

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5337 - L2 Version 4
Chandra X-Ray Center

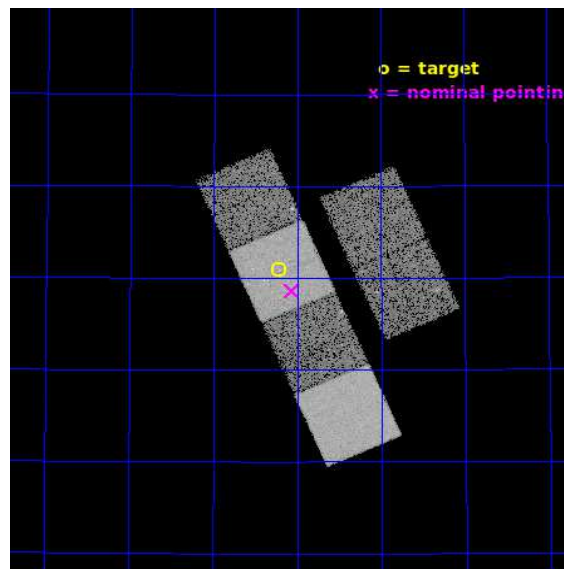
L2 Processing Date : Sep 27 2020

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
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

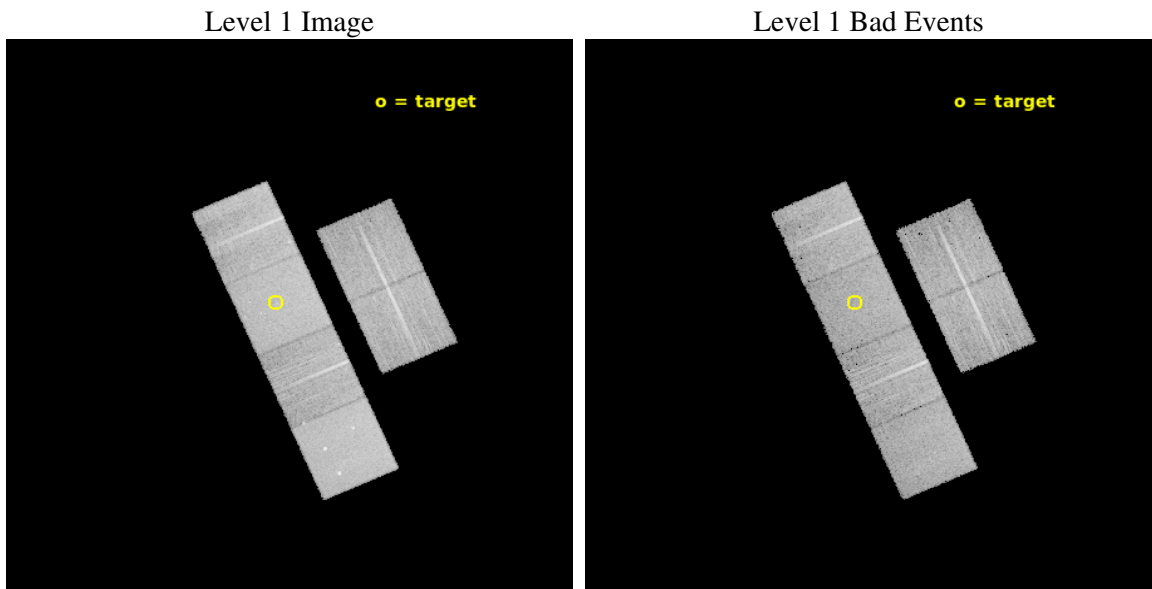
seq_num	600389	Sequence number
obs_id	5337	Observation id
title	An Ultra-Deep Study of M101	Proposal title
observer	Dr. K.D. Kuntz	Principal investigator
object	M101	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	210.80375	Observer's specified target RA [deg]
dec_targ	54.348778	Observer's specified target Dec [deg]
ra_nom	210.76616800946	Nominal RA [deg]
dec_nom	54.310553326641	Nominal Dec [deg]
roll_nom	246.18487928954	Nominal Roll [deg]
revision	4	Processing version of data
ontime	10070.399962485	Sum of GTIs [s]
livetime	9942.882494493	Livetime [s]
ontime2	10070.399962485	Sum of GTIs [s]
ontime3	10070.399962485	Sum of GTIs [s]
ontime5	10070.399962485	Sum of GTIs [s]
ontime6	10070.399962485	Sum of GTIs [s]
ontime7	10070.399962485	Sum of GTIs [s]
ontime8	10070.399962485	Sum of GTIs [s]
l2events	120649	Number of level 2 events



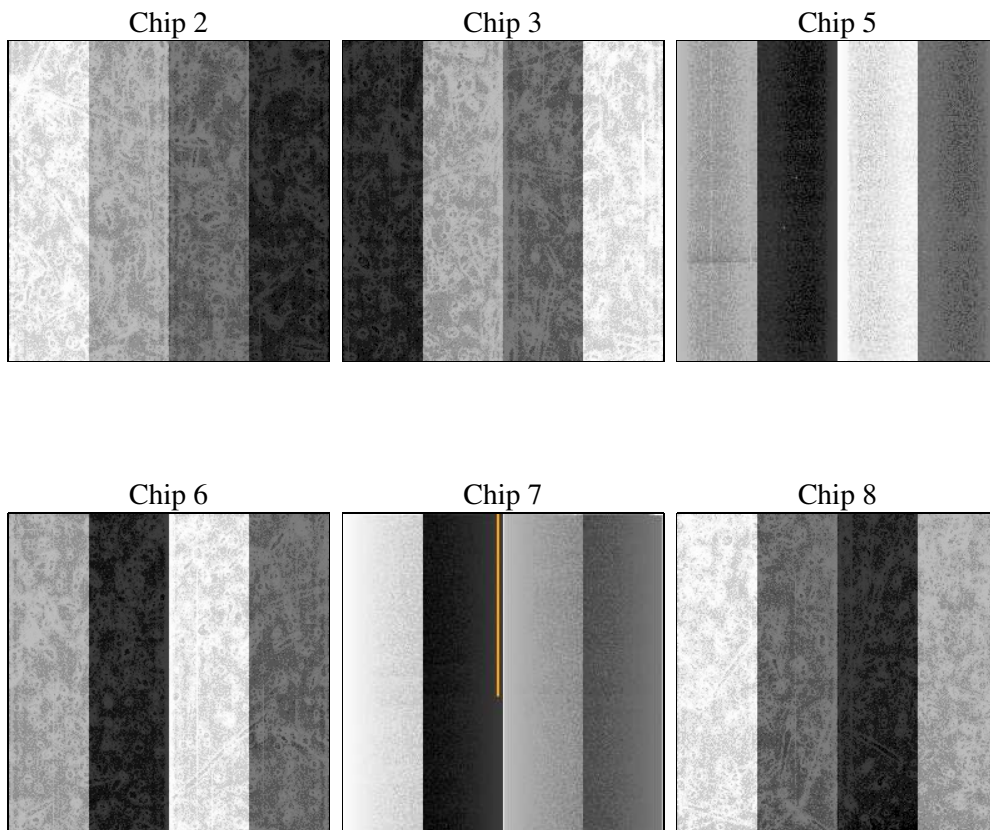
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9964.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	10070.399962485	Sum of GTIs [s]
caldbver	4.9.2	 	ontime2	10070.399962485	Sum of GTIs [s]
date	2020-09-27T03:33:14	Date and time of file creation	ontime3	10070.399962485	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	10070.399962485	Sum of GTIs [s]
			ontime6	10070.399962485	Sum of GTIs [s]
			ontime7	10070.399962485	Sum of GTIs [s]
			ontime8	10070.399962485	Sum of GTIs [s]
			l1events	542412	Number of level 1 events

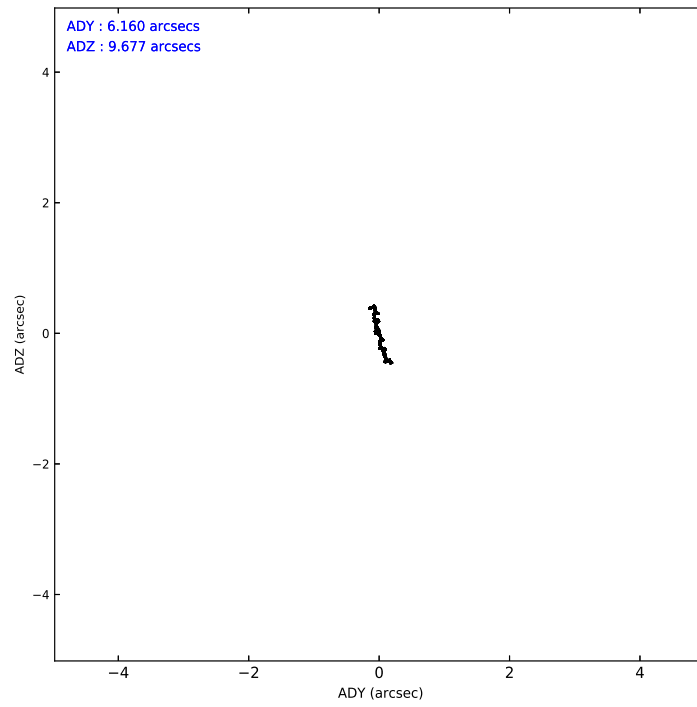
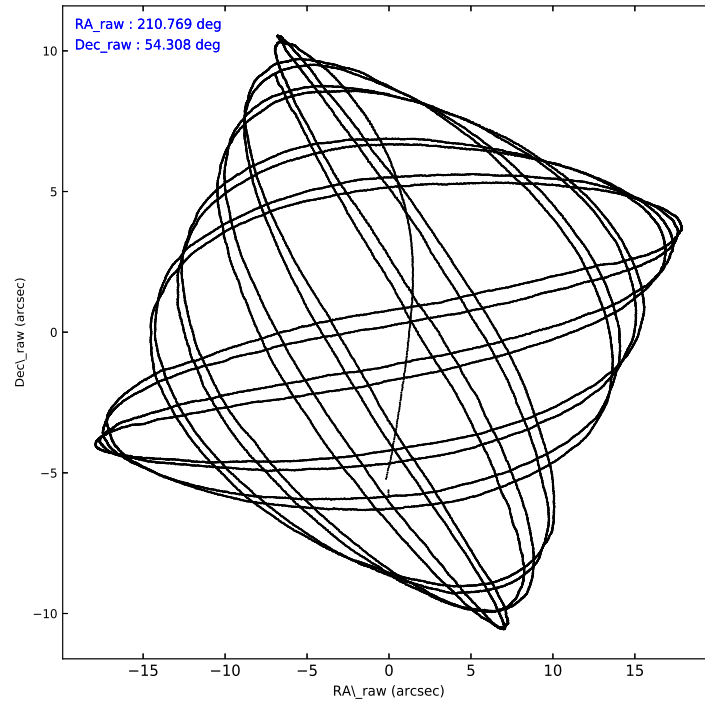
2.1.4 Events

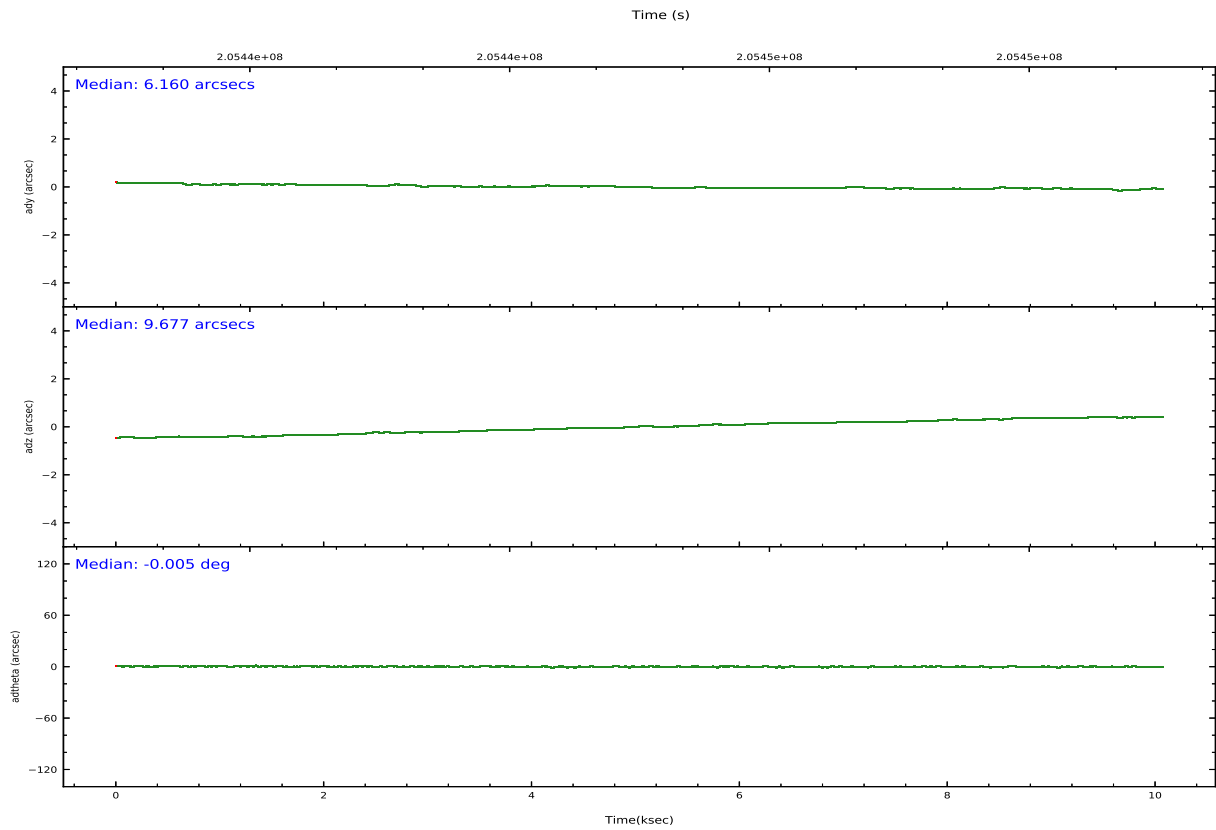
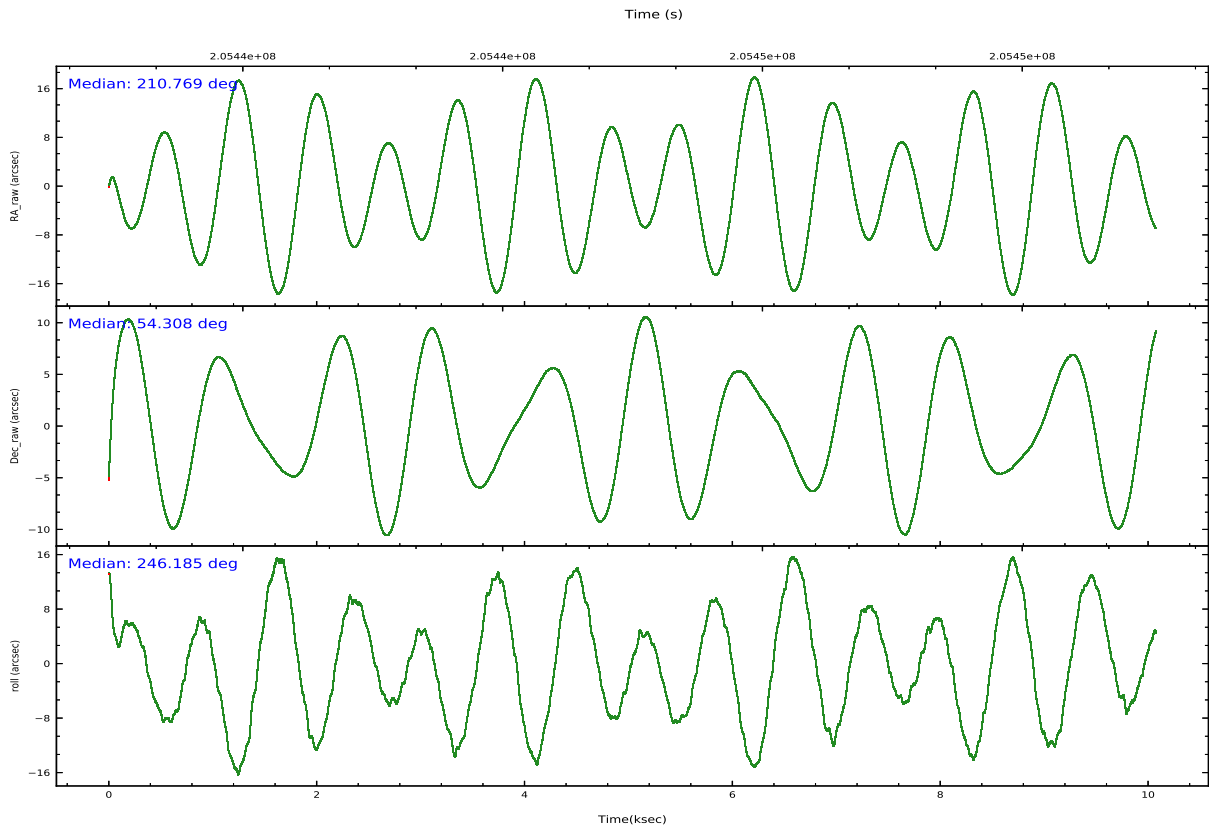
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	79159	73395	112949	76764	104377	95768	grade 0 events	4016	3743	4749	3770	4400	6343
rejected events	70281	64887	62694	67629	61303	76770		5%	5%	4%	4%	4%	6%
rejected %	88%	88%	55%	88%	58%	80%	grade 1 events	57	34	196	28	118	52
								0%	0%	0%	0%	0%	0%
							grade 2 events	1782	1656	15007	1877	8699	4328
								2%	2%	13%	2%	8%	4%
							grade 3 events	827	892	1812	887	3823	1880
								1%	1%	1%	1%	3%	1%
							grade 4 events	909	888	1792	905	3845	1801
								1%	1%	1%	1%	3%	1%
							grade 5 events	3110	3363	7740	3512	9792	4590
								3%	4%	6%	4%	9%	4%
							grade 6 events	1485	1476	27796	1839	22953	5040
								1%	2%	24%	2%	21%	5%
							grade 7 events	66973	61343	53857	63946	50747	71734
								84%	83%	47%	83%	48%	74%

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	210.763621	210.76616800946	Subarray requested	NONE	NONE
[deg] Pointing Dec	54.334730	54.310553326641	Alternating exposures requested	N	N
[deg] Pointing Roll	246.032598	246.18487928954	[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	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	205441325.184000	205440157.71975			
Observation start date	2004-07-05T19:01:01	2004-07-05T18:42:37			
[s] Observation end time (MET)	205451289.184000	205452118.95778			
Observation end date	2004-07-05T21:47:05	2004-07-05T22:01:58			
Read mode	TIMED	TIMED			

2.3 Aspect





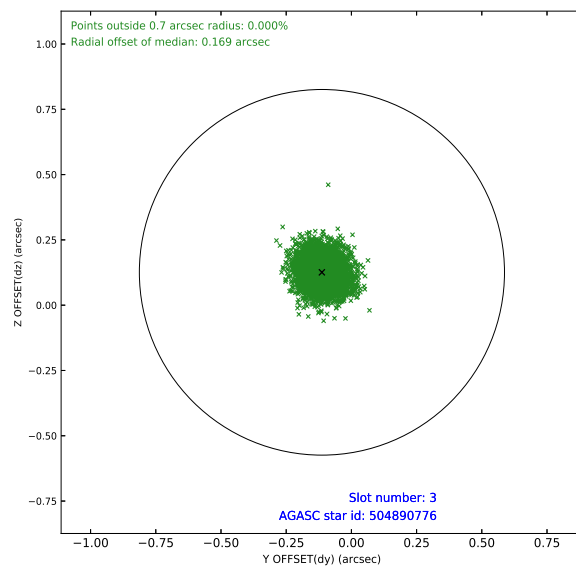
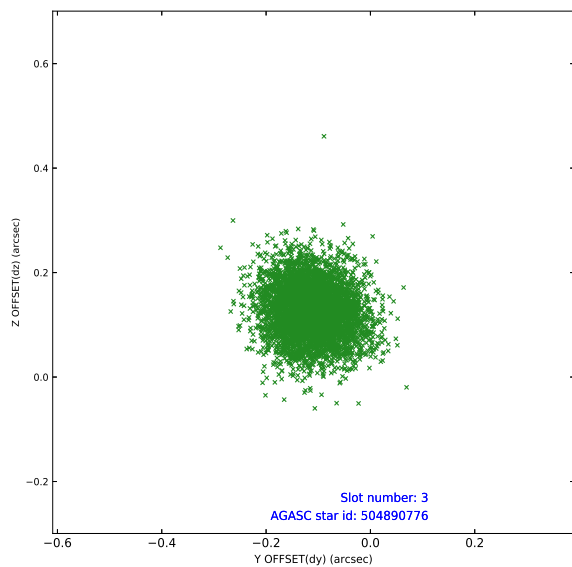
Slot Statistics

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	2458	1.000	-0.124	-0.098	0.008	0.014	0.000000	0.000000	-759.00	-1731
1	FID		ACIS-S-4	7.20	2459	1.000	0.096	0.069	0.006	0.011	0.000000	0.000000	2154.24	177
2	FID		ACIS-S-6	7.35	2459	1.000	0.001	0.037	0.008	0.015	0.000000	0.000000	403.75	815
3	GUIDE	used	504890776	9.28	4913	1.000	-0.113	0.126	0.075	0.122	211.095934	54.816966	-1867.49	-75
4	GUIDE	used	504891480	8.08	4915	1.000	-0.130	-0.036	0.064	0.099	210.708012	54.666096	-1043.04	-590
5	GUIDE	used	504893088	9.21	4917	1.000	0.063	-0.074	0.080	0.128	210.351715	54.364955	249.66	-834
6	GUIDE	used	504894856	8.98	4916	1.000	0.107	-0.101	0.090	0.143	209.819510	54.132689	1462.17	-1529
7	GUIDE	used	504890480	8.18	4916	1.000	0.069	0.083	0.072	0.113	210.132463	53.768436	2404.40	-401

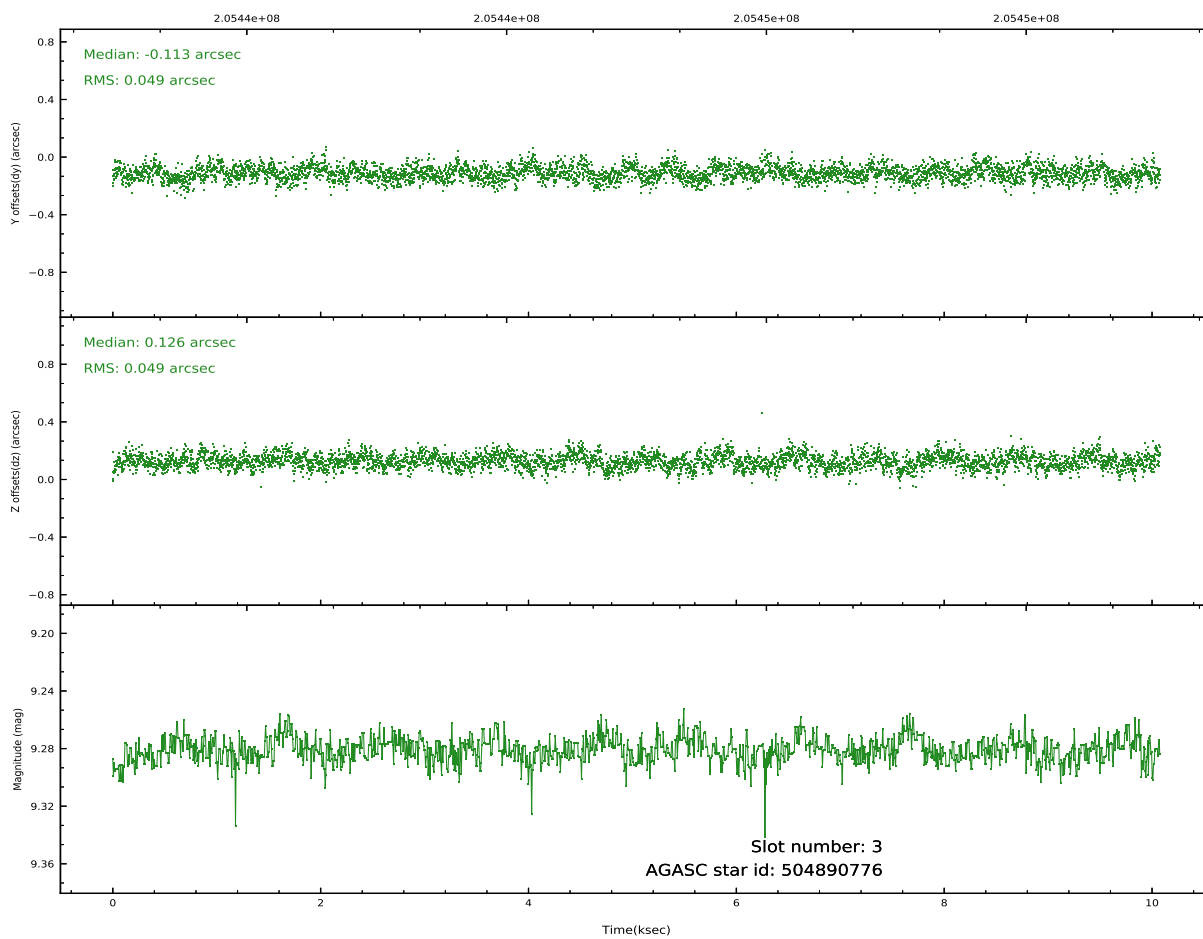
∞

2.4 Star Slots

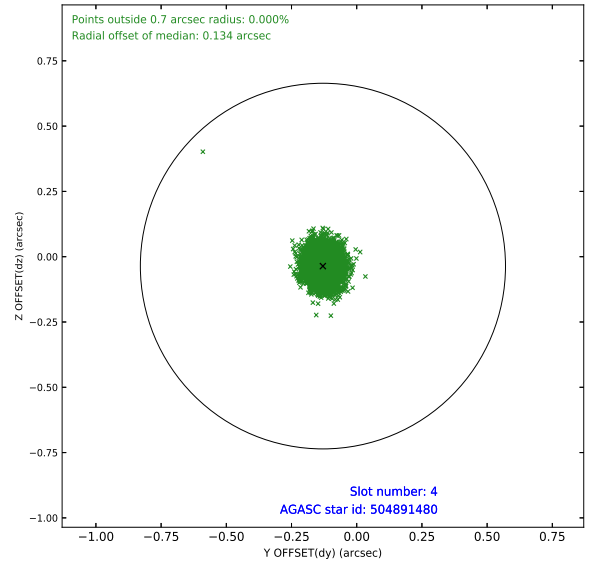
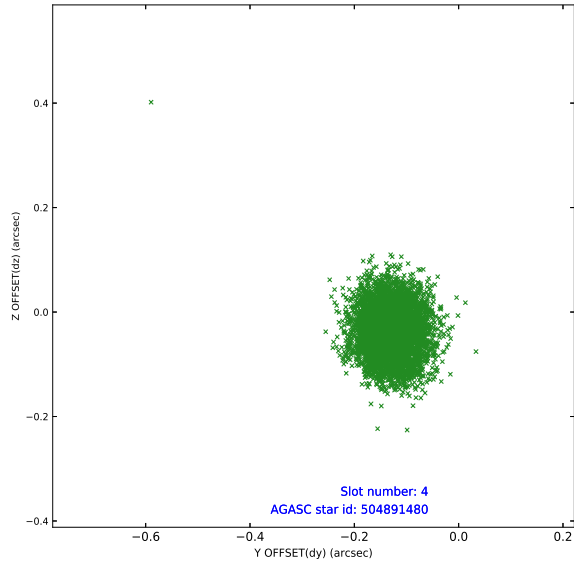
2.4.1 Slot 3



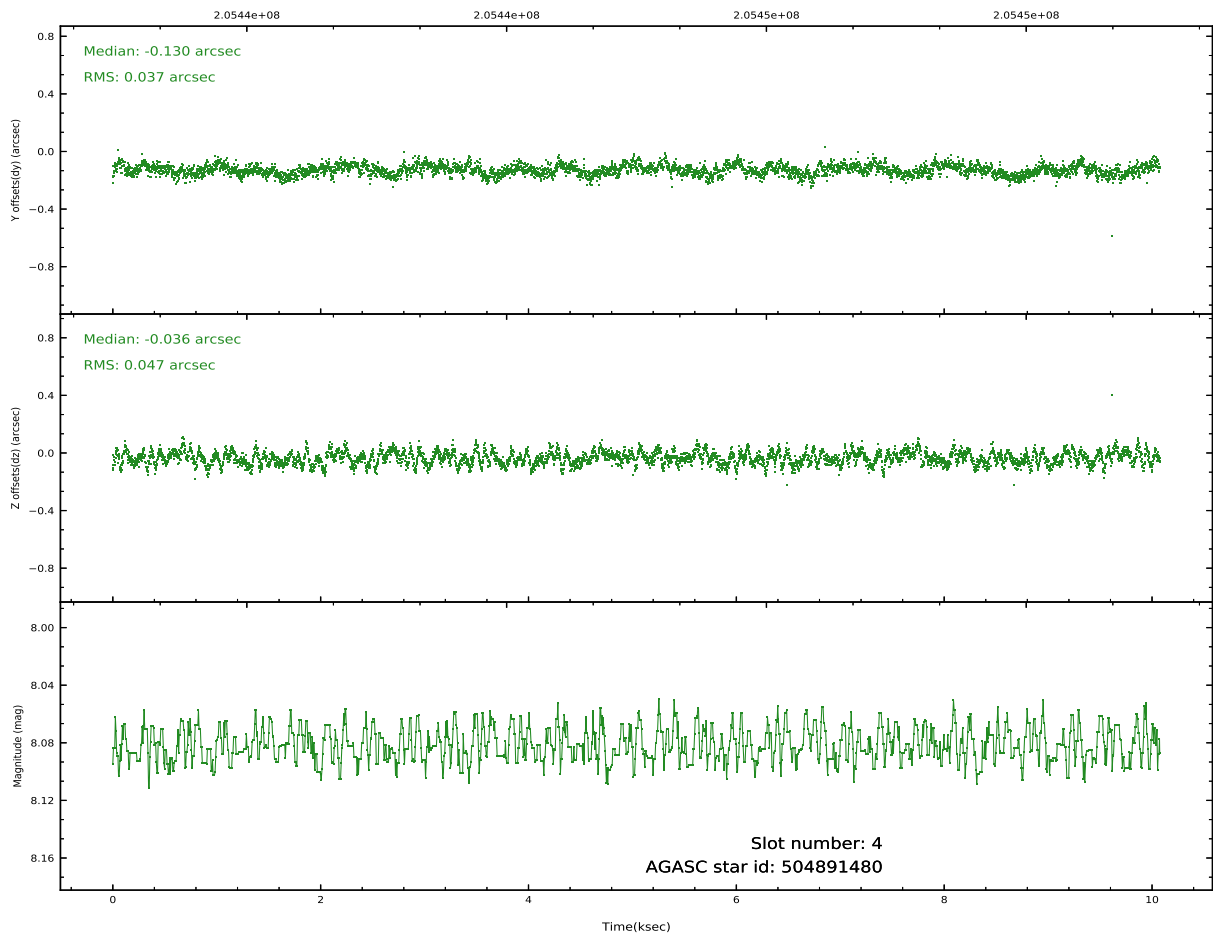
Time (s)



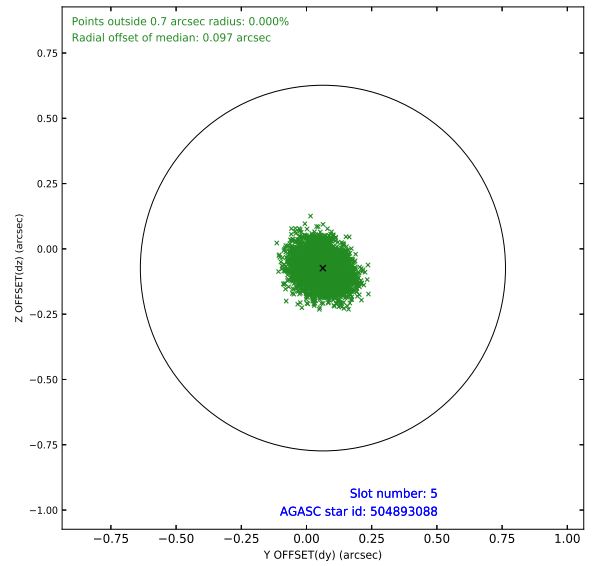
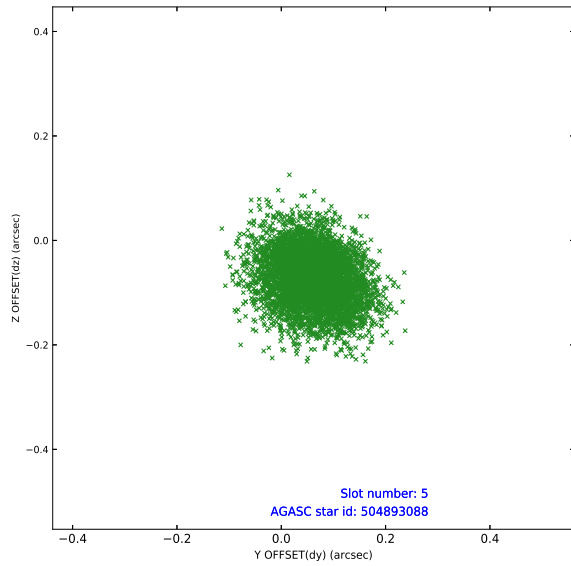
2.4.2 Slot 4



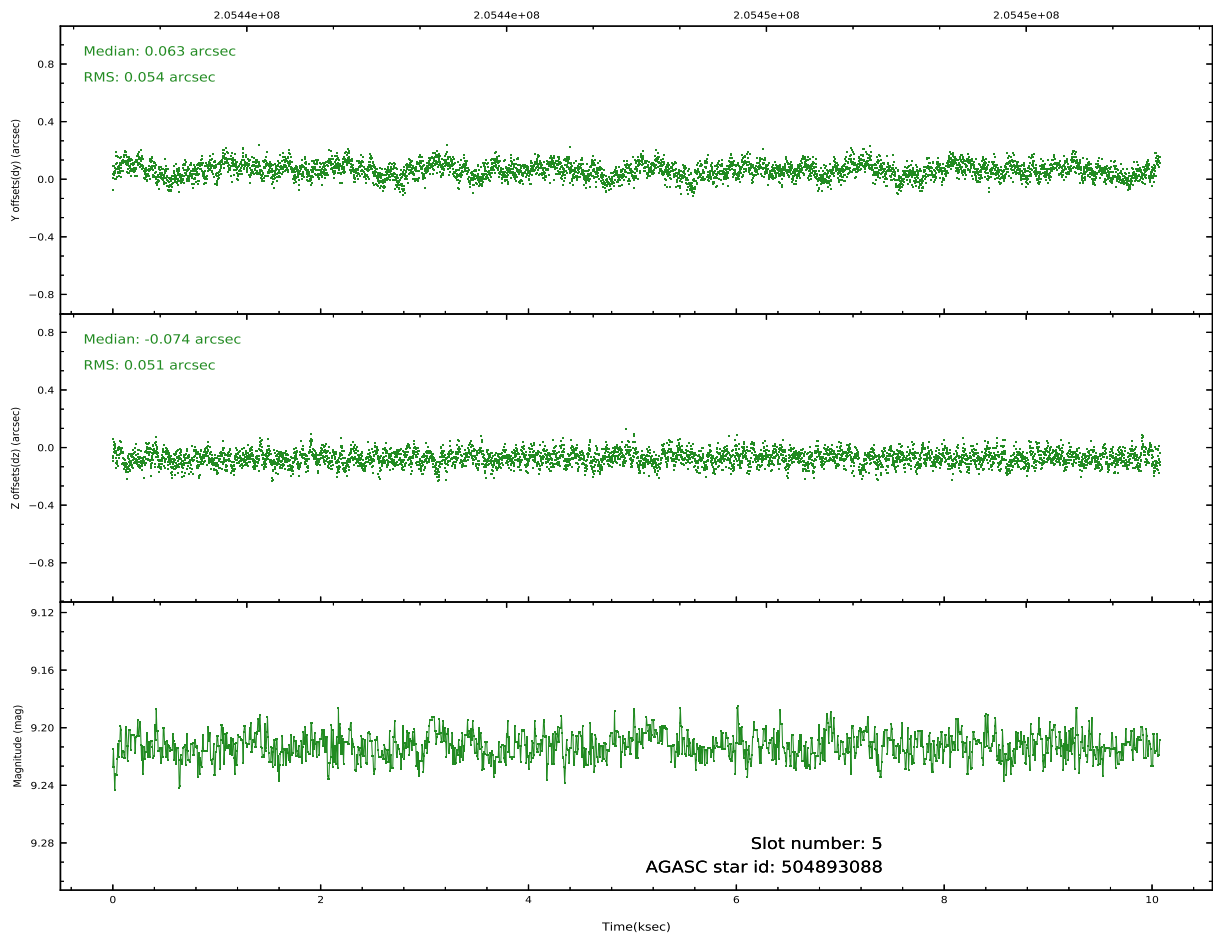
Time (s)



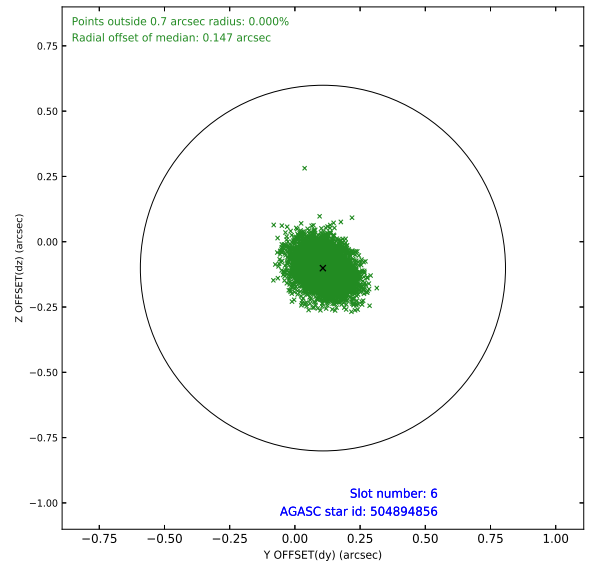
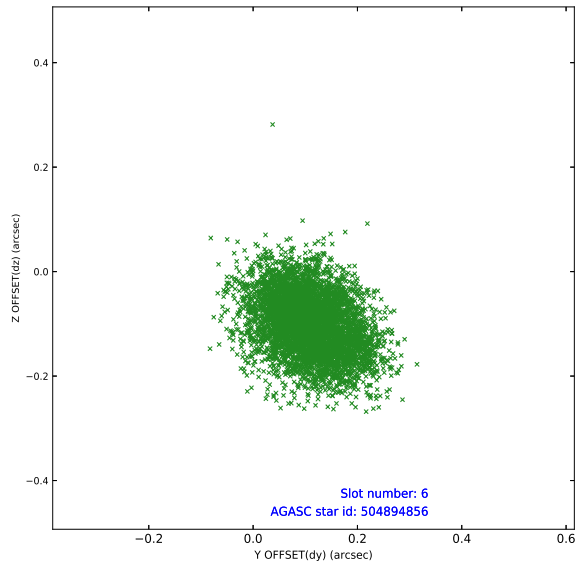
2.4.3 Slot 5



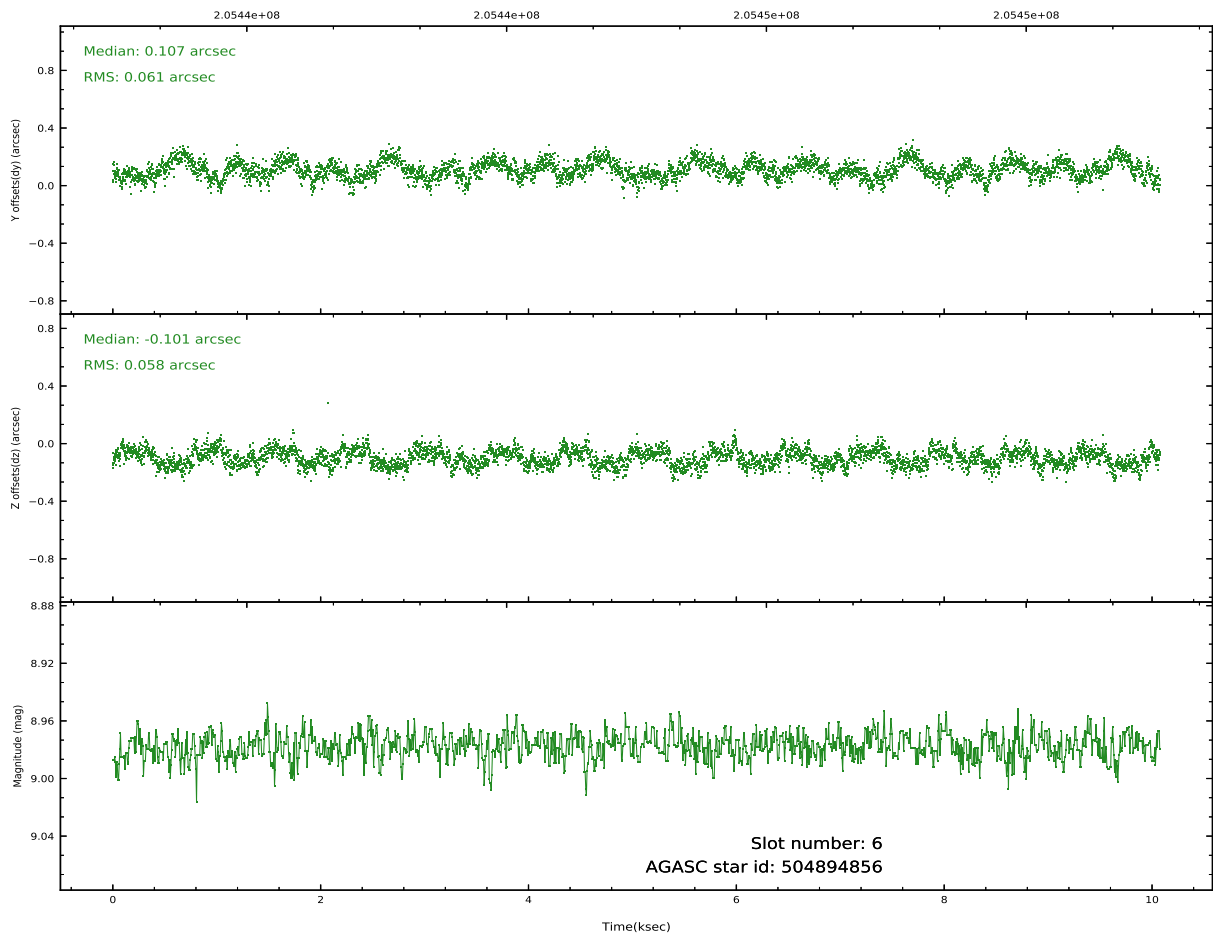
Time (s)



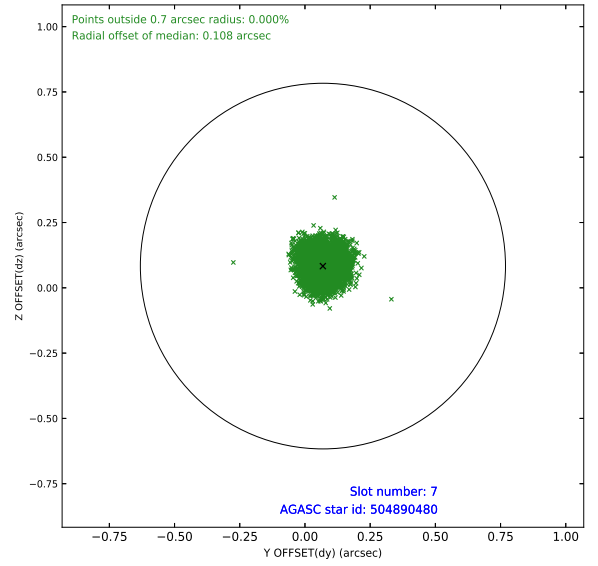
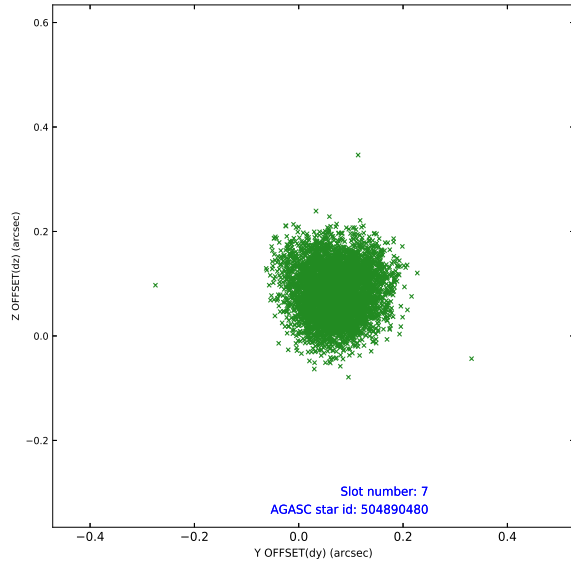
2.4.4 Slot 6



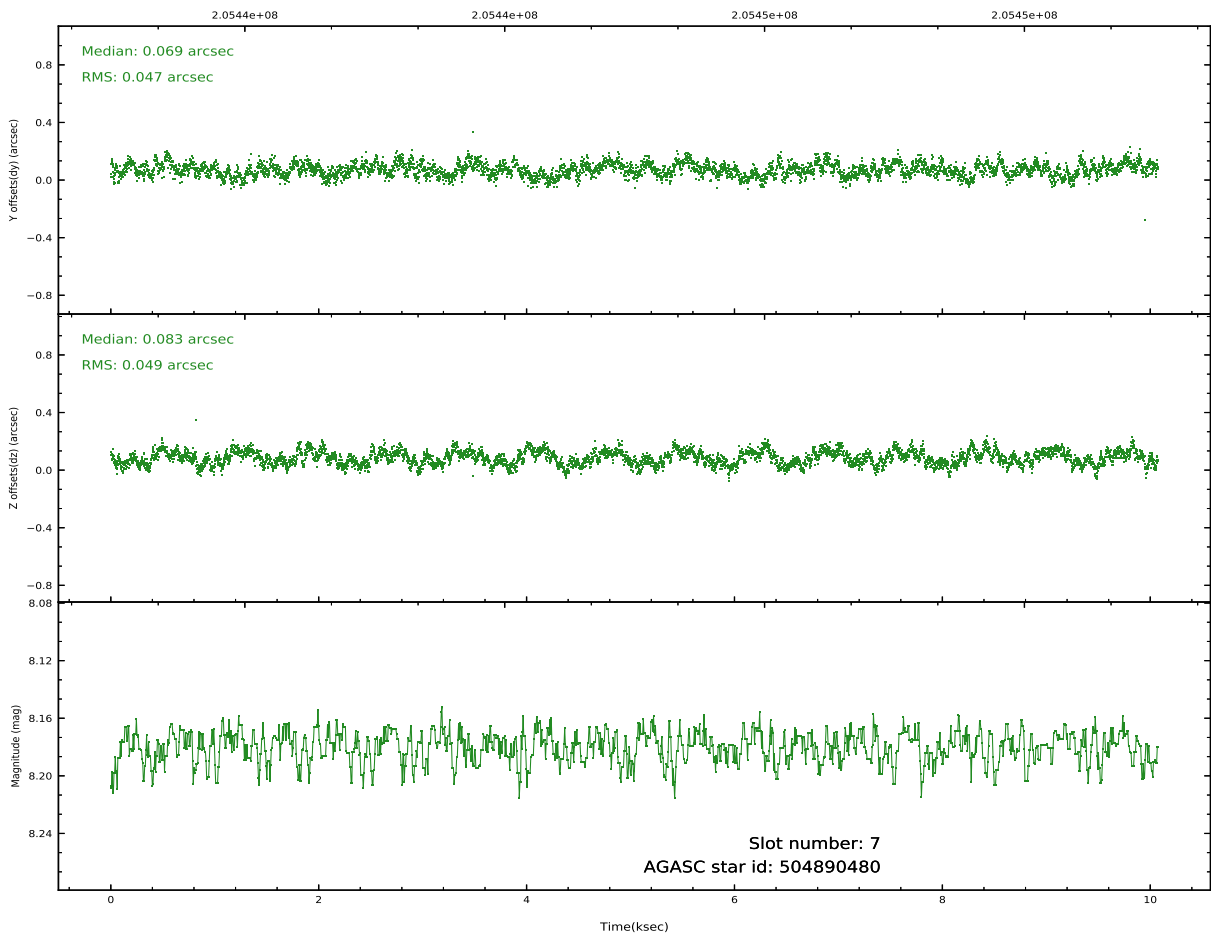
Time (s)



2.4.5 Slot 7

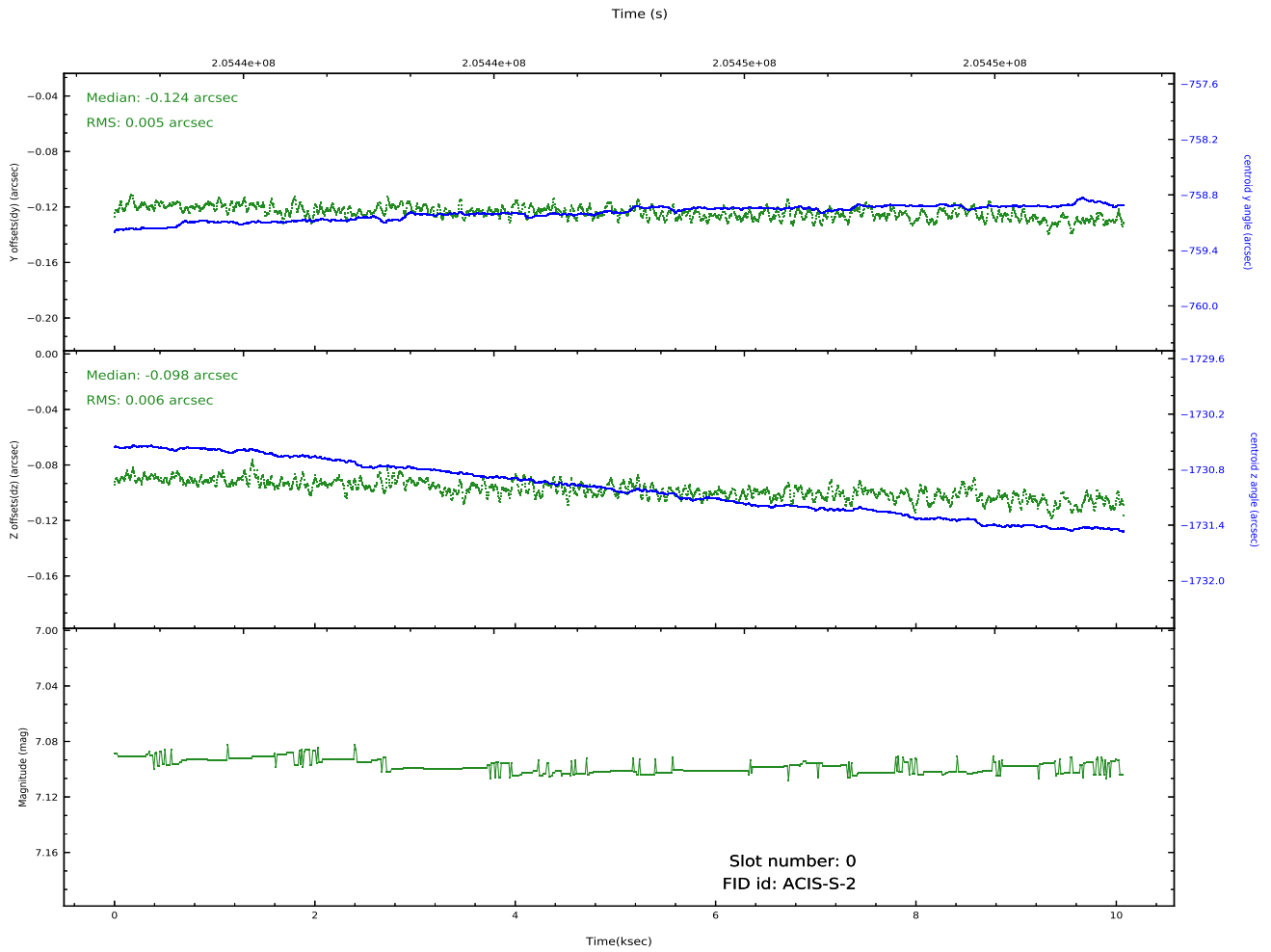
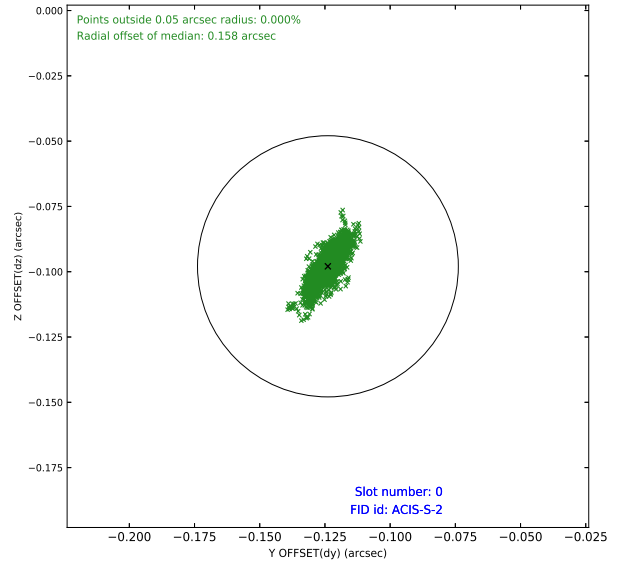
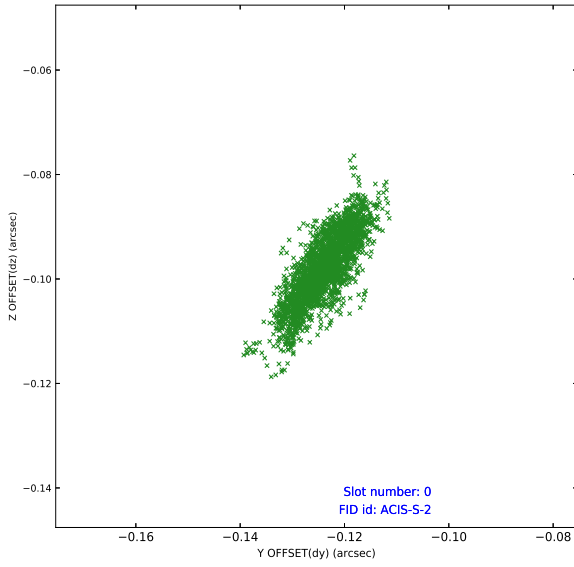


Time (s)

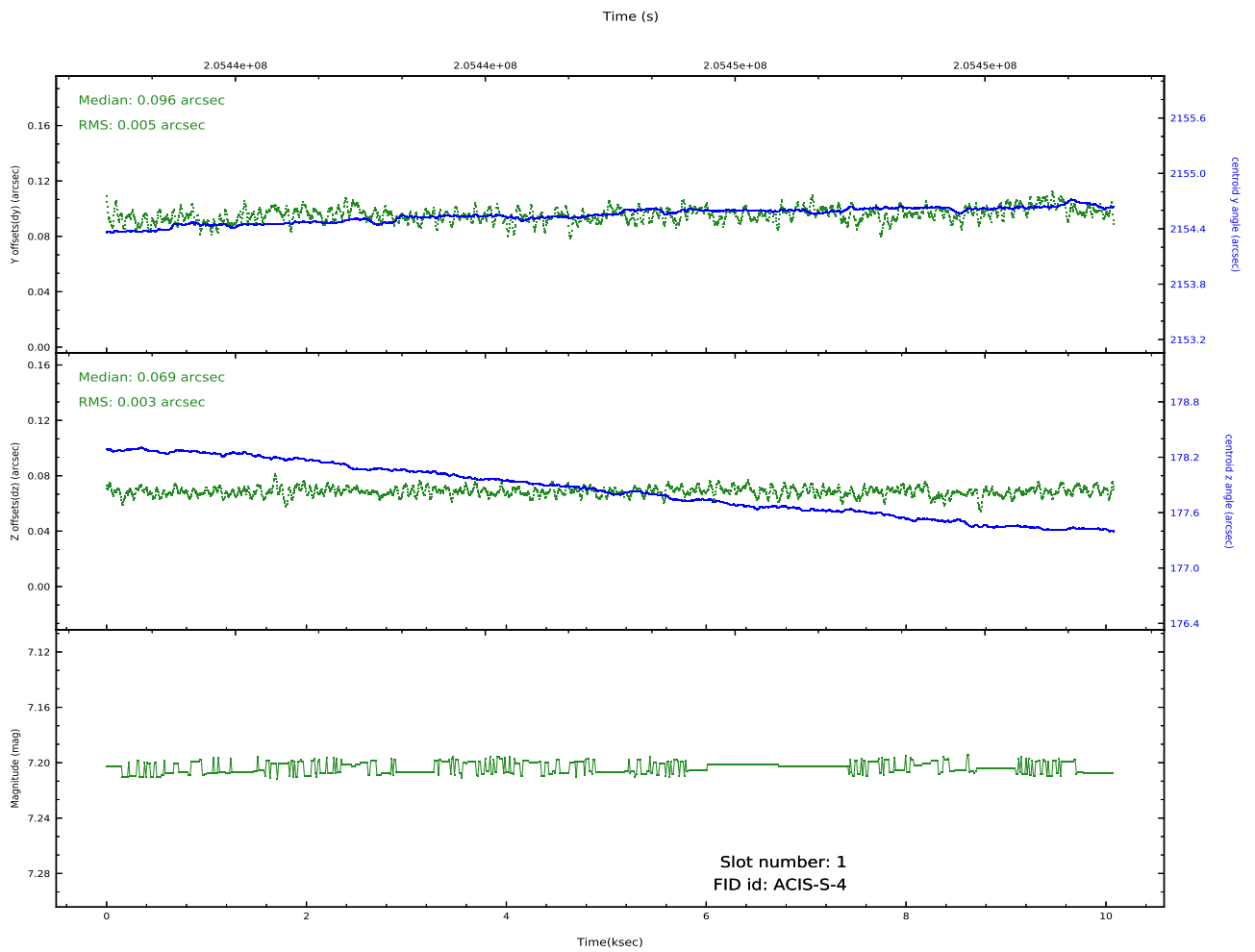
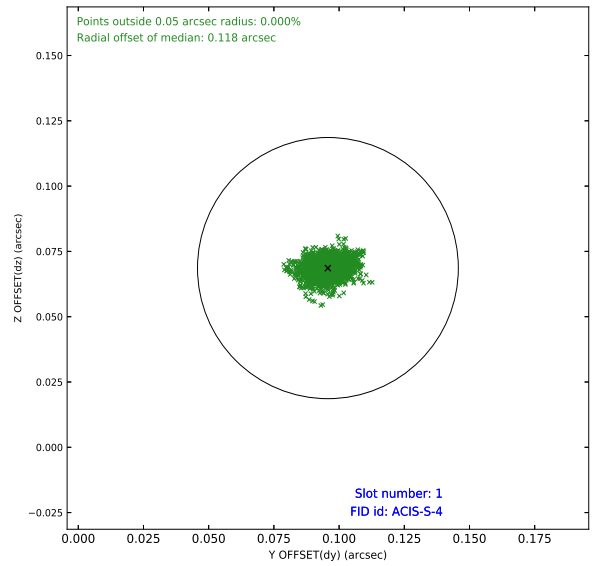
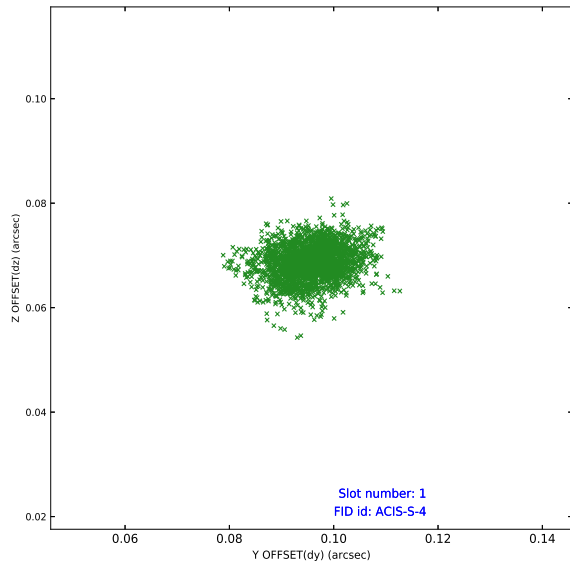


2.5 FID Slots

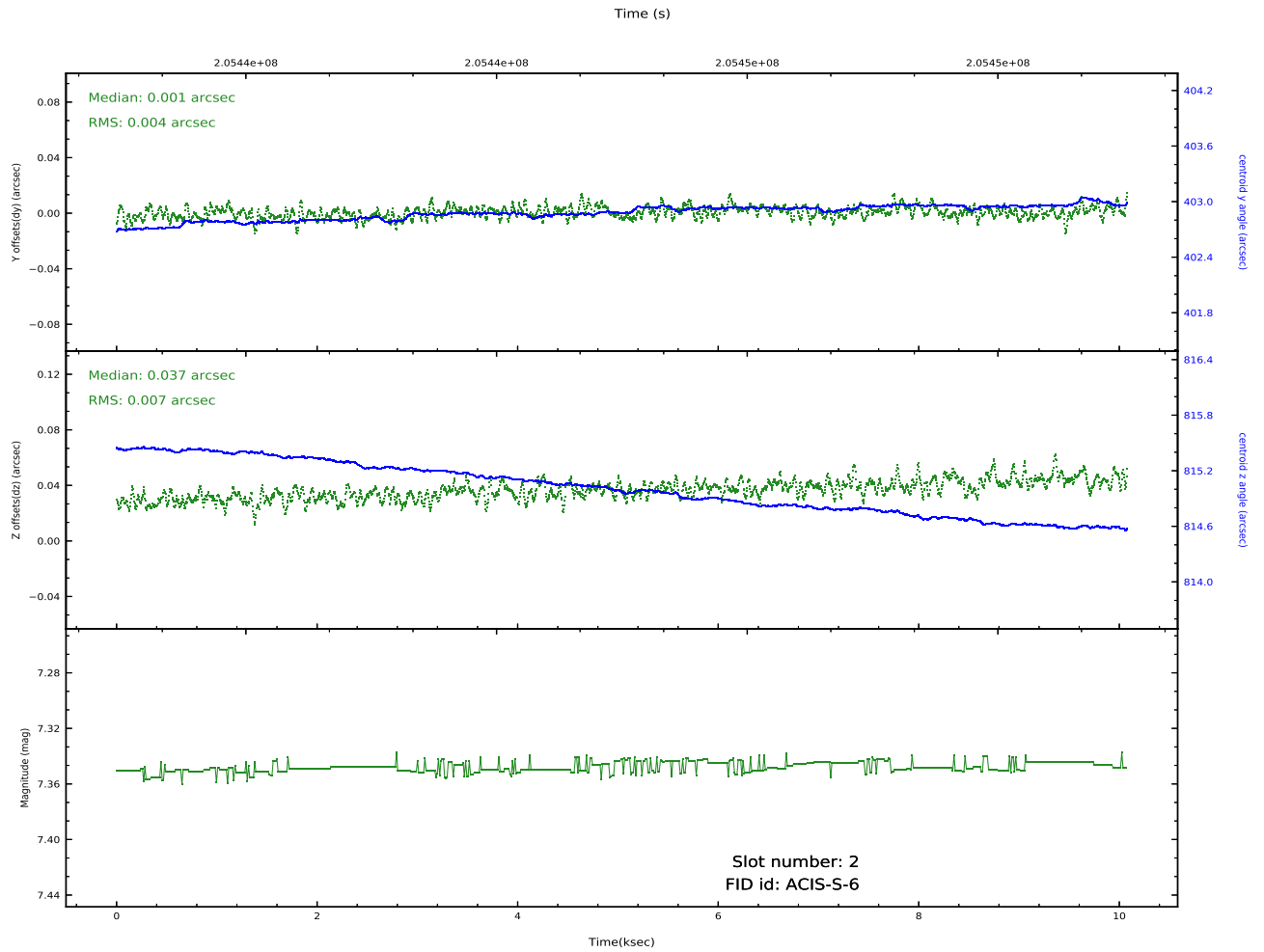
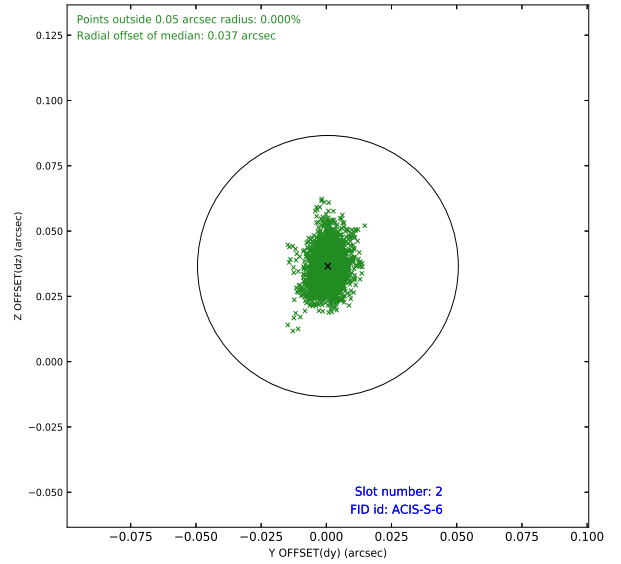
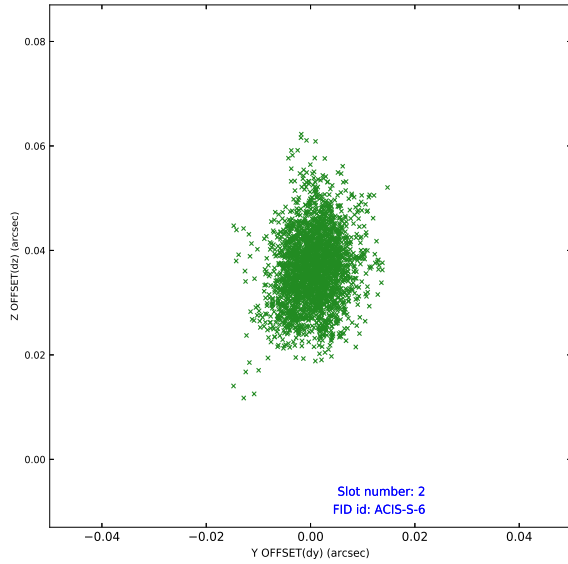
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.09.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.07

A.2 Comments