

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20508 - L2 Version 2
Chandra X-Ray Center

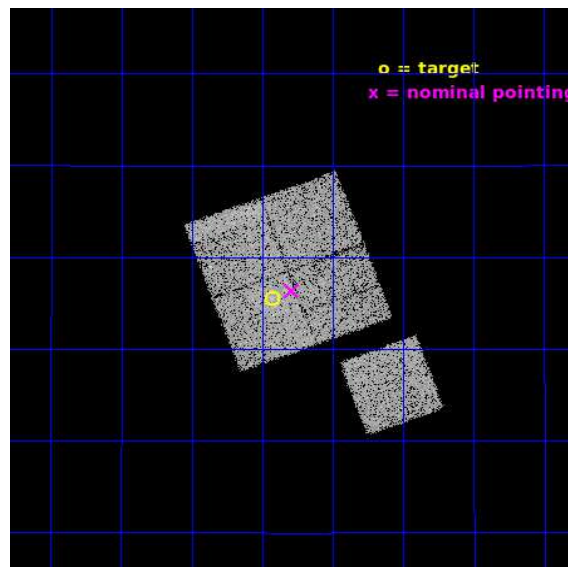
L2 Processing Date : Oct 25 2020

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1 Front

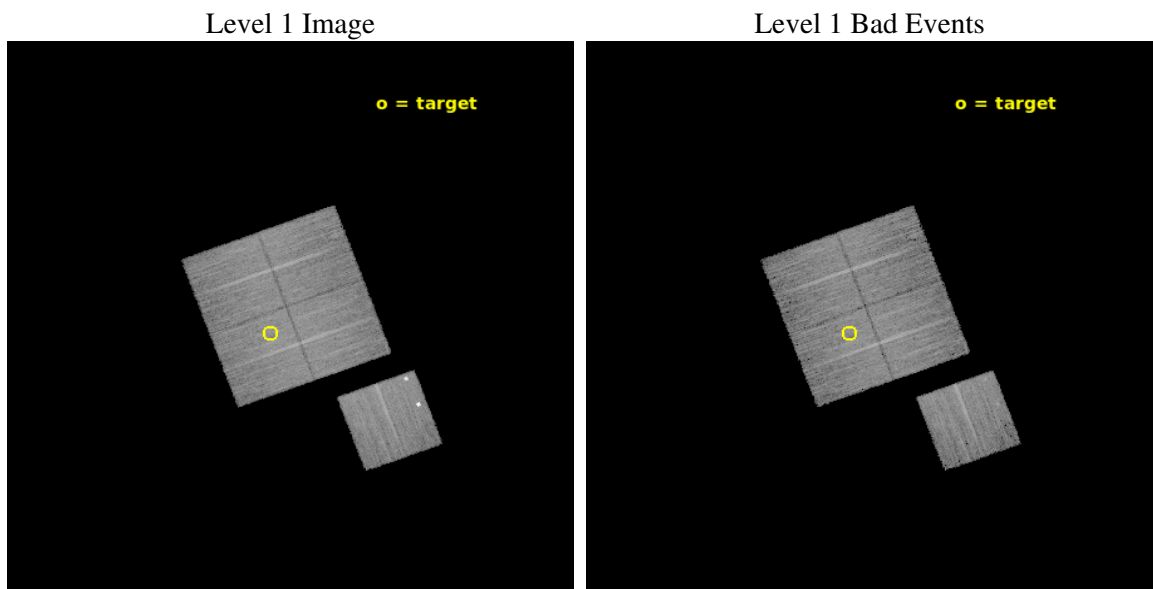
seq_num	801722	Sequence number
obs_id	20508	Observation id
title	Enabling precision cosmology with optically selected galaxy clusters	
observer	Roger Morris	Principal investigator
object	CIG J161855+105524	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	244.732083	Observer's specified target RA [deg]
dec_targ	10.925139	Observer's specified target Dec [deg]
ra_nom	244.69745120286	Nominal RA [deg]
dec_nom	10.939519574437	Nominal Dec [deg]
roll_nom	159.7104286695	Nominal Roll [deg]
revision	2	Processing version of data
ontime	12070.791275263	Sum of GTIs [s]
livetime	11913.077500864	Livetime [s]
ontime0	12070.668155313	Sum of GTIs [s]
ontime1	12070.709195256	Sum of GTIs [s]
ontime2	12070.750235319	Sum of GTIs [s]
ontime3	12070.791275263	Sum of GTIs [s]
ontime6	12070.62711525	Sum of GTIs [s]
l2events	43339	Number of level 2 events



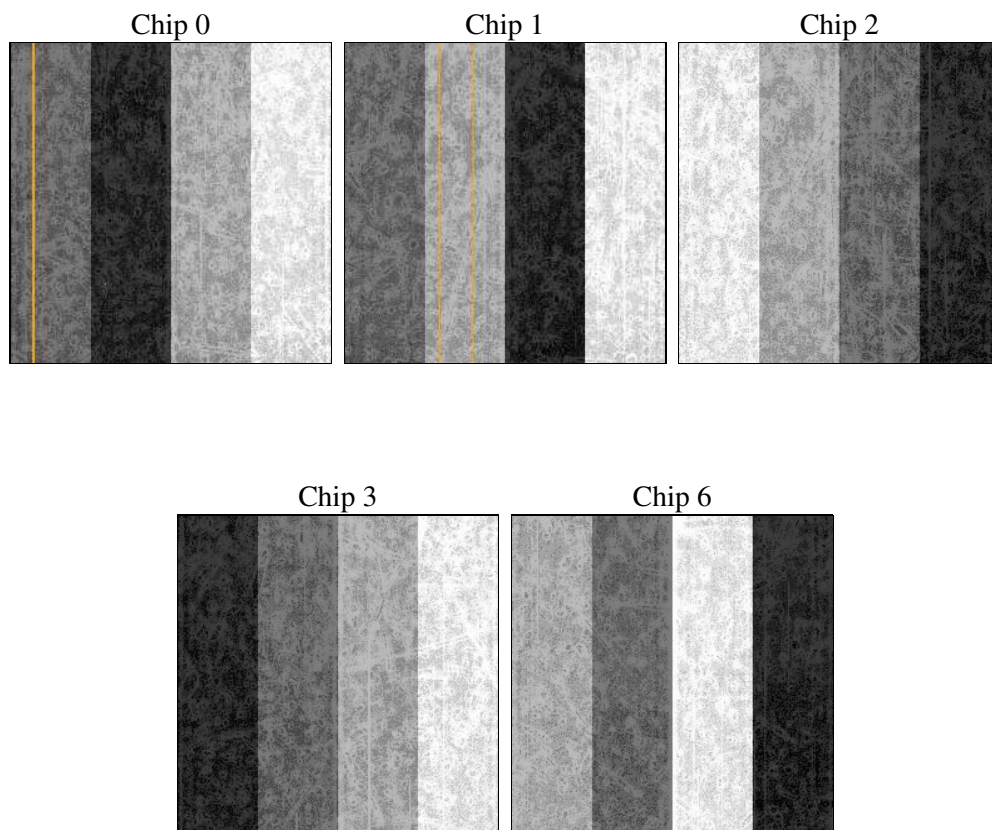
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	12000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	12070.791275263	Sum of GTIs [s]
caldbver	4.9.3	 	ontime0	12070.668155313	Sum of GTIs [s]
date	2020-10-26T00:01:49	Date and time of file creation	ontime1	12070.709195256	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	12070.750235319	Sum of GTIs [s]
			ontime3	12070.791275263	Sum of GTIs [s]
			ontime6	12070.62711525	Sum of GTIs [s]
			l1events	446689	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	83504	84707	91027	88697	98754
rejected events	73361	73380	81249	78466	77845
rejected %	87%	86%	89%	88%	78%

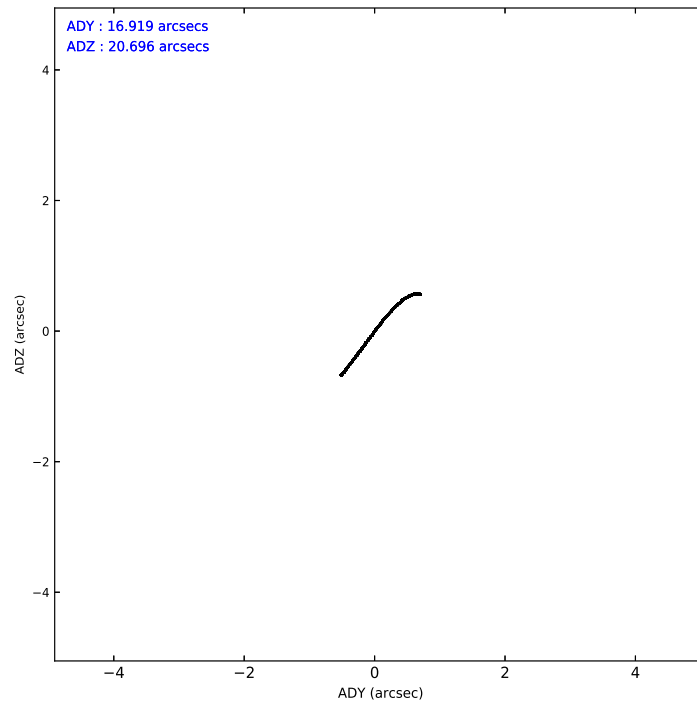
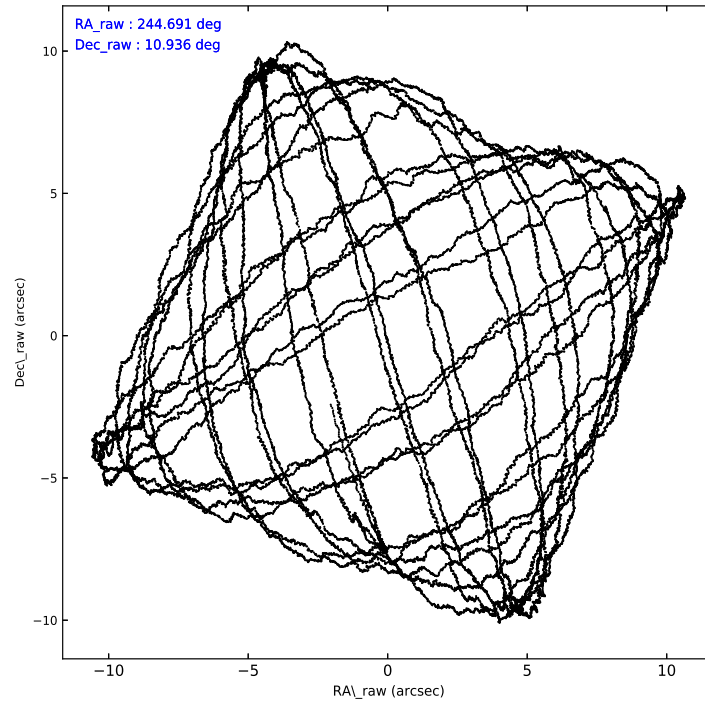
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3512	3695	3533	4068	6921
	4%	4%	3%	4%	7%
grade 1 events	37	49	56	67	71
	0%	0%	0%	0%	0%
grade 2 events	2550	2954	2500	2104	9624
	3%	3%	2%	2%	9%
grade 3 events	1006	1059	943	1041	978
	1%	1%	1%	1%	0%
grade 4 events	939	1048	987	983	986
	1%	1%	1%	1%	0%
grade 5 events	3796	4038	3629	4304	4223
	4%	4%	3%	4%	4%
grade 6 events	2138	2571	1820	2038	2407
	2%	3%	1%	2%	2%
grade 7 events	69526	69293	77559	74092	73544
	83%	81%	85%	83%	74%

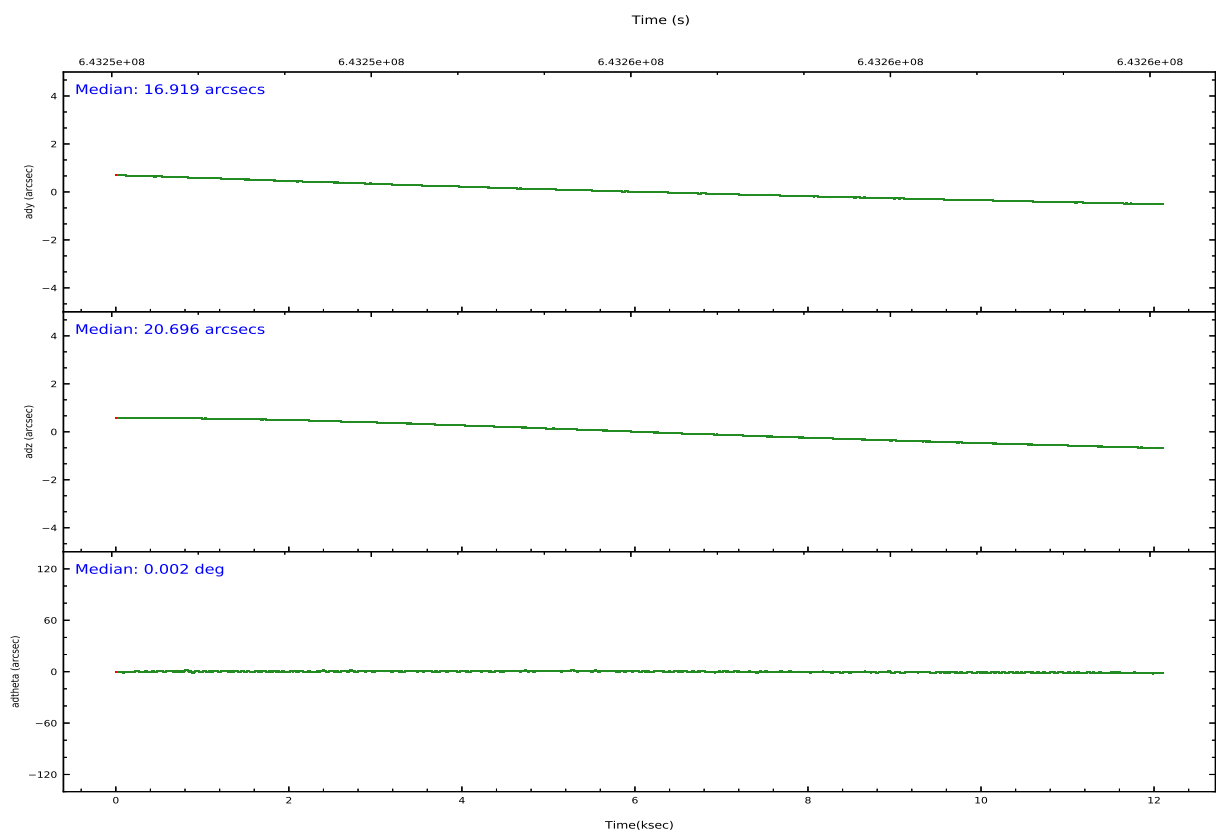
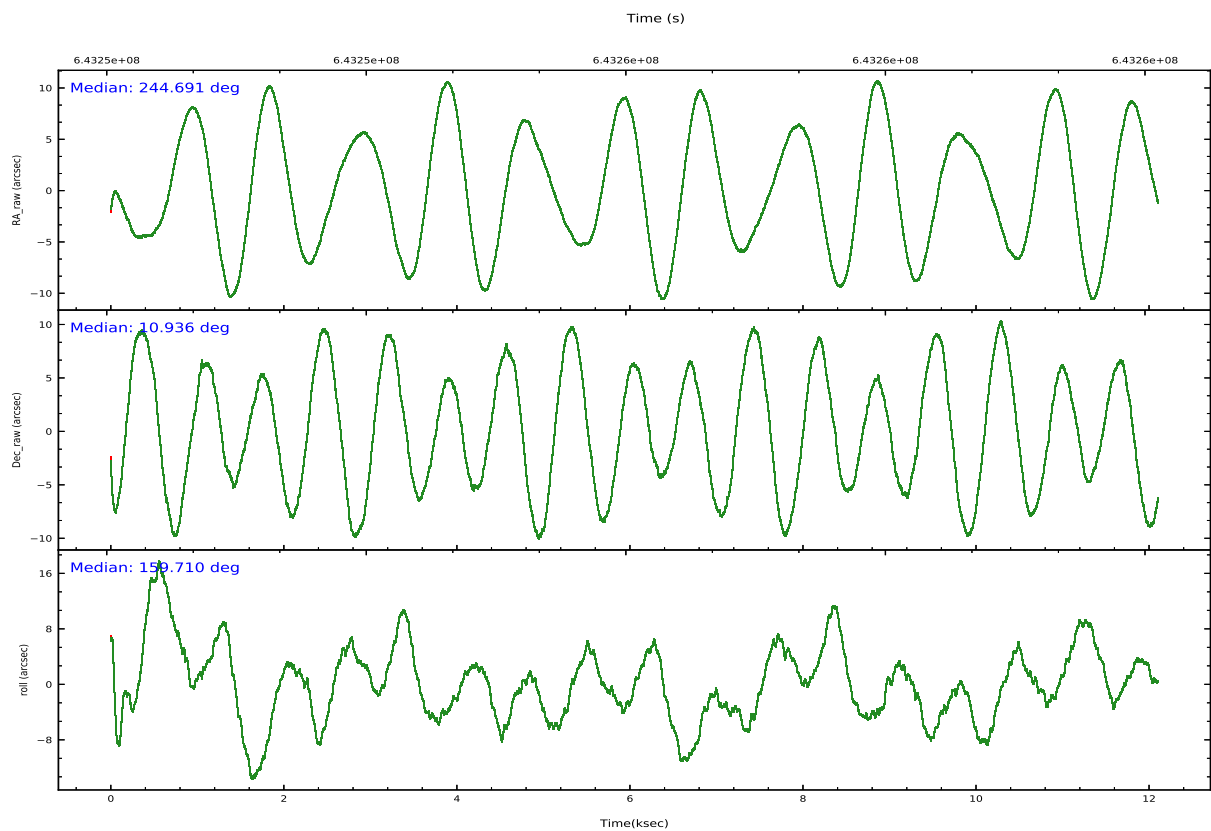
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-01236	ACIS-01236
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	244.718314	244.69745120286
[deg] Pointing Dec	10.940432	10.939519574437
[deg] Pointing Roll	159.502604	159.7104286695
[mm] SIM focus pos	-0.782348	-0.7809083437167272
[mm] SIM defocus	0	0.001439871863259334
[mm] SIM translation stage pos	-228.472463	-228.4783457680588
[mm] SIM translation stage offset	-5.12	-5.114107234870914
[s] Observation start time (MET)	643249152.184000	643247791.3277299
Observation start date	2018-05-21T00:18:03	2018-05-20T23:56:31
[s] Observation end time (MET)	643261152.184000	643262203.34108
Observation end date	2018-05-21T03:38:03	2018-05-21T03:56:43
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	Y	Y
CCD I1 on	Y	Y
CCD I2 on	Y	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O1	Y
CCD S3 on	N	N
CCD S4 on	N	N
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



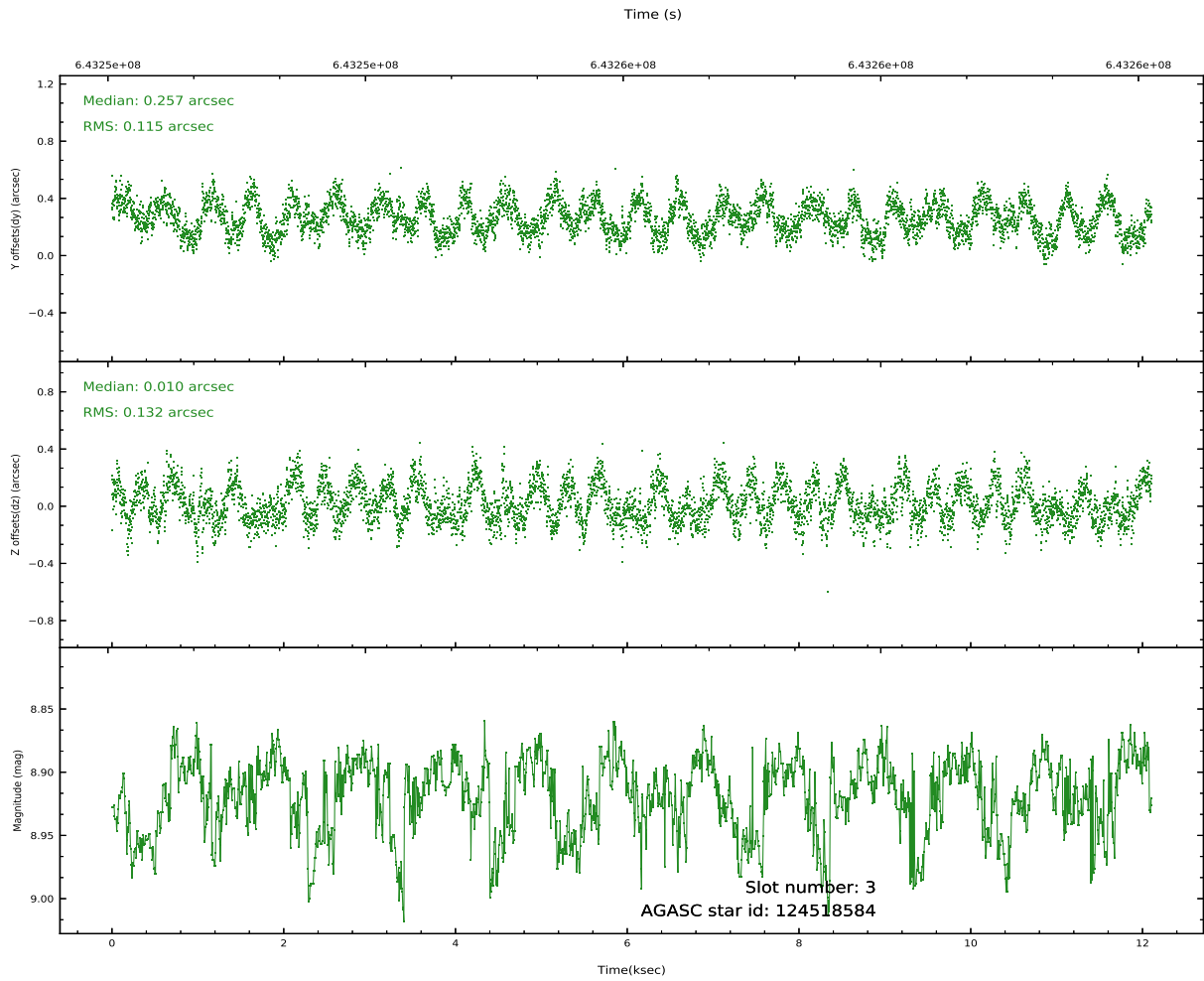
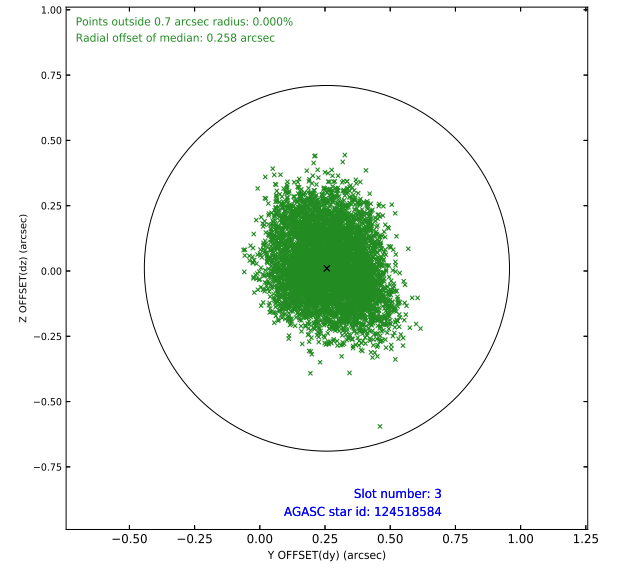
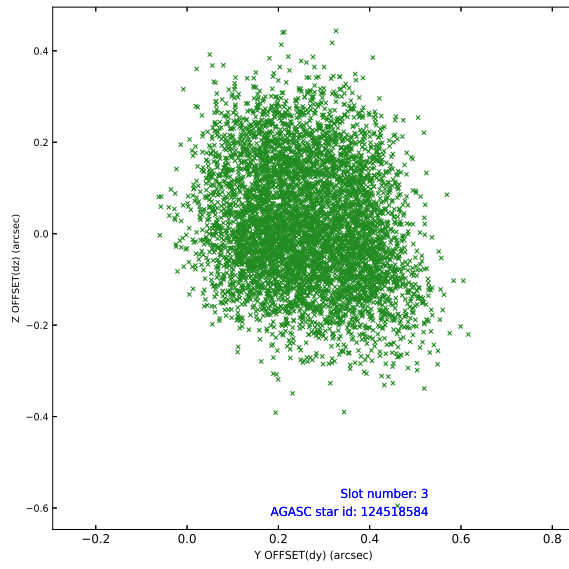


Slot Statistics

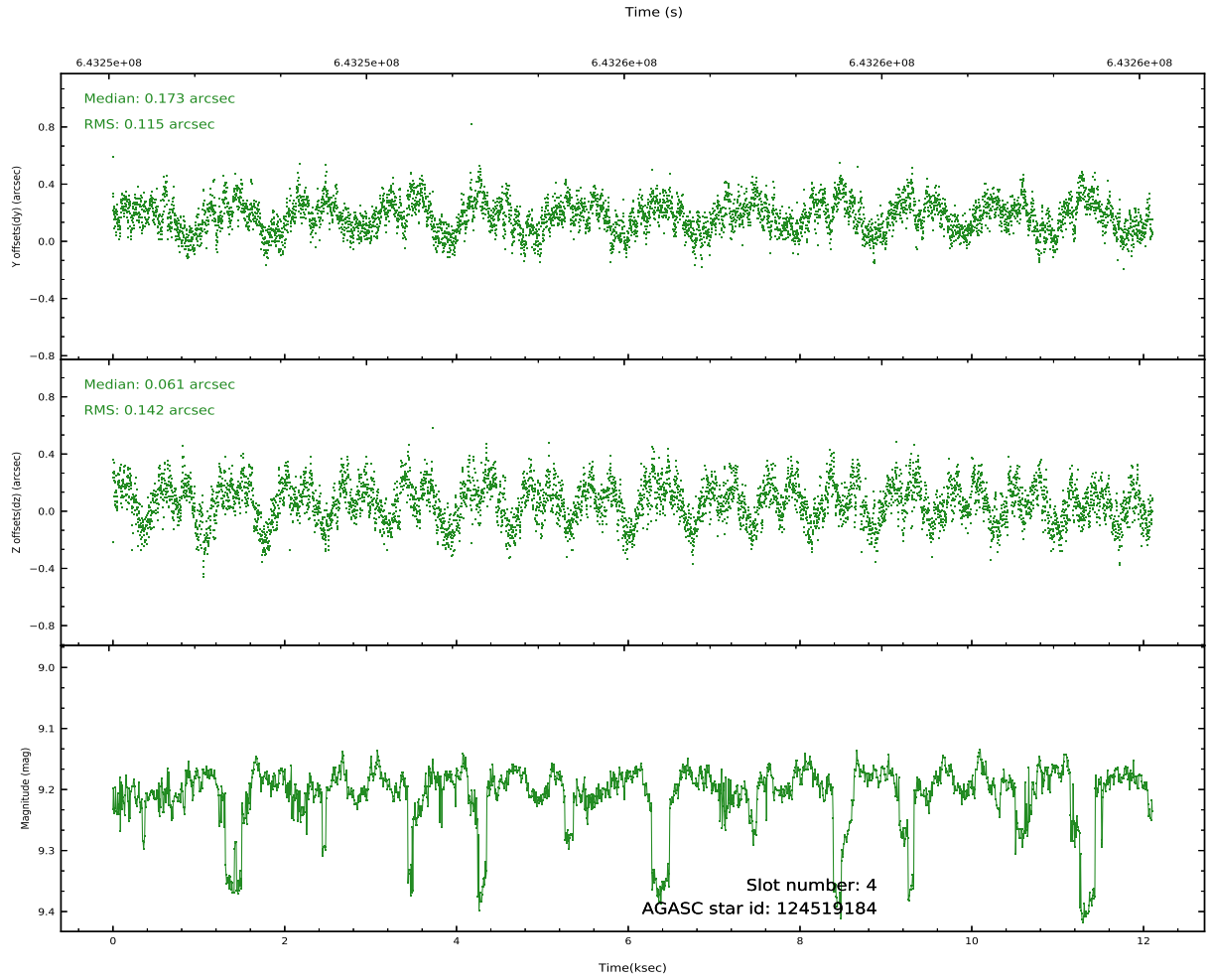
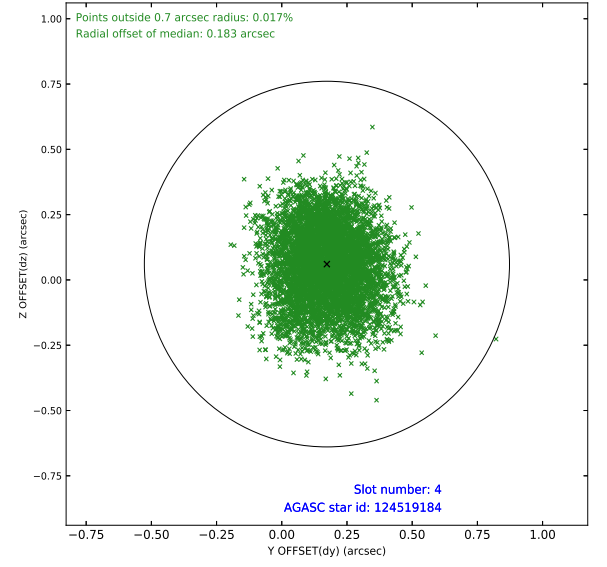
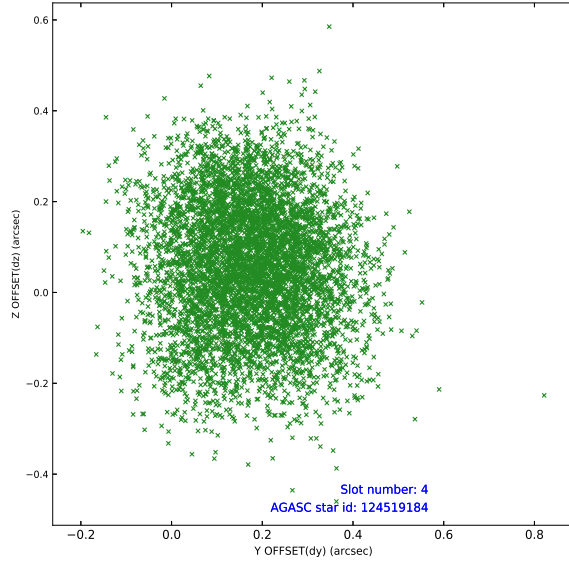
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.18	2953	1.000	0.286	-0.233	0.013	0.018	0.000000	0.000000	922.57	-949
1	FID		ACIS-I-5	7.16	2953	1.000	-0.353	0.233	0.014	0.021	0.000000	0.000000	-1825.82	948
2	FID		ACIS-I-6	7.18	2953	1.000	-0.025	0.070	0.020	0.026	0.000000	0.000000	387.53	1592
3	GUIDE	used	124518584	8.91	5896	1.000	0.257	0.010	0.190	0.291	244.919236	11.236040	-291.04	-1245
4	GUIDE	used	124519184	9.20	5900	1.000	0.173	0.061	0.198	0.311	245.080982	11.110662	-984.31	-1023
5	GUIDE	used	124522760	9.47	5891	1.000	-0.161	-0.126	0.193	0.313	244.226307	11.030053	1741.89	305
6	GUIDE	used	124528752	9.71	5904	1.000	-0.363	-0.181	0.322	0.523	244.355380	10.719347	924.65	1194
7	GUIDE	used	126755712	9.31	5893	1.000	0.021	0.223	0.179	0.287	245.545240	11.329765	-2241.39	-2337

2.4 Star Slots

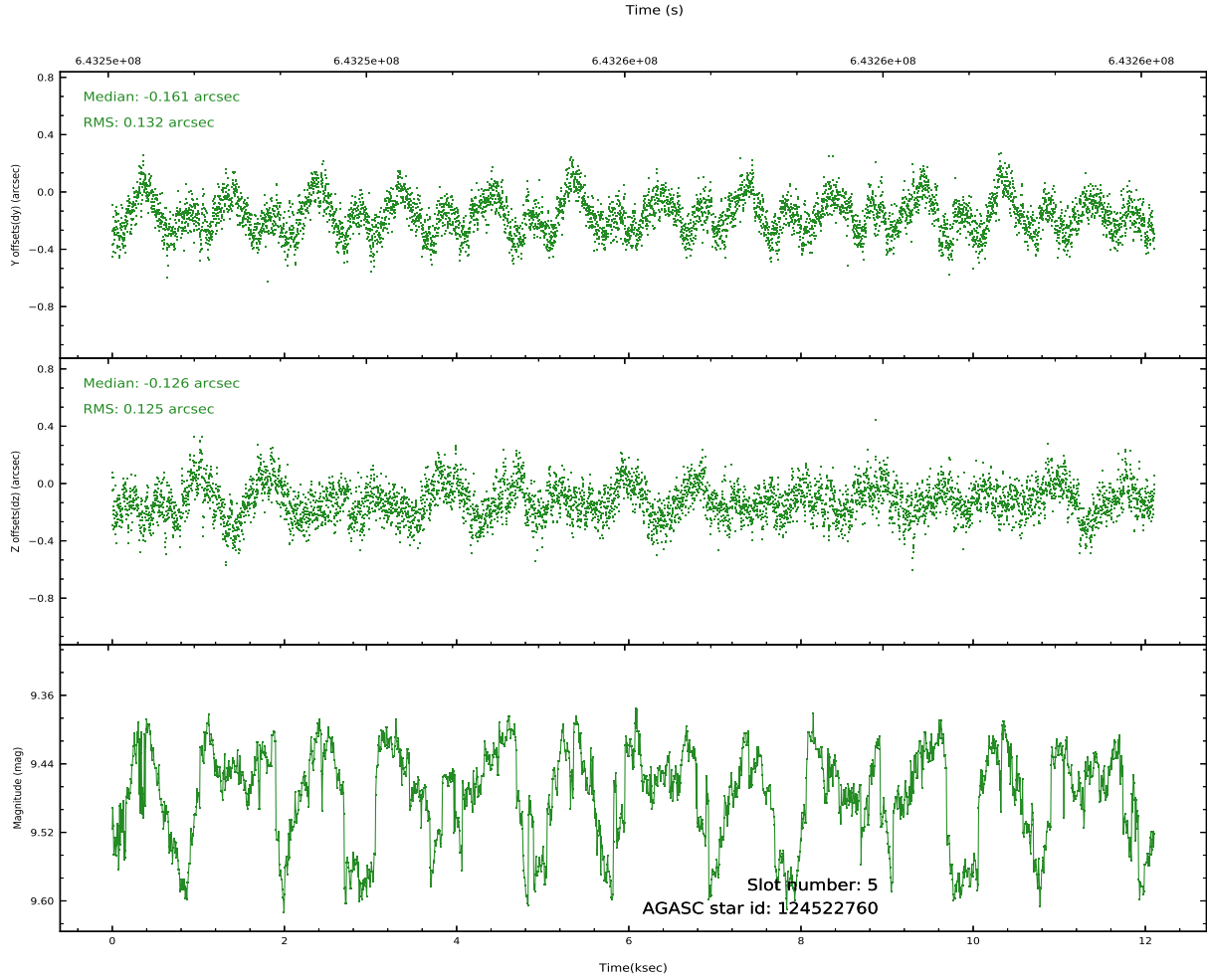
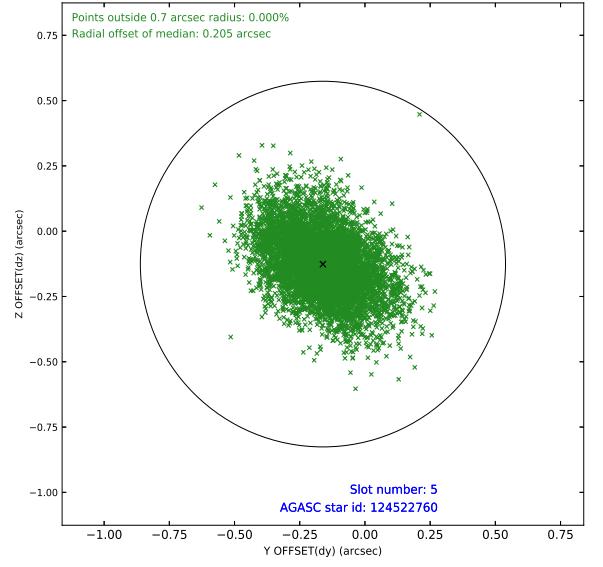
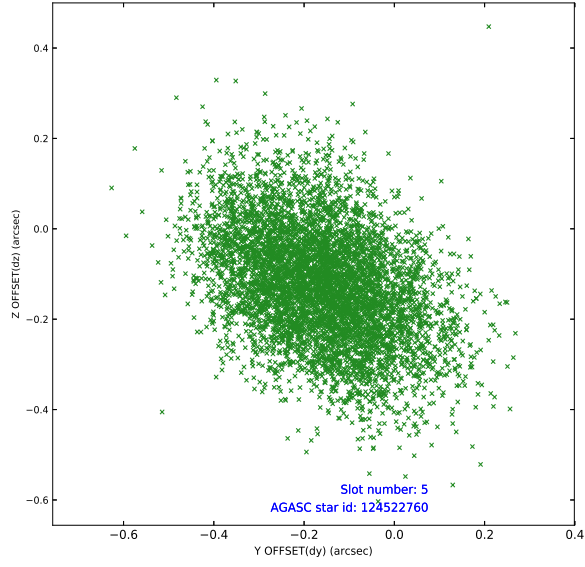
2.4.1 Slot 3



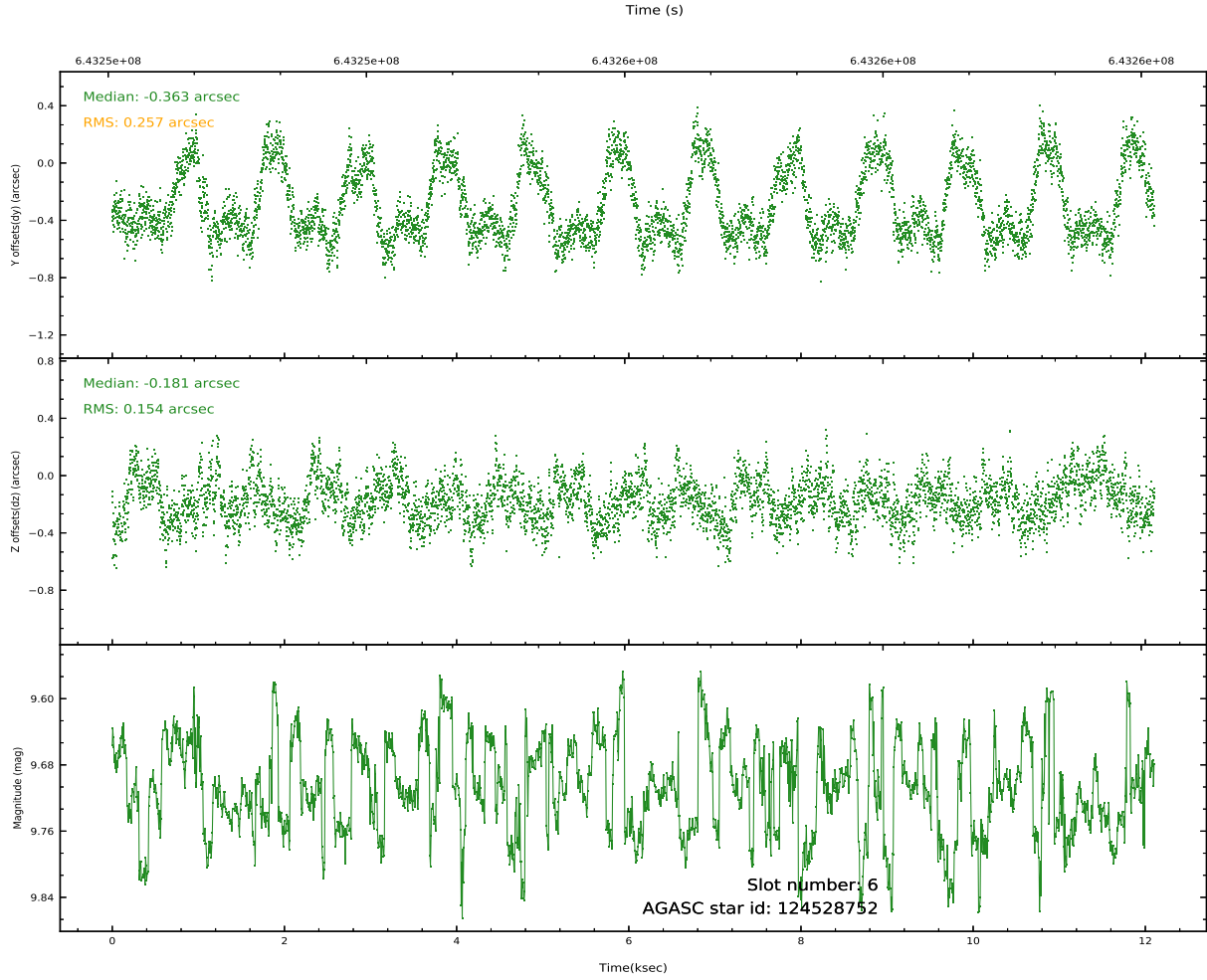
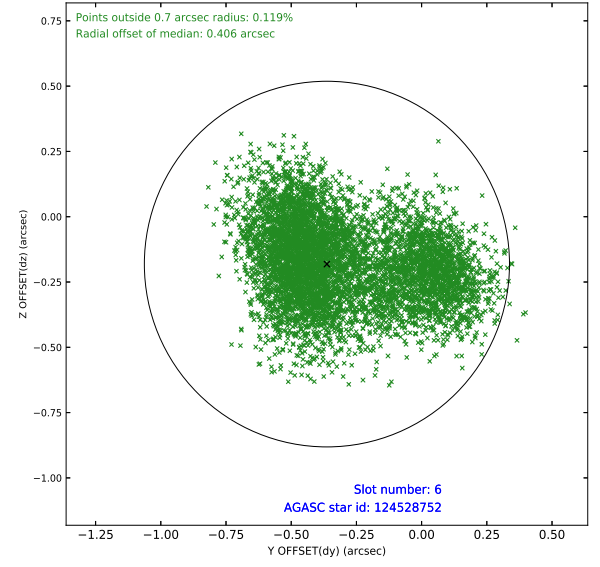
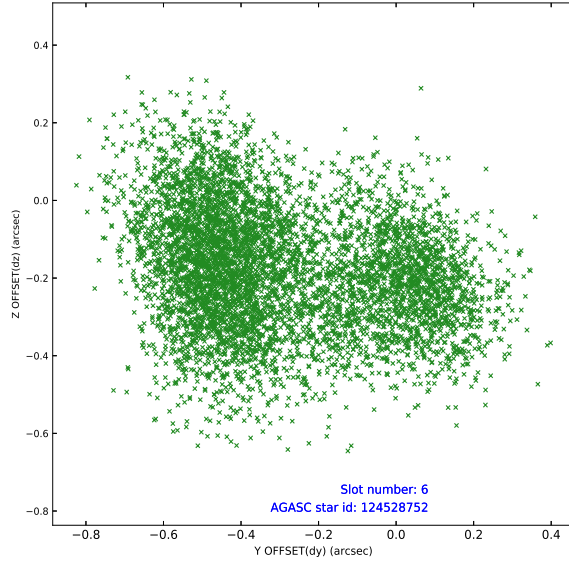
2.4.2 Slot 4



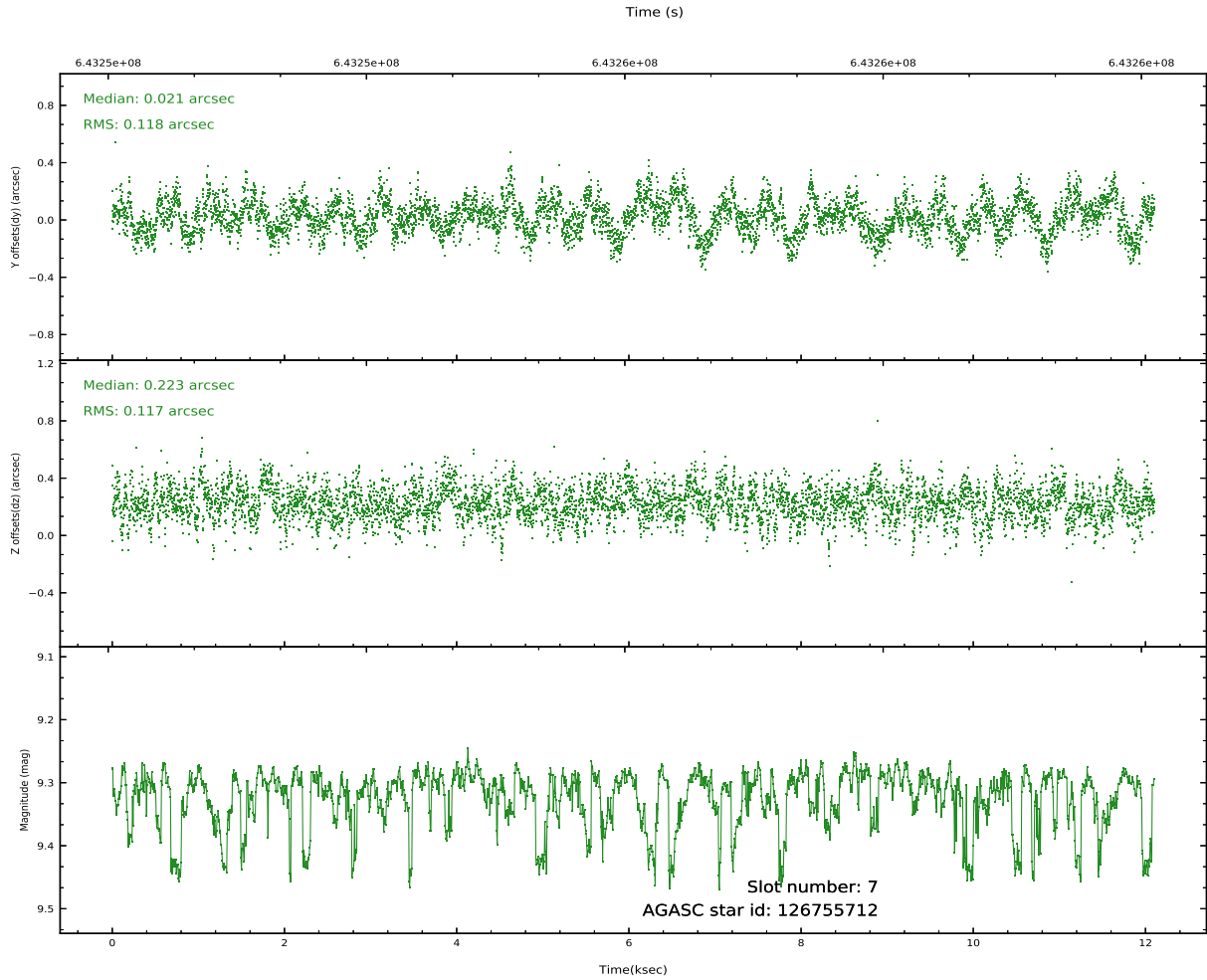
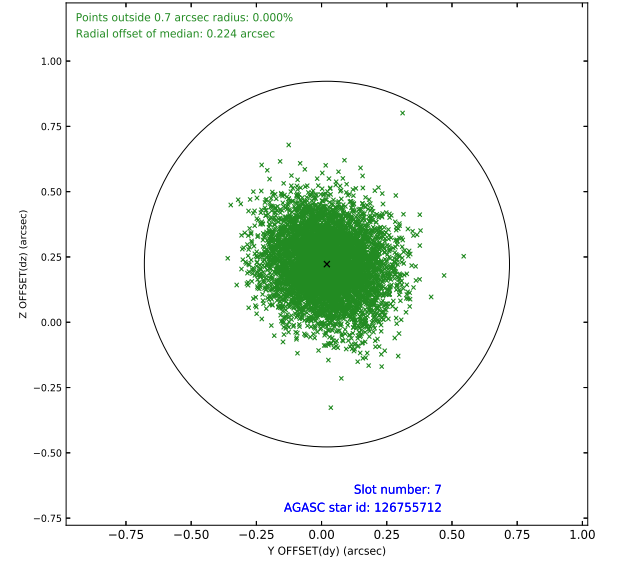
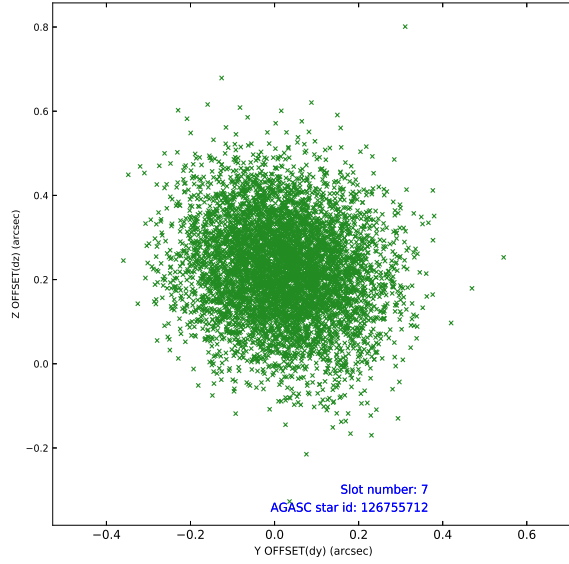
2.4.3 Slot 5



2.4.4 Slot 6

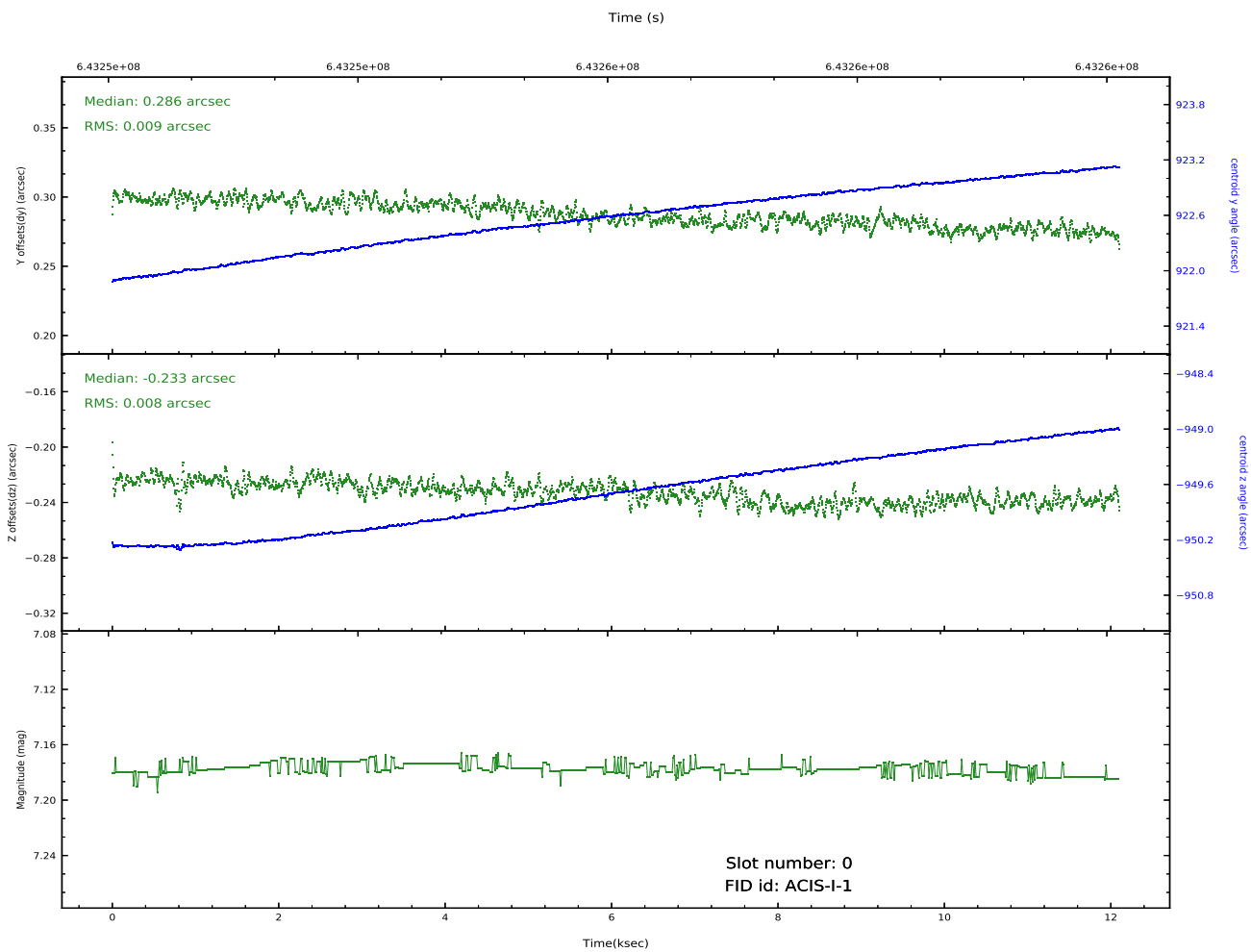
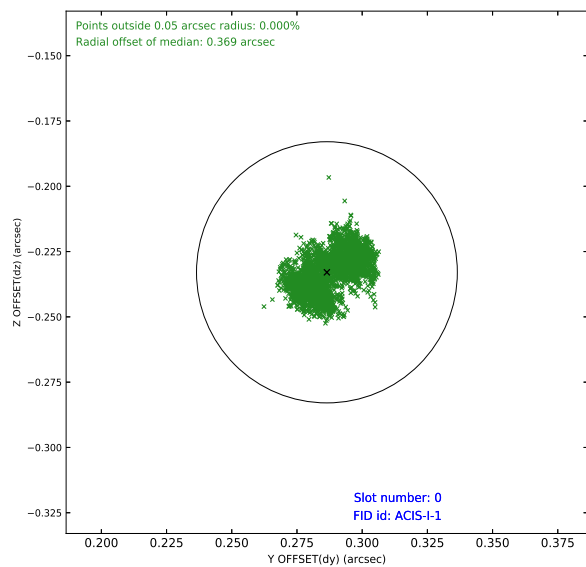
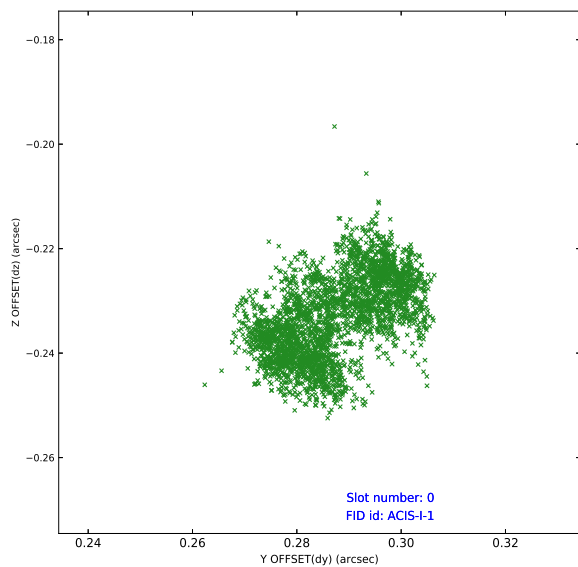


2.4.5 Slot 7

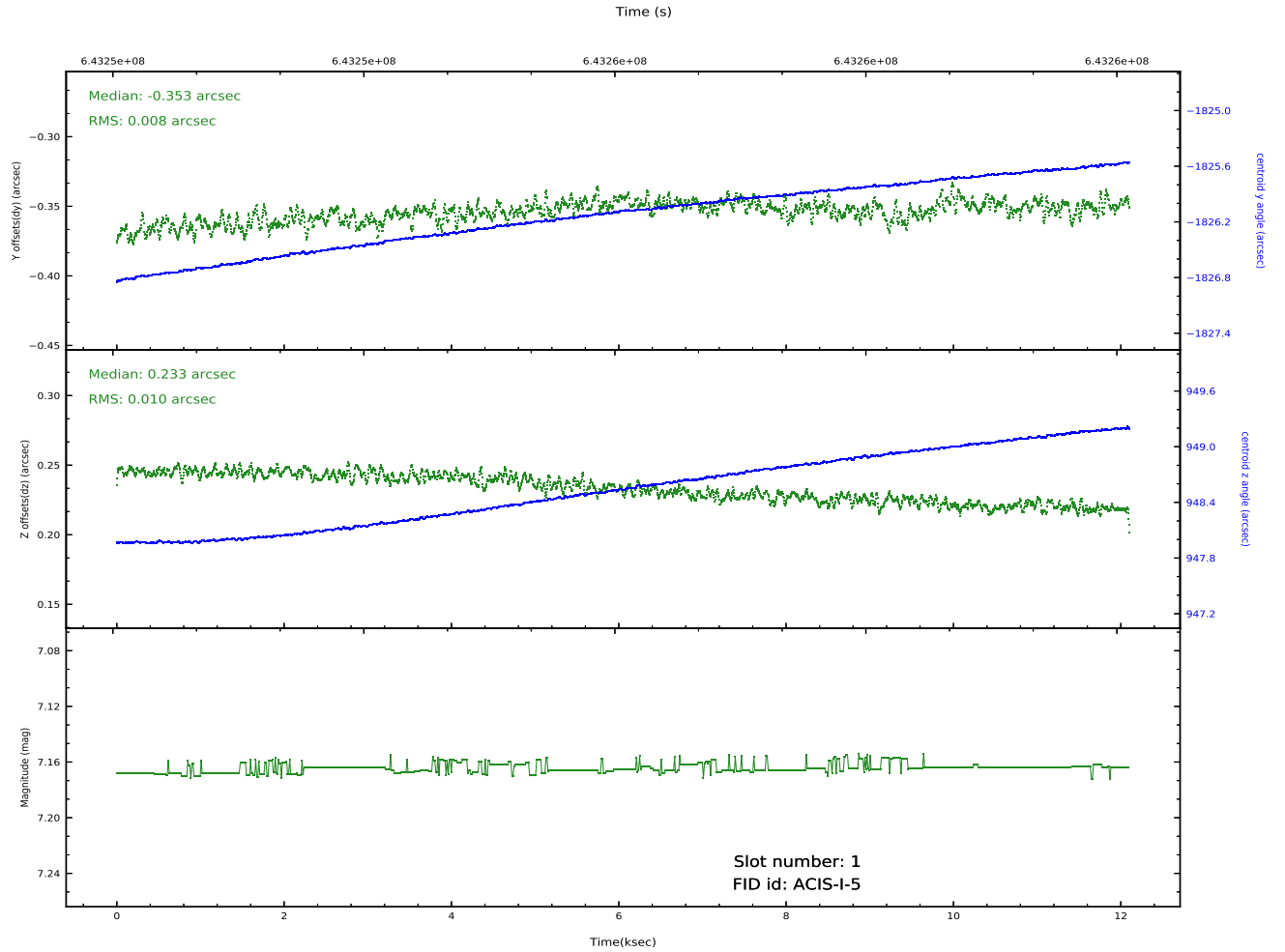
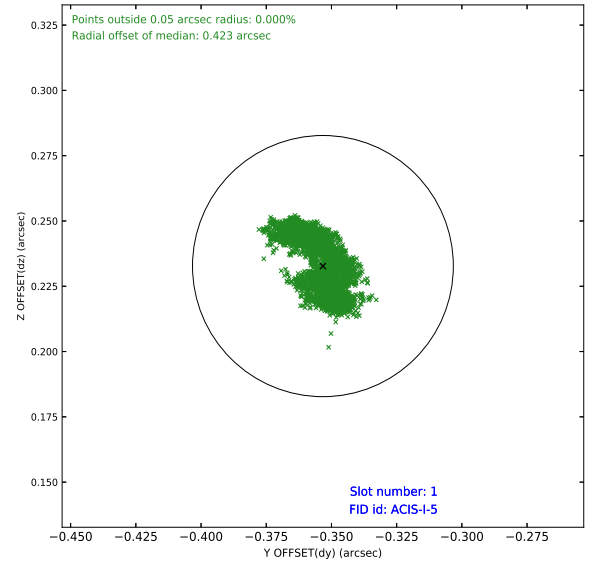
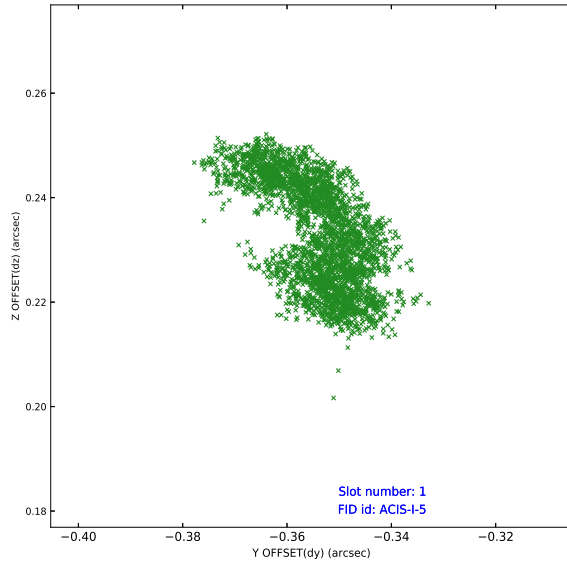


2.5 FID Slots

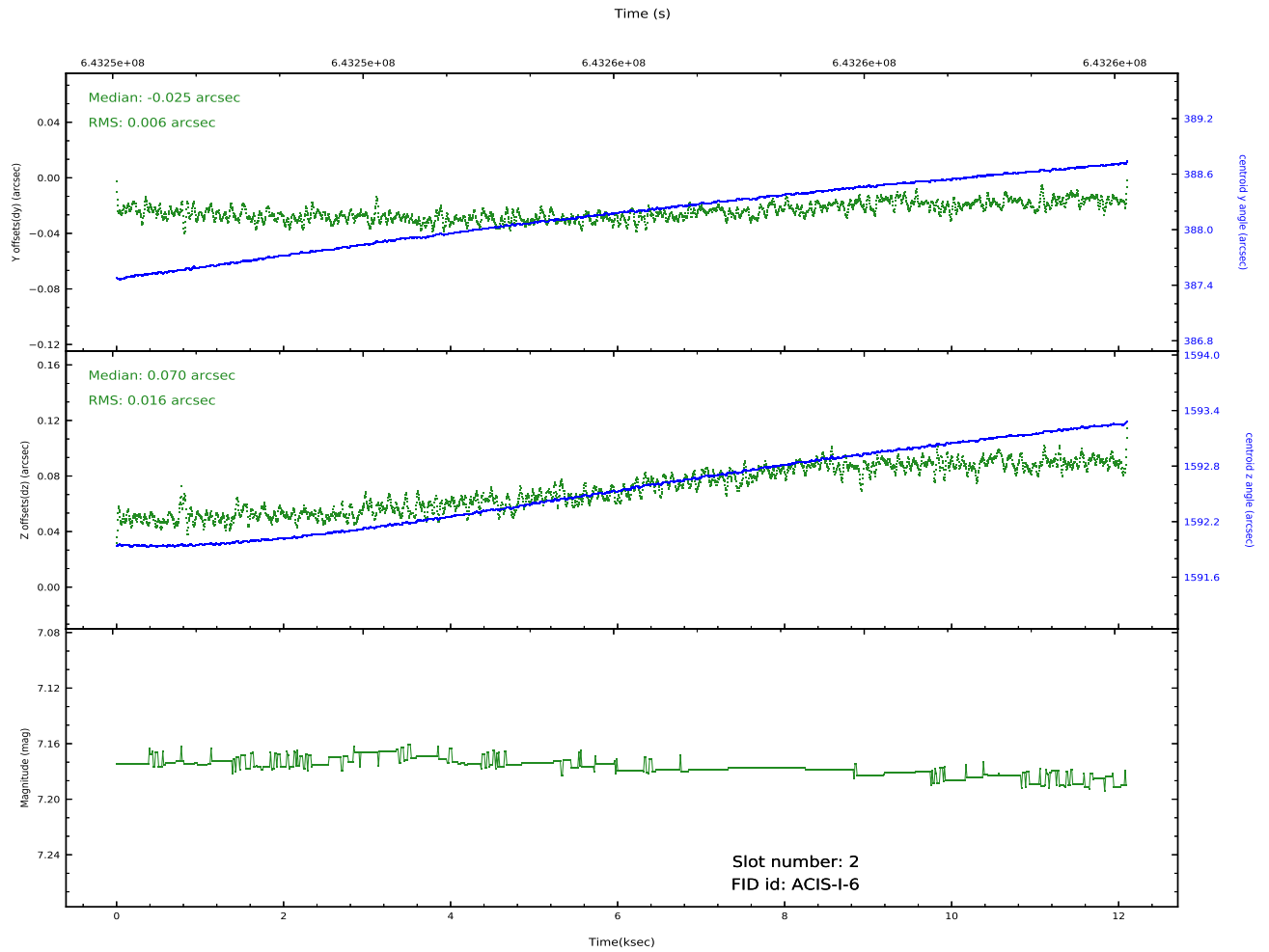
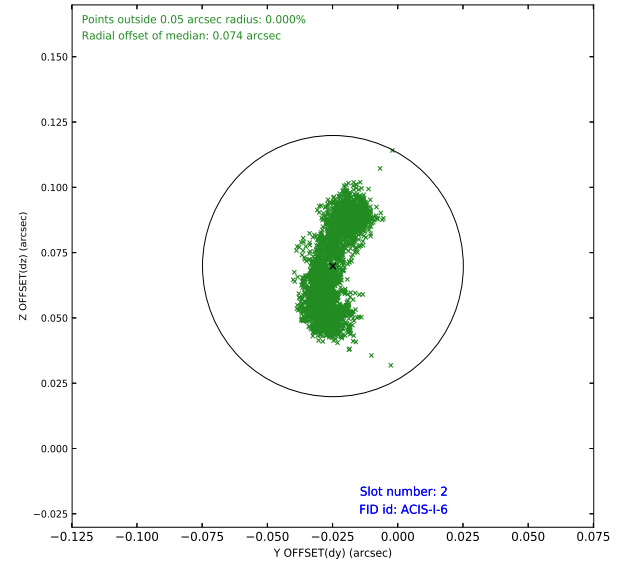
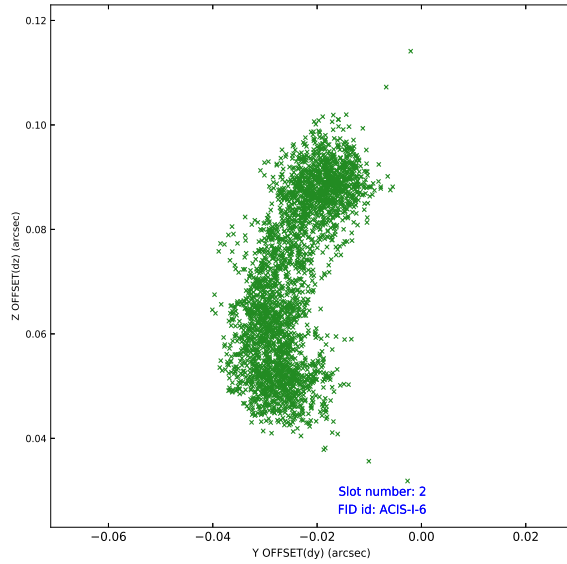
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	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	12.070791272044

A.2 Comments