

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20775 - L2 Version 4
Chandra X-Ray Center

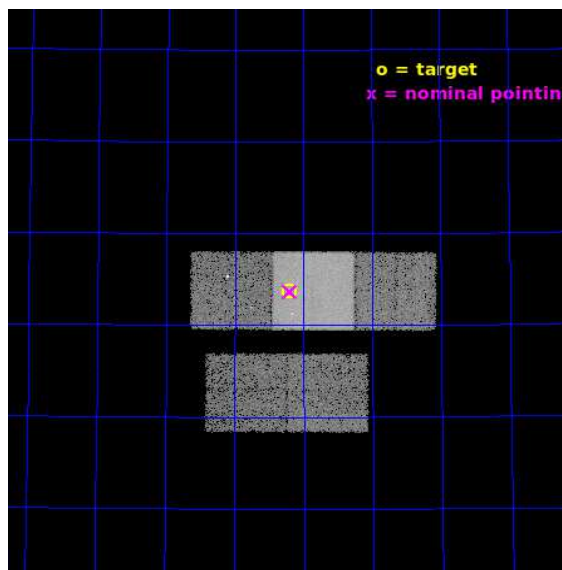
L2 Processing Date : Oct 27 2020

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1 Front

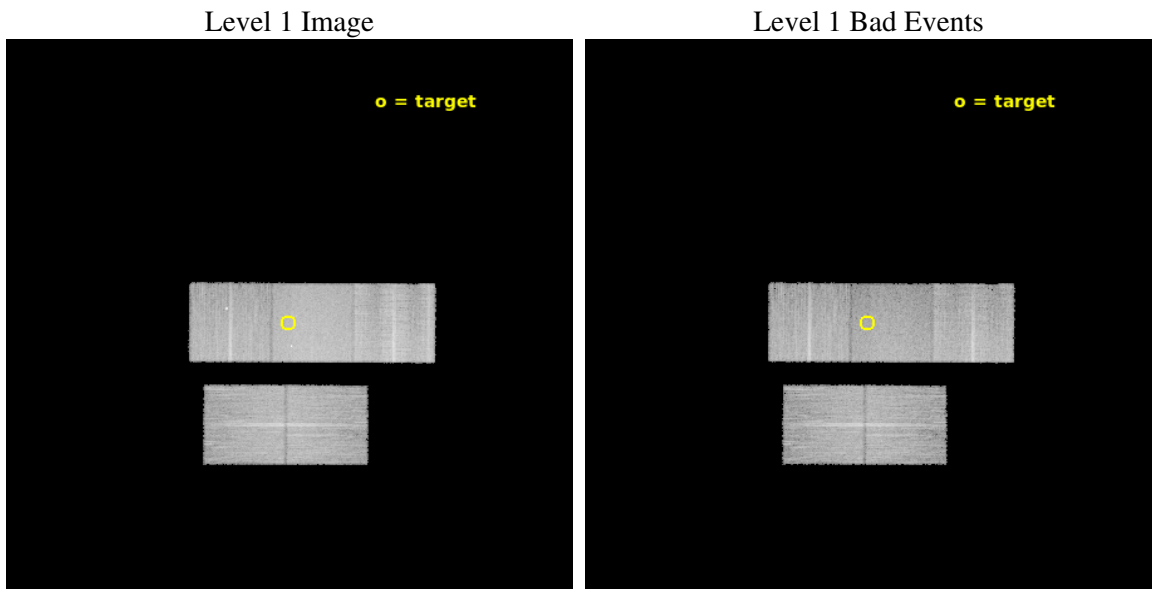
seq_num	703640	Sequence number
obs_id	20775	Observation id
title	A Chandra Survey of Nearby Optical AGN Candidates in Dwarf Galaxies	
observer	Ralph Kraft	Principal investigator
object	UGC 06192	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	167.301667	Observer's specified target RA [deg]
dec_targ	61.396306	Observer's specified target Dec [deg]
ra_nom	167.29993215735	Nominal RA [deg]
dec_nom	61.394421048482	Nominal Dec [deg]
roll_nom	0.27654787913626	Nominal Roll [deg]
revision	4	Processing version of data
ontime	16057.079006195	Sum of GTIs [s]
livetime	15847.28144793	Livetime [s]
ontime2	16053.773875952	Sum of GTIs [s]
ontime3	16056.996926188	Sum of GTIs [s]
ontime6	16057.037966251	Sum of GTIs [s]
ontime7	16057.079006195	Sum of GTIs [s]
ontime8	16056.955886245	Sum of GTIs [s]
l2events	117012	Number of level 2 events



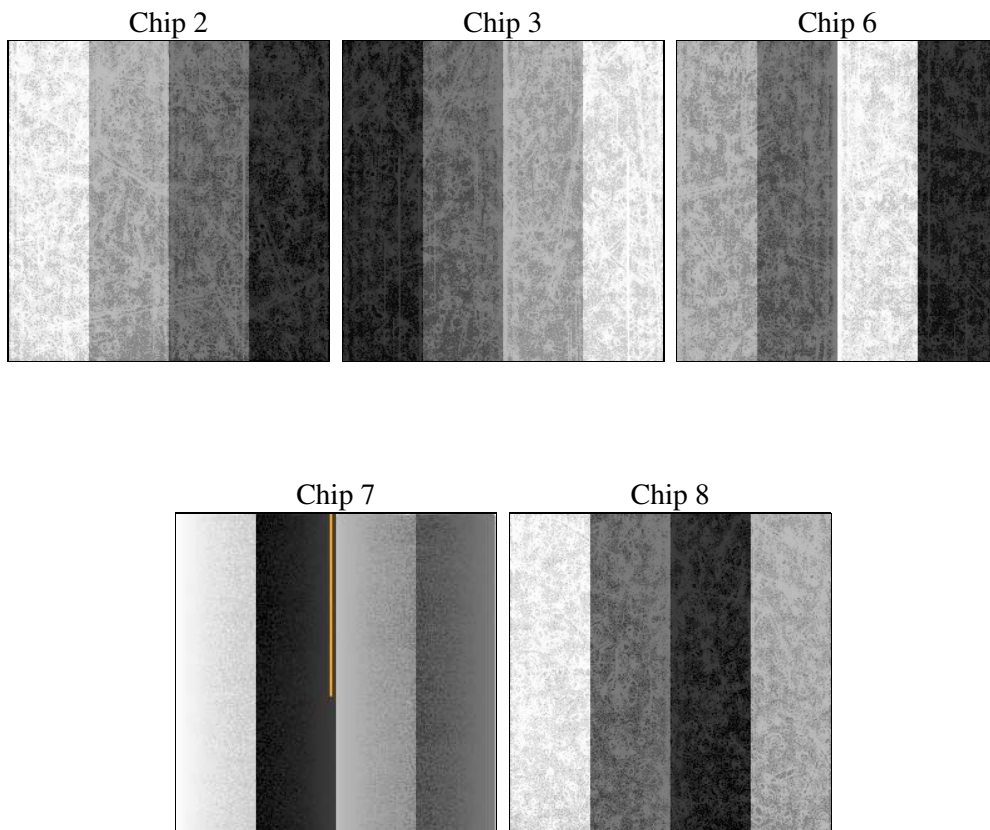
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	16000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	16057.079006195	Sum of GTIs [s]
caldbver	4.9.3	 	ontime2	16053.773875952	Sum of GTIs [s]
date	2020-10-28T00:25:24	Date and time of file creation	ontime3	16056.996926188	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	16057.037966251	Sum of GTIs [s]
			ontime7	16057.079006195	Sum of GTIs [s]
			ontime8	16056.955886245	Sum of GTIs [s]
			l1events	679912	Number of level 1 events

2.1.4 Events

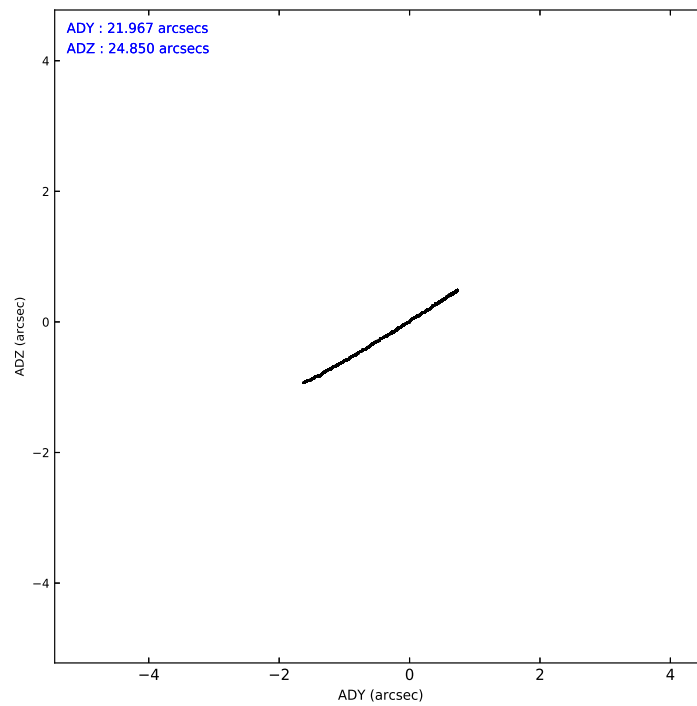
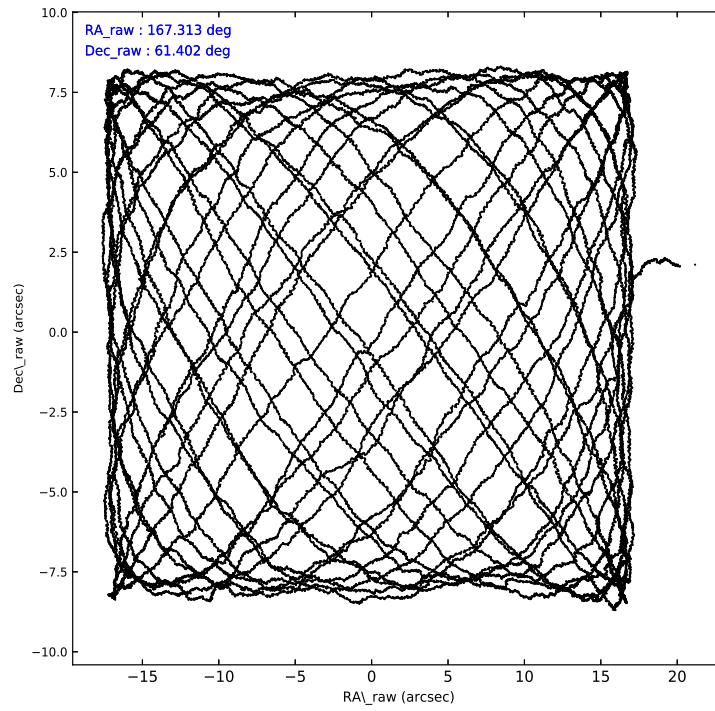
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	118077	118325	124117	156949	162444
rejected events	105048	104894	109341	88148	117210
rejected %	88%	88%	88%	56%	72%

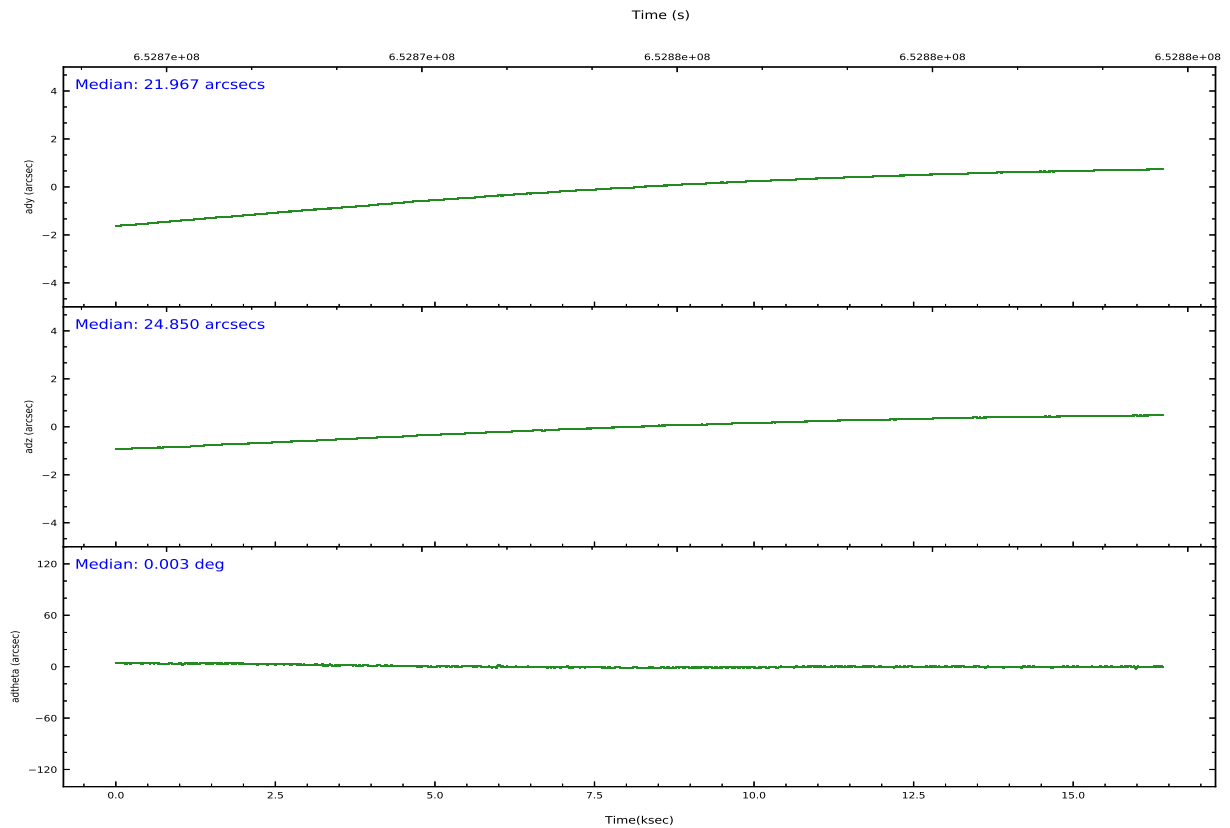
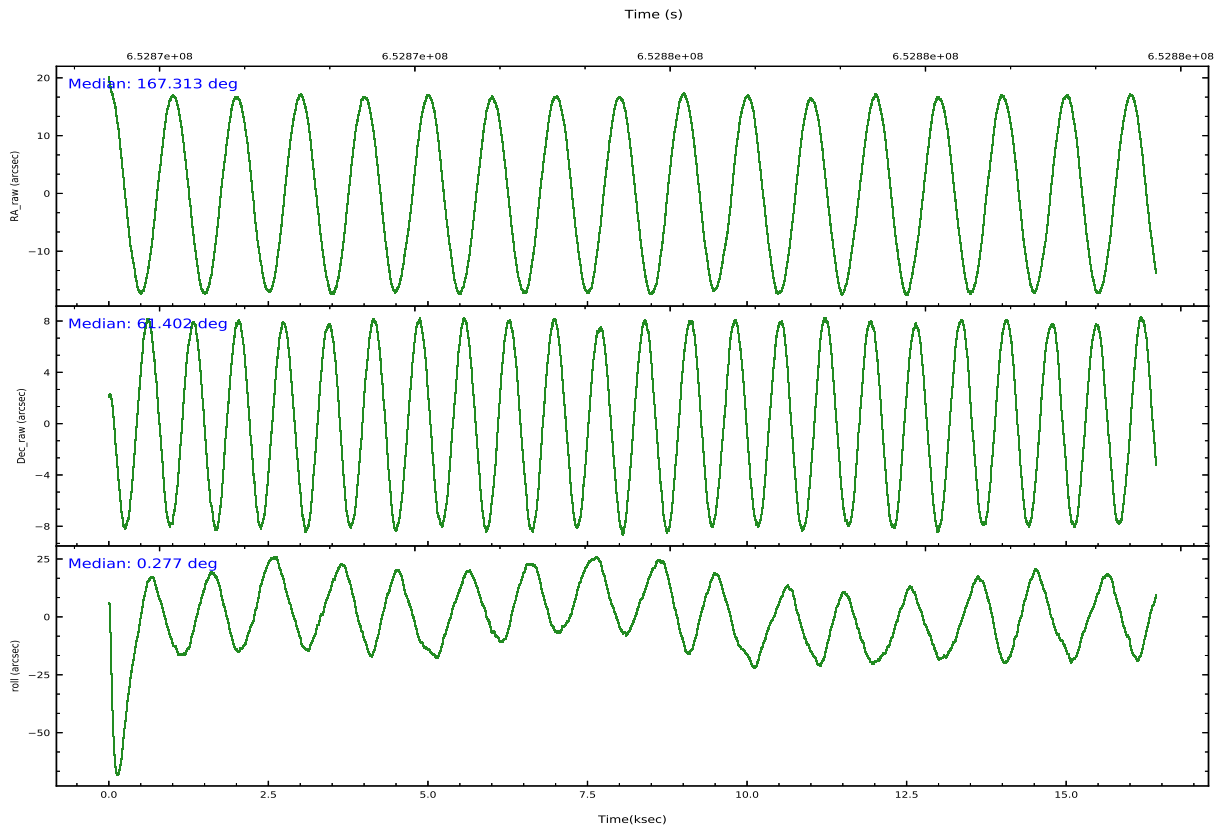
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	4532	5103	5249	5898	13315
	3%	4%	4%	3%	8%
grade 1 events	61	77	59	228	126
	0%	0%	0%	0%	0%
grade 2 events	3327	3032	3452	14861	10773
	2%	2%	2%	9%	6%
grade 3 events	1233	1305	1404	5516	4884
	1%	1%	1%	3%	3%
grade 4 events	1374	1291	1372	5358	4484
	1%	1%	1%	3%	2%
grade 5 events	4501	5788	5763	15504	8525
	3%	4%	4%	9%	5%
grade 6 events	2566	2705	3304	37195	11785
	2%	2%	2%	23%	7%
grade 7 events	100483	99024	103514	72389	108552
	85%	83%	83%	46%	66%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	167.263979	167.29993215735	CCD I2 on	O1	Y
[deg] Pointing Dec	61.387378	61.394421048482	CCD I3 on	Y	Y
[deg] Pointing Roll	0.174371	0.27654787913626	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	652867615.184000	652866560.51017	CCD S5 on	N	N
Observation start date	2018-09-09T08:05:46	2018-09-09T07:49:20	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	652883615.184000	652884652.2737401	On-chip summing requested	N	N
Observation end date	2018-09-09T12:32:26	2018-09-09T12:50:52	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





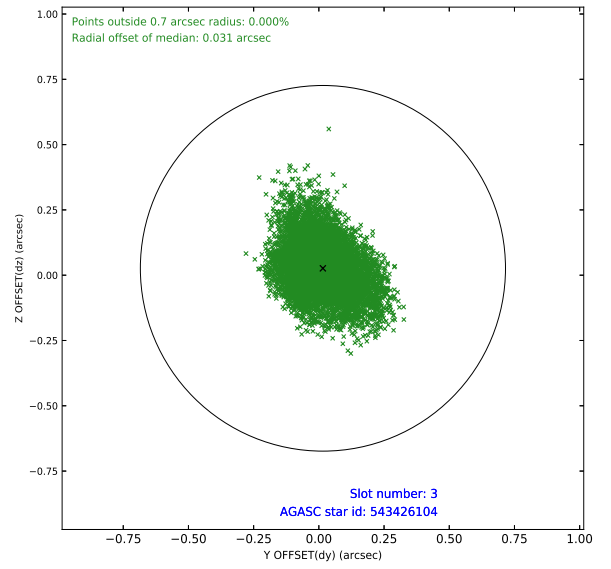
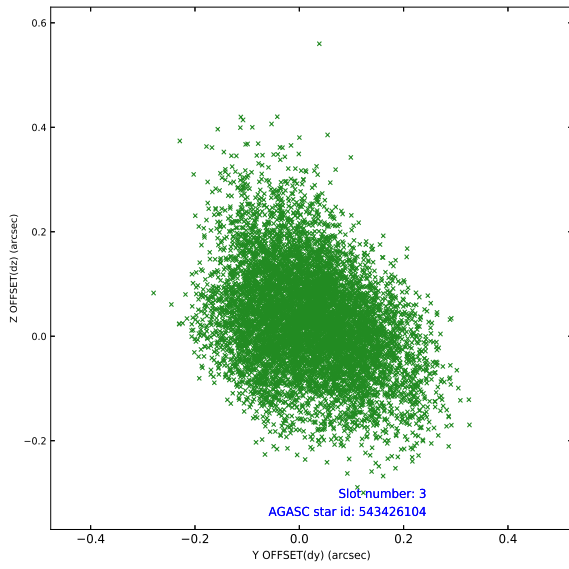
Slot Statistics

pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	6.97	4003	1.000	0.139	-0.014	0.027	0.064	0.000000	0.000000	-775.05	-1746
1	FID		ACIS-S-4	7.06	4003	1.000	0.050	-0.063	0.014	0.033	0.000000	0.000000	2138.26	161
2	FID		ACIS-S-5	7.09	4003	1.000	-0.222	0.085	0.021	0.034	0.000000	0.000000	-1827.67	156
3	GUIDE	used	543426104	7.74	8006	1.000	0.016	0.026	0.143	0.239	168.042477	61.204381	1348.53	-654
4	GUIDE	used	543426168	9.88	7973	1.000	0.013	0.199	0.275	0.443	166.329545	61.821823	-1584.71	1579
5	GUIDE	used	543427224	9.49	7996	1.000	0.011	0.255	0.254	0.398	167.453535	61.100598	327.71	-1033
6	GUIDE	used	543428808	9.88	7988	1.000	-0.163	-0.563	0.339	0.524	167.812105	62.042068	932.35	2357
7	GUIDE	used	543433168	7.61	8001	1.000	0.137	0.082	0.131	0.210	167.468171	60.782635	353.50	-2176

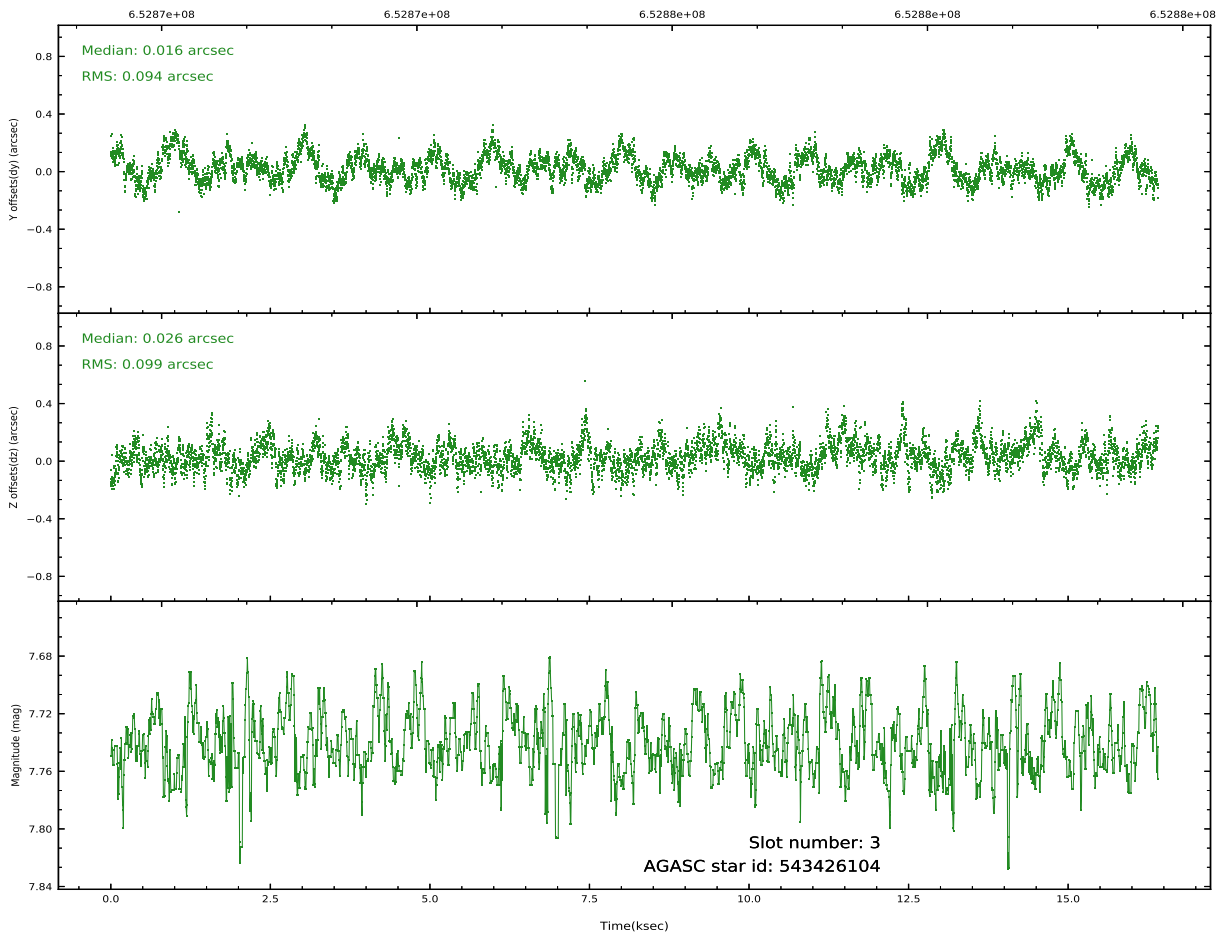
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2.4 Star Slots

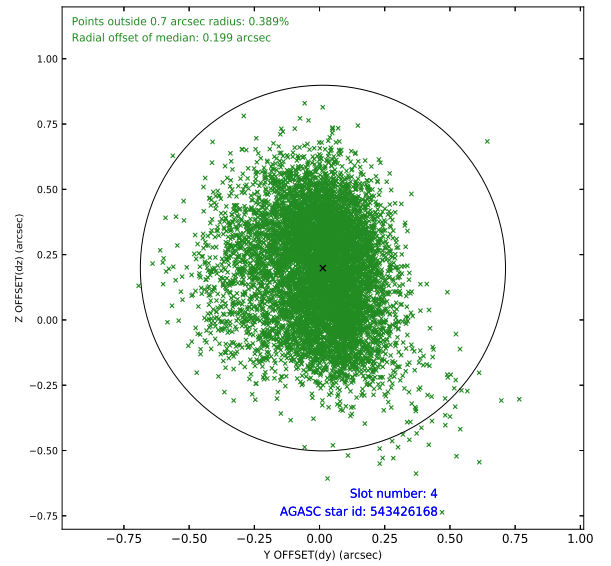
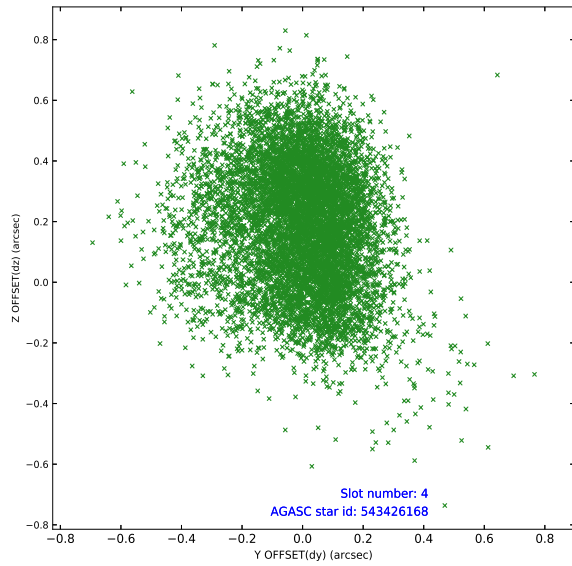
2.4.1 Slot 3



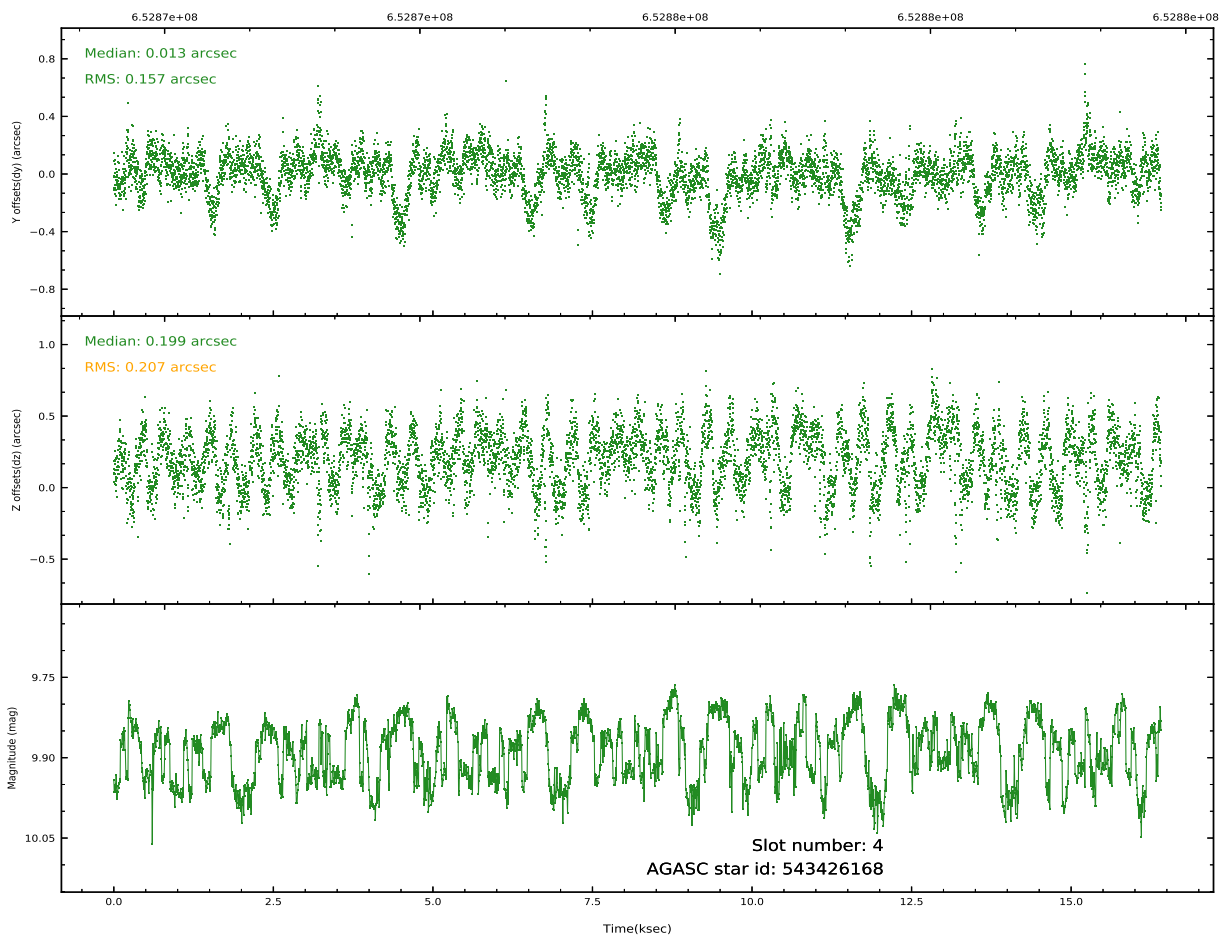
Time (s)



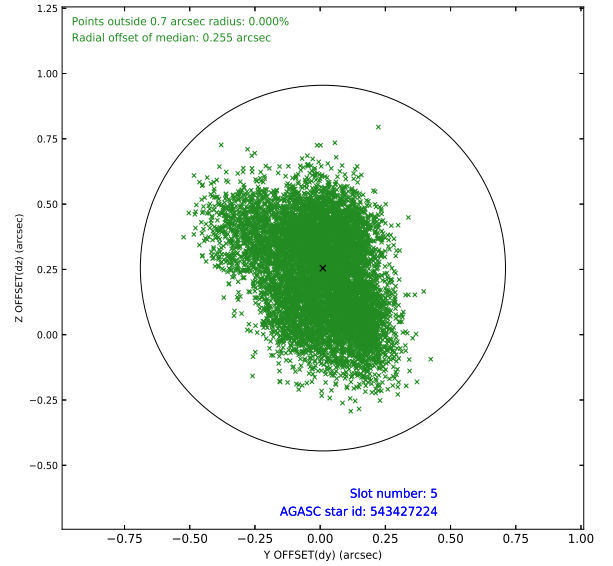
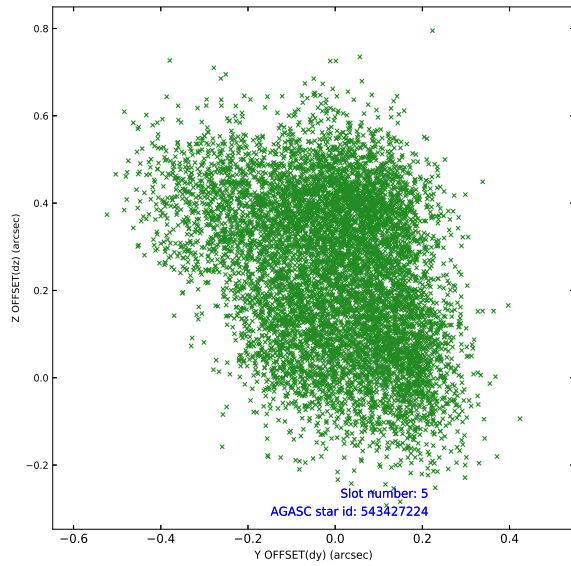
2.4.2 Slot 4



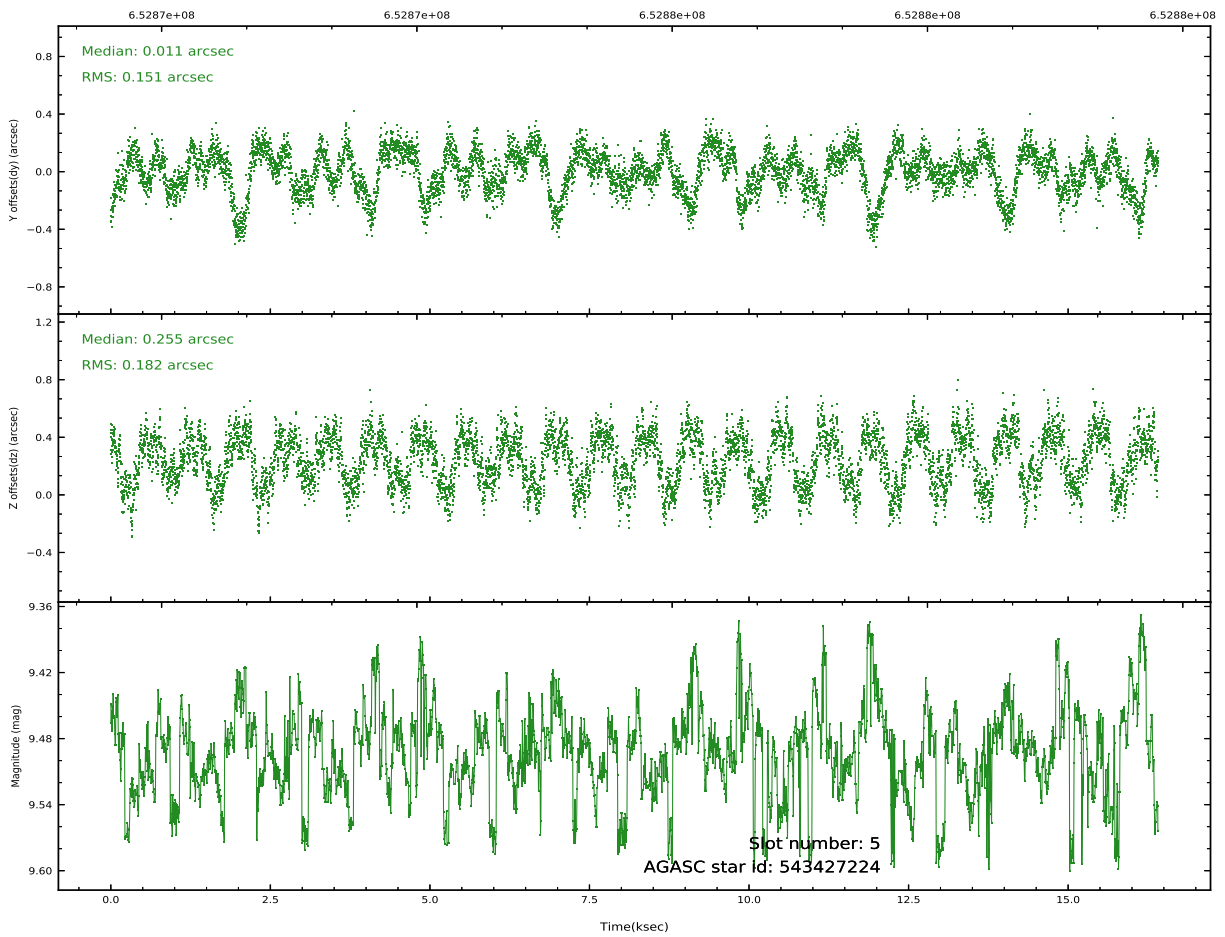
Time (s)



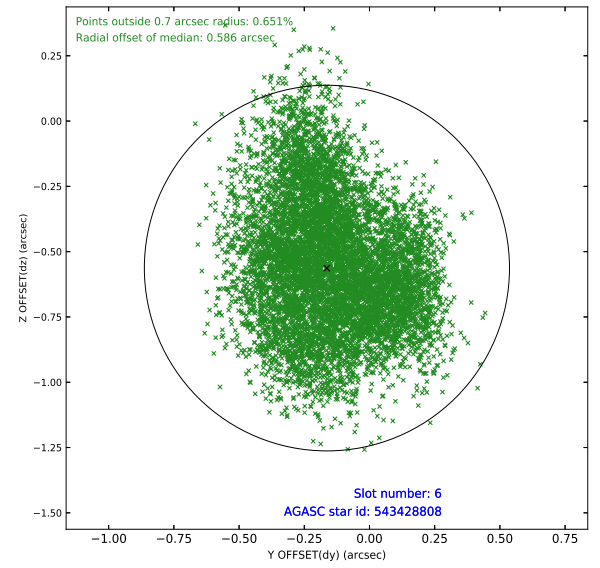
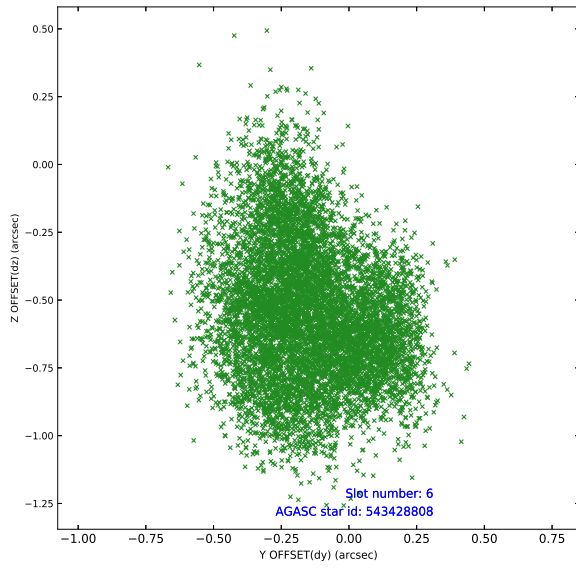
2.4.3 Slot 5



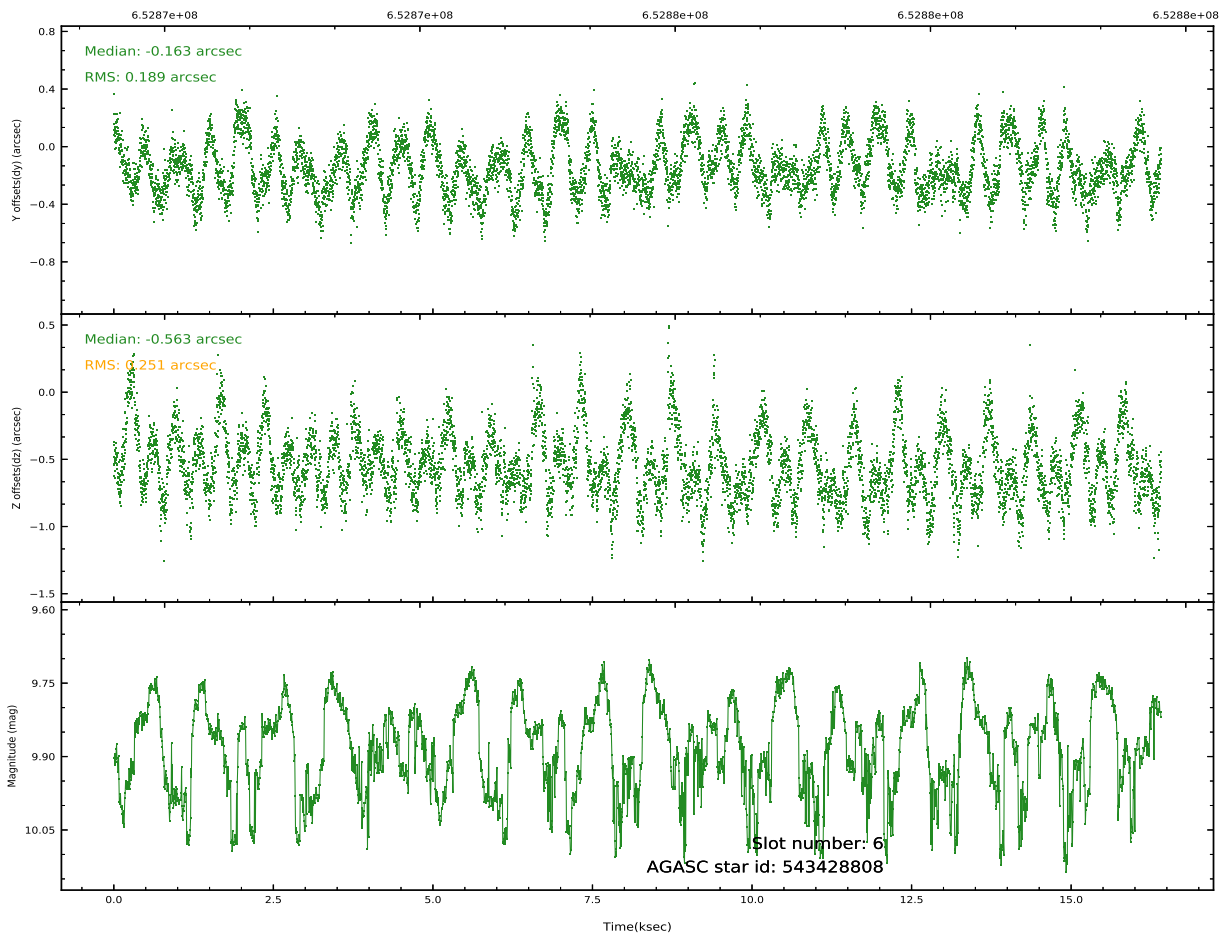
Time (s)



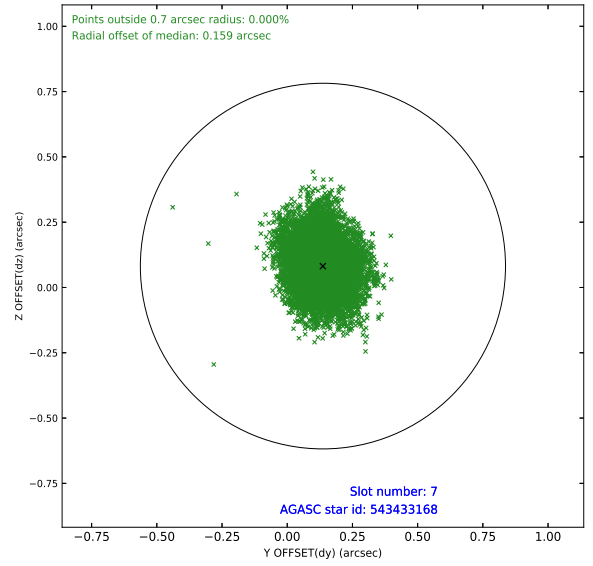
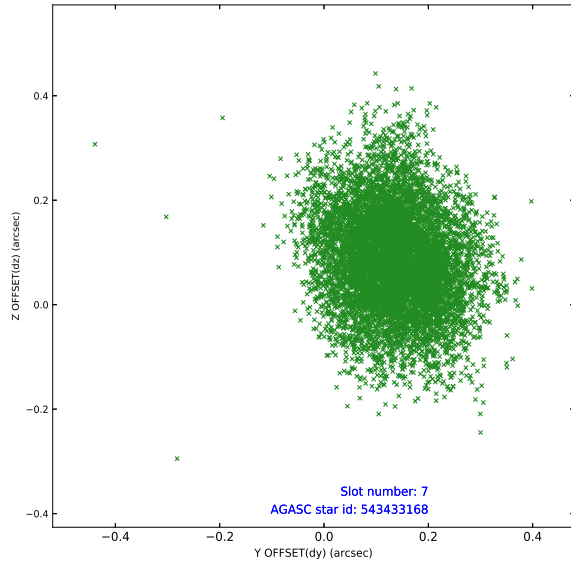
2.4.4 Slot 6



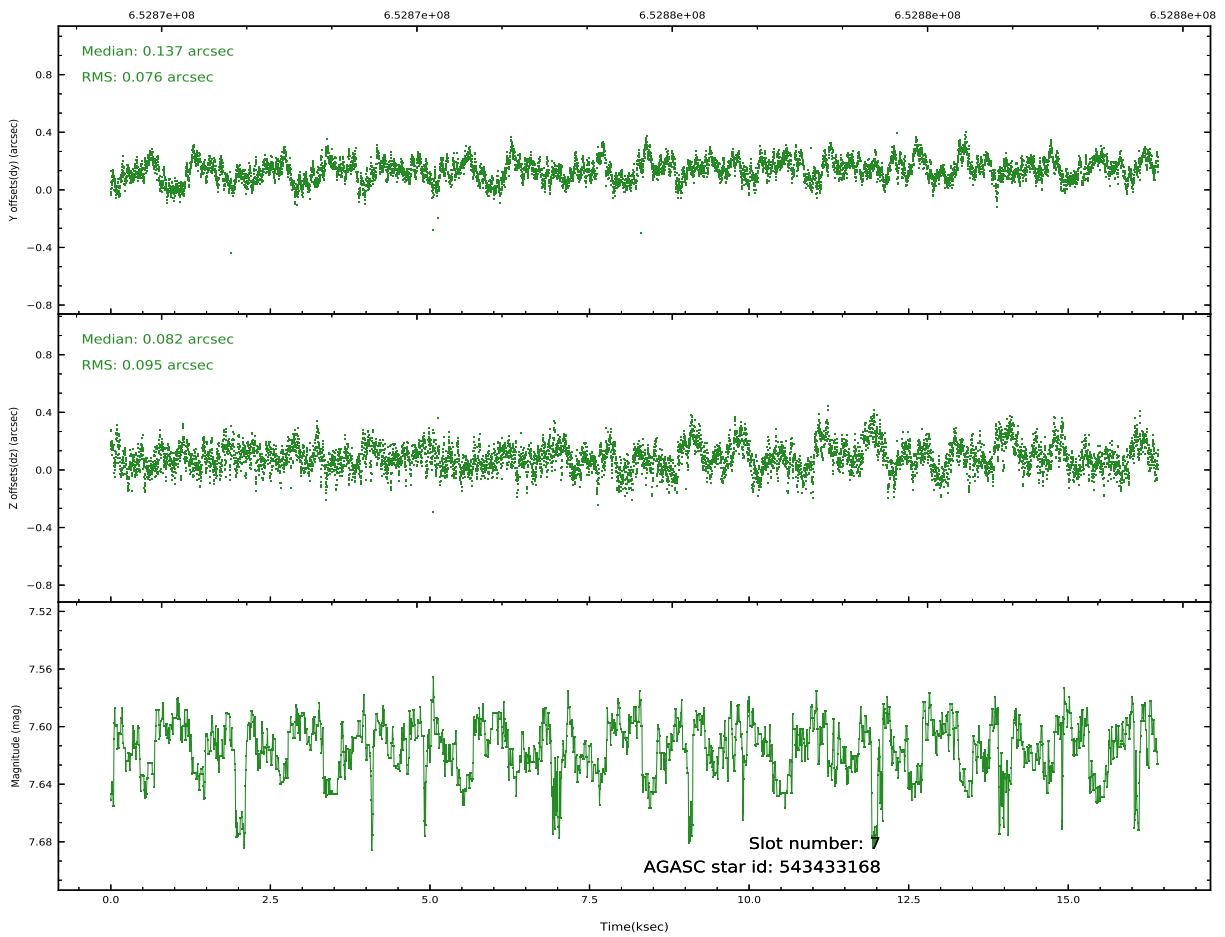
Time (s)



2.4.5 Slot 7

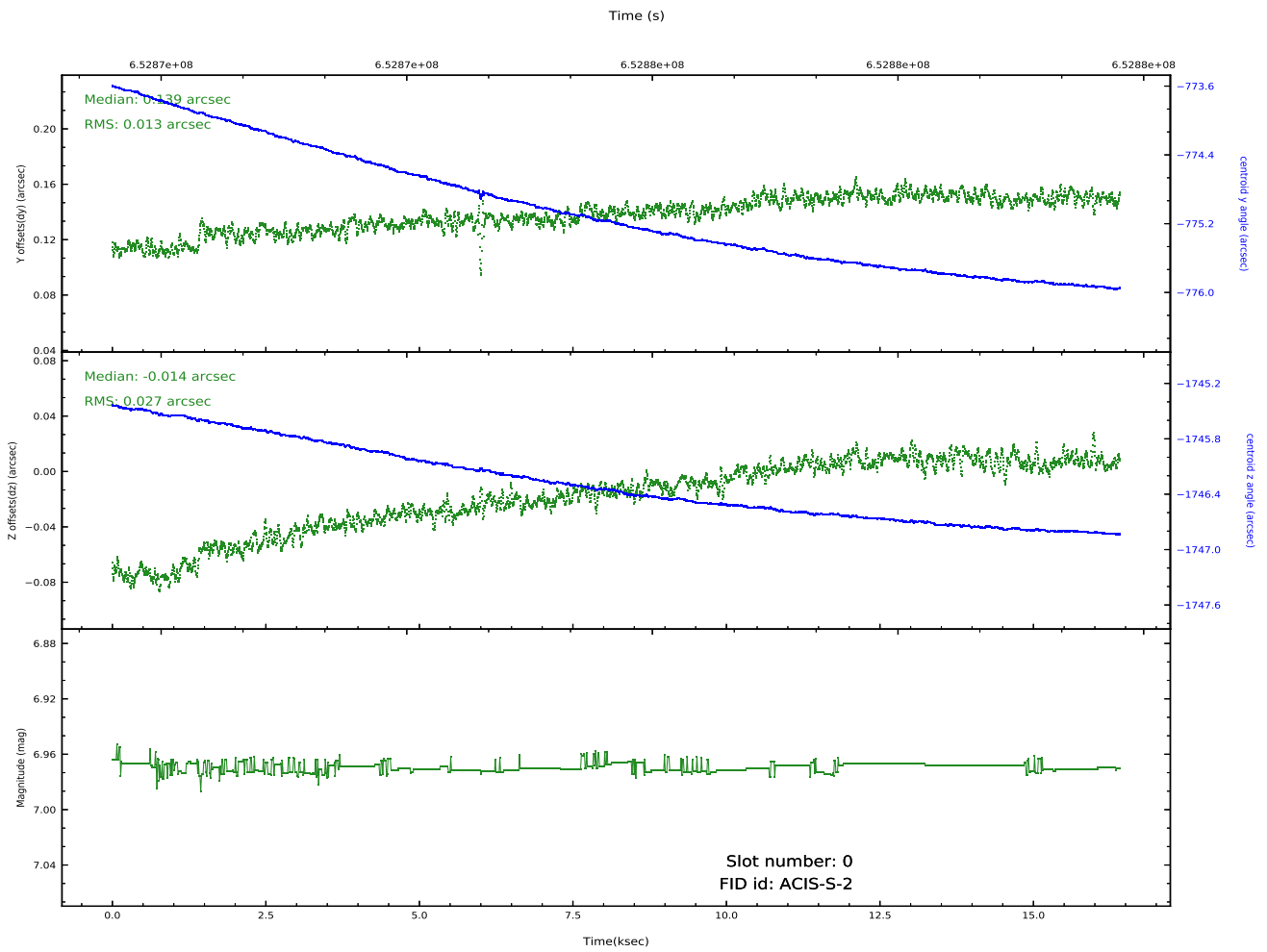
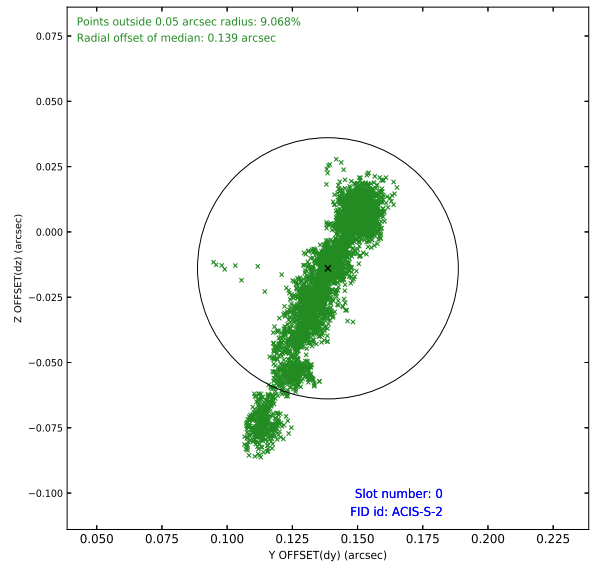
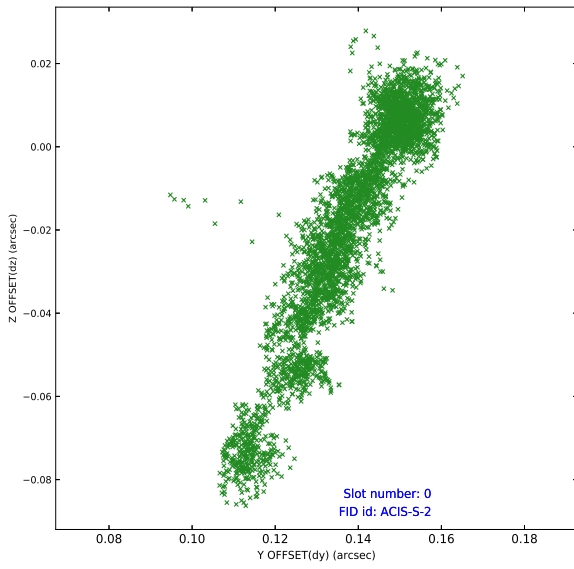


Time (s)

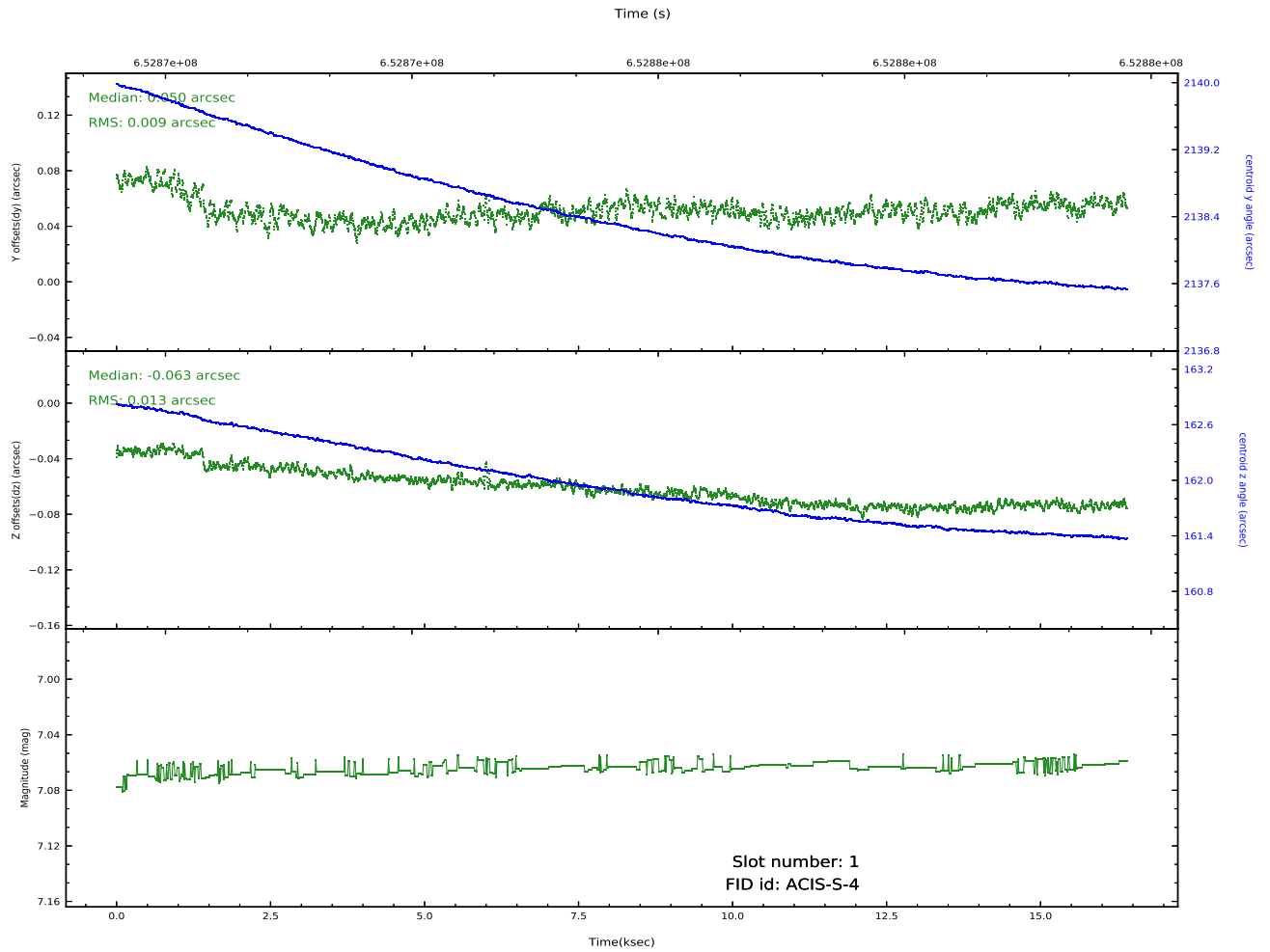
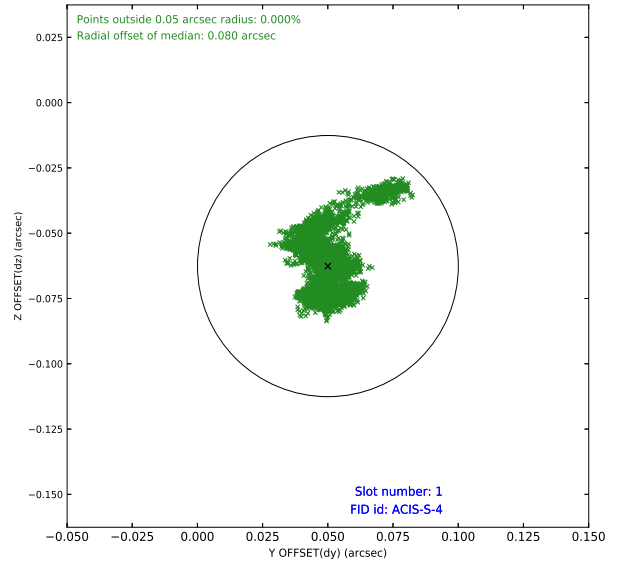
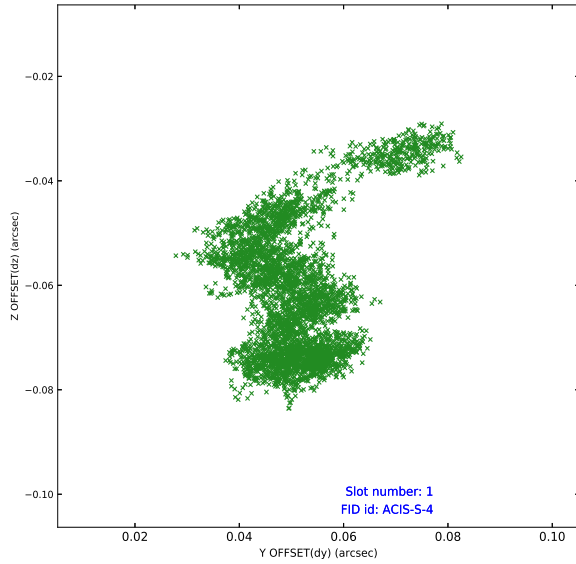


2.5 FID Slots

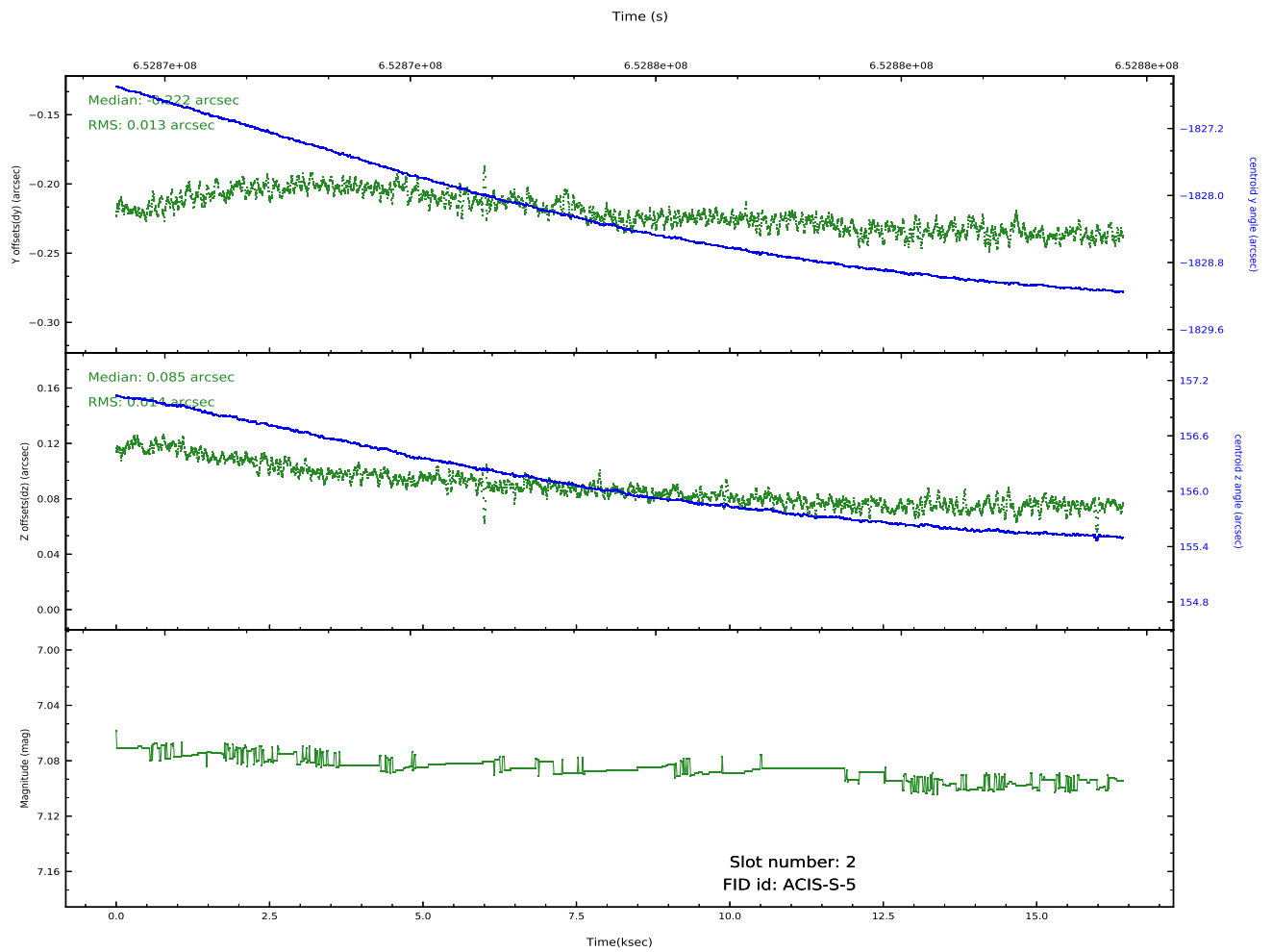
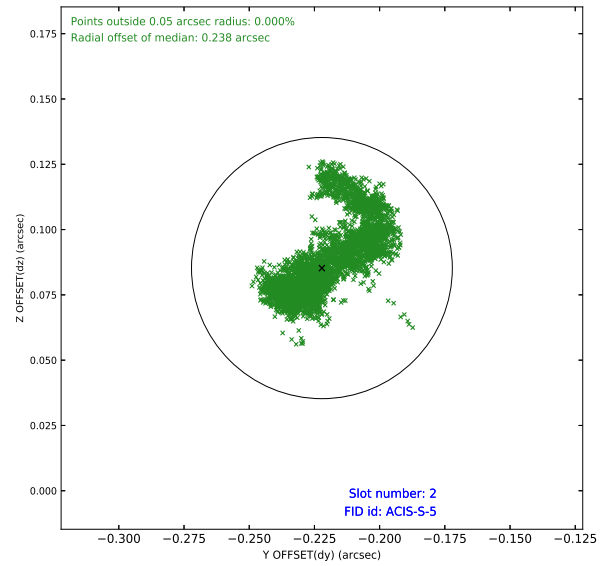
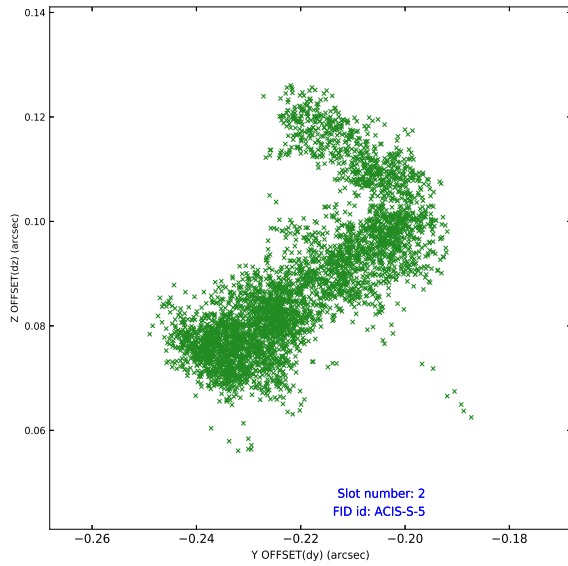
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	16.057079006076

A.2 Comments

A spatial region of the original bias map for CCD = 3 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 3 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords: (167.02100,61.22353), (167.02112,61.21521), (167.12787,61.21567), (167.12947,61.22400).