

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20541 - L2 Version 2
Chandra X-Ray Center

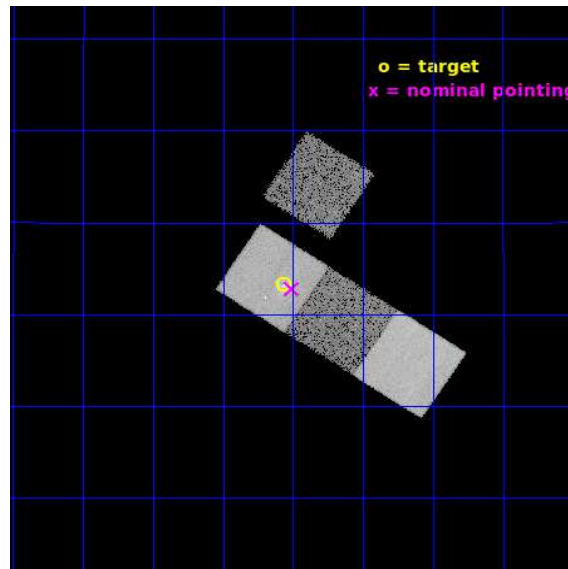
L2 Processing Date : Oct 30 2020

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1 Front

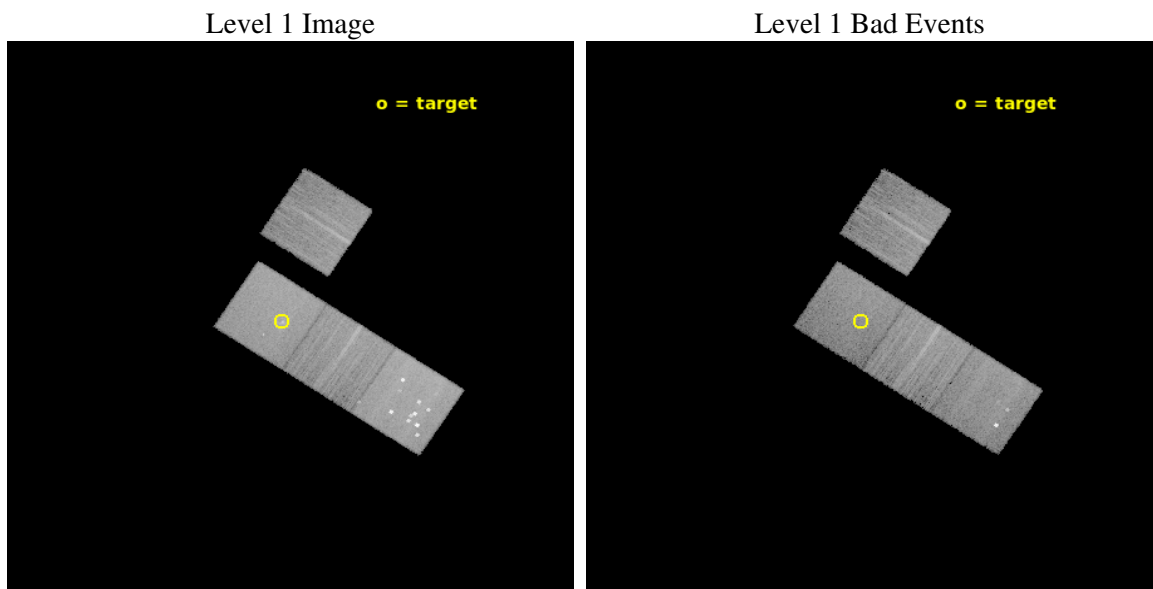
seq_num	801753	Sequence number
obs_id	20541	Observation id
title	Fuelling and self-regulation of AGN feedback at the Bondi radius of M84	Proposal title
observer	Helen Russell	Principal investigator
object	M84	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	186.265833	Observer's specified target RA [deg]
dec_targ	12.886944	Observer's specified target Dec [deg]
ra_nom	186.25195465148	Nominal RA [deg]
dec_nom	12.880190612882	Nominal Dec [deg]
roll_nom	213.15715201772	Nominal Roll [deg]
revision	2	Processing version of data
ontime	11438.524348378	Sum of GTIs [s]
livetime	11289.071606848	Livetime [s]
ontime3	11438.401228428	Sum of GTIs [s]
ontime5	11438.483308434	Sum of GTIs [s]
ontime6	11438.442268372	Sum of GTIs [s]
ontime7	11438.524348378	Sum of GTIs [s]
l2events	133088	Number of level 2 events



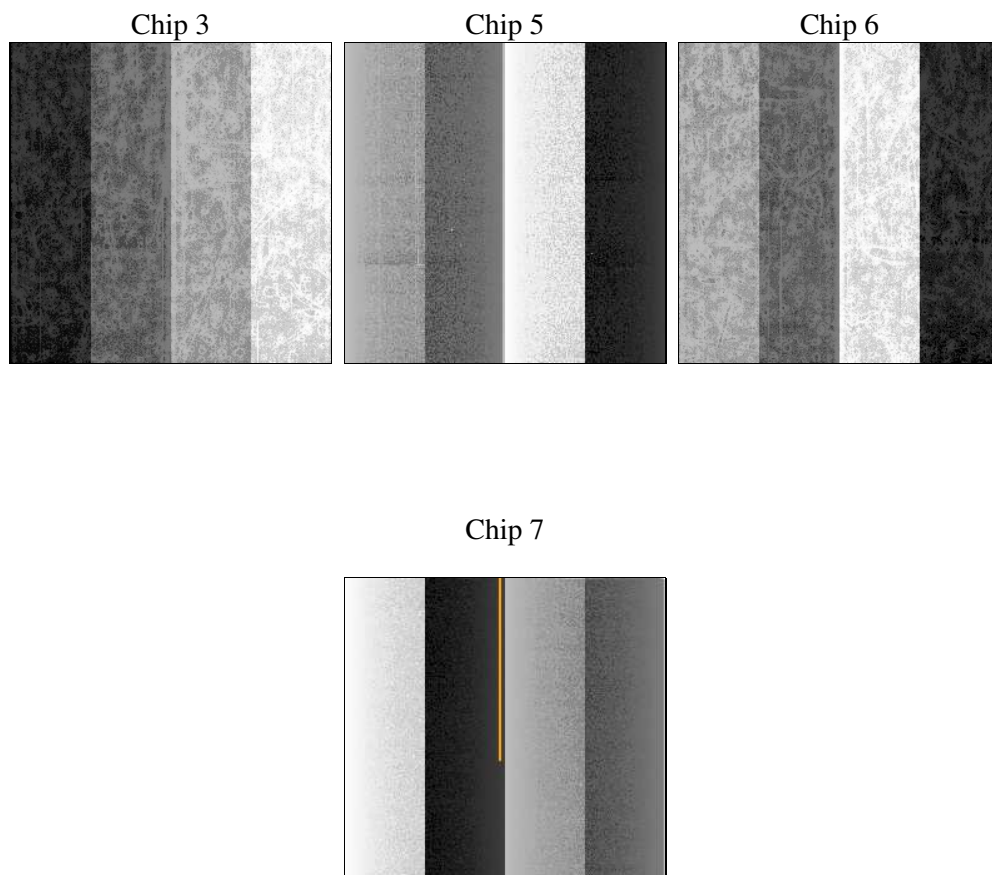
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	11372.364000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	11438.524348378	Sum of GTIs [s]
caldsver	4.9.3	 	ontime3	11438.401228428	Sum of GTIs [s]
date	2020-10-30T09:32:17	Date and time of file creation	ontime5	11438.483308434	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	11438.442268372	Sum of GTIs [s]
			ontime7	11438.524348378	Sum of GTIs [s]
			l1events	460427	Number of level 1 events

2.1.4 Events

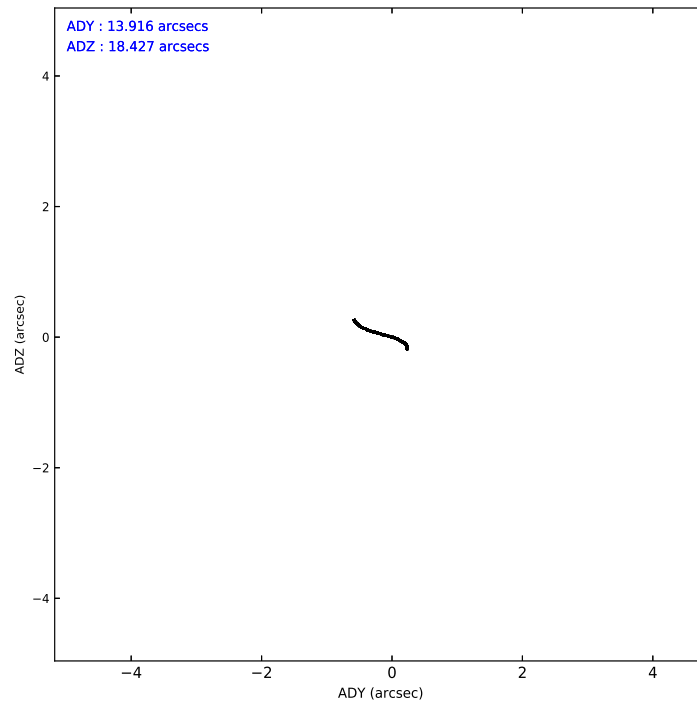
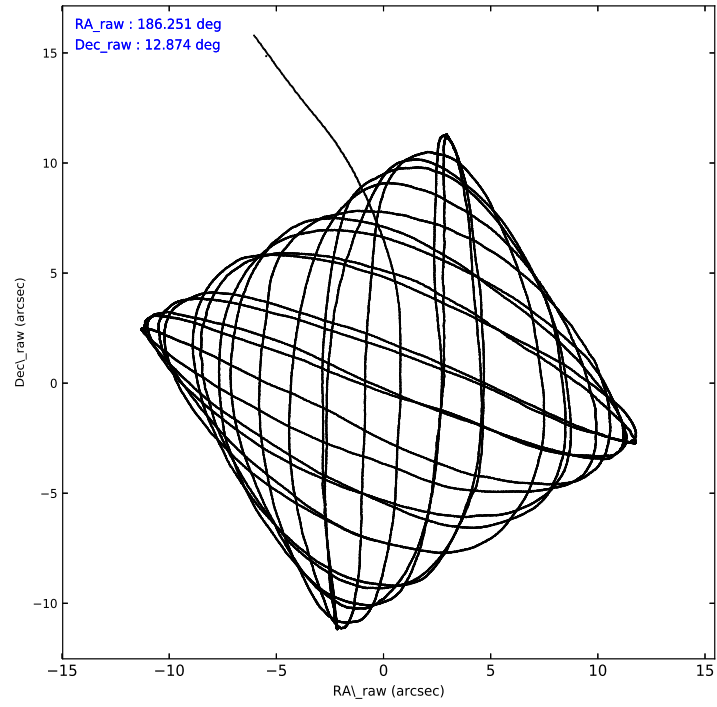
	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	83166	164739	95679	116843
rejected events	73527	78134	84944	64549
rejected %	88%	47%	88%	55%

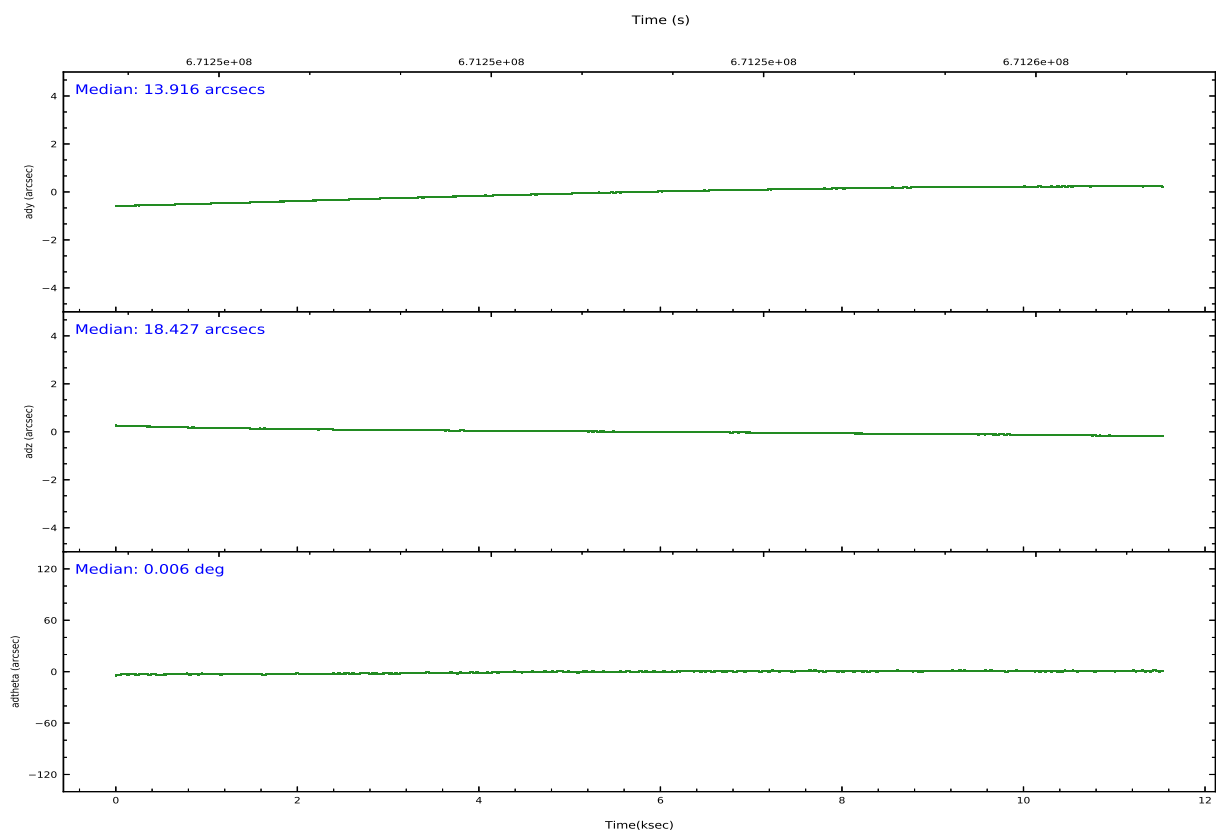
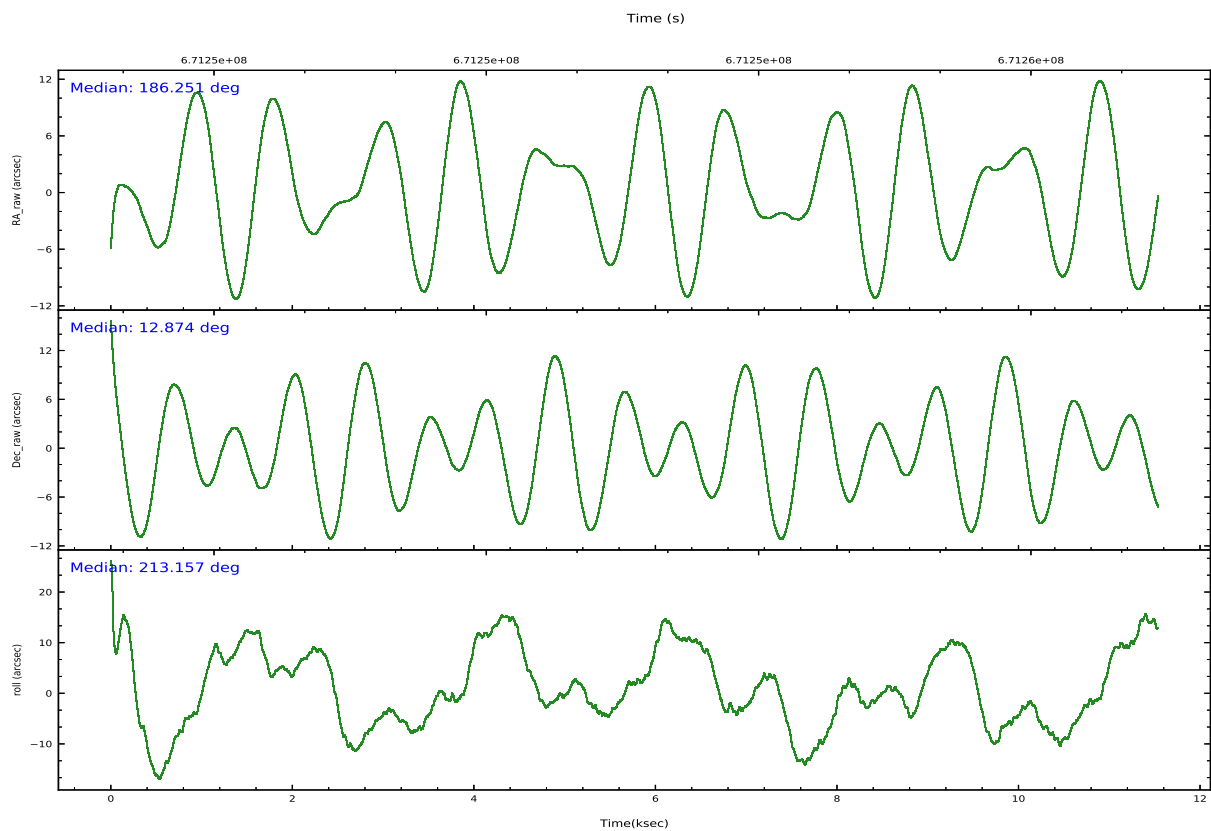
	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	3653	17808	3596	5093
	4%	10%	3%	4%
grade 1 events	50	411	35	171
	0%	0%	0%	0%
grade 2 events	2048	27022	2628	11080
	2%	16%	2%	9%
grade 3 events	993	2223	878	4126
	1%	1%	0%	3%
grade 4 events	941	1929	959	4063
	1%	1%	1%	3%
grade 5 events	4051	9524	3902	10949
	4%	5%	4%	9%
grade 6 events	2006	37641	2675	27947
	2%	22%	2%	23%
grade 7 events	69424	68181	81006	53414
	83%	41%	84%	45%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-3567	ACIS-3567	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	186.263911	186.25195465148	CCD I2 on	O1	N
[deg] Pointing Dec	12.898013	12.880190612882	CCD I3 on	Y	Y
[deg] Pointing Roll	213.000429	213.15715201772	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	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	O2	N
[s] Observation start time (MET)	671247029.184000	671246138.03613	CCD S5 on	N	N
Observation start date	2019-04-10T01:29:20	2019-04-10T01:15:38	Number of optional ACIS chips dropped	2	2
[s] Observation end time (MET)	671258401.184000	671259038.1744	On-chip summing requested	N	N
Observation end date	2019-04-10T04:38:52	2019-04-10T04:50:38	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



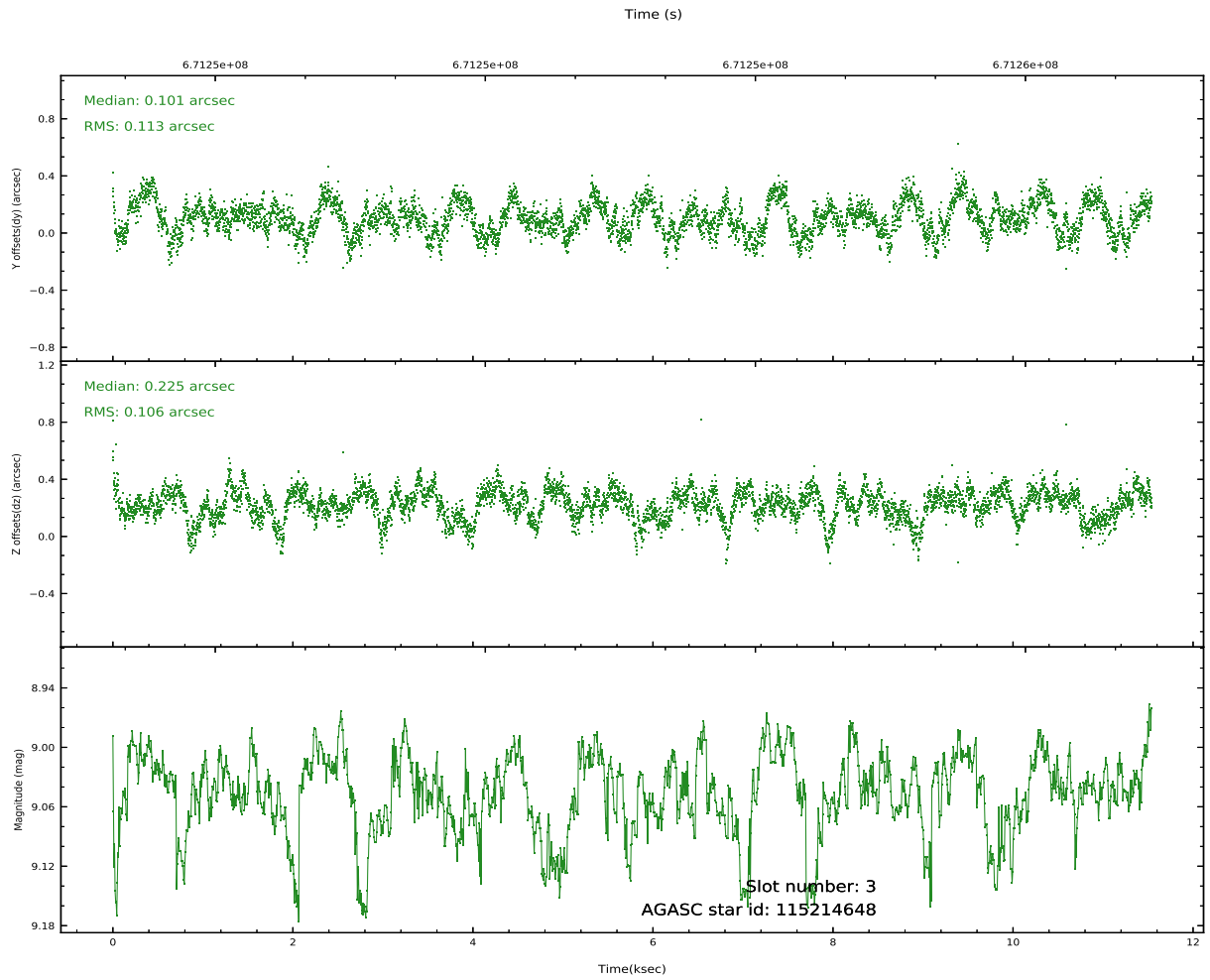
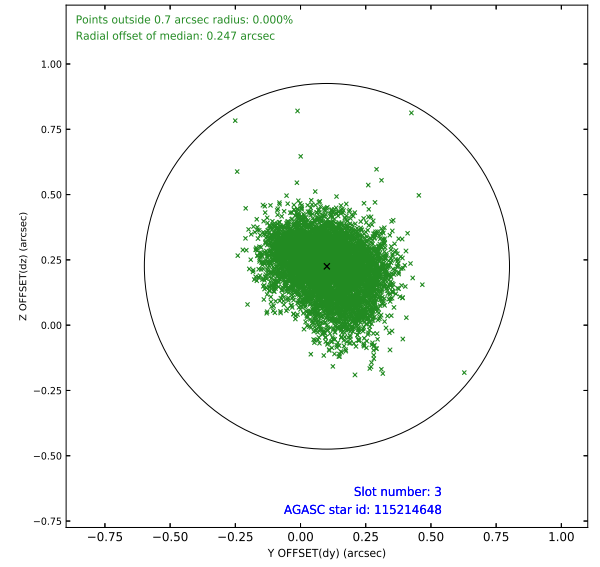
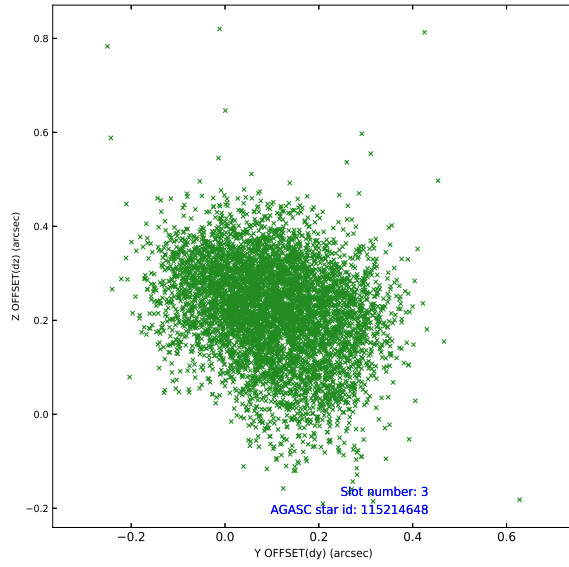


Slot Statistics

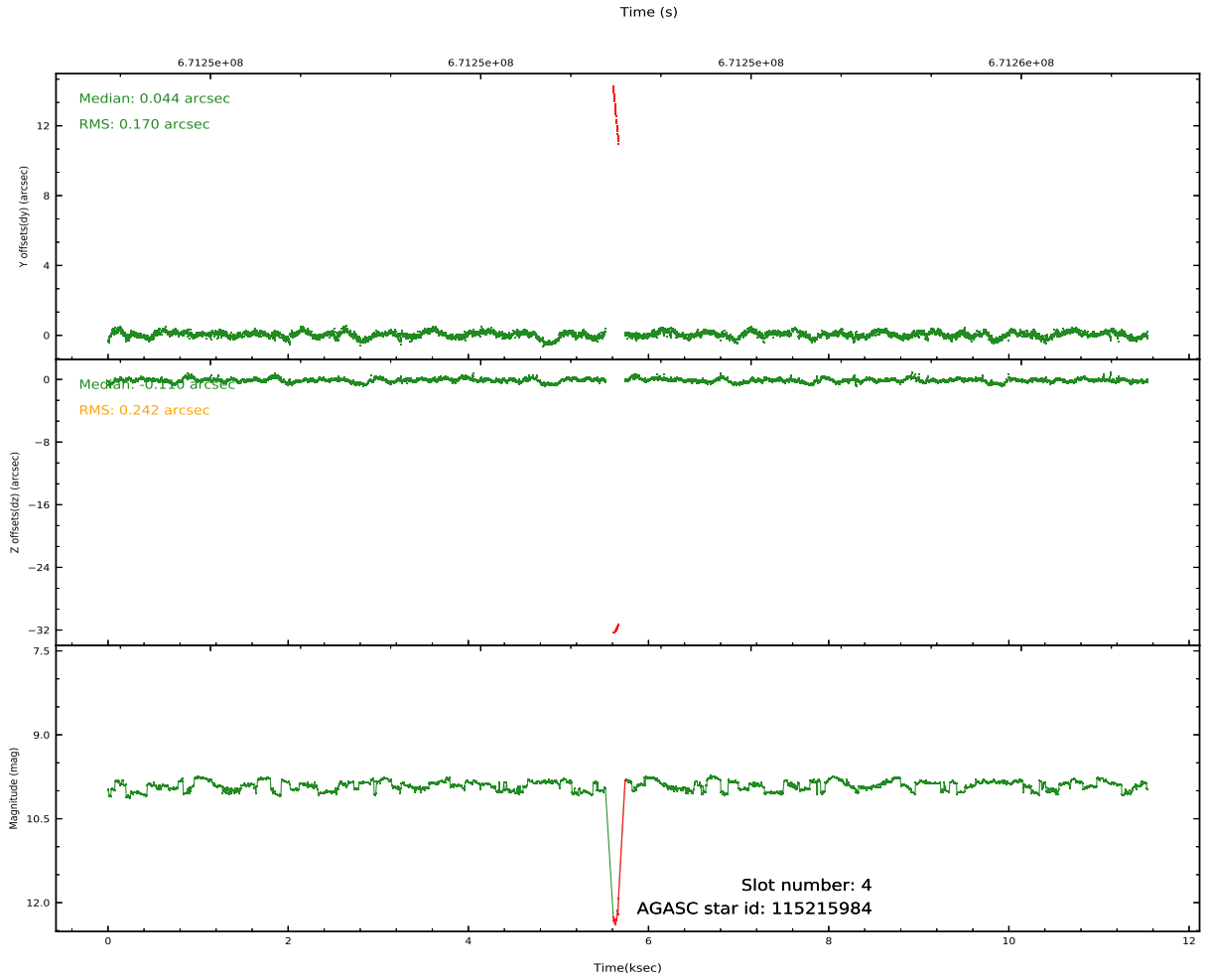
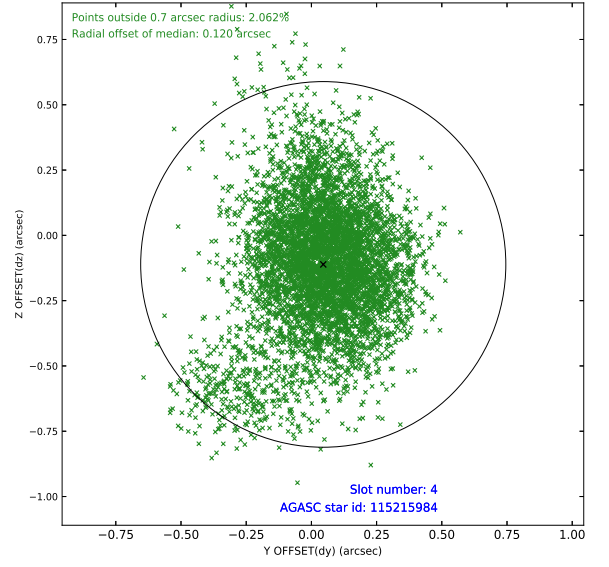
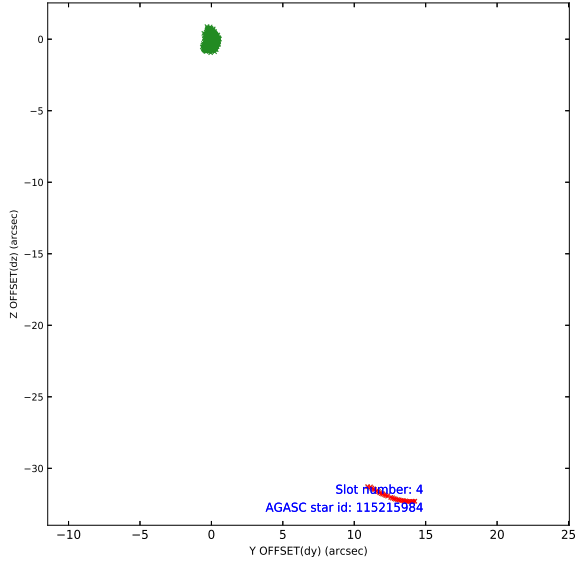
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.09	2815	1.000	0.219	-0.157	0.009	0.013	0.000000	0.000000	-766.88	-1739
1	FID		ACIS-S-4	7.21	2815	1.000	0.166	-0.063	0.010	0.018	0.000000	0.000000	2146.47	167
2	FID		ACIS-S-5	7.18	2814	1.000	-0.418	0.229	0.012	0.018	0.000000	0.000000	-1819.47	162
3	GUIDE	used	115214648	9.04	5622	1.000	0.101	0.225	0.167	0.256	185.771147	12.685188	1869.28	-301
4	GUIDE	used	115215984	9.90	5499	0.995	0.044	-0.110	0.294	0.586	186.134733	12.875031	426.57	-176
5	GUIDE	used	115216184	9.61	5620	1.000	-0.049	-0.181	0.202	0.342	185.973150	12.580247	1481.21	406
6	GUIDE	used	115347480	9.59	5625	1.000	-0.079	0.110	0.162	0.254	186.668576	13.310410	-1997.29	-472
7	GUIDE	used	115349448	9.69	5533	1.000	-0.037	-0.066	0.191	0.427	186.471080	13.770115	-2317.08	-2238

2.4 Star Slots

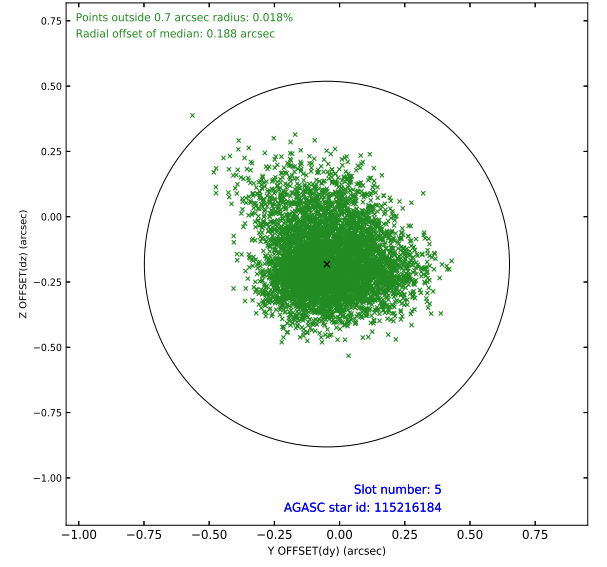
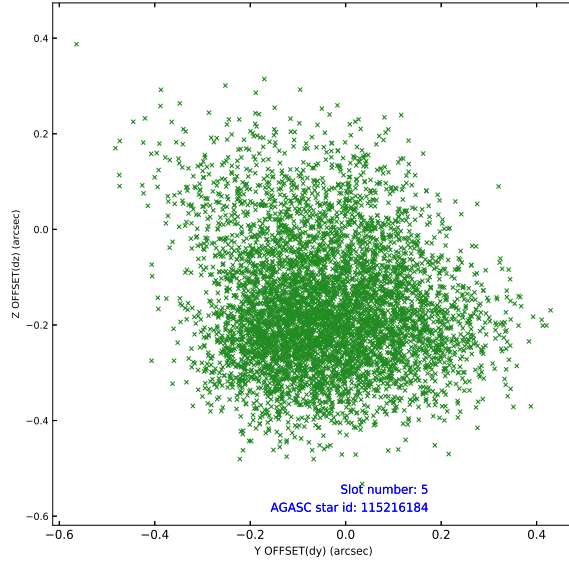
2.4.1 Slot 3



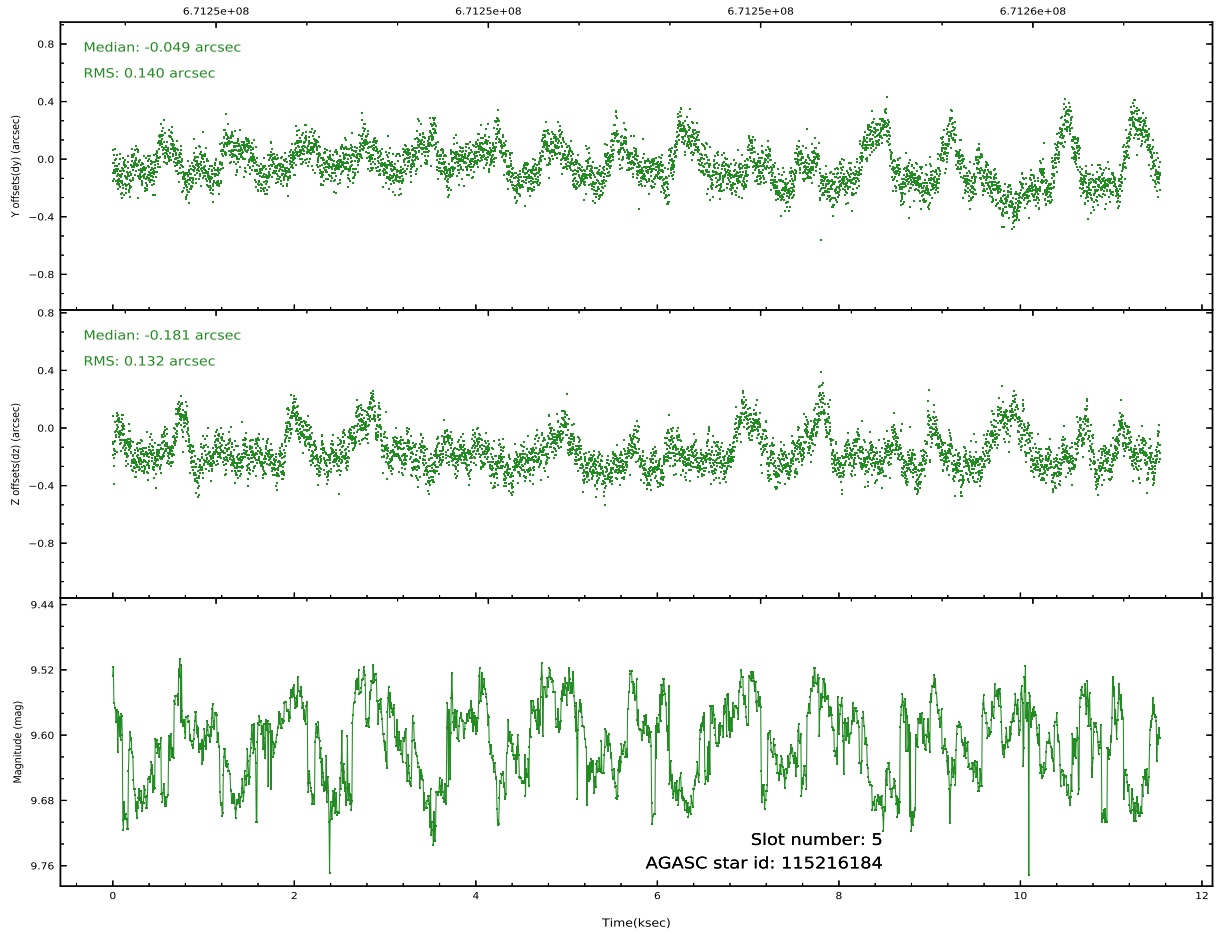
2.4.2 Slot 4



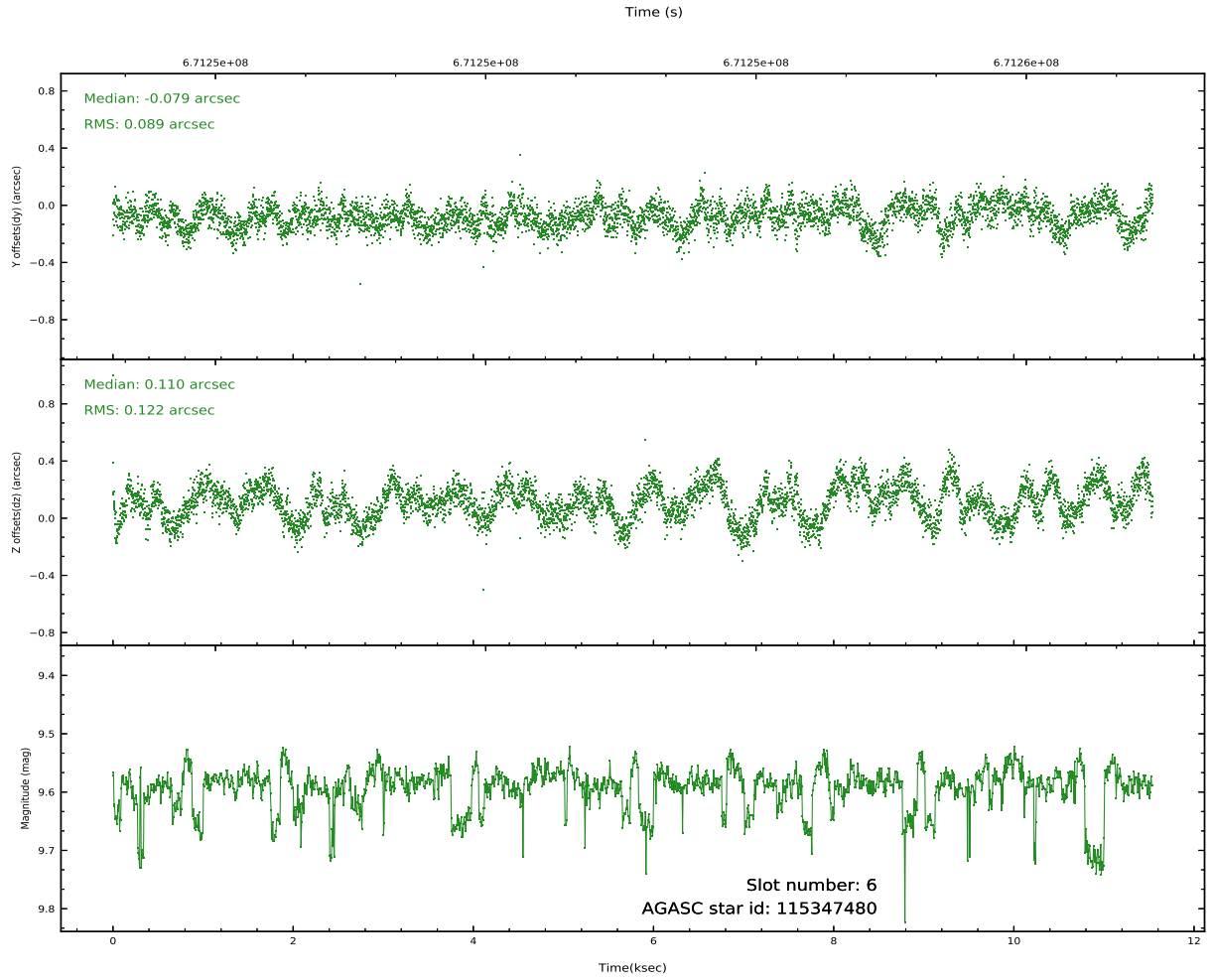
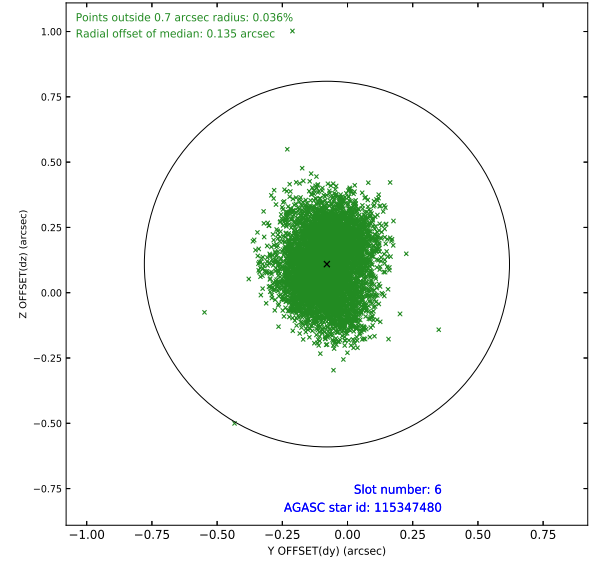
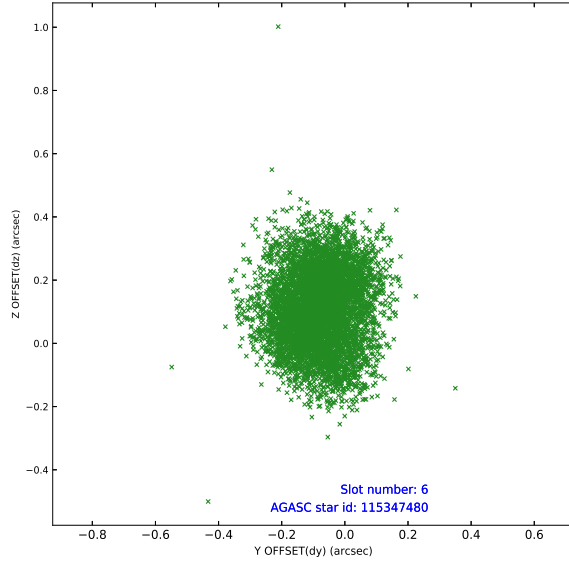
2.4.3 Slot 5



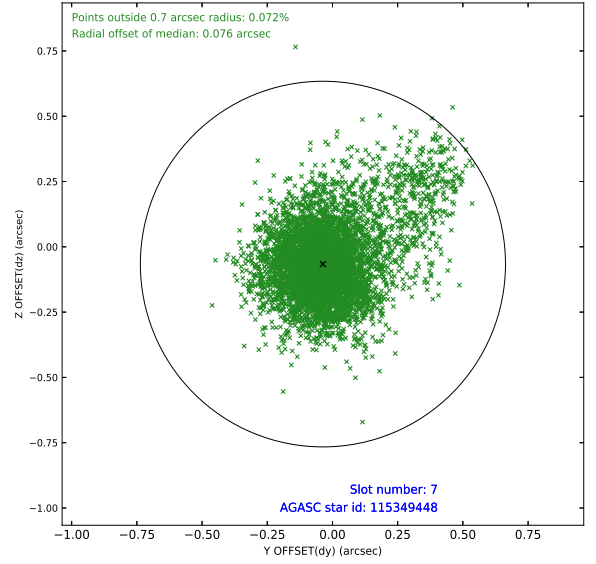
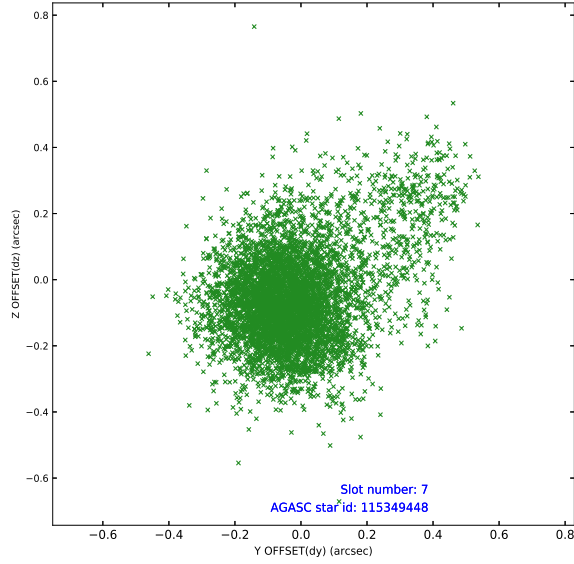
Time (s)



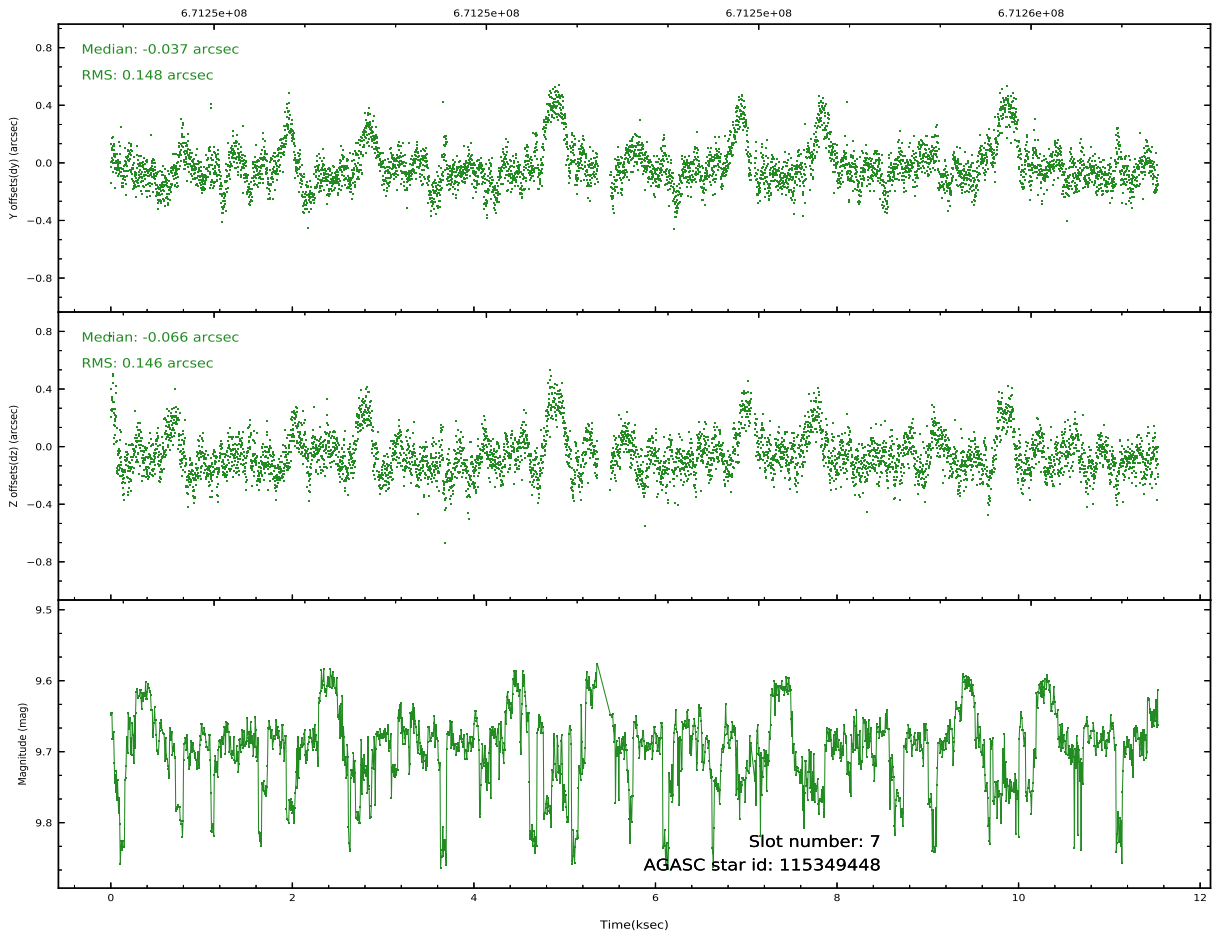
2.4.4 Slot 6



2.4.5 Slot 7

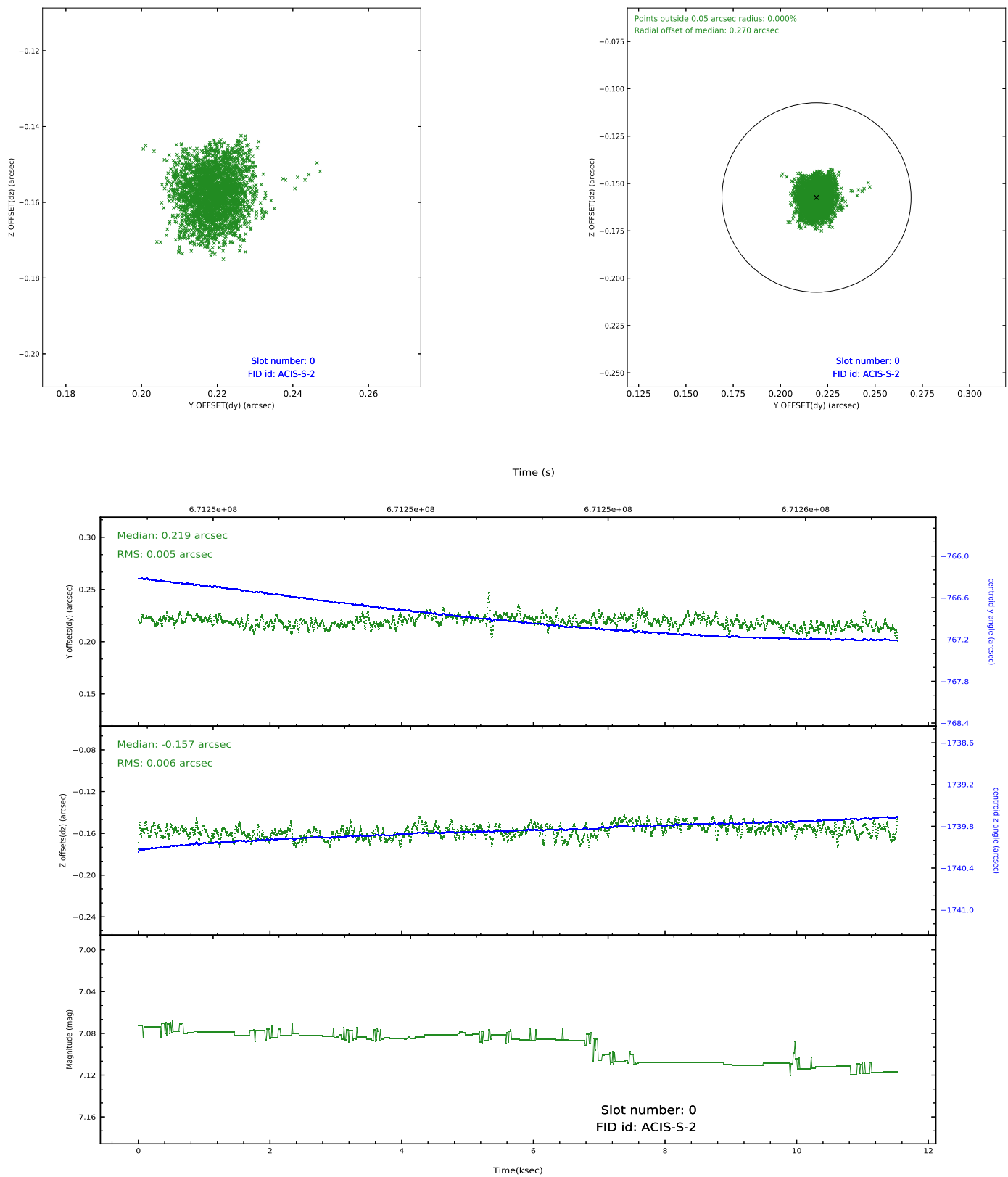


Time (s)

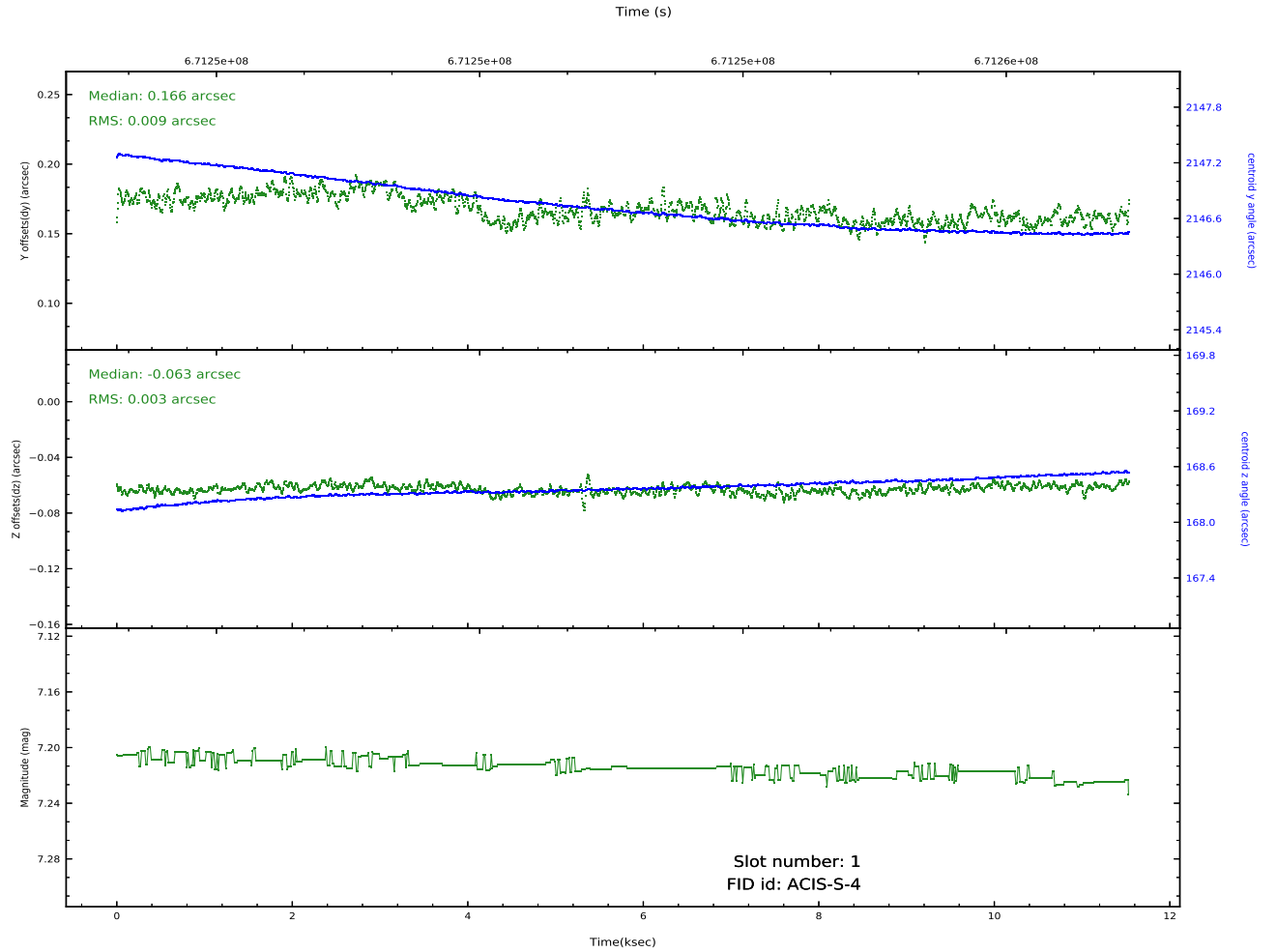
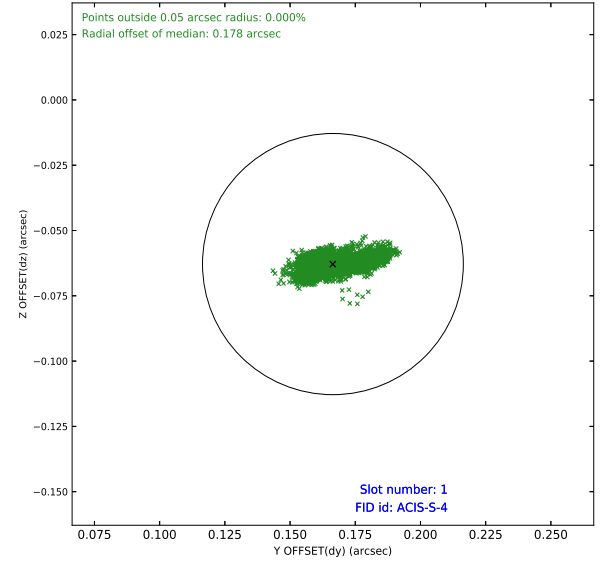
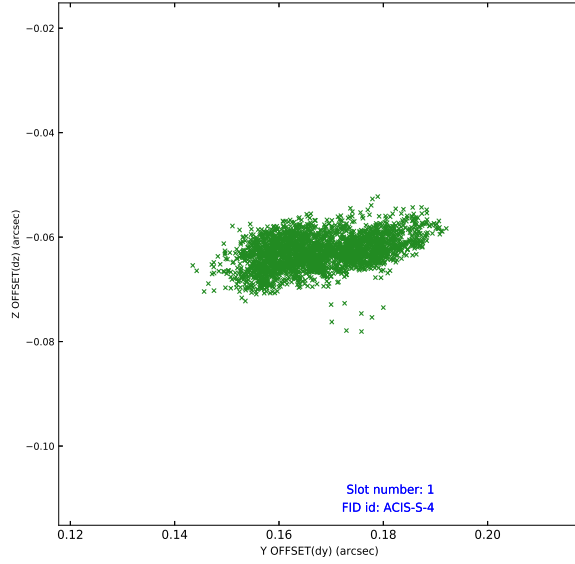


2.5 FID Slots

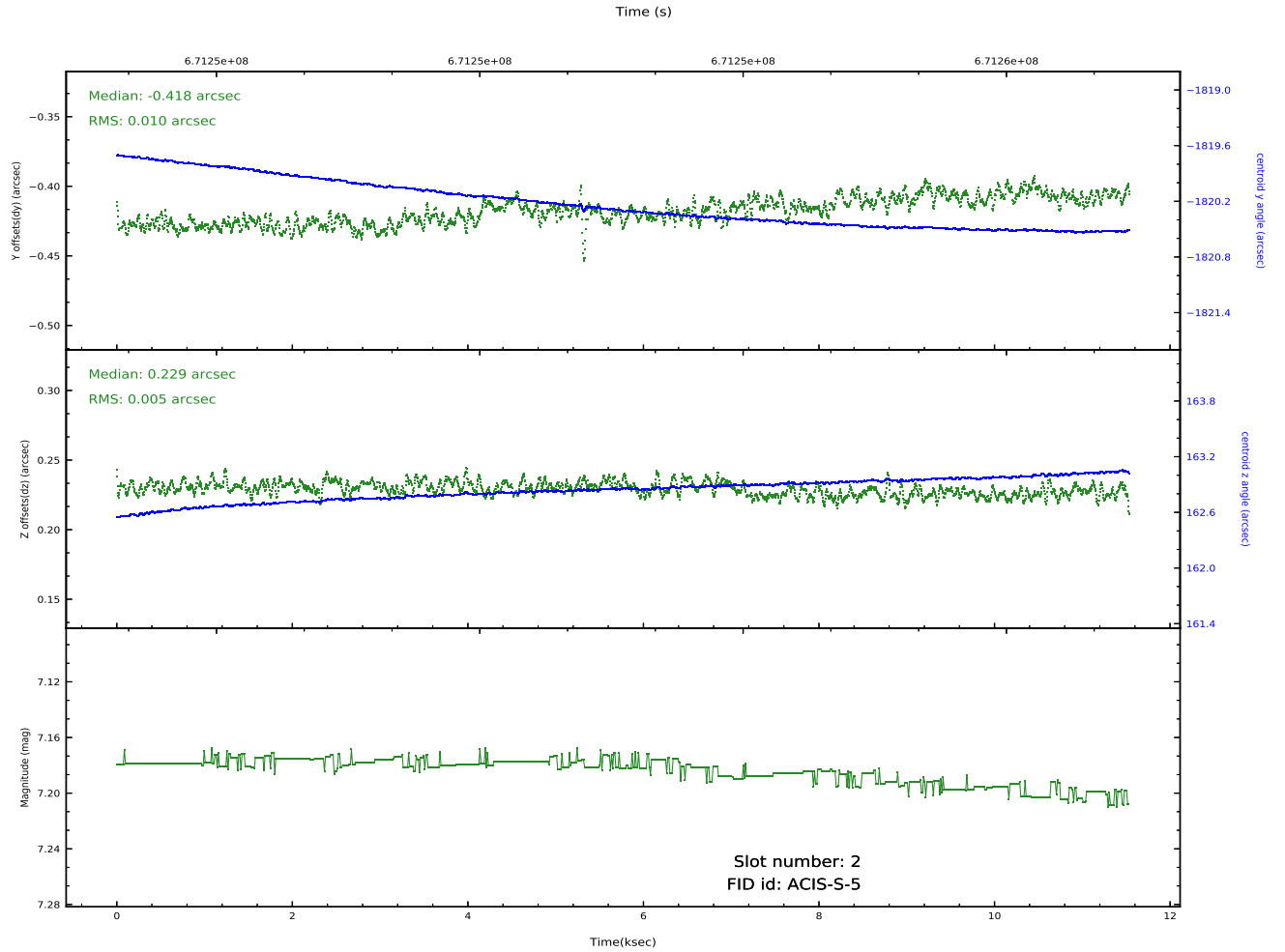
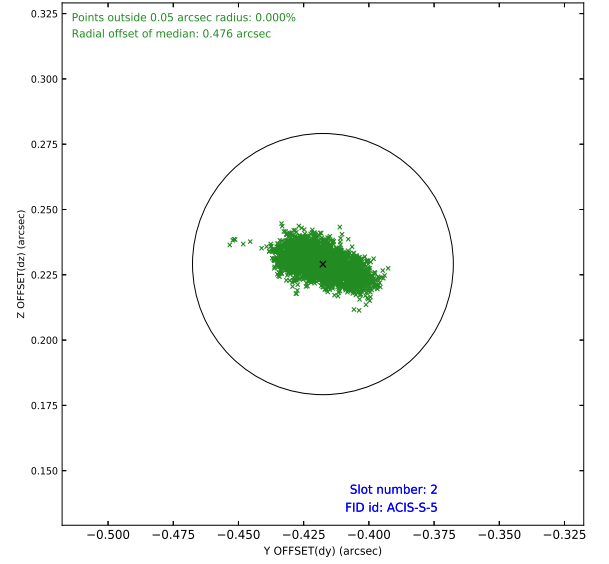
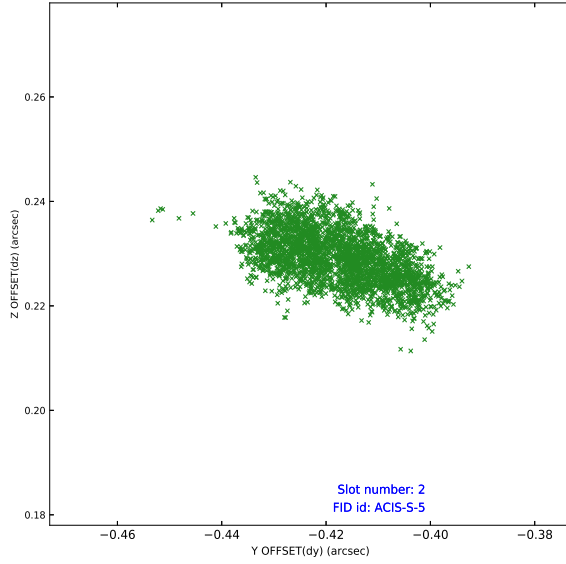
2.5.1 Slot 0



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)	2020.10.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	11.438524348021

A.2 Comments

Optional chips I2 and S4 not included.