

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 4763 - L2 Version 4
Chandra X-Ray Center

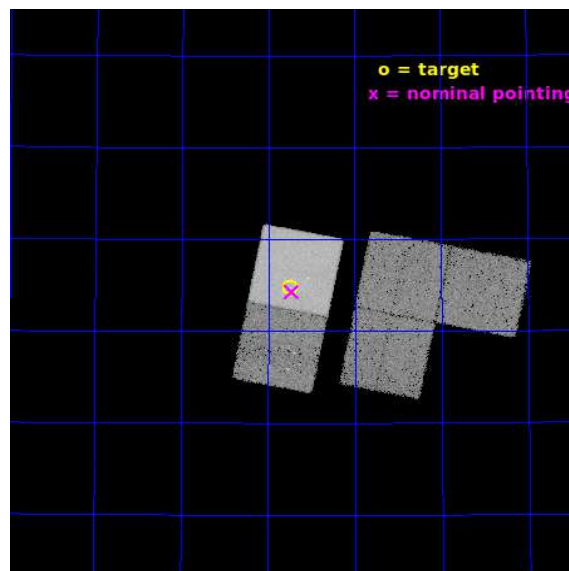
L2 Processing Date : Oct 1 2020

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

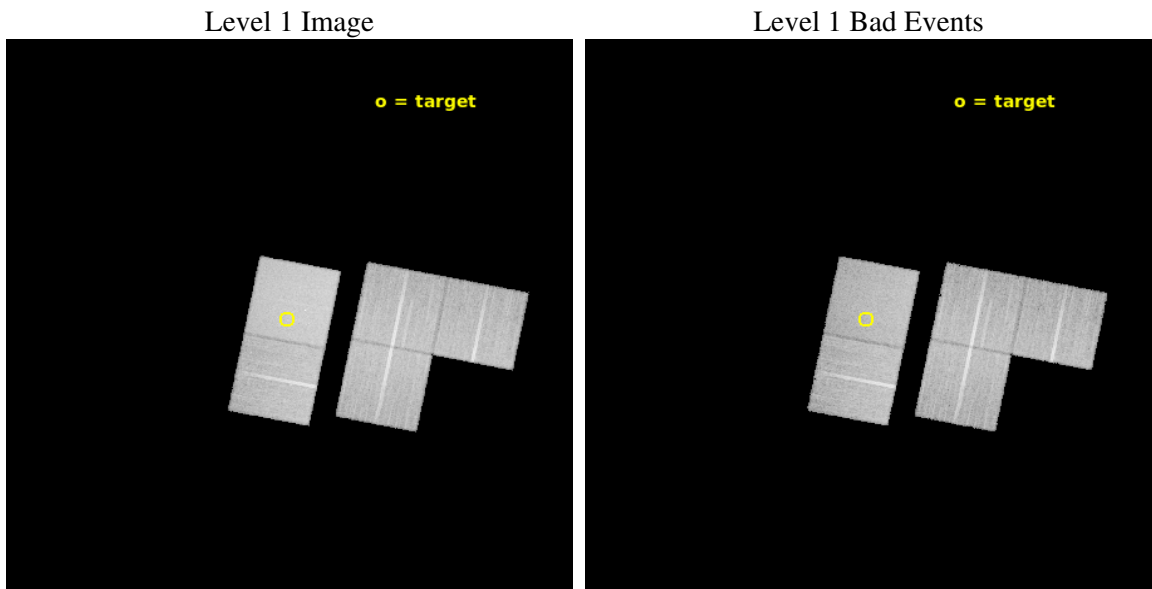
seq_num	700846	Sequence number
obs_id	4763	Observation id
title	Lensed Views of Quasar Outflows	Proposal title
observer	Gordon Garmire	Principal investigator
object	SBS 1520+530	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	230.436667	Observer's specified target RA [deg]
dec_targ	52.9135	Observer's specified target Dec [deg]
ra_nom	230.43127149057	Nominal RA [deg]
dec_nom	52.905247822089	Nominal Dec [deg]
roll_nom	281.24221007641	Nominal Roll [deg]
revision	4	Processing version of data
ontime	20177.899961174	Sum of GTIs [s]
livetime	19914.260843427	Livetime [s]
ontime1	20174.758971035	Sum of GTIs [s]
ontime2	20171.618040681	Sum of GTIs [s]
ontime3	20174.758990914	Sum of GTIs [s]
ontime6	20174.758971006	Sum of GTIs [s]
ontime7	20177.899961174	Sum of GTIs [s]
l2events	157951	Number of level 2 events



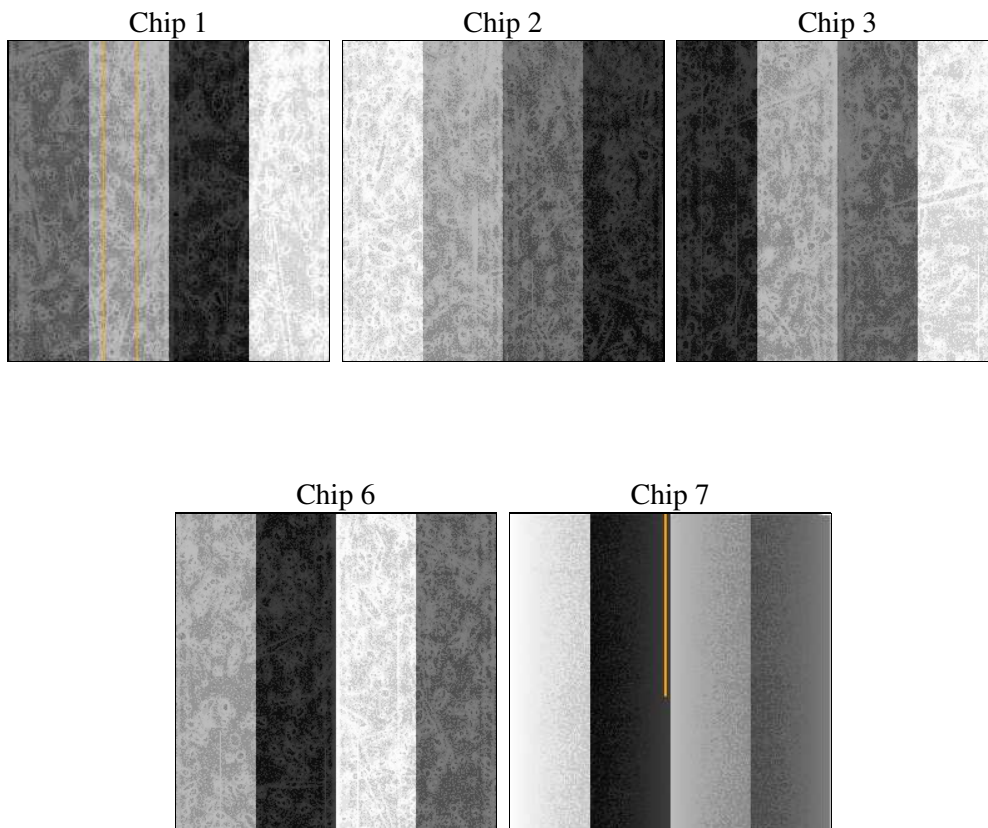
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	3	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	20177.899961174	Sum of GTIs [s]
caldbver	4.9.2	 	ontime1	20174.758971035	Sum of GTIs [s]
date	2020-10-01T21:35:02	Date and time of file creation	ontime2	20171.618040681	Sum of GTIs [s]
revision	4	Processing version of data	ontime3	20174.758990914	Sum of GTIs [s]
			ontime6	20174.758971006	Sum of GTIs [s]
			ontime7	20177.899961174	Sum of GTIs [s]
			l1events	874070	Number of level 1 events

2.1.4 Events

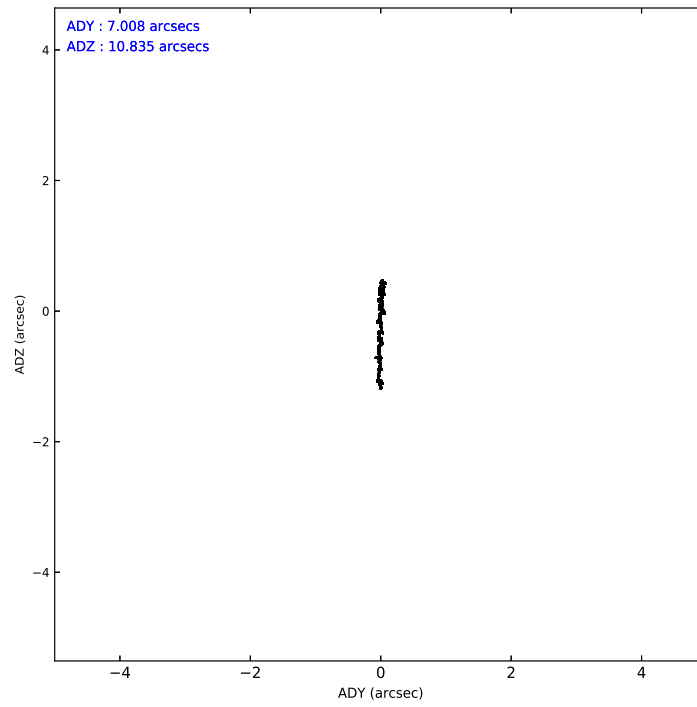
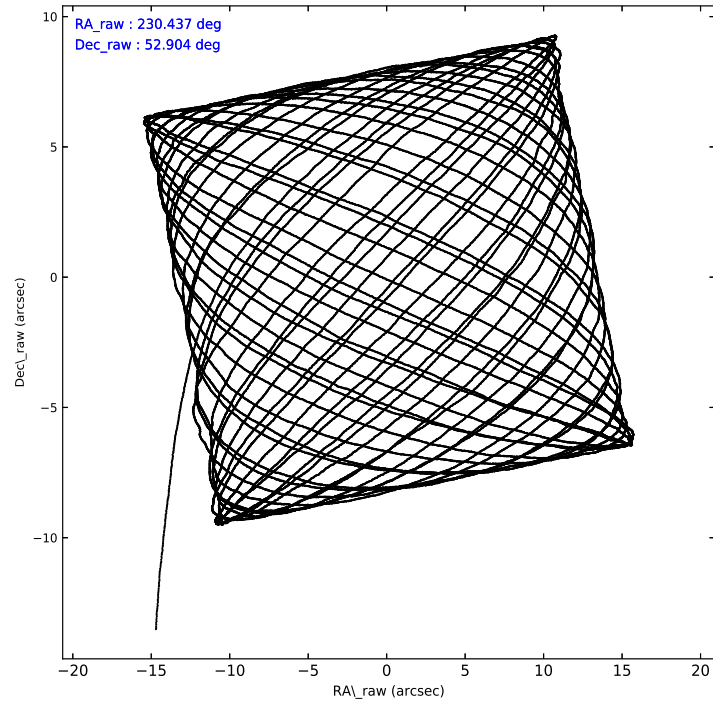
	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	152169	161960	163289	169003	227649
rejected events	131786	142748	144125	148617	136225
rejected %	86%	88%	88%	87%	59%

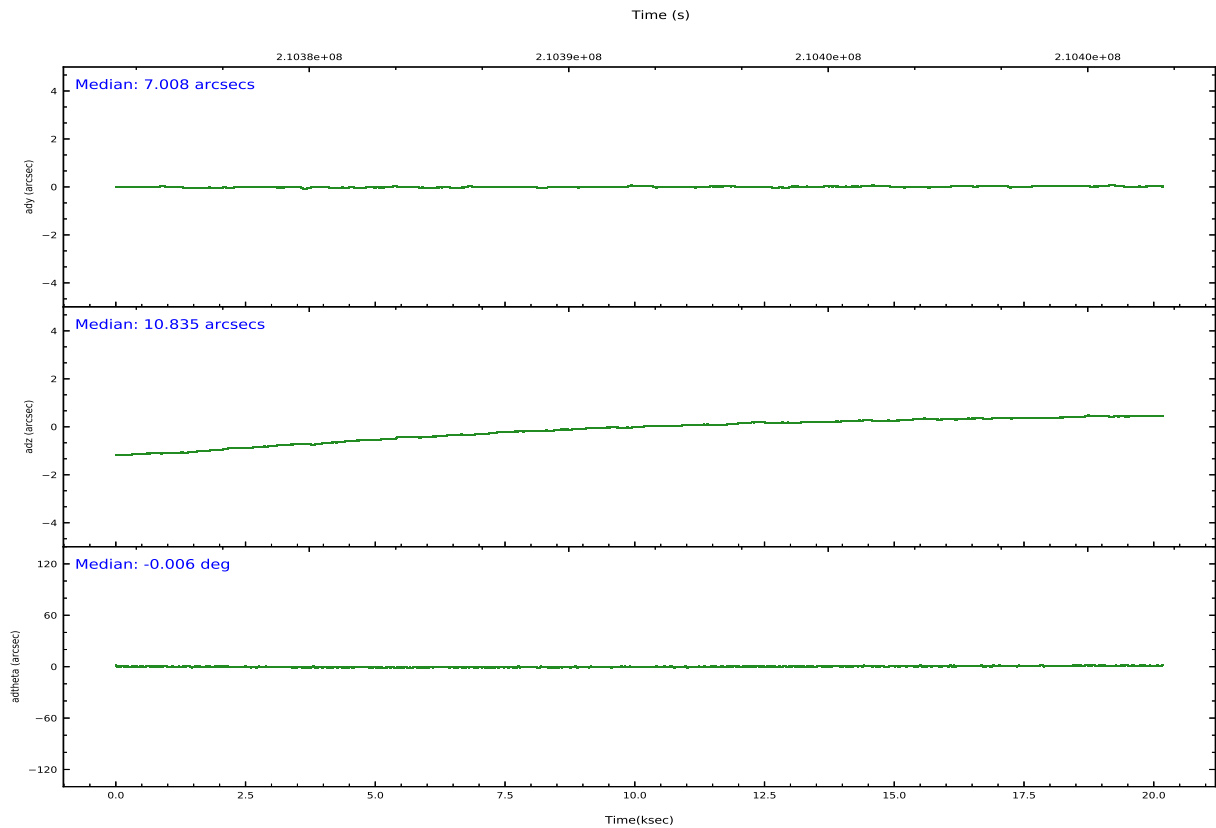
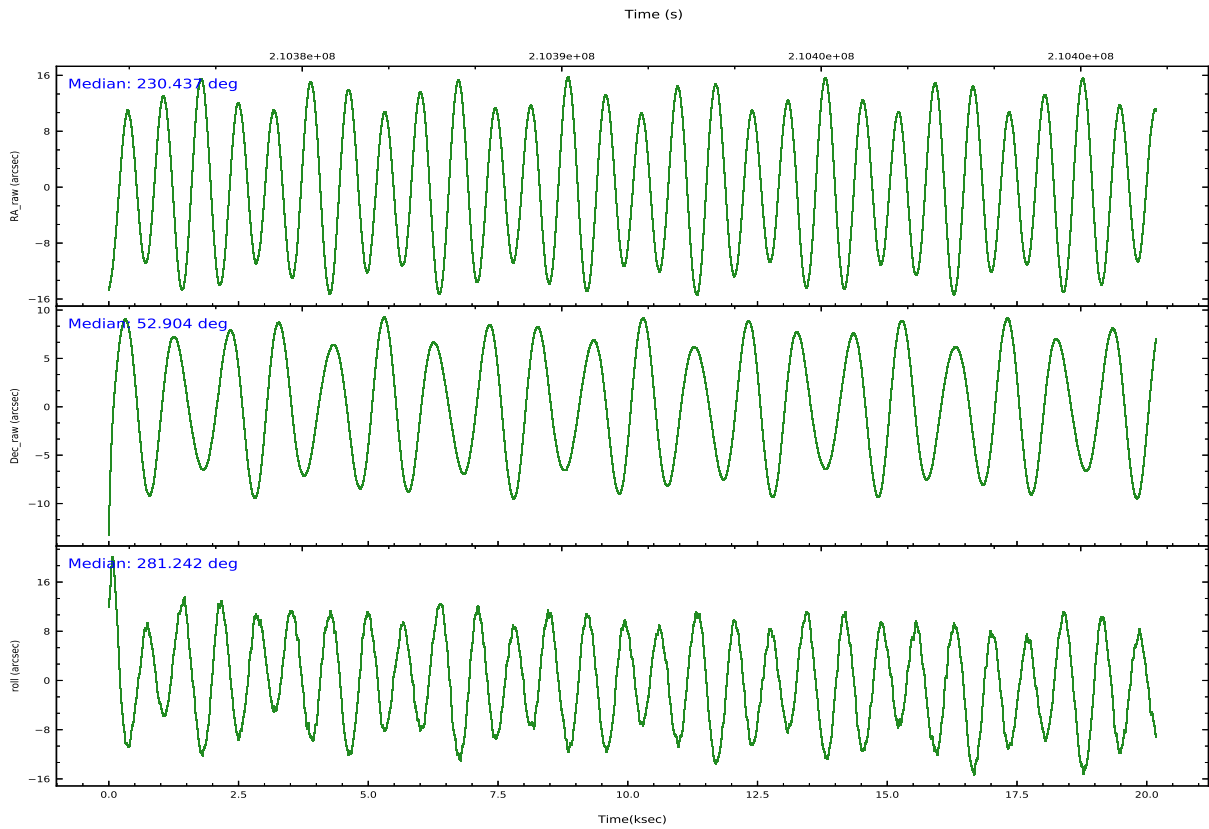
	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	9052	9778	9362	9561	9101
	5%	6%	5%	5%	3%
grade 1 events	62	102	105	82	232
	0%	0%	0%	0%	0%
grade 2 events	4635	3958	3825	4398	19335
	3%	2%	2%	2%	8%
grade 3 events	2044	1863	1966	1966	8610
	1%	1%	1%	1%	3%
grade 4 events	2071	1873	1914	1902	8581
	1%	1%	1%	1%	3%
grade 5 events	6926	6285	7234	7519	21041
	4%	3%	4%	4%	9%
grade 6 events	4068	3151	3487	4011	52592
	2%	1%	2%	2%	23%
grade 7 events	123311	134950	135396	139564	108157
	81%	83%	82%	82%	47%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-12367	ACIS-12367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	230.406751	230.43127149057	Subarray requested	NONE	NONE
[deg] Pointing Dec	52.924064	52.905247822089	Alternating exposures requested	N	N
[deg] Pointing Roll	281.106170	281.24221007641	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	210381454.184000	210379663.68937			
Observation start date	2004-08-31T23:16:30	2004-08-31T22:47:43			
[s] Observation end time (MET)	210401454.184000	210401984.60286			
Observation end date	2004-09-01T04:49:50	2004-09-01T04:59:44			
Read mode	TIMED	TIMED			

2.3 Aspect



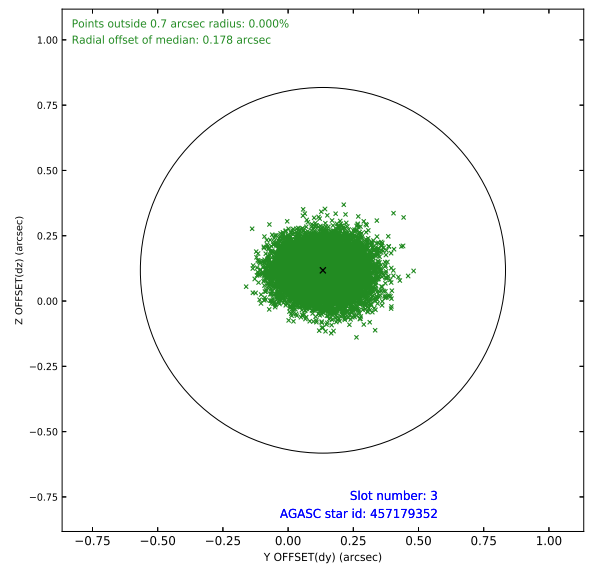
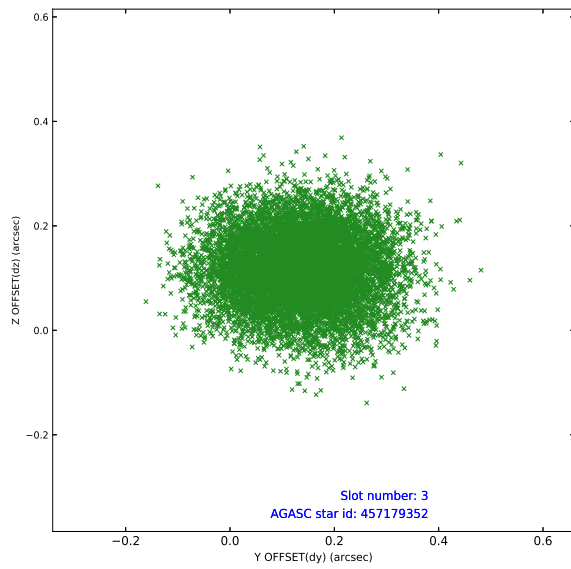


Slot Statistics

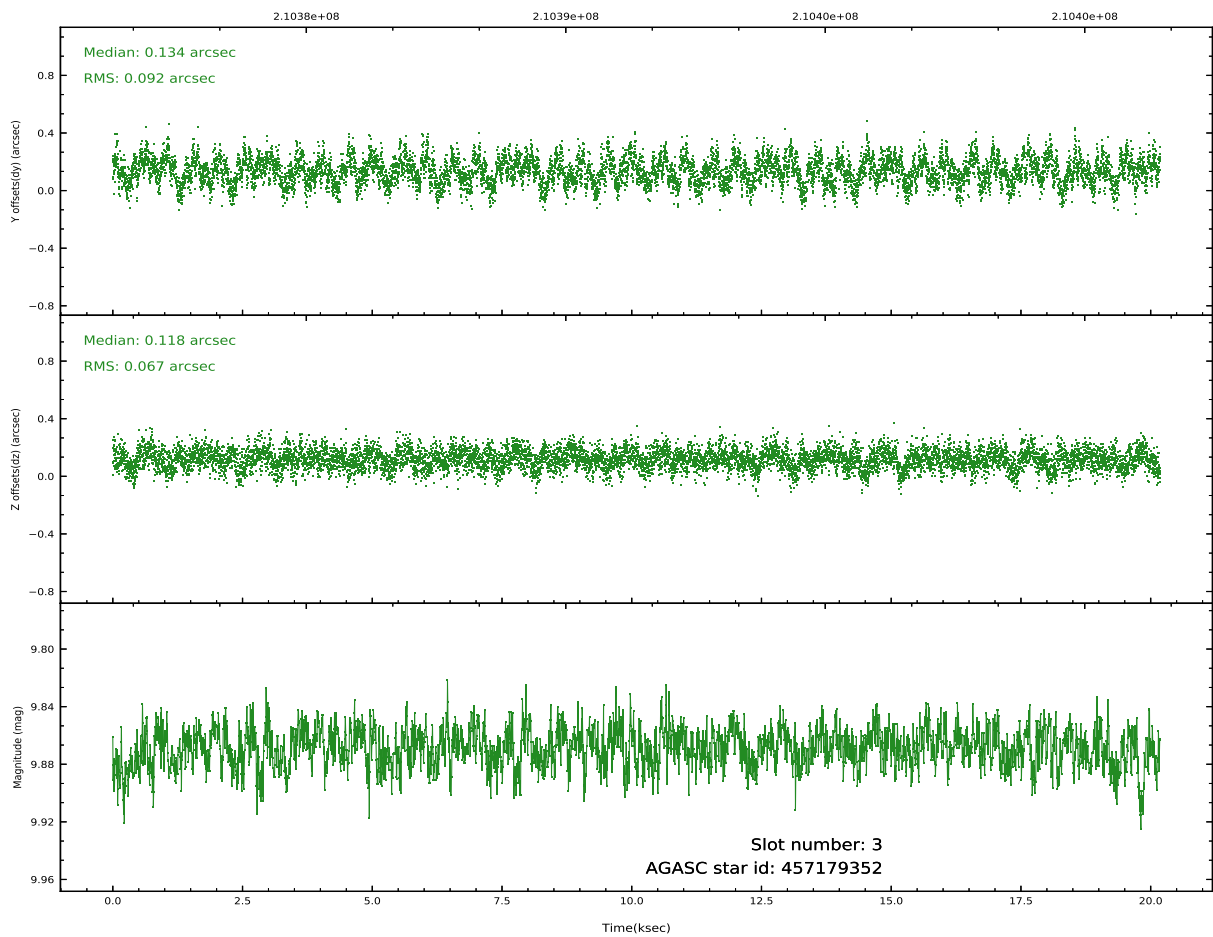
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	4923	1.000	-0.083	-0.054	0.010	0.017	0.000000	0.000000	-759.79	-1732
1	FID		ACIS-S-4	7.20	4921	1.000	0.142	0.055	0.009	0.017	0.000000	0.000000	2153.57	176
2	FID		ACIS-S-5	7.23	4923	1.000	-0.090	0.009	0.008	0.014	0.000000	0.000000	-1812.46	170
3	GUIDE	used	457179352	9.87	9836	1.000	0.134	0.118	0.122	0.197	231.588393	52.490307	2010.78	2245
4	GUIDE	used	457180992	7.92	9846	1.000	-0.018	0.082	0.070	0.110	230.362137	52.344454	2029.00	-497
5	GUIDE	used	457181616	8.84	9842	1.000	0.002	-0.056	0.073	0.116	229.954323	52.287535	2053.81	-1417
6	GUIDE	used	506994248	8.26	9844	1.000	-0.096	-0.195	0.066	0.106	230.374449	53.063992	-507.45	28
7	GUIDE	used	506993752	9.81	9841	1.000	-0.025	0.056	0.128	0.205	230.957817	53.653149	-2353.45	1660

2.4 Star Slots

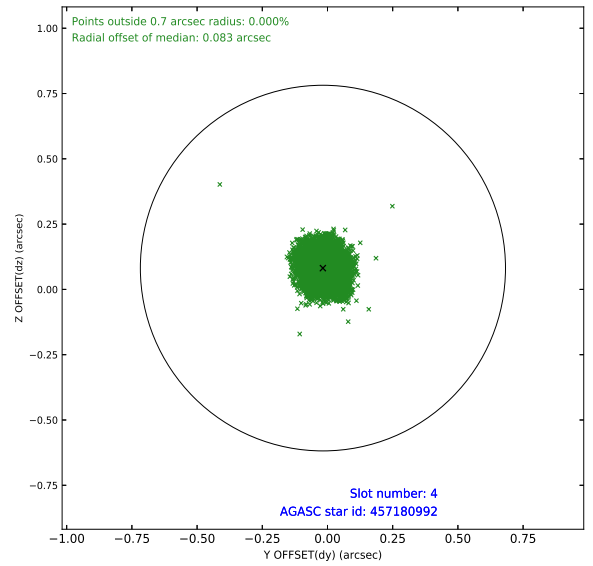
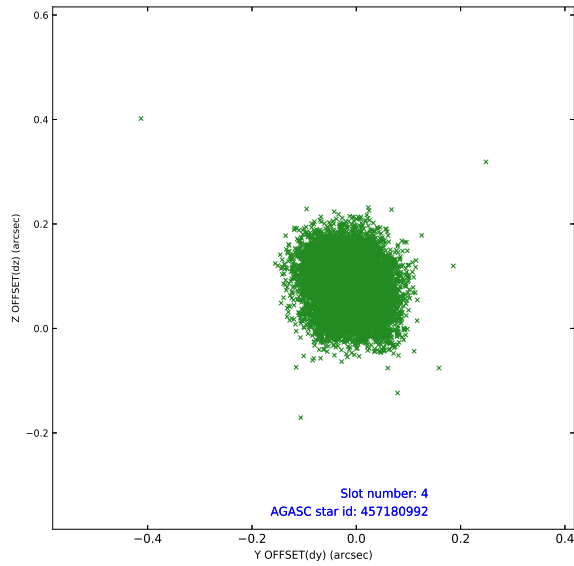
2.4.1 Slot 3



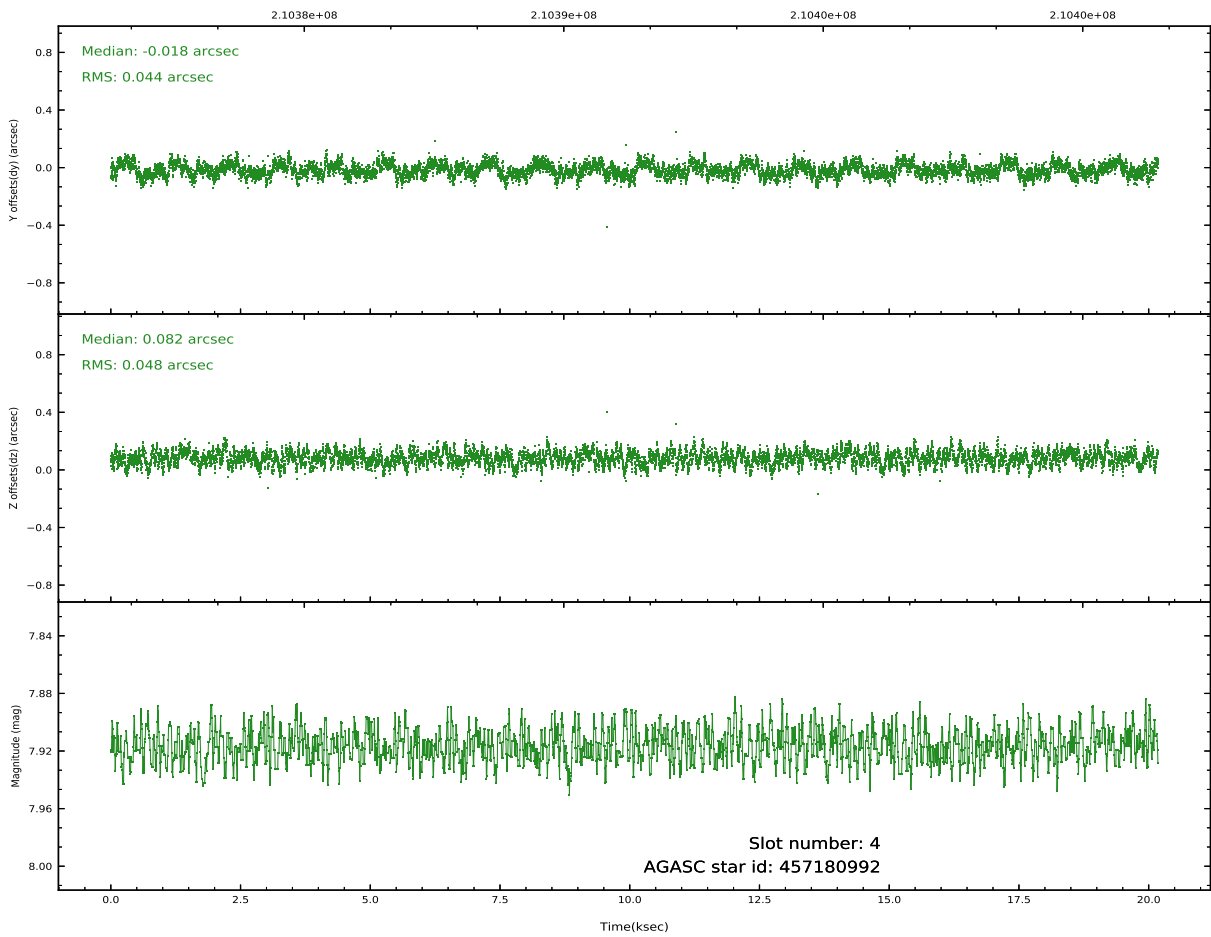
Time (s)



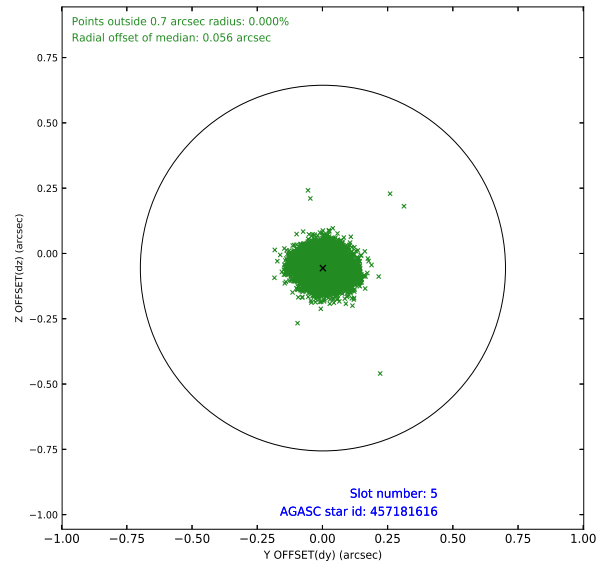
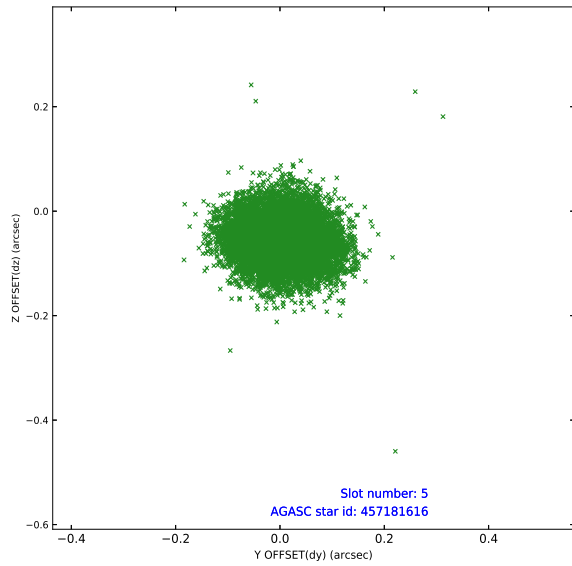
2.4.2 Slot 4



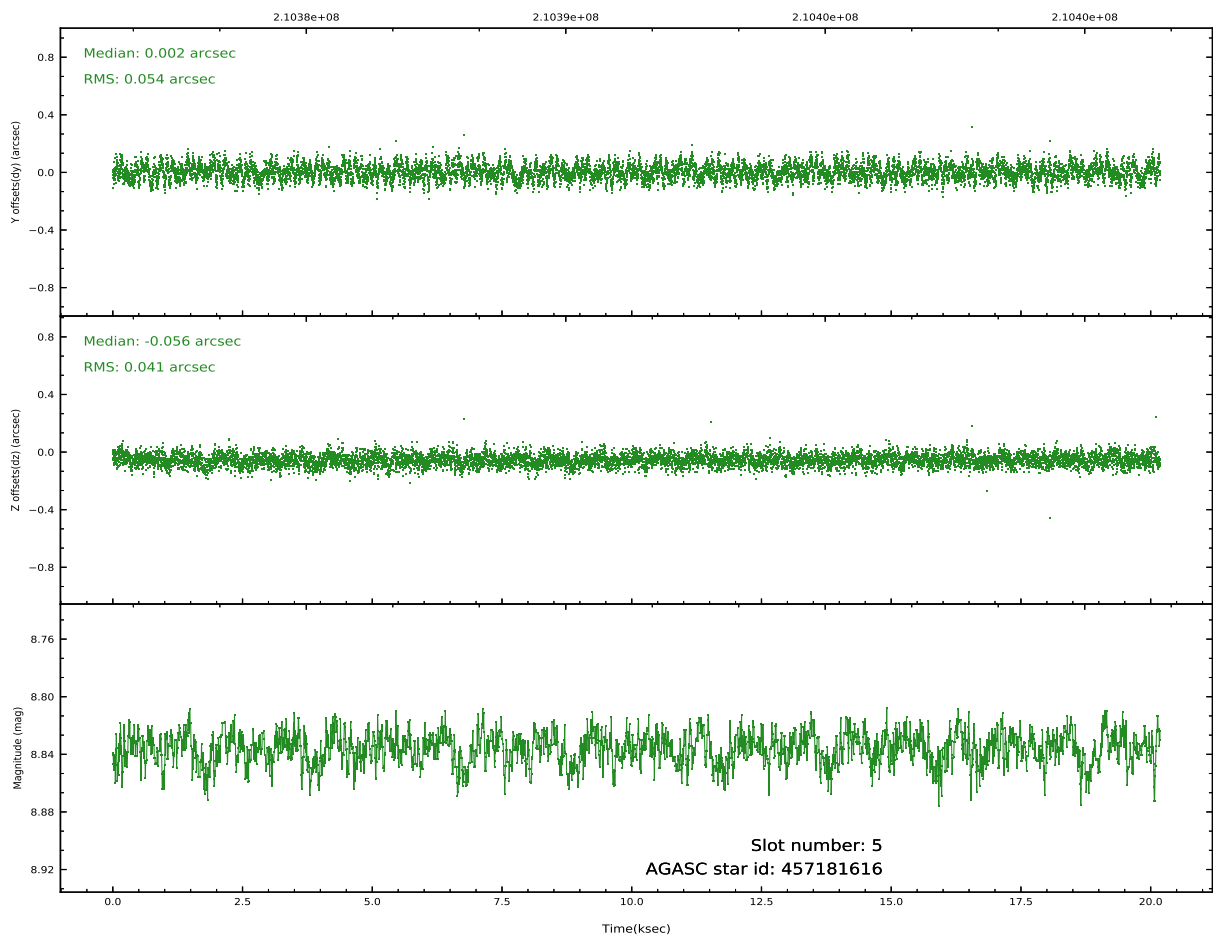
Time (s)



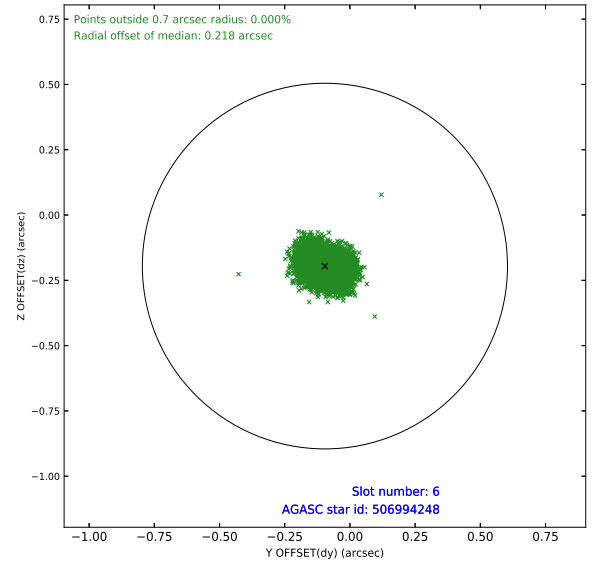
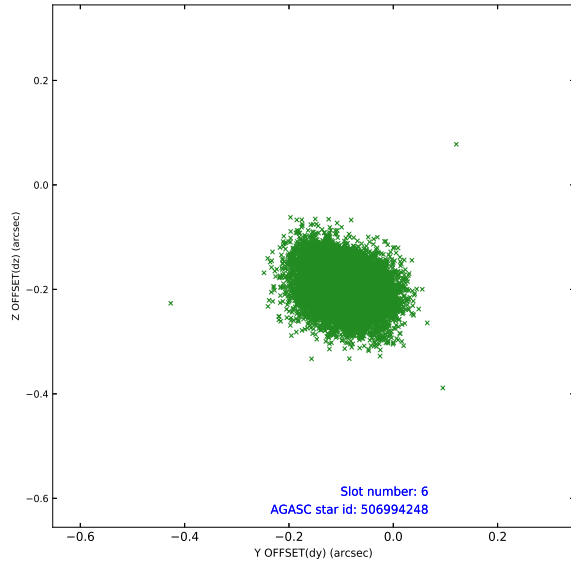
2.4.3 Slot 5



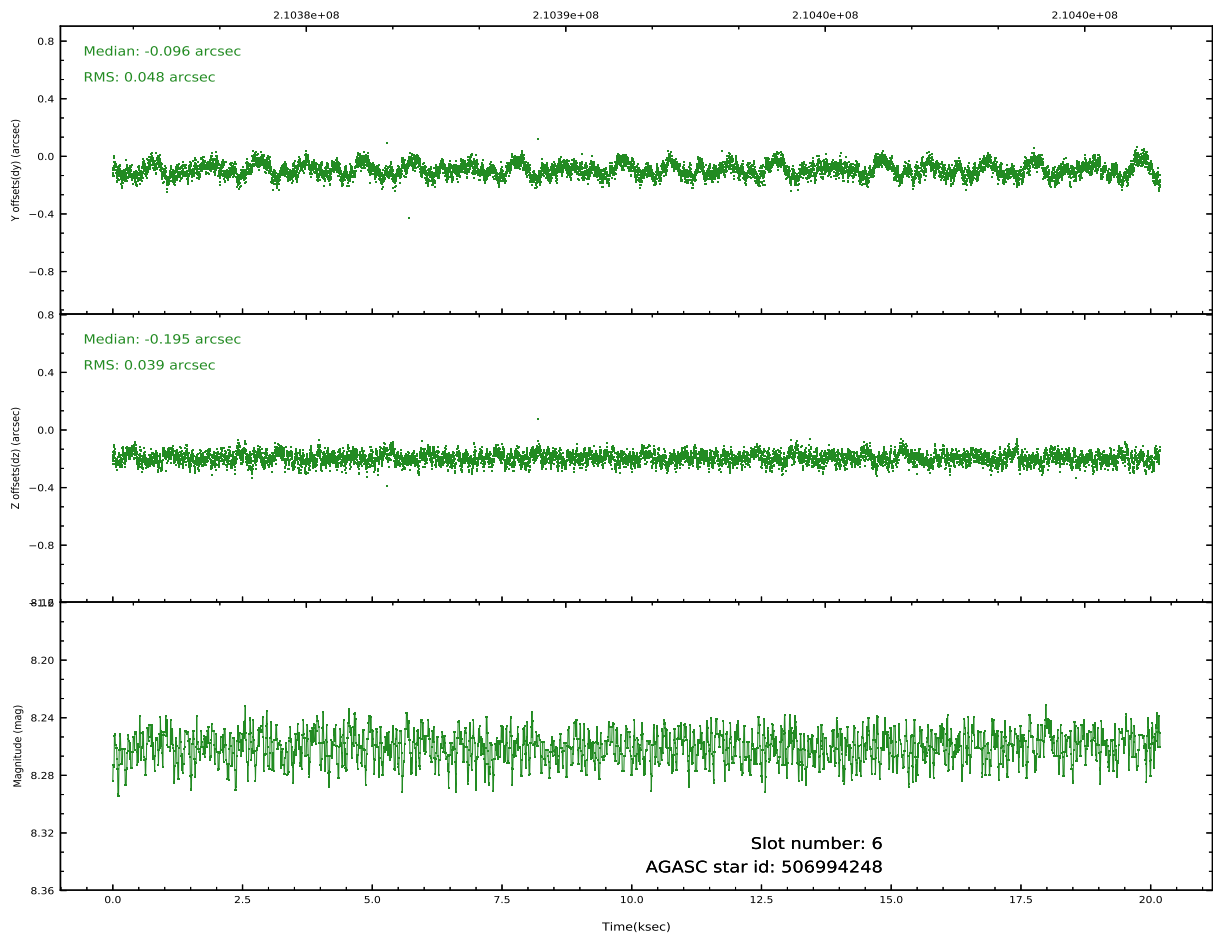
Time (s)



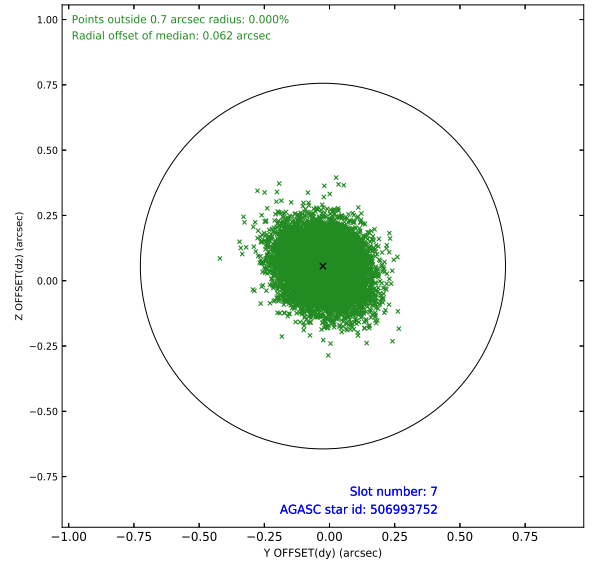
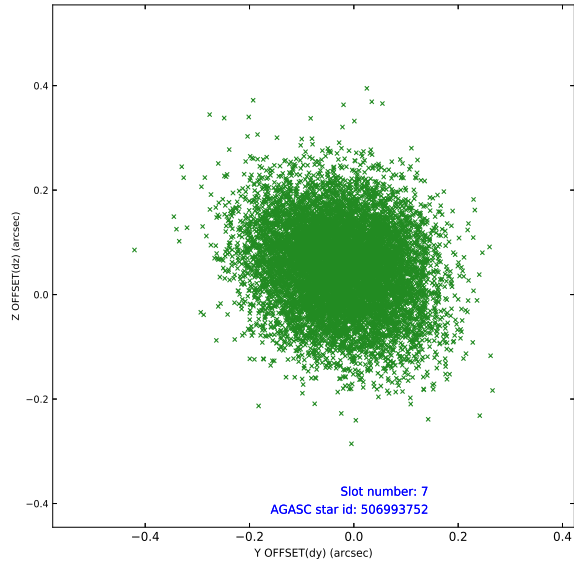
2.4.4 Slot 6



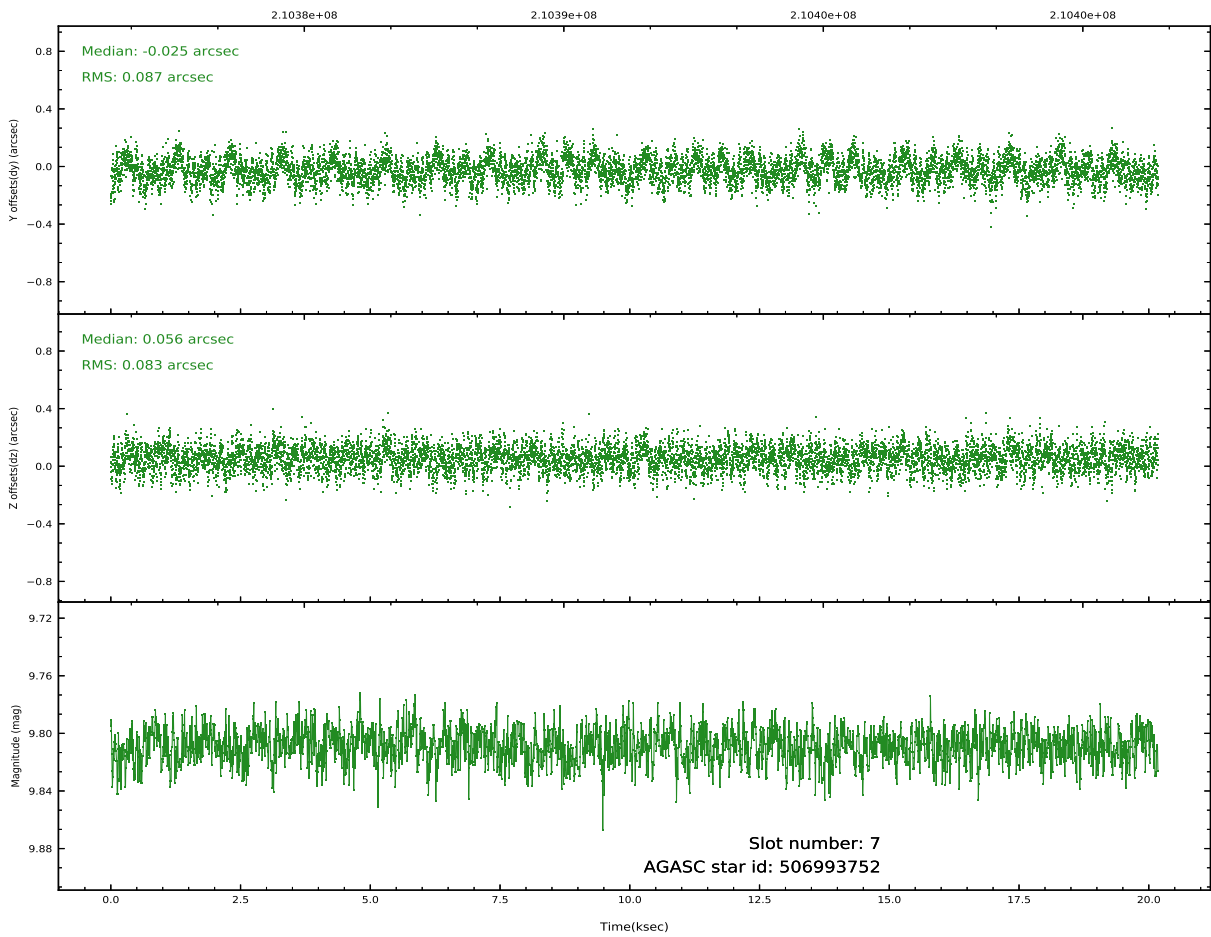
Time (s)



2.4.5 Slot 7

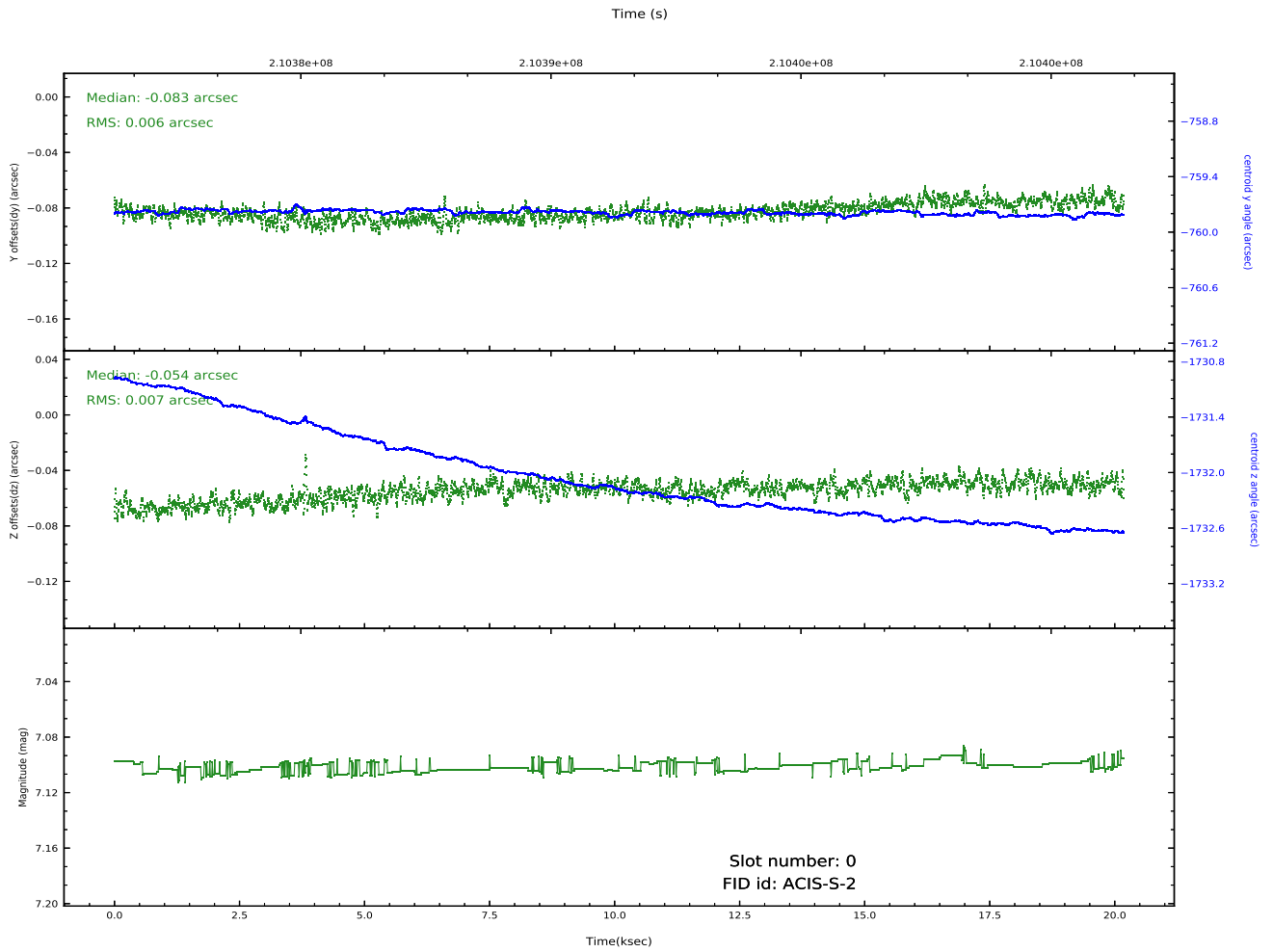
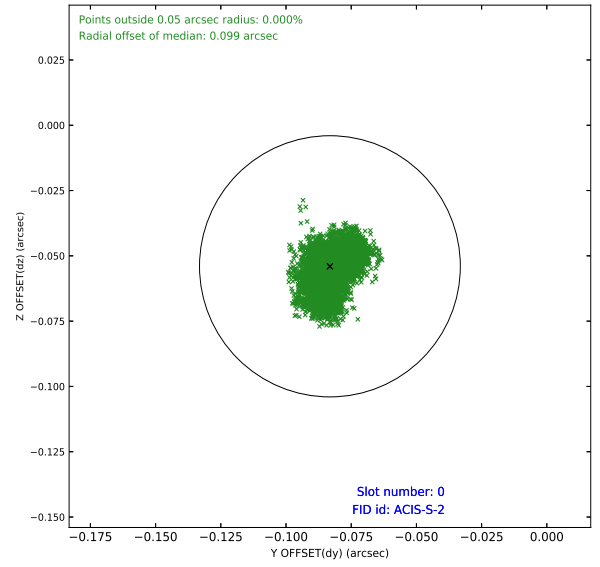
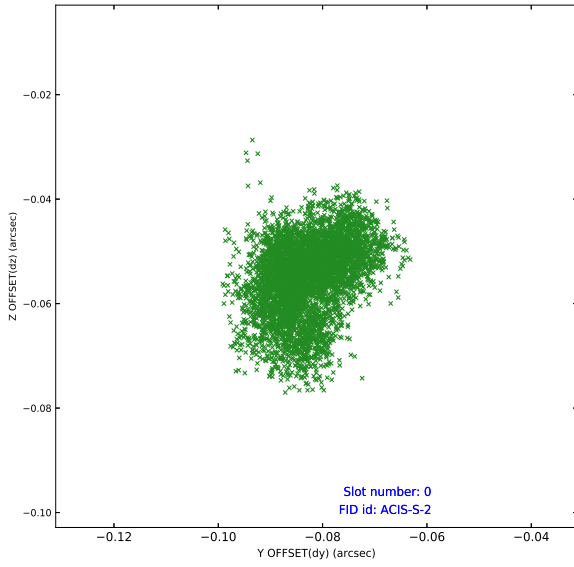


Time (s)

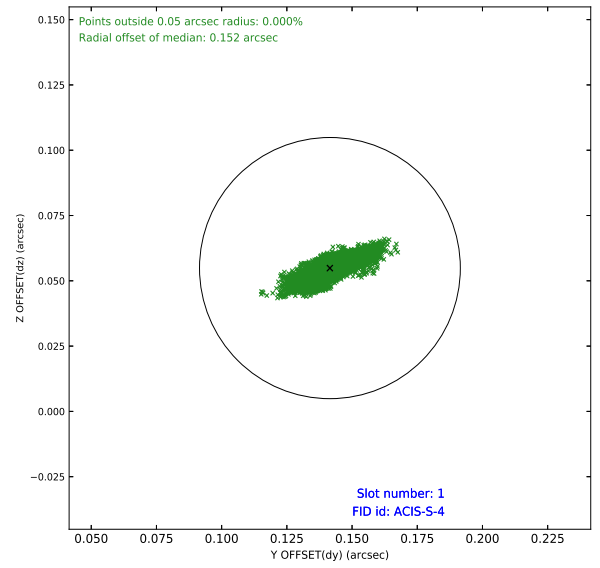
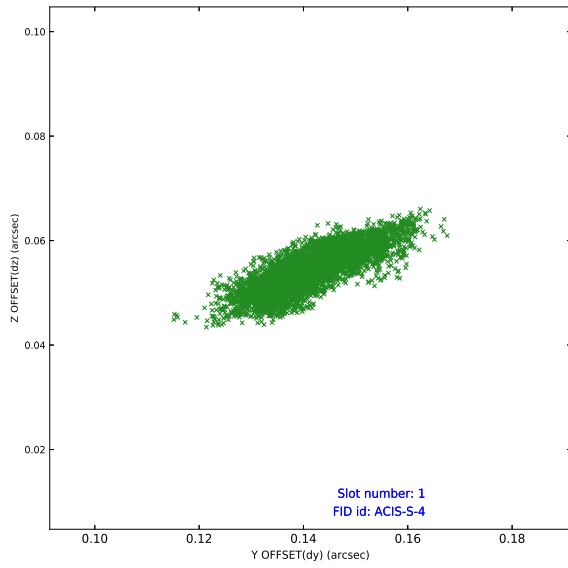


2.5 FID Slots

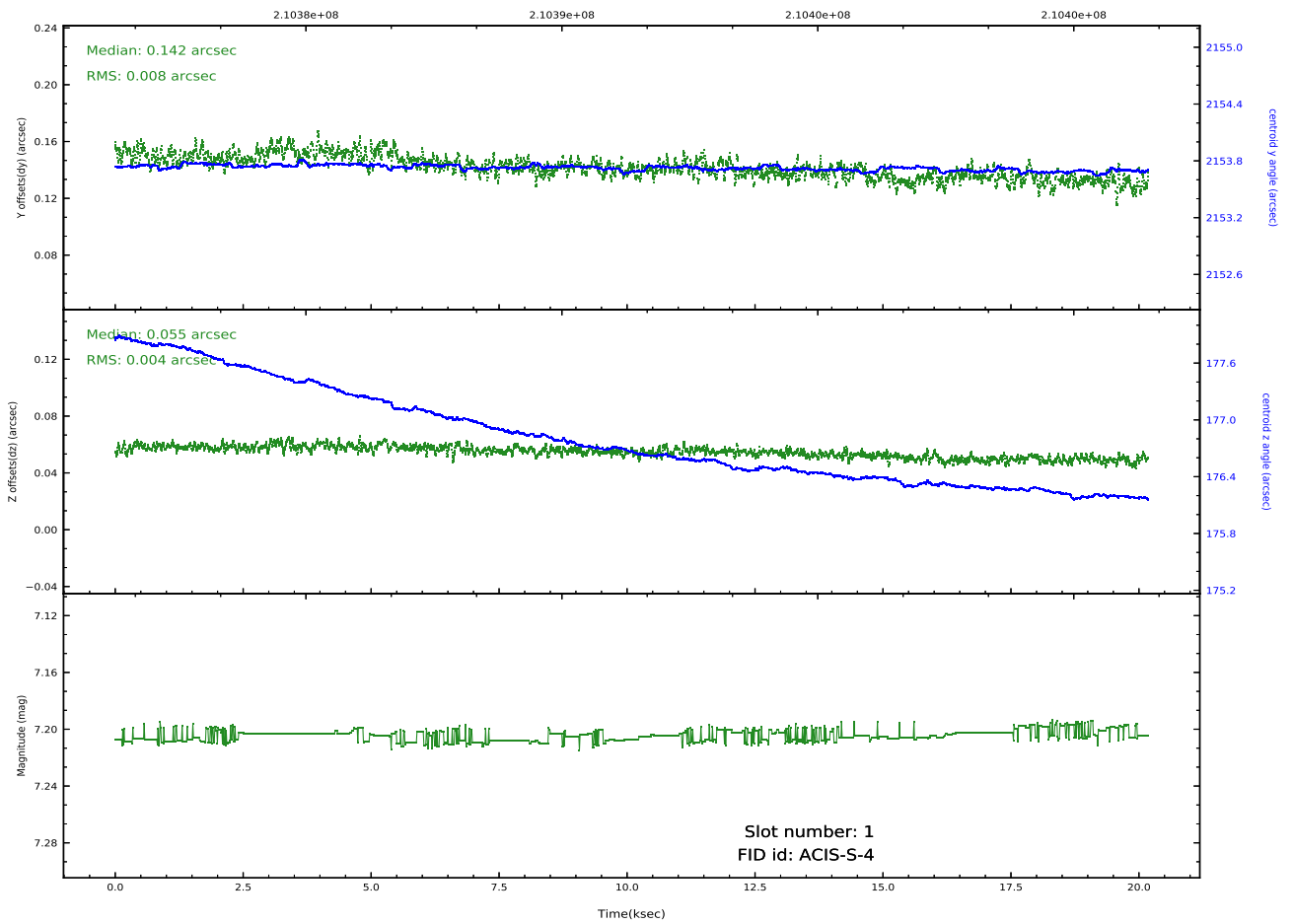
2.5.1 Slot 0



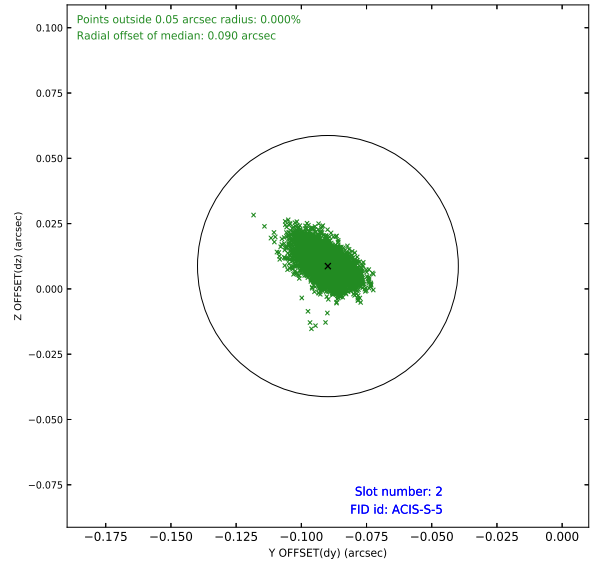
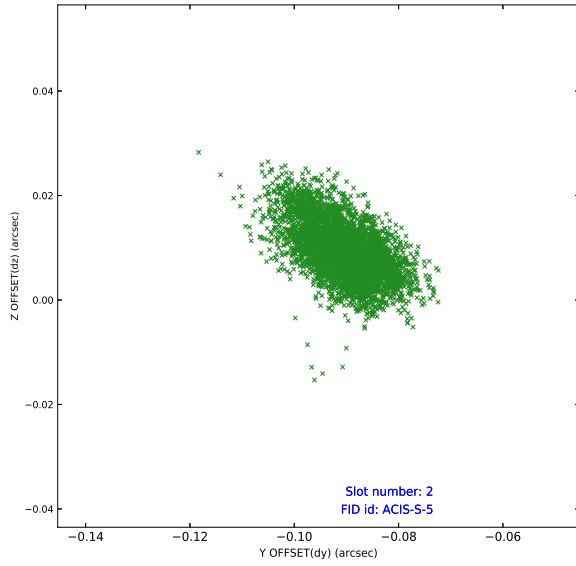
2.5.2 Slot 1



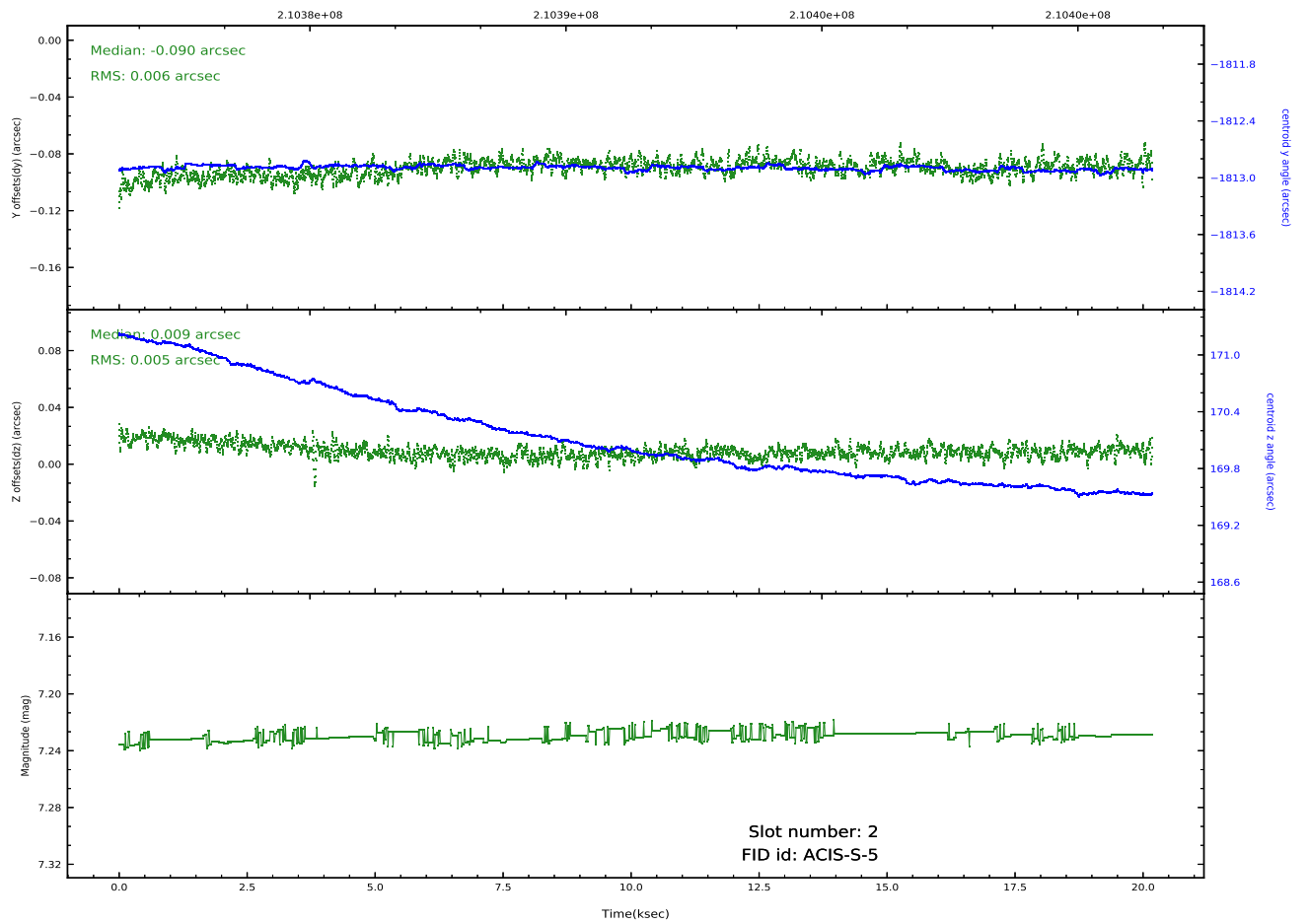
Time (s)



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.177

A.2 Comments