

# V&V Reference Report

## L2 ASCDS Version : 10.9.2

Observation 21004 - L2 Version 2  
Chandra X-Ray Center

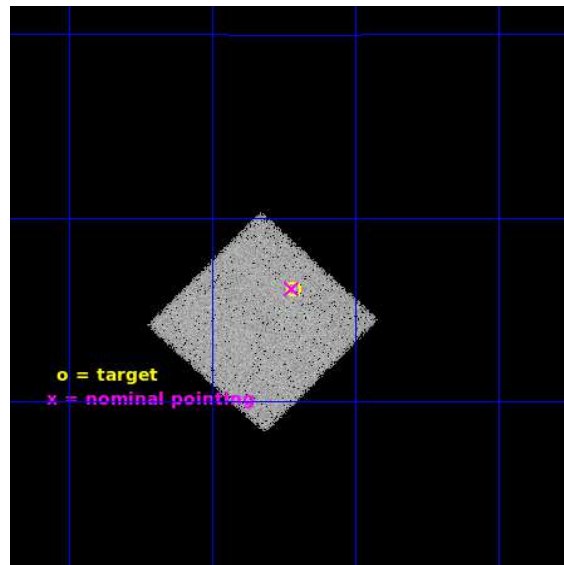
L2 Processing Date : Oct 27 2020

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# 1 Front

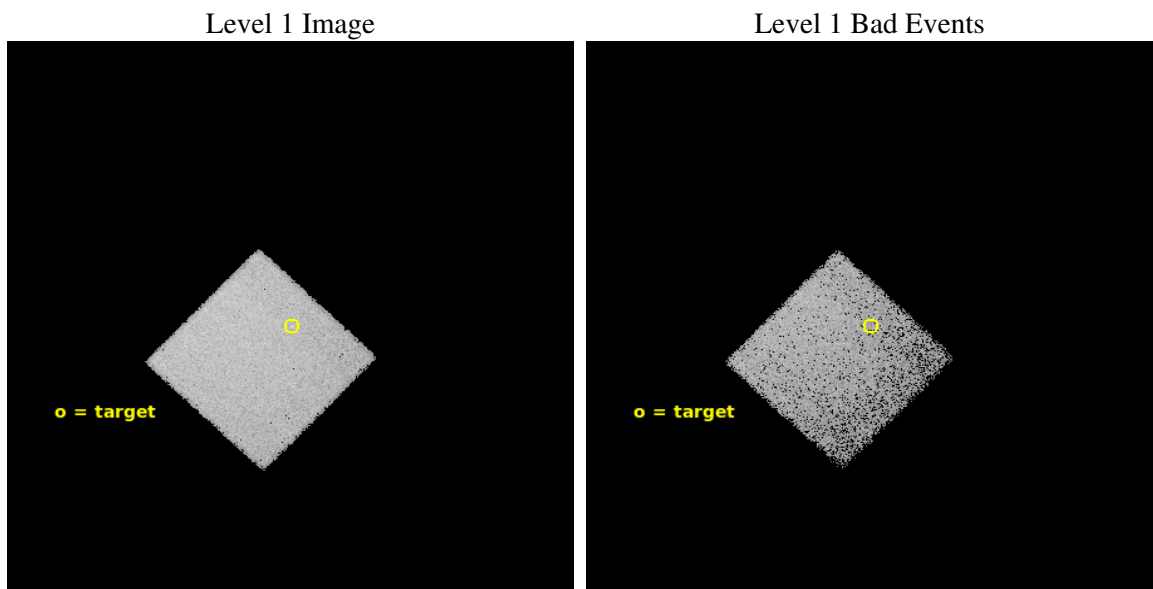
seq_num	503050	Sequence number
obs_id	21004	Observation id
title	Zeroing in on the Mass Loss Properties of Core Collapse Supernova Progenitors	Proposal title
observer	Daniel Patnaude	Principal investigator
object	SN2003gk	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	345.429167	Observer's specified target RA [deg]
dec_targ	2.268889	Observer's specified target Dec [deg]
ra_nom	345.43042909947	Nominal RA [deg]
dec_nom	2.2693070616945	Nominal Dec [deg]
roll_nom	133.71861787412	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15090.0	Sum of GTIs [s]
liveltime	14886.35466814	Livetime [s]
ontime7	15090.0	Sum of GTIs [s]
l2events	60725	Number of level 2 events



## 2 OBI

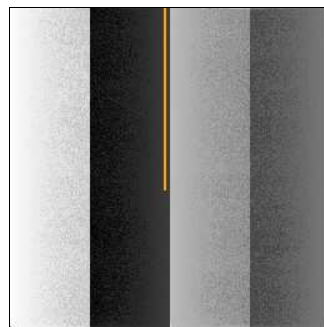
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	15090.0	Sum of GTIs [s]
caldsver	4.9.3	&#160	ontime7	15090.0	Sum of GTIs [s]
date	2020-10-27T08:30:31	Date and time of file creation	l1events	140781	Number of level 1 events
revision	2	Processing version of data			

### 2.1.4 Events

	<b>ccd 7</b>
level 1 events	140781
rejected events	78150
rejected %	55%

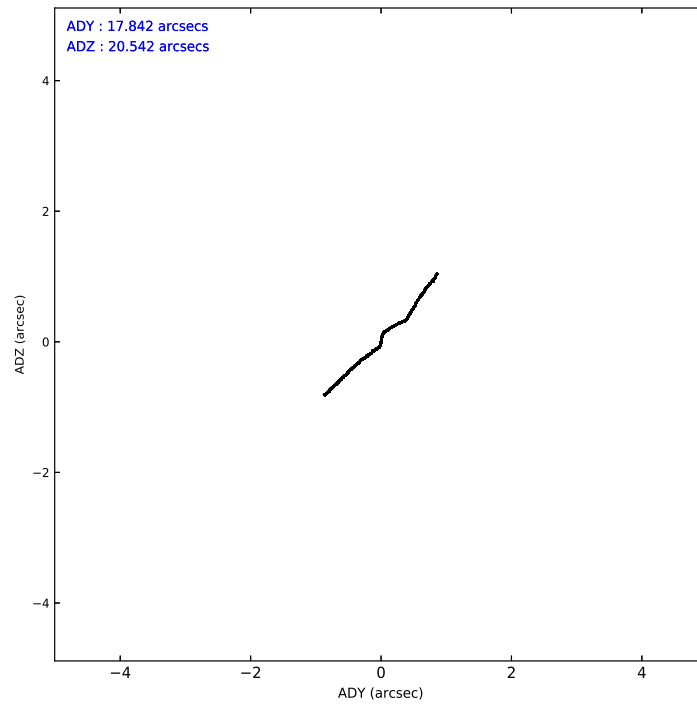
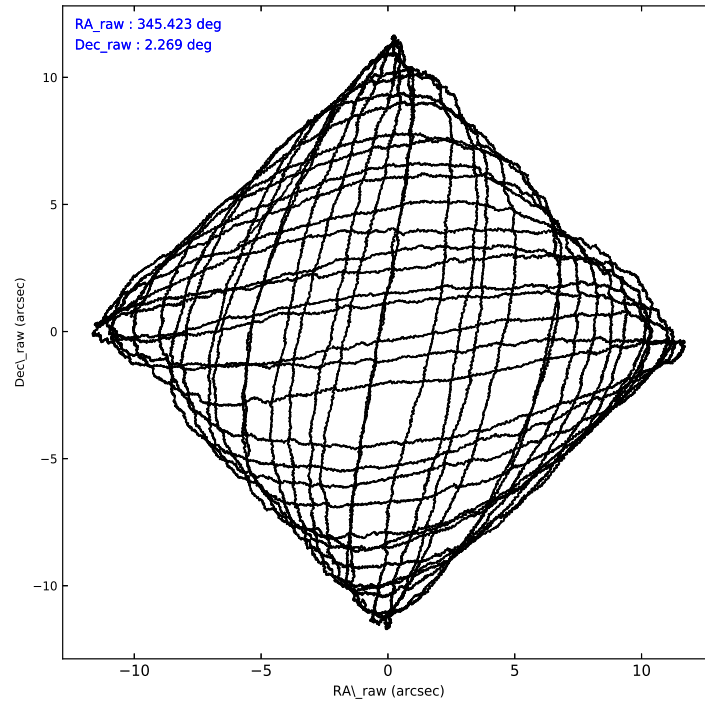
	<b>ccd 7</b>
grade 0 events	5318
	3%
grade 1 events	195
	0%
grade 2 events	13342
	9%
grade 3 events	5081
	3%
grade 4 events	5097
	3%
grade 5 events	14270
	10%
grade 6 events	33813
	24%
grade 7 events	63665
	45%

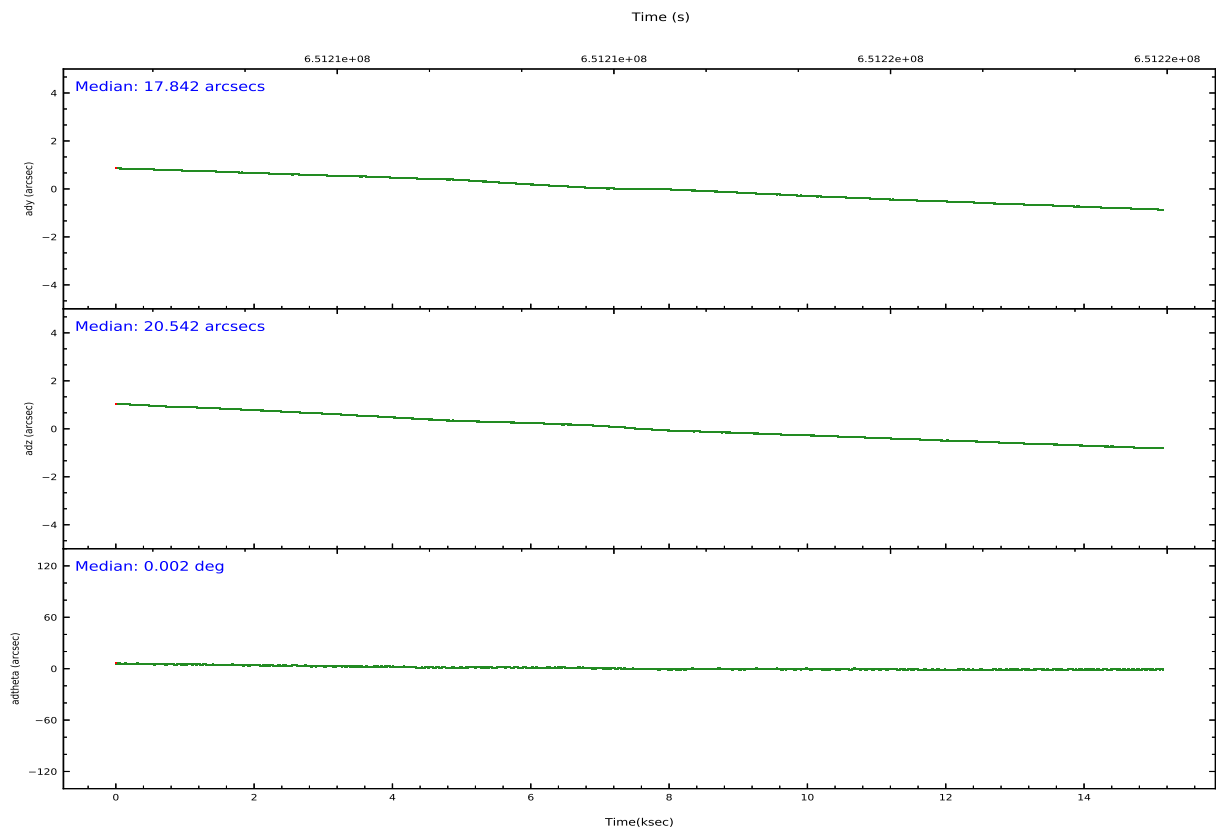
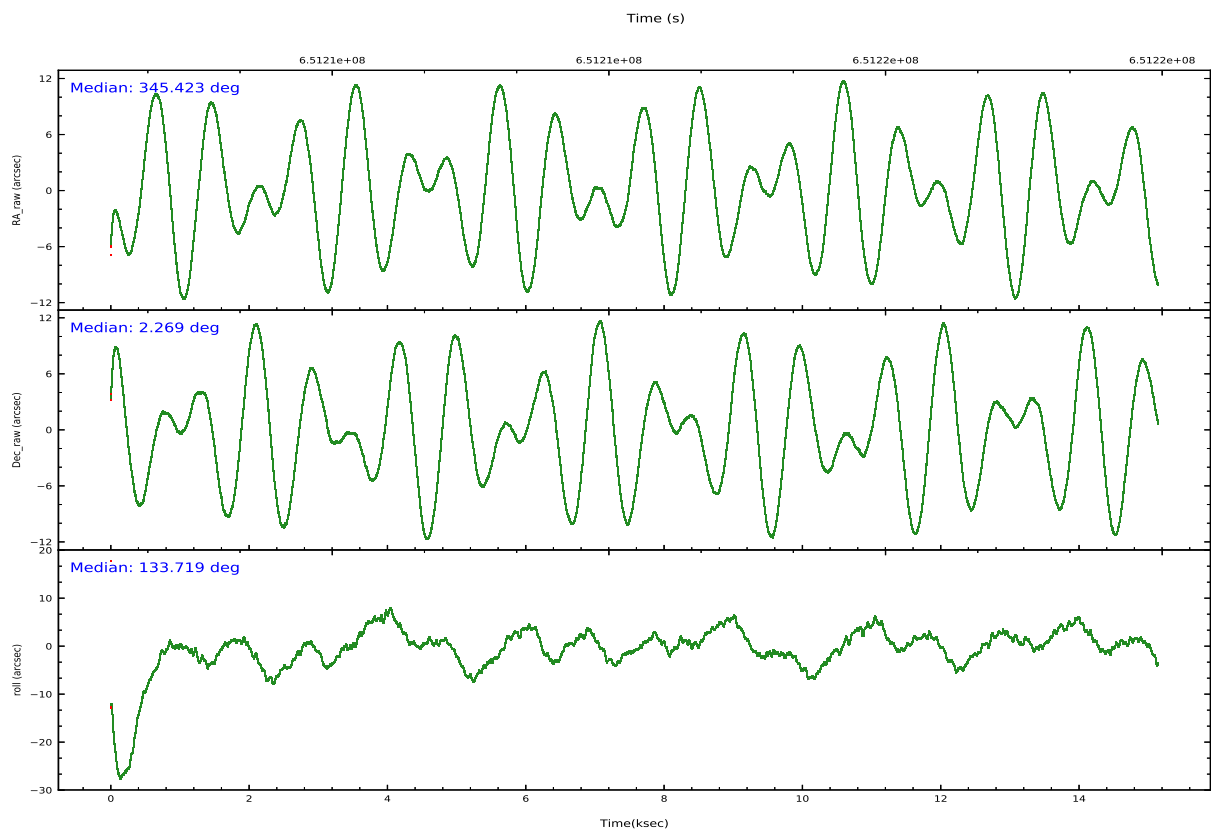


## 2.2 Compared Parameters

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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	345.449033	345.43042909947	Subarray requested	NONE	NONE
[deg] Pointing Dec	2.261574	2.2693070616945	Alternating exposures requested	N	N
[deg] Pointing Roll	133.570134	133.71861787412	[s] Primary exposure time	0.000000	3
[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)	651204941.184000	651203609.63643			
Observation start date	2018-08-21T02:14:32	2018-08-21T01:53:29			
[s] Observation end time (MET)	651219941.184000	651221457.44999			
Observation end date	2018-08-21T06:24:32	2018-08-21T06:50:57			
Read mode	TIMED	TIMED			

## 2.3 Aspect



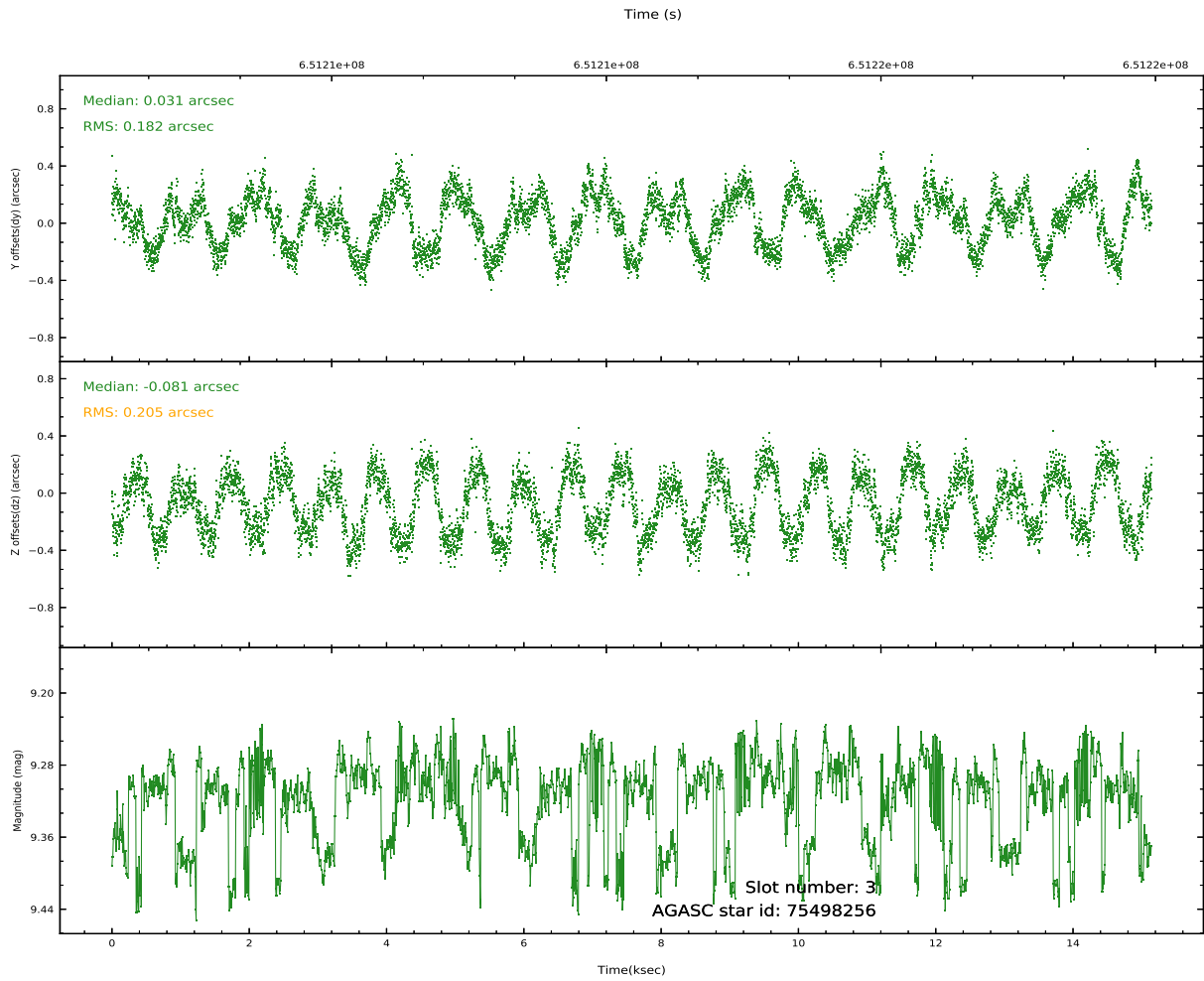
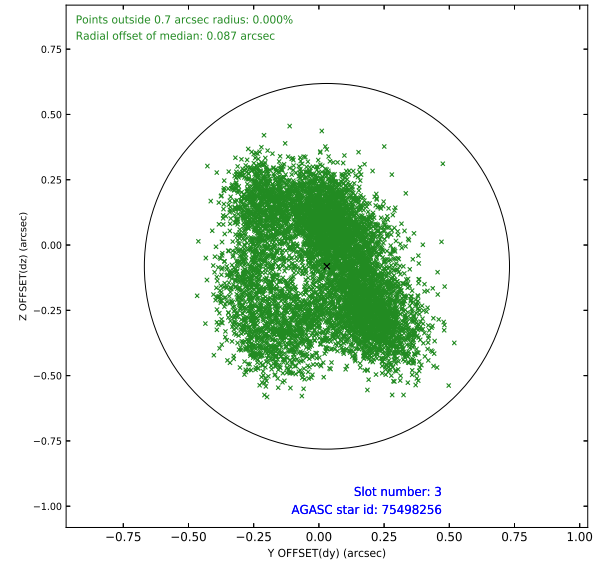
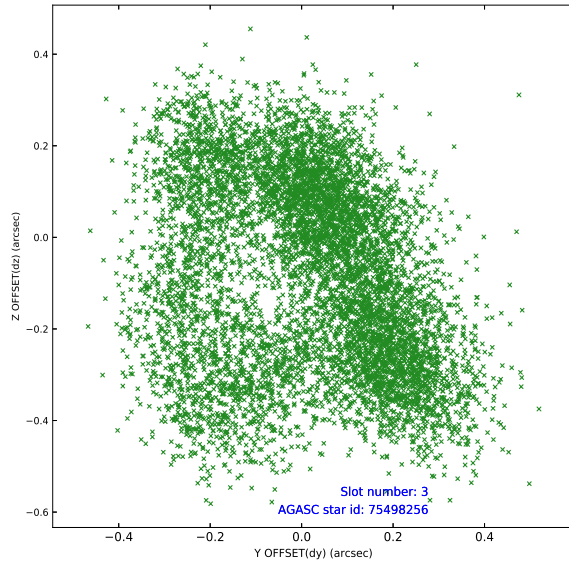


Slot Statistics

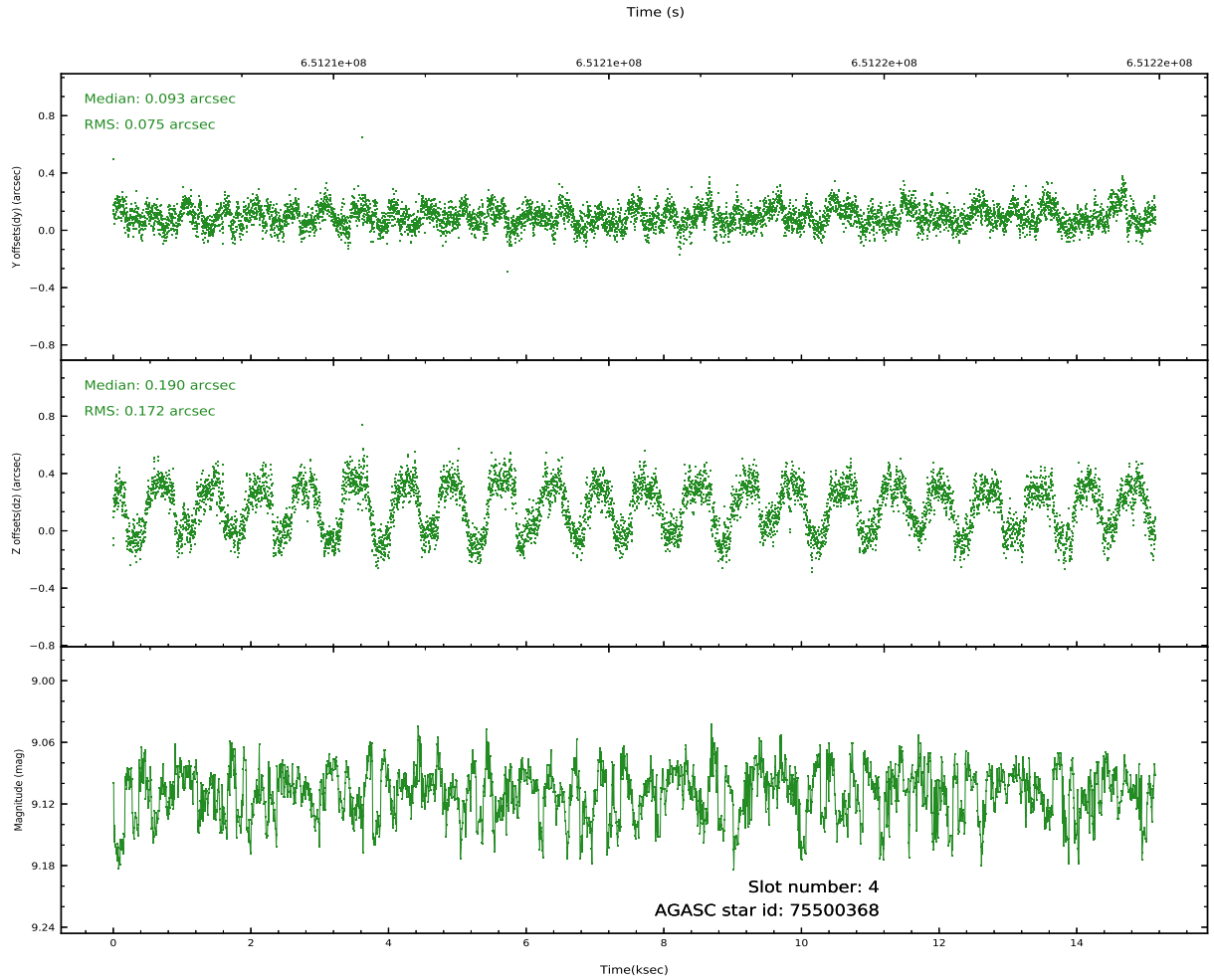
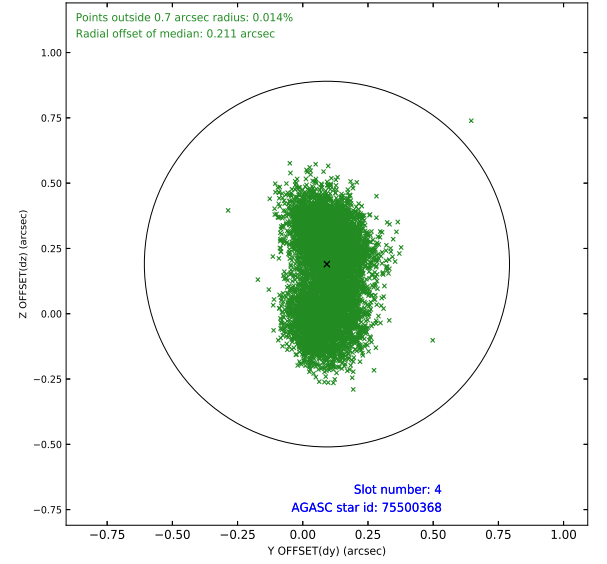
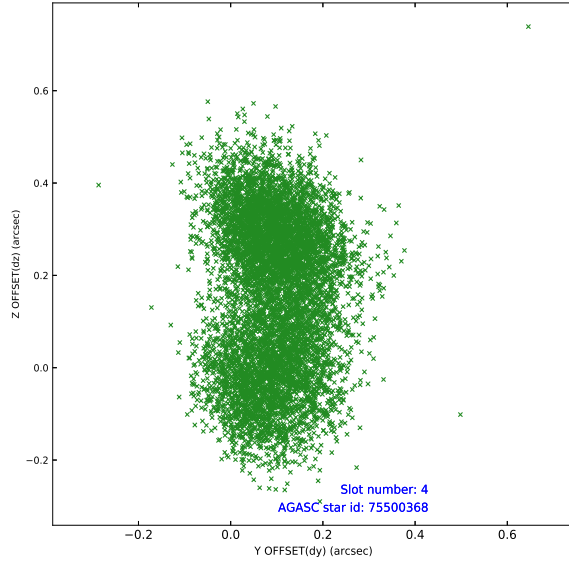
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	6.97	3693	1.000	0.113	-0.065	0.011	0.025	0.000000	0.000000	-770.99	-1742
1	FID		ACIS-S-4	7.07	3694	1.000	0.126	-0.036	0.007	0.012	0.000000	0.000000	2142.38	165
2	FID		ACIS-S-5	7.05	3693	1.000	-0.270	0.109	0.010	0.022	0.000000	0.000000	-1823.62	160
3	GUIDE	used	75498256	9.31	7377	1.000	0.031	-0.081	0.304	0.432	345.058096	2.406929	1348.08	658
4	GUIDE	used	75500368	9.11	7375	1.000	0.093	0.190	0.203	0.320	345.404137	1.857050	-944.08	1120
5	GUIDE	used	75501776	9.21	7376	1.000	-0.181	-0.136	0.161	0.245	345.214687	1.812014	-592.06	1726
6	GUIDE	used	75890912	9.10	7379	1.000	-0.045	-0.146	0.173	0.279	345.626465	2.795722	953.02	-1787
7	GUIDE	used	75892688	7.94	7386	1.000	0.112	0.202	0.118	0.190	345.937590	2.608900	-304.27	-2134

## 2.4 Star Slots

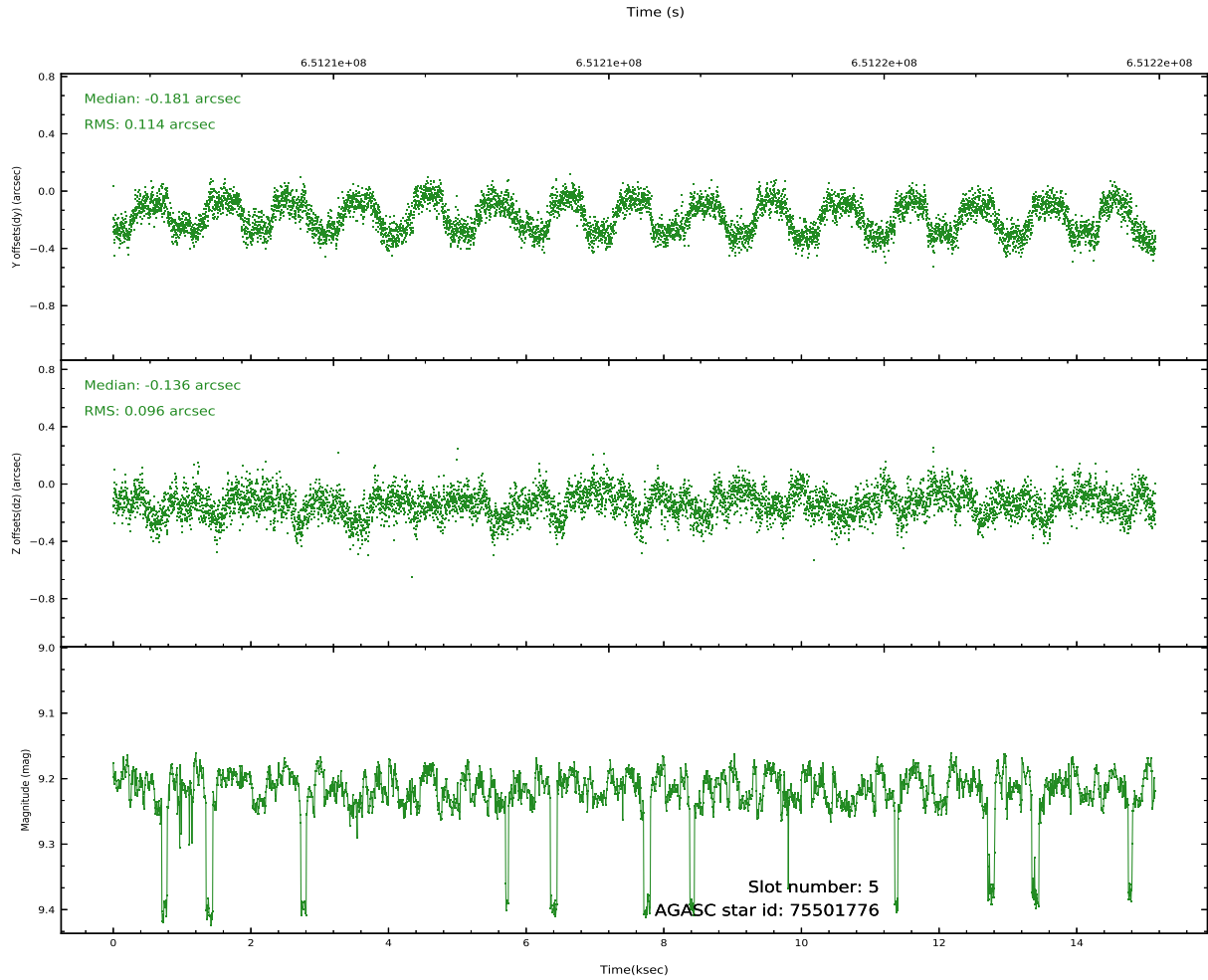
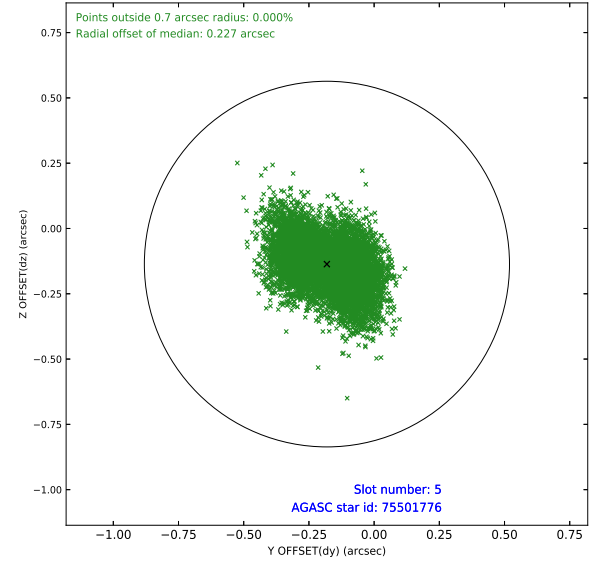
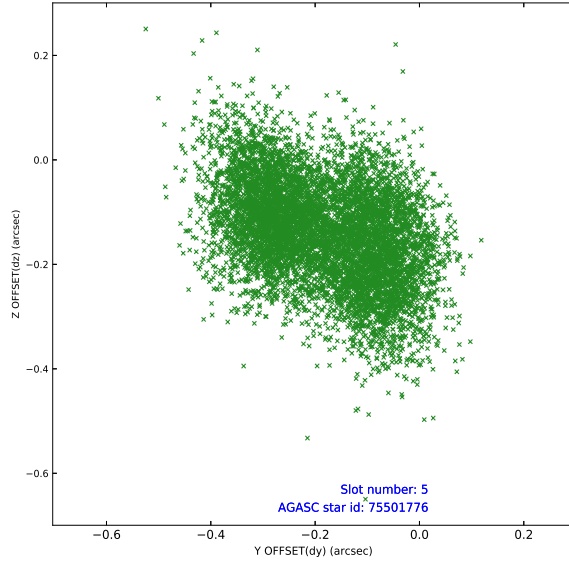
### 2.4.1 Slot 3



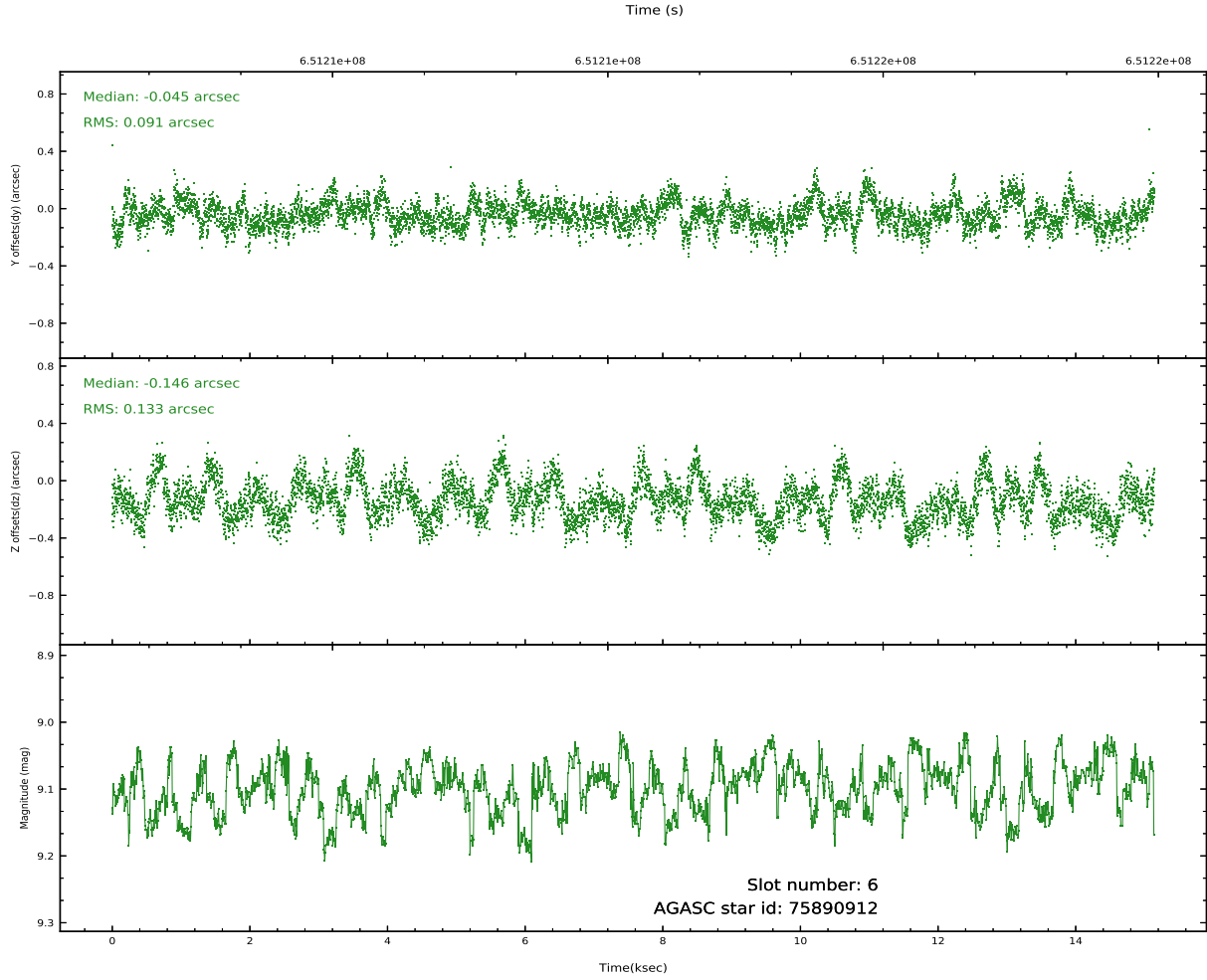
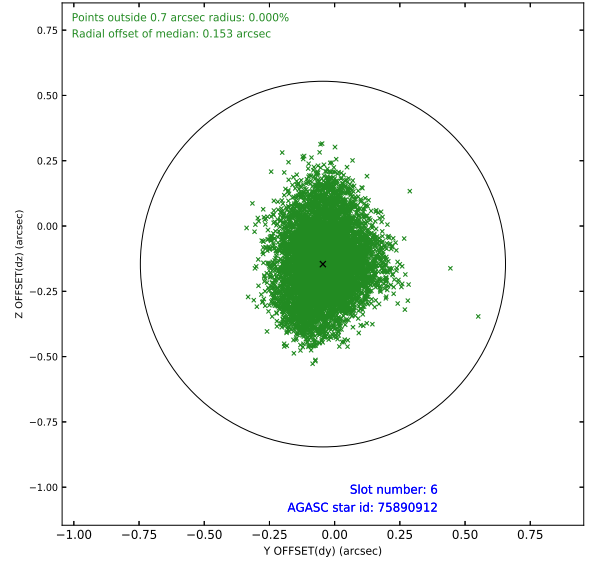
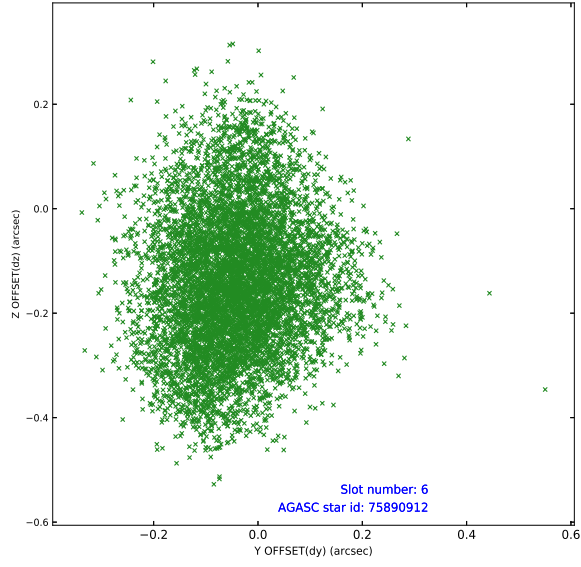
## 2.4.2 Slot 4



### 2.4.3 Slot 5

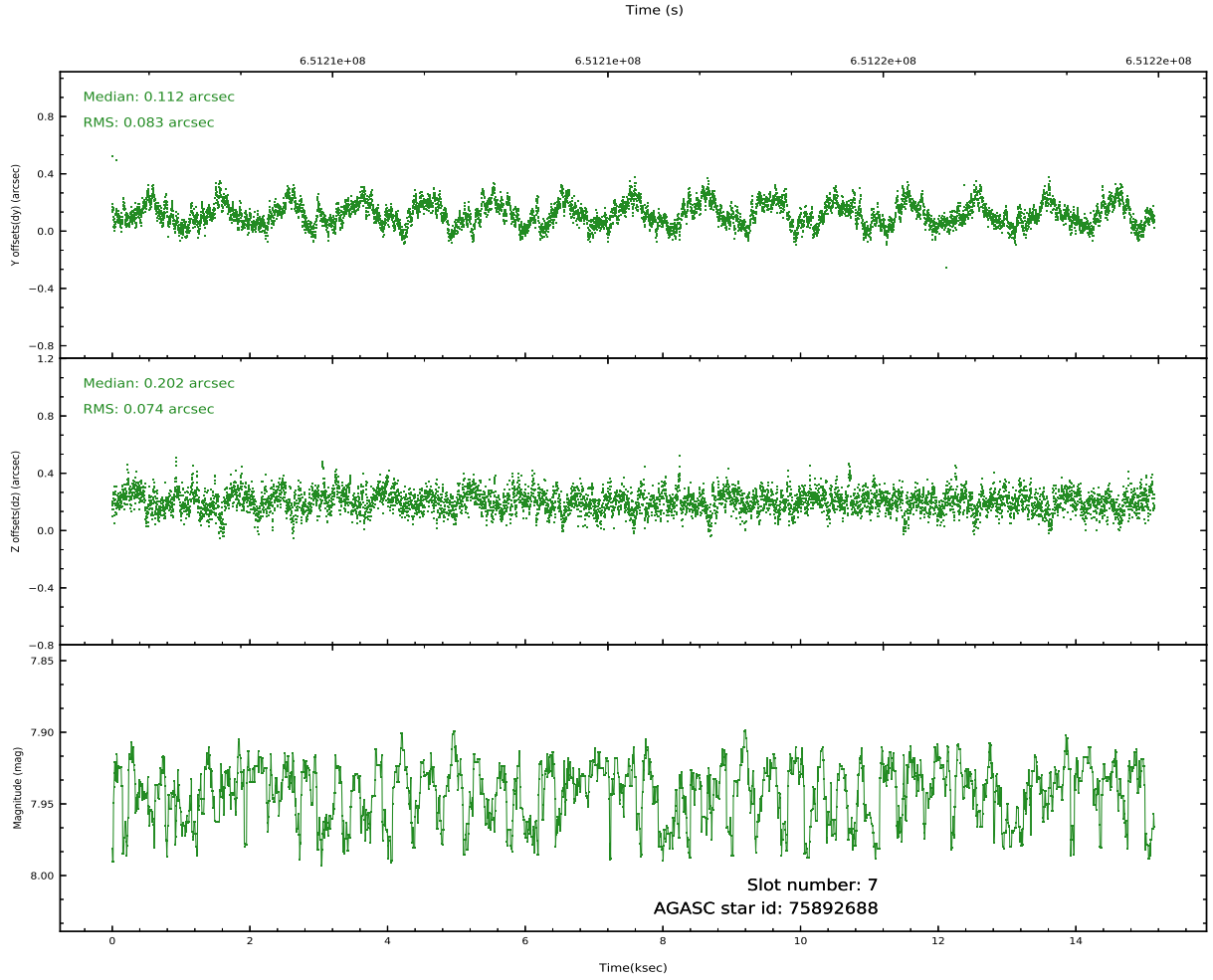
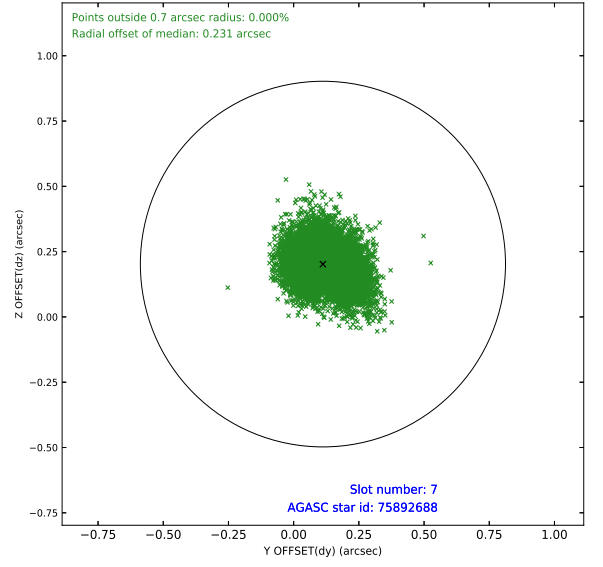
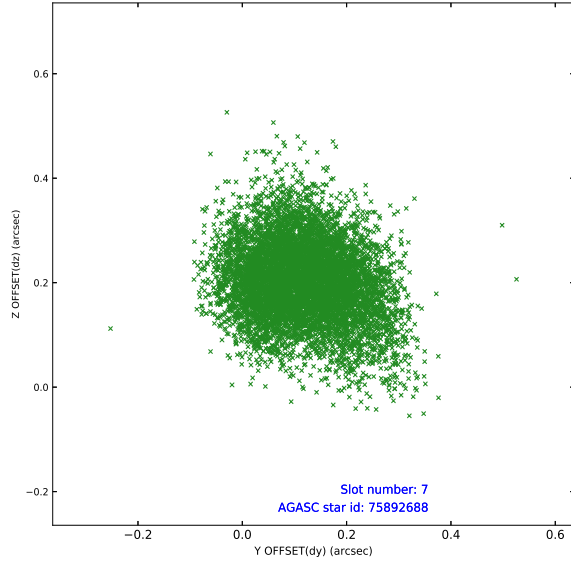


## 2.4.4 Slot 6



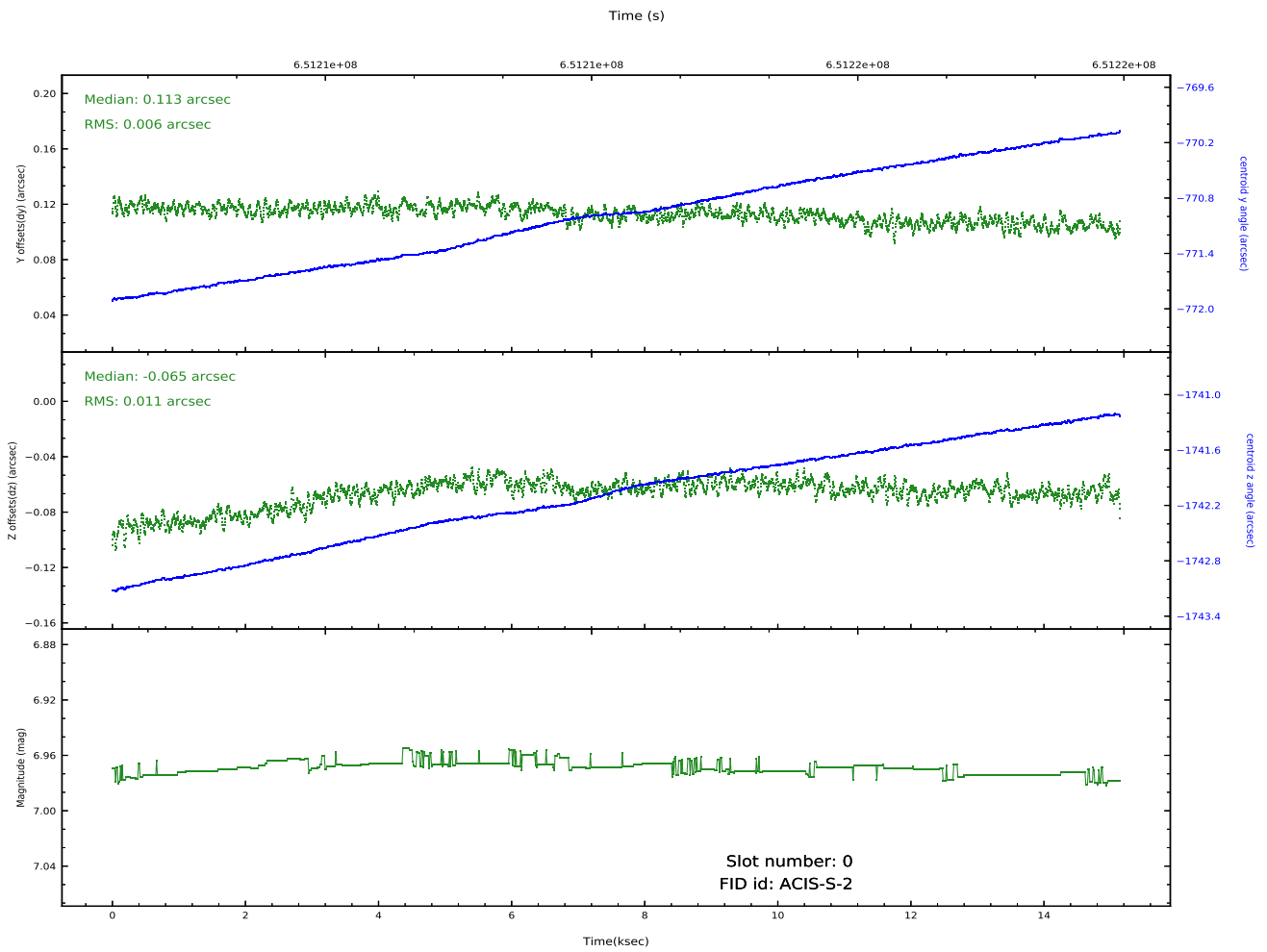
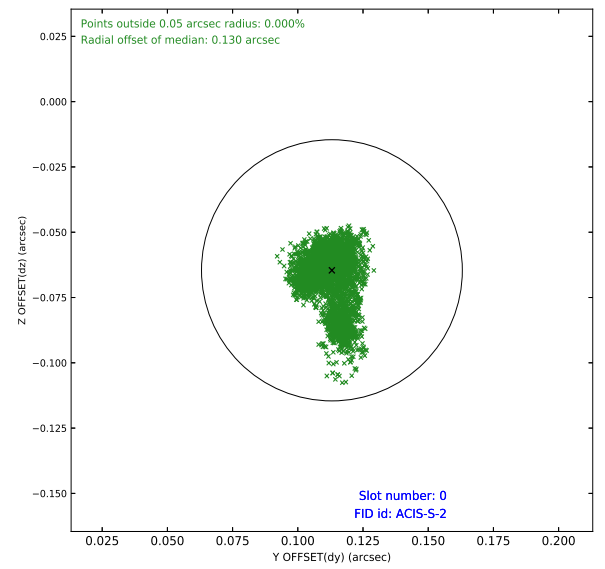
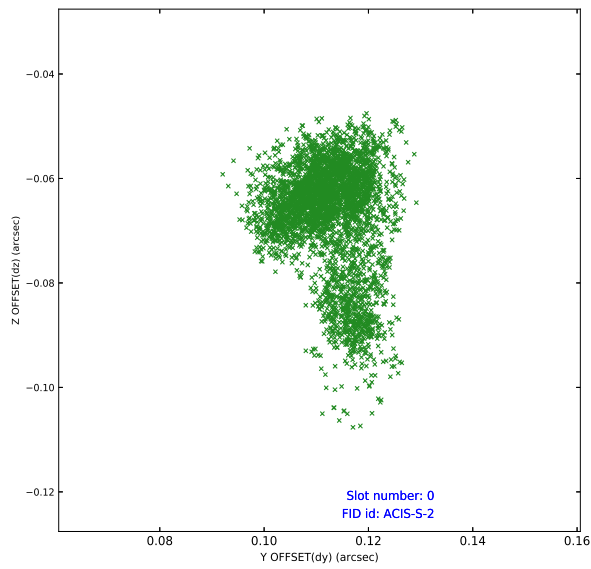


## 2.4.5 Slot 7

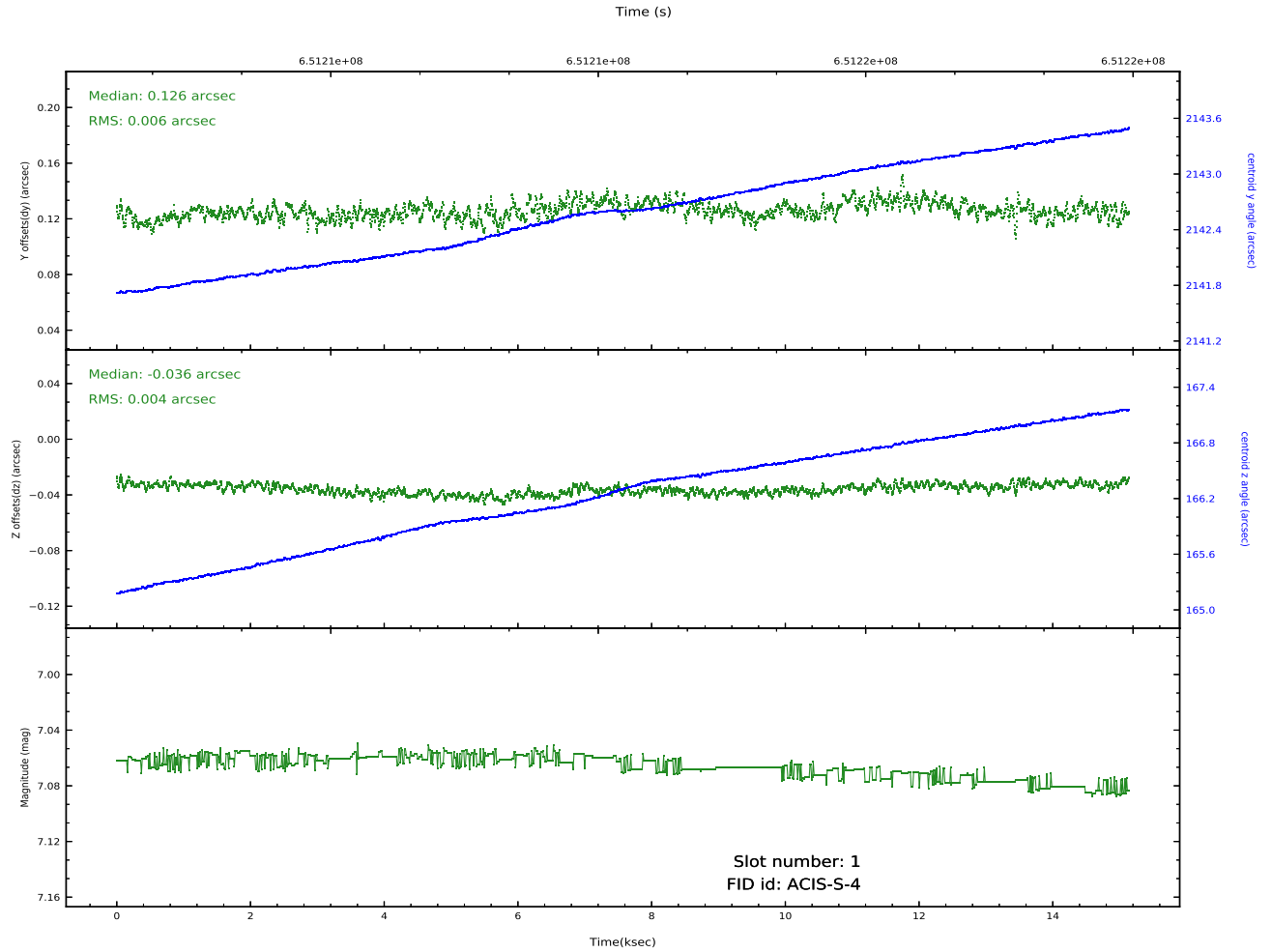
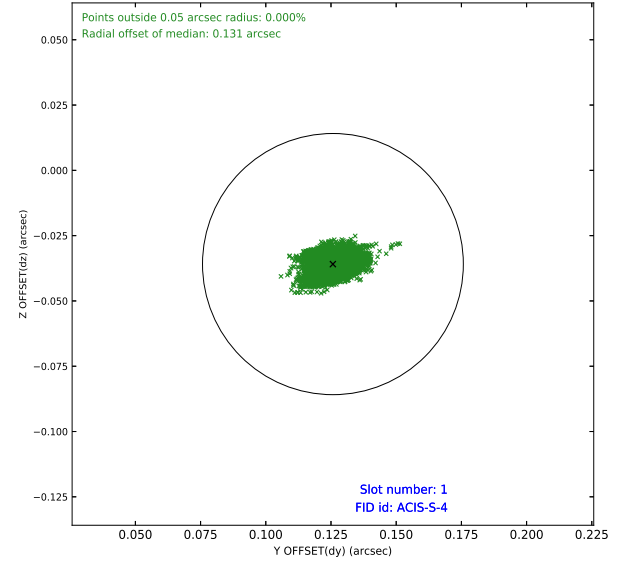
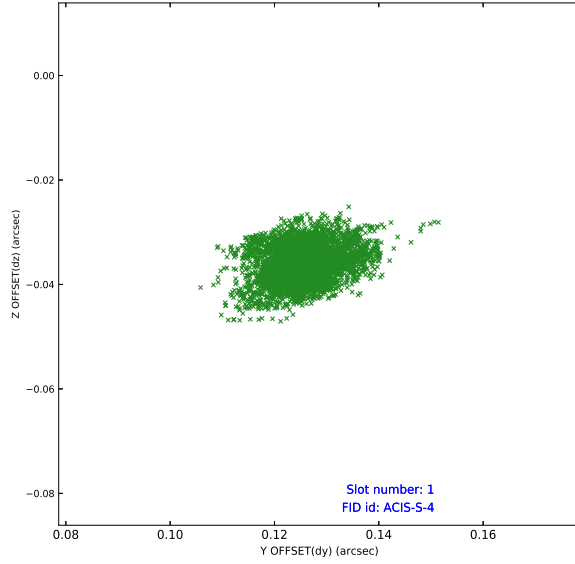


## 2.5 FID Slots

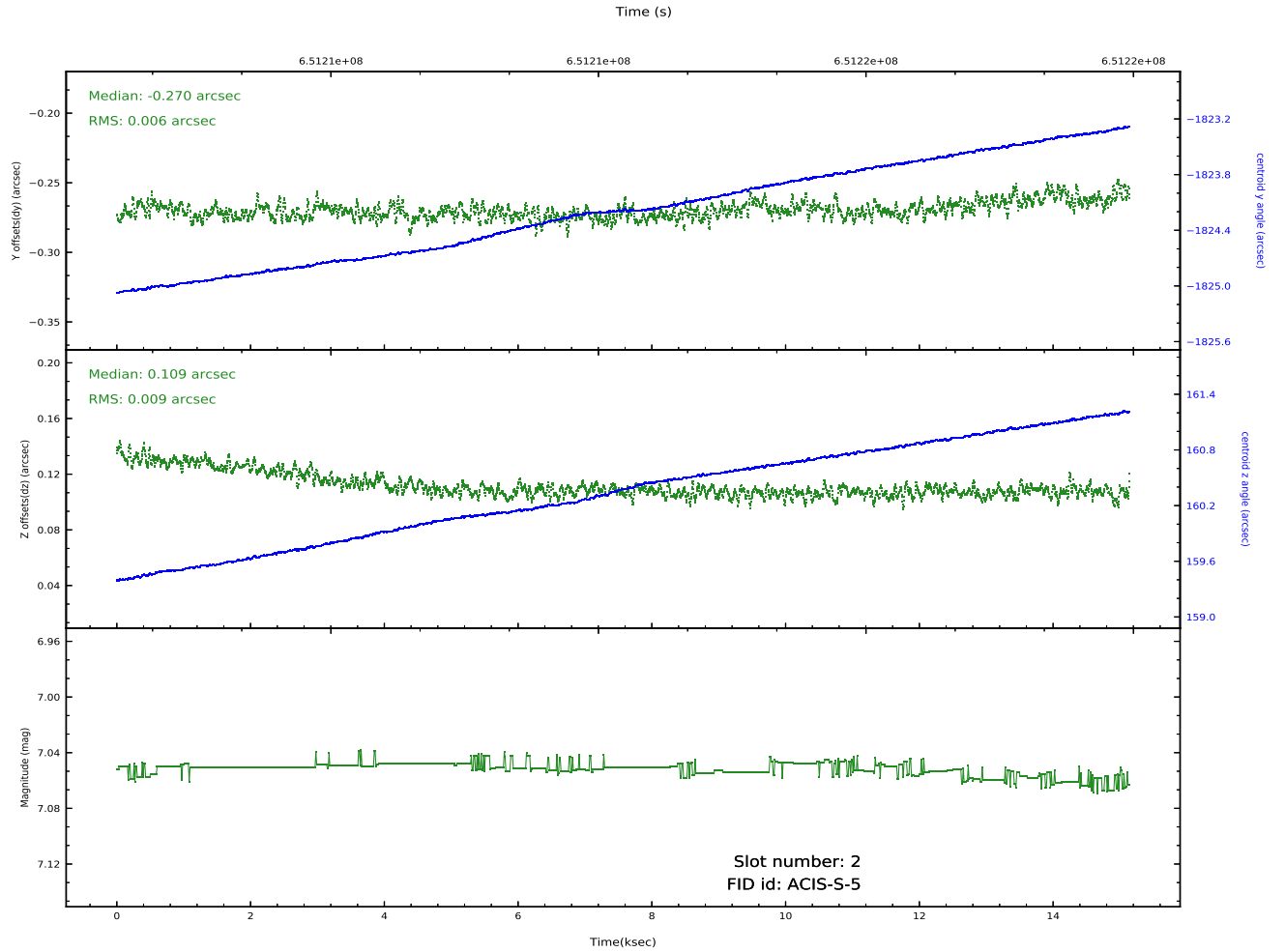
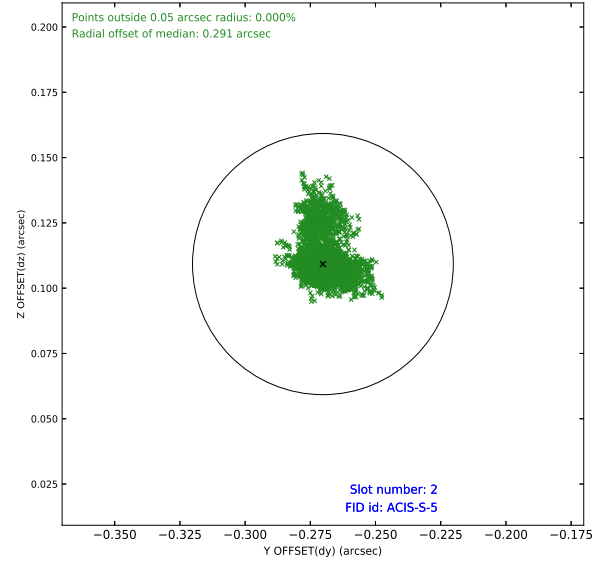
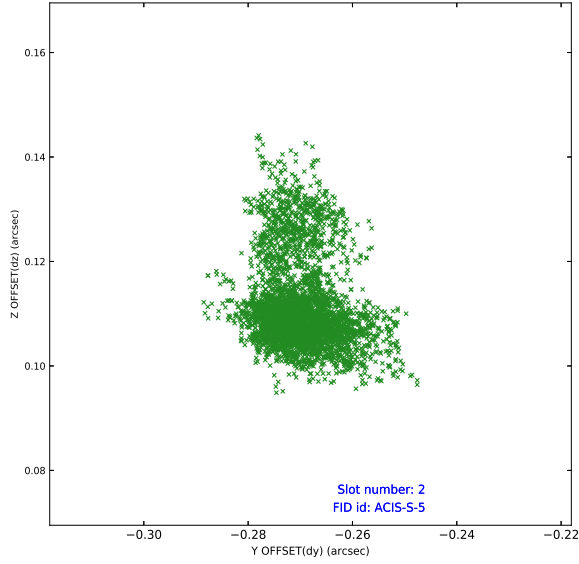
### 2.5.1 Slot 0



## 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	15.09

### **A.2 Comments**