

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20463 - L2 Version 2
Chandra X-Ray Center

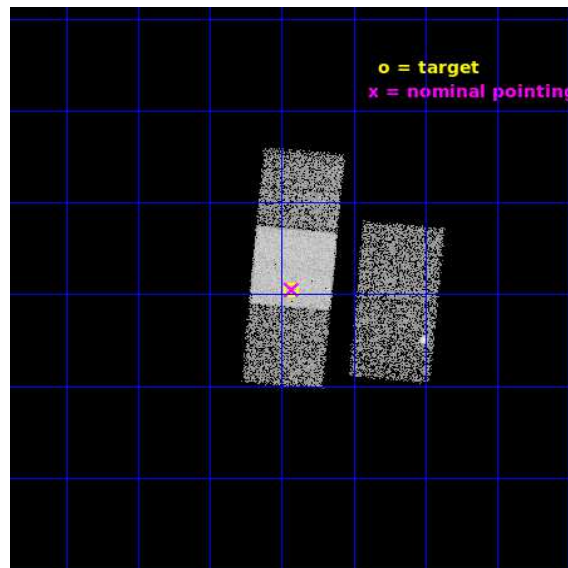
L2 Processing Date : Oct 24 2020

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

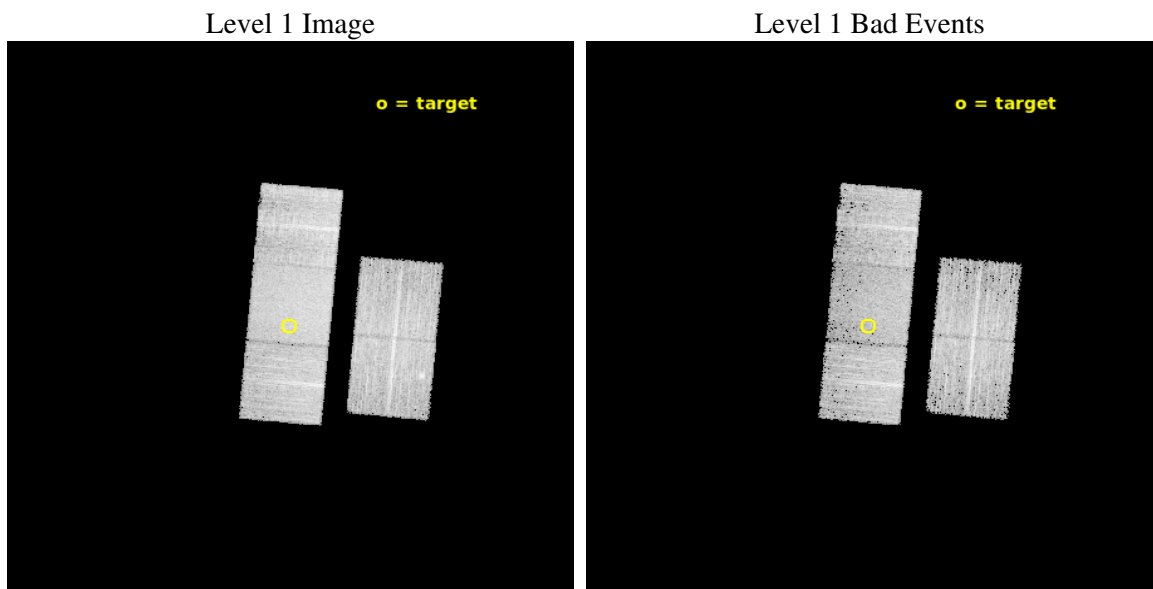
seq_num	703566	Sequence number
obs_id	20463	Observation id
title	Understanding AGN Accretion State Transitions with a Statistical Sample of Changing-Look Quasars	Proposal title
observer	John Ruan	Principal investigator
object	SDSS J022556.08+003026.7	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	36.48375	Observer's specified target RA [deg]
dec_targ	0.507417	Observer's specified target Dec [deg]
ra_nom	36.482221132134	Nominal RA [deg]
dec_nom	0.50845965627982	Nominal Dec [deg]
roll_nom	275.15066755154	Nominal Roll [deg]
revision	2	Processing version of data
ontime	7054.5968053341	Sum of GTIs [s]
livetime	6962.4233045538	Livetime [s]
ontime2	7054.4326453209	Sum of GTIs [s]
ontime3	7054.5147253275	Sum of GTIs [s]
ontime6	7054.5557653904	Sum of GTIs [s]
ontime7	7054.5968053341	Sum of GTIs [s]
ontime8	7054.4736853838	Sum of GTIs [s]
l2events	48537	Number of level 2 events



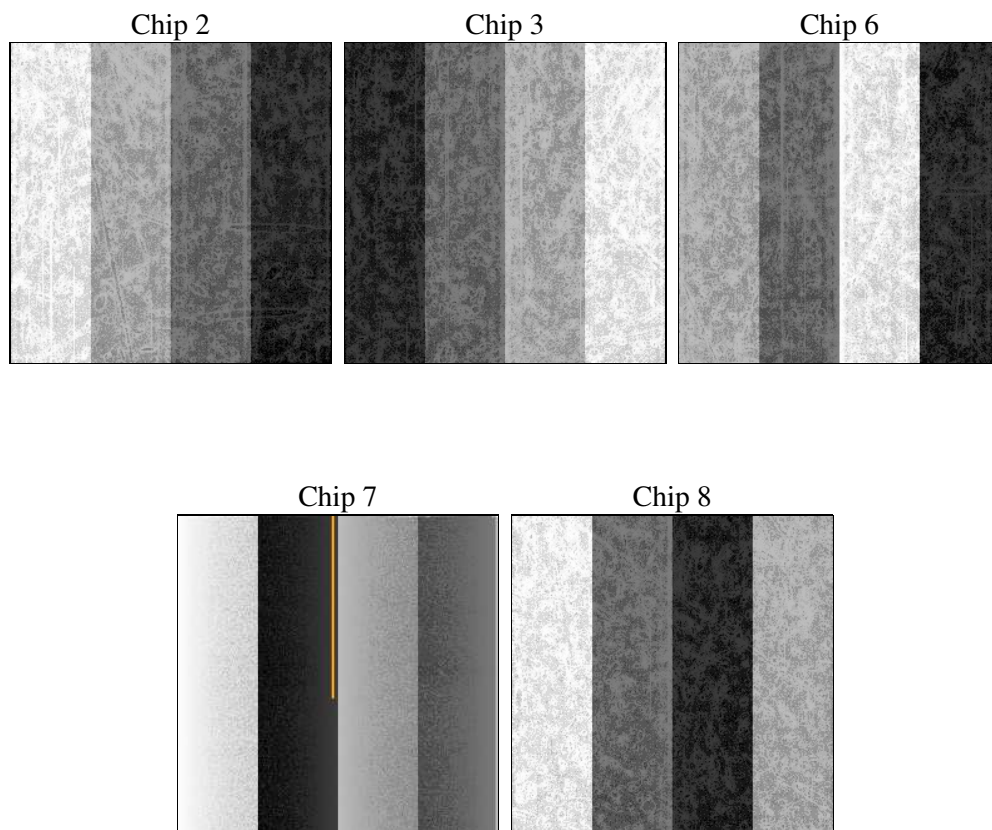
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	7054.5968053341	Sum of GTIs [s]
caldsver	4.9.3	 	ontime2	7054.4326453209	Sum of GTIs [s]
date	2020-10-25T01:44:27	Date and time of file creation	ontime3	7054.5147253275	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	7054.5557653904	Sum of GTIs [s]
			ontime7	7054.5968053341	Sum of GTIs [s]
			ontime8	7054.4736853838	Sum of GTIs [s]
			l1events	294464	Number of level 1 events

2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	53138	51719	55487	67572	66548
rejected events	47366	46535	49647	38426	50336
rejected %	89%	89%	89%	56%	75%

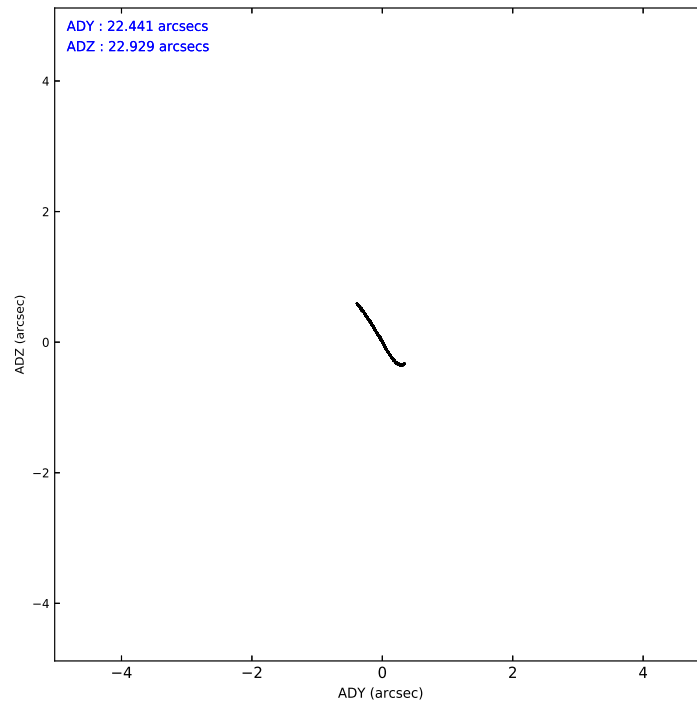
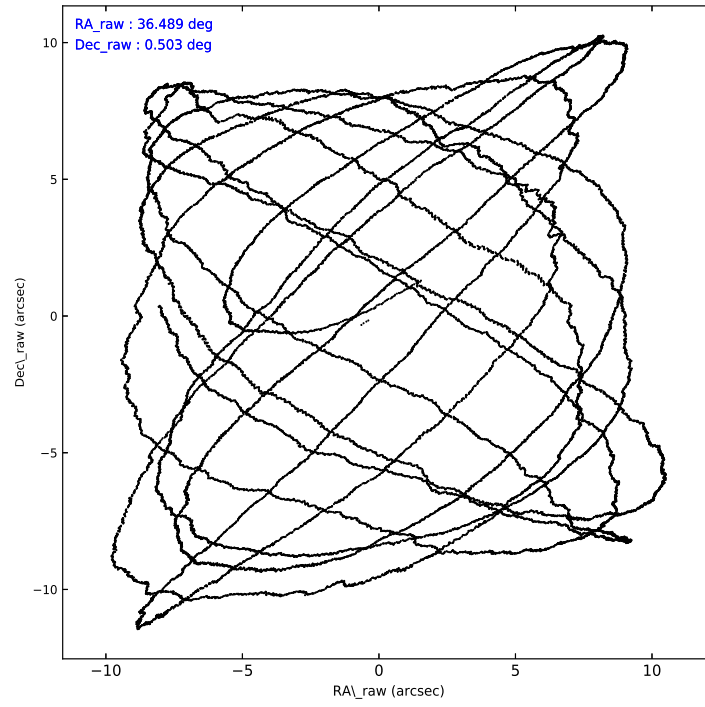
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	2406	1788	1662	2448	4509
	4%	3%	2%	3%	6%
grade 1 events	37	26	17	93	46
	0%	0%	0%	0%	0%
grade 2 events	1230	1101	1579	6022	4040
	2%	2%	2%	8%	6%
grade 3 events	533	545	497	2413	1658
	1%	1%	0%	3%	2%
grade 4 events	535	582	529	2311	1472
	1%	1%	0%	3%	2%
grade 5 events	1901	2288	2185	6491	3528
	3%	4%	3%	9%	5%
grade 6 events	1071	1171	1576	15963	4537
	2%	2%	2%	23%	6%
grade 7 events	45425	44218	47442	31831	46758
	85%	85%	85%	47%	70%

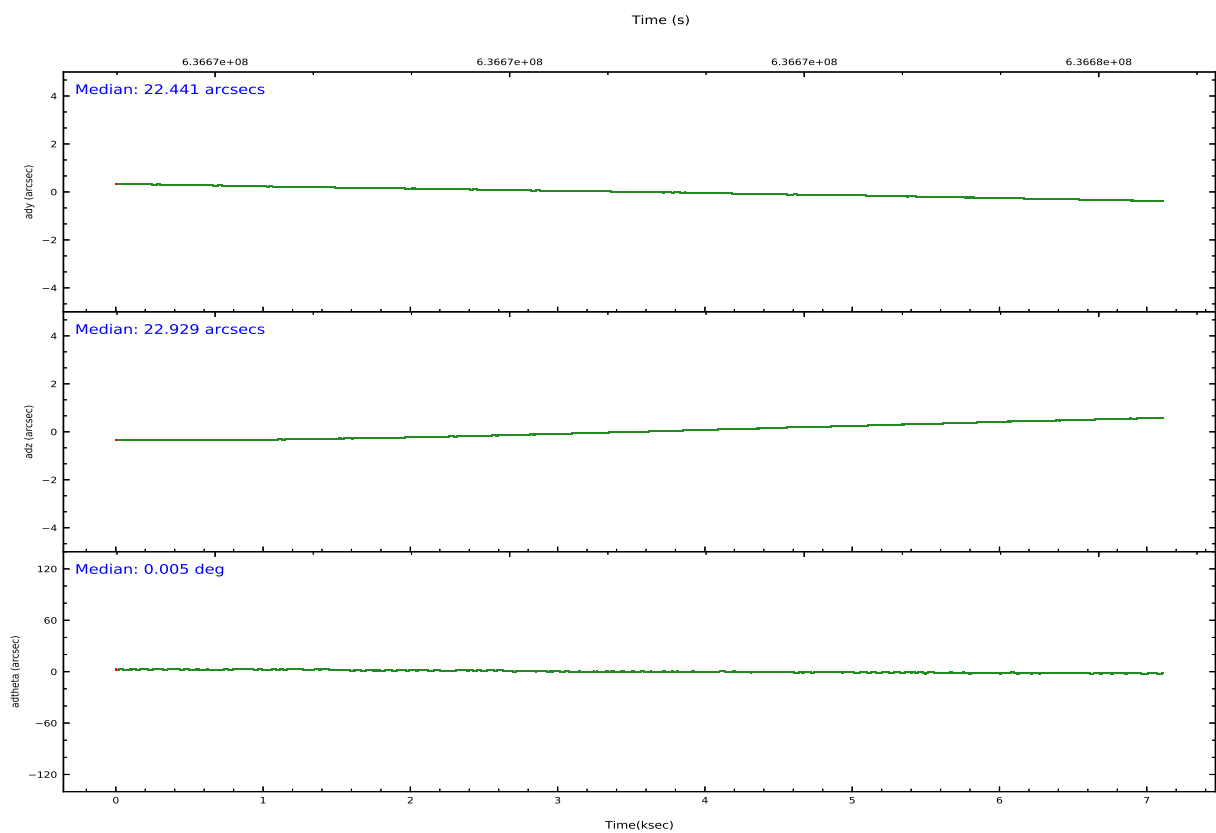
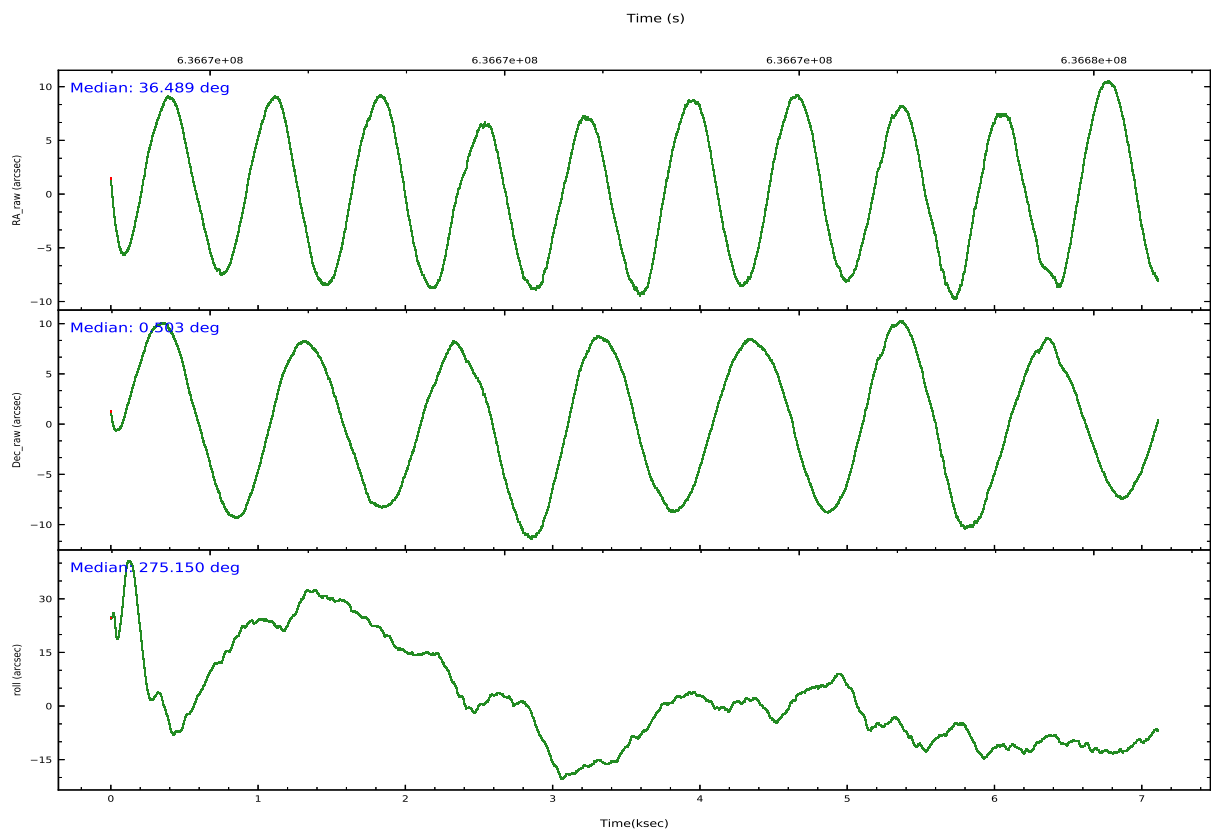
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-23678	ACIS-23678
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	36.473253	36.482221132134
[deg] Pointing Dec	0.524693	0.50845965627982
[deg] Pointing Roll	275.000102	275.15066755154
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1425803651734
[mm] SIM translation stage offset	0	0.01005778216563158
[s] Observation start time (MET)	636669437.184000	636668160.65185
Observation start date	2018-03-05T20:36:08	2018-03-05T20:16:00
[s] Observation end time (MET)	636676437.184000	636677190.3898799
Observation end date	2018-03-05T22:32:48	2018-03-05T22:46:30
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	N	N
CCD I1 on	N	N
CCD I2 on	O1	Y
CCD I3 on	O2	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	Y	Y
CCD S3 on	Y	Y
CCD S4 on	Y	Y
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

2.3 Aspect



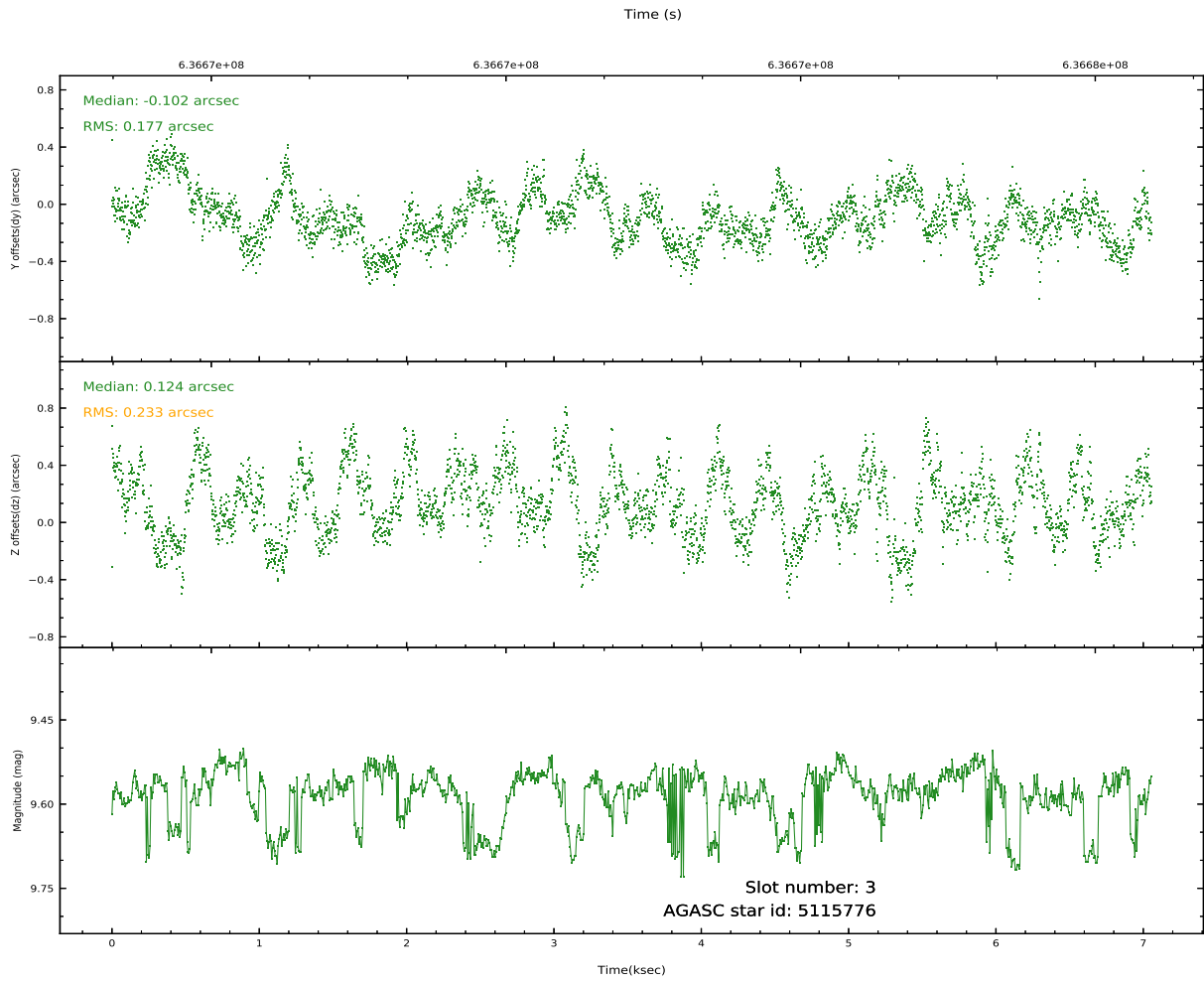
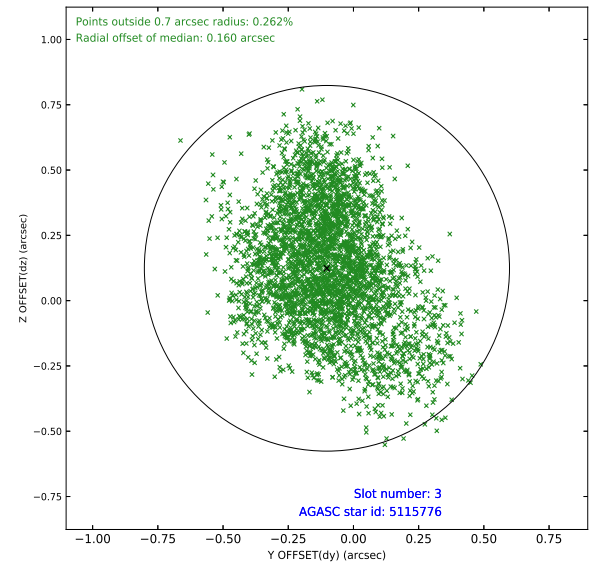
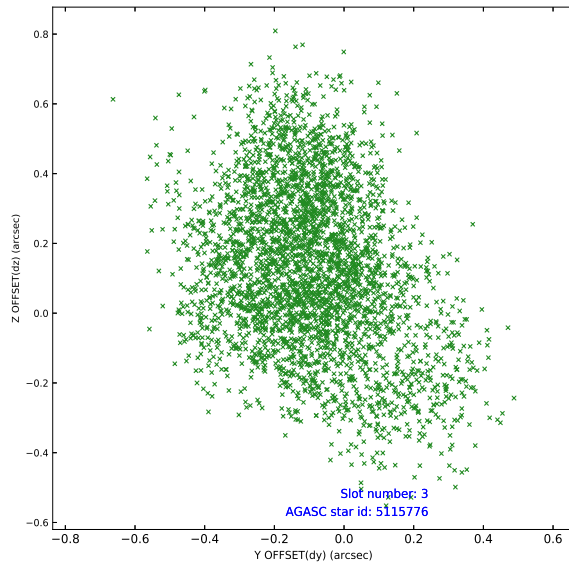


Slot Statistics

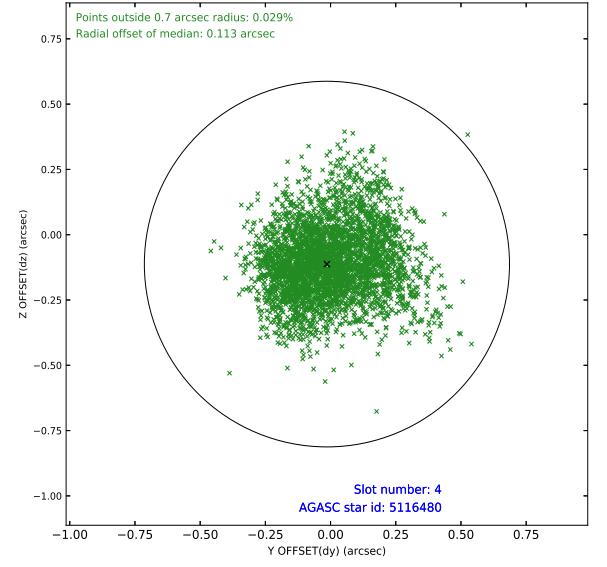
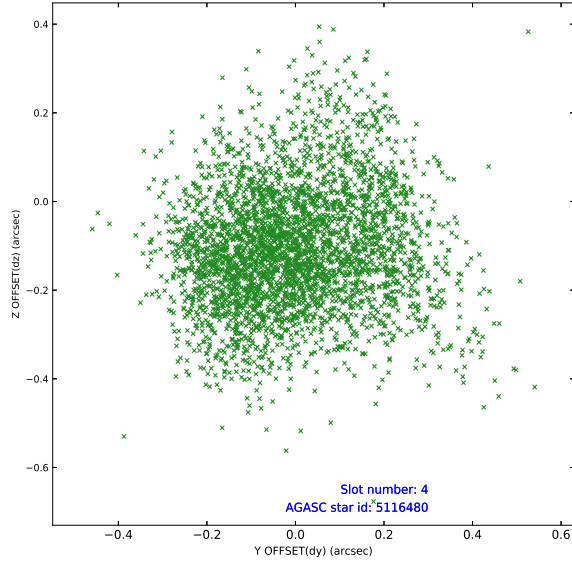
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.15	1735	1.000	0.172	-0.157	0.018	0.026	0.000000	0.000000	-775.72	-1744
1	FID		ACIS-S-4	7.25	1735	1.000	0.103	-0.041	0.010	0.022	0.000000	0.000000	2137.42	162
2	FID		ACIS-S-5	7.26	1735	1.000	-0.309	0.209	0.013	0.030	0.000000	0.000000	-1827.70	158
3	GUIDE	used	5115776	9.58	3431	1.000	-0.102	0.124	0.311	0.515	36.405971	0.913022	-1412.89	-119
4	GUIDE	used	5116480	9.26	3450	1.000	-0.014	-0.112	0.222	0.359	36.624607	0.603451	-234.39	568
5	GUIDE	used	5119056	9.48	3464	1.000	0.186	-0.193	0.264	0.449	36.799344	0.156256	1424.93	1053
6	GUIDE	used	5119960	10.05	3450	1.000	-0.349	0.107	0.371	0.611	37.023523	0.390889	653.56	1932
7	GUIDE	used	5114216	9.98	3456	1.000	0.275	0.065	0.328	0.614	36.363947	1.057819	-1943.69	-224

2.4 Star Slots

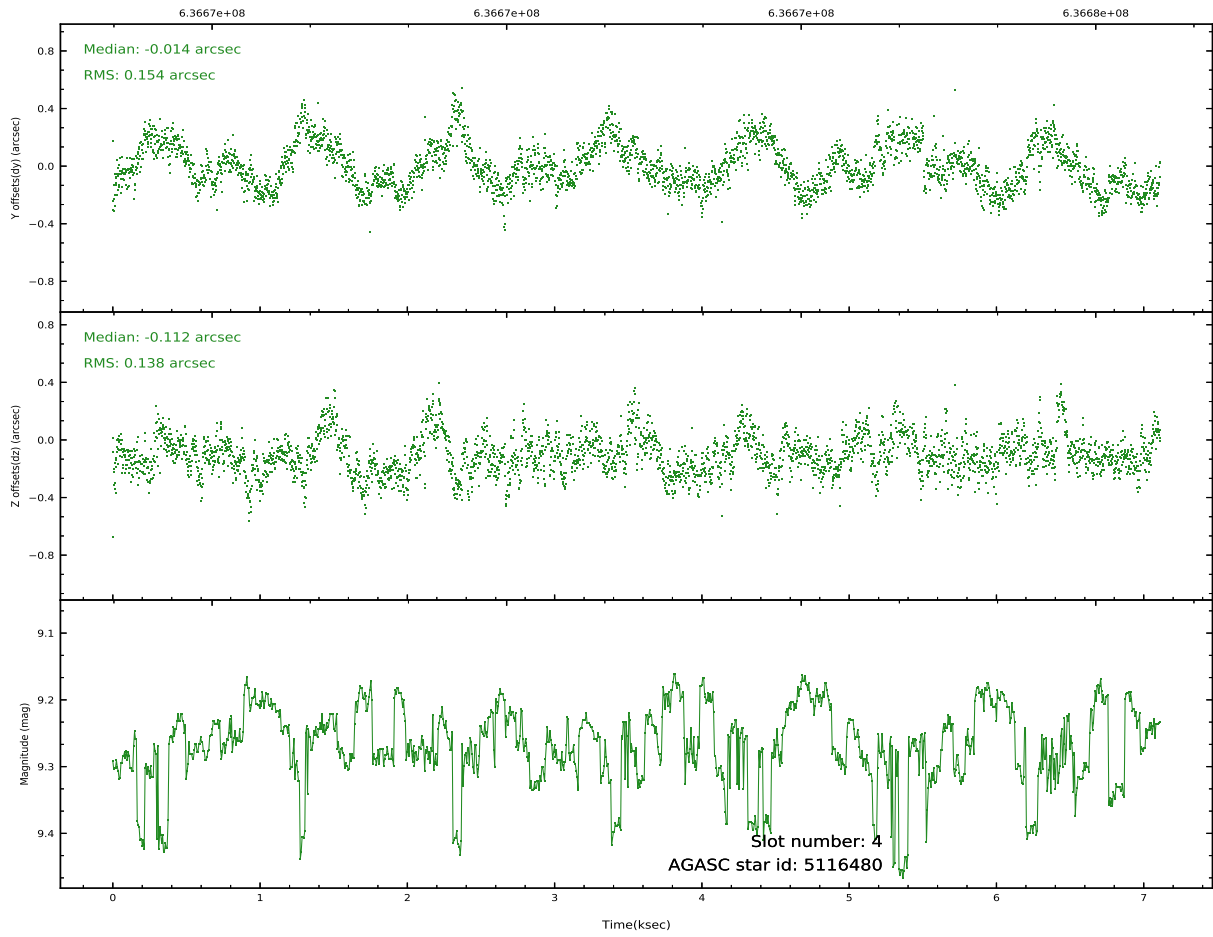
2.4.1 Slot 3



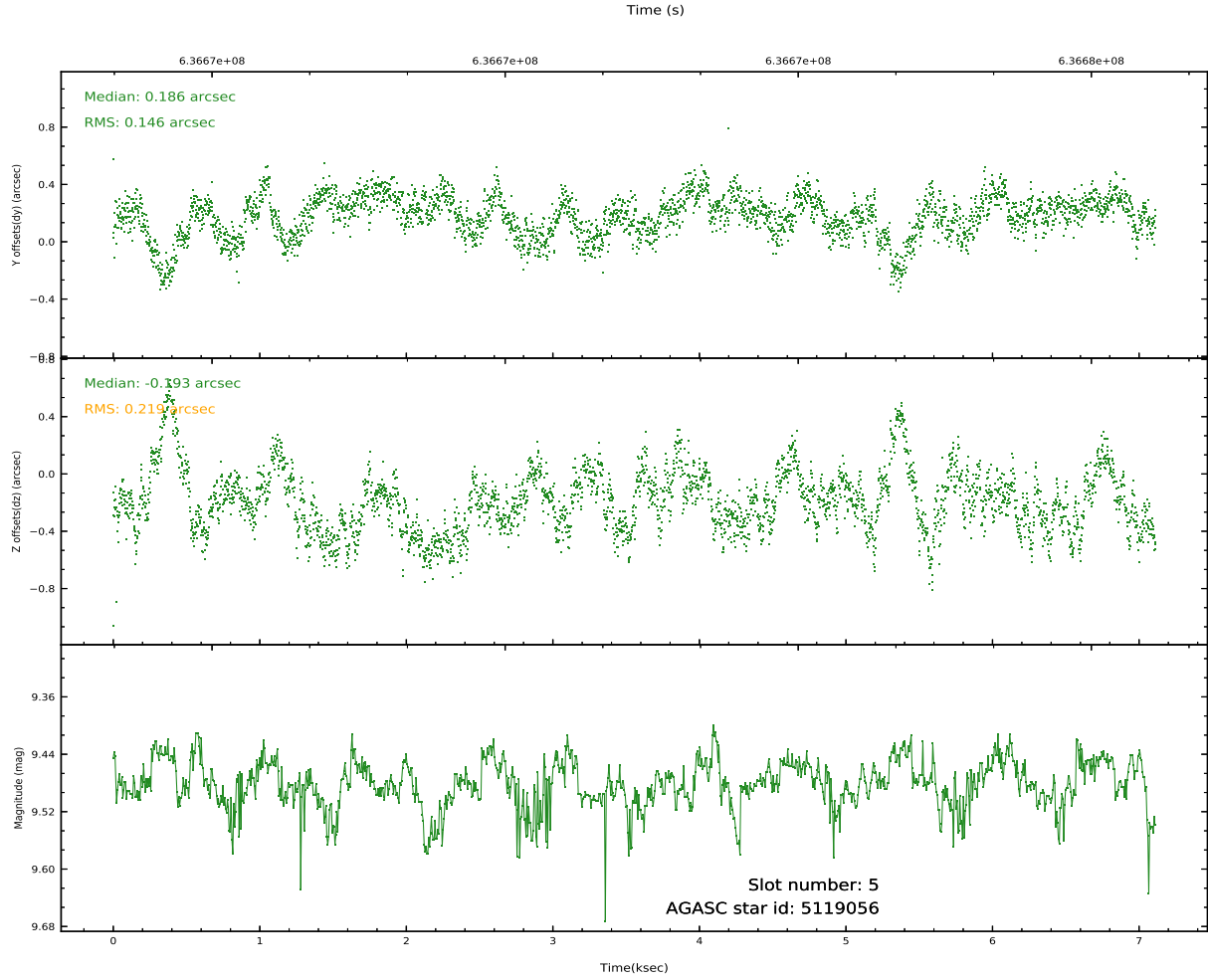
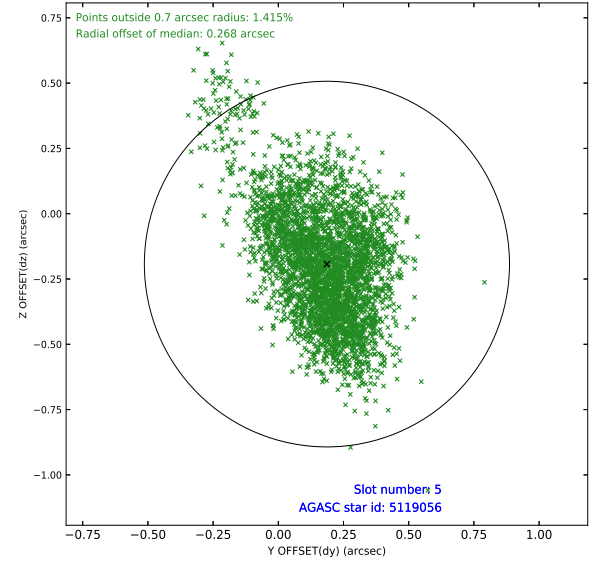
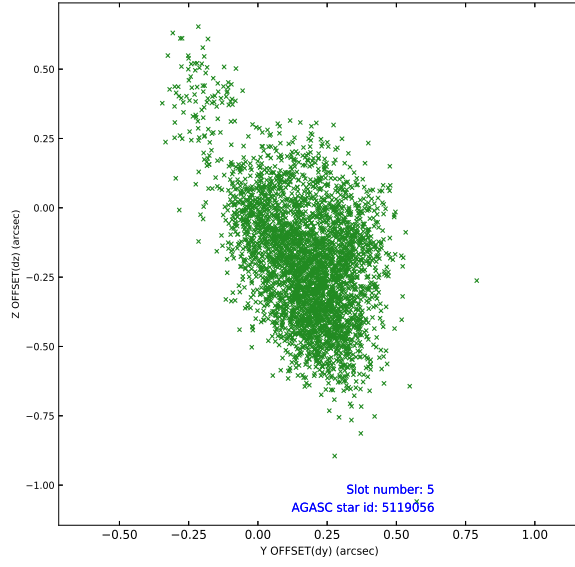
2.4.2 Slot 4



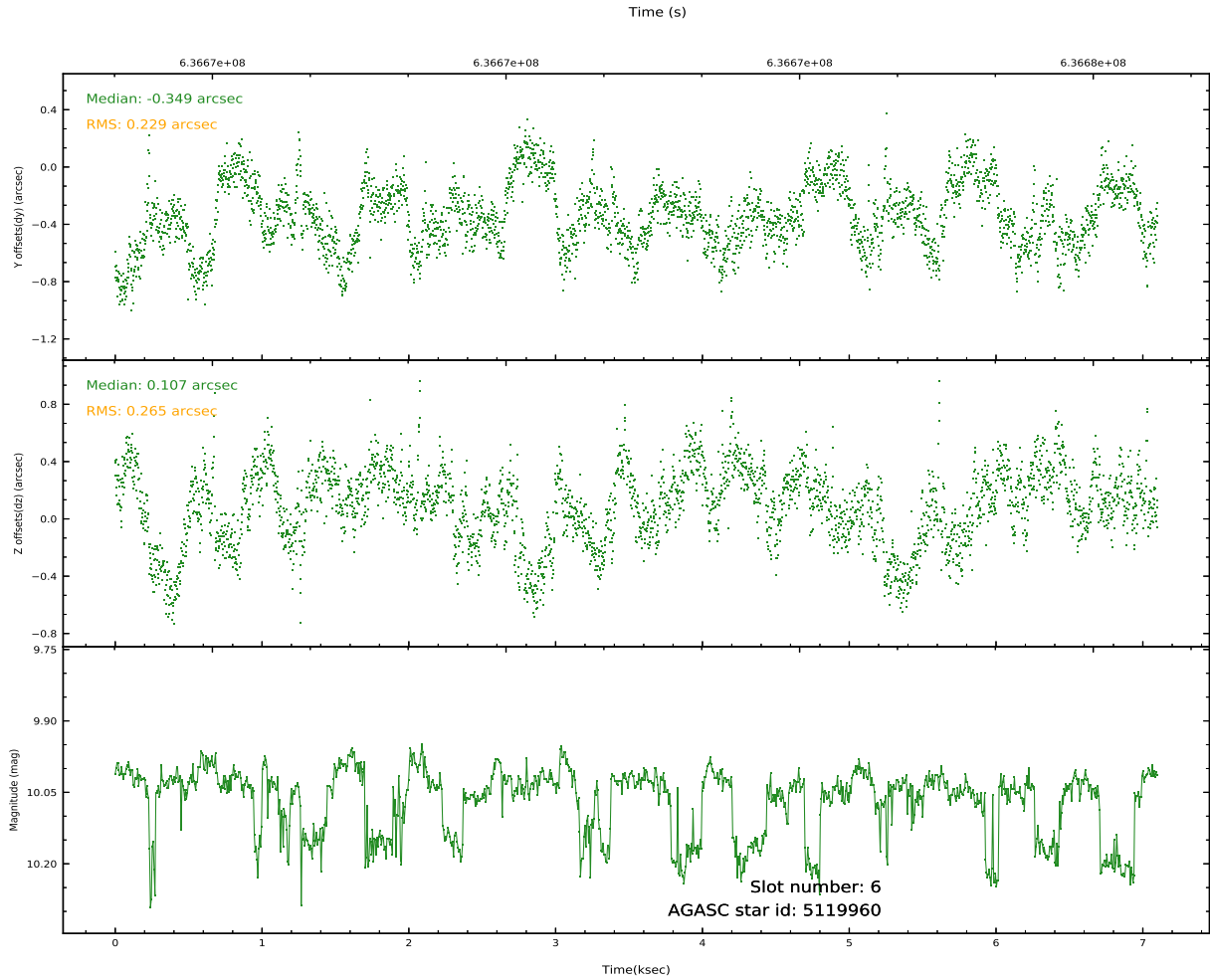
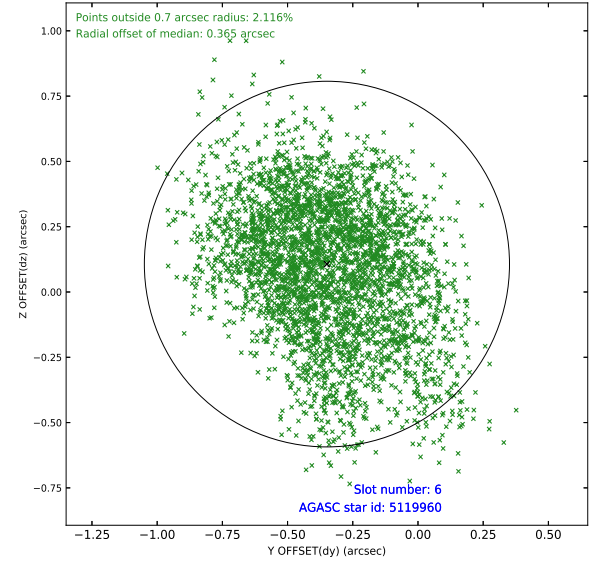
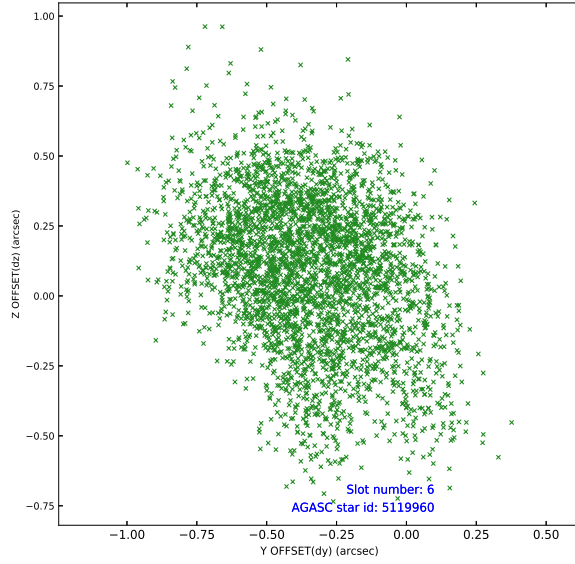
Time (s)



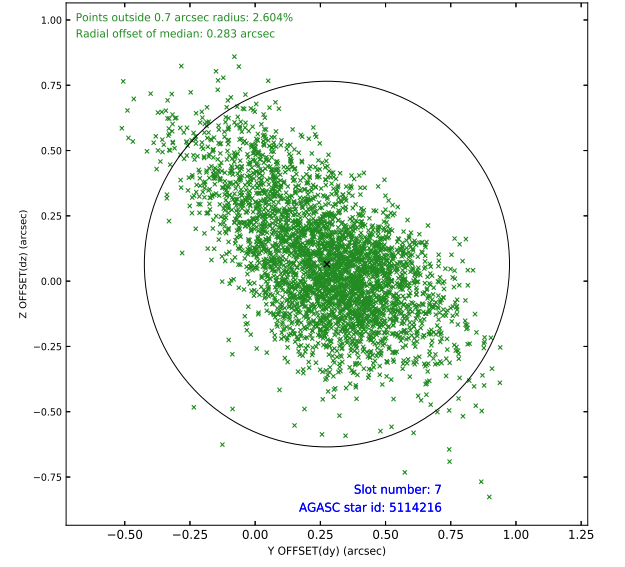
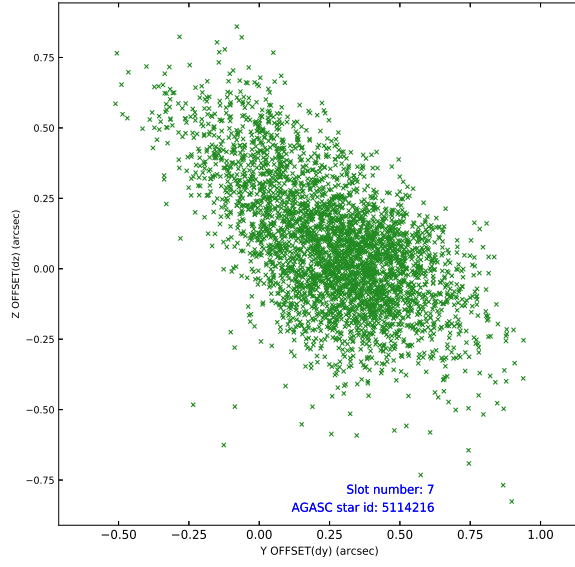
2.4.3 Slot 5



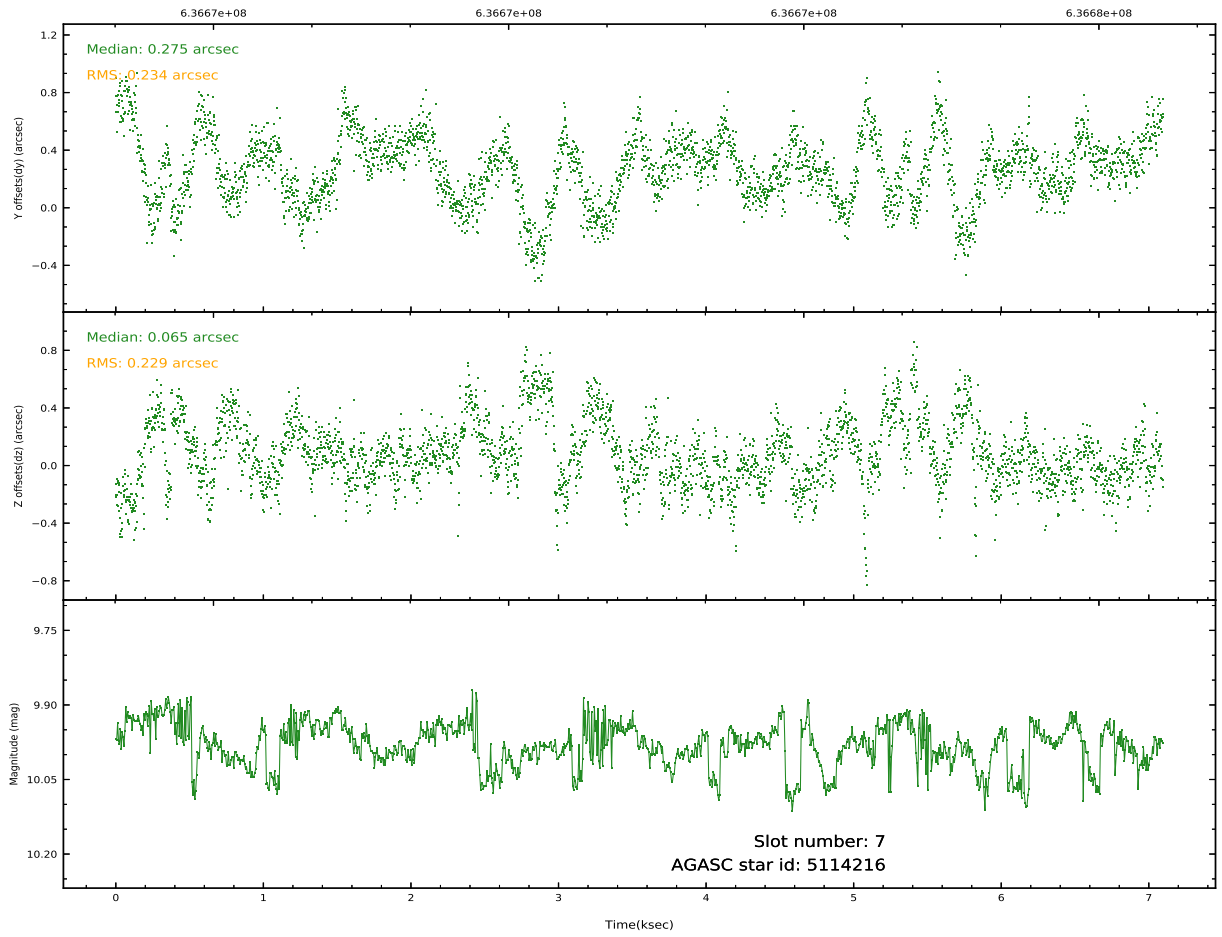
2.4.4 Slot 6



2.4.5 Slot 7

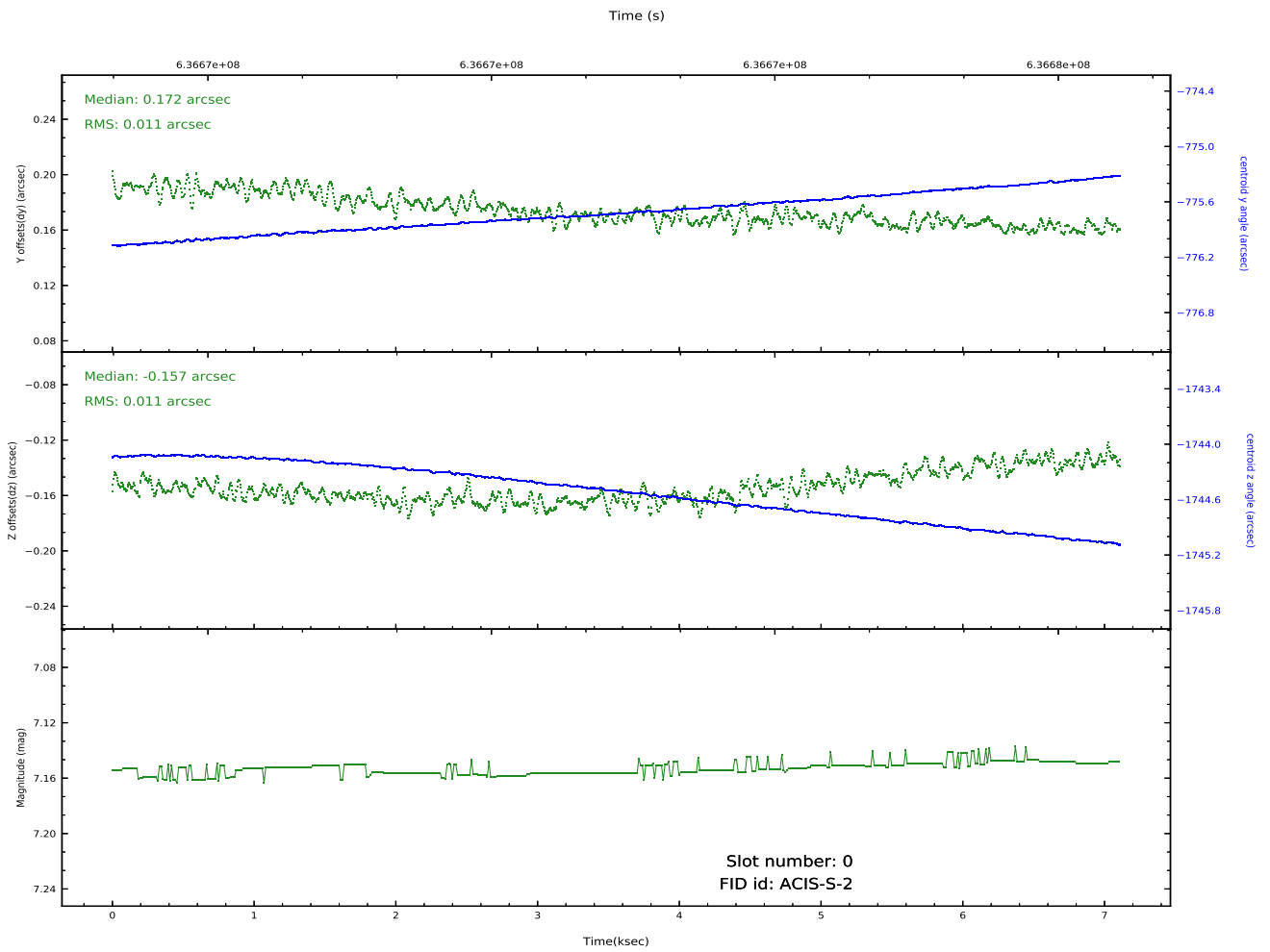
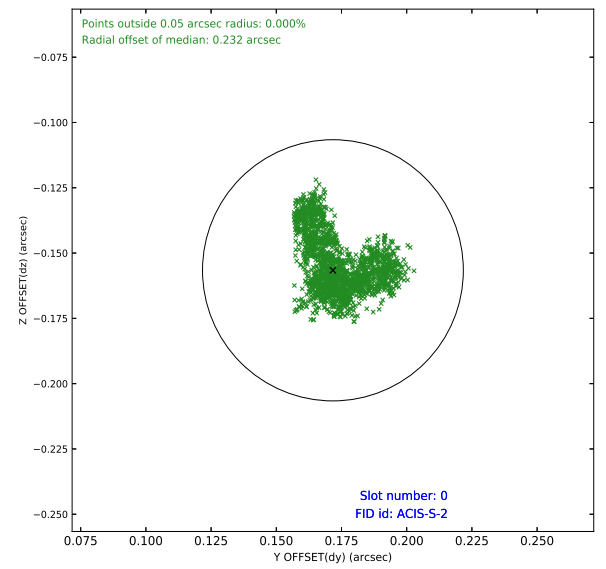
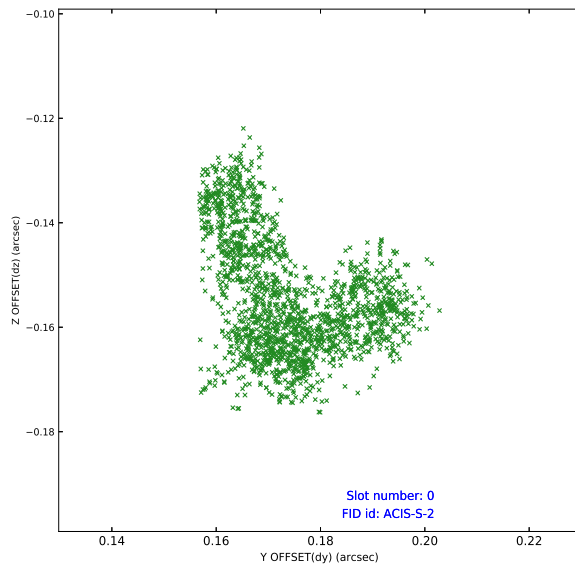


Time (s)

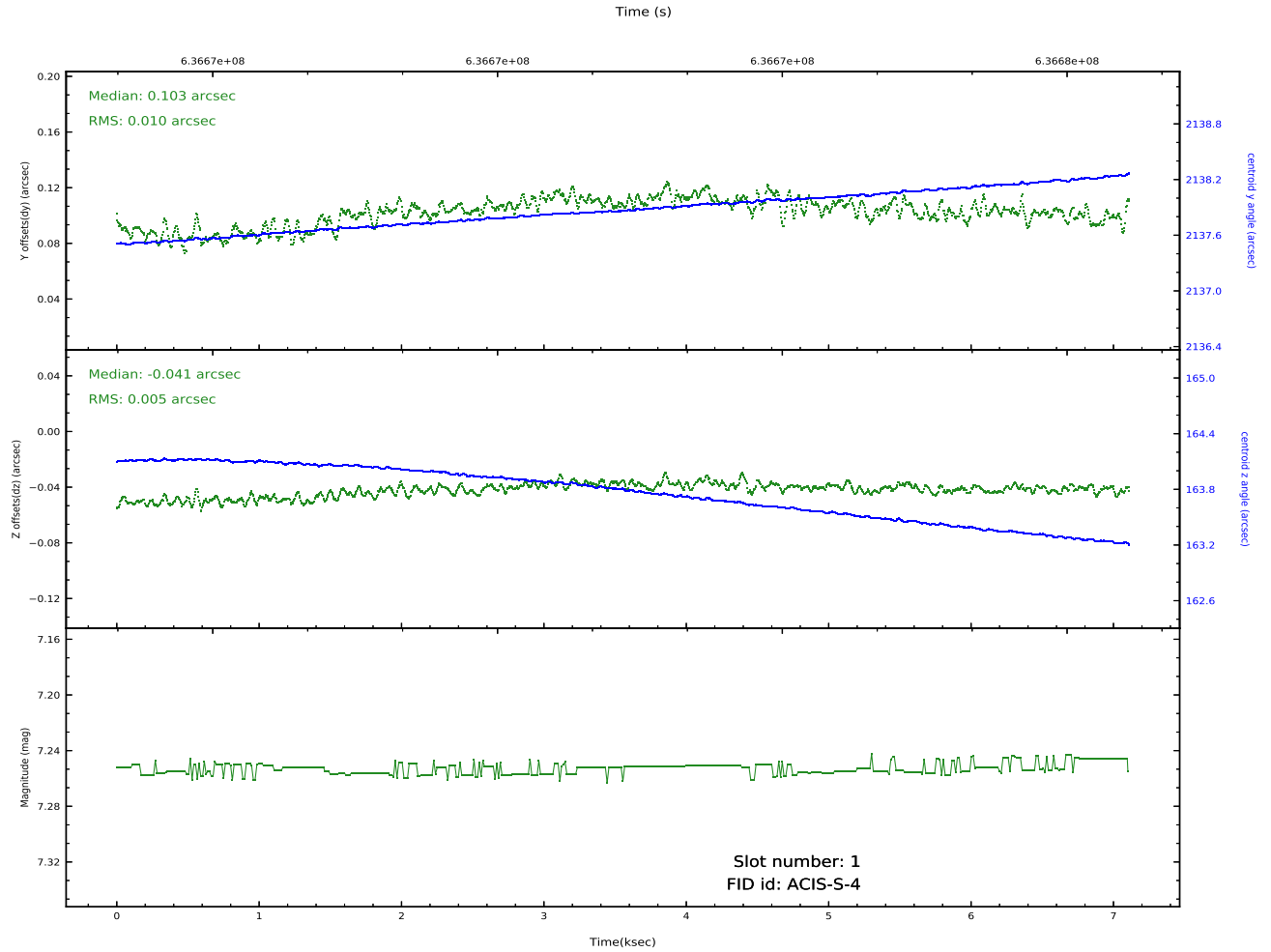
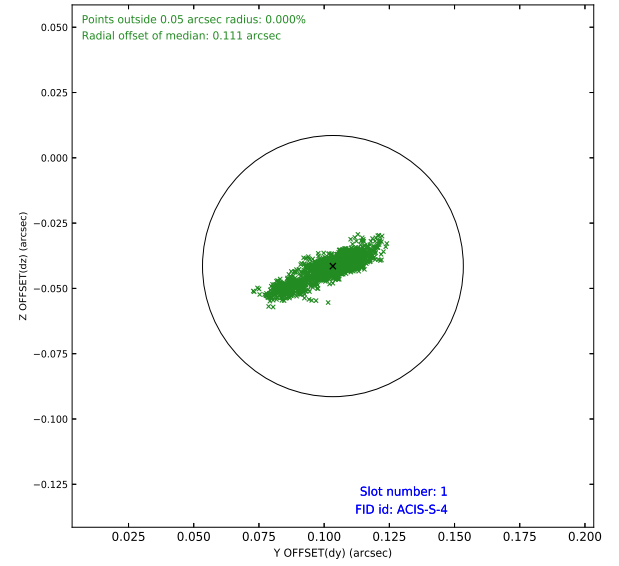
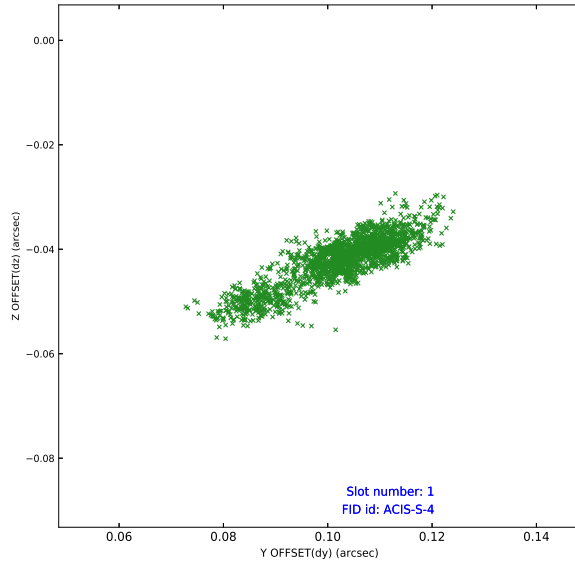


2.5 FID Slots

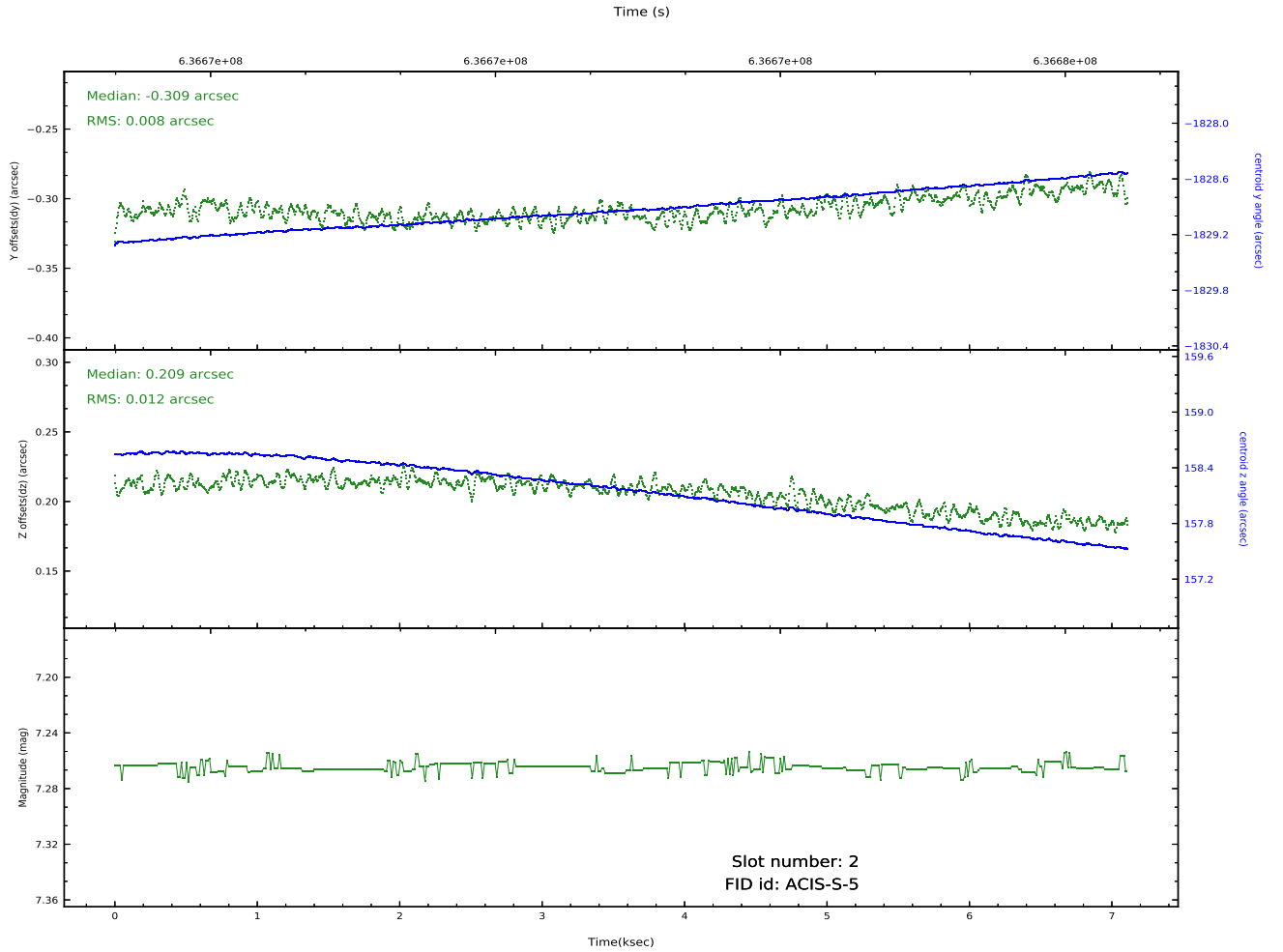
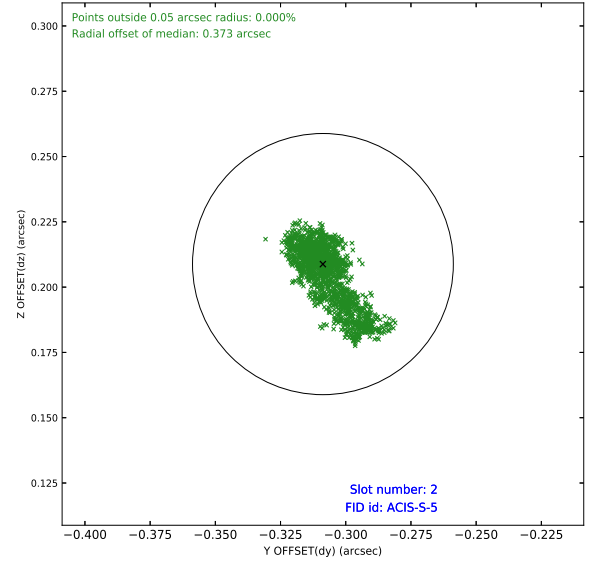
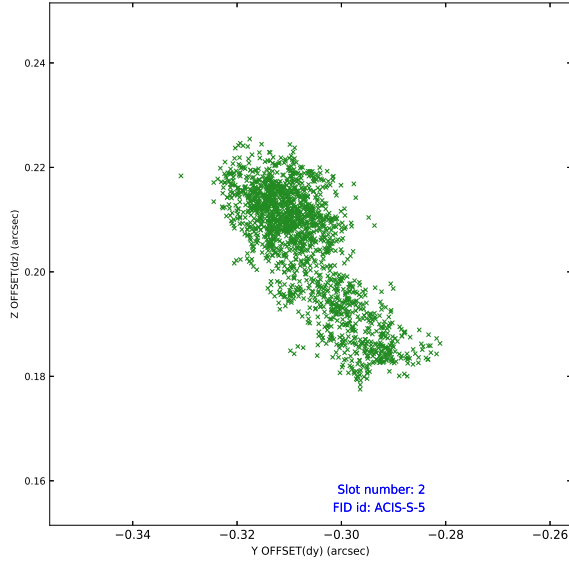
2.5.1 Slot 0



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)	2020.10.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.0545968002081

A.2 Comments