

V&V Reference Report

L2 ASCDS Version : 10

Observation 16320 - L2 Version 2
Chandra X-Ray Center

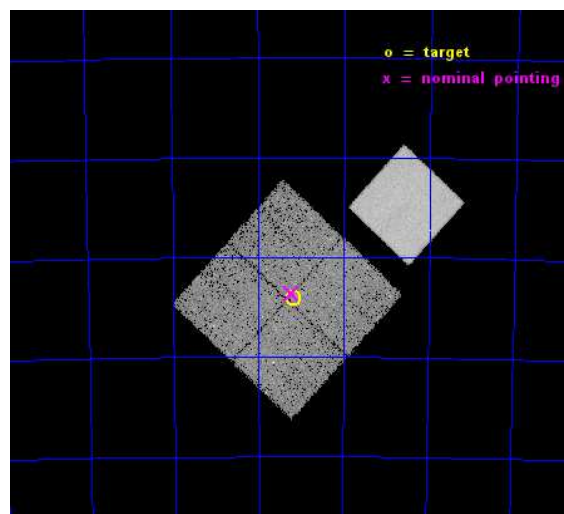
L2 Processing Date : Dec 6 2014

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1 Front

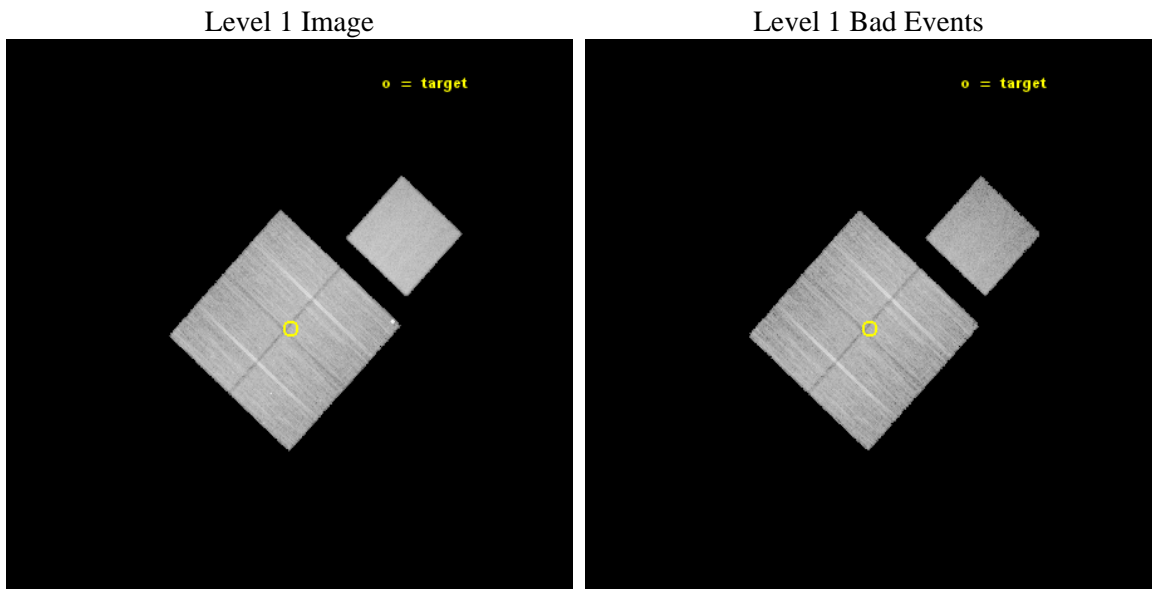
seq_num	401497	Sequence number
obs_id	16320	Observation id
title	The Small Magellanic Cloud - A Case Study of X-ray Populations at Low Metallicity	Proposal title
observer	Dr Andreas Zezas	Principal investigator
object	SMC Deep Field 01	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	17.792083	Observer's specified target RA [deg]
dec_targ	-72.734306	Observer's specified target Dec [deg]
ra_nom	17.805671323261	Nominal RA [deg]
dec_nom	-72.727301821558	Nominal Dec [deg]
roll_nom	42.721647992862	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30066.859220922	Sum of GTIs [s]
livetime	29674.013570301	Livetime [s]
ontime0	30070.000231266	Sum of GTIs [s]
ontime1	30066.859220922	Sum of GTIs [s]
ontime2	30070.000231266	Sum of GTIs [s]
ontime3	30066.859220922	Sum of GTIs [s]
ontime7	30070.000231266	Sum of GTIs [s]
l2events	123375	Number of level 2 events



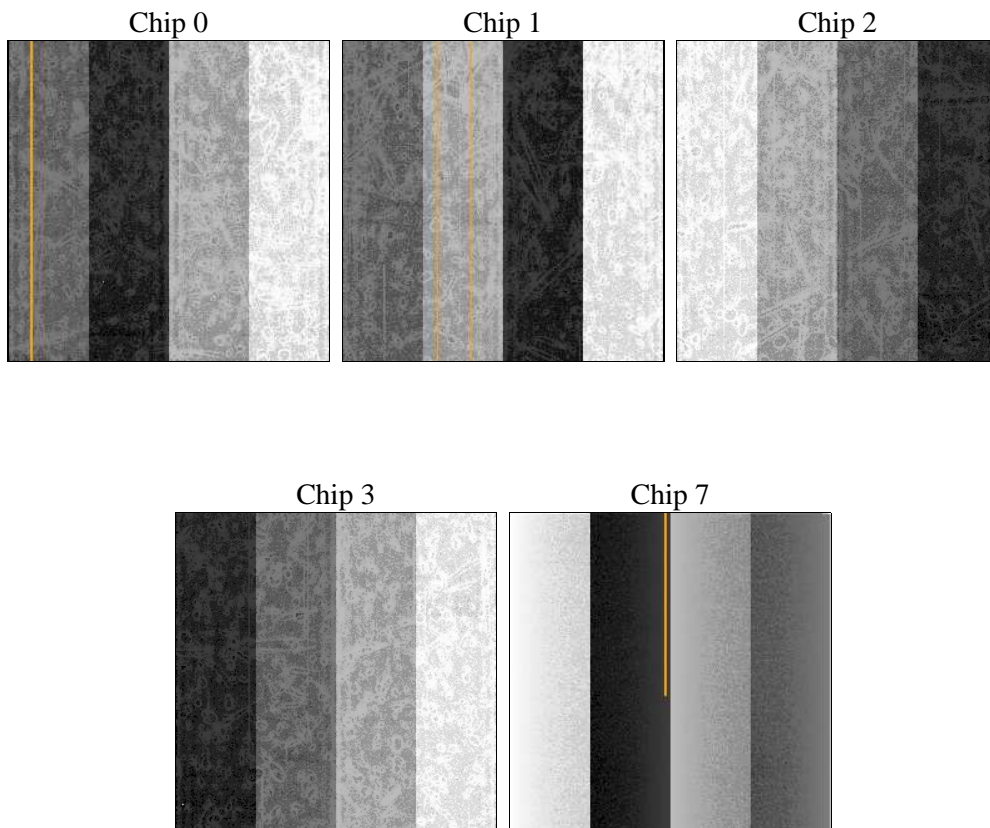
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	30066.859220922	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	30070.000231266	Sum of GTIs [s]
date	2014-12-06T08:42:49	Date and time of file creation	ontime1	30066.859220922	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	30070.000231266	Sum of GTIs [s]
			ontime3	30066.859220922	Sum of GTIs [s]
			ontime7	30070.000231266	Sum of GTIs [s]
			l1events	661933	Number of level 1 events

2.1.4 Events

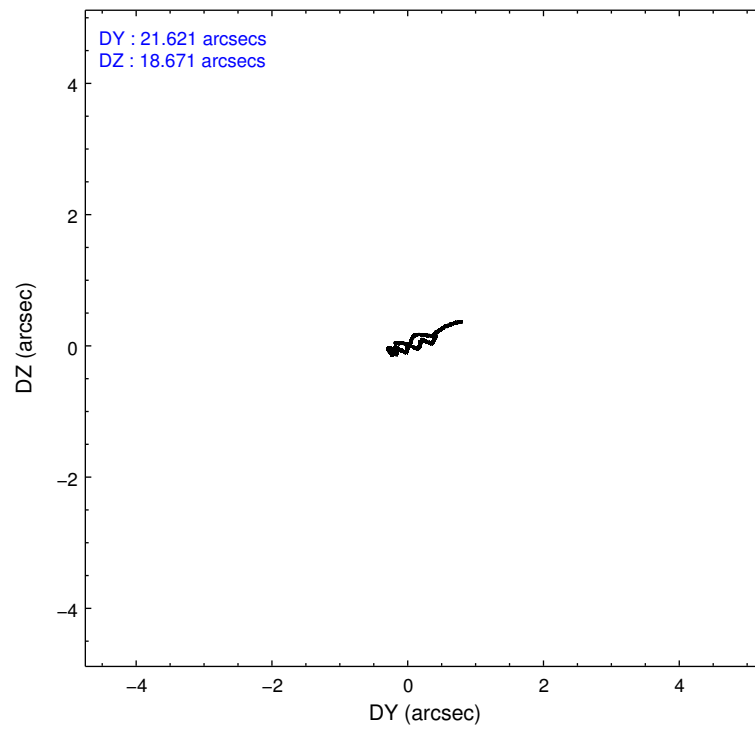
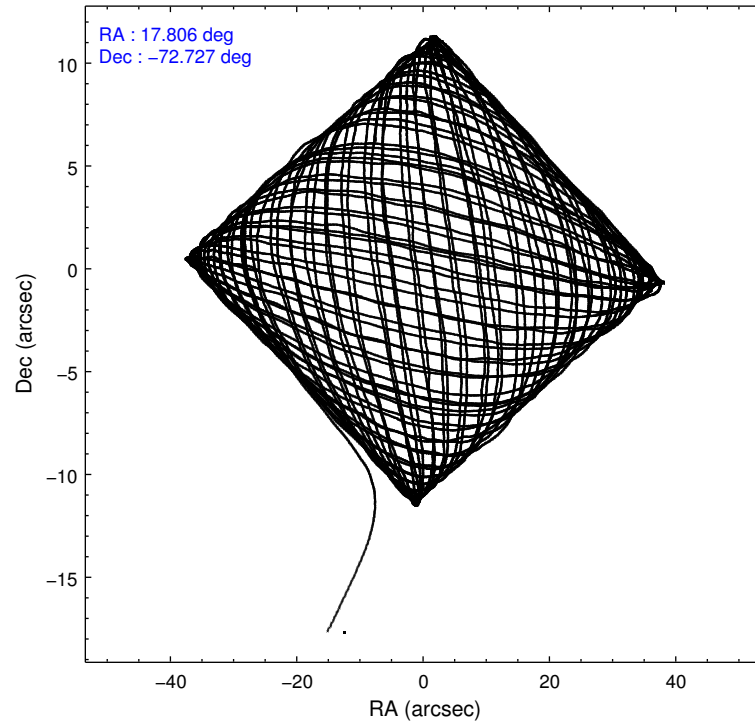
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	119576	123604	132818	128280	157655
rejected events	103573	107119	117589	111660	83805
rejected %	86%	86%	88%	87%	53%

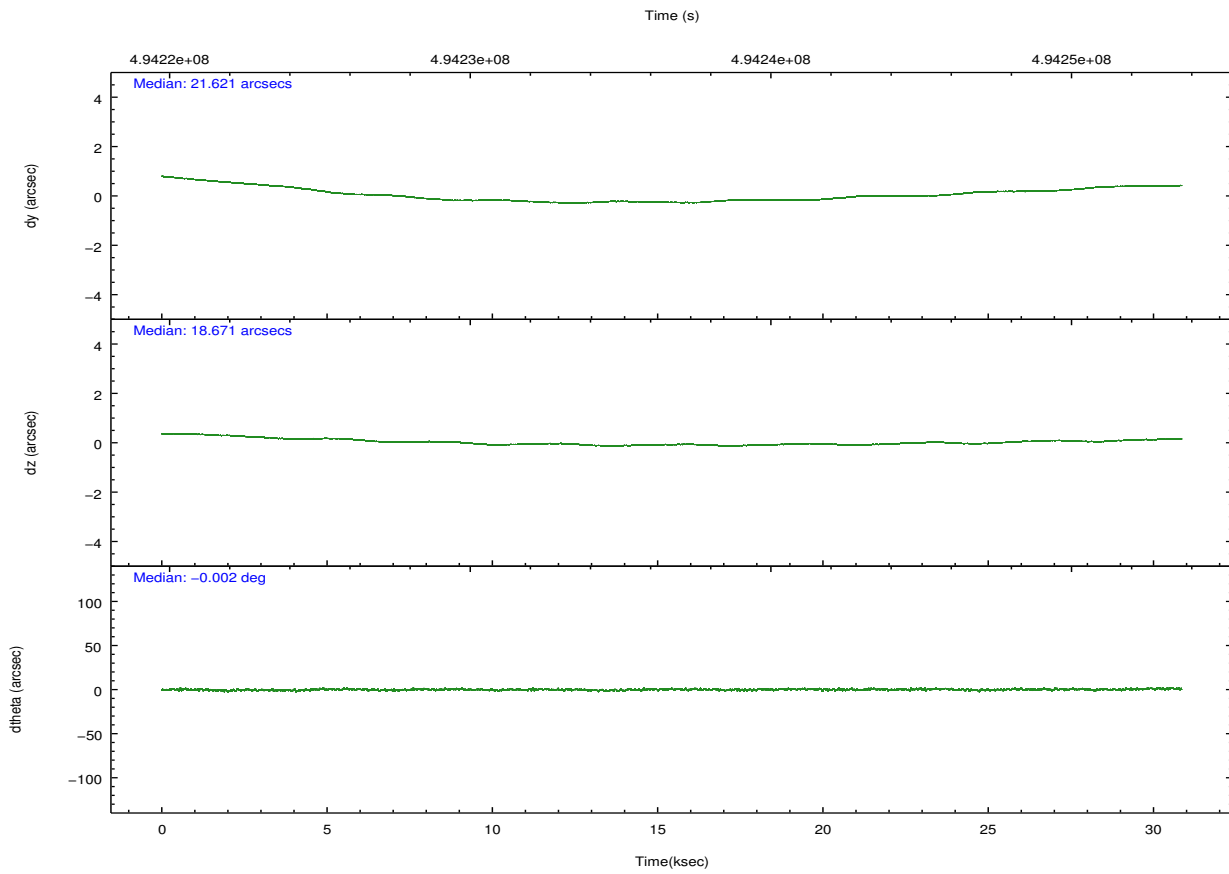
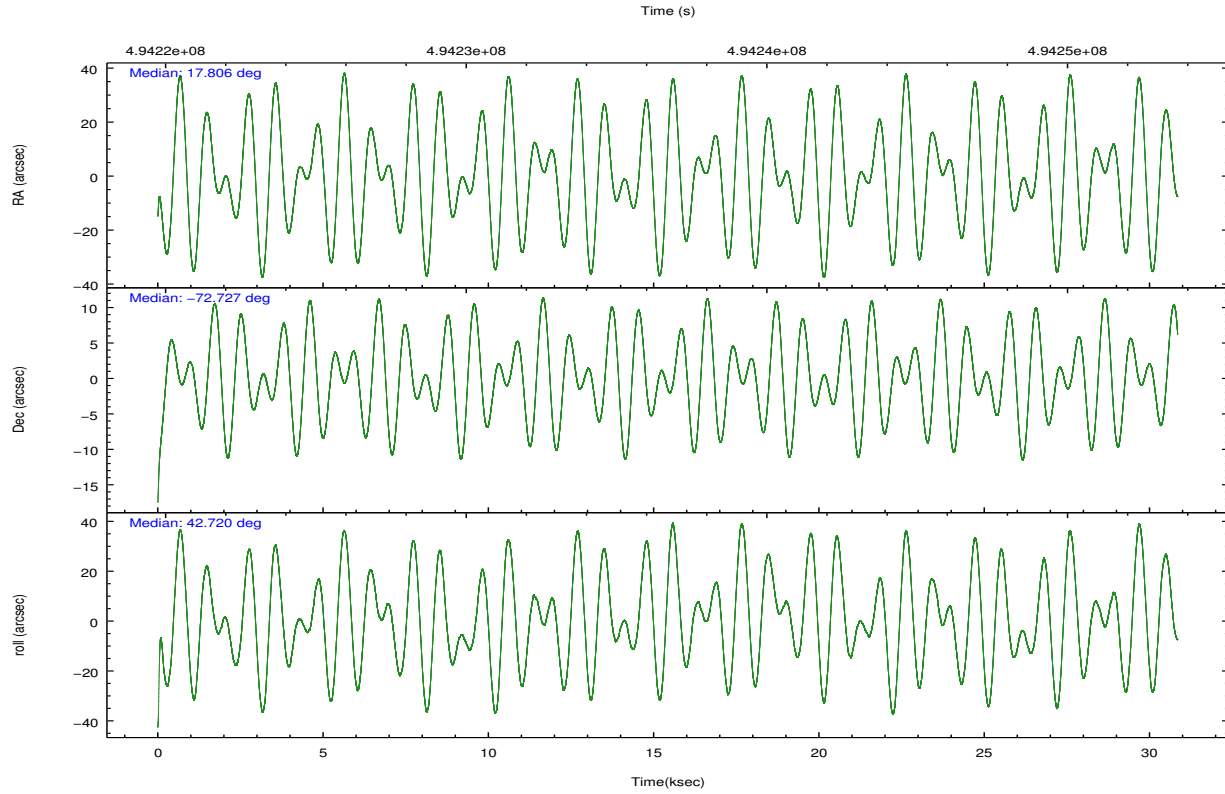
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	5757	5688	5705	7239	7237
	4%	4%	4%	5%	4%
grade 1 events	70	63	63	74	219
	0%	0%	0%	0%	0%
grade 2 events	4096	3882	3715	3305	15712
	3%	3%	2%	2%	9%
grade 3 events	1630	1757	1539	1544	6553
	1%	1%	1%	1%	4%
grade 4 events	1519	1696	1494	1526	6341
	1%	1%	1%	1%	4%
grade 5 events	5325	5843	4904	6103	16845
	4%	4%	3%	4%	10%
grade 6 events	3005	3464	2782	3008	38018
	2%	2%	2%	2%	24%
grade 7 events	98174	101211	112616	105481	66730
	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	17.778492	17.80567132326127	Subarray requested	NONE	NONE
[deg] Pointing Dec	-72.753593	-72.72730182155779	Alternating exposures requested	N	N
[deg] Pointing Roll	42.487026	42.72164799286227	[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)	494222131.184000	494220597.24565			
Observation start date	2013-08-30T03:54:24	2013-08-30T03:29:57			
[s] Observation end time (MET)	494252131.184000	494253172.77243			
Observation end date	2013-08-30T12:14:24	2013-08-30T12:32:52			
Read mode	TIMED	TIMED			

2.3 Aspect





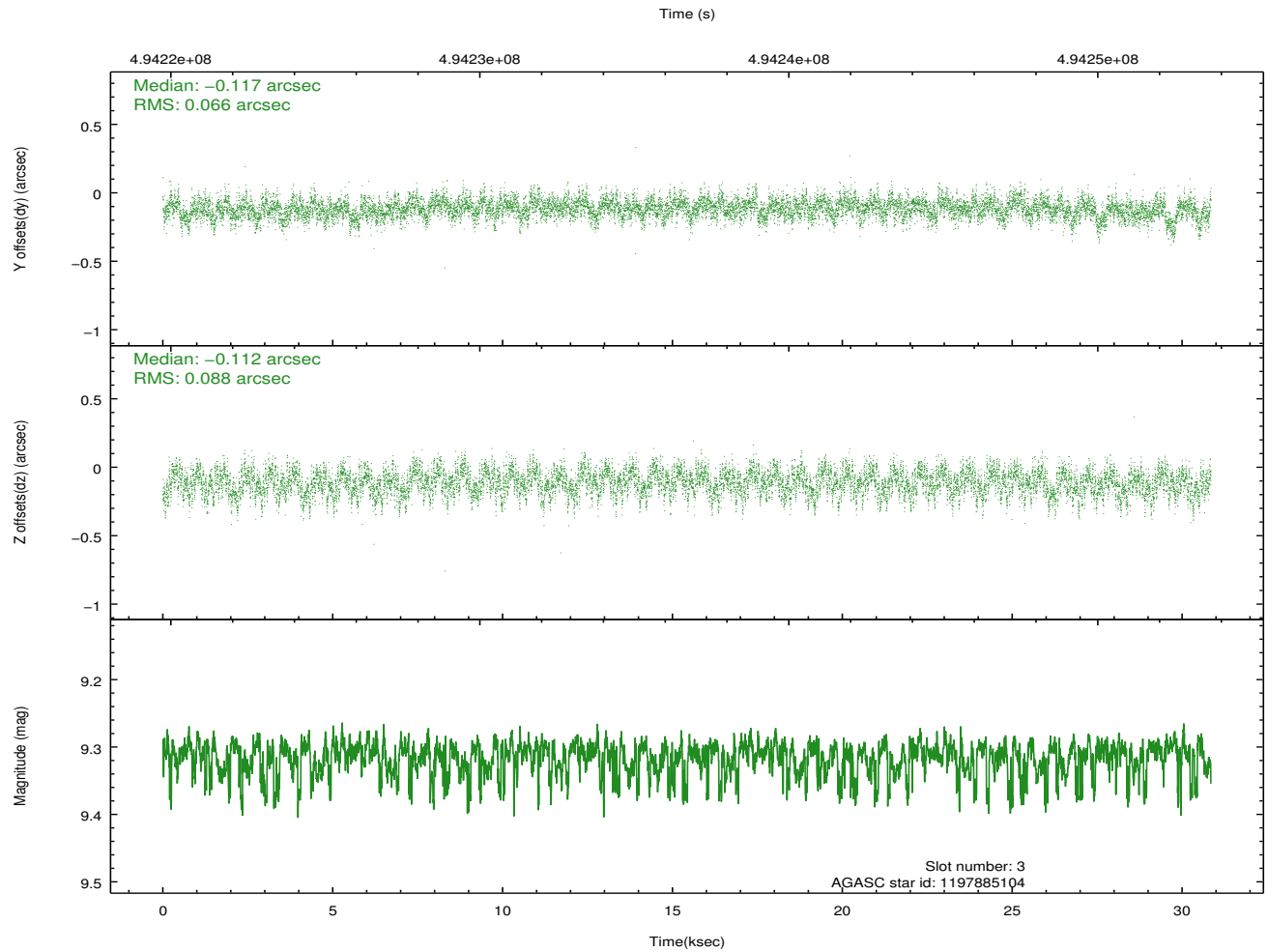
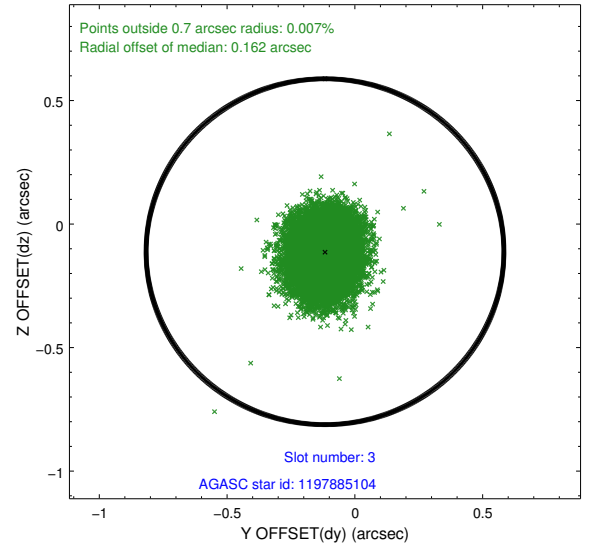
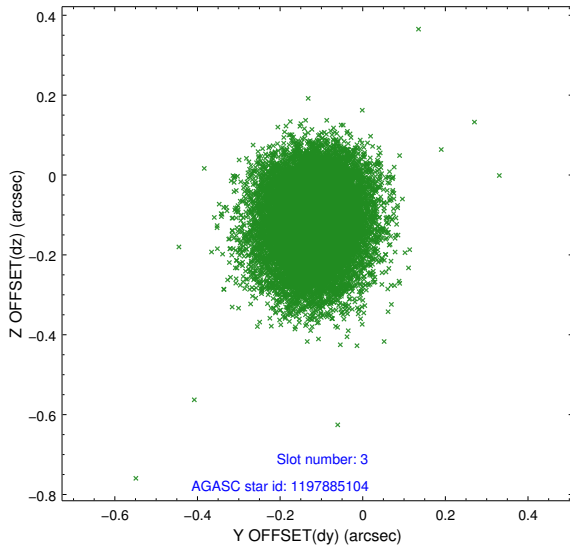
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.08	7523	-0.122	0.013	0.008	0.015	0.000000	0.000000	917.47	-842.38
1	FID		ACIS-I-4	7.02	7524	0.122	0.101	0.012	0.020	0.000000	0.000000	2137.80	1057.48
2	FID		ACIS-I-6	7.08	7524	-0.097	-0.049	0.011	0.019	0.000000	0.000000	383.49	1699.59
3	GUIDE	used	1197885104	9.31	14908	-0.117	-0.112	0.118	0.190	17.845067	-72.189368	1424.96	1448.03
4	GUIDE	used	1198189696	7.36	15046	-0.119	-0.144	0.081	0.134	15.223750	-72.697522	-1919.44	1952.64
5	GUIDE	used	1198282744	9.01	15006	0.195	0.191	0.093	0.150	17.028326	-73.013356	-1216.61	-160.23
6	GUIDE	used	1198283128	7.97	15043	-0.131	-0.268	0.063	0.099	17.272580	-72.642428	-132.03	660.21
7	GUIDE	used	1198273408	9.29	14984	0.163	0.338	0.121	0.198	17.532323	-73.621495	-2294.44	-2135.43

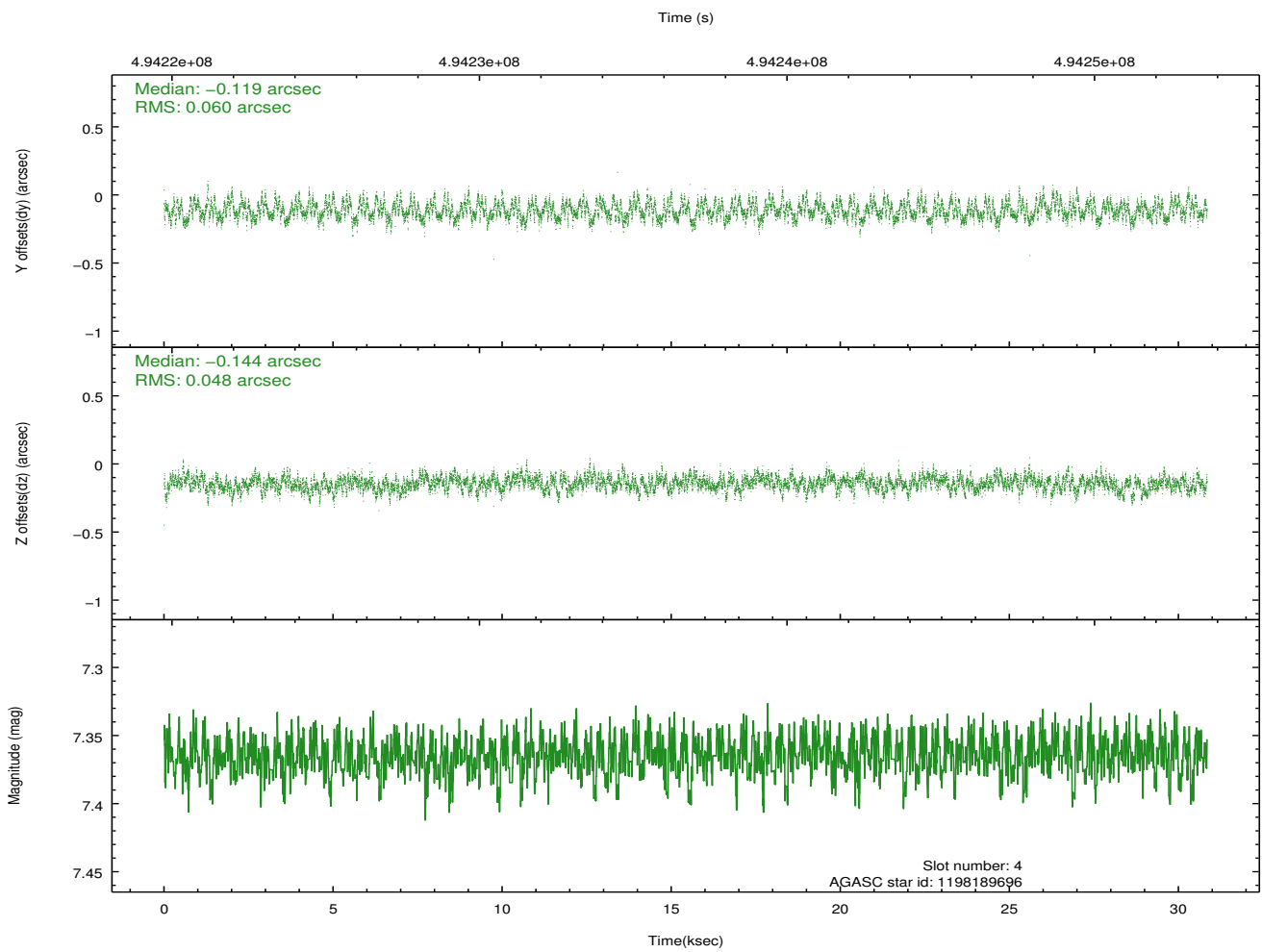
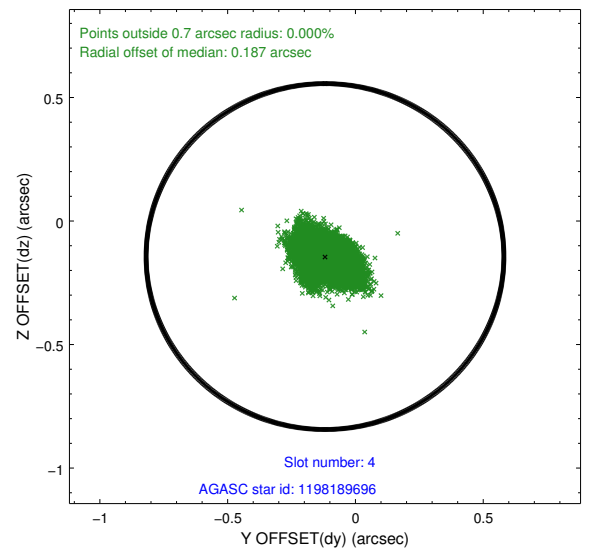
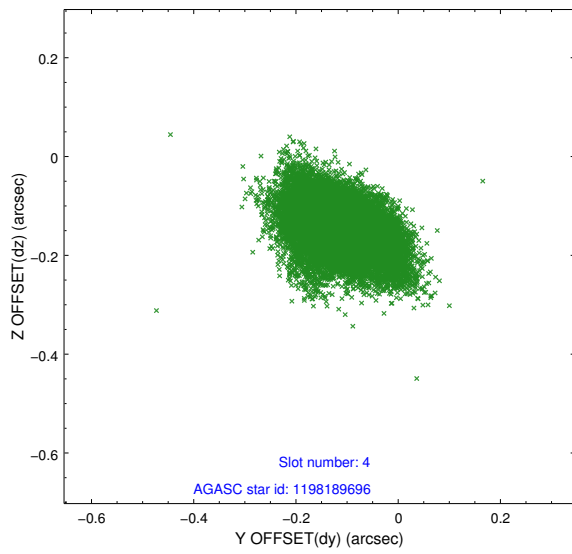
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2.4 Star Slots

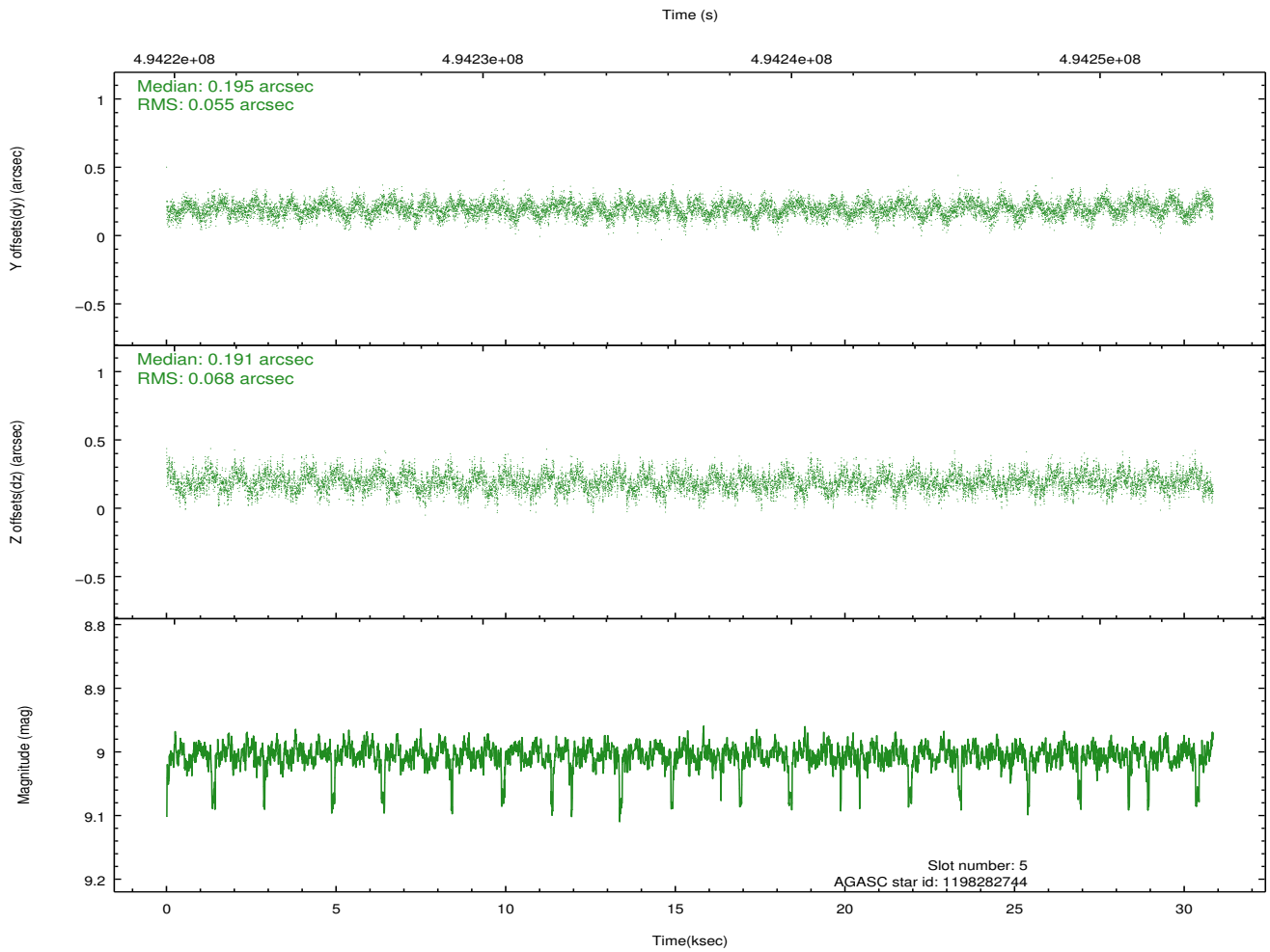
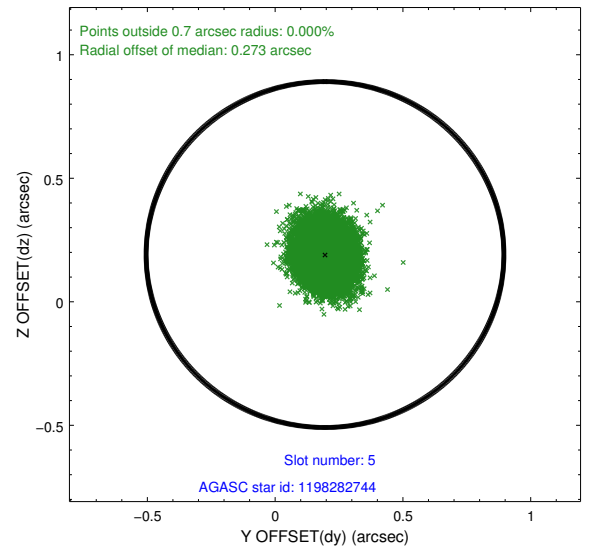
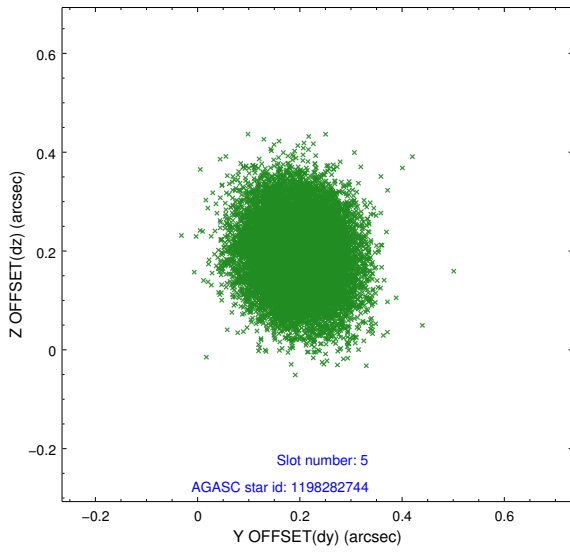
2.4.1 Slot 3



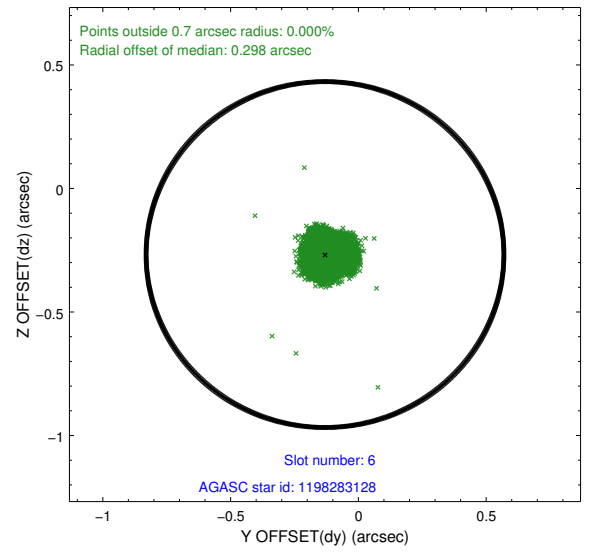
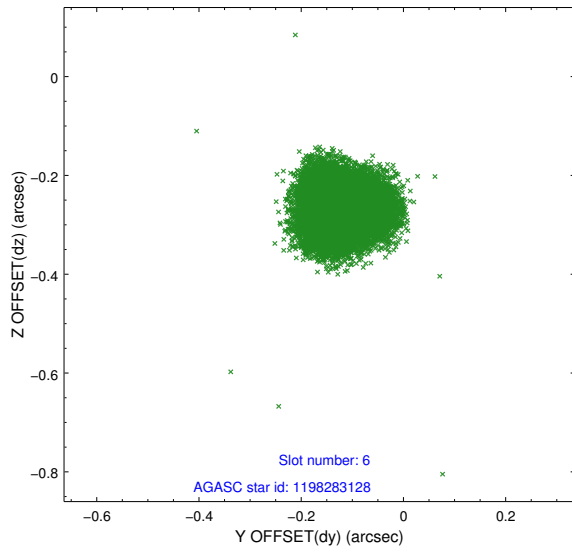
2.4.2 Slot 4



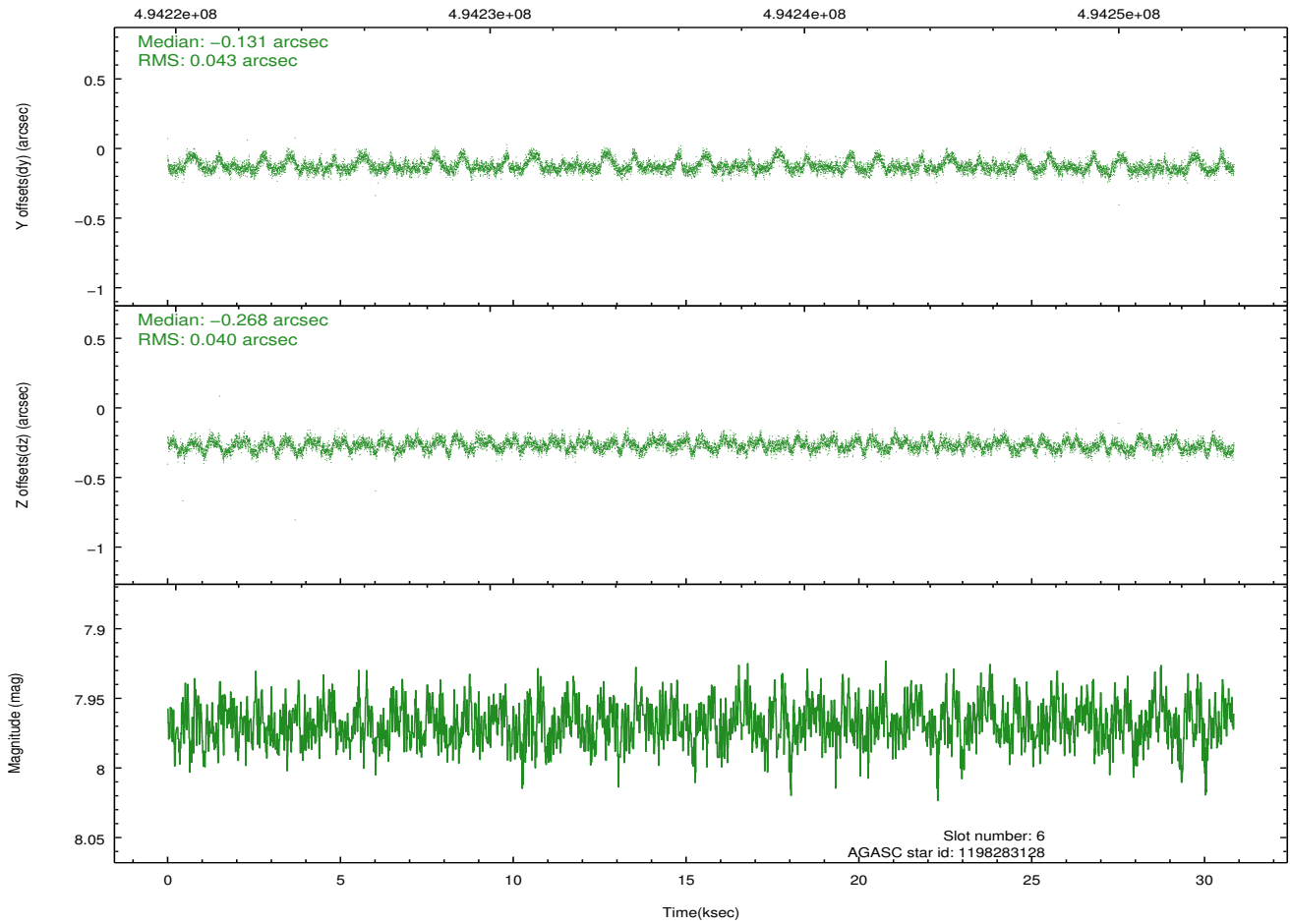
2.4.3 Slot 5



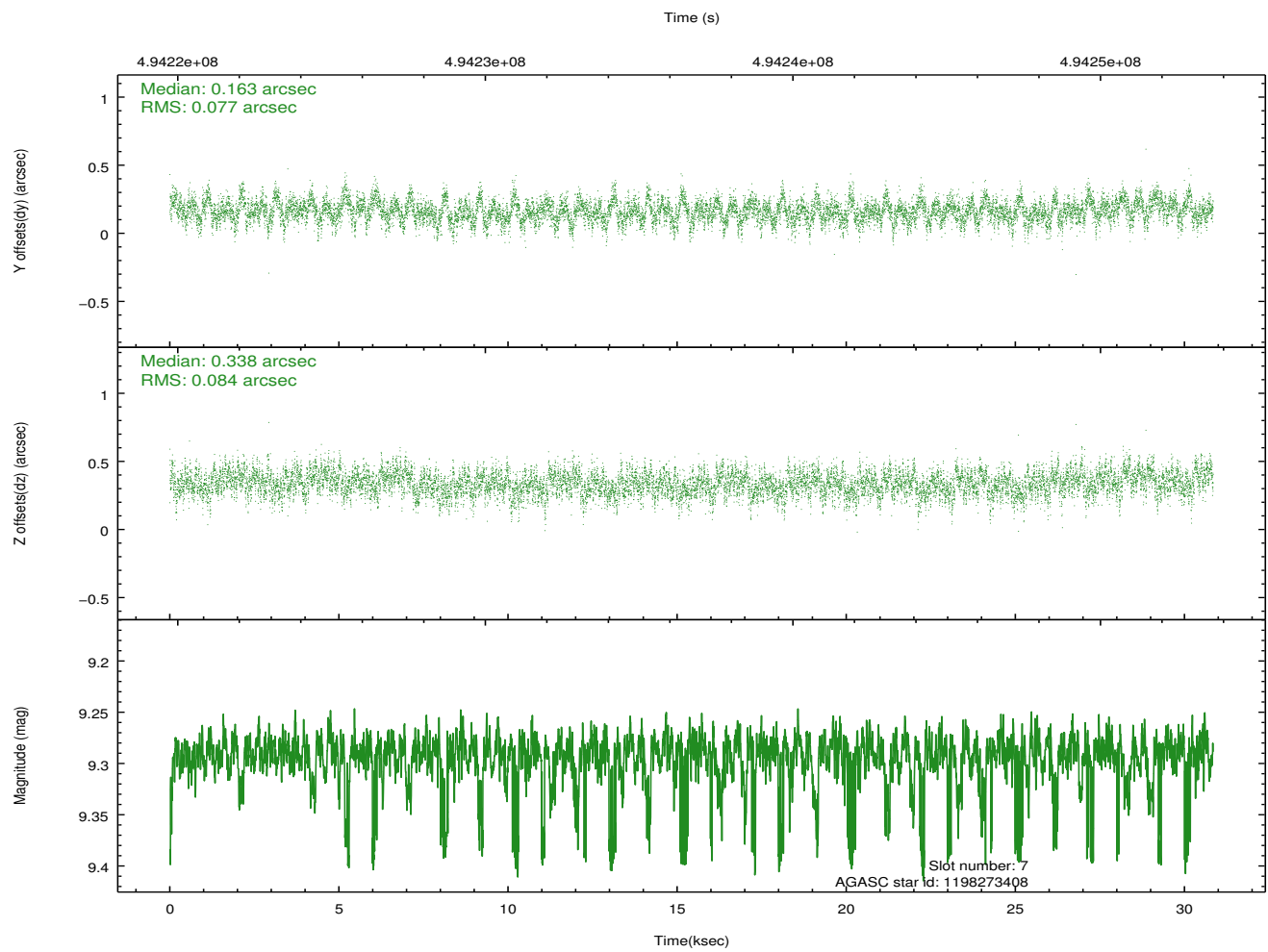
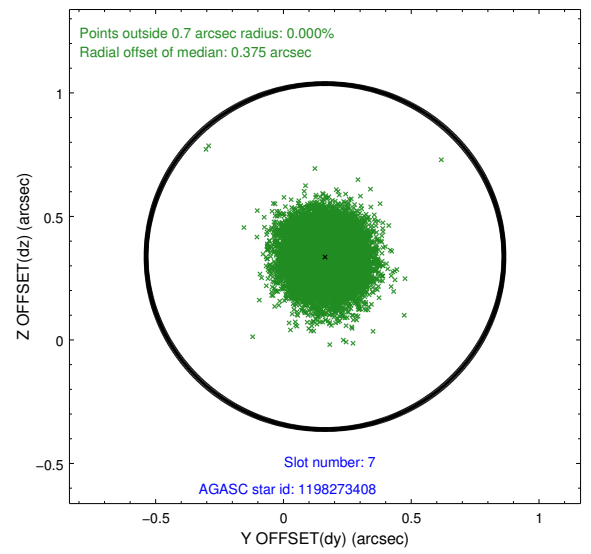
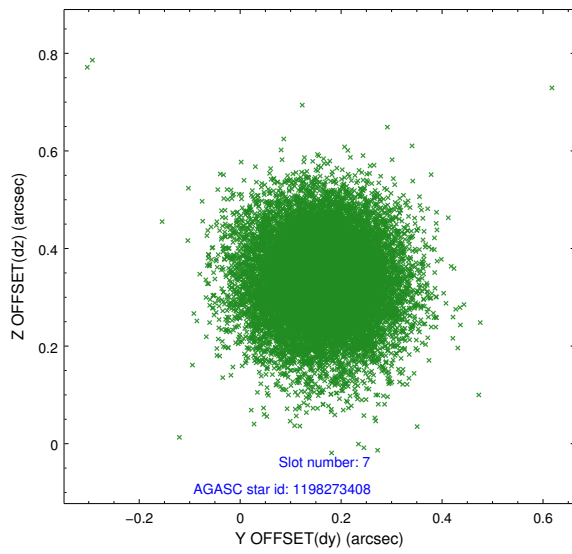
2.4.4 Slot 6



Time (s)

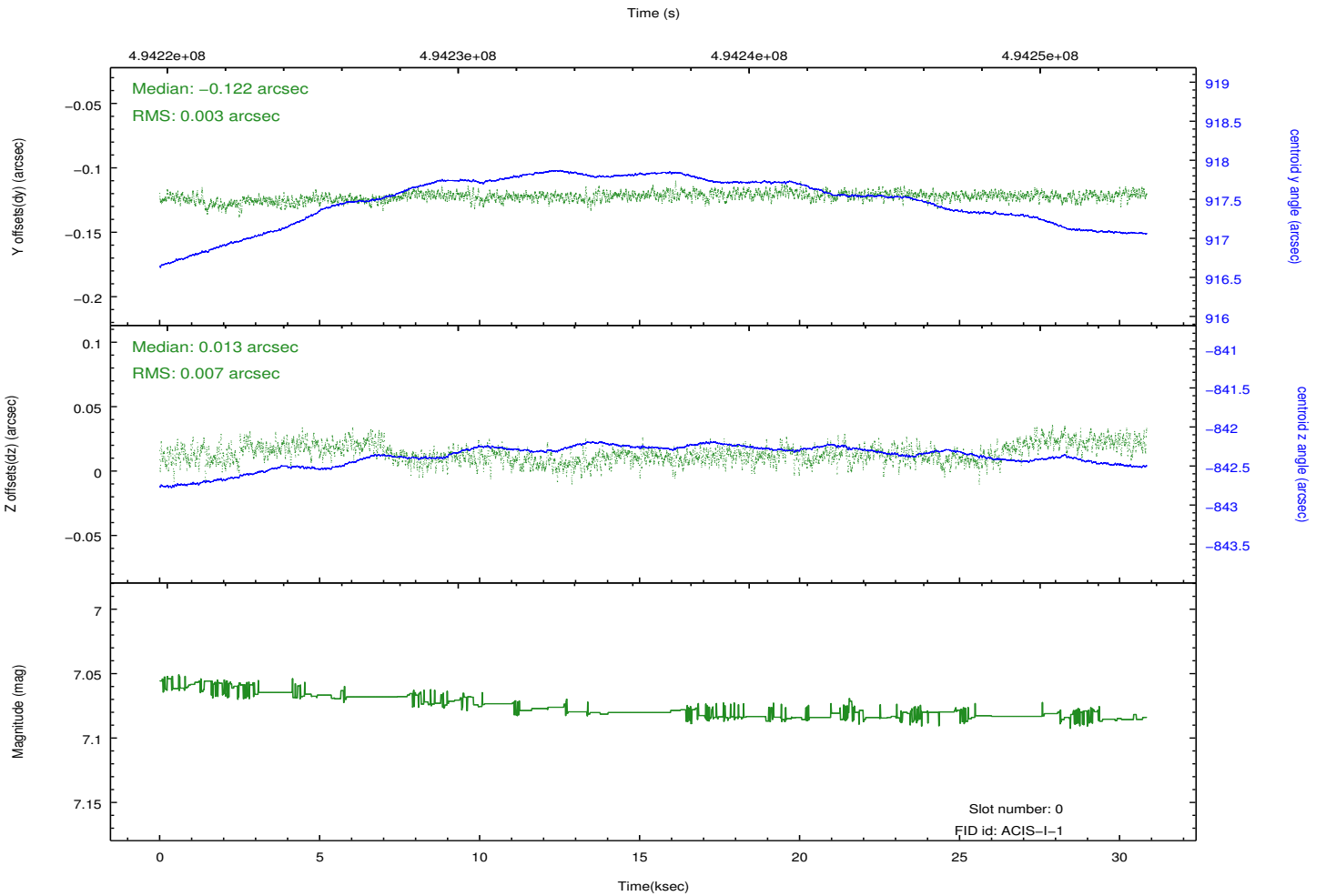
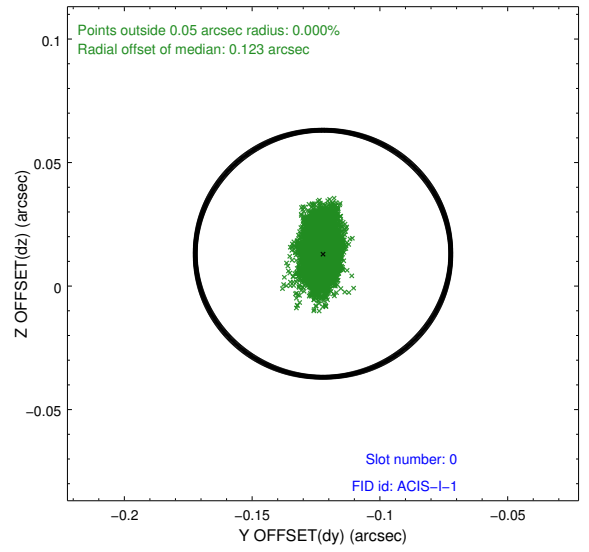
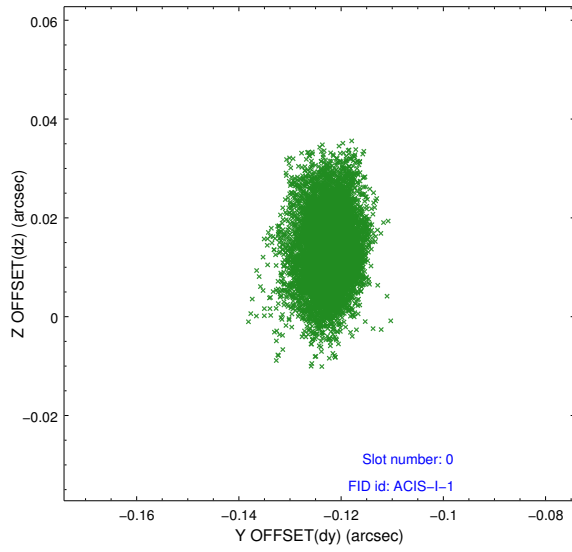


2.4.5 Slot 7

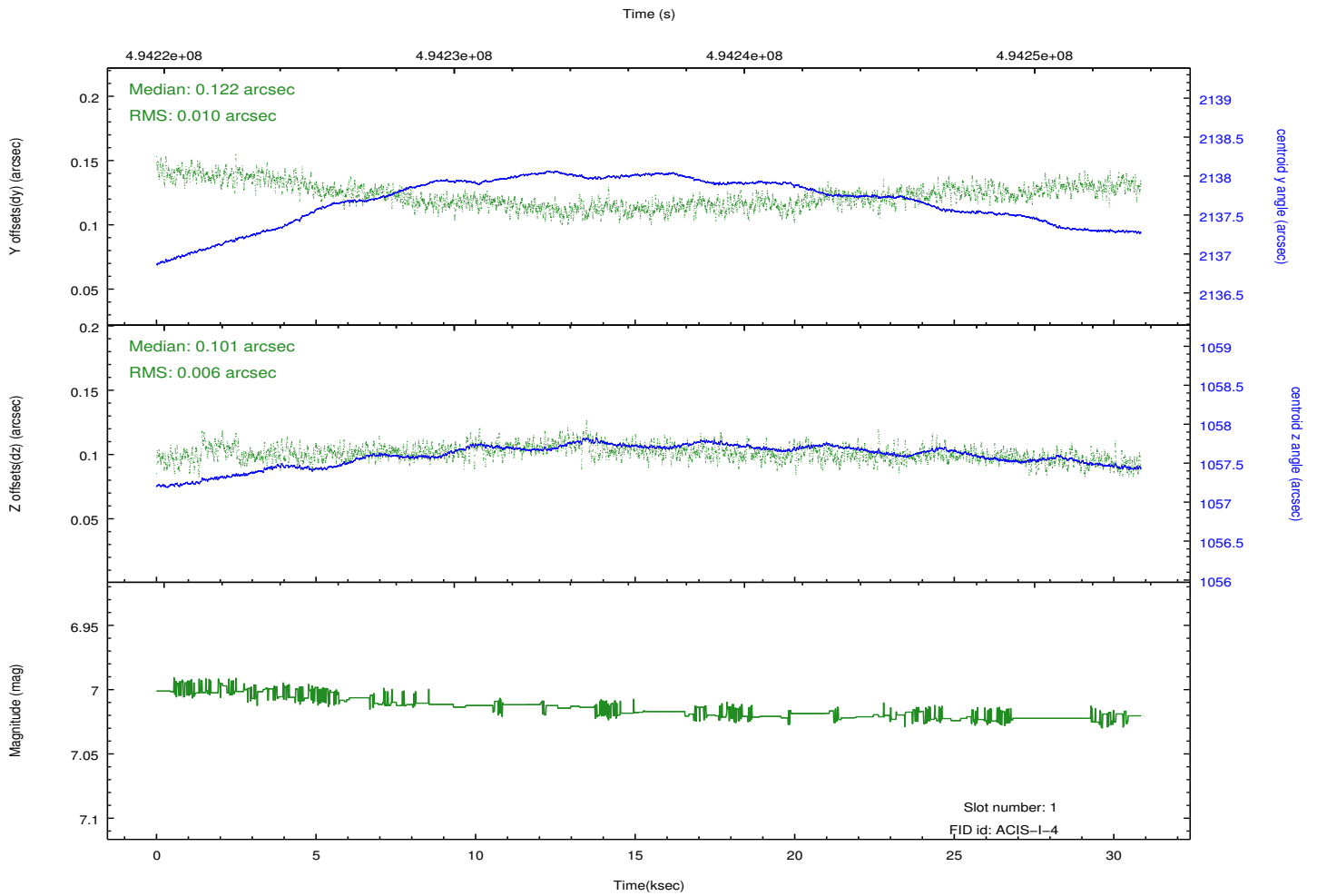
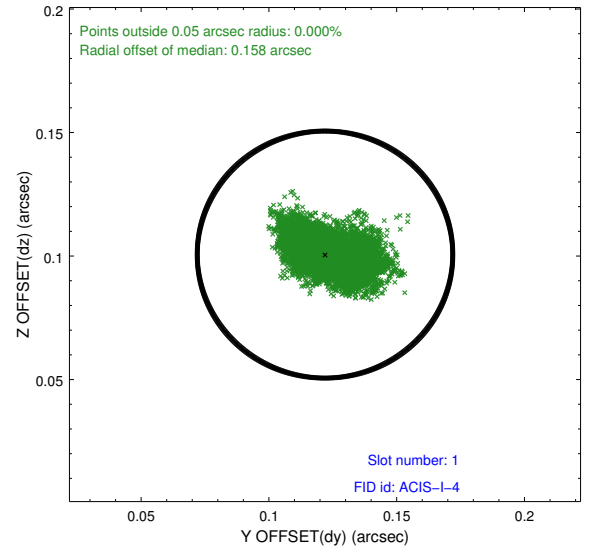
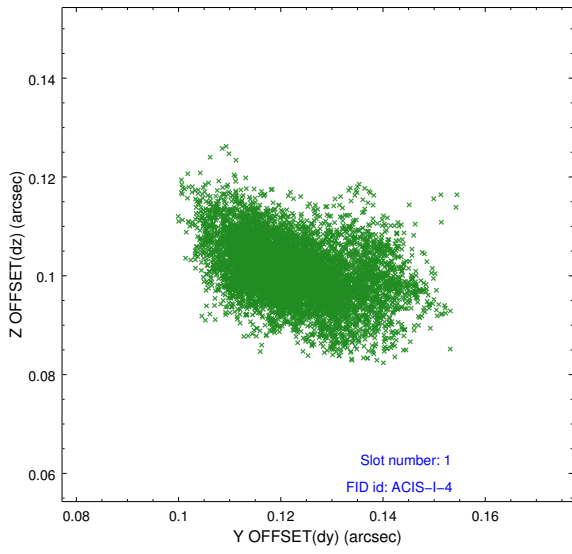


2.5 FID Slots

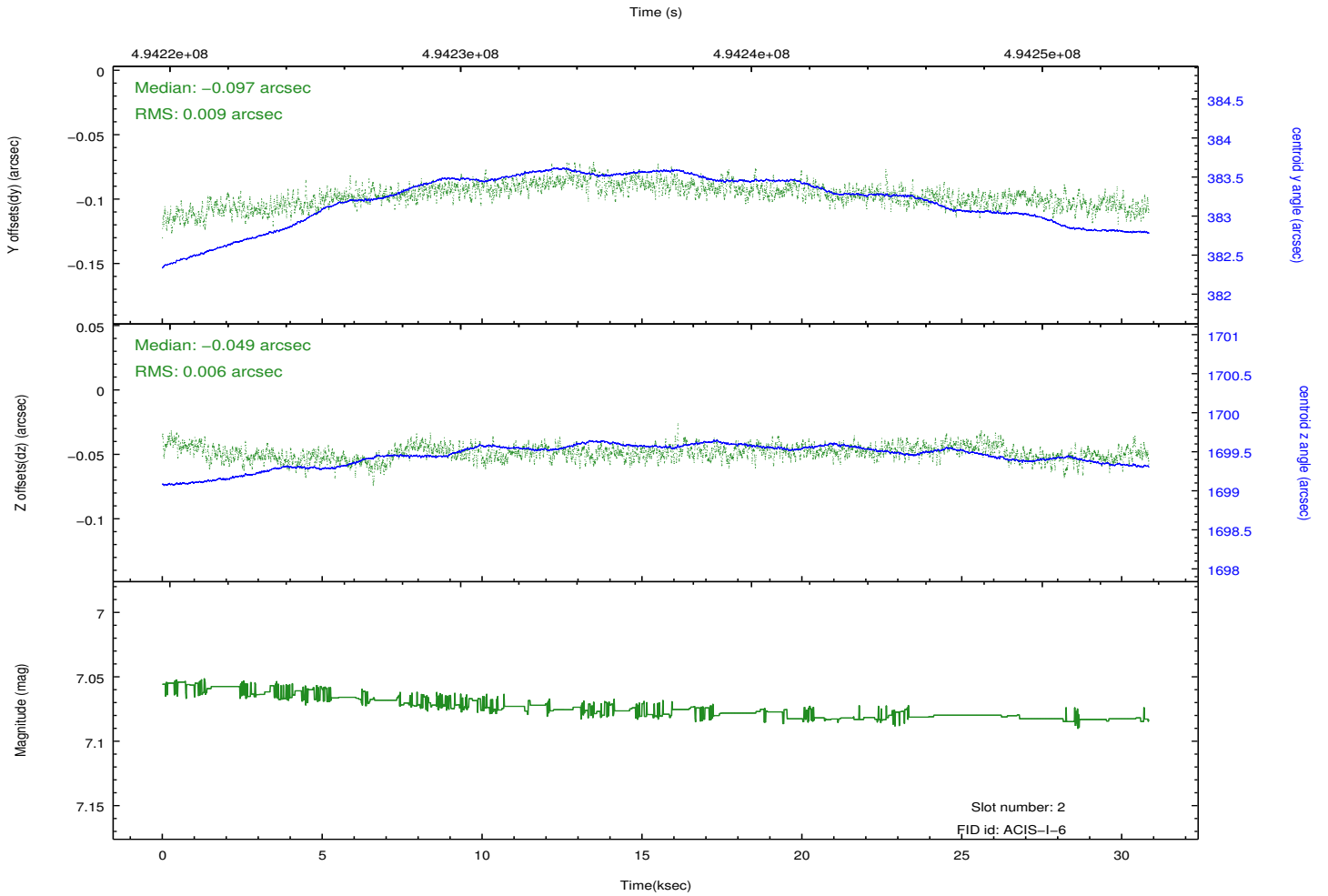
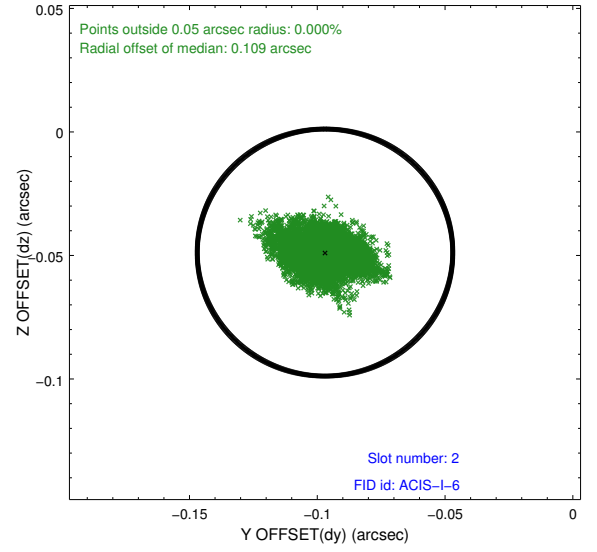
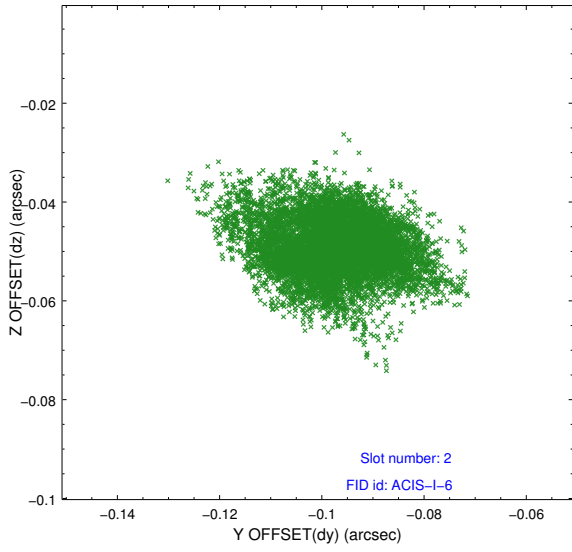
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	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	30.066859220922

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.