

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20380 - L2 Version 3
Chandra X-Ray Center

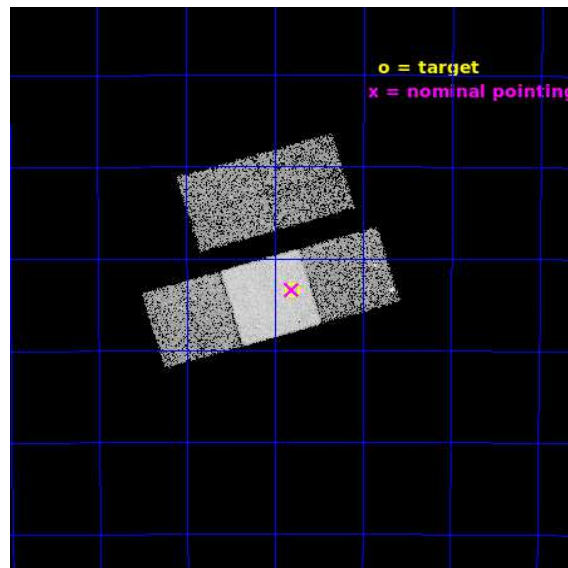
L2 Processing Date : Oct 24 2020

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1 Front

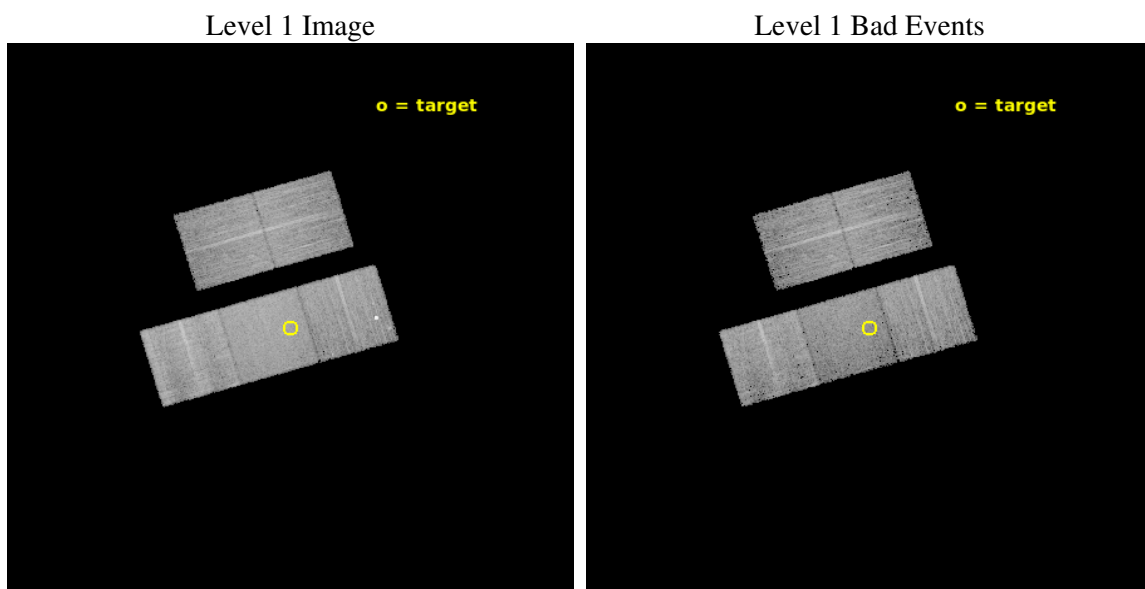
seq_num	703485	Sequence number
obs_id	20380	Observation id
title	HEAVILY REDDENED, LUMINOUS TYPE 1 QSOs: A TRANSITION POPULATION EMERGING FROM THE DUST	Proposal title
observer	Enrico Piconcelli	Principal investigator
object	VHSJ2227-5203	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	336.949167	Observer's specified target RA [deg]
dec_targ	-52.058194	Observer's specified target Dec [deg]
ra_nom	336.95139906916	Nominal RA [deg]
dec_nom	-52.056811072899	Nominal Dec [deg]
roll_nom	163.49038864449	Nominal Roll [deg]
revision	3	Processing version of data
ontime	9052.0000697374	Sum of GTIs [s]
livetime	8933.7290248408	Livetime [s]
ontime2	9052.0000697374	Sum of GTIs [s]
ontime3	9052.0000697374	Sum of GTIs [s]
ontime6	9052.0000697374	Sum of GTIs [s]
ontime7	9052.0000697374	Sum of GTIs [s]
ontime8	9052.0000697374	Sum of GTIs [s]
l2events	62409	Number of level 2 events



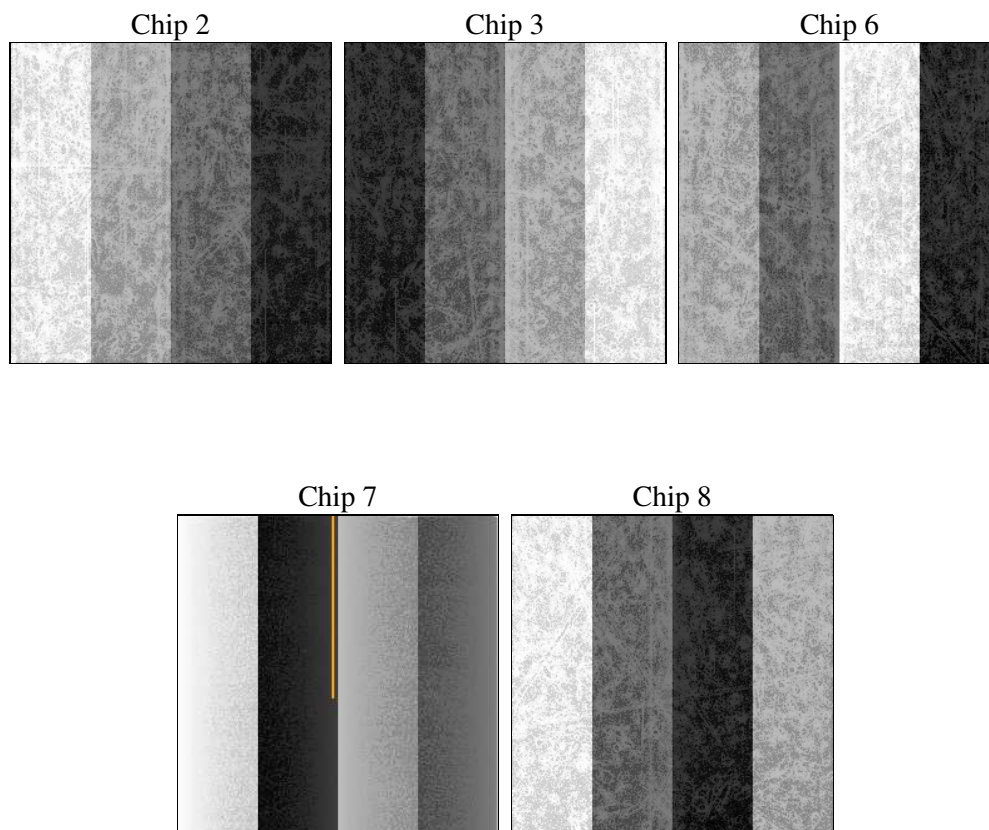
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8998.952000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	9052.0000697374	Sum of GTIs [s]
caldsver	4.9.3	 	ontime2	9052.0000697374	Sum of GTIs [s]
date	2020-10-25T02:20:19	Date and time of file creation	ontime3	9052.0000697374	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	9052.0000697374	Sum of GTIs [s]
			ontime7	9052.0000697374	Sum of GTIs [s]
			ontime8	9052.0000697374	Sum of GTIs [s]
			l1events	376684	Number of level 1 events

2.1.4 Events

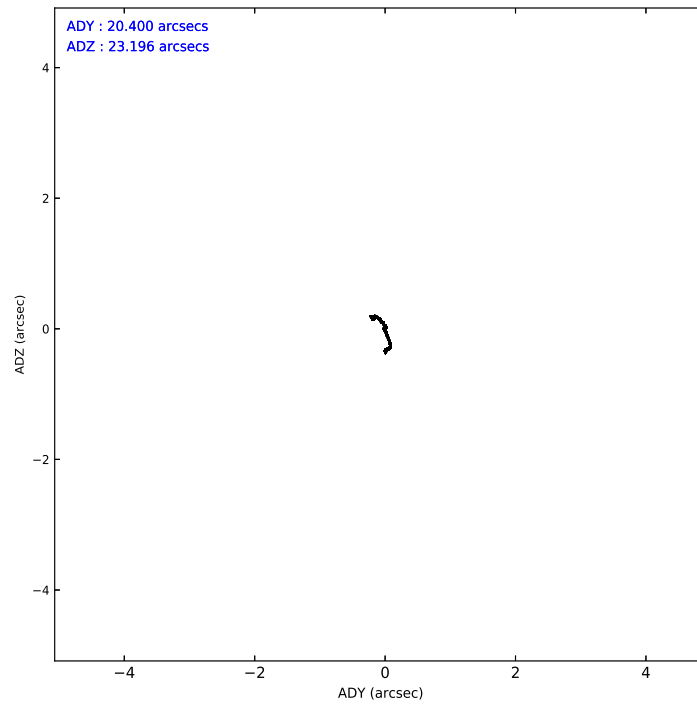
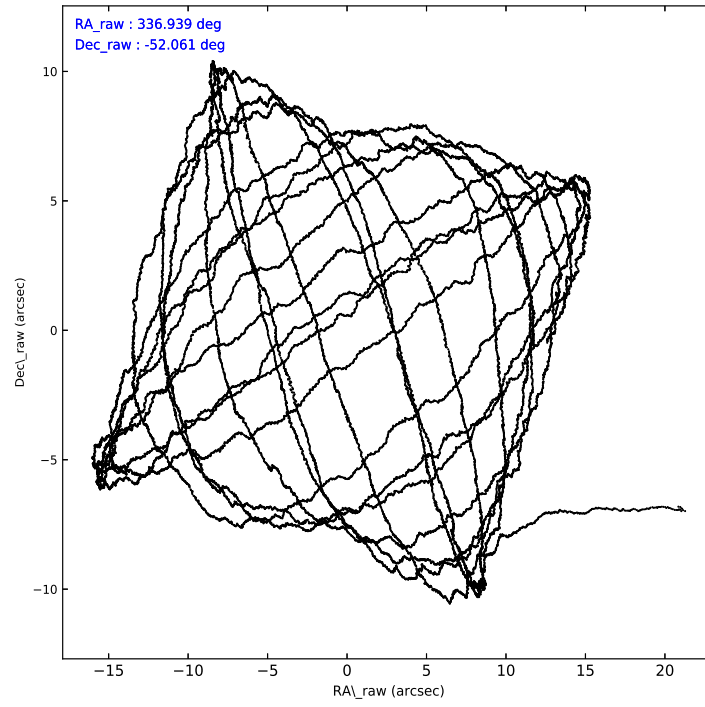
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	66151	63995	72852	85085	88601
rejected events	59193	57007	62220	48015	64922
rejected %	89%	89%	85%	56%	73%

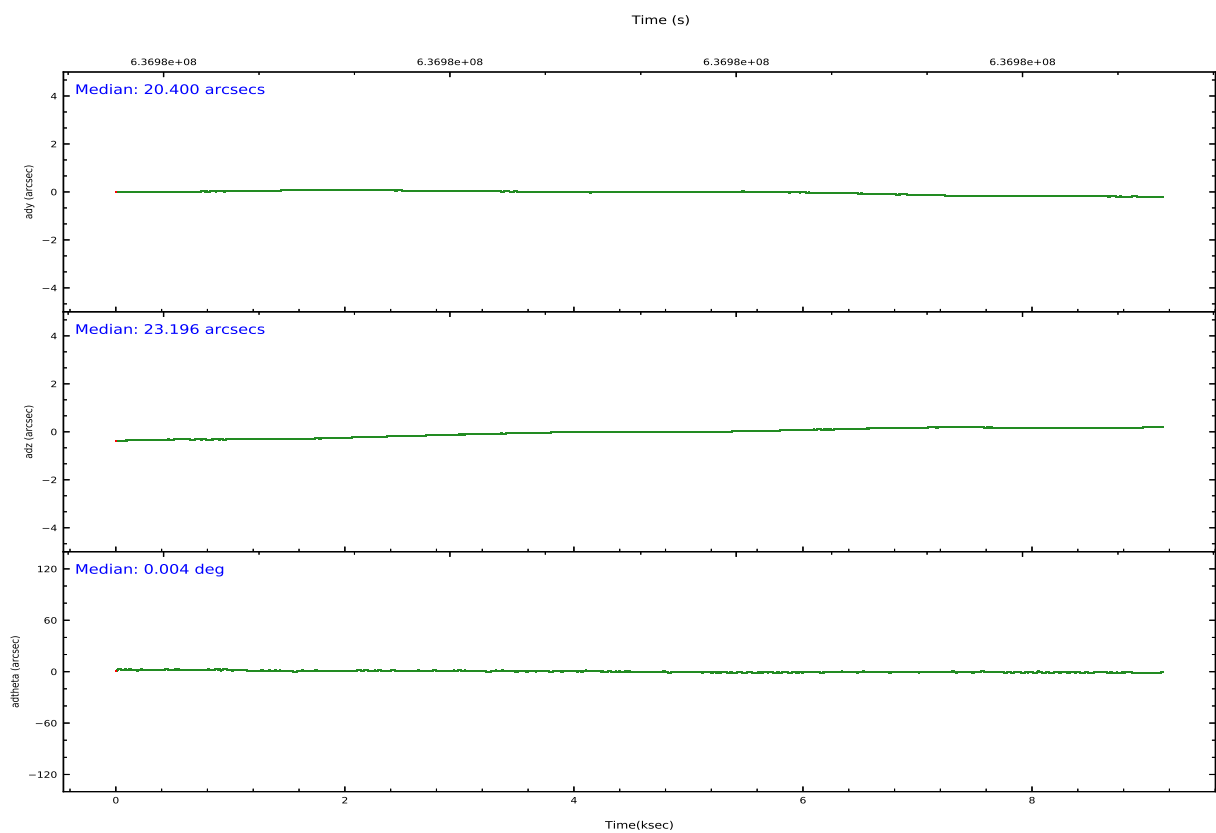
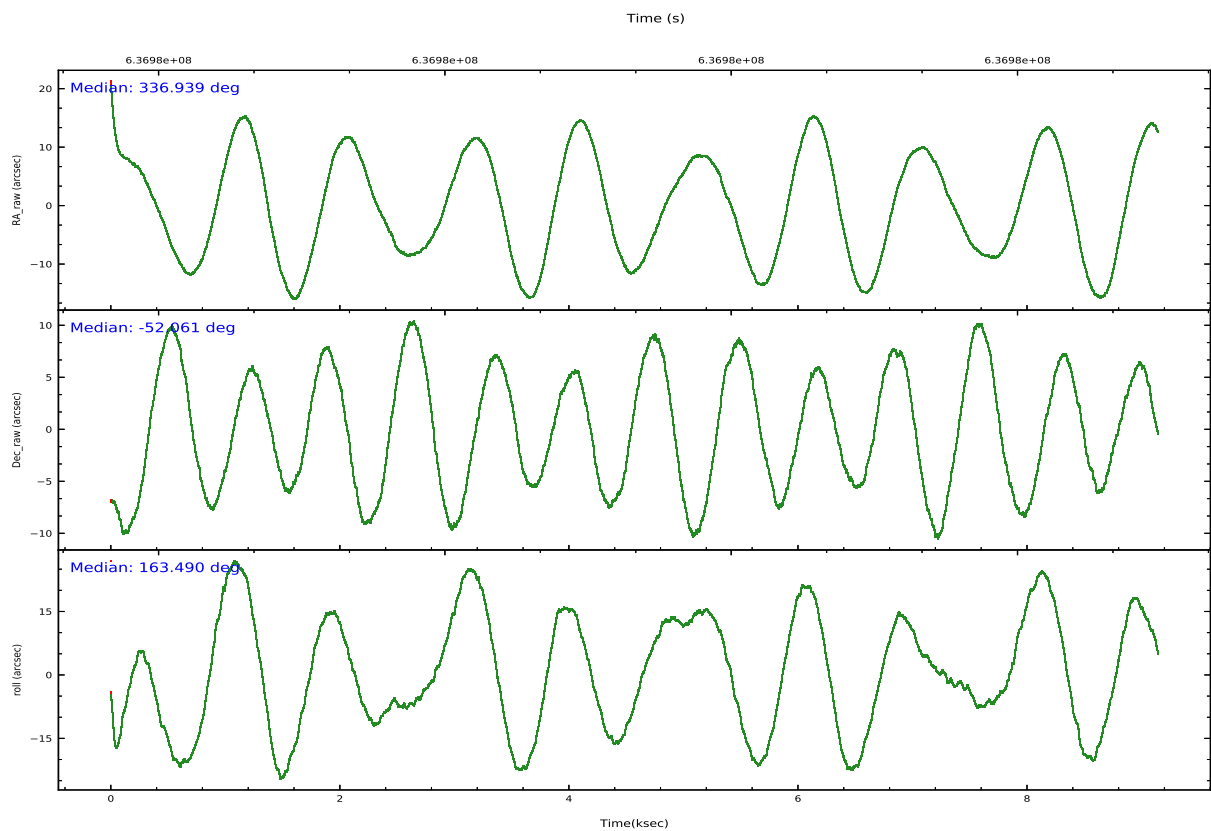
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	2466	2603	5505	3199	6840
	3%	4%	7%	3%	7%
grade 1 events	36	39	53	125	57
	0%	0%	0%	0%	0%
grade 2 events	1717	1421	1816	7792	5729
	2%	2%	2%	9%	6%
grade 3 events	703	779	753	3033	2428
	1%	1%	1%	3%	2%
grade 4 events	706	730	752	2976	2200
	1%	1%	1%	3%	2%
grade 5 events	2432	3037	3065	8580	4827
	3%	4%	4%	10%	5%
grade 6 events	1371	1460	1819	20108	6488
	2%	2%	2%	23%	7%
grade 7 events	56720	53926	59089	39272	60032
	85%	84%	81%	46%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	336.982260	336.95139906916	CCD I2 on	O1	Y
[deg] Pointing Dec	-52.054746	-52.056811072899	CCD I3 on	O2	Y
[deg] Pointing Roll	163.375091	163.49038864449	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	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	O3	Y
[s] Observation start time (MET)	636974729.184000	636973248.84484	CCD S5 on	N	N
Observation start date	2018-03-09T09:24:20	2018-03-09T09:00:48	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	636983728.184000	636984789.83302	On-chip summing requested	N	N
Observation end date	2018-03-09T11:54:19	2018-03-09T12:13:09	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



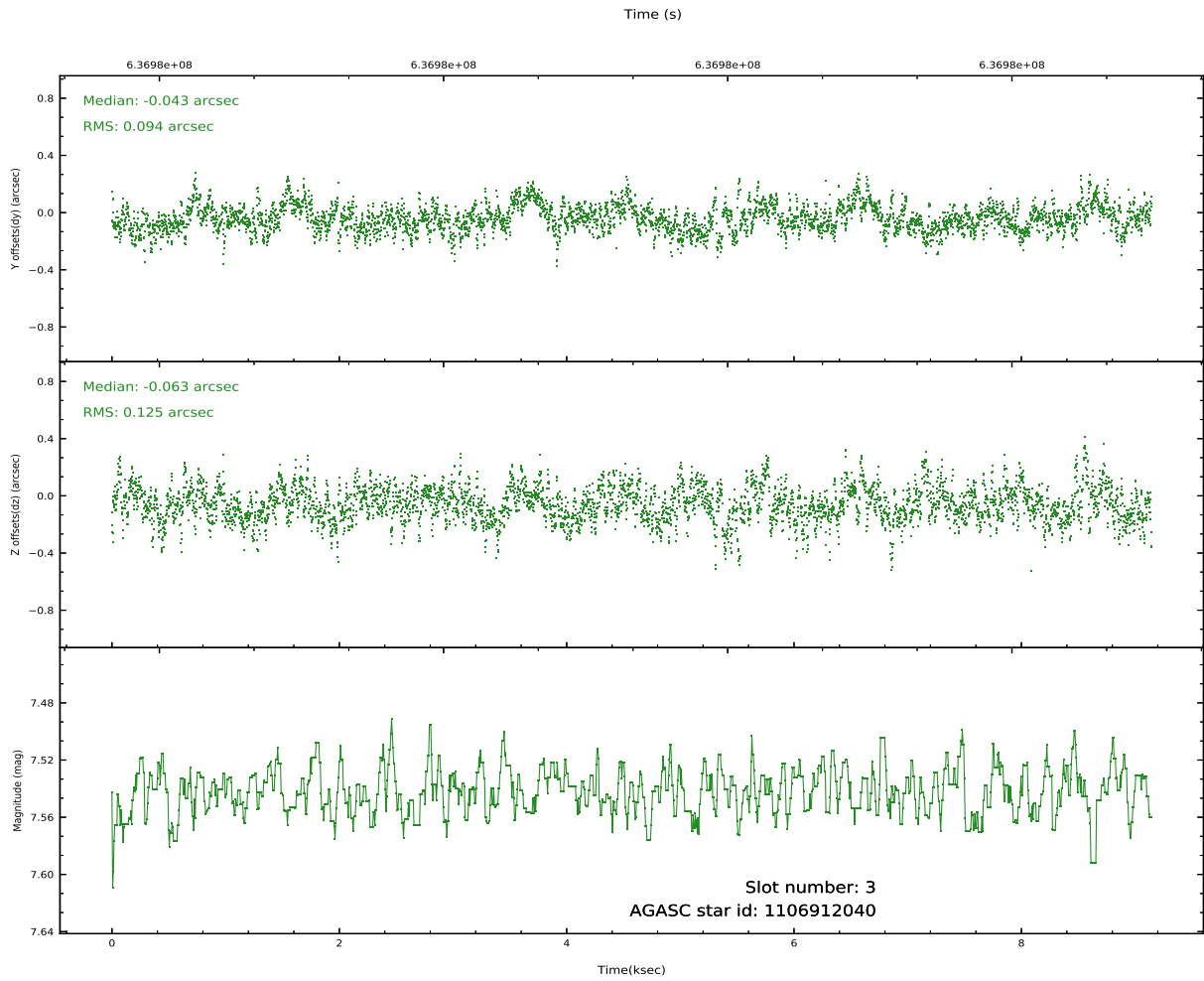
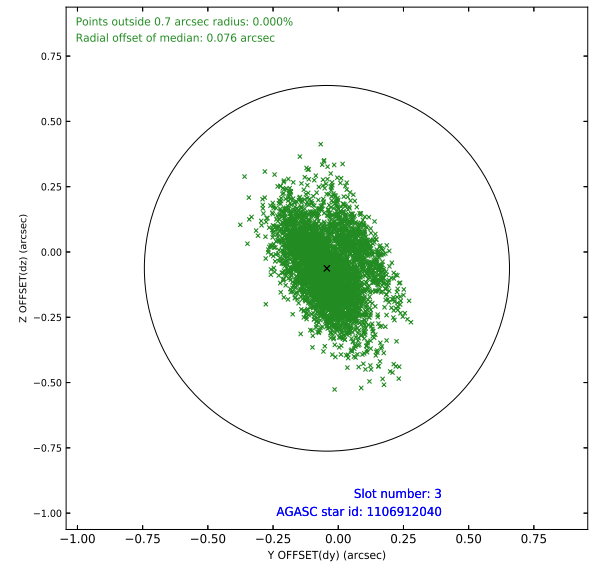
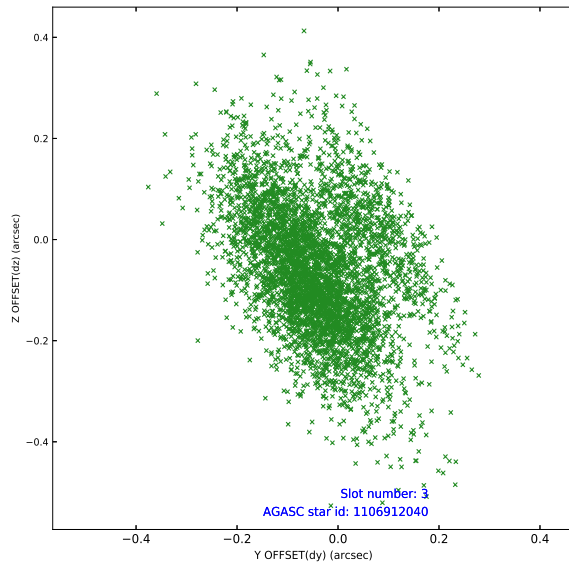


Slot Statistics

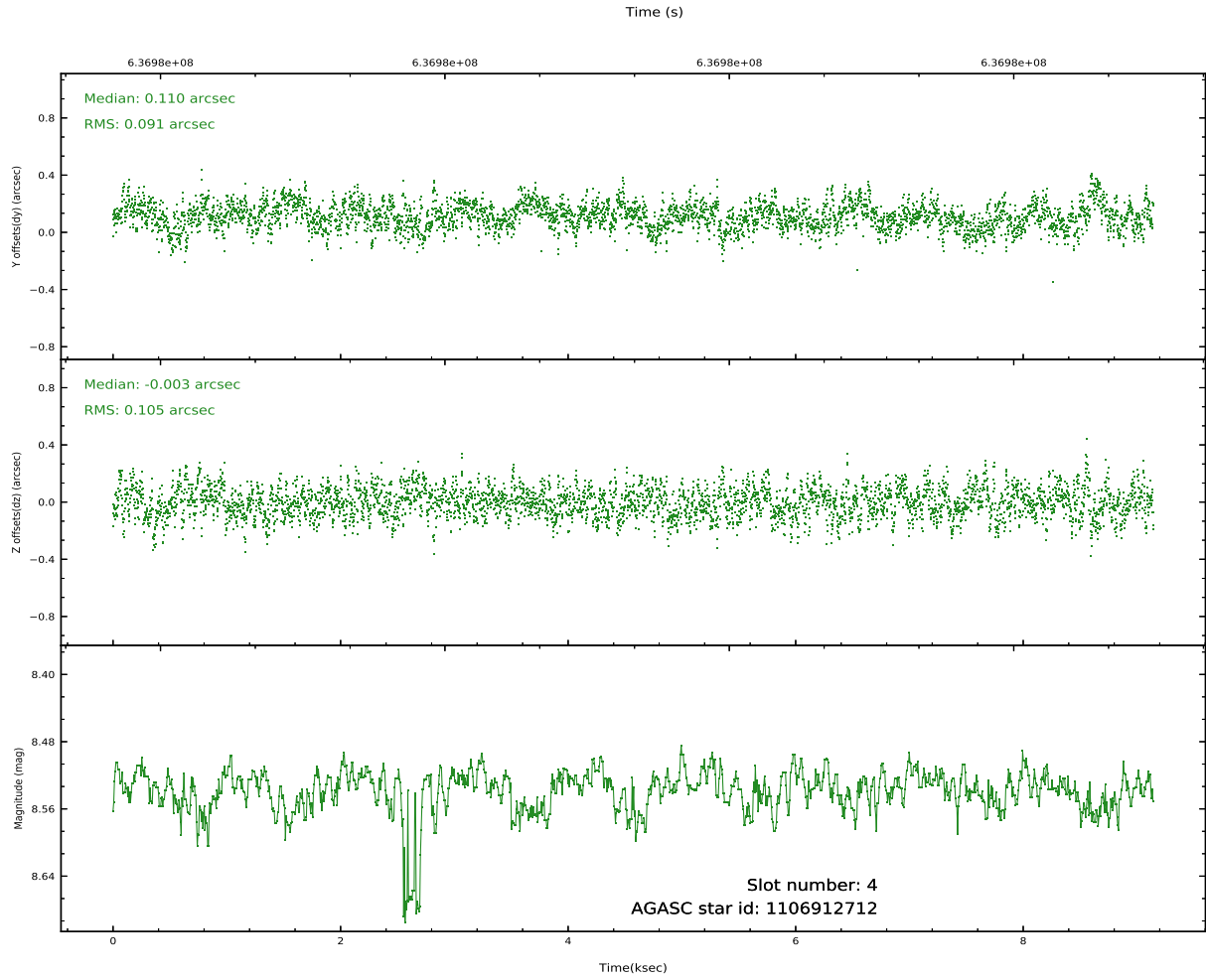
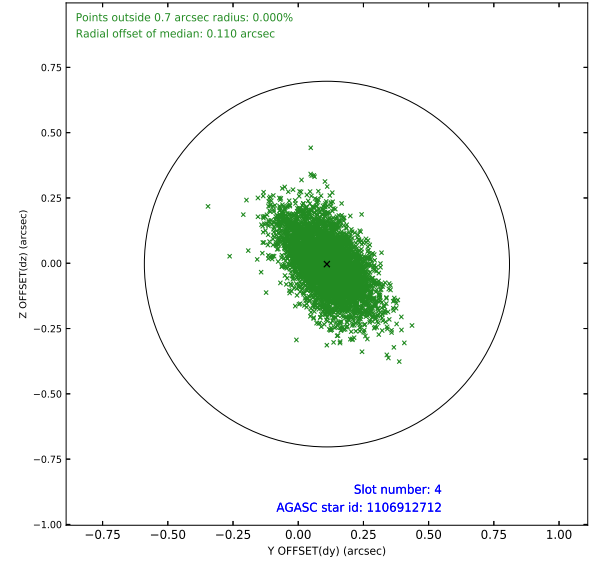
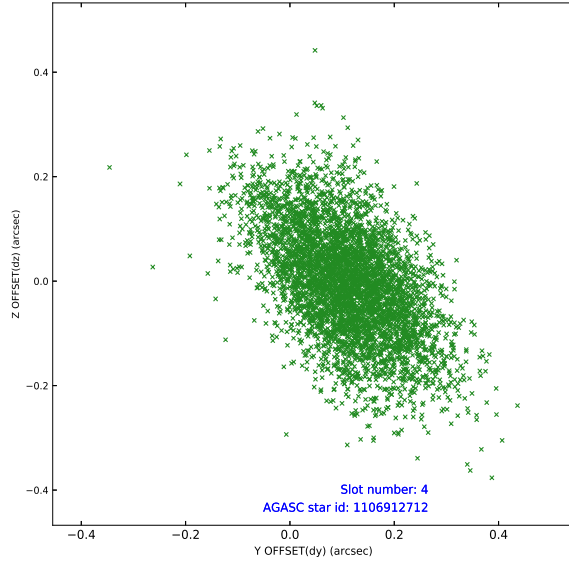
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.07	2231	1.000	0.114	-0.127	0.013	0.020	0.000000	0.000000	-773.63	-1744
1	FID		ACIS-S-4	7.19	2231	1.000	0.093	-0.021	0.009	0.016	0.000000	0.000000	2139.63	162
2	FID		ACIS-S-5	7.19	2231	1.000	-0.239	0.157	0.012	0.018	0.000000	0.000000	-1825.79	157
3	GUIDE	used	1106912040	7.54	4461	1.000	-0.043	-0.063	0.163	0.282	336.319813	-51.398442	2100.51	-1830
4	GUIDE	used	1106912712	8.54	4458	1.000	0.110	-0.003	0.145	0.249	336.167290	-51.750831	2051.39	-519
5	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
6	GUIDE	used	1156326496	10.07	4444	1.000	-0.127	0.086	0.217	0.358	336.615894	-52.525402	282.91	1855
7	GUIDE	used	1156326856	9.75	4439	1.000	0.060	-0.021	0.191	0.318	337.070470	-52.740322	-889.81	2310

2.4 Star Slots

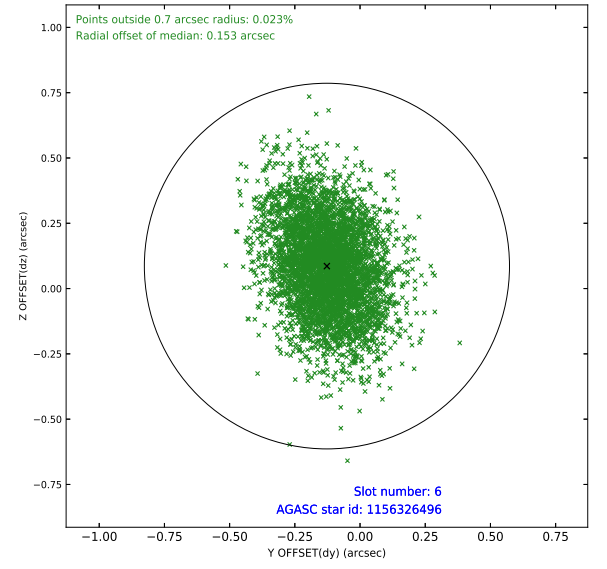
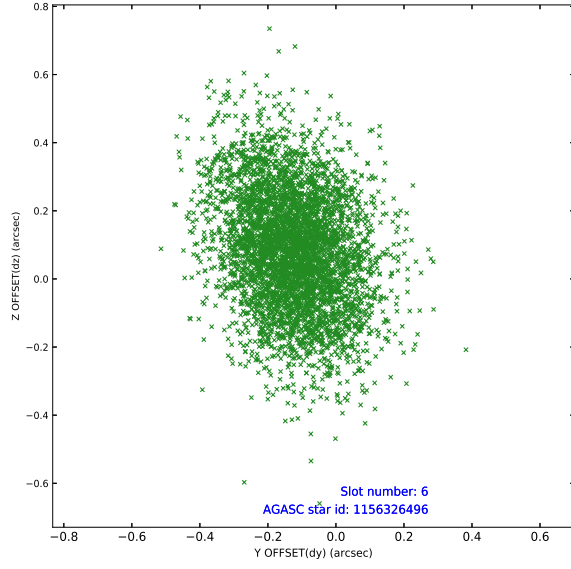
2.4.1 Slot 3



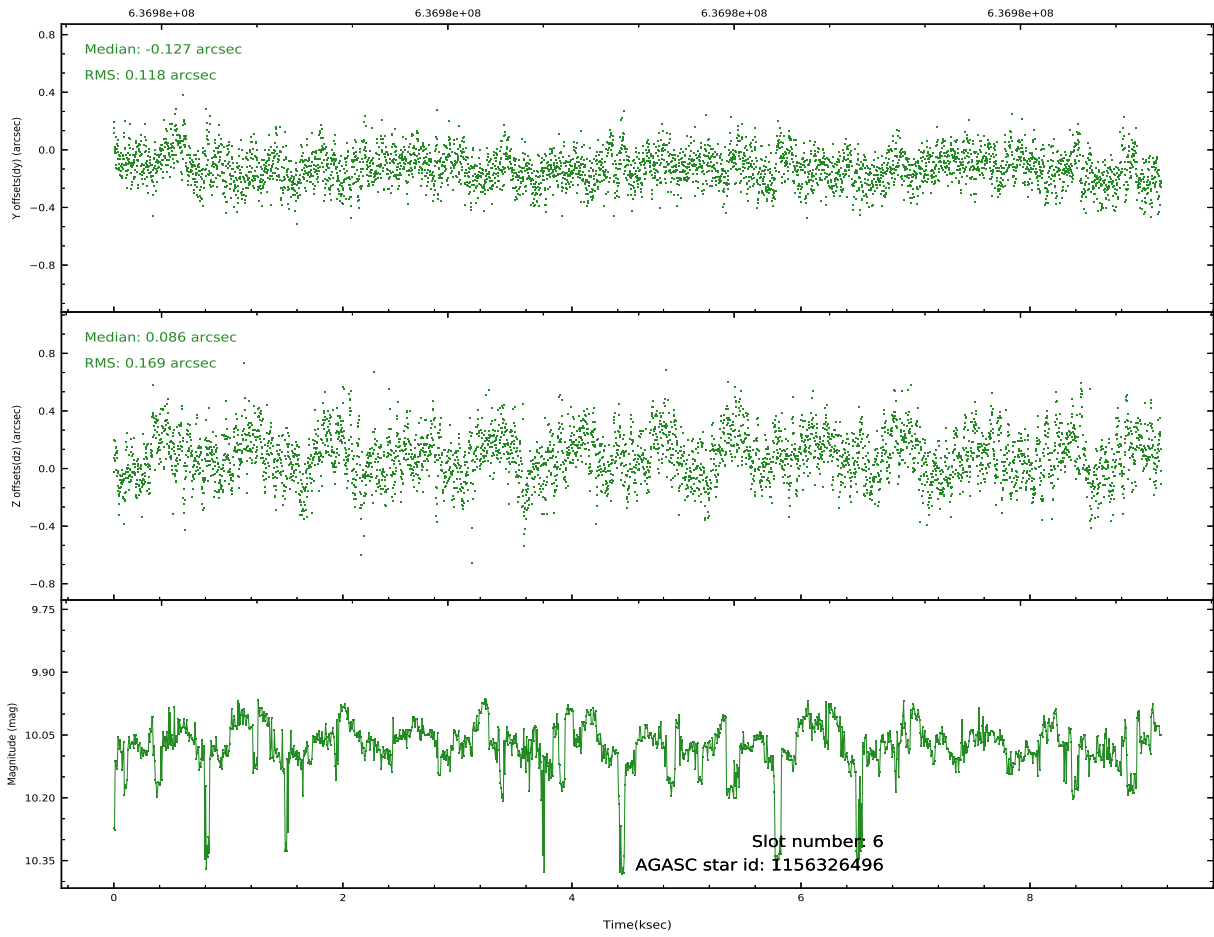
2.4.2 Slot 4



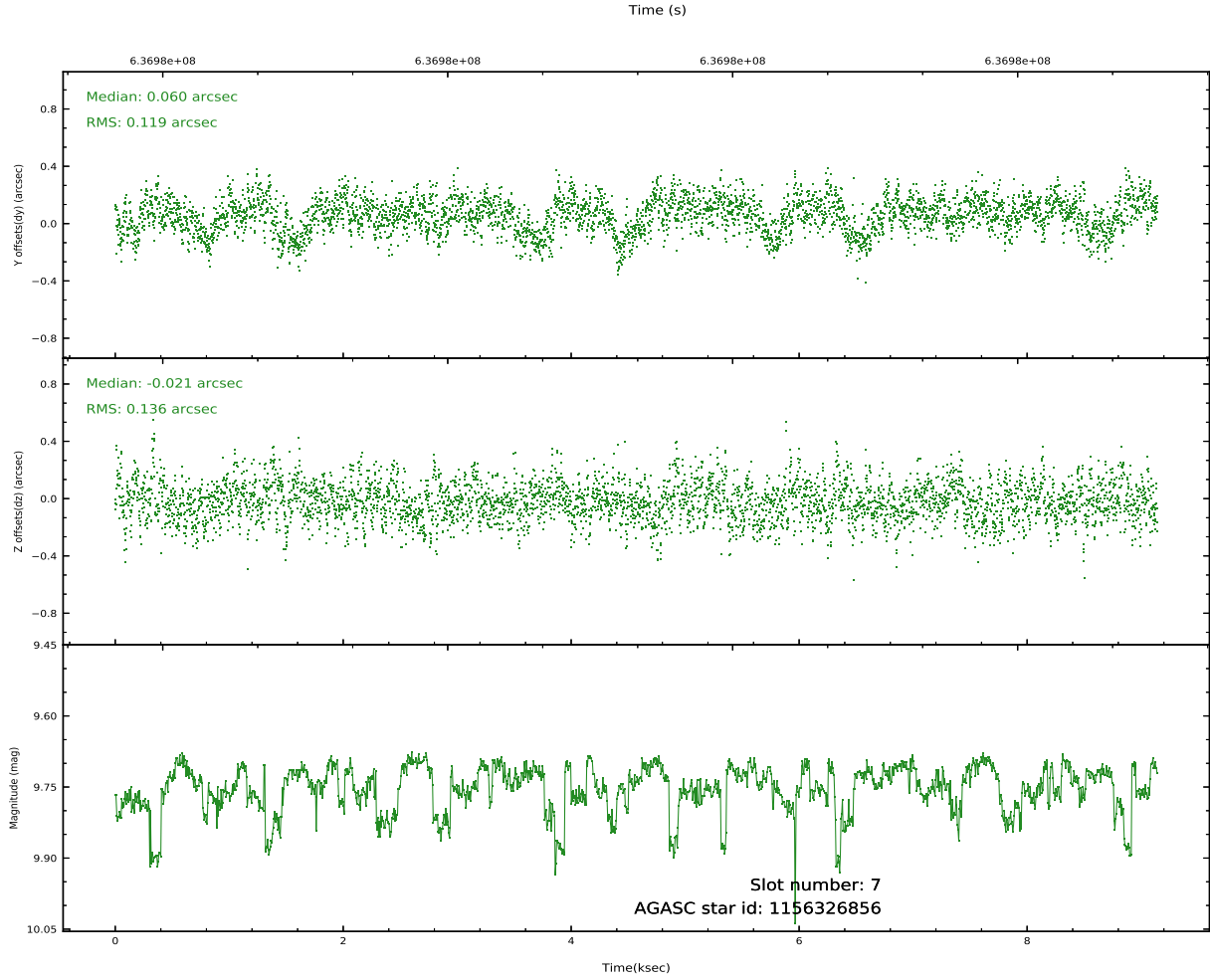
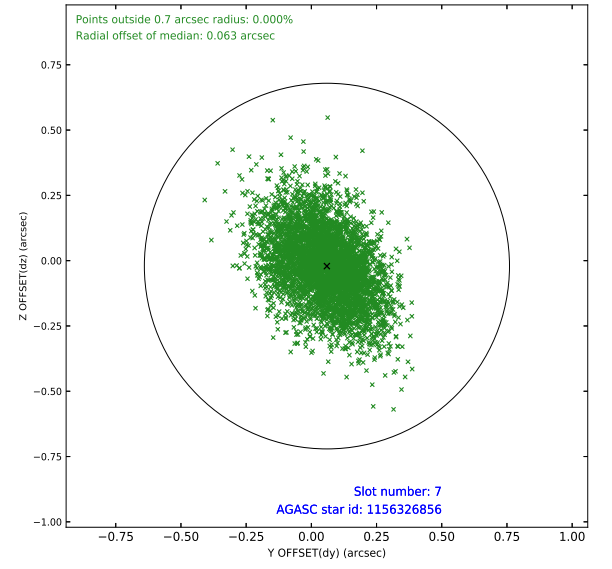
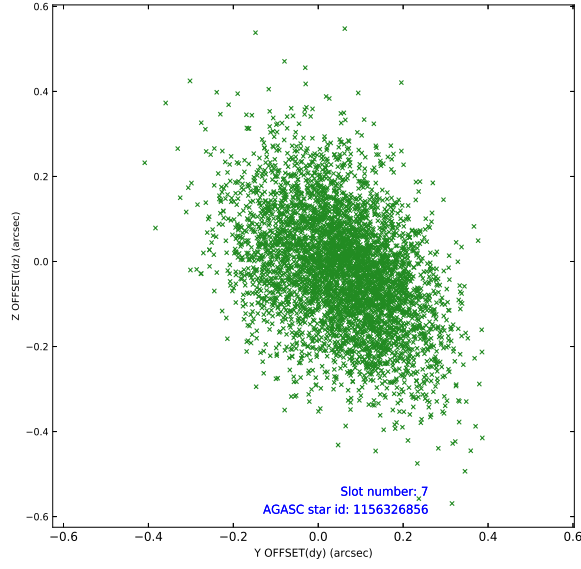
2.4.3 Slot 6



Time (s)

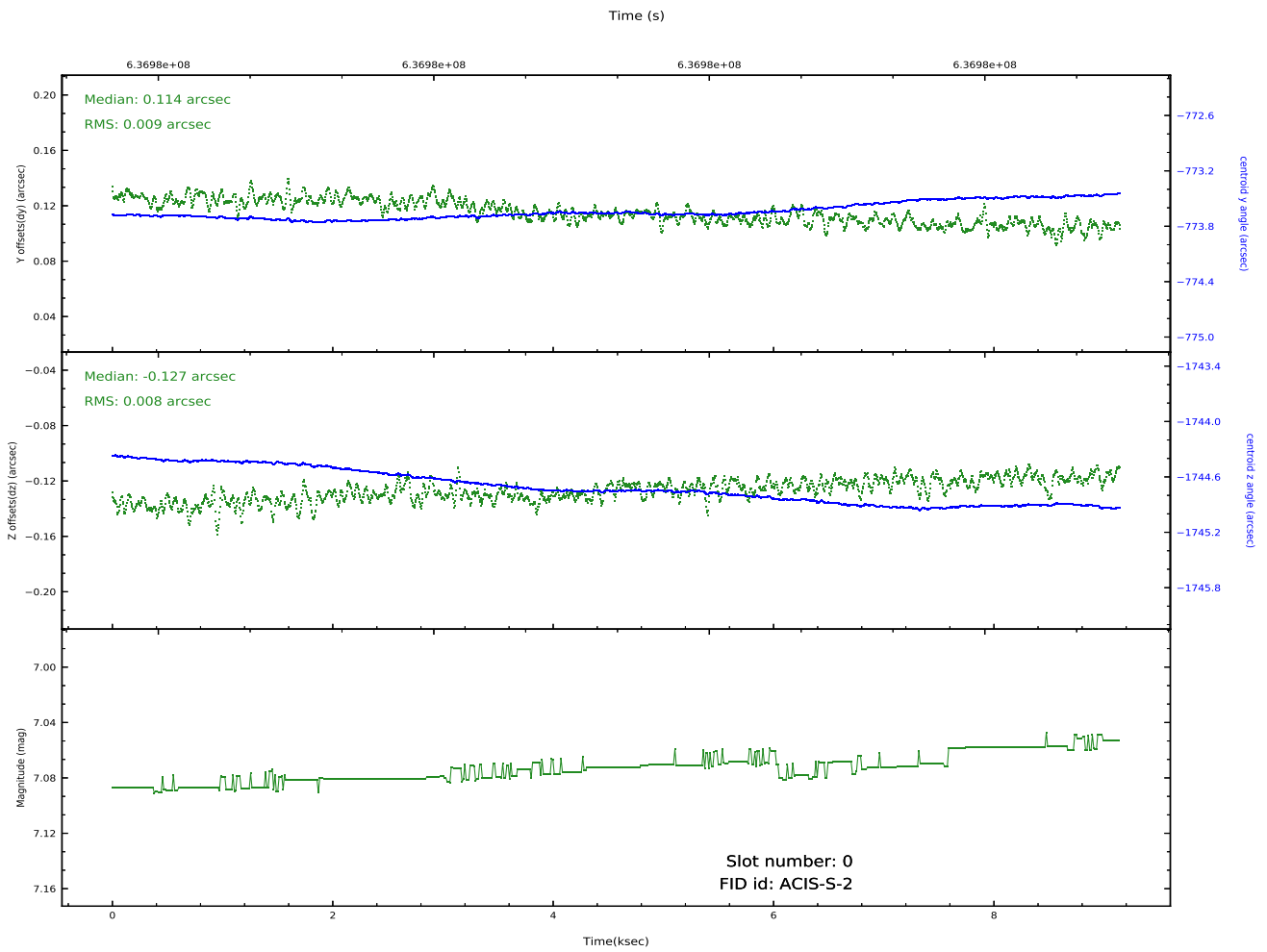
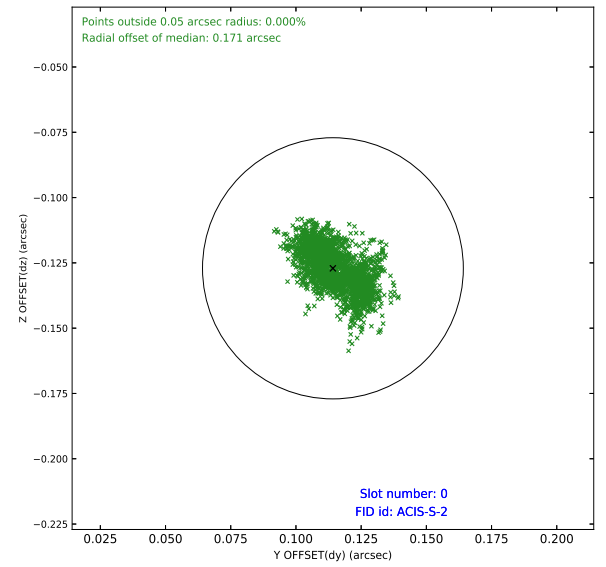
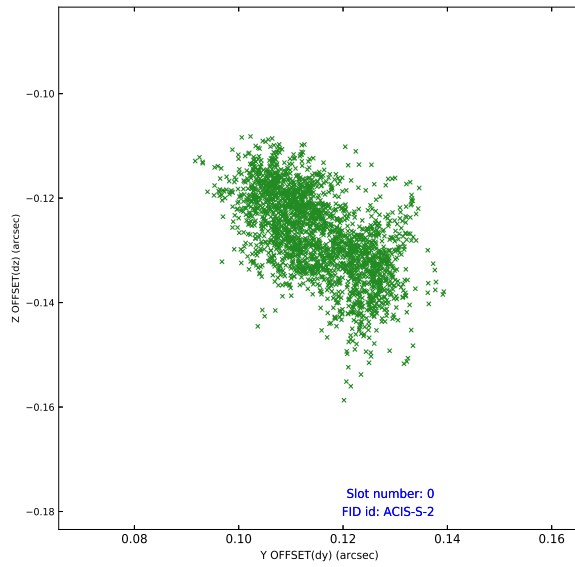


2.4.4 Slot 7

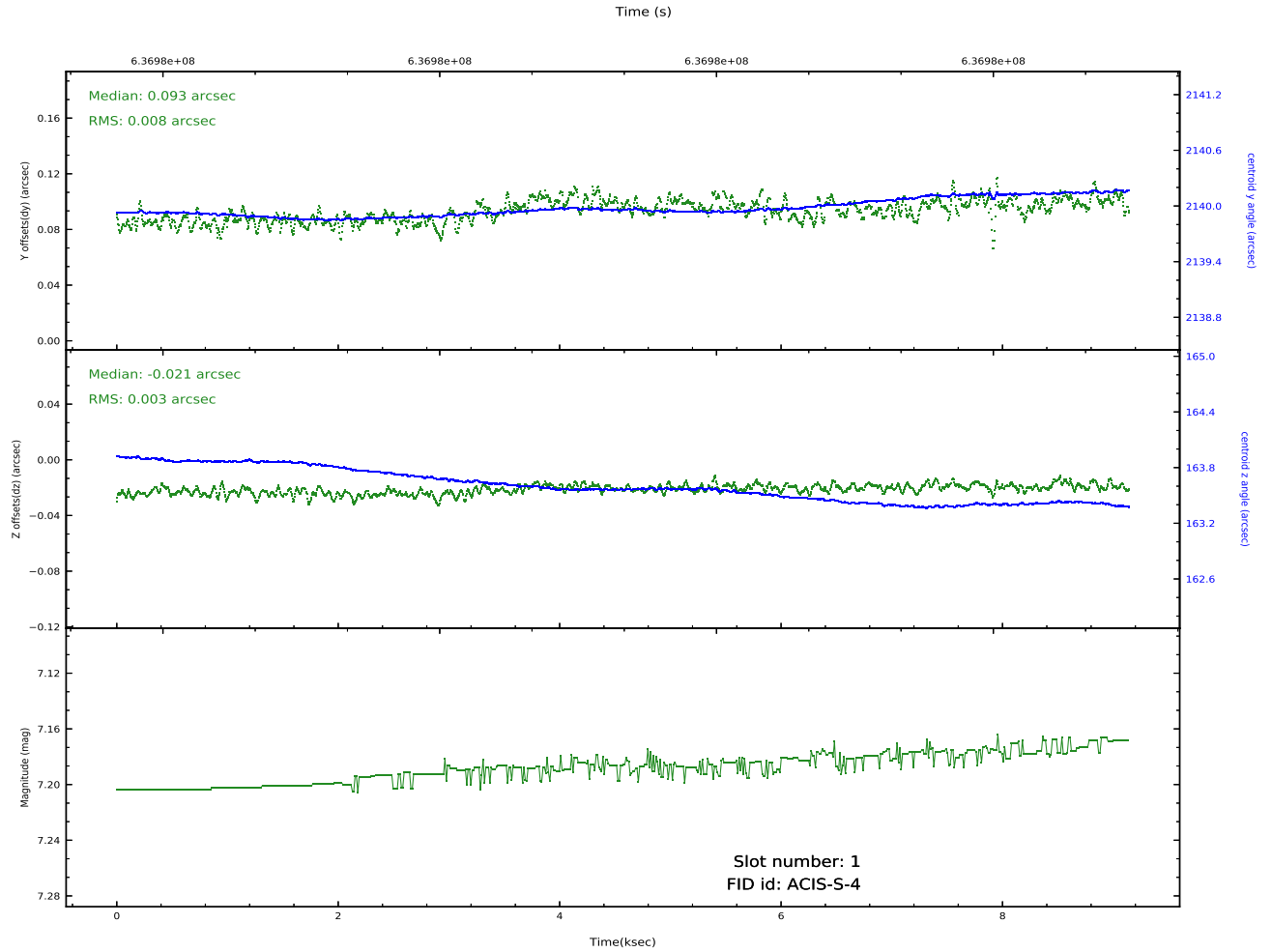
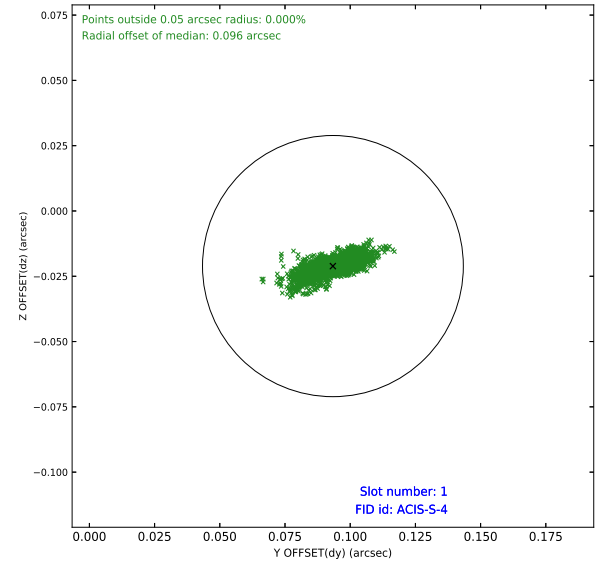
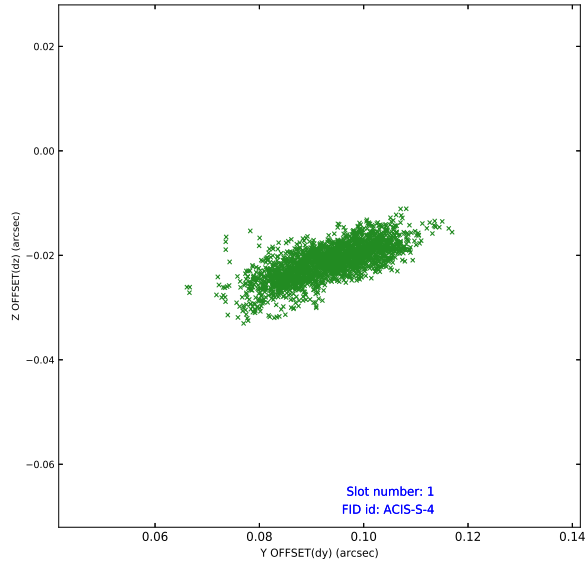


2.5 FID Slots

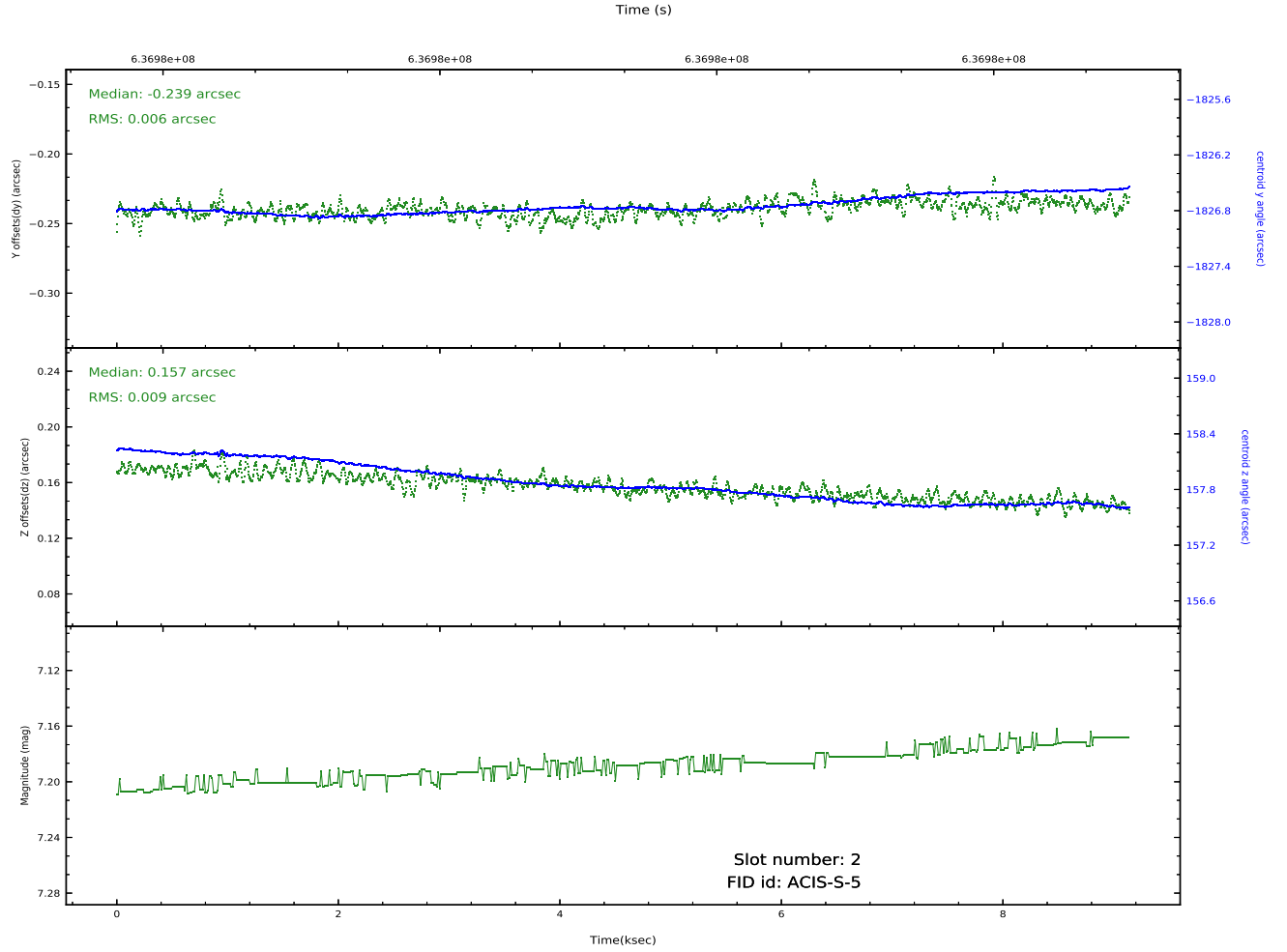
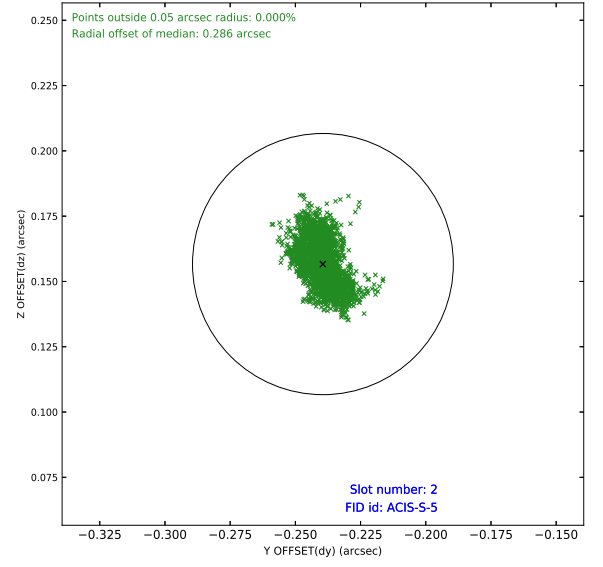
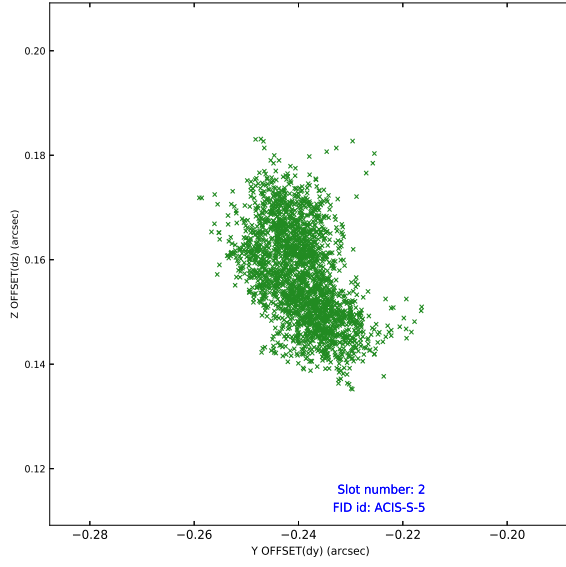
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.0520000697374

A.2 Comments

The guide star in slot 5 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this slot from the solution.