

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 16498 - L2 Version 2
Chandra X-Ray Center

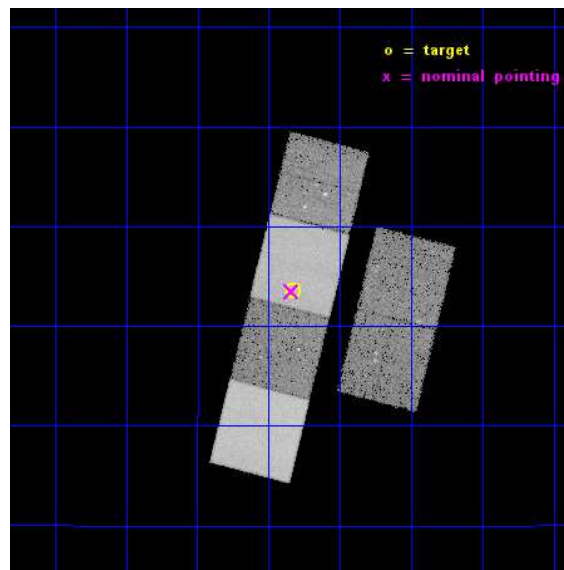
L2 Processing Date : Dec 7 2014

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1 Front

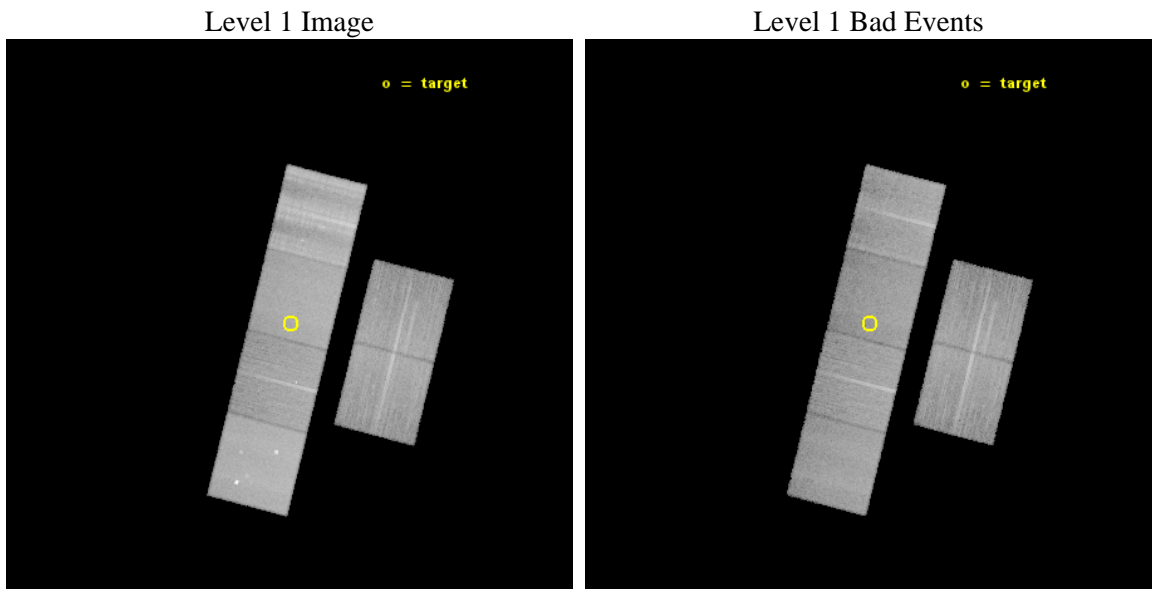
seq_num	702785	Sequence number
obs_id	16498	Observation id
title	A late time look at the candidate relativistic tidal disruption event Swift 2058+0516	Proposal title
observer	Dr Andrew Levan	Principal investigator
object	Swift2058+0516	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	314.5825	Observer's specified target RA [deg]
dec_targ	5.225833	Observer's specified target Dec [deg]
ra_nom	314.58538091917	Nominal RA [deg]
dec_nom	5.2248806503779	Nominal Dec [deg]
roll_nom	284.15637474916	Nominal Roll [deg]
revision	2	Processing version of data
ontime	29913.599888623	Sum of GTIs [s]
livetime	29534.815875026	Livetime [s]
ontime2	29910.358888268	Sum of GTIs [s]
ontime3	29910.358868361	Sum of GTIs [s]
ontime5	29913.599888623	Sum of GTIs [s]
ontime6	29913.599888623	Sum of GTIs [s]
ontime7	29913.599888623	Sum of GTIs [s]
ontime8	29913.599888623	Sum of GTIs [s]
l2events	275471	Number of level 2 events



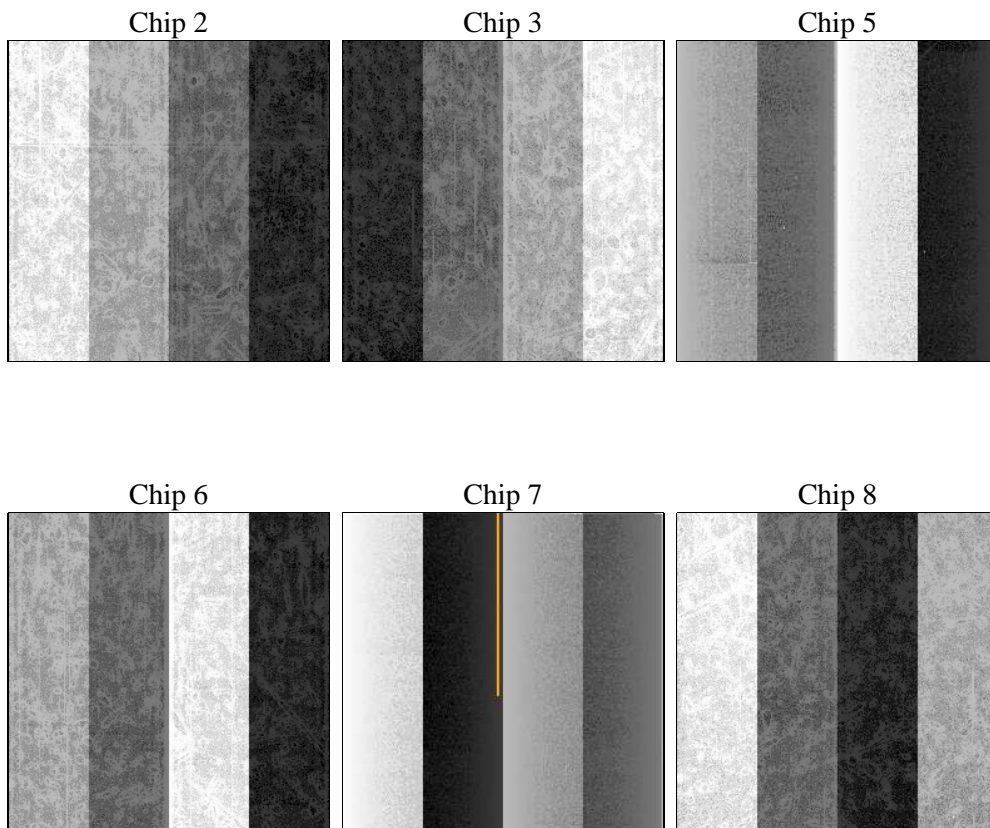
2 OBI

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	10.3.1	Processing system revision	ontime	29913.599888623	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	29910.358888268	Sum of GTIs [s]
date	2014-12-07T19:10:13	Date and time of file creation	ontime3	29910.358868361	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	29913.599888623	Sum of GTIs [s]
			ontime6	29913.599888623	Sum of GTIs [s]
			ontime7	29913.599888623	Sum of GTIs [s]
			ontime8	29913.599888623	Sum of GTIs [s]
			l1events	1209174	Number of level 1 events

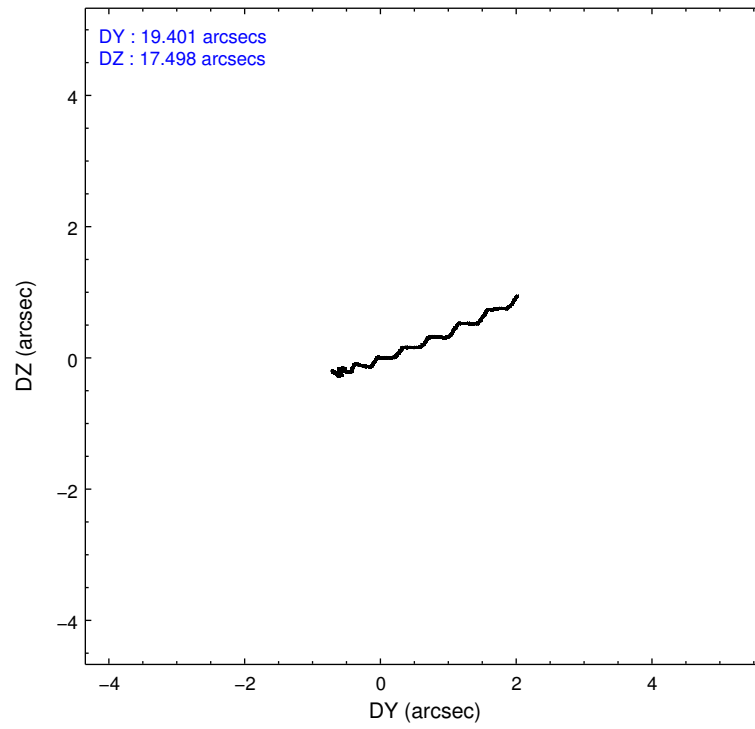
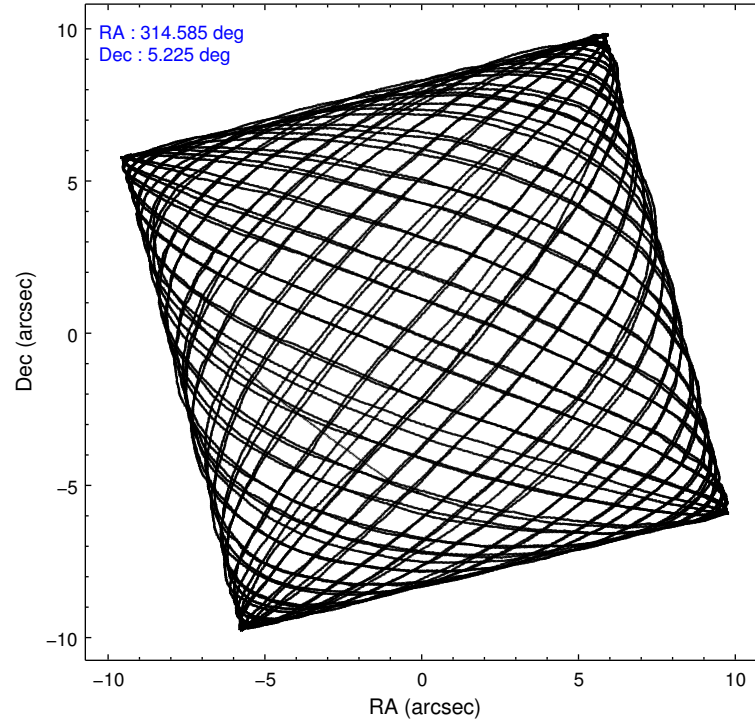
2.1.4 Events

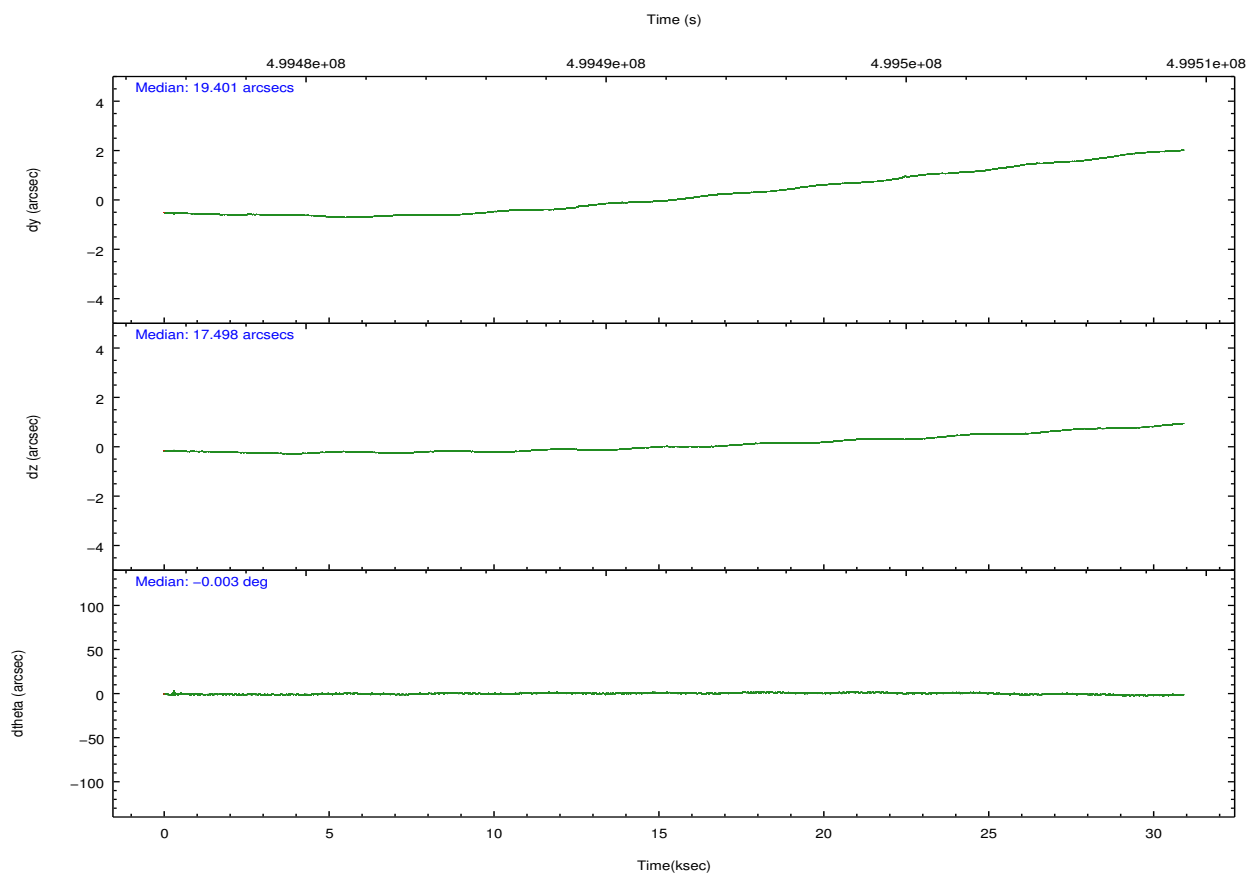
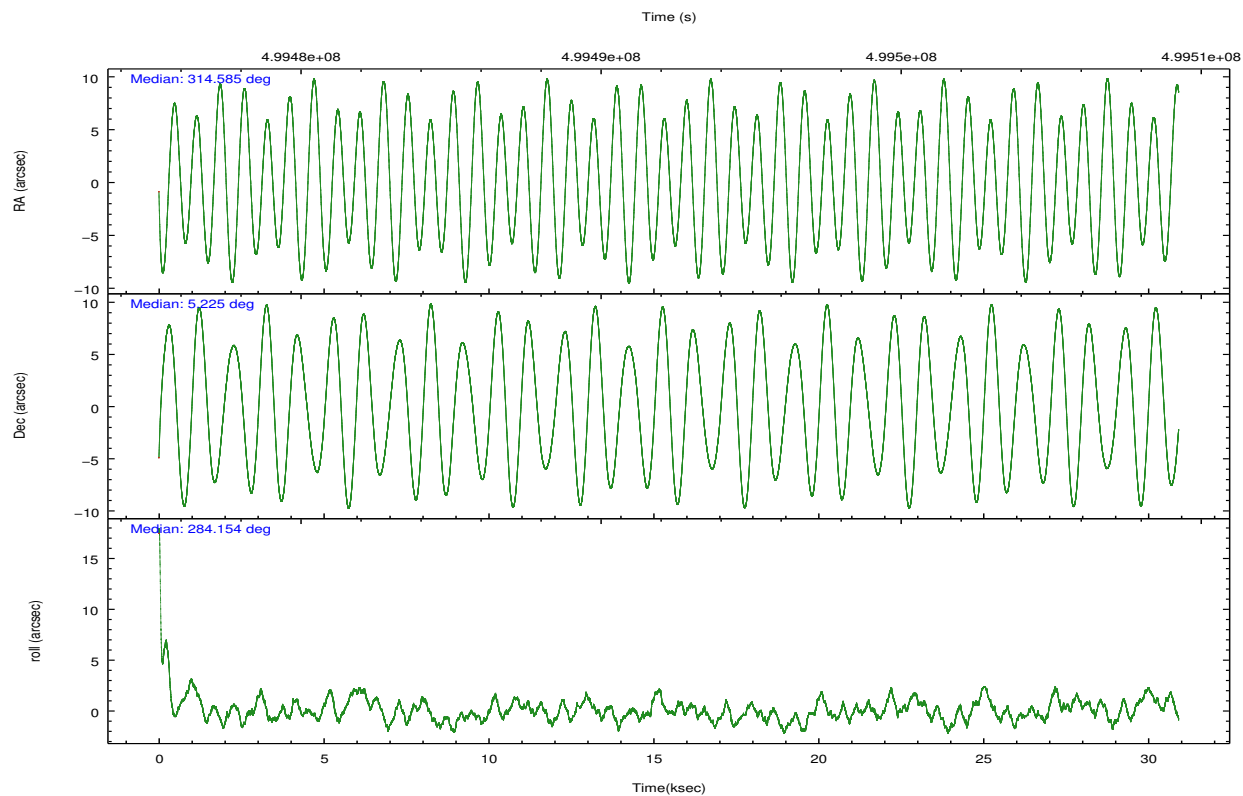
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	160554	149372	257885	162041	206530	272792	grade 0 events	8113	6463	13926	8100	8551	42888
rejected events	140430	131966	131629	141303	114530	153302		5%	4%	5%	4%	4%	15%
rejected %	87%	88%	51%	87%	55%	56%	grade 1 events	109	74	557	97	303	308
								0%	0%	0%	0%	0%	0%
							grade 2 events	4724	3867	38912	4522	19552	18264
								2%	2%	15%	2%	9%	6%
							grade 3 events	1767	1788	4983	1896	7934	19148
								1%	1%	1%	1%	3%	7%
							grade 4 events	2087	1745	4706	1844	7780	17949
								1%	1%	1%	1%	3%	6%
							grade 5 events	6504	7580	19058	7693	20752	11735
								4%	5%	7%	4%	10%	4%
							grade 6 events	3434	3546	63761	4381	48205	21244
								2%	2%	24%	2%	23%	7%
							grade 7 events	133816	124309	111982	133508	93453	141256
								83%	83%	43%	82%	45%	51%

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	314.565989	314.5853809191724	CCD I2 on	O3	Y
[deg] Pointing Dec	5.244238	5.224880650377876	CCD I3 on	O4	Y
[deg] Pointing Roll	284.001511	284.1563747491565	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	O2	Y
[s] Observation start time (MET)	499477711.184000	499475952.42038	CCD S5 on	N	N
Observation start date	2013-10-29T23:47:24	2013-10-29T23:19:12	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	499507711.184000	499508491.04717	On-chip summing requested	N	N
Observation end date	2013-10-30T08:07:24	2013-10-30T08:21:31	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



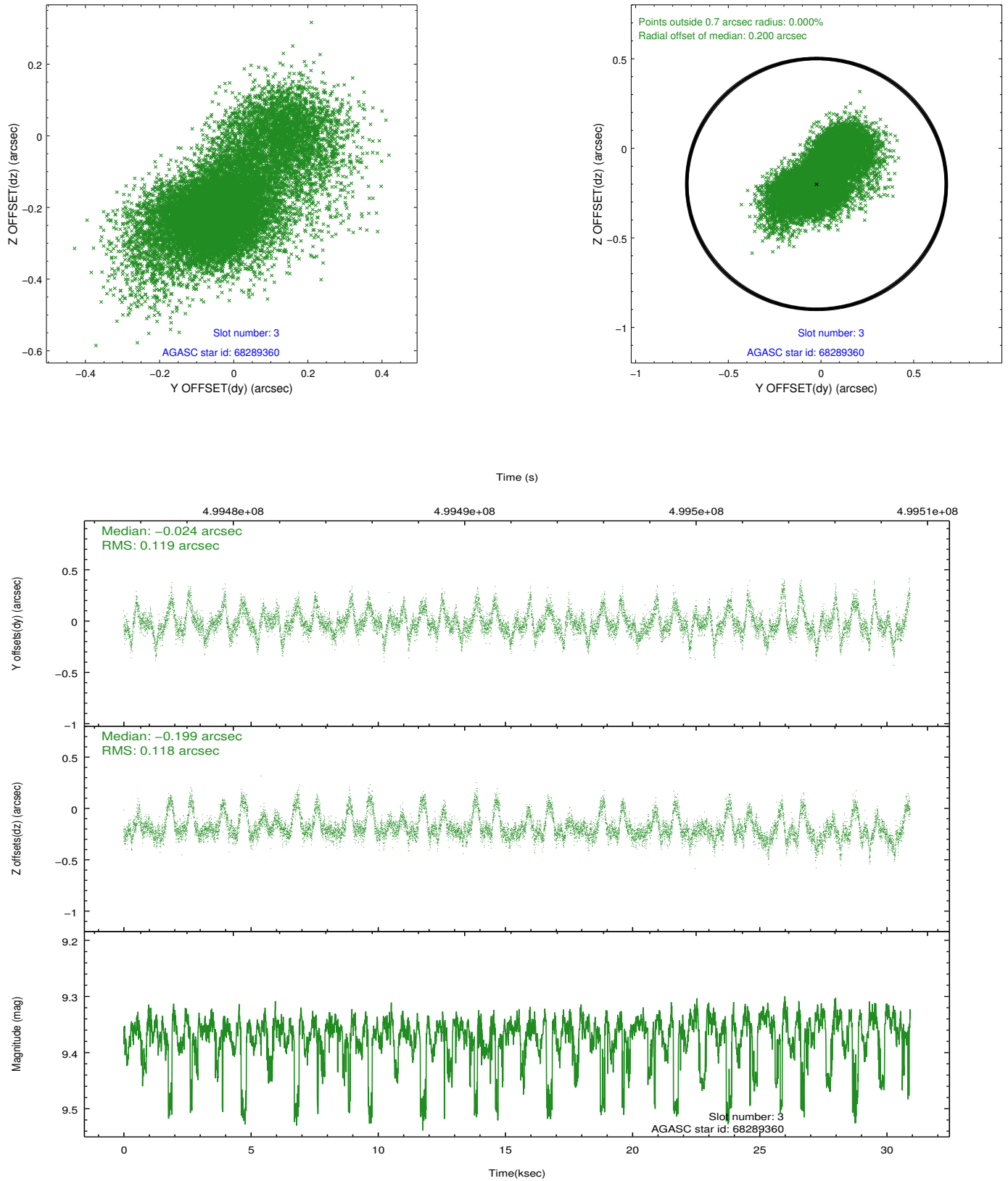


Slot Statistics

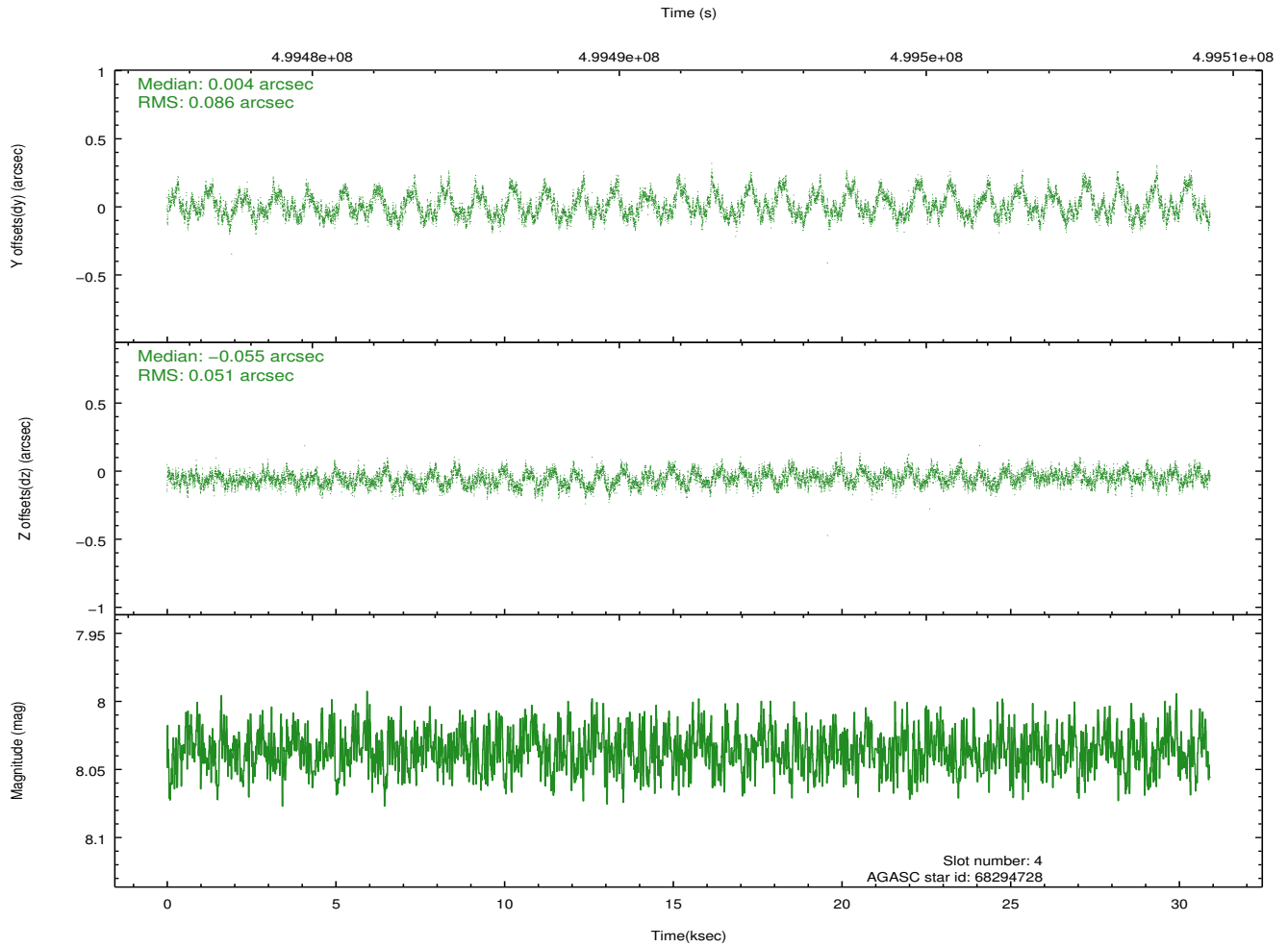
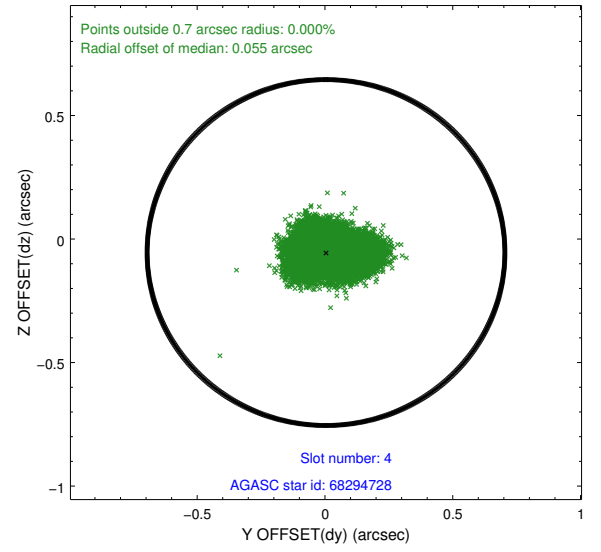
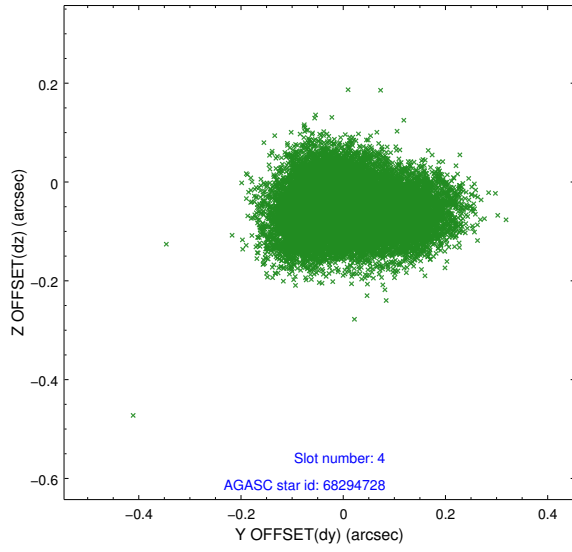
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.96	7542	-0.103	-0.040	0.013	0.020	0.000000	0.000000	-772.90	-1739.08
1	FID		ACIS-S-4	7.04	7542	0.253	0.060	0.013	0.028	0.000000	0.000000	2140.74	169.38
2	FID		ACIS-S-5	7.07	7541	-0.182	-0.012	0.018	0.033	0.000000	0.000000	-1825.70	163.12
3	GUIDE	used	68289360	9.37	15065	-0.024	-0.199	0.163	0.326	314.851818	4.732502	2035.76	550.04
4	GUIDE	used	68294728	8.04	15079	0.004	-0.055	0.106	0.172	314.337495	5.362003	-609.48	-691.47
5	GUIDE	used	68297496	9.46	15061	0.348	-0.020	0.175	0.262	314.202757	4.562790	2065.44	-1857.94
6	GUIDE	used	68818264	8.30	15076	-0.290	0.451	0.102	0.163	314.871687	5.856158	-1872.71	1595.95
7	GUIDE	used	69995496	9.59	15066	-0.059	-0.187	0.188	0.320	315.072470	5.376727	-24.17	1877.22

2.4 Star Slots

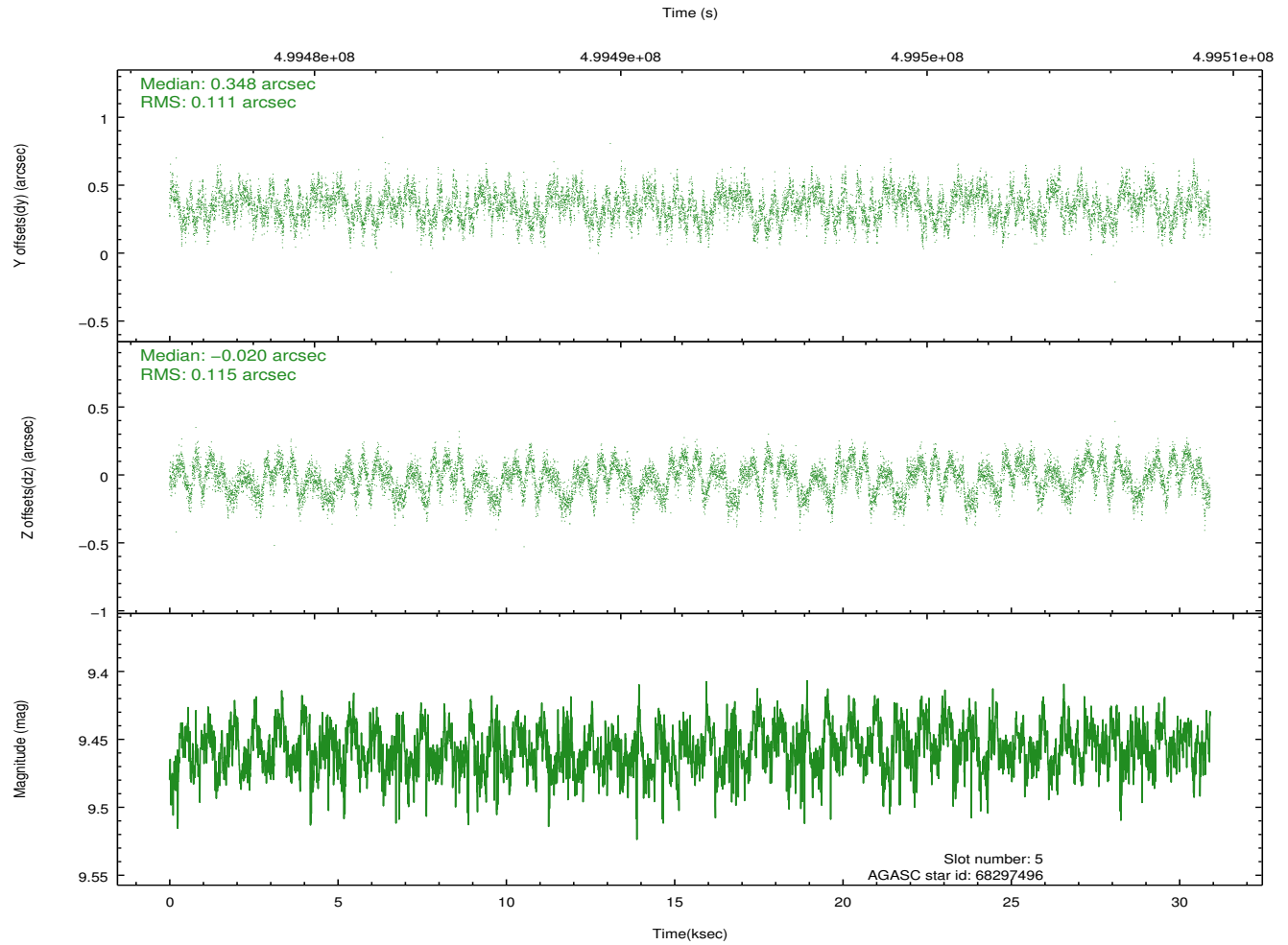
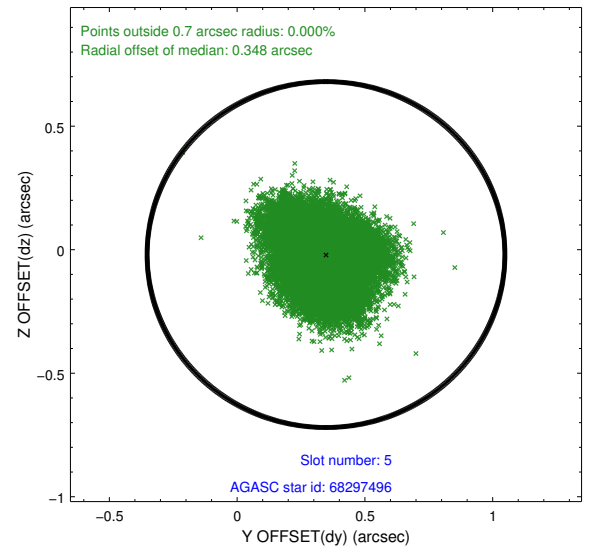
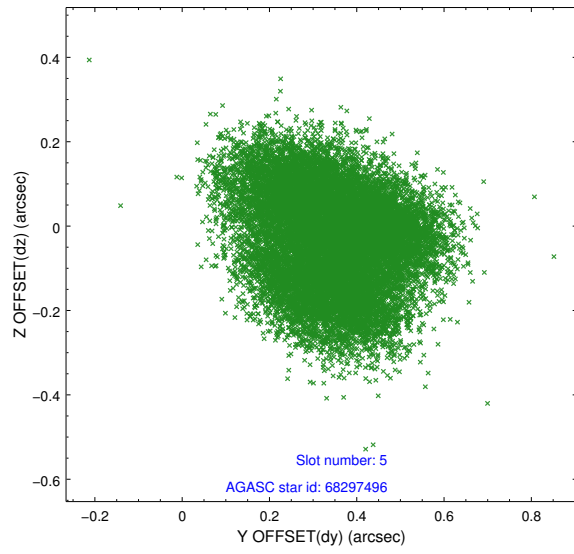
2.4.1 Slot 3



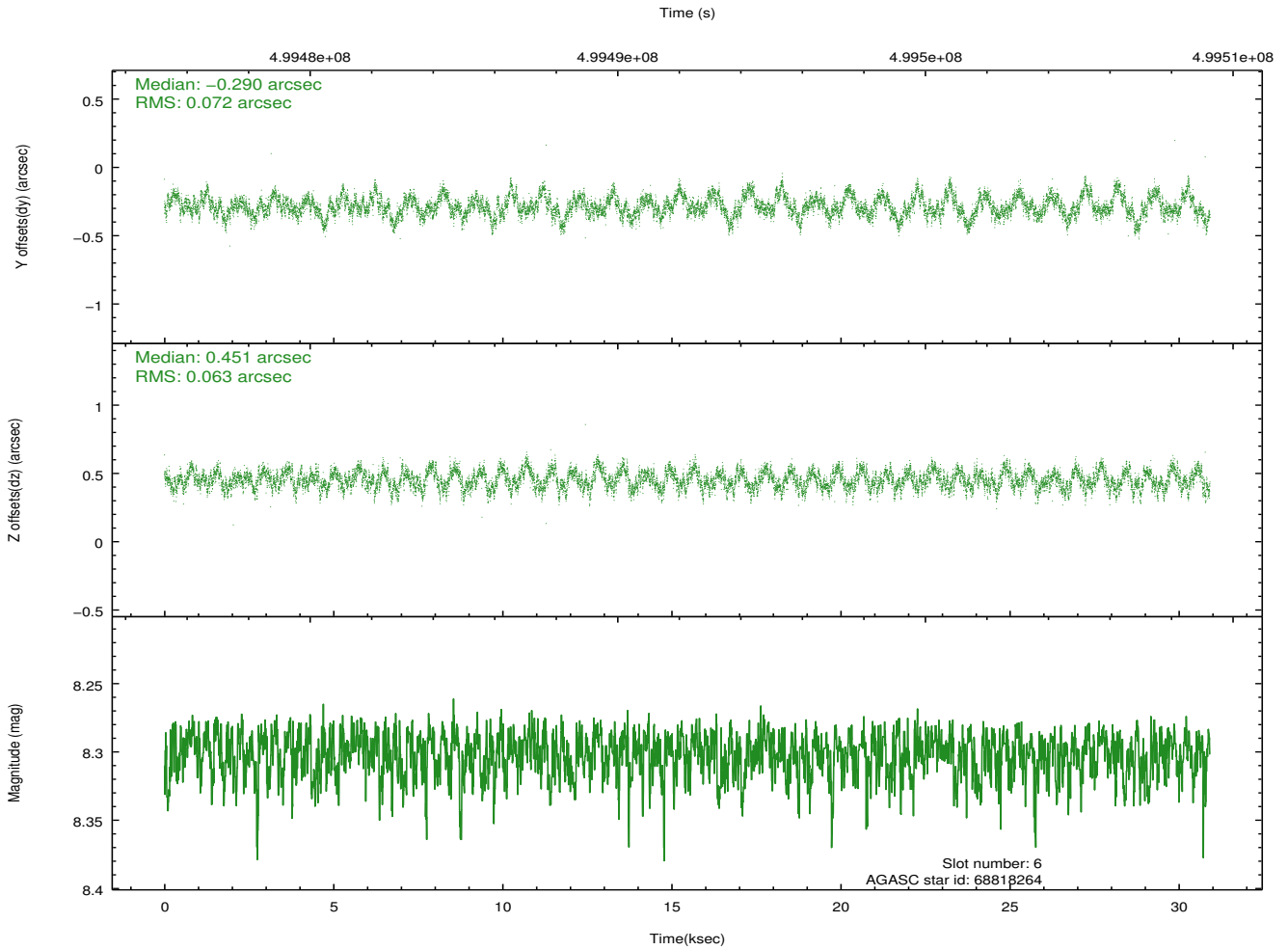
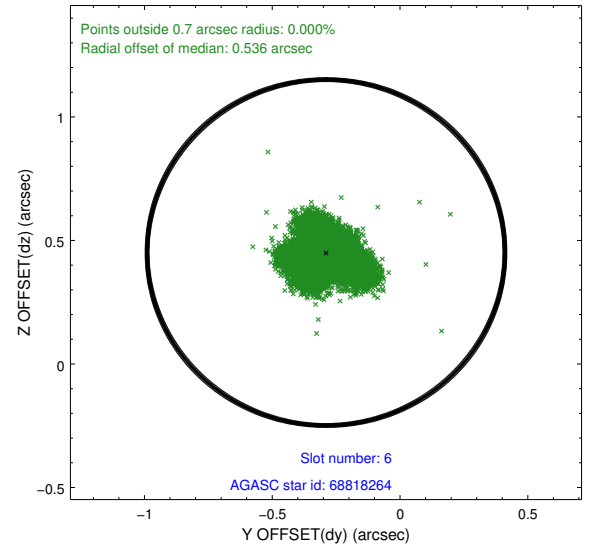
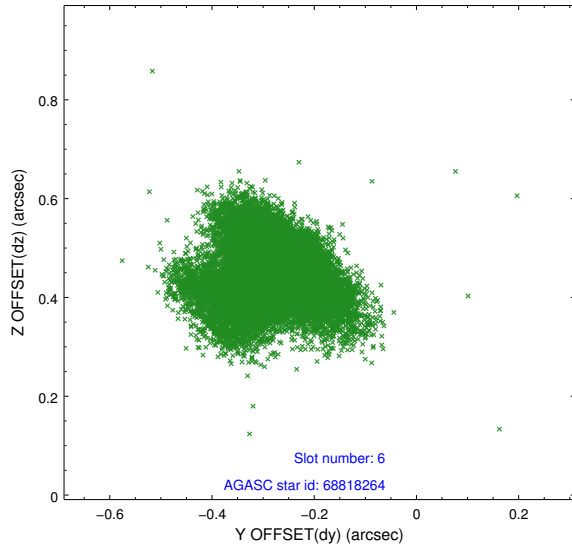
2.4.2 Slot 4



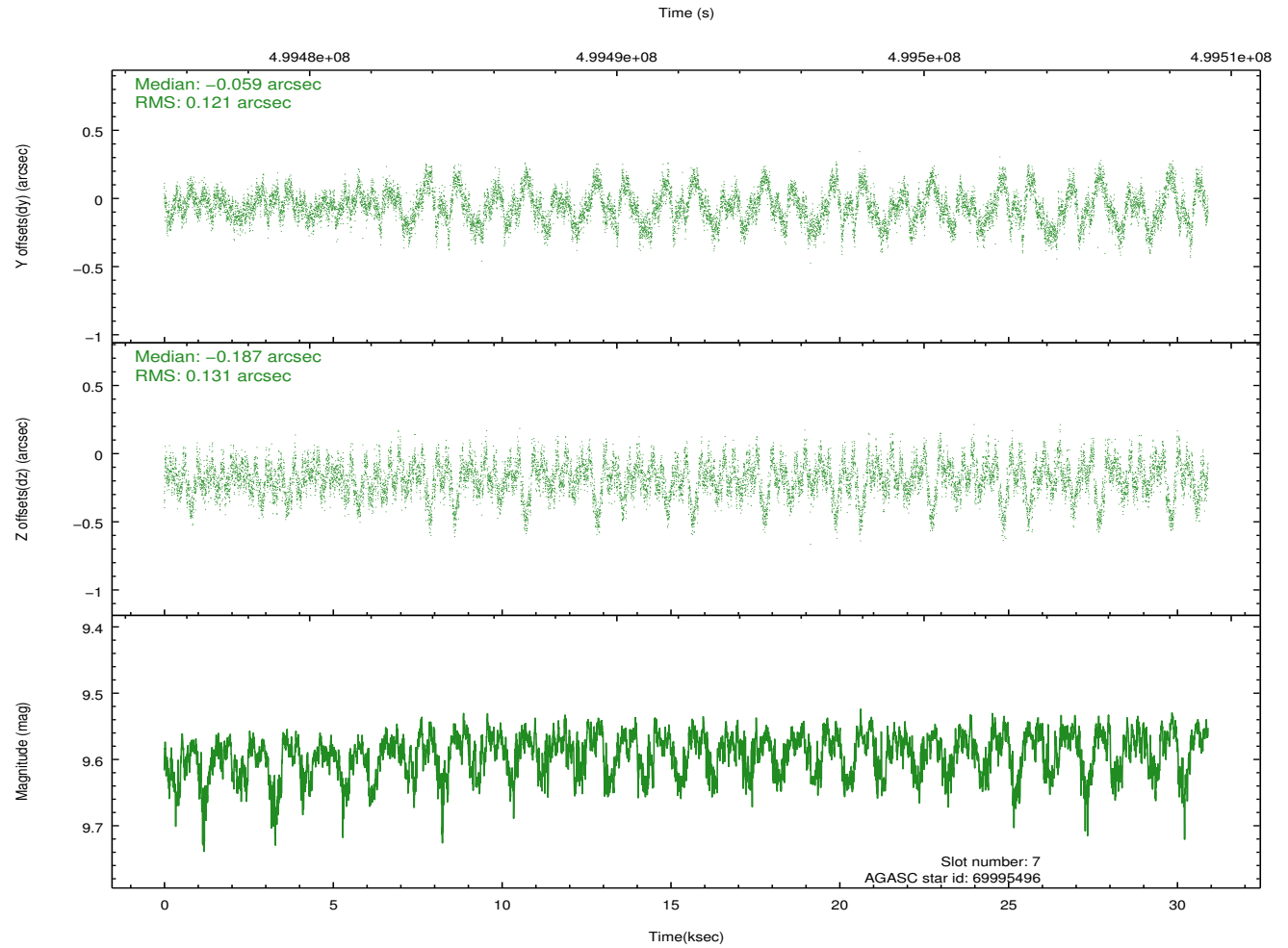
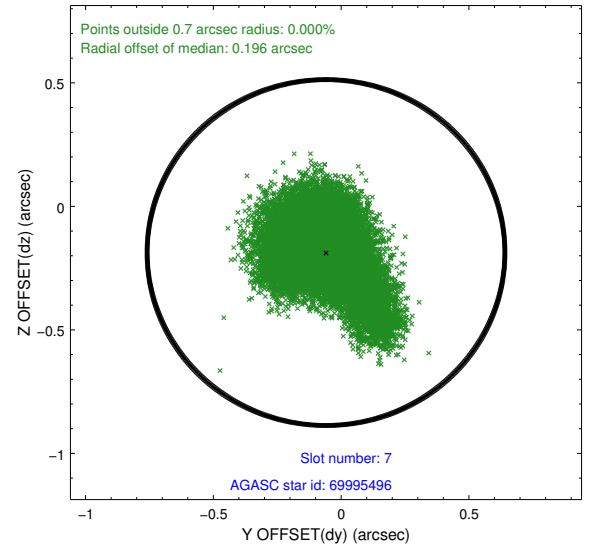
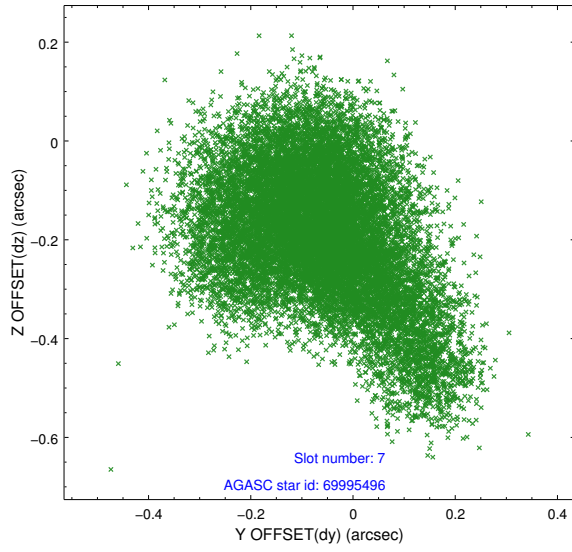
2.4.3 Slot 5



2.4.4 Slot 6

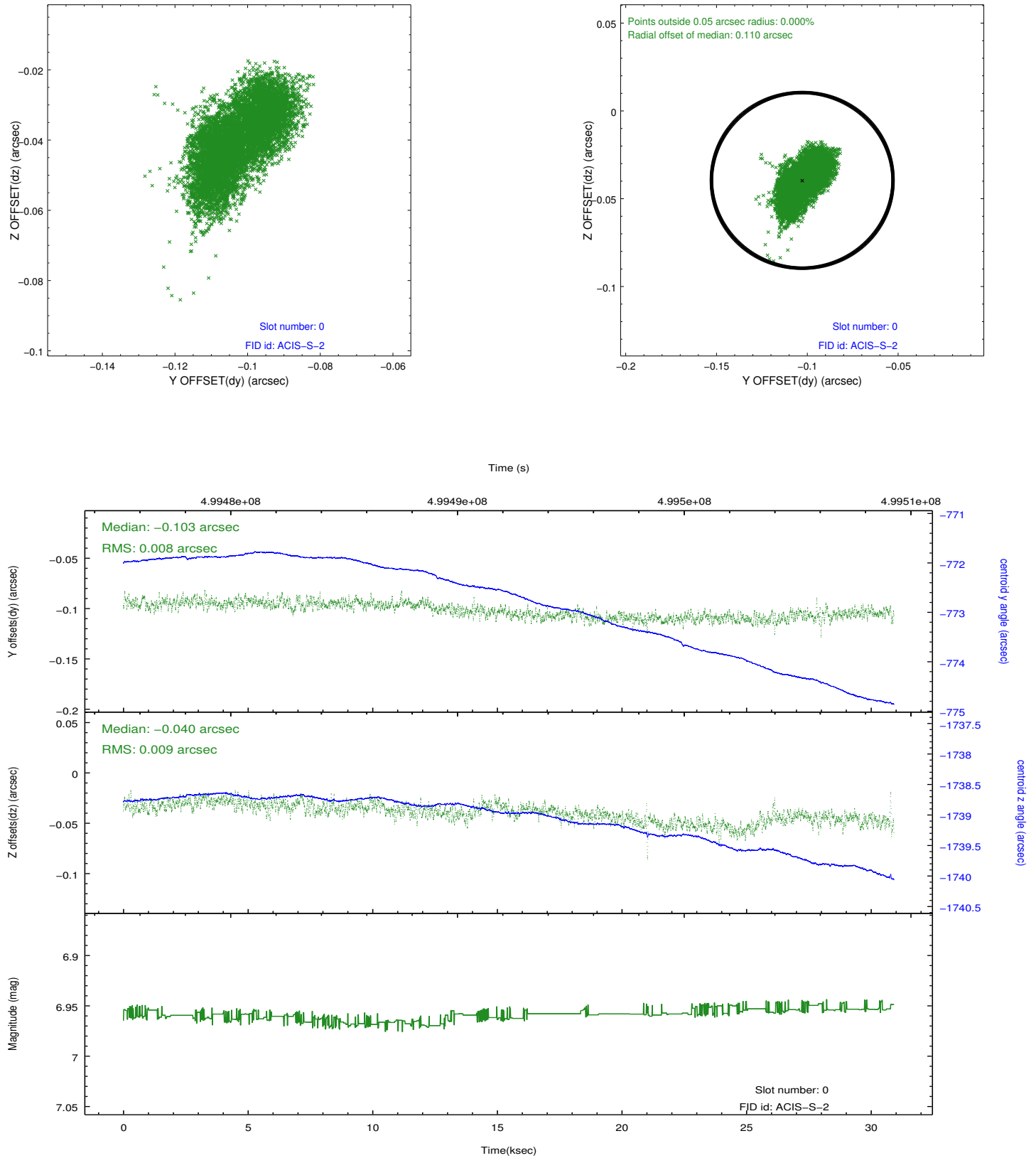


2.4.5 Slot 7

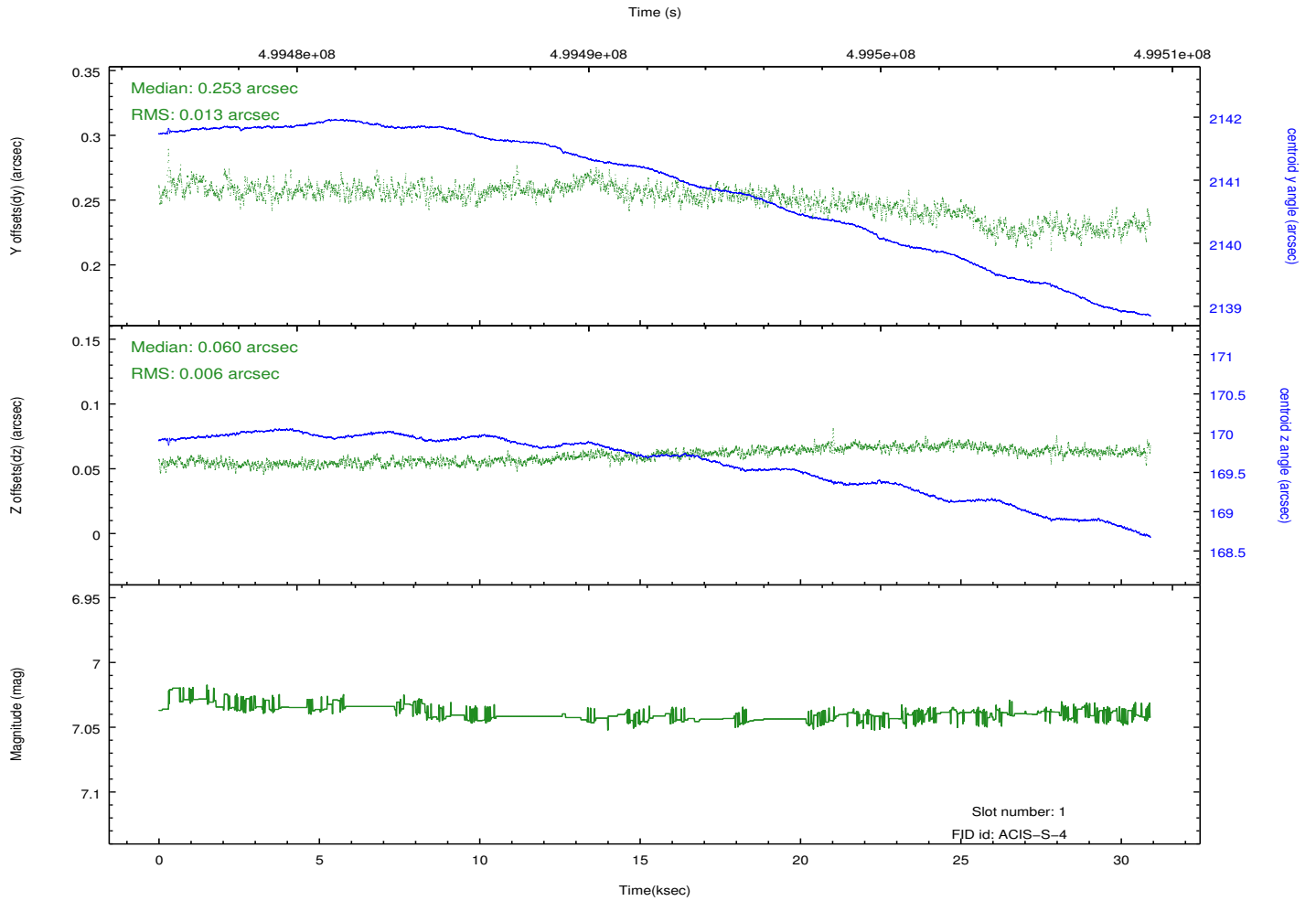
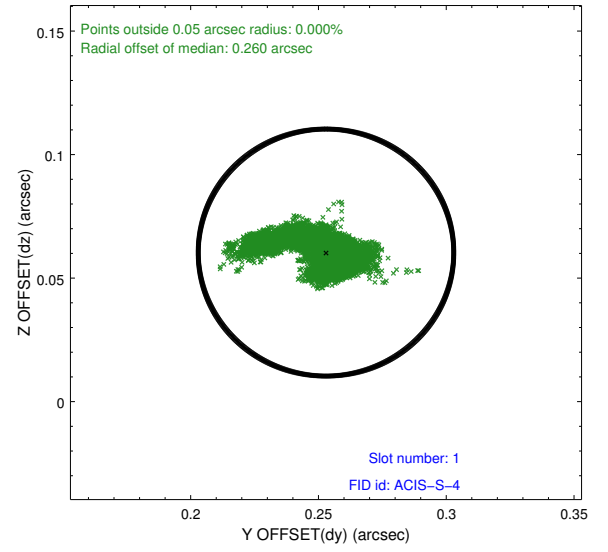
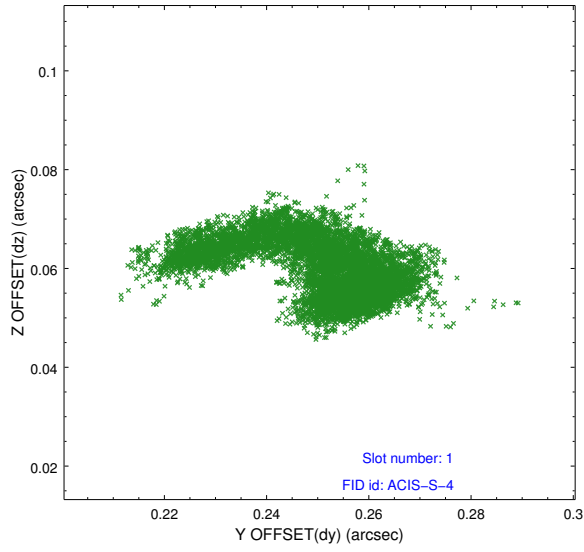


2.5 FID Slots

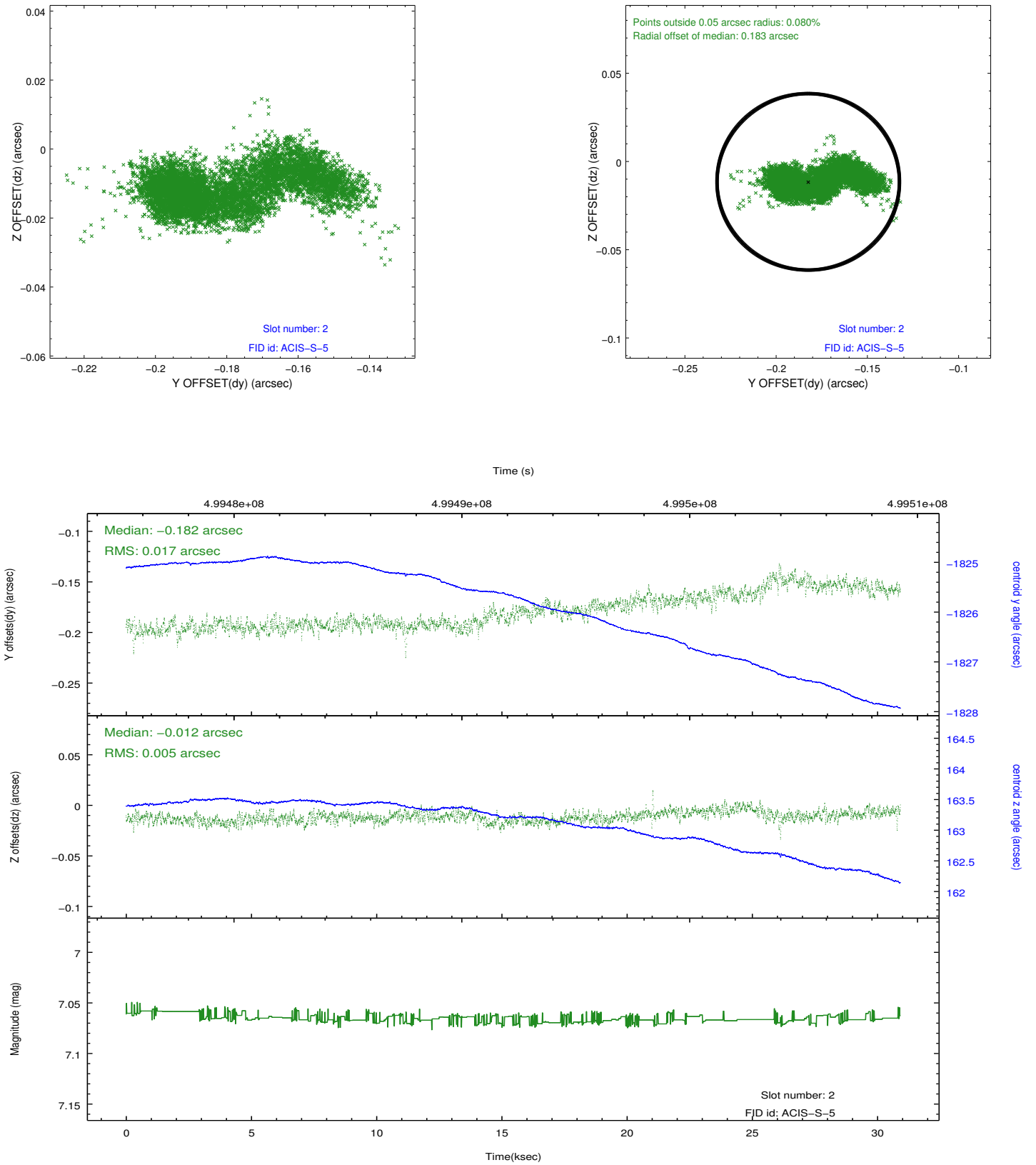
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.913599888623

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.