

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 21030 - L2 Version 2
Chandra X-Ray Center

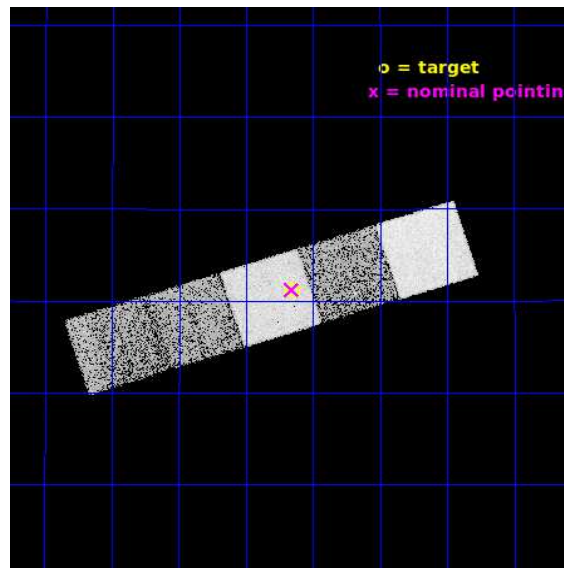
L2 Processing Date : Oct 25 2020

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

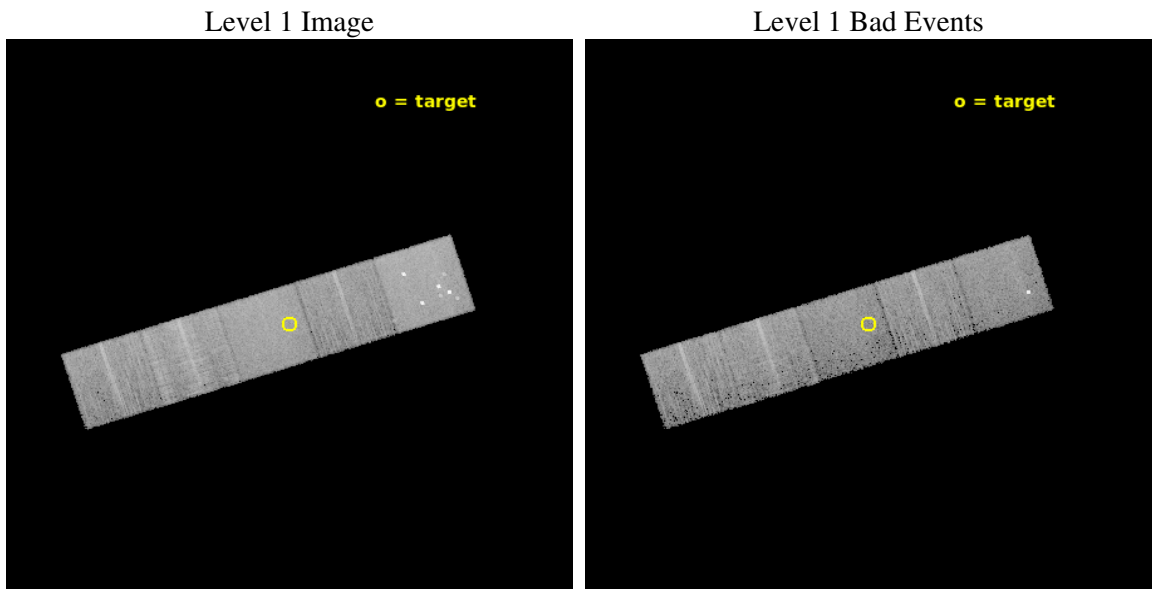
seq_num	703671	Sequence number
obs_id	21030	Observation id
title	LOW SURFACE BRIGHTNESS GALAXIES AND THE BLACK HOLE OCCUPATION FRACTION	Proposal title
observer	Elena Gallo	Principal investigator
object	UGC 10015	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	236.413333	Observer's specified target RA [deg]
dec_targ	21.019528	Observer's specified target Dec [deg]
ra_nom	236.41445629462	Nominal RA [deg]
dec_nom	21.020296001798	Nominal Dec [deg]
roll_nom	162.17189153323	Nominal Roll [deg]
revision	2	Processing version of data
ontime	7852.3000605106	Sum of GTIs [s]
livetime	7749.7039794409	Livetime [s]
ontime5	7852.3000605106	Sum of GTIs [s]
ontime6	7852.3000605106	Sum of GTIs [s]
ontime7	7852.3000605106	Sum of GTIs [s]
ontime8	7852.3000605106	Sum of GTIs [s]
ontime9	7852.3000605106	Sum of GTIs [s]
l2events	91558	Number of level 2 events



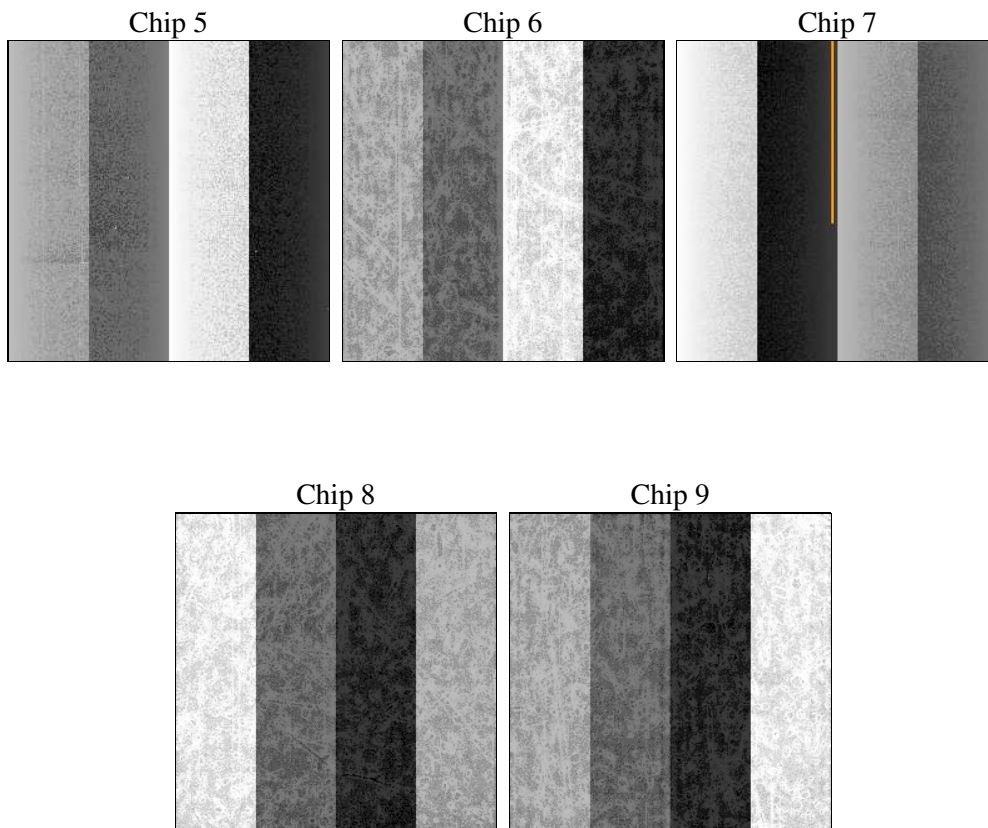
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7800.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	7852.3000605106	Sum of GTIs [s]
caldbver	4.9.3	 	ontime5	7852.3000605106	Sum of GTIs [s]
date	2020-10-25T21:22:39	Date and time of file creation	ontime6	7852.3000605106	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	7852.3000605106	Sum of GTIs [s]
			ontime8	7852.3000605106	Sum of GTIs [s]
			ontime9	7852.3000605106	Sum of GTIs [s]
			l1events	374606	Number of level 1 events

2.1.4 Events

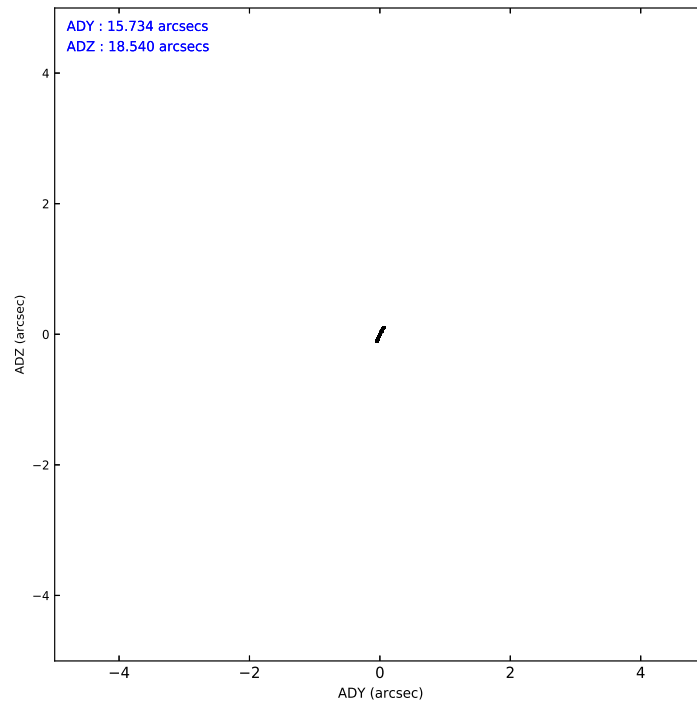
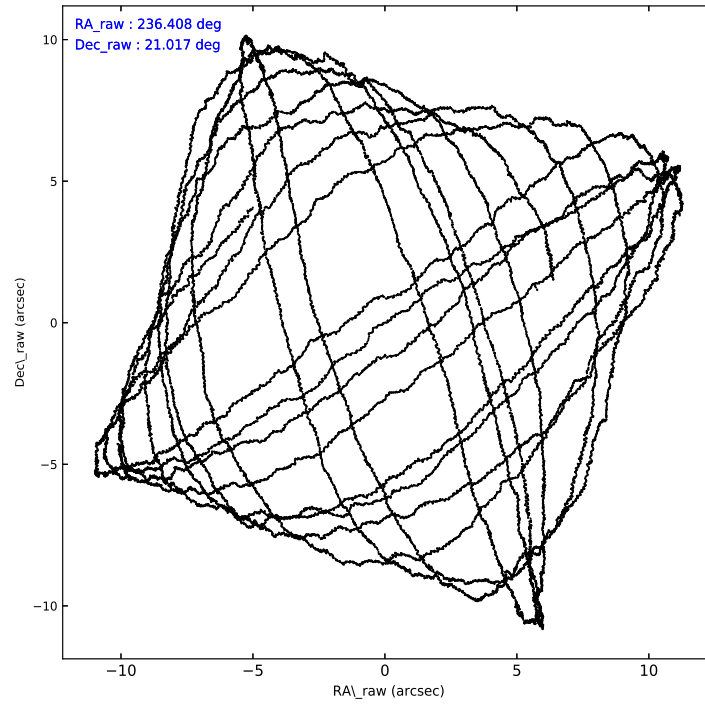
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	103206	59444	75485	77508	58963
rejected events	51314	52640	43027	57230	52024
rejected %	49%	88%	57%	73%	88%

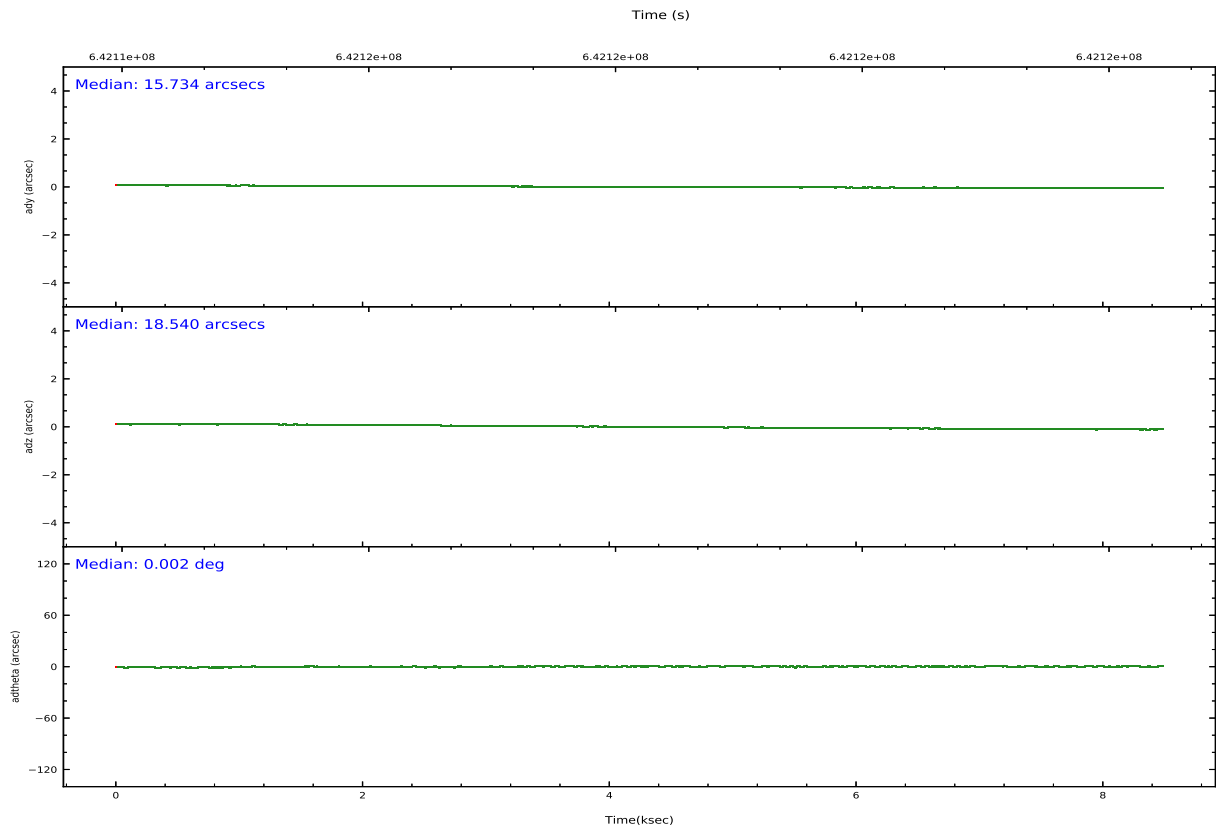
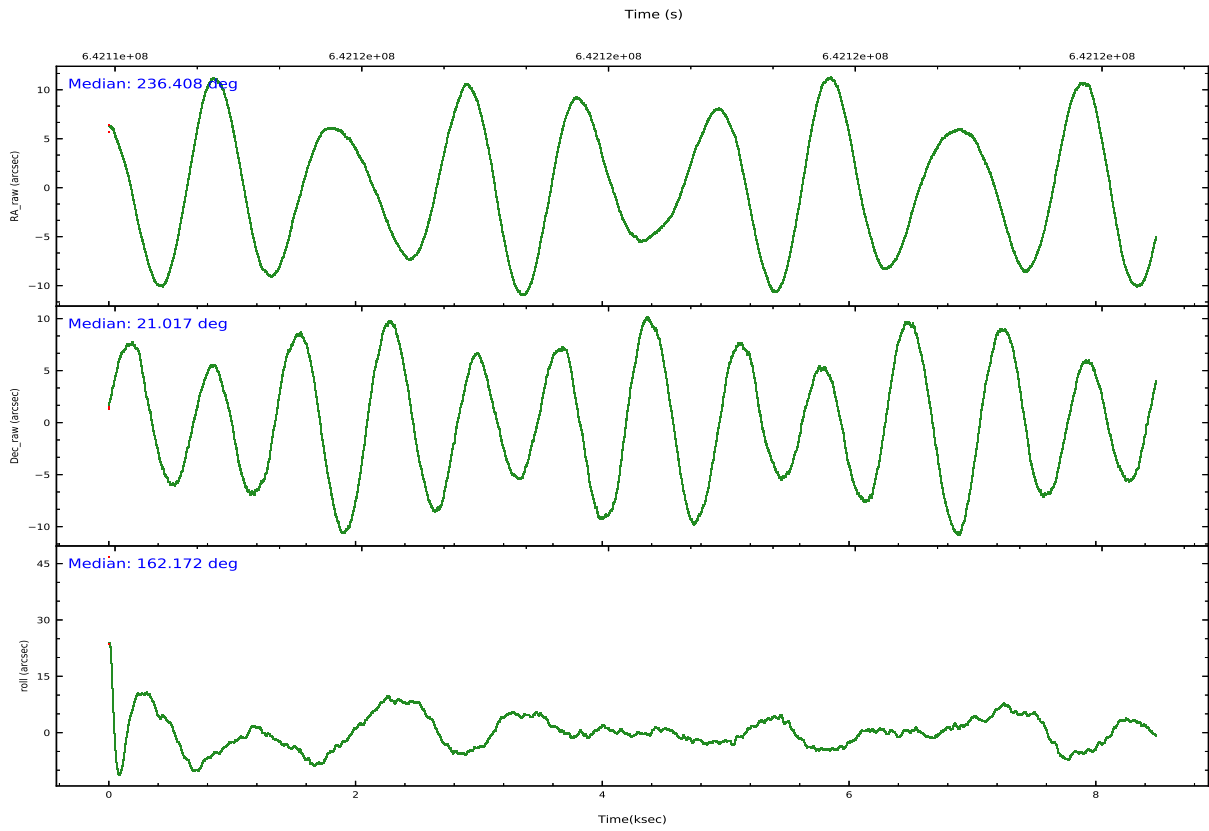
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	10239	2246	2754	5457	2427
	9%	3%	3%	7%	4%
grade 1 events	239	22	100	63	37
	0%	0%	0%	0%	0%
grade 2 events	14228	1588	6901	5007	1625
	13%	2%	9%	6%	2%
grade 3 events	1372	651	2467	2176	712
	1%	1%	3%	2%	1%
grade 4 events	1247	647	2484	1928	683
	1%	1%	3%	2%	1%
grade 5 events	6194	2717	7362	4172	2977
	6%	4%	9%	5%	5%
grade 6 events	24824	1675	17870	5714	1495
	24%	2%	23%	7%	2%
grade 7 events	44863	49898	35547	52991	49007
	43%	83%	47%	68%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-56789	ACIS-56789	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	236.436762	236.41445629462	CCD I2 on	N	N
[deg] Pointing Dec	21.022706	21.020296001798	CCD I3 on	N	N
[deg] Pointing Roll	162.021129	162.17189153323	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[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)	642114639.184000	642113446.82319	CCD S5 on	O2	Y
Observation start date	2018-05-07T21:09:30	2018-05-07T20:50:46	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	642122439.184000	642122949.59875	On-chip summing requested	N	N
Observation end date	2018-05-07T23:19:30	2018-05-07T23:29:09	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



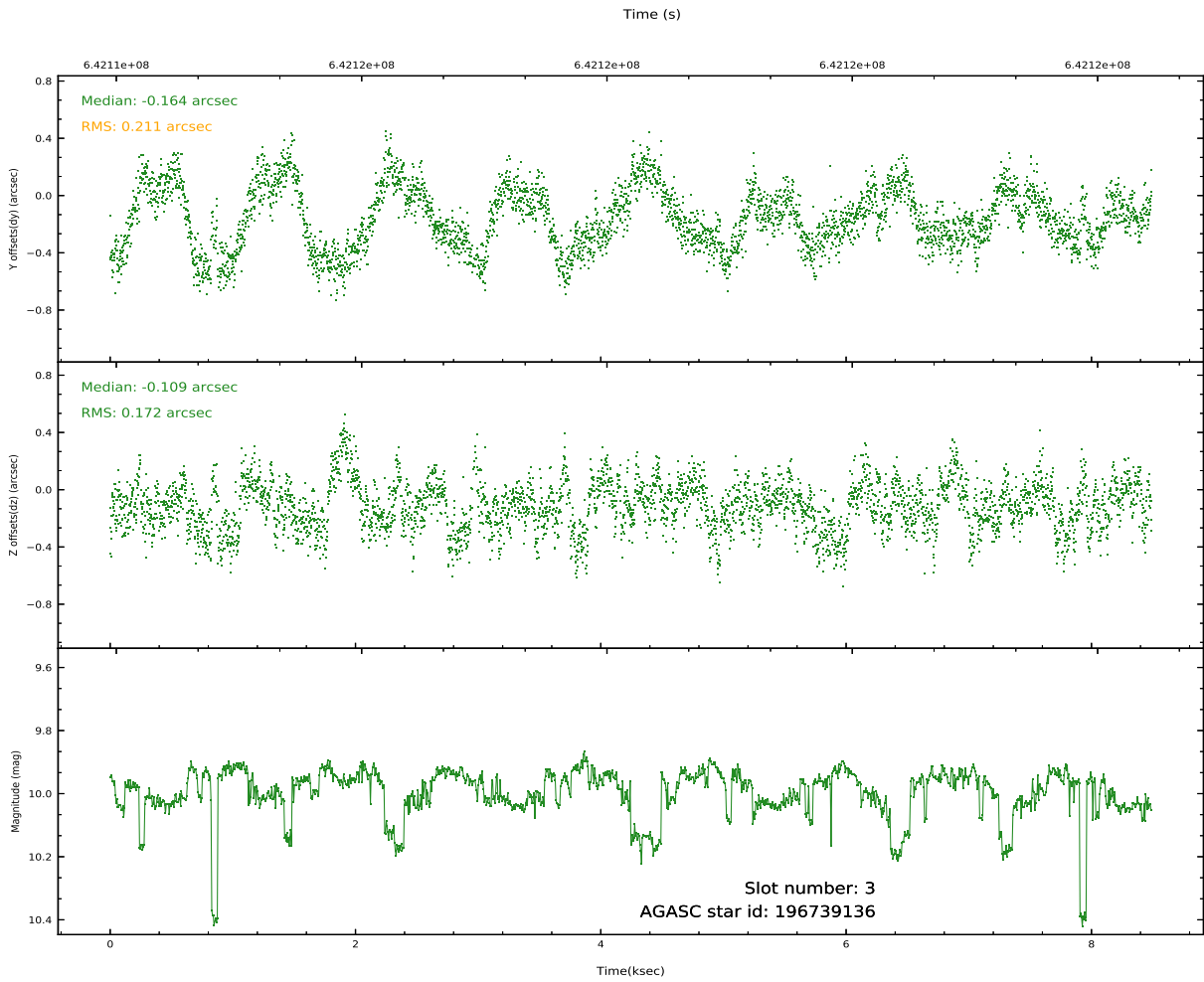
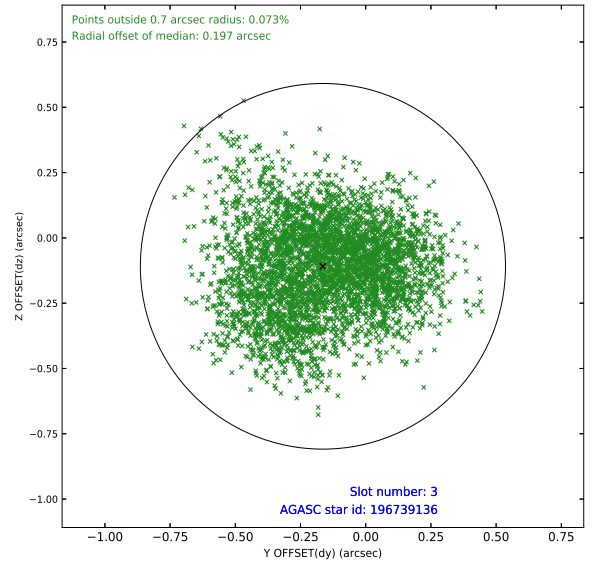
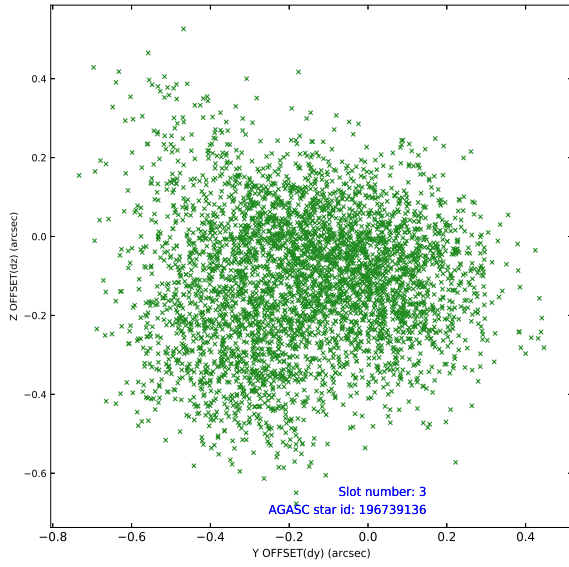


Slot Statistics

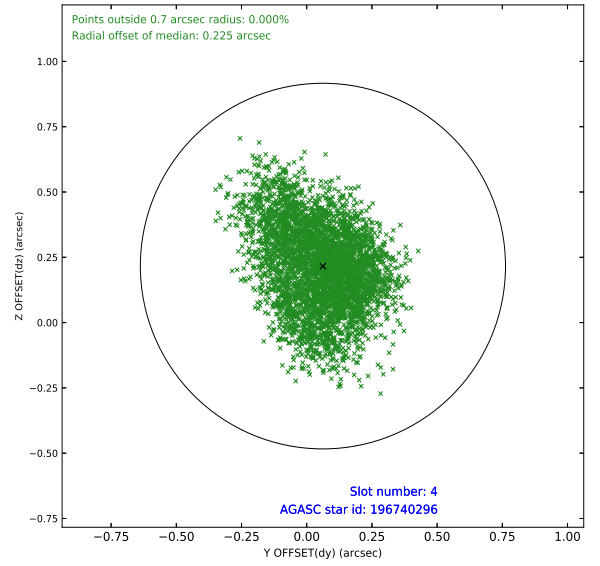
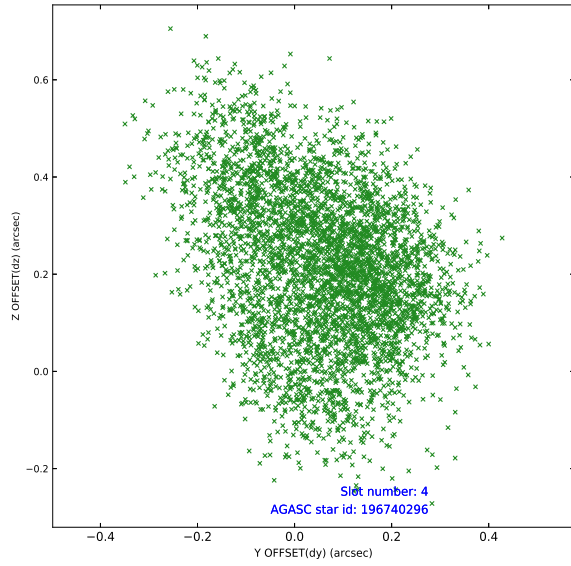
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-2	7.05	2071	1.000	0.094	-0.105	0.008	0.013	0.000000	0.000000	-768.84	-1739
1	FID		ACIS-S-4	7.16	2071	1.000	0.146	-0.017	0.005	0.010	0.000000	0.000000	2144.41	167
2	FID		ACIS-S-5	7.14	2071	1.000	-0.271	0.130	0.008	0.013	0.000000	0.000000	-1821.00	162
3	GUIDE	used	196739136	9.98	4113	1.000	-0.164	-0.109	0.294	0.454	236.148007	20.660841	522.90	1538
4	GUIDE	used	196740296	9.47	4138	1.000	0.062	0.216	0.221	0.356	236.880142	20.506243	-1995.23	1305
5	GUIDE	used	196747536	9.69	4131	1.000	0.033	0.017	0.262	0.451	236.170788	21.236046	1086.88	-455
6	GUIDE	used	196750056	8.18	4141	1.000	-0.117	-0.131	0.251	0.357	236.232272	20.881409	496.99	695
7	GUIDE	used	196751472	9.38	4133	1.000	0.207	0.012	0.244	0.346	236.602985	21.373692	-139.44	-1373

2.4 Star Slots

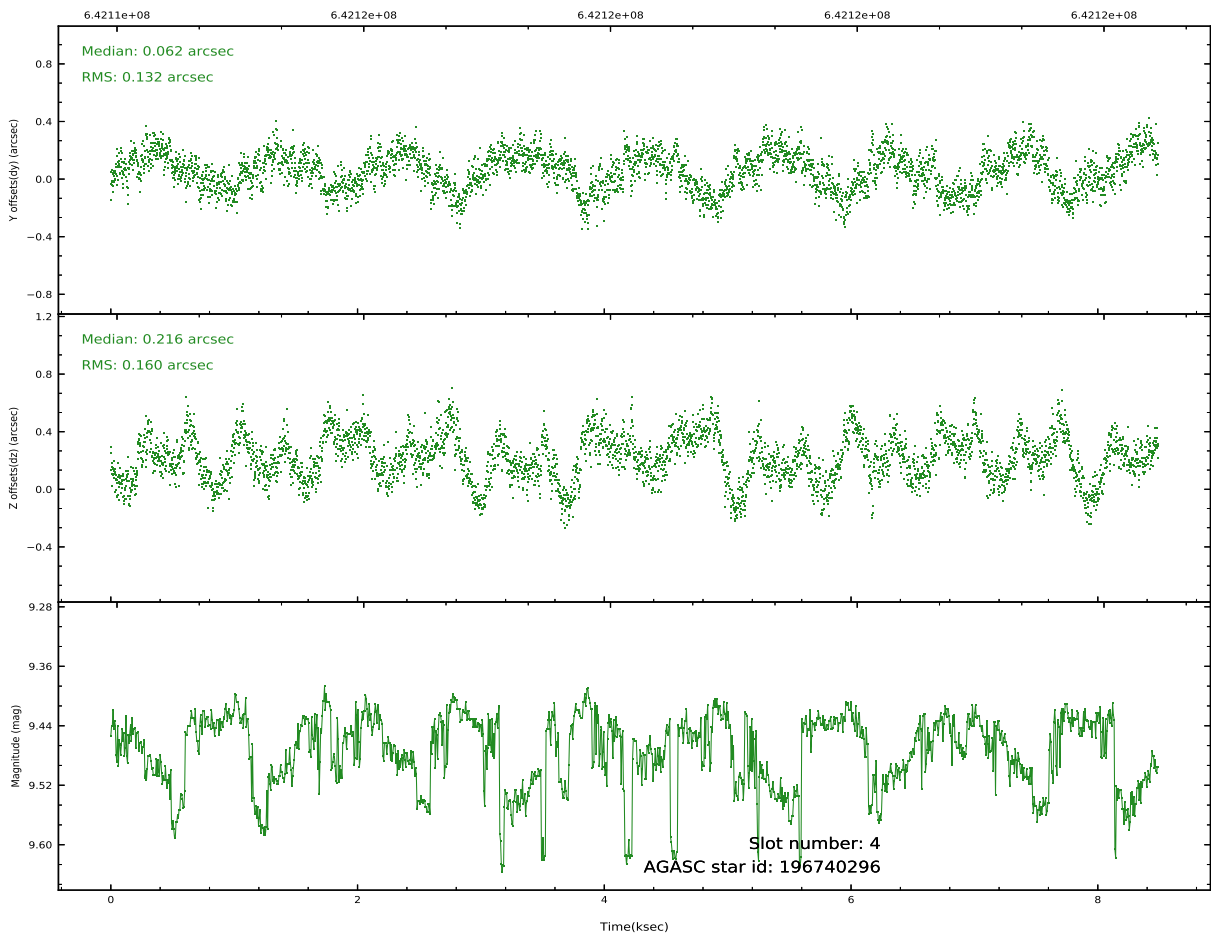
2.4.1 Slot 3



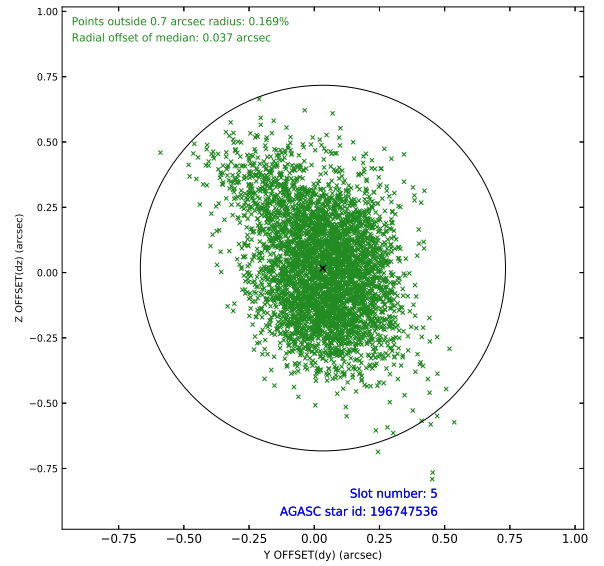
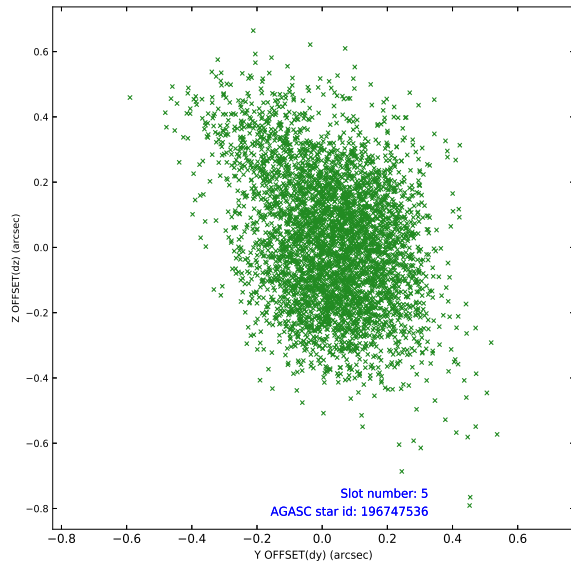
2.4.2 Slot 4



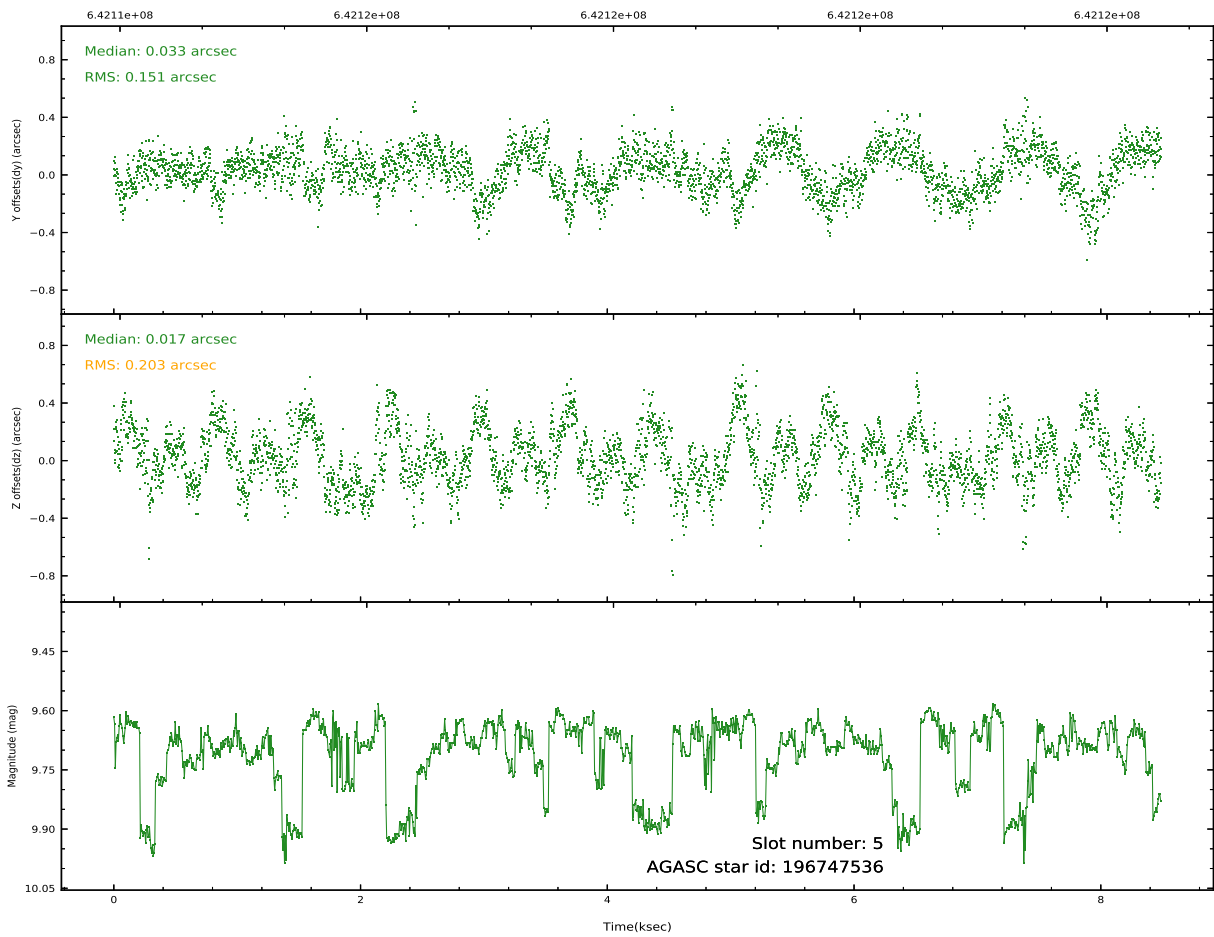
Time (s)



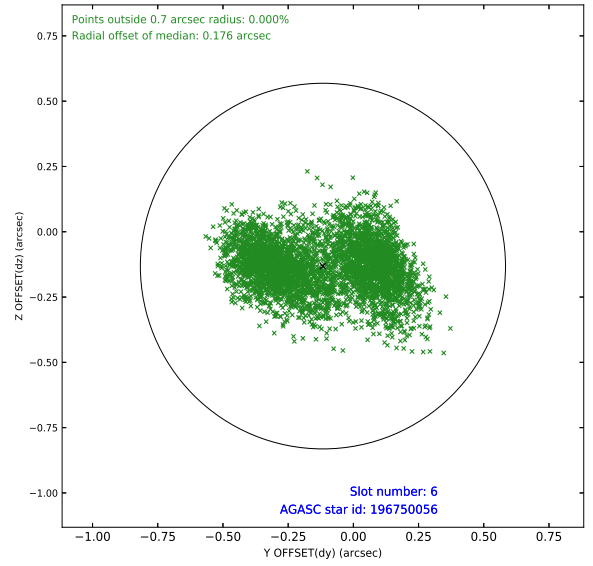
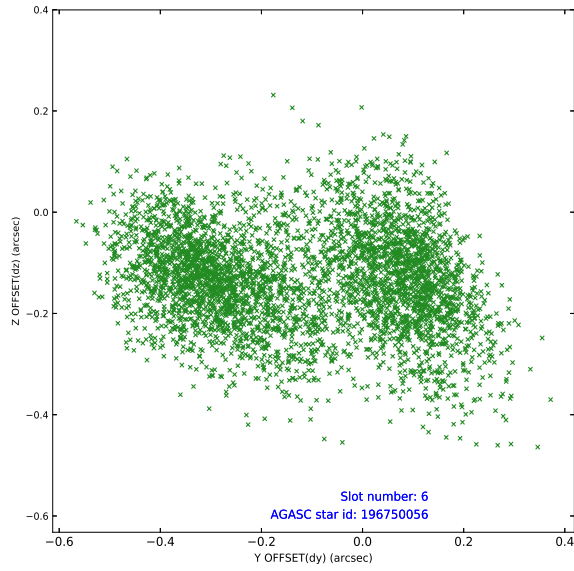
2.4.3 Slot 5



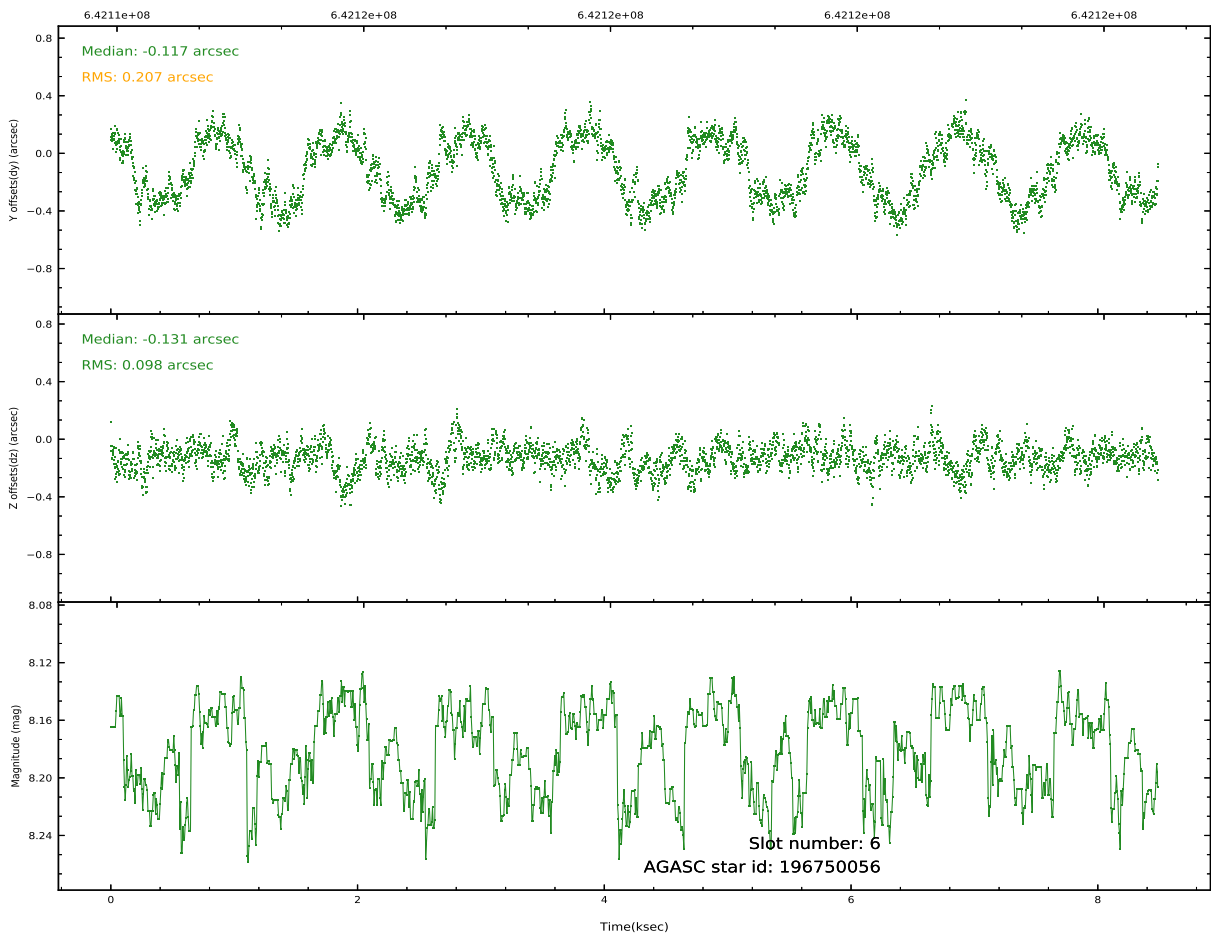
Time (s)



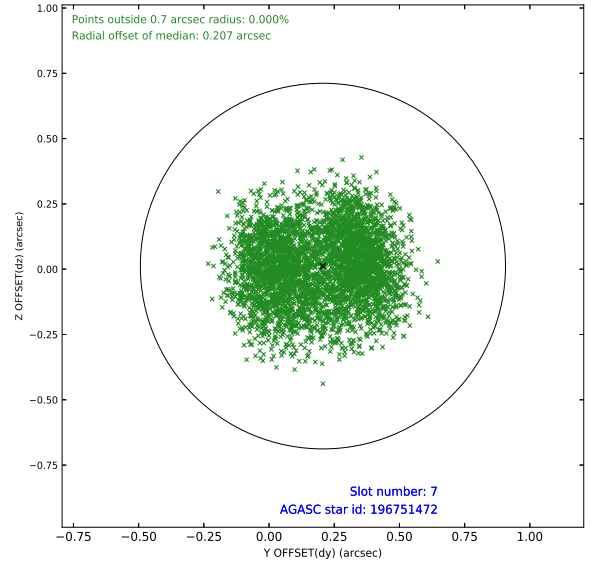
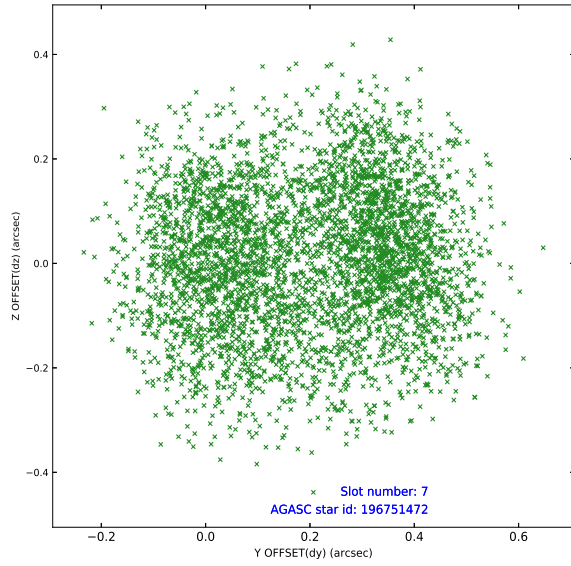
2.4.4 Slot 6



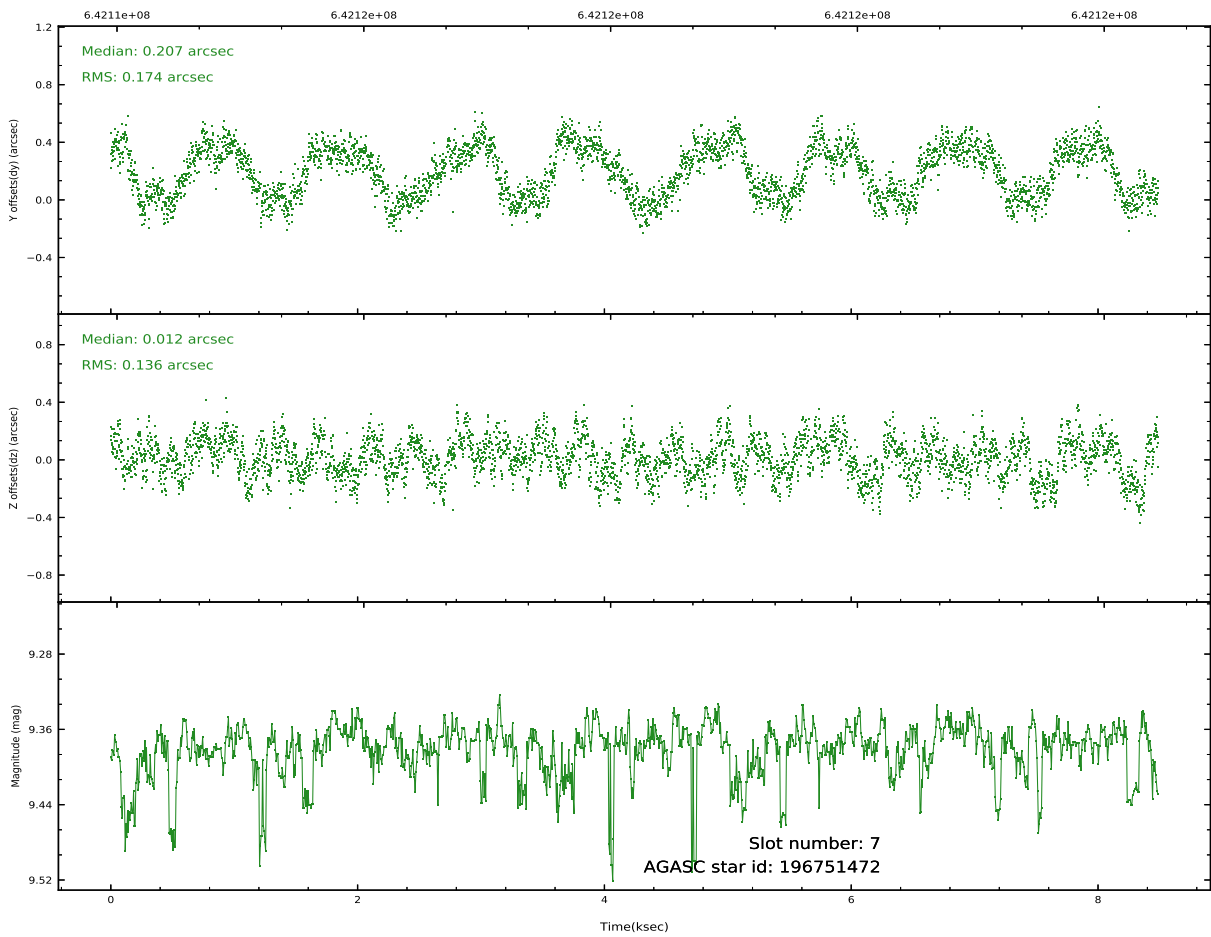
Time (s)



2.4.5 Slot 7

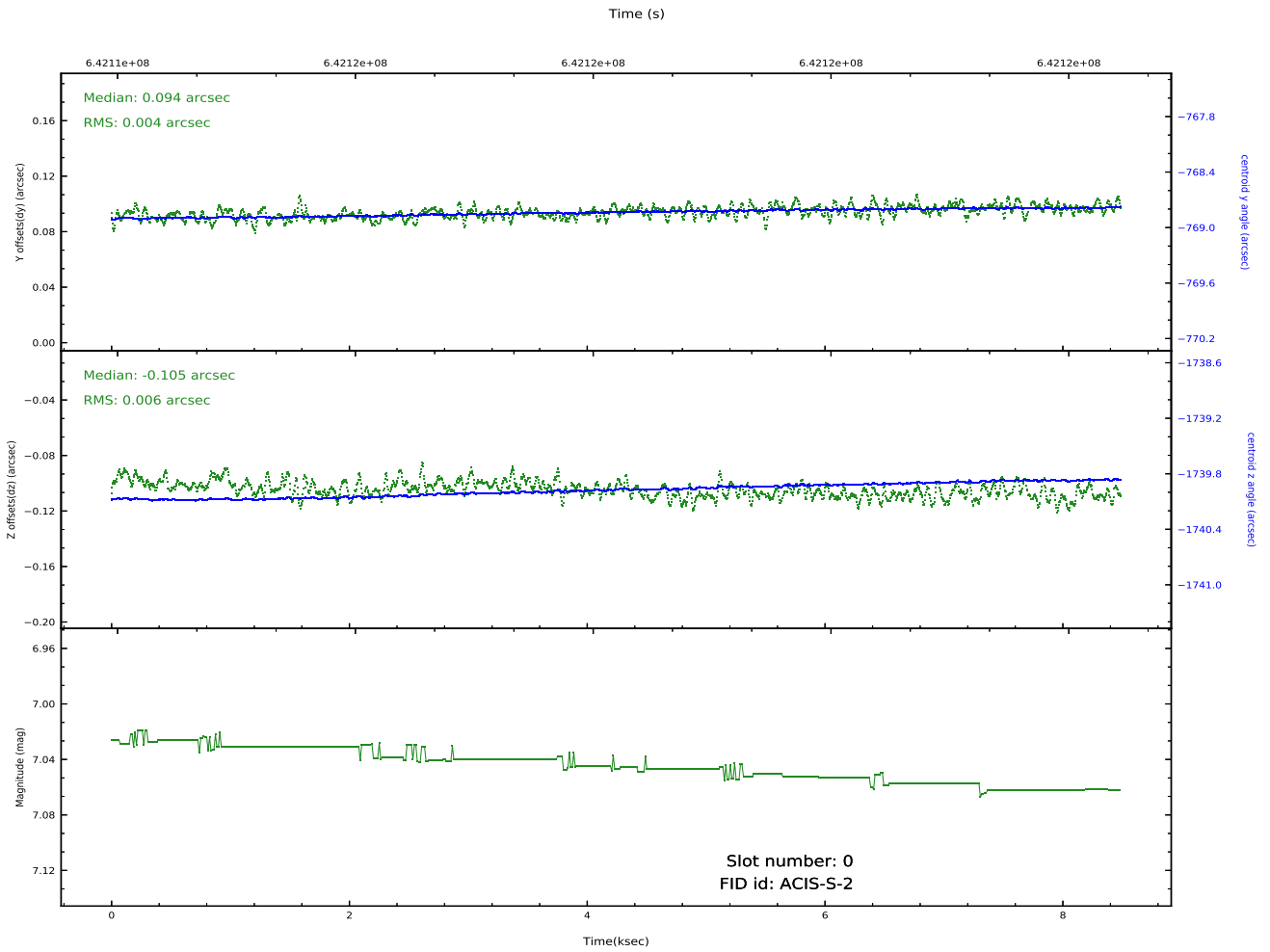
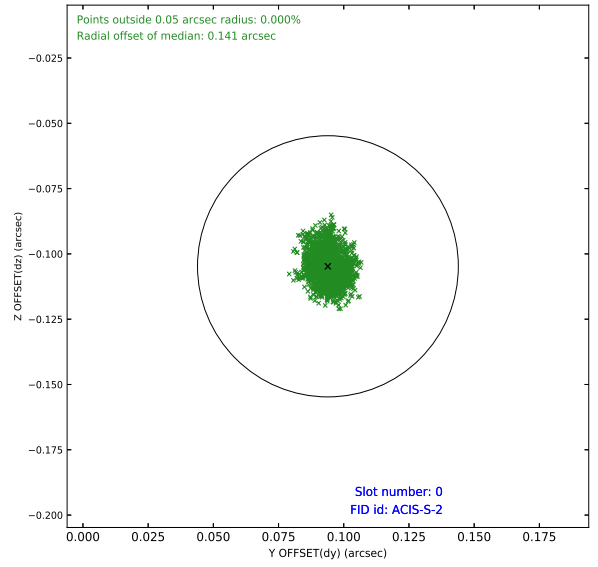
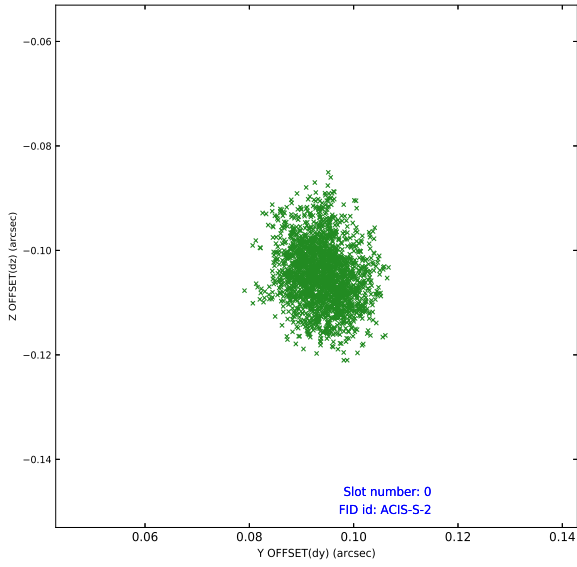


Time (s)

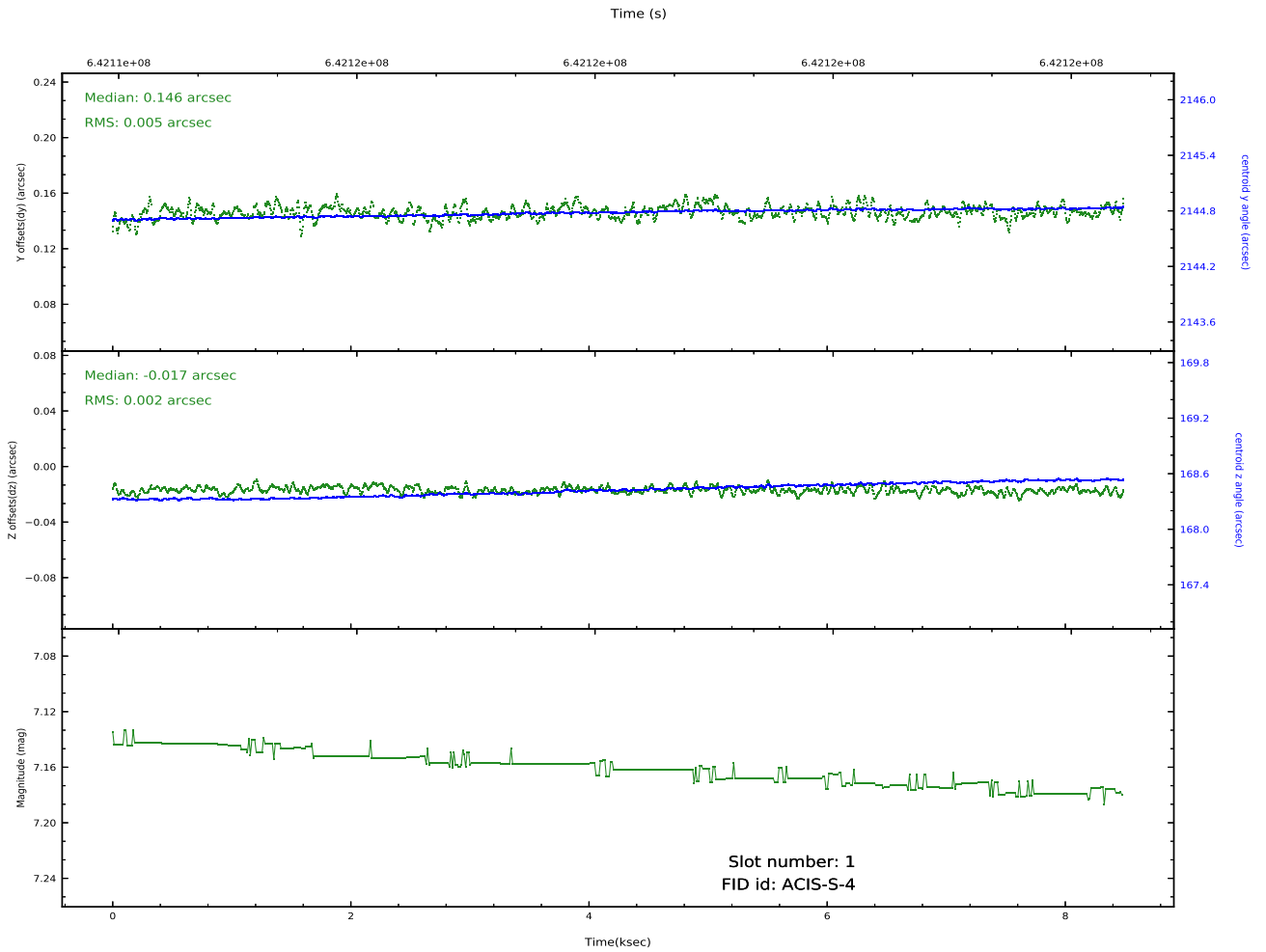
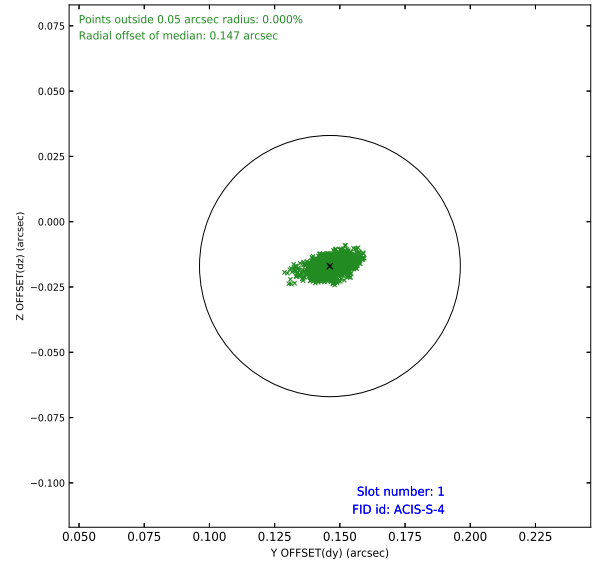
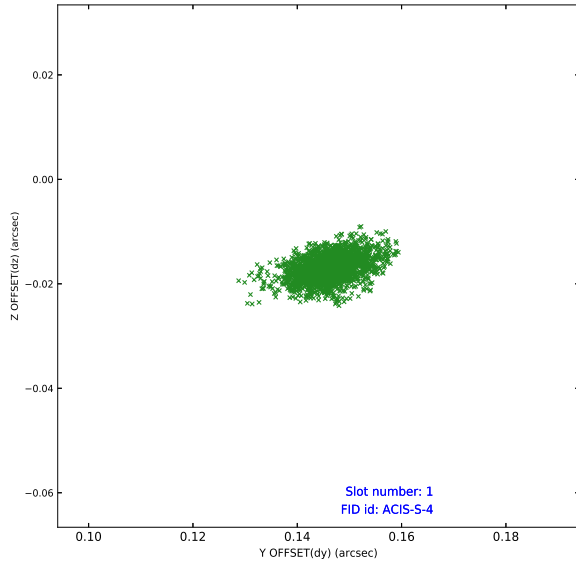


2.5 FID Slots

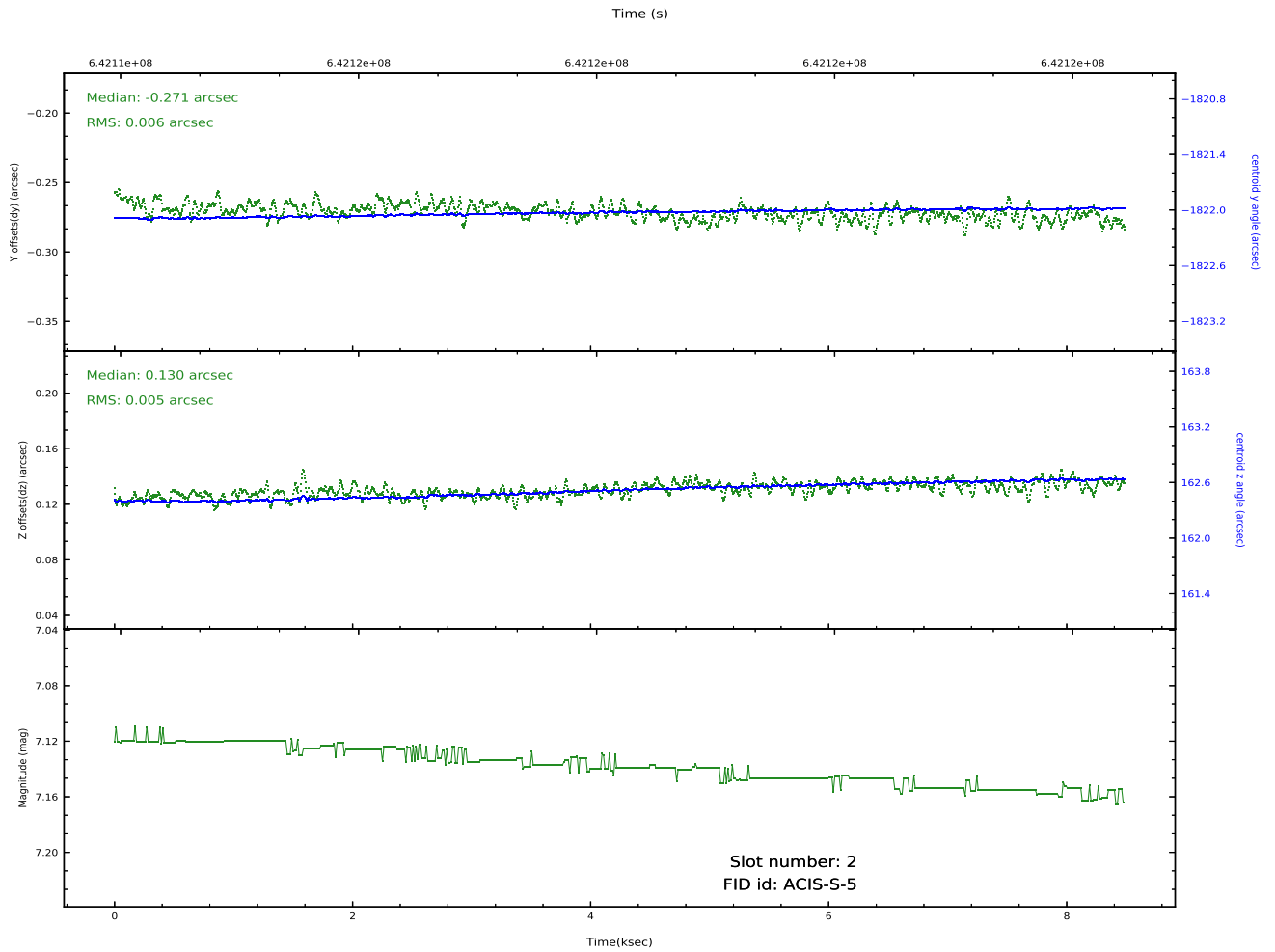
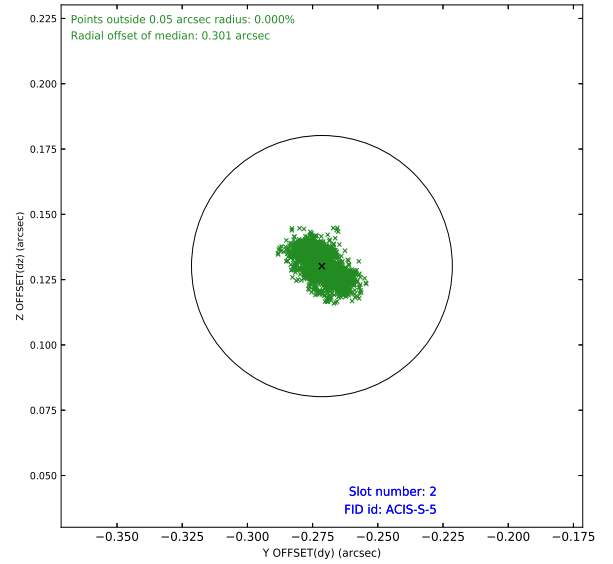
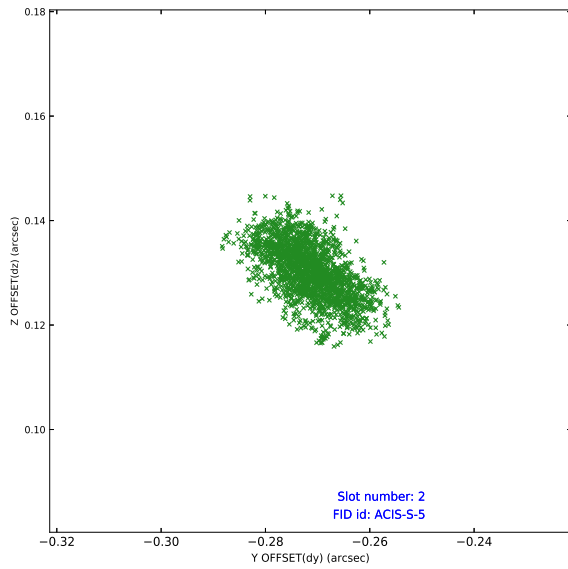
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	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	7.8523000605106

A.2 Comments