

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 18927 - L2 Version 2
Chandra X-Ray Center

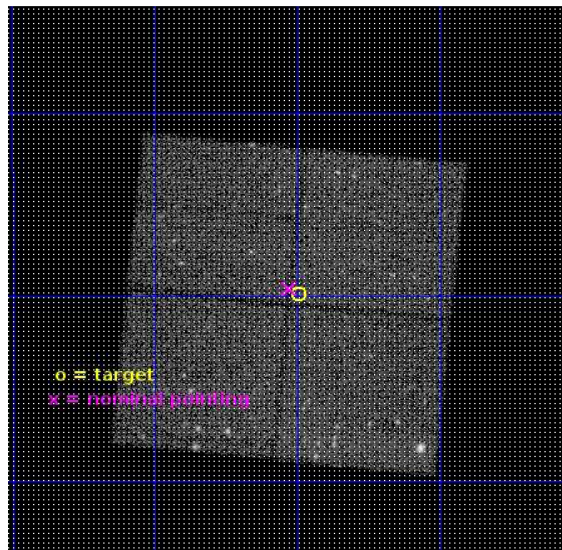
L2 Processing Date : Dec 18 2017

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 2	15
A	Summary	16
A.1	Status	16
A.2	Comments	16

1 Front

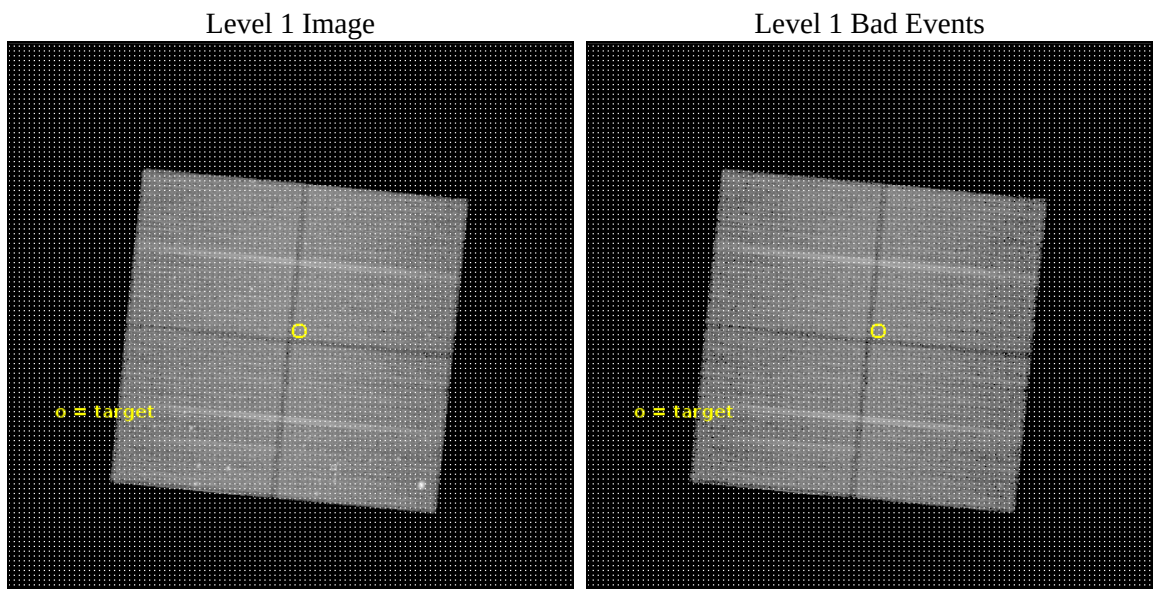
seq_num	201120	Sequence number
obs_id	18927	Observation id
title	Definitive X-Ray Detection of the Class 0 Protostar HOPS 383	Propo
observer	Dr Nicolas Grosso	Principal investigator
object	HOPS 383	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.874167	Observer's specified target RA [deg]
dec_targ	-4.997778	Observer's specified target Dec [deg]
ra_nom	83.882459975287	Nominal RA [deg]
dec_nom	-4.9924822752914	Nominal Dec [deg]
roll_nom	5.7094164565264	Nominal Roll [deg]
revision	2	Processing version of data
ontime	37903.659231424	Sum of GTIs [s]
livetime	37408.420019298	Livetime [s]
ontime0	37906.705818653	Sum of GTIs [s]
ontime1	37903.605758309	Sum of GTIs [s]
ontime2	37906.78789866	Sum of GTIs [s]
ontime3	37903.659231424	Sum of GTIs [s]
l2events	122243	Number of level 2 events



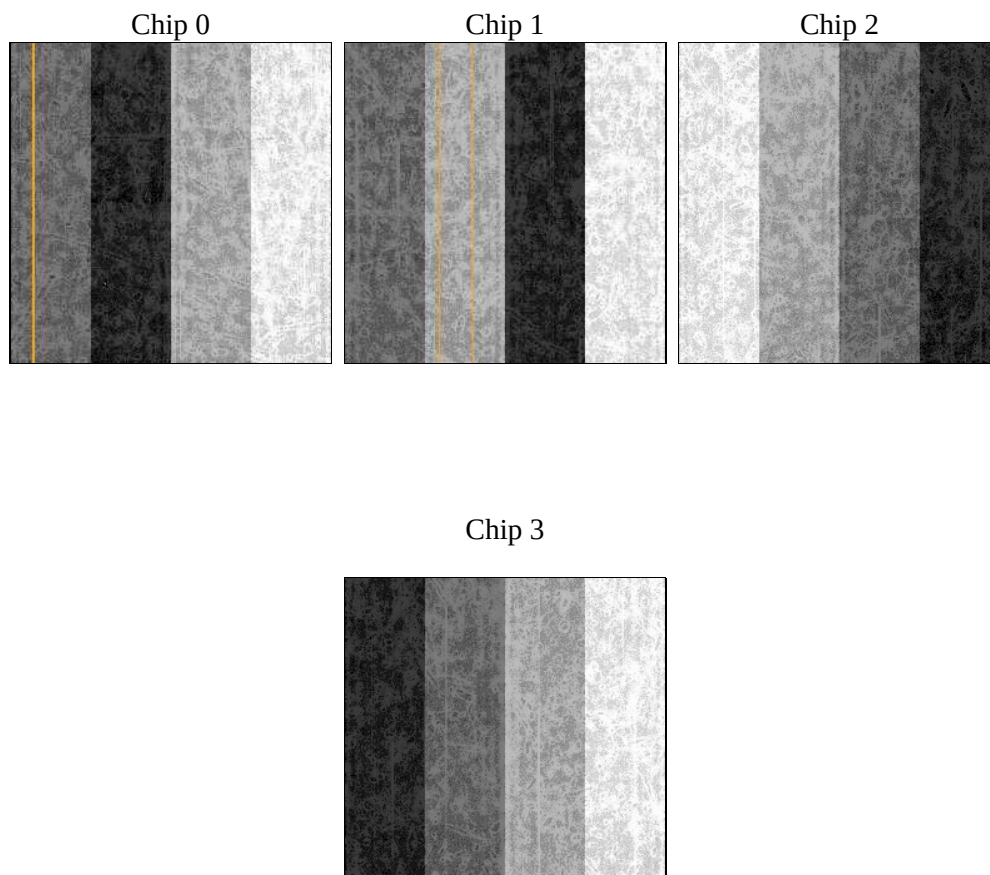
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	38000.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	37903.659231424	Sum of GTIs [s]
caldsver	4.7.7	 	ontime0	37906.705818653	Sum of GTIs [s]
date	2017-12-18T17:52:35	Date and time of file creation	ontime1	37903.605758309	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	37906.78789866	Sum of GTIs [s]
			ontime3	37903.659231424	Sum of GTIs [s]
			l1events	1079843	Number of level 1 events

2.1.4 Events

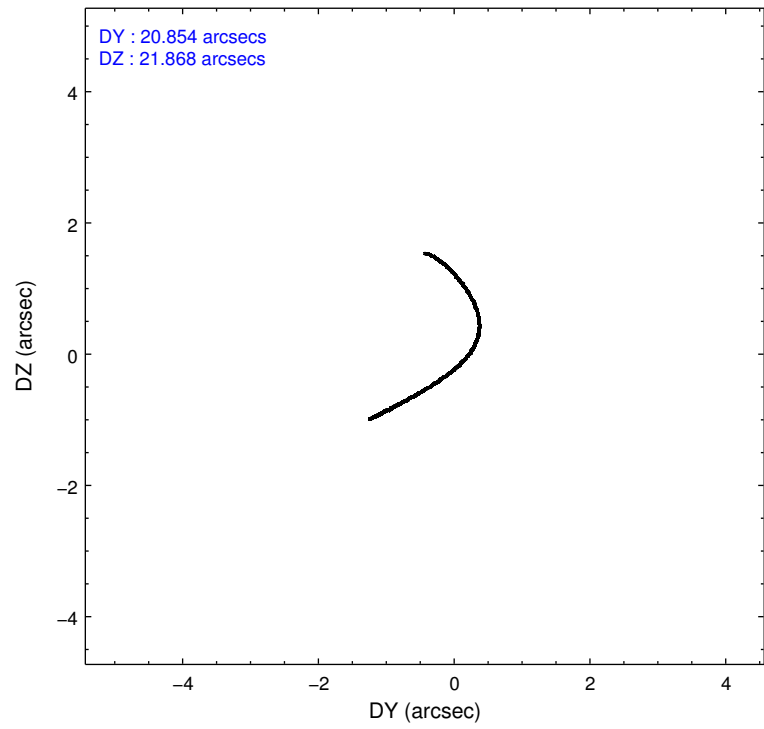
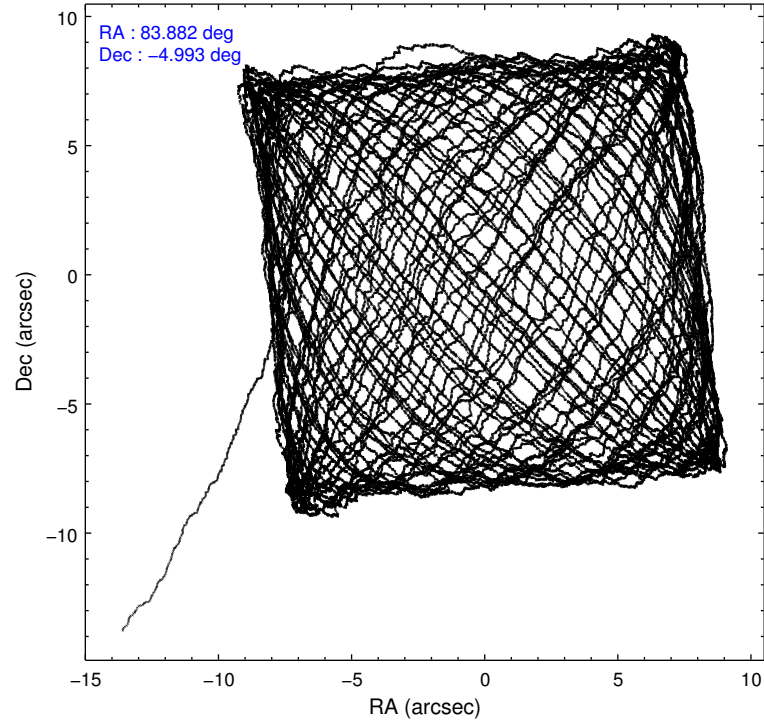
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	257761	272086	282530	267466
rejected events	223330	226980	250167	235537
rejected %	86%	83%	88%	88%

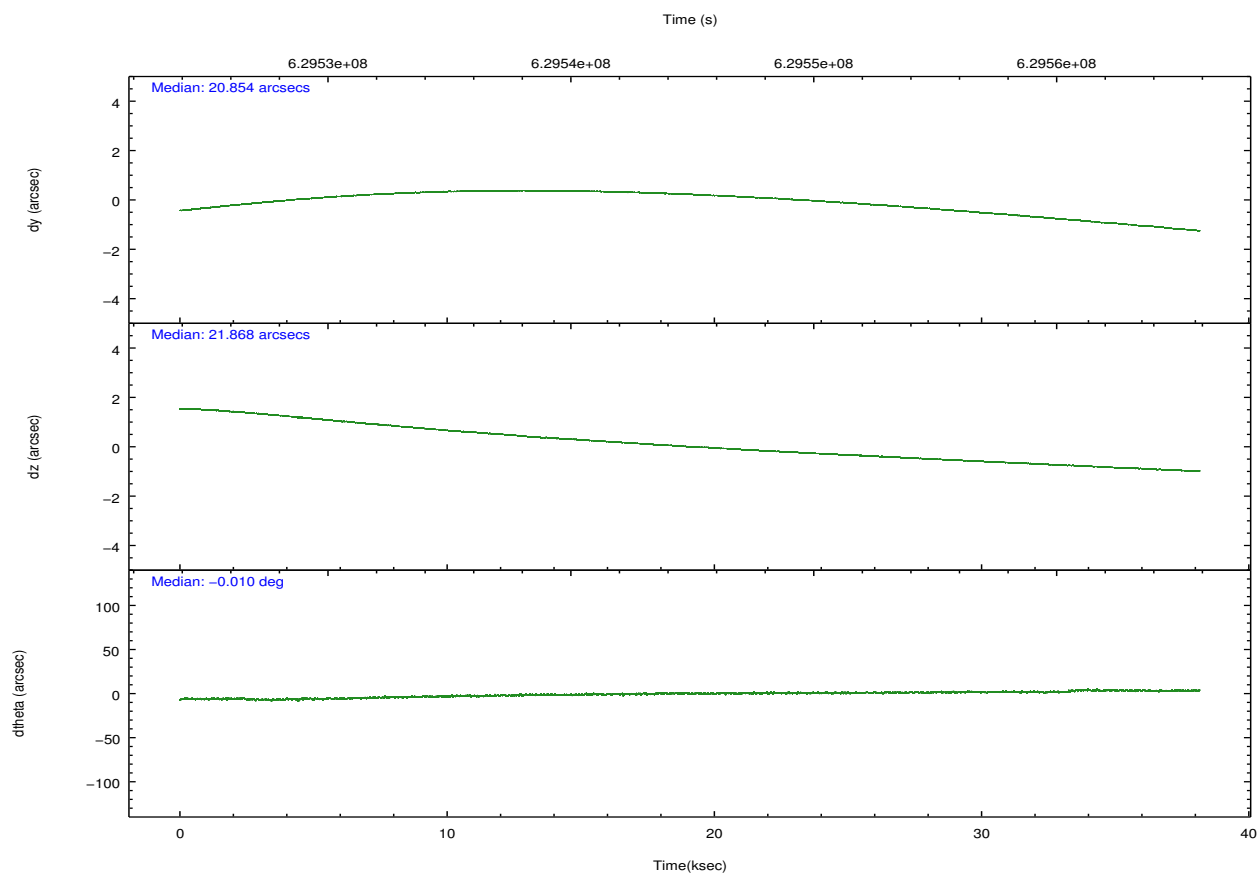
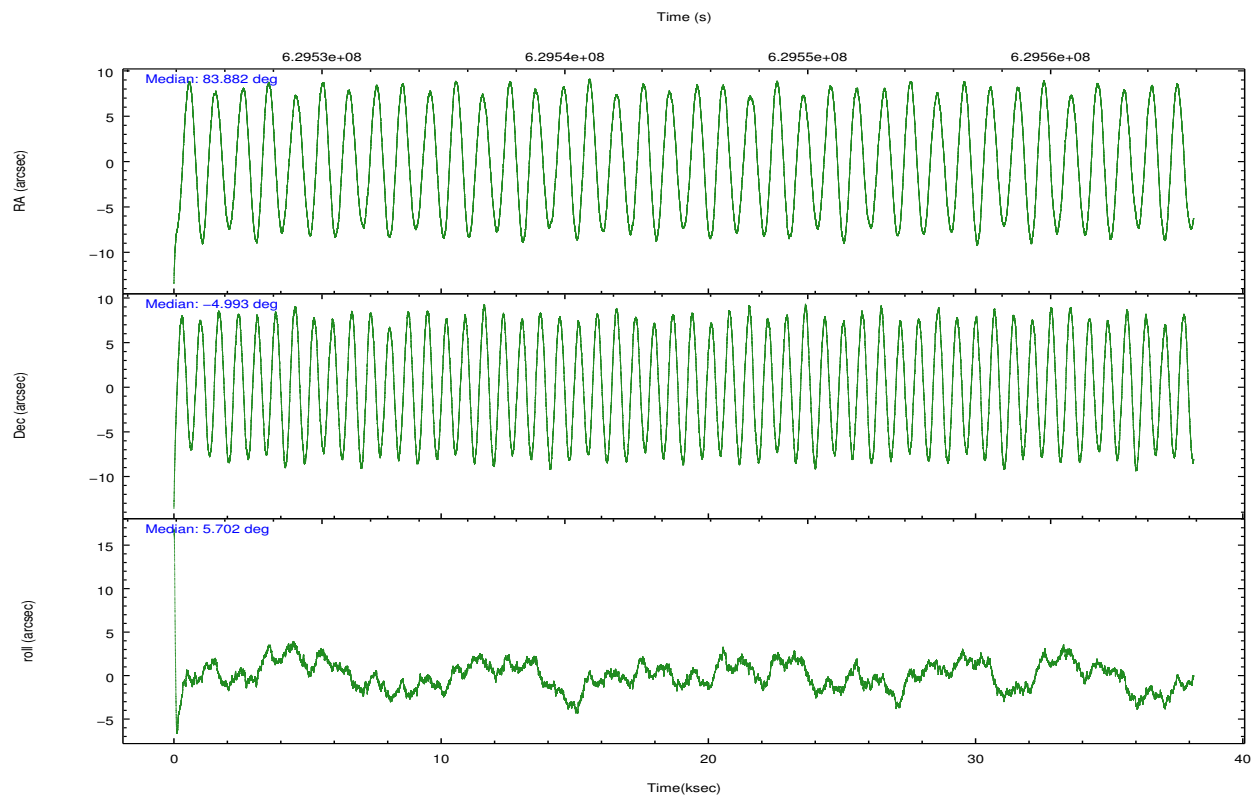
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	13751	20770	12719	12807
	5%	7%	4%	4%
grade 1 events	151	194	174	166
	0%	0%	0%	0%
grade 2 events	8085	9534	7682	6642
	3%	3%	2%	2%
grade 3 events	3177	3433	3051	3197
	1%	1%	1%	1%
grade 4 events	2953	3449	3015	3129
	1%	1%	1%	1%
grade 5 events	11337	12037	10871	13024
	4%	4%	3%	4%
grade 6 events	6467	7927	5901	6157
	2%	2%	2%	2%
grade 7 events	211840	214742	239117	222344
	82%	78%	84%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	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	83.860032	83.88245997528654	Subarray requested	NONE	NONE
[deg] Pointing Dec	-5.008680	-4.992482275291409	Alternating exposures requested	N	N
[deg] Pointing Roll	5.498768	5.709416456526435	[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)	629525995.184000	629524848.1064			
Observation start date	2017-12-13T04:18:46	2017-12-13T04:00:48			
[s] Observation end time (MET)	629563995.184000	629564781.08375			
Observation end date	2017-12-13T14:52:06	2017-12-13T15:06:21			
Read mode	TIMED	TIMED			

2.3 Aspect



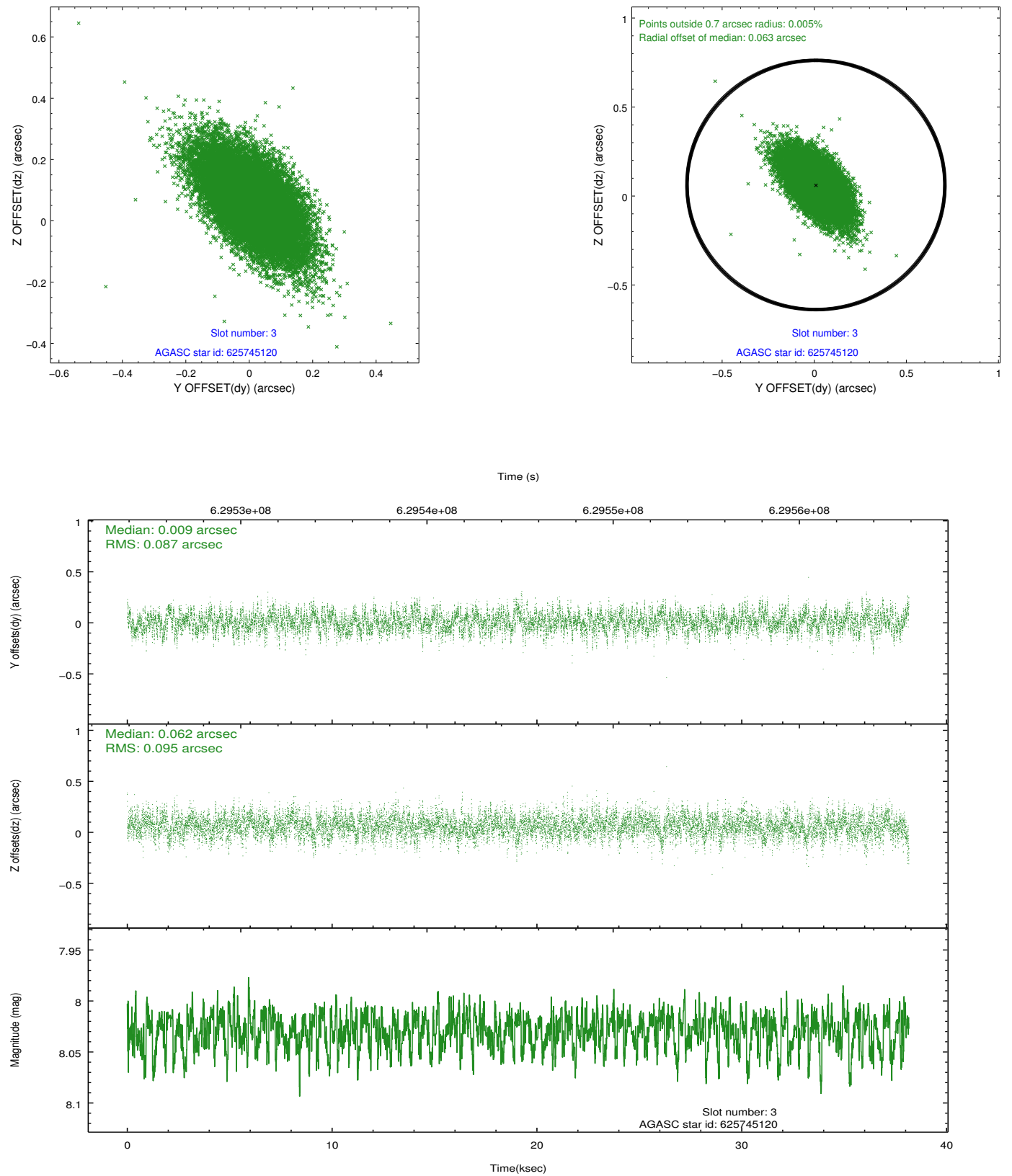


Slot Statistics

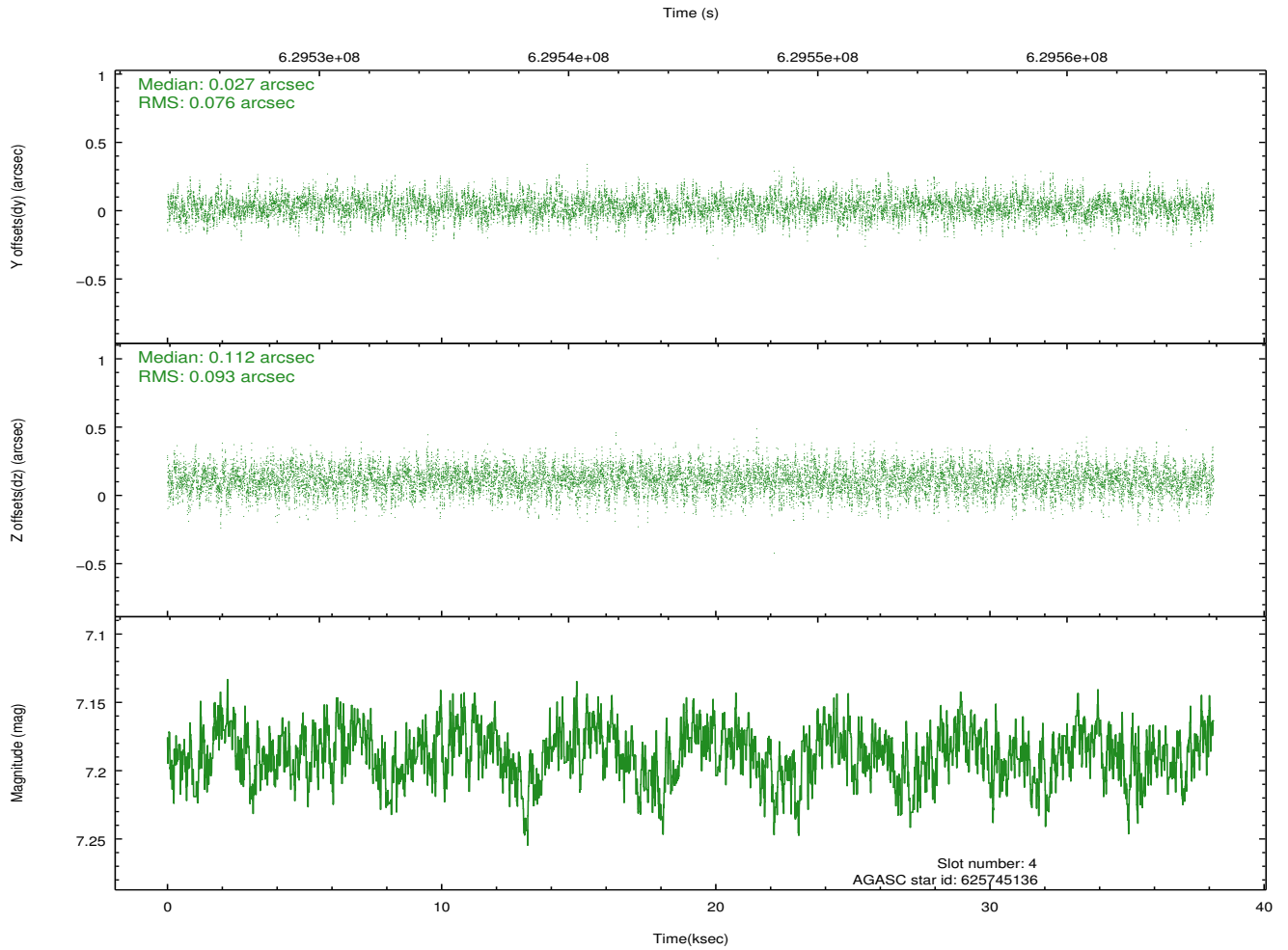
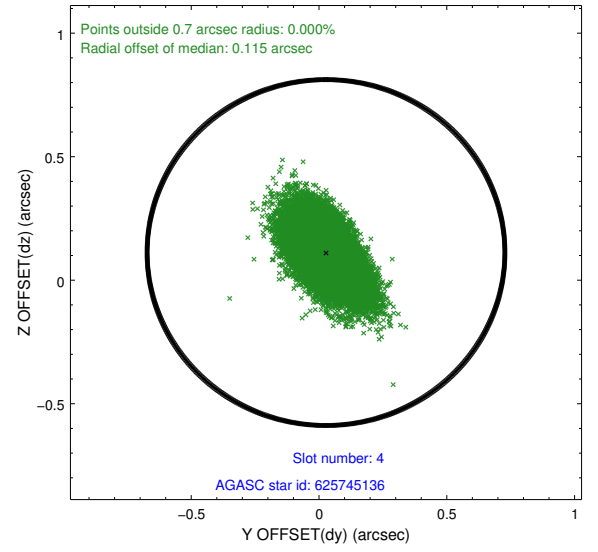
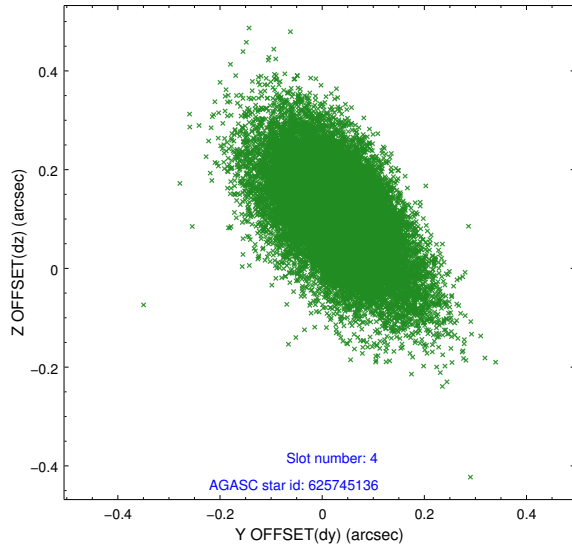
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.20	9308	0.159	-0.106	0.016	0.061	0.000000	0.000000	918.85	-845.74
1	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
2	FID		ACIS-I-5	7.20	9308	-0.220	0.156	0.016	0.061	0.000000	0.000000	-1829.87	1051.61
3	GUIDE	used	625745120	8.03	18612	0.009	0.062	0.131	0.233	83.237850	-4.566478	-2070.04	1797.52
4	GUIDE	used	625745136	7.19	18613	0.027	0.112	0.123	0.218	83.600341	-4.804339	-856.51	821.69
5	GUIDE	used	625874664	6.68	18616	-0.238	-0.310	0.113	0.204	84.472438	-4.814037	2253.77	486.17
6	GUIDE	used	625745064	8.06	18608	-0.022	-0.308	0.143	0.255	83.745849	-4.354262	-182.18	2384.15
7	GUIDE	used	626273040	7.11	18614	0.219	0.445	0.147	0.250	84.062610	-5.647920	502.73	-2359.55

2.4 Star Slots

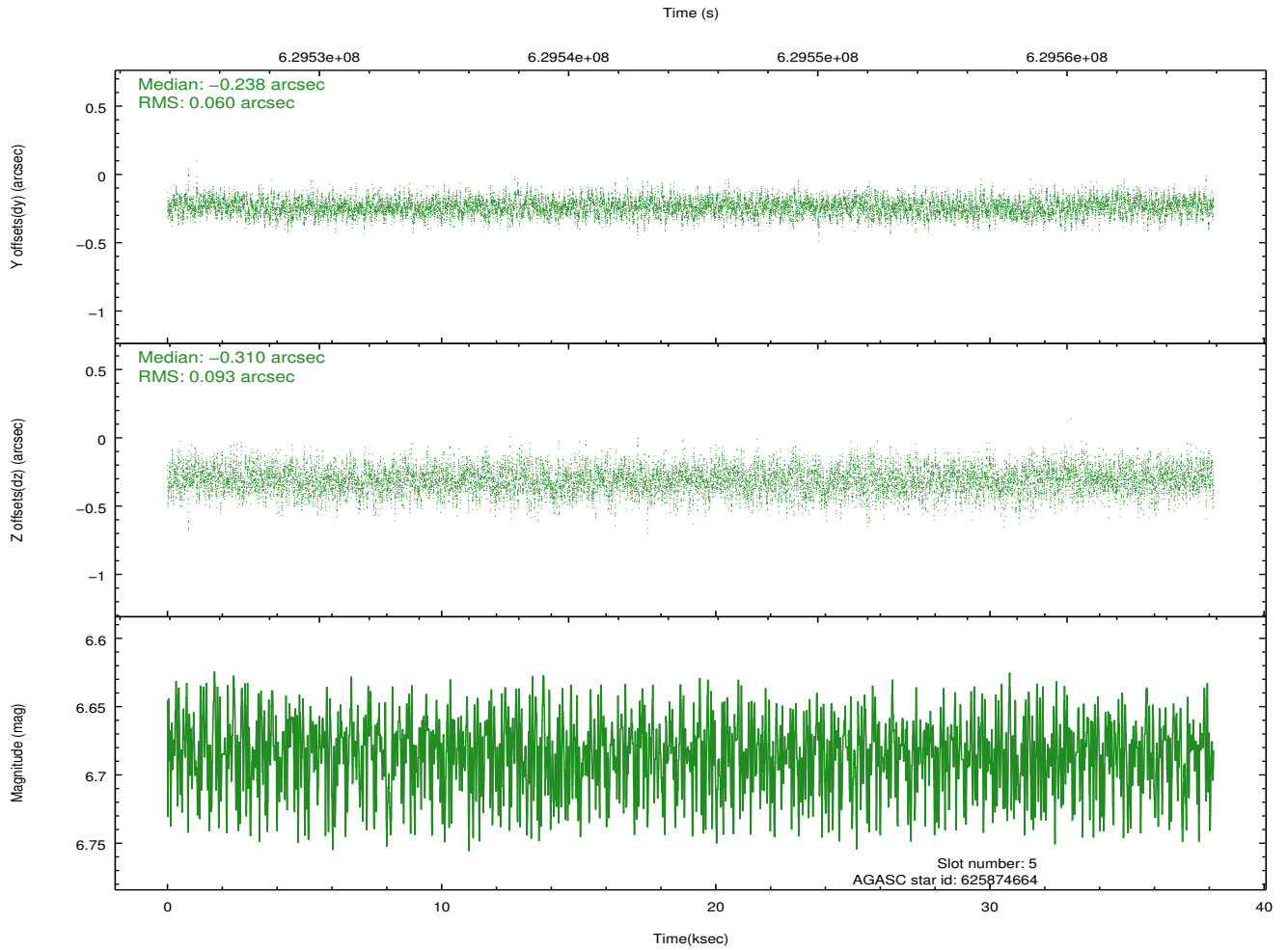
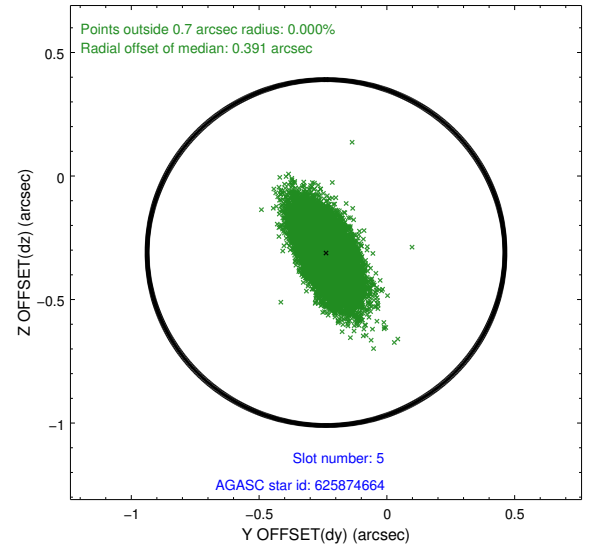
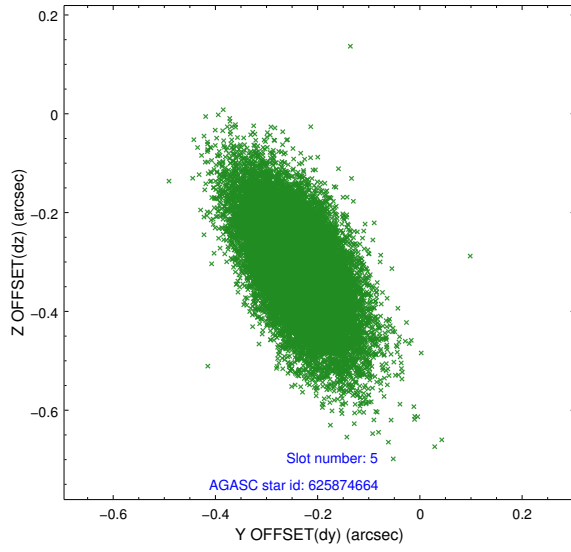
2.4.1 Slot 3



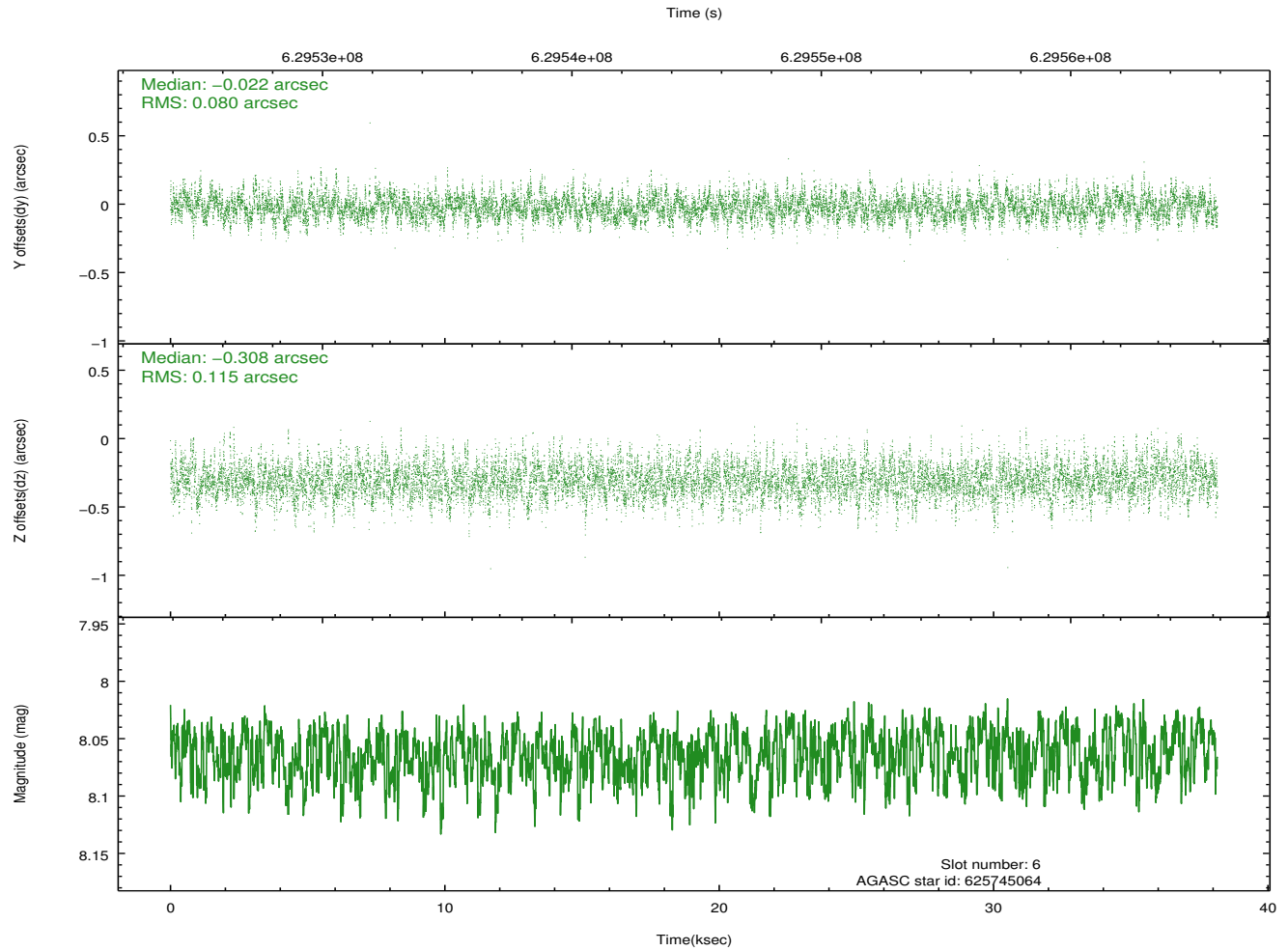
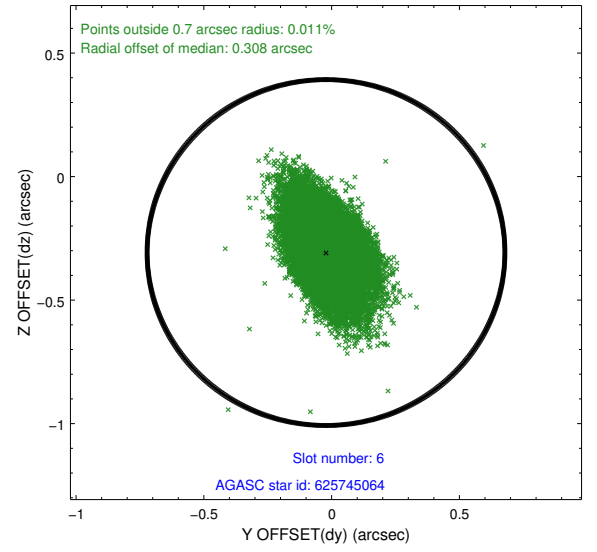
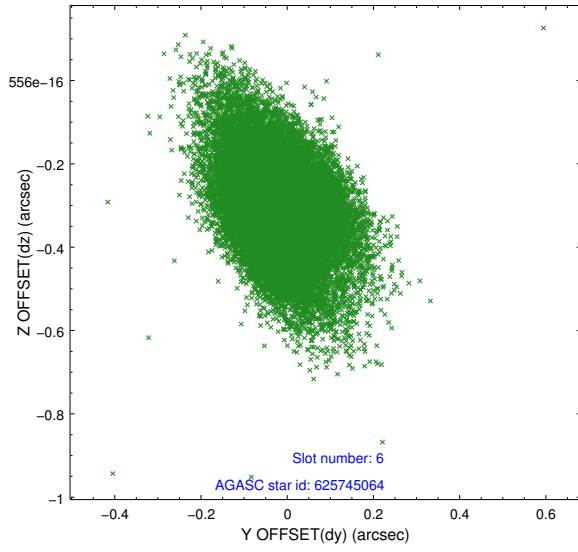
2.4.2 Slot 4



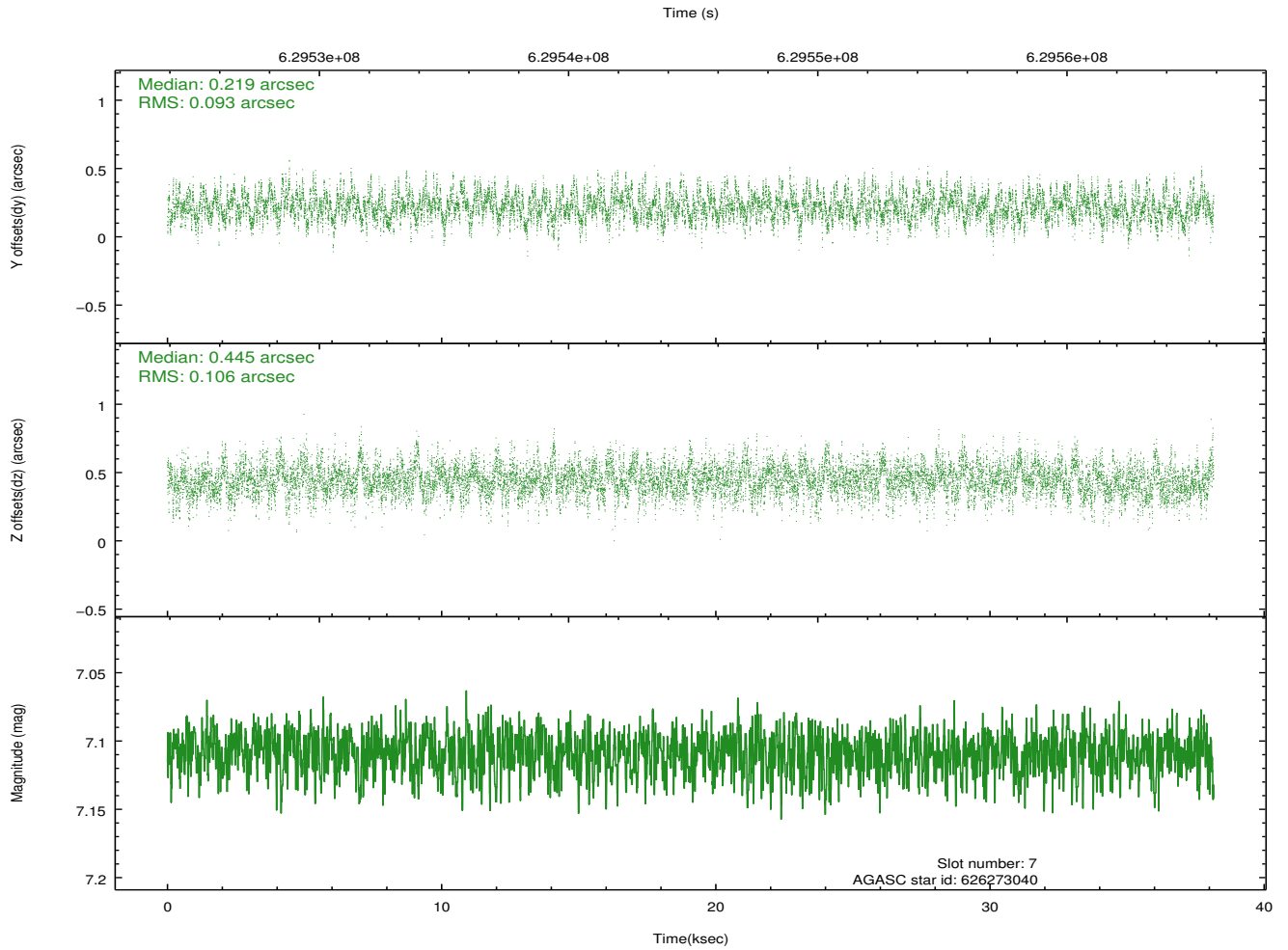
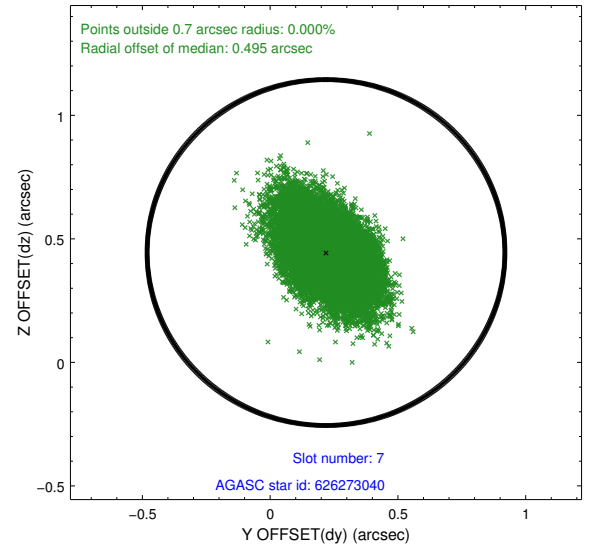
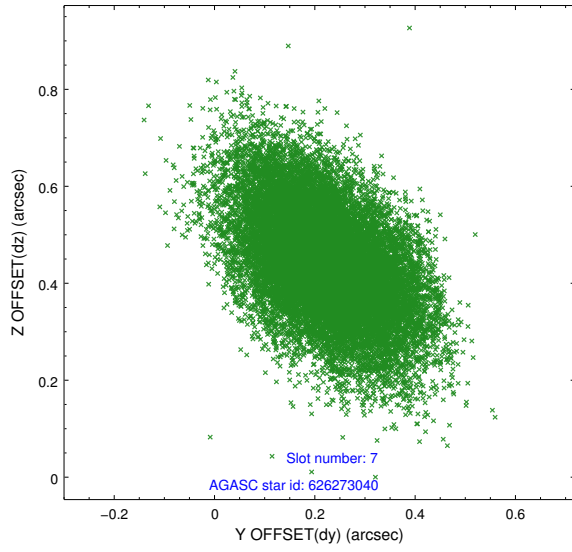
2.4.3 Slot 5



2.4.4 Slot 6

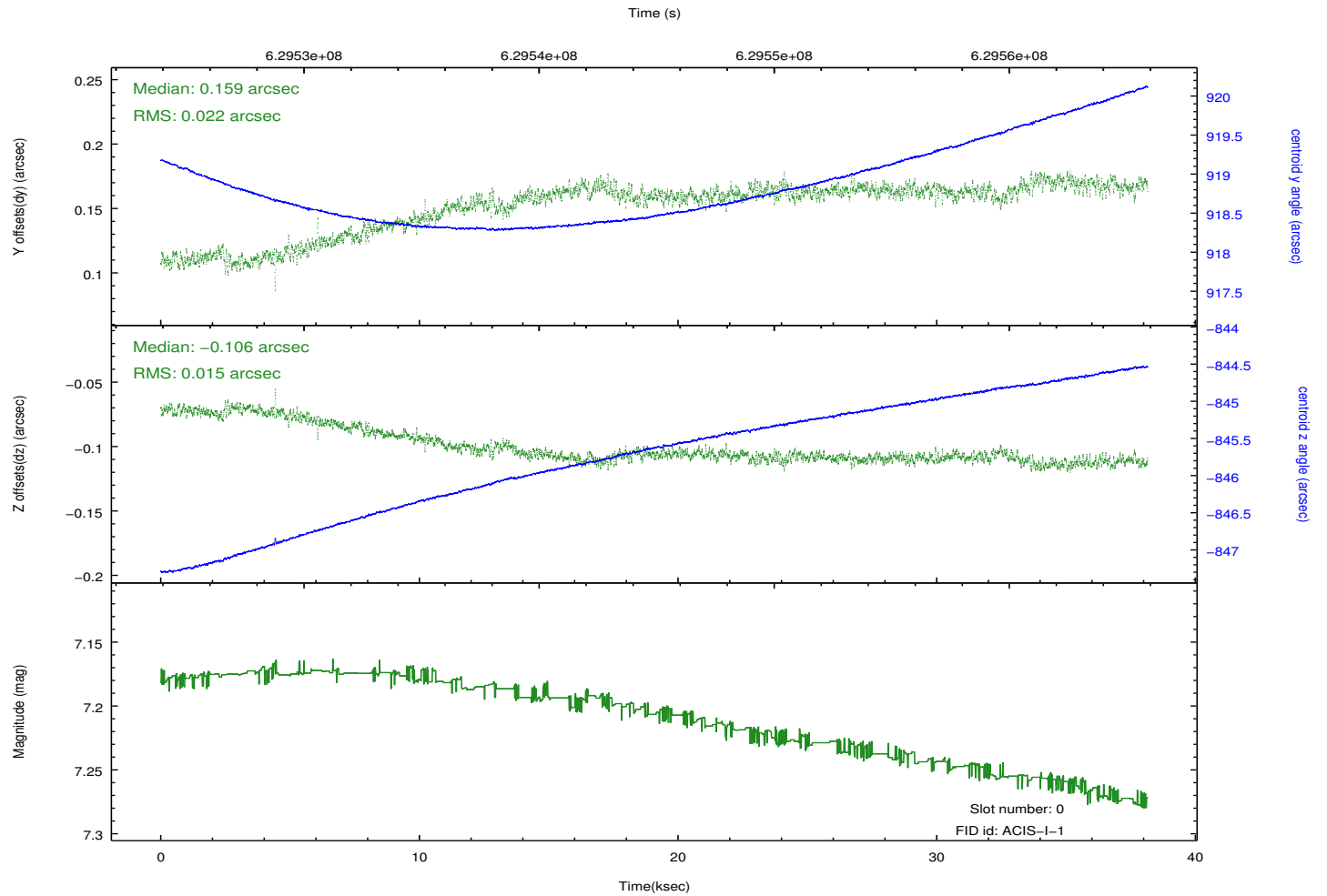
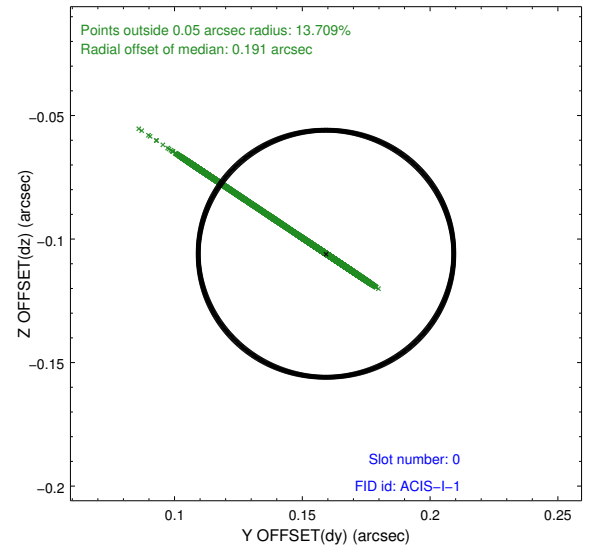
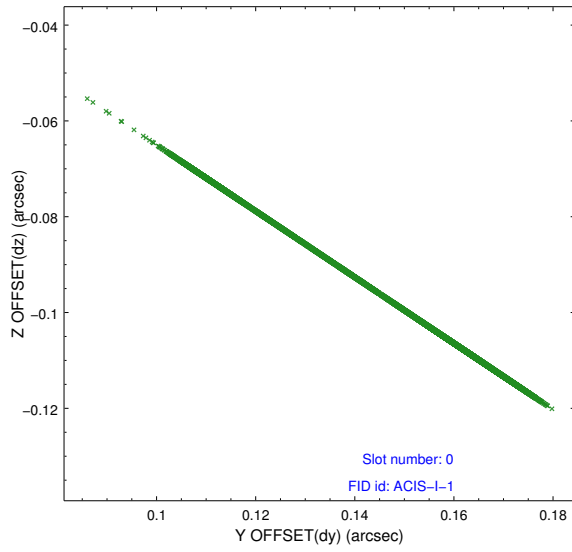


2.4.5 Slot 7

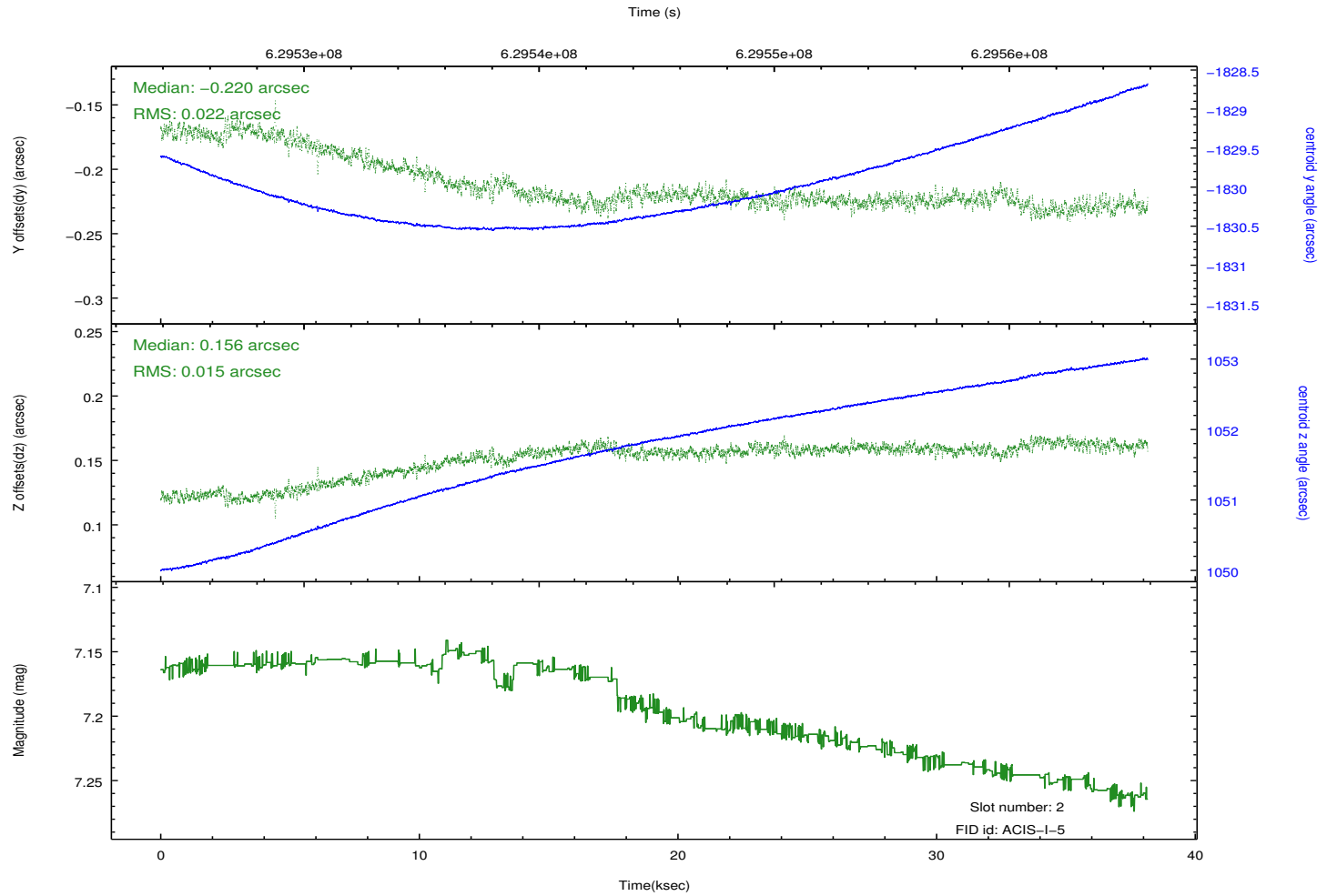
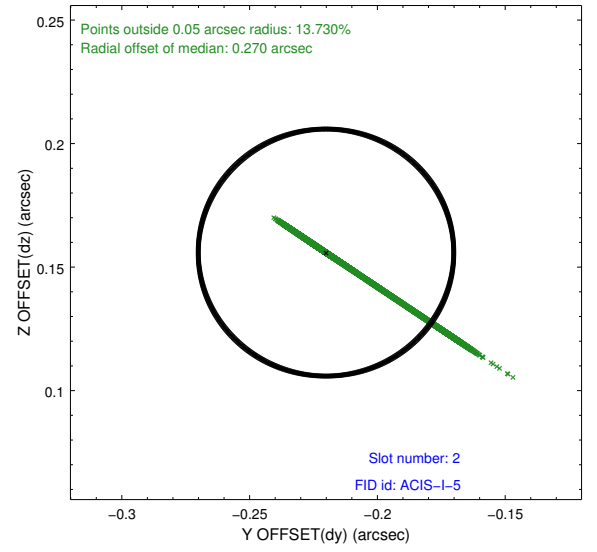
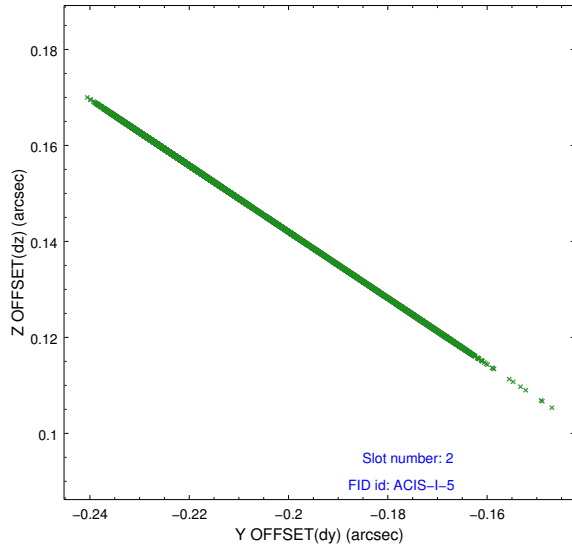


2.5 FID Slots

2.5.1 Slot 0



2.5.2 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2017.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	37.903659231424

A.2 Comments

Joint proposal with NOAO.

The fid light in slot 1 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this slot from the solution.