

V&V Reference Report

L2 ASCDS Version : 10.8

Observation 22496 - L2 Version 1
Chandra X-Ray Center

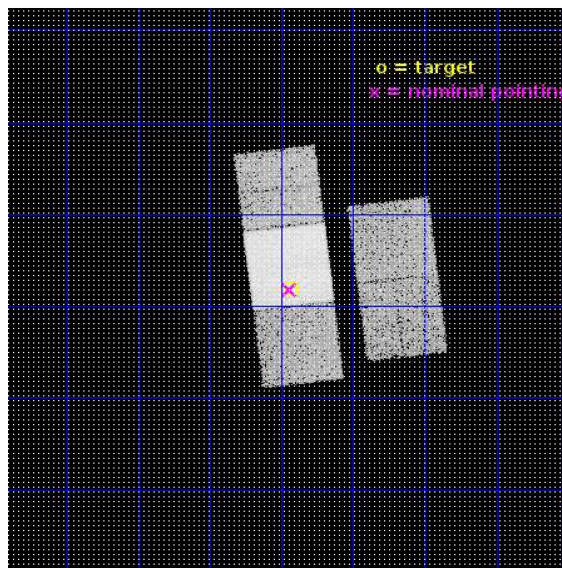
L2 Processing Date : Sep 7 2019

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1 Front

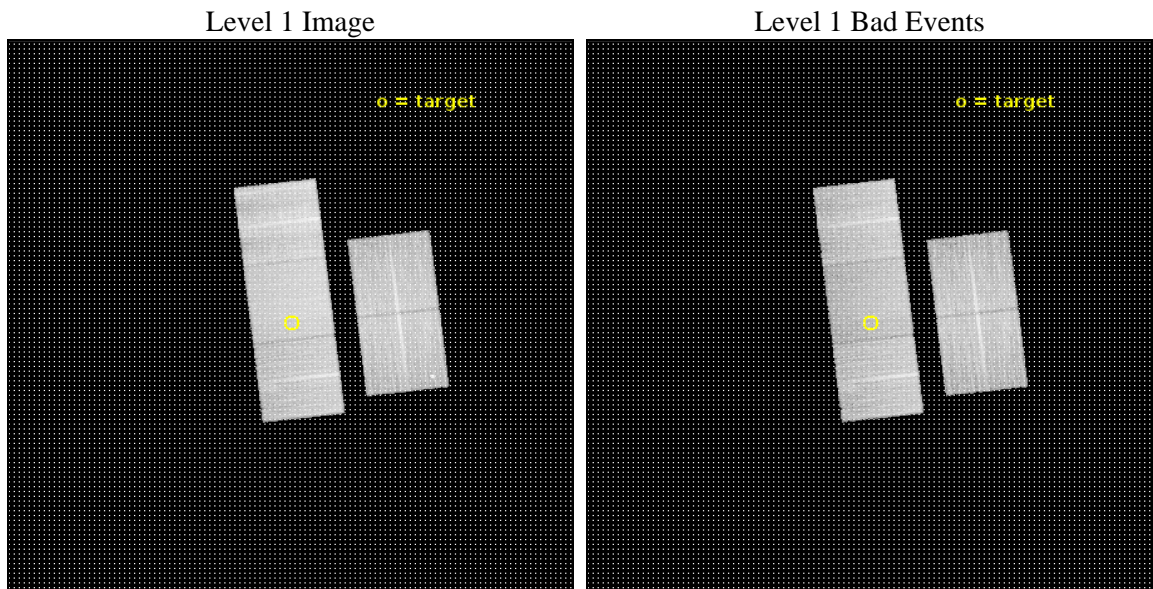
seq_num	601473	Sequence number
obs_id	22496	Observation id
title	A LOCAL CHARACTERIZATION OF THE z 10 X-RAY RADIATION FIELD AND ITS EFFECTS ON EARLY IGM HEATING	Proposal title
observer	Bret Lehmer	Principal investigator
object	J151725.9-000805.4	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	229.35776	Observer's specified target RA [deg]
dec_targ	-0.13485	Observer's specified target Dec [deg]
ra_nom	229.3610295136	Nominal RA [deg]
dec_nom	-0.13694670475579	Nominal Dec [deg]
roll_nom	263.16516327596	Nominal Roll [deg]
revision	1	Processing version of data
ontime	17053.100131273	Sum of GTIs [s]
livetime	16830.288823749	Livetime [s]
ontime2	17049.959160924	Sum of GTIs [s]
ontime3	17053.100131273	Sum of GTIs [s]
ontime6	17053.100131273	Sum of GTIs [s]
ontime7	17053.100131273	Sum of GTIs [s]
ontime8	17053.100131273	Sum of GTIs [s]
l2events	124441	Number of level 2 events



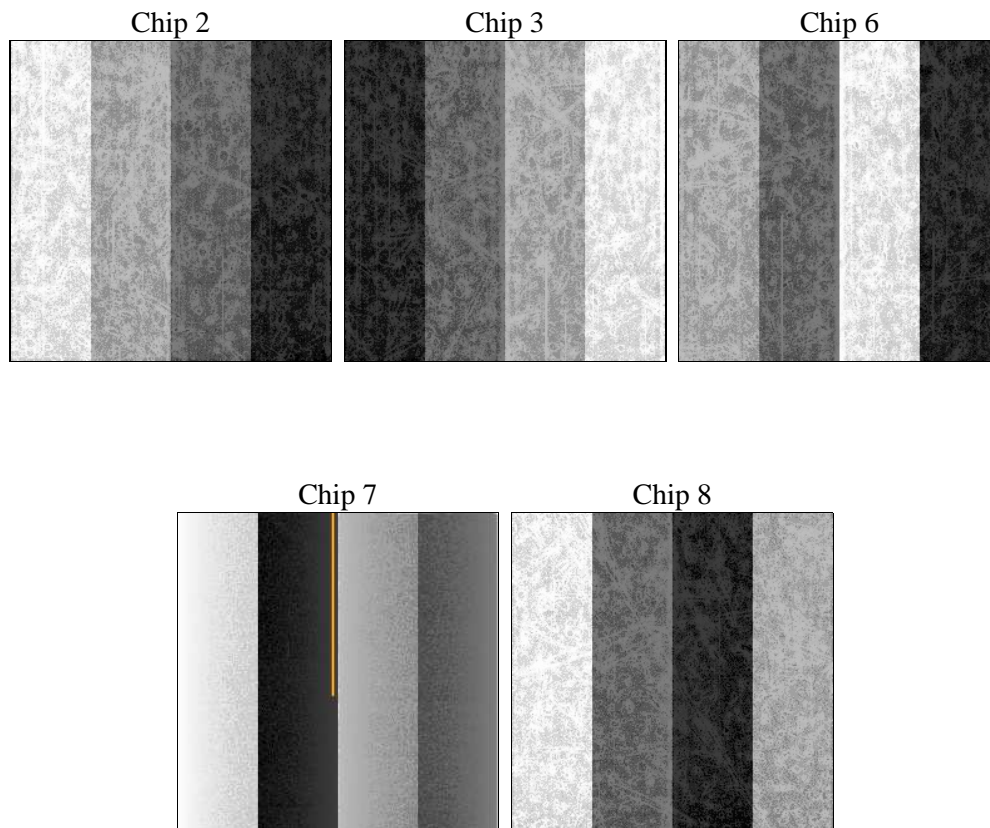
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	17000.000000	[s] Scheduled observation exposure time
ascdsver	10.8	Processing system revision	ontime	17053.100131273	Sum of GTIs [s]
caldbver	4.8.4.1	 	ontime2	17049.959160924	Sum of GTIs [s]
date	2019-09-07T15:38:27	Date and time of file creation	ontime3	17053.100131273	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	17053.100131273	Sum of GTIs [s]
			ontime7	17053.100131273	Sum of GTIs [s]
			ontime8	17053.100131273	Sum of GTIs [s]
			l1events	734946	Number of level 1 events

2.1.4 Events

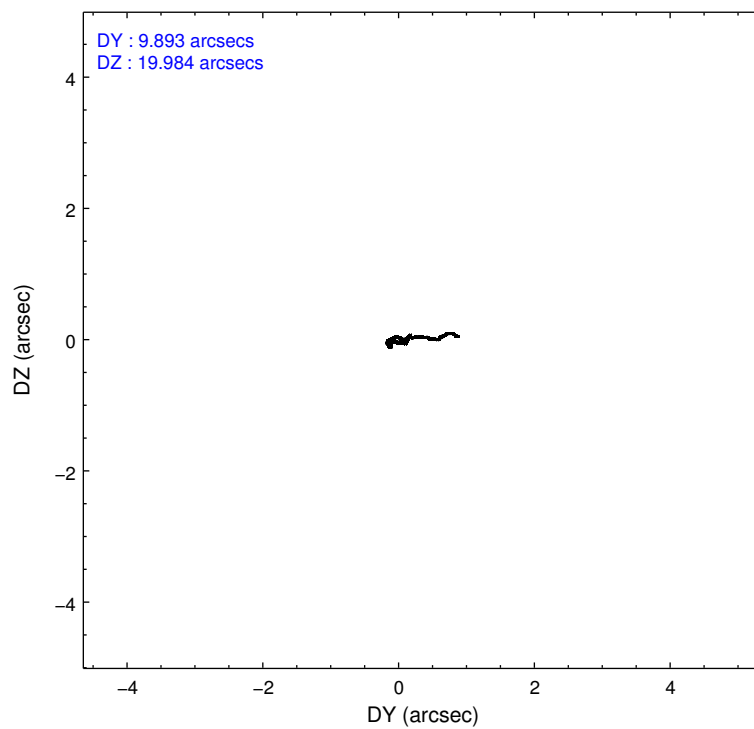
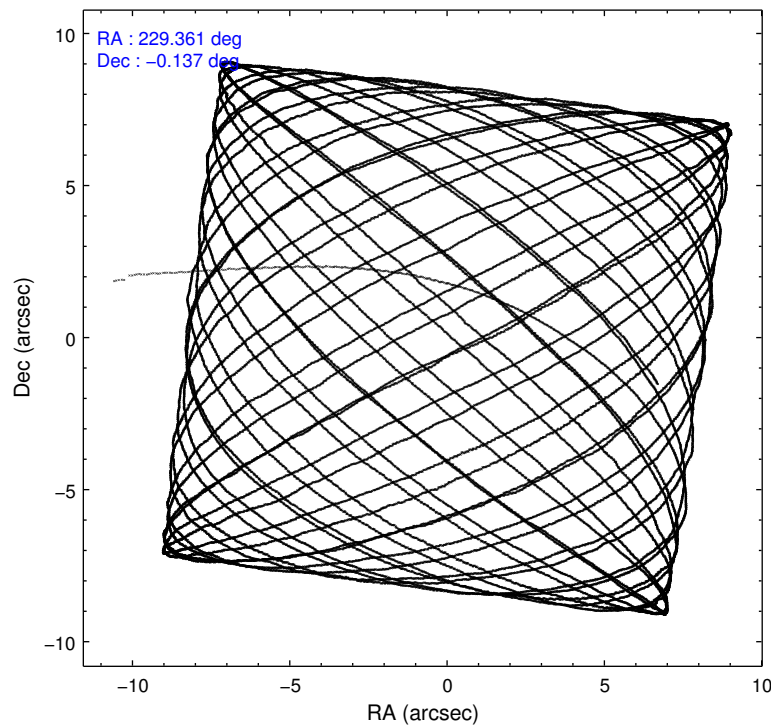
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	132940	125834	134611	167723	173838
rejected events	117851	111535	119761	95318	125234
rejected %	88%	88%	88%	56%	72%

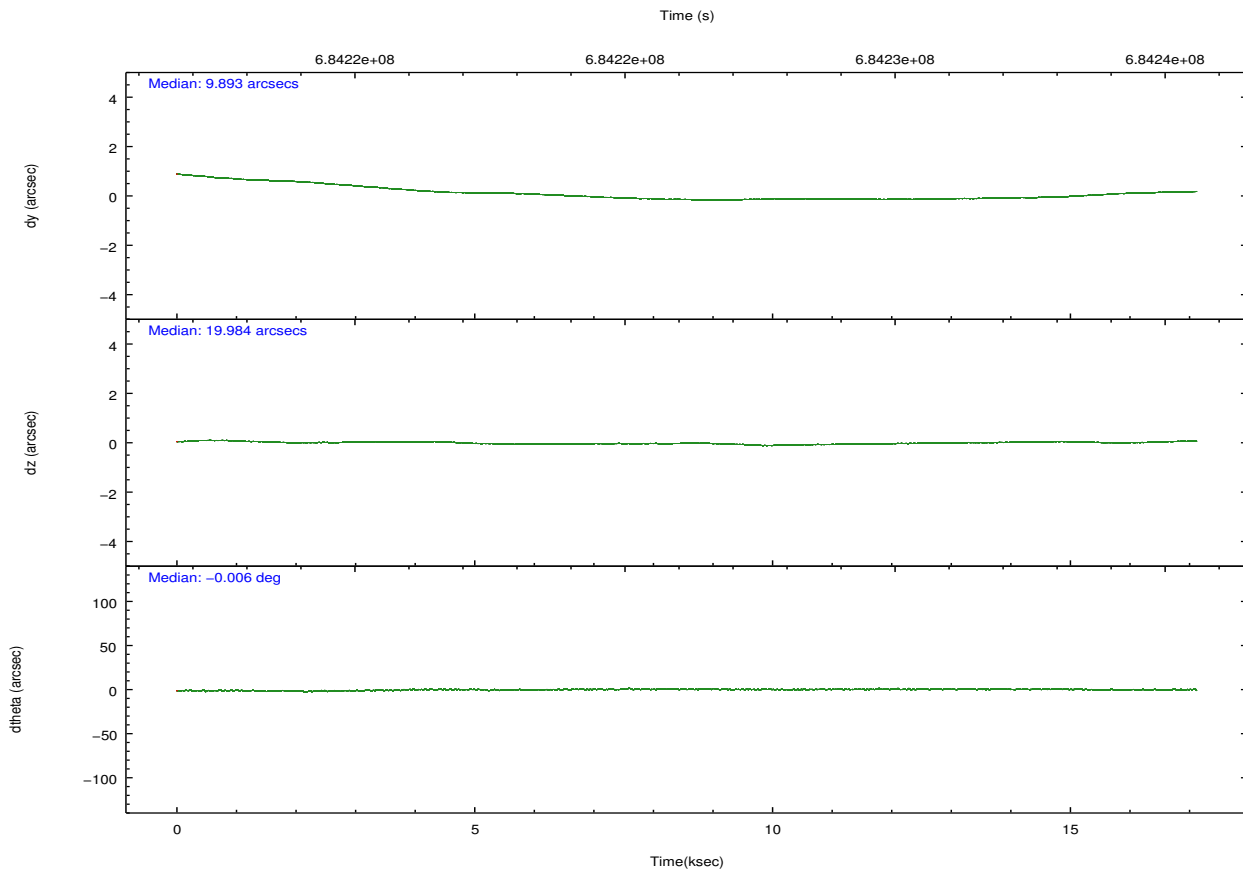
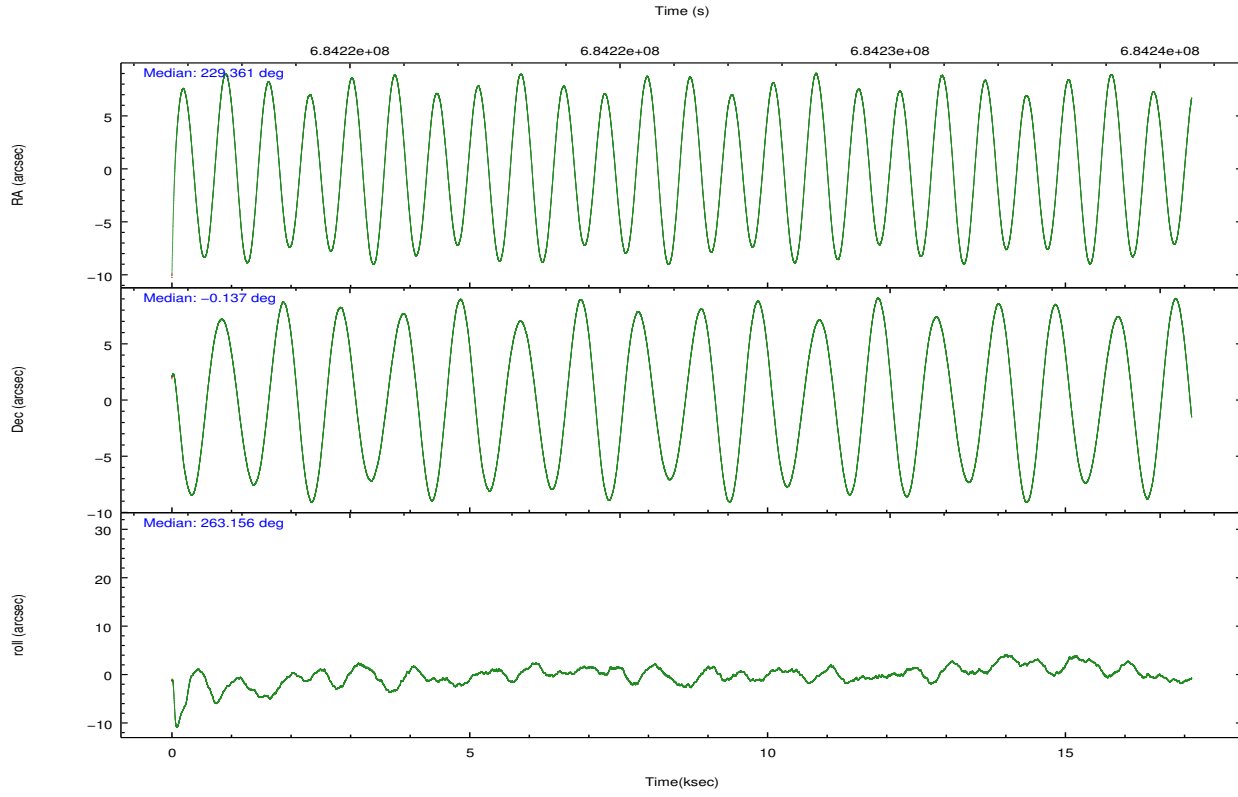
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	6045	5560	4880	5950	14054
	4%	4%	3%	3%	8%
grade 1 events	94	79	79	248	140
	0%	0%	0%	0%	0%
grade 2 events	3478	3018	3505	15315	11685
	2%	2%	2%	9%	6%
grade 3 events	1368	1419	1435	5643	4916
	1%	1%	1%	3%	2%
grade 4 events	1484	1428	1429	5631	4683
	1%	1%	1%	3%	2%
grade 5 events	4874	6018	6000	16846	9516
	3%	4%	4%	10%	5%
grade 6 events	2716	2878	3606	39901	13313
	2%	2%	2%	23%	7%
grade 7 events	112881	105434	113677	78189	115531
	84%	83%	84%	46%	66%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	229.349900	229.3610295136018	CCD I2 on	O2	Y
[deg] Pointing Dec	-0.111864	-0.1369467047557893	CCD I3 on	O3	Y
[deg] Pointing Roll	263.008510	263.1651632759598	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	684217703.184000	684216597.97708	CCD S5 on	N	N
Observation start date	2019-09-07T04:27:14	2019-09-07T04:09:57	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	684234703.184000	684235665.54072	On-chip summing requested	N	N
Observation end date	2019-09-07T09:10:34	2019-09-07T09:27:45	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





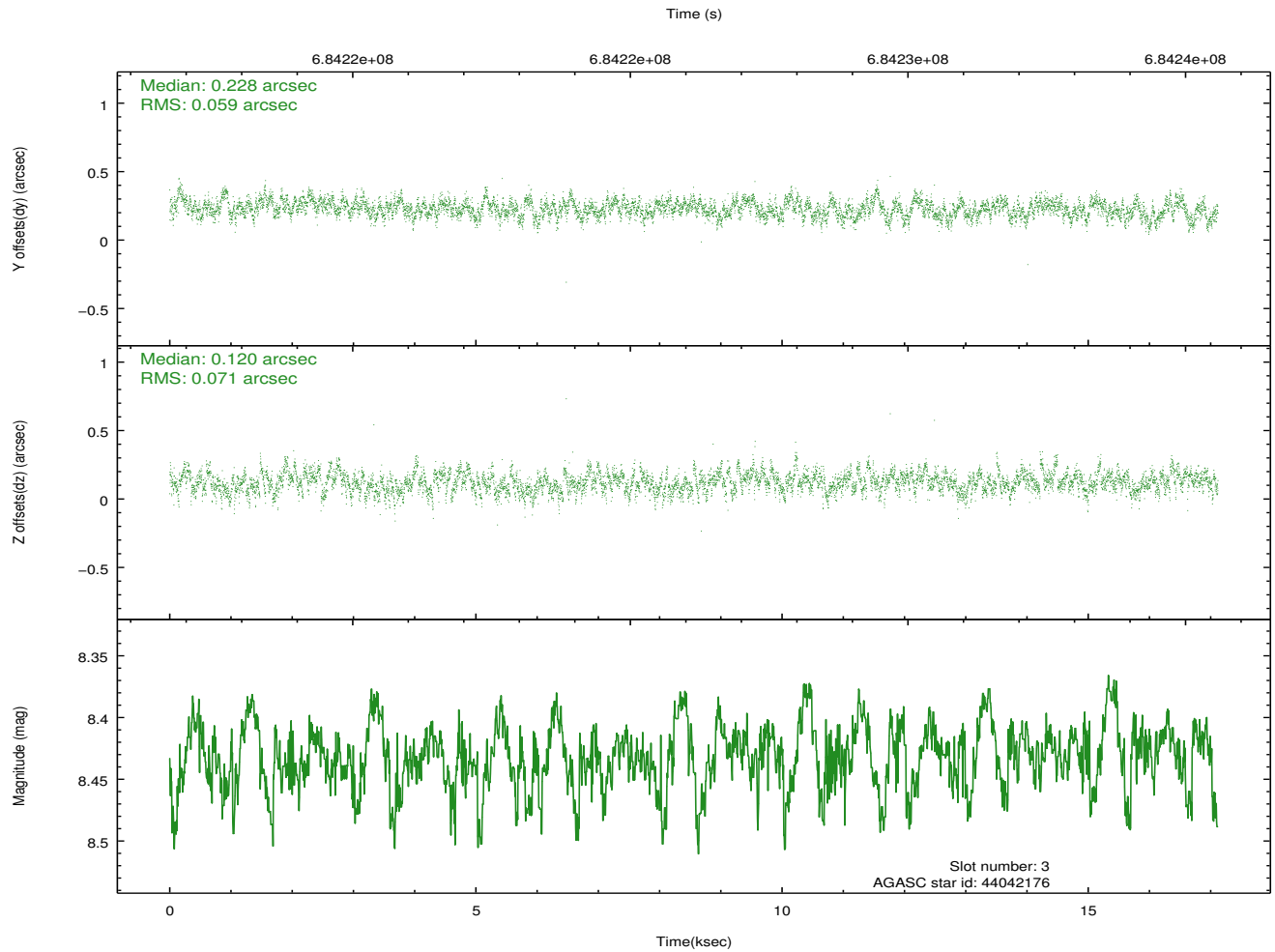
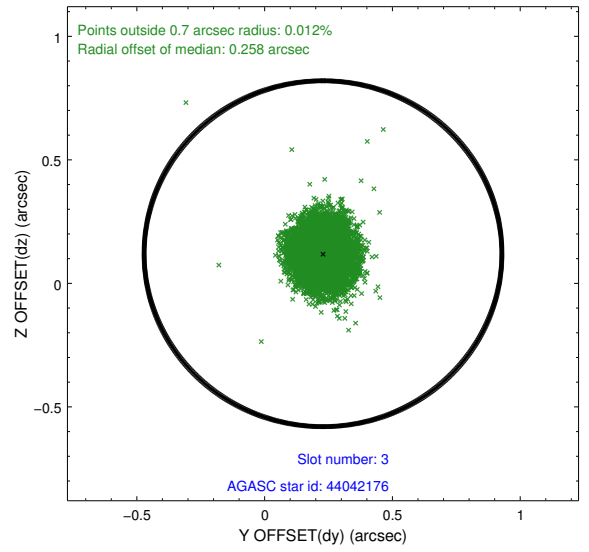
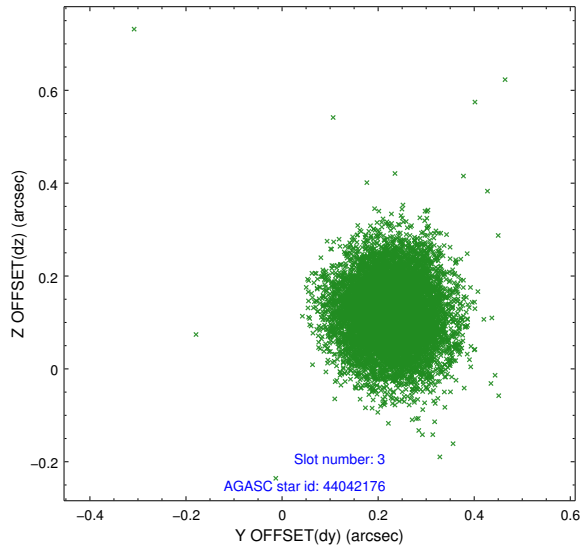
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-3	7.33	4174	1.000	-0.235	-0.200	0.009	0.015	0.000000	0.000000	50.20	-1870
1	FID		ACIS-S-4	7.18	4176	1.000	0.625	0.217	0.012	0.023	0.000000	0.000000	2151.15	167
2	FID		ACIS-S-5	7.17	4176	1.000	-0.418	-0.007	0.010	0.019	0.000000	0.000000	-1815.78	160
3	GUIDE	used	44042176	8.43	8346	1.000	0.228	0.120	0.098	0.158	228.857428	0.157131	-744.67	-1877
4	GUIDE	used	655492976	9.07	8341	1.000	0.077	0.251	0.169	0.272	228.732304	-0.140959	375.40	-2193
5	GUIDE	used	655626240	9.02	8343	1.000	-0.226	0.036	0.153	0.232	229.662640	-0.167783	63.34	1141
6	GUIDE	used	655626912	8.69	8347	1.000	0.029	0.037	0.119	0.192	229.071624	-0.169354	328.04	-969
7	GUIDE	used	655627448	7.72	8346	1.000	-0.106	-0.429	0.097	0.151	229.614962	-0.786210	2295.21	1242

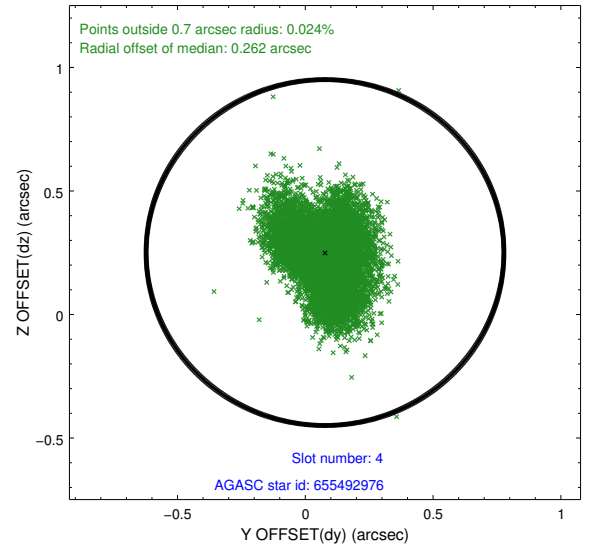
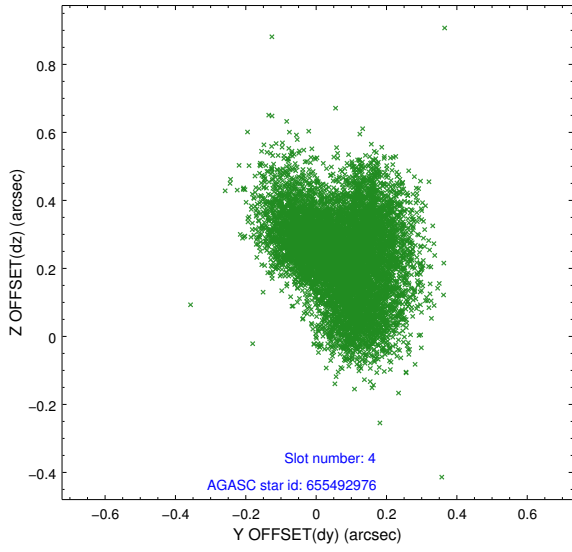
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2.4 Star Slots

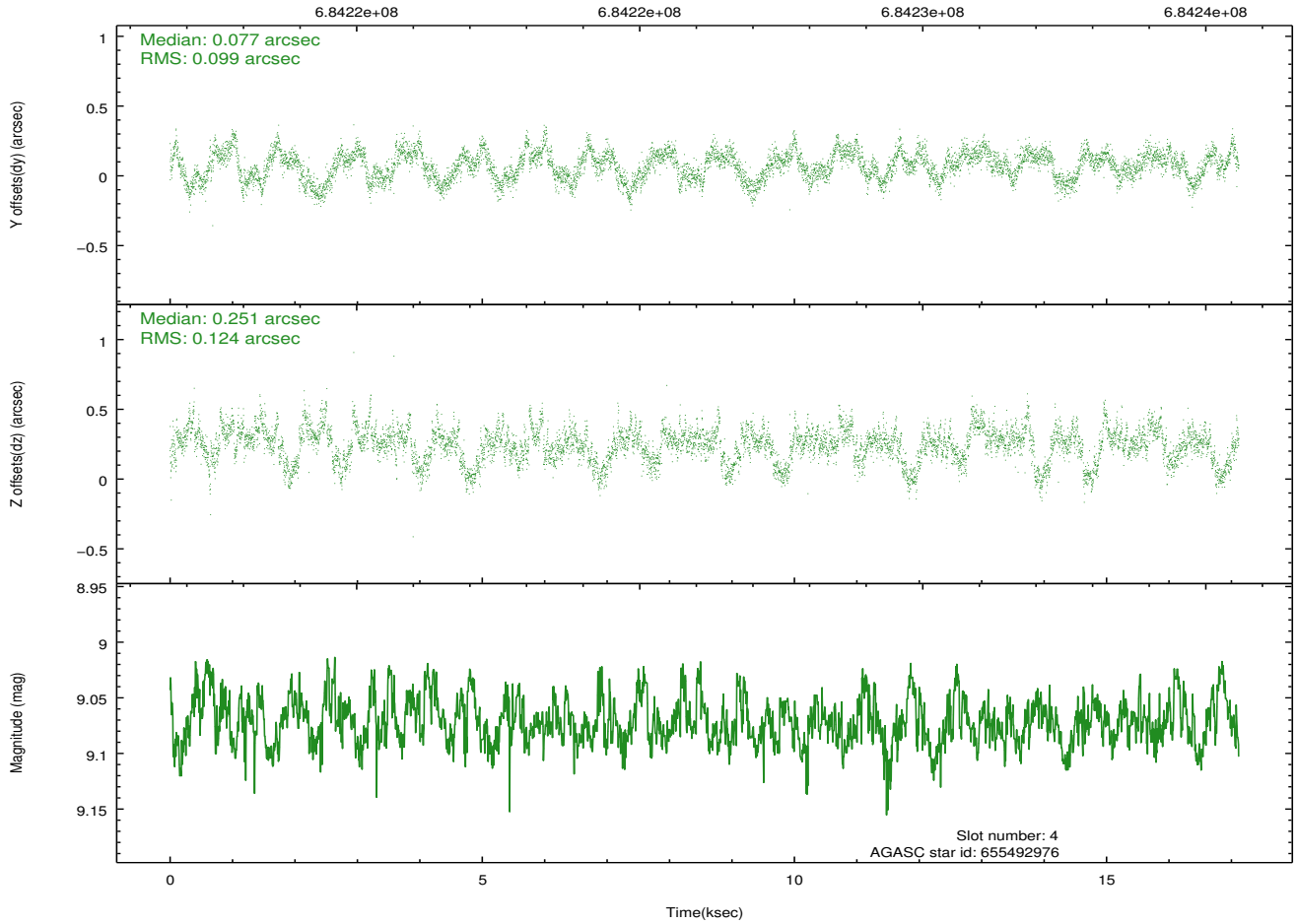
2.4.1 Slot 3



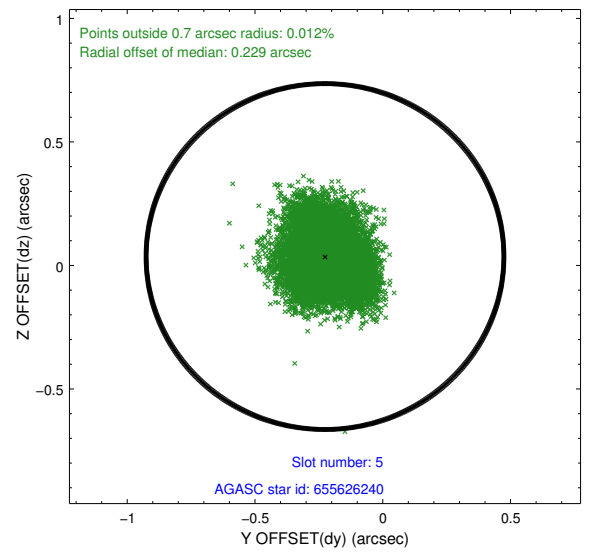
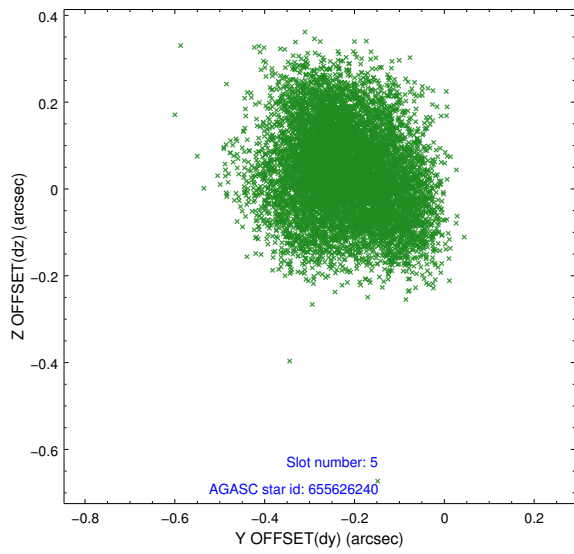
2.4.2 Slot 4



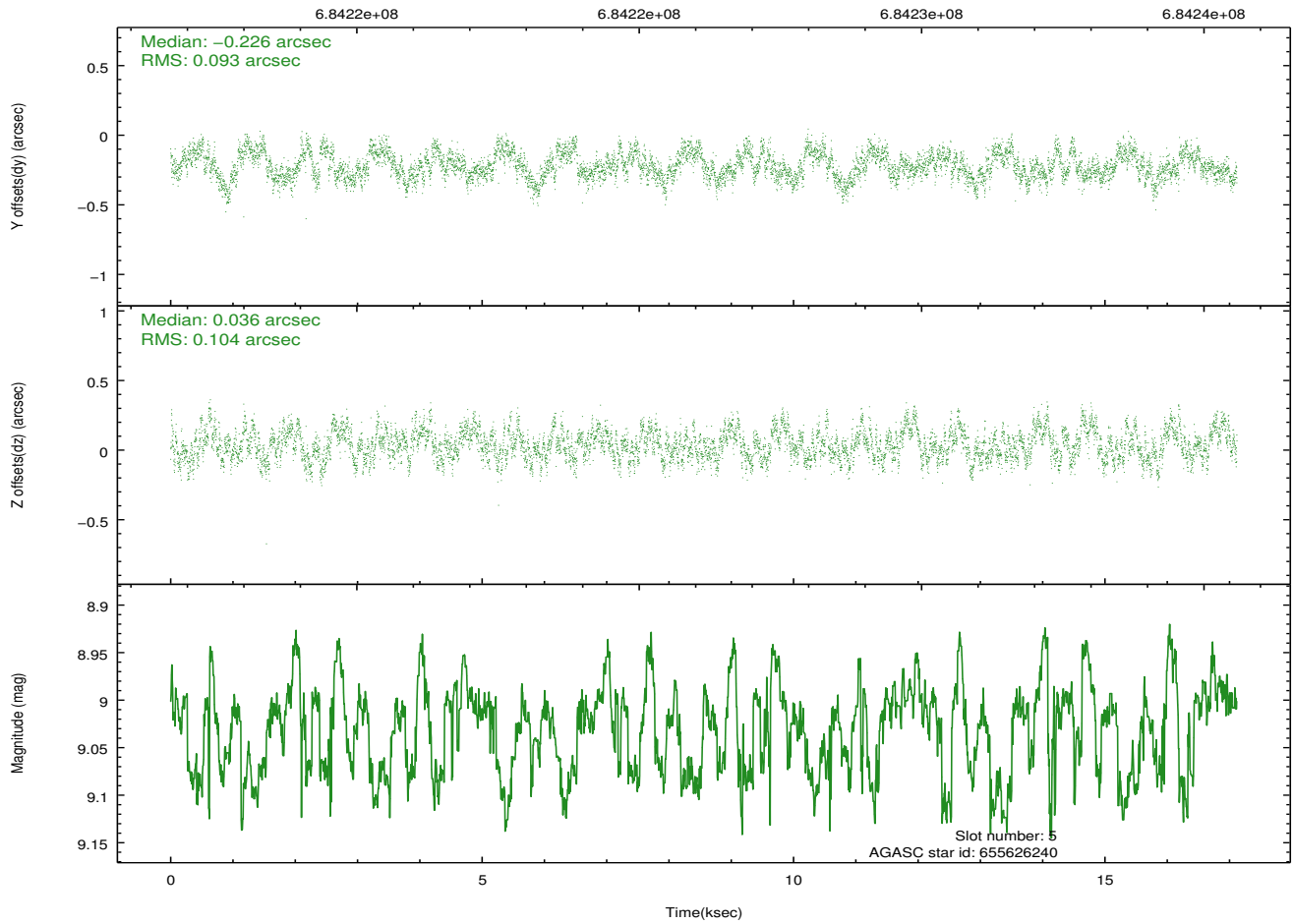
Time (s)



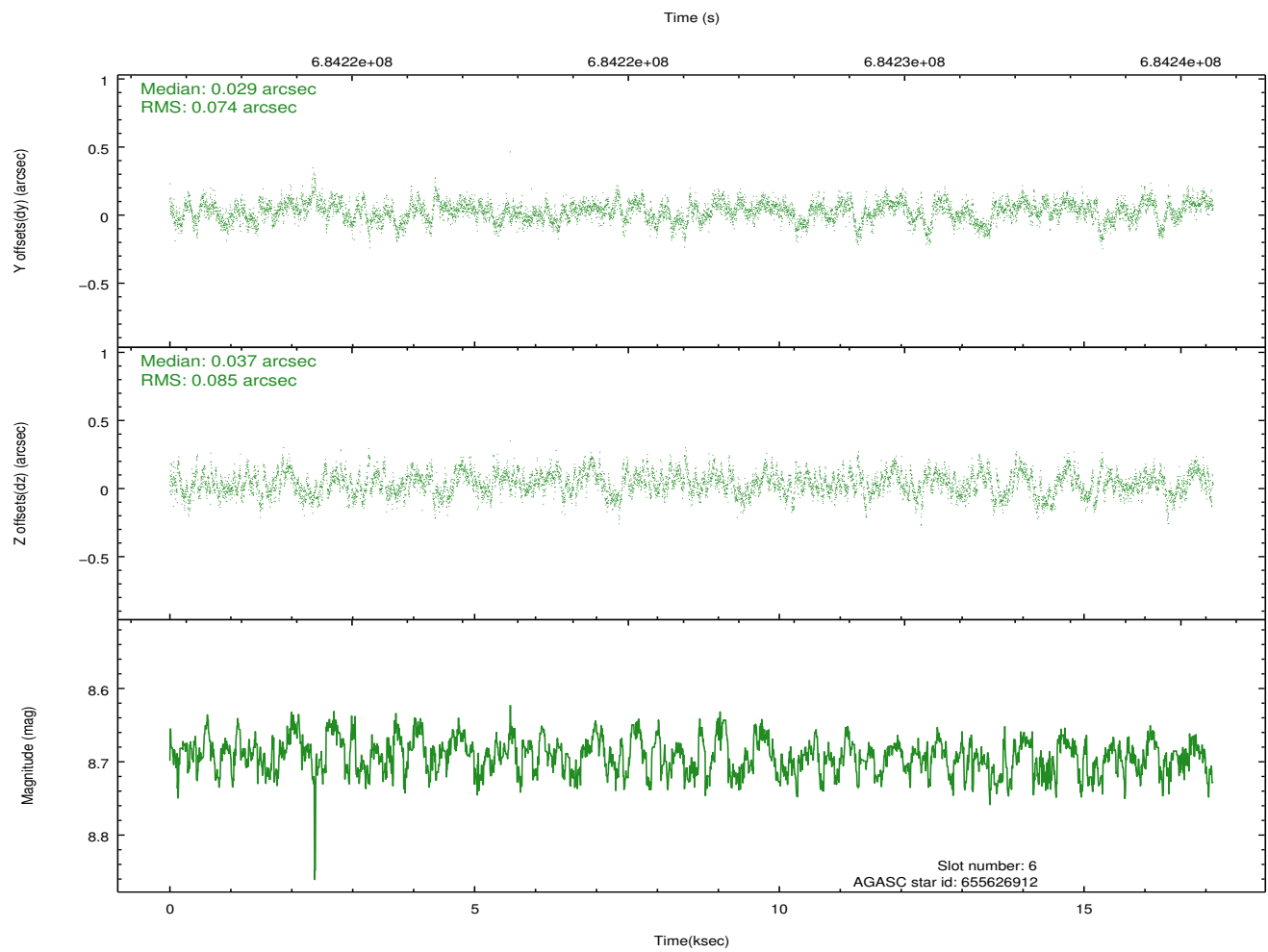
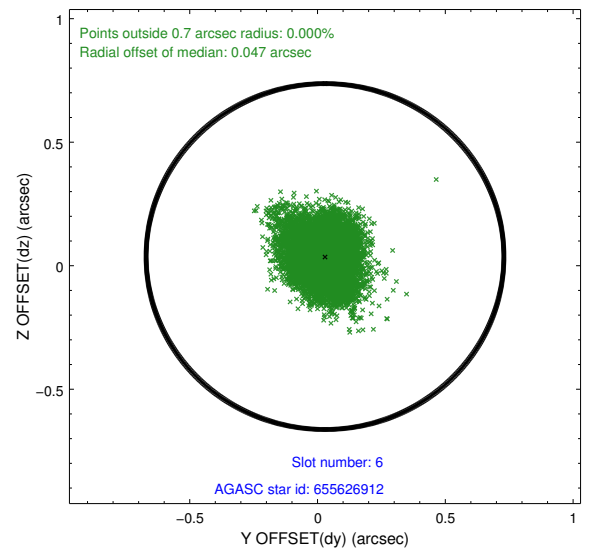
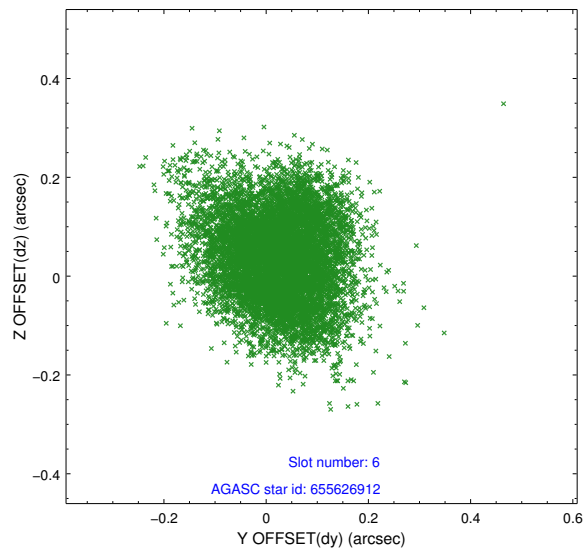
2.4.3 Slot 5



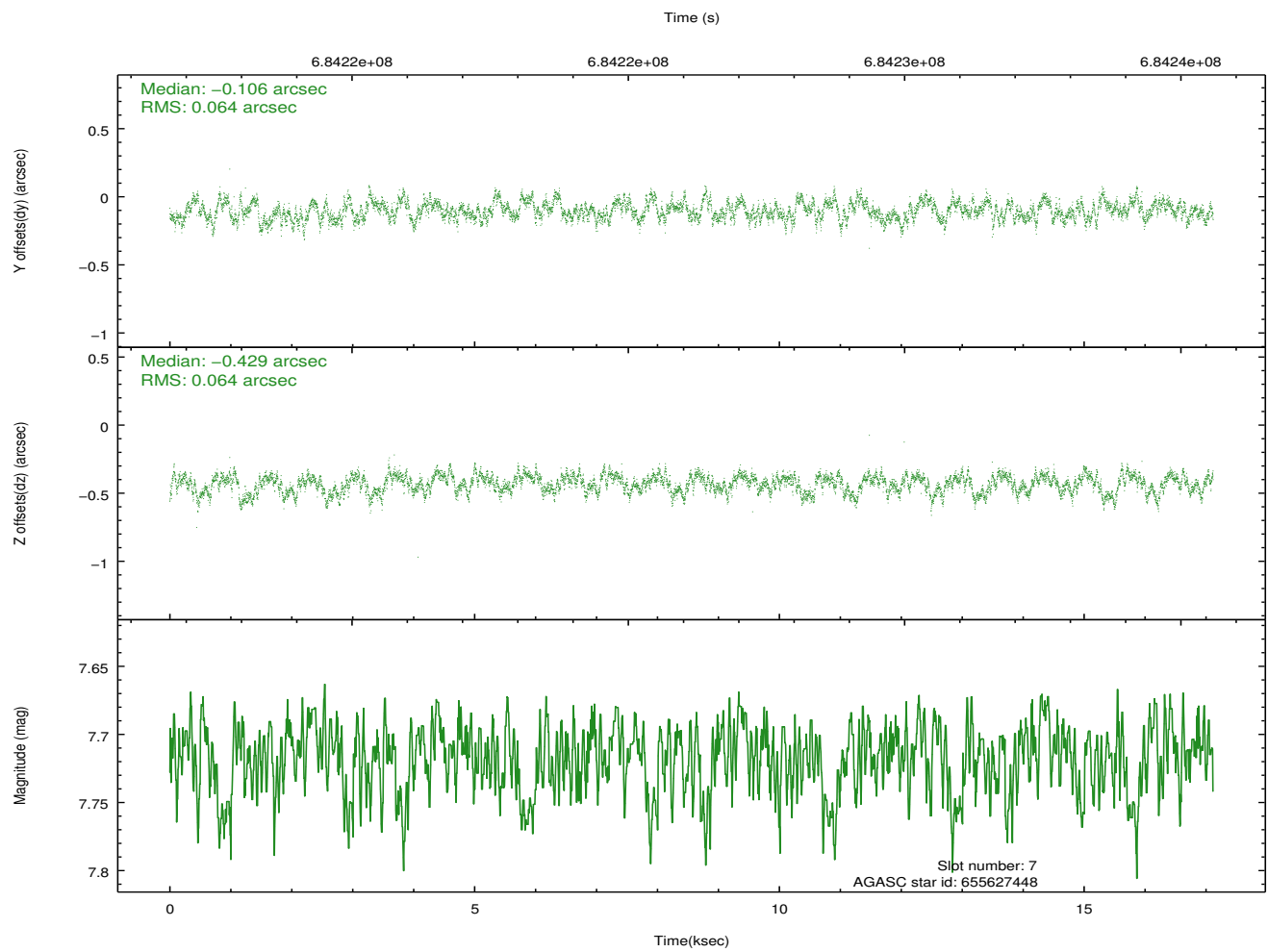
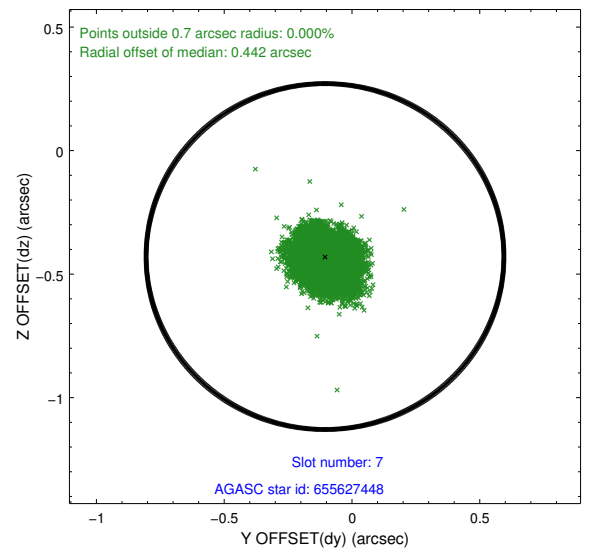
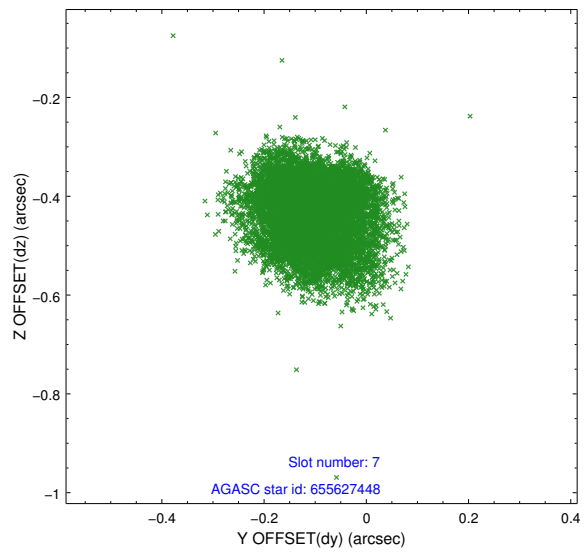
Time (s)



2.4.4 Slot 6

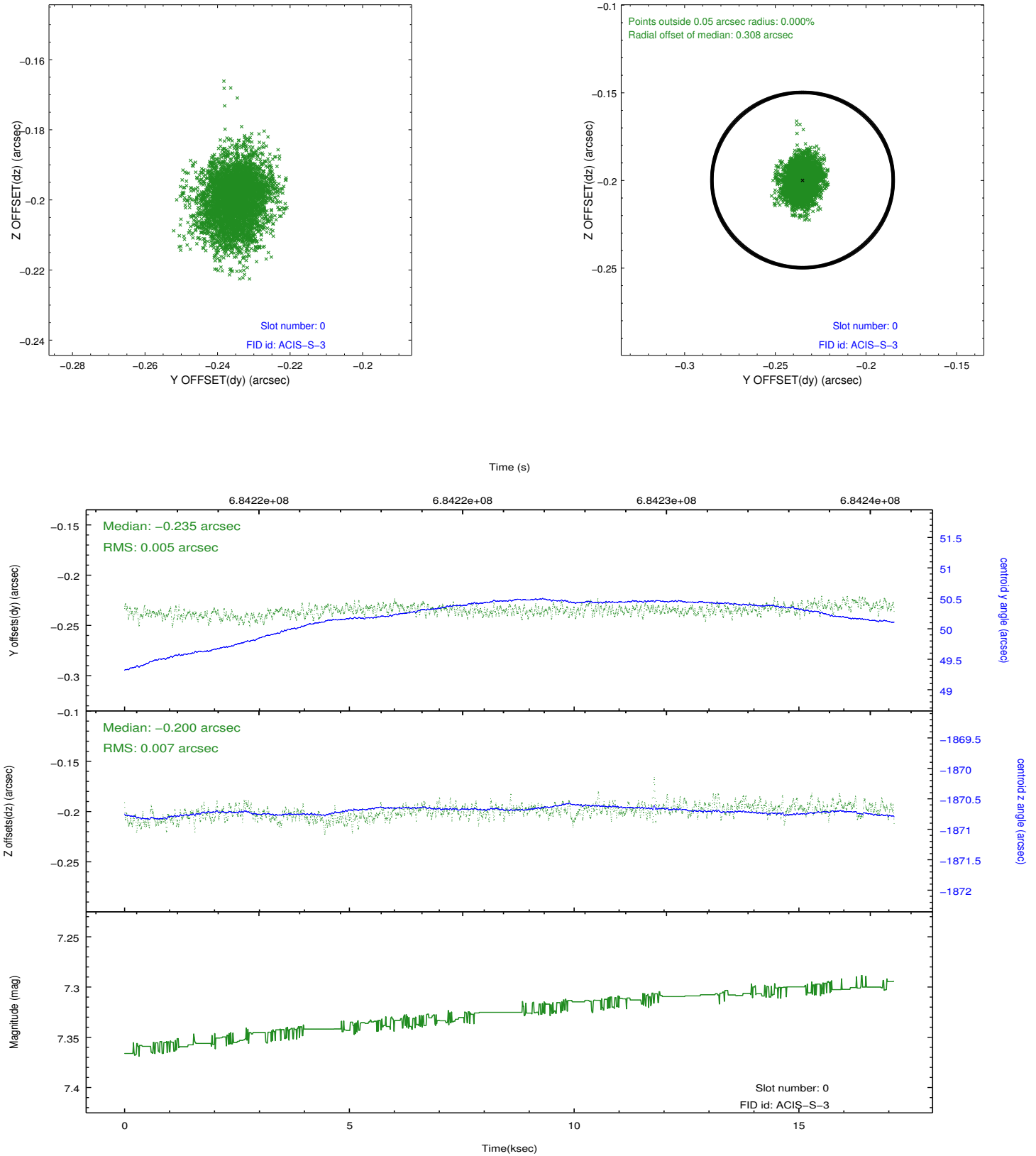


2.4.5 Slot 7

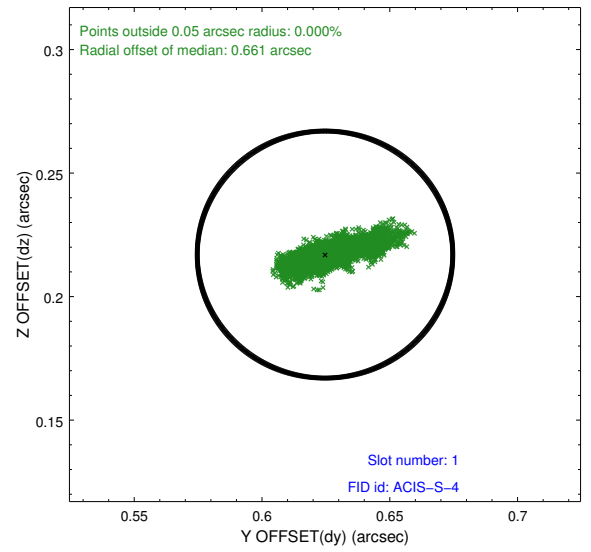
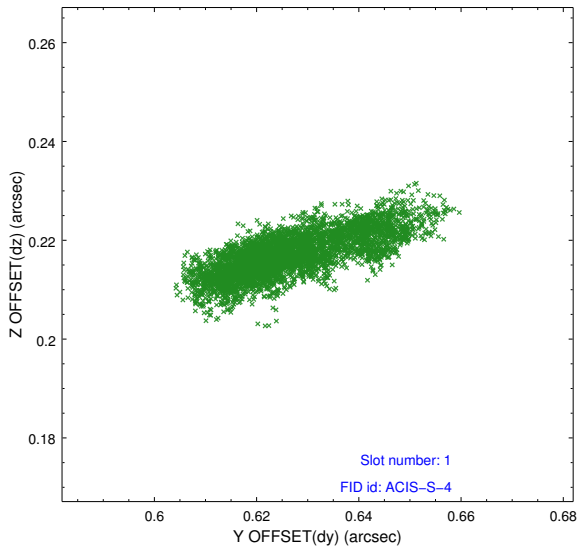


2.5 FID Slots

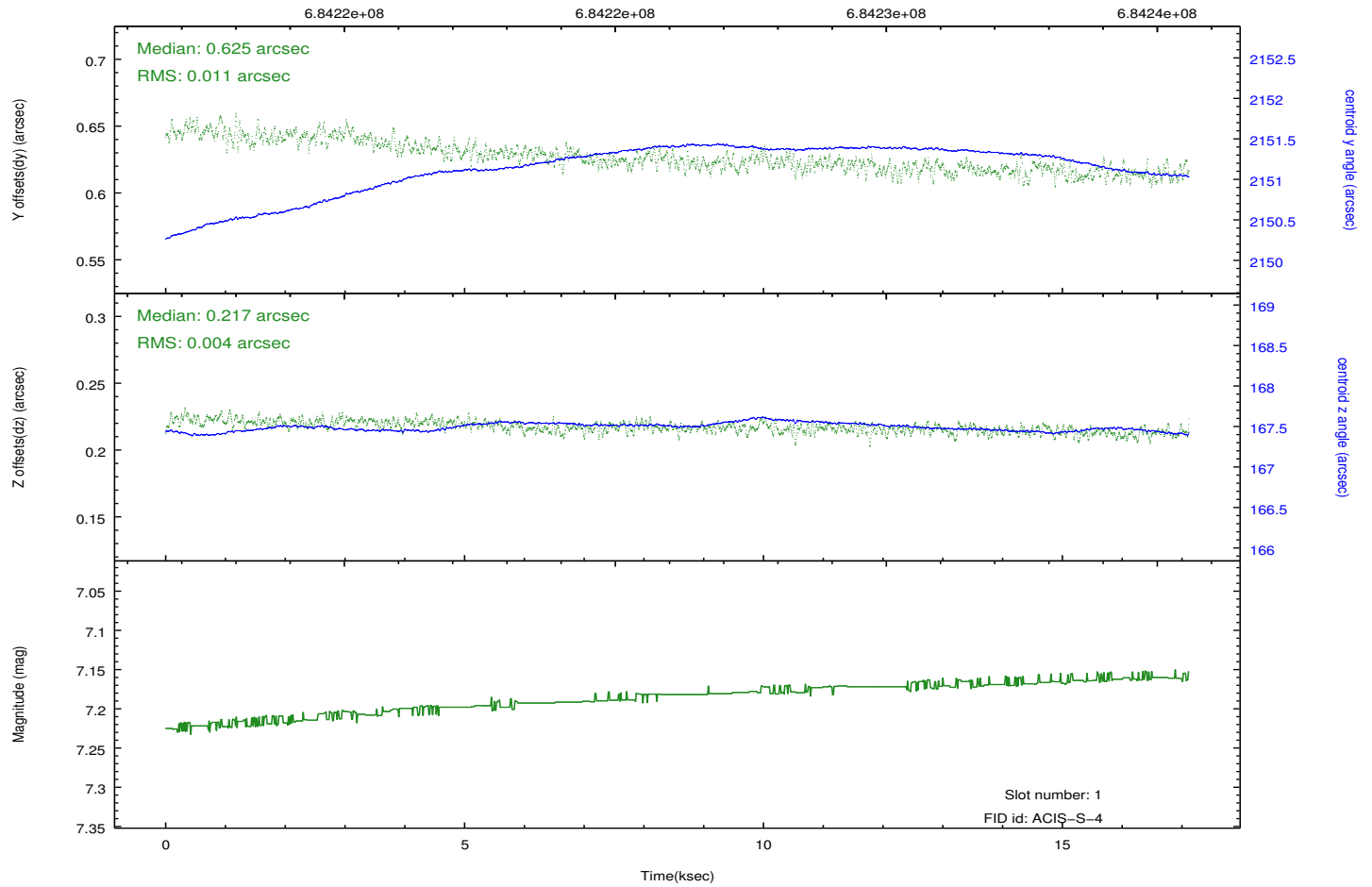
2.5.1 Slot 0



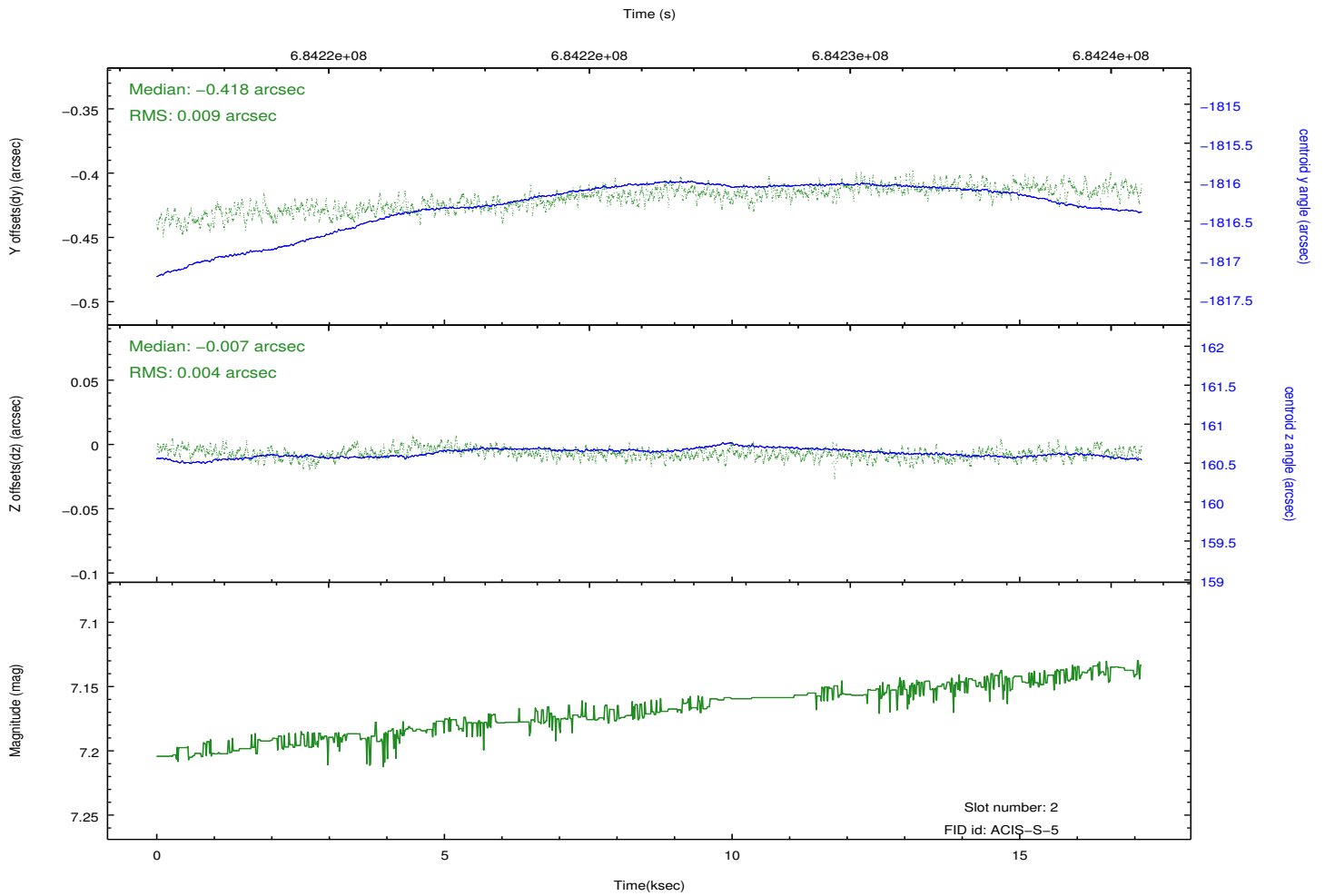
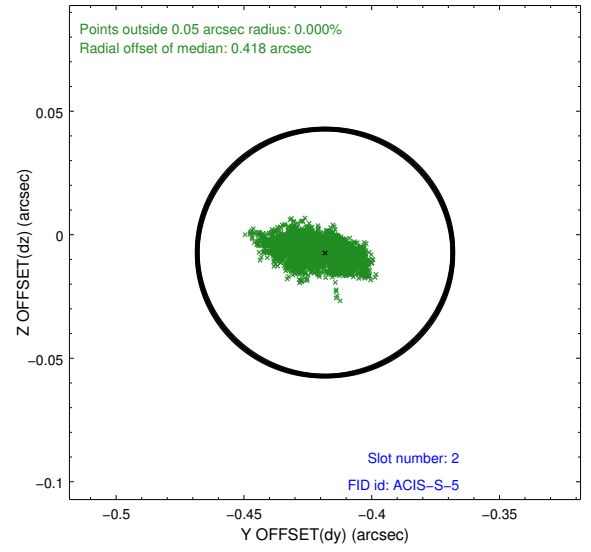
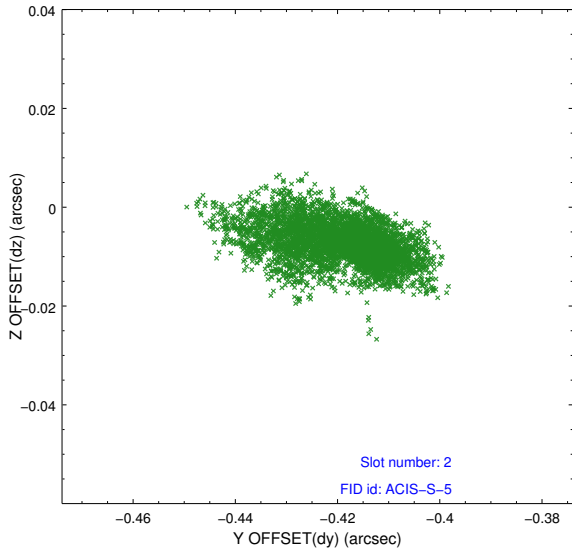
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2019.09.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	17.053100131273

A.2 Comments

One optional chip was dropped.