

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 4946 - L2 Version 4
Chandra X-Ray Center

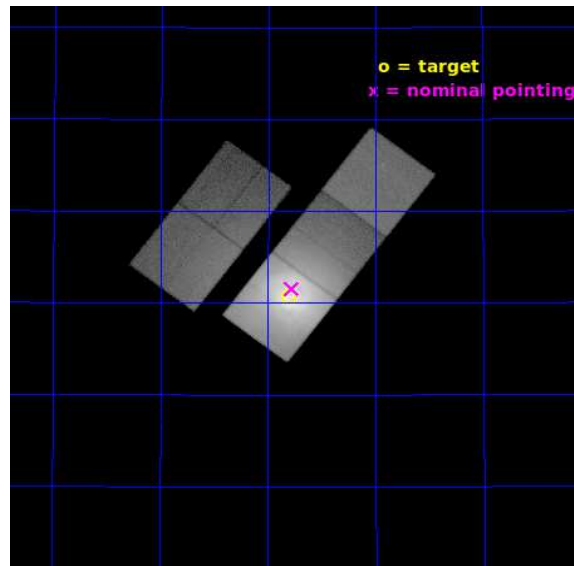
L2 Processing Date : Oct 2 2020

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1 Front

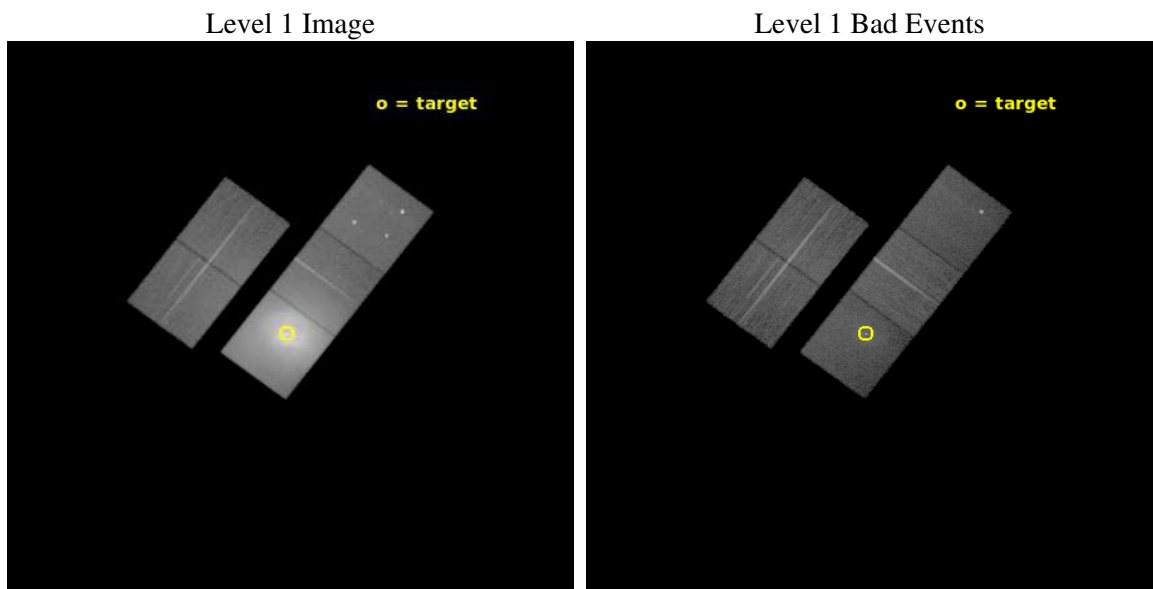
seq_num	800397	Sequence number
obs_id	4946	Observation id
title	A Megasecond Image of the Core of the Perseus Cluster	Proposal tit
observer	Andrew Fabian	Principal investigator
object	Abell 426	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	49.950833	Observer's specified target RA [deg]
dec_targ	41.511722	Observer's specified target Dec [deg]
ra_nom	49.944472402379	Nominal RA [deg]
dec_nom	41.525994393081	Nominal Dec [deg]
roll_nom	127.1703497732	Nominal Roll [deg]
revision	4	Processing version of data
ontime	23975.399953872	Sum of GTIs [s]
liveltime	23662.143703042	Livetime [s]
ontime2	23975.399953872	Sum of GTIs [s]
ontime3	23975.399953872	Sum of GTIs [s]
ontime5	23975.399953872	Sum of GTIs [s]
ontime6	23972.258973628	Sum of GTIs [s]
ontime7	23975.399953872	Sum of GTIs [s]
l2events	2364627	Number of level 2 events



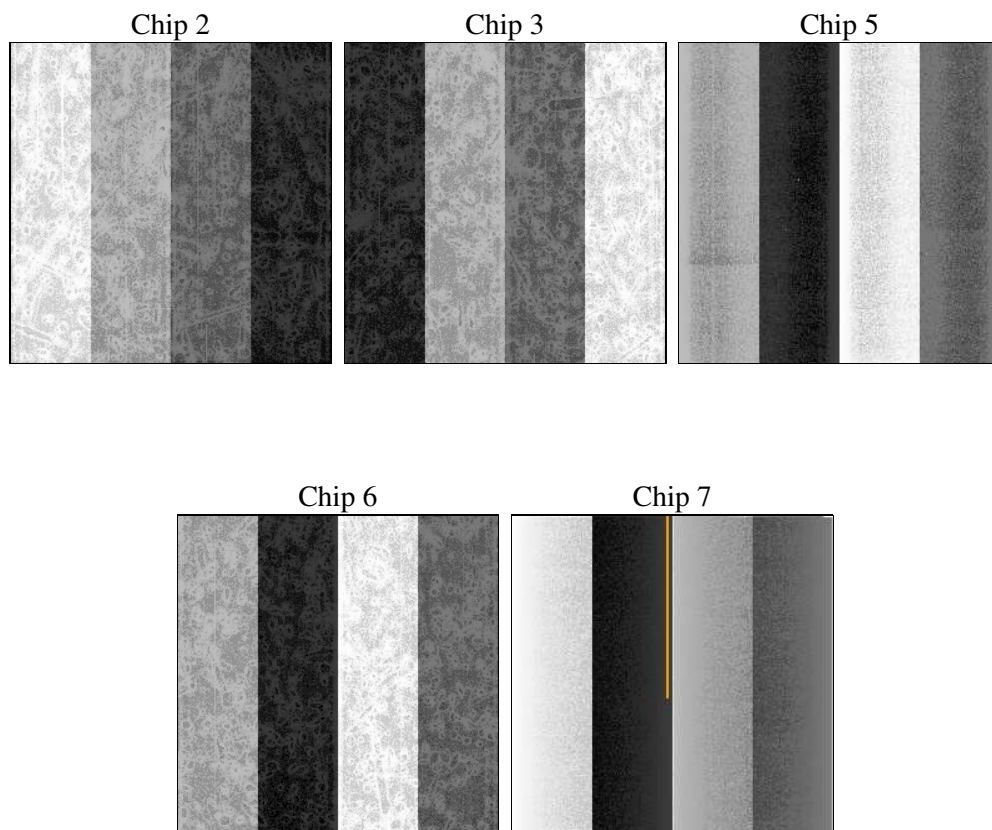
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	119108.290000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	23975.399953872	Sum of GTIs [s]
caldbver	4.9.2	 	ontime2	23975.399953872	Sum of GTIs [s]
date	2020-10-02T21:41:26	Date and time of file creation	ontime3	23975.399953872	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	23975.399953872	Sum of GTIs [s]
			ontime6	23972.258973628	Sum of GTIs [s]
			ontime7	23975.399953872	Sum of GTIs [s]
			l1events	3187656	Number of level 1 events

2.1.4 Events

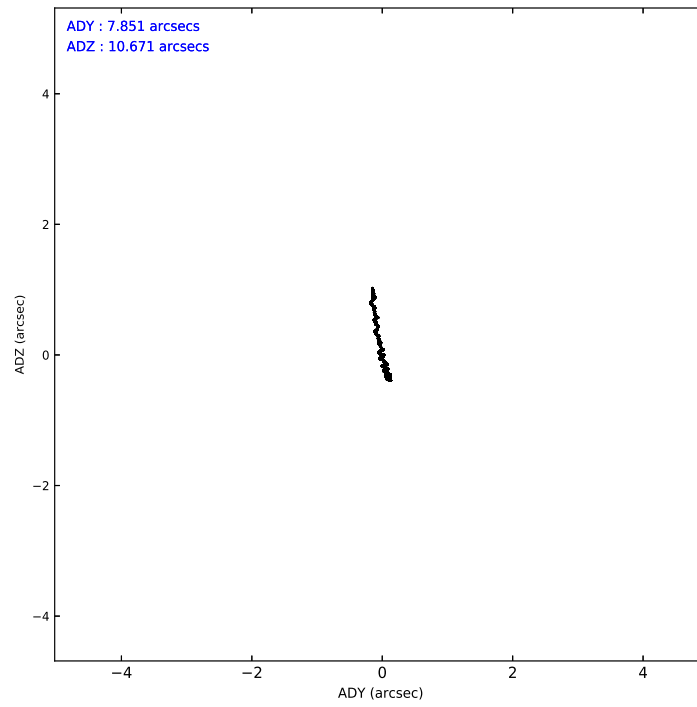
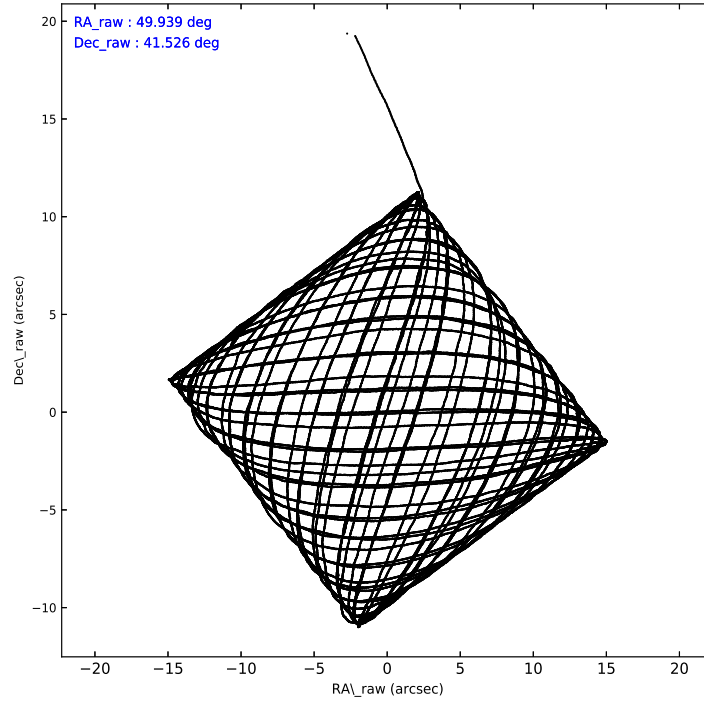
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	232303	263615	276750	417406	1997582
rejected events	163840	155825	128889	167109	150358
rejected %	70%	59%	46%	40%	7%

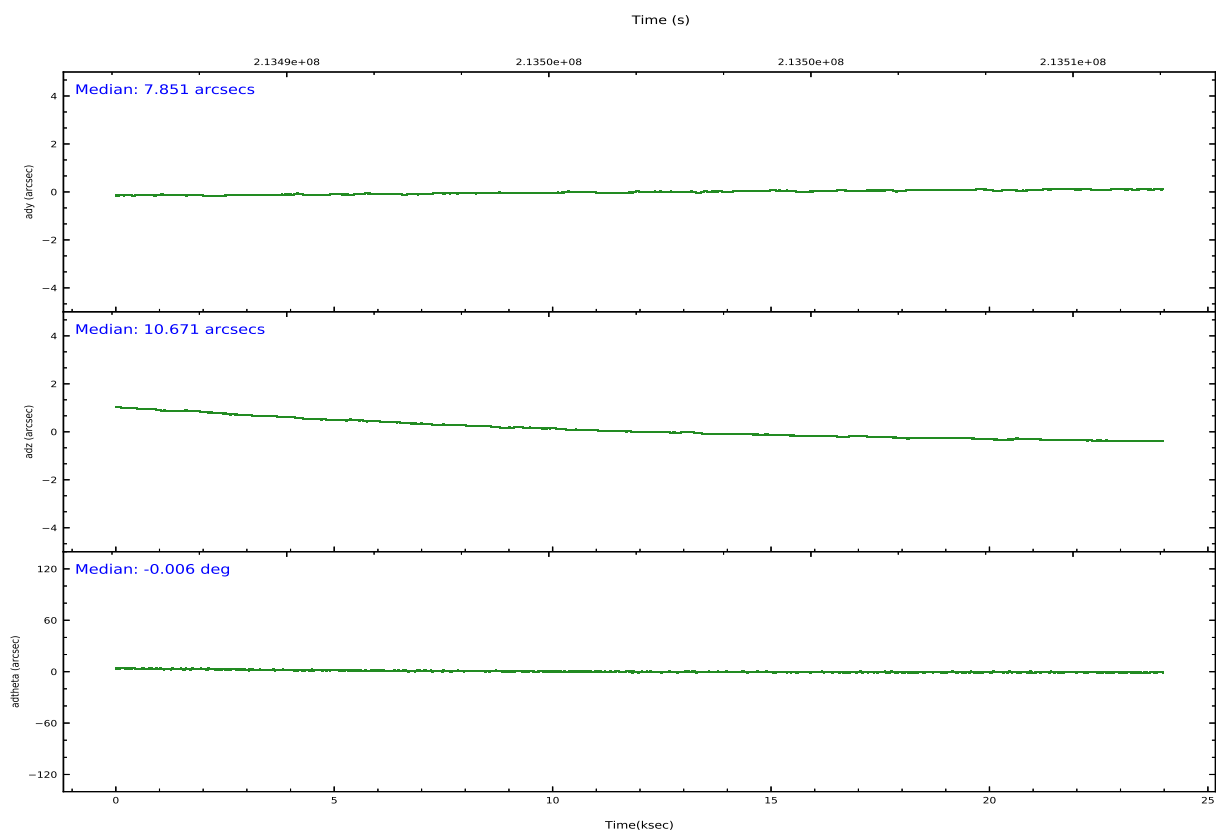
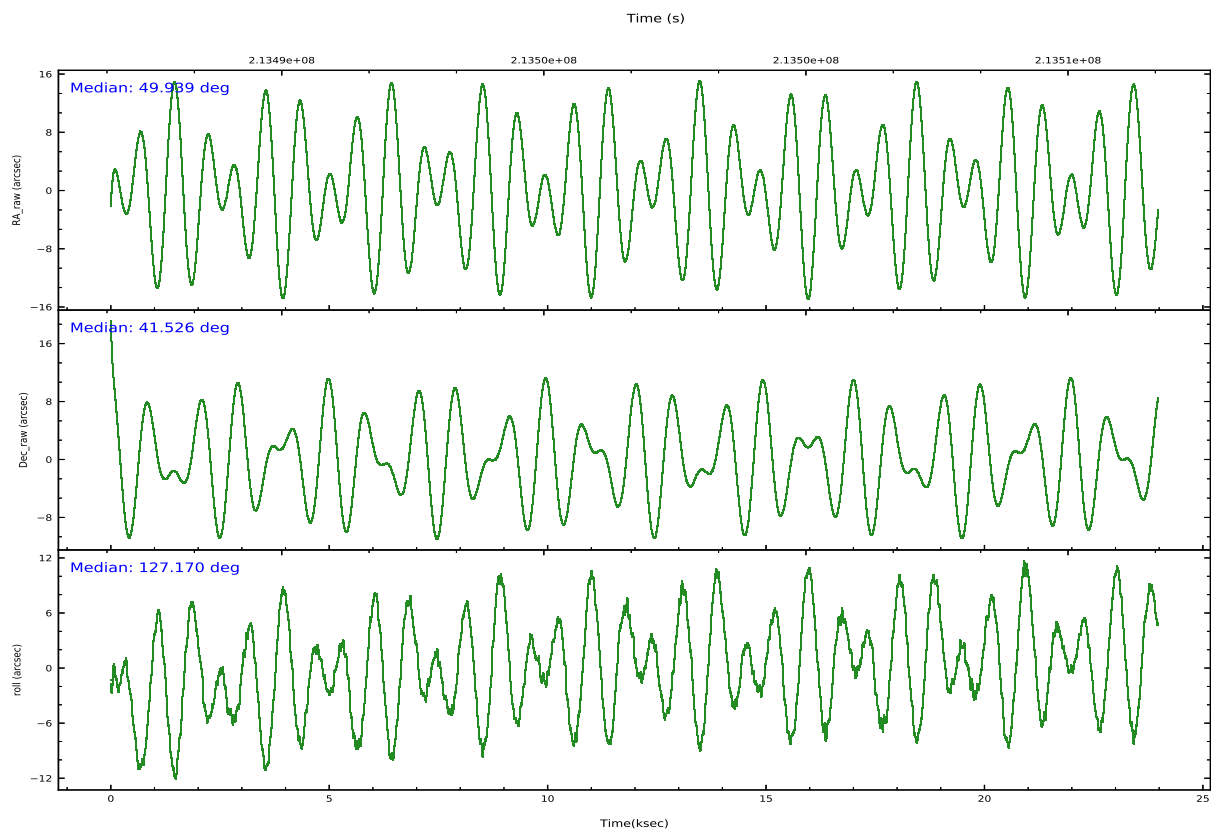
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	50459	82255	29638	196467	507893
	21%	31%	10%	47%	25%
grade 1 events	354	498	474	902	1441
	0%	0%	0%	0%	0%
grade 2 events	9299	12870	46708	28209	491902
	4%	4%	16%	6%	24%
grade 3 events	3567	5071	8254	9324	219574
	1%	1%	2%	2%	10%
grade 4 events	3496	4844	8356	9389	215948
	1%	1%	3%	2%	10%
grade 5 events	5592	6758	19714	7629	32623
	2%	2%	7%	1%	1%
grade 6 events	4465	5463	65018	10621	438248
	1%	2%	23%	2%	21%
grade 7 events	155071	145856	98588	154865	89953
	66%	55%	35%	37%	4%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-23567	ACIS-23567	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	49.973039	49.944472402379	Subarray requested	NONE	NONE
[deg] Pointing Dec	41.515694	41.525994393081	Alternating exposures requested	N	N
[deg] Pointing Roll	126.990499	127.1703497732	[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)	213486231.184000	213484566.153			
Observation start date	2004-10-06T21:42:47	2004-10-06T21:16:06			
[s] Observation end time (MET)	213605339.184000	213510706.21667			
Observation end date	2004-10-08T06:47:55	2004-10-07T04:31:46			
Read mode	TIMED	TIMED			

2.3 Aspect



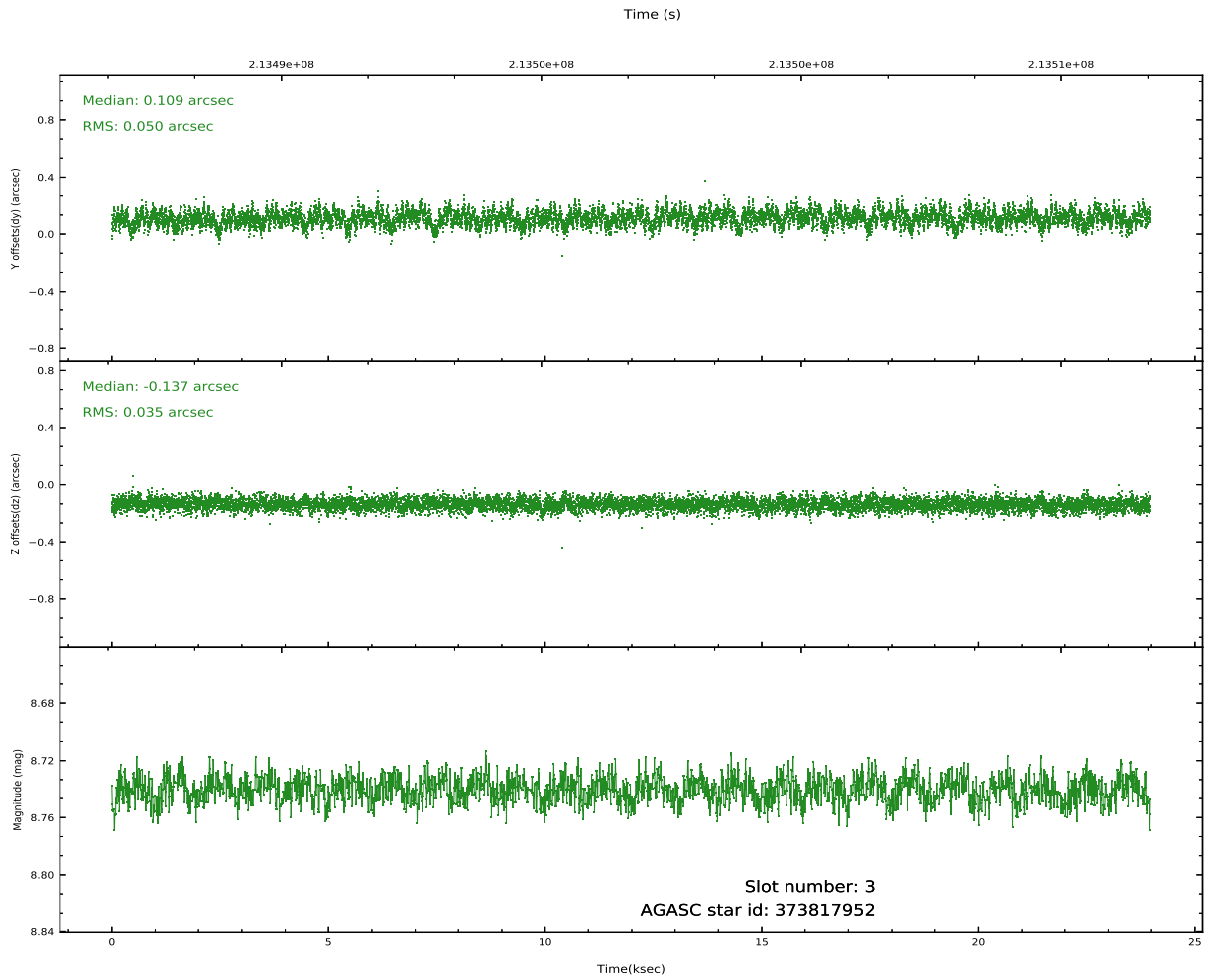
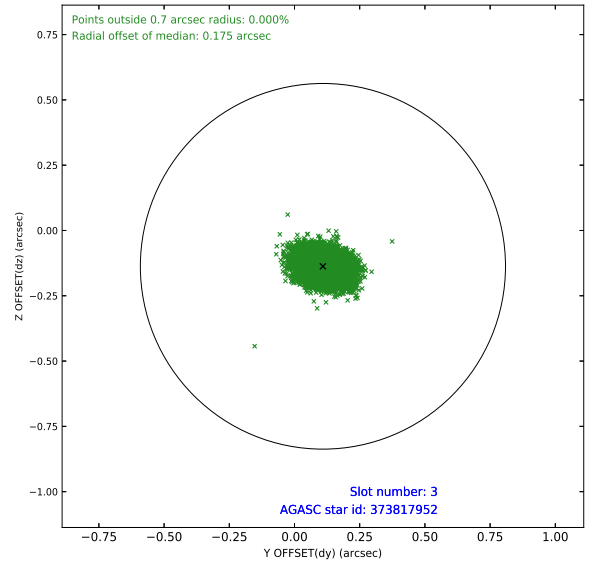
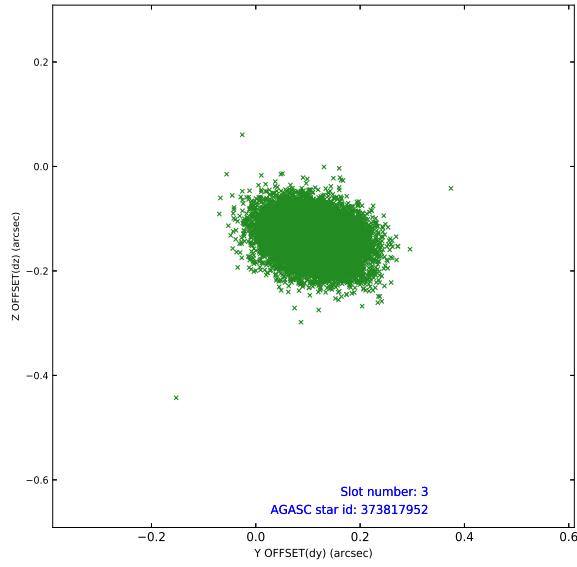


Slot Statistics

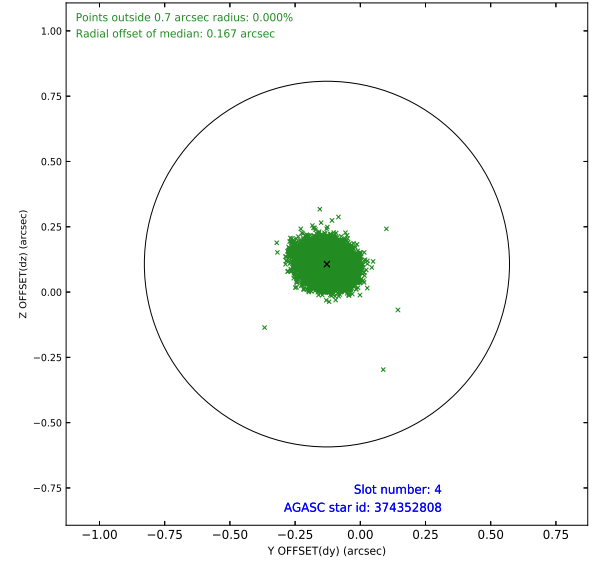
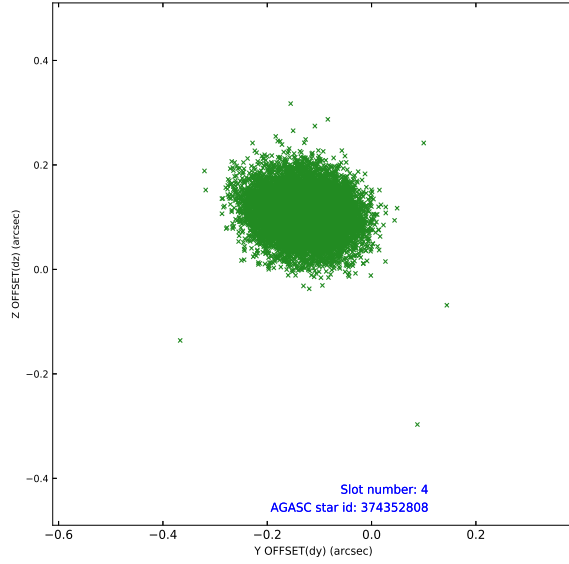
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.19	5848	1.000	0.008	-0.095	0.021	0.036	0.000000	0.000000	935.46	-1727
1	FID		ACIS-S-4	7.21	5847	1.000	0.116	0.067	0.014	0.020	0.000000	0.000000	2153.01	176
2	FID		ACIS-S-5	7.23	5849	1.000	-0.152	0.040	0.011	0.020	0.000000	0.000000	-1813.44	170
3	GUIDE	used	373817952	8.74	11690	1.000	0.109	-0.137	0.064	0.107	49.913424	40.978510	-1447.03	1292
4	GUIDE	used	374352808	8.78	11689	1.000	-0.128	0.107	0.068	0.110	49.969955	42.208621	1997.46	-1493
5	GUIDE	used	374357808	8.68	11693	1.000	-0.176	0.092	0.071	0.113	49.921429	42.176083	1982.03	-1320
6	GUIDE	used	374345008	9.37	11683	1.000	0.118	0.001	0.087	0.139	48.768668	41.619367	2266.36	2351
7	GUIDE	used	375534552	8.20	11692	1.000	0.079	-0.060	0.058	0.093	50.877490	41.206927	-2351.11	-1295

2.4 Star Slots

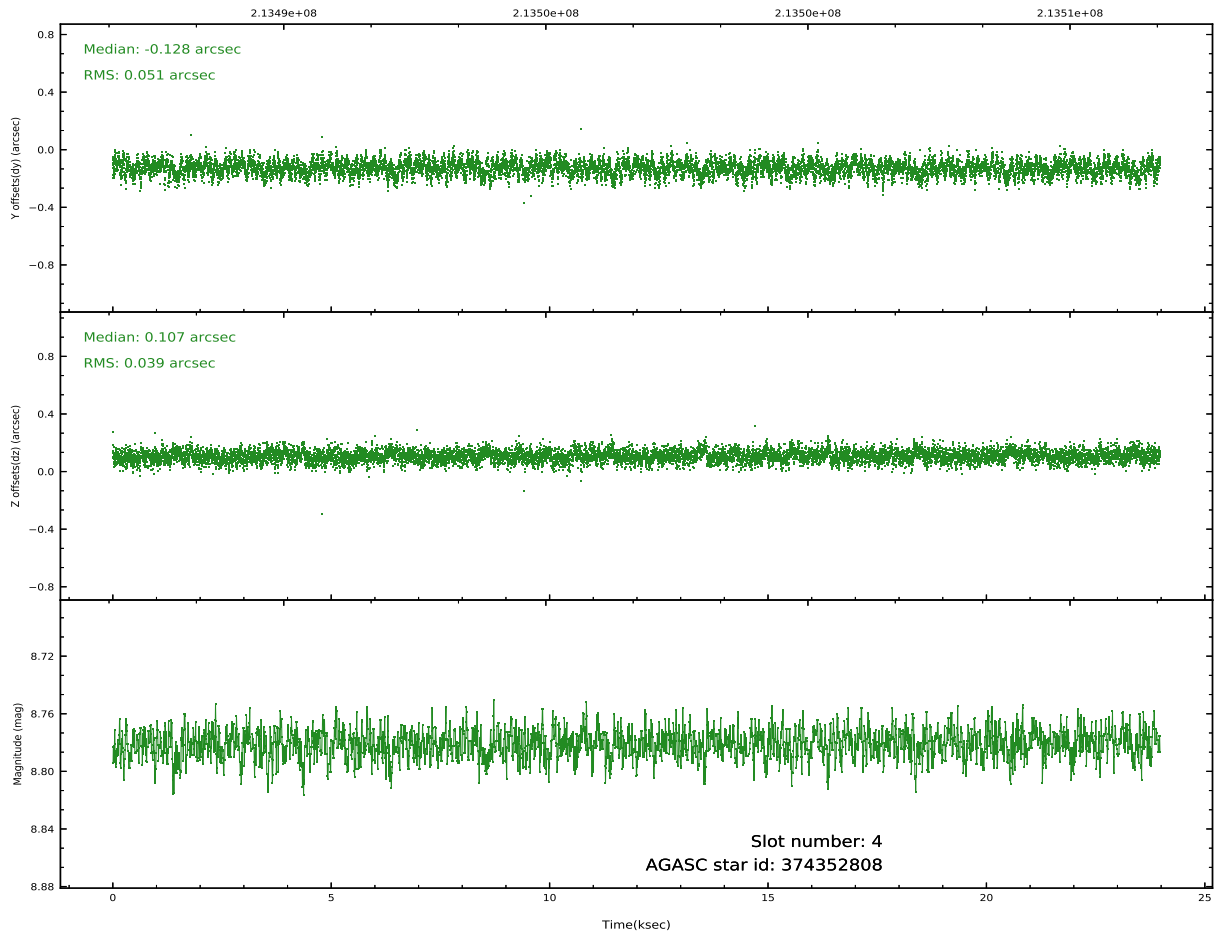
2.4.1 Slot 3



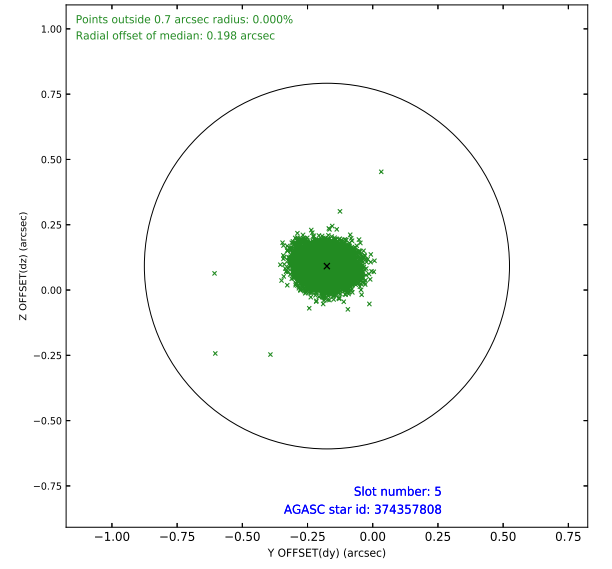
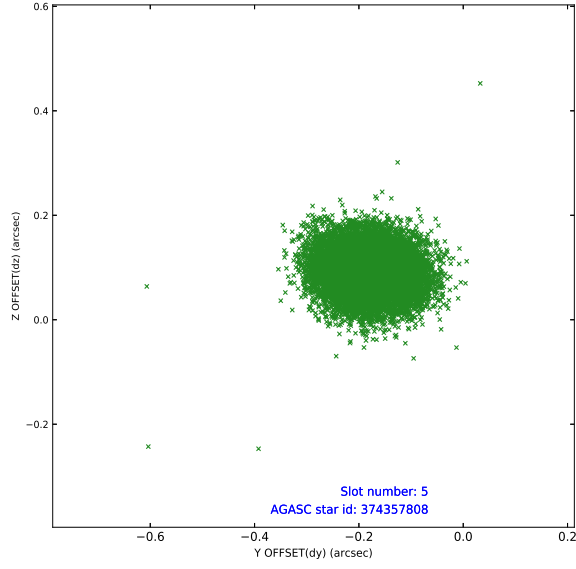
2.4.2 Slot 4



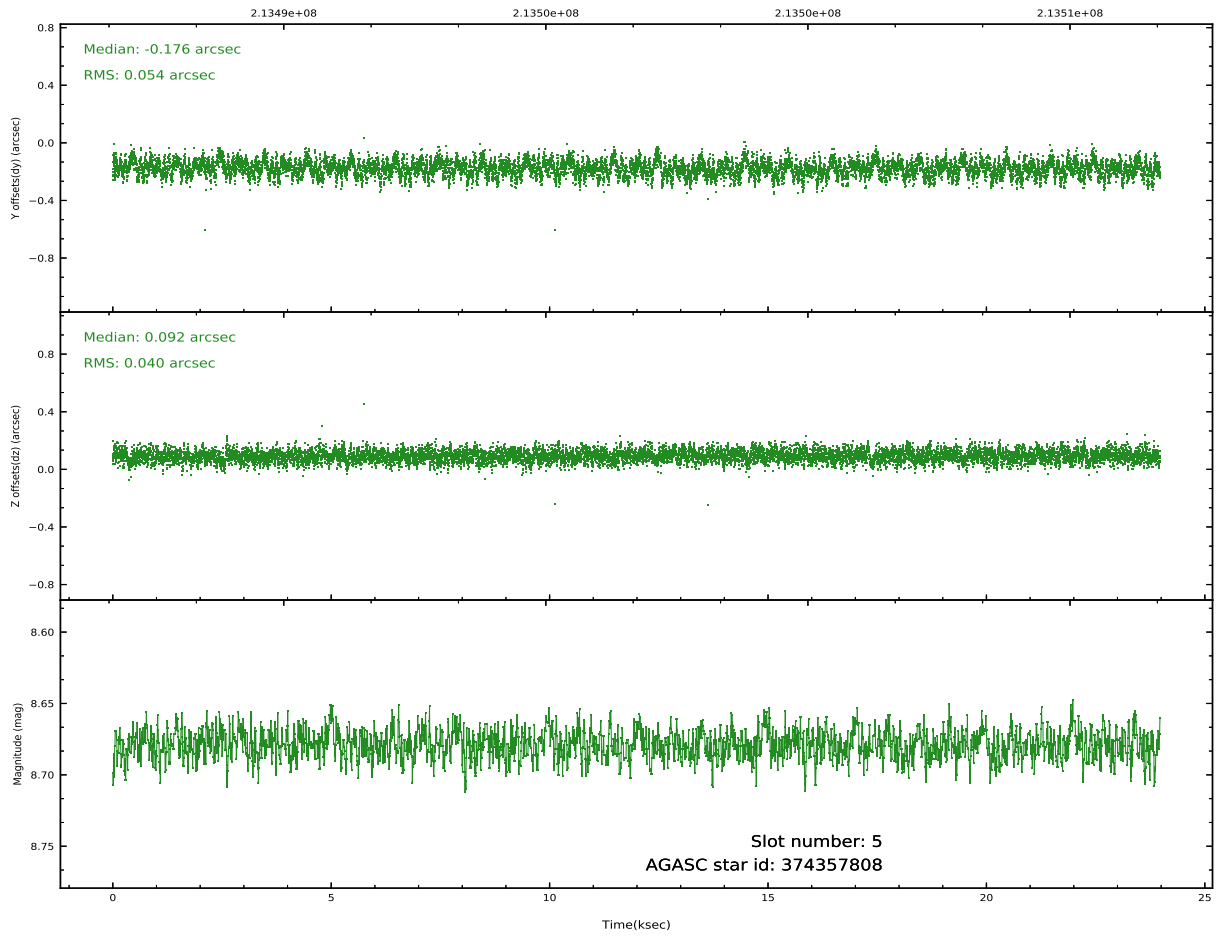
Time (s)



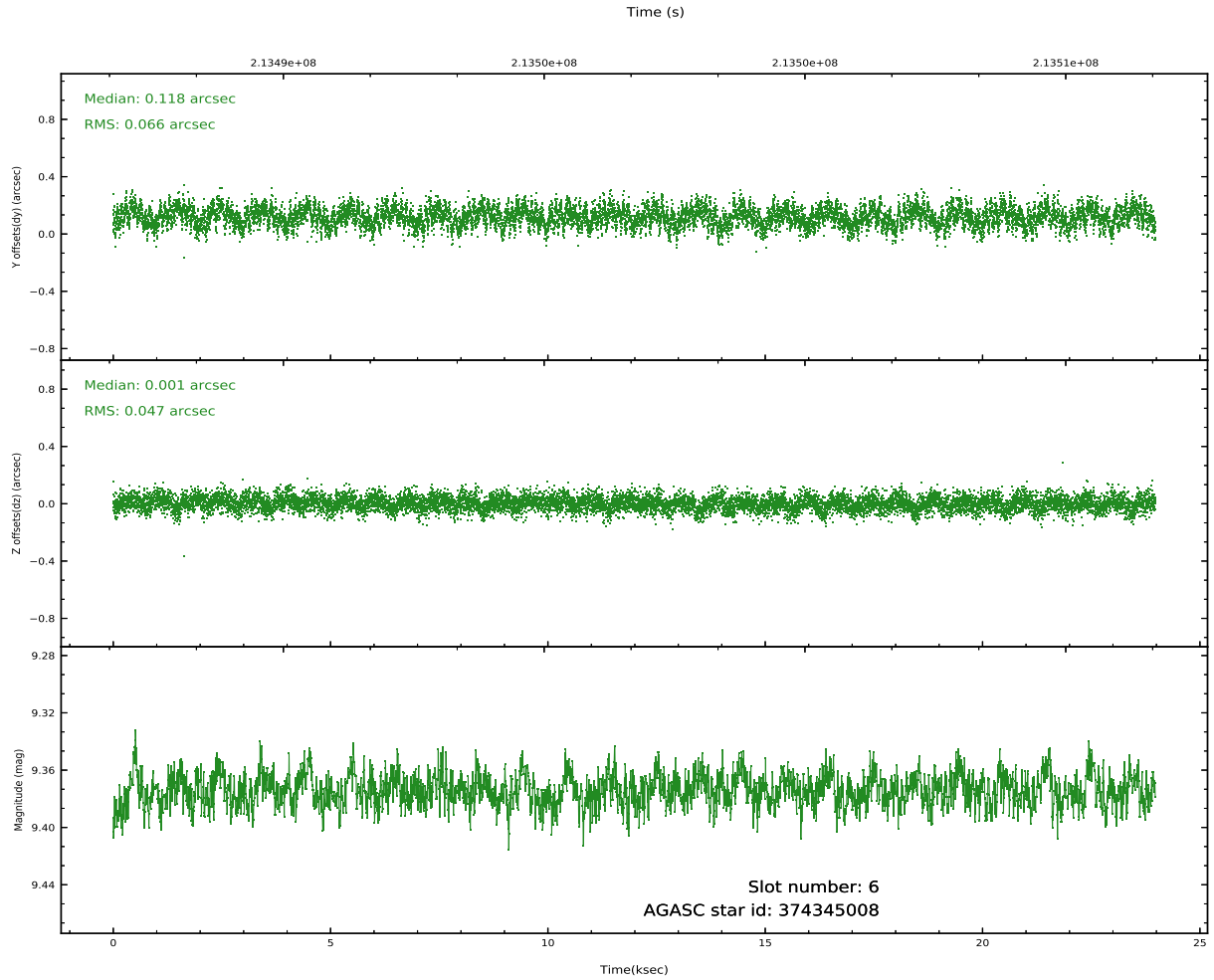
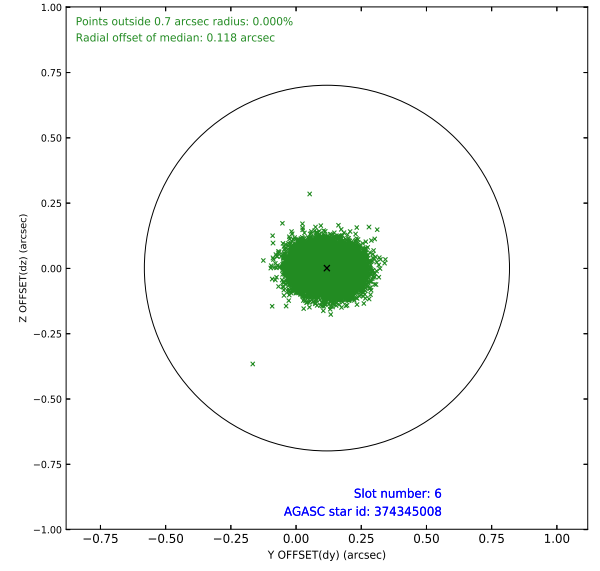
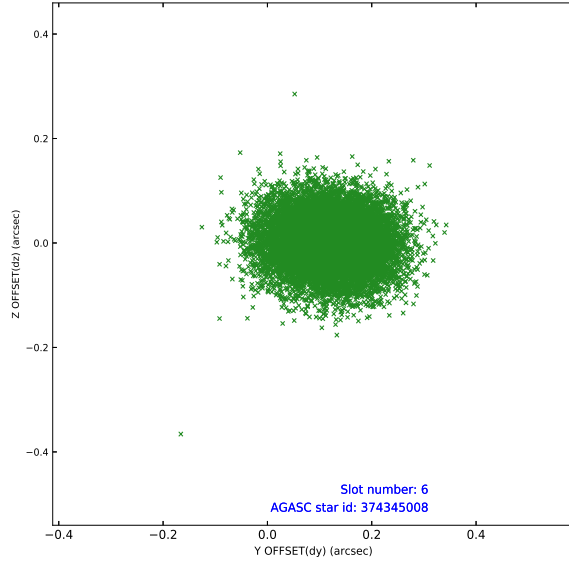
2.4.3 Slot 5



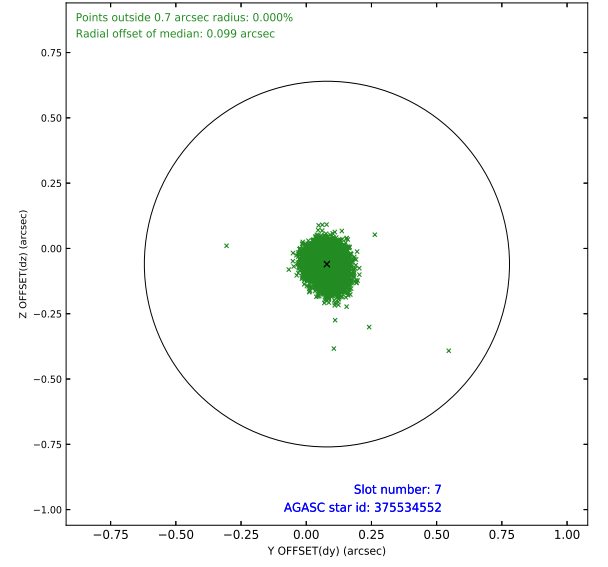
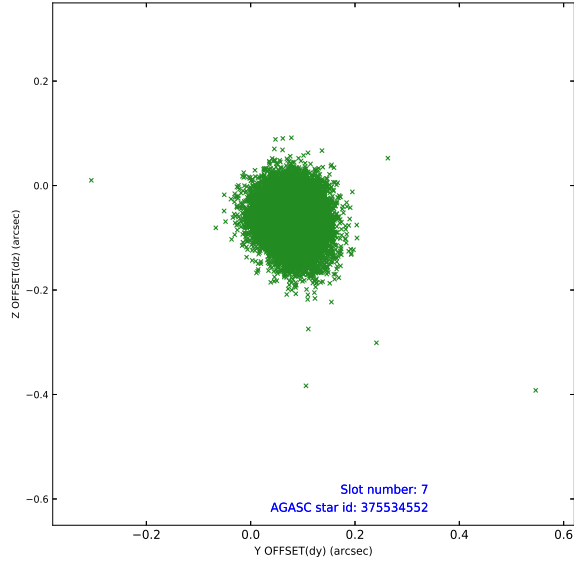
Time (s)



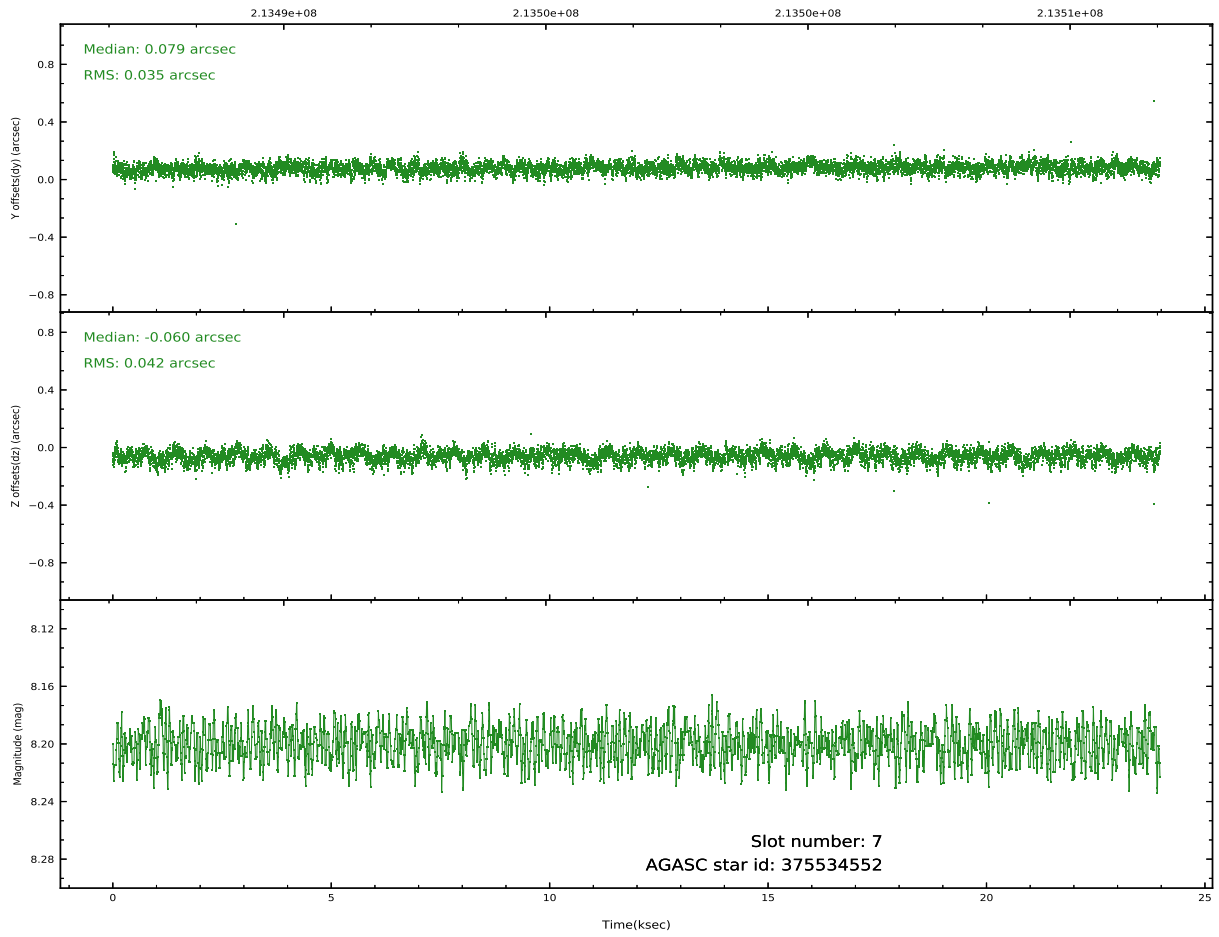
2.4.4 Slot 6



2.4.5 Slot 7

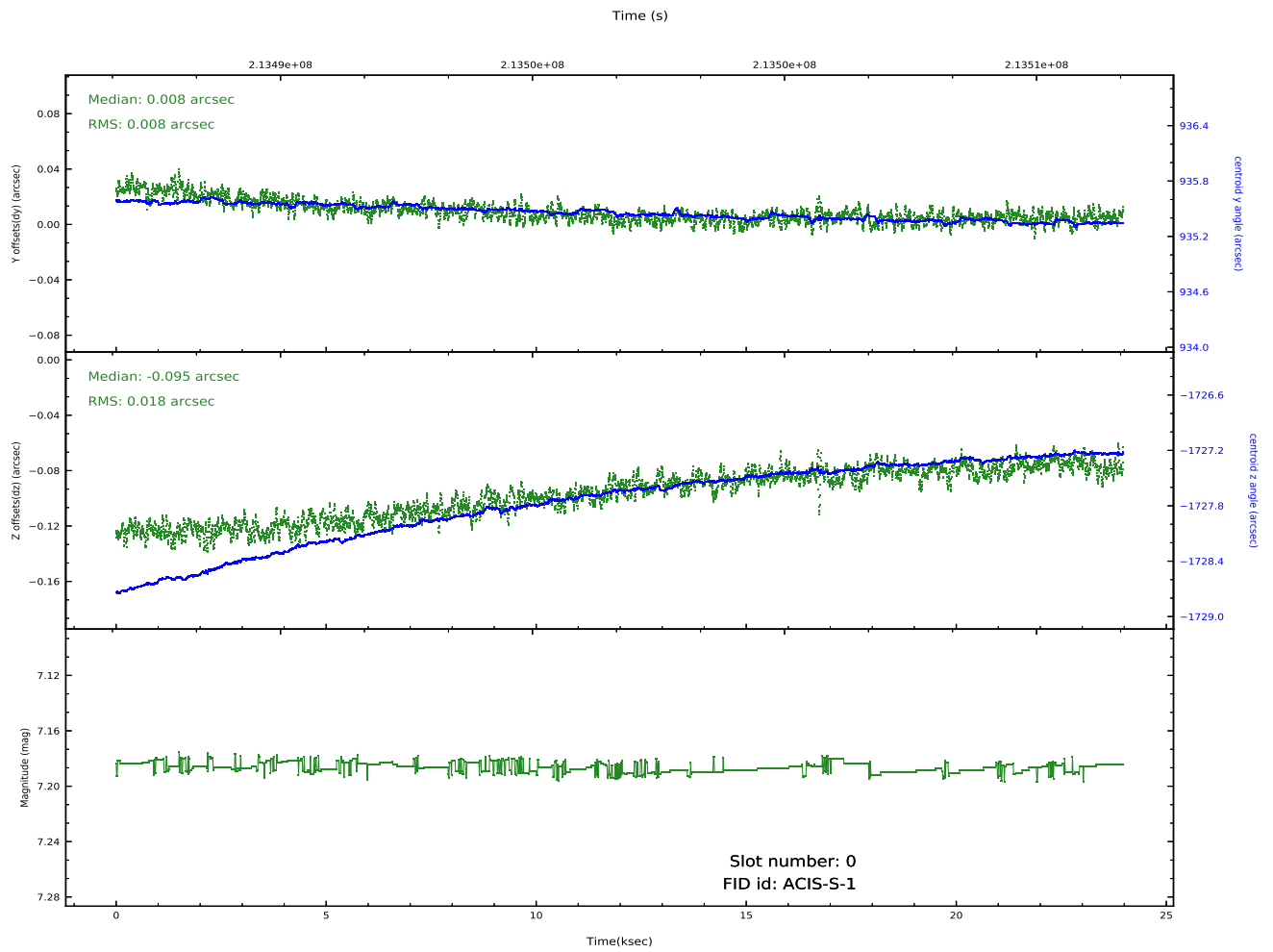
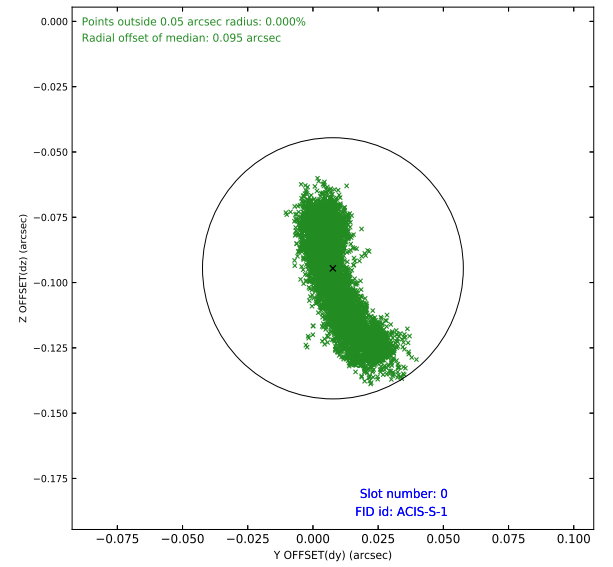
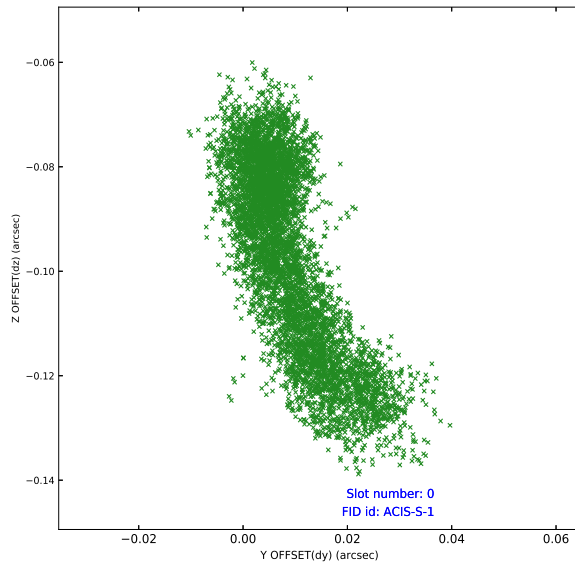


Time (s)

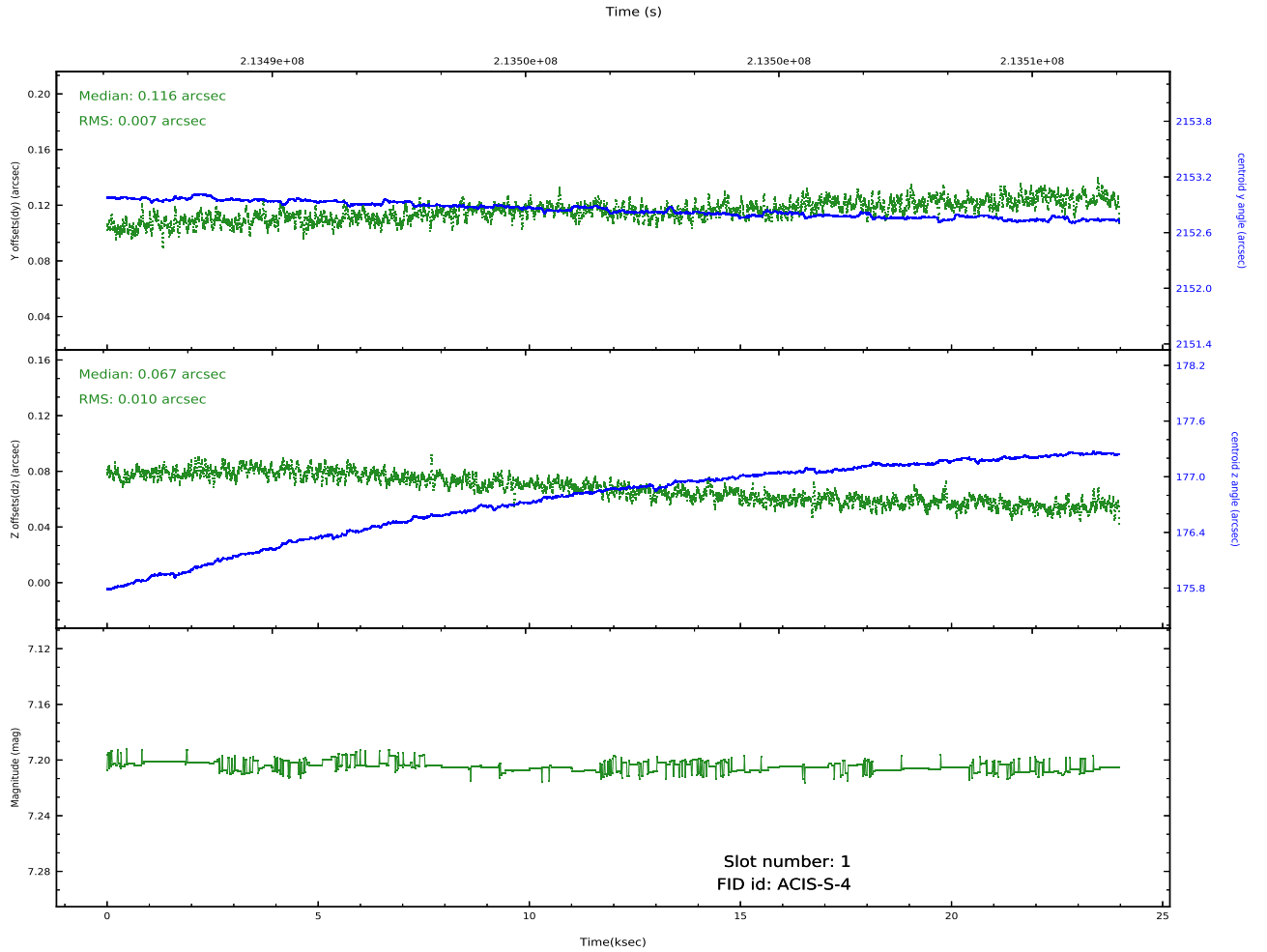
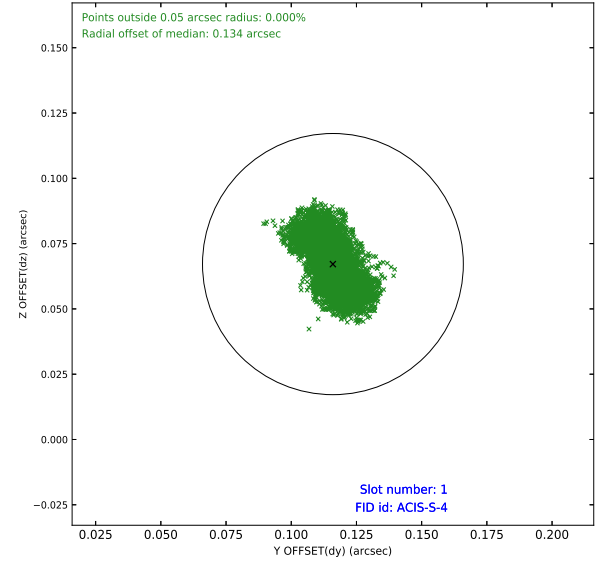
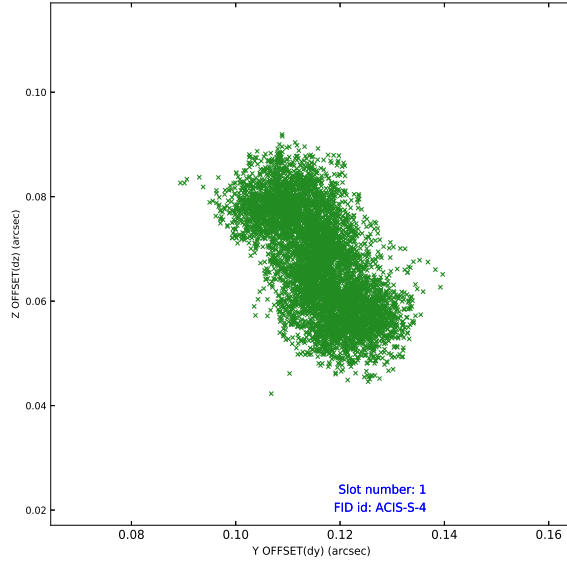


2.5 FID Slots

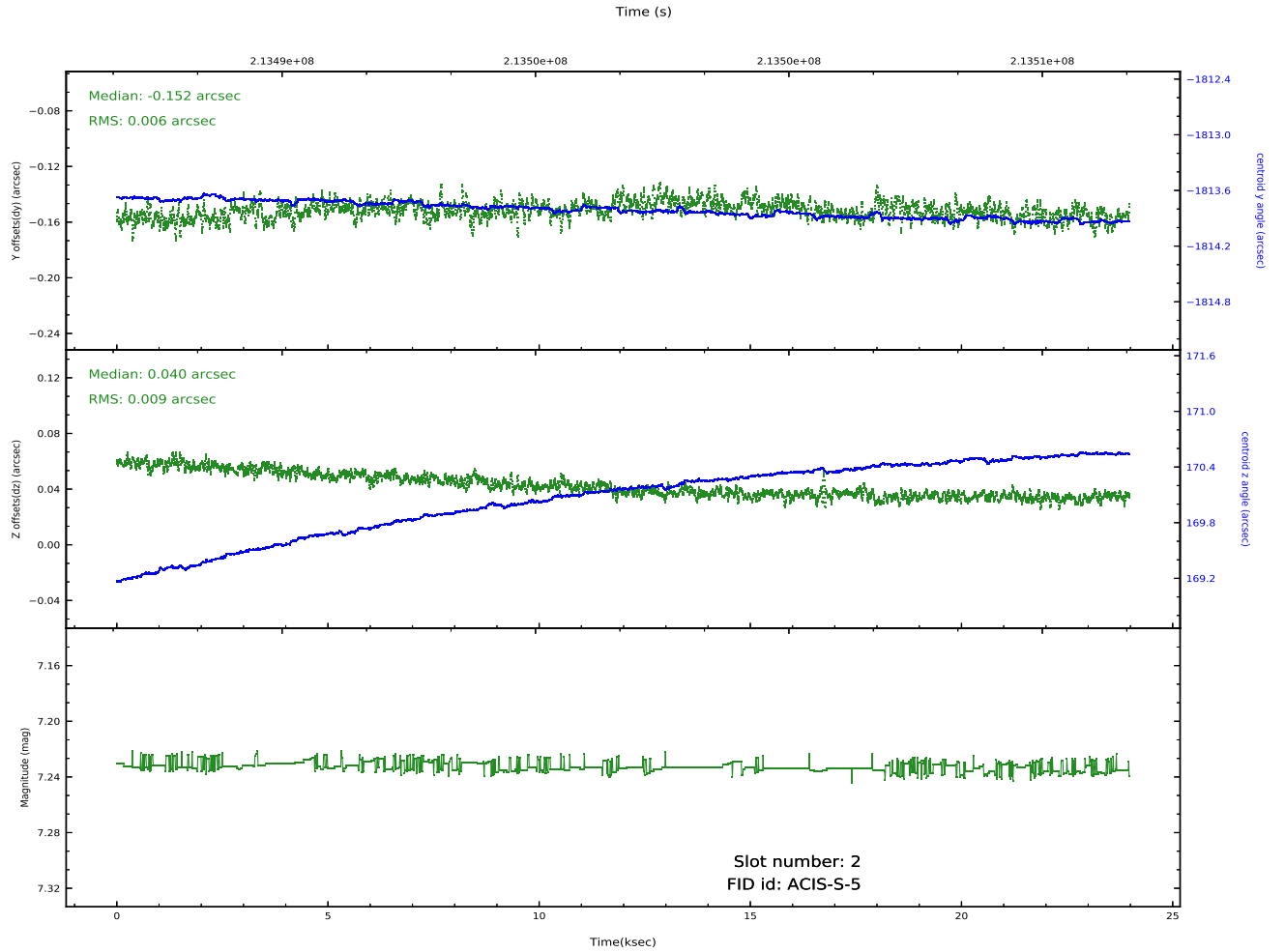
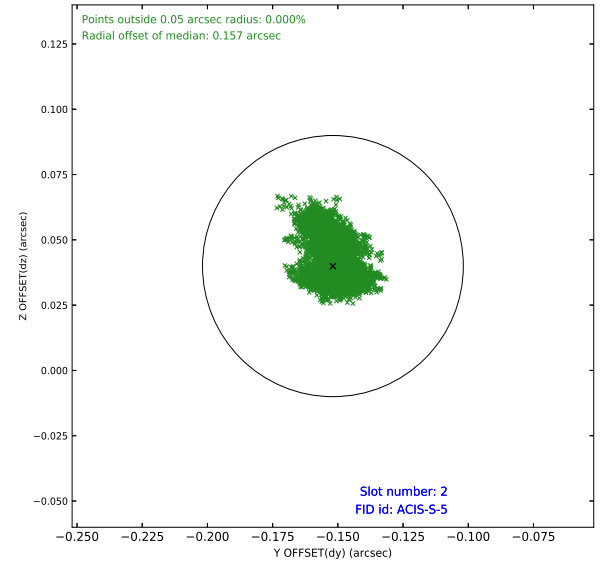
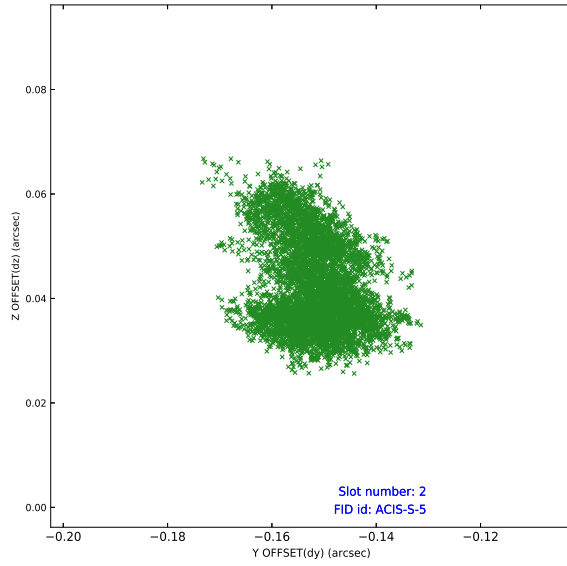
2.5.1 Slot 0



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)	2020.10.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.975

A.2 Comments