

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 15804 - L2 Version 3
Chandra X-Ray Center

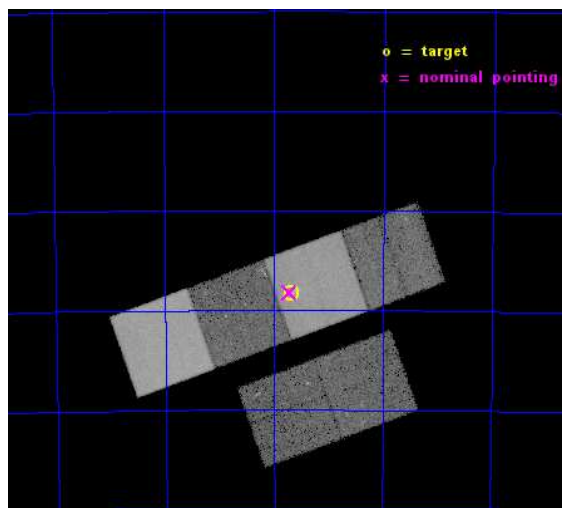
L2 Processing Date : Dec 8 2014

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1 Front

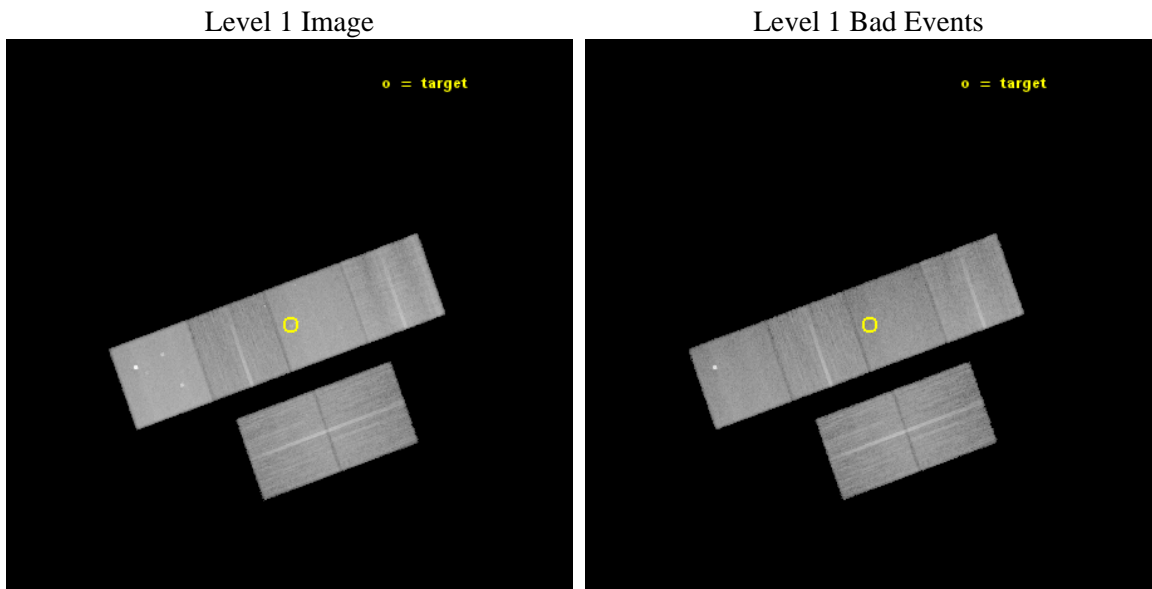
seq_num	401601	Sequence number
obs_id	15804	Observation id
title	Resolving a New Hyper-luminous X-ray Source in NGC 1511	Proposal t
observer	Dr Sean Farrell	Principal investigator
object	XMMU J035941.7-673820	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	59.92375	Observer's specified target RA [deg]
dec_targ	-67.638889	Observer's specified target Dec [deg]
ra_nom	59.930013433249	Nominal RA [deg]
dec_nom	-67.637026234097	Nominal Dec [deg]
roll_nom	340.16241839363	Nominal Roll [deg]
revision	3	Processing version of data
ontime	39266.55183655	Sum of GTIs [s]
livetime	38769.335113717	Livetime [s]
ontime2	39266.592876554	Sum of GTIs [s]
ontime3	39266.42871654	Sum of GTIs [s]
ontime5	39266.510796547	Sum of GTIs [s]
ontime6	39266.469756544	Sum of GTIs [s]
ontime7	39266.55183655	Sum of GTIs [s]
ontime8	39263.14669621	Sum of GTIs [s]
l2events	328278	Number of level 2 events



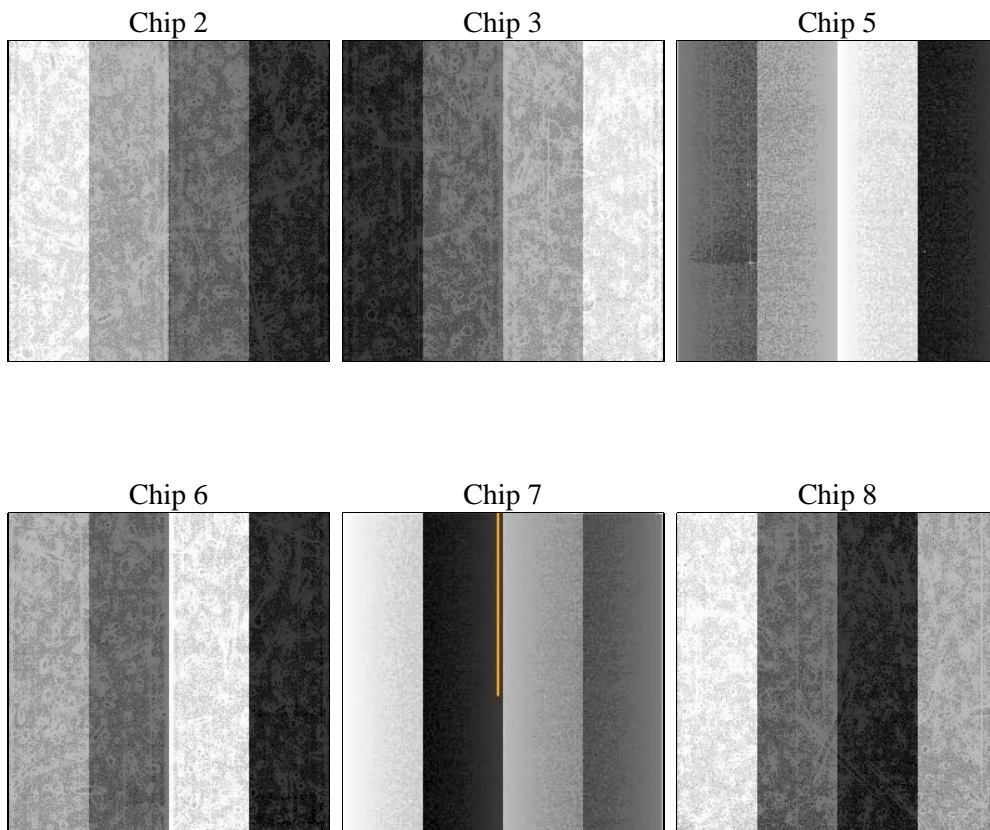
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	39300.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	39266.55183655	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	39266.592876554	Sum of GTIs [s]
date	2014-12-08T15:11:22	Date and time of file creation	ontime3	39266.42871654	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	39266.510796547	Sum of GTIs [s]
			ontime6	39266.469756544	Sum of GTIs [s]
			ontime7	39266.55183655	Sum of GTIs [s]
			ontime8	39263.14669621	Sum of GTIs [s]
			l1events	1368974	Number of level 1 events

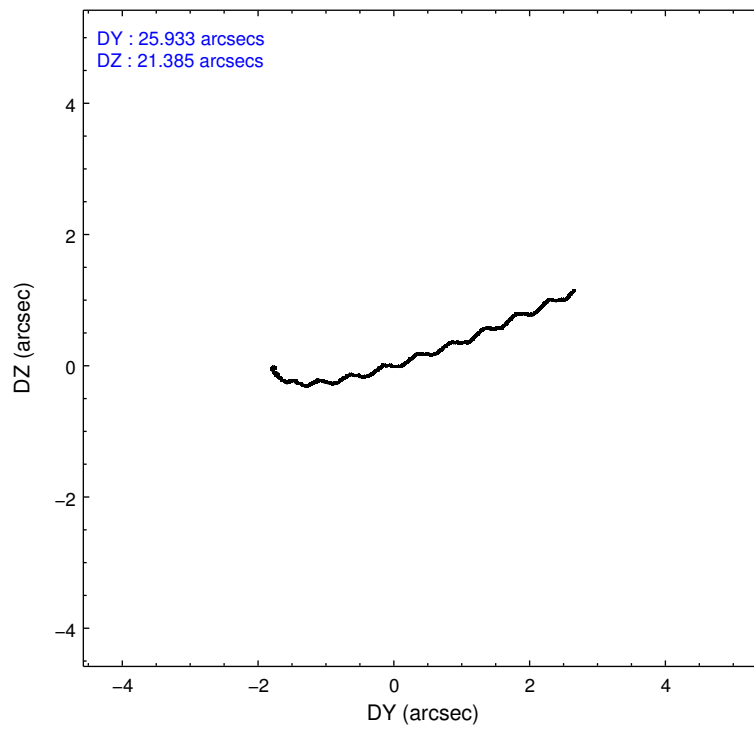
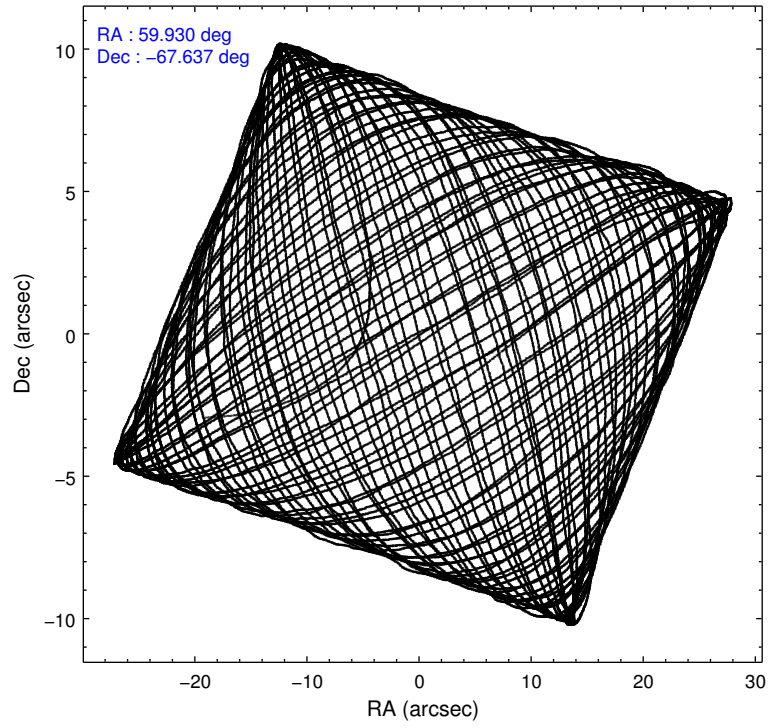
2.1.4 Events

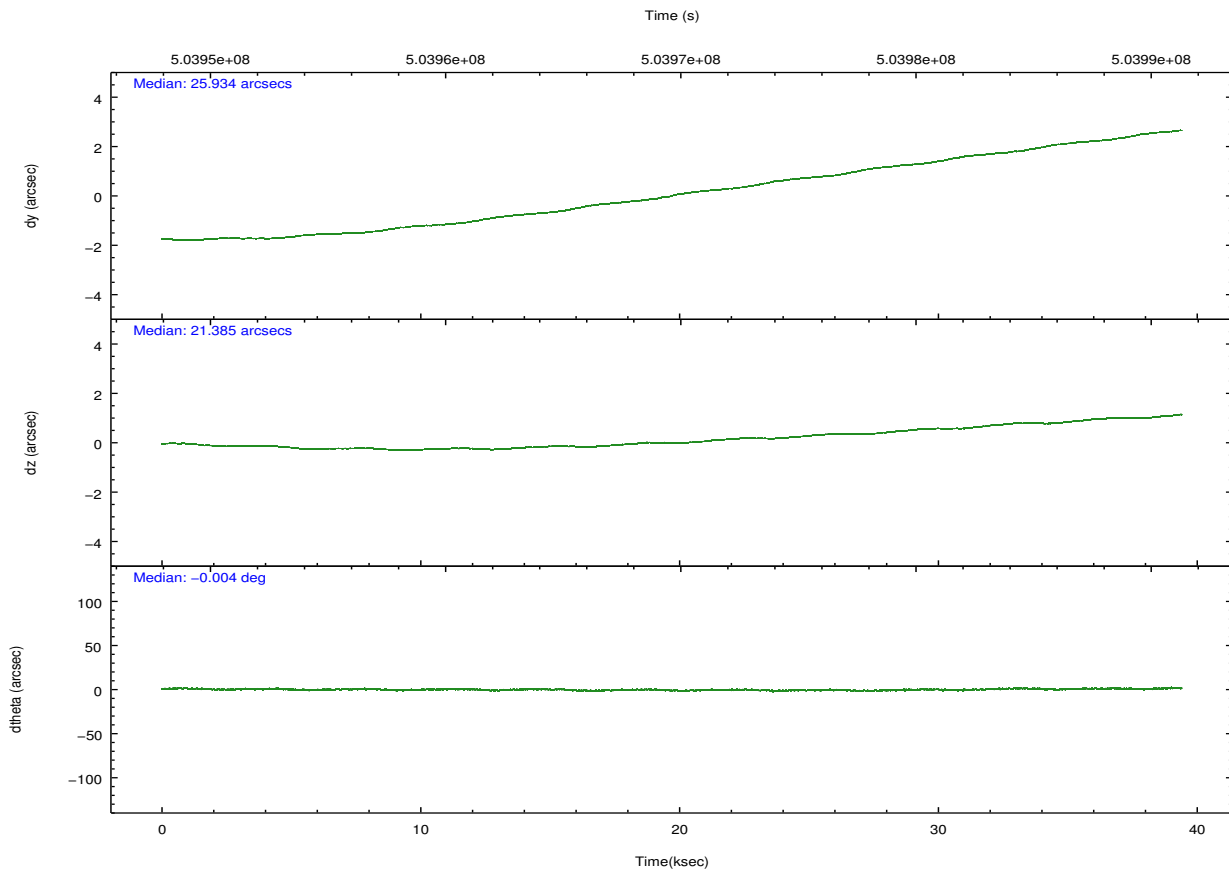
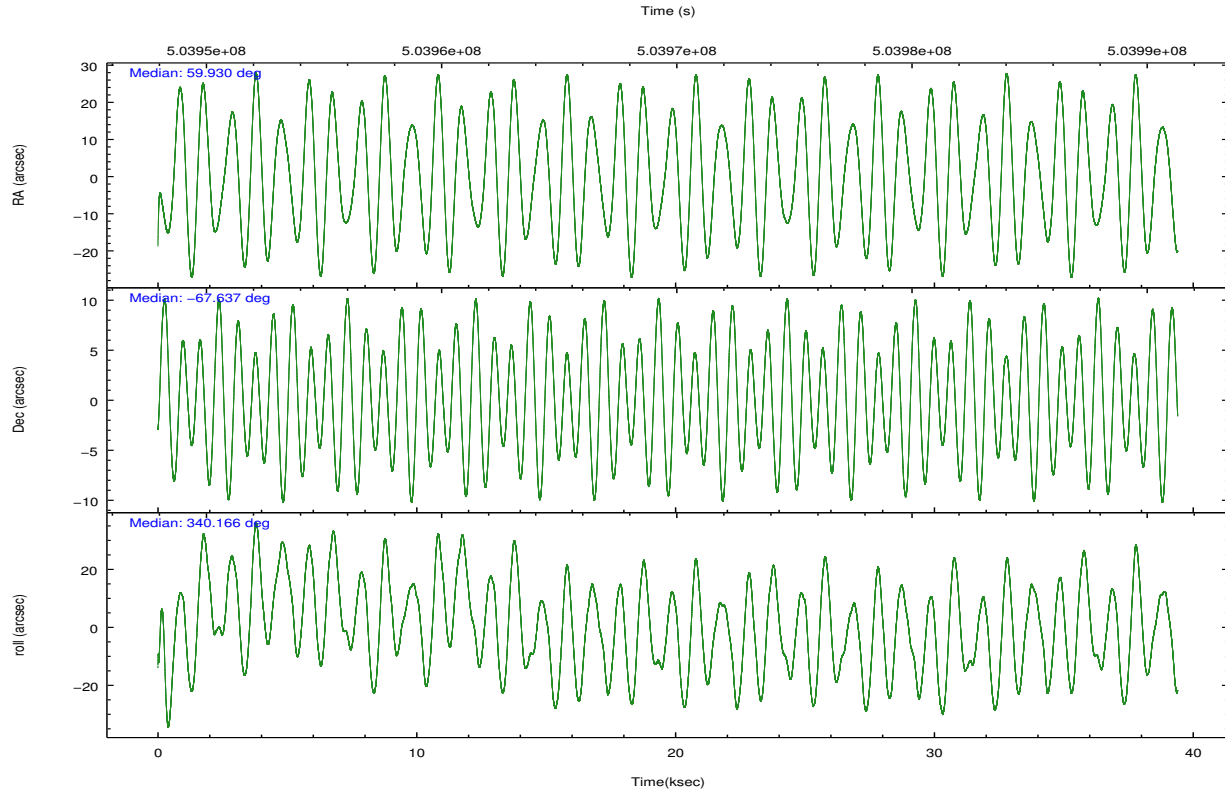
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	186858	174278	315425	188439	255608	248366	grade 0 events	7426	7053	12424	8148	10356	19476
rejected events	165657	153911	164883	164941	143507	181531		3%	4%	3%	4%	4%	7%
rejected %	88%	88%	52%	87%	56%	73%	grade 1 events	113	105	539	110	329	182
								0%	0%	0%	0%	0%	0%
							grade 2 events	5331	4675	48446	5187	22854	16227
								2%	2%	15%	2%	8%	6%
							grade 3 events	2057	2193	5161	2418	9596	6579
								1%	1%	1%	1%	3%	2%
							grade 4 events	2161	2219	4704	2323	9637	6449
								1%	1%	1%	1%	3%	2%
							grade 5 events	8385	9761	23656	9857	26380	14227
								4%	5%	7%	5%	10%	5%
							grade 6 events	4227	4229	79812	5424	59668	18115
								2%	2%	25%	2%	23%	7%
							grade 7 events	157158	144043	140683	154972	116788	167111
								84%	82%	44%	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	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	59.859484	59.93001343324906	CCD I2 on	O2	Y
[deg] Pointing Dec	-67.642218	-67.63702623409679	CCD I3 on	O1	Y
[deg] Pointing Roll	339.940567	340.1624183936259	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	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)	503950019.184000	503948314.66554	CCD S5 on	N	N
Observation start date	2013-12-20T18:05:52	2013-12-20T17:38:34	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	503989319.184000	503990629.74286	On-chip summing requested	N	N
Observation end date	2013-12-21T05:00:52	2013-12-21T05:23:49	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect





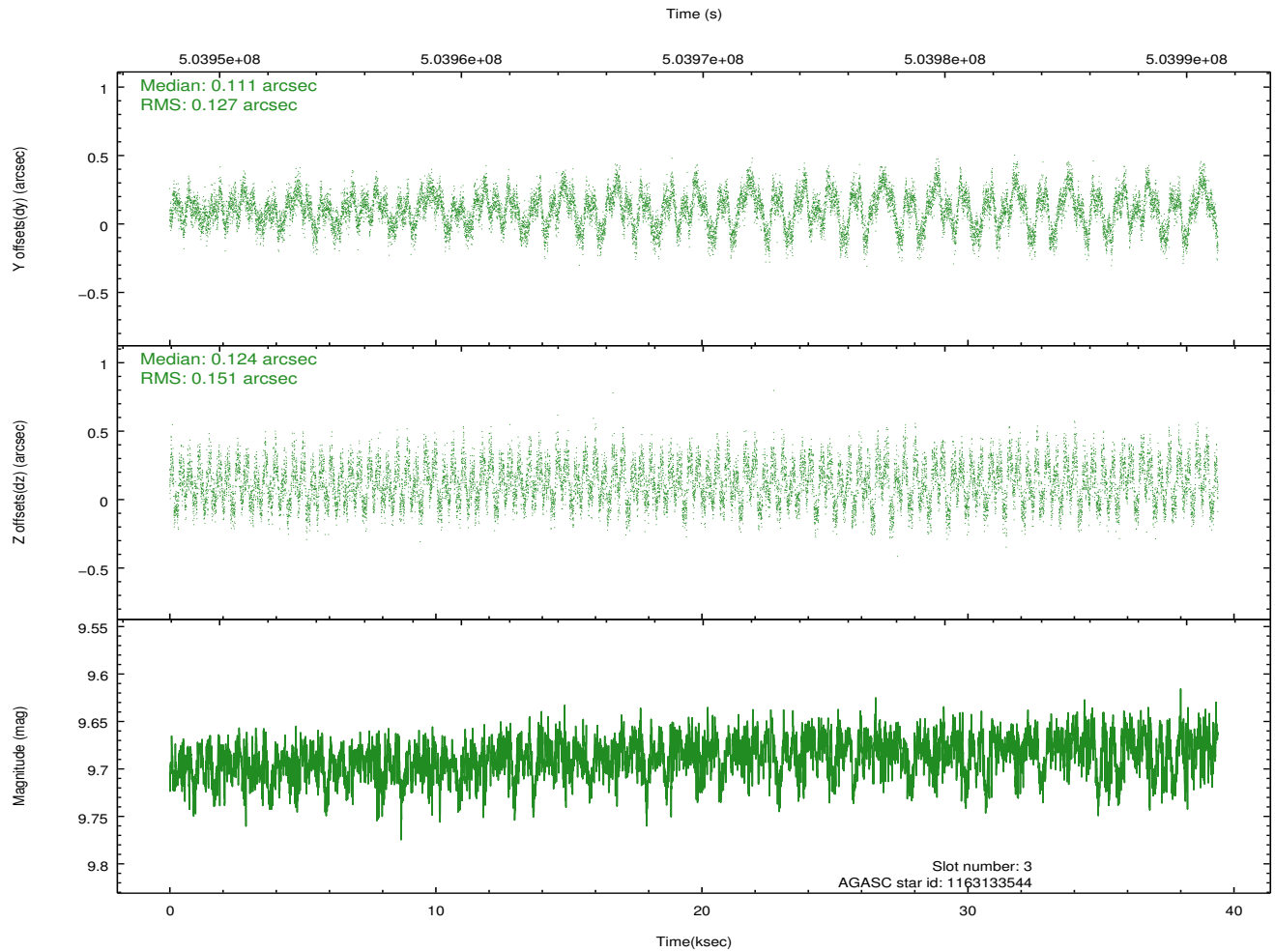
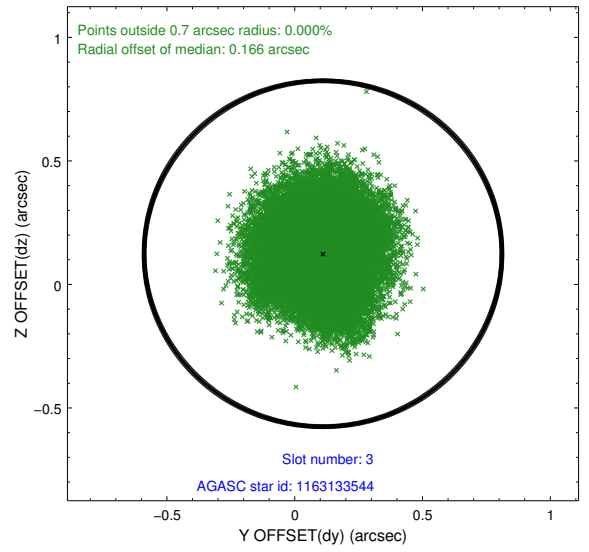
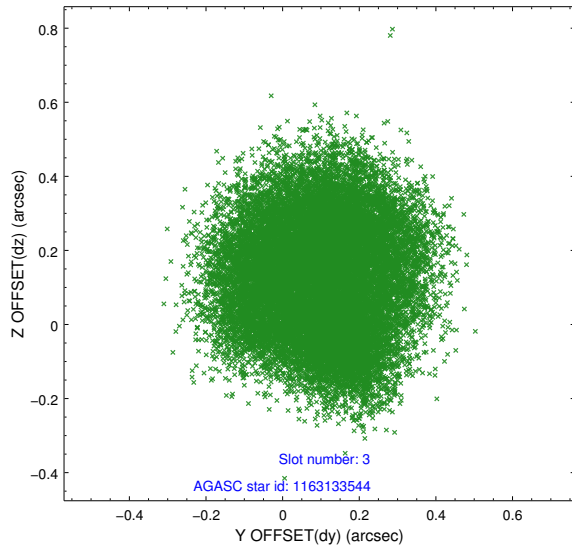
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.95	9610	-0.157	-0.011	0.019	0.051	0.000000	0.000000	-779.49	-1743.14
1	FID		ACIS-S-4	7.05	9611	0.321	0.080	0.017	0.078	0.000000	0.000000	2134.29	165.40
2	FID		ACIS-S-5	7.07	9610	-0.199	-0.056	0.029	0.057	0.000000	0.000000	-1832.34	158.99
3	GUIDE	used	1163133544	9.69	19203	0.111	0.124	0.218	0.317	60.211304	-67.148473	-146.75	1837.22
4	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
5	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
6	GUIDE	used	1199703856	9.67	19148	0.185	-0.138	0.187	0.287	59.596287	-67.517182	-493.96	298.24
7	GUIDE	used	1199704240	7.92	19217	-0.292	0.013	0.134	0.190	61.587584	-67.705410	2305.90	564.72

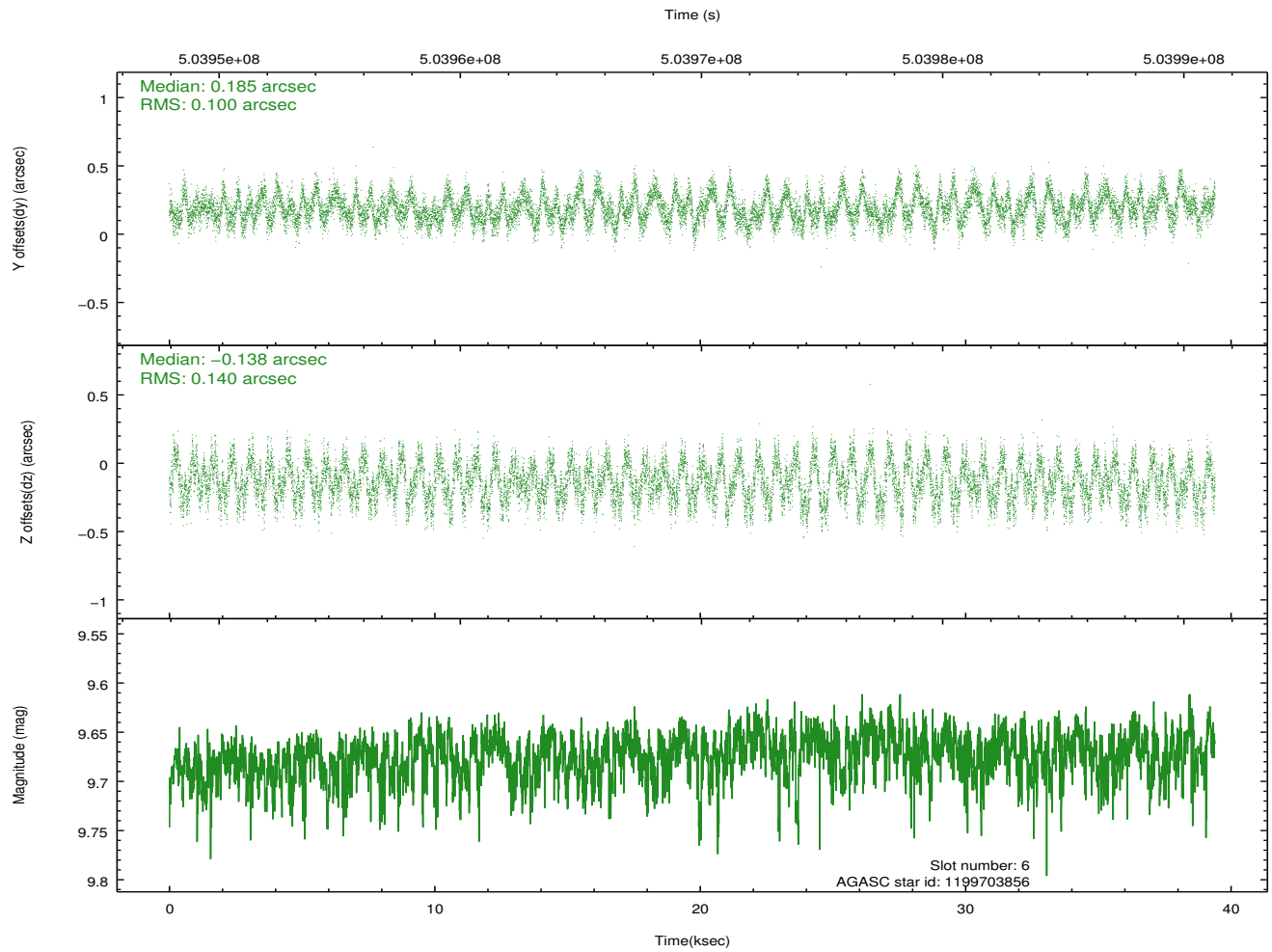
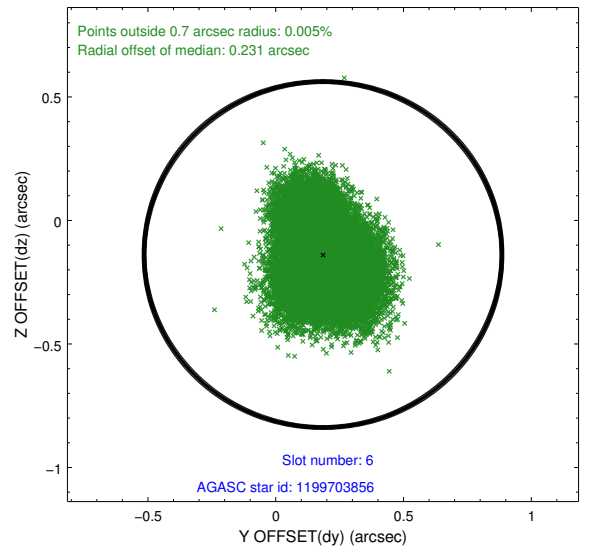
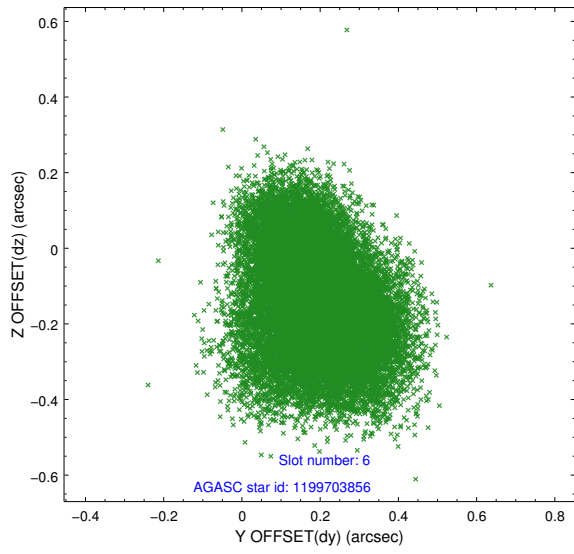
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2.4 Star Slots

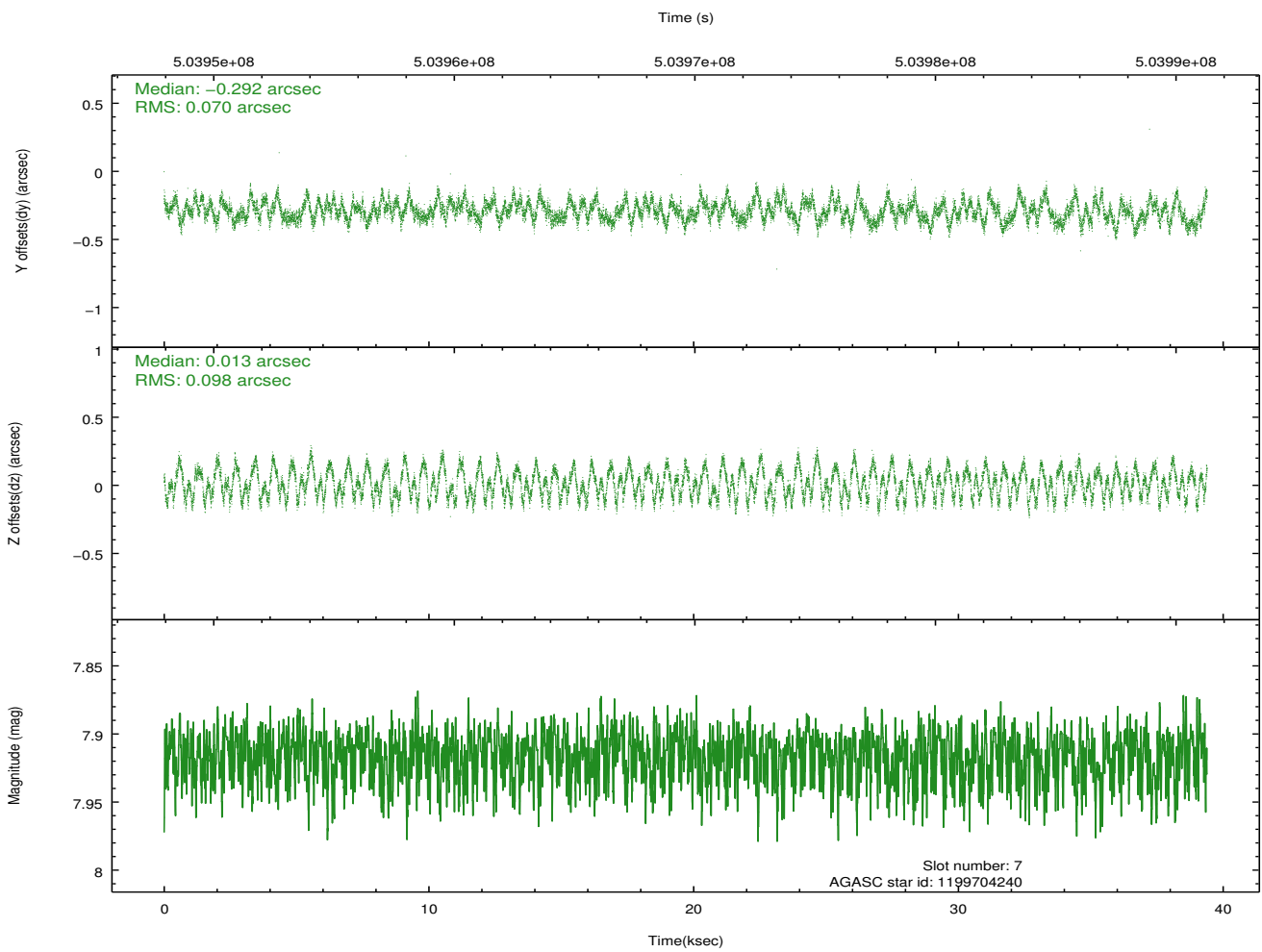
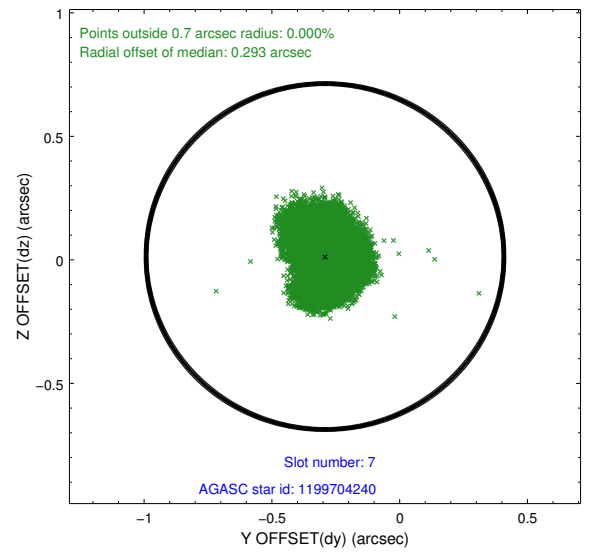
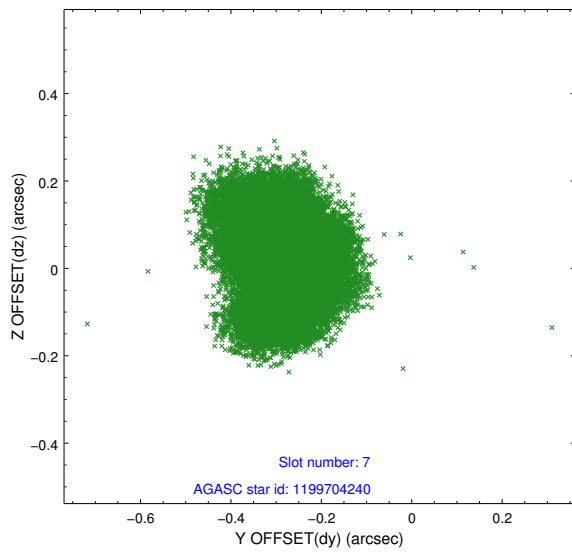
2.4.1 Slot 3



2.4.2 Slot 6

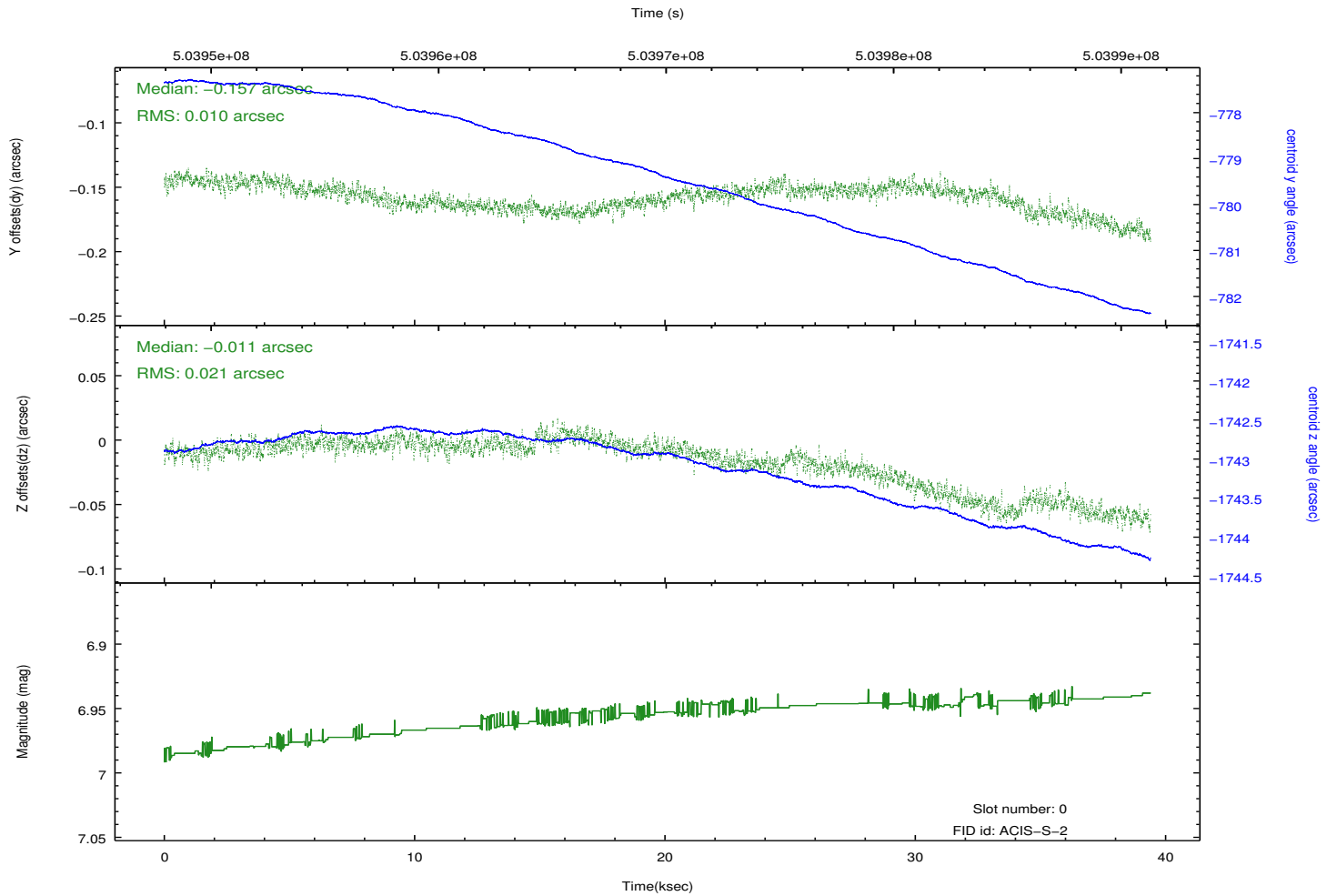
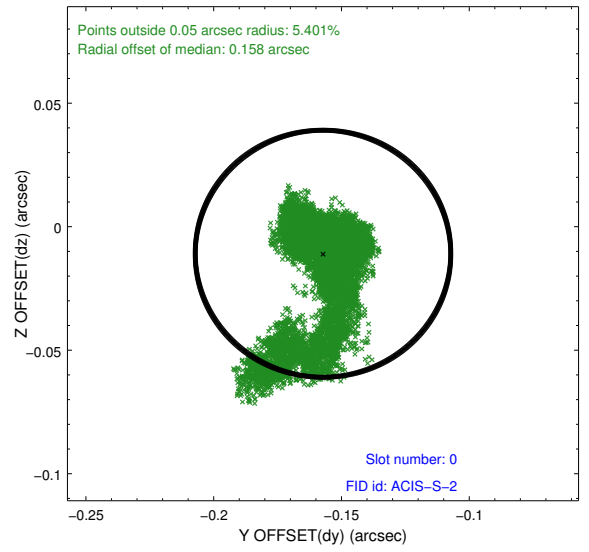
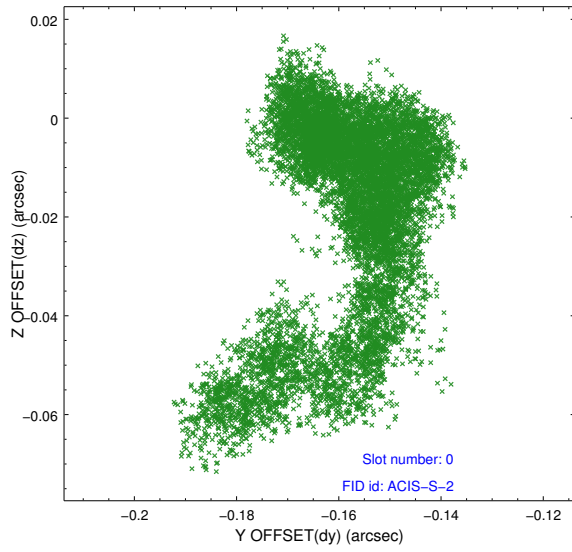


2.4.3 Slot 7

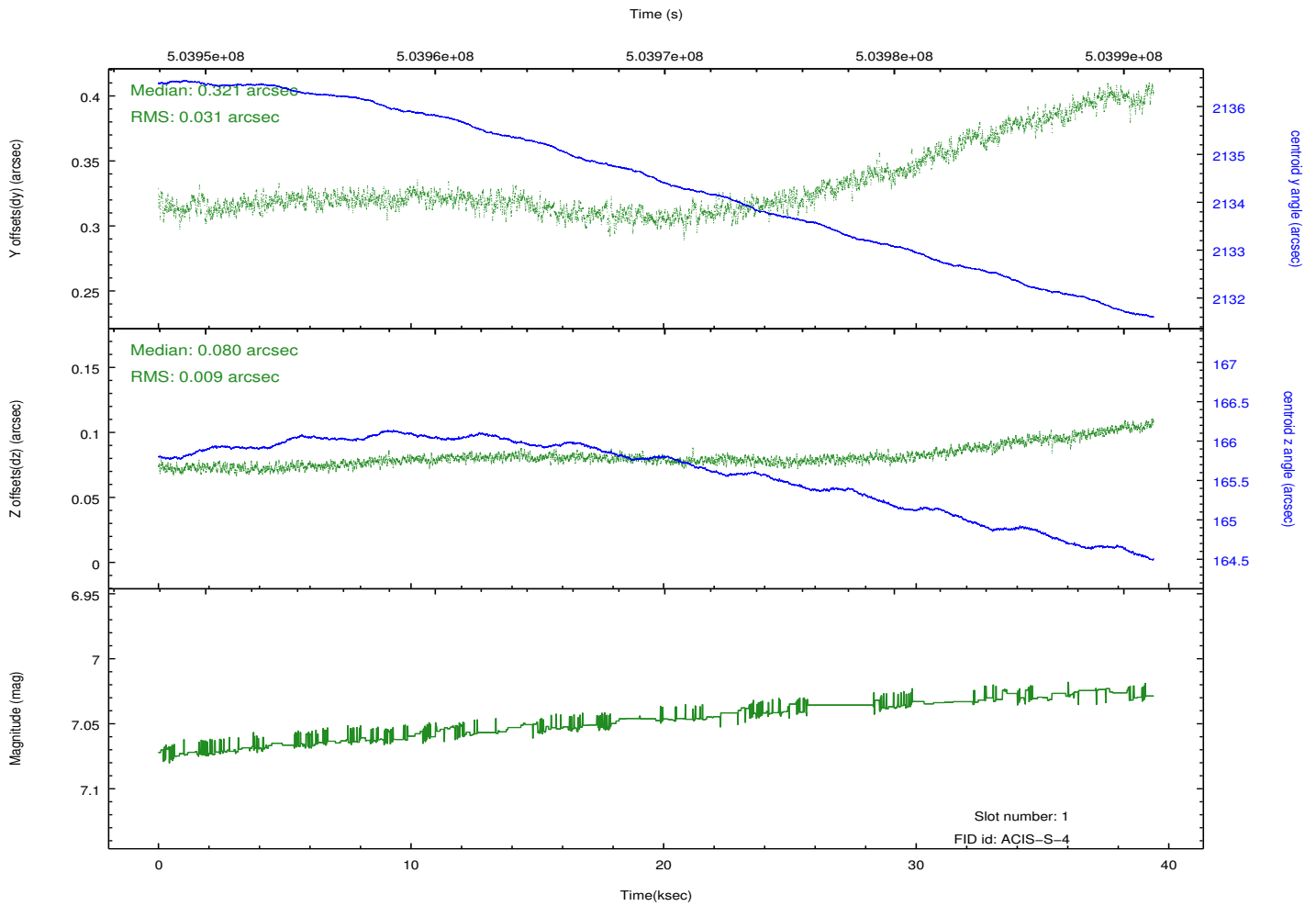
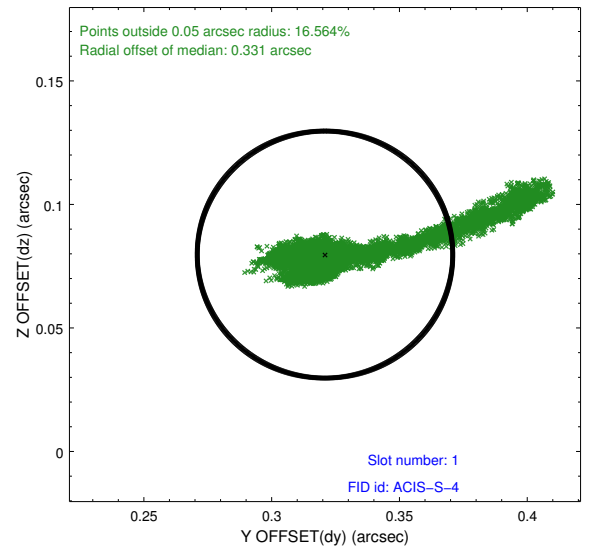
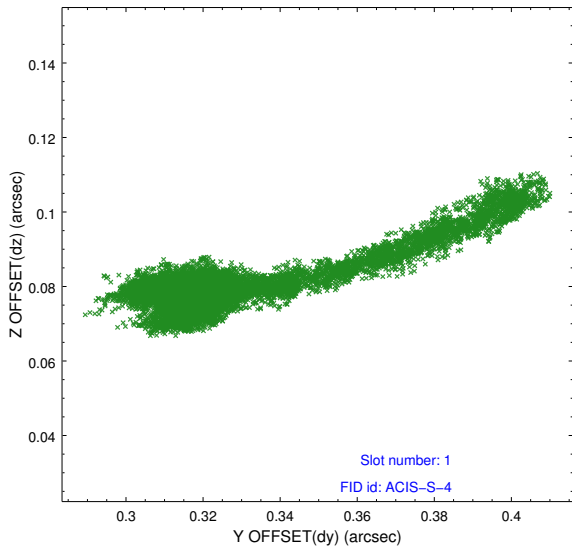


2.5 FID Slots

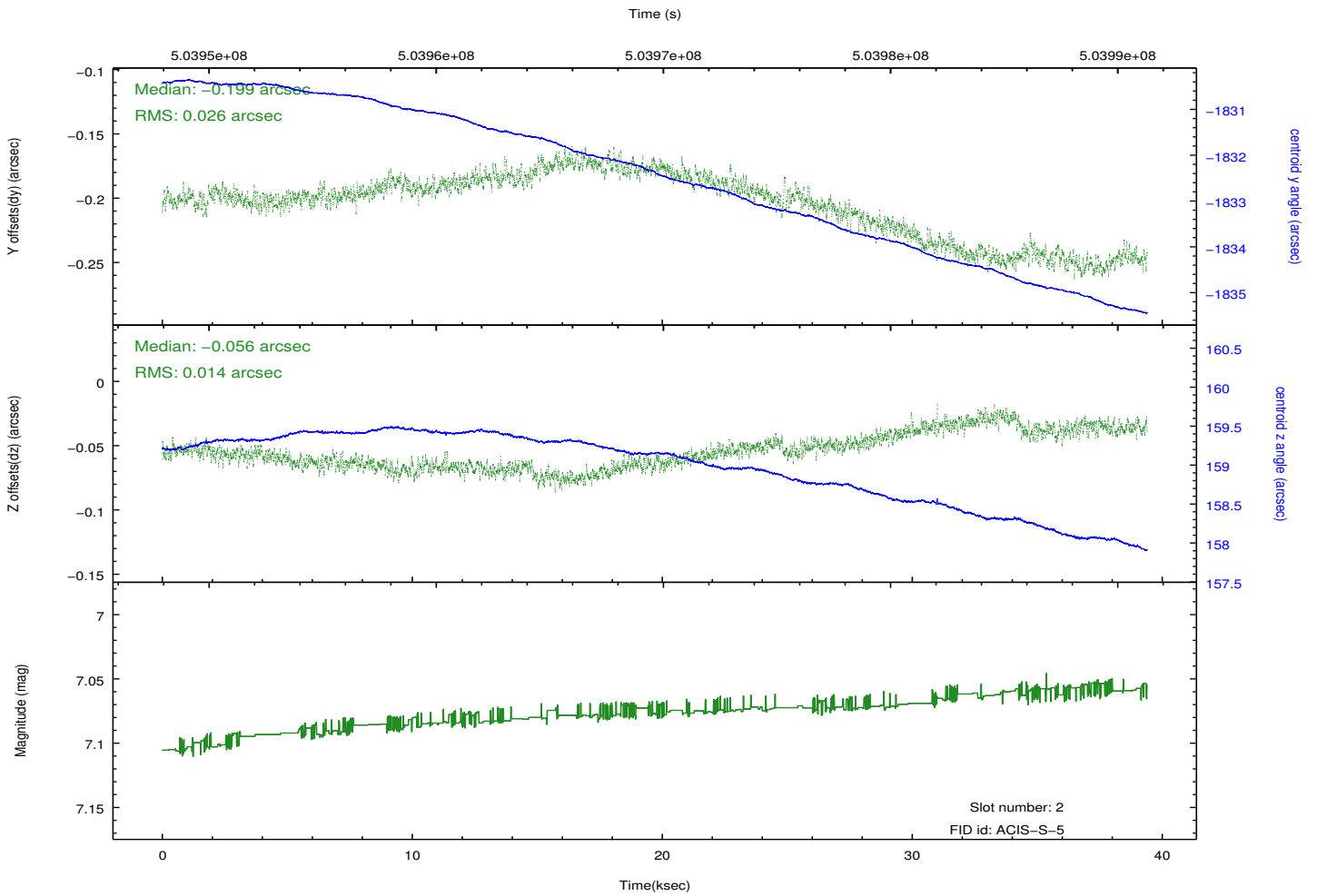
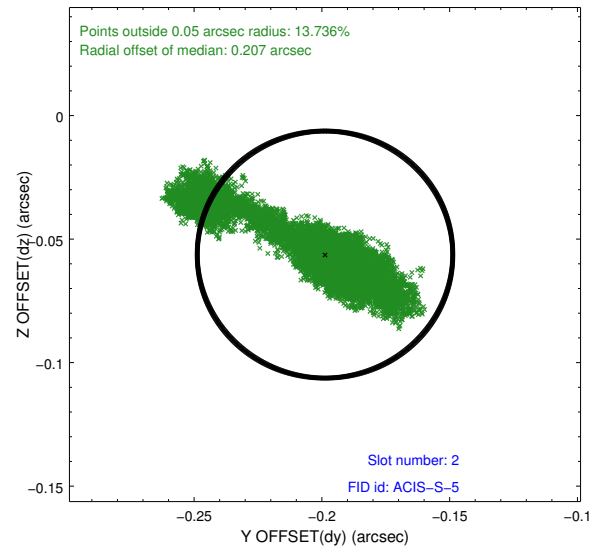
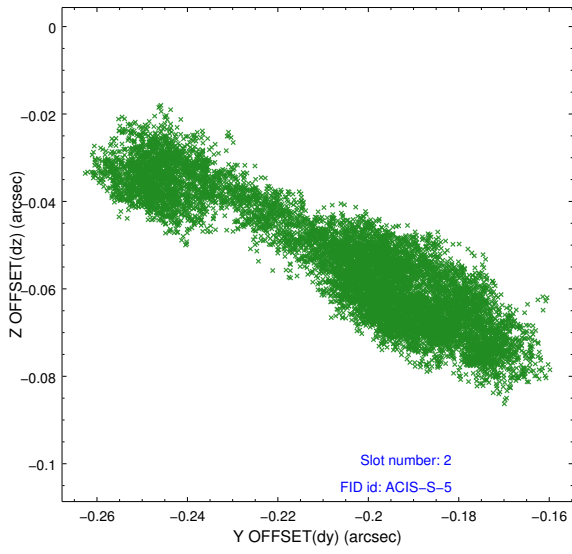
2.5.1 Slot 0



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)	2014.12.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	39.26655183655

A.2 Comments

The guide stars in slots 4 and 5 were removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of these stars from the solution.

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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.