

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 15505 - L2 Version 2
Chandra X-Ray Center

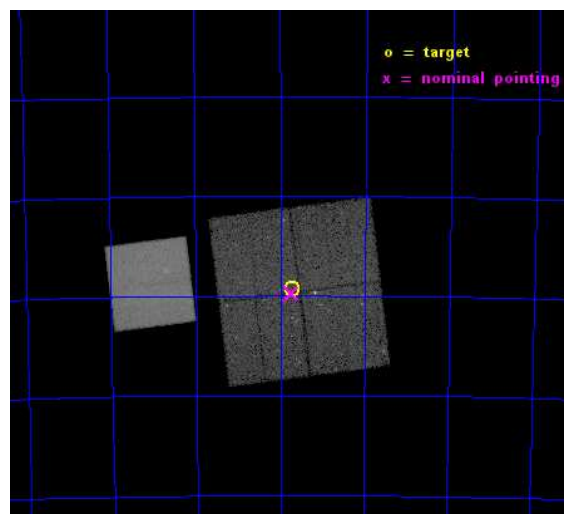
L2 Processing Date : Dec 9 2014

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

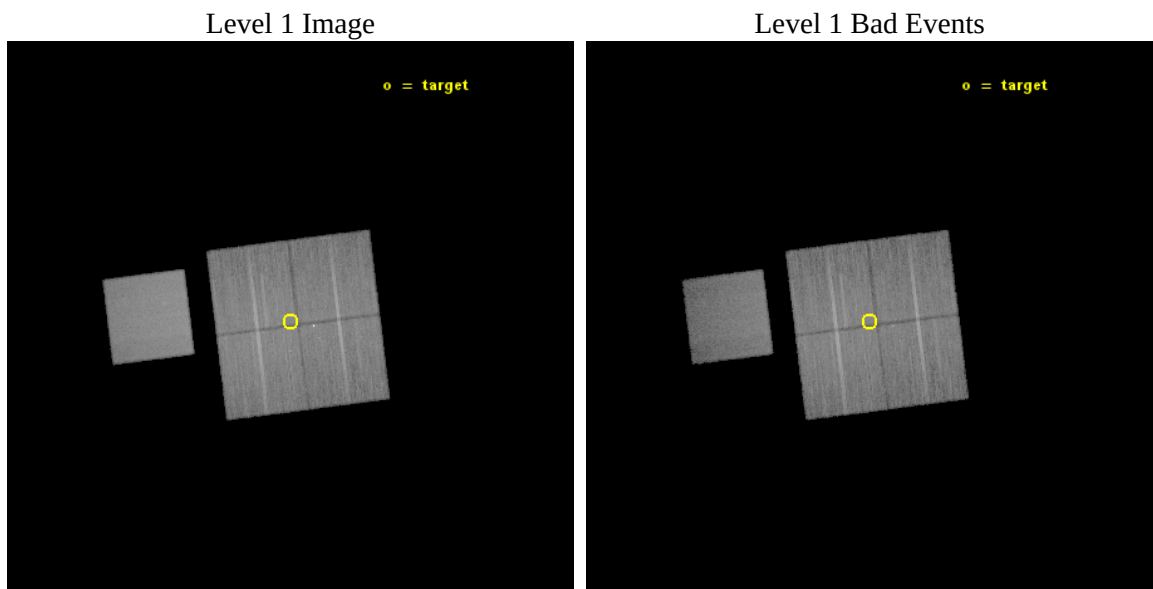
seq_num	401505	Sequence number
obs_id	15505	Observation id
title	The Small Magellanic Cloud - A Case Study of X-ray Populations at Low Metallicity	Proposal title
observer	Dr Andreas Zezas	Principal investigator
object	Deep Field 09	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	12.43	Observer's specified target RA [deg]
dec_targ	-72.821194	Observer's specified target Dec [deg]
ra_nom	12.434805676151	Nominal RA [deg]
dec_nom	-72.829148922153	Nominal Dec [deg]
roll_nom	262.85214789446	Nominal Roll [deg]
revision	2	Processing version of data
ontime	49069.087678552	Sum of GTIs [s]
livetime	48427.963923895	Livetime [s]
ontime0	49065.823588133	Sum of GTIs [s]
ontime1	49065.864608228	Sum of GTIs [s]
ontime2	49059.623697639	Sum of GTIs [s]
ontime3	49069.087678552	Sum of GTIs [s]
ontime7	49069.128718555	Sum of GTIs [s]
l2events	207151	Number of level 2 events



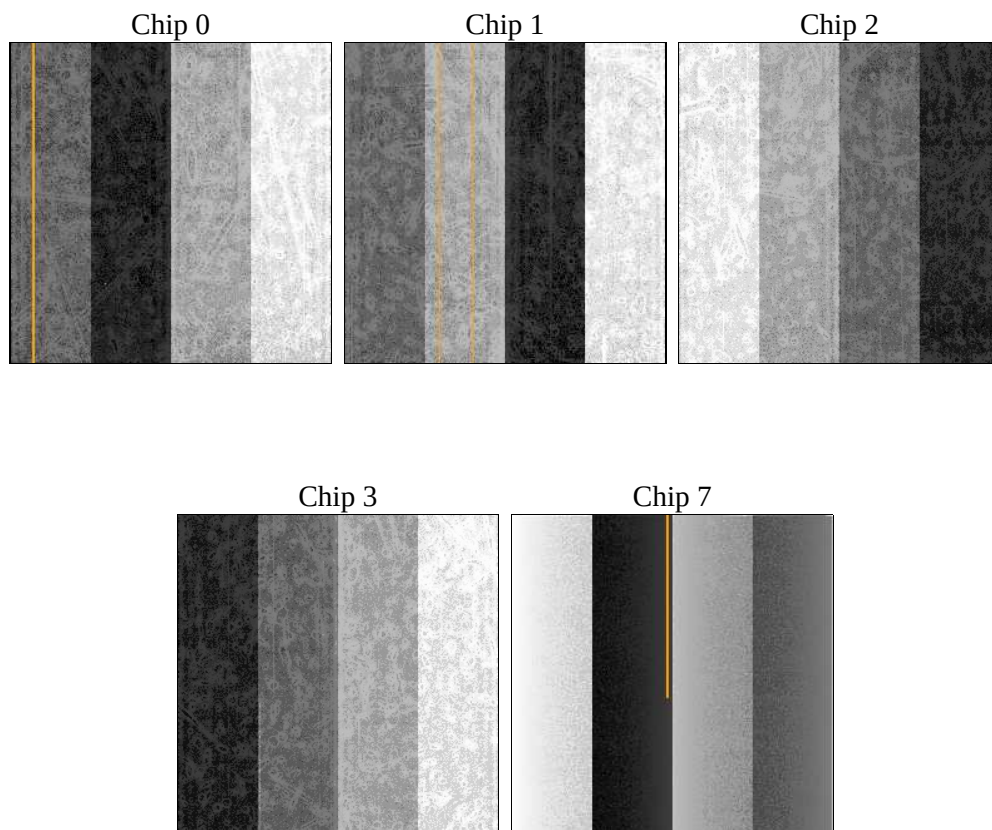
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	49000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	49069.087678552	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	49065.823588133	Sum of GTIs [s]
date	2014-12-09T23:44:43	Date and time of file creation	ontime1	49065.864608228	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	49059.623697639	Sum of GTIs [s]
			ontime3	49069.087678552	Sum of GTIs [s]
			ontime7	49069.128718555	Sum of GTIs [s]
			l1events	1080315	Number of level 1 events

2.1.4 Events

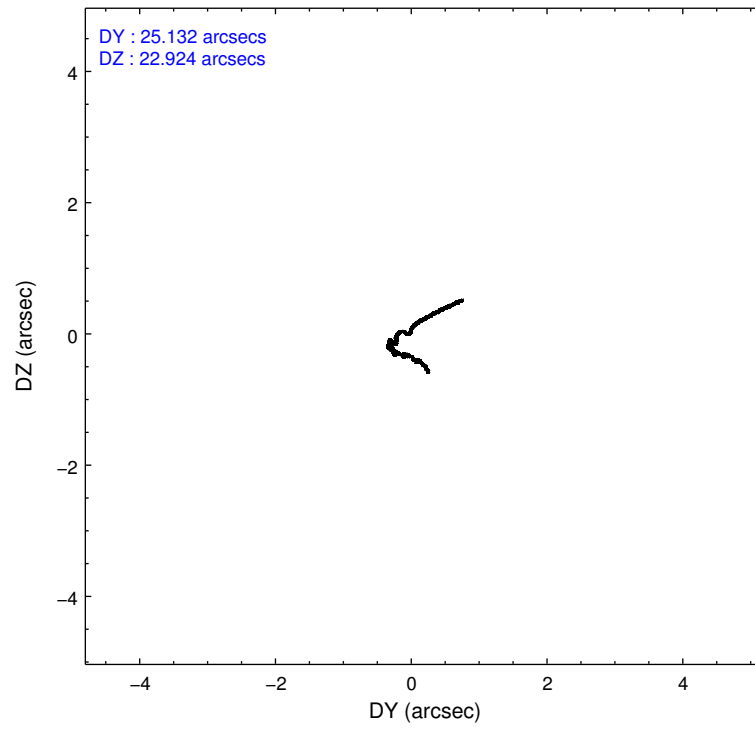
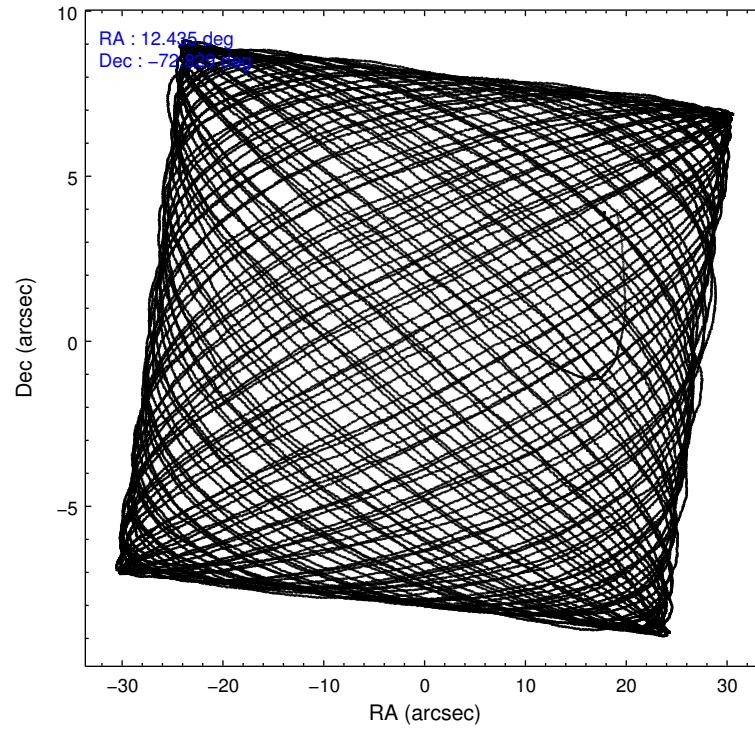
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	202095	192468	217646	210705	257401
rejected events	171264	166365	191952	186543	136154
rejected %	84%	86%	88%	88%	52%

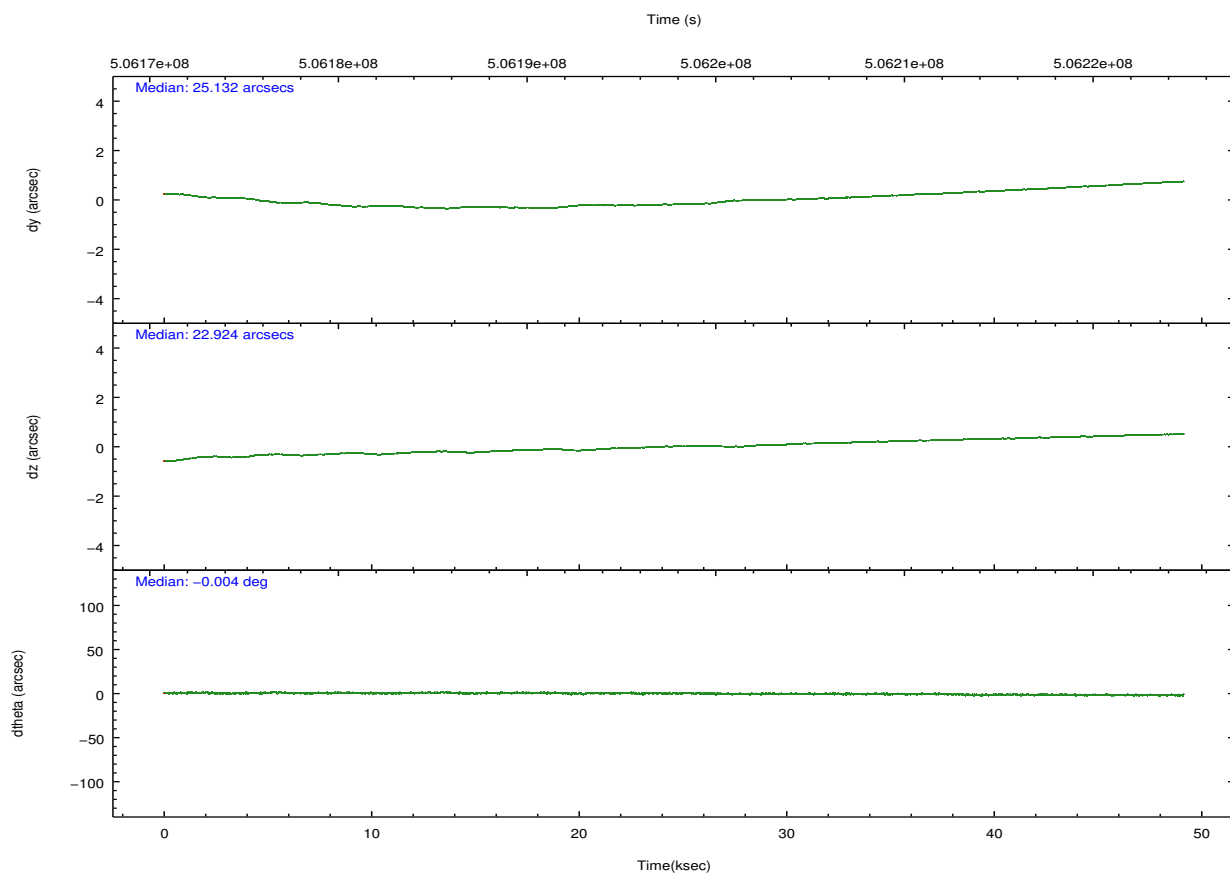
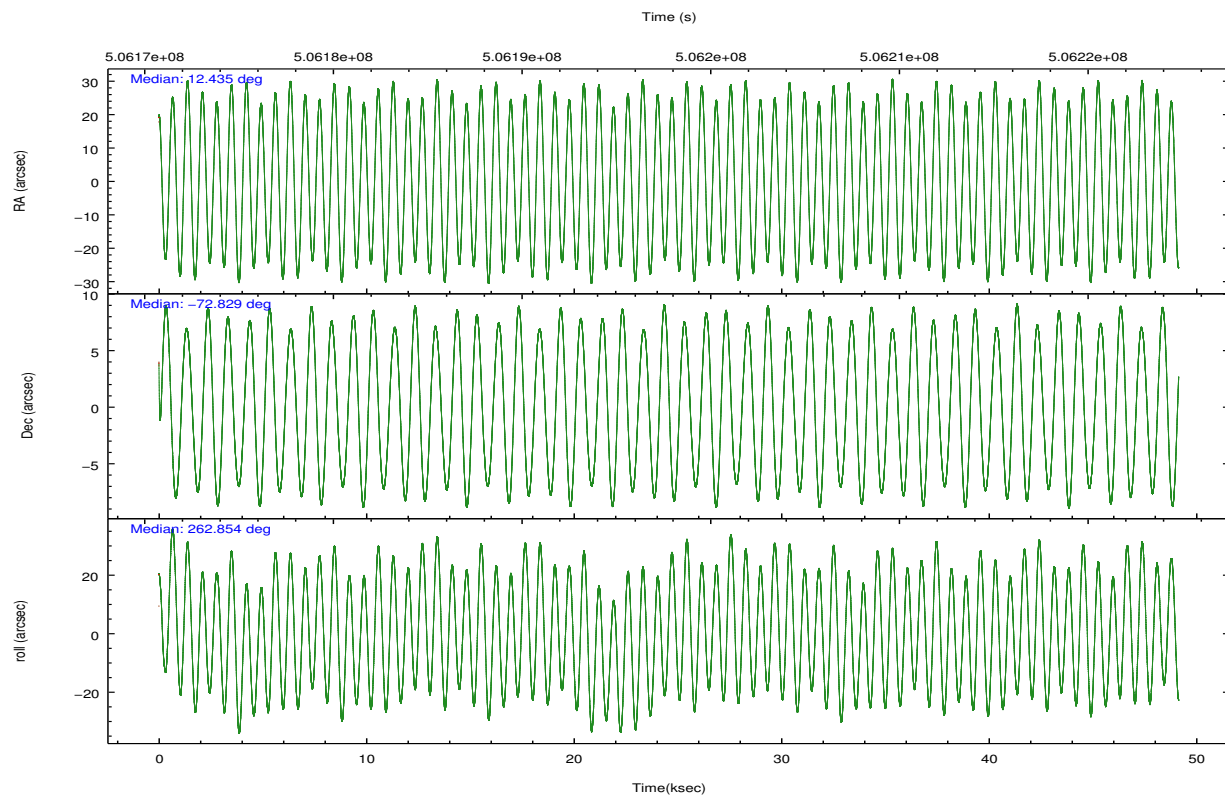
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	12776	8702	9763	9014	11794
	6%	4%	4%	4%	4%
grade 1 events	236	129	129	143	369
	0%	0%	0%	0%	0%
grade 2 events	7156	6275	6441	5278	25972
	3%	3%	2%	2%	10%
grade 3 events	2918	2633	2479	2543	10644
	1%	1%	1%	1%	4%
grade 4 events	2734	2794	2440	2486	10544
	1%	1%	1%	1%	4%
grade 5 events	8714	9457	8188	10191	27133
	4%	4%	3%	4%	10%
grade 6 events	5250	5703	4574	4841	62326
	2%	2%	2%	2%	24%
grade 7 events	162311	156775	183632	176209	108619
	80%	81%	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	12.398351	12.43480567615052	Subarray requested	NONE	NONE
[deg] Pointing Dec	-72.803836	-72.82914892215294	Alternating exposures requested	N	N
[deg] Pointing Roll	262.608639	262.8521478944573	[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)	506173344.184000	506172127.62521			
Observation start date	2014-01-15T11:41:17	2014-01-15T11:22:07			
[s] Observation end time (MET)	506222344.184000	506222983.5155			
Observation end date	2014-01-16T01:17:57	2014-01-16T01:29:43			
Read mode	TIMED	TIMED			

2.3 Aspect



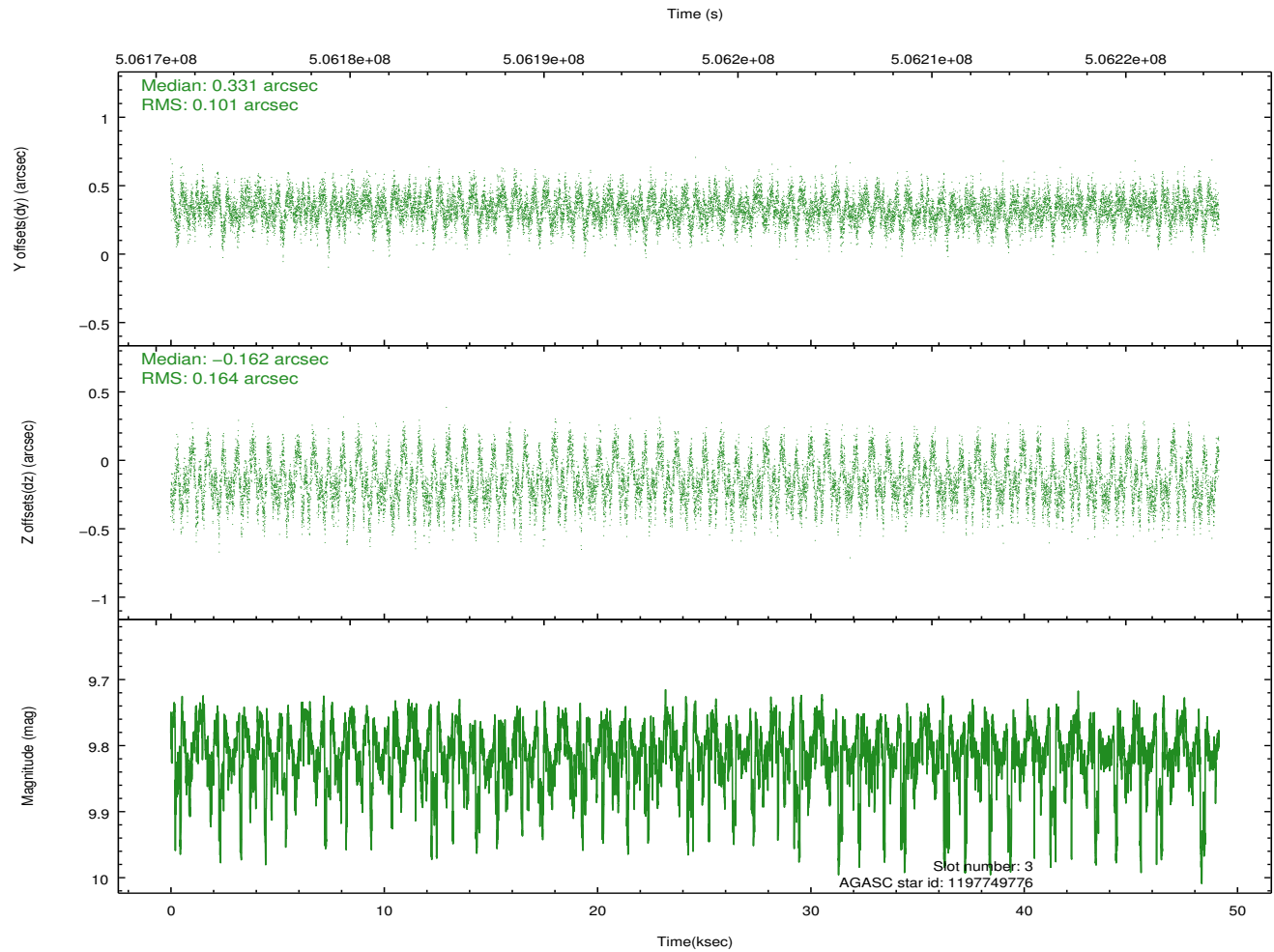
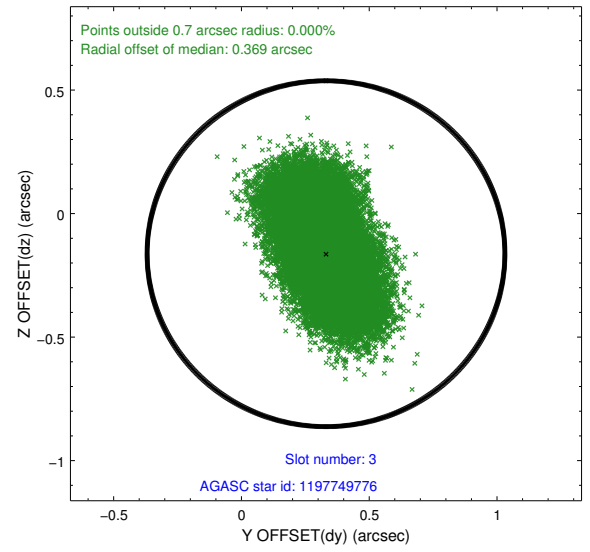
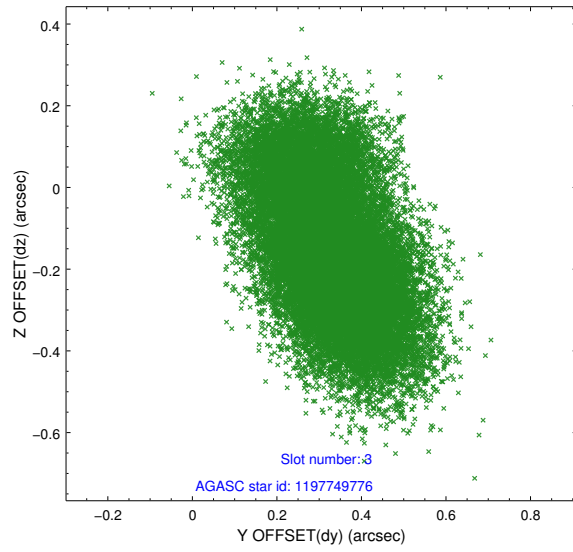


Slot Statistics

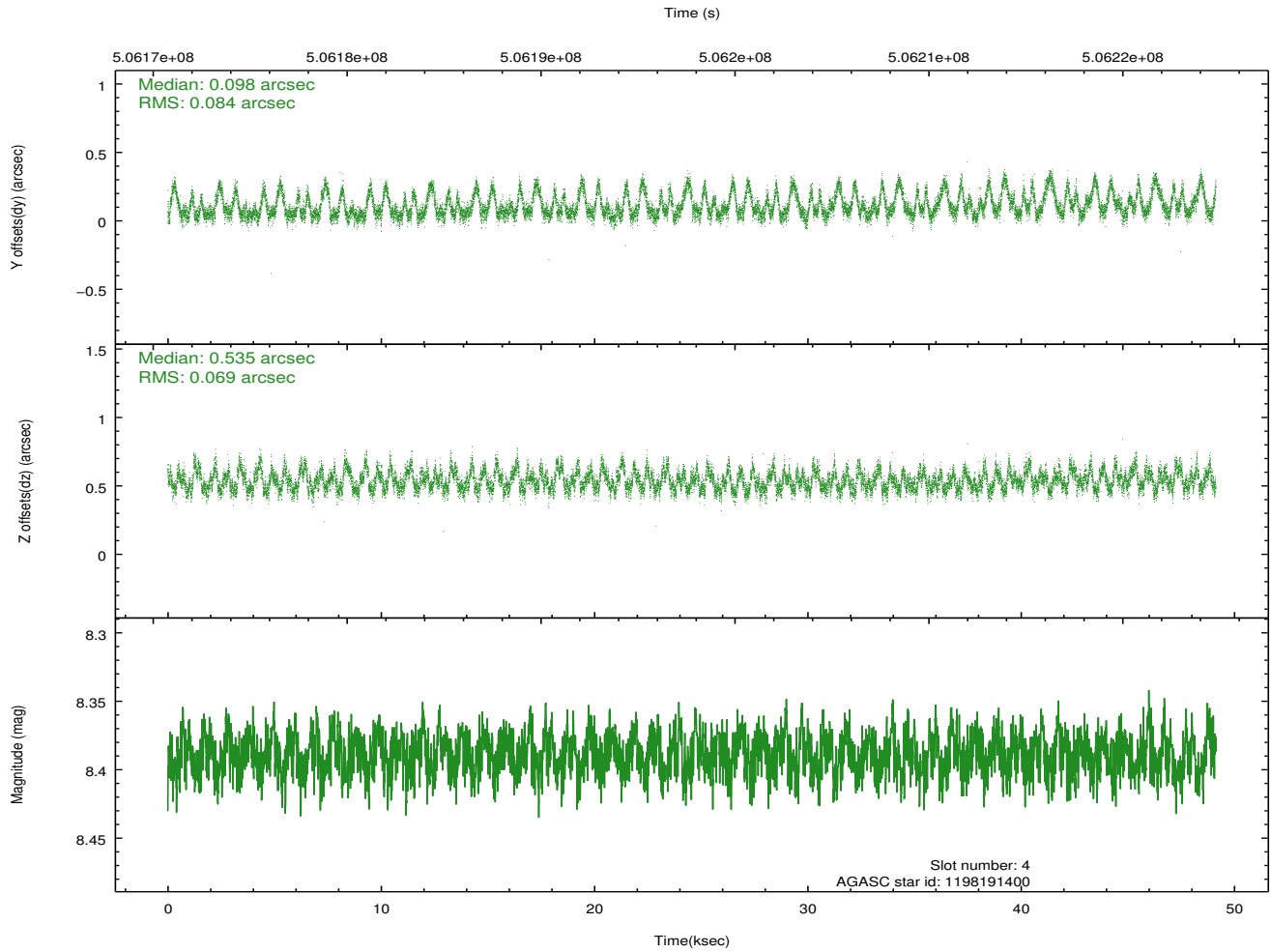
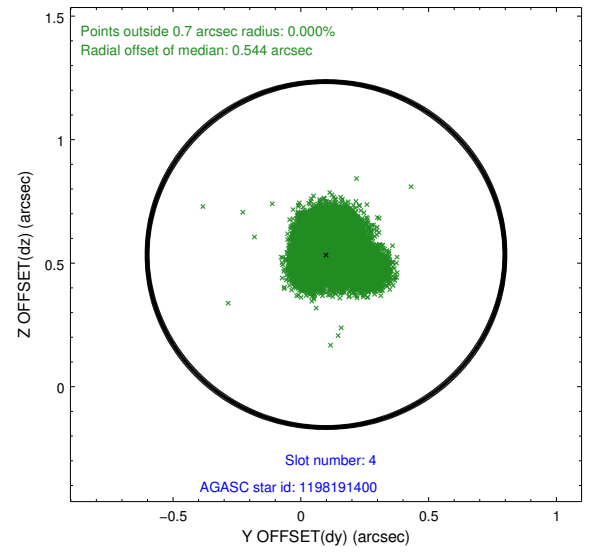
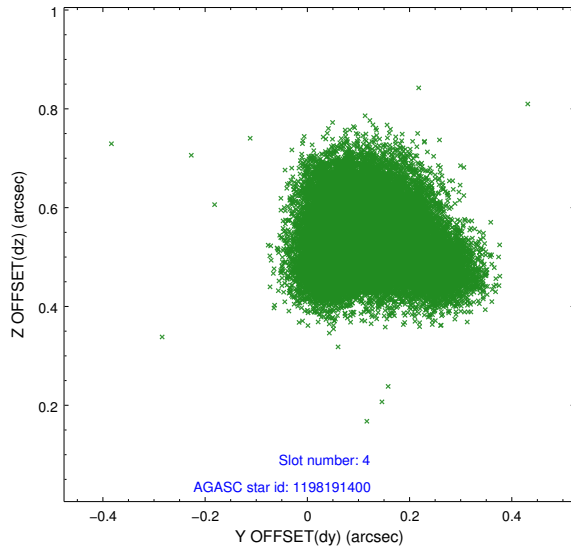
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.07	11985	0.046	0.045	0.020	0.038	0.000000	0.000000	914.07	-846.66
1	FID		ACIS-I-5	7.06	11986	-0.258	0.050	0.011	0.026	0.000000	0.000000	-1834.40	1050.76
2	FID		ACIS-I-6	7.06	11986	0.122	-0.025	0.011	0.019	0.000000	0.000000	379.64	1695.23
3	GUIDE	used	1197749776	9.81	23951	0.331	-0.162	0.207	0.336	12.674349	-72.322893	-1754.25	76.51
4	GUIDE	used	1198191400	8.39	23959	0.098	0.535	0.116	0.191	11.617890	-72.595865	-628.64	-928.20
5	GUIDE	used	1198192176	9.46	23948	-0.318	-0.175	0.187	0.294	14.042526	-73.121350	935.39	1854.42
6	GUIDE	used	1198192408	9.41	23950	0.140	-0.026	0.111	0.178	12.860639	-72.678863	-507.45	434.38
7	GUIDE	used	1198190648	8.08	23965	-0.276	-0.188	0.076	0.123	12.344115	-73.478663	2416.56	257.63

2.4 Star Slots

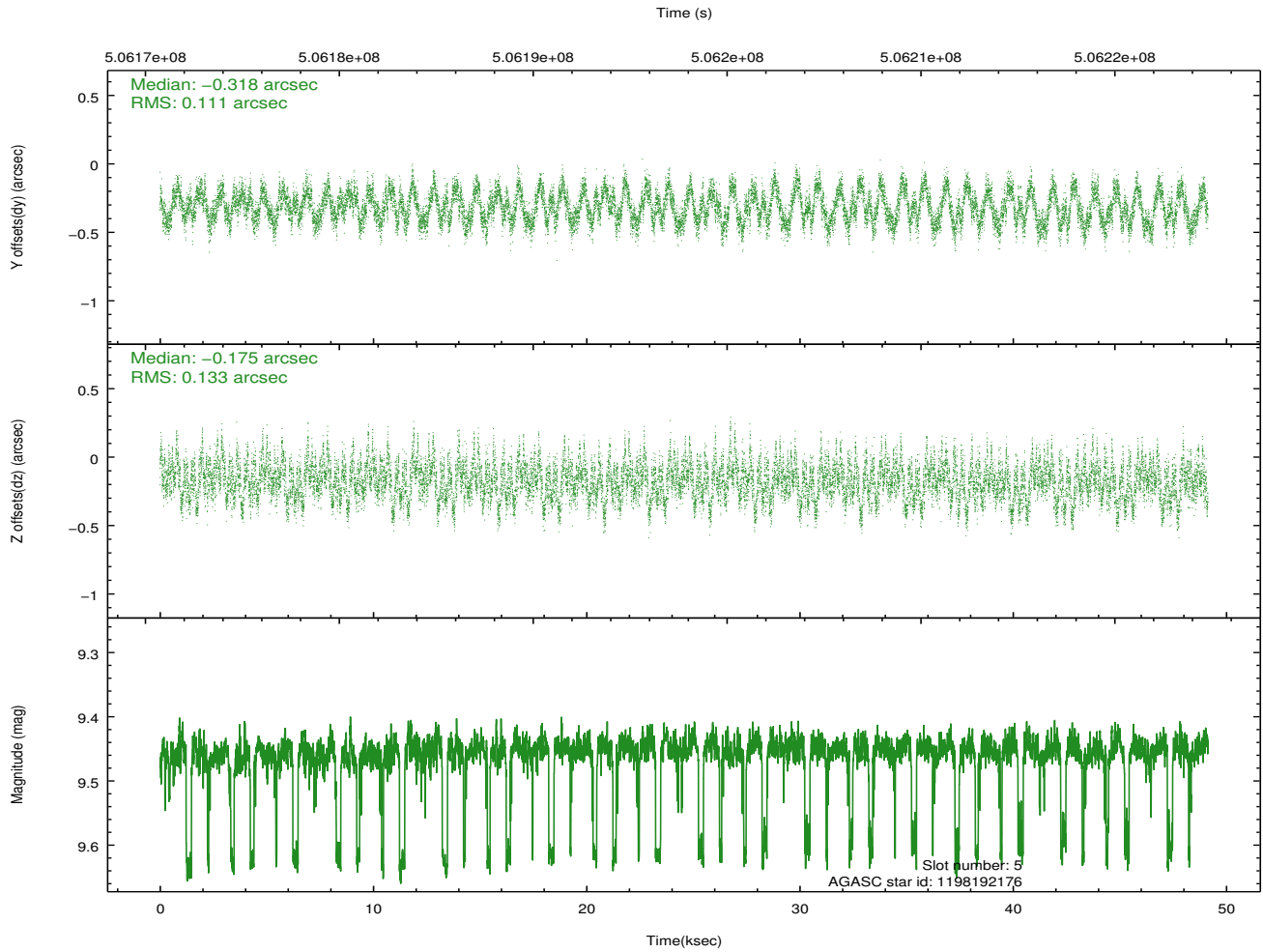
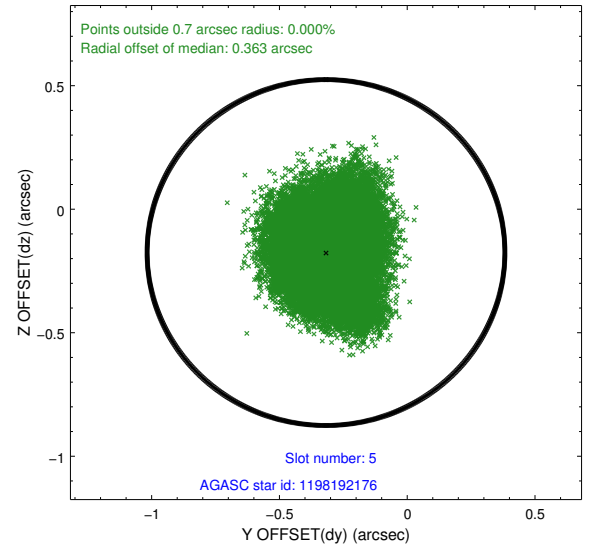
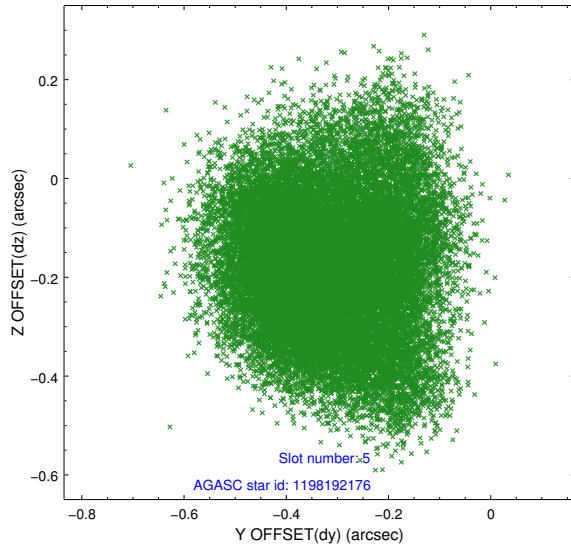
2.4.1 Slot 3



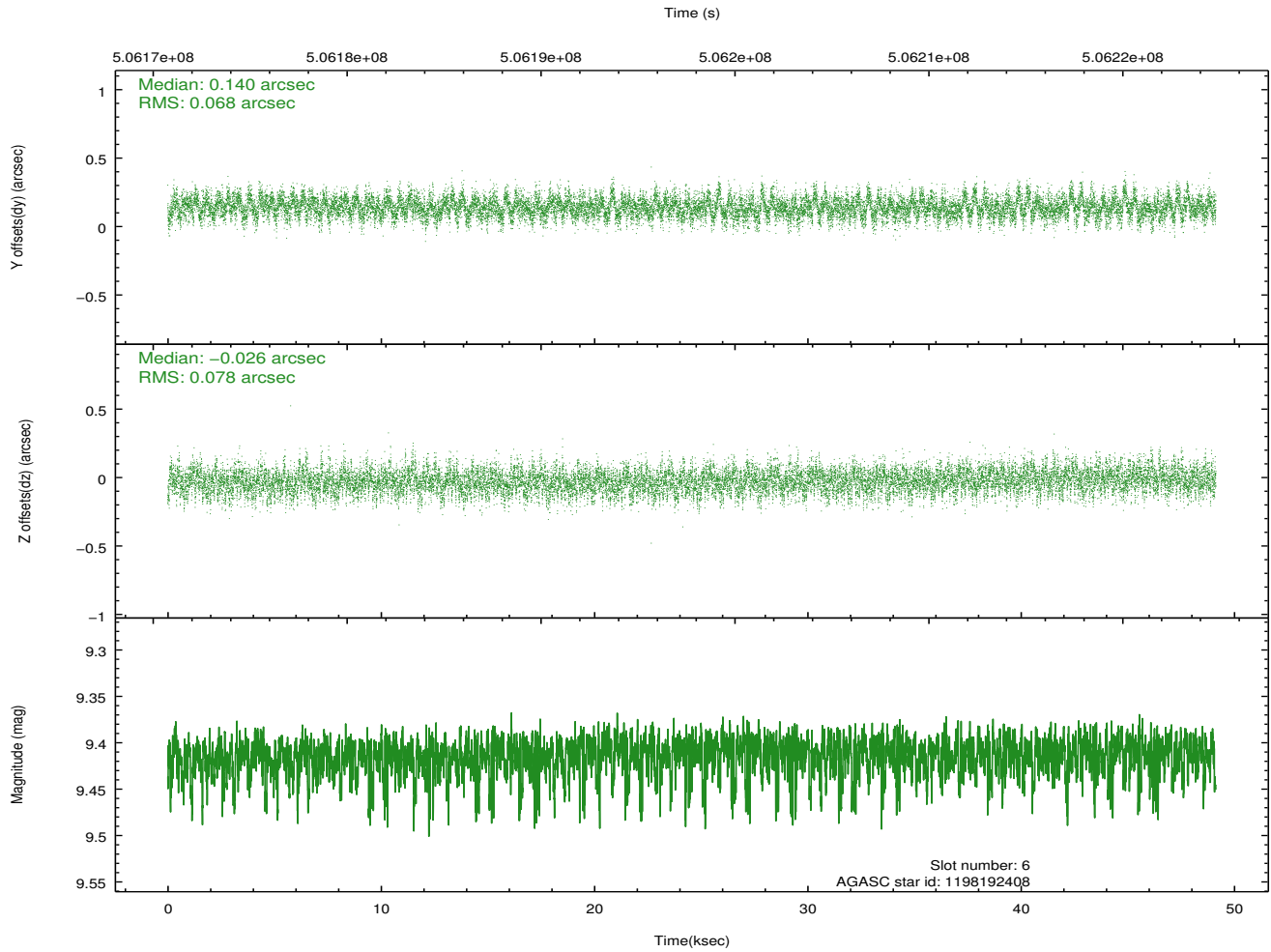
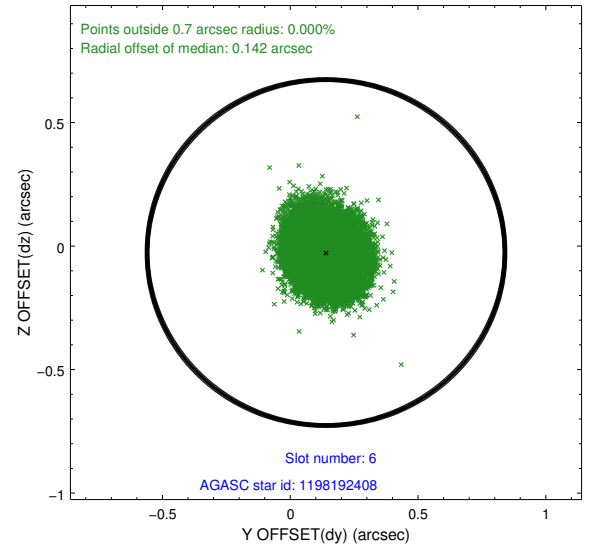
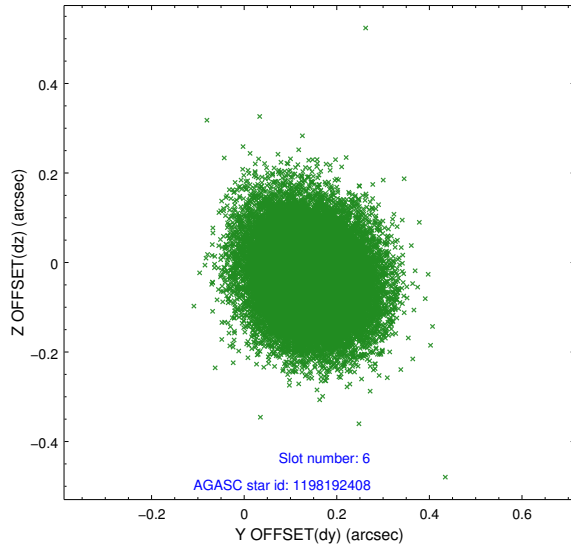
2.4.2 Slot 4



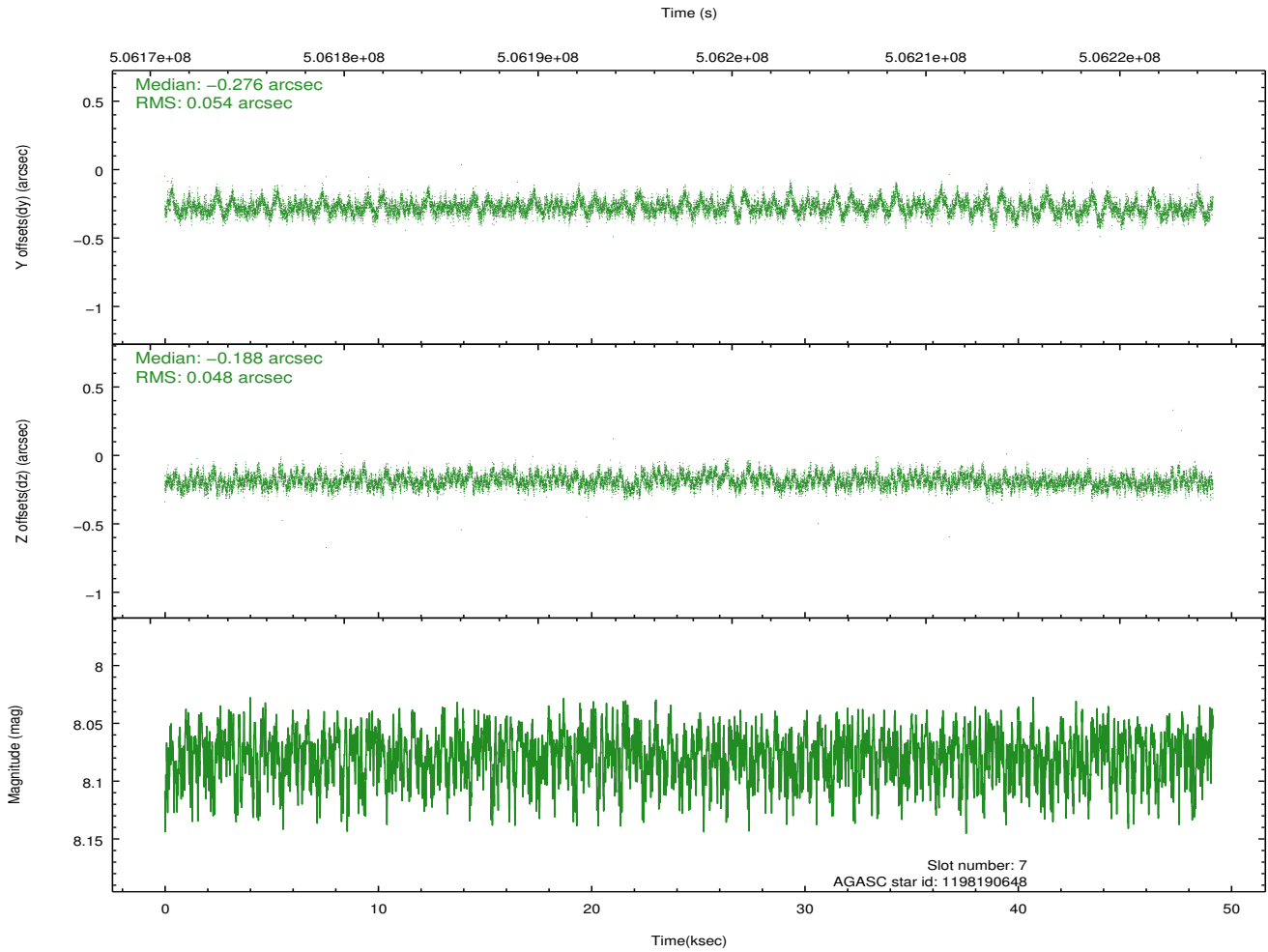
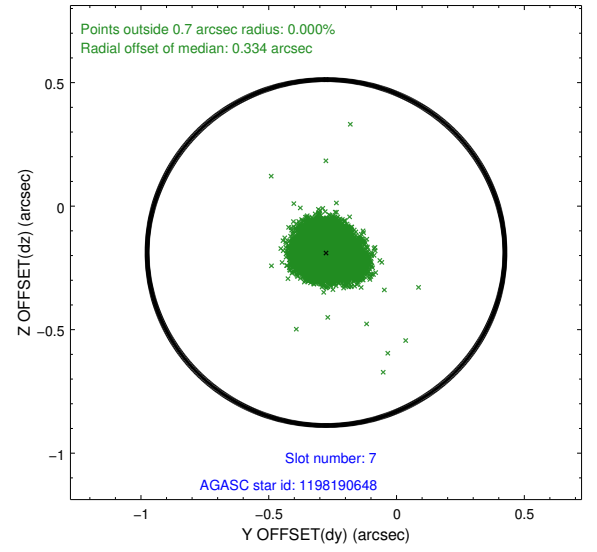
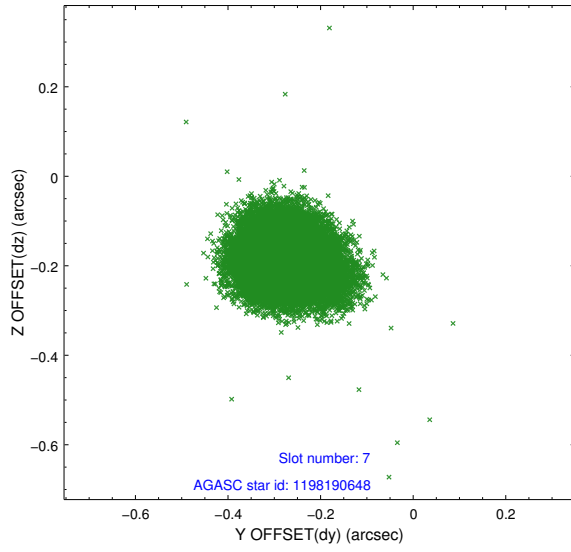
2.4.3 Slot 5



2.4.4 Slot 6

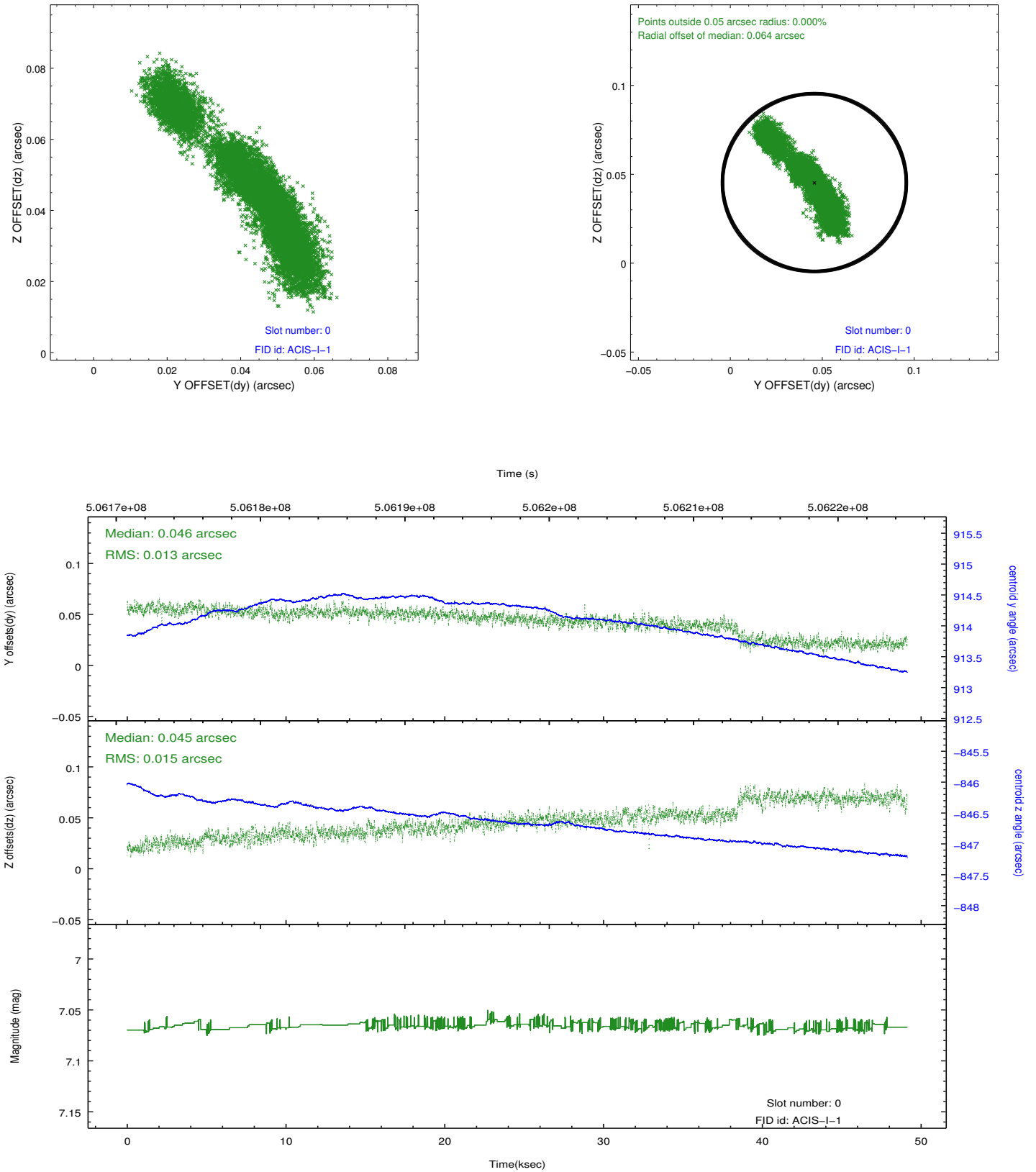


2.4.5 Slot 7

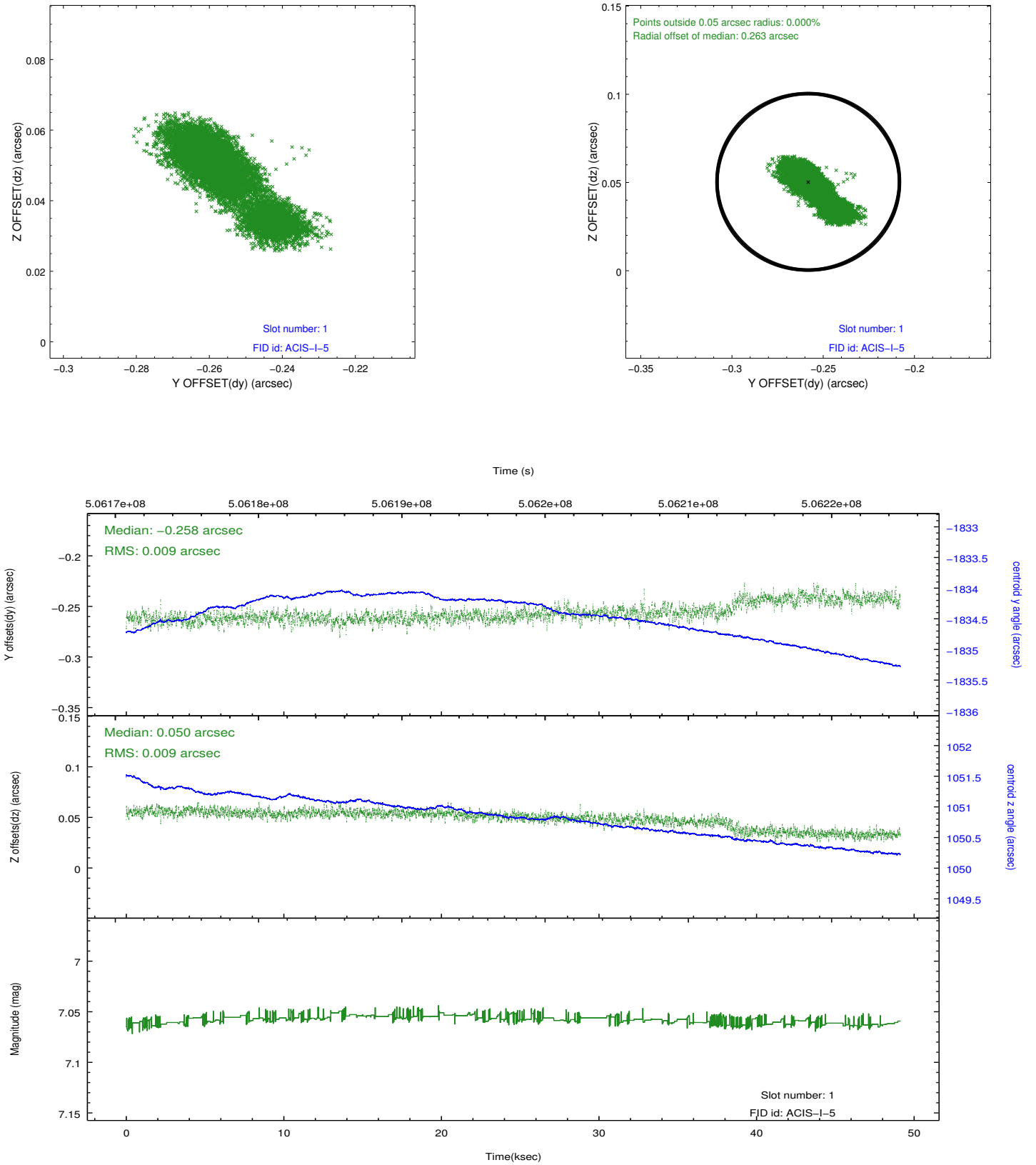


2.5 FID Slots

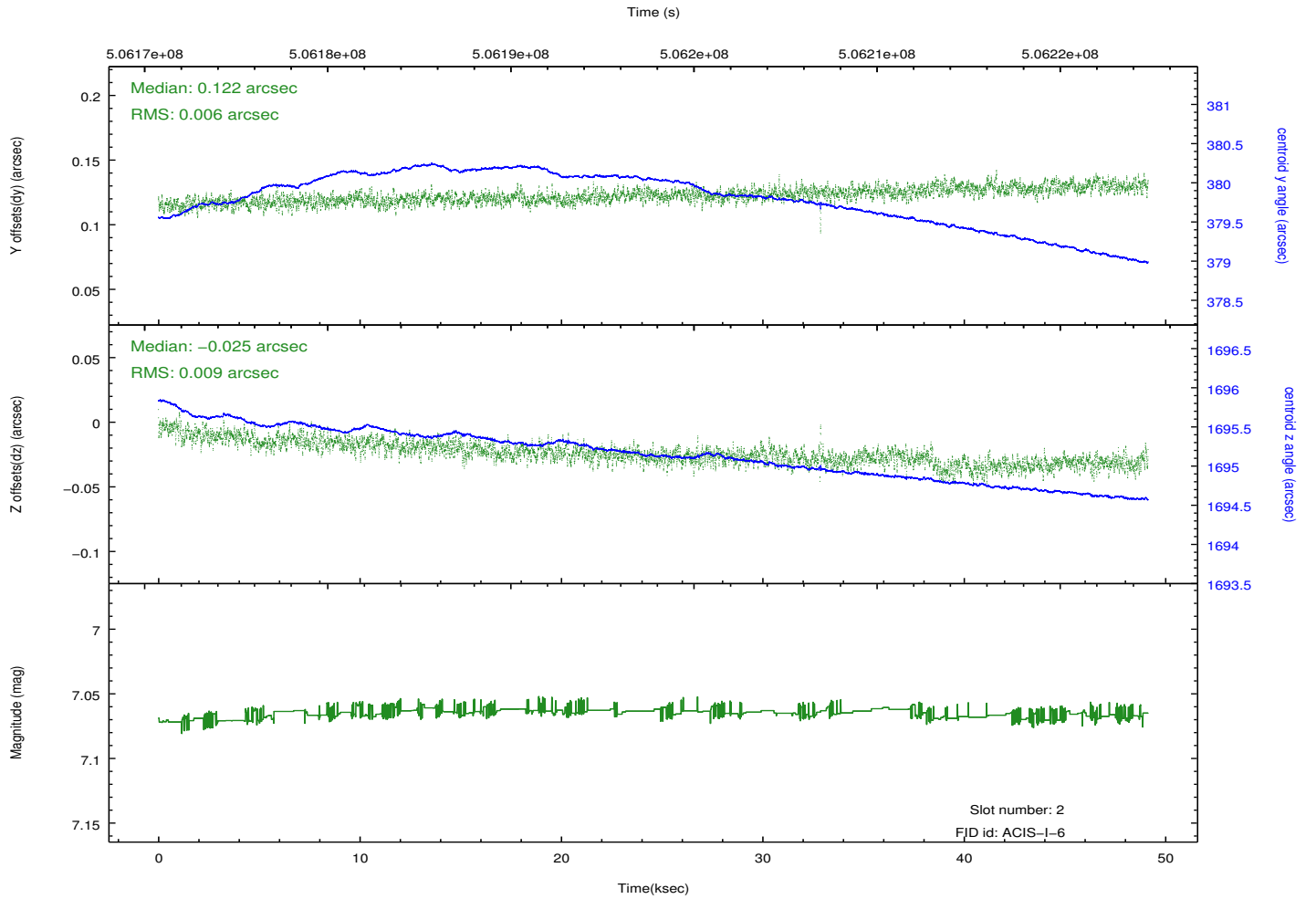
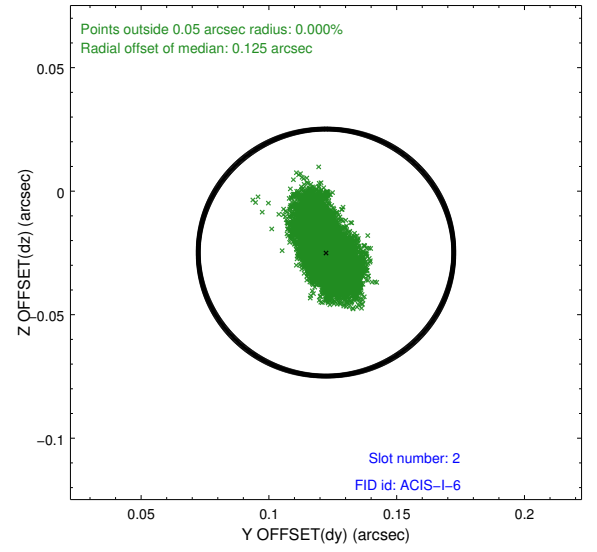
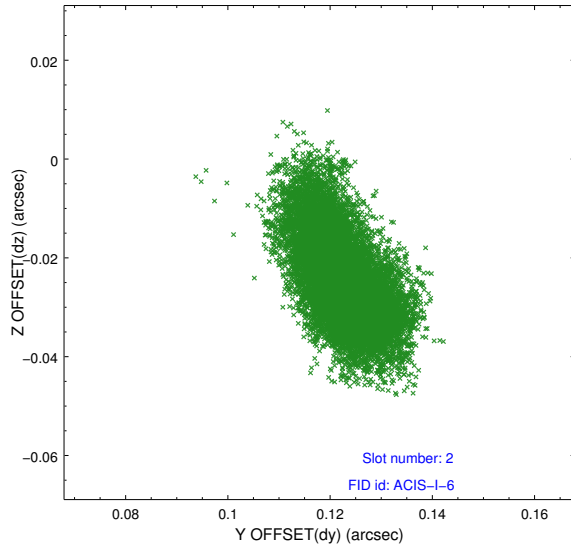
2.5.1 Slot 0



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)	2014.12.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	49.069087678552

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.