

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 21997 - L2 Version 1
Chandra X-Ray Center

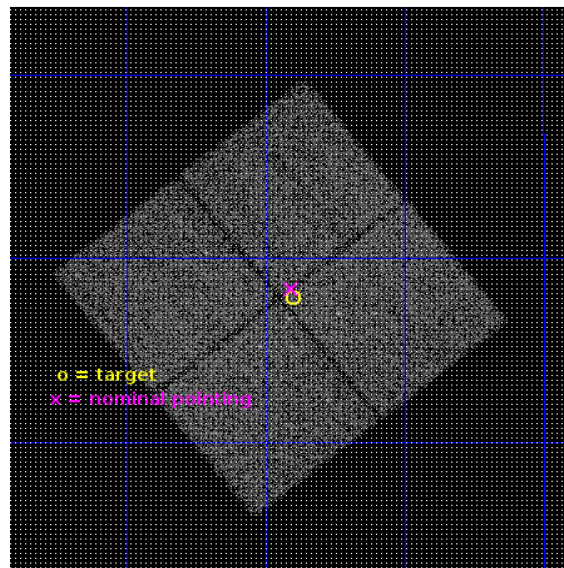
L2 Processing Date : Dec 14 2018

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1 Front

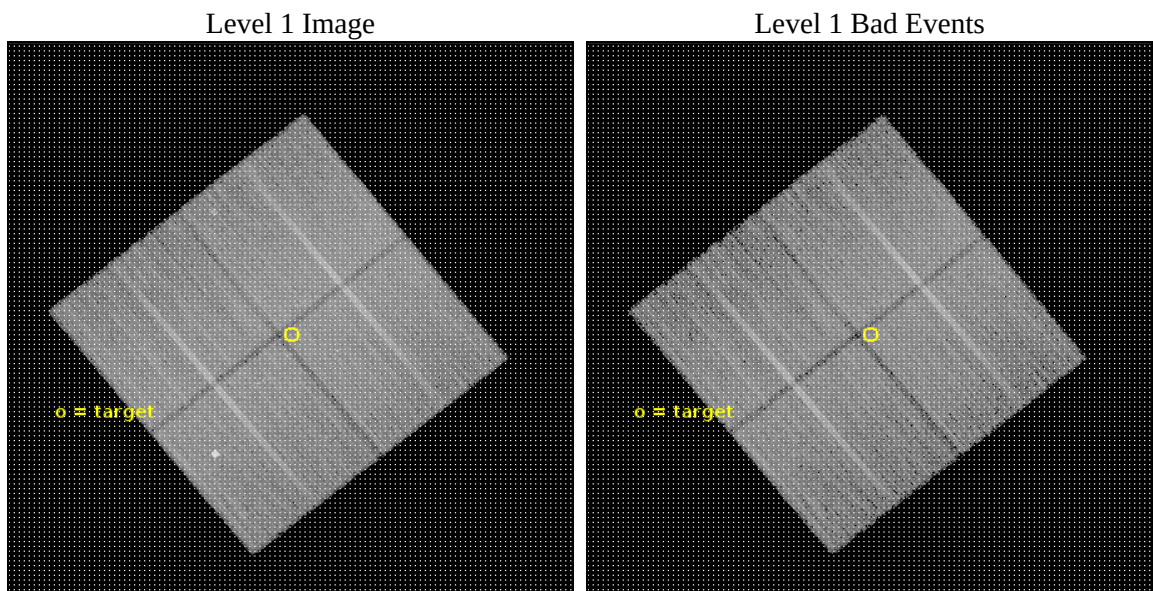
seq_num	201209	Sequence number
obs_id	21997	Observation id
title	Filling The Missing Link In Stellar Magnetic Activity Evolution (GTO part)	Proposal title
observer	Dr. Gordon Garmire	Principal investigator
object	NGC 2169	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	92.1	Observer's specified target RA [deg]
dec_targ	13.965	Observer's specified target Dec [deg]
ra_nom	92.101535642612	Nominal RA [deg]
dec_nom	13.972670781574	Nominal Dec [deg]
roll_nom	51.208317753791	Nominal Roll [deg]
revision	1	Processing version of data
ontime	33715.600259423	Sum of GTIs [s]
livetime	33275.08112097	Livetime [s]
ontime0	33712.459189057	Sum of GTIs [s]
ontime1	33715.600259423	Sum of GTIs [s]
ontime2	33715.600259423	Sum of GTIs [s]
ontime3	33715.600259423	Sum of GTIs [s]
l2events	86938	Number of level 2 events



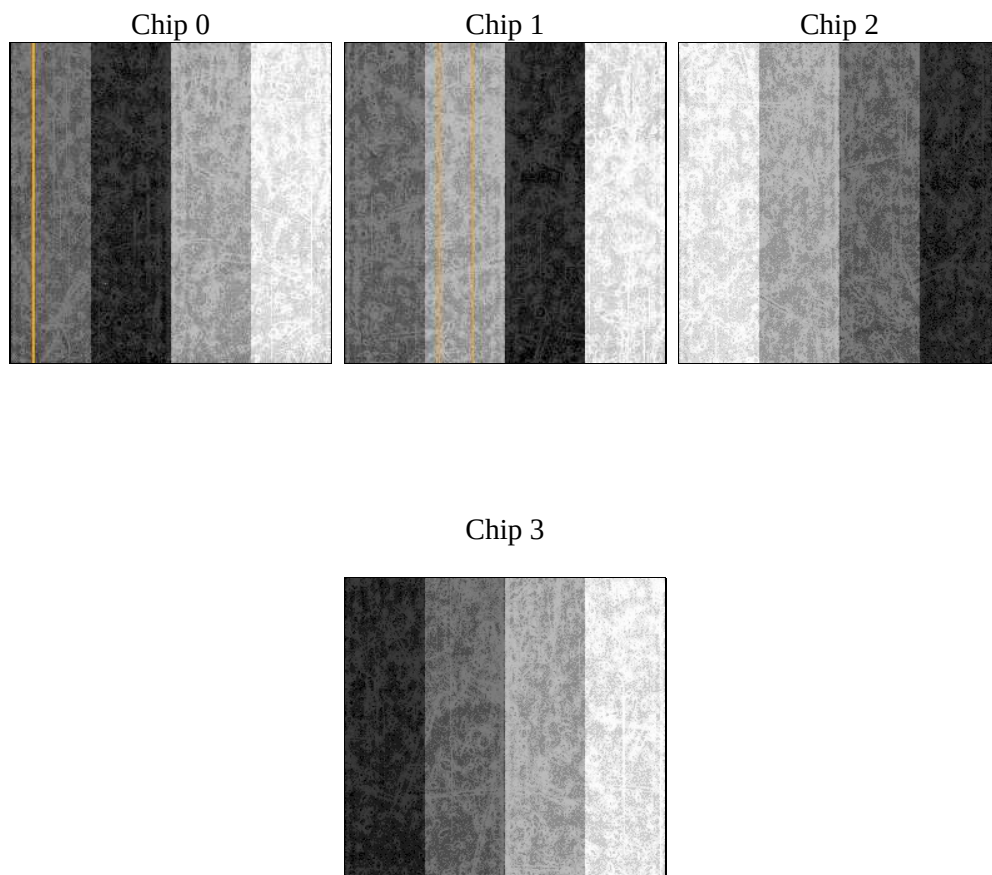
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	33639.448000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	33715.600259423	Sum of GTIs [s]
caldsver	4.8.2	 	ontime0	33712.459189057	Sum of GTIs [s]
date	2018-12-15T00:54:01	Date and time of file creation	ontime1	33715.600259423	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	33715.600259423	Sum of GTIs [s]
			ontime3	33715.600259423	Sum of GTIs [s]
			l1events	900320	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	216457	217947	239267	226649
rejected events	189706	185667	213131	201715
rejected %	87%	85%	89%	88%

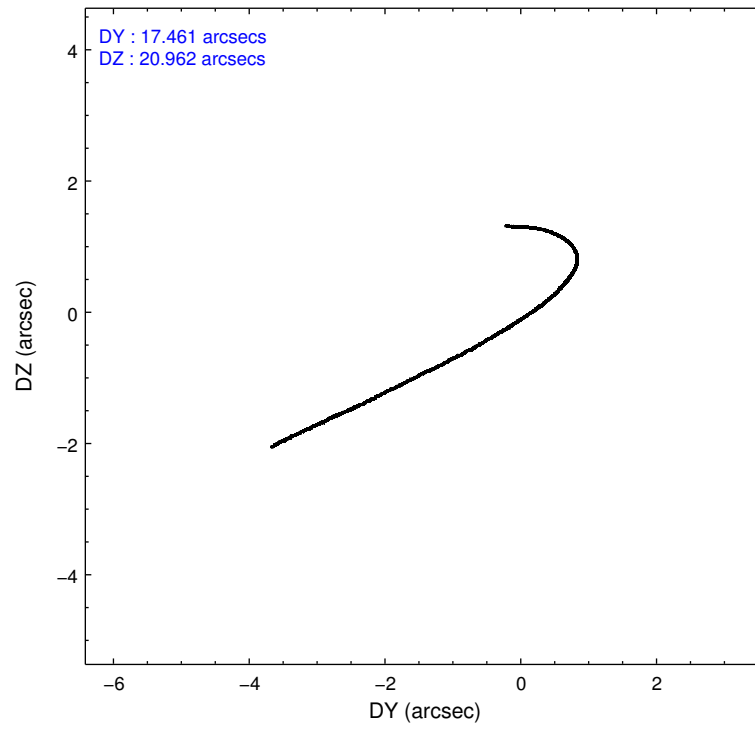
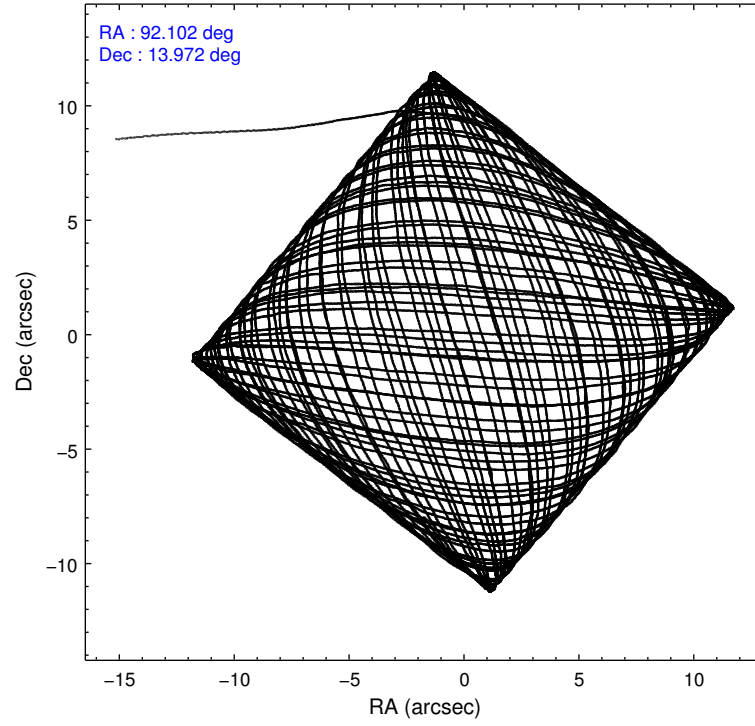
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	9692	14332	10087	9345
	4%	6%	4%	4%
grade 1 events	132	143	157	131
	0%	0%	0%	0%
grade 2 events	6759	6627	6253	5529
	3%	3%	2%	2%
grade 3 events	2727	2602	2478	2615
	1%	1%	1%	1%
grade 4 events	2429	2613	2550	2602
	1%	1%	1%	1%
grade 5 events	8679	9008	8303	9659
	4%	4%	3%	4%
grade 6 events	5147	6113	4770	4846
	2%	2%	1%	2%
grade 7 events	180892	176509	204669	191922
	83%	80%	85%	84%

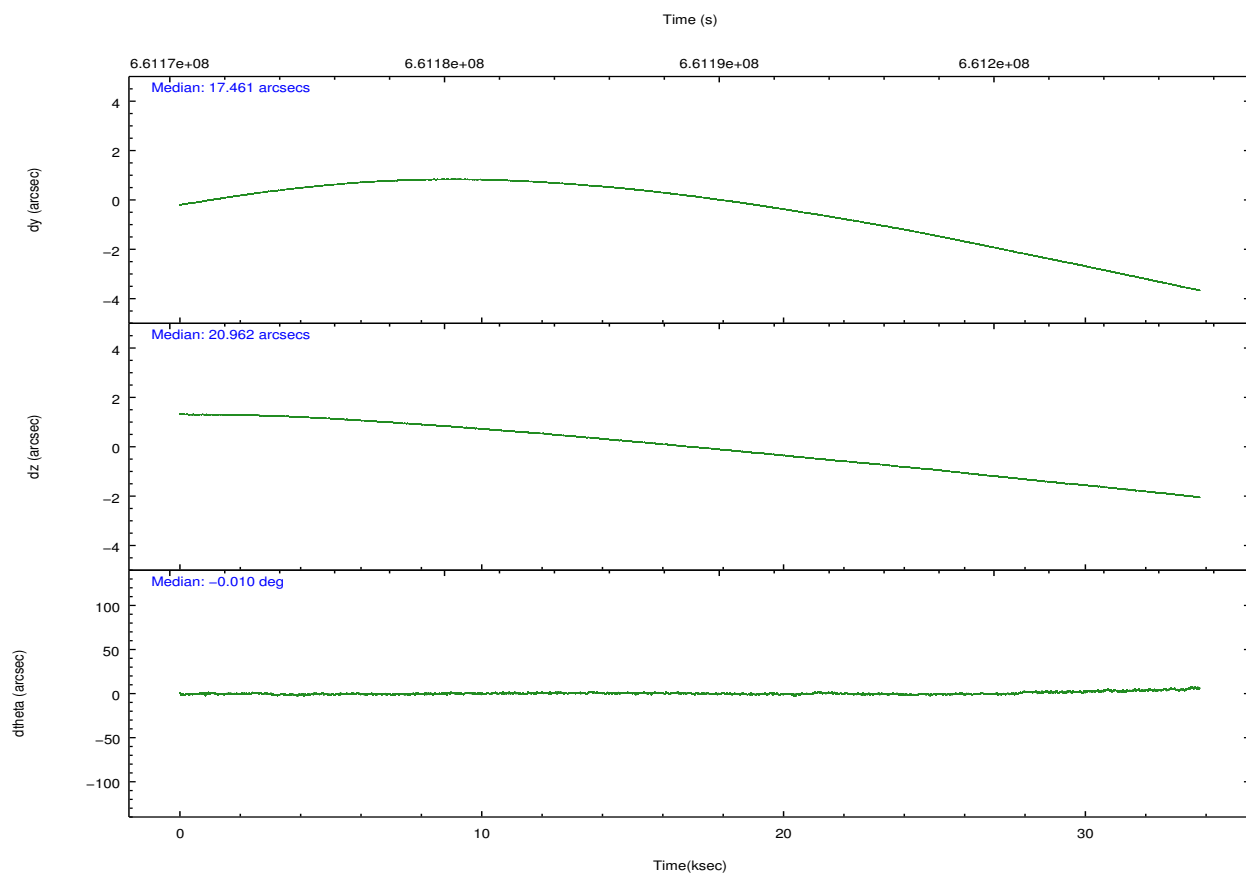
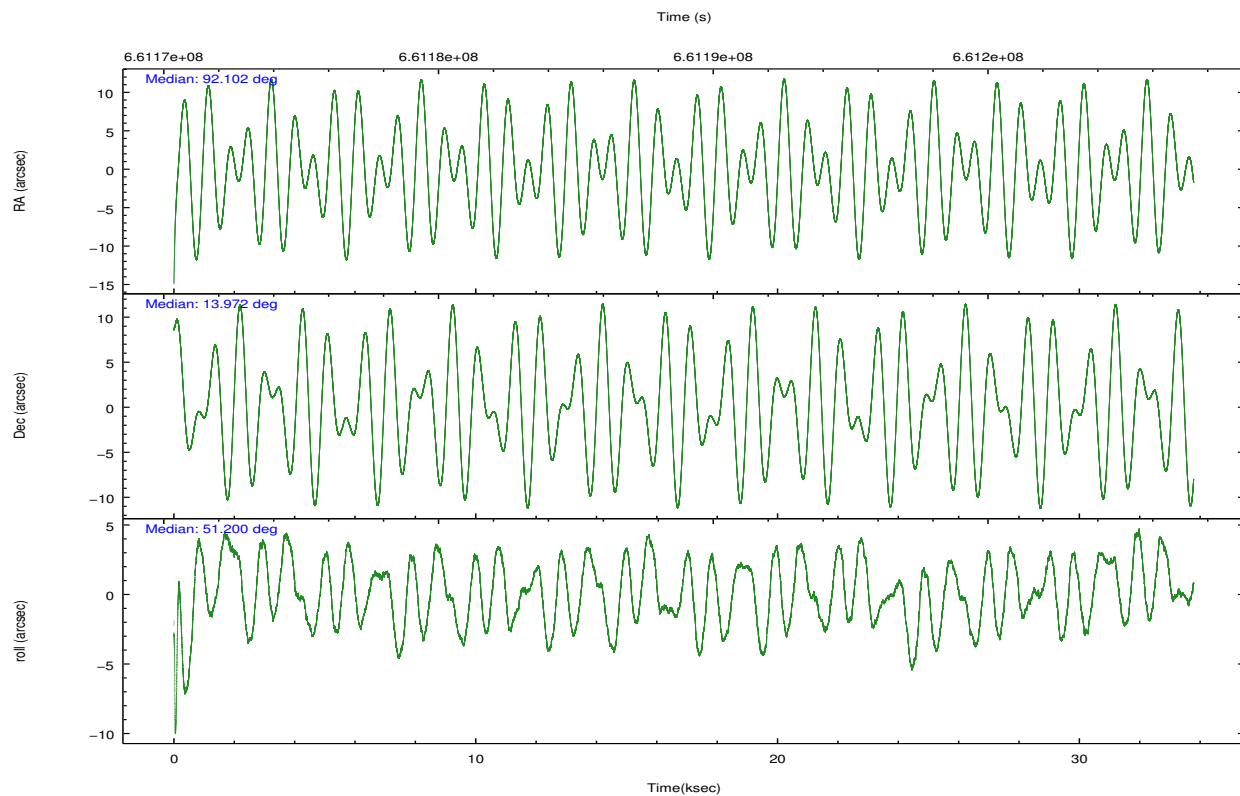
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-0123	ACIS-0123
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	92.097289	92.10153564261219
[deg] Pointing Dec	13.945372	13.97267078157433
[deg] Pointing Roll	51.000652	51.20831775379052
[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)	661172175.184000	661170963.48417
Observation start date	2018-12-14T10:55:06	2018-12-14T10:36:03
[s] Observation end time (MET)	661205814.184000	661206803.1238101
Observation end date	2018-12-14T20:15:45	2018-12-14T20:33:23
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

2.3 Aspect



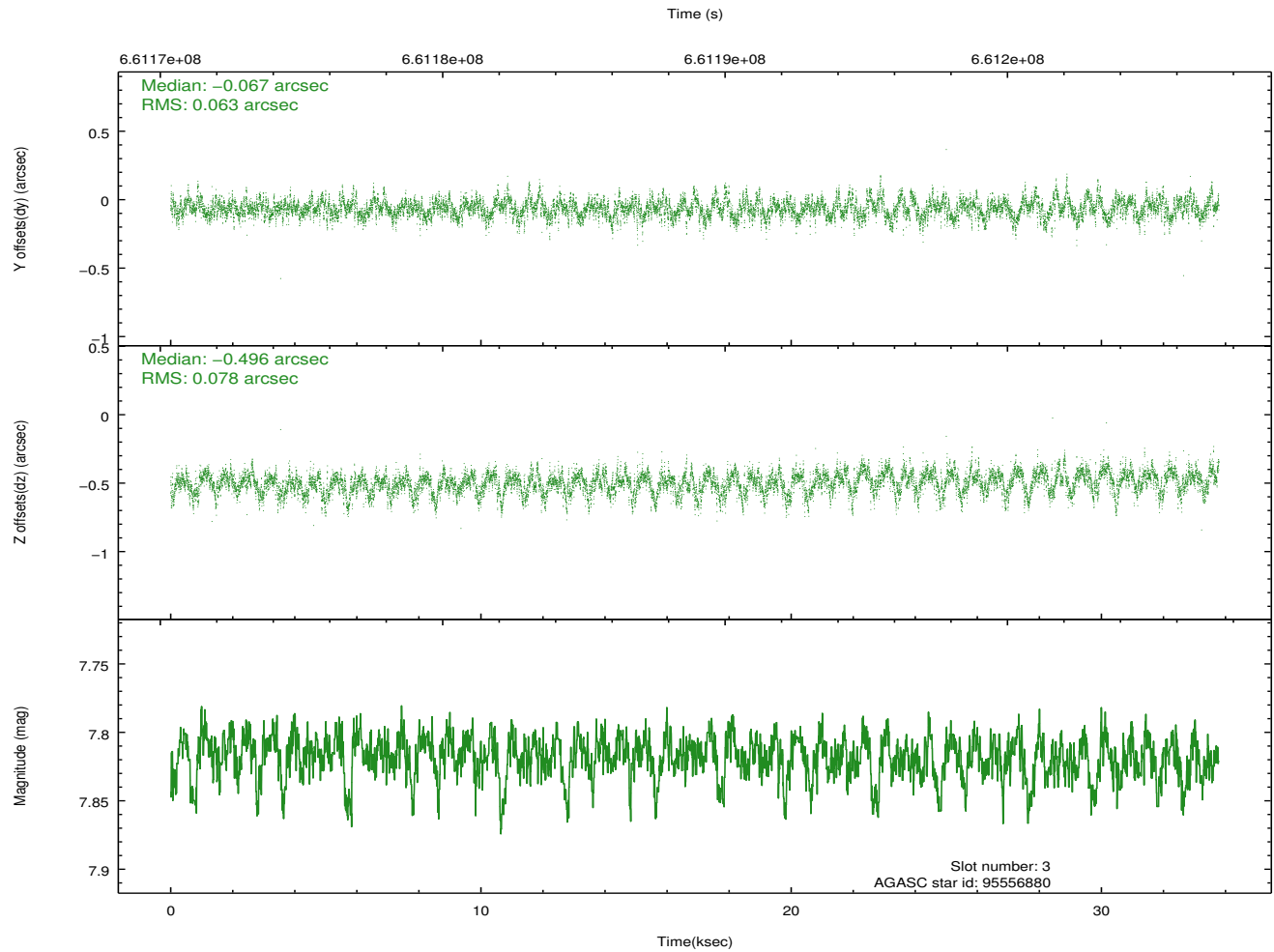
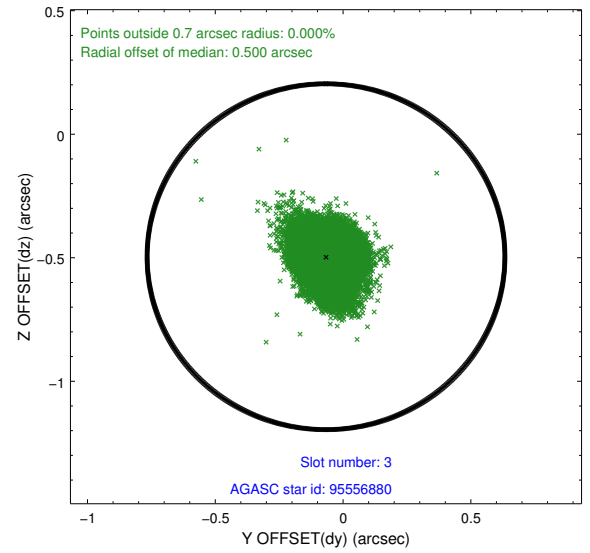
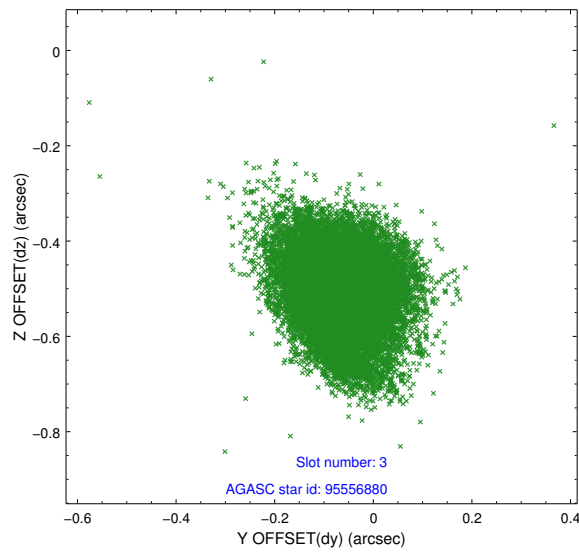


Slot Statistics

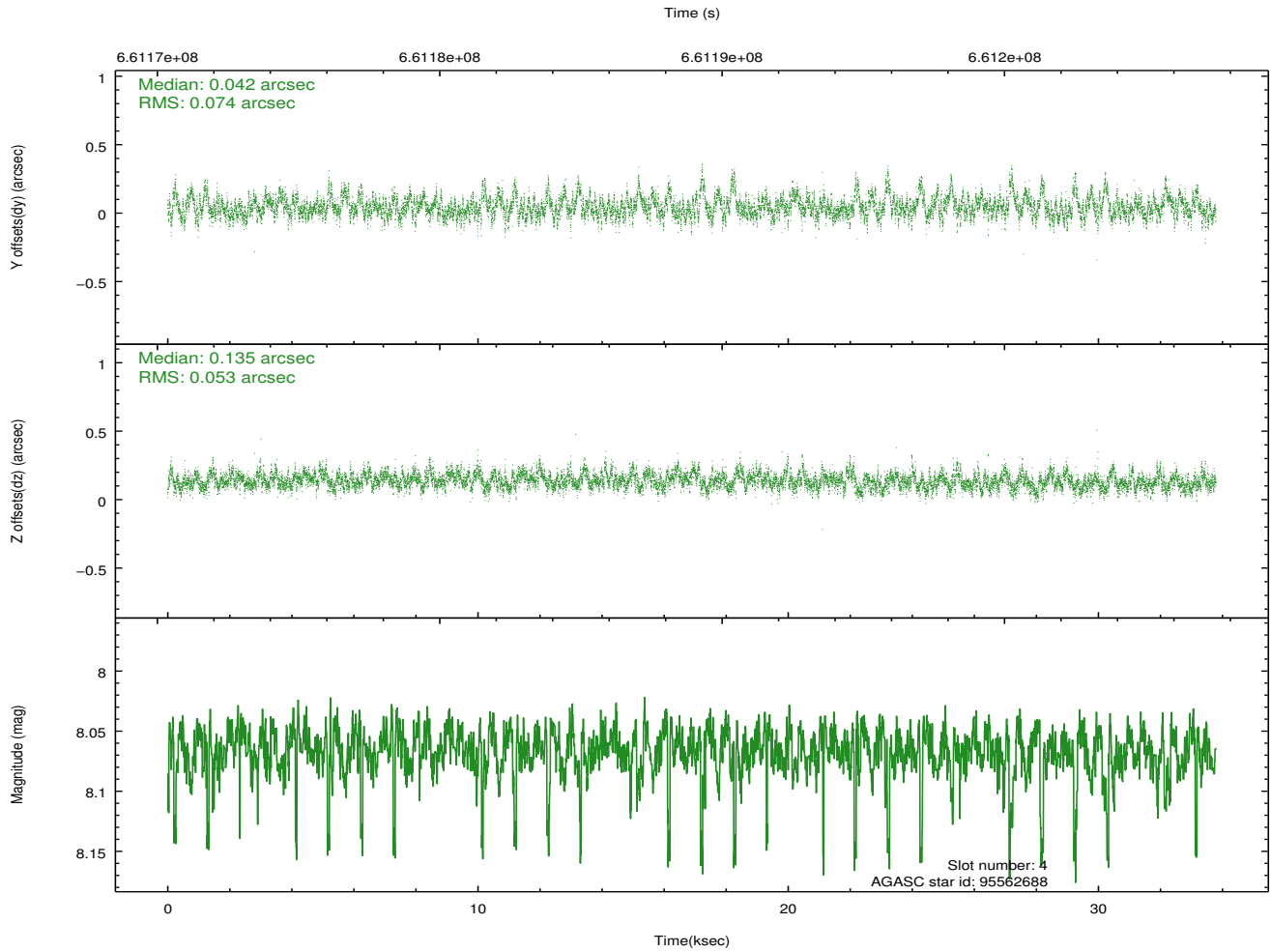
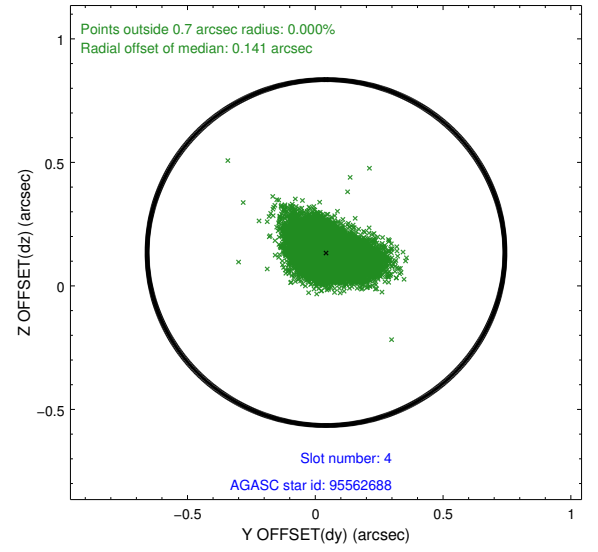
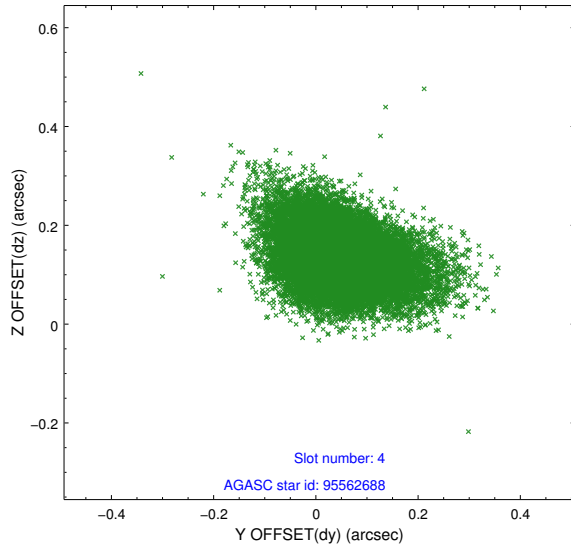
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.18	8240	1.000	-0.120	-0.195	0.038	0.141	0.000000	0.000000	922.48	-844
1	FID		ACIS-I-4	7.10	8241	1.000	0.713	0.217	0.036	0.109	0.000000	0.000000	2143.11	1055
2	FID		ACIS-I-5	7.16	8241	1.000	-0.691	0.049	0.019	0.077	0.000000	0.000000	-1826.28	1052
3	GUIDE	used	95556880	7.82	16481	1.000	-0.067	-0.496	0.105	0.175	91.708131	14.211452	-109.84	1658
4	GUIDE	used	95562688	8.07	16467	1.000	0.042	0.135	0.094	0.165	91.712319	13.596958	-1821.17	258
5	GUIDE	used	97258736	8.10	16474	1.000	0.124	0.110	0.118	0.203	92.458937	13.782127	340.31	-1351
6	GUIDE	used	97272824	7.37	16475	1.000	-0.105	0.258	0.104	0.173	92.697328	13.659469	523.84	-2276
7	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0

2.4 Star Slots

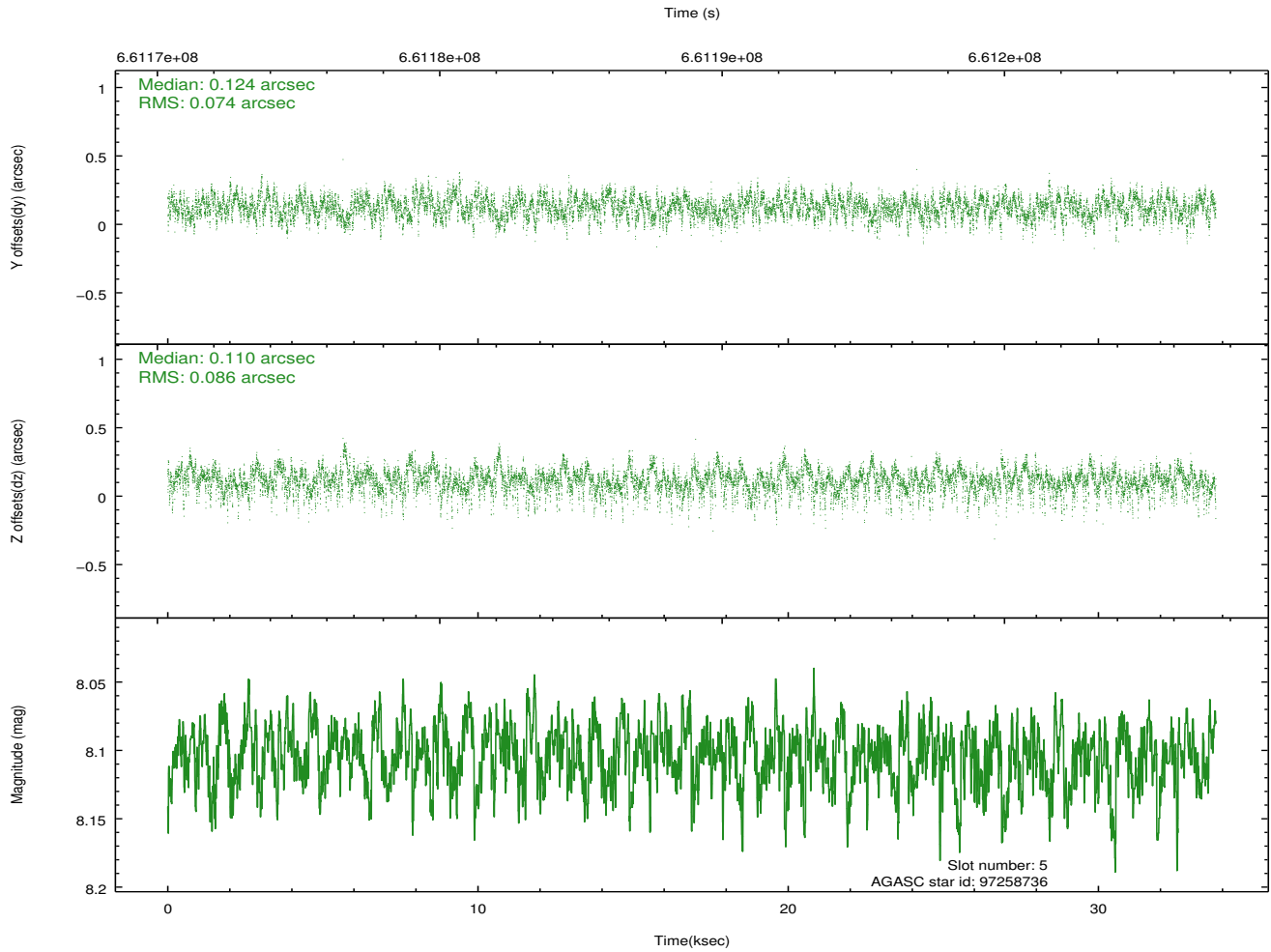
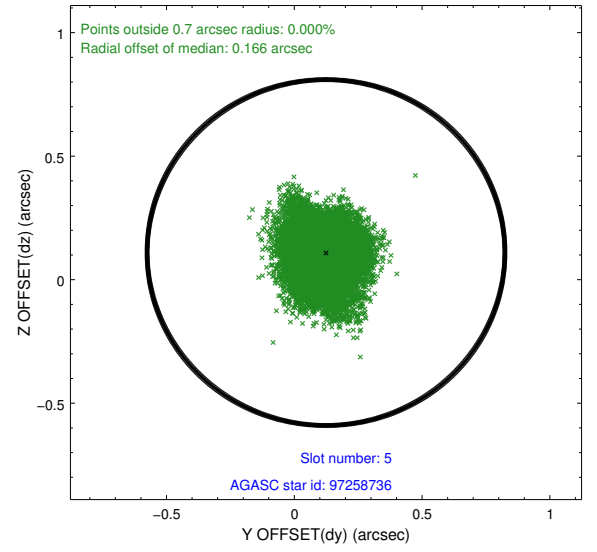
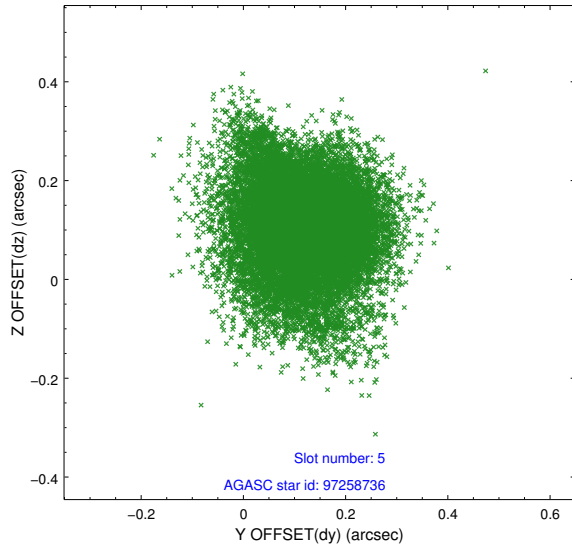
2.4.1 Slot 3



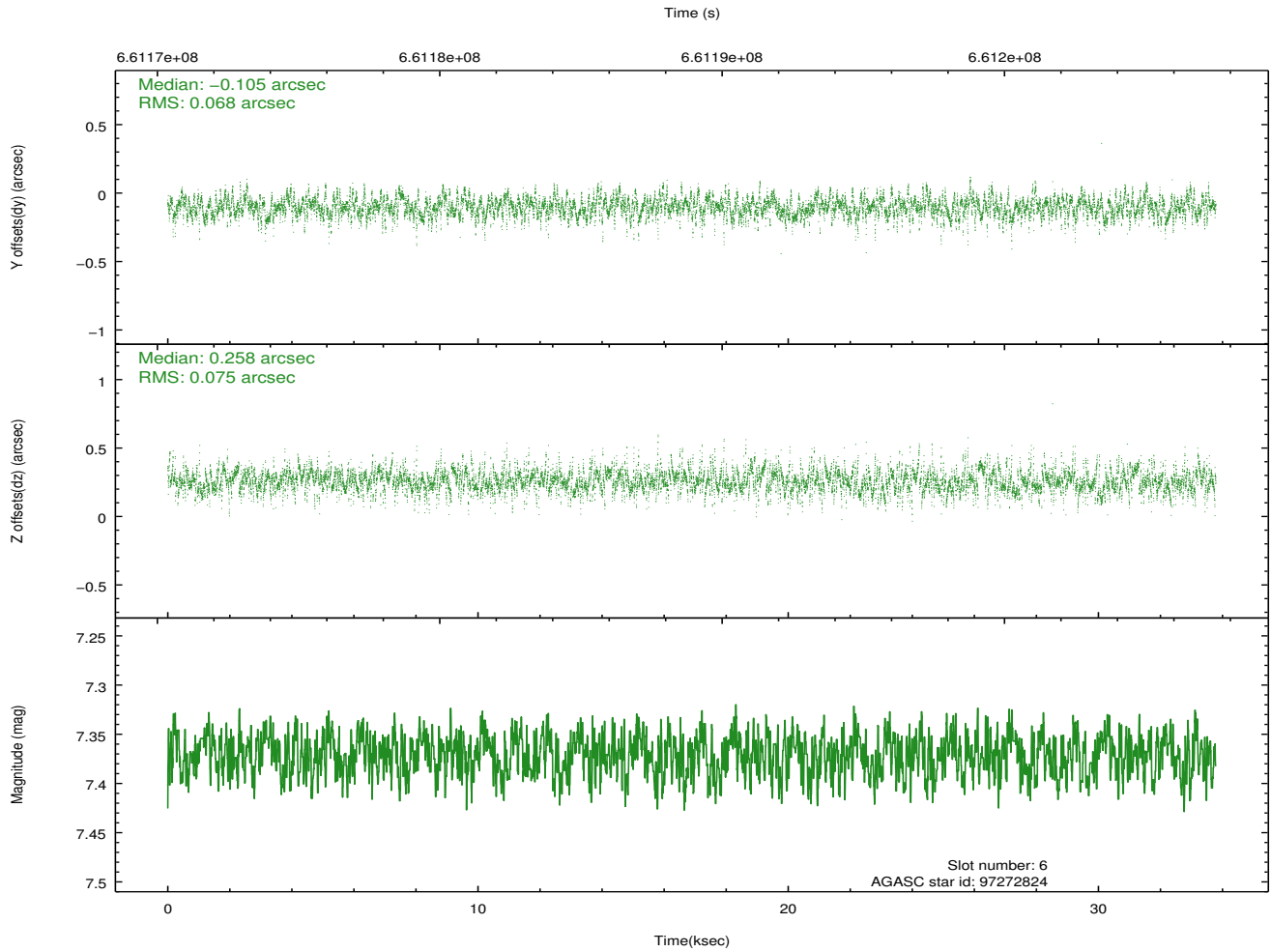
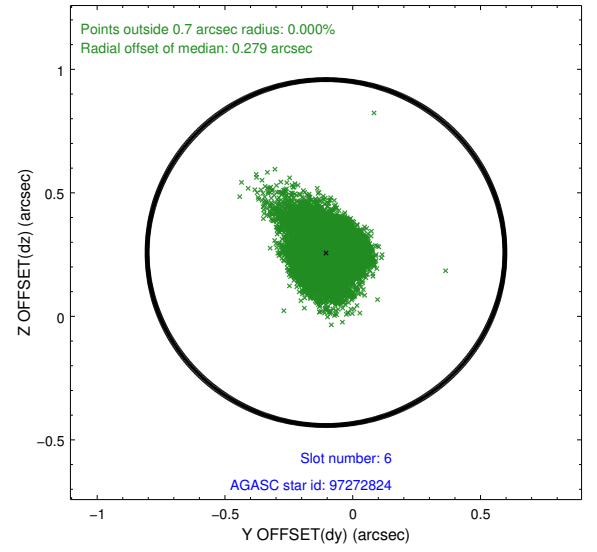
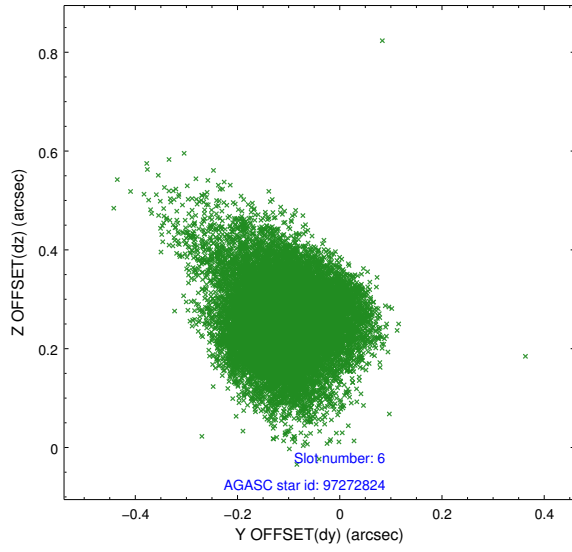
2.4.2 Slot 4



2.4.3 Slot 5

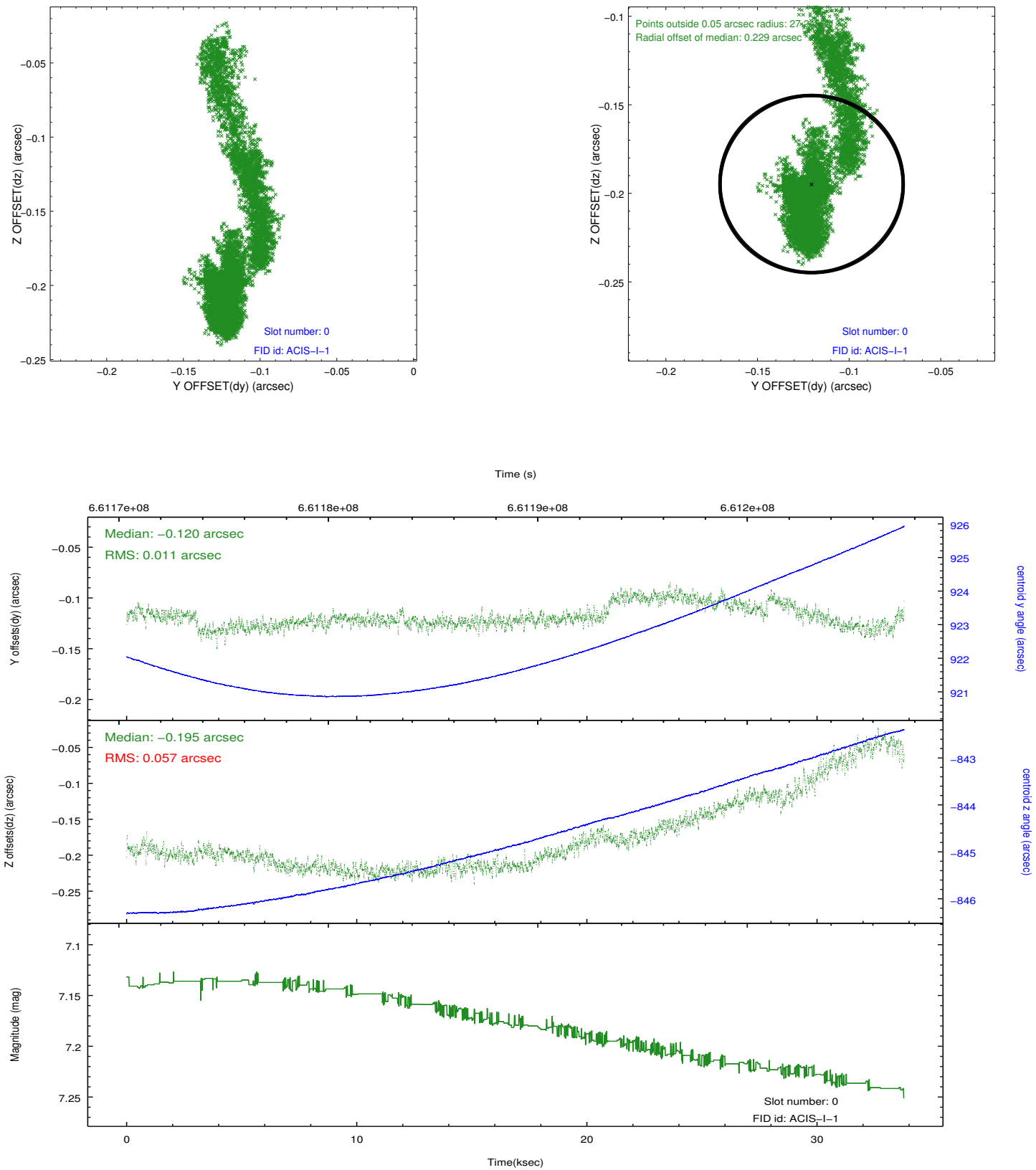


2.4.4 Slot 6

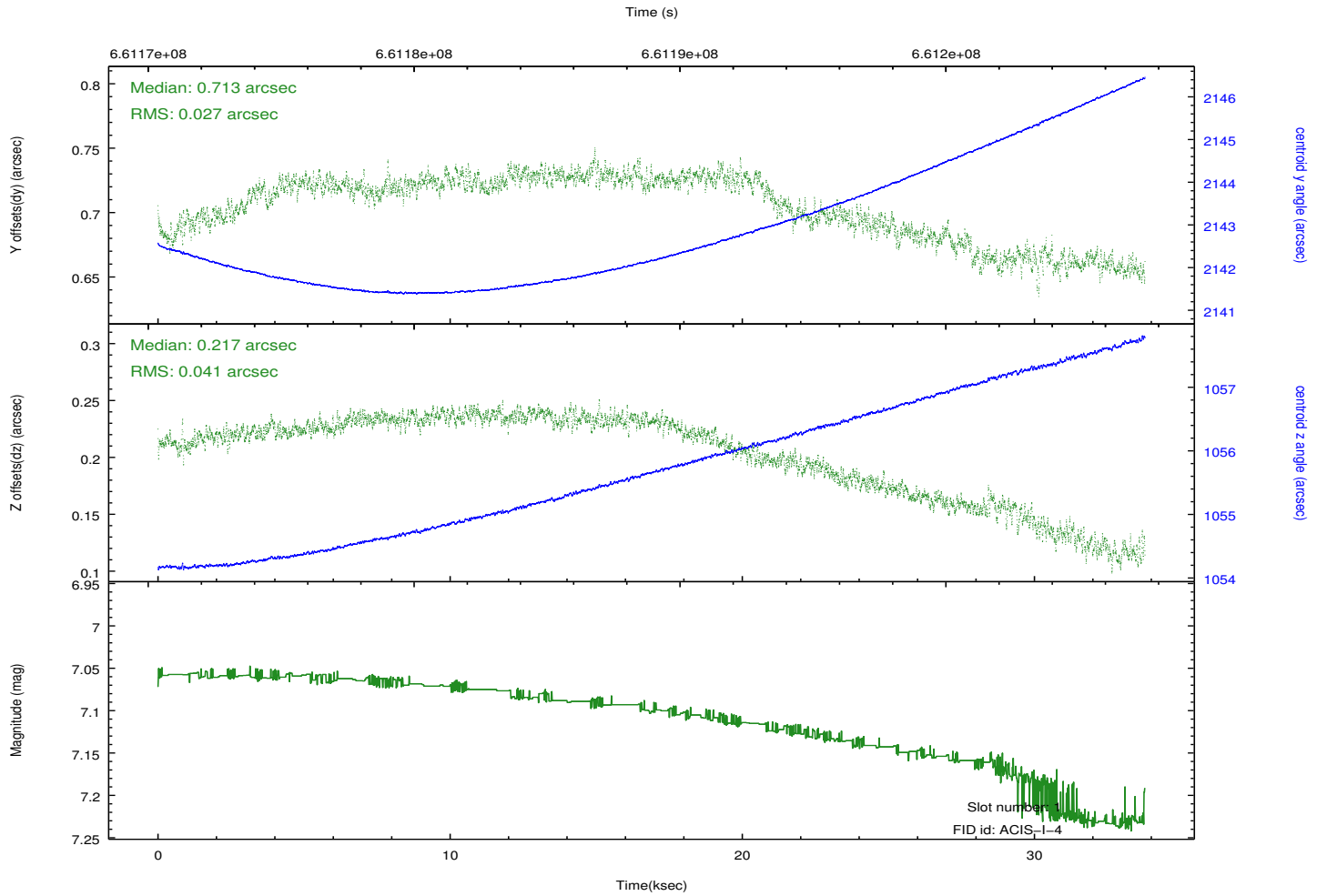
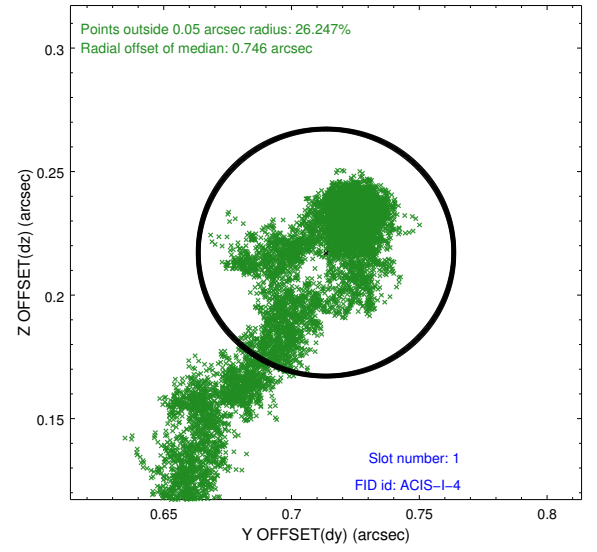
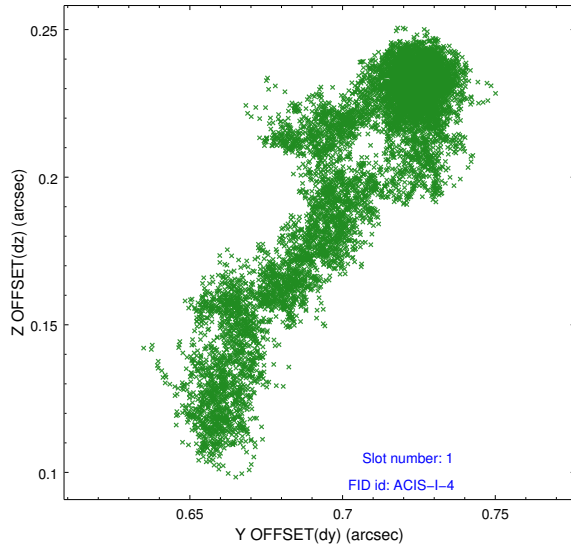


2.5 FID Slots

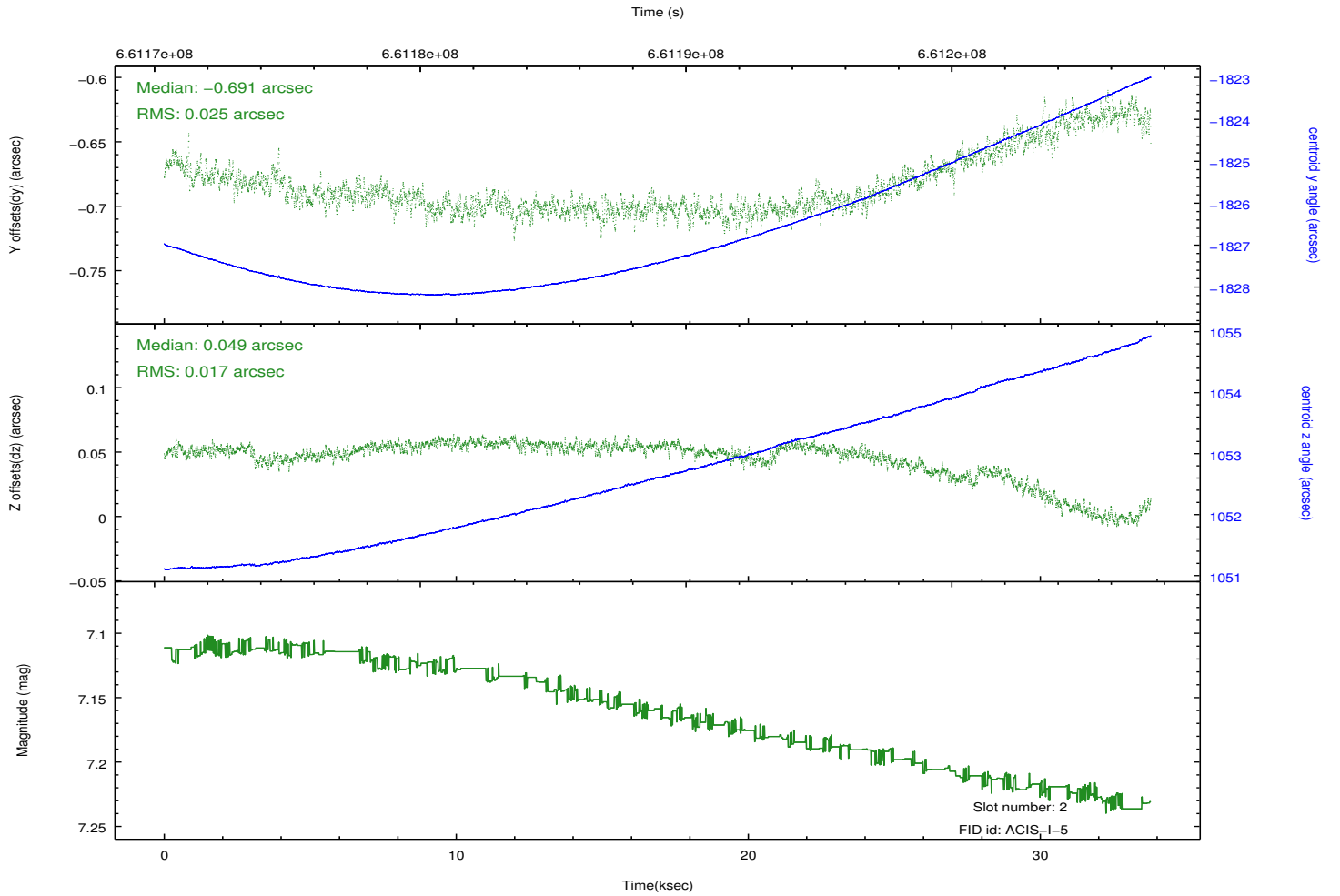
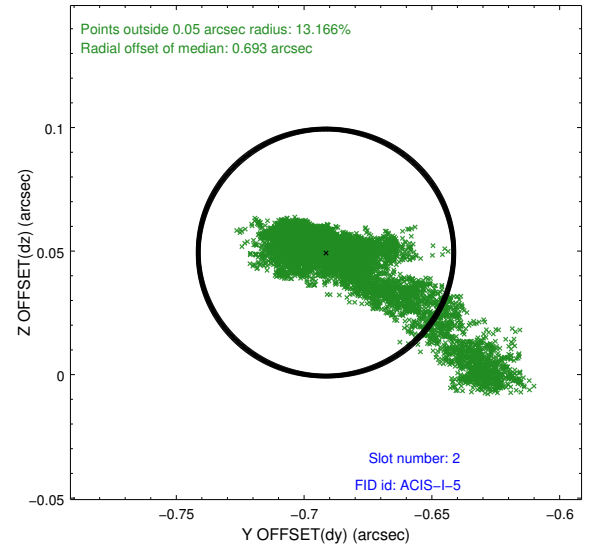
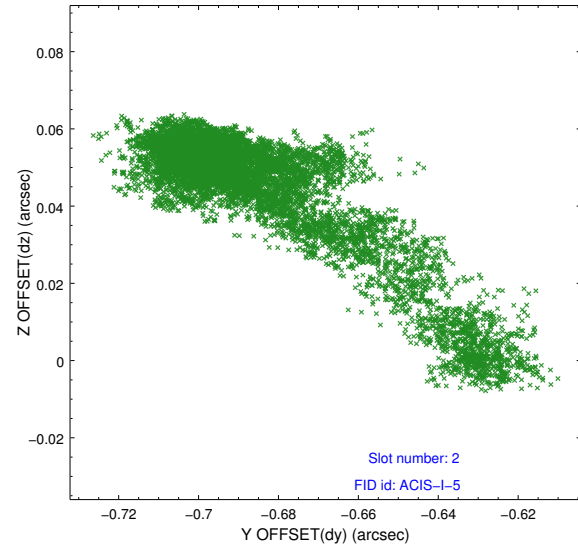
2.5.1 Slot 0



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)	2018.12.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	33.715600259423

A.2 Comments

The guide star in slot 7 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.