

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5375 - L2 Version 4  
Chandra X-Ray Center

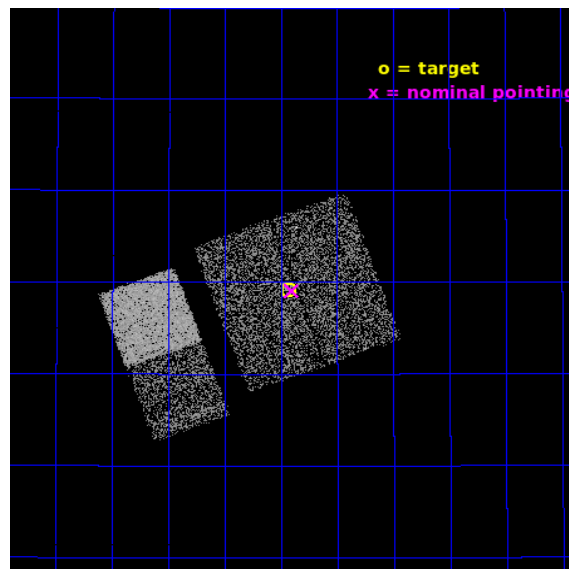
L2 Processing Date : Oct 5 2020

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# 1 Front

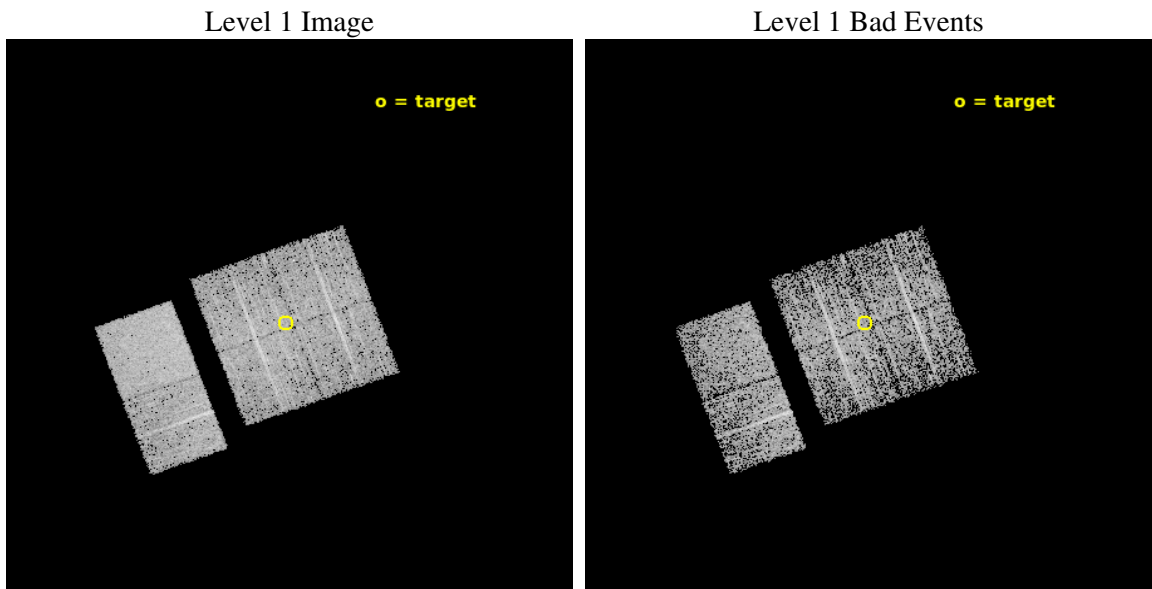
seq_num	200310	Sequence number
obs_id	5375	Observation id
title	Search for beta Pic analogs	Proposal title
observer	Gordon Garmire	Principal investigator
object	mu Aur	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	78.357083	Observer's specified target RA [deg]
dec_targ	38.484722	Observer's specified target Dec [deg]
ra_nom	78.350434899065	Nominal RA [deg]
dec_nom	38.484489606317	Nominal Dec [deg]
roll_nom	249.84849227686	Nominal Roll [deg]
revision	4	Processing version of data
ontime	3132.7999883294	Sum of GTIs [s]
livetime	3093.1305885315	Livetime [s]
ontime0	3132.7999883294	Sum of GTIs [s]
ontime1	3132.7999883294	Sum of GTIs [s]
ontime2	3132.7999883294	Sum of GTIs [s]
ontime3	3132.7999883294	Sum of GTIs [s]
ontime6	3132.7999883294	Sum of GTIs [s]
ontime7	3132.7999883294	Sum of GTIs [s]
l2events	23582	Number of level 2 events



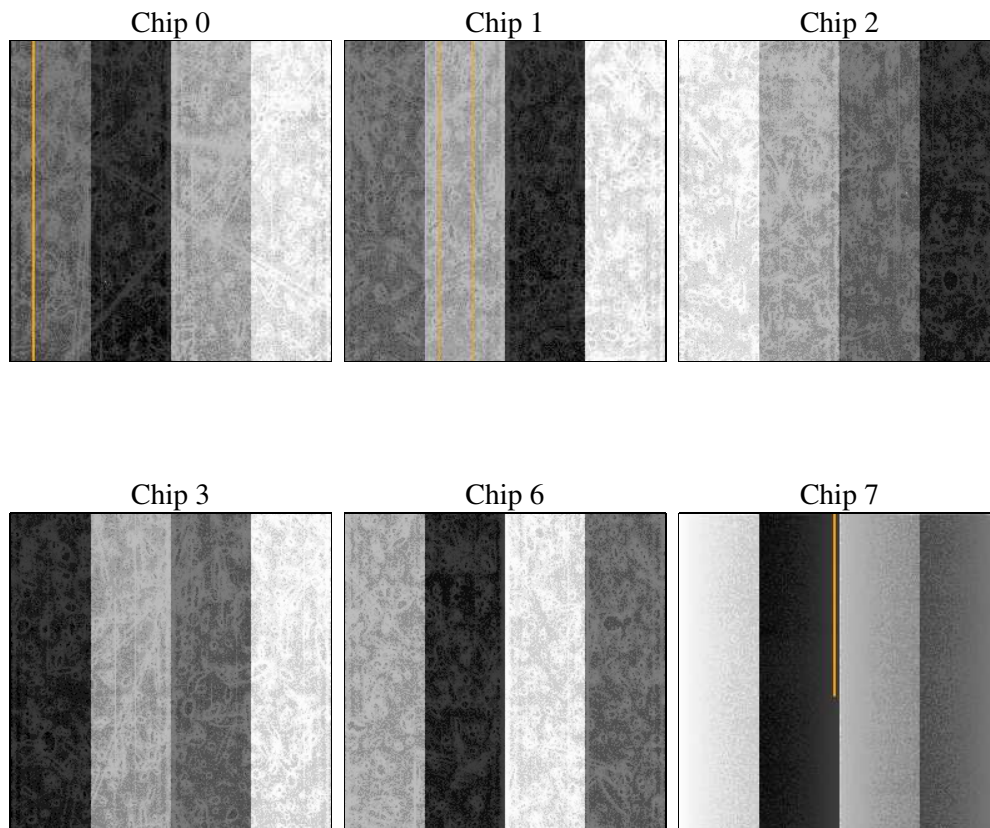
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	3132.7999883294	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime0	3132.7999883294	Sum of GTIs [s]
date	2020-10-06T03:34:44	Date and time of file creation	ontime1	3132.7999883294	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	3132.7999883294	Sum of GTIs [s]
			ontime3	3132.7999883294	Sum of GTIs [s]
			ontime6	3132.7999883294	Sum of GTIs [s]
			ontime7	3132.7999883294	Sum of GTIs [s]
			l1events	134527	Number of level 1 events

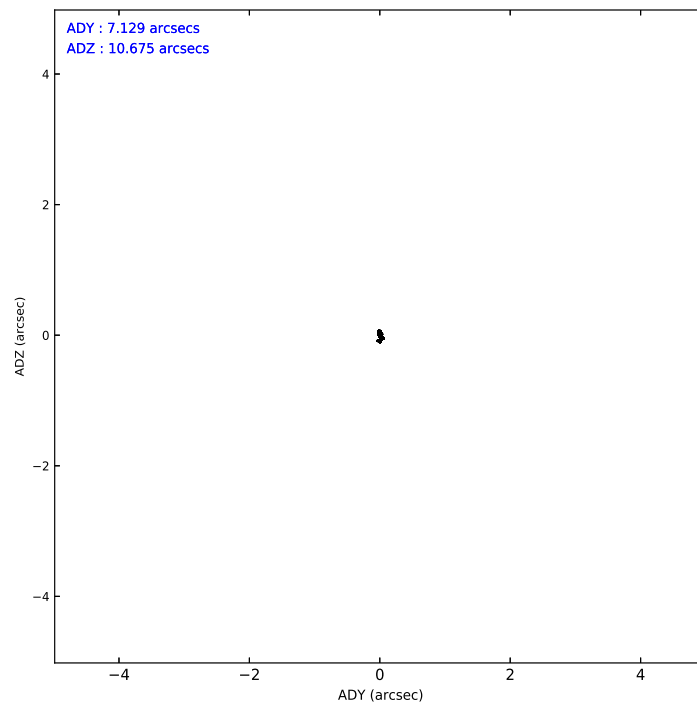
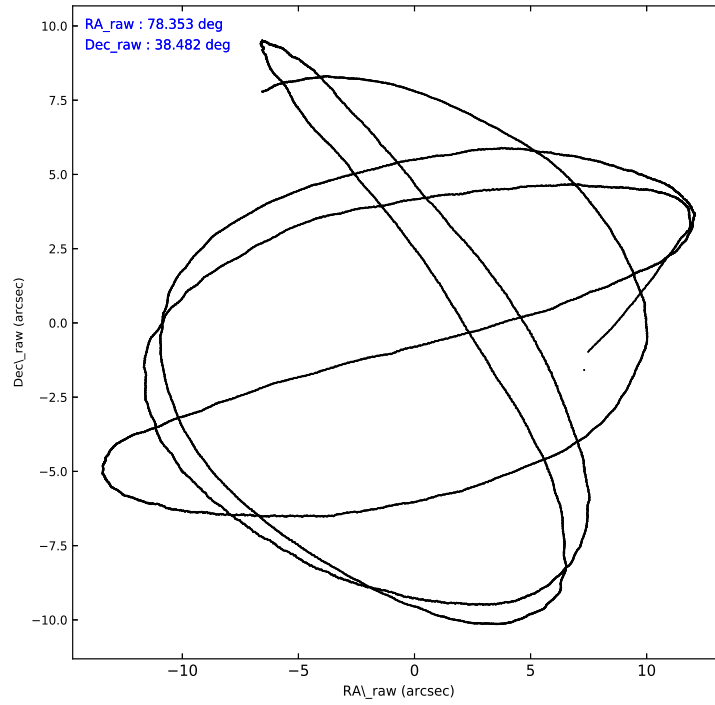
### 2.1.4 Events

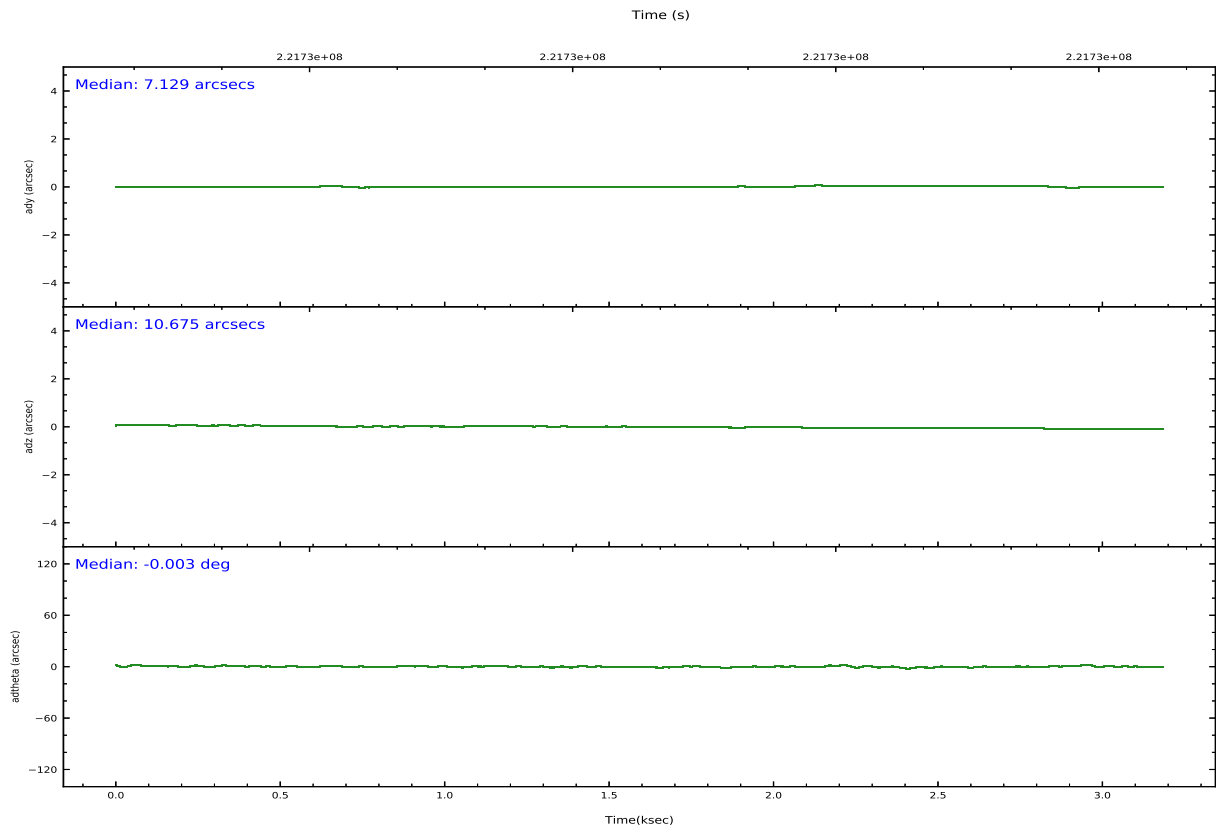
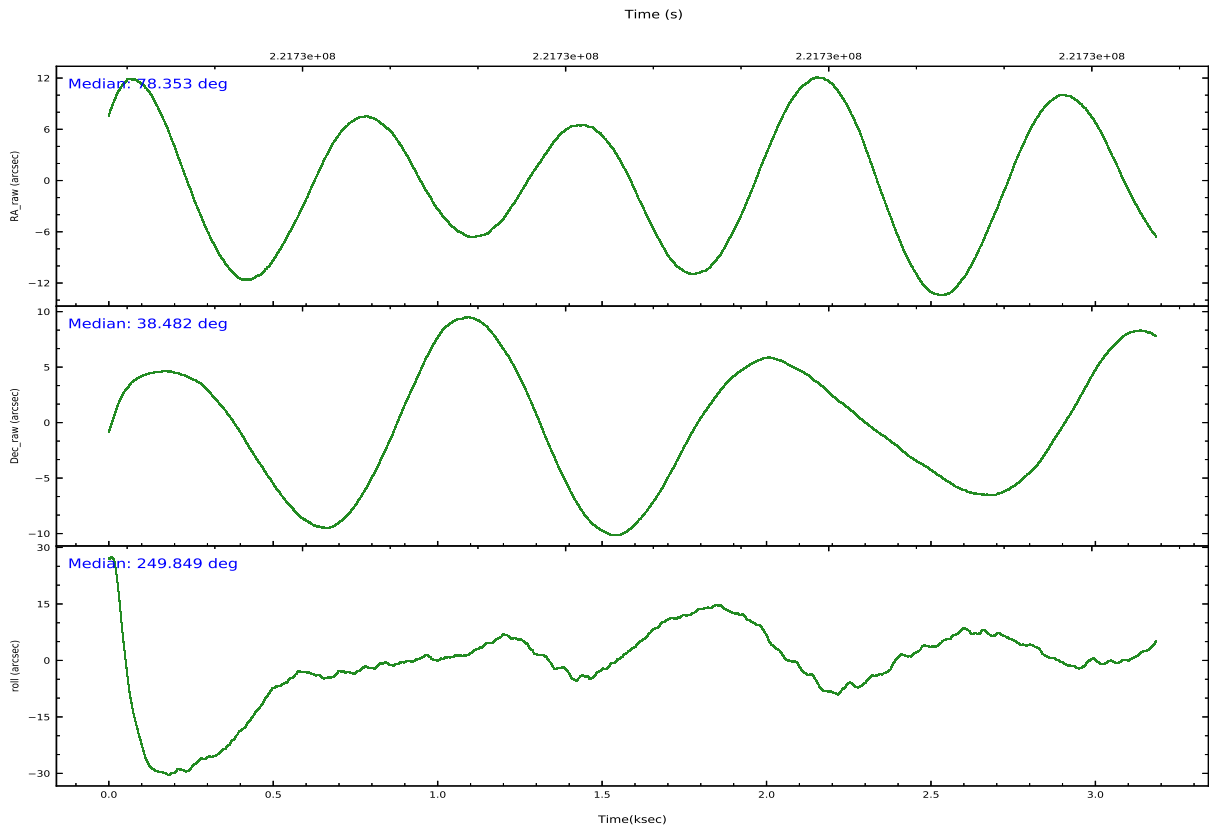
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	19357	20250	21378	20845	22197	30500	grade 0 events	1179	1128	1159	1143	1099	1094
rejected events	16650	17369	18742	18236	19562	18195		6%	5%	5%	5%	4%	3%
rejected %	86%	85%	87%	87%	88%	59%	grade 1 events	11	8	16	11	6	38
								0%	0%	0%	0%	0%	0%
							grade 2 events	541	652	491	507	491	2457
								2%	3%	2%	2%	2%	8%
							grade 3 events	274	276	270	276	237	1118
								1%	1%	1%	1%	1%	3%
							grade 4 events	252	274	274	246	263	1072
								1%	1%	1%	1%	1%	3%
							grade 5 events	851	912	852	1009	1064	2881
								4%	4%	3%	4%	4%	9%
							grade 6 events	462	557	448	439	551	6571
								2%	2%	2%	2%	2%	21%
							grade 7 events	15787	16443	17868	17214	18486	15269
								81%	81%	83%	82%	83%	50%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-012367	ACIS-012367	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	78.346902	78.35043489906499	Subarray requested	NONE	NONE
[deg] Pointing Dec	38.508304	38.484489606317	Alternating exposures requested	N	N
[deg] Pointing Roll	249.655105	249.84849227686	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	221728395.184000	221727348.99817			
Observation start date	2005-01-10T07:12:11	2005-01-10T06:55:48			
[s] Observation end time (MET)	221731395.184000	221732498.59841			
Observation end date	2005-01-10T08:02:11	2005-01-10T08:21:38			
Read mode	TIMED	TIMED			

## 2.3 Aspect



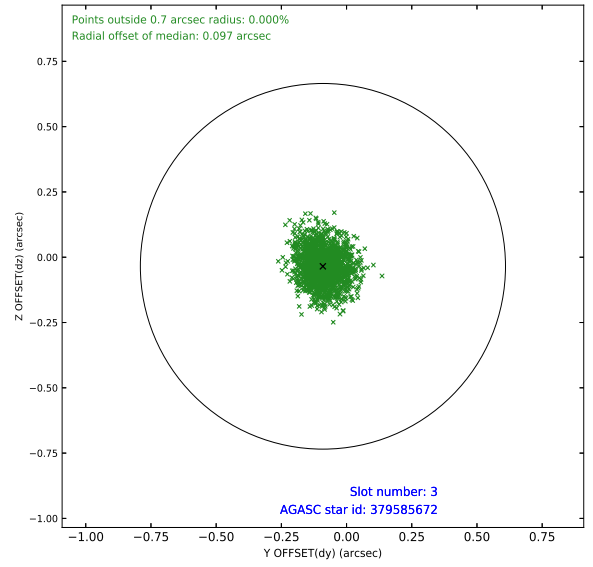
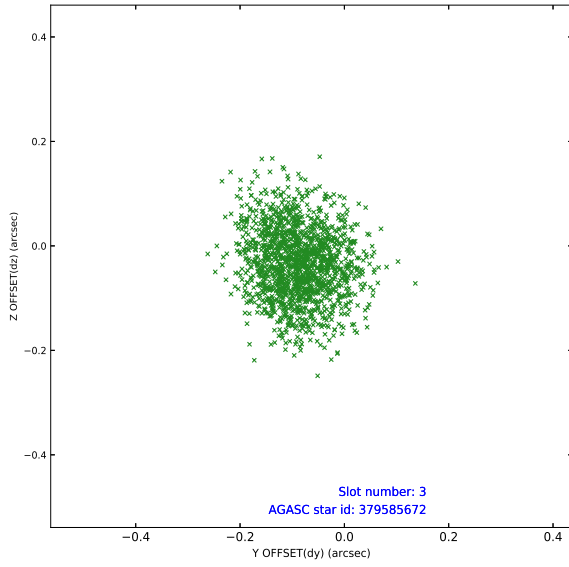


### Slot Statistics

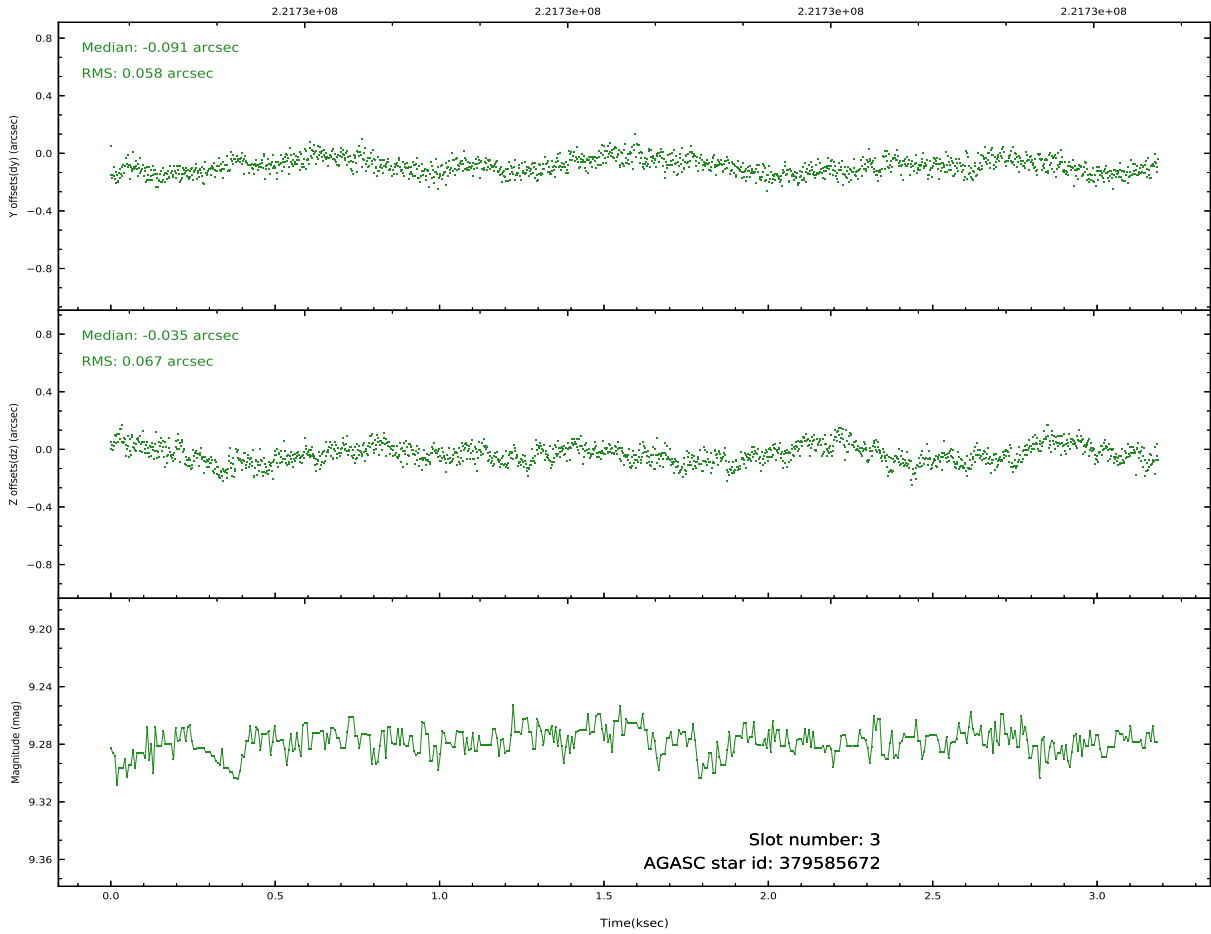
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-I-2	7.14	778	1.000	-0.102	-0.120	0.010	0.016	0.000000	0.000000	-761.72	-840
1	FID		ACIS-I-4	7.18	776	1.000	0.197	0.092	0.006	0.010	0.000000	0.000000	2151.70	1064
2	FID		ACIS-I-5	7.23	778	1.000	-0.196	0.097	0.009	0.016	0.000000	0.000000	-1813.10	1064
3	GUIDE	used	379585672	9.28	1554	1.000	-0.091	-0.035	0.095	0.149	78.446049	39.020940	-1825.91	-382
4	GUIDE	used	379595128	9.25	1550	1.000	-0.036	-0.116	0.096	0.162	78.433075	38.328758	520.96	452
5	GUIDE	used	379596248	9.98	1532	1.000	0.037	-0.045	0.164	0.248	77.581920	38.259519	1584.82	-1718
6	GUIDE	used	379596840	9.47	1552	1.000	0.006	0.136	0.084	0.138	78.612545	38.209933	746.51	1076
7	GUIDE	used	379596528	9.14	1553	1.000	0.092	0.054	0.083	0.131	78.638795	38.225565	667.29	1128

## 2.4 Star Slots

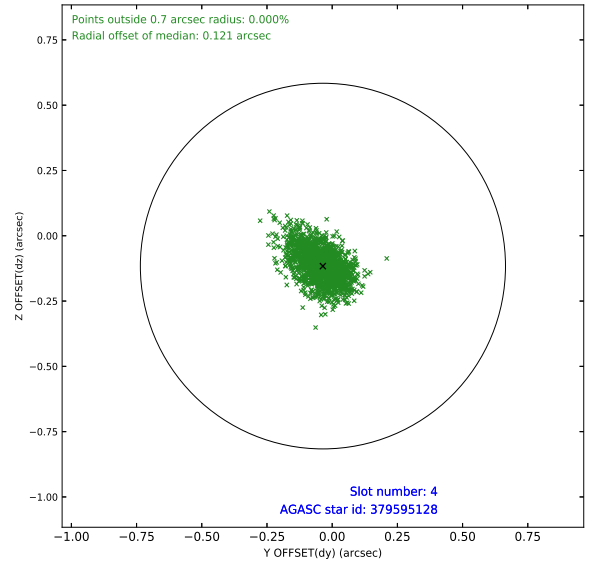
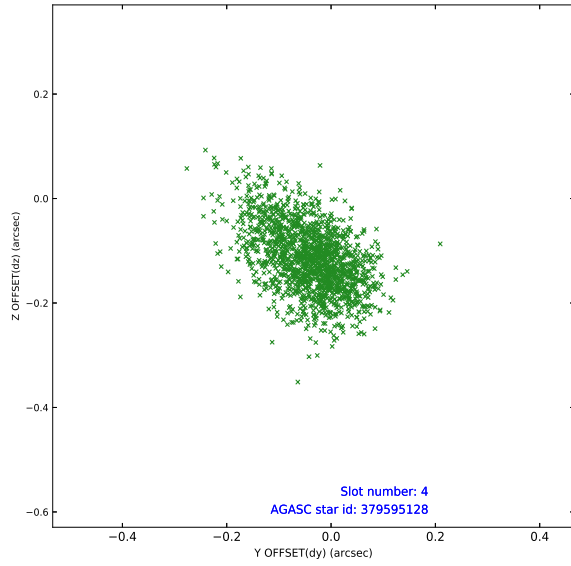
### 2.4.1 Slot 3



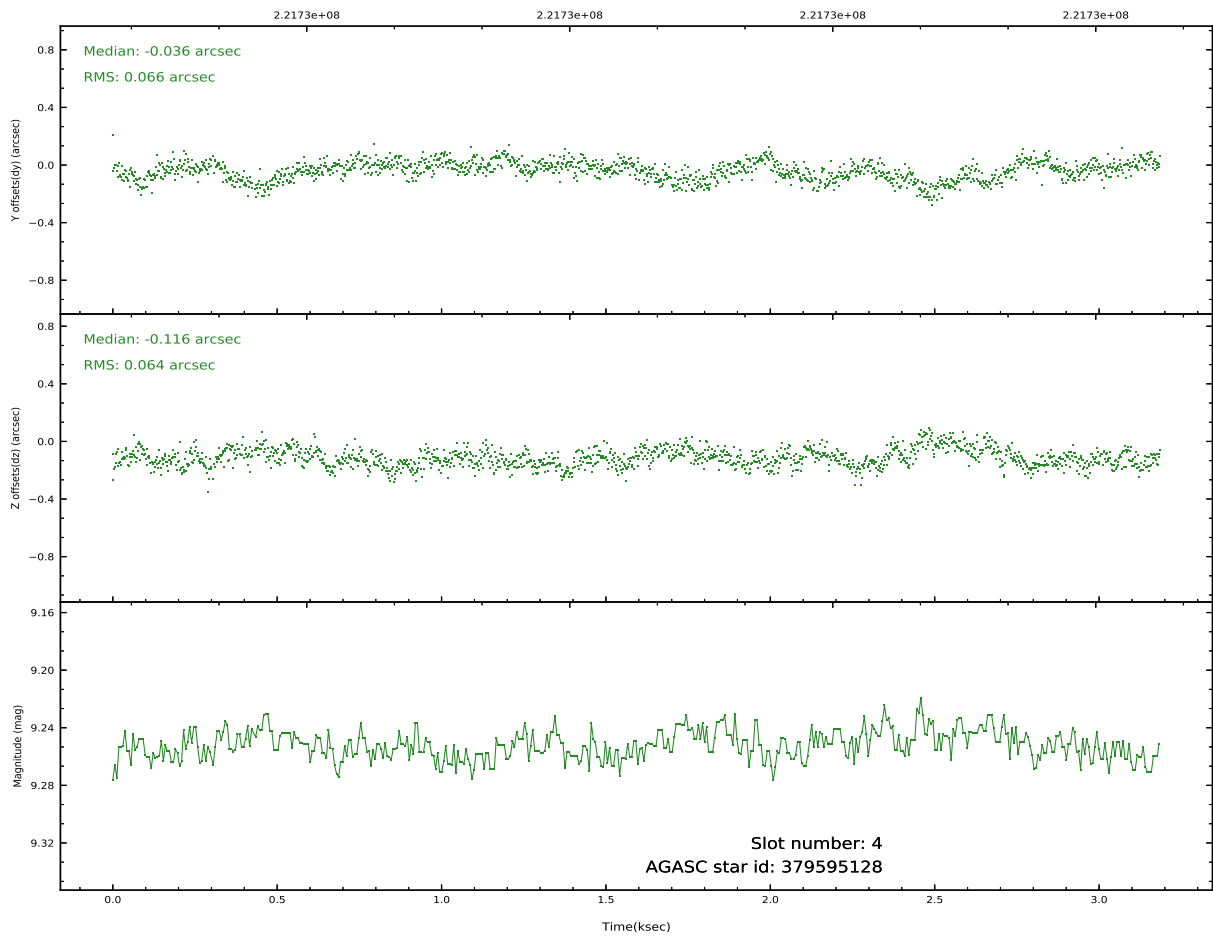
Time (s)



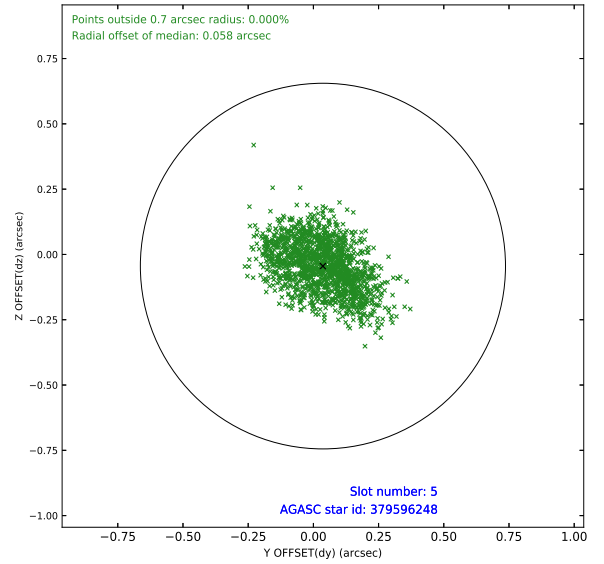
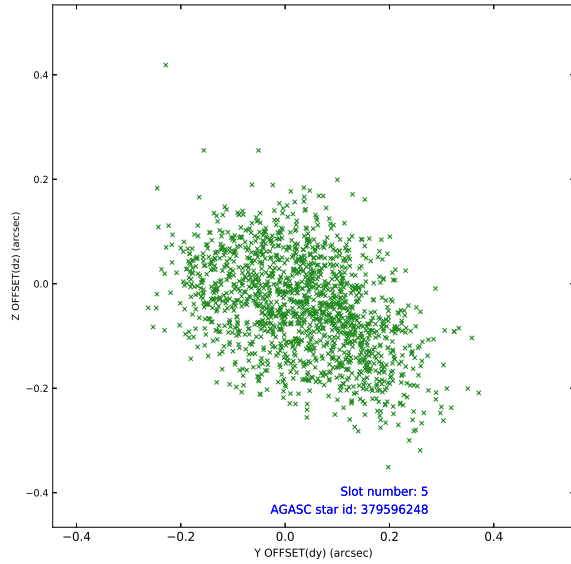
## 2.4.2 Slot 4



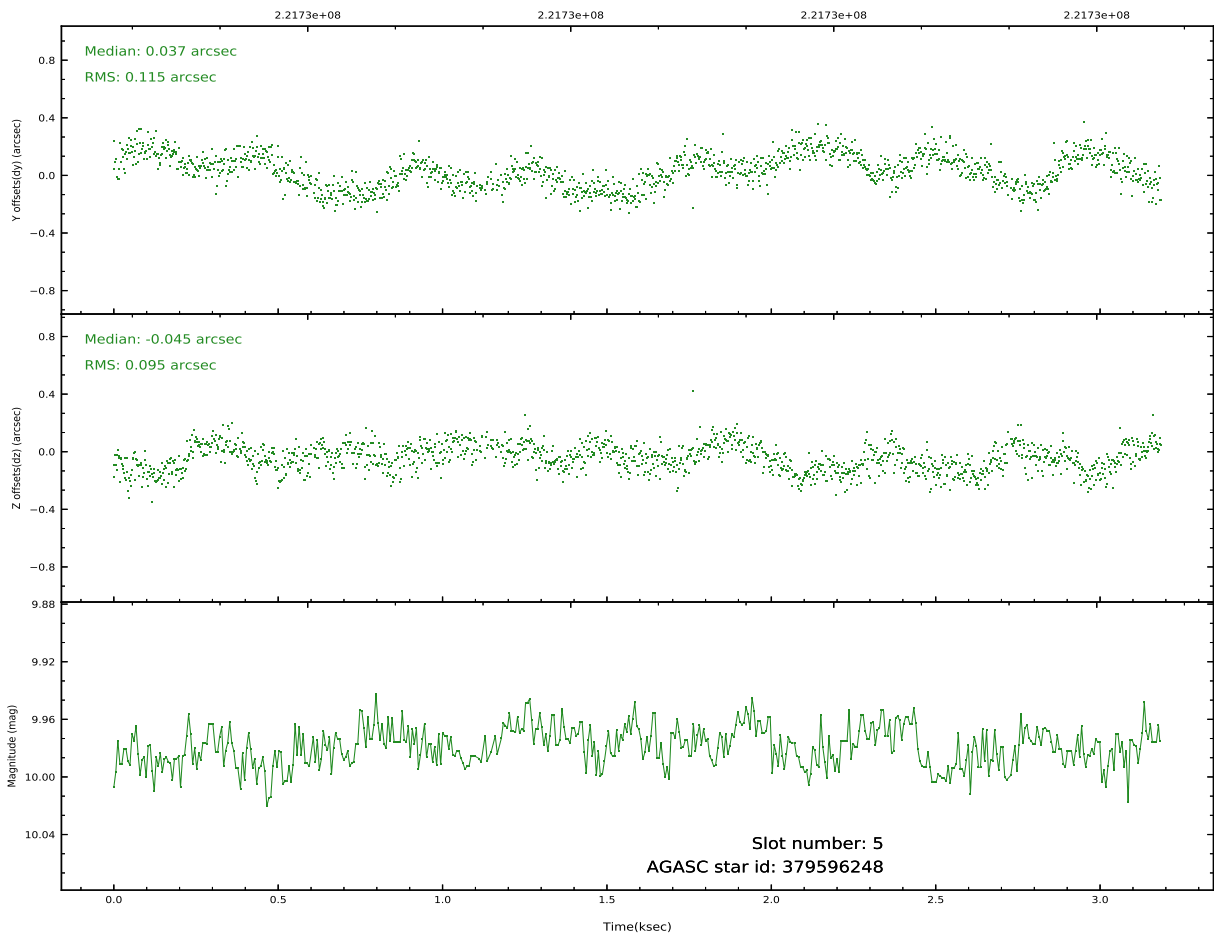
Time (s)



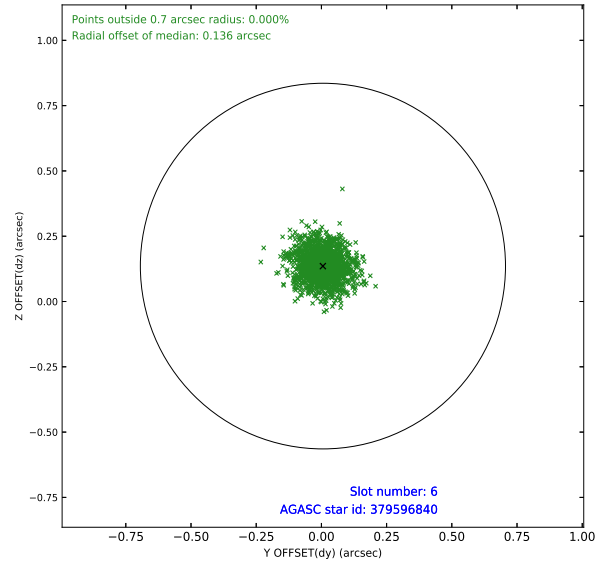
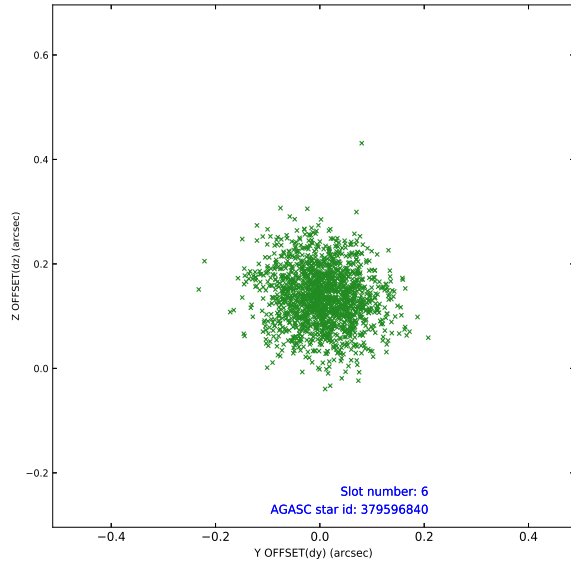
### 2.4.3 Slot 5



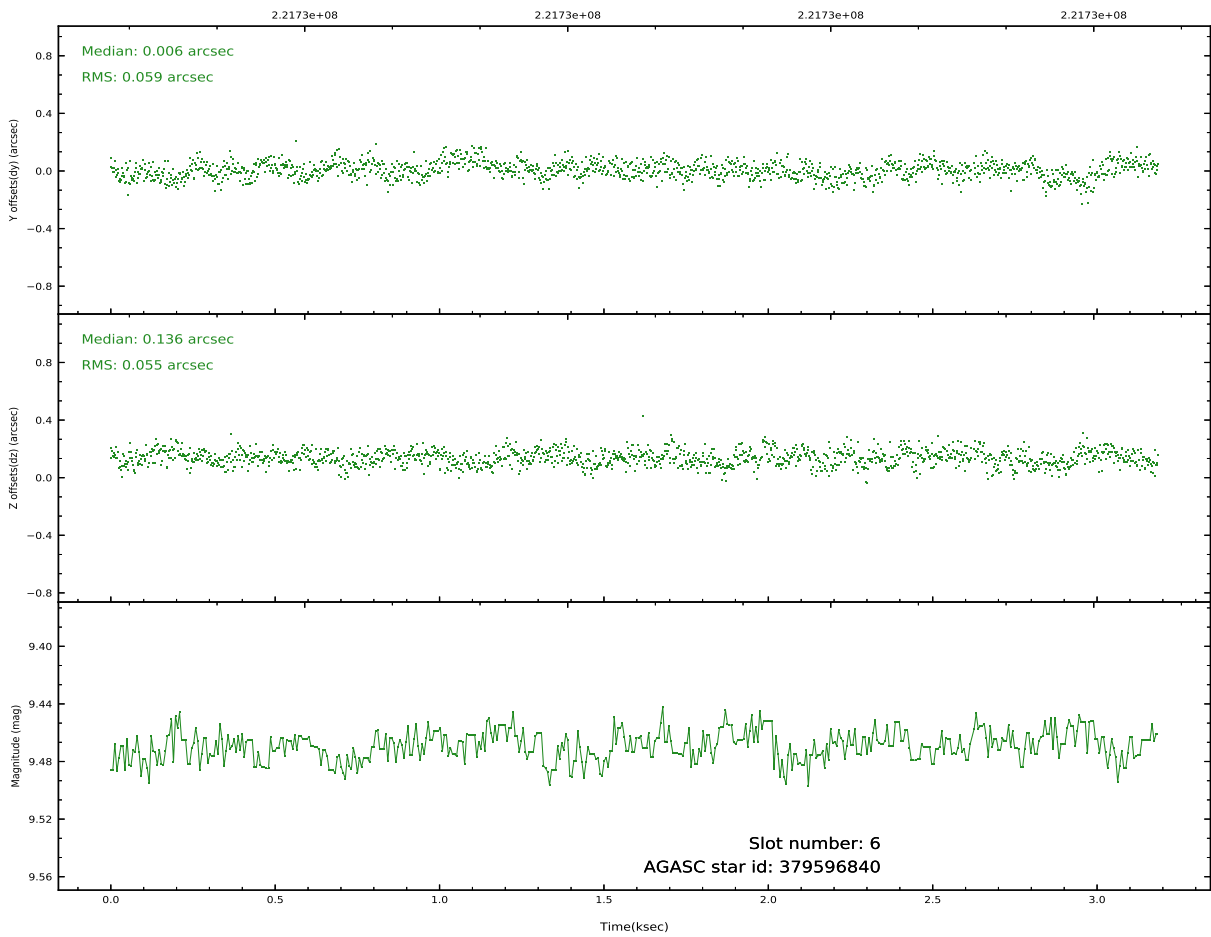
Time (s)



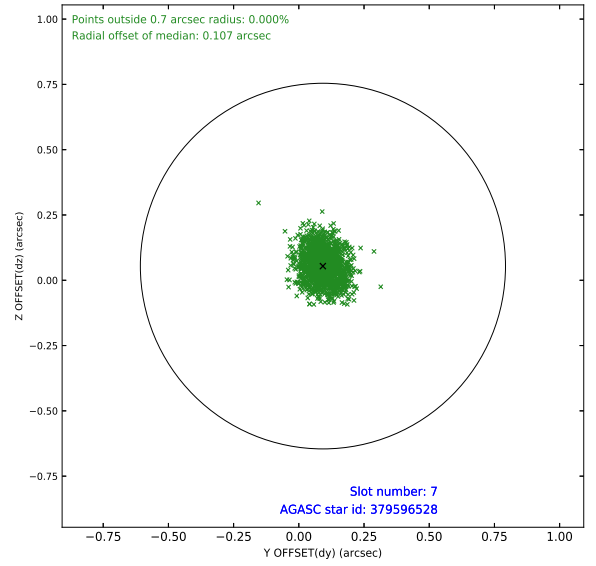
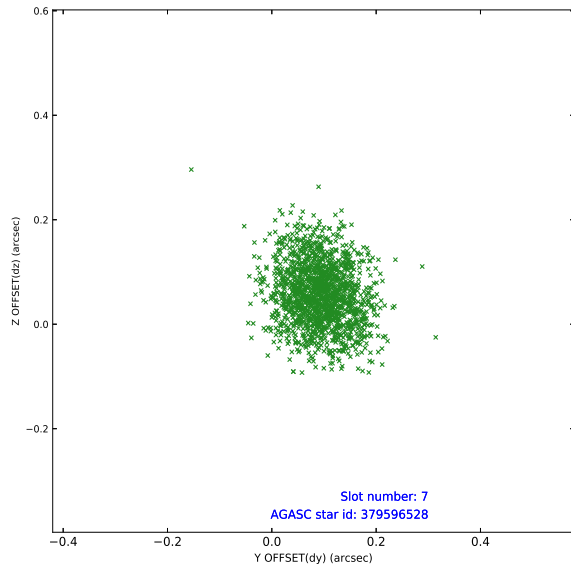
## 2.4.4 Slot 6



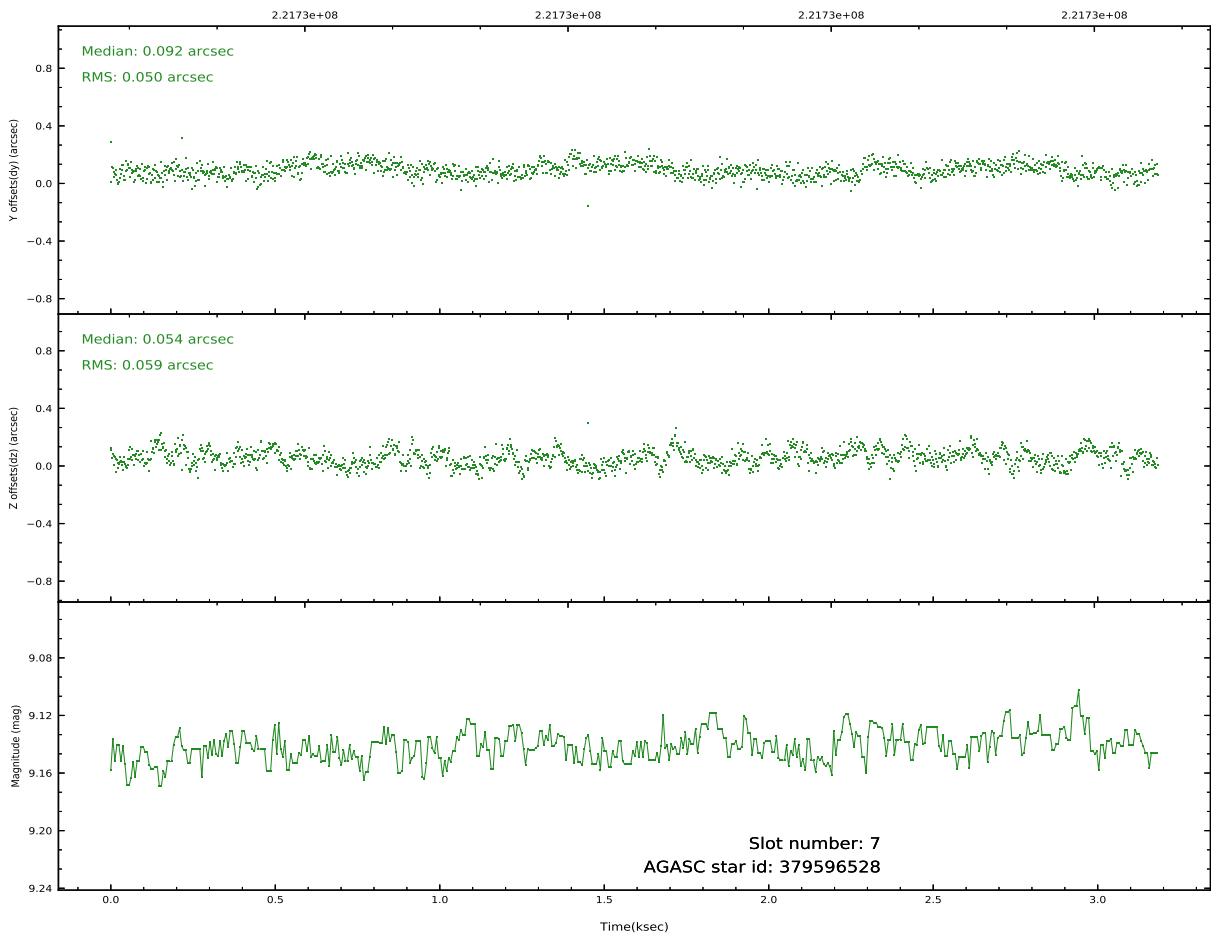
Time (s)



## 2.4.5 Slot 7

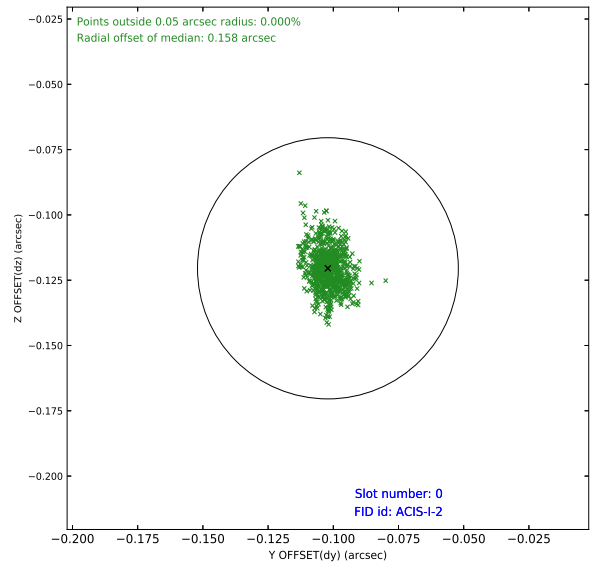
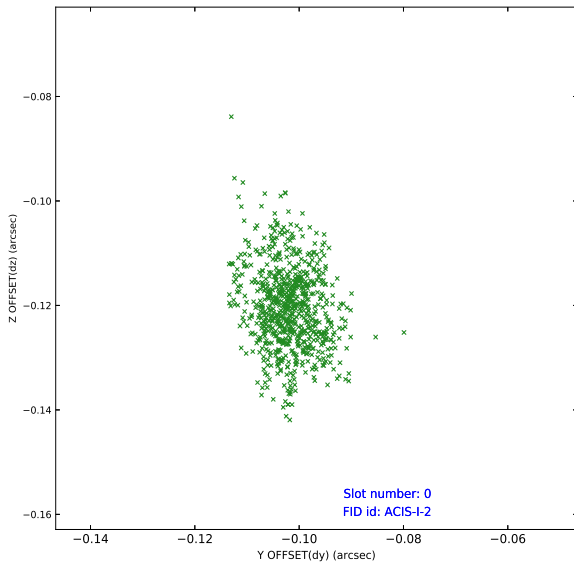


Time (s)

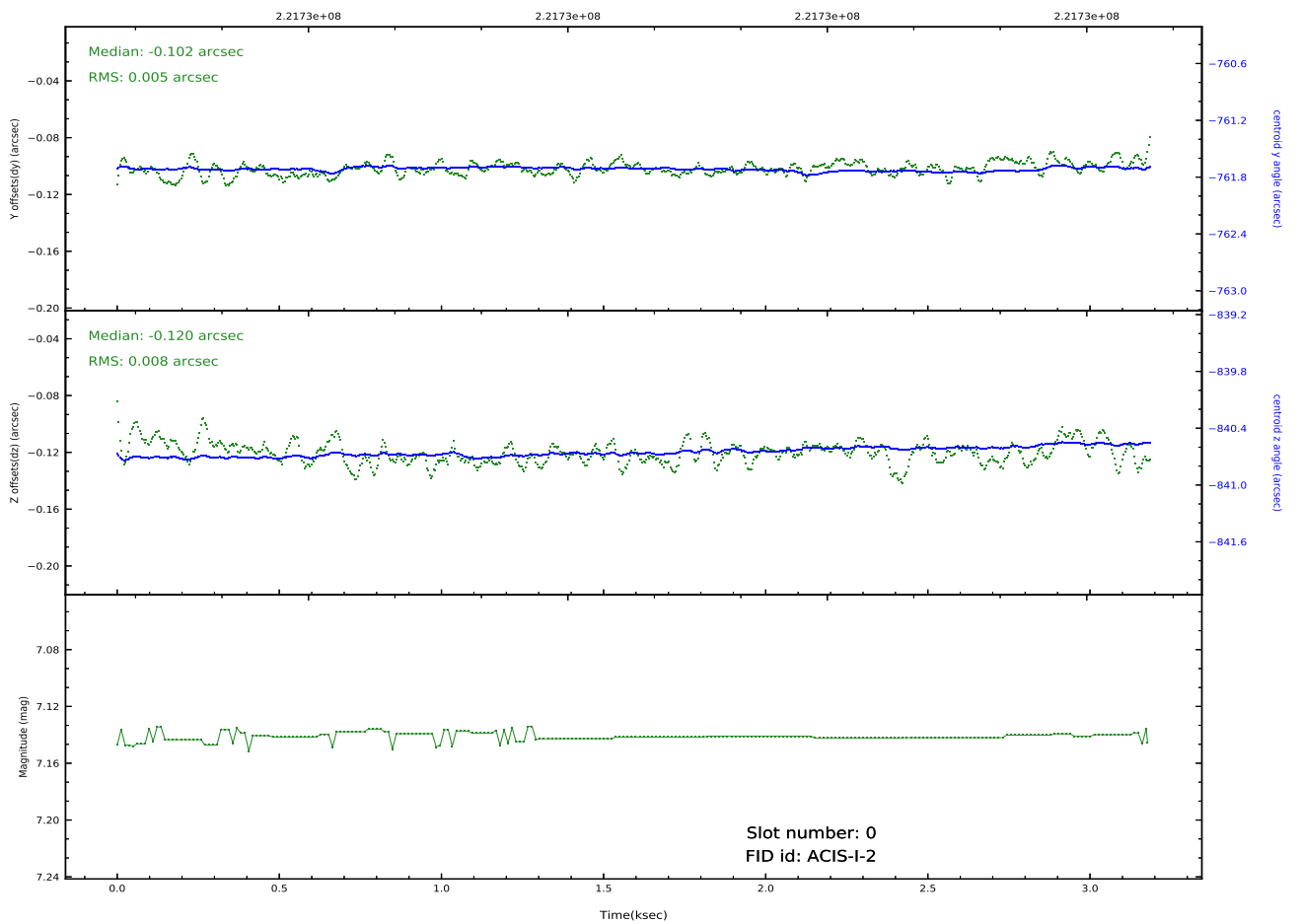


## 2.5 FID Slots

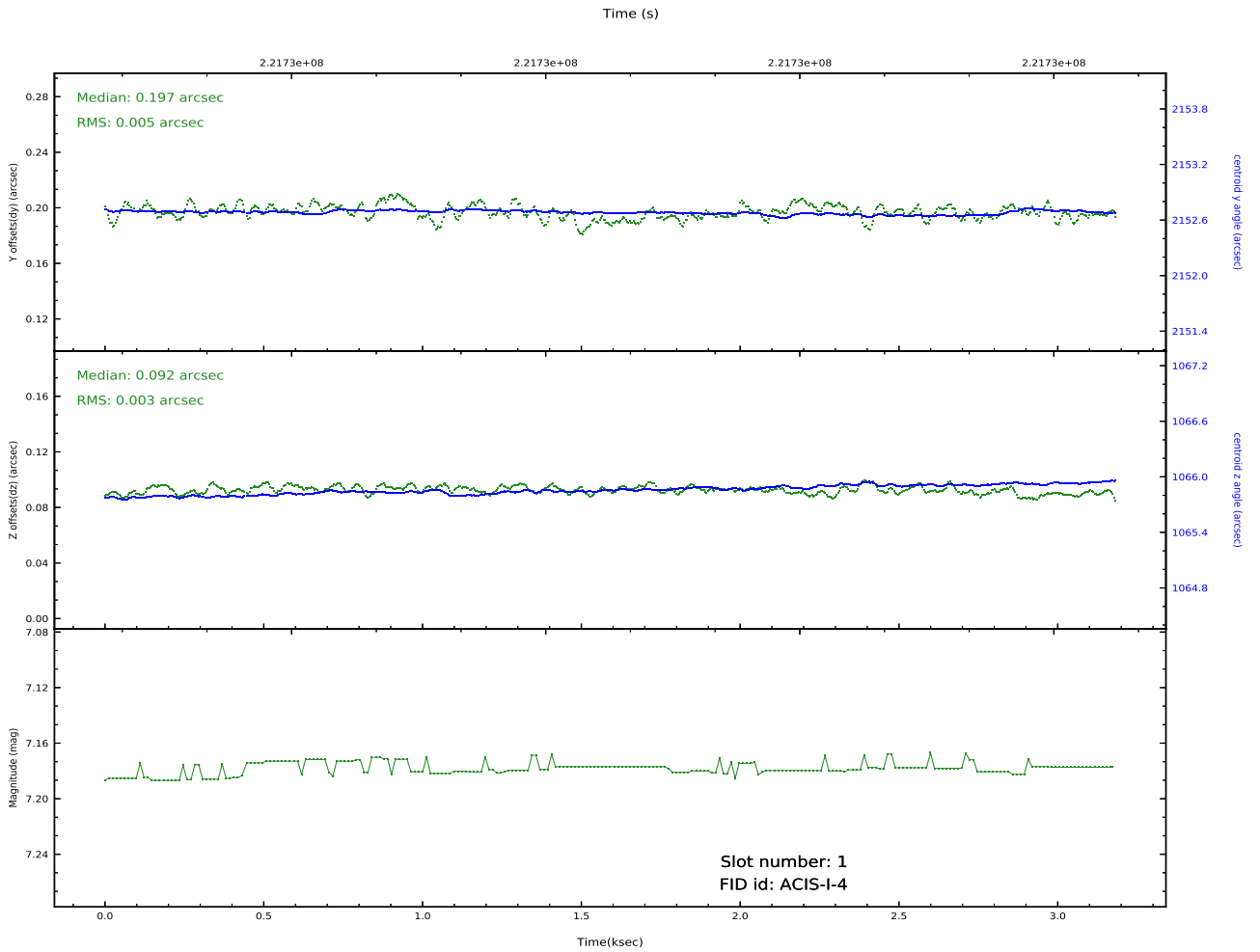
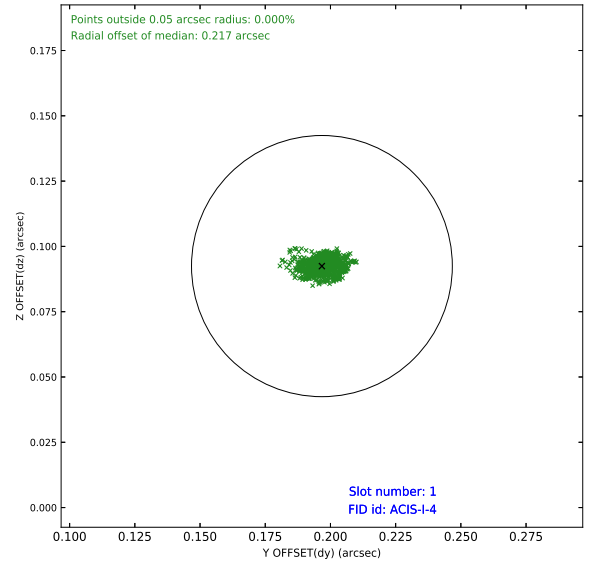
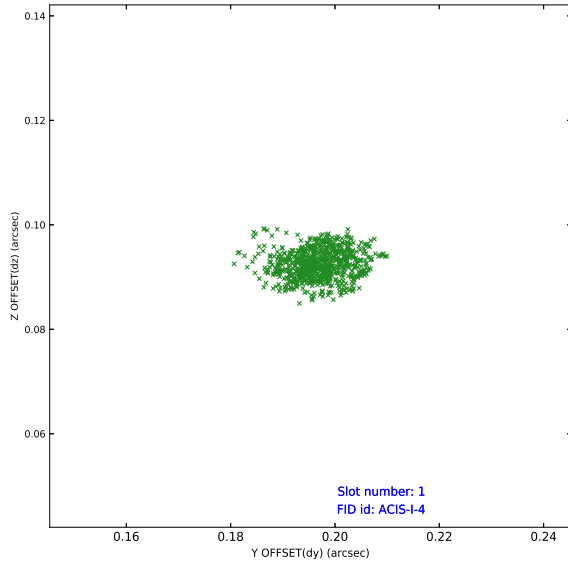
### 2.5.1 Slot 0



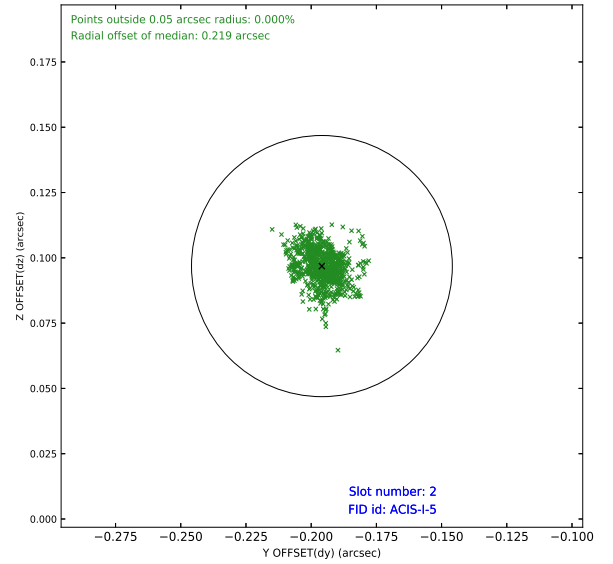
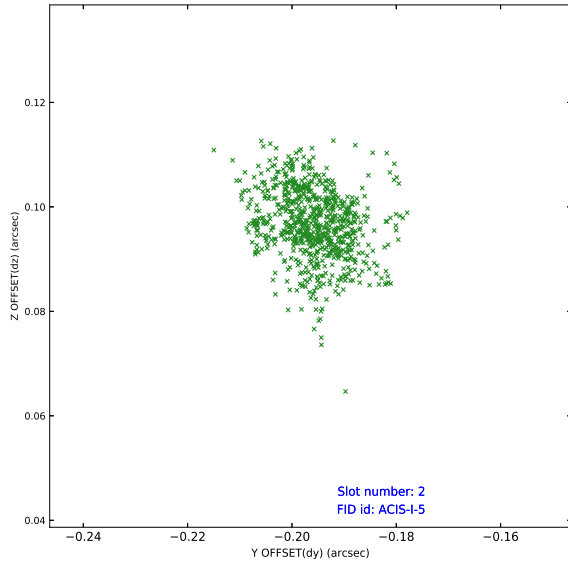
Time (s)



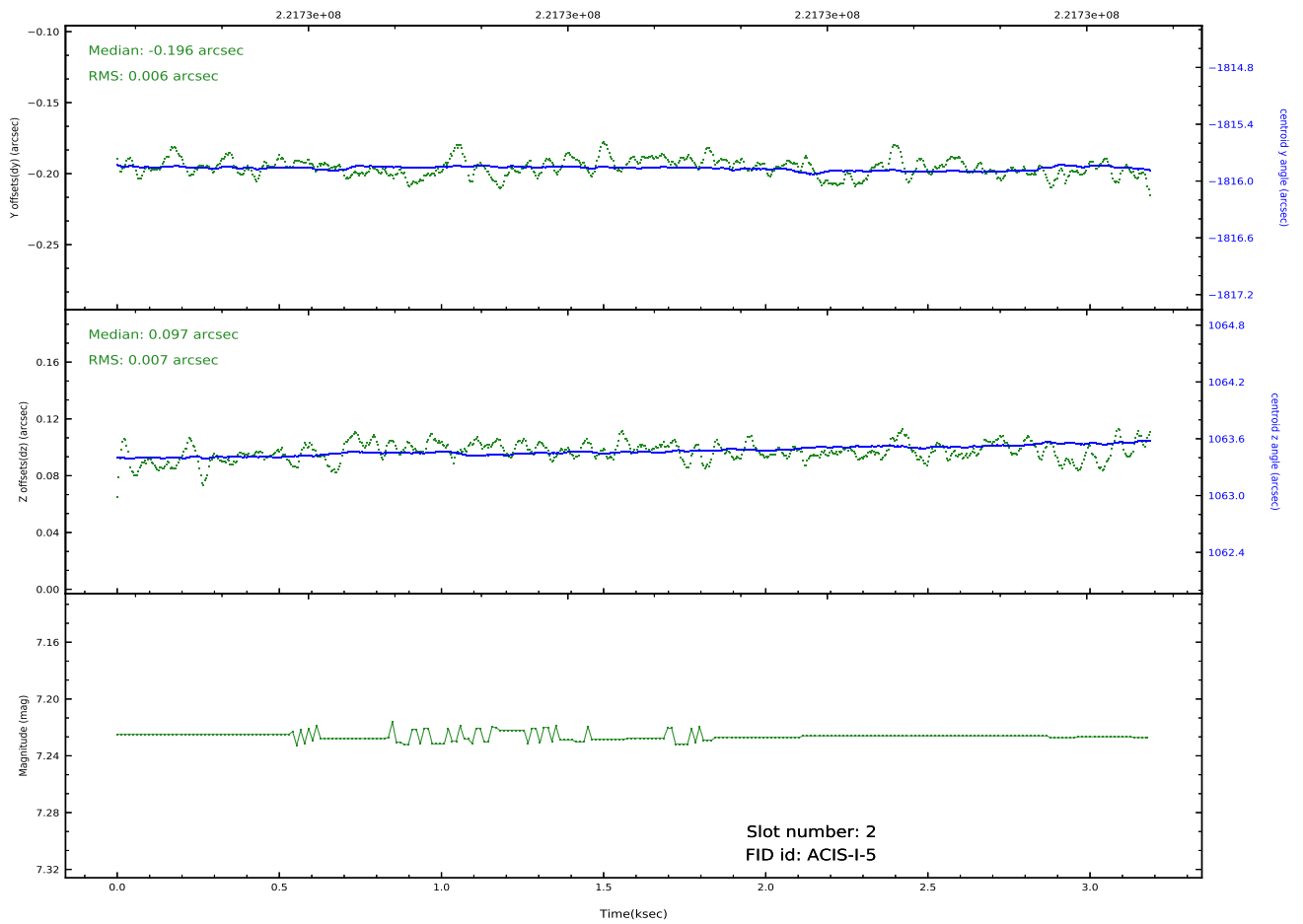
## 2.5.2 Slot 1



### 2.5.3 Slot 2



Time (s)



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.132799

## A.2 Comments