

V&V Reference Report

L2 ASCDS Version : 10.1

Observation 16490 - L2 Version 2
Chandra X-Ray Center

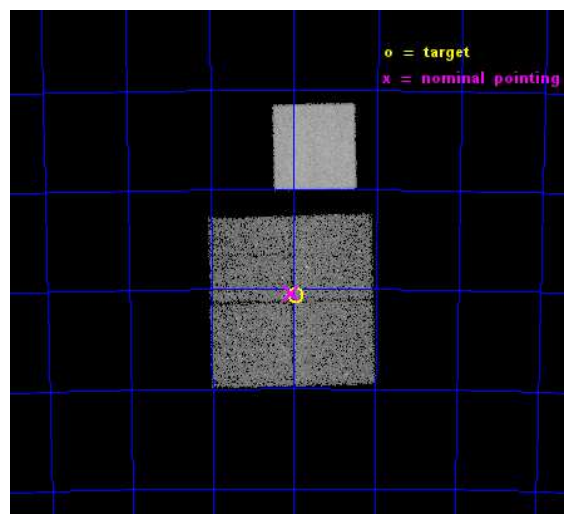
L2 Processing Date : Dec 6 2014

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1 Front

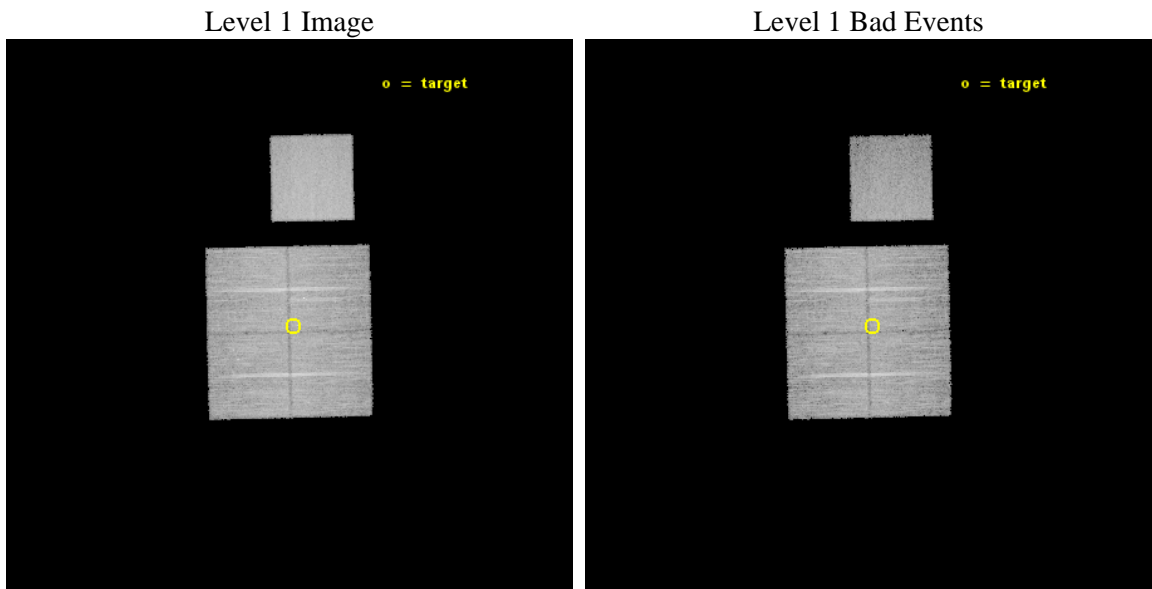
seq_num	401499	Sequence number
obs_id	16490	Observation id
title	The Small Magellanic Cloud - A Case Study of X-ray Populations at Low Metallicity	Proposal title
observer	Dr Andreas Zezas	Principal investigator
object	Deep Field 03	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	18.487083	Observer's specified target RA [deg]
dec_targ	-73.342778	Observer's specified target Dec [deg]
ra_nom	18.514239600457	Nominal RA [deg]
dec_nom	-73.340554654718	Nominal Dec [deg]
roll_nom	358.73470179449	Nominal Roll [deg]
revision	2	Processing version of data
ontime	24570.600188971	Sum of GTIs [s]
livetime	24249.567208889	Livetime [s]
ontime0	24570.600188971	Sum of GTIs [s]
ontime1	24567.459198713	Sum of GTIs [s]
ontime2	24567.459208608	Sum of GTIs [s]
ontime3	24570.600188971	Sum of GTIs [s]
ontime7	24570.600188971	Sum of GTIs [s]
l2events	102807	Number of level 2 events



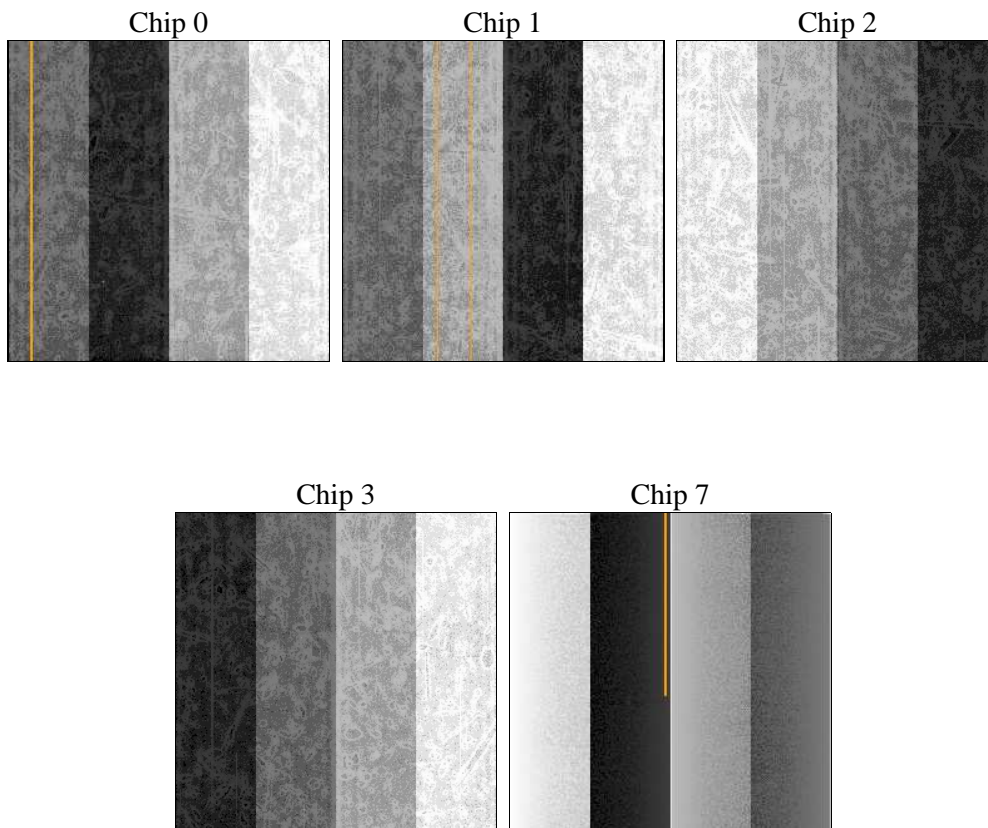
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	24500.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	24570.600188971	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	24570.600188971	Sum of GTIs [s]
date	2014-12-07T02:05:14	Date and time of file creation	ontime1	24567.459198713	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	24567.459208608	Sum of GTIs [s]
			ontime3	24570.600188971	Sum of GTIs [s]
			ontime7	24570.600188971	Sum of GTIs [s]
			l1events	536178	Number of level 1 events

2.1.4 Events

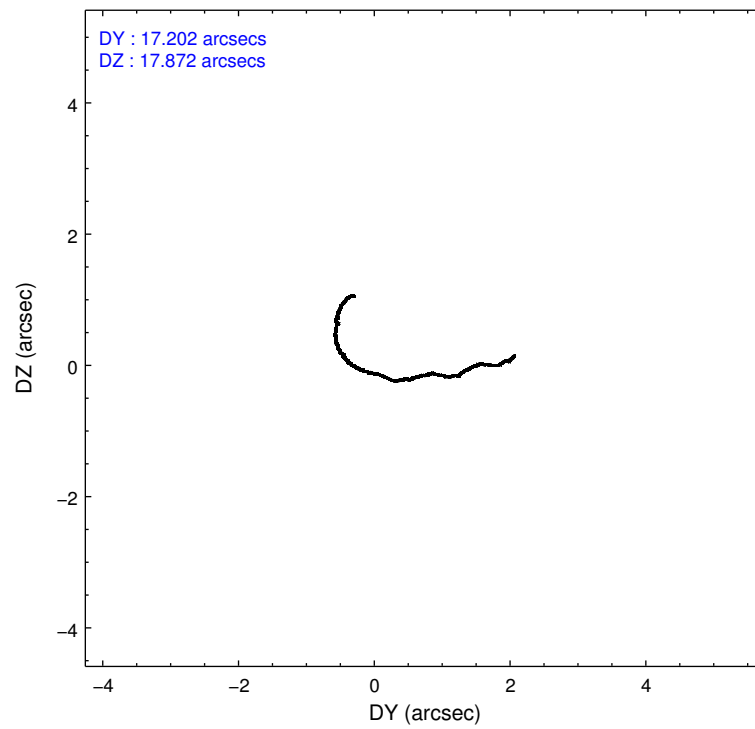
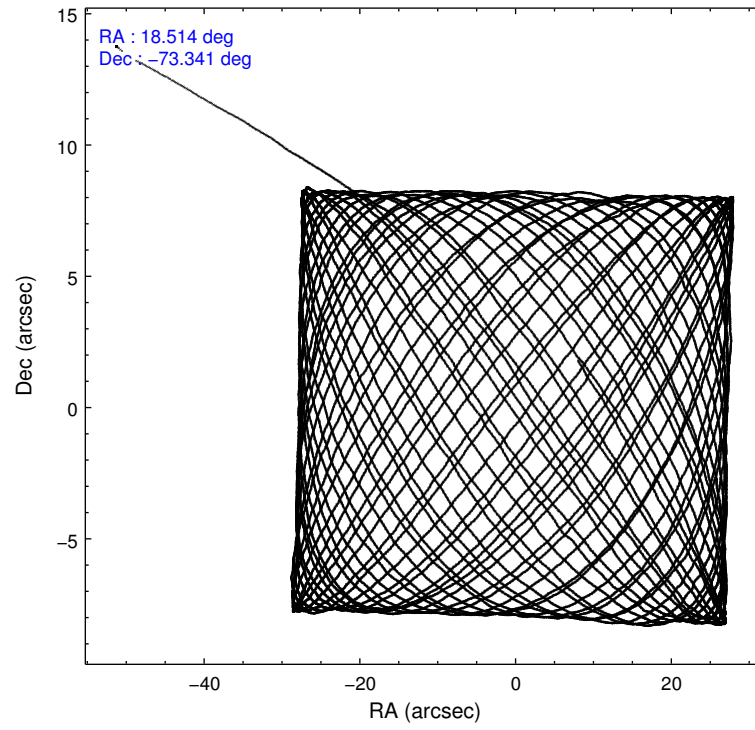
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	101009	99223	107339	99255	129352
rejected events	87412	85596	94645	86765	68691
rejected %	86%	86%	88%	87%	53%

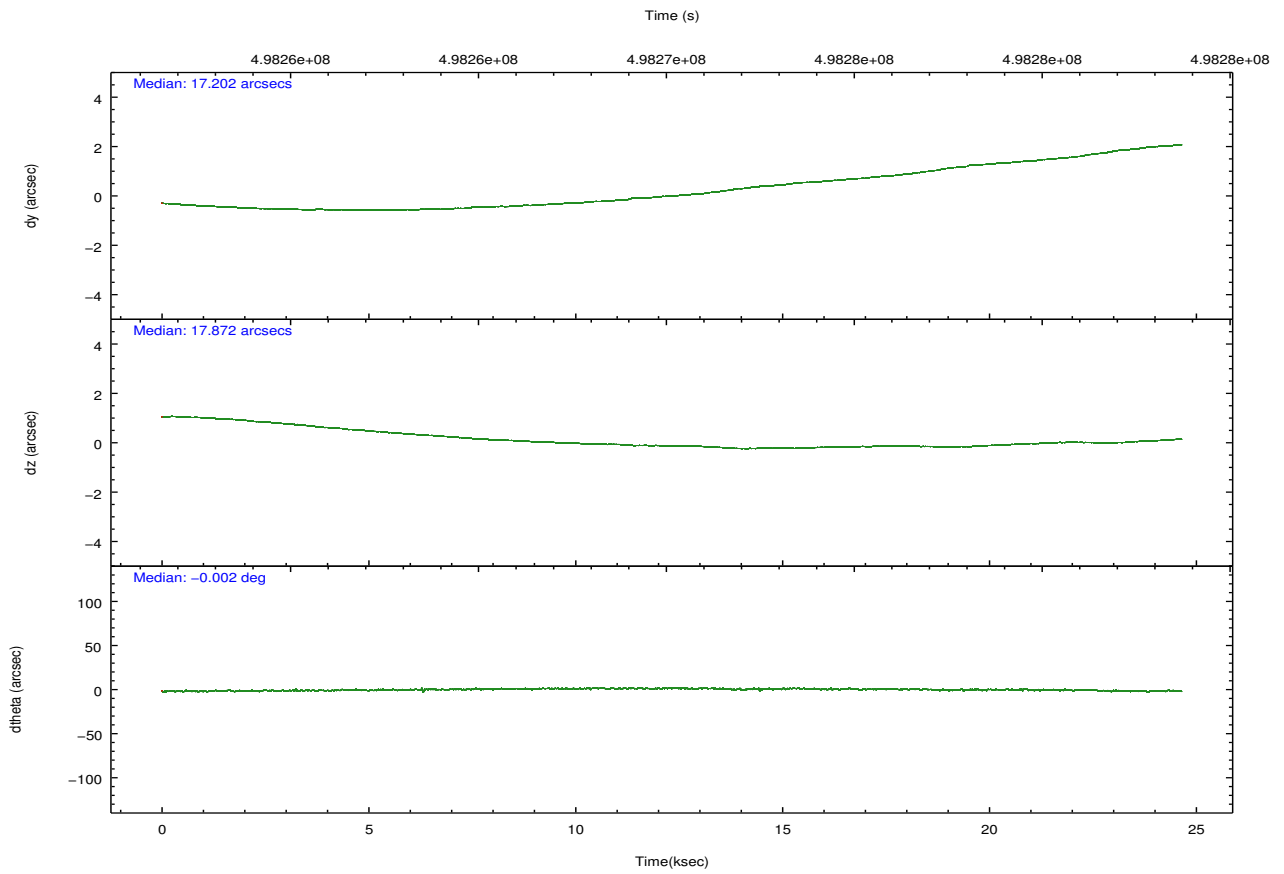
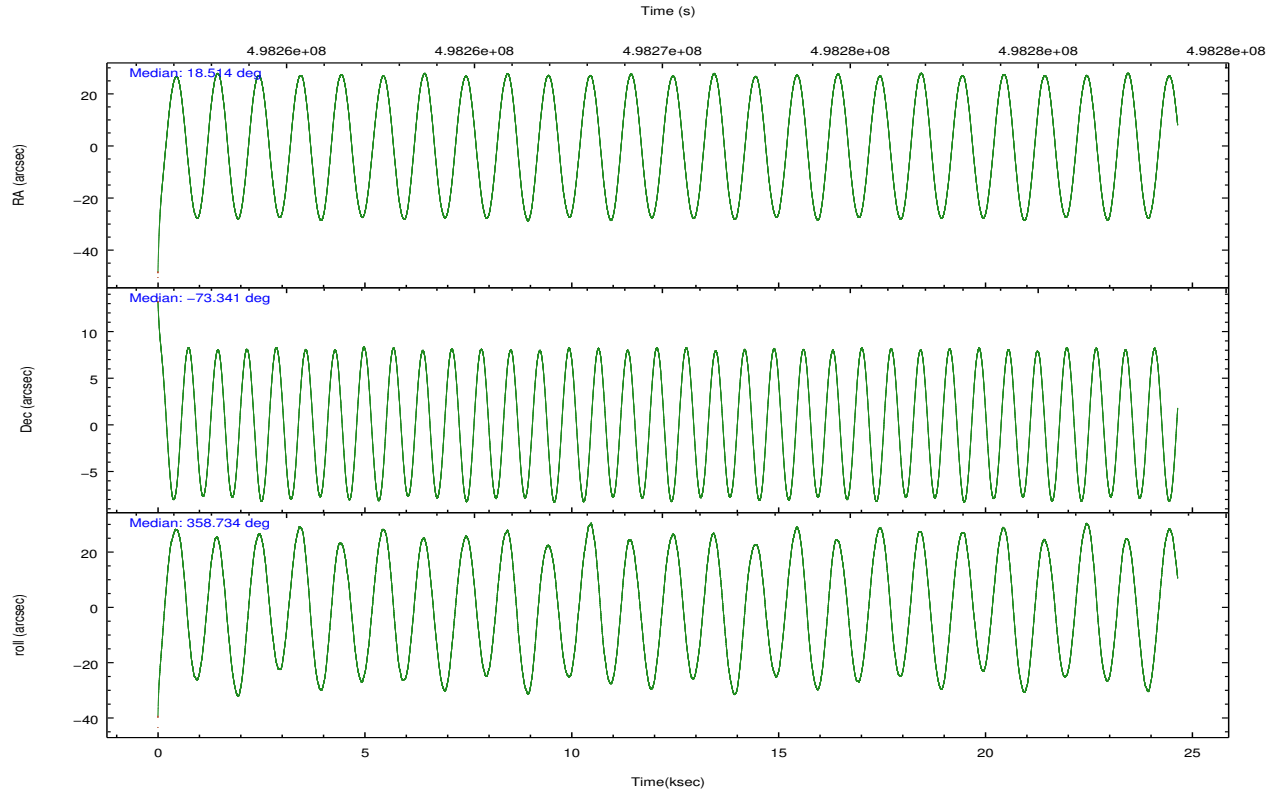
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	5047	4721	4926	4744	5759
	4%	4%	4%	4%	4%
grade 1 events	66	59	56	65	172
	0%	0%	0%	0%	0%
grade 2 events	3351	3268	3103	2737	12841
	3%	3%	2%	2%	9%
grade 3 events	1400	1371	1226	1261	5345
	1%	1%	1%	1%	4%
grade 4 events	1236	1389	1220	1262	5241
	1%	1%	1%	1%	4%
grade 5 events	4303	4798	4056	4952	13768
	4%	4%	3%	4%	10%
grade 6 events	2565	2879	2219	2487	31481
	2%	2%	2%	2%	24%
grade 7 events	83041	80738	90533	81747	54745
	82%	81%	84%	82%	42%

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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	18.430219	18.51423960045736	Subarray requested	NONE	NONE
[deg] Pointing Dec	-73.353821	-73.34055465471825	Alternating exposures requested	N	N
[deg] Pointing Roll	358.445518	358.7347017944907	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	498257969.184000	498256660.52866			
Observation start date	2013-10-15T20:58:22	2013-10-15T20:37:40			
[s] Observation end time (MET)	498282469.184000	498283525.26763			
Observation end date	2013-10-16T03:46:42	2013-10-16T04:05:25			
Read mode	TIMED	TIMED			

2.3 Aspect





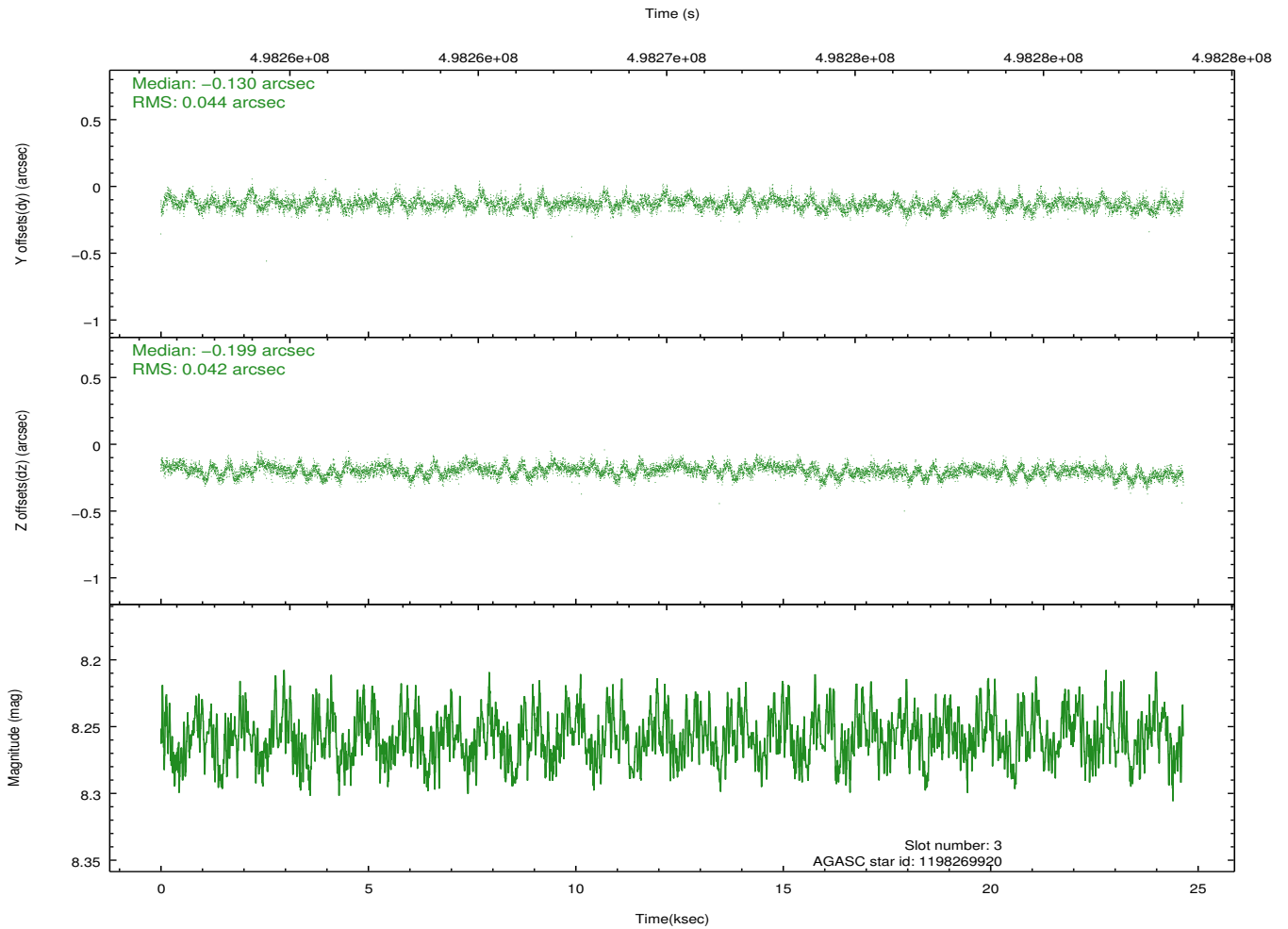
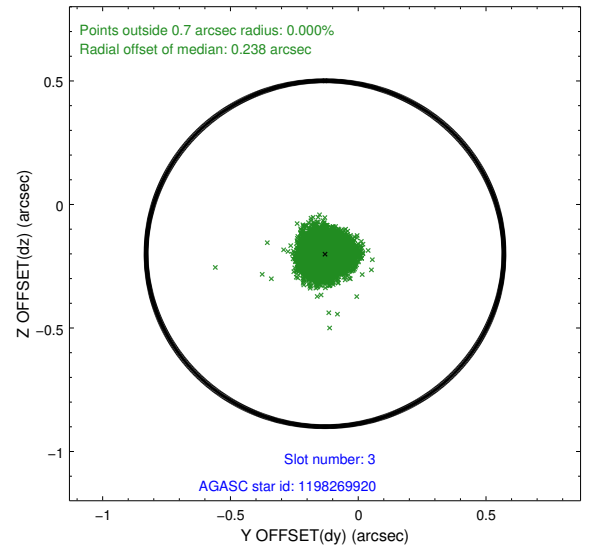
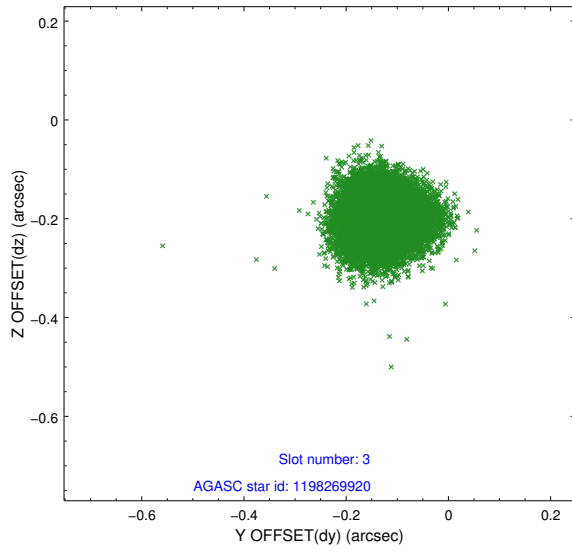
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.05	6012	0.036	0.044	0.024	0.047	0.000000	0.000000	921.92	-841.64
1	FID		ACIS-I-5	7.05	6011	-0.207	0.052	0.028	0.038	0.000000	0.000000	-1826.37	1055.77
2	FID		ACIS-I-6	7.06	6012	0.086	-0.027	0.016	0.023	0.000000	0.000000	387.37	1700.35
3	GUIDE	used	1198269920	8.26	12019	-0.130	-0.199	0.066	0.104	20.316466	-73.033728	1950.47	1174.57
4	GUIDE	used	1198272400	9.16	11948	0.092	0.095	0.109	0.186	20.411923	-73.620598	2038.10	-938.44
5	GUIDE	used	1198273408	9.31	12005	0.046	0.105	0.128	0.203	17.532323	-73.621495	-884.13	-994.54
6	GUIDE	used	1198282824	7.32	12023	0.004	-0.022	0.070	0.114	18.044095	-73.907062	-329.64	-2002.09
7	GUIDE	used	1198282744	9.00	12017	-0.014	0.018	0.082	0.133	17.028326	-73.013356	-1506.33	1167.77

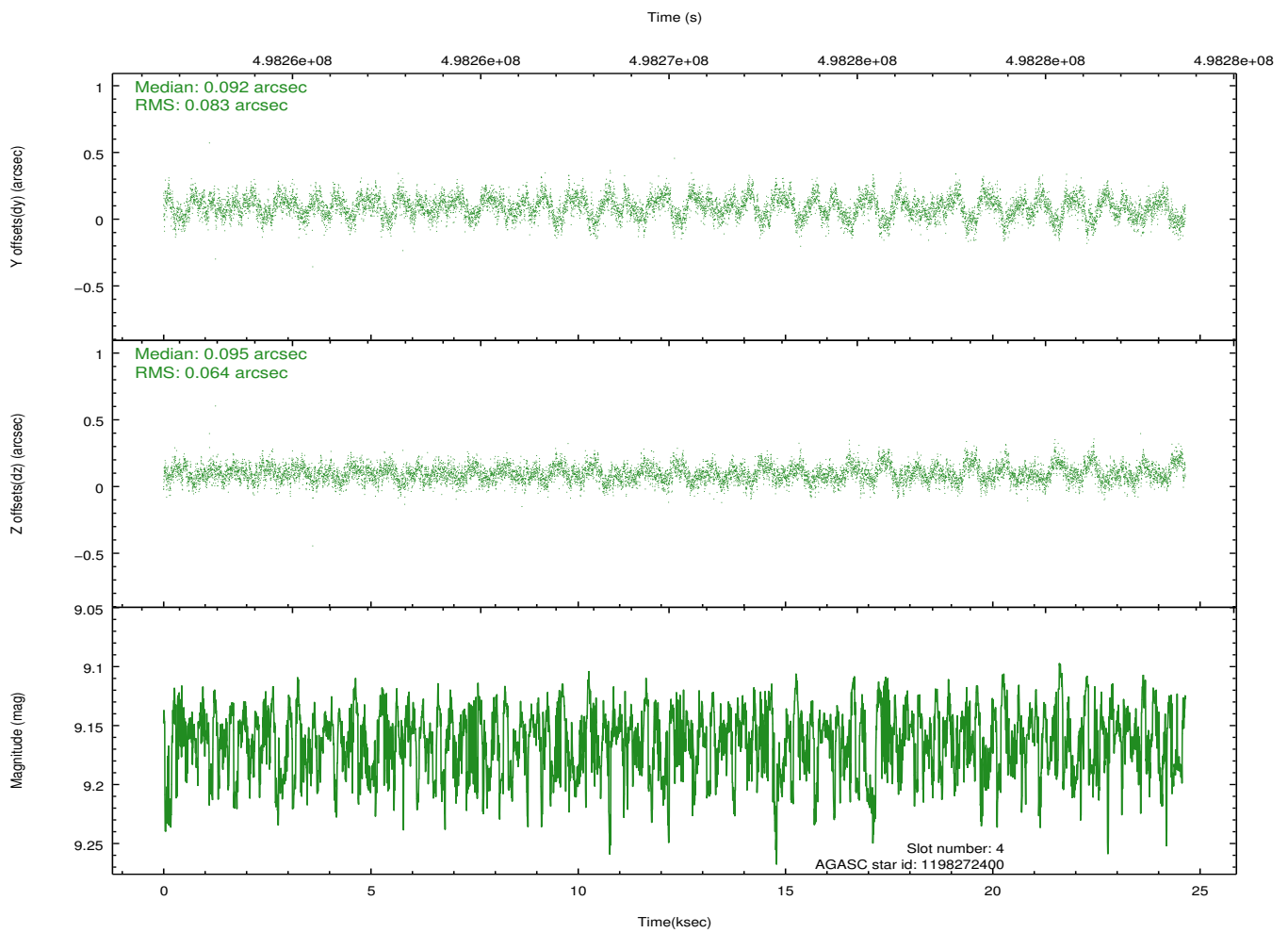
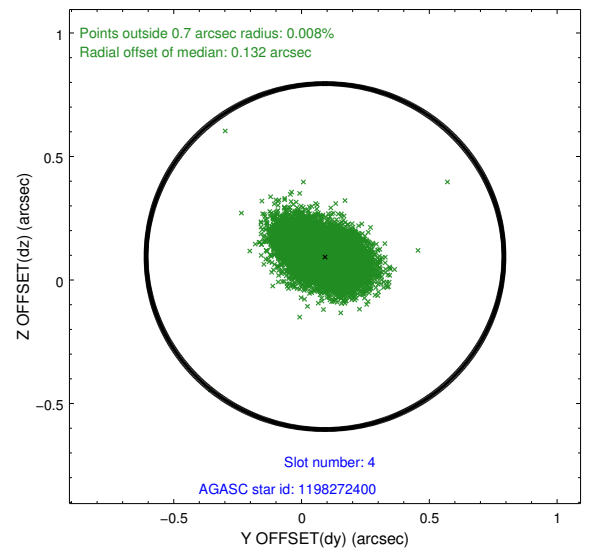
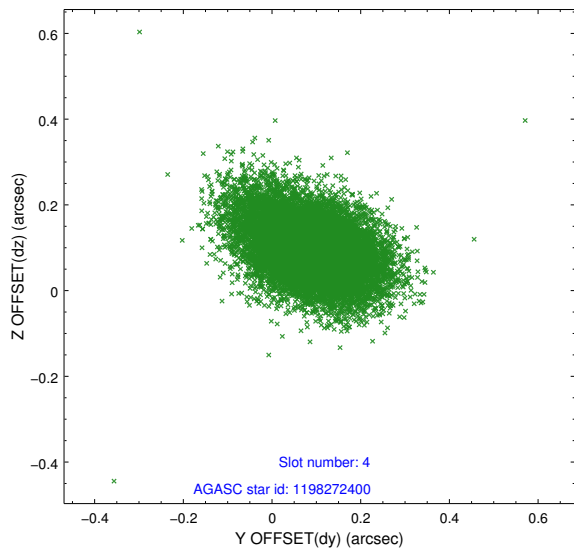
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2.4 Star Slots

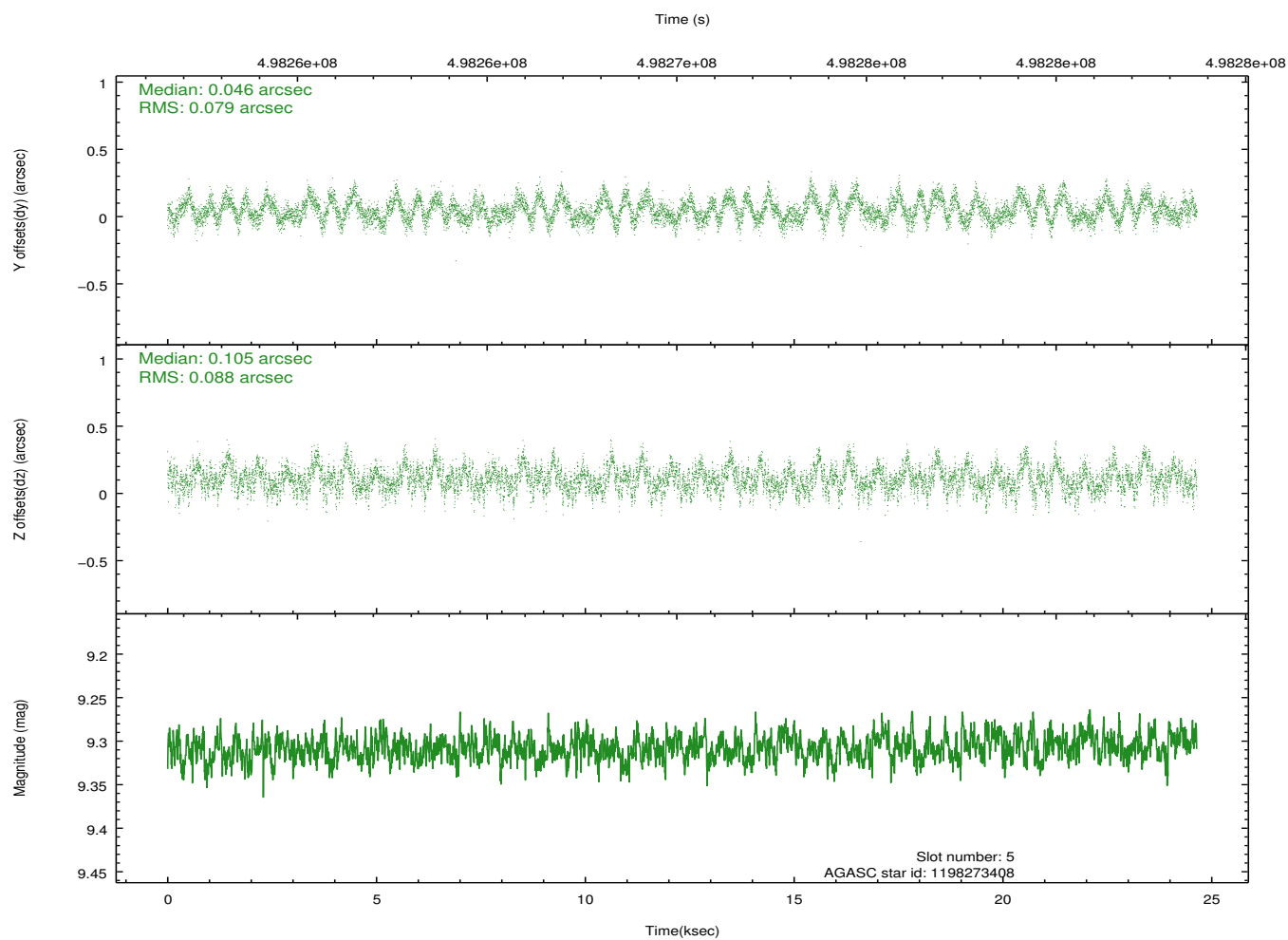
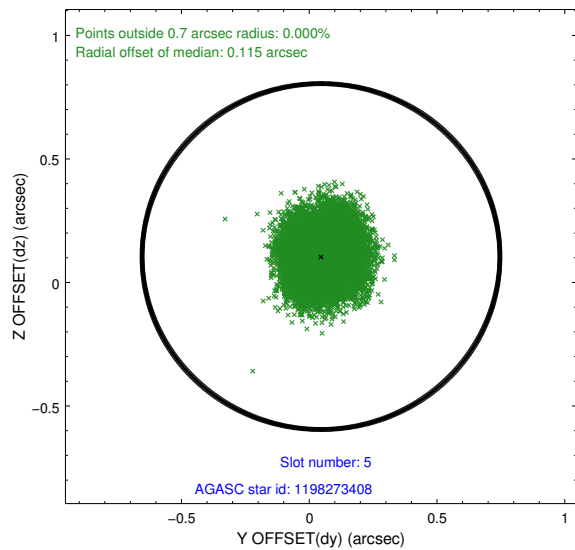
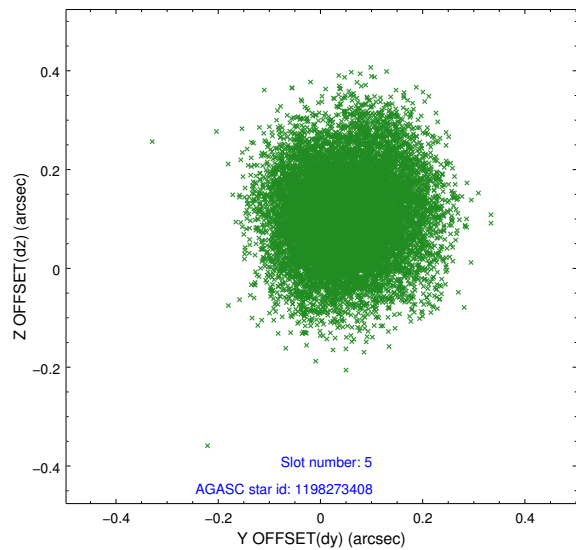
2.4.1 Slot 3



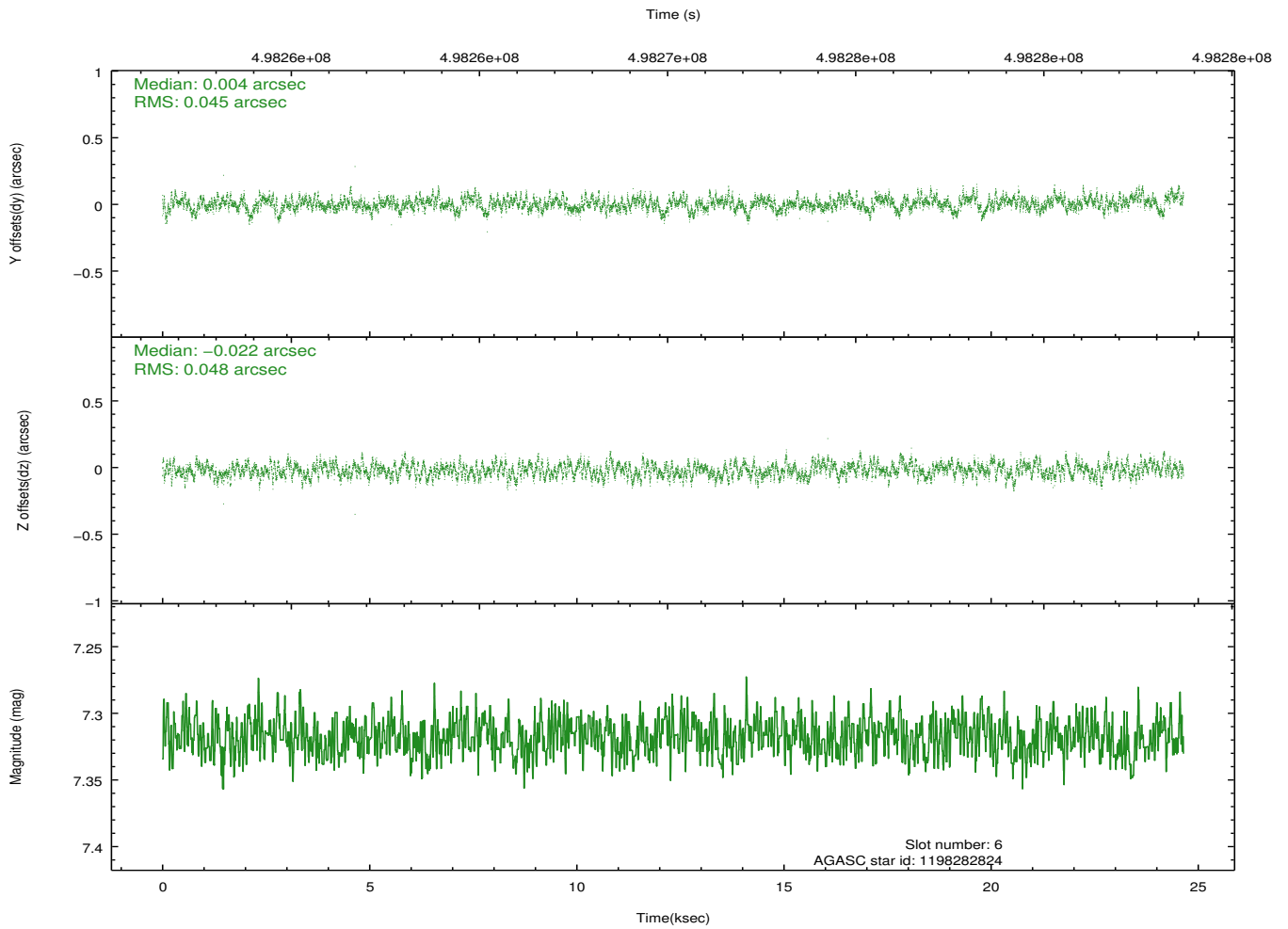
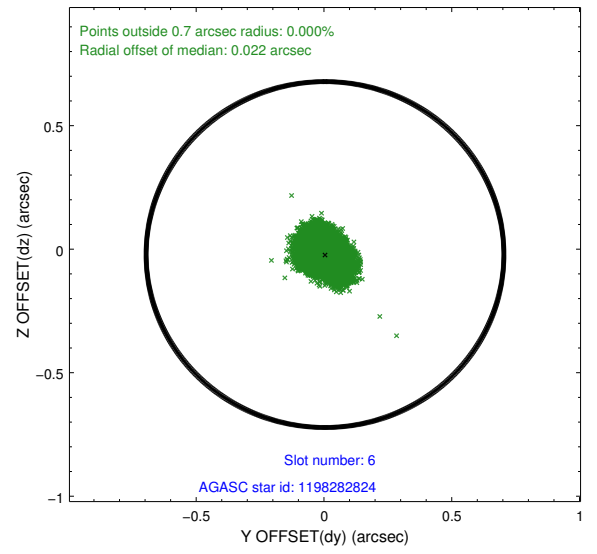
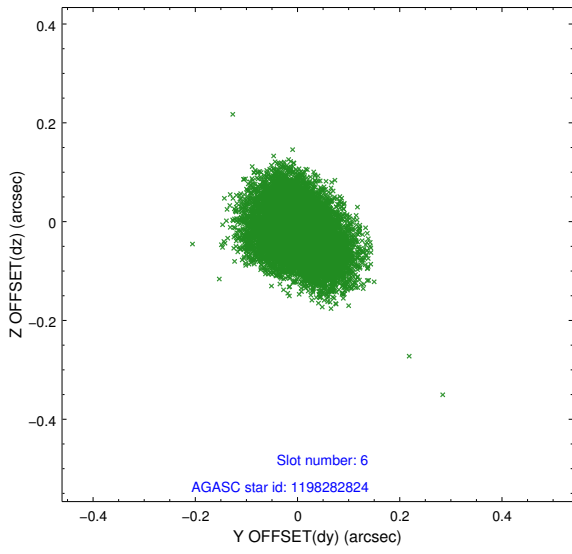
2.4.2 Slot 4



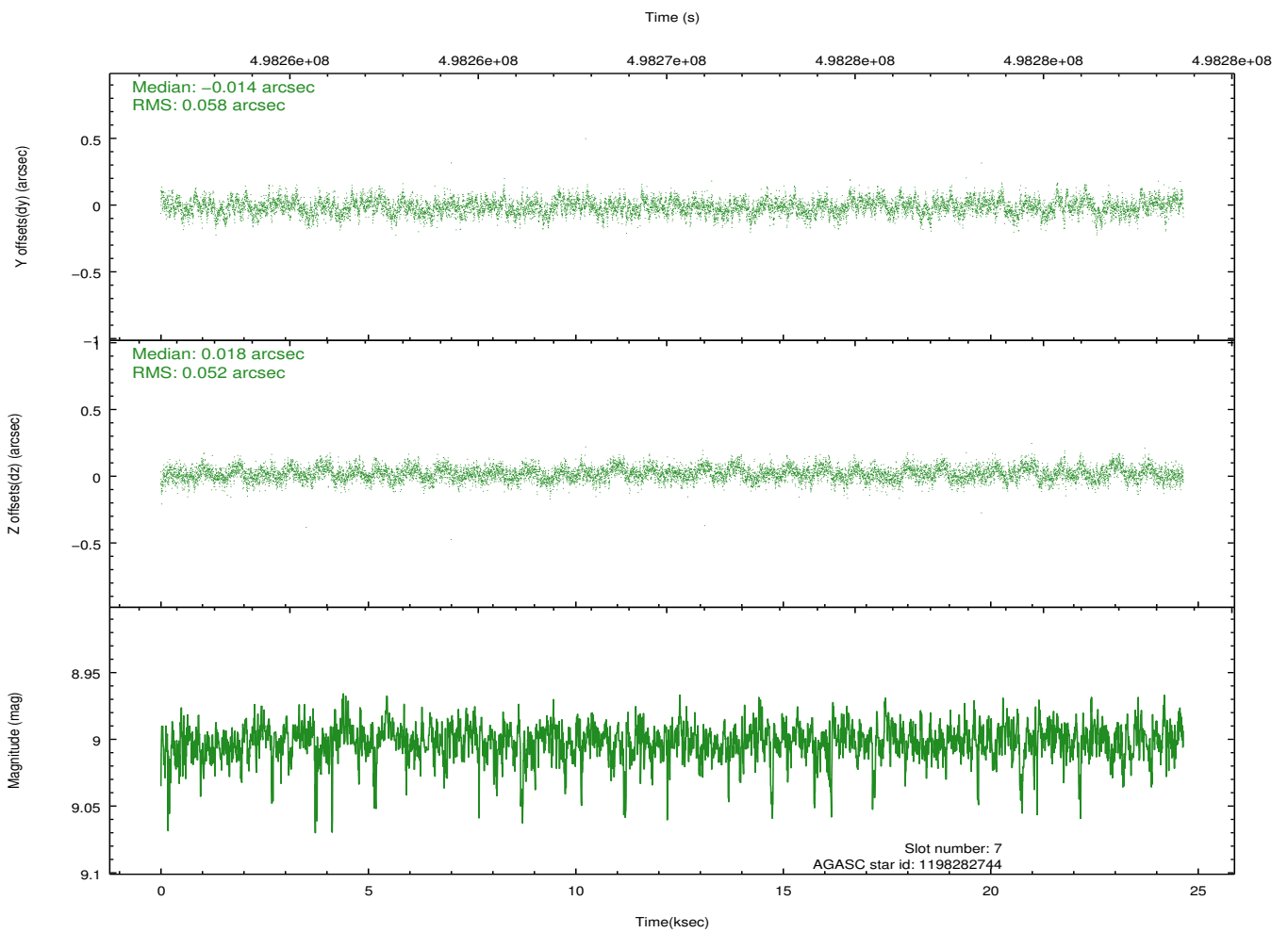
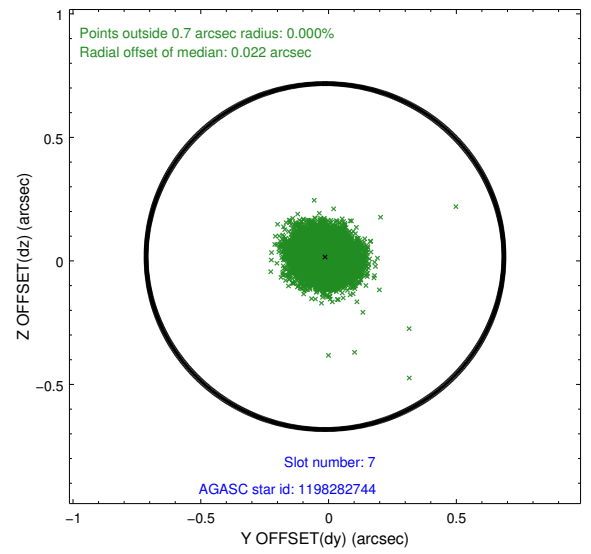
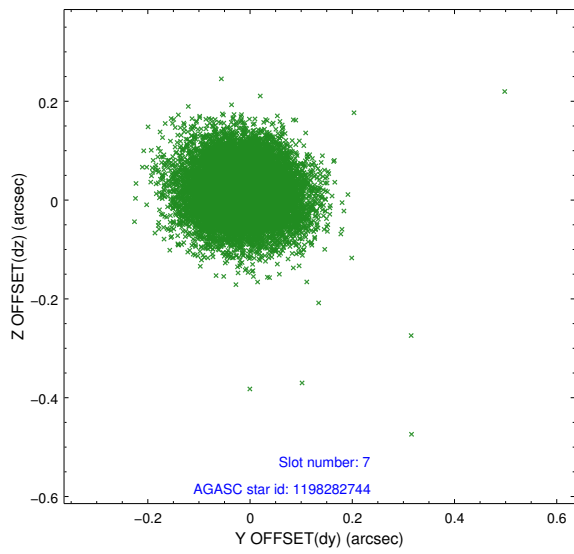
2.4.3 Slot 5



2.4.4 Slot 6

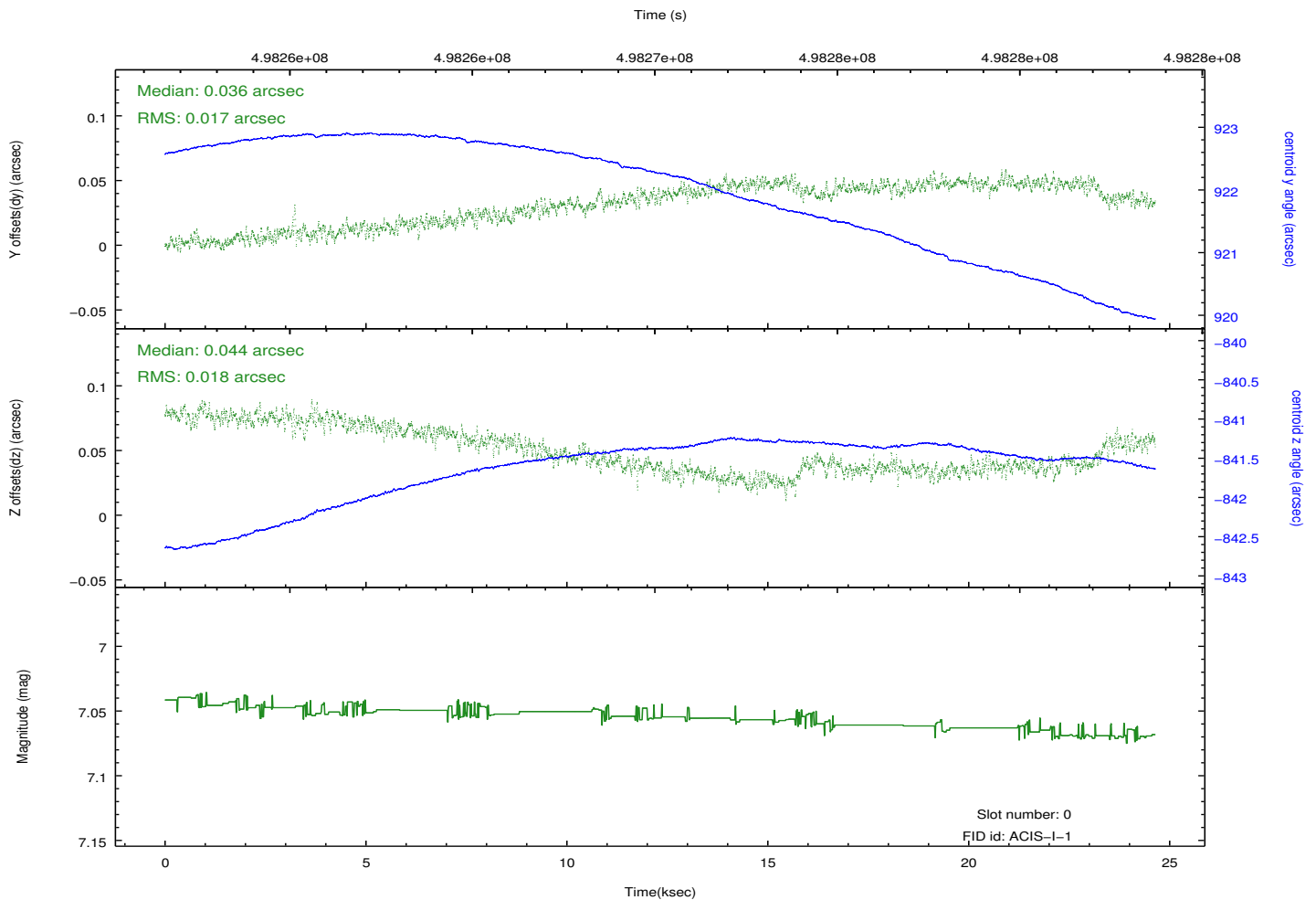
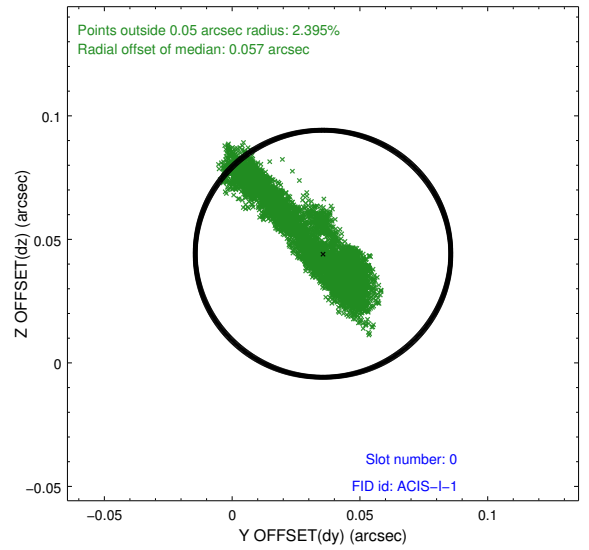
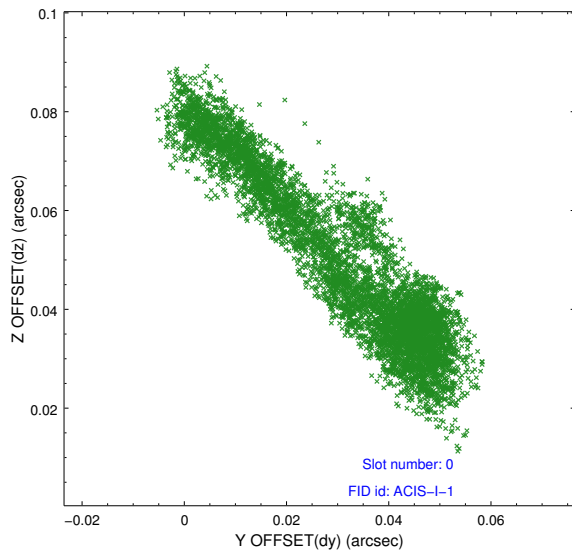


2.4.5 Slot 7

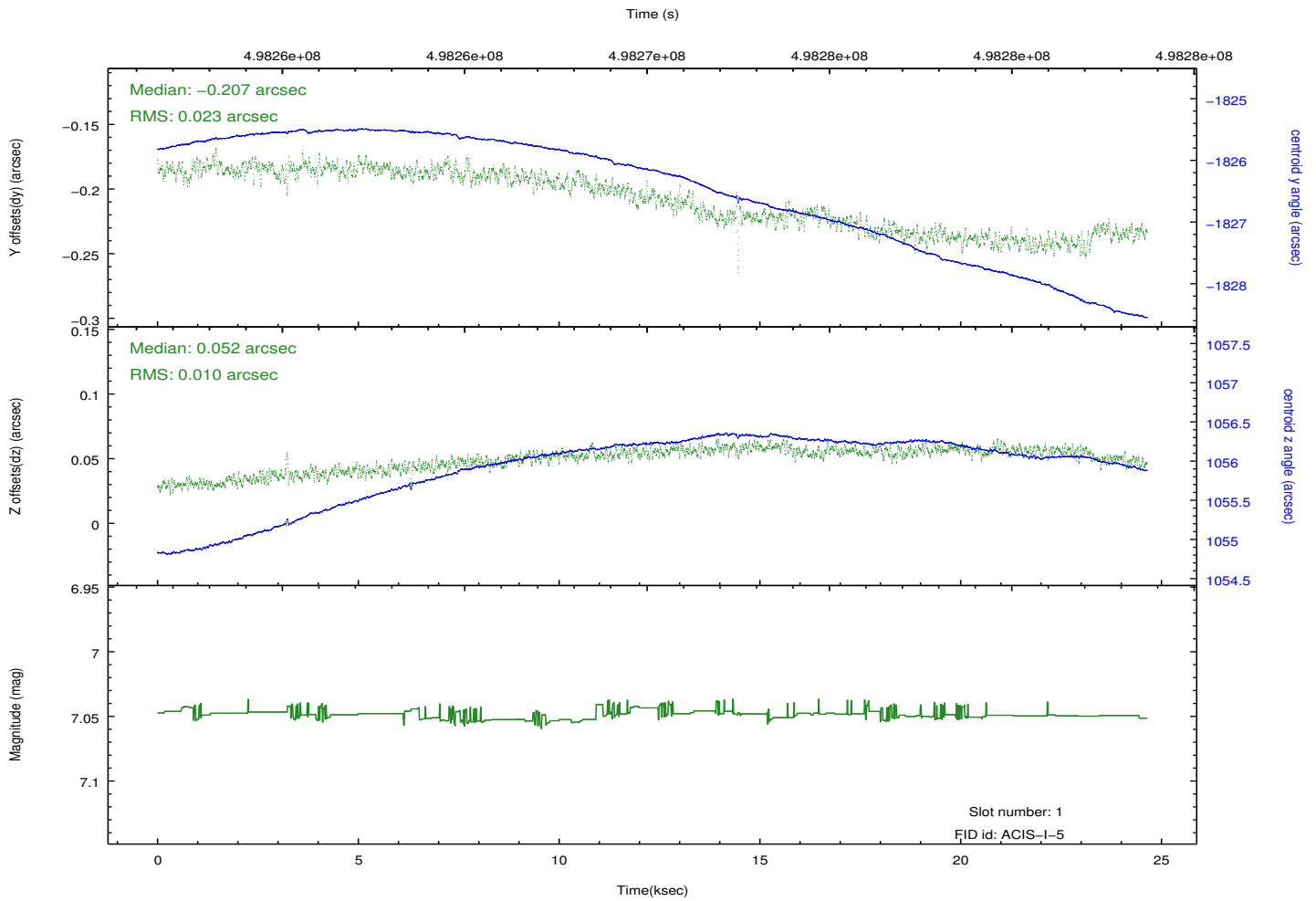
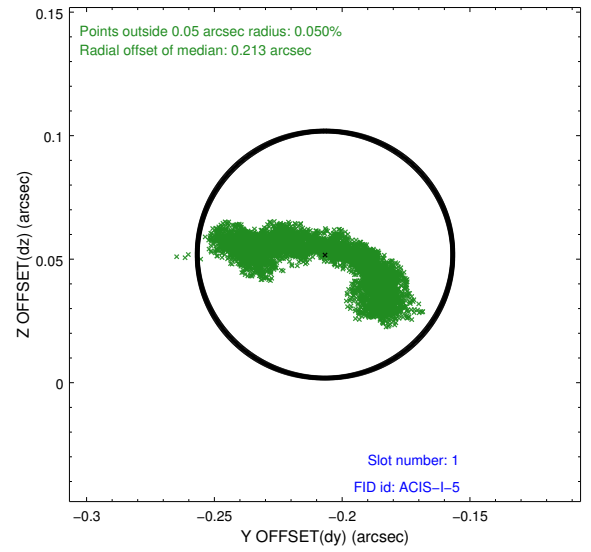
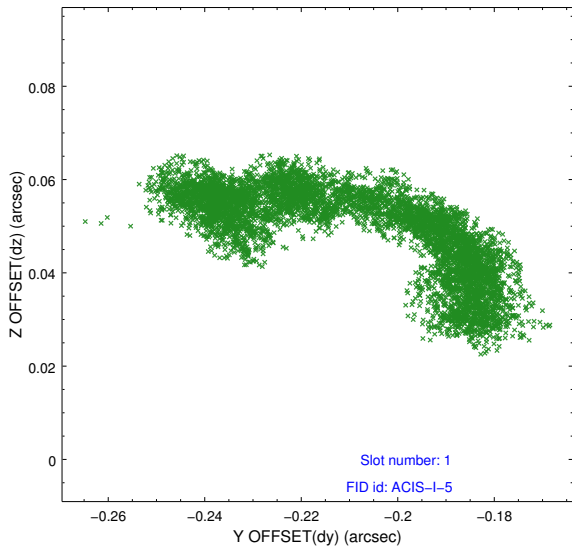


2.5 FID Slots

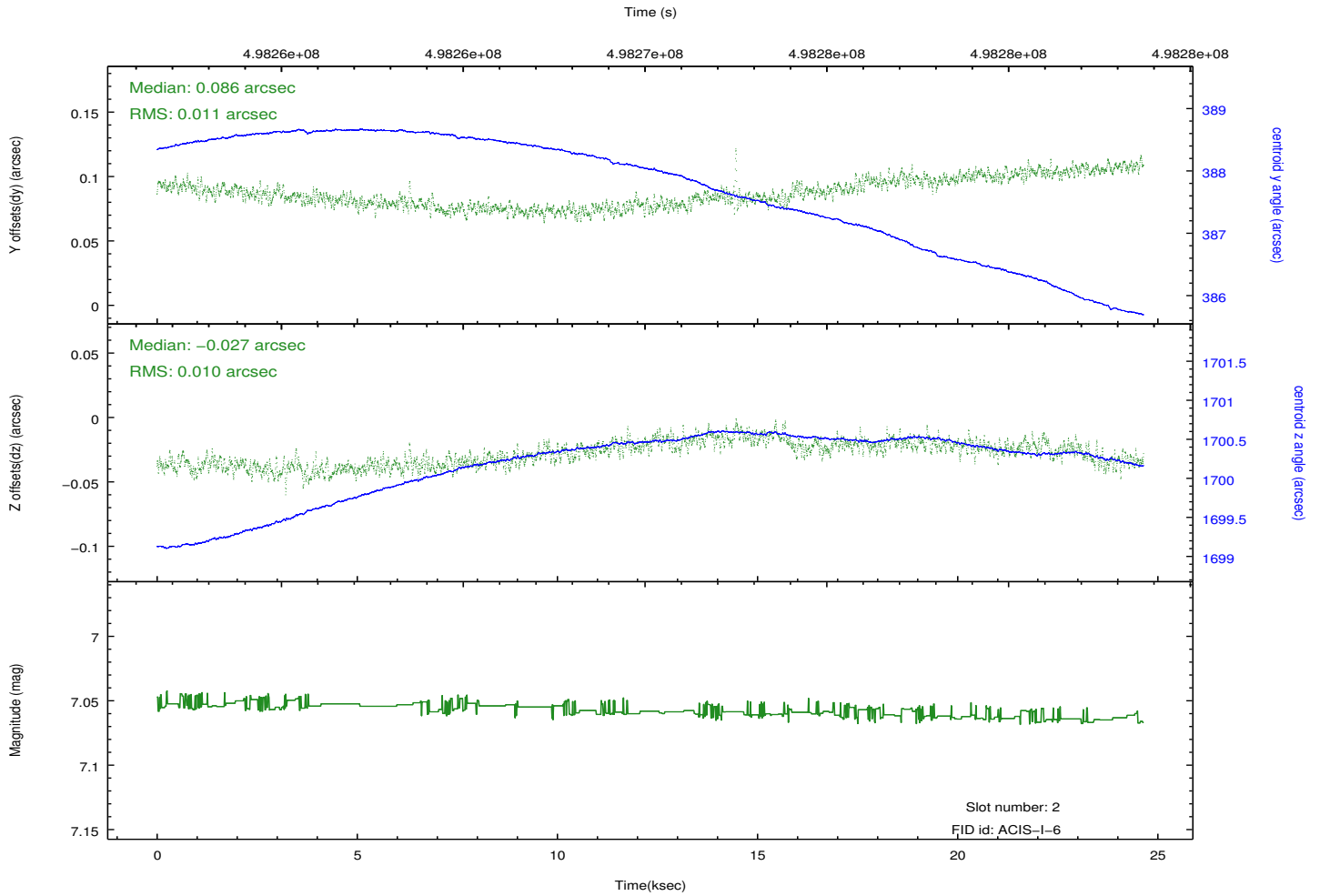
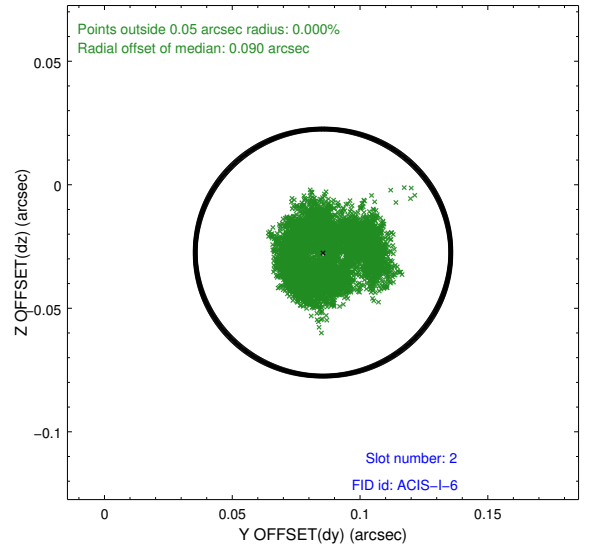
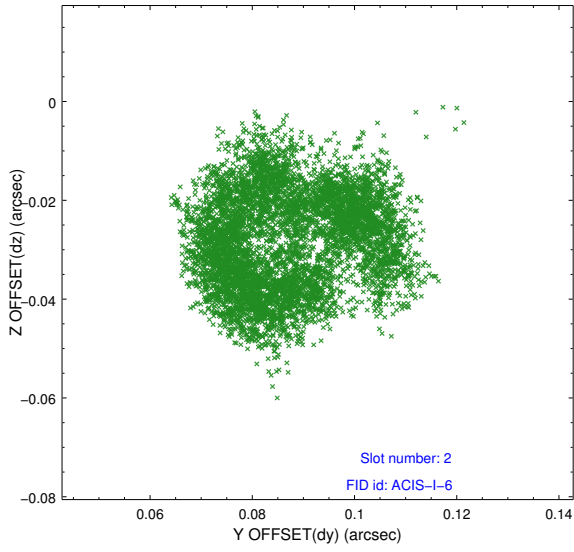
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.570600188971

A.2 Comments

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.