

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 20031 - L2 Version 2
Chandra X-Ray Center

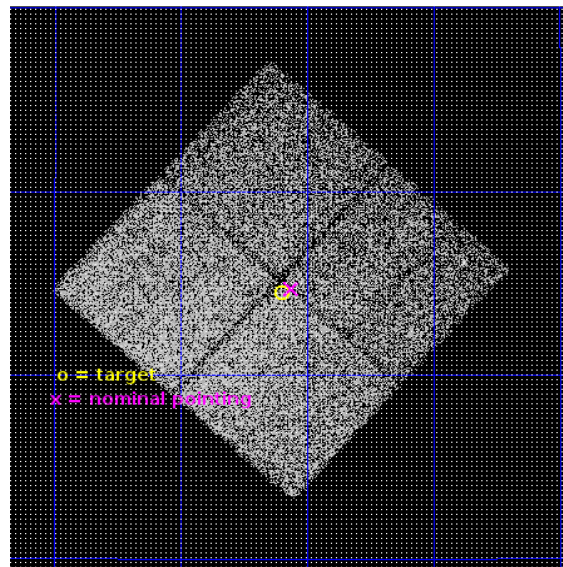
L2 Processing Date : Mar 15 2017

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1 Front

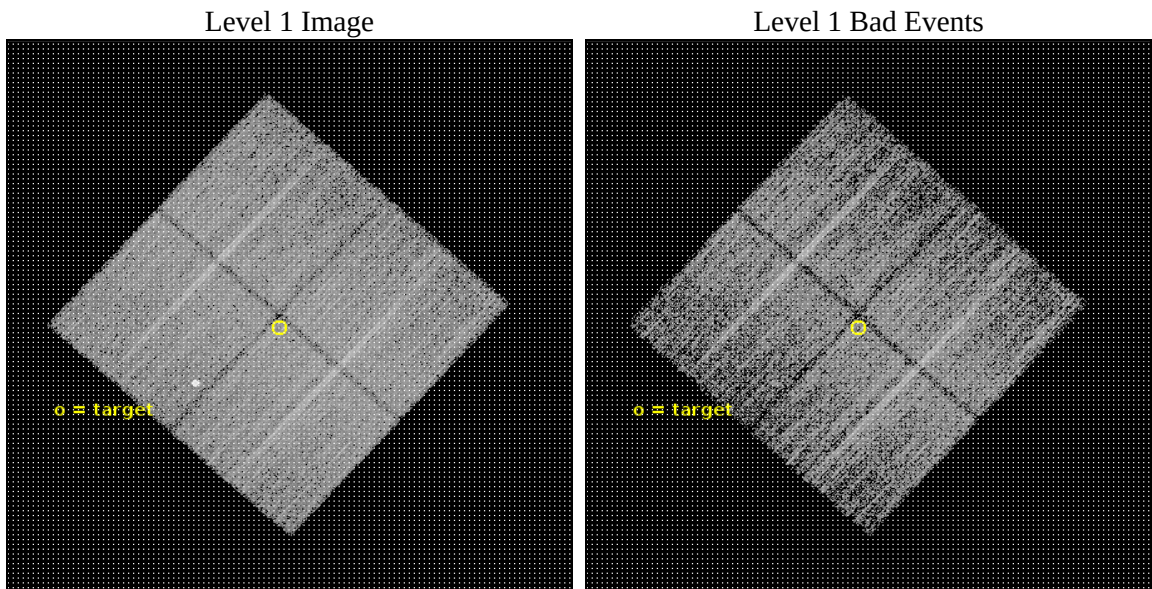
seq_num	801595	Sequence number
obs_id	20031	Observation id
title	Probing ICM on mean free path scales	Proposal title
observer	Irina Zhuravleva	Principal investigator
object	Coma cluster	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	194.649583	Observer's specified target RA [deg]
dec_targ	28.074806	Observer's specified target Dec [deg]
ra_nom	194.64057250051	Nominal RA [deg]
dec_nom	28.078380201797	Nominal Dec [deg]
roll_nom	132.21295974849	Nominal Roll [deg]
revision	2	Processing version of data
ontime	11076.05487752	Sum of GTIs [s]
livetime	10931.338066472	Livetime [s]
ontime0	11072.790697336	Sum of GTIs [s]
ontime1	11075.972797513	Sum of GTIs [s]
ontime2	11076.013837576	Sum of GTIs [s]
ontime3	11076.05487752	Sum of GTIs [s]
l2events	60411	Number of level 2 events



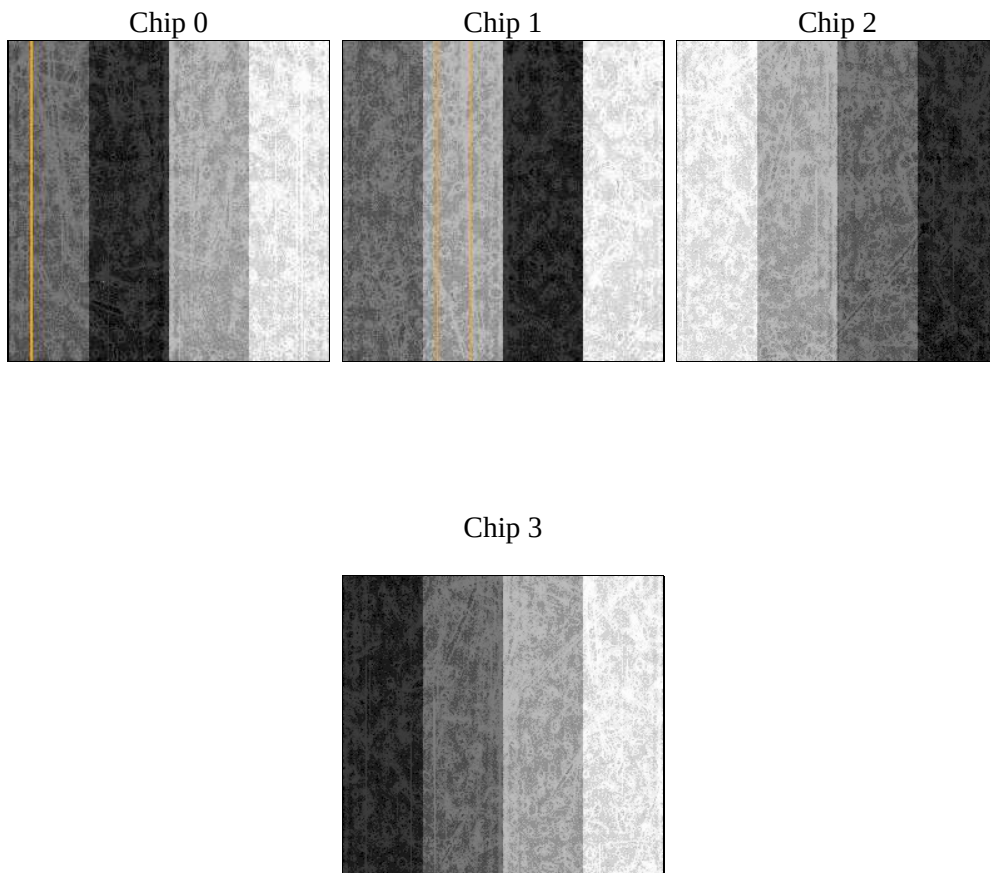
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	11000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	11076.05487752	Sum of GTIs [s]
caldsver	4.7.3	 	ontime0	11072.790697336	Sum of GTIs [s]
date	2017-03-15T18:53:22	Date and time of file creation	ontime1	11075.972797513	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	11076.013837576	Sum of GTIs [s]
			ontime3	11076.05487752	Sum of GTIs [s]
			l1events	354008	Number of level 1 events

2.1.4 Events

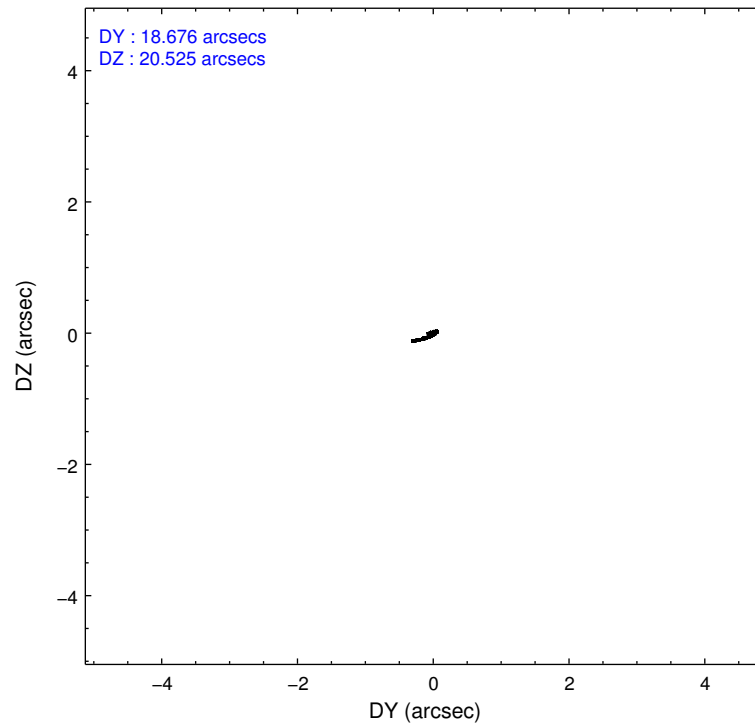
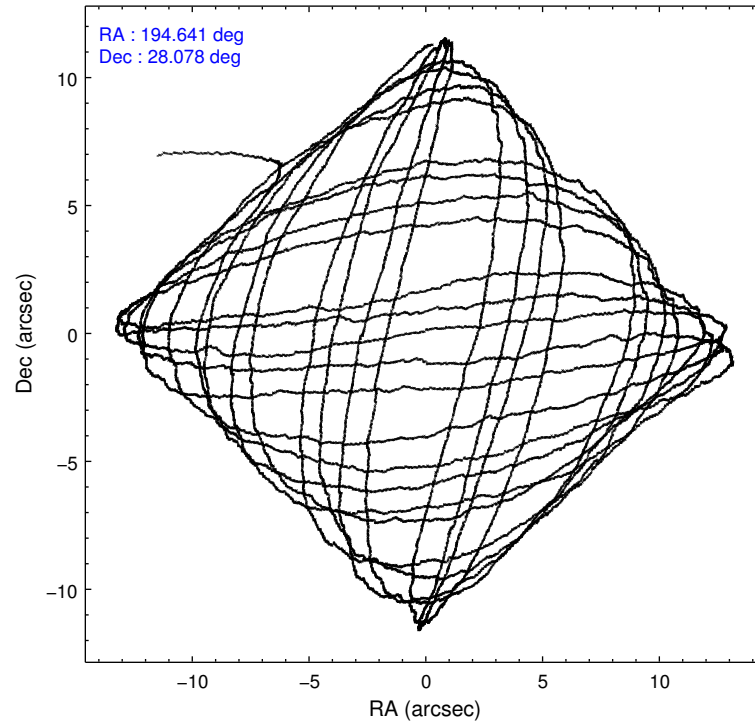
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	80884	90777	89371	92976
rejected events	67620	65501	76211	73519
rejected %	83%	72%	85%	79%

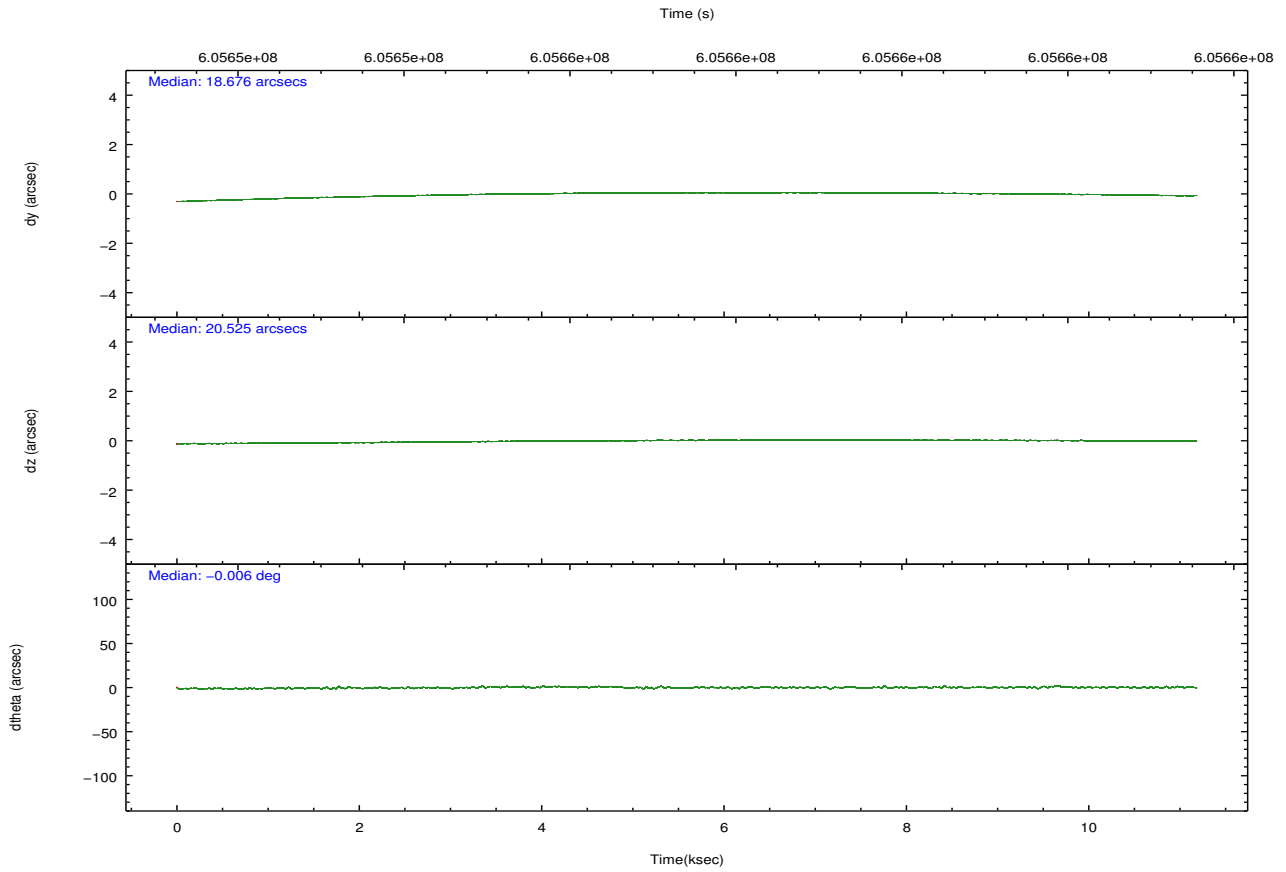
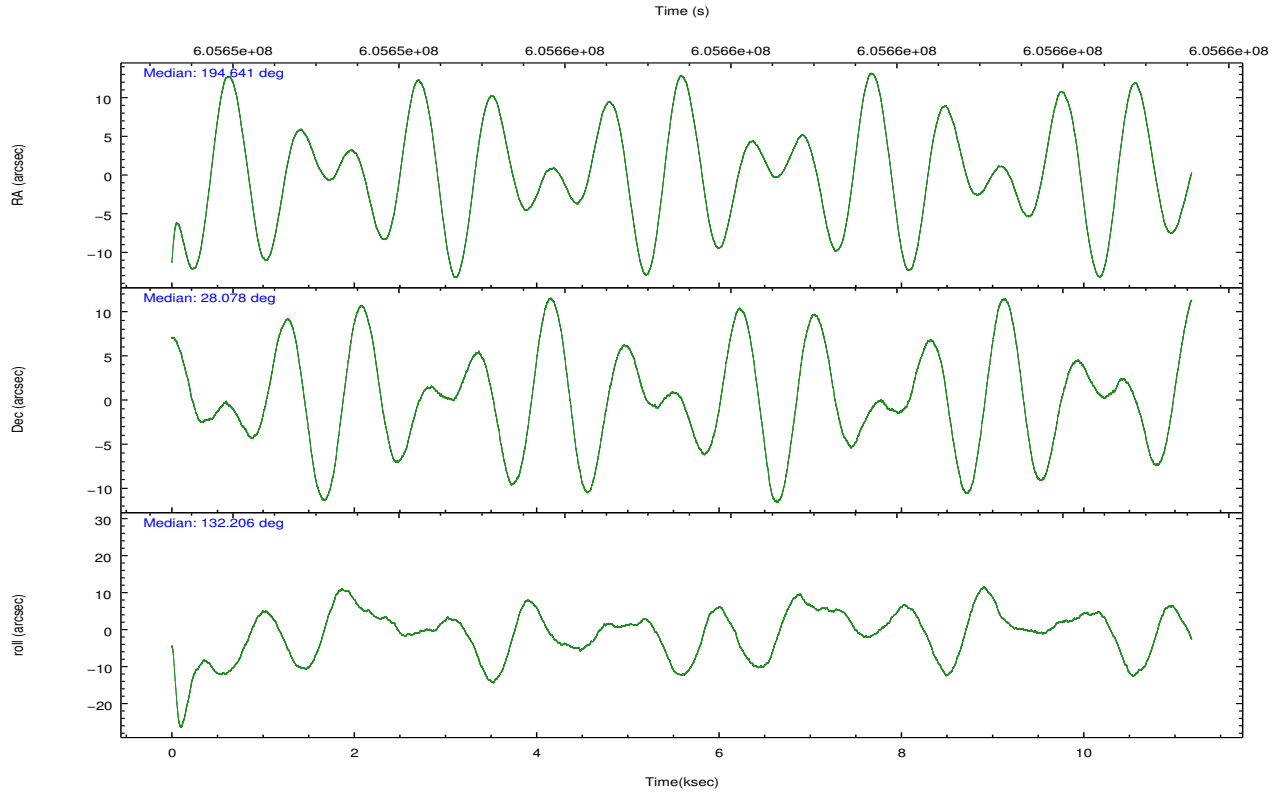
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	6343	15988	6562	11748
	7%	17%	7%	12%
grade 1 events	53	78	64	86
	0%	0%	0%	0%
grade 2 events	2747	3920	2590	2939
	3%	4%	2%	3%
grade 3 events	1099	1380	1065	1301
	1%	1%	1%	1%
grade 4 events	1030	1356	1070	1344
	1%	1%	1%	1%
grade 5 events	3409	3502	3155	3801
	4%	3%	3%	4%
grade 6 events	2055	2660	1882	2141
	2%	2%	2%	2%
grade 7 events	64148	61893	72983	69616
	79%	68%	81%	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	194.670467	194.6405725005068	Subarray requested	NONE	NONE
[deg] Pointing Dec	28.070045	28.07838020179734	Alternating exposures requested	N	N
[deg] Pointing Roll	131.990170	132.212959748494	[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)	605652018.184000	605651114.05049			
Observation start date	2017-03-11T20:39:09	2017-03-11T20:25:14			
[s] Observation end time (MET)	605663018.184000	605663478.6262			
Observation end date	2017-03-11T23:42:29	2017-03-11T23:51:18			
Read mode	TIMED	TIMED			

2.3 Aspect



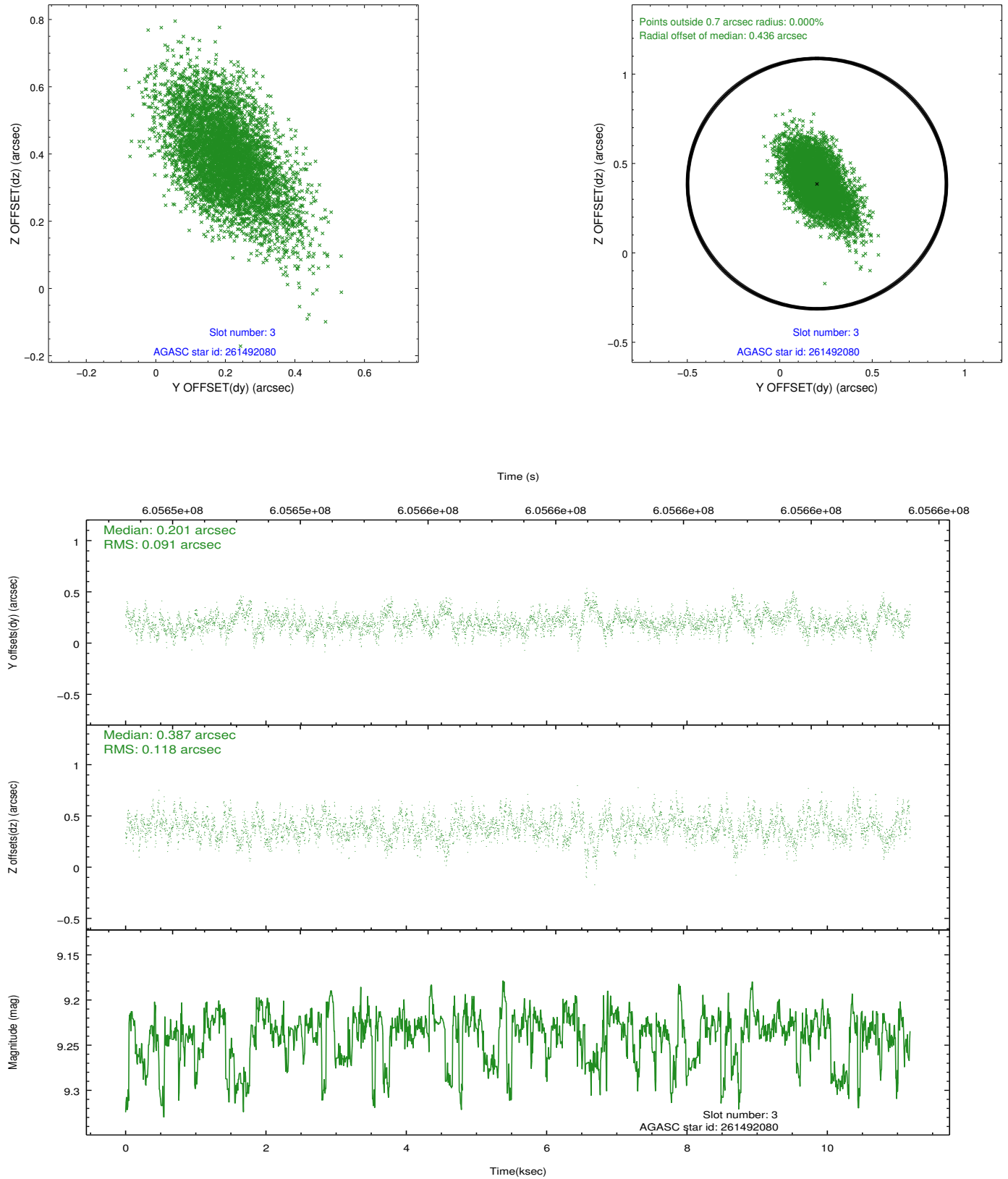


Slot Statistics

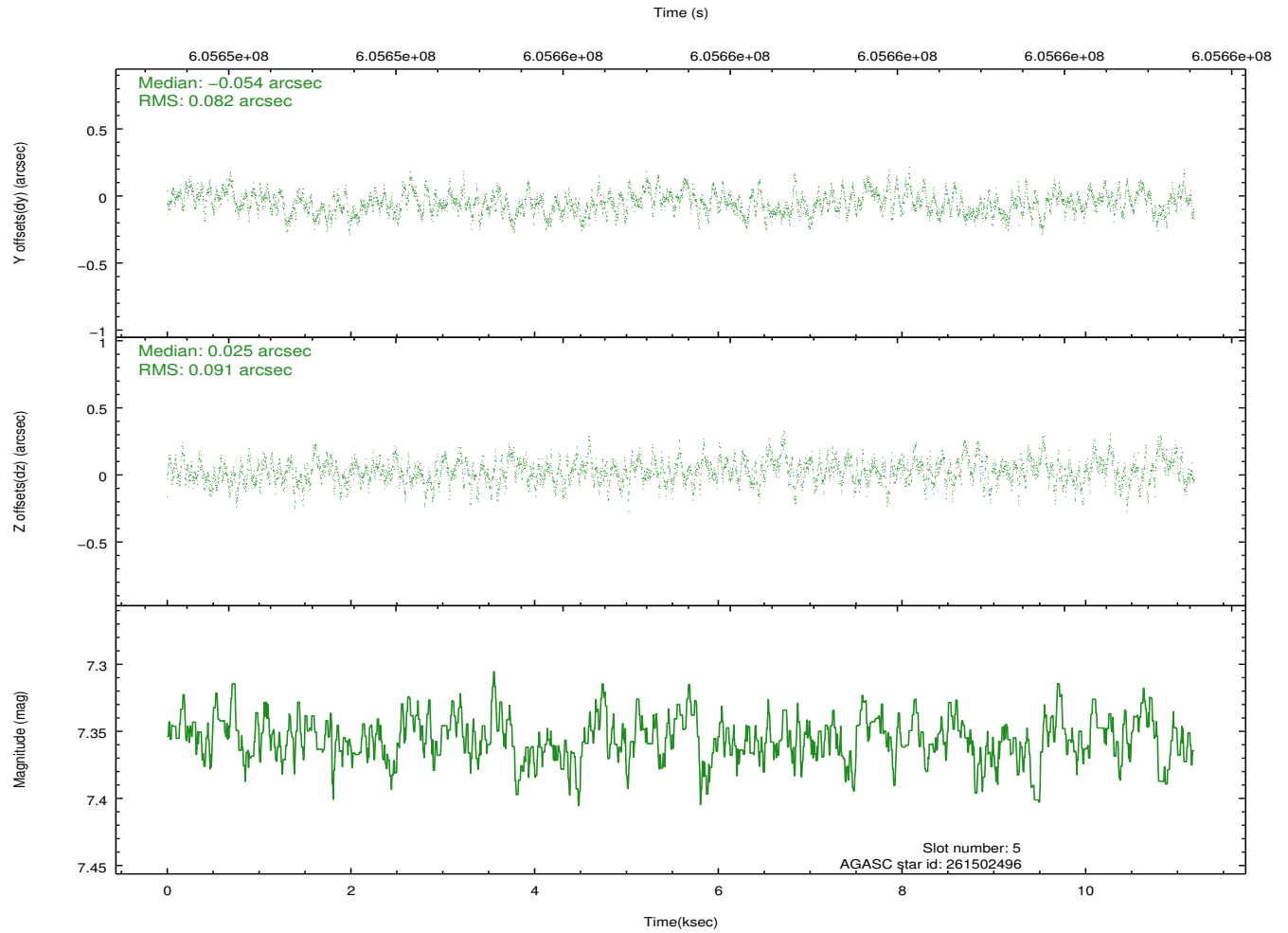
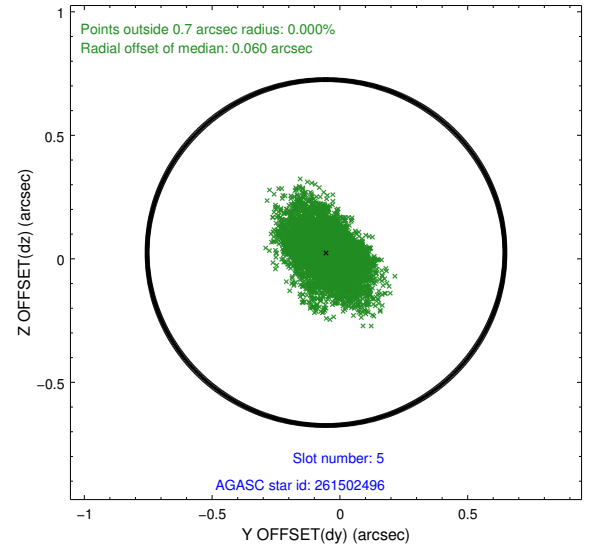
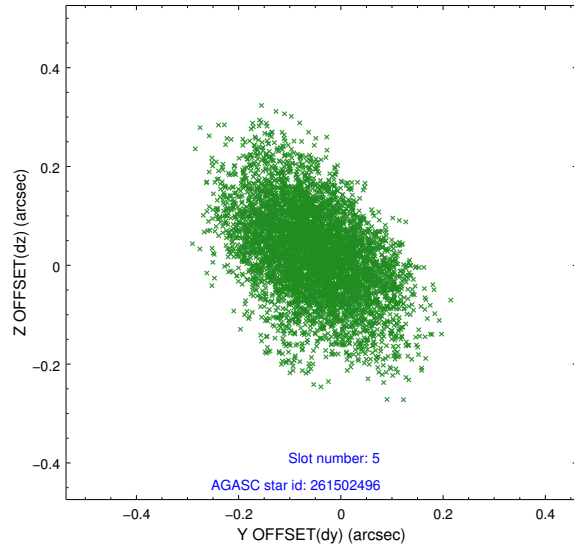
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.22	2728	-0.062	-0.102	0.011	0.018	0.000000	0.000000	920.71	-844.29
1	FID		ACIS-I-4	7.16	2725	0.497	0.124	0.009	0.014	0.000000	0.000000	2141.44	1055.58
2	FID		ACIS-I-5	7.21	2728	-0.533	0.048	0.008	0.013	0.000000	0.000000	-1827.29	1053.63
3	GUIDE	used	261492080	9.24	5454	0.201	0.387	0.152	0.270	194.976344	28.631585	857.49	-2071.10
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	5455	-0.054	0.025	0.129	0.216	194.887297	28.065668	-471.73	-502.21
6	GUIDE	used	261503168	8.54	5452	-0.154	-0.413	0.107	0.174	193.765545	28.234101	2366.59	1730.86
7	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

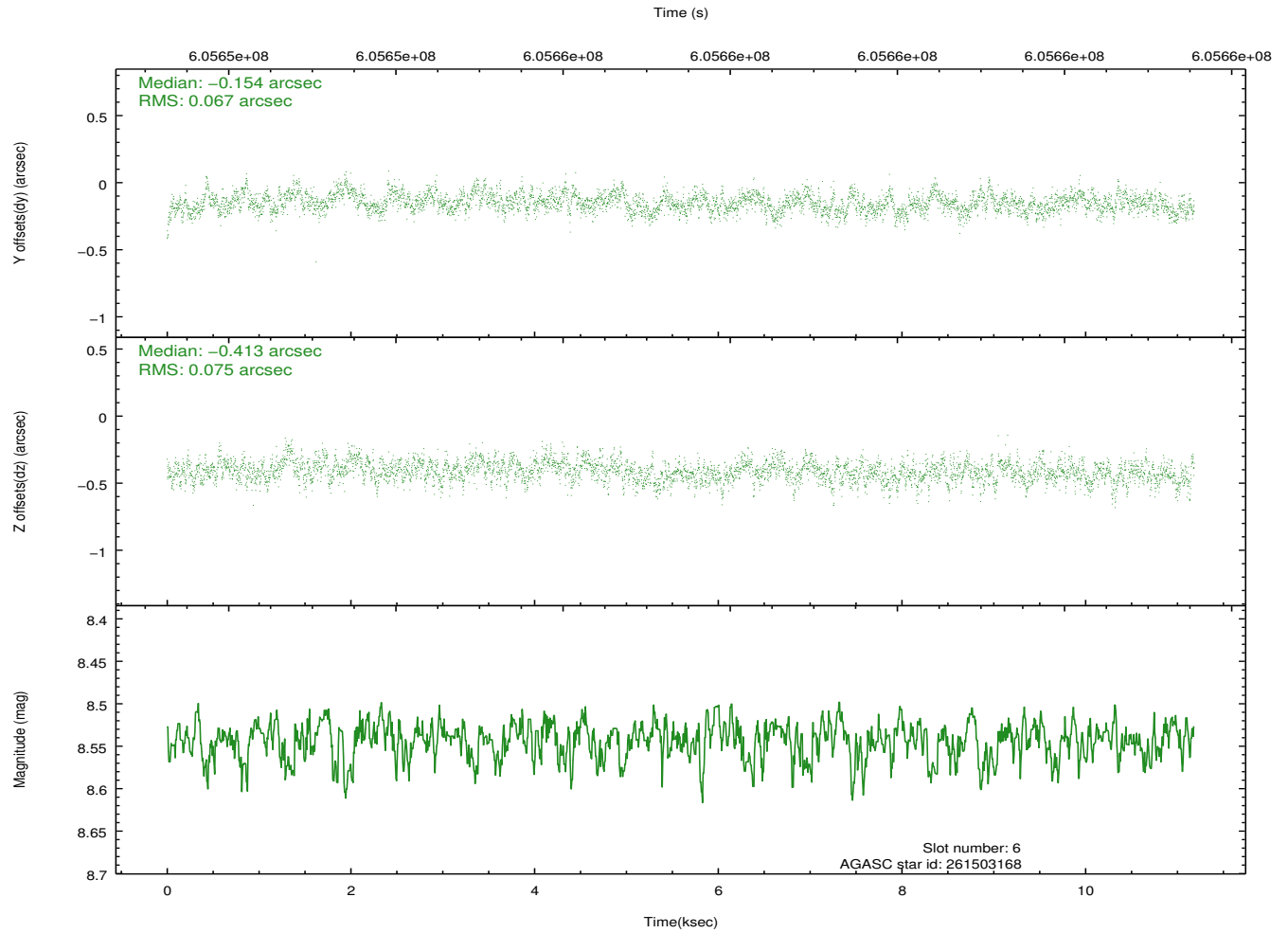
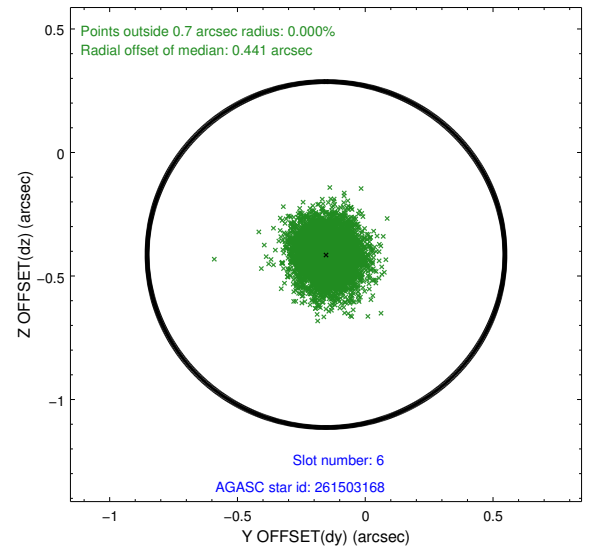
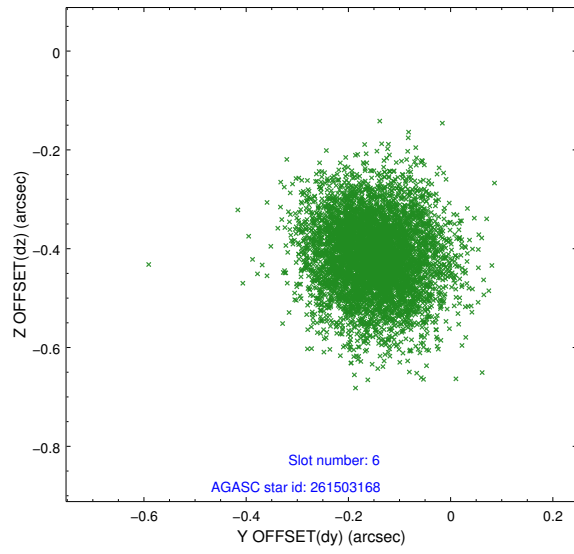
2.4.1 Slot 3



2.4.2 Slot 5

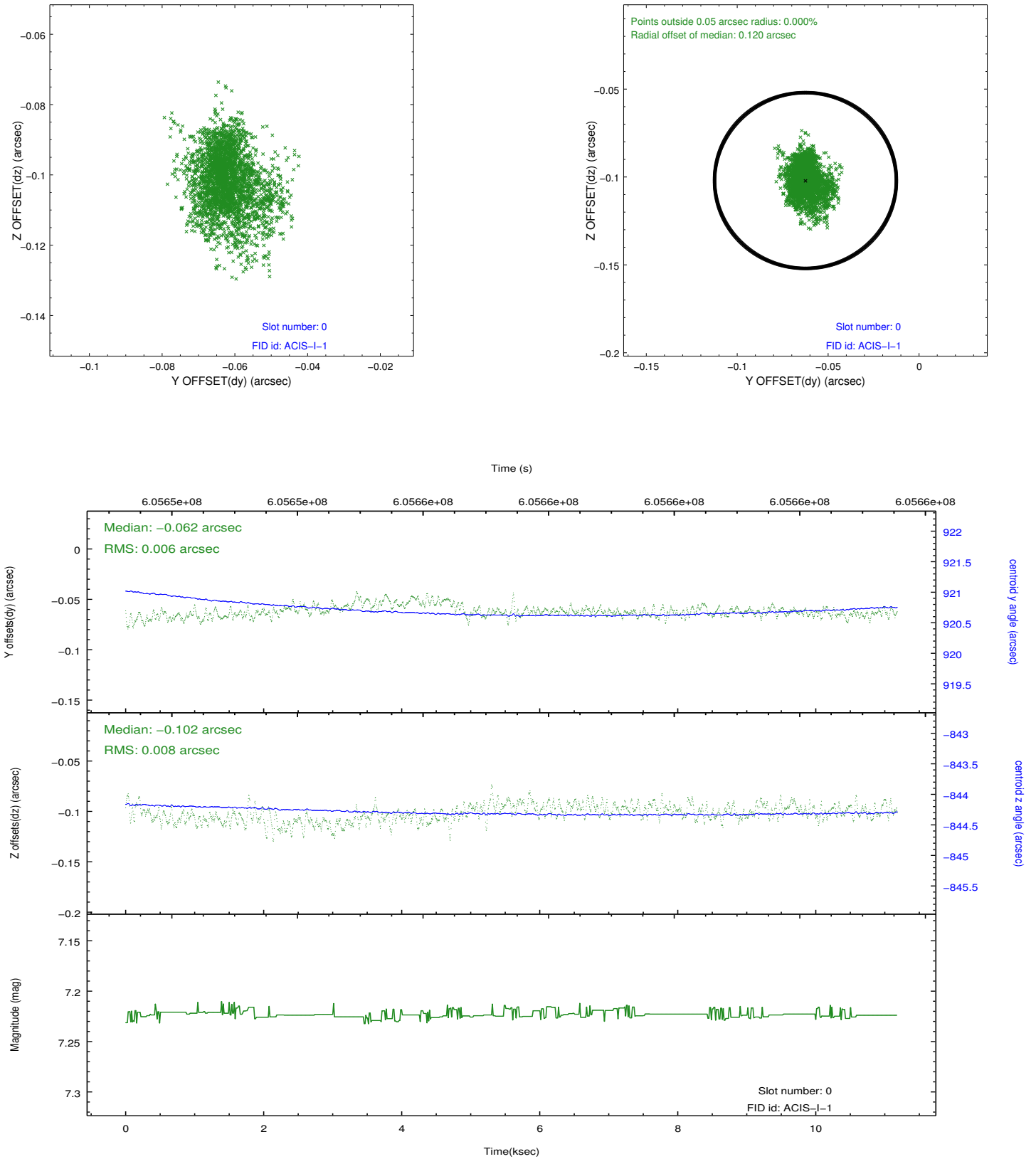


2.4.3 Slot 6

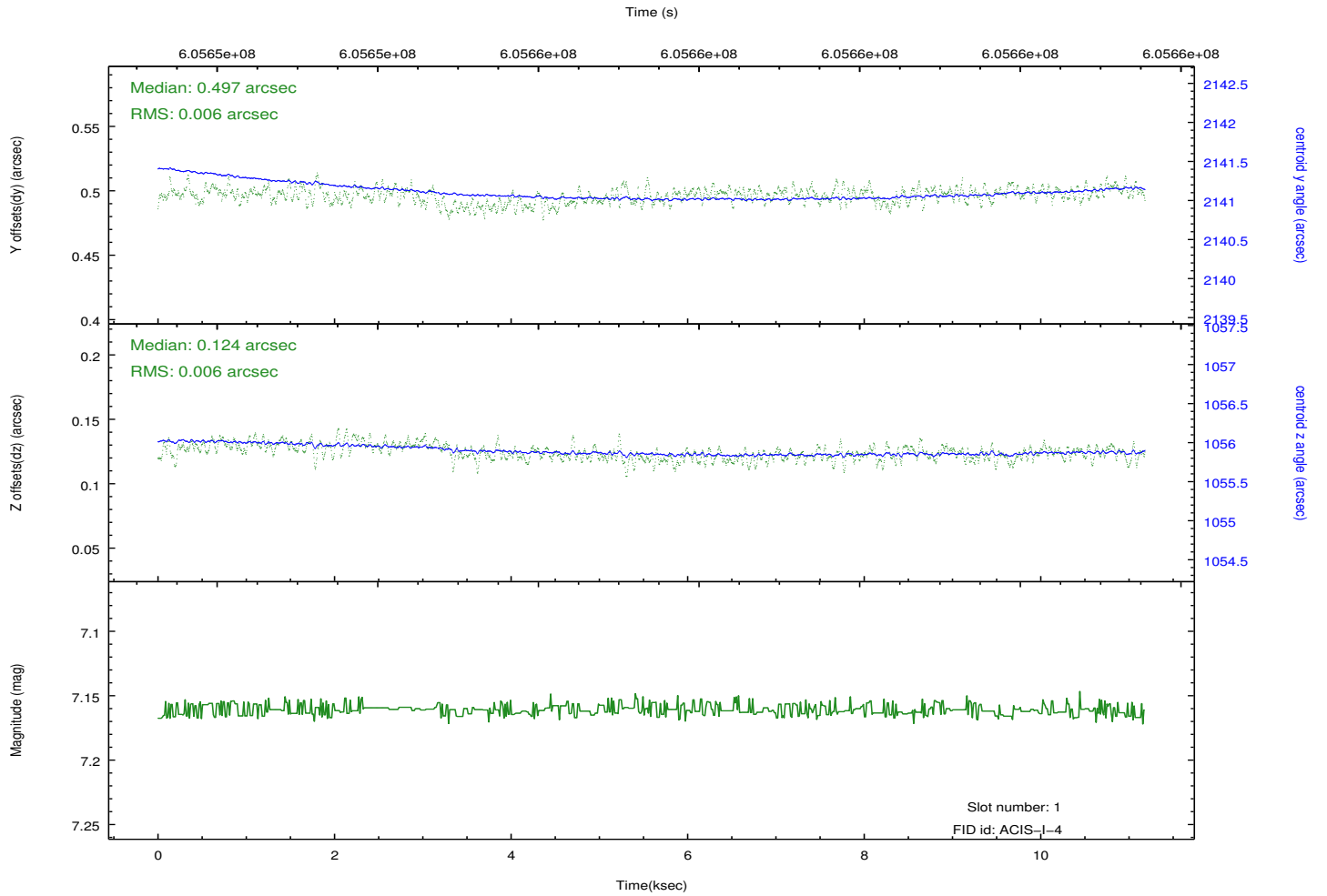
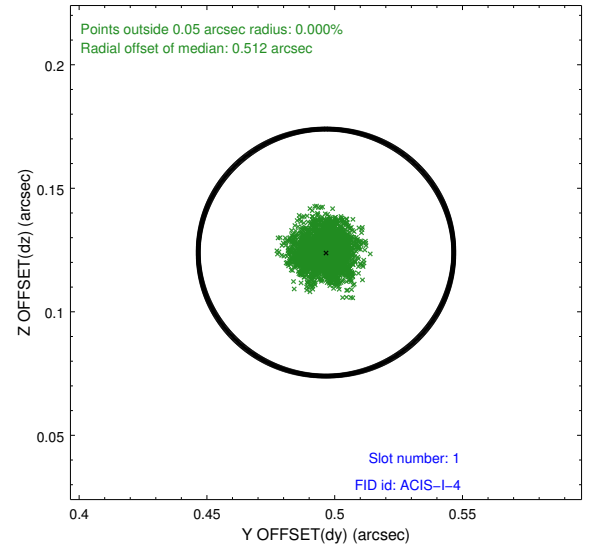
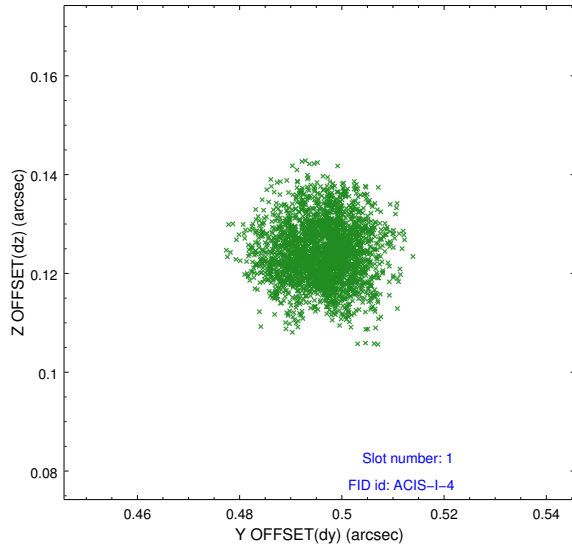


2.5 FID Slots

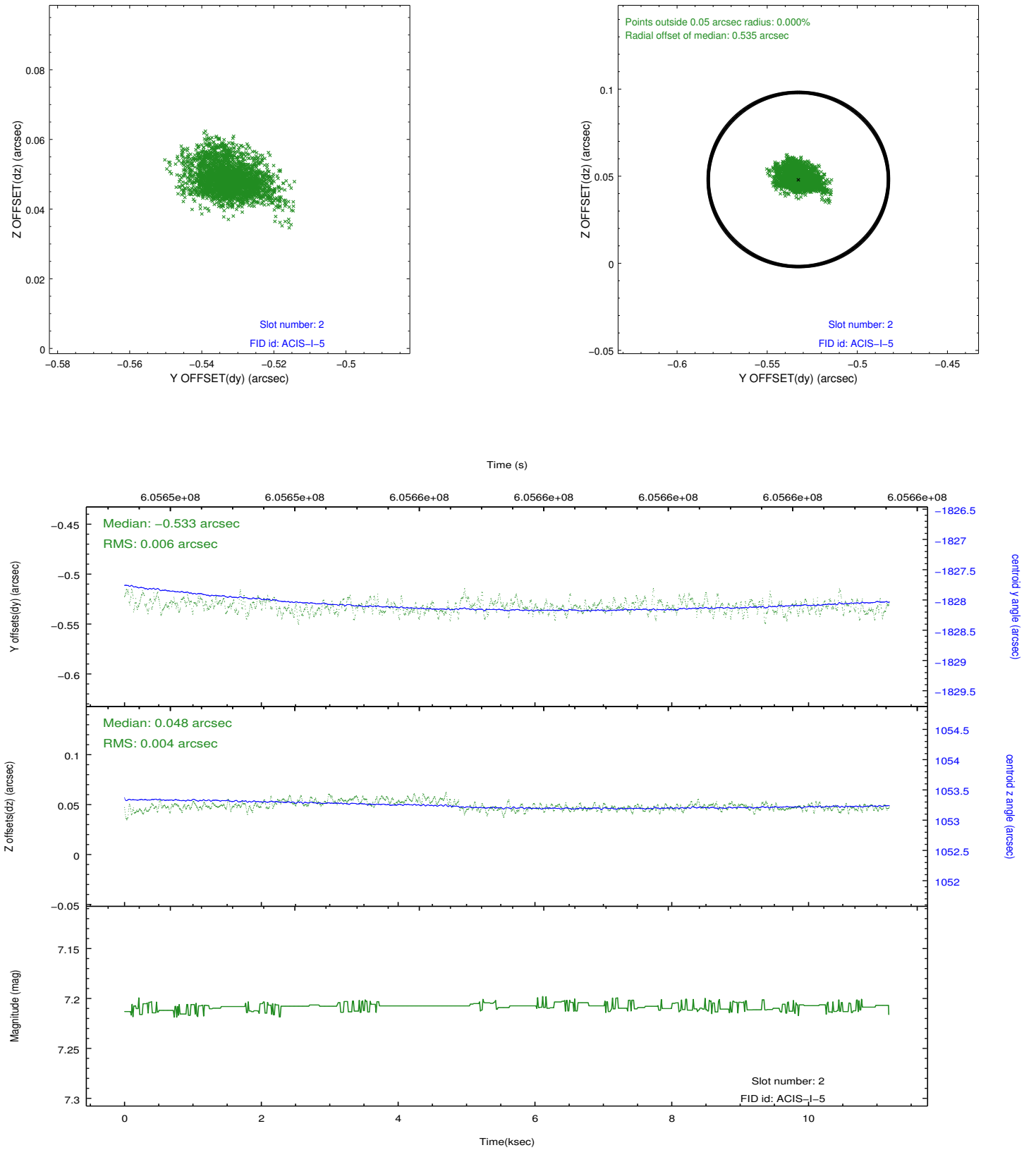
2.5.1 Slot 0



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)	2017.03.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	11.07605487752

A.2 Comments

The guide stars in slots 4 and 7 were removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of these slots from the solution.