

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 22246 - L2 Version 1
Chandra X-Ray Center

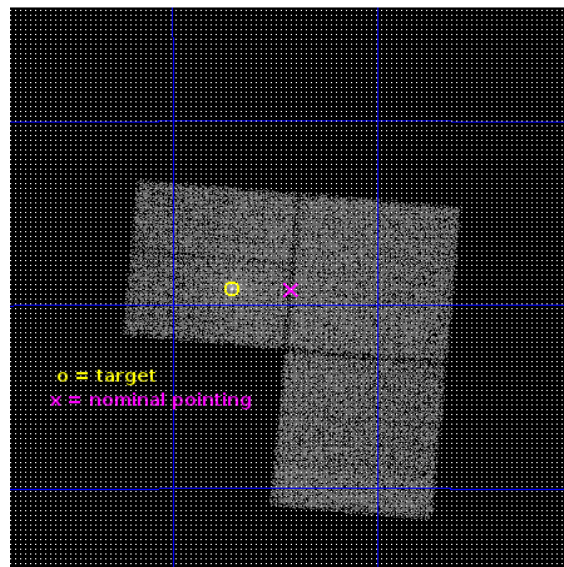
L2 Processing Date : Jun 6 2019

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1 Front

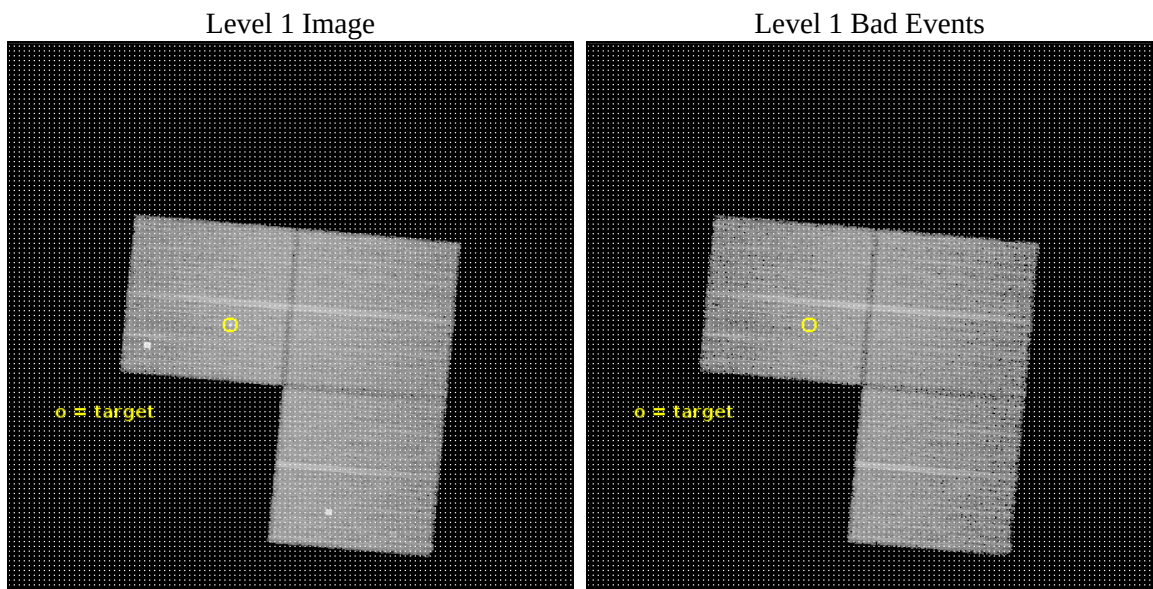
seq_num	502999	Sequence number
obs_id	22246	Observation id
title	The Answer is Blowing in the Wind: Jet Sweepback in Three PWNe	Pro
observer	Roger Romani	Principal investigator
object	PSR J1709-4429	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	257.427724	Observer's specified target RA [deg]
dec_targ	-44.485585	Observer's specified target Dec [deg]
ra_nom	257.35499377087	Nominal RA [deg]
dec_nom	-44.486545036265	Nominal Dec [deg]
roll_nom	5.1576682202419	Nominal Roll [deg]
revision	1	Processing version of data
ontime	28622.259180307	Sum of GTIs [s]
livetime	28248.288292716	Livetime [s]
ontime1	28619.118109822	Sum of GTIs [s]
ontime2	28622.259180307	Sum of GTIs [s]
ontime3	28619.118119836	Sum of GTIs [s]
l2events	76213	Number of level 2 events



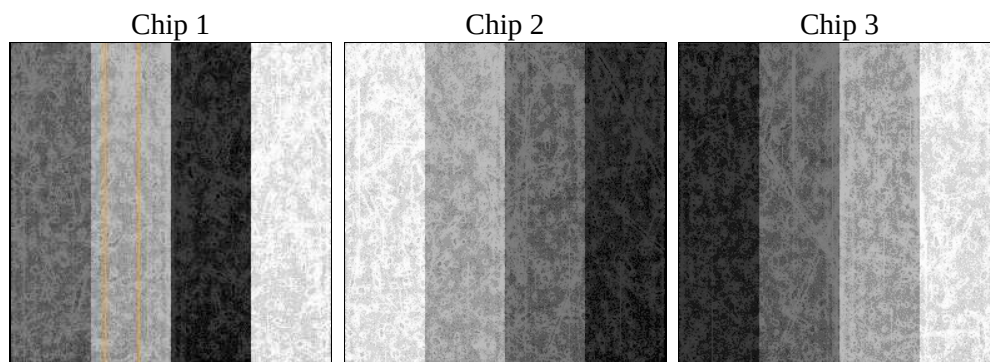
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	28500.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	28622.259180307	Sum of GTIs [s]
caldsver	4.8.3	 	ontime1	28619.118109822	Sum of GTIs [s]
date	2019-06-06T23:55:30	Date and time of file creation	ontime2	28622.259180307	Sum of GTIs [s]
revision	1	Processing version of data	ontime3	28619.118119836	Sum of GTIs [s]
			l1events	664296	Number of level 1 events

2.1.4 Events

	ccd 1	ccd 2	ccd 3
level 1 events	214694	230531	219071
rejected events	182181	194887	190792
rejected %	84%	84%	87%

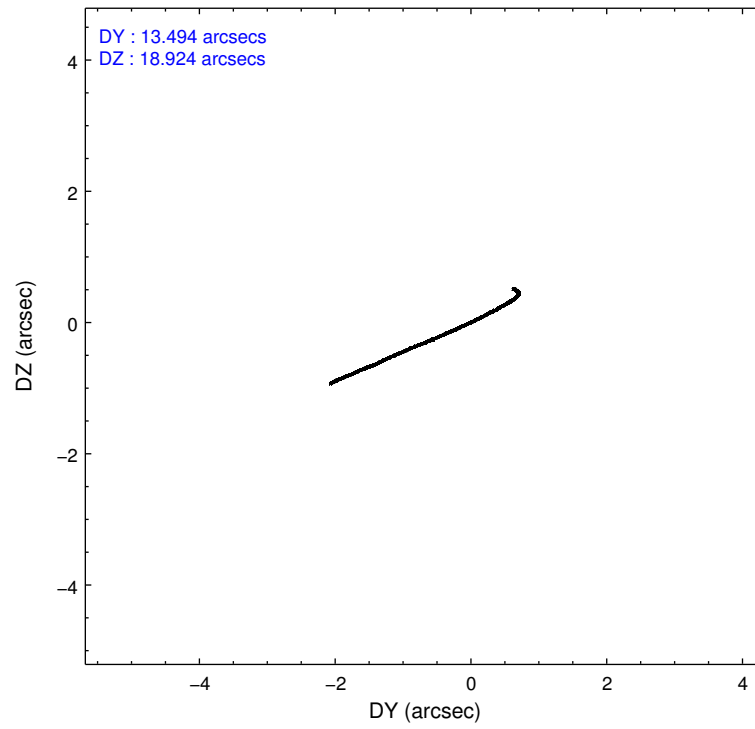
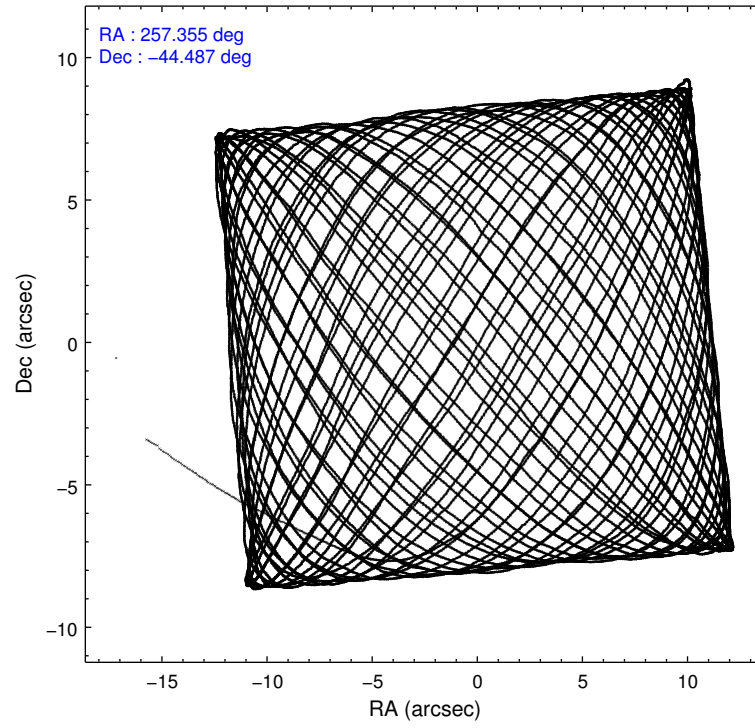
	ccd 1	ccd 2	ccd 3
grade 0 events	13768	18934	12519
	6%	8%	5%
grade 1 events	147	201	155
	0%	0%	0%
grade 2 events	7410	6524	5535
	3%	2%	2%
grade 3 events	2517	2591	2615
	1%	1%	1%
grade 4 events	2443	2649	2611
	1%	1%	1%
grade 5 events	9358	8783	10230
	4%	3%	4%
grade 6 events	6380	4949	5000
	2%	2%	2%
grade 7 events	172671	185900	180406
	80%	80%	82%

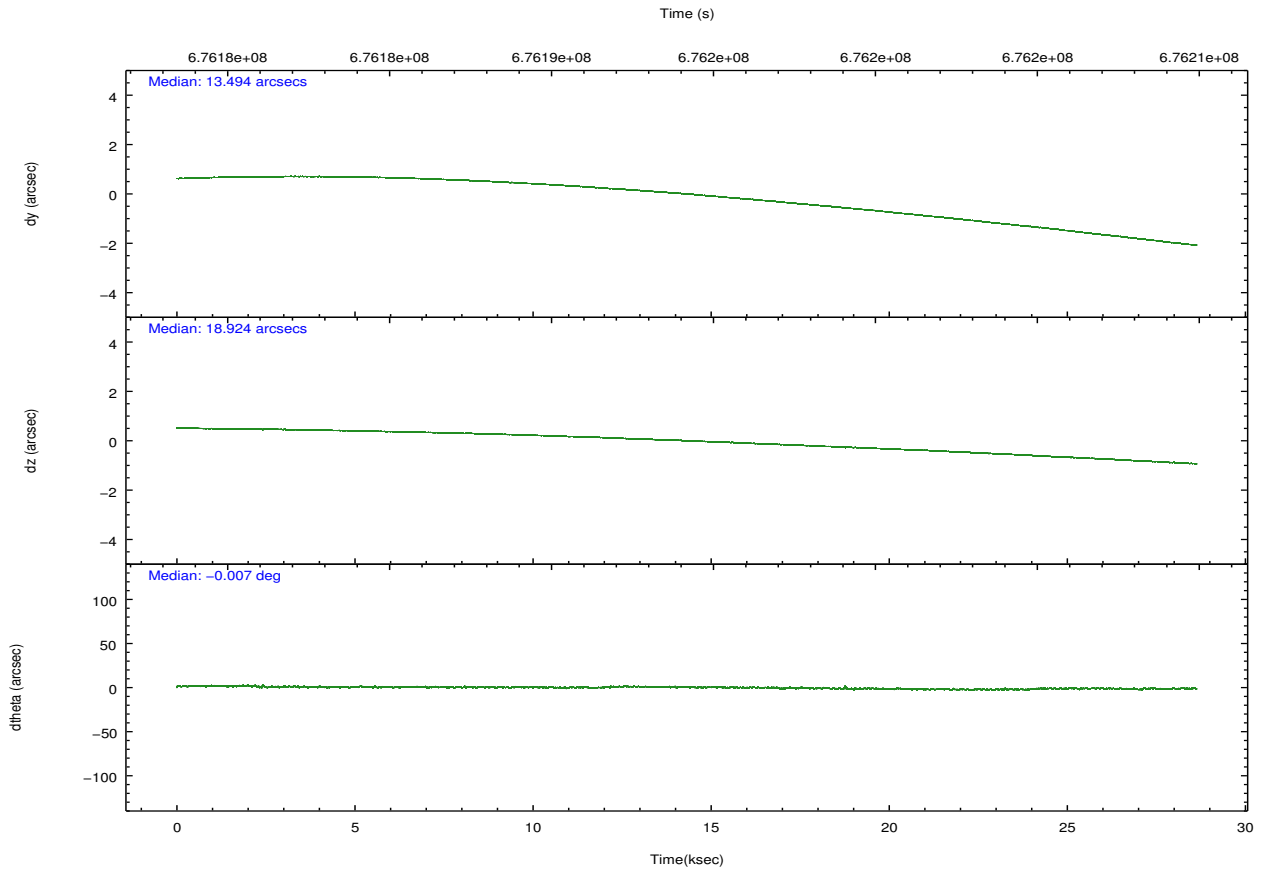
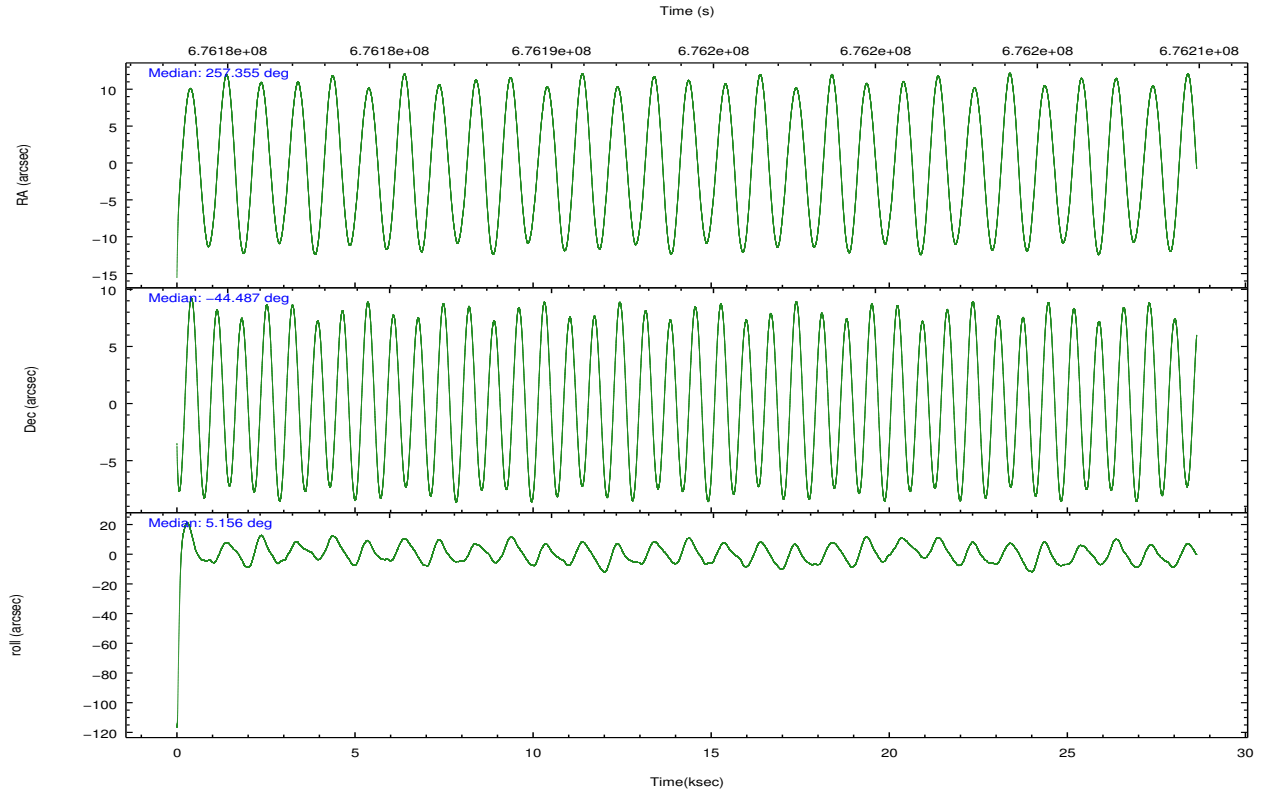
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-123	ACIS-123
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	257.323407	257.3549937708738
[deg] Pointing Dec	-44.502519	-44.48654503626479
[deg] Pointing Roll	4.926904	5.157668220241859
[mm] SIM focus pos	-0.782348	-0.7809083437167272
[mm] SIM defocus	0	0.001439871863259334
[mm] SIM translation stage pos	-226.279963	-226.2858628250985
[mm] SIM translation stage offset	-7.3125	-7.306590177831225
[s] Observation start time (MET)	676179983.184000	676178214.8816299
Observation start date	2019-06-06T03:45:14	2019-06-06T03:16:54
[s] Observation end time (MET)	676208483.184000	676209513.25851
Observation end date	2019-06-06T11:40:14	2019-06-06T11:58:33
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	O1	N
CCD I1 on	Y	Y
CCD I2 on	Y	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	N	N
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



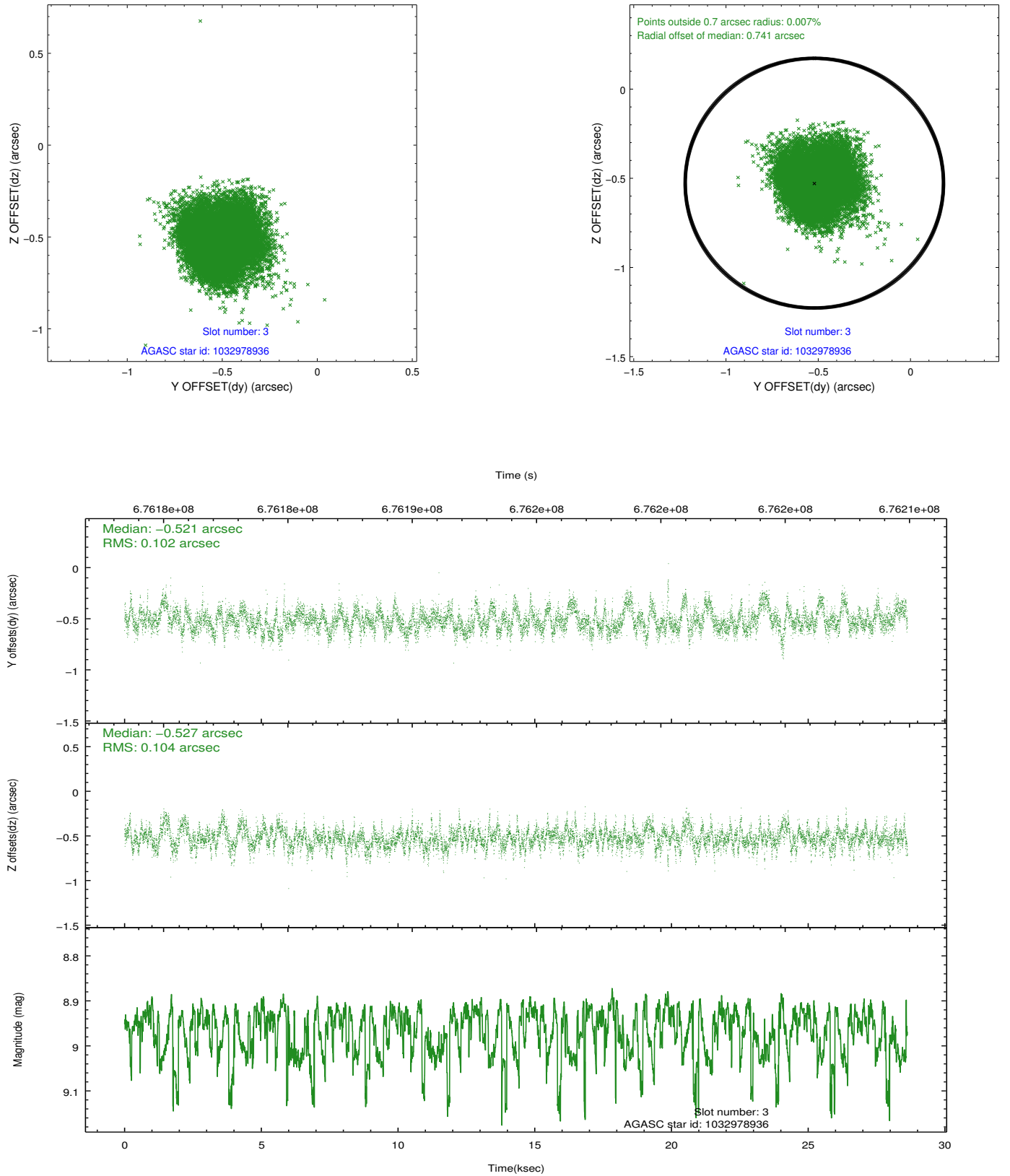


Slot Statistics

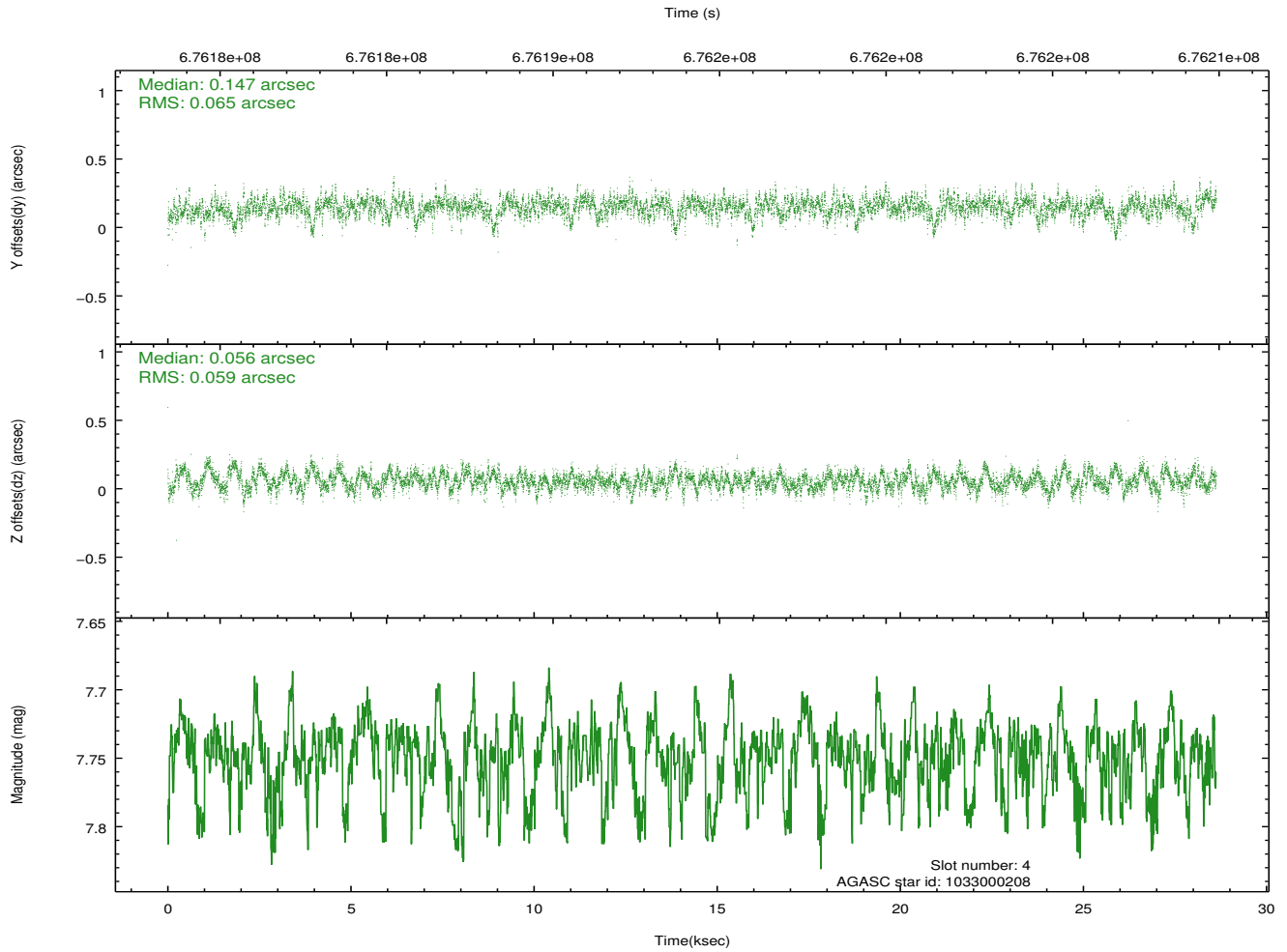
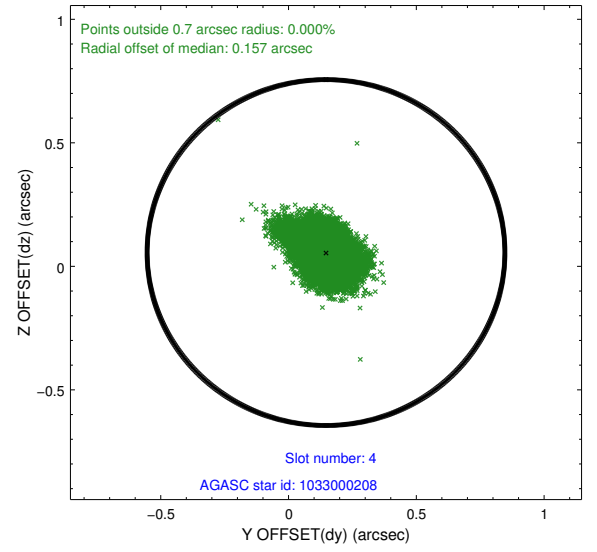
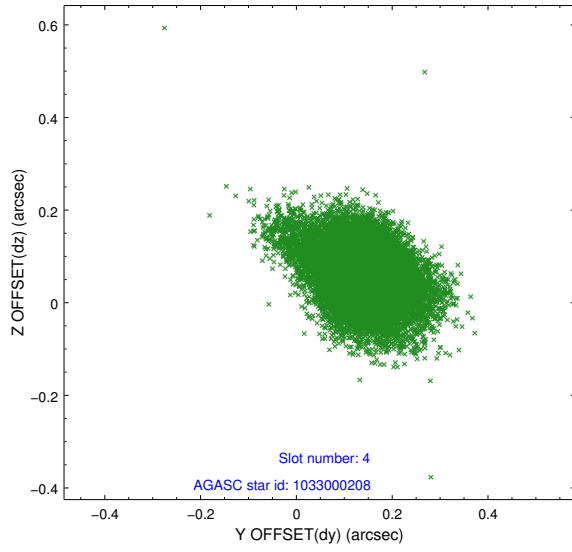
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.15	6984	1.000	0.125	-0.108	0.021	0.033	0.000000	0.000000	926.33	-992
1	FID		ACIS-I-5	7.19	6982	1.000	-0.539	0.025	0.016	0.024	0.000000	0.000000	-1822.56	904
2	FID		ACIS-I-6	7.19	6983	1.000	0.319	0.157	0.022	0.039	0.000000	0.000000	391.75	1549
3	GUIDE	used	1032978936	8.96	13946	1.000	-0.521	-0.527	0.153	0.254	257.447182	-44.360307	361.78	482
4	GUIDE	used	1033000208	7.75	13964	1.000	0.147	0.056	0.090	0.158	256.502750	-44.372681	-2063.50	637
5	GUIDE	used	1033111224	8.92	13943	1.000	-0.129	-0.260	0.169	0.279	257.844751	-44.847109	1219.55	-1353
6	GUIDE	used	1091569256	8.37	13963	1.000	0.188	0.356	0.118	0.195	257.146819	-45.037377	-611.74	-1879
7	GUIDE	used	1091578128	8.58	13953	1.000	0.309	0.390	0.129	0.210	257.198938	-45.154577	-514.77	-2310

2.4 Star Slots

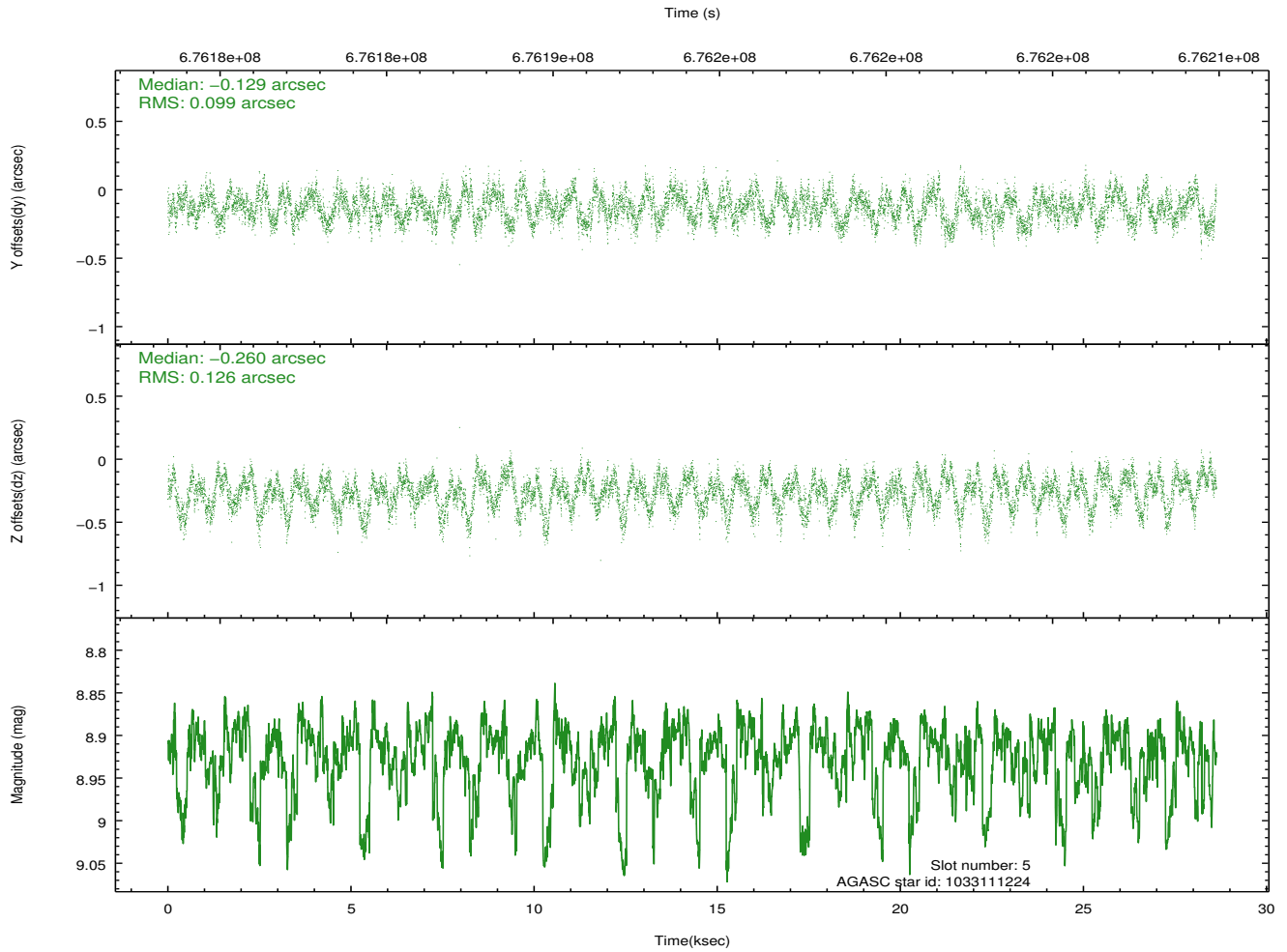
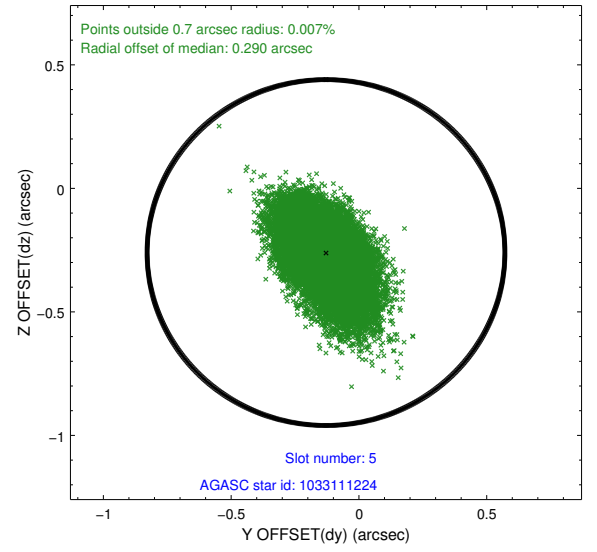
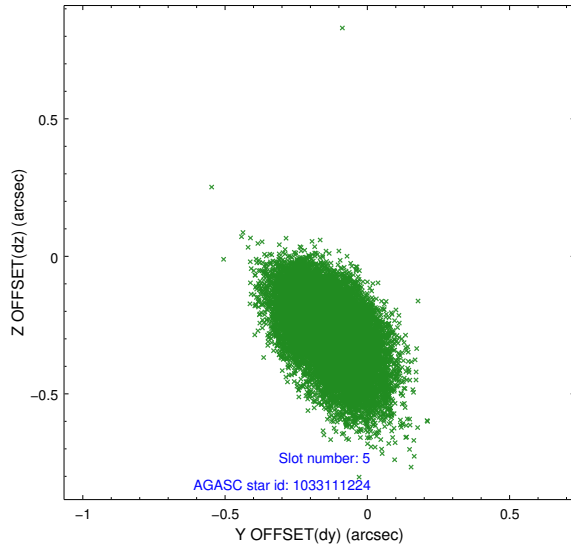
2.4.1 Slot 3



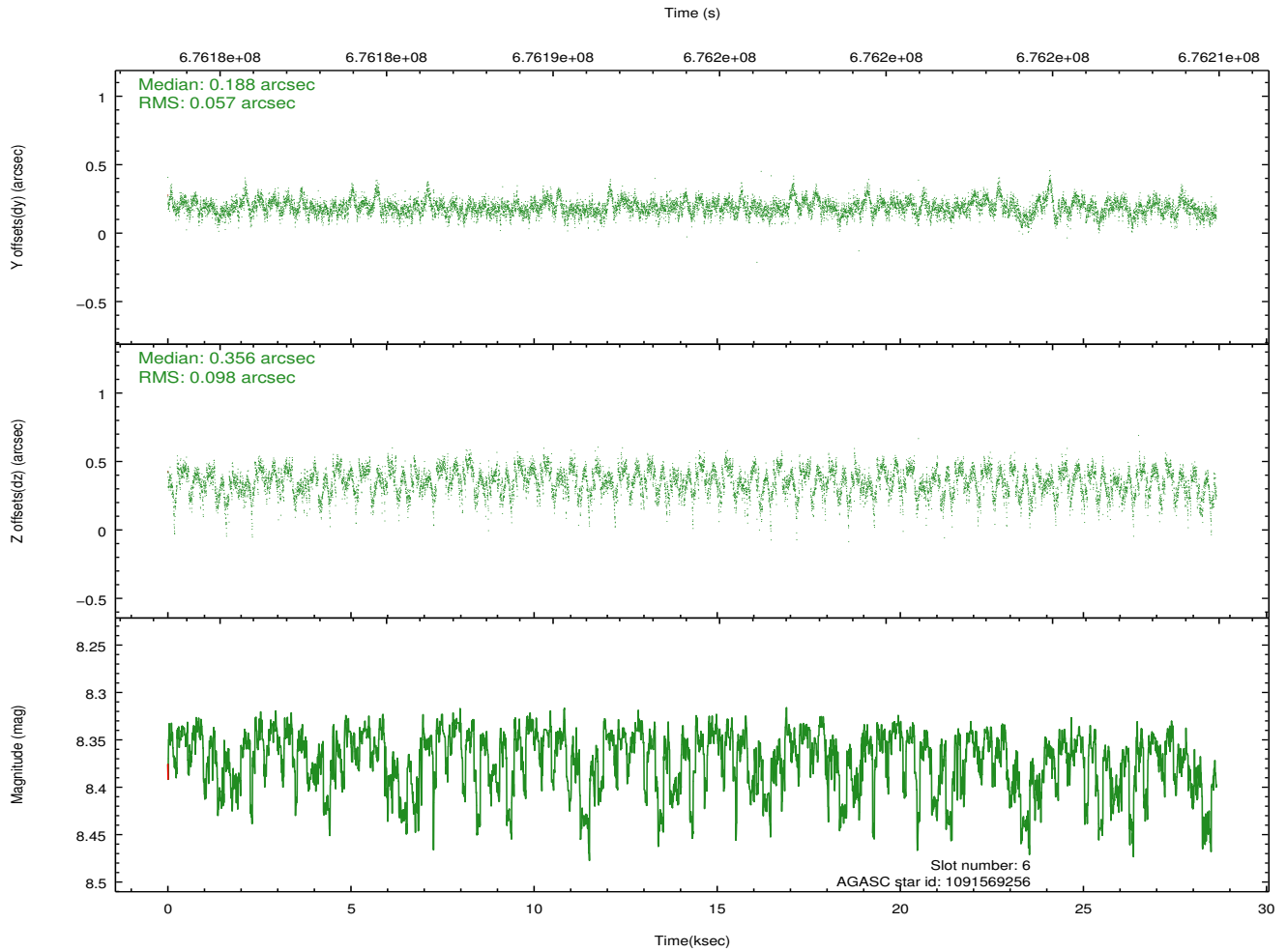
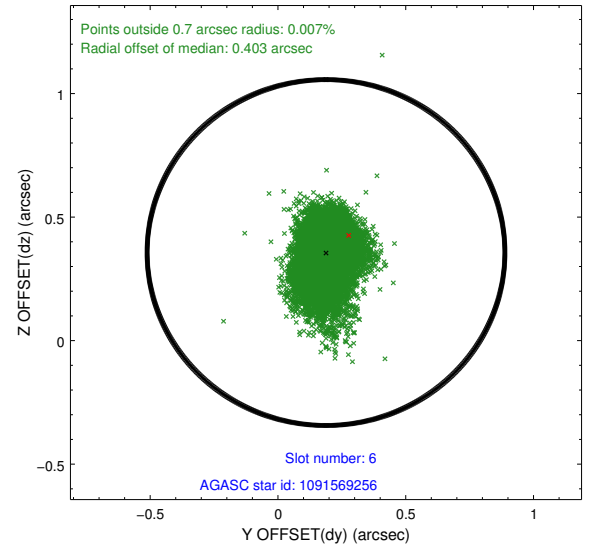
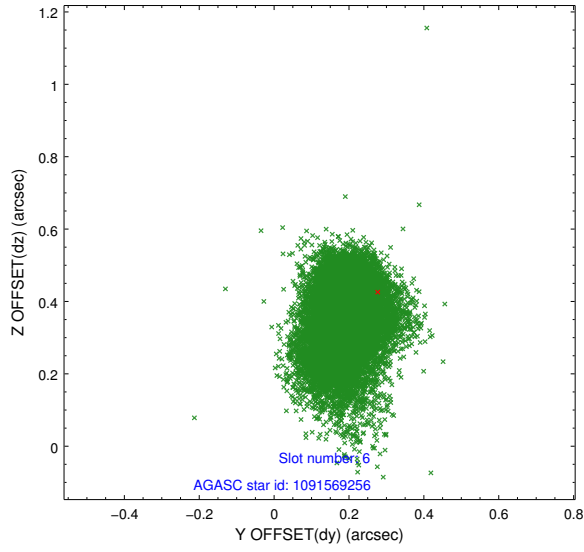
2.4.2 Slot 4



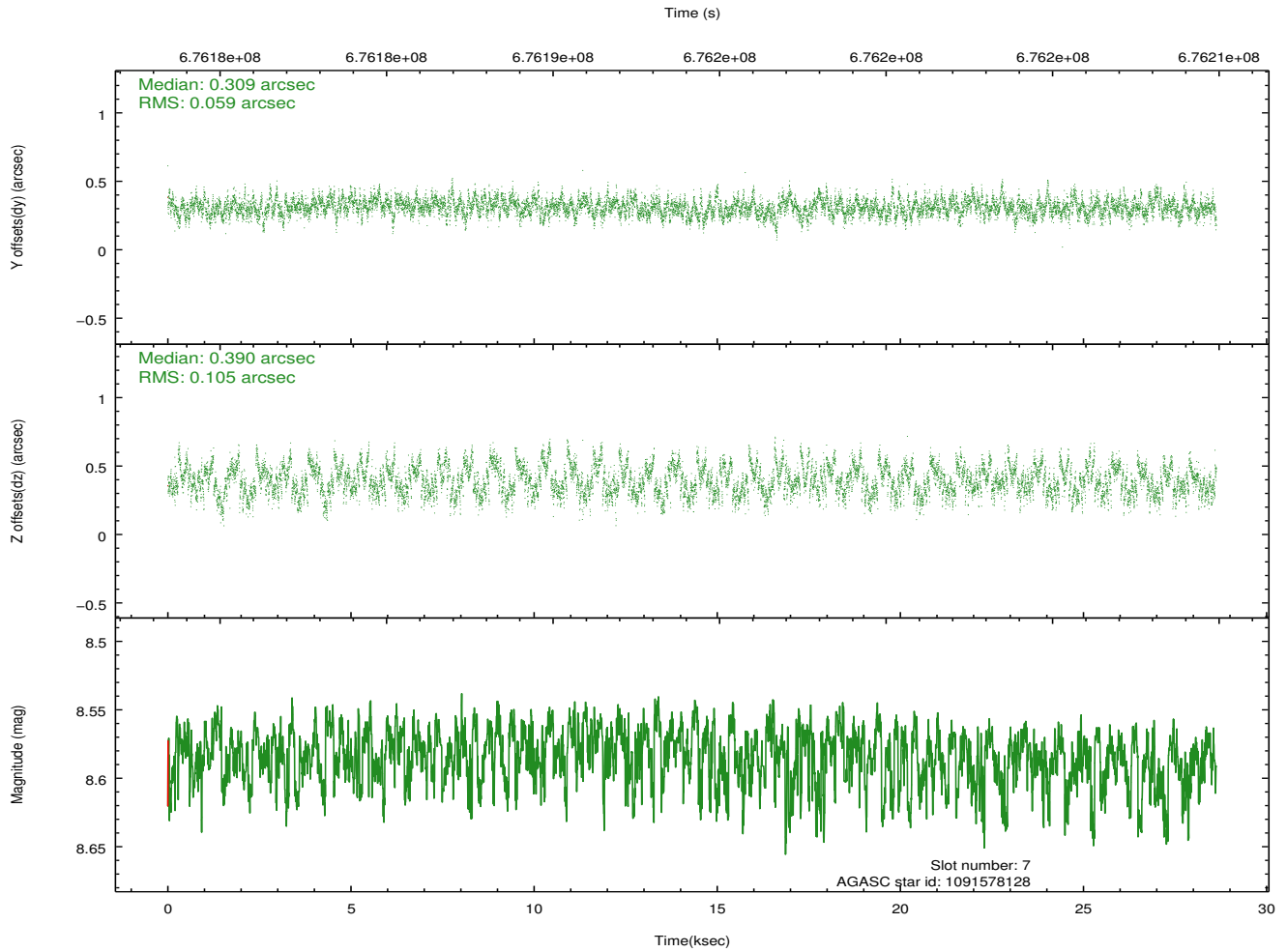
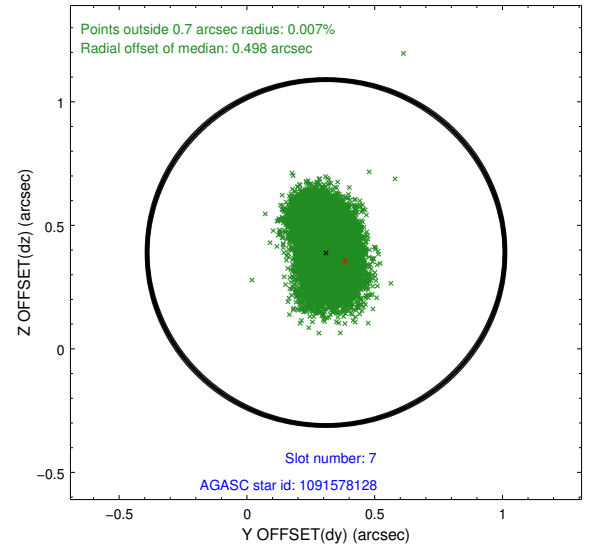
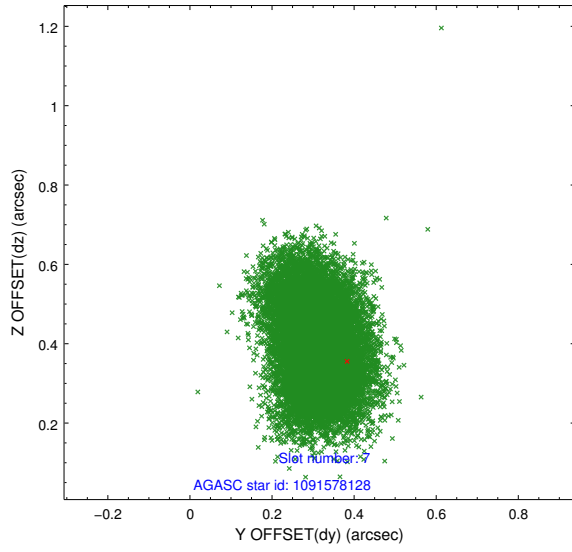
2.4.3 Slot 5



2.4.4 Slot 6

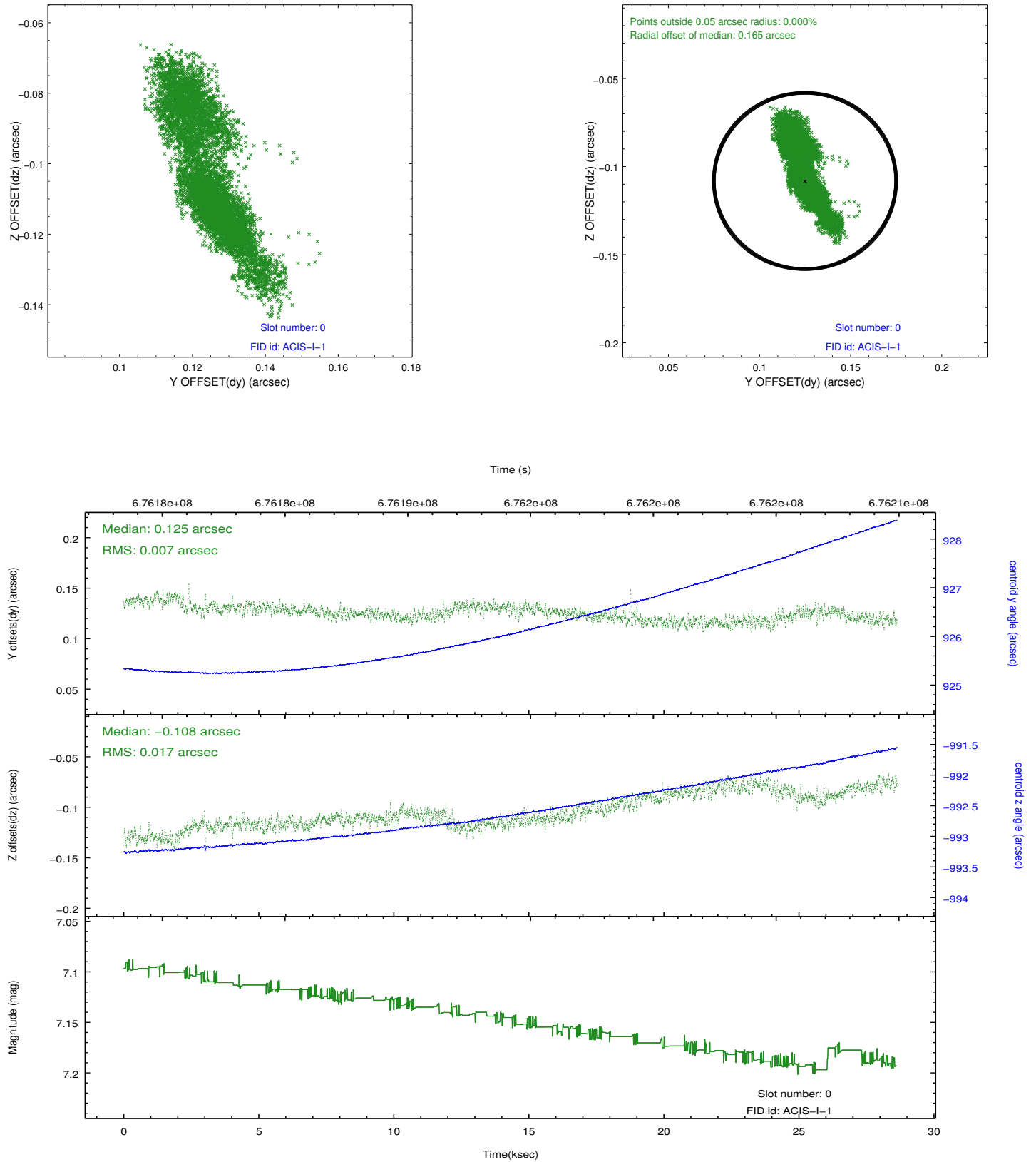


2.4.5 Slot 7

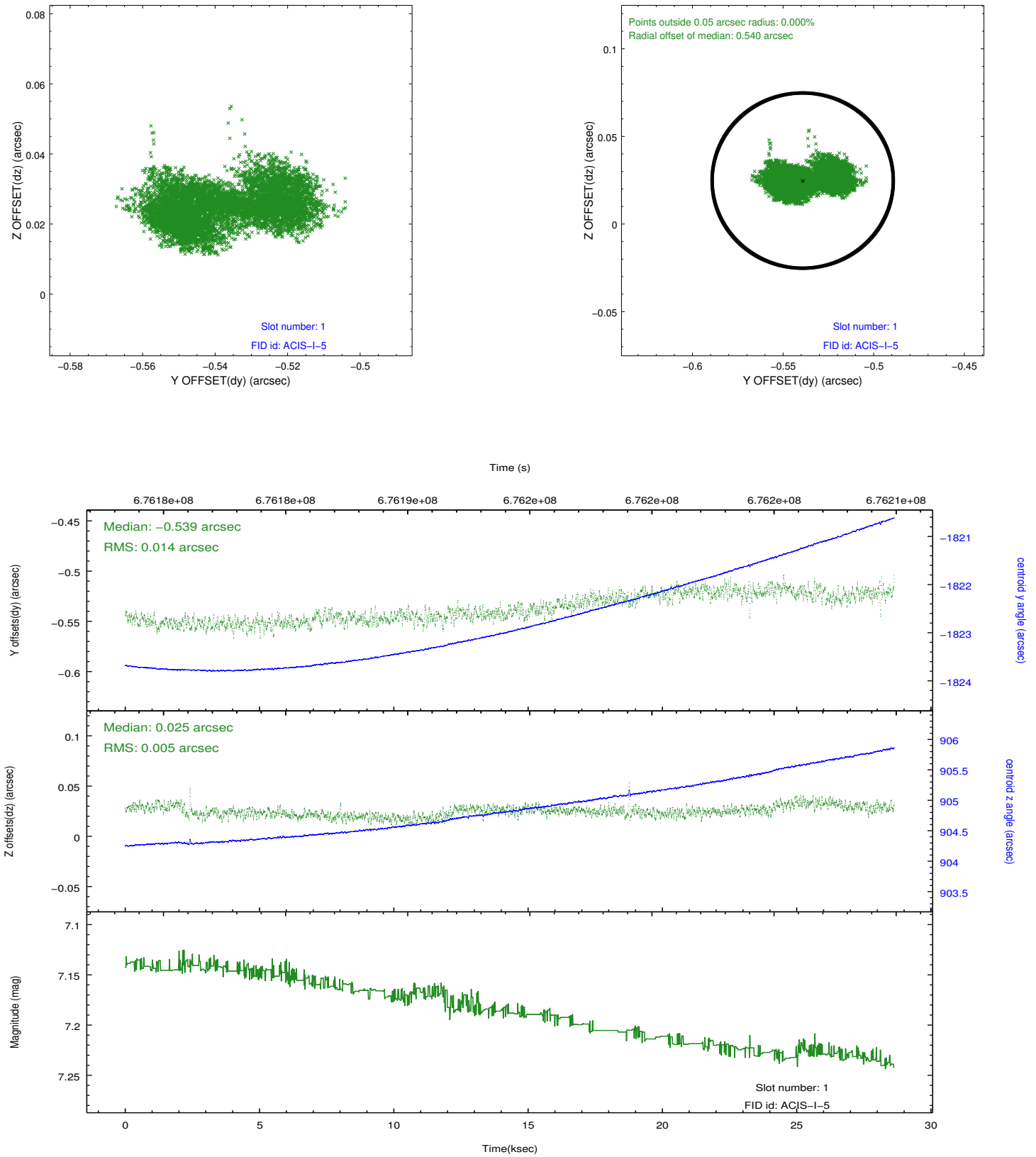


2.5 FID Slots

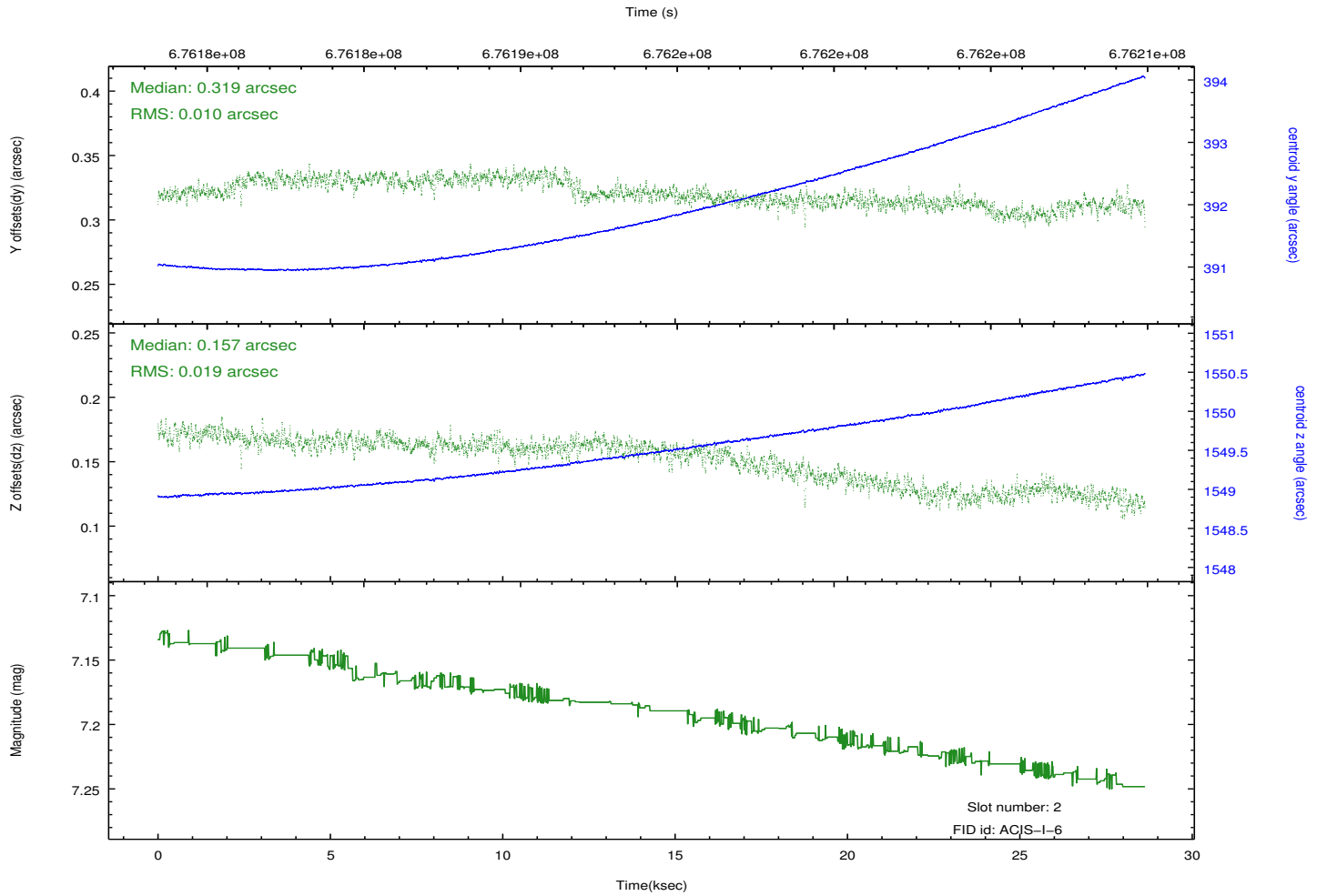
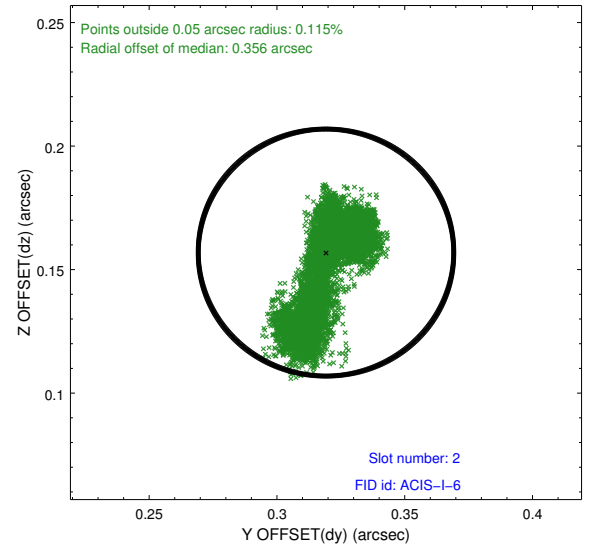
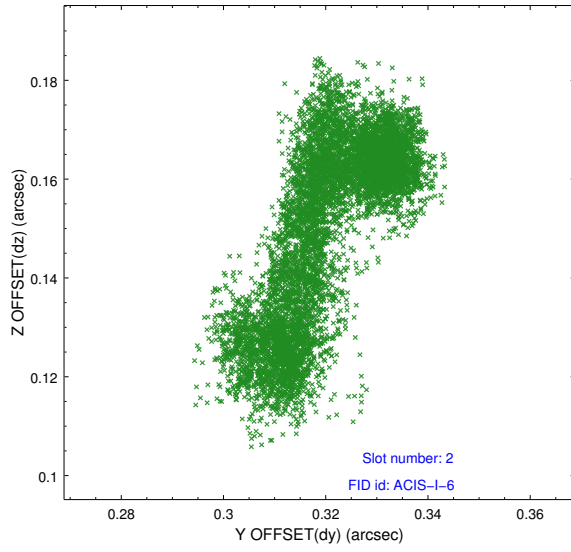
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2019.06.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.622259180307

A.2 Comments

One optional chip was dropped.