

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 18235 - L2 Version 2
Chandra X-Ray Center

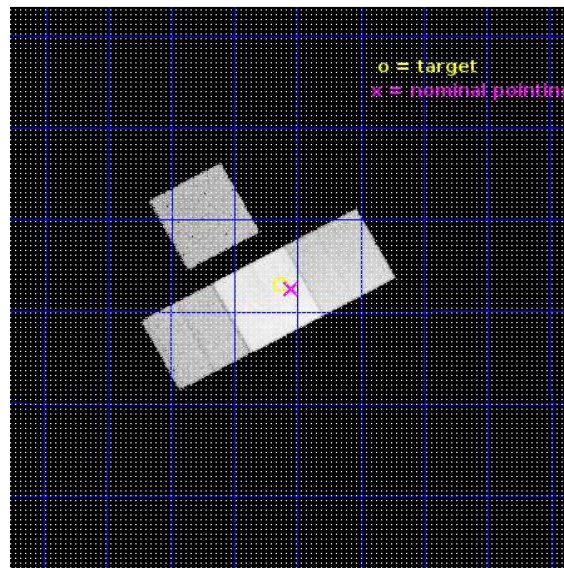
L2 Processing Date : Mar 23 2017

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1 Front

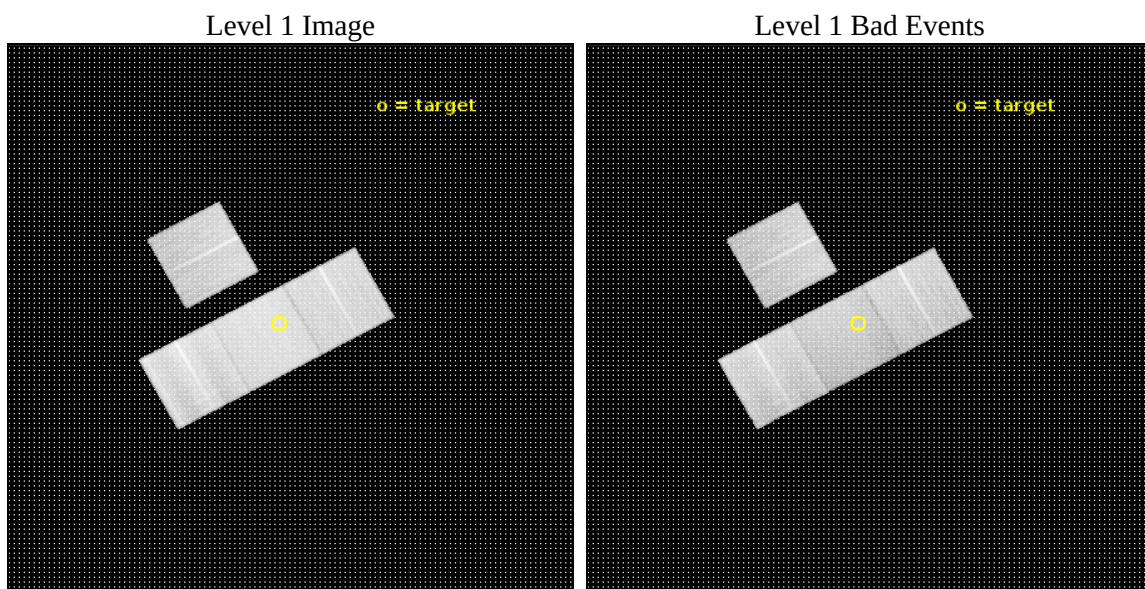
seq_num	801562	Sequence number
obs_id	18235	Observation id
title	Tales of tails: the Coma episodes	Proposal title
observer	Ming Sun	Principal investigator
object	IC 4040	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	195.159167	Observer's specified target RA [deg]
dec_targ	28.049056	Observer's specified target Dec [deg]
ra_nom	195.1370515956	Nominal RA [deg]
dec_nom	28.041888896952	Nominal Dec [deg]
roll_nom	151.54562019253	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30066.125901461	Sum of GTIs [s]
livetime	29673.289832198	Livetime [s]
ontime3	30053.479479909	Sum of GTIs [s]
ontime6	30059.802721143	Sum of GTIs [s]
ontime7	30066.125901461	Sum of GTIs [s]
ontime8	30062.86170125	Sum of GTIs [s]
l2events	284707	Number of level 2 events



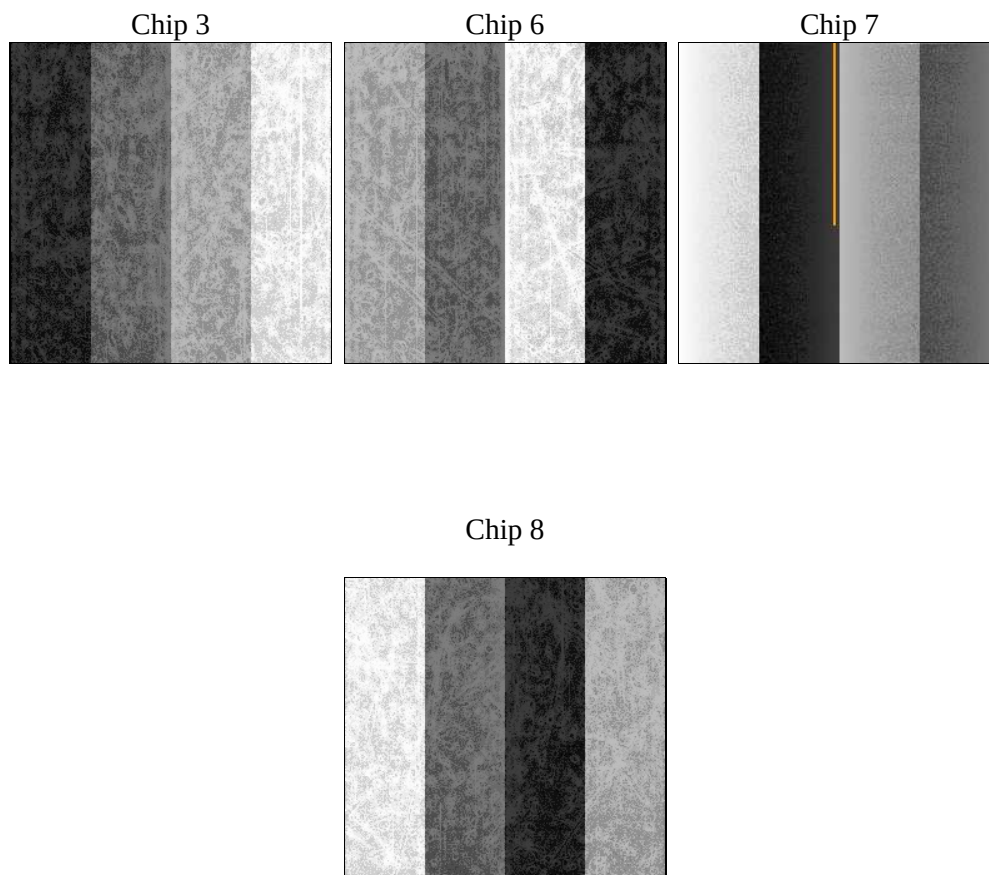
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	30066.125901461	Sum of GTIs [s]
caldsver	4.7.3	 	ontime3	30053.479479909	Sum of GTIs [s]
date	2017-03-23T17:13:55	Date and time of file creation	ontime6	30059.802721143	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	30066.125901461	Sum of GTIs [s]
			ontime8	30062.86170125	Sum of GTIs [s]
			l1events	1109297	Number of level 1 events

2.1.4 Events

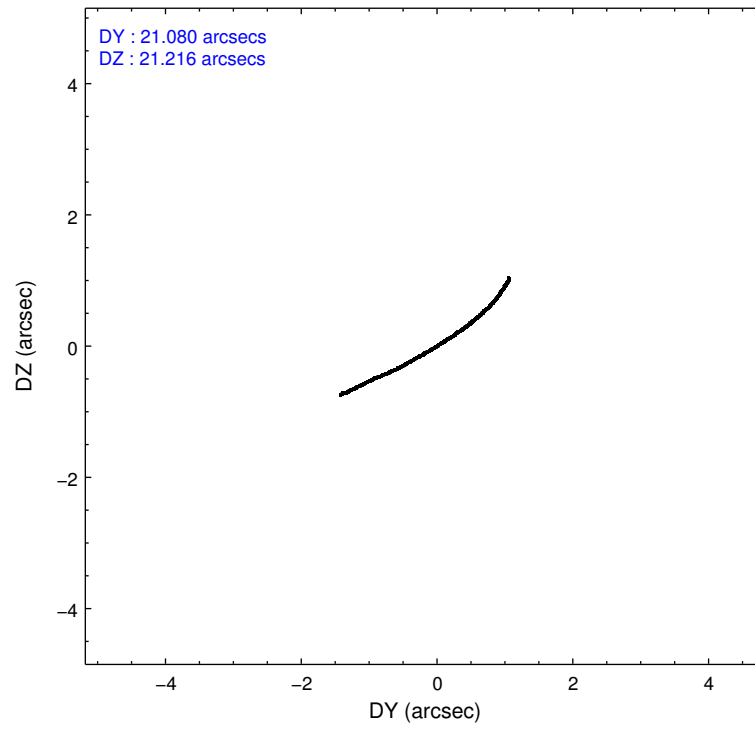
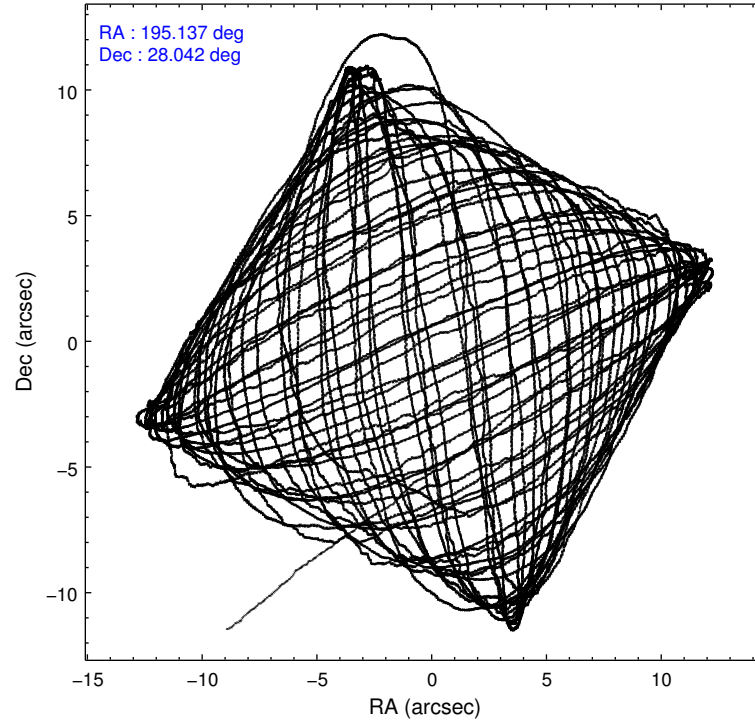
	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	214618	274788	323297	296594
rejected events	188070	204358	159031	210872
rejected %	87%	74%	49%	71%

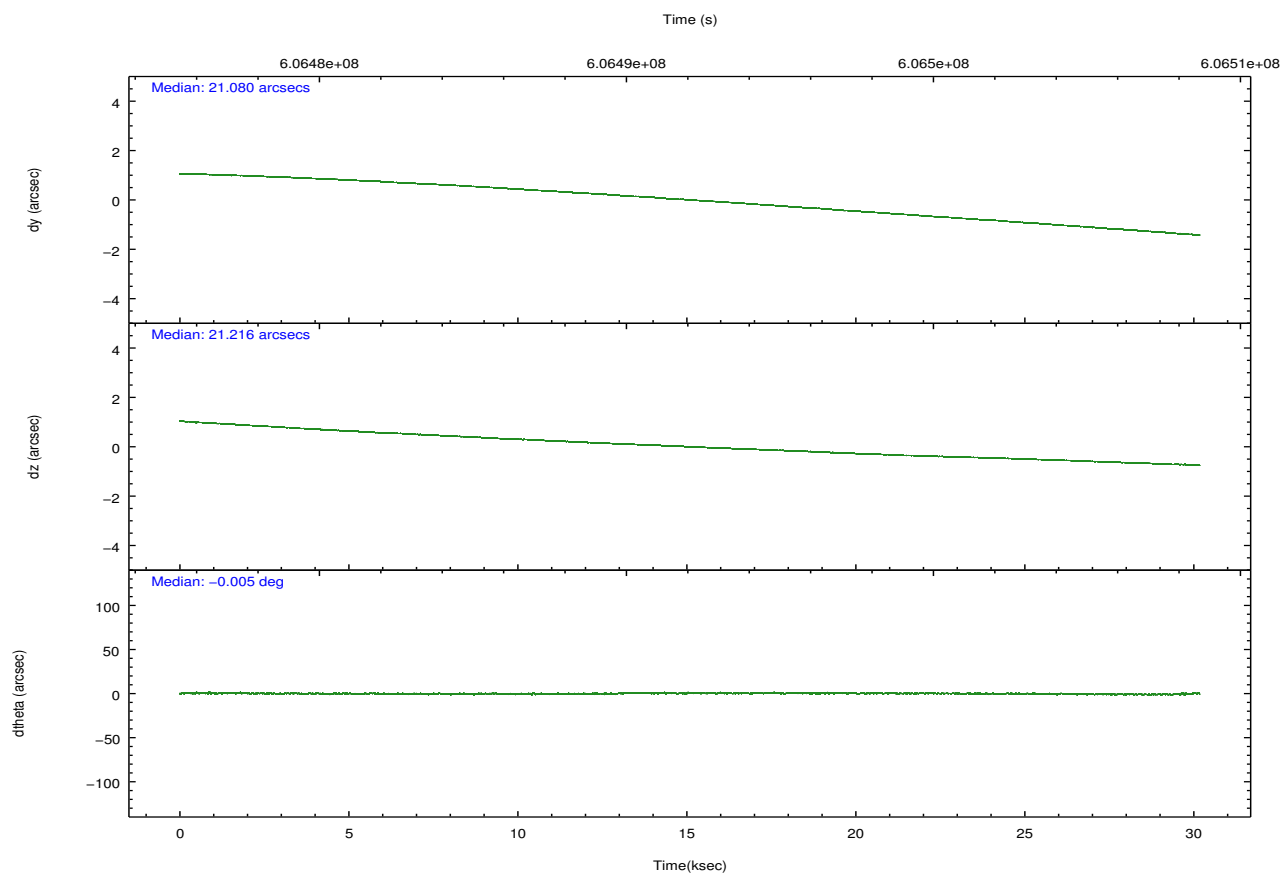
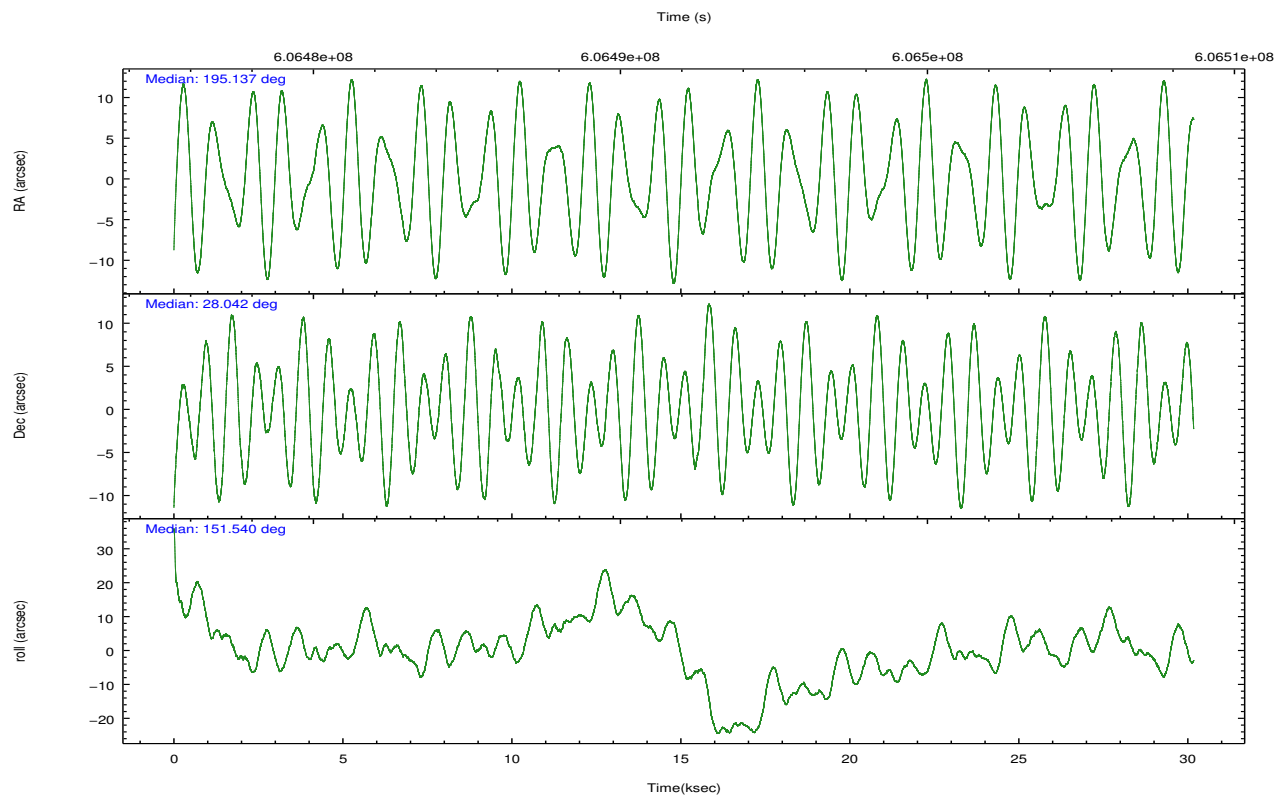
	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	11292	43679	21262	29188
	5%	15%	6%	9%
grade 1 events	135	248	363	270
	0%	0%	0%	0%
grade 2 events	5377	11114	36966	19990
	2%	4%	11%	6%
grade 3 events	2632	3996	14431	8033
	1%	1%	4%	2%
grade 4 events	2486	4014	14242	7630
	1%	1%	4%	2%
grade 5 events	10174	10389	27913	15267
	4%	3%	8%	5%
grade 6 events	4763	7630	77383	20887
	2%	2%	23%	7%
grade 7 events	177759	193718	130737	195329
	82%	70%	40%	65%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-3678	ACIS-3678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	195.168108	195.1370515955988	CCD I2 on	O1	N
[deg] Pointing Dec	28.042989	28.04188889695163	CCD I3 on	Y	Y
[deg] Pointing Roll	151.374384	151.5456201925295	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	606477146.184000	606475810.64837	CCD S5 on	N	N
Observation start date	2017-03-21T09:51:17	2017-03-21T09:30:10	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	606507146.184000	606508038.18773	On-chip summing requested	N	N
Observation end date	2017-03-21T18:11:17	2017-03-21T18:27:18	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



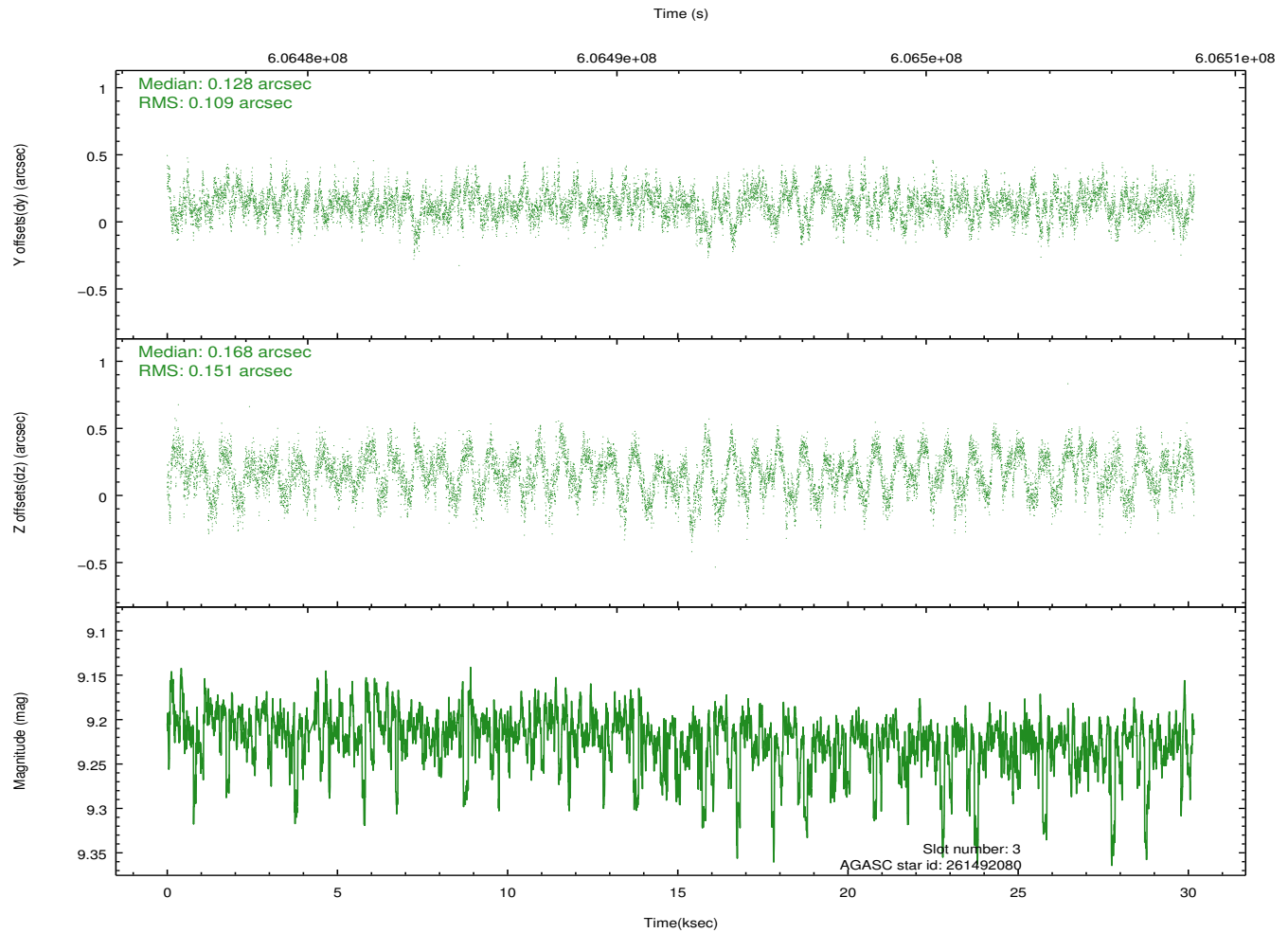
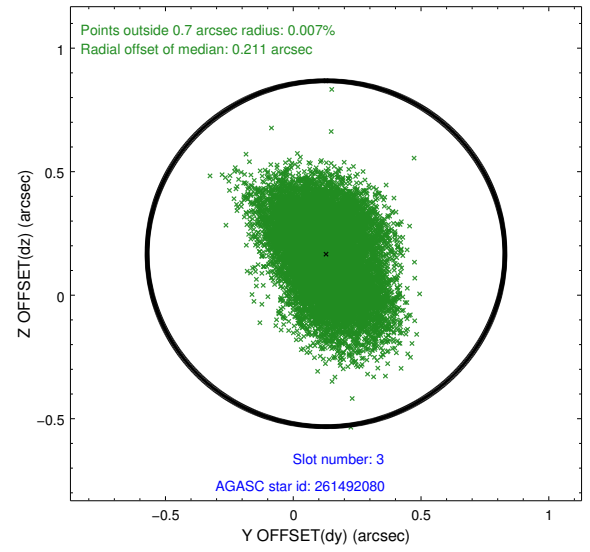
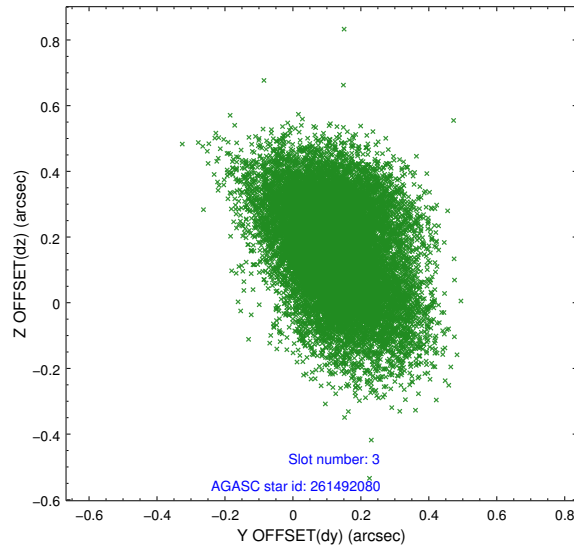


Slot Statistics

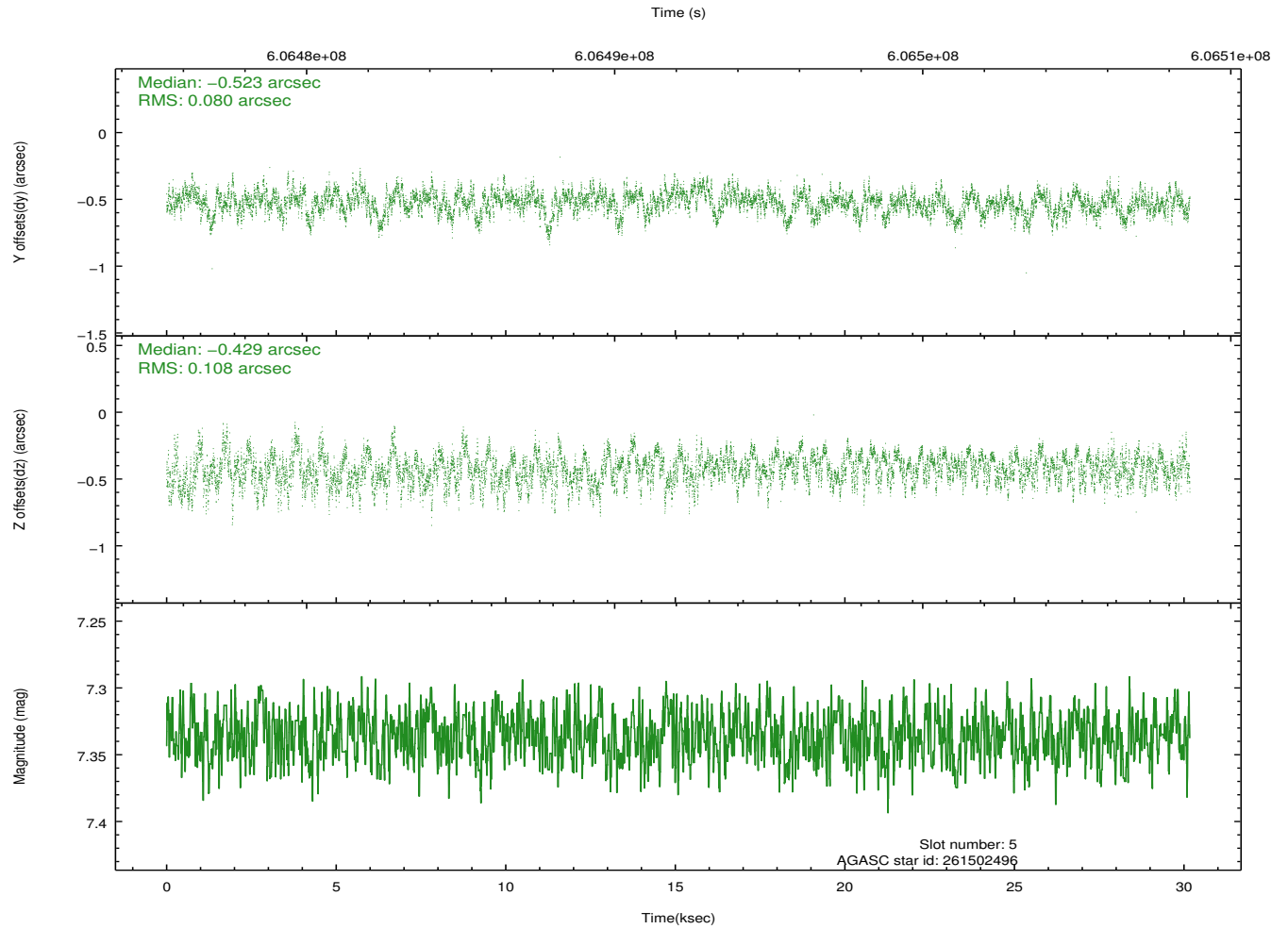
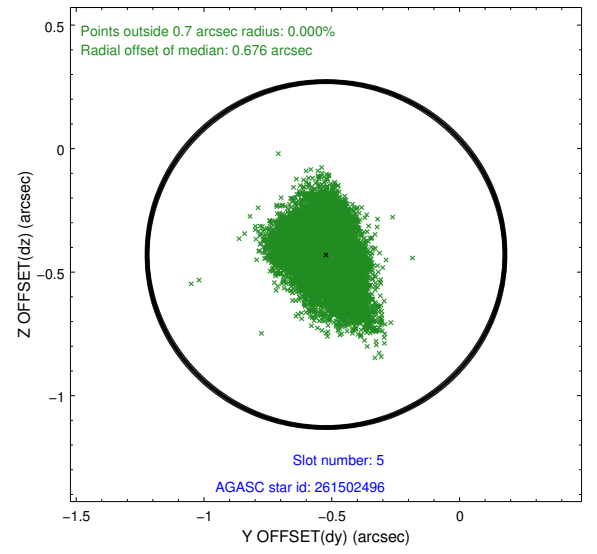
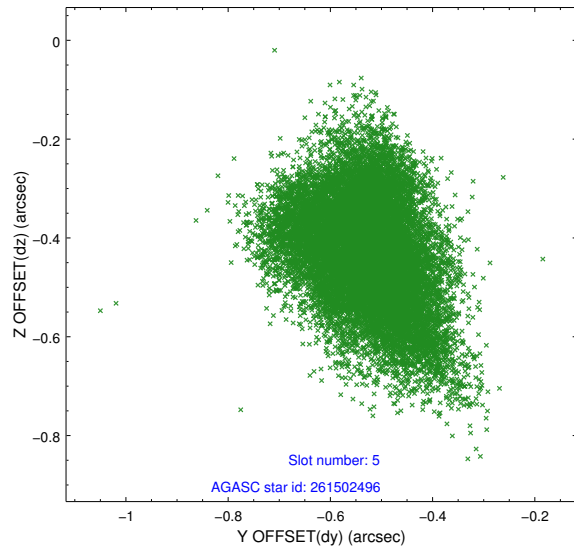
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.04	7359	-0.246	-0.135	0.024	0.037	0.000000	0.000000	-774.39	-1742.95
1	FID		ACIS-S-4	7.16	7360	0.531	0.155	0.014	0.038	0.000000	0.000000	2139.62	165.77
2	FID		ACIS-S-5	7.16	7359	-0.315	-0.011	0.020	0.032	0.000000	0.000000	-1827.23	159.32
3	GUIDE	used	261492080	9.22	14640	0.128	0.168	0.198	0.324	194.976344	28.631585	1547.77	-1569.66
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	7.34	14718	-0.523	-0.429	0.143	0.233	194.887297	28.065668	822.39	354.44
6	GUIDE	used	261505232	9.69	14694	-0.030	-0.263	0.289	0.450	194.216553	27.802521	2249.35	2202.37
7	GUIDE	used	261498520	9.18	14642	0.439	0.558	0.158	0.259	195.911074	28.449954	-1357.72	-2417.07

2.4 Star Slots

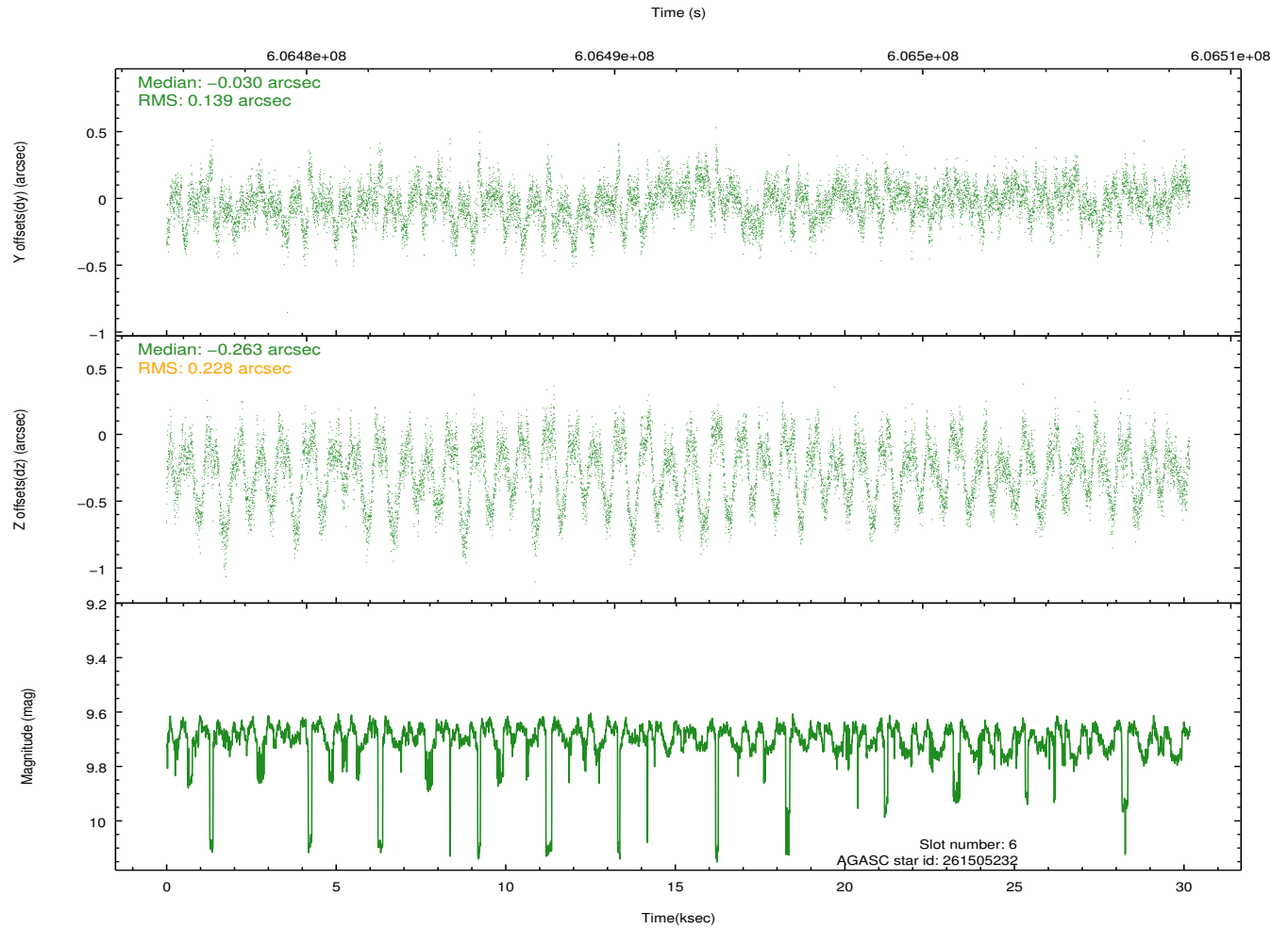
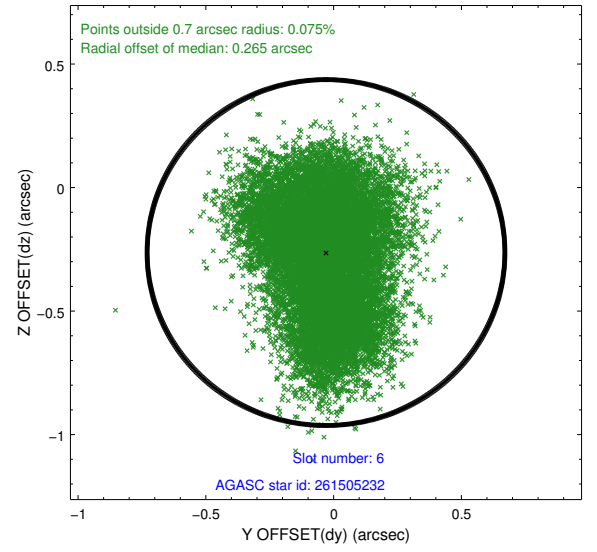
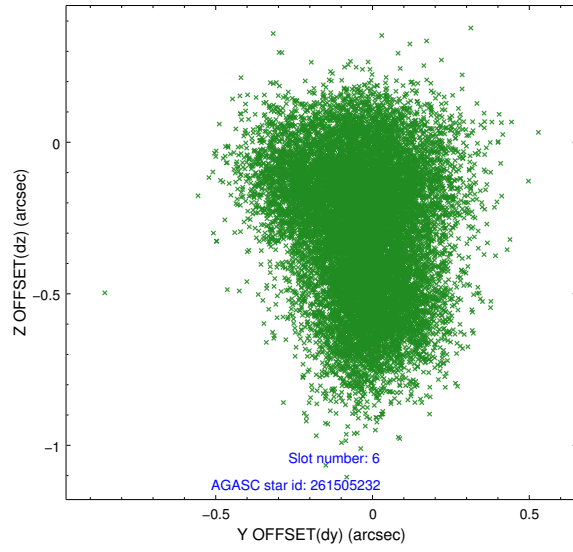
2.4.1 Slot 3



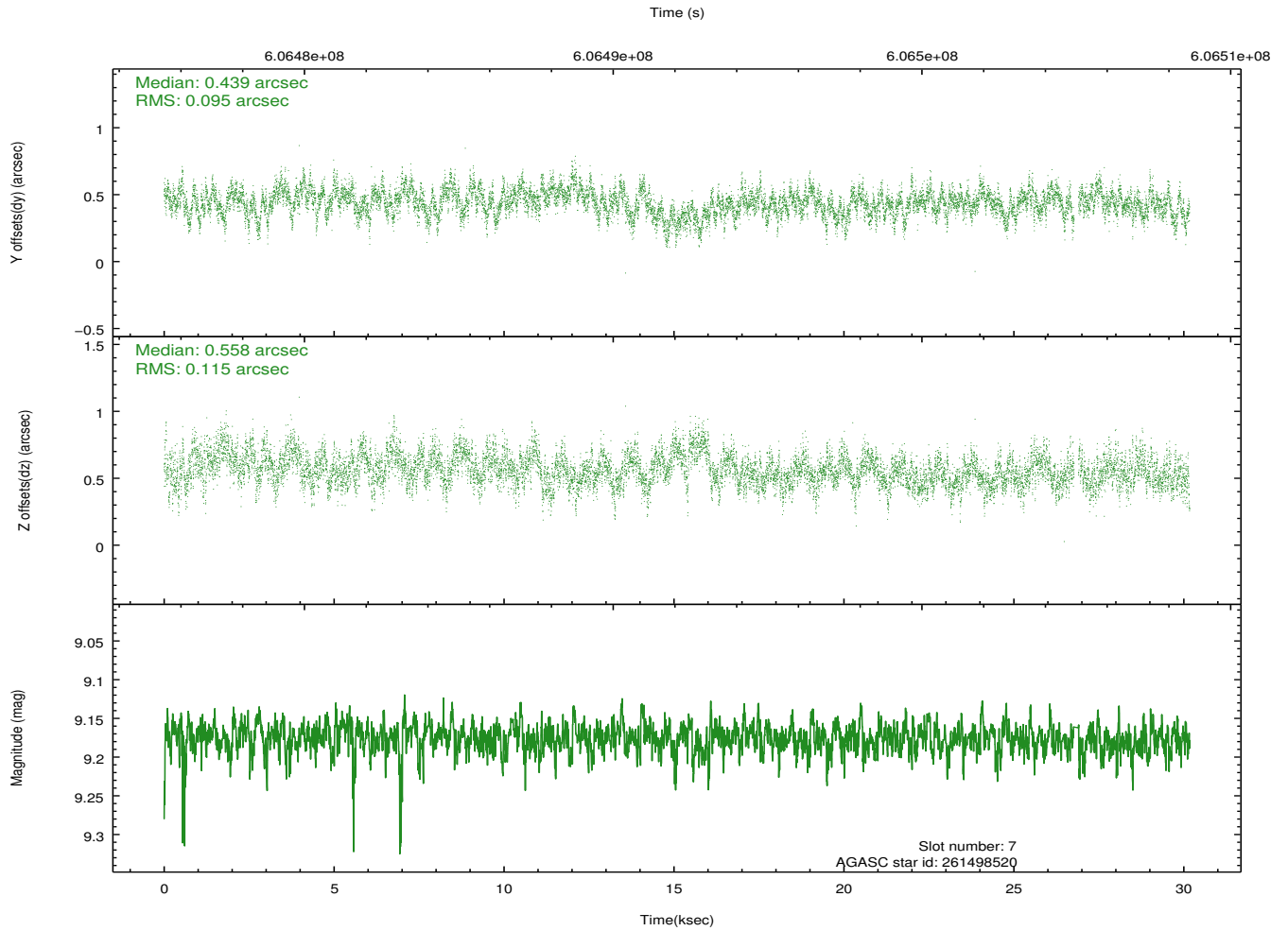
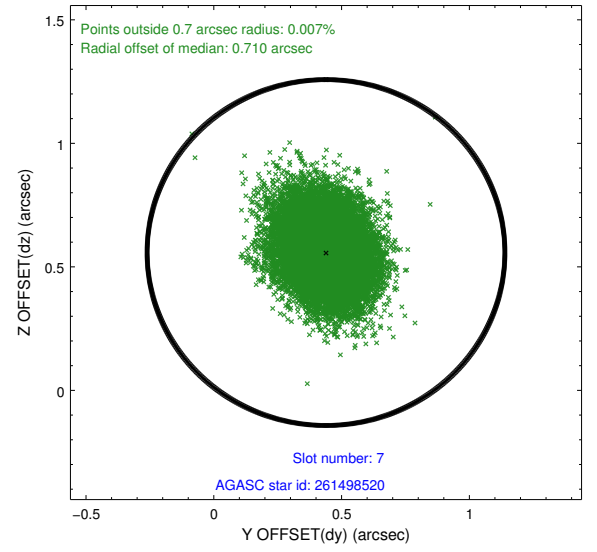
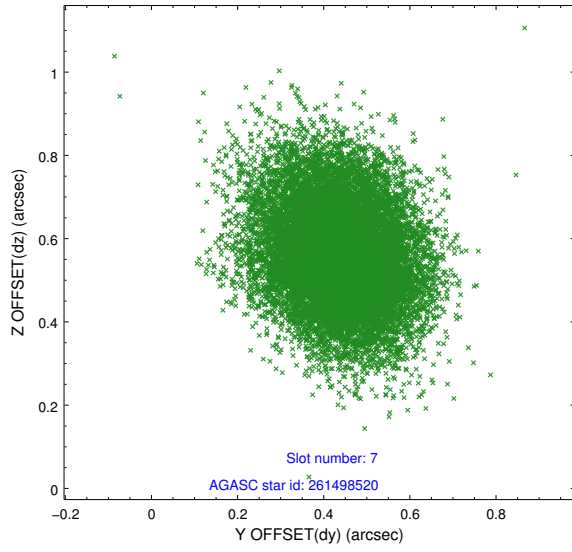
2.4.2 Slot 5



2.4.3 Slot 6

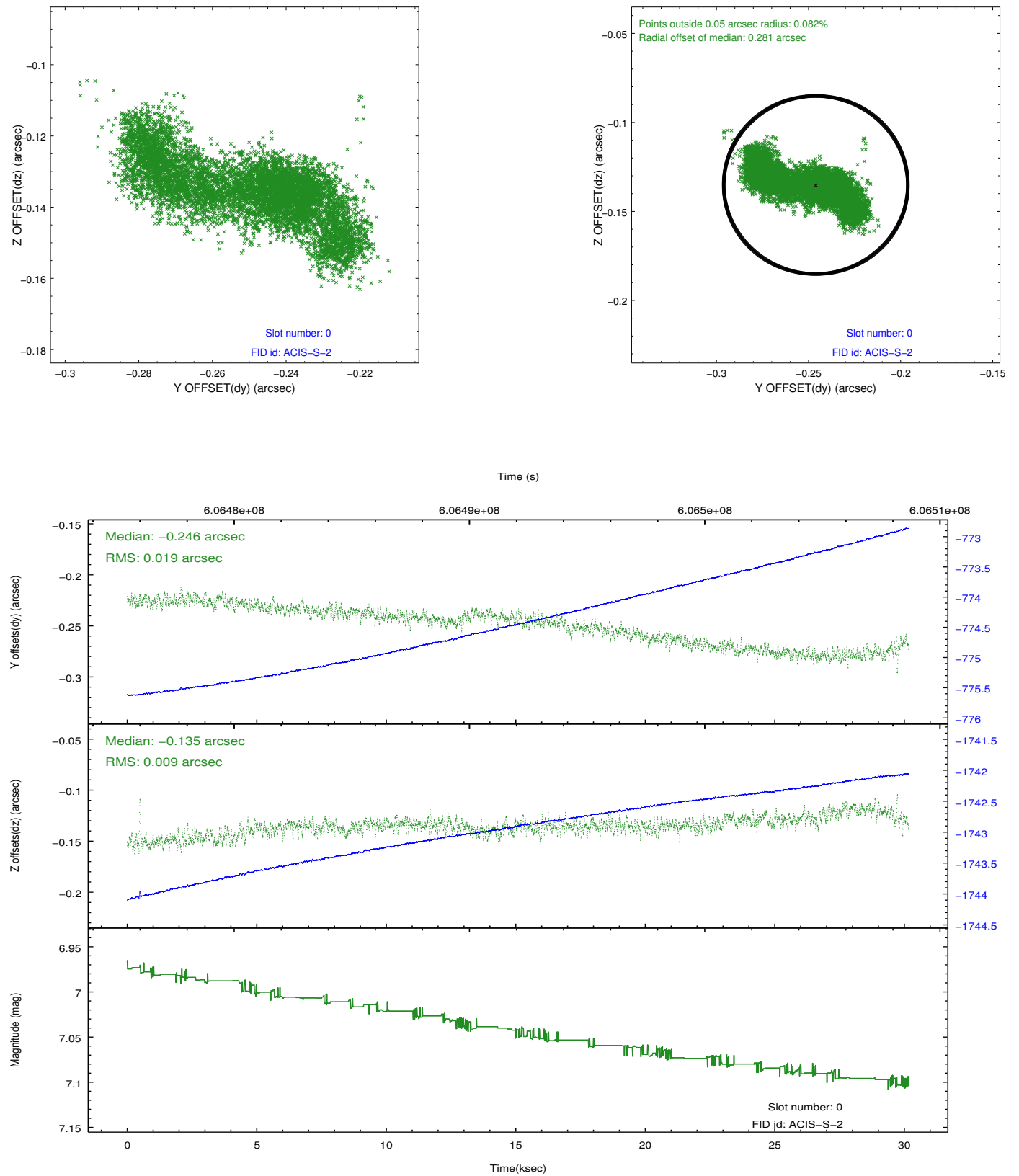


2.4.4 Slot 7

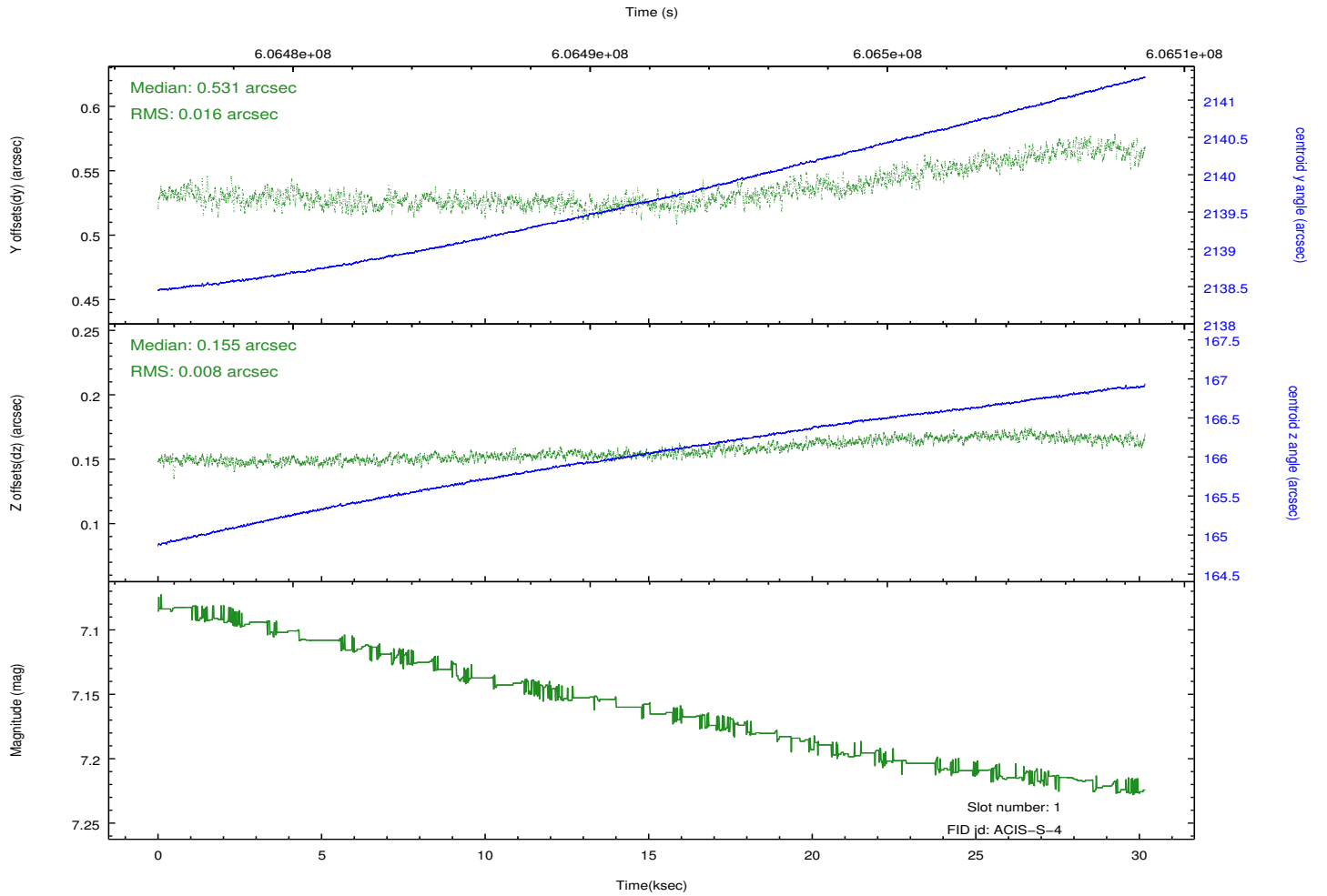
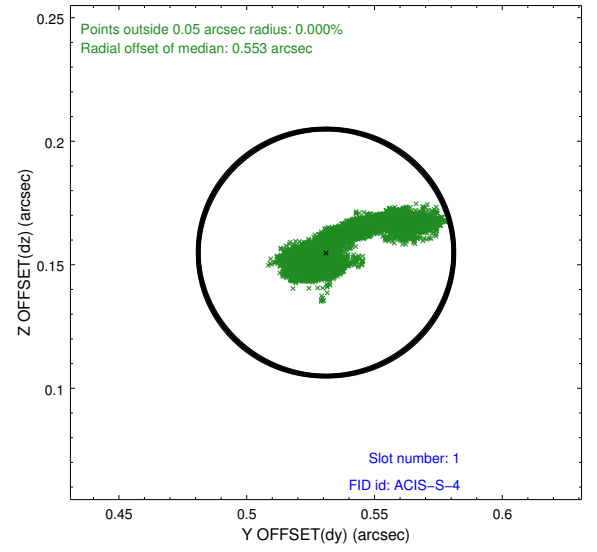
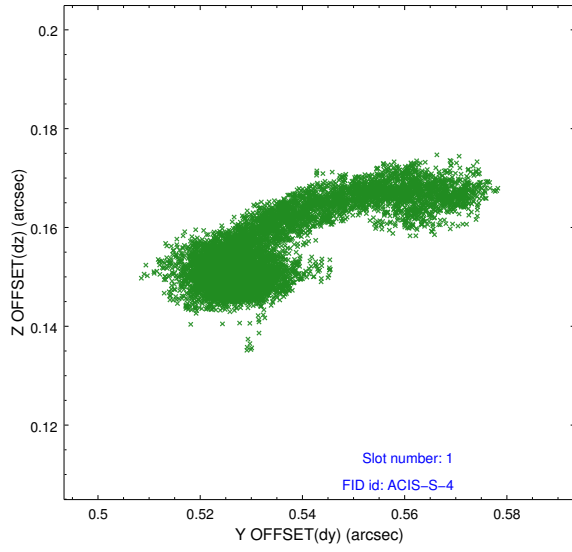


2.5 FID Slots

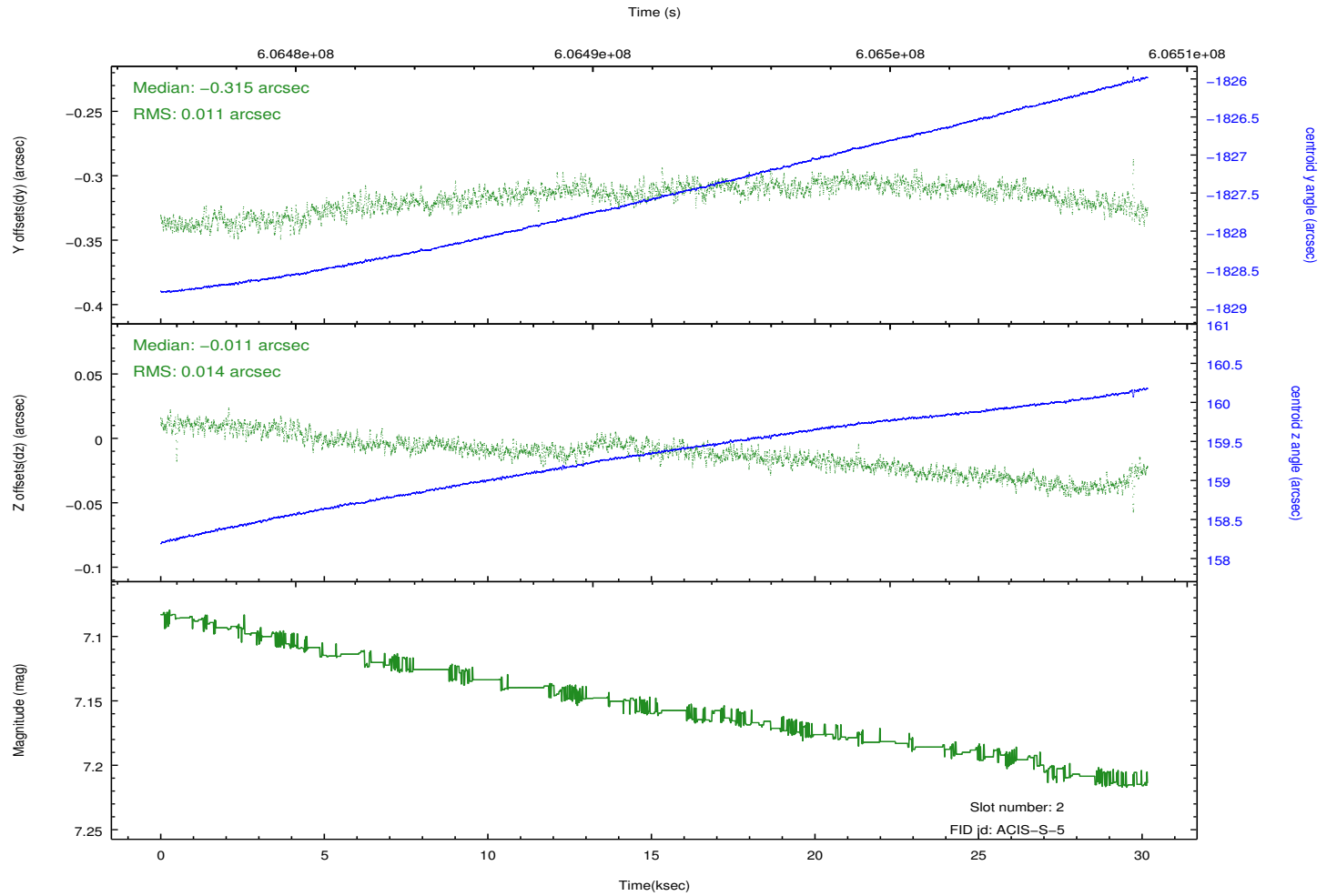
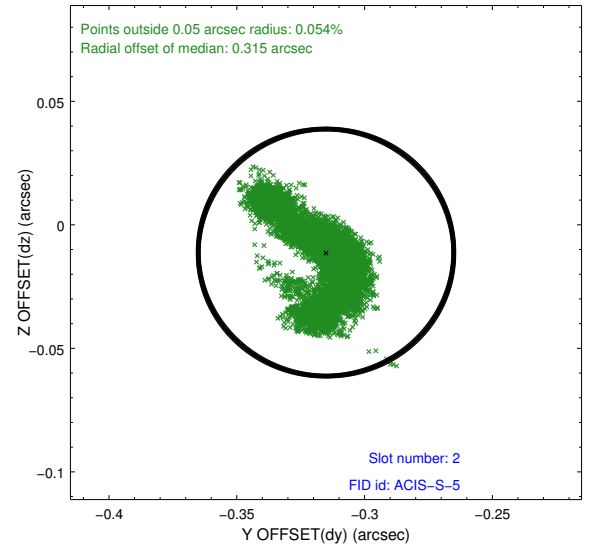
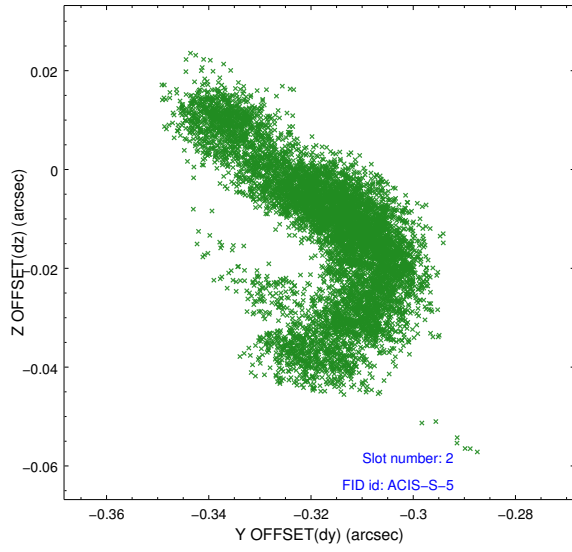
2.5.1 Slot 0



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)	2017.03.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.066125901461

A.2 Comments

Joint proposal with HST and NRAO.

One optional chip was dropped.

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.