

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 20303 - L2 Version 1
Chandra X-Ray Center

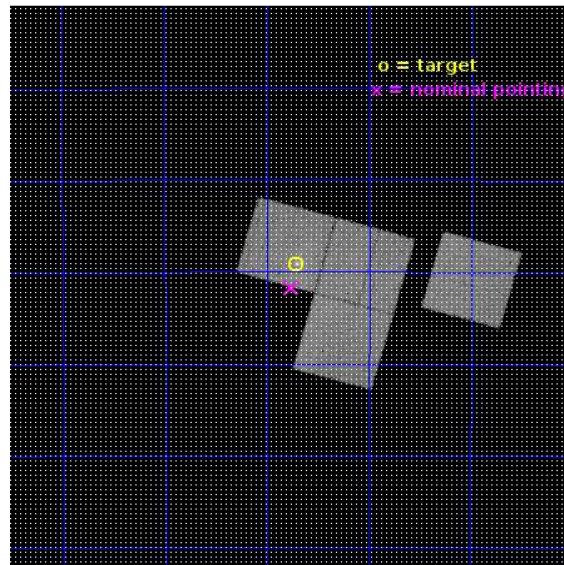
L2 Processing Date : Jan 25 2019

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1 Front

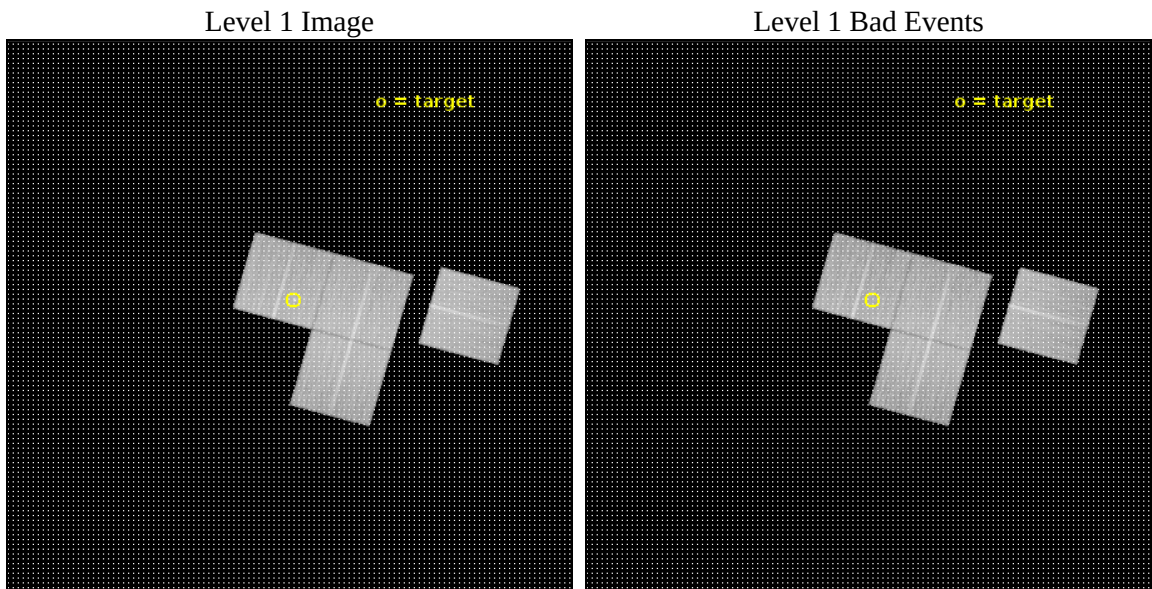
seq_num	503000	Sequence number
obs_id	20303	Observation id
title	The Answer is Blowing in the Wind: Jet Sweepback in Three PWNe	Pro
observer	Roger Romani	Principal investigator
object	PSR J1709-4429	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	257.42835	Observer's specified target RA [deg]
dec_targ	-44.4853	Observer's specified target Dec [deg]
ra_nom	257.44050820438	Nominal RA [deg]
dec_nom	-44.528628106249	Nominal Dec [deg]
roll_nom	105.71719936927	Nominal Roll [deg]
revision	1	Processing version of data
ontime	38126.90029335	Sum of GTIs [s]
livetime	37628.744272402	Livetime [s]
ontime0	38126.90029335	Sum of GTIs [s]
ontime2	38123.759333134	Sum of GTIs [s]
ontime3	38114.336372614	Sum of GTIs [s]
ontime6	38123.759333014	Sum of GTIs [s]
l2events	134873	Number of level 2 events



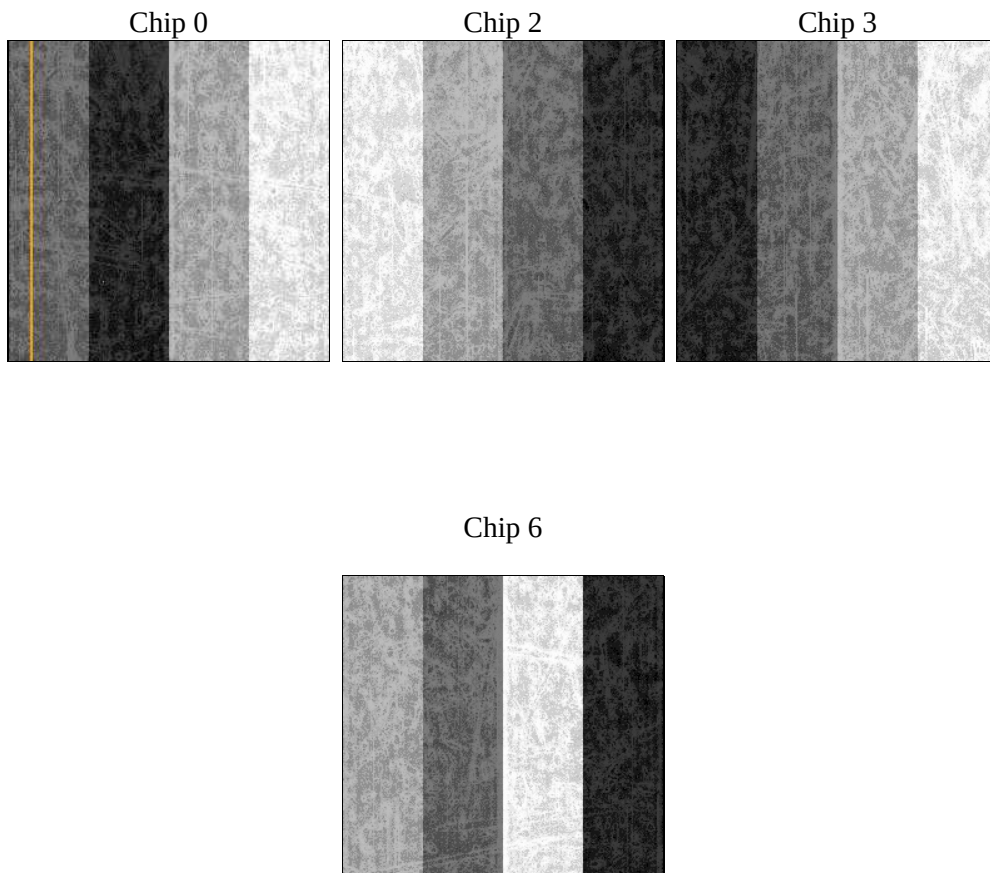
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	38000.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	38126.90029335	Sum of GTIs [s]
caldsver	4.8.2	 	ontime0	38126.90029335	Sum of GTIs [s]
date	2019-01-25T06:53:49	Date and time of file creation	ontime2	38123.759333134	Sum of GTIs [s]
revision	1	Processing version of data	ontime3	38114.336372614	Sum of GTIs [s]
			ontime6	38123.759333014	Sum of GTIs [s]
			l1events	1174815	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 2	ccd 3	ccd 6
level 1 events	281090	308245	286546	298934
rejected events	237617	268001	250770	261874
rejected %	84%	86%	87%	87%

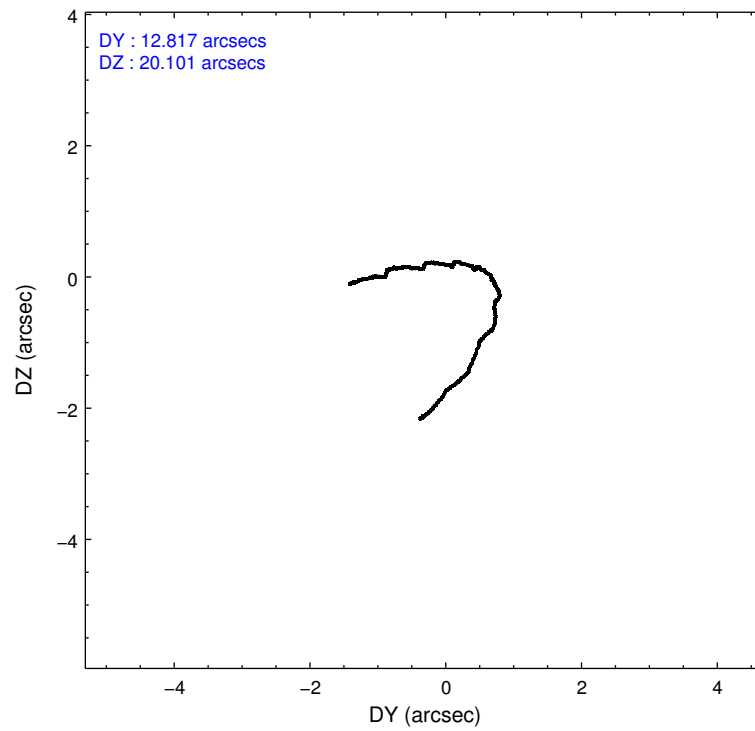
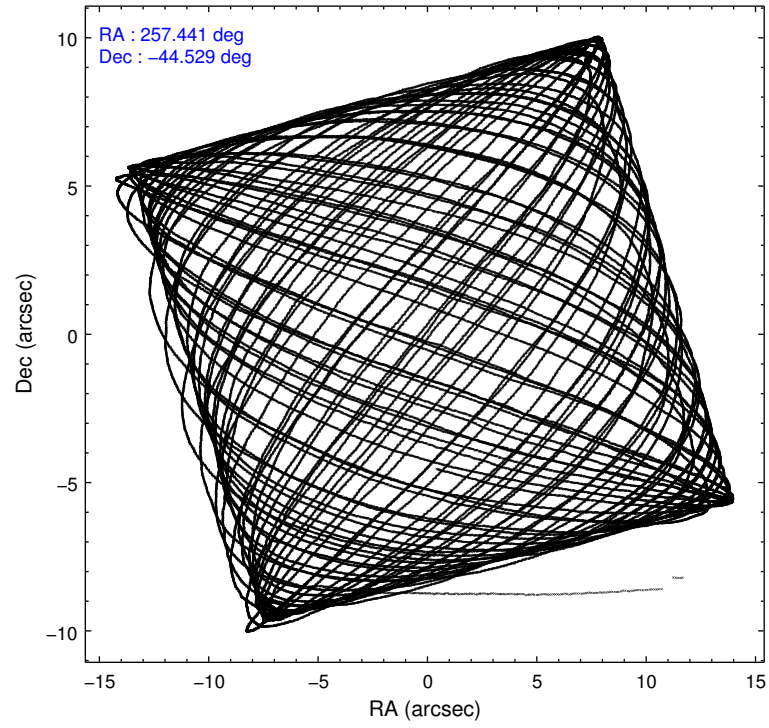
	ccd 0	ccd 2	ccd 3	ccd 6
grade 0 events	19410	17857	15302	13841
	6%	5%	5%	4%
grade 1 events	183	201	181	140
	0%	0%	0%	0%
grade 2 events	9623	8859	7194	8414
	3%	2%	2%	2%
grade 3 events	3638	3379	3325	3366
	1%	1%	1%	1%
grade 4 events	3467	3512	3330	3379
	1%	1%	1%	1%
grade 5 events	12210	11446	13841	13051
	4%	3%	4%	4%
grade 6 events	7338	6641	6631	8062
	2%	2%	2%	2%
grade 7 events	225221	256350	236742	248681
	80%	83%	82%	83%

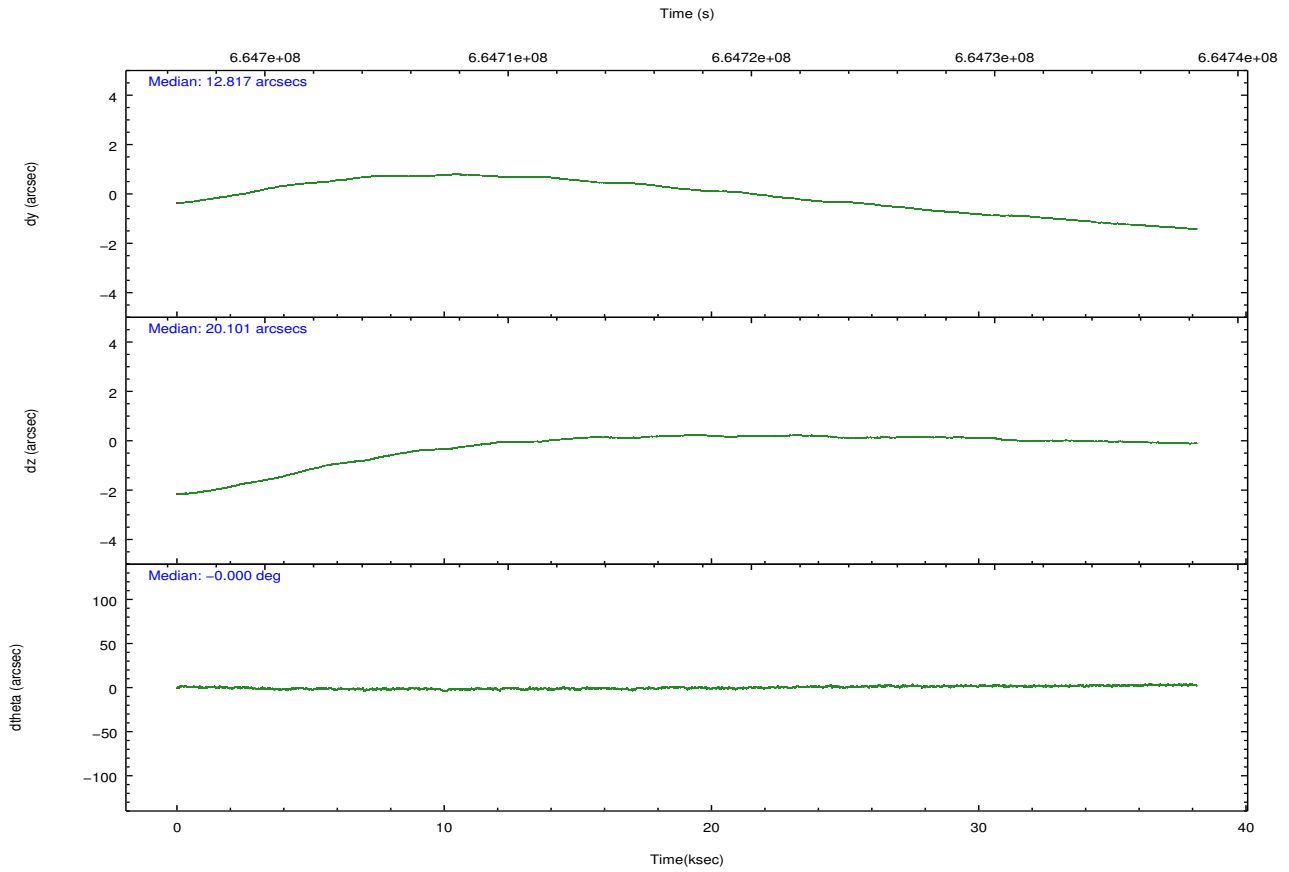
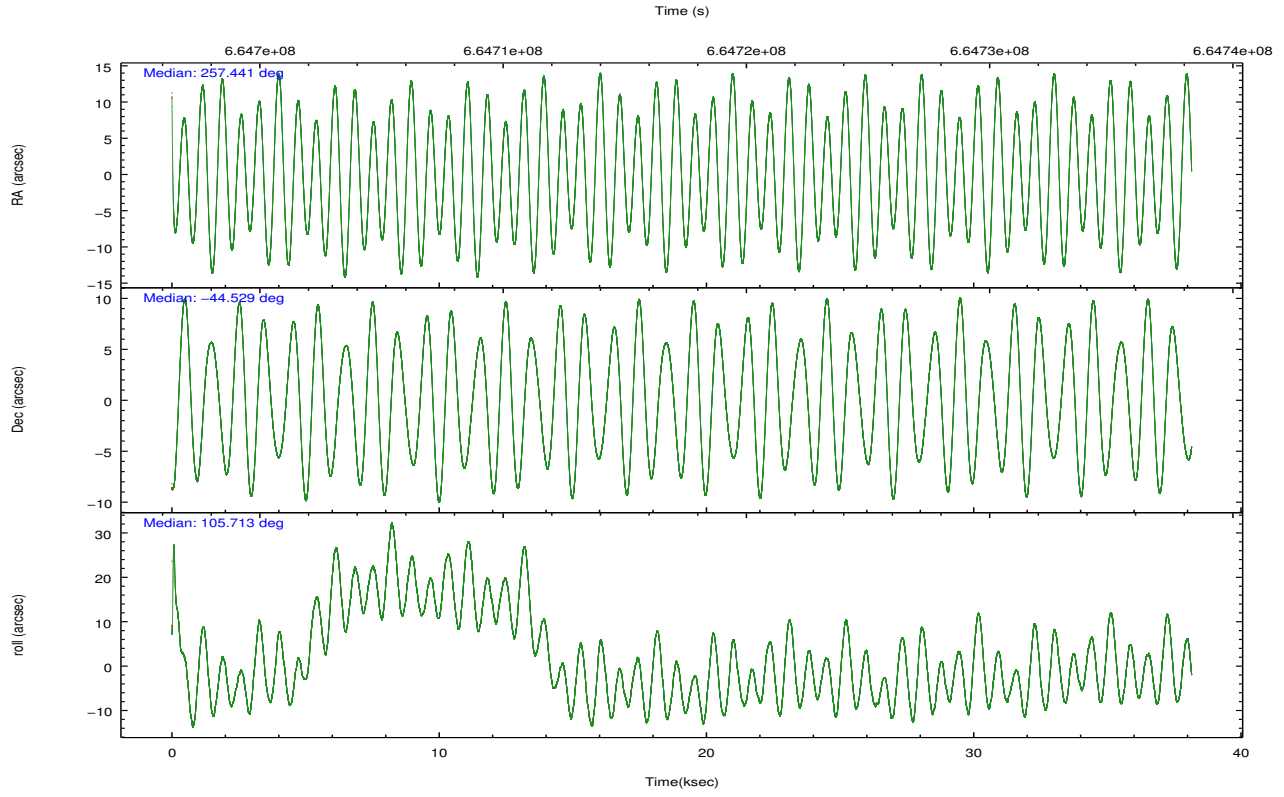
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-0236	ACIS-0236
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	257.468326	257.4405082043758
[deg] Pointing Dec	-44.547816	-44.52862810624907
[deg] Pointing Roll	105.528042	105.7171993692675
[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)	664698423.184000	664697354.73212
Observation start date	2019-01-24T06:25:54	2019-01-24T06:09:14
[s] Observation end time (MET)	664736423.184000	664737571.6345201
Observation end date	2019-01-24T16:59:14	2019-01-24T17:19:31
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	N
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	1	1
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



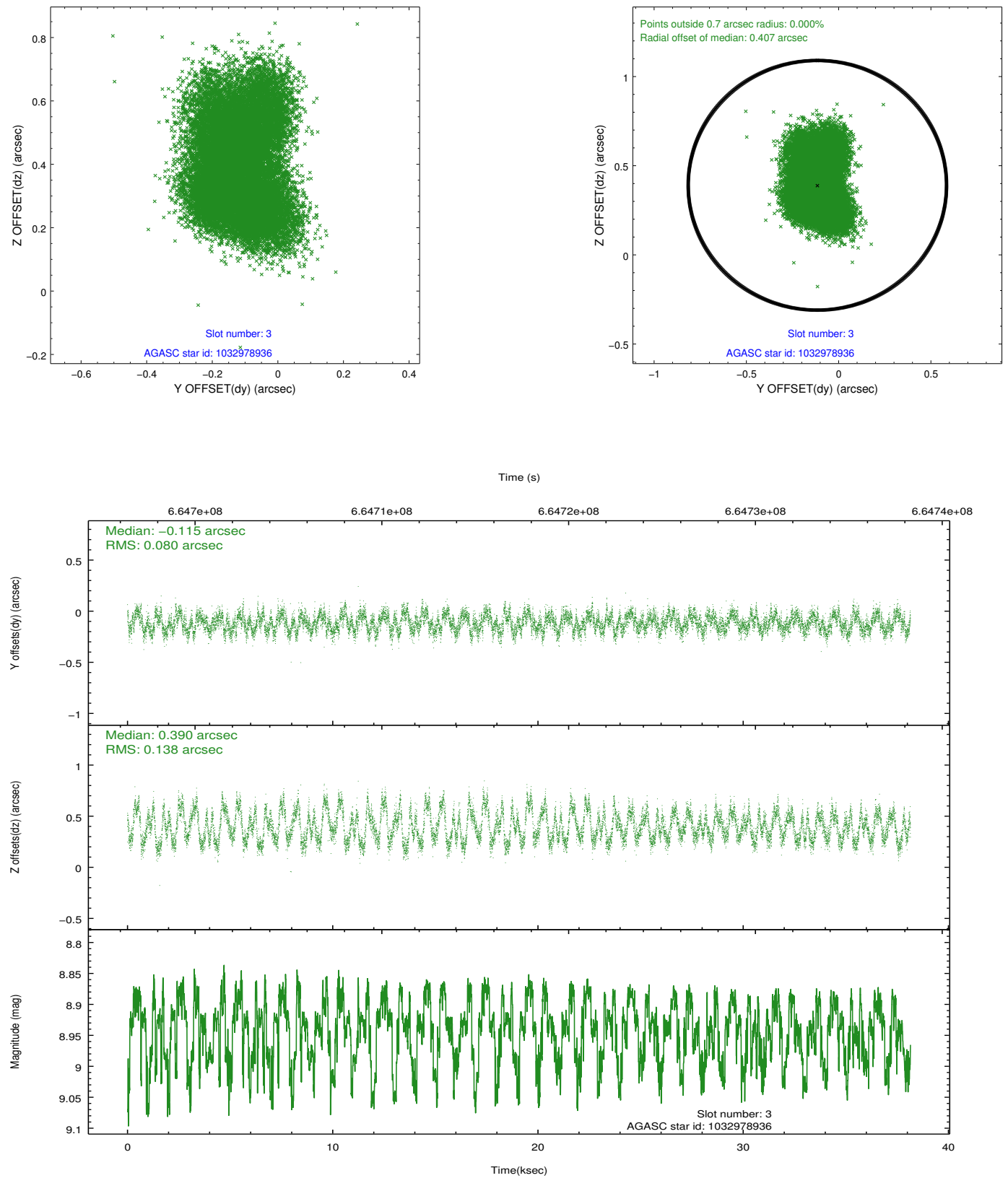


Slot Statistics

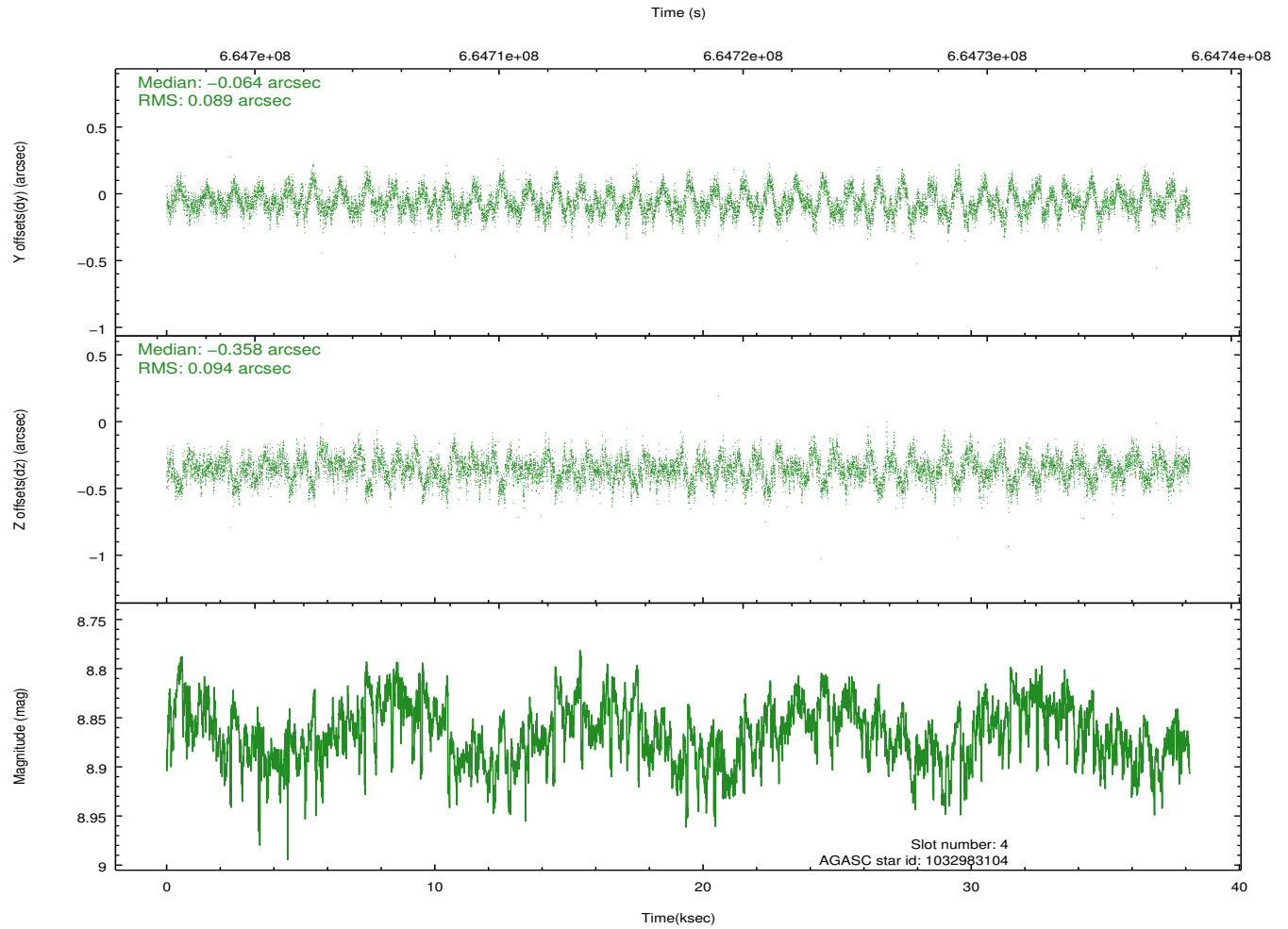
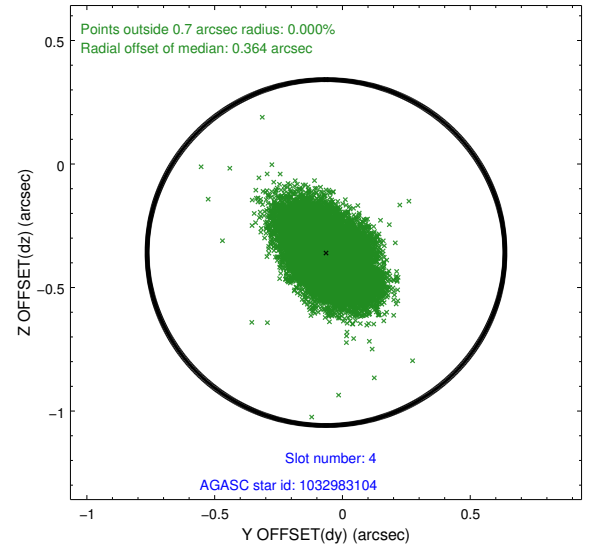
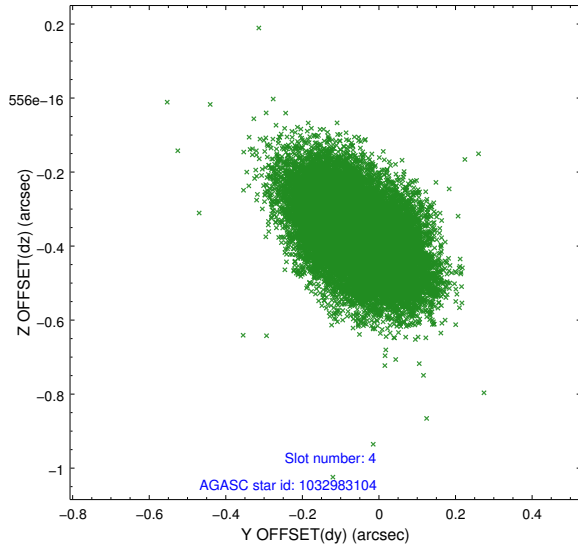
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.22	9307	1.000	0.095	0.092	0.013	0.059	0.000000	0.000000	927.05	-650
1	FID		ACIS-I-3	7.37	9306	1.000	-0.166	-0.020	0.013	0.024	0.000000	0.000000	44.30	-784
2	FID		ACIS-I-6	7.15	9303	1.000	-0.018	-0.006	0.013	0.059	0.000000	0.000000	392.73	1890
3	GUIDE	used	1032978936	8.94	18588	1.000	-0.115	0.390	0.171	0.272	257.447182	-44.360307	665.20	-127
4	GUIDE	used	1032983104	8.87	18605	1.000	-0.064	-0.358	0.138	0.227	256.914293	-44.699956	-153.00	1513
5	GUIDE	used	1033111224	8.90	18584	1.000	0.332	0.603	0.126	0.220	257.844751	-44.847109	-1296.93	-636
6	GUIDE	used	1091569256	8.37	18598	1.000	0.173	-0.012	0.131	0.215	257.146819	-45.037377	-1480.56	1260
7	GUIDE	used	1032980048	8.59	18601	1.000	-0.321	-0.633	0.115	0.190	256.605534	-44.572067	496.68	2157

2.4 Star Slots

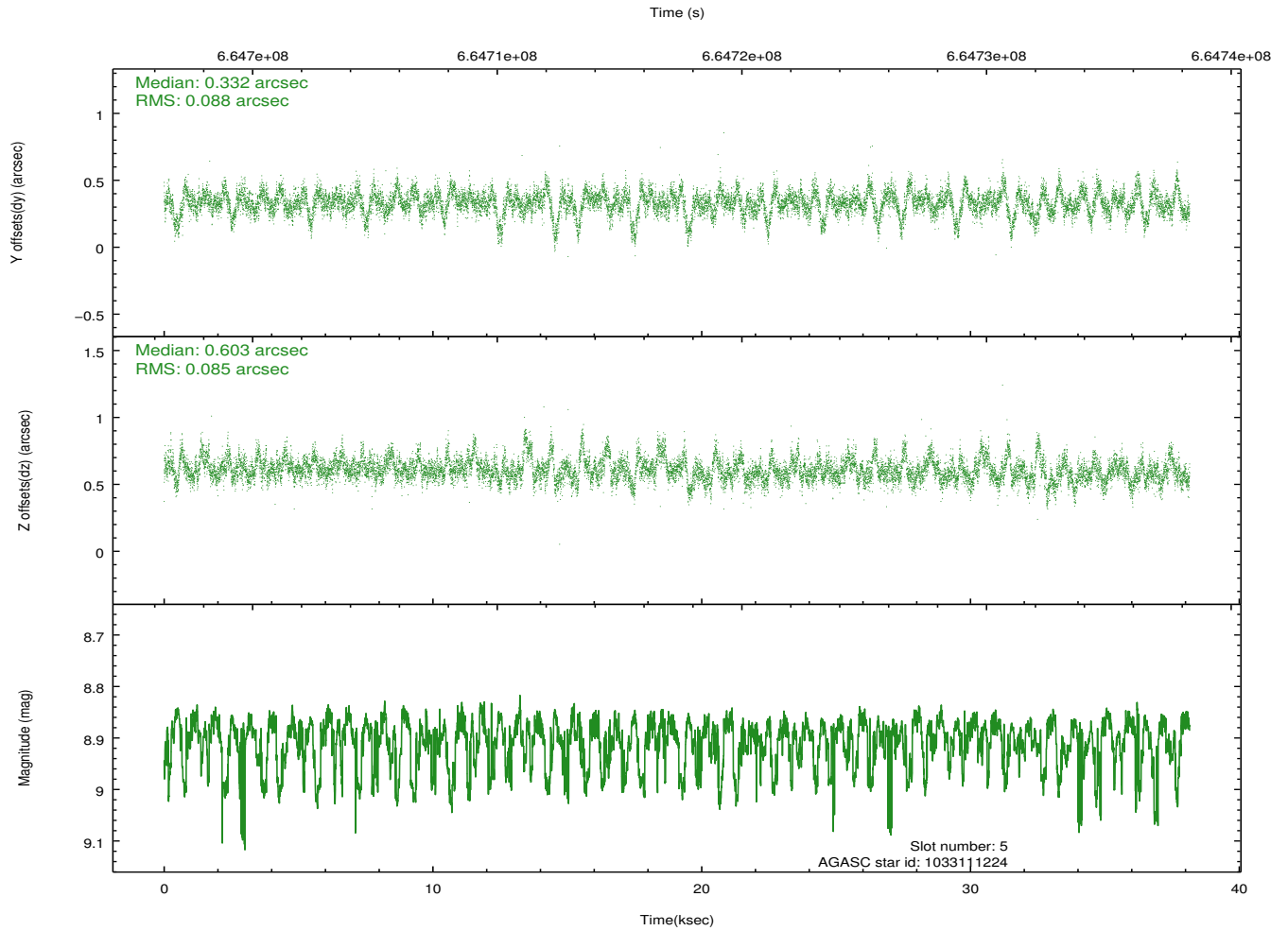
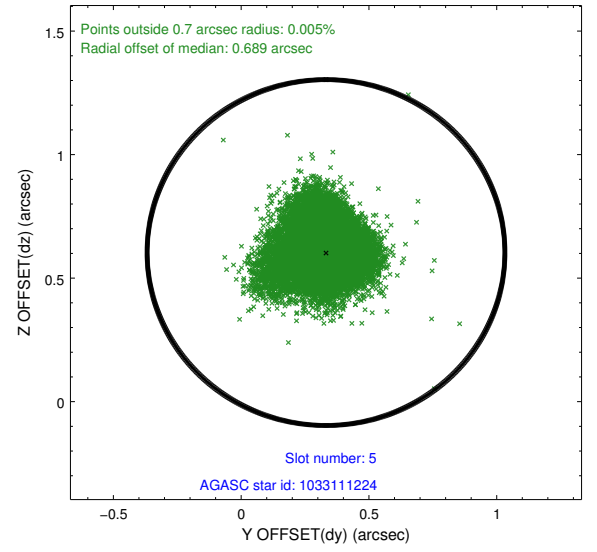
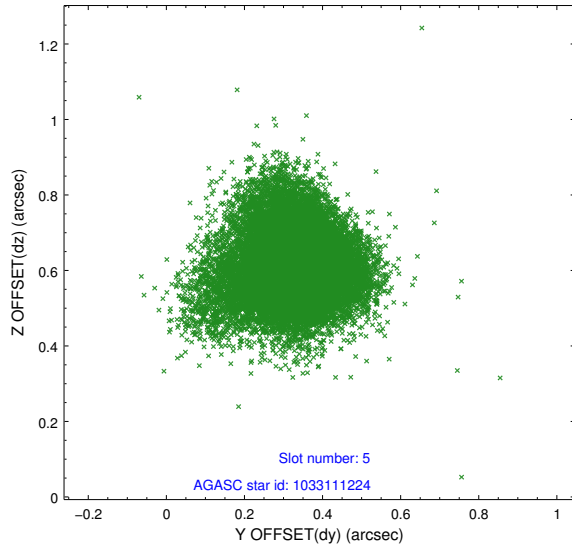
2.4.1 Slot 3



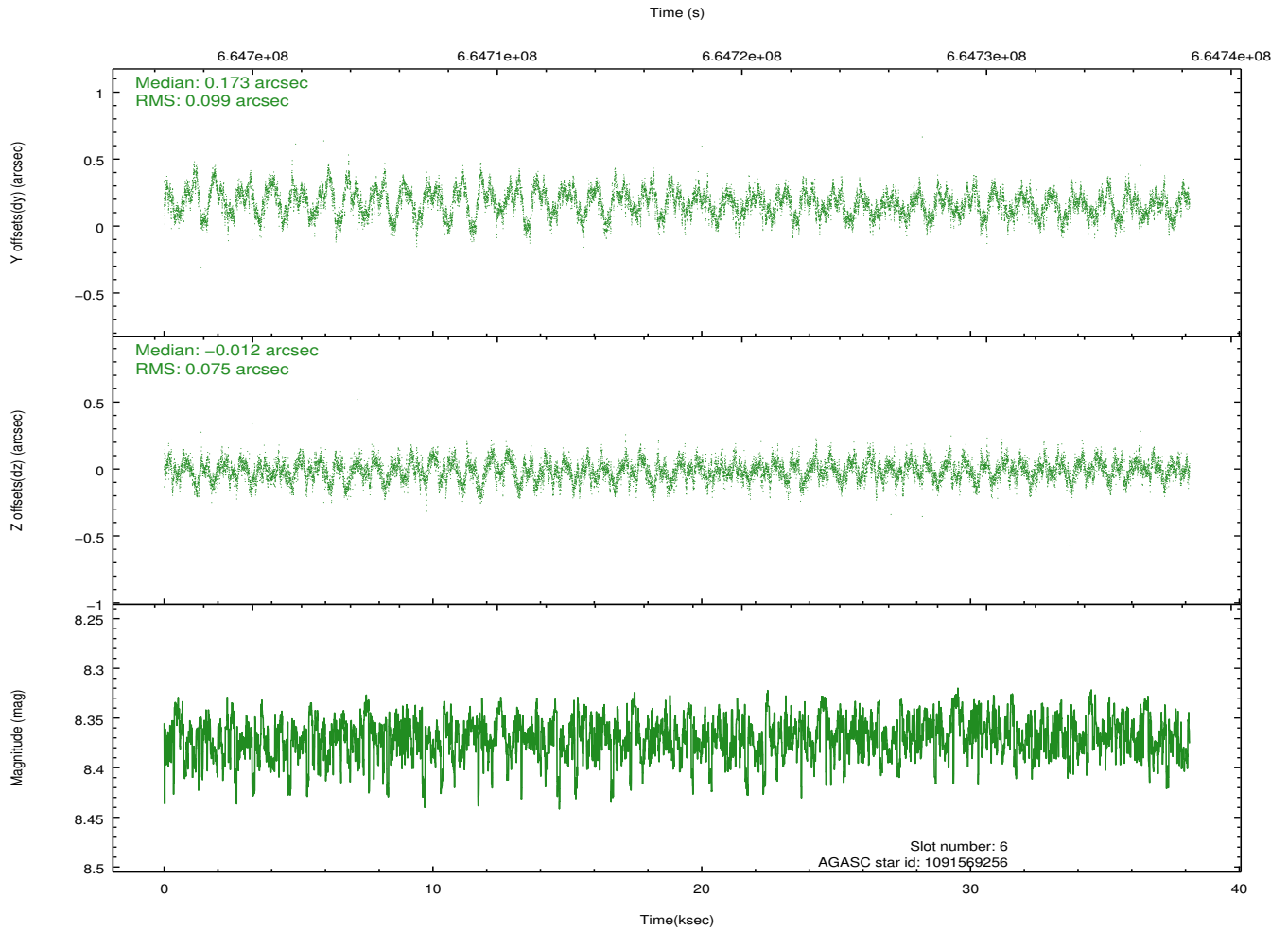
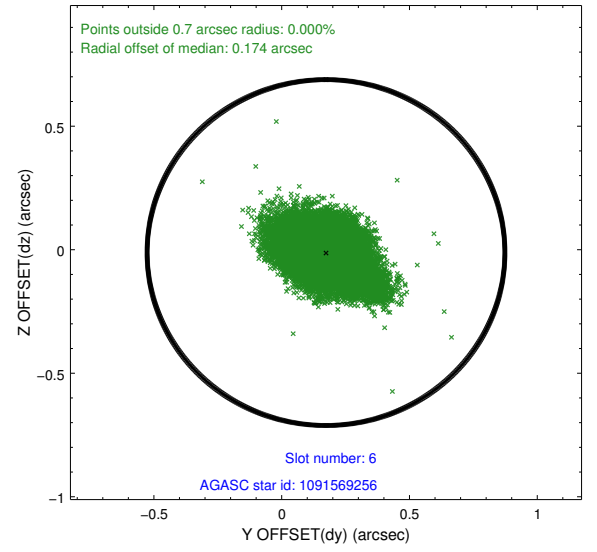
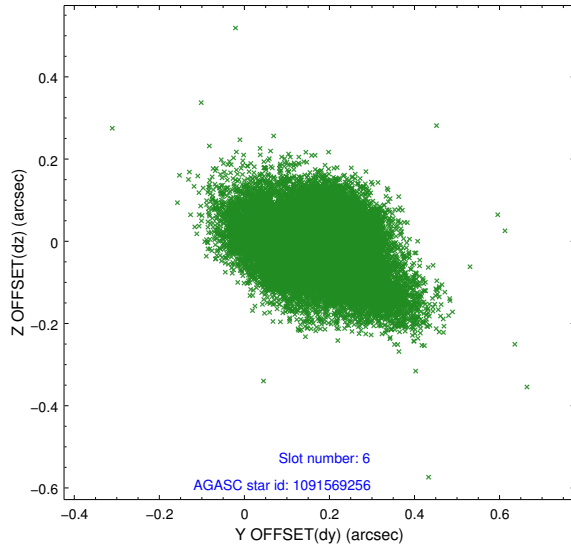
2.4.2 Slot 4



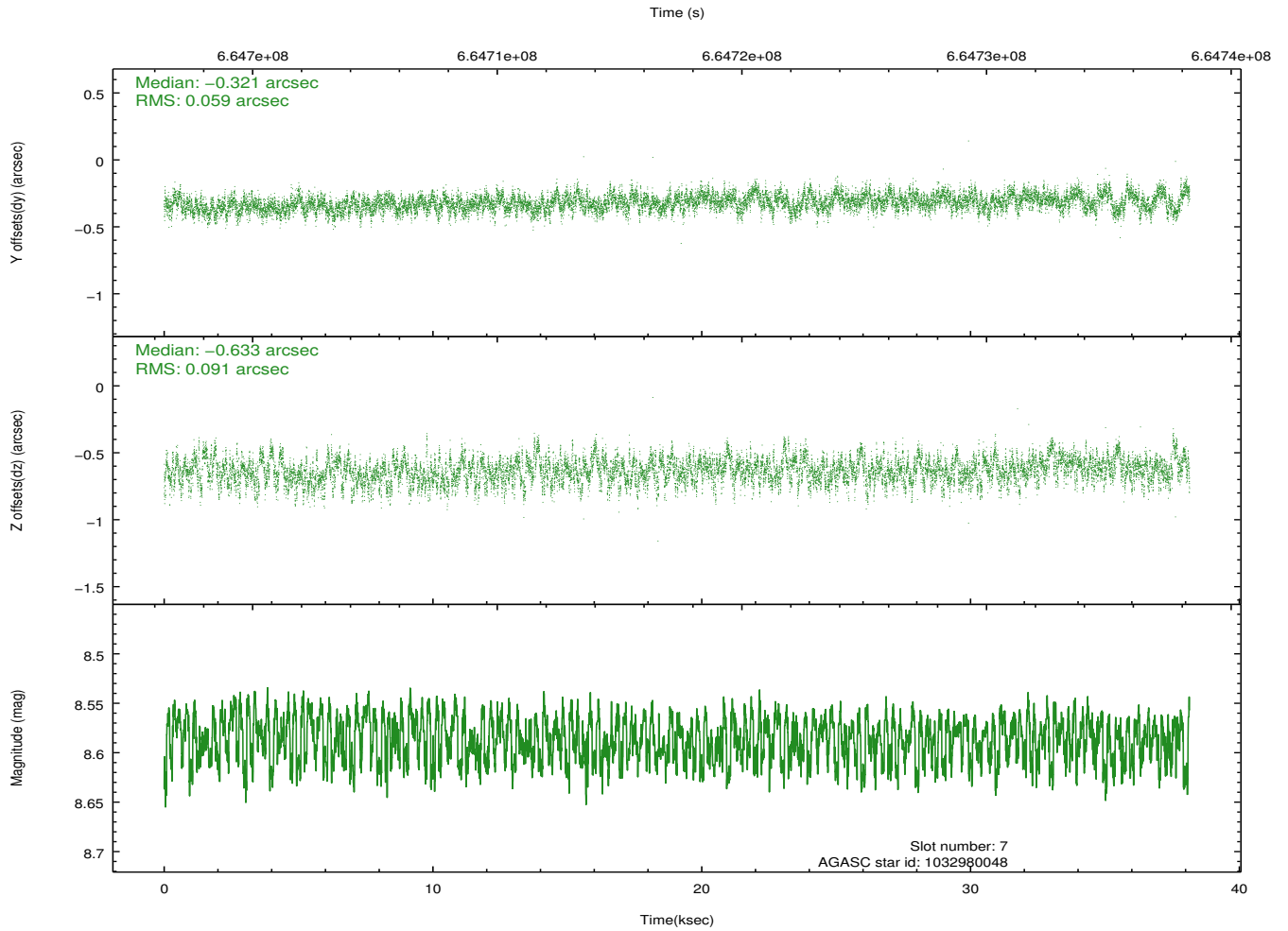
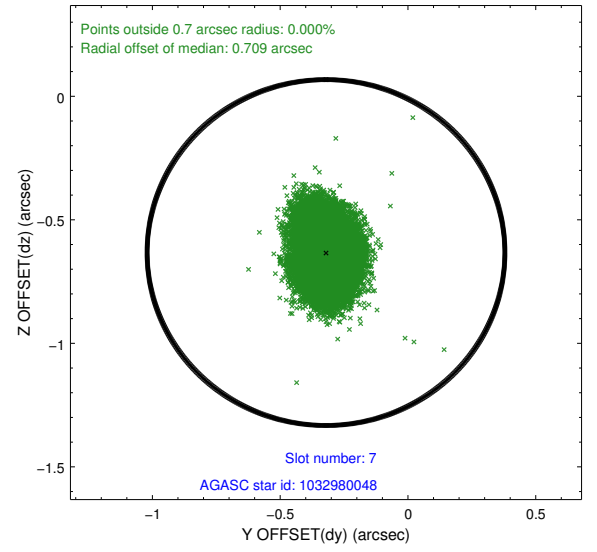
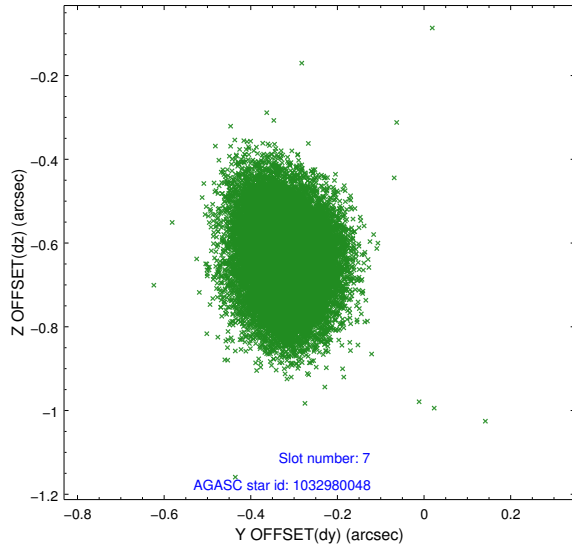
2.4.3 Slot 5



2.4.4 Slot 6

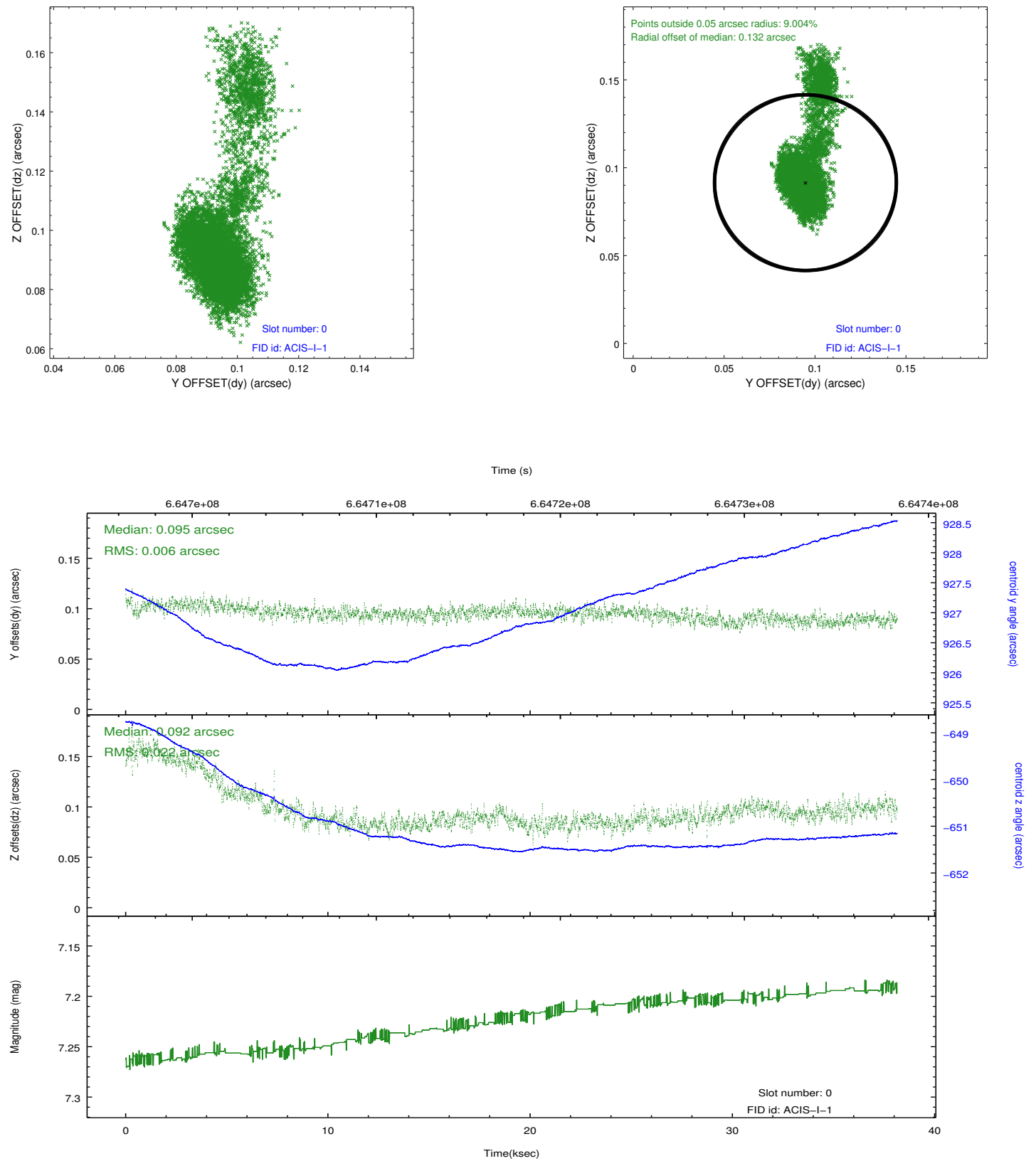


2.4.5 Slot 7

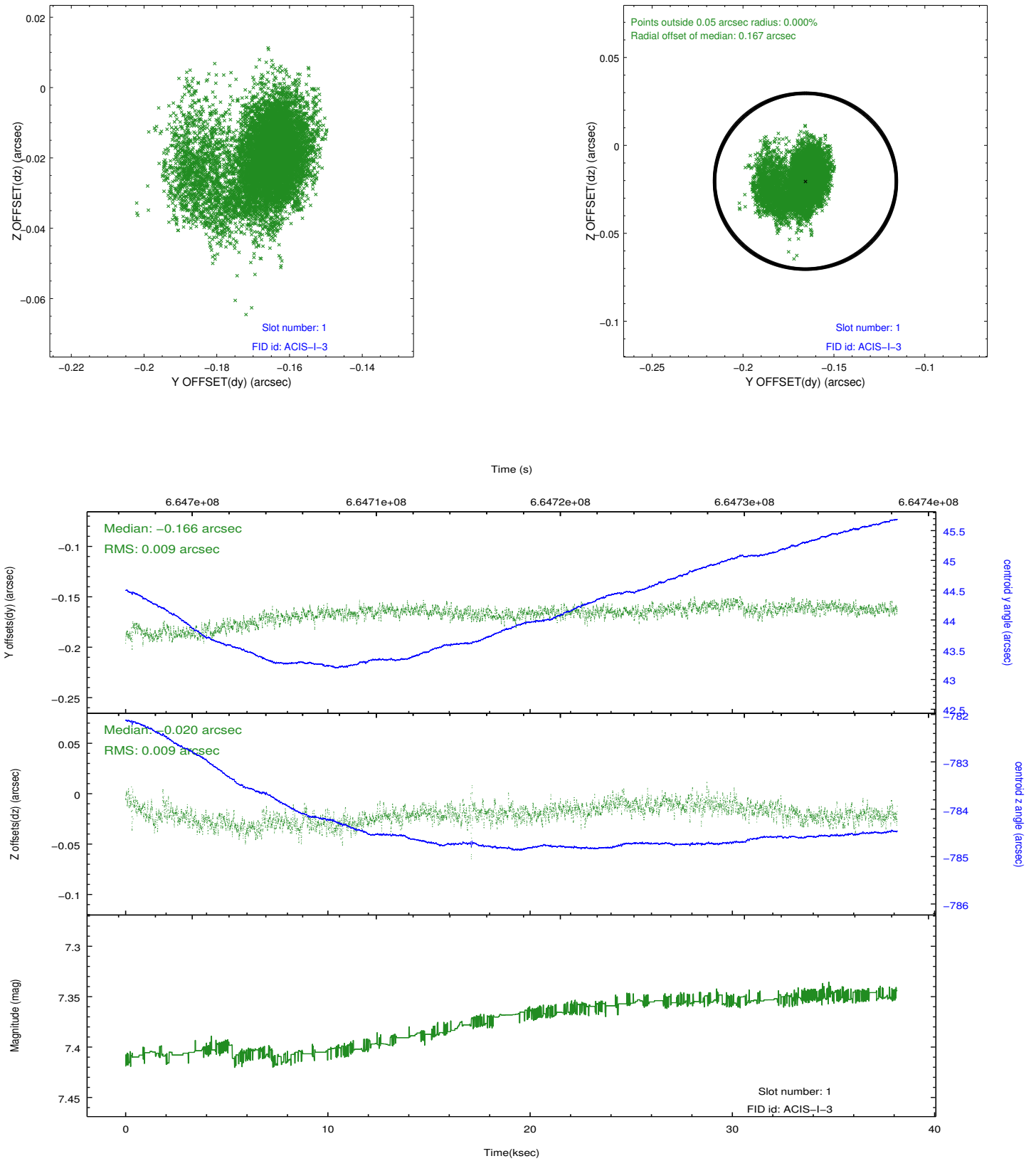


2.5 FID Slots

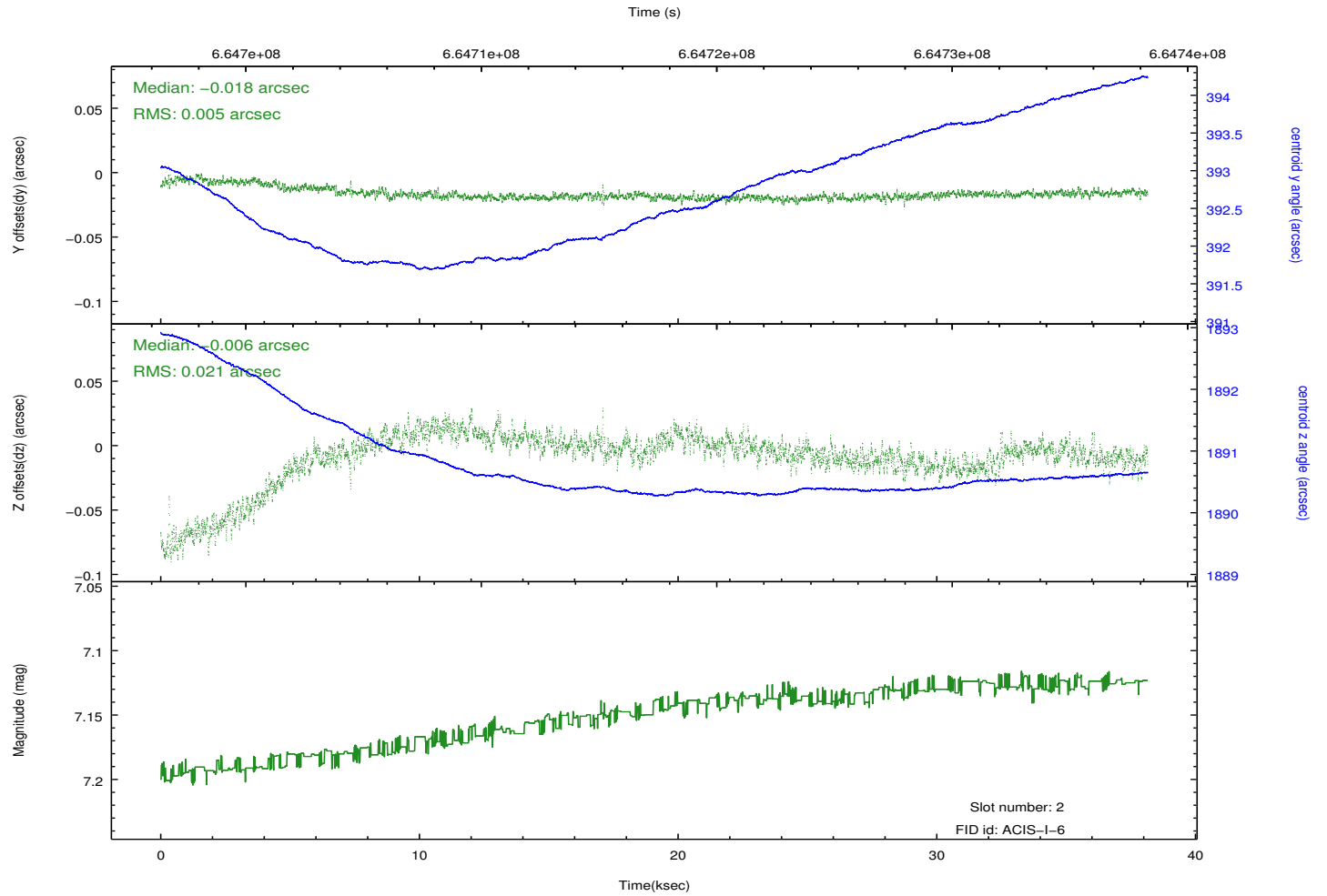
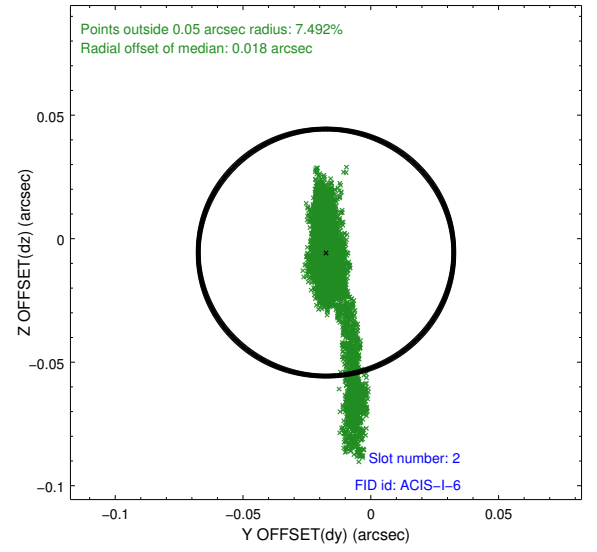
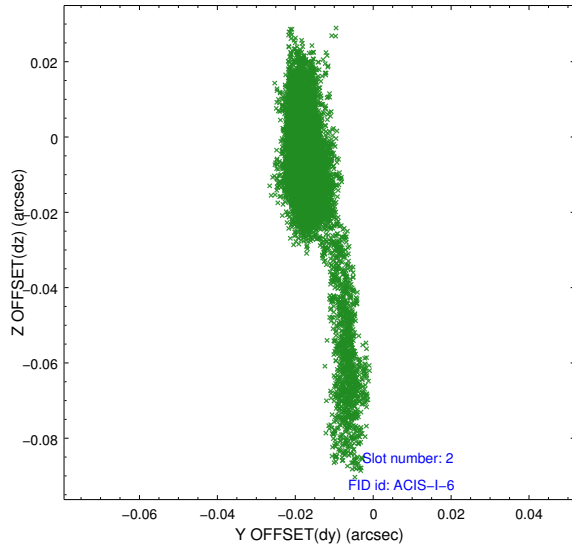
2.5.1 Slot 0



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)	2019.01.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	38.12690029335

A.2 Comments