

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 14667 - L2 Version 2
Chandra X-Ray Center

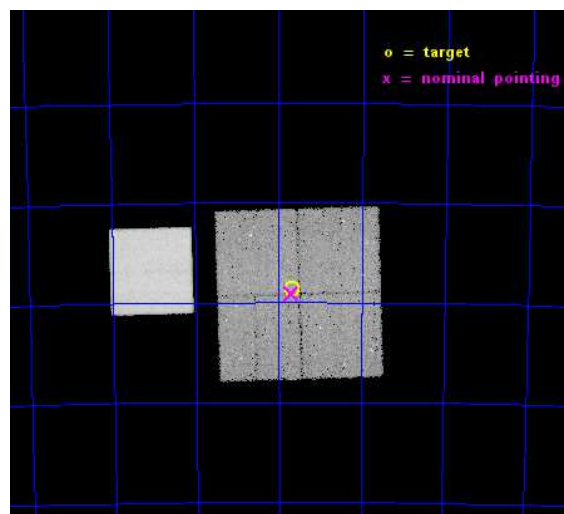
L2 Processing Date : Dec 1 2014

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1 Front

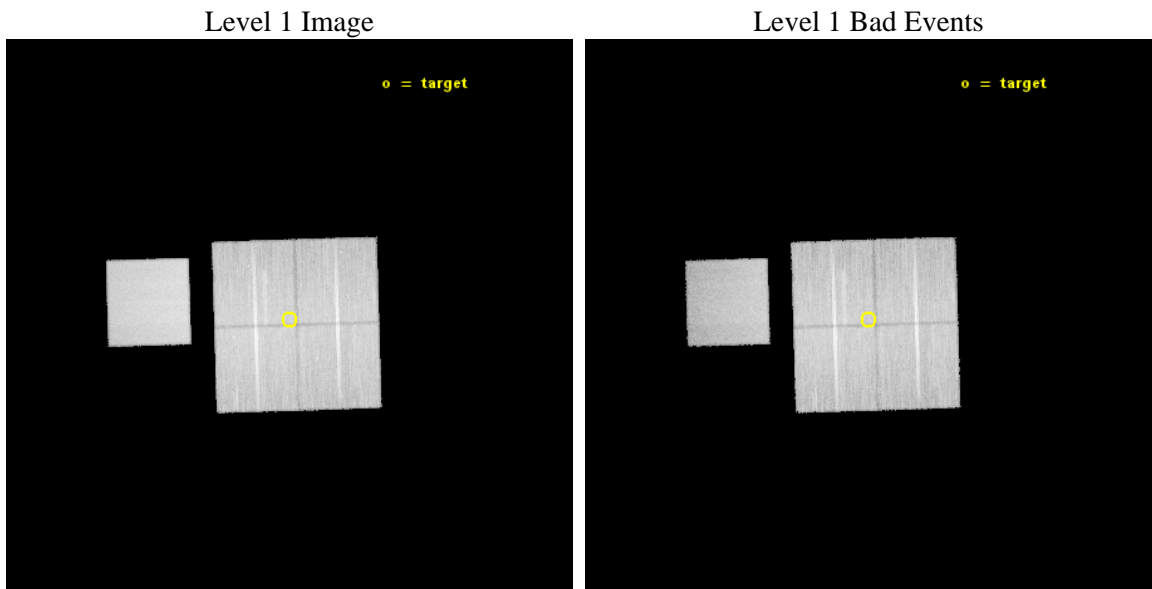
seq_num	401500	Sequence number
obs_id	14667	Observation id
title	The Small Magellanic Cloud - A Case Study of X-ray Populations at Low Metallicity	Proposal title
observer	Dr Andreas Zezas	Principal investigator
object	Deep Field 04	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	18.41625	Observer's specified target RA [deg]
dec_targ	-73.143667	Observer's specified target Dec [deg]
ra_nom	18.423744031457	Nominal RA [deg]
dec_nom	-73.151460699463	Nominal Dec [deg]
roll_nom	268.2834922013	Nominal Roll [deg]
revision	2	Processing version of data
ontime	47057.836490631	Sum of GTIs [s]
livetime	46442.991213406	Livetime [s]
ontime0	47070.400362015	Sum of GTIs [s]
ontime1	47067.259391665	Sum of GTIs [s]
ontime2	47067.259361744	Sum of GTIs [s]
ontime3	47057.836490631	Sum of GTIs [s]
ontime7	47070.400362015	Sum of GTIs [s]
l2events	220928	Number of level 2 events



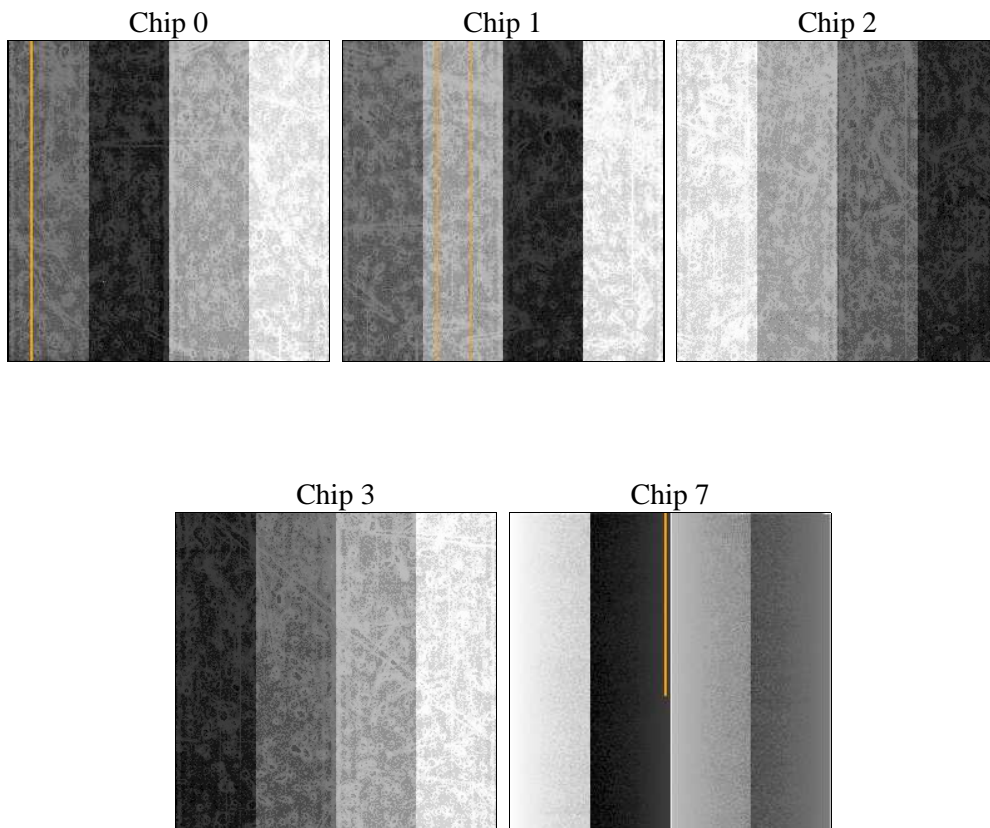
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	47000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	47057.836490631	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	47070.400362015	Sum of GTIs [s]
date	2014-12-01T02:10:24	Date and time of file creation	ontime1	47067.259391665	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	47067.259361744	Sum of GTIs [s]
			ontime3	47057.836490631	Sum of GTIs [s]
			ontime7	47070.400362015	Sum of GTIs [s]
			l1events	1205945	Number of level 1 events

2.1.4 Events

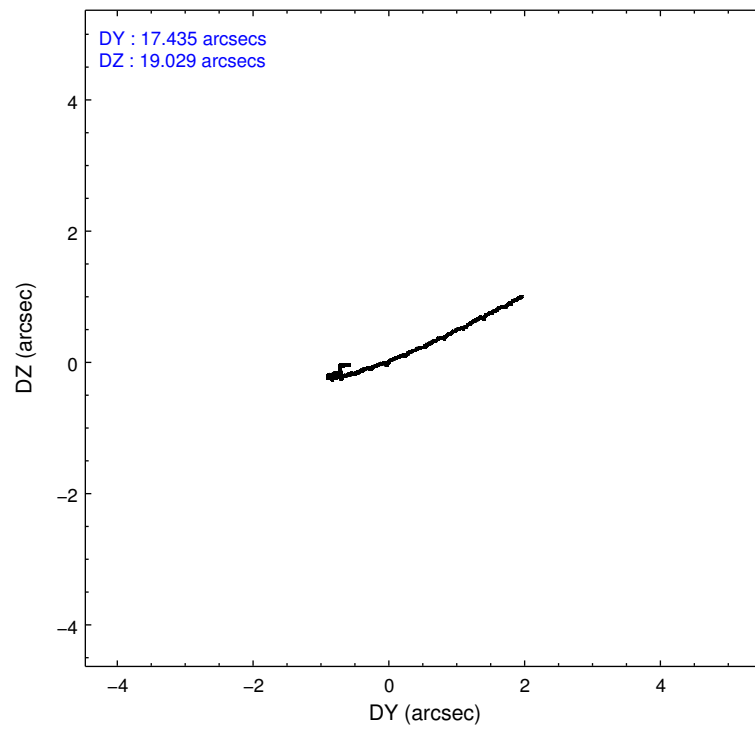
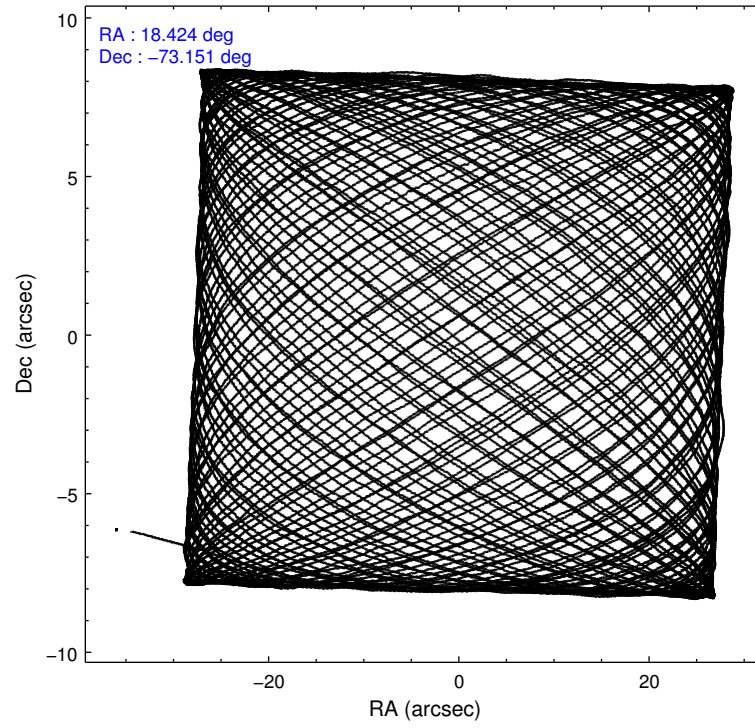
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	226371	221853	243061	234105	280555
rejected events	198223	192657	215124	207599	148242
rejected %	87%	86%	88%	88%	52%

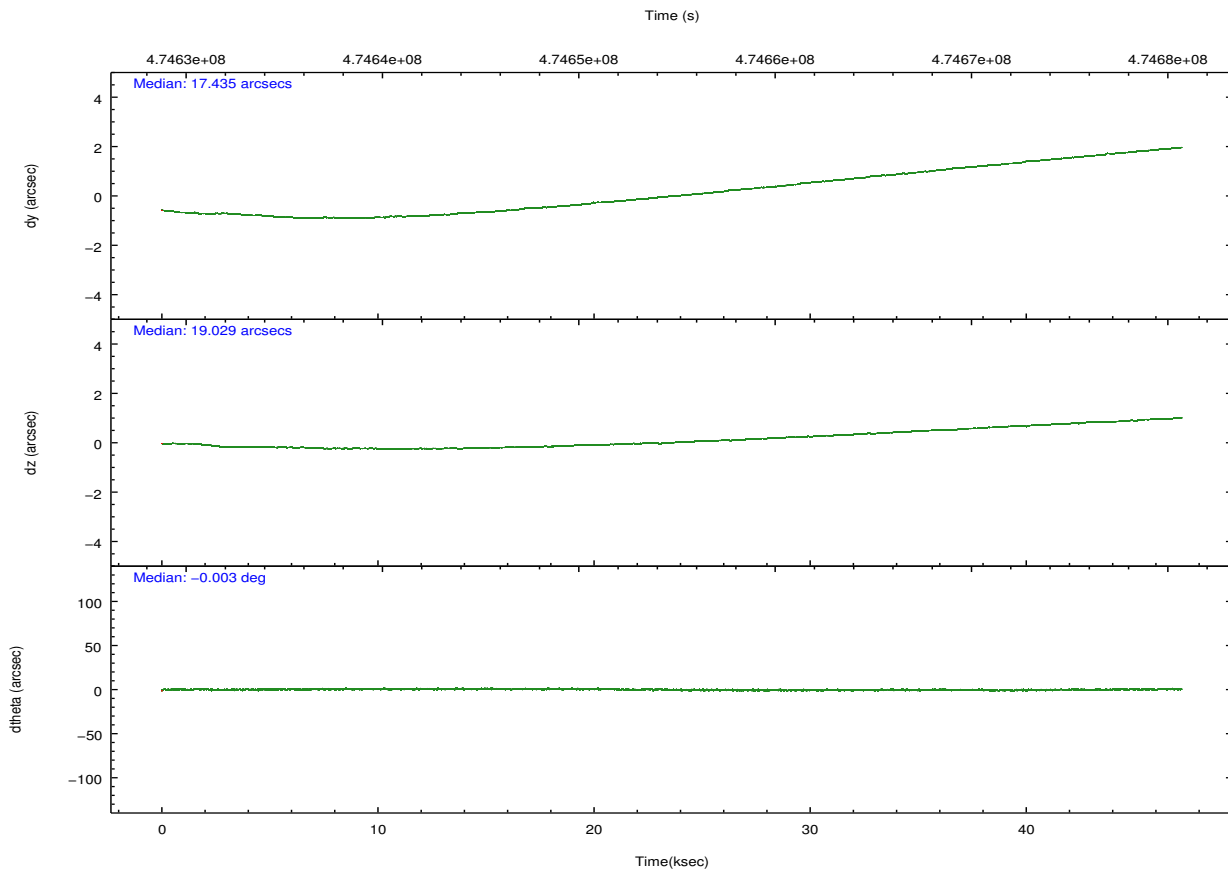
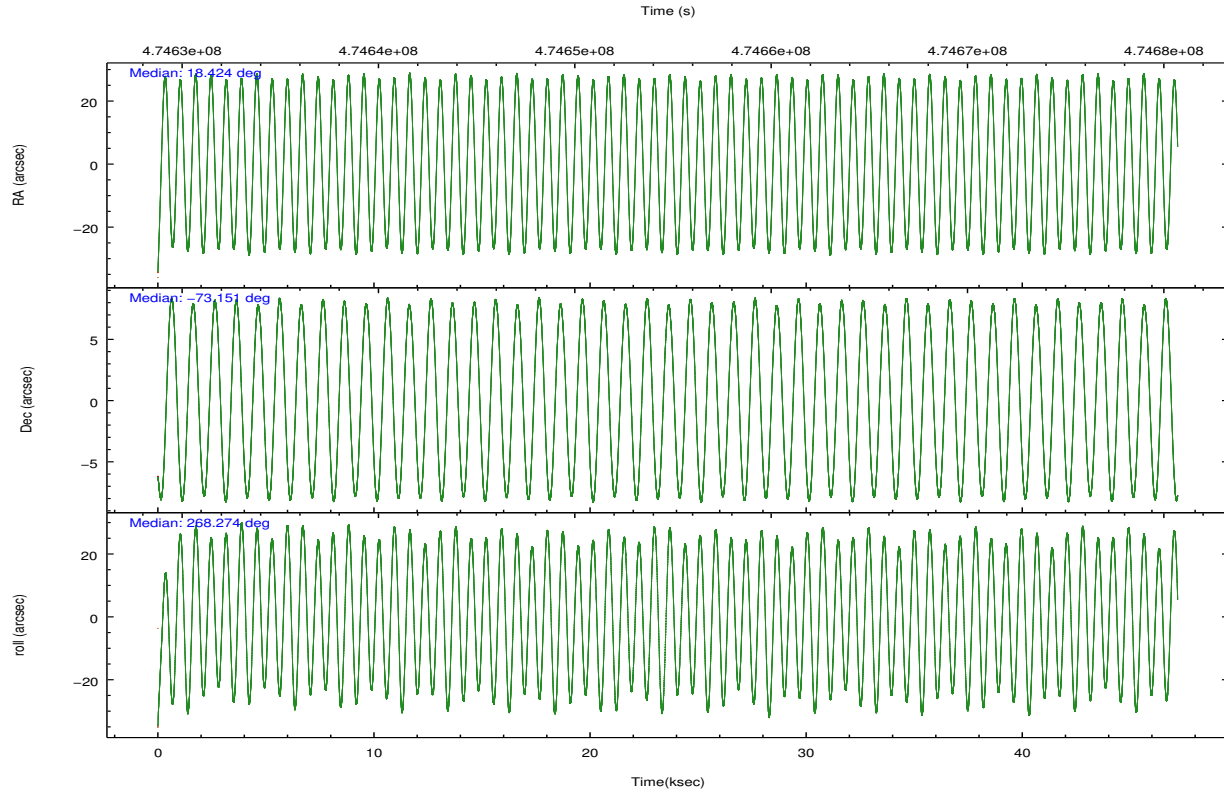
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	9875	10155	10454	9663	12785
	4%	4%	4%	4%	4%
grade 1 events	151	110	149	156	439
	0%	0%	0%	0%	0%
grade 2 events	7220	6843	6960	6113	28160
	3%	3%	2%	2%	10%
grade 3 events	2932	2985	2648	2668	11619
	1%	1%	1%	1%	4%
grade 4 events	2759	3123	2760	2870	11784
	1%	1%	1%	1%	4%
grade 5 events	9449	10195	8961	11182	29558
	4%	4%	3%	4%	10%
grade 6 events	5368	6092	5121	5192	67978
	2%	2%	2%	2%	24%
grade 7 events	188617	182350	206008	196261	118232
	83%	82%	84%	83%	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	18.378531	18.42374403145728	Subarray requested	NONE	NONE
[deg] Pointing Dec	-73.127276	-73.15146069946309	Alternating exposures requested	N	N
[deg] Pointing Roll	268.031535	268.2834922013038	[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)	474631328.184000	474630250.3709			
Observation start date	2013-01-15T10:01:01	2013-01-15T09:44:10			
[s] Observation end time (MET)	474678328.184000	474679069.07347			
Observation end date	2013-01-15T23:04:21	2013-01-15T23:17:49			
Read mode	TIMED	TIMED			

2.3 Aspect





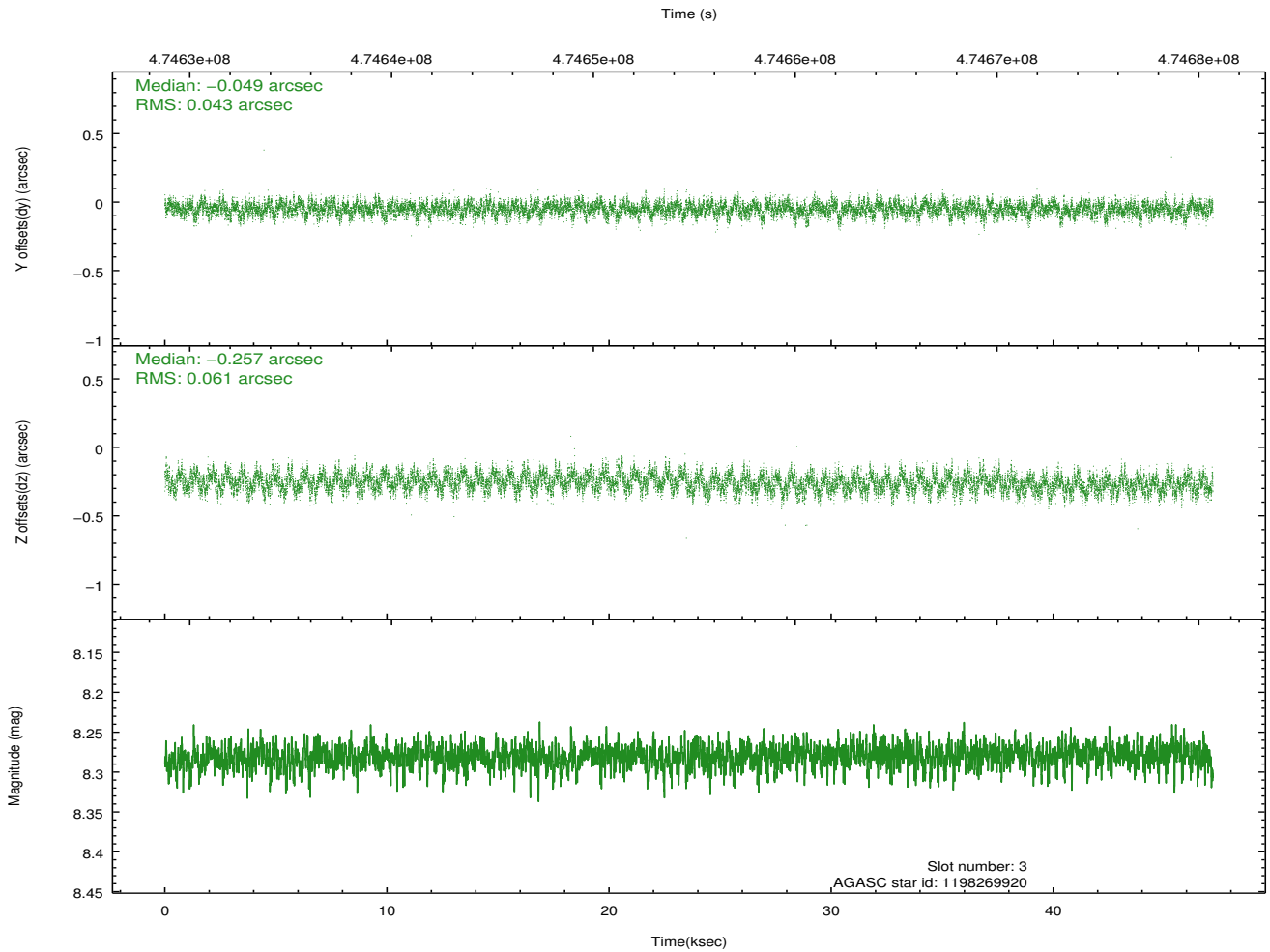
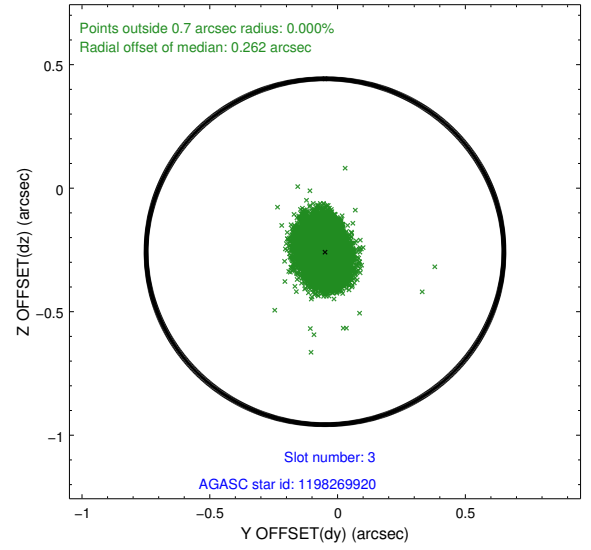
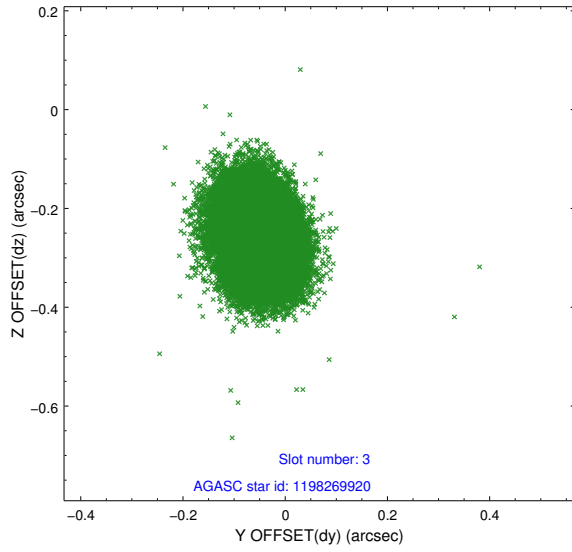
Slot Statistics

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	11510	0.005	0.066	0.017	0.034	0.000000	0.000000	921.79	-842.83
1	FID		ACIS-I-5	7.05	11510	-0.193	0.028	0.022	0.030	0.000000	0.000000	-1826.55	1054.59
2	FID		ACIS-I-6	7.05	11510	0.096	-0.024	0.022	0.037	0.000000	0.000000	387.40	1699.07
3	GUIDE	used	1198269920	8.28	23008	-0.049	-0.257	0.080	0.128	20.316466	-73.033728	-373.78	2024.12
4	GUIDE	used	1198272400	9.12	23004	-0.098	-0.176	0.166	0.254	20.411923	-73.620598	1738.93	2125.38
5	GUIDE	used	1198282744	9.02	23000	0.167	0.043	0.122	0.181	17.028326	-73.013356	-344.19	-1432.19
6	GUIDE	used	1198283128	7.79	23019	0.077	0.263	0.065	0.105	17.272580	-72.642428	-1692.17	-1246.48
7	GUIDE	used	1198191248	8.37	22975	-0.073	0.112	0.083	0.134	15.995132	-73.462457	1338.96	-2396.65

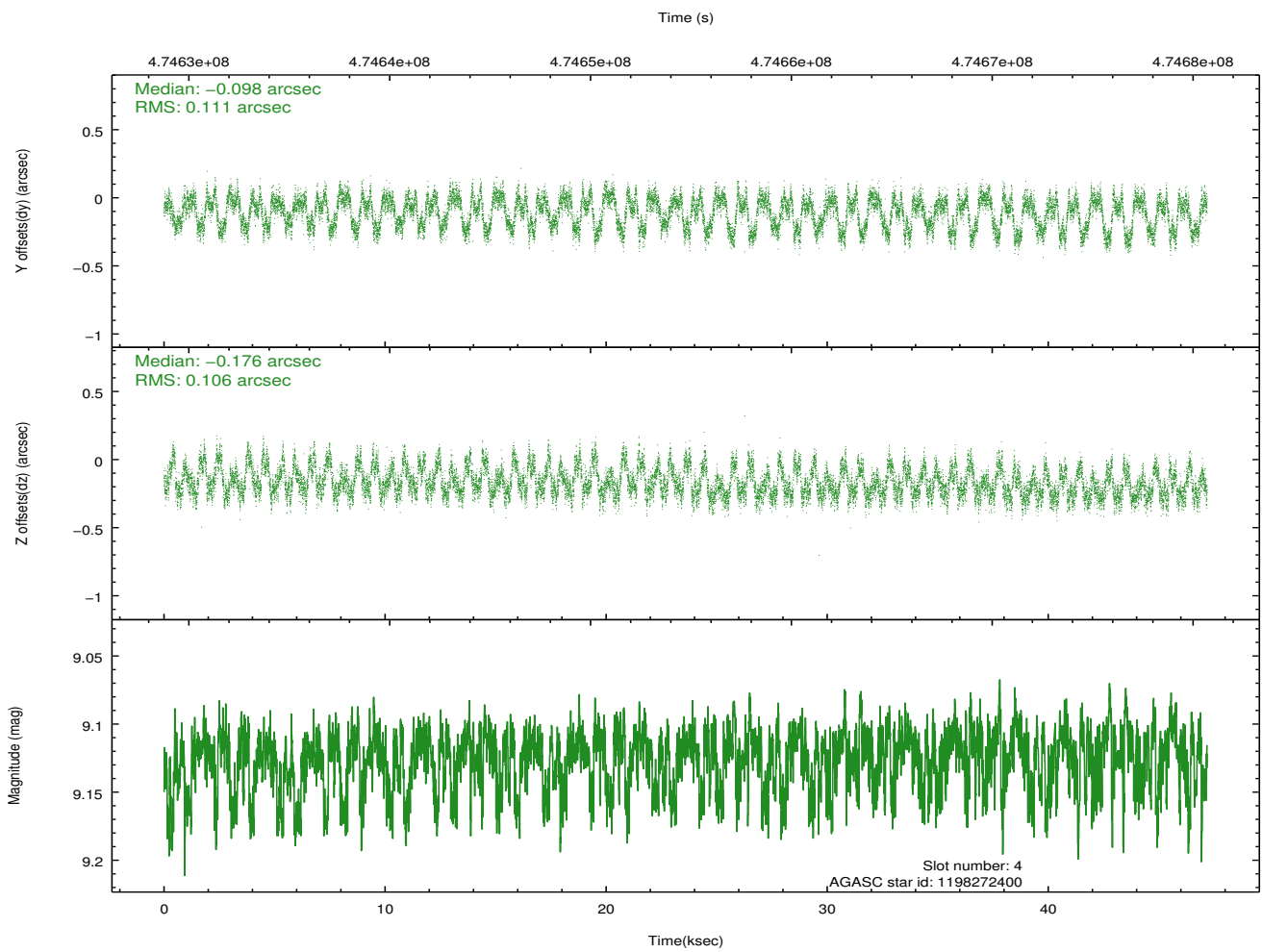
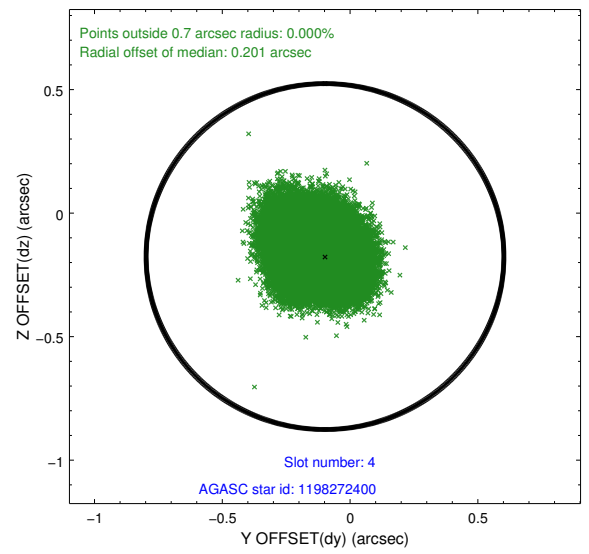
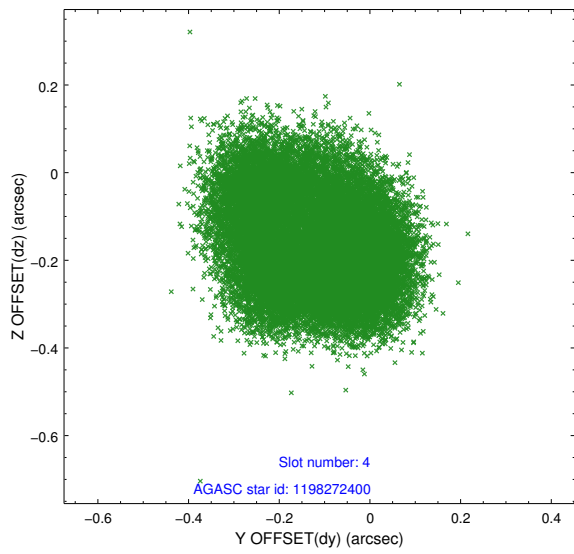
∞

2.4 Star Slots

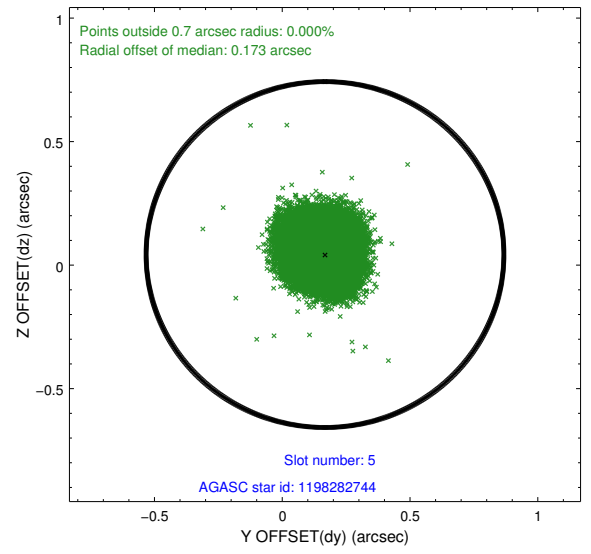
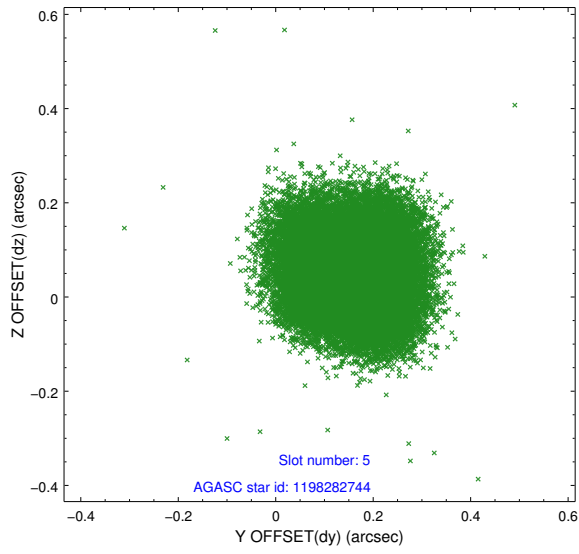
2.4.1 Slot 3



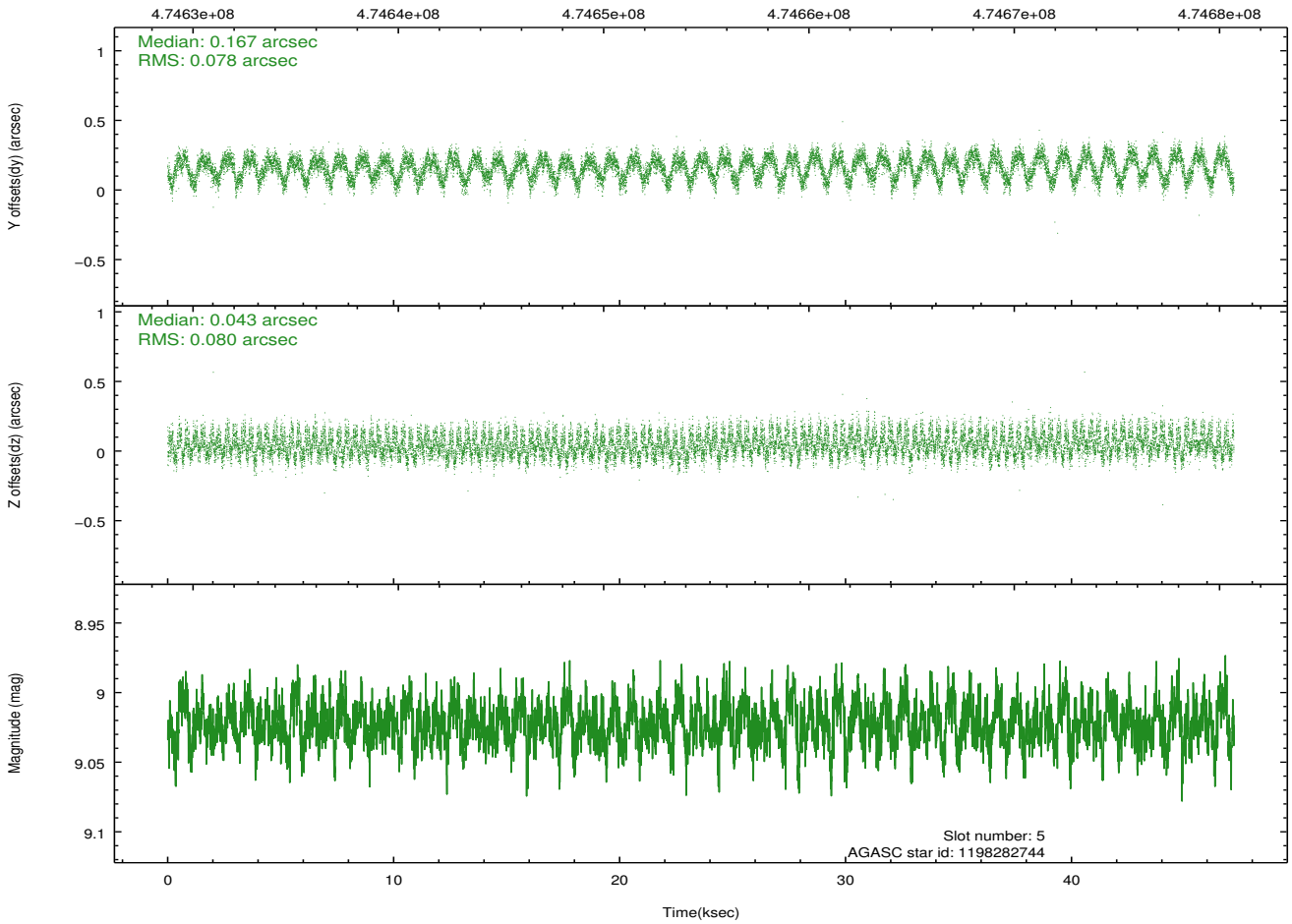
2.4.2 Slot 4



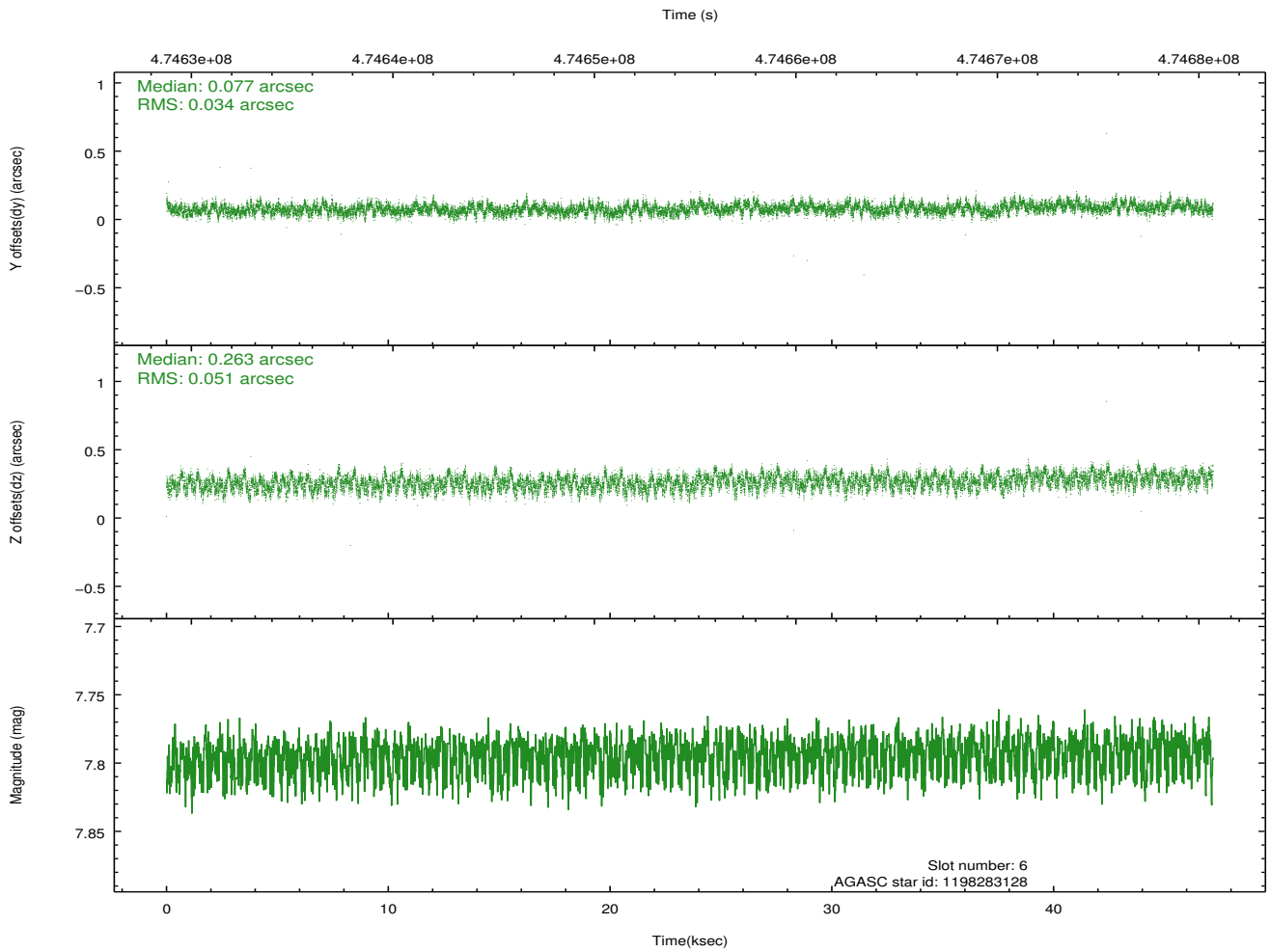
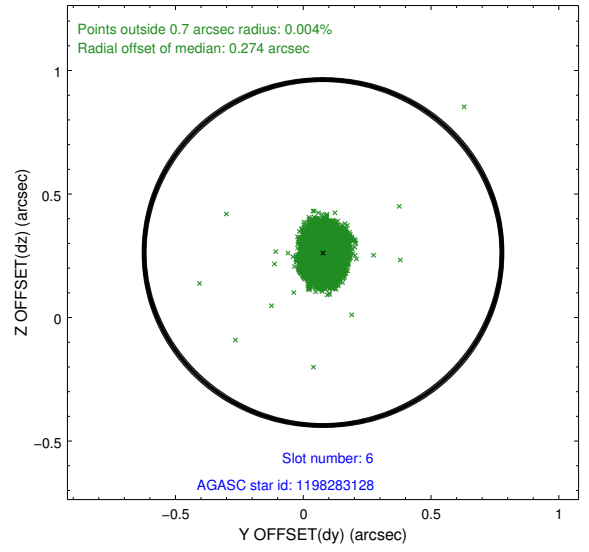
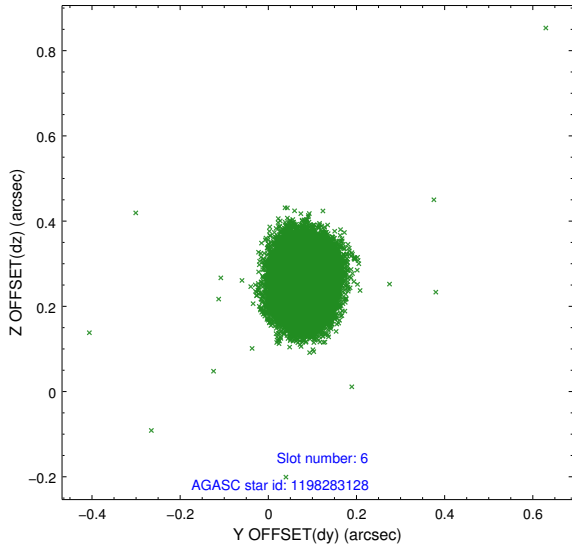
2.4.3 Slot 5



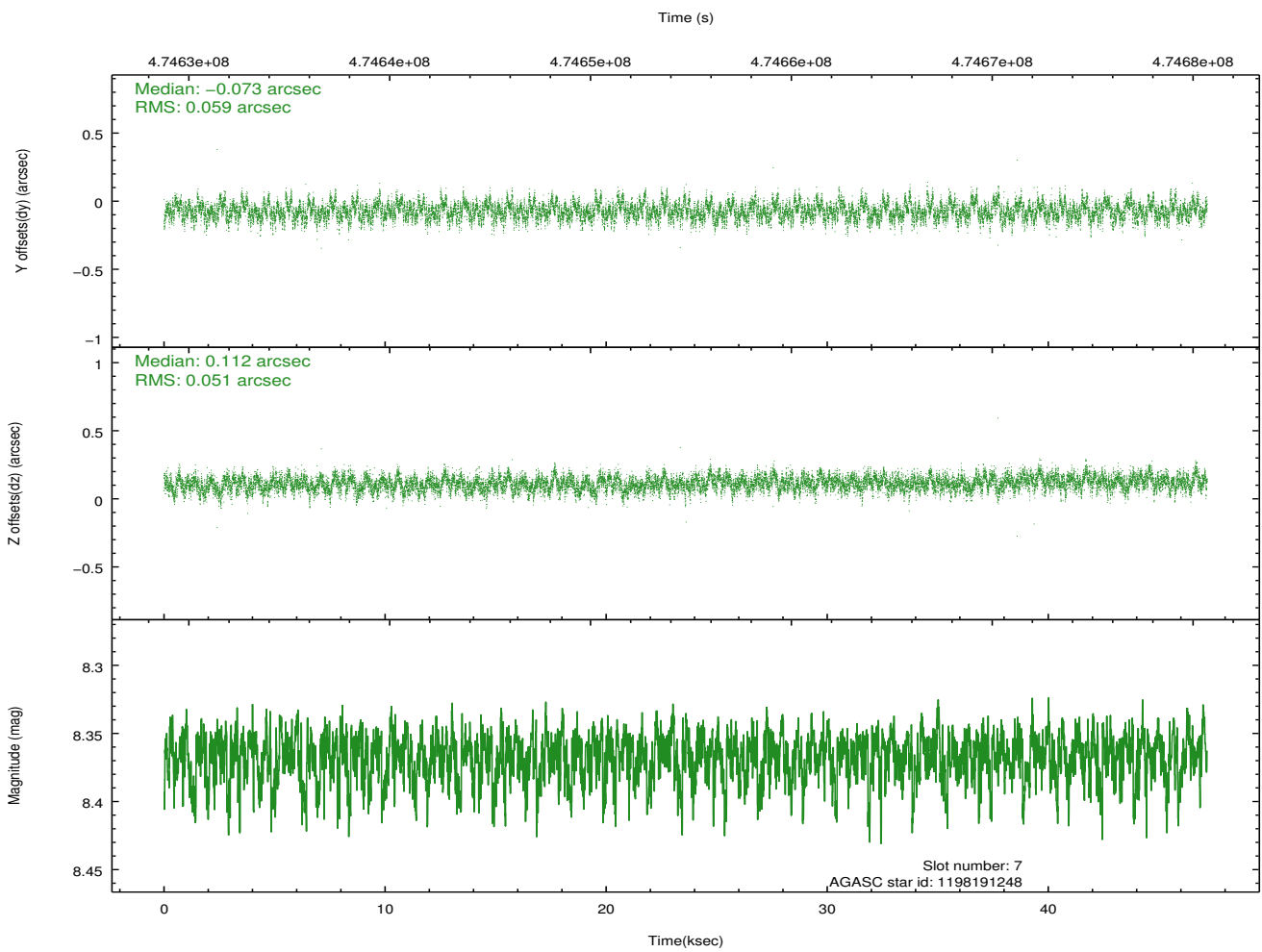
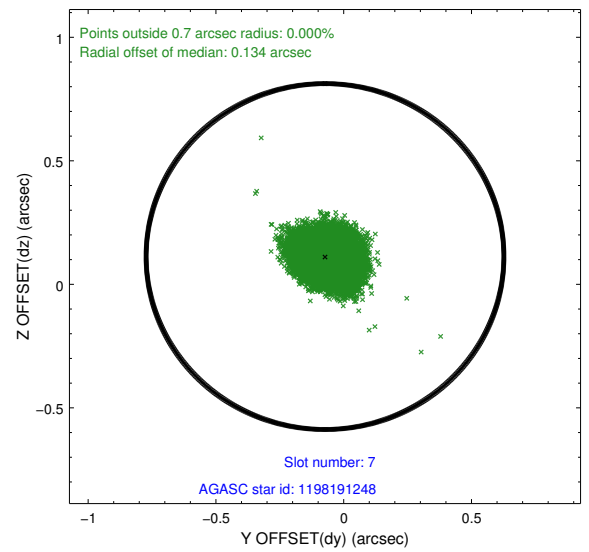
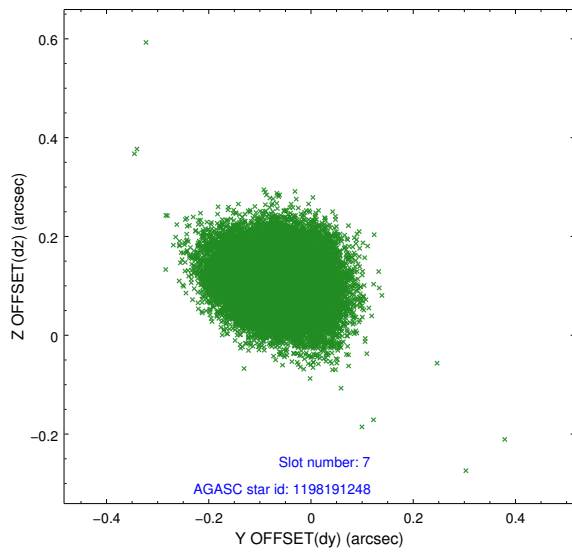
Time (s)



2.4.4 Slot 6

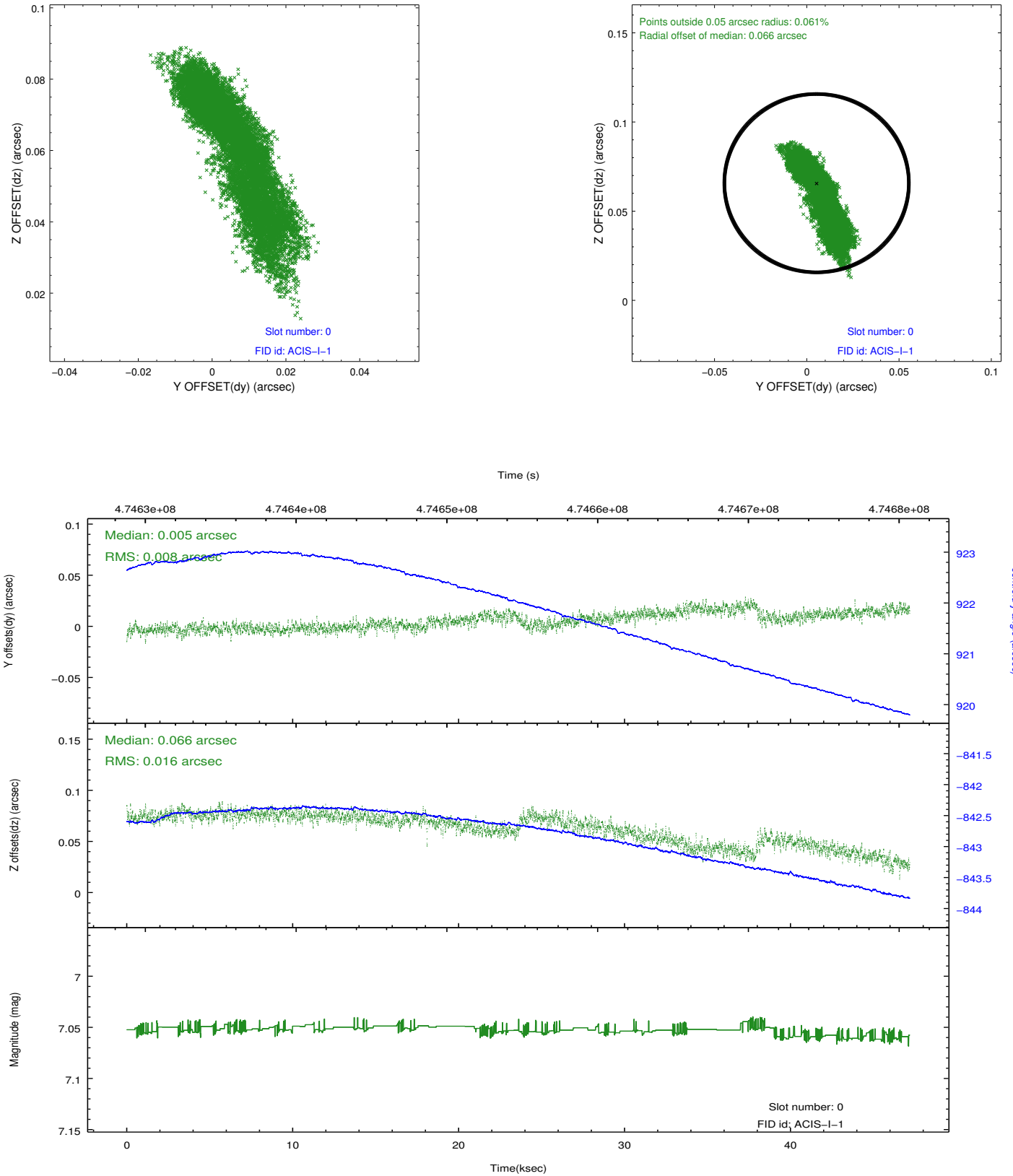


2.4.5 Slot 7

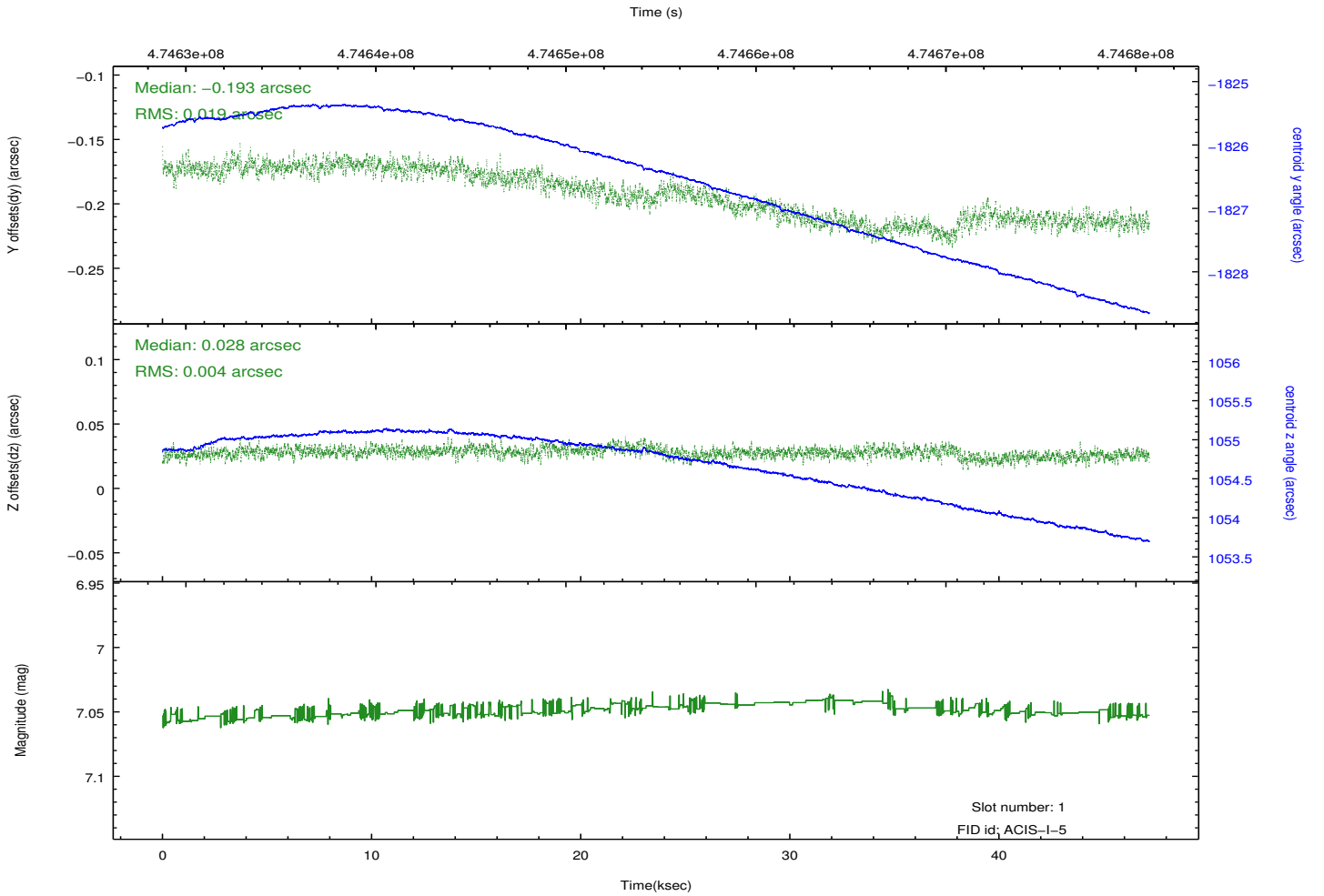
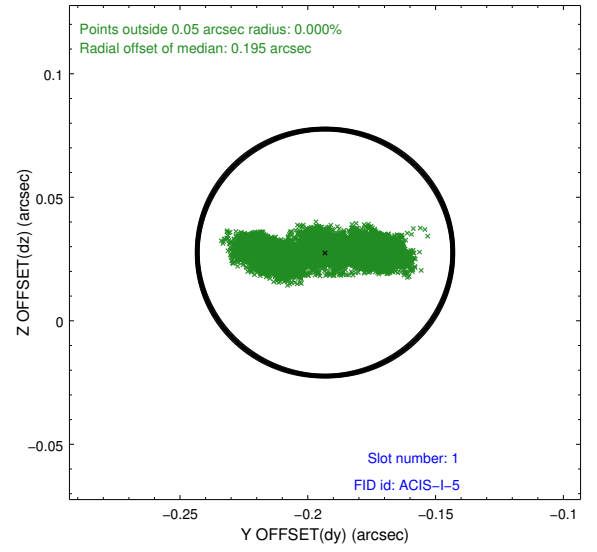
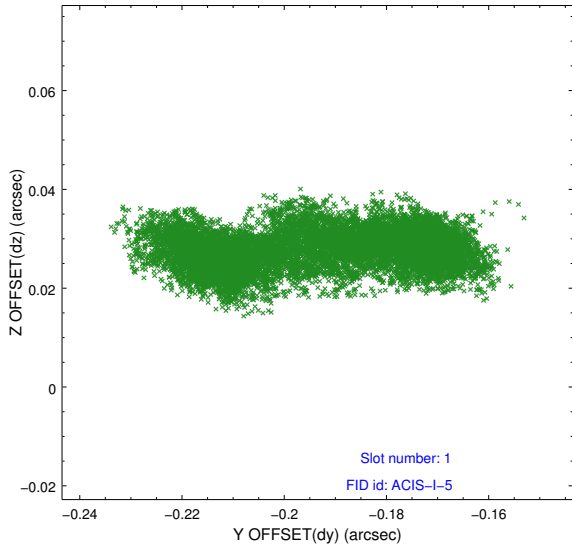


2.5 FID Slots

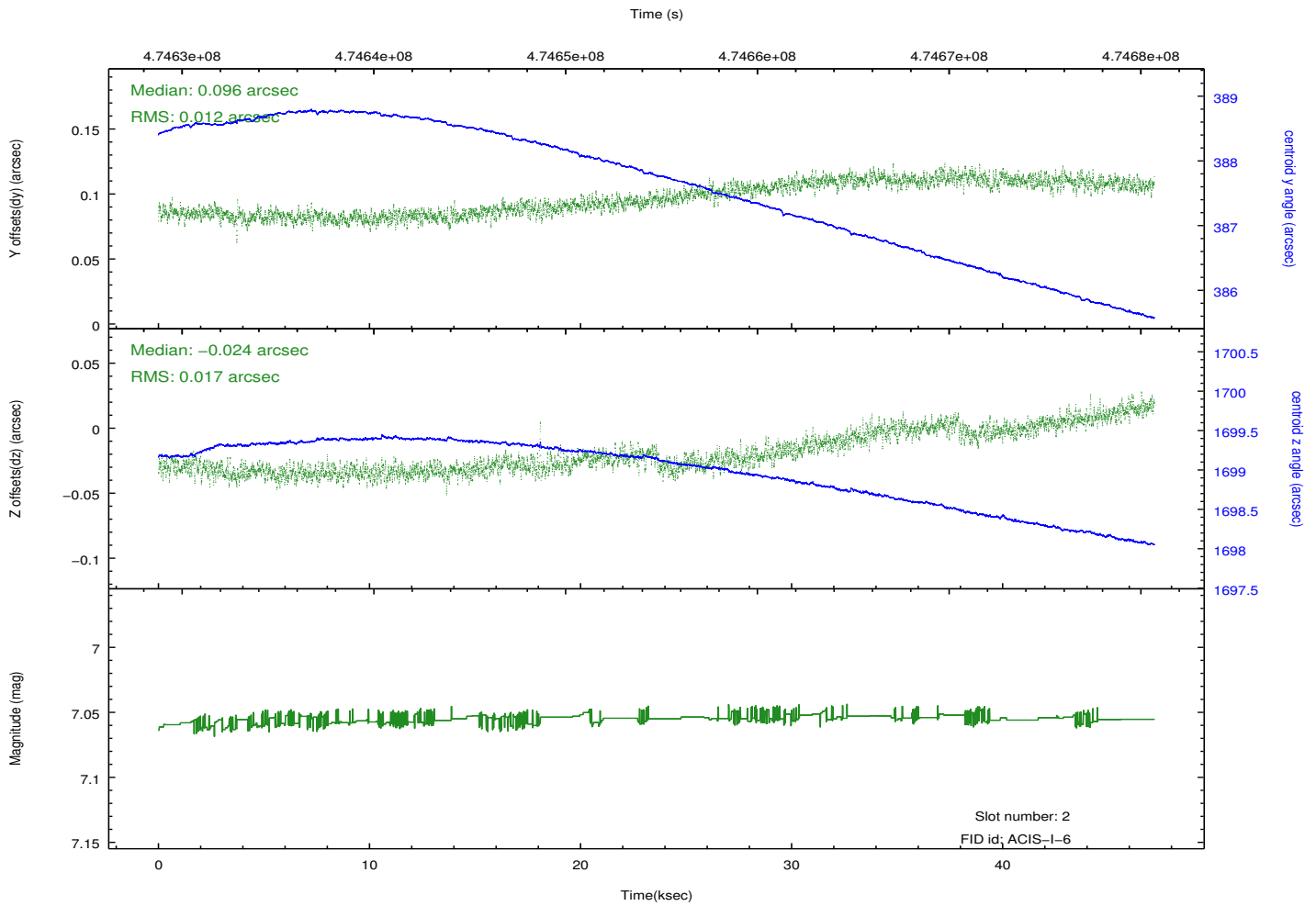
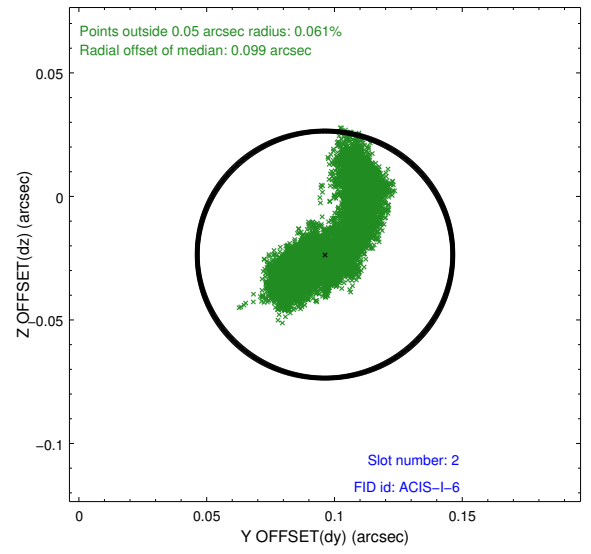
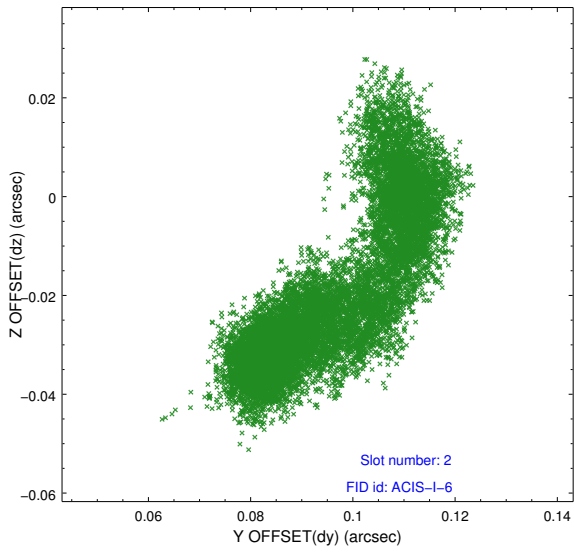
2.5.1 Slot 0



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)	2014.12.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	47.057836490631

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.