

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 19579 - L2 Version 2
Chandra X-Ray Center

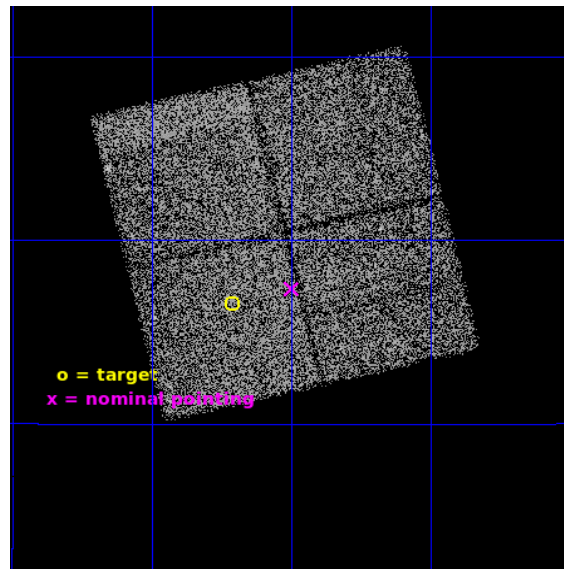
L2 Processing Date : Oct 25 2020

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

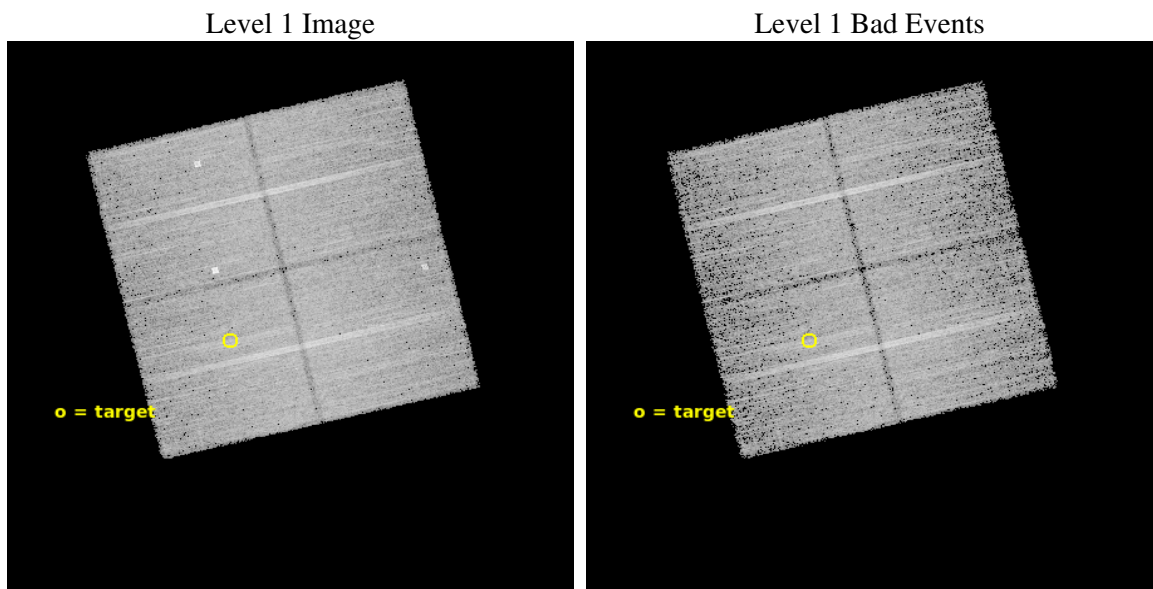
seq_num	801671	Sequence number
obs_id	19579	Observation id
title	Determining the Universality of f _{gas} at High Redshift	Proposal ti
observer	Mark Brodwin	Principal investigator
object	MOO J1514+1346	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	228.677917	Observer's specified target RA [deg]
dec_targ	13.775278	Observer's specified target Dec [deg]
ra_nom	228.62422351583	Nominal RA [deg]
dec_nom	13.789273365574	Nominal Dec [deg]
roll_nom	166.61817892009	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20081.800154567	Sum of GTIs [s]
livetime	19819.416651541	Livetime [s]
ontime0	20078.65908432	Sum of GTIs [s]
ontime1	20075.518023849	Sum of GTIs [s]
ontime2	20081.800154567	Sum of GTIs [s]
ontime3	20081.800154567	Sum of GTIs [s]
l2events	54506	Number of level 2 events



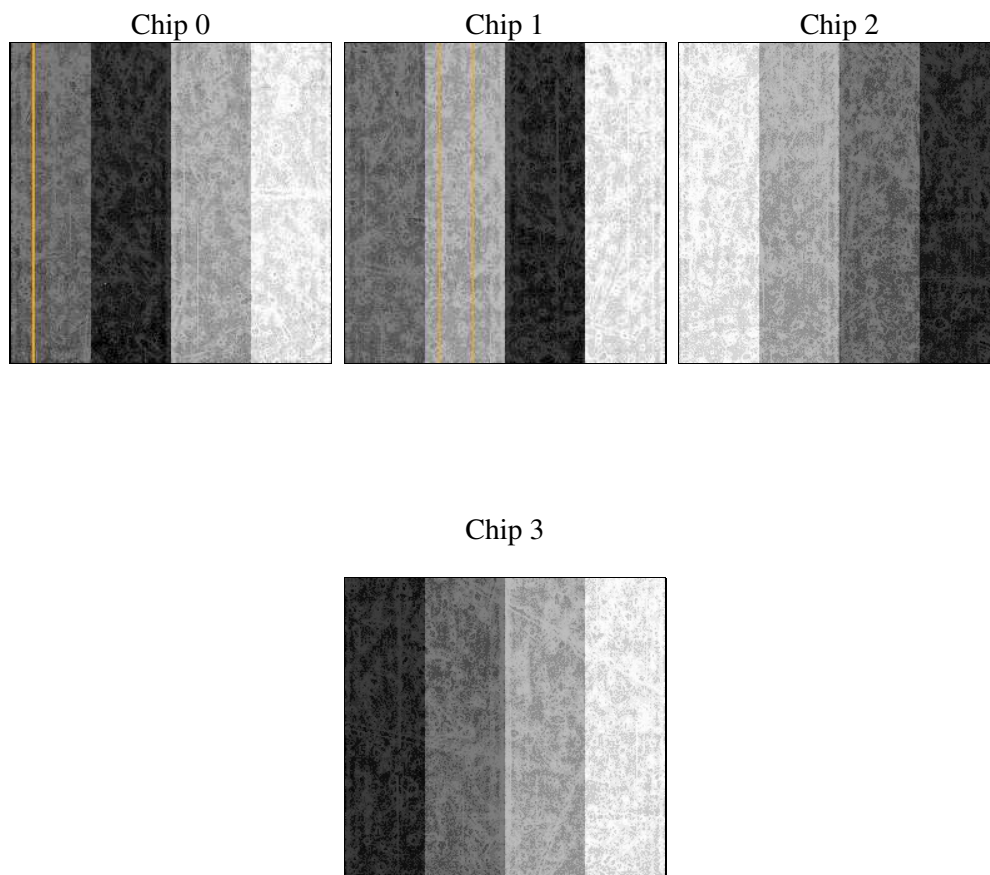
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	20081.800154567	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	20078.65908432	Sum of GTIs [s]
date	2020-10-25T20:25:21	Date and time of file creation	ontime1	20075.518023849	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	20081.800154567	Sum of GTIs [s]
			ontime3	20081.800154567	Sum of GTIs [s]
			l1events	570317	Number of level 1 events

2.1.4 Events

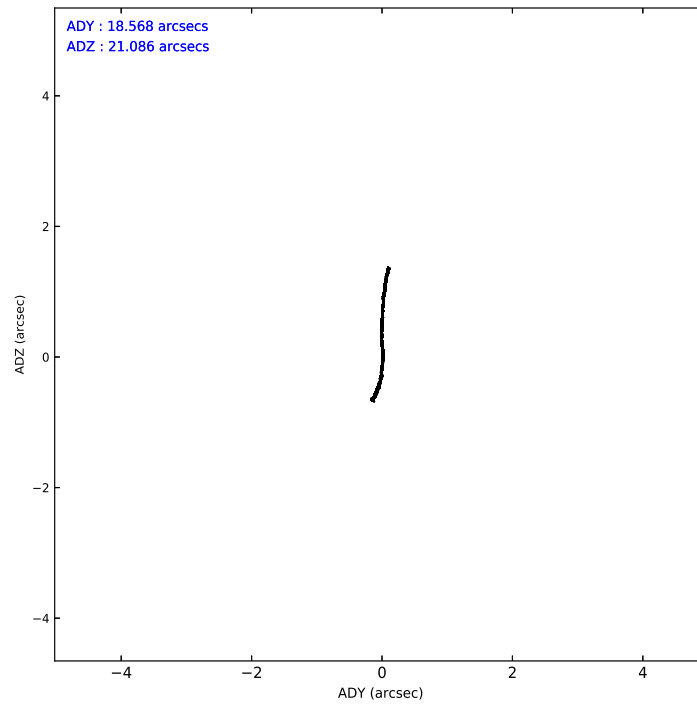
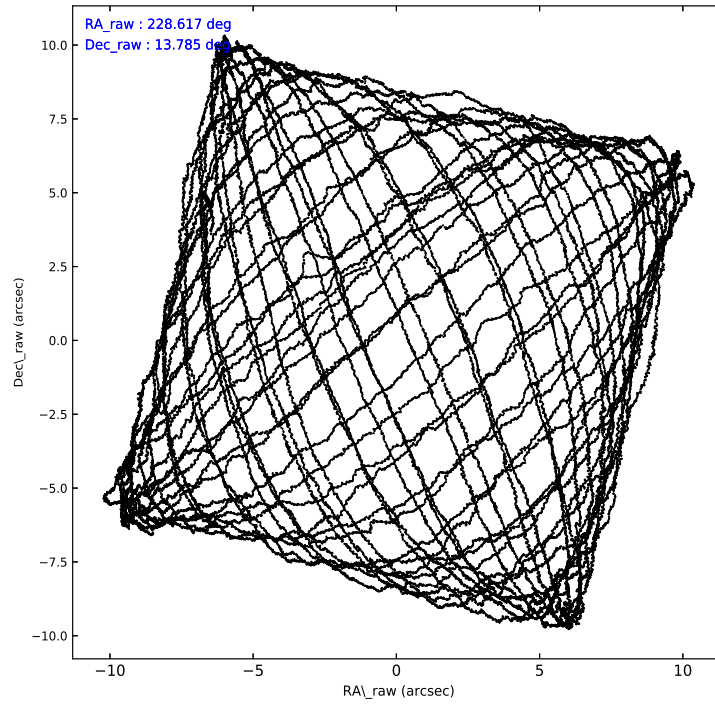
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	134514	142111	147969	145723
rejected events	118639	121402	131485	130156
rejected %	88%	85%	88%	89%

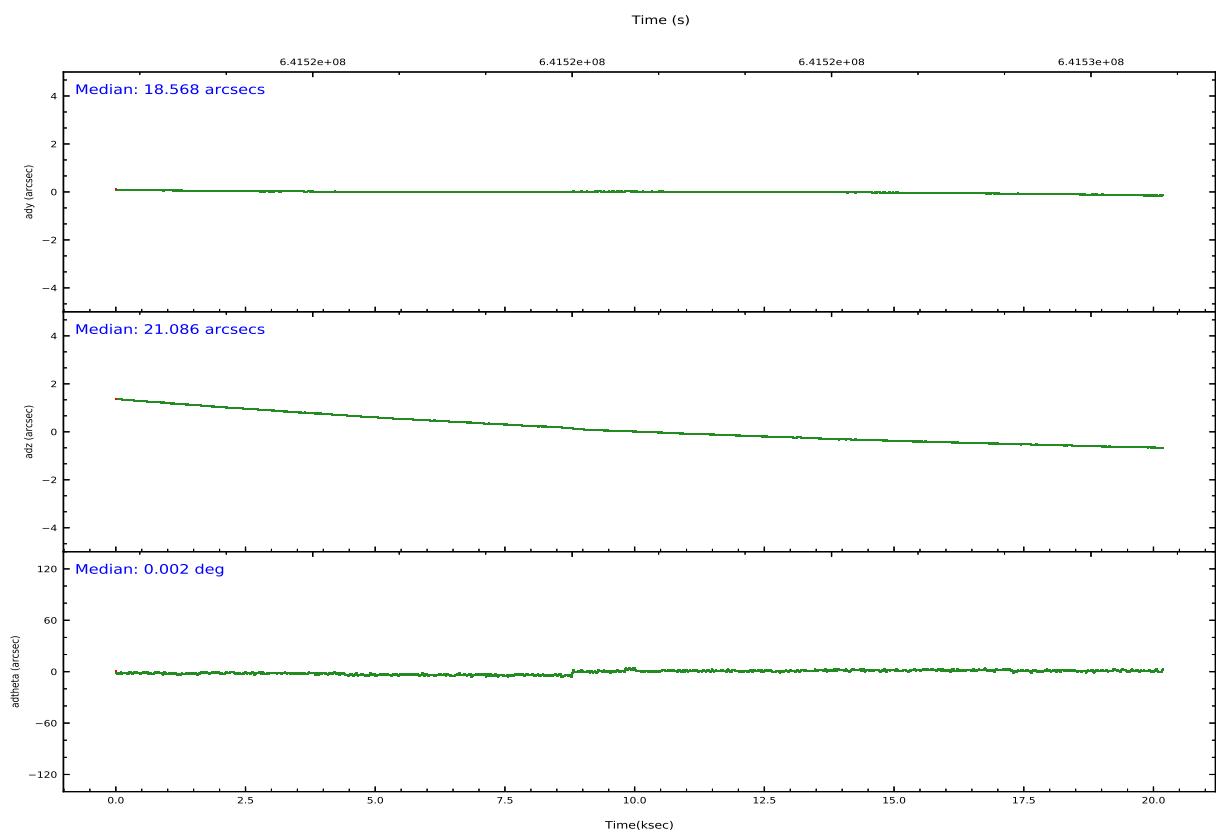
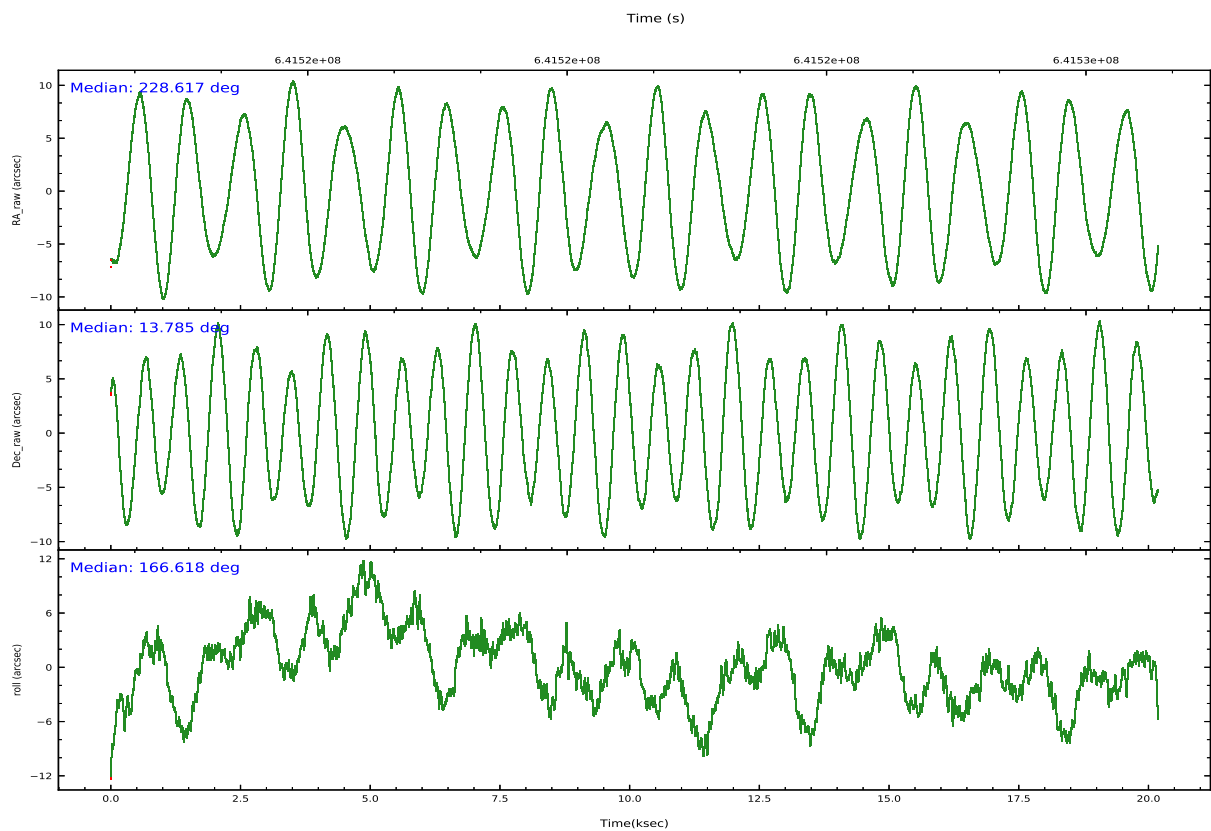
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	5468	8418	6185	5506
	4%	5%	4%	3%
grade 1 events	83	131	99	94
	0%	0%	0%	0%
grade 2 events	3867	4601	3872	3492
	2%	3%	2%	2%
grade 3 events	1655	1730	1589	1592
	1%	1%	1%	1%
grade 4 events	1543	1698	1641	1602
	1%	1%	1%	1%
grade 5 events	6302	6276	5551	6955
	4%	4%	3%	4%
grade 6 events	3343	4269	3201	3377
	2%	3%	2%	2%
grade 7 events	112253	114988	125831	123105
	83%	80%	85%	84%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-0123	ACIS-0123	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	228.644658	228.62422351583	CCD I2 on	Y	Y
[deg] Pointing Dec	13.792569	13.789273365574	CCD I3 on	Y	Y
[deg] Pointing Roll	166.407916	166.61817892009	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	N
[mm] SIM translation stage pos	-225.840463	-225.8433433320239	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.752	-7.749109670905796	CCD S4 on	N	N
[s] Observation start time (MET)	641511390.184000	641510509.50008	CCD S5 on	N	N
Observation start date	2018-04-30T21:35:21	2018-04-30T21:21:49	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	641531390.184000	641532352.25137	On-chip summing requested	N	N
Observation end date	2018-05-01T03:08:41	2018-05-01T03:25:52	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



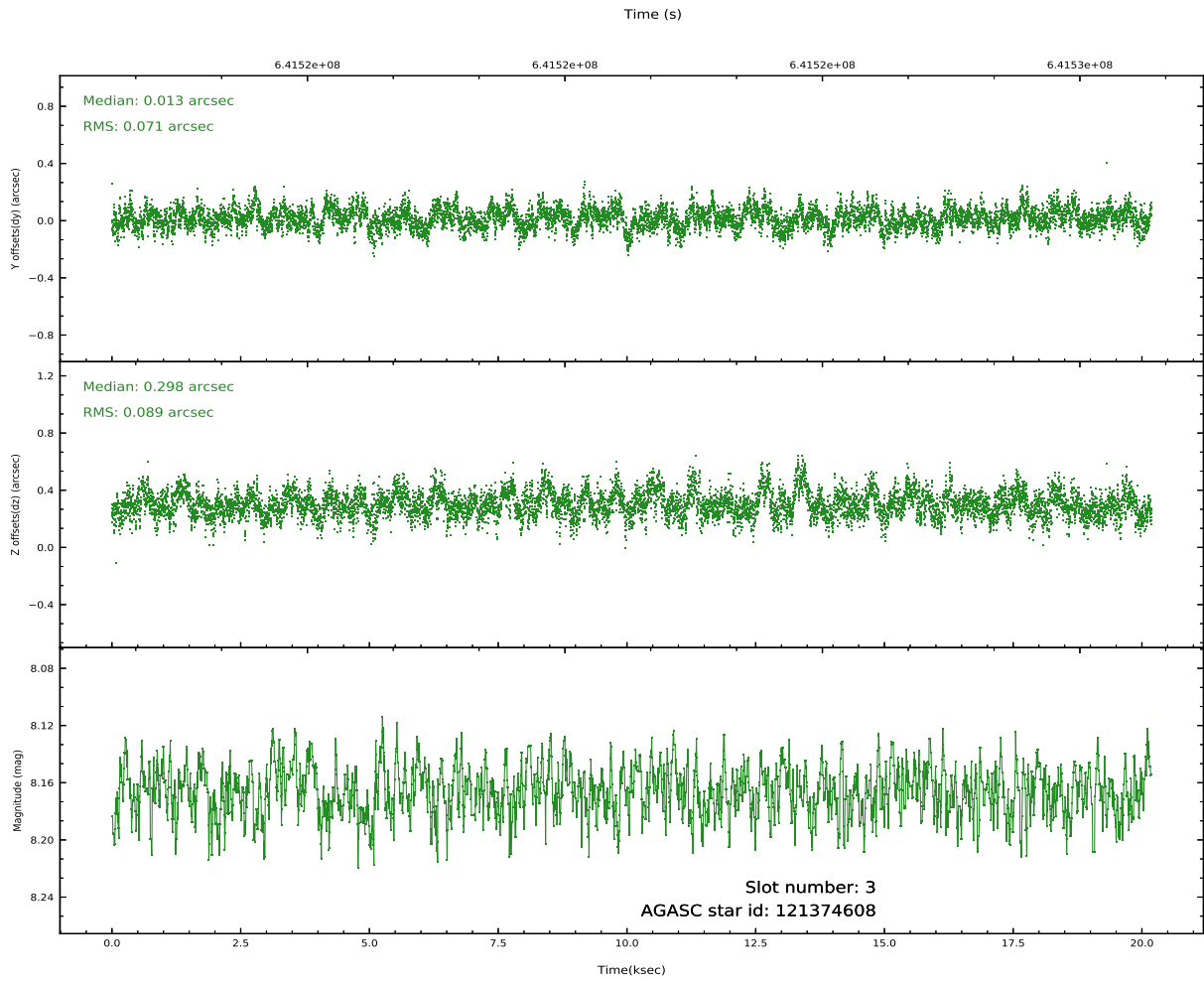
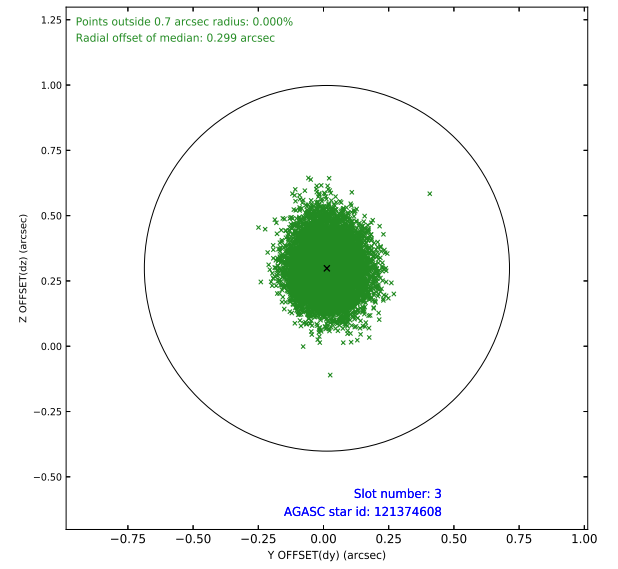
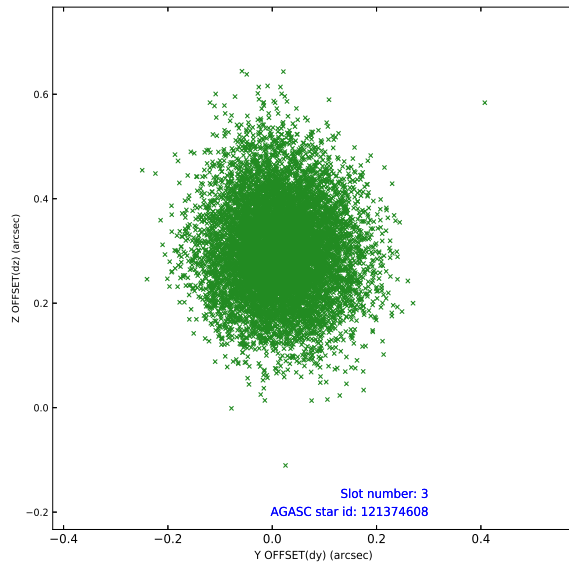


Slot Statistics

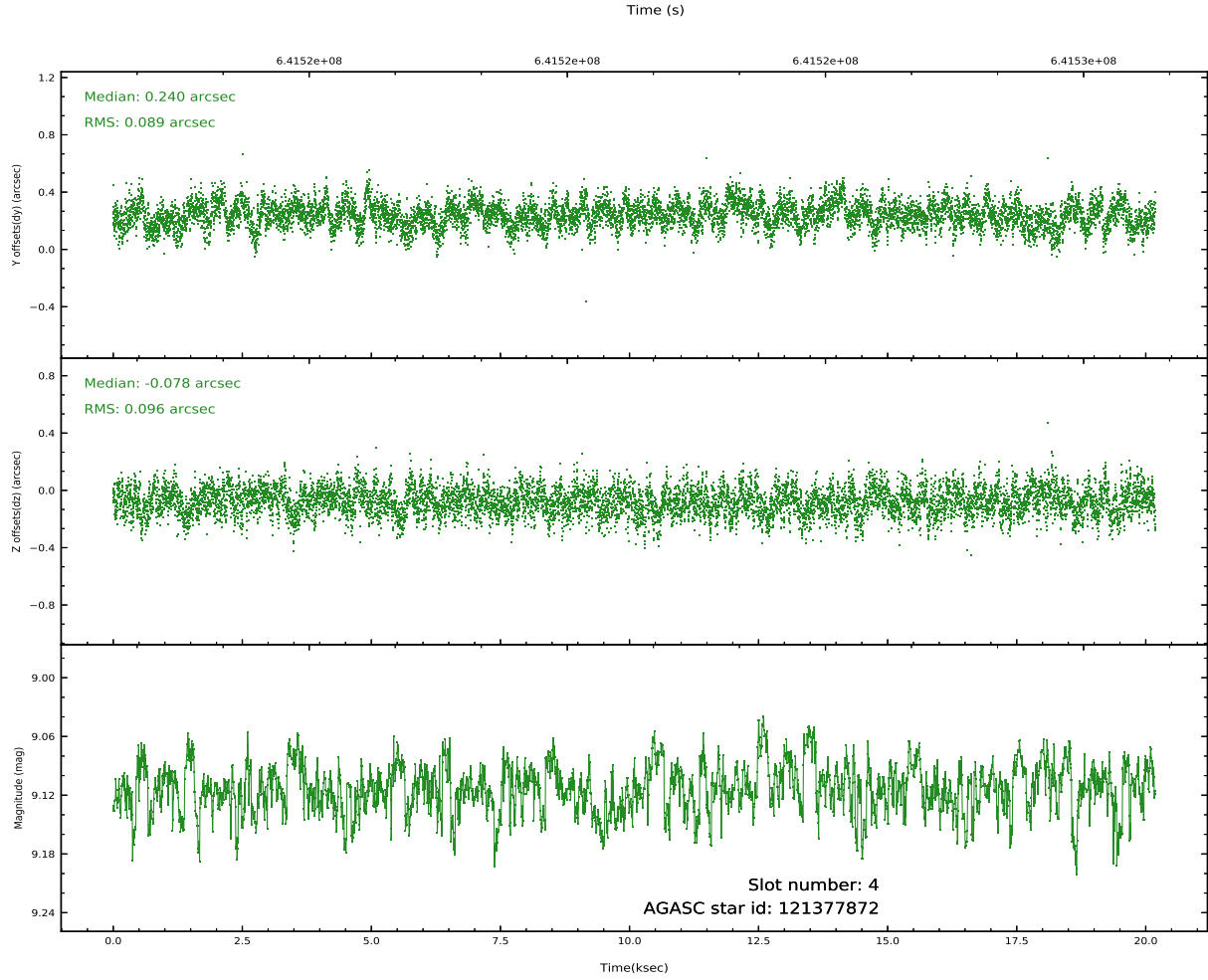
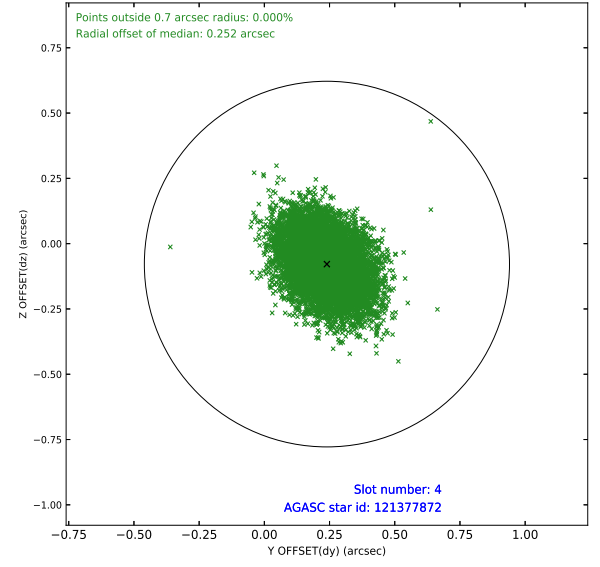
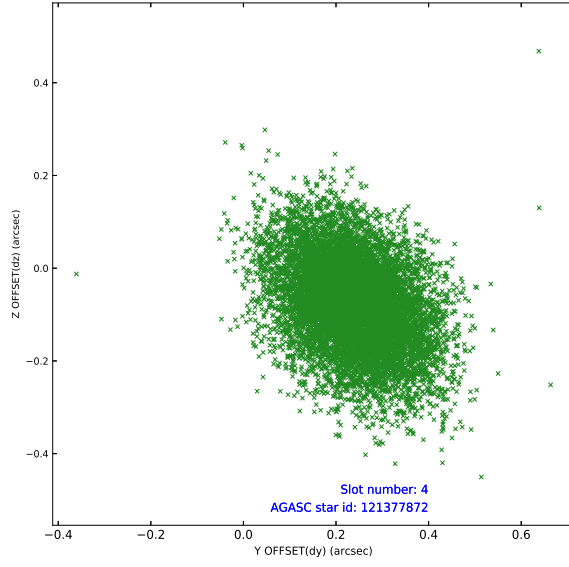
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-2	7.13	4922	1.000	-0.068	-0.035	0.038	0.051	0.000000	0.000000	-774.07	-1009
1	FID		ACIS-I-4	7.09	4921	1.000	0.001	0.024	0.014	0.021	0.000000	0.000000	2140.08	896
2	FID		ACIS-I-6	7.20	4923	1.000	-0.028	0.082	0.023	0.034	0.000000	0.000000	386.88	1538
3	GUIDE	used	121374608	8.17	9840	1.000	0.013	0.298	0.121	0.199	229.231600	14.224898	-1623.86	-1996
4	GUIDE	used	121377872	9.11	9839	1.000	0.240	-0.078	0.138	0.229	228.754541	13.759513	-400.92	25
5	GUIDE	used	121381016	9.01	9840	1.000	-0.022	-0.063	0.140	0.239	228.973703	13.064816	-1736.35	2275
6	GUIDE	used	121381656	7.07	9847	1.000	-0.115	-0.009	0.114	0.201	229.029733	13.470196	-1583.18	810
7	GUIDE	used	121383304	8.78	9839	1.000	-0.119	-0.146	0.120	0.202	228.341612	13.273353	593.75	2066

2.4 Star Slots

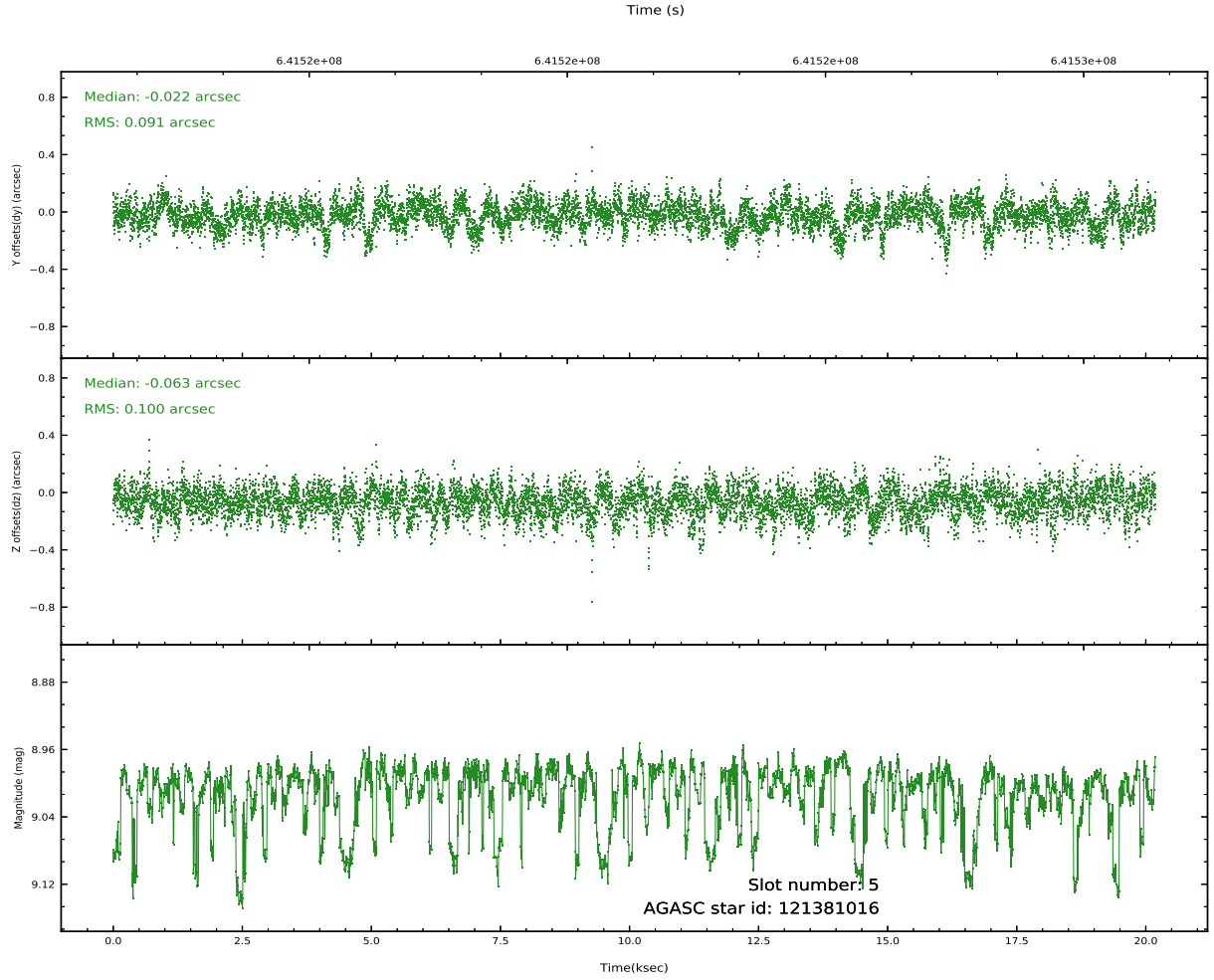
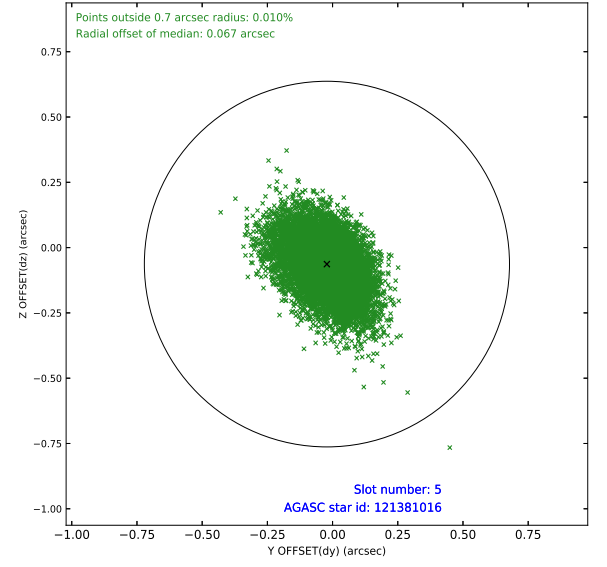
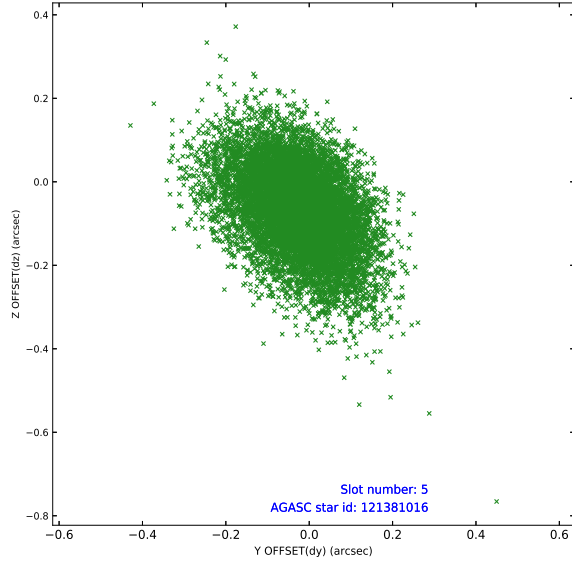
2.4.1 Slot 3



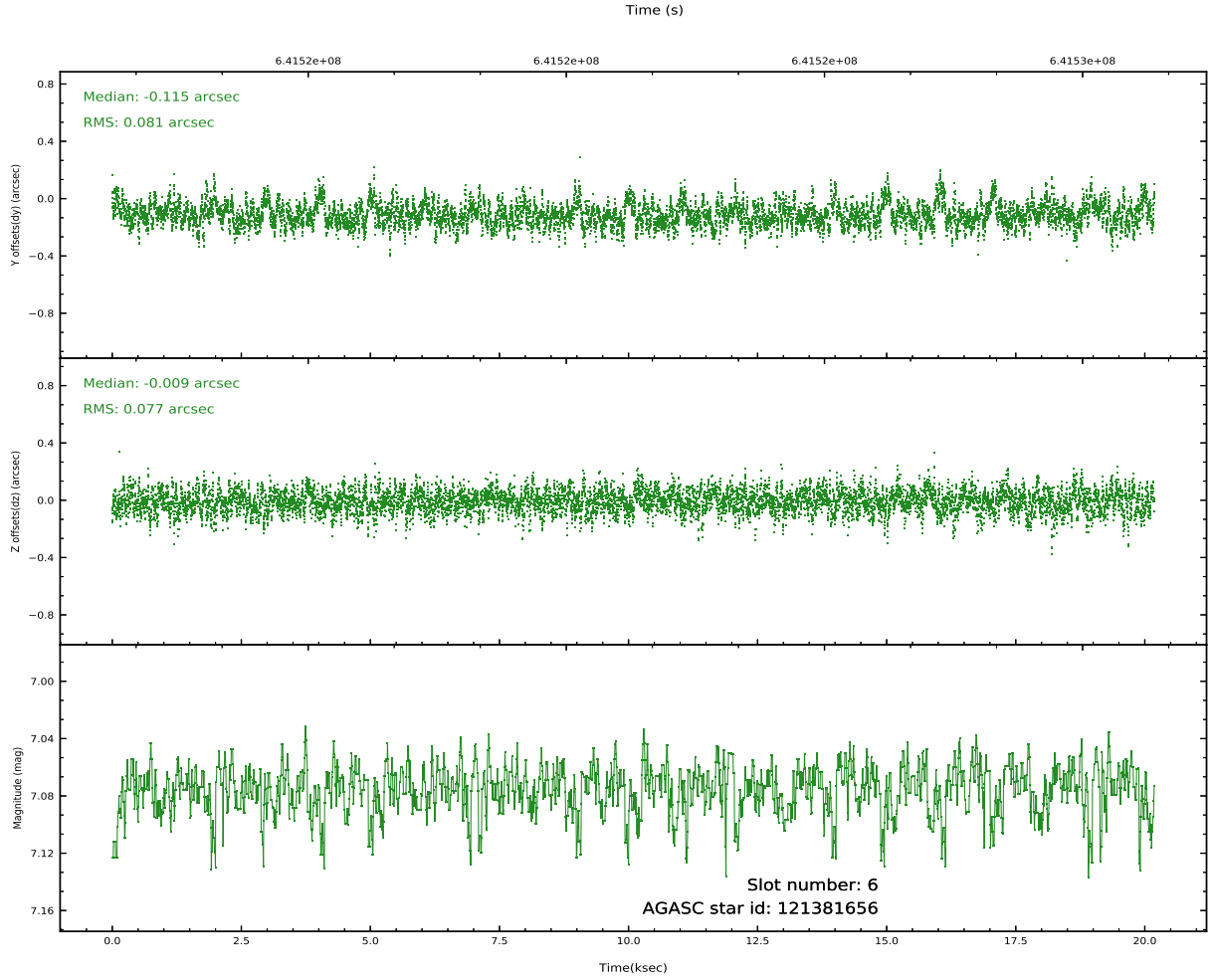
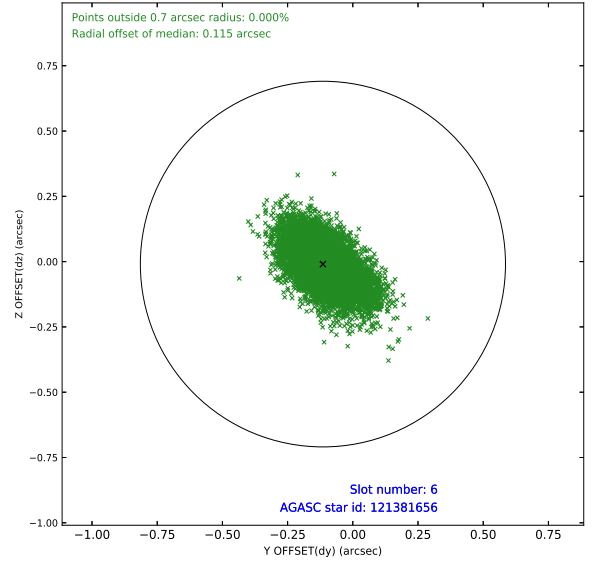
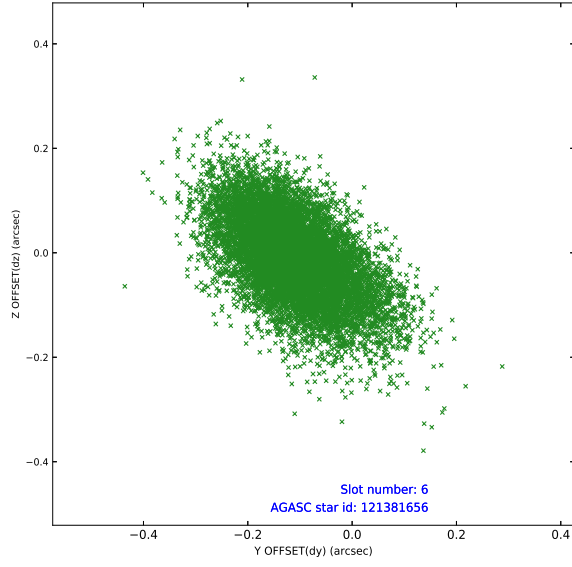
2.4.2 Slot 4



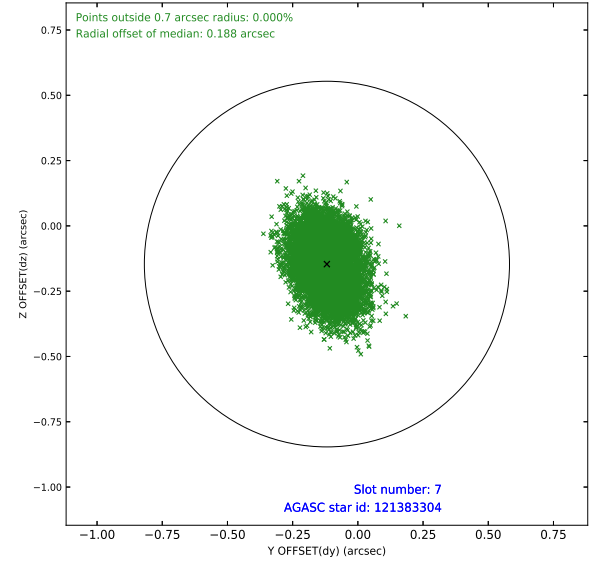
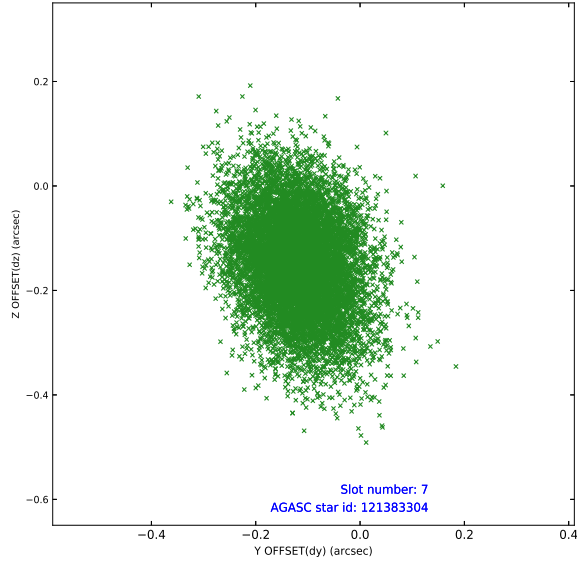
2.4.3 Slot 5



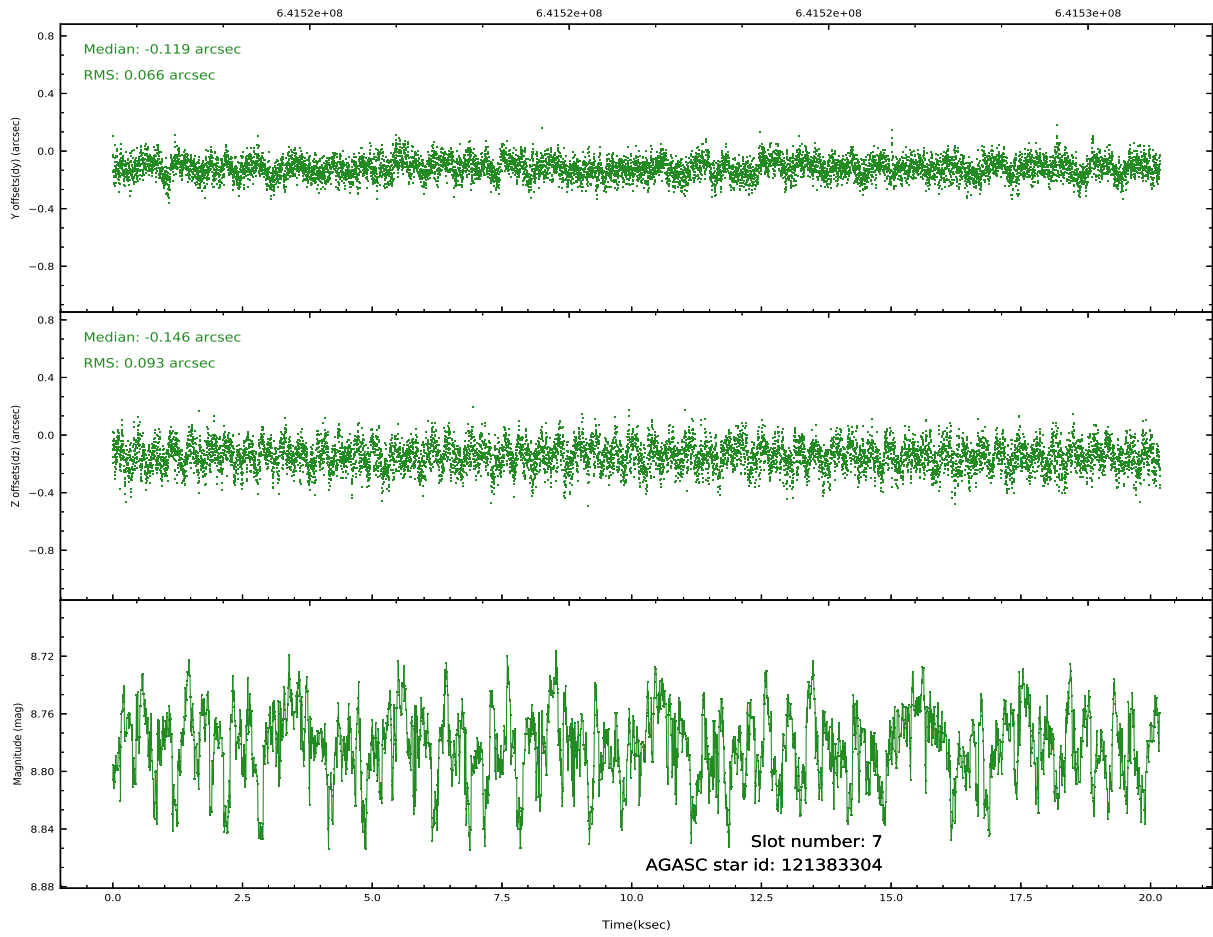
2.4.4 Slot 6



2.4.5 Slot 7

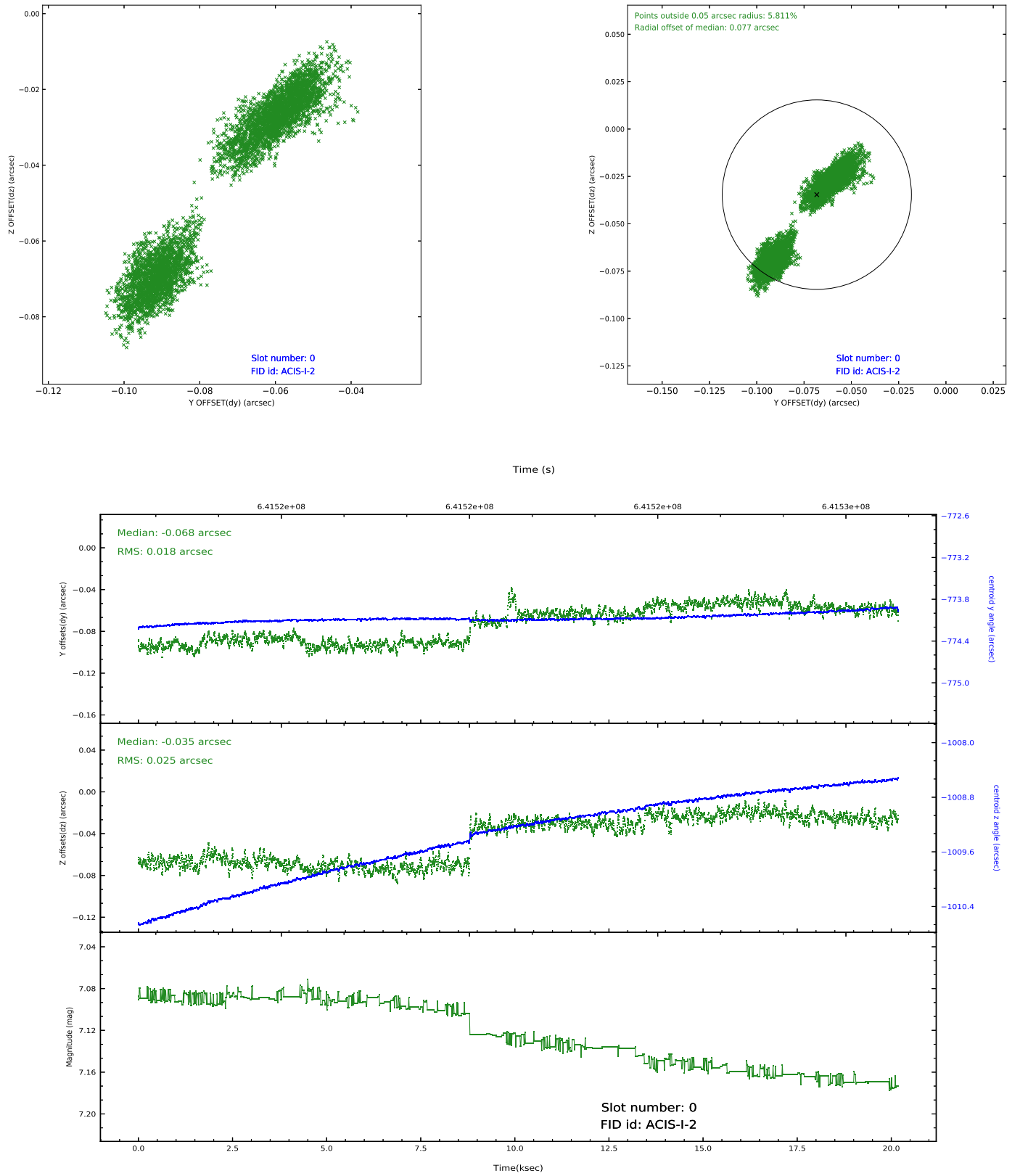


Time (s)

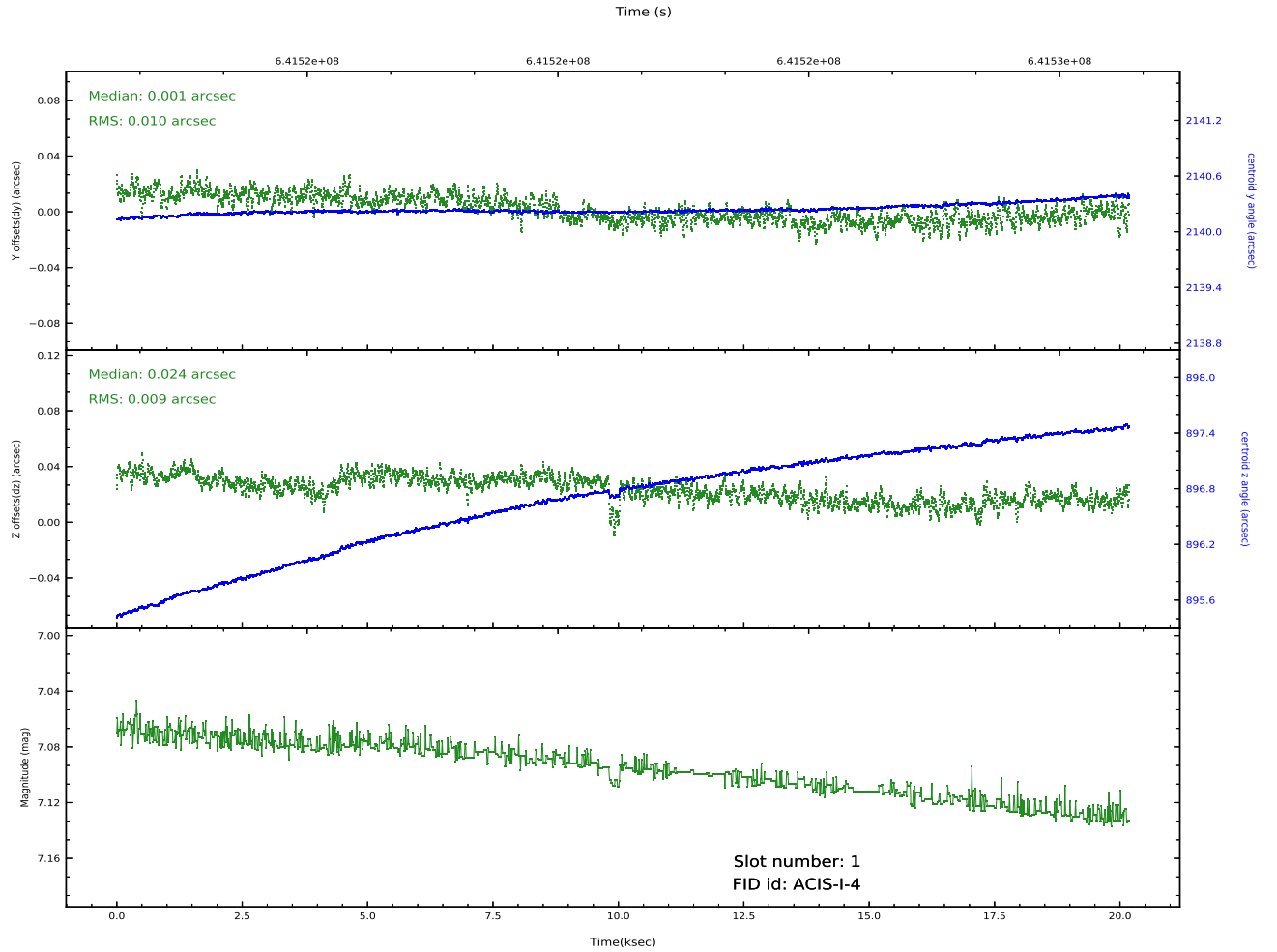
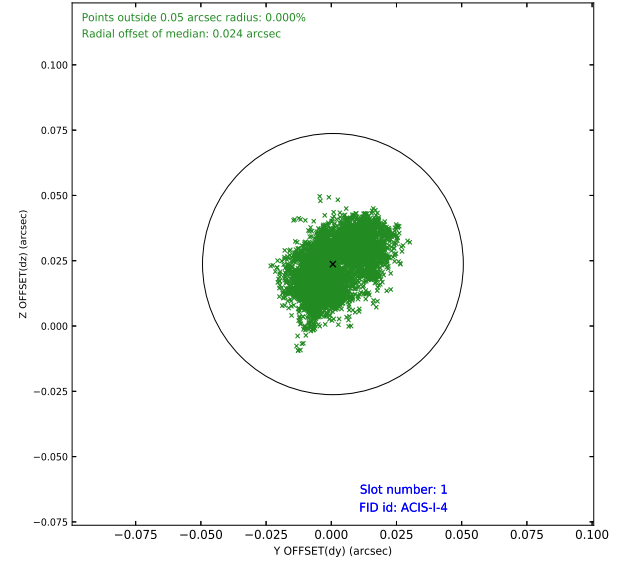
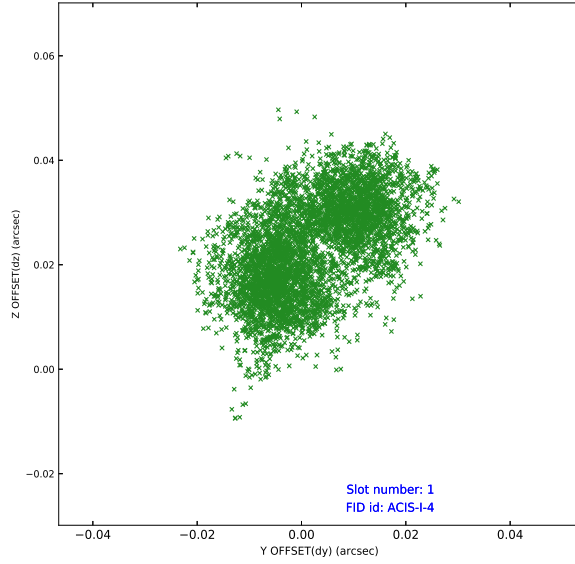


2.5 FID Slots

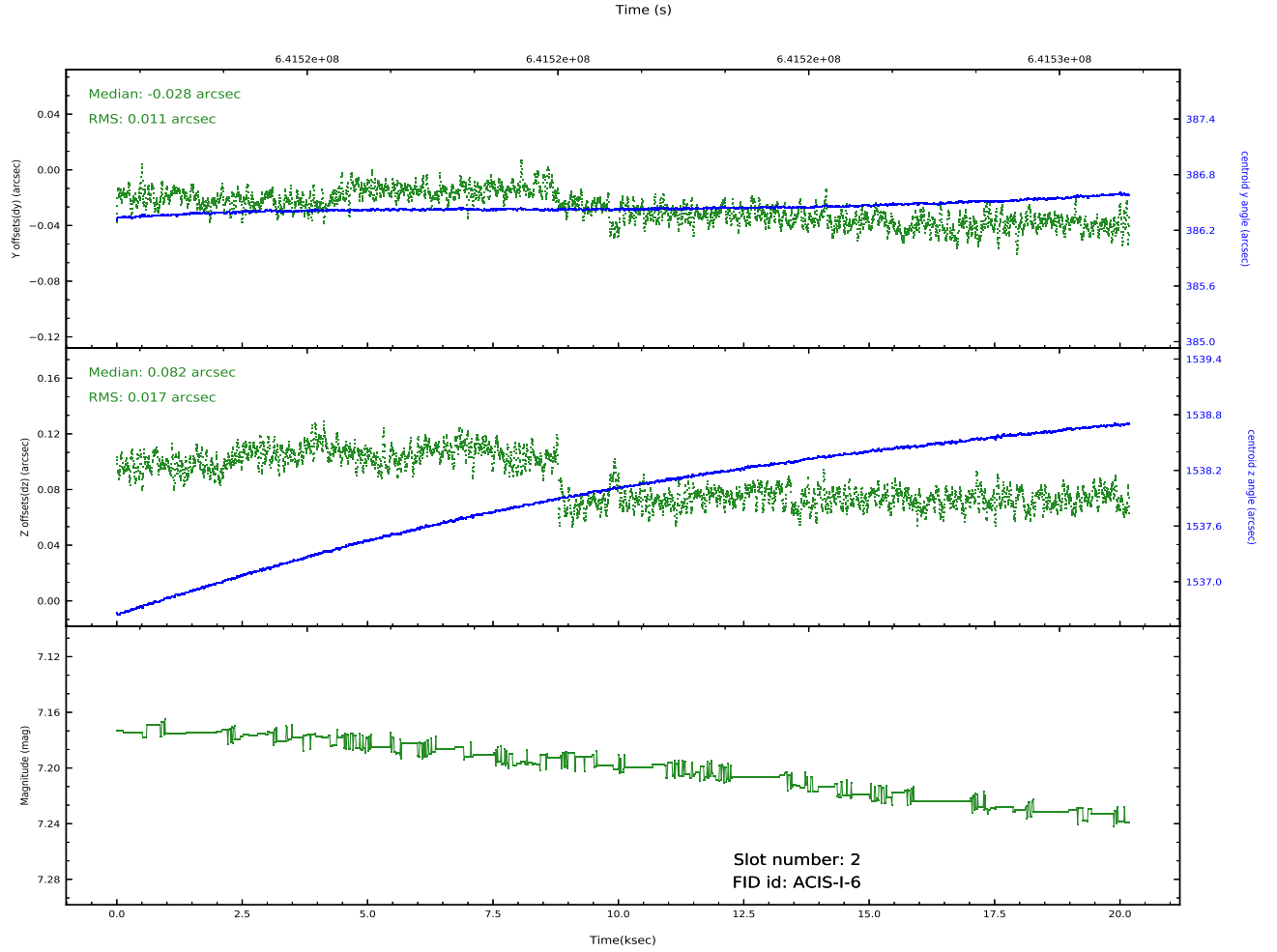
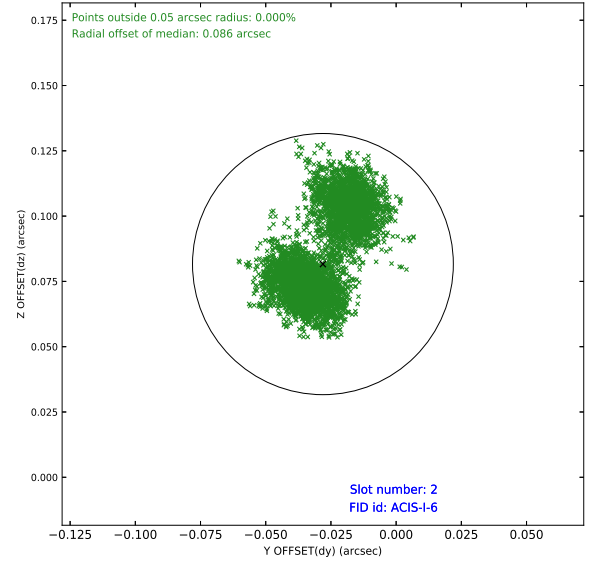
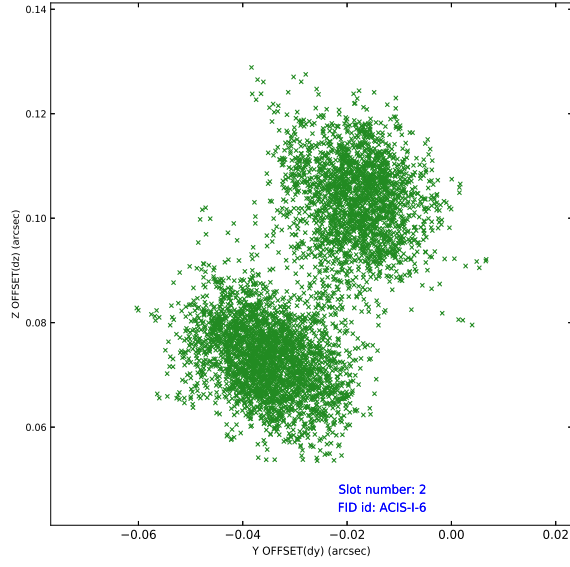
2.5.1 Slot 0



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)	2020.10.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.081800154567

A.2 Comments

Optional chip S2 not included.