

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 6331 - L2 Version 4
Chandra X-Ray Center

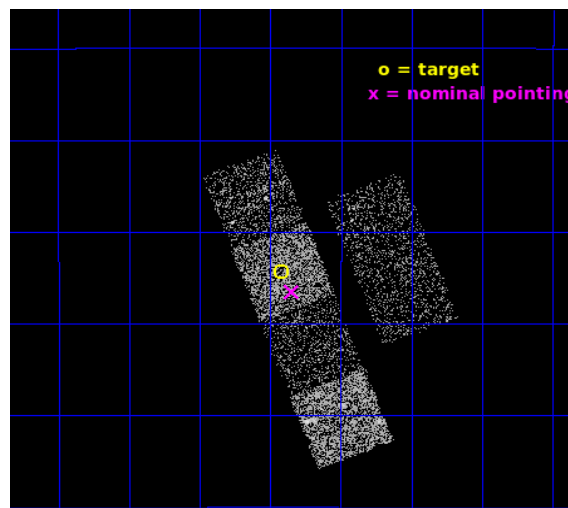
L2 Processing Date : Oct 9 2020

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1 Front

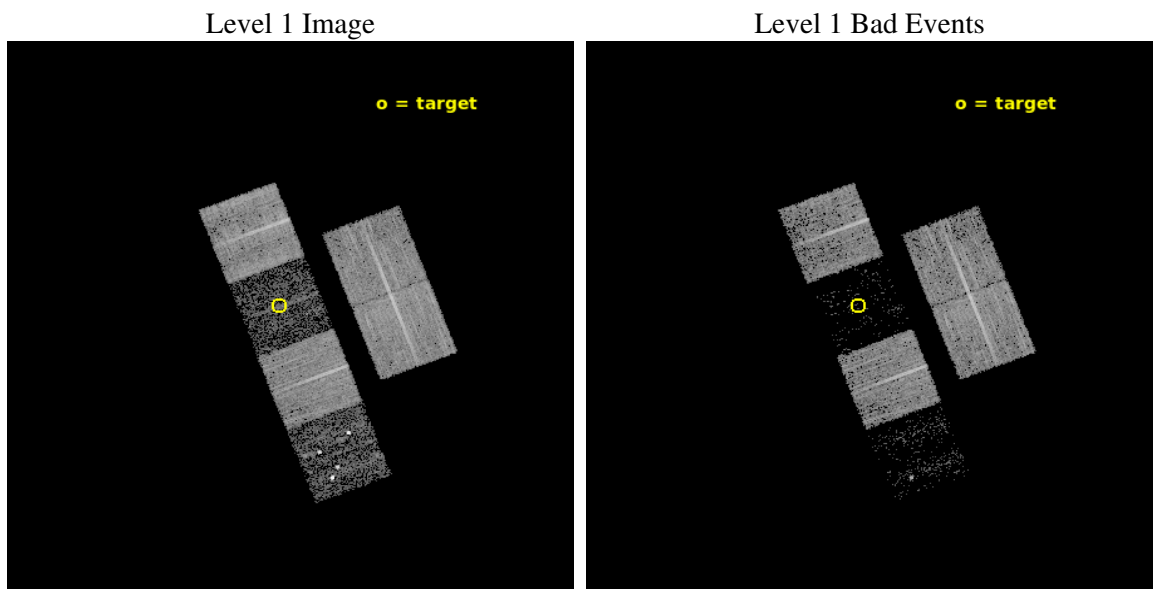
seq_num	100055	Sequence number
obs_id	6331	Observation id
title	Comet 9P/Tempel 1 During the Deep Impact Encounter	Proposal title
observer	Carey Lisse	Principal investigator
object	Comet 9P/Tempel 1	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	205.230995	Observer's specified target RA [deg]
dec_targ	-10.238833	Observer's specified target Dec [deg]
ra_nom	205.21163896246	Nominal RA [deg]
dec_nom	-10.275287458589	Nominal Dec [deg]
roll_nom	249.04004159423	Nominal Roll [deg]
revision	4	Processing version of data
ontime	8086.3999698758	Sum of GTIs [s]
livetime	7984.0051044117	Livetime [s]
ontime2	8086.3999698758	Sum of GTIs [s]
ontime3	8086.3999698758	Sum of GTIs [s]
ontime5	8086.3999698758	Sum of GTIs [s]
ontime6	8086.3999698758	Sum of GTIs [s]
ontime7	8086.3999698758	Sum of GTIs [s]
ontime8	8086.3999698758	Sum of GTIs [s]
l2events	11493	Number of level 2 events



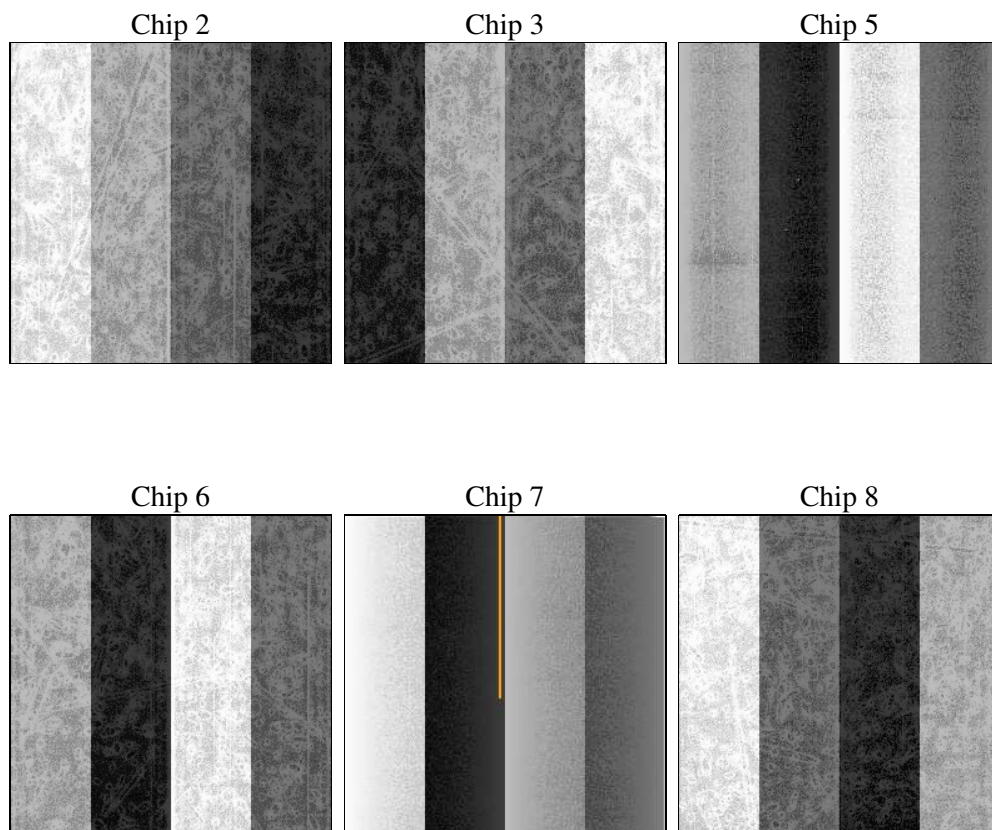
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7899.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	8086.3999698758	Sum of GTIs [s]
caldsver	4.9.2	 	ontime2	8086.3999698758	Sum of GTIs [s]
date	2020-10-09T07:22:10	Date and time of file creation	ontime3	8086.3999698758	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	8086.3999698758	Sum of GTIs [s]
			ontime6	8086.3999698758	Sum of GTIs [s]
			ontime7	8086.3999698758	Sum of GTIs [s]
			ontime8	8086.3999698758	Sum of GTIs [s]
			l1events	178031	Number of level 1 events

2.1.4 Events

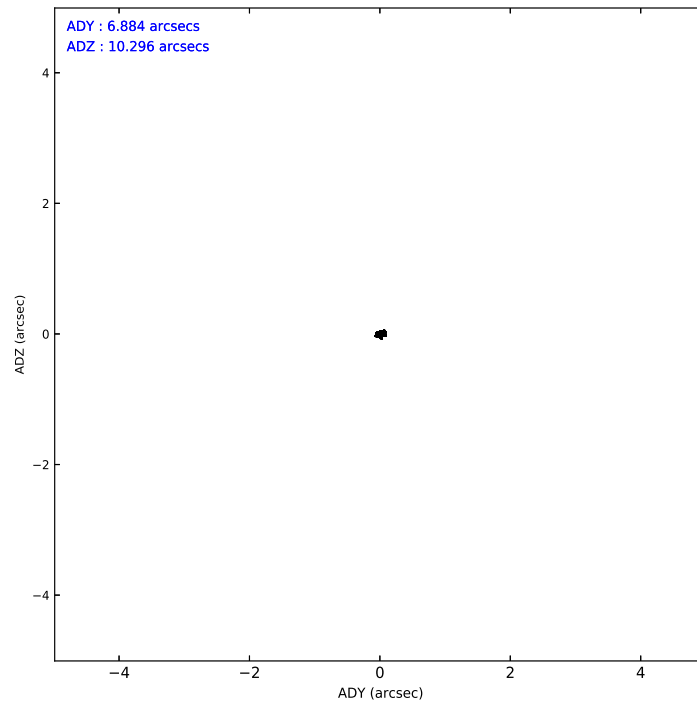
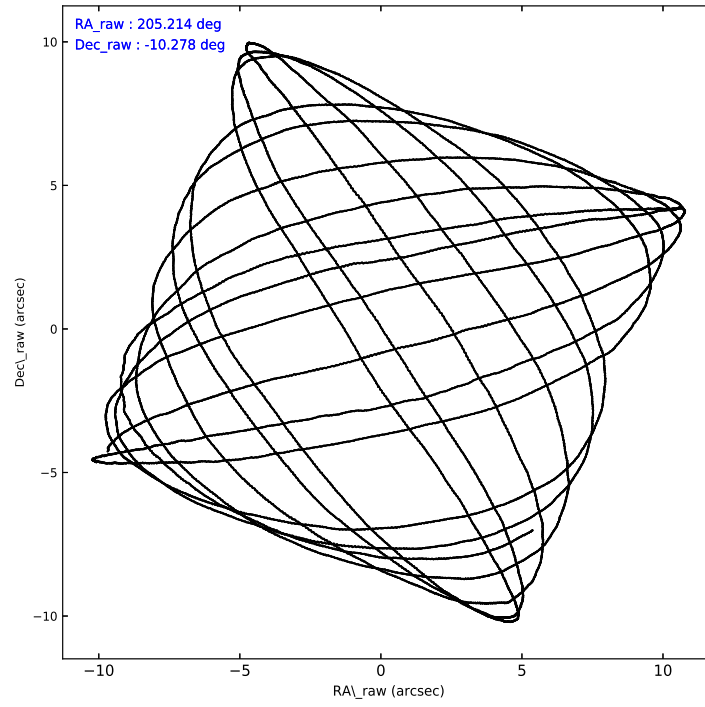
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	43774	35987	13234	37019	5064	42953
rejected events	42082	34782	2521	35518	1195	32659
rejected %	96%	96%	19%	95%	23%	76%

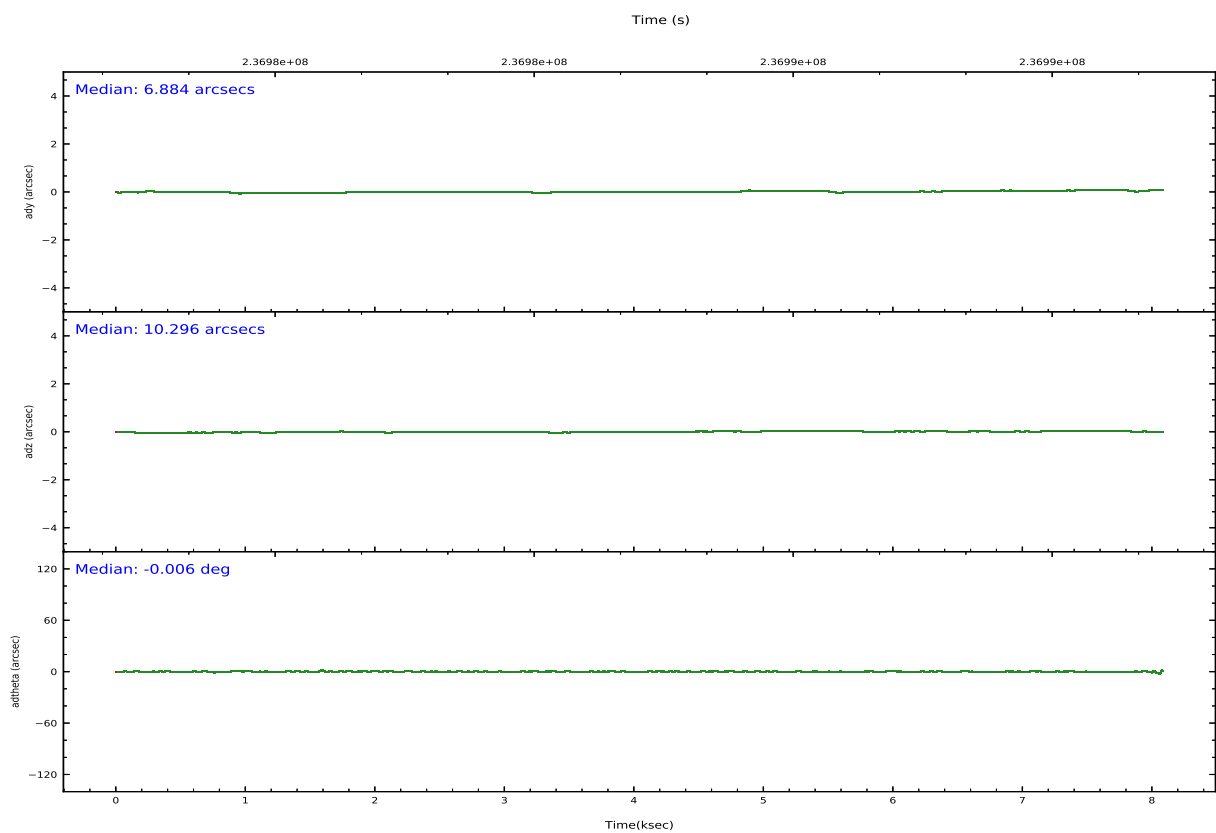
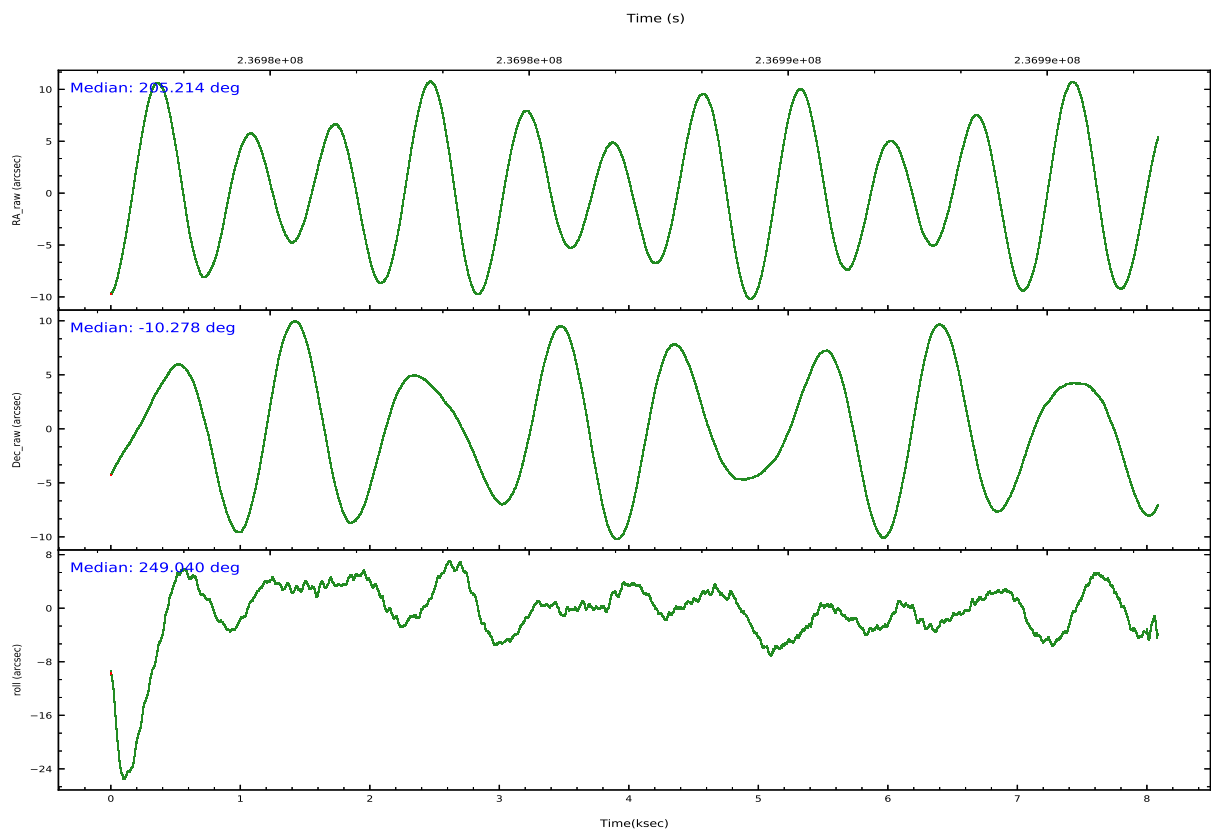
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	701	628	5409	708	1046	2870
	1%	1%	40%	1%	20%	6%
grade 1 events	15	6	220	13	29	44
	0%	0%	1%	0%	0%	0%
grade 2 events	420	152	4017	257	1324	2414
	0%	0%	30%	0%	26%	5%
grade 3 events	203	205	612	243	590	1251
	0%	0%	4%	0%	11%	2%
grade 4 events	241	162	603	223	584	1160
	0%	0%	4%	0%	11%	2%
grade 5 events	60	39	360	36	129	212
	0%	0%	2%	0%	2%	0%
grade 6 events	192	115	520	112	484	2913
	0%	0%	3%	0%	9%	6%
grade 7 events	41942	34680	1493	35427	878	32089
	95%	96%	11%	95%	17%	74%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-235678	ACIS-235678	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	205.209032	205.21163896246	Subarray requested	NONE	NONE
[deg] Pointing Dec	-10.251400	-10.275287458589	Alternating exposures requested	N	N
[deg] Pointing Roll	248.883299	249.04004159423	[s] Primary exposure time	0.000000	3.2
[s] Window start time (MET)	236966464.184000	236966464.184000			
[s] Window stop time (MET)	237031264.184000	237031264.184000			
[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)	236980957.184000	236980581.22855			
Observation start date	2005-07-05T20:01:33	2005-07-05T19:56:21			
[s] Observation end time (MET)	236988856.184000	236988990.32894			
Observation end date	2005-07-05T22:13:12	2005-07-05T22:16:30			
Read mode	TIMED	TIMED			

2.3 Aspect



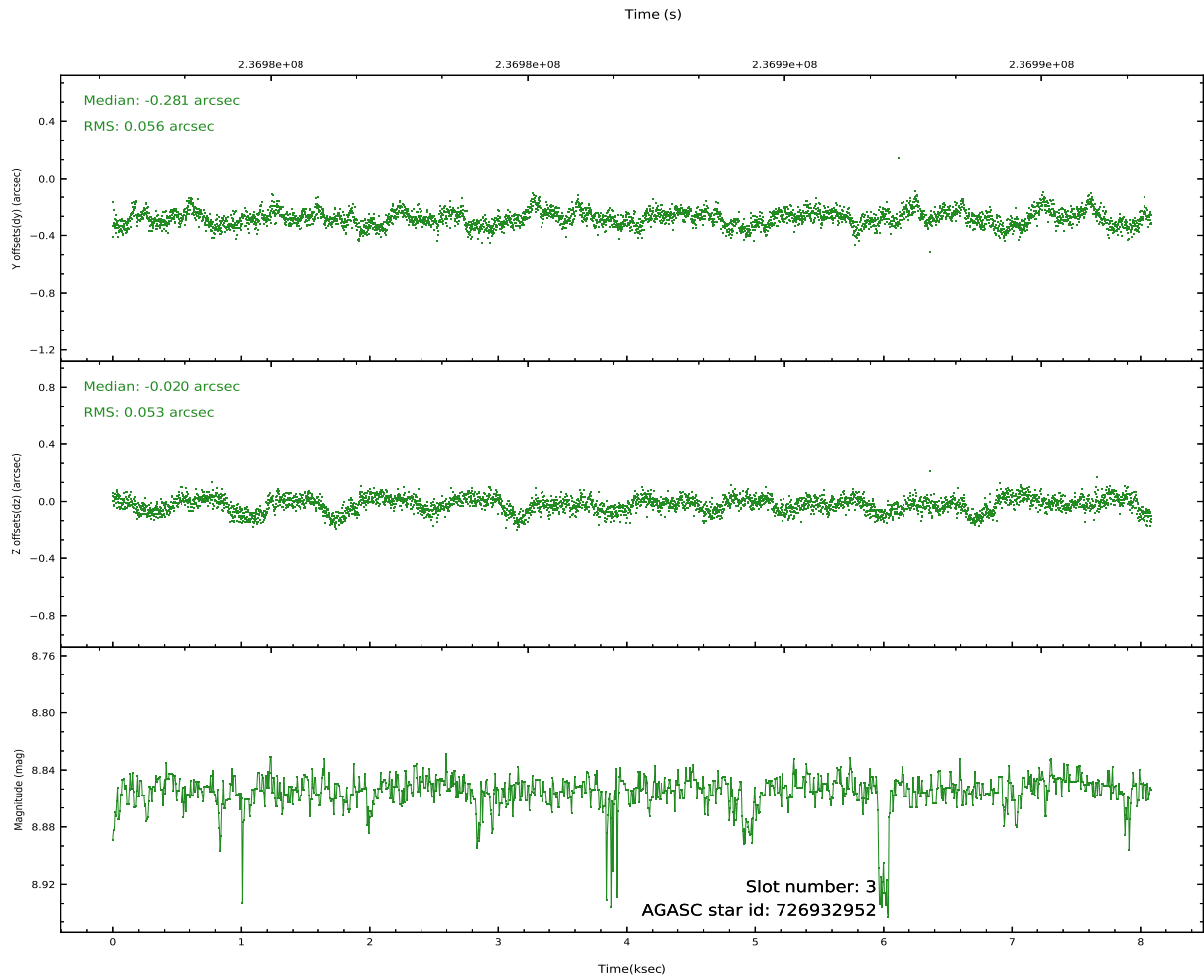
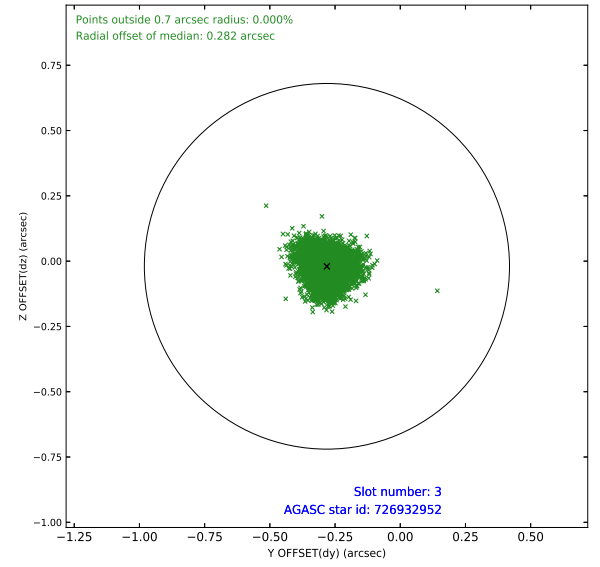
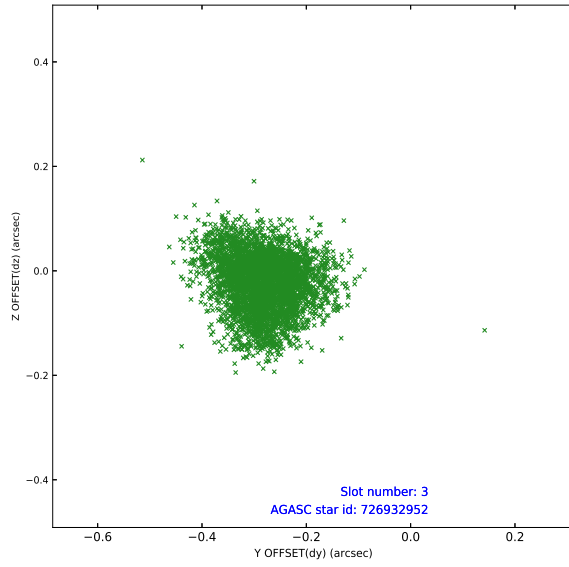


Slot Statistics

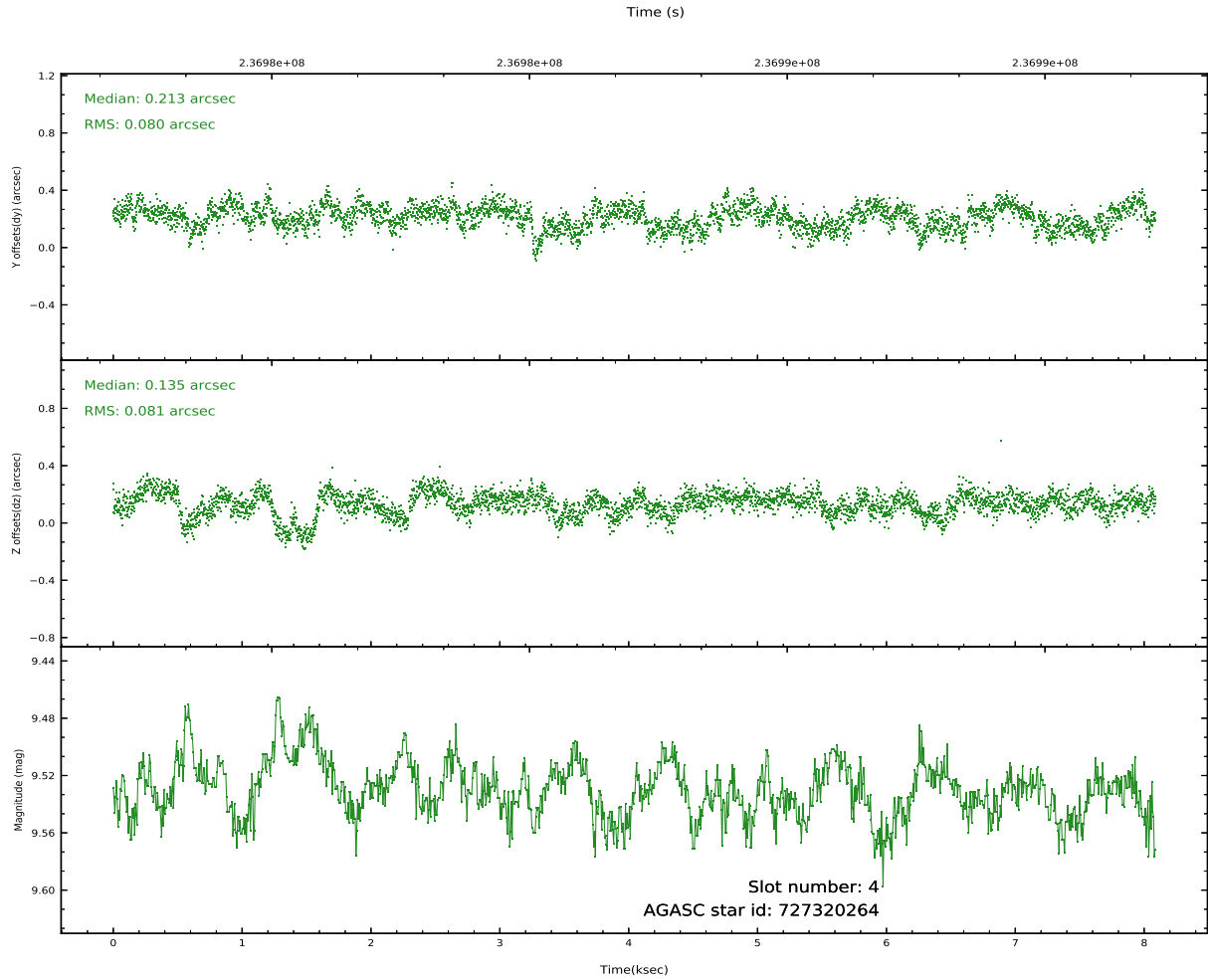
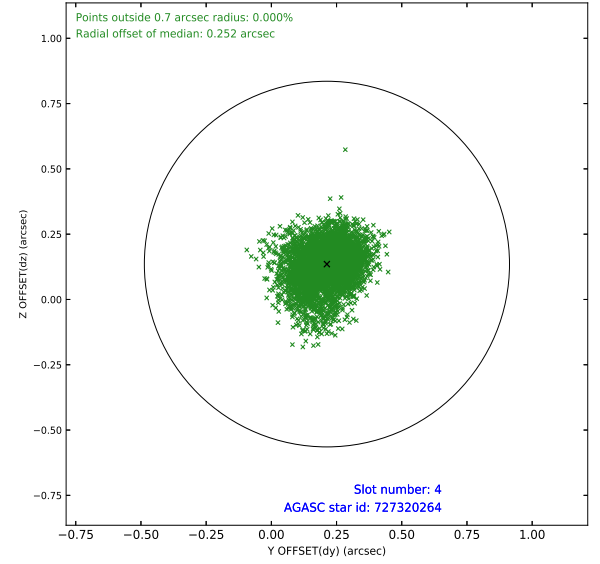
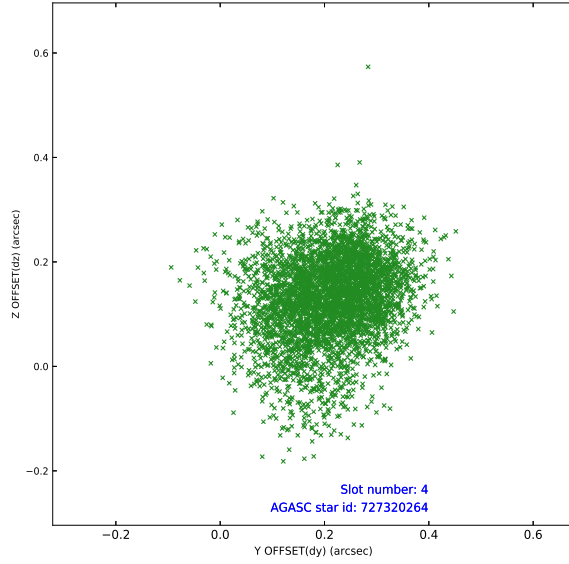
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	1972	1.000	-0.096	-0.063	0.006	0.011	0.000000	0.000000	-759.67	-1731
1	FID		ACIS-S-4	7.21	1973	1.000	0.170	0.063	0.005	0.010	0.000000	0.000000	2153.49	176
2	FID		ACIS-S-5	7.23	1973	1.000	-0.105	0.009	0.006	0.010	0.000000	0.000000	-1811.70	170
3	GUIDE	used	726932952	8.85	3942	1.000	-0.281	-0.020	0.082	0.131	205.485641	-9.671333	-2301.38	163
4	GUIDE	used	727320264	9.53	3938	1.000	0.213	0.135	0.118	0.202	205.464326	-10.871323	1756.73	1646
5	GUIDE	used	727320968	9.34	3943	1.000	-0.061	-0.018	0.108	0.166	205.790359	-10.593418	409.56	2363
6	GUIDE	used	727321088	9.45	3943	1.000	0.137	-0.089	0.100	0.160	204.964296	-10.686432	1773.91	-243
7	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0

2.4 Star Slots

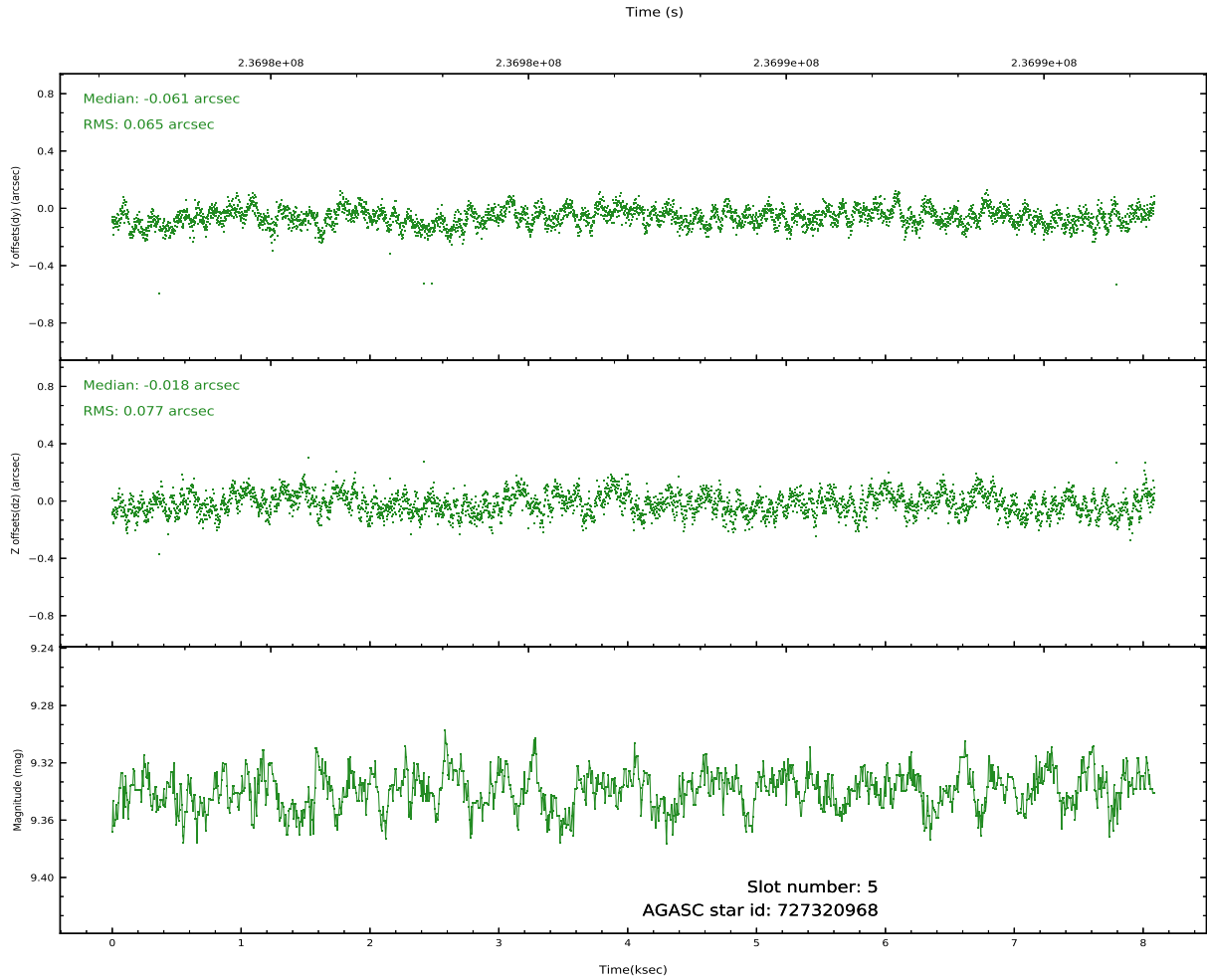
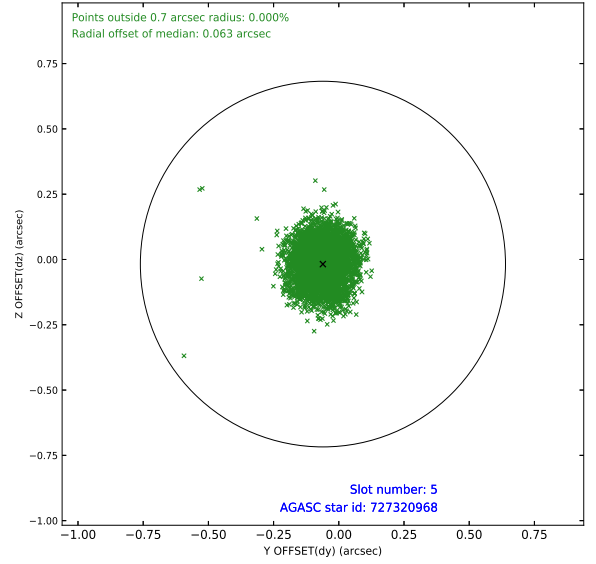
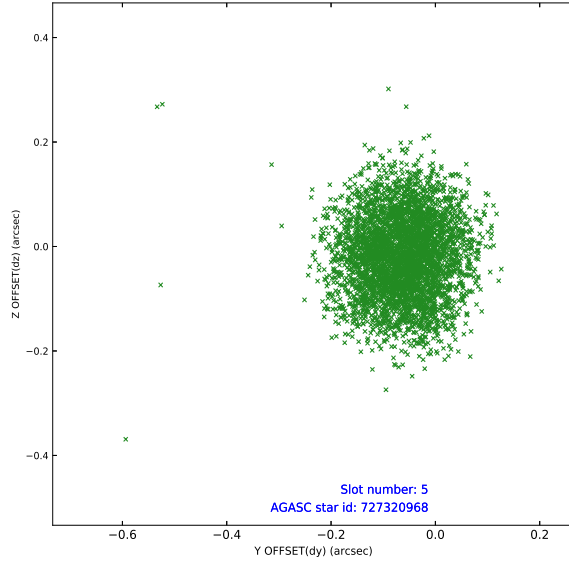
2.4.1 Slot 3



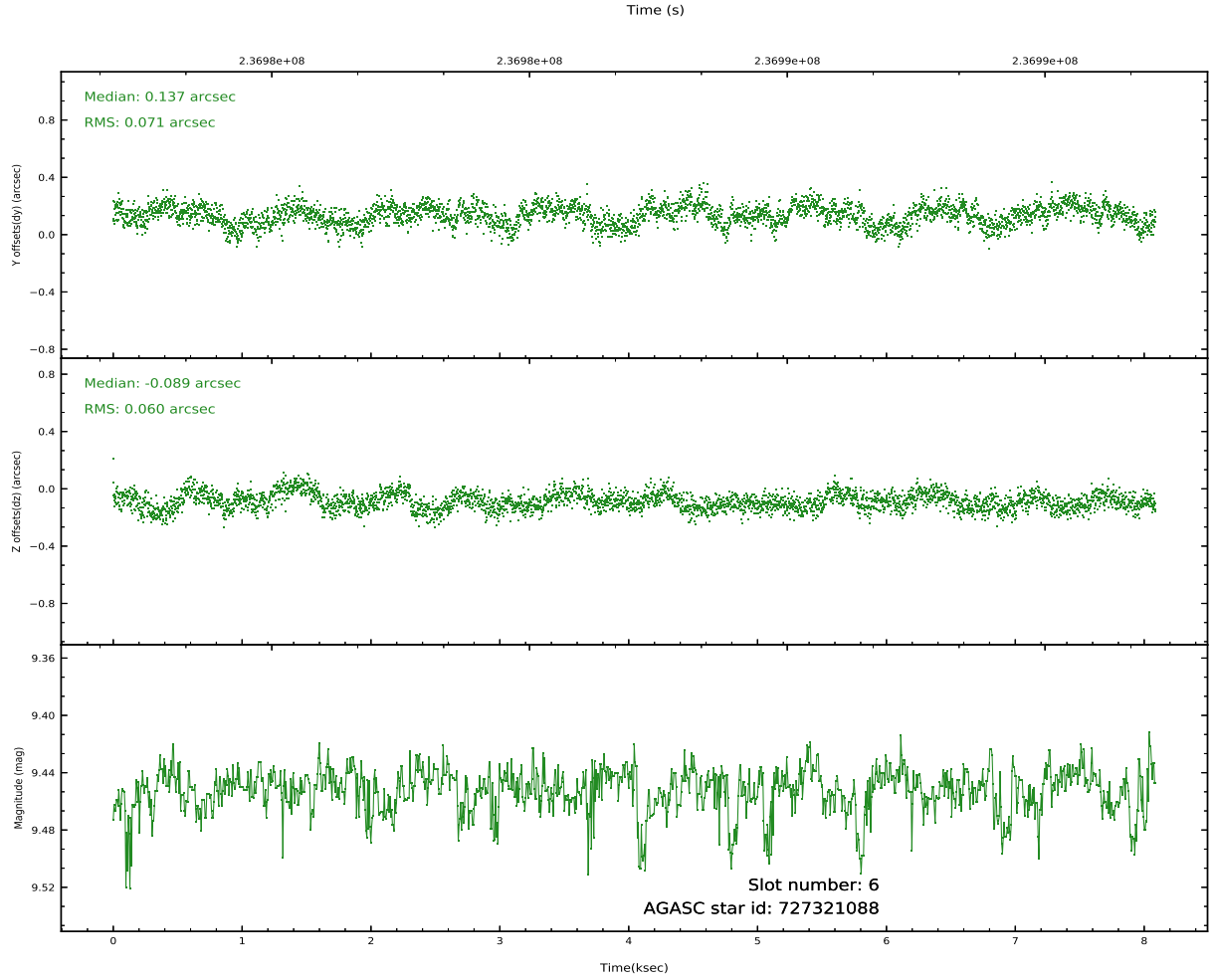
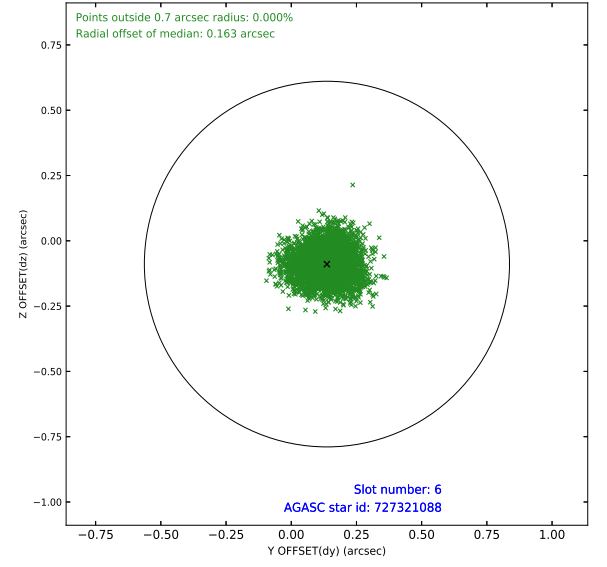
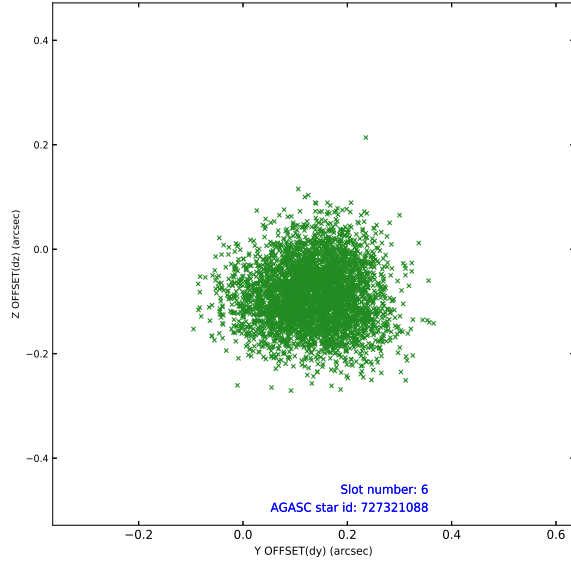
2.4.2 Slot 4



2.4.3 Slot 5

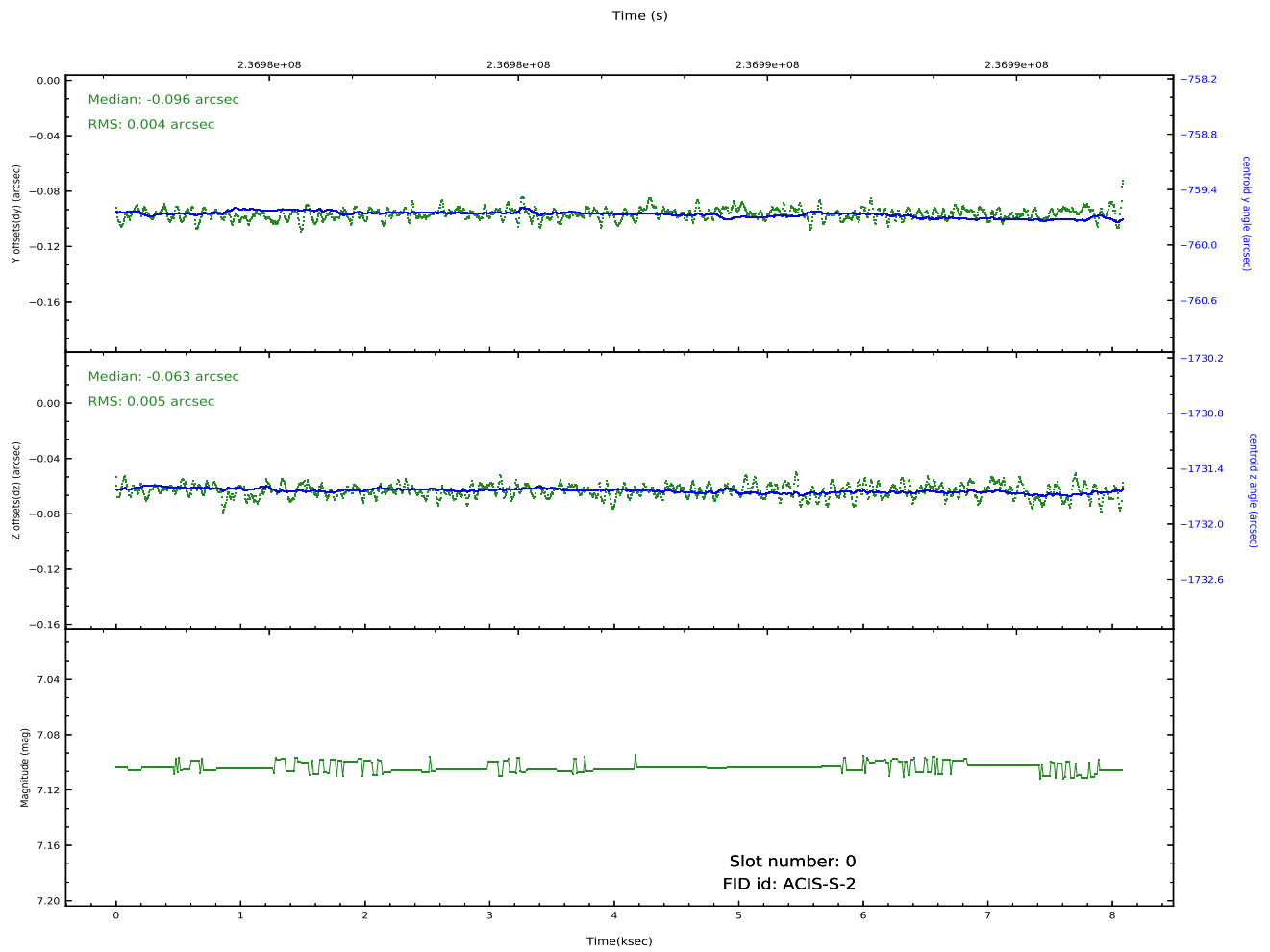
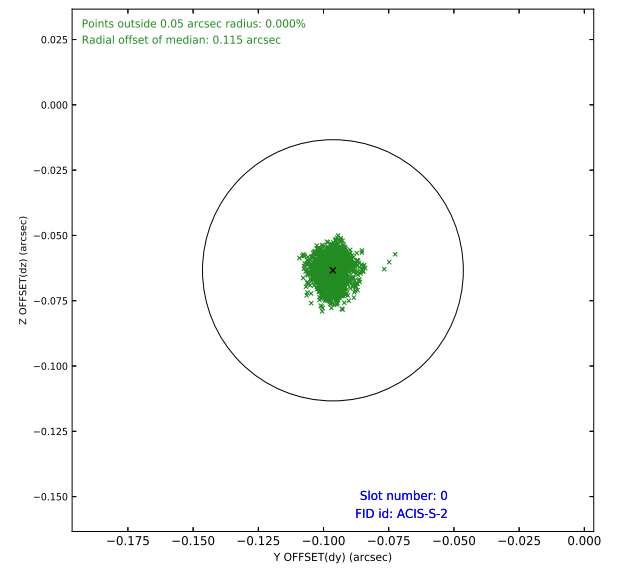
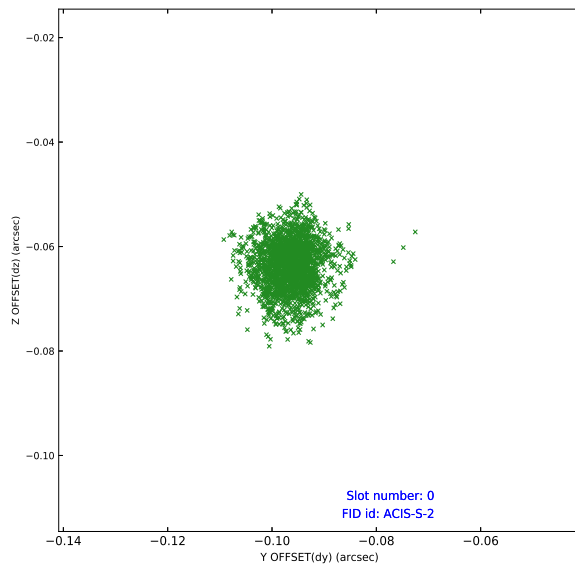


2.4.4 Slot 6

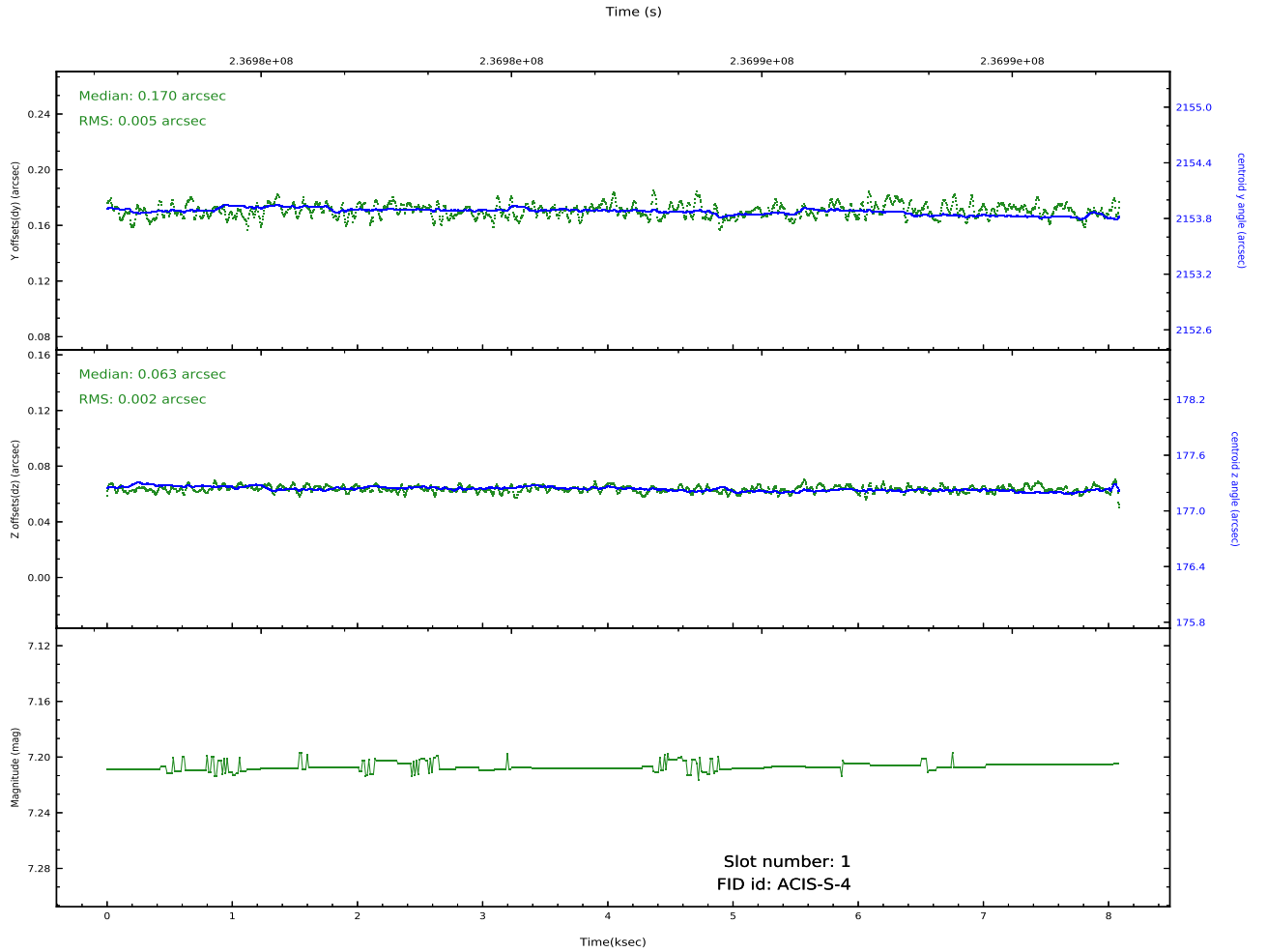
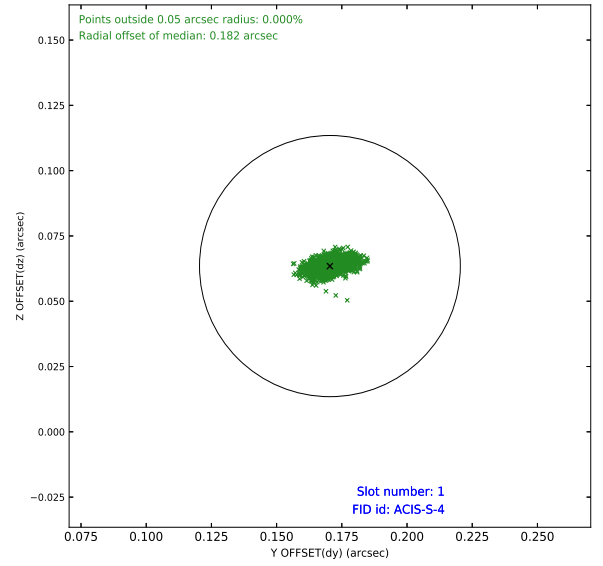
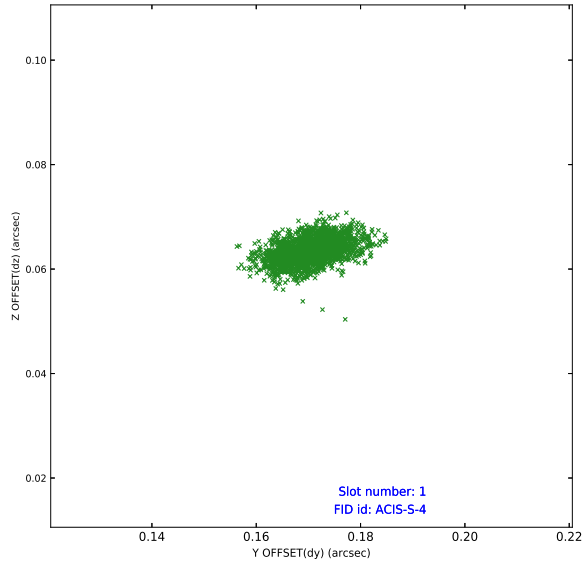


2.5 FID Slots

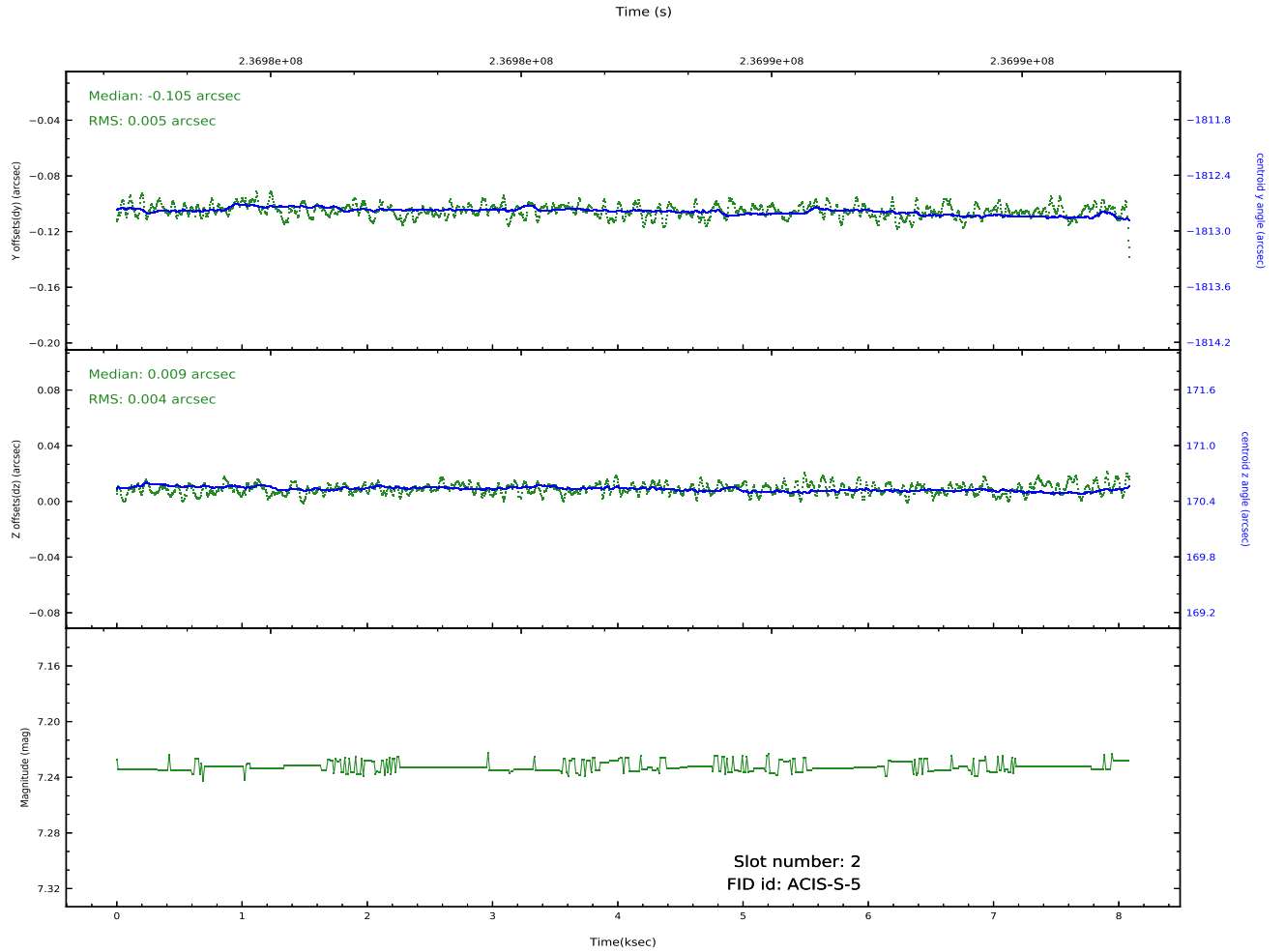
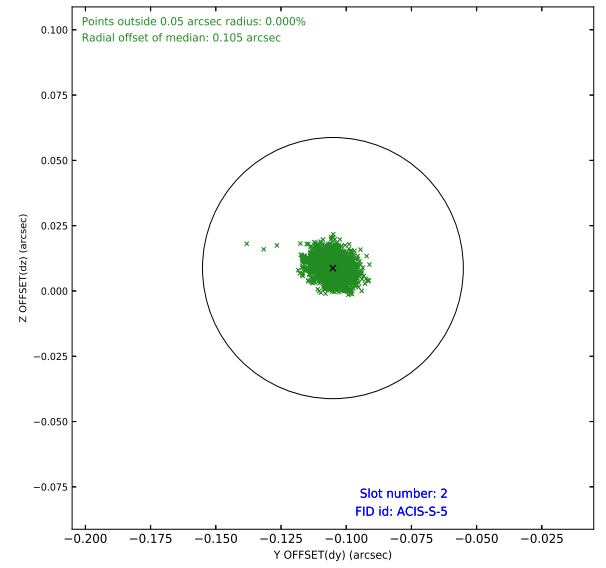
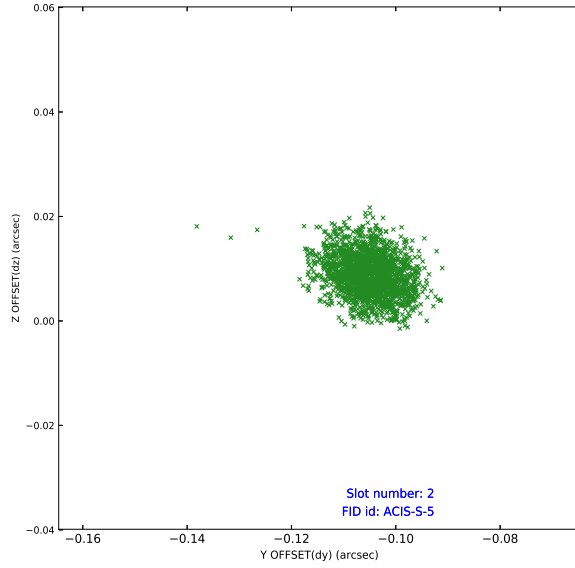
2.5.1 Slot 0



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)	2020.10.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.086399

A.2 Comments

Window constraint met. This is a moving target. Users will need to run sso_freeze or similar software to position the events in the reference frame of the target.

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The guide star in slot 7 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.