

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 14499 - L2 Version 2
Chandra X-Ray Center

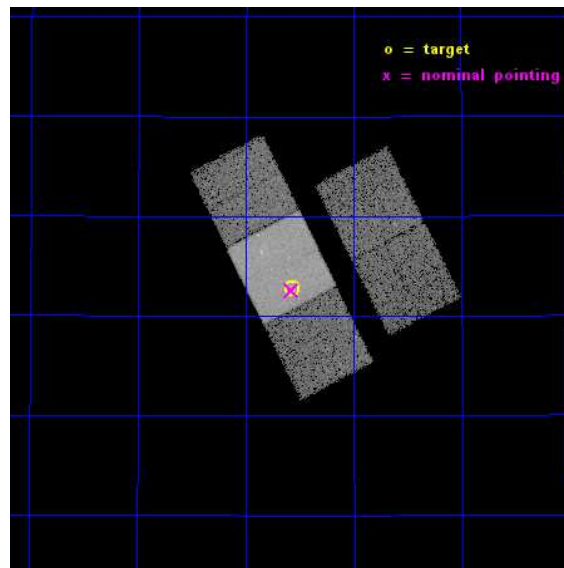
L2 Processing Date : Dec 11 2014

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1 Front

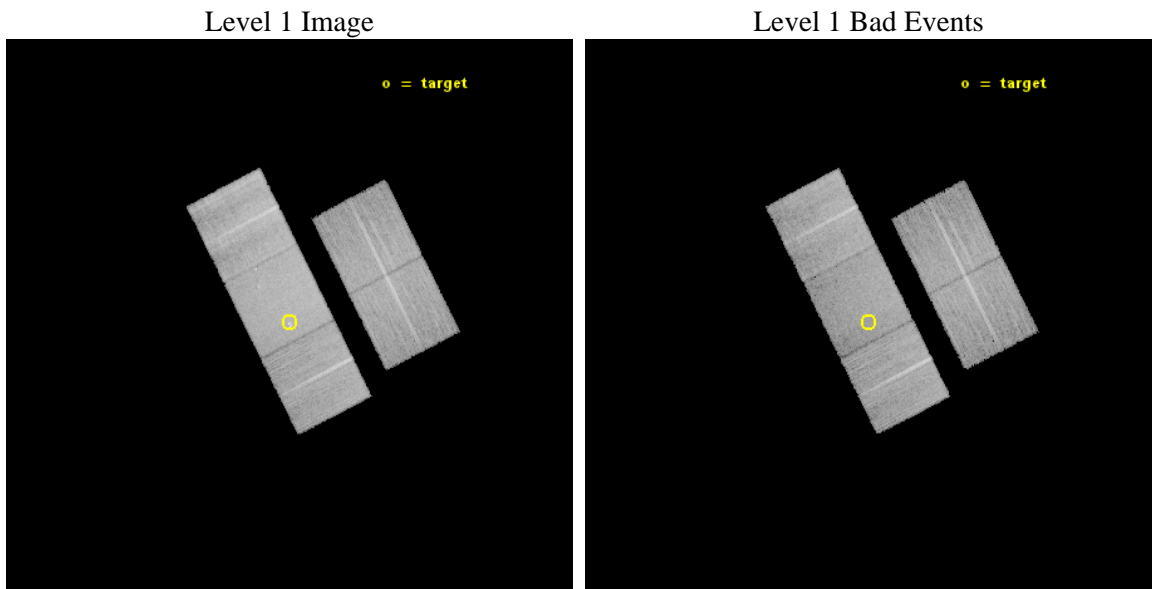
seq_num	702736	Sequence number
obs_id	14499	Observation id
title	ENERGY DEPENDENT X-RAY MICROLENSING AND THE STRUCTURE OF QUASARS	P
observer	Prof. Christopher Kochanek	Principal investigator
object	SDSS1004+4112	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	151.1425	Observer's specified target RA [deg]
dec_targ	41.212222	Observer's specified target Dec [deg]
ra_nom	151.14456266356	Nominal RA [deg]
dec_nom	41.209610804332	Nominal Dec [deg]
roll_nom	242.9931045001	Nominal Roll [deg]
revision	2	Processing version of data
ontime	23631.300181746	Sum of GTIs [s]
livetime	23322.539847762	Livetime [s]
ontime2	23631.300181746	Sum of GTIs [s]
ontime3	23628.159151554	Sum of GTIs [s]
ontime6	23631.300181746	Sum of GTIs [s]
ontime7	23631.300181746	Sum of GTIs [s]
ontime8	23631.300181746	Sum of GTIs [s]
l2events	115437	Number of level 2 events



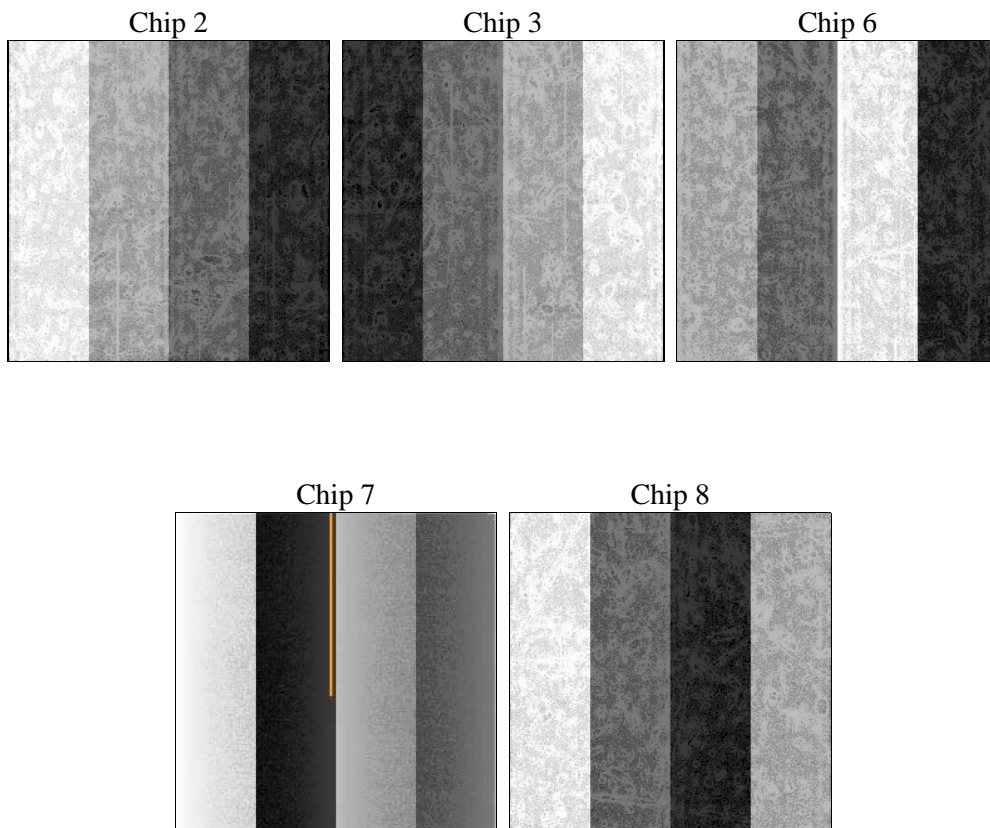
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23563.250000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	23631.300181746	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	23631.300181746	Sum of GTIs [s]
date	2014-12-11T09:27:53	Date and time of file creation	ontime3	23628.159151554	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	23631.300181746	Sum of GTIs [s]
			ontime7	23631.300181746	Sum of GTIs [s]
			ontime8	23631.300181746	Sum of GTIs [s]
			l1events	649187	Number of level 1 events

2.1.4 Events

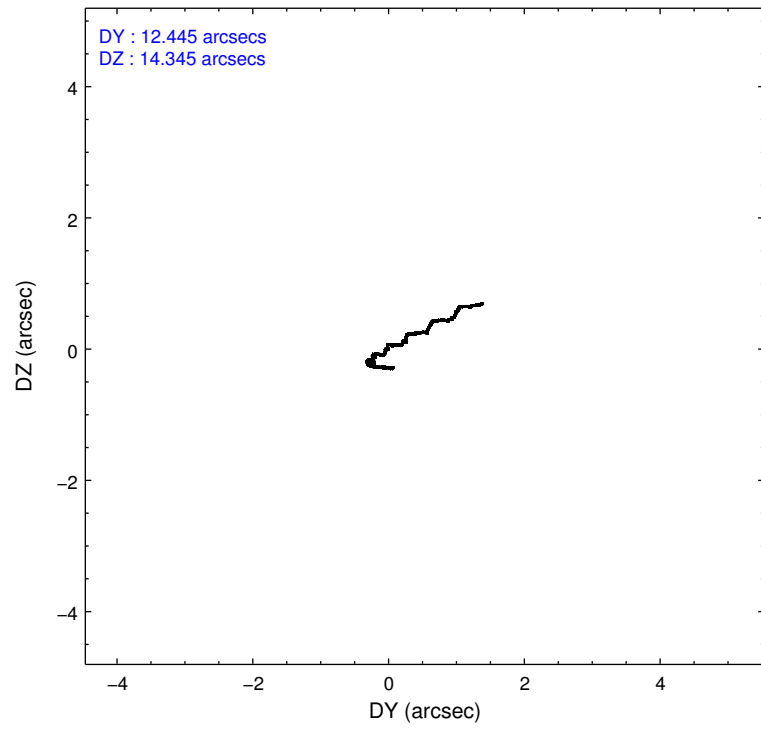
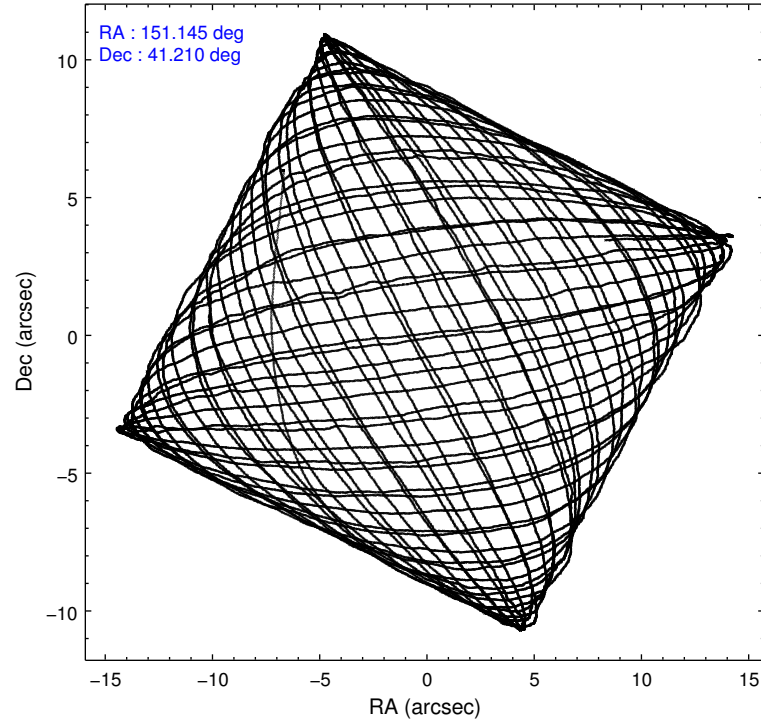
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	107752	109298	118088	158905	155144
rejected events	95556	96870	104380	89487	115726
rejected %	88%	88%	88%	56%	74%

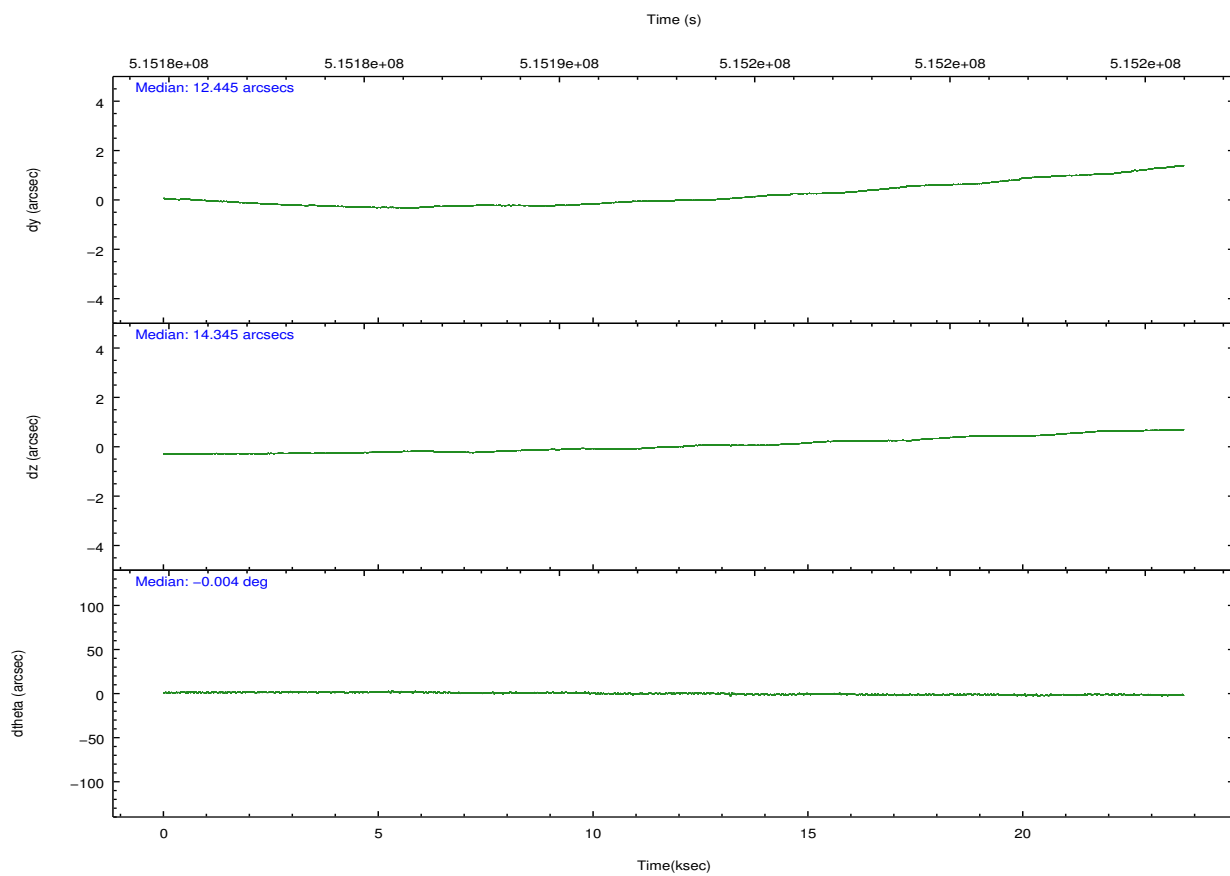
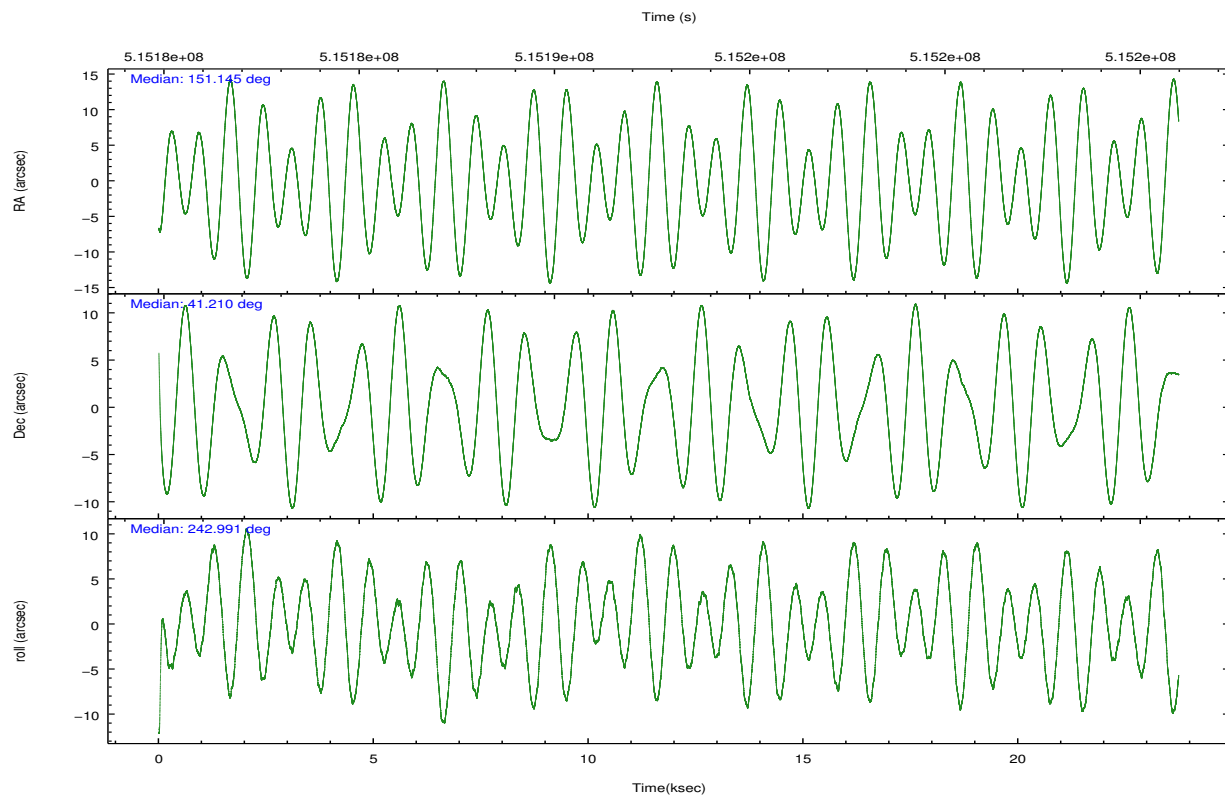
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	4120	4270	4447	6389	11038
	3%	3%	3%	4%	7%
grade 1 events	57	69	54	175	109
	0%	0%	0%	0%	0%
grade 2 events	2911	2731	3200	14275	9567
	2%	2%	2%	8%	6%
grade 3 events	1260	1367	1355	5786	4072
	1%	1%	1%	3%	2%
grade 4 events	1324	1349	1349	5581	3793
	1%	1%	1%	3%	2%
grade 5 events	4834	5979	5902	15528	8690
	4%	5%	4%	9%	5%
grade 6 events	2582	2713	3359	37396	10953
	2%	2%	2%	23%	7%
grade 7 events	90664	90820	98422	73775	106922
	84%	83%	83%	46%	68%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	151.142147	151.1445626635553	CCD I2 on	O4	Y
[deg] Pointing Dec	41.236903	41.20961080433229	CCD I3 on	O3	Y
[deg] Pointing Roll	242.838079	242.9931045000963	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	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)	515181238.184000	515180284.75892	CCD S5 on	N	N
Observation start date	2014-04-29T17:52:51	2014-04-29T17:38:04	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	515204801.184000	515205028.77282	On-chip summing requested	N	N
Observation end date	2014-04-30T00:25:34	2014-04-30T00:30:28	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



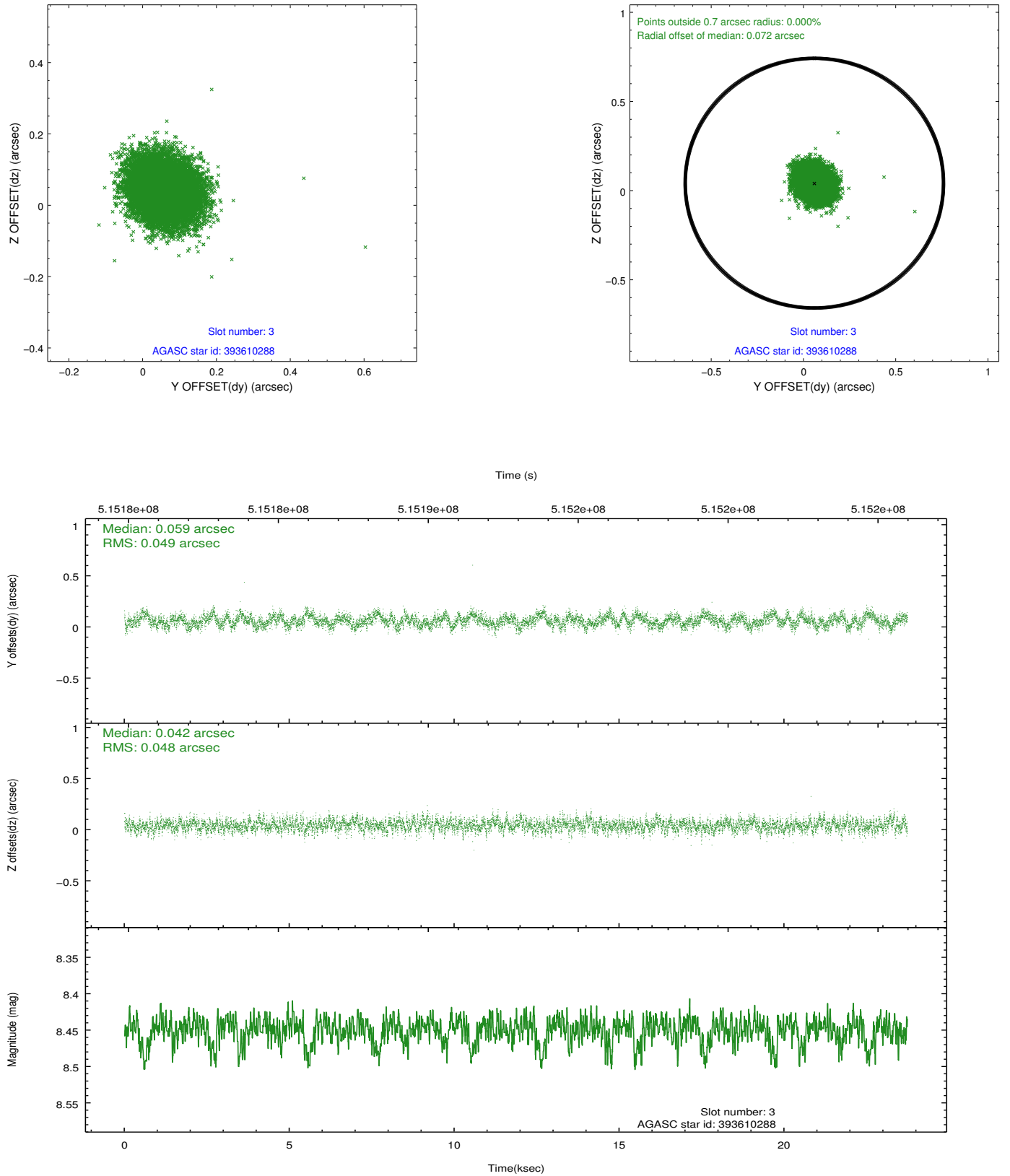


Slot Statistics

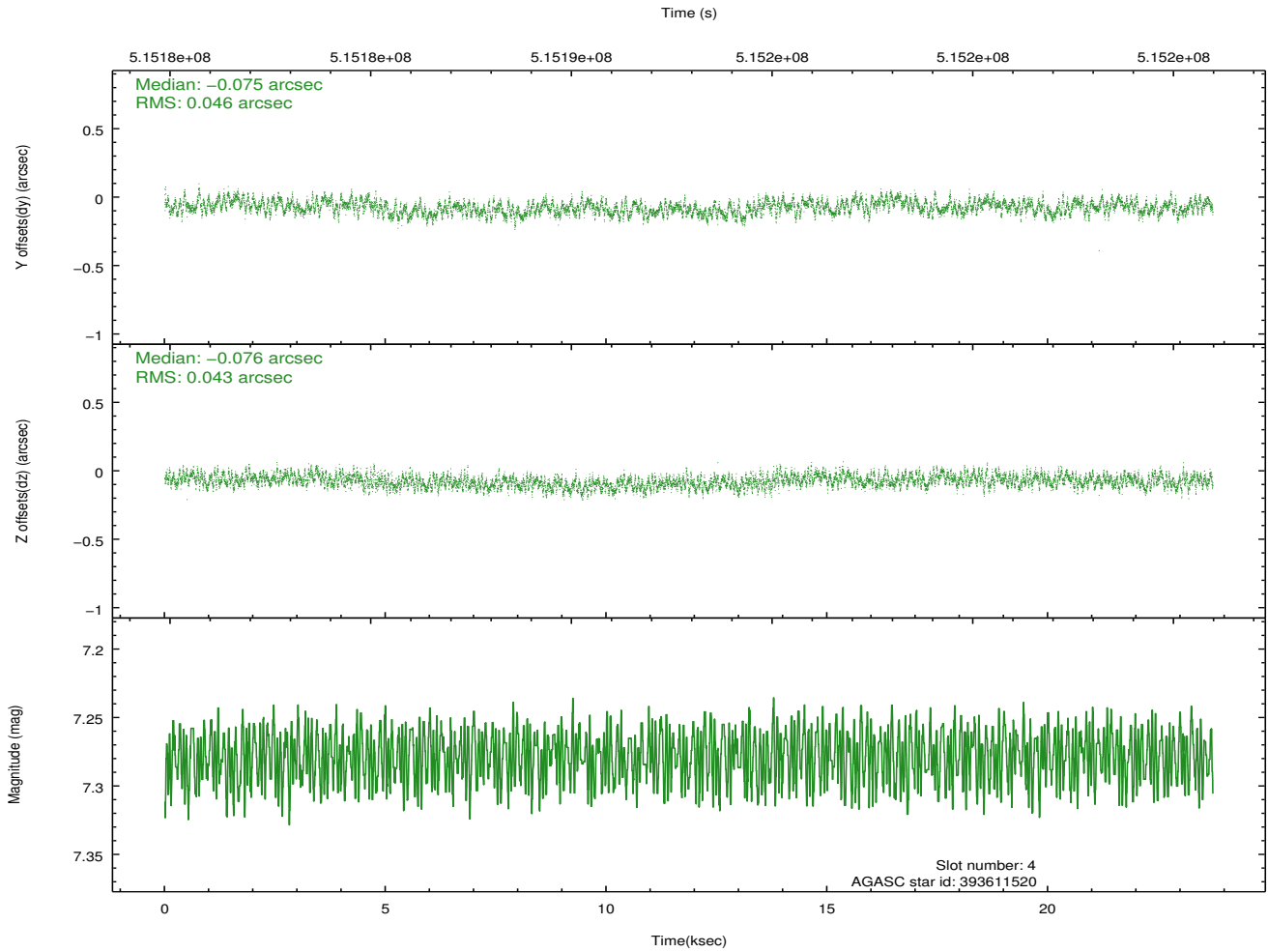
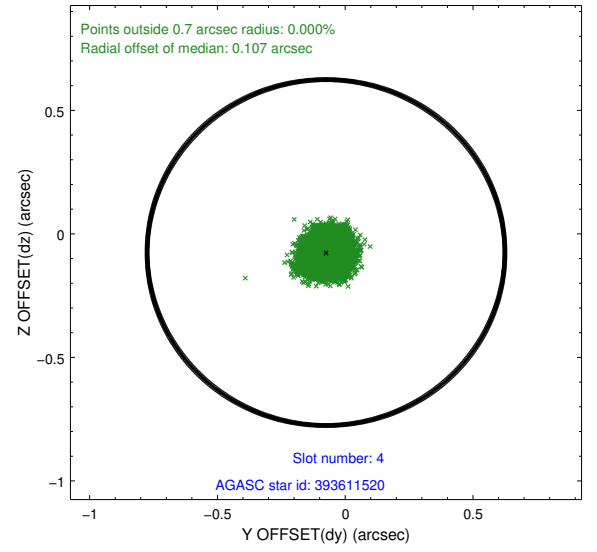
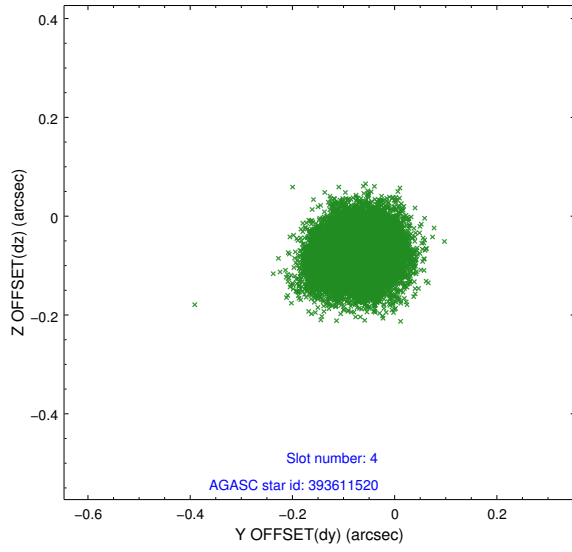
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.04	5789	-0.057	-0.034	0.014	0.025	0.000000	0.000000	-765.60	-1735.82
1	FID		ACIS-S-4	7.14	5789	0.197	0.037	0.015	0.050	0.000000	0.000000	2147.86	172.62
2	FID		ACIS-S-5	7.17	5789	-0.172	0.007	0.015	0.033	0.000000	0.000000	-1818.40	166.38
3	GUIDE	used	393610288	8.45	11575	0.059	0.042	0.073	0.116	151.538899	41.090404	-23.38	1196.39
4	GUIDE	used	393611520	7.28	11579	-0.075	-0.076	0.069	0.104	150.852248	42.009344	-2121.53	-1960.20
5	GUIDE	used	393613624	8.50	11574	-0.008	0.203	0.086	0.136	151.136661	40.665270	1837.67	926.37
6	GUIDE	used	393616688	8.96	11574	0.166	-0.228	0.129	0.192	151.530834	40.712712	1193.08	1804.12
7	GUIDE	used	393616816	8.42	11574	-0.140	0.053	0.066	0.110	151.562975	40.925077	474.60	1528.97

2.4 Star Slots

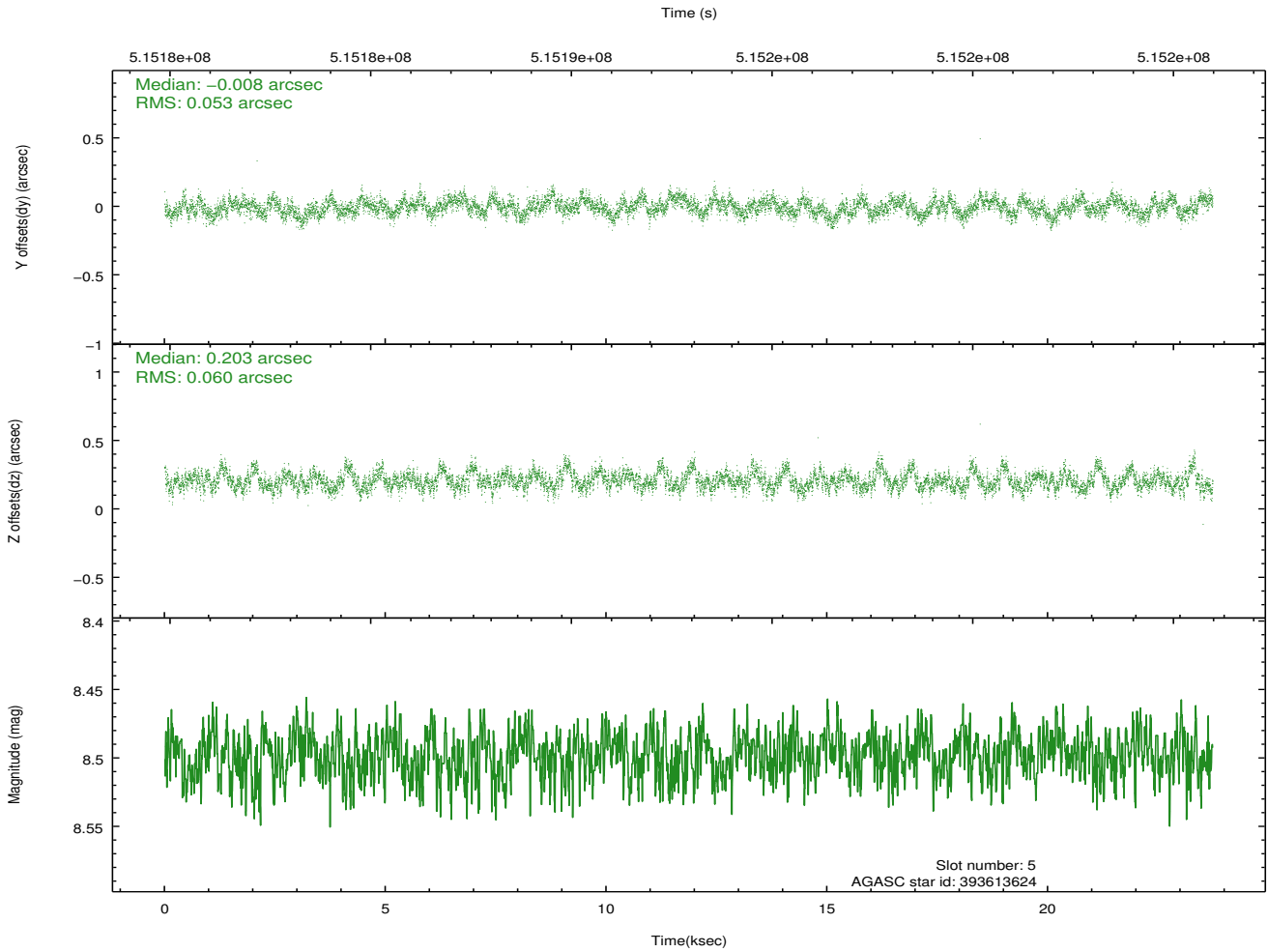
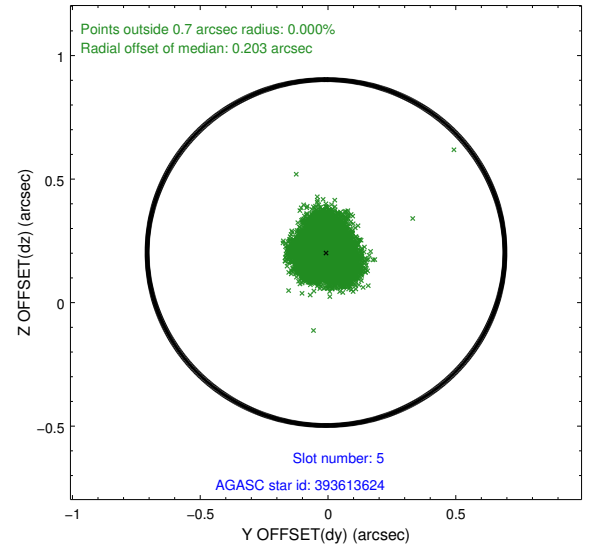
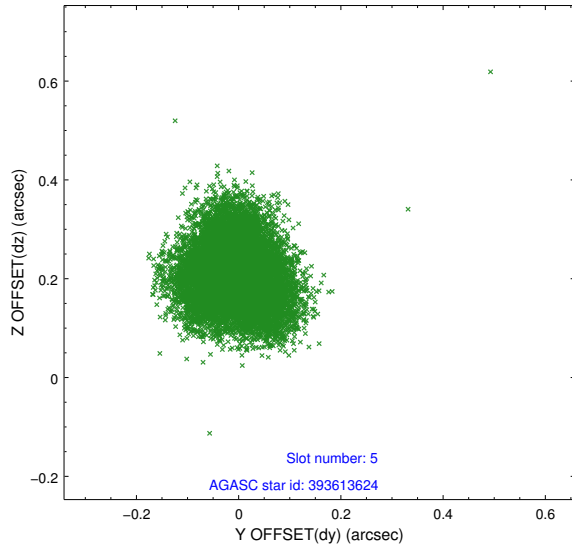
2.4.1 Slot 3



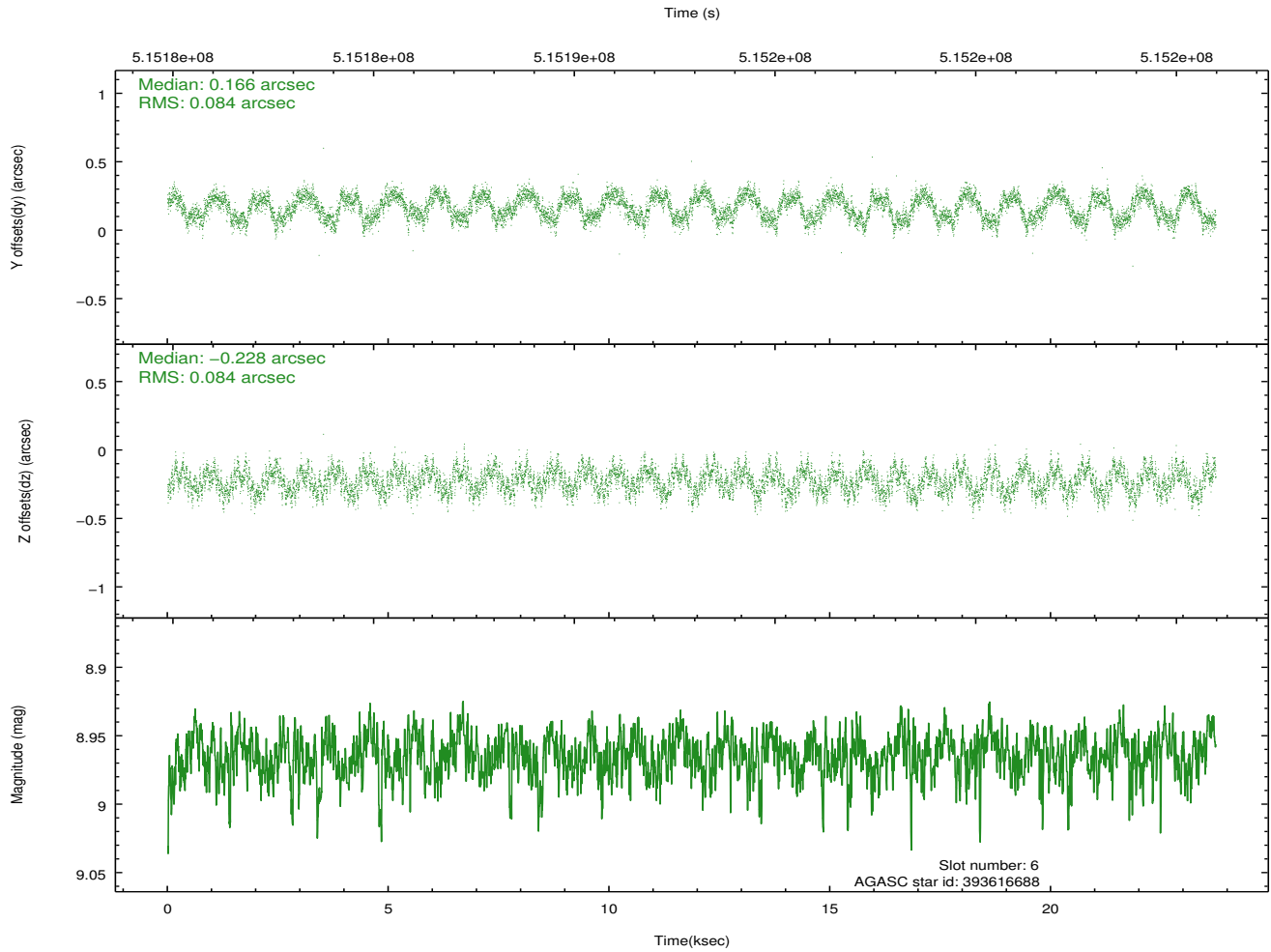
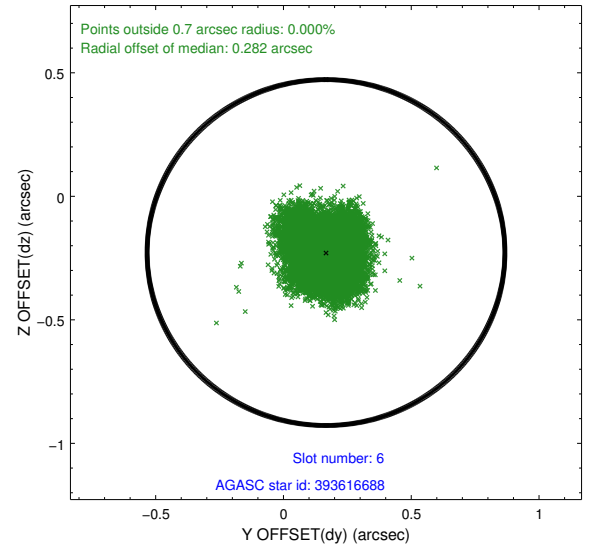
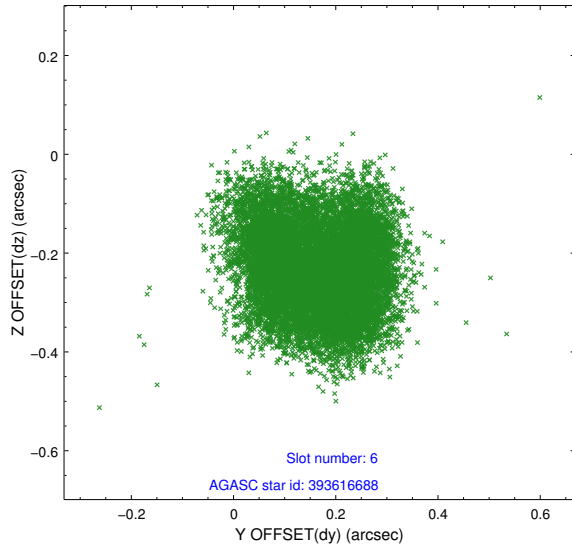
2.4.2 Slot 4



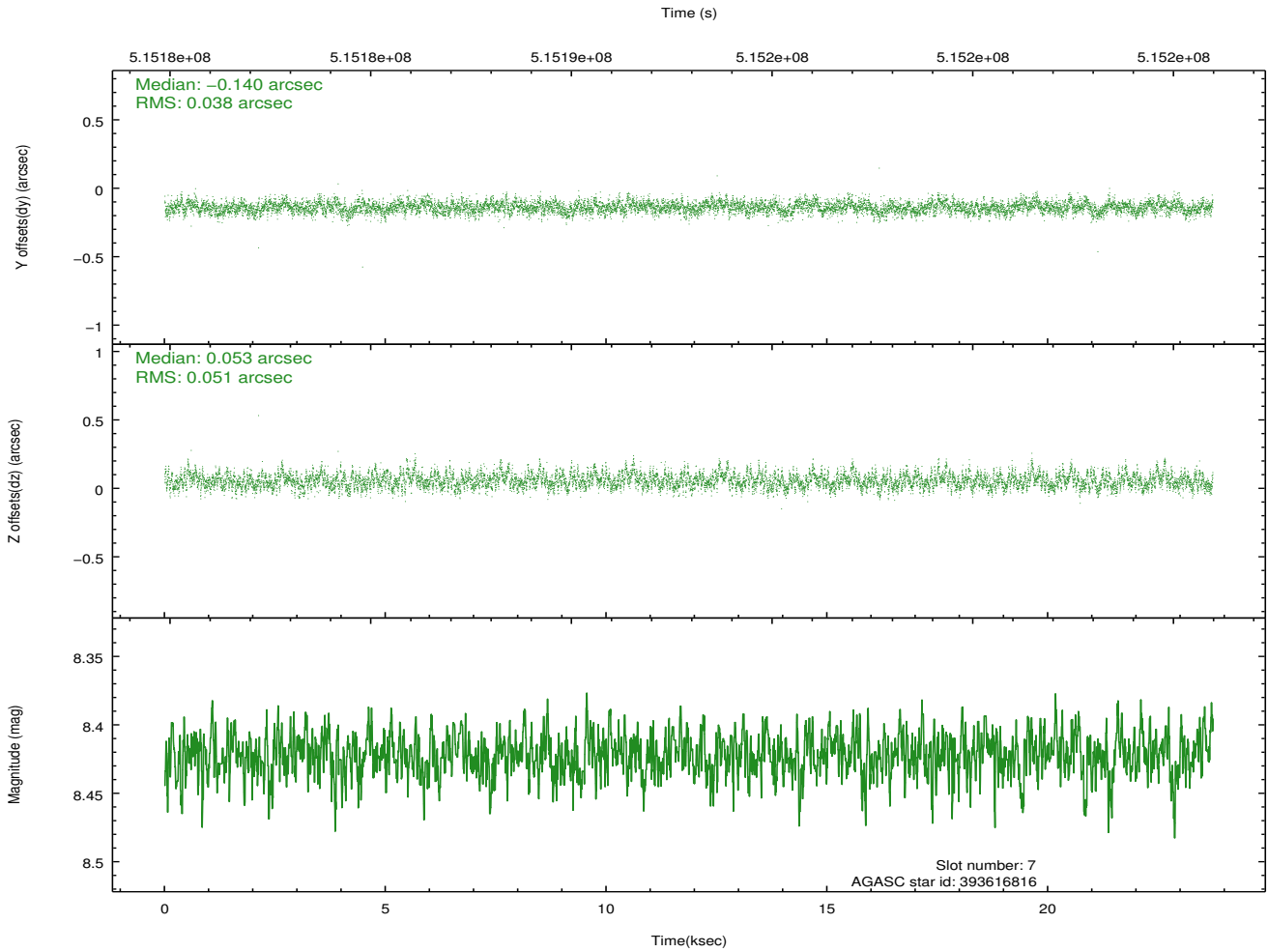
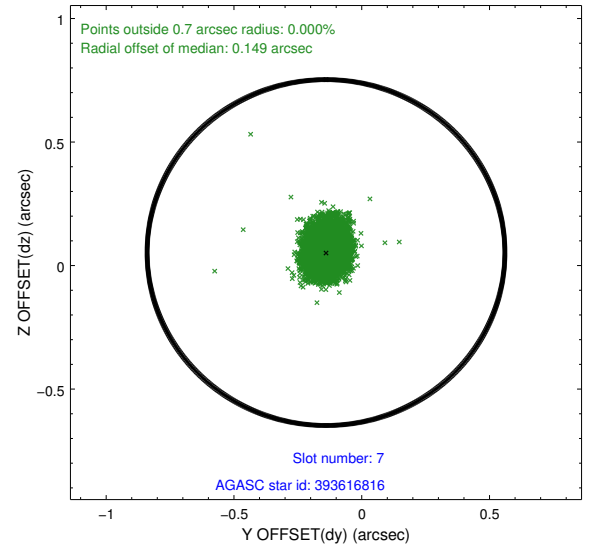
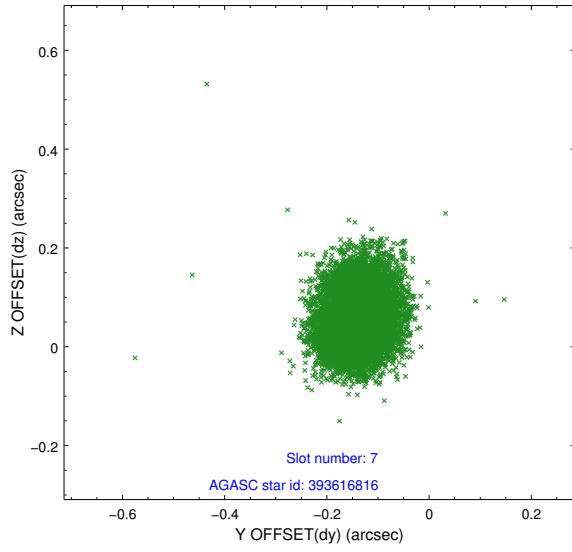
2.4.3 Slot 5



2.4.4 Slot 6

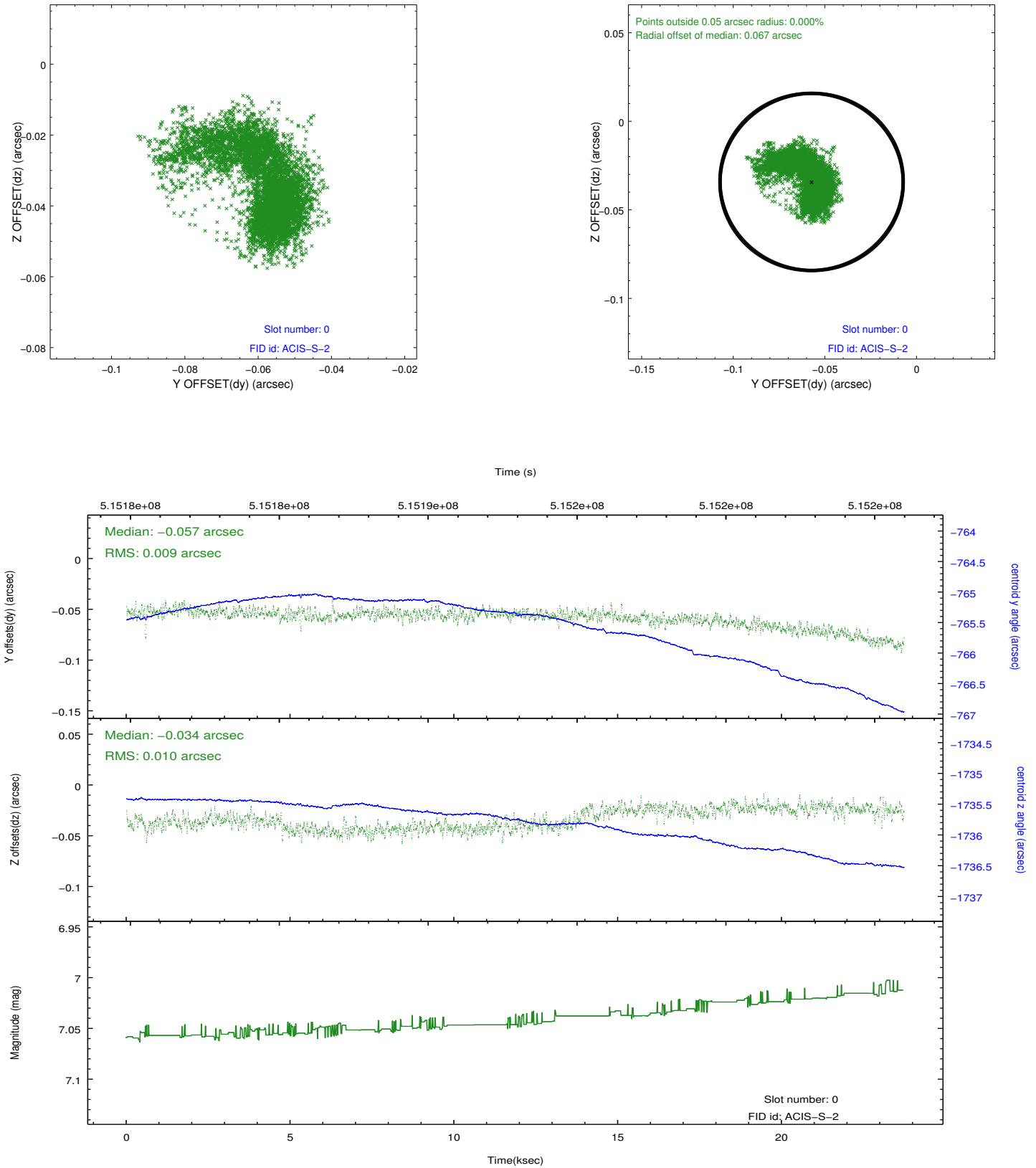


2.4.5 Slot 7

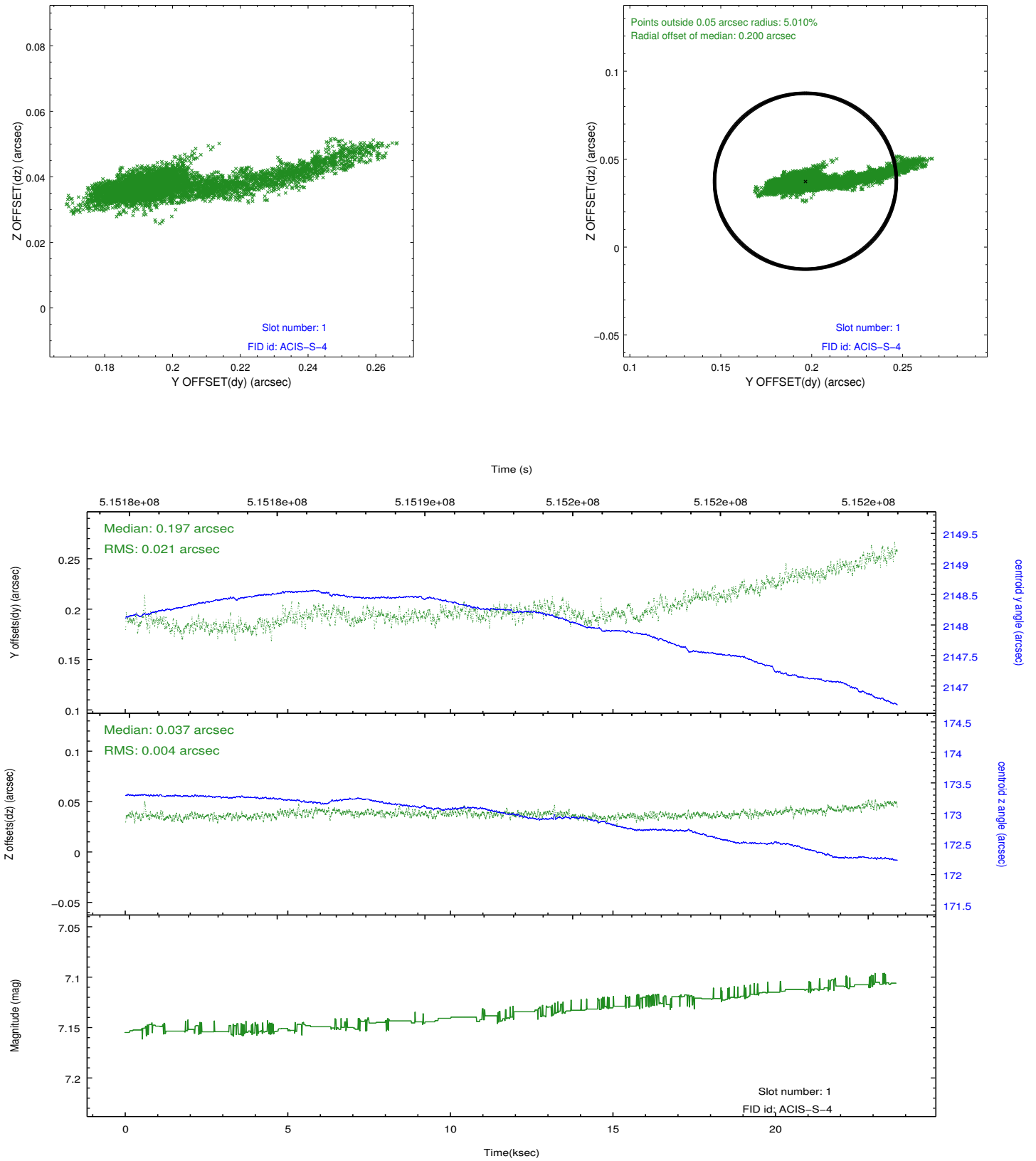


2.5 FID Slots

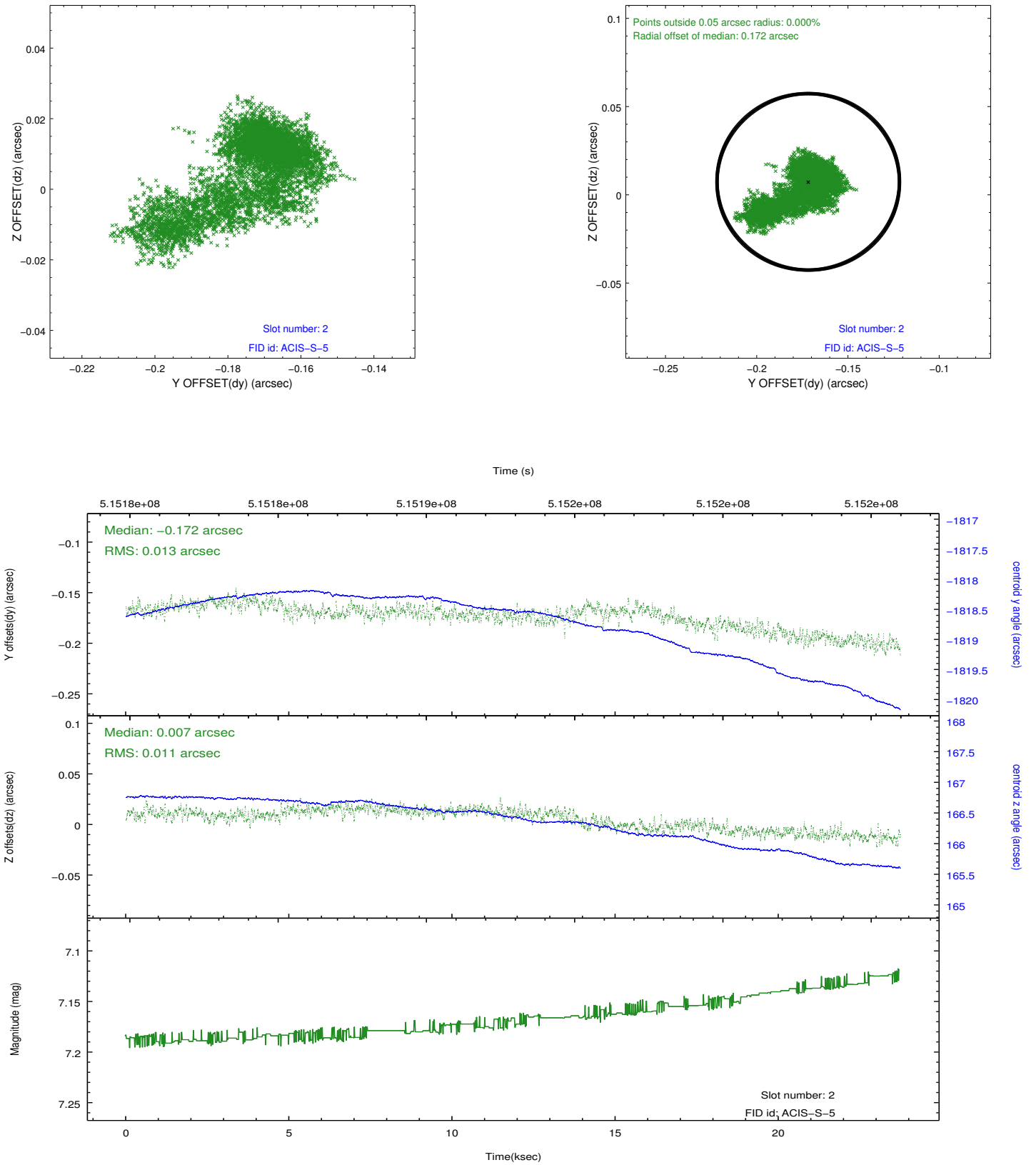
2.5.1 Slot 0



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)	2014.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.631300181746

A.2 Comments

Joint proposal with HST.

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.