

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 22060 - L2 Version 1
Chandra X-Ray Center

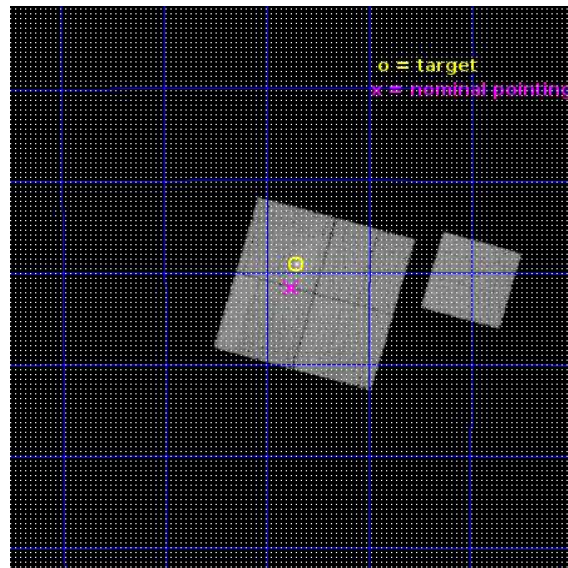
L2 Processing Date : Jan 26 2019

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1 Front

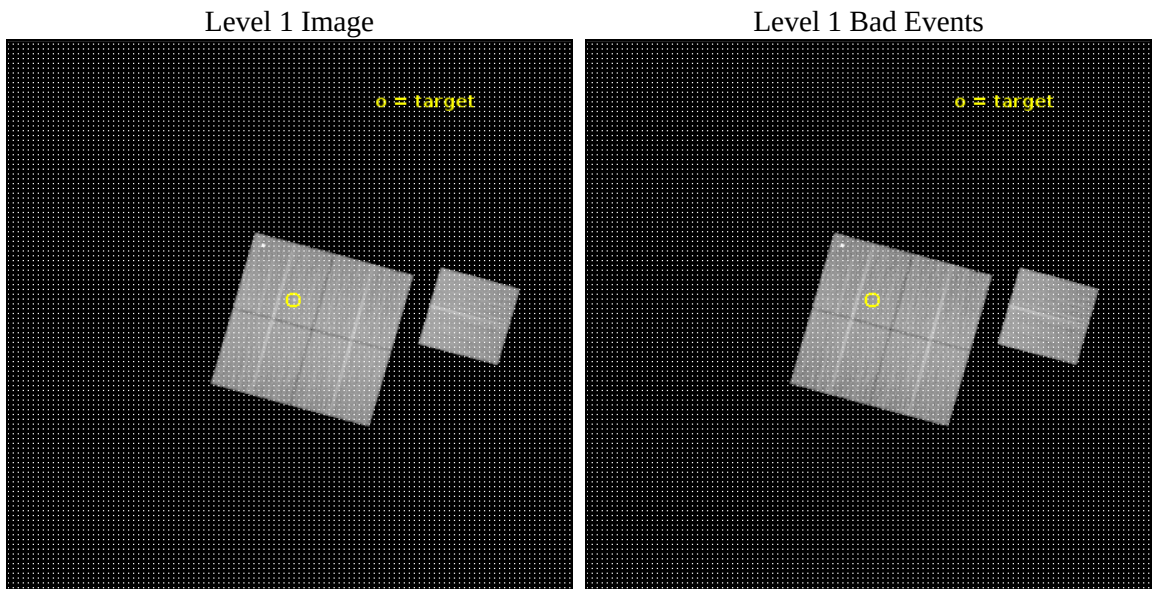
seq_num	503000	Sequence number
obs_id	22060	Observation id
title	The Answer is Blowing in the Wind: Jet Sweepback in Three PWNe	Pro
observer	Roger Romani	Principal investigator
object	PSR J1709-4429	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	257.42835	Observer's specified target RA [deg]
dec_targ	-44.4853	Observer's specified target Dec [deg]
ra_nom	257.44011211779	Nominal RA [deg]
dec_nom	-44.528288001762	Nominal Dec [deg]
roll_nom	105.71693747609	Nominal Roll [deg]
revision	1	Processing version of data
ontime	35561.910448909	Sum of GTIs [s]
livetime	35097.267908596	Livetime [s]
ontime0	35561.910448909	Sum of GTIs [s]
ontime1	35558.8105582	Sum of GTIs [s]
ontime2	35561.992508888	Sum of GTIs [s]
ontime3	35558.892518282	Sum of GTIs [s]
ontime6	35565.010379076	Sum of GTIs [s]
l2events	156056	Number of level 2 events



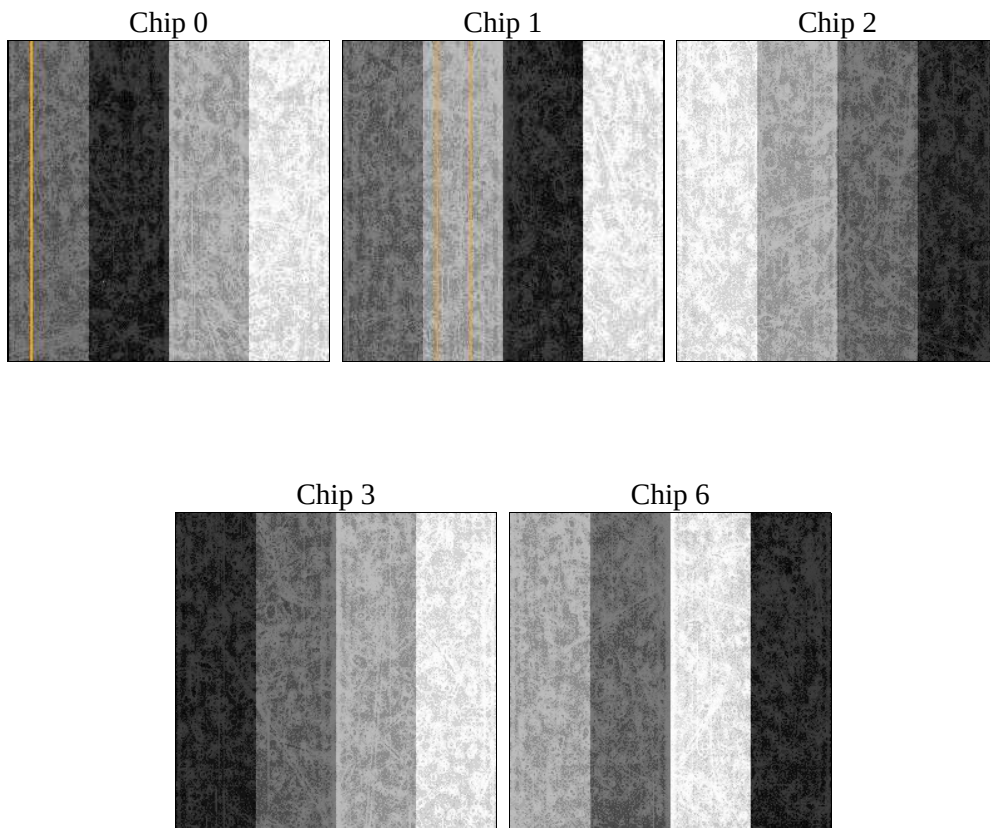
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	35500.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	35561.910448909	Sum of GTIs [s]
caldsver	4.8.2	 	ontime0	35561.910448909	Sum of GTIs [s]
date	2019-01-26T17:01:48	Date and time of file creation	ontime1	35558.8105582	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	35561.992508888	Sum of GTIs [s]
			ontime3	35558.892518282	Sum of GTIs [s]
			ontime6	35565.010379076	Sum of GTIs [s]
			l1events	1366667	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	271688	258494	284224	273300	278961
rejected events	231016	222074	247334	240462	244311
rejected %	85%	85%	87%	87%	87%

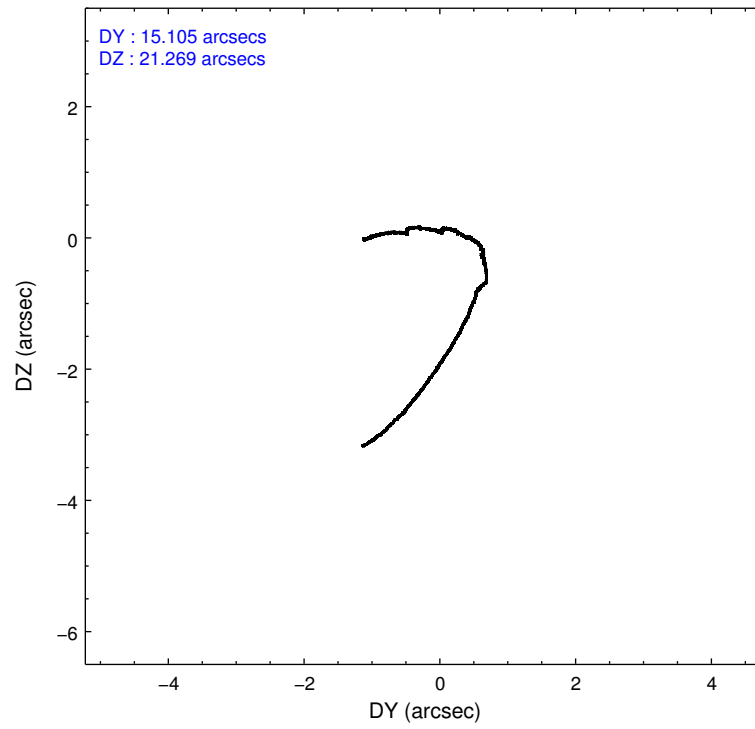
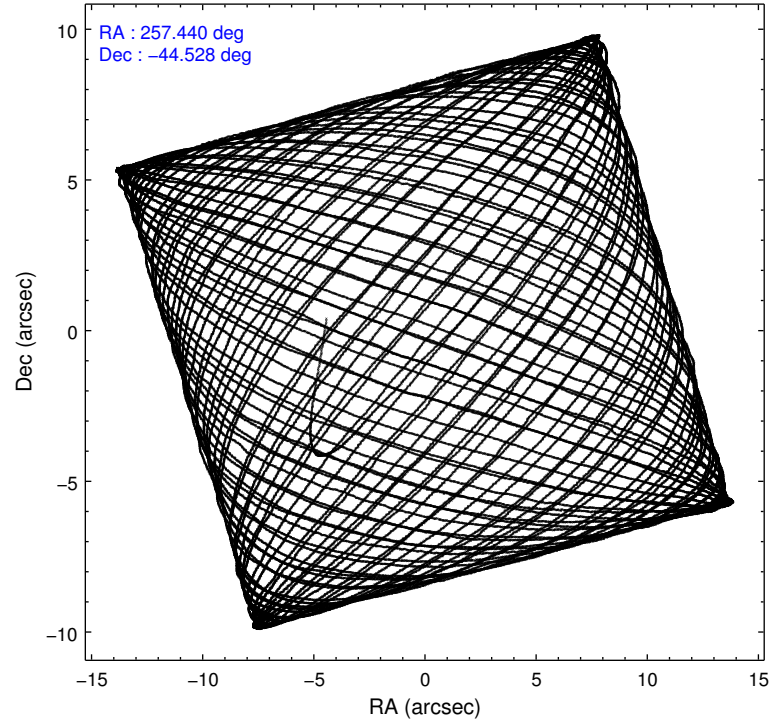
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	18072	12969	16366	13481	12823
	6%	5%	5%	4%	4%
grade 1 events	11074	140	173	181	144
	4%	0%	0%	0%	0%
grade 2 events	9177	9474	8193	6808	7909
	3%	3%	2%	2%	2%
grade 3 events	3421	3252	3097	3150	3075
	1%	1%	1%	1%	1%
grade 4 events	3160	3115	3207	3087	3050
	1%	1%	1%	1%	1%
grade 5 events	11552	11907	10583	12980	12057
	4%	4%	3%	4%	4%
grade 6 events	6844	7613	6028	6315	7799
	2%	2%	2%	2%	2%
grade 7 events	208388	210024	236577	227298	232104
	76%	81%	83%	83%	83%

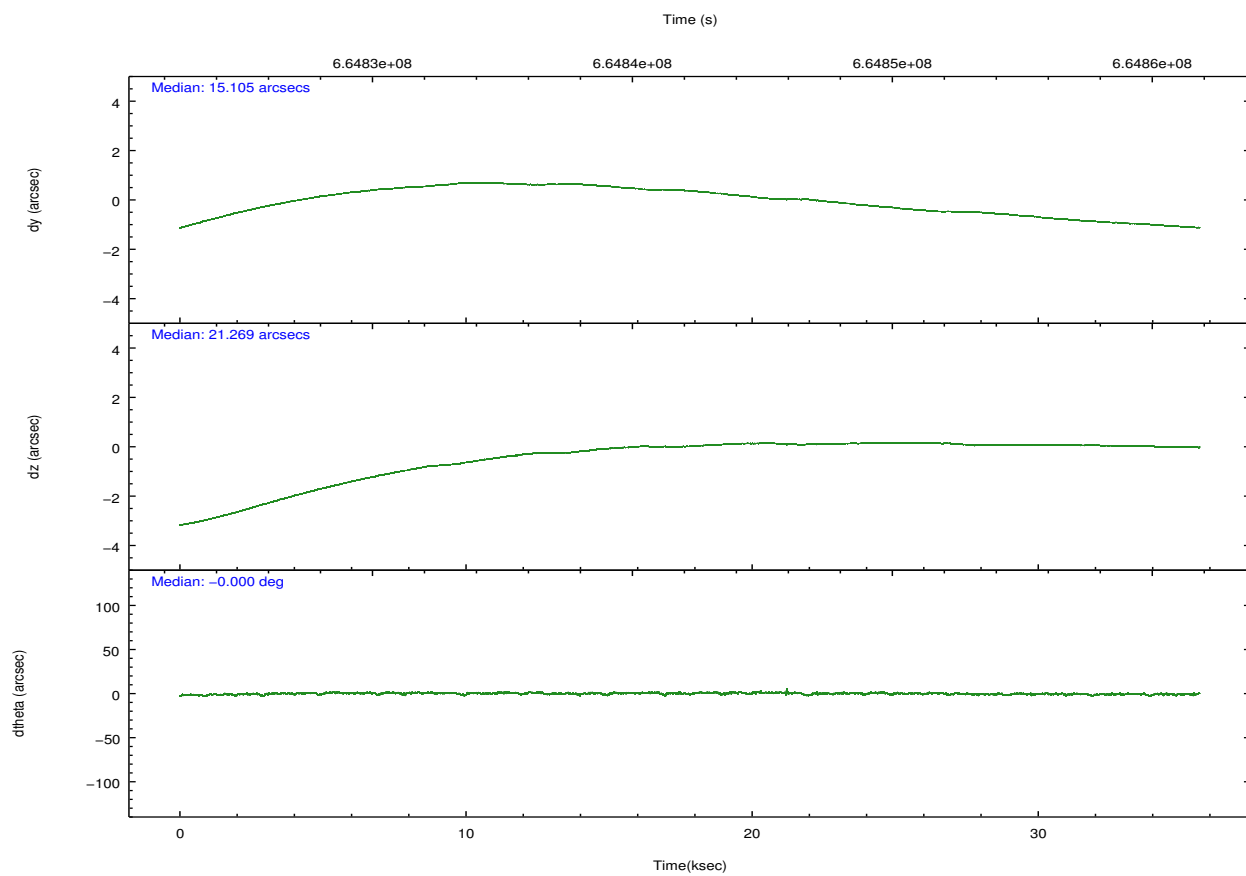
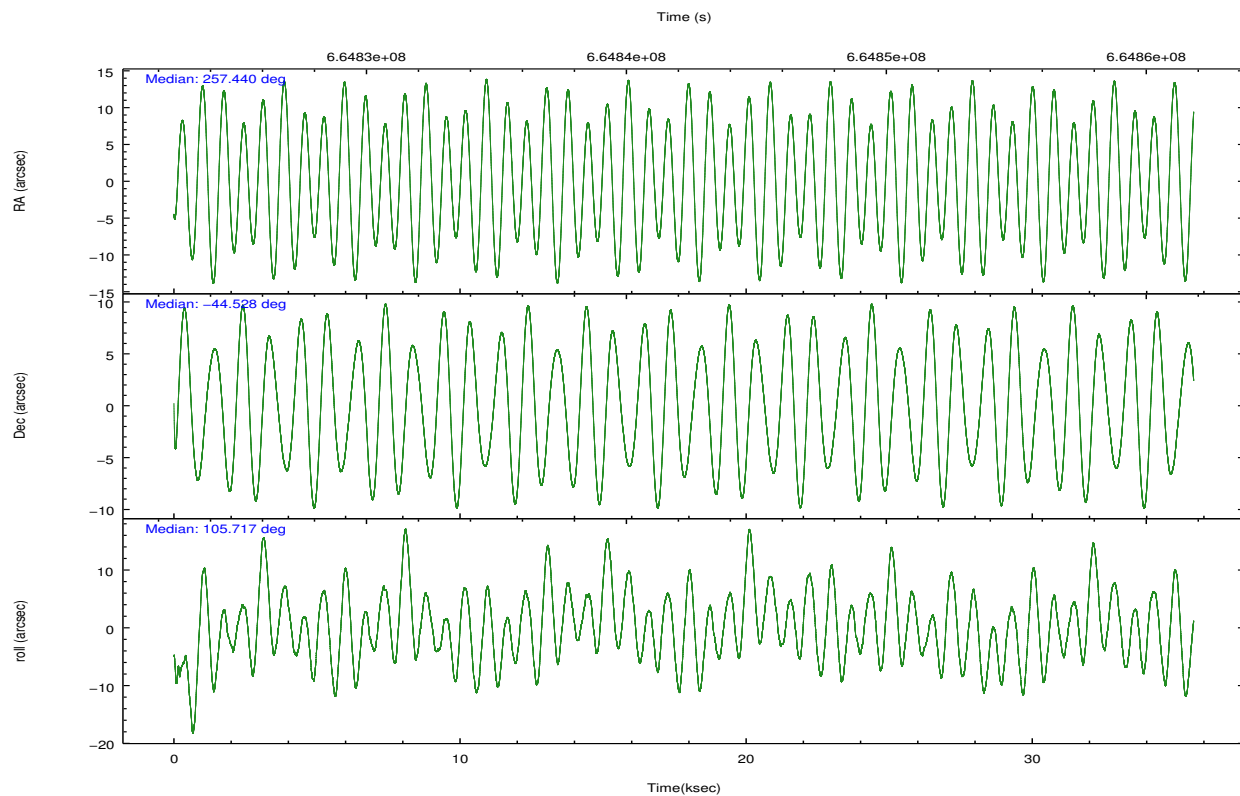
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-01236	ACIS-01236
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	257.467934	257.4401121177854
[deg] Pointing Dec	-44.547507	-44.52828800176168
[deg] Pointing Roll	105.527763	105.7169374760855
[mm] SIM focus pos	-0.782348	-0.7809083437167272
[mm] SIM defocus	0	0.001439871863259334
[mm] SIM translation stage pos	-242.952463	-242.9608019050444
[mm] SIM translation stage offset	9.359999999999999	9.36834890211469
[s] Observation start time (MET)	664824523.184000	664823356.96465
Observation start date	2019-01-25T17:27:34	2019-01-25T17:09:16
[s] Observation end time (MET)	664860023.184000	664860984.2043999
Observation end date	2019-01-26T03:19:14	2019-01-26T03:36:24
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	Y	Y
CCD I1 on	O1	Y
CCD I2 on	Y	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O2	Y
CCD S3 on	N	N
CCD S4 on	N	N
CCD S5 on	N	N
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



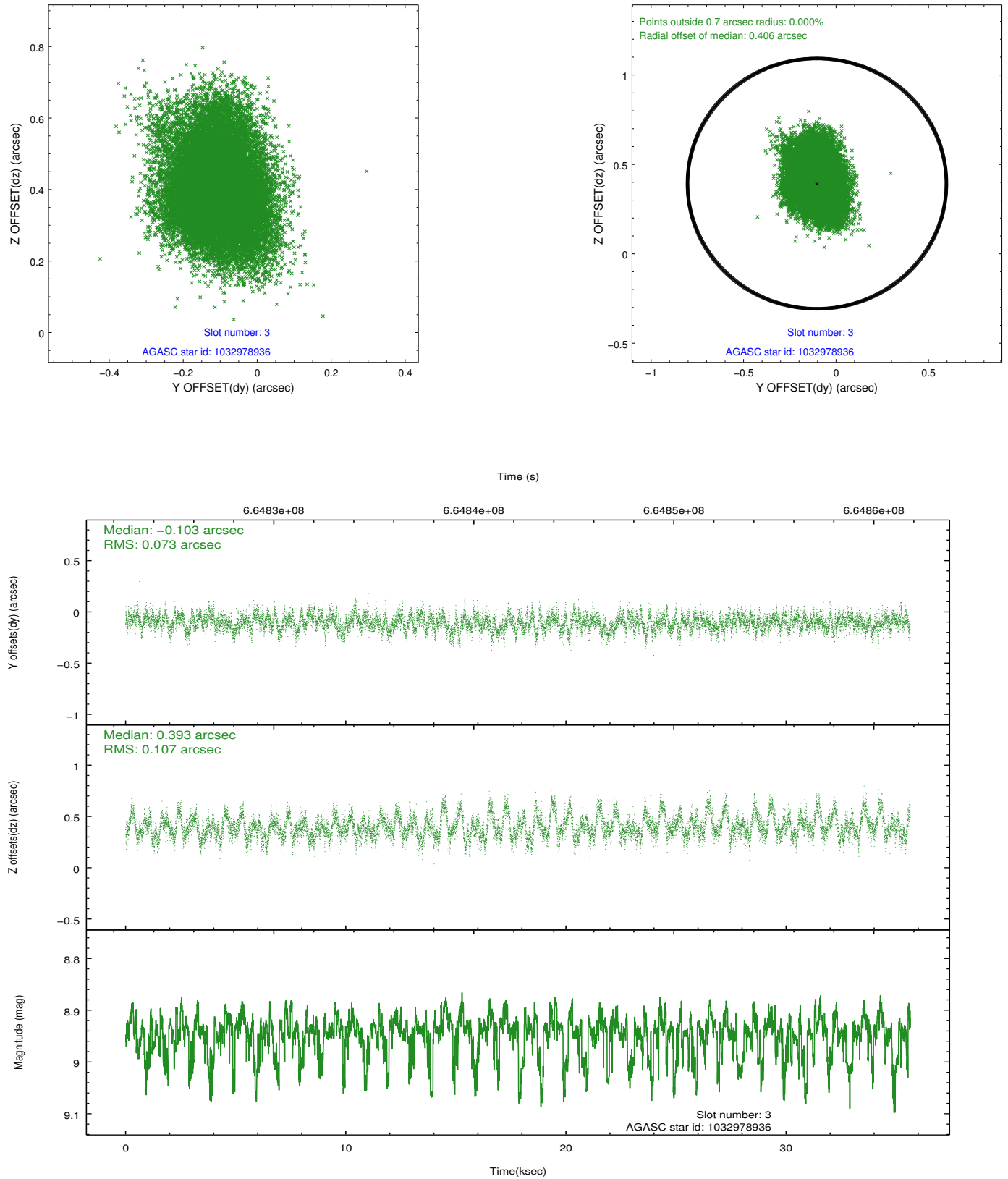


Slot Statistics

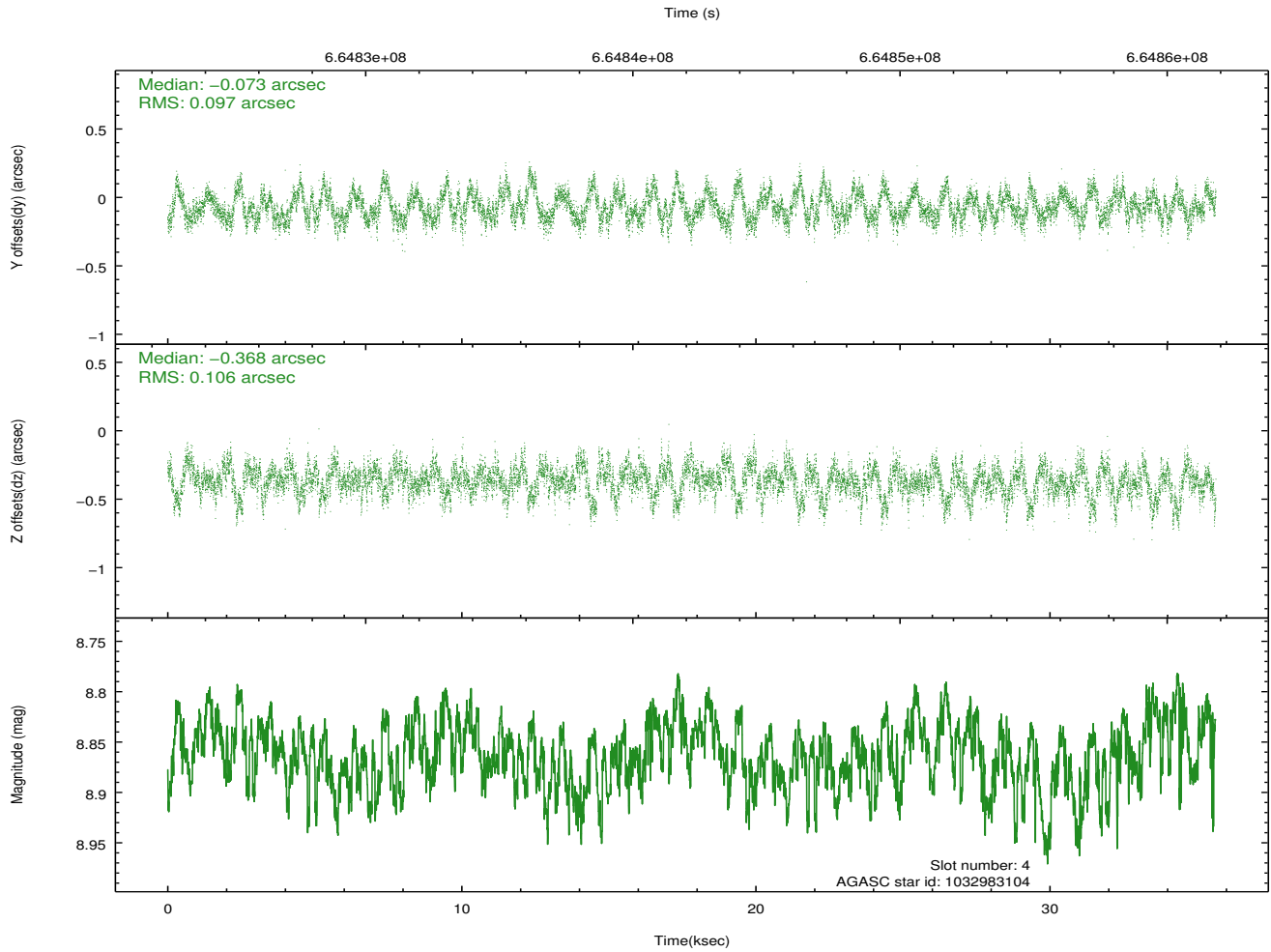
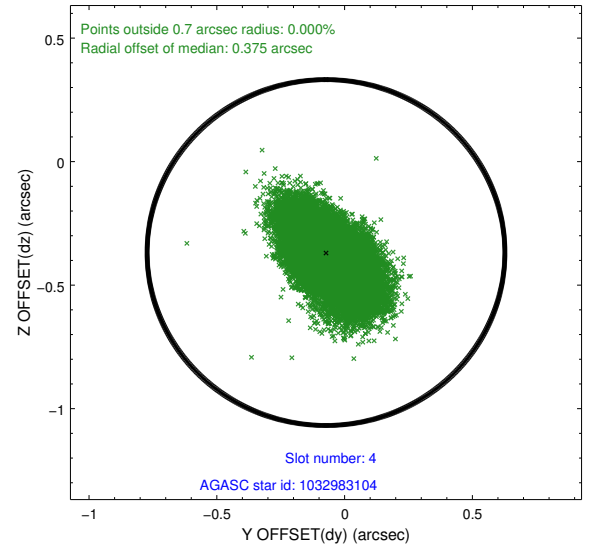
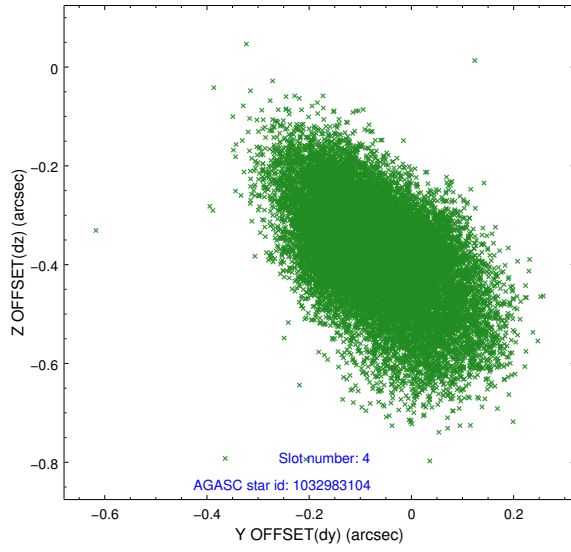
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.30	8694	1.000	0.082	0.107	0.018	0.033	0.000000	0.000000	924.67	-651
1	FID		ACIS-I-3	7.47	8694	1.000	-0.156	-0.005	0.018	0.041	0.000000	0.000000	41.95	-785
2	FID		ACIS-I-6	7.22	8694	1.000	-0.016	-0.036	0.022	0.047	0.000000	0.000000	390.36	1889
3	GUIDE	used	1032978936	8.94	17372	1.000	-0.103	0.393	0.135	0.232	257.447182	-44.360307	663.90	-129
4	GUIDE	used	1032983104	8.86	17367	1.000	-0.073	-0.368	0.148	0.260	256.914293	-44.699956	-154.19	1512
5	GUIDE	used	1033111224	8.90	17370	1.000	0.354	0.659	0.137	0.222	257.844751	-44.847109	-1298.26	-637
6	GUIDE	used	1091569256	8.37	17376	1.000	0.186	-0.008	0.120	0.185	257.146819	-45.037377	-1481.75	1259
7	GUIDE	used	1032980048	8.59	17378	1.000	-0.363	-0.683	0.107	0.178	256.605534	-44.572067	495.50	2156

2.4 Star Slots

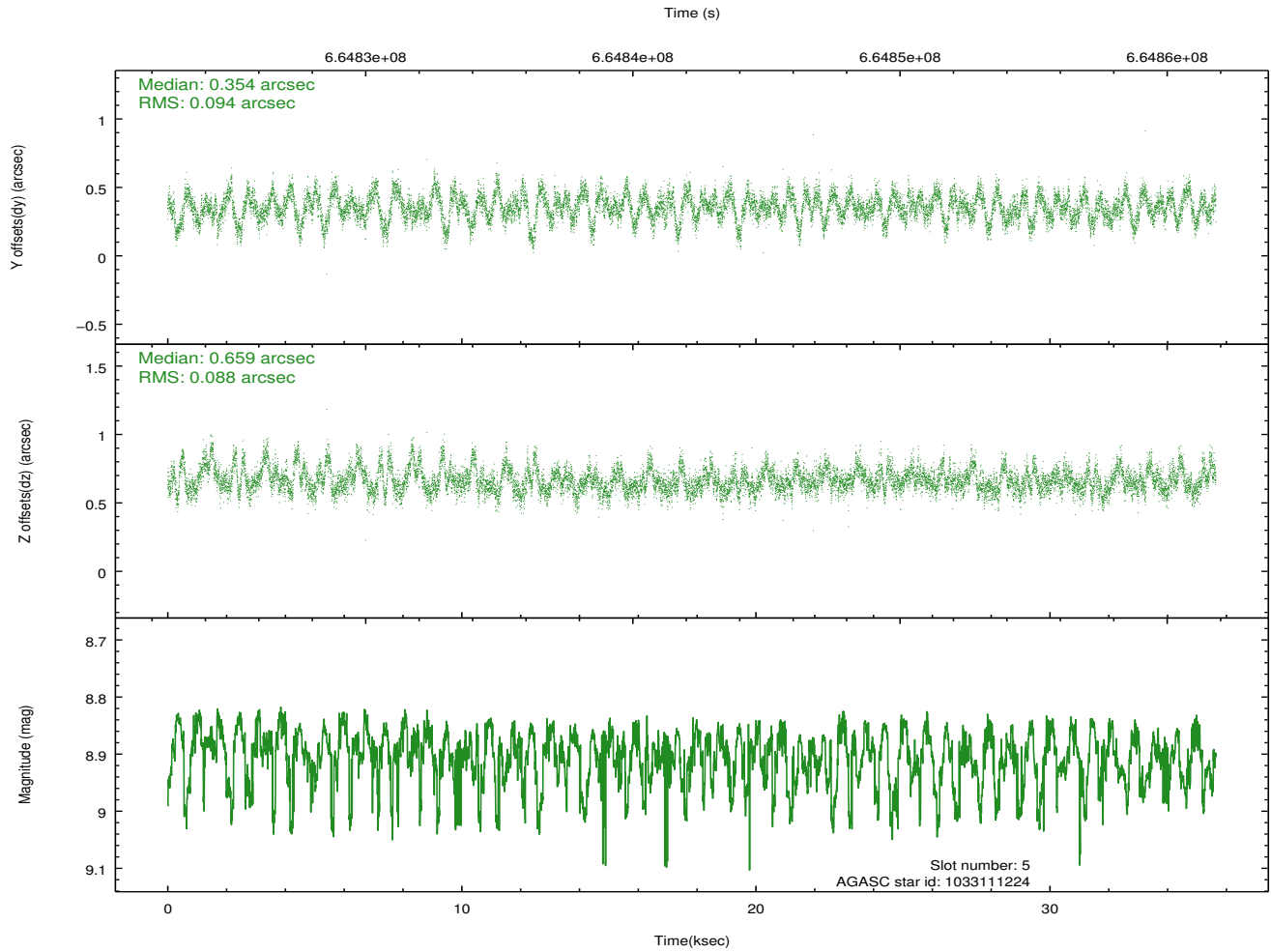
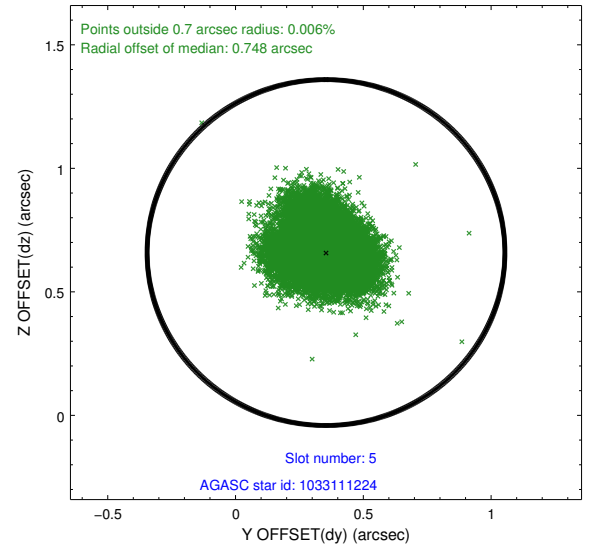
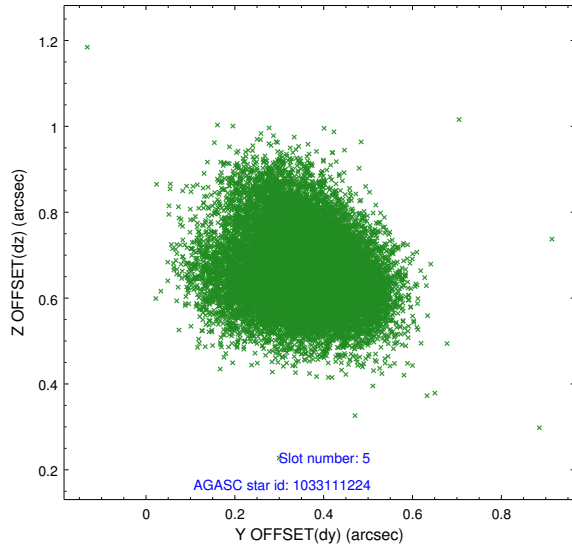
2.4.1 Slot 3



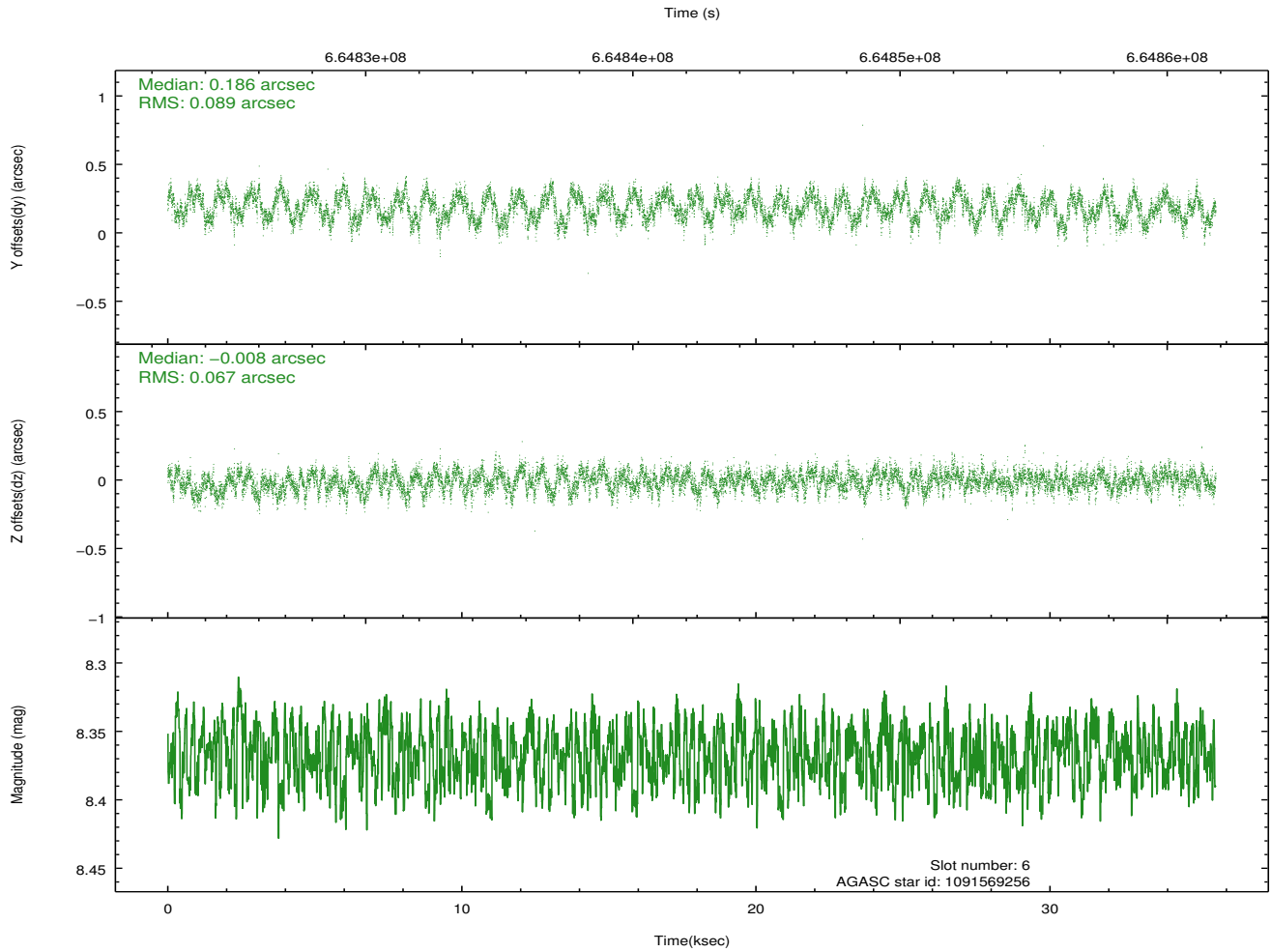
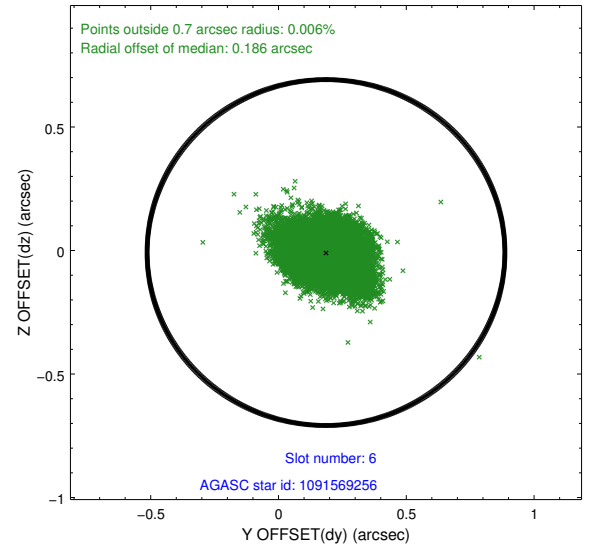
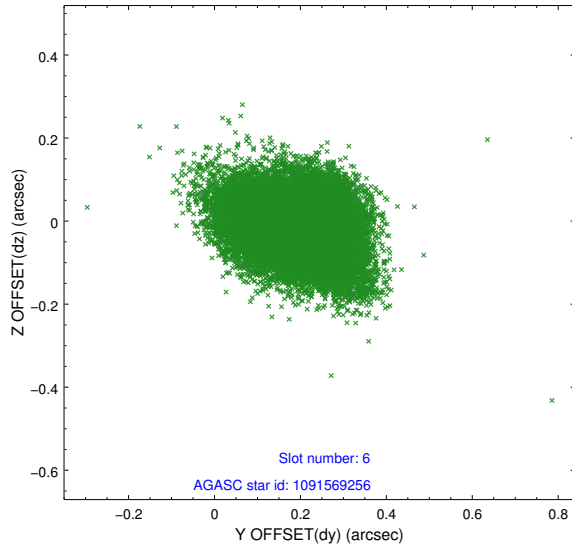
2.4.2 Slot 4



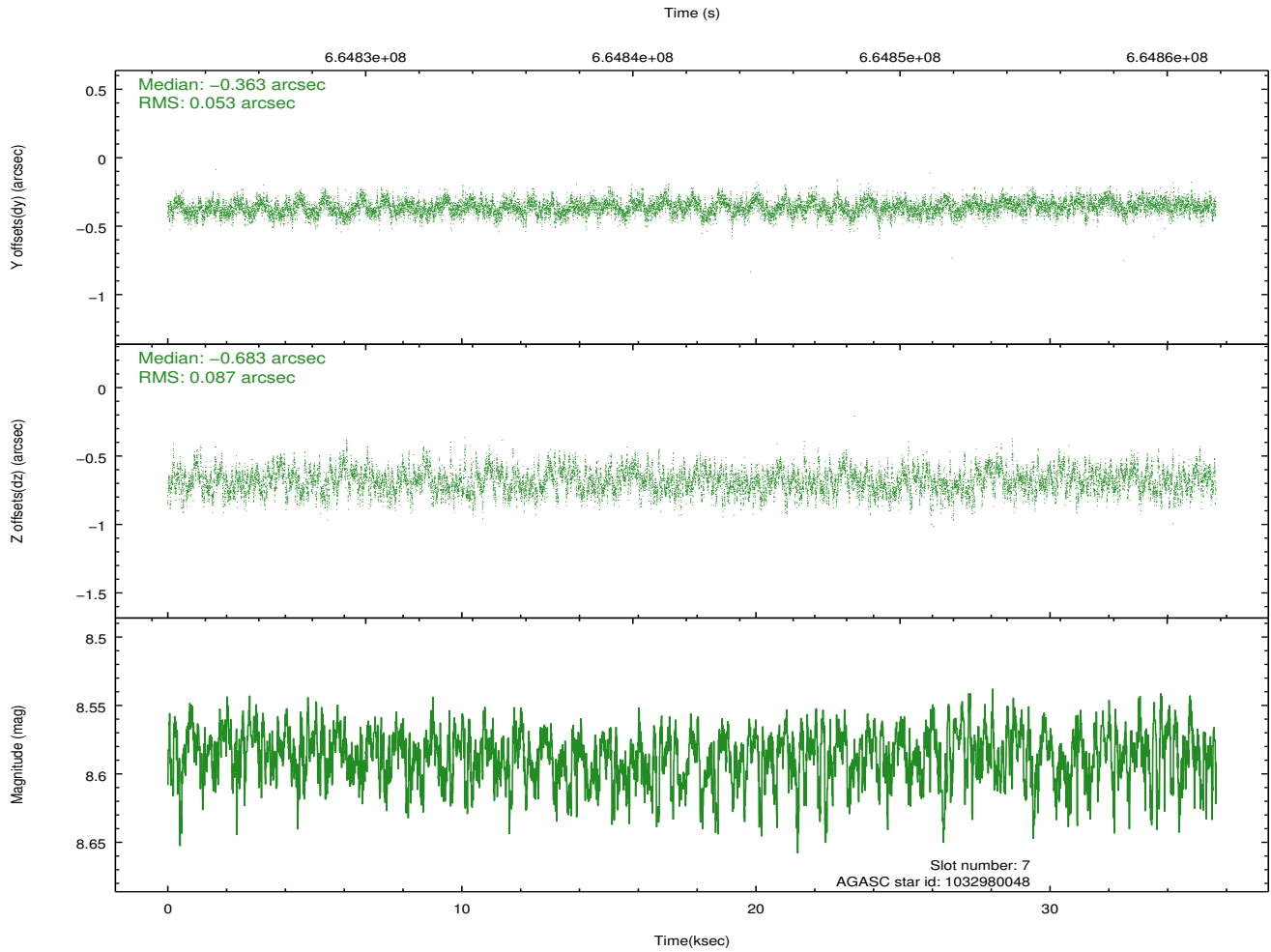
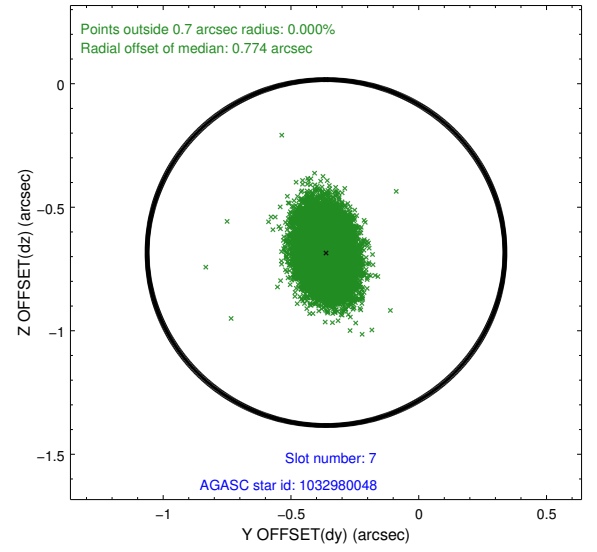
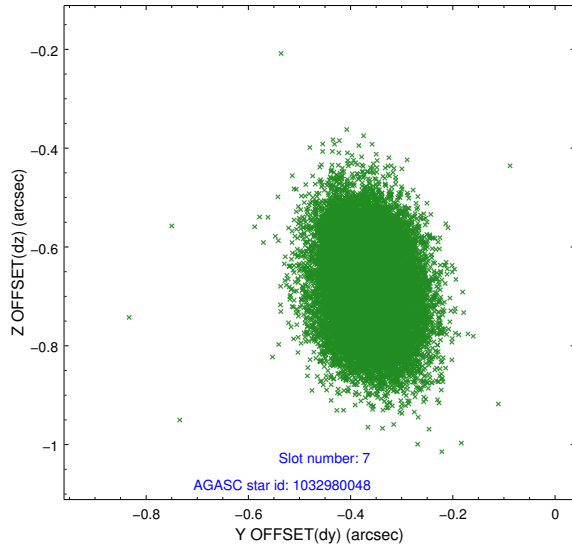
2.4.3 Slot 5



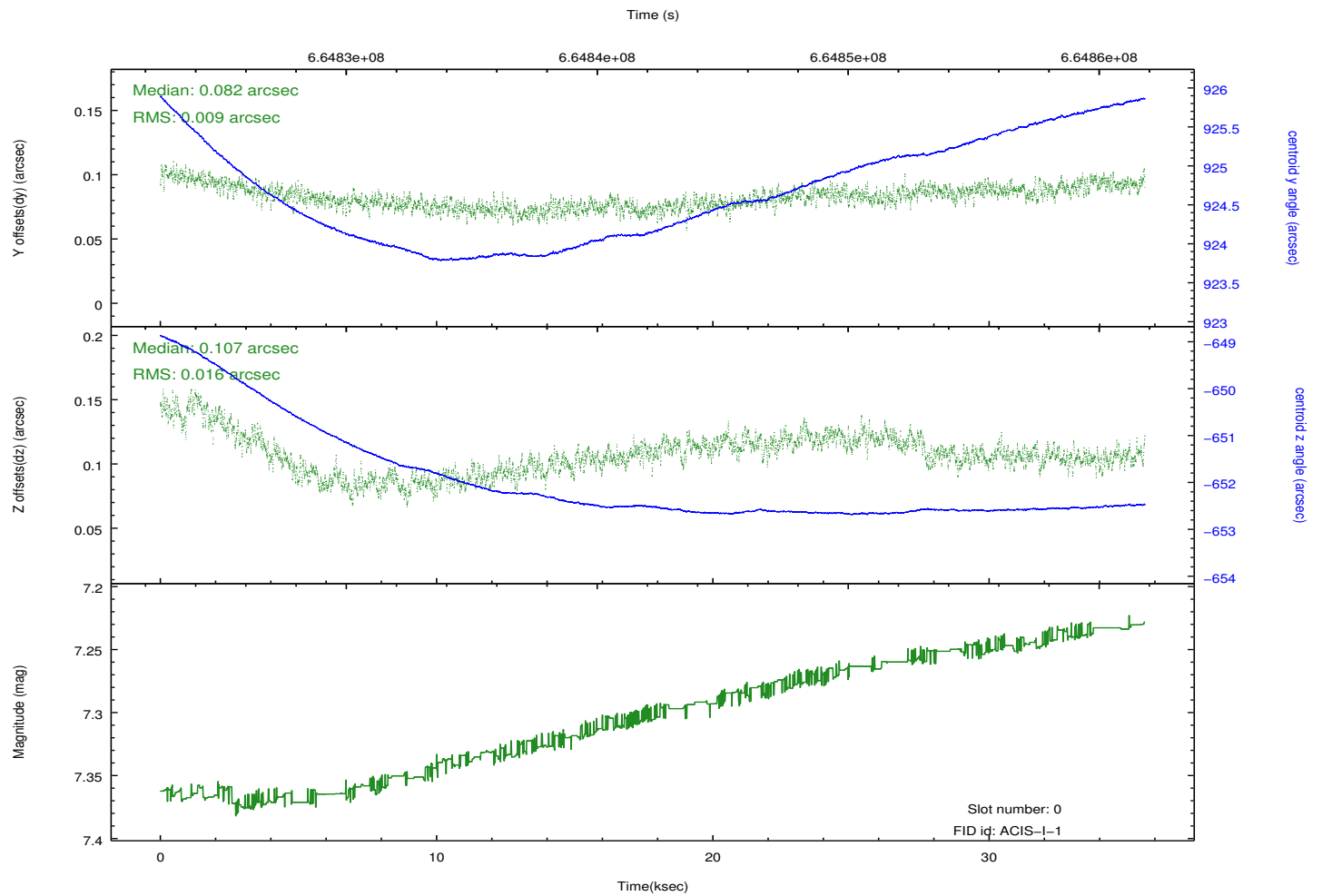
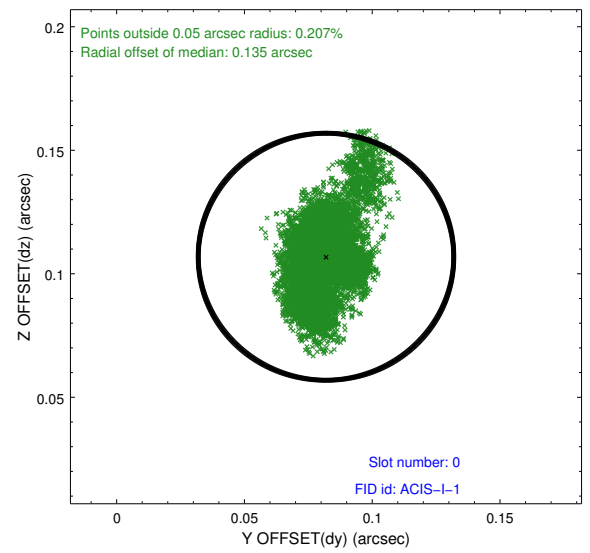
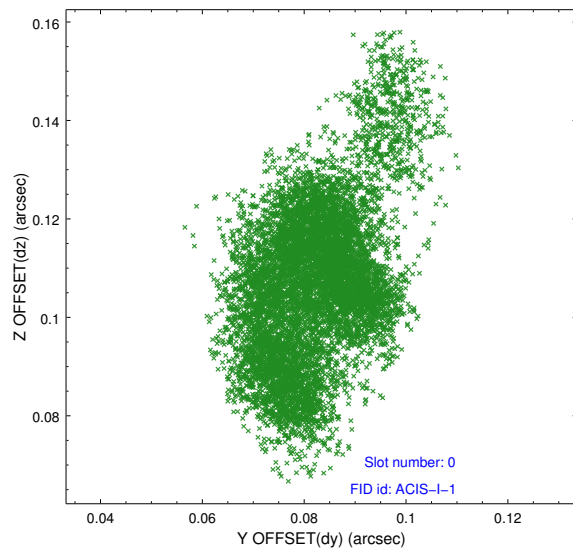
2.4.4 Slot 6



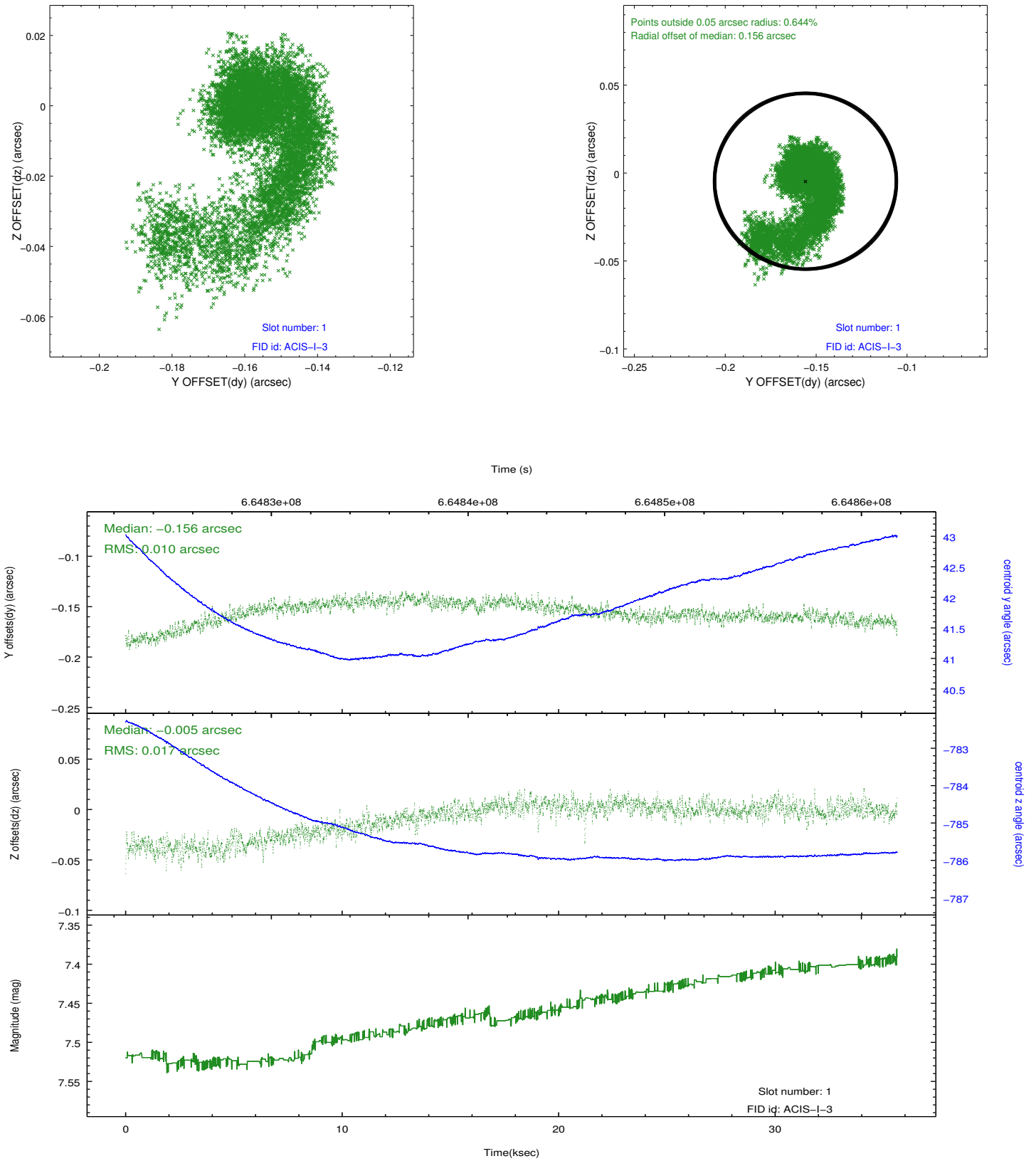
2.4.5 Slot 7



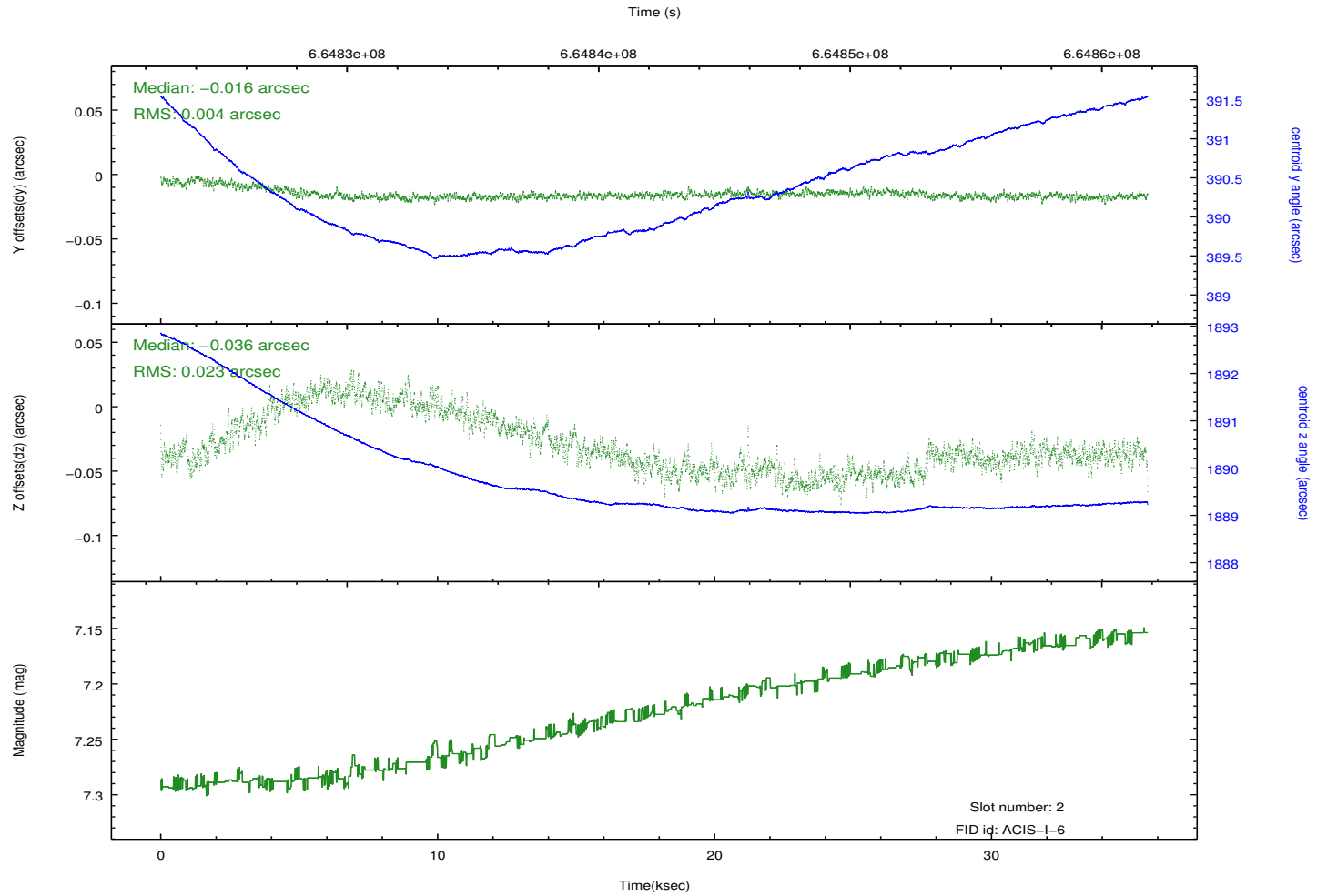
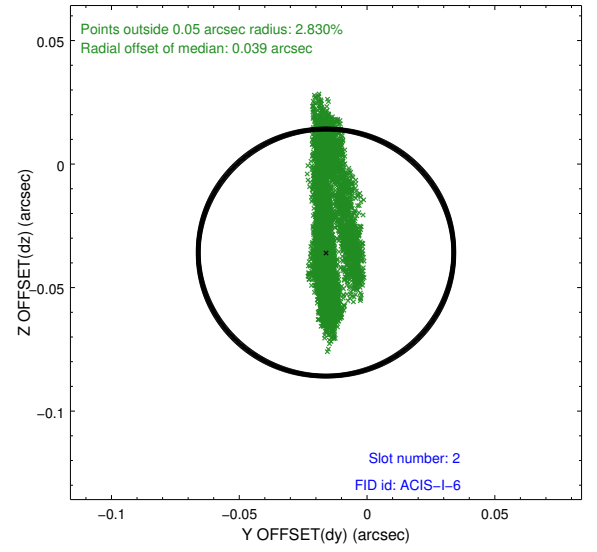
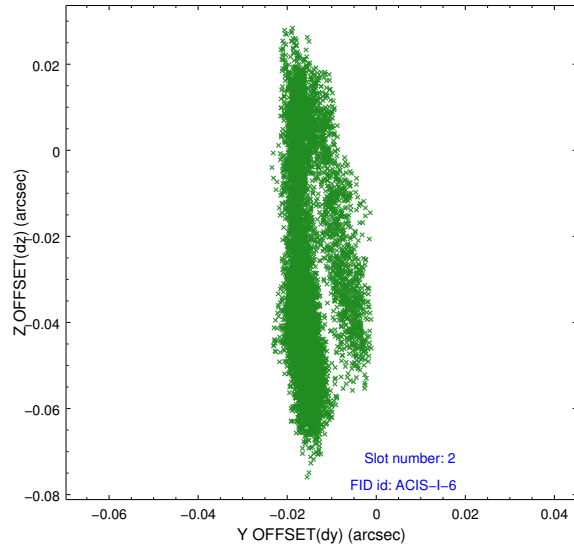
2.5.1 Slot 0



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)	2019.01.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	35.561910448909

A.2 Comments