

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 19636 - L2 Version 2
Chandra X-Ray Center

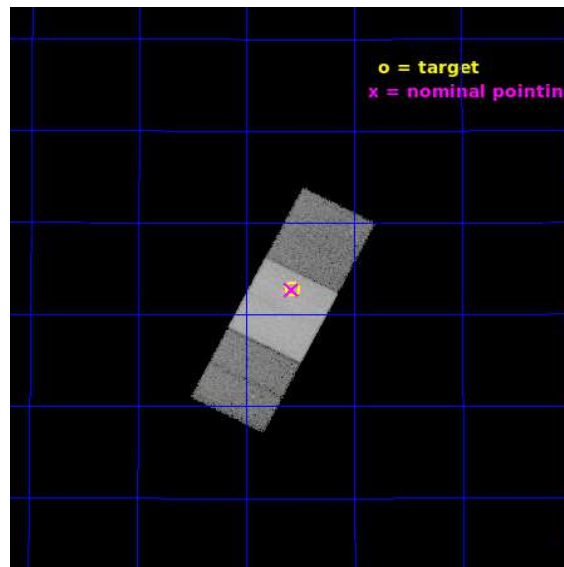
L2 Processing Date : Oct 24 2020

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1 Front

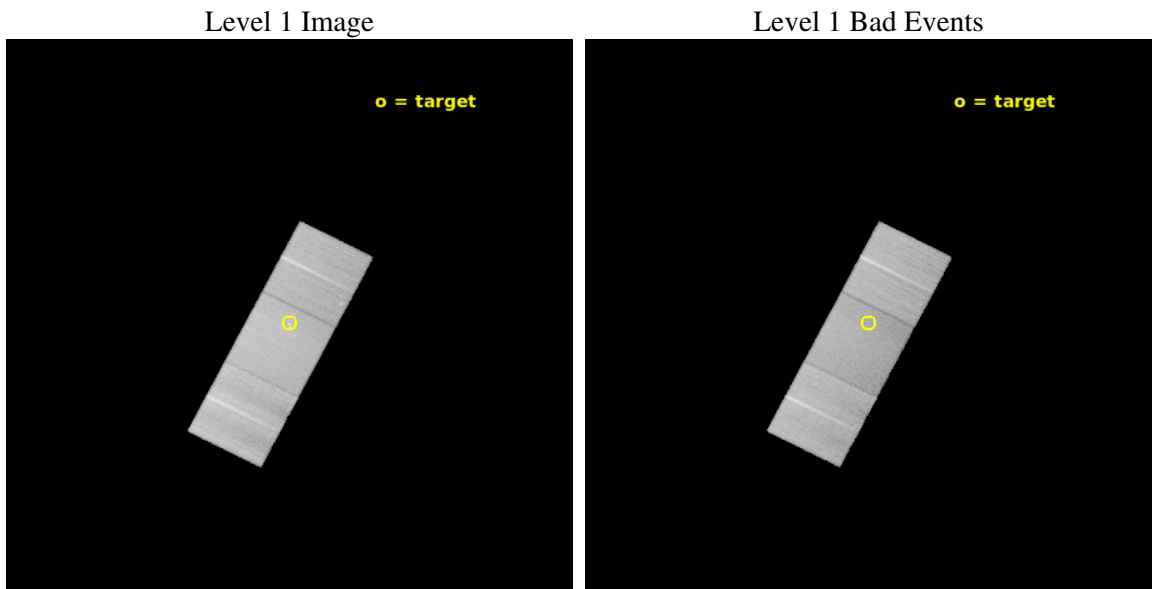
seq_num	703433	Sequence number
obs_id	19636	Observation id
title	MEASURING THE INNERMOST STABLE ORBIT USING MICROLENSING OF THE FE K LINE	Proposal title
observer	George Chartas	Principal investigator
object	SDSS1004+4112	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	151.1425	Observer's specified target RA [deg]
dec_targ	41.212222	Observer's specified target Dec [deg]
ra_nom	151.14430711749	Nominal RA [deg]
dec_nom	41.212013187018	Nominal Dec [deg]
roll_nom	117.16810650976	Nominal Roll [deg]
revision	2	Processing version of data
ontime	36424.165170908	Sum of GTIs [s]
livetime	35948.25663787	Livetime [s]
ontime6	36424.124201655	Sum of GTIs [s]
ontime7	36424.165170908	Sum of GTIs [s]
ontime8	36414.659930825	Sum of GTIs [s]
l2events	203925	Number of level 2 events



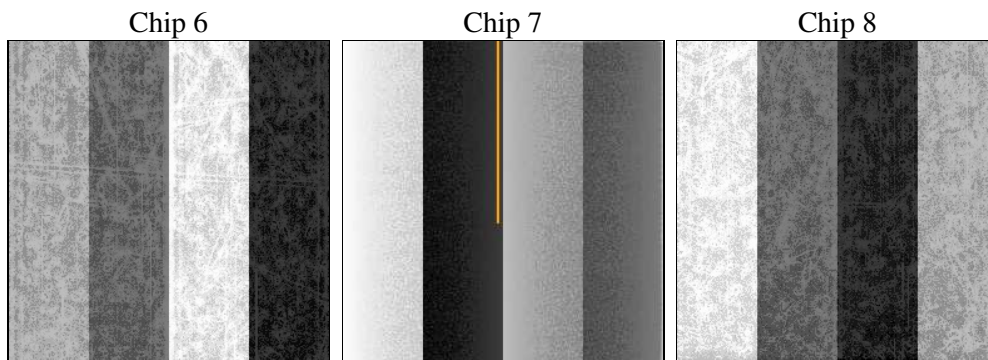
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	36500.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	36424.165170908	Sum of GTIs [s]
caldbver	4.9.3	 	ontime6	36424.124201655	Sum of GTIs [s]
date	2020-10-24T07:49:39	Date and time of file creation	ontime7	36424.165170908	Sum of GTIs [s]
revision	2	Processing version of data	ontime8	36414.659930825	Sum of GTIs [s]
			l1events	1009947	Number of level 1 events

2.1.4 Events

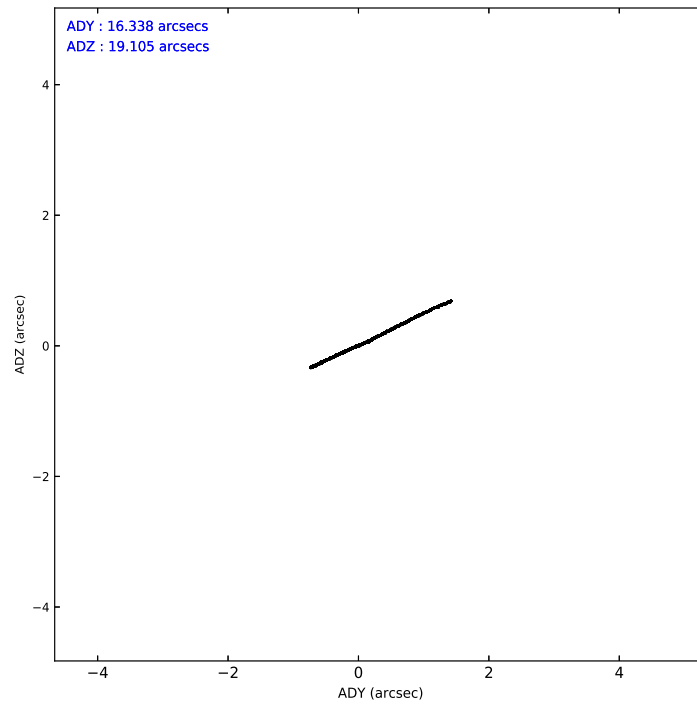
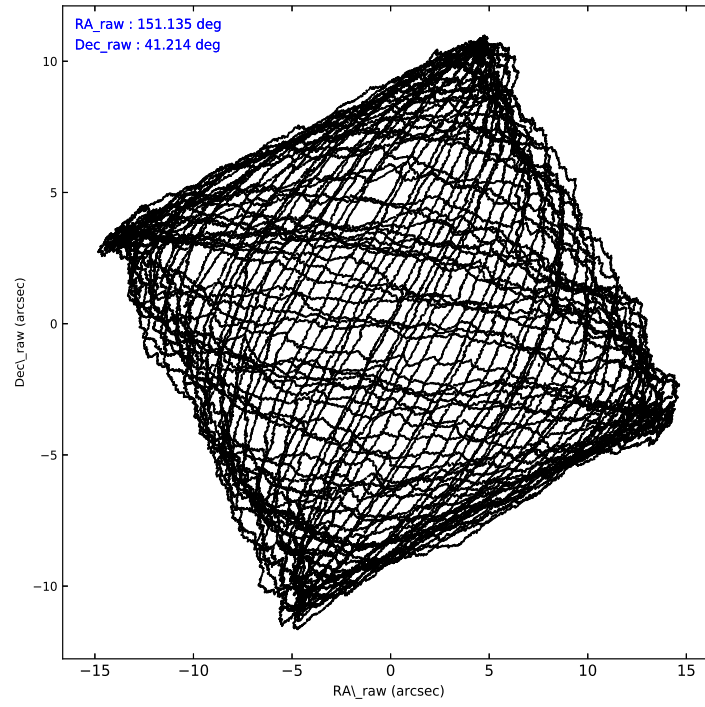
	ccd 6	ccd 7	ccd 8
level 1 events	294152	352327	363468
rejected events	263312	197882	276368
rejected %	89%	56%	76%

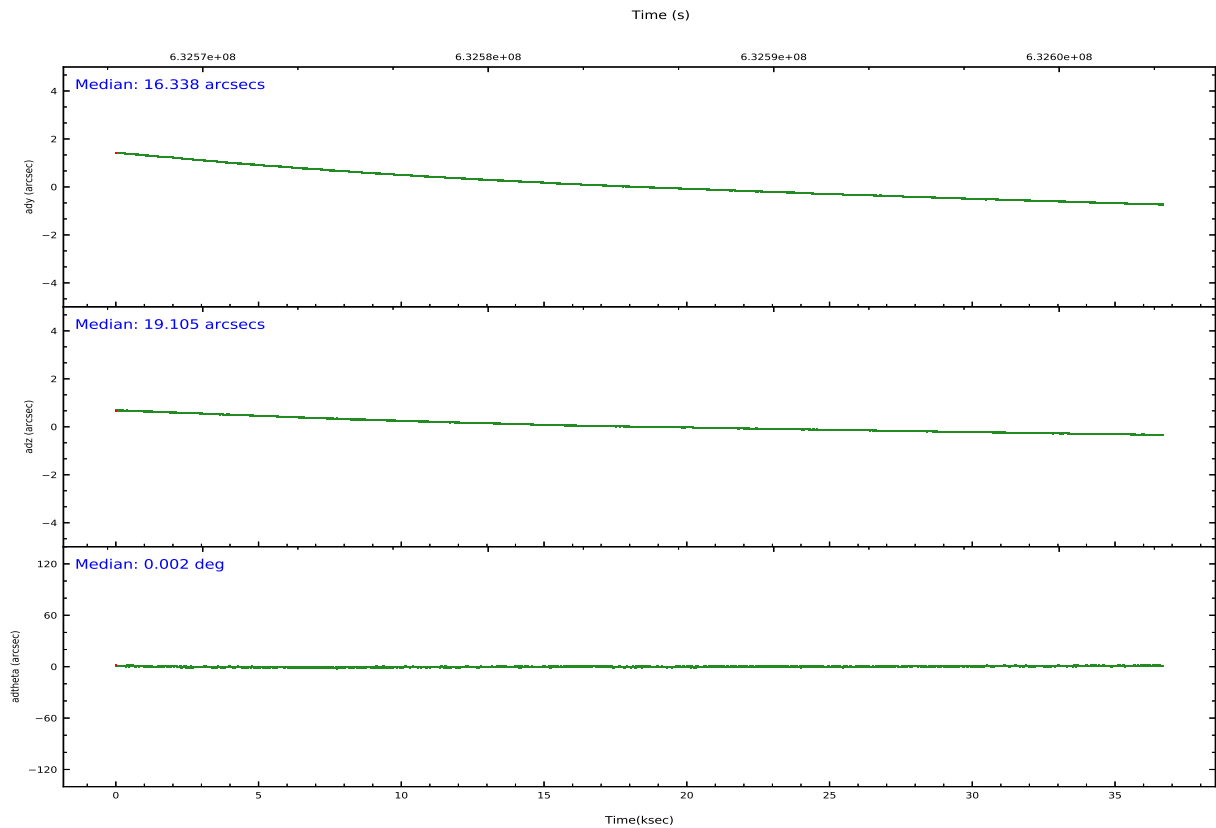
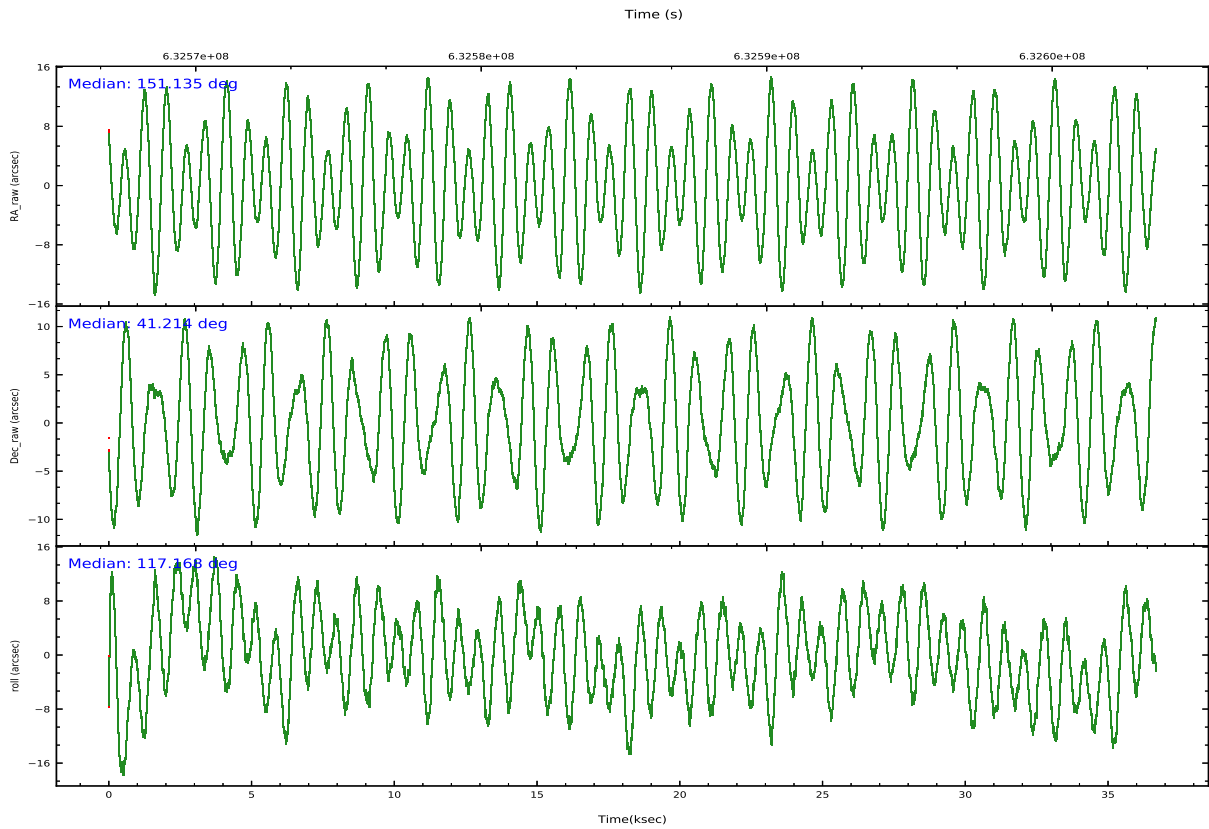
	ccd 6	ccd 7	ccd 8
grade 0 events	8487	13419	23813
	2%	3%	6%
grade 1 events	136	537	280
	0%	0%	0%
grade 2 events	8729	31400	22227
	2%	8%	6%
grade 3 events	2423	12593	8574
	0%	3%	2%
grade 4 events	2420	12036	7763
	0%	3%	2%
grade 5 events	11081	33813	18098
	3%	9%	4%
grade 6 events	8784	85030	24751
	2%	24%	6%
grade 7 events	252092	163499	257962
	85%	46%	70%

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	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	151.165865	151.14430711749	CCD I2 on	O1	N
[deg] Pointing Dec	41.199114	41.212013187018	CCD I3 on	O2	N
[deg] Pointing Roll	116.995387	117.16810650976	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	O4	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O3	Y
[s] Observation start time (MET)	632567141.184000	632566434.31025	CCD S5 on	N	N
Observation start date	2018-01-17T09:04:32	2018-01-17T08:53:54	Number of optional ACIS chips dropped	2	2
[s] Observation end time (MET)	632603641.184000	632604852.33751	On-chip summing requested	N	N
Observation end date	2018-01-17T19:12:52	2018-01-17T19:34:12	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





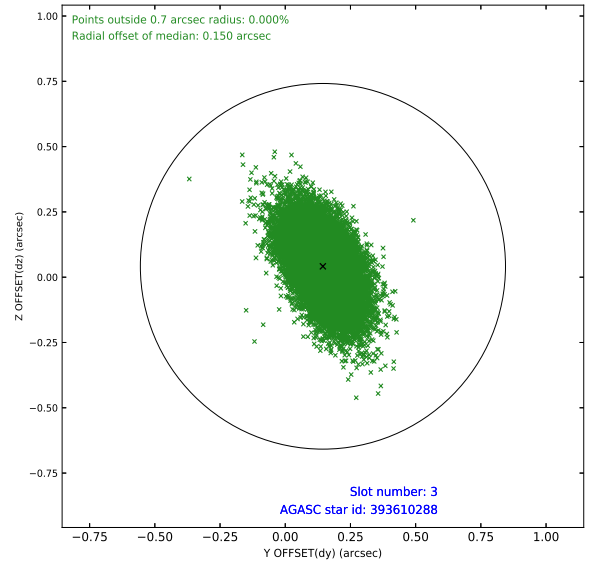
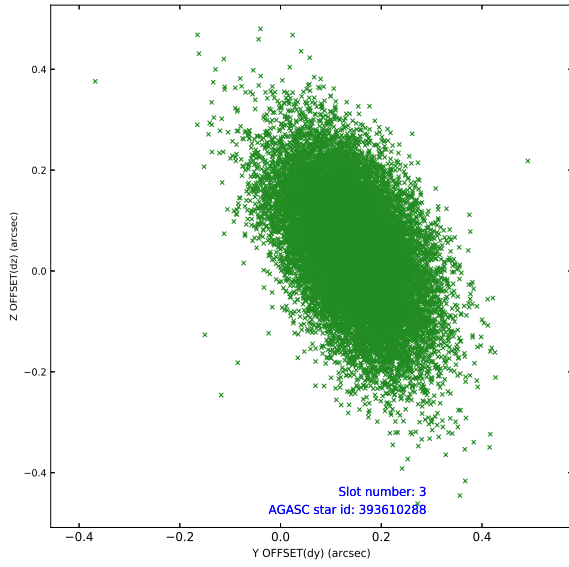
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-2	7.18	8948	1.000	0.102	-0.102	0.018	0.026	0.000000	0.000000	-769.55	-1740
1	FID		ACIS-S-4	7.30	8946	1.000	0.154	-0.022	0.017	0.025	0.000000	0.000000	2143.97	167
2	FID		ACIS-S-5	7.29	8948	1.000	-0.285	0.131	0.007	0.012	0.000000	0.000000	-1822.54	161
3	GUIDE	used	393610288	8.44	17887	1.000	0.144	0.042	0.138	0.244	151.538899	41.090404	-805.37	-723
4	GUIDE	used	393613624	8.47	17886	1.000	-0.029	-0.079	0.143	0.266	151.136661	40.665270	-1676.40	943
5	GUIDE	used	393616408	9.01	17871	1.000	-0.140	-0.143	0.148	0.267	150.713966	41.346840	1031.02	845
6	GUIDE	used	393616816	8.40	17886	1.000	0.043	0.161	0.143	0.253	151.562975	40.925077	-1366.49	-513
7	GUIDE	used	393619280	9.33	17872	1.000	-0.021	0.024	0.168	0.307	150.915222	40.640455	-1481.33	1523

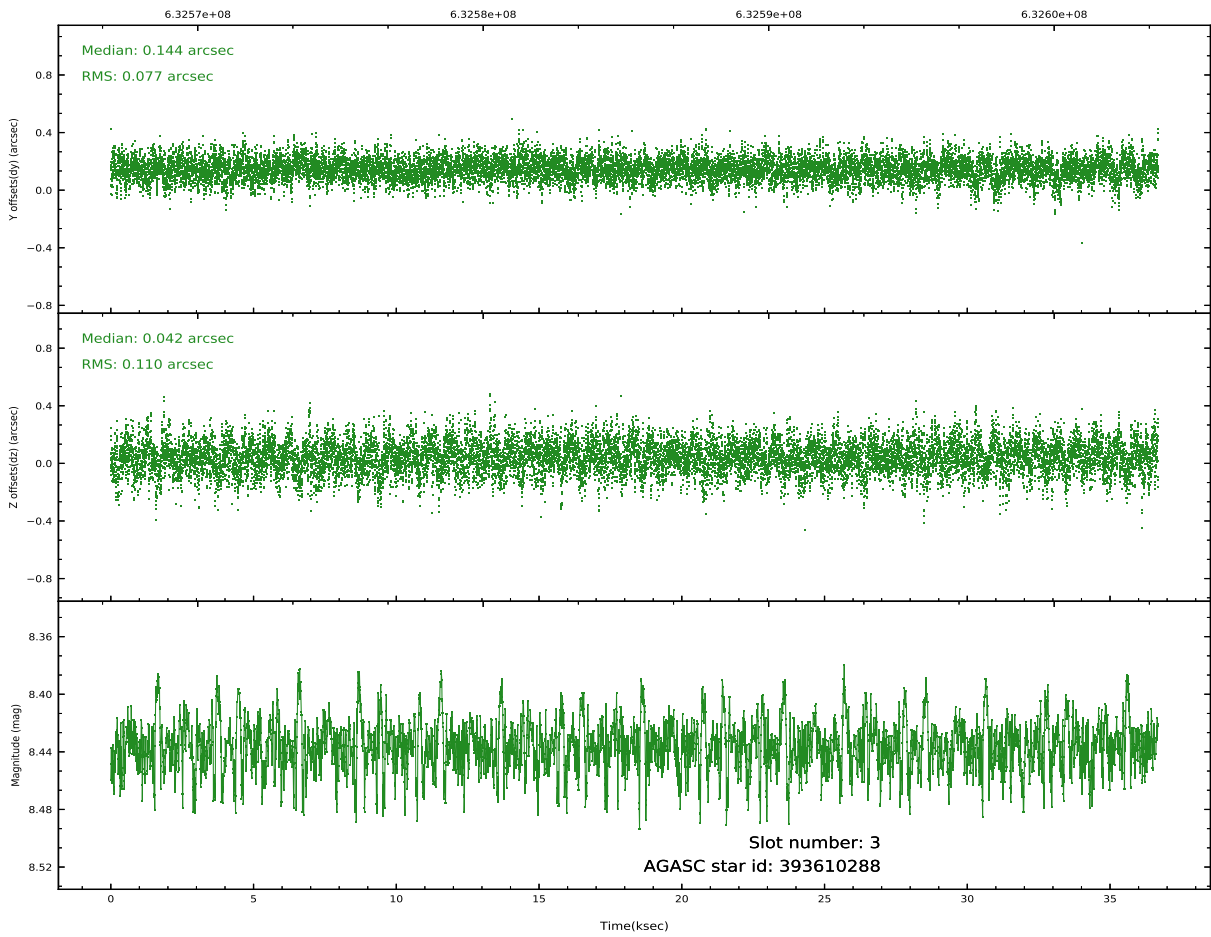
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2.4 Star Slots

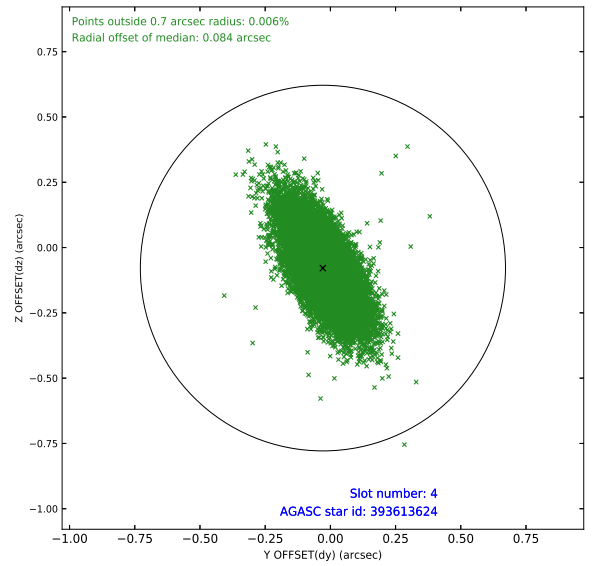
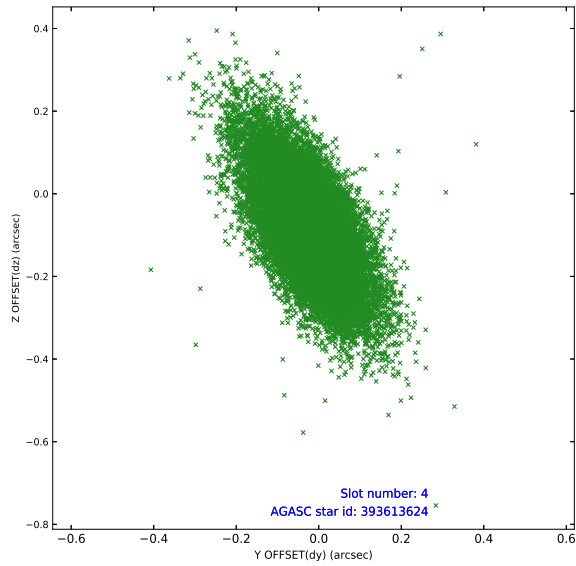
2.4.1 Slot 3



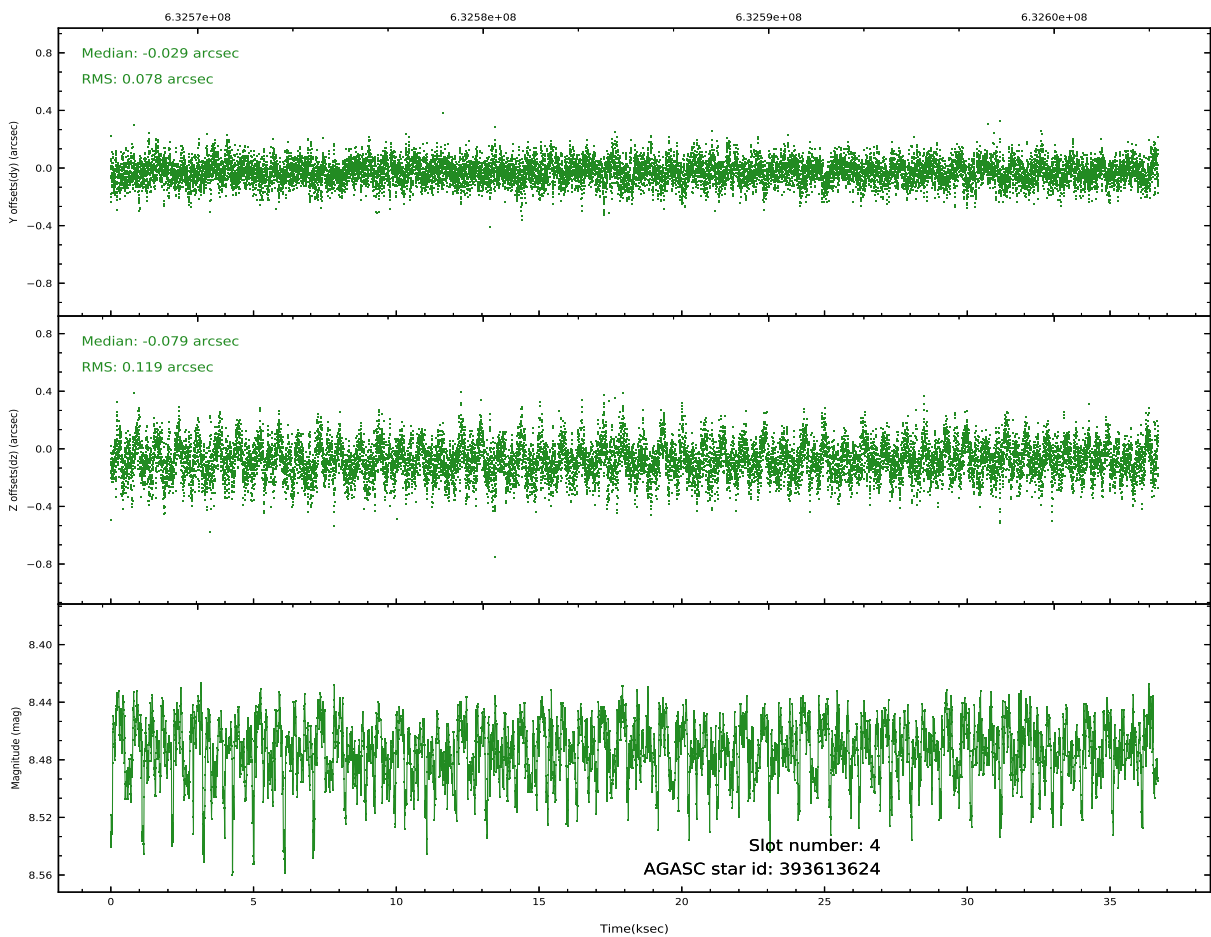
Time (s)



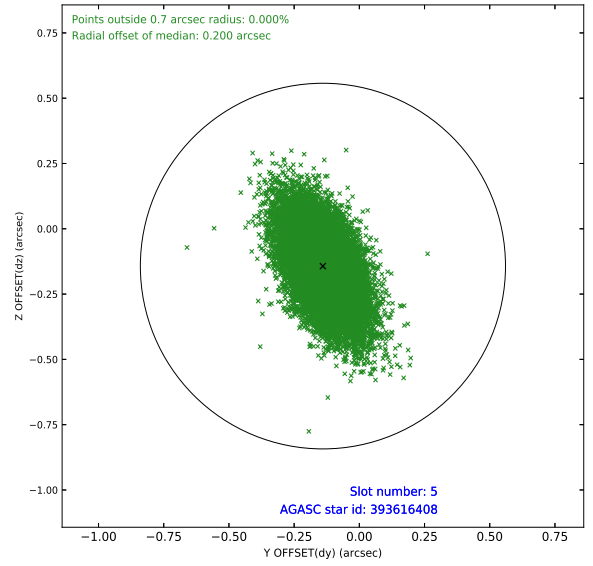
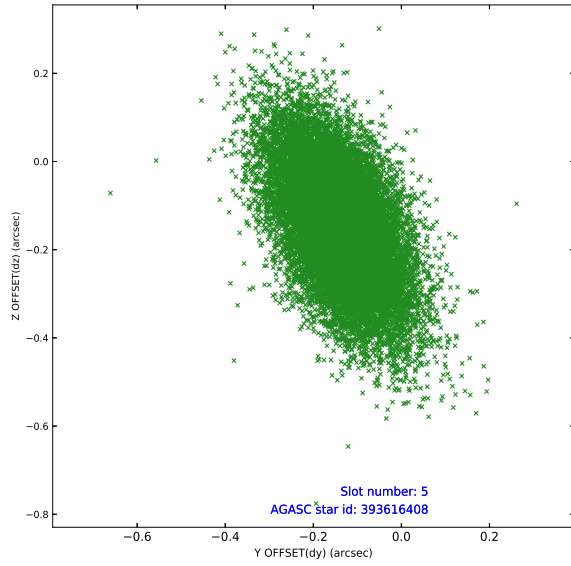
2.4.2 Slot 4



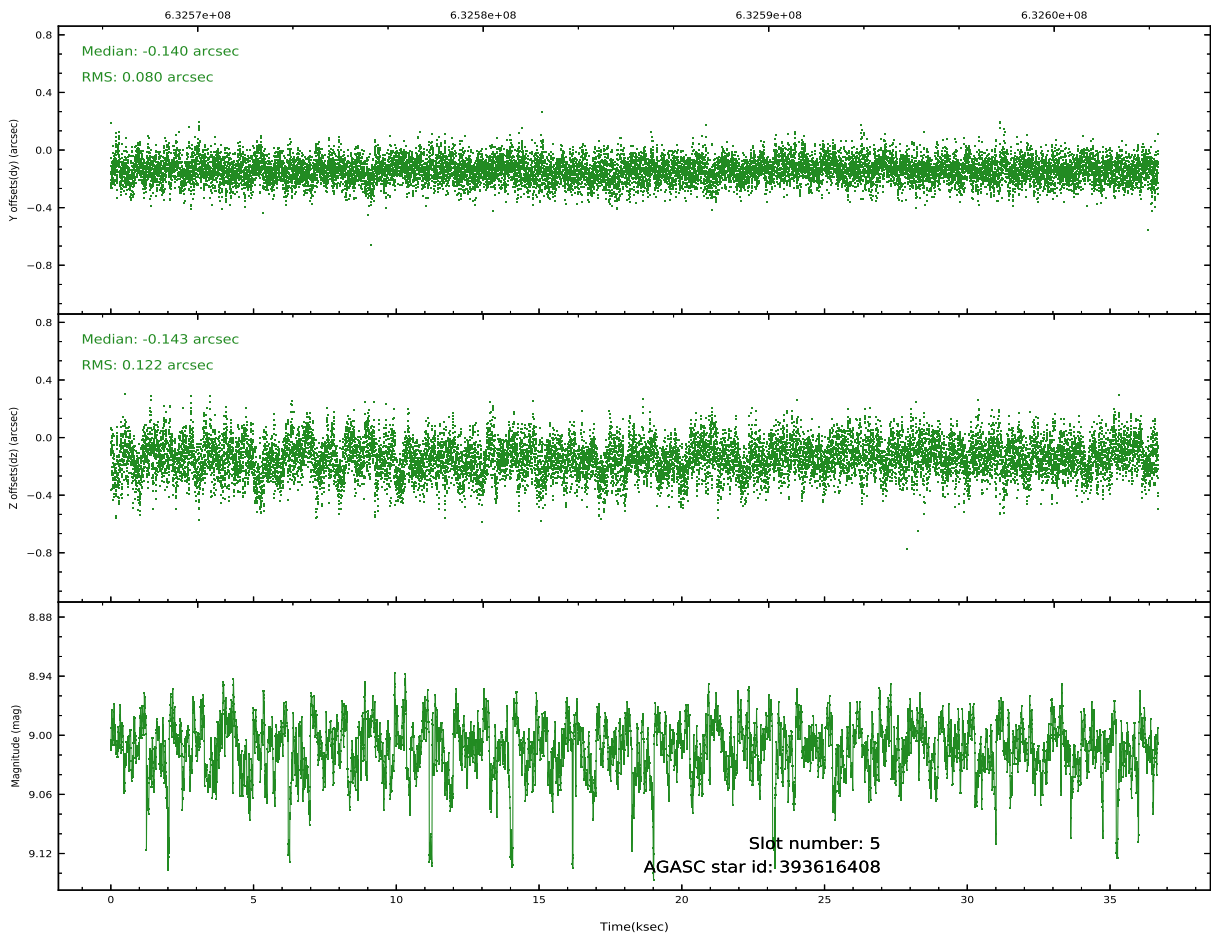
Time (s)



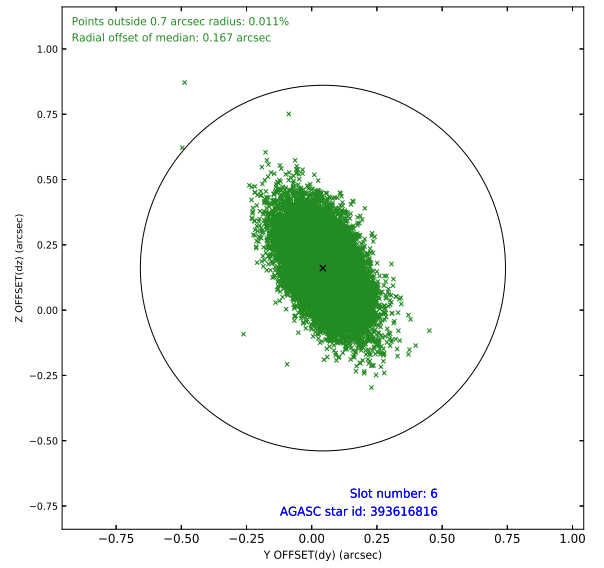
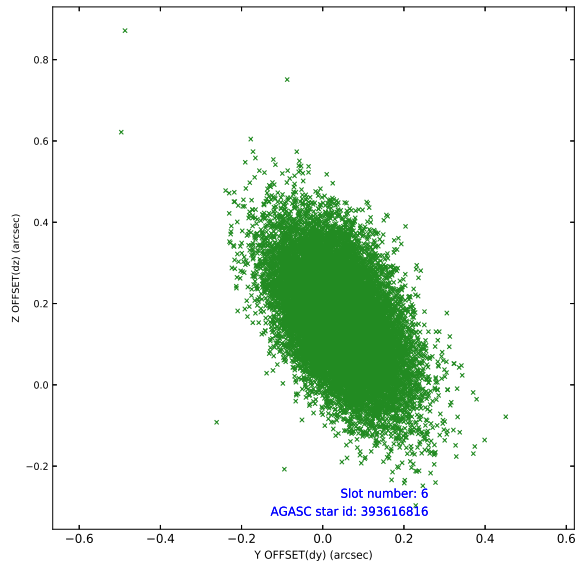
2.4.3 Slot 5



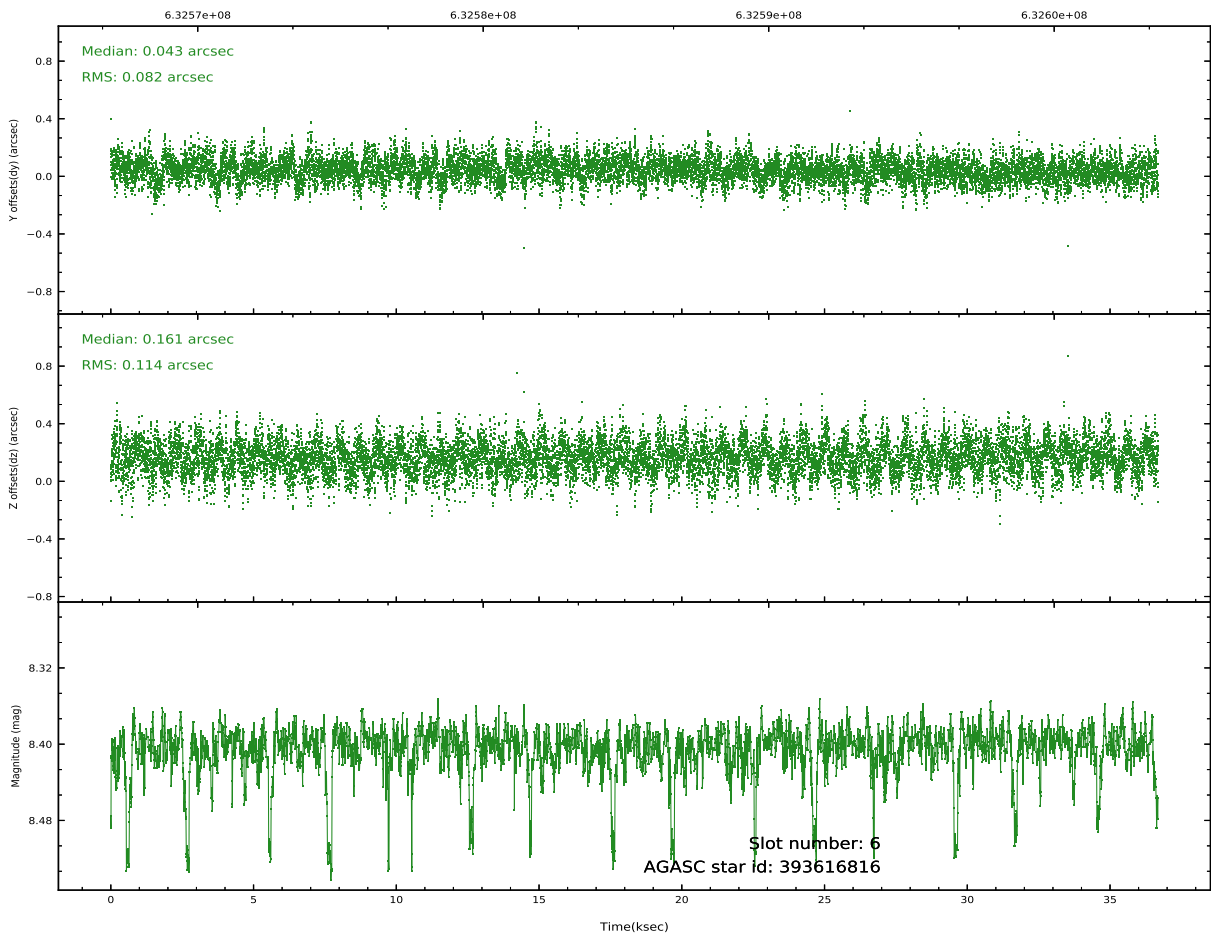
Time (s)



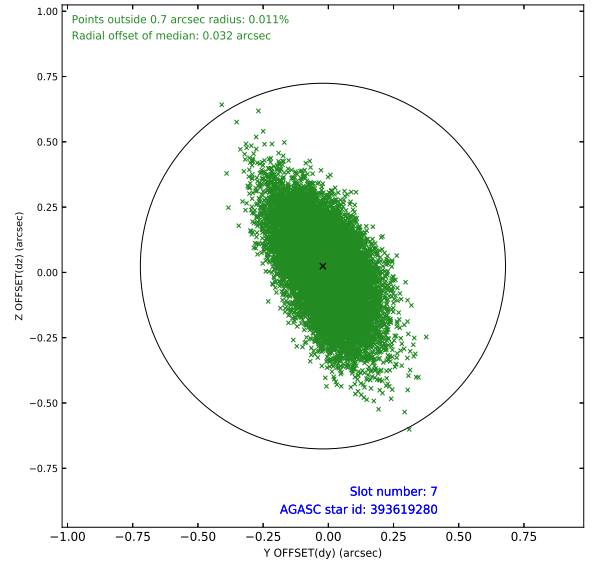
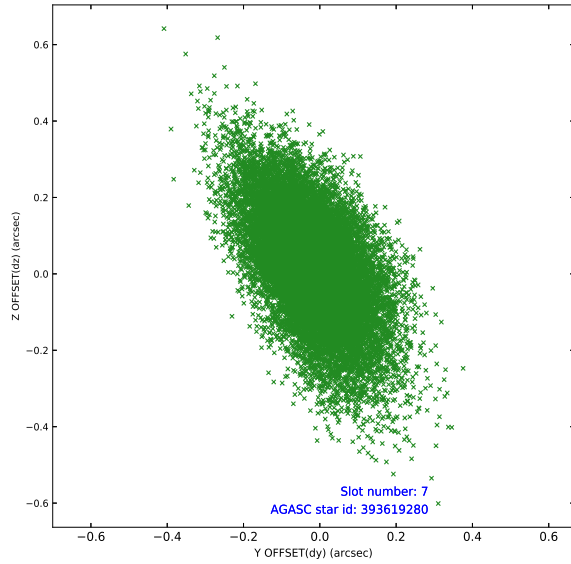
2.4.4 Slot 6



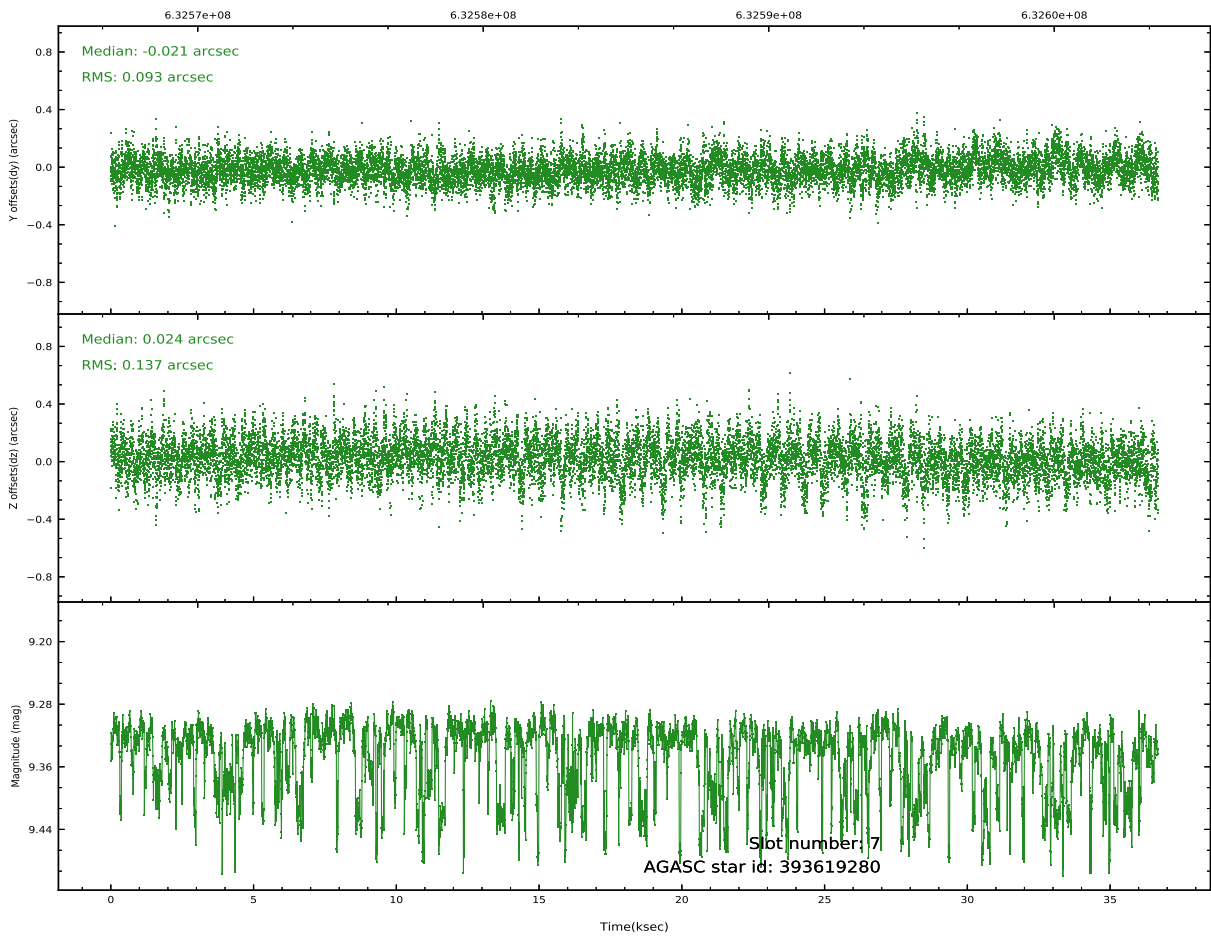
Time (s)



2.4.5 Slot 7

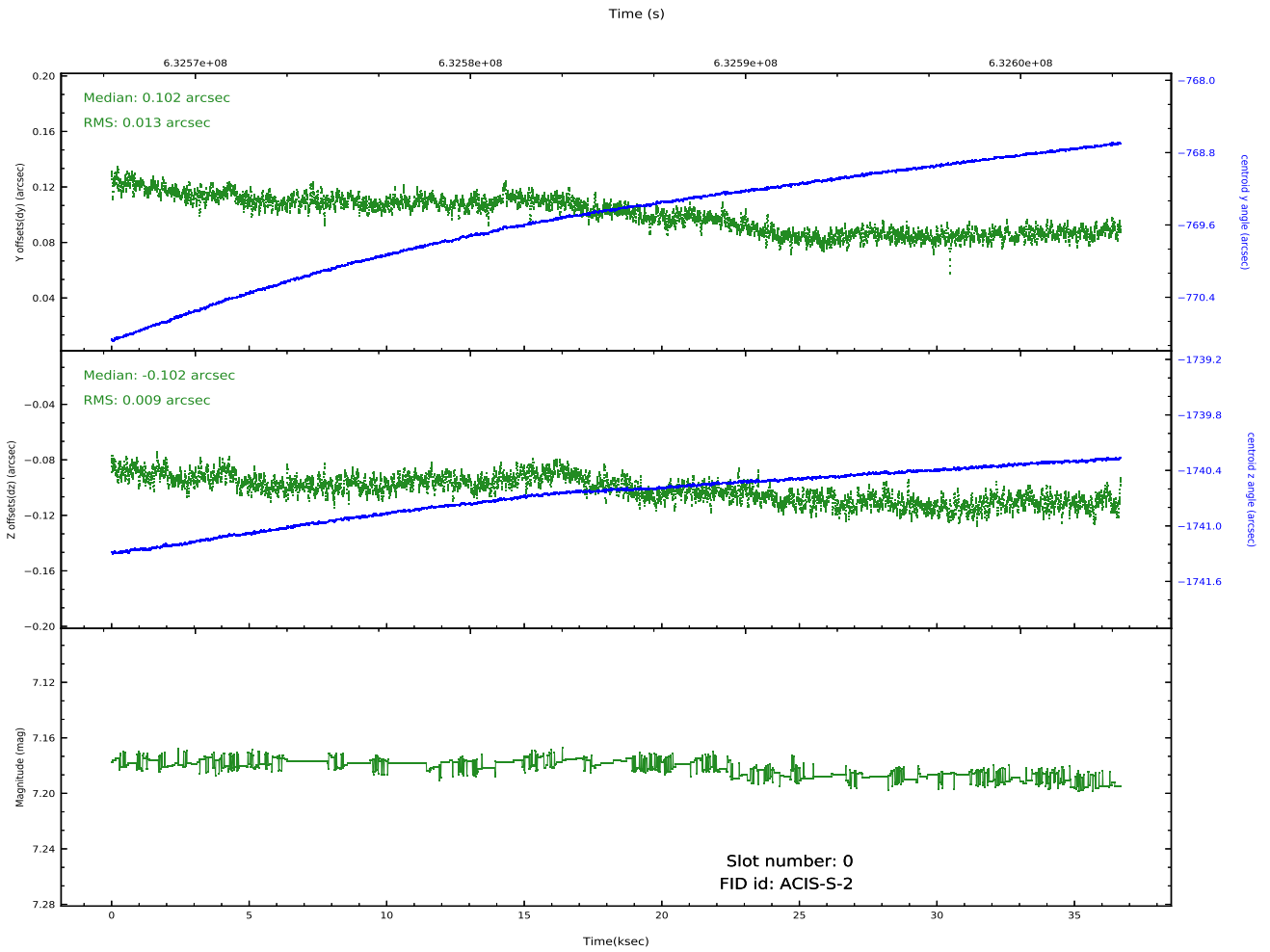
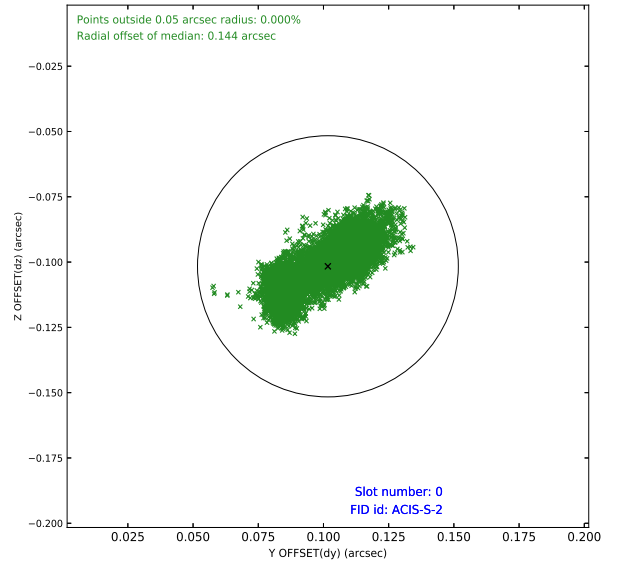
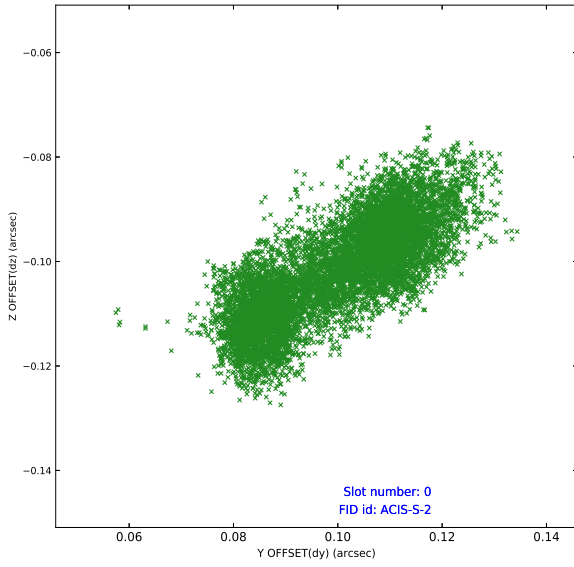


Time (s)

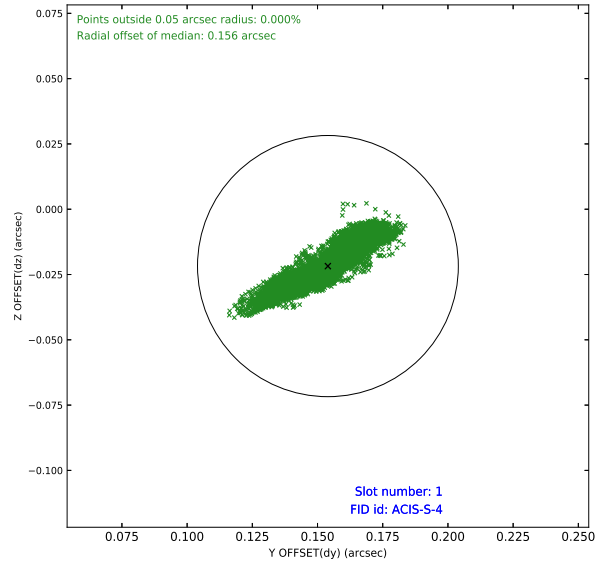
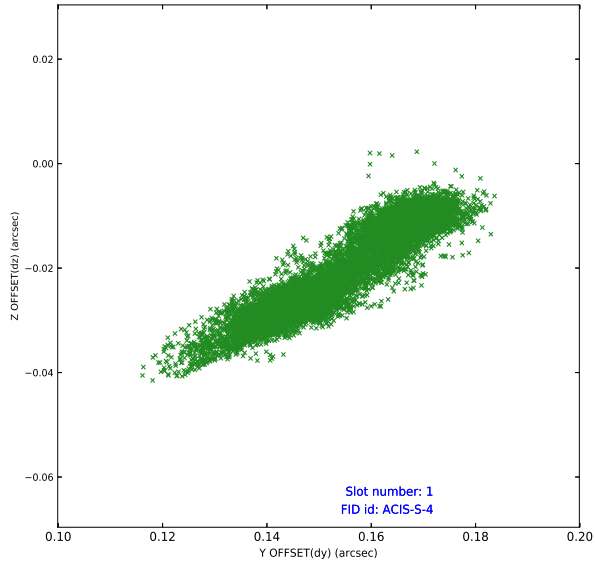


2.5 FID Slots

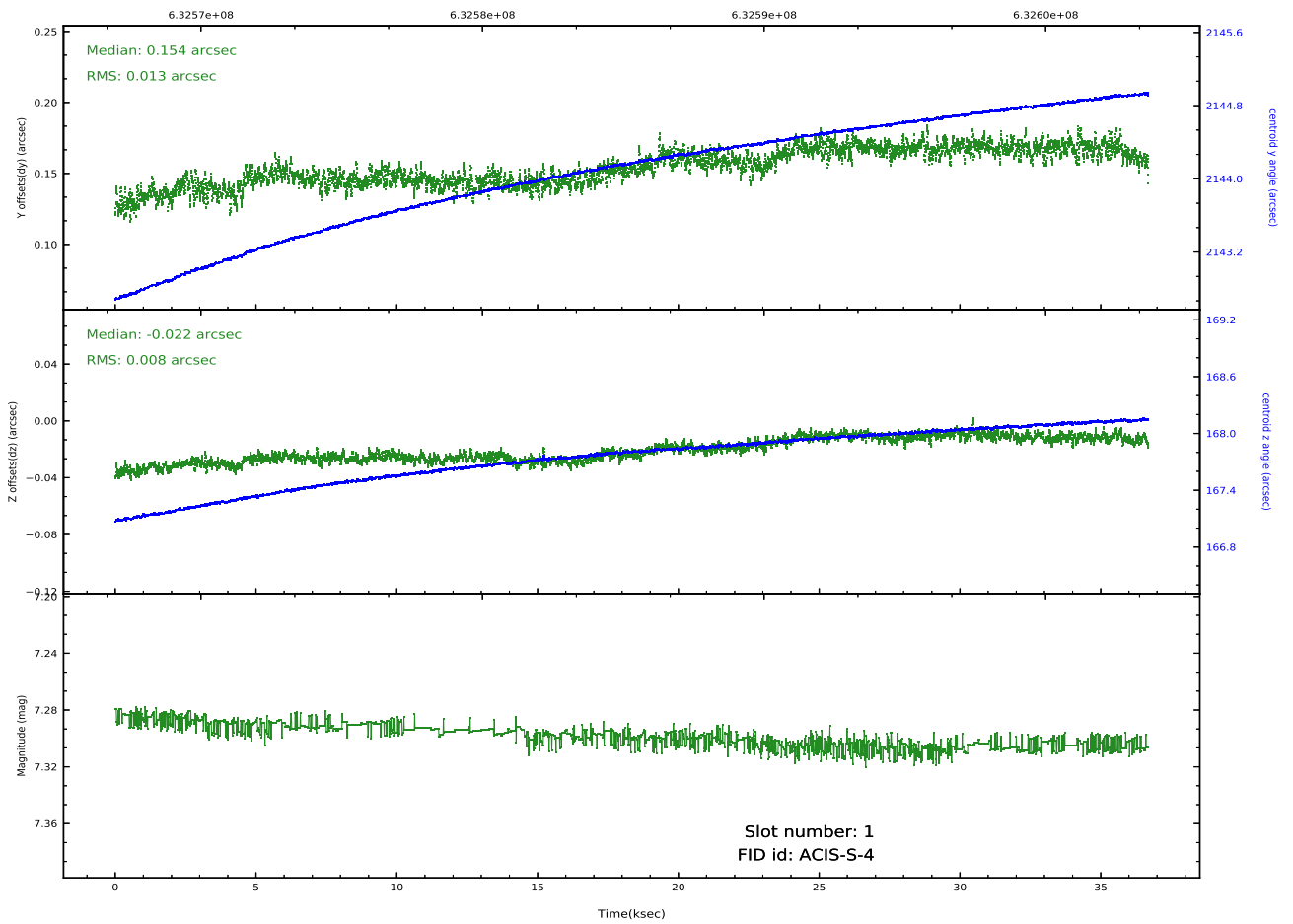
2.5.1 Slot 0



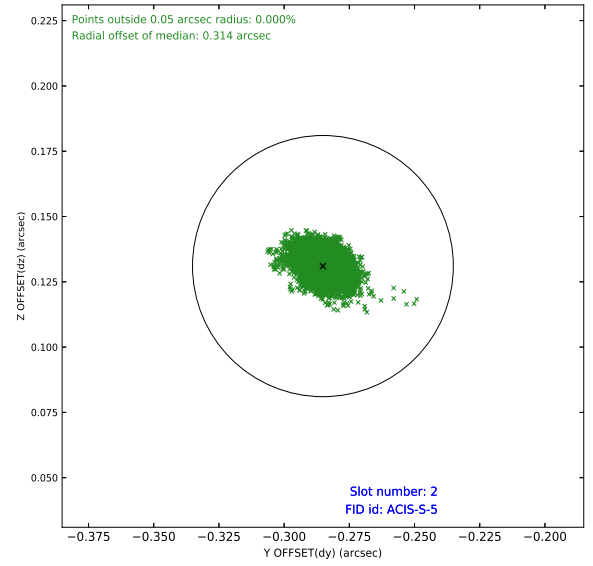
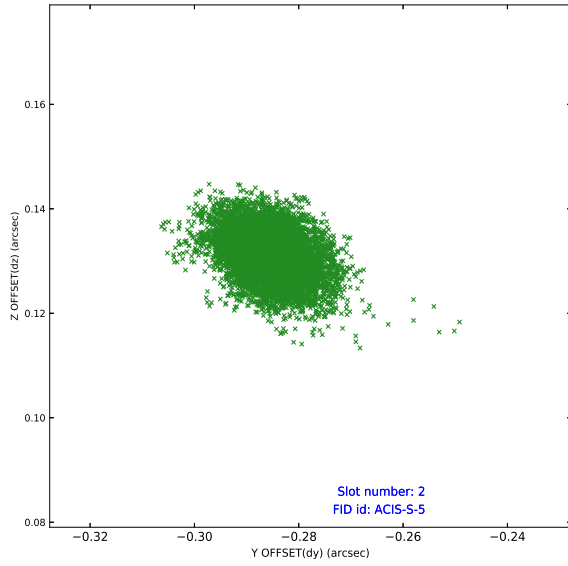
2.5.2 Slot 1



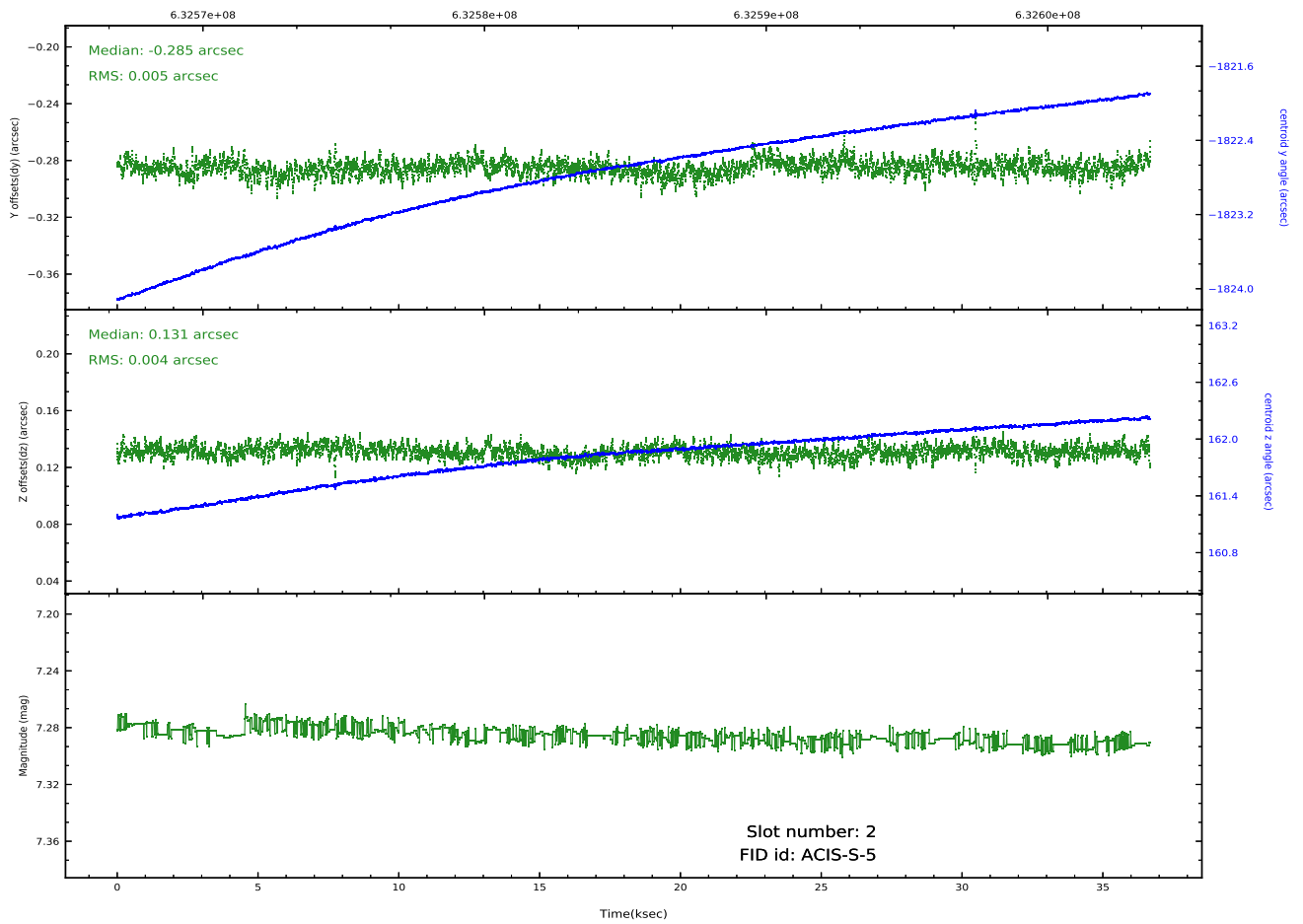
Time (s)



2.5.3 Slot 2



Time (s)



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	36.424165170431

A.2 Comments

Two optional chips were dropped.