

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5617 - L2 Version 4  
Chandra X-Ray Center

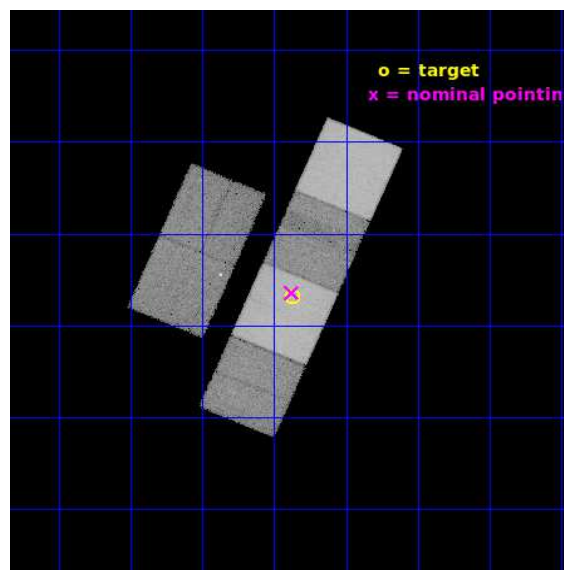
L2 Processing Date : Oct 9 2020

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# 1 Front

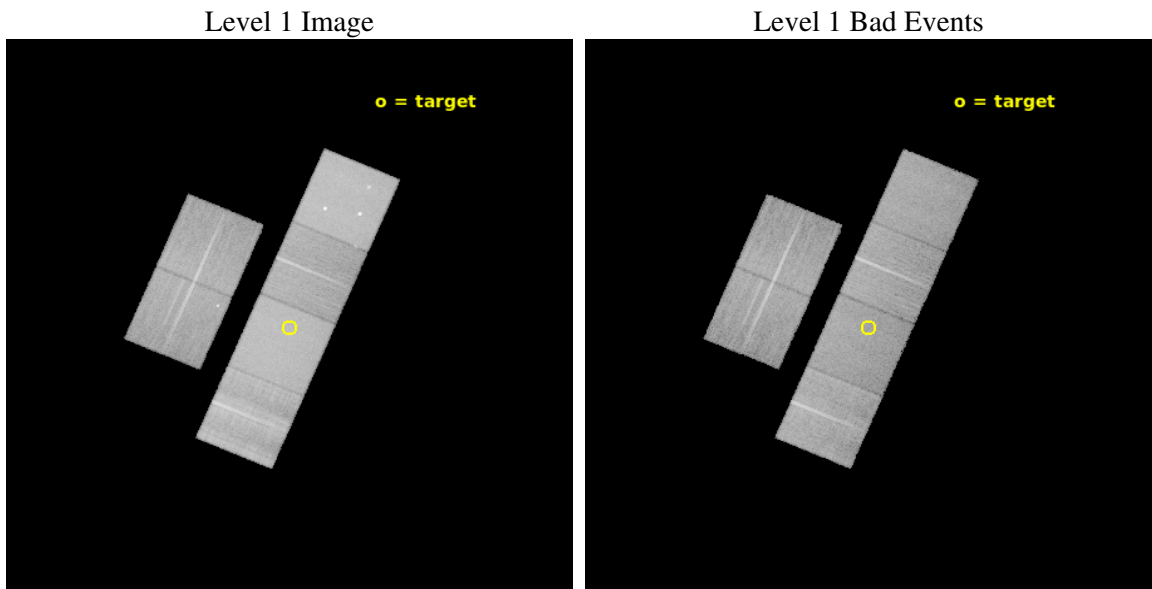
seq_num	701040	Sequence number
obs_id	5617	Observation id
title	A Chandra Survey of the Most Distant Quasars: X-raying the First Massive Black Holes	Proposal title
observer	William Brandt	Principal investigator
object	SDSS J0005-0006	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	1.467917	Observer's specified target RA [deg]
dec_targ	-0.1155	Observer's specified target Dec [deg]
ra_nom	1.4691995286375	Nominal RA [deg]
dec_nom	-0.10693177684712	Nominal Dec [deg]
roll_nom	113.07443683205	Nominal Roll [deg]
revision	4	Processing version of data
ontime	17148.247071892	Sum of GTIs [s]
livetime	16931.105642033	Livetime [s]
ontime2	17148.288111895	Sum of GTIs [s]
ontime3	17148.123951882	Sum of GTIs [s]
ontime5	17148.206031889	Sum of GTIs [s]
ontime6	17148.164991885	Sum of GTIs [s]
ontime7	17148.247071892	Sum of GTIs [s]
ontime8	17148.082911909	Sum of GTIs [s]
l2events	419183	Number of level 2 events



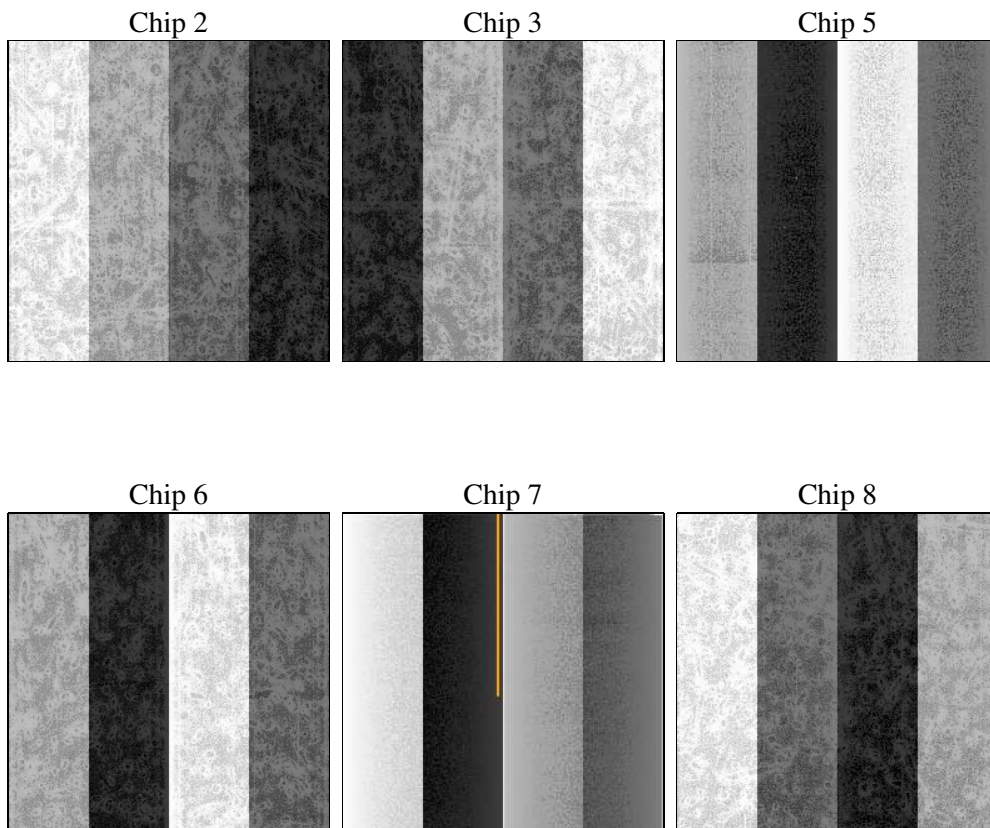
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	3	Obi number	sched_exp_time	17194.092000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	17148.247071892	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime2	17148.288111895	Sum of GTIs [s]
date	2020-10-09T14:27:28	Date and time of file creation	ontime3	17148.123951882	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	17148.206031889	Sum of GTIs [s]
			ontime6	17148.164991885	Sum of GTIs [s]
			ontime7	17148.247071892	Sum of GTIs [s]
			ontime8	17148.082911909	Sum of GTIs [s]
			l1events	1265403	Number of level 1 events

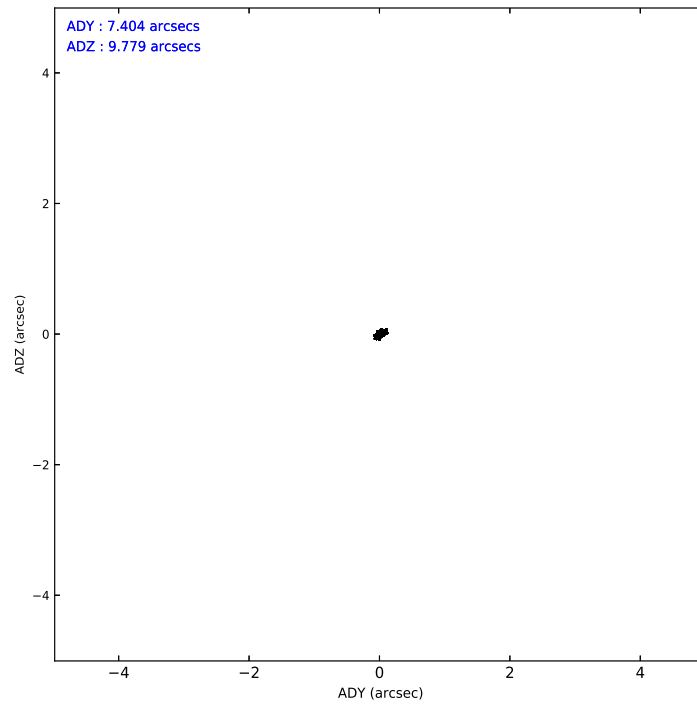
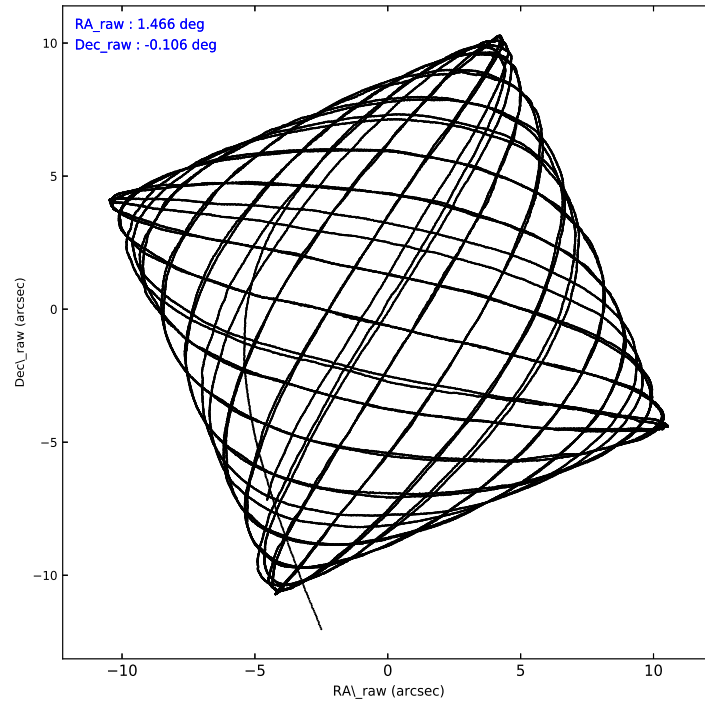
### 2.1.4 Events

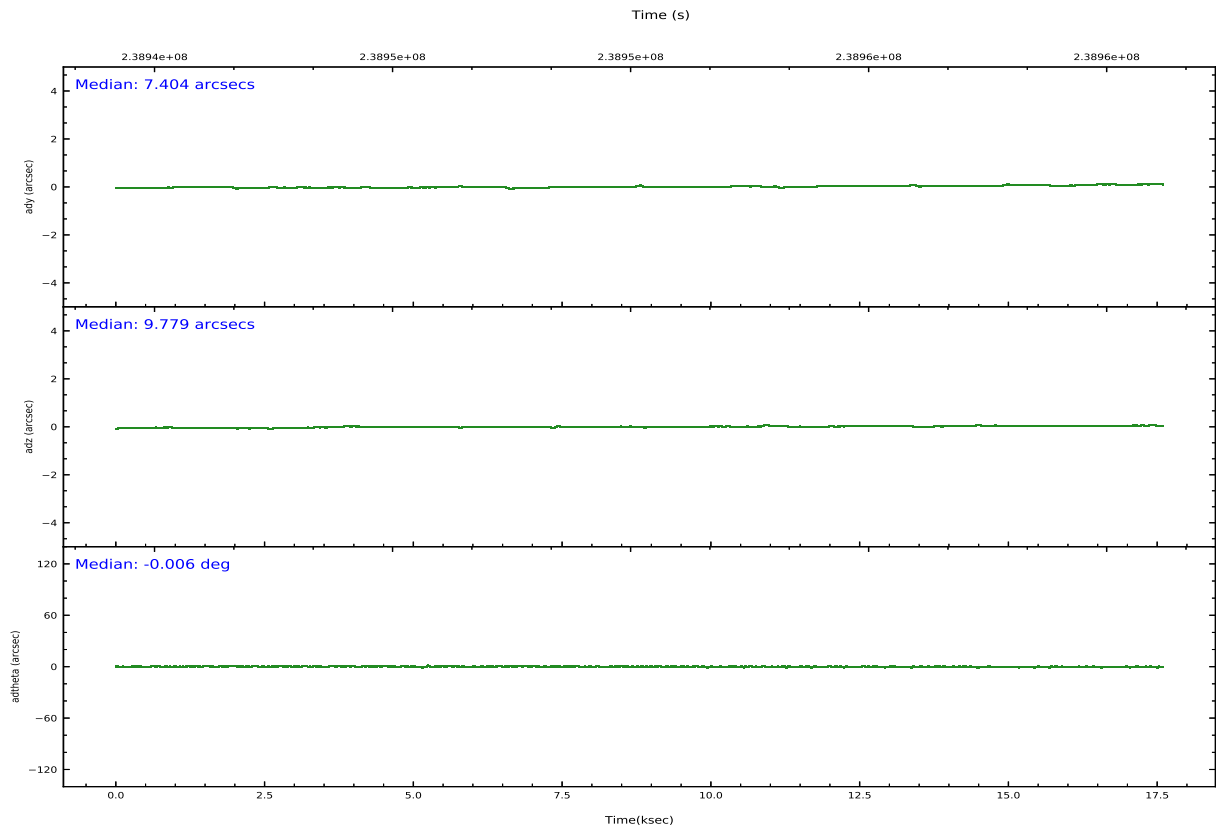
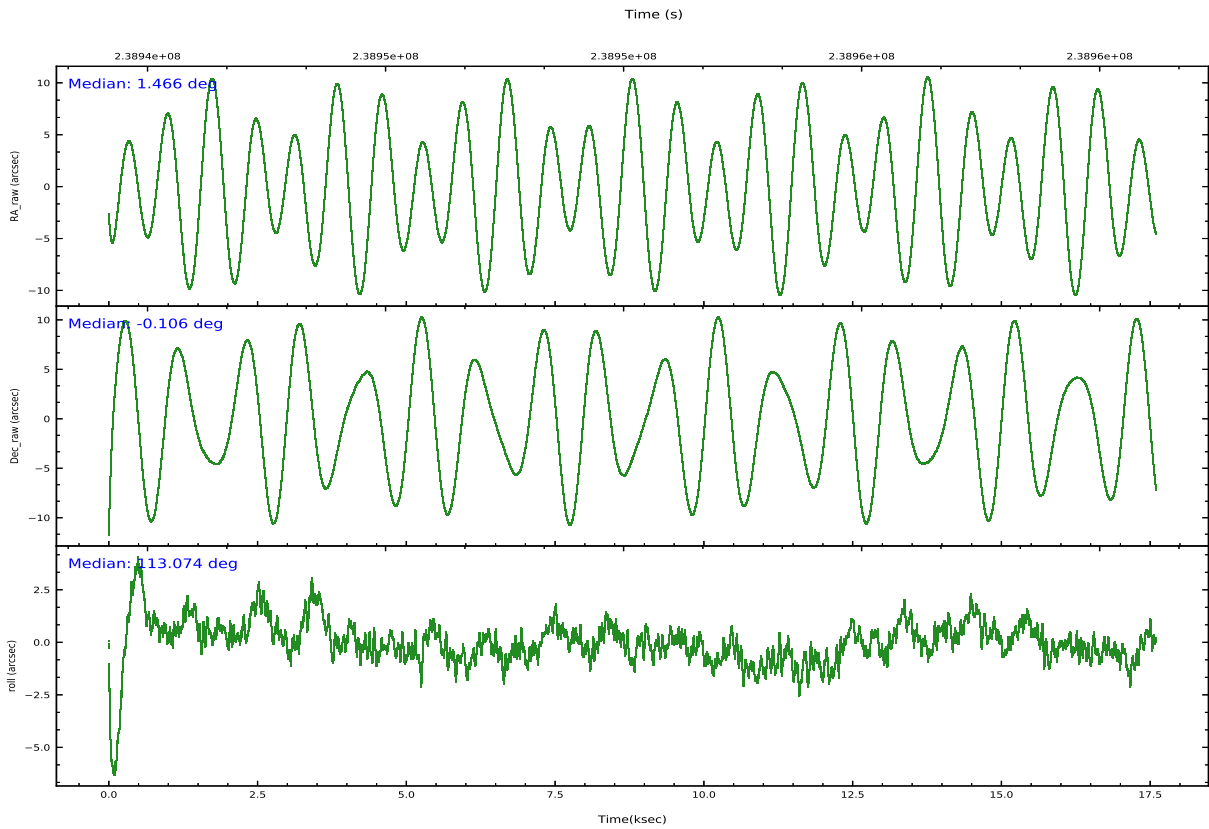
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	165676	156991	278806	170700	256281	236949	grade 0 events	19749	19332	19870	20857	14578	34159
rejected events	131232	123466	120474	133257	111955	148581		11%	12%	7%	12%	5%	14%
rejected %	79%	78%	43%	78%	43%	62%	grade 1 events	153	167	334	133	214	226
								0%	0%	0%	0%	0%	0%
							grade 2 events	6342	5781	48889	7364	27573	16485
								3%	3%	17%	4%	10%	6%
							grade 3 events	1986	2158	6777	2130	11879	9534
								1%	1%	2%	1%	4%	4%
							grade 4 events	2260	2118	6493	2112	11592	8663
								1%	1%	2%	1%	4%	3%
							grade 5 events	5376	6119	16138	6377	18404	8697
								3%	3%	5%	3%	7%	3%
							grade 6 events	4142	4164	76489	5039	78883	19583
								2%	2%	27%	2%	30%	8%
							grade 7 events	125668	117152	103816	126688	93158	139602
								75%	74%	37%	74%	36%	58%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	1.487736	1.4691995286375	Subarray requested	NONE	NONE
[deg] Pointing Dec	-0.122137	-0.10693177684712	Alternating exposures requested	N	N
[deg] Pointing Roll	112.923145	113.07443683205	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	238943755.184000	238942682.44335			
Observation start date	2005-07-28T13:14:51	2005-07-28T12:58:02			
[s] Observation end time (MET)	238960949.184000	238961170.3692			
Observation end date	2005-07-28T18:01:25	2005-07-28T18:06:10			
Read mode	TIMED	TIMED			

## 2.3 Aspect





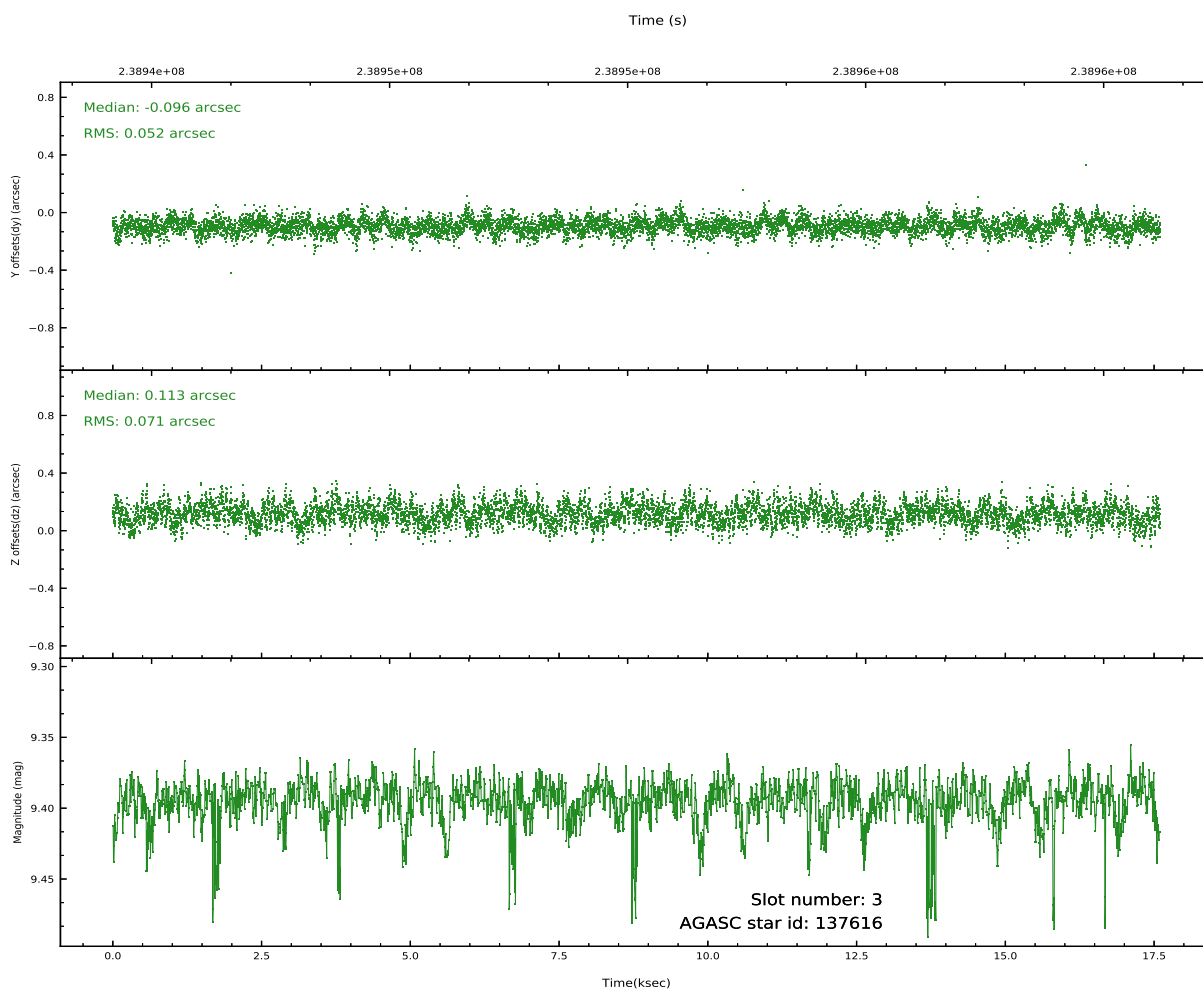
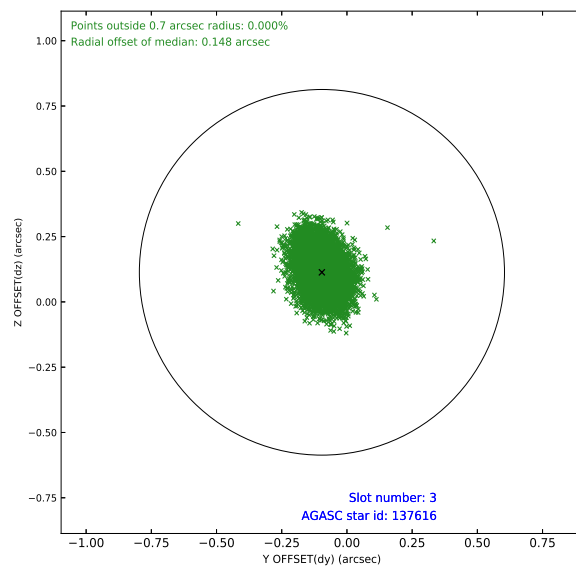
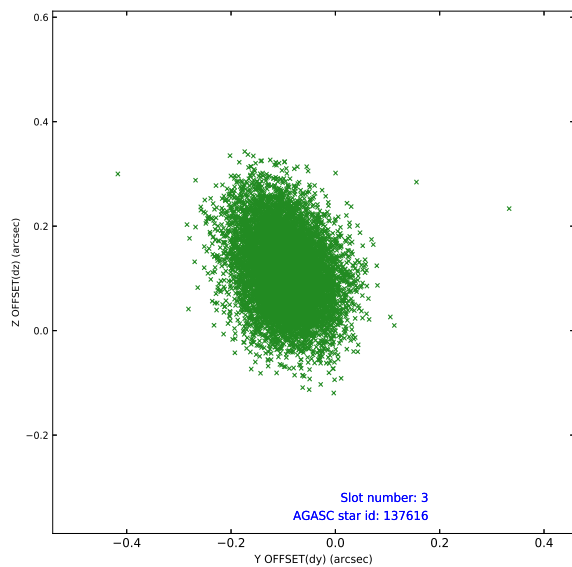
### Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-2	7.10	4293	1.000	-0.079	-0.069	0.007	0.011	0.000000	0.000000	-760.19	-1731
1	FID		ACIS-S-4	7.21	4293	1.000	0.162	0.057	0.005	0.010	0.000000	0.000000	2153.15	177
2	FID		ACIS-S-5	7.23	4293	1.000	-0.115	0.021	0.007	0.011	0.000000	0.000000	-1812.83	171
3	GUIDE	used	137616	9.39	8571	1.000	-0.096	0.113	0.093	0.153	1.910737	0.179097	406.12	-1824
4	GUIDE	used	138632	9.40	8574	1.000	-0.037	0.117	0.097	0.165	1.786186	0.339837	1113.75	-1637
5	GUIDE	used	138904	9.24	8578	1.000	0.043	0.115	0.121	0.201	1.959050	0.129938	175.25	-1916
6	GUIDE	used	611189096	6.17	8587	1.000	0.102	-0.213	0.052	0.090	1.265931	-0.503035	-952.30	1268
7	GUIDE	used	611192512	9.11	8579	1.000	-0.015	-0.132	0.090	0.145	1.062008	-0.007399	977.19	1251

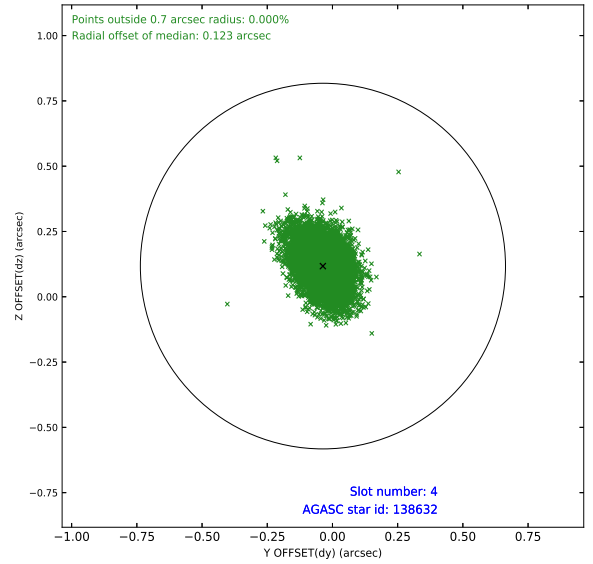
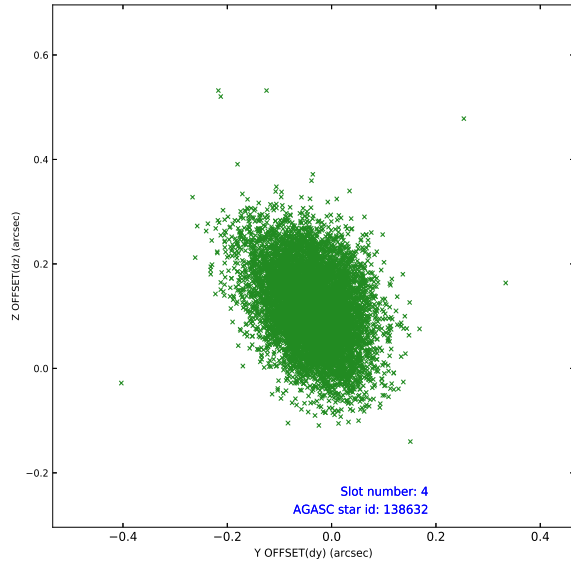
∞

## 2.4 Star Slots

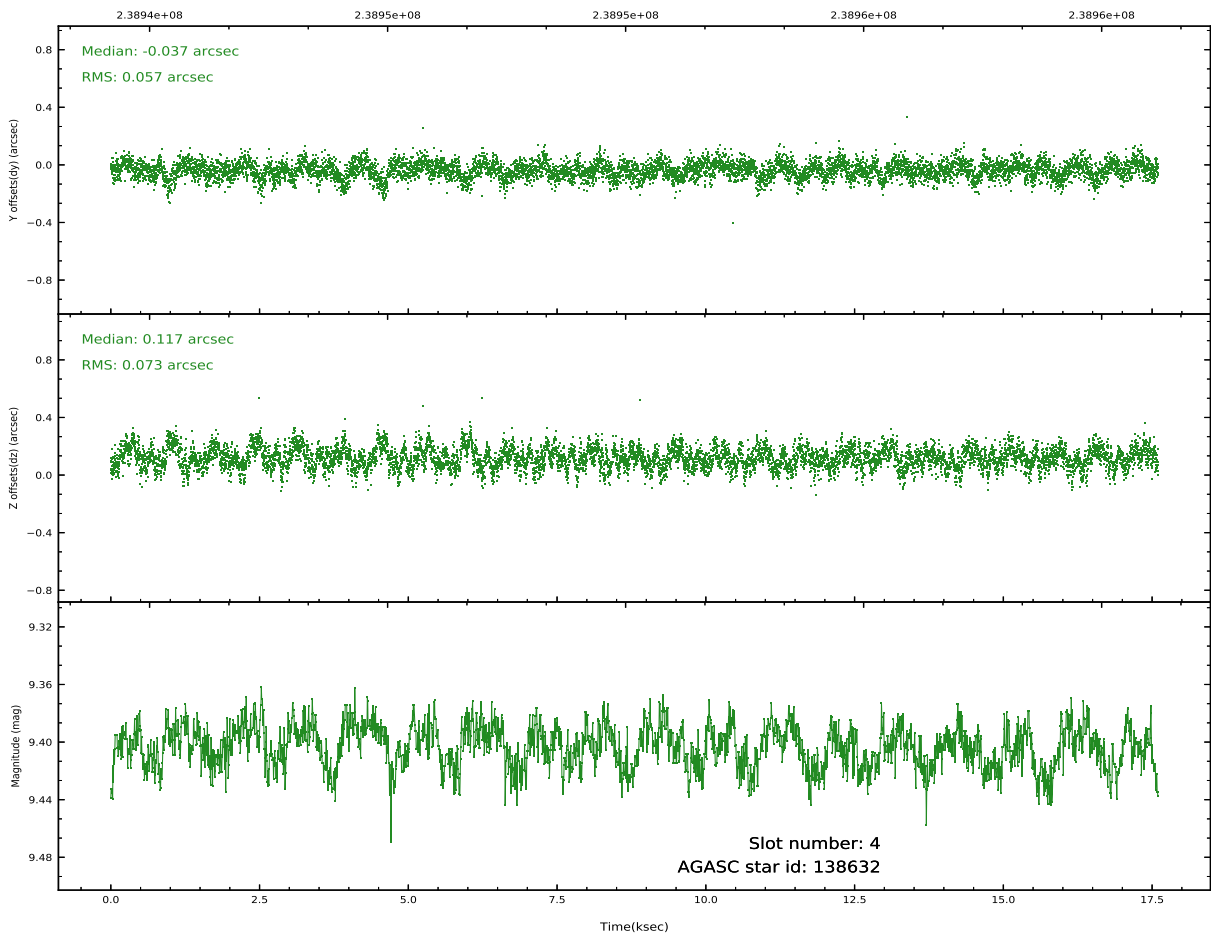
### 2.4.1 Slot 3



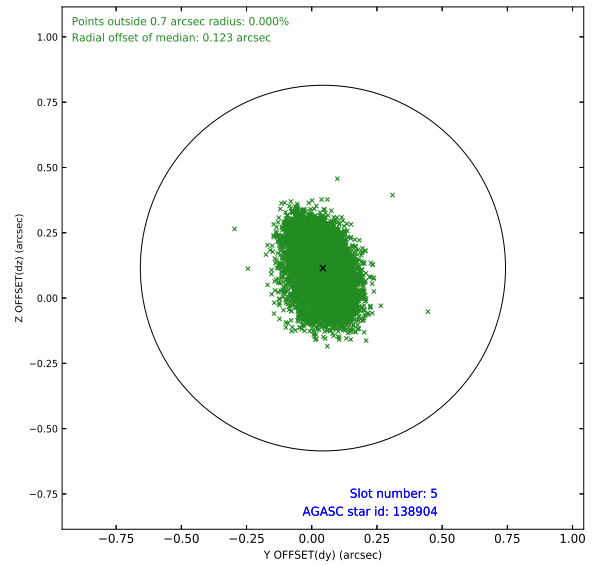
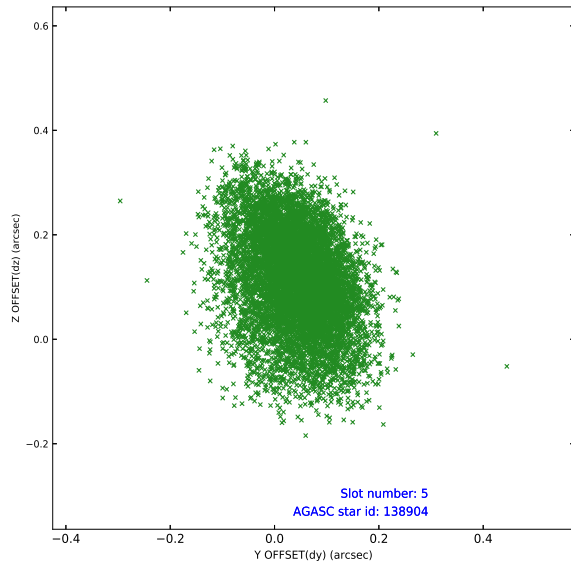
## 2.4.2 Slot 4



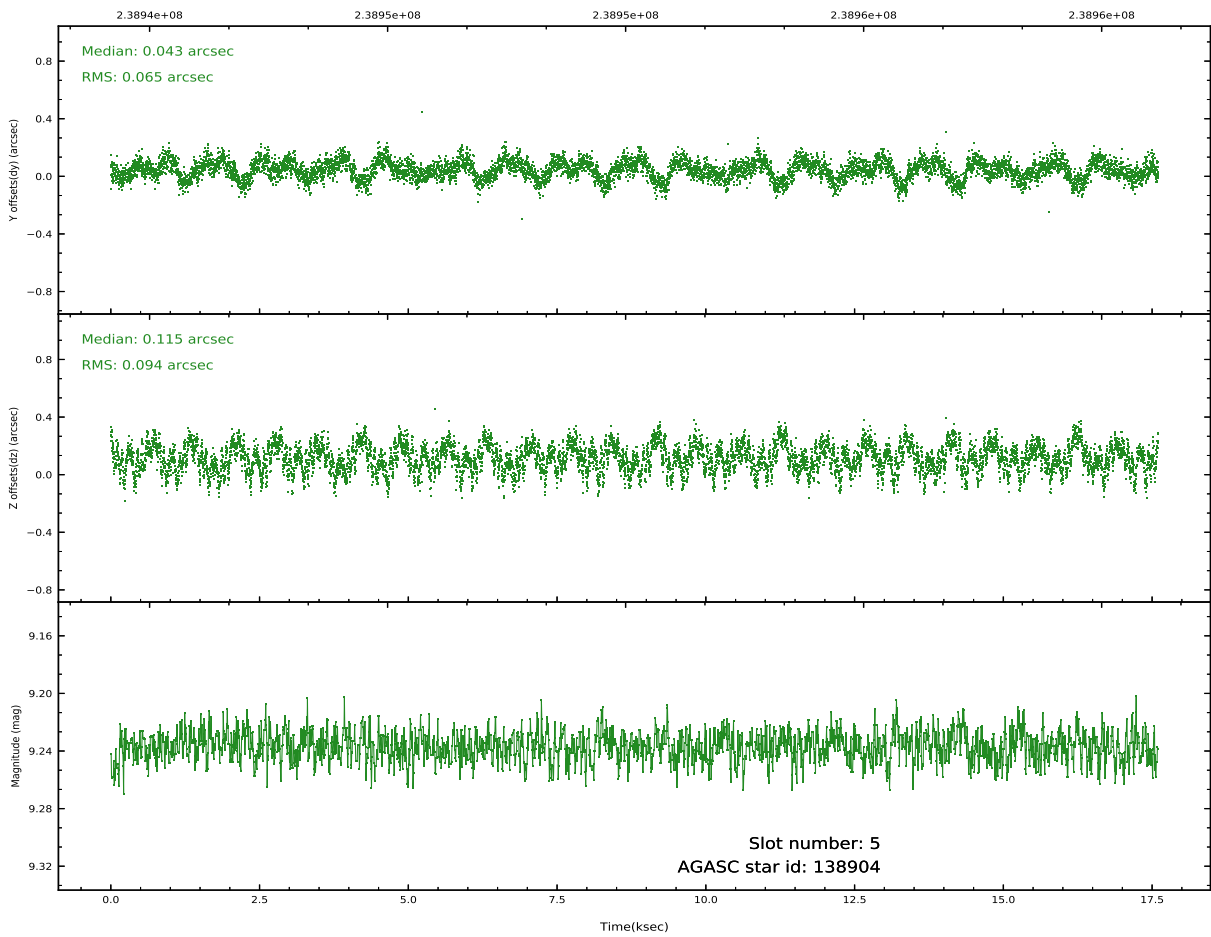
Time (s)



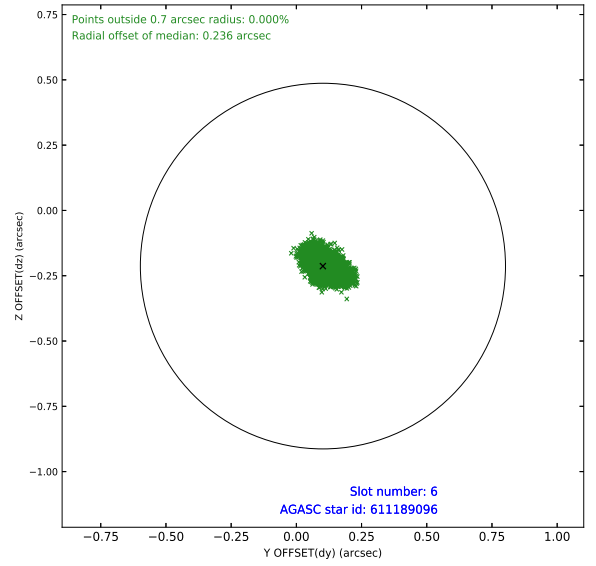
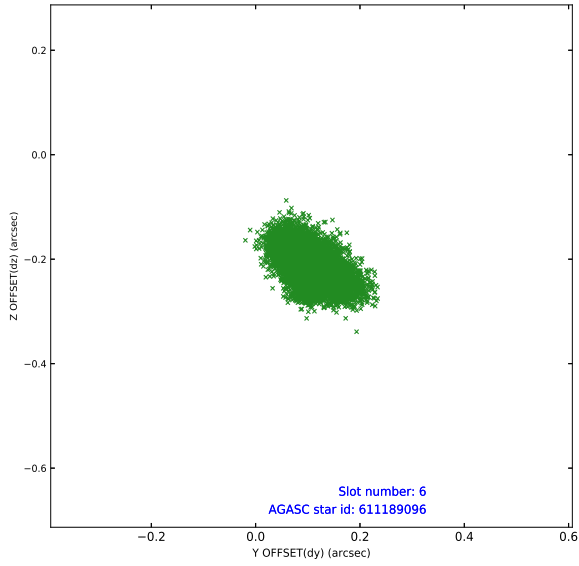
### 2.4.3 Slot 5



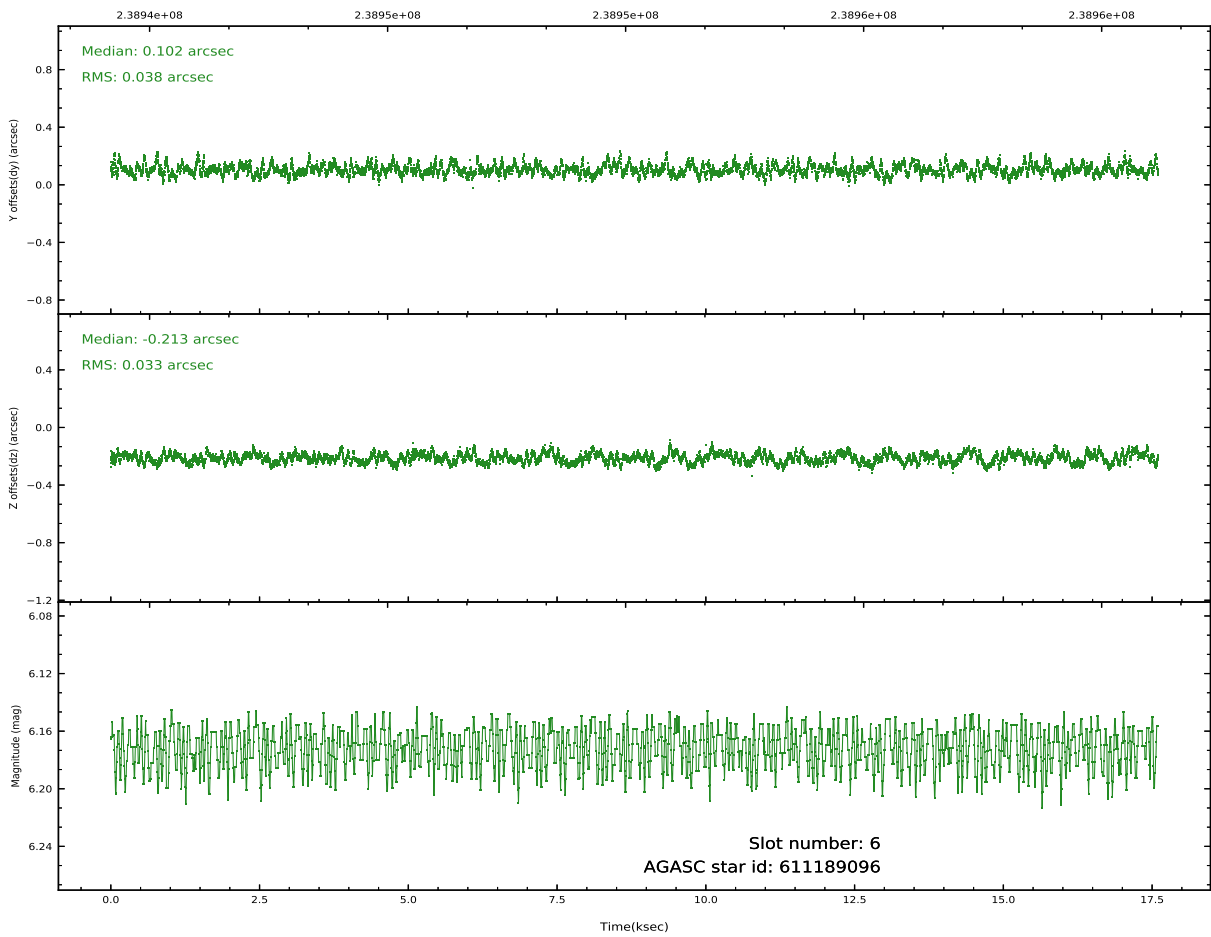
Time (s)



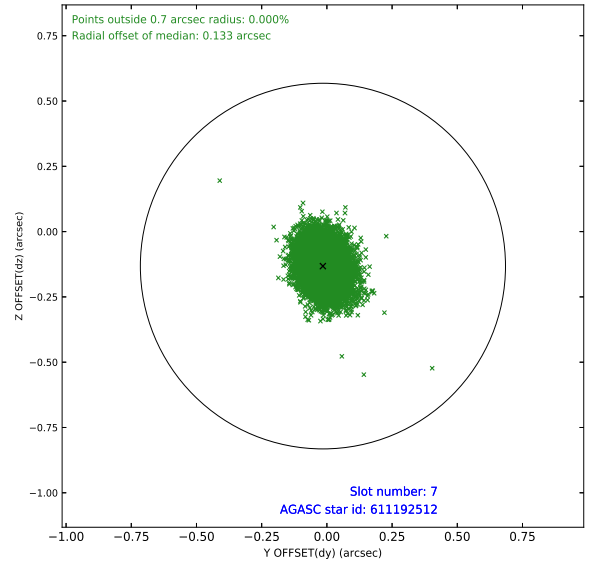
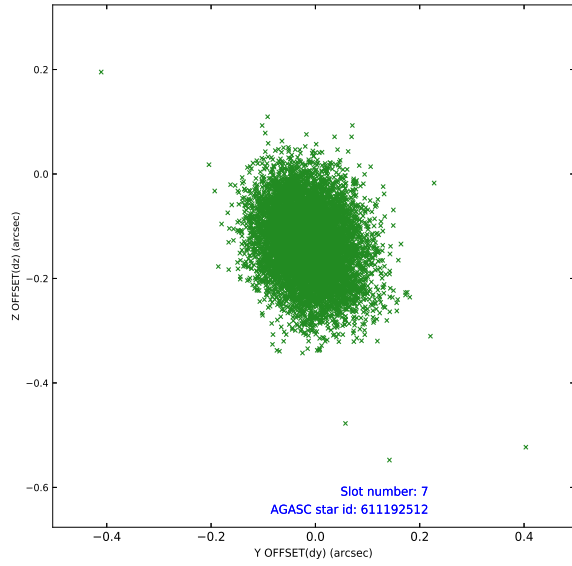
## 2.4.4 Slot 6



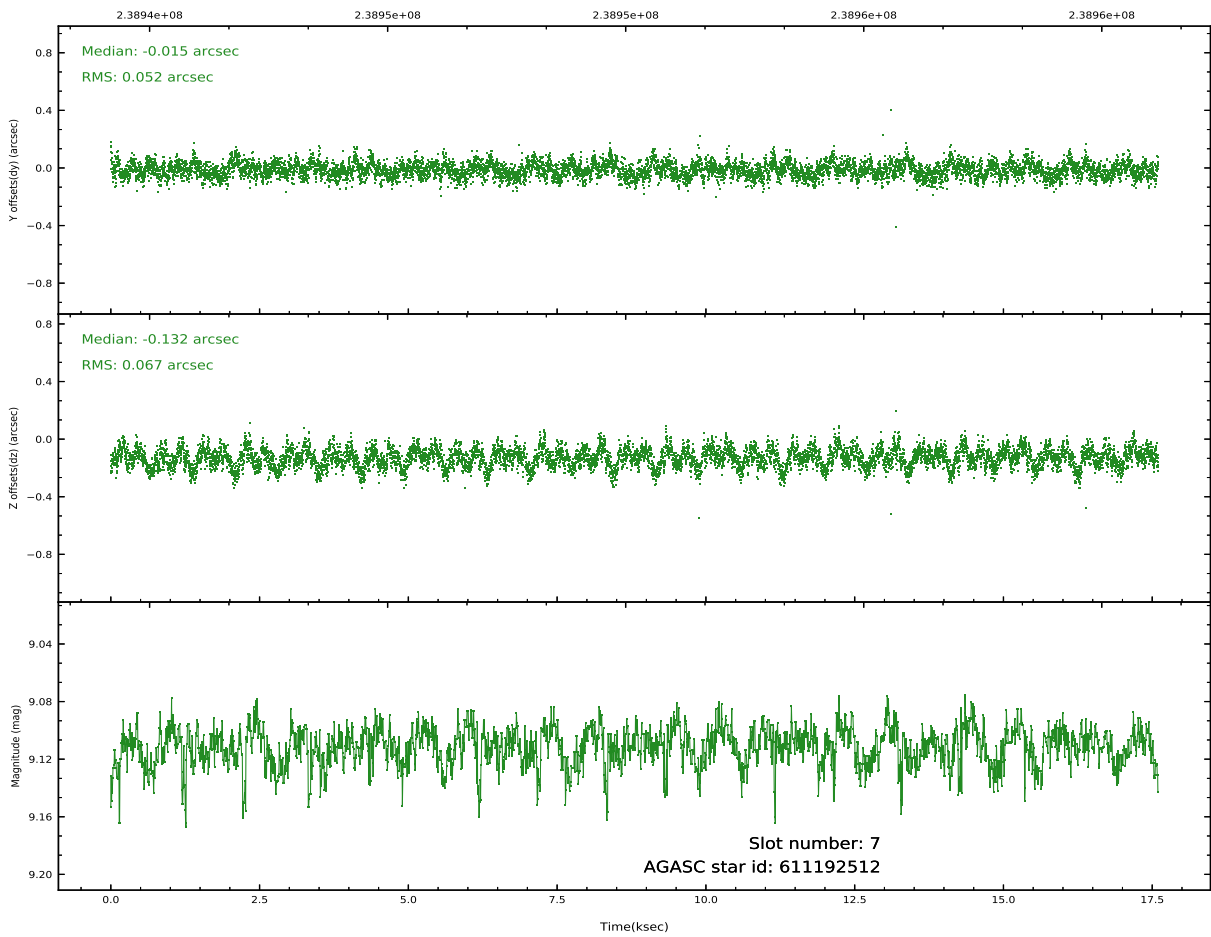
Time (s)



## 2.4.5 Slot 7

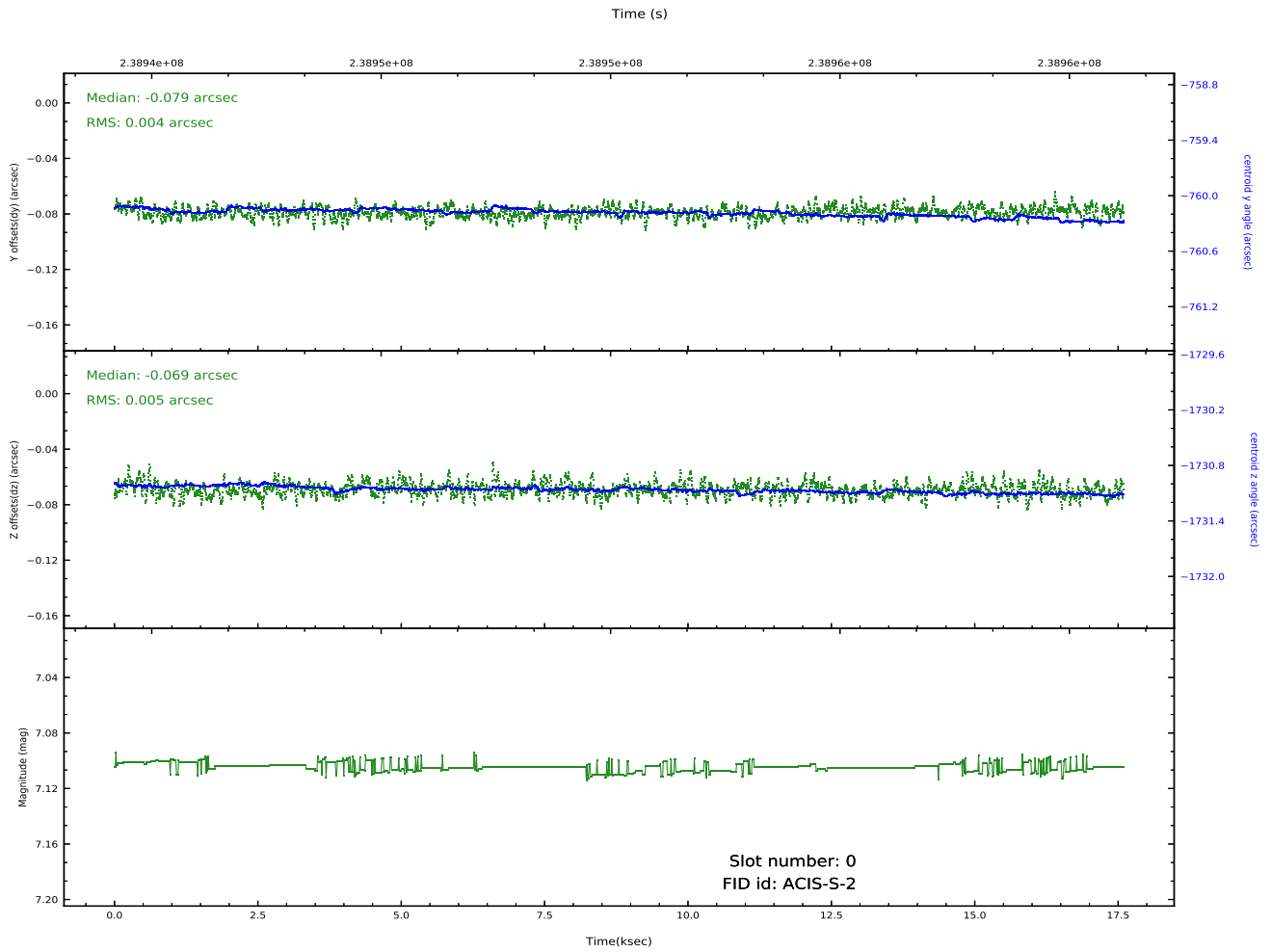
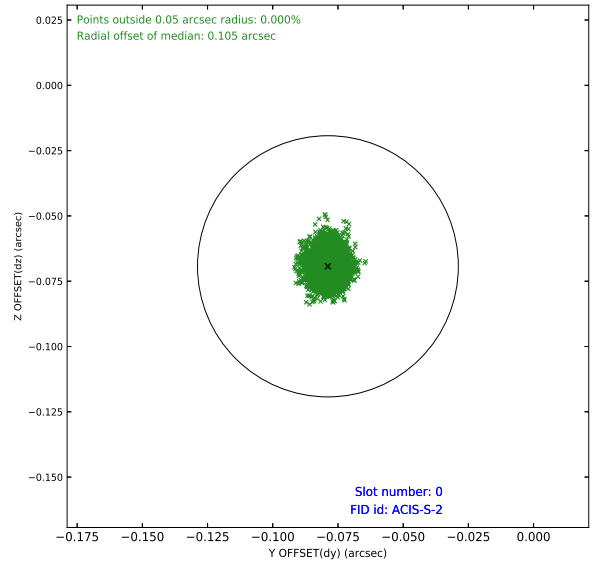
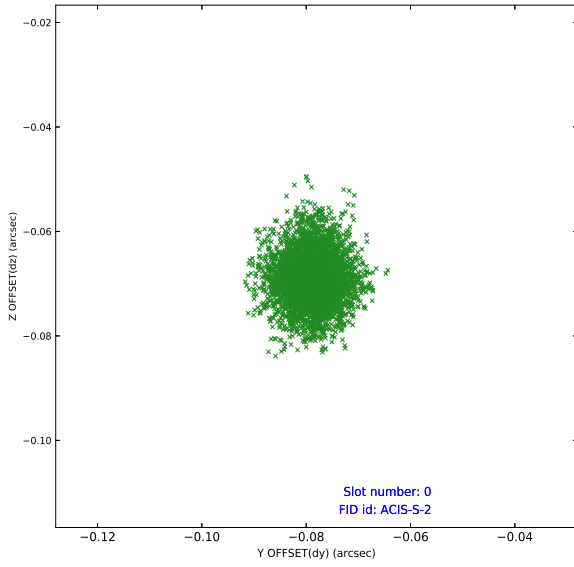


Time (s)

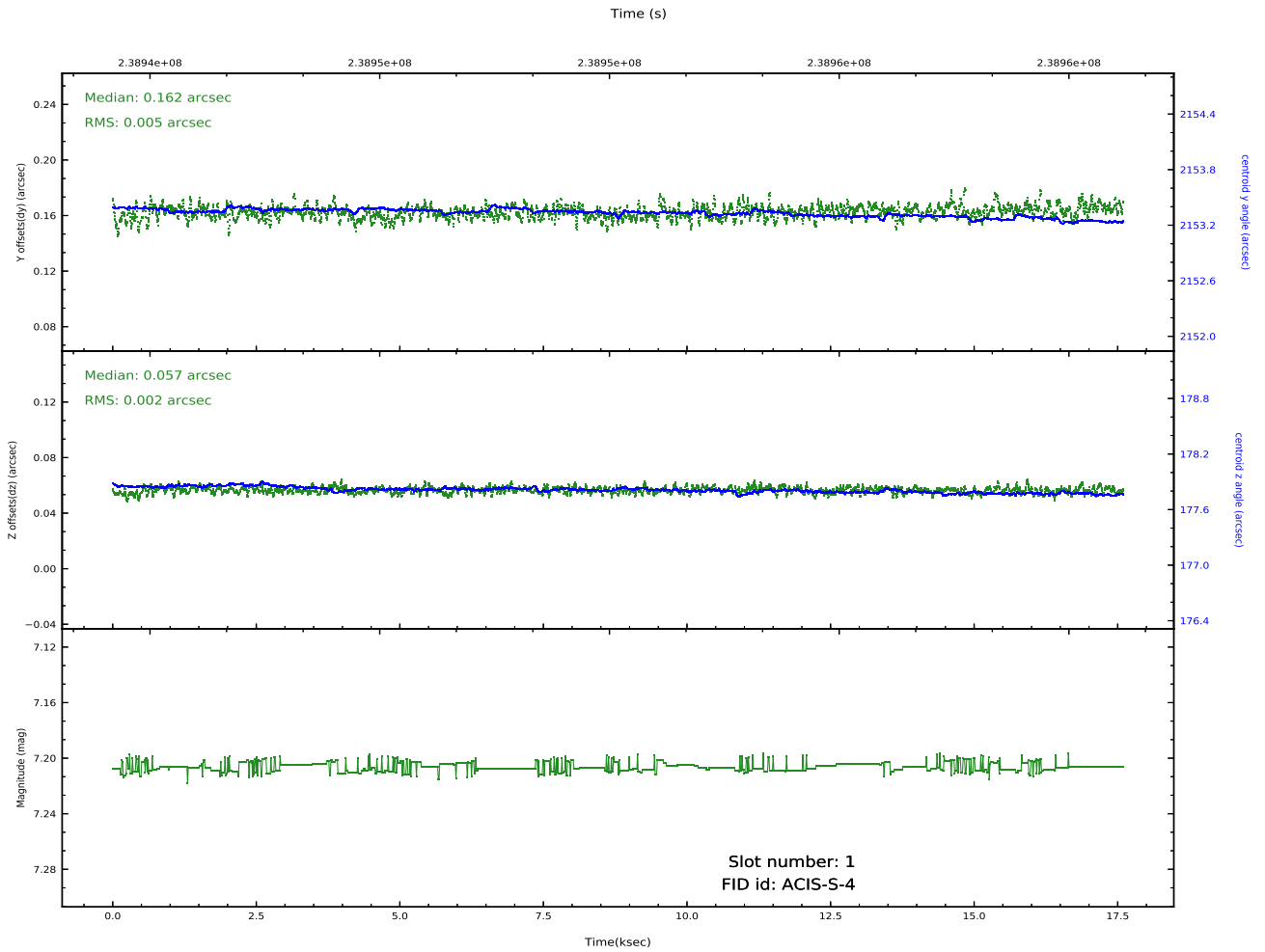
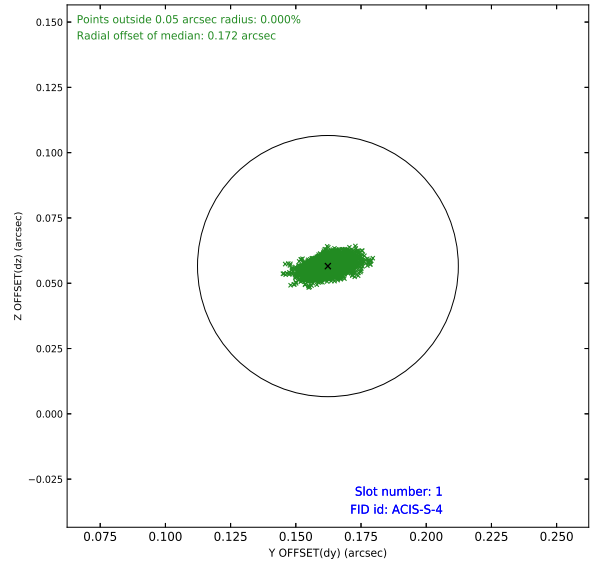
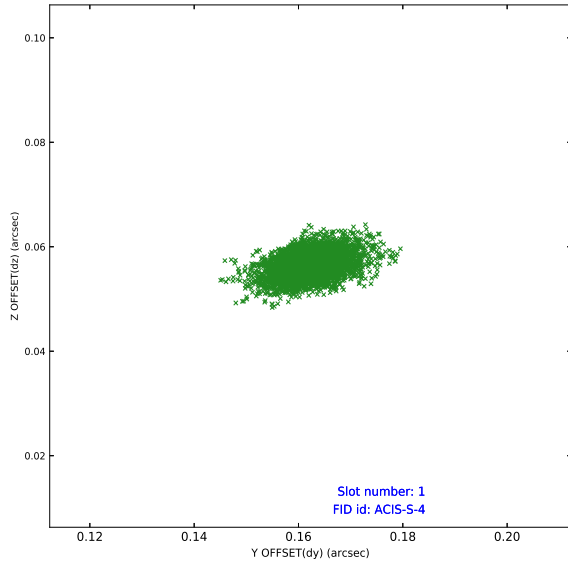


## 2.5 FID Slots

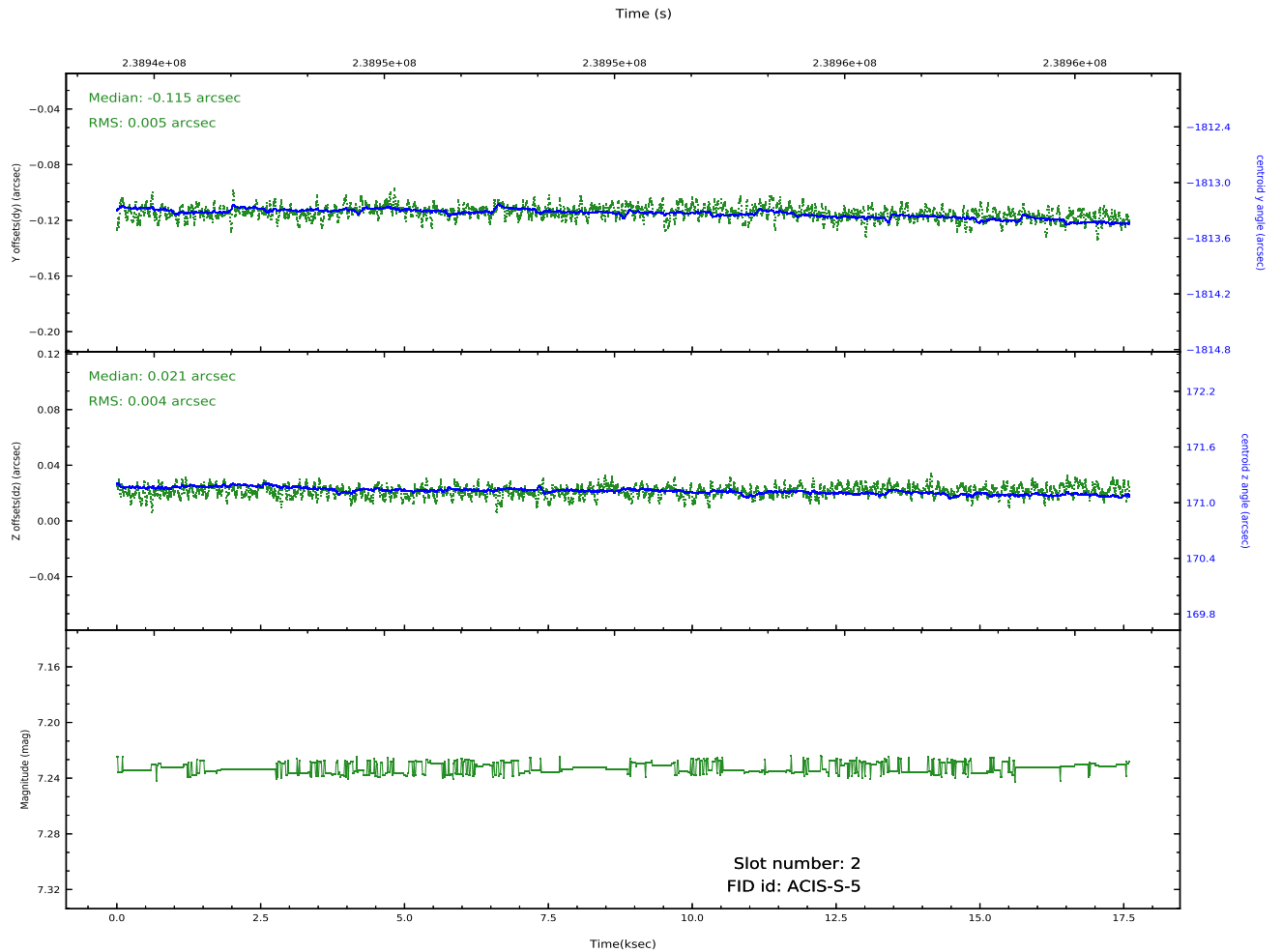
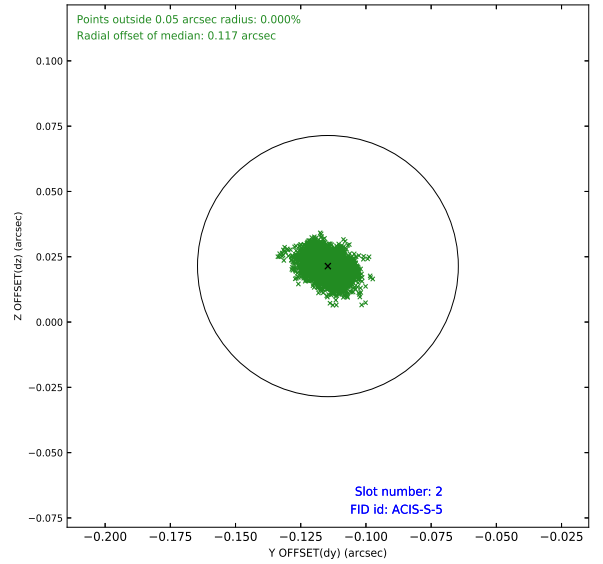
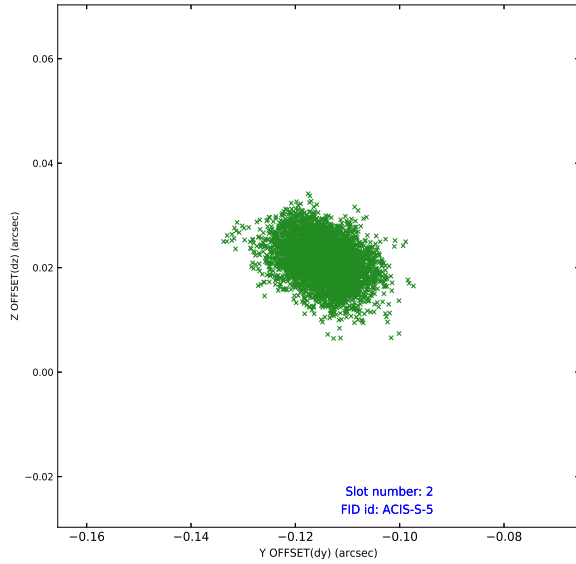
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Francesca Civano
V&V Date (YYYY-MM-DD)	2020.10.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	17.15467

## A.2 Comments