

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 21872 - L2 Version 2
Chandra X-Ray Center

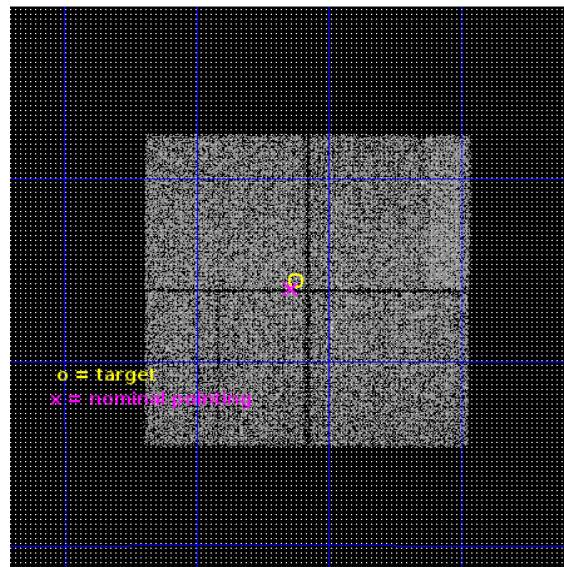
L2 Processing Date : Feb 14 2019

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1 Front

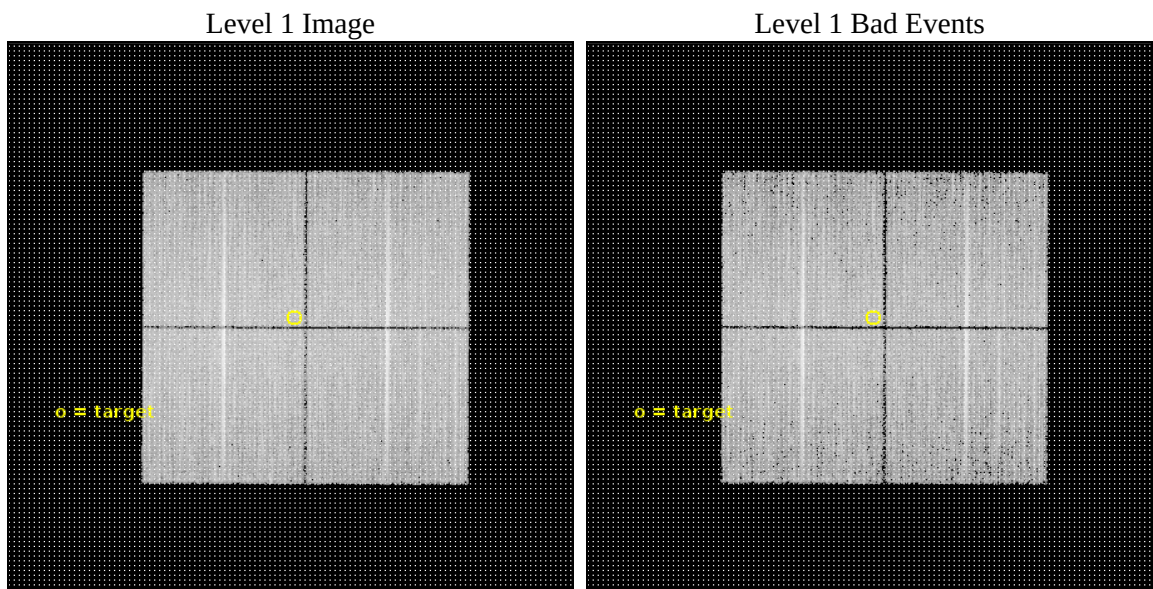
seq_num	801799	Sequence number
obs_id	21872	Observation id
title	Mapping of cosmic web filaments around A133	Proposal title
observer	Ralph Kraft	Principal investigator
object	A133 filament	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.281479	Observer's specified target RA [deg]
dec_targ	-22.593636	Observer's specified target Dec [deg]
ra_nom	16.285433294294	Nominal RA [deg]
dec_nom	-22.600479666505	Nominal Dec [deg]
roll_nom	270.21019368	Nominal Roll [deg]
revision	2	Processing version of data
ontime	28070.418345213	Sum of GTIs [s]
livetime	27703.657664391	Livetime [s]
ontime0	28076.700216055	Sum of GTIs [s]
ontime1	28073.55923593	Sum of GTIs [s]
ontime2	28073.559255719	Sum of GTIs [s]
ontime3	28070.418345213	Sum of GTIs [s]
l2events	79164	Number of level 2 events



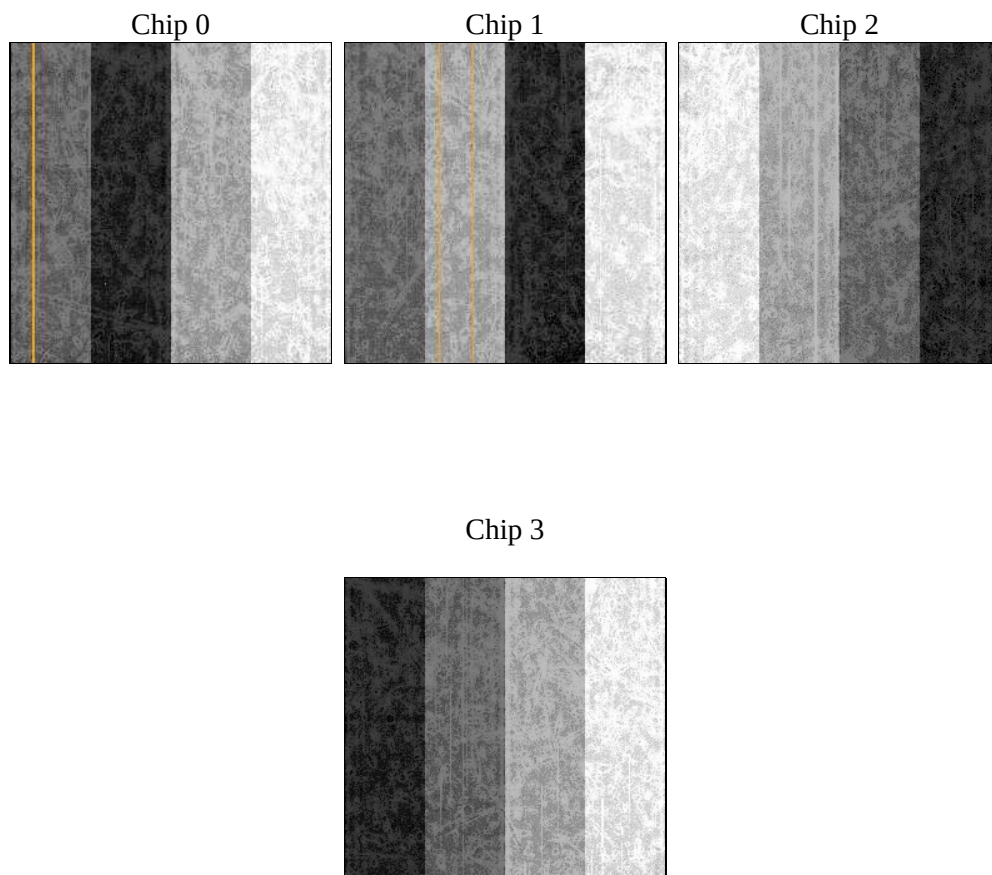
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	28000.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	28070.418345213	Sum of GTIs [s]
caldsver	4.8.2	 	ontime0	28076.700216055	Sum of GTIs [s]
date	2019-02-14T19:24:50	Date and time of file creation	ontime1	28073.55923593	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	28073.559255719	Sum of GTIs [s]
			ontime3	28070.418345213	Sum of GTIs [s]
			l1events	789882	Number of level 1 events

2.1.4 Events

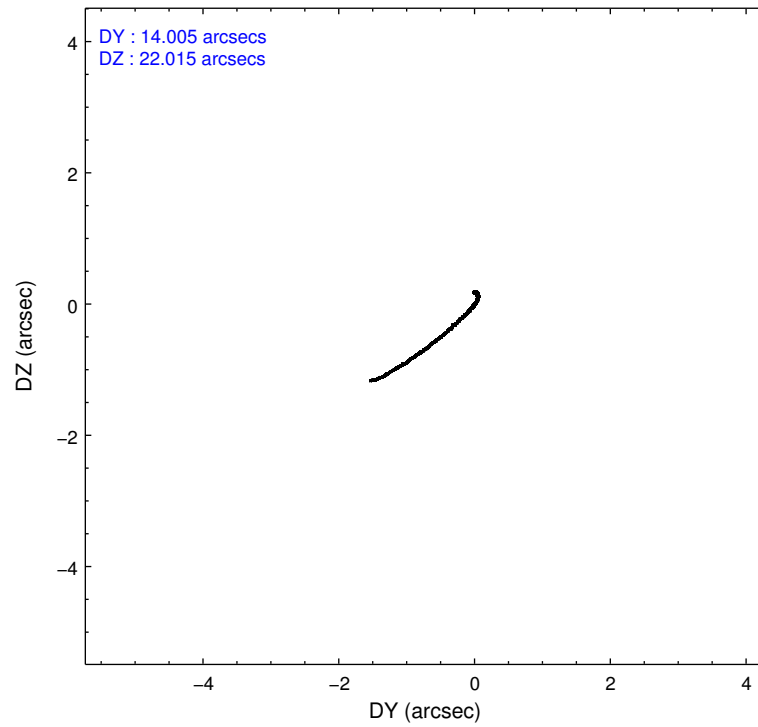
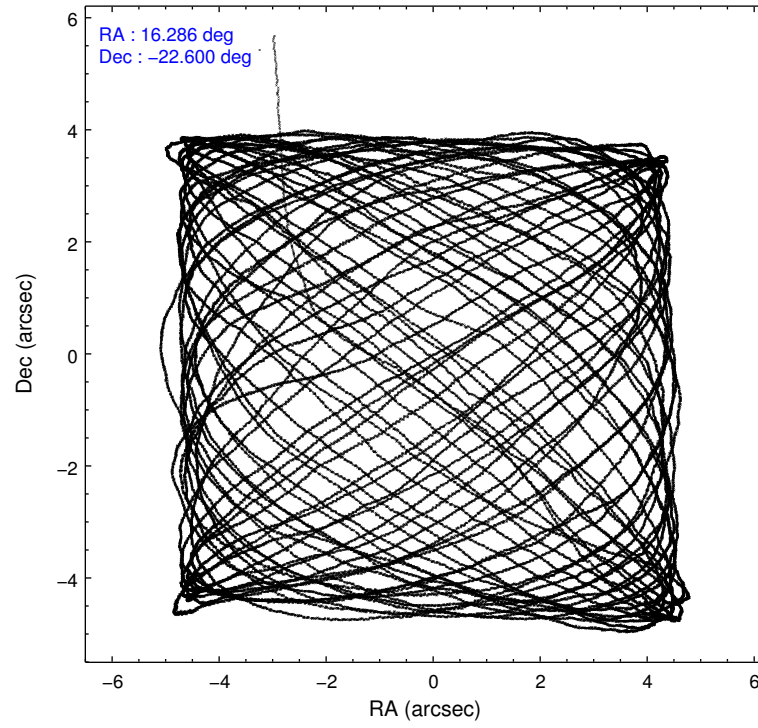
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	188820	194343	205509	201210
rejected events	164917	167899	182111	179340
rejected %	87%	86%	88%	89%

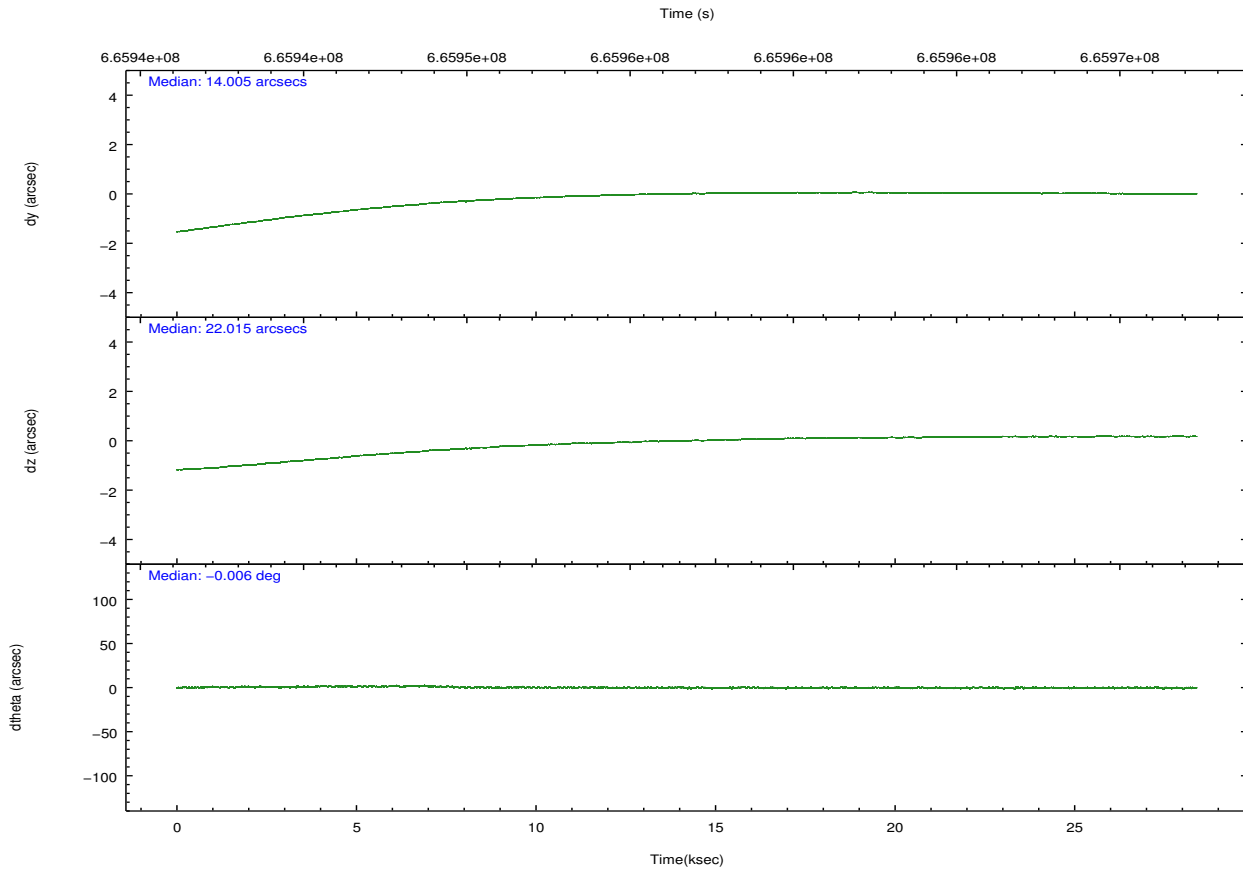
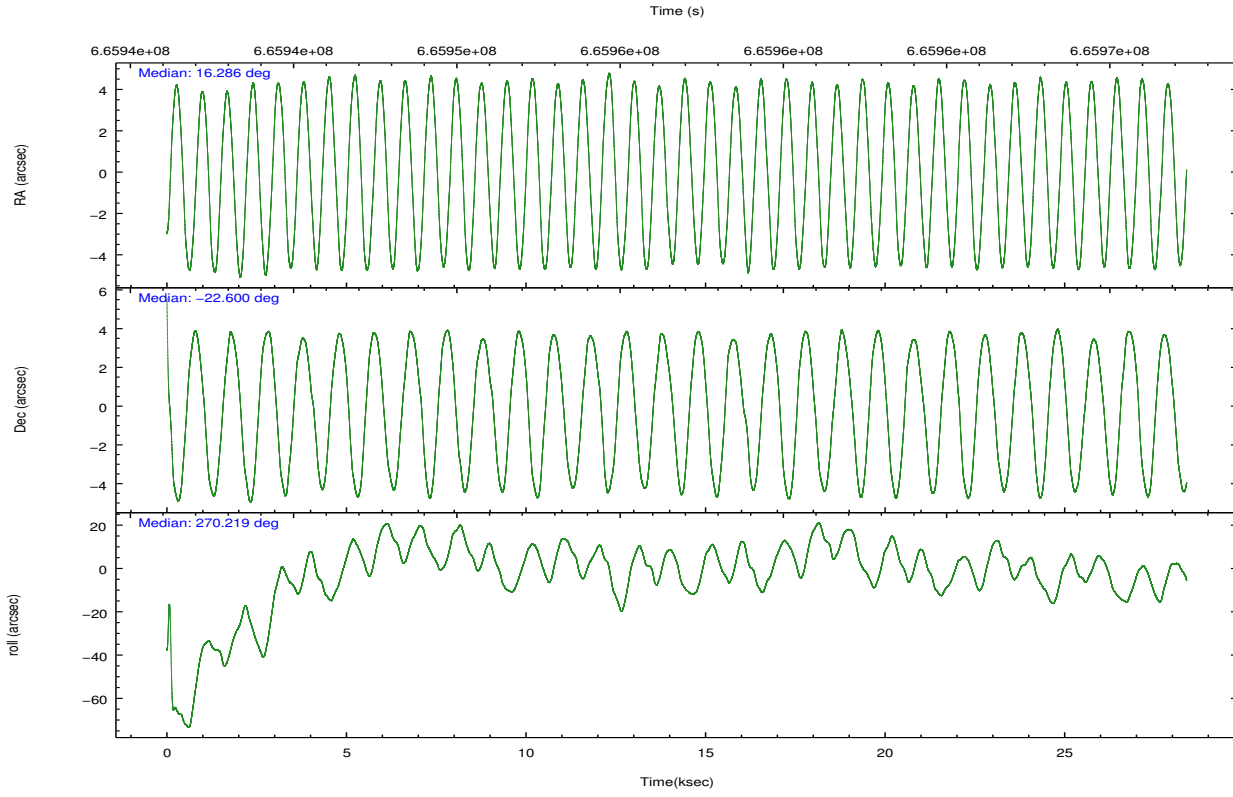
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	7948	8796	8234	7626
	4%	4%	4%	3%
grade 1 events	132	103	126	129
	0%	0%	0%	0%
grade 2 events	6284	6796	5999	4946
	3%	3%	2%	2%
grade 3 events	2458	2522	2277	2299
	1%	1%	1%	1%
grade 4 events	2266	2552	2379	2288
	1%	1%	1%	1%
grade 5 events	9031	9498	8537	10118
	4%	4%	4%	5%
grade 6 events	4955	5783	4511	4717
	2%	2%	2%	2%
grade 7 events	155746	158293	173446	169087
	82%	81%	84%	84%

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	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	16.270299	16.28543329429396	CCD I2 on	Y	Y
[deg] Pointing Dec	-22.576670	-22.60047966650474	CCD I3 on	Y	Y
[deg] Pointing Roll	269.995713	270.2101936799958	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	O2	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	665942938.184000	665941953.88148	CCD S5 on	N	N
Observation start date	2019-02-07T16:07:49	2019-02-07T15:52:33	Number of optional ACIS chips dropped	2	2
[s] Observation end time (MET)	665970938.184000	665971114.10822	On-chip summing requested	N	N
Observation end date	2019-02-07T23:54:29	2019-02-07T23:58:34	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



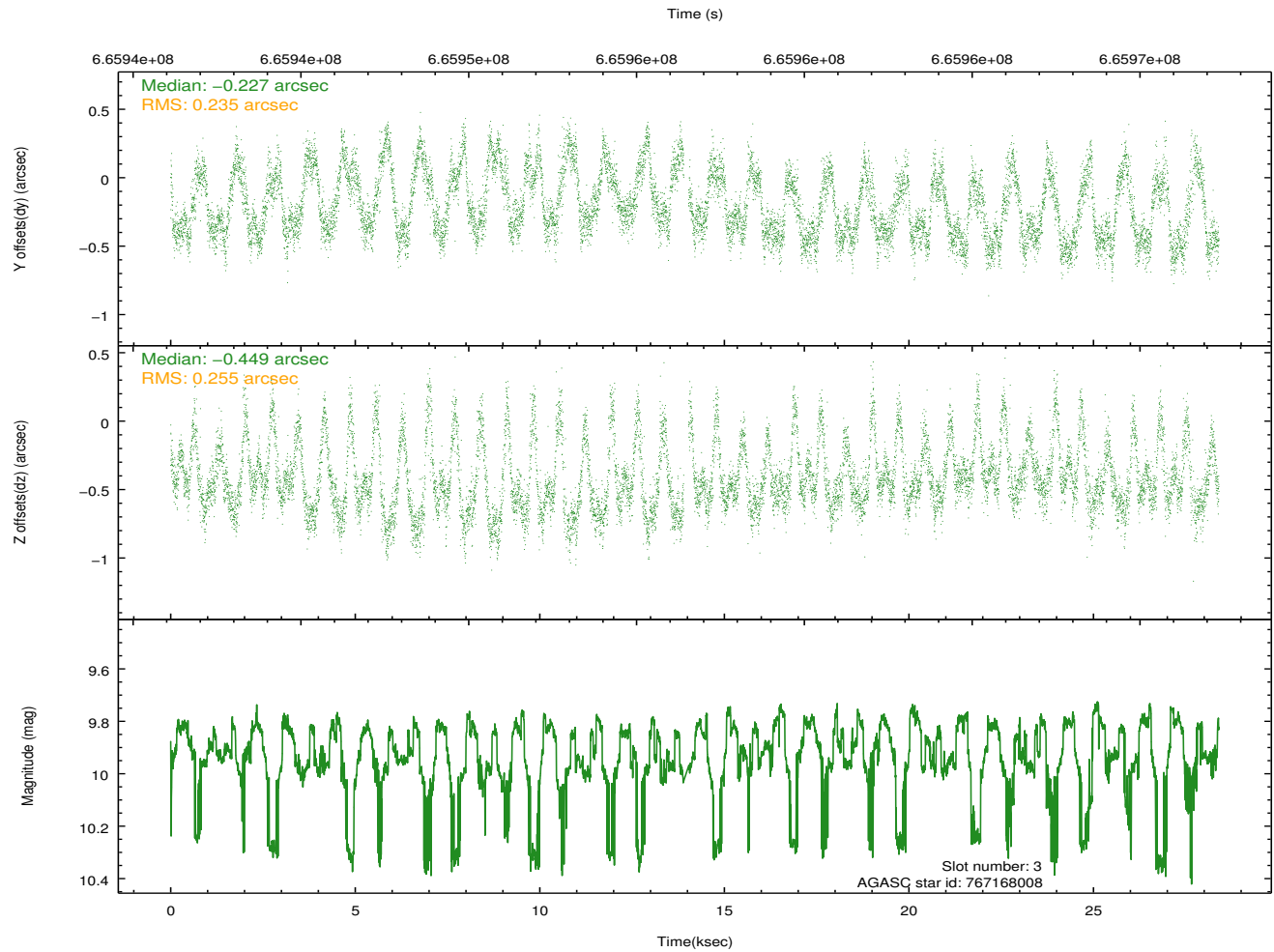
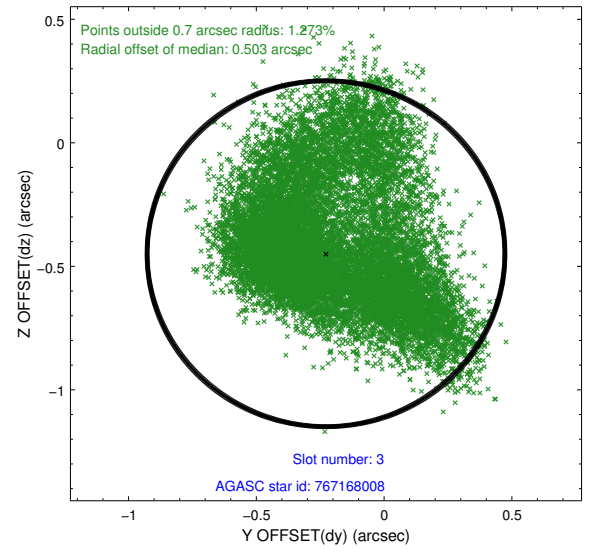
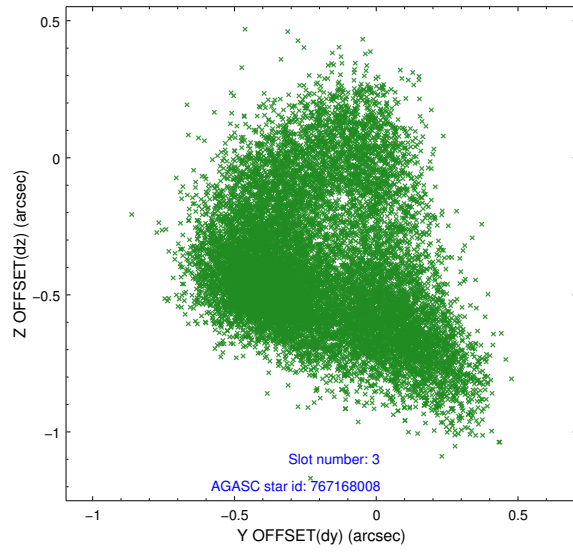


Slot Statistics

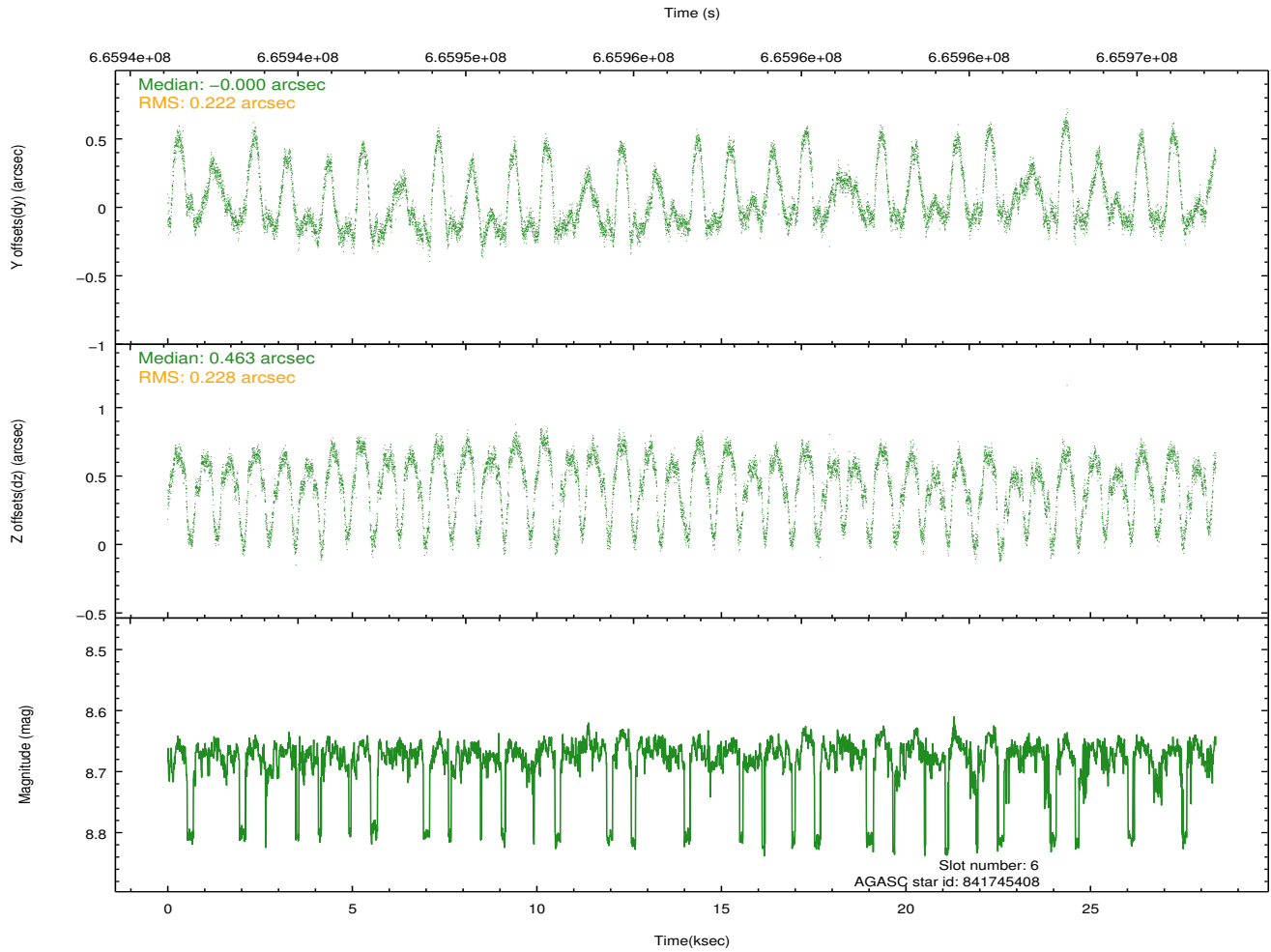
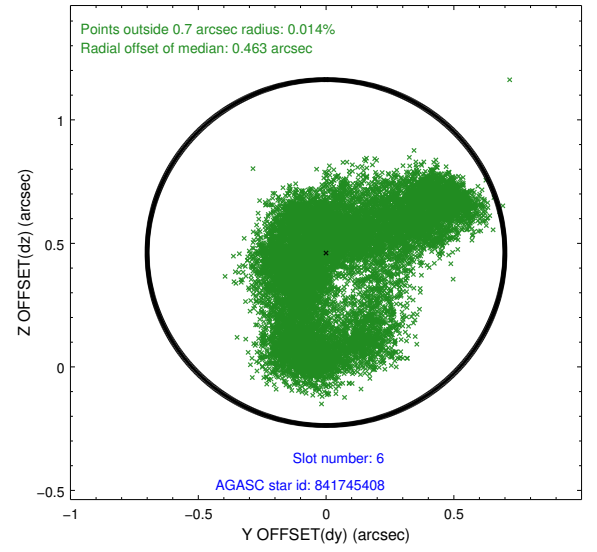
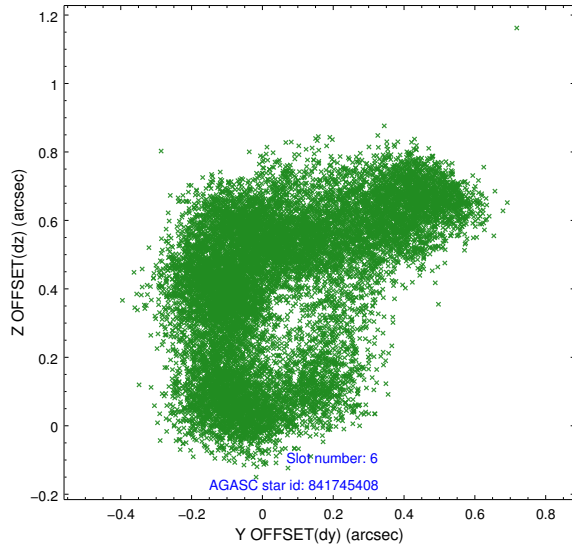
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.13	6924	1.000	0.091	-0.061	0.016	0.041	0.000000	0.000000	925.88	-845
1	FID		ACIS-I-5	7.12	6927	1.000	-0.465	0.017	0.009	0.017	0.000000	0.000000	-1822.87	1051
2	FID		ACIS-I-6	7.13	6926	1.000	0.284	0.115	0.018	0.040	0.000000	0.000000	391.34	1696
3	GUIDE	used	767168008	9.93	13589	1.000	-0.227	-0.449	0.374	0.599	16.508534	-22.453162	-440.95	795
4	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
5	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
6	GUIDE	used	841745408	8.67	13848	1.000	-0.000	0.463	0.371	0.526	16.162435	-22.504118	-259.87	-358
7	GUIDE	used	842141944	9.37	13730	1.000	0.111	-0.010	0.241	0.435	16.748595	-23.246579	2416.19	1581

2.4 Star Slots

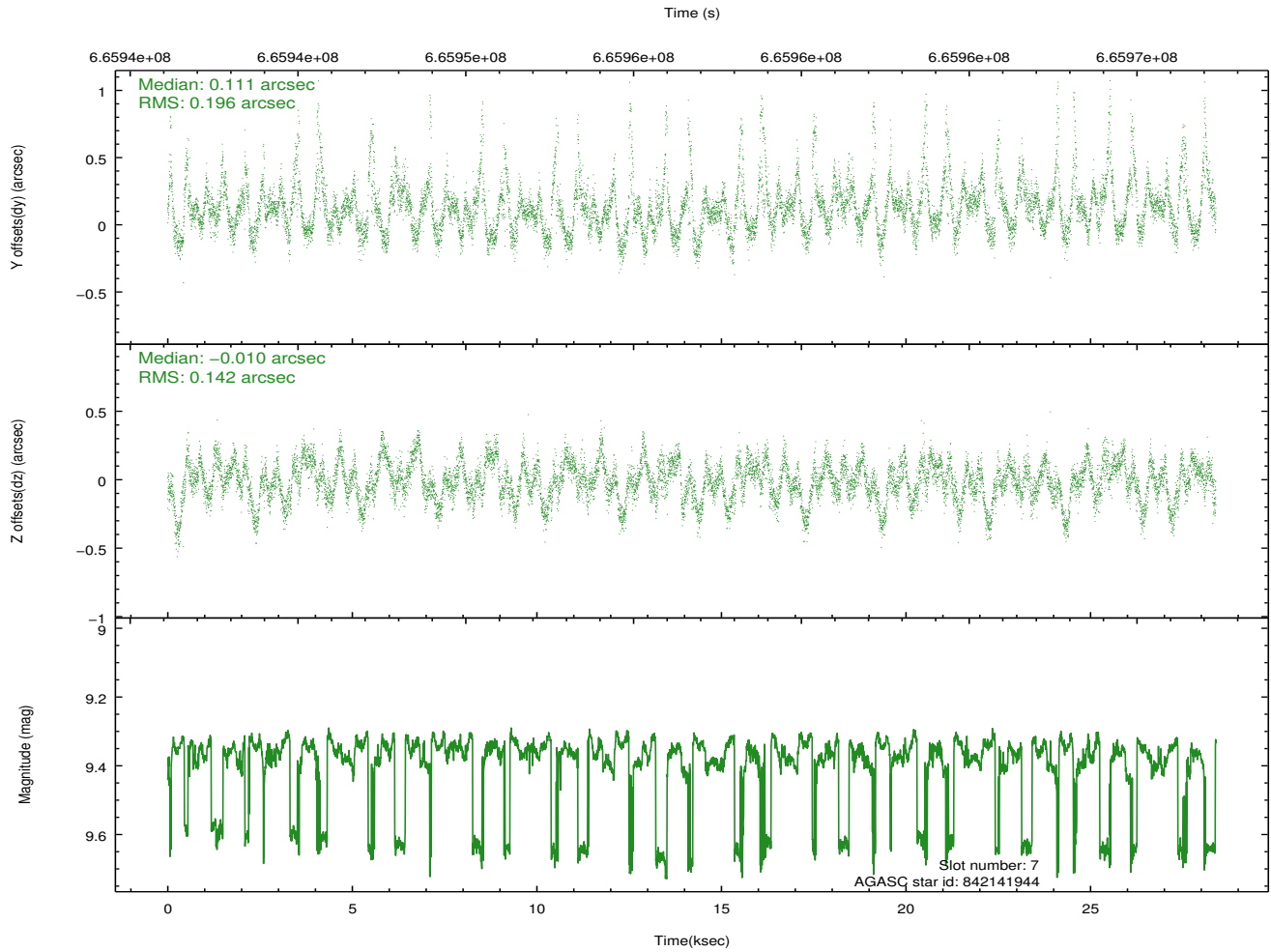
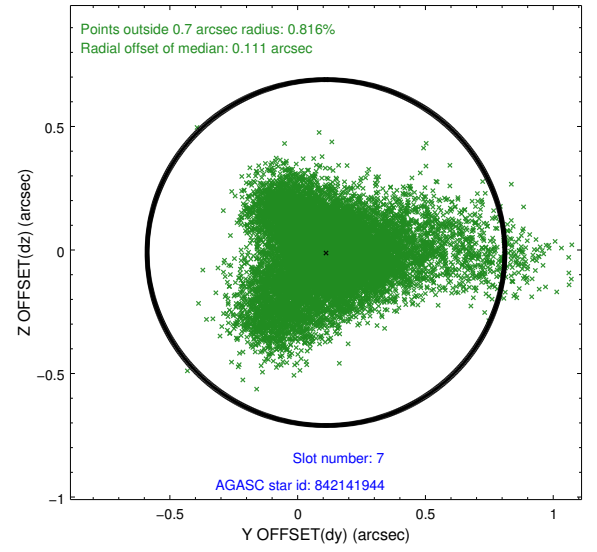
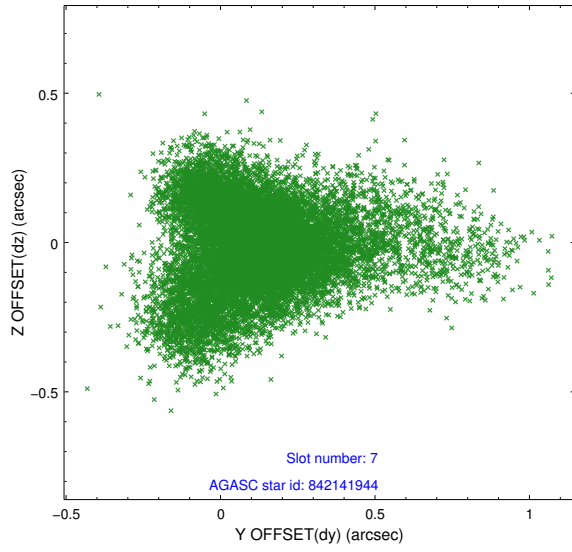
2.4.1 Slot 3



2.4.2 Slot 6

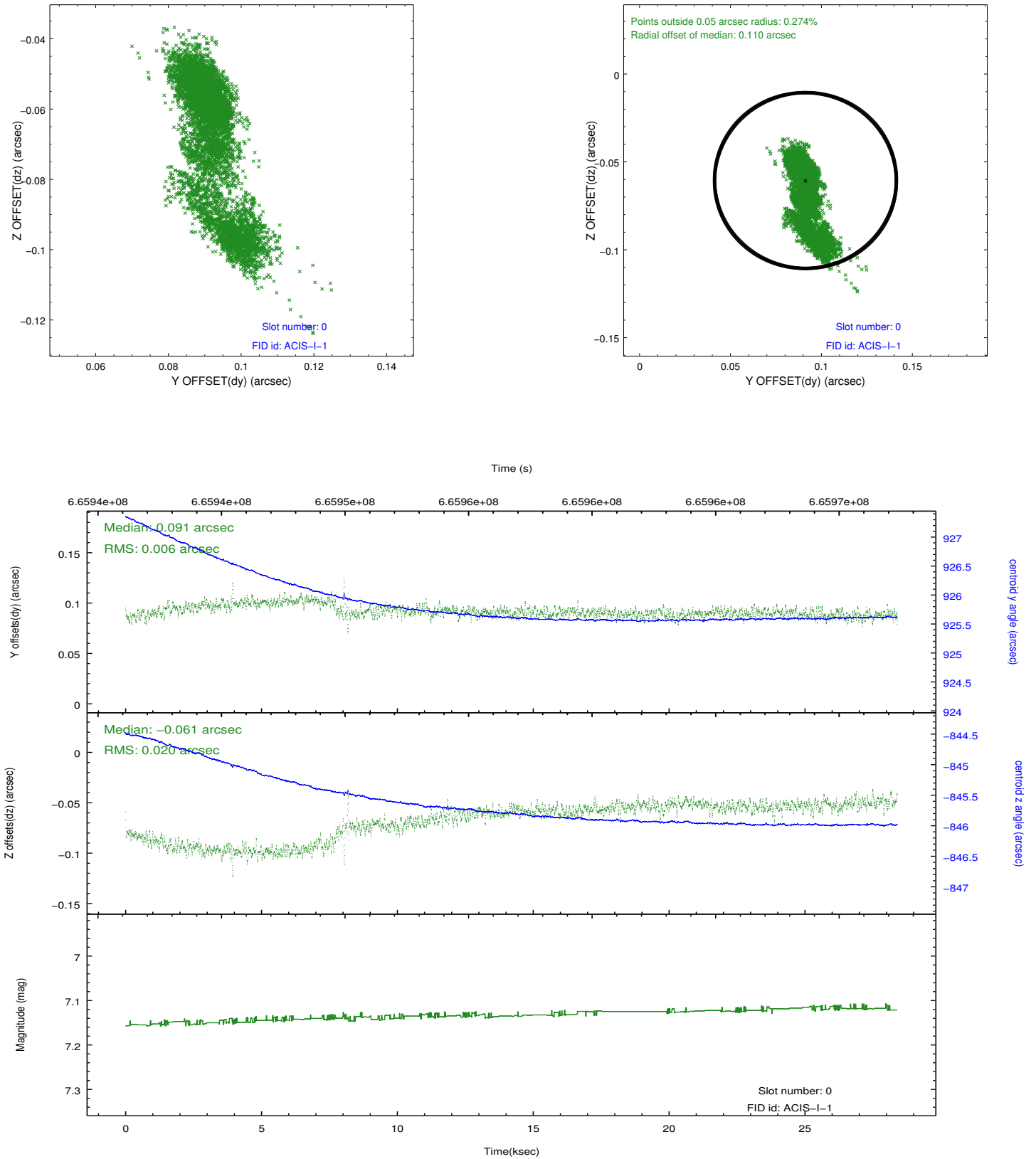


2.4.3 Slot 7

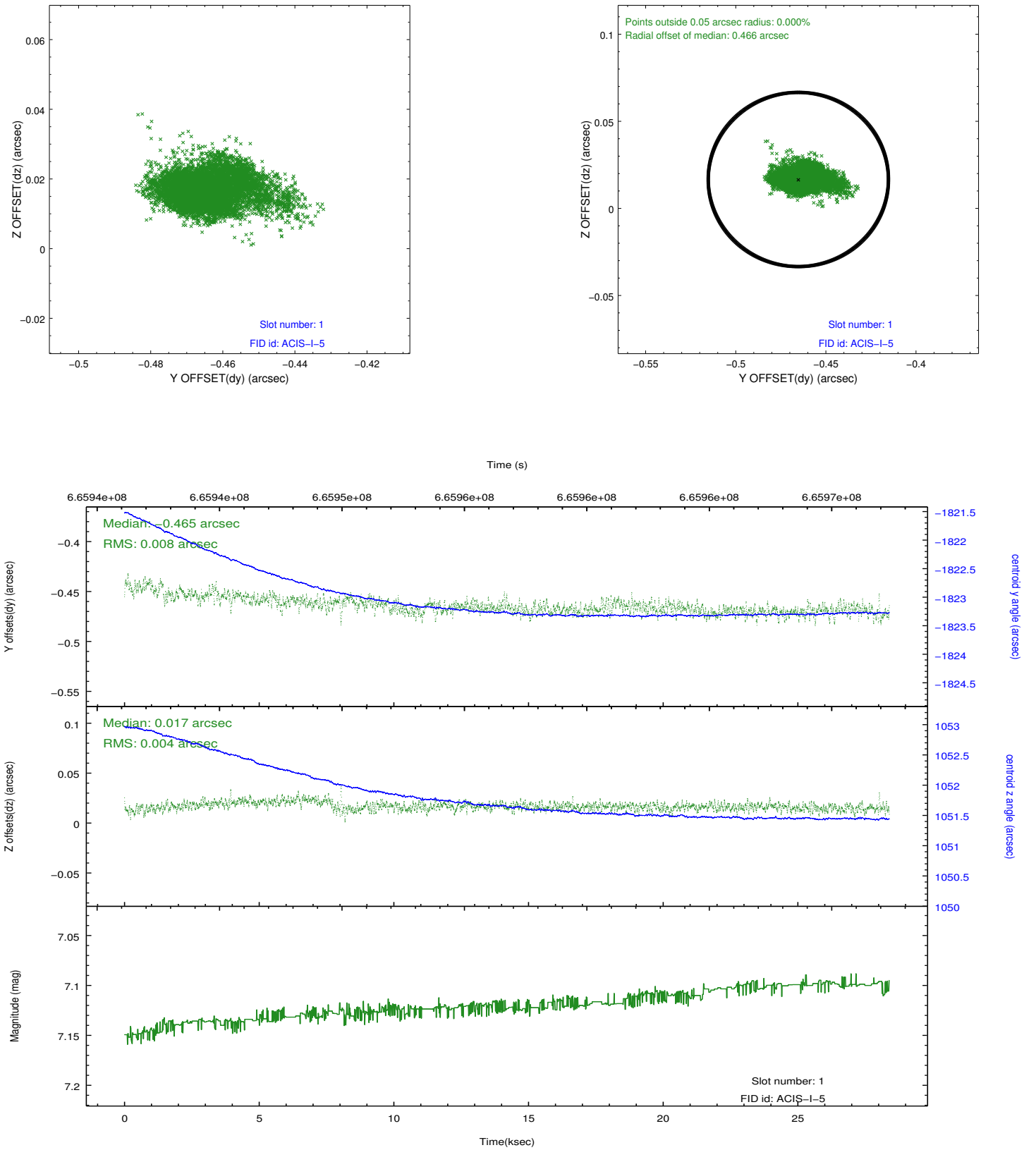


2.5 FID Slots

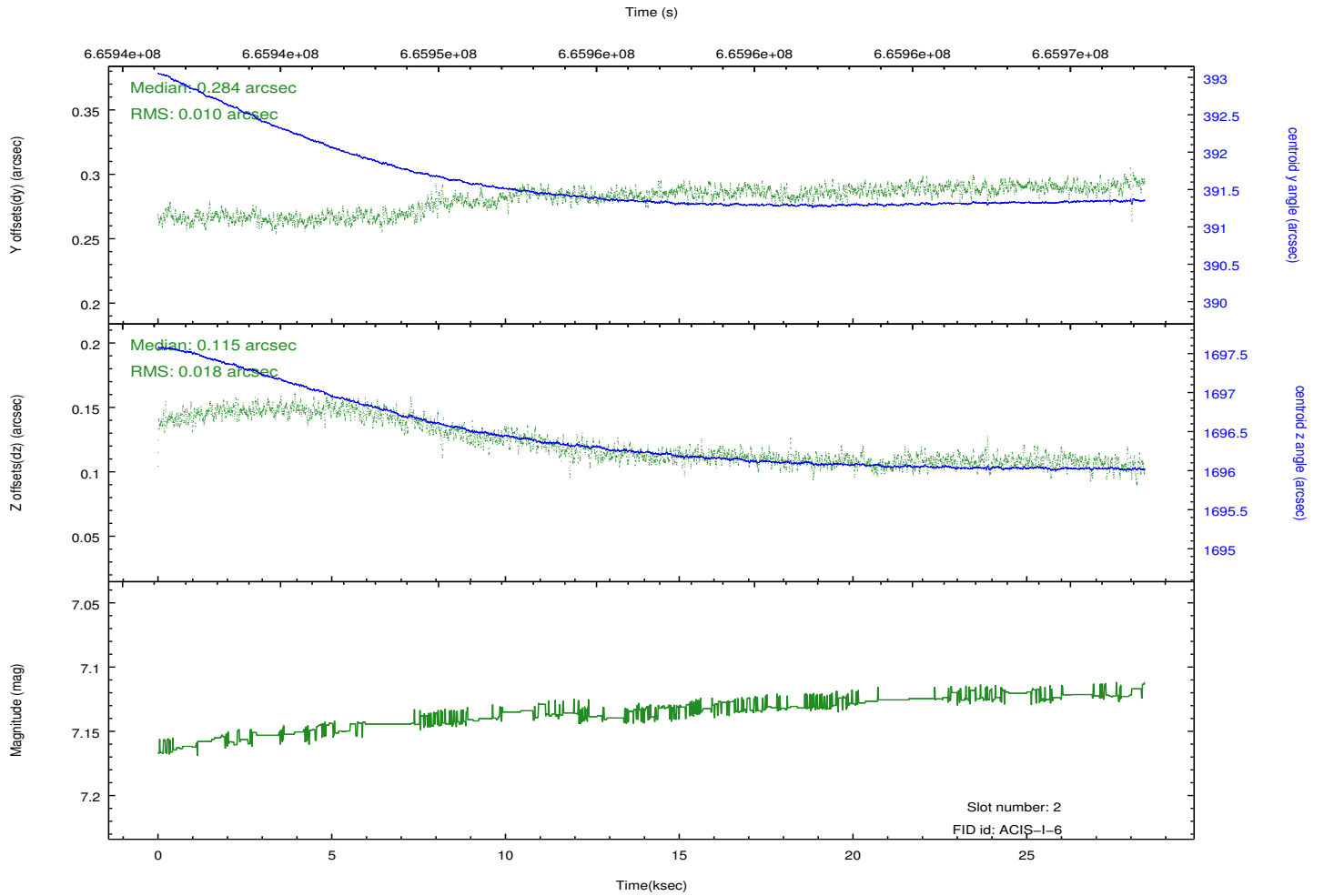
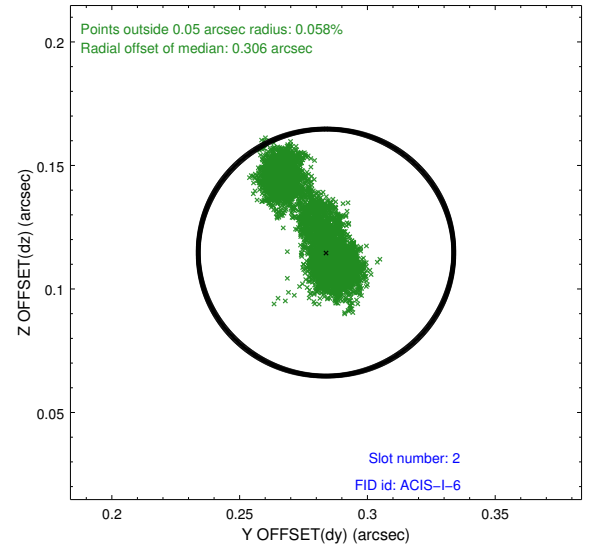
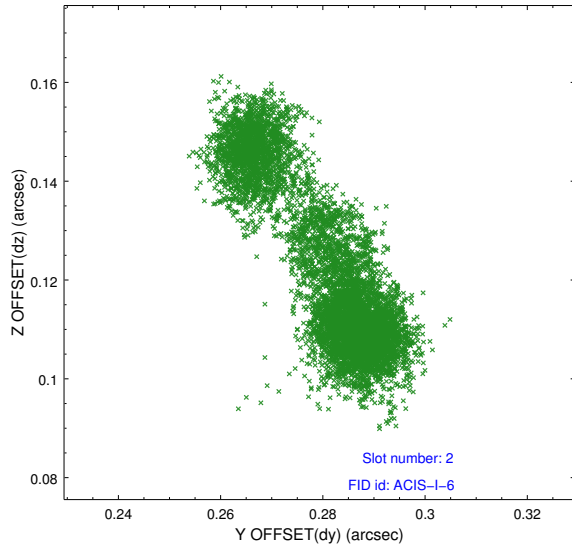
2.5.1 Slot 0



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)	2019.02.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.070418345213

A.2 Comments

Two optional chips were dropped.

The guide stars in slots 4 and 5 were removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of these slots from the solution.