

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20415 - L2 Version 2
Chandra X-Ray Center

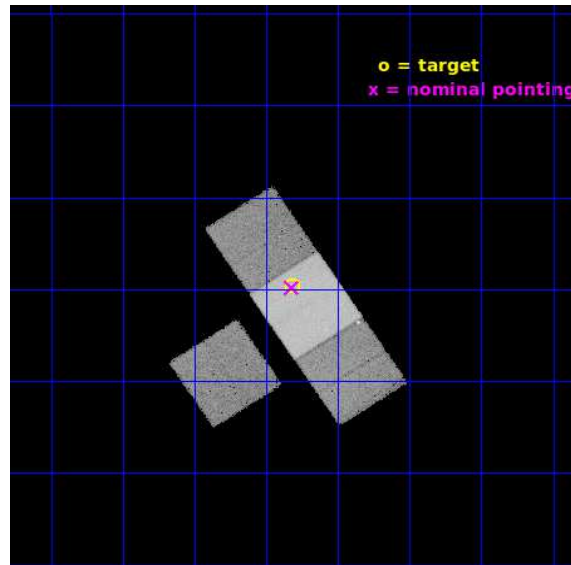
L2 Processing Date : Oct 29 2020

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1 Front

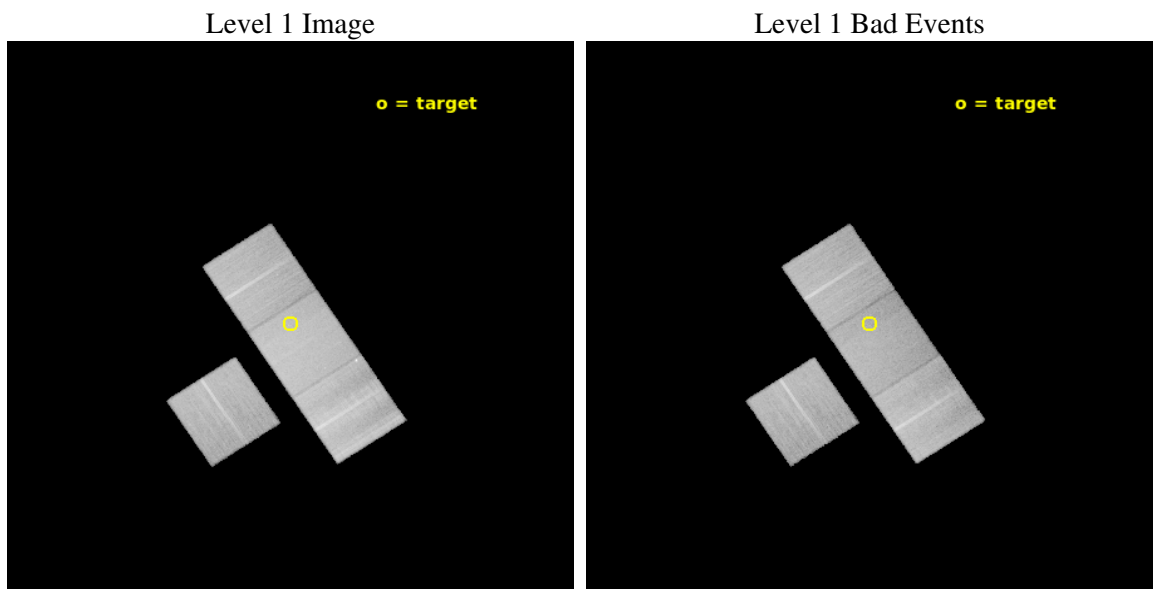
seq_num	703520	Sequence number
obs_id	20415	Observation id
title	A Complete X-ray Survey of Luminous Quasars at the End of Reionization: a Changing Population?	Proposal title
observer	Xiaohui Fan	Principal investigator
object	J1048-0109	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	162.079583	Observer's specified target RA [deg]
dec_targ	-1.161194	Observer's specified target Dec [deg]
ra_nom	162.08015206837	Nominal RA [deg]
dec_nom	-1.1636047919598	Nominal Dec [deg]
roll_nom	56.60171625708	Nominal Roll [deg]
revision	2	Processing version of data
ontime	35222.128407478	Sum of GTIs [s]
livetime	34761.925369681	Livetime [s]
ontime3	35222.046327472	Sum of GTIs [s]
ontime6	35222.087367535	Sum of GTIs [s]
ontime7	35222.128407478	Sum of GTIs [s]
ontime8	35218.864197254	Sum of GTIs [s]
l2events	227384	Number of level 2 events



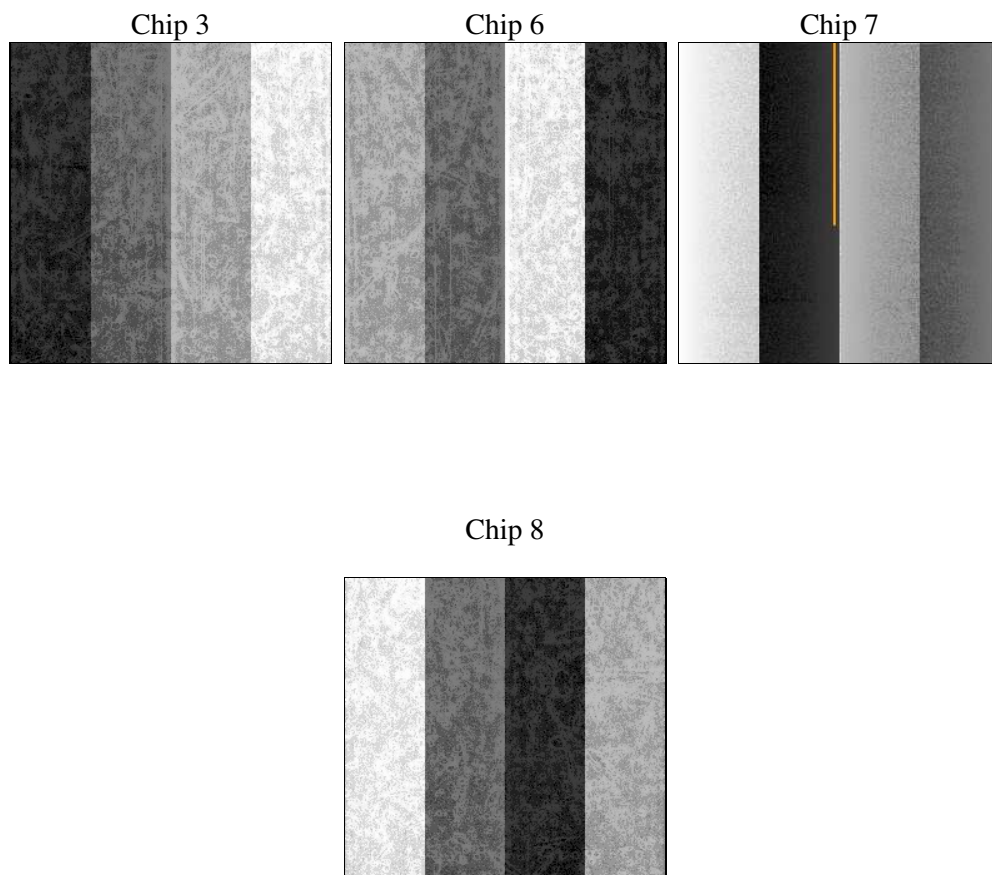
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	35155.383000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	35222.128407478	Sum of GTIs [s]
caldsver	4.9.3	 	ontime3	35222.046327472	Sum of GTIs [s]
date	2020-10-29T05:04:52	Date and time of file creation	ontime6	35222.087367535	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	35222.128407478	Sum of GTIs [s]
			ontime8	35218.864197254	Sum of GTIs [s]
			l1events	1228953	Number of level 1 events

2.1.4 Events

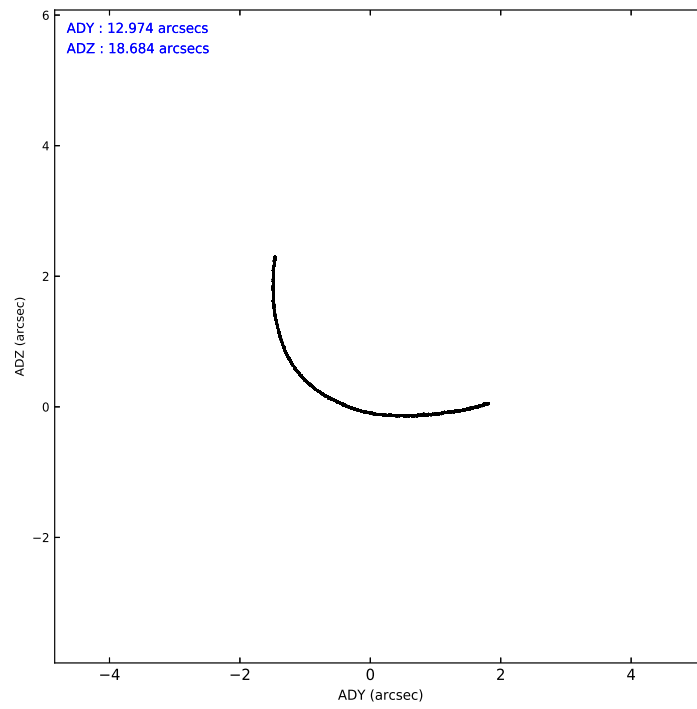
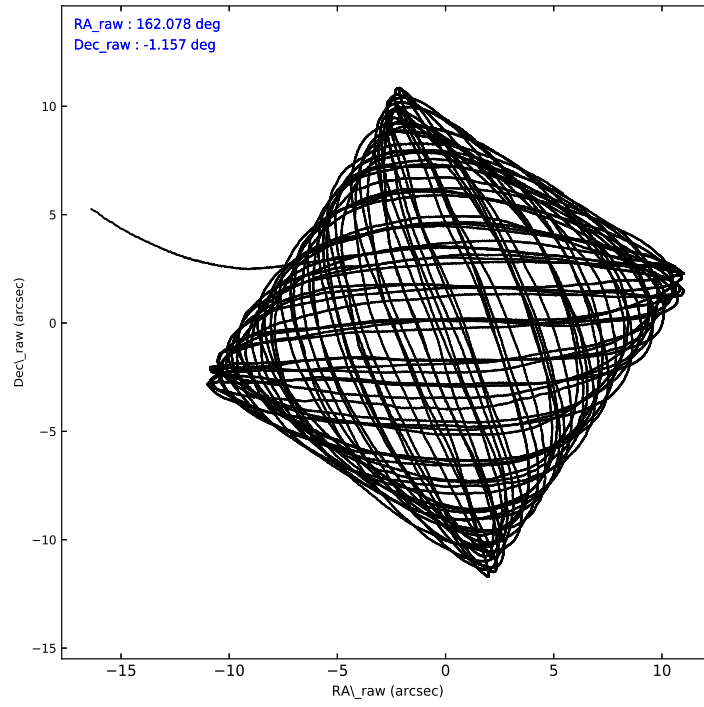
	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	254093	275052	345007	354801
rejected events	227032	244646	195740	259905
rejected %	89%	88%	56%	73%

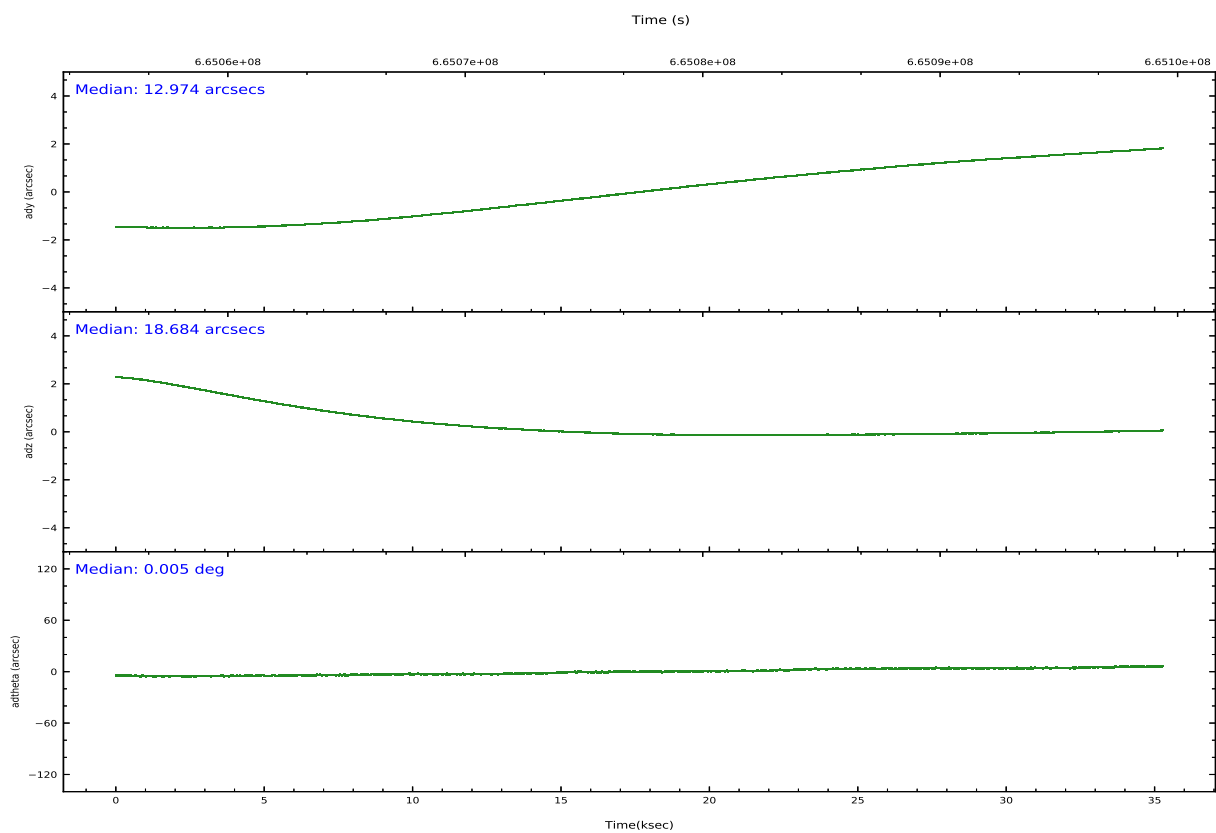
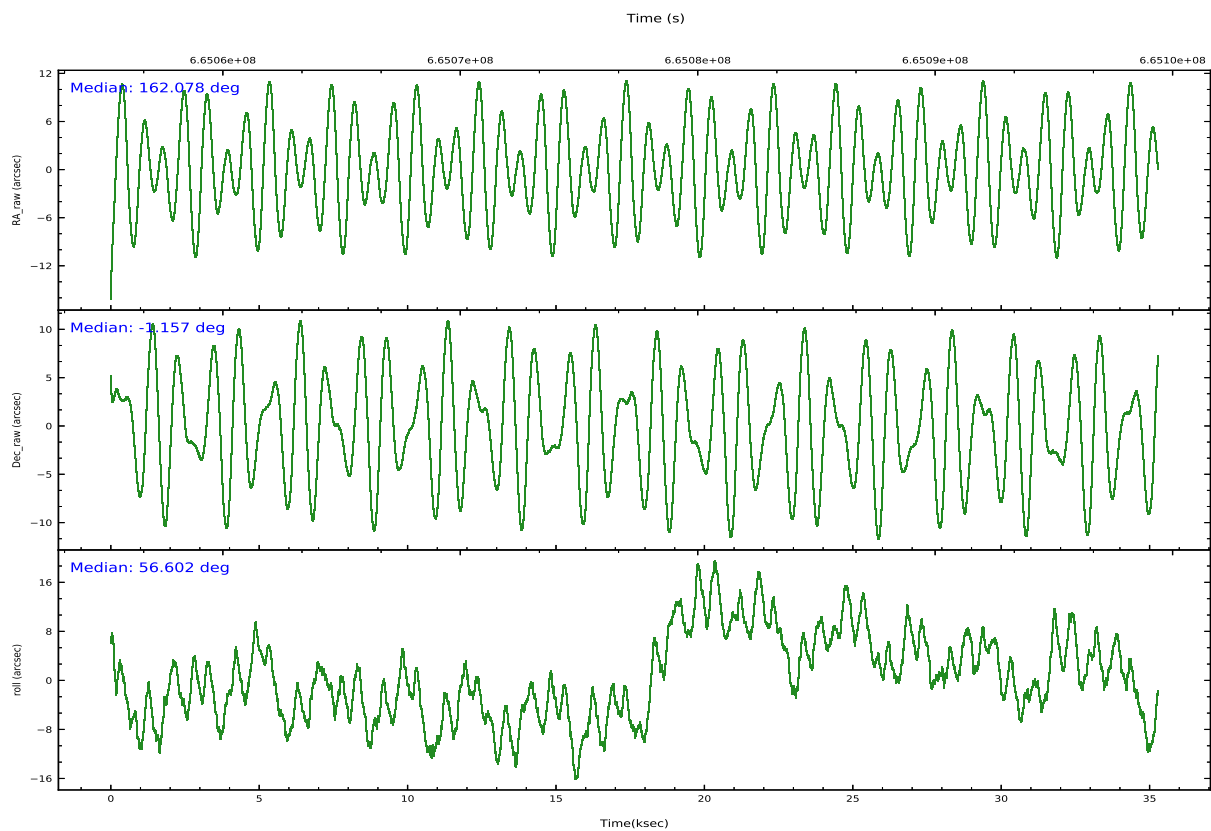
	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	9442	9830	12370	26304
	3%	3%	3%	7%
grade 1 events	138	130	538	264
	0%	0%	0%	0%
grade 2 events	6077	7363	31680	23369
	2%	2%	9%	6%
grade 3 events	2877	2992	11692	9577
	1%	1%	3%	2%
grade 4 events	2927	2836	11357	8842
	1%	1%	3%	2%
grade 5 events	12434	12384	33789	19249
	4%	4%	9%	5%
grade 6 events	5742	7389	82180	26821
	2%	2%	23%	7%
grade 7 events	214456	232128	161401	240375
	84%	84%	46%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-3678	ACIS-3678	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	162.076462	162.08015206837	CCD I2 on	O2	N
[deg] Pointing Dec	-1.184805	-1.1636047919598	CCD I3 on	Y	Y
[deg] Pointing Roll	56.453702	56.60171625708	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)	665060357.184000	665059151.05373	CCD S5 on	O1	N
Observation start date	2019-01-28T10:58:08	2019-01-28T10:39:11	Number of optional ACIS chips dropped	2	2
[s] Observation end time (MET)	665095513.184000	665096709.10598	On-chip summing requested	N	N
Observation end date	2019-01-28T20:44:04	2019-01-28T21:05:09	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



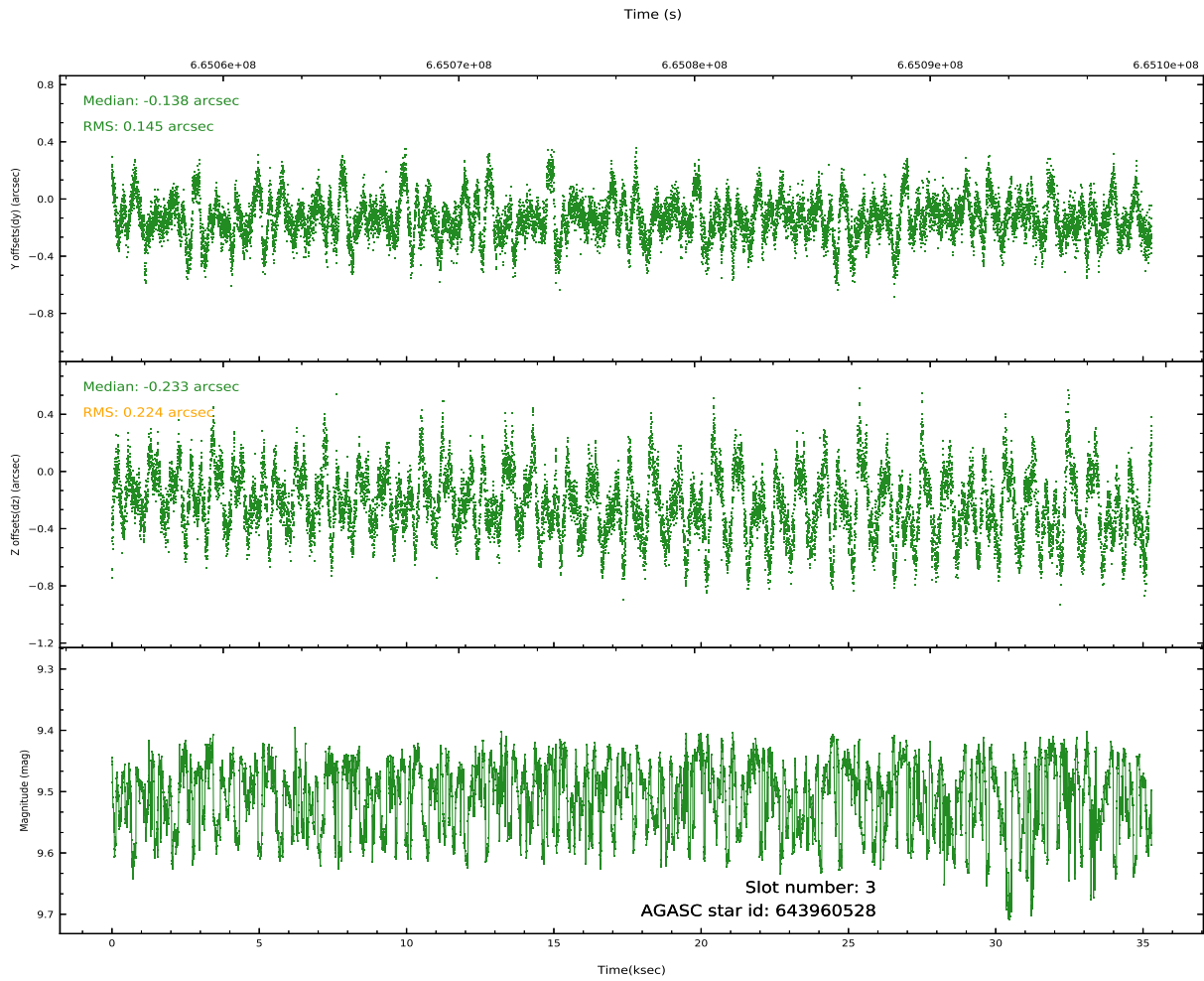
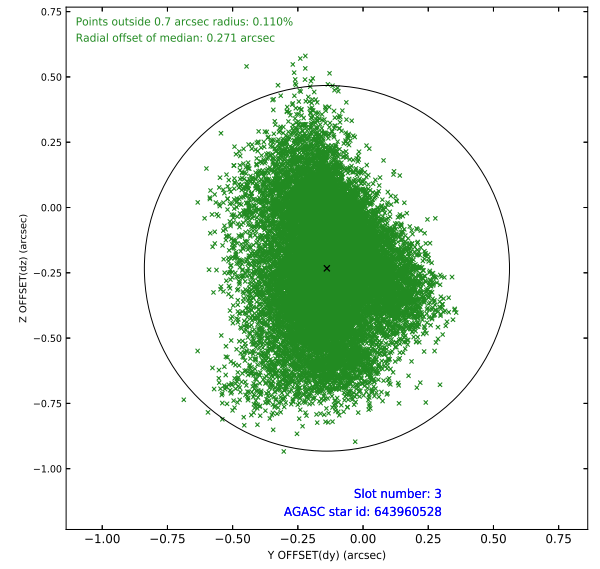
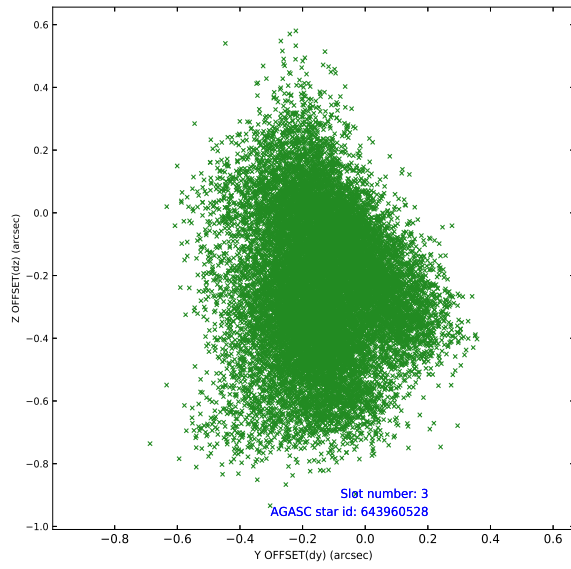


Slot Statistics

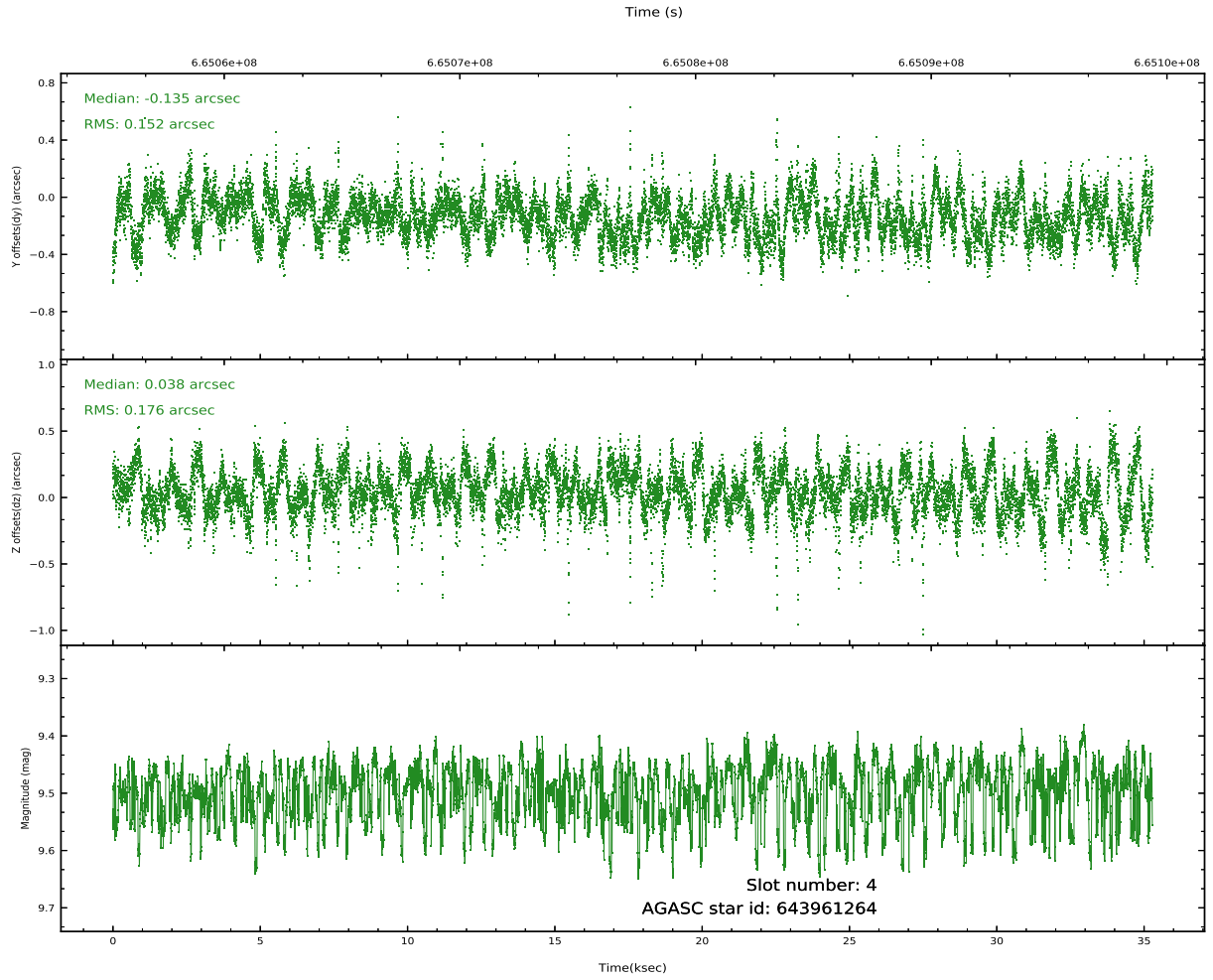
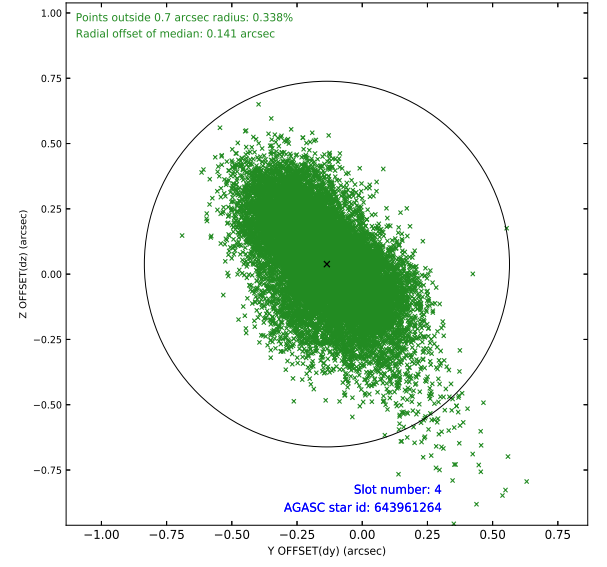
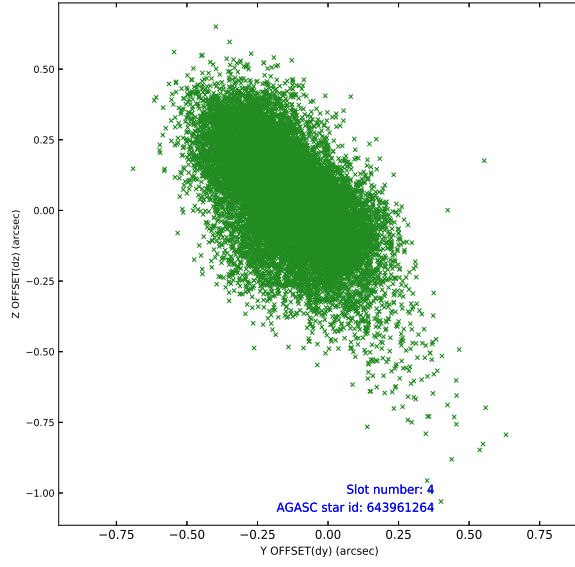
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.04	8605	1.000	0.197	-0.125	0.041	0.101	0.000000	0.000000	-765.99	-1740
1	FID		ACIS-S-4	7.16	8606	1.000	0.130	-0.065	0.025	0.037	0.000000	0.000000	2147.51	167
2	FID		ACIS-S-5	7.14	8605	1.000	-0.374	0.202	0.049	0.133	0.000000	0.000000	-1819.03	162
3	GUIDE	used	643960528	9.50	17199	1.000	-0.138	-0.233	0.282	0.462	161.965373	-1.225331	-342.80	251
4	GUIDE	used	643961264	9.49	17175	1.000	-0.135	0.038	0.243	0.405	161.356141	-1.417550	-2131.17	1697
5	GUIDE	used	643964784	9.51	17092	1.000	0.143	0.144	0.320	0.542	162.141797	-1.803842	-1726.78	-1427
6	GUIDE	used	643964864	9.85	17120	1.000	-0.153	-0.247	0.258	0.446	162.279679	-0.961118	1074.16	-164
7	GUIDE	used	643965408	9.52	16983	1.000	0.271	0.236	0.253	0.390	162.285690	-1.822116	-1495.63	-1895

2.4 Star Slots

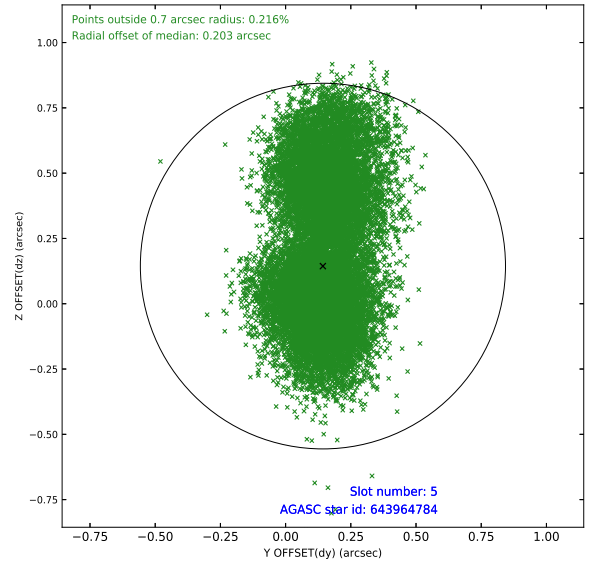
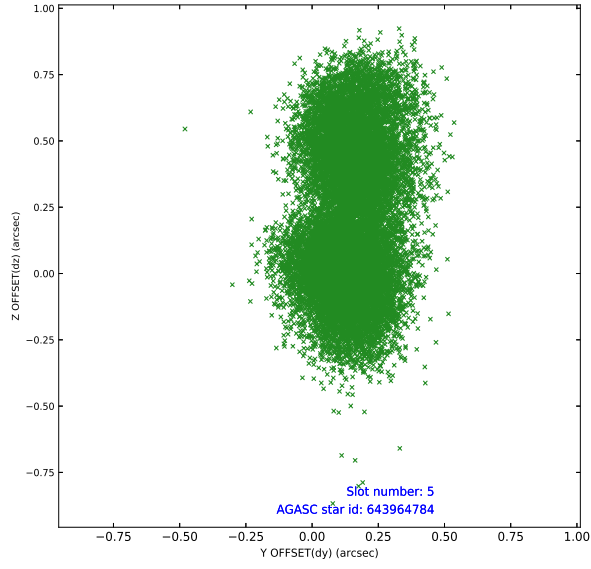
2.4.1 Slot 3



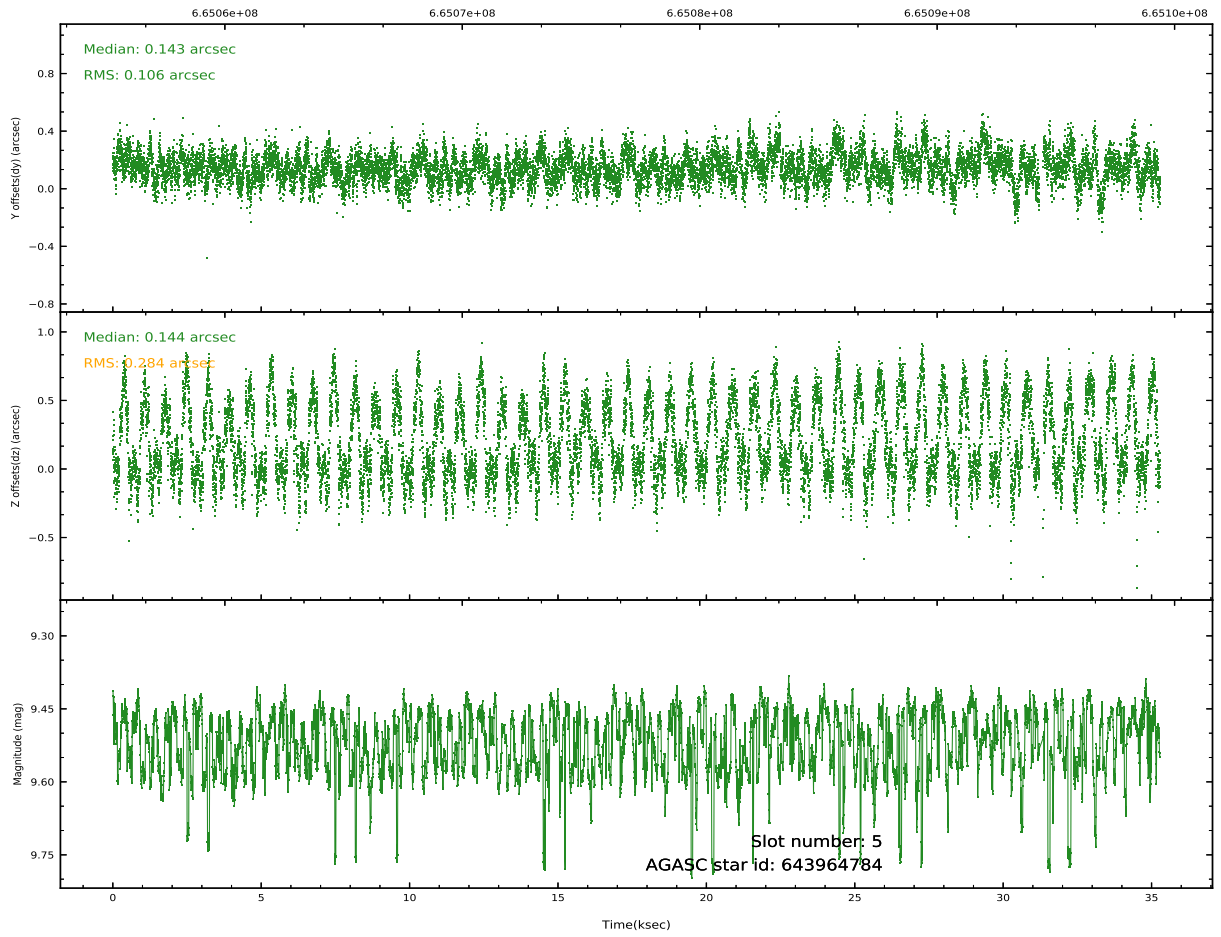
2.4.2 Slot 4



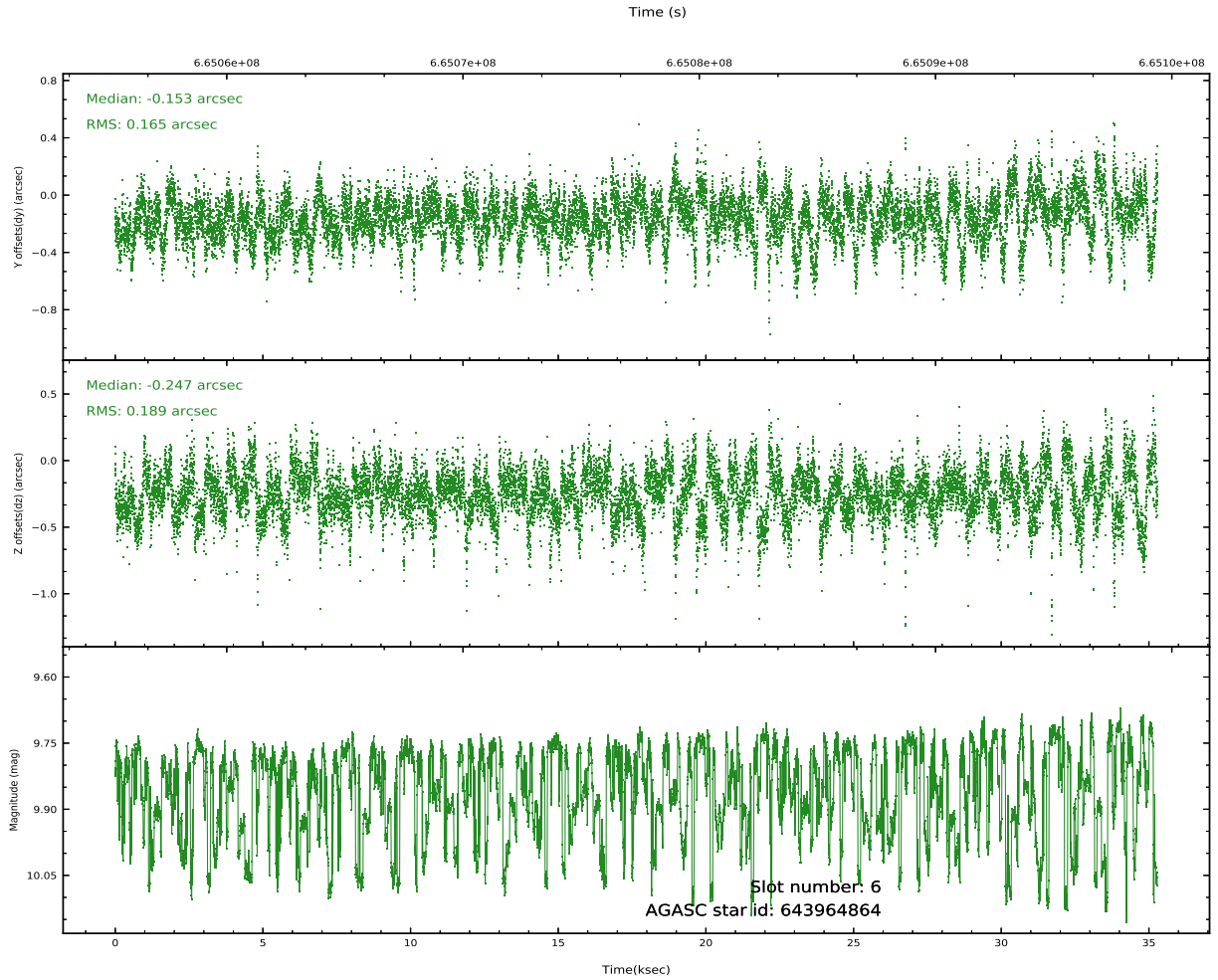
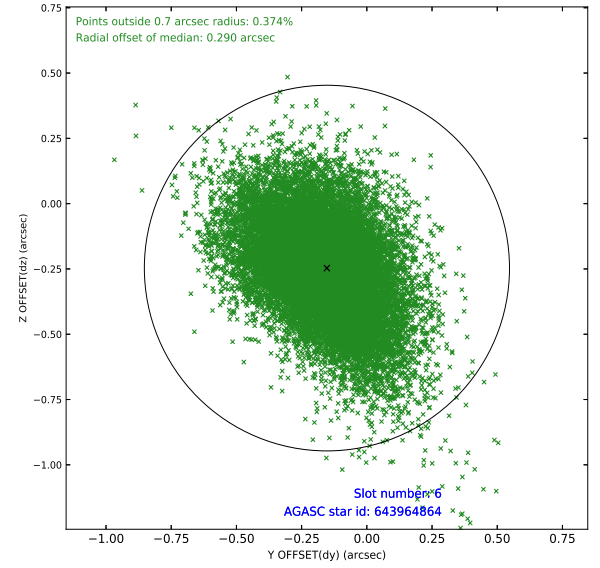
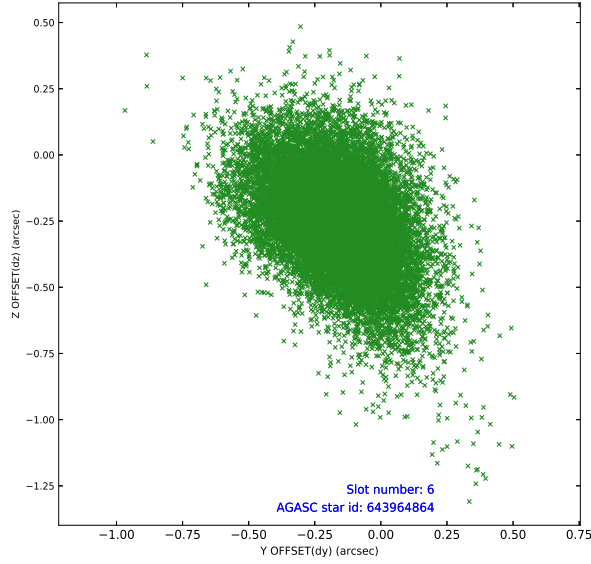
2.4.3 Slot 5



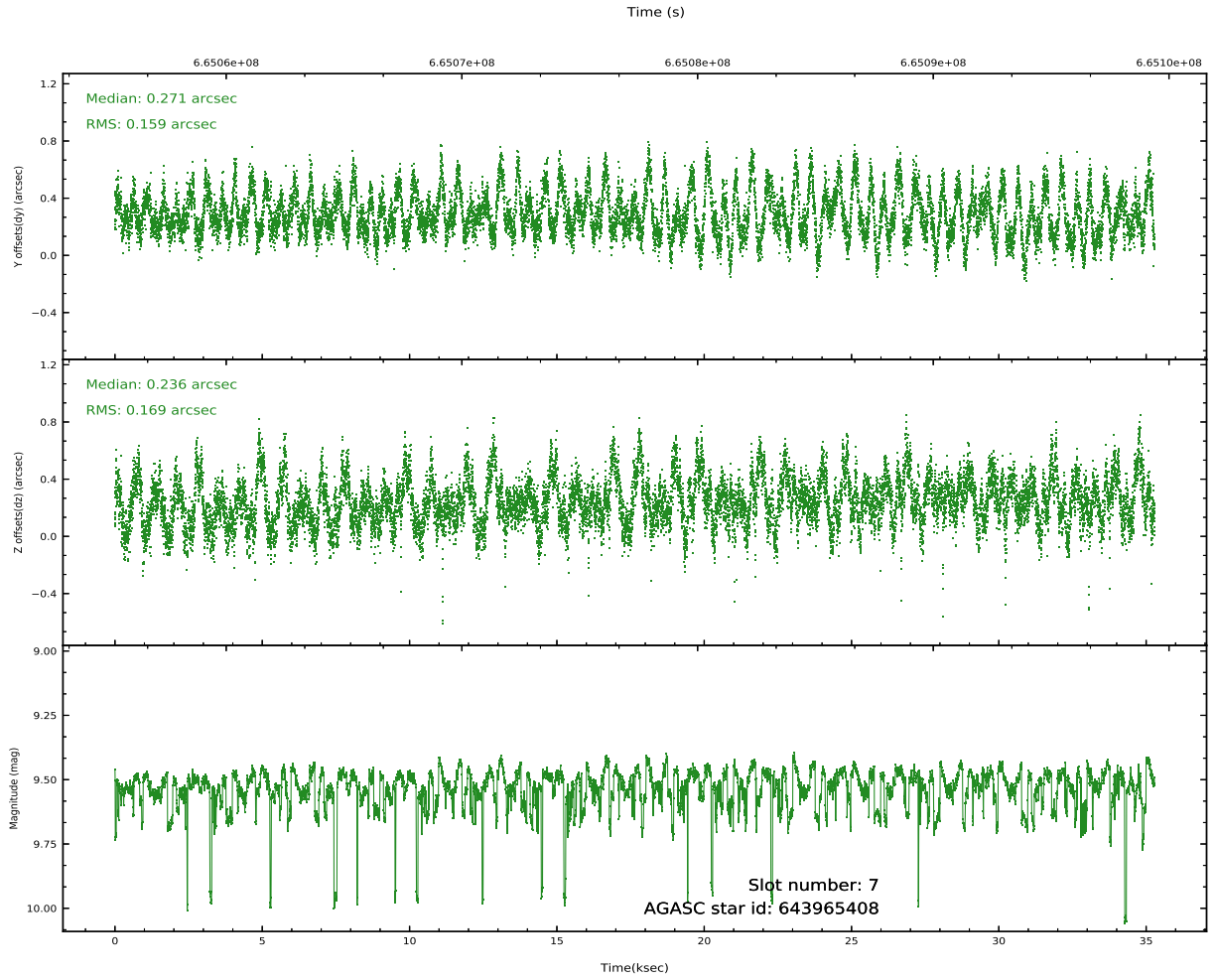
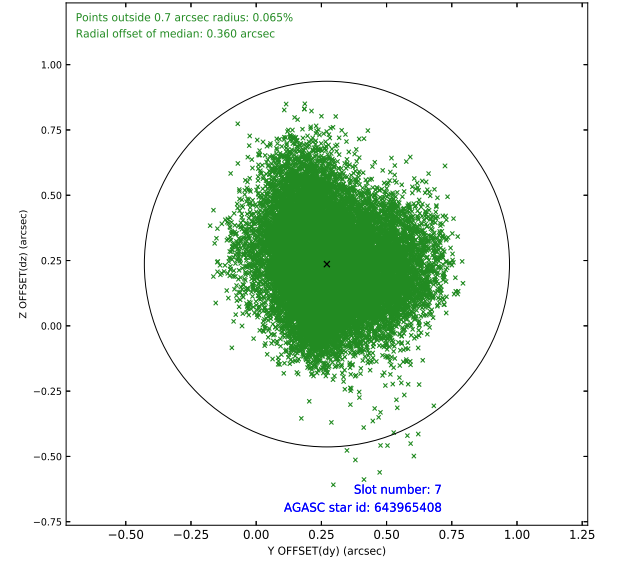
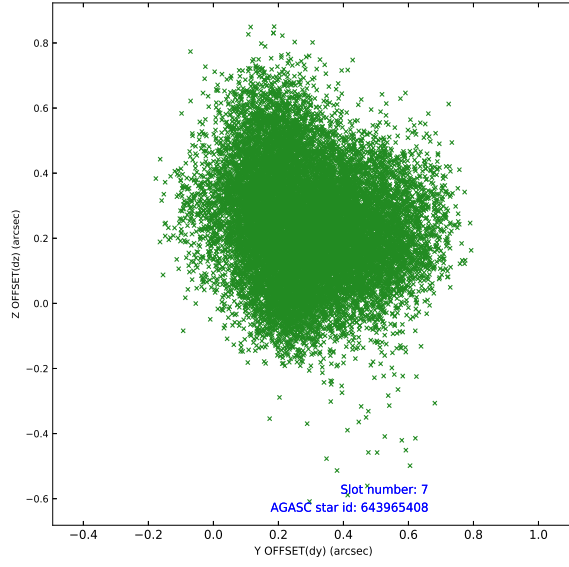
Time (s)



2.4.4 Slot 6

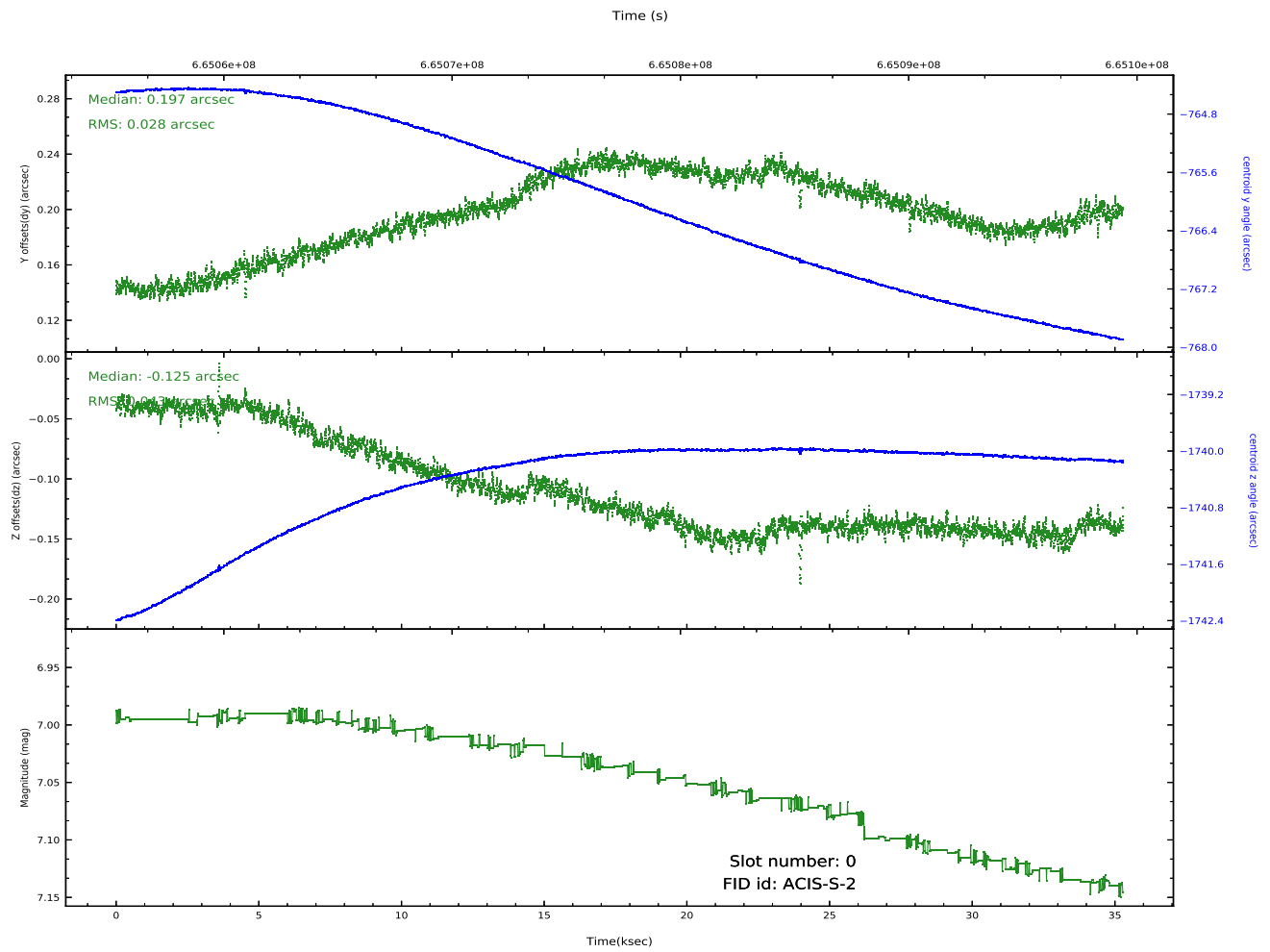
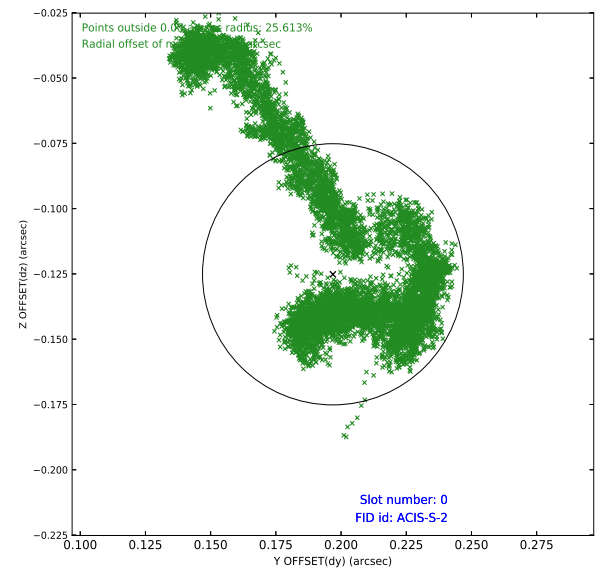
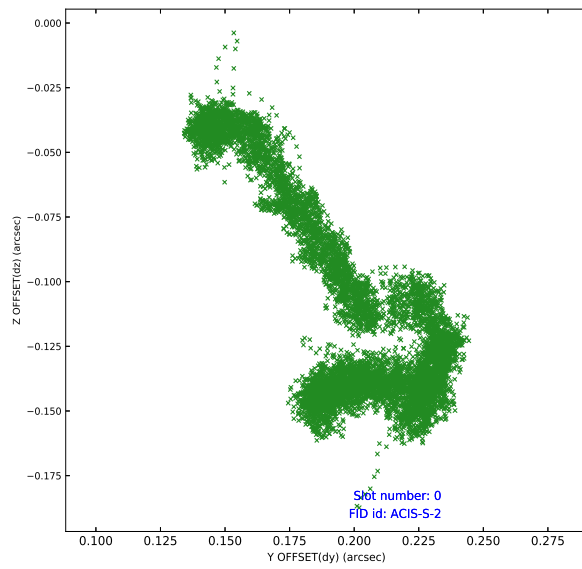


2.4.5 Slot 7

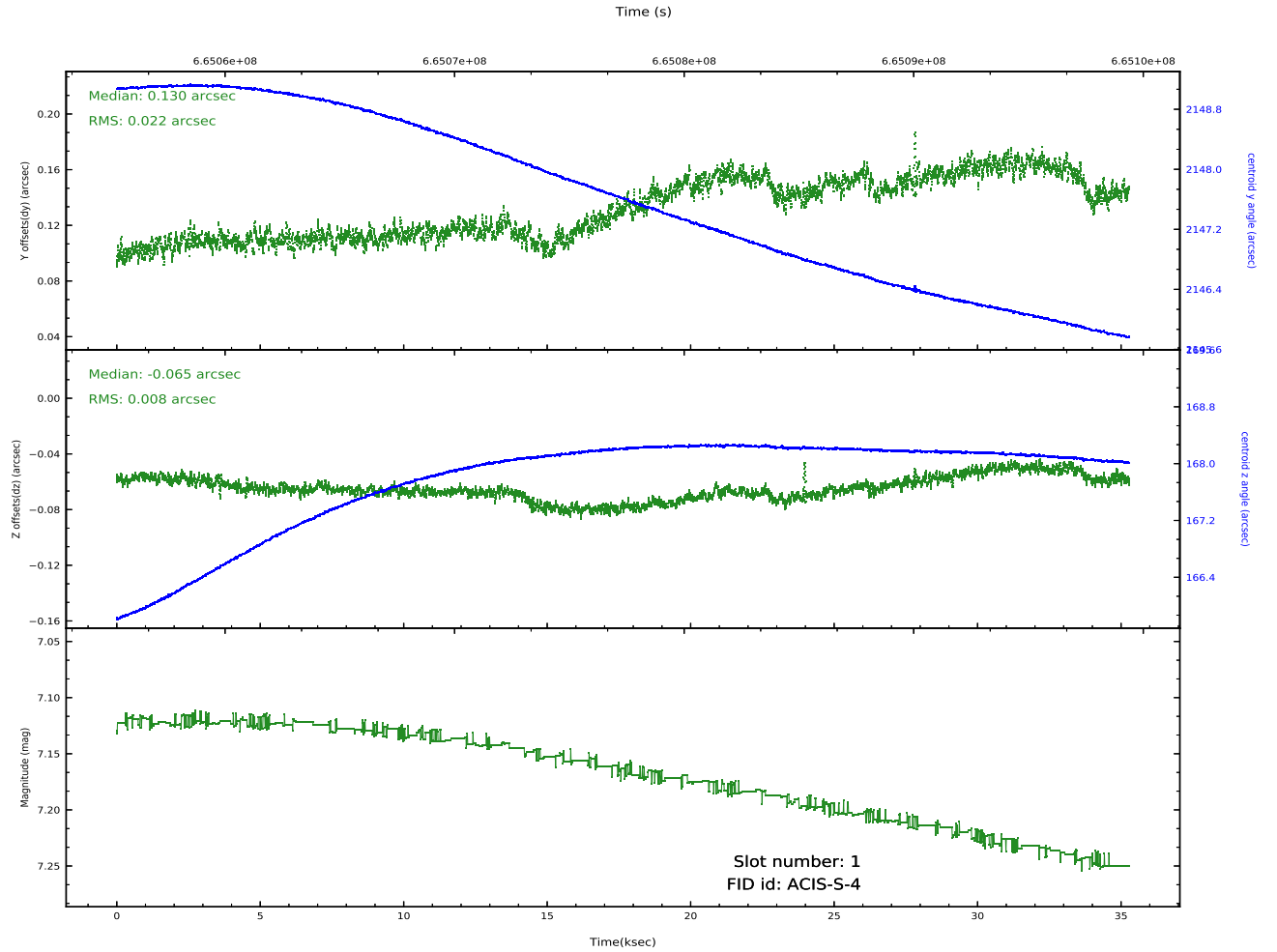
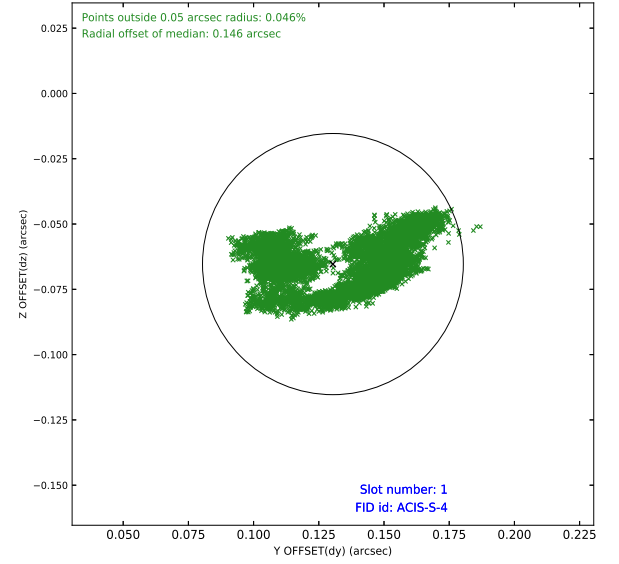
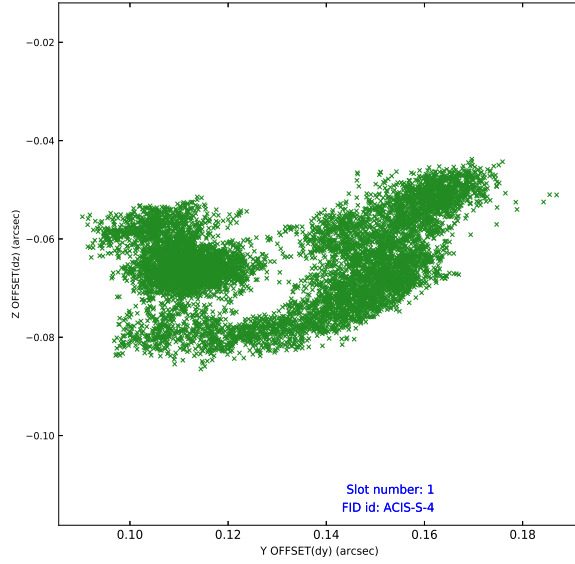


2.5 FID Slots

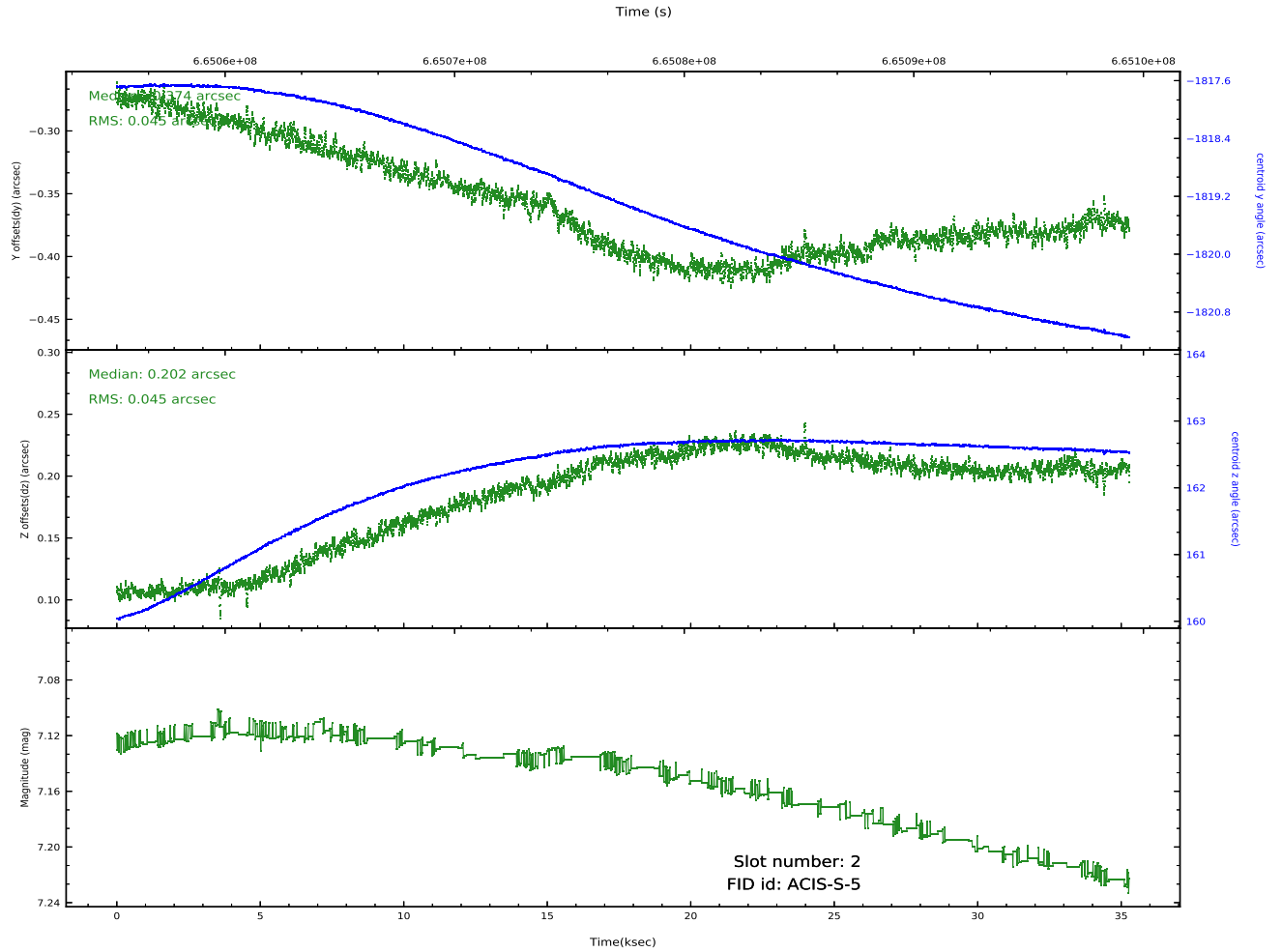
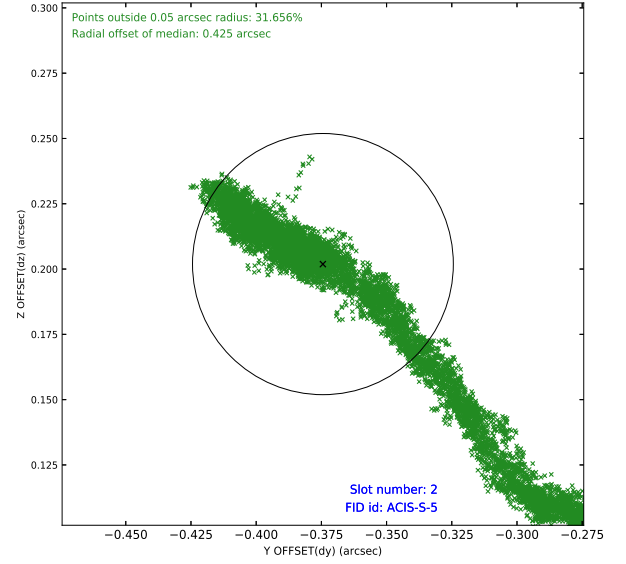
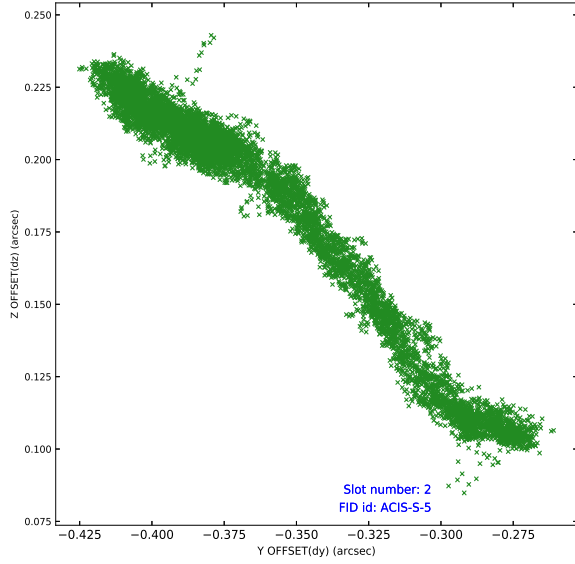
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	35.222128408194

A.2 Comments

Two optional chips were dropped.