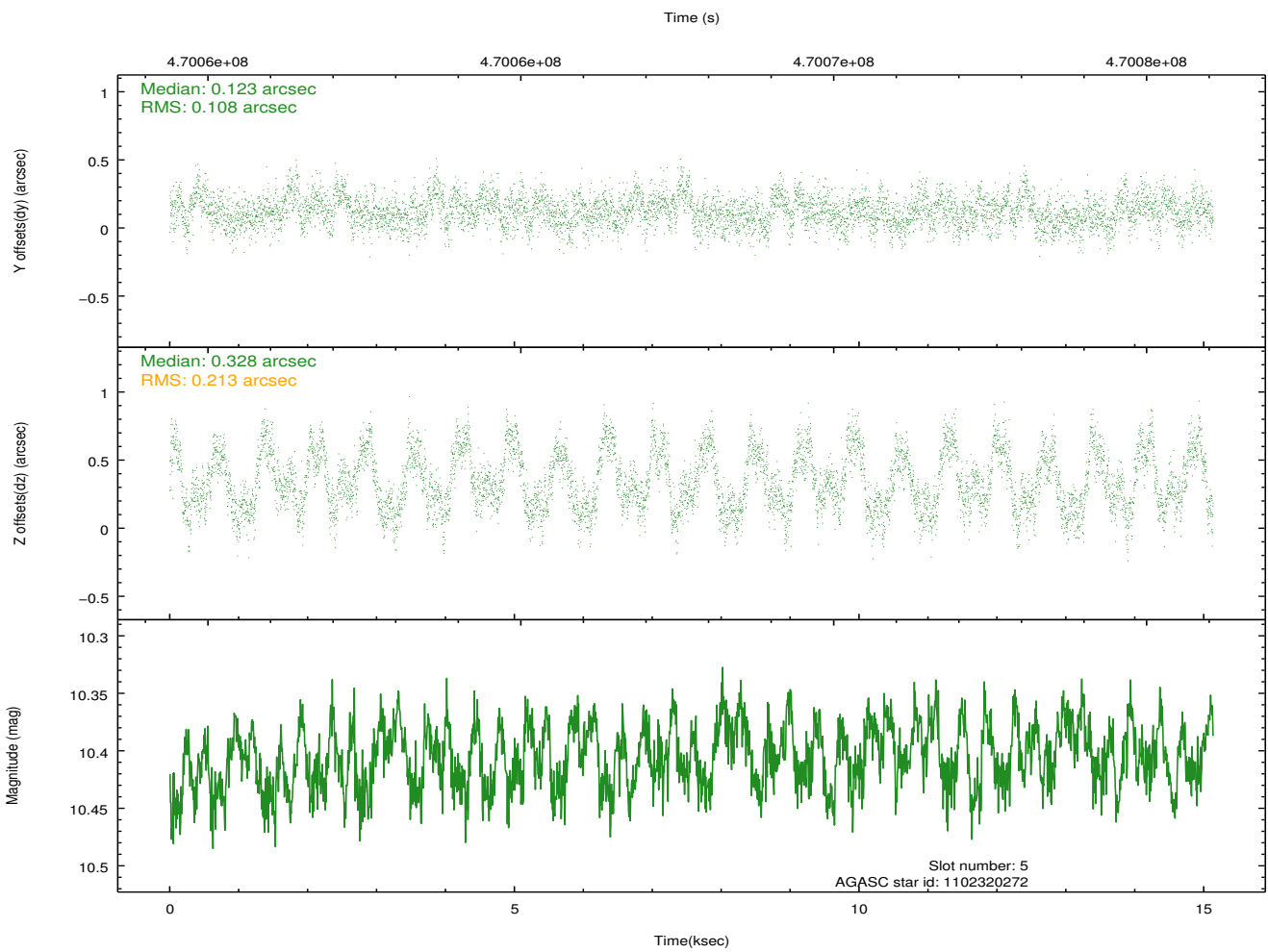
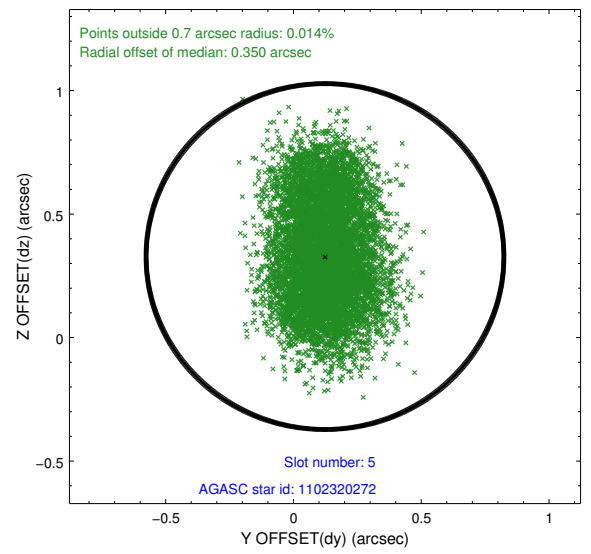
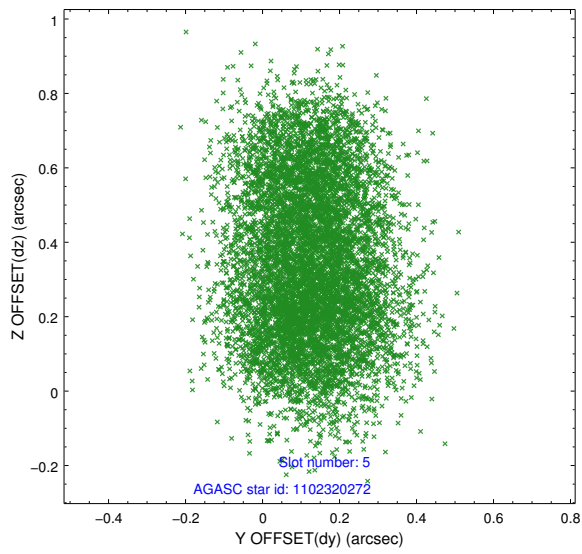
2.4.1 Slot 3



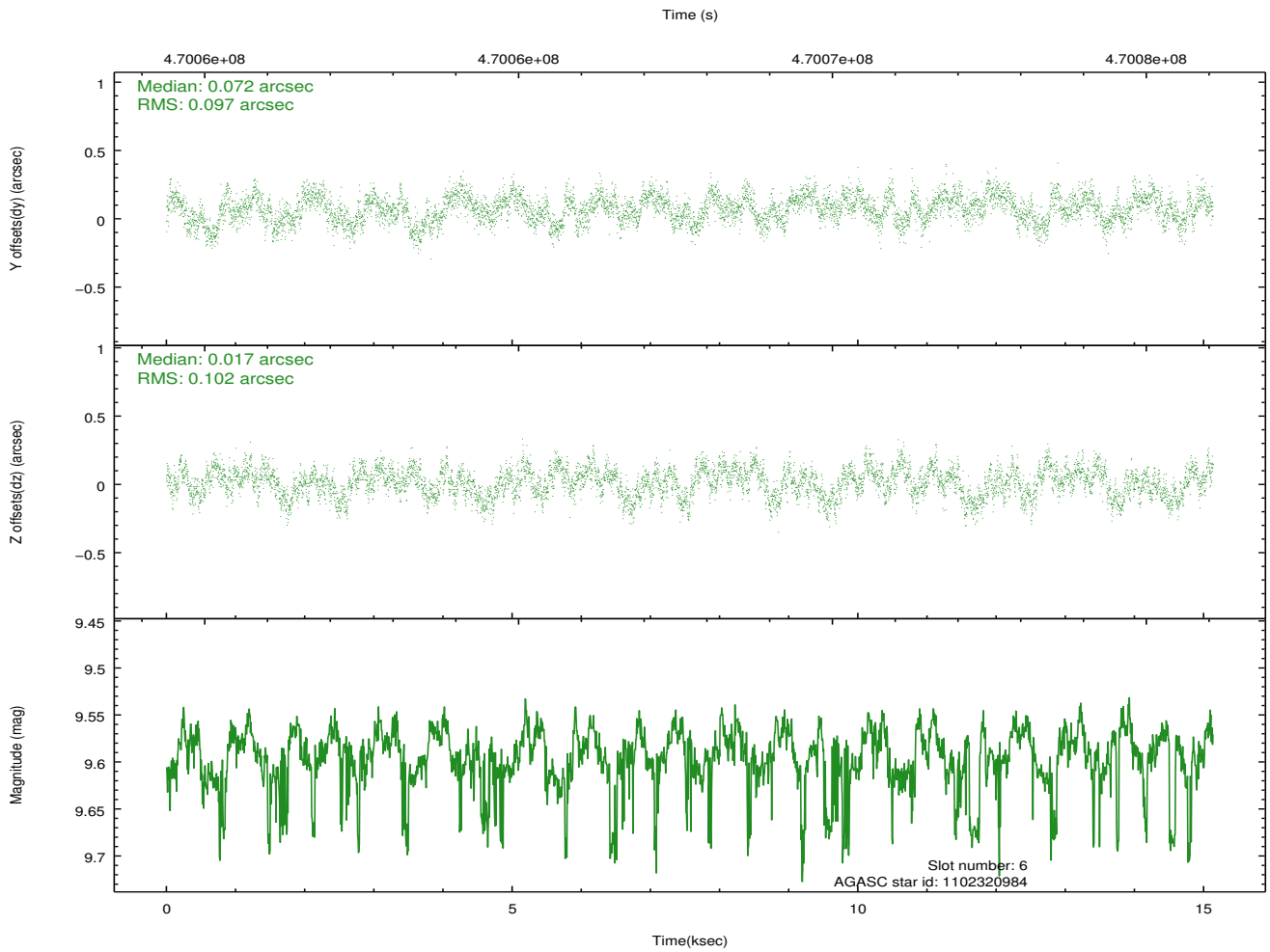
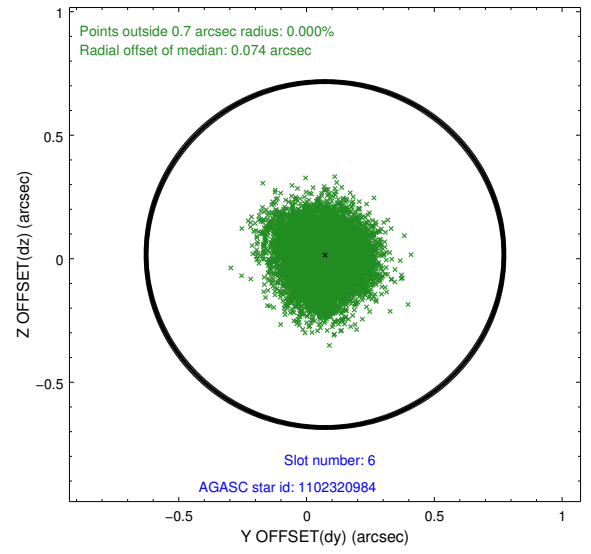
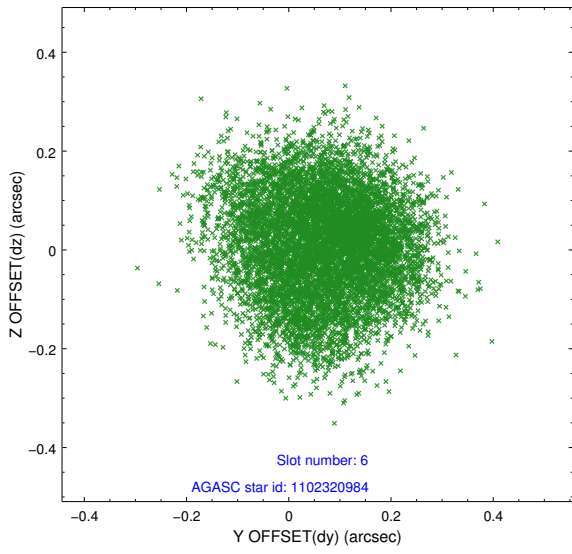
2.4.2 Slot 4



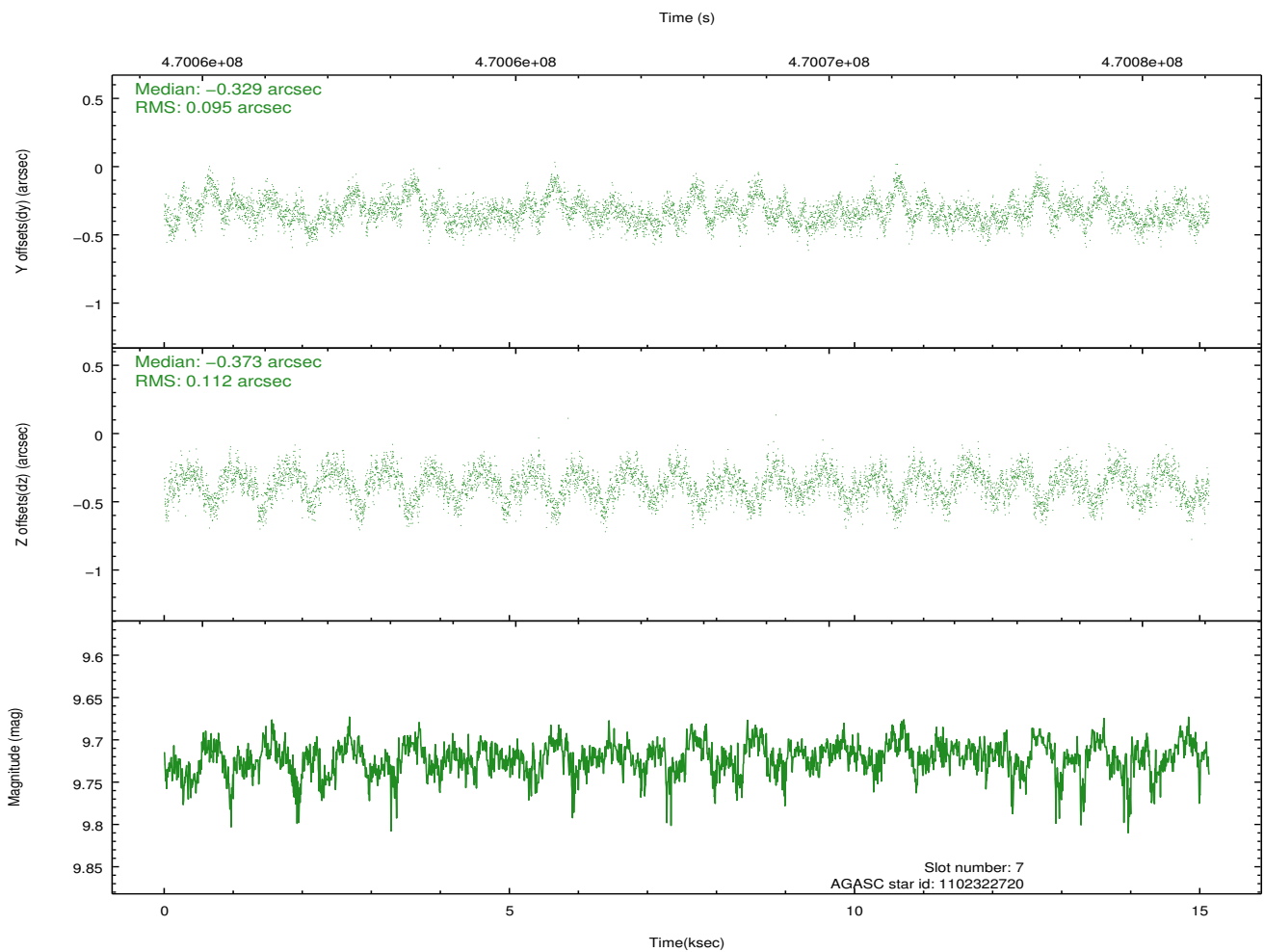
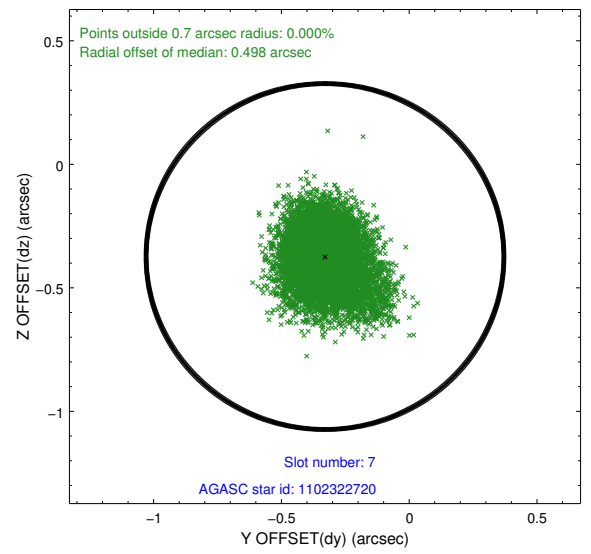
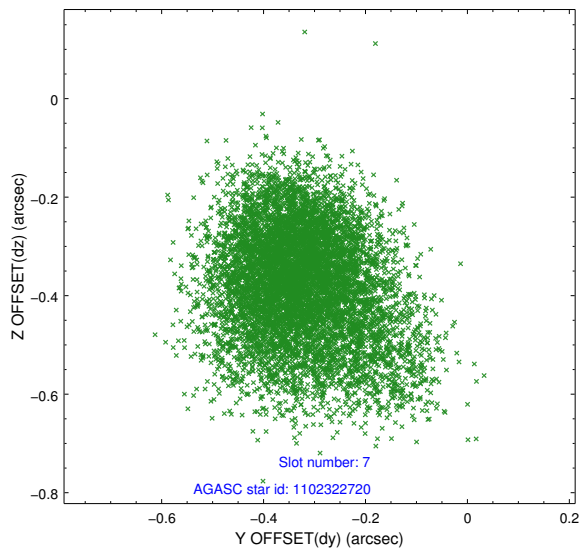
2.4.3 Slot 5



2.4.4 Slot 6

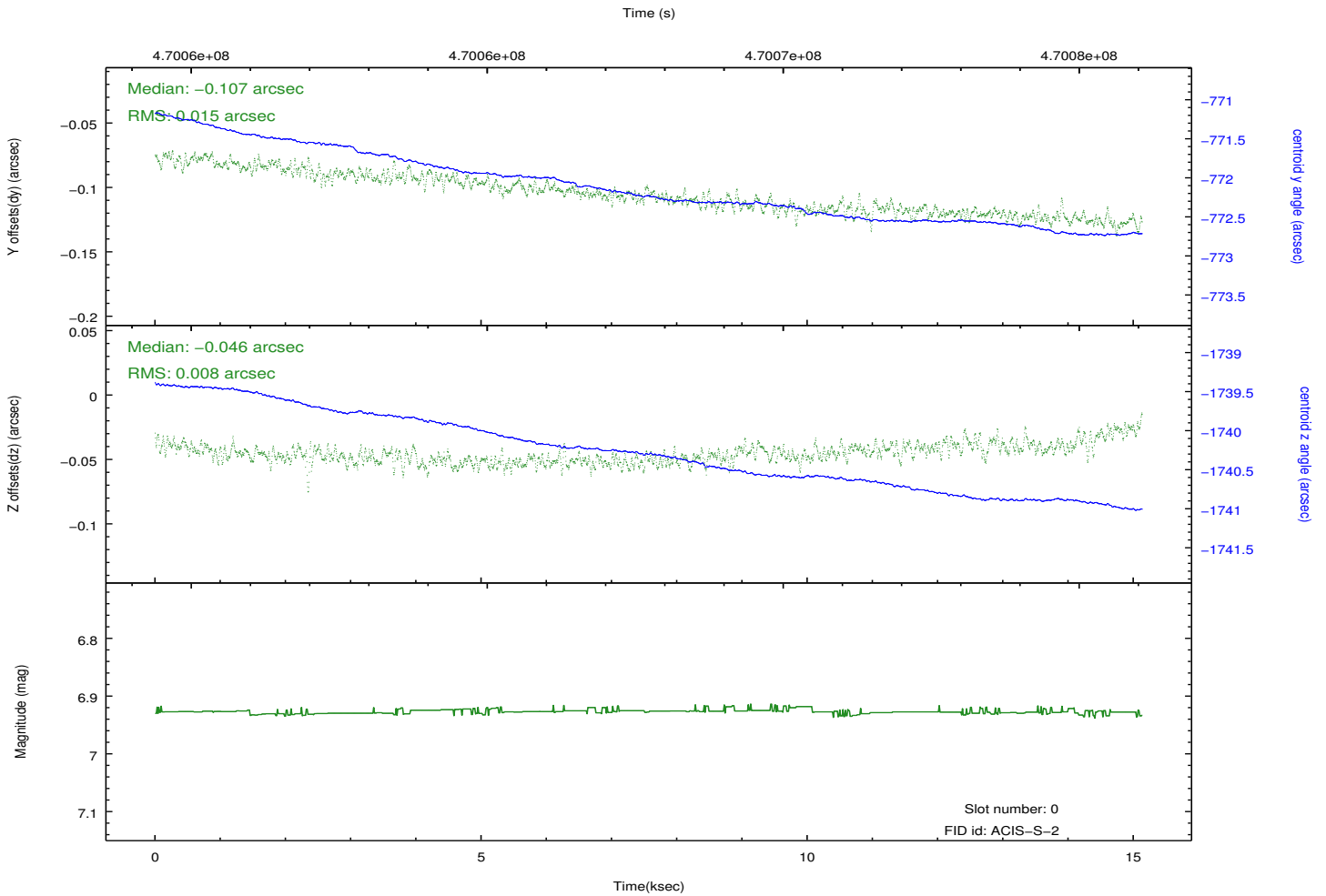
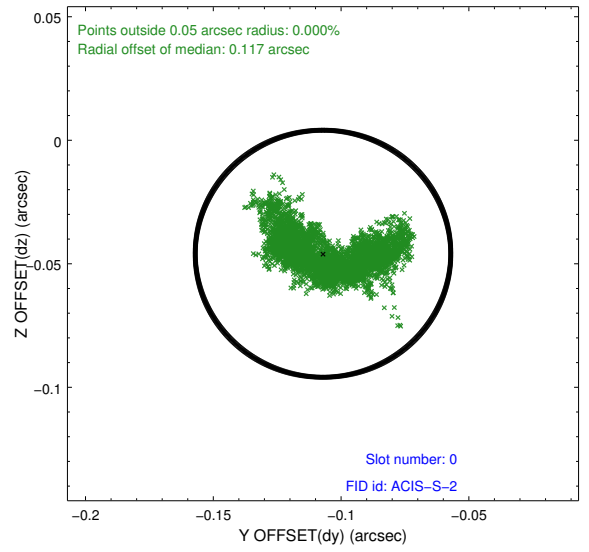
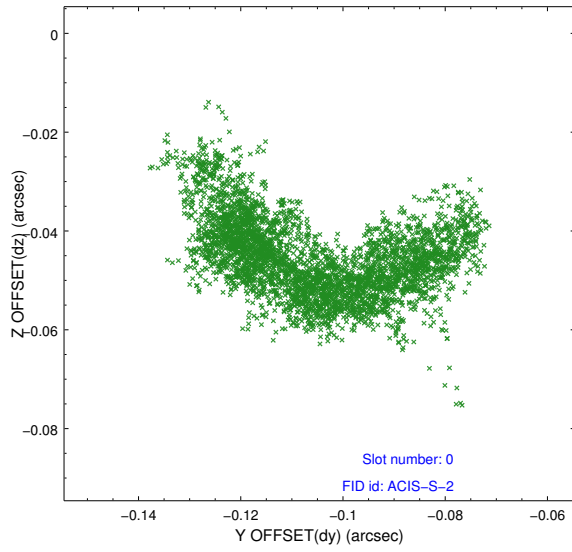


2.4.5 Slot 7

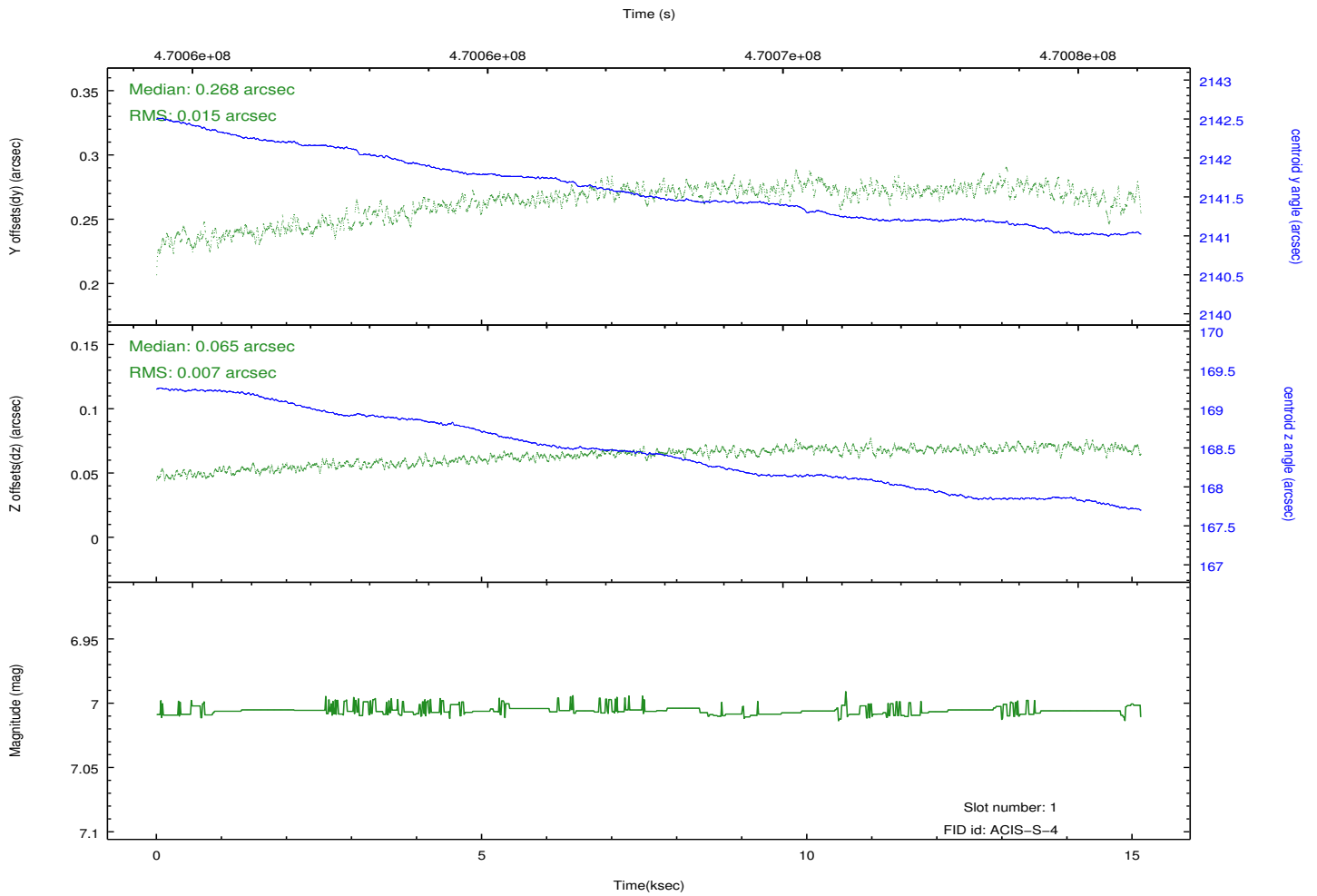
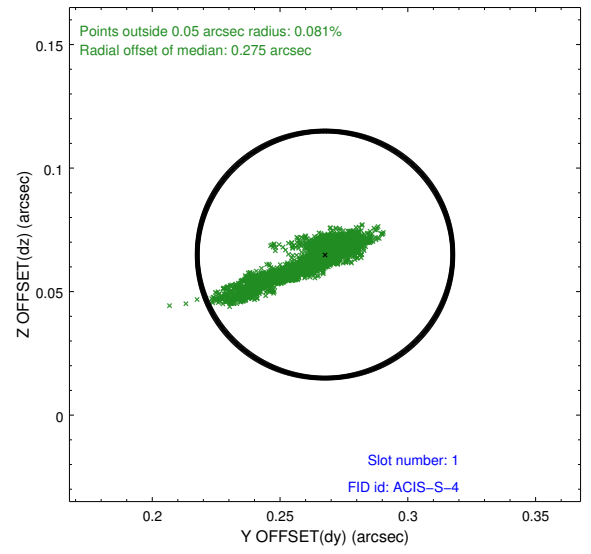
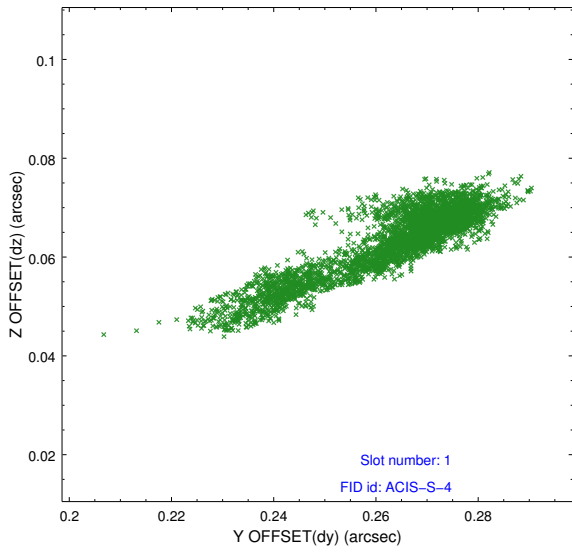


2.5 FID Slots

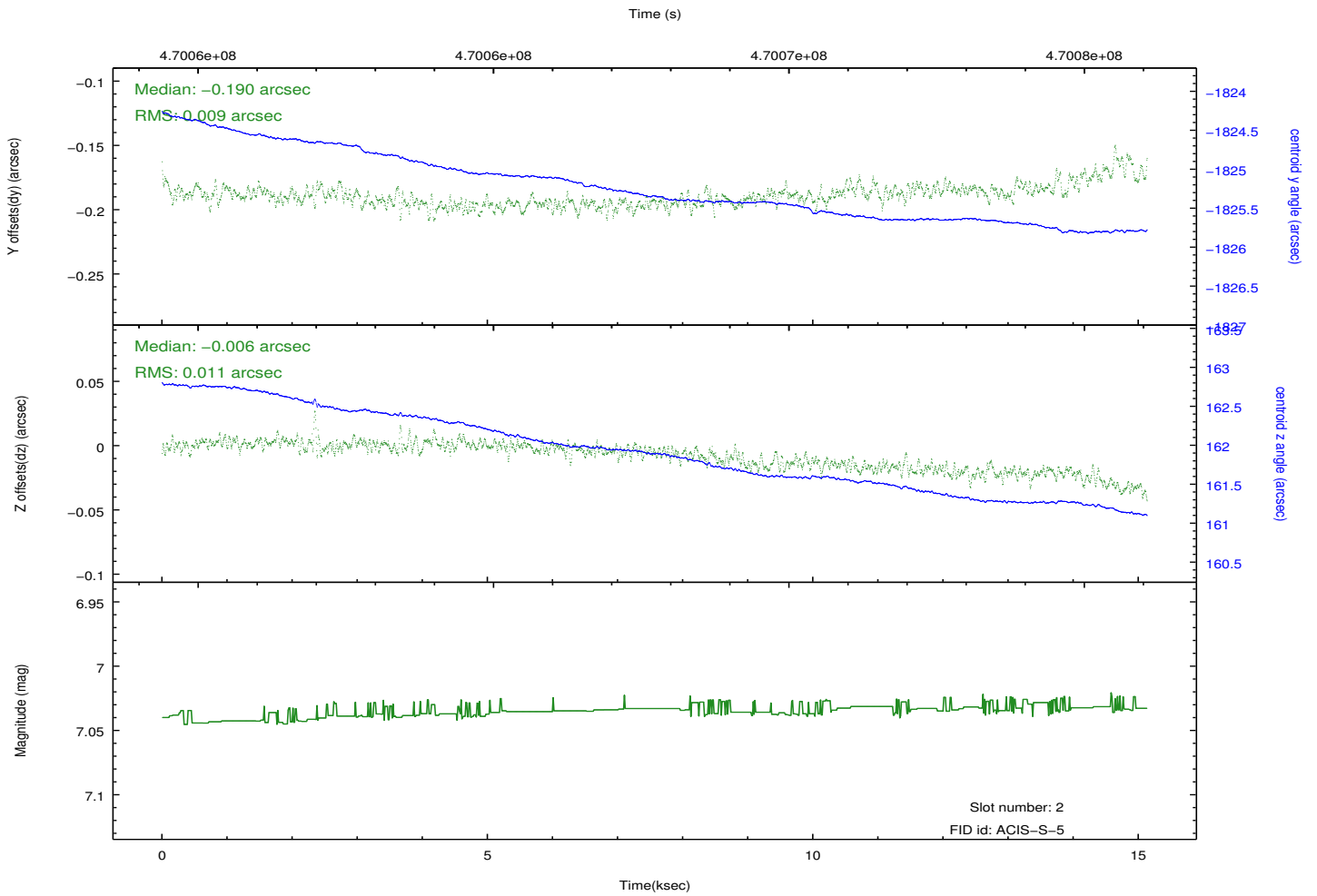
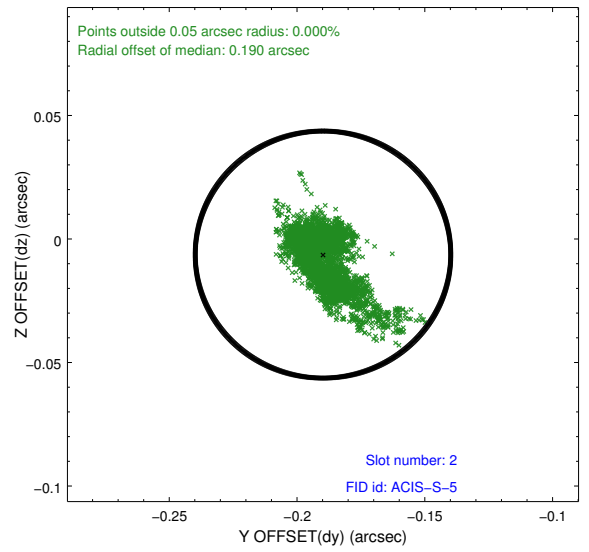
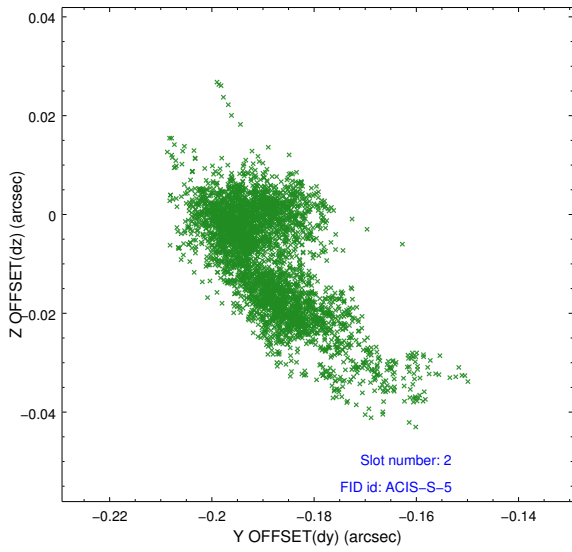
2.5.1 Slot 0



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)	2014.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.965054117024

A.2 Comments

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.