

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5297 - L2 Version 4
Chandra X-Ray Center

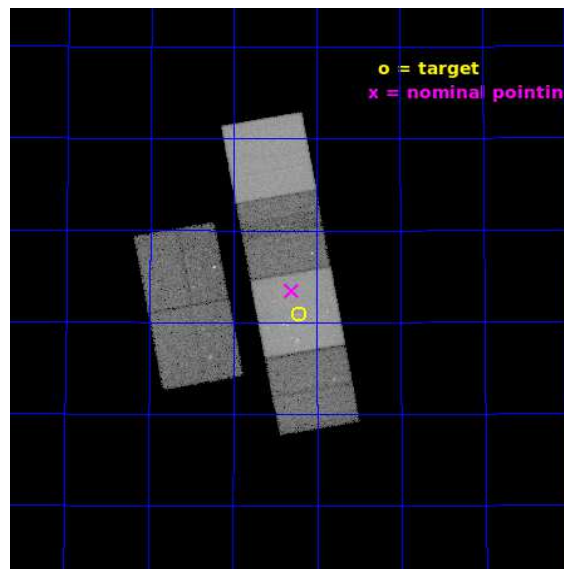
L2 Processing Date : Sep 23 2020

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1 Front

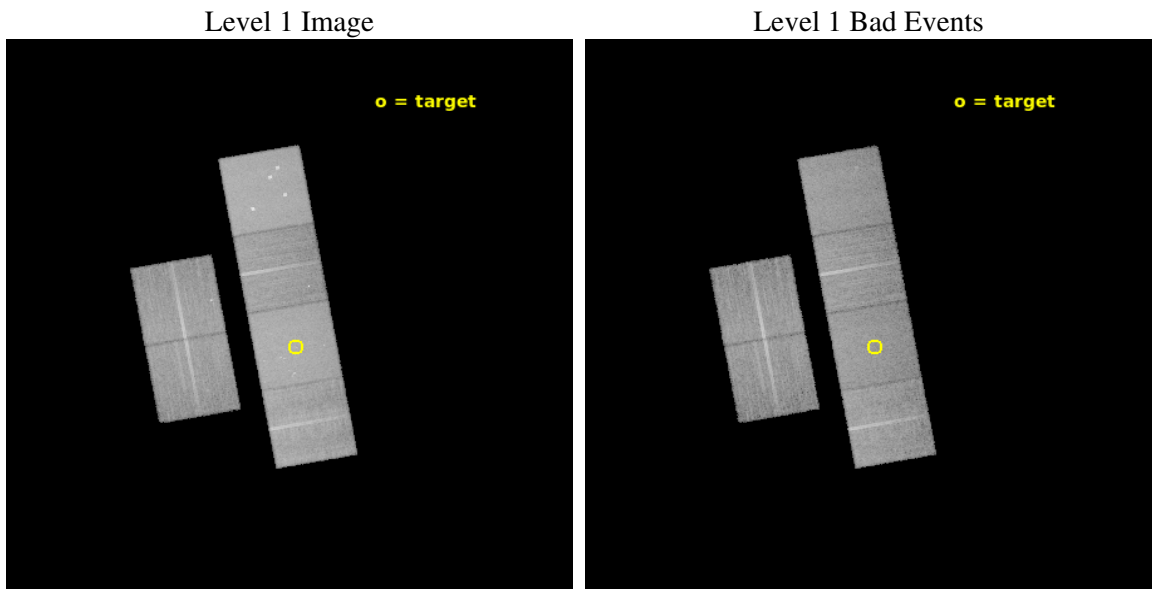
seq_num	600386	Sequence number
obs_id	5297	Observation id
title	An Ultra-Deep Study of M101	Proposal title
observer	Dr. K.D. Kuntz	Principal investigator
object	M101	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	210.80375	Observer's specified target RA [deg]
dec_targ	54.348778	Observer's specified target Dec [deg]
ra_nom	210.82468270476	Nominal RA [deg]
dec_nom	54.391060515049	Nominal Dec [deg]
roll_nom	79.743836299193	Nominal Roll [deg]
revision	4	Processing version of data
ontime	21963.873942405	Sum of GTIs [s]
livetime	21685.754145489	Livetime [s]
ontime2	21963.914982408	Sum of GTIs [s]
ontime3	21963.750822395	Sum of GTIs [s]
ontime5	21963.832902402	Sum of GTIs [s]
ontime6	21960.550892115	Sum of GTIs [s]
ontime7	21963.873942405	Sum of GTIs [s]
ontime8	21963.709782422	Sum of GTIs [s]
l2events	303364	Number of level 2 events



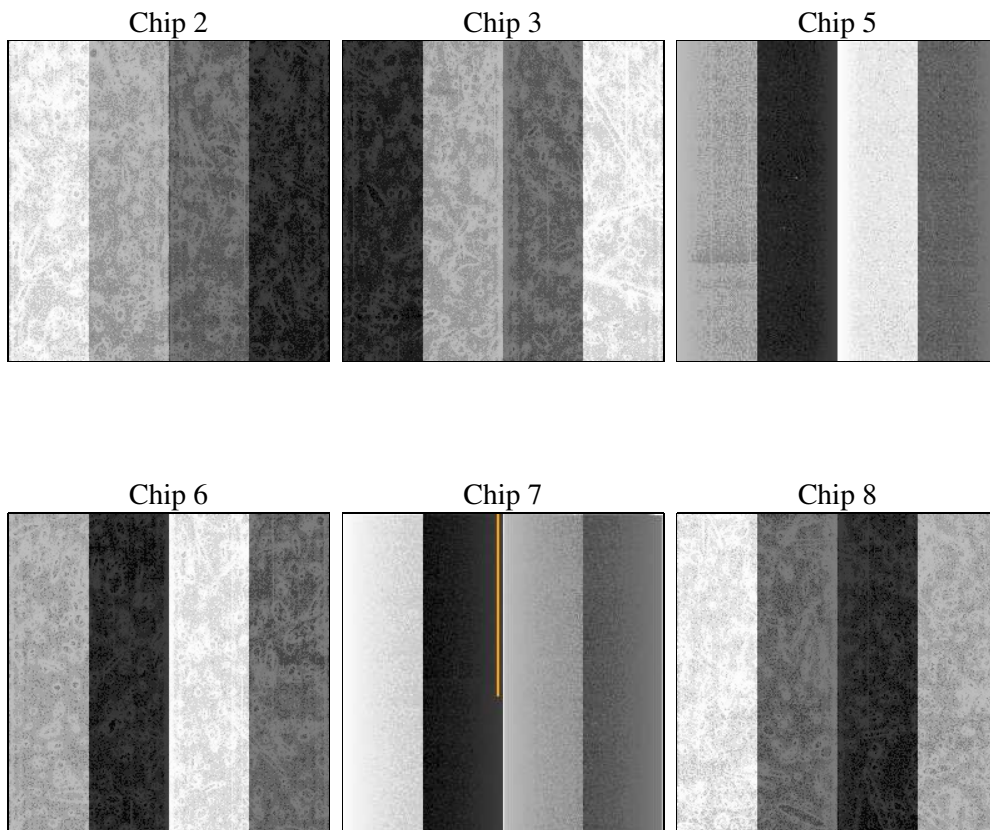
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	22000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	21963.873942405	Sum of GTIs [s]
caldsver	4.9.2	 	ontime2	21963.914982408	Sum of GTIs [s]
date	2020-09-23T15:17:35	Date and time of file creation	ontime3	21963.750822395	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	21963.832902402	Sum of GTIs [s]
			ontime6	21960.550892115	Sum of GTIs [s]
			ontime7	21963.873942405	Sum of GTIs [s]
			ontime8	21963.709782422	Sum of GTIs [s]
			l1events	1023031	Number of level 1 events

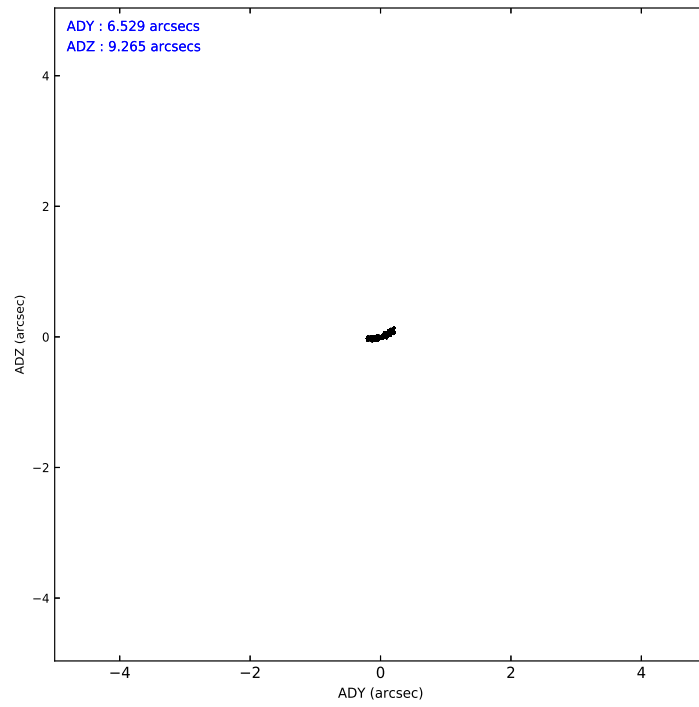
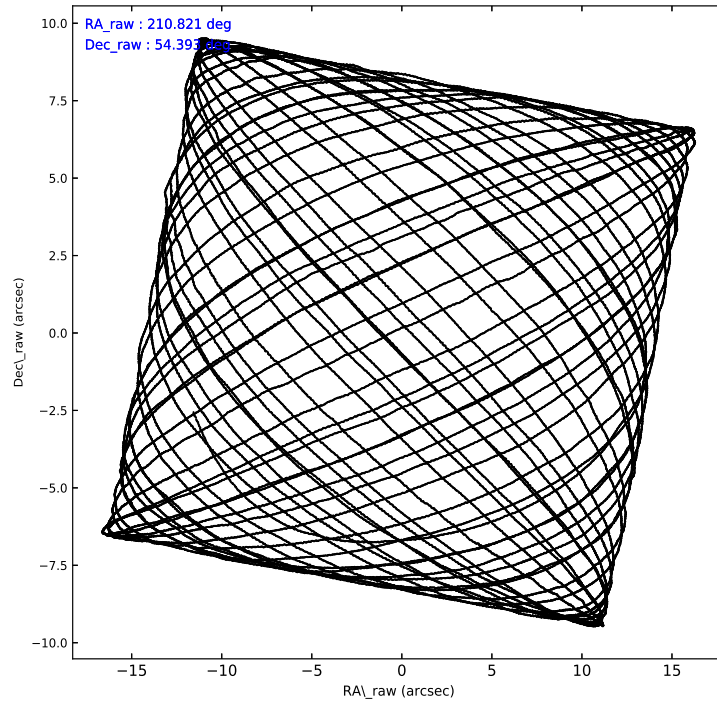
2.1.4 Events

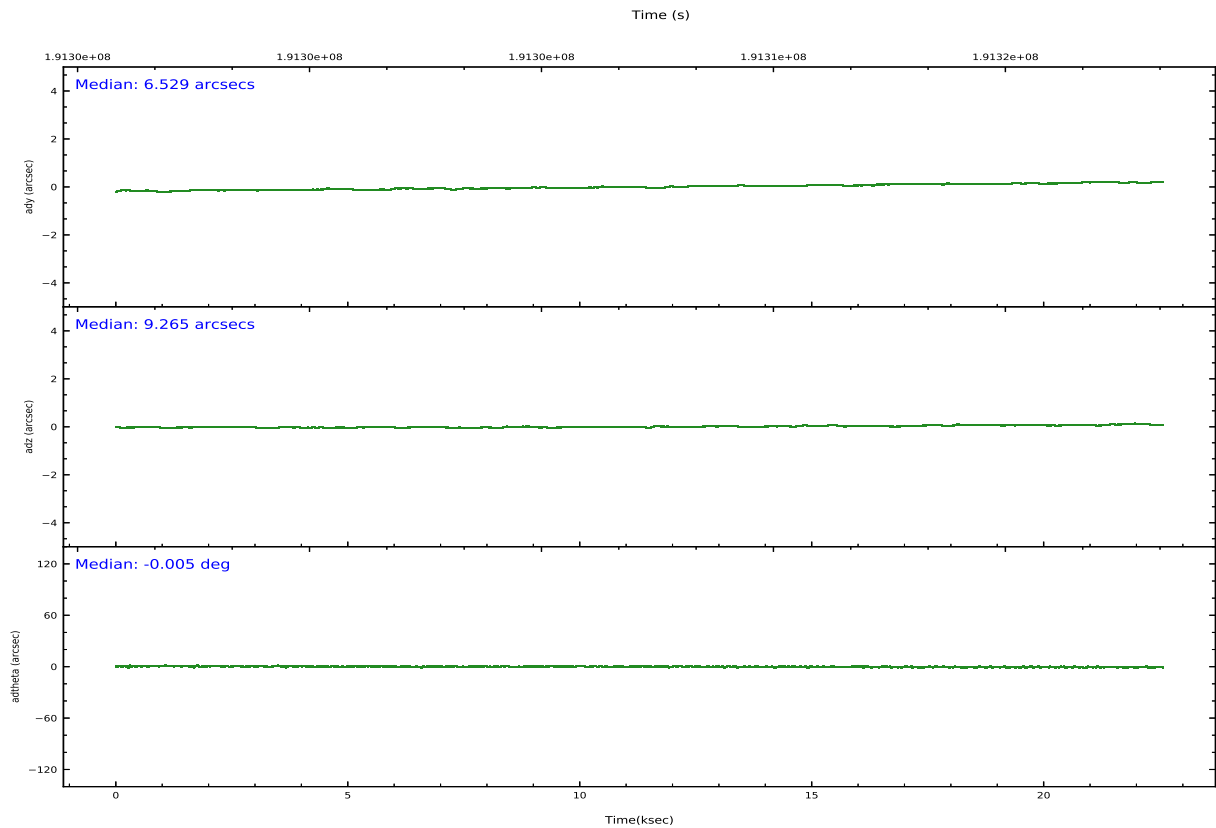
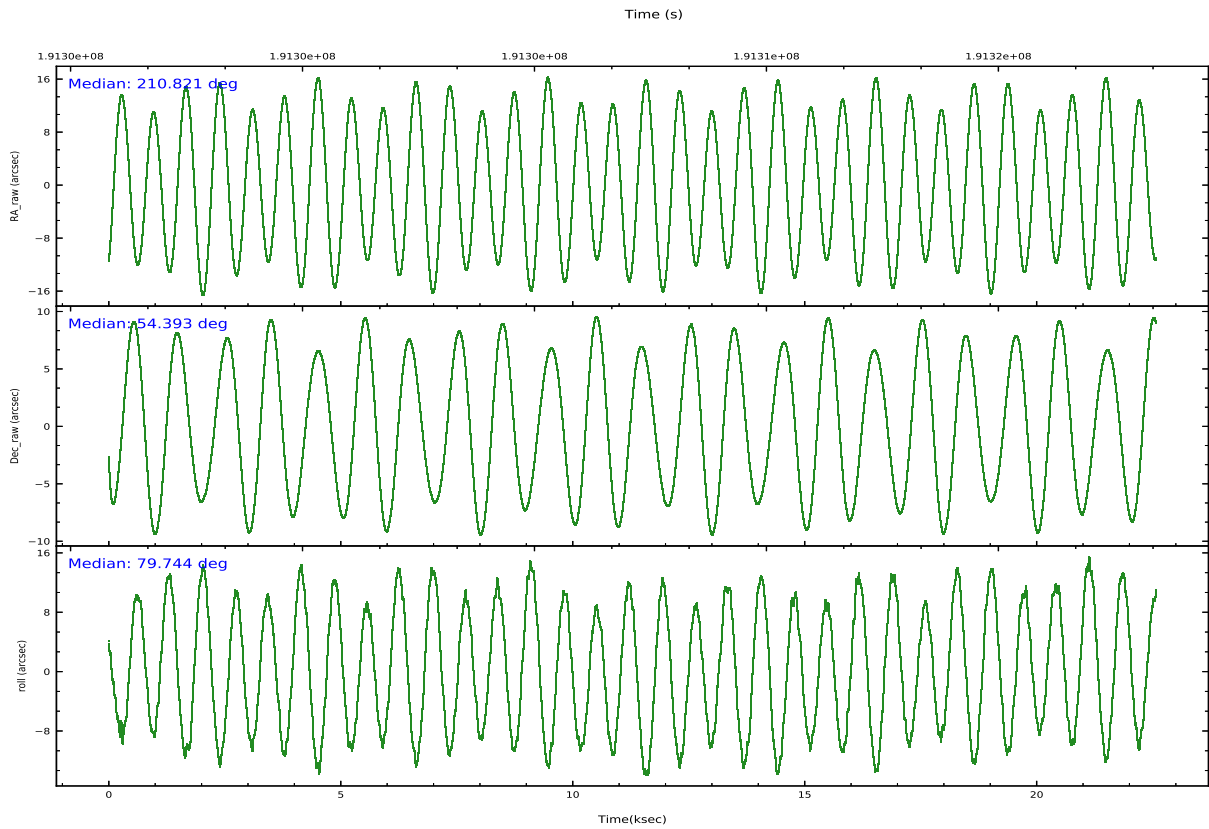
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	142291	132627	223041	141921	206352	176799	grade 0 events	14984	14361	15596	15810	11099	21386
rejected events	116350	107249	107689	113588	104132	127131		10%	10%	6%	11%	5%	12%
rejected %	81%	80%	48%	80%	50%	71%	grade 1 events	109	114	260	98	172	137
								0%	0%	0%	0%	0%	0%
							grade 2 events	4292	4190	32910	5099	19333	9246
								3%	3%	14%	3%	9%	5%
							grade 3 events	1751	1753	4991	1806	8611	4798
								1%	1%	2%	1%	4%	2%
							grade 4 events	1755	1873	4759	1754	8314	4399
								1%	1%	2%	1%	4%	2%
							grade 5 events	5189	5758	14809	5948	17062	7794
								3%	4%	6%	4%	8%	4%
							grade 6 events	3164	3202	57110	3869	54871	9847
								2%	2%	25%	2%	26%	5%
							grade 7 events	111047	101376	92606	107537	86890	119192
								78%	76%	41%	75%	42%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-235678	ACIS-235678	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	210.837114	210.82468270476	Subarray requested	NONE	NONE
[deg] Pointing Dec	54.367910	54.391060515049	Alternating exposures requested	N	N
[deg] Pointing Roll	79.572882	79.74383629919301	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	191296400.184000	191295242.68477			
Observation start date	2004-01-24T01:52:16	2004-01-24T01:34:02			
[s] Observation end time (MET)	191318400.184000	191319064.71081			
Observation end date	2004-01-24T07:58:56	2004-01-24T08:11:04			
Read mode	TIMED	TIMED			

2.3 Aspect





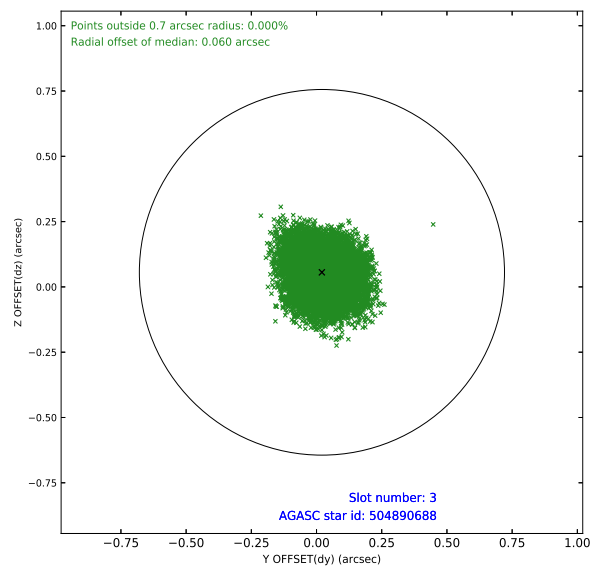
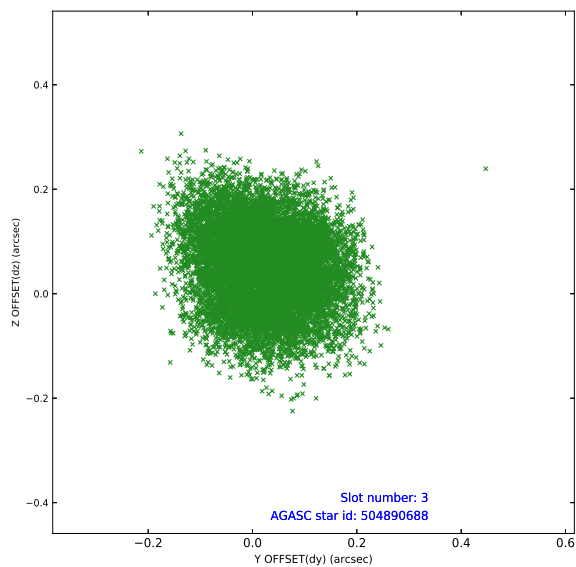
Slot Statistics

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-2	7.10	5507	1.000	-0.104	-0.077	0.009	0.015	0.000000	0.000000	-759.35	-1730
1	FID		ACIS-S-4	7.20	5507	1.000	0.084	0.057	0.008	0.013	0.000000	0.000000	2154.02	177
2	FID		ACIS-S-6	7.35	5506	1.000	-0.009	0.027	0.007	0.012	0.000000	0.000000	402.89	815
3	GUIDE	used	504890688	9.16	11009	1.000	0.021	0.056	0.120	0.181	211.697686	53.837149	-1537.26	-2141
4	GUIDE	used	504890776	9.28	11008	1.000	0.002	0.140	0.084	0.137	211.095934	54.816966	1688.13	-235
5	GUIDE	used	504891480	8.07	11014	1.000	0.029	-0.127	0.065	0.098	210.708012	54.666096	1007.69	458
6	GUIDE	used	504894856	8.99	11012	1.000	0.037	-0.037	0.088	0.137	209.819510	54.132689	-1205.87	1960
7	GUIDE	used	505292416	9.34	11007	1.000	-0.089	-0.026	0.097	0.153	210.920759	55.040479	2412.81	269

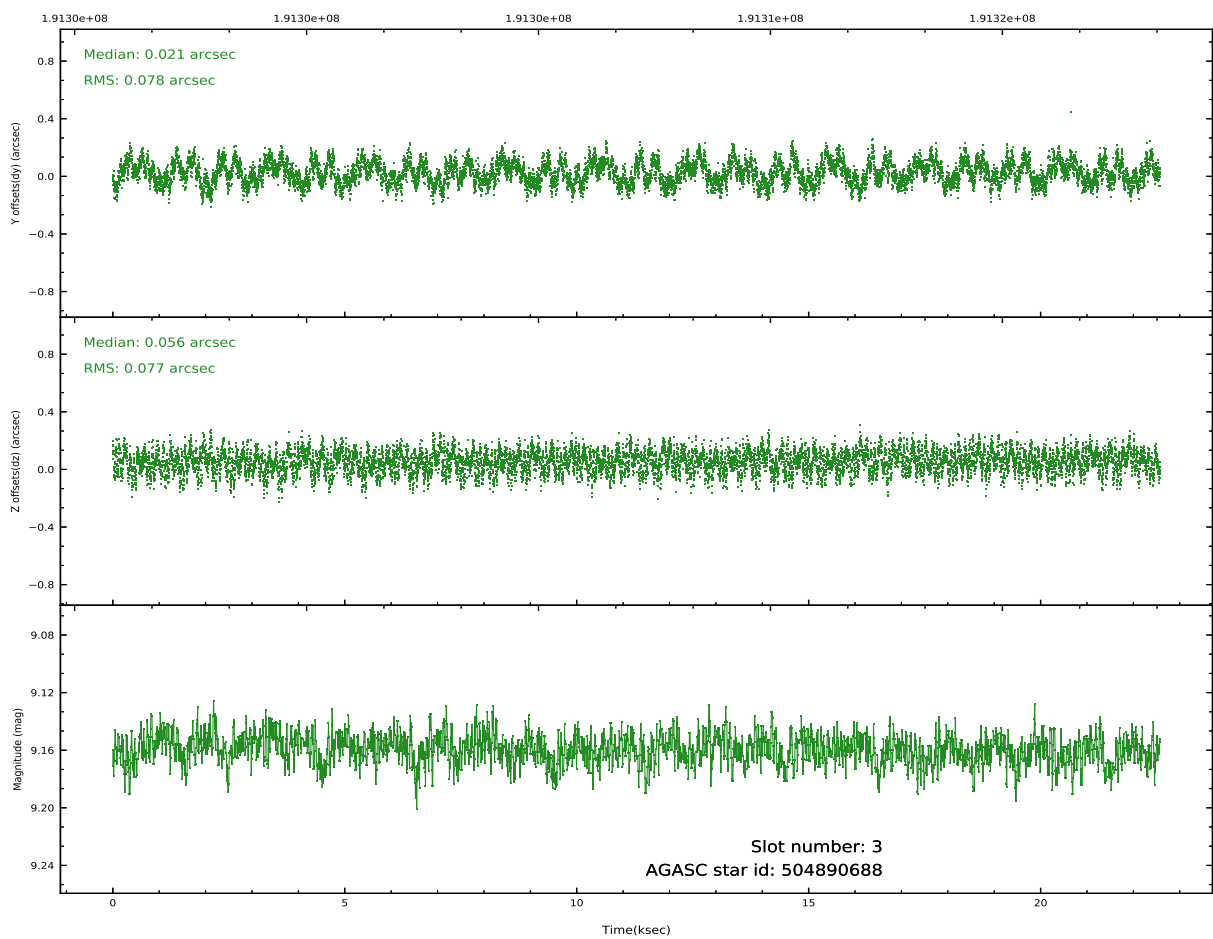
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2.4 Star Slots

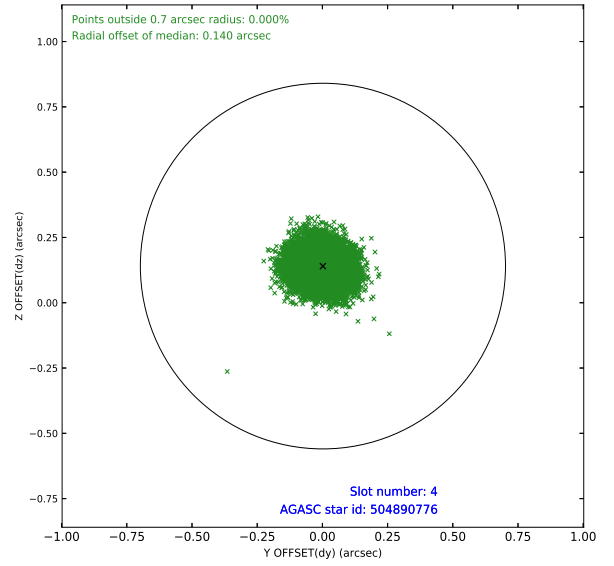
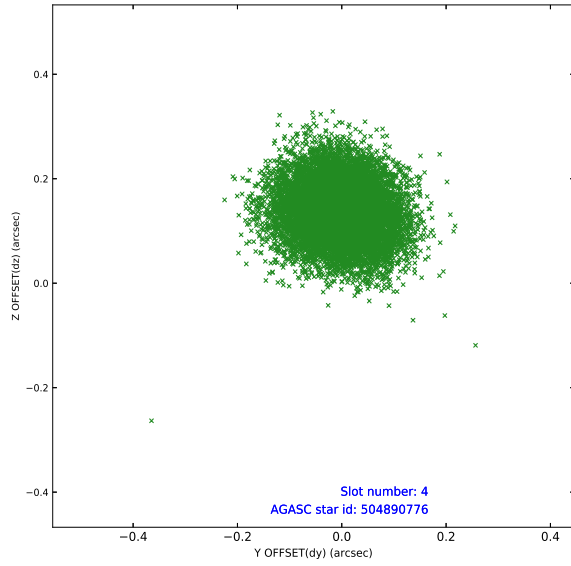
2.4.1 Slot 3



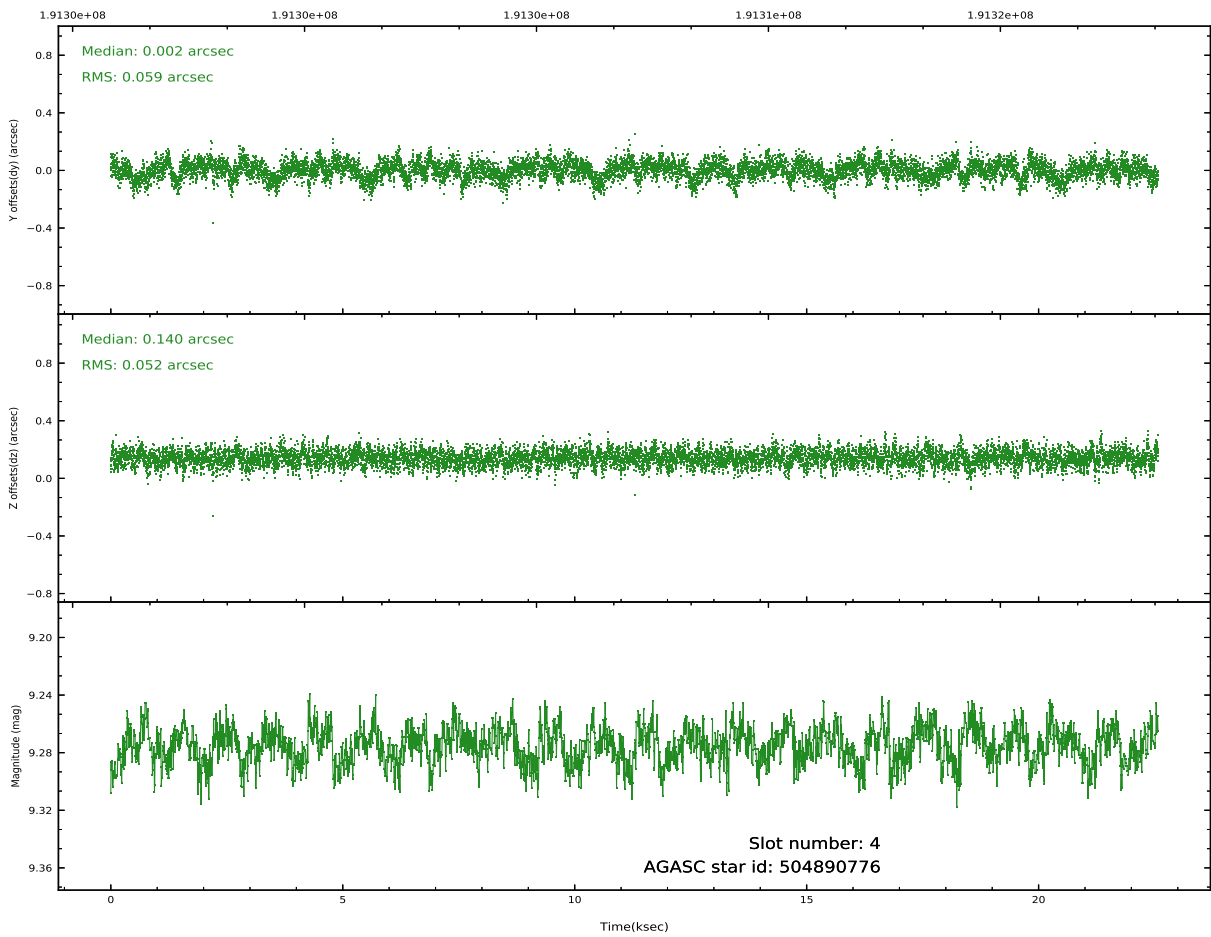
Time (s)



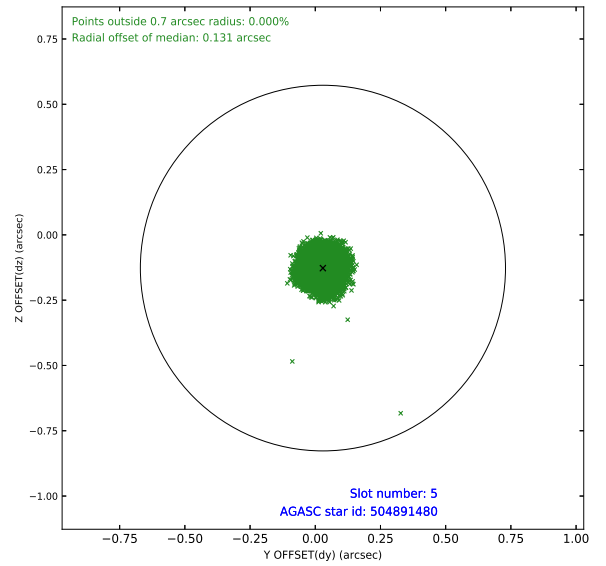
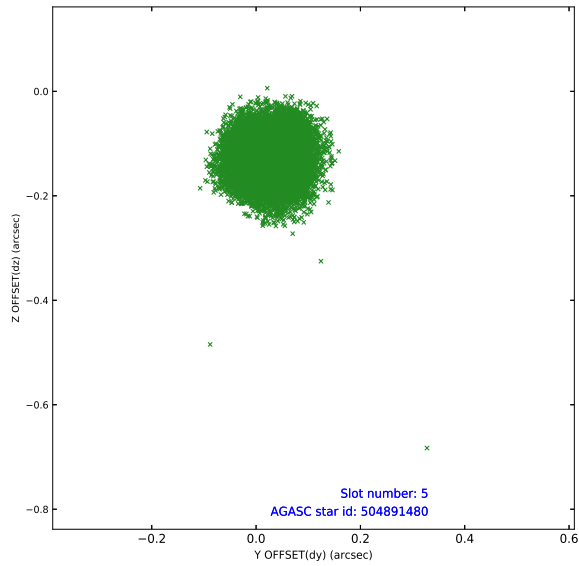
2.4.2 Slot 4



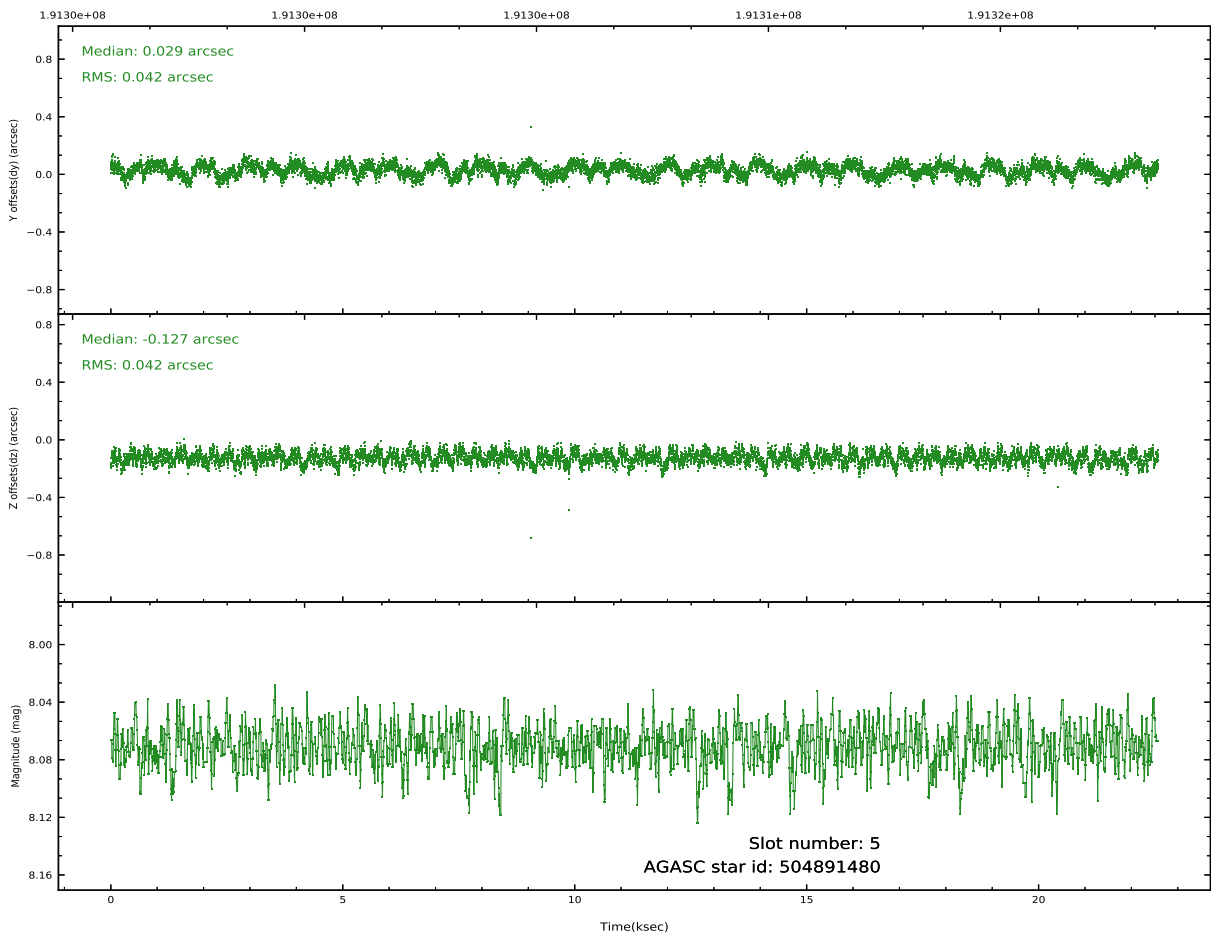
Time (s)



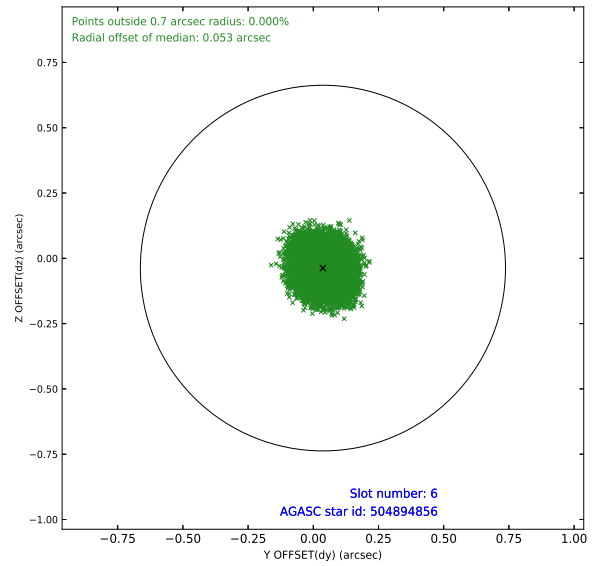
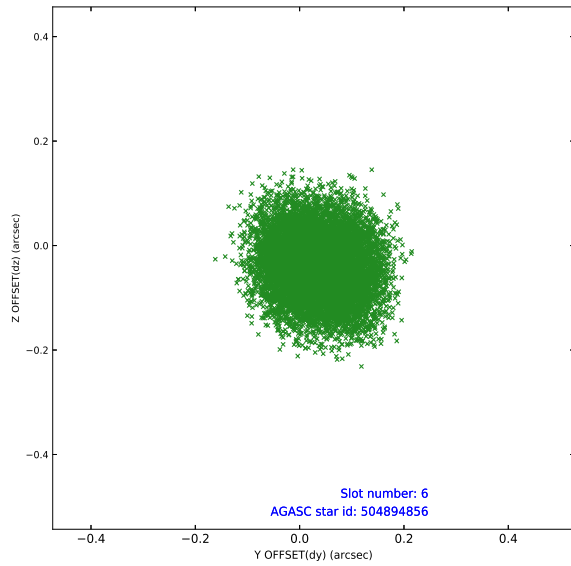
2.4.3 Slot 5



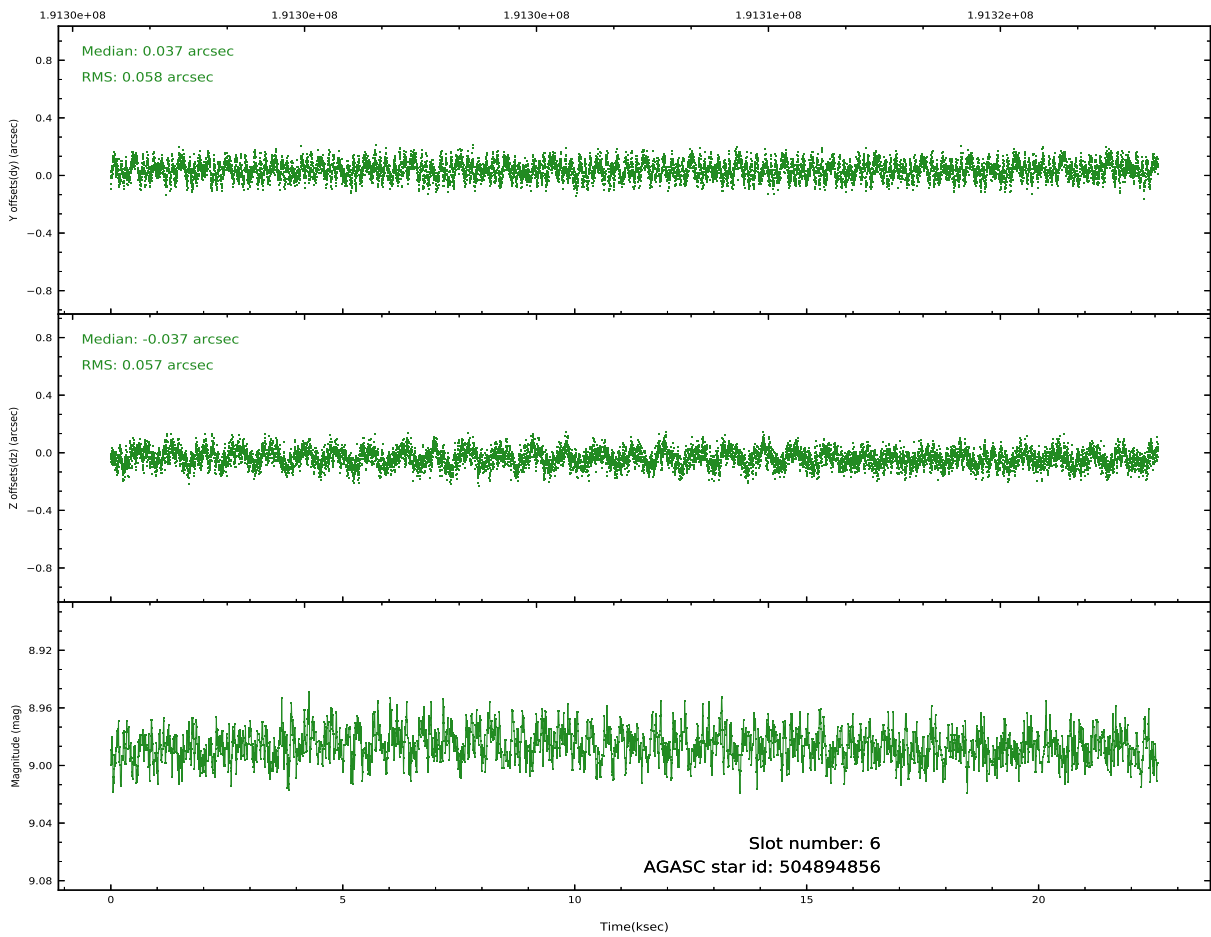
Time (s)



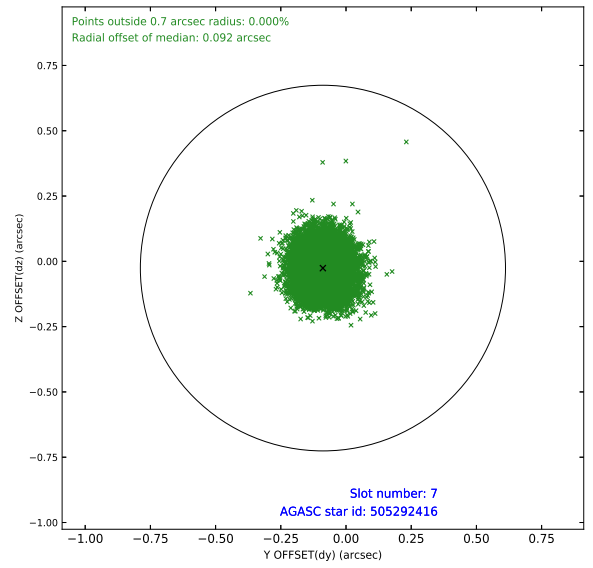
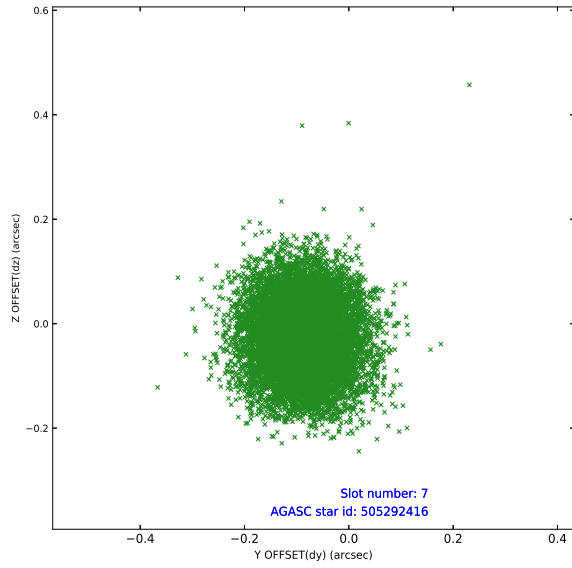
2.4.4 Slot 6



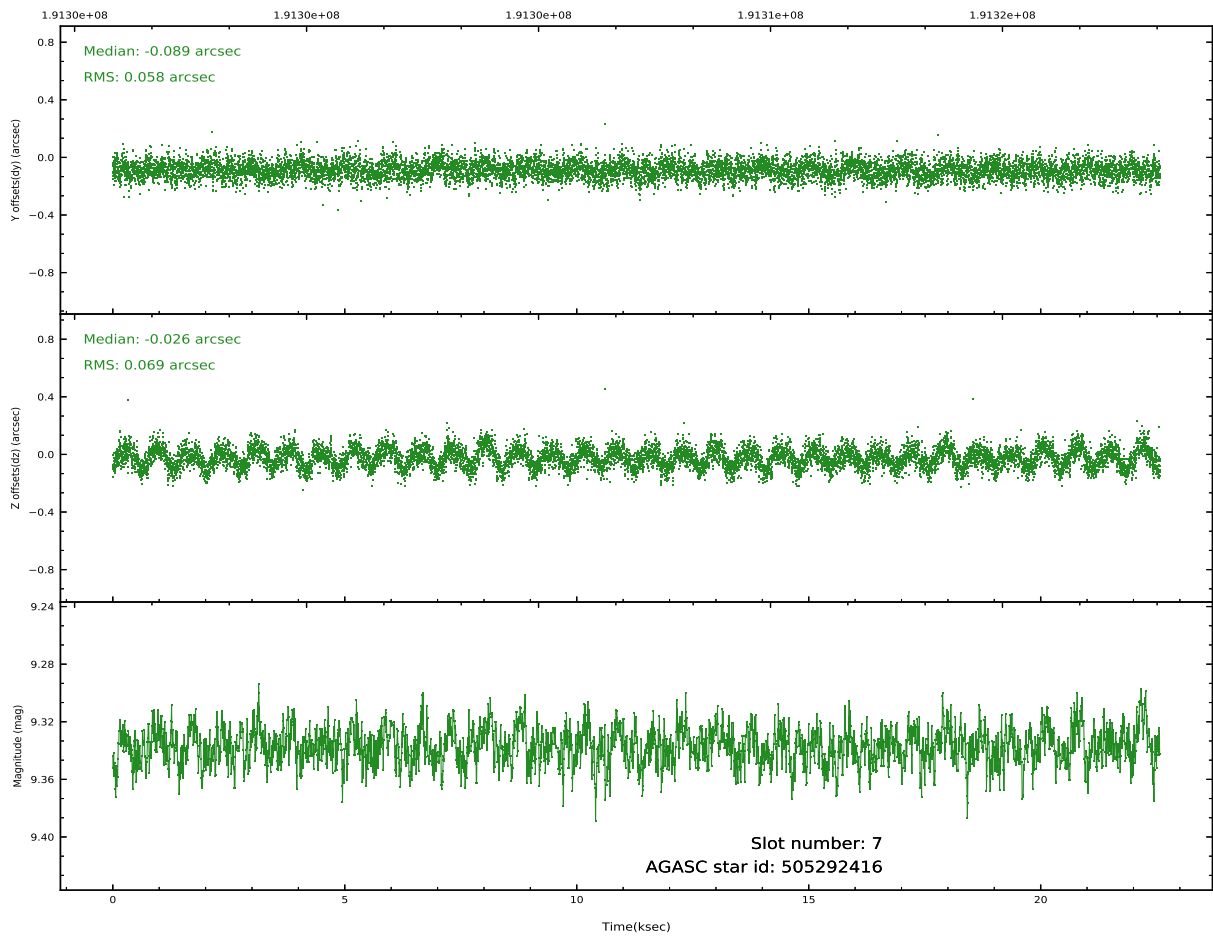
Time (s)



2.4.5 Slot 7

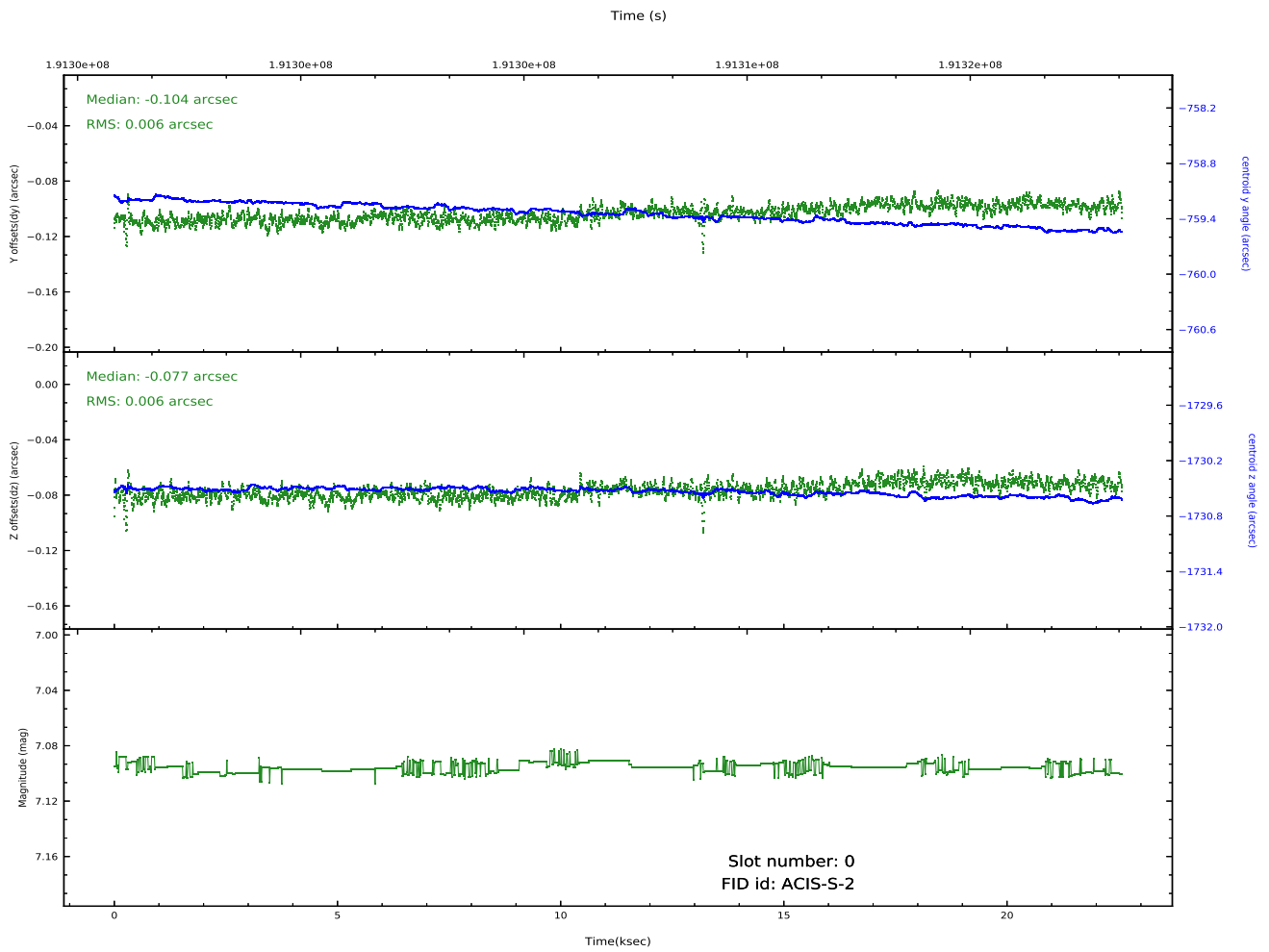
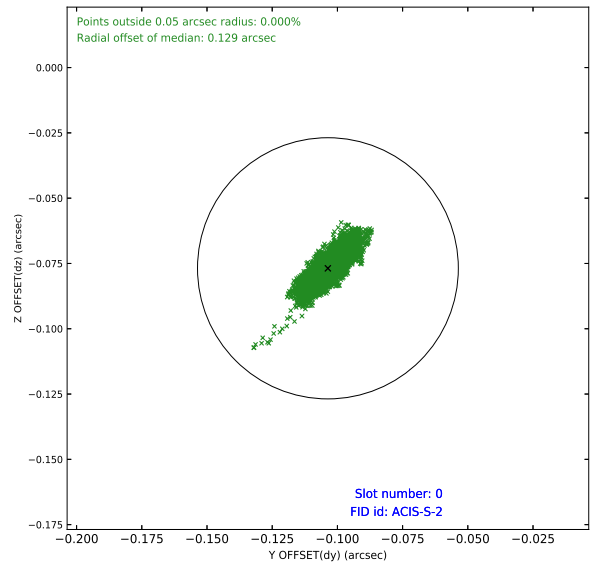
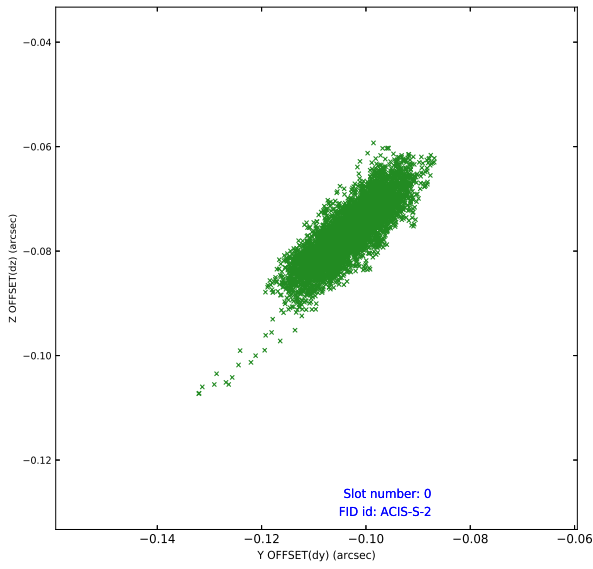


Time (s)

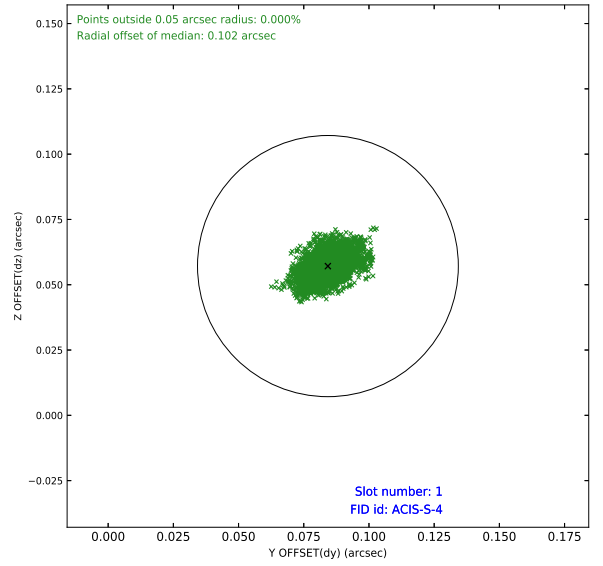
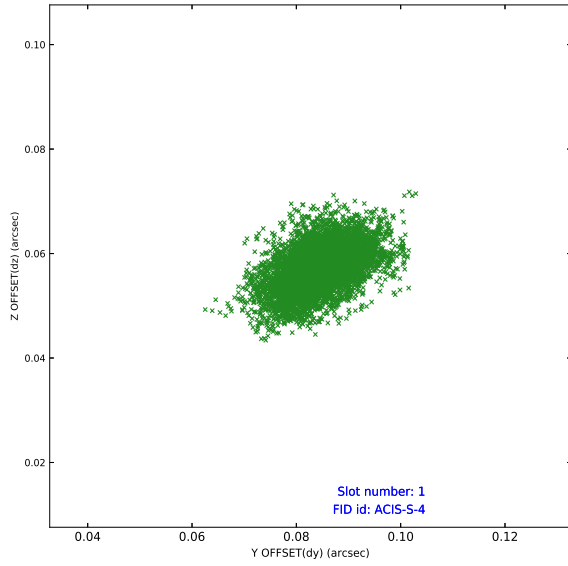


2.5 FID Slots

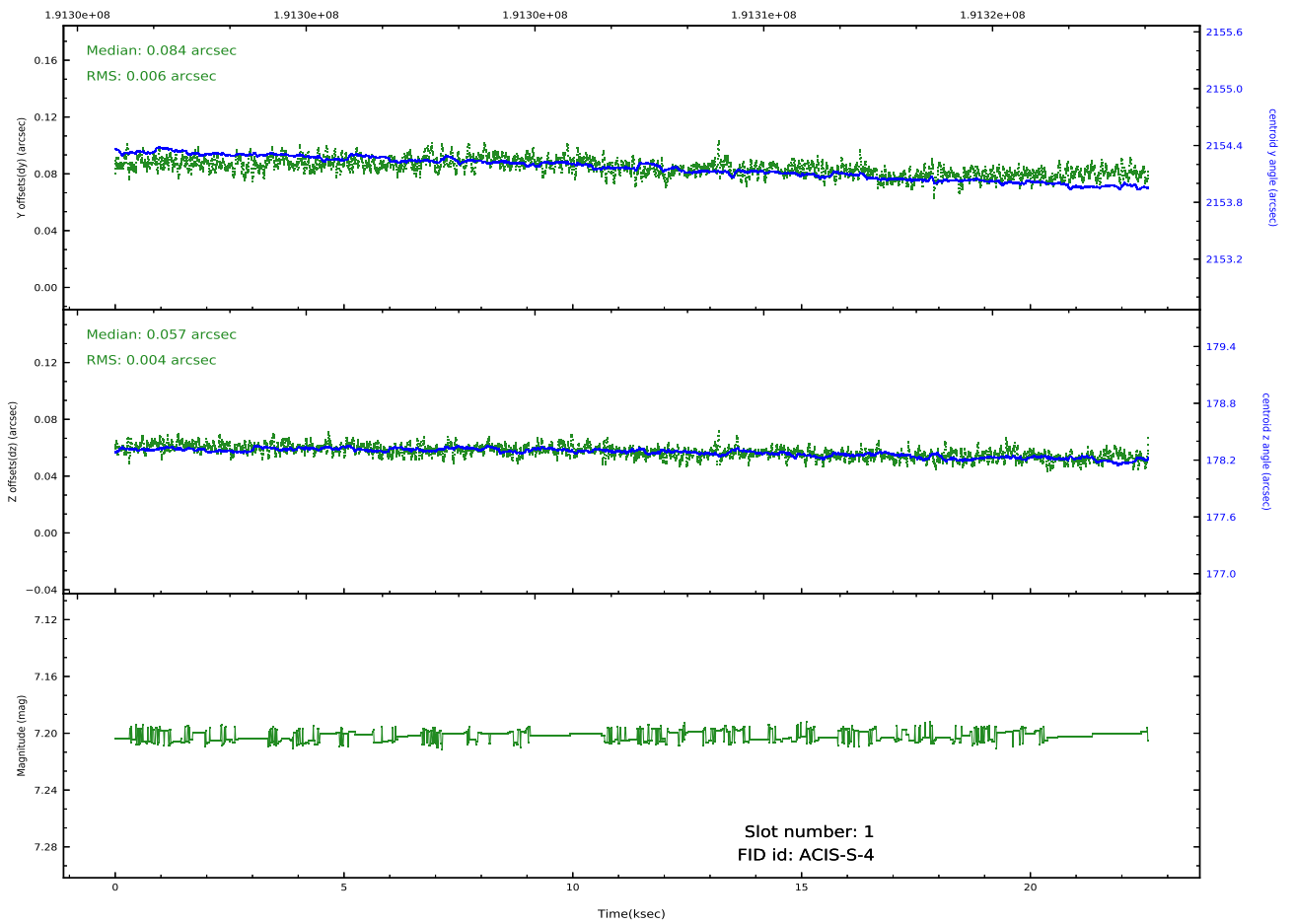
2.5.1 Slot 0



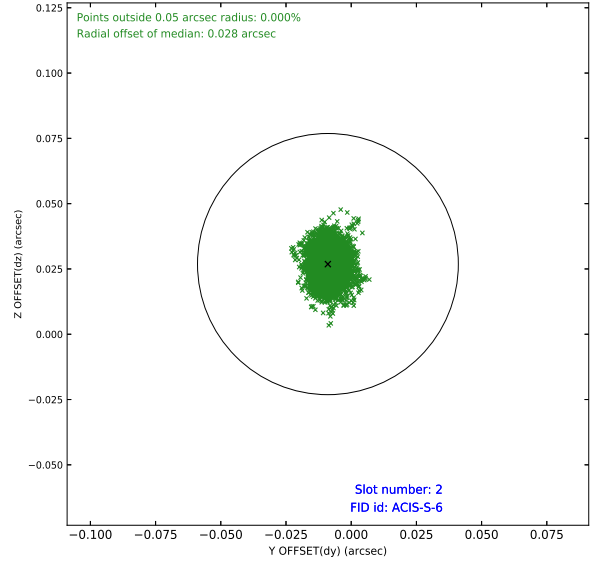
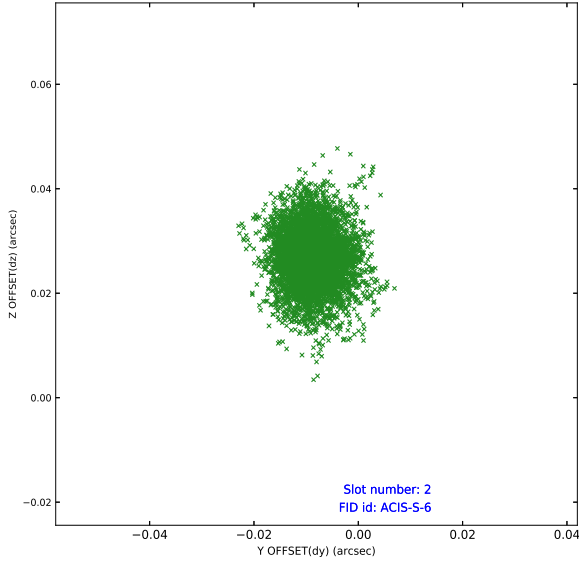
2.5.2 Slot 1



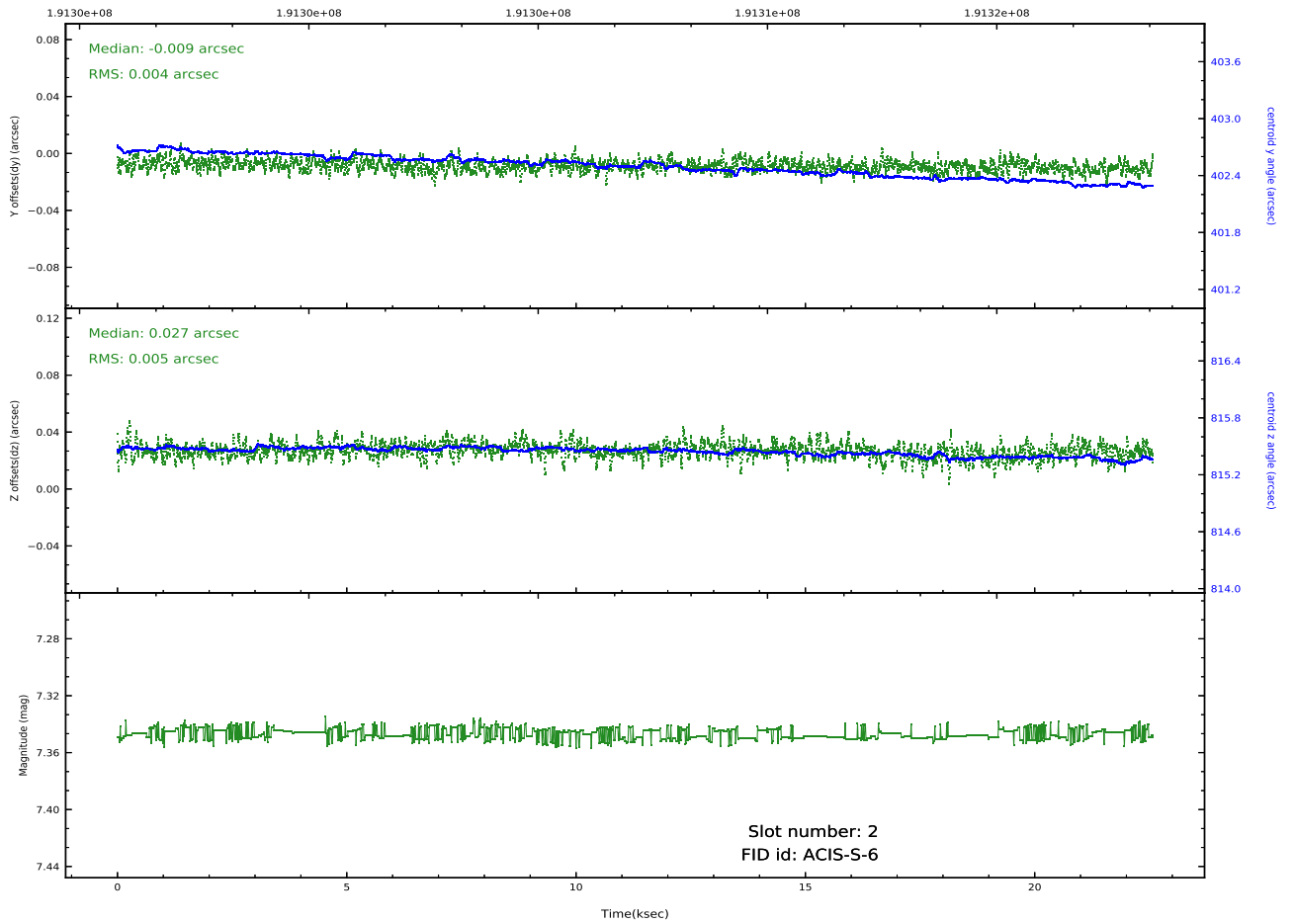
Time (s)



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.09.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	21.964

A.2 Comments