

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 14579 - L2 Version 2
Chandra X-Ray Center

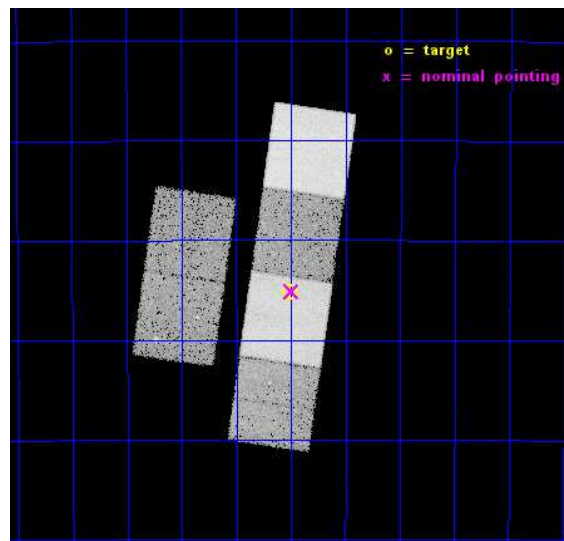
L2 Processing Date : Dec 9 2014

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1 Front

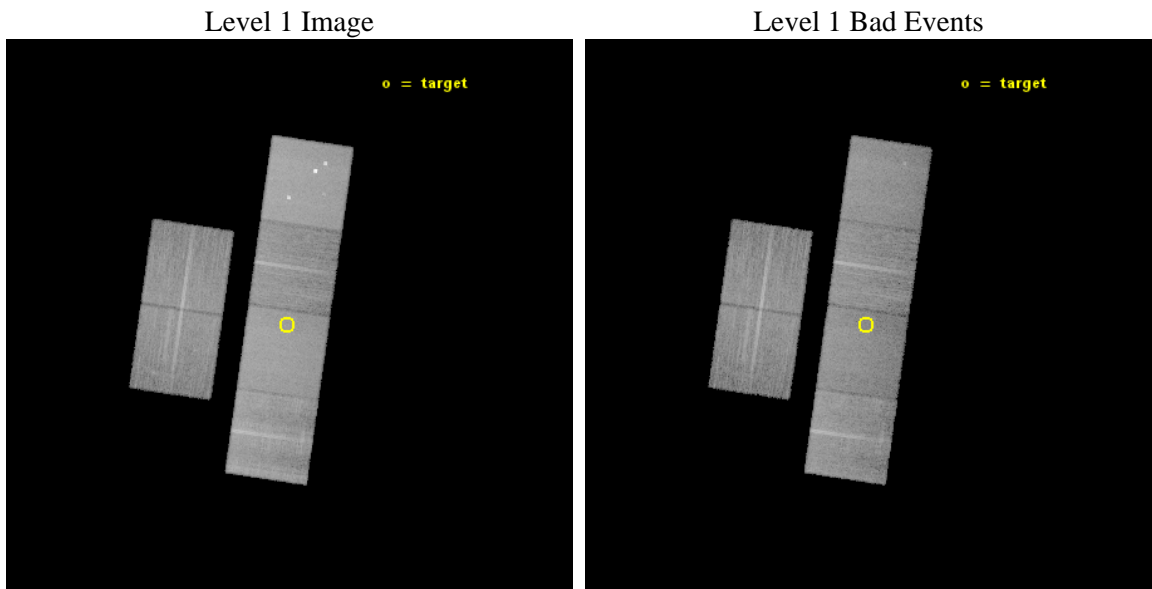
seq_num	200880	Sequence number
obs_id	14579	Observation id
title	COMPACT AND DIFFUSE X-RAY SOURCES IN THE YOUNGEST PLANETARY NEBULAE	
observer	Dr. Joel Kastner	Principal investigator
object	NGC 6153	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	247.8775	Observer's specified target RA [deg]
dec_targ	-40.253417	Observer's specified target Dec [deg]
ra_nom	247.87387650814	Nominal RA [deg]
dec_nom	-40.252168162998	Nominal Dec [deg]
roll_nom	98.276173415486	Nominal Roll [deg]
revision	2	Processing version of data
ontime	28965.442888916	Sum of GTIs [s]
livetime	28598.66501016	Livetime [s]
ontime2	28962.24291873	Sum of GTIs [s]
ontime3	28965.319768906	Sum of GTIs [s]
ontime5	28965.401848912	Sum of GTIs [s]
ontime6	28965.360808909	Sum of GTIs [s]
ontime7	28965.442888916	Sum of GTIs [s]
ontime8	28965.278728902	Sum of GTIs [s]
l2events	248099	Number of level 2 events



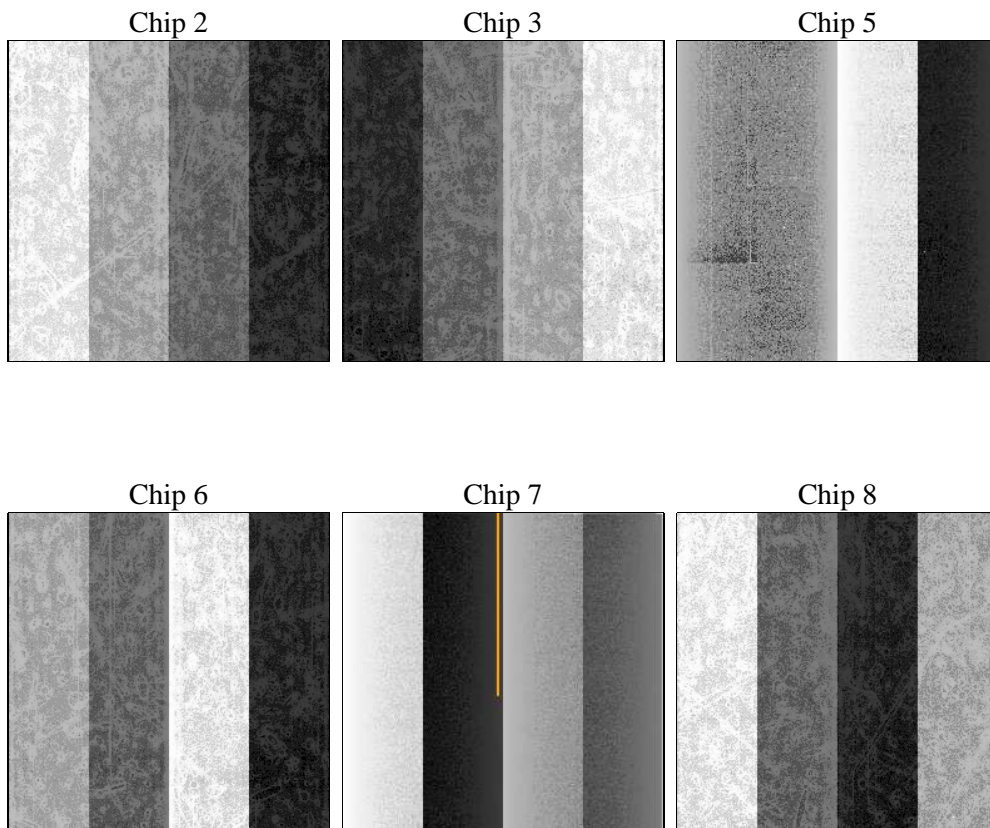
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	29000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	28965.442888916	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	28962.24291873	Sum of GTIs [s]
date	2014-12-10T00:07:33	Date and time of file creation	ontime3	28965.319768906	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	28965.401848912	Sum of GTIs [s]
			ontime6	28965.360808909	Sum of GTIs [s]
			ontime7	28965.442888916	Sum of GTIs [s]
			ontime8	28965.278728902	Sum of GTIs [s]
			l1events	1022254	Number of level 1 events

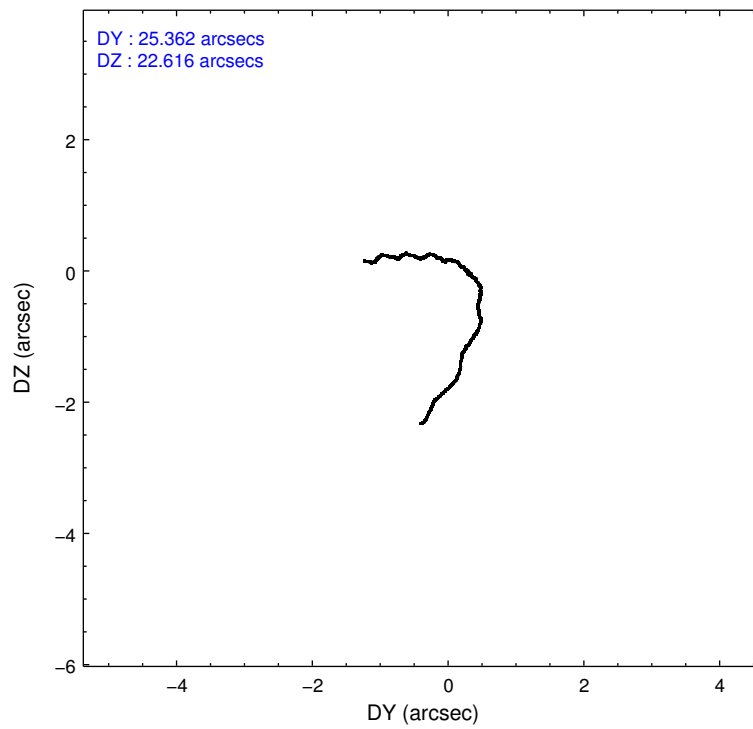
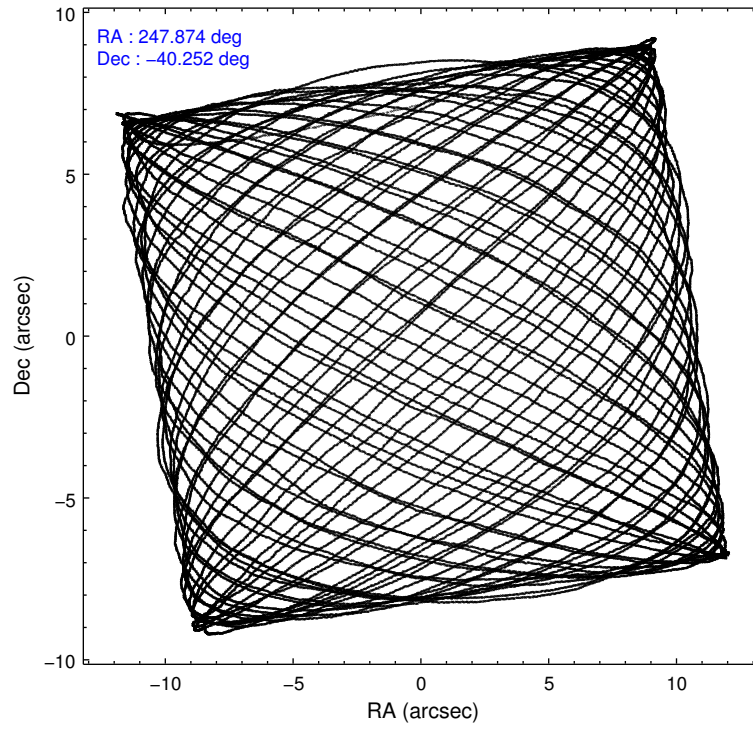
2.1.4 Events

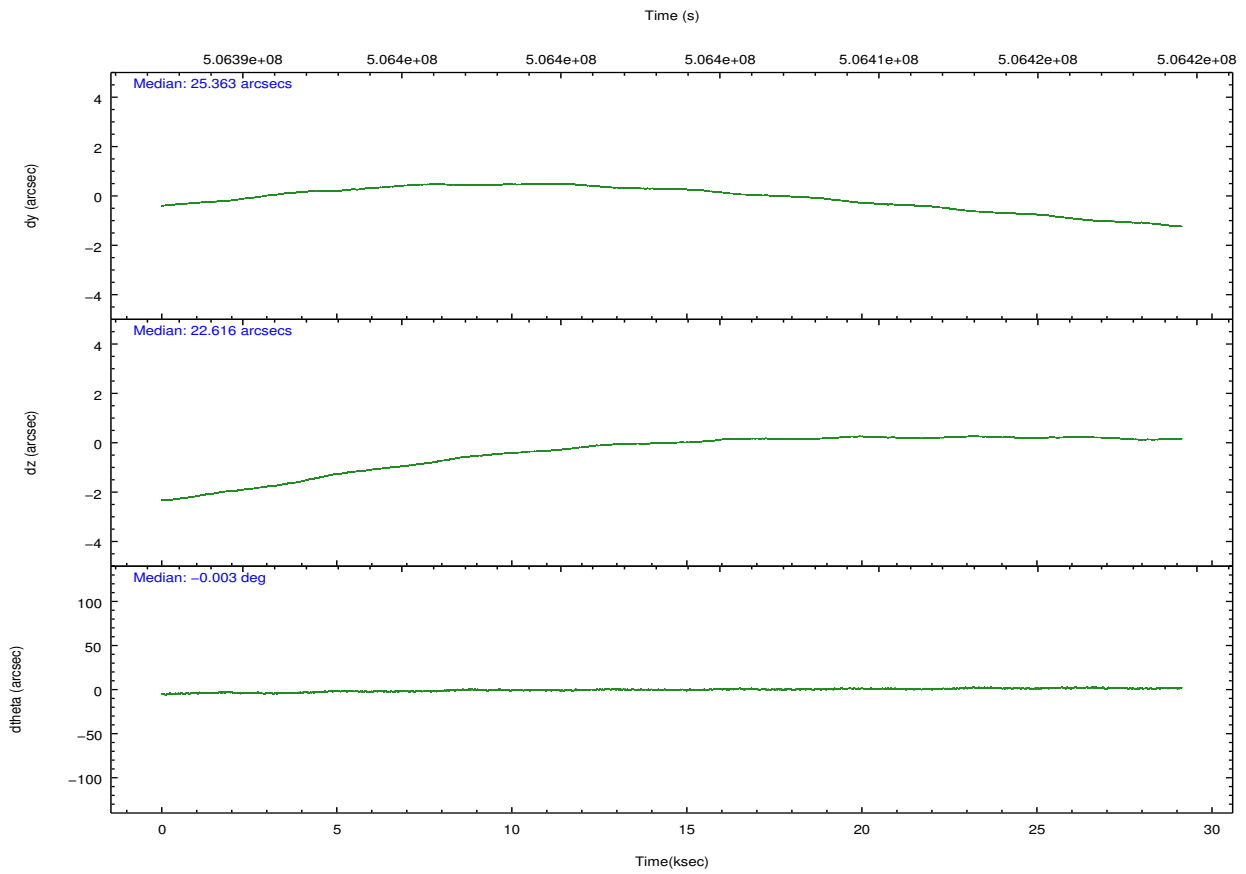
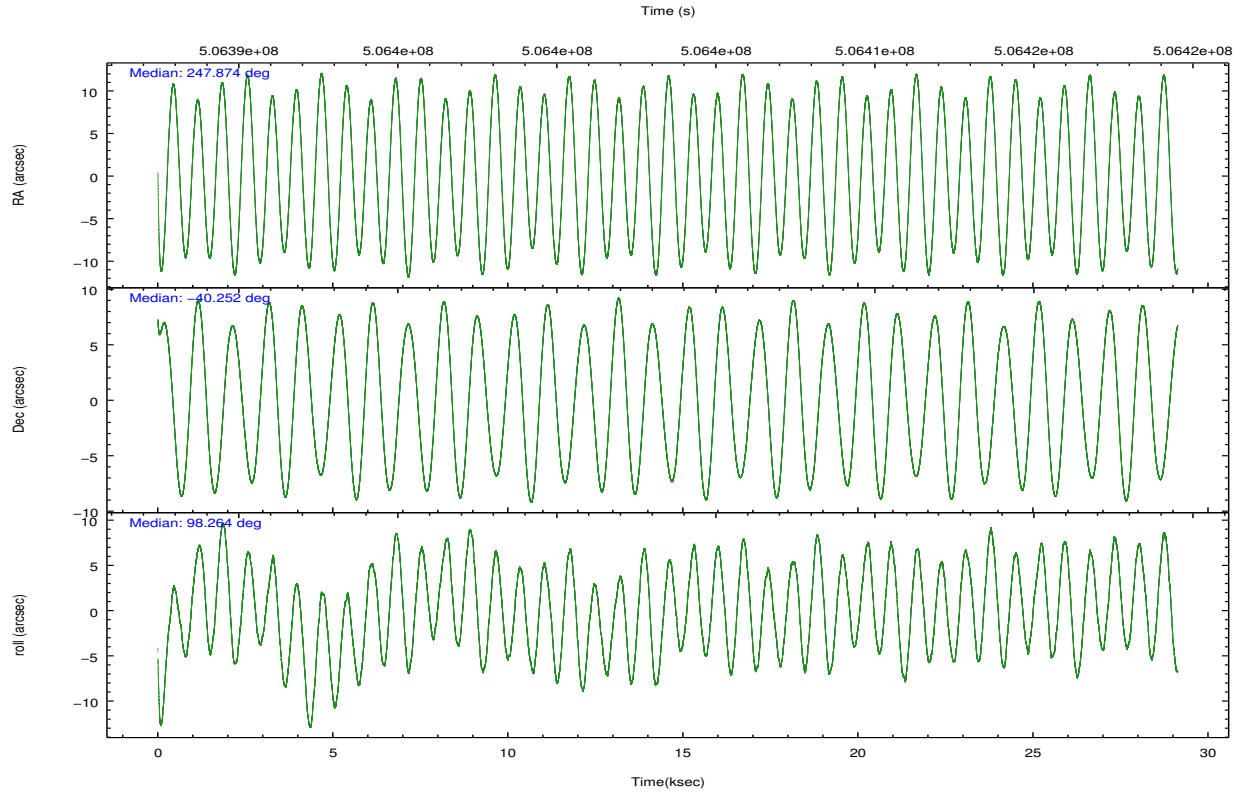
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	136690	128473	240152	138399	190767	187773	grade 0 events	5750	5587	19646	6143	7288	15075
rejected events	120690	112820	119061	121076	107305	137315		4%	4%	8%	4%	3%	8%
rejected %	88%	87%	49%	87%	56%	73%	grade 1 events	78	91	571	62	230	131
								0%	0%	0%	0%	0%	0%
							grade 2 events	3901	3408	33447	3811	17282	11926
								2%	2%	13%	2%	9%	6%
							grade 3 events	1571	1690	3999	1742	6990	5049
								1%	1%	1%	1%	3%	2%
							grade 4 events	1588	1738	3977	1701	6976	4928
								1%	1%	1%	1%	3%	2%
							grade 5 events	6230	7173	17509	7182	19679	10601
								4%	5%	7%	5%	10%	5%
							grade 6 events	3194	3233	60044	3929	44949	13486
								2%	2%	25%	2%	23%	7%
							grade 7 events	114378	105553	100959	113829	87373	126577
								83%	82%	42%	82%	45%	67%

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	247.896462	247.8738765081358	CCD I2 on	O3	Y
[deg] Pointing Dec	-40.273403	-40.25216816299752	CCD I3 on	O2	Y
[deg] Pointing Roll	98.134150	98.27617341548583	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	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)	506389063.184000	506387835.81206	CCD S5 on	N	N
Observation start date	2014-01-17T23:36:36	2014-01-17T23:17:15	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	506418063.184000	506418816.95126	On-chip summing requested	N	N
Observation end date	2014-01-18T07:39:56	2014-01-18T07:53:36	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect





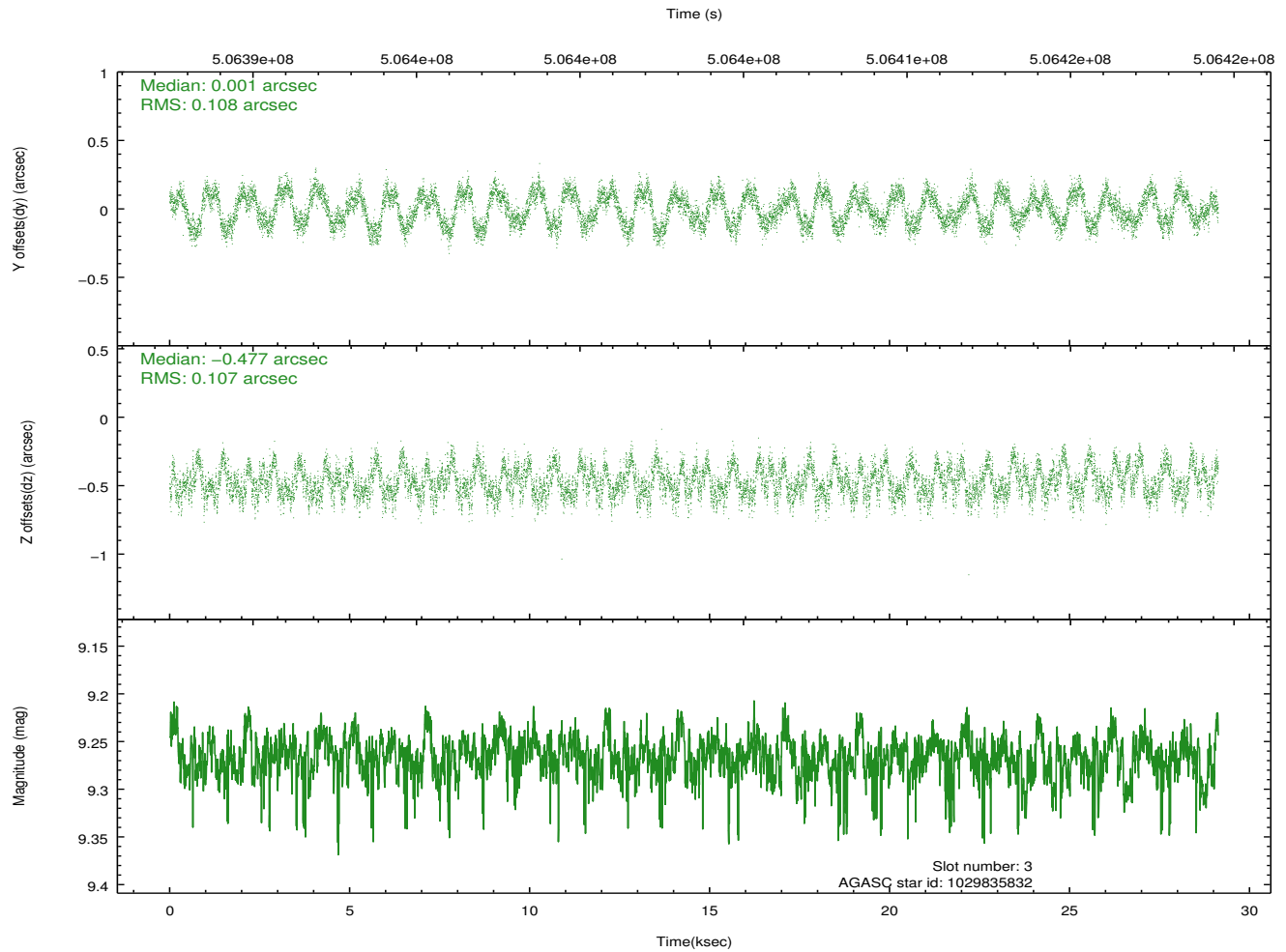
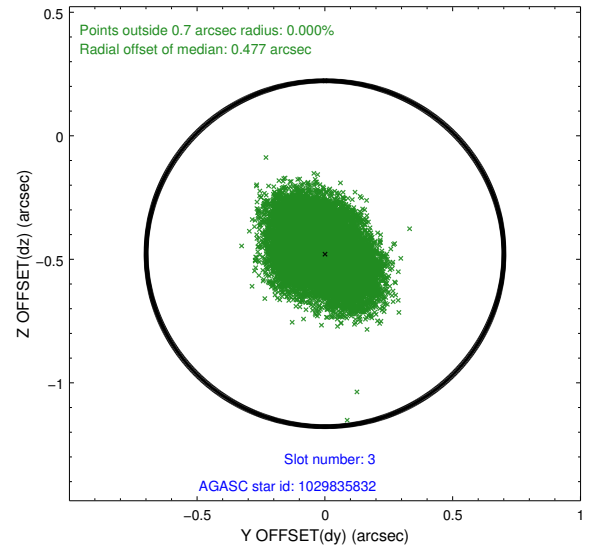
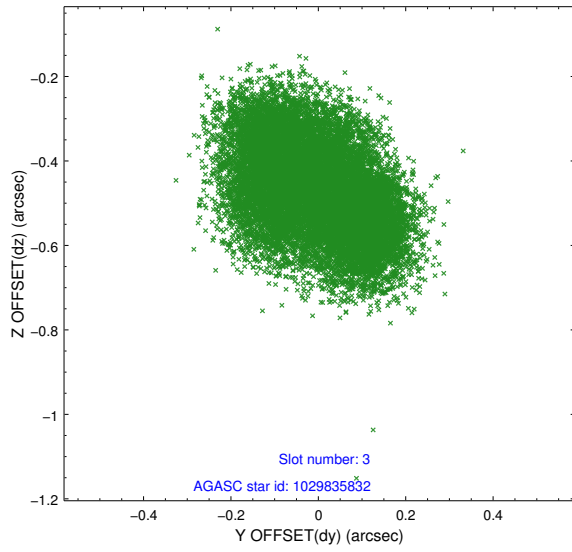
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.96	7105	-0.157	-0.053	0.021	0.061	0.000000	0.000000	-778.68	-1743.83
1	FID		ACIS-S-4	7.05	7105	0.323	0.089	0.010	0.018	0.000000	0.000000	2135.06	164.67
2	FID		ACIS-S-5	7.08	7106	-0.193	-0.029	0.028	0.054	0.000000	0.000000	-1831.44	158.35
3	GUIDE	used	1029835832	9.27	14196	0.001	-0.477	0.166	0.245	247.229158	-40.418815	-266.75	1885.17
4	GUIDE	used	1029964184	9.29	14204	0.157	0.307	0.167	0.259	248.669501	-40.347620	-573.63	-2059.62
5	GUIDE	used	1029838464	7.99	14208	-0.012	-0.333	0.091	0.134	247.387742	-40.726954	-1424.04	1605.22
6	GUIDE	used	1029977216	7.91	14210	0.107	0.292	0.096	0.150	248.402376	-40.770339	-1969.62	-1111.44
7	GUIDE	used	1029966624	9.37	14199	-0.265	0.236	0.373	0.504	248.599474	-39.897512	1057.23	-2112.20

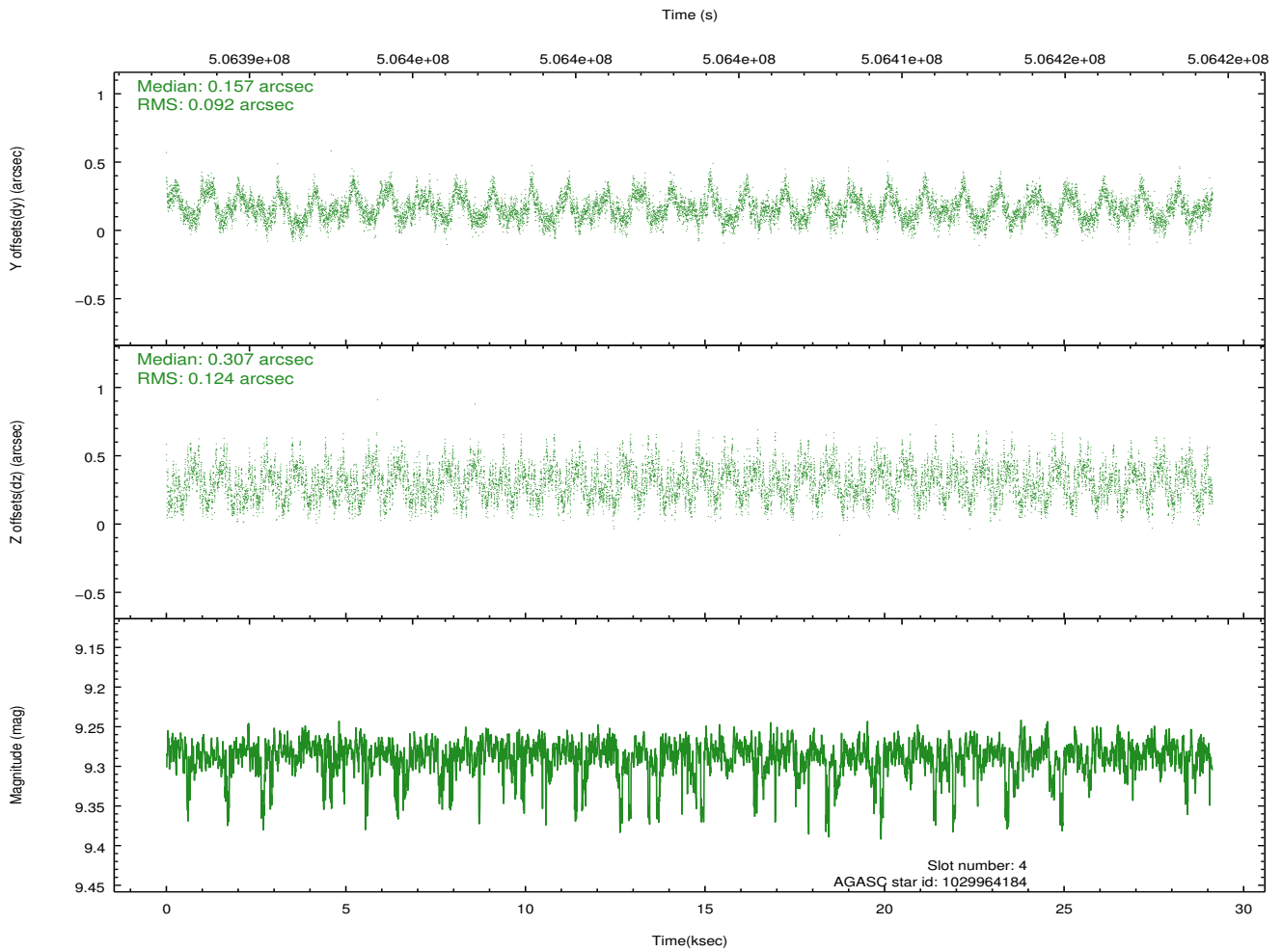
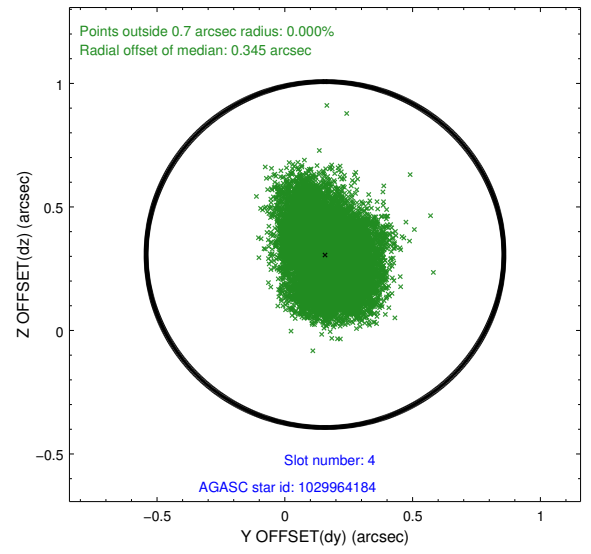
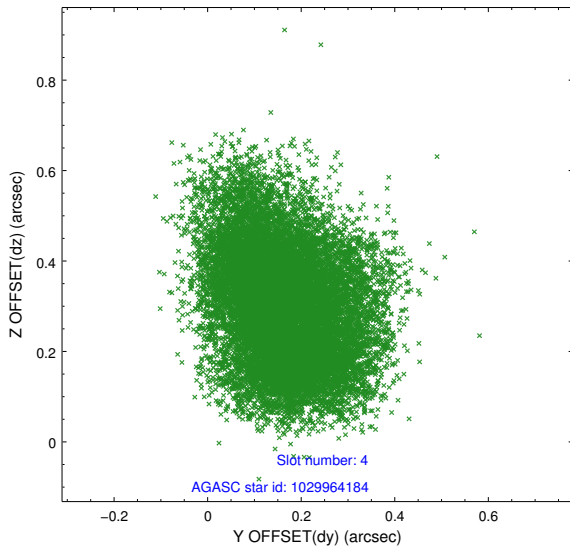
∞

2.4 Star Slots

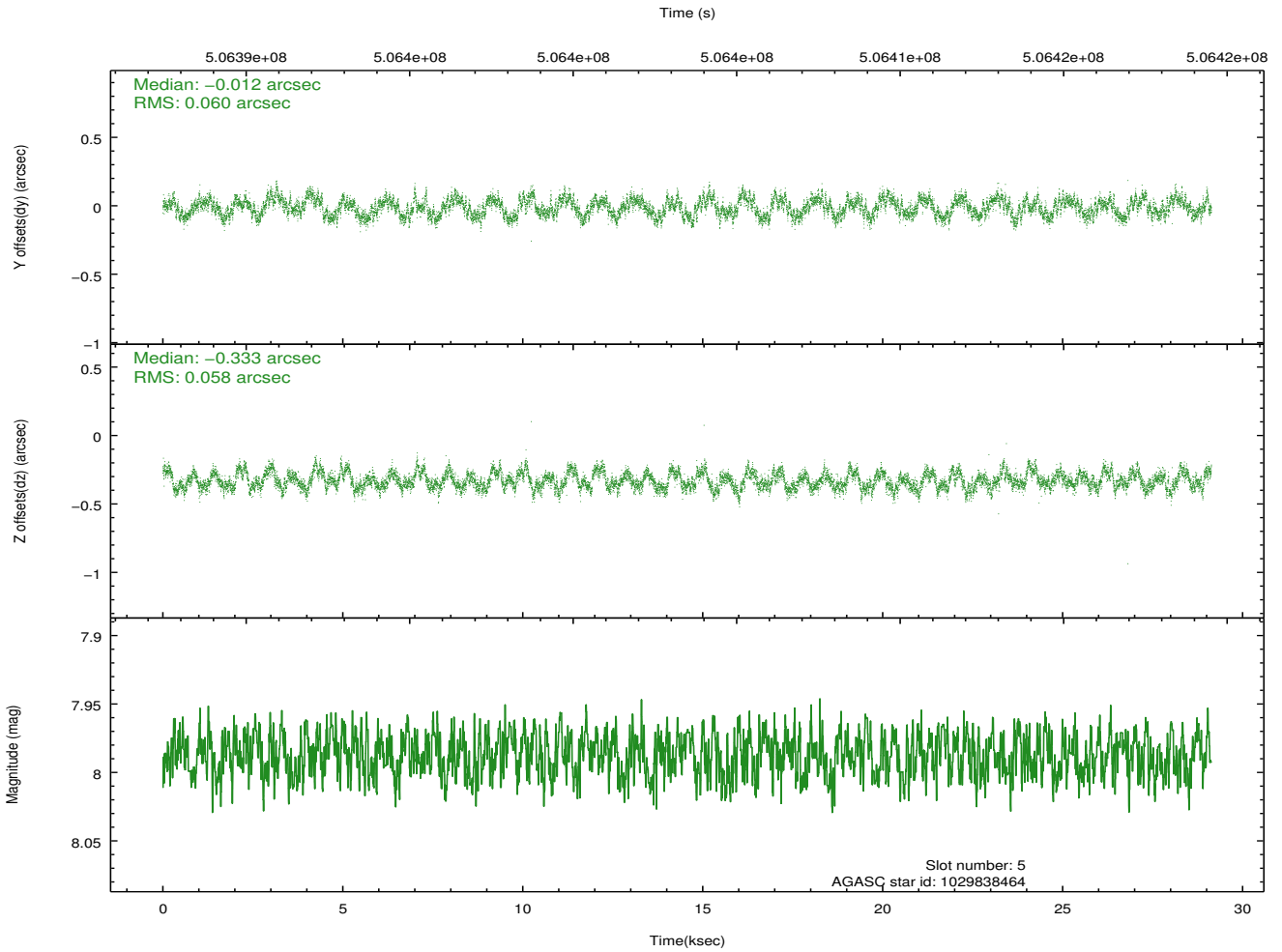
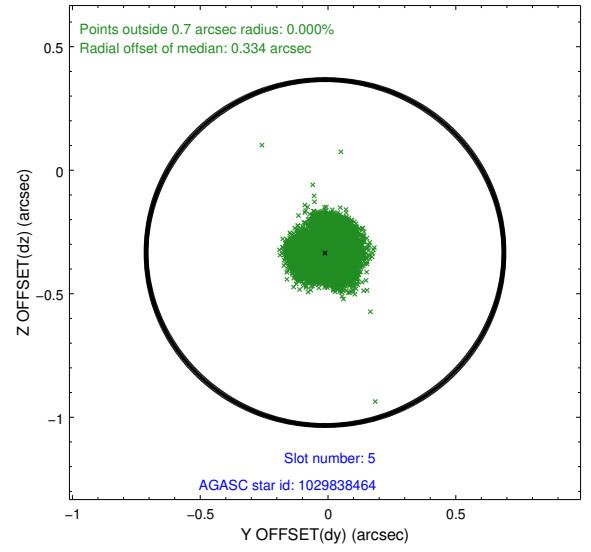
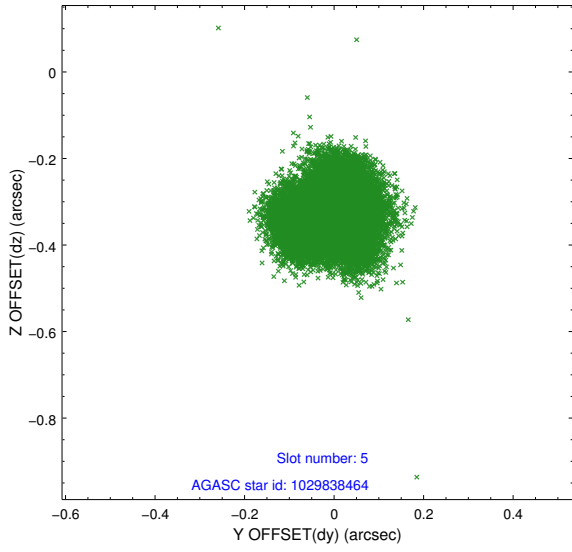
2.4.1 Slot 3



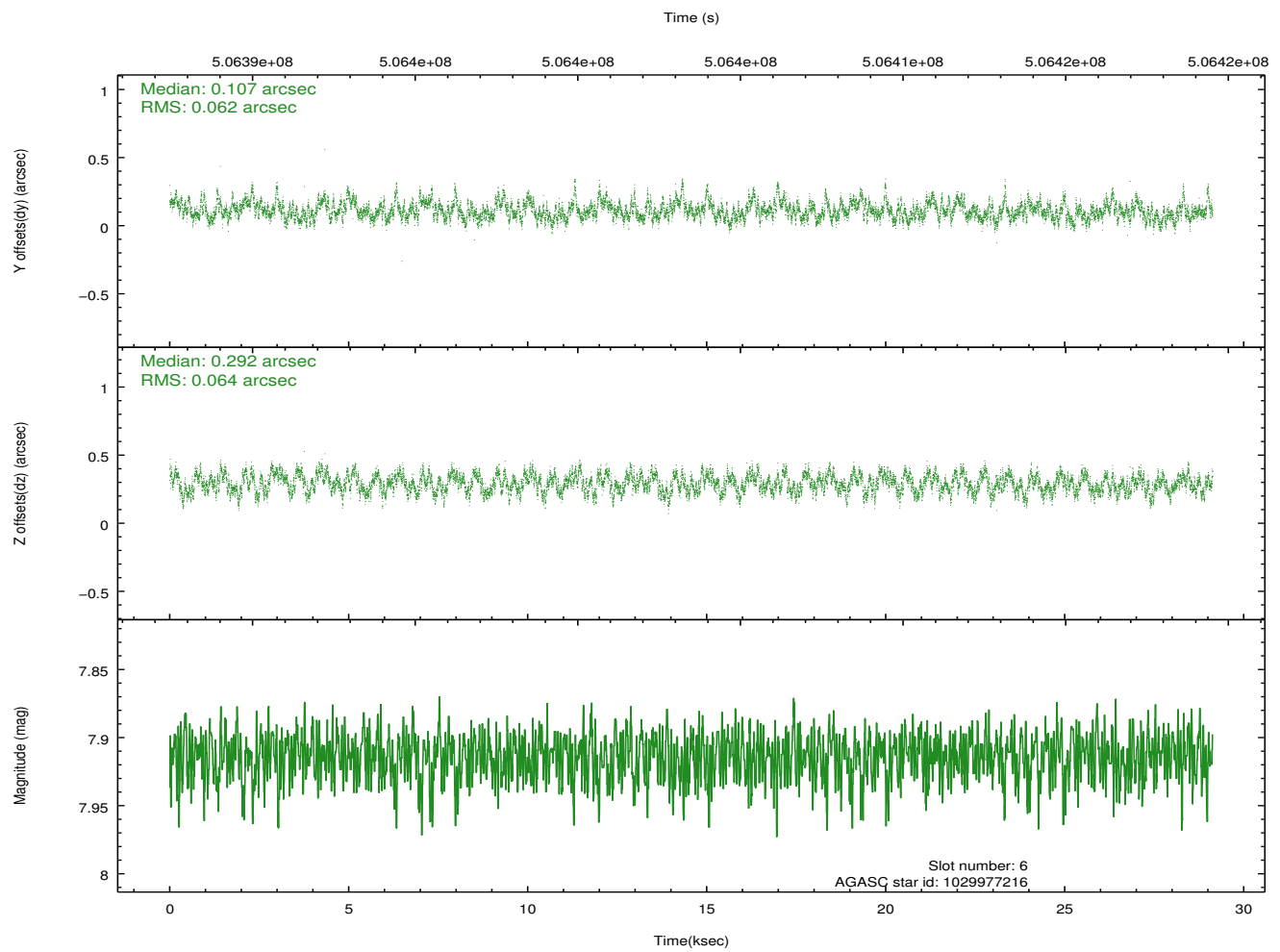
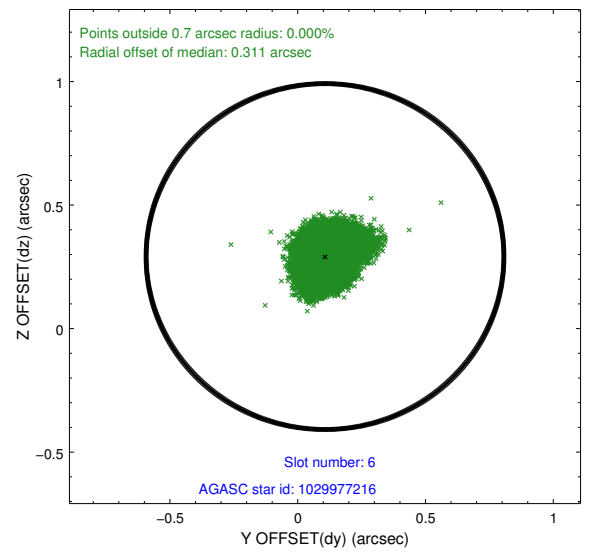
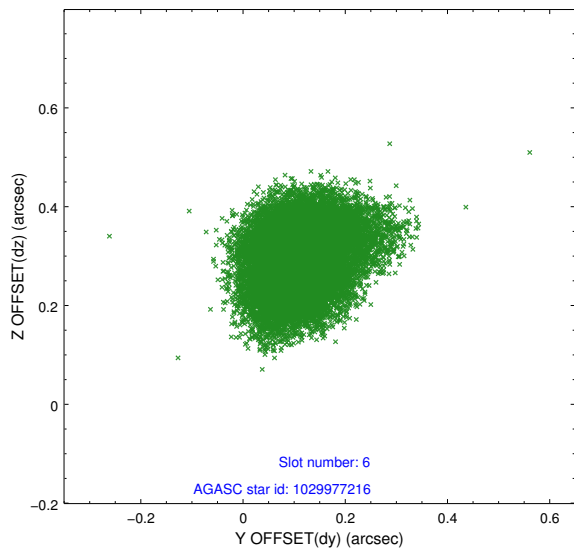
2.4.2 Slot 4



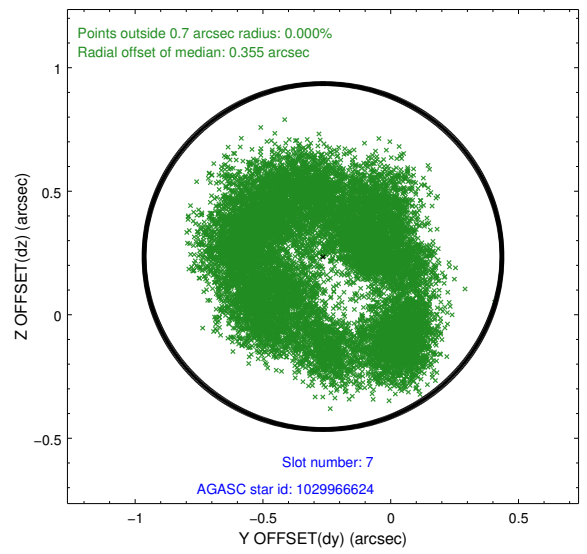
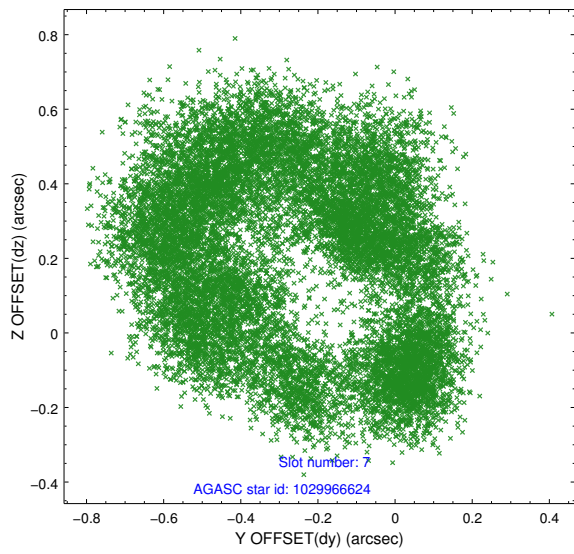
2.4.3 Slot 5



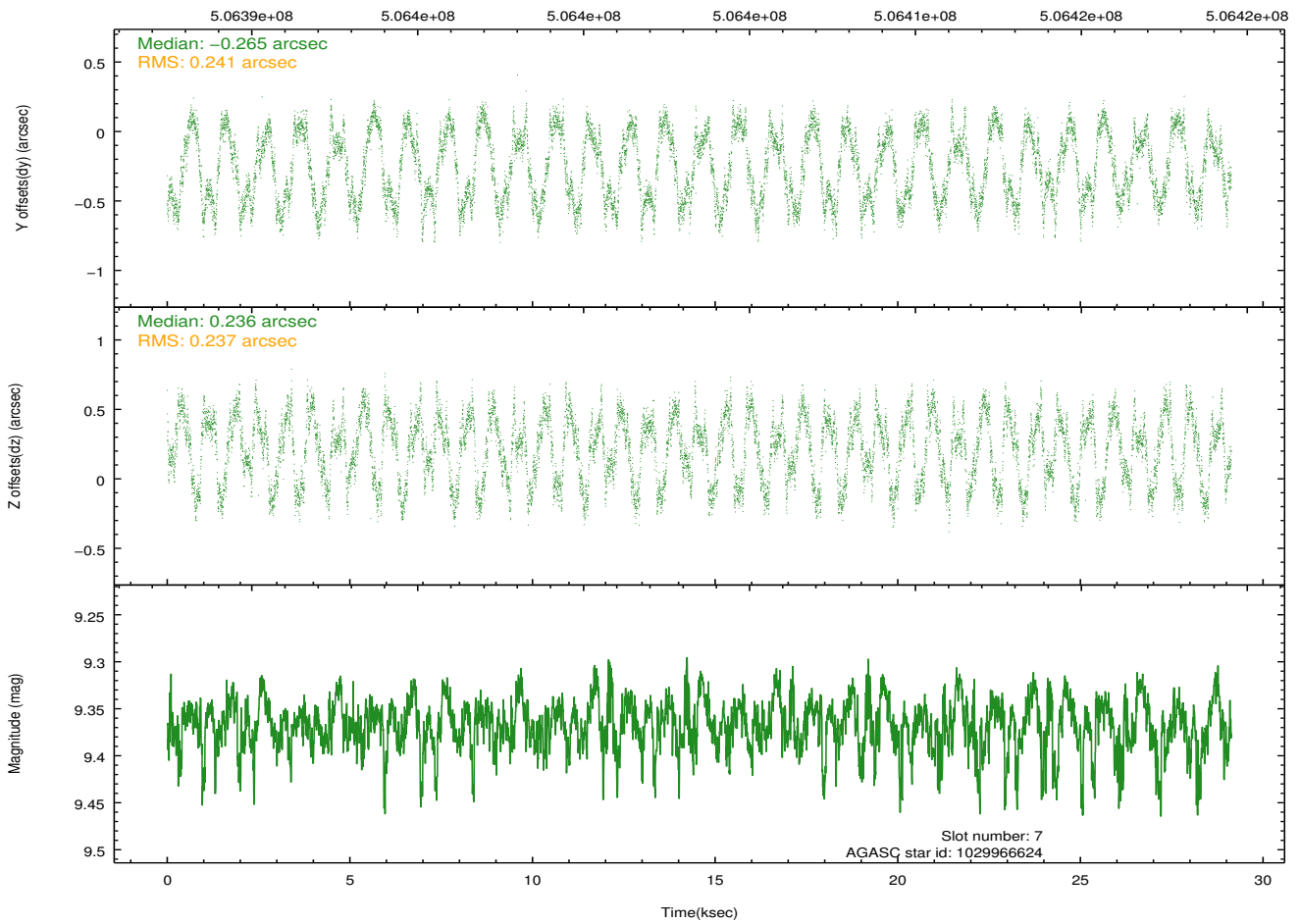
2.4.4 Slot 6



2.4.5 Slot 7

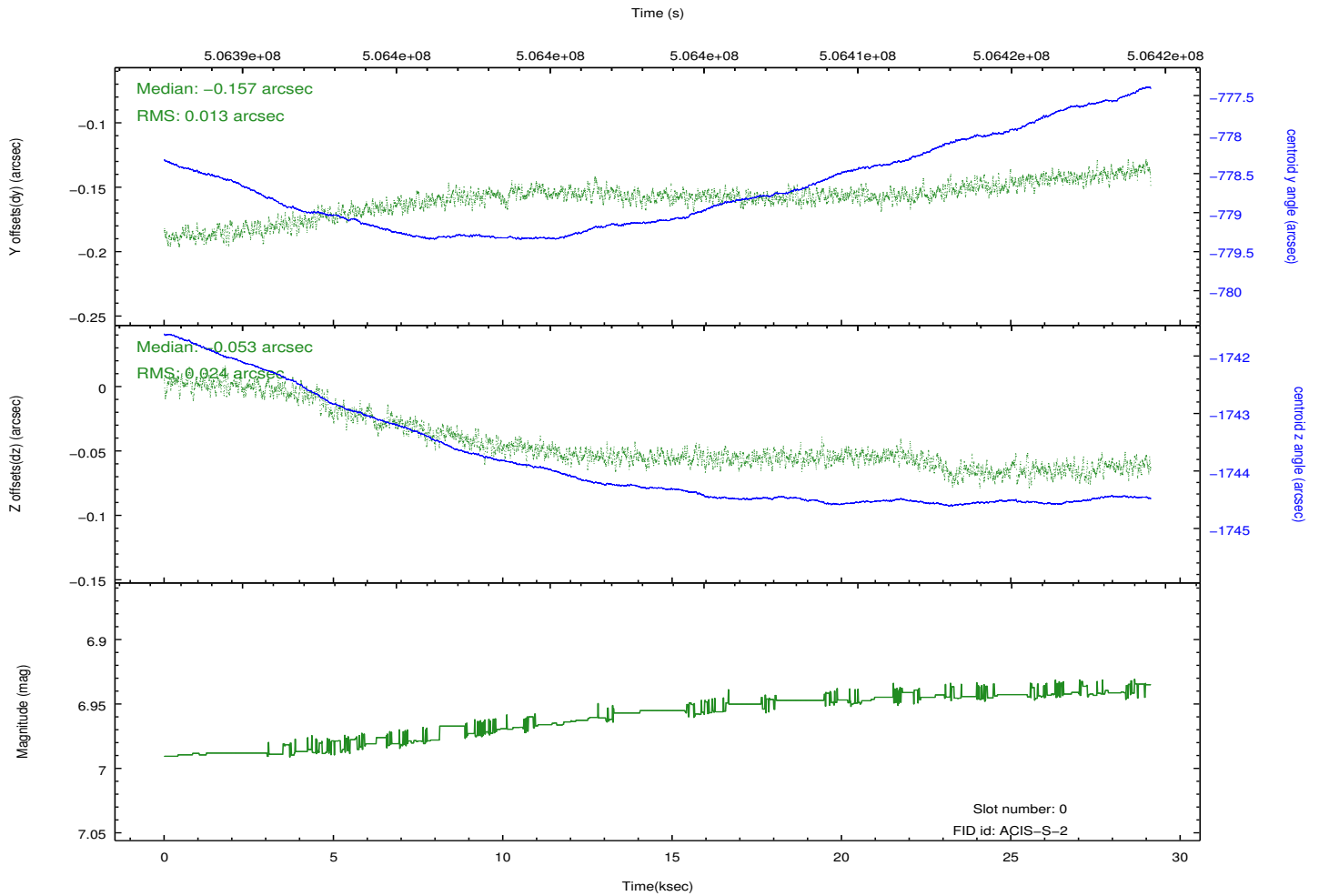
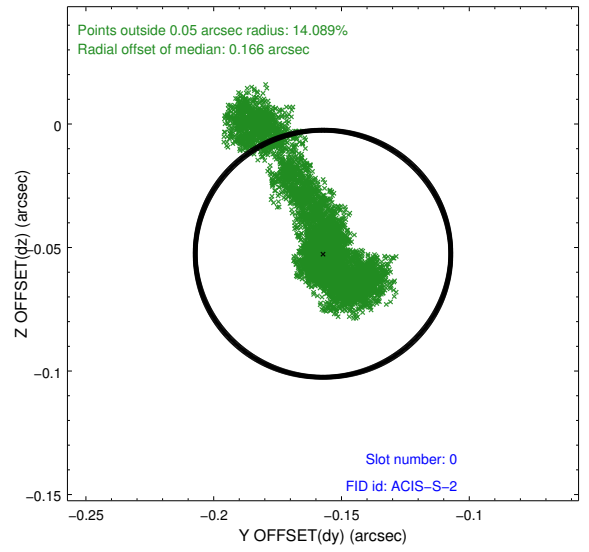
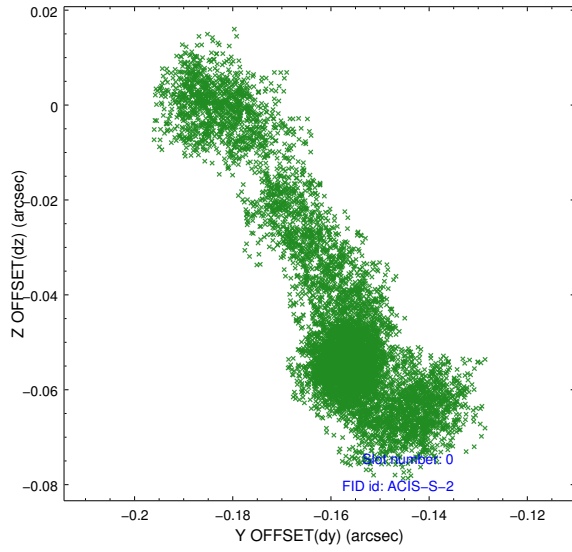


Time (s)

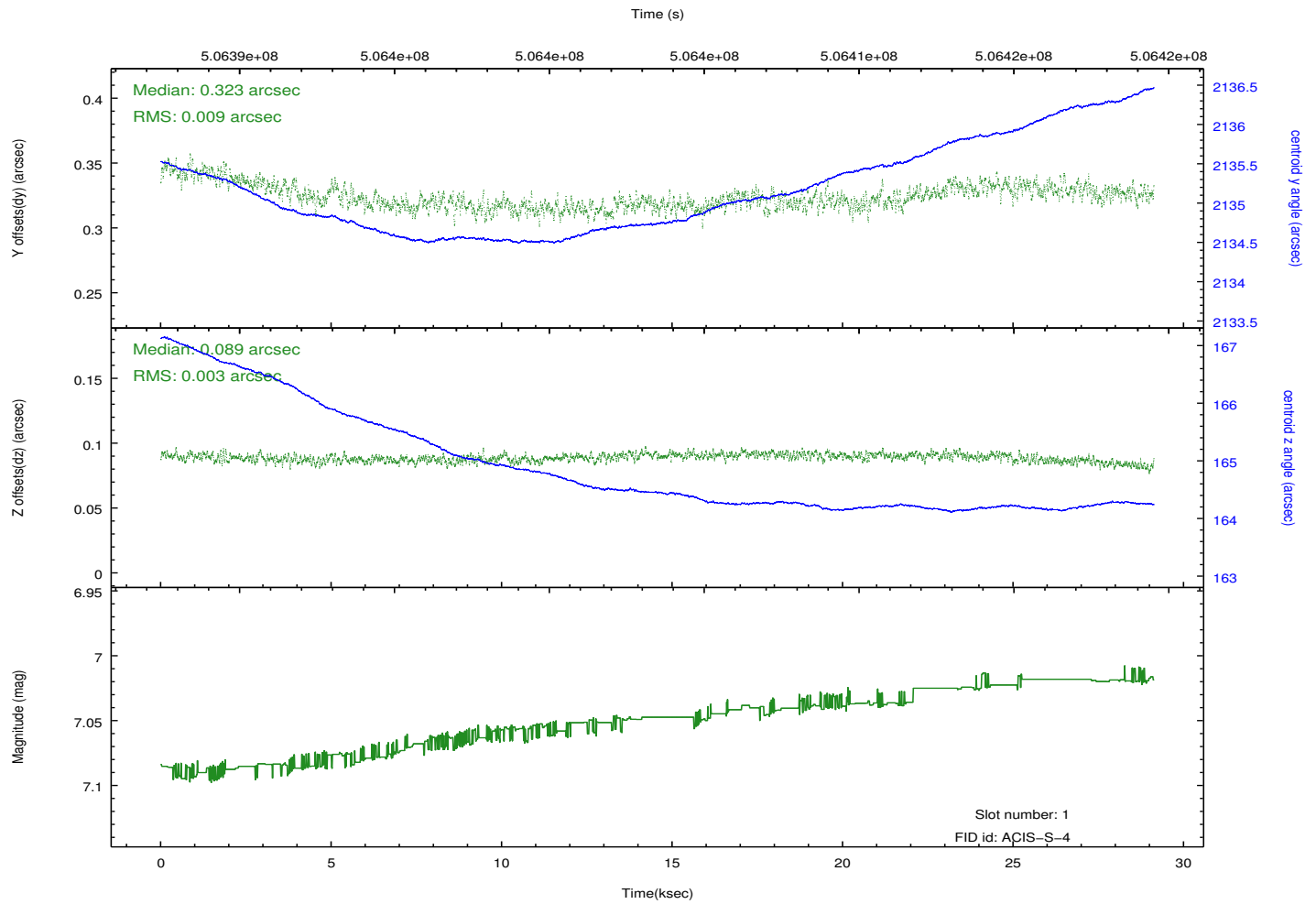
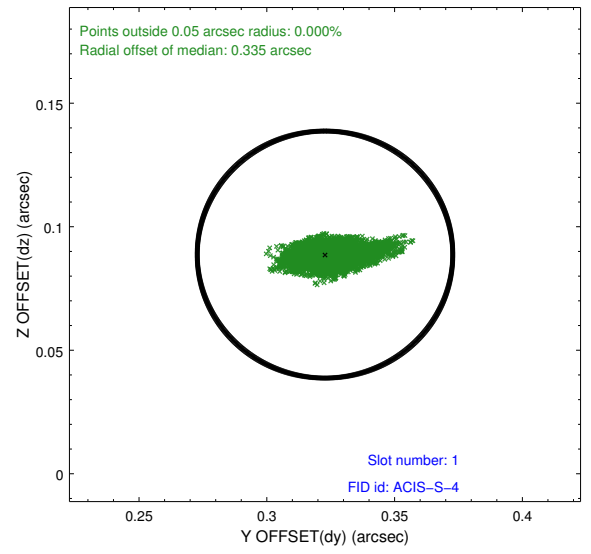
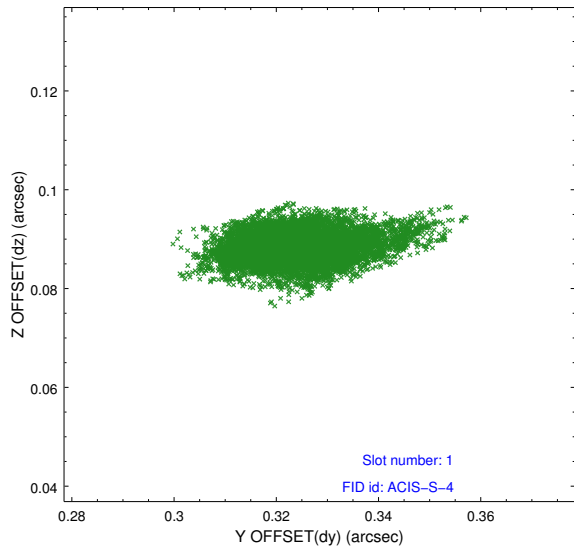


2.5 FID Slots

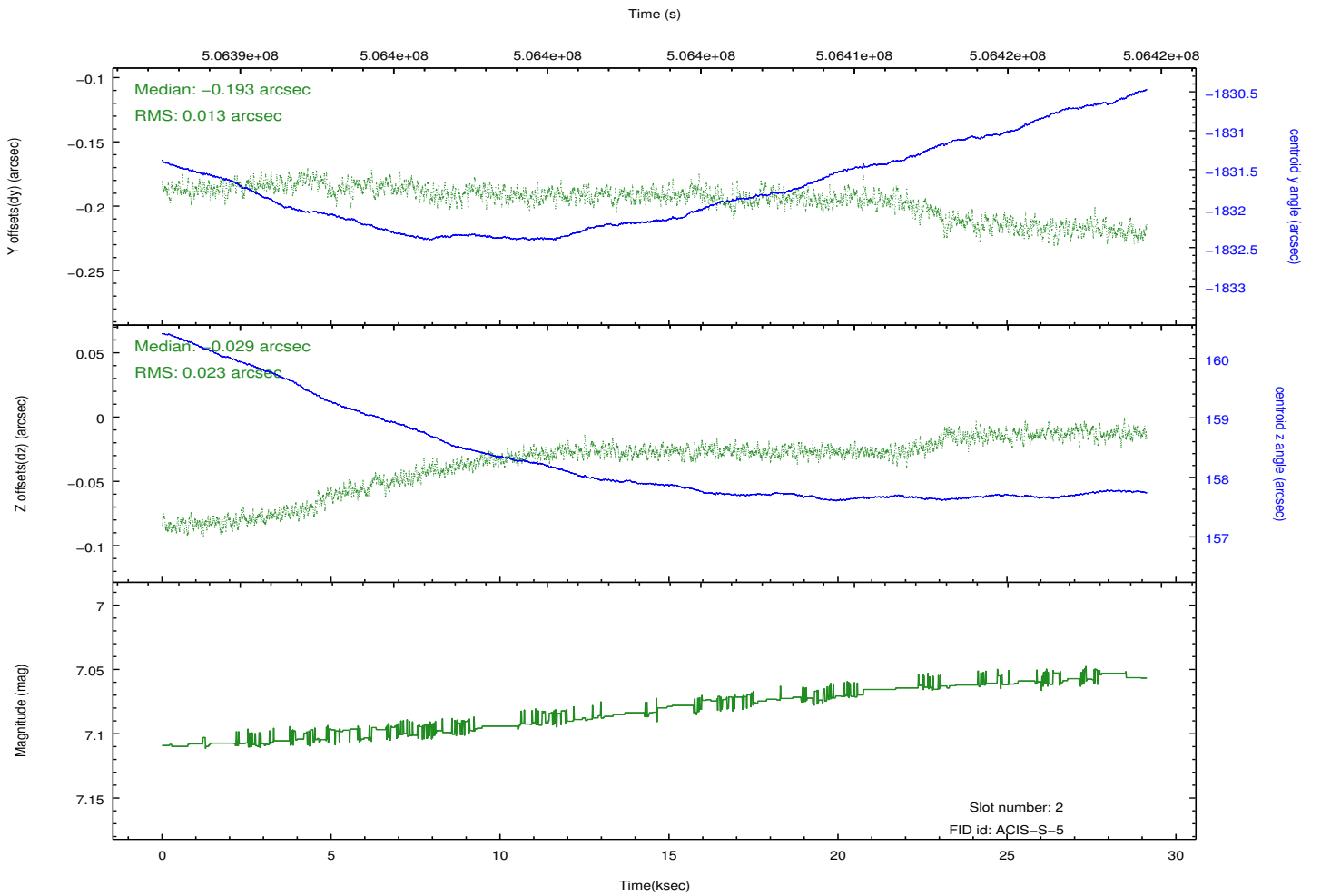
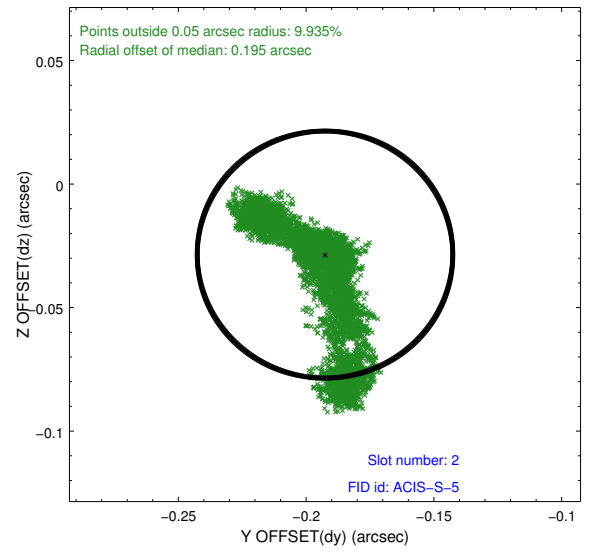
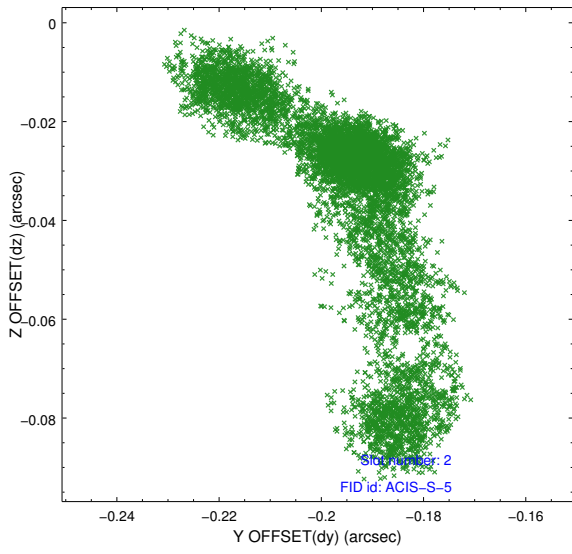
2.5.1 Slot 0



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)	2014.12.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.965442888916

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.