

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 4824 - L2 Version 6
Chandra X-Ray Center

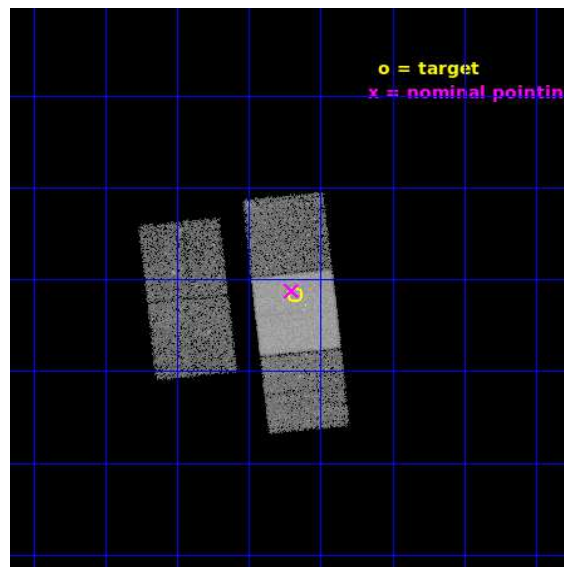
L2 Processing Date : Oct 7 2020

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.5	FID Slots	13
2.5.1	Slot 0	13
2.5.2	Slot 1	14
2.5.3	Slot 2	15
A	Summary	16
A.1	Status	16
A.2	Comments	16

1 Front

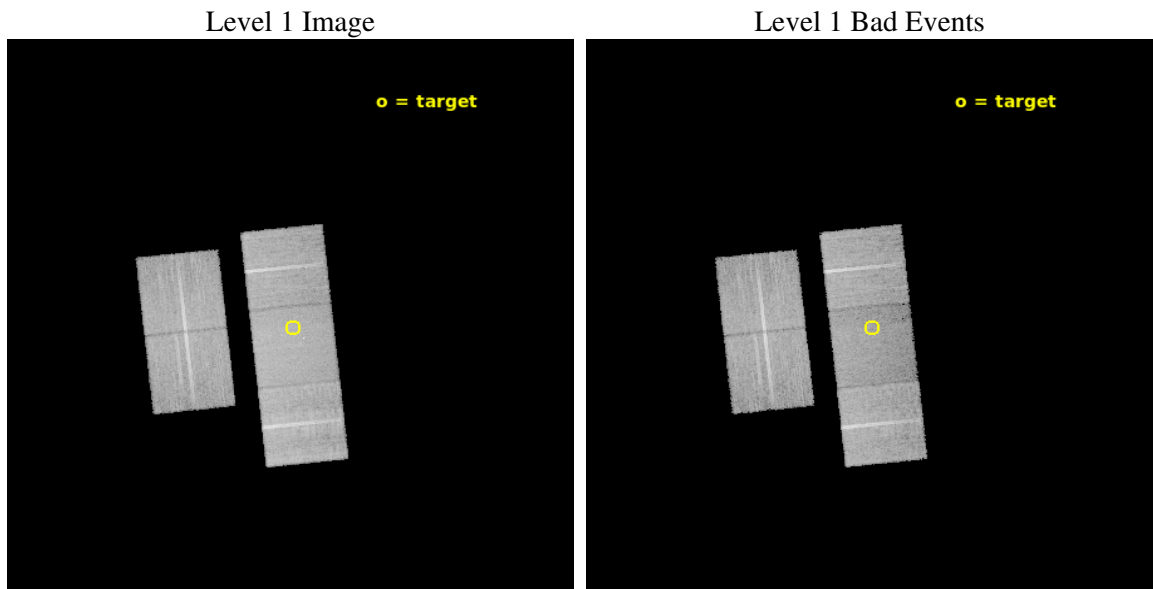
seq_num	700906	Sequence number
obs_id	4824	Observation id
title	Destroying Degeneracy: Spanning the Luminosity Range for Radio-Quiet Quasars at z=4	Proposal title
observer	Dr. Jill Bechtold	Principal investigator
object	QSO J1321+0038	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	200.295	Observer's specified target RA [deg]
dec_targ	0.639444	Observer's specified target Dec [deg]
ra_nom	200.30011301105	Nominal RA [deg]
dec_nom	0.64629775314959	Nominal Dec [deg]
roll_nom	83.857085857467	Nominal Roll [deg]
revision	6	Processing version of data
ontime	18035.742660284	Sum of GTIs [s]
livetime	17800.092404707	Livetime [s]
ontime2	18032.437510014	Sum of GTIs [s]
ontime3	18035.660580277	Sum of GTIs [s]
ontime6	18035.701620281	Sum of GTIs [s]
ontime7	18035.742660284	Sum of GTIs [s]
ontime8	18032.478530139	Sum of GTIs [s]
l2events	94709	Number of level 2 events



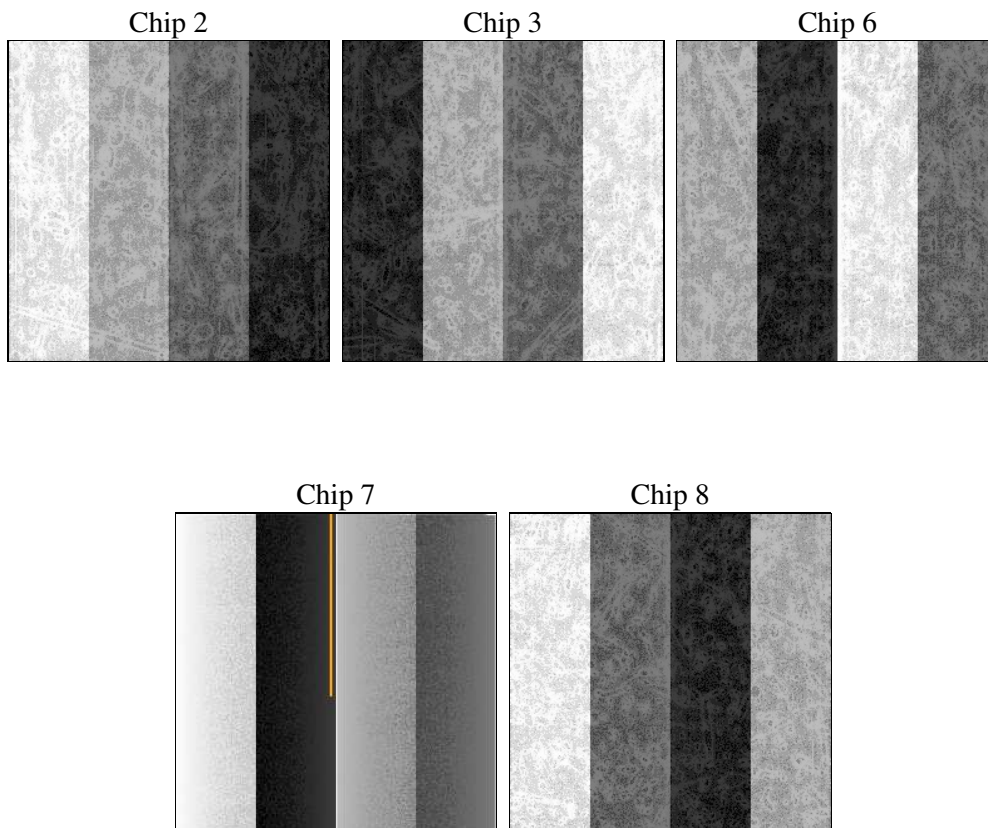
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	18000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	18035.742660284	Sum of GTIs [s]
caldsver	4.9.2	 	ontime2	18032.437510014	Sum of GTIs [s]
date	2020-10-07T03:48:29	Date and time of file creation	ontime3	18035.660580277	Sum of GTIs [s]
revision	6	Processing version of data	ontime6	18035.701620281	Sum of GTIs [s]
			ontime7	18035.742660284	Sum of GTIs [s]
			ontime8	18032.478530139	Sum of GTIs [s]
			l1events	604469	Number of level 1 events

2.1.4 Events

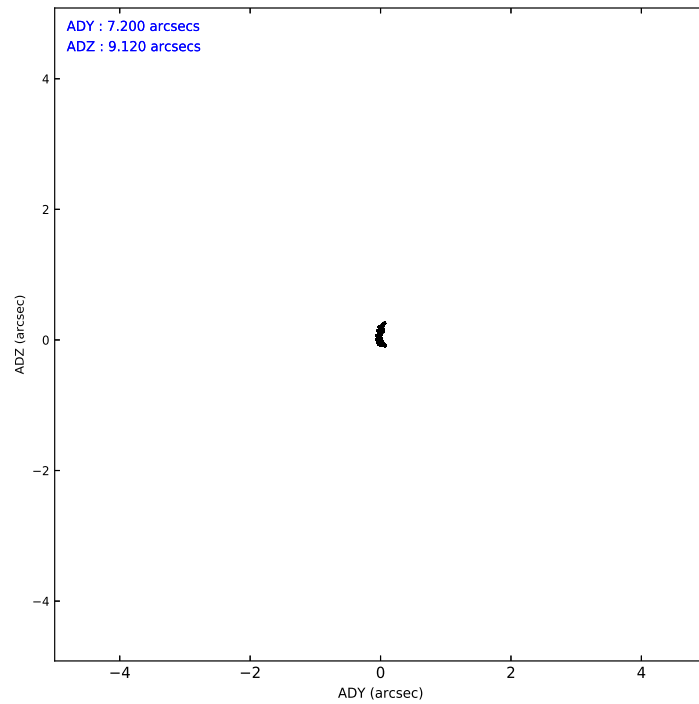
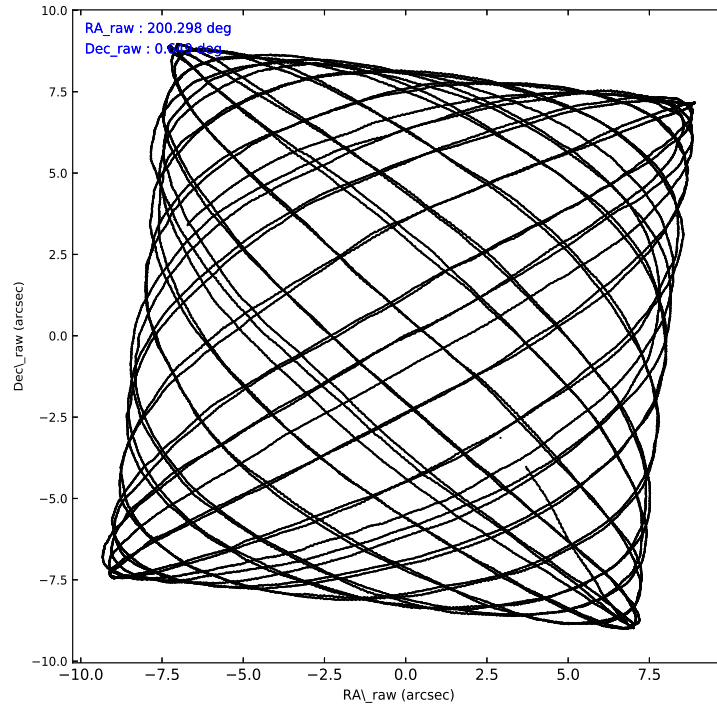
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	112180	110666	114015	124993	142615
rejected events	101298	100338	102298	68607	108389
rejected %	90%	90%	89%	54%	76%

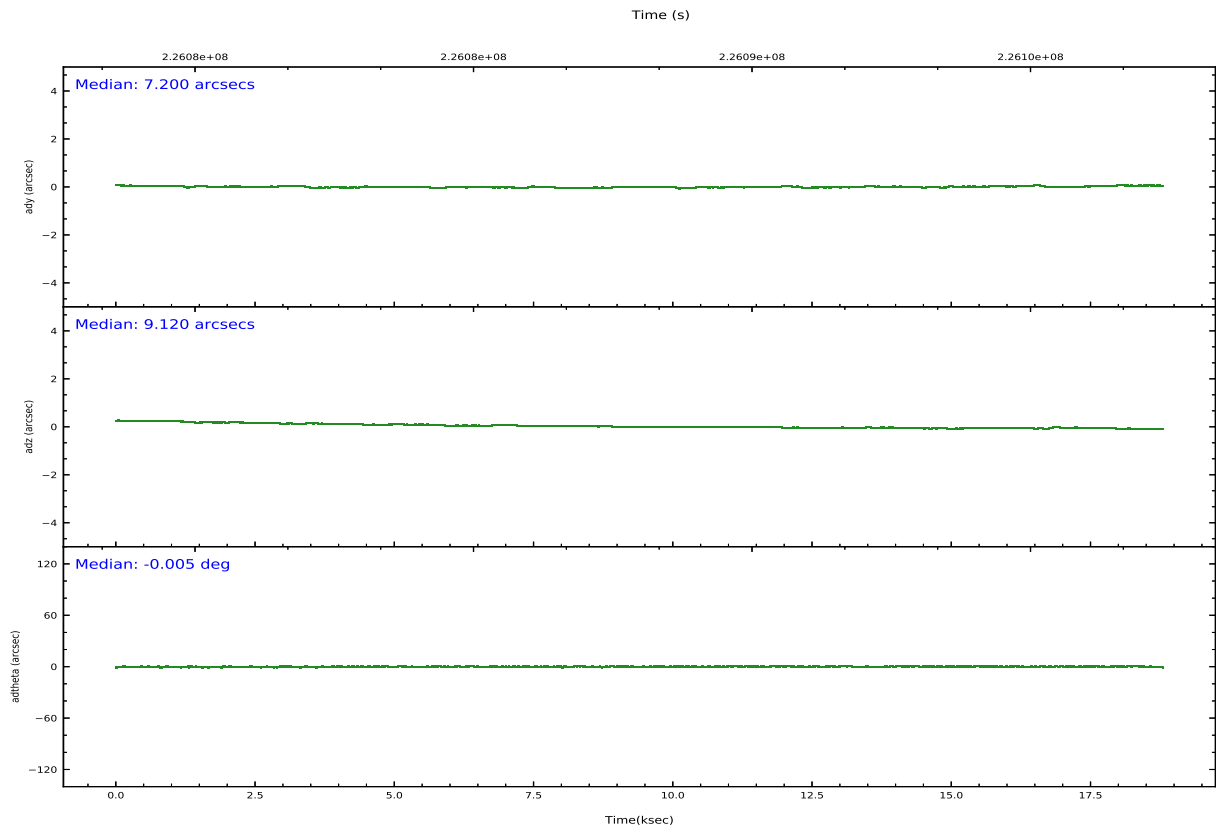
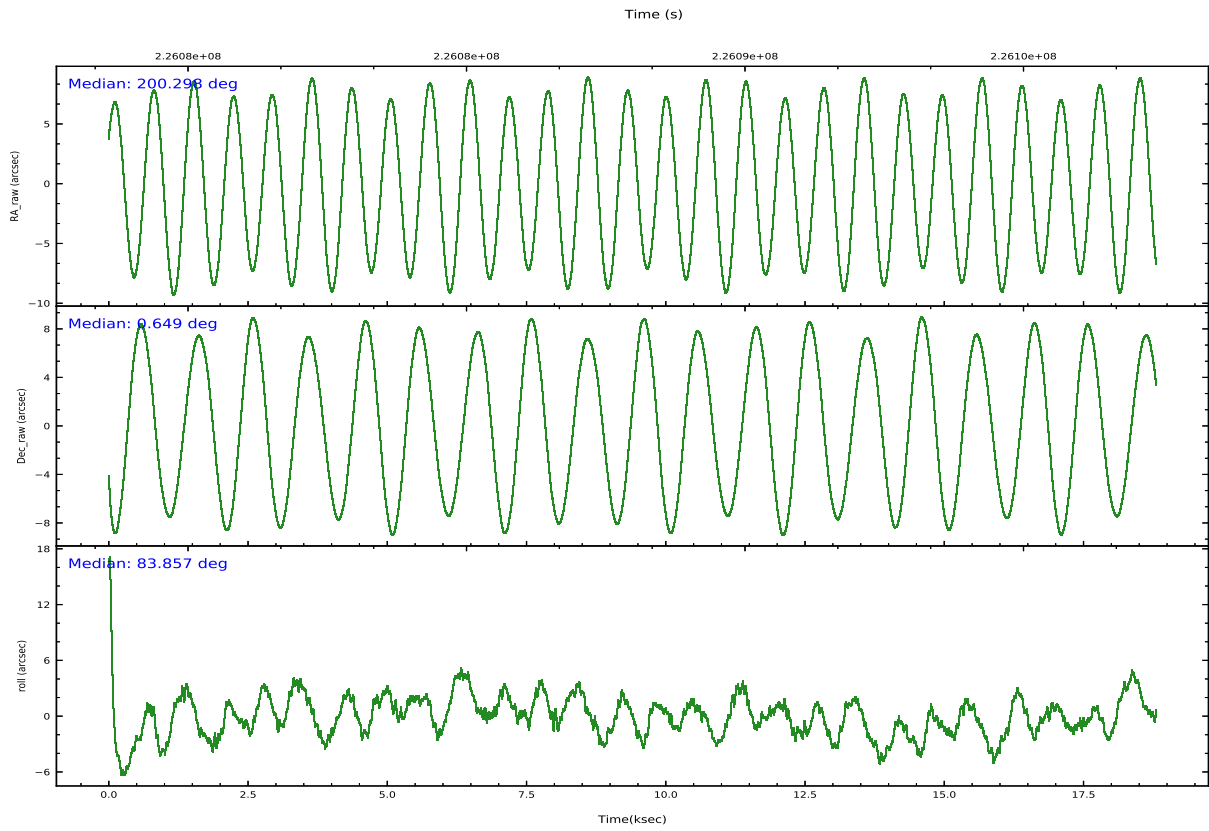
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	3951	3648	4237	5224	10380
	3%	3%	3%	4%	7%
grade 1 events	74	55	48	106	94
	0%	0%	0%	0%	0%
grade 2 events	2513	2200	2440	11446	7258
	2%	1%	2%	9%	5%
grade 3 events	1267	1202	1260	5396	4028
	1%	1%	1%	4%	2%
grade 4 events	1185	1161	1231	5265	3643
	1%	1%	1%	4%	2%
grade 5 events	3649	4369	4506	13328	6374
	3%	3%	3%	10%	4%
grade 6 events	1971	2120	2554	29069	8921
	1%	1%	2%	23%	6%
grade 7 events	97570	95911	97739	55159	101917
	86%	86%	85%	44%	71%

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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	200.309051	200.30011301105	Subarray requested	NONE	NONE
[deg] Pointing Dec	0.623977	0.64629775314959	Alternating exposures requested	N	N
[deg] Pointing Roll	83.699849	83.857085857467	[s] Primary exposure time	0.000000	3.1
[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)	226079382.184000	226078144.14484			
Observation start date	2005-03-01T15:48:38	2005-03-01T15:29:04			
[s] Observation end time (MET)	226097382.184000	226097828.24573			
Observation end date	2005-03-01T20:48:38	2005-03-01T20:57:08			
Read mode	TIMED	TIMED			

2.3 Aspect





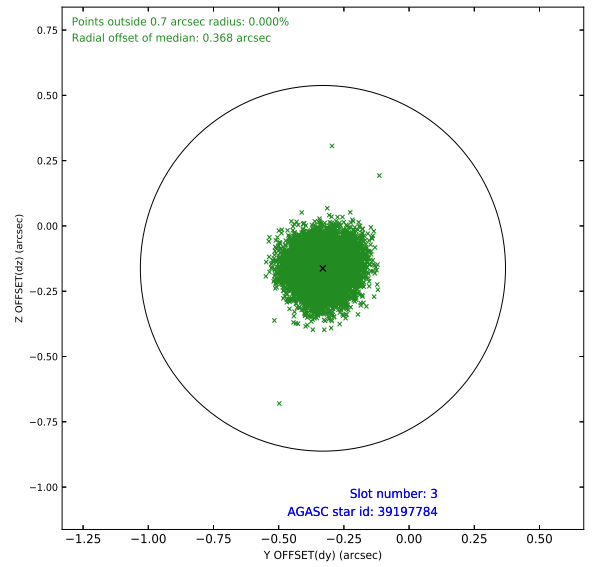
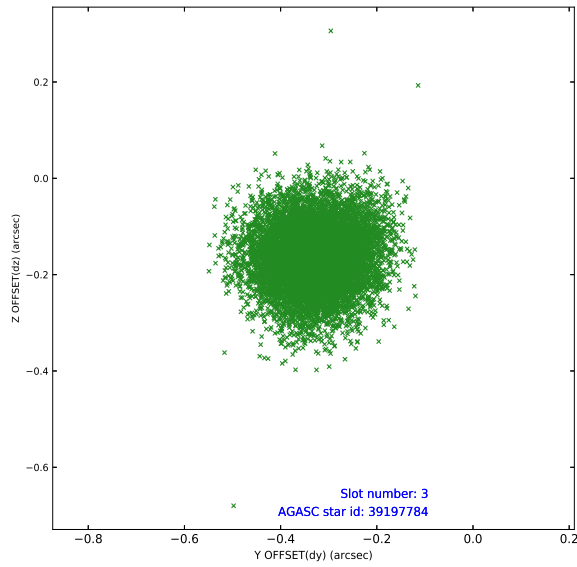
Slot Statistics

slot	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	4587	1.000	-0.071	-0.084	0.008	0.013	0.000000	0.000000	-759.98	-1730
1	FID		ACIS-S-4	7.21	4587	1.000	0.154	0.056	0.006	0.010	0.000000	0.000000	2153.38	178
2	FID		ACIS-S-5	7.23	4587	1.000	-0.115	0.036	0.008	0.013	0.000000	0.000000	-1812.65	171
3	GUIDE	used	39197784	9.66	9163	1.000	-0.330	-0.162	0.099	0.161	199.911028	1.264167	2133.73	1677
4	GUIDE	used	39325904	8.92	9166	1.000	-0.023	-0.022	0.094	0.162	201.024165	1.205349	2363.84	-2328
5	GUIDE	used	39326016	10.02	9161	1.000	0.285	0.024	0.119	0.205	200.101287	0.633158	-48.28	746
6	GUIDE	used	39327968	9.36	9167	1.000	0.064	0.162	0.108	0.167	200.905774	0.519018	-139.23	-2176
7	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0

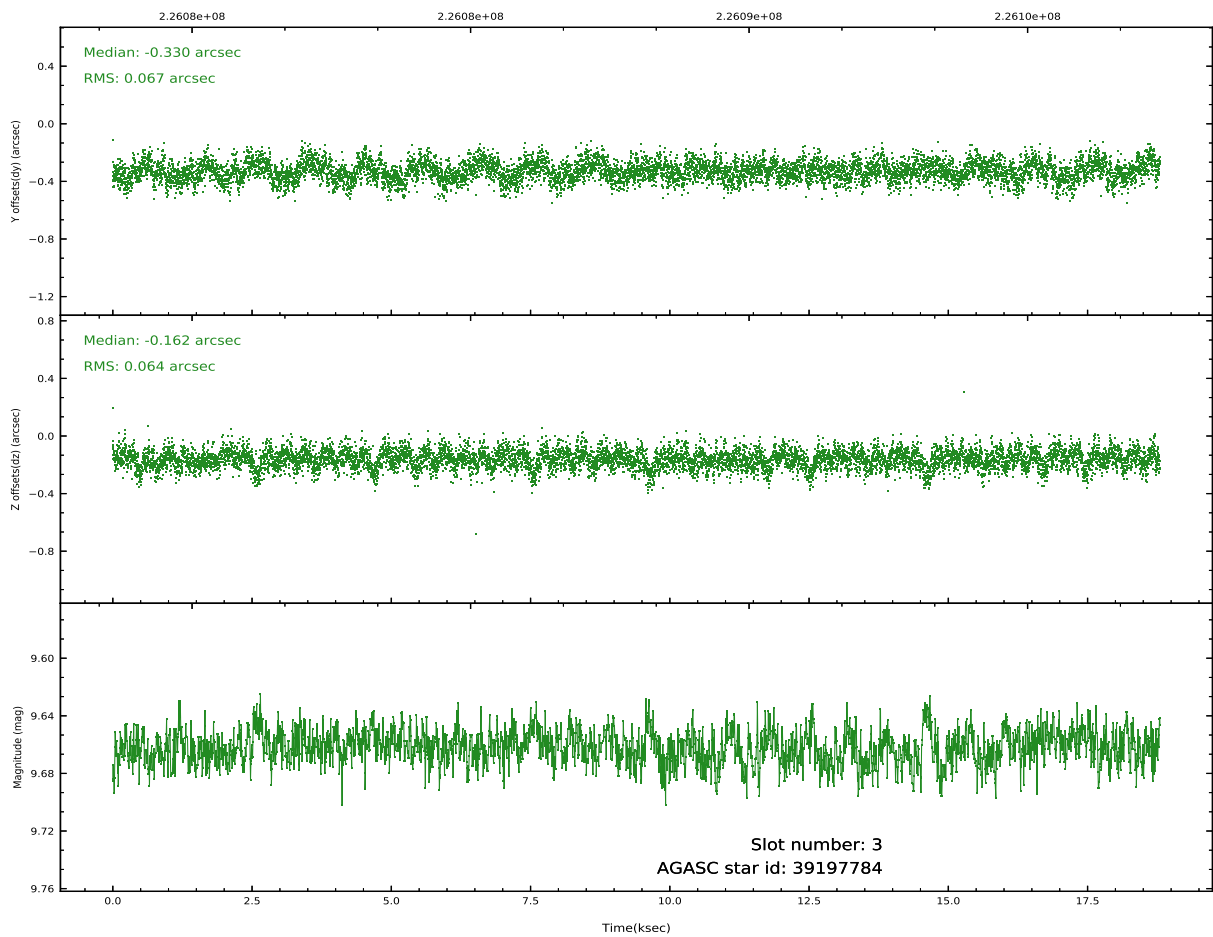
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2.4 Star Slots

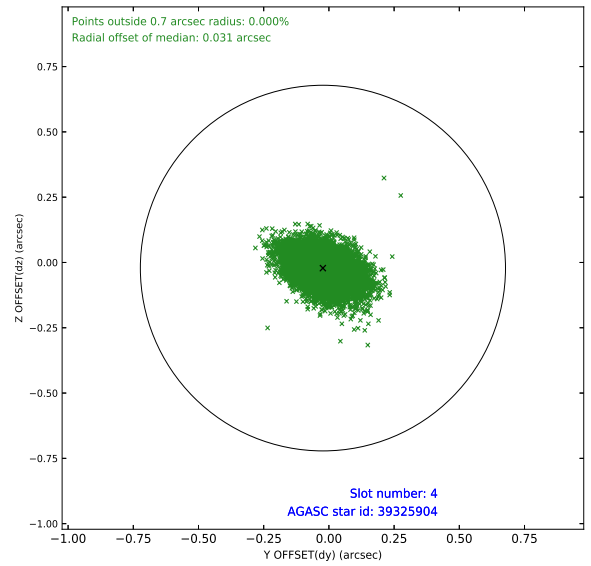
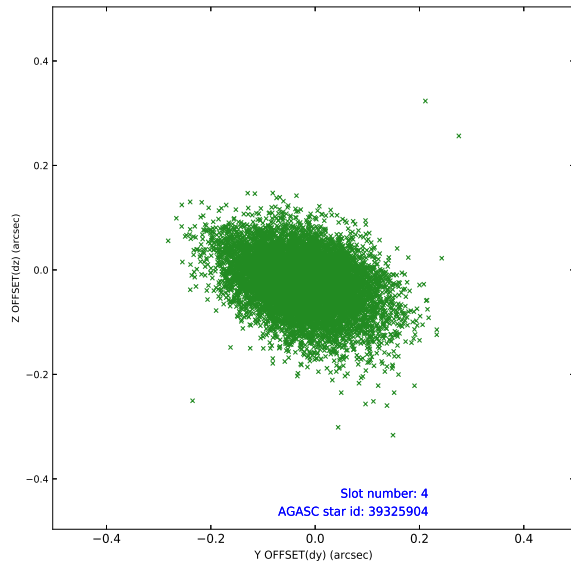
2.4.1 Slot 3



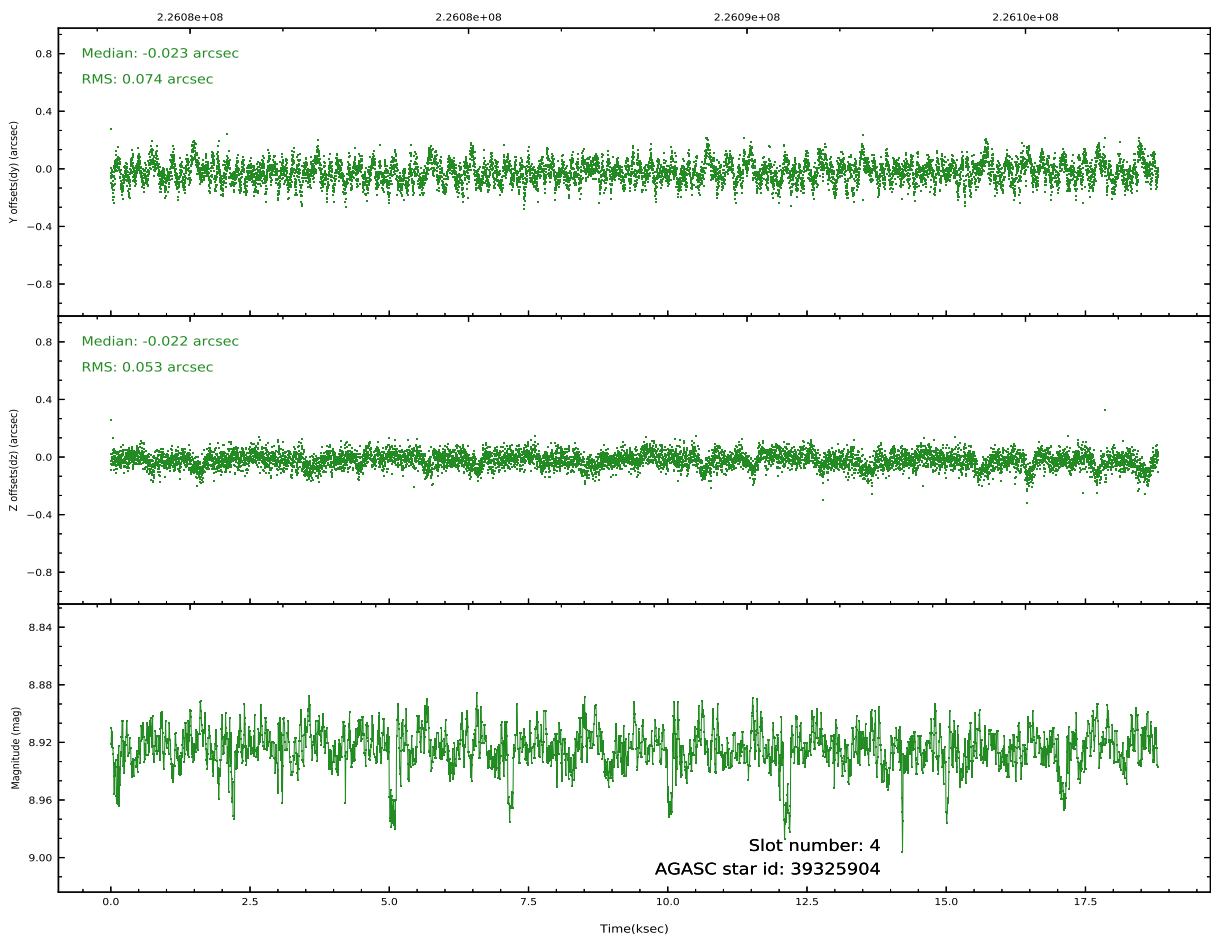
Time (s)



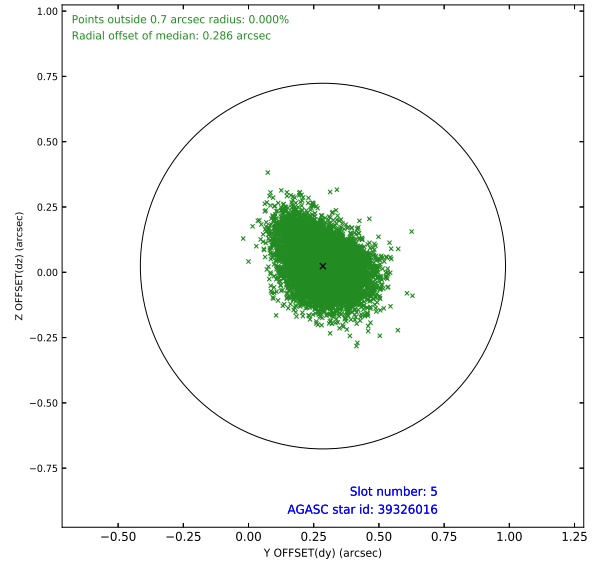
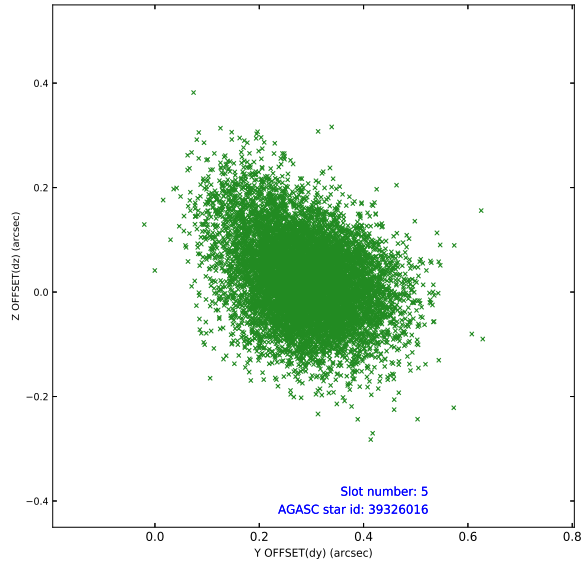
2.4.2 Slot 4



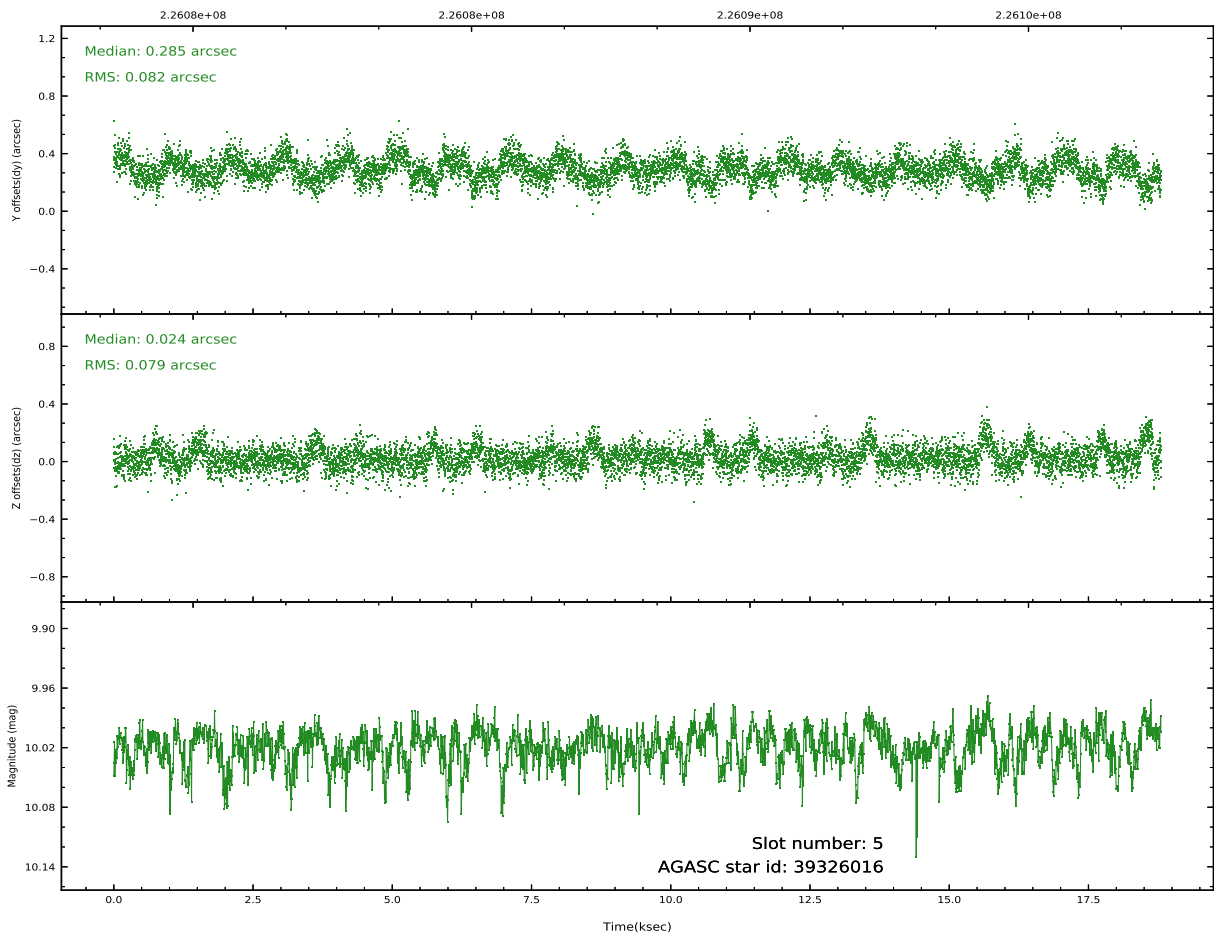
Time (s)



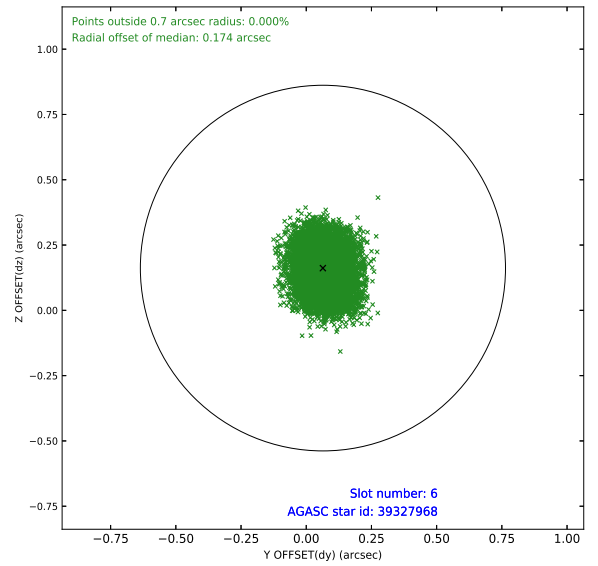
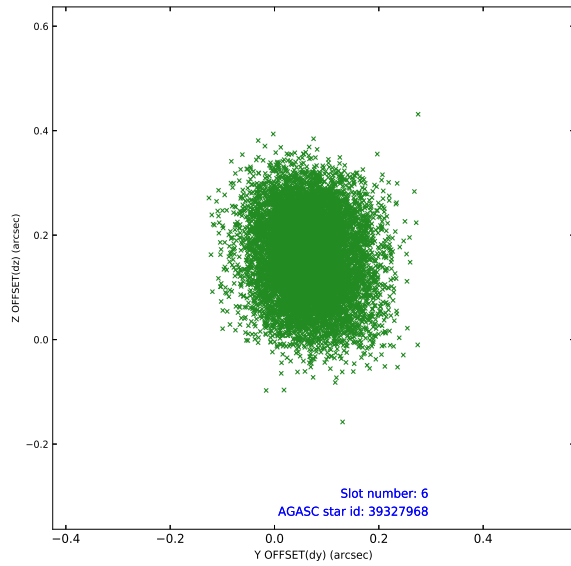
2.4.3 Slot 5



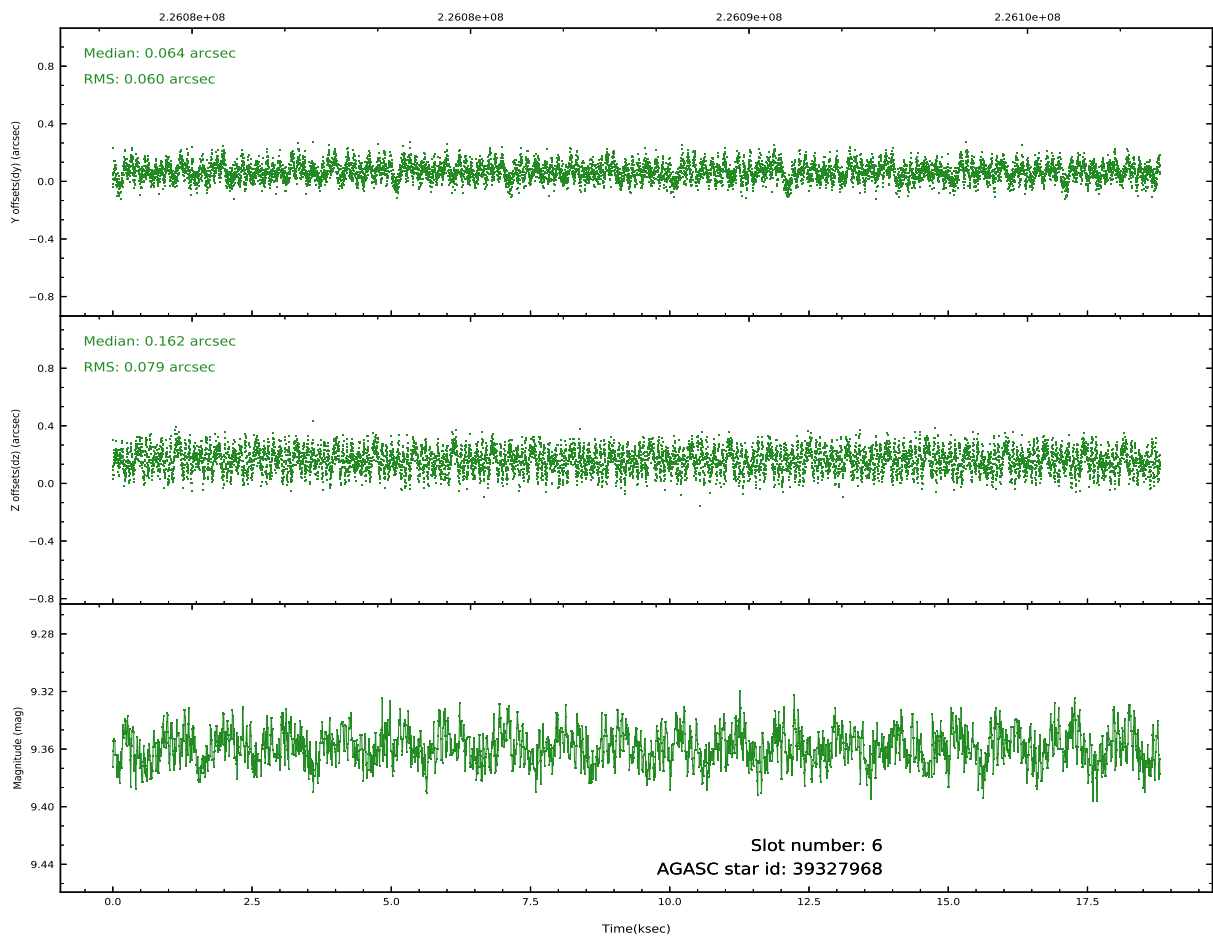
Time (s)



2.4.4 Slot 6

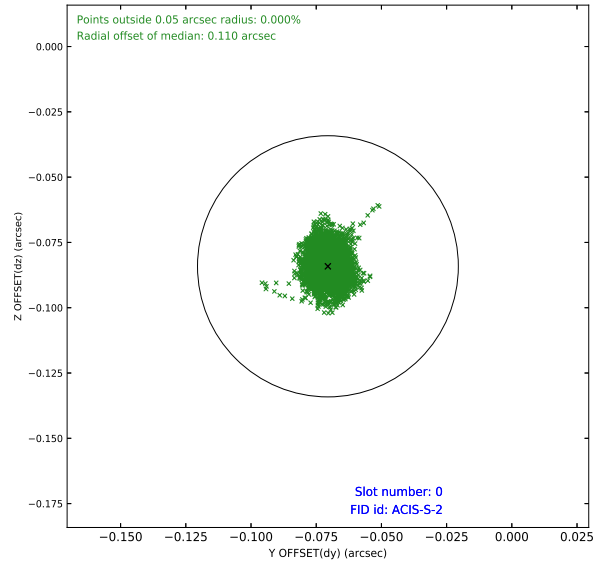
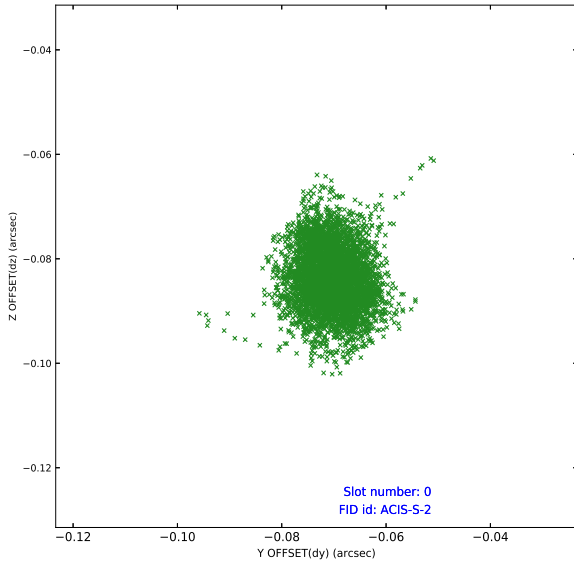


Time (s)

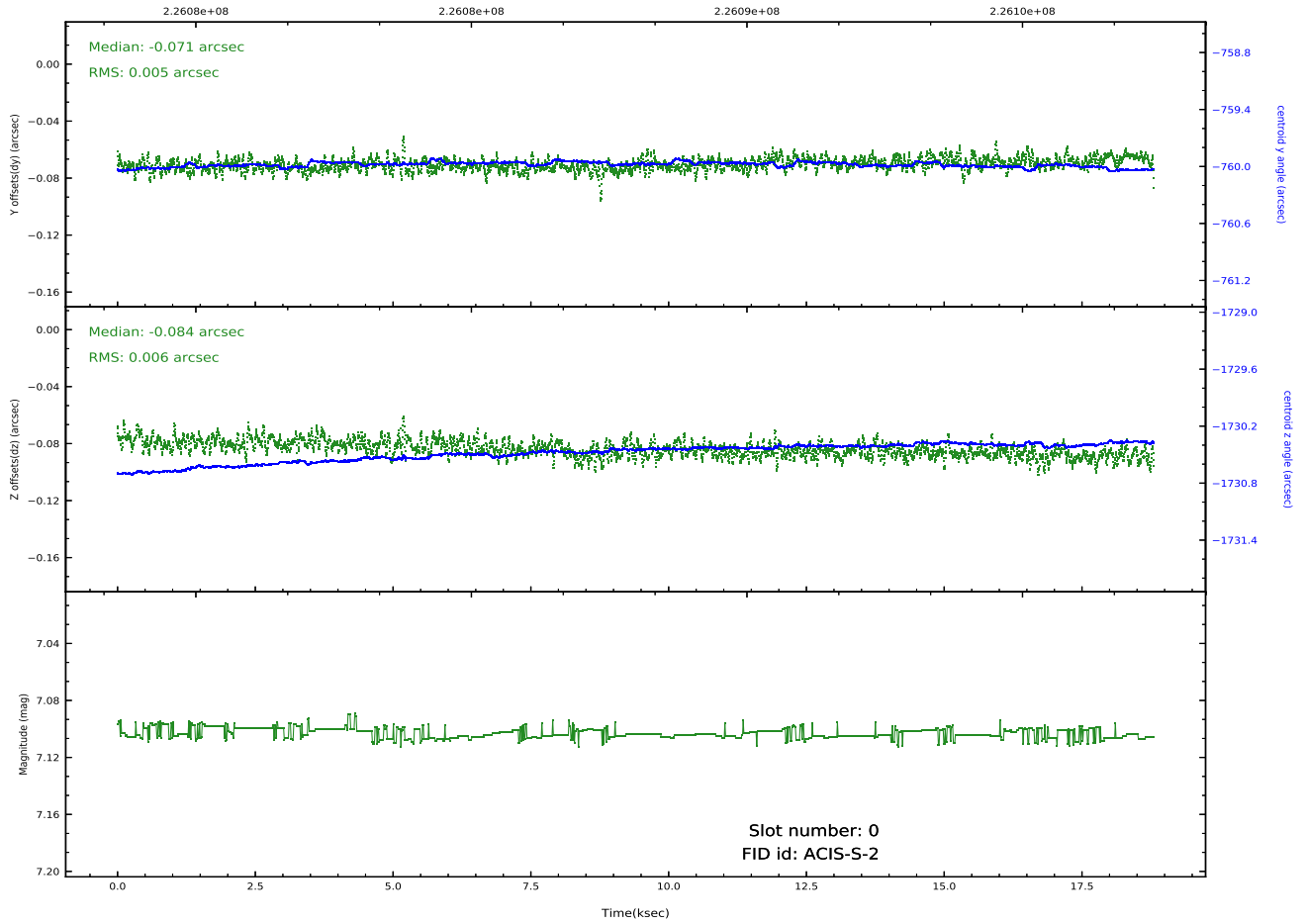


2.5 FID Slots

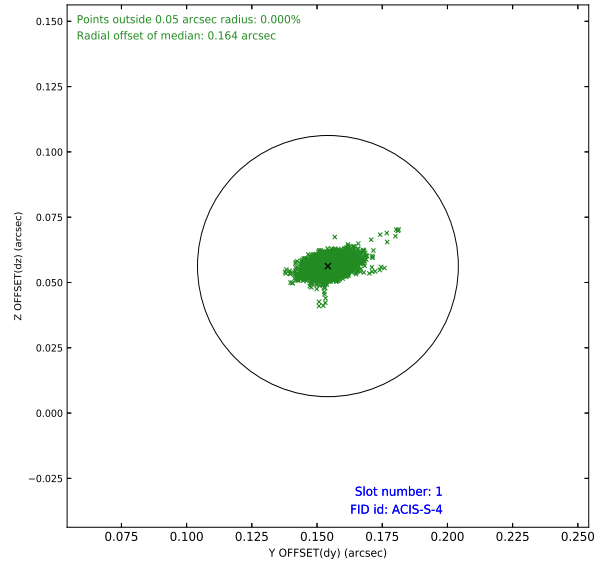
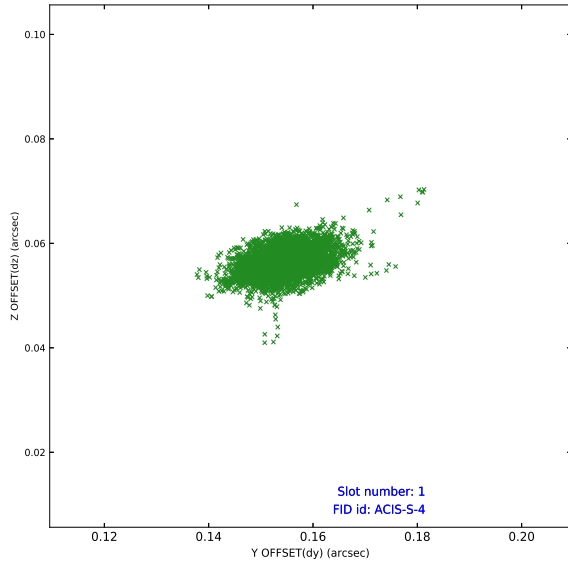
2.5.1 Slot 0



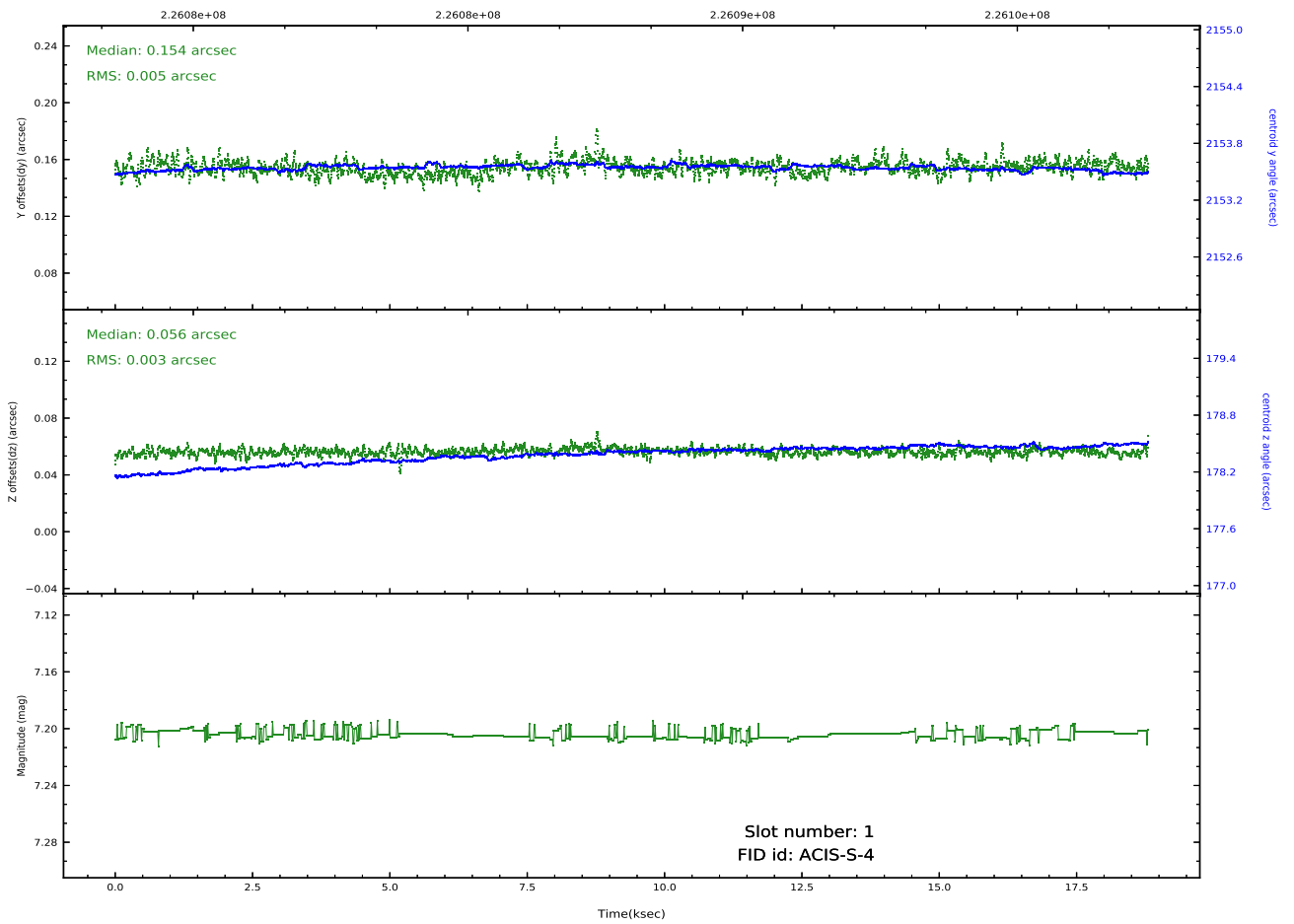
Time (s)



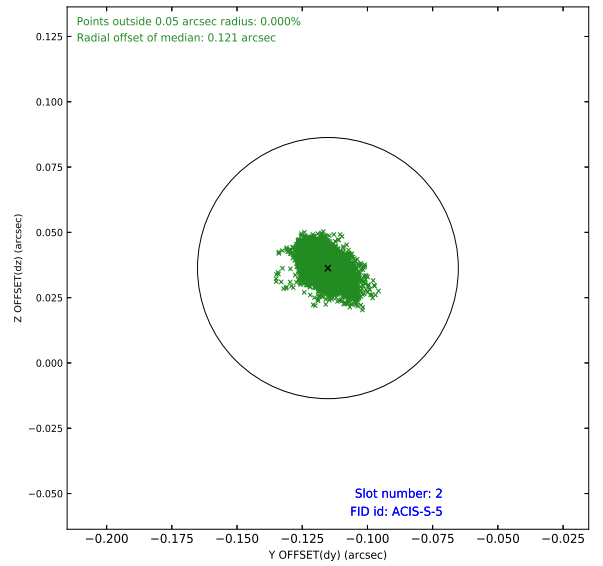
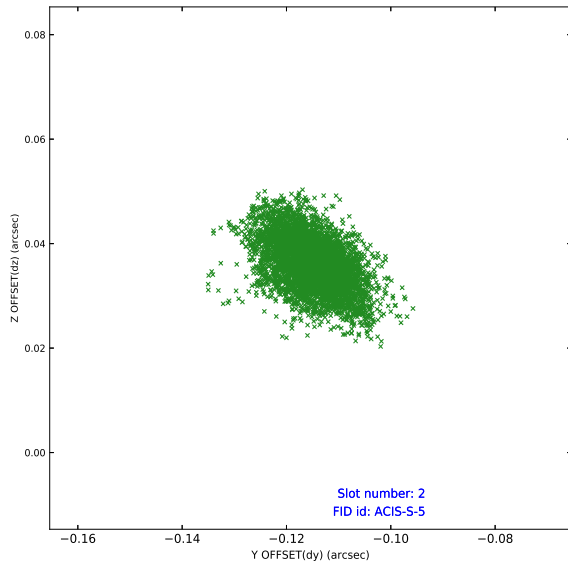
2.5.2 Slot 1



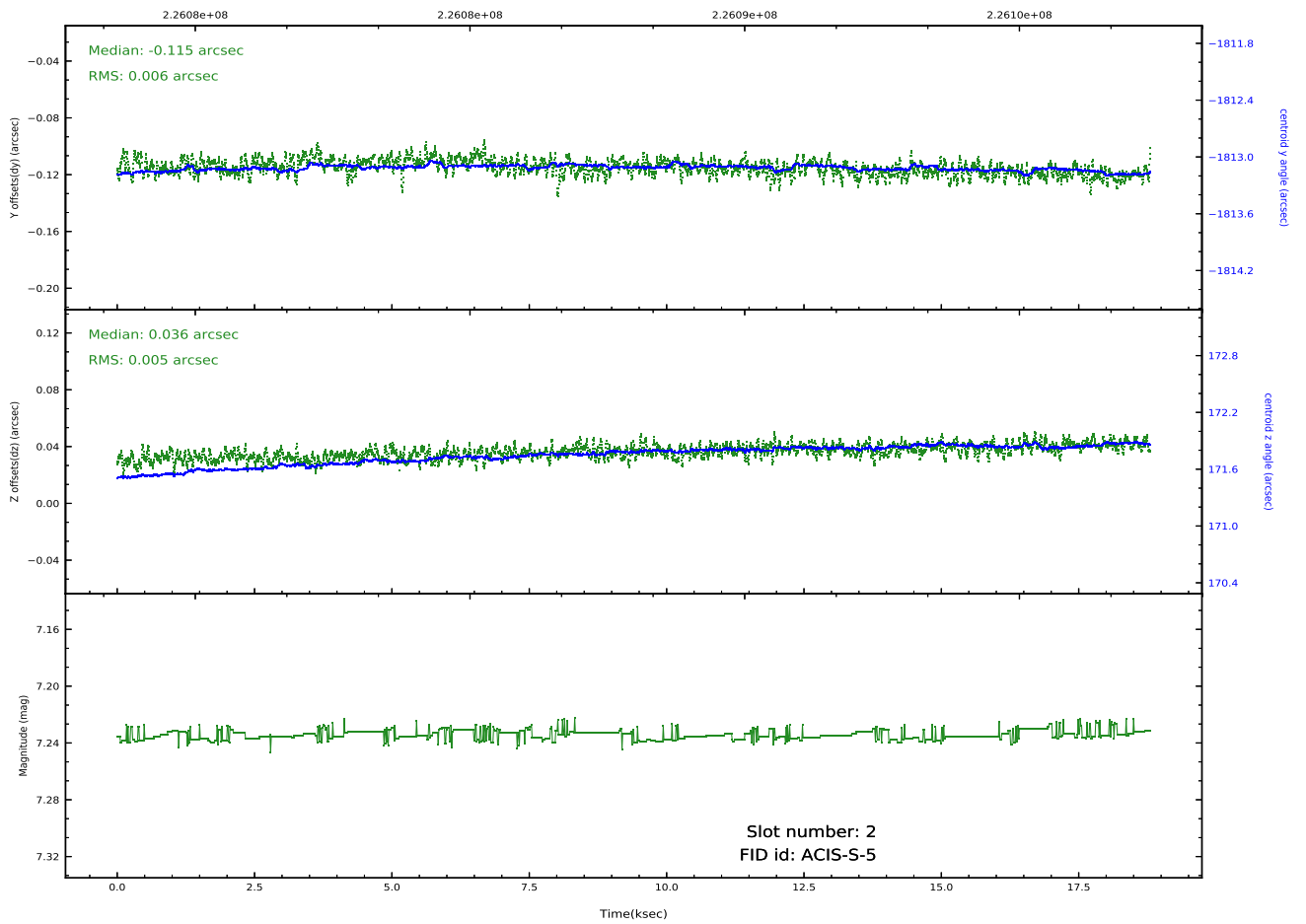
Time (s)



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	18.03579

A.2 Comments

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 slot from the solution.