

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20295 - L2 Version 2
Chandra X-Ray Center

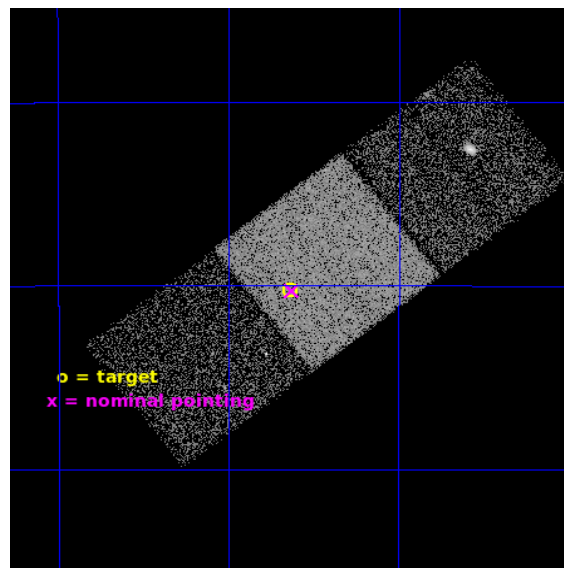
L2 Processing Date : Oct 26 2020

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1 Front

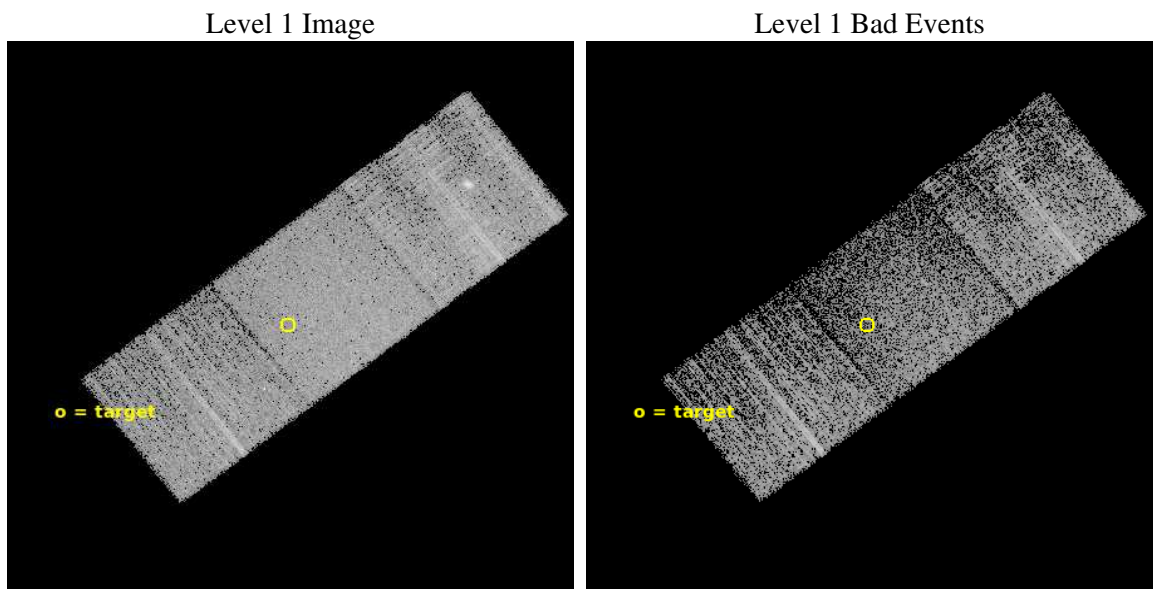
seq_num	502994	Sequence number
obs_id	20295	Observation id
title	Uncovering a new population of soft gamma-ray pulsars with Chandra	
observer	Pablo Saz Parkinson	Principal investigator
object	3FGL J1616.8-5343	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	244.158917	Observer's specified target RA [deg]
dec_targ	-53.670528	Observer's specified target Dec [deg]
ra_nom	244.15669684108	Nominal RA [deg]
dec_nom	-53.671529456341	Nominal Dec [deg]
roll_nom	322.15530348667	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8112.4746086597	Sum of GTIs [s]
livetime	8006.4791555807	Livetime [s]
ontime6	8112.433568716	Sum of GTIs [s]
ontime7	8112.4746086597	Sum of GTIs [s]
ontime8	8112.3925286531	Sum of GTIs [s]
l2events	49784	Number of level 2 events



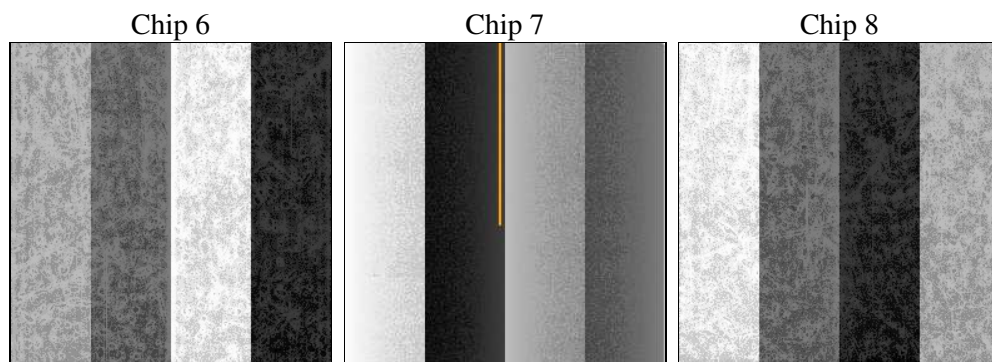
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	8112.4746086597	Sum of GTIs [s]
caldsver	4.9.3	 	ontime6	8112.433568716	Sum of GTIs [s]
date	2020-10-26T08:17:09	Date and time of file creation	ontime7	8112.4746086597	Sum of GTIs [s]
revision	2	Processing version of data	ontime8	8112.3925286531	Sum of GTIs [s]
			l1events	227822	Number of level 1 events

2.1.4 Events

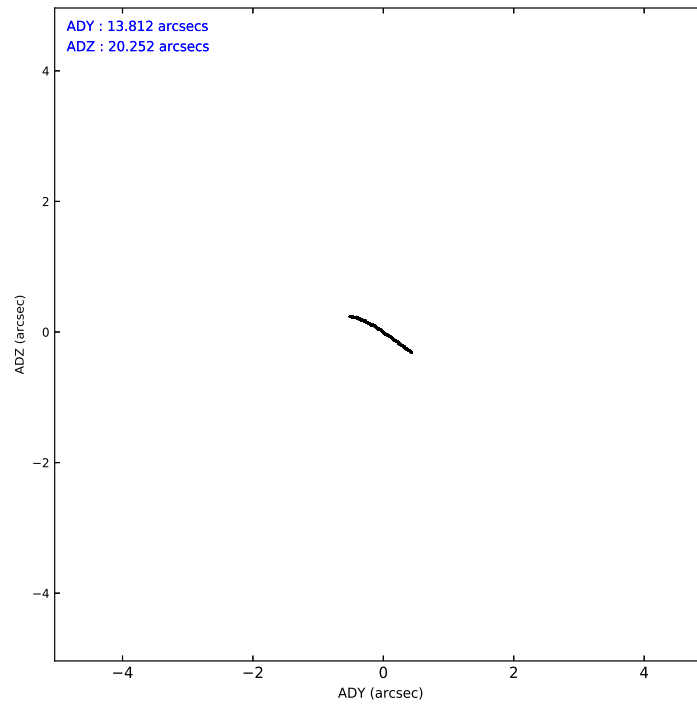
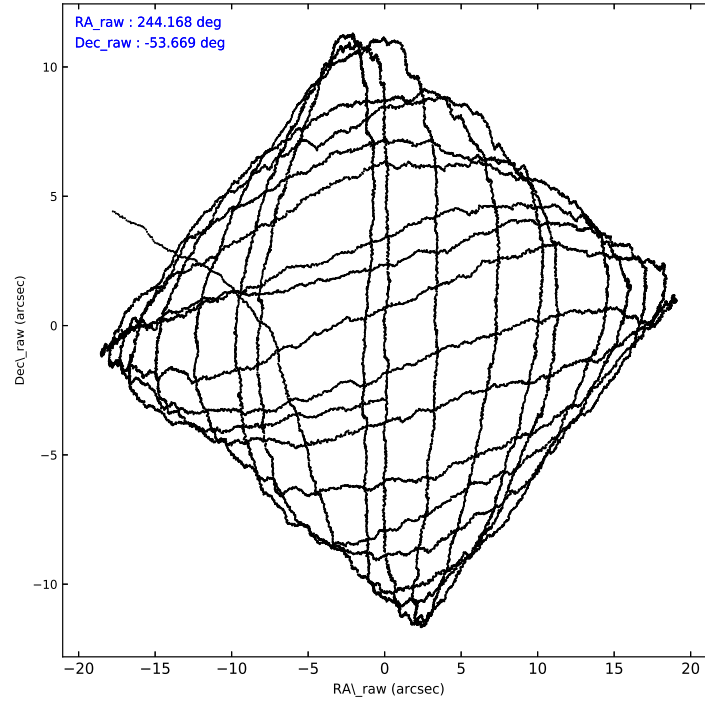
	ccd 6	ccd 7	ccd 8
level 1 events	62548	80656	84618
rejected events	54842	45083	59940
rejected %	87%	55%	70%

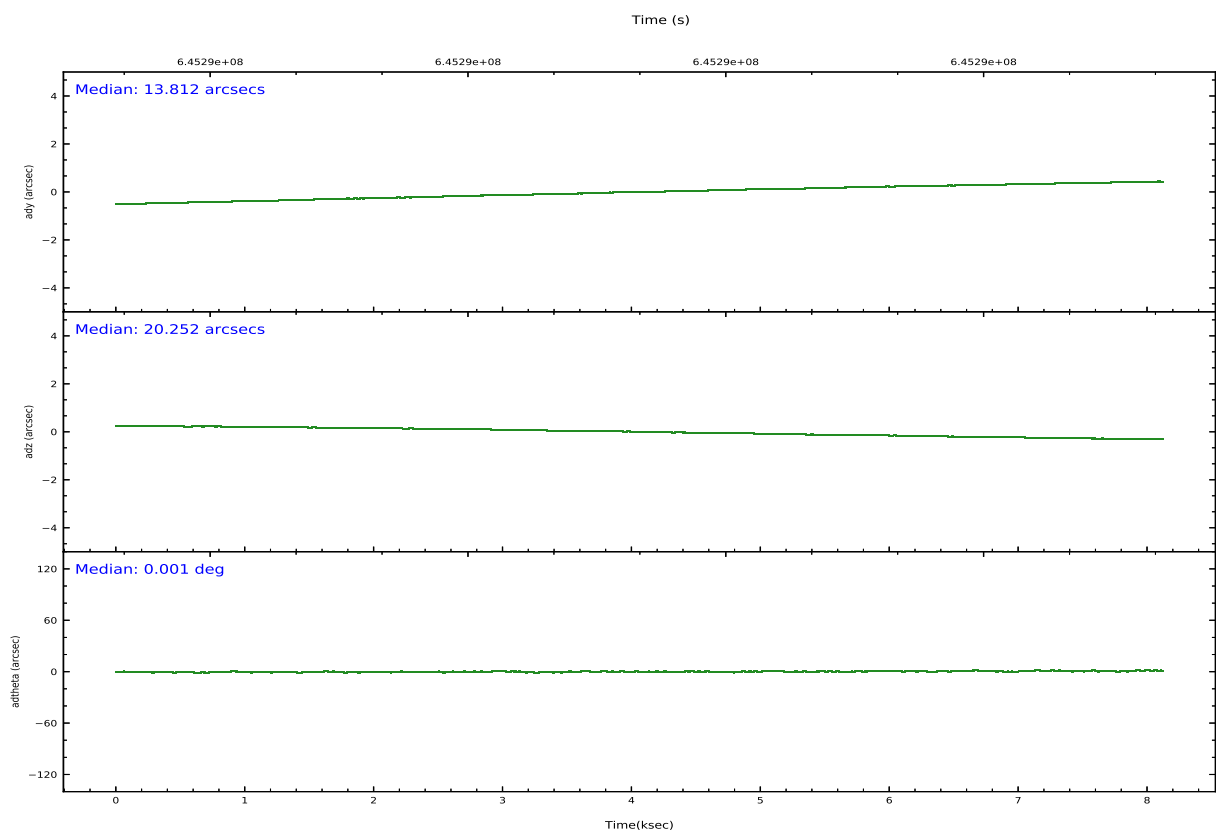
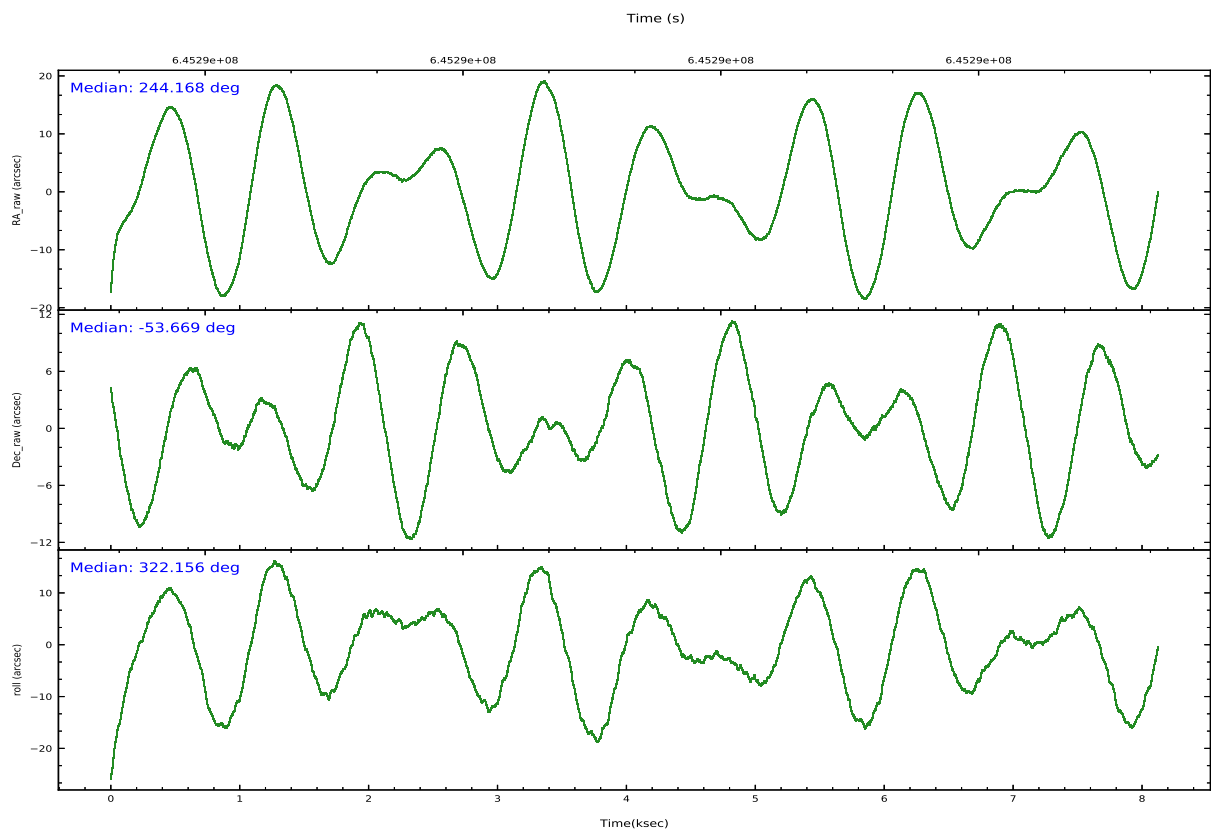
	ccd 6	ccd 7	ccd 8
grade 0 events	2875	3199	8000
	4%	3%	9%
grade 1 events	45	135	84
	0%	0%	0%
grade 2 events	1726	7631	5846
	2%	9%	6%
grade 3 events	697	2894	2448
	1%	3%	2%
grade 4 events	721	2911	2269
	1%	3%	2%
grade 5 events	2975	8225	4494
	4%	10%	5%
grade 6 events	1691	18951	6120
	2%	23%	7%
grade 7 events	51818	36710	55357
	82%	45%	65%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-678	ACIS-678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	244.122191	244.15669684108	Subarray requested	NONE	NONE
[deg] Pointing Dec	-53.665985	-53.671529456341	Alternating exposures requested	N	N
[deg] Pointing Roll	321.970420	322.15530348667	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	645287393.184000	645285931.68576			
Observation start date	2018-06-13T14:28:44	2018-06-13T14:05:31			
[s] Observation end time (MET)	645295393.184000	645296683.4239			
Observation end date	2018-06-13T16:42:04	2018-06-13T17:04:43			
Read mode	TIMED	TIMED			

2.3 Aspect



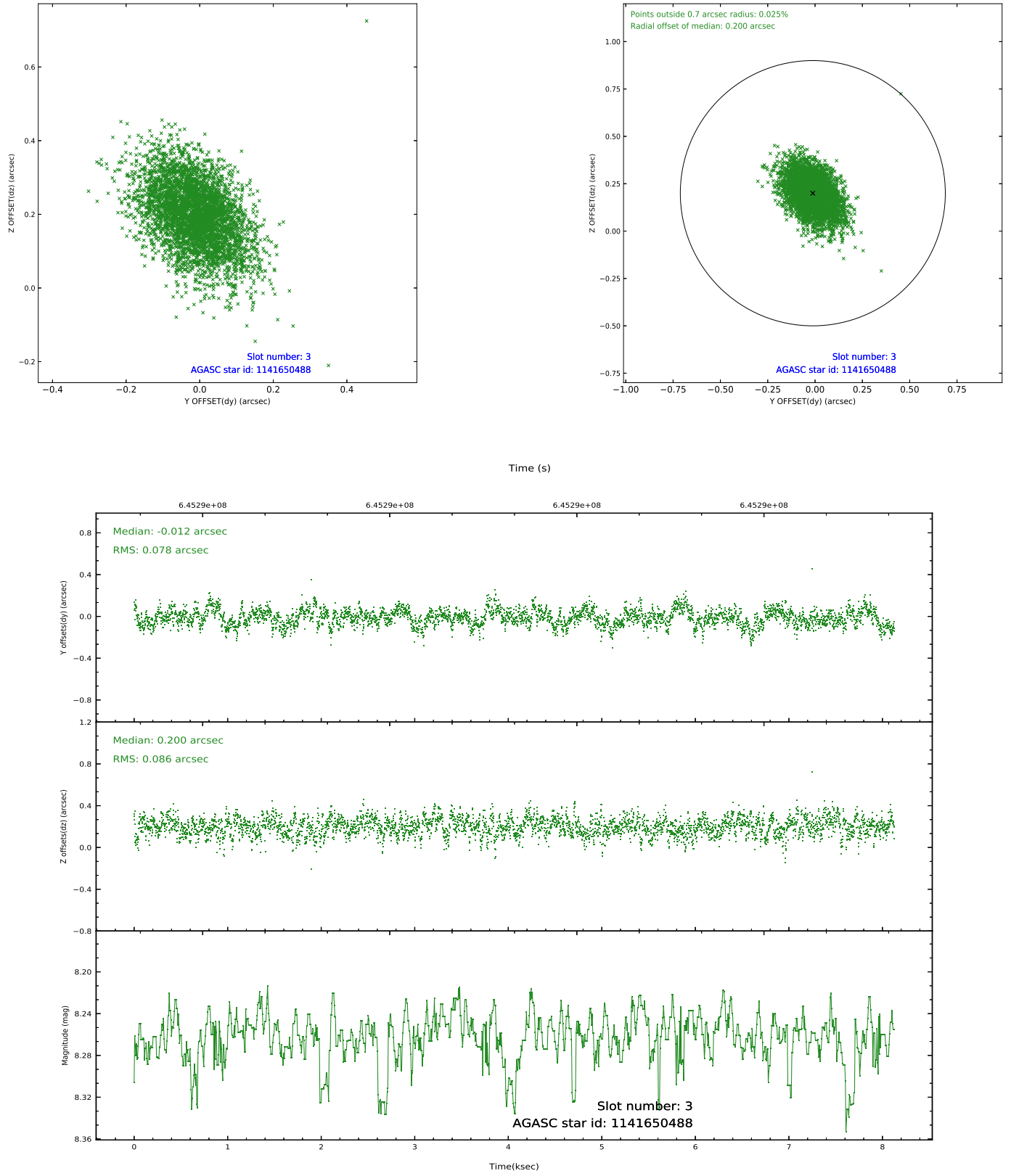


Slot Statistics

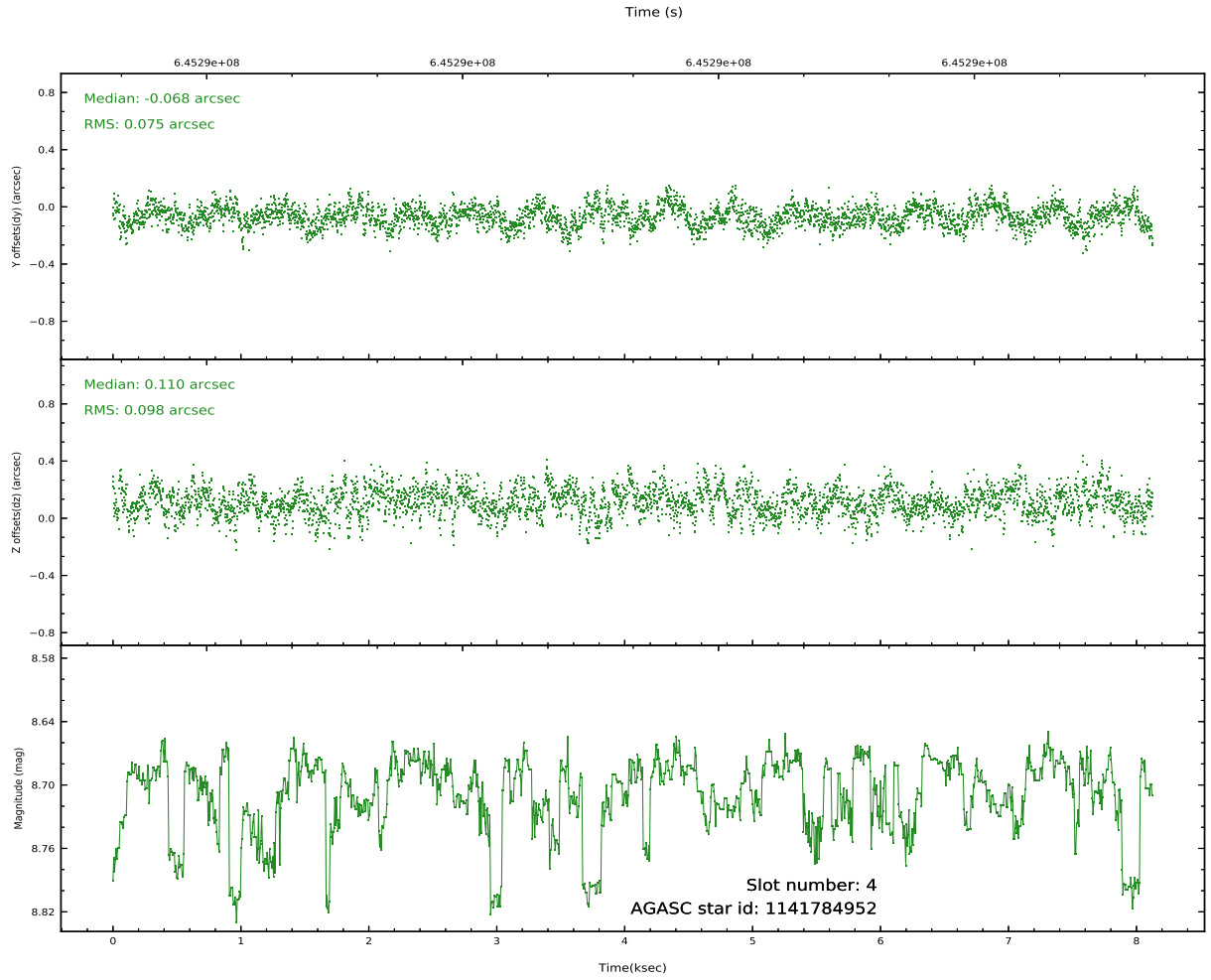
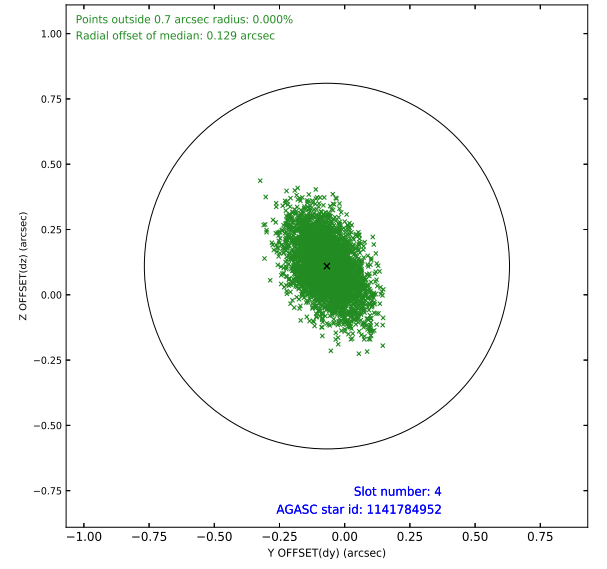
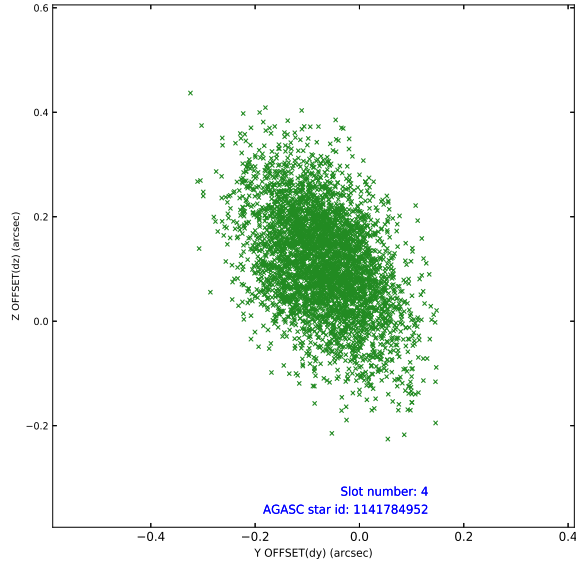
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	6.97	1982	1.000	0.071	-0.054	0.016	0.025	0.000000	0.000000	-766.82	-1741
1	FID		ACIS-S-4	7.09	1982	1.000	0.153	-0.020	0.015	0.028	0.000000	0.000000	2146.39	165
2	FID		ACIS-S-5	7.08	1983	1.000	-0.255	0.082	0.009	0.015	0.000000	0.000000	-1818.94	160
3	GUIDE	used	1141650488	8.26	3961	1.000	-0.012	0.200	0.122	0.204	243.134455	-53.514455	-1991.95	-884
4	GUIDE	used	1141784952	8.70	3963	1.000	-0.068	0.110	0.126	0.222	244.317404	-52.951543	-1251.23	2286
5	GUIDE	used	1141783328	8.66	3959	1.000	-0.166	-0.092	0.169	0.275	245.189578	-53.538762	1526.83	1755
6	GUIDE	used	1142300008	8.55	3963	1.000	0.034	-0.085	0.136	0.222	243.989828	-54.476515	1581.08	-2468
7	GUIDE	used	1142294712	8.67	3958	1.000	0.216	-0.138	0.164	0.278	244.045940	-54.475260	1670.73	-2393

2.4 Star Slots

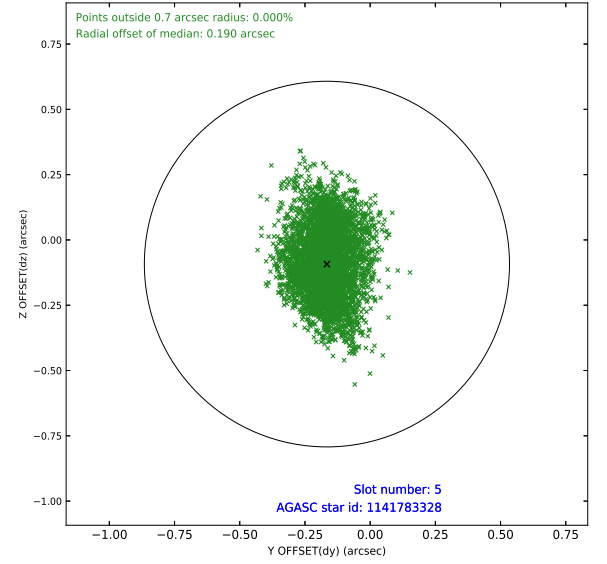
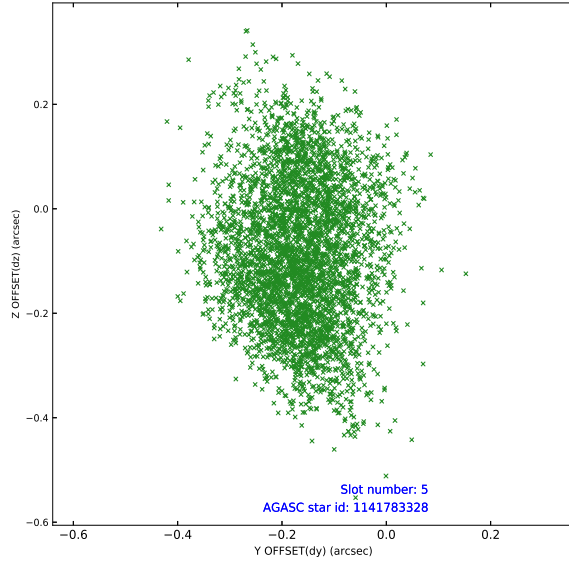
2.4.1 Slot 3



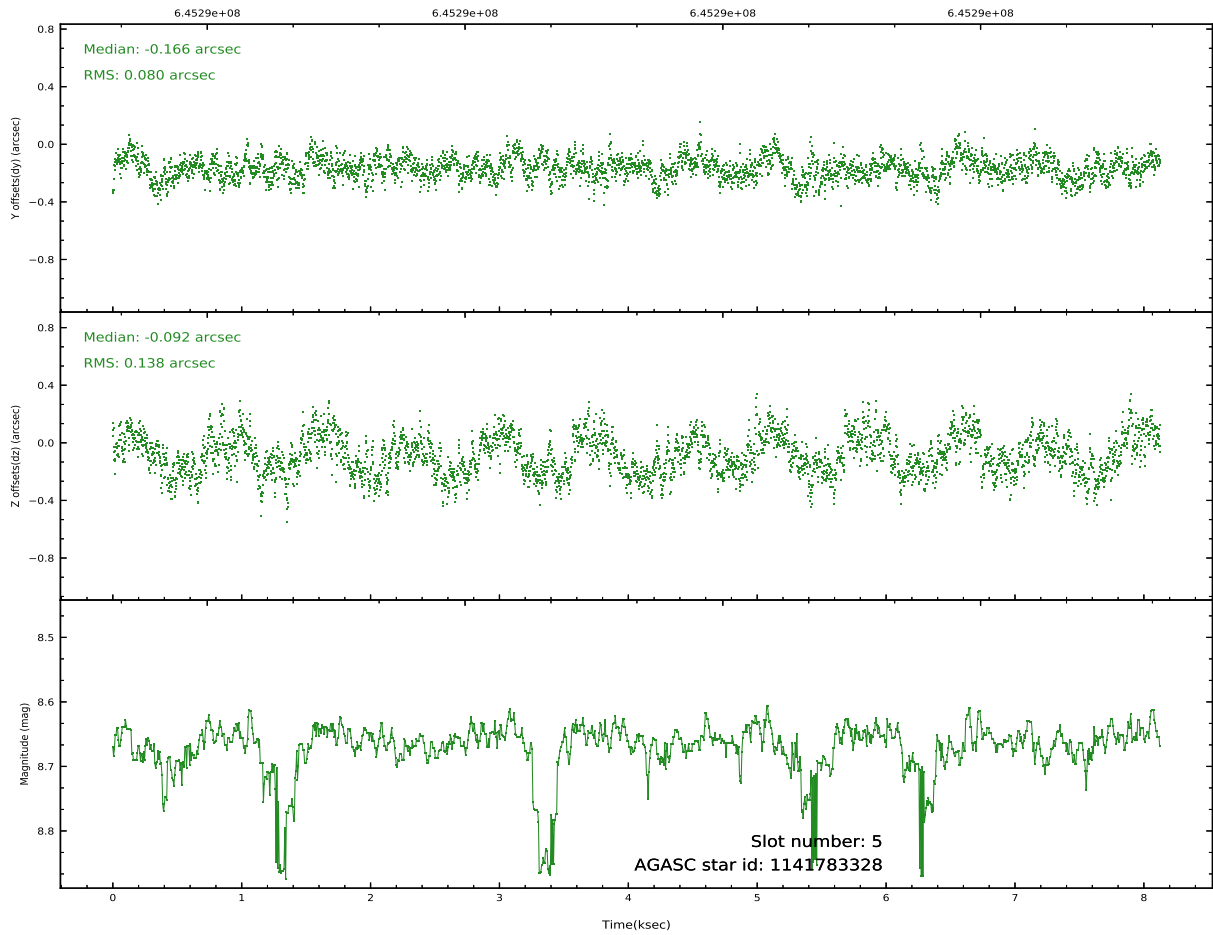
2.4.2 Slot 4



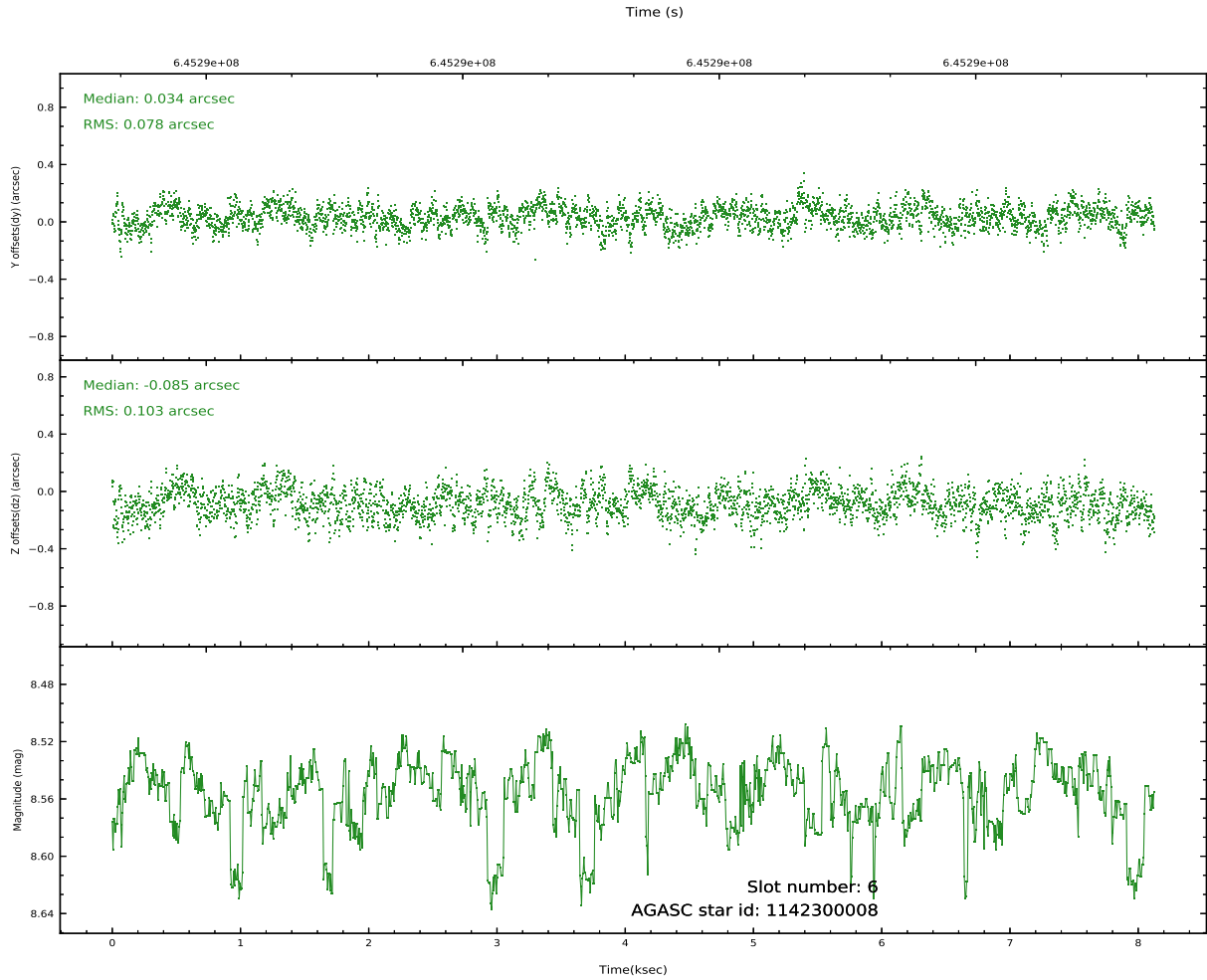
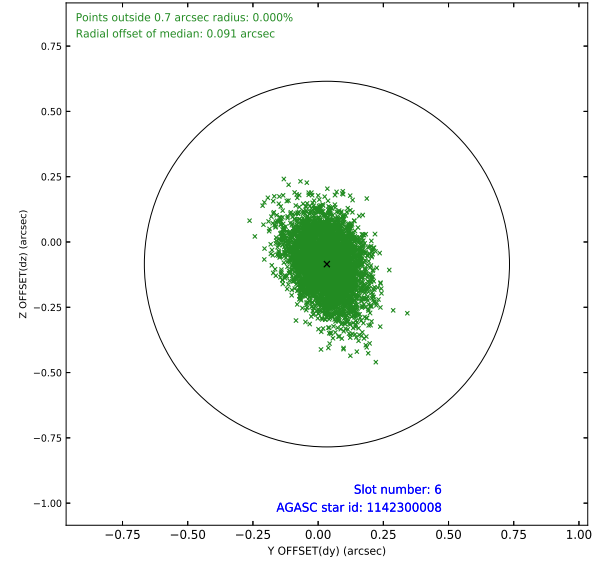
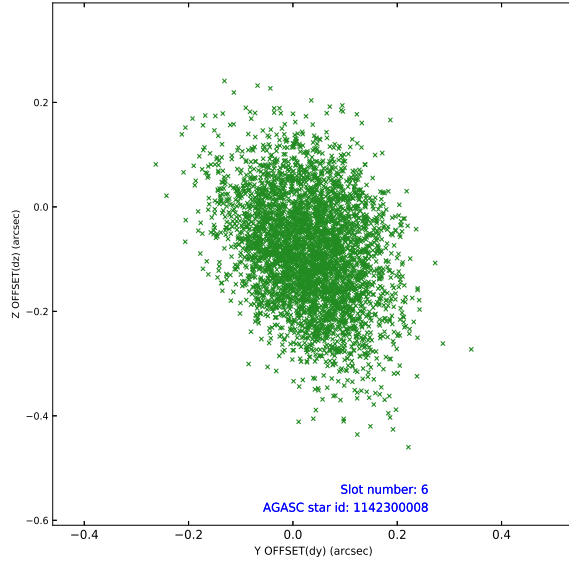
2.4.3 Slot 5



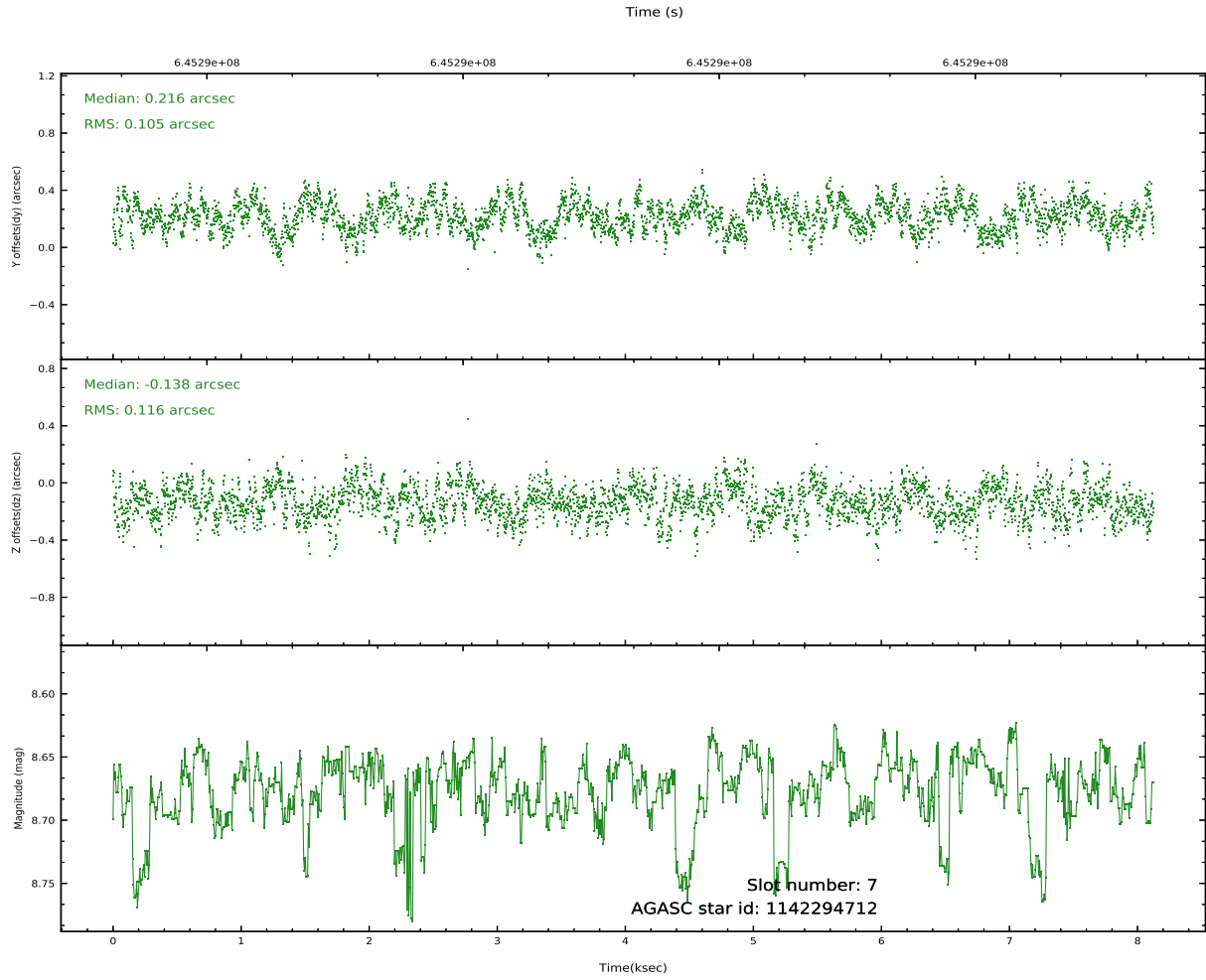
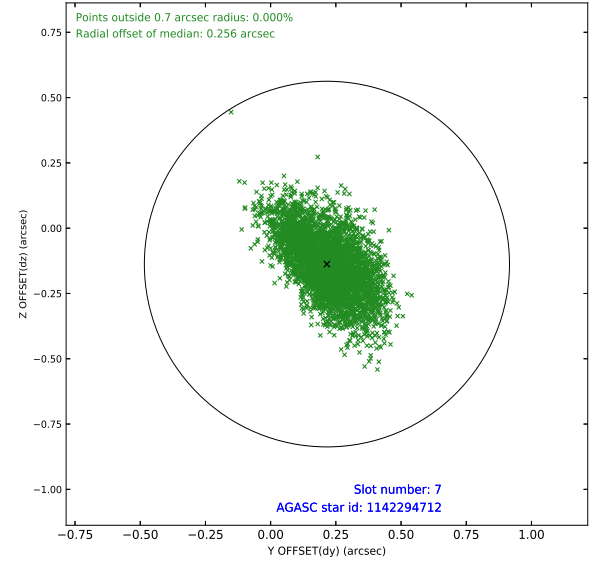
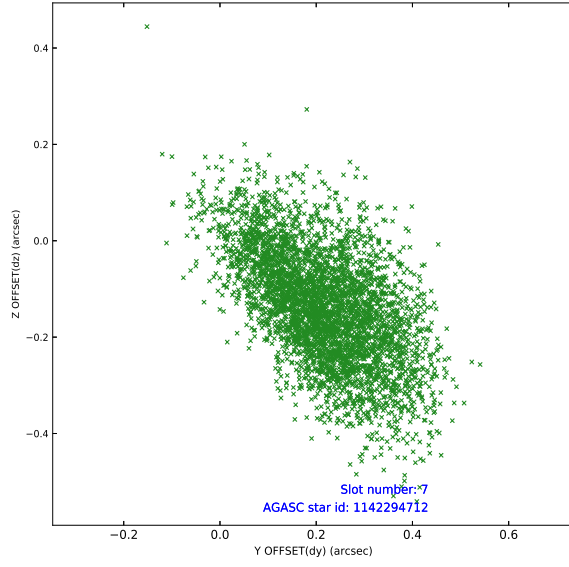
Time (s)



2.4.4 Slot 6

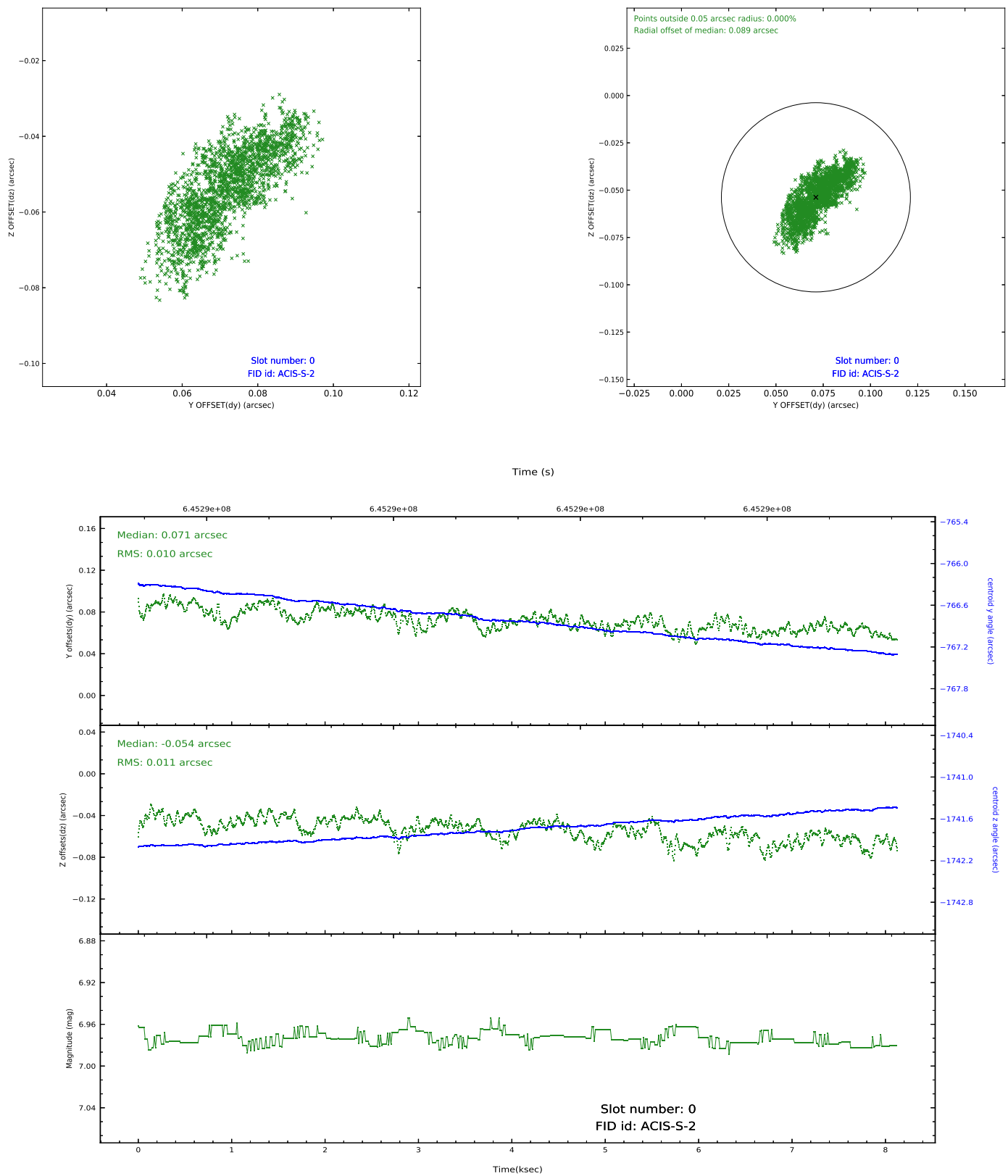


2.4.5 Slot 7

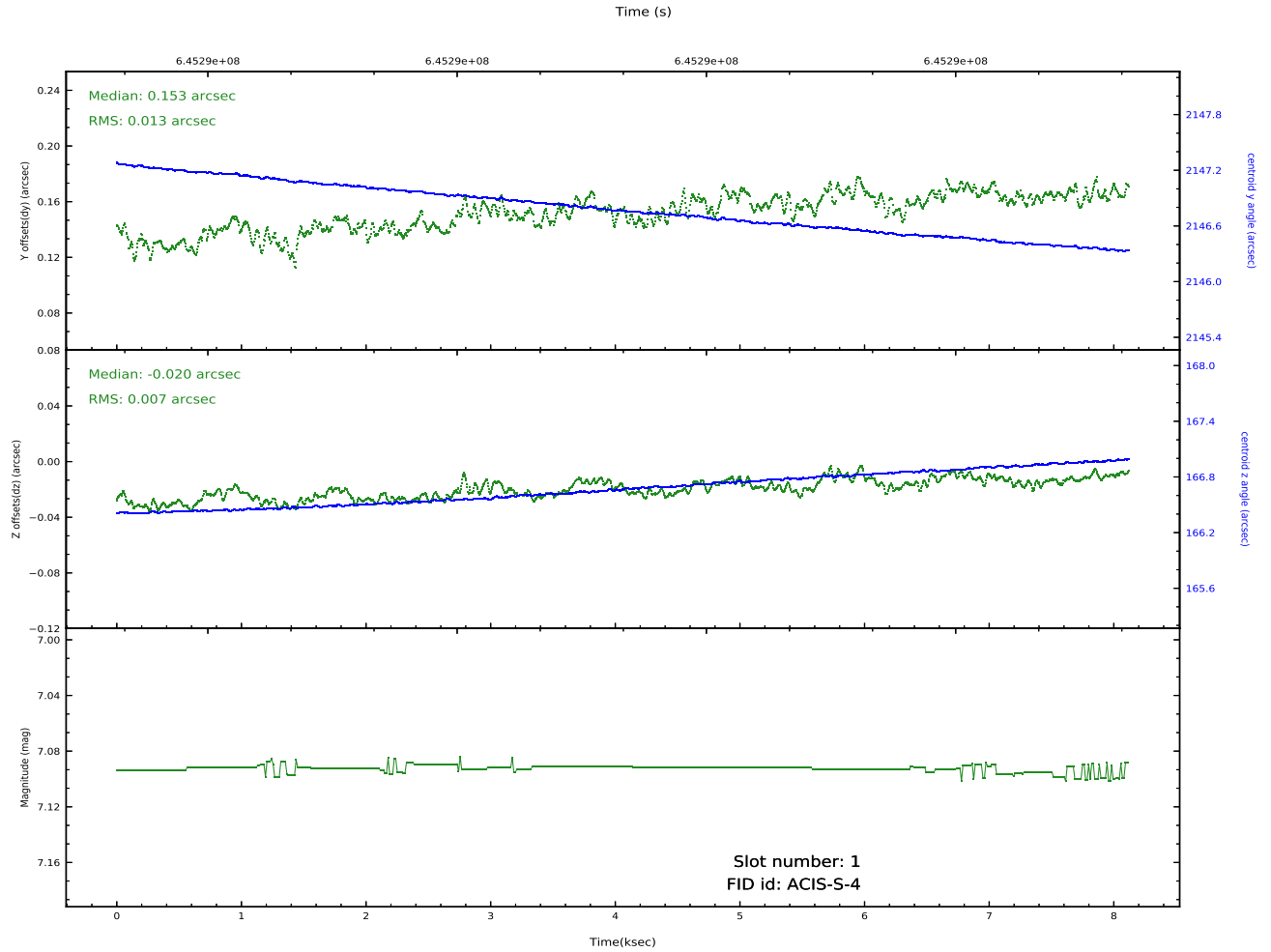
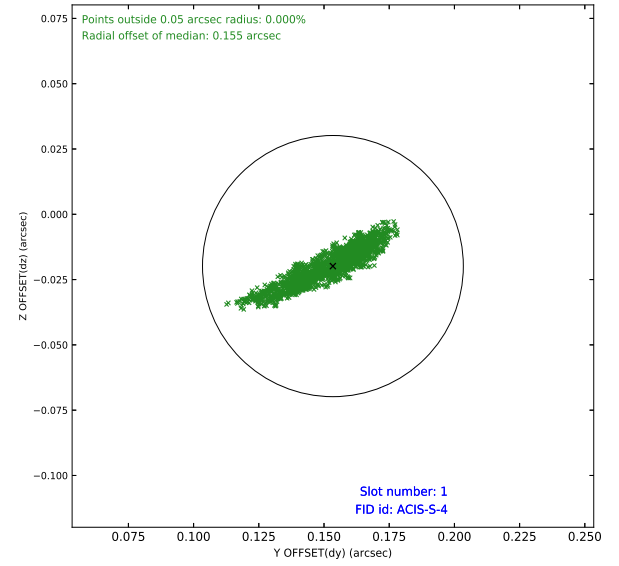
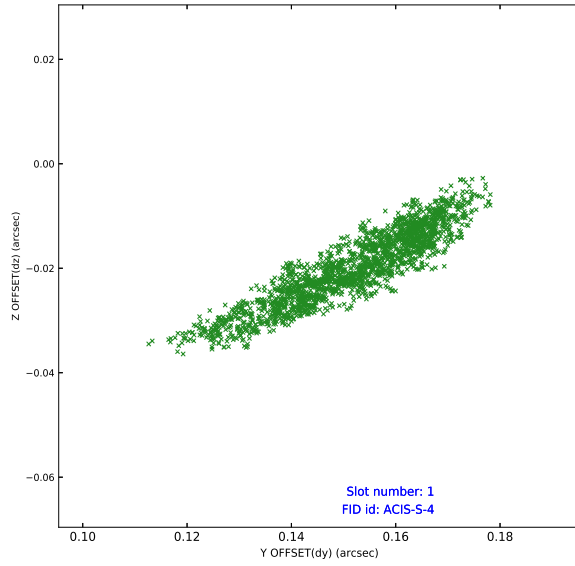


2.5 FID Slots

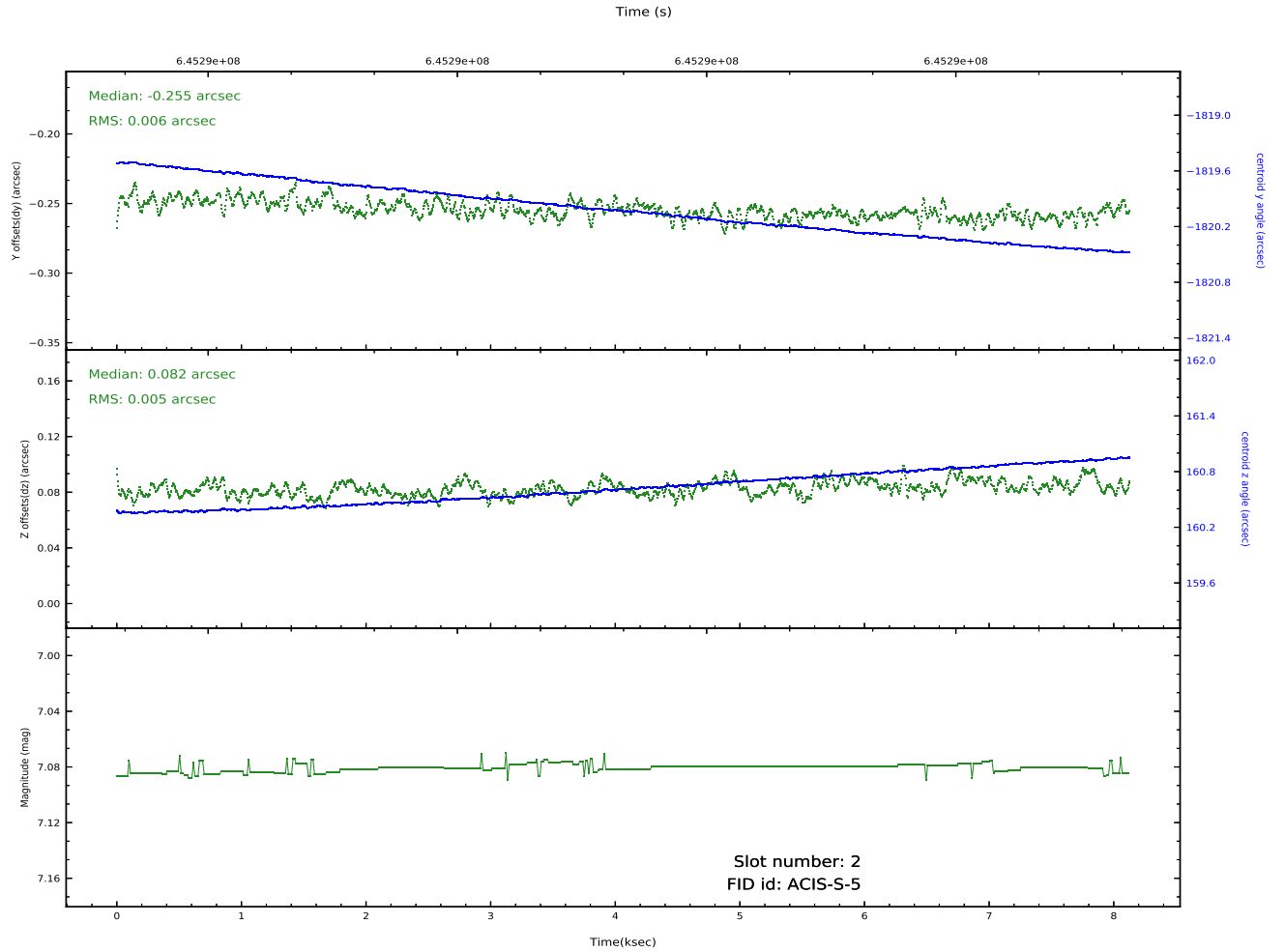
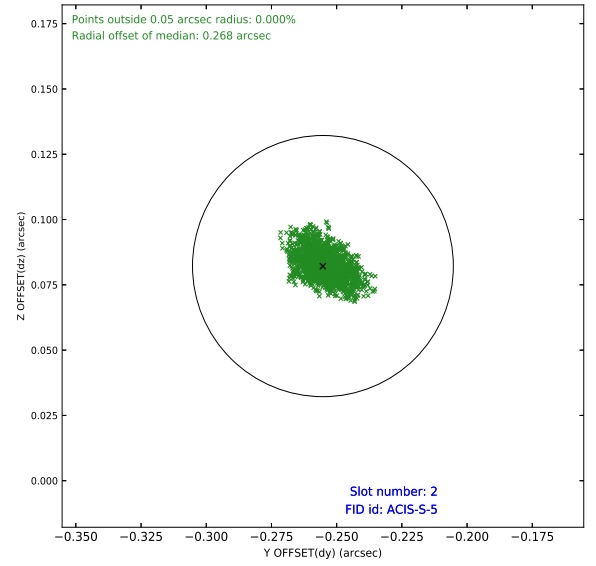
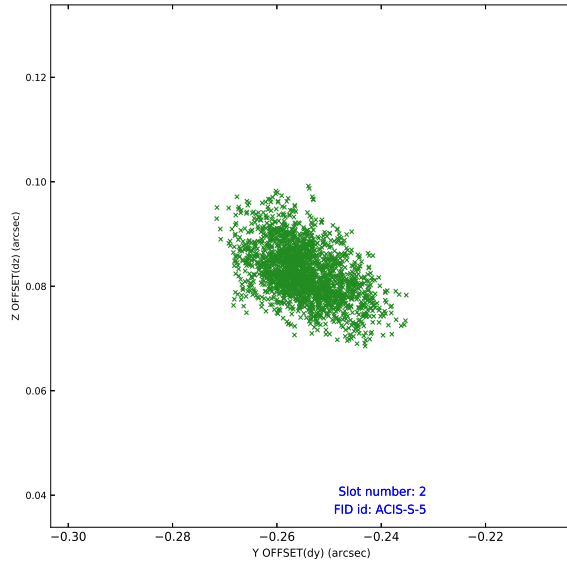
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.1124746148586

A.2 Comments