

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 20027 - L2 Version 2
Chandra X-Ray Center

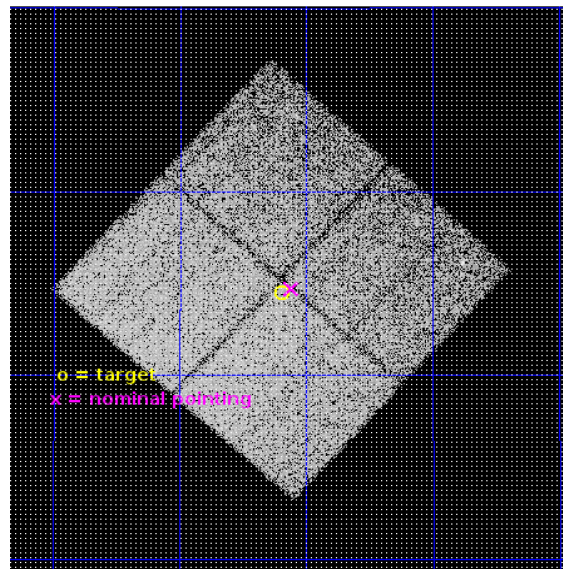
L2 Processing Date : Mar 16 2017

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1 Front

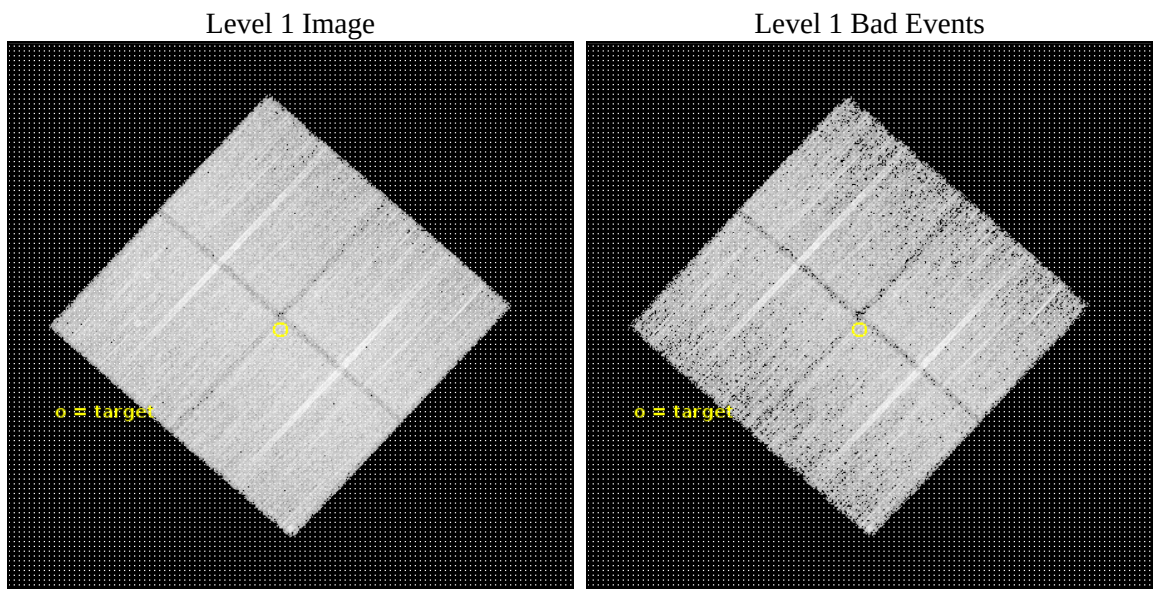
seq_num	801595	Sequence number
obs_id	20027	Observation id
title	Probing ICM on mean free path scales	Proposal title
observer	Irina Zhuravleva	Principal investigator
object	Coma cluster	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	194.649583	Observer's specified target RA [deg]
dec_targ	28.074806	Observer's specified target Dec [deg]
ra_nom	194.63978667953	Nominal RA [deg]
dec_nom	28.078655827998	Nominal Dec [deg]
roll_nom	132.2133076592	Nominal Roll [deg]
revision	2	Processing version of data
ontime	21082.122570276	Sum of GTIs [s]
livetime	20806.669118463	Livetime [s]
ontime0	21081.999450326	Sum of GTIs [s]
ontime1	21078.89944005	Sum of GTIs [s]
ontime2	21082.081530333	Sum of GTIs [s]
ontime3	21082.122570276	Sum of GTIs [s]
l2events	115056	Number of level 2 events



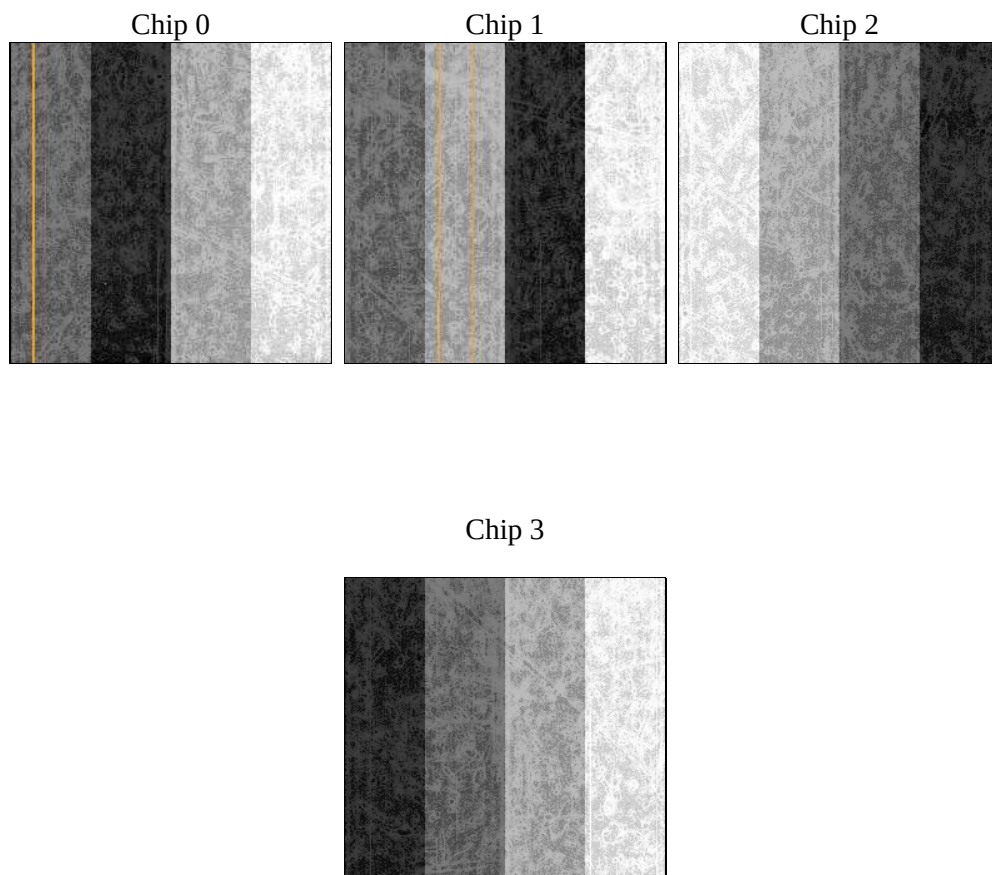
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	21000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	21082.122570276	Sum of GTIs [s]
caldsver	4.7.3	 	ontime0	21081.999450326	Sum of GTIs [s]
date	2017-03-16T14:15:46	Date and time of file creation	ontime1	21078.89944005	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	21082.081530333	Sum of GTIs [s]
			ontime3	21082.122570276	Sum of GTIs [s]
			l1events	656411	Number of level 1 events

2.1.4 Events

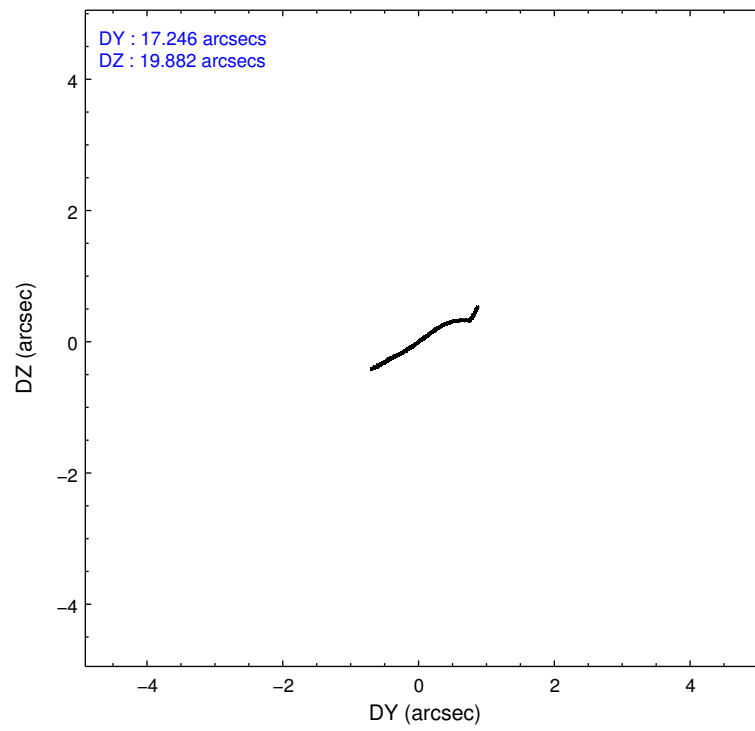
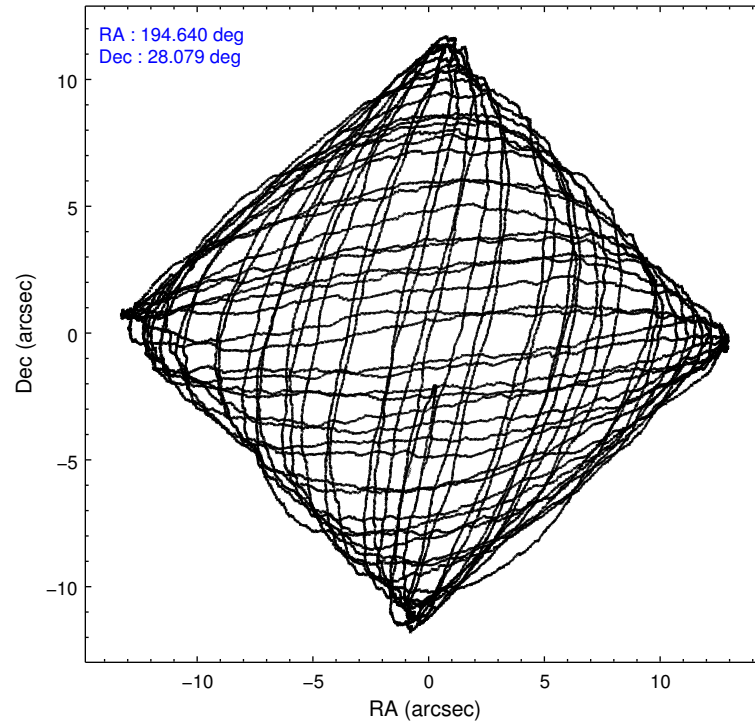
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	146085	171762	164084	174480
rejected events	120937	129380	138775	137288
rejected %	82%	75%	84%	78%

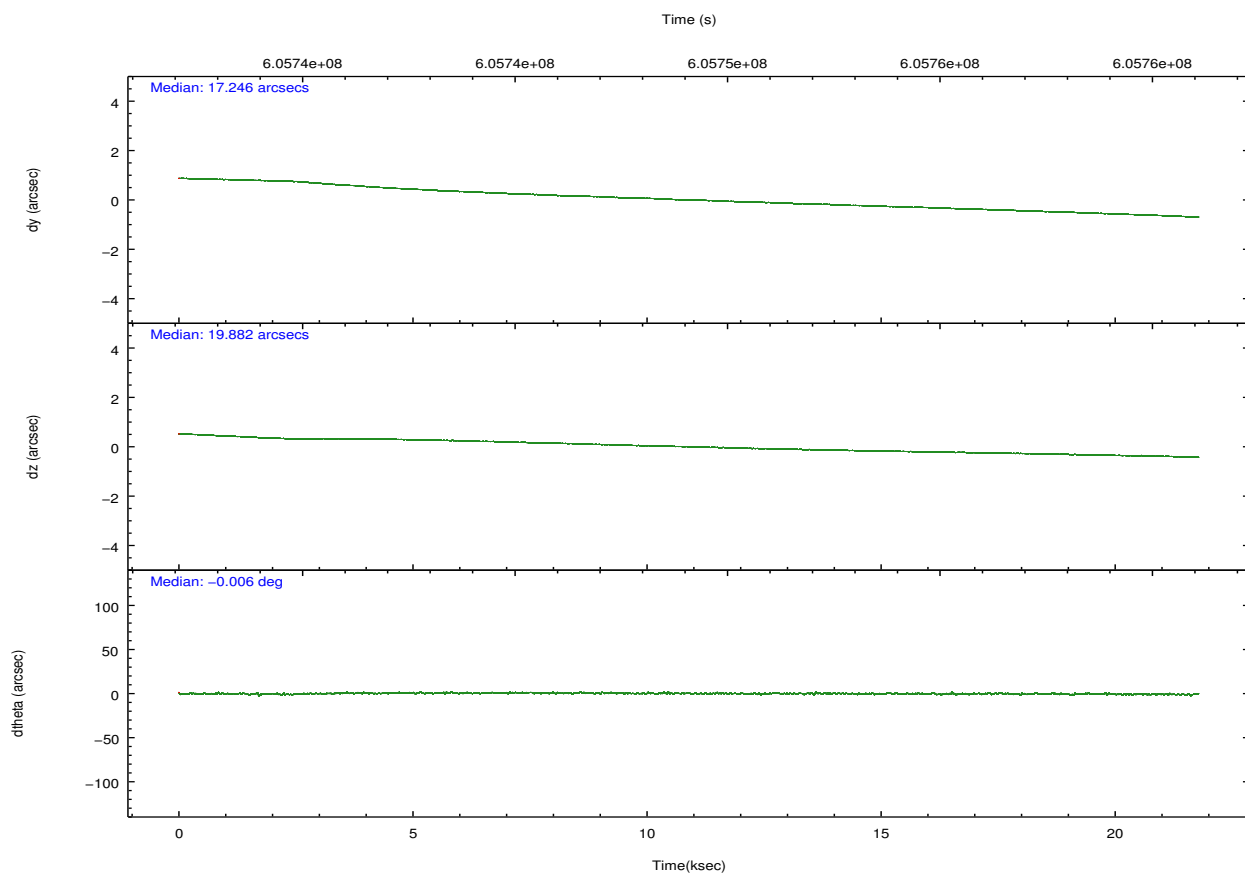
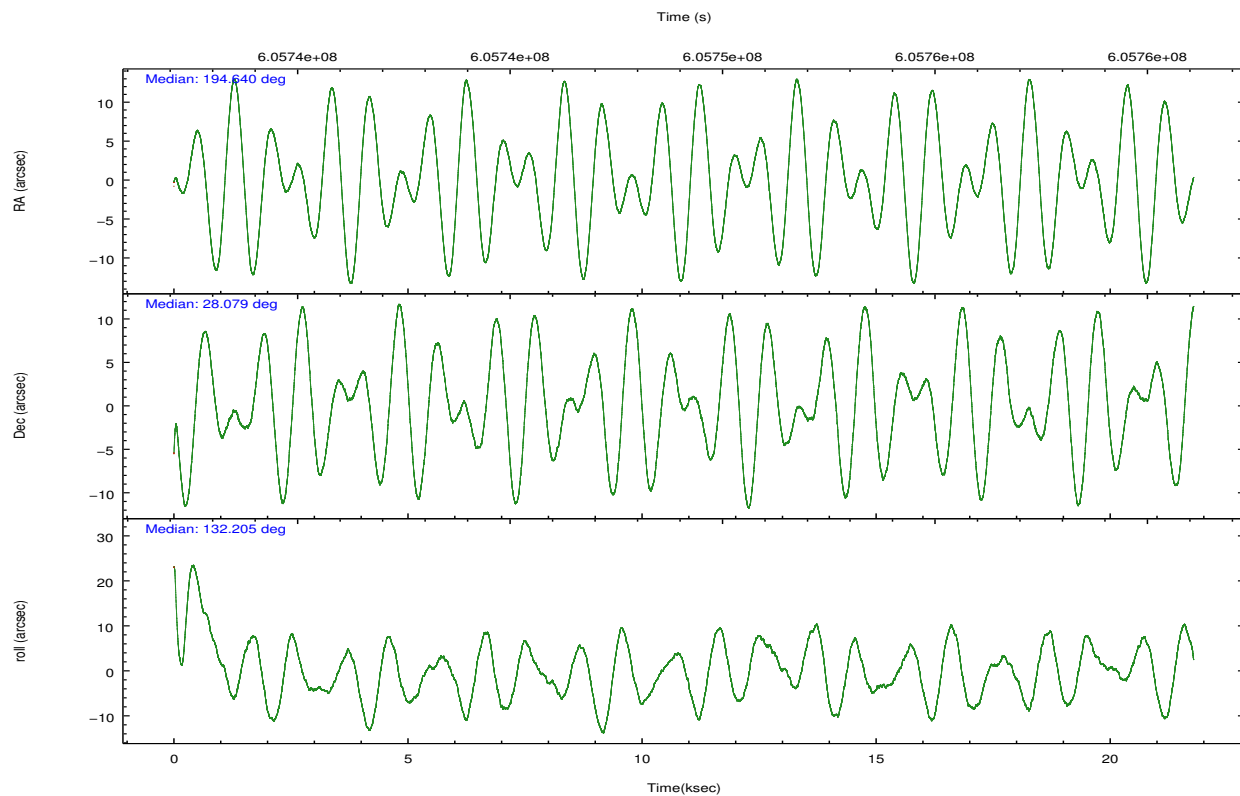
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	12176	24724	13013	22115
	8%	14%	7%	12%
grade 1 events	111	169	133	195
	0%	0%	0%	0%
grade 2 events	5201	7473	4981	6078
	3%	4%	3%	3%
grade 3 events	2089	2621	1922	2443
	1%	1%	1%	1%
grade 4 events	1903	2521	1997	2431
	1%	1%	1%	1%
grade 5 events	6335	6970	6034	7347
	4%	4%	3%	4%
grade 6 events	3785	5048	3400	4132
	2%	2%	2%	2%
grade 7 events	114485	122236	132604	129739
	78%	71%	80%	74%

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	194.669613	194.6397866795269	Subarray requested	NONE	NONE
[deg] Pointing Dec	28.070343	28.07865582799834	Alternating exposures requested	N	N
[deg] Pointing Roll	131.990573	132.2133076591991	[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)	605738991.184000	605737150.50547			
Observation start date	2017-03-12T20:48:42	2017-03-12T20:19:10			
[s] Observation end time (MET)	605759991.184000	605760888.48185			
Observation end date	2017-03-13T02:38:42	2017-03-13T02:54:48			
Read mode	TIMED	TIMED			

2.3 Aspect



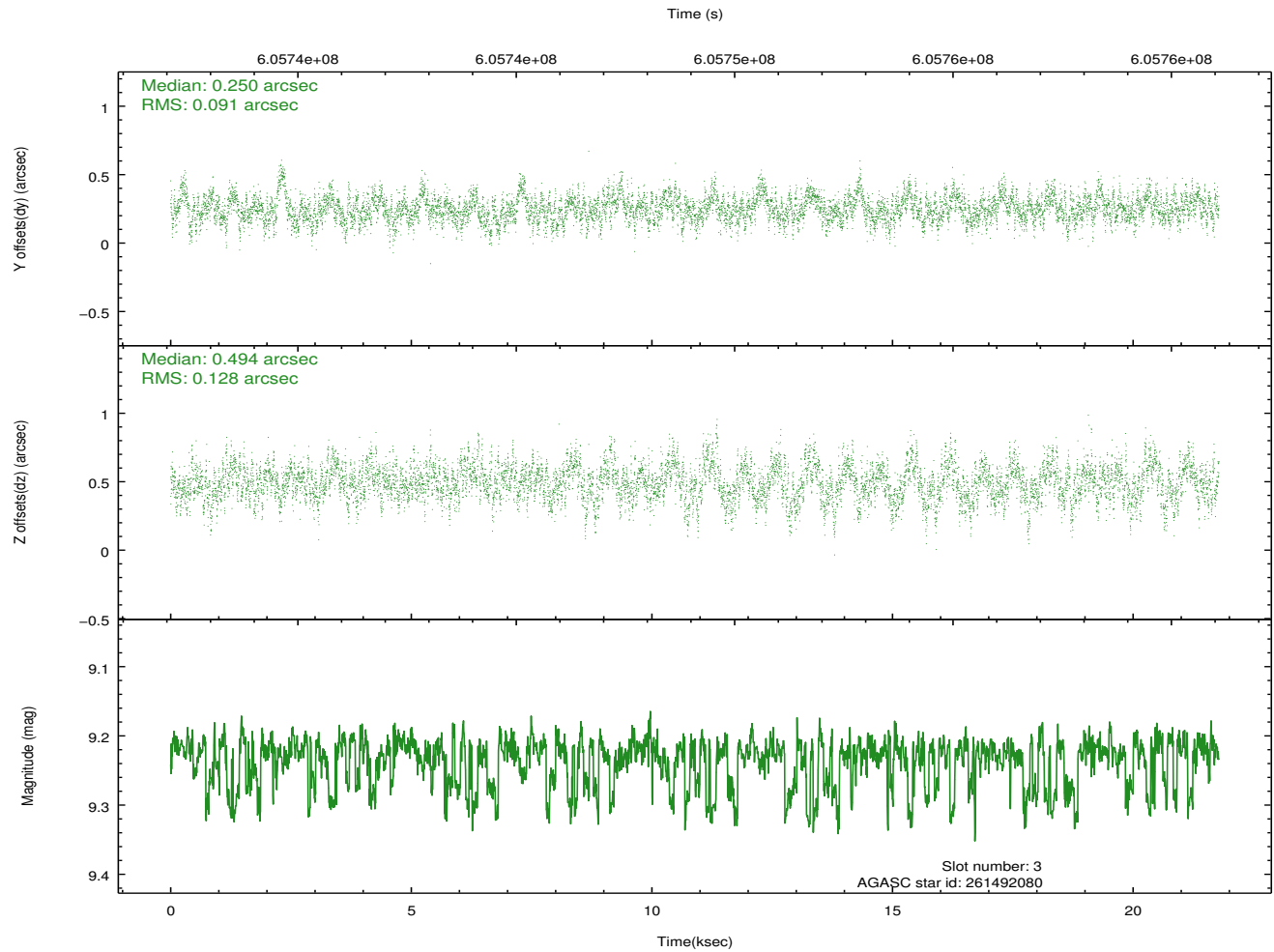
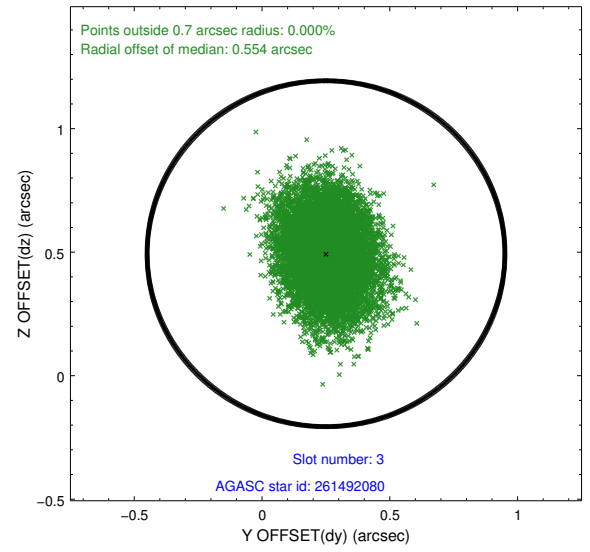
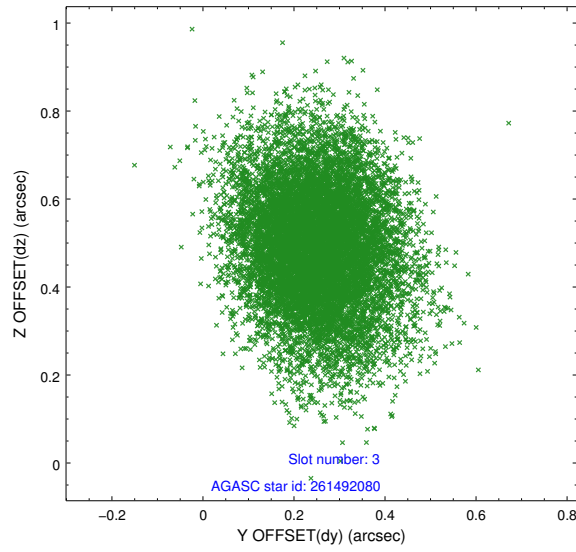


Slot Statistics

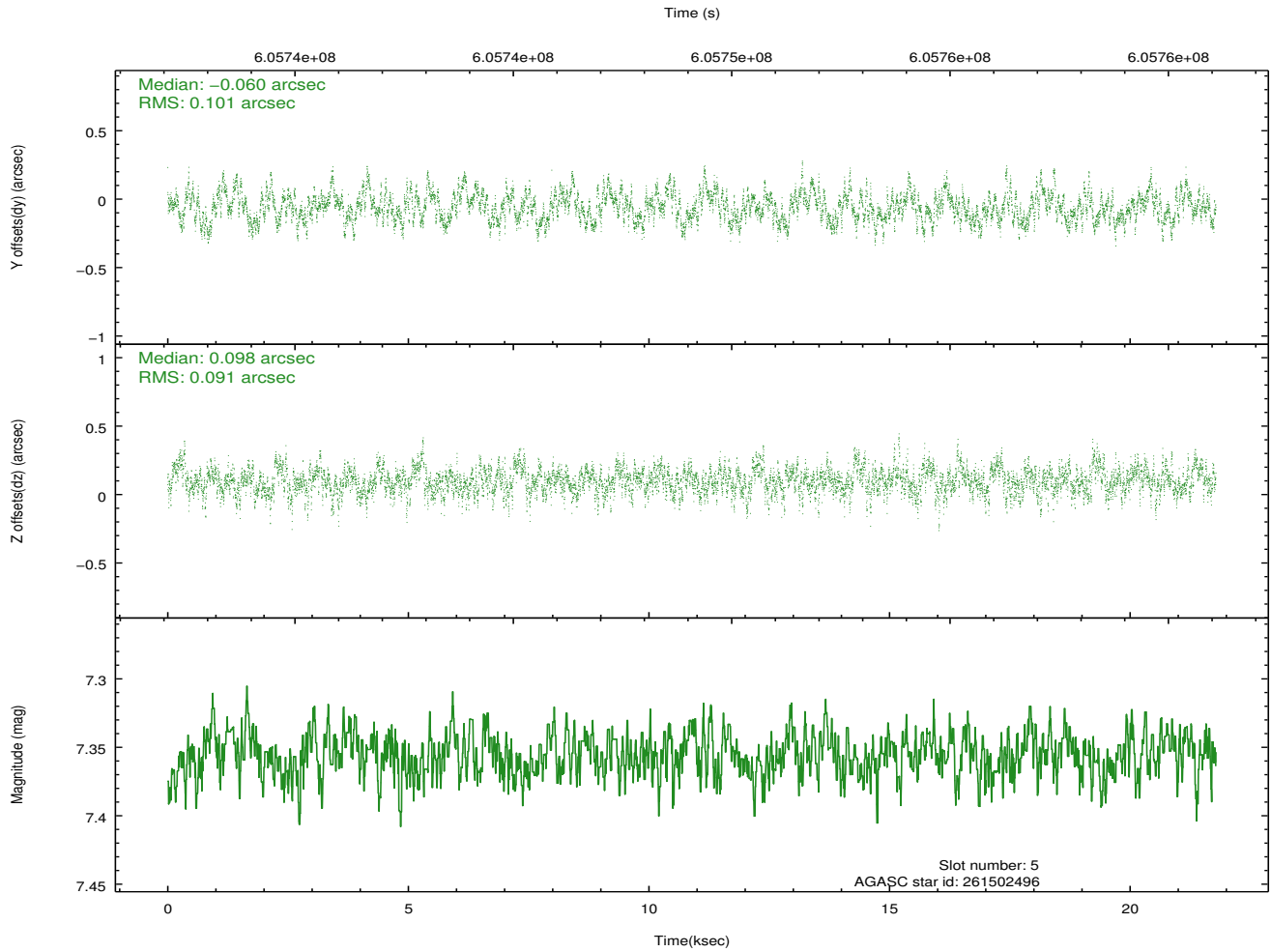
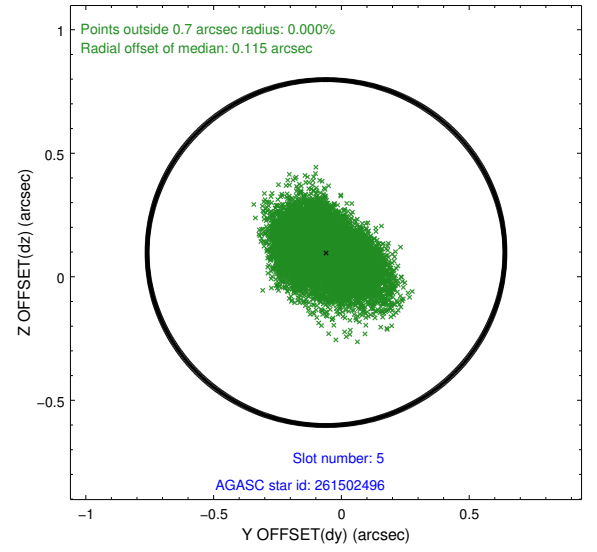
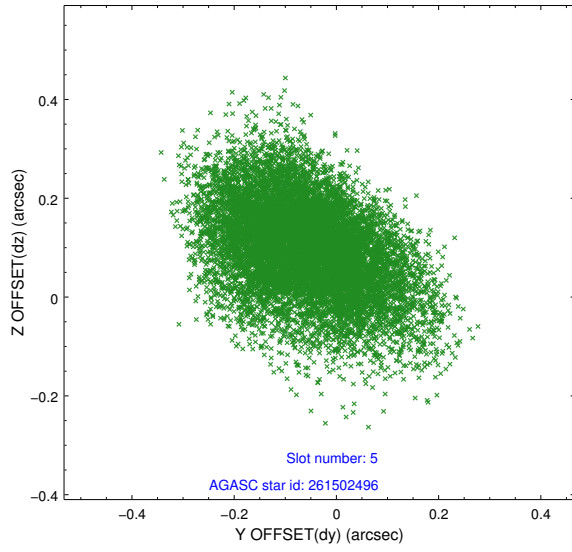
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.10	5314	-0.080	-0.041	0.019	0.030	0.000000	0.000000	922.09	-843.60
1	FID		ACIS-I-4	7.04	5313	0.467	0.091	0.020	0.029	0.000000	0.000000	2142.63	1056.34
2	FID		ACIS-I-5	7.09	5314	-0.484	0.021	0.016	0.027	0.000000	0.000000	-1826.25	1054.02
3	GUIDE	used	261492080	9.23	10610	0.250	0.494	0.164	0.278	194.976344	28.631585	855.12	-2072.27
4	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
5	GUIDE	used	261502496	7.36	10625	-0.060	0.098	0.145	0.236	194.887297	28.065668	-474.28	-503.27
6	GUIDE	used	261503168	8.55	10621	-0.143	-0.302	0.167	0.251	193.765545	28.234101	2364.11	1729.79
7	GUIDE	used	261505760	9.71	10610	-0.045	-0.296	0.300	0.439	193.736841	27.992885	1785.33	2383.17

2.4 Star Slots

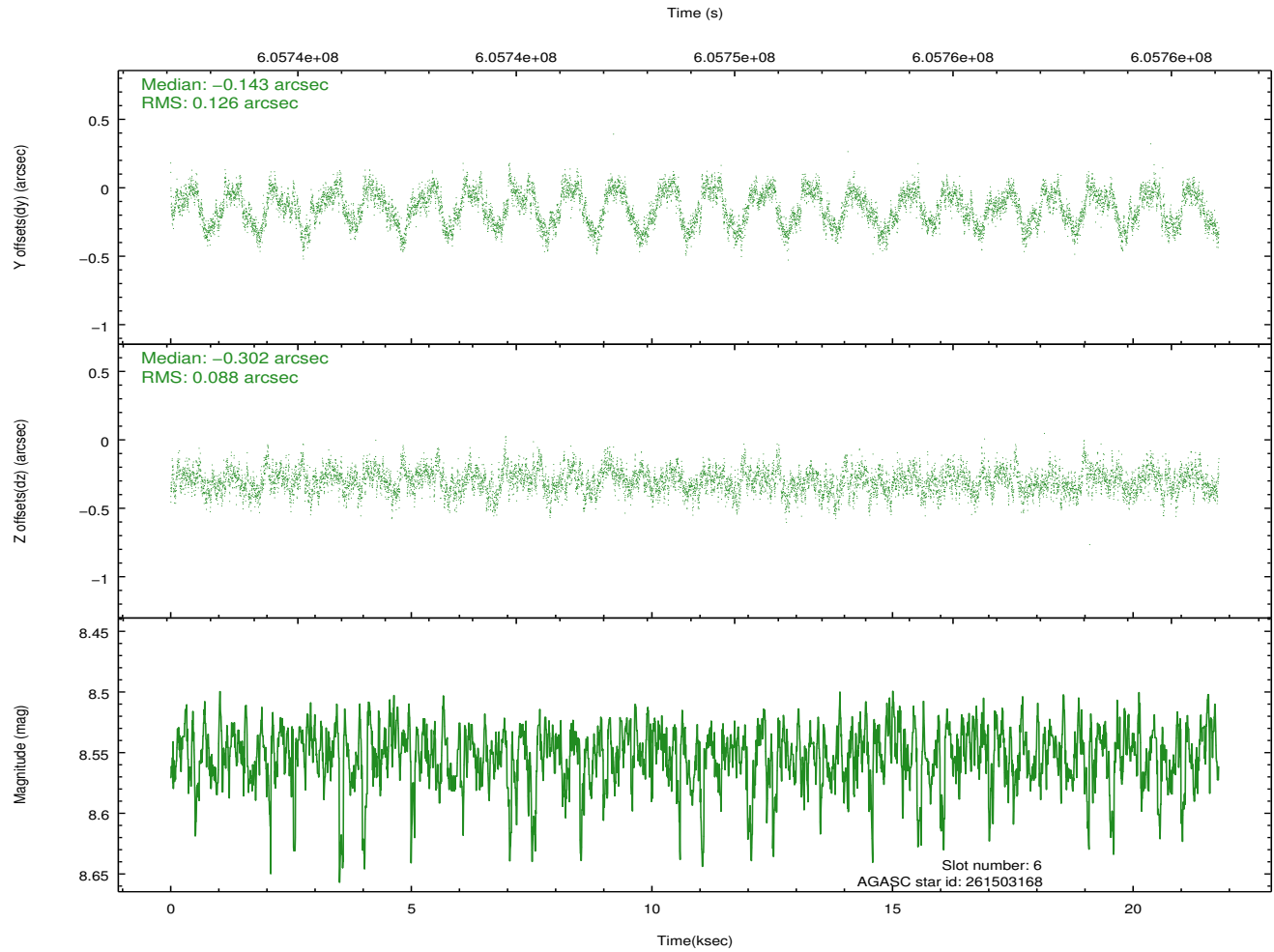
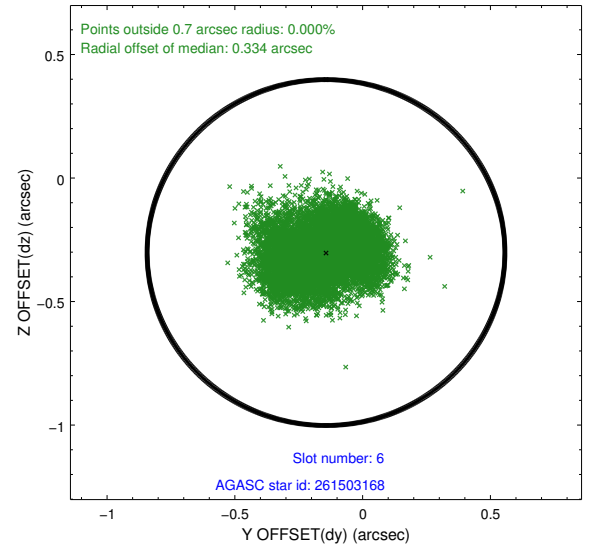
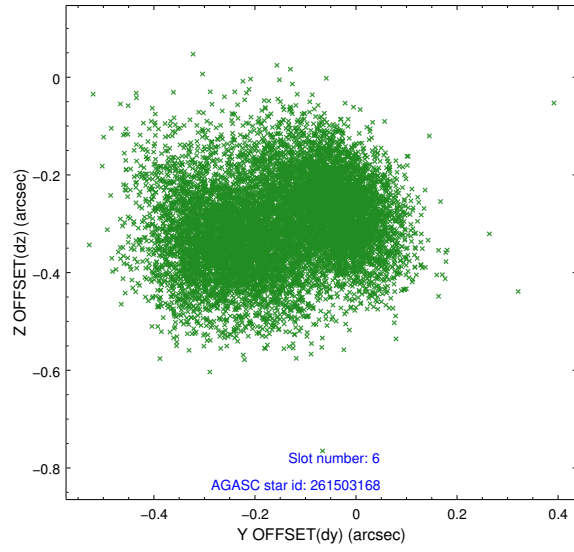
2.4.1 Slot 3



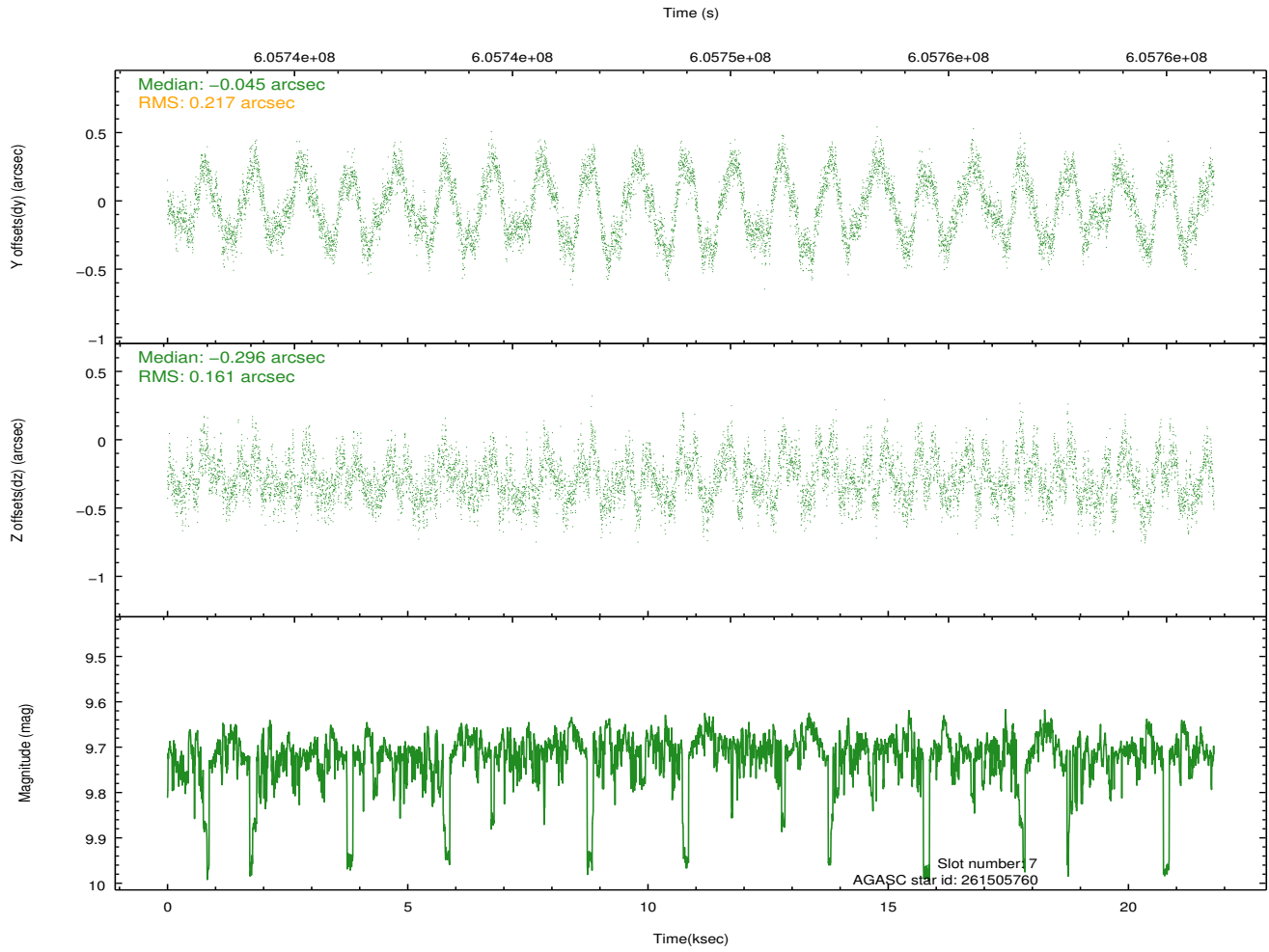
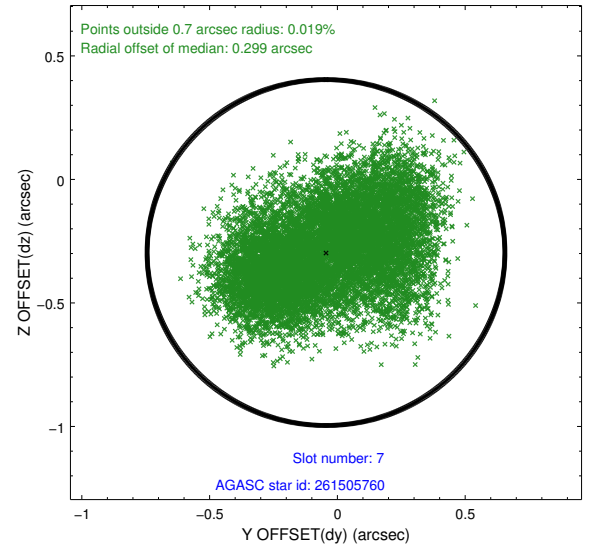
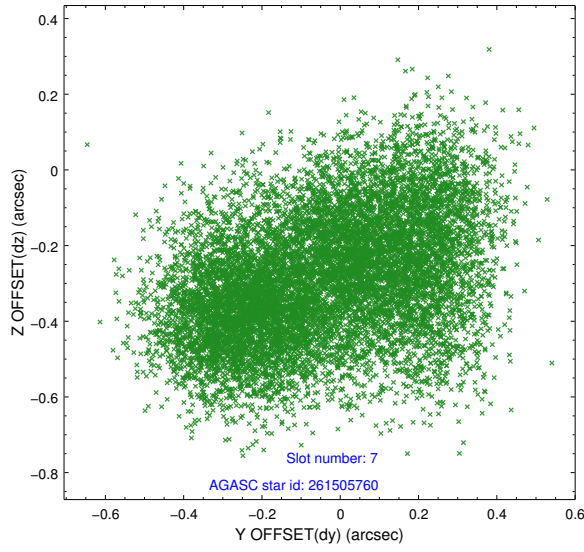
2.4.2 Slot 5



2.4.3 Slot 6

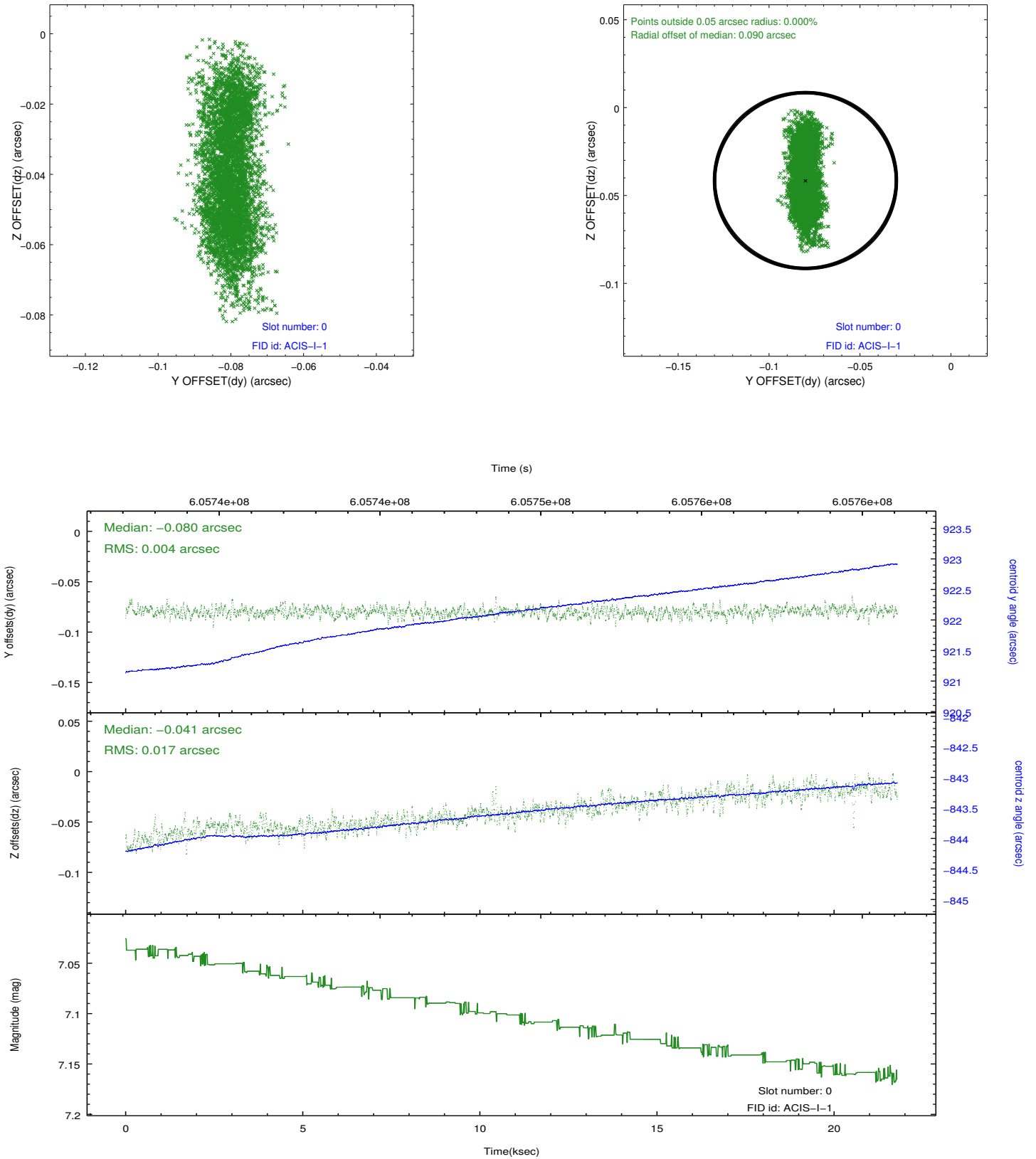


2.4.4 Slot 7

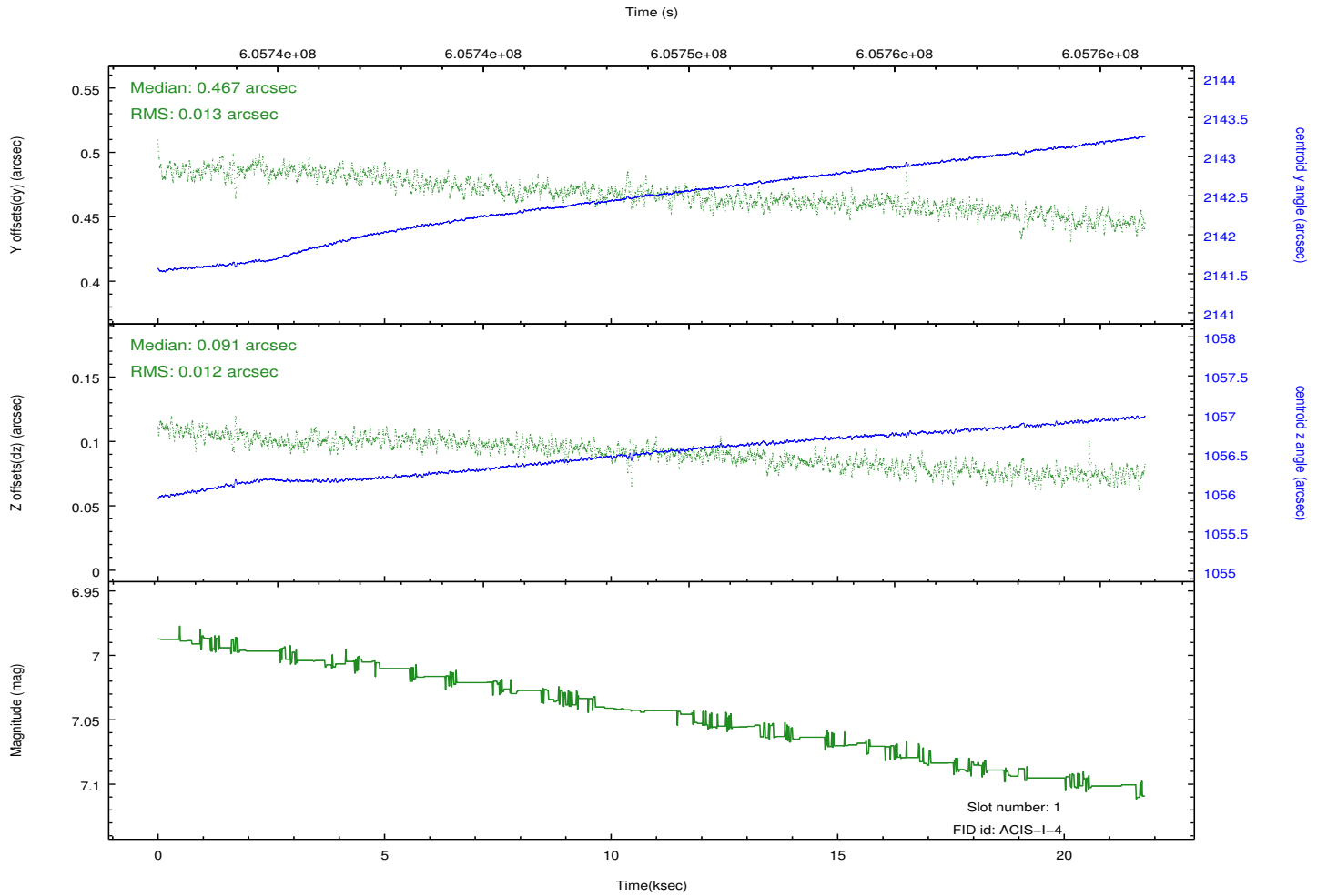
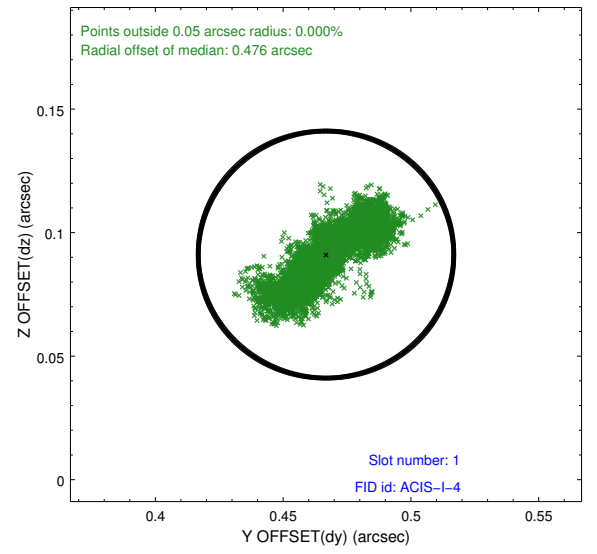
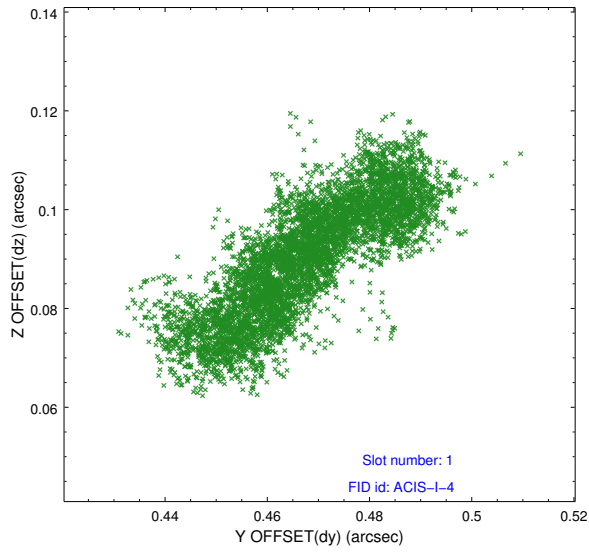


2.5 FID Slots

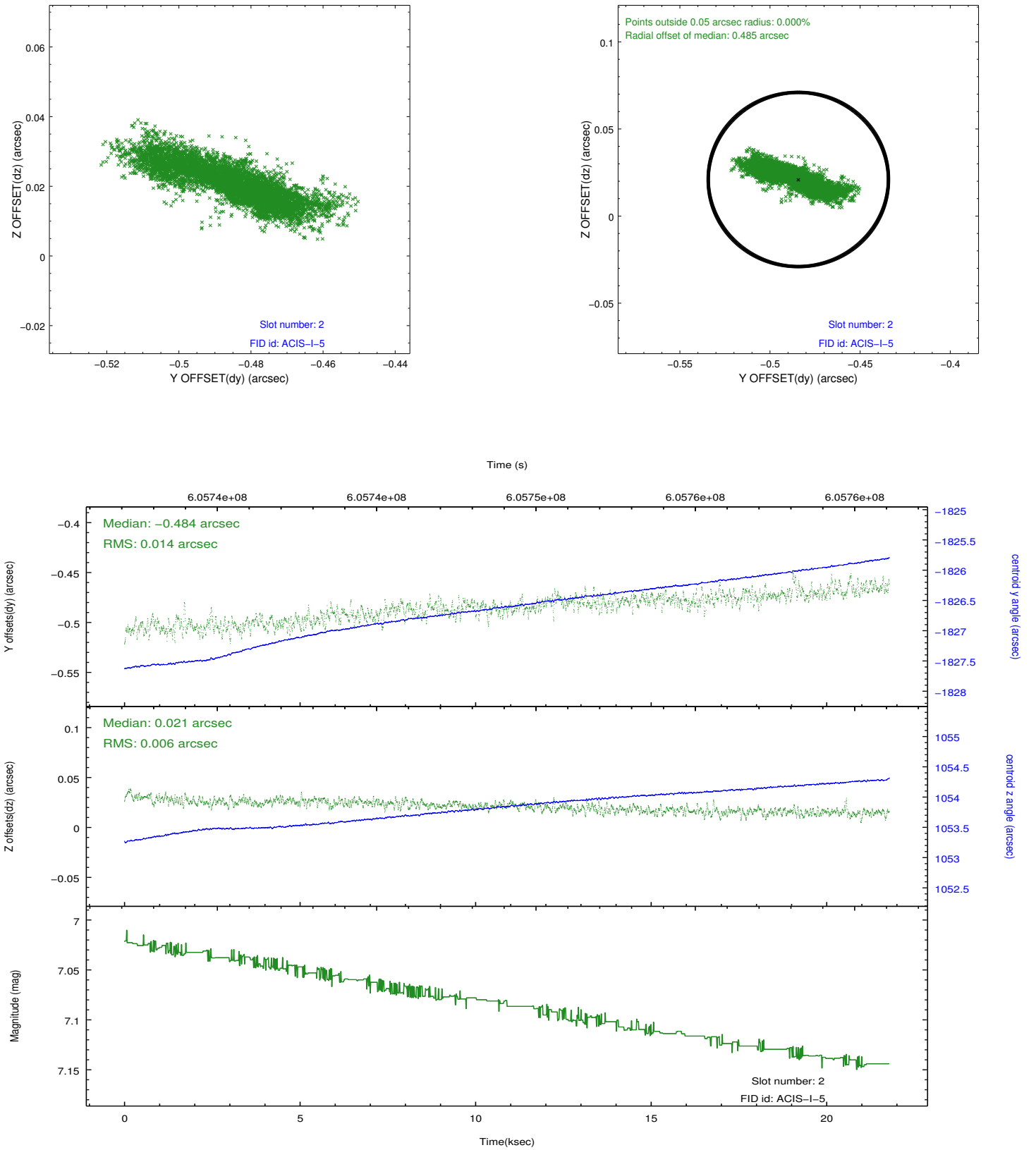
2.5.1 Slot 0



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)	2017.03.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	21.082122570276

A.2 Comments

The guide star in slot 4 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.