

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 14498 - L2 Version 2
Chandra X-Ray Center

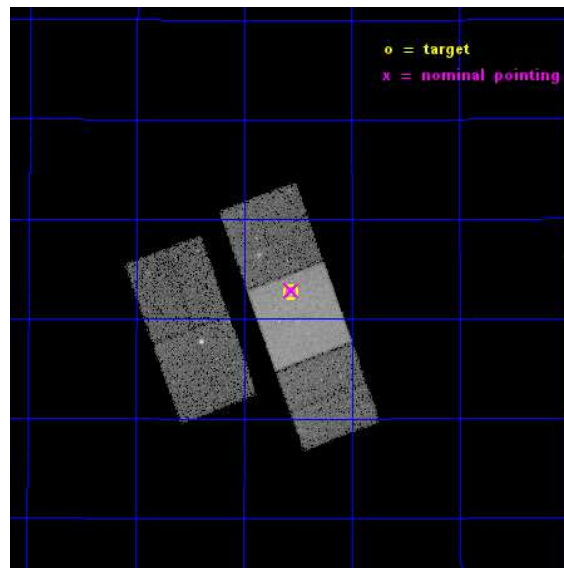
L2 Processing Date : Dec 7 2014

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1 Front

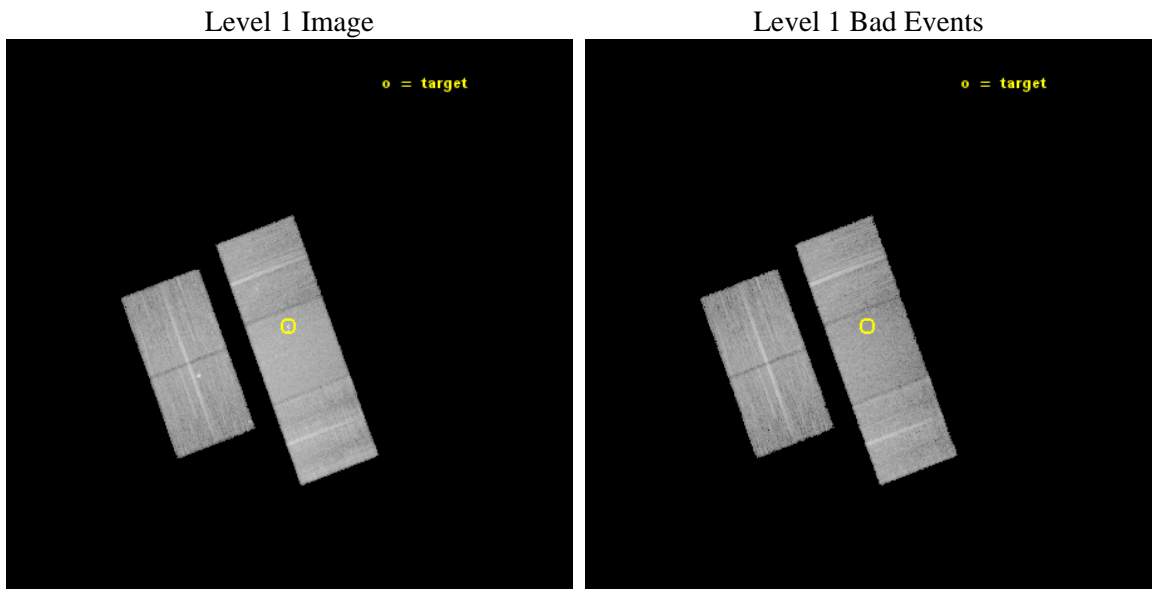
seq_num	702735	Sequence number
obs_id	14498	Observation id
title	ENERGY DEPENDENT X-RAY MICROLENSING AND THE STRUCTURE OF QUASARS	P
observer	Prof. Christopher Kochanek	Principal investigator
object	SDSS1004+4112	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	151.1425	Observer's specified target RA [deg]
dec_targ	41.212222	Observer's specified target Dec [deg]
ra_nom	151.14006703961	Nominal RA [deg]
dec_nom	41.21461614837	Nominal Dec [deg]
roll_nom	69.737873344495	Nominal Roll [deg]
revision	2	Processing version of data
ontime	24067.483677685	Sum of GTIs [s]
livetime	23753.024285213	Livetime [s]
ontime2	24064.178517401	Sum of GTIs [s]
ontime3	24067.401597679	Sum of GTIs [s]
ontime6	24067.442637682	Sum of GTIs [s]
ontime7	24067.483677685	Sum of GTIs [s]
ontime8	24067.360557675	Sum of GTIs [s]
l2events	119970	Number of level 2 events



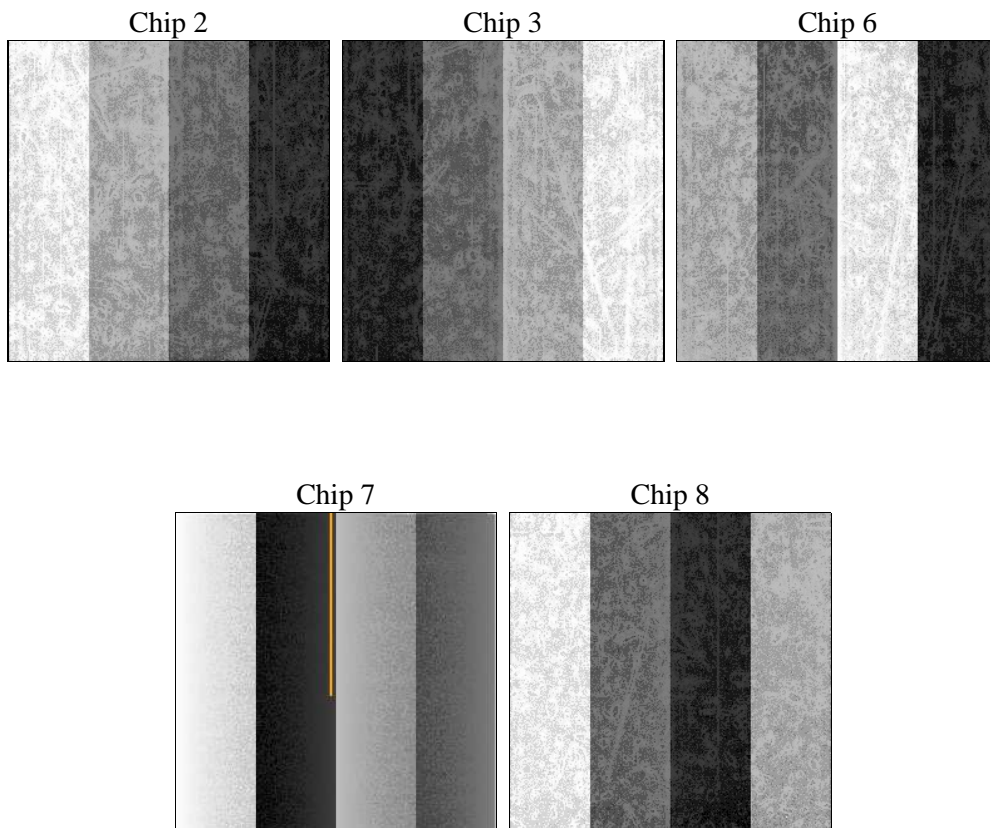
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	24000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	24067.483677685	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	24064.178517401	Sum of GTIs [s]
date	2014-12-08T02:18:10	Date and time of file creation	ontime3	24067.401597679	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	24067.442637682	Sum of GTIs [s]
			ontime7	24067.483677685	Sum of GTIs [s]
			ontime8	24067.360557675	Sum of GTIs [s]
			l1events	657209	Number of level 1 events

2.1.4 Events

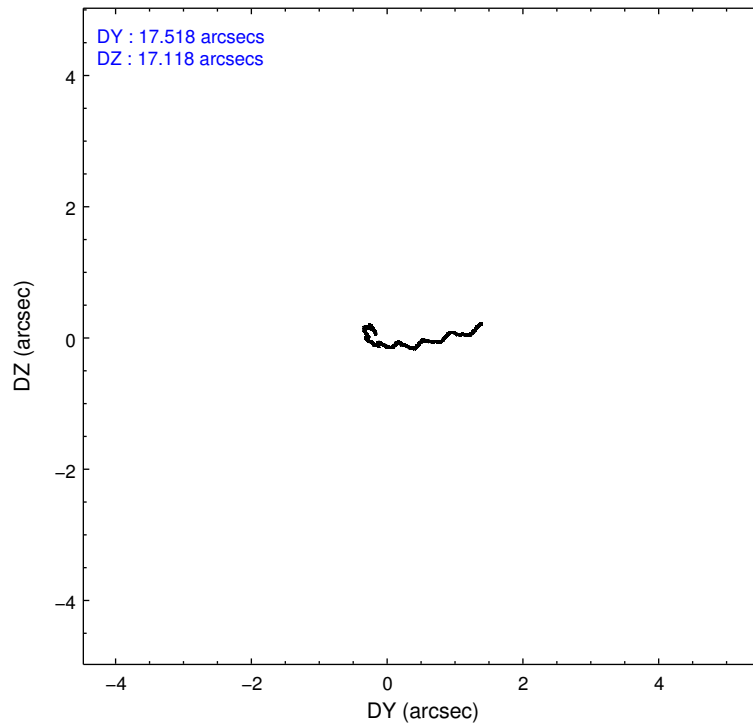
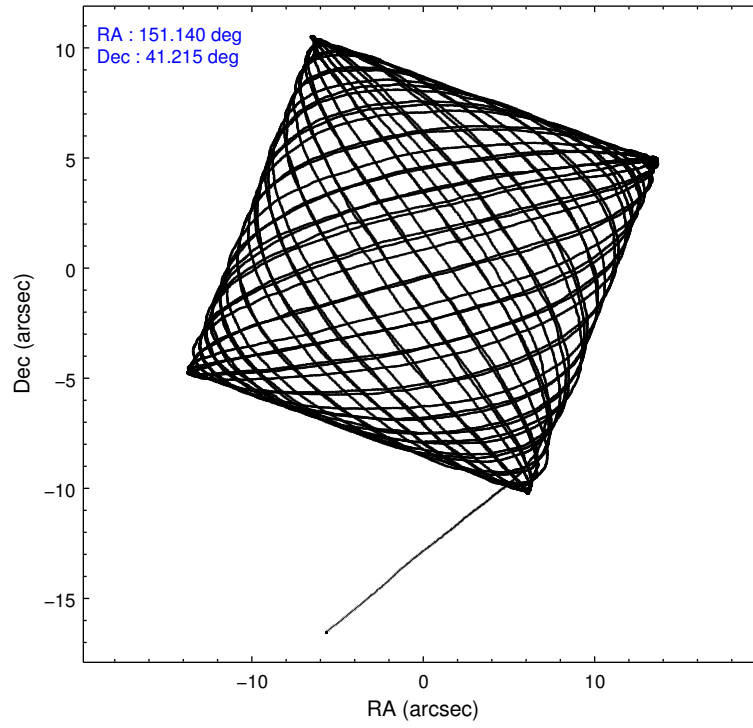
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	113256	108060	117799	160268	157826
rejected events	100458	94090	102993	89347	113723
rejected %	88%	87%	87%	55%	72%

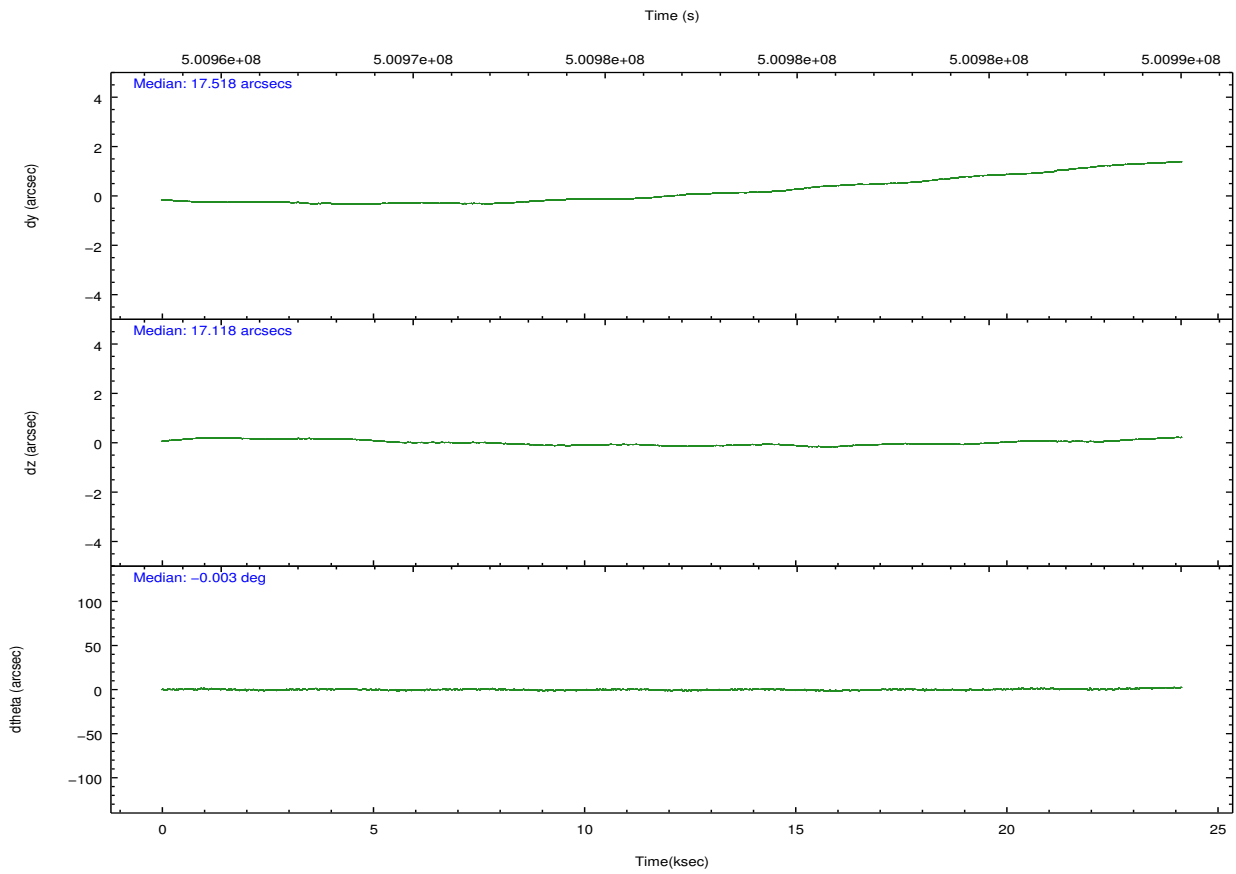
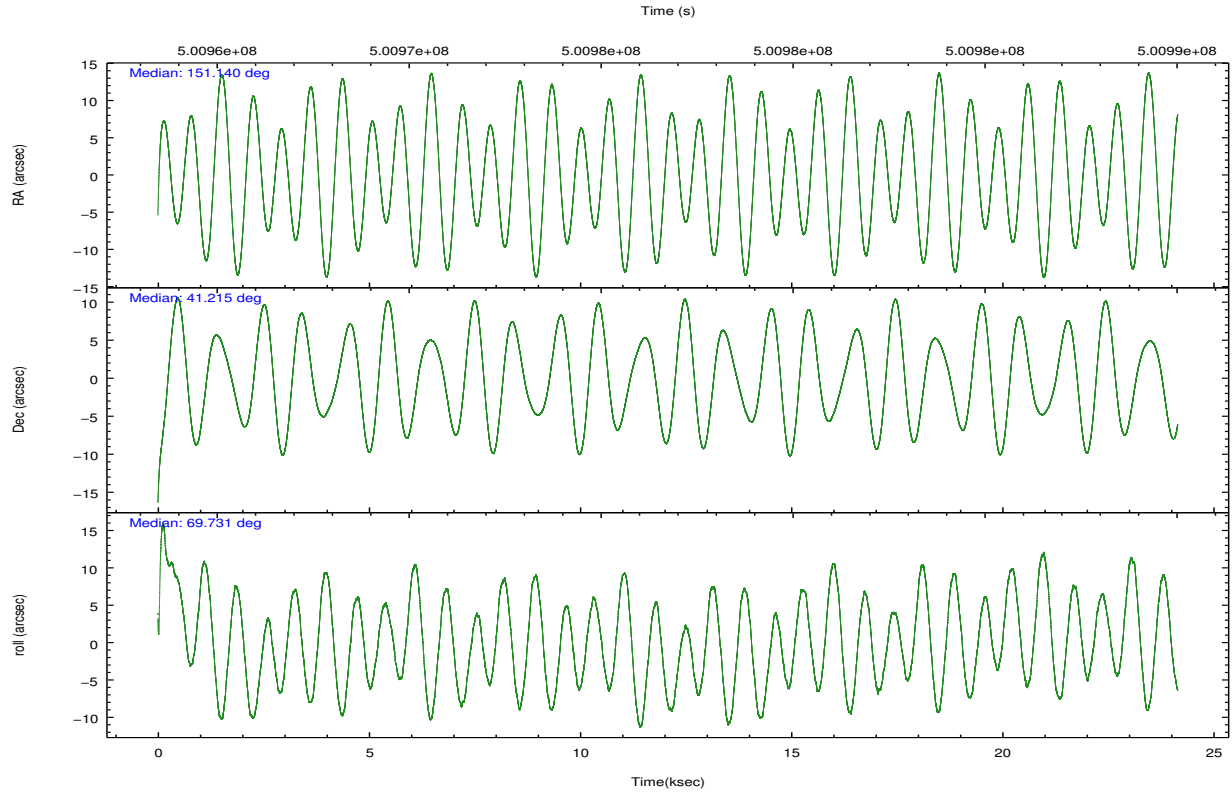
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	4362	5520	5179	6834	13103
	3%	5%	4%	4%	8%
grade 1 events	48	79	91	186	105
	0%	0%	0%	0%	0%
grade 2 events	3196	2883	3438	14644	10351
	2%	2%	2%	9%	6%
grade 3 events	1281	1397	1454	6132	4668
	1%	1%	1%	3%	2%
grade 4 events	1359	1459	1444	6209	4328
	1%	1%	1%	3%	2%
grade 5 events	4880	6154	6171	16526	8743
	4%	5%	5%	10%	5%
grade 6 events	2603	2713	3296	37119	11658
	2%	2%	2%	23%	7%
grade 7 events	95527	87855	96726	72618	104870
	84%	81%	82%	45%	66%

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	151.146710	151.1400670396053	CCD I2 on	O4	Y
[deg] Pointing Dec	41.187749	41.21461614836997	CCD I3 on	O3	Y
[deg] Pointing Roll	69.576880	69.73787334449455	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	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	O2	Y
[s] Observation start time (MET)	500964811.184000	500963771.26441	CCD S5 on	N	N
Observation start date	2013-11-16T04:52:24	2013-11-16T04:36:11	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	500988811.184000	500989640.21583	On-chip summing requested	N	N
Observation end date	2013-11-16T11:32:24	2013-11-16T11:47:20	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





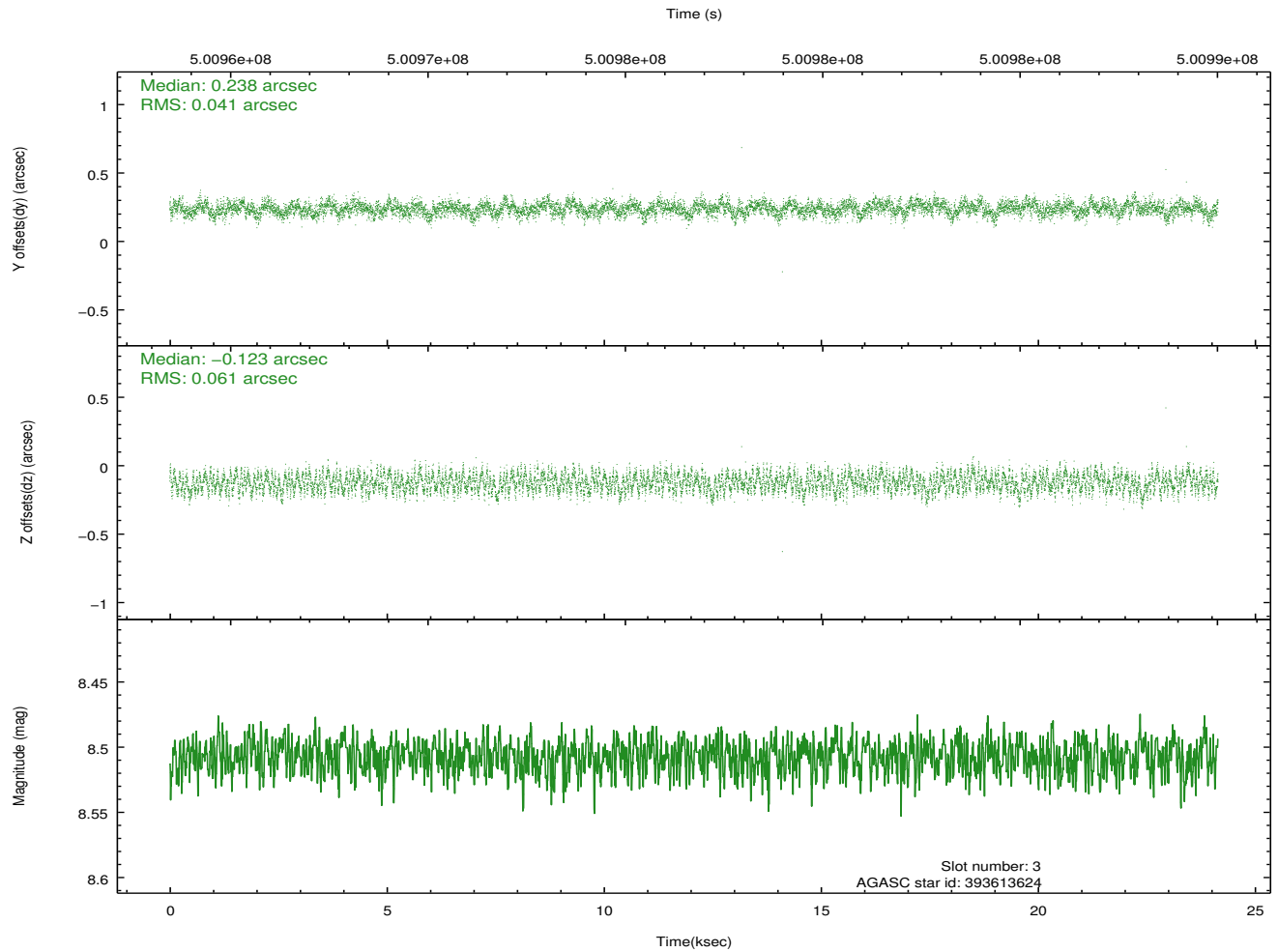
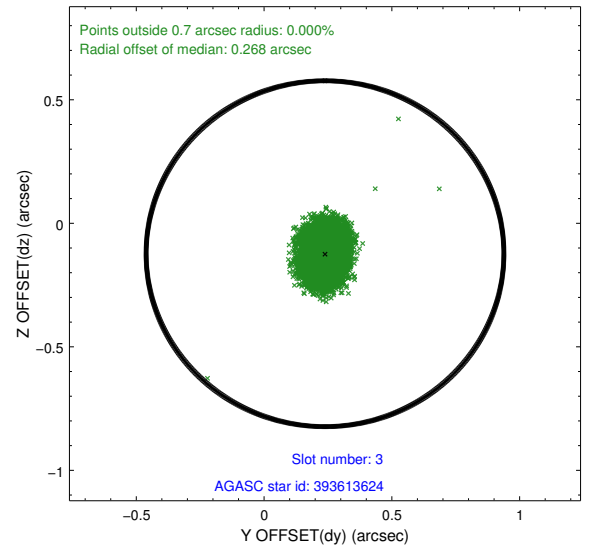
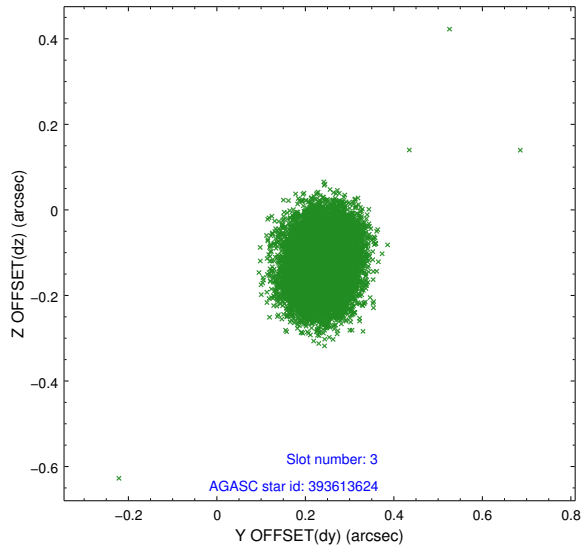
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.03	5891	-0.087	-0.035	0.010	0.016	0.000000	0.000000	-770.88	-1738.54
1	FID		ACIS-S-4	7.10	5891	0.233	0.051	0.019	0.041	0.000000	0.000000	2142.68	169.87
2	FID		ACIS-S-5	7.14	5890	-0.179	-0.008	0.018	0.031	0.000000	0.000000	-1823.63	163.67
3	GUIDE	used	393613624	8.51	11777	0.238	-0.123	0.079	0.124	151.136661	40.665270	-1771.64	-630.65
4	GUIDE	used	393616408	9.02	11778	-0.323	-0.308	0.084	0.134	150.713966	41.346840	131.03	1296.88
5	GUIDE	used	393616688	8.99	11773	-0.068	0.325	0.083	0.140	151.530834	40.712712	-1234.28	-1577.65
6	GUIDE	used	393616816	8.43	11779	0.069	-0.073	0.088	0.144	151.562975	40.925077	-488.77	-1388.95
7	GUIDE	used	393619280	9.36	11768	0.089	0.188	0.098	0.158	150.915222	40.640455	-2066.84	-94.50

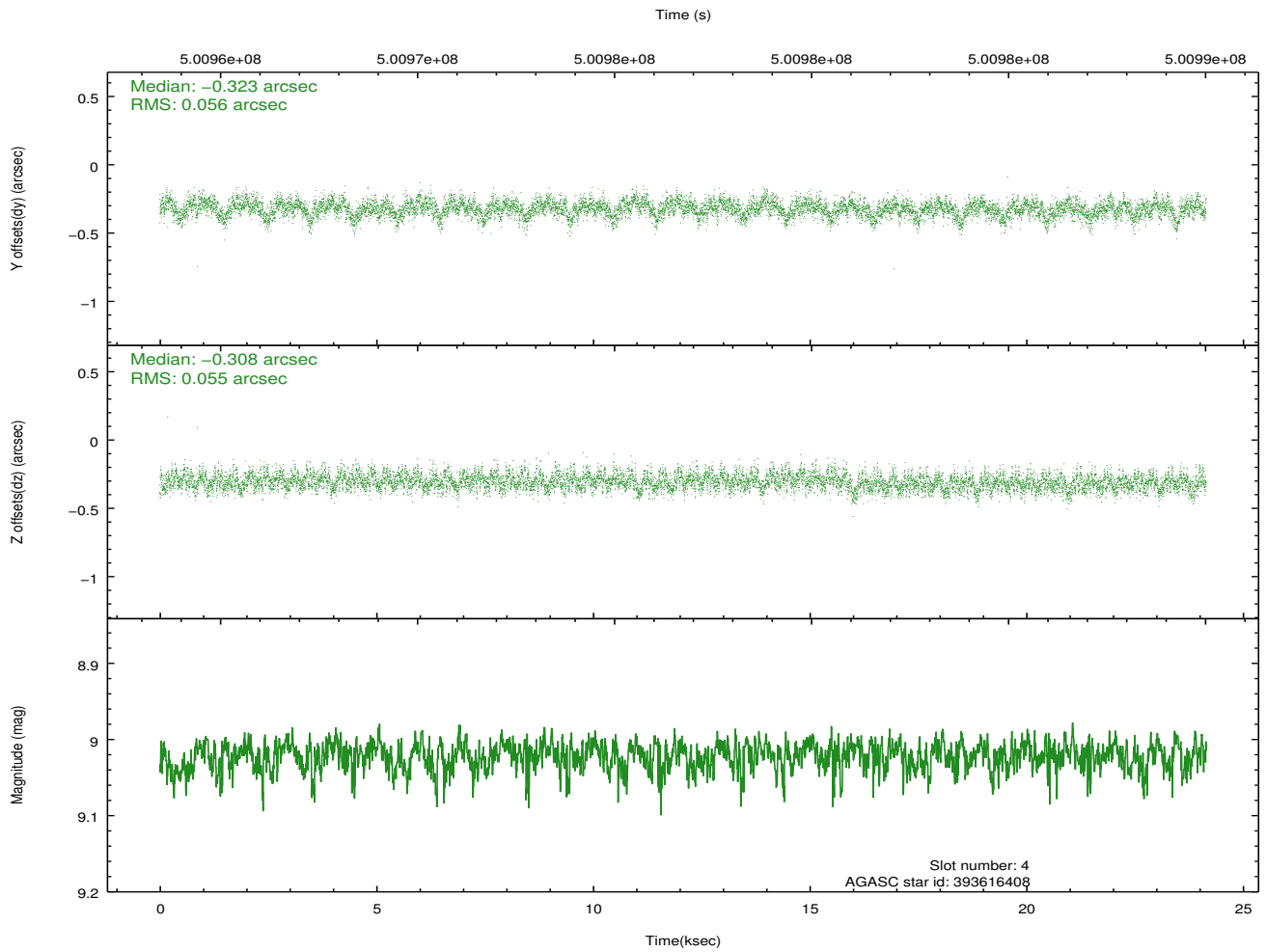
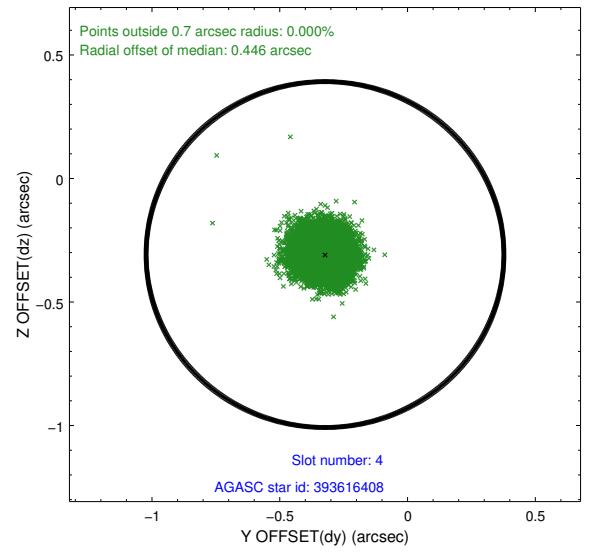
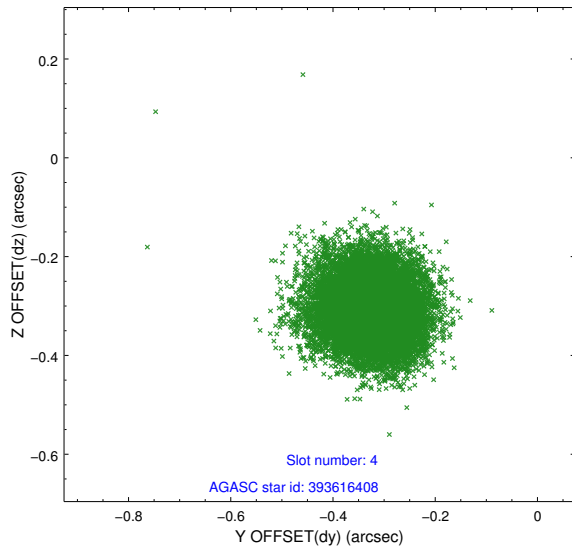
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2.4 Star Slots

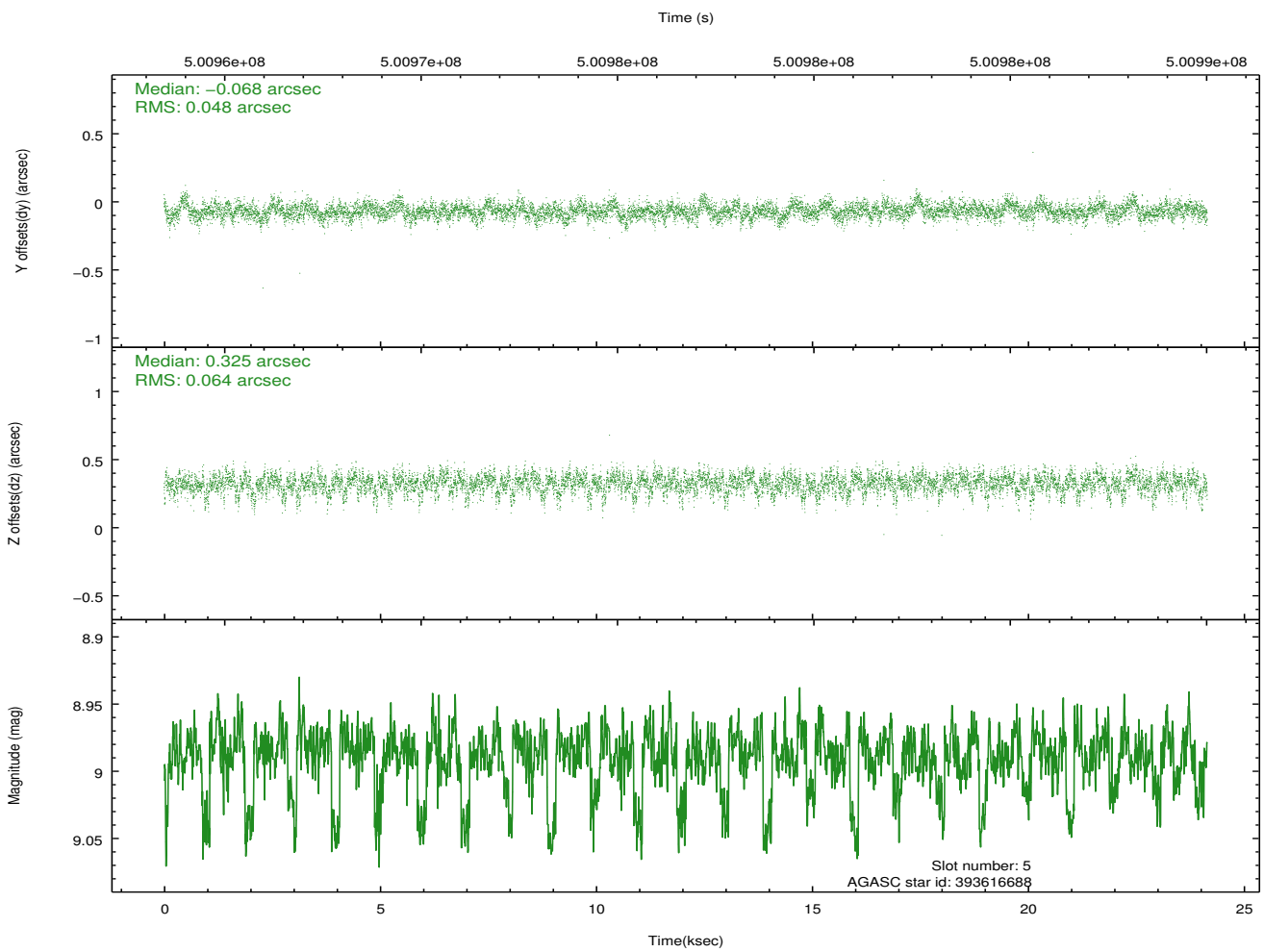
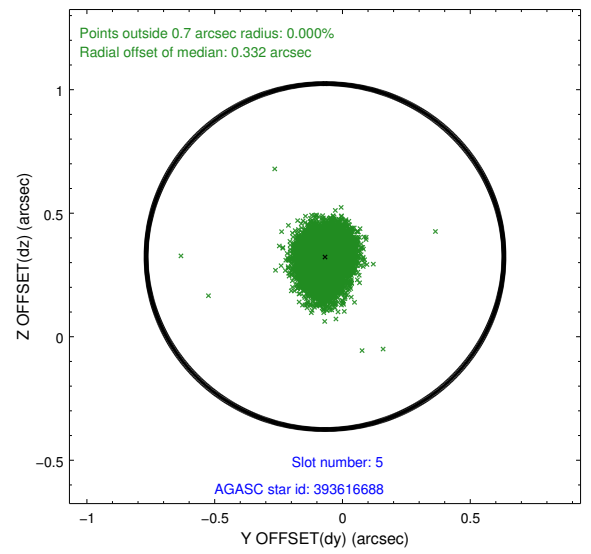
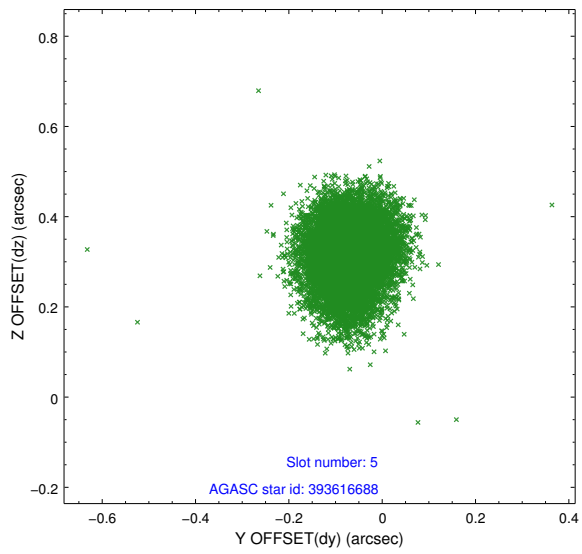
2.4.1 Slot 3



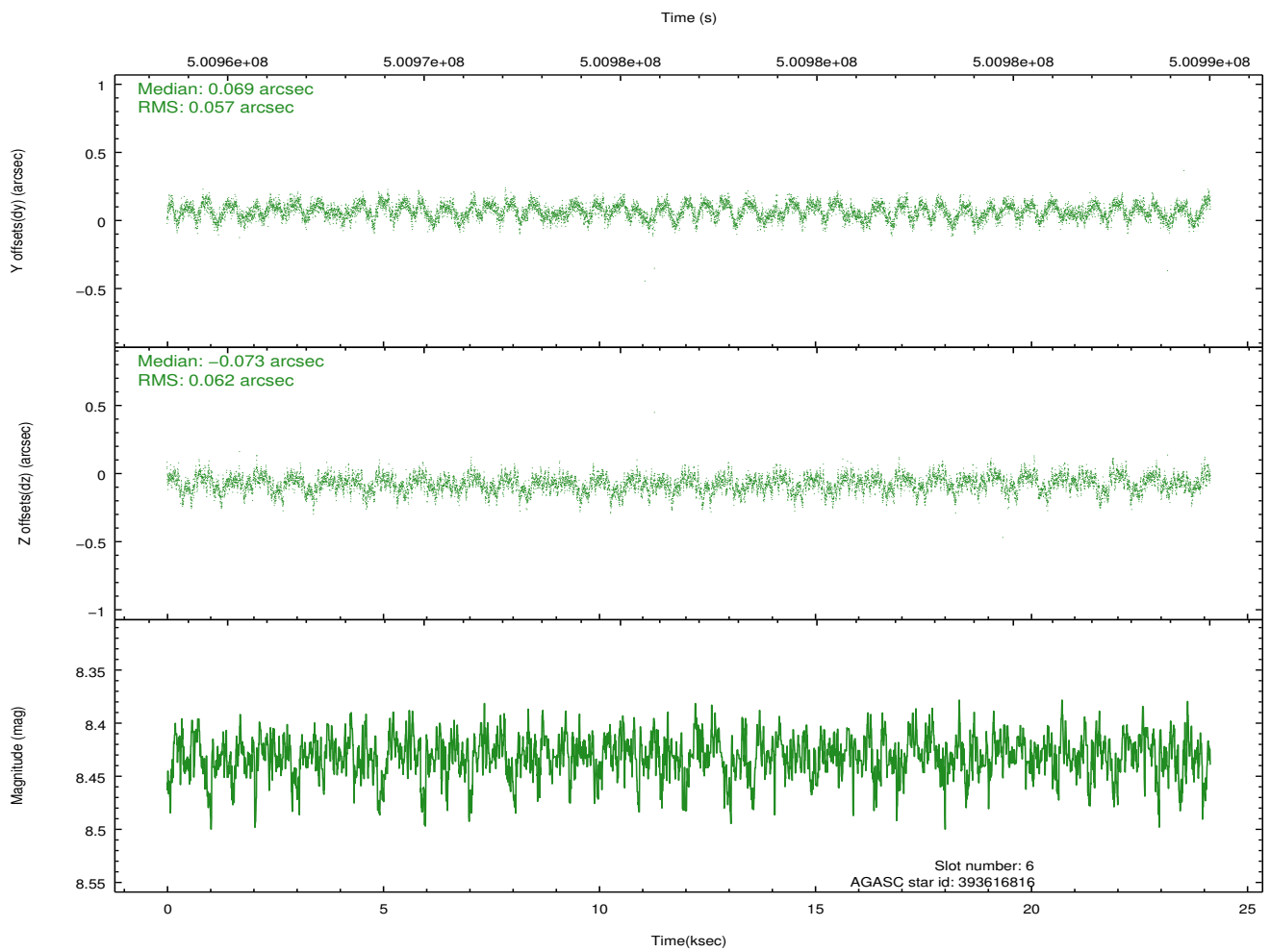
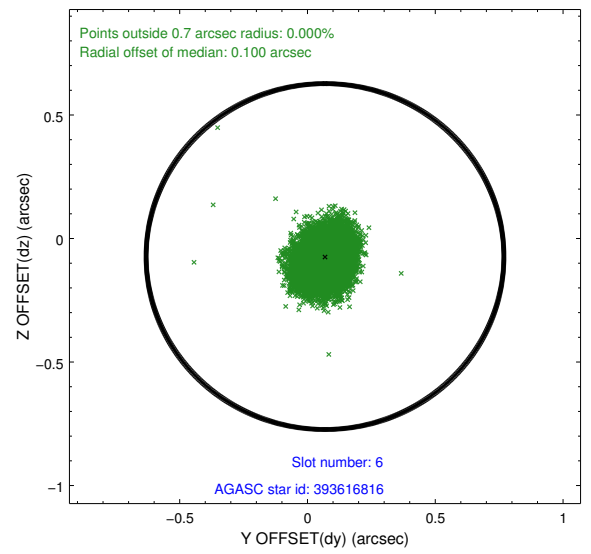
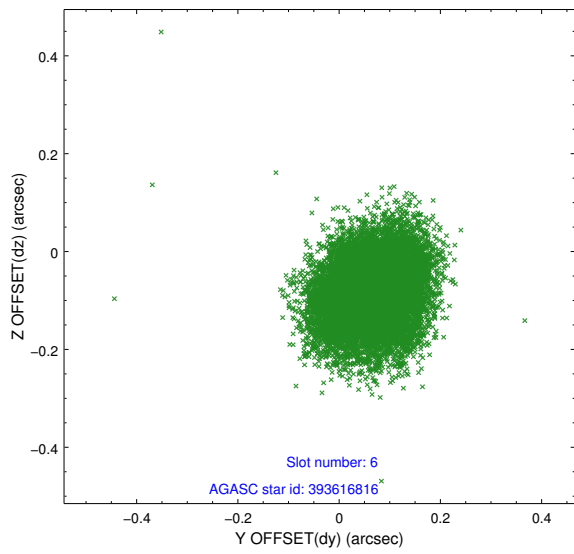
2.4.2 Slot 4



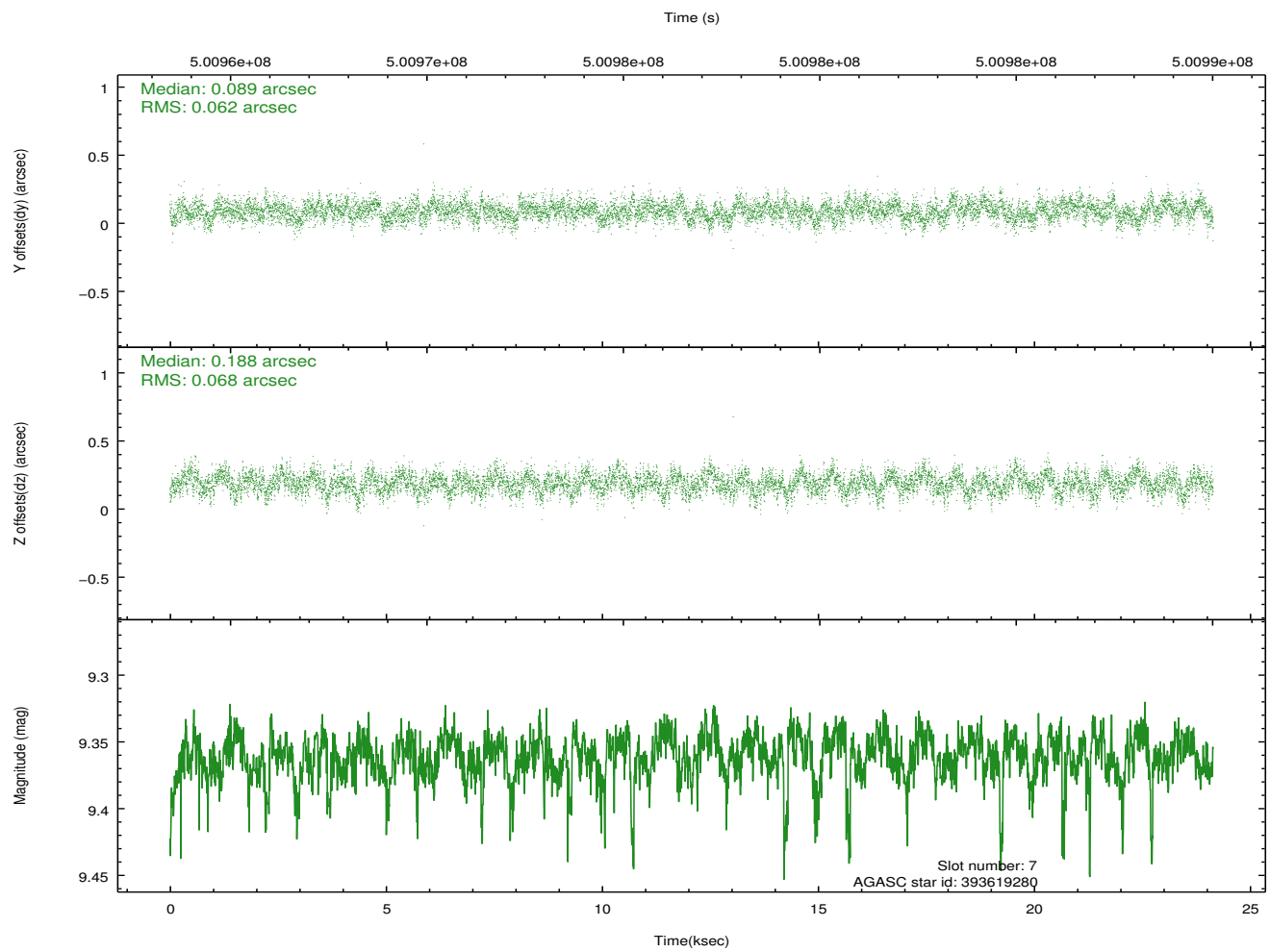
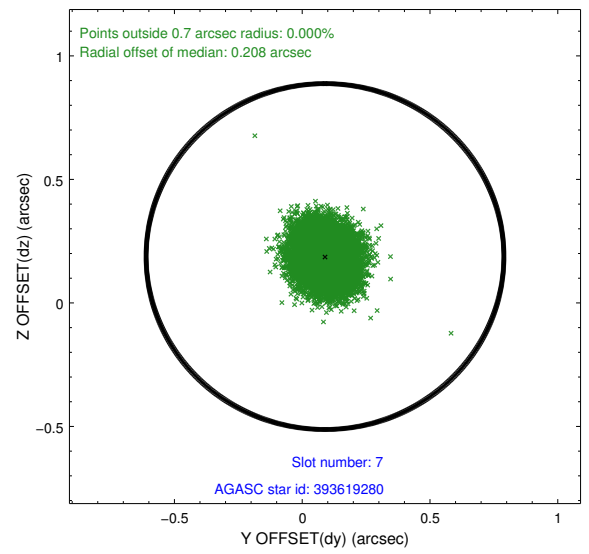
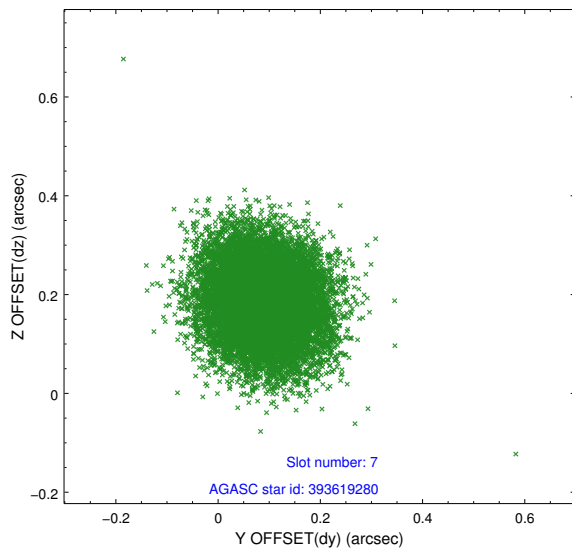
2.4.3 Slot 5



2.4.4 Slot 6

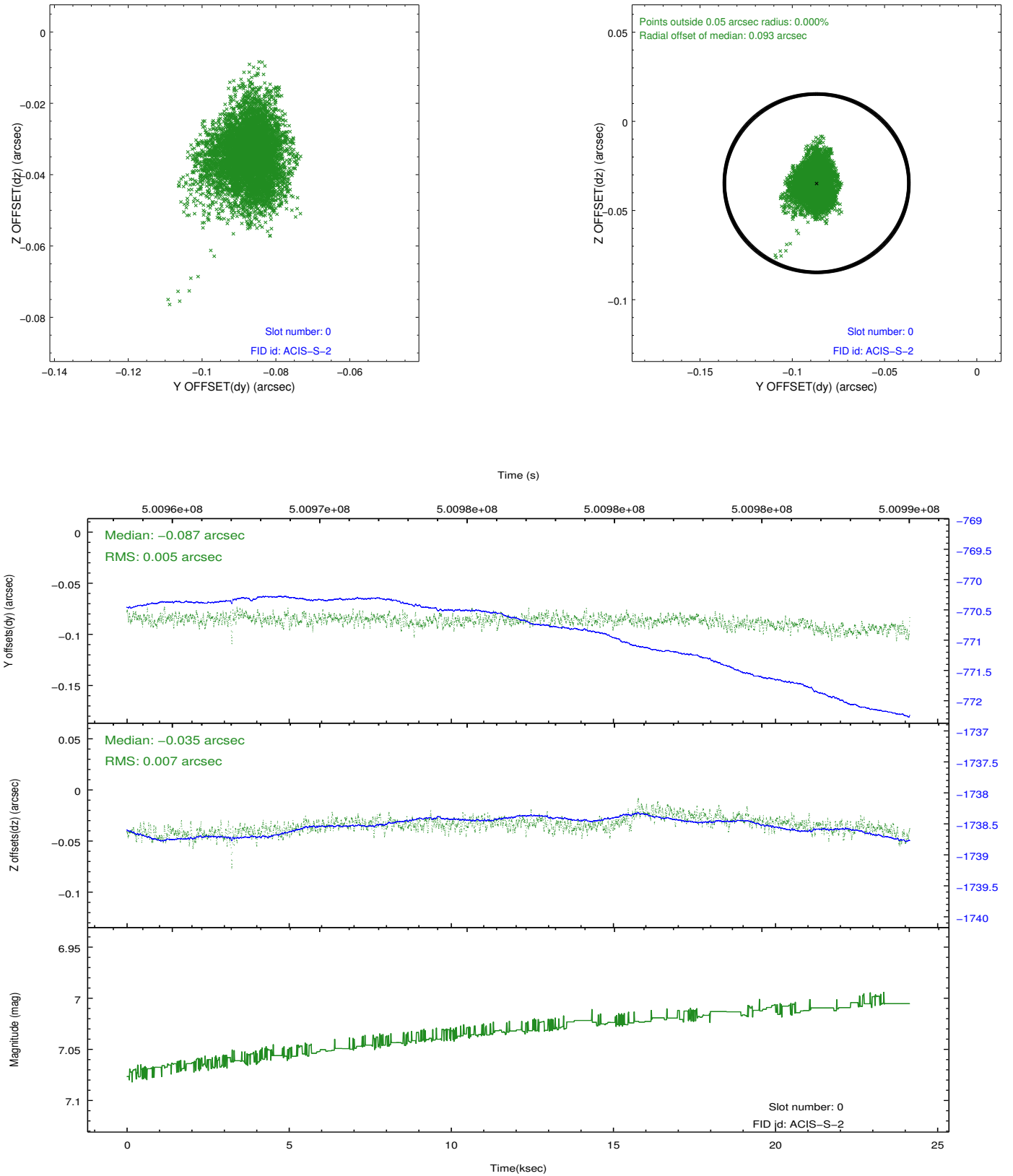


2.4.5 Slot 7

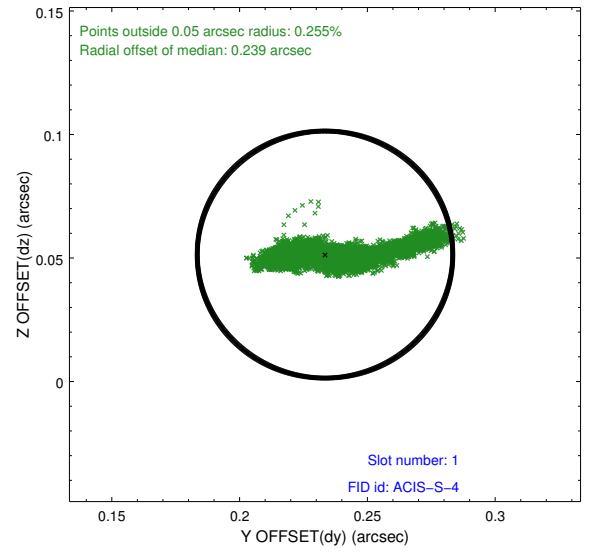
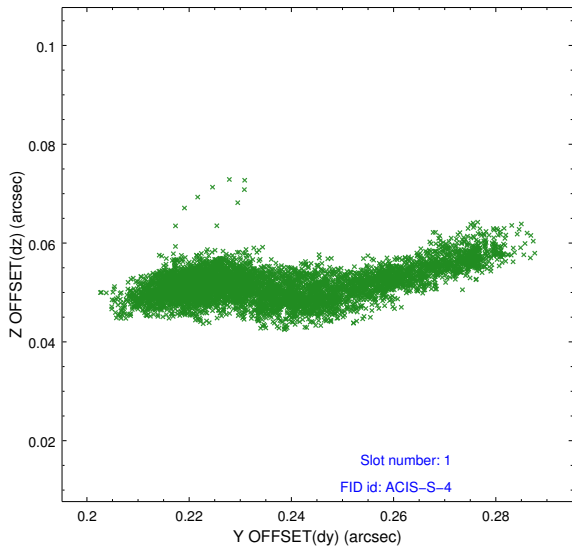


2.5 FID Slots

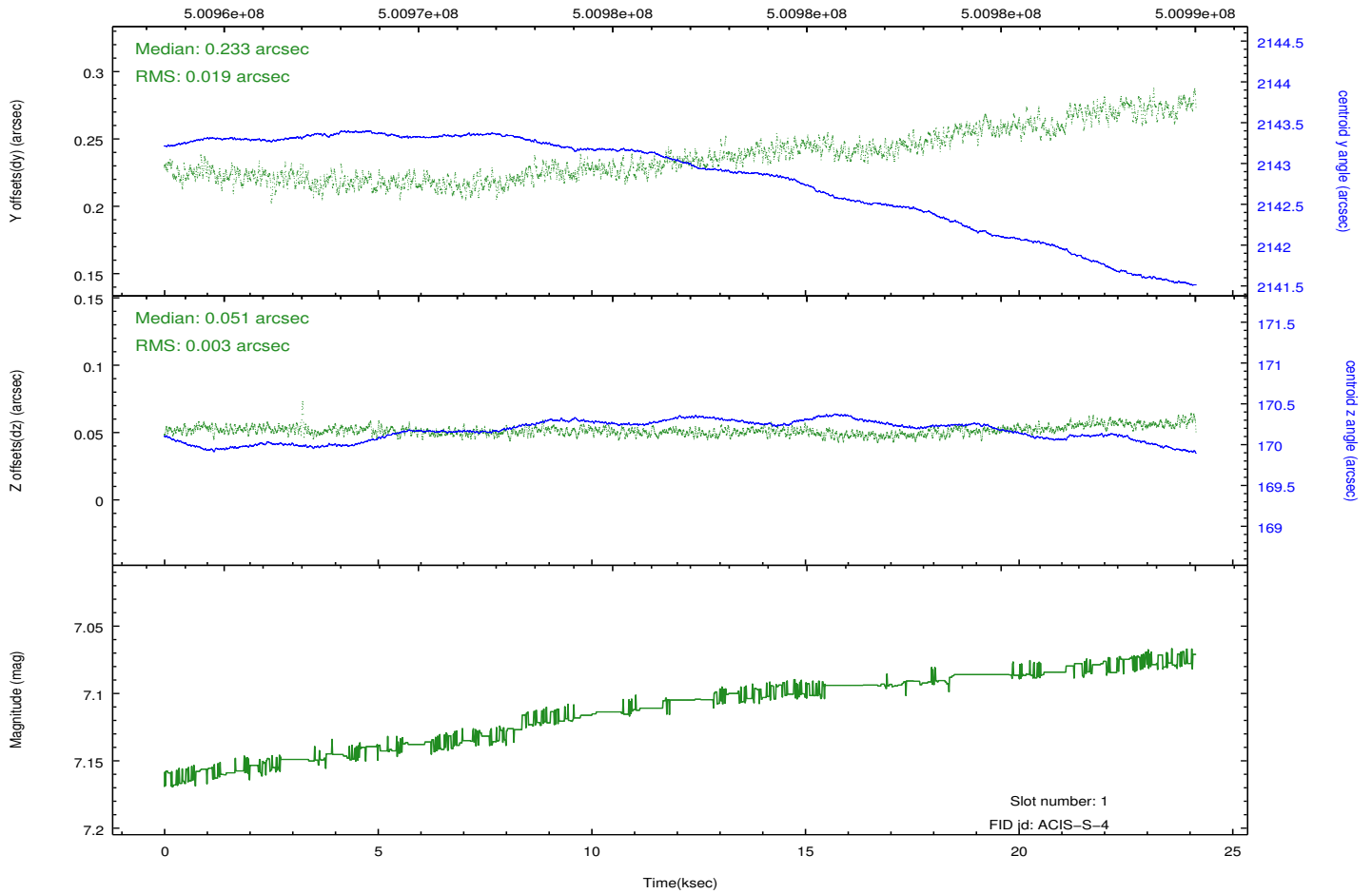
2.5.1 Slot 0



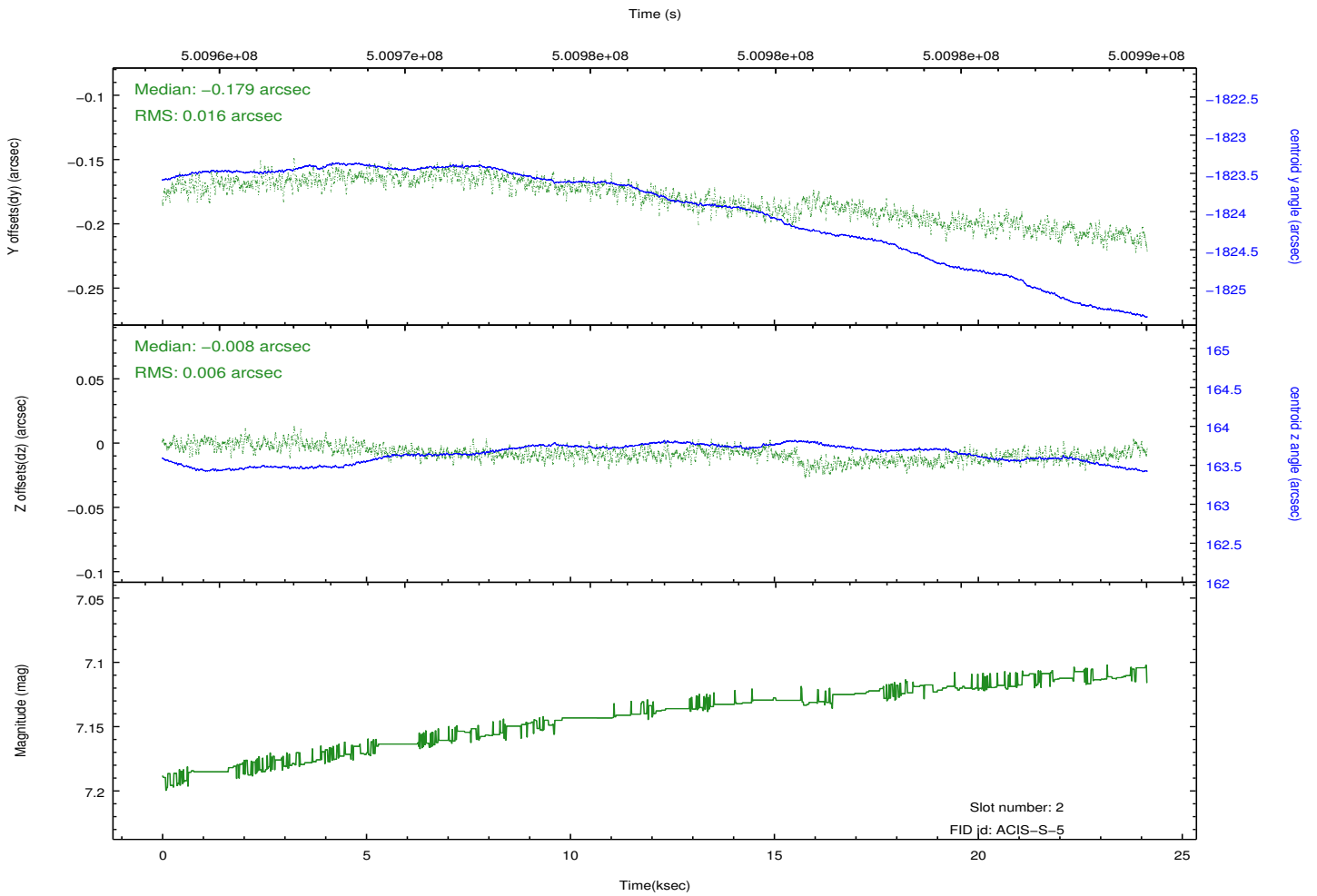
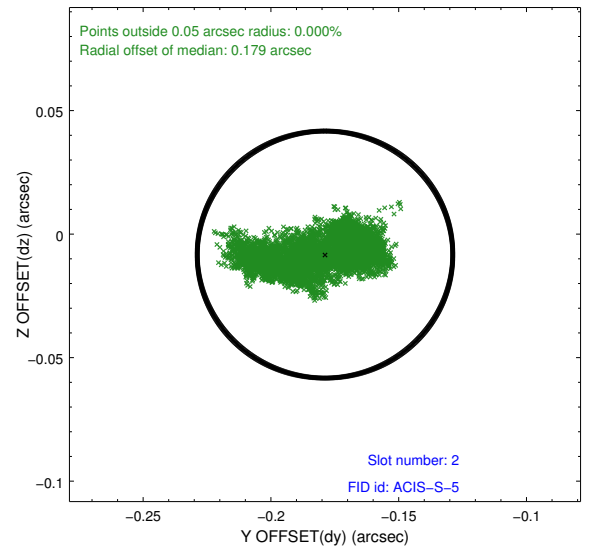
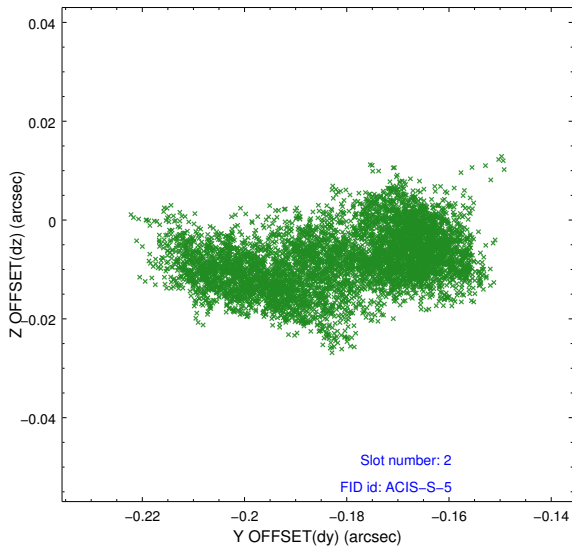
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.067483677685

A.2 Comments

Joint Proposal: HST. Monitor constraint met.

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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.