

V&V Reference Report

L2 ASCDS Version : 10

Observation 14597 - L2 Version 2
Chandra X-Ray Center

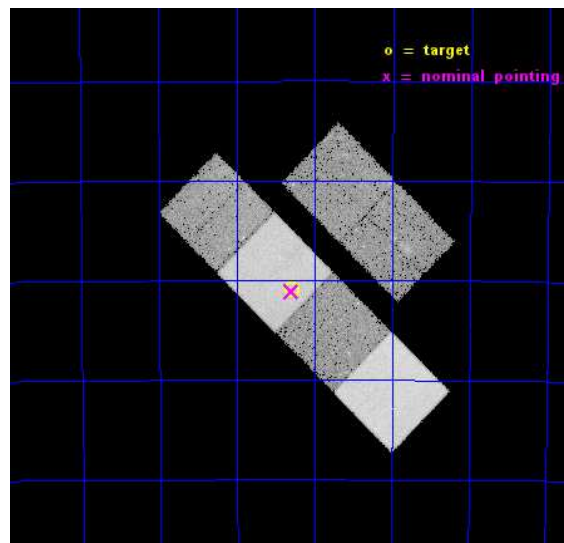
L2 Processing Date : Dec 4 2014

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1 Front

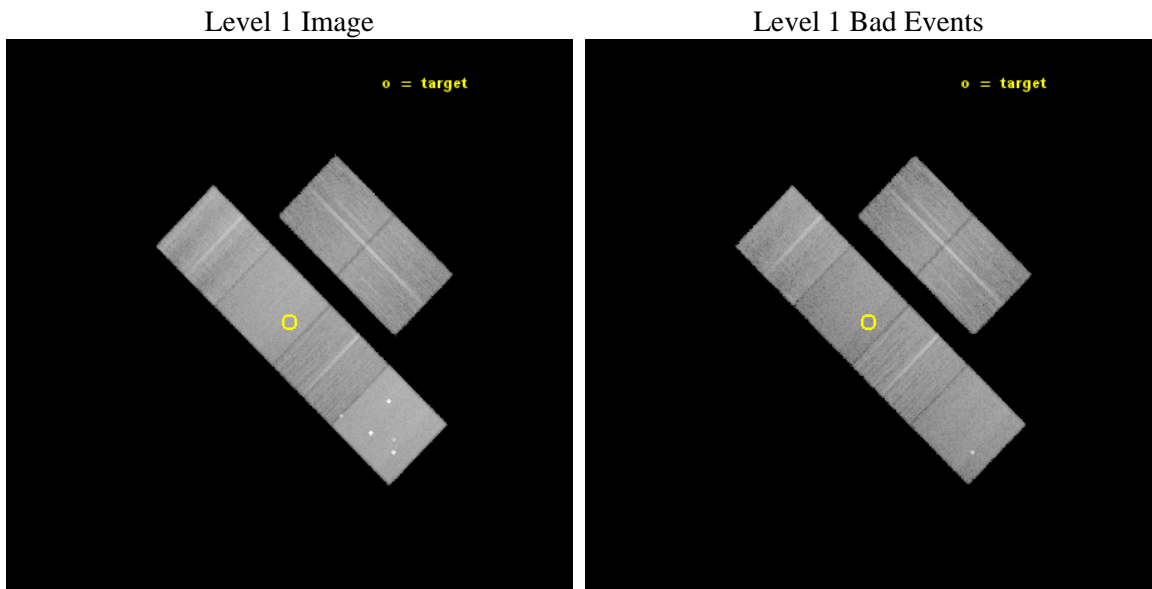
seq_num	200898	Sequence number
obs_id	14597	Observation id
title	COMPACT AND DIFFUSE X-RAY SOURCES IN THE YOUNGEST PLANETARY NEBULAE	
observer	Dr. Joel Kastner	Principal investigator
object	NGC 3918	Source name
dtycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	177.57375	Observer's specified target RA [deg]
dec_targ	-57.182472	Observer's specified target Dec [deg]
ra_nom	177.57493847462	Nominal RA [deg]
dec_nom	-57.18542562009	Nominal Dec [deg]
roll_nom	224.48945155953	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30427.913239419	Sum of GTIs [s]
livetime	30042.616680492	Livetime [s]
ontime2	30427.954279423	Sum of GTIs [s]
ontime3	30427.79011941	Sum of GTIs [s]
ontime5	30427.872199416	Sum of GTIs [s]
ontime6	30427.831159413	Sum of GTIs [s]
ontime7	30427.913239419	Sum of GTIs [s]
ontime8	30427.749079406	Sum of GTIs [s]
l2events	263594	Number of level 2 events



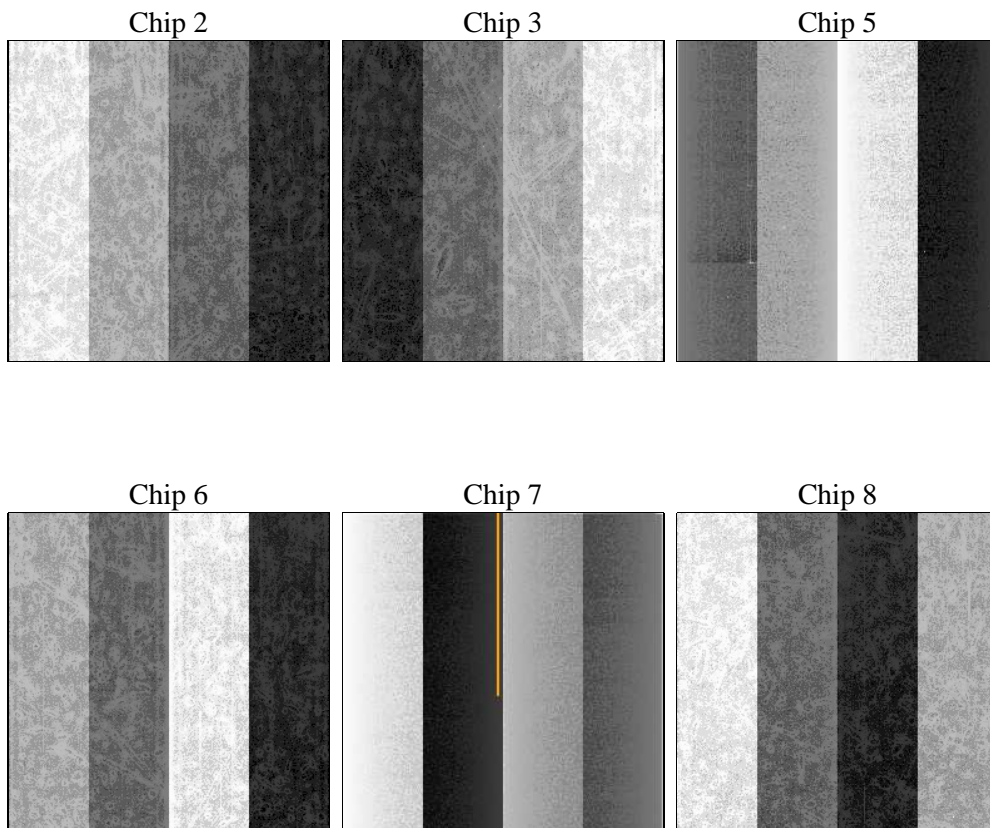
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30463.822000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	30427.913239419	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	30427.954279423	Sum of GTIs [s]
date	2014-12-04T22:54:18	Date and time of file creation	ontime3	30427.79011941	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	30427.872199416	Sum of GTIs [s]
			ontime6	30427.831159413	Sum of GTIs [s]
			ontime7	30427.913239419	Sum of GTIs [s]
			ontime8	30427.749079406	Sum of GTIs [s]
			l1events	1087560	Number of level 1 events

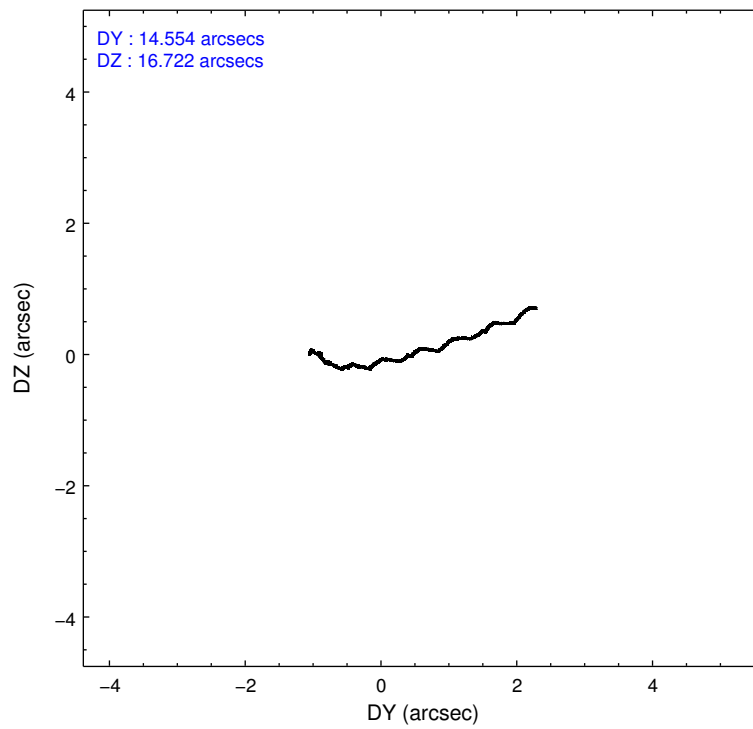
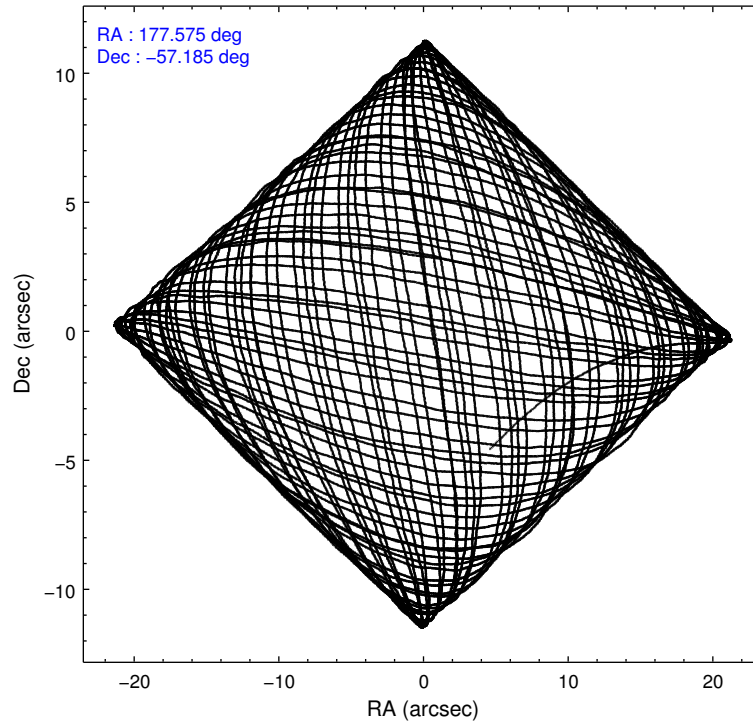
2.1.4 Events

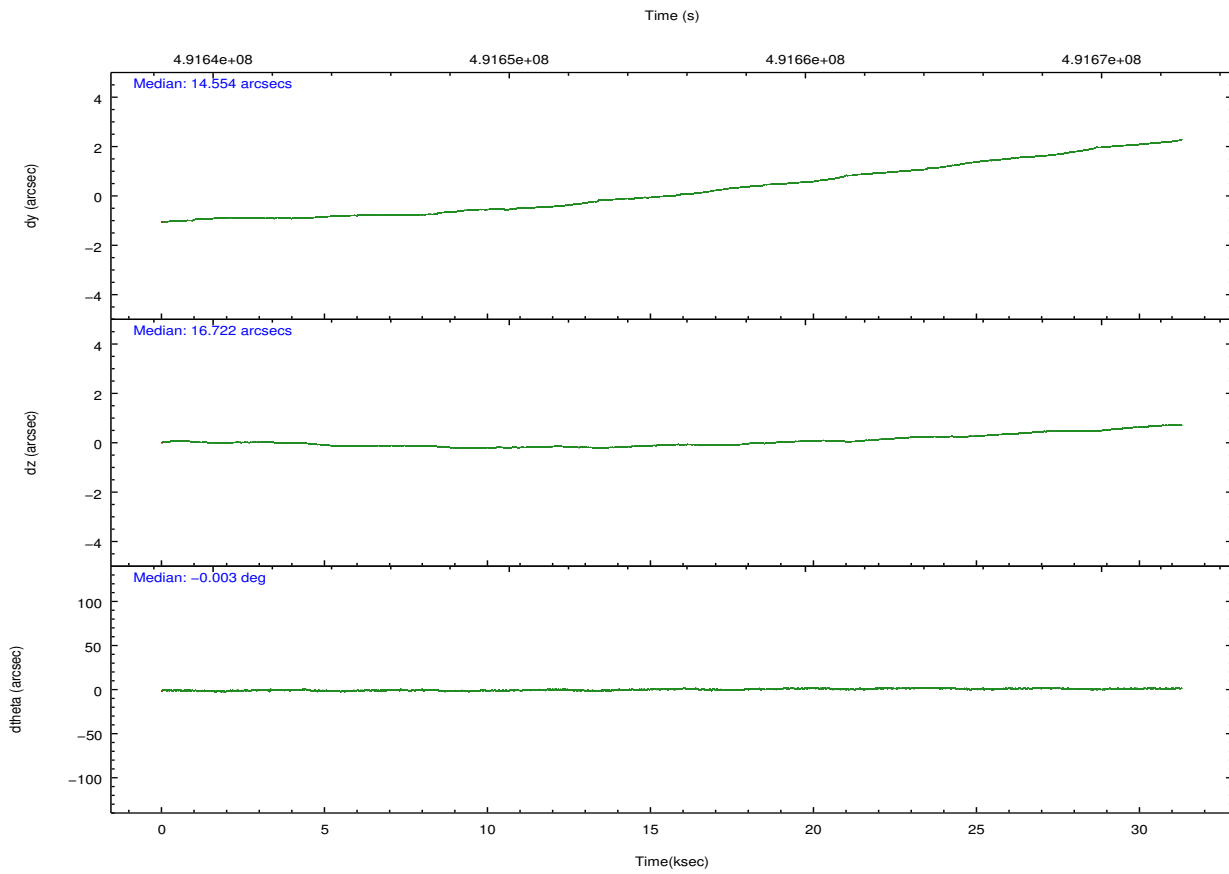
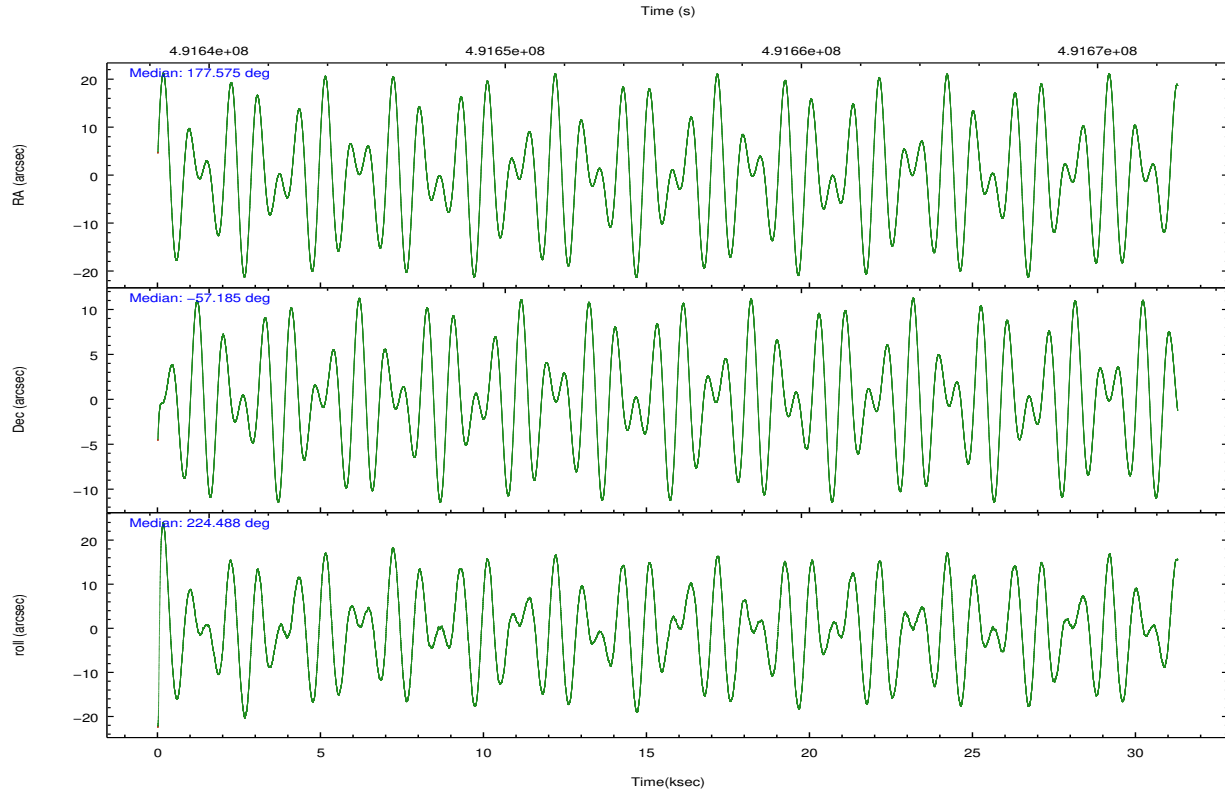
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	143280	138583	258029	149532	200677	197459	grade 0 events	6813	6039	22775	6397	7967	15979
rejected events	125274	121820	126127	131388	112047	143977		4%	4%	8%	4%	3%	8%
rejected %	87%	87%	48%	87%	55%	72%	grade 1 events	86	86	423	90	236	163
								0%	0%	0%	0%	0%	0%
							grade 2 events	4379	3694	37085	3960	18315	12484
								3%	2%	14%	2%	9%	6%
							grade 3 events	1715	1762	4727	1796	7829	5717
								1%	1%	1%	1%	3%	2%
							grade 4 events	1735	1809	4218	1823	7744	5437
								1%	1%	1%	1%	3%	2%
							grade 5 events	6693	7514	18806	7777	21252	11291
								4%	5%	7%	5%	10%	5%
							grade 6 events	3366	3462	63127	4173	46795	13871
								2%	2%	24%	2%	23%	7%
							grade 7 events	118493	114217	106868	123516	90539	132517
								82%	82%	41%	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	177.587729	177.5749384746208	CCD I2 on	O3	Y
[deg] Pointing Dec	-57.158992	-57.18542562009014	CCD I3 on	O2	Y
[deg] Pointing Roll	224.343591	224.4894515595291	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)	491640672.184000	491639252.47995	CCD S5 on	N	N
Observation start date	2013-07-31T06:50:05	2013-07-31T06:27:32	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	491671136.184000	491671361.63169	On-chip summing requested	N	N
Observation end date	2013-07-31T15:17:49	2013-07-31T15:22:41	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect





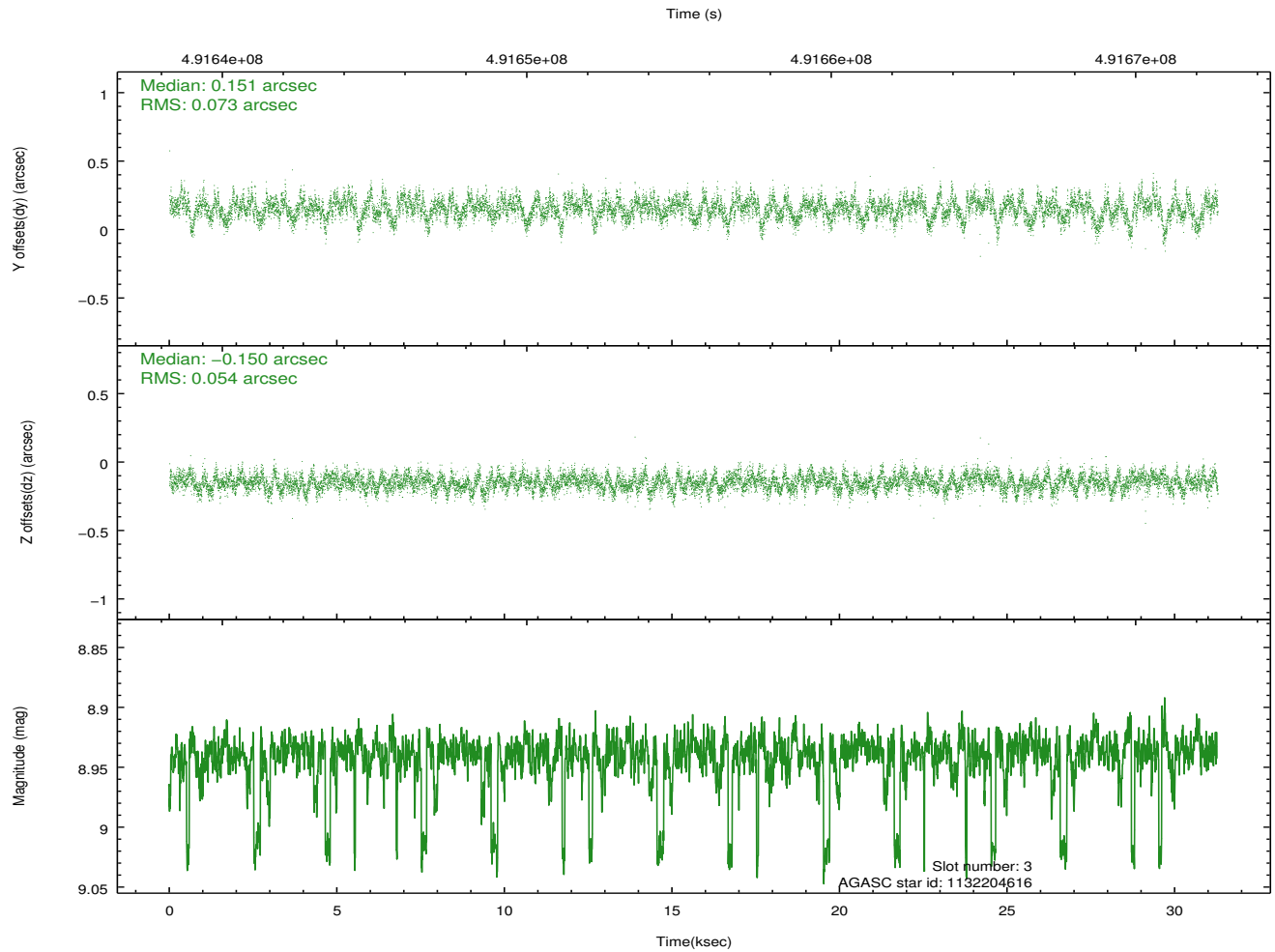
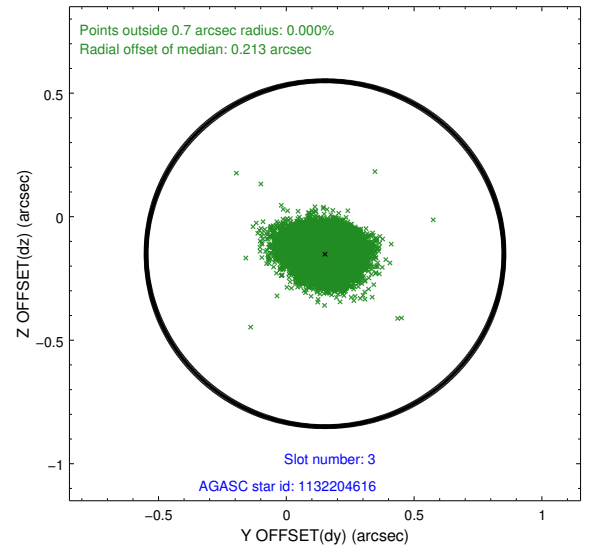
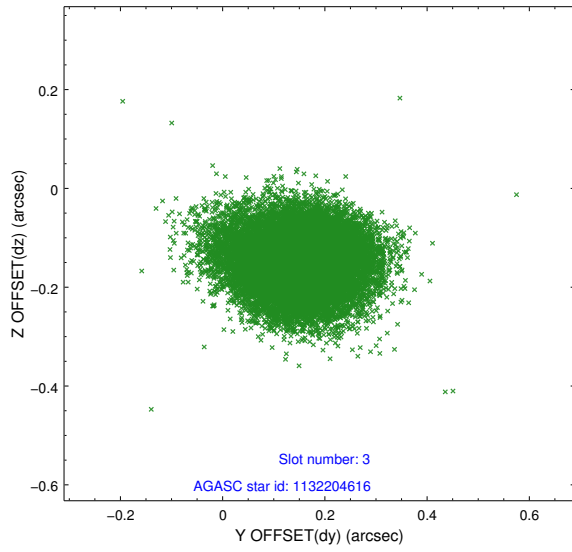
Slot Statistics

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	7629	-0.064	0.003	0.021	0.032	0.000000	0.000000	-767.86	-1738.20
1	FID		ACIS-S-4	7.02	7630	0.171	0.032	0.020	0.029	0.000000	0.000000	2145.65	170.19
2	FID		ACIS-S-5	7.05	7630	-0.153	-0.022	0.032	0.050	0.000000	0.000000	-1820.67	163.95
3	GUIDE	used	1132204616	8.94	15212	0.151	-0.150	0.096	0.157	176.246887	-57.204651	2003.34	-1691.28
4	GUIDE	used	1132205440	9.13	15210	0.115	-0.087	0.103	0.168	176.170965	-57.096063	1844.03	-2077.85
5	GUIDE	used	1132338432	8.96	15250	0.056	0.068	0.115	0.173	177.525776	-56.837735	-720.32	-912.18
6	GUIDE	used	1132350584	9.42	15211	-0.274	-0.000	0.138	0.206	177.688804	-57.766182	1389.38	1699.27
7	GUIDE	used	1132345824	8.99	15248	-0.049	0.175	0.107	0.171	177.492317	-56.271963	-2094.44	-2417.30

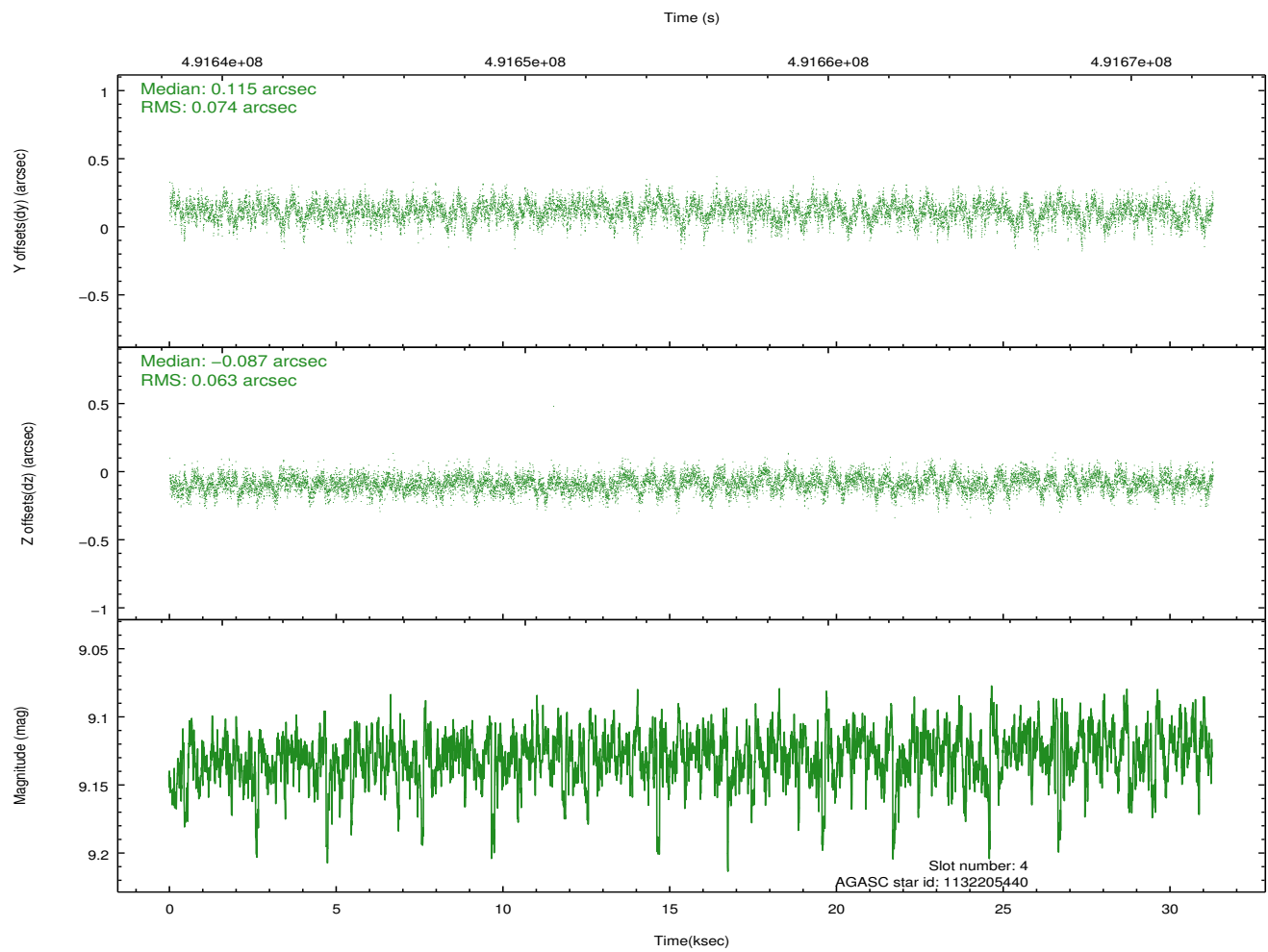
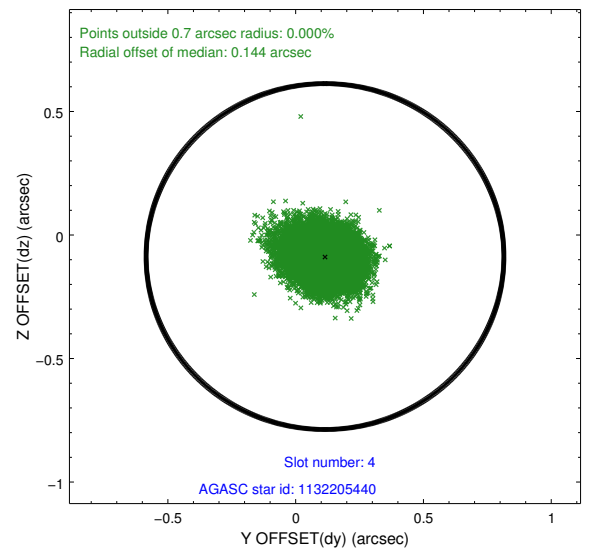
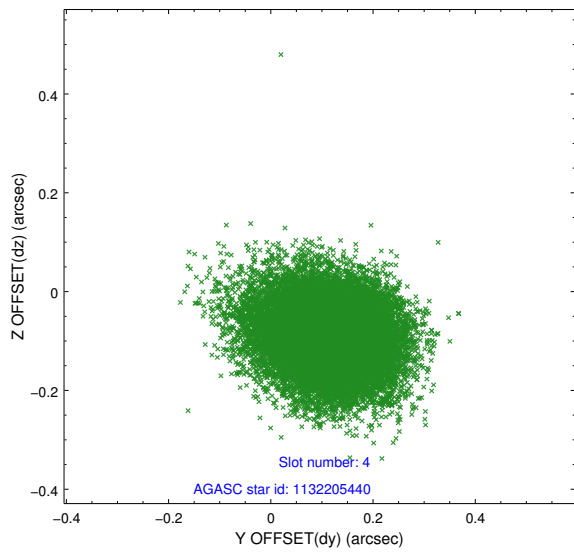
∞

2.4 Star Slots

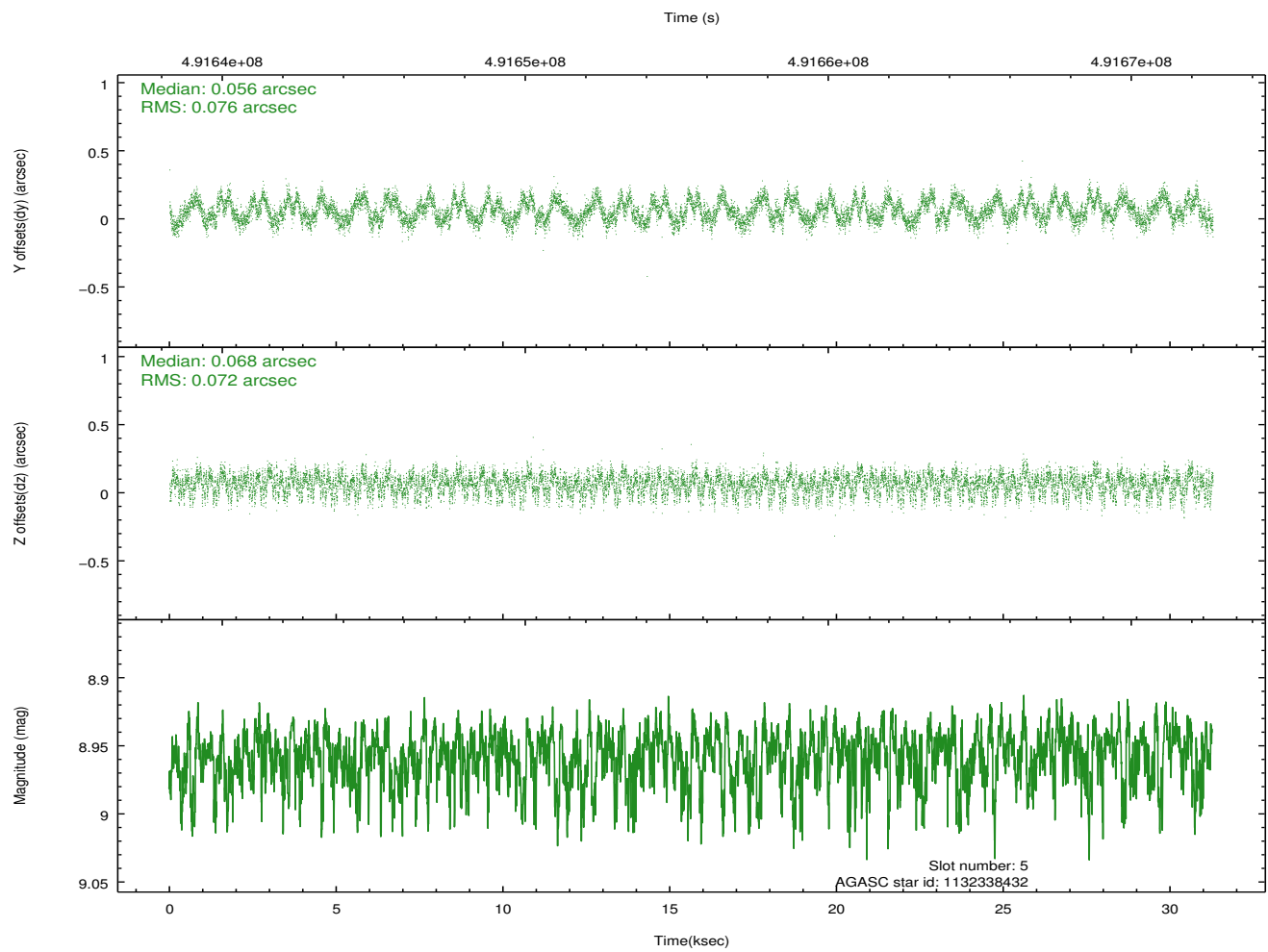
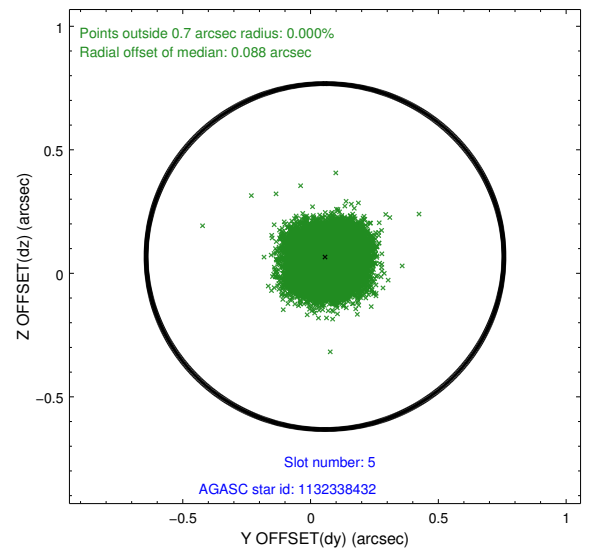
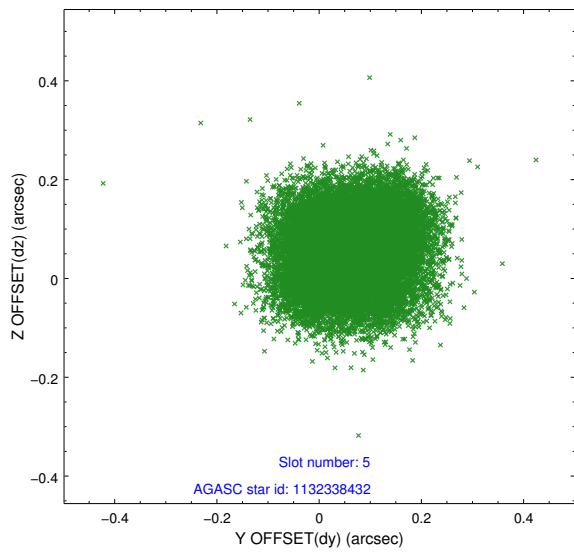
2.4.1 Slot 3



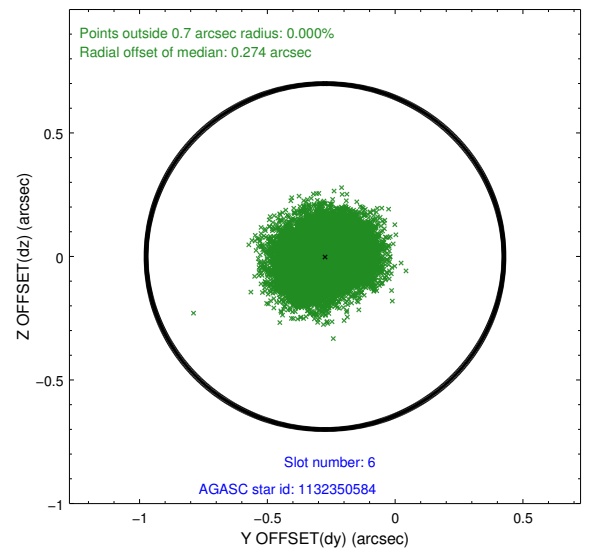
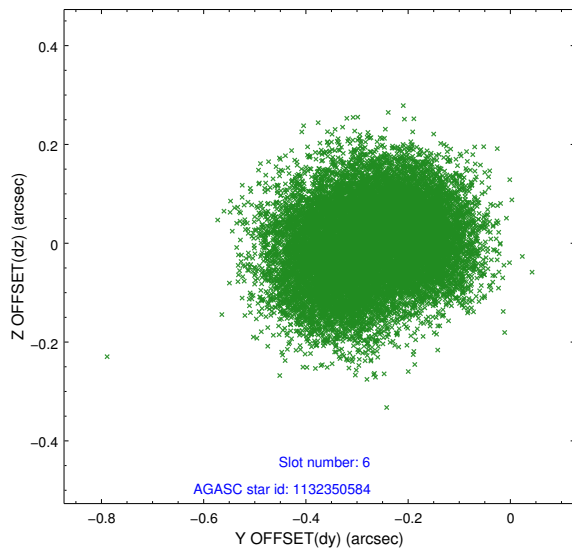
2.4.2 Slot 4



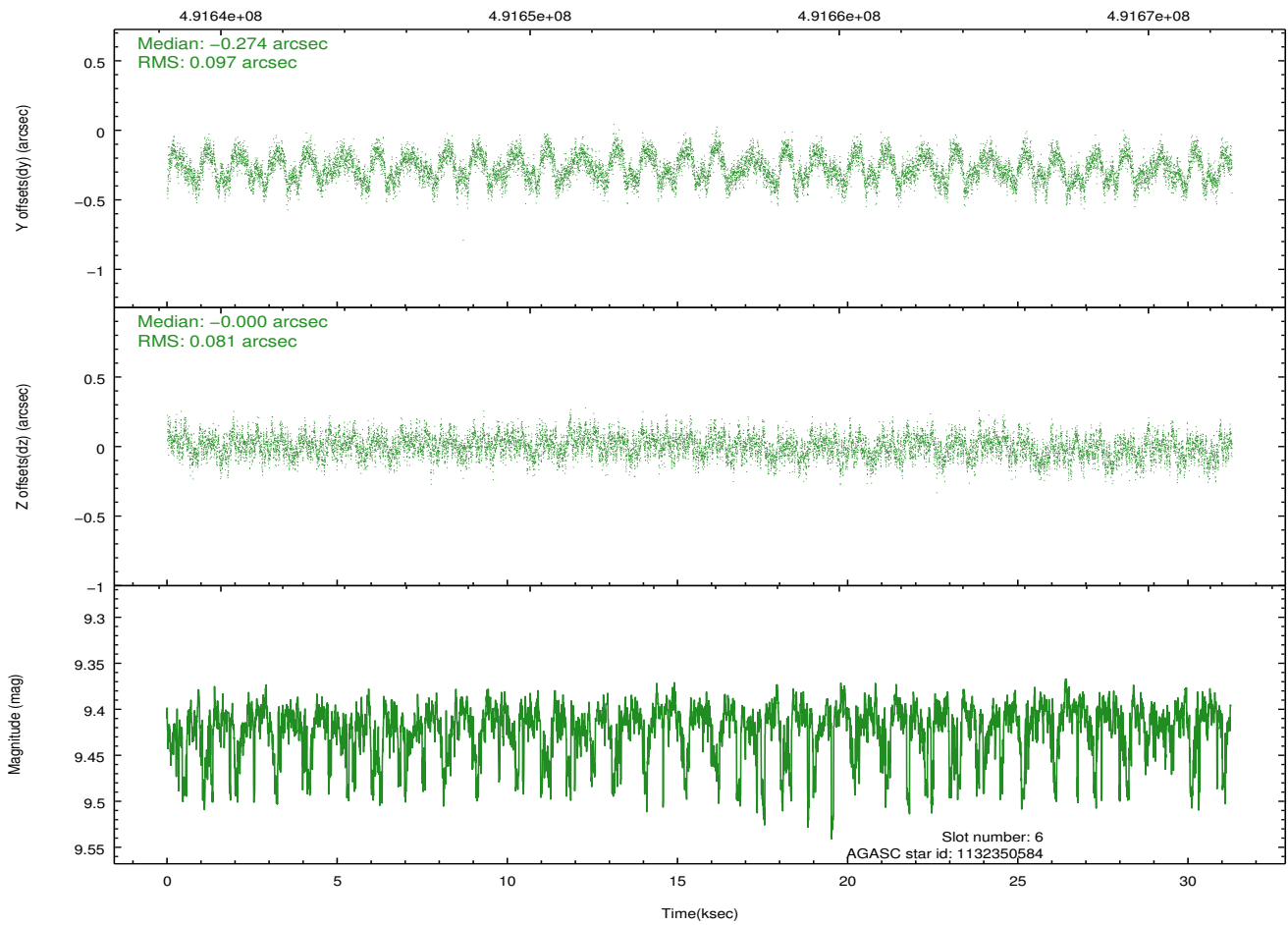
2.4.3 Slot 5



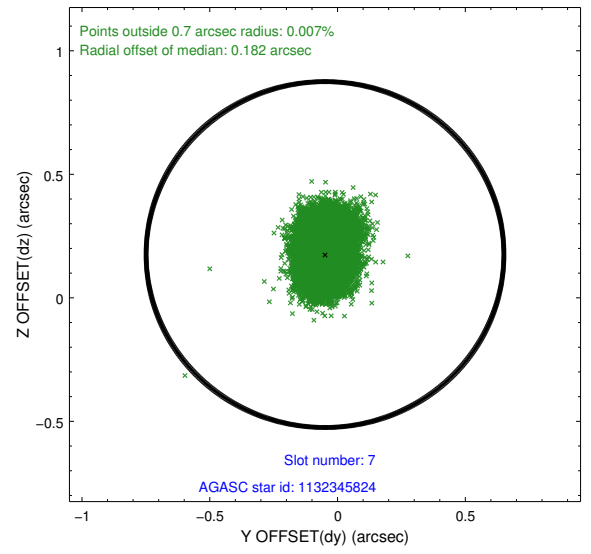
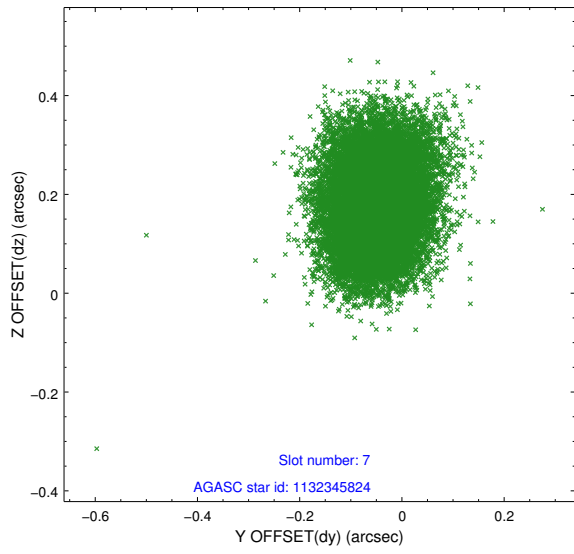
2.4.4 Slot 6



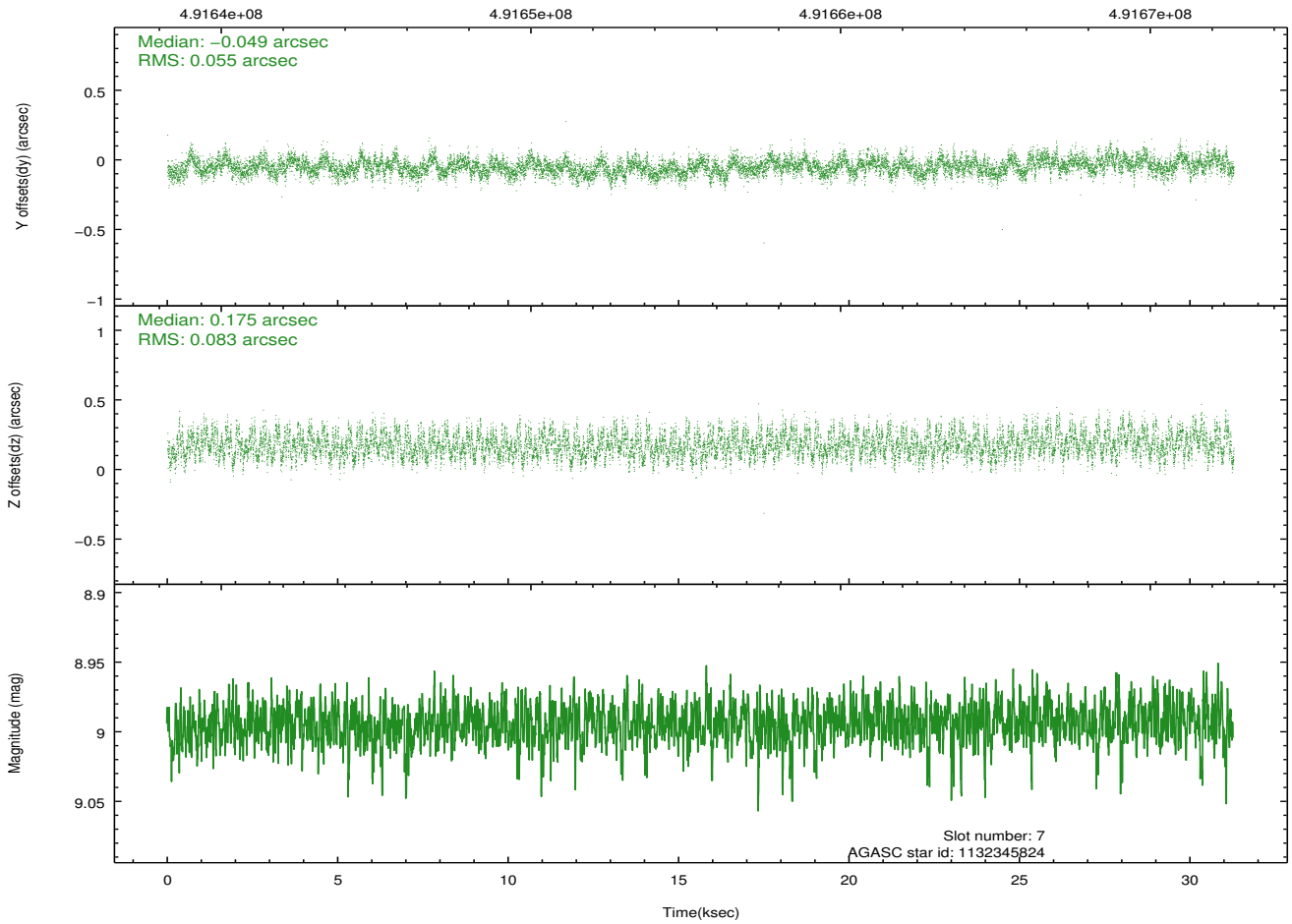
Time (s)



2.4.5 Slot 7

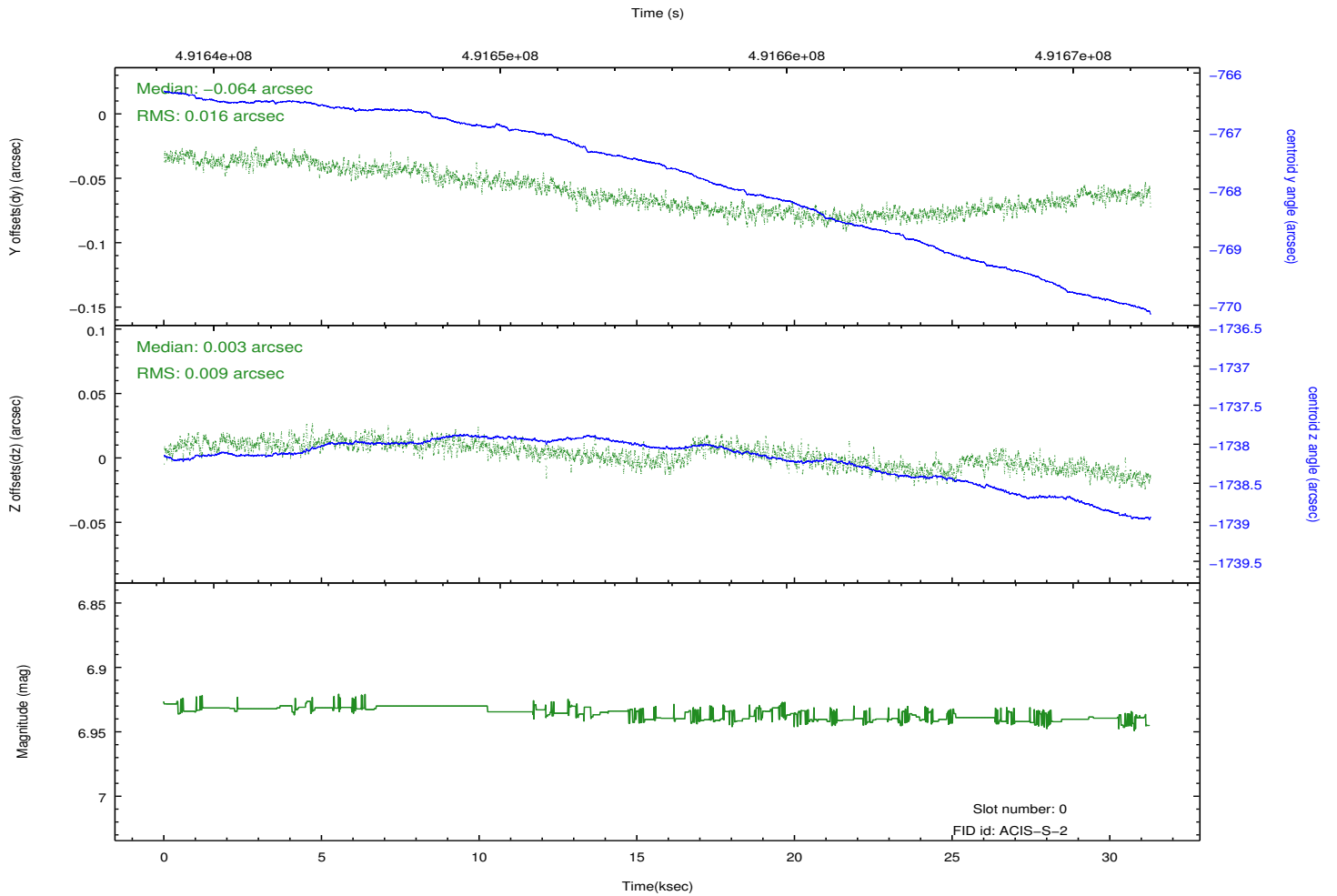
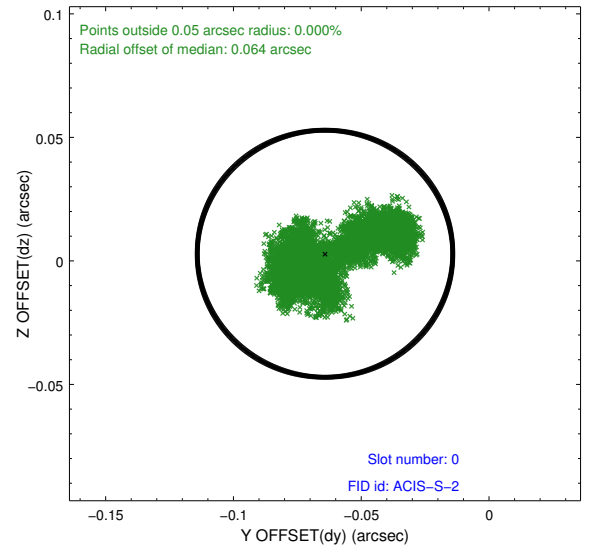
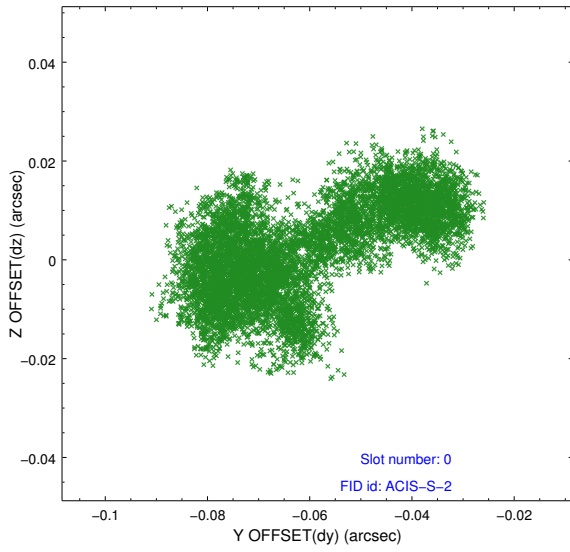


Time (s)

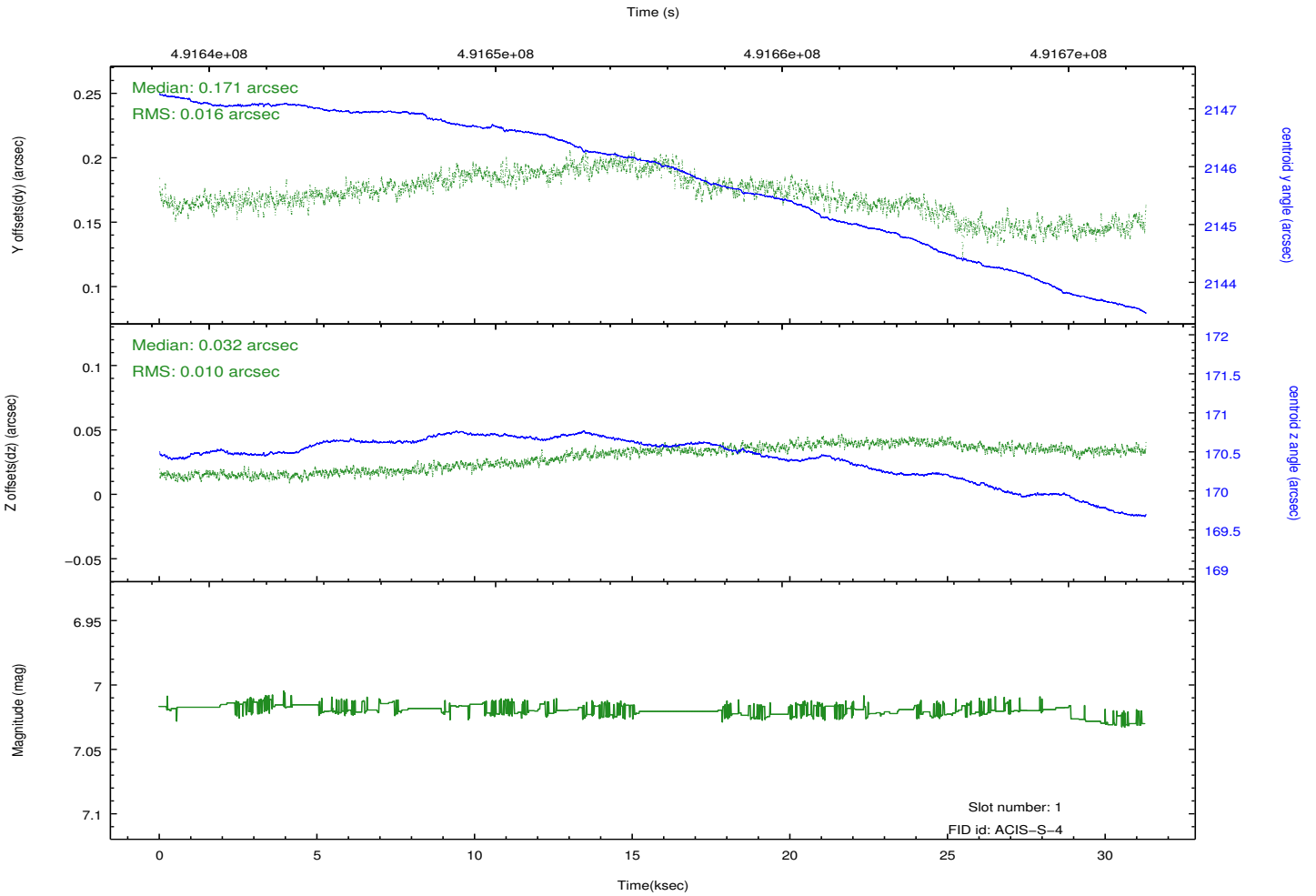
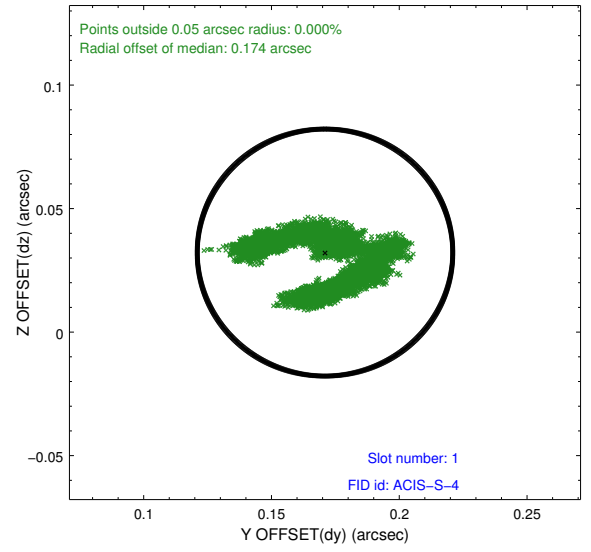
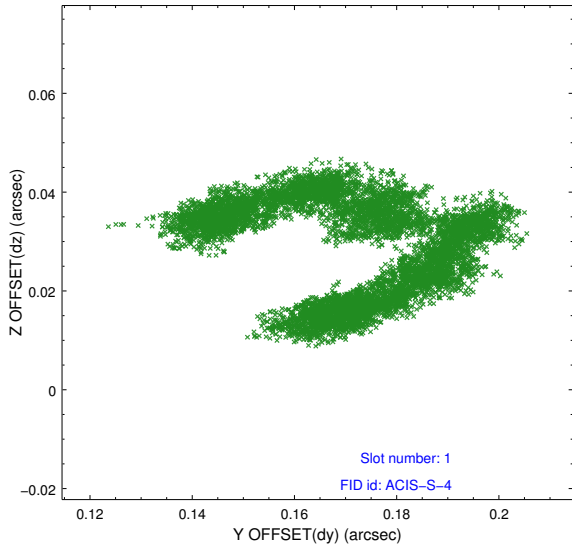


2.5 FID Slots

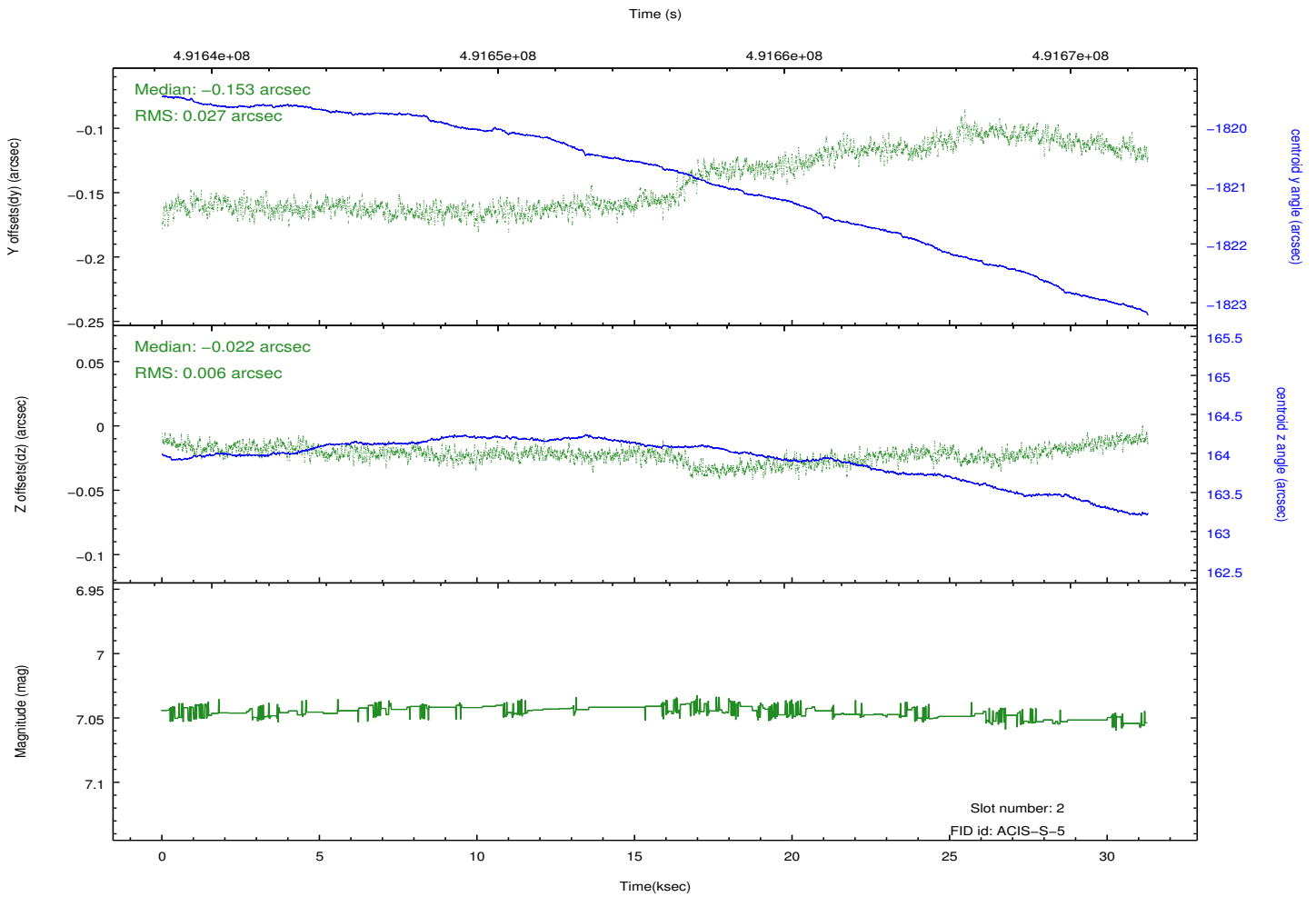
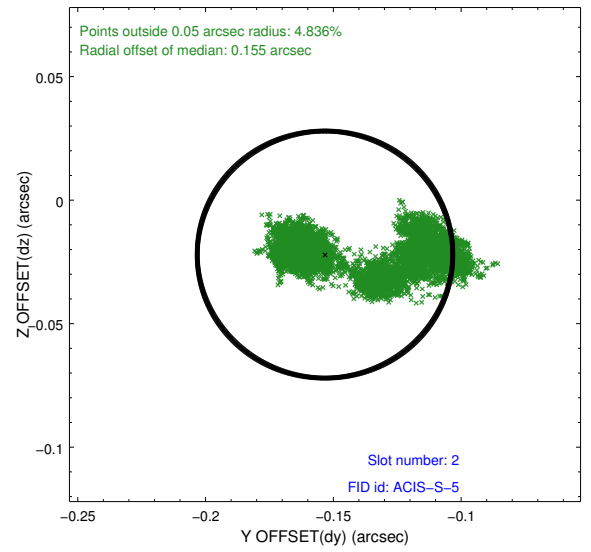
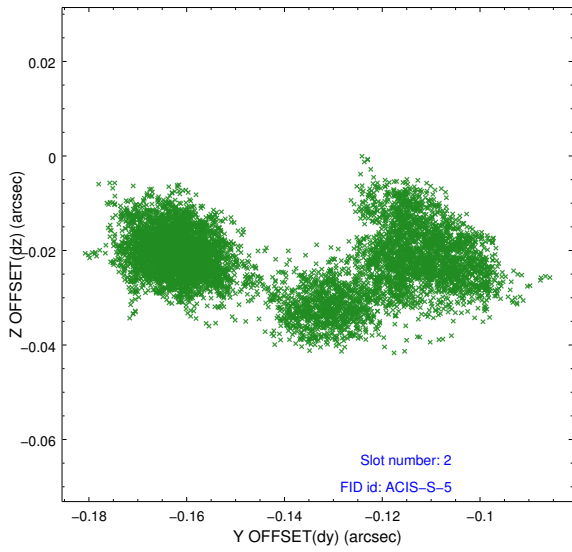
2.5.1 Slot 0



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)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.427913239419

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.