

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 4843 - L2 Version 4
Chandra X-Ray Center

L2 Processing Date : Sep 28 2020

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1 Front

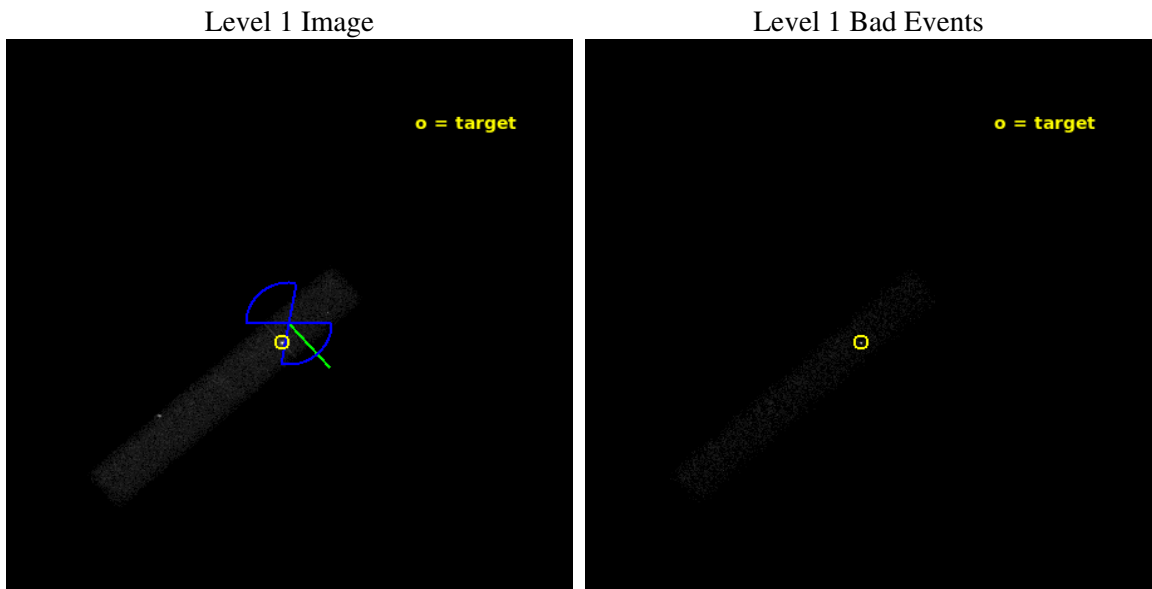
seq_num	700925	Sequence number
obs_id	4843	Observation id
title	The Physics of Relativistic Jets: Chandra Imaging of Extended Jets in Gamma-loud Blazars	Proposal title
observer	Dr. FABRIZIO TAVECCHIO	Principal investigator
object	3C454.3	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	343.490417	Observer's specified target RA [deg]
dec_targ	16.148194	Observer's specified target Dec [deg]
ra_nom	343.48733454343	Nominal RA [deg]
dec_nom	16.156800066194	Nominal Dec [deg]
roll_nom	138.24196220719	Nominal Roll [deg]
revision	4	Processing version of data
ontime	20134.00029999	Sum of GTIs [s]
livetime	18260.475512416	Livetime [s]
ontime7	20134.00029999	Sum of GTIs [s]
l2events	34213	Number of level 2 events



2 OBI

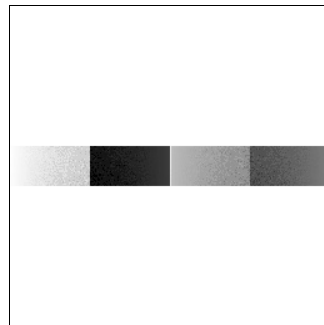
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	20134.00029999	Sum of GTIs [s]
caldsver	4.9.2	 	ontime7	20134.00029999	Sum of GTIs [s]
date	2020-09-28T06:04:57	Date and time of file creation	l1events	51976	Number of level 1 events
revision	4	Processing version of data			

2.1.4 Events

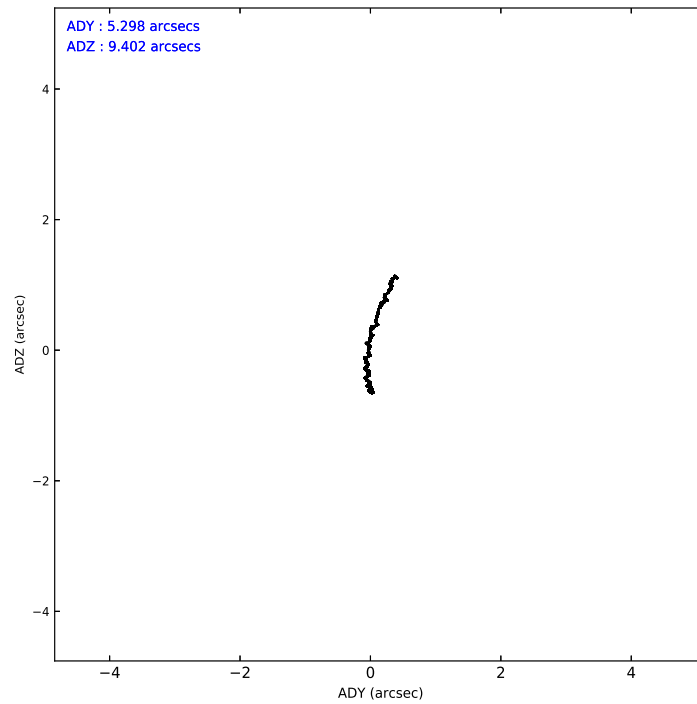
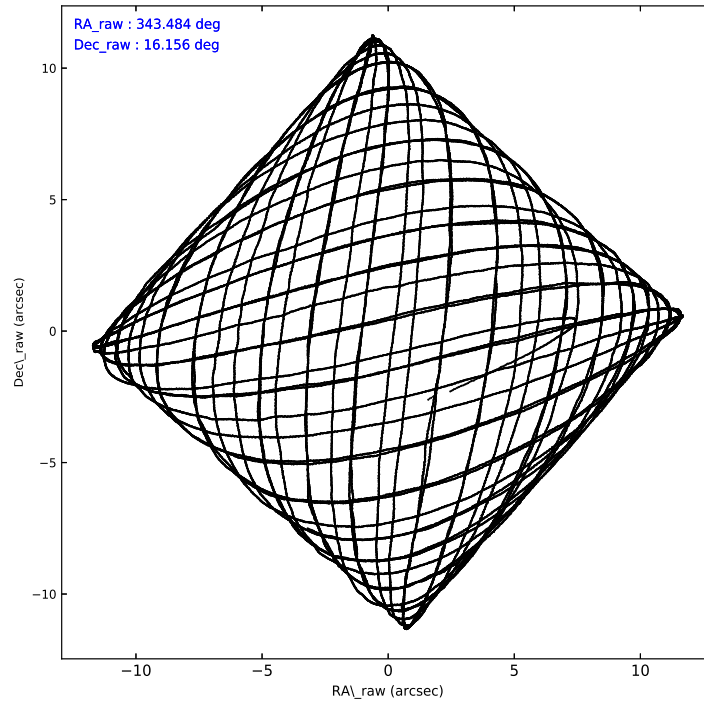
	ccd 7
level 1 events	51976
rejected events	17290
rejected %	33%

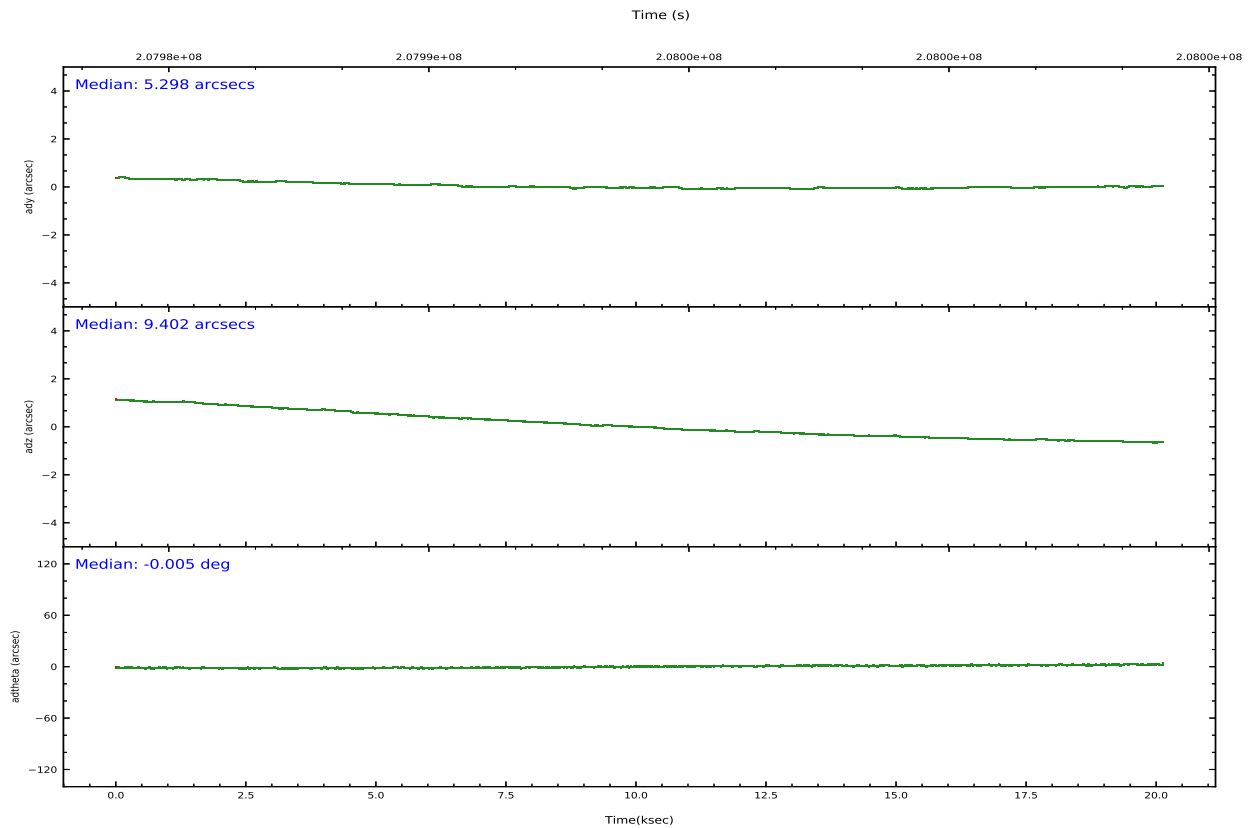
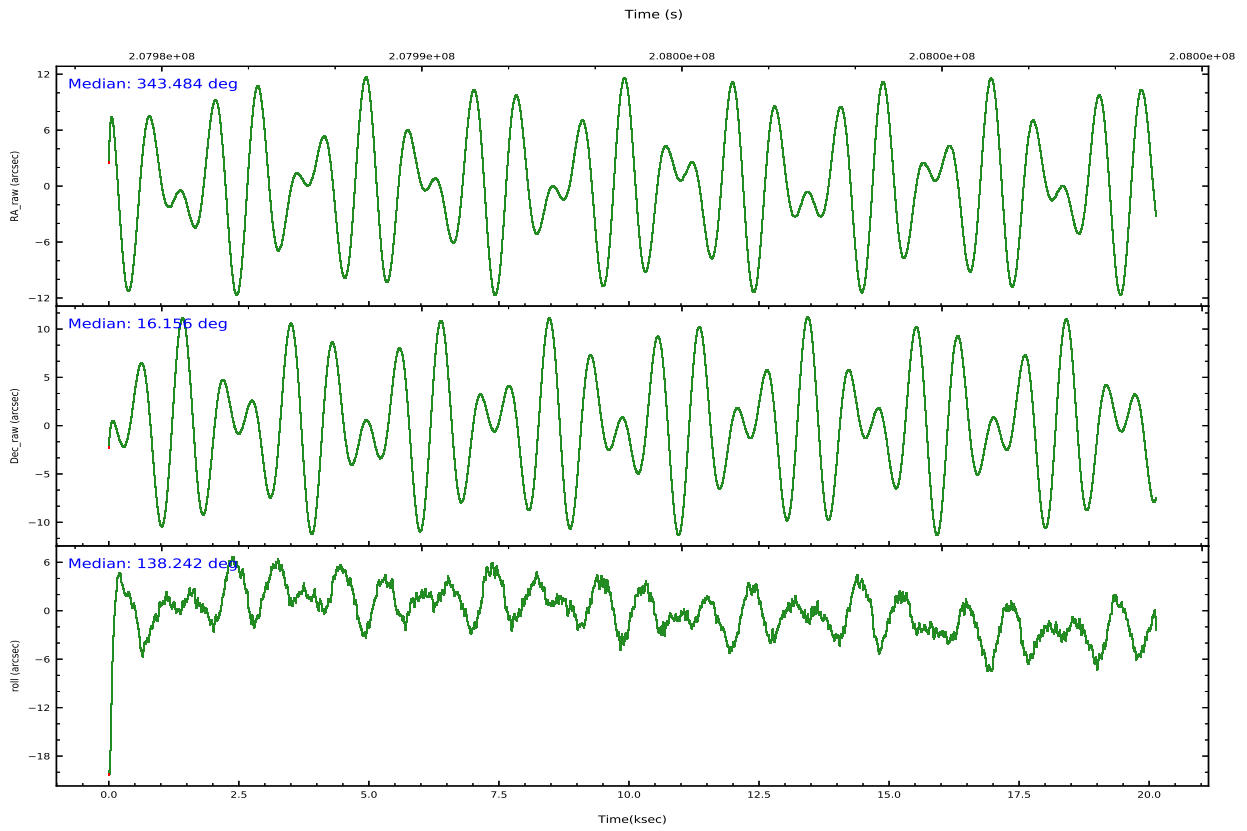
	ccd 7
grade 0 events	7487
	14%
grade 1 events	280
	0%
grade 2 events	8165
	15%
grade 3 events	4275
	8%
grade 4 events	4091
	7%
grade 5 events	3676
	7%
grade 6 events	11394
	21%
grade 7 events	12608
	24%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-7	ACIS-7	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	343.512031	343.48733454343	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	16.150607	16.156800066194	Subarray start row	449	449
[deg] Pointing Roll	138.075568	138.24196220719	Subarray row count	128	128
[deg] Roll angle	140.000000	140.000000	Alternating exposures requested	N	N
[deg] Roll tolerance	50.000000	50.000000	[s] Primary exposure time	0.000000	0.4
Roll constraint allows 180D rotation	Y	Y			
[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)	207984117.184000	207982910.69519			
Observation start date	2004-08-04T05:20:53	2004-08-04T05:01:50			
[s] Observation end time (MET)	208004117.184000	208004983.04617			
Observation end date	2004-08-04T10:54:13	2004-08-04T11:09:43			
Read mode	TIMED	TIMED			

2.3 Aspect





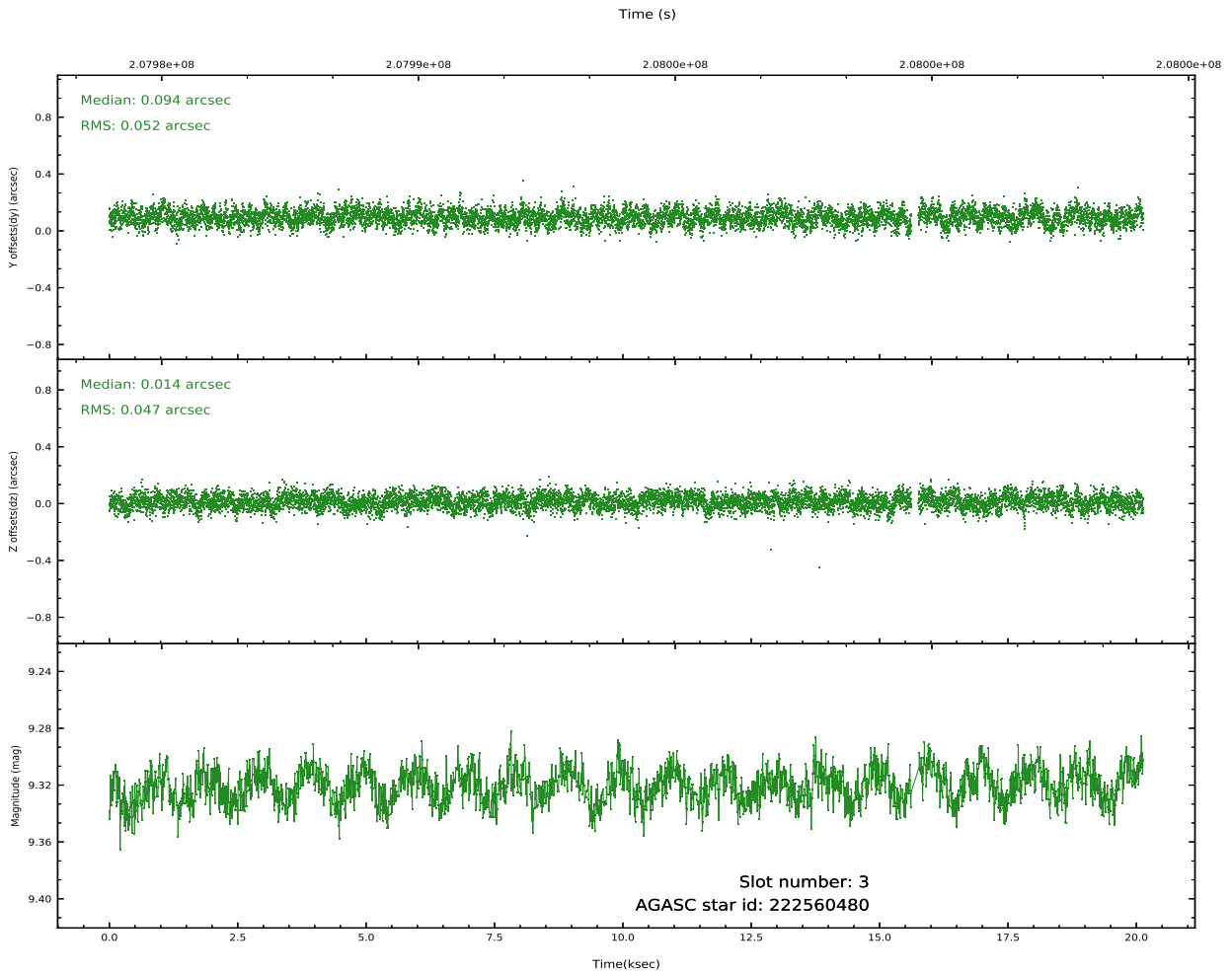
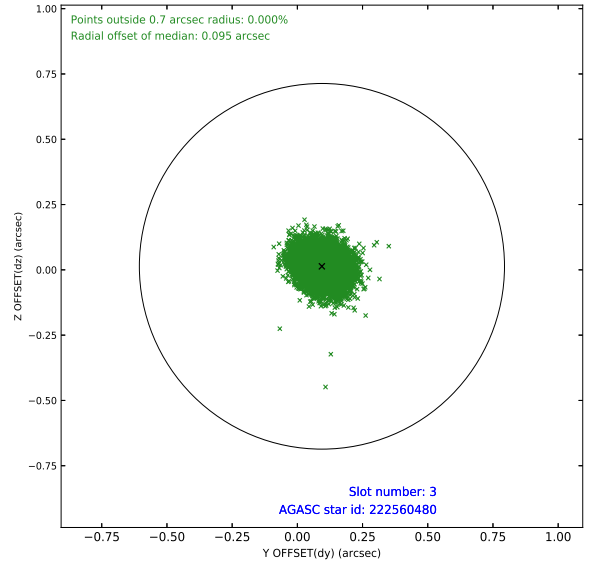
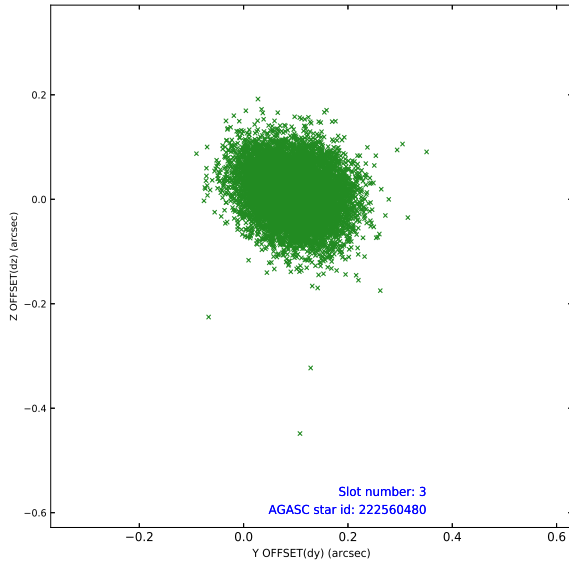
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-1	7.19	4912	1.000	0.026	-0.027	0.017	0.035	0.000000	0.000000	937.99	-1726
1	FID		ACIS-S-5	7.24	4911	1.000	-0.123	0.001	0.016	0.023	0.000000	0.000000	-1811.03	171
2	FID		ACIS-S-6	7.35	4912	1.000	0.073	0.036	0.022	0.048	0.000000	0.000000	403.42	815
3	GUIDE	used	222560480	9.32	9745	1.000	0.094	0.014	0.075	0.121	343.777779	15.665461	-1851.60	683
4	GUIDE	used	222561240	8.72	9823	1.000	-0.019	-0.003	0.067	0.109	343.355884	15.743652	-576.37	1451
5	GUIDE	used	222562432	8.96	9757	1.000	0.120	0.046	0.109	0.199	343.698150	16.309399	-96.21	-855
6	GUIDE	used	222563736	8.81	9819	1.000	-0.111	-0.140	0.080	0.128	343.076284	16.308502	1500.88	581
7	GUIDE	used	222565592	8.26	9820	1.000	-0.094	0.091	0.063	0.100	343.291662	16.508291	1426.96	-449

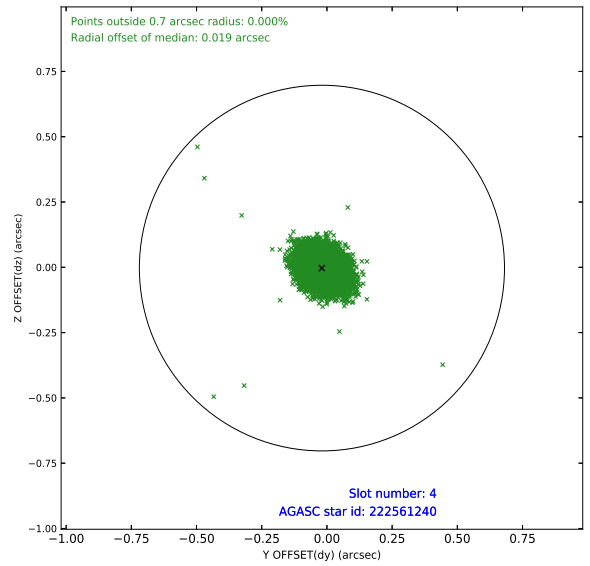
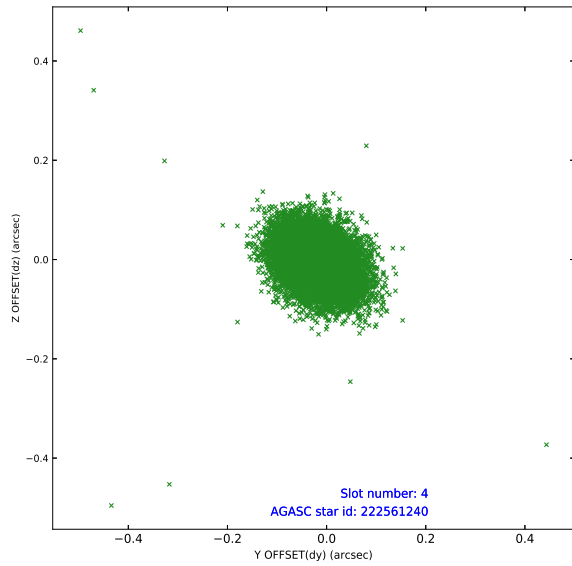
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2.4 Star Slots

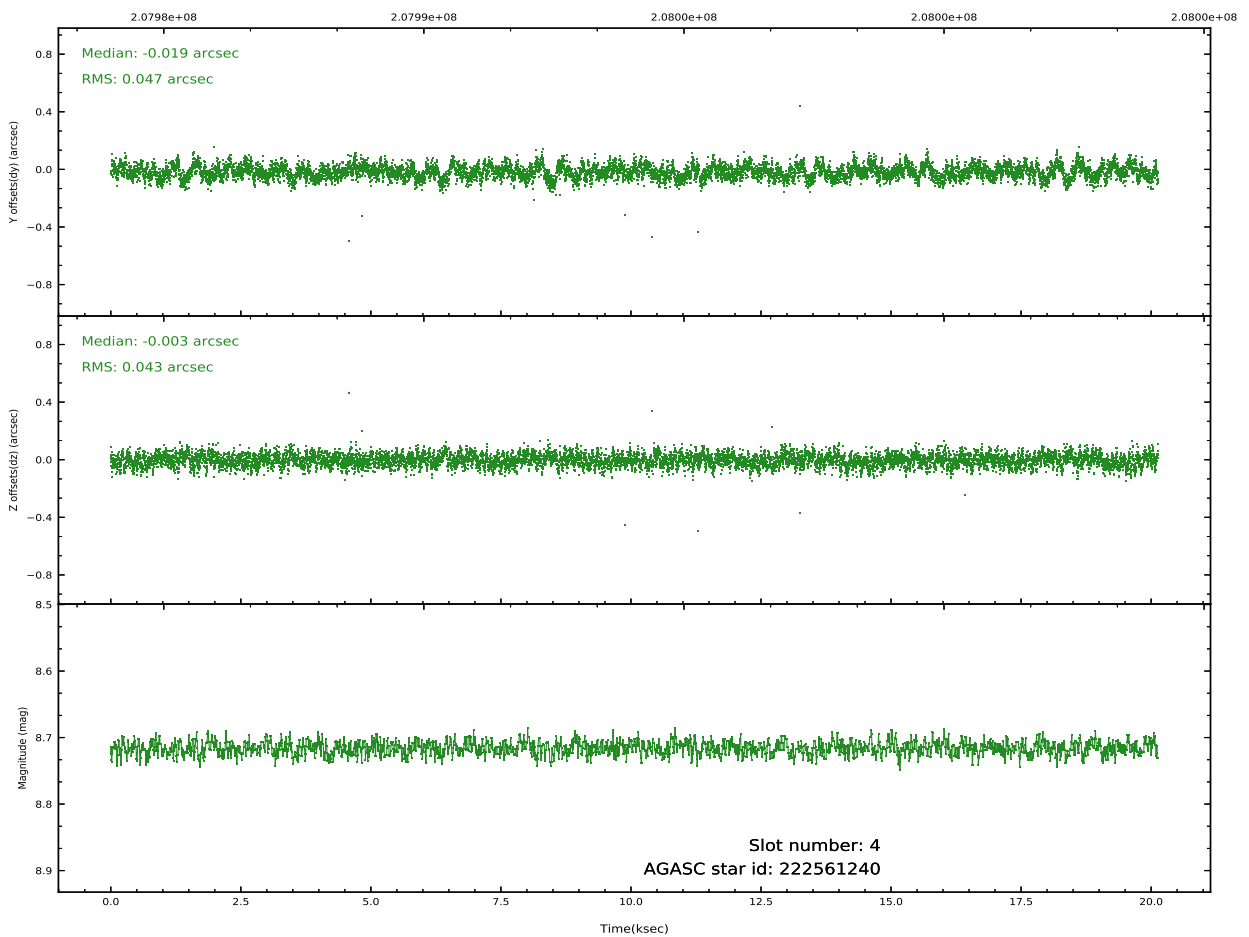
2.4.1 Slot 3



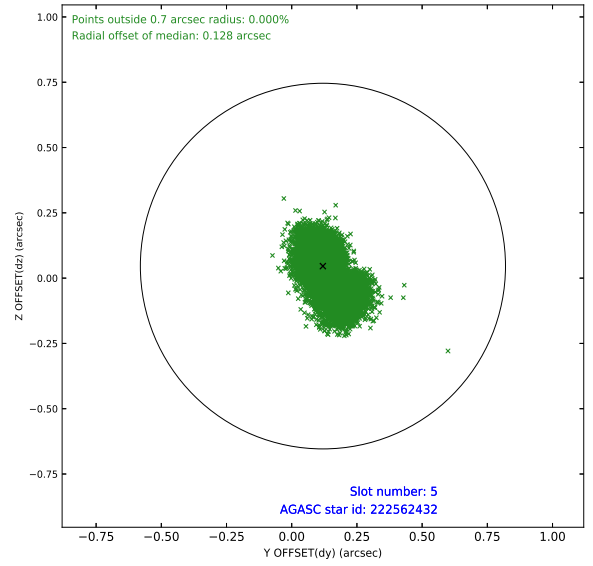
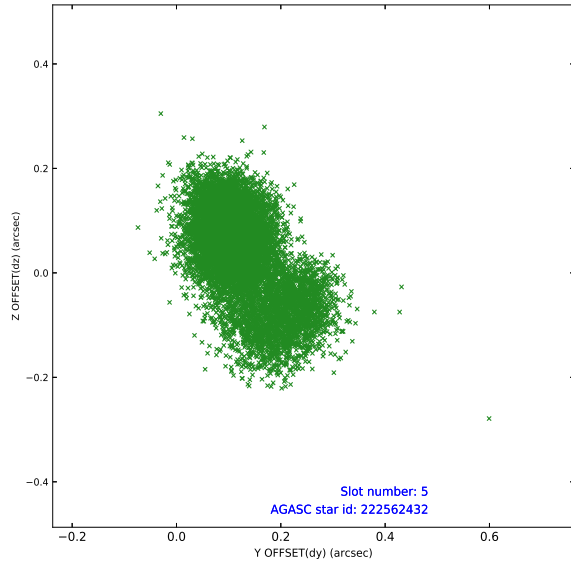
2.4.2 Slot 4



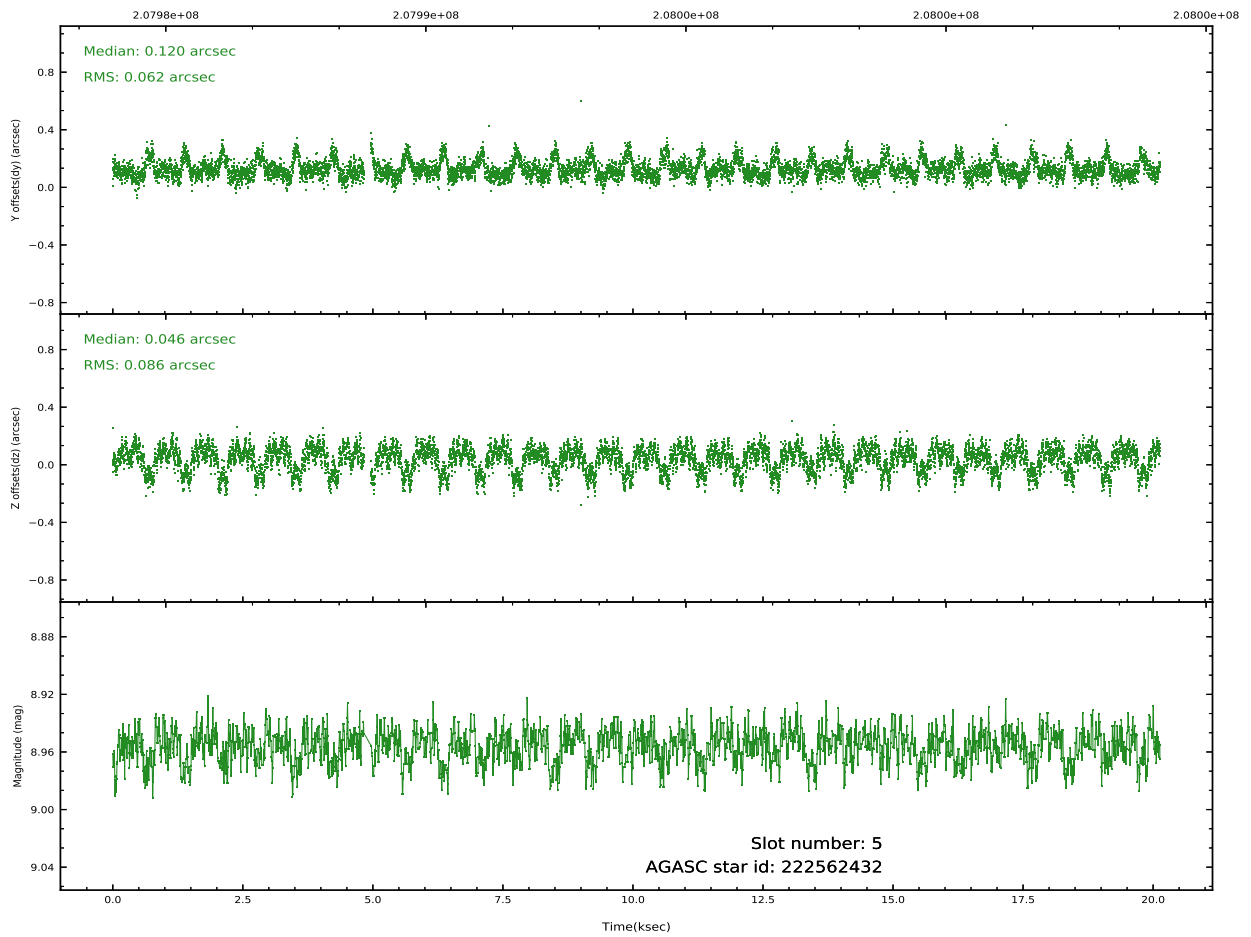
Time (s)



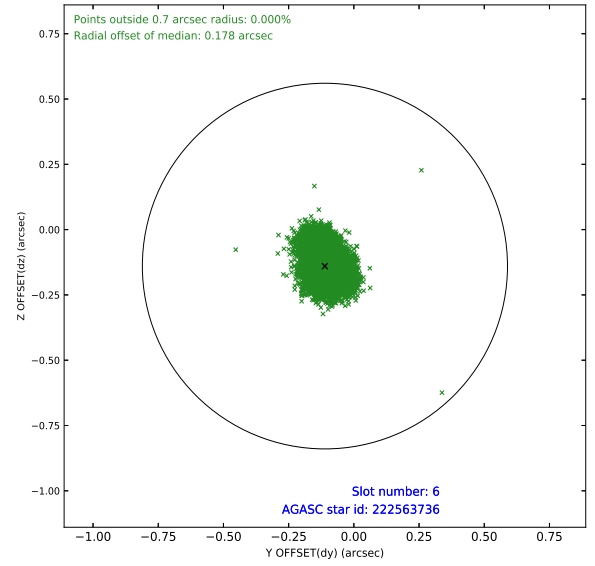
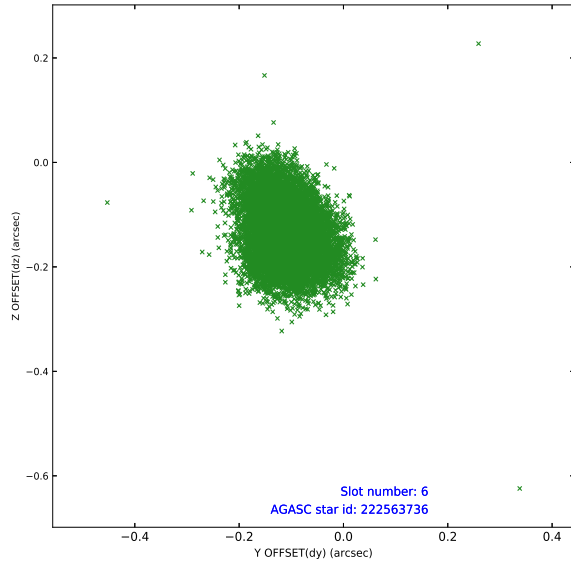
2.4.3 Slot 5



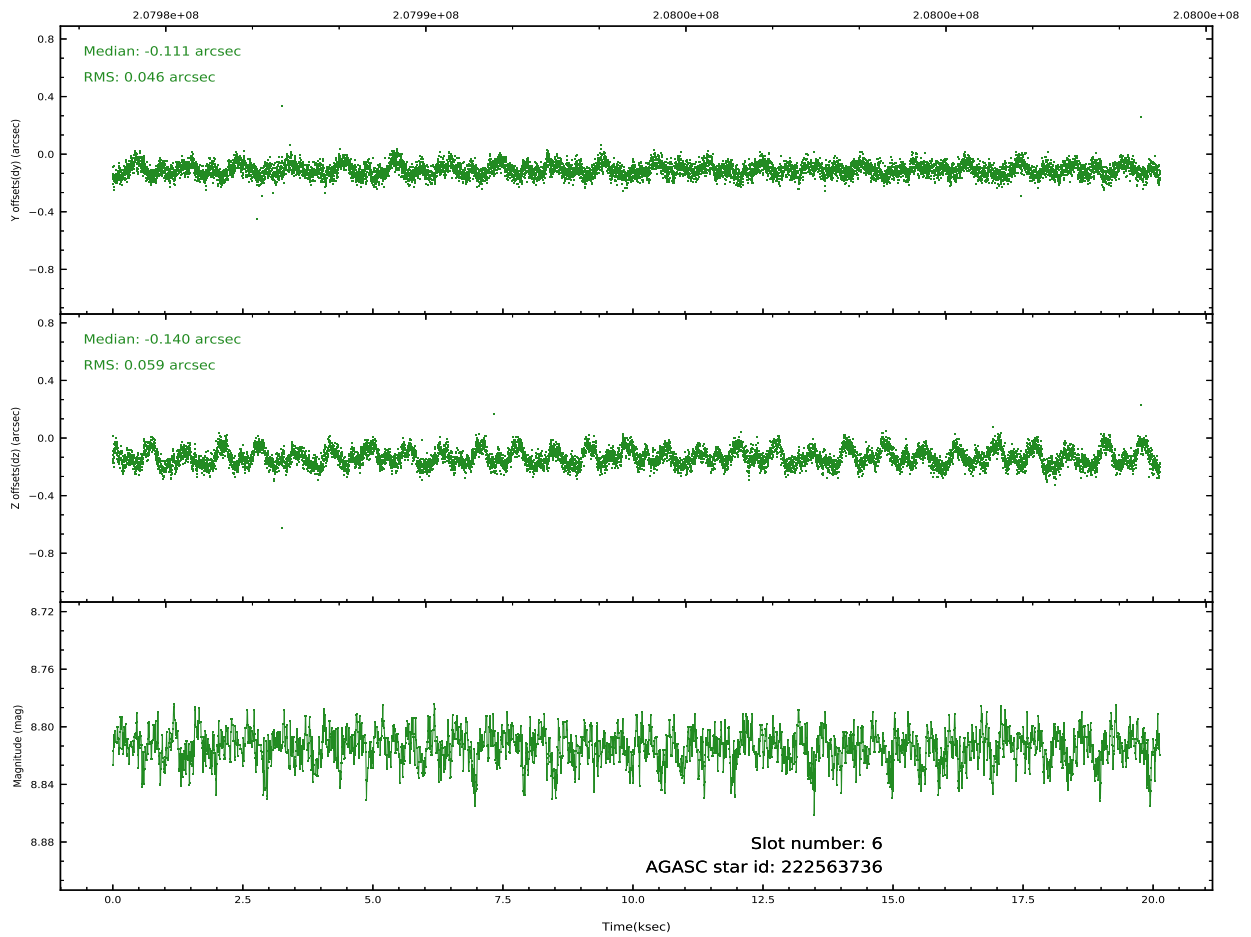
Time (s)



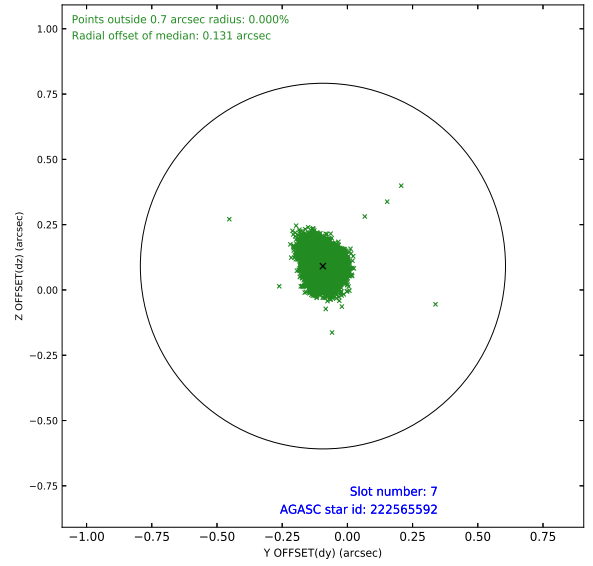
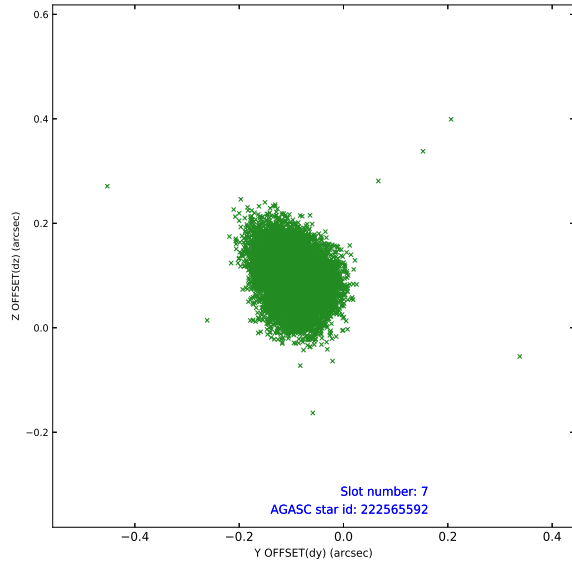
2.4.4 Slot 6



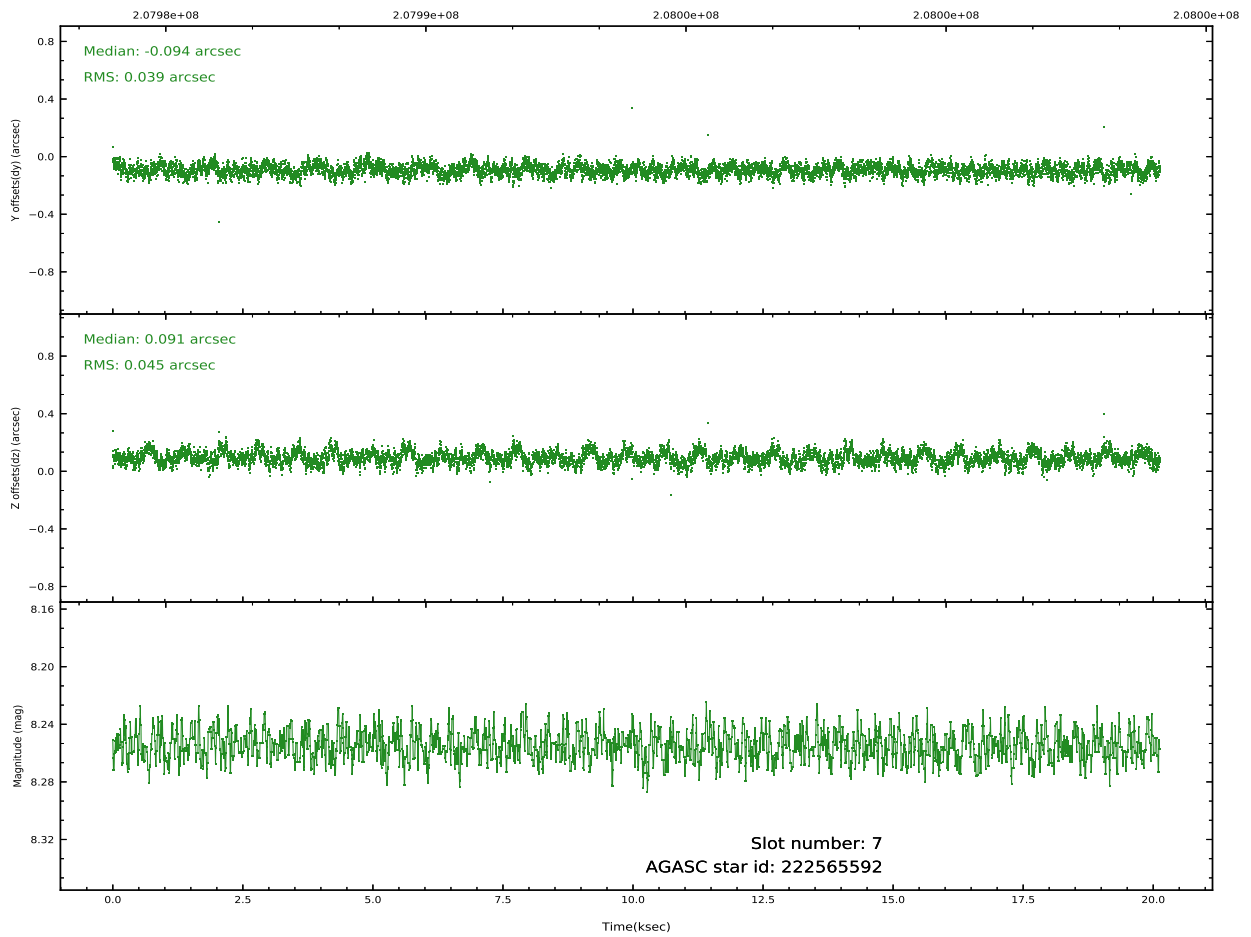
Time (s)



2.4.5 Slot 7

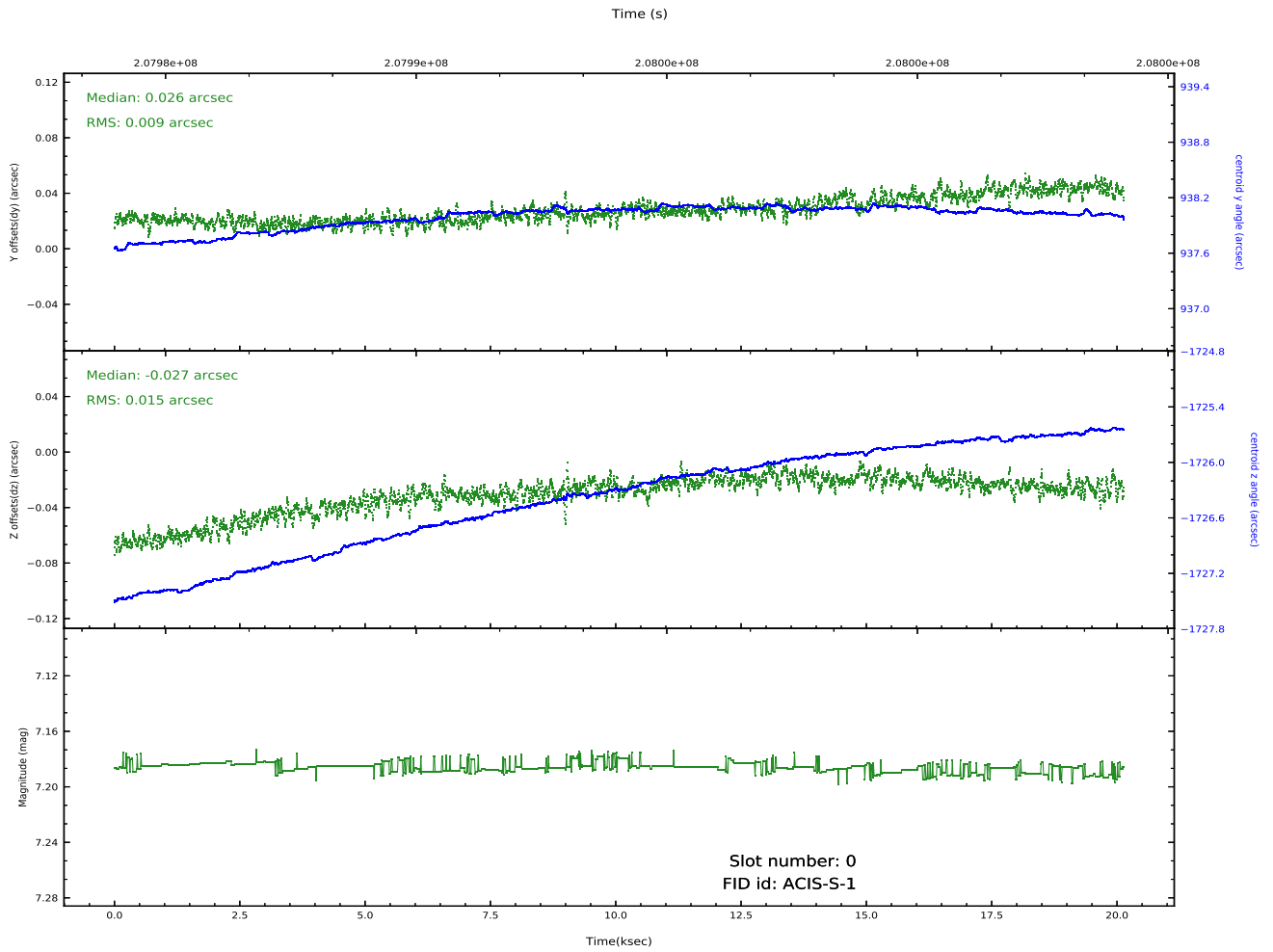
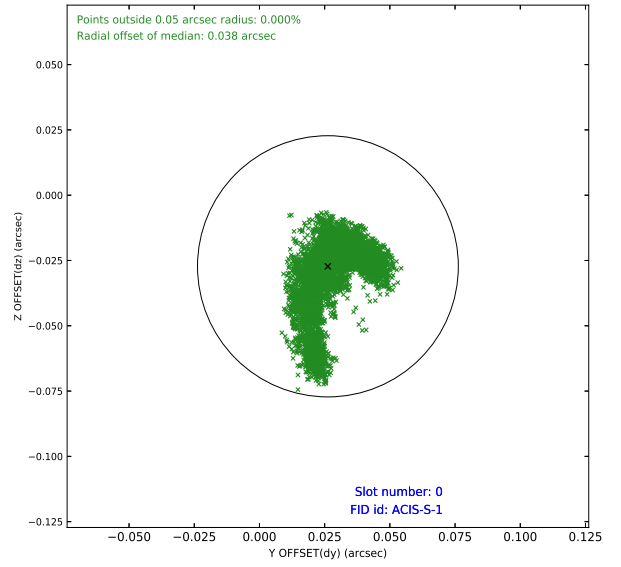
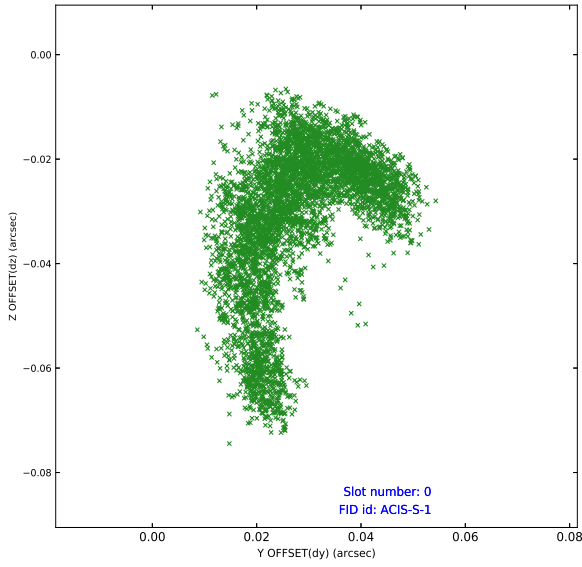


Time (s)

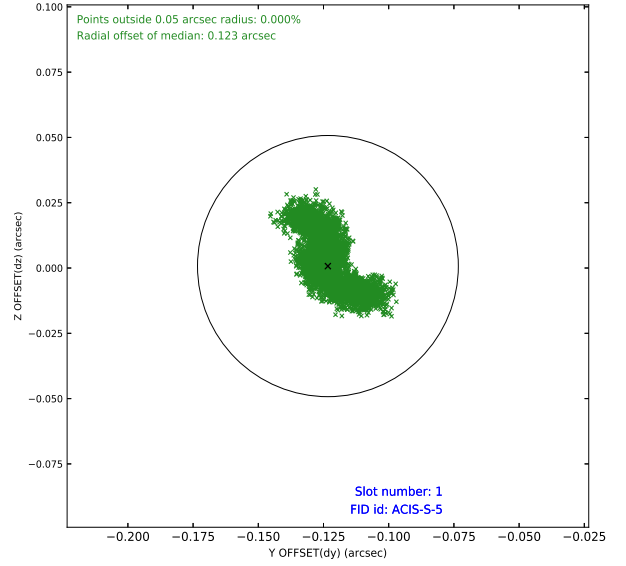
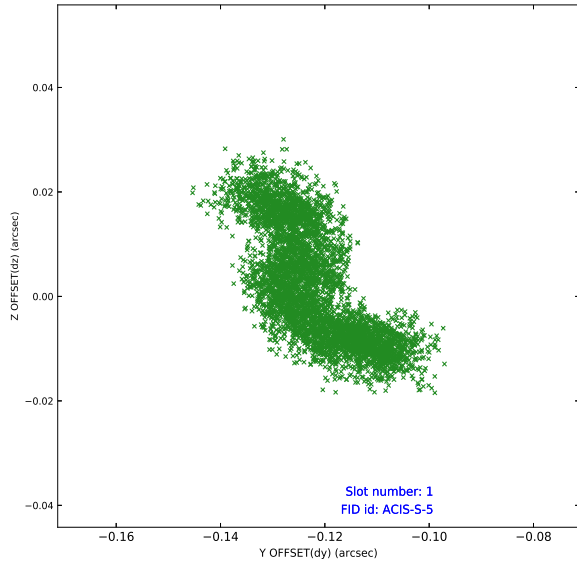


2.5 FID Slots

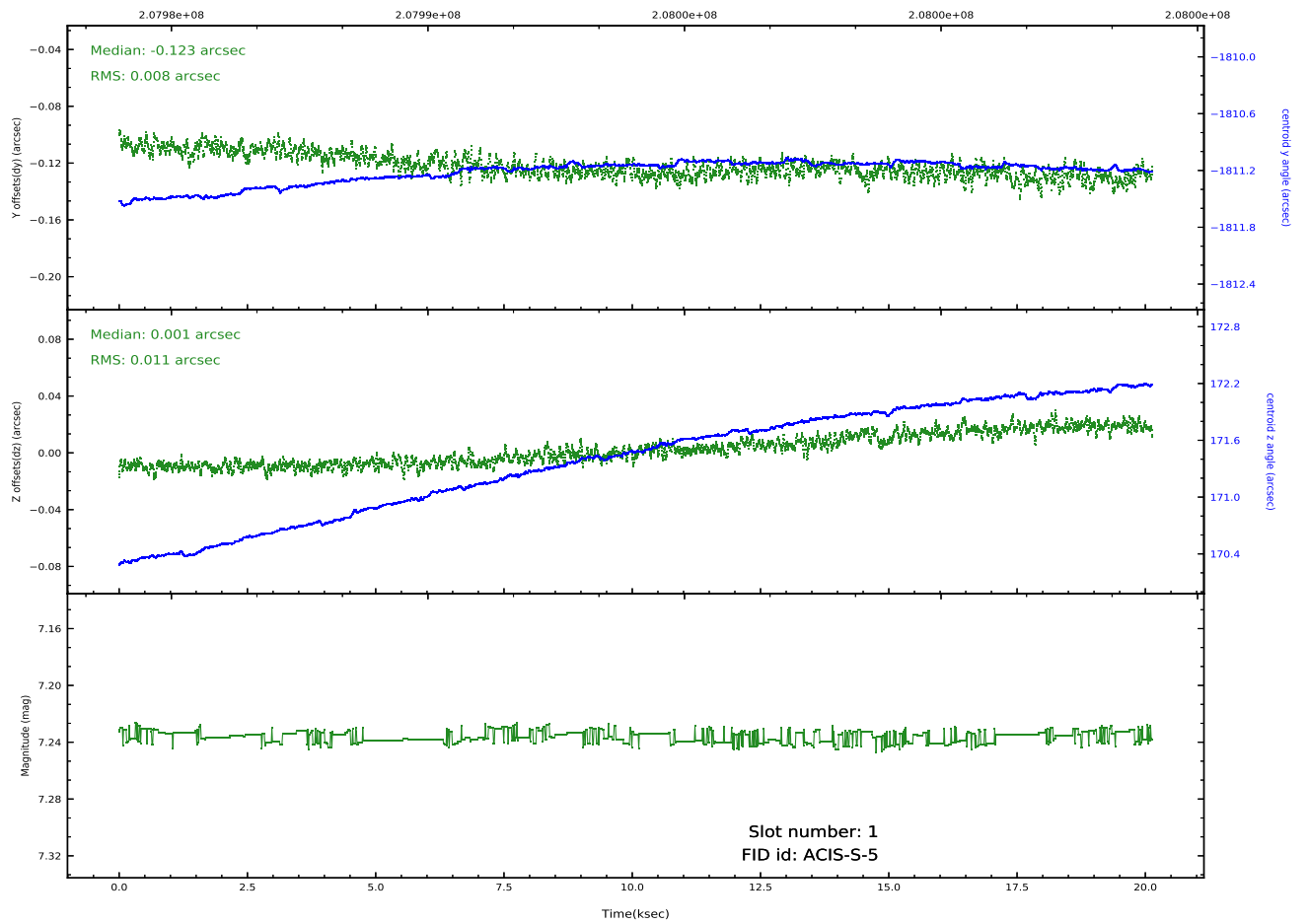
2.5.1 Slot 0



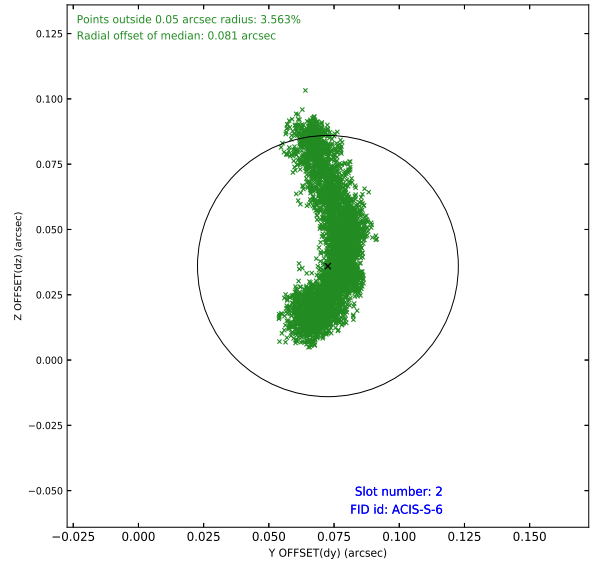
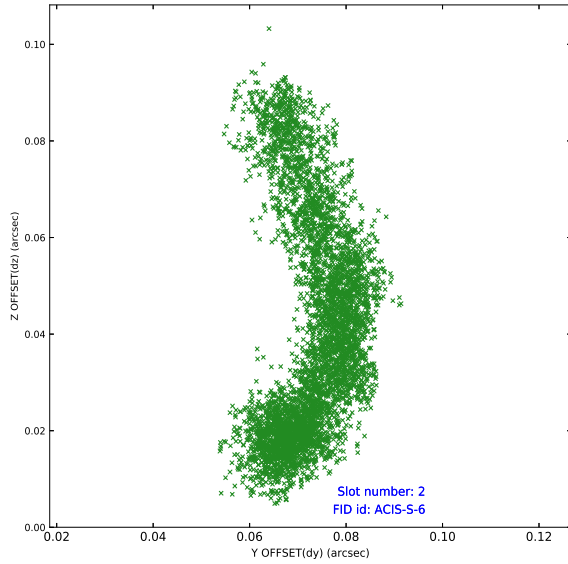
2.5.2 Slot 1



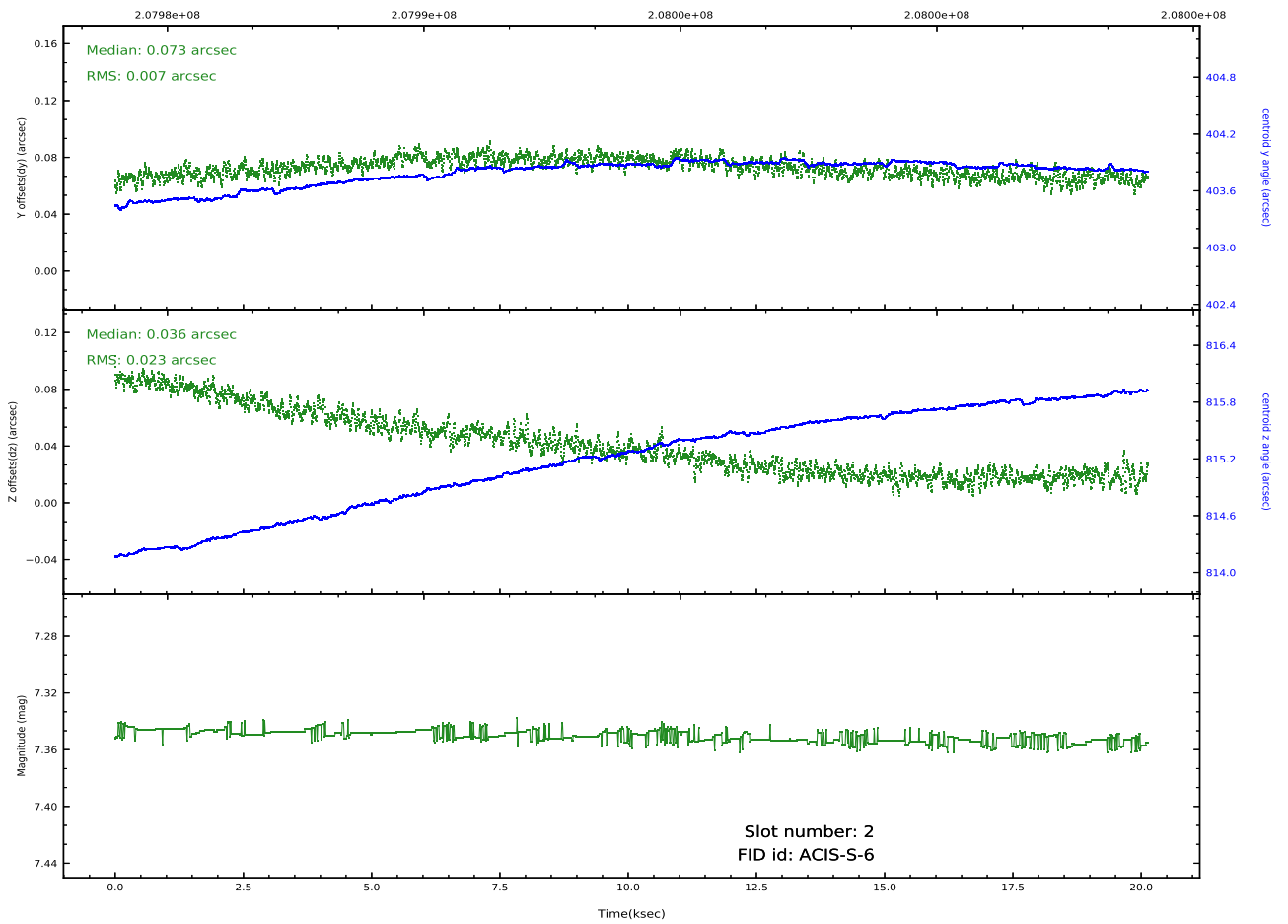
Time (s)



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.09.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.1340003

A.2 Comments

Joint proposal with HST.

Roll constraint met.