

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5886 - L2 Version 5
Chandra X-Ray Center

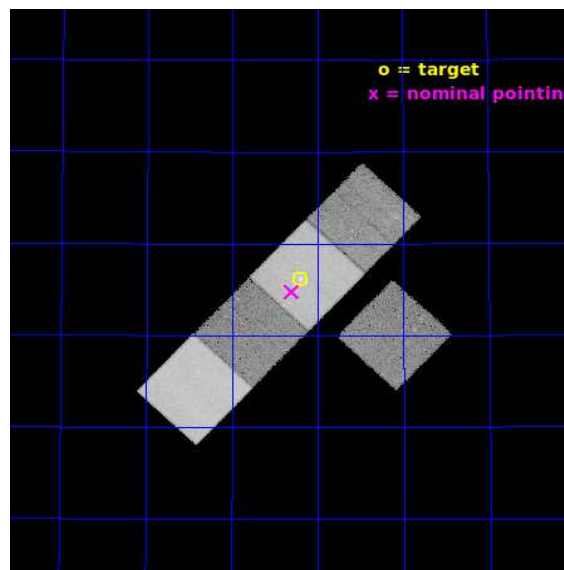
L2 Processing Date : Oct 10 2020

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1 Front

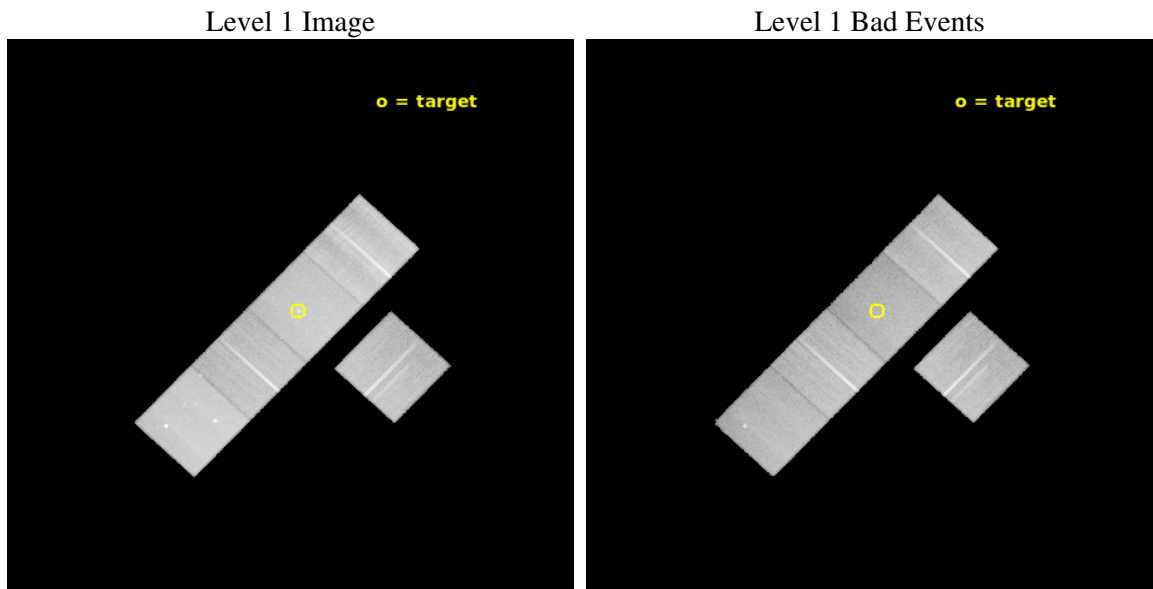
seq_num	900386	Sequence number
obs_id	5886	Observation id
title	X-ray Emission from Optically-Selected, High-Redshift Galaxy Clusters from the RCS Survey	Proposal title
observer	Gordon Garmire	Principal investigator
object	CIG J1419+5326	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	214.800417	Observer's specified target RA [deg]
dec_targ	53.436389	Observer's specified target Dec [deg]
ra_nom	214.82536238611	Nominal RA [deg]
dec_nom	53.413252563524	Nominal Dec [deg]
roll_nom	313.35857441158	Nominal Roll [deg]
revision	5	Processing version of data
ontime	48180.199907333	Sum of GTIs [s]
livetime	47550.690125796	Livetime [s]
ontime3	48180.199907333	Sum of GTIs [s]
ontime5	48180.199907333	Sum of GTIs [s]
ontime6	48177.058927089	Sum of GTIs [s]
ontime7	48180.199907333	Sum of GTIs [s]
ontime8	48180.199907333	Sum of GTIs [s]
l2events	404223	Number of level 2 events



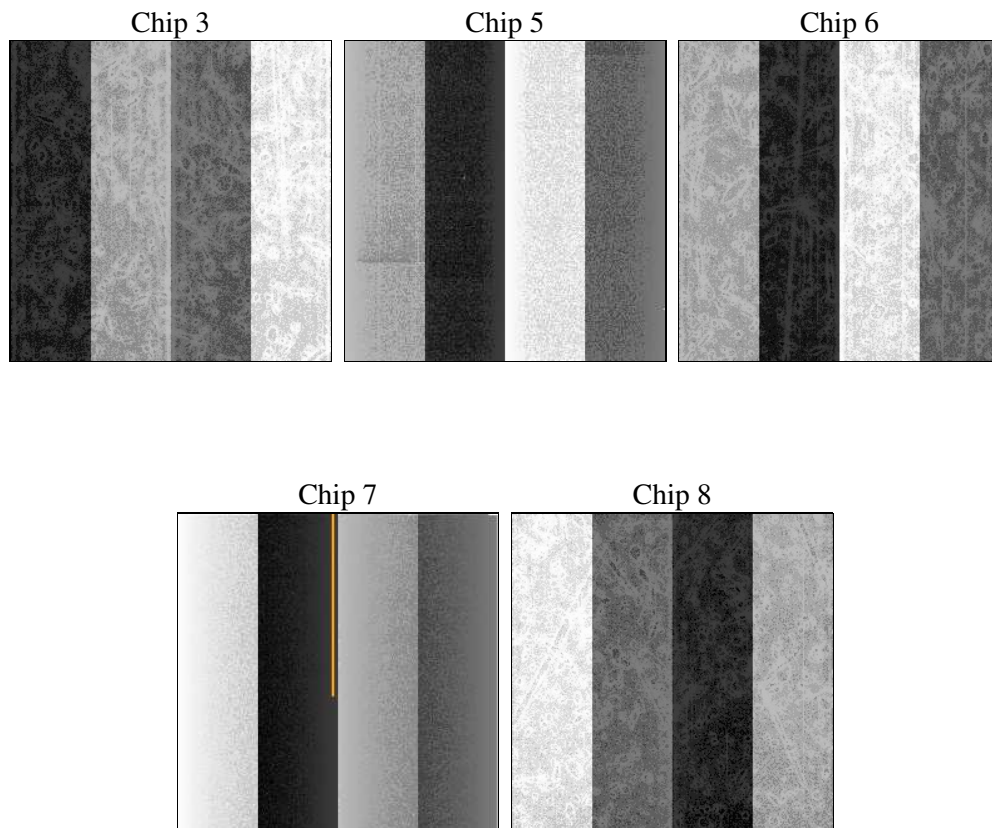
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	48000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	48180.199907333	Sum of GTIs [s]
caldbver	4.9.2	 	ontime3	48180.199907333	Sum of GTIs [s]
date	2020-10-10T13:11:45	Date and time of file creation	ontime5	48180.199907333	Sum of GTIs [s]
revision	5	Processing version of data	ontime6	48177.058927089	Sum of GTIs [s]
			ontime7	48180.199907333	Sum of GTIs [s]
			ontime8	48180.199907333	Sum of GTIs [s]
			l1events	1545517	Number of level 1 events

2.1.4 Events

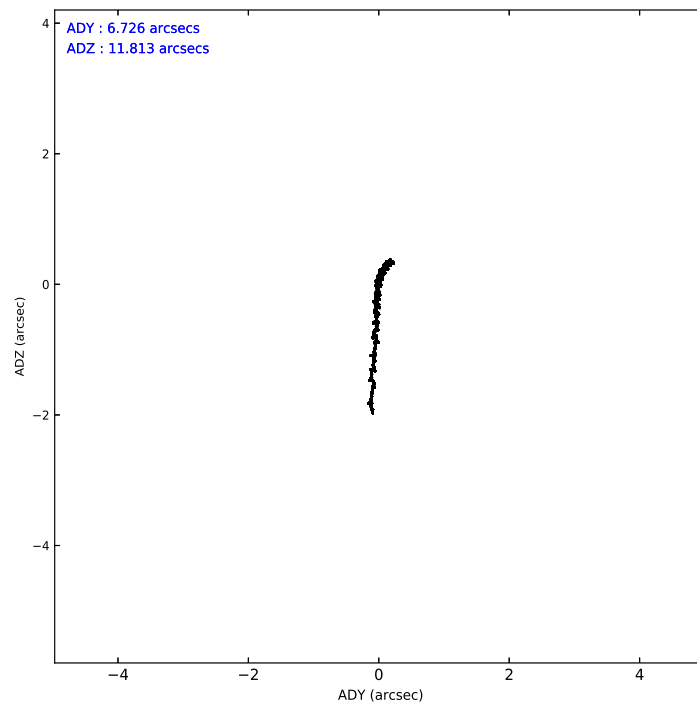
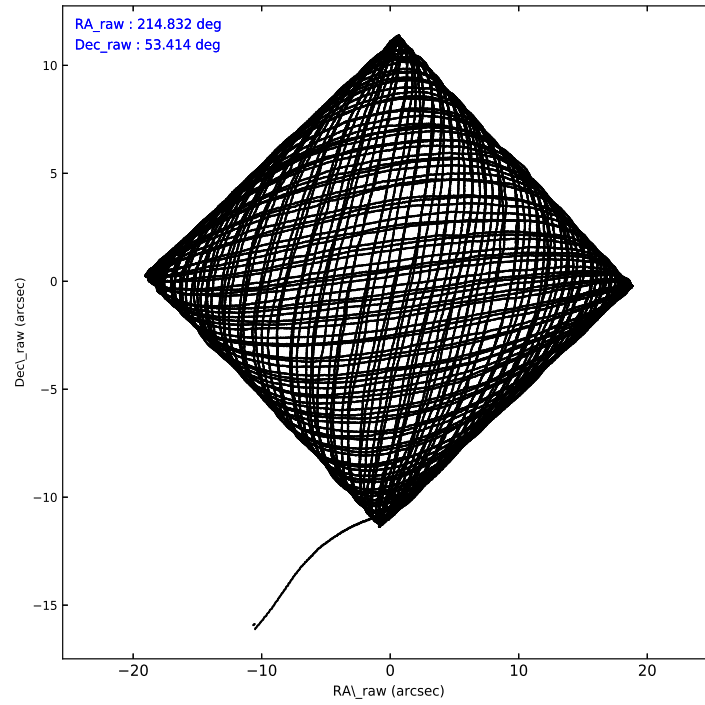
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	253113	369998	261619	309225	351562
rejected events	226863	183007	231351	160174	247931
rejected %	89%	49%	88%	51%	70%

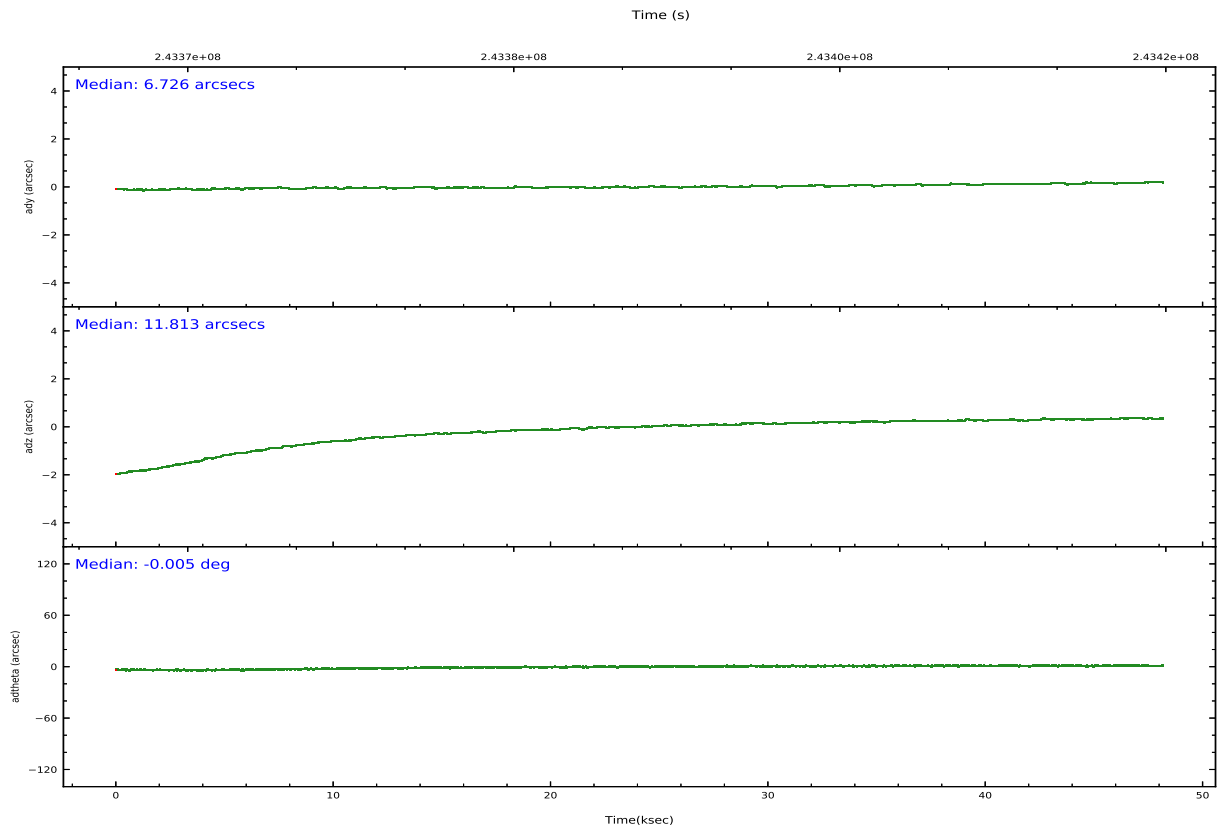
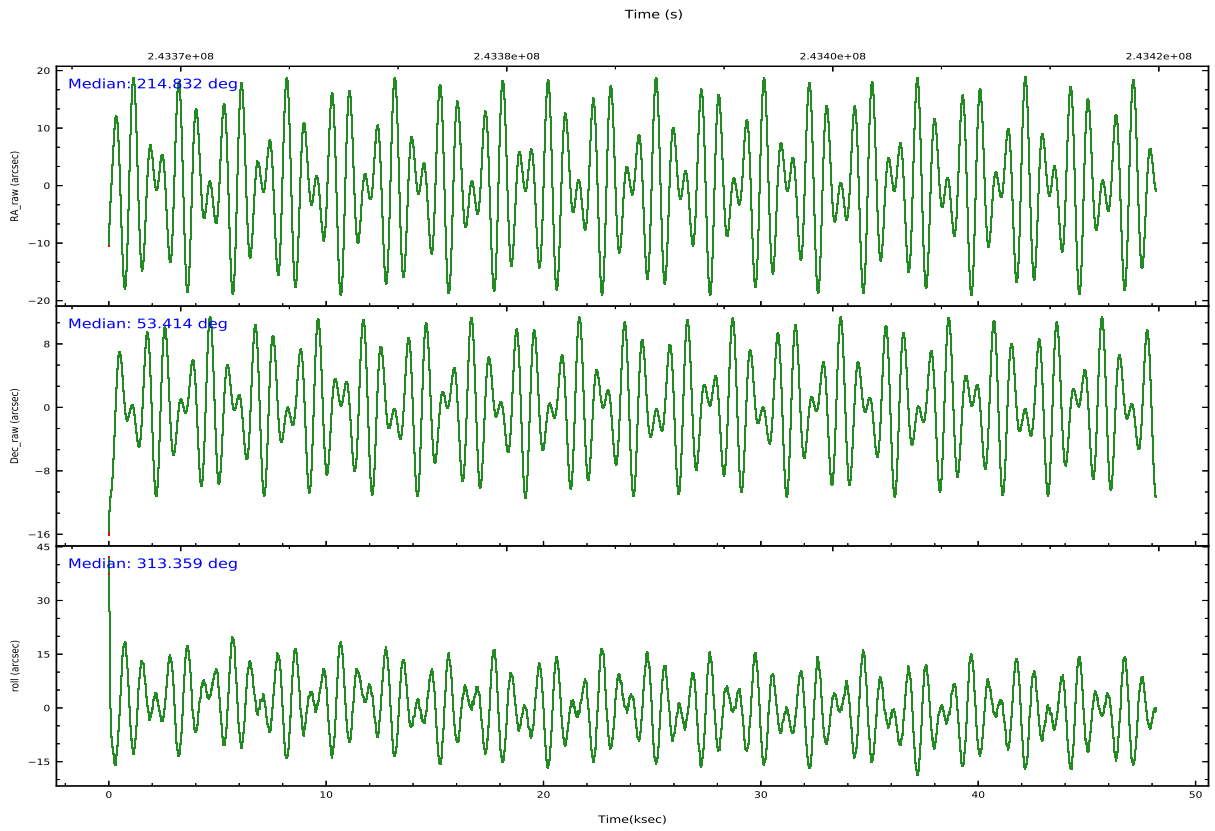
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	9754	16775	11208	15464	33319
	3%	4%	4%	5%	9%
grade 1 events	123	1360	135	222	273
	0%	0%	0%	0%	0%
grade 2 events	5567	57105	6765	30444	20582
	2%	15%	2%	9%	5%
grade 3 events	3029	9505	3091	14396	12944
	1%	2%	1%	4%	3%
grade 4 events	2826	9319	3108	14527	11936
	1%	2%	1%	4%	3%
grade 5 events	10400	30518	10683	31410	15538
	4%	8%	4%	10%	4%
grade 6 events	5304	96084	6328	75469	25676
	2%	25%	2%	24%	7%
grade 7 events	216110	149332	220301	127293	231294
	85%	40%	84%	41%	65%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-35678	ACIS-35678	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	214.787773	214.82536238611	Subarray requested	NONE	NONE
[deg] Pointing Dec	53.421526	53.413252563524	Alternating exposures requested	N	N
[deg] Pointing Roll	313.239426	313.35857441158	[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)	243366877.184000	243365684.23377			
Observation start date	2005-09-17T17:53:33	2005-09-17T17:34:44			
[s] Observation end time (MET)	243414877.184000	243415884.12357			
Observation end date	2005-09-18T07:13:33	2005-09-18T07:31:24			
Read mode	TIMED	TIMED			

2.3 Aspect





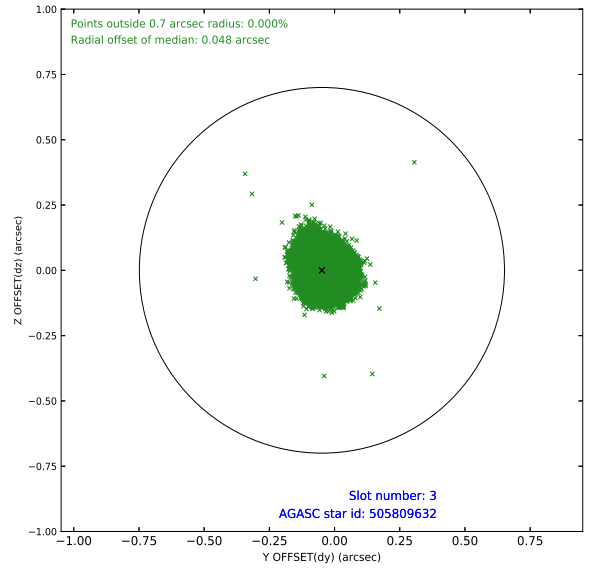
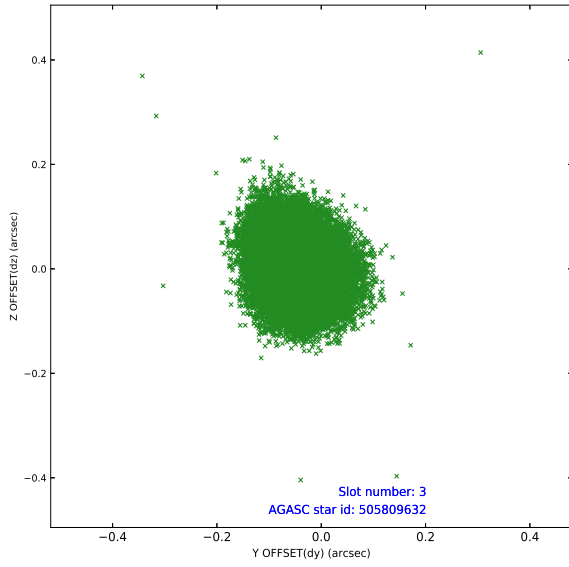
Slot Statistics

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	11753	1.000	-0.069	-0.062	0.015	0.029	0.000000	0.000000	-759.52	-1732
1	FID		ACIS-S-4	7.20	11753	1.000	0.140	0.050	0.013	0.030	0.000000	0.000000	2153.94	175
2	FID		ACIS-S-5	7.23	11751	1.000	-0.103	0.021	0.012	0.019	0.000000	0.000000	-1812.45	169
3	GUIDE	used	505809632	8.05	23500	1.000	-0.048	0.000	0.079	0.123	215.499426	53.521185	776.59	1360
4	GUIDE	used	505812088	8.16	23432	1.000	0.106	-0.201	0.085	0.131	214.186617	53.263562	-475.89	-1328
5	GUIDE	used	505817208	10.14	23453	1.000	0.047	0.017	0.162	0.269	216.079038	53.466425	1759.58	2144
6	GUIDE	used	505817616	10.10	23297	1.000	0.048	0.129	0.151	0.243	216.040487	53.402541	1874.29	1928
7	GUIDE	used	505812376	7.65	23504	1.000	-0.153	0.054	0.078	0.124	214.039537	52.937930	150.38	-2369

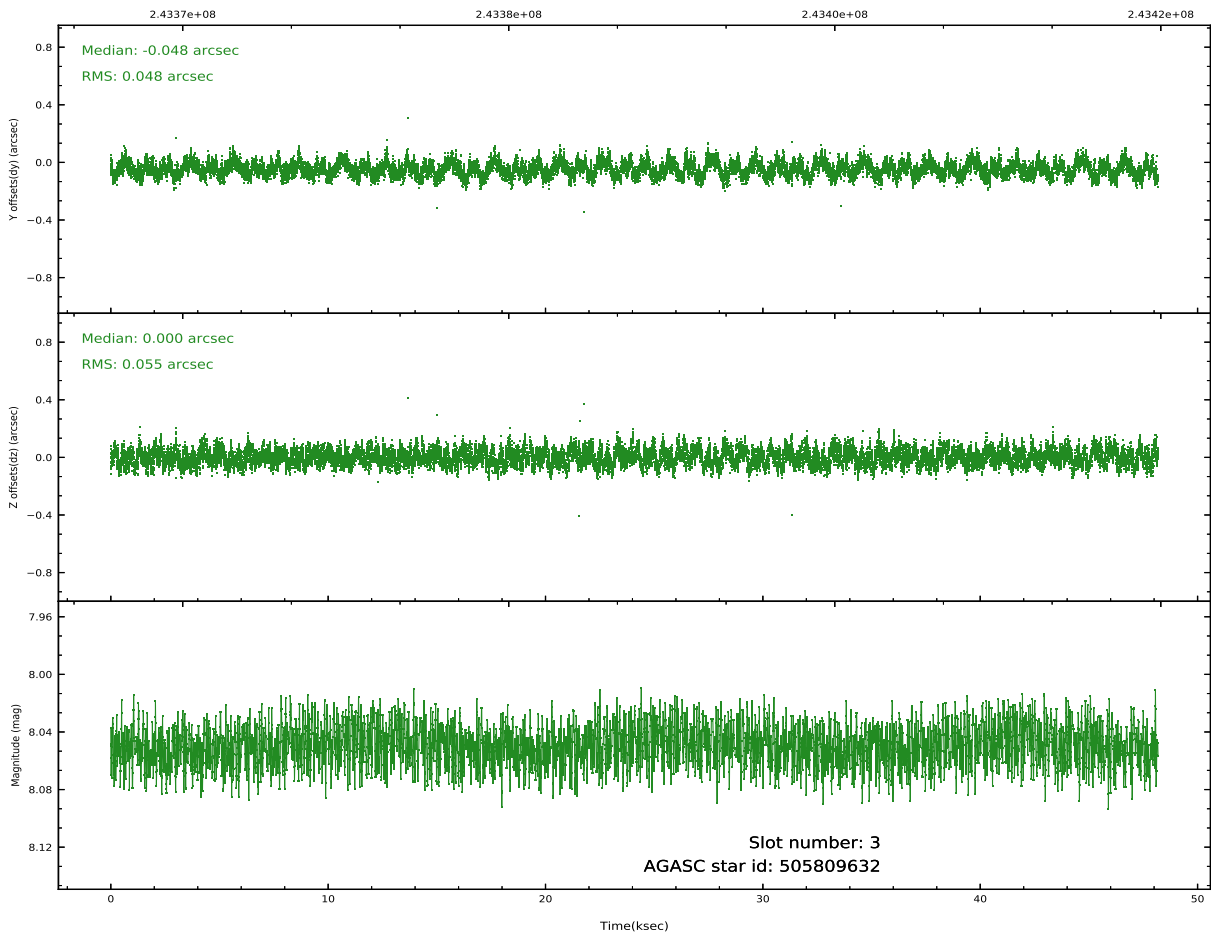
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2.4 Star Slots

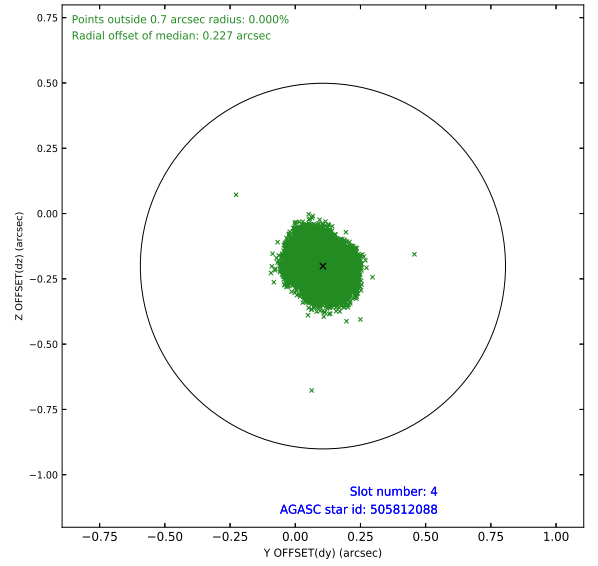
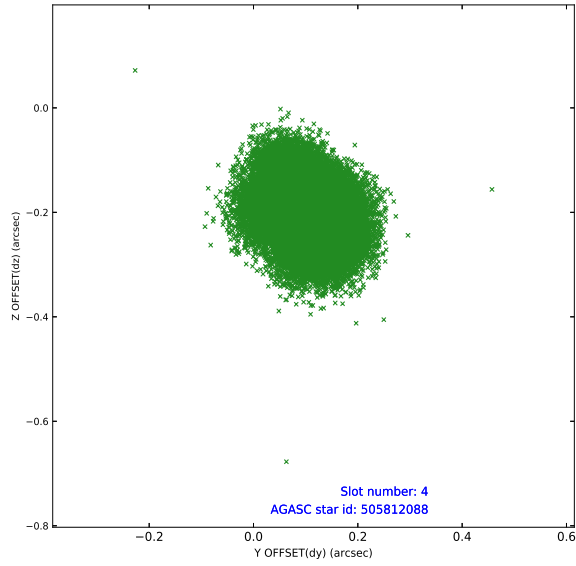
2.4.1 Slot 3



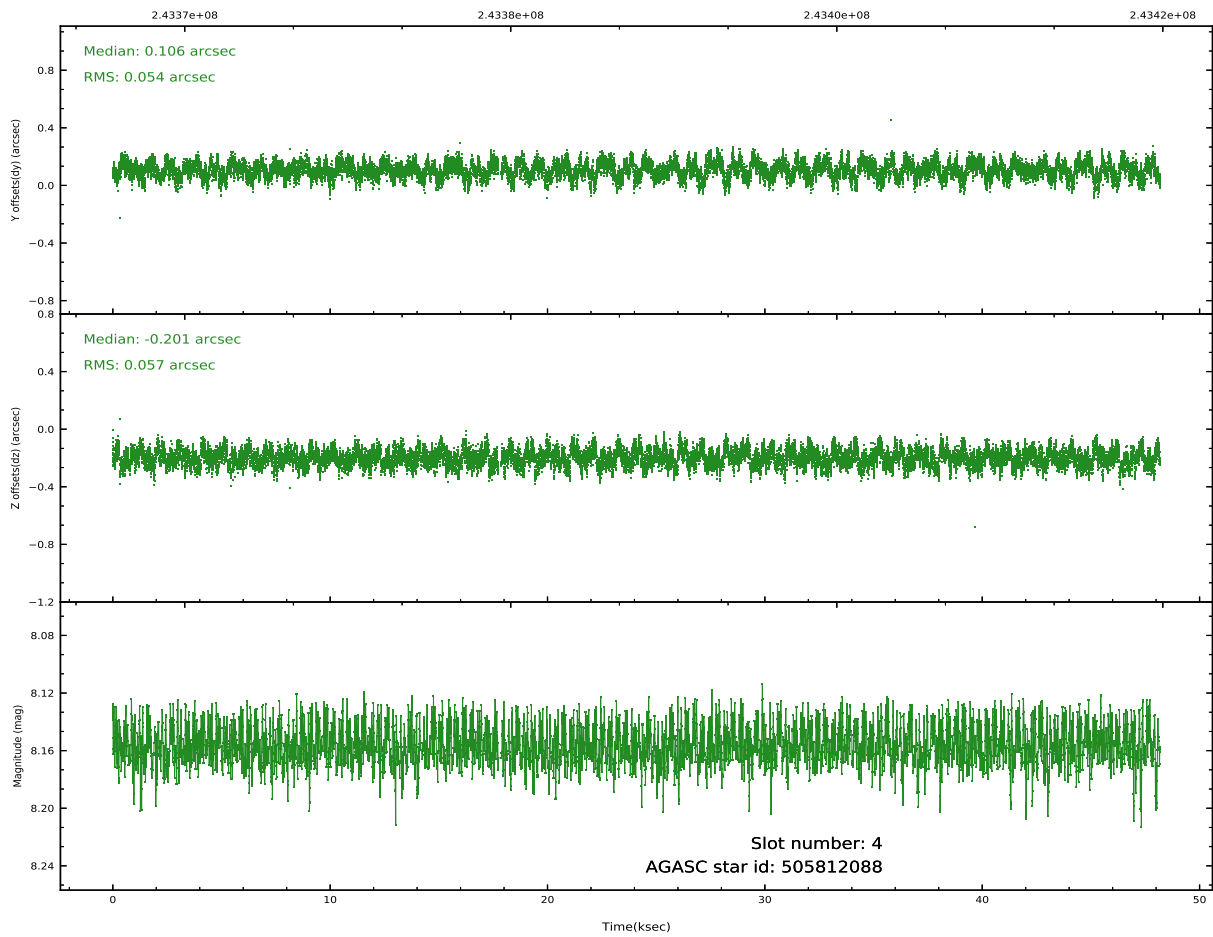
Time (s)



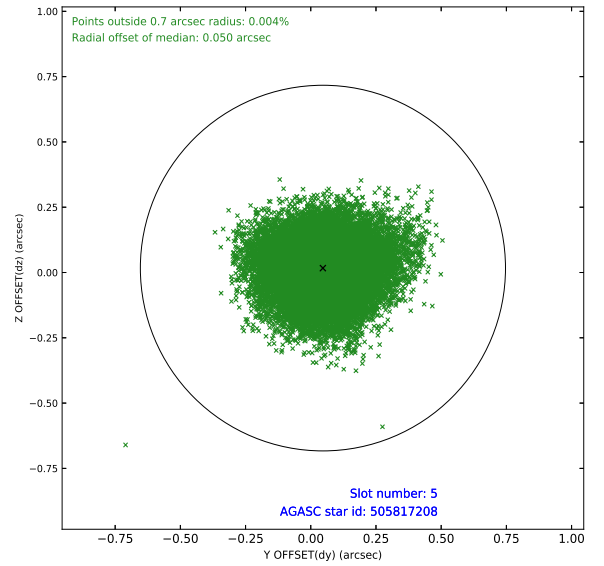
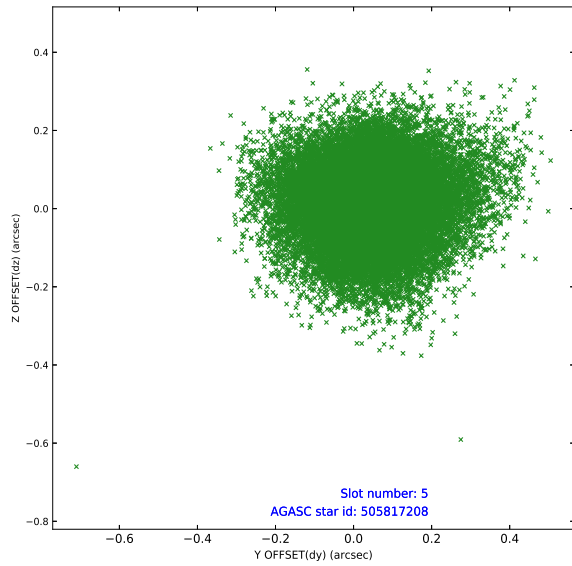
2.4.2 Slot 4



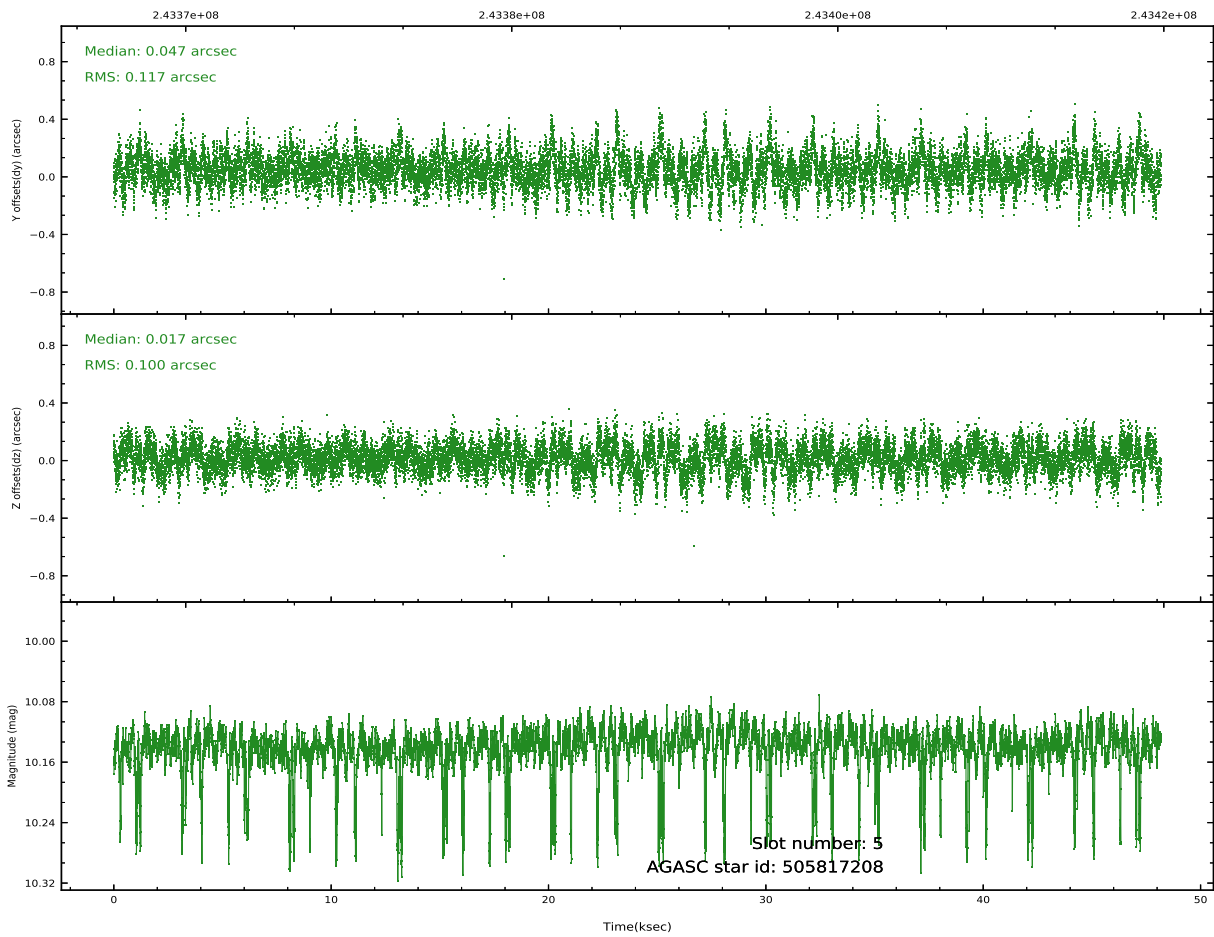
Time (s)



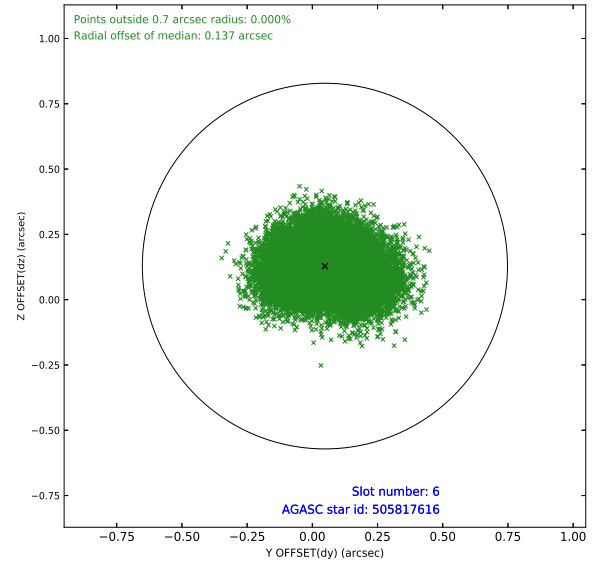
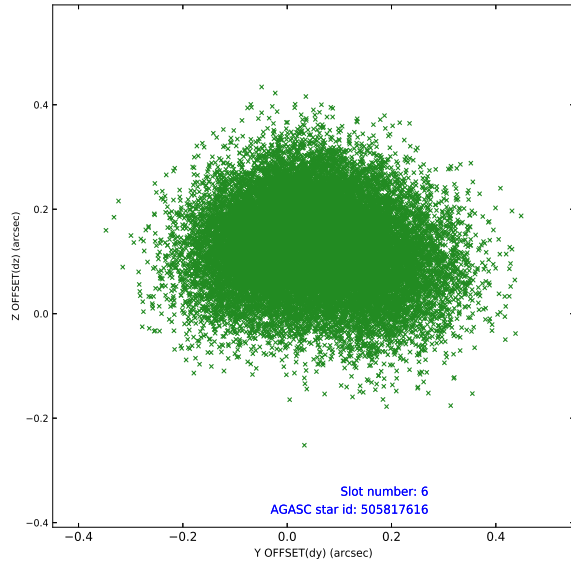
2.4.3 Slot 5



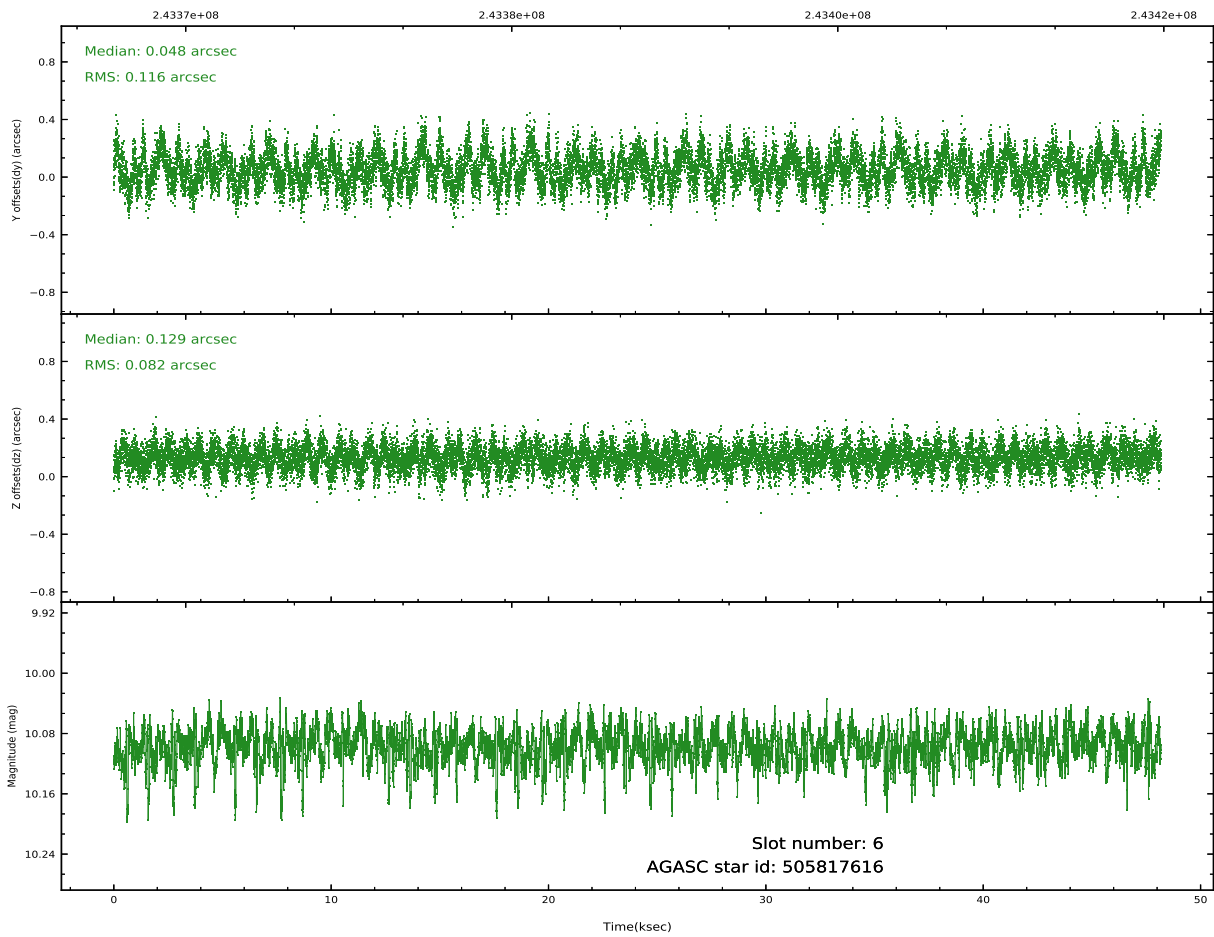
Time (s)



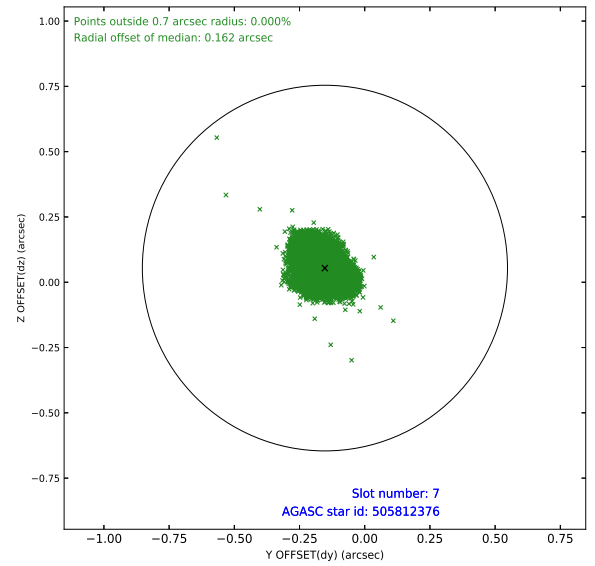
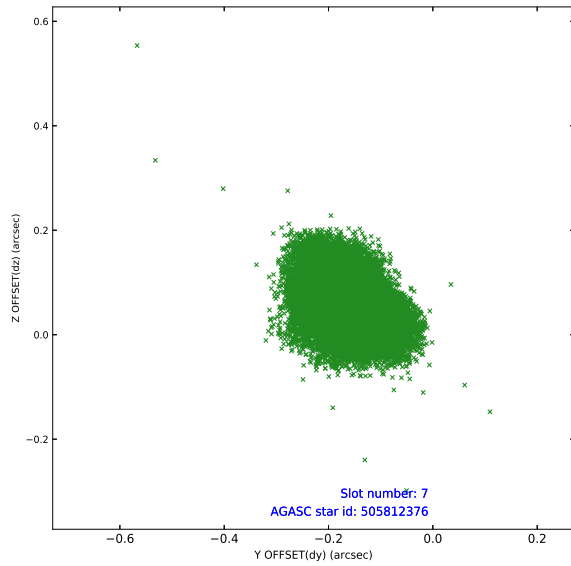
2.4.4 Slot 6



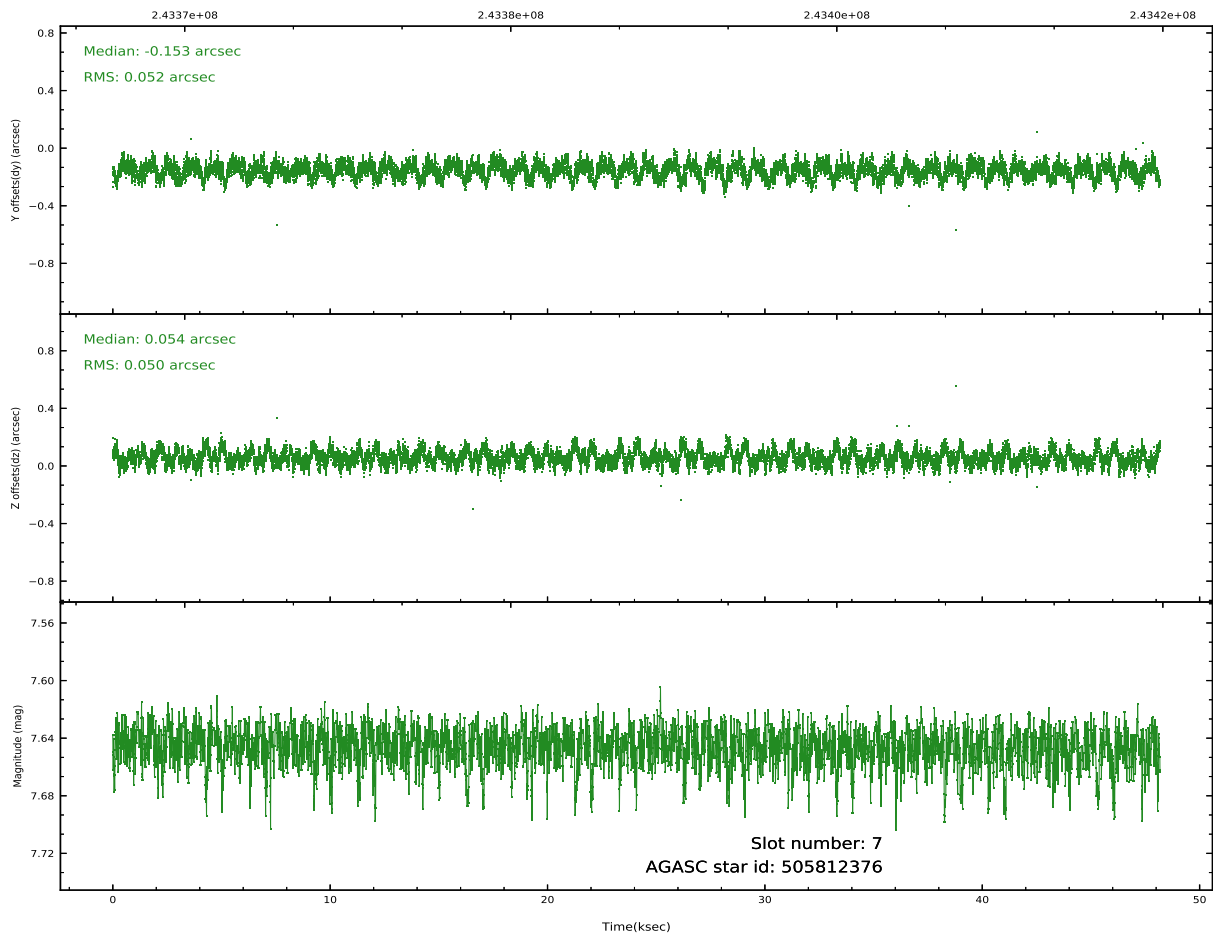
Time (s)



2.4.5 Slot 7

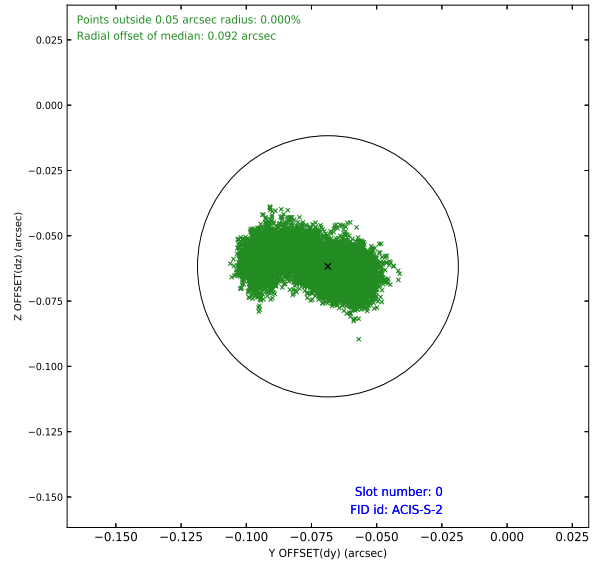
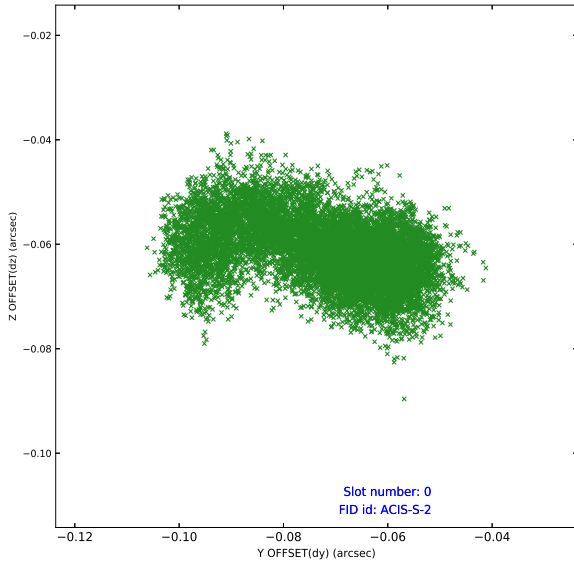


Time (s)

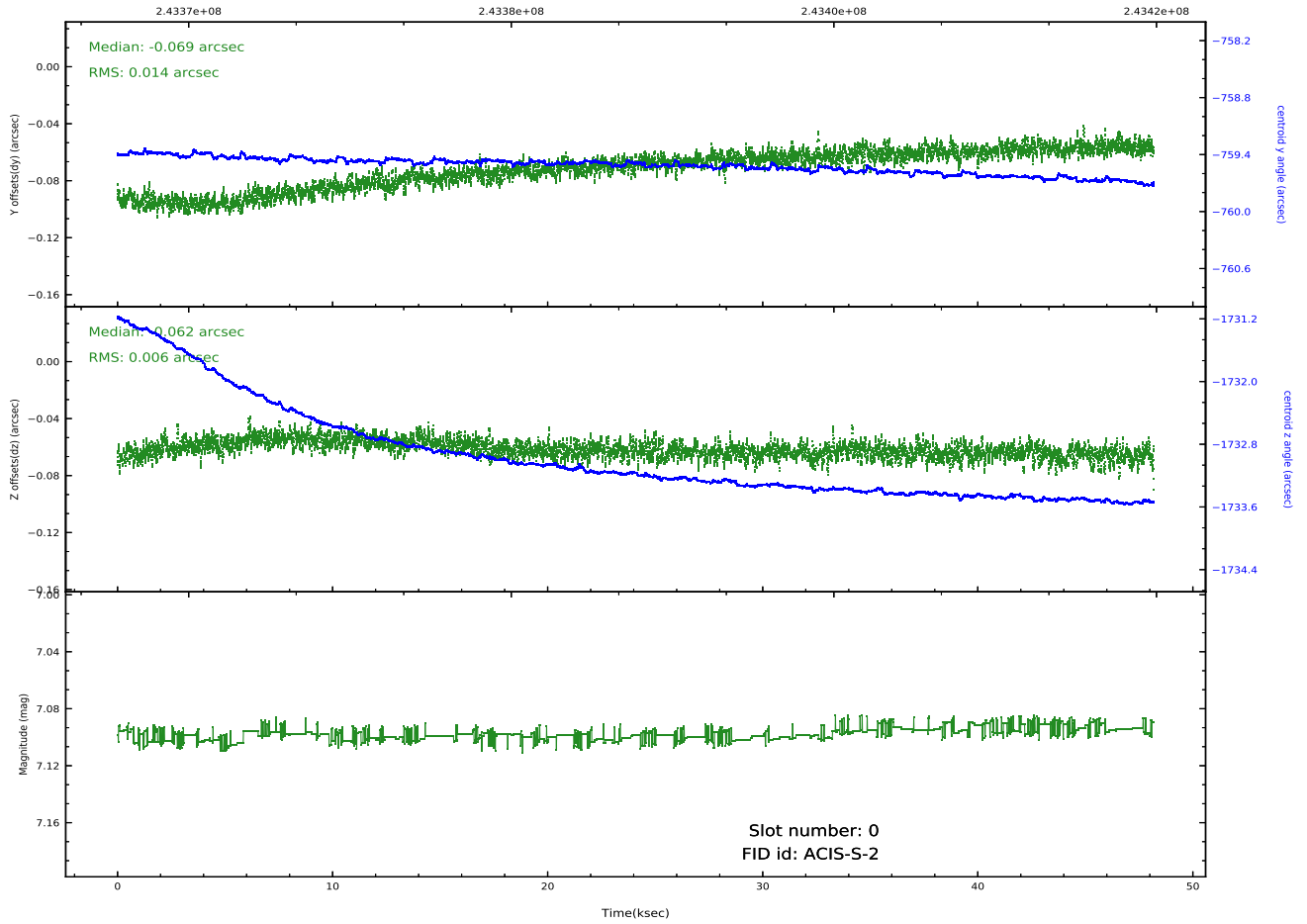


2.5 FID Slots

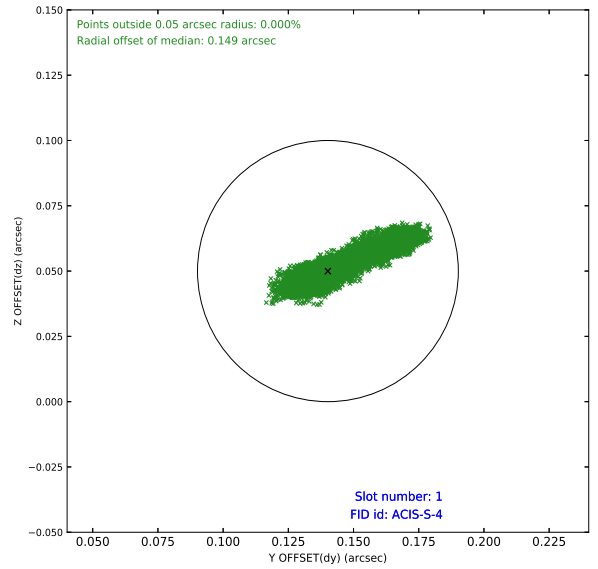
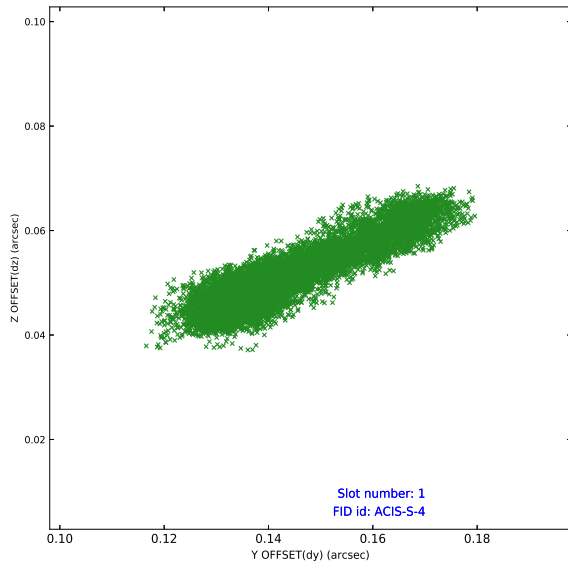
2.5.1 Slot 0



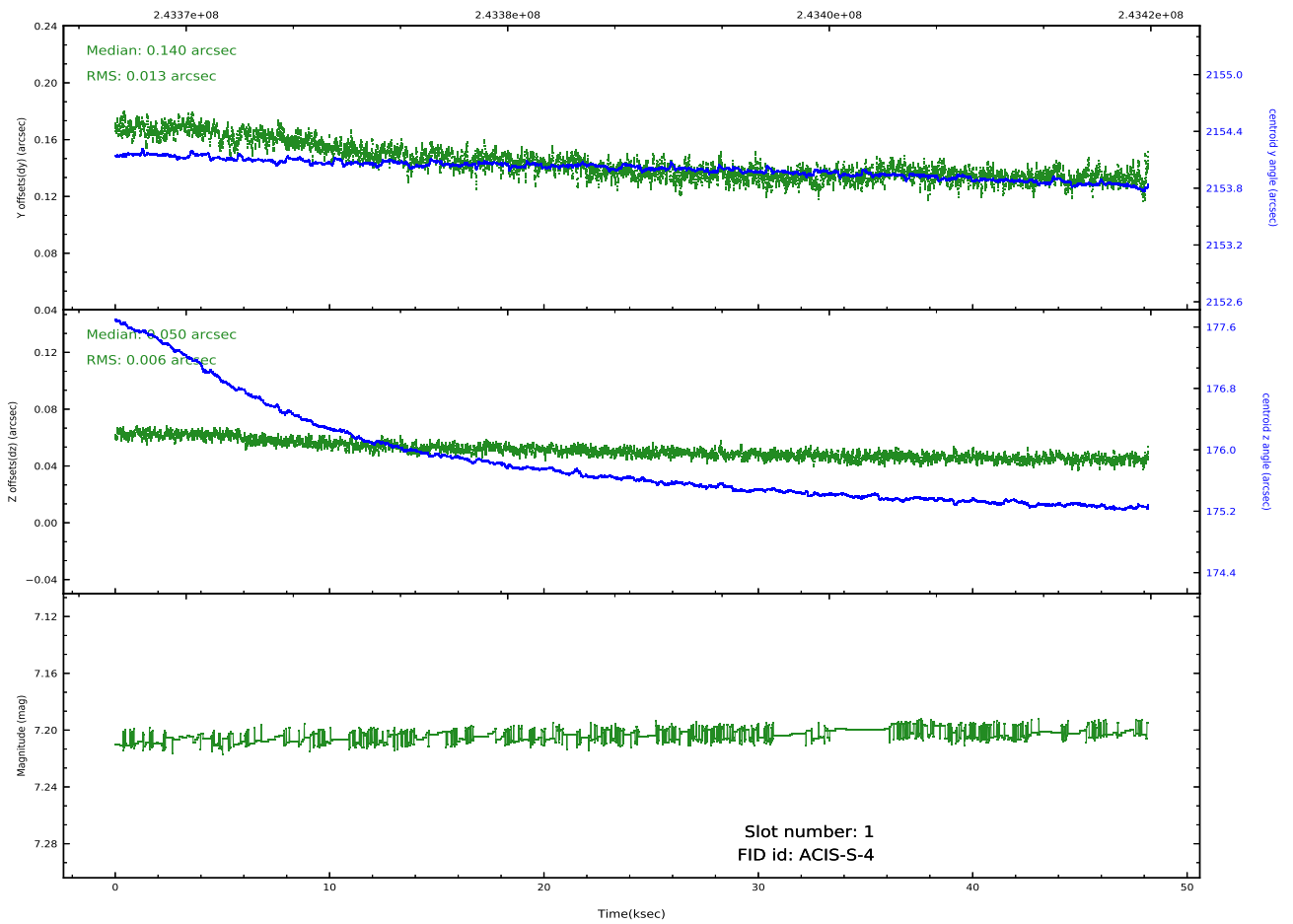
Time (s)



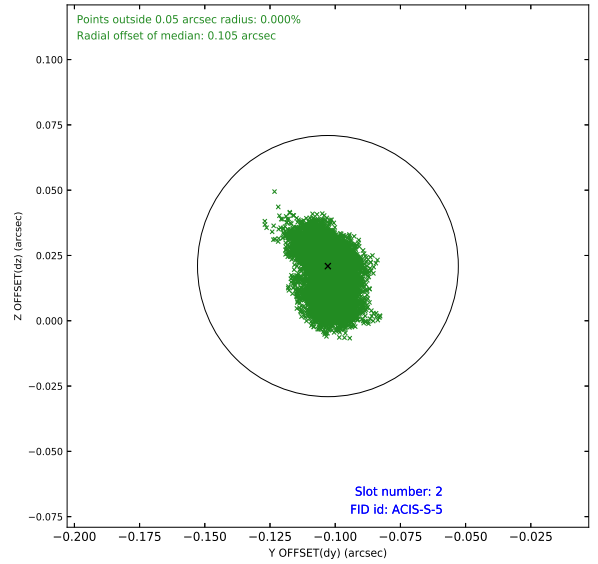
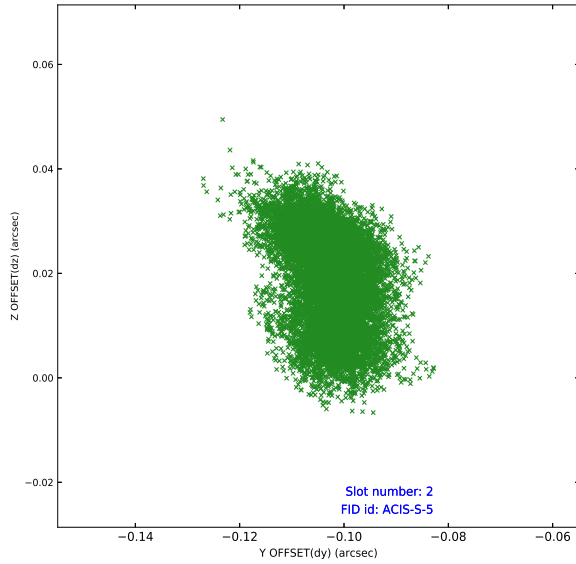
2.5.2 Slot 1



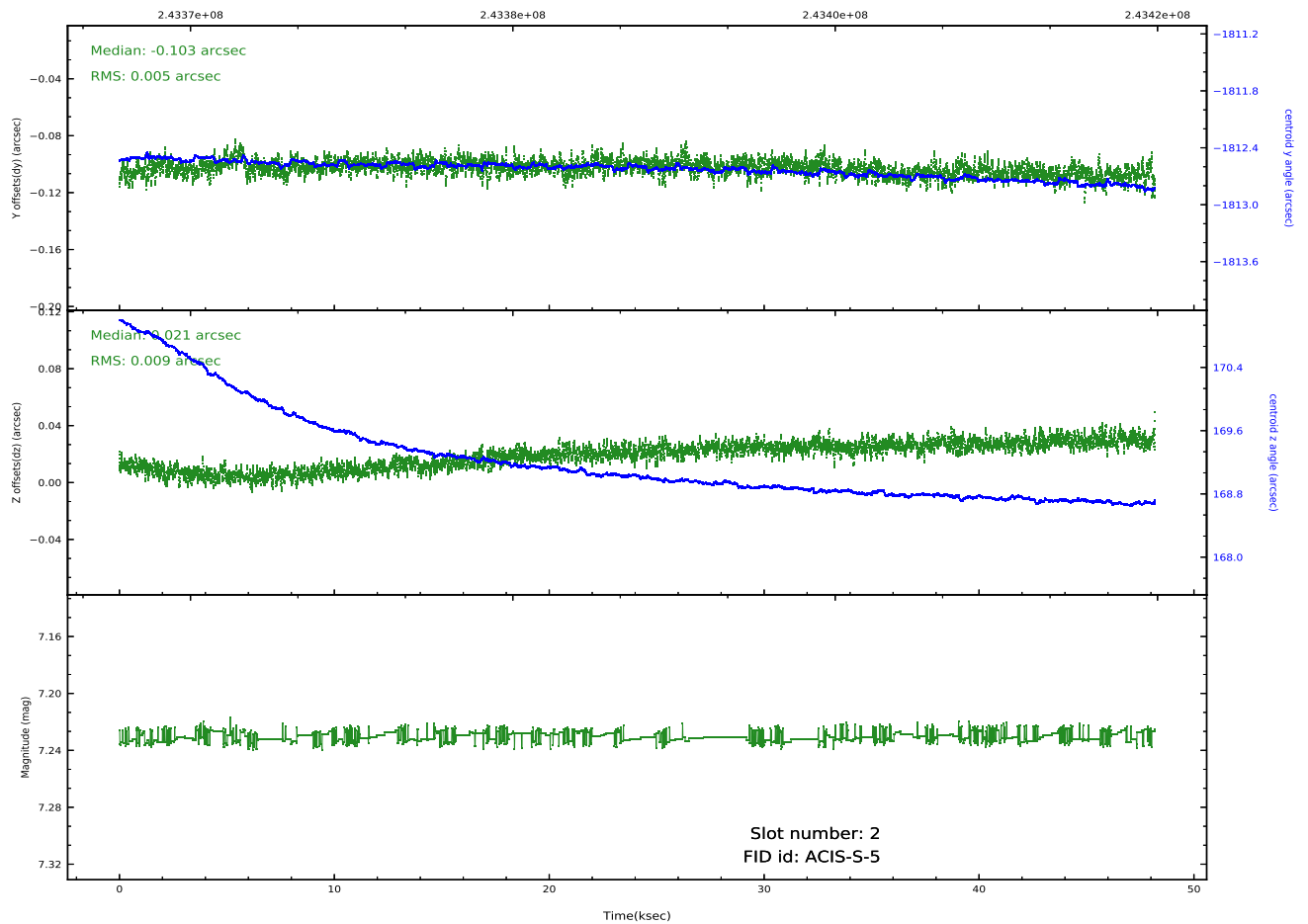
Time (s)



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	48.18019

A.2 Comments

As a consequence of the DEA-A shutdown anomaly on Sep 15th (DOY258), the reported value of the ACIS FP temperature was ~1.3 degrees warmer than the actual temperature. The value for FP temperature reported in the headers of the Level 2 event file and the Mission Timeline files ARE INCORRECT by this amount for this processing. However, the temperature is corrected in the processing in order to obtain the correct temperature for the CTI correction. So the calibrated data are correct.