

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 18915 - L2 Version 2
Chandra X-Ray Center

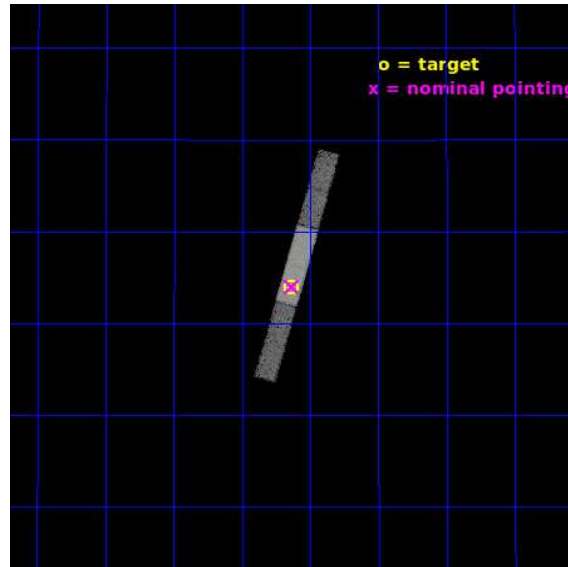
L2 Processing Date : Oct 24 2020

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

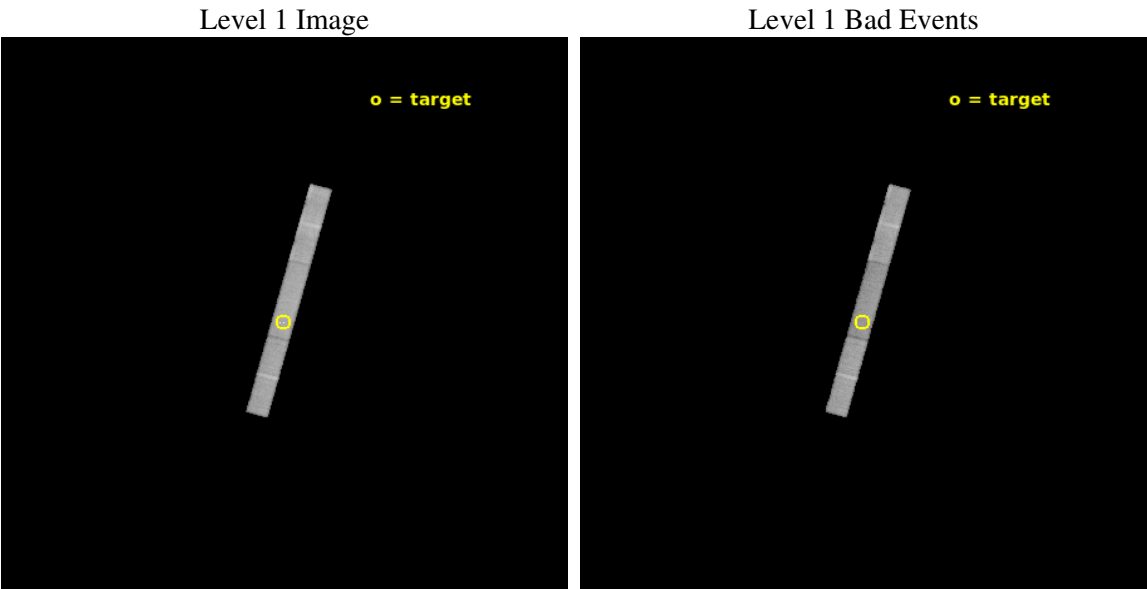
seq_num	201108	Sequence number
obs_id	18915	Observation id
title	The HL Tau Jet and X-ray Irradiated Protoplanetary Disk	Proposal t
observer	Stephen Skinner	Principal investigator
object	HL Tau	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	67.91	Observer's specified target RA [deg]
dec_targ	18.232667	Observer's specified target Dec [deg]
ra_nom	67.908545235656	Nominal RA [deg]
dec_nom	18.233383075037	Nominal Dec [deg]
roll_nom	285.14767987088	Nominal Roll [deg]
revision	2	Processing version of data
ontime	28082.699255943	Sum of GTIs [s]
livetime	26857.975569953	Livetime [s]
ontime6	28080.817145586	Sum of GTIs [s]
ontime7	28082.699255943	Sum of GTIs [s]
ontime8	28082.699255943	Sum of GTIs [s]
l2events	45722	Number of level 2 events



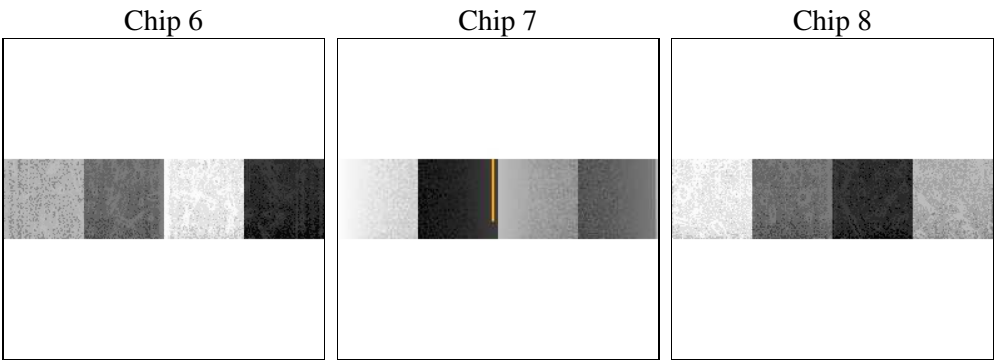
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	28000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	28082.699255943	Sum of GTIs [s]
caldsver	4.9.3	 	ontime6	28080.817145586	Sum of GTIs [s]
date	2020-10-24T05:30:13	Date and time of file creation	ontime7	28082.699255943	Sum of GTIs [s]
revision	2	Processing version of data	ontime8	28082.699255943	Sum of GTIs [s]
			l1events	221940	Number of level 1 events

2.1.4 Events

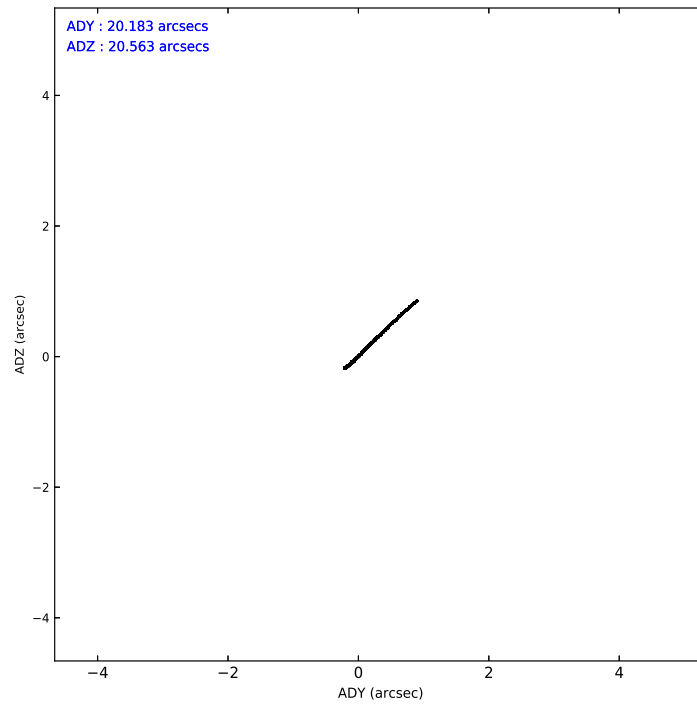
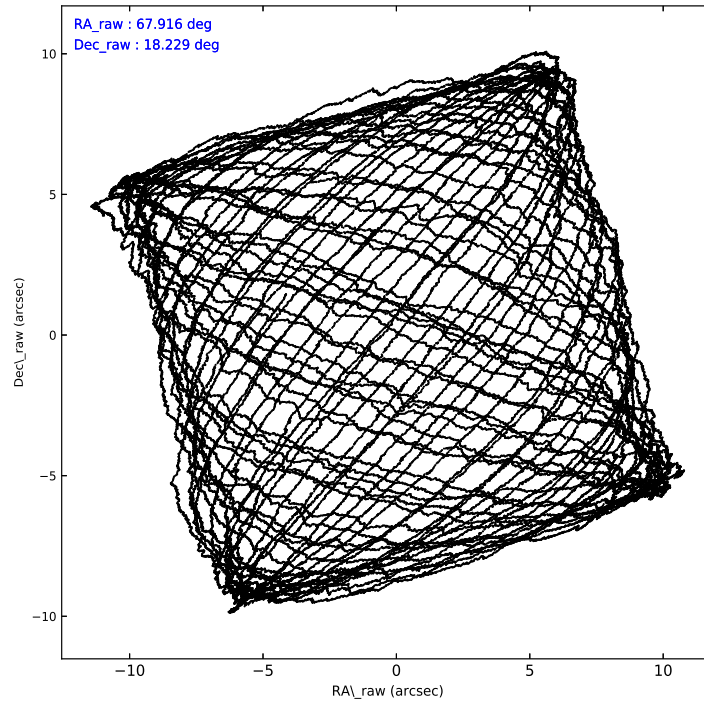
	ccd 6	ccd 7	ccd 8
level 1 events	65654	73257	83029
rejected events	58671	38168	64204
rejected %	89%	52%	77%

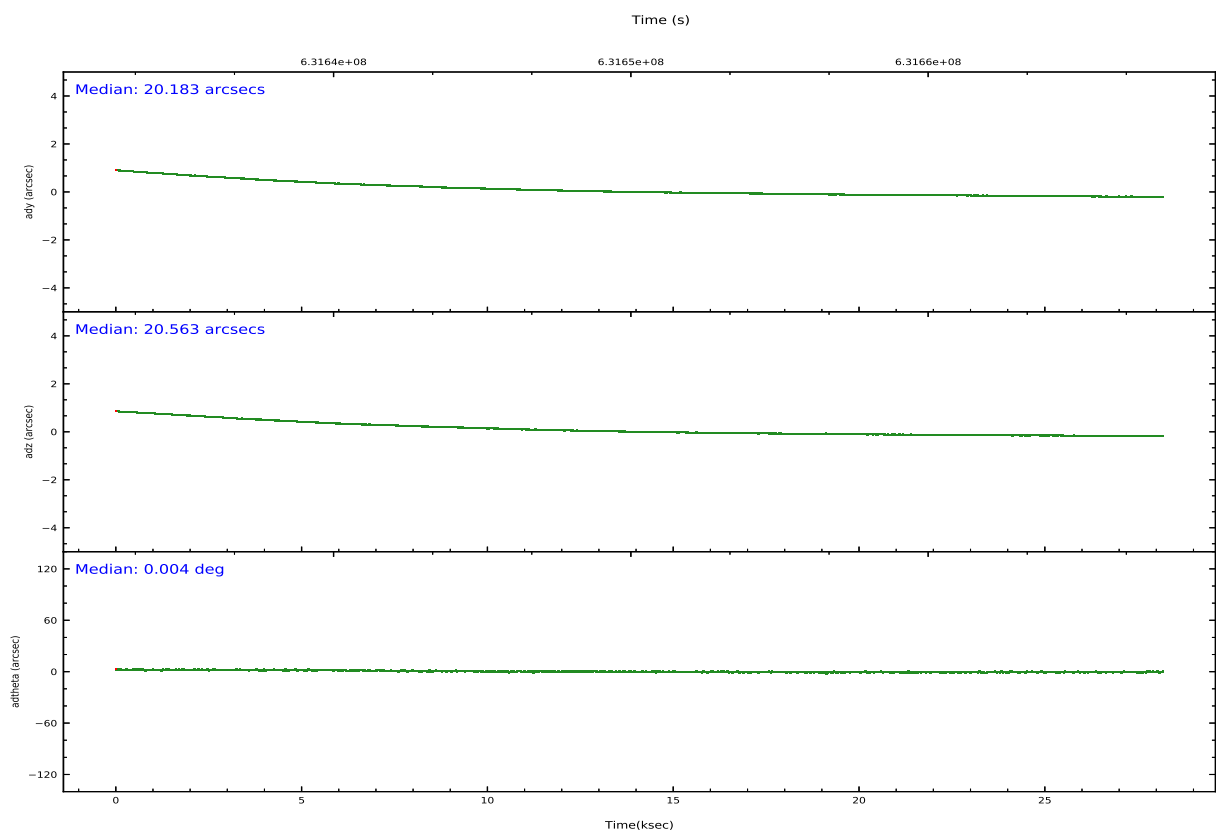
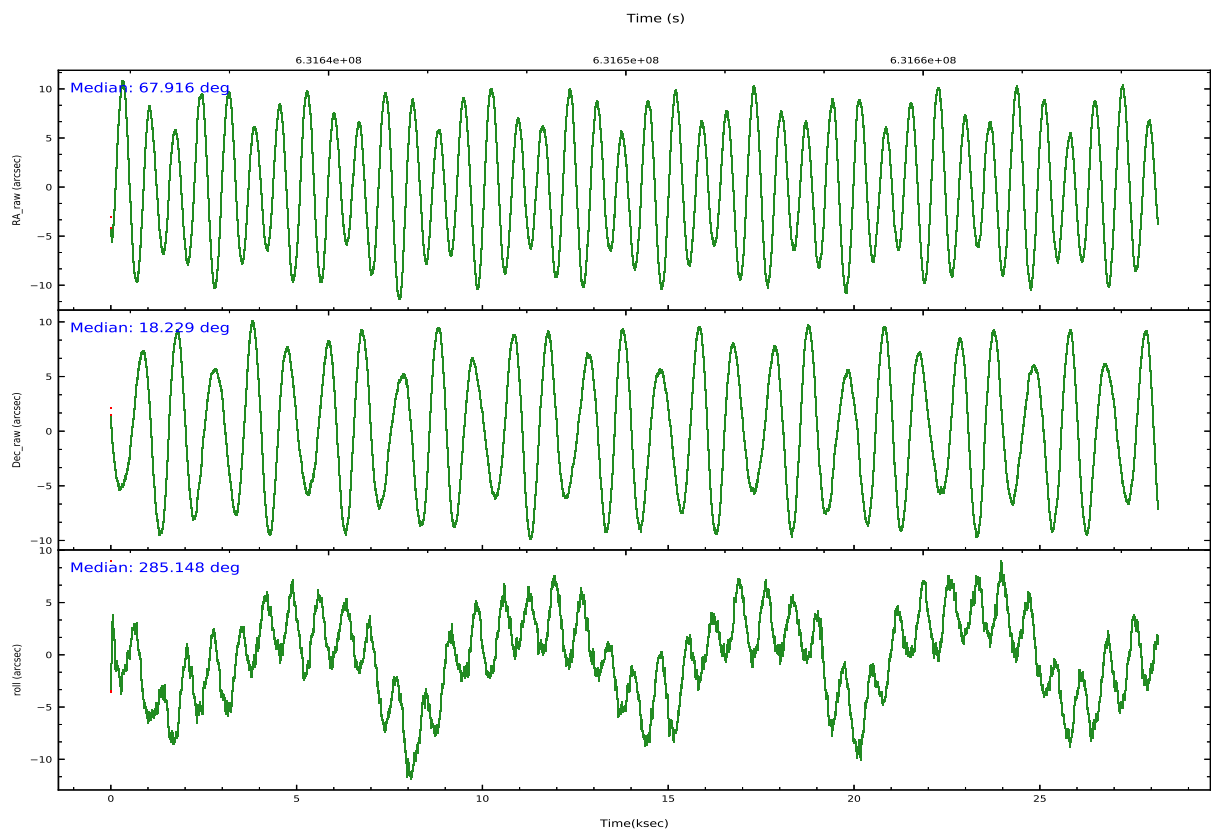
	ccd 6	ccd 7	ccd 8
grade 0 events	1984	3793	4782
	3%	5%	5%
grade 1 events	15	118	41
	0%	0%	0%
grade 2 events	1410	7252	4115
	2%	9%	4%
grade 3 events	1068	3730	2171
	1%	5%	2%
grade 4 events	1037	3605	2053
	1%	4%	2%
grade 5 events	2532	7254	3745
	3%	9%	4%
grade 6 events	1486	16711	5704
	2%	22%	6%
grade 7 events	56122	30794	60418
	85%	42%	72%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-678	ACIS-678	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	67.895433	67.90854523565601	CCD I2 on	N	N
[deg] Pointing Dec	18.248415	18.233383075037	CCD I3 on	N	N
[deg] Pointing Roll	285.004566	285.14767987088	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	O1	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	Y
[s] Observation start time (MET)	631634324.184000	631632711.01781	CCD S5 on	N	N
Observation start date	2018-01-06T13:57:35	2018-01-06T13:31:51	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	631662324.184000	631663700.86963	On-chip summing requested	N	N
Observation end date	2018-01-06T21:44:15	2018-01-06T22:08:20	Subarray requested	CUSTOM	1/4
Read mode	TIMED	TIMED	Subarray start row	385	385
			Subarray row count	256	256
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	0.9

2.3 Aspect



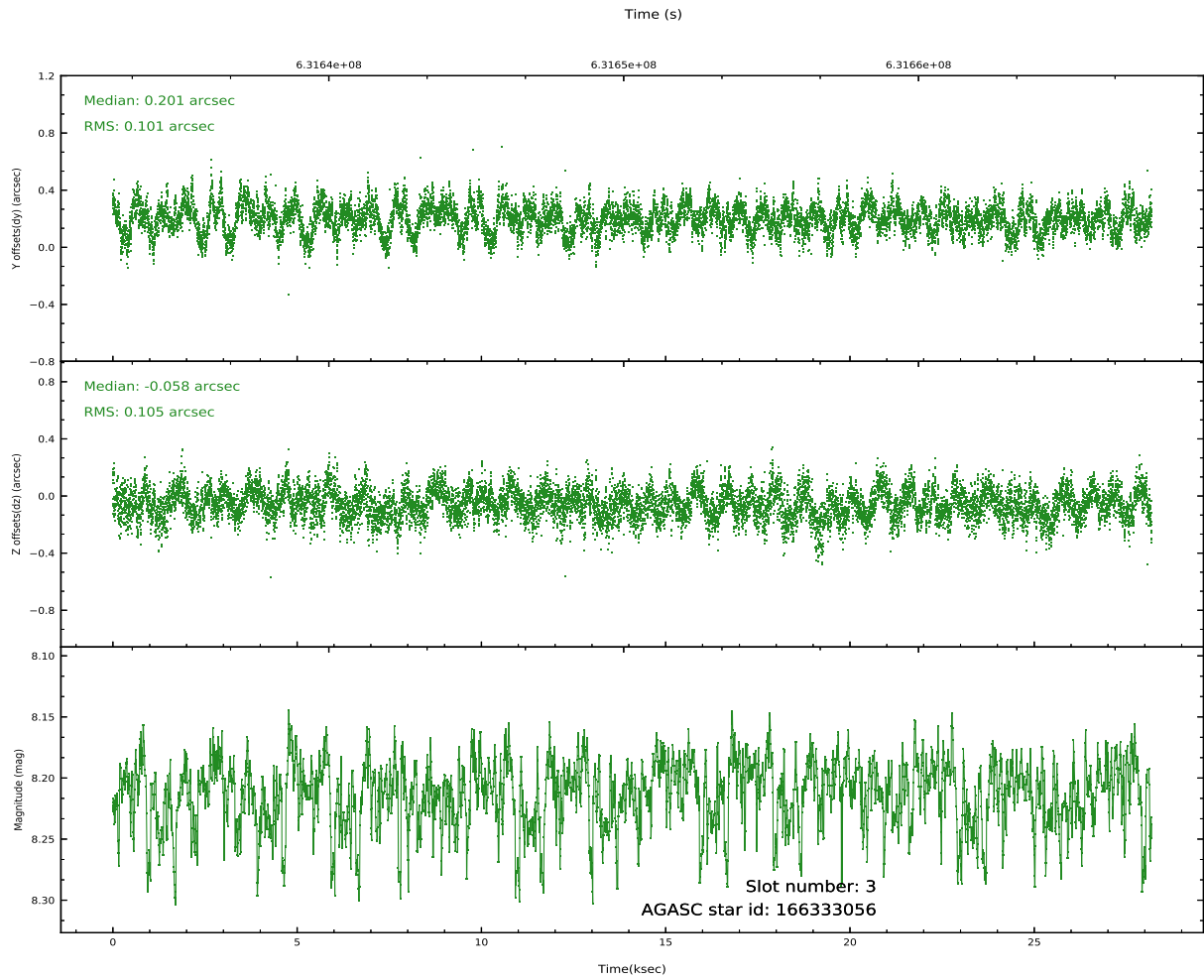
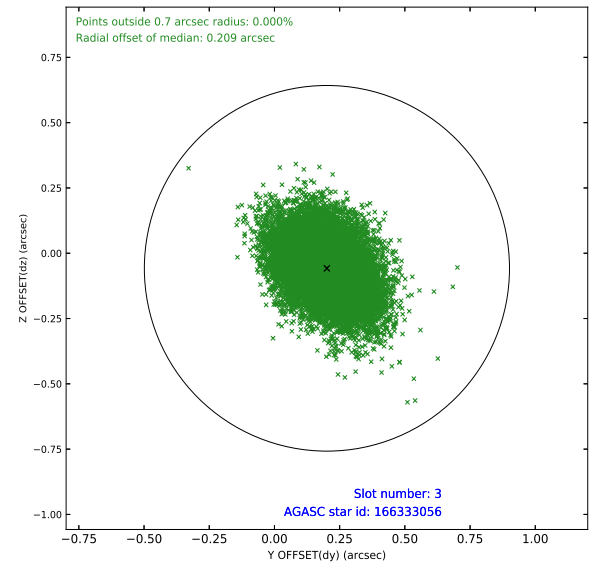
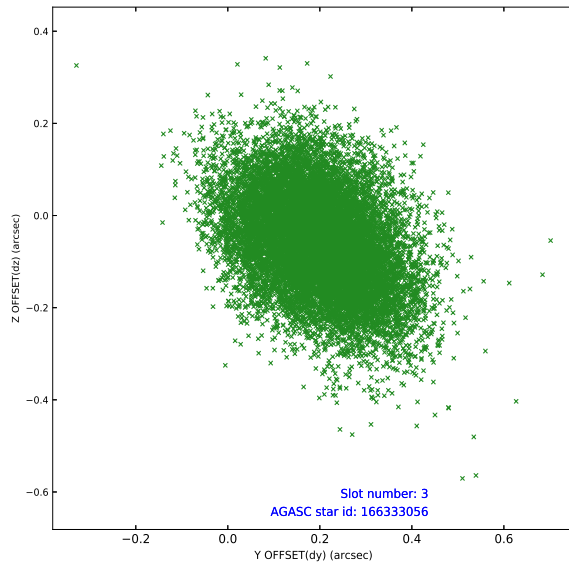


Slot Statistics

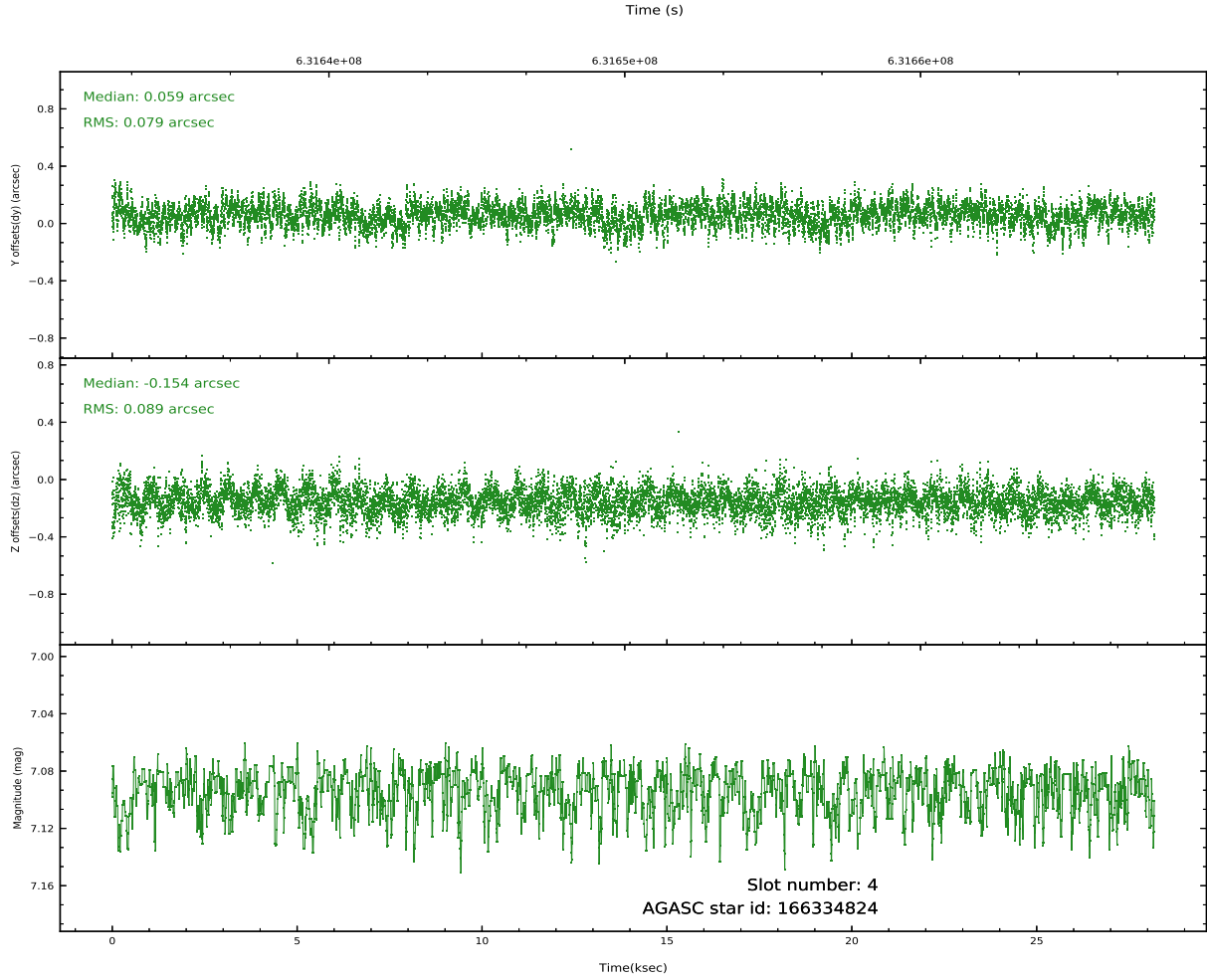
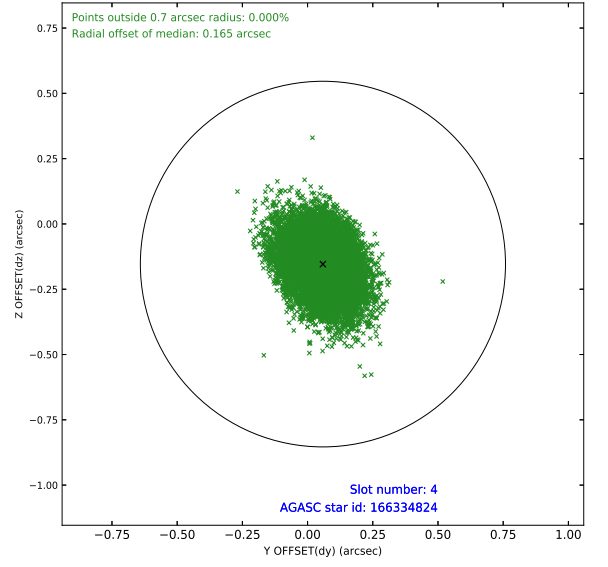
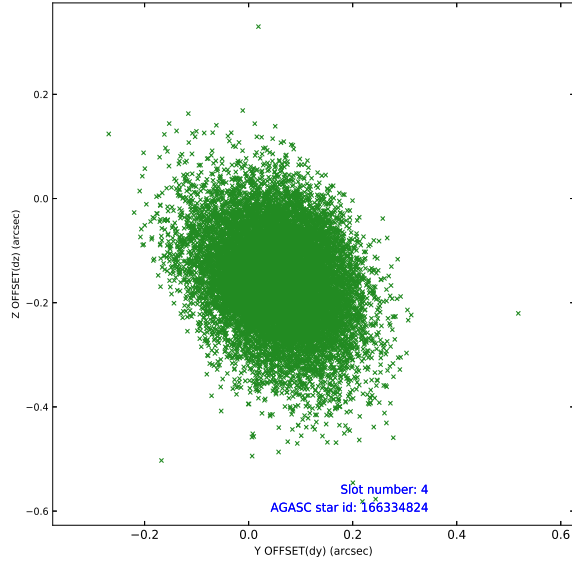
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.11	6874	1.000	0.098	-0.115	0.016	0.039	0.000000	0.000000	-773.55	-1742
1	FID		ACIS-S-4	7.24	6874	1.000	0.118	-0.016	0.022	0.059	0.000000	0.000000	2139.96	165
2	FID		ACIS-S-5	7.22	6875	1.000	-0.245	0.142	0.015	0.023	0.000000	0.000000	-1826.36	160
3	GUIDE	used	166333056	8.21	13742	1.000	0.201	-0.058	0.155	0.250	67.813257	17.557208	2330.78	-916
4	GUIDE	used	166334824	7.09	13748	1.000	0.059	-0.154	0.125	0.206	67.376458	17.863163	878.40	-2074
5	GUIDE	used	166995216	7.87	13745	1.000	-0.311	0.087	0.121	0.207	68.200288	18.935370	-2120.88	1643
6	GUIDE	used	166996584	9.08	13736	1.000	-0.010	0.115	0.220	0.346	68.020035	18.861675	-2022.84	981
7	GUIDE	used	166467888	8.07	13741	1.000	0.073	0.009	0.135	0.224	68.675864	17.748180	2427.74	2121

2.4 Star Slots

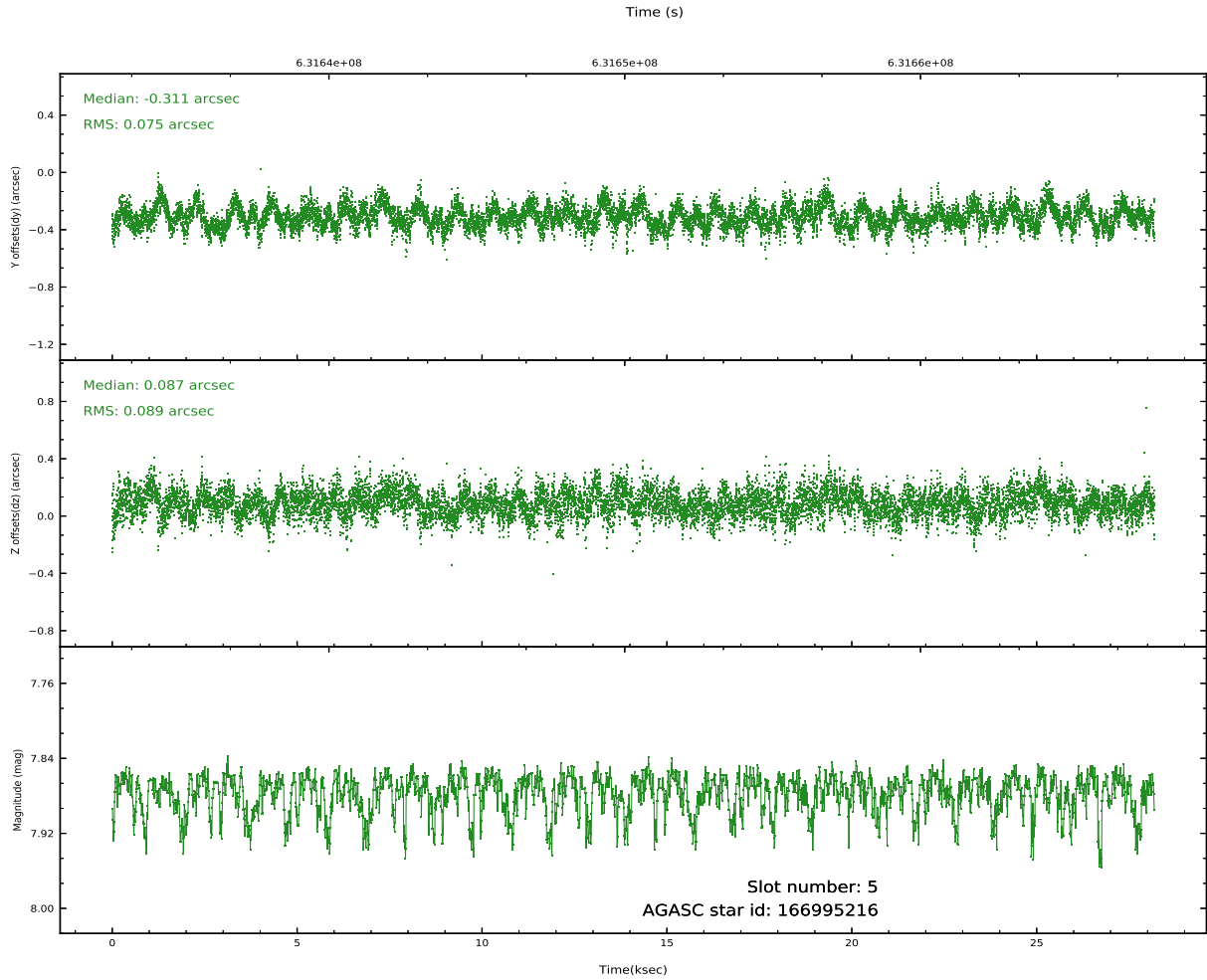
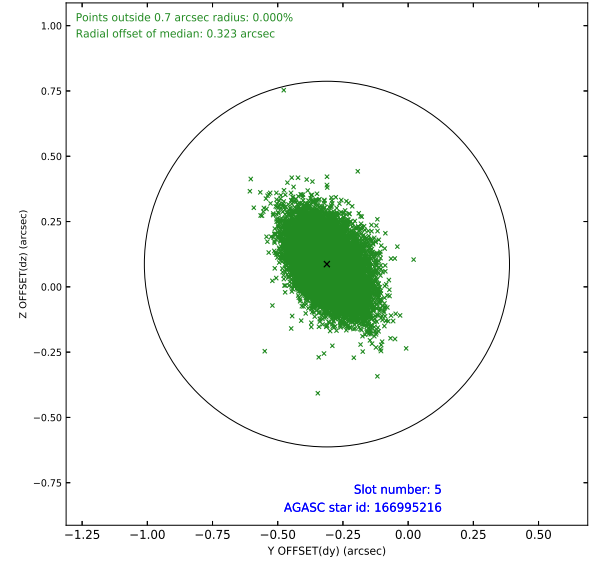
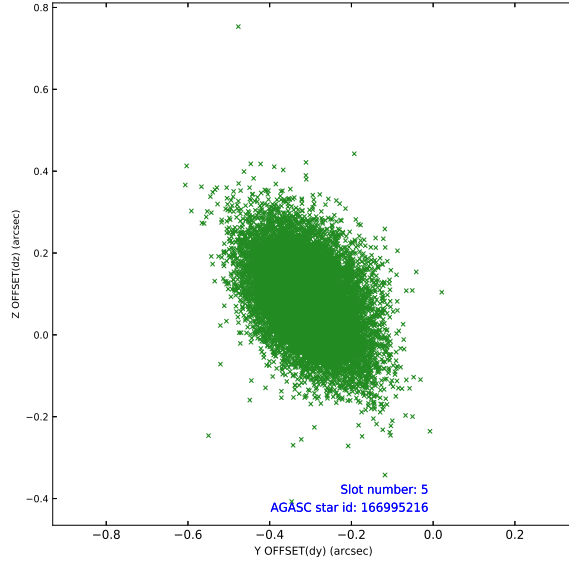
2.4.1 Slot 3



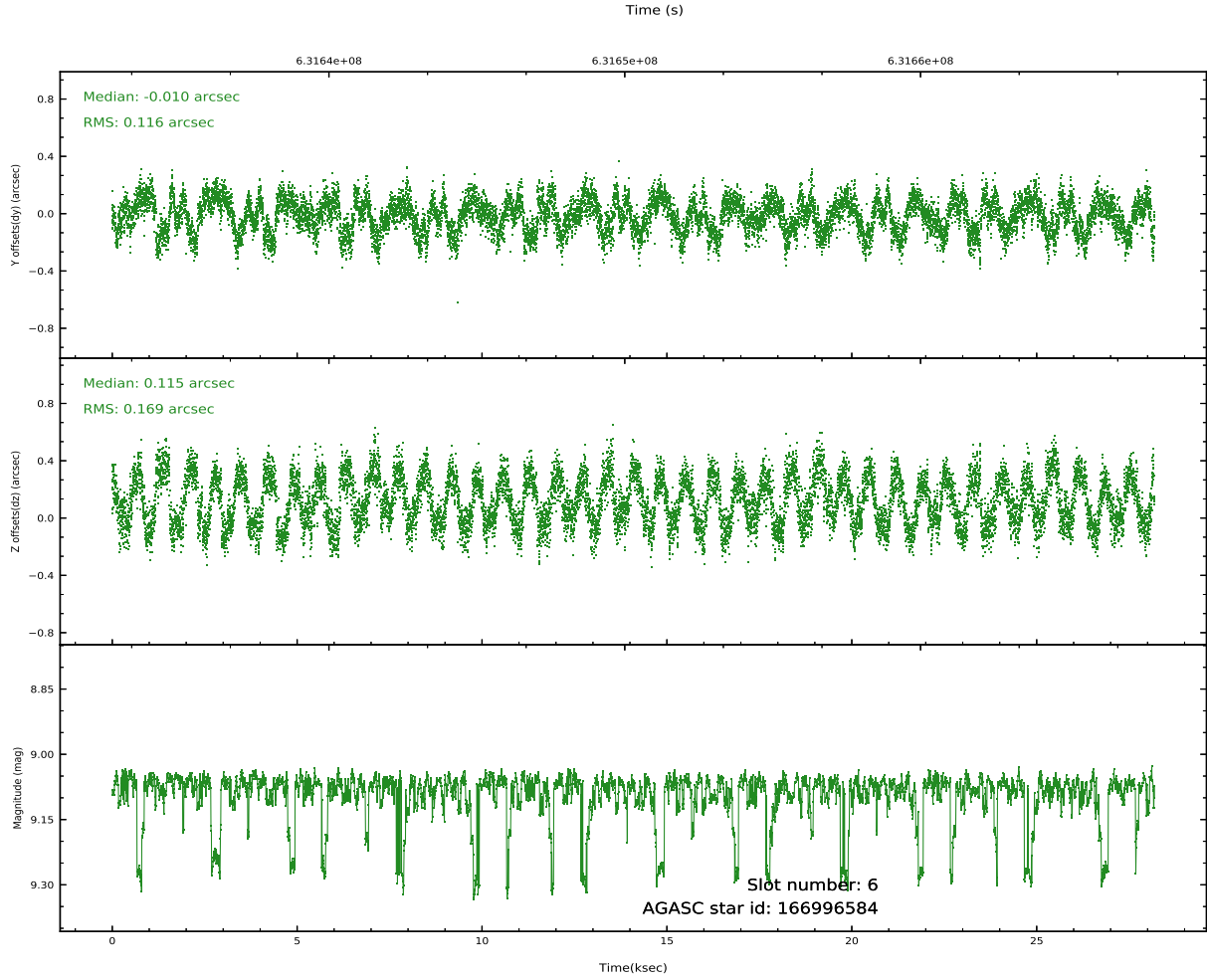
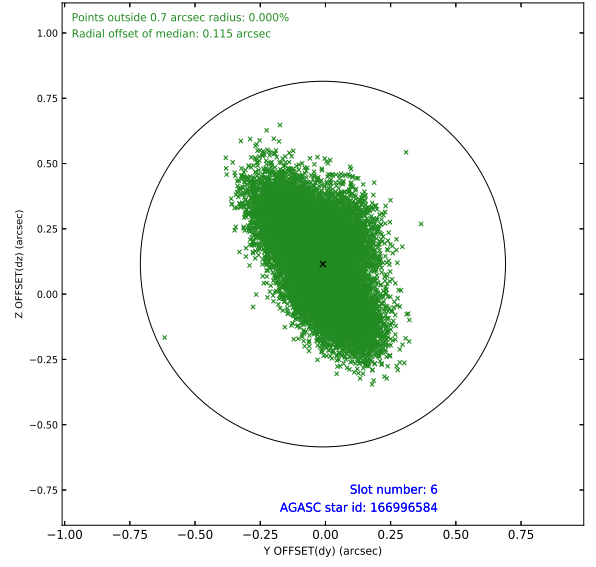
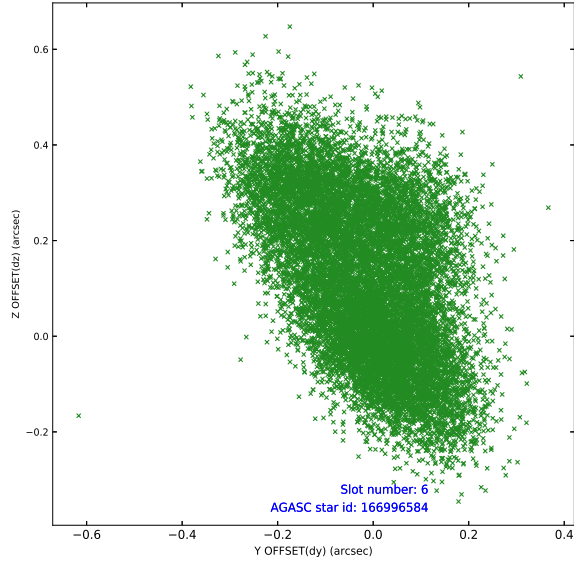
2.4.2 Slot 4



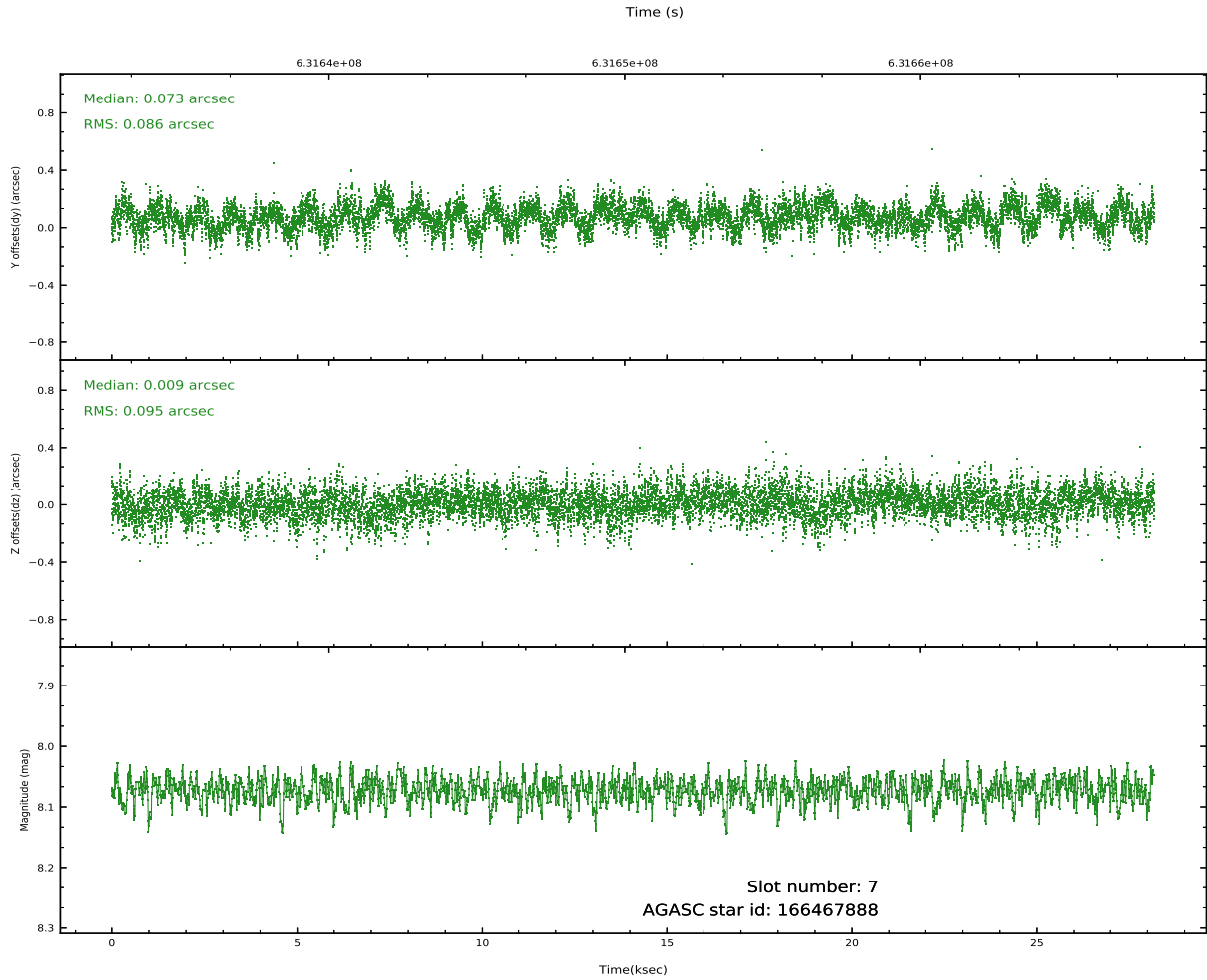
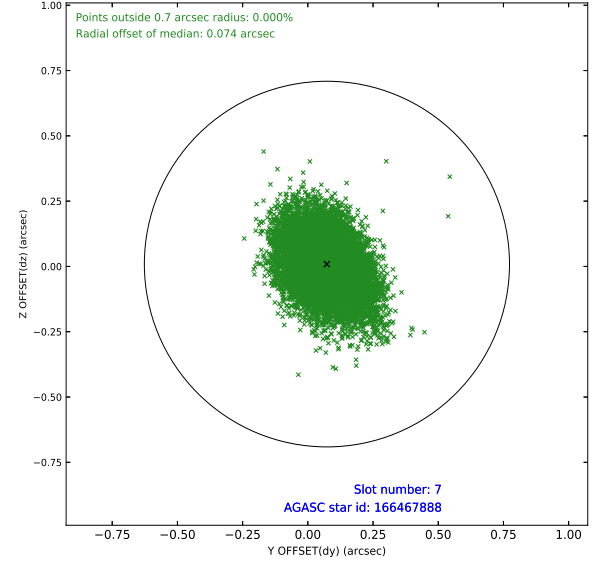
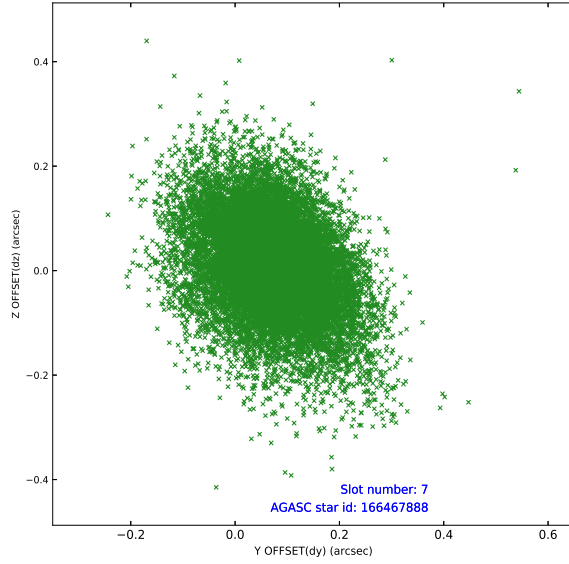
2.4.3 Slot 5



2.4.4 Slot 6

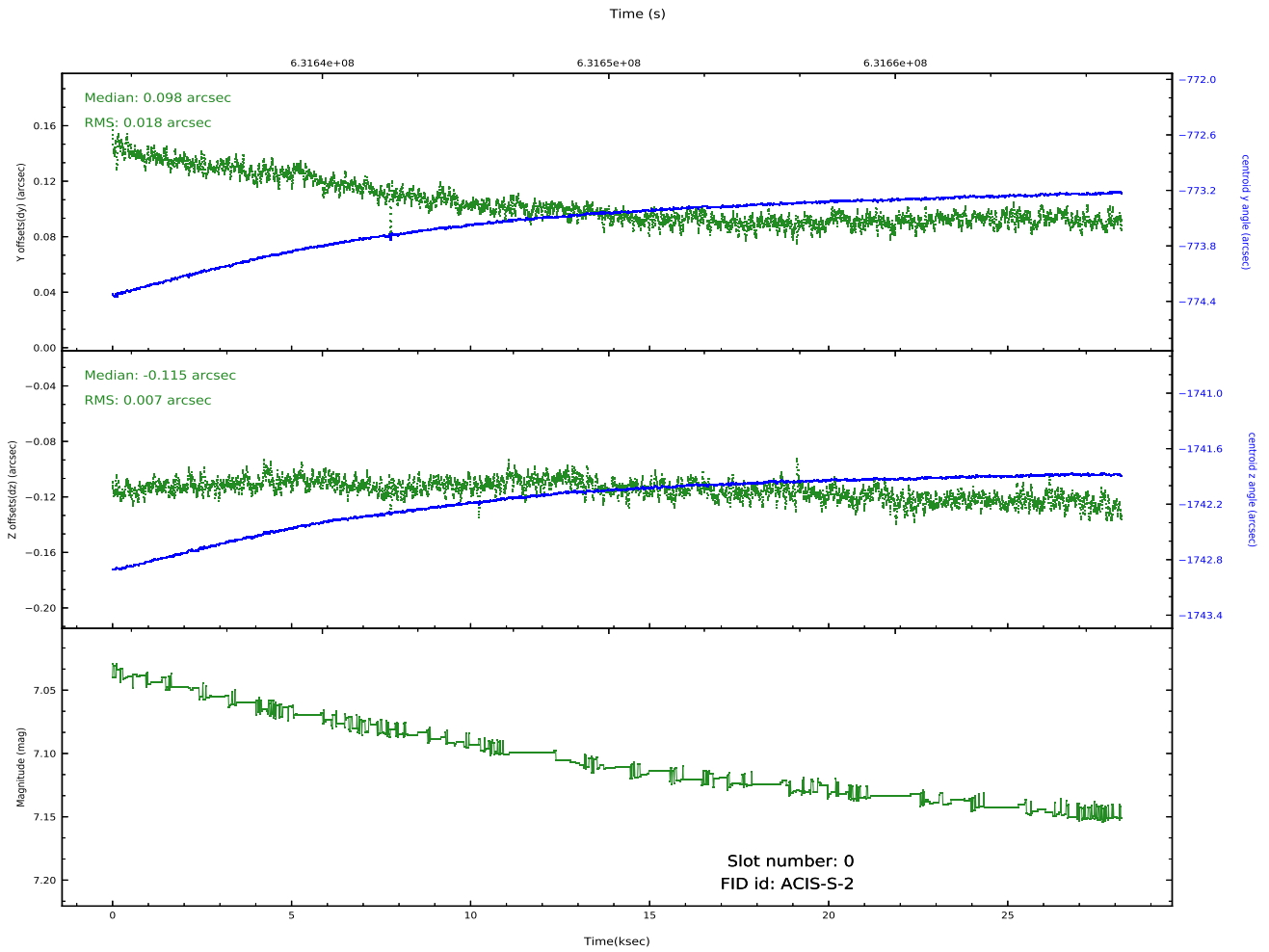
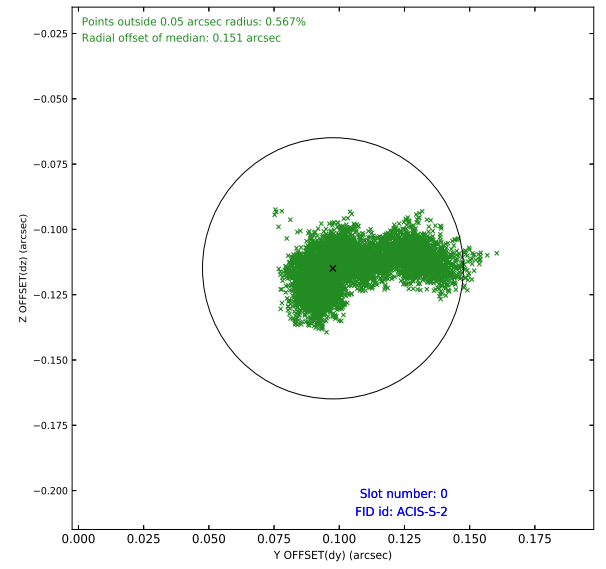
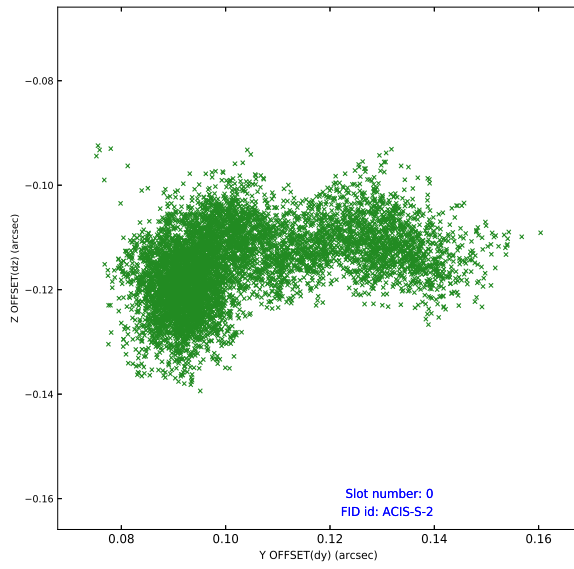


2.4.5 Slot 7

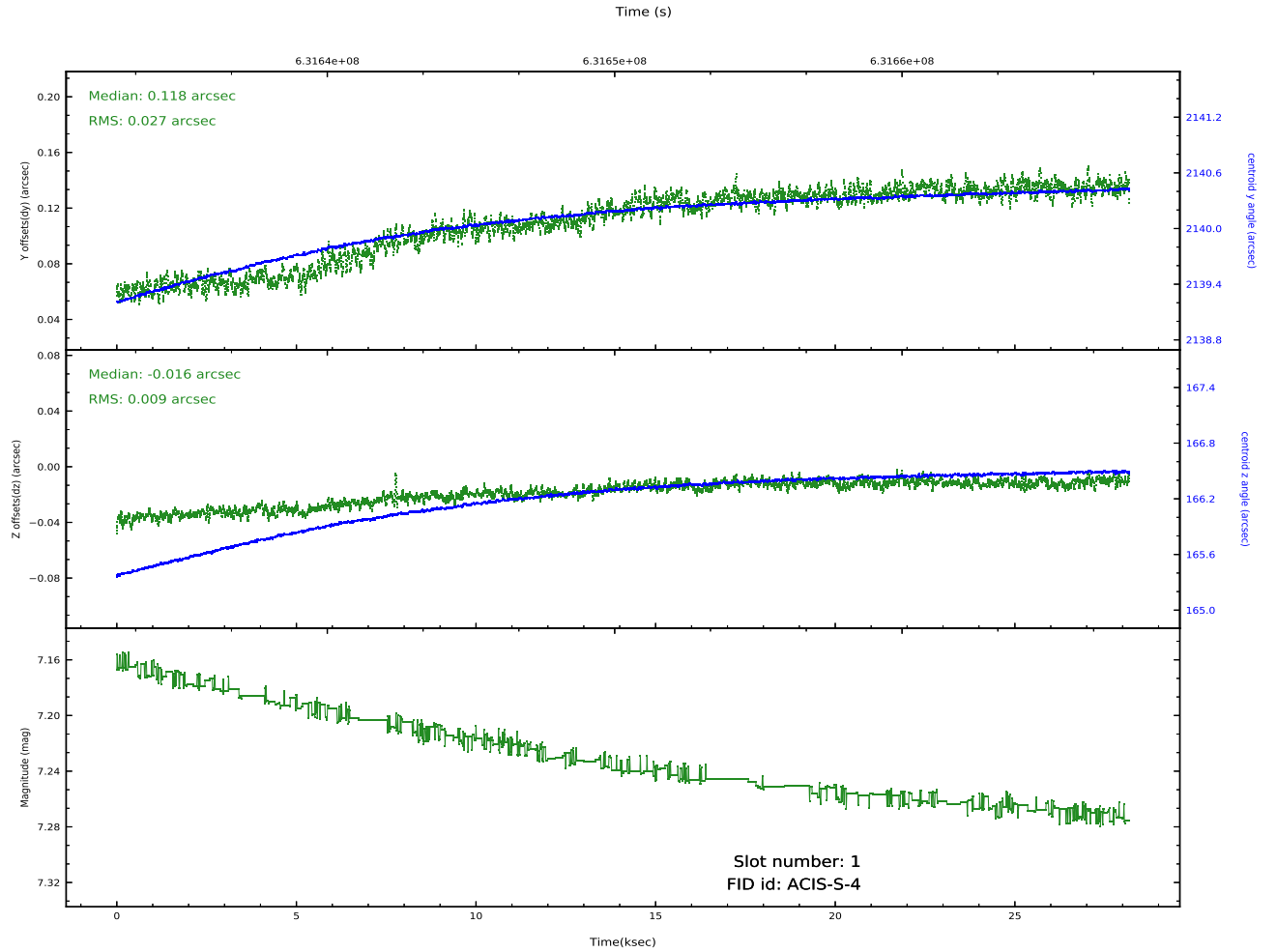
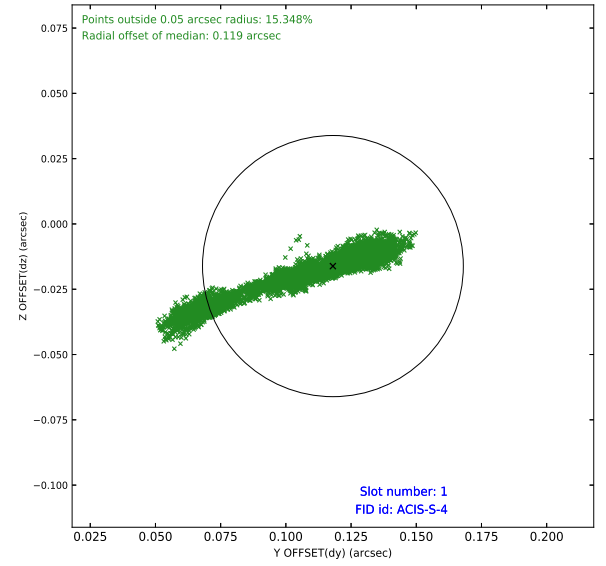
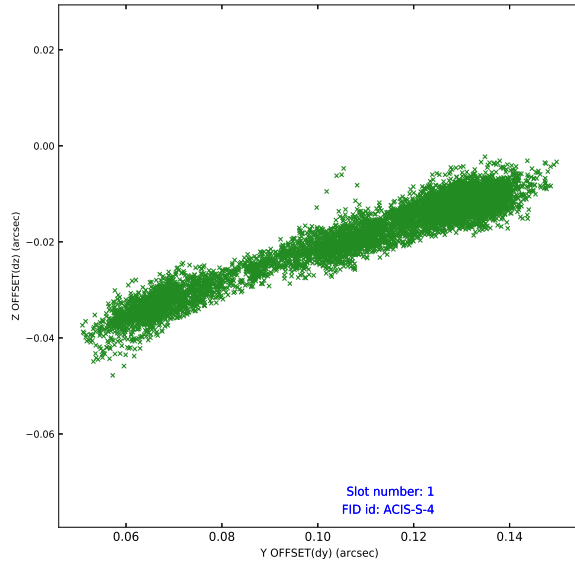


2.5 FID Slots

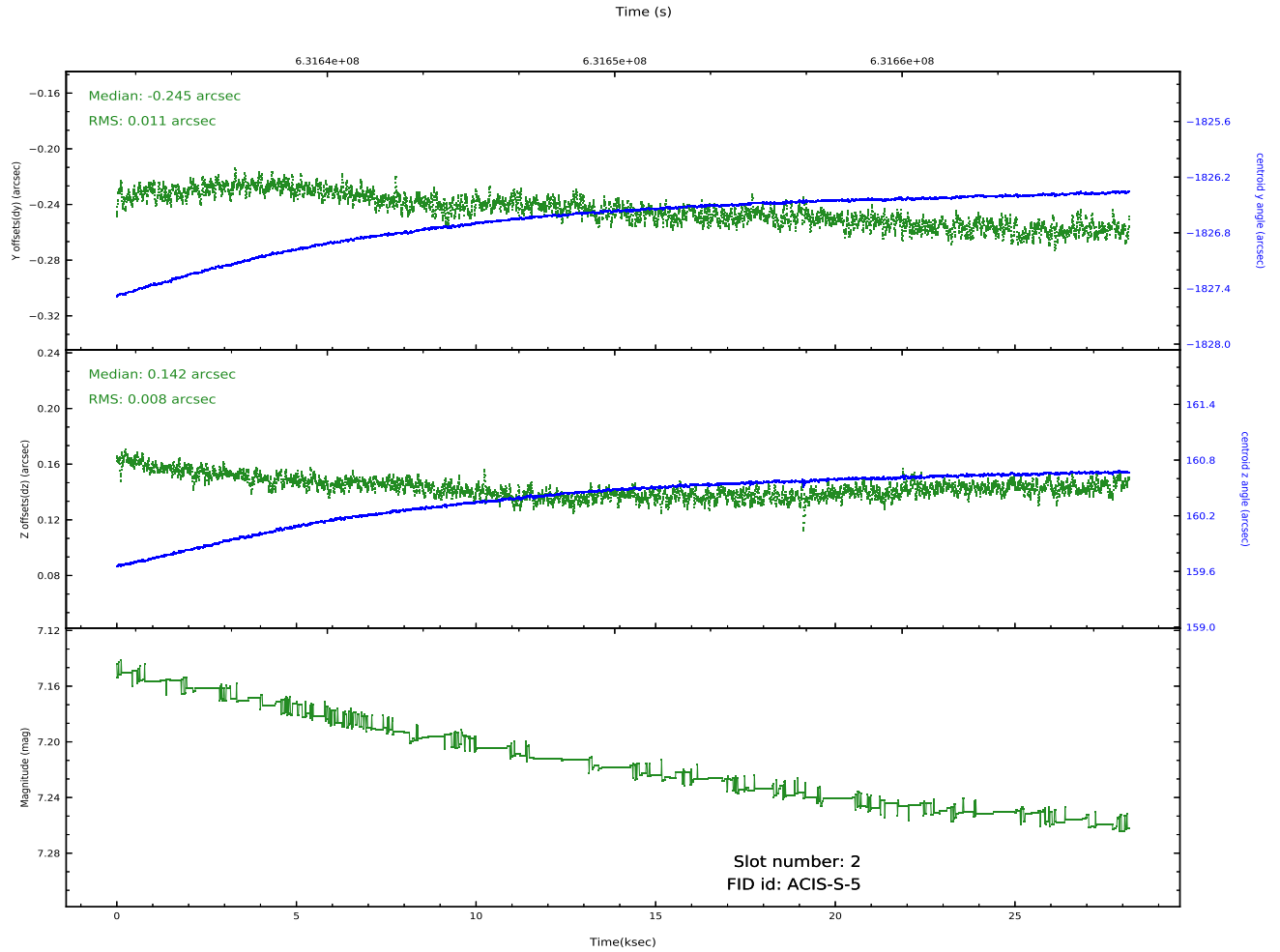
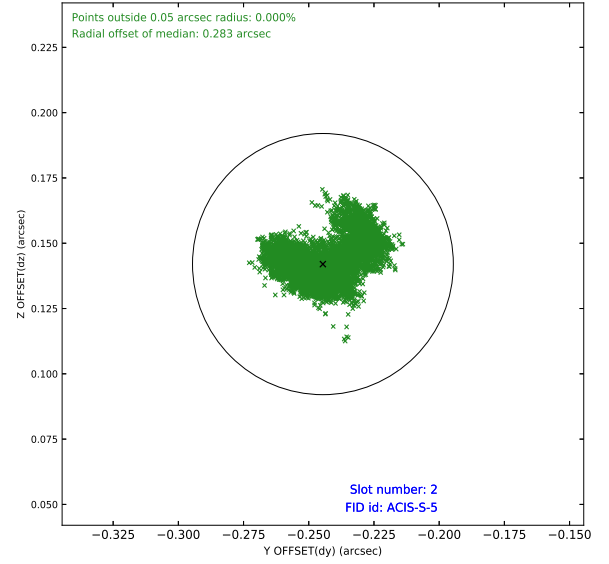
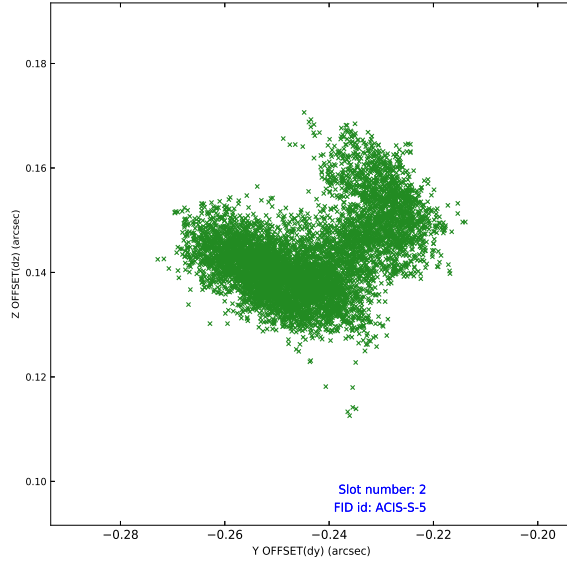
2.5.1 Slot 0



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)	2020.10.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.082699255943

A.2 Comments