

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 14586 - L2 Version 2
Chandra X-Ray Center

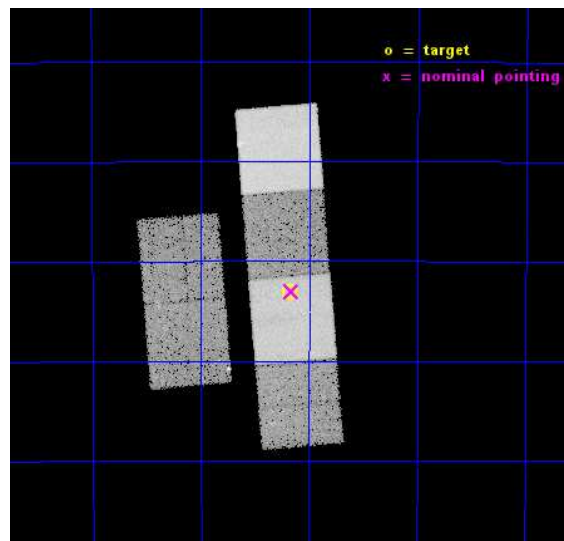
L2 Processing Date : Dec 10 2014

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1 Front

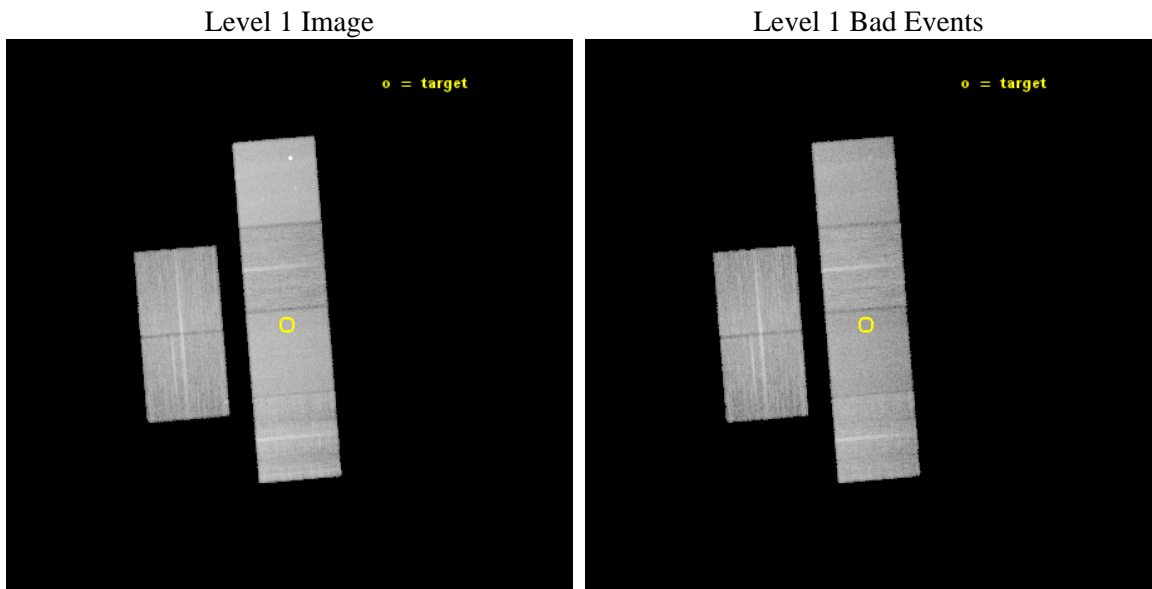
seq_num	200887	Sequence number
obs_id	14586	Observation id
title	COMPACT AND DIFFUSE X-RAY SOURCES IN THE YOUNGEST PLANETARY NEBULAE	
observer	Dr. Joel Kastner	Principal investigator
object	IC 4637	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	256.29375	Observer's specified target RA [deg]
dec_targ	-40.885667	Observer's specified target Dec [deg]
ra_nom	256.29055622438	Nominal RA [deg]
dec_nom	-40.883847640241	Nominal Dec [deg]
roll_nom	85.274643359914	Nominal Roll [deg]
revision	2	Processing version of data
ontime	29964.799888432	Sum of GTIs [s]
livetime	29585.367549608	Livetime [s]
ontime2	29961.558828115	Sum of GTIs [s]
ontime3	29964.799888432	Sum of GTIs [s]
ontime5	29964.799888432	Sum of GTIs [s]
ontime6	29964.799888432	Sum of GTIs [s]
ontime7	29964.799888432	Sum of GTIs [s]
ontime8	29961.558888078	Sum of GTIs [s]
l2events	244870	Number of level 2 events



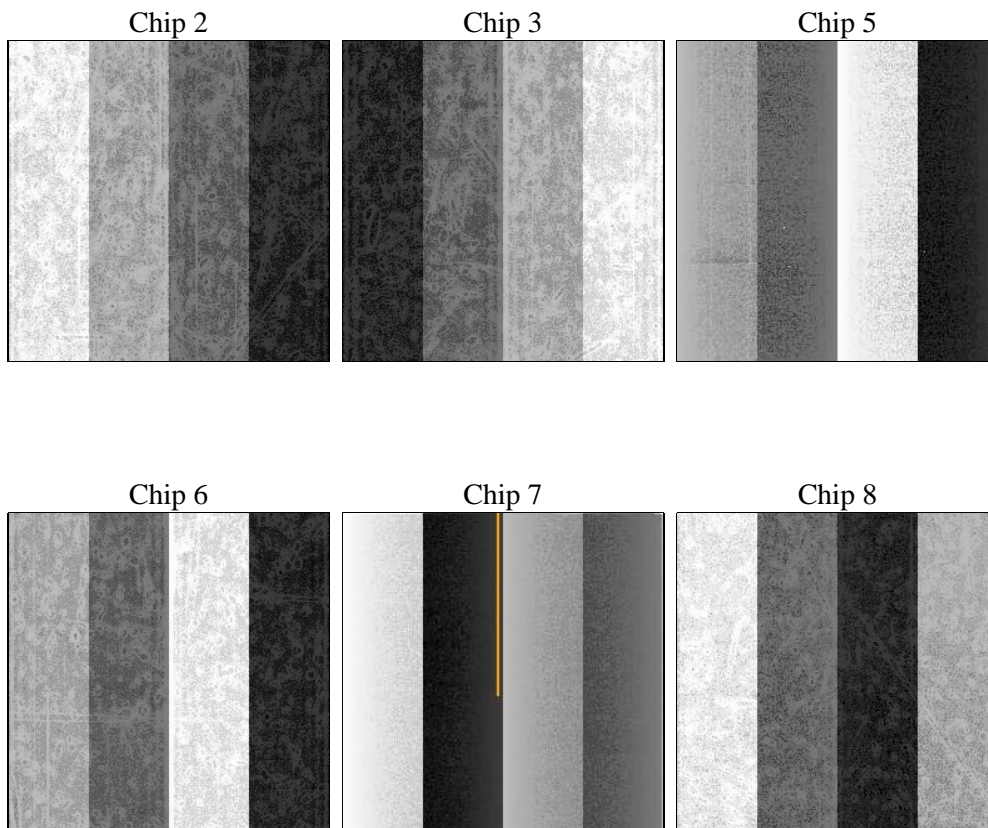
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	29964.799888432	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	29961.558828115	Sum of GTIs [s]
date	2014-12-10T16:18:28	Date and time of file creation	ontime3	29964.799888432	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	29964.799888432	Sum of GTIs [s]
			ontime6	29964.799888432	Sum of GTIs [s]
			ontime7	29964.799888432	Sum of GTIs [s]
			ontime8	29961.558888078	Sum of GTIs [s]
			l1events	998492	Number of level 1 events

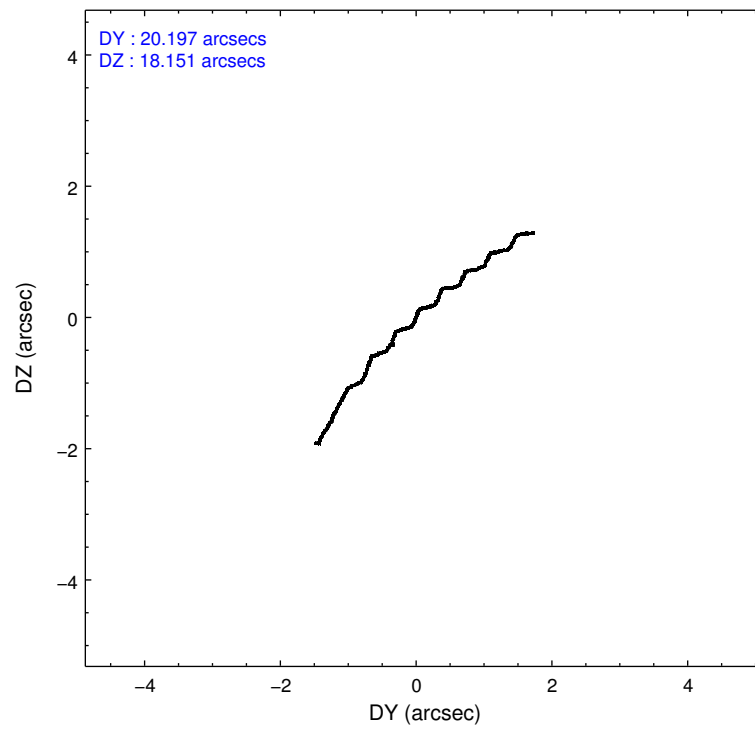
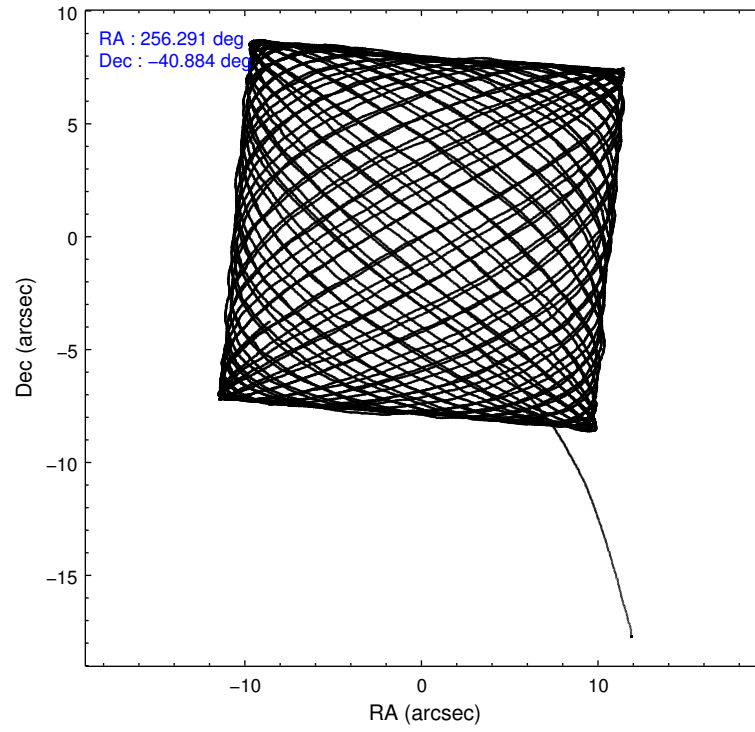
2.1.4 Events

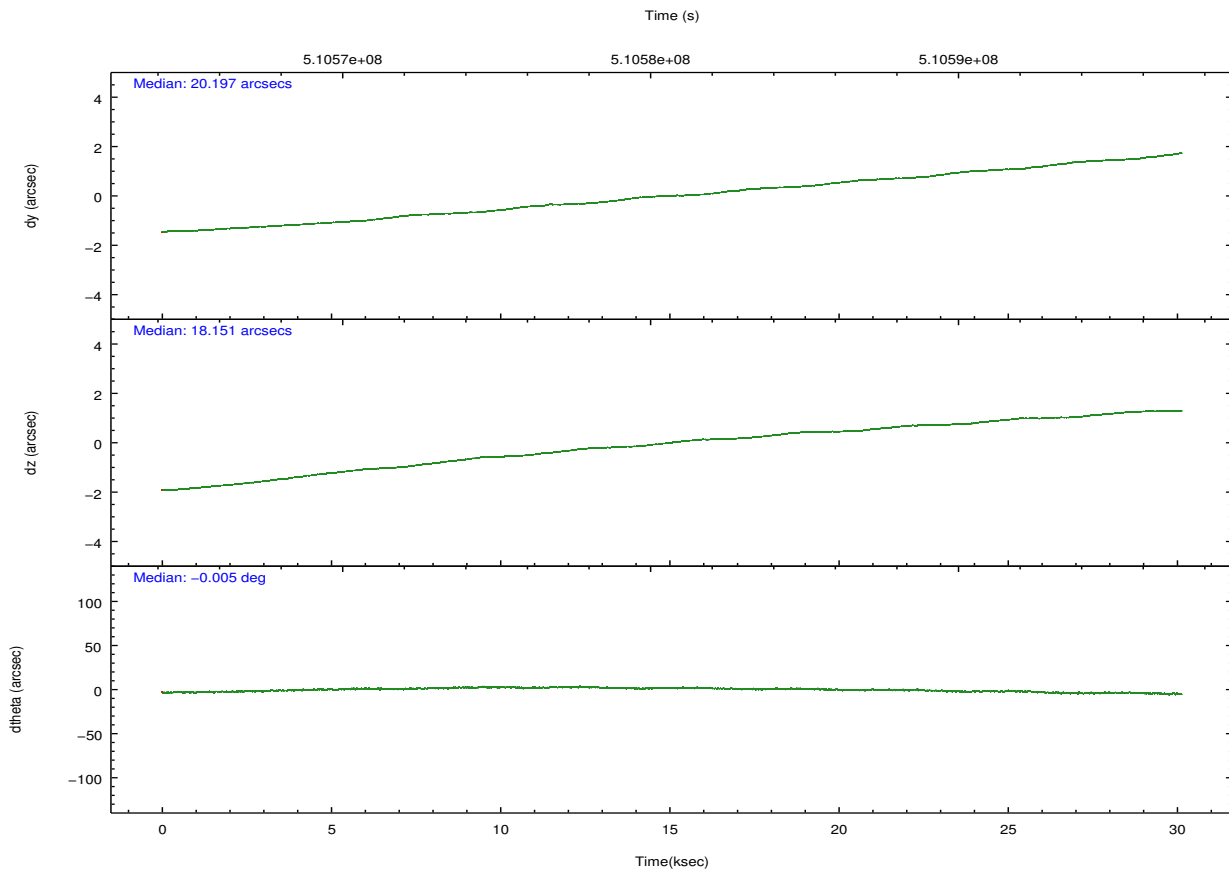
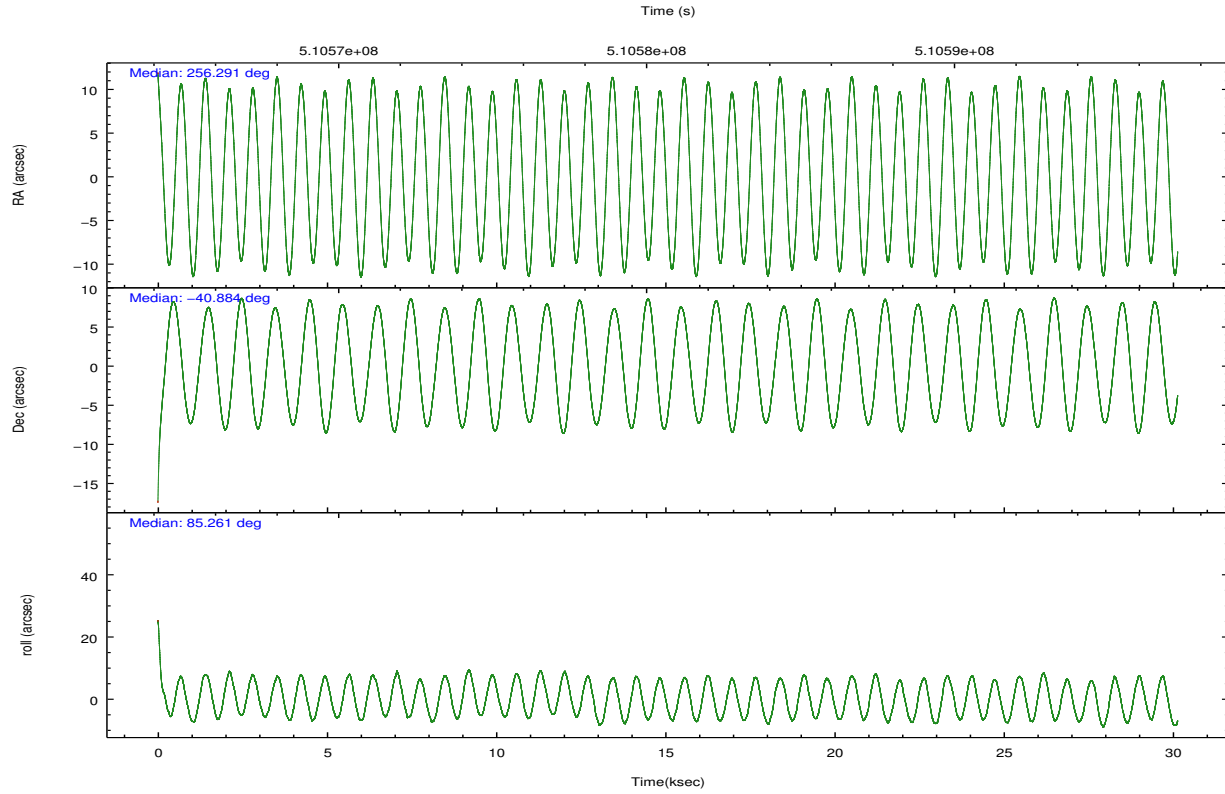
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	138135	128944	225603	137553	185248	183009	grade 0 events	6657	6609	8093	6465	7247	15409
rejected events	120884	112185	117187	119916	103911	131330		4%	5%	3%	4%	3%	8%
rejected %	87%	87%	51%	87%	56%	71%	grade 1 events	96	84	519	76	215	145
								0%	0%	0%	0%	0%	0%
							grade 2 events	4097	3538	34504	3875	16753	11940
								2%	2%	15%	2%	9%	6%
							grade 3 events	1667	1685	3534	1706	6944	5440
								1%	1%	1%	1%	3%	2%
							grade 4 events	1703	1679	3413	1669	6823	5175
								1%	1%	1%	1%	3%	2%
							grade 5 events	6182	7109	16284	7052	18803	10238
								4%	5%	7%	5%	10%	5%
							grade 6 events	3129	3249	58892	3924	43580	13717
								2%	2%	26%	2%	23%	7%
							grade 7 events	114604	104991	100364	112786	84883	120945
								82%	81%	44%	81%	45%	66%

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	256.306456	256.2905562243809	CCD I2 on	O3	Y
[deg] Pointing Dec	-40.908404	-40.88384764024056	CCD I3 on	O2	Y
[deg] Pointing Roll	85.128421	85.27464335991402	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	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	510565756.184000	510564638.77944	CCD S5 on	N	N
Observation start date	2014-03-07T07:48:09	2014-03-07T07:30:38	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	510595756.184000	510596951.39372	On-chip summing requested	N	N
Observation end date	2014-03-07T16:08:09	2014-03-07T16:29:11	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect





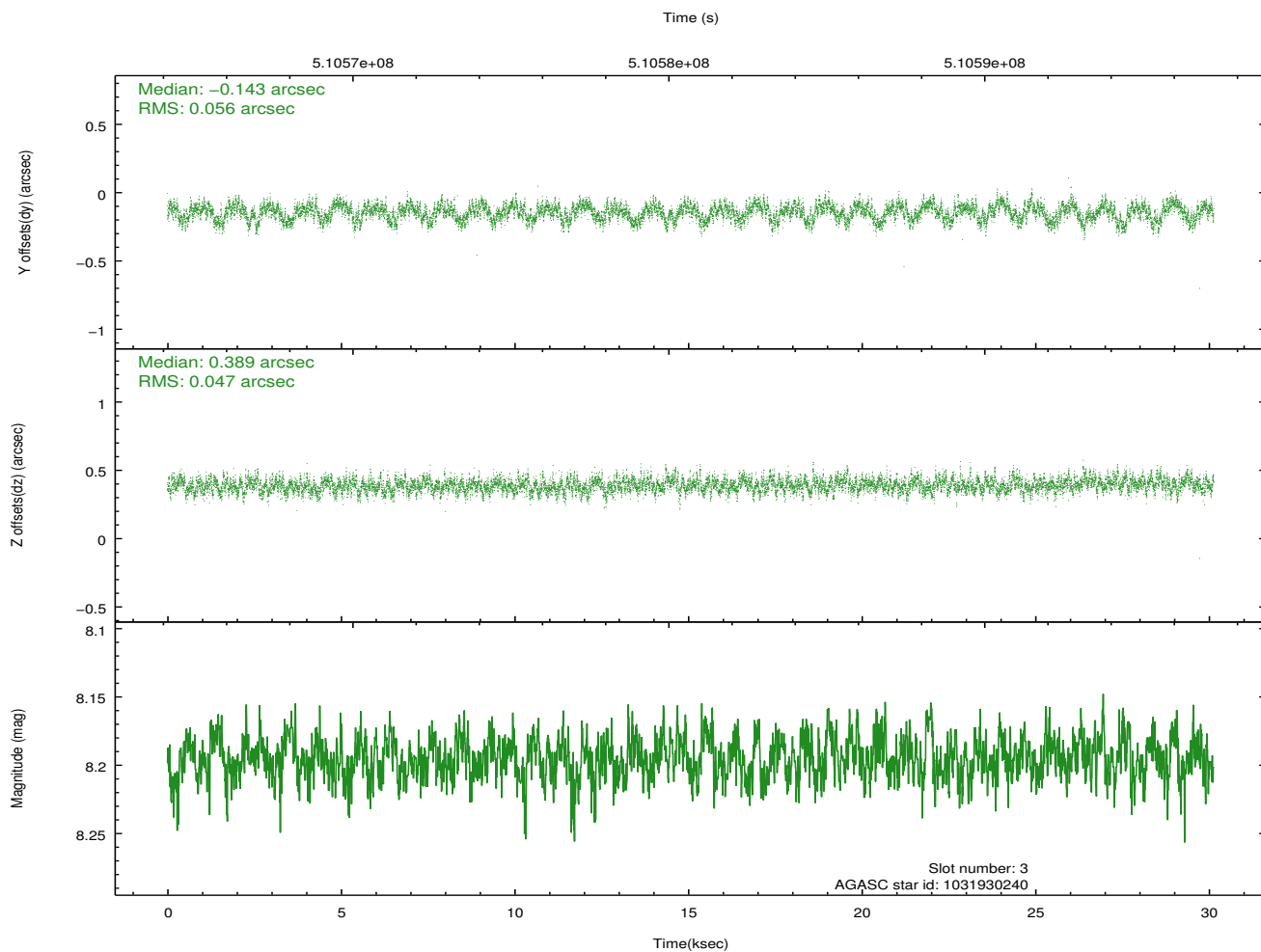
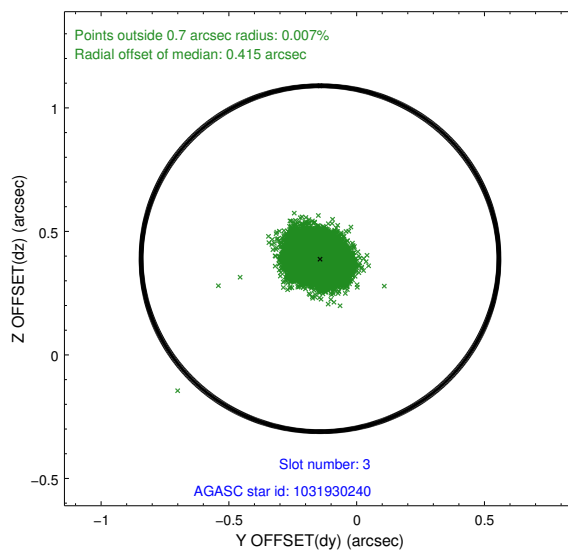
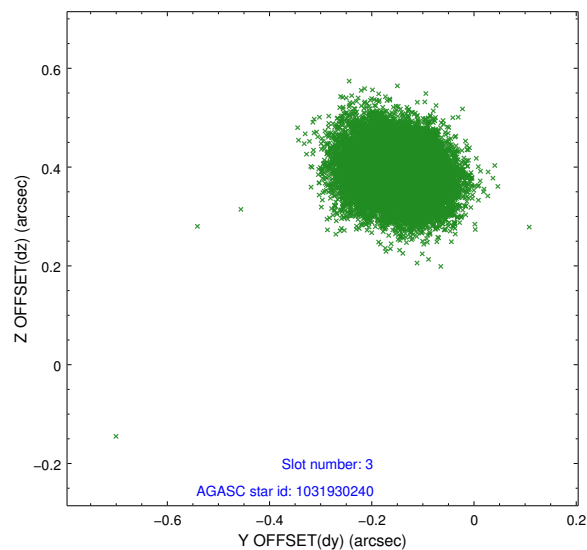
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.13	7351	0.038	-0.008	0.034	0.069	0.000000	0.000000	922.74	-1735.10
1	FID		ACIS-S-4	7.14	7350	0.196	-0.006	0.017	0.038	0.000000	0.000000	2140.34	169.00
2	FID		ACIS-S-5	7.16	7351	-0.257	0.028	0.031	0.052	0.000000	0.000000	-1826.35	162.72
3	GUIDE	used	1031930240	8.20	14697	-0.143	0.389	0.079	0.125	257.160708	-40.849868	396.71	-2300.04
4	GUIDE	used	1031930696	6.92	14701	-0.069	0.282	0.071	0.112	257.072028	-41.024503	-248.25	-2107.65
5	GUIDE	used	1031937520	8.21	14699	0.100	0.124	0.091	0.147	256.333720	-41.104608	-697.01	-133.50
6	GUIDE	used	1031938144	8.48	14697	-0.025	-0.433	0.086	0.138	255.693343	-40.912652	-162.94	1659.96
7	GUIDE	used	1032466120	9.13	14690	0.137	-0.364	0.100	0.167	255.616572	-41.318828	-1638.40	1732.45

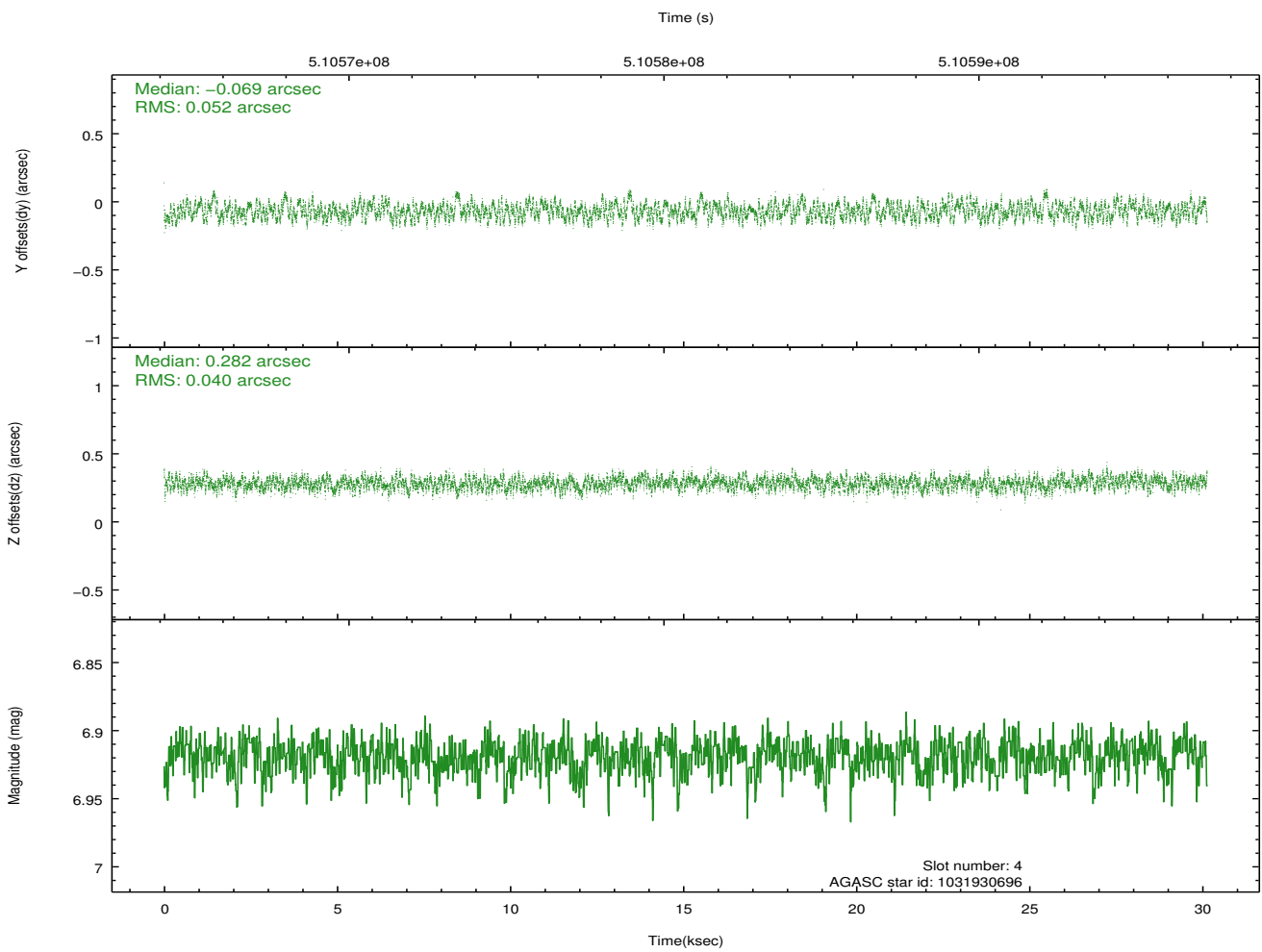
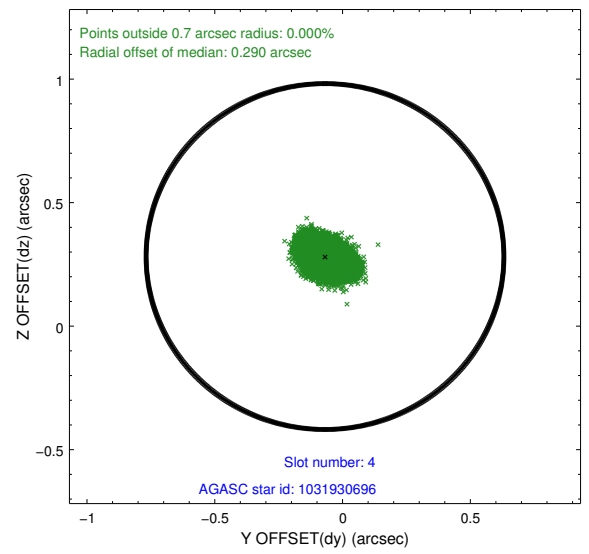
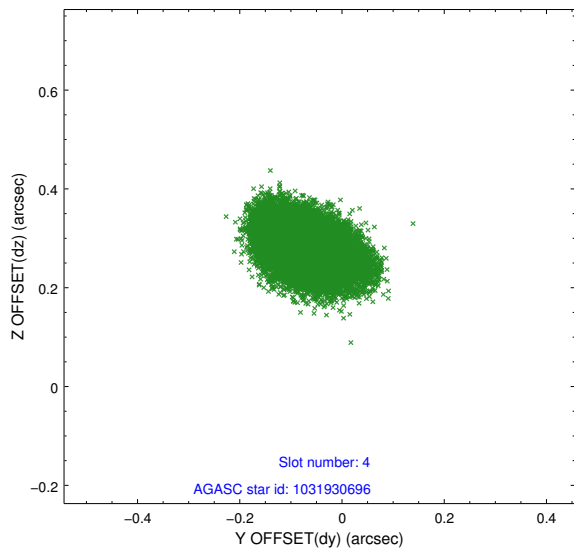
∞

2.4 Star Slots

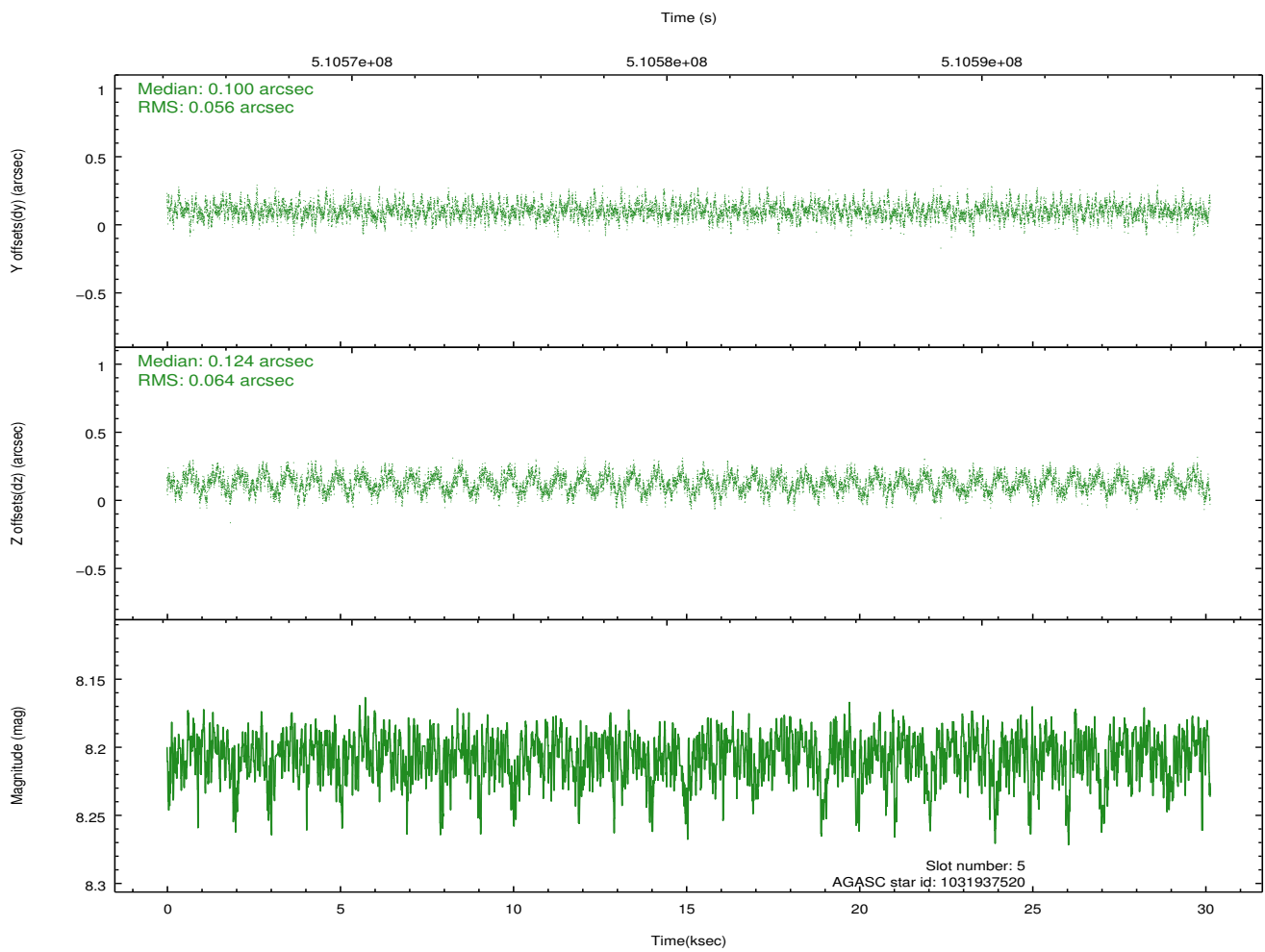
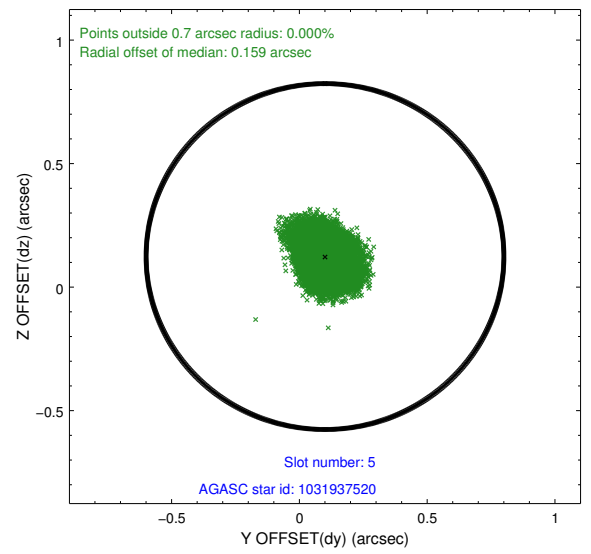
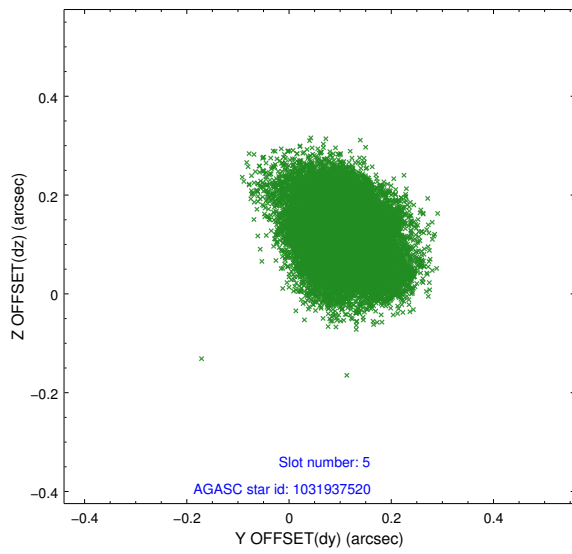
2.4.1 Slot 3



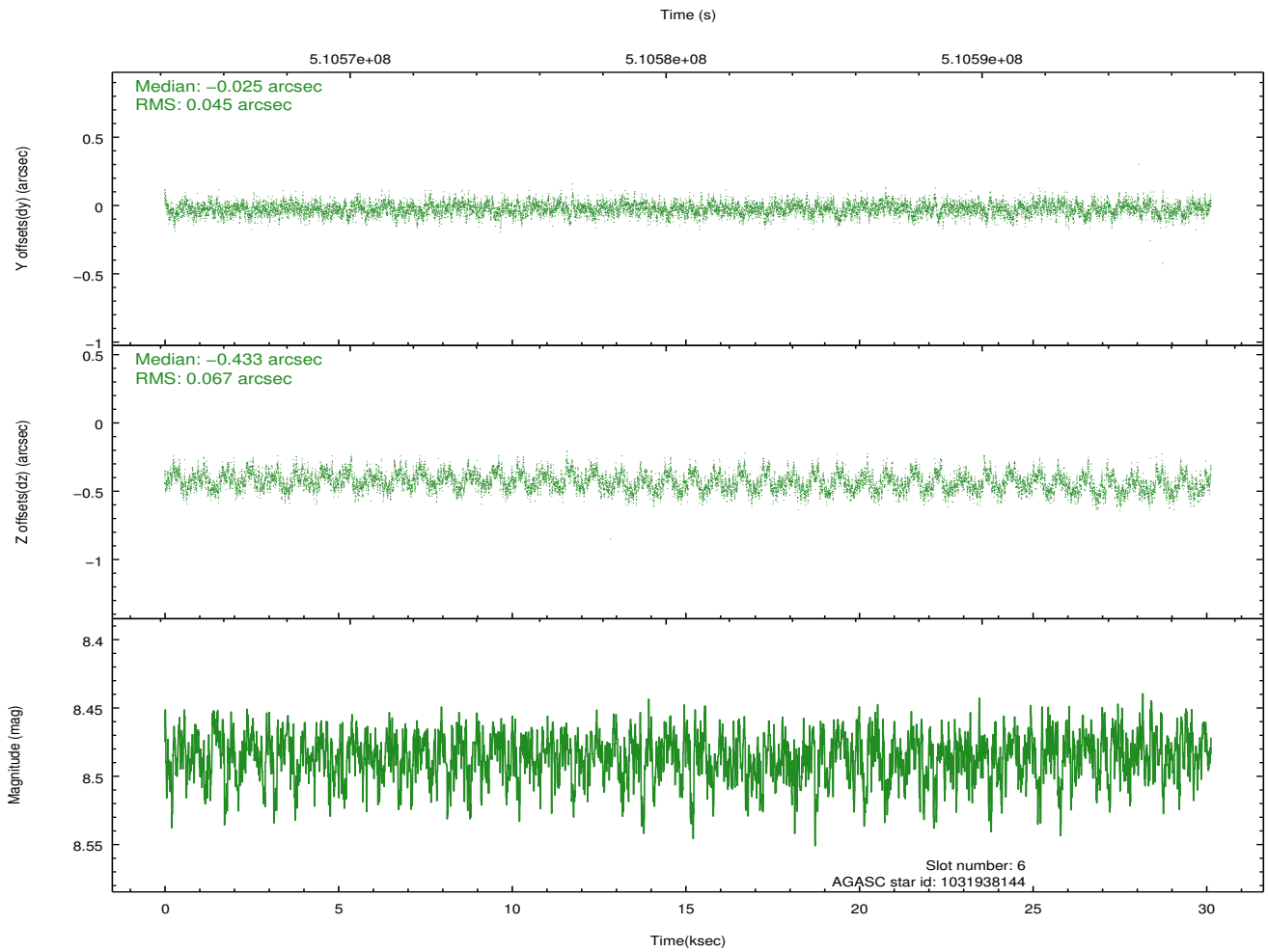
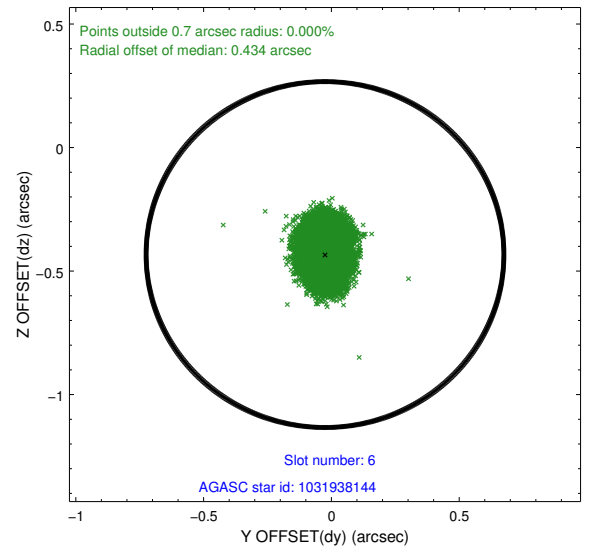
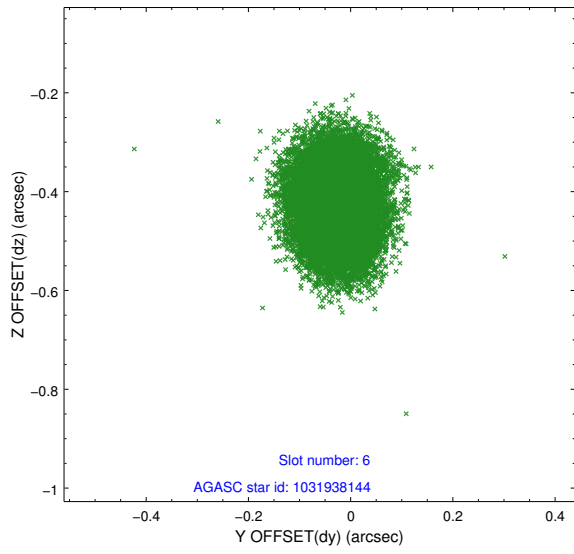
2.4.2 Slot 4



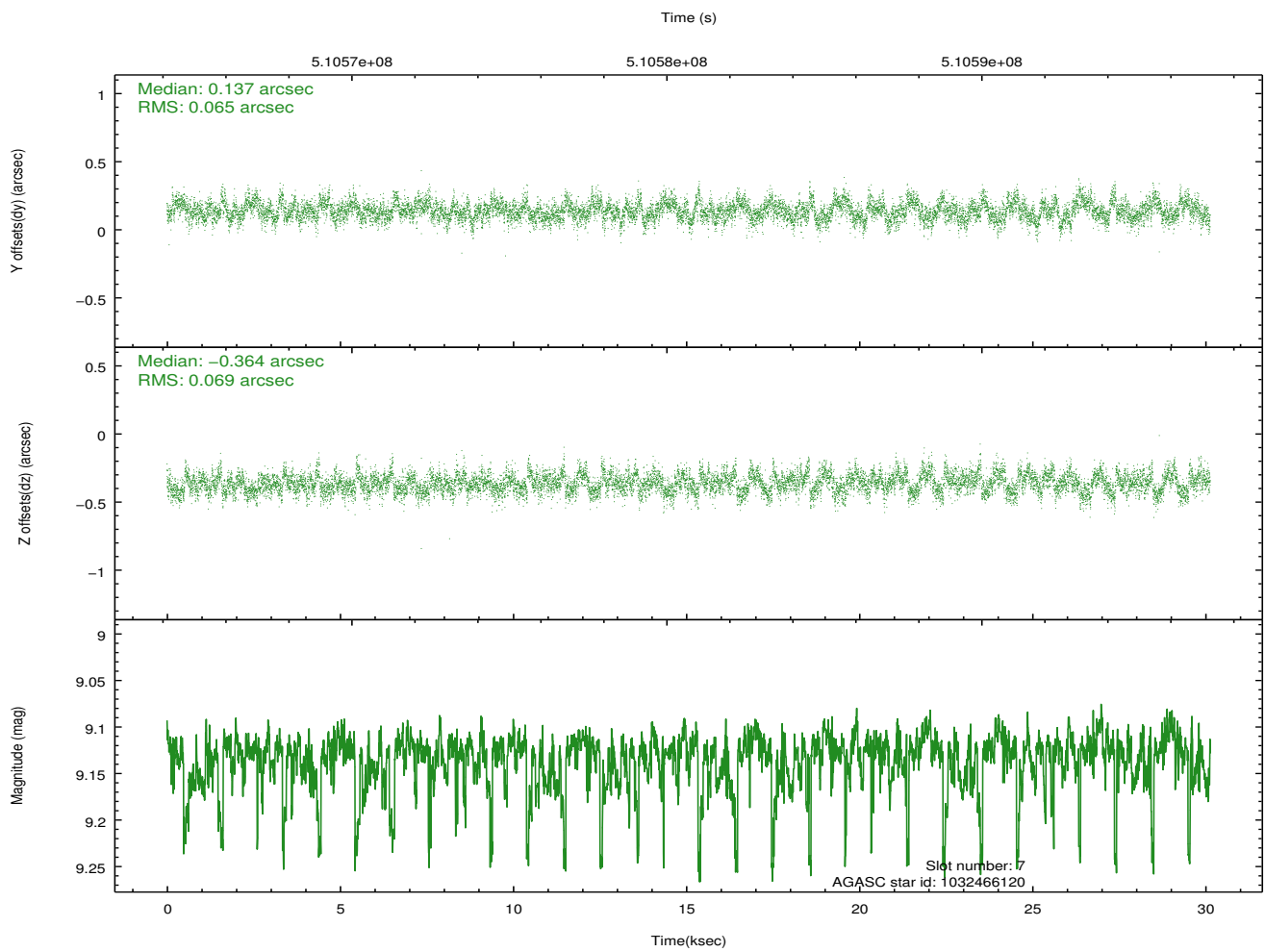
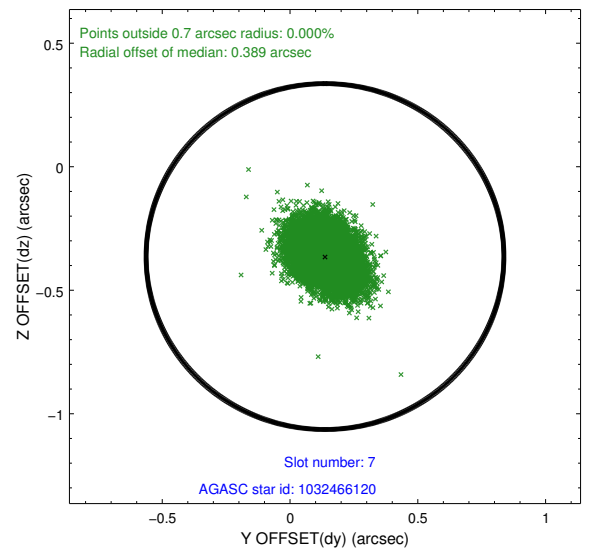
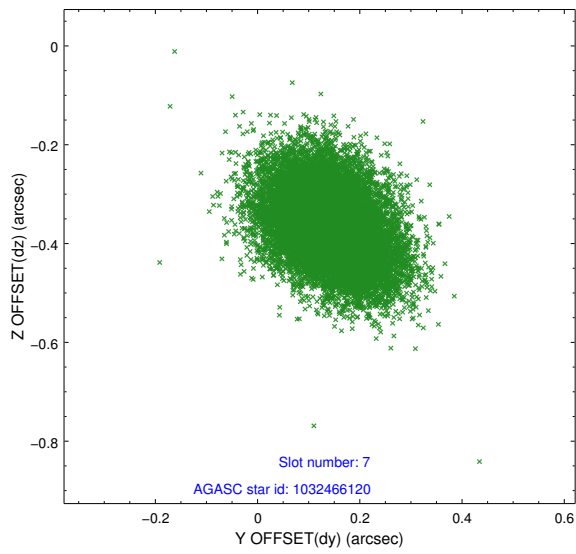
2.4.3 Slot 5



2.4.4 Slot 6

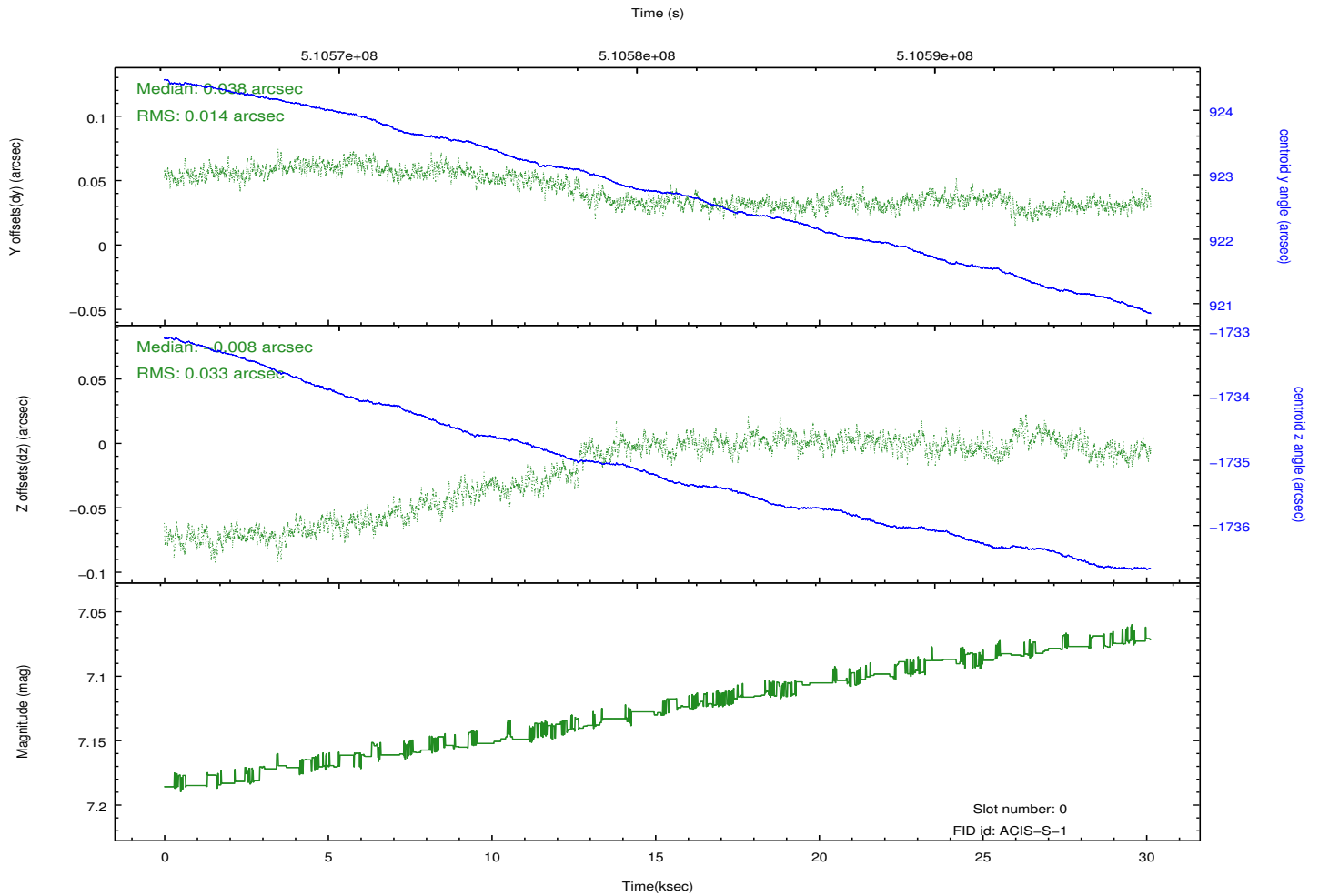
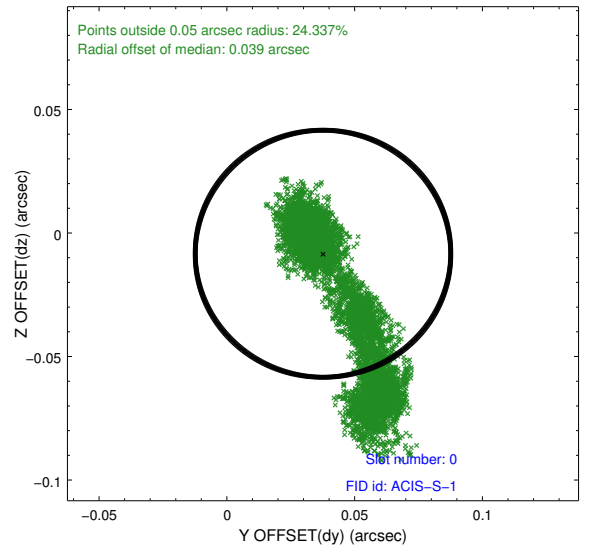
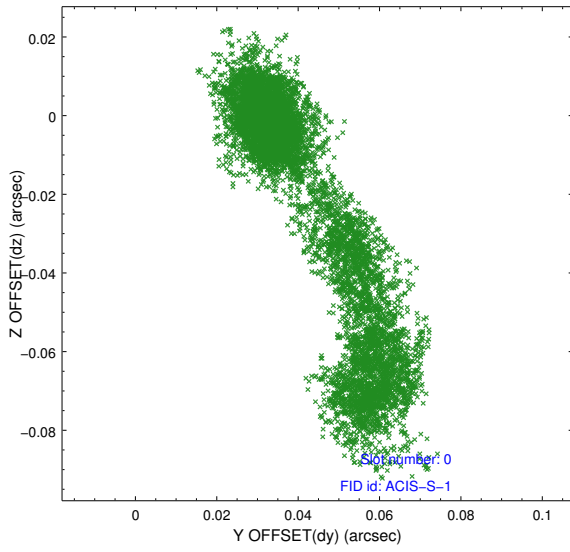


2.4.5 Slot 7

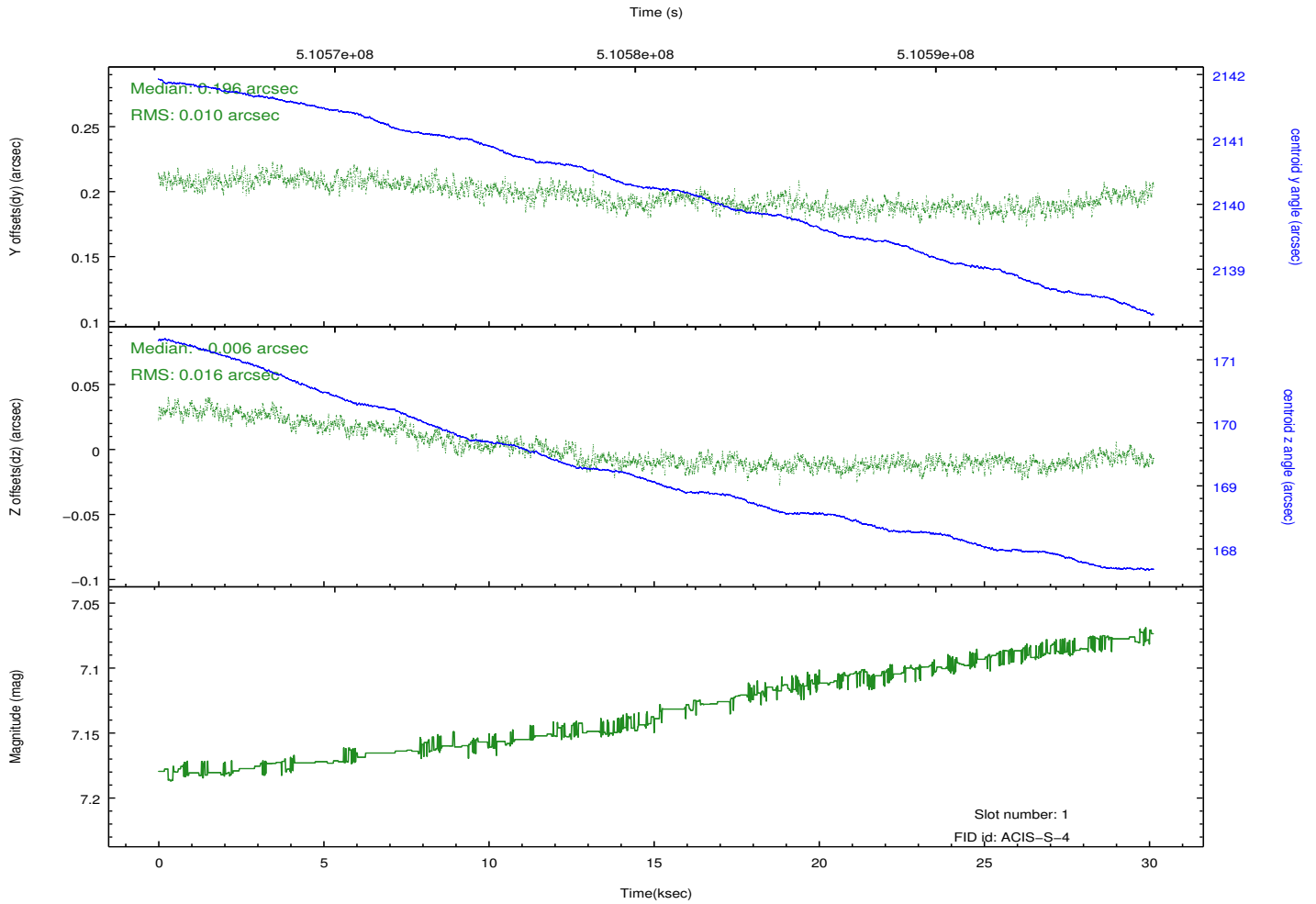
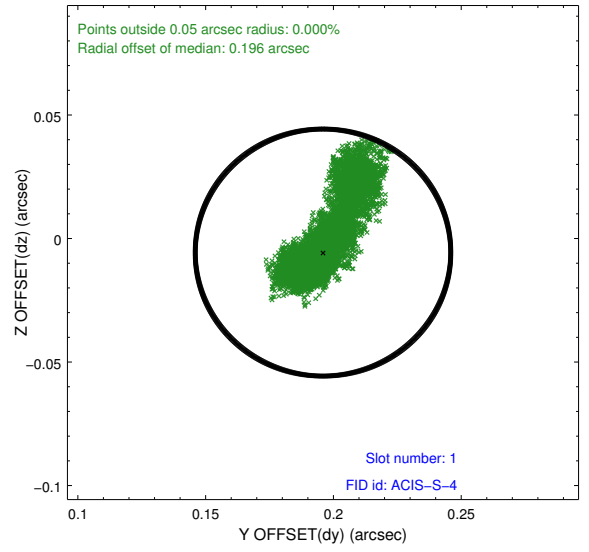
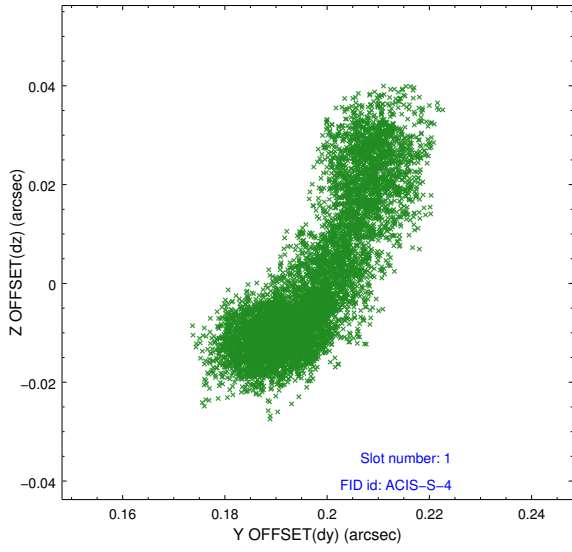


2.5 FID Slots

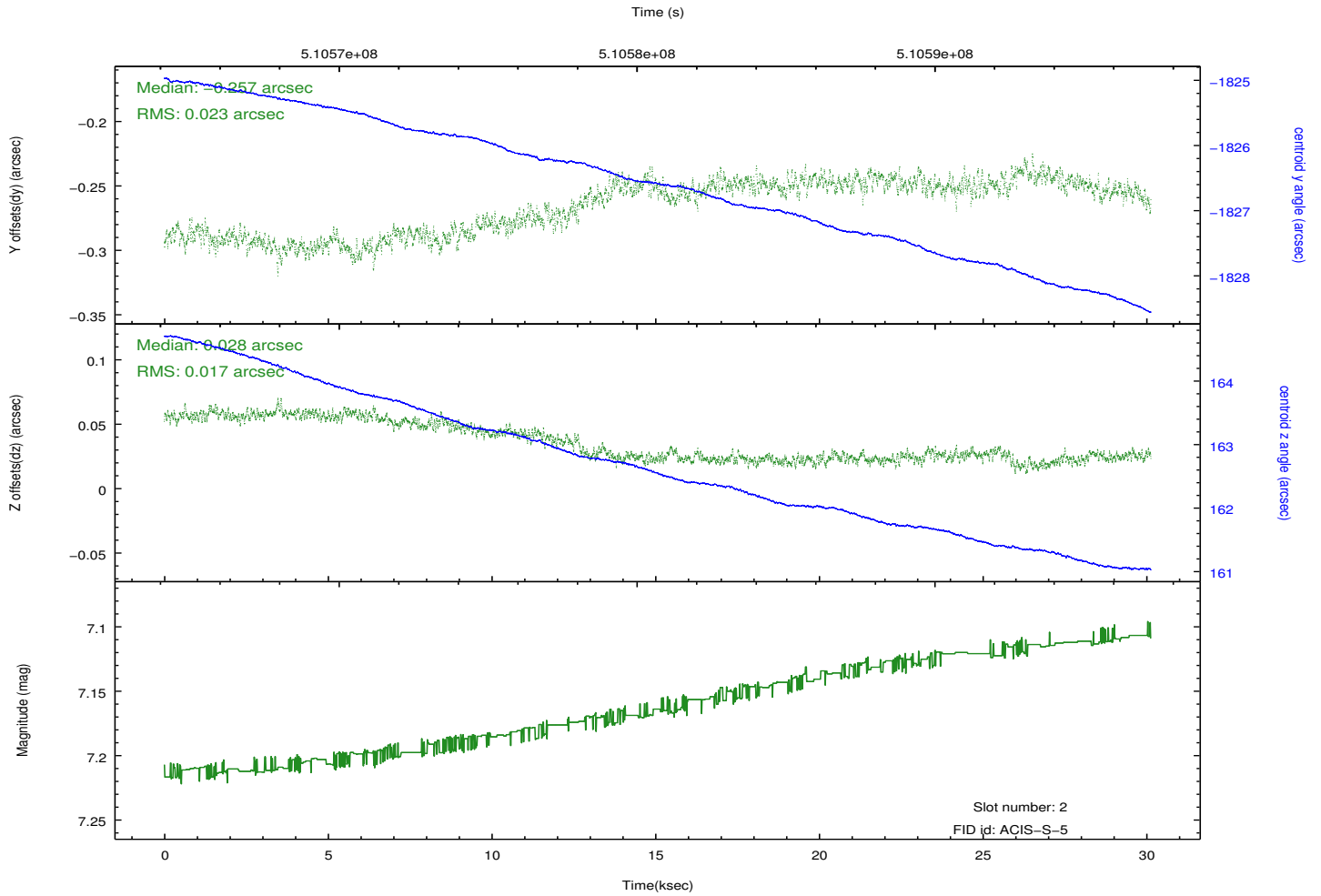
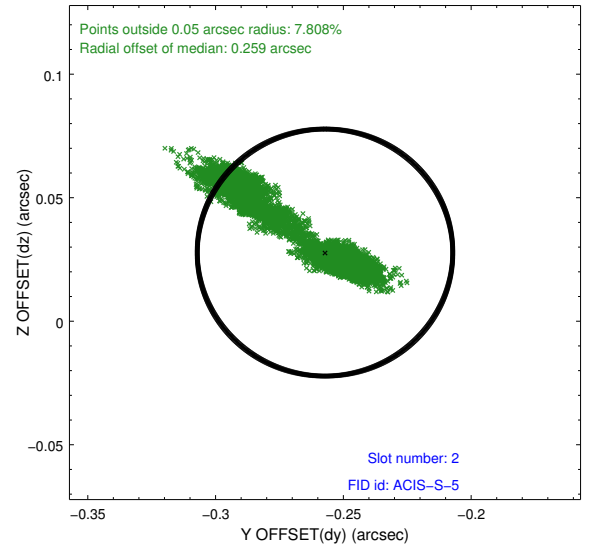
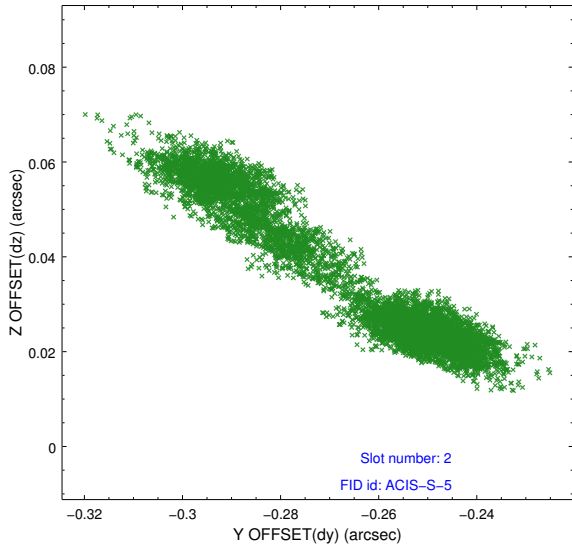
2.5.1 Slot 0



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)	2014.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.964799888432

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.