

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 14496 - L2 Version 2
Chandra X-Ray Center

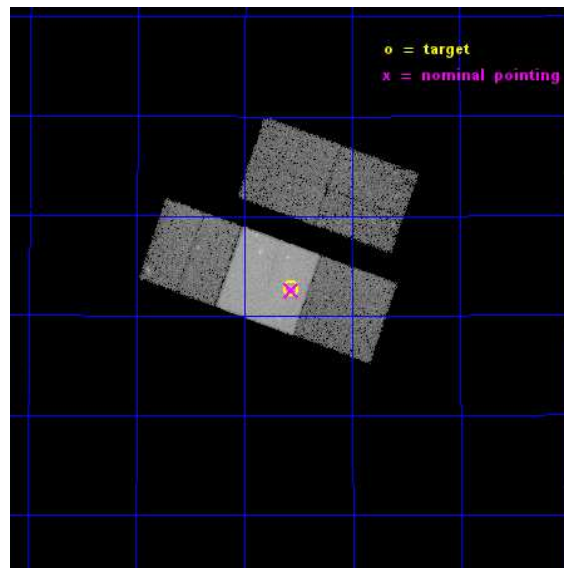
L2 Processing Date : Dec 1 2014

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1 Front

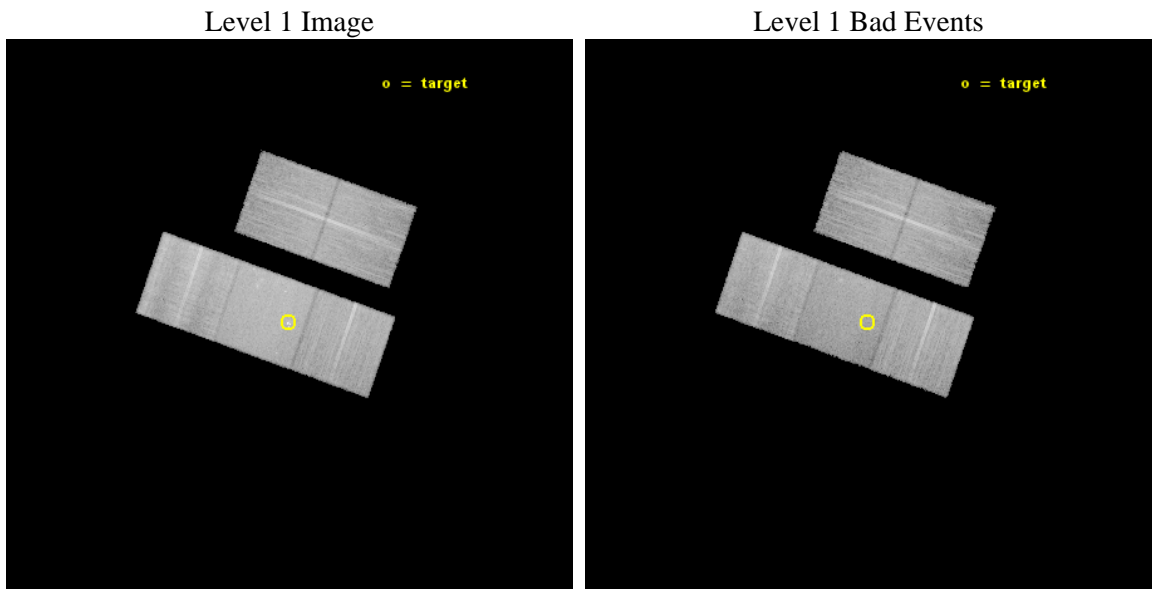
seq_num	702733	Sequence number
obs_id	14496	Observation id
title	ENERGY DEPENDENT X-RAY MICROLENSING AND THE STRUCTURE OF QUASARS	P
observer	Prof. Christopher Kochanek	Principal investigator
object	SDSS1004+4112	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	151.1425	Observer's specified target RA [deg]
dec_targ	41.212222	Observer's specified target Dec [deg]
ra_nom	151.14159095381	Nominal RA [deg]
dec_nom	41.209268963442	Nominal Dec [deg]
roll_nom	199.41308408527	Nominal Roll [deg]
revision	2	Processing version of data
ontime	25066.600192785	Sum of GTIs [s]
livetime	24739.086607504	Livetime [s]
ontime2	25066.600192785	Sum of GTIs [s]
ontime3	25063.459132433	Sum of GTIs [s]
ontime6	25066.600192785	Sum of GTIs [s]
ontime7	25066.600192785	Sum of GTIs [s]
ontime8	25066.600192785	Sum of GTIs [s]
l2events	139347	Number of level 2 events



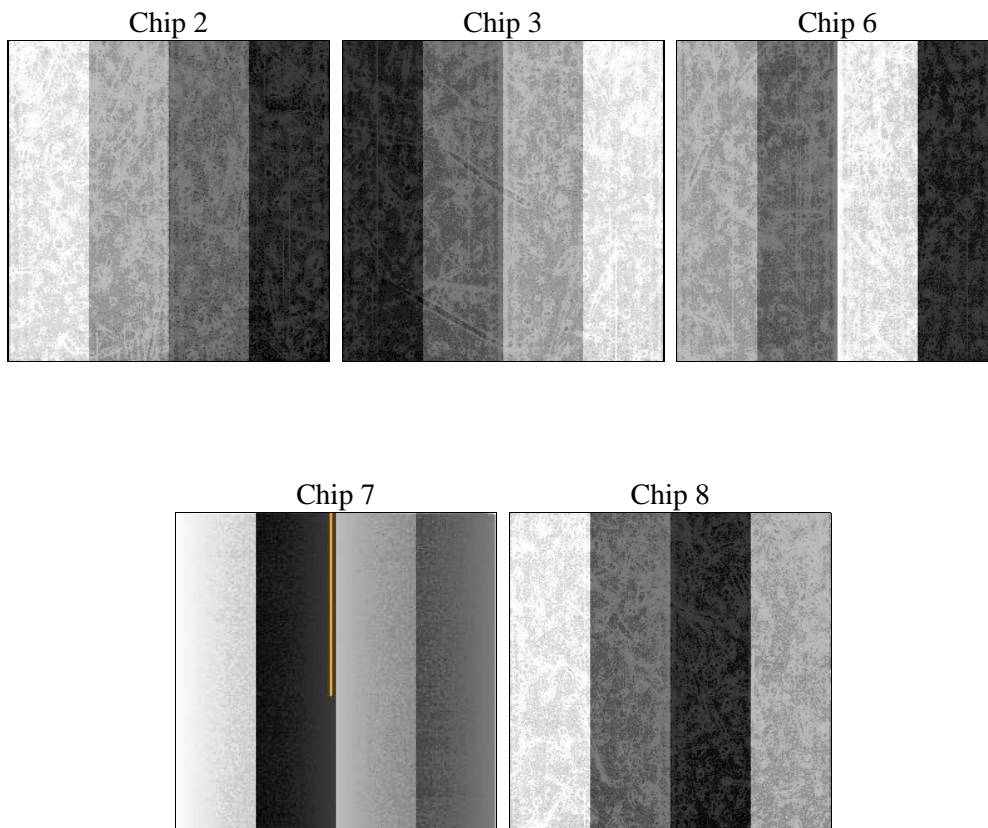
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	25066.600192785	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	25066.600192785	Sum of GTIs [s]
date	2014-12-01T19:59:48	Date and time of file creation	ontime3	25063.459132433	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	25066.600192785	Sum of GTIs [s]
			ontime7	25066.600192785	Sum of GTIs [s]
			ontime8	25066.600192785	Sum of GTIs [s]
			l1events	793271	Number of level 1 events

2.1.4 Events

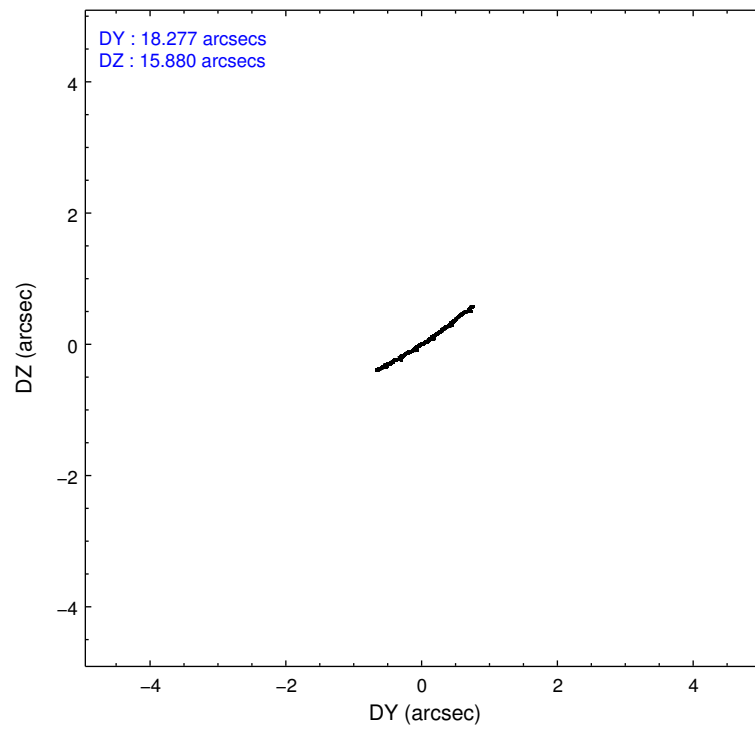
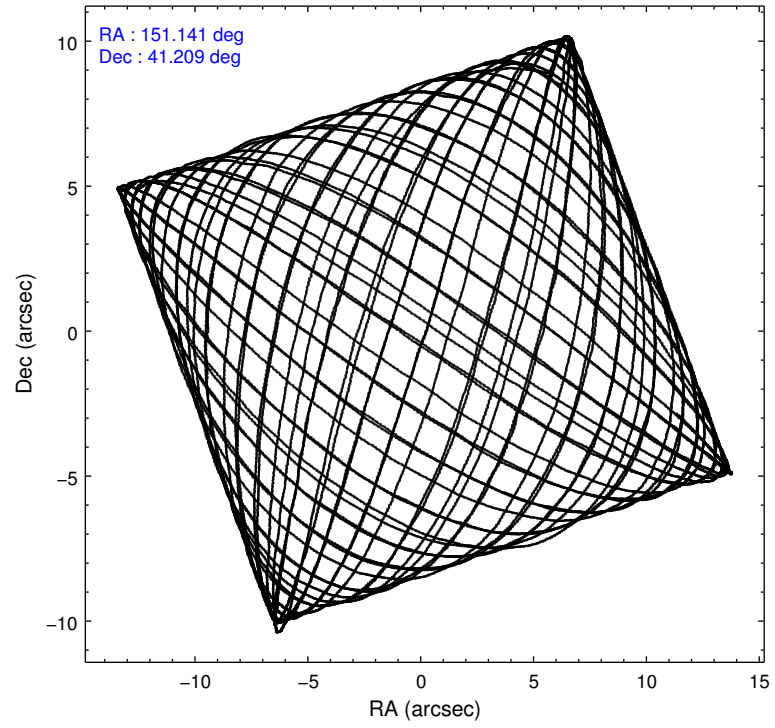
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	136372	136446	145581	190946	183926
rejected events	121075	121708	129227	106029	136643
rejected %	88%	89%	88%	55%	74%

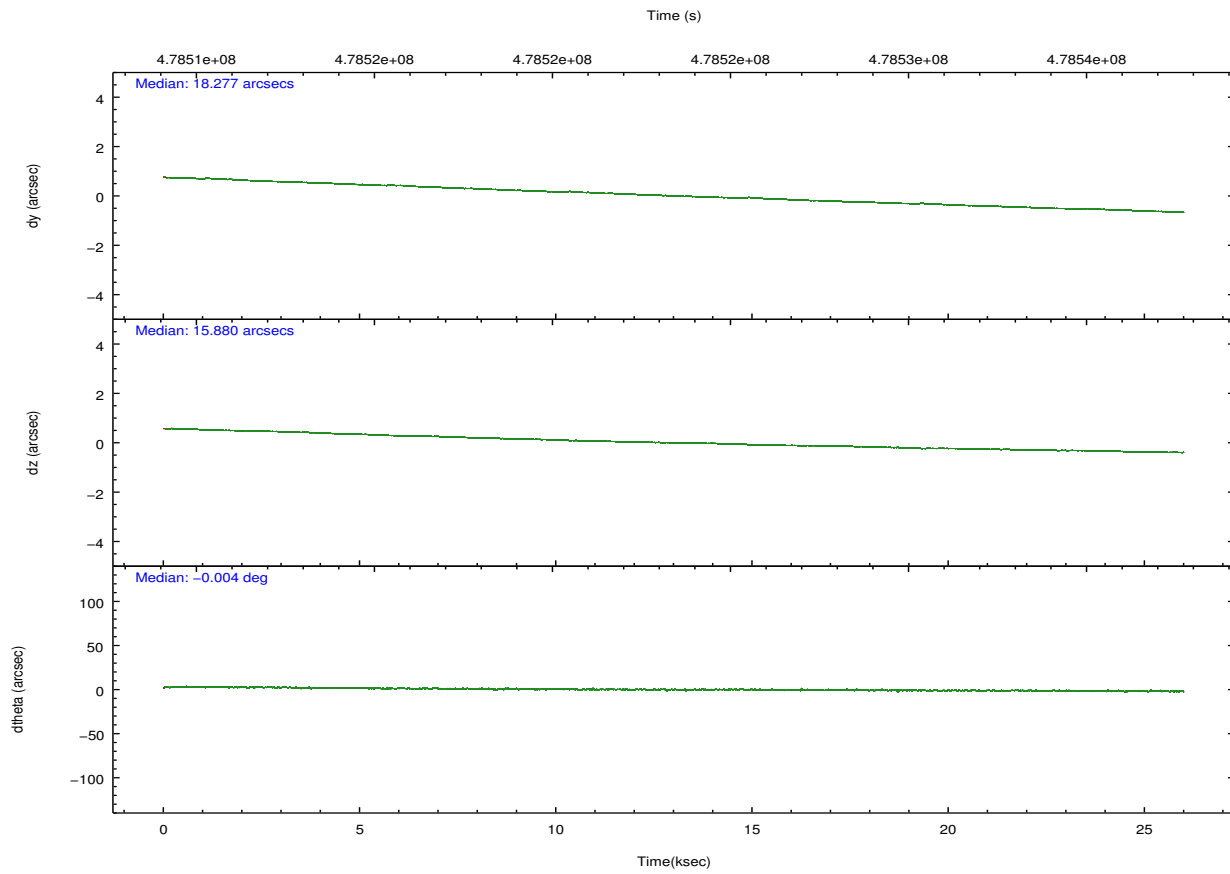
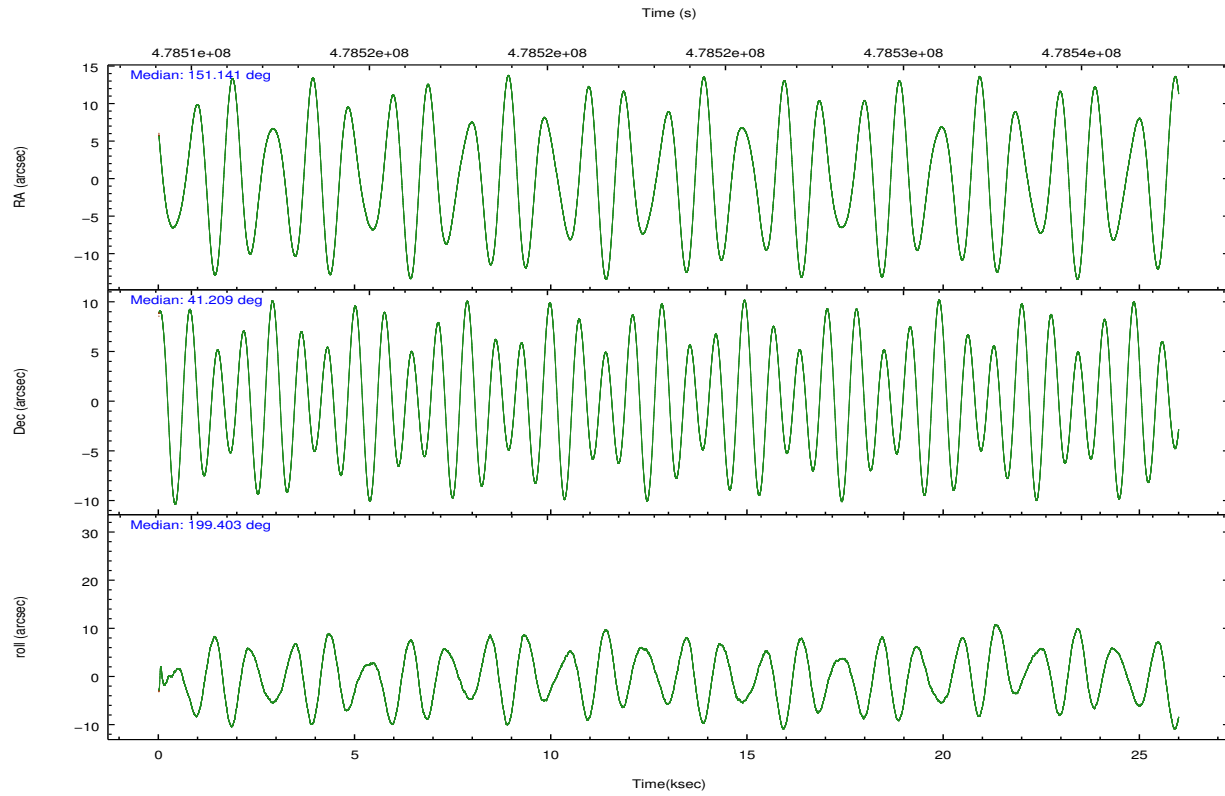
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	5472	4999	5447	8284	13007
	4%	3%	3%	4%	7%
grade 1 events	68	73	78	236	124
	0%	0%	0%	0%	0%
grade 2 events	3516	3373	3726	17531	11751
	2%	2%	2%	9%	6%
grade 3 events	1633	1603	1726	7244	4865
	1%	1%	1%	3%	2%
grade 4 events	1649	1690	1734	7431	4573
	1%	1%	1%	3%	2%
grade 5 events	5767	7021	7161	19430	10343
	4%	5%	4%	10%	5%
grade 6 events	3027	3074	3724	44439	13090
	2%	2%	2%	23%	7%
grade 7 events	115240	114613	121985	86351	126173
	84%	83%	83%	45%	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	151.164862	151.1415909538092	CCD I2 on	O4	Y
[deg] Pointing Dec	41.230276	41.20926896344191	CCD I3 on	O3	Y
[deg] Pointing Roll	199.241120	199.4130840852728	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)	478511402.184000	478510064.1804	CCD S5 on	N	N
Observation start date	2013-03-01T07:48:55	2013-03-01T07:27:44	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	478536402.184000	478537347.11937	On-chip summing requested	N	N
Observation end date	2013-03-01T14:45:35	2013-03-01T15:02:27	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





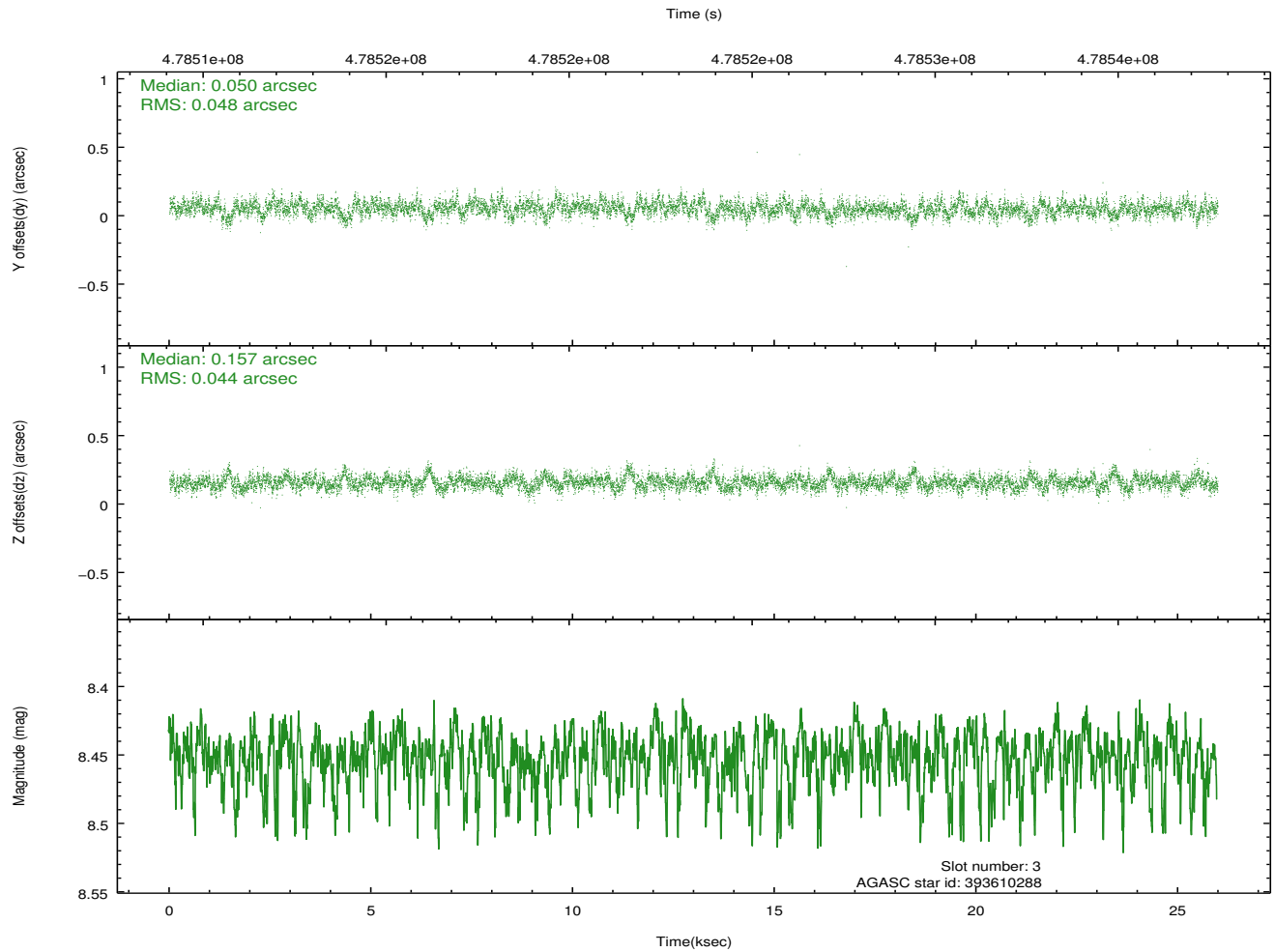
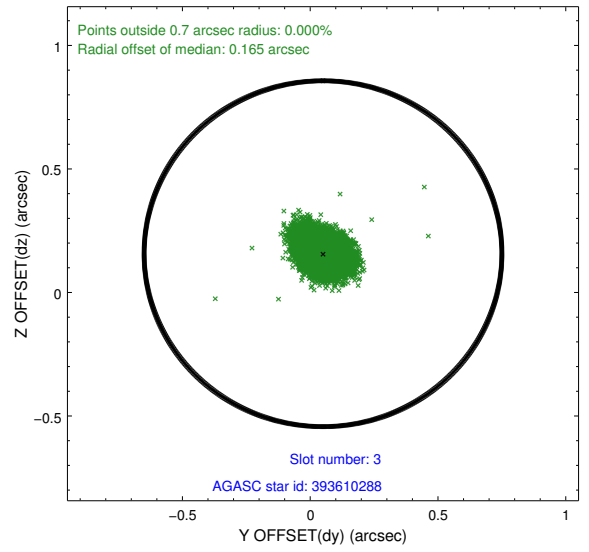
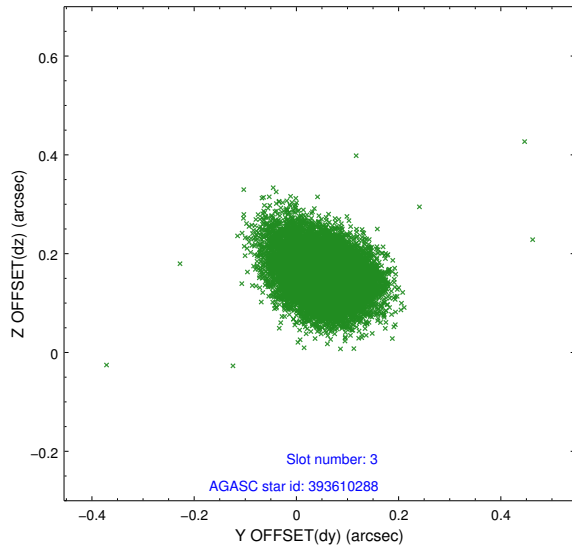
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.00	6339	-0.120	-0.011	0.008	0.013	0.000000	0.000000	-771.47	-1737.28
1	FID		ACIS-S-4	7.08	6339	0.288	0.061	0.012	0.022	0.000000	0.000000	2142.16	171.17
2	FID		ACIS-S-5	7.11	6337	-0.200	-0.041	0.012	0.020	0.000000	0.000000	-1824.26	164.85
3	GUIDE	used	393610288	8.45	12673	0.050	0.157	0.068	0.114	151.538899	41.090404	-791.57	807.68
4	GUIDE	used	393613624	8.48	12670	-0.287	-0.059	0.082	0.133	151.136661	40.665270	742.47	1895.27
5	GUIDE	used	393616408	9.04	12670	0.123	-0.024	0.095	0.149	150.713966	41.346840	1011.64	-800.34
6	GUIDE	used	393616816	8.44	12672	0.076	0.069	0.082	0.130	151.562975	40.925077	-659.90	1391.70
7	GUIDE	used	393619280	9.35	12650	0.045	-0.144	0.112	0.177	150.915222	40.640455	1343.65	1780.14

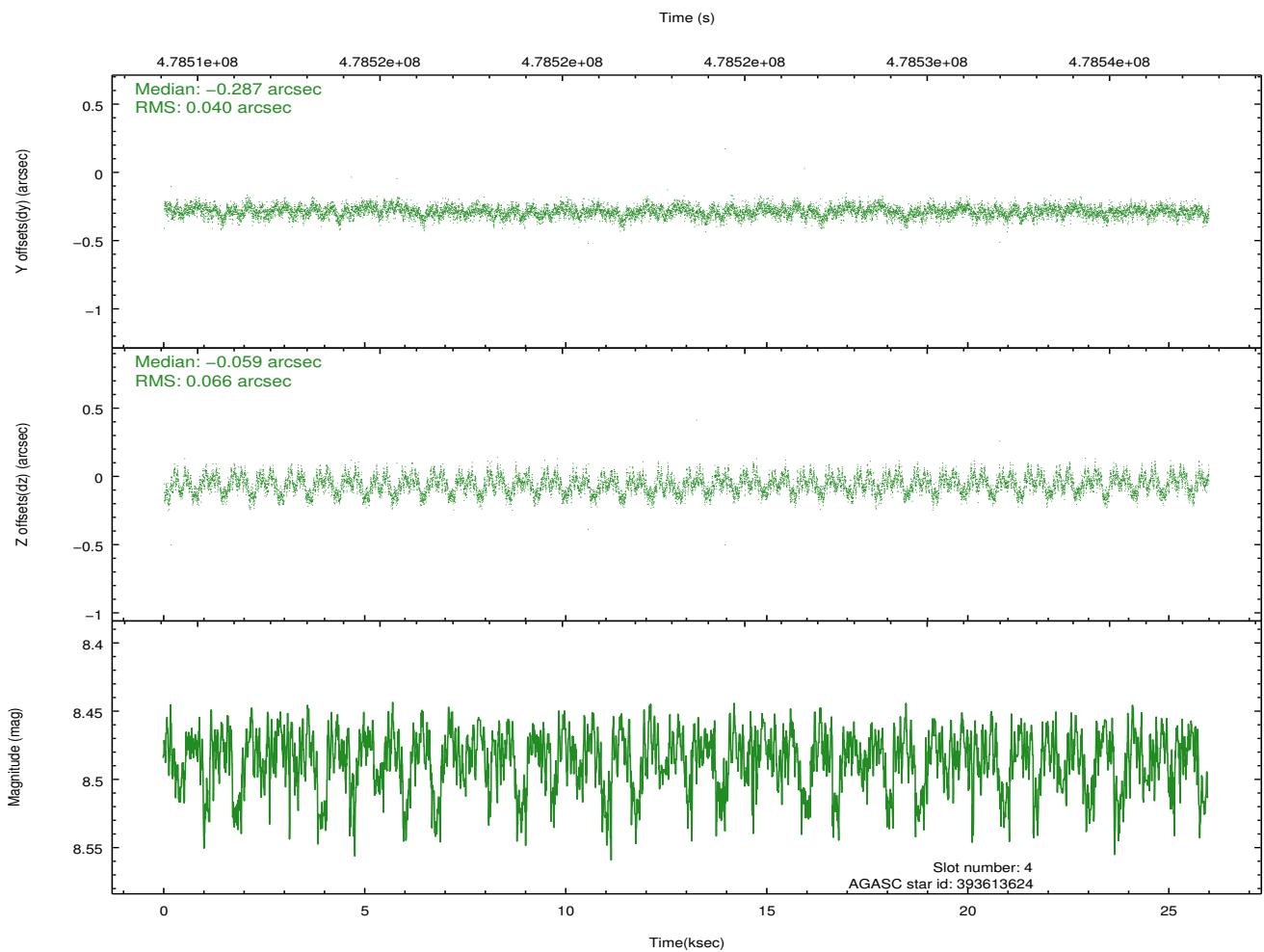
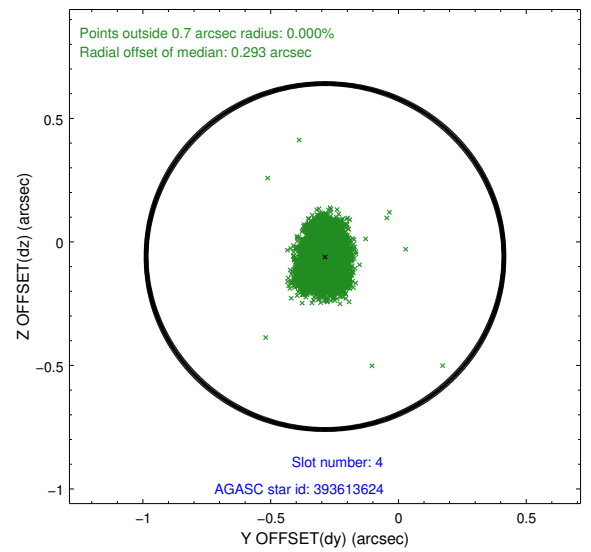
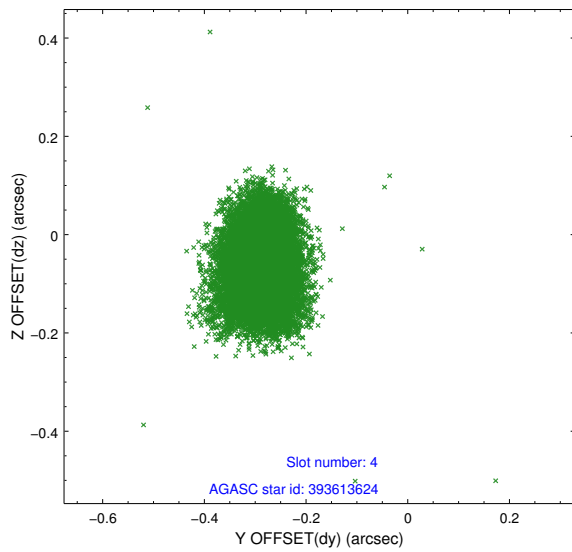
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2.4 Star Slots

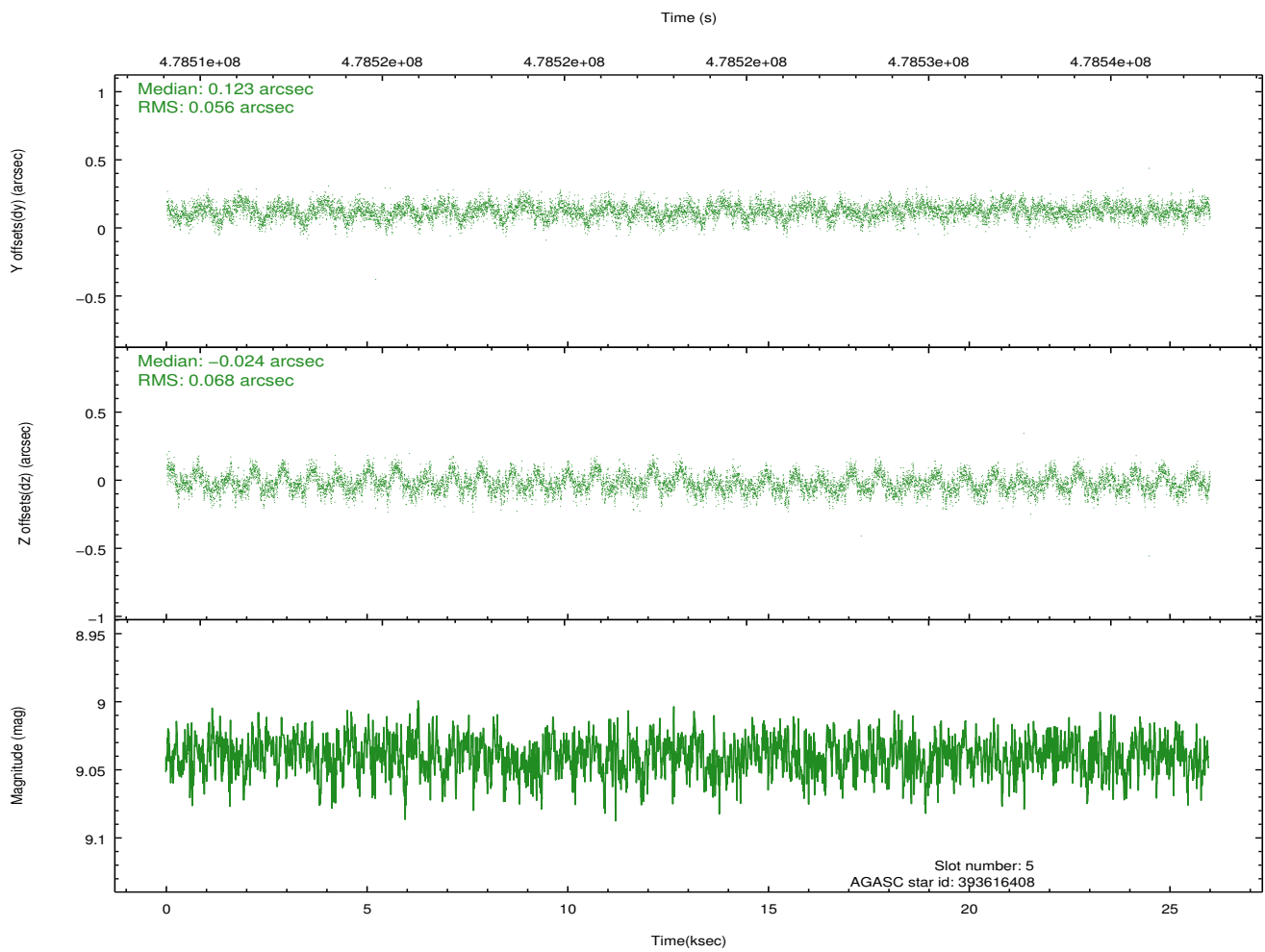
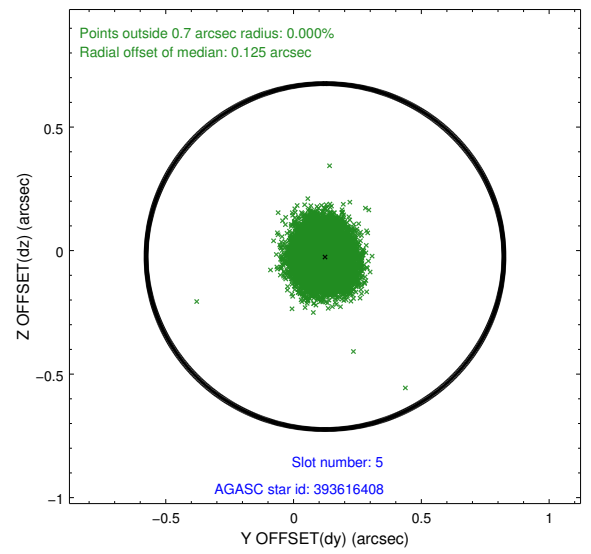
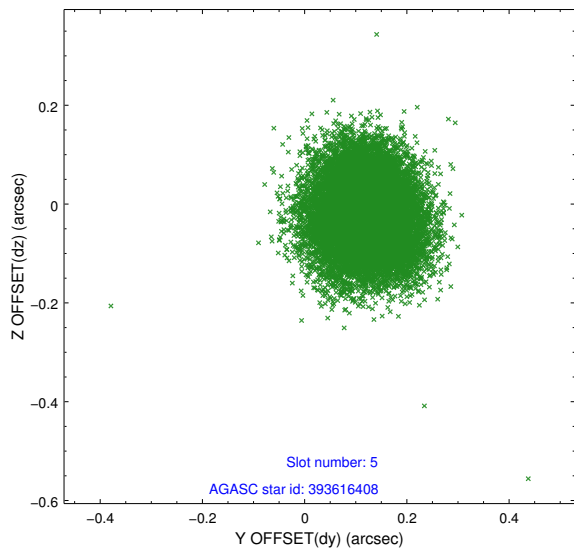
2.4.1 Slot 3



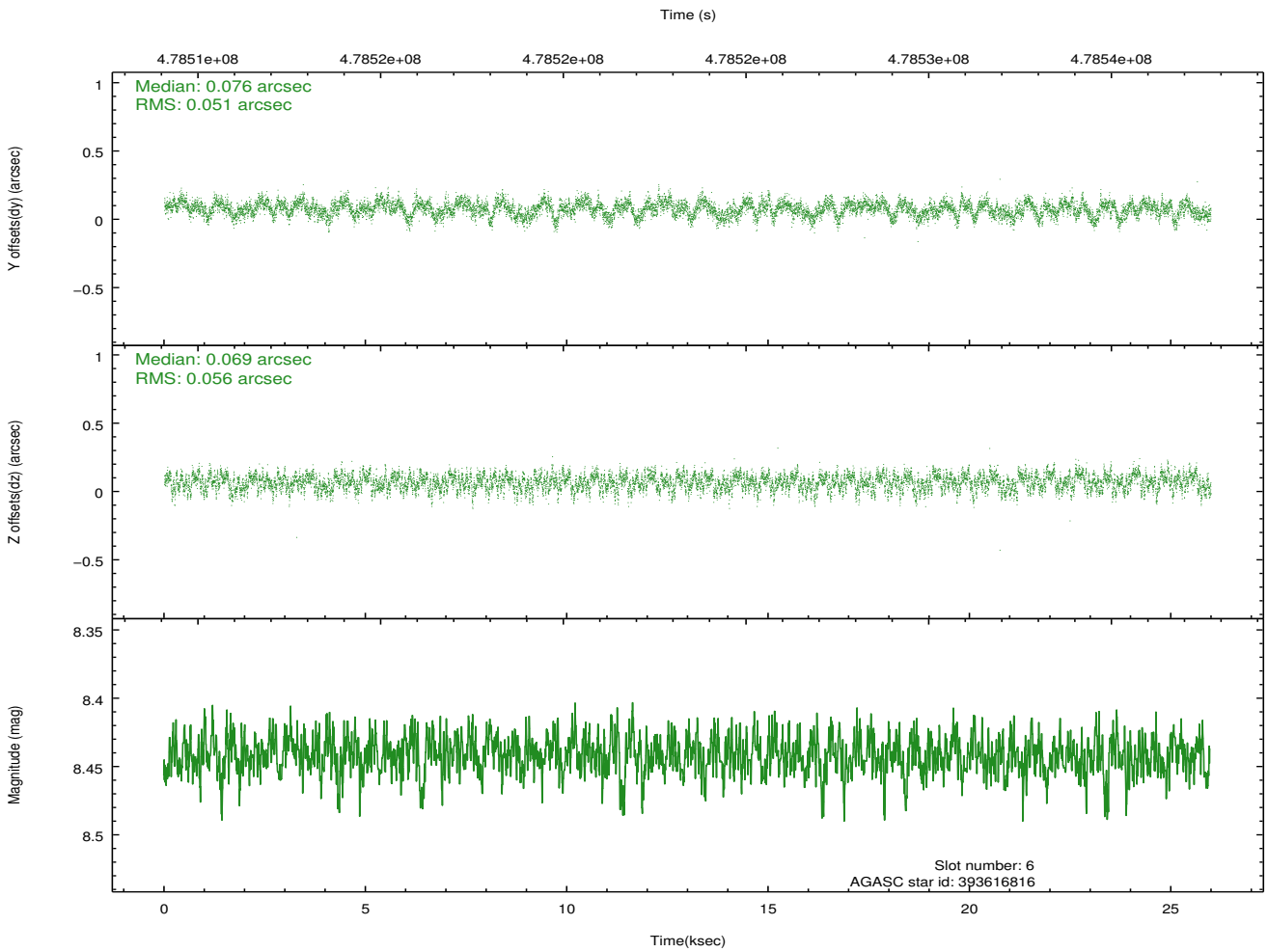
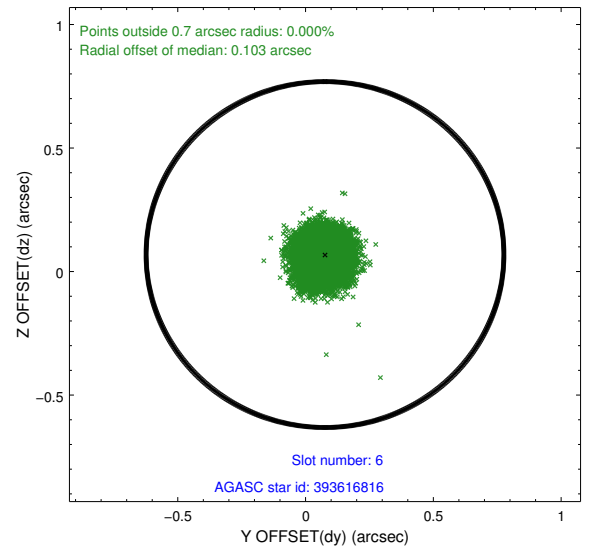
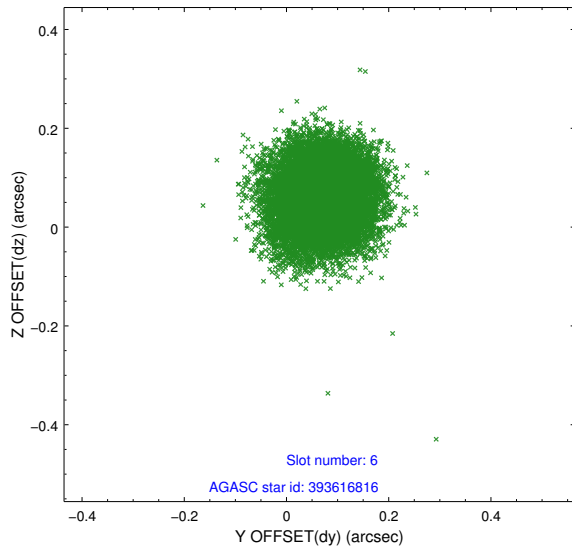
2.4.2 Slot 4



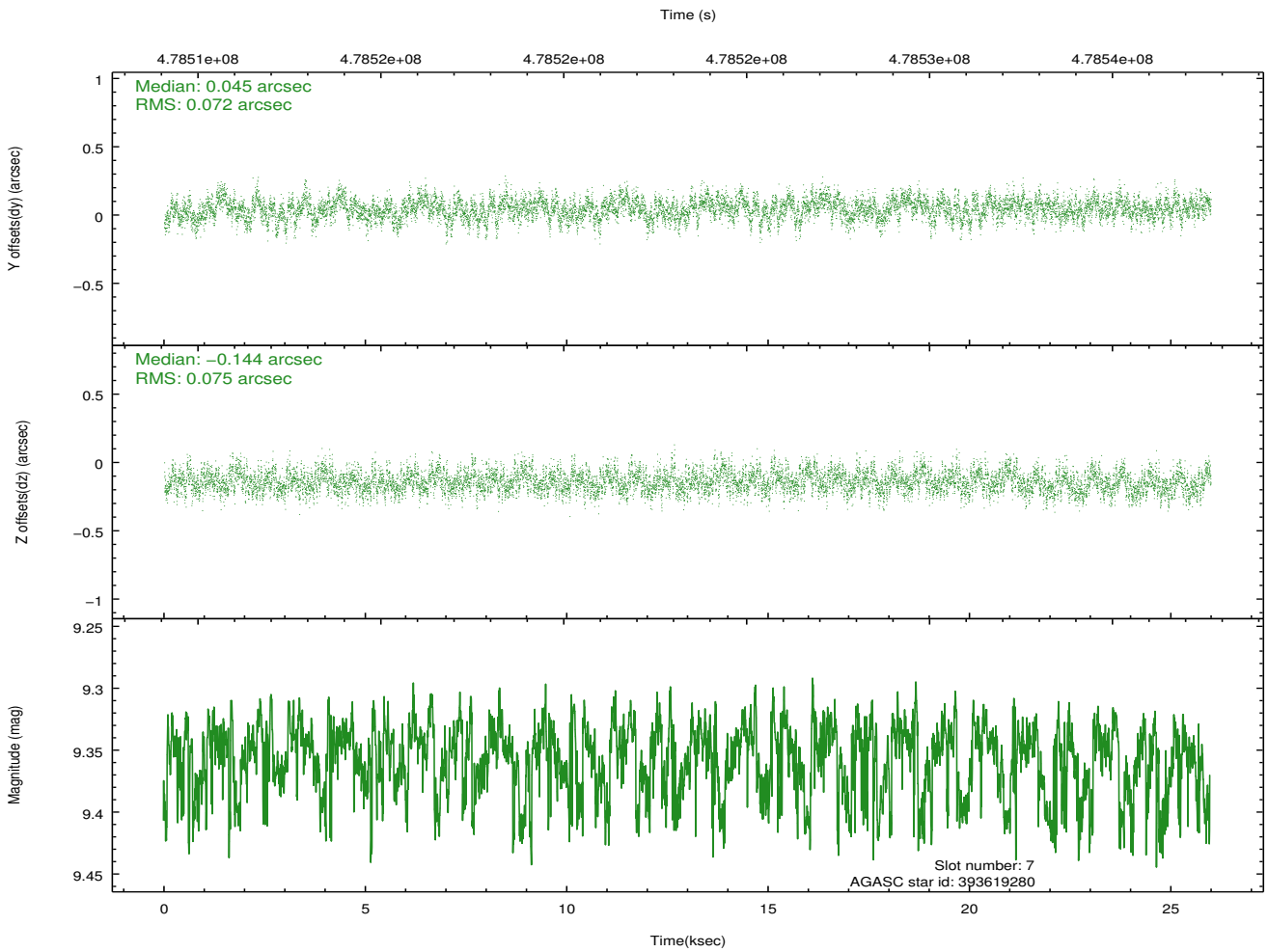
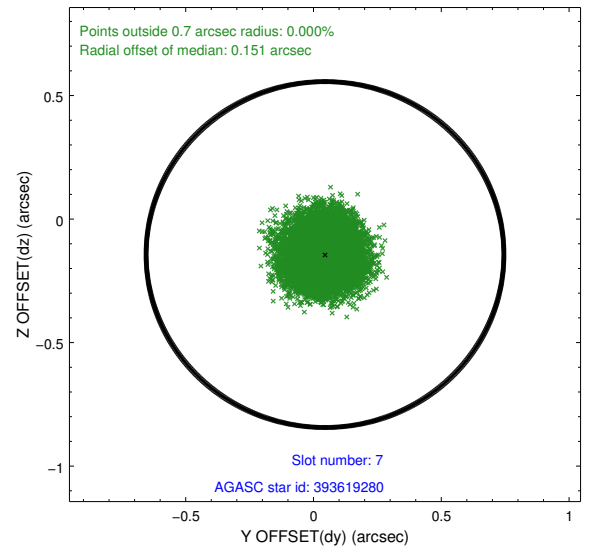
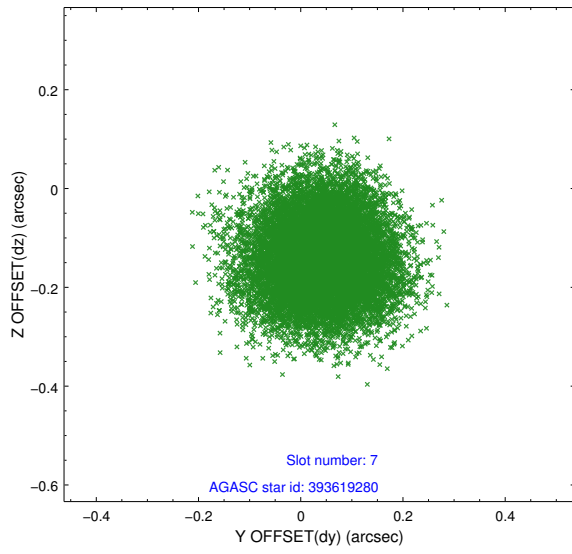
2.4.3 Slot 5



2.4.4 Slot 6

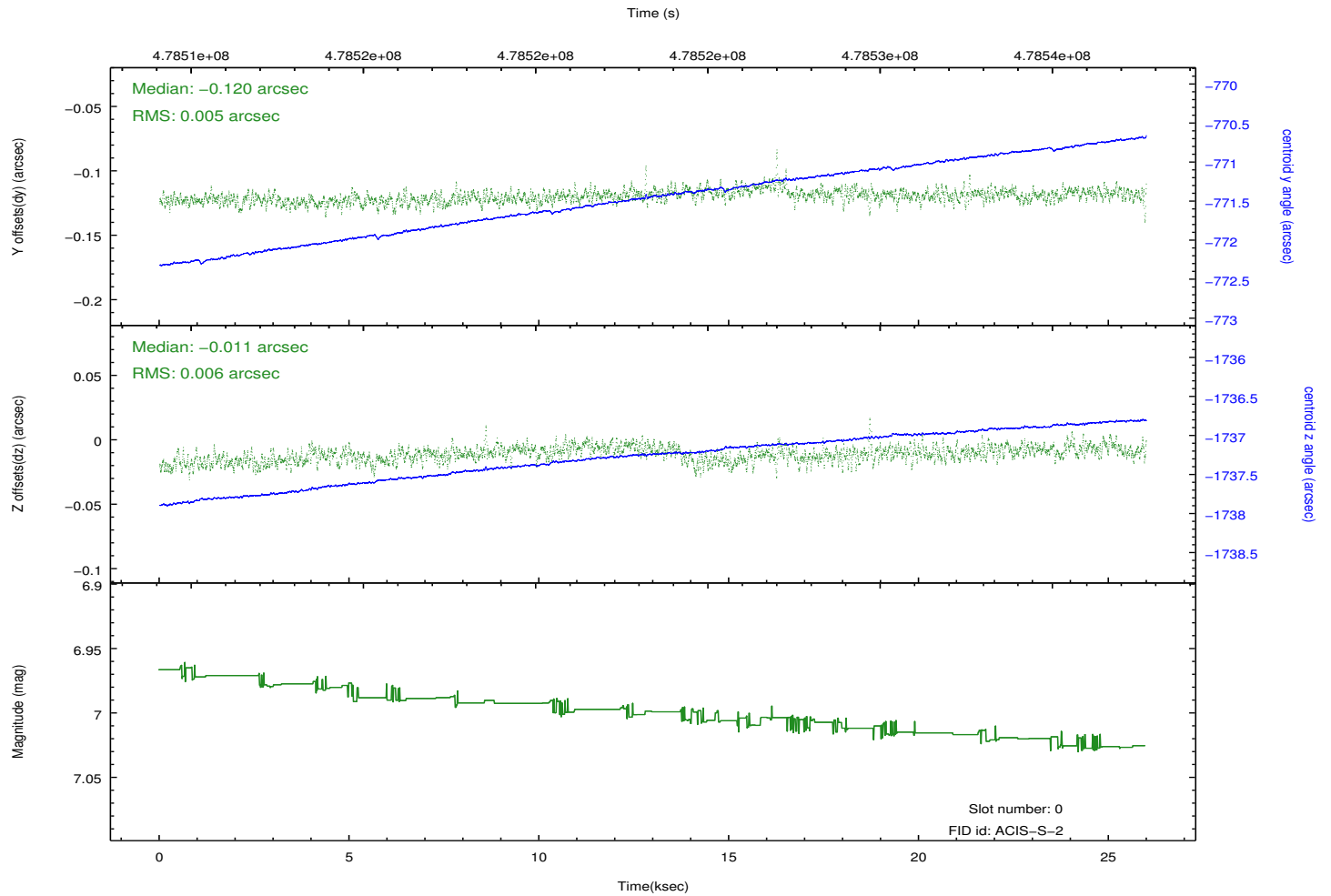
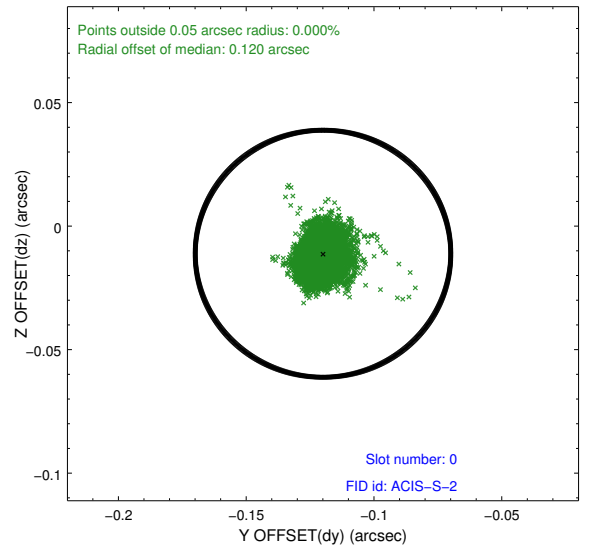
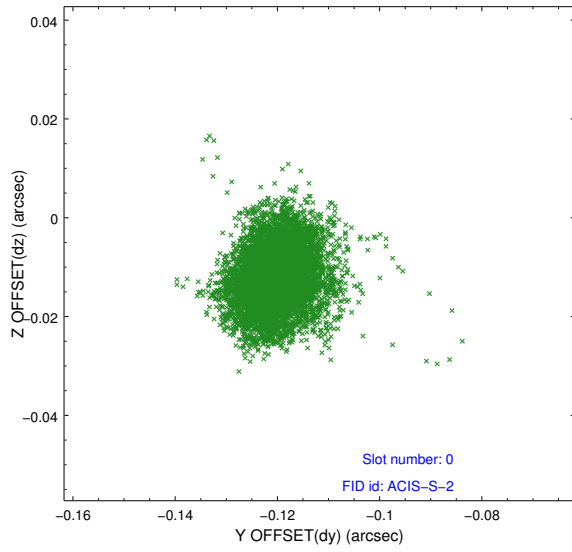


2.4.5 Slot 7

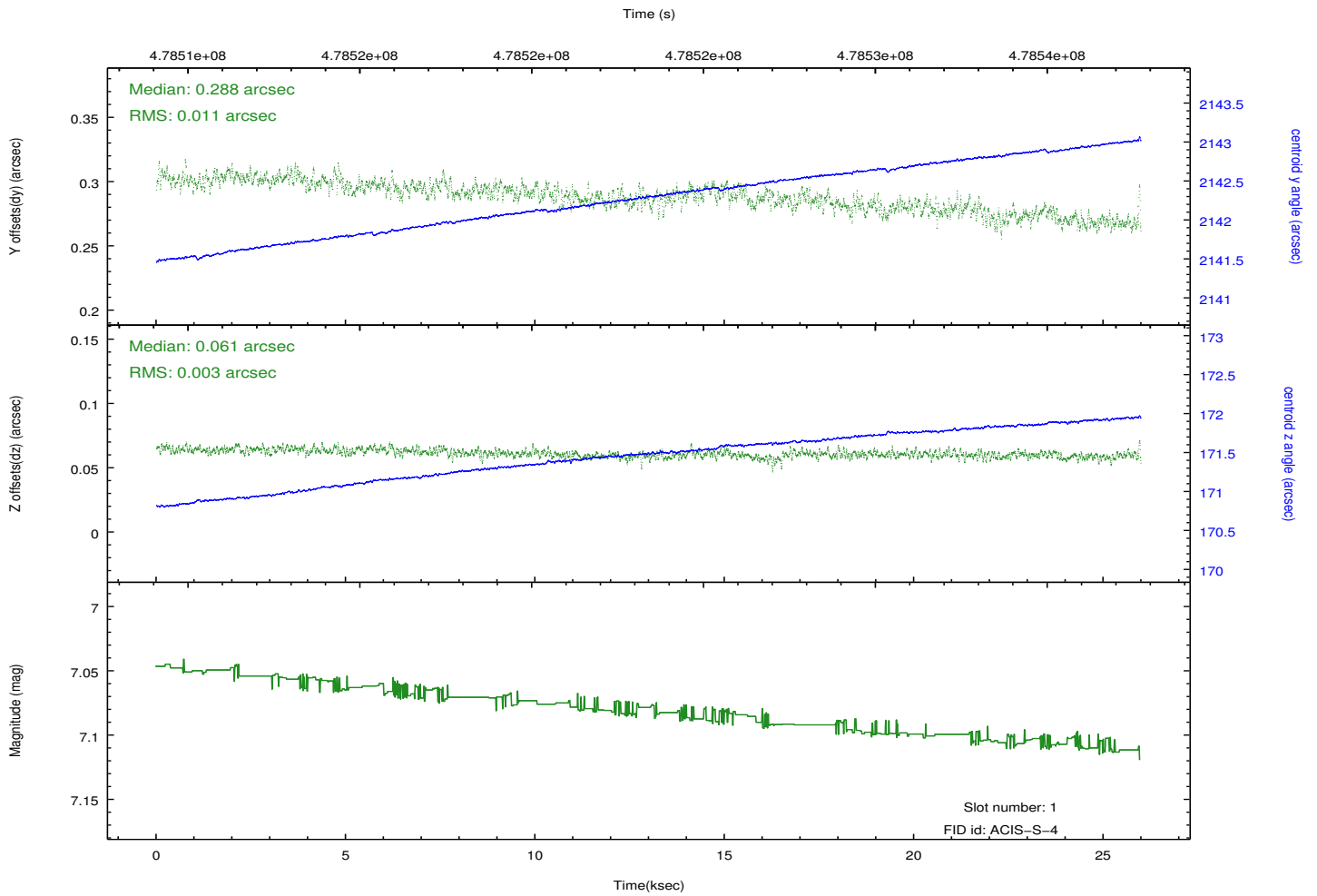
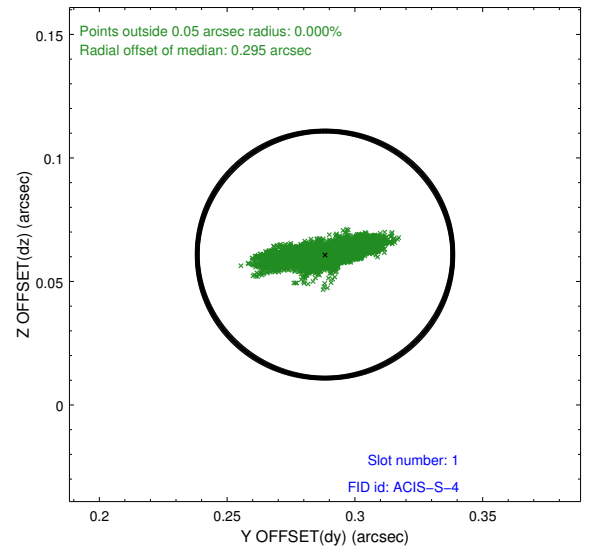
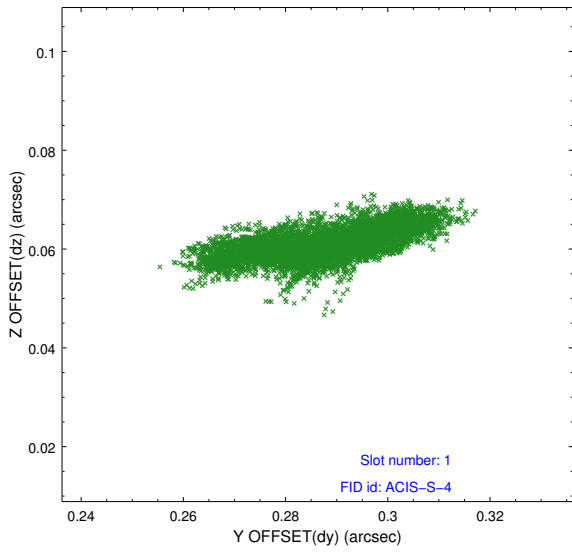


2.5 FID Slots

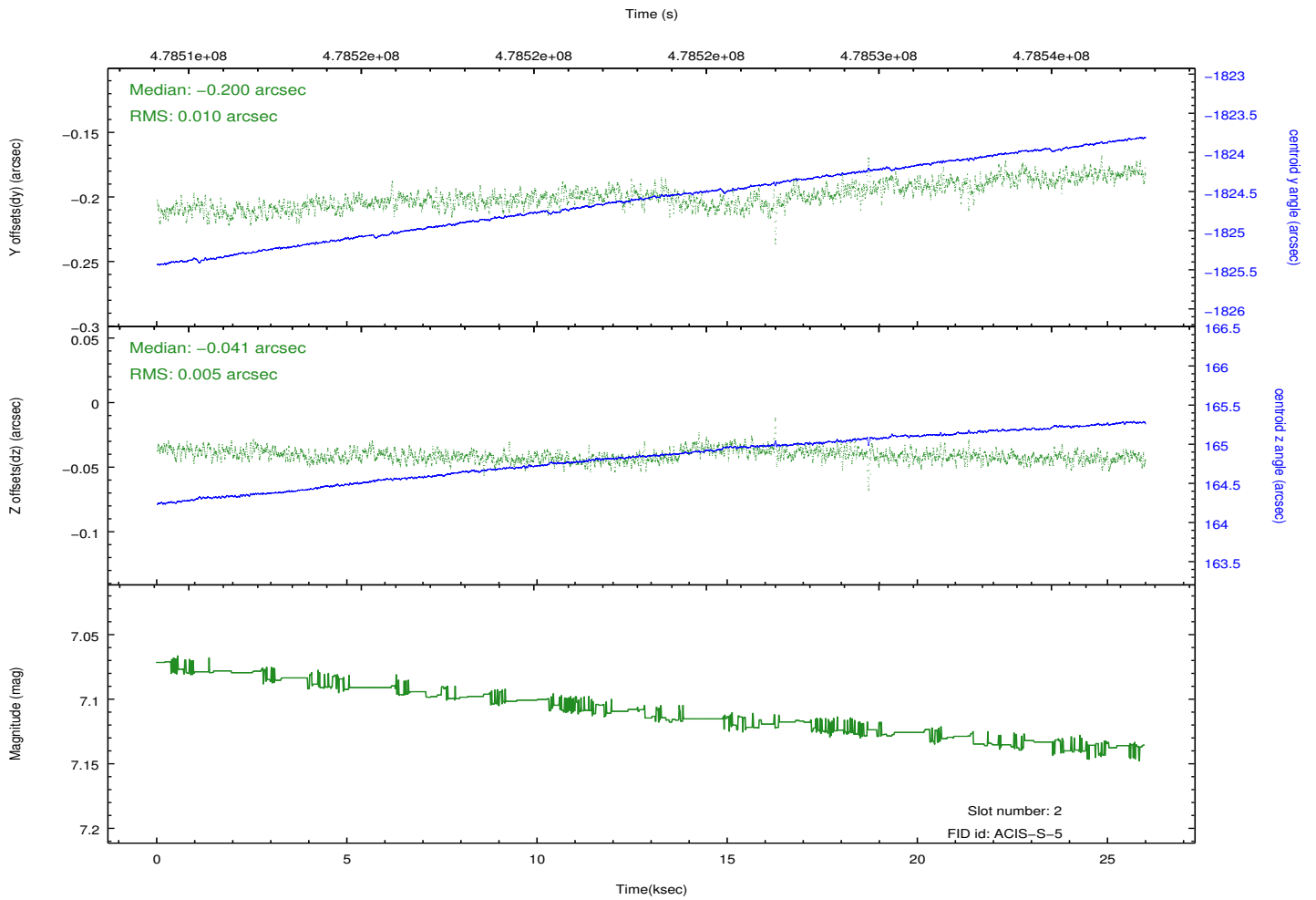
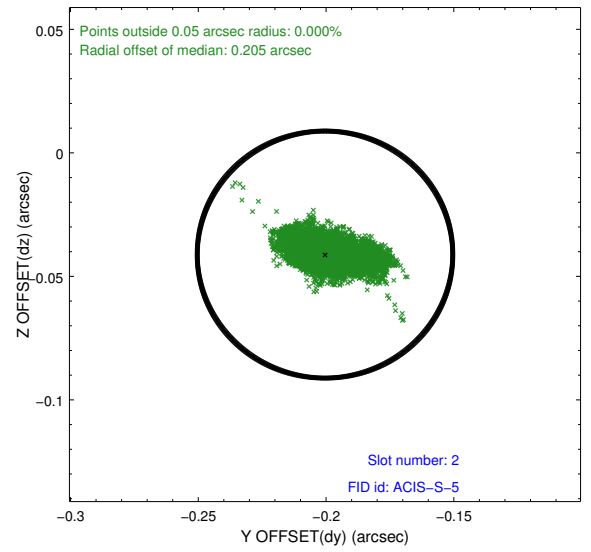
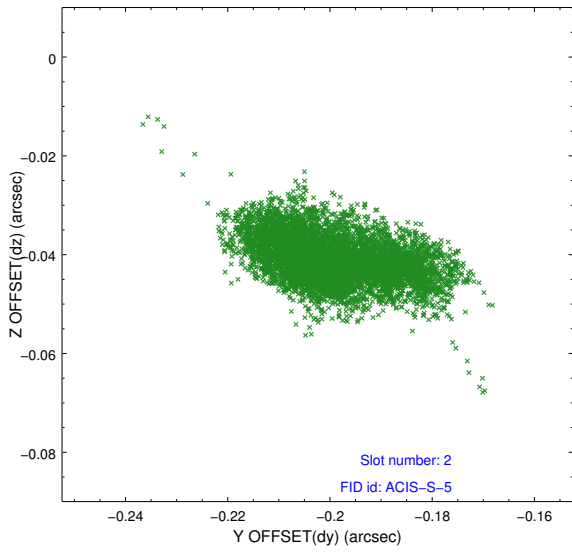
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.12.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.066600192785

A.2 Comments

Joint proposal with HST.

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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.