

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5369 - L2 Version 4
Chandra X-Ray Center

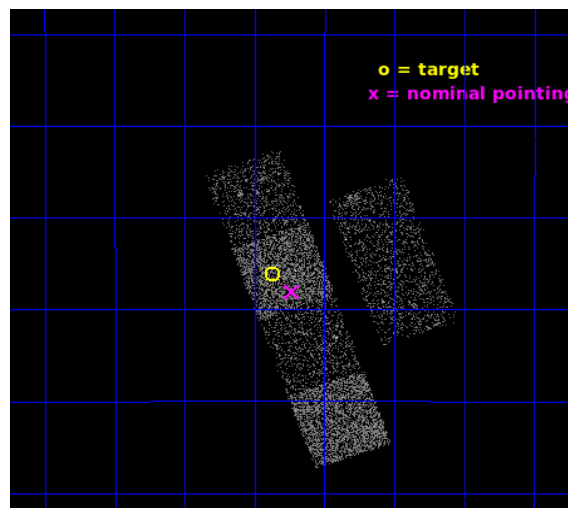
L2 Processing Date : Oct 9 2020

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1 Front

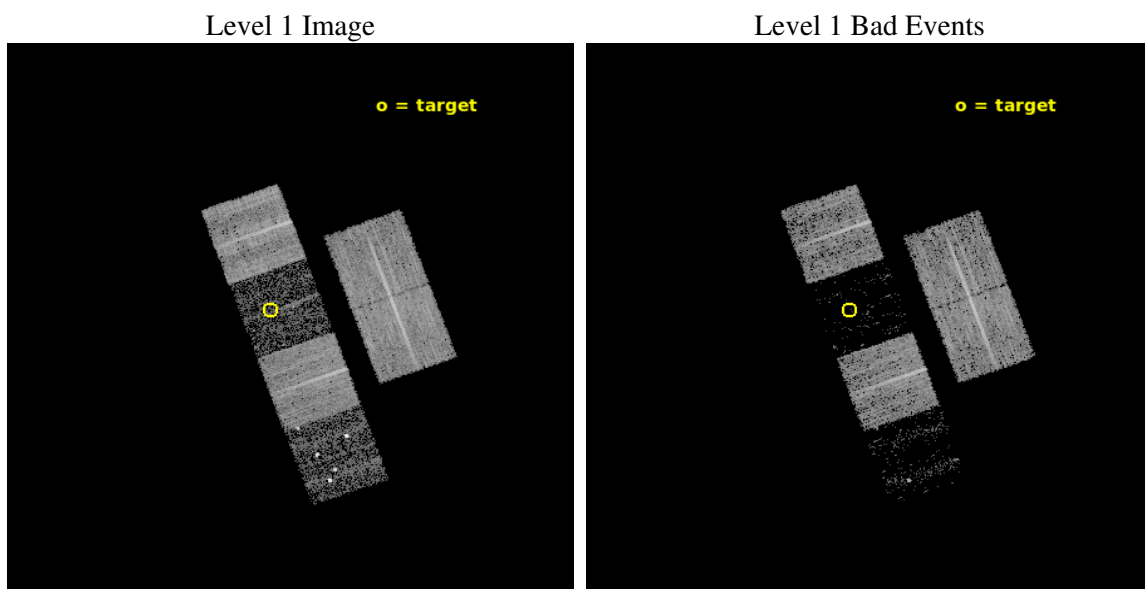
seq_num	100057	Sequence number
obs_id	5369	Observation id
title	Comet 9P/Tempel 1 During the Deep Impact Encounter	Proposal title
observer	Carey Lisse	Principal investigator
object	Comet 9P/Tempel 1	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	209.09316	Observer's specified target RA [deg]
dec_targ	-13.269715	Observer's specified target Dec [deg]
ra_nom	209.05830417163	Nominal RA [deg]
dec_nom	-13.301162943011	Nominal Dec [deg]
roll_nom	250.06034932089	Nominal Roll [deg]
revision	4	Processing version of data
ontime	8287.2699272633	Sum of GTIs [s]
livetime	8182.3315254494	Livetime [s]
ontime2	8287.3109672666	Sum of GTIs [s]
ontime3	8287.1468072534	Sum of GTIs [s]
ontime5	8287.22888726	Sum of GTIs [s]
ontime6	8287.1878472567	Sum of GTIs [s]
ontime7	8287.2699272633	Sum of GTIs [s]
ontime8	8287.1057672799	Sum of GTIs [s]
l2events	10954	Number of level 2 events



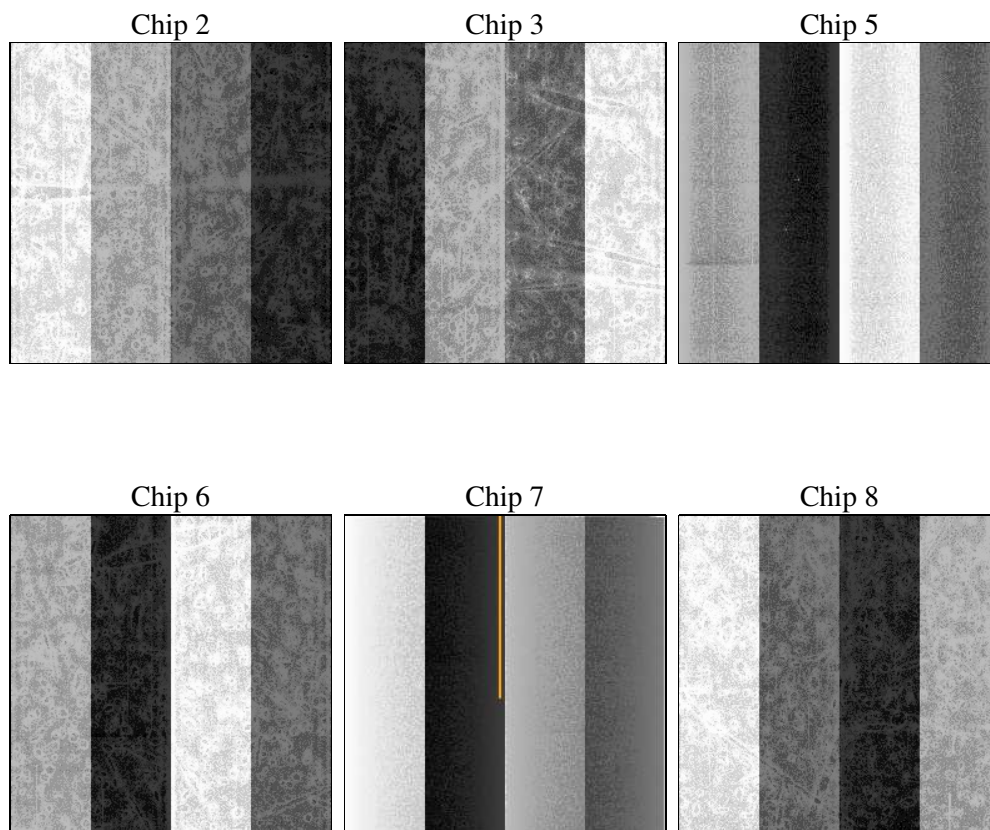
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	8325.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	8287.2699272633	Sum of GTIs [s]
caldsver	4.9.2	 	ontime2	8287.3109672666	Sum of GTIs [s]
date	2020-10-09T08:51:39	Date and time of file creation	ontime3	8287.1468072534	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	8287.22888726	Sum of GTIs [s]
			ontime6	8287.1878472567	Sum of GTIs [s]
			ontime7	8287.2699272633	Sum of GTIs [s]
			ontime8	8287.1057672799	Sum of GTIs [s]
			l1events	165626	Number of level 1 events

2.1.4 Events

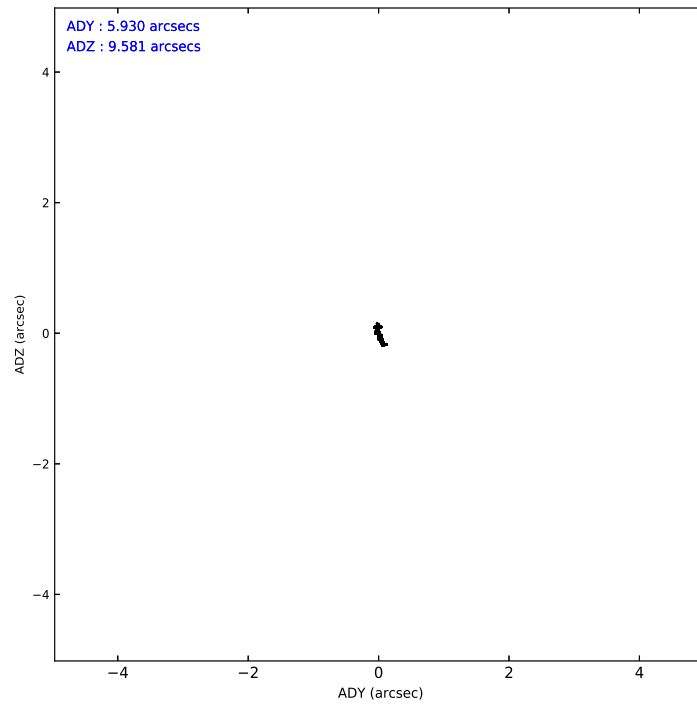
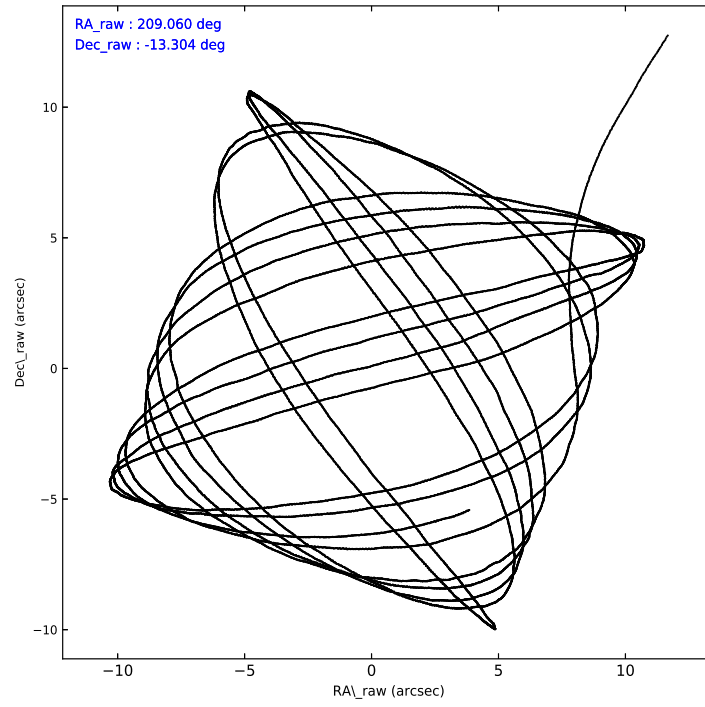
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	39323	33966	12620	34612	4774	40331
rejected events	37625	32706	2144	33062	1003	30105
rejected %	95%	96%	16%	95%	21%	74%

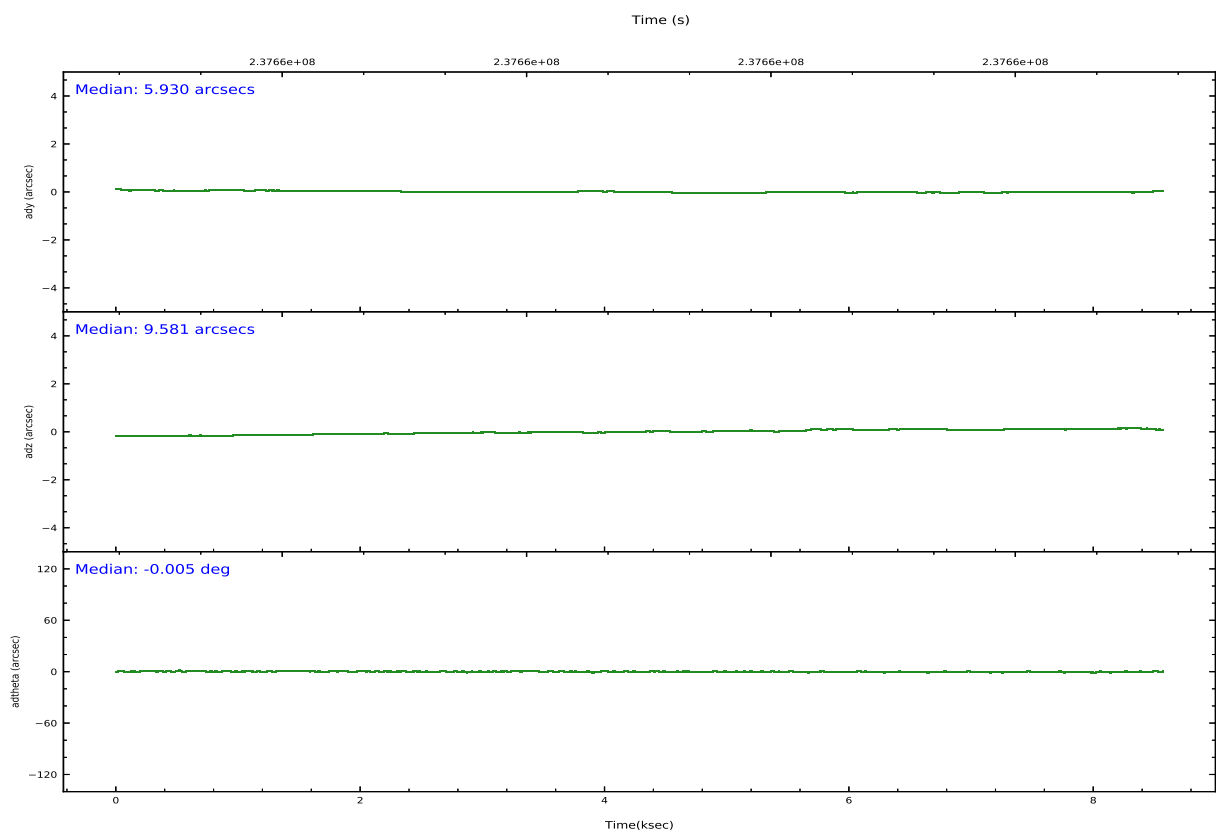
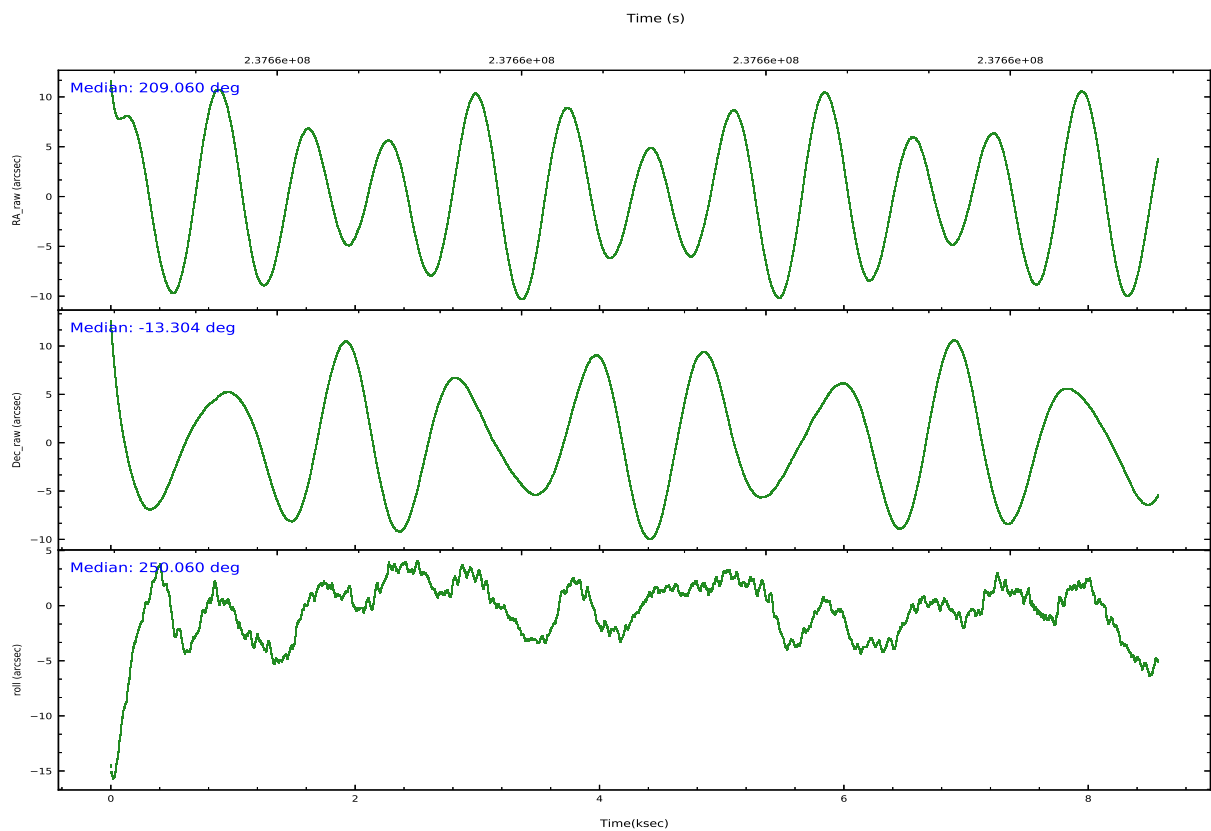
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	728	616	5800	771	1091	2911
	1%	1%	45%	2%	22%	7%
grade 1 events	5	7	299	5	23	19
	0%	0%	2%	0%	0%	0%
grade 2 events	378	156	3140	261	1158	2300
	0%	0%	24%	0%	24%	5%
grade 3 events	211	210	602	235	556	1194
	0%	0%	4%	0%	11%	2%
grade 4 events	249	179	585	213	543	1127
	0%	0%	4%	0%	11%	2%
grade 5 events	33	34	367	19	121	225
	0%	0%	2%	0%	2%	0%
grade 6 events	167	120	490	99	491	2805
	0%	0%	3%	0%	10%	6%
grade 7 events	37552	32644	1337	33009	791	29750
	95%	96%	10%	95%	16%	73%

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	209.055101	209.05830417163	Subarray requested	NONE	NONE
[deg] Pointing Dec	-13.276940	-13.301162943011	Alternating exposures requested	N	N
[deg] Pointing Roll	249.901052	250.06034932089	[s] Primary exposure time	0.000000	3.2
[s] Window start time (MET)	237708064.184000	237708064.184000			
[s] Window stop time (MET)	237751264.184000	237751264.184000			
[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)	237656885.184000	237655890.20944			
Observation start date	2005-07-13T15:47:01	2005-07-13T15:31:30			
[s] Observation end time (MET)	237665210.184000	237665343.78487			
Observation end date	2005-07-13T18:05:46	2005-07-13T18:09:03			
Read mode	TIMED	TIMED			

2.3 Aspect



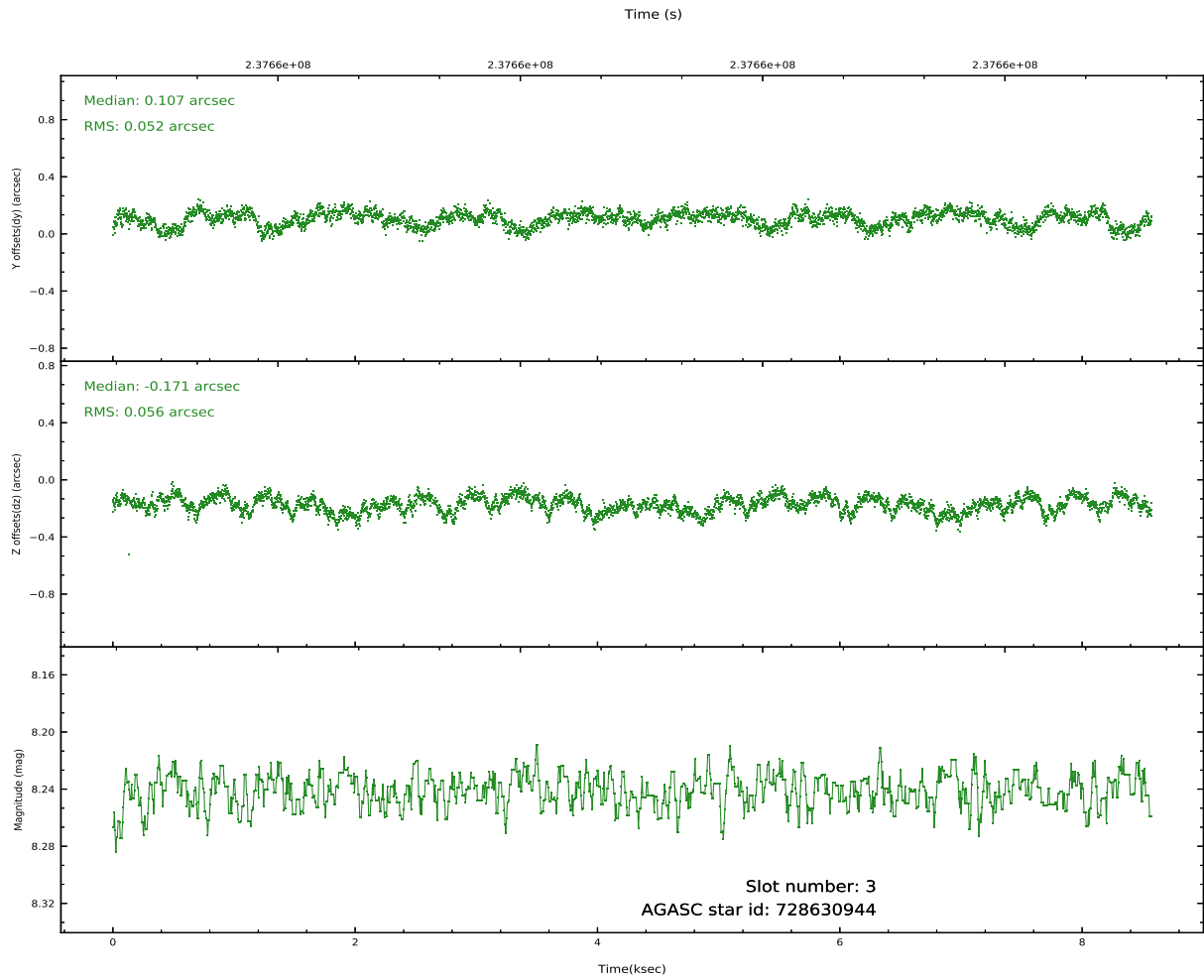
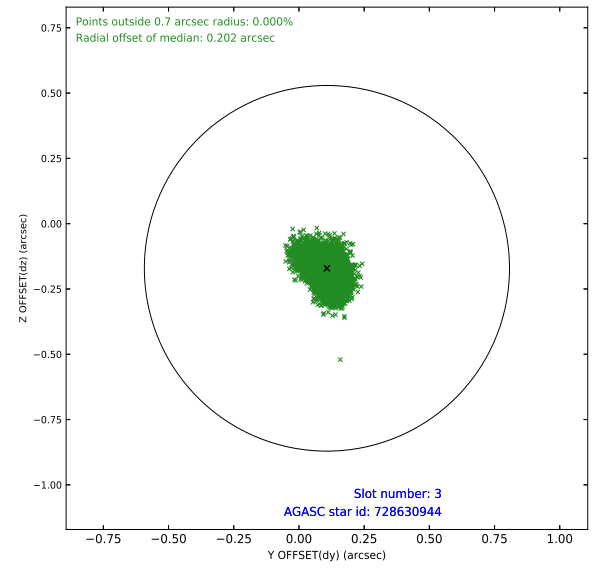
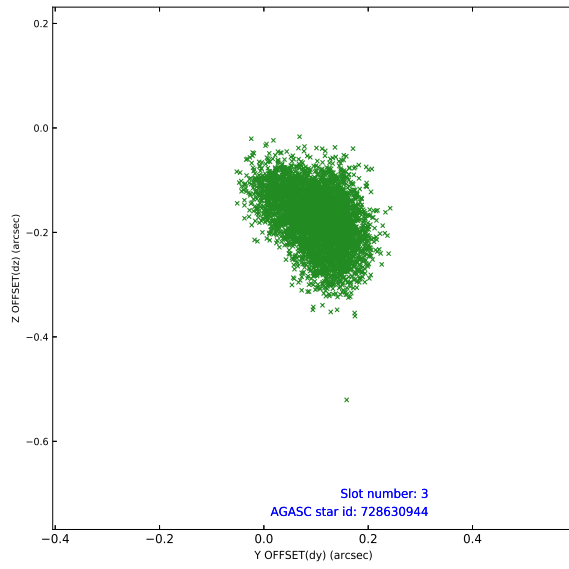


Slot Statistics

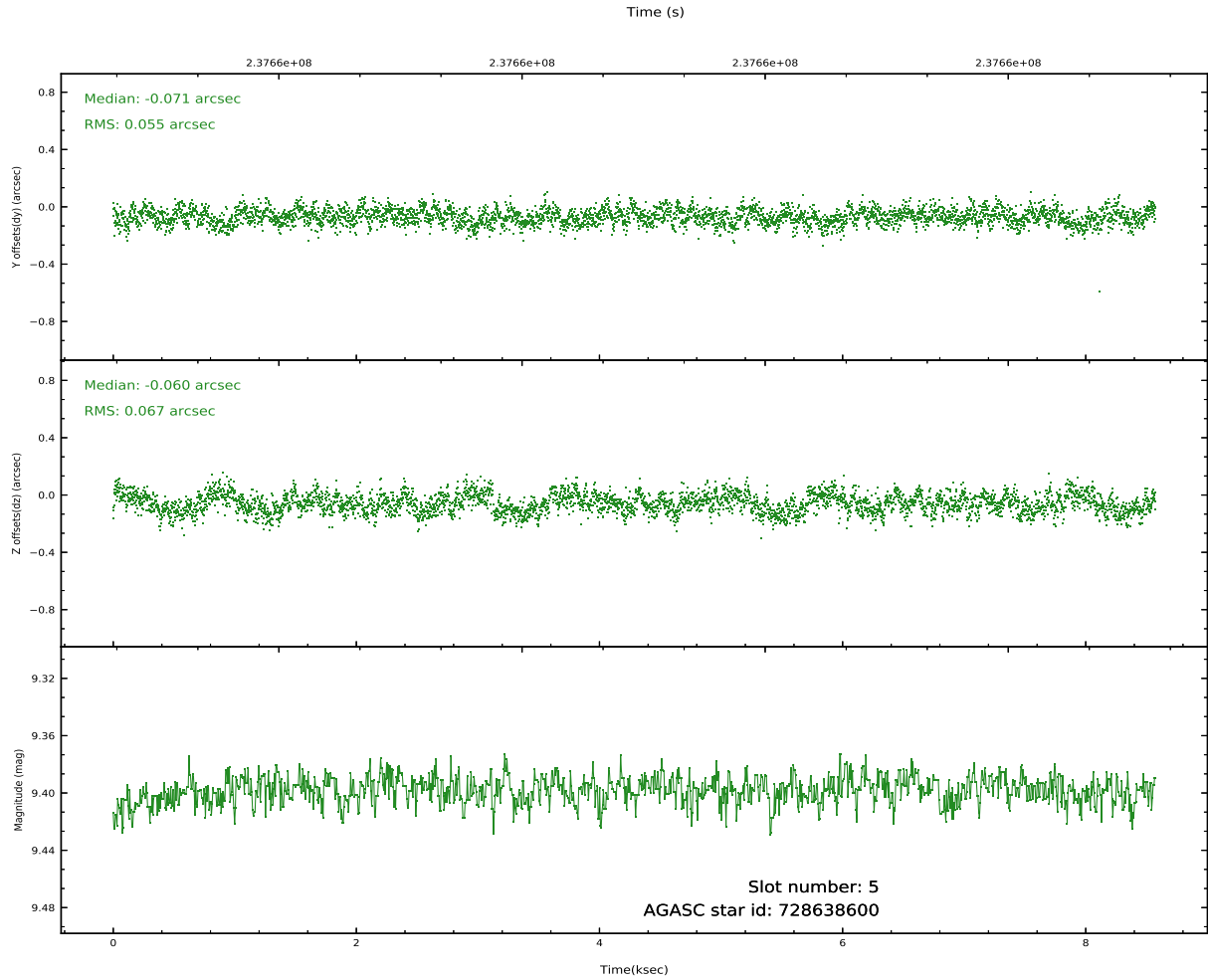
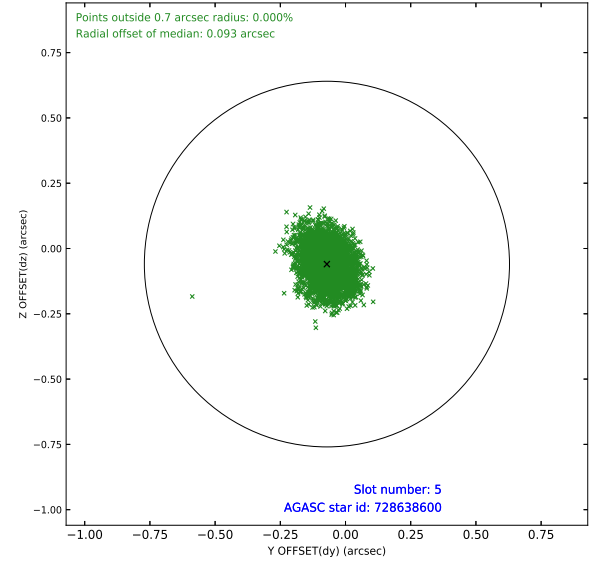
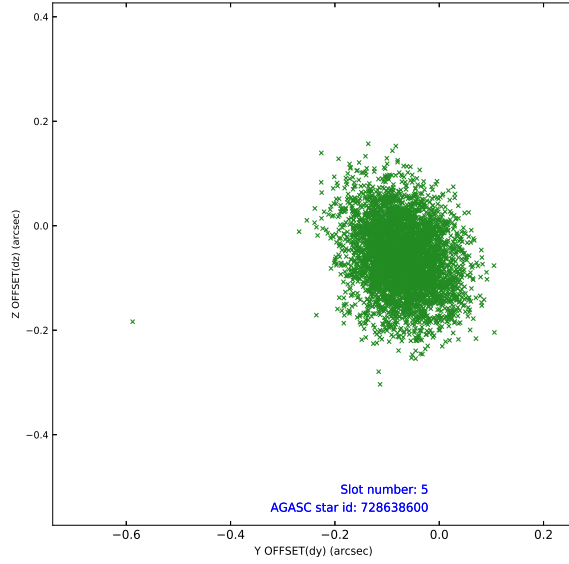
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	2091	1.000	-0.096	-0.075	0.007	0.011	0.000000	0.000000	-758.71	-1730
1	FID		ACIS-S-4	7.21	2091	1.000	0.170	0.066	0.006	0.011	0.000000	0.000000	2154.49	177
2	FID		ACIS-S-5	7.23	2091	1.000	-0.105	0.017	0.006	0.011	0.000000	0.000000	-1810.78	171
3	GUIDE	used	728630944	8.24	4182	1.000	0.107	-0.171	0.083	0.129	208.923207	-13.740319	1725.50	140
4	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
5	GUIDE	used	728638600	9.40	4180	1.000	-0.071	-0.060	0.091	0.149	209.320543	-13.467304	325.07	1108
6	GUIDE	used	728639032	9.16	4180	1.000	0.237	0.259	0.094	0.149	209.196450	-13.877558	1861.42	1207
7	GUIDE	used	728639792	9.83	4174	1.000	-0.264	-0.024	0.120	0.208	209.293230	-12.690895	-2268.01	60

2.4 Star Slots

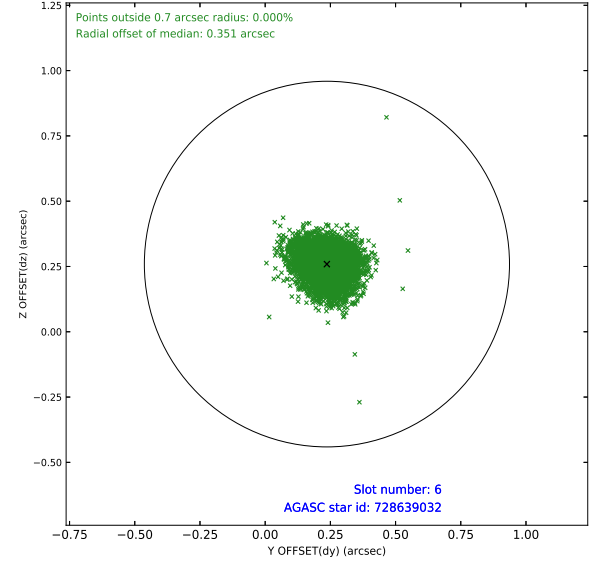
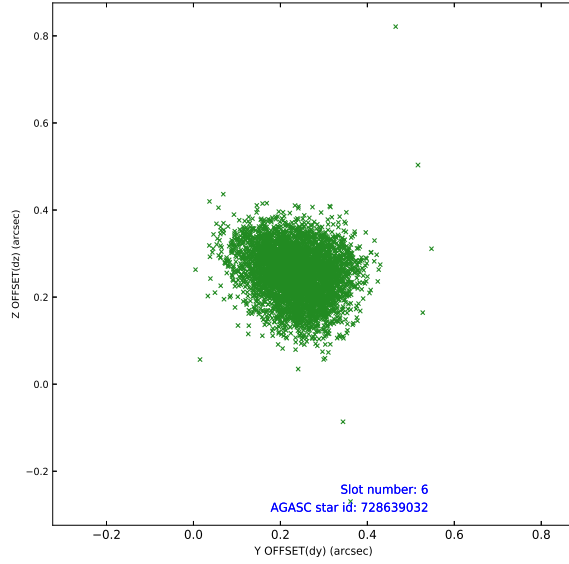
2.4.1 Slot 3



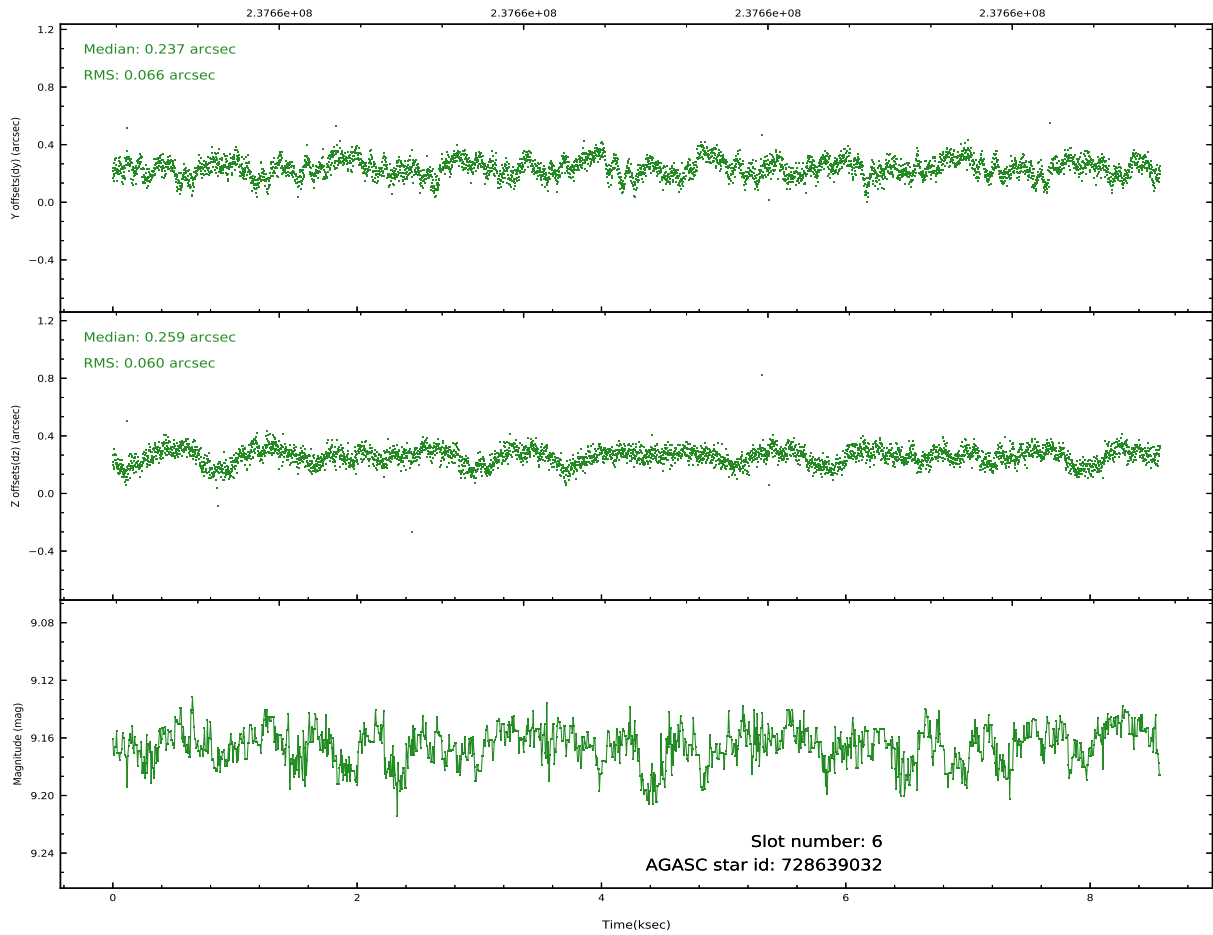
2.4.2 Slot 5



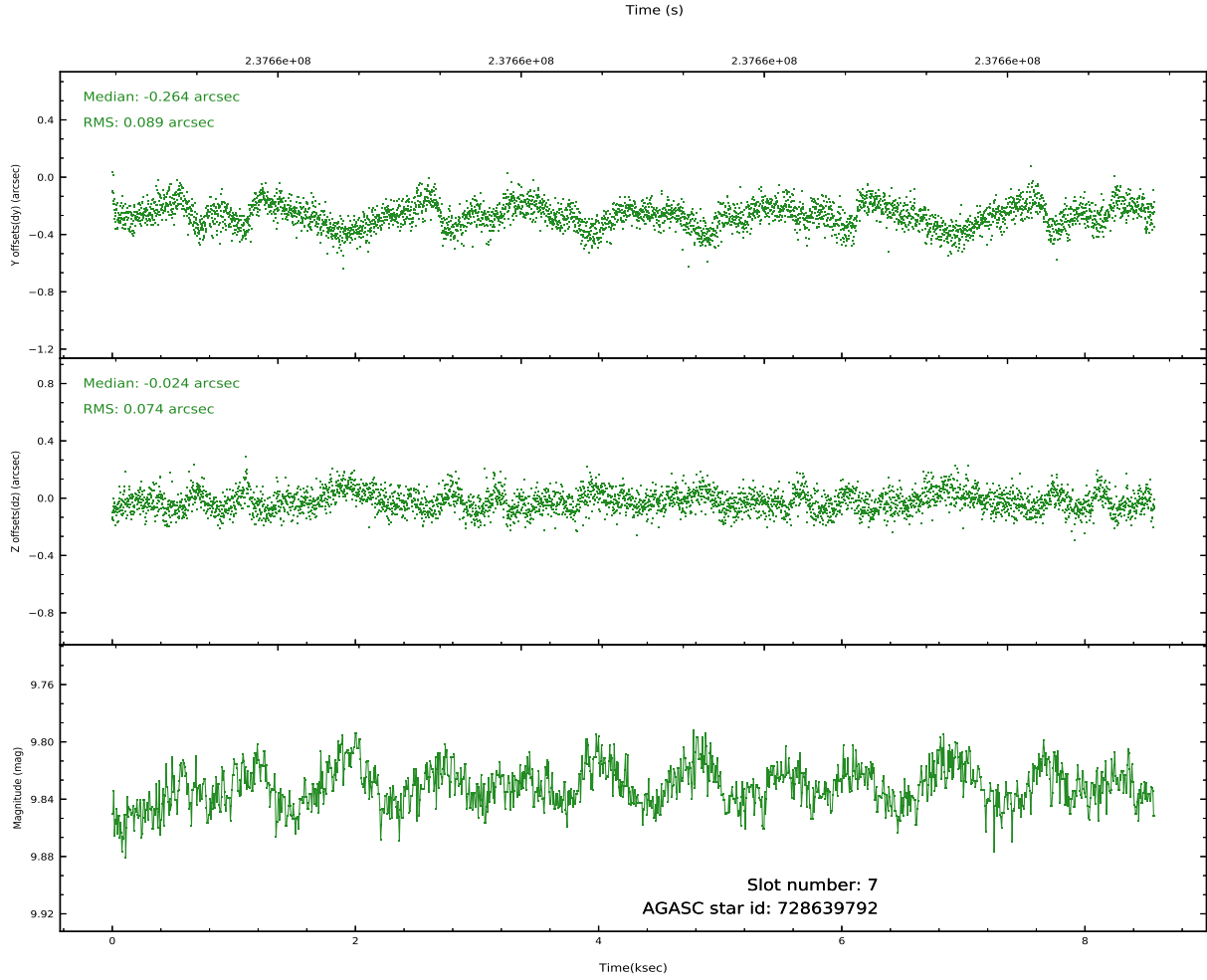
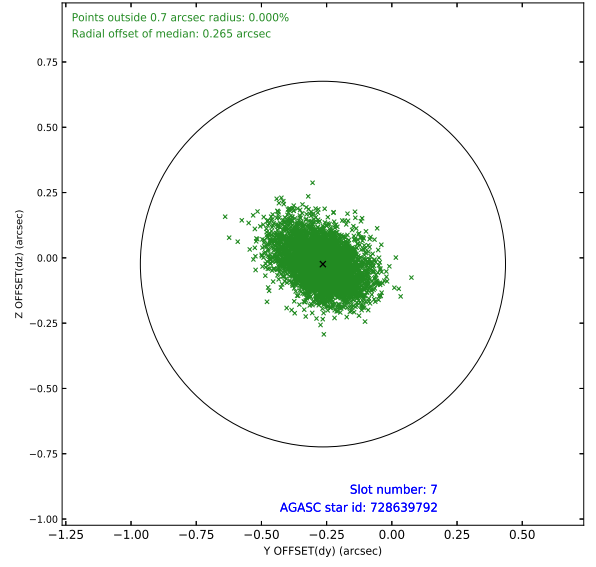
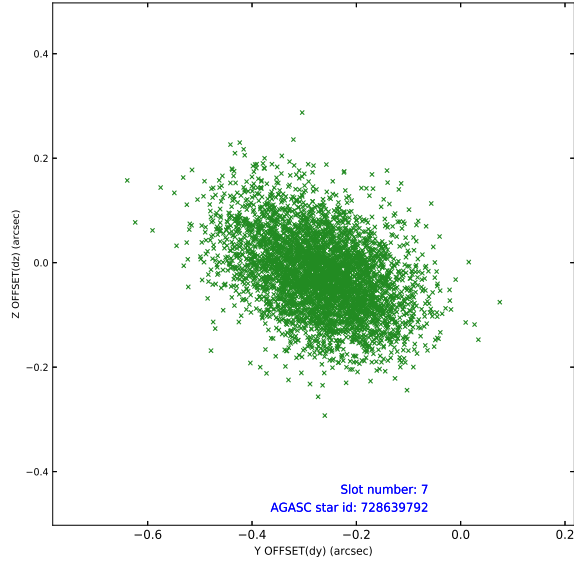
2.4.3 Slot 6



Time (s)

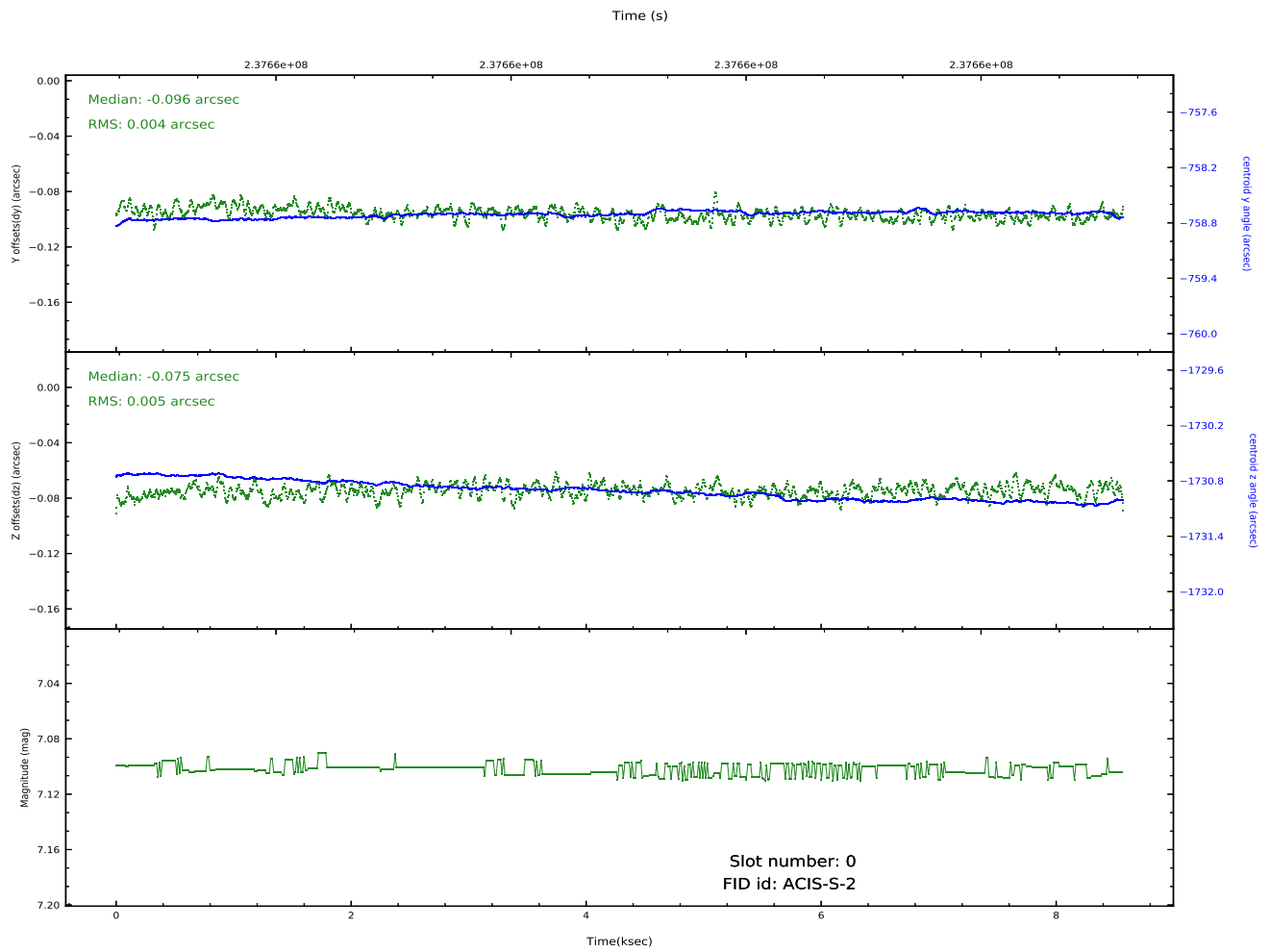
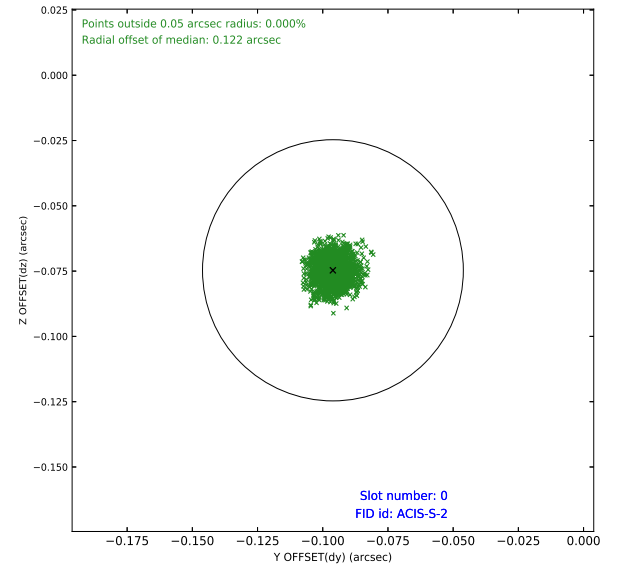
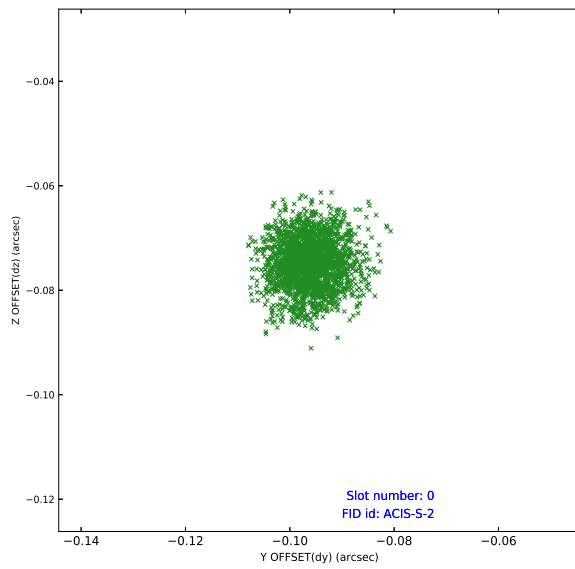


2.4.4 Slot 7

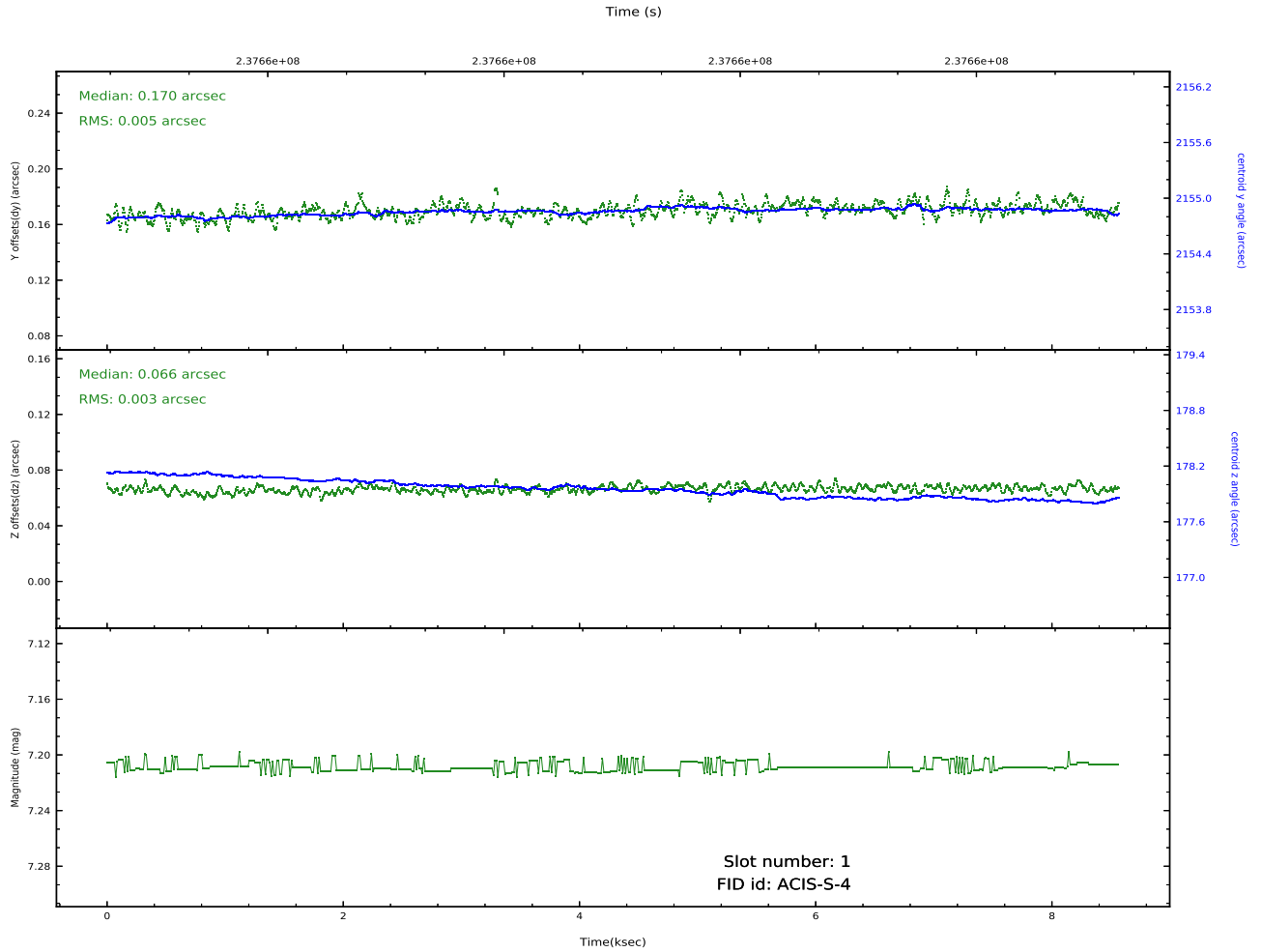
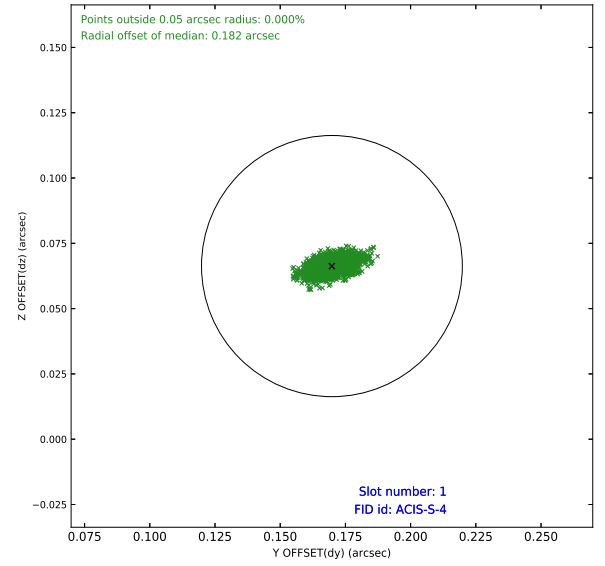
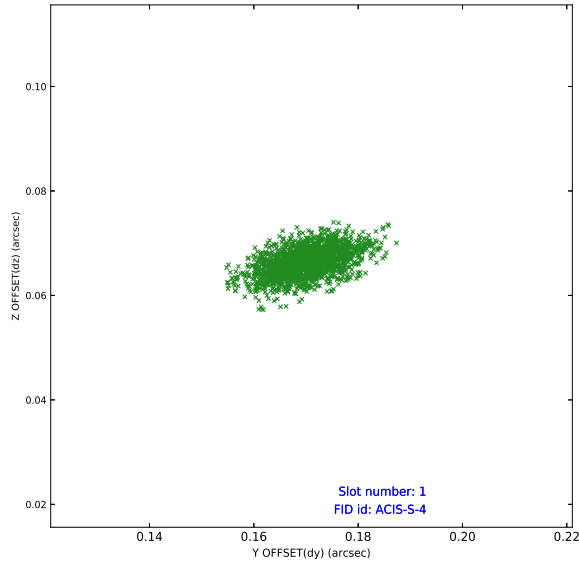


2.5 FID Slots

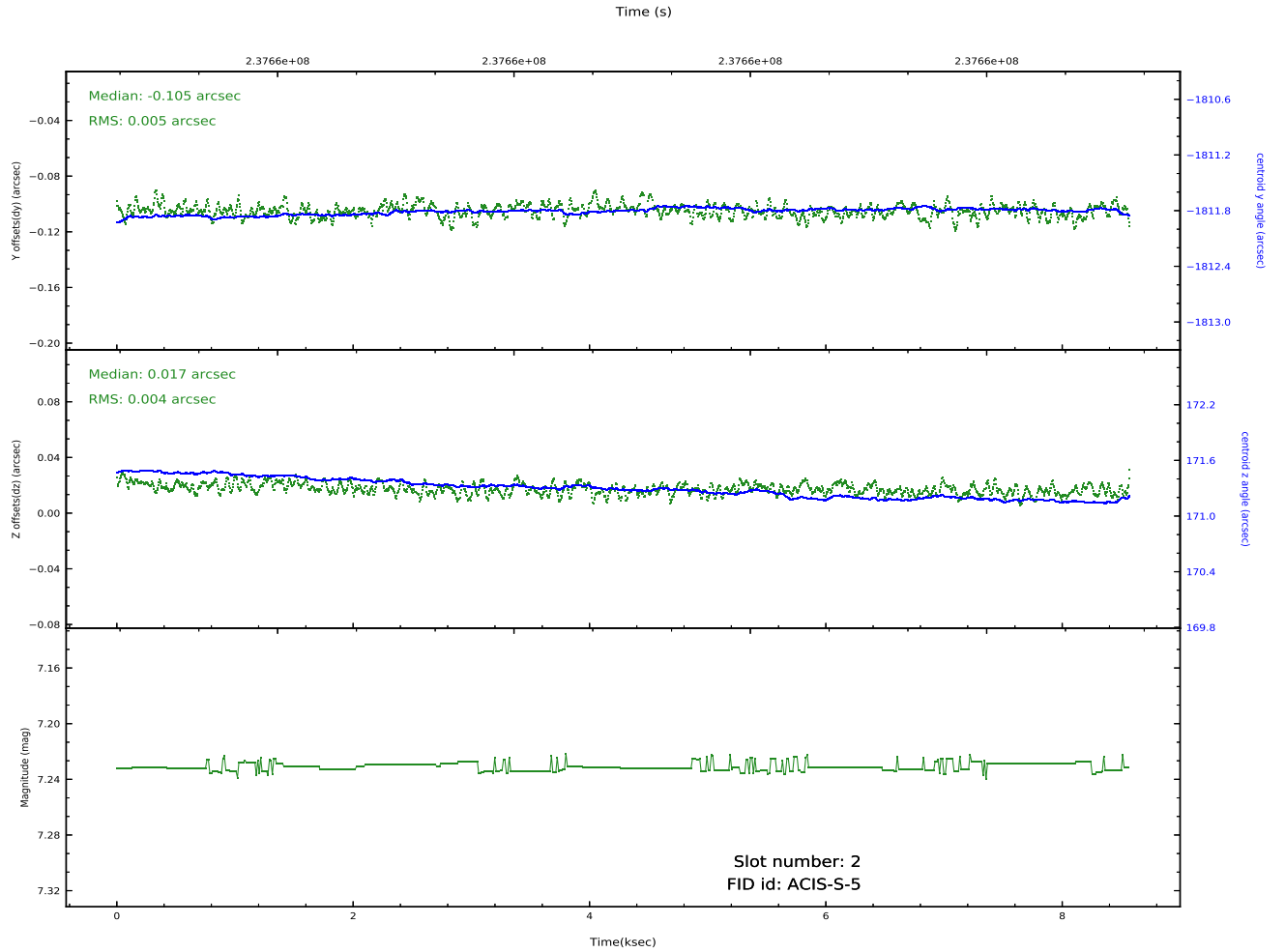
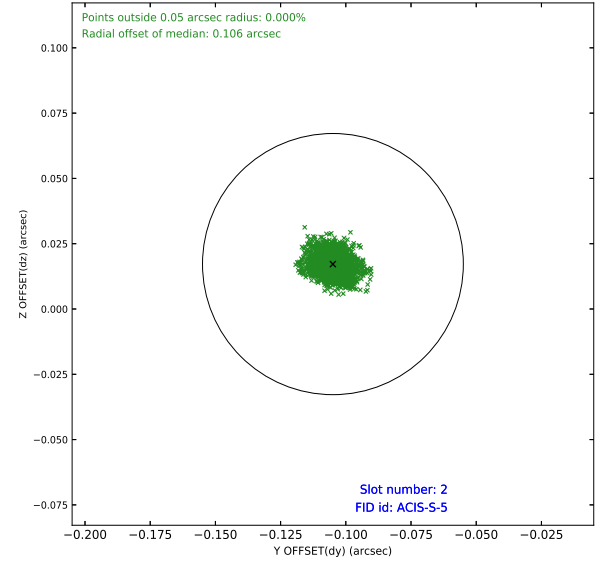
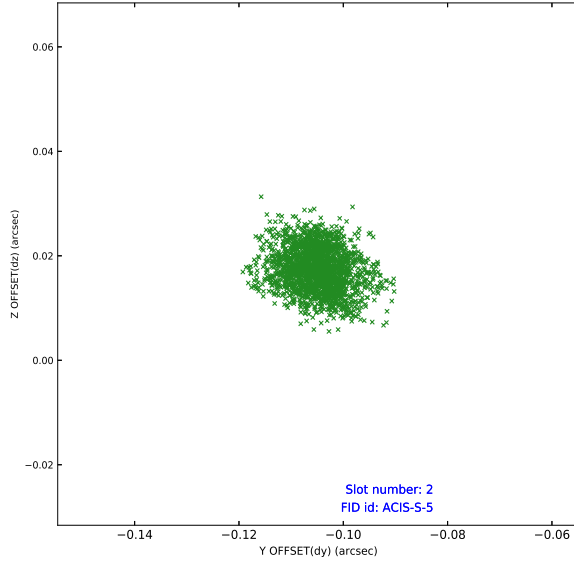
2.5.1 Slot 0



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)	2020.10.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.287999

A.2 Comments

Window preference was not 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 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.