

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 19561 - L2 Version 3
Chandra X-Ray Center

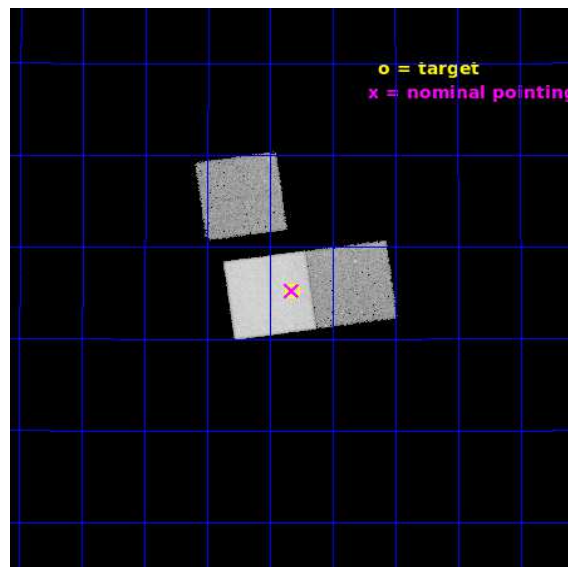
L2 Processing Date : Oct 25 2020

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1 Front

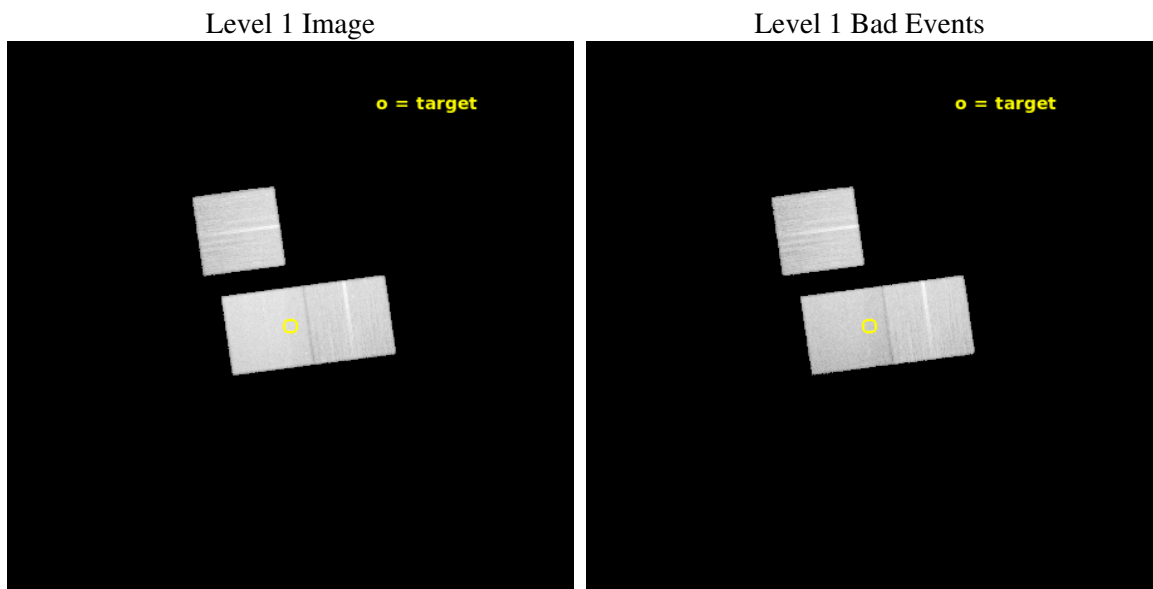
seq_num	703409	Sequence number
obs_id	19561	Observation id
title	Continued Quasar and AGN Variability on 10-100 kyr Timescales	Prop
observer	Walter Maksym	Principal investigator
object	UGC 7342	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	184.580417	Observer's specified target RA [deg]
dec_targ	29.253611	Observer's specified target Dec [deg]
ra_nom	184.58151104694	Nominal RA [deg]
dec_nom	29.254459032664	Nominal Dec [deg]
roll_nom	172.15041627235	Nominal Roll [deg]
revision	3	Processing version of data
ontime	32112.900247097	Sum of GTIs [s]
livetime	31693.321564195	Livetime [s]
ontime3	32112.900247097	Sum of GTIs [s]
ontime6	32109.75917697	Sum of GTIs [s]
ontime7	32112.900247097	Sum of GTIs [s]
l2events	177348	Number of level 2 events



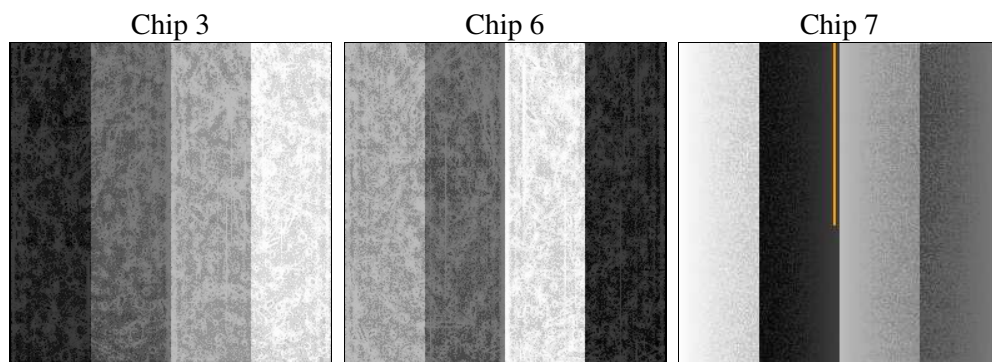
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	32000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	32112.900247097	Sum of GTIs [s]
caldsver	4.9.3	 	ontime3	32112.900247097	Sum of GTIs [s]
date	2020-10-25T04:23:14	Date and time of file creation	ontime6	32109.75917697	Sum of GTIs [s]
revision	3	Processing version of data	ontime7	32112.900247097	Sum of GTIs [s]
			l1events	822706	Number of level 1 events

2.1.4 Events

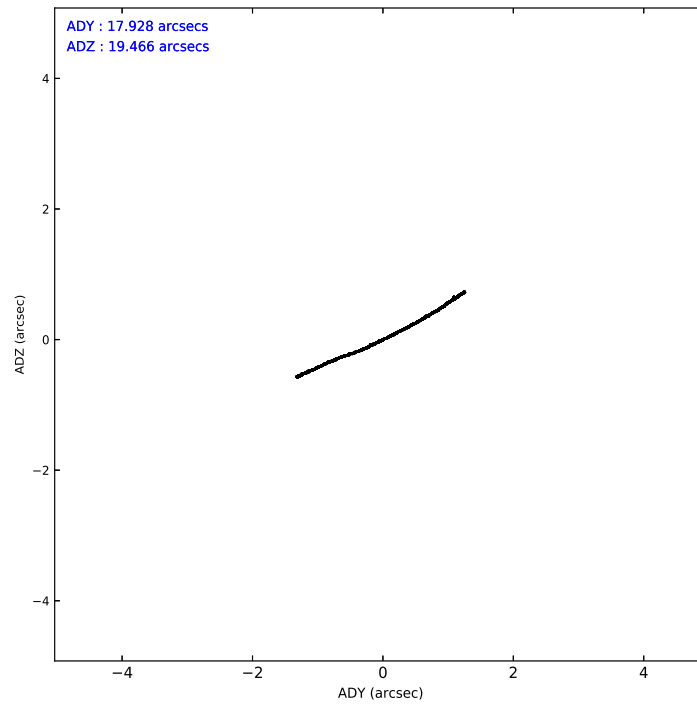
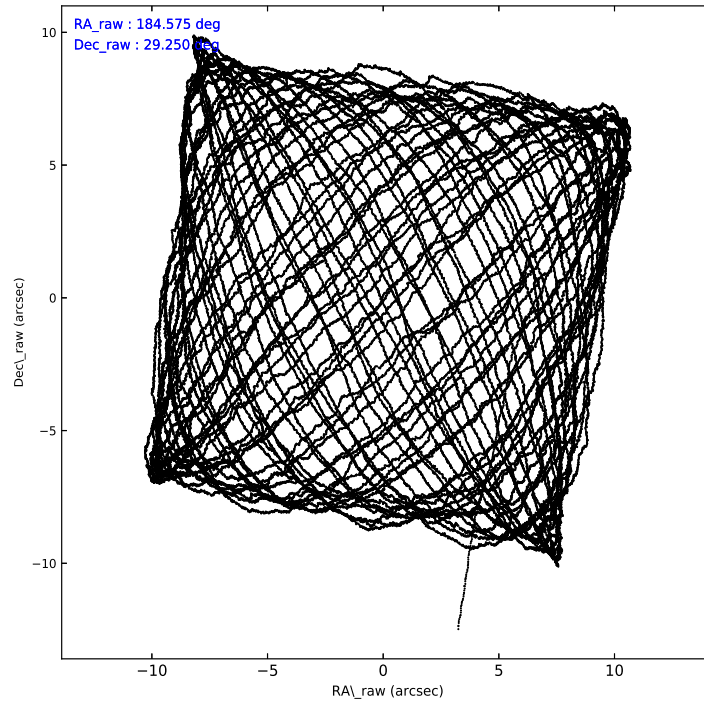
	ccd 3	ccd 6	ccd 7
level 1 events	246178	264504	312024
rejected events	221900	237280	176317
rejected %	90%	89%	56%

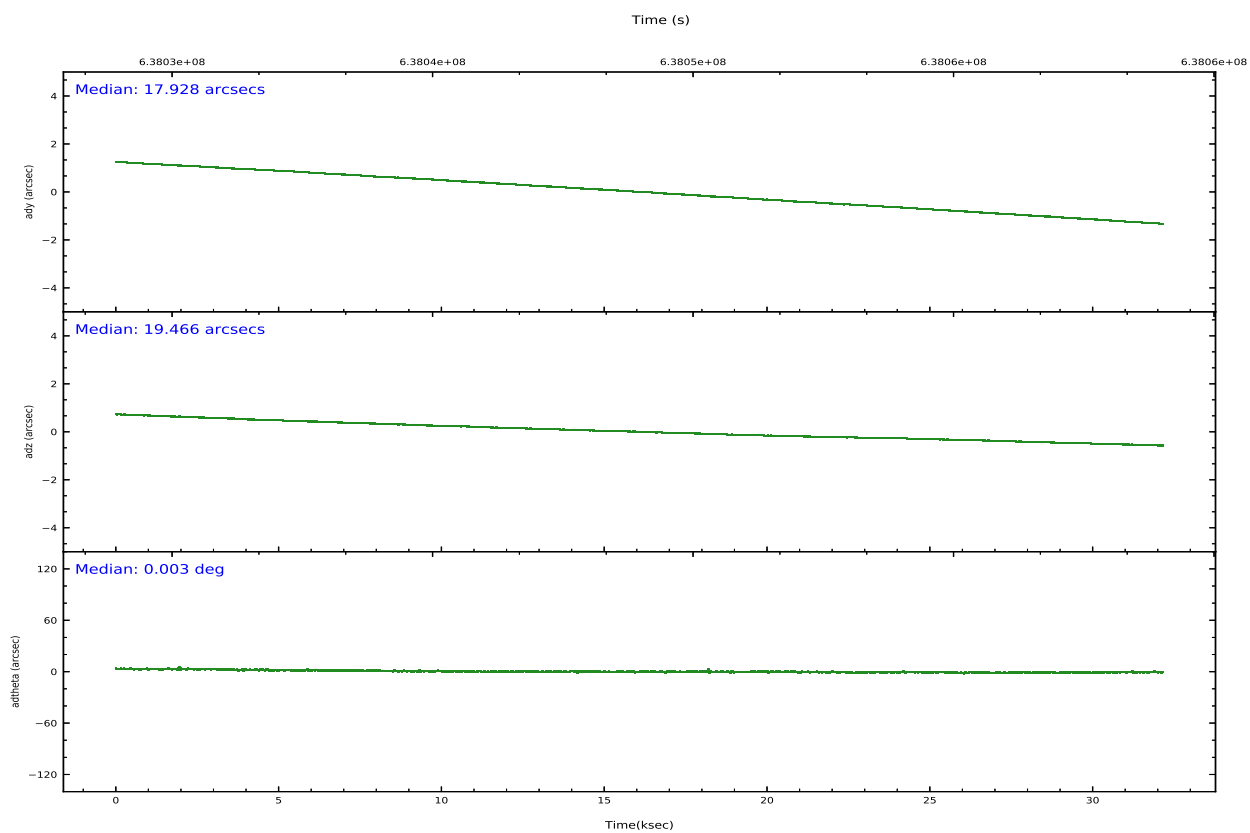
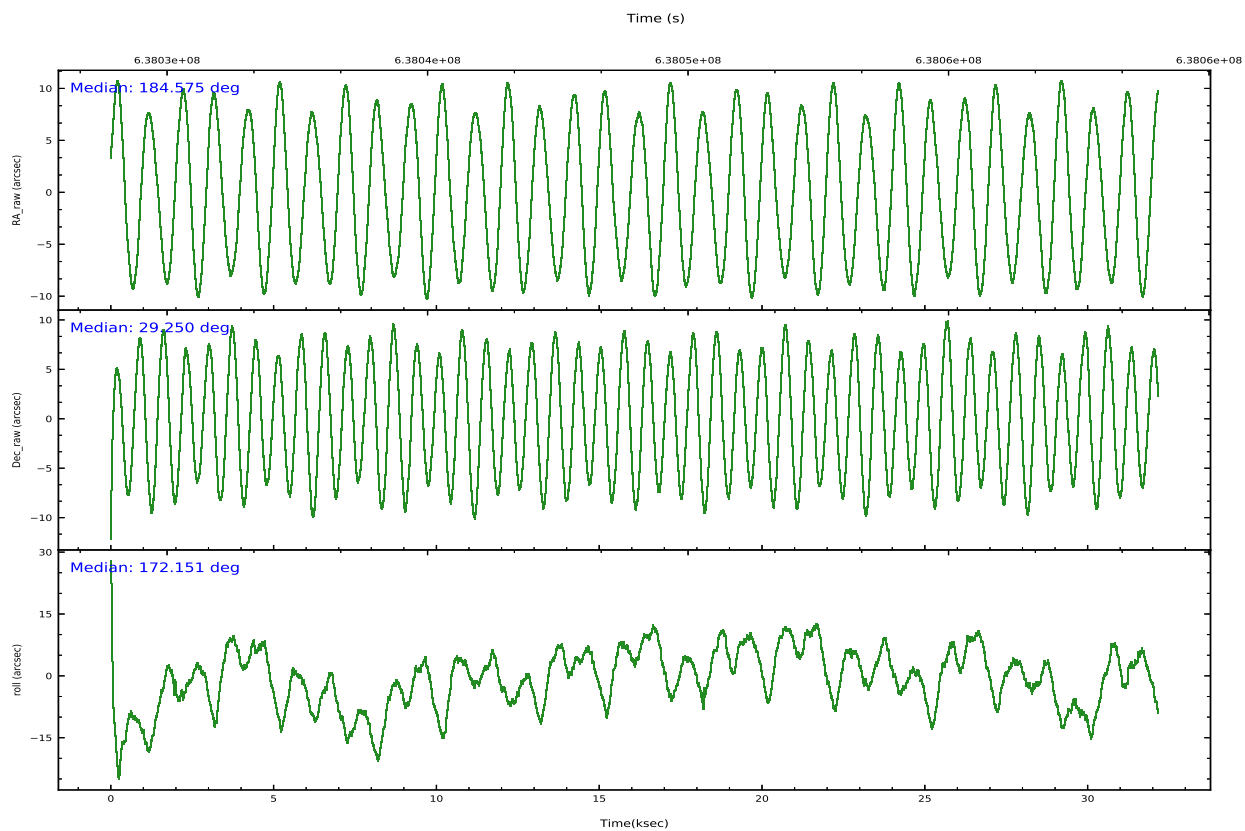
	ccd 3	ccd 6	ccd 7
grade 0 events	8429	7825	11389
	3%	2%	3%
grade 1 events	124	121	411
	0%	0%	0%
grade 2 events	5400	7313	28095
	2%	2%	9%
grade 3 events	2519	2286	10701
	1%	0%	3%
grade 4 events	2504	2318	10614
	1%	0%	3%
grade 5 events	10769	10420	30450
	4%	3%	9%
grade 6 events	5427	7483	74927
	2%	2%	24%
grade 7 events	211006	226738	145437
	85%	85%	46%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-367	ACIS-367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	184.603732	184.58151104694	CCD I2 on	O2	N
[deg] Pointing Dec	29.260318	29.254459032664	CCD I3 on	O3	Y
[deg] Pointing Roll	171.988603	172.15041627235	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	O4	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	O1	N
[s] Observation start time (MET)	638030437.184000	638029514.4821399	CCD S5 on	N	N
Observation start date	2018-03-21T14:39:28	2018-03-21T14:25:14	Number of optional ACIS chips dropped	2	2
[s] Observation end time (MET)	638062437.184000	638063517.8341399	On-chip summing requested	N	N
Observation end date	2018-03-21T23:32:48	2018-03-21T23:51:57	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



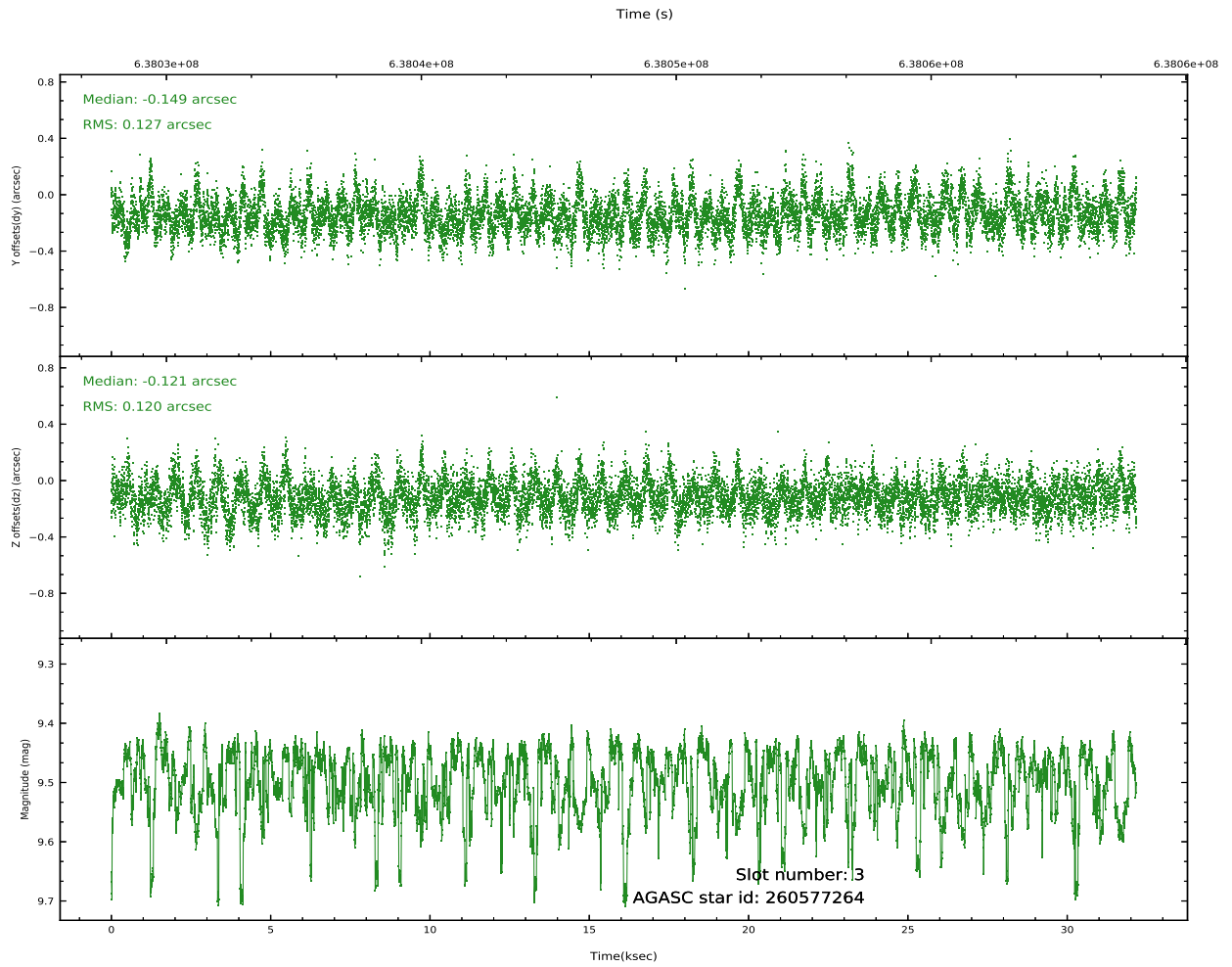
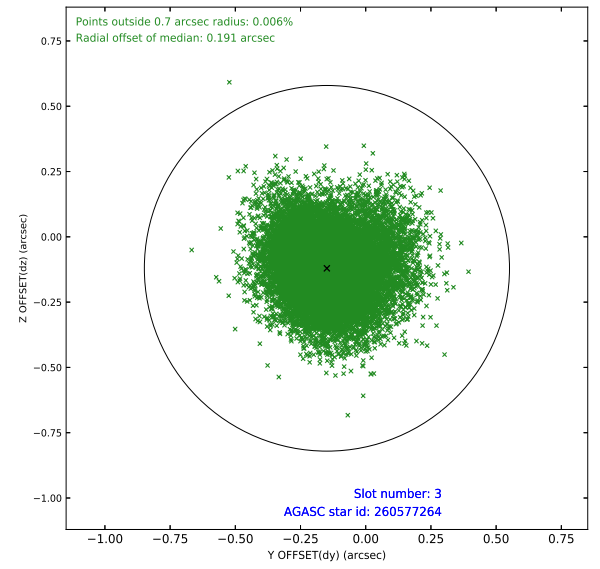
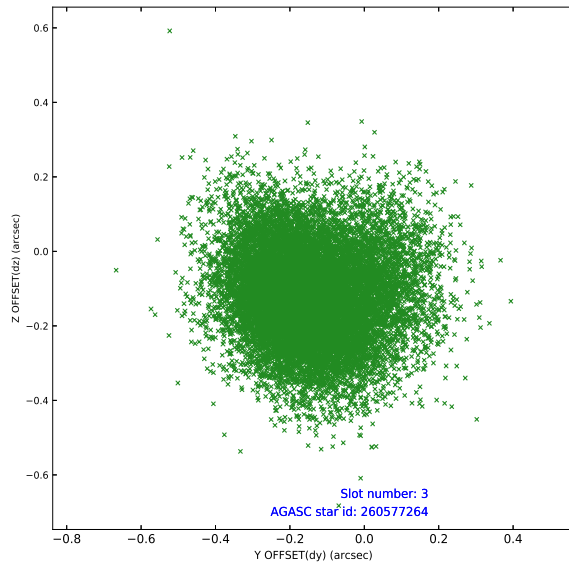


Slot Statistics

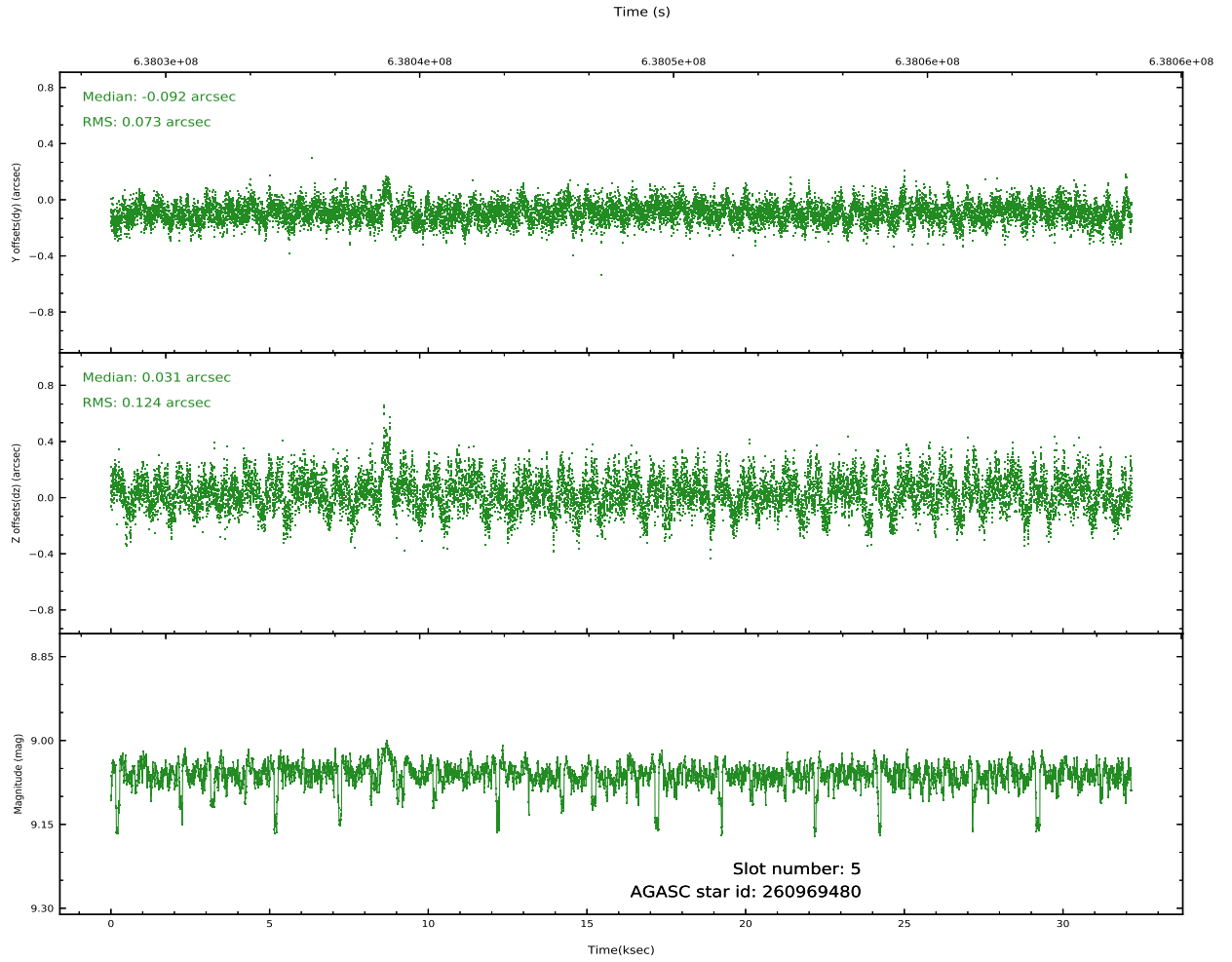
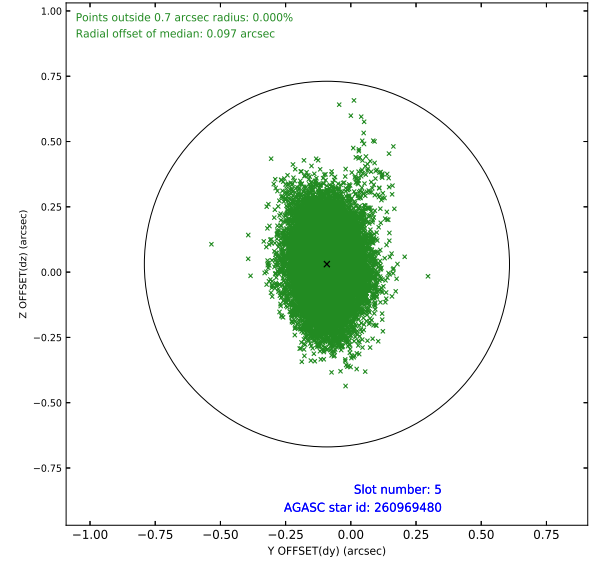
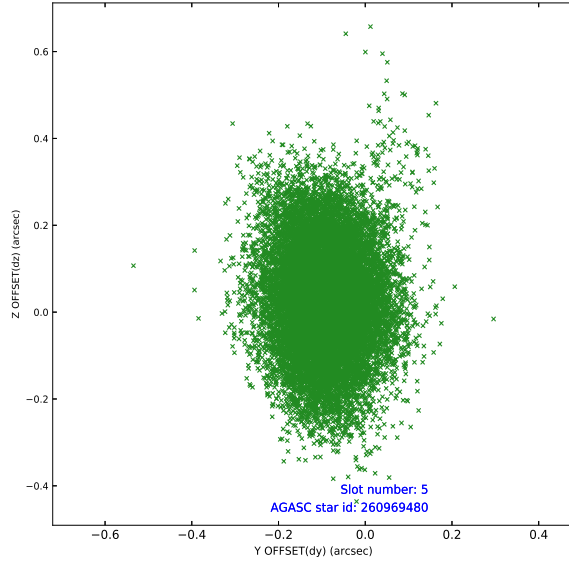
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.16	7845	1.000	0.107	-0.109	0.021	0.032	0.000000	0.000000	-771.07	-1740
1	FID		ACIS-S-4	7.25	7846	1.000	0.162	-0.022	0.011	0.019	0.000000	0.000000	2142.46	167
2	FID		ACIS-S-5	7.25	7846	1.000	-0.302	0.143	0.018	0.030	0.000000	0.000000	-1824.02	161
3	GUIDE	used	260577264	9.49	15672	1.000	-0.149	-0.121	0.184	0.309	183.832255	29.107902	2327.58	873
4	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
5	GUIDE	used	260969480	9.06	15672	1.000	-0.092	0.031	0.150	0.255	184.329513	28.726397	590.89	2023
6	GUIDE	used	260979504	6.11	15692	1.000	0.036	-0.122	0.151	0.238	184.377399	28.937186	544.99	1250
7	GUIDE	used	260965048	10.27	15618	1.000	0.200	0.206	0.218	0.361	185.120667	29.682199	-1388.20	-1732

2.4 Star Slots

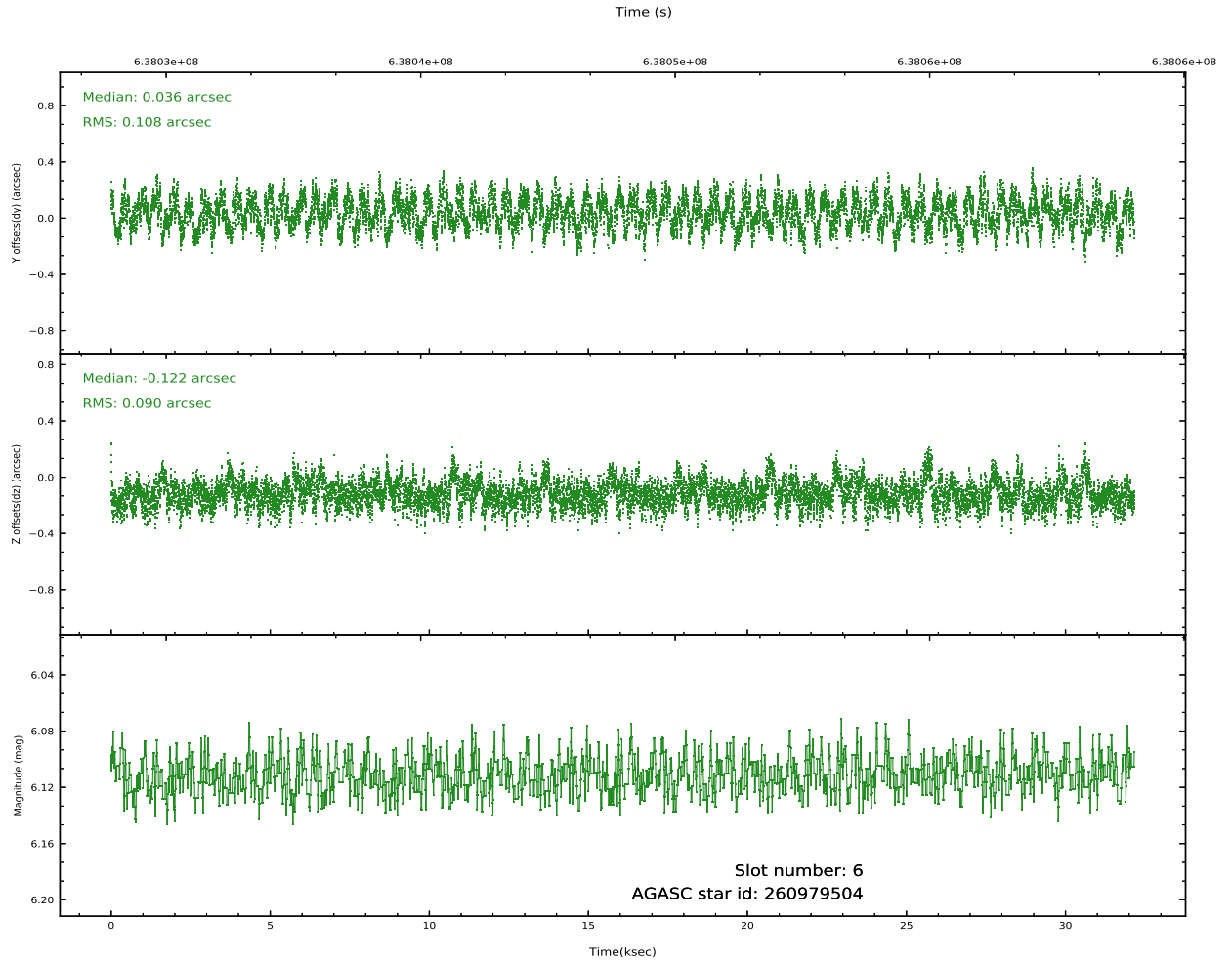
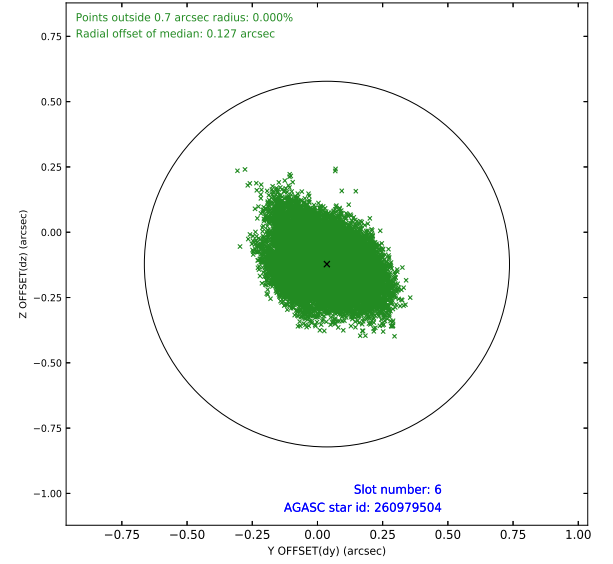
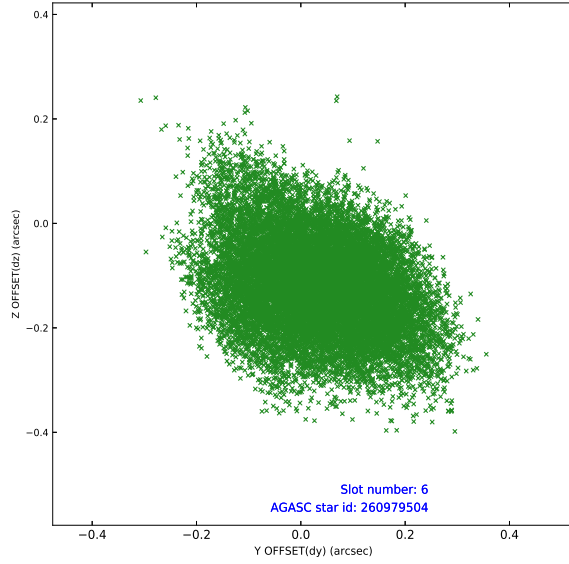
2.4.1 Slot 3



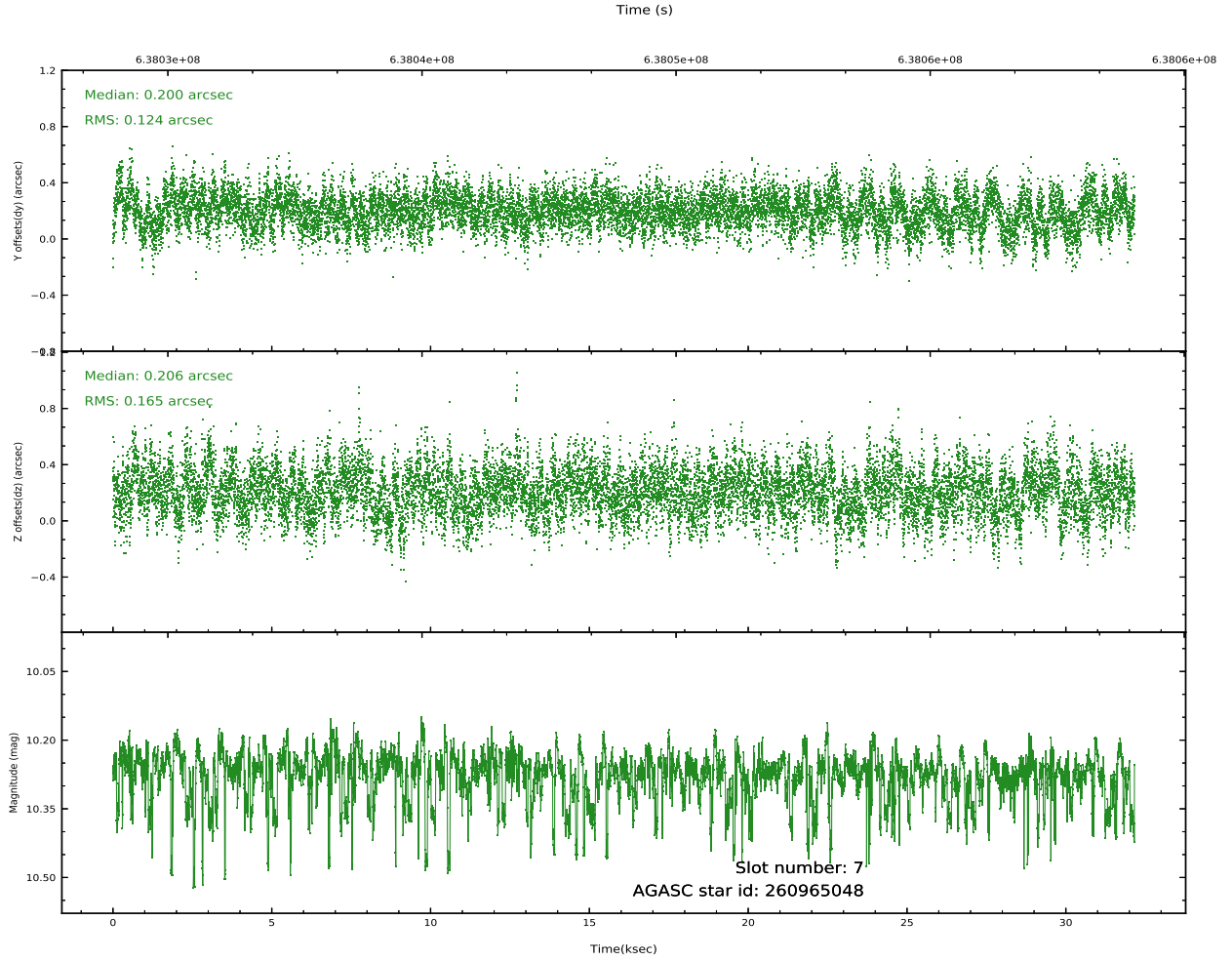
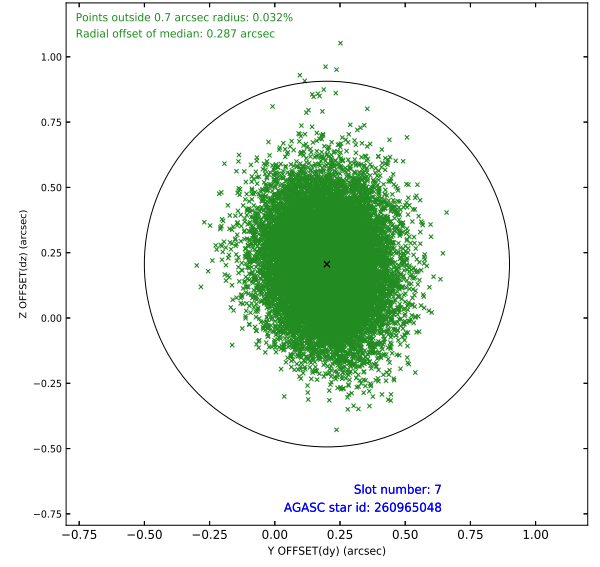
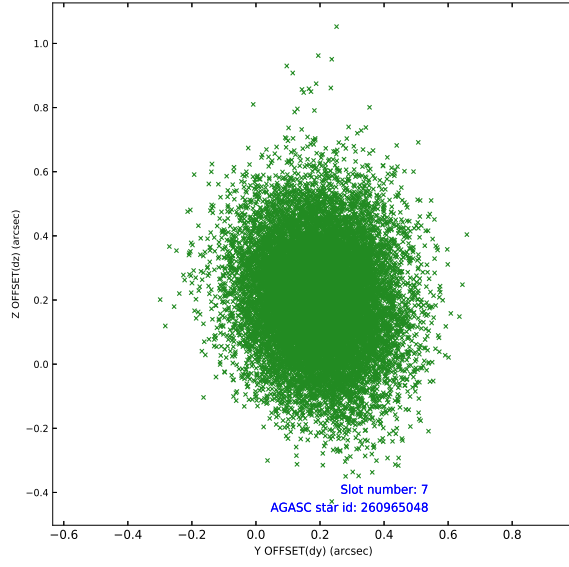
2.4.2 Slot 5



2.4.3 Slot 6

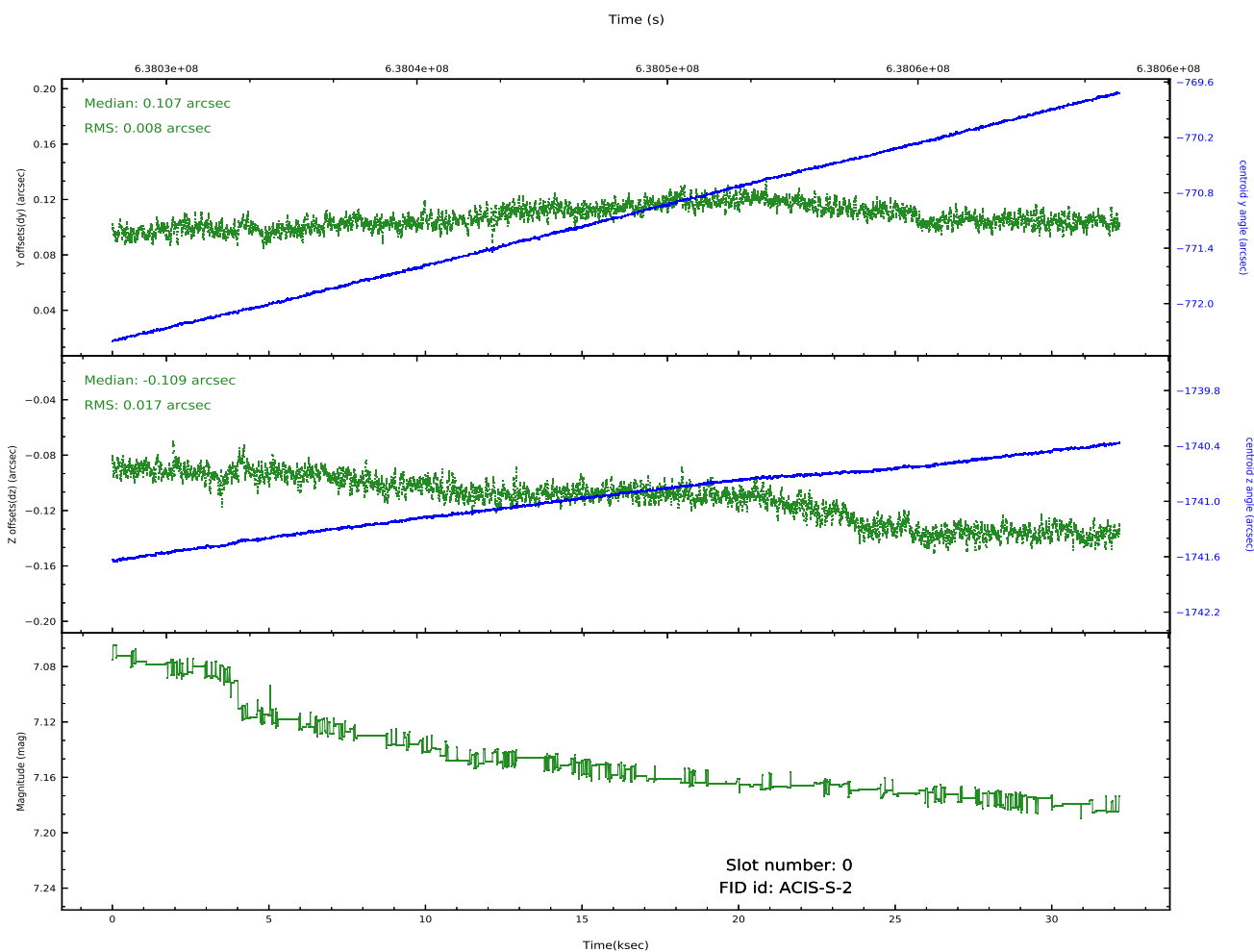
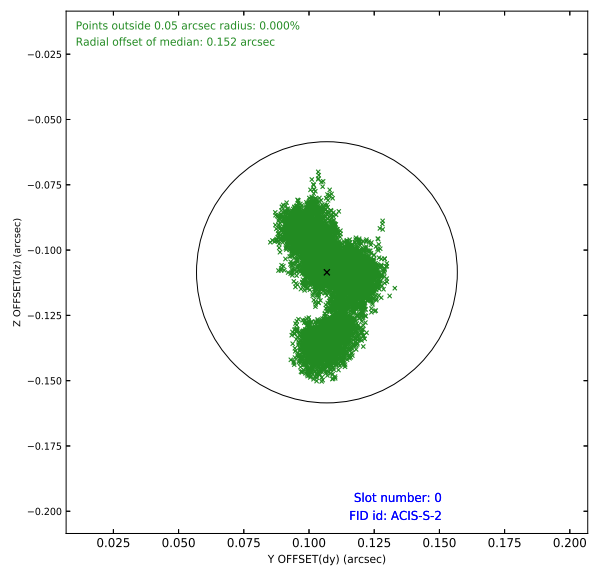
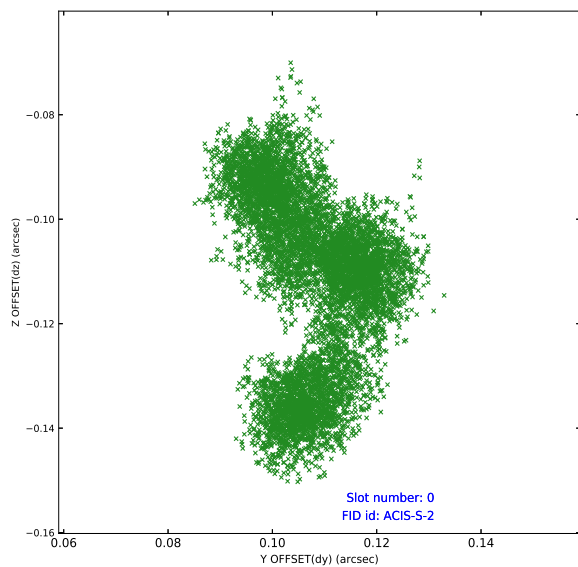


2.4.4 Slot 7

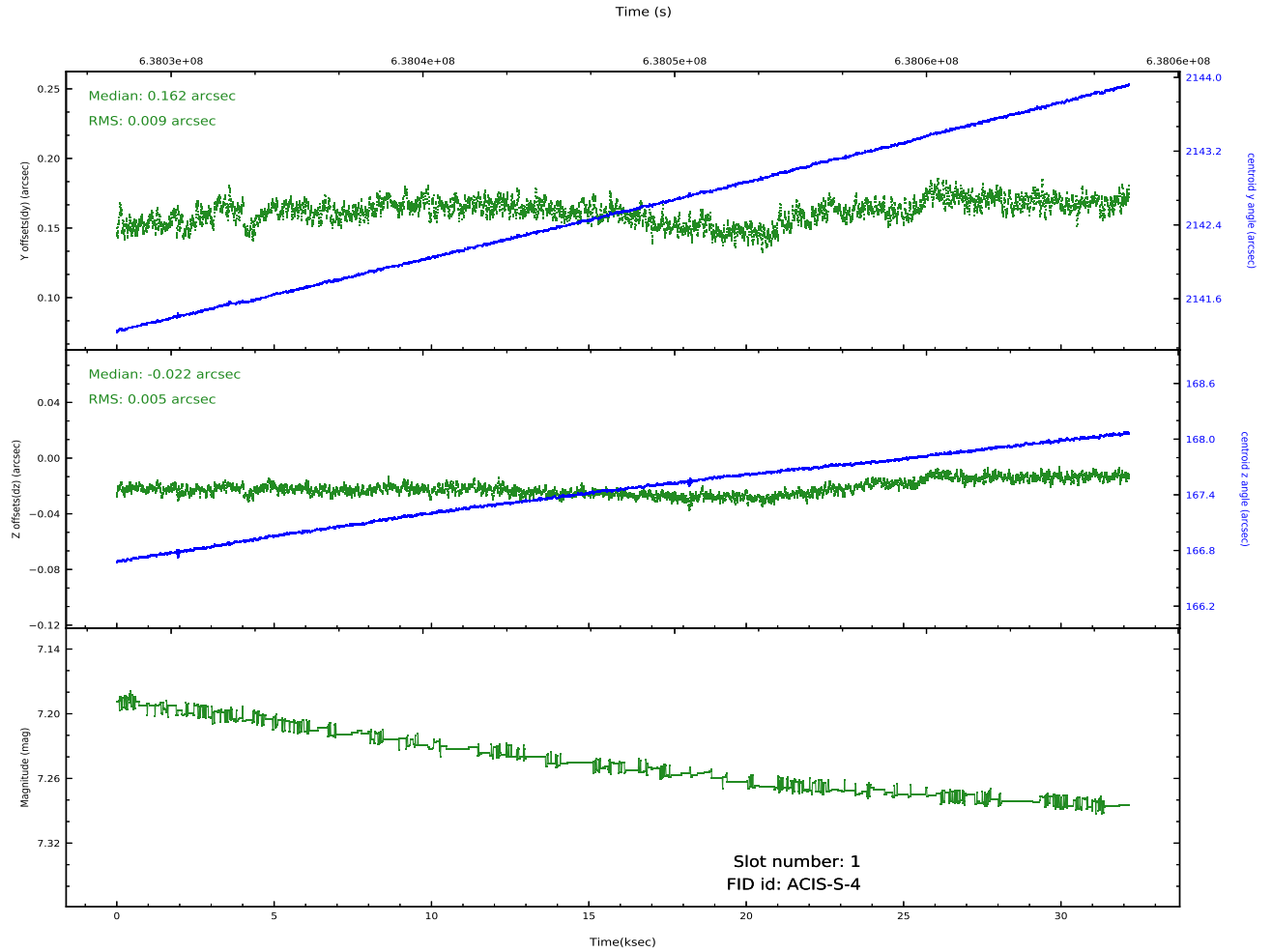
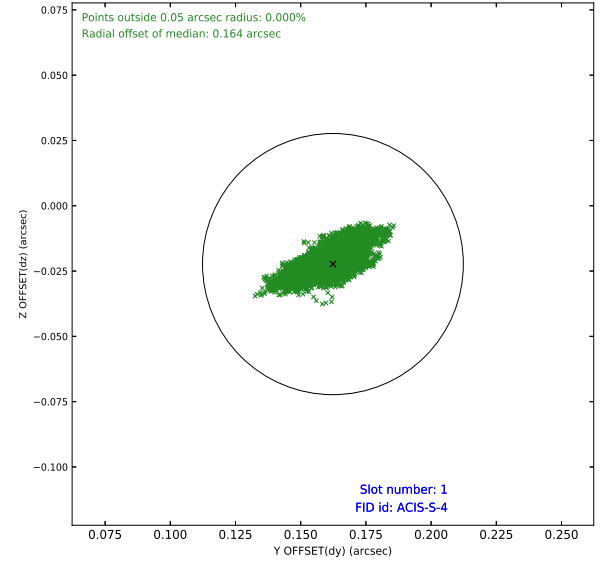
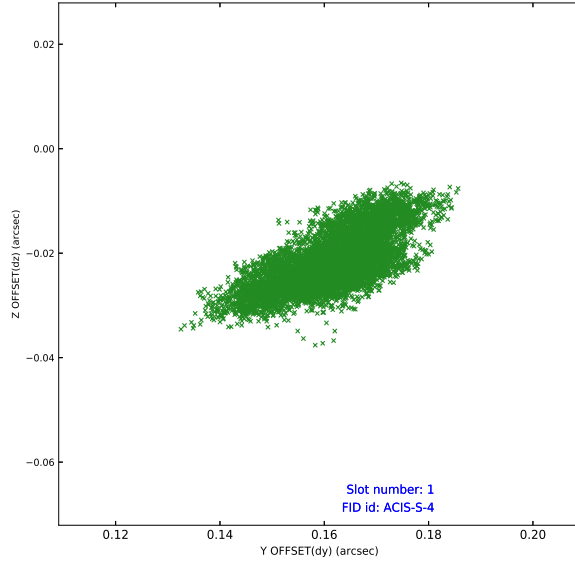


2.5 FID Slots

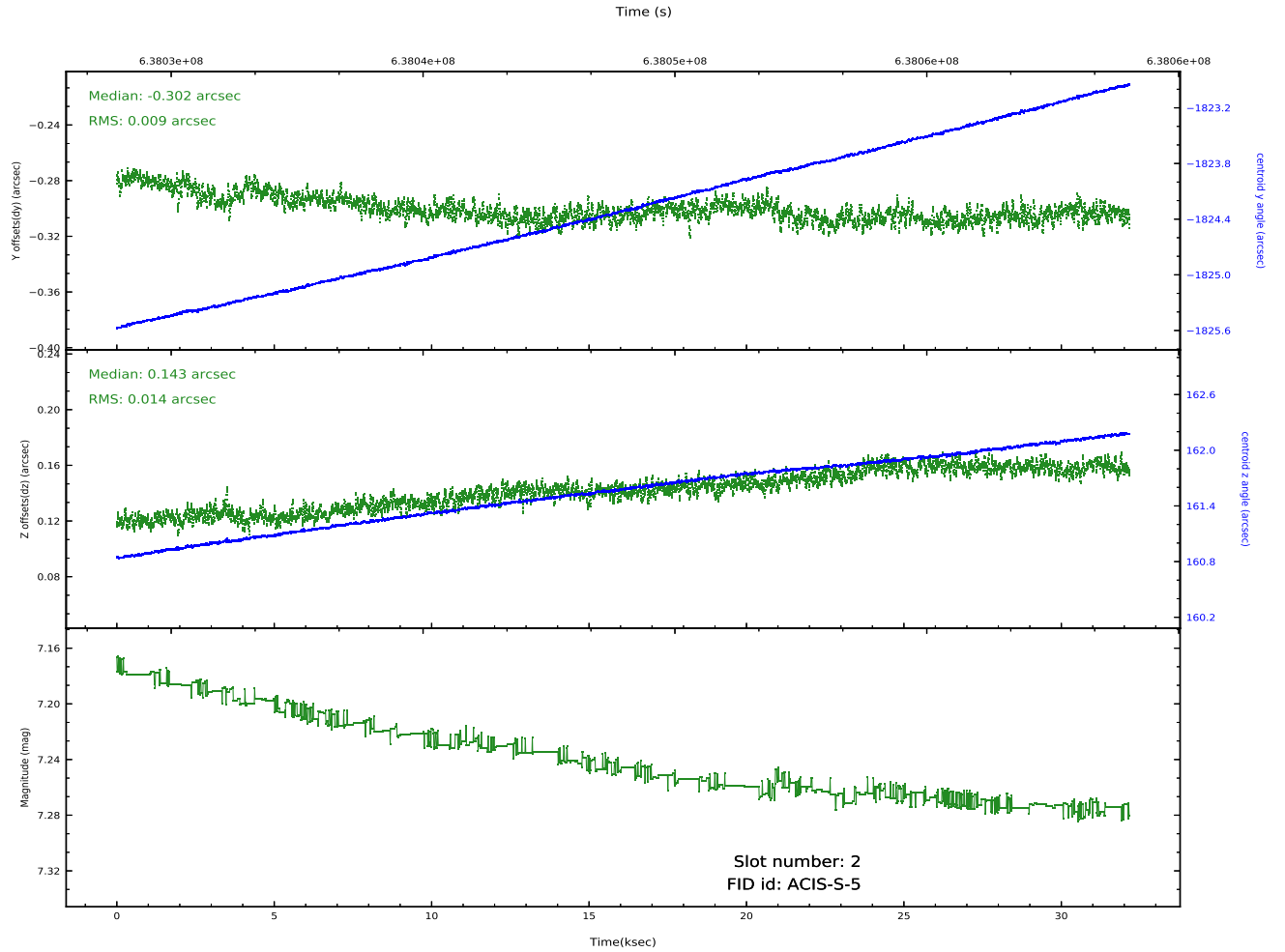
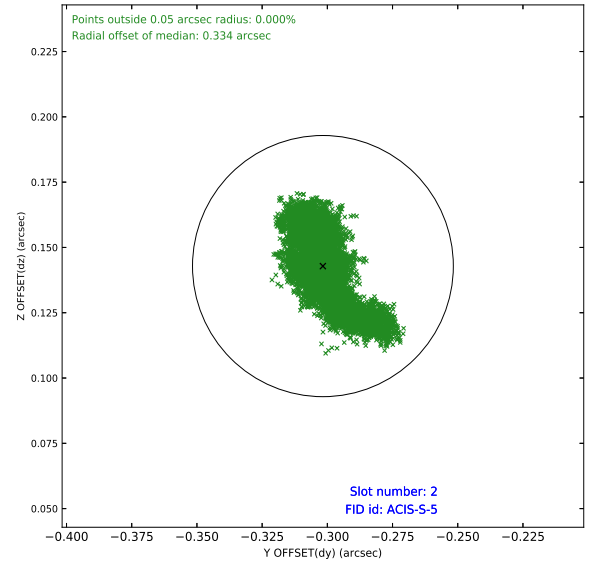
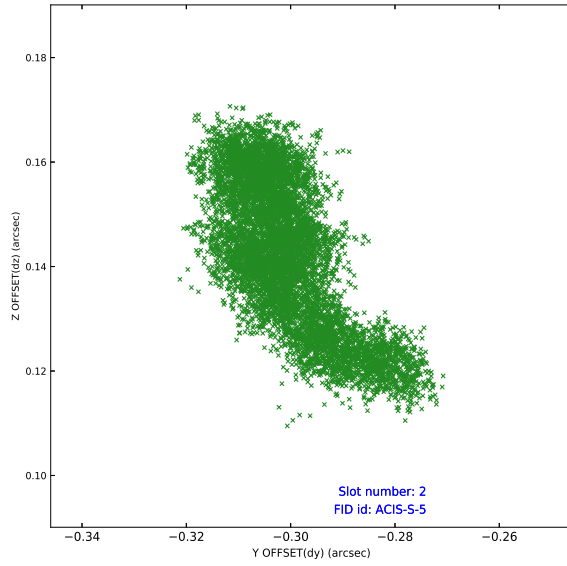
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	32.112900247097

A.2 Comments

Two optional chips were dropped.

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The guide star in slot 4 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this slot from the solution.