

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5306 - L2 Version 4  
Chandra X-Ray Center

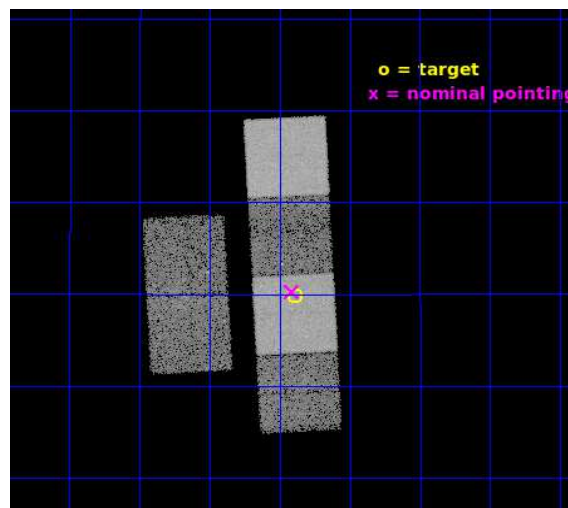
L2 Processing Date : Sep 24 2020

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# 1 Front

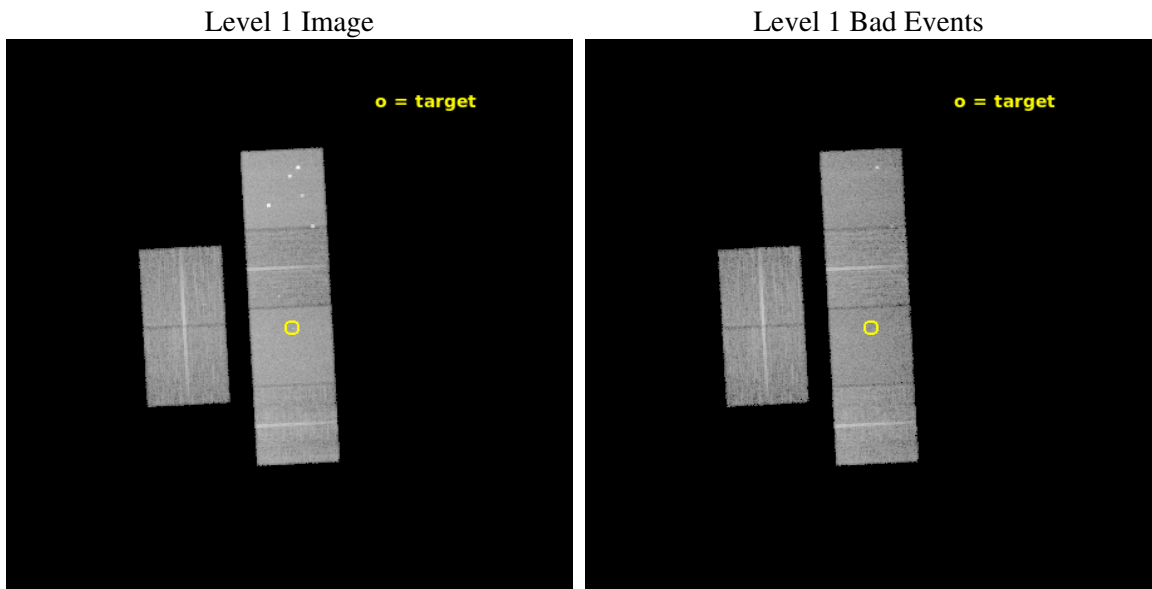
seq_num	500505	Sequence number
obs_id	5306	Observation id
title	Prompt Observation of the Type Ib/c Supernova 2001em	Proposal titl
observer	David Pooley	Principal investigator
object	SN 2001em	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	325.598333	Observer's specified target RA [deg]
dec_targ	12.497306	Observer's specified target Dec [deg]
ra_nom	325.60339569416	Nominal RA [deg]
dec_nom	12.504497576475	Nominal Dec [deg]
roll_nom	87.032909840549	Nominal Roll [deg]
revision	4	Processing version of data
ontime	14755.199945033	Sum of GTIs [s]
livetime	14568.360718814	Livetime [s]
ontime2	14755.199945033	Sum of GTIs [s]
ontime3	14755.199945033	Sum of GTIs [s]
ontime5	14755.199945033	Sum of GTIs [s]
ontime6	14755.199945033	Sum of GTIs [s]
ontime7	14755.199945033	Sum of GTIs [s]
ontime8	14751.959044278	Sum of GTIs [s]
l2events	156629	Number of level 2 events



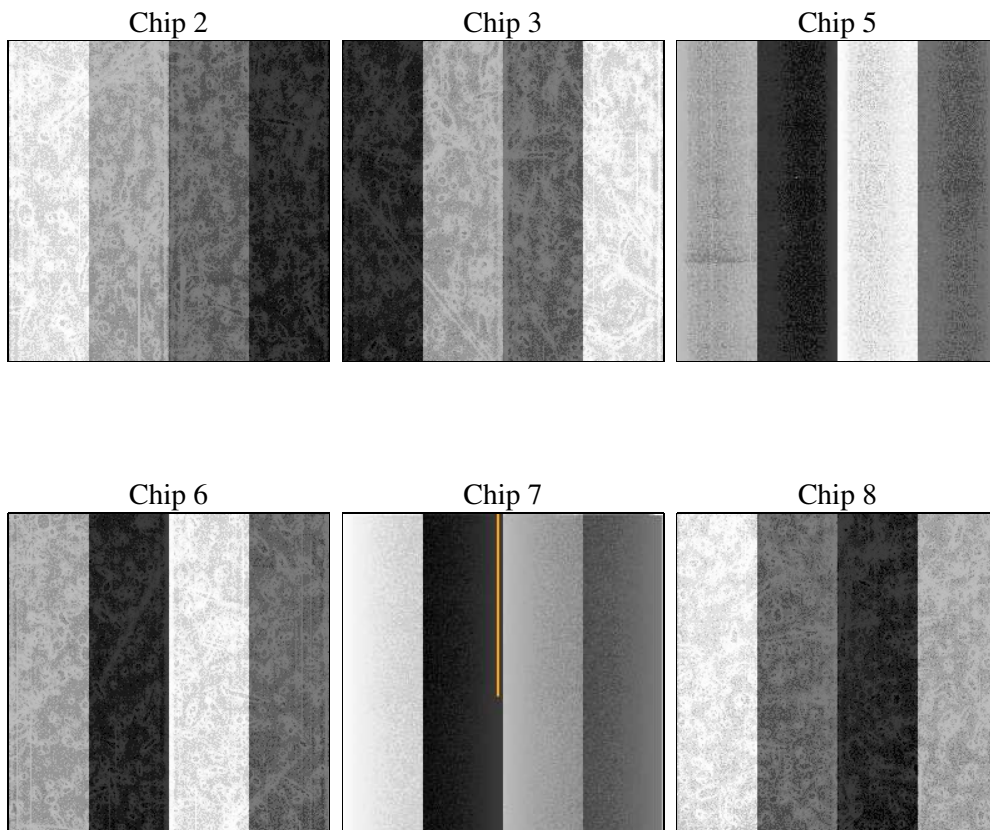
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	14755.199945033	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime2	14755.199945033	Sum of GTIs [s]
date	2020-09-25T01:10:35	Date and time of file creation	ontime3	14755.199945033	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	14755.199945033	Sum of GTIs [s]
			ontime6	14755.199945033	Sum of GTIs [s]
			ontime7	14755.199945033	Sum of GTIs [s]
			ontime8	14751.959044278	Sum of GTIs [s]
			l1events	703124	Number of level 1 events

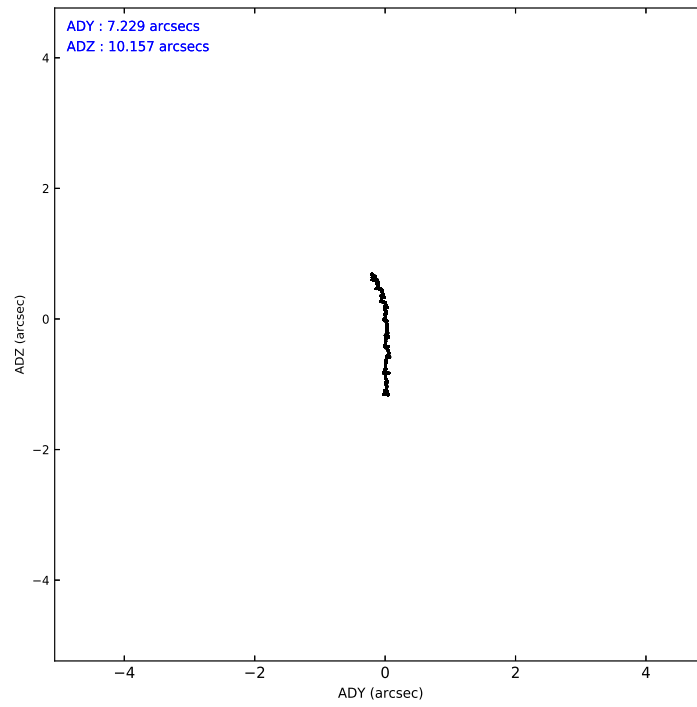
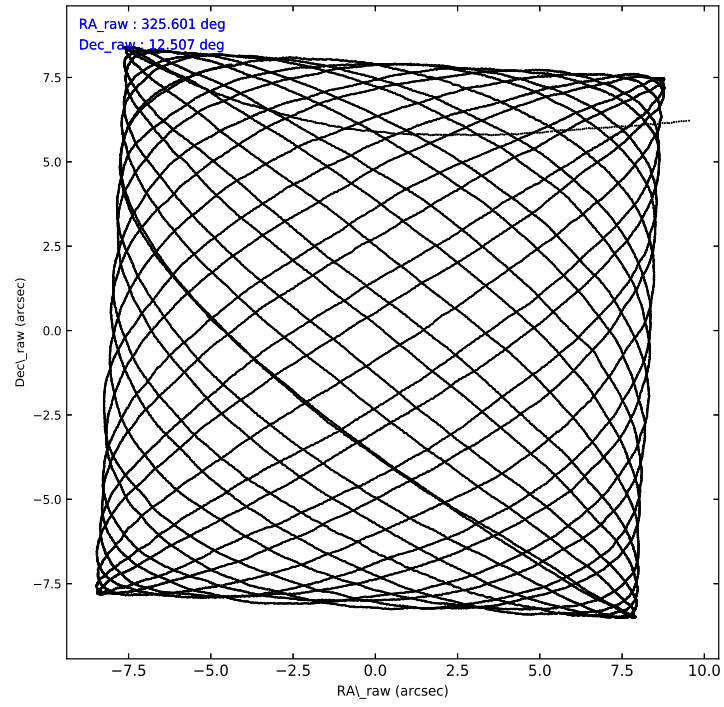
### 2.1.4 Events

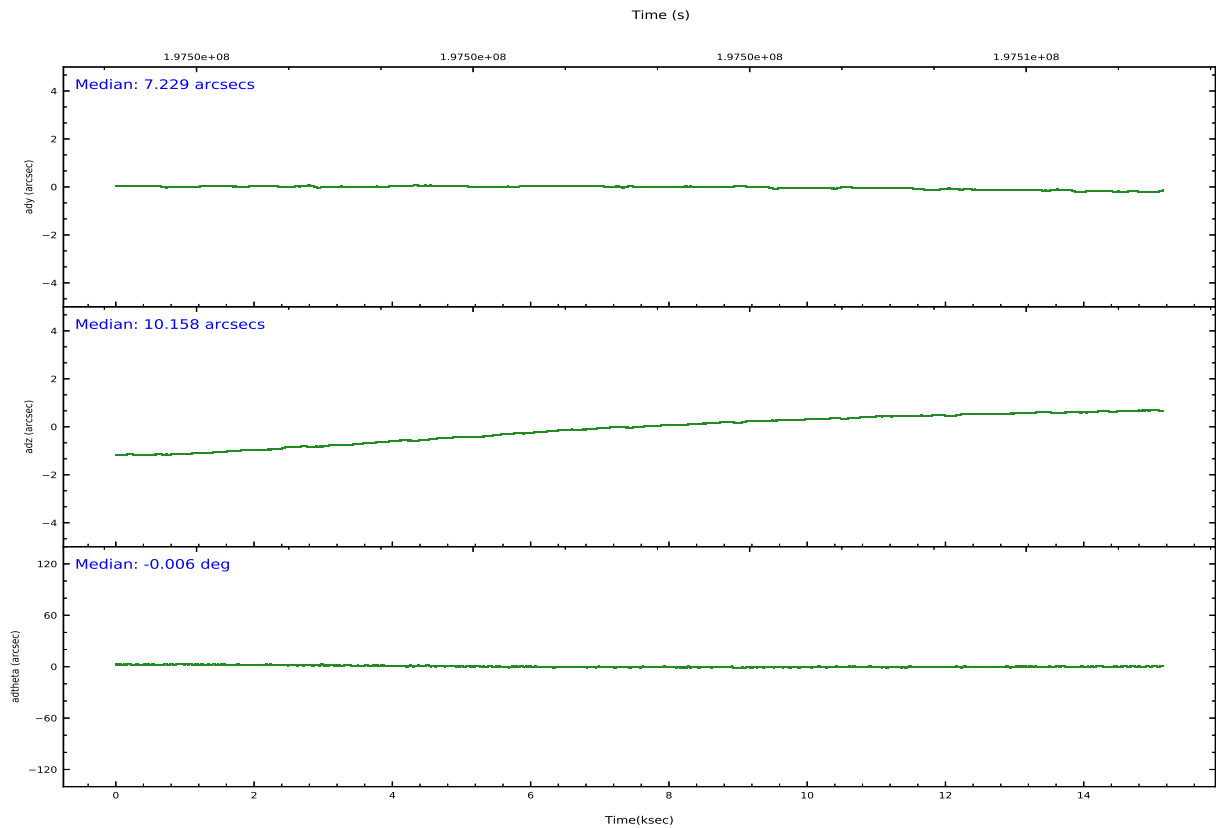
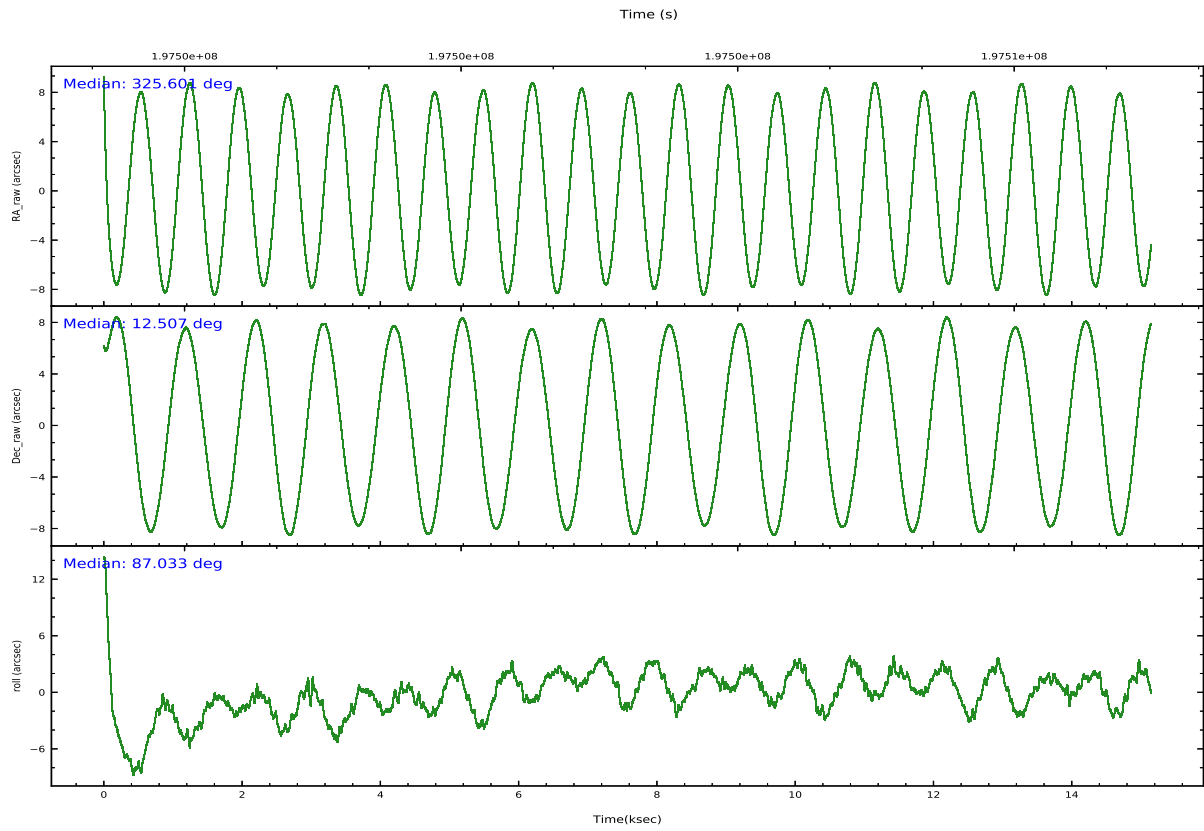
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	99908	94109	153012	98459	132176	125460	grade 0 events	5234	5284	11837	4990	5314	7874
rejected events	88088	82435	79680	86347	77365	100273		5%	5%	7%	5%	4%	6%
rejected %	88%	87%	52%	87%	58%	79%	grade 1 events	65	64	734	55	121	72
								0%	0%	0%	0%	0%	0%
							grade 2 events	2384	2211	21607	2456	10925	5522
								2%	2%	14%	2%	8%	4%
							grade 3 events	1094	1088	2595	1216	4851	2565
								1%	1%	1%	1%	3%	2%
							grade 4 events	1107	1157	2440	1071	4773	2388
								1%	1%	1%	1%	3%	1%
							grade 5 events	3789	4356	10682	4583	12632	5713
								3%	4%	6%	4%	9%	4%
							grade 6 events	2003	1938	34866	2382	28958	6850
								2%	2%	22%	2%	21%	5%
							grade 7 events	84232	78011	68251	81706	64602	94476
								84%	82%	44%	82%	48%	75%

## 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	325.613583	325.60339569416	Subarray requested	NONE	NONE
[deg] Pointing Dec	12.482643	12.504497576475	Alternating exposures requested	N	N
[deg] Pointing Roll	86.875589	87.032909840549	[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)	197494981.184000	197493843.33133			
Observation start date	2004-04-04T19:41:57	2004-04-04T19:24:03			
[s] Observation end time (MET)	197509981.184000	197510572.86957			
Observation end date	2004-04-04T23:51:57	2004-04-05T00:02:52			
Read mode	TIMED	TIMED			

## 2.3 Aspect





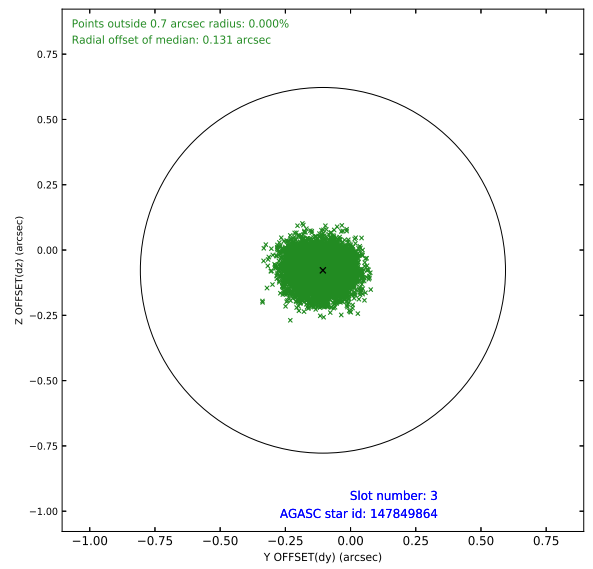
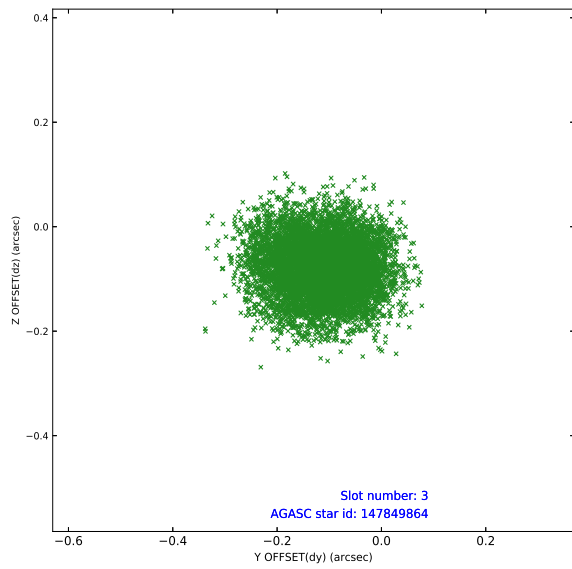
### Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	3694	1.000	-0.077	-0.051	0.014	0.029	0.000000	0.000000	-759.97	-1731
1	FID		ACIS-S-4	7.20	3693	1.000	0.130	0.050	0.006	0.012	0.000000	0.000000	2153.31	177
2	FID		ACIS-S-5	7.23	3696	1.000	-0.086	0.009	0.015	0.031	0.000000	0.000000	-1812.51	170
3	GUIDE	used	147849864	9.28	7382	1.000	-0.106	-0.078	0.090	0.144	325.017652	12.996291	1734.60	2188
4	GUIDE	used	147854072	8.10	7384	1.000	-0.025	-0.056	0.063	0.102	325.349490	12.755754	931.84	979
5	GUIDE	used	147991784	7.94	7391	1.000	0.070	0.064	0.051	0.085	325.826731	12.518355	169.68	-741
6	GUIDE	used	147995336	8.76	7388	1.000	-0.154	0.184	0.083	0.135	326.176555	13.042686	2123.16	-1861
7	GUIDE	used	147864216	9.17	7382	1.000	0.214	-0.113	0.088	0.140	325.021145	12.092394	-1513.92	2005

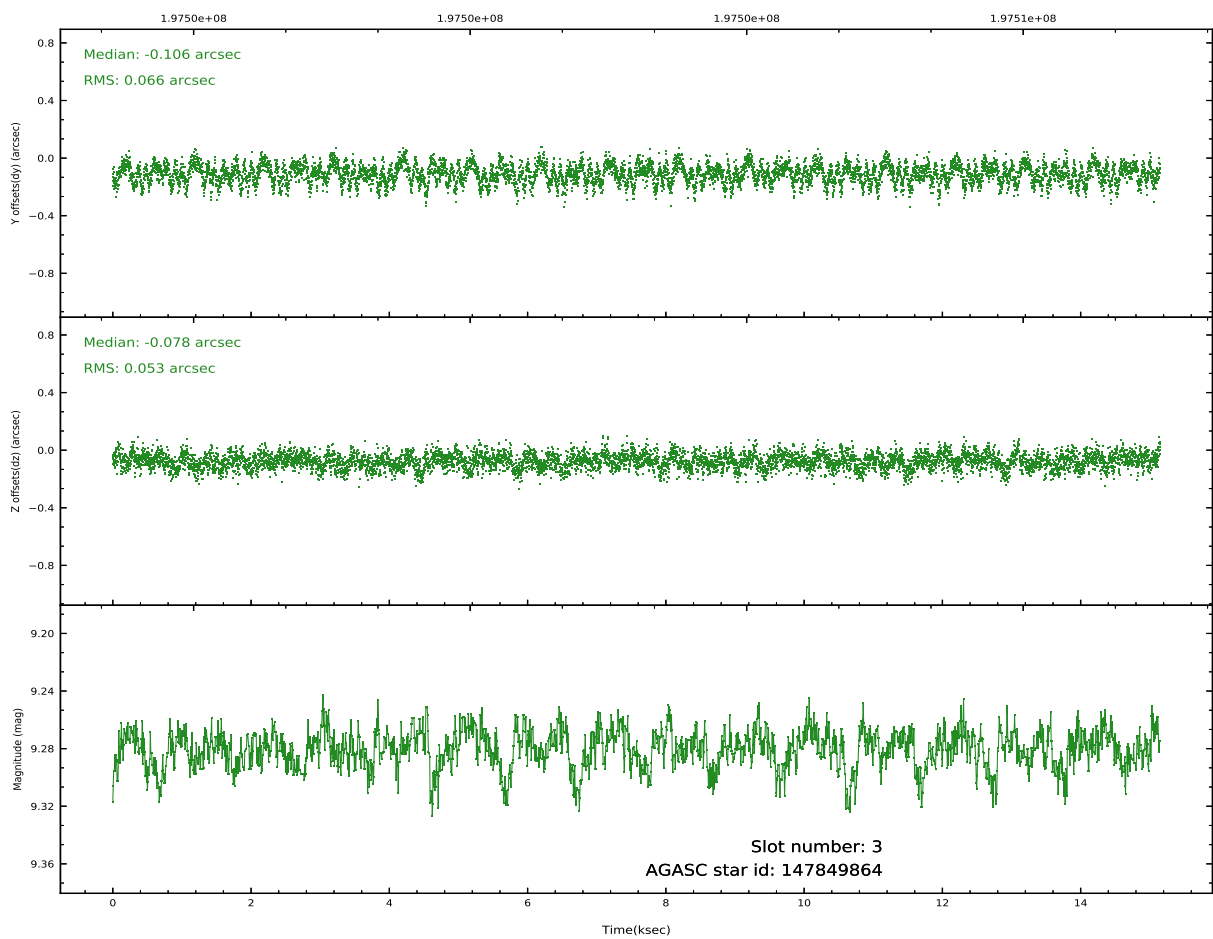
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## 2.4 Star Slots

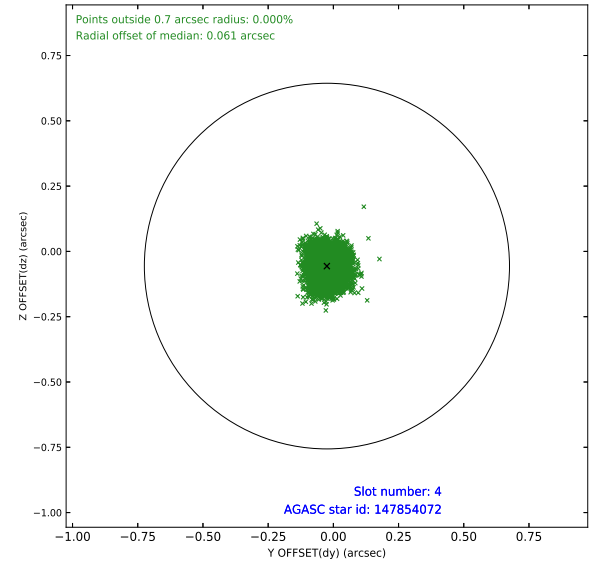
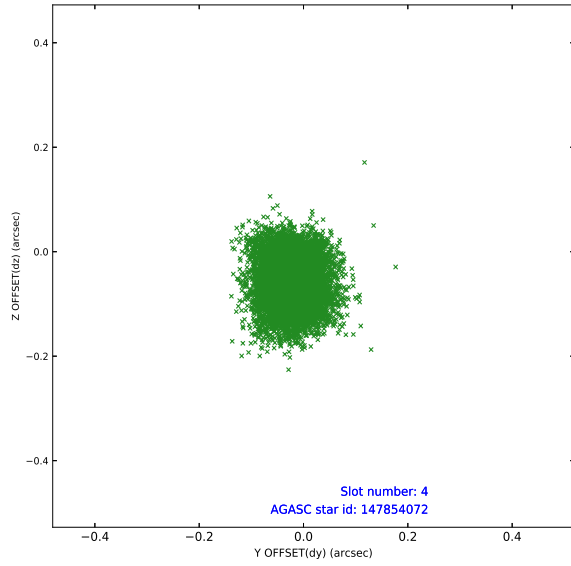
### 2.4.1 Slot 3



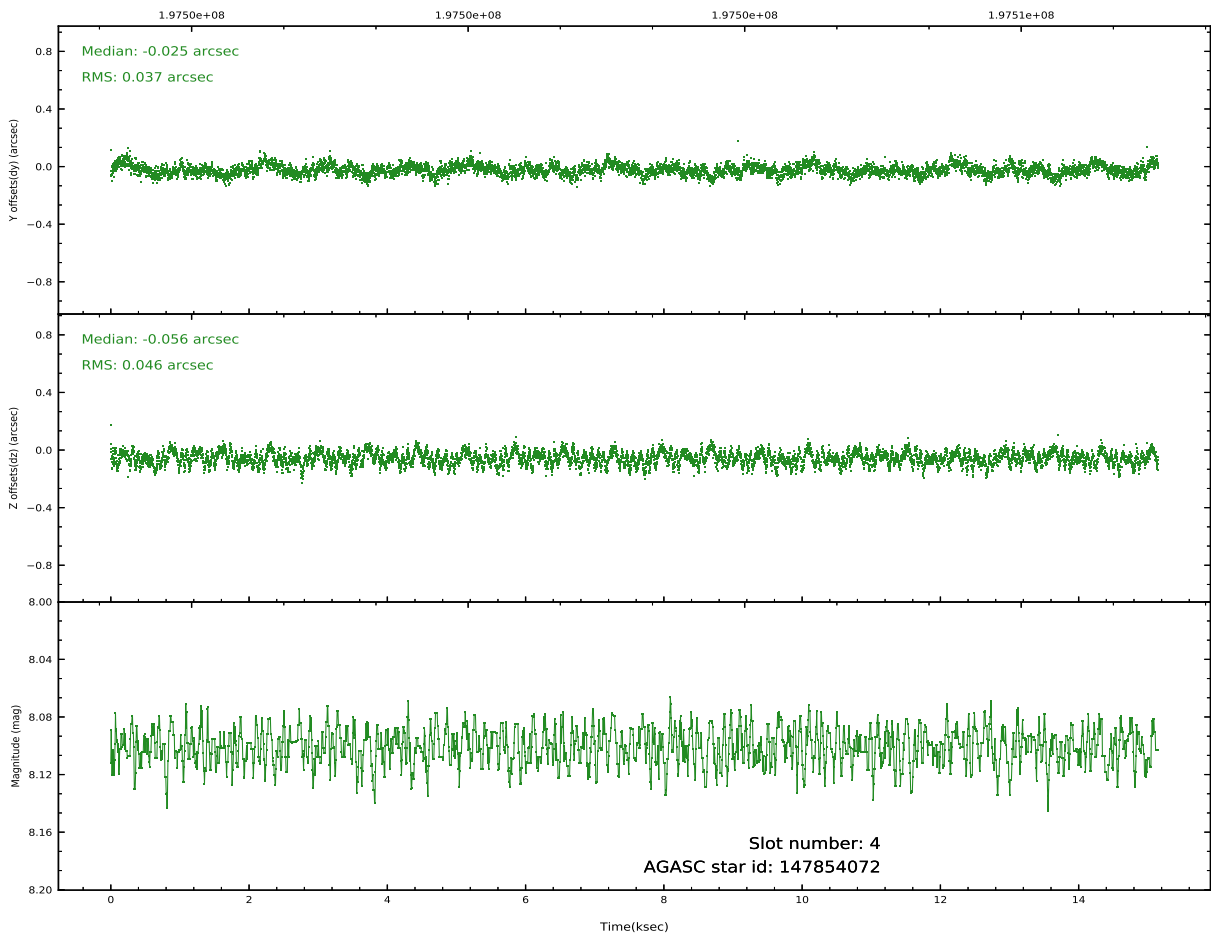
Time (s)



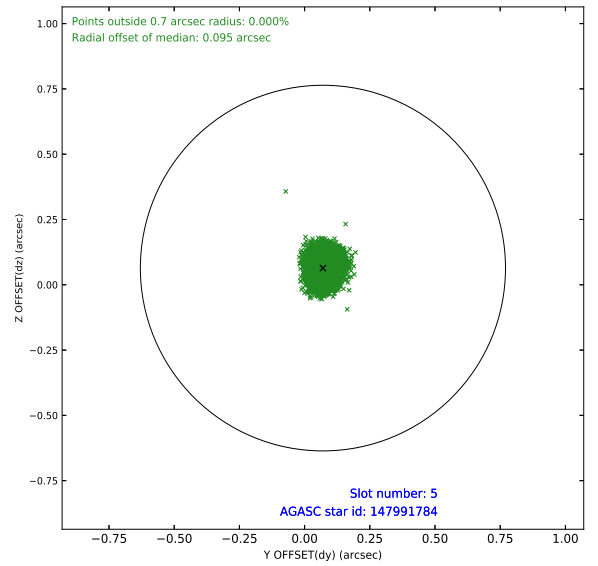
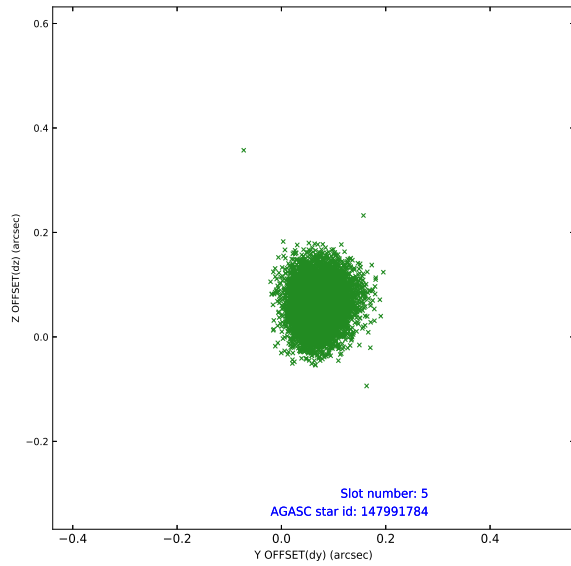
## 2.4.2 Slot 4



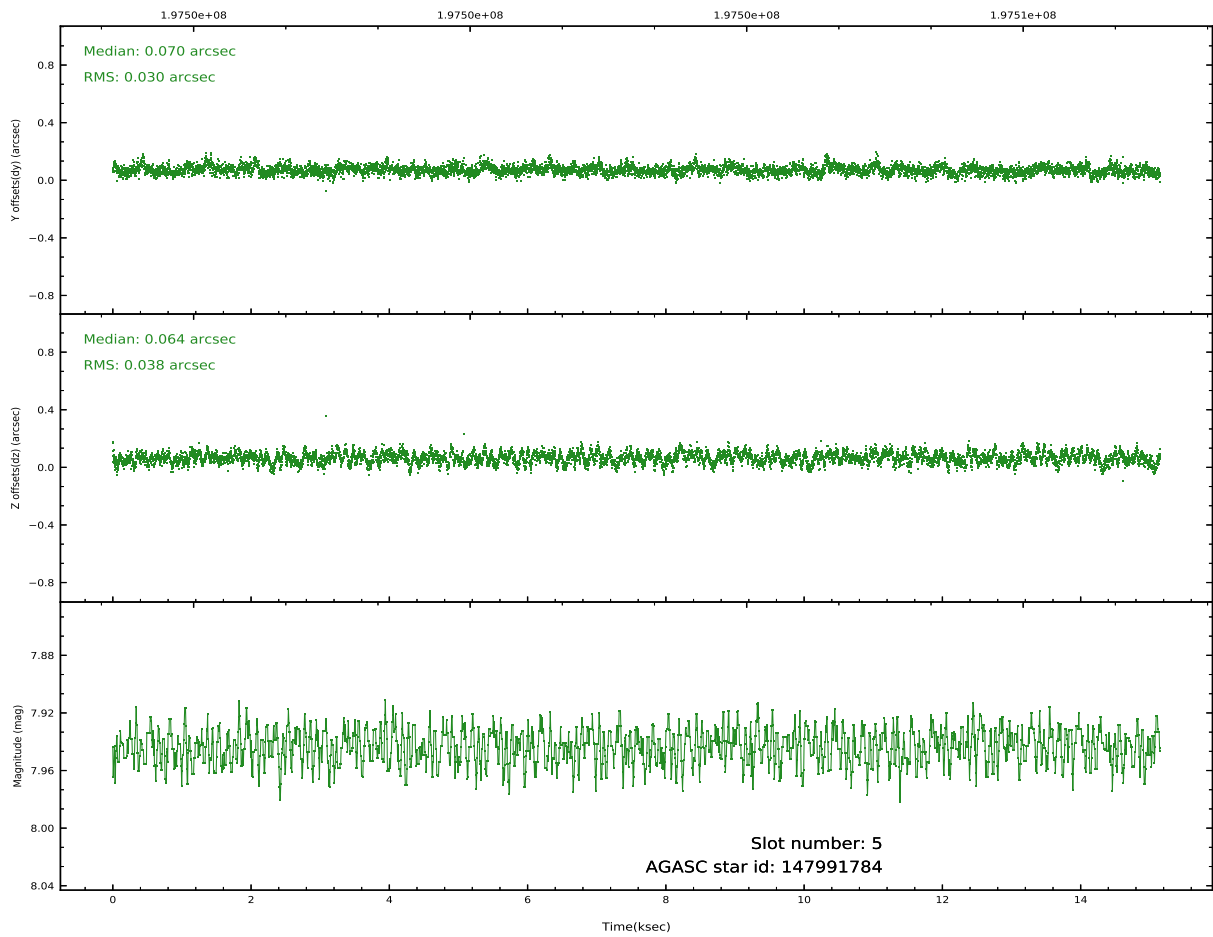
Time (s)



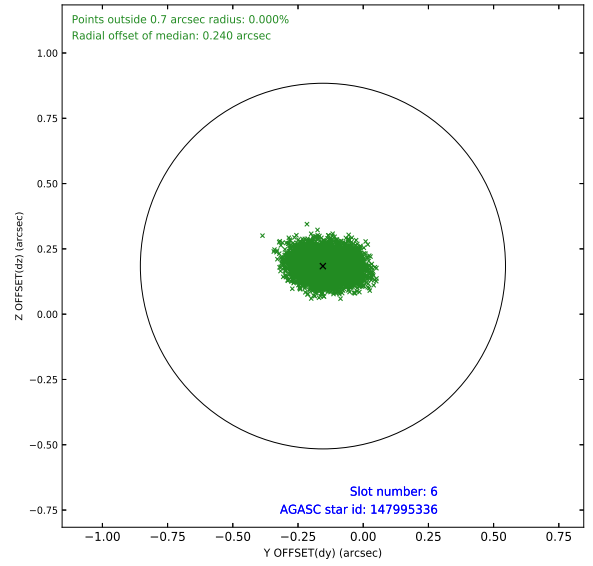
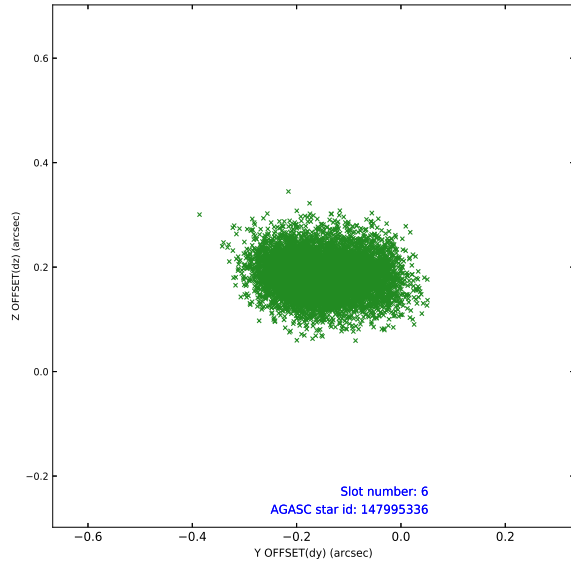
### 2.4.3 Slot 5



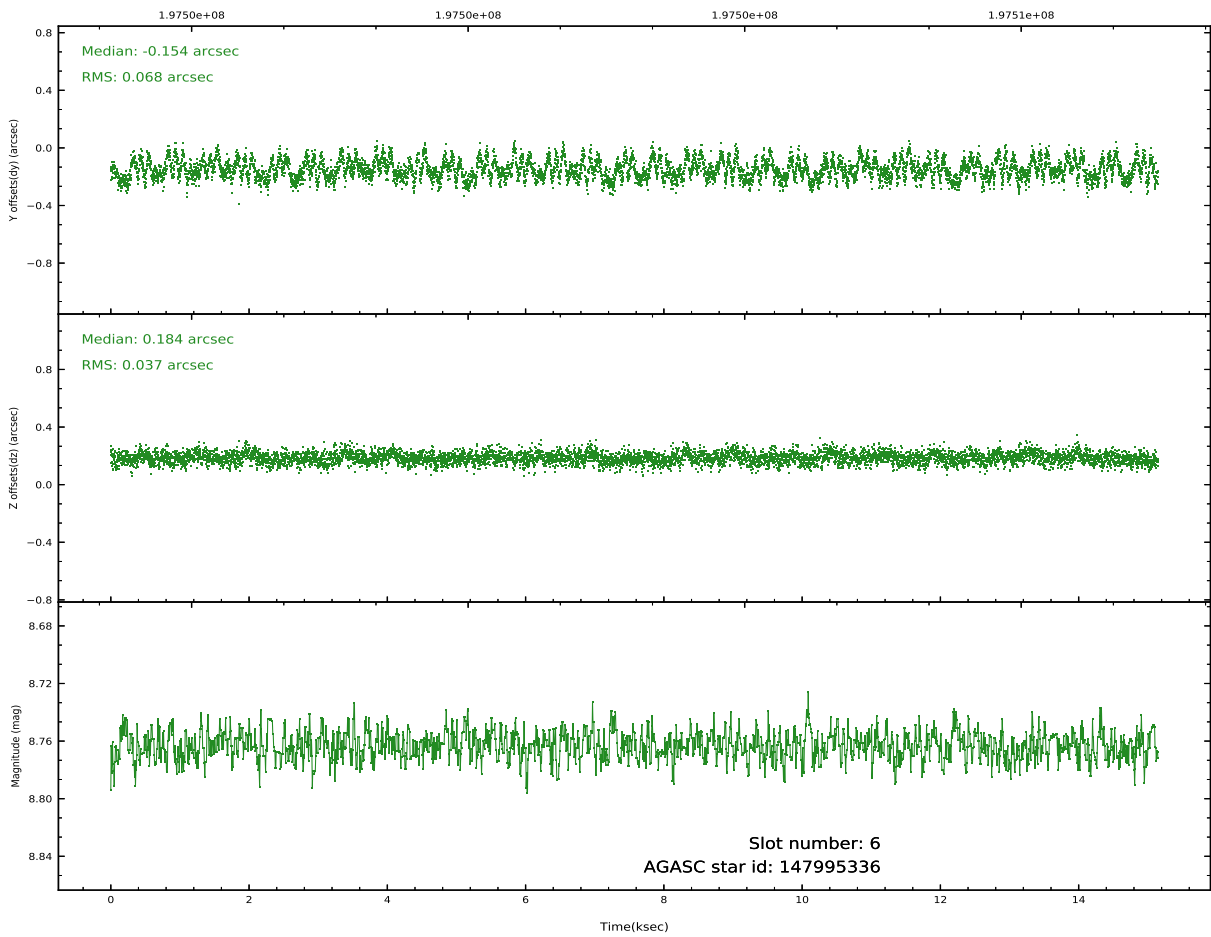
Time (s)



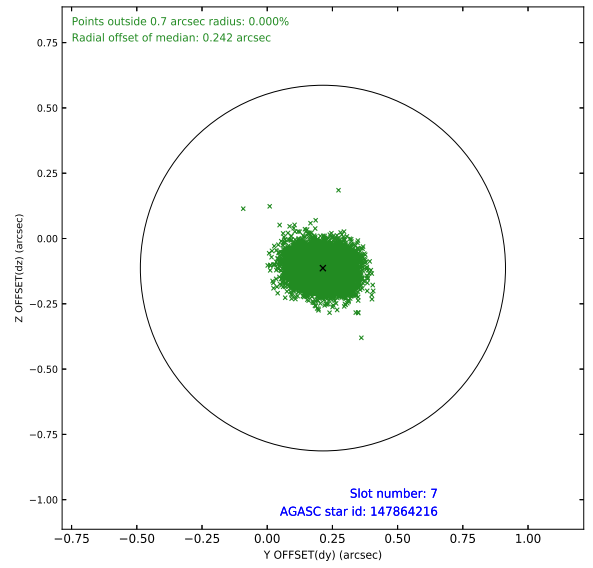
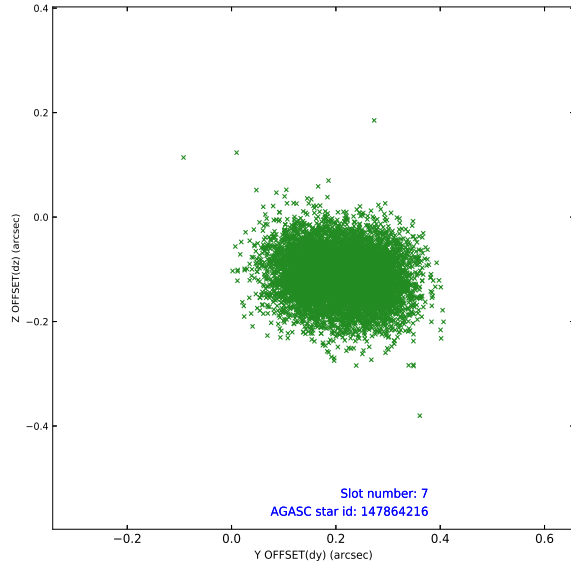
## 2.4.4 Slot 6



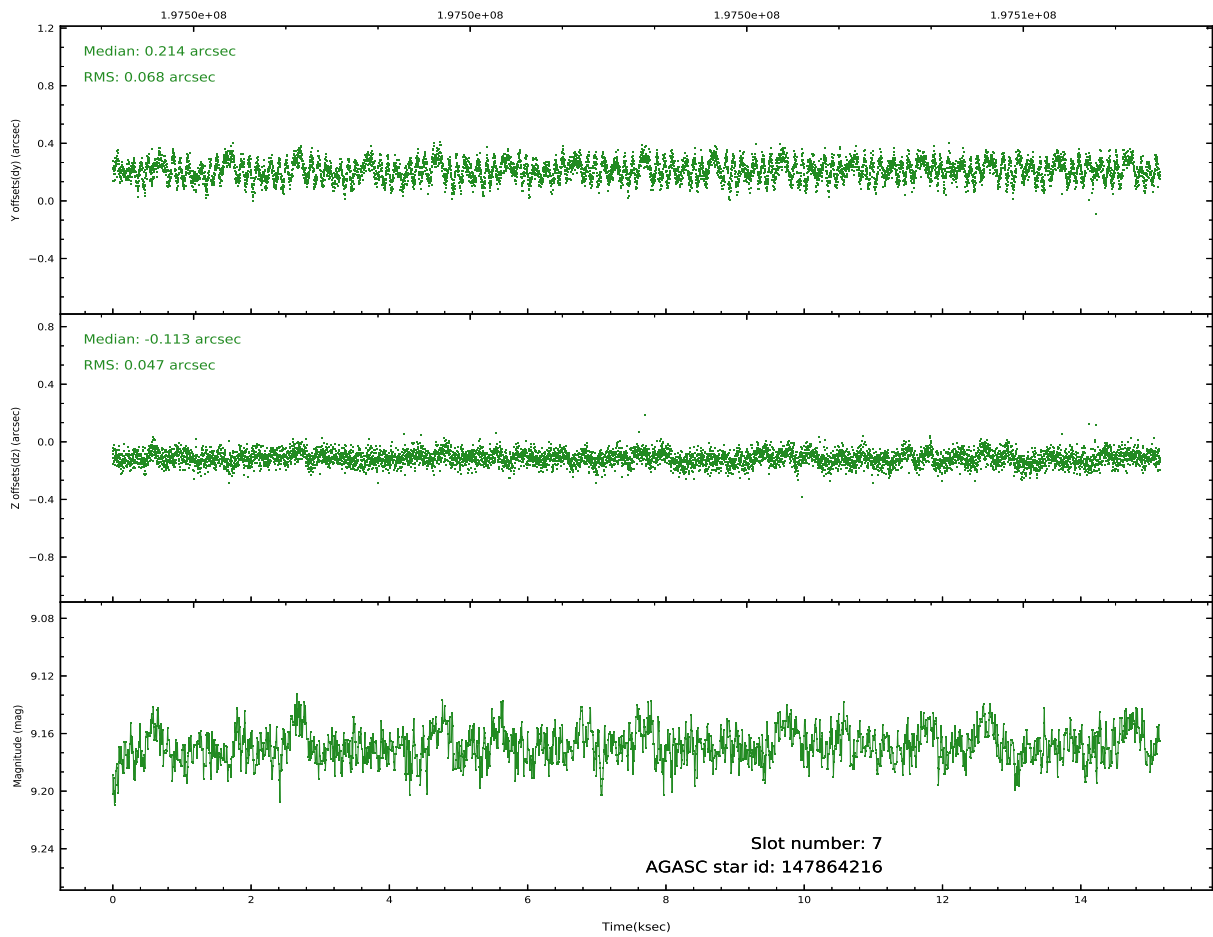
Time (s)



## 2.4.5 Slot 7

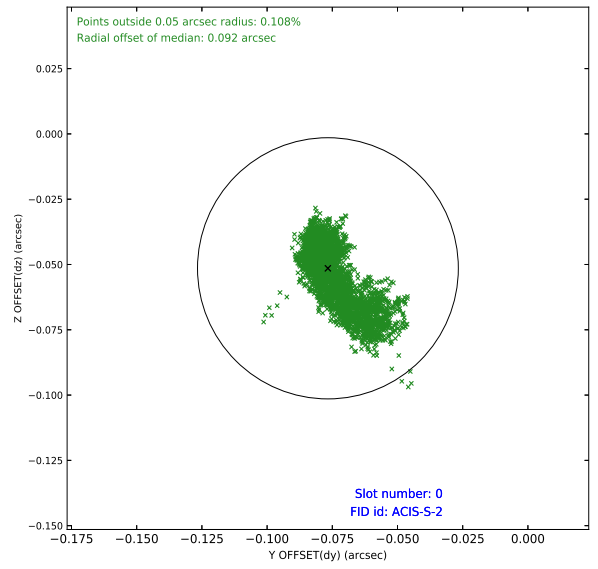
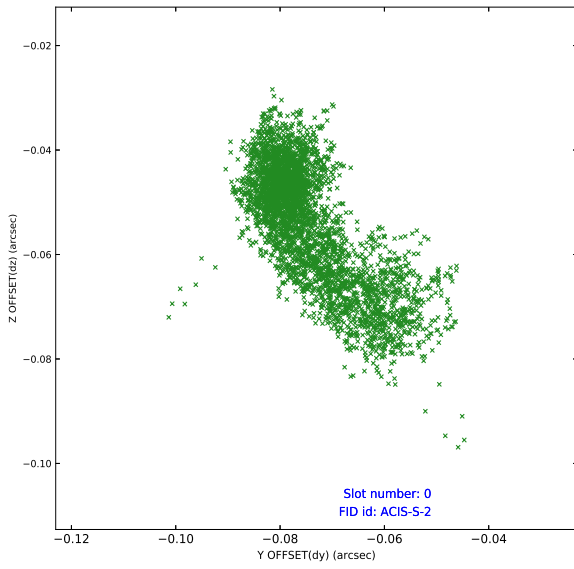


Time (s)

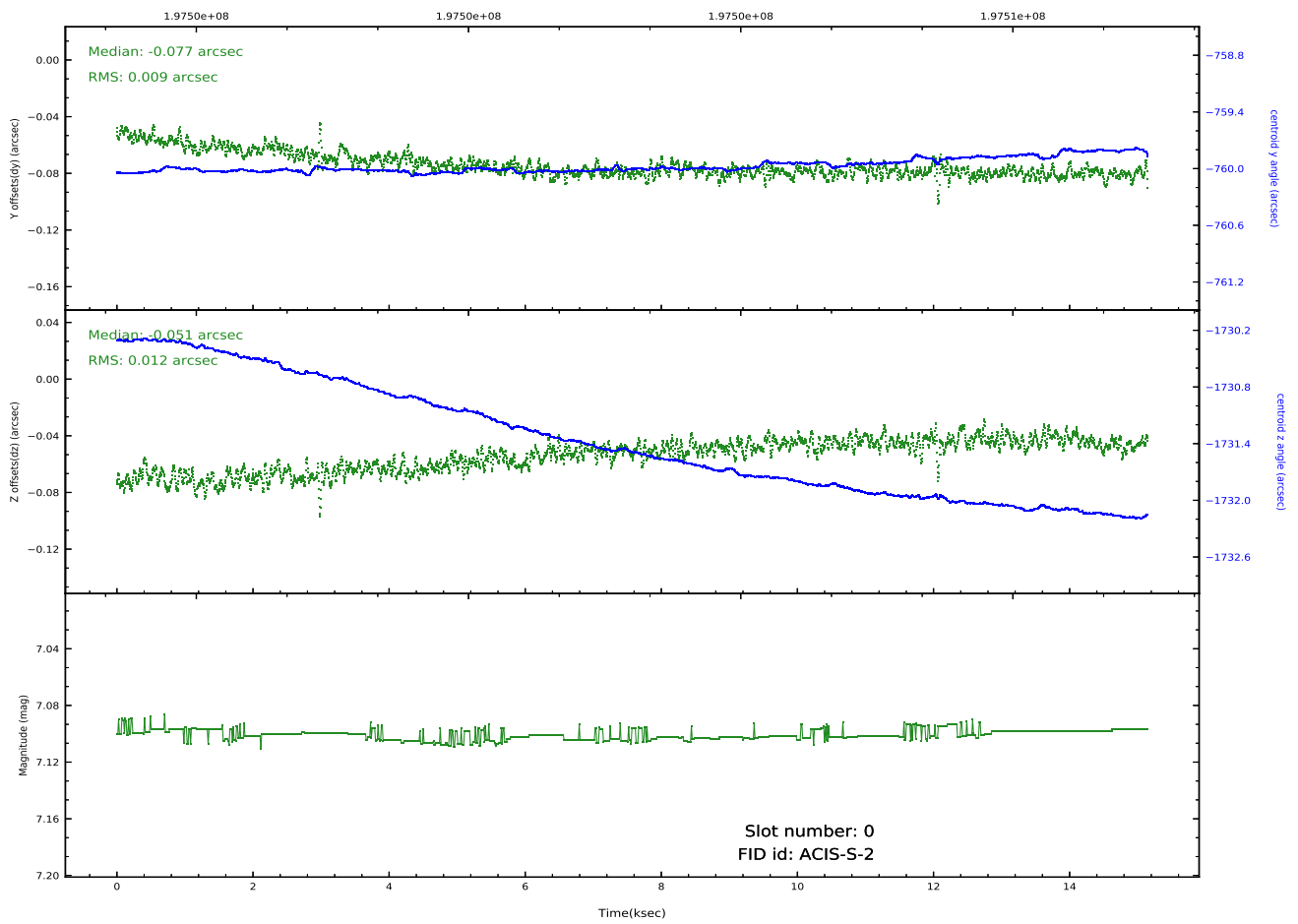


## 2.5 FID Slots

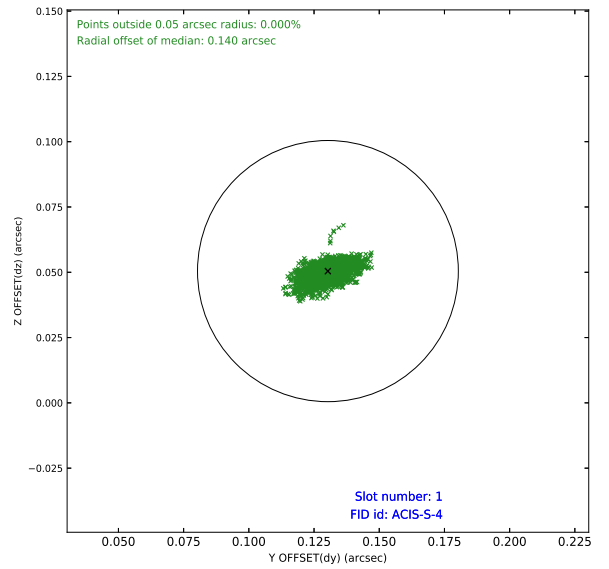
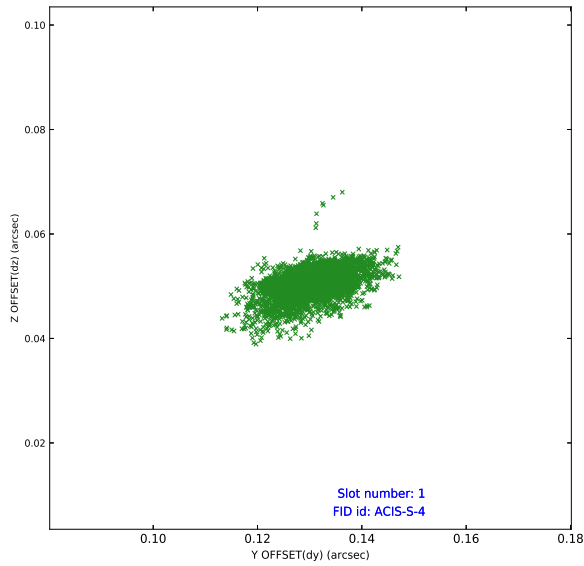
### 2.5.1 Slot 0



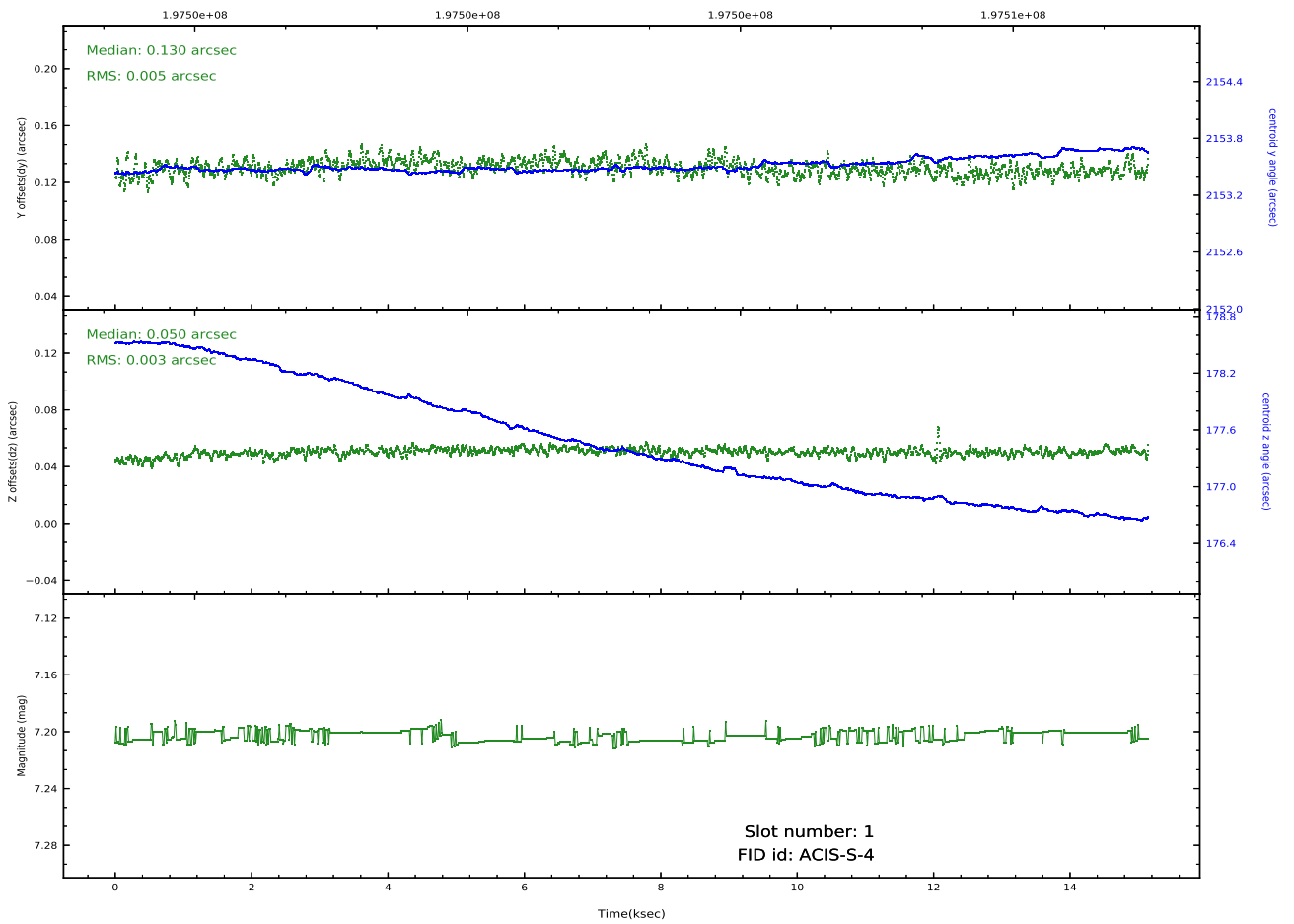
Time (s)



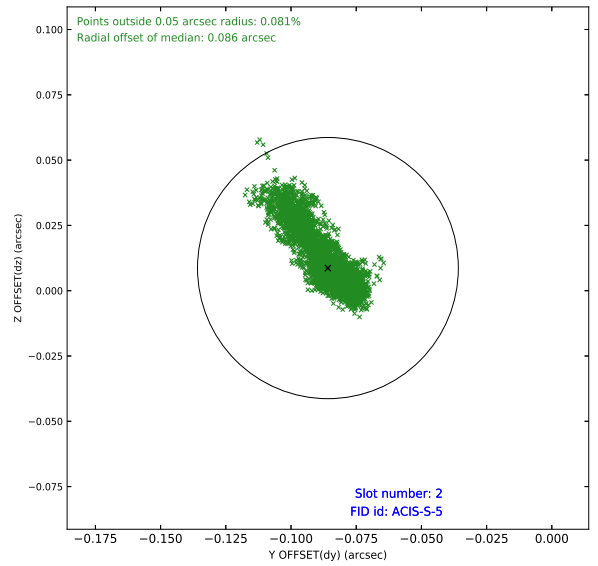
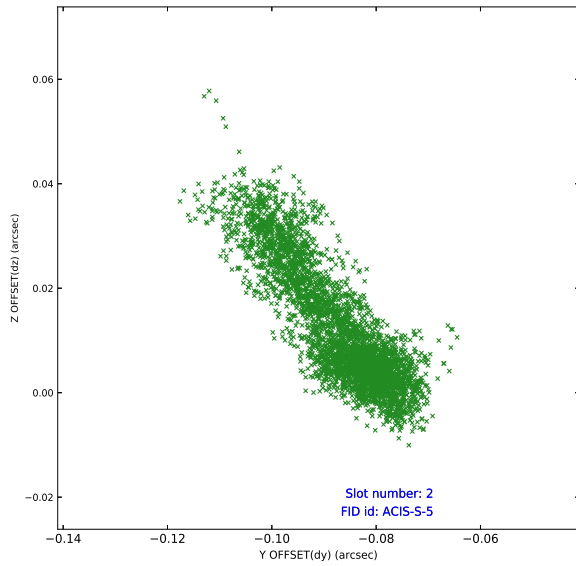
## 2.5.2 Slot 1



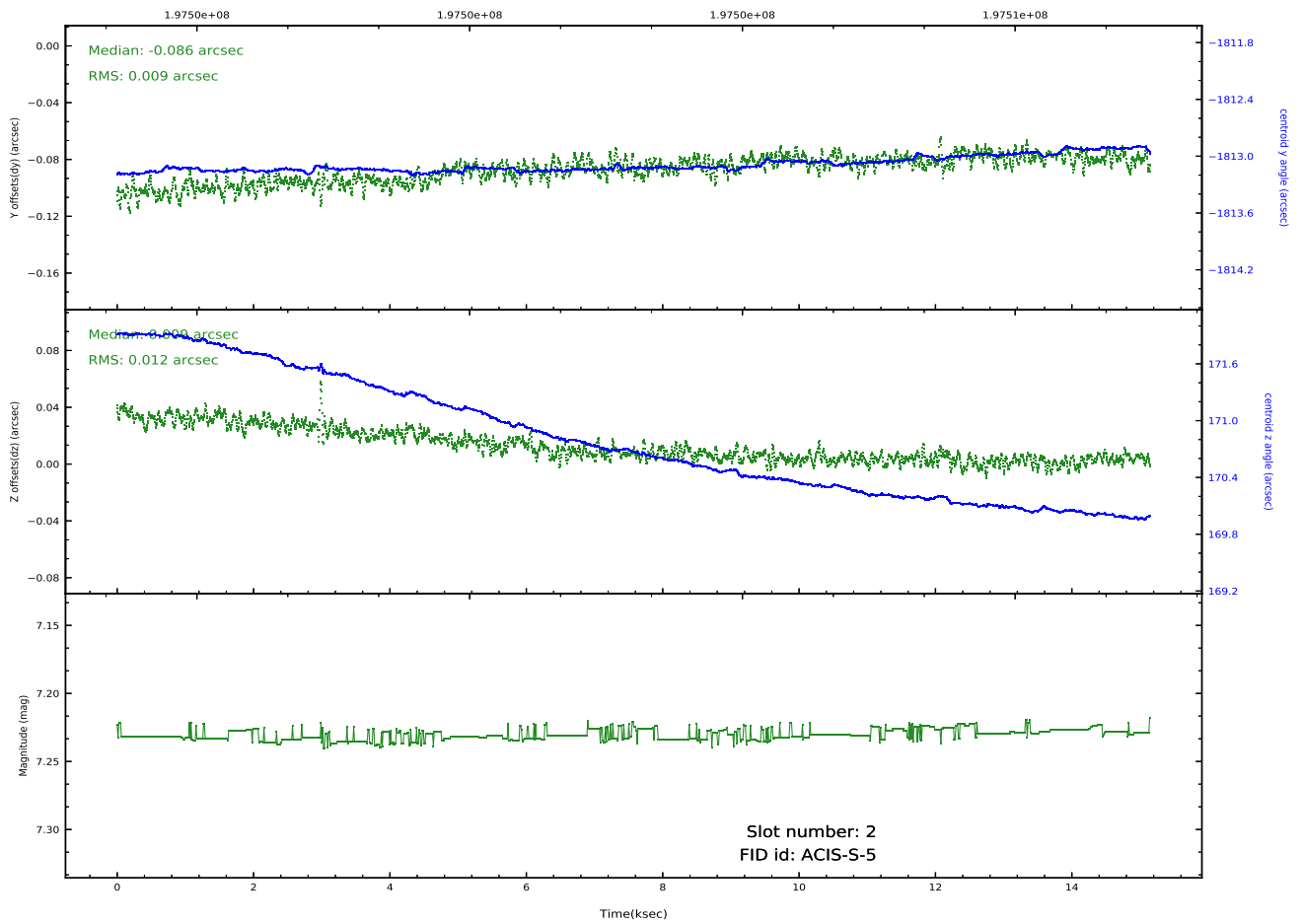
Time (s)



### 2.5.3 Slot 2



Time (s)



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.09.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.758

## A.2 Comments