

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 21870 - L2 Version 1
Chandra X-Ray Center

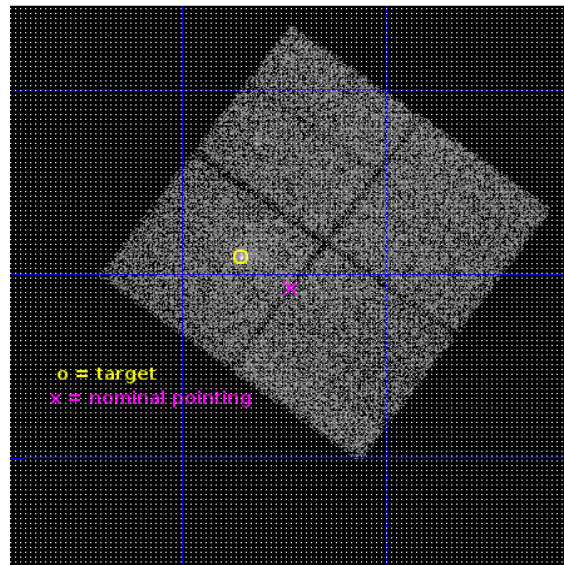
L2 Processing Date : May 25 2019

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1 Front

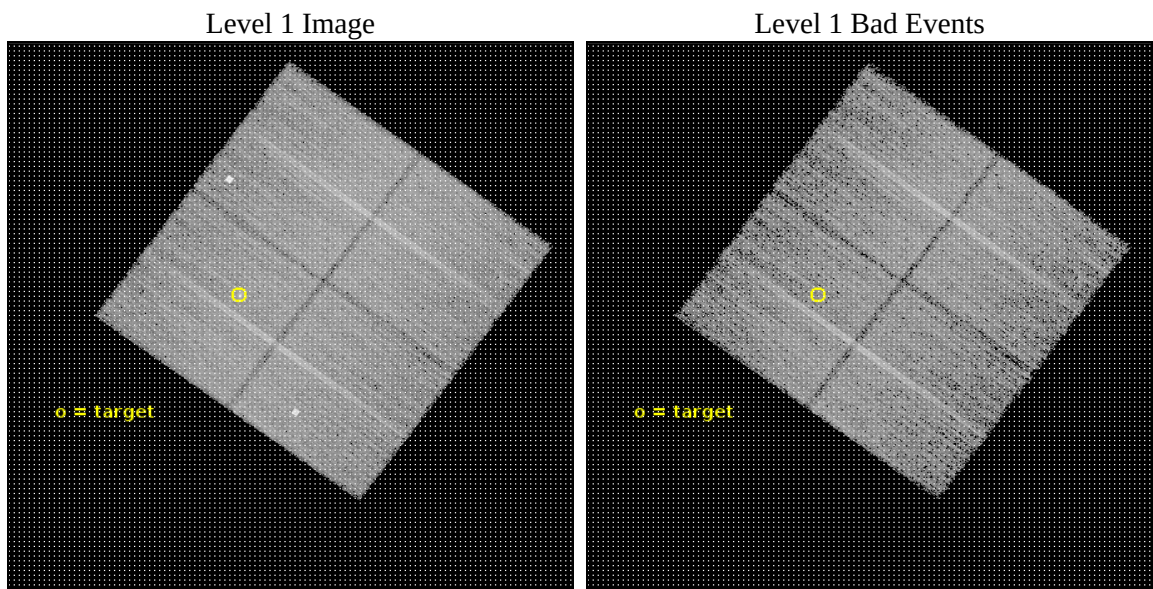
seq_num	502999	Sequence number
obs_id	21870	Observation id
title	The Answer is Blowing in the Wind: Jet Sweepback in Three PWNe	Pro
observer	Roger Romani	Principal investigator
object	PSR J1709-4429	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	257.427724	Observer's specified target RA [deg]
dec_targ	-44.485585	Observer's specified target Dec [deg]
ra_nom	257.36607474722	Nominal RA [deg]
dec_nom	-44.513083447857	Nominal Dec [deg]
roll_nom	36.165471585523	Nominal Roll [deg]
revision	1	Processing version of data
ontime	20078.700154543	Sum of GTIs [s]
livetime	19816.3571553	Livetime [s]
ontime0	20078.700154543	Sum of GTIs [s]
ontime1	20078.700154543	Sum of GTIs [s]
ontime2	20078.700154543	Sum of GTIs [s]
ontime3	20072.418034077	Sum of GTIs [s]
l2events	73553	Number of level 2 events



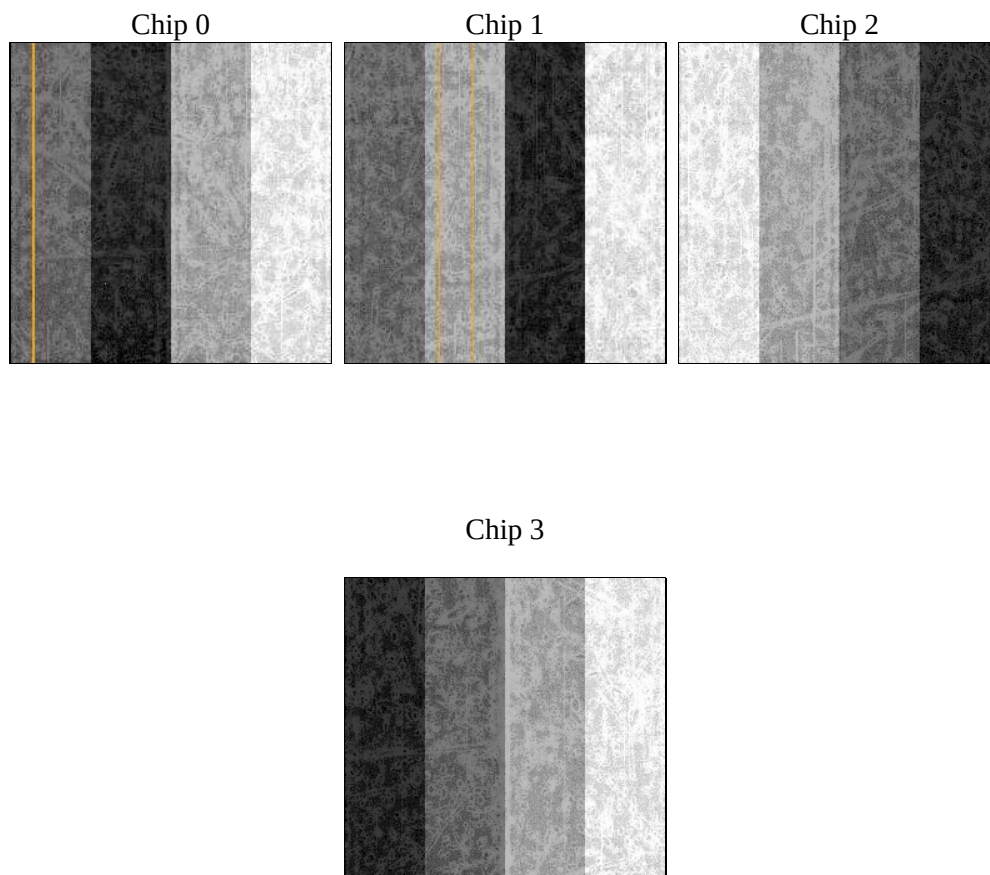
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	20078.700154543	Sum of GTIs [s]
caldsver	4.8.3	 	ontime0	20078.700154543	Sum of GTIs [s]
date	2019-05-25T04:42:37	Date and time of file creation	ontime1	20078.700154543	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	20078.700154543	Sum of GTIs [s]
			ontime3	20072.418034077	Sum of GTIs [s]
			l1events	611149	Number of level 1 events

2.1.4 Events

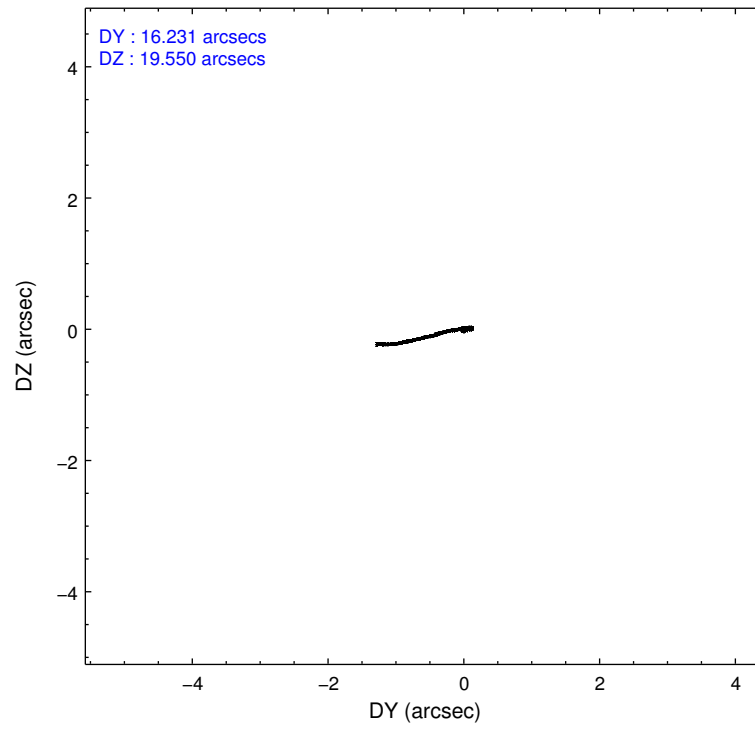
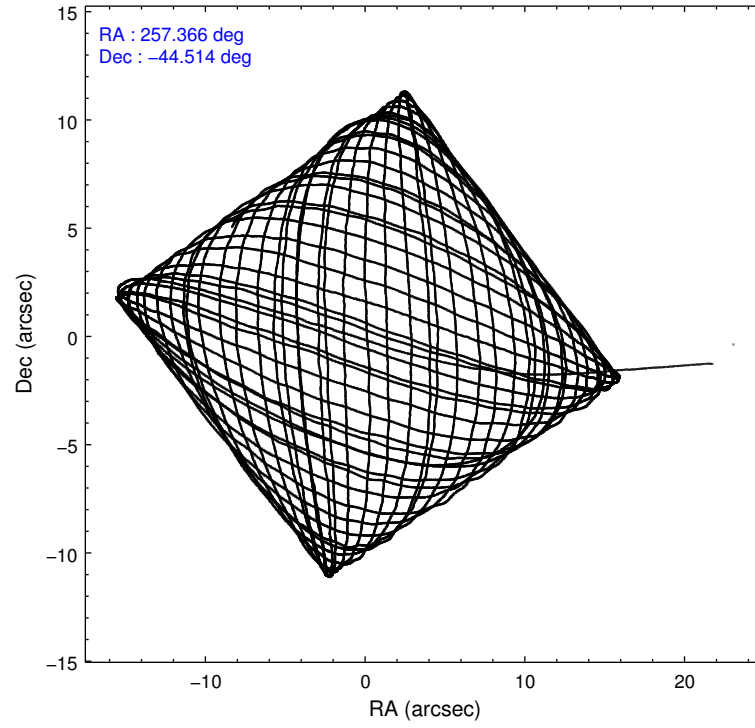
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	147322	146201	164452	153174
rejected events	124859	122728	137993	133144
rejected %	84%	83%	83%	86%

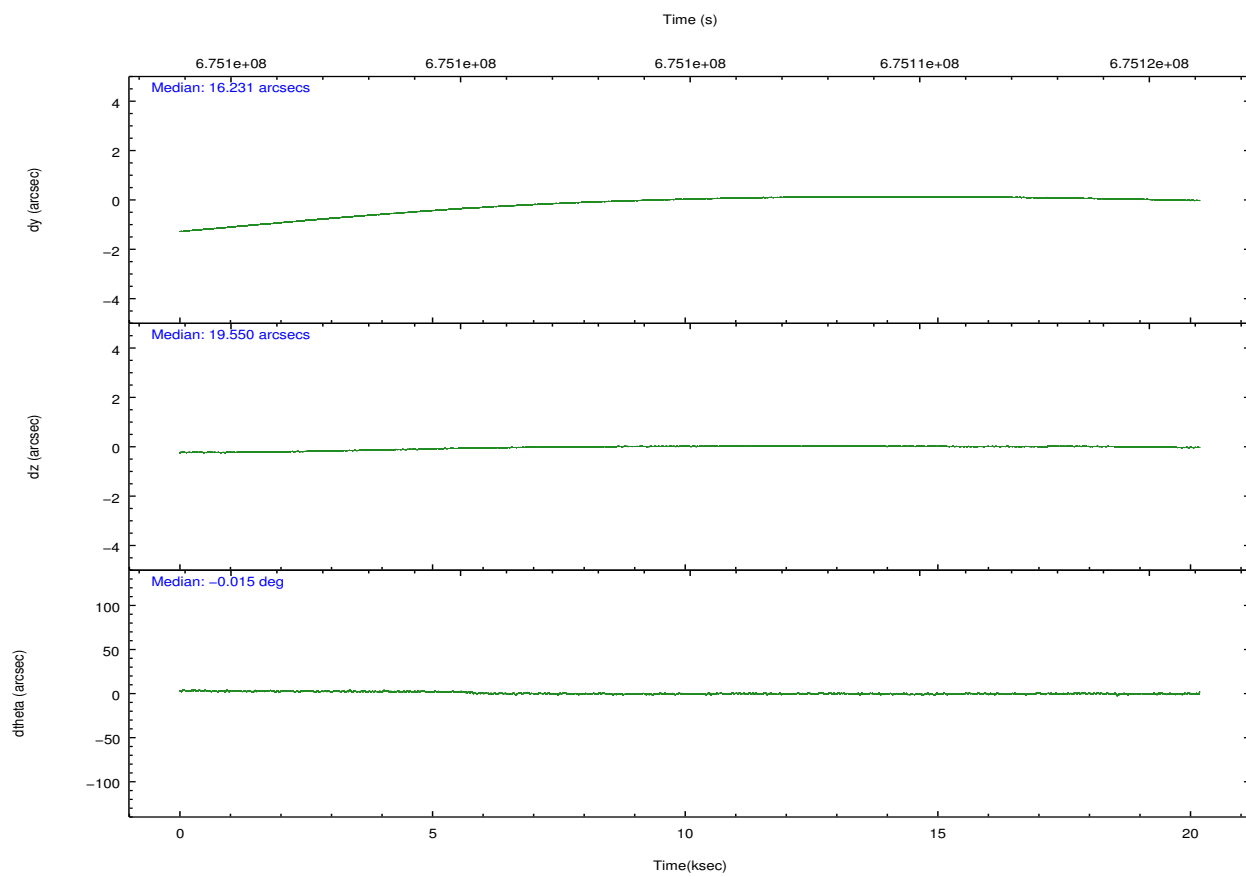
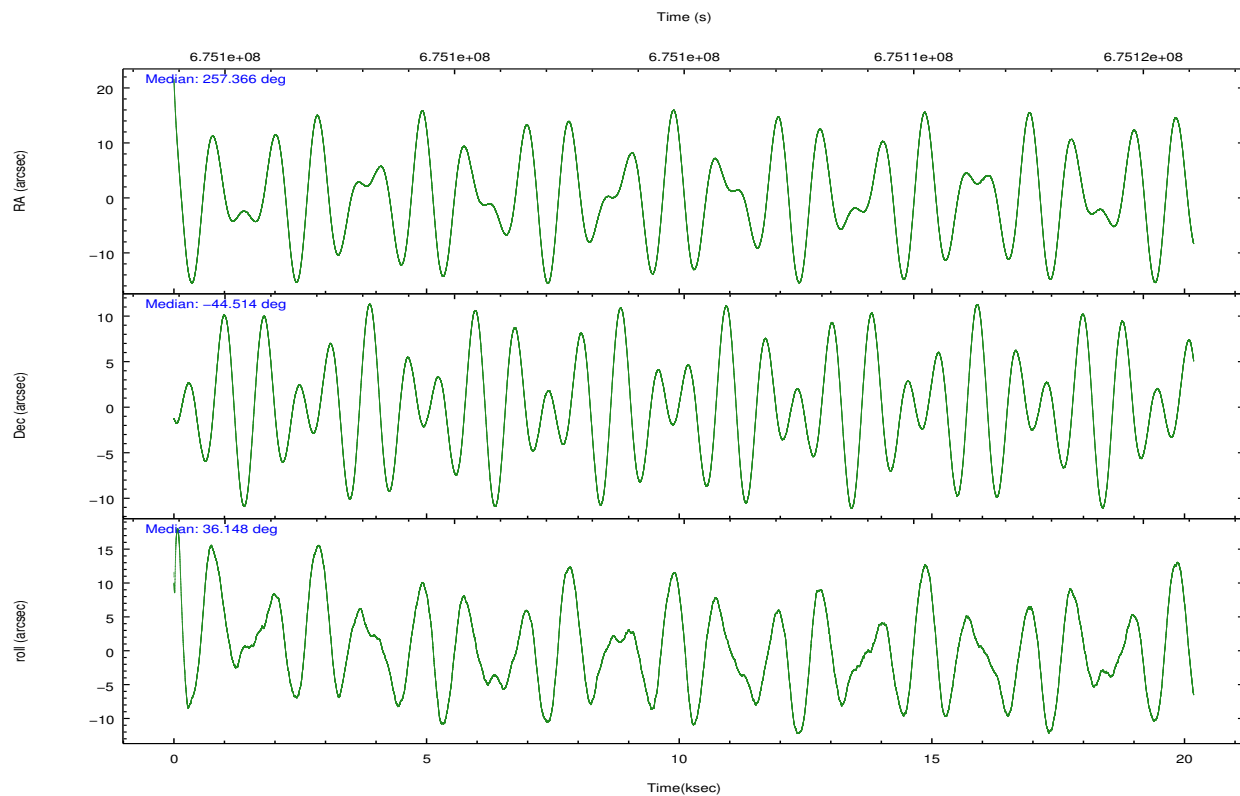
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	9698	10558	14469	8864
	6%	7%	8%	5%
grade 1 events	88	101	139	116
	0%	0%	0%	0%
grade 2 events	4923	4914	4633	3937
	3%	3%	2%	2%
grade 3 events	1936	1766	1893	1901
	1%	1%	1%	1%
grade 4 events	1878	1731	1923	1729
	1%	1%	1%	1%
grade 5 events	6710	6839	6374	7253
	4%	4%	3%	4%
grade 6 events	4032	4509	3545	3600
	2%	3%	2%	2%
grade 7 events	118057	115783	131476	125774
	80%	79%	79%	82%

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	257.350550	257.3660747472152	Subarray requested	NONE	NONE
[deg] Pointing Dec	-44.538392	-44.51308344785698	Alternating exposures requested	N	N
[deg] Pointing Roll	35.945909	36.16547158552262	[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	-244.707463	-244.7107653549301			
[mm] SIM translation stage offset	11.115	11.11831235200043			
[s] Observation start time (MET)	675095092.184000	675093838.10412			
Observation start date	2019-05-24T14:23:43	2019-05-24T14:03:58			
[s] Observation end time (MET)	675115092.184000	675115811.54294			
Observation end date	2019-05-24T19:57:03	2019-05-24T20:10:11			
Read mode	TIMED	TIMED			

2.3 Aspect



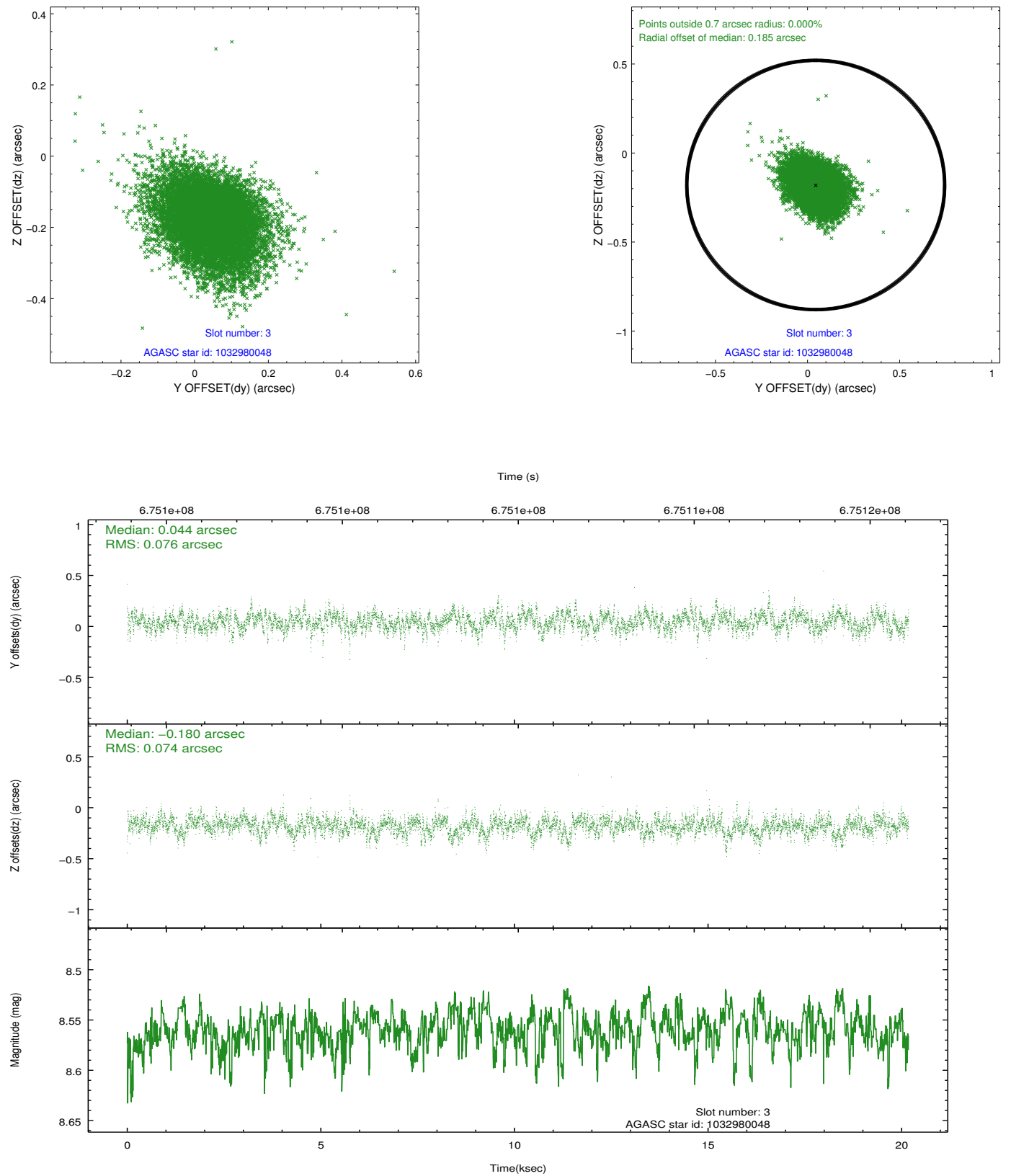


Slot Statistics

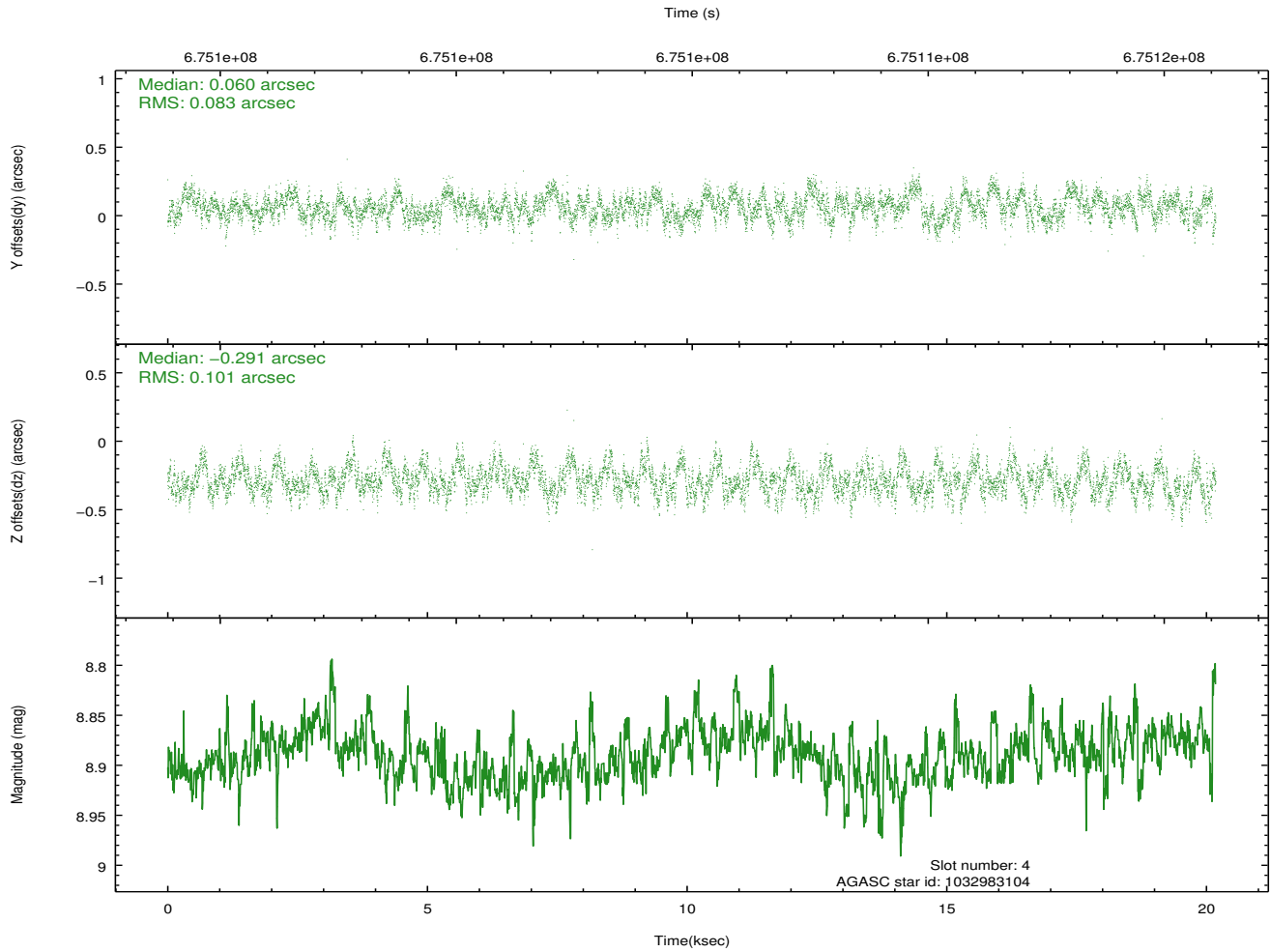
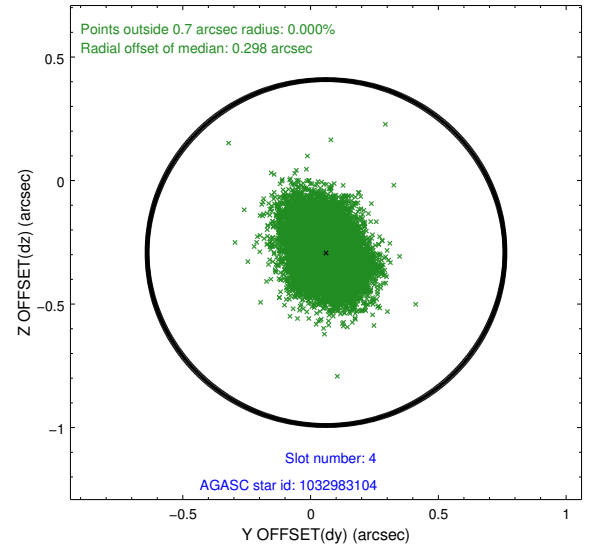
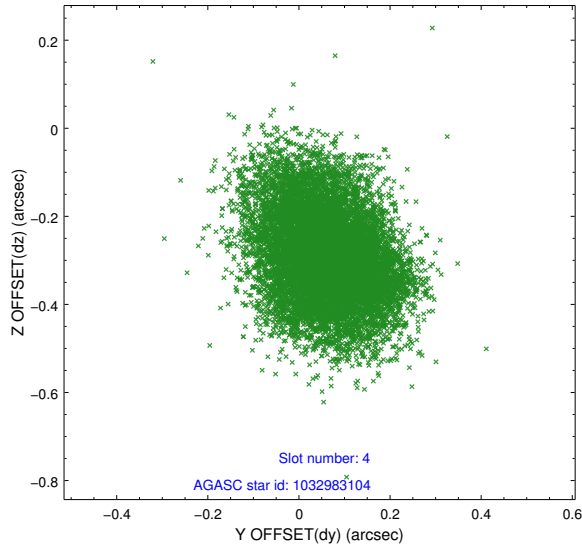
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.29	4922	1.000	0.123	0.039	0.012	0.021	0.000000	0.000000	923.89	-614
1	FID		ACIS-I-3	7.46	4923	1.000	-0.096	-0.080	0.014	0.026	0.000000	0.000000	41.30	-748
2	FID		ACIS-I-5	7.20	4923	1.000	-0.119	0.116	0.019	0.038	0.000000	0.000000	-1824.98	1282
3	GUIDE	used	1032980048	8.56	9835	1.000	0.044	-0.180	0.111	0.187	256.605534	-44.572067	-1621.97	1016
4	GUIDE	used	1032983104	8.89	9839	1.000	0.060	-0.291	0.139	0.224	256.914293	-44.699956	-1246.08	182
5	GUIDE	used	1033000208	7.77	9842	1.000	-0.097	-0.391	0.106	0.181	256.502750	-44.372681	-1421.92	1754
6	GUIDE	used	1091569256	8.36	9839	1.000	-0.056	0.425	0.142	0.210	257.146819	-45.037377	-1473.06	-1149
7	GUIDE	used	1091578128	8.58	9836	1.000	0.053	0.451	0.109	0.177	257.198938	-45.154577	-1612.01	-1569

2.4 Star Slots

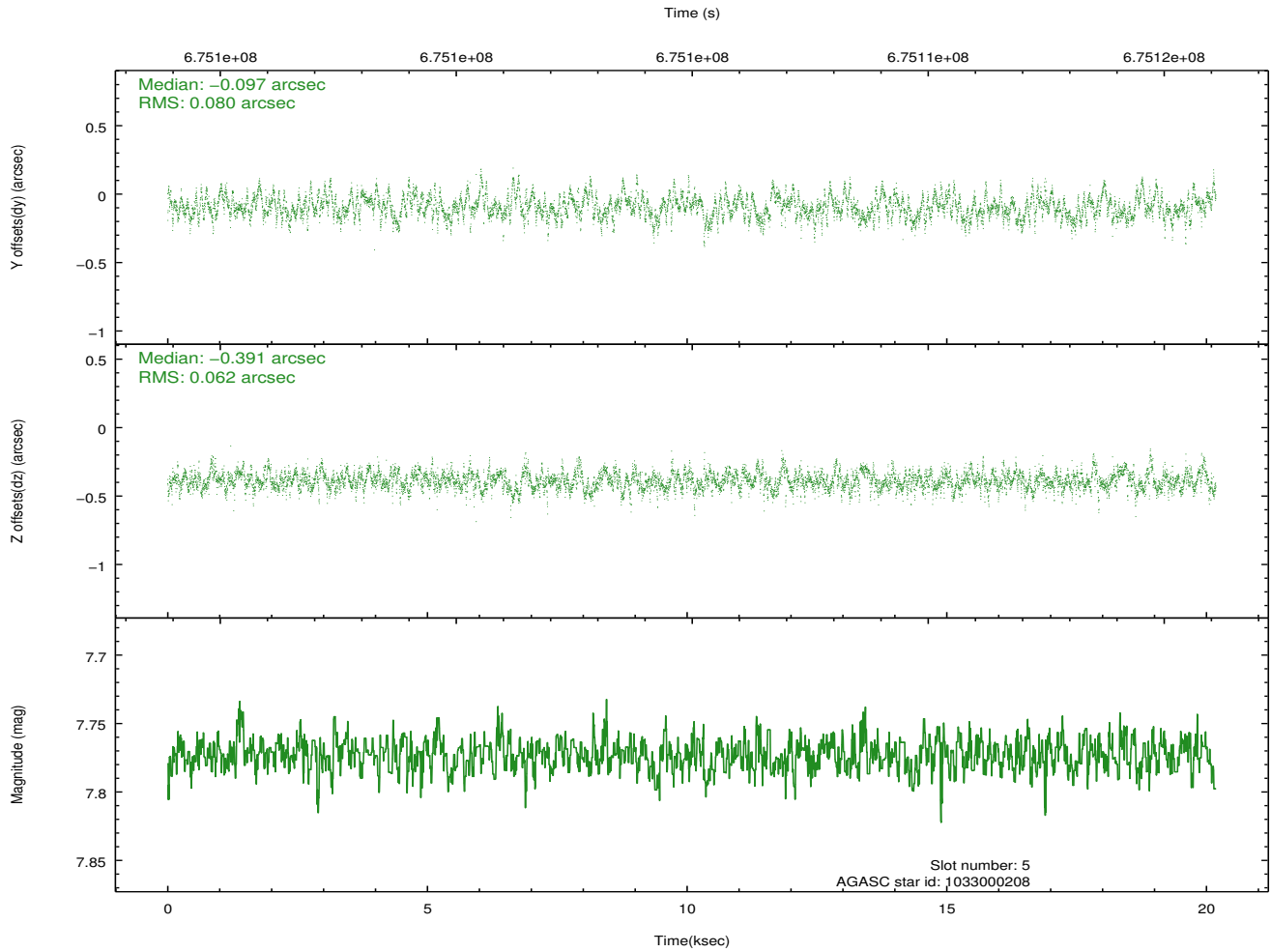
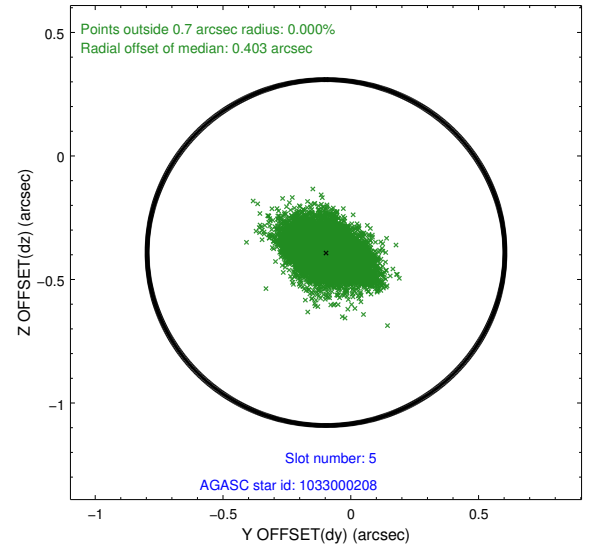
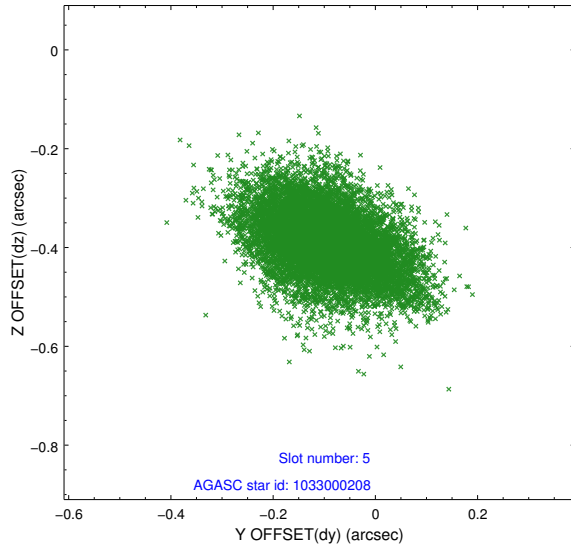
2.4.1 Slot 3



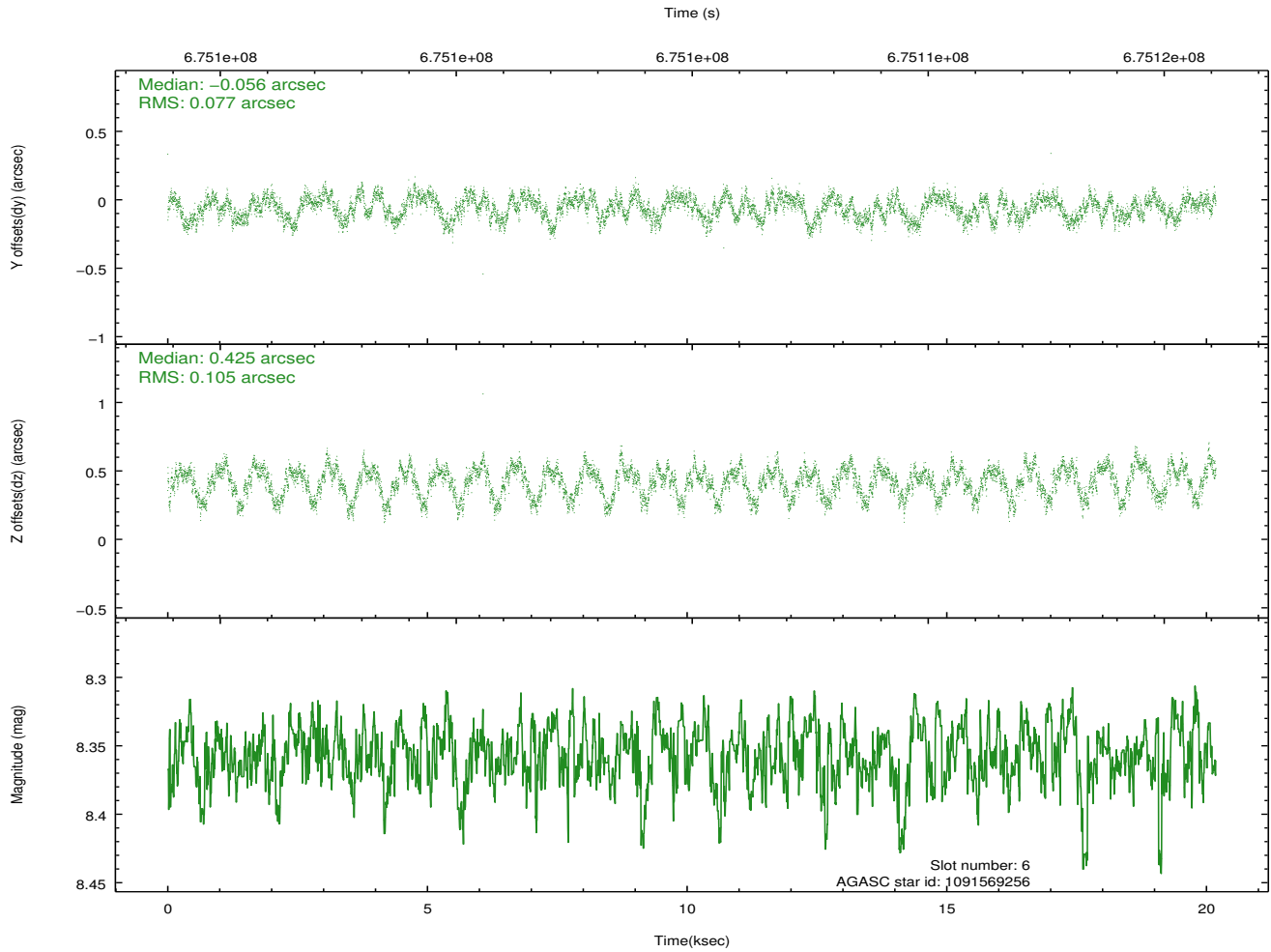
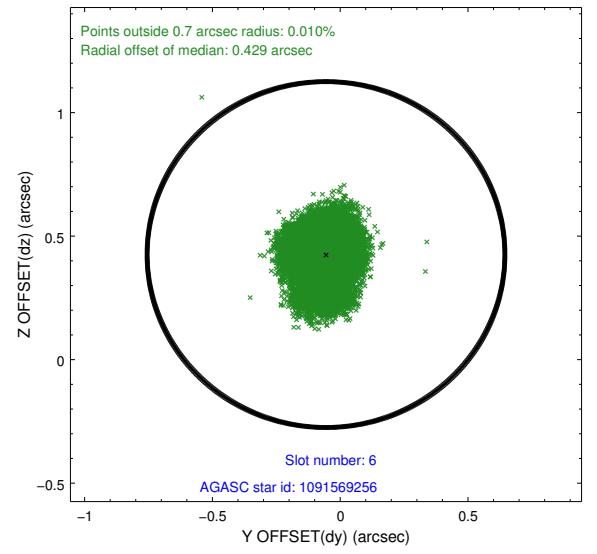
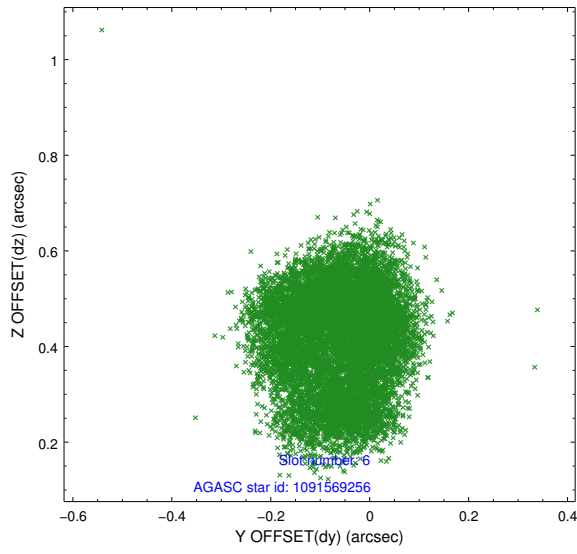
2.4.2 Slot 4



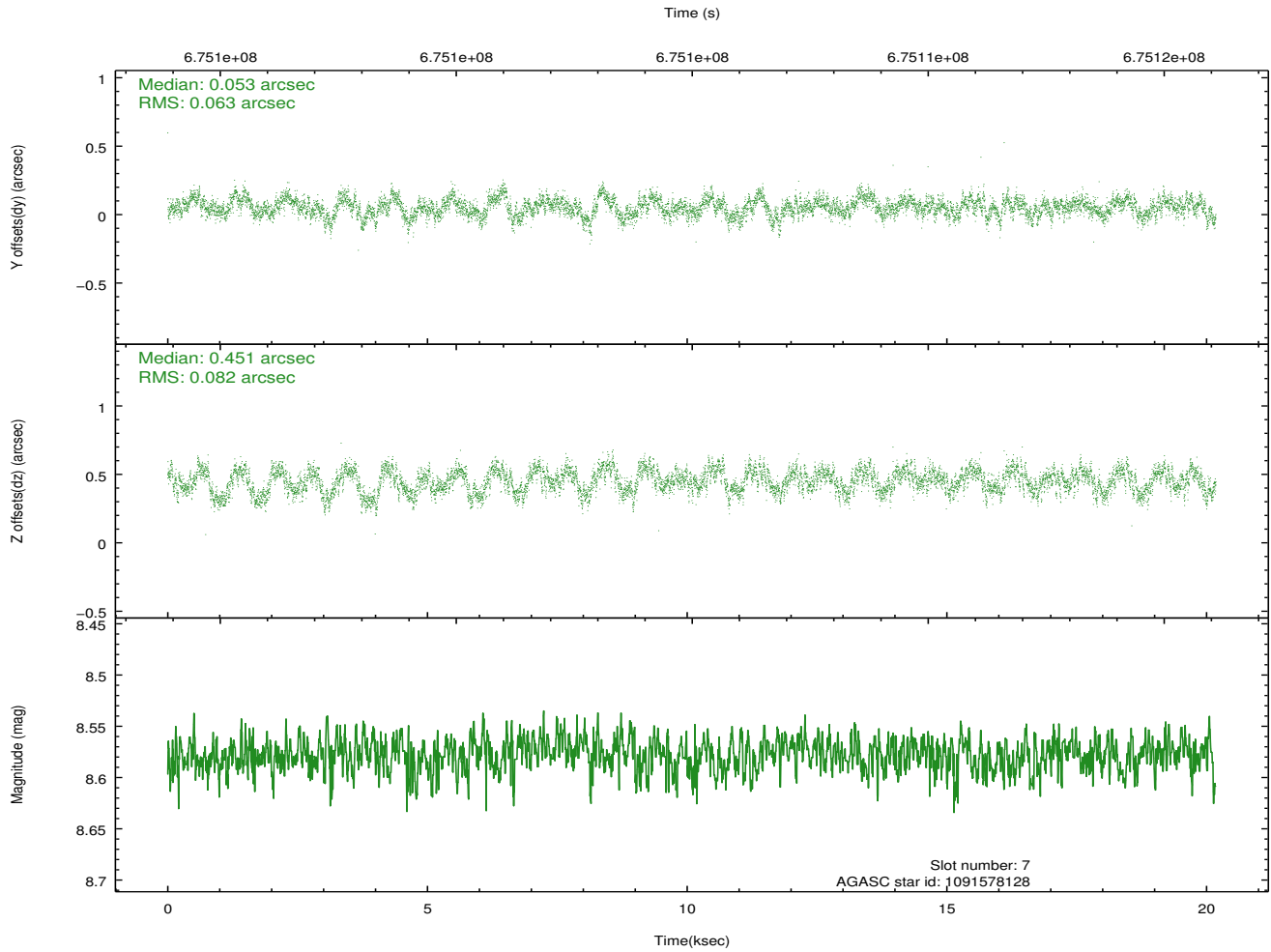
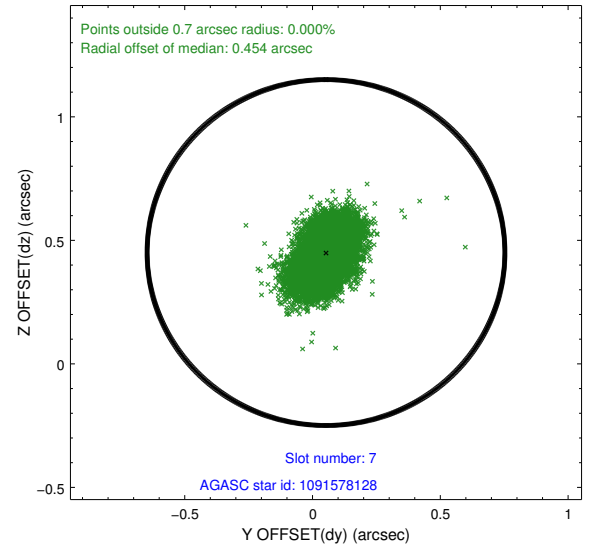
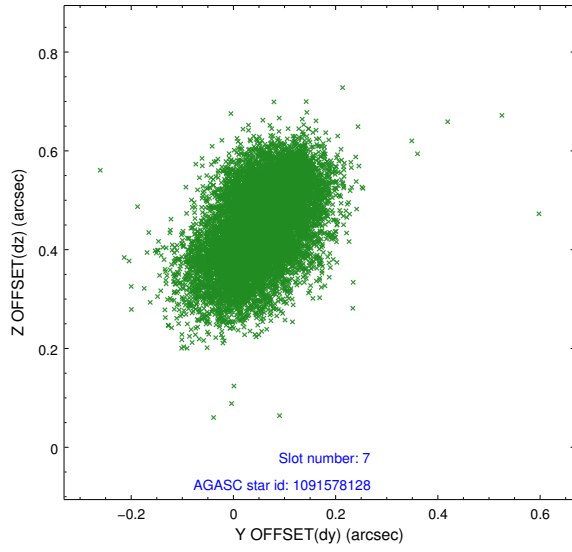
2.4.3 Slot 5



2.4.4 Slot 6

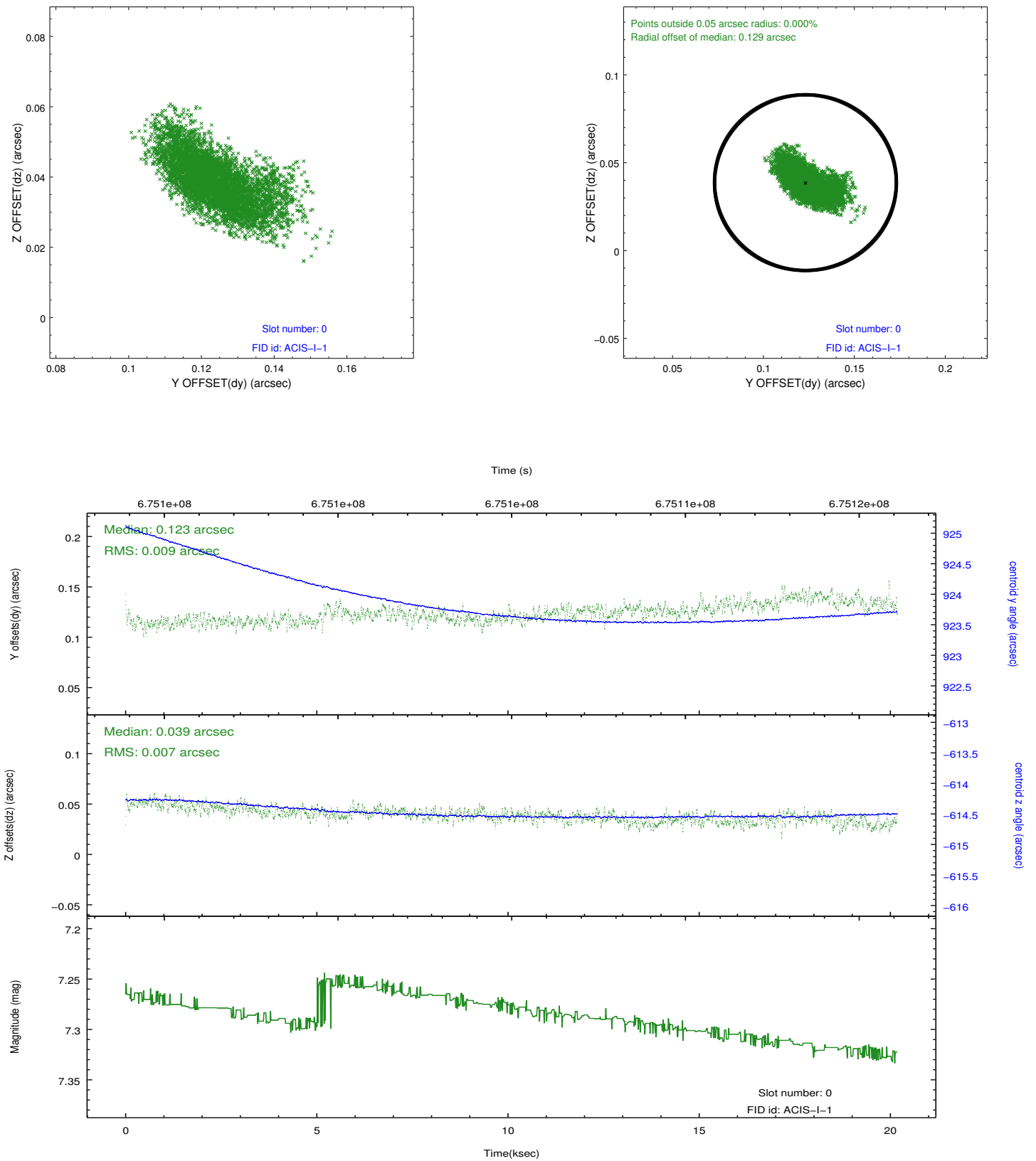


2.4.5 Slot 7

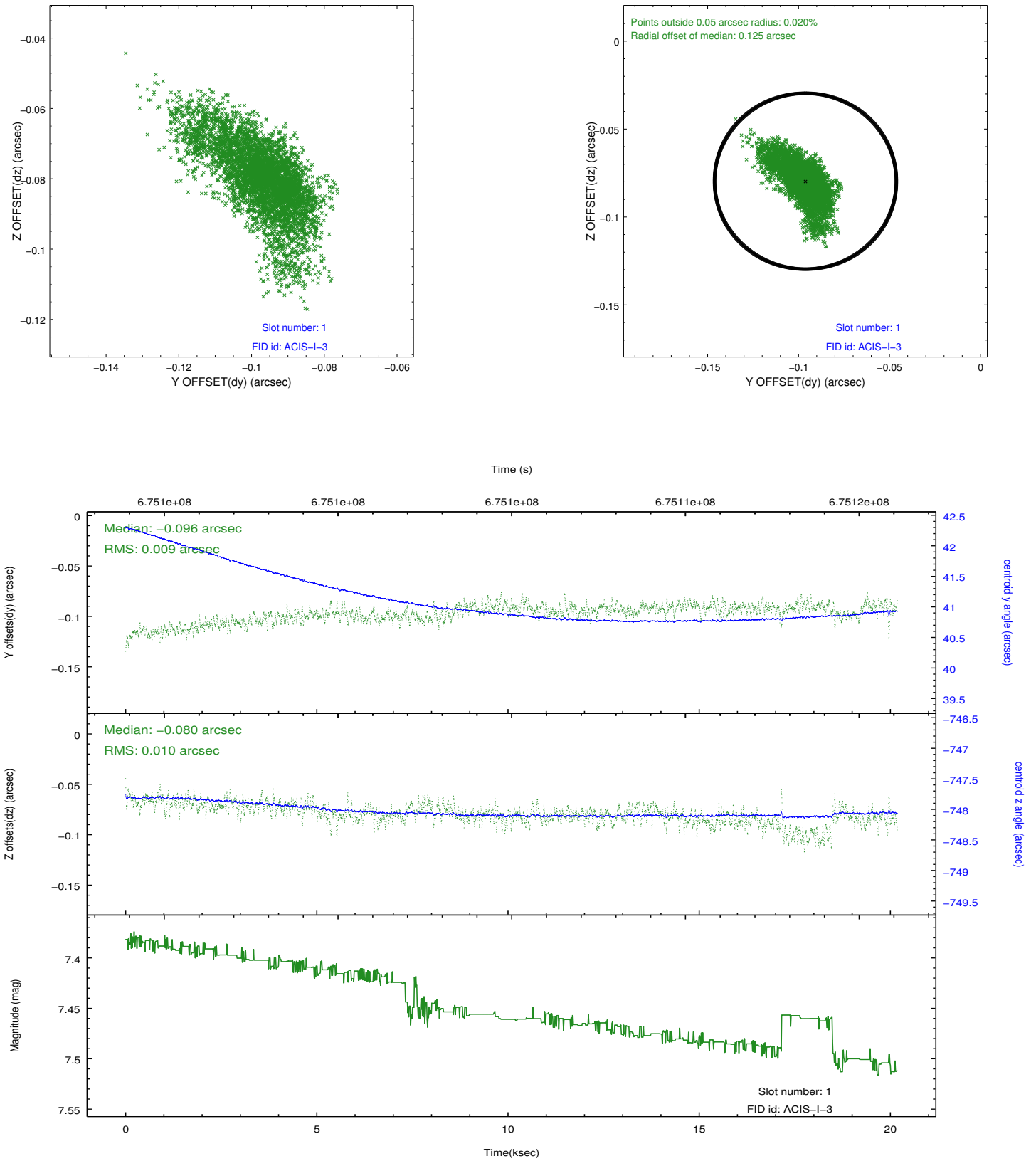


2.5 FID Slots

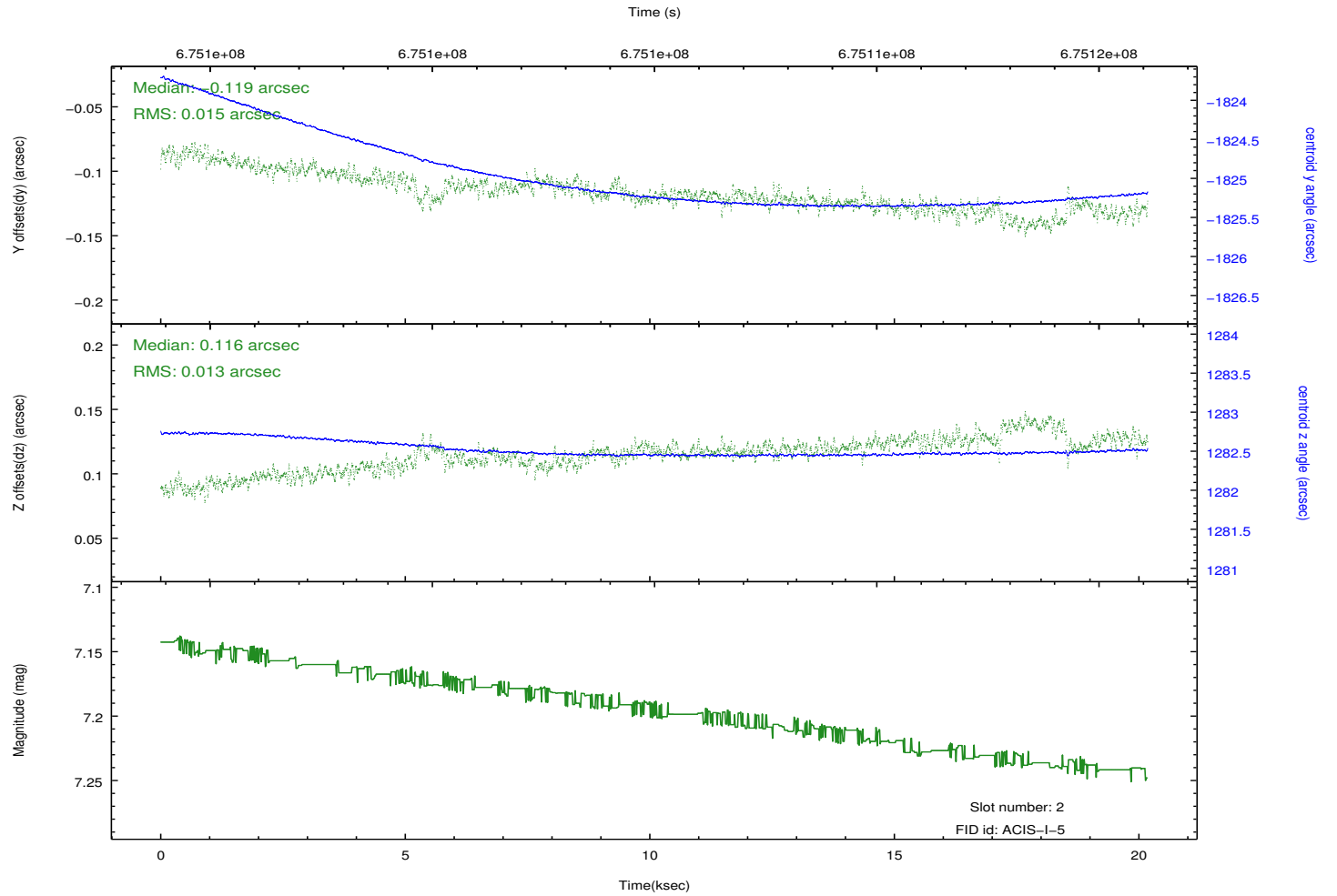
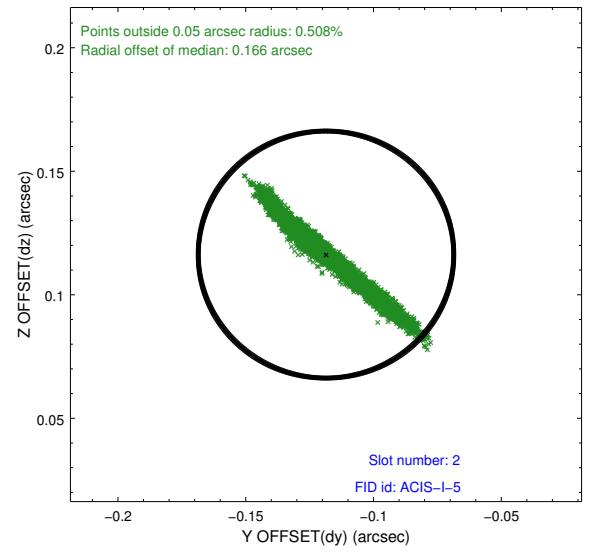
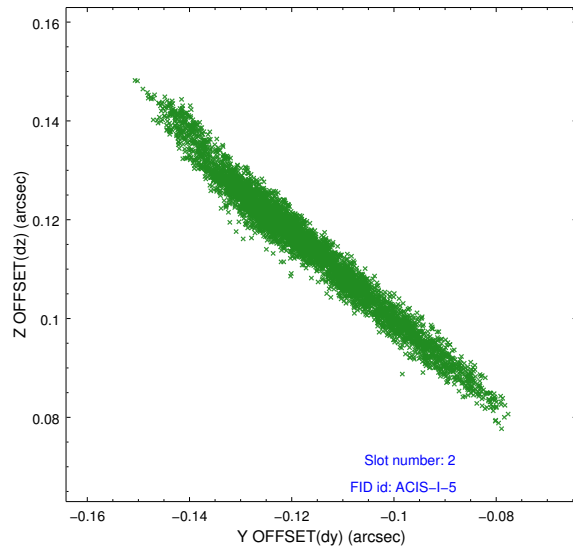
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2019.05.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.078700154543

A.2 Comments

Monitor constraint met.