

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 22087 - L2 Version 1
Chandra X-Ray Center

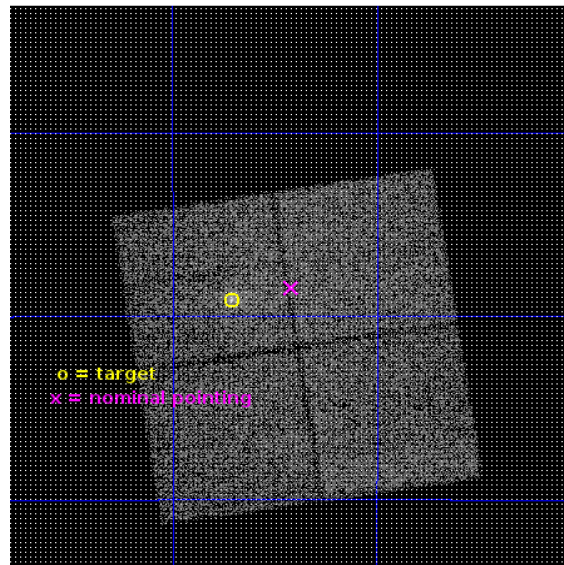
L2 Processing Date : Jun 16 2019

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1 Front

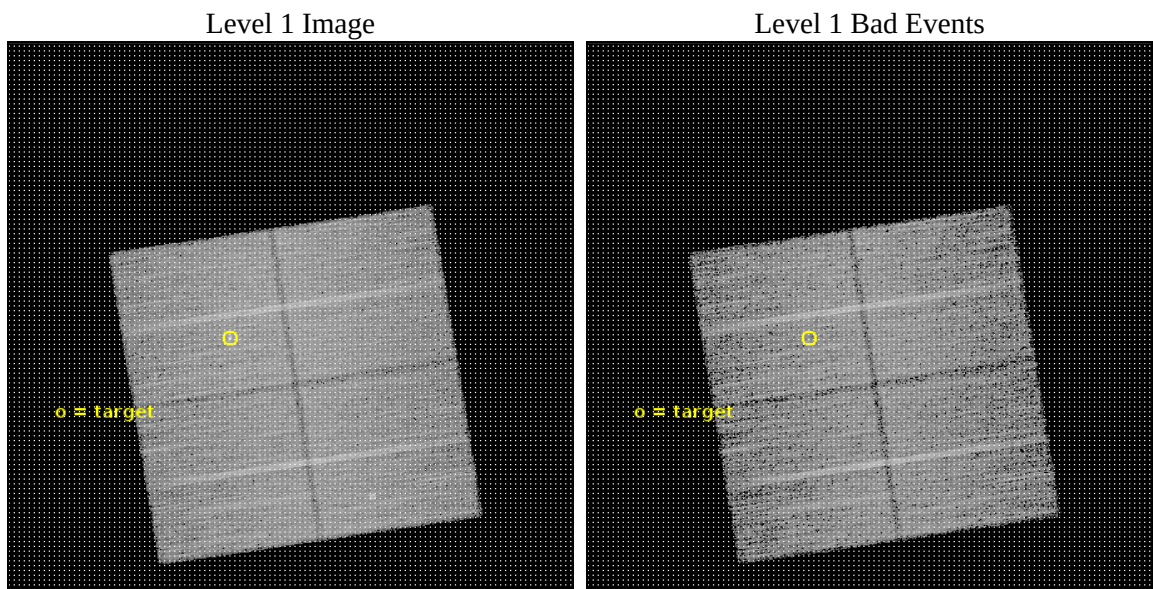
seq_num	502999	Sequence number
obs_id	22087	Observation id
title	The Answer is Blowing in the Wind: Jet Sweepback in Three PWNe	Pro
observer	Roger Romani	Principal investigator
object	PSR J1709-4429	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	257.427724	Observer's specified target RA [deg]
dec_targ	-44.485585	Observer's specified target Dec [deg]
ra_nom	257.3545786301	Nominal RA [deg]
dec_nom	-44.474375455039	Nominal Dec [deg]
roll_nom	351.15743871024	Nominal Roll [deg]
revision	1	Processing version of data
ontime	20078.659104466	Sum of GTIs [s]
livetime	19816.316641573	Livetime [s]
ontime0	20081.800154567	Sum of GTIs [s]
ontime1	20081.800154567	Sum of GTIs [s]
ontime2	20078.659104466	Sum of GTIs [s]
ontime3	20078.659124136	Sum of GTIs [s]
l2events	70666	Number of level 2 events



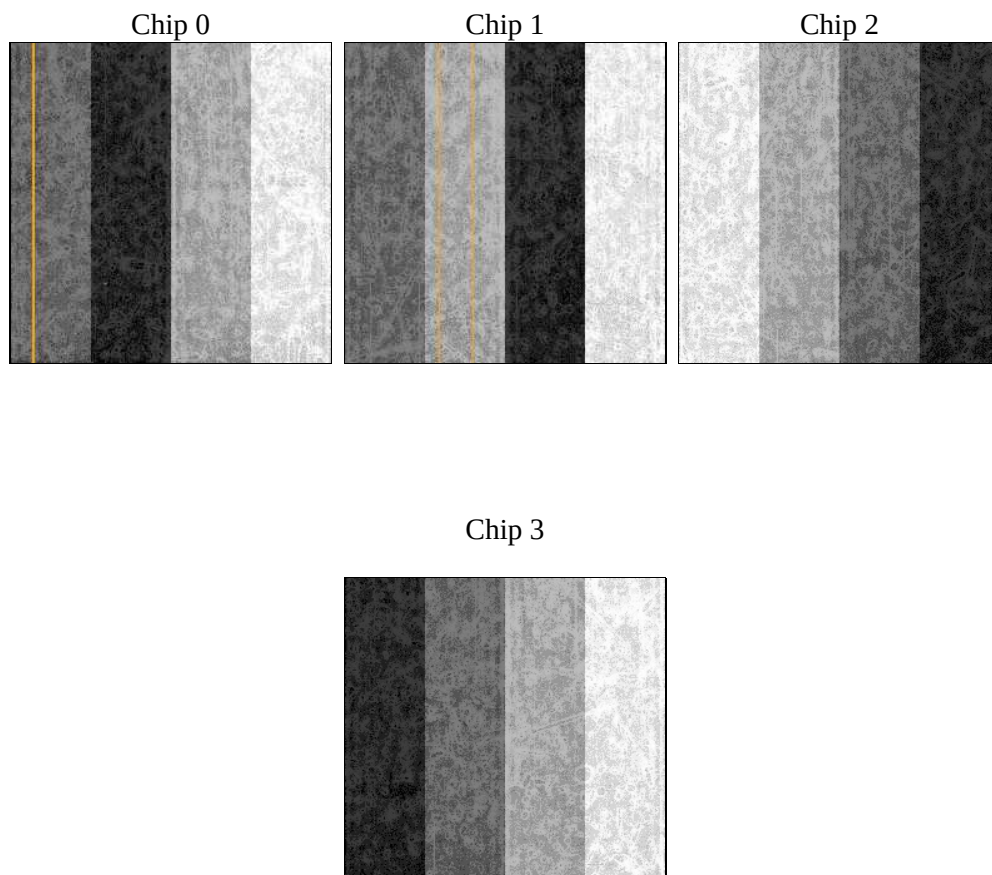
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	20078.659104466	Sum of GTIs [s]
caldbver	4.8.3	 	ontime0	20081.800154567	Sum of GTIs [s]
date	2019-06-16T23:53:05	Date and time of file creation	ontime1	20081.800154567	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	20078.659104466	Sum of GTIs [s]
			ontime3	20078.659124136	Sum of GTIs [s]
			l1events	598792	Number of level 1 events

2.1.4 Events

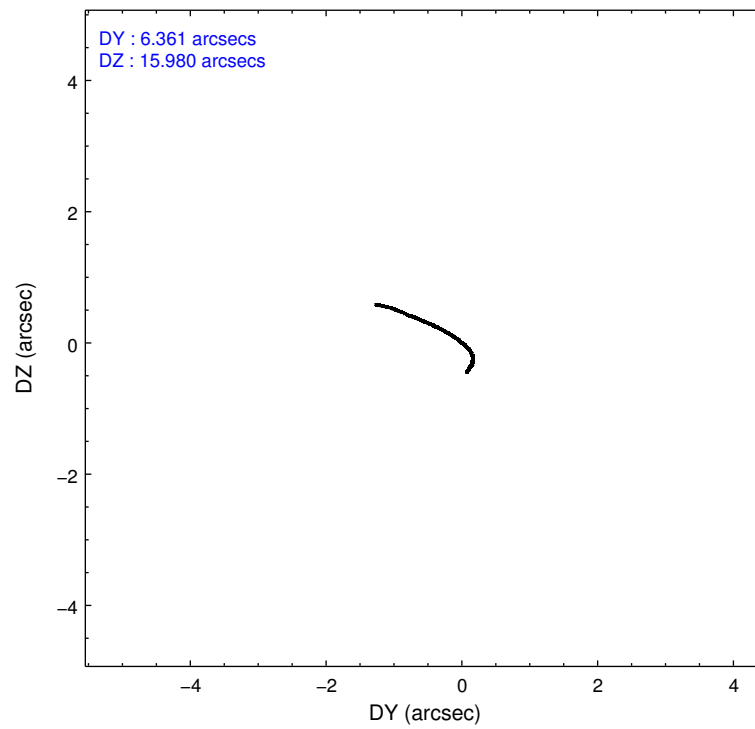
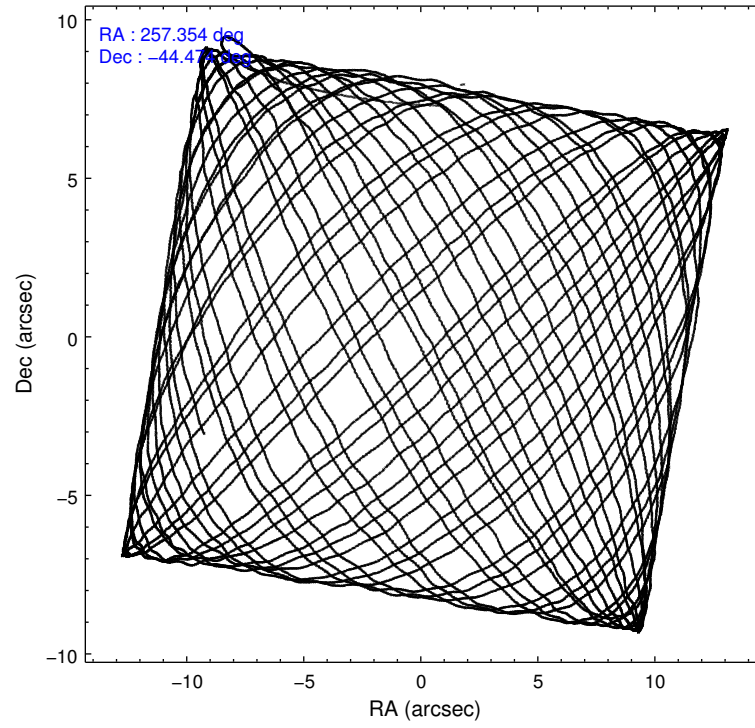
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	143265	143919	159114	152494
rejected events	124609	122089	136971	131601
rejected %	86%	84%	86%	86%

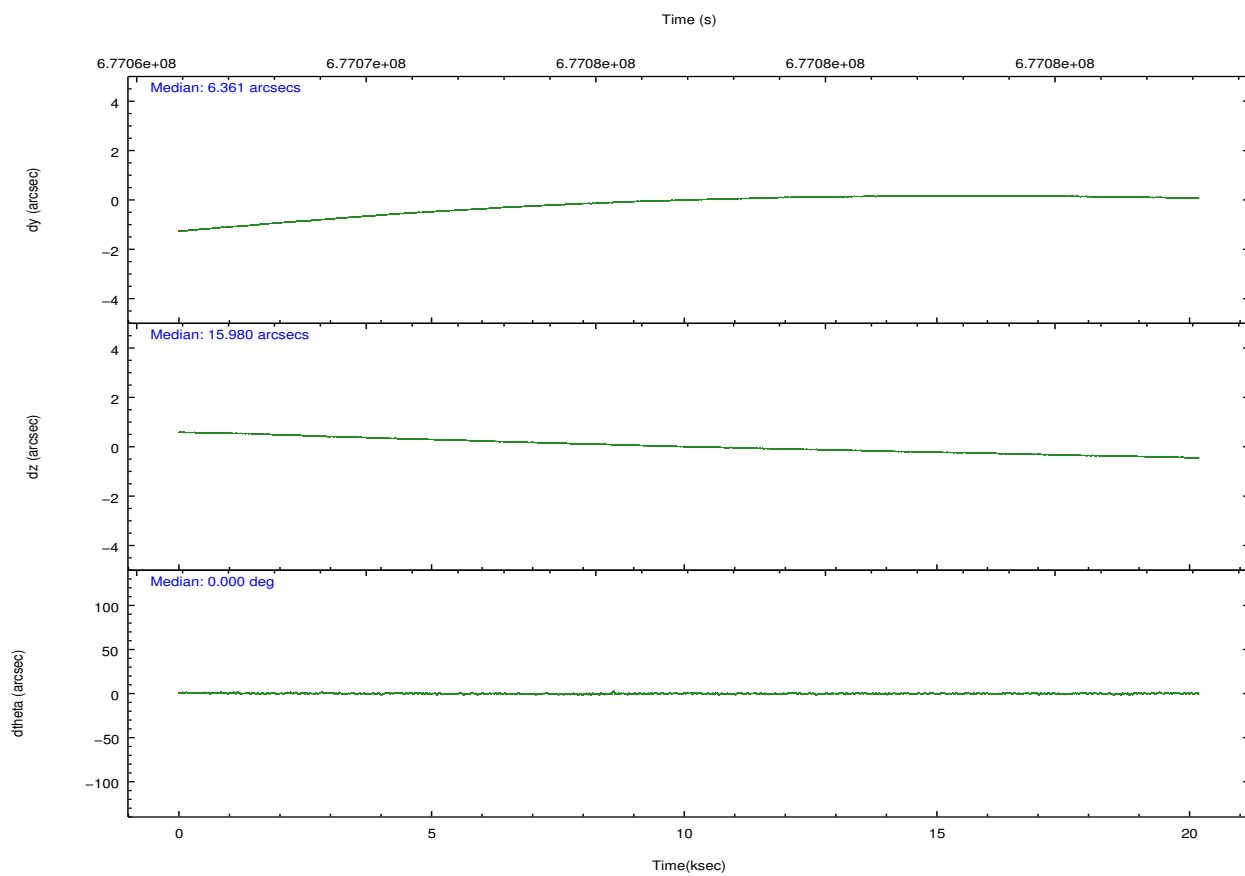
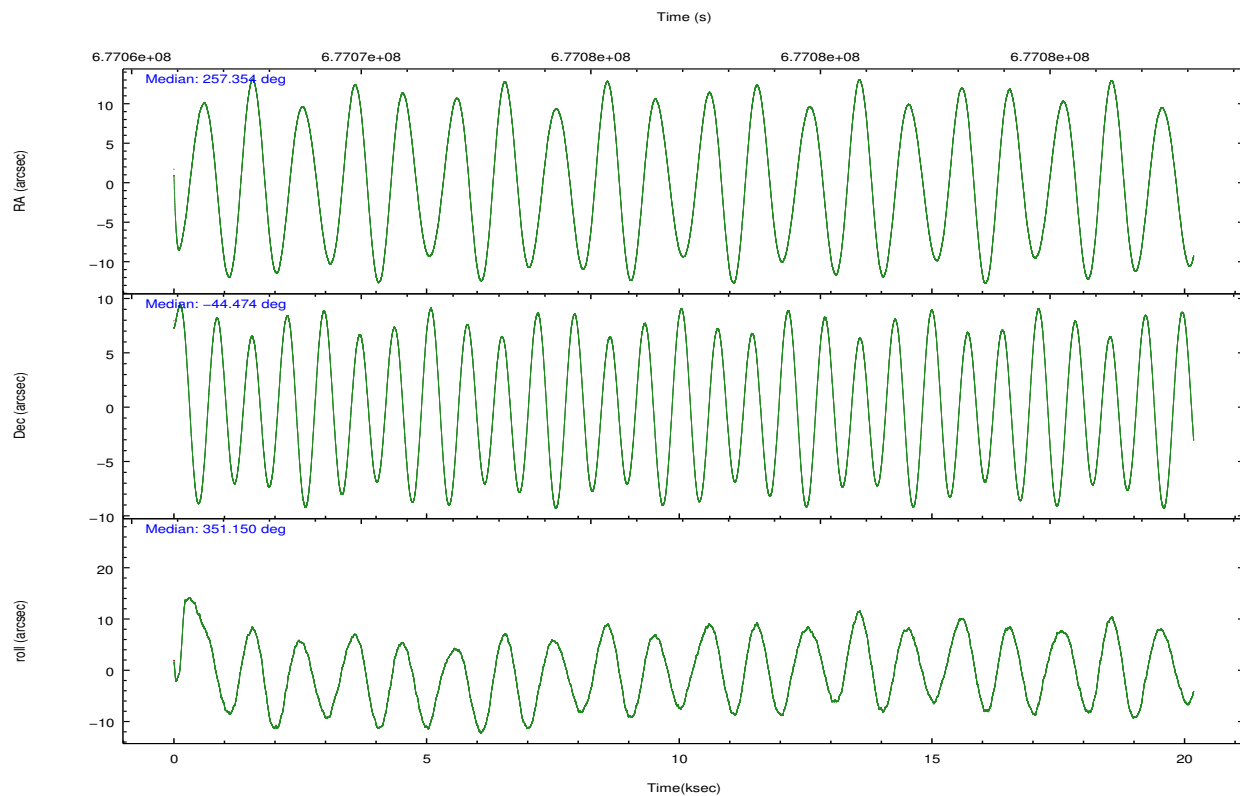
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	6976	8462	10238	9287
	4%	5%	6%	6%
grade 1 events	91	109	120	112
	0%	0%	0%	0%
grade 2 events	4523	5180	4695	4157
	3%	3%	2%	2%
grade 3 events	1796	1887	1755	1906
	1%	1%	1%	1%
grade 4 events	1676	1845	1805	1890
	1%	1%	1%	1%
grade 5 events	6636	6707	6217	7067
	4%	4%	3%	4%
grade 6 events	3687	4457	3656	3658
	2%	3%	2%	2%
grade 7 events	117880	115272	130628	124417
	82%	80%	82%	81%

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	CCD I0 on	O1	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	257.318560	257.3545786300996	CCD I2 on	Y	Y
[deg] Pointing Dec	-44.484460	-44.47437545503918	CCD I3 on	Y	Y
[deg] Pointing Roll	350.923516	351.1574387102424	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	N	N
[mm] SIM translation stage pos	-226.279963	-226.2883771404	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.3125	-7.304075862529686	CCD S4 on	N	N
[s] Observation start time (MET)	677067097.184000	677065432.38486	CCD S5 on	N	N
Observation start date	2019-06-16T10:10:28	2019-06-16T09:43:52	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	677087097.184000	677088126.39872	On-chip summing requested	N	N
Observation end date	2019-06-16T15:43:48	2019-06-16T16:02:06	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



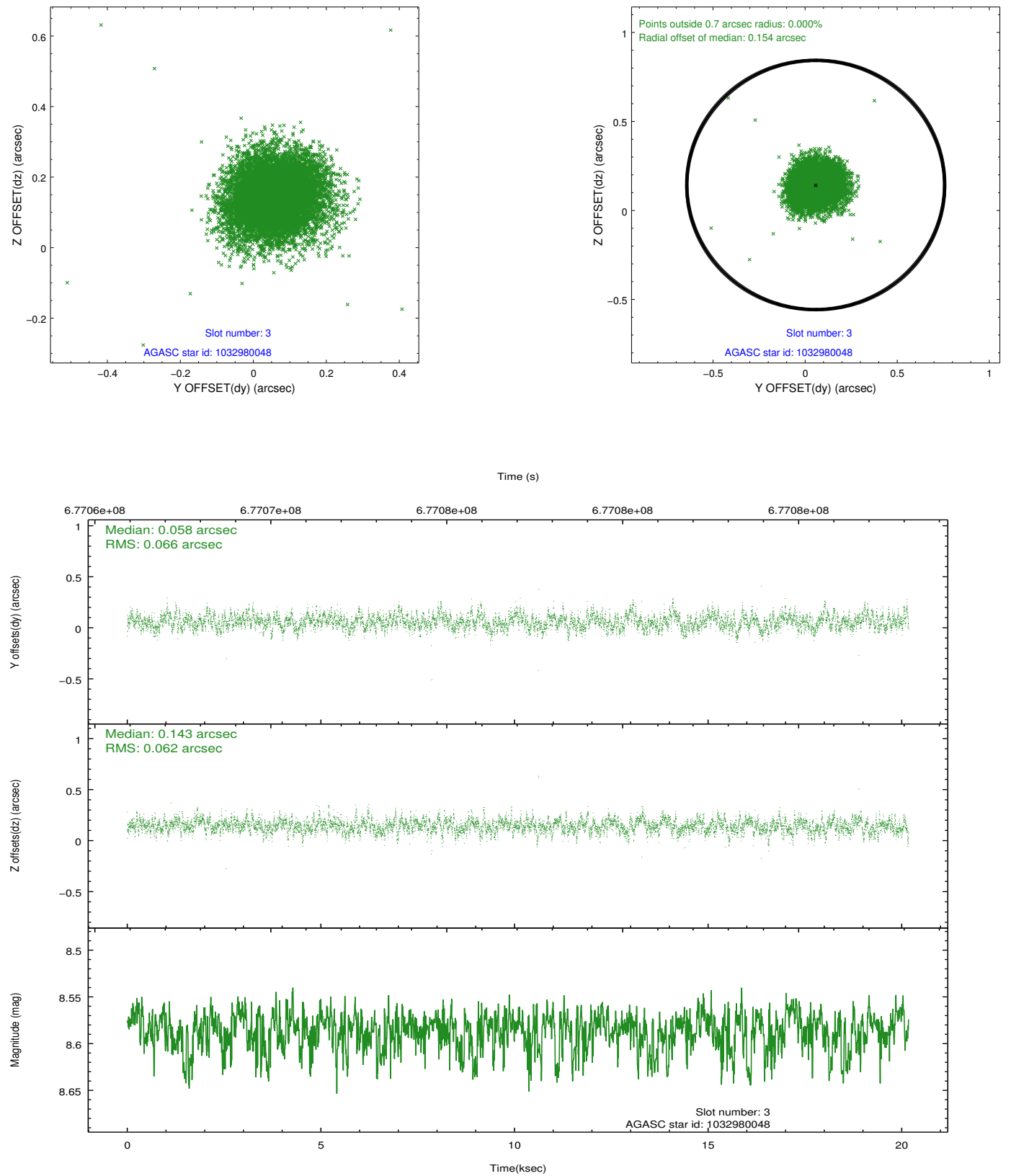


Slot Statistics

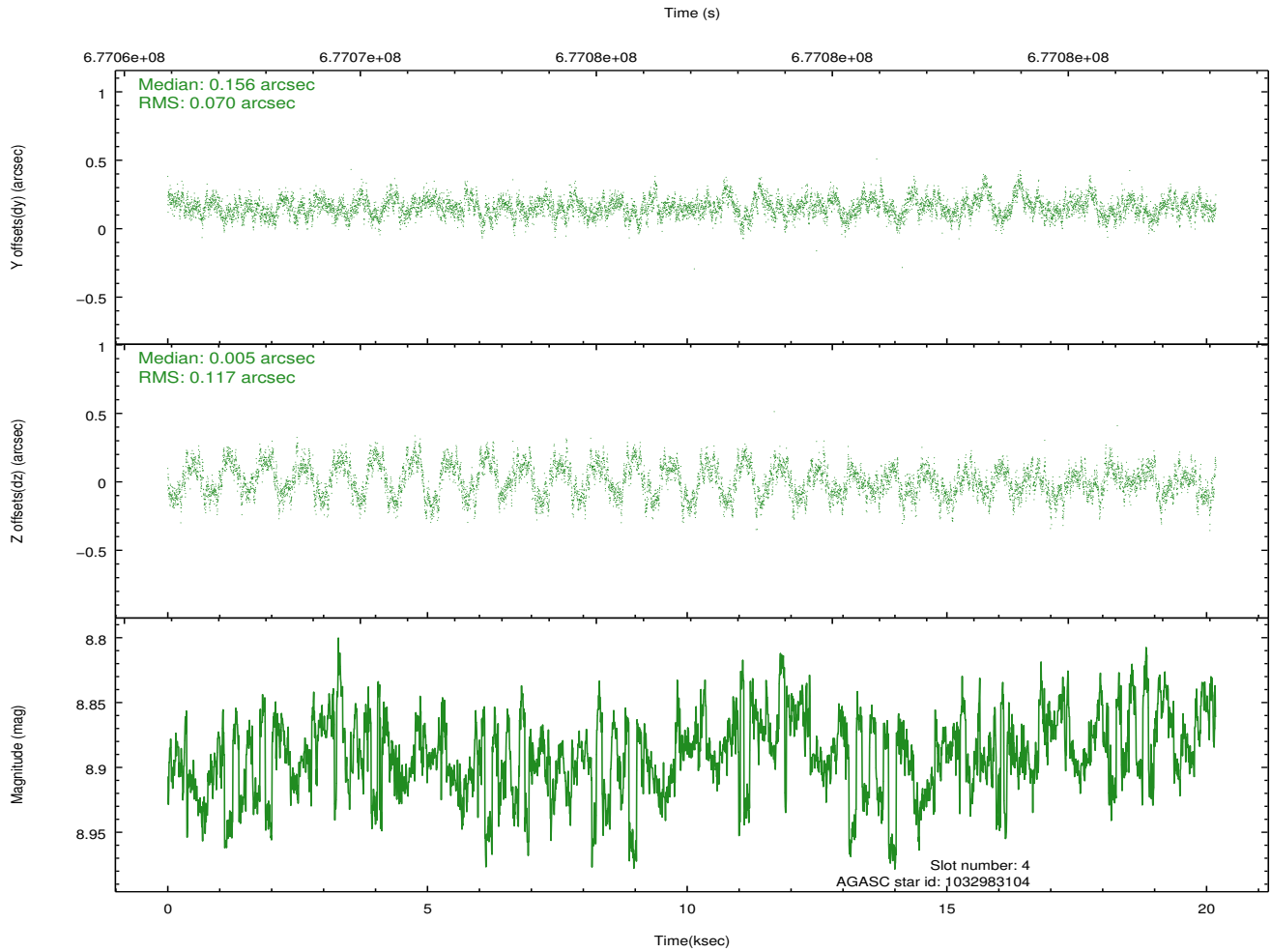
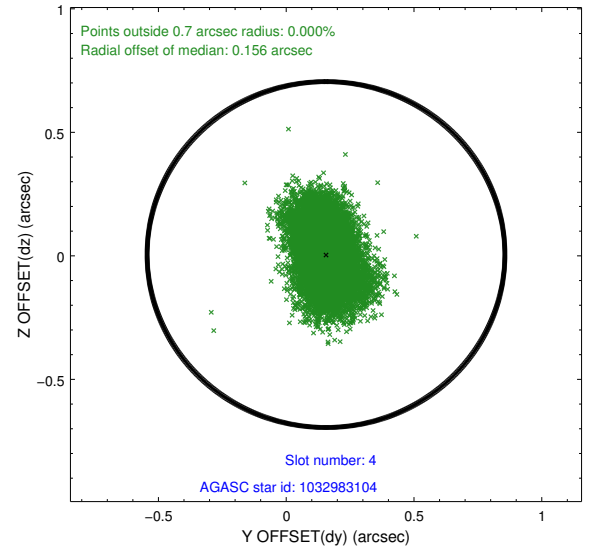
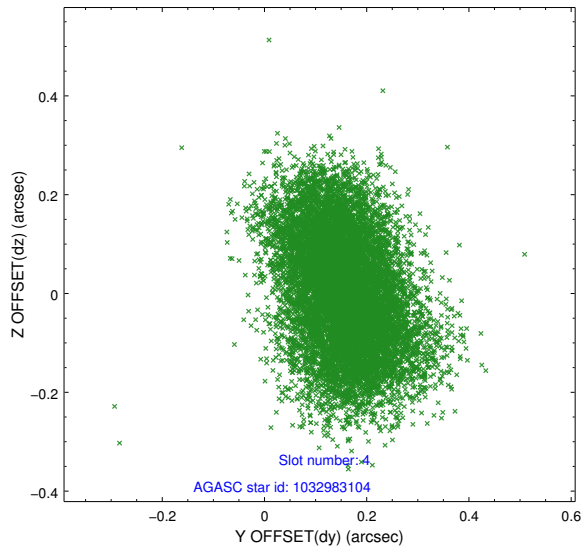
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.14	4923	1.000	0.147	-0.133	0.009	0.015	0.000000	0.000000	933.51	-989
1	FID		ACIS-I-3	7.34	4922	1.000	-0.162	0.051	0.017	0.025	0.000000	0.000000	50.80	-1122
2	FID		ACIS-I-6	7.16	4923	1.000	-0.074	0.149	0.019	0.028	0.000000	0.000000	399.12	1552
3	GUIDE	used	1032980048	8.59	9837	1.000	0.058	0.143	0.095	0.157	256.605534	-44.572067	-1754.07	-607
4	GUIDE	used	1032983104	8.89	9837	1.000	0.156	0.005	0.147	0.232	256.914293	-44.699956	-898.29	-932
5	GUIDE	used	1033000208	7.75	9844	1.000	-0.091	-0.183	0.092	0.159	256.502750	-44.372681	-2134.48	55
6	GUIDE	used	1091569256	8.37	9837	1.000	0.007	0.006	0.099	0.163	257.146819	-45.037377	-116.84	-2034
7	GUIDE	used	1091578128	8.58	9834	1.000	-0.140	0.046	0.133	0.226	257.198938	-45.154577	81.79	-2430

2.4 Star Slots

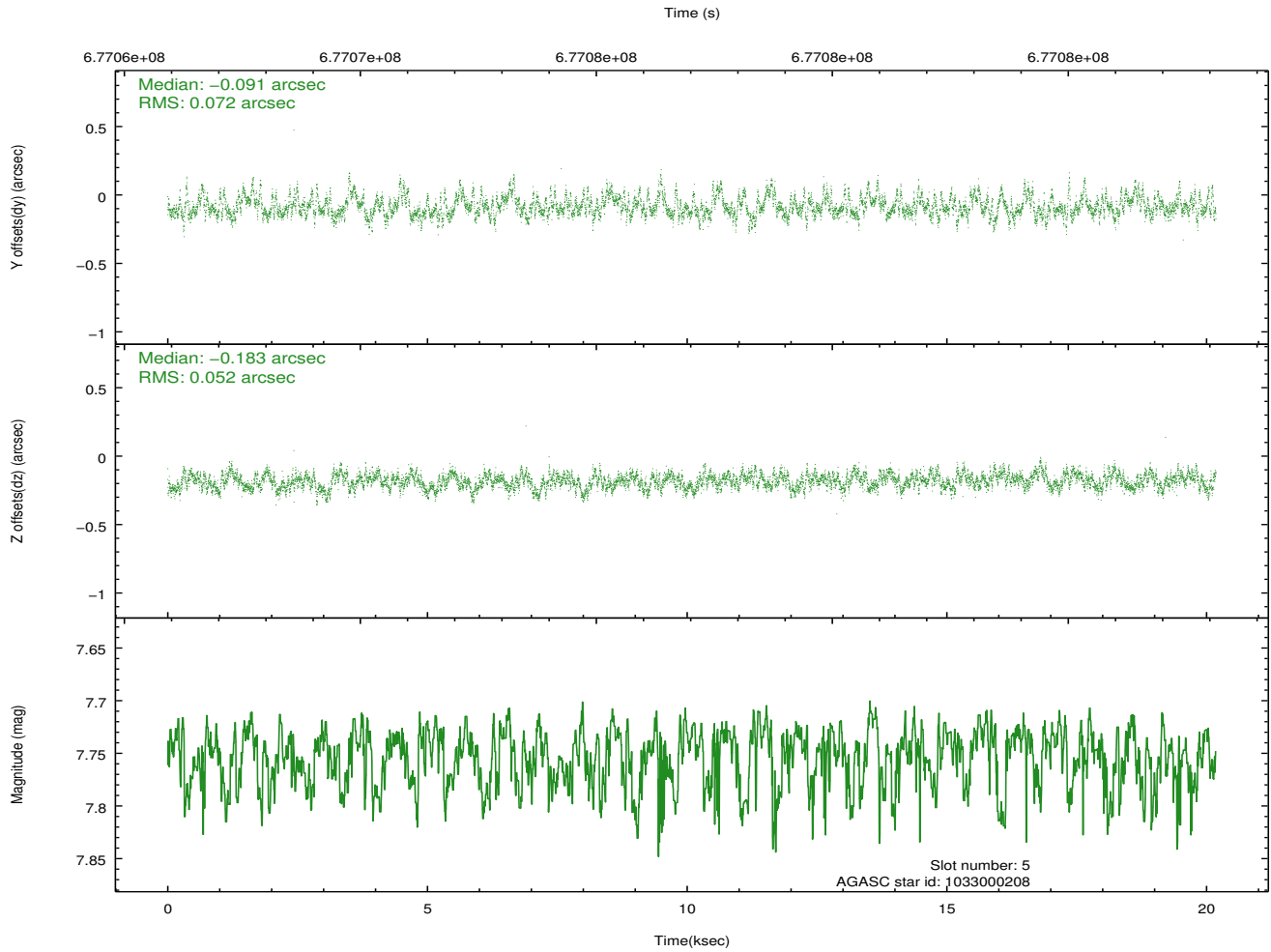
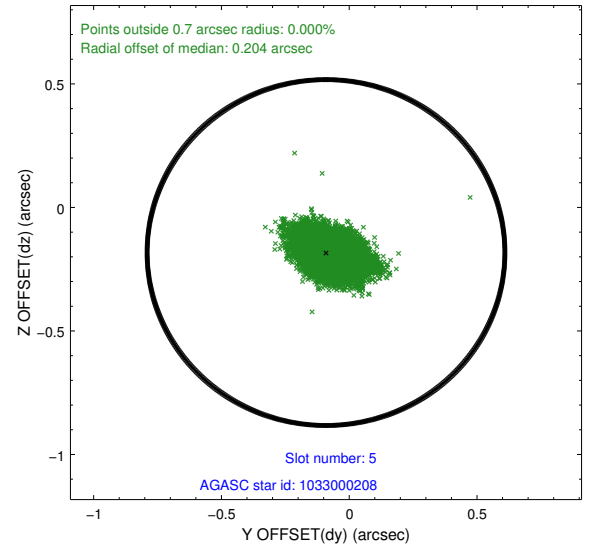
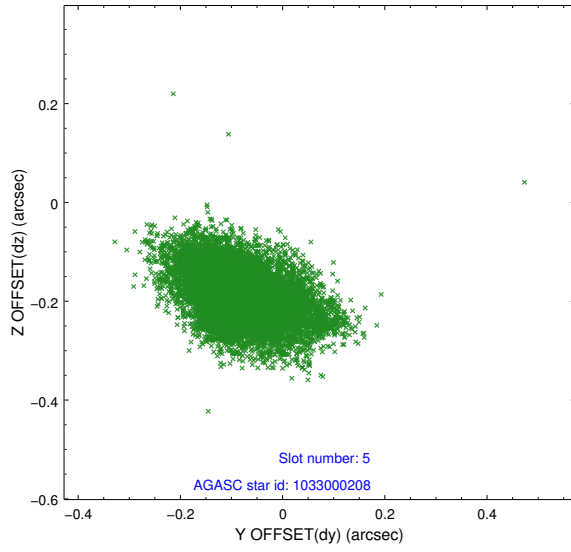
2.4.1 Slot 3



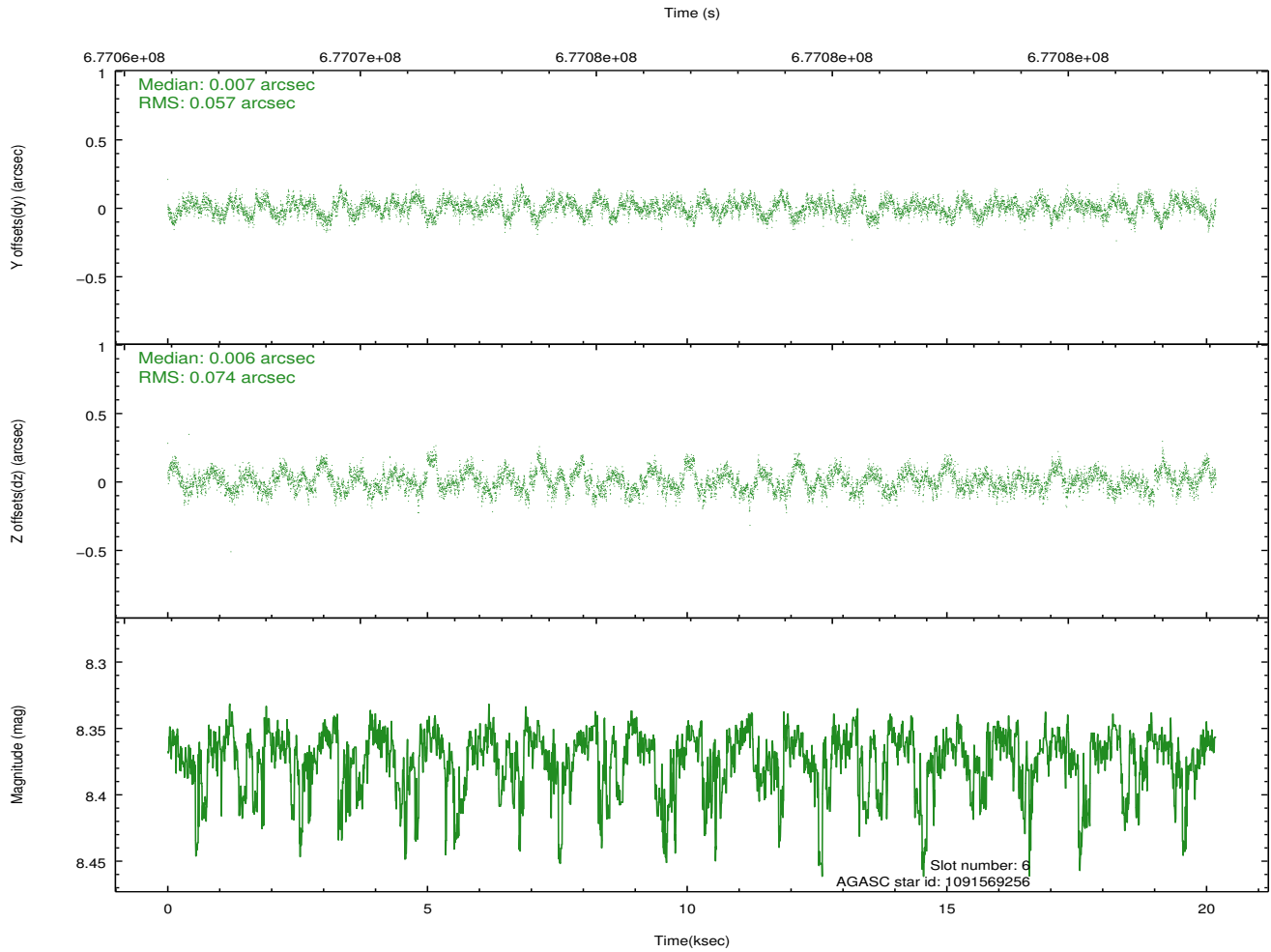
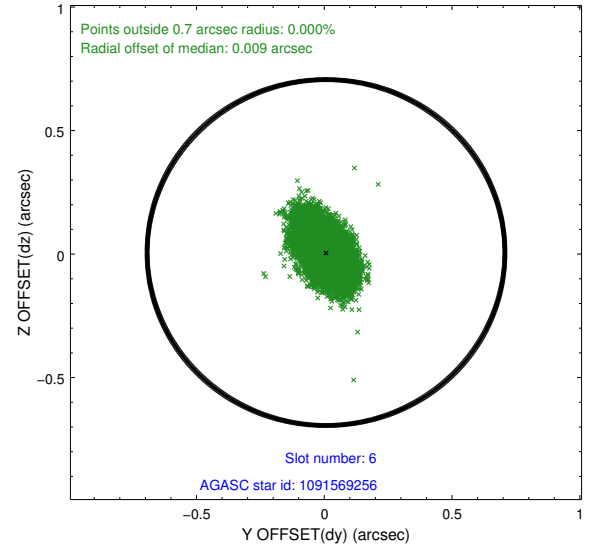
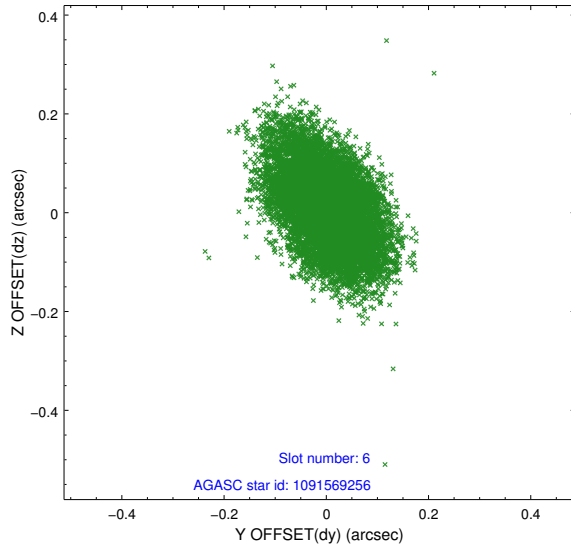
2.4.2 Slot 4



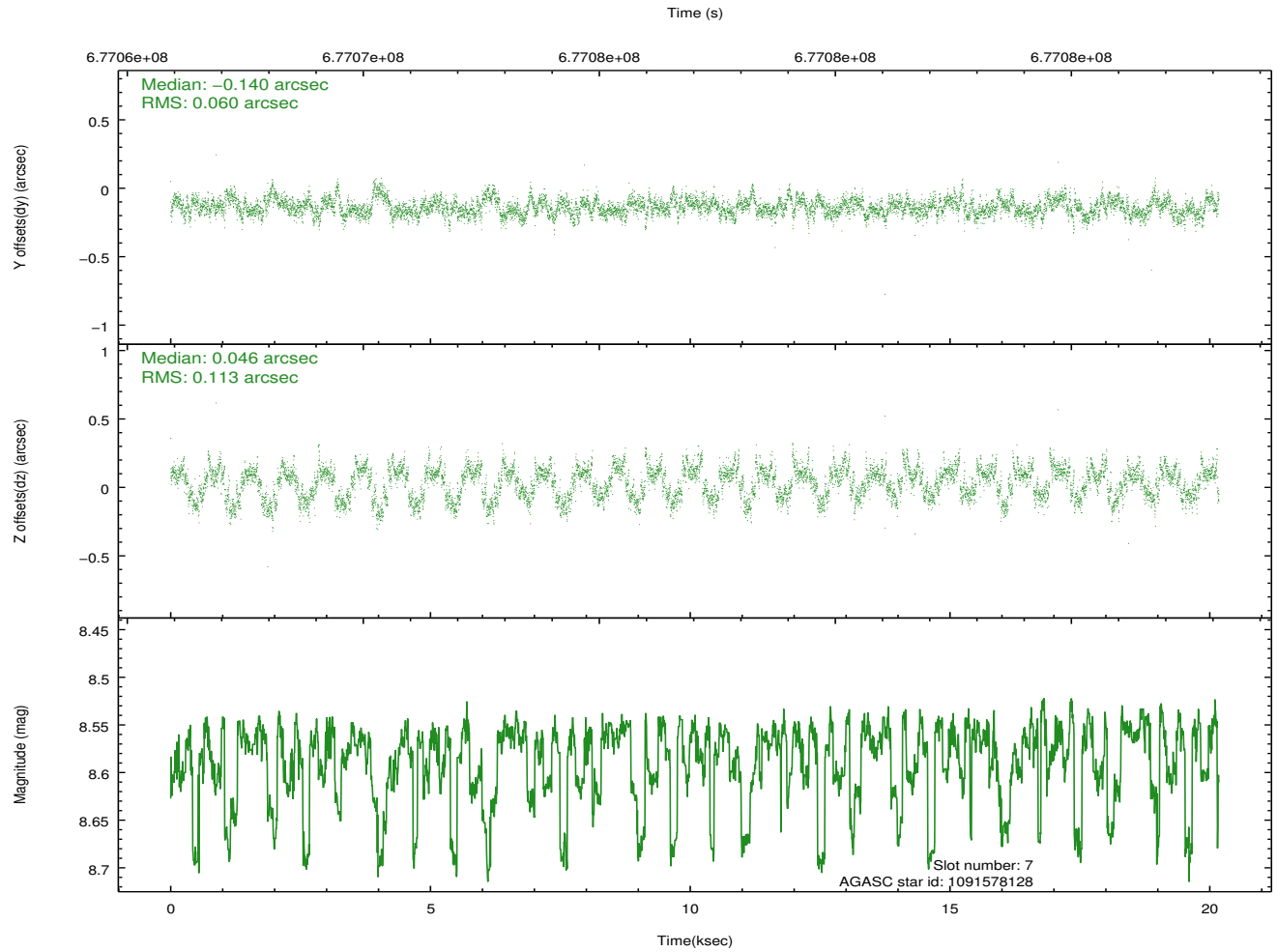
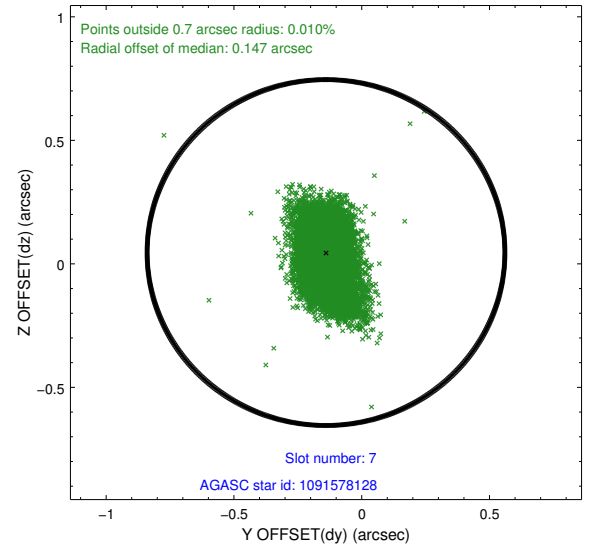
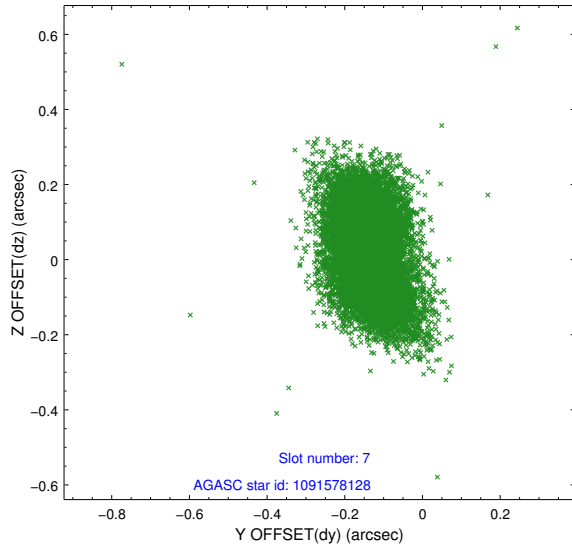
2.4.3 Slot 5



2.4.4 Slot 6

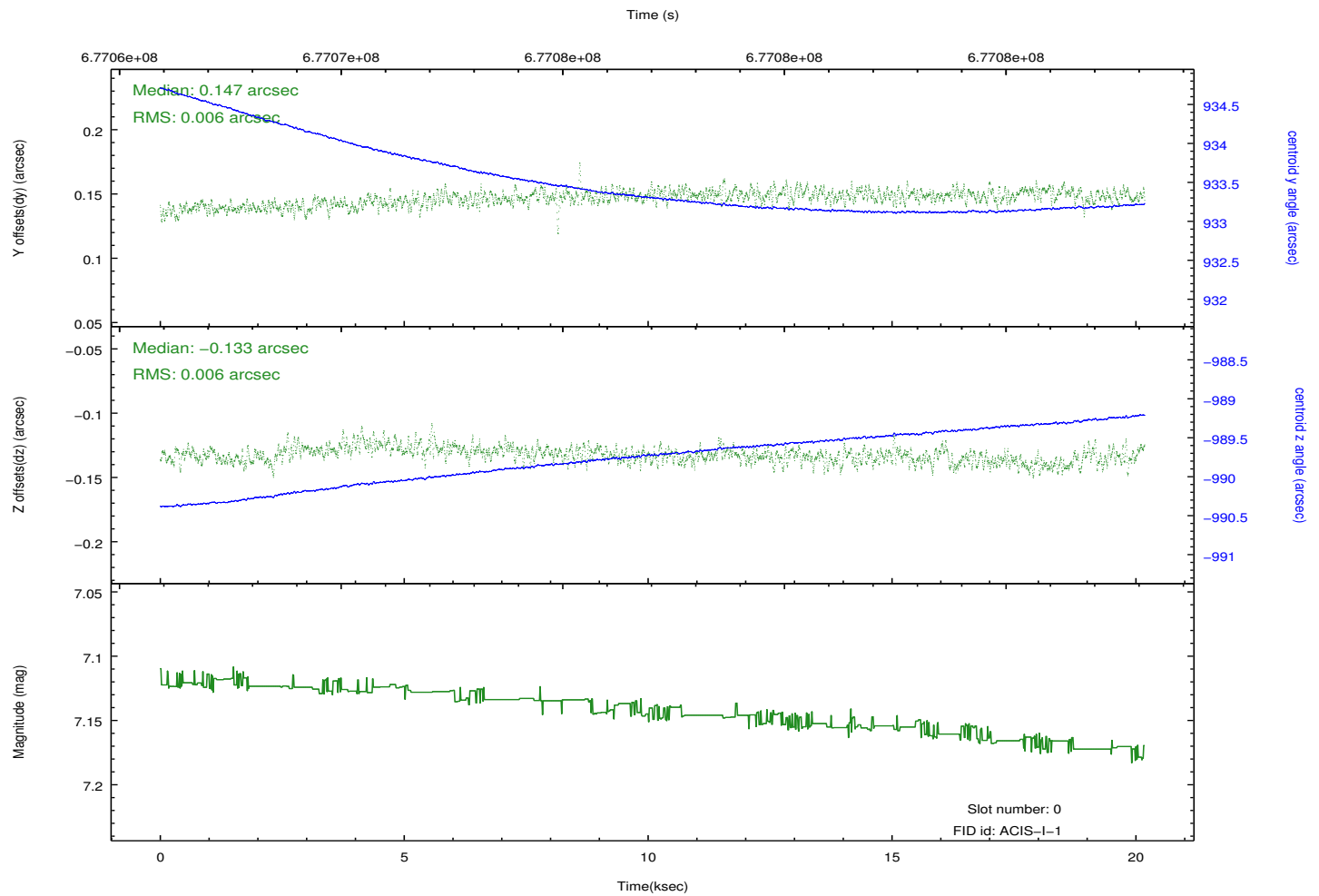
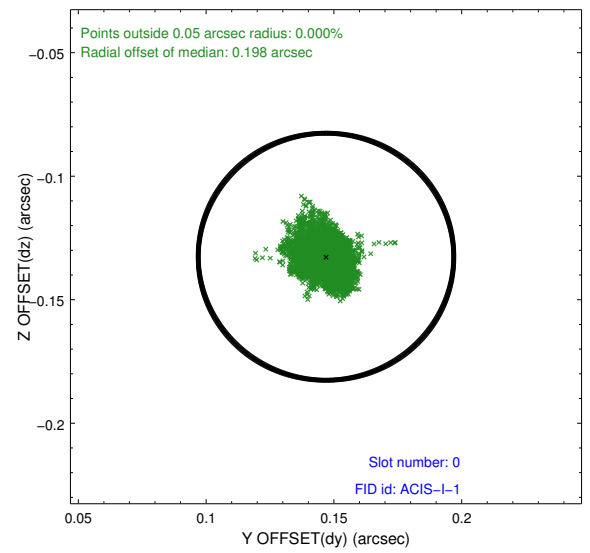
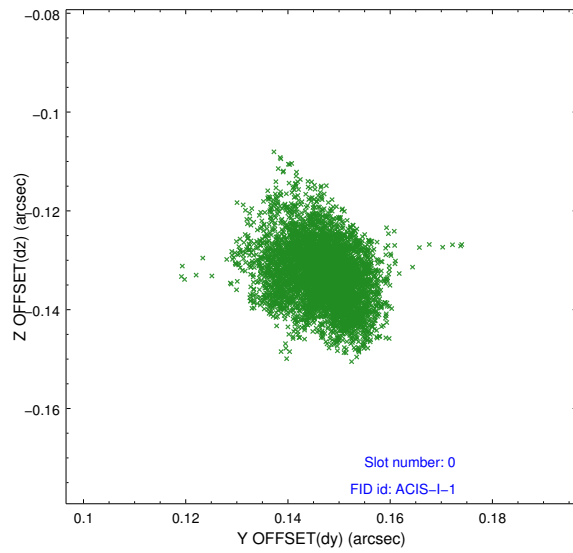


2.4.5 Slot 7

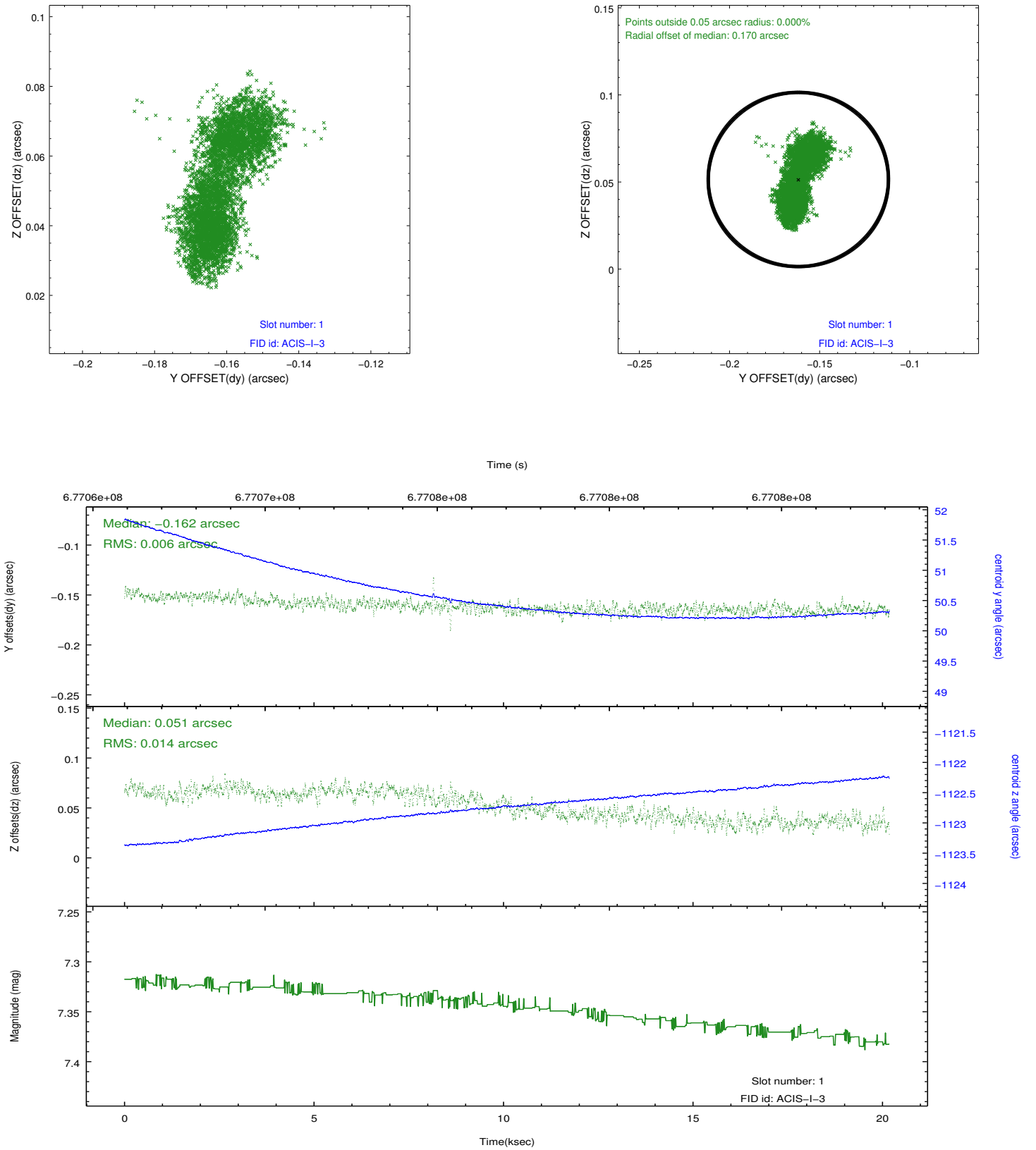


2.5 FID Slots

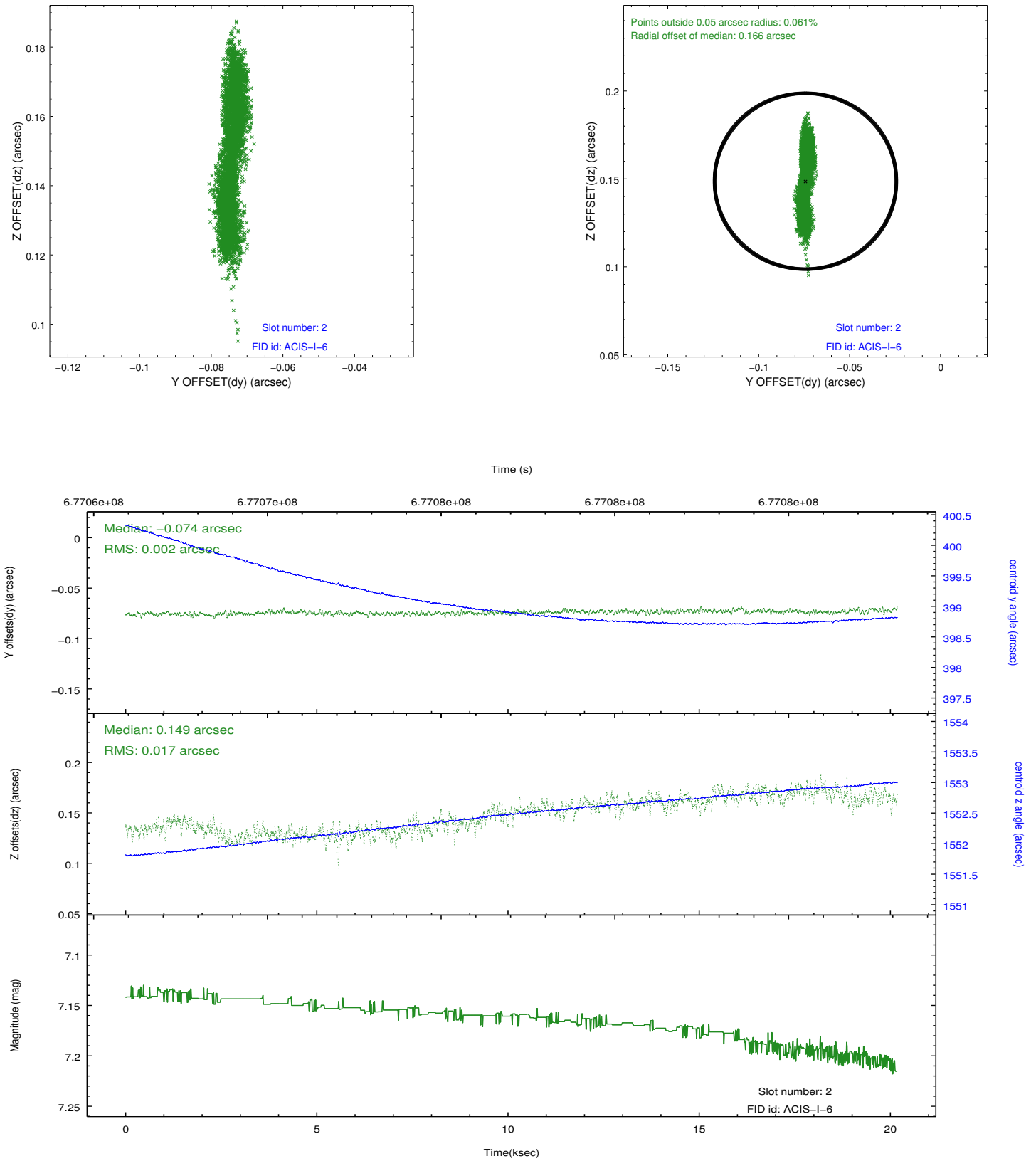
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2019.06.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.078659104466

A.2 Comments