

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 6152 - L2 Version 6
Chandra X-Ray Center

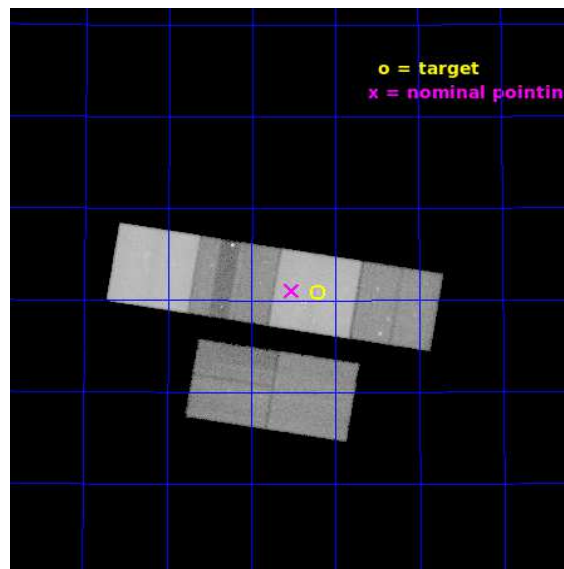
L2 Processing Date : Oct 4 2020

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1 Front

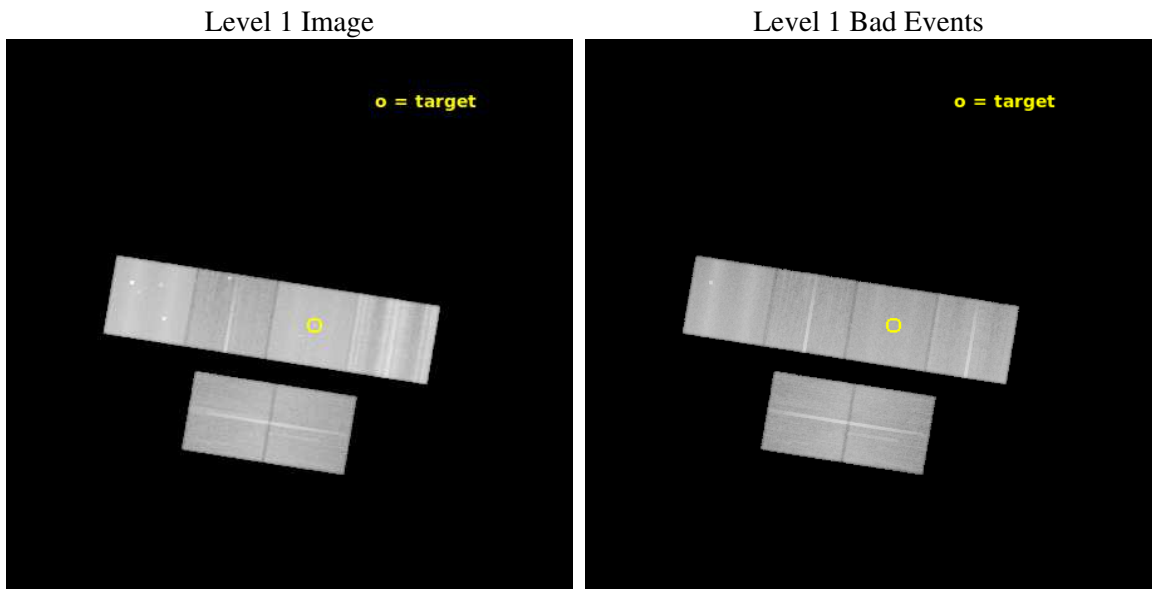
seq_num	600391	Sequence number
obs_id	6152	Observation id
title	An Ultra-Deep Study of M101	Proposal title
observer	Dr. K.D. Kuntz	Principal investigator
object	M101	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	210.80375	Observer's specified target RA [deg]
dec_targ	54.348778	Observer's specified target Dec [deg]
ra_nom	210.87971032548	Nominal RA [deg]
dec_nom	54.351190579681	Nominal Dec [deg]
roll_nom	9.2920329427802	Nominal Roll [deg]
revision	6	Processing version of data
ontime	44656.110625267	Sum of GTIs [s]
livetime	44090.648063848	Livetime [s]
ontime2	33792.775225312	Sum of GTIs [s]
ontime3	34619.395559013	Sum of GTIs [s]
ontime5	44202.374021322	Sum of GTIs [s]
ontime6	34304.975213319	Sum of GTIs [s]
ontime7	44656.110625267	Sum of GTIs [s]
ontime8	35163.922311962	Sum of GTIs [s]
l2events	864861	Number of level 2 events



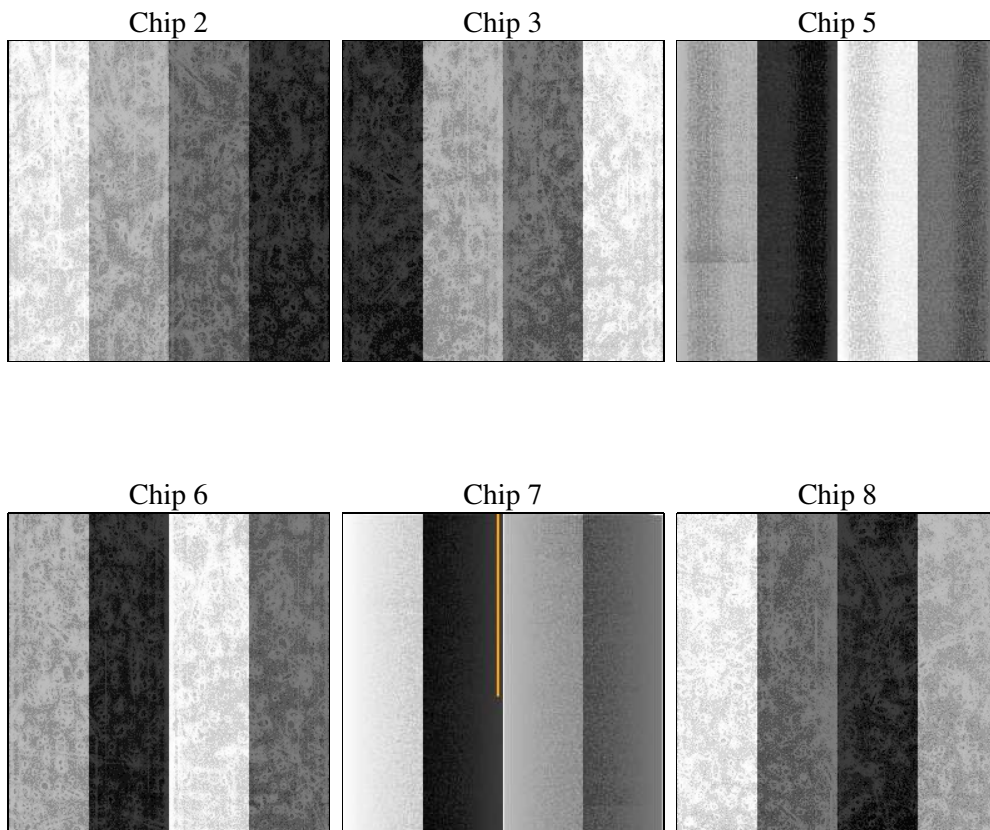
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	51800.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	44656.110625267	Sum of GTIs [s]
caldbver	4.9.2	 	ontime2	33792.775225312	Sum of GTIs [s]
date	2020-10-05T00:30:51	Date and time of file creation	ontime3	34619.395559013	Sum of GTIs [s]
revision	6	Processing version of data	ontime5	44202.374021322	Sum of GTIs [s]
			ontime6	34304.975213319	Sum of GTIs [s]
			ontime7	44656.110625267	Sum of GTIs [s]
			ontime8	35163.922311962	Sum of GTIs [s]
			l1events	3063013	Number of level 1 events

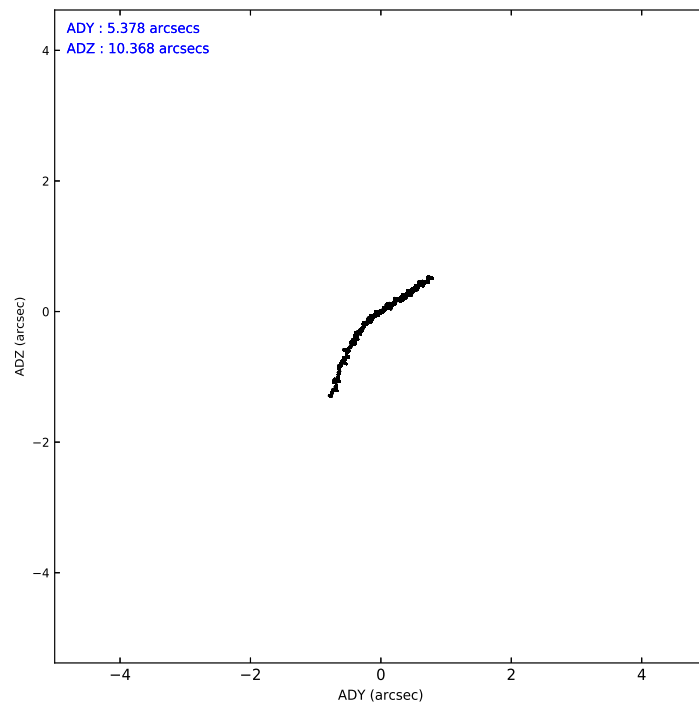
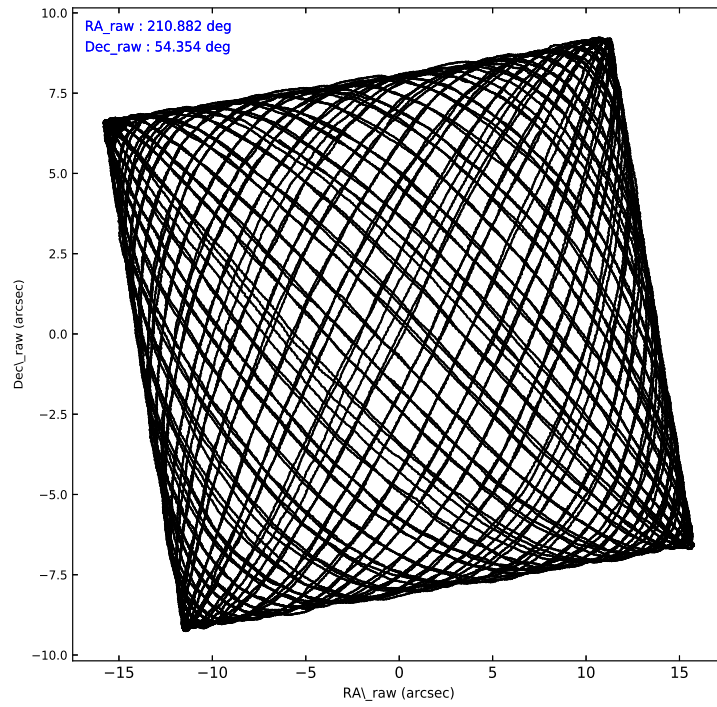
2.1.4 Events

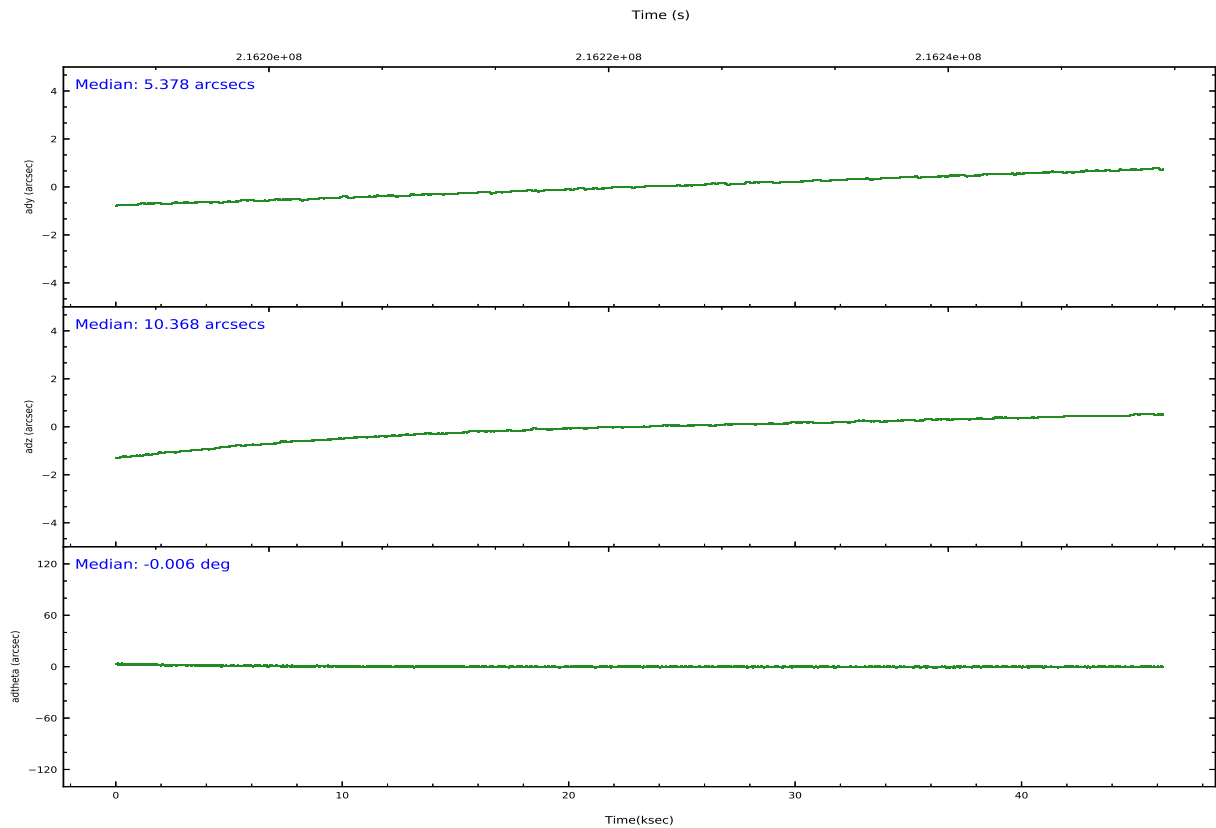
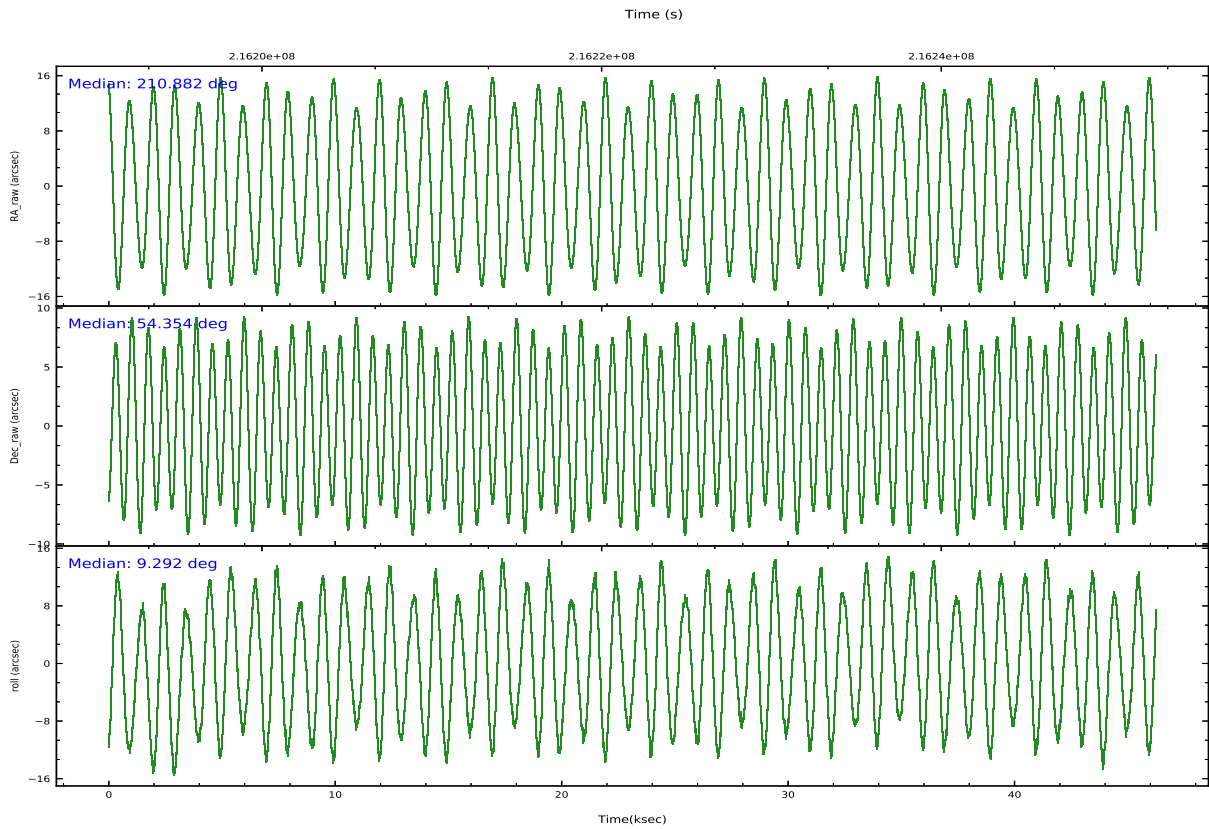
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	363019	350625	674287	365042	579626	730414	grade 0 events	33626	30228	36780	33788	30130	152027
rejected events	289644	275425	346107	285950	291188	331567		9%	8%	5%	9%	5%	20%
rejected %	79%	78%	51%	78%	50%	45%	grade 1 events	361	270	1723	277	898	1416
								0%	0%	0%	0%	0%	0%
							grade 2 events	18199	23159	103096	24359	61988	54986
								5%	6%	15%	6%	10%	7%
							grade 3 events	3350	3612	19167	3709	24731	68549
								0%	1%	2%	1%	4%	9%
							grade 4 events	4784	3872	18856	3727	24977	60778
								1%	1%	2%	1%	4%	8%
							grade 5 events	10620	11668	44607	12258	48299	19590
								2%	3%	6%	3%	8%	2%
							grade 6 events	13416	14564	150292	13702	146627	63489
								3%	4%	22%	3%	25%	8%
							grade 7 events	278663	263252	299766	273222	241976	309579
								76%	75%	44%	74%	41%	42%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	8	8
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	OVERRIDE	OVERRIDE
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	210.845857	210.87971032548	Subarray requested	NONE	NONE
[deg] Pointing Dec	54.336878	54.351190579681	Alternating exposures requested	N	N
[deg] Pointing Roll	9.165783	9.2920329427802	[s] Primary exposure time	3.2	3.2
[mm] SIM focus pos	-0.6828225247311905	-0.6828225247311905			
[mm] SIM defocus	0.001444942264670179	0.001444942264670179			
[mm] SIM translation stage pos	-190.1400660498719	-190.1400660498719			
[mm] SIM translation stage offset	0.007542945904702947	0.007542945904702947			
[s] Observation start time (MET)	216198234.184000	216198234.184			
Observation start date	2004-11-07T07:02:50	2004-11-07T07:03:54			
[s] Observation end time (MET)	216244546.000000	216244546			
Observation end date	2004-11-07T19:55:46	2004-11-07T19:55:46			
Read mode	TIMED	TIMED			

2.3 Aspect



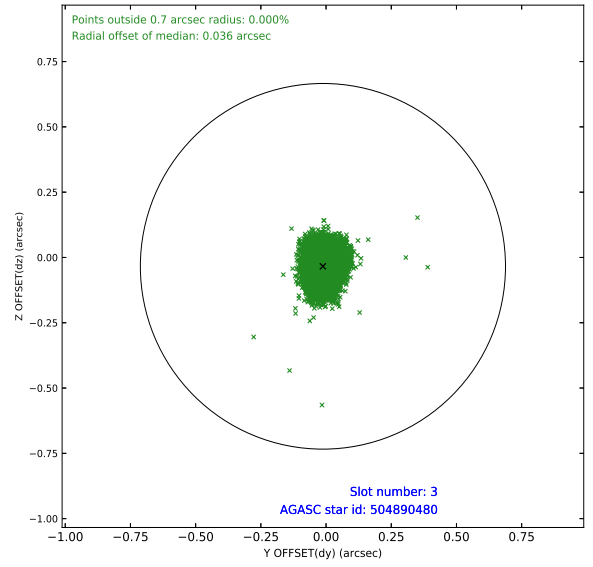
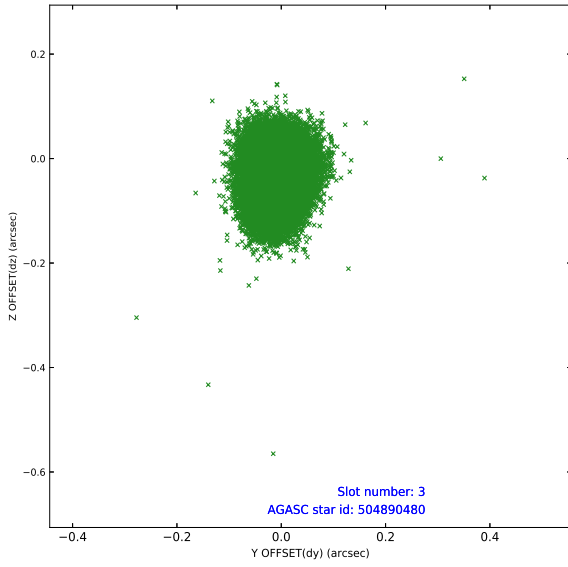


Slot Statistics

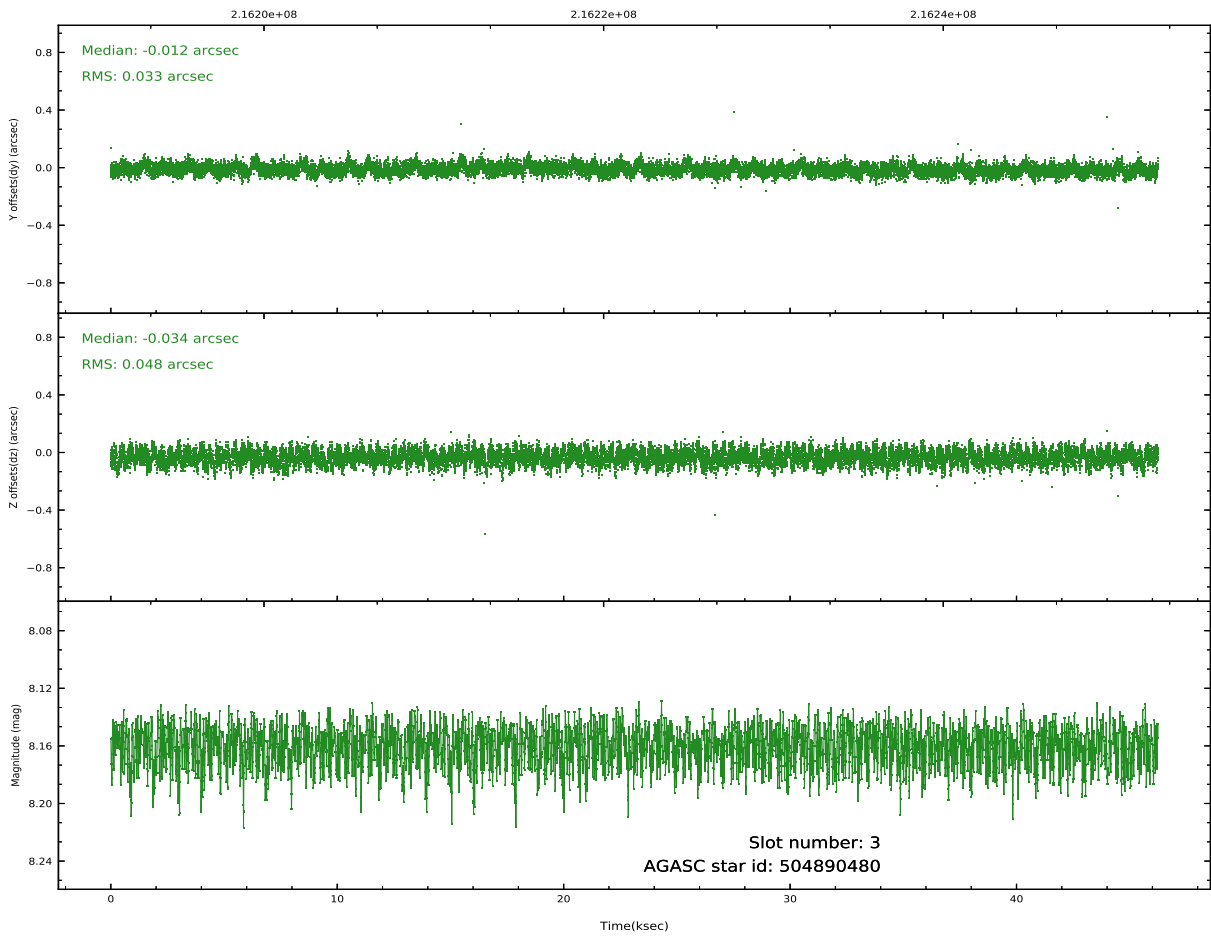
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	11282	1.000	-0.097	-0.059	0.011	0.025	0.000000	0.000000	-758.13	-1731
1	FID		ACIS-S-4	7.20	11282	1.000	0.165	0.063	0.012	0.023	0.000000	0.000000	2155.36	177
2	FID		ACIS-S-5	7.23	11279	1.000	-0.097	0.005	0.017	0.036	0.000000	0.000000	-1811.04	170
3	GUIDE	used	504890480	8.16	22561	1.000	-0.012	-0.034	0.062	0.099	210.132463	53.768436	-1823.38	-1771
4	GUIDE	used	504890688	9.19	22550	1.000	0.003	0.030	0.087	0.140	211.697686	53.837149	1502.34	-2053
5	GUIDE	used	504891480	8.07	22557	1.000	-0.025	-0.015	0.070	0.114	210.708012	54.666096	-94.35	1216
6	GUIDE	used	504894408	9.28	22548	1.000	-0.024	-0.015	0.092	0.148	211.942794	54.047749	2126.29	-1378
7	GUIDE	used	504894856	8.98	22553	1.000	0.060	0.039	0.073	0.117	209.819510	54.132689	-2251.21	-365

2.4 Star Slots

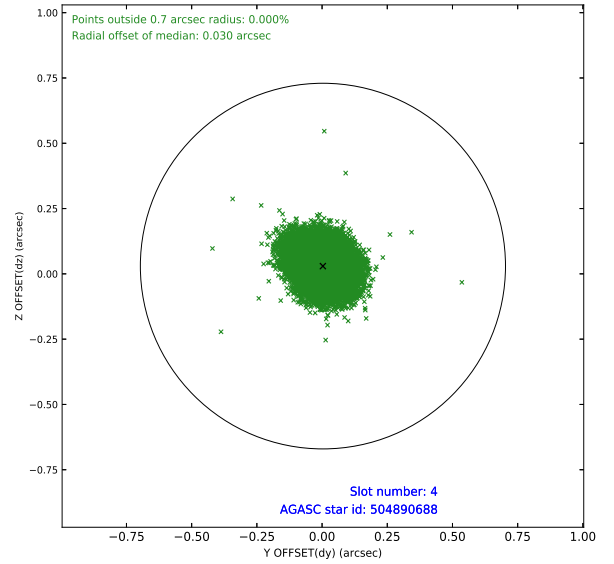
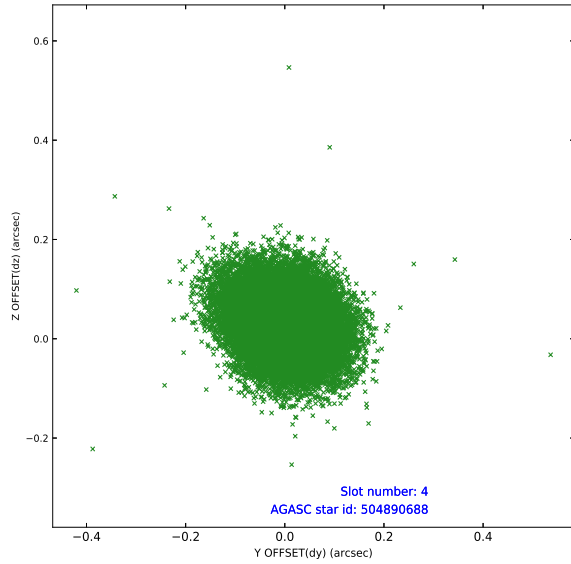
2.4.1 Slot 3



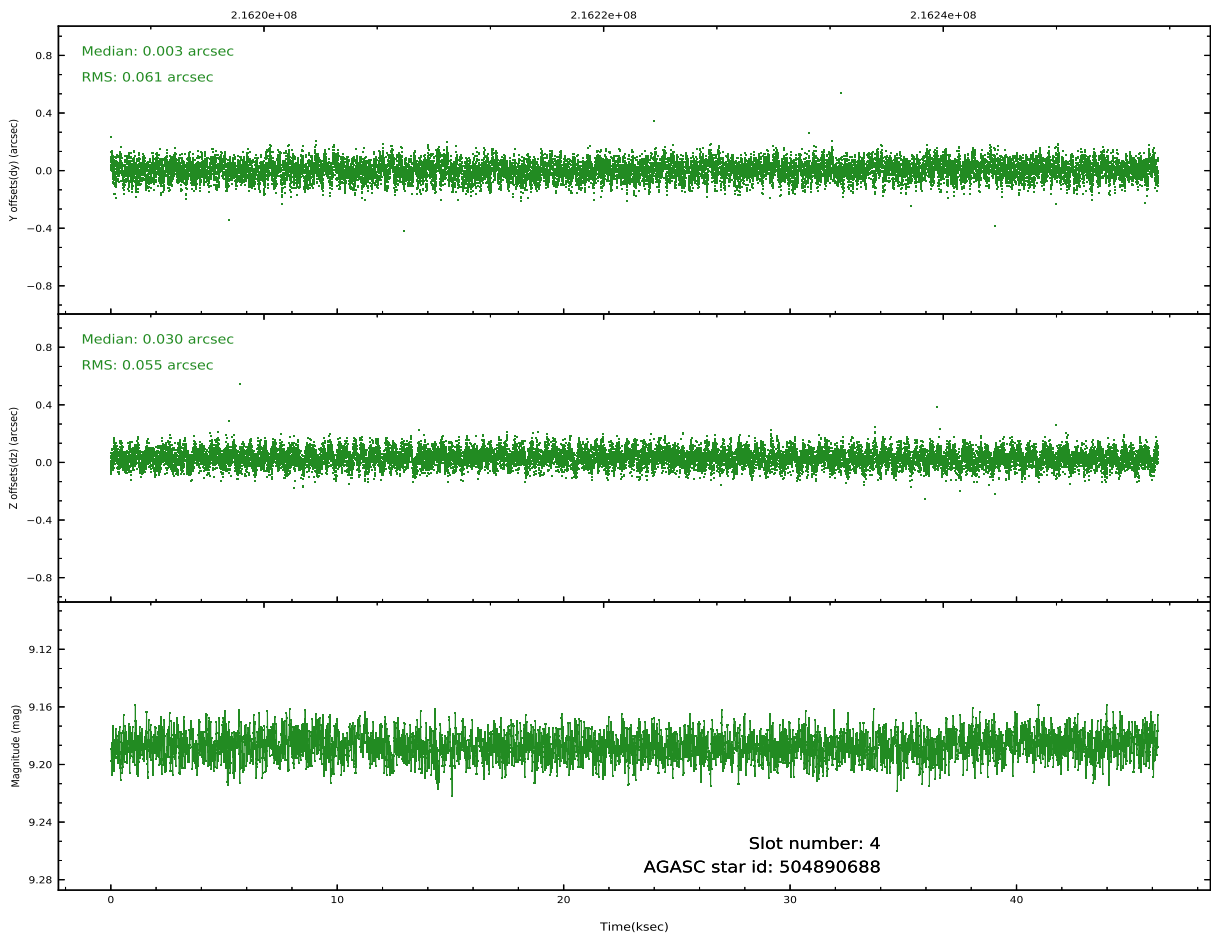
Time (s)



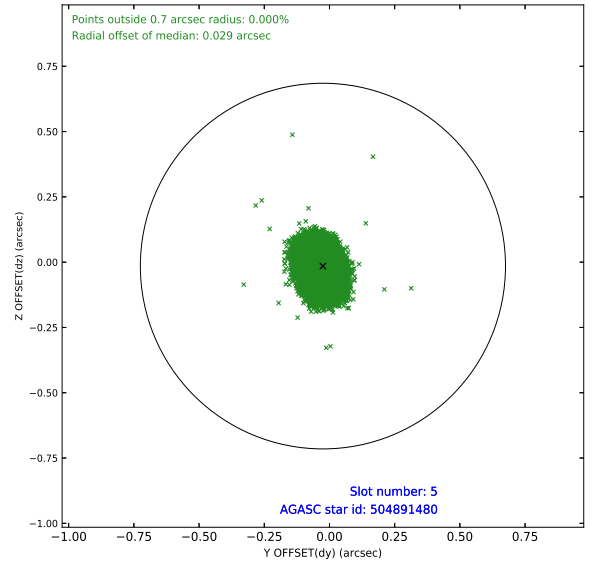
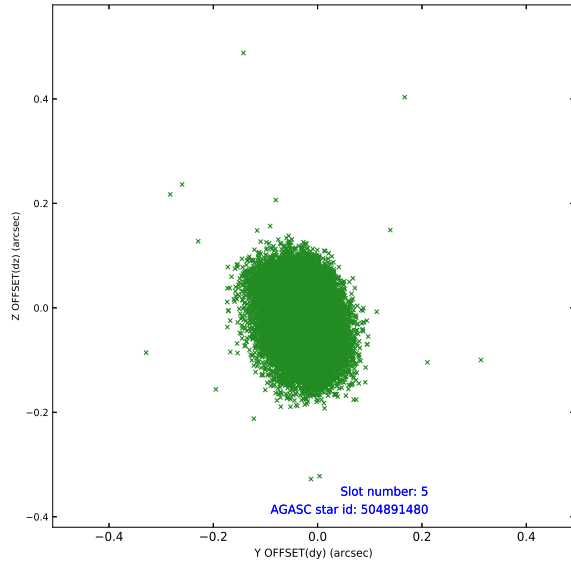
2.4.2 Slot 4



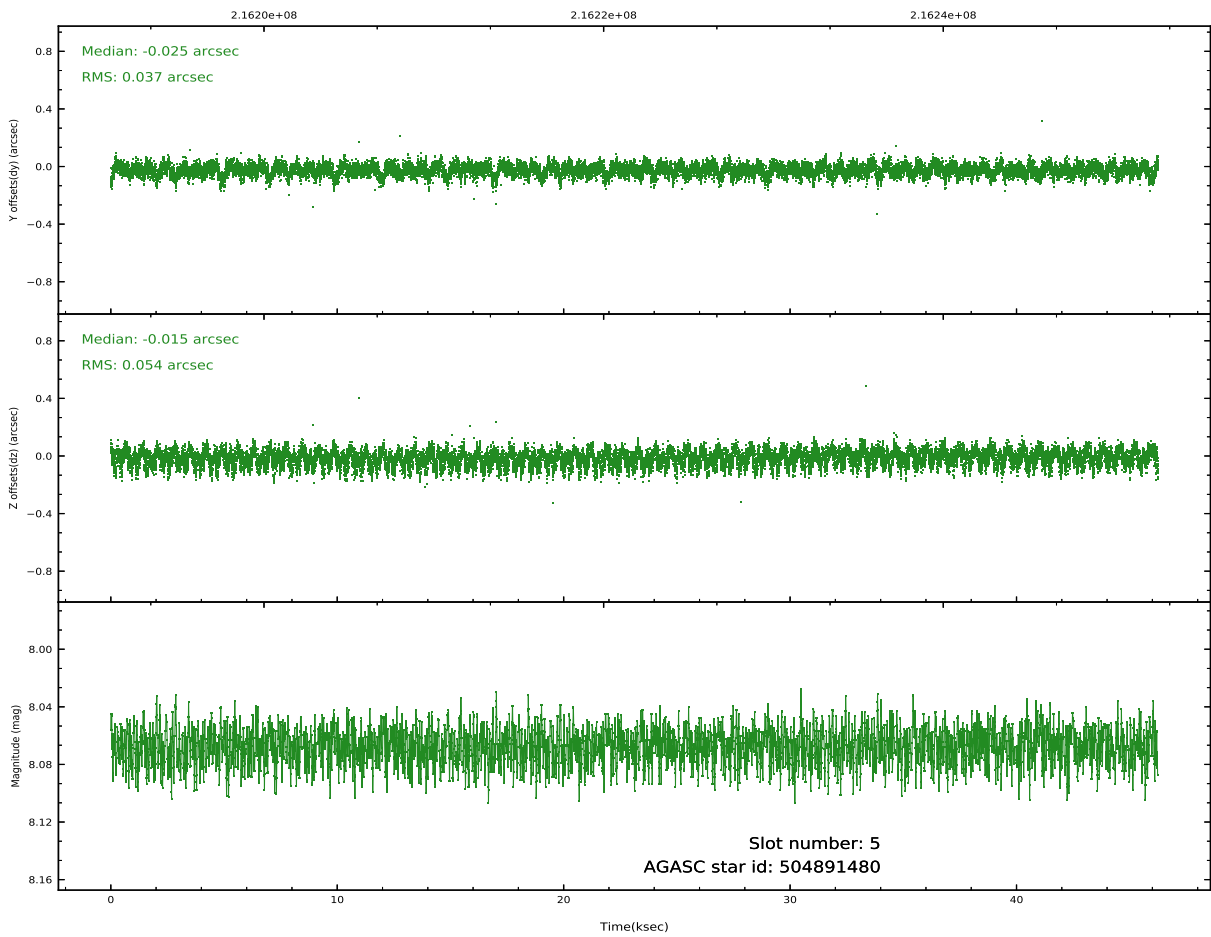
Time (s)



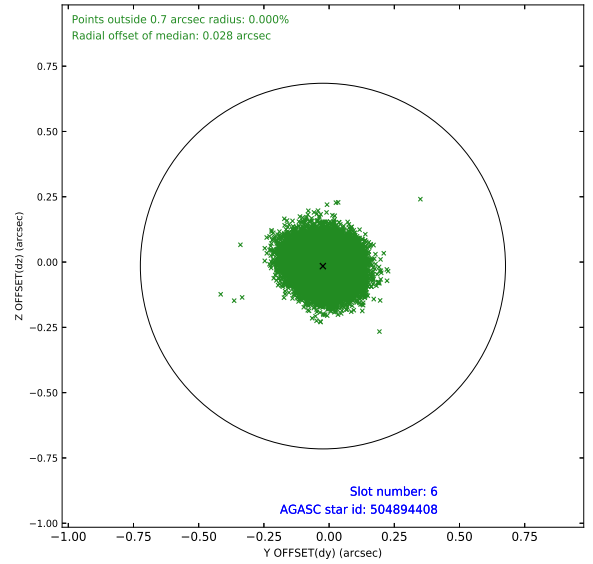
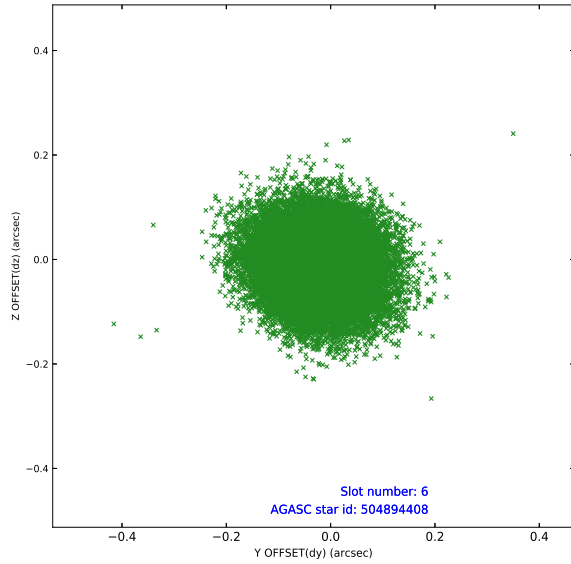
2.4.3 Slot 5



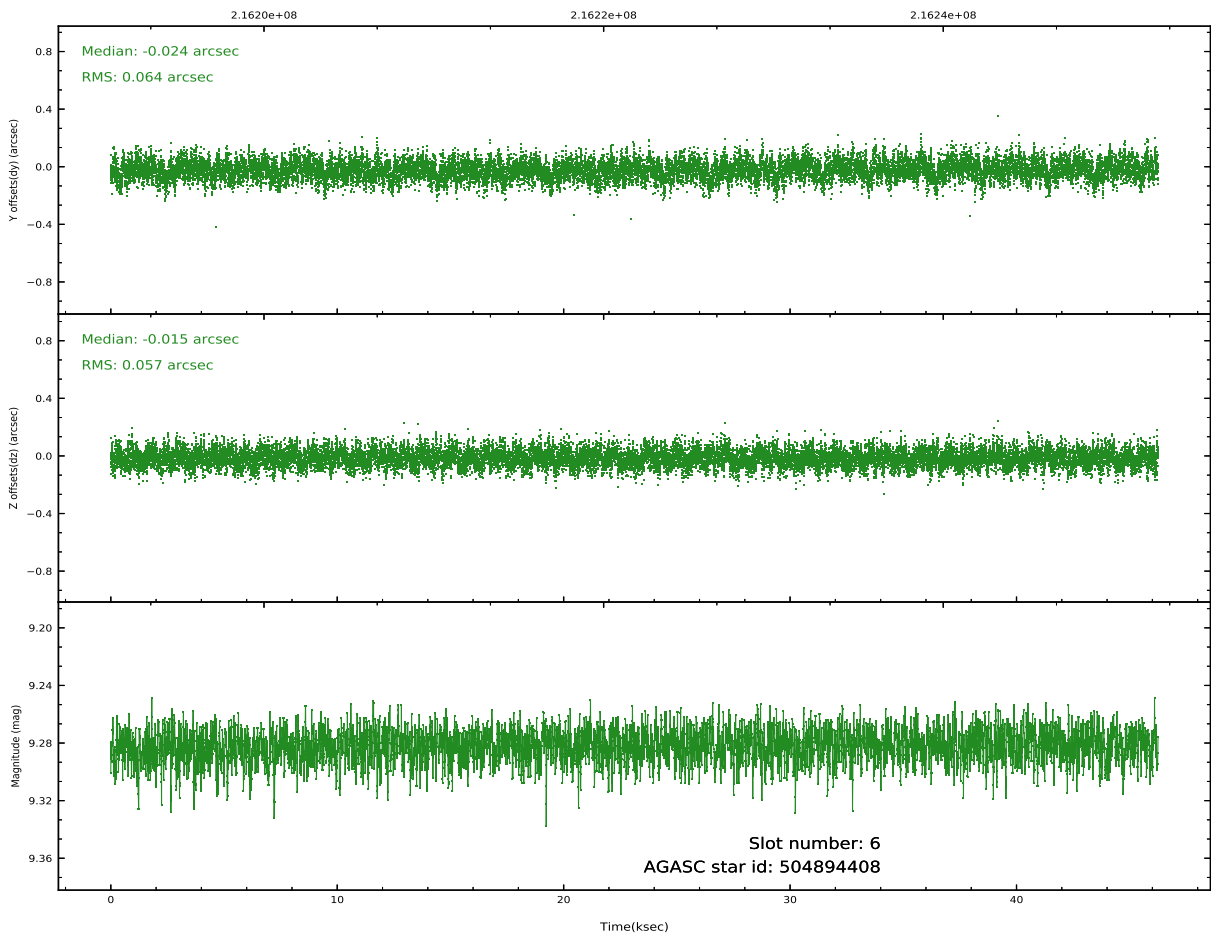
Time (s)



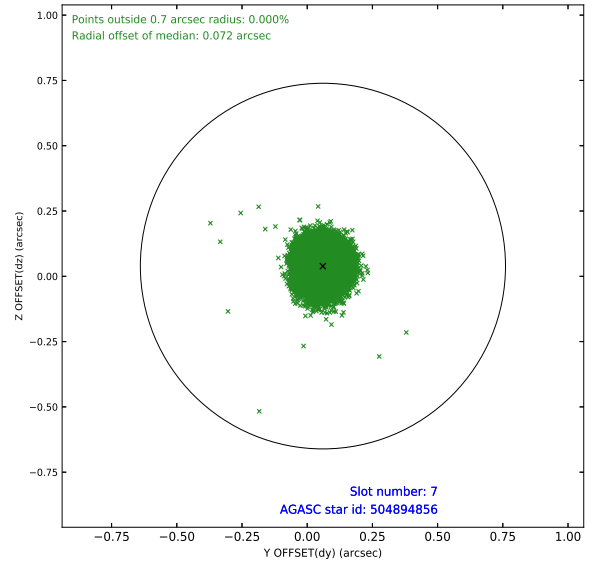
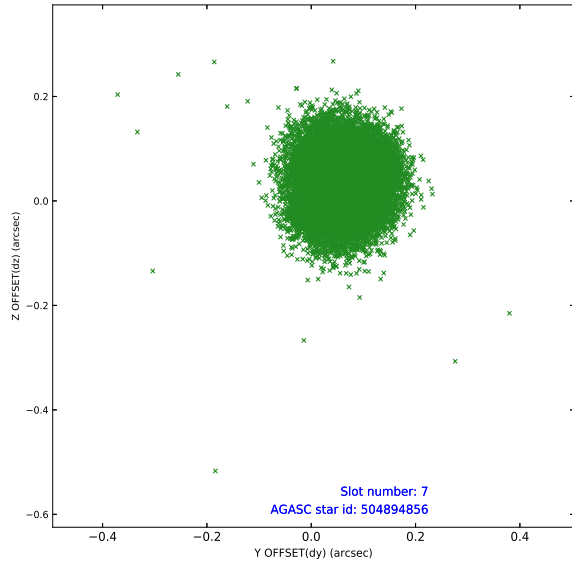
2.4.4 Slot 6



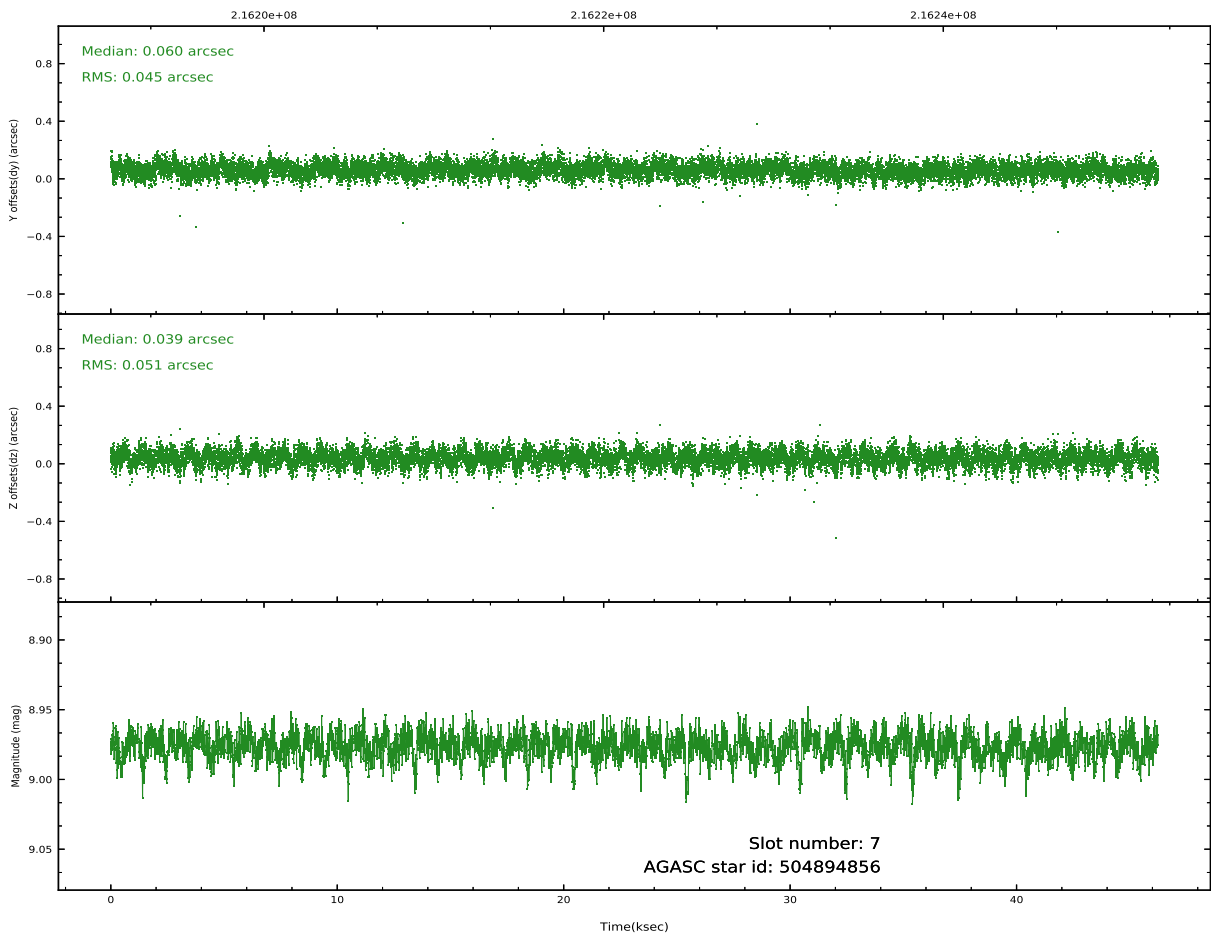
Time (s)



2.4.5 Slot 7

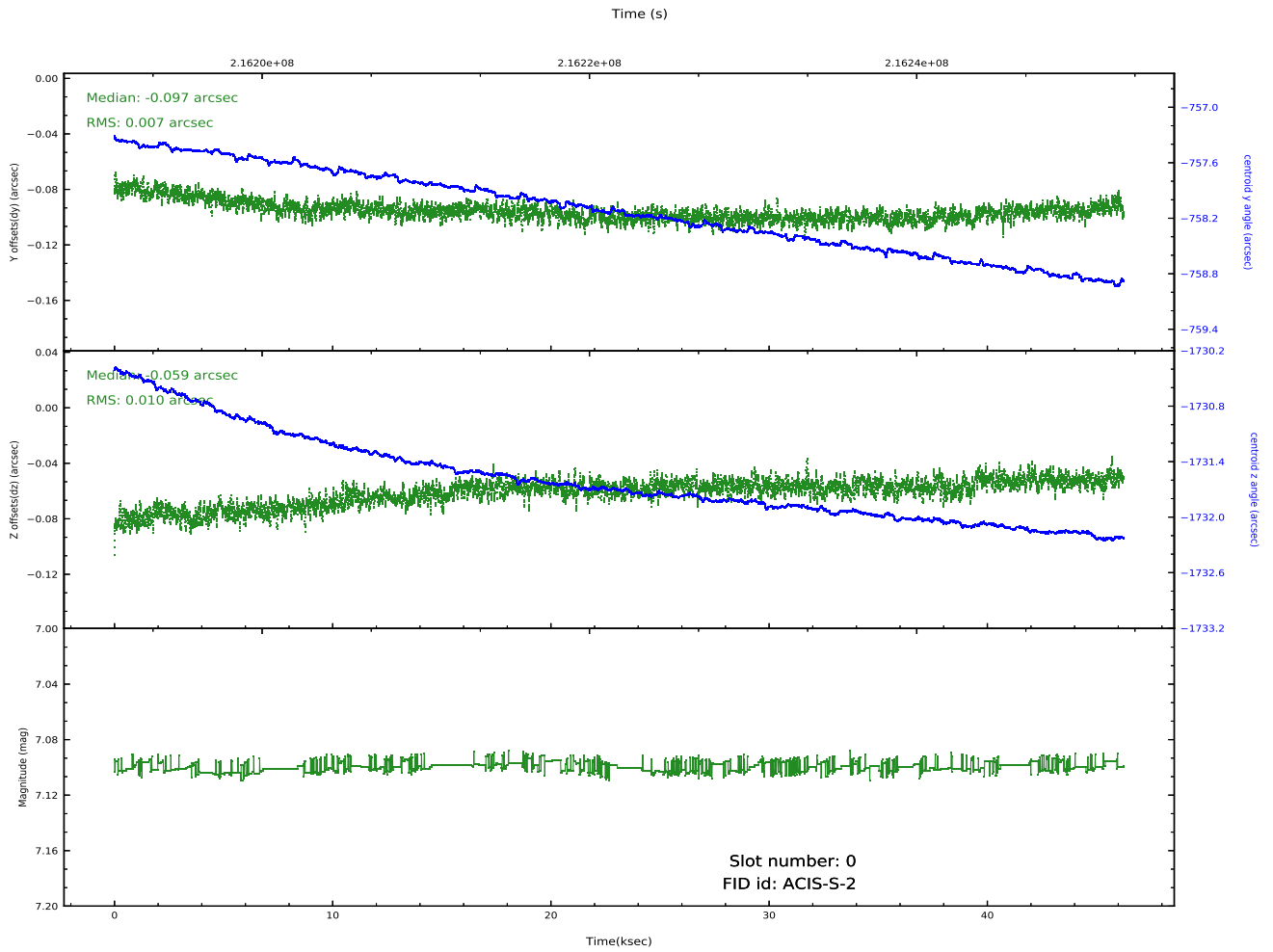
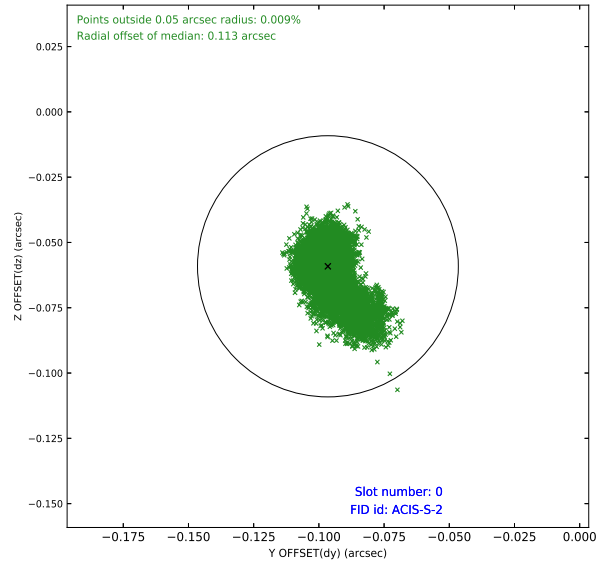
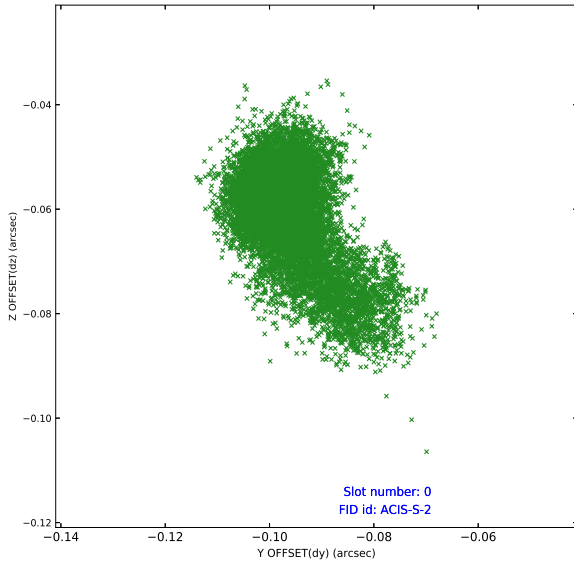


Time (s)

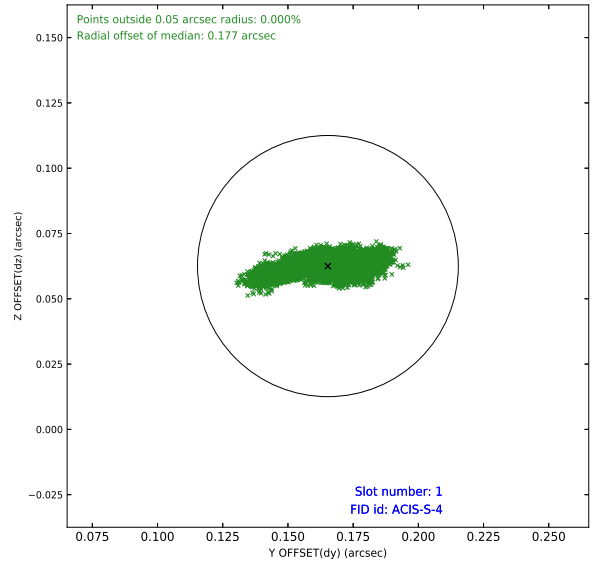
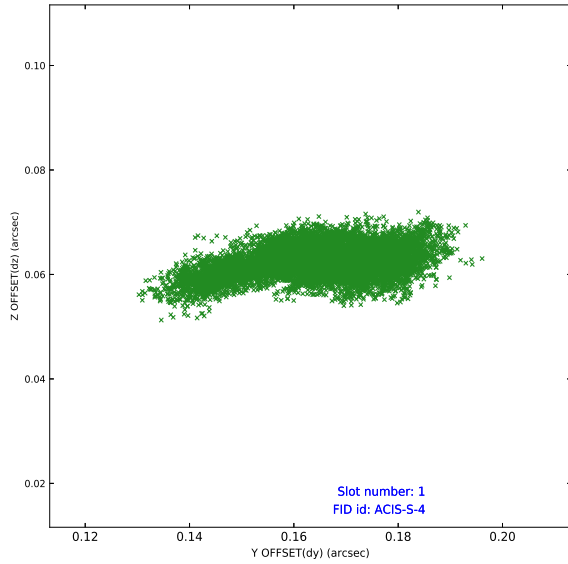


2.5 FID Slots

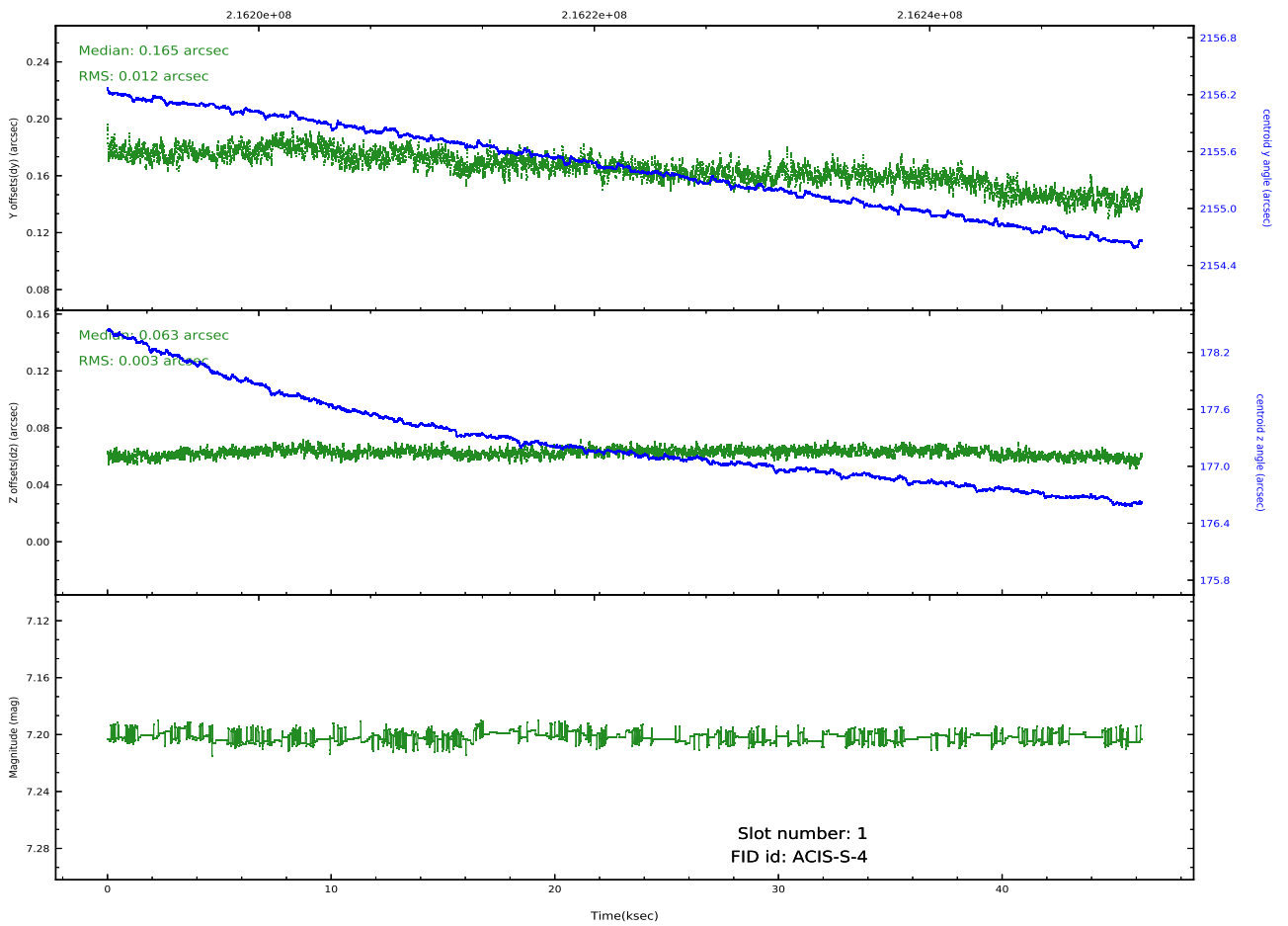
2.5.1 Slot 0



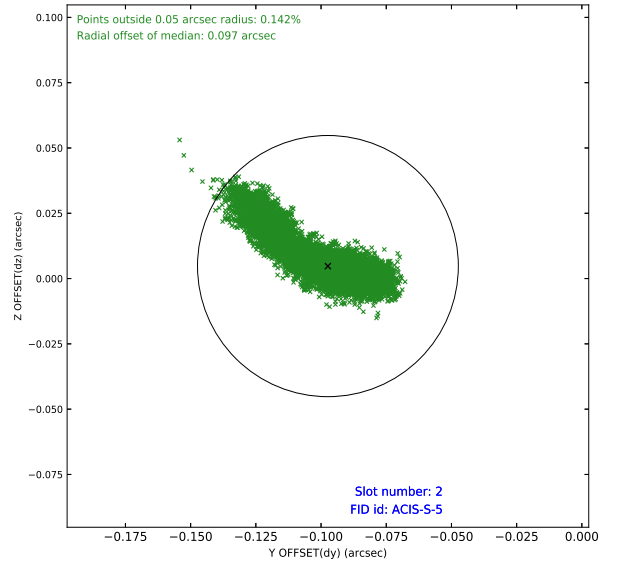
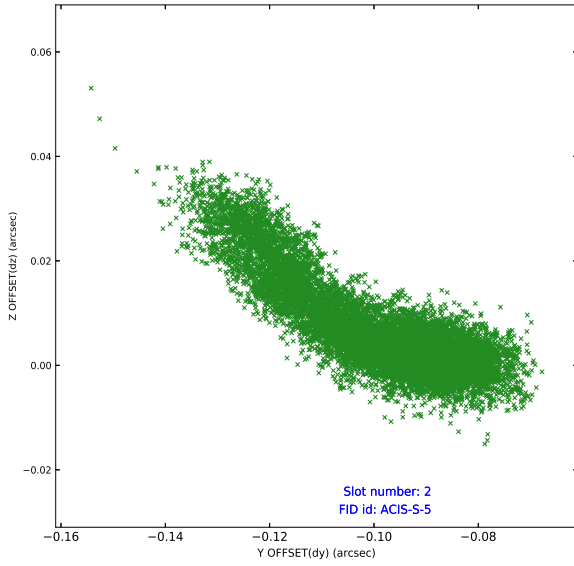
2.5.2 Slot 1



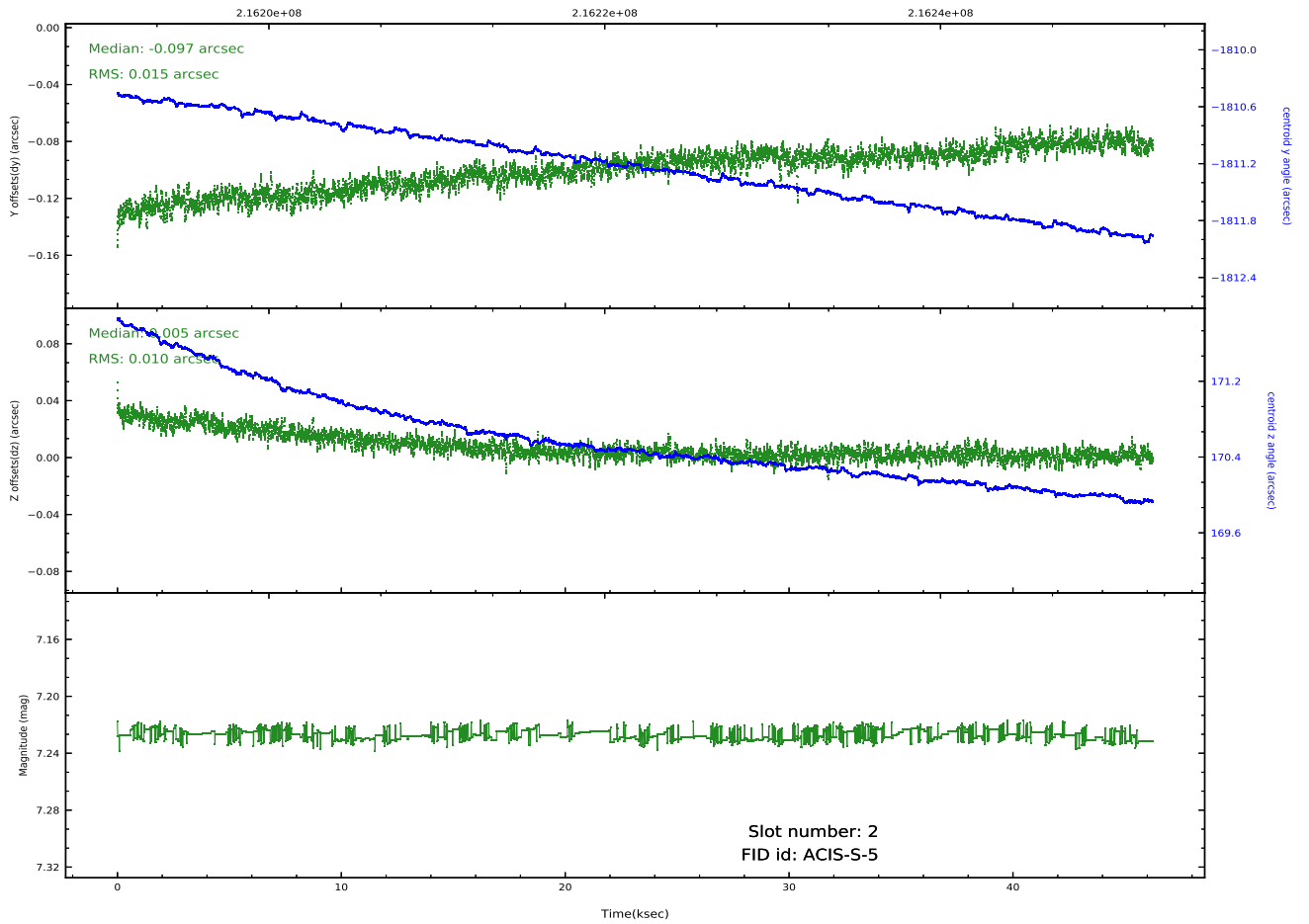
Time (s)



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	44.656

A.2 Comments

This observation was interrupted by safing of the science instruments due to high solar radiation environment. The observation was interrupted at 2004:312:19:54:46.