

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5911 - L2 Version 3  
Chandra X-Ray Center

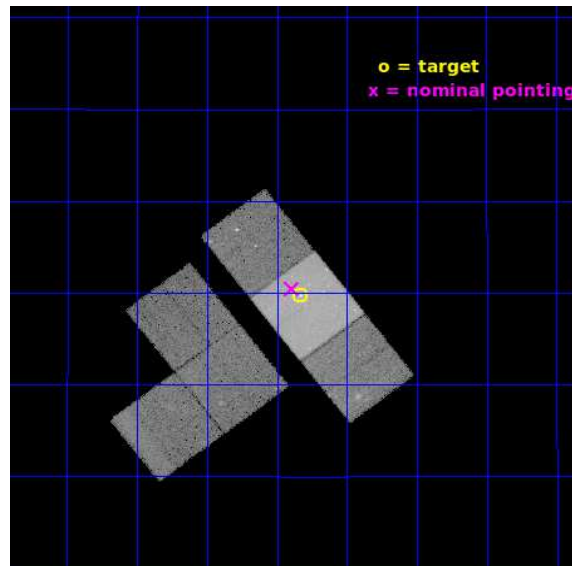
L2 Processing Date : Oct 11 2020

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# 1 Front

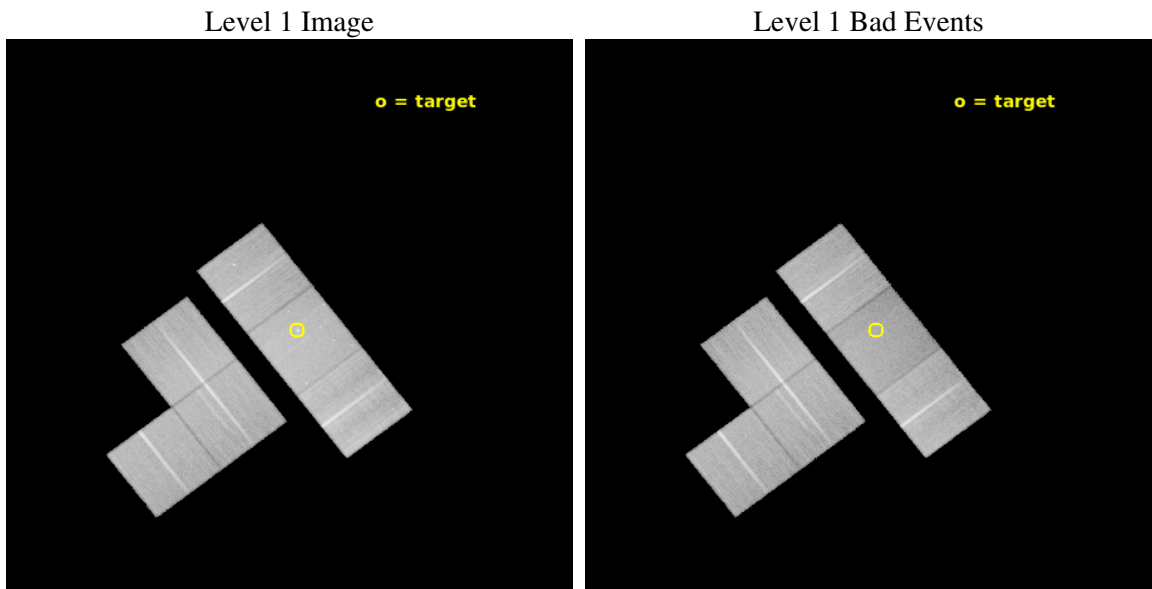
seq_num	600430	Sequence number
obs_id	5911	Observation id
title	Ram Pressure Stripping of the Virgo Spiral NGC 4569 (M90)	Proposal
observer	prof jeffrey kenney	Principal investigator
object	NGC 4569	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	189.2075	Observer's specified target RA [deg]
dec_targ	13.162778	Observer's specified target Dec [deg]
ra_nom	189.22327212285	Nominal RA [deg]
dec_nom	13.17445844797	Nominal Dec [deg]
roll_nom	52.432096721057	Nominal Roll [deg]
revision	3	Processing version of data
ontime	39647.9998523	Sum of GTIs [s]
livetime	39145.953005011	Livetime [s]
ontime1	39641.518001378	Sum of GTIs [s]
ontime2	39635.036040962	Sum of GTIs [s]
ontime3	39641.517891824	Sum of GTIs [s]
ontime6	39647.9998523	Sum of GTIs [s]
ontime7	39647.9998523	Sum of GTIs [s]
ontime8	39647.9998523	Sum of GTIs [s]
l2events	280968	Number of level 2 events



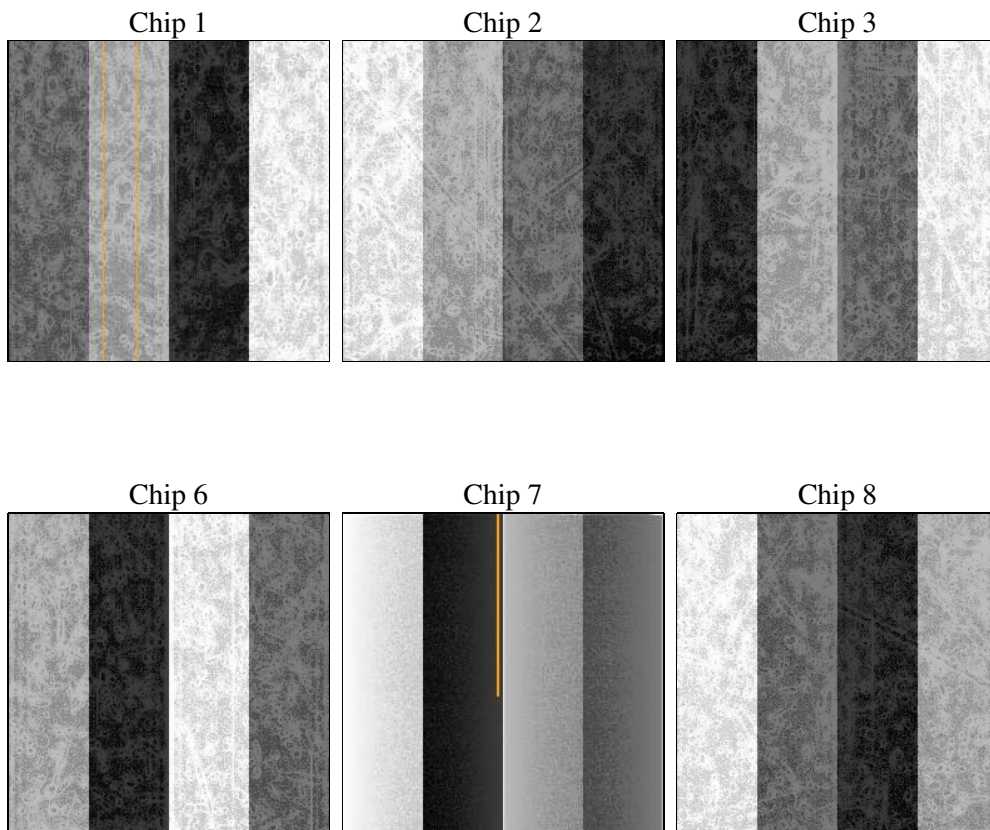
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	39468.115000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	39647.9998523	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime1	39641.518001378	Sum of GTIs [s]
date	2020-10-11T15:02:59	Date and time of file creation	ontime2	39635.036040962	Sum of GTIs [s]
revision	3	Processing version of data	ontime3	39641.517891824	Sum of GTIs [s]
			ontime6	39647.9998523	Sum of GTIs [s]
			ontime7	39647.9998523	Sum of GTIs [s]
			ontime8	39647.9998523	Sum of GTIs [s]
			l1events	1783475	Number of level 1 events

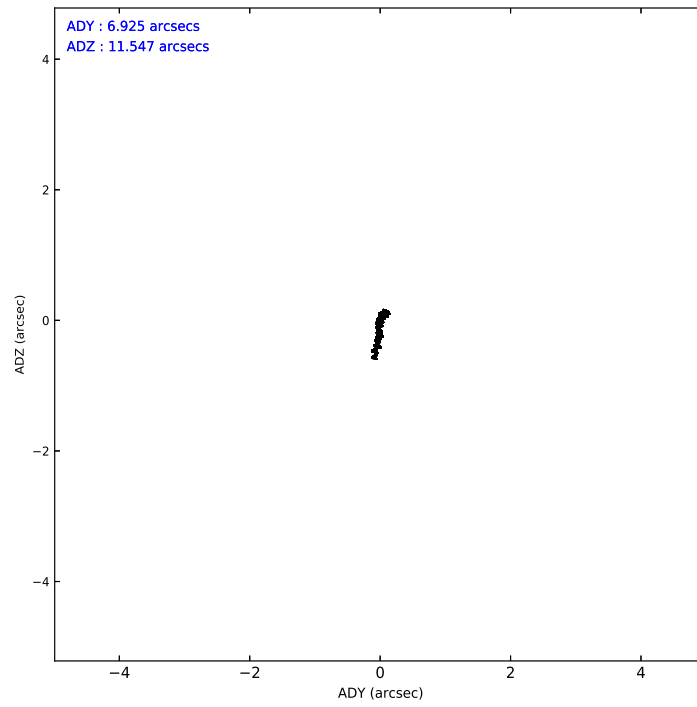
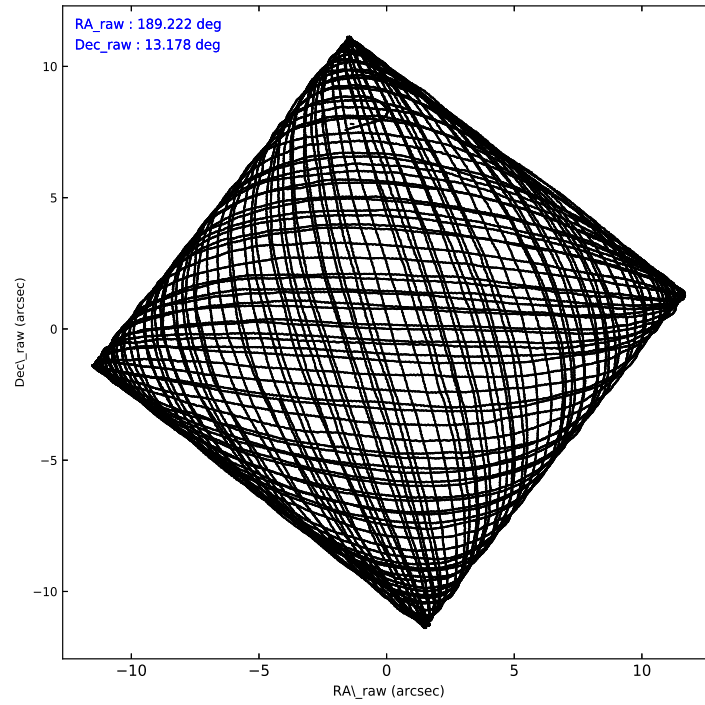
### 2.1.4 Events

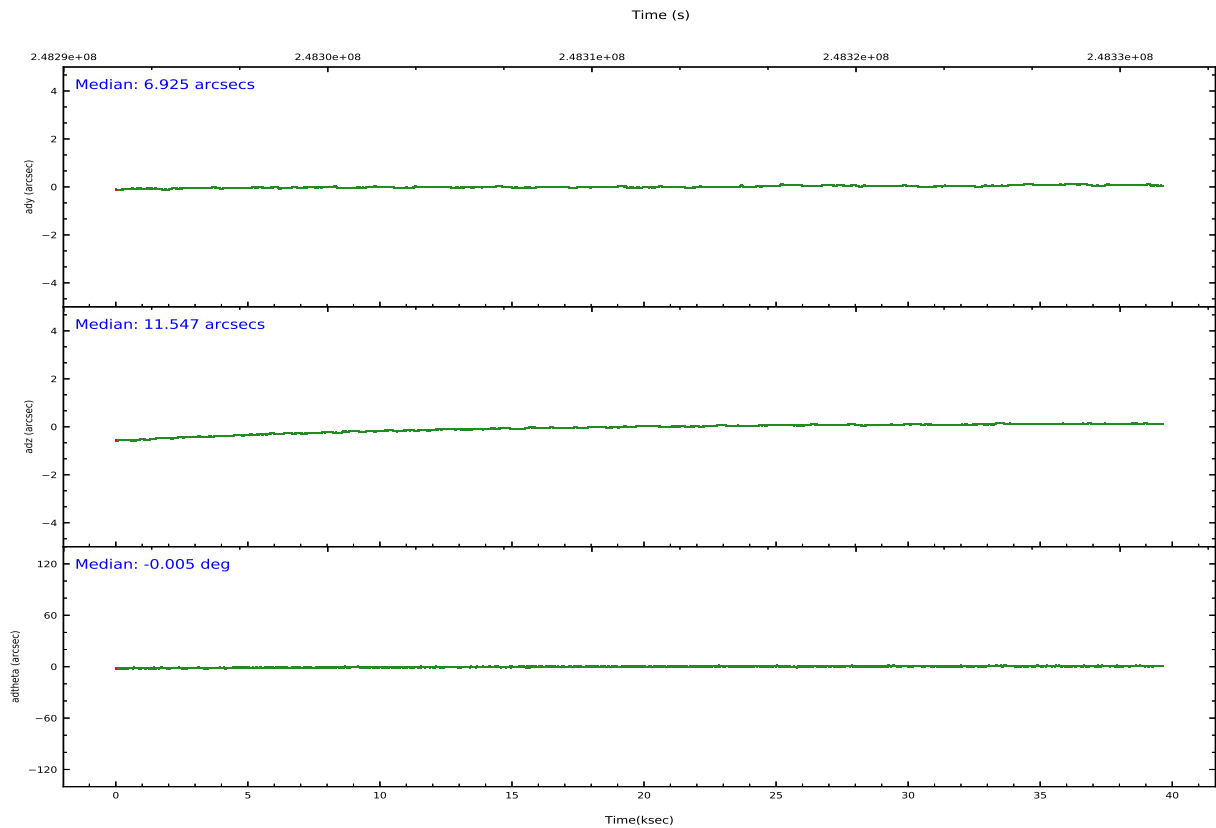
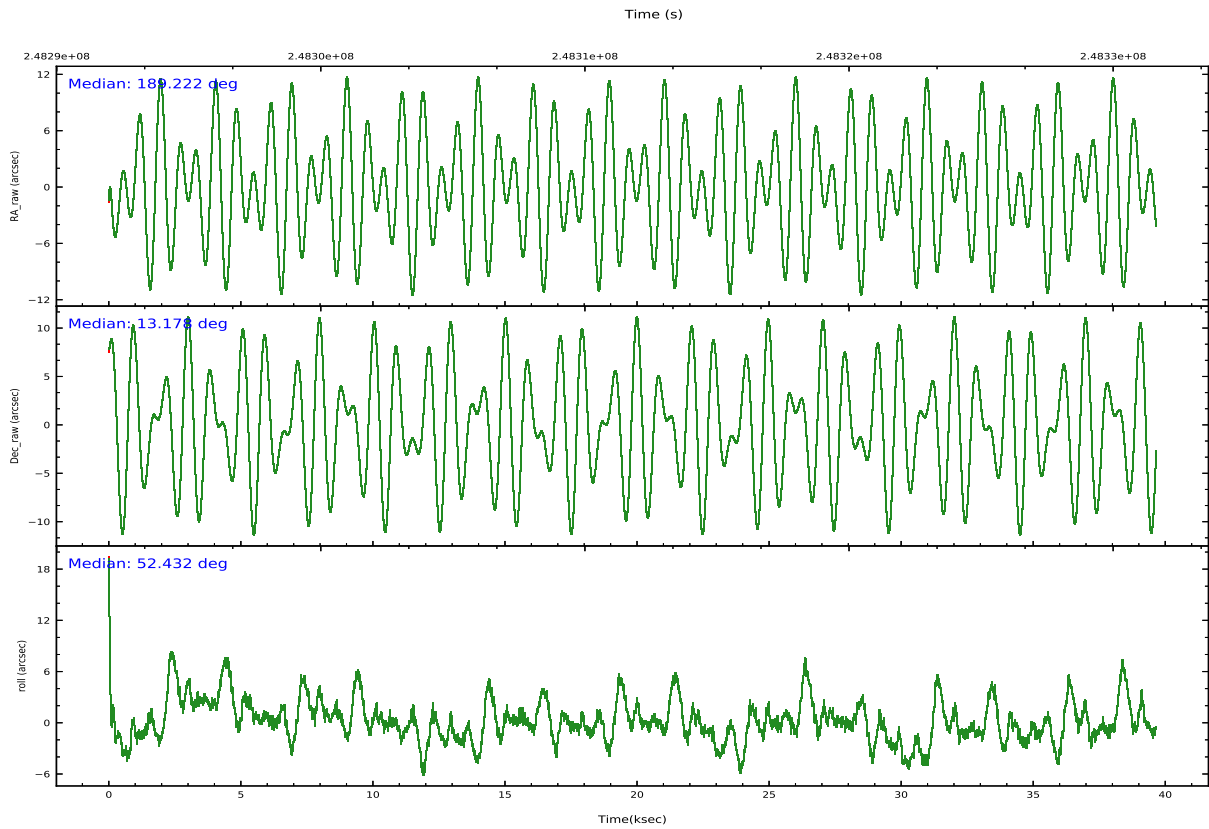
	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8		ccd 1	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	269761	289085	271269	279937	325368	348055	grade 0 events	12505	10715	11253	12682	16816	27942
rejected events	237918	262009	243289	248884	172357	266009		4%	3%	4%	4%	5%	8%
rejected %	88%	90%	89%	88%	52%	76%	grade 1 events	127	141	164	111	251	277
								0%	0%	0%	0%	0%	0%
							grade 2 events	7201	6630	6040	6459	32107	18660
								2%	2%	2%	2%	9%	5%
							grade 3 events	3437	2943	3103	3243	14970	8703
								1%	1%	1%	1%	4%	2%
							grade 4 events	3401	2928	3103	3254	14796	7979
								1%	1%	1%	1%	4%	2%
							grade 5 events	10707	8694	10919	11241	33017	15913
								3%	3%	4%	4%	10%	4%
							grade 6 events	6363	4817	5386	6417	79256	21511
								2%	1%	1%	2%	24%	6%
							grade 7 events	226020	252217	231301	236530	134155	247070
								83%	87%	85%	84%	41%	70%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-123678	ACIS-123678	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	189.218555	189.22327212285	Subarray requested	NONE	NONE
[deg] Pointing Dec	13.151083	13.17445844797	Alternating exposures requested	N	N
[deg] Pointing Roll	52.276531	52.432096721057	[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	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	248292160.184000	248290385.62311			
Observation start date	2005-11-13T18:01:36	2005-11-13T17:33:05			
[s] Observation end time (MET)	248331629.184000	248331854.56252			
Observation end date	2005-11-14T04:59:25	2005-11-14T05:04:14			
Read mode	TIMED	TIMED			

## 2.3 Aspect





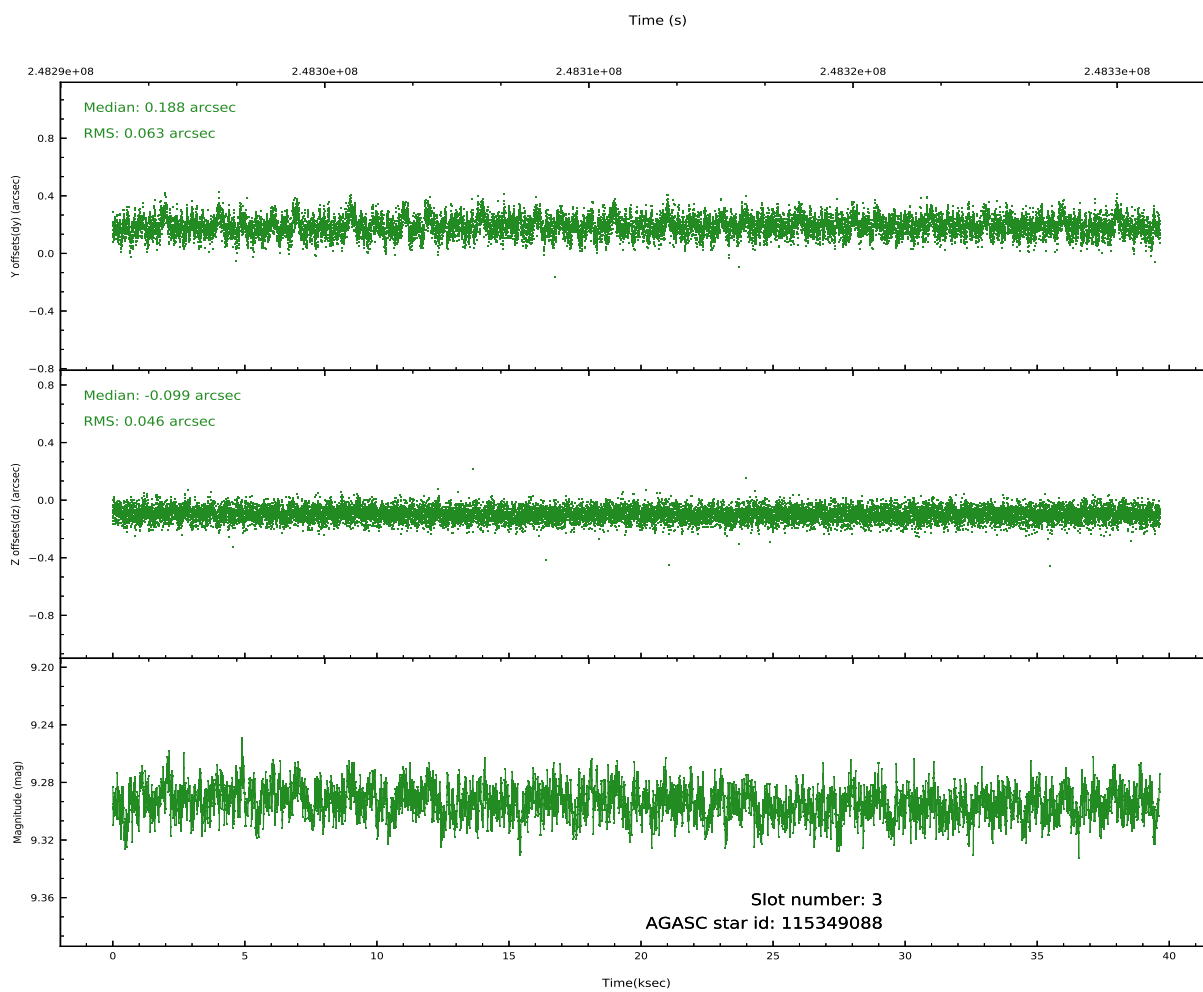
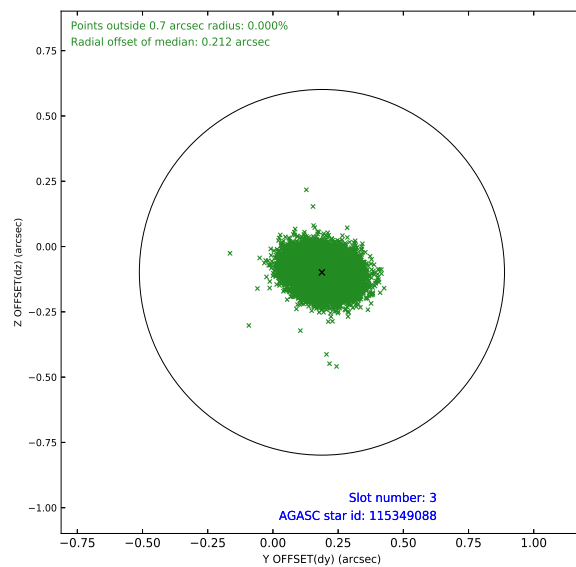
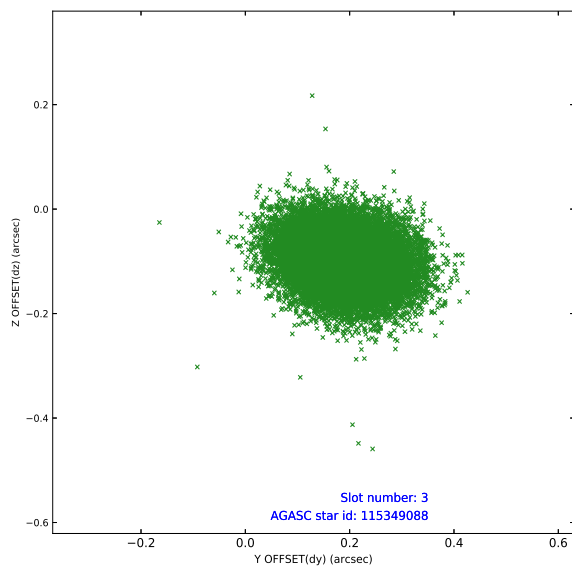
### Slot Statistics

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-1	7.18	9673	1.000	0.016	-0.123	0.009	0.017	0.000000	0.000000	936.37	-1728
1	FID		ACIS-S-4	7.20	9673	1.000	0.100	0.082	0.008	0.013	0.000000	0.000000	2153.86	175
2	FID		ACIS-S-5	7.23	9673	1.000	-0.142	0.054	0.007	0.012	0.000000	0.000000	-1812.65	169
3	GUIDE	used	115349088	9.29	19333	1.000	0.188	-0.099	0.082	0.137	188.777694	12.938966	-1549.04	757
4	GUIDE	used	115479688	9.95	19335	1.000	-0.112	0.040	0.125	0.200	188.989208	13.490346	474.94	1382
5	GUIDE	used	115479944	9.54	19235	1.000	-0.190	0.002	0.128	0.203	189.780595	13.242655	1467.78	-1354
6	GUIDE	used	115481912	8.58	19335	1.000	0.049	0.072	0.072	0.112	189.408526	12.669552	-962.10	-1588
7	GUIDE	used	115482272	8.16	19338	1.000	0.068	-0.024	0.064	0.104	189.342268	12.983616	-210.84	-711

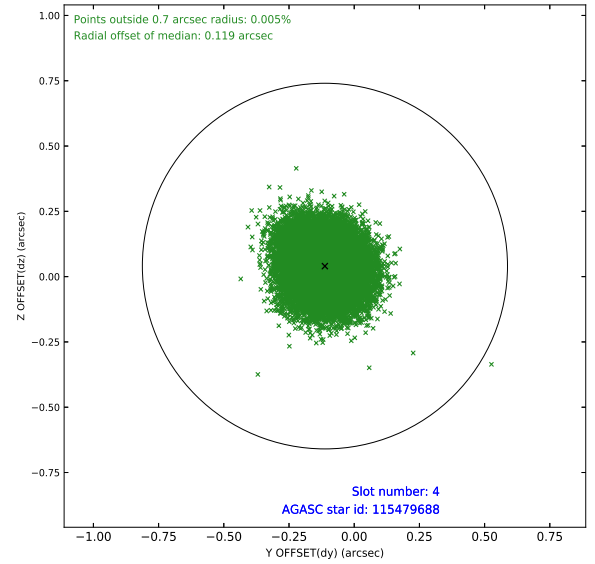
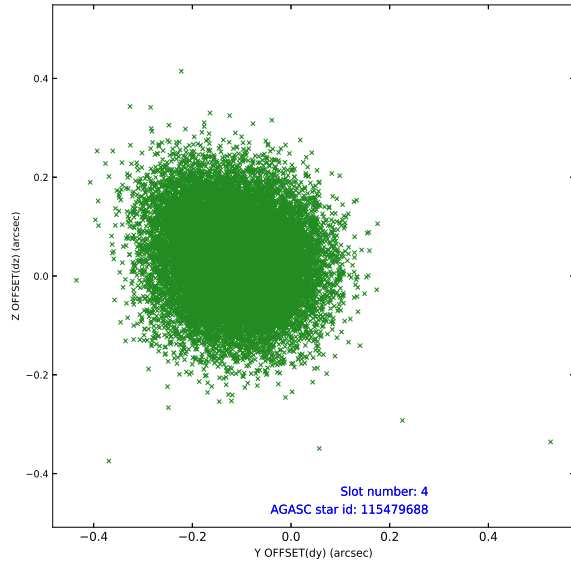
∞

## 2.4 Star Slots

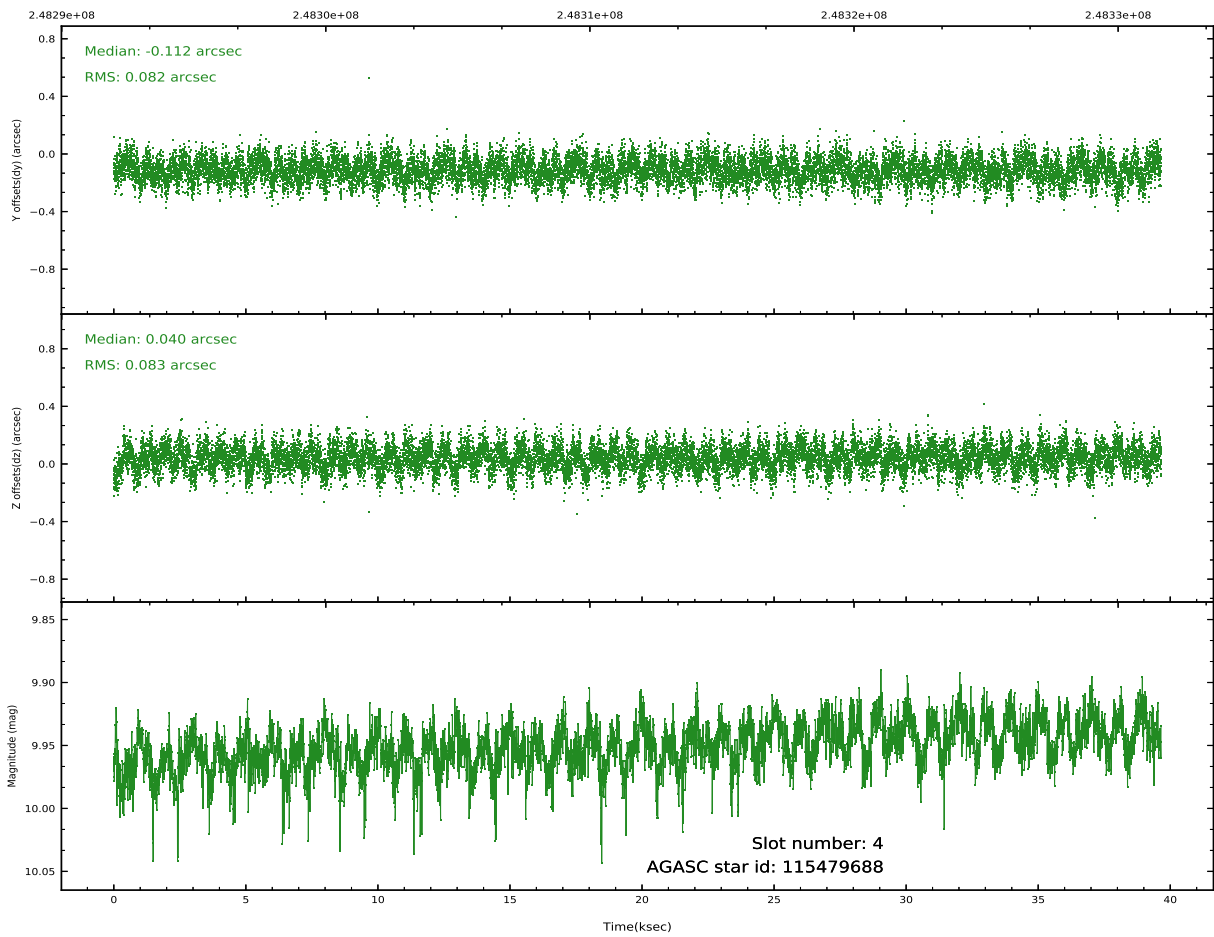
### 2.4.1 Slot 3



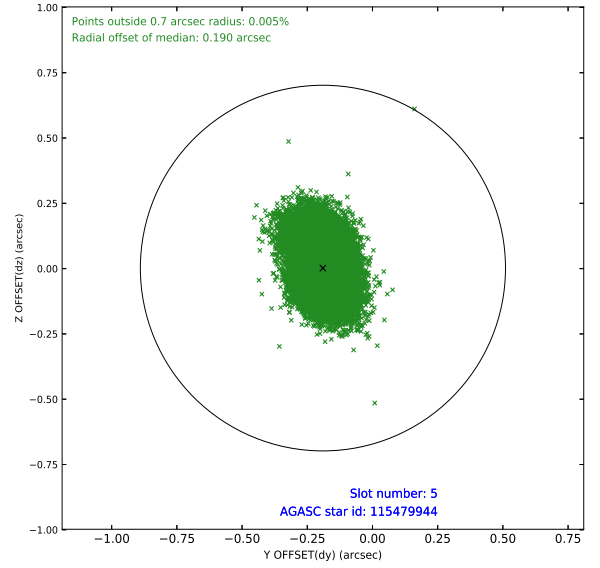
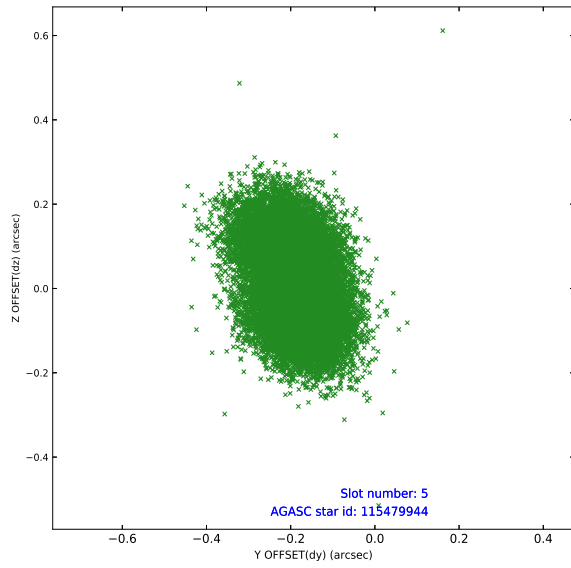
## 2.4.2 Slot 4



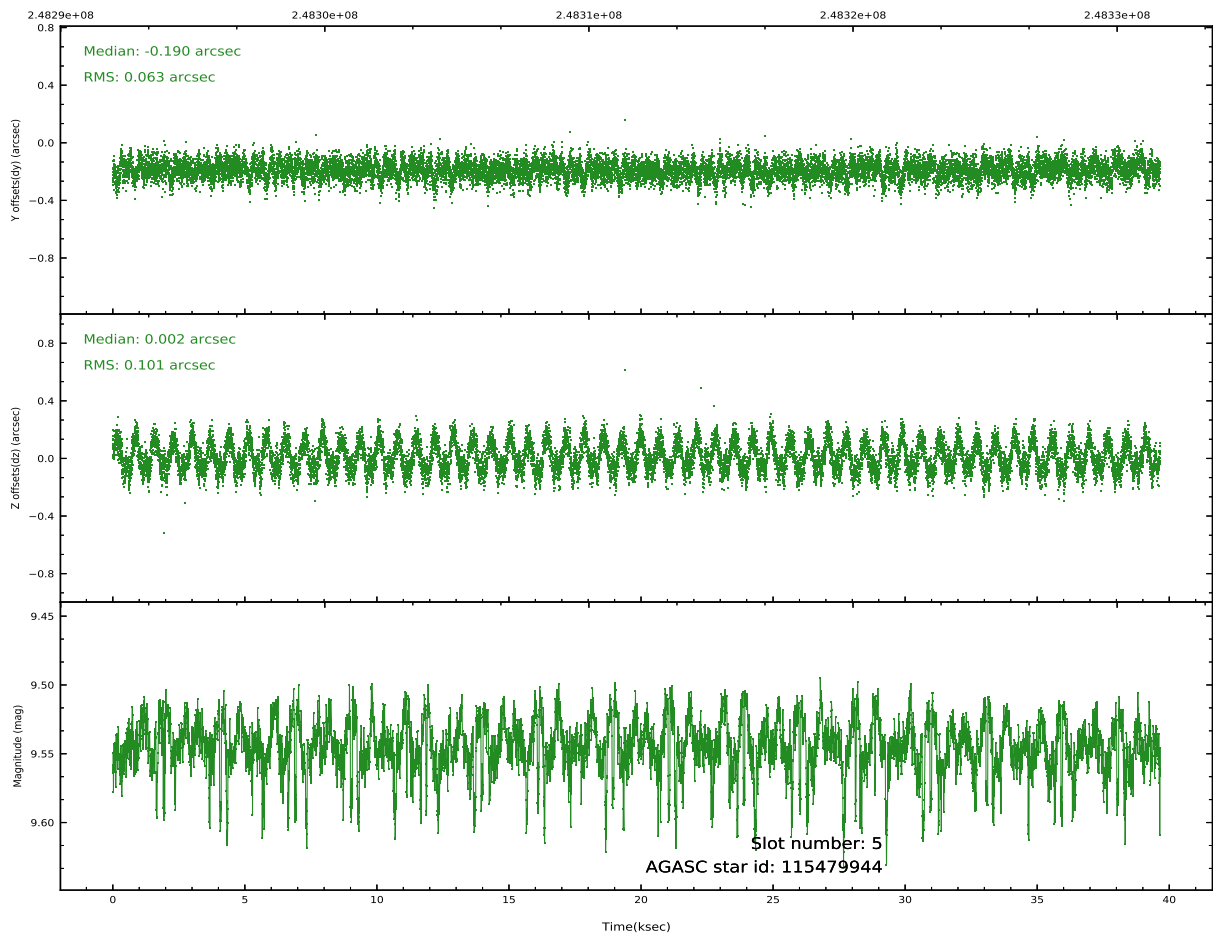
Time (s)



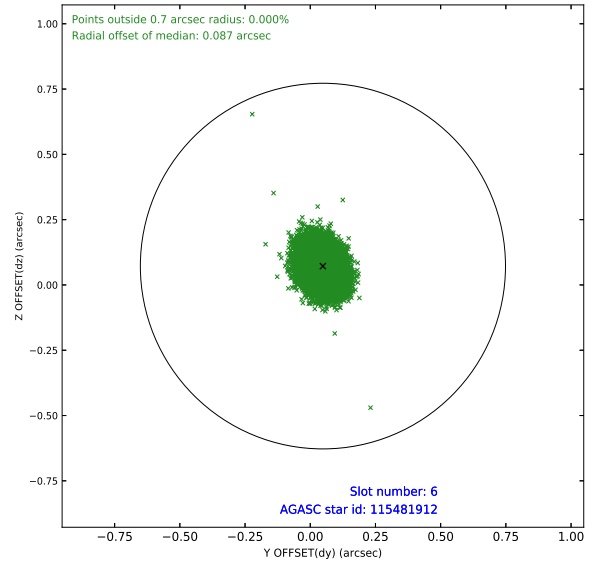
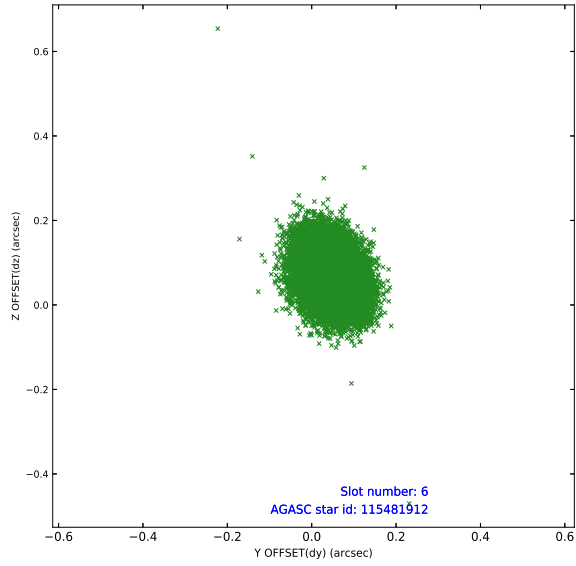
### 2.4.3 Slot 5



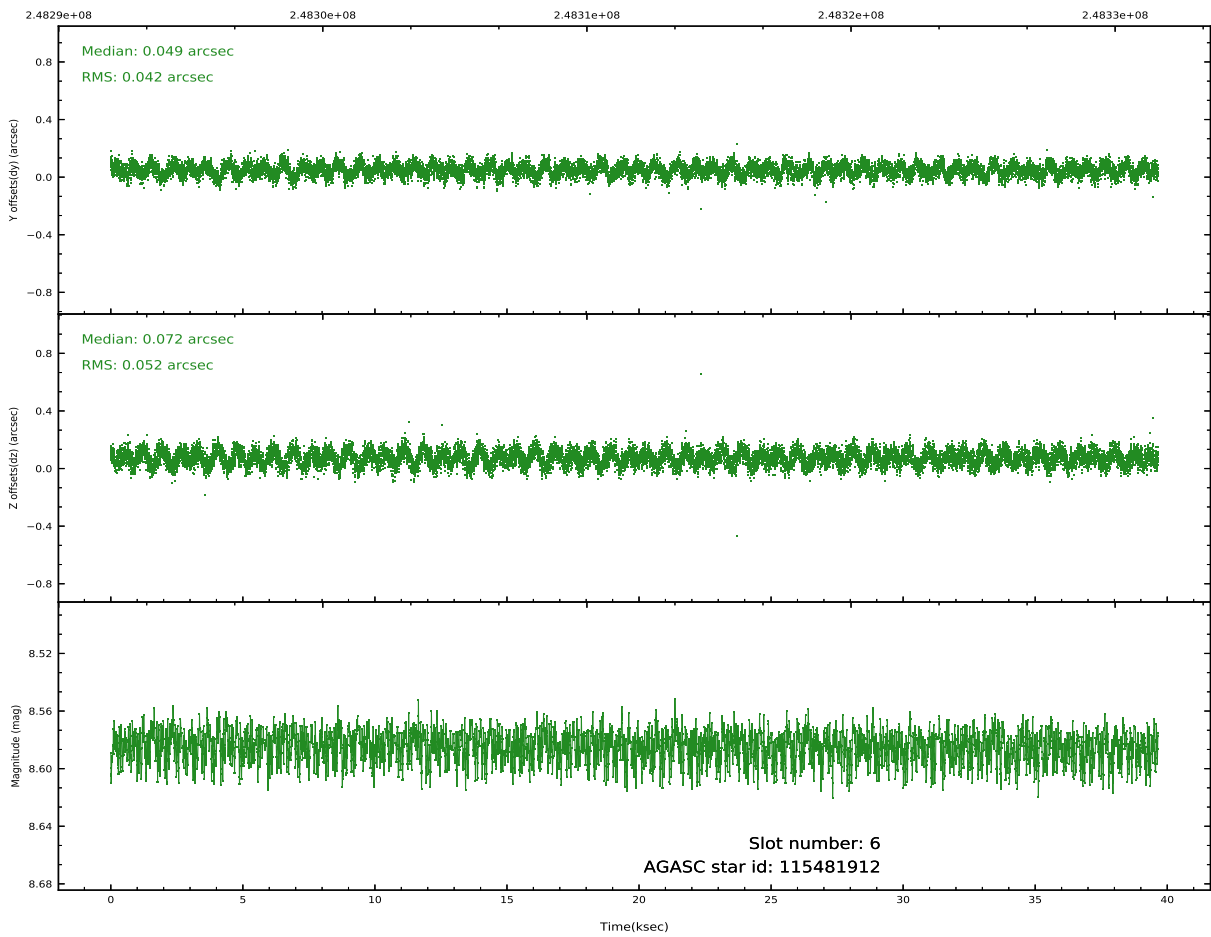
Time (s)



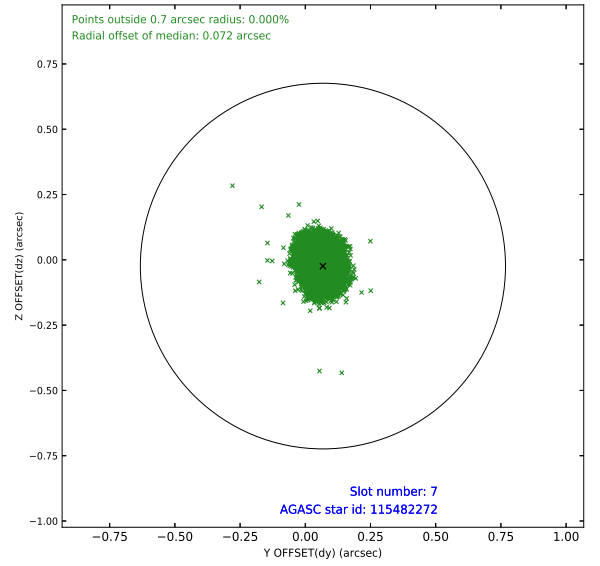
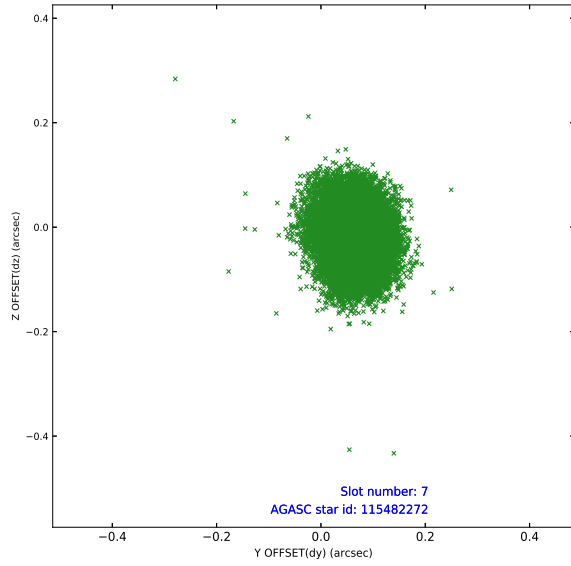
## 2.4.4 Slot 6



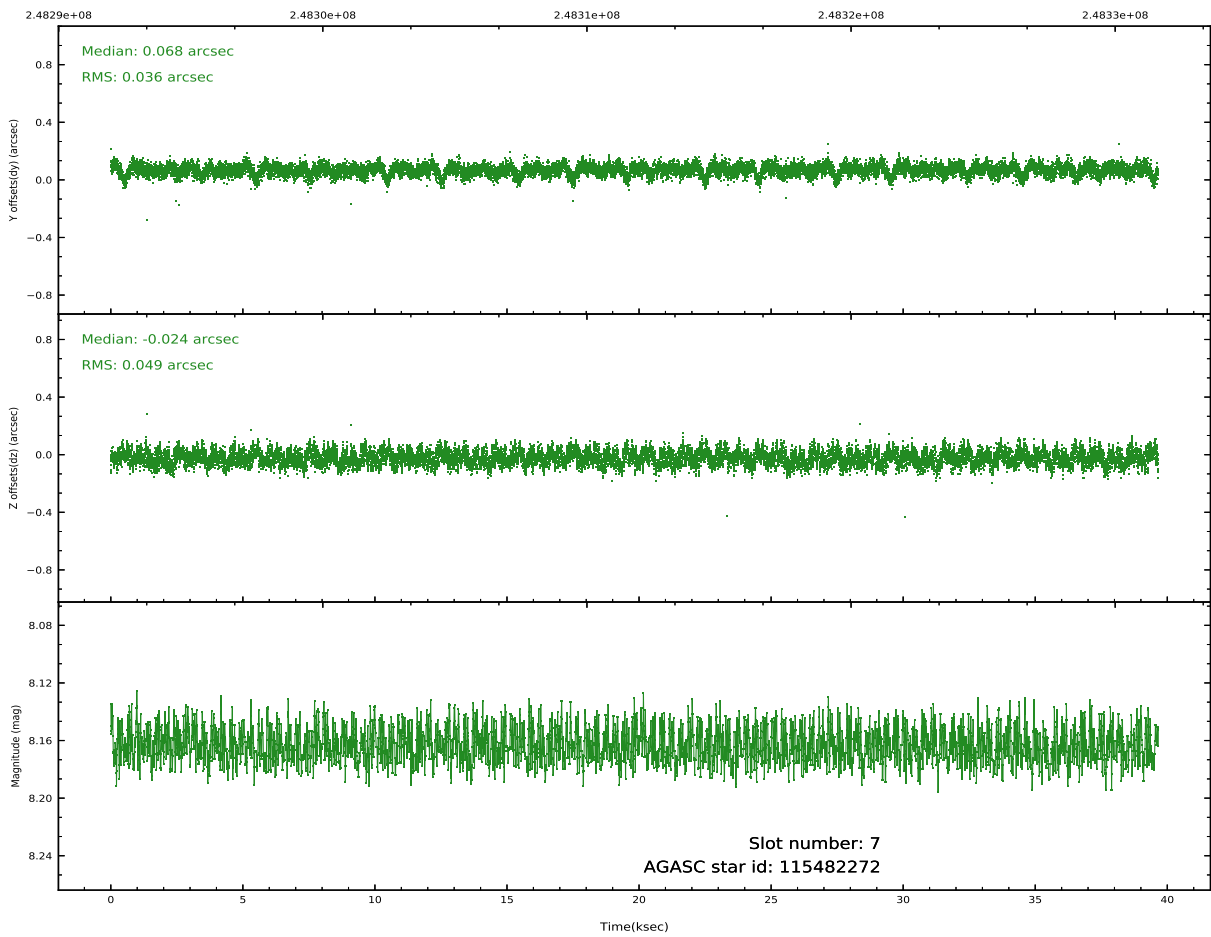
Time (s)



## 2.4.5 Slot 7

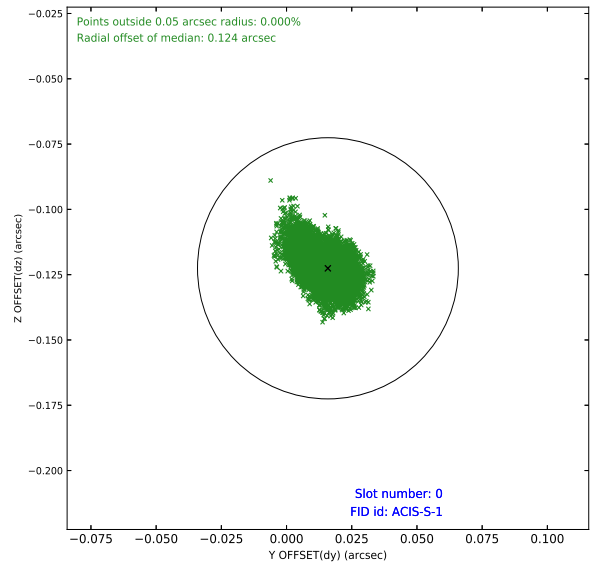
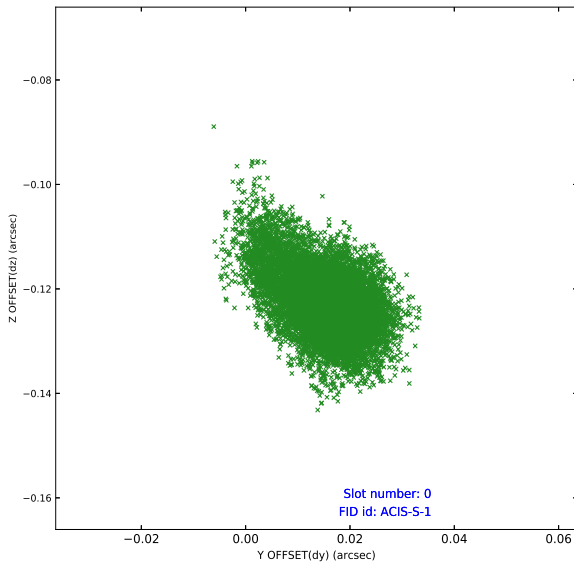


Time (s)

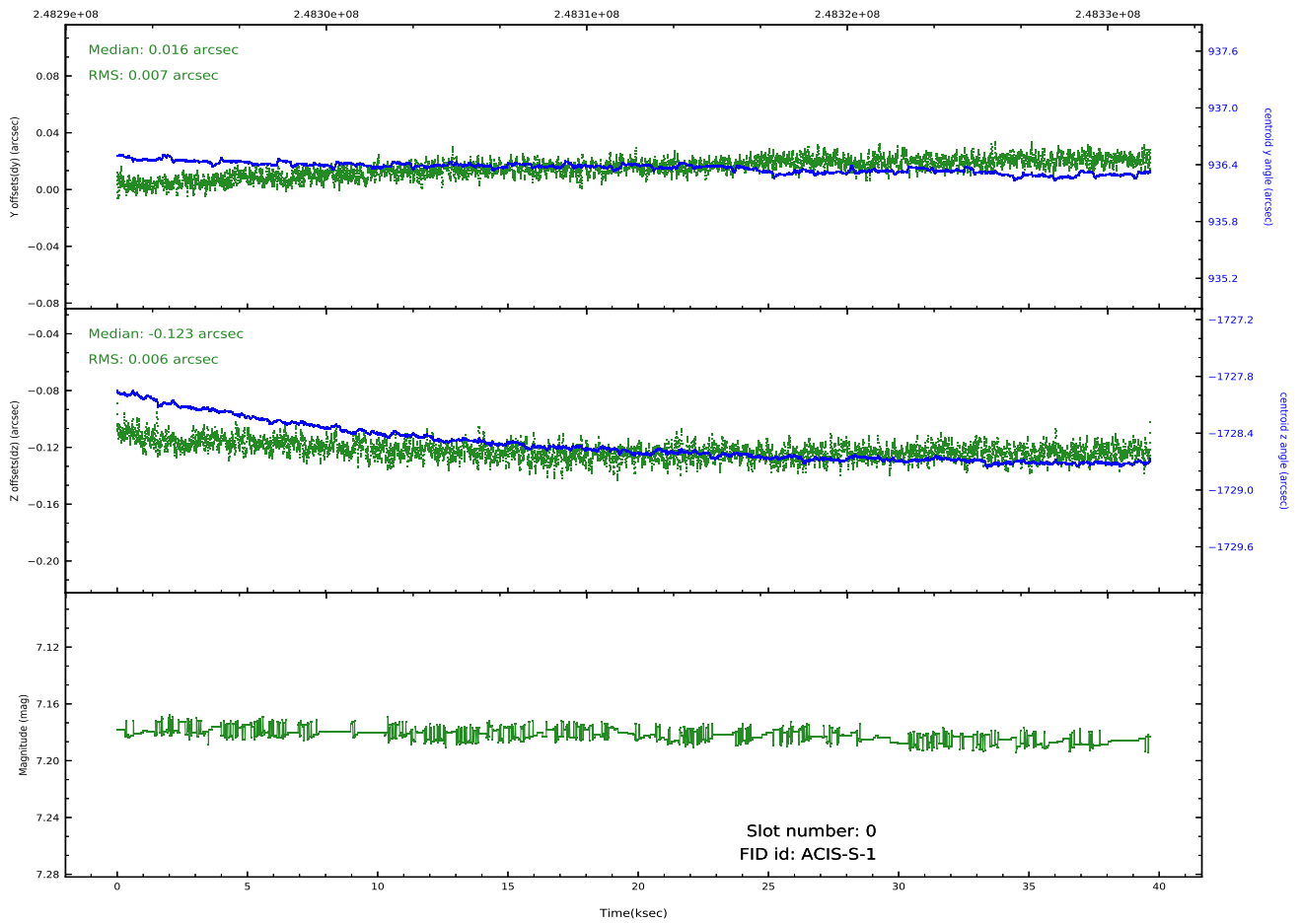


## 2.5 FID Slots

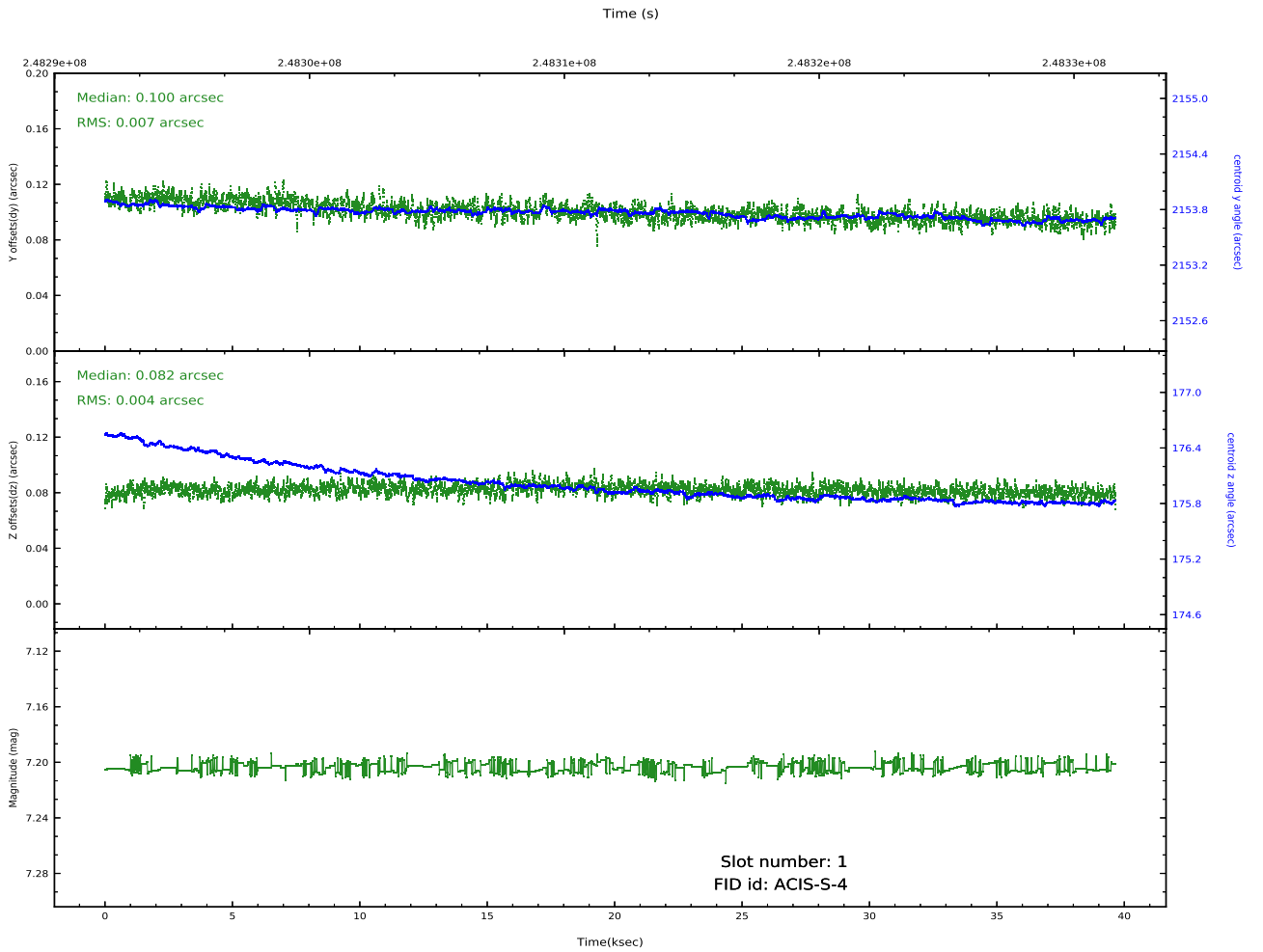
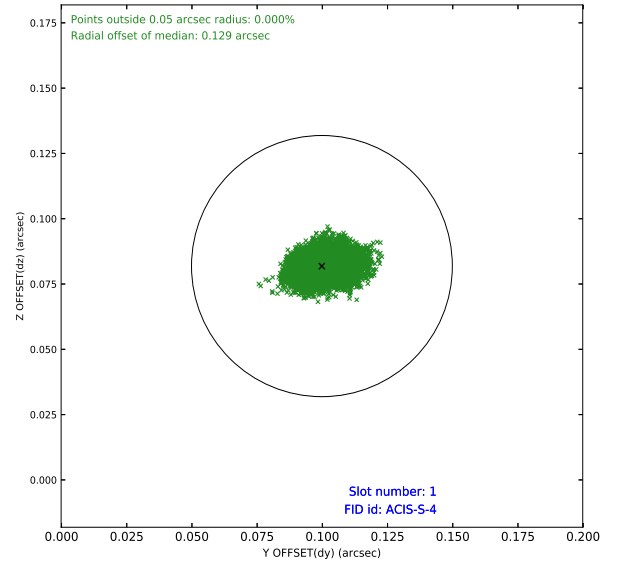
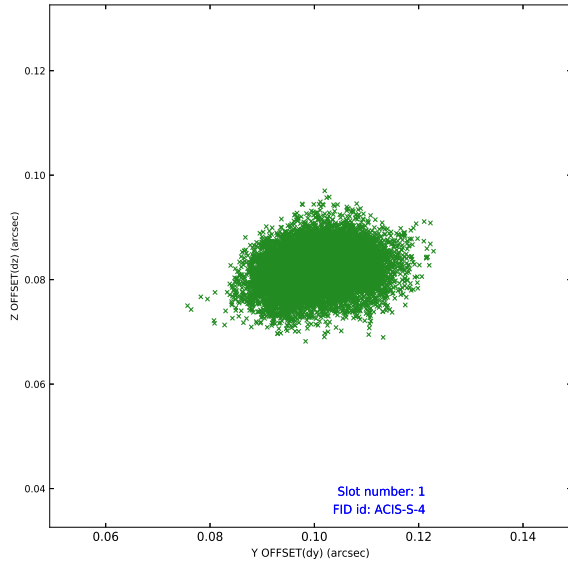
### 2.5.1 Slot 0



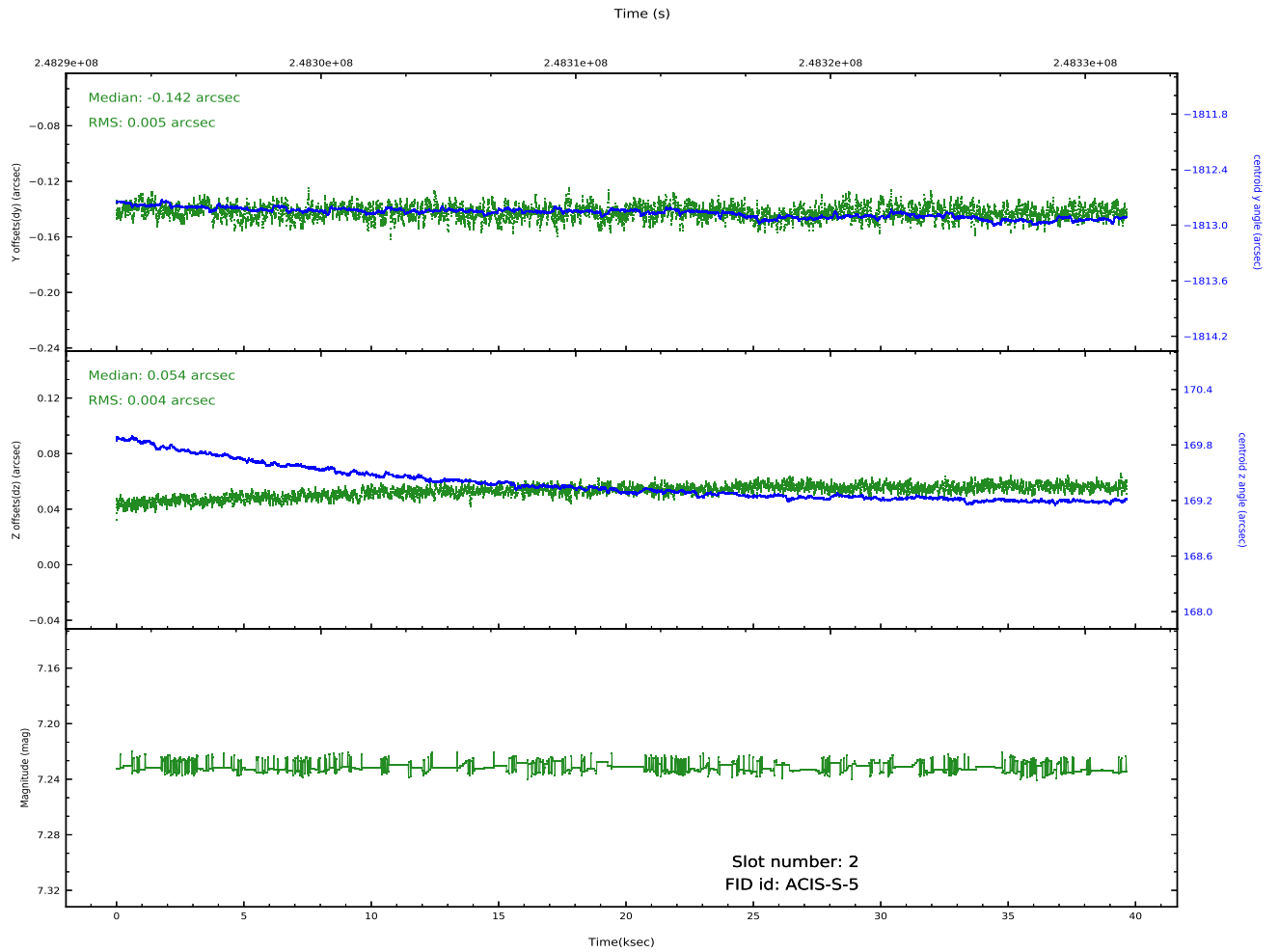
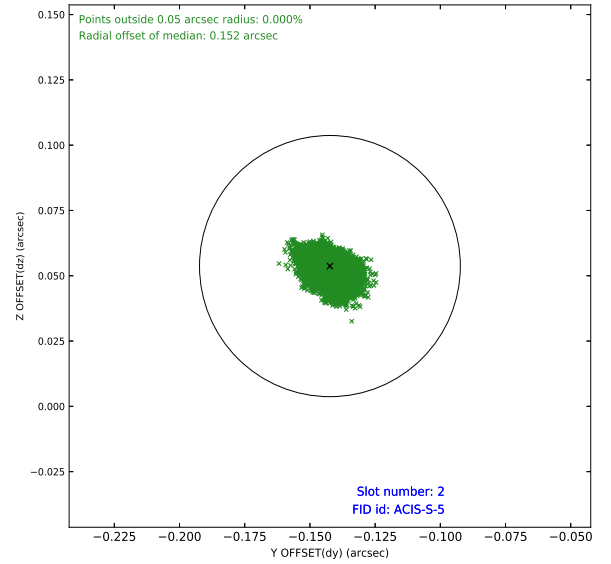
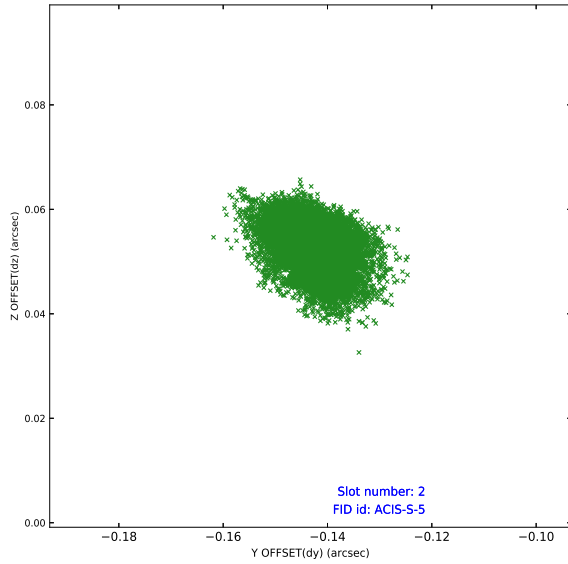
Time (s)



## 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)	2020.10.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	39.64799

## A.2 Comments