

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 6343 - L2 Version 5
Chandra X-Ray Center

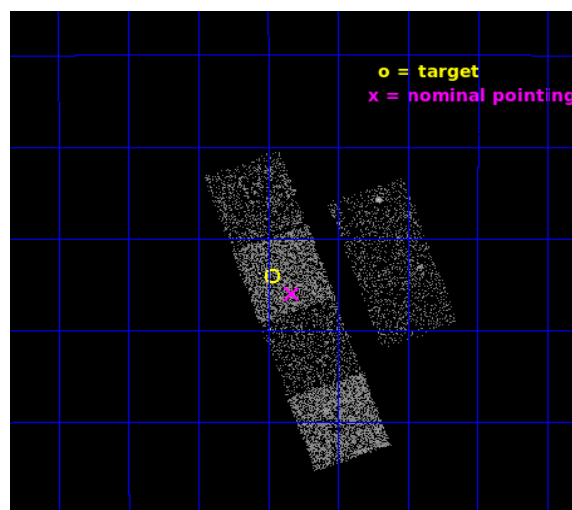
L2 Processing Date : Oct 9 2020

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1 Front

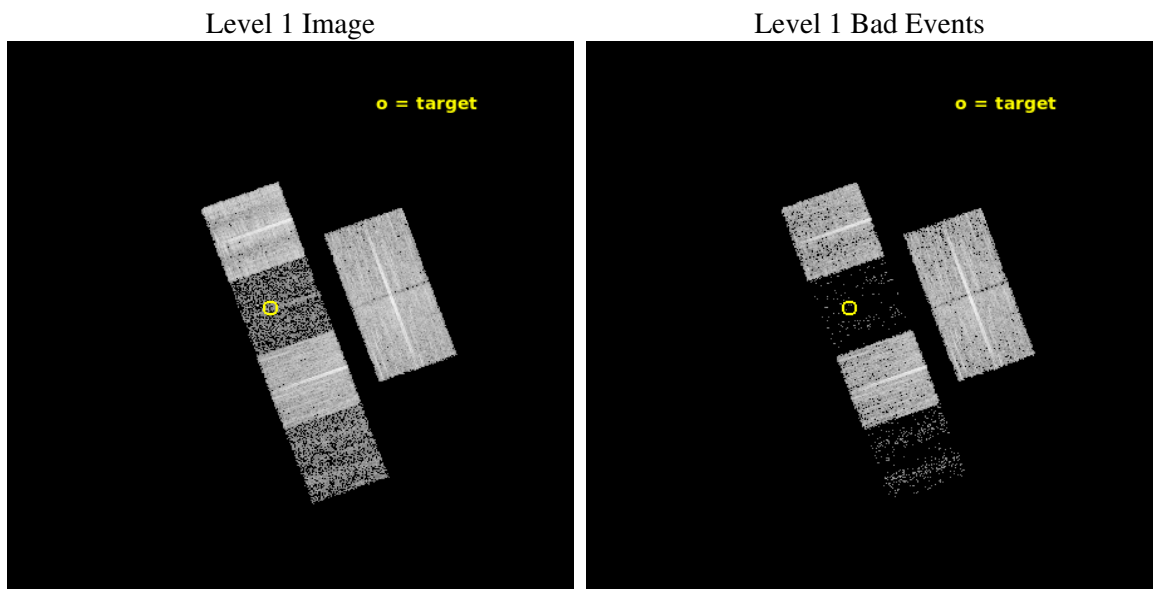
seq_num	100057	Sequence number
obs_id	6343	Observation id
title	Comet 9P/Tempel 1 During the Deep Impact Encounter	Proposal title
observer	Carey Lisse	Principal investigator
object	Comet 9P/Tempel 1	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	209.242193	Observer's specified target RA [deg]
dec_targ	-13.402081	Observer's specified target Dec [deg]
ra_nom	209.20735452211	Nominal RA [deg]
dec_nom	-13.433236253376	Nominal Dec [deg]
roll_nom	250.11648195903	Nominal Roll [deg]
revision	5	Processing version of data
ontime	8502.3999683261	Sum of GTIs [s]
livetime	8394.7374603965	Livetime [s]
ontime2	8502.3999683261	Sum of GTIs [s]
ontime3	8502.3999683261	Sum of GTIs [s]
ontime5	8502.3999683261	Sum of GTIs [s]
ontime6	8499.1589980423	Sum of GTIs [s]
ontime7	8502.3999683261	Sum of GTIs [s]
ontime8	8502.3999683261	Sum of GTIs [s]
l2events	11699	Number of level 2 events



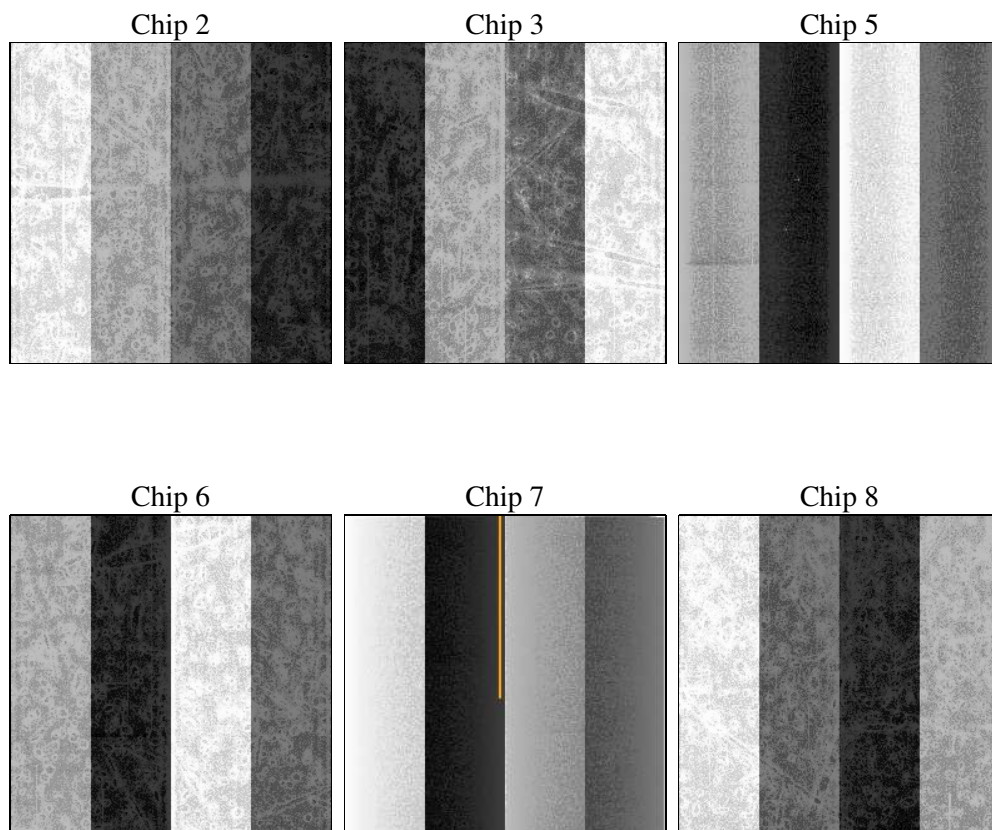
2 OBI

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	8502.3999683261	Sum of GTIs [s]
caldsver	4.9.2	 	ontime2	8502.3999683261	Sum of GTIs [s]
date	2020-10-09T08:57:21	Date and time of file creation	ontime3	8502.3999683261	Sum of GTIs [s]
revision	5	Processing version of data	ontime5	8502.3999683261	Sum of GTIs [s]
			ontime6	8499.1589980423	Sum of GTIs [s]
			ontime7	8502.3999683261	Sum of GTIs [s]
			ontime8	8502.3999683261	Sum of GTIs [s]
			l1events	175762	Number of level 1 events

2.1.4 Events

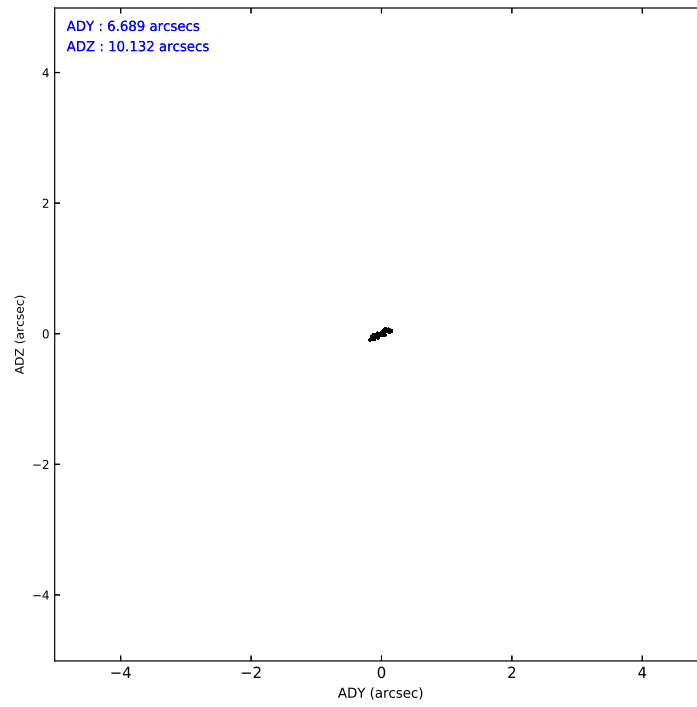
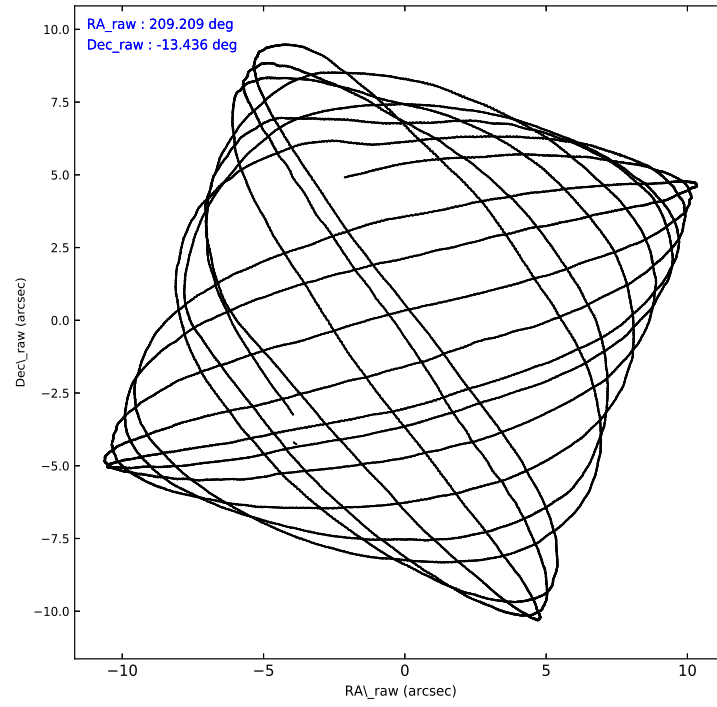
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	42189	36998	6373	36761	4966	48475
rejected events	40139	35744	2131	34976	1049	31592
rejected %	95%	96%	33%	95%	21%	65%

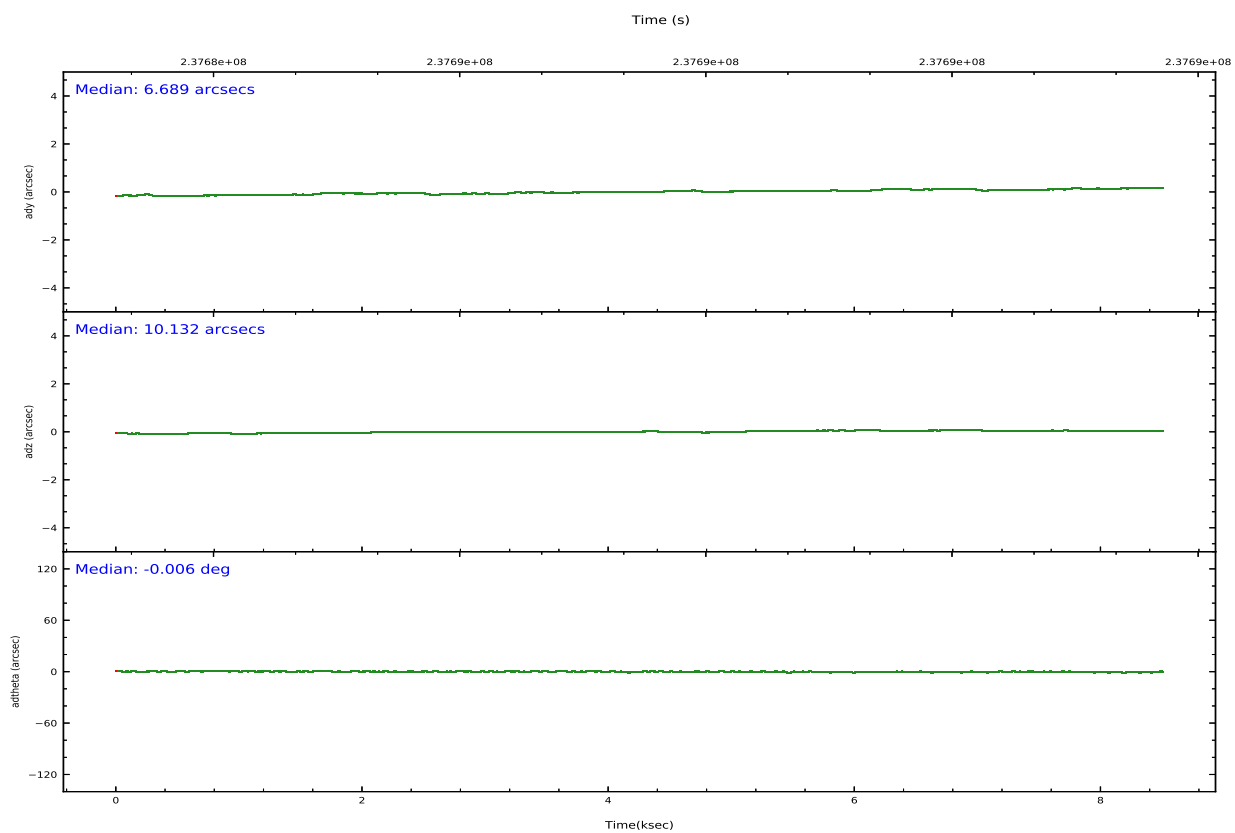
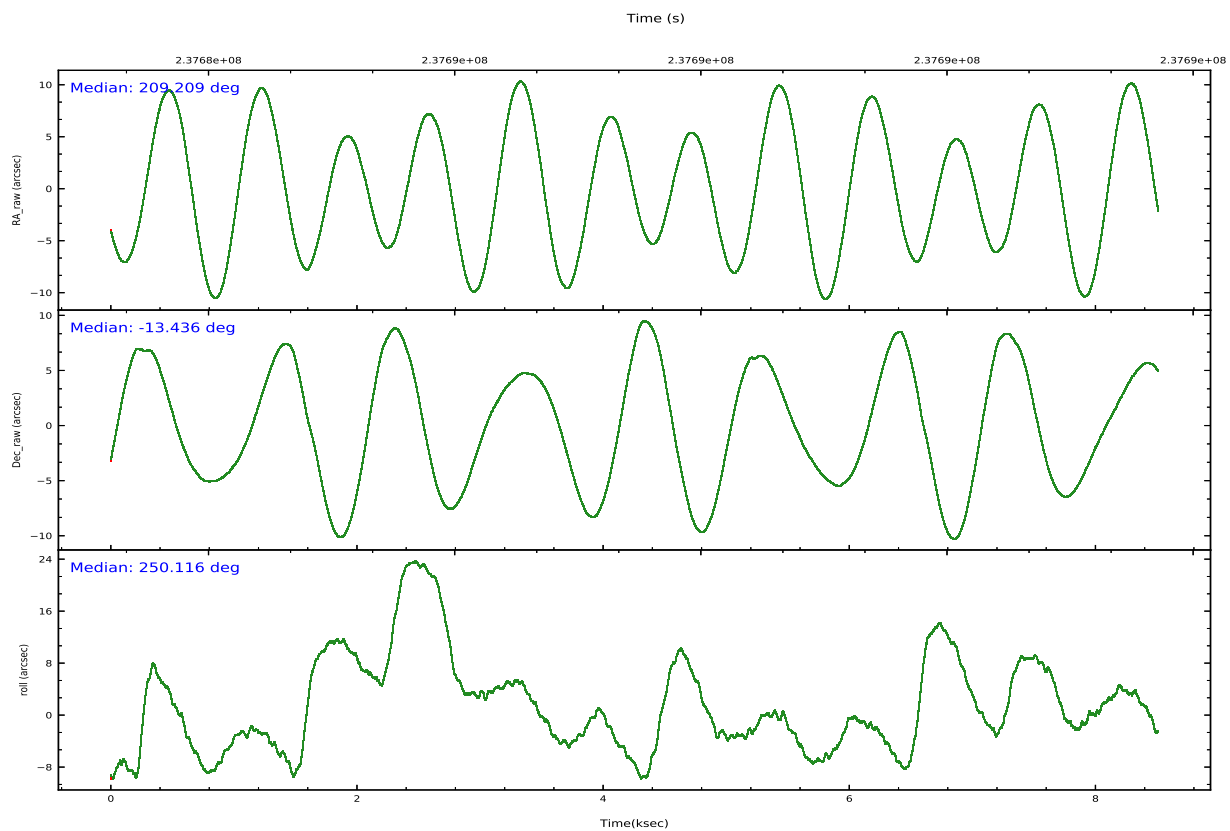
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	842	636	1110	800	1043	4681
	1%	1%	17%	2%	21%	9%
grade 1 events	16	15	52	9	14	31
	0%	0%	0%	0%	0%	0%
grade 2 events	591	159	1681	435	1292	3553
	1%	0%	26%	1%	26%	7%
grade 3 events	198	223	523	231	617	2345
	0%	0%	8%	0%	12%	4%
grade 4 events	265	173	531	250	577	2100
	0%	0%	8%	0%	11%	4%
grade 5 events	43	48	380	24	151	320
	0%	0%	5%	0%	3%	0%
grade 6 events	202	104	494	99	487	4513
	0%	0%	7%	0%	9%	9%
grade 7 events	40032	35640	1602	34913	785	30932
	94%	96%	25%	94%	15%	63%

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	209.204116	209.20735452211	Subarray requested	NONE	NONE
[deg] Pointing Dec	-13.409335	-13.433236253376	Alternating exposures requested	N	N
[deg] Pointing Roll	249.958804	250.11648195903	[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)	237683390.184000	237683013.76068			
Observation start date	2005-07-13T23:08:46	2005-07-13T23:03:33			
[s] Observation end time (MET)	237691715.184000	237692695.39863			
Observation end date	2005-07-14T01:27:31	2005-07-14T01:44:55			
Read mode	TIMED	TIMED			

2.3 Aspect



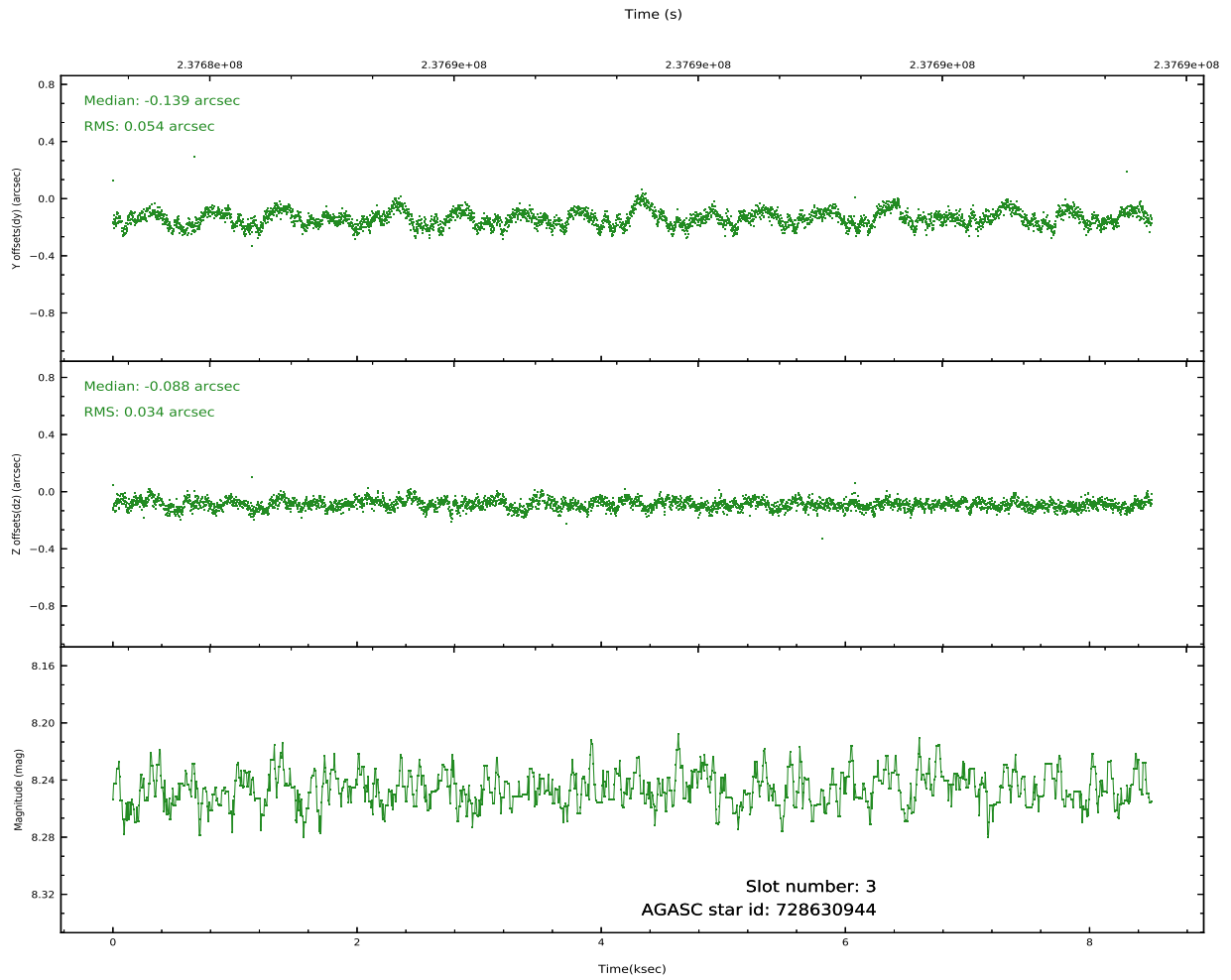
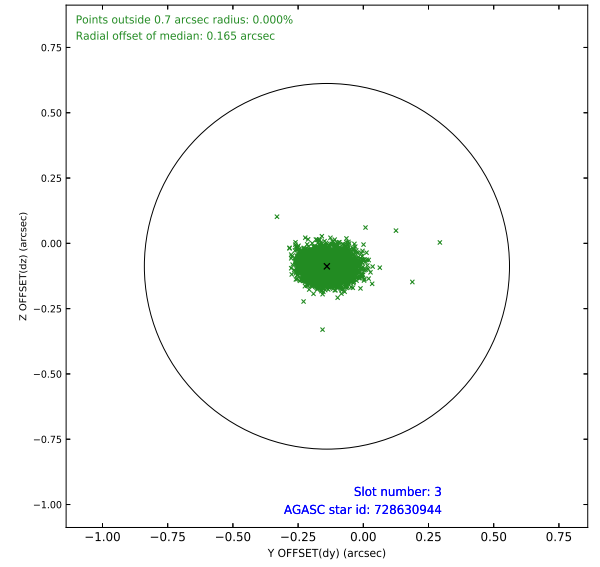
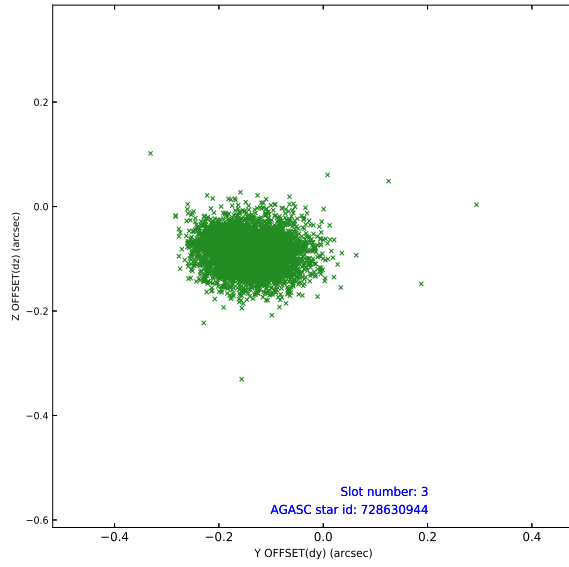


Slot Statistics

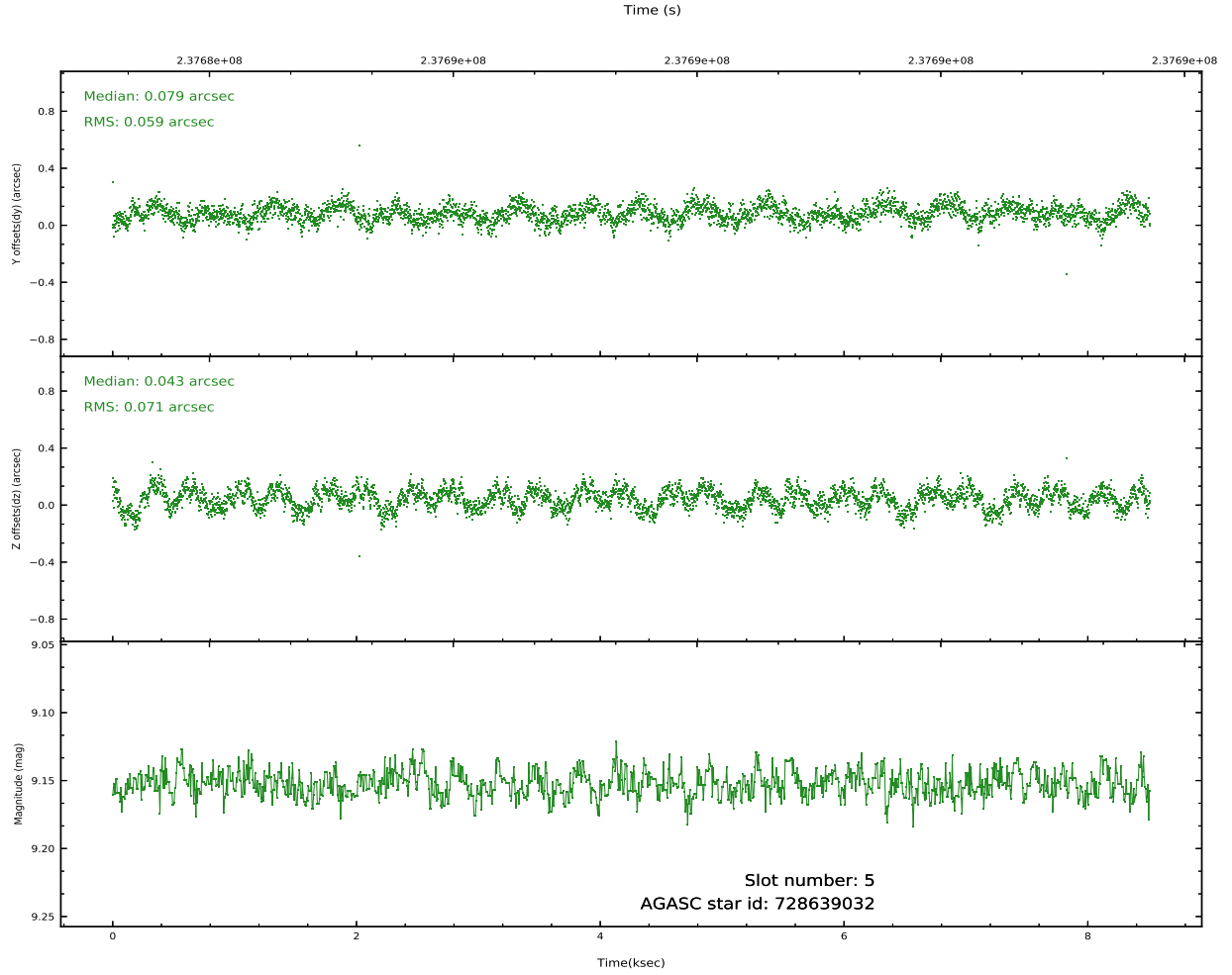
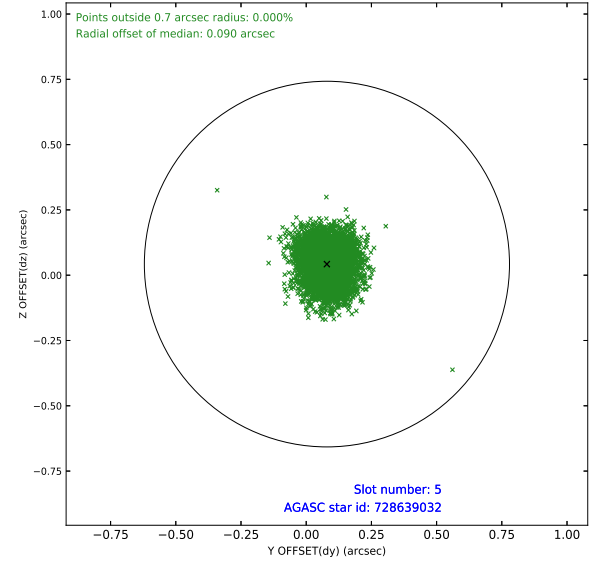
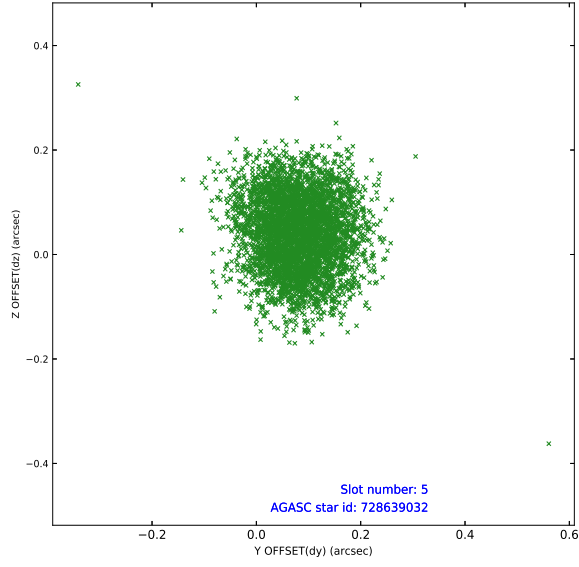
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	2076	1.000	-0.096	-0.064	0.006	0.010	0.000000	0.000000	-759.46	-1731
1	FID		ACIS-S-4	7.21	2076	1.000	0.167	0.063	0.005	0.010	0.000000	0.000000	2153.72	176
2	FID		ACIS-S-5	7.23	2076	1.000	-0.103	0.009	0.006	0.011	0.000000	0.000000	-1811.54	170
3	GUIDE	used	728630944	8.25	4152	1.000	-0.139	-0.088	0.067	0.110	208.923207	-13.740319	1457.02	-514
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	728639032	9.15	4149	1.000	0.079	0.043	0.100	0.154	209.196450	-13.877558	1593.67	552
6	GUIDE	used	728765720	6.75	4152	1.000	-0.020	0.056	0.060	0.090	209.624356	-14.122063	1909.39	2258
7	GUIDE	used	728632824	10.09	4146	1.000	0.079	-0.006	0.176	0.283	208.794061	-13.959609	2354.32	-665

2.4 Star Slots

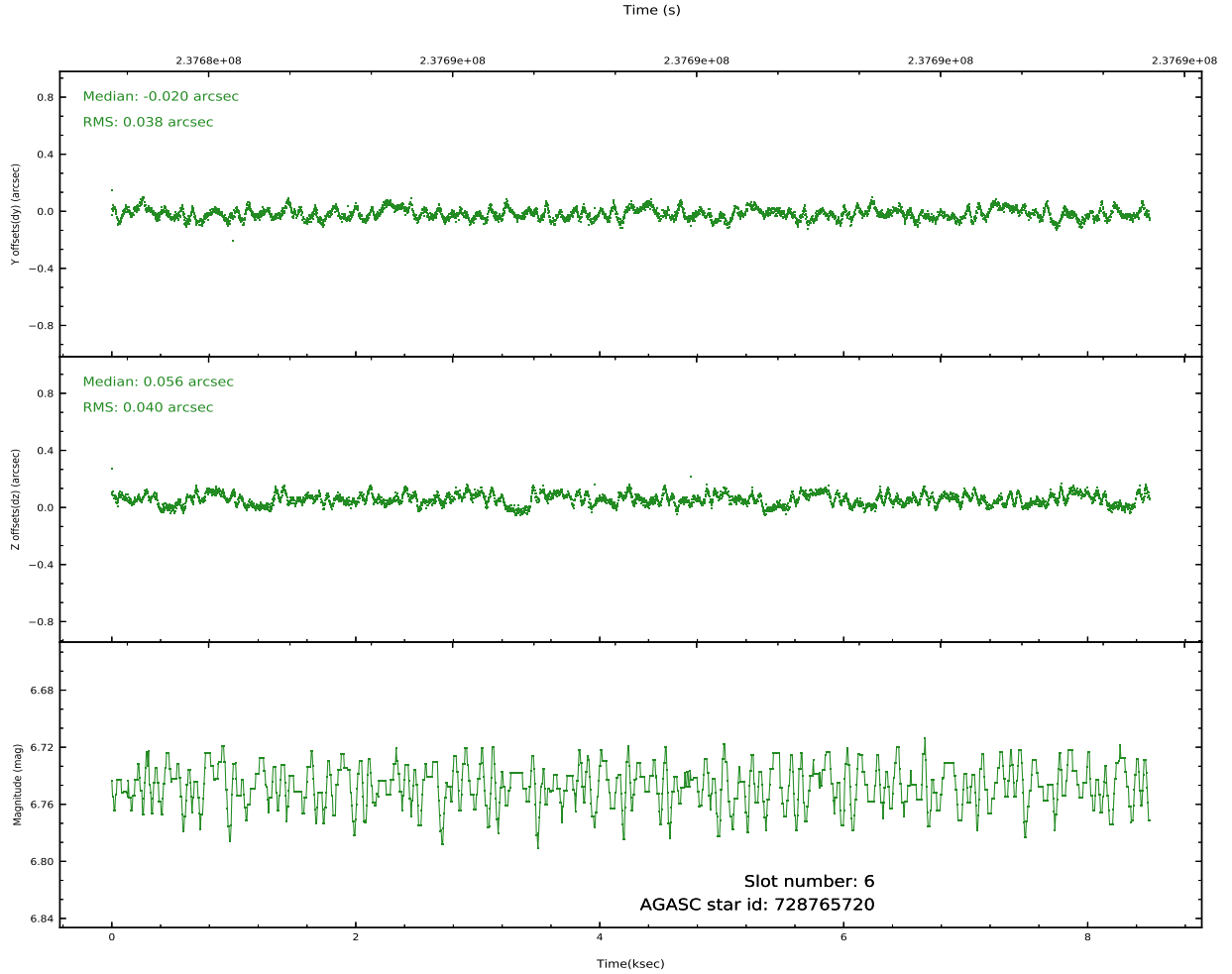
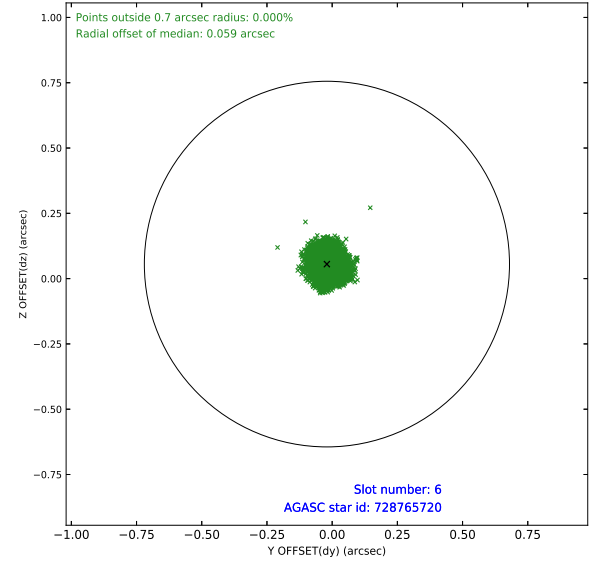
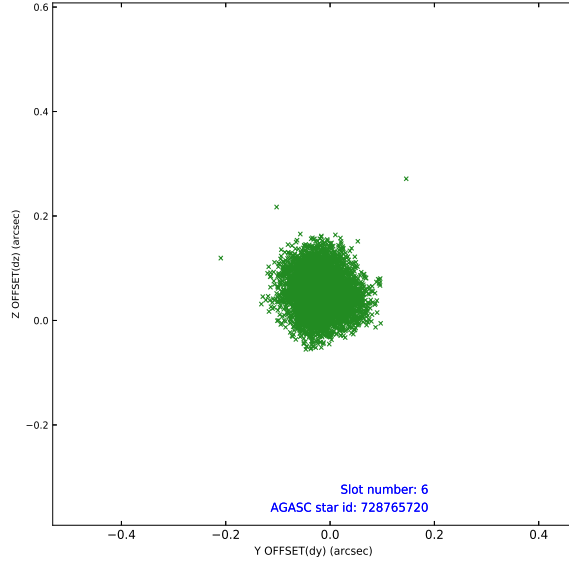
2.4.1 Slot 3



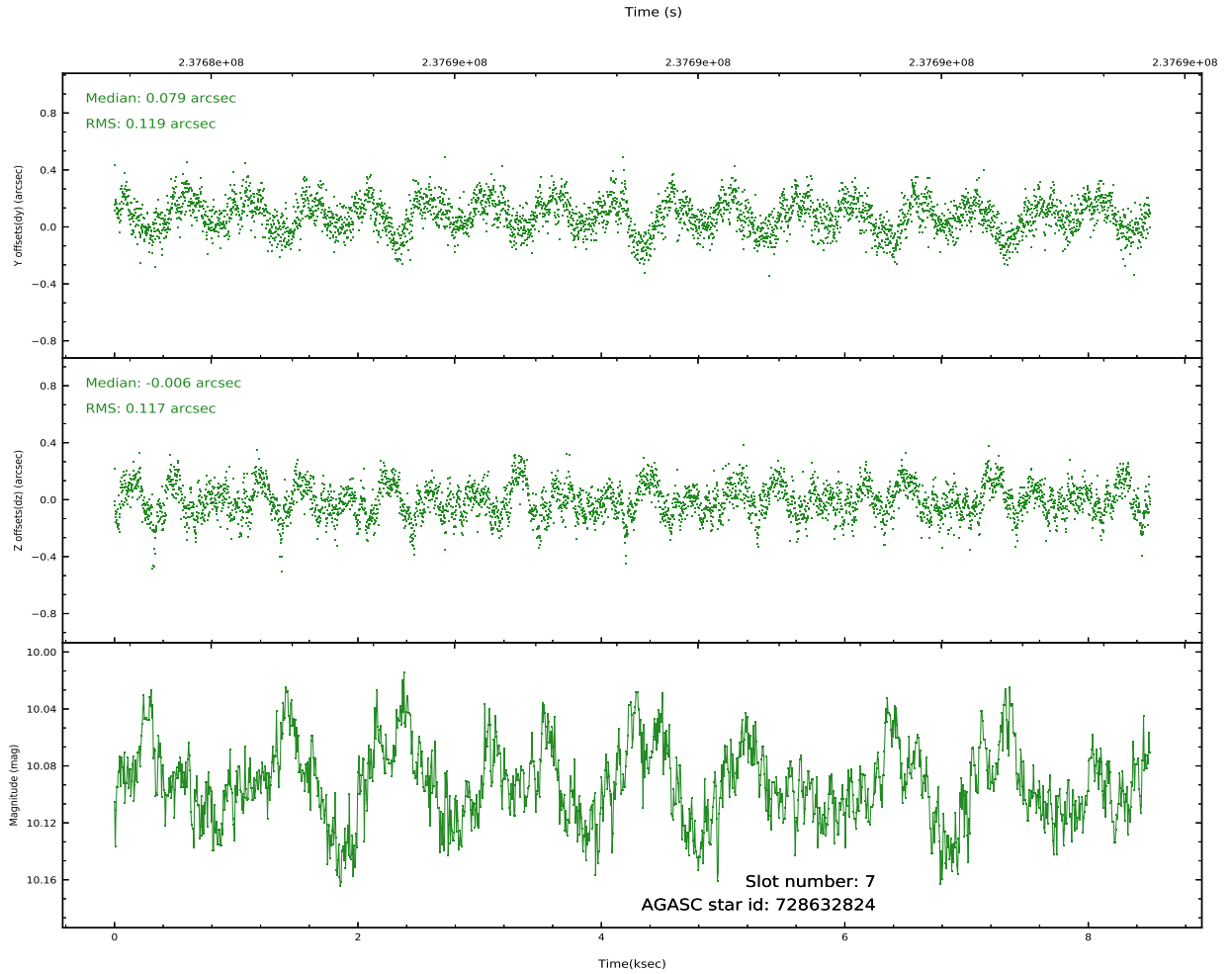
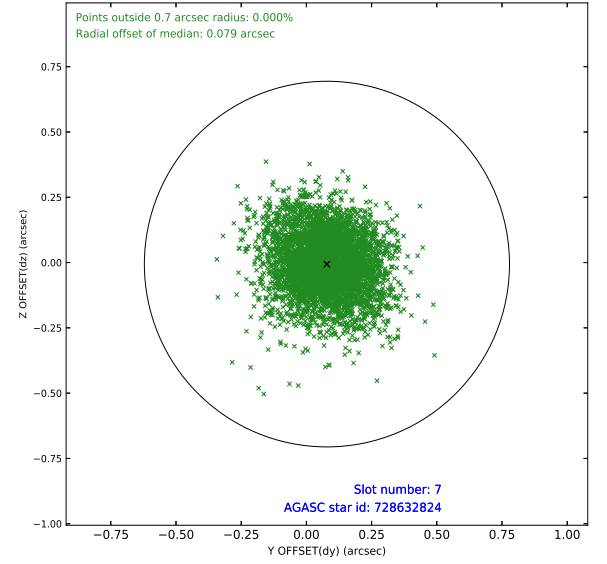
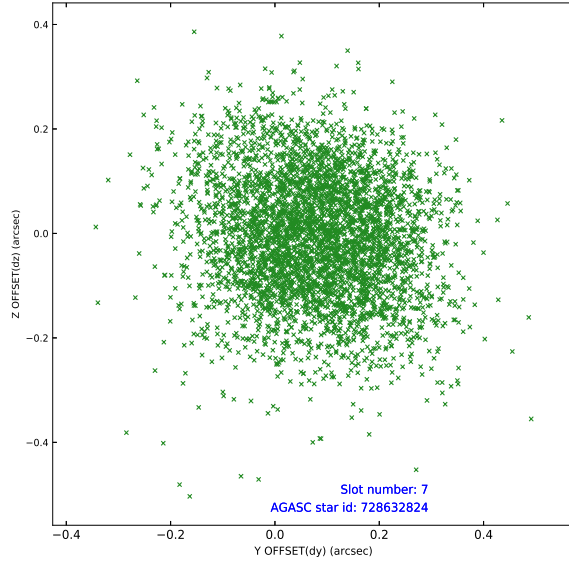
2.4.2 Slot 5



2.4.3 Slot 6

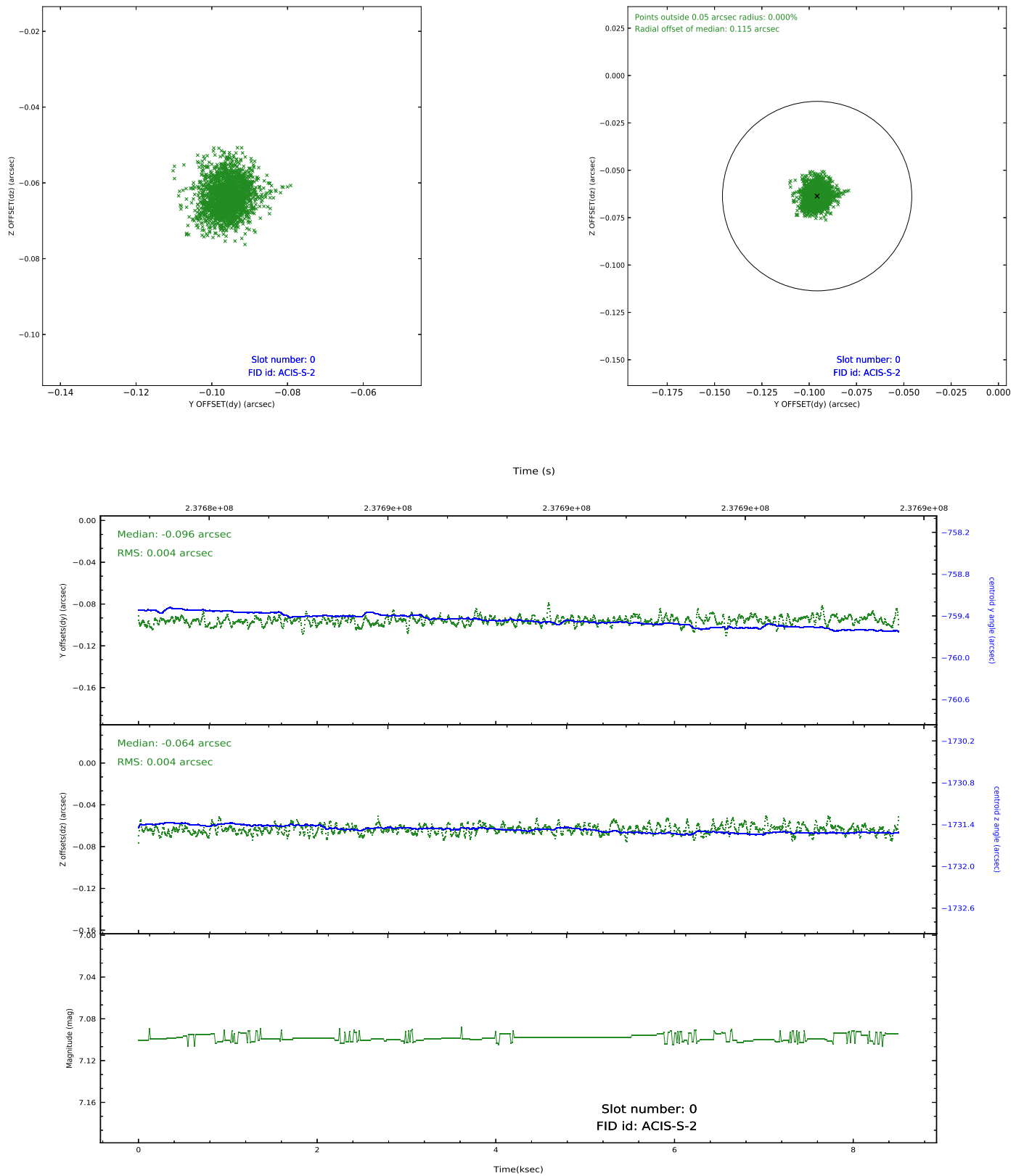


2.4.4 Slot 7

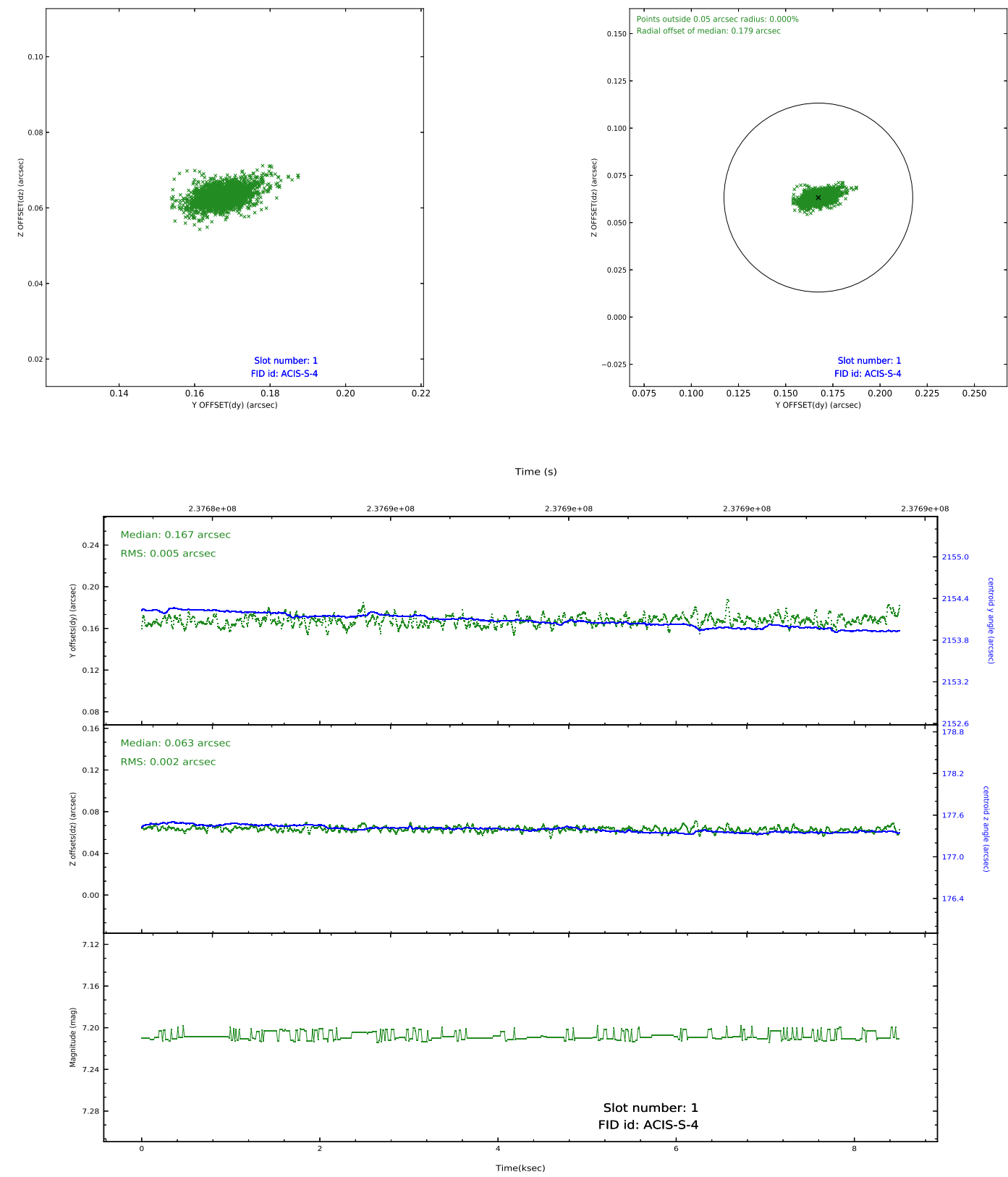


2.5 FID Slots

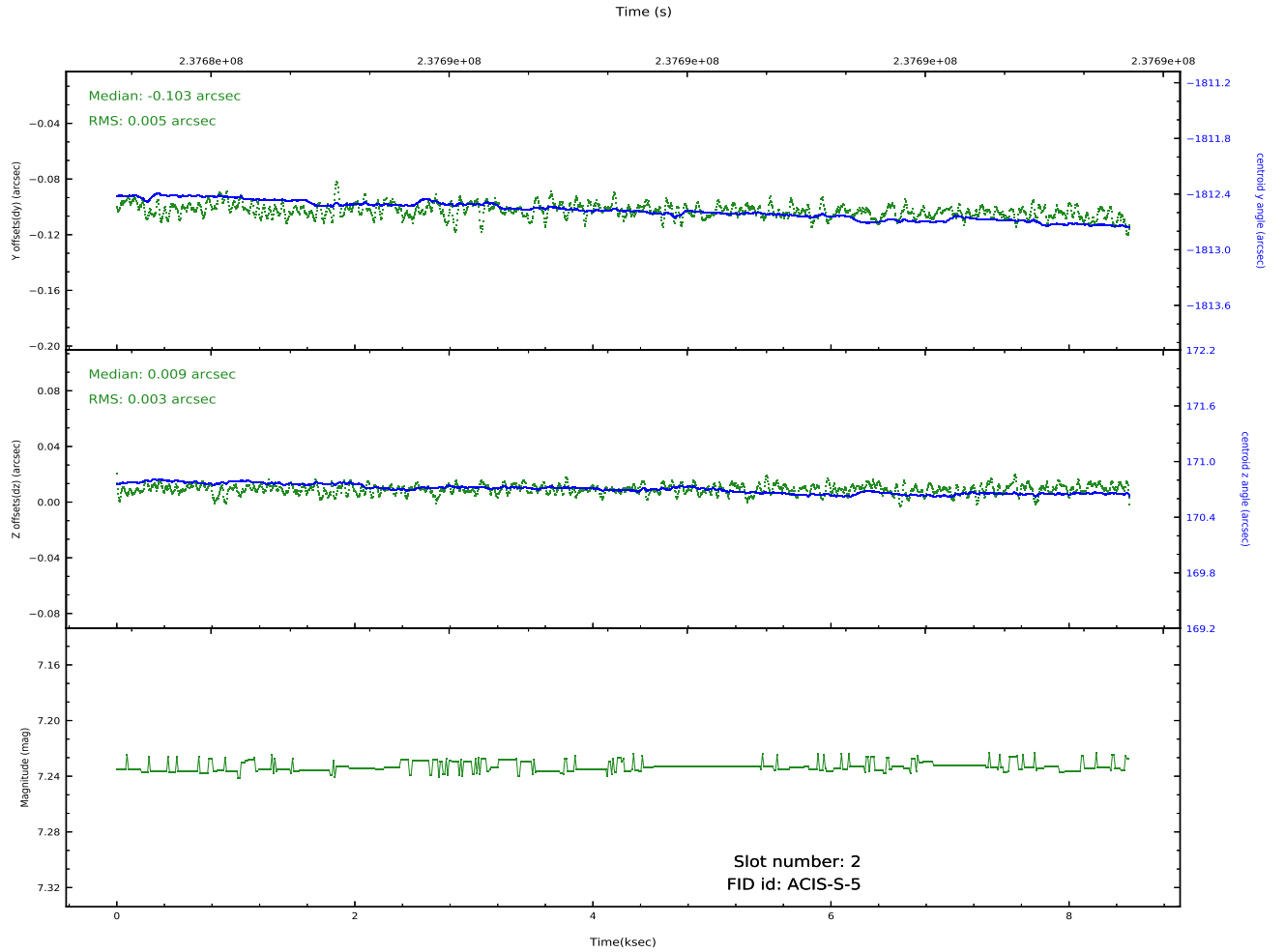
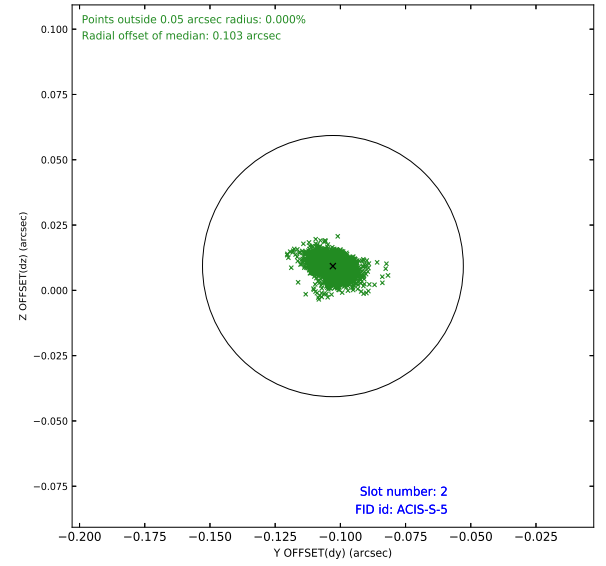
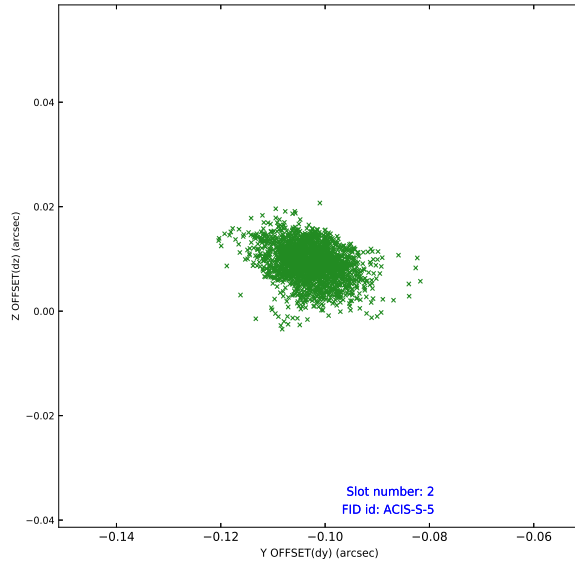
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.502399

A.2 Comments

This is an observation of 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 star from the solution.

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Window constraint was not met.