

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 16137 - L2 Version 2
Chandra X-Ray Center

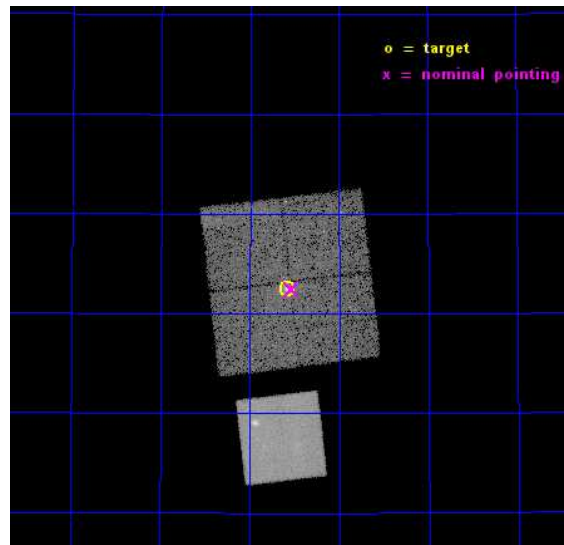
L2 Processing Date : Dec 10 2014

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1 Front

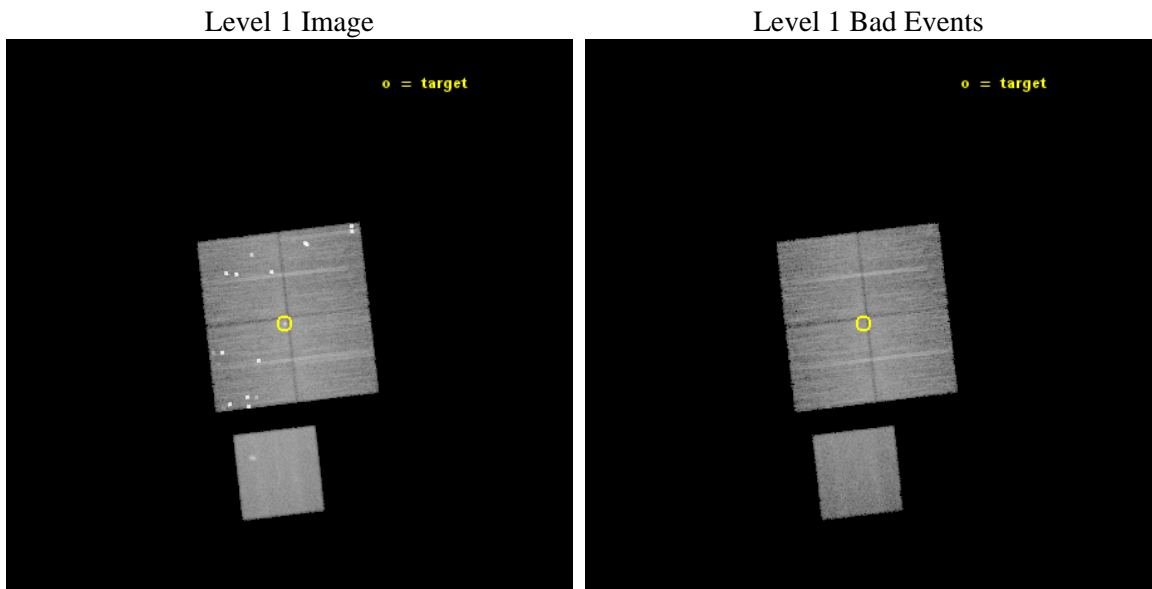
seq_num	801391	Sequence number
obs_id	16137	Observation id
title	Unmasking Galaxy Clusters Masquerading As Quasars	Proposal title
observer	Dr. Megan Donahue	Principal investigator
object	RXJ103035.2+513229	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	157.646667	Observer's specified target RA [deg]
dec_targ	51.54225	Observer's specified target Dec [deg]
ra_nom	157.63391369676	Nominal RA [deg]
dec_nom	51.540755794193	Nominal Dec [deg]
roll_nom	173.37743232078	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20466.200157404	Sum of GTIs [s]
livetime	20198.79418535	Livetime [s]
ontime0	20466.200157404	Sum of GTIs [s]
ontime1	20466.200157404	Sum of GTIs [s]
ontime2	20466.200157404	Sum of GTIs [s]
ontime3	20466.200157404	Sum of GTIs [s]
ontime7	20466.200157404	Sum of GTIs [s]
l2events	117289	Number of level 2 events



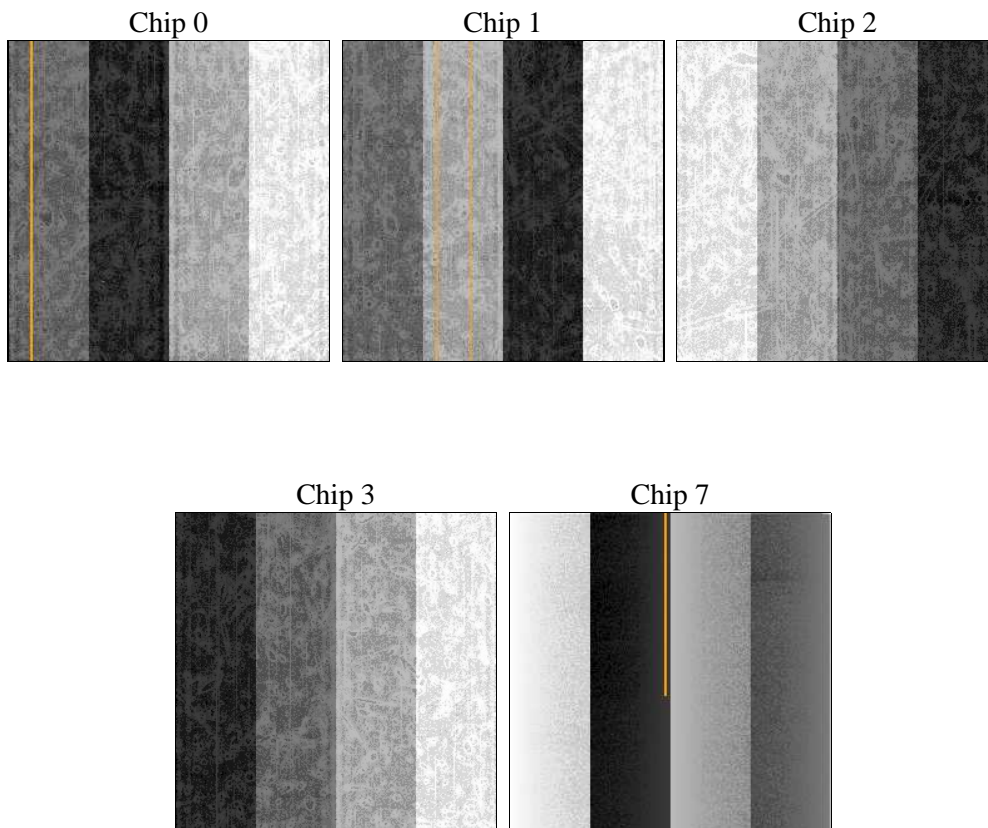
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20400.985000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	20466.200157404	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	20466.200157404	Sum of GTIs [s]
date	2014-12-10T08:51:07	Date and time of file creation	ontime1	20466.200157404	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	20466.200157404	Sum of GTIs [s]
			ontime3	20466.200157404	Sum of GTIs [s]
			ontime7	20466.200157404	Sum of GTIs [s]
			l1events	709523	Number of level 1 events

2.1.4 Events

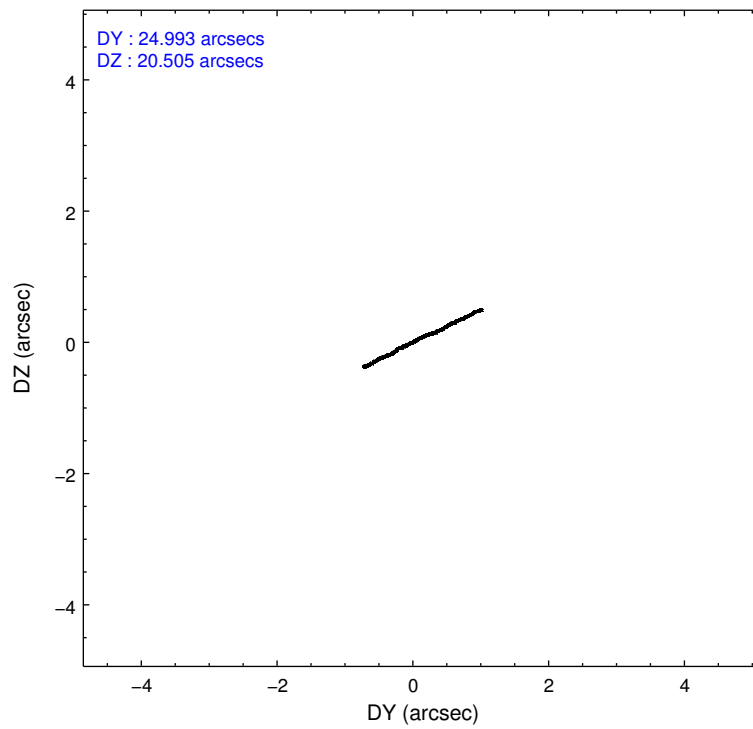
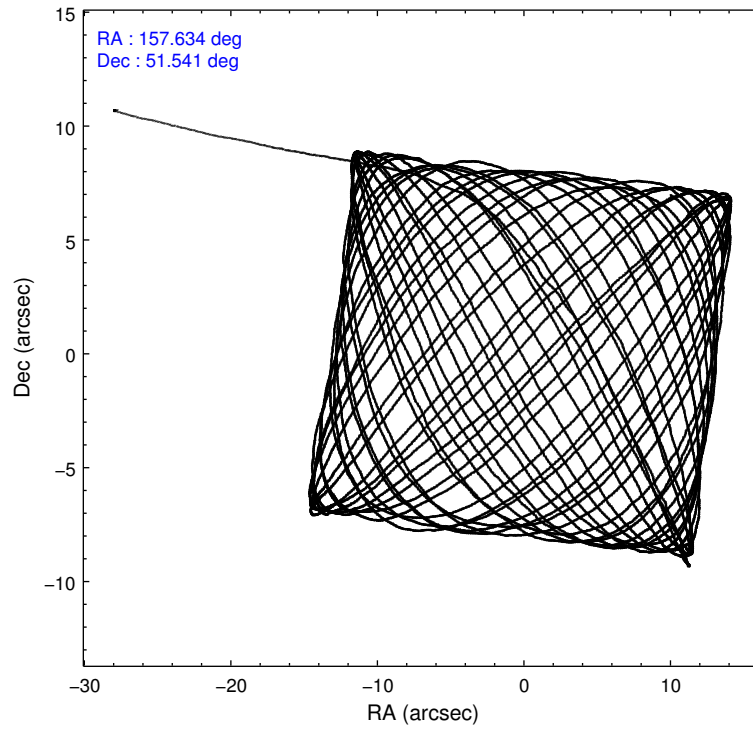
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	132123	133200	133316	158244	152640
rejected events	89329	96864	114827	109656	83030
rejected %	67%	72%	86%	69%	54%

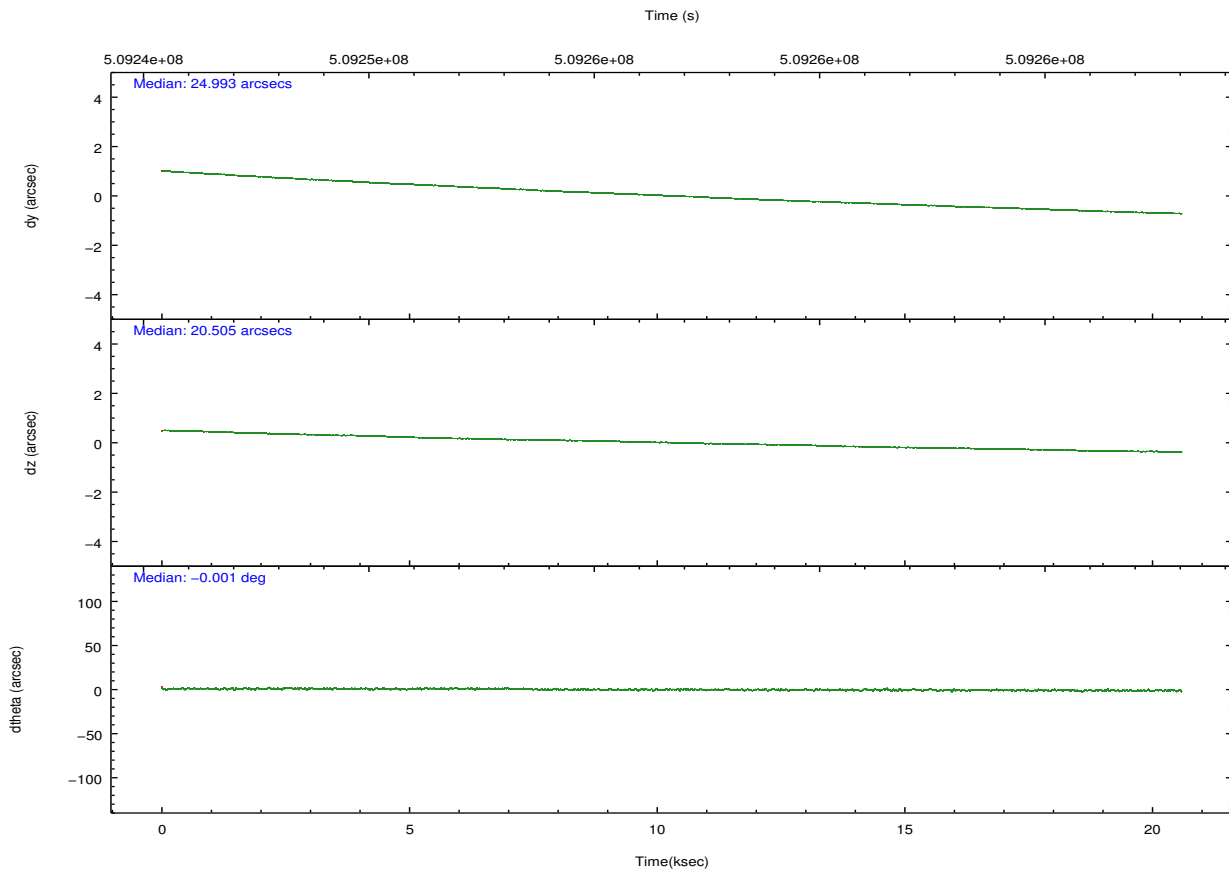
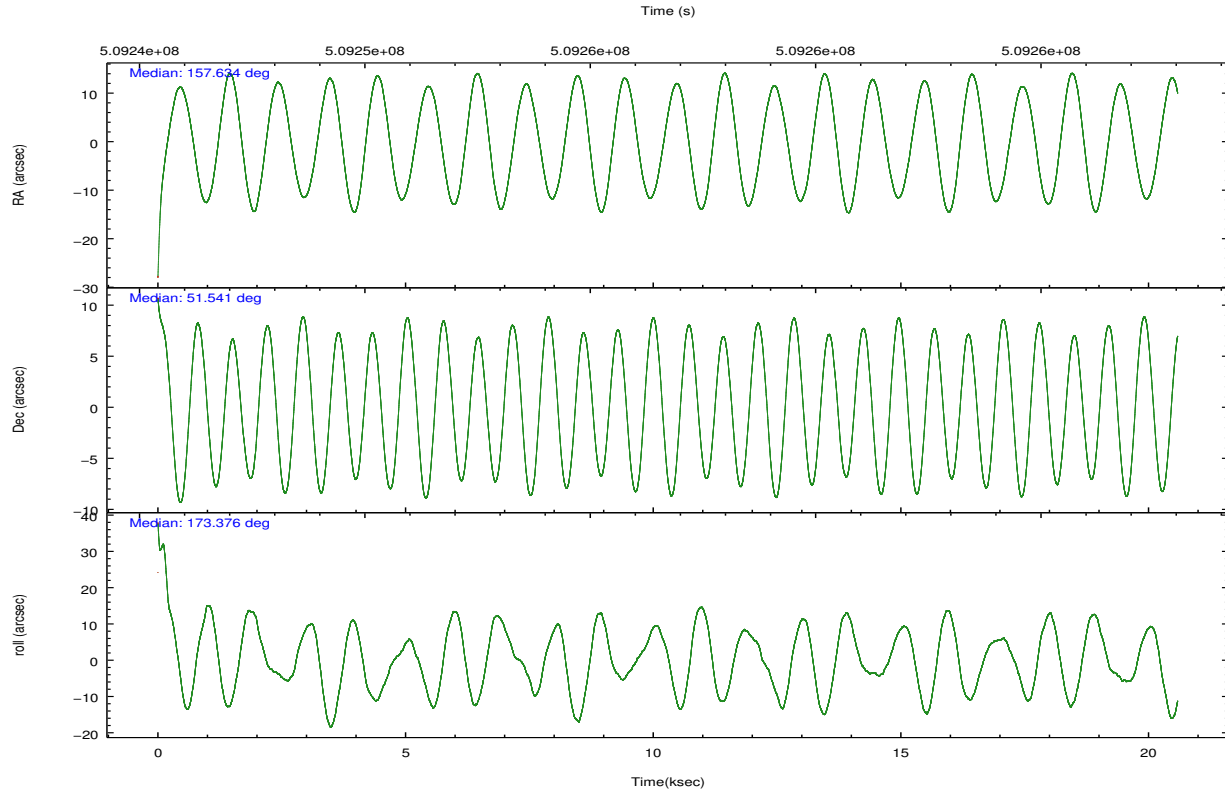
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	33559	21190	8339	39575	7210
	25%	15%	6%	25%	4%
grade 1 events	190	102	139	221	315
	0%	0%	0%	0%	0%
grade 2 events	4331	9866	4402	3889	16446
	3%	7%	3%	2%	10%
grade 3 events	1341	1225	1157	1343	5850
	1%	0%	0%	0%	3%
grade 4 events	1143	1274	2062	1333	5992
	0%	0%	1%	0%	3%
grade 5 events	4599	4778	4269	5244	14177
	3%	3%	3%	3%	9%
grade 6 events	2432	2790	2532	2462	34150
	1%	2%	1%	1%	22%
grade 7 events	84528	91975	110416	104177	68500
	63%	69%	82%	65%	44%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01237	ACIS-01237	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	157.674429	157.6339136967614	CCD I2 on	Y	Y
[deg] Pointing Dec	51.551757	51.54075579419322	CCD I3 on	Y	Y
[deg] Pointing Roll	173.137021	173.377432320776	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O2	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	509246620.184000	509245508.29427	CCD S5 on	N	N
Observation start date	2014-02-20T01:22:33	2014-02-20T01:05:08	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	509267021.184000	509267257.77047	On-chip summing requested	N	N
Observation end date	2014-02-20T07:02:34	2014-02-20T07:07:37	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





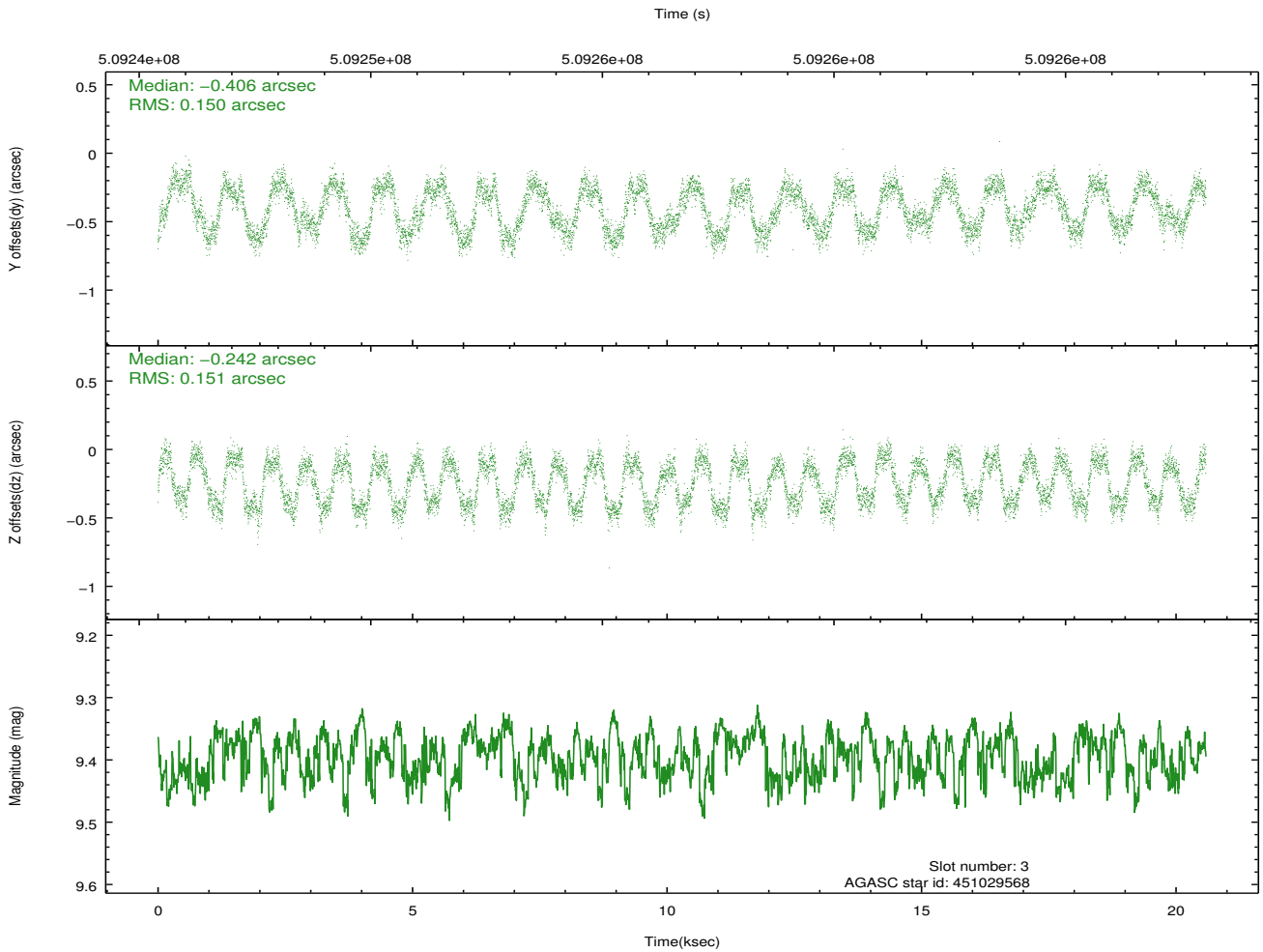
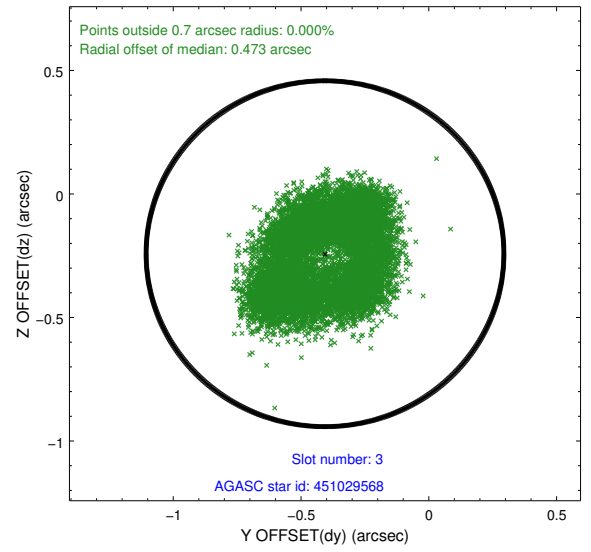
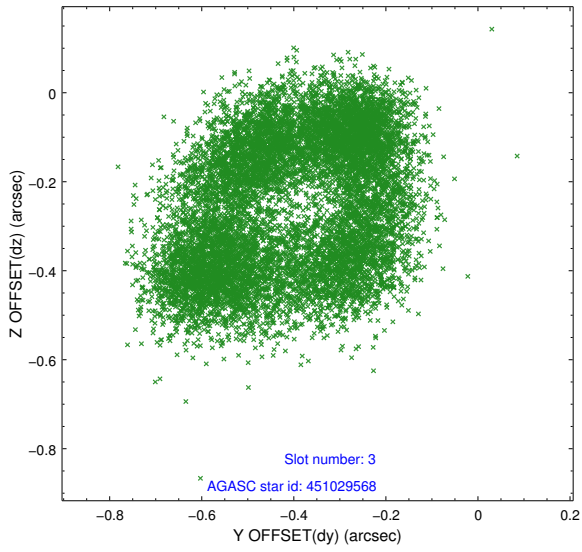
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.10	5021	-0.042	-0.097	0.014	0.024	0.000000	0.000000	-780.09	-850.70
1	FID		ACIS-I-5	7.20	5022	-0.235	0.018	0.010	0.018	0.000000	0.000000	-1834.42	1053.19
2	FID		ACIS-I-6	7.21	5022	0.183	0.148	0.007	0.012	0.000000	0.000000	379.70	1697.98
3	GUIDE	used	451029568	9.39	10035	-0.406	-0.242	0.233	0.318	156.626708	51.050272	2140.42	2059.38
4	GUIDE	used	451942680	9.16	10036	0.145	0.155	0.190	0.275	158.148634	51.845277	-917.89	-1177.02
5	GUIDE	used	451943072	8.88	10039	0.186	0.037	0.141	0.227	157.774577	51.808956	-110.48	-945.91
6	GUIDE	used	451944768	9.14	10039	0.063	-0.261	0.469	0.591	157.673498	51.401166	-62.18	538.87
7	GUIDE	used	451938400	10.31	9810	0.052	0.279	0.214	0.355	158.848958	52.107864	-2335.62	-2318.06

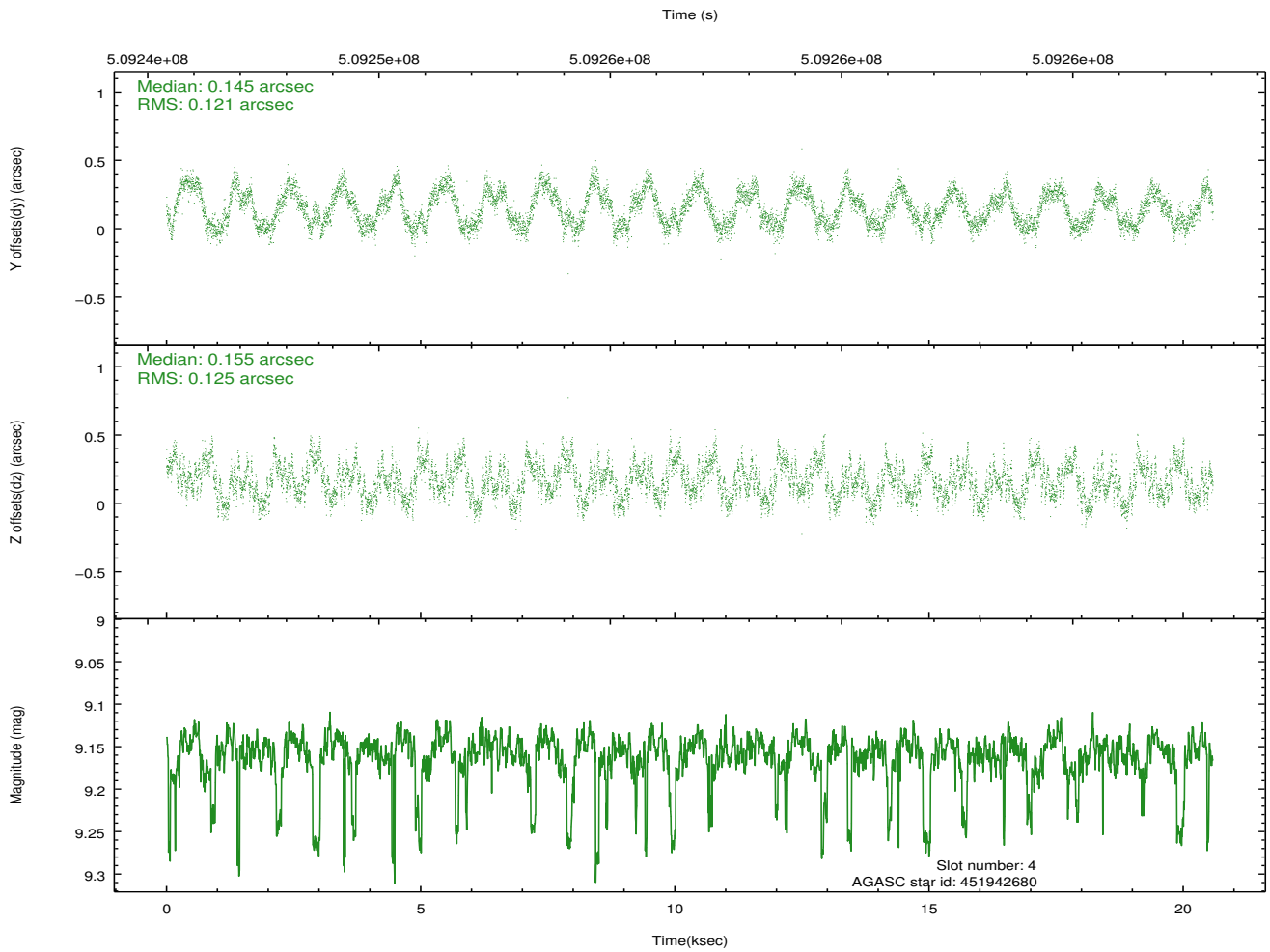
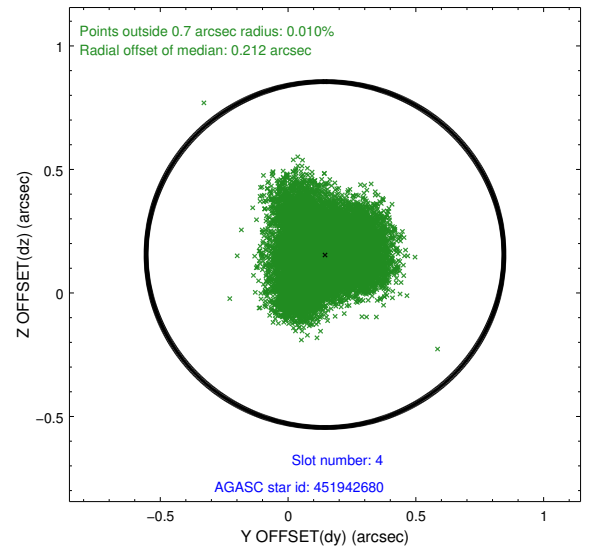
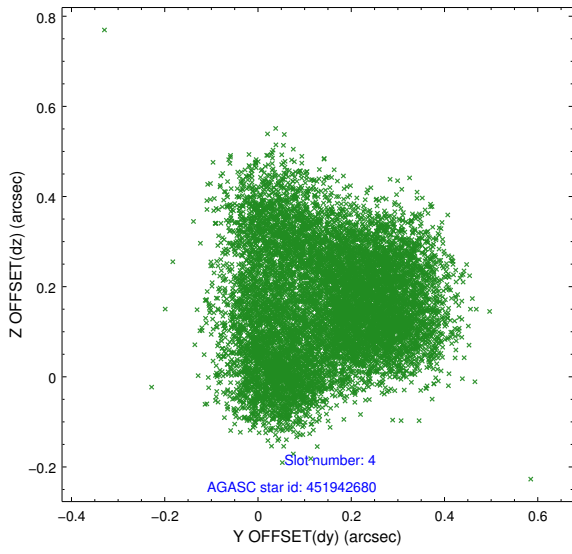
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2.4 Star Slots

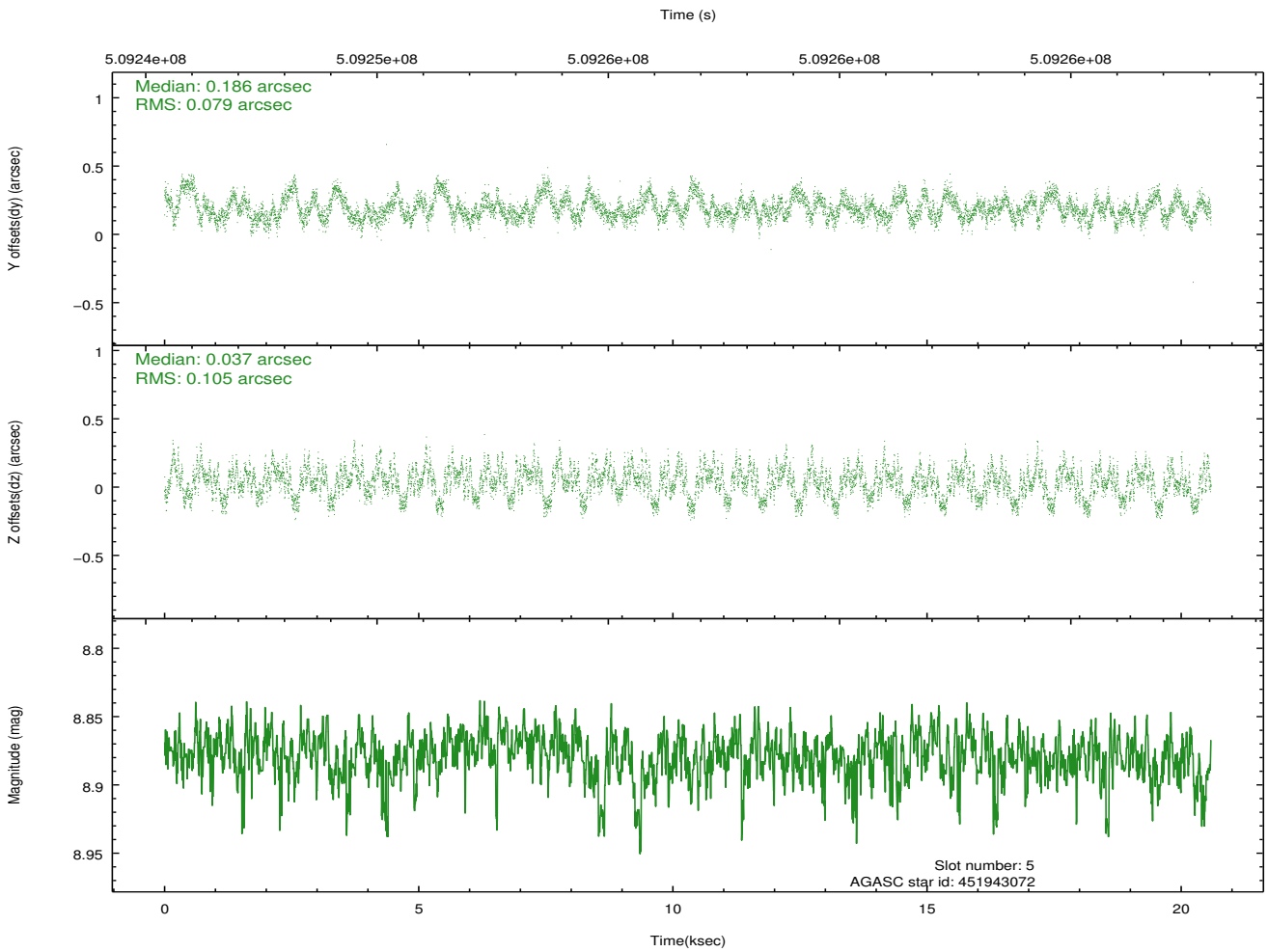
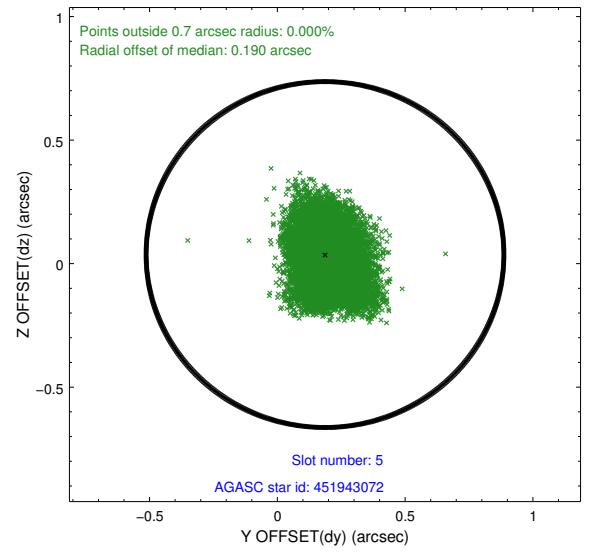
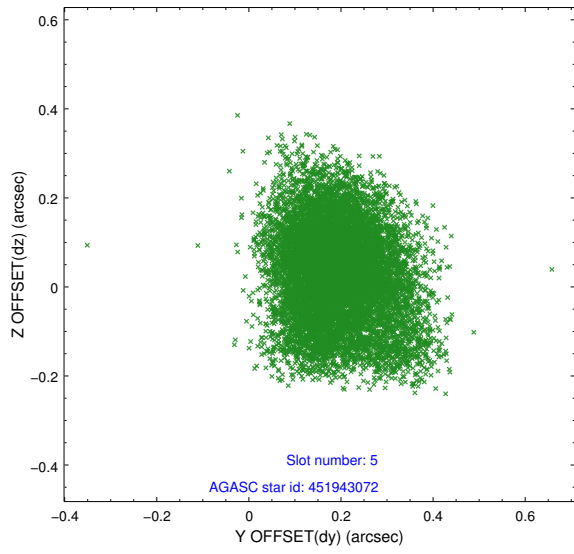
2.4.1 Slot 3



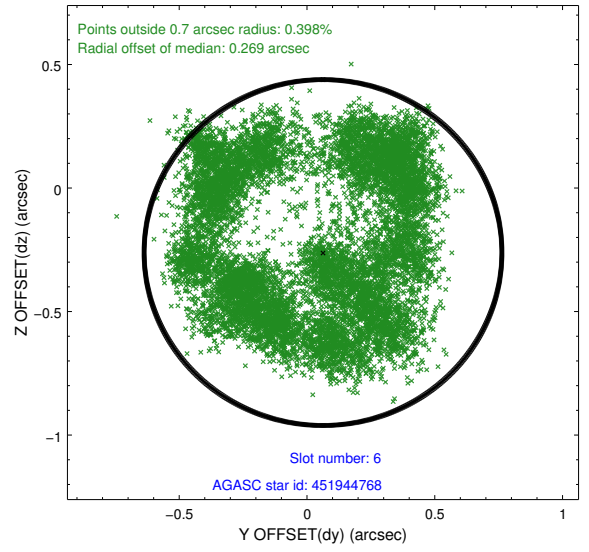
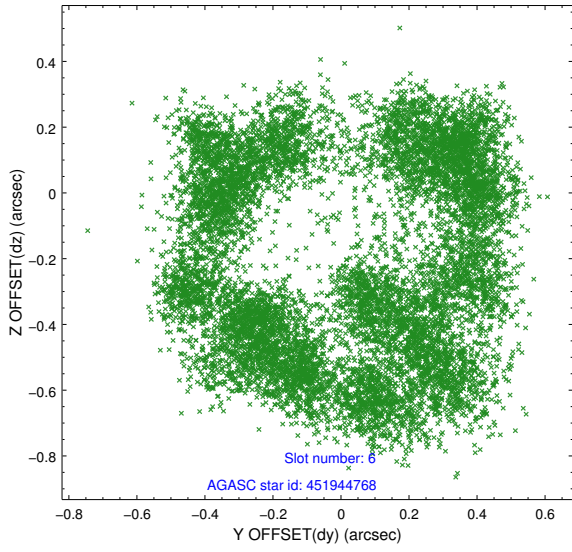
2.4.2 Slot 4



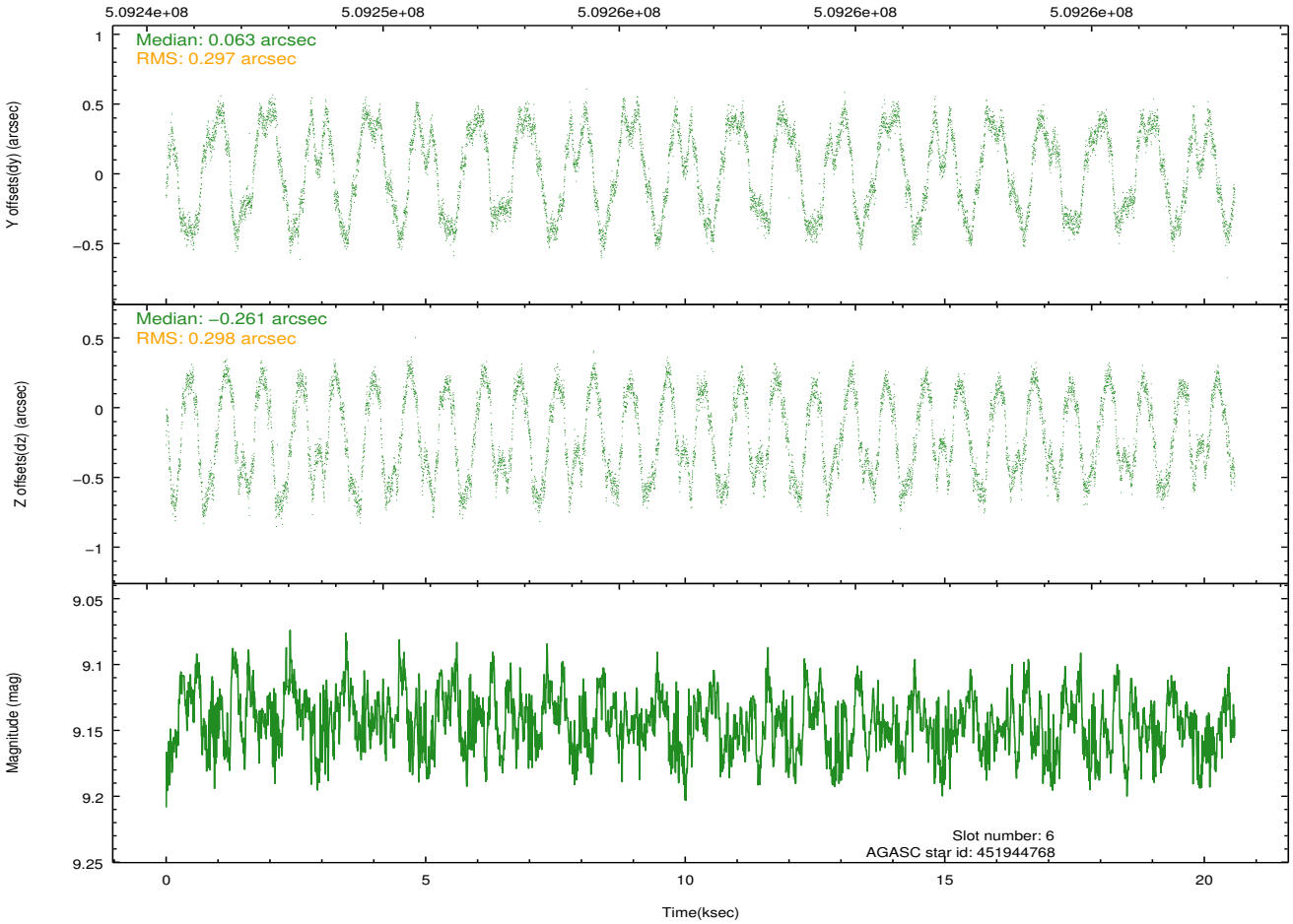
2.4.3 Slot 5



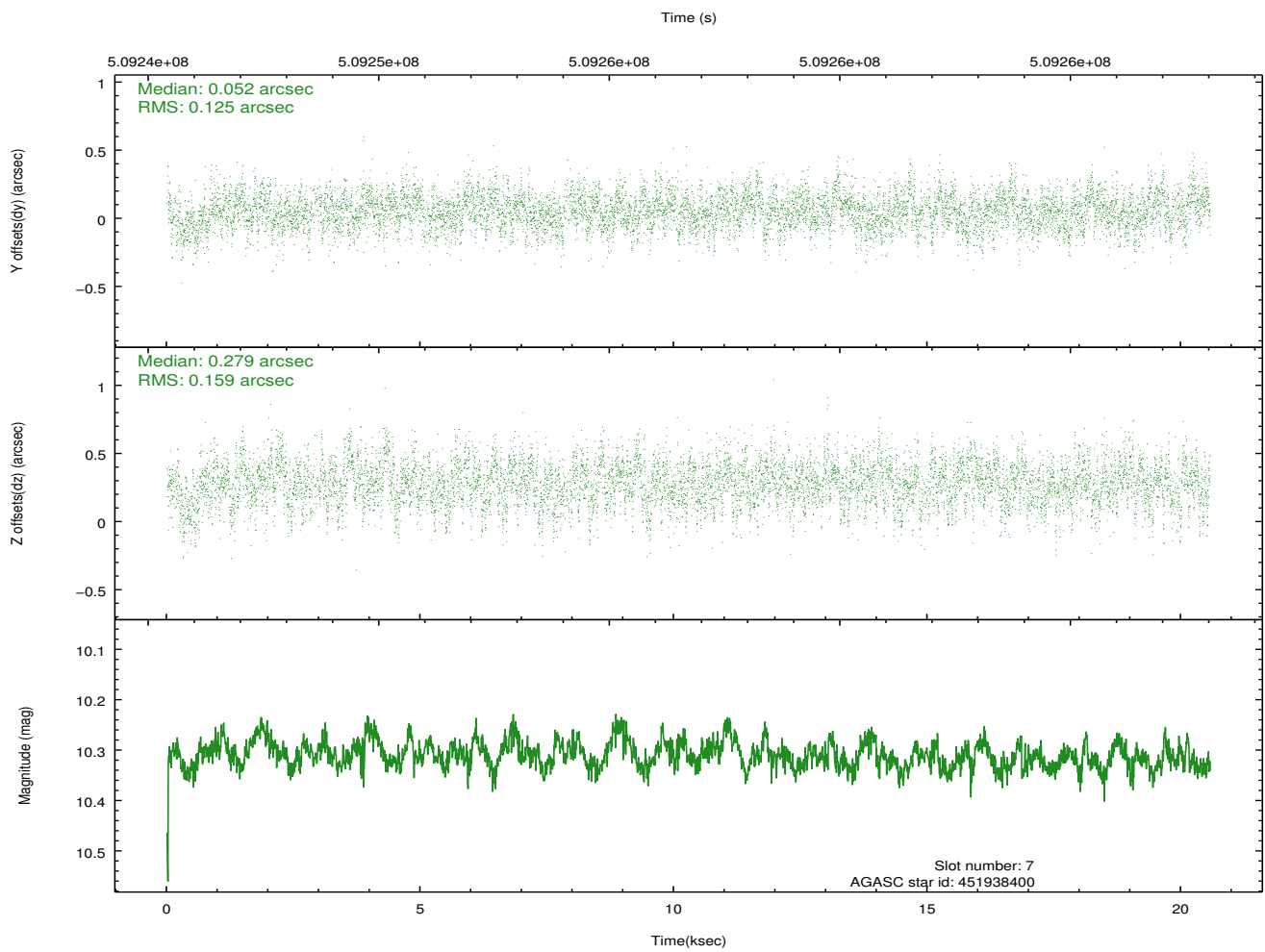
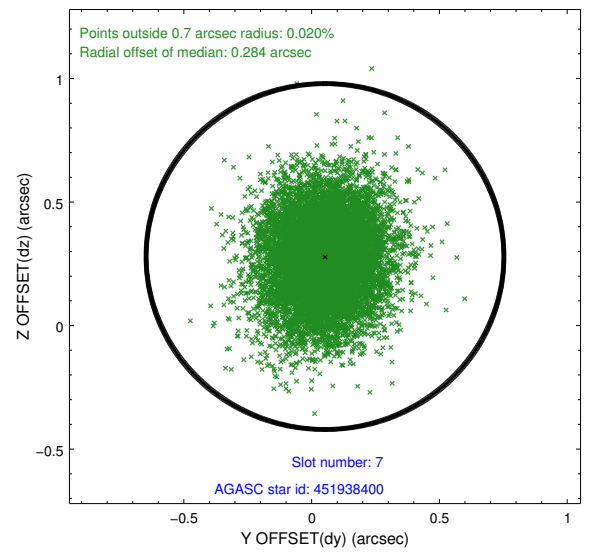
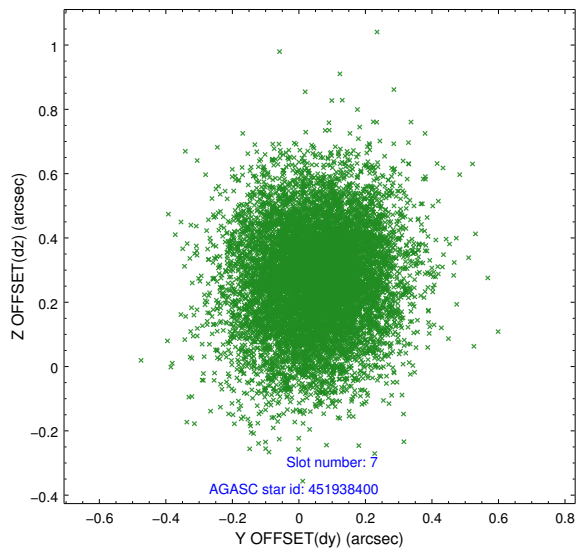
2.4.4 Slot 6



Time (s)

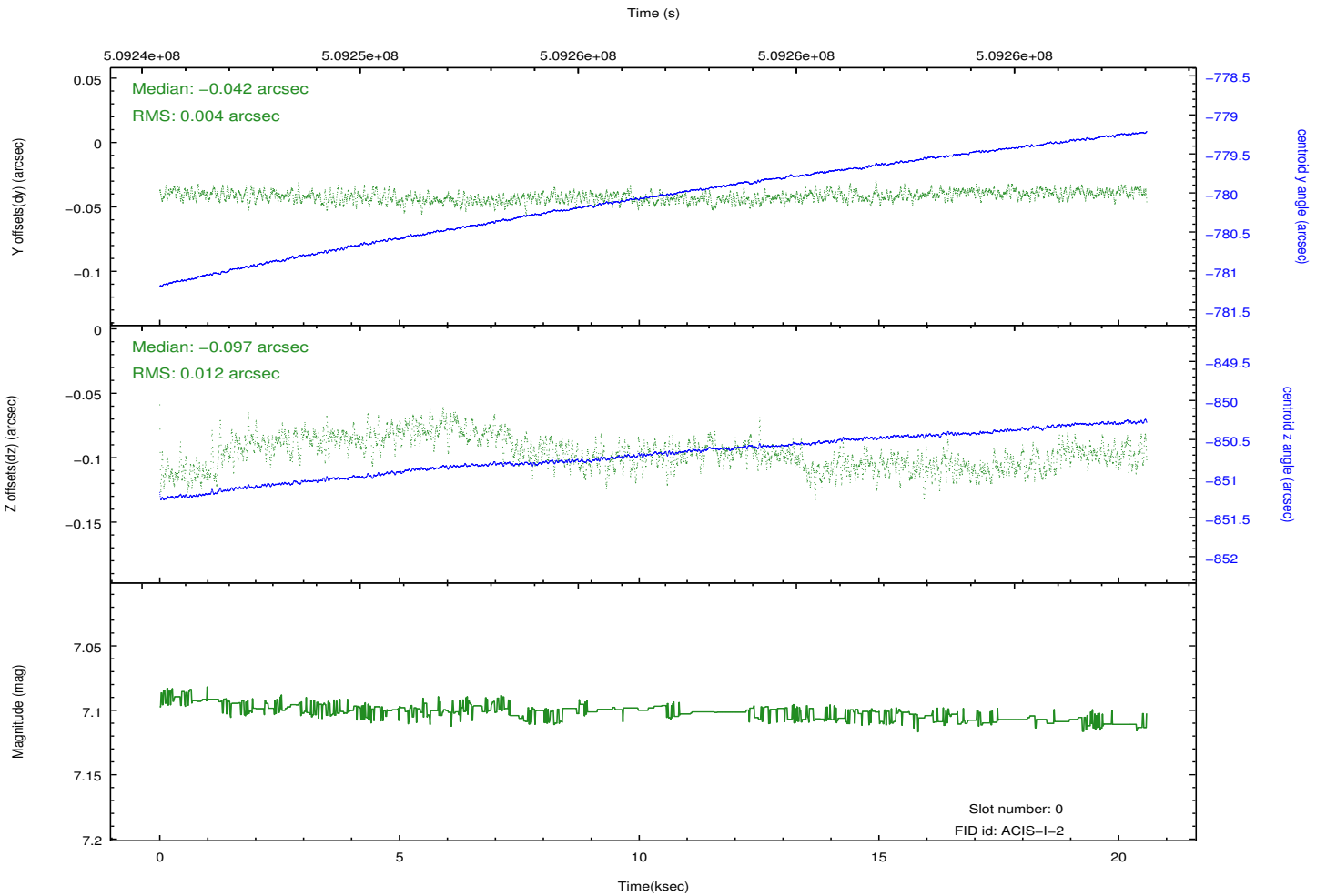
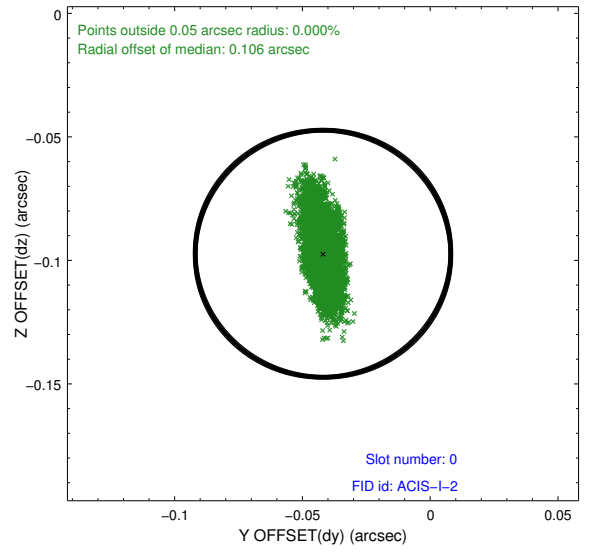
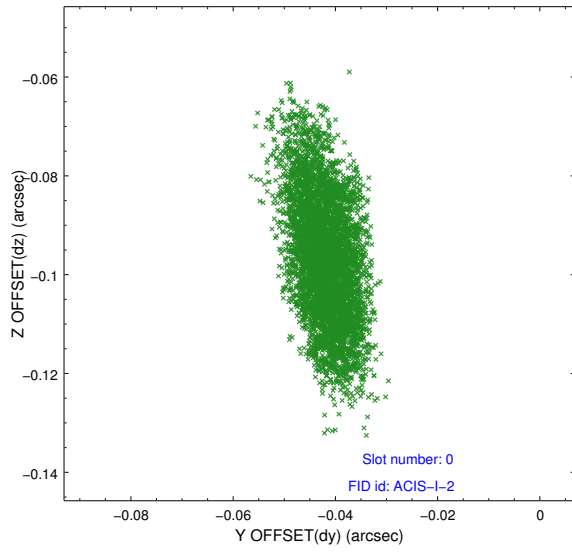


2.4.5 Slot 7

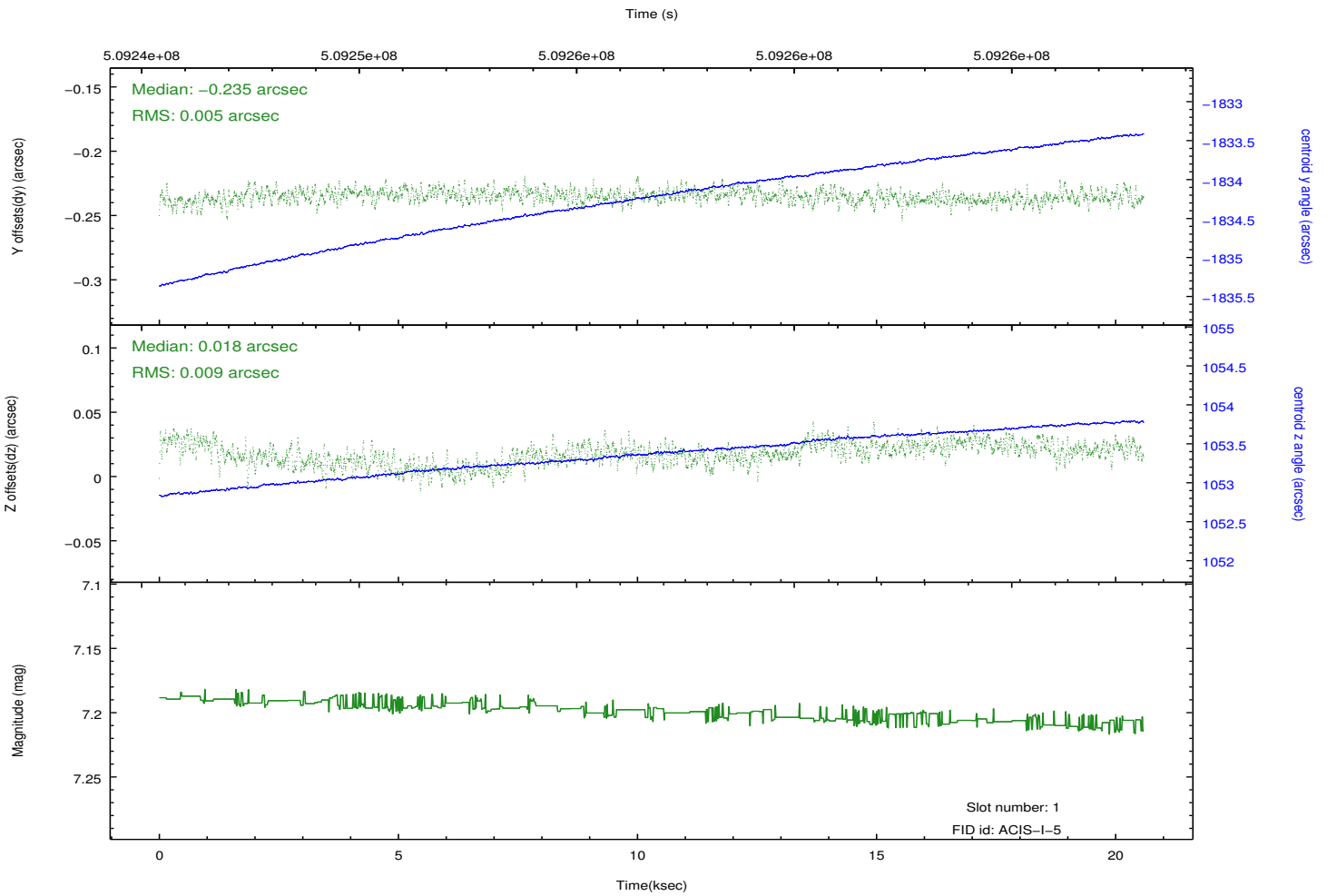
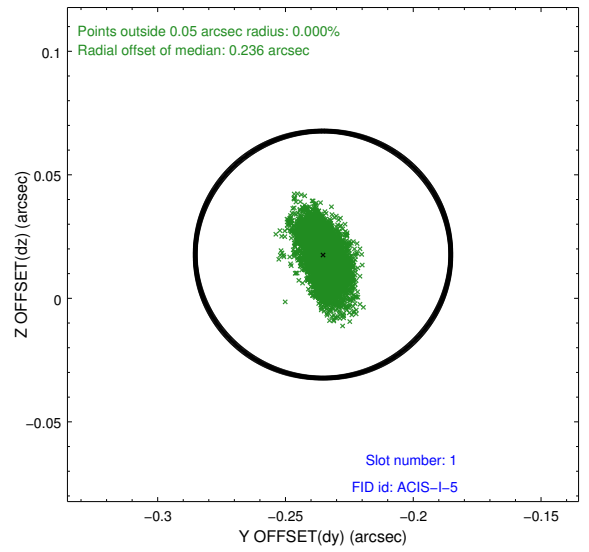
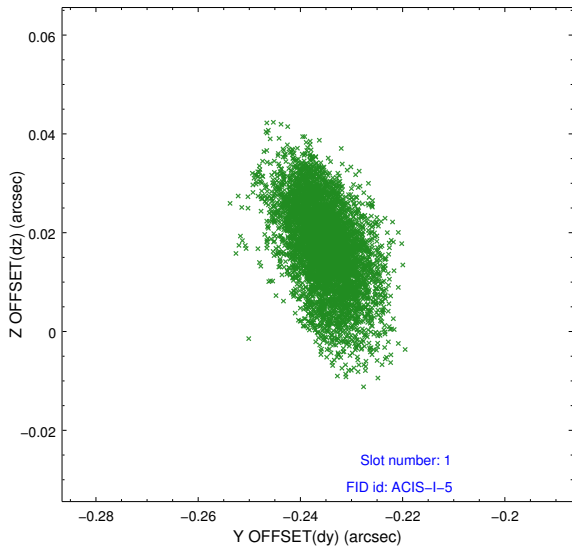


2.5 FID Slots

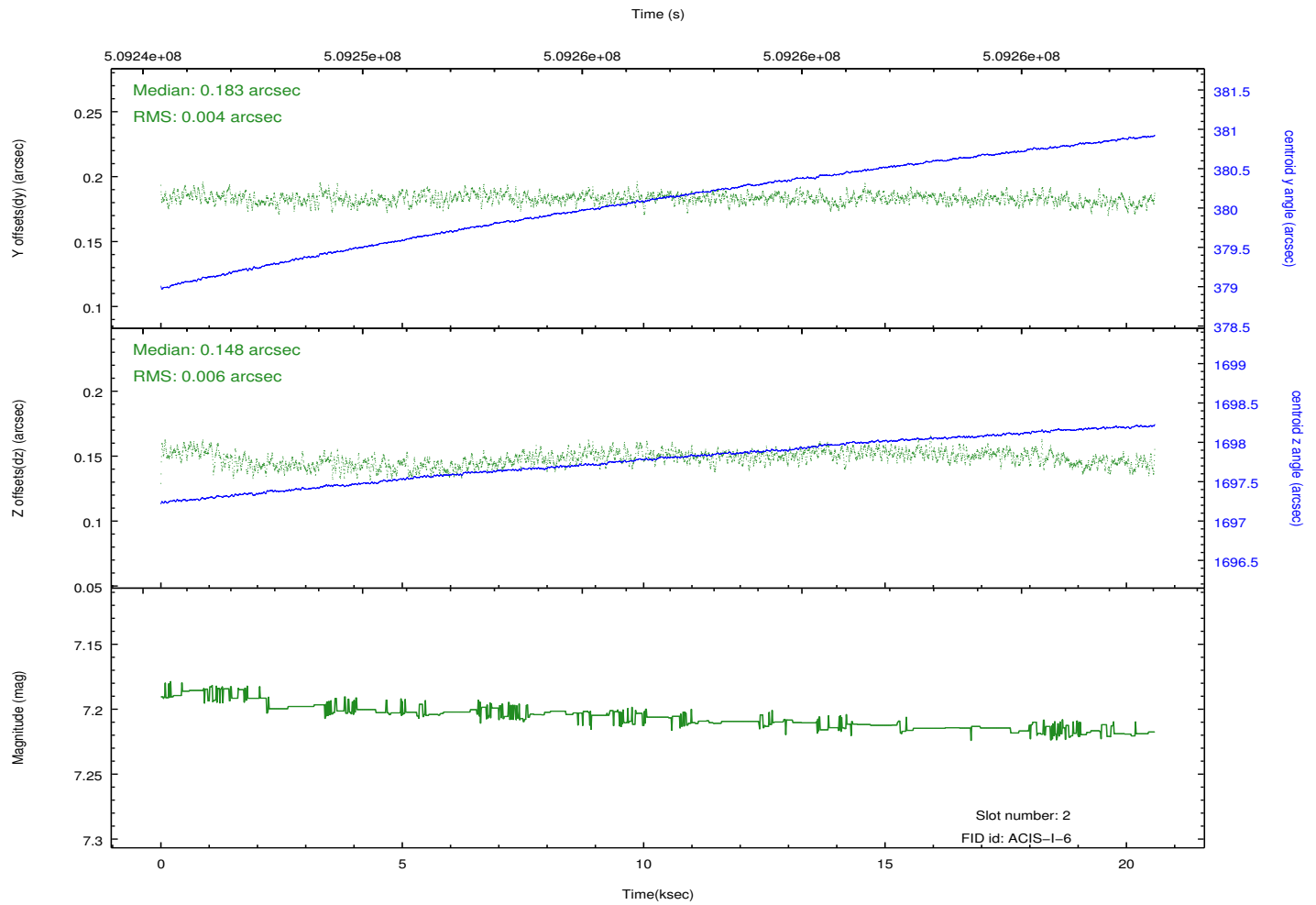
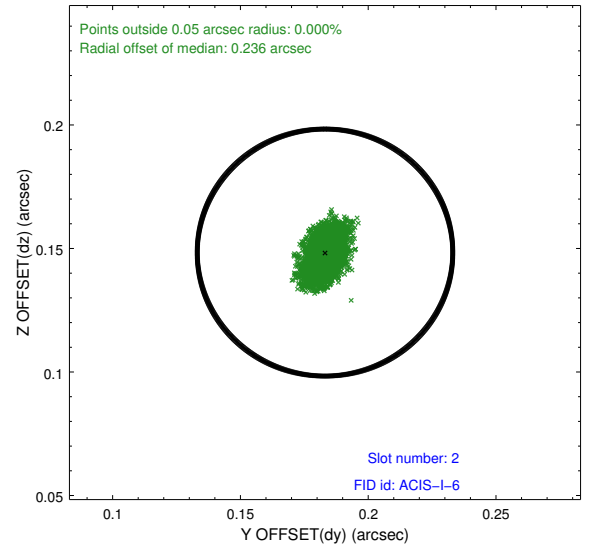
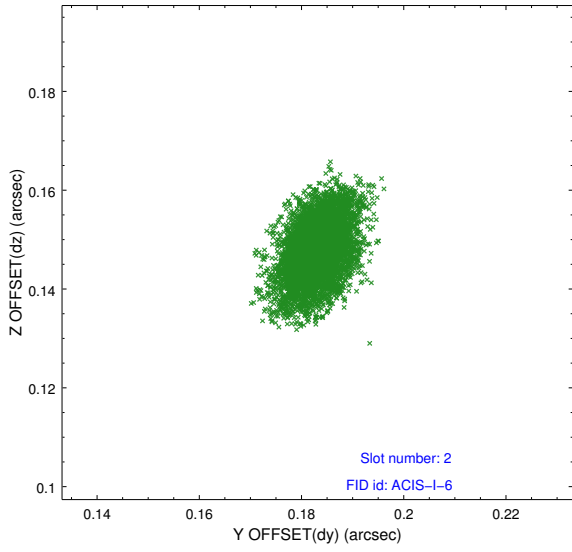
2.5.1 Slot 0



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)	2014.12.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.466200157404

A.2 Comments

Optional chip S2 not included.

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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.