

V&V Reference Report

L2 ASCDS Version : 10.6.4.1

Observation 20784 - L2 Version 1
Chandra X-Ray Center

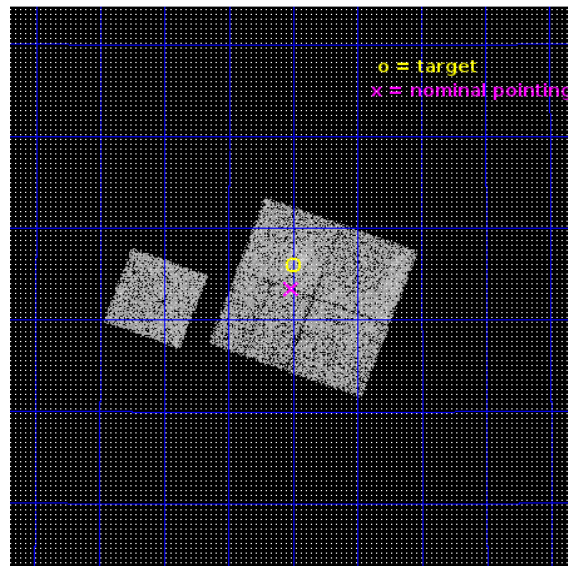
L2 Processing Date : Sep 18 2018

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1 Front

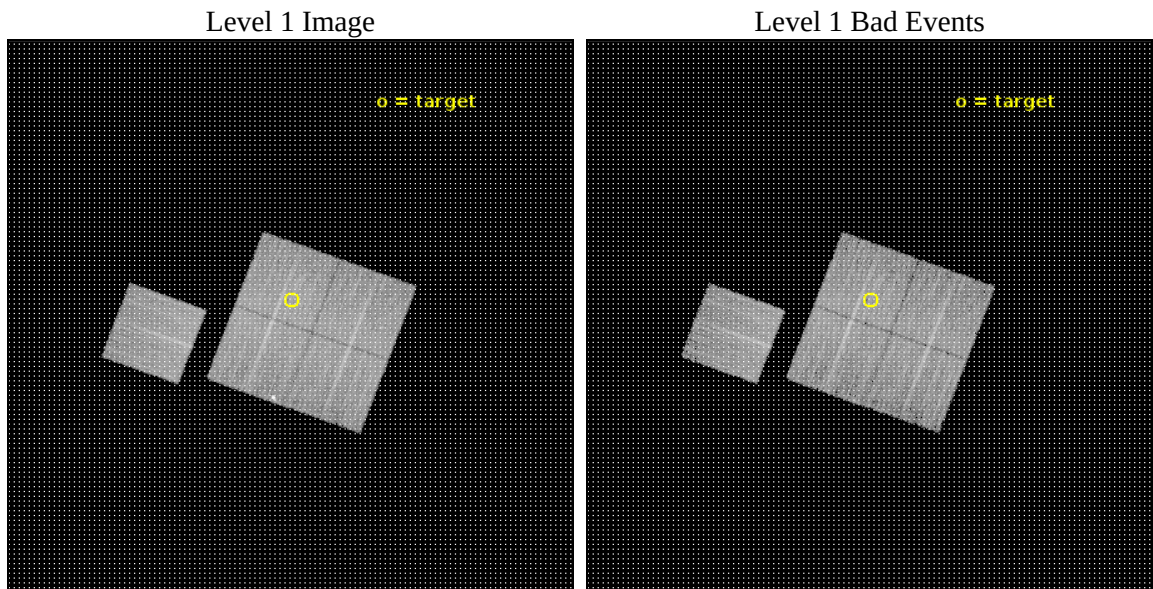
seq_num	801797	Sequence number
obs_id	20784	Observation id
title	Cluster Mergers - Formation of radio relics and halos	Proposal tit
observer	Ralph Kraft	Principal investigator
object	ZwCl1447.2+2619	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	222.375	Observer's specified target RA [deg]
dec_targ	26.1	Observer's specified target Dec [deg]
ra_nom	222.37803728575	Nominal RA [deg]
dec_nom	26.056663621226	Nominal Dec [deg]
roll_nom	290.32103638333	Nominal Roll [deg]
revision	1	Processing version of data
ontime	10065.700077534	Sum of GTIs [s]
livetime	9934.1842957602	Livetime [s]
ontime0	10065.700077534	Sum of GTIs [s]
ontime1	10059.417966962	Sum of GTIs [s]
ontime2	10065.700077534	Sum of GTIs [s]
ontime3	10065.700077534	Sum of GTIs [s]
ontime6	10065.700077534	Sum of GTIs [s]
l2events	36073	Number of level 2 events



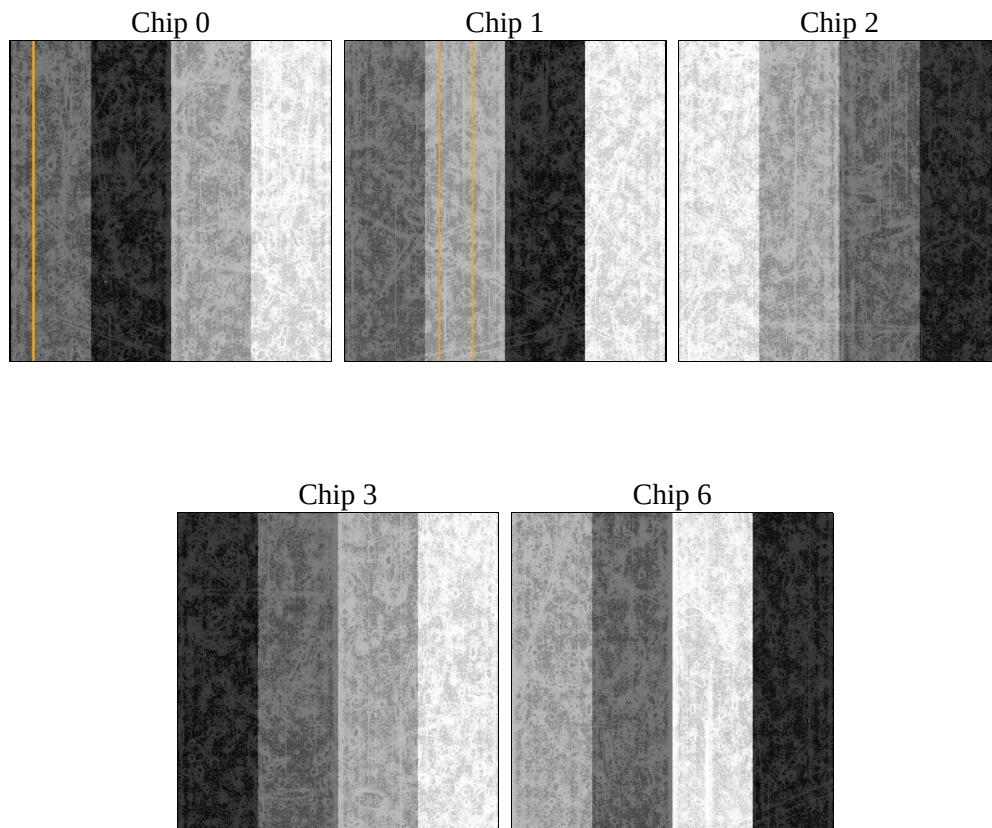
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.6.4.1	Processing system revision	ontime	10065.700077534	Sum of GTIs [s]
caldsver	4.8.0	 	ontime0	10065.700077534	Sum of GTIs [s]
date	2018-09-18T15:33:25	Date and time of file creation	ontime1	10059.417966962	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	10065.700077534	Sum of GTIs [s]
			ontime3	10065.700077534	Sum of GTIs [s]
			ontime6	10065.700077534	Sum of GTIs [s]
			l1events	382072	Number of level 1 events

2.1.4 Events

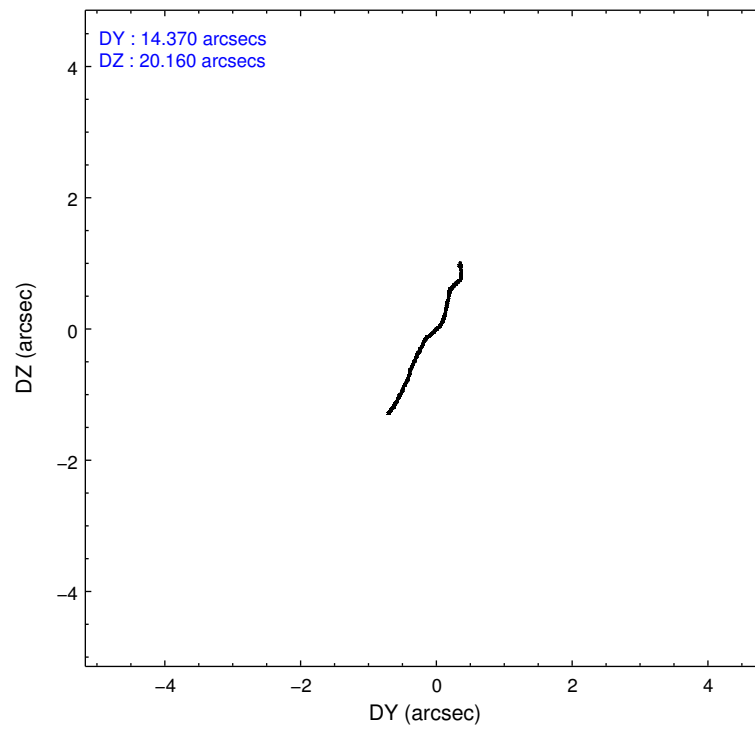
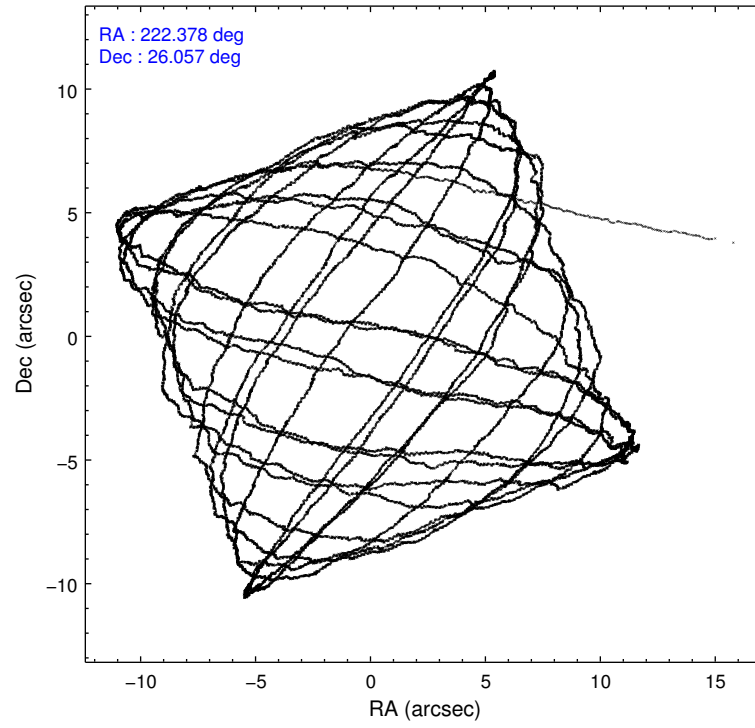
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	71149	72658	81523	78318	78424
rejected events	62906	63419	70380	69709	69985
rejected %	88%	87%	86%	89%	89%

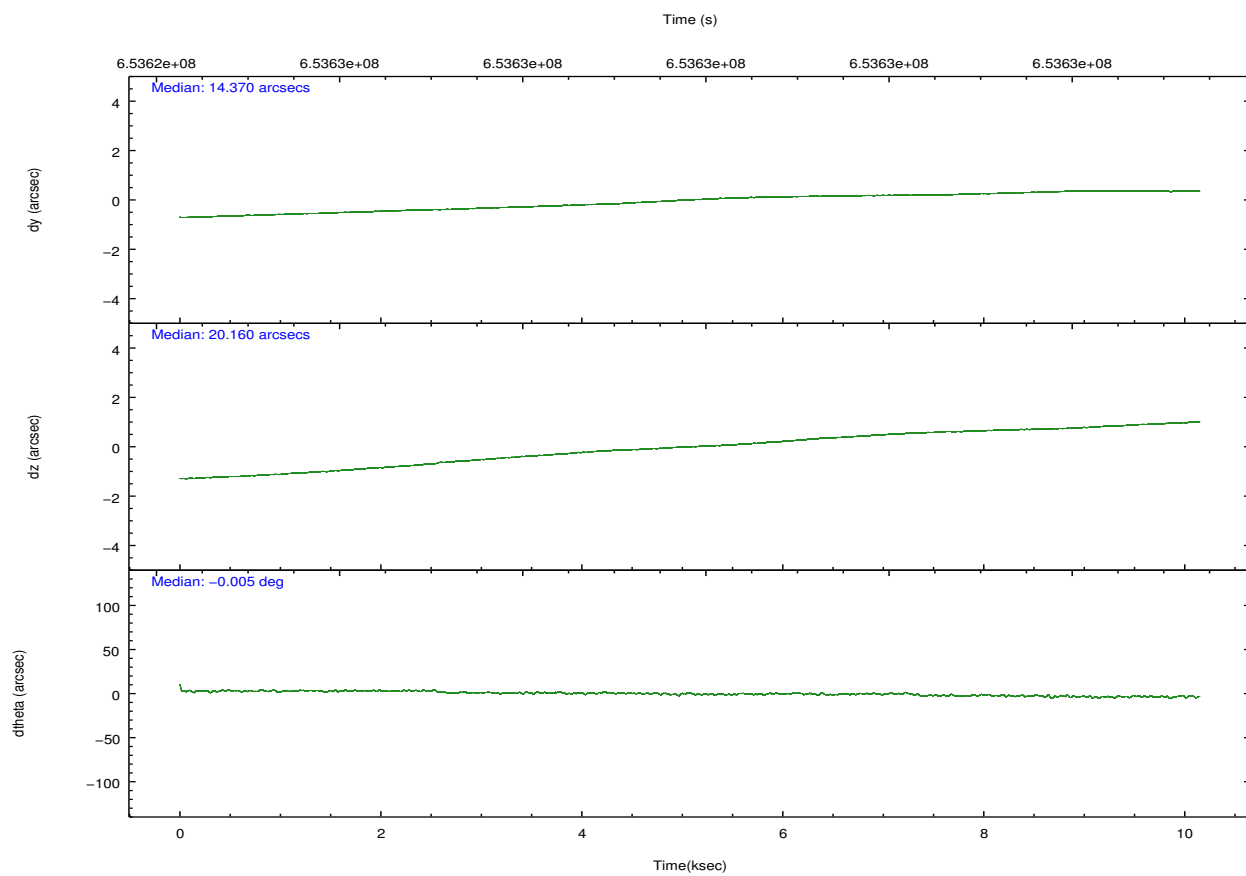
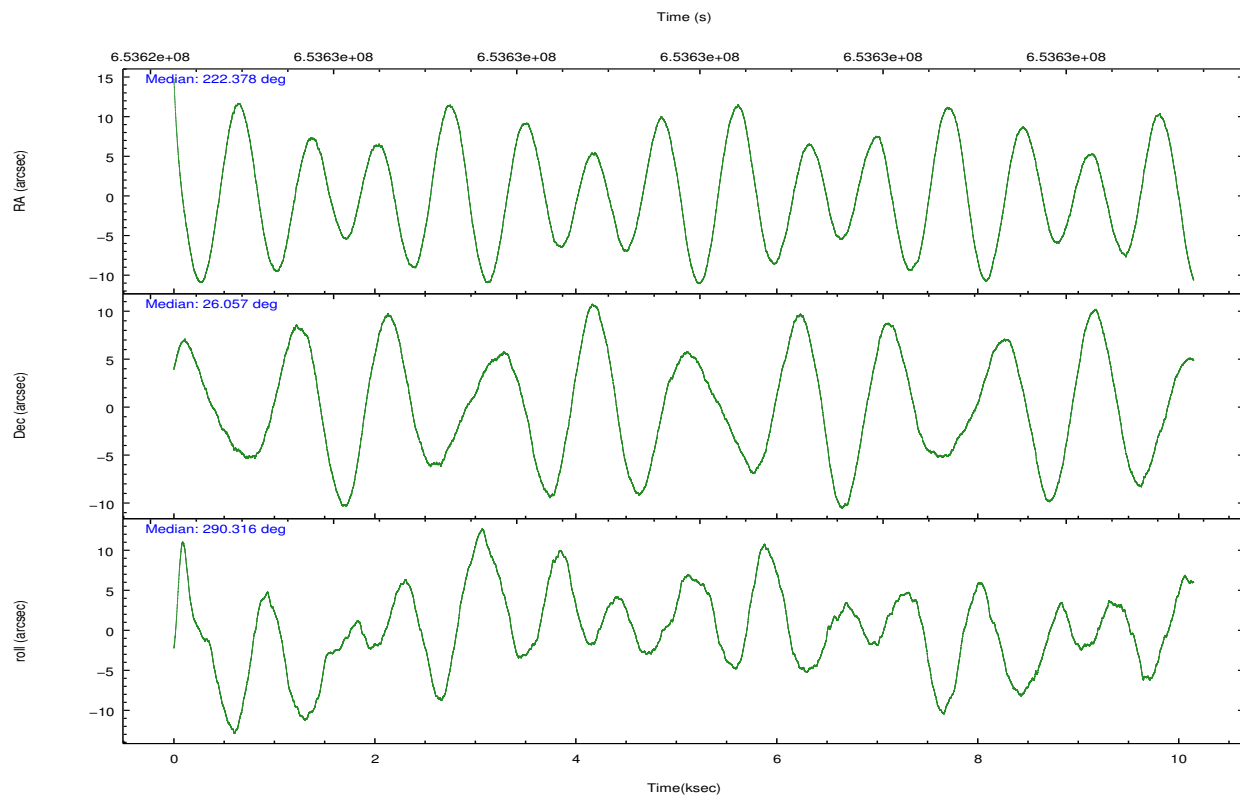
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2716	2960	5985	3341	2696
	3%	4%	7%	4%	3%
grade 1 events	24	43	54	54	40
	0%	0%	0%	0%	0%
grade 2 events	2095	2512	1885	1791	2065
	2%	3%	2%	2%	2%
grade 3 events	843	756	796	858	735
	1%	1%	0%	1%	0%
grade 4 events	857	813	848	867	778
	1%	1%	1%	1%	0%
grade 5 events	3000	3128	2815	3558	3402
	4%	4%	3%	4%	4%
grade 6 events	1733	2201	1632	1754	2166
	2%	3%	2%	2%	2%
grade 7 events	59881	60245	67508	66095	66542
	84%	82%	82%	84%	84%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	222.354321	222.3780372857477	CCD I2 on	Y	Y
[deg] Pointing Dec	26.074183	26.05666362122589	CCD I3 on	Y	Y
[deg] Pointing Roll	290.122794	290.3210363833311	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	O1	Y
[mm] SIM translation stage pos	-228.842463	-228.8404071714834	CCD S3 on	N	N
[mm] SIM translation stage offset	-4.75	-4.752045831446281	CCD S4 on	N	N
[s] Observation start time (MET)	653624899.184000	653623753.16764	CCD S5 on	N	N
Observation start date	2018-09-18T02:27:10	2018-09-18T02:09:13	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	653634899.184000	653636152.08088	On-chip summing requested	N	N
Observation end date	2018-09-18T05:13:50	2018-09-18T05:35:52	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



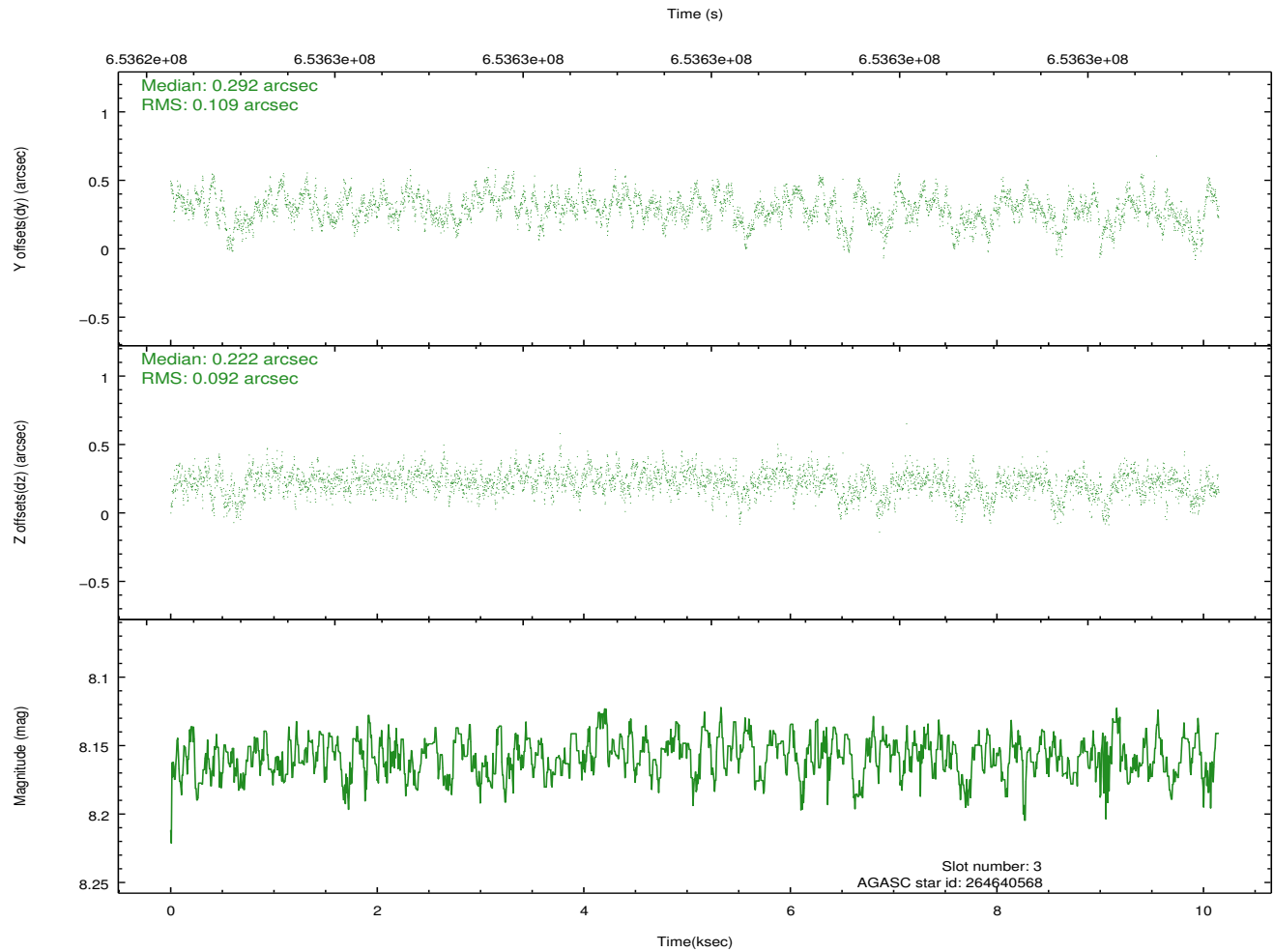
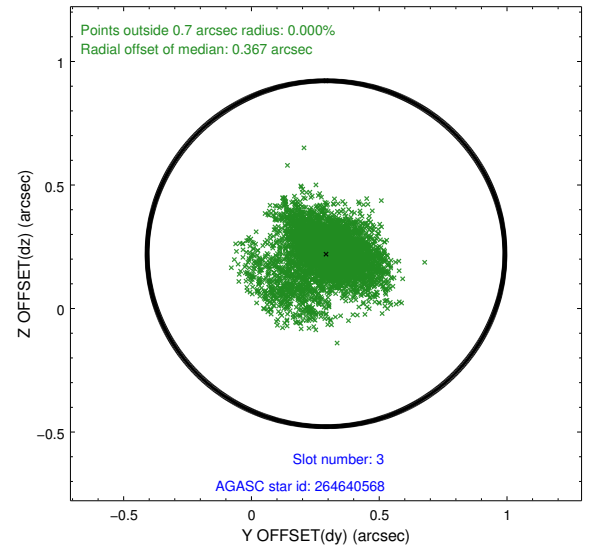
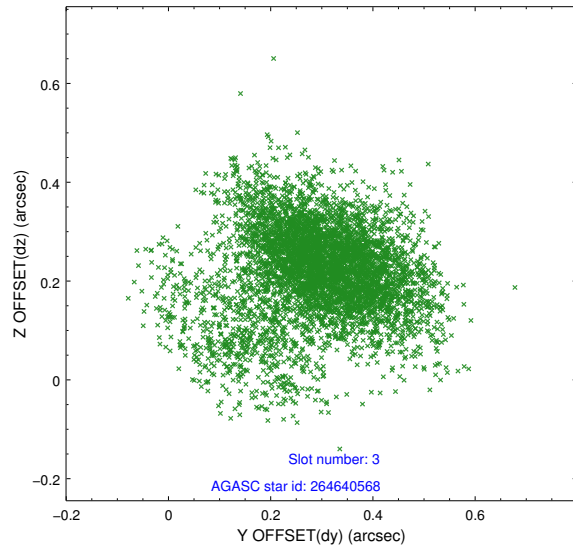


Slot Statistics

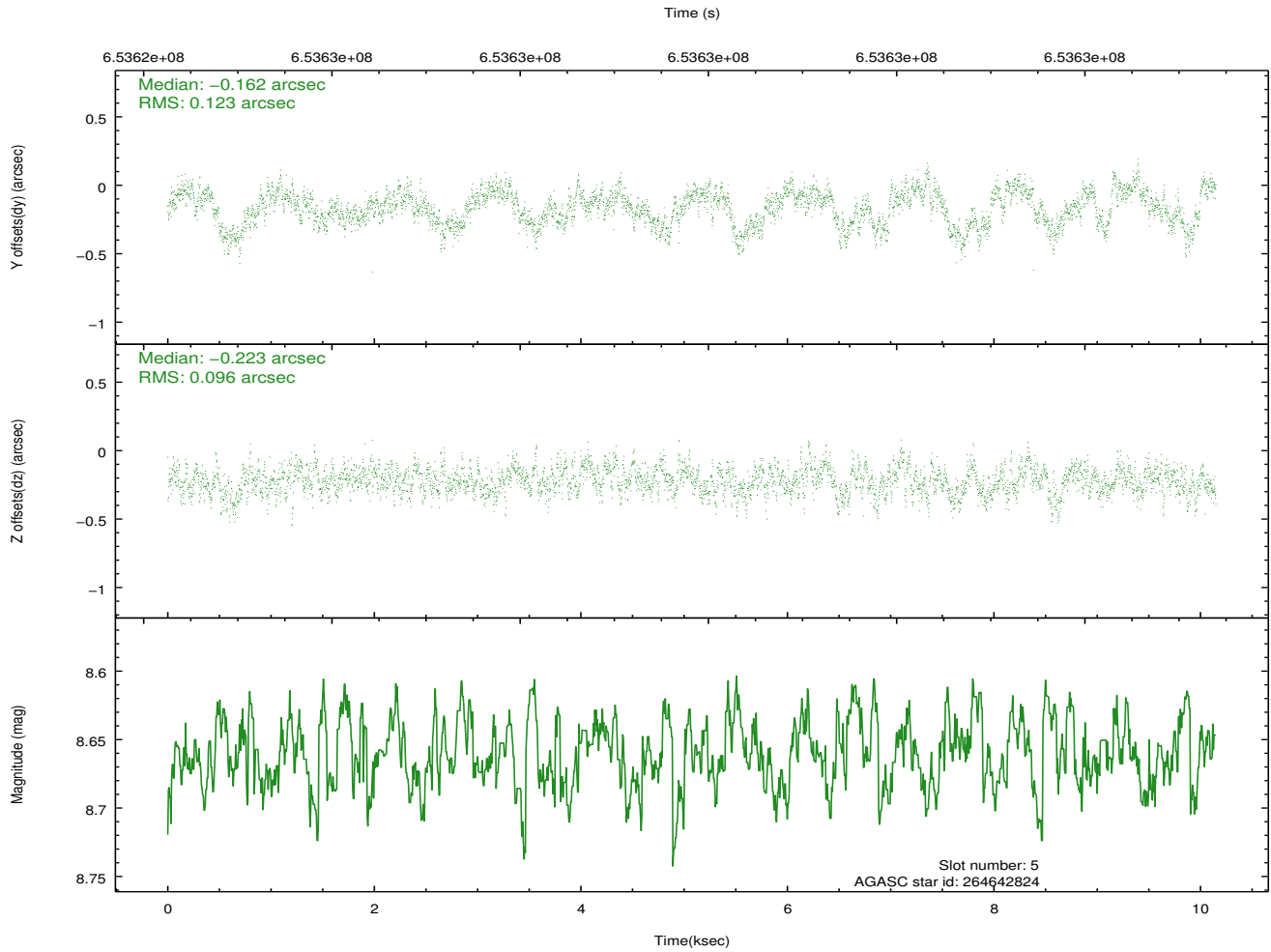
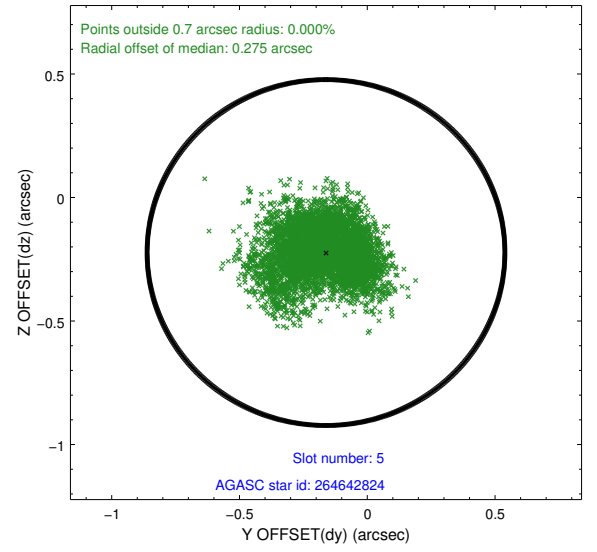
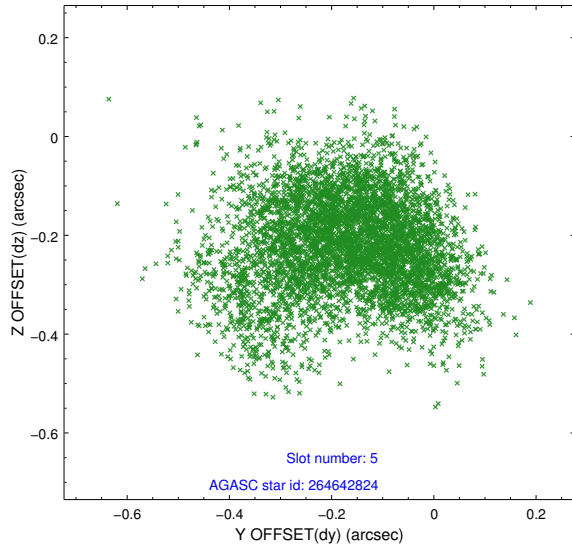
	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	m
	FID		ACIS-I-2	7.16	2476	1.000	-0.226	-0.152	0.017	0.037	0.000000	0.000000	-769.51	-9
	FID		ACIS-I-4	7.15	2476	1.000	0.458	0.161	0.016	0.027	0.000000	0.000000	2144.88	9
	FID		ACIS-I-5	7.20	2476	1.000	-0.333	0.060	0.021	0.034	0.000000	0.000000	-1822.61	9
	GUIDE	used	264640568	8.16	4951	1.000	0.292	0.222	0.147	0.264	221.959074	25.471499	1594.53	-19
	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	
	GUIDE	used	264642824	8.66	4948	1.000	-0.162	-0.223	0.164	0.274	222.903460	26.126500	431.17	17
	GUIDE	used	264642384	7.81	4952	1.000	0.390	0.385	0.136	0.254	221.613751	25.948500	-404.72	-24
	BAD	used	264640720	10.19	4128	1.000	-0.613	-0.448	0.260	0.449	221.832500	25.389067	1730.41	-24

2.4 Star Slots

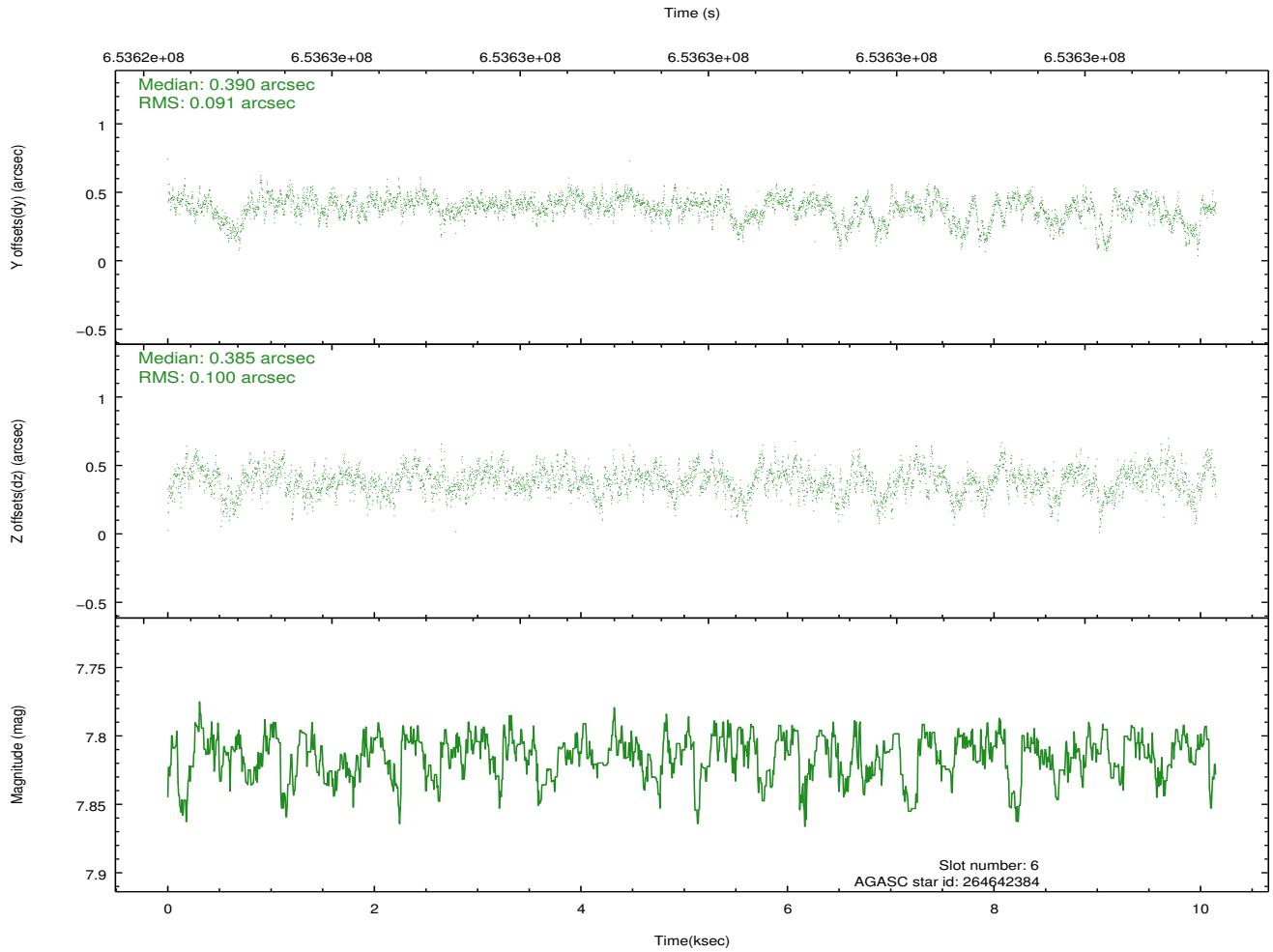
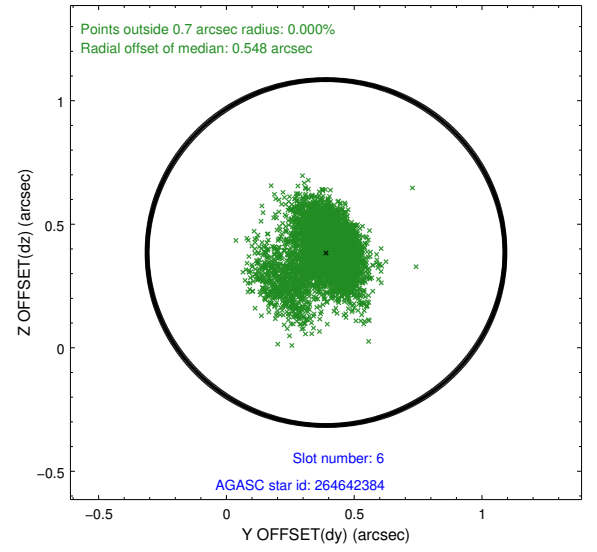
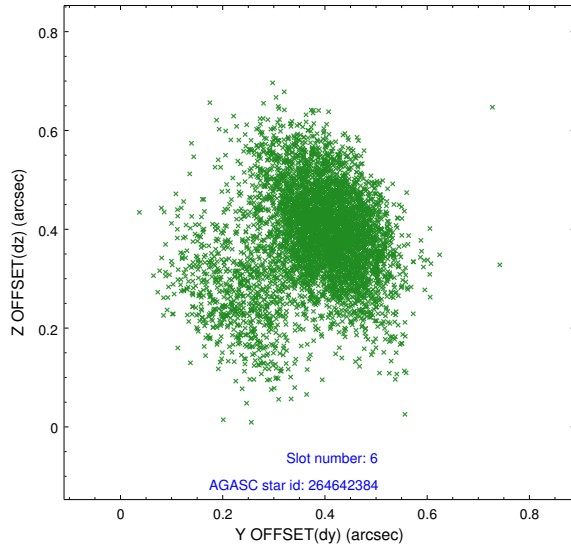
2.4.1 Slot 3



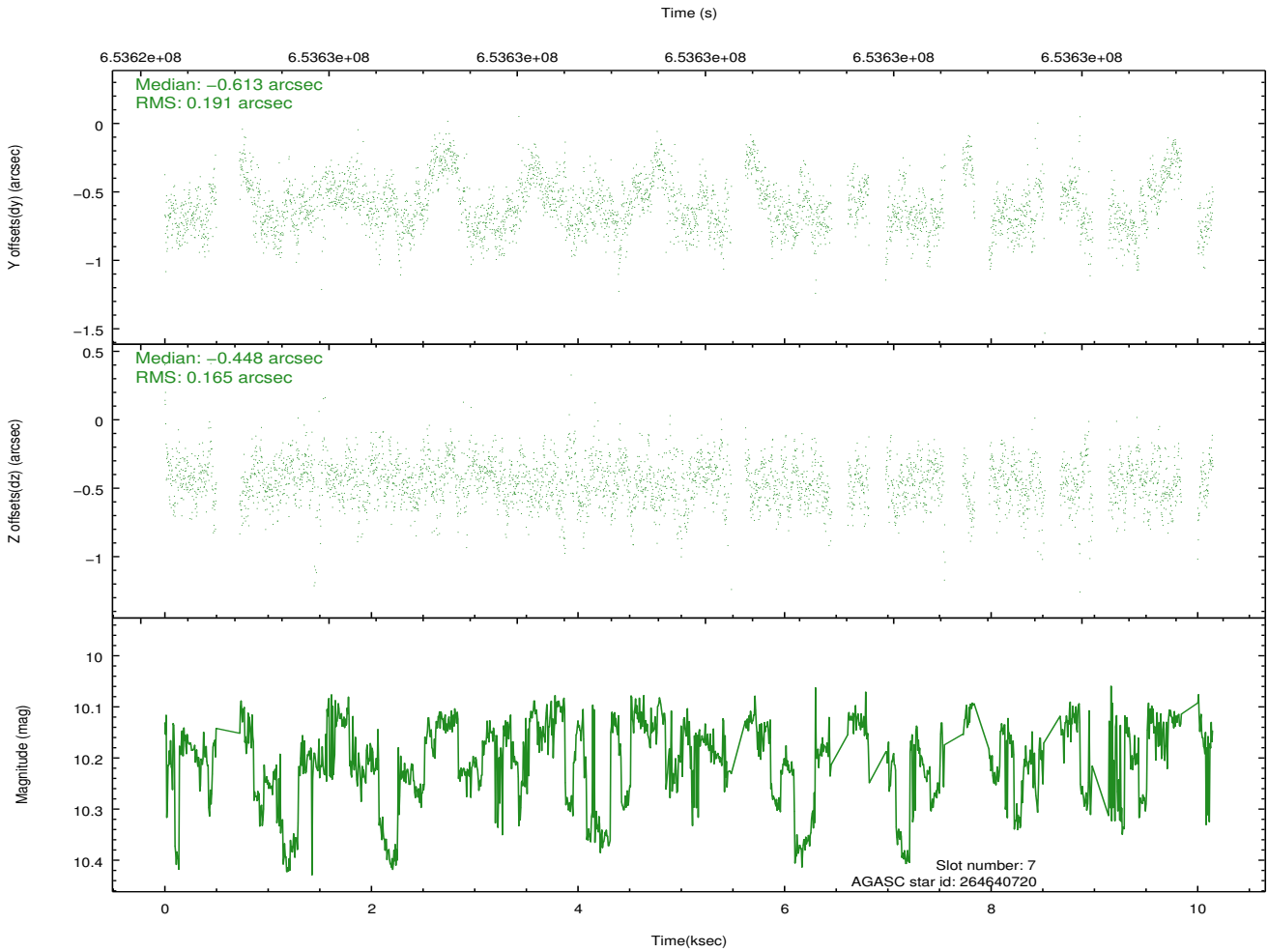
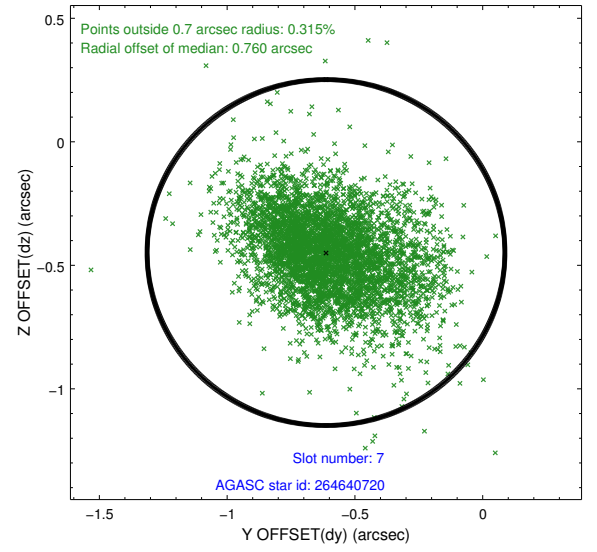
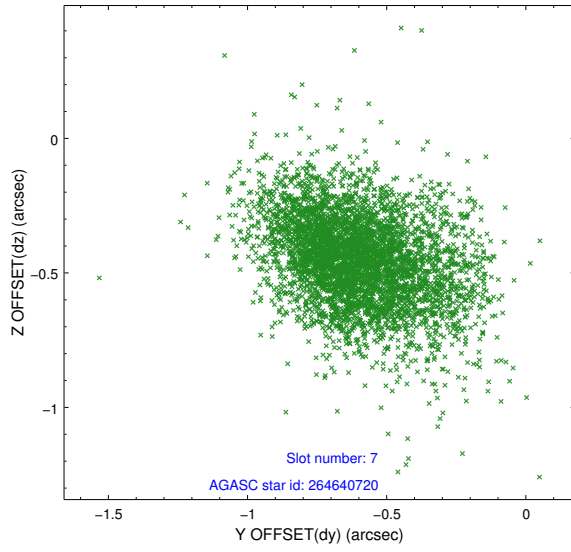
2.4.2 Slot 5



2.4.3 Slot 6

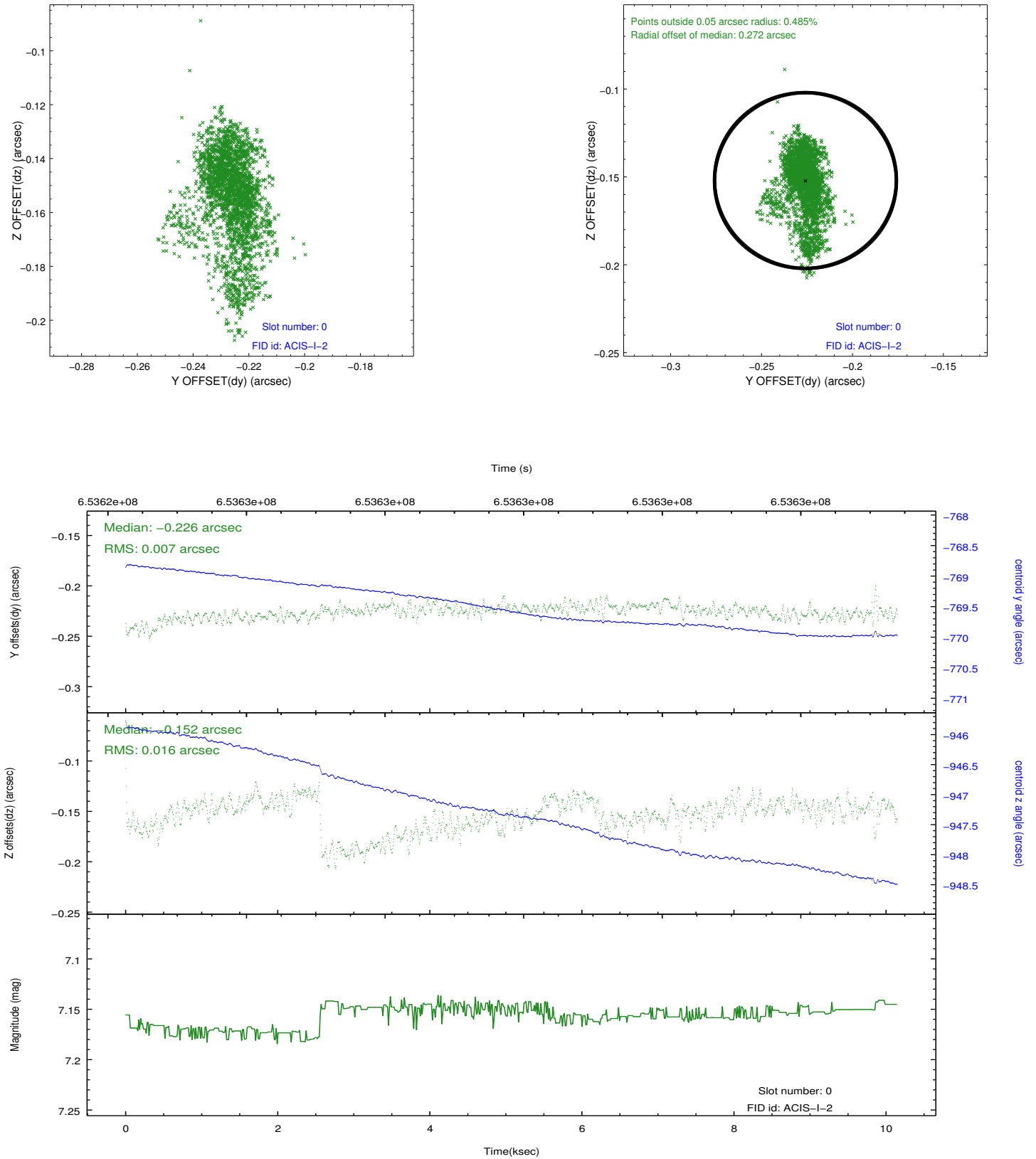


2.4.4 Slot 7

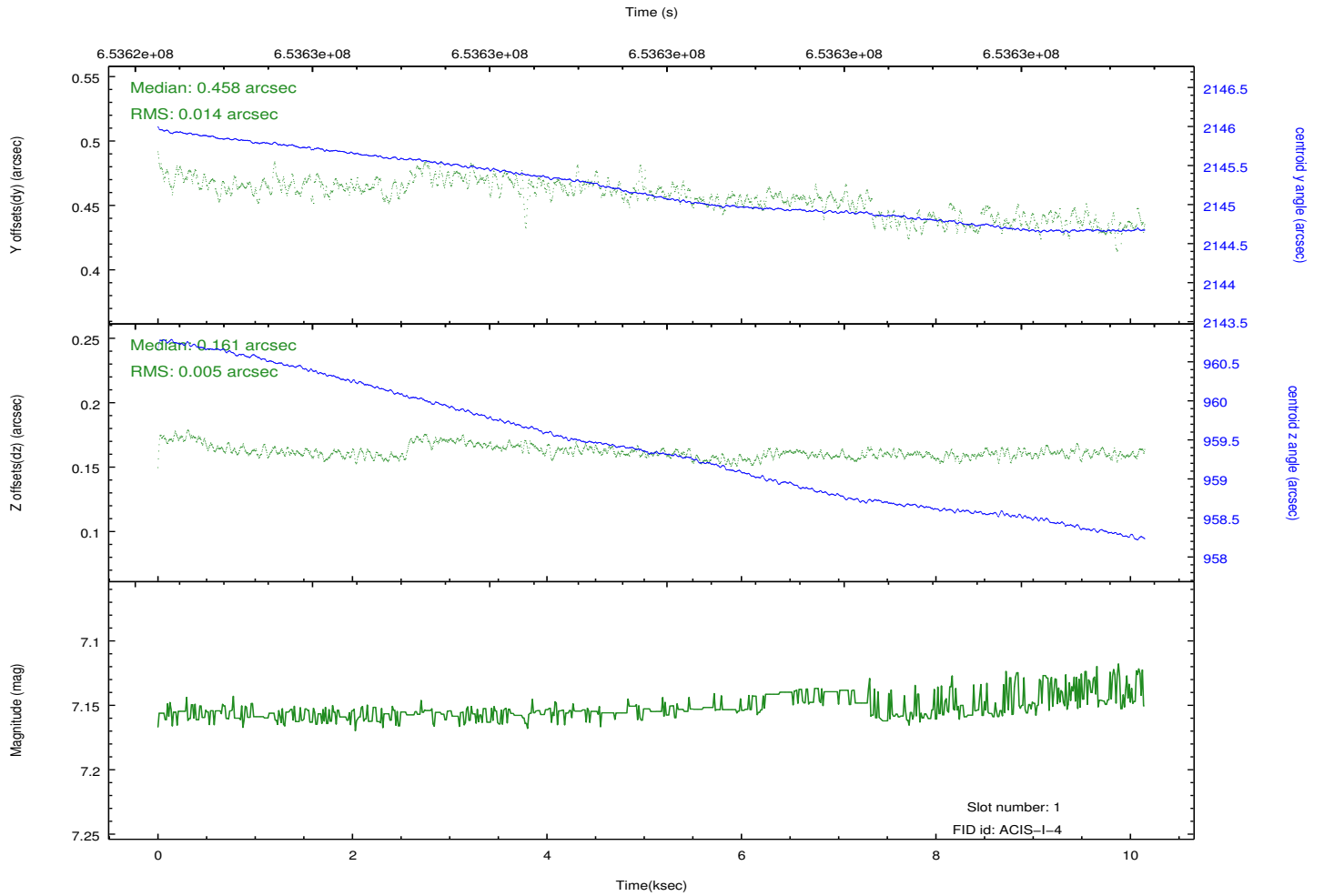
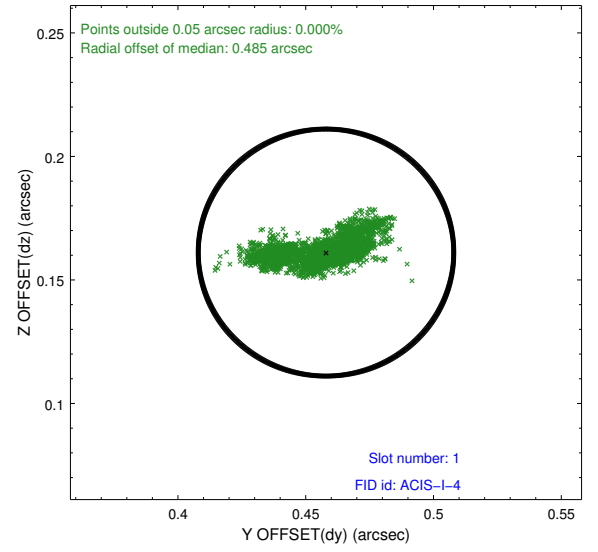
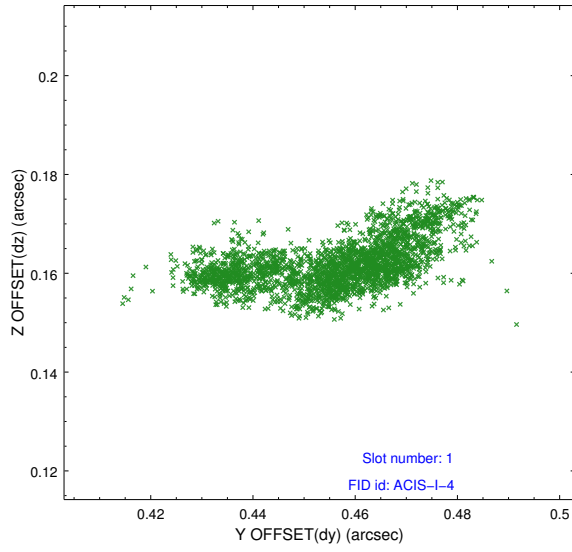


2.5 FID Slots

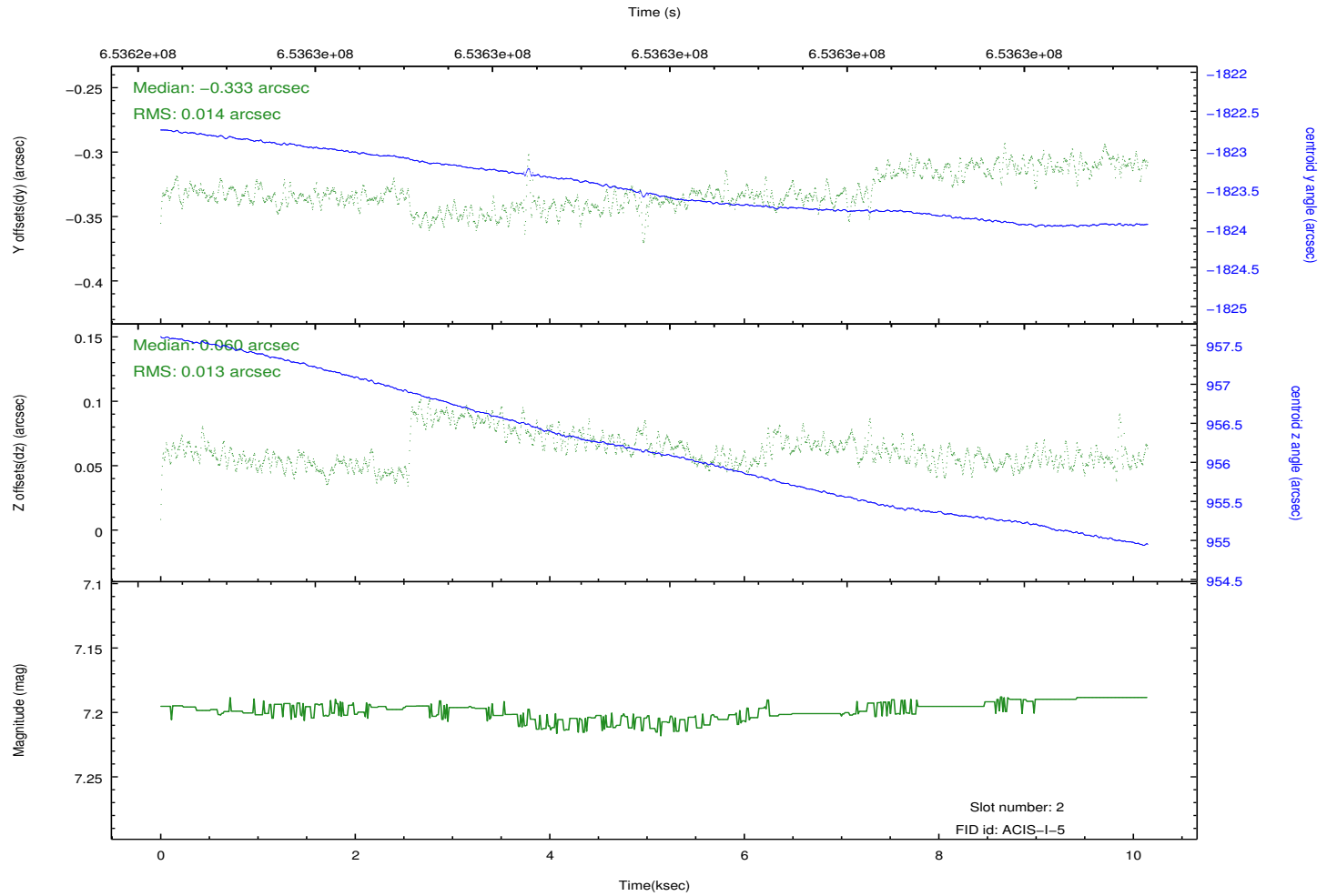
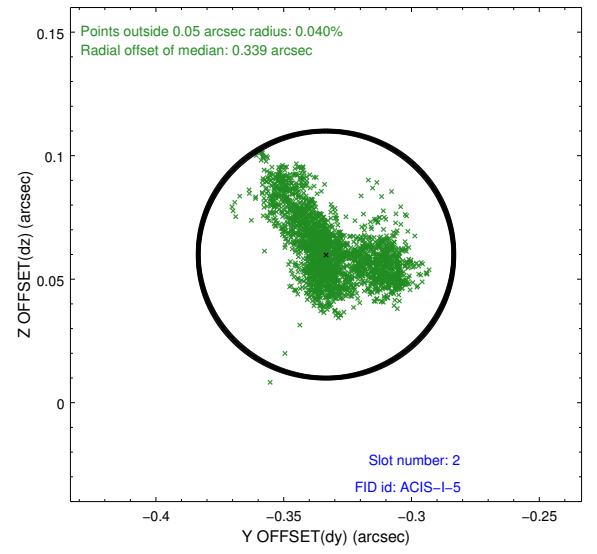
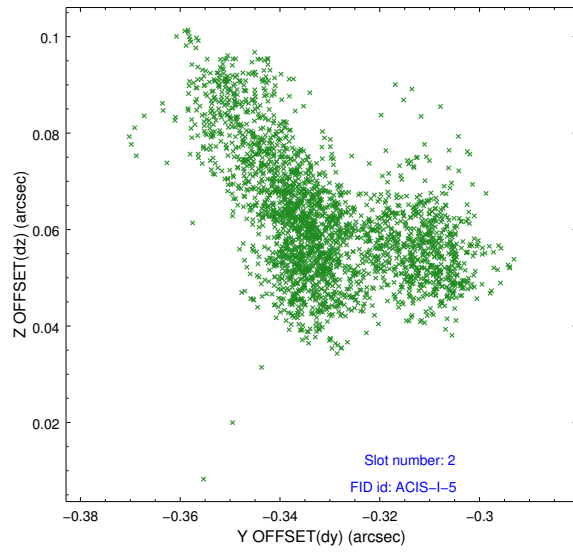
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2018.09.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.065700077534

A.2 Comments

The guide star in slot 4 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.