

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 4902 - L2 Version 4  
Chandra X-Ray Center

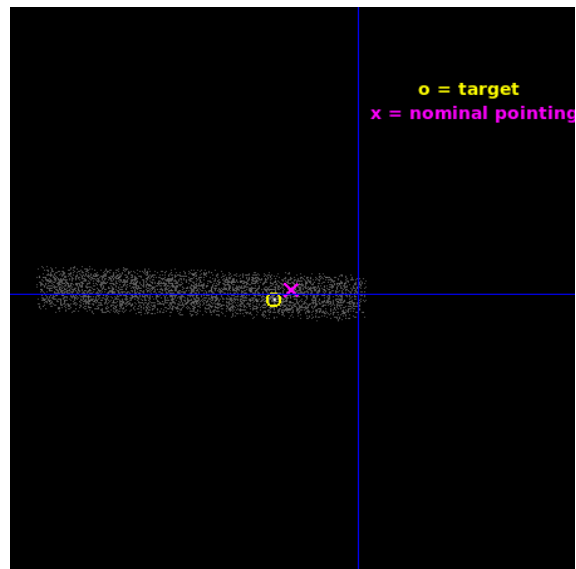
L2 Processing Date : Sep 23 2020

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# 1 Front

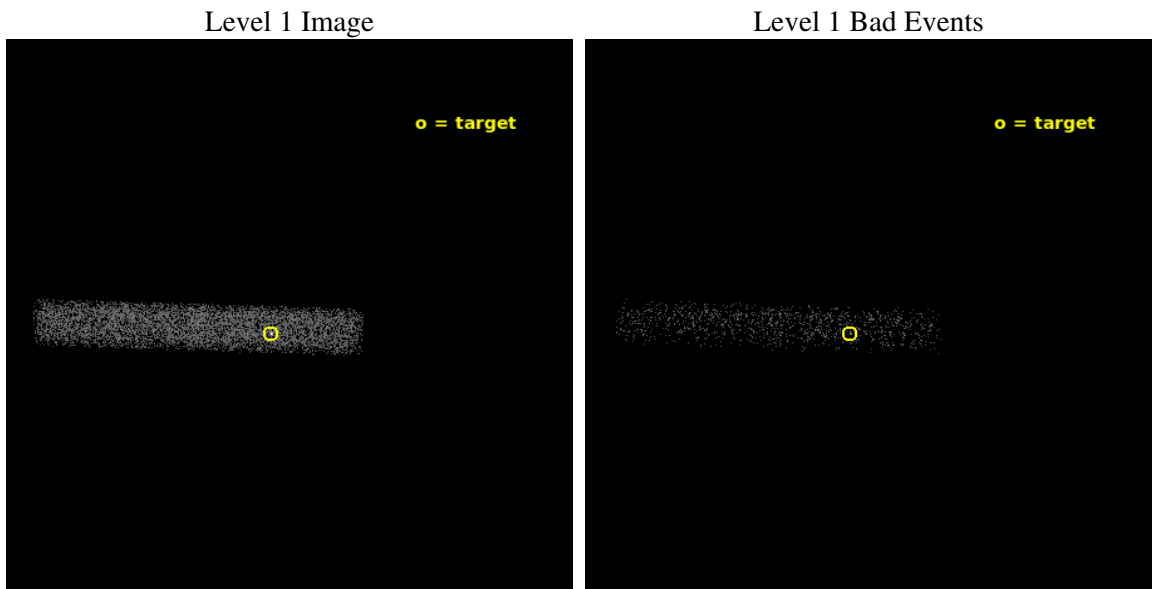
seq_num	700983	Sequence number
obs_id	4902	Observation id
title	The X-ray Spectra of Red Quasars	Proposal title
observer	Dr Mark Lacy	Principal investigator
object	FTM 0830+3759	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	127.54625	Observer's specified target RA [deg]
dec_targ	37.99775	Observer's specified target Dec [deg]
ra_nom	127.53658599979	Nominal RA [deg]
dec_nom	38.002107653572	Nominal Dec [deg]
roll_nom	181.86923245314	Nominal Roll [deg]
revision	4	Processing version of data
ontime	10146.800151169	Sum of GTIs [s]
livetime	9202.6121450837	Livetime [s]
ontime7	10146.800151169	Sum of GTIs [s]
l2events	5555	Number of level 2 events



## 2 OBI

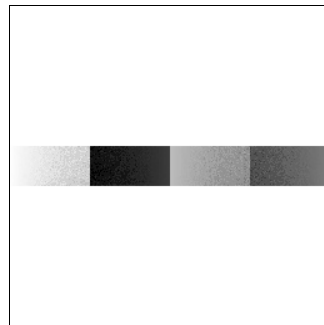
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	10146.800151169	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime7	10146.800151169	Sum of GTIs [s]
date	2020-09-23T15:42:53	Date and time of file creation	l1events	12294	Number of level 1 events
revision	4	Processing version of data			

### 2.1.4 Events

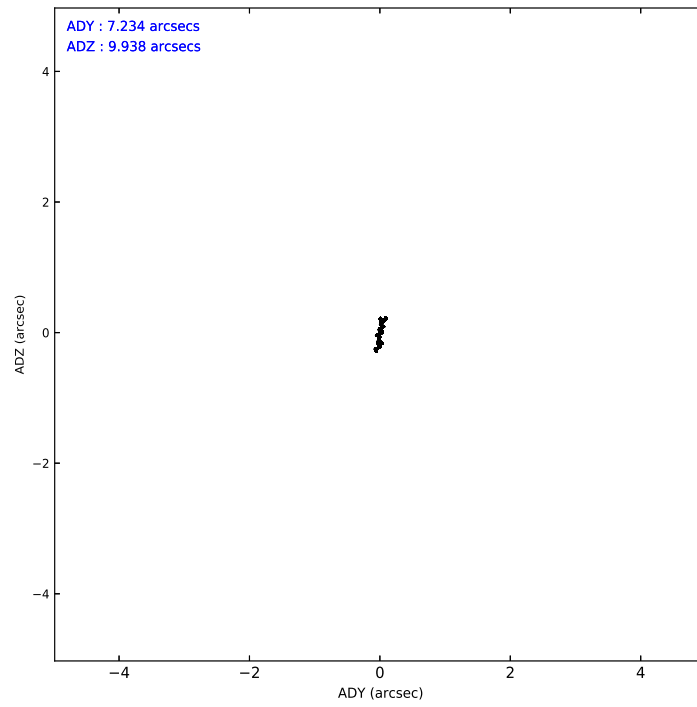
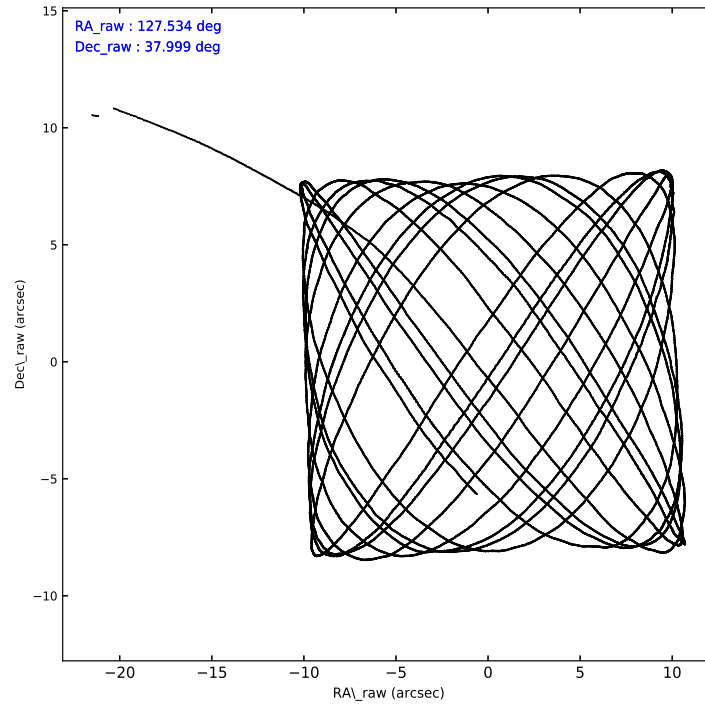
	<b>ccd 7</b>
level 1 events	12294
rejected events	6535
rejected %	53%

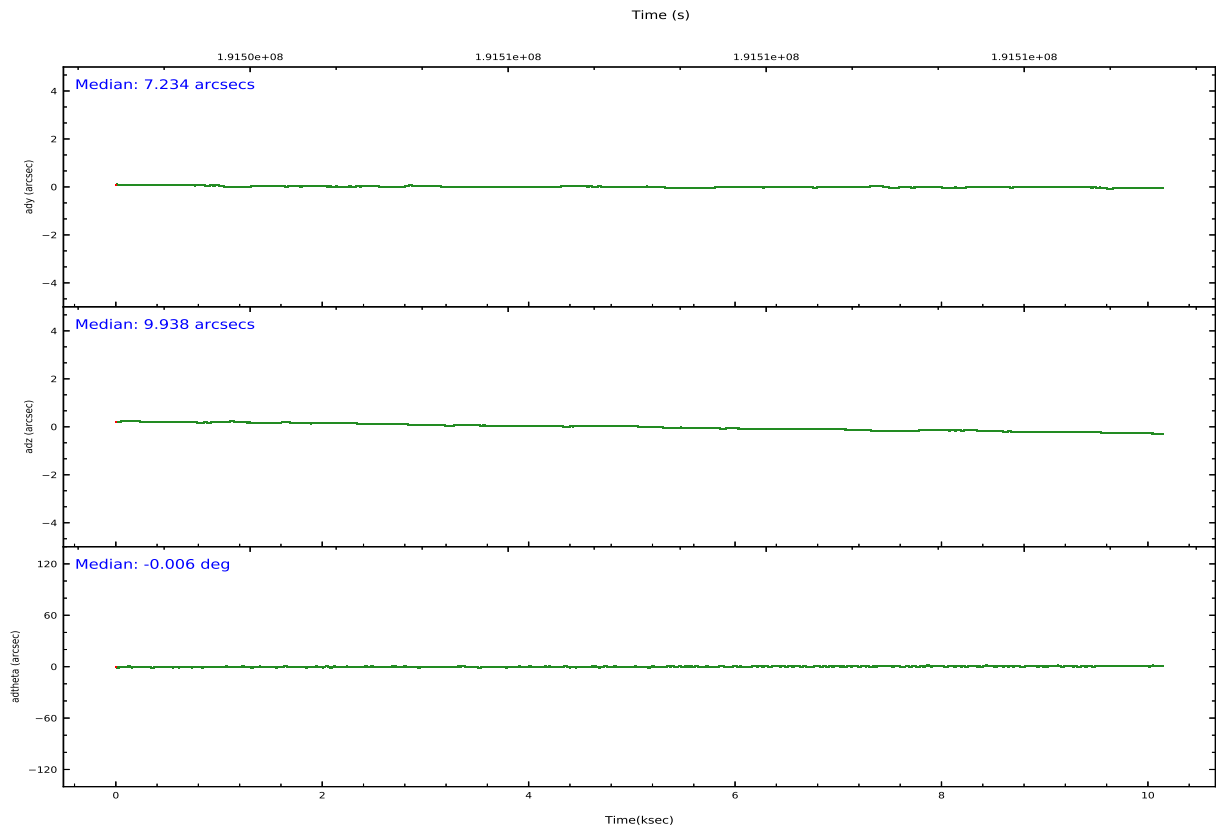
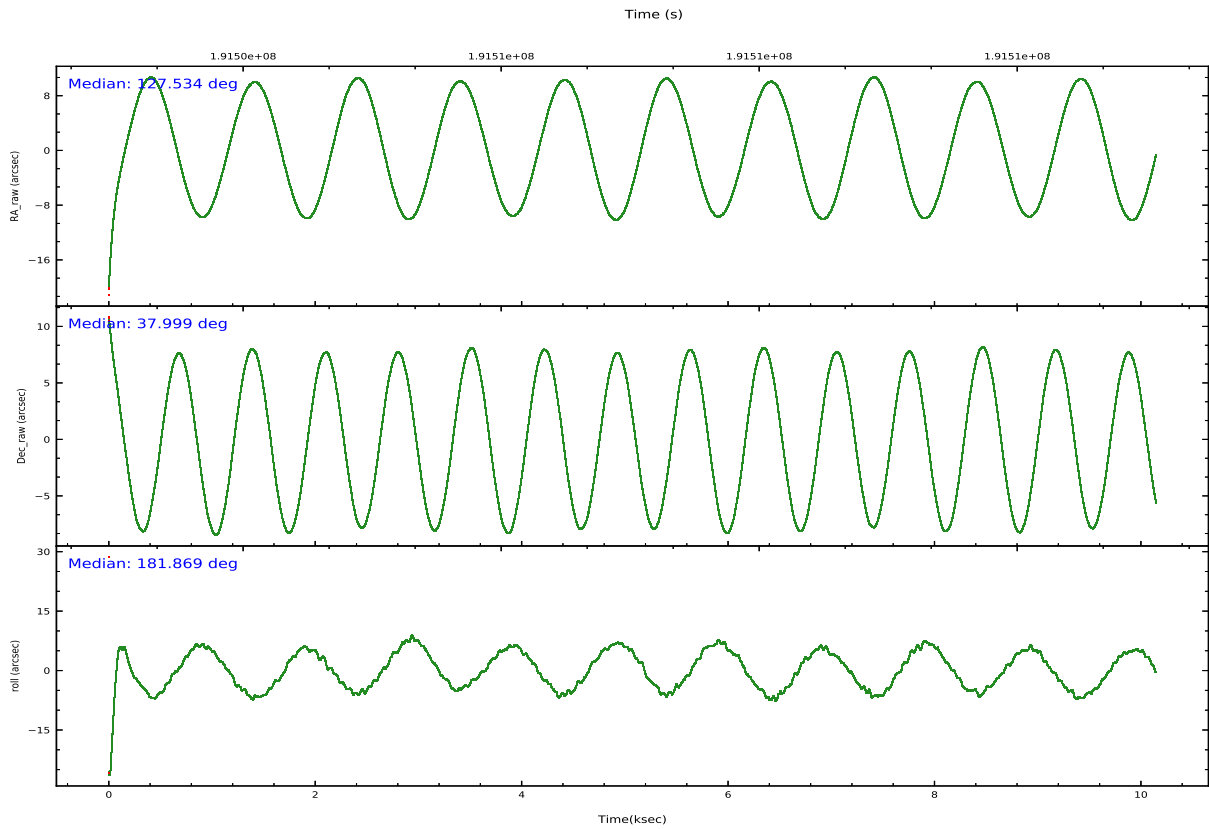
	<b>ccd 7</b>
grade 0 events	840
	6%
grade 1 events	13
	0%
grade 2 events	1221
	9%
grade 3 events	799
	6%
grade 4 events	775
	6%
grade 5 events	1081
	8%
grade 6 events	2560
	20%
grade 7 events	5005
	40%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-7	ACIS-7	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	127.563213	127.53658599979	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	38.013814	38.002107653572	Subarray start row	449	449
[deg] Pointing Roll	181.693184	181.86923245314	Subarray row count	128	128
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	0.4
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	191503846.184000	191502754.45633			
Observation start date	2004-01-26T11:29:42	2004-01-26T11:12:34			
[s] Observation end time (MET)	191513846.184000	191514698.26935			
Observation end date	2004-01-26T14:16:22	2004-01-26T14:31:38			
Read mode	TIMED	TIMED			

## 2.3 Aspect





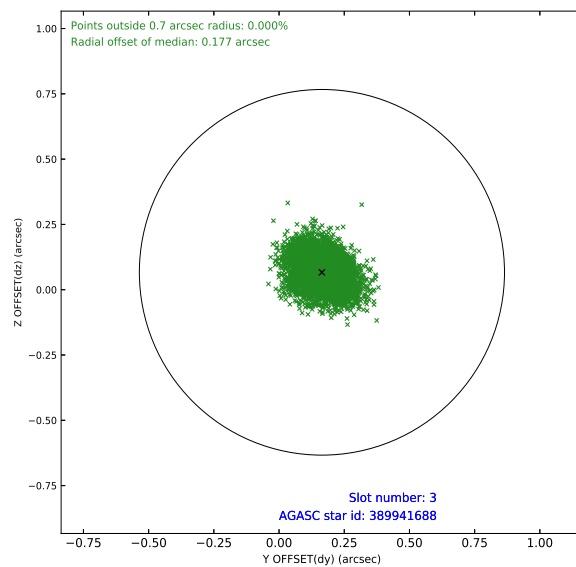
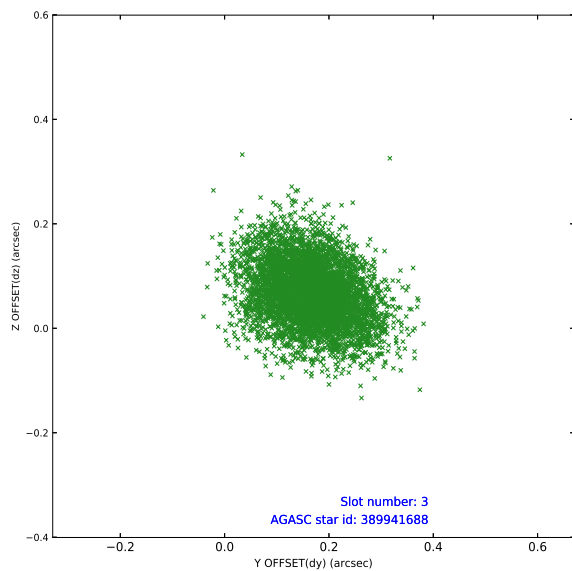
### Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-2	7.10	2476	1.000	-0.072	-0.053	0.007	0.012	0.000000	0.000000	-760.01	-1731
1	FID		ACIS-S-4	7.20	2476	1.000	0.132	0.049	0.005	0.010	0.000000	0.000000	2153.17	176
2	FID		ACIS-S-5	7.23	2476	1.000	-0.091	0.013	0.007	0.012	0.000000	0.000000	-1812.26	170
3	GUIDE	used	389941688	9.45	4949	1.000	0.164	0.067	0.092	0.151	127.096763	38.100167	1311.76	-352
4	GUIDE	used	389943192	8.41	4950	1.000	-0.103	-0.013	0.062	0.098	127.620263	38.598604	-222.34	-2099
5	GUIDE	used	389944848	8.16	4951	1.000	-0.070	-0.043	0.058	0.093	126.949244	37.500847	1806.95	1788
6	GUIDE	used	389948112	8.02	4951	1.000	0.006	0.007	0.046	0.078	127.973824	37.693433	-1134.88	1185
7	GUIDE	used	389947560	8.01	4949	1.000	0.005	-0.017	0.054	0.089	128.370020	37.895863	-2278.91	482

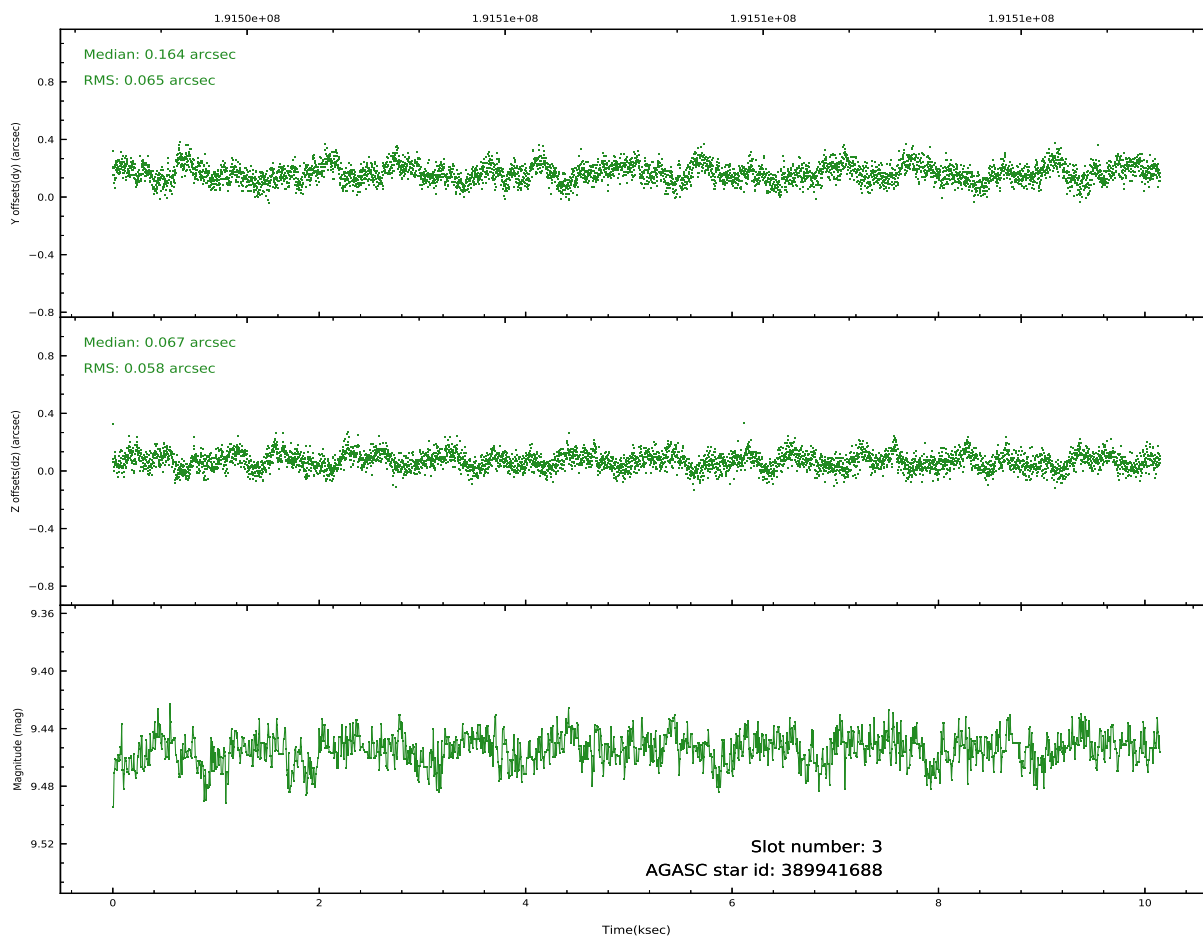
∞

## 2.4 Star Slots

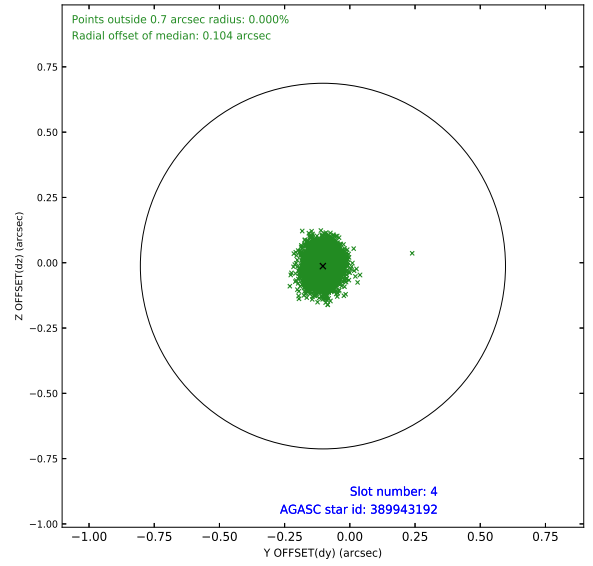
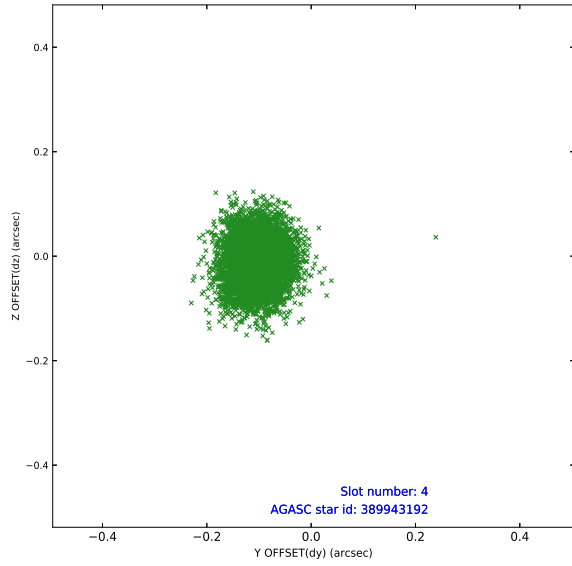
### 2.4.1 Slot 3



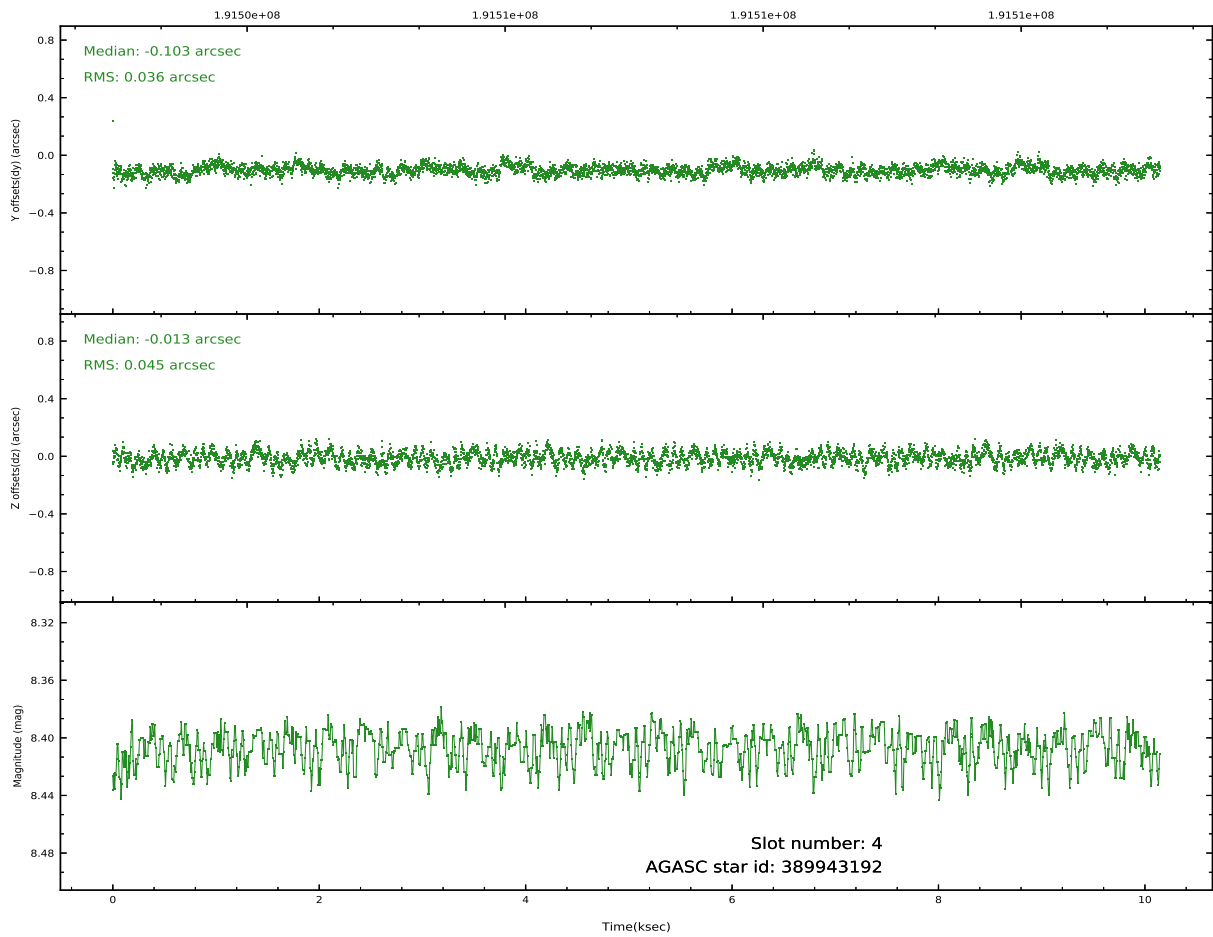
Time (s)



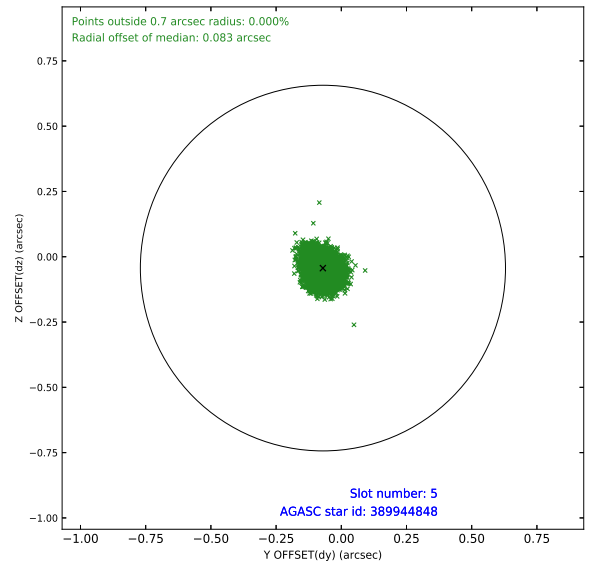
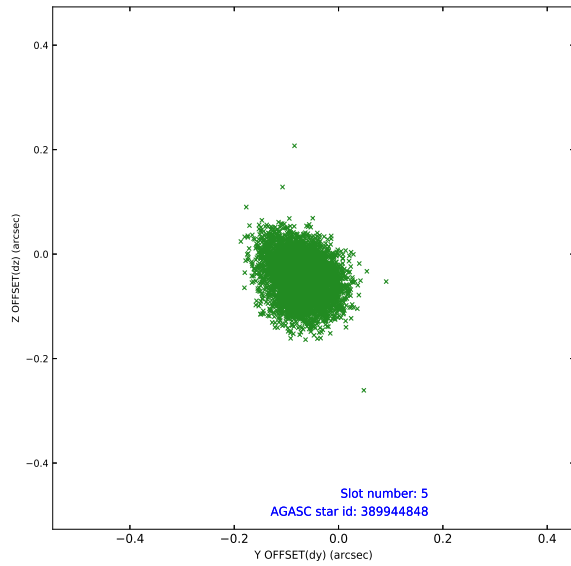
## 2.4.2 Slot 4



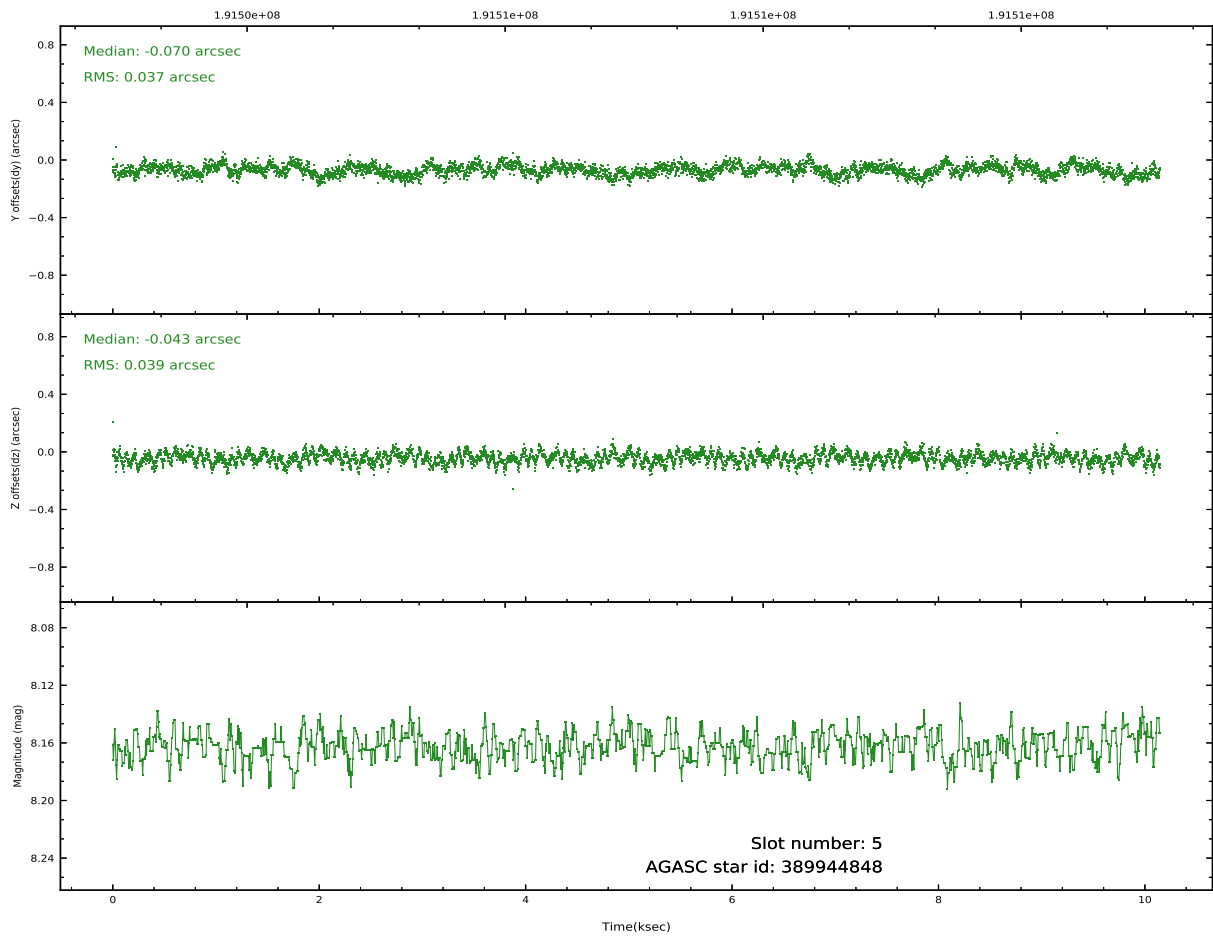
Time (s)



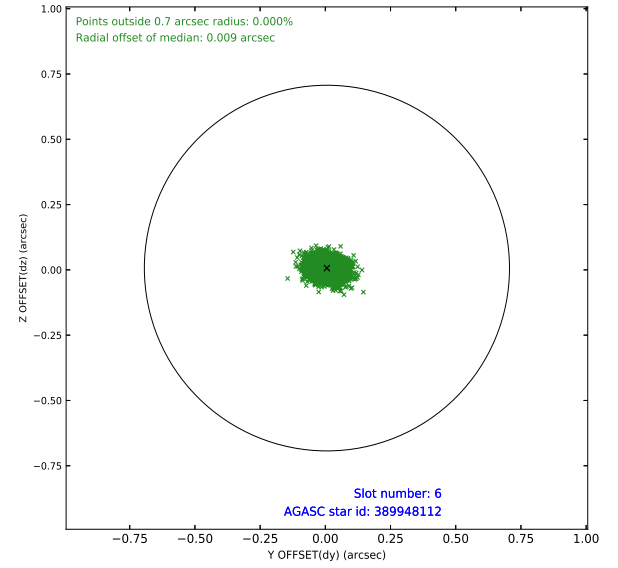
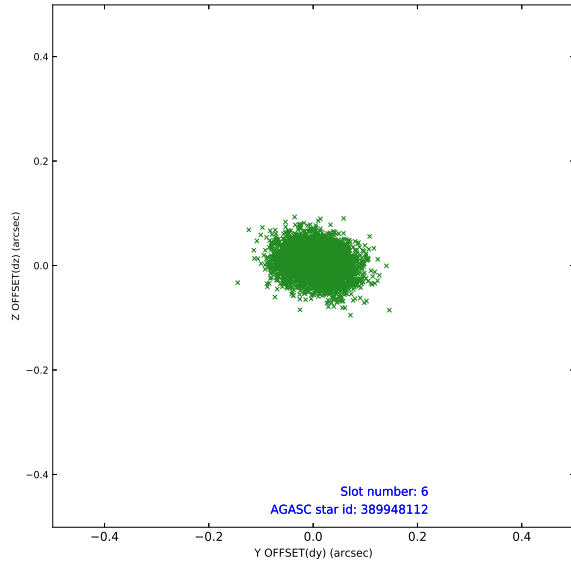
### 2.4.3 Slot 5



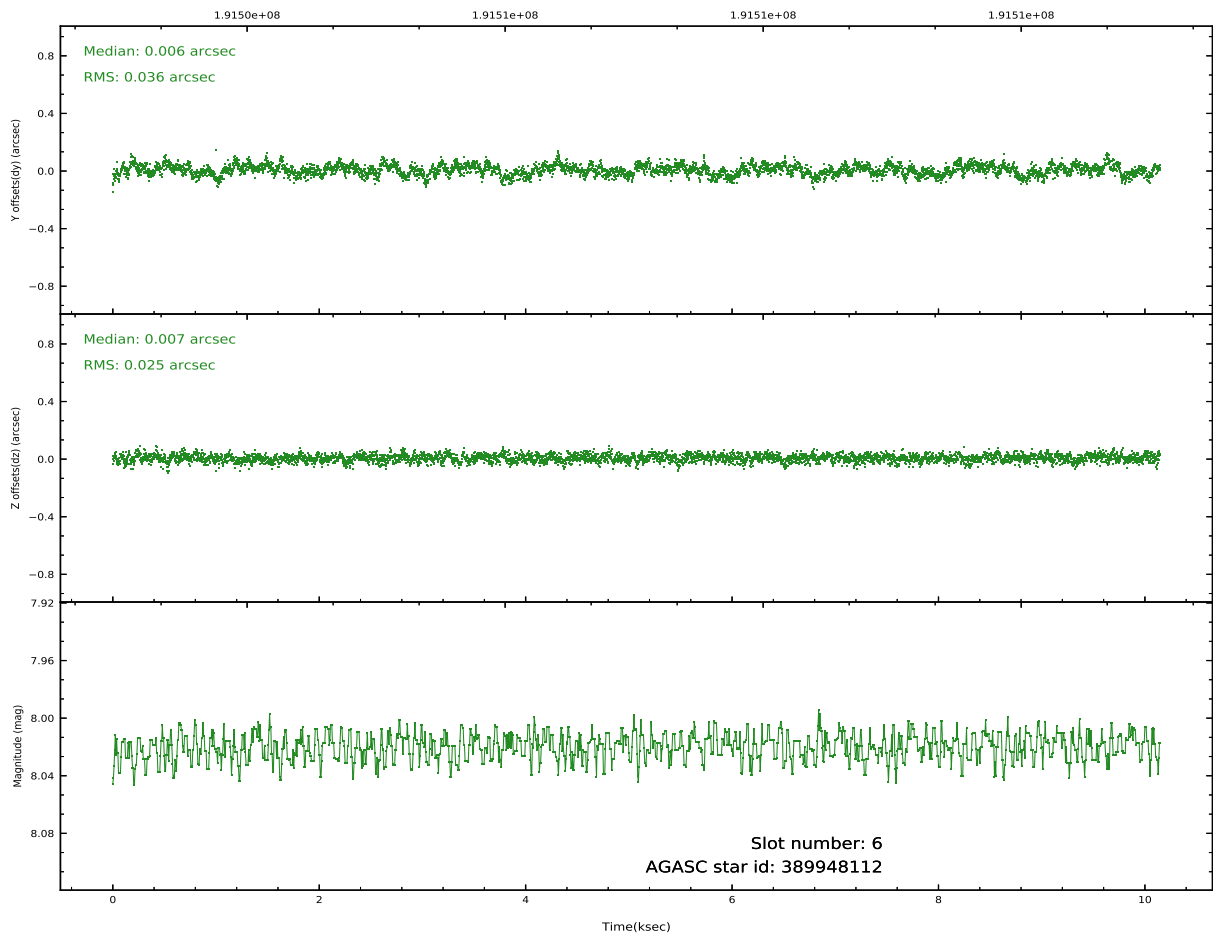
Time (s)



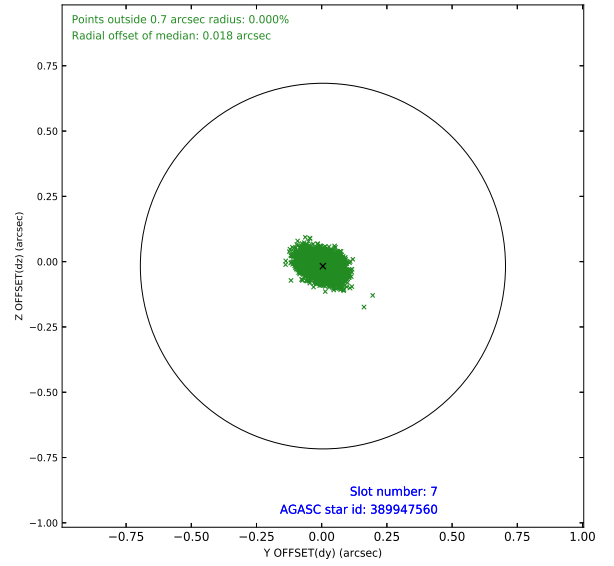
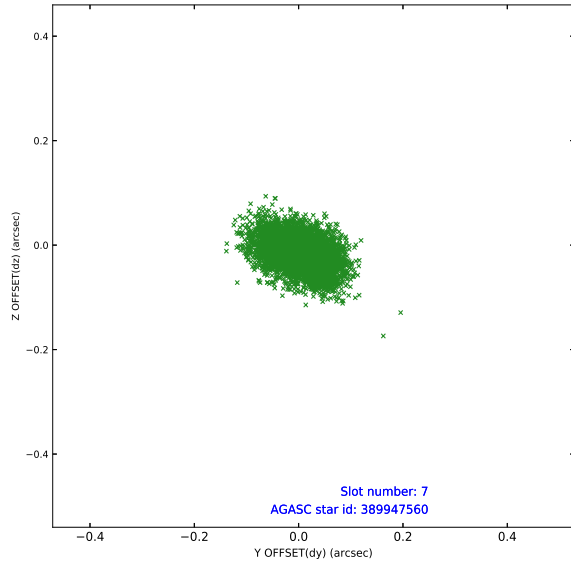
## 2.4.4 Slot 6



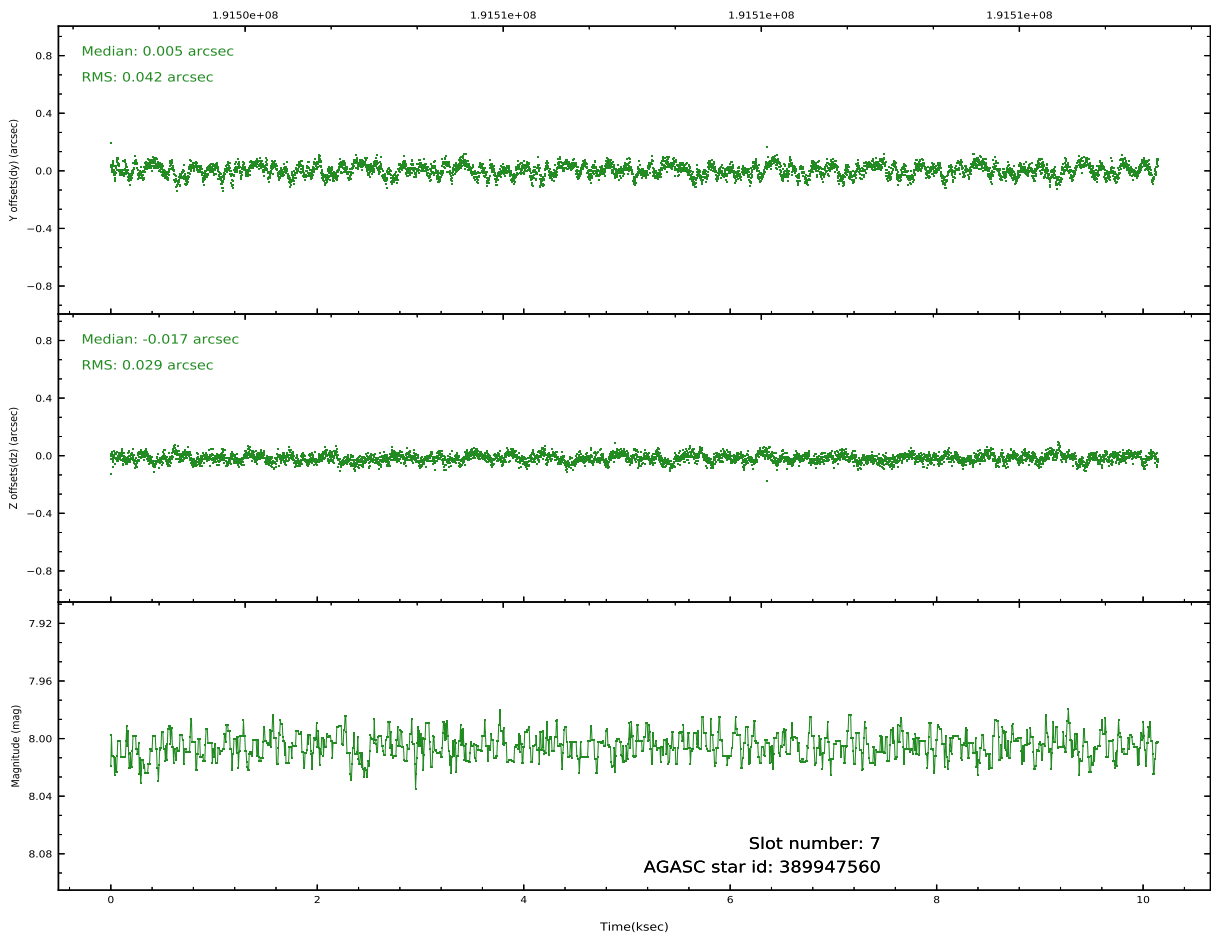
Time (s)



## 2.4.5 Slot 7

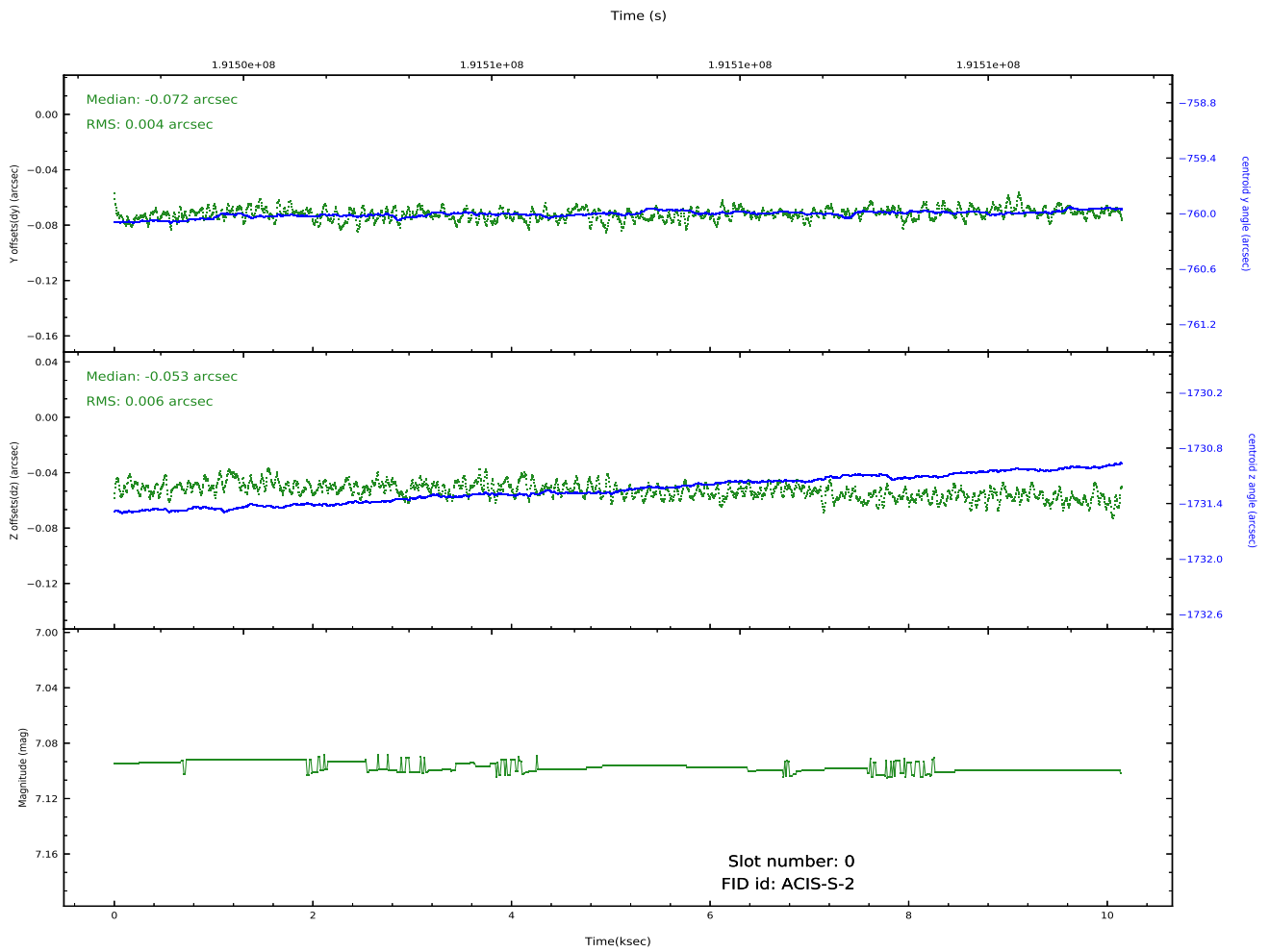
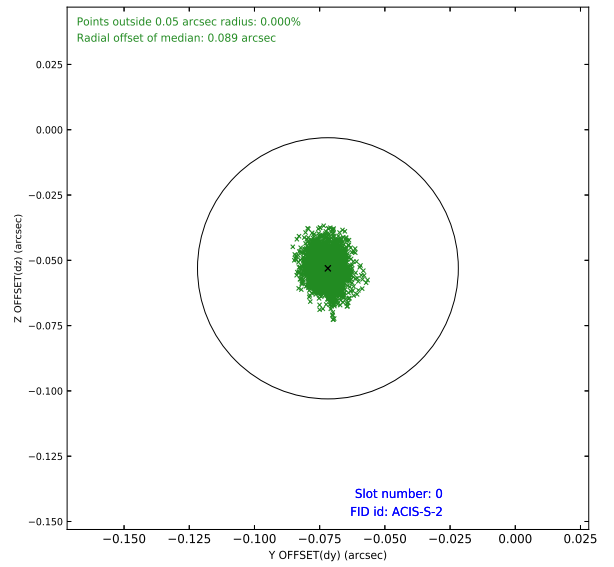
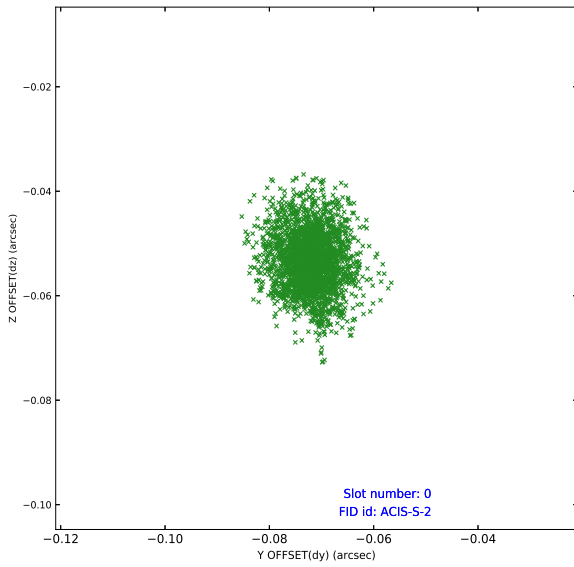


Time (s)

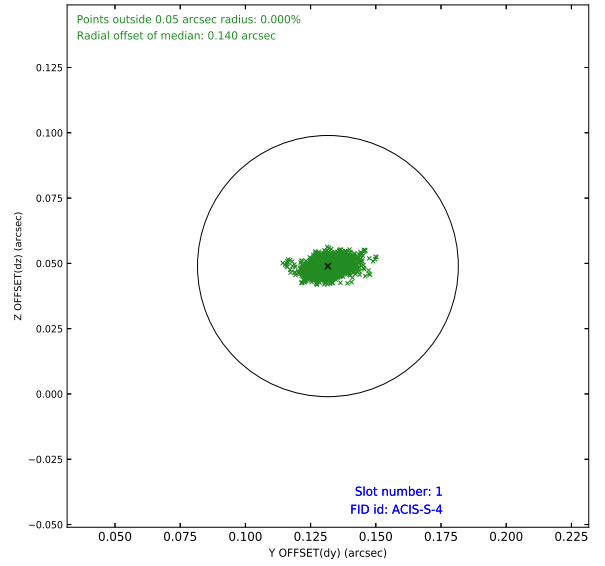
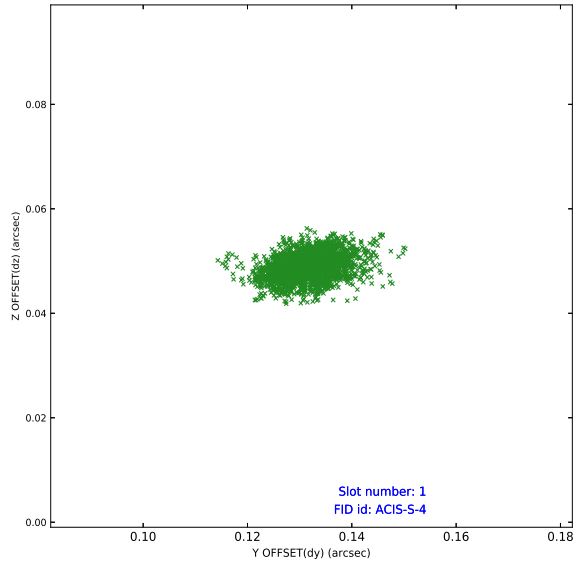


## 2.5 FID Slots

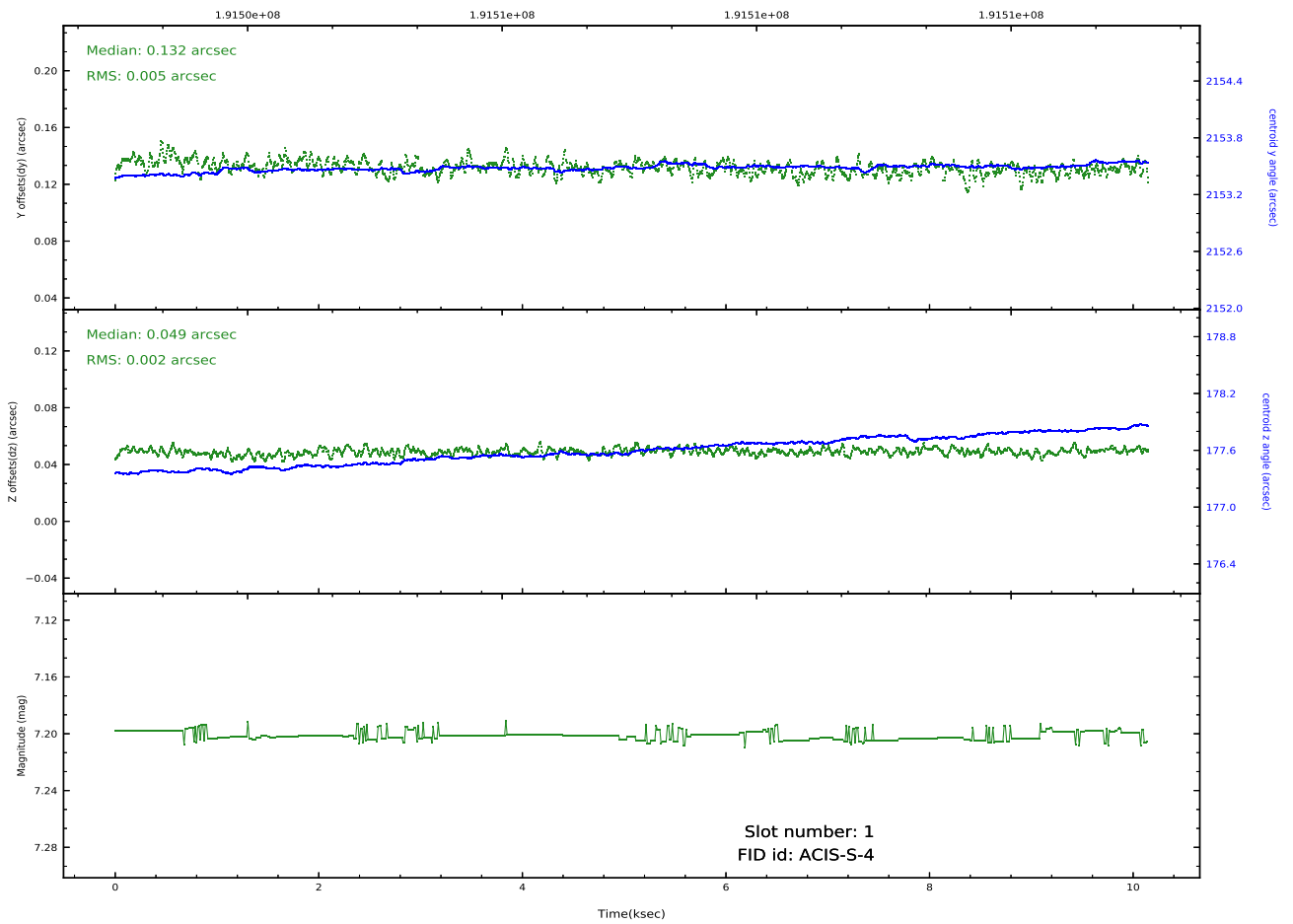
### 2.5.1 Slot 0



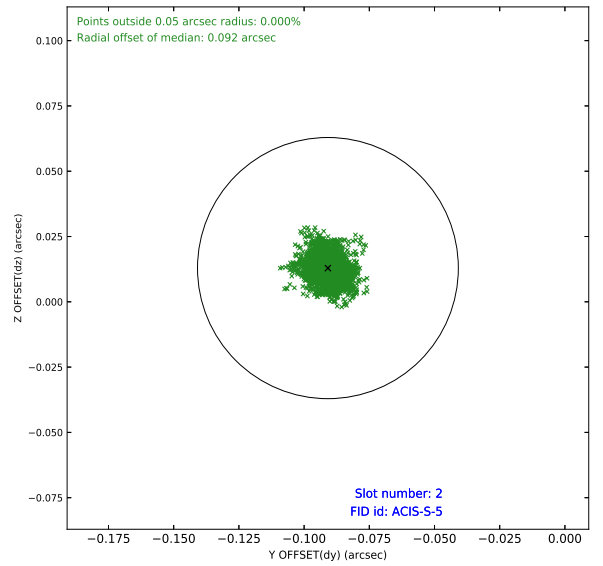
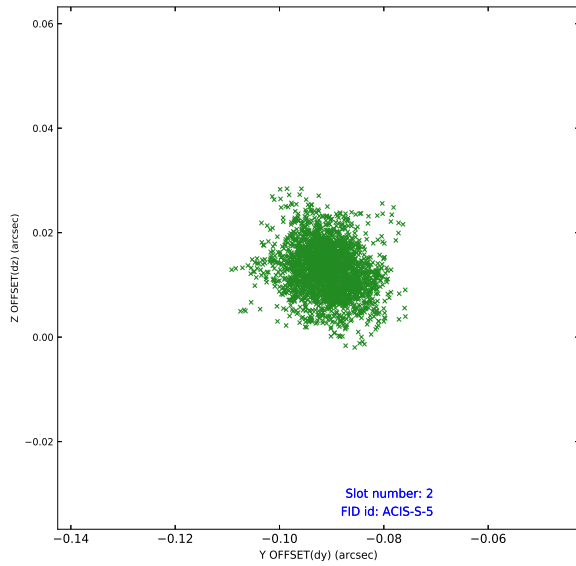
## 2.5.2 Slot 1



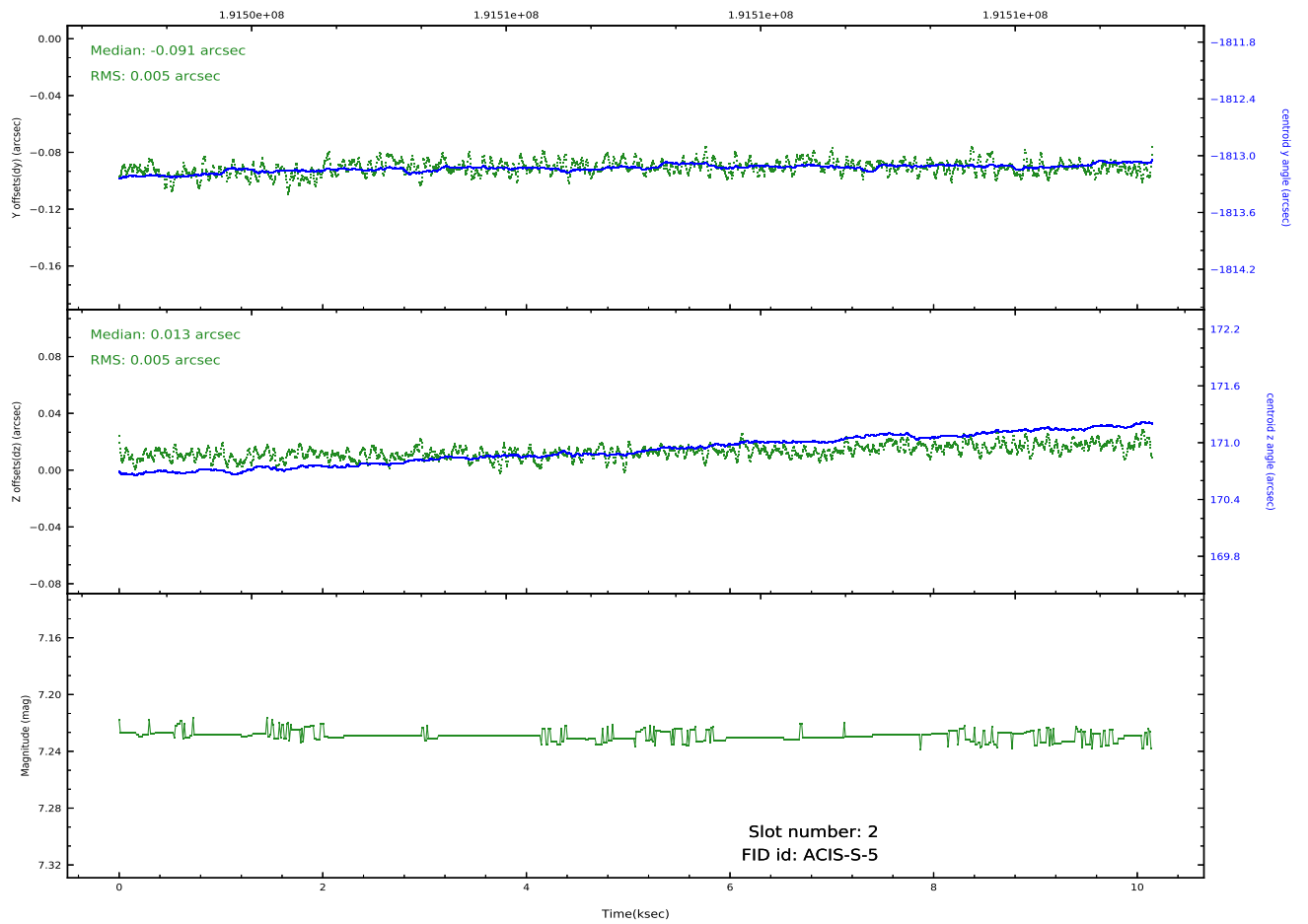
Time (s)



### 2.5.3 Slot 2



Time (s)



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.09.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.146

## A.2 Comments