

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 6153 - L2 Version 4  
Chandra X-Ray Center

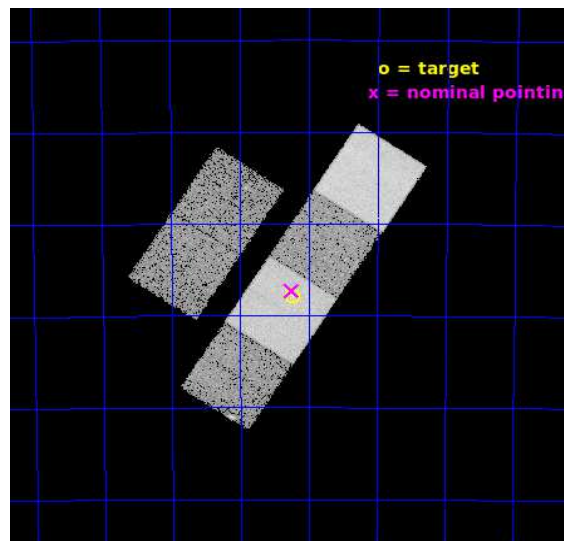
L2 Processing Date : Oct 4 2020

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# 1 Front

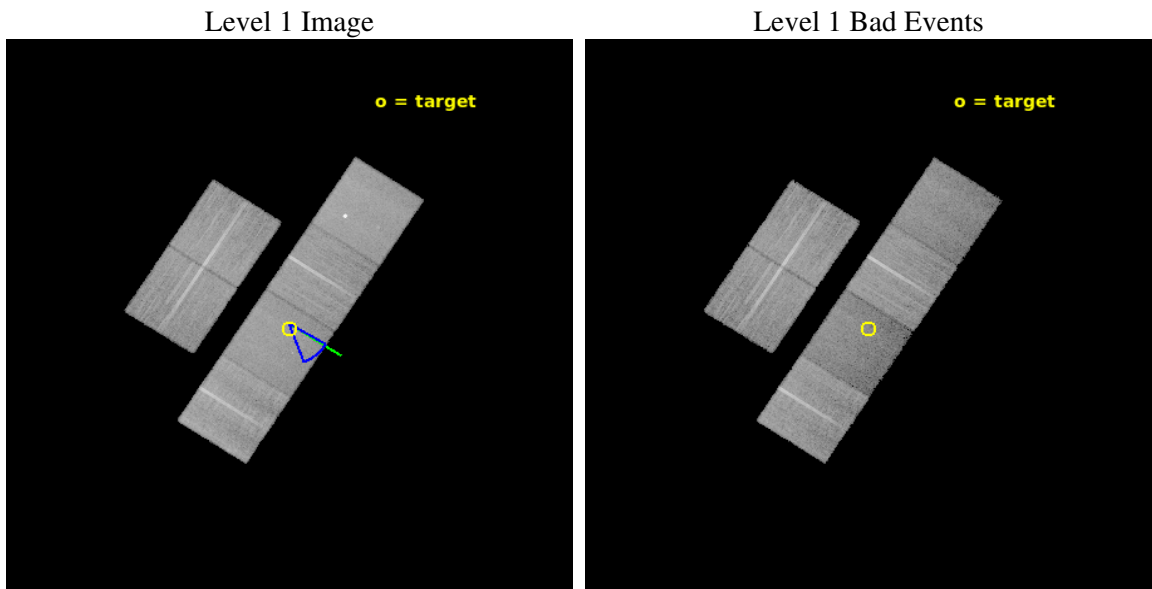
seq_num	500495	Sequence number
obs_id	6153	Observation id
title	Probing the X-ray emission from the high-magnetic field radio pulsar PSR J1119-6127 associated with SNR G292.2-0.5	Proposal title
observer	Samar Safi-Harb	Principal investigator
object	PSR J1119-6127	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	169.81	Observer's specified target RA [deg]
dec_targ	-61.463806	Observer's specified target Dec [deg]
ra_nom	169.81101903603	Nominal RA [deg]
dec_nom	-61.454860506767	Nominal Dec [deg]
roll_nom	122.94669007627	Nominal Roll [deg]
revision	4	Processing version of data
ontime	19139.199928701	Sum of GTIs [s]
livetime	18896.847854961	Livetime [s]
ontime2	19139.199928701	Sum of GTIs [s]
ontime3	19139.199928701	Sum of GTIs [s]
ontime5	19139.199928701	Sum of GTIs [s]
ontime6	19135.958958417	Sum of GTIs [s]
ontime7	19139.199928701	Sum of GTIs [s]
ontime8	19139.199928701	Sum of GTIs [s]
l2events	168461	Number of level 2 events



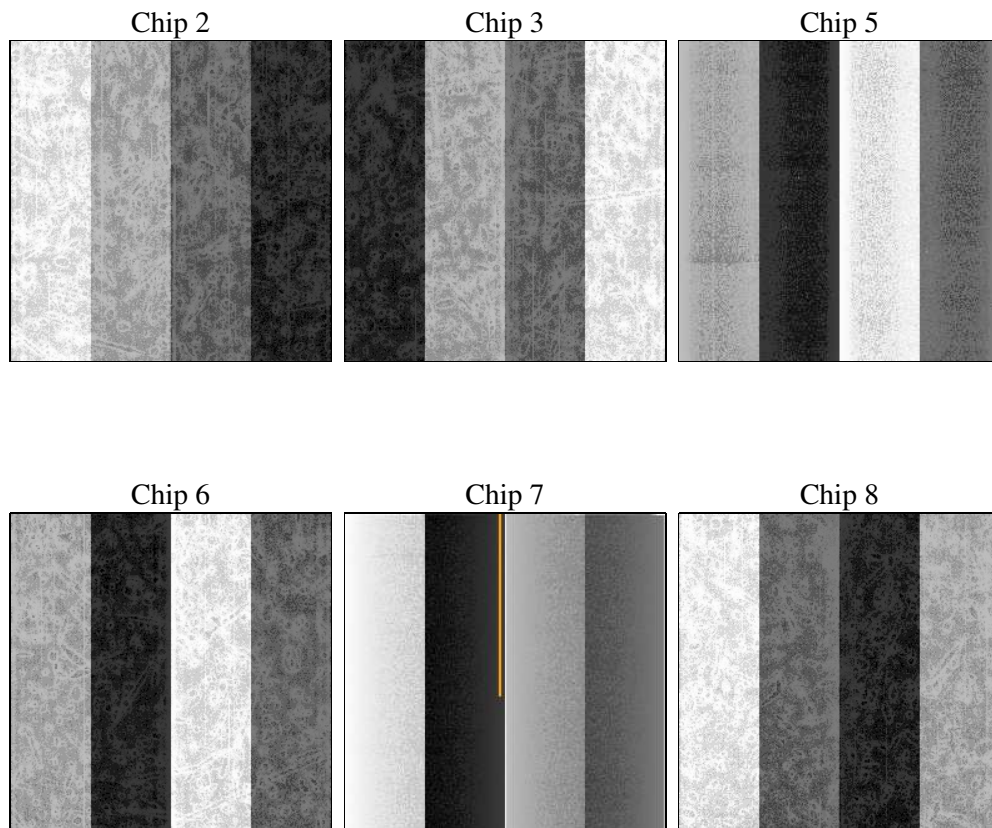
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	19139.199928701	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime2	19139.199928701	Sum of GTIs [s]
date	2020-10-04T23:45:55	Date and time of file creation	ontime3	19139.199928701	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	19139.199928701	Sum of GTIs [s]
			ontime6	19135.958958417	Sum of GTIs [s]
			ontime7	19139.199928701	Sum of GTIs [s]
			ontime8	19139.199928701	Sum of GTIs [s]
			l1events	818291	Number of level 1 events

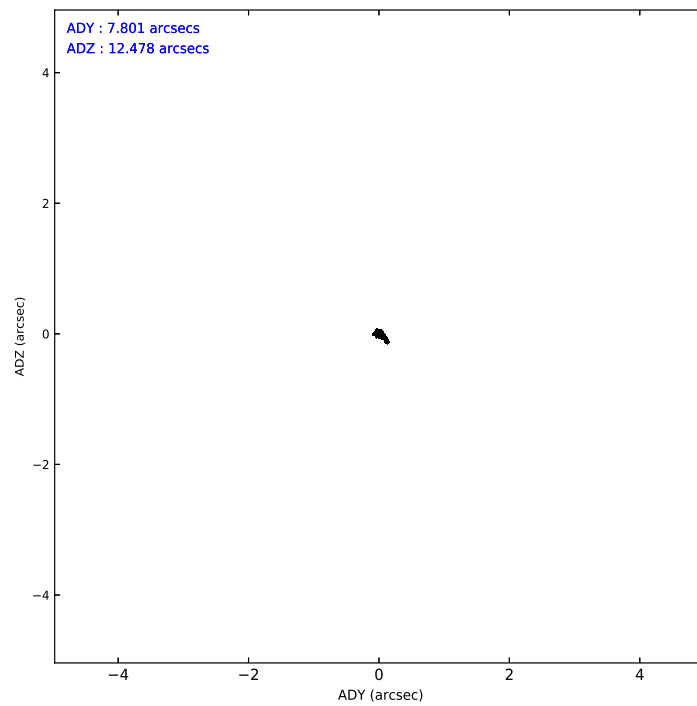
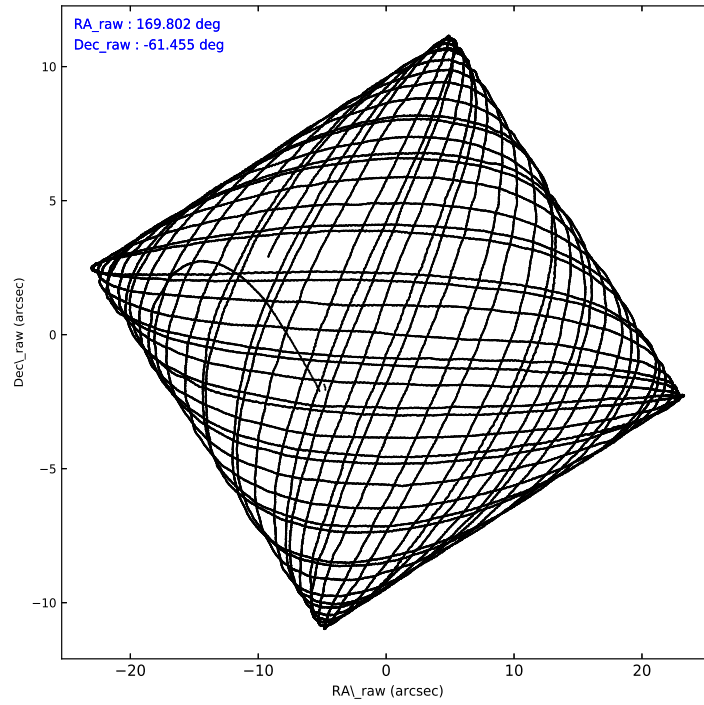
### 2.1.4 Events

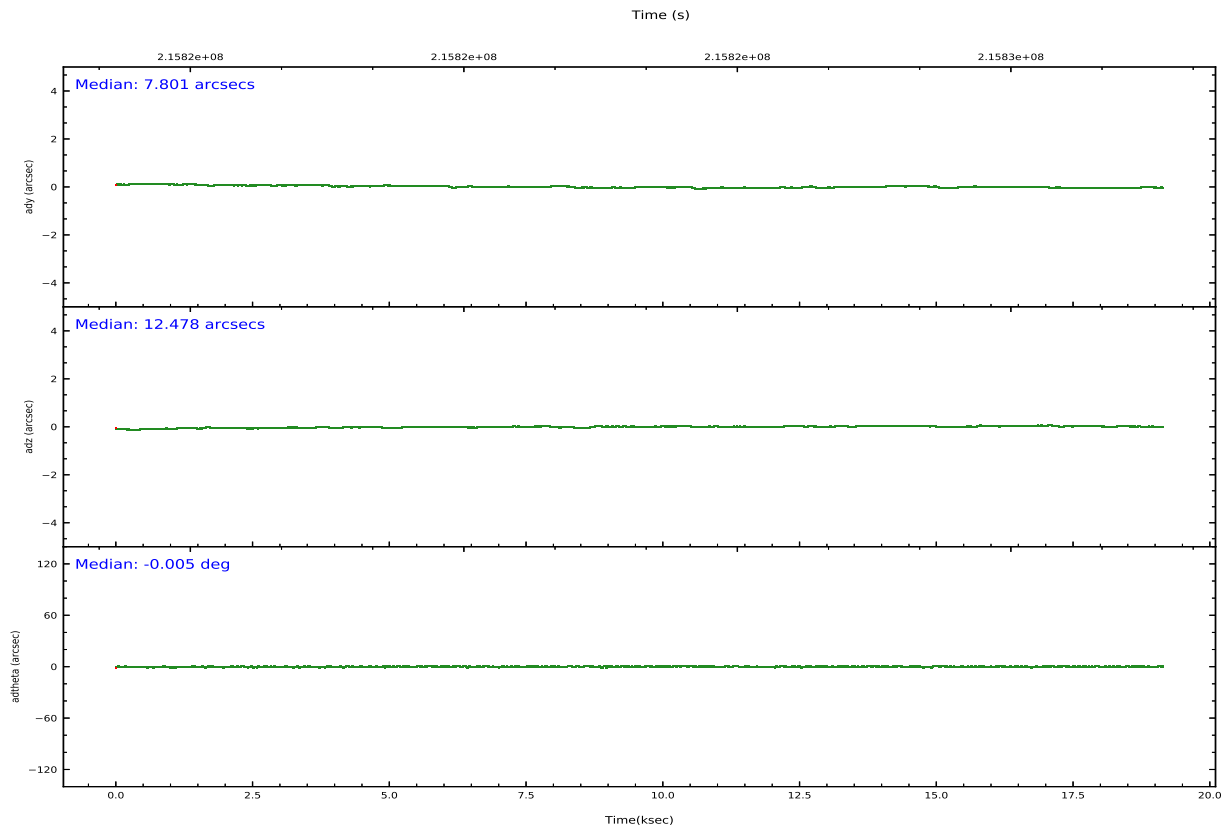
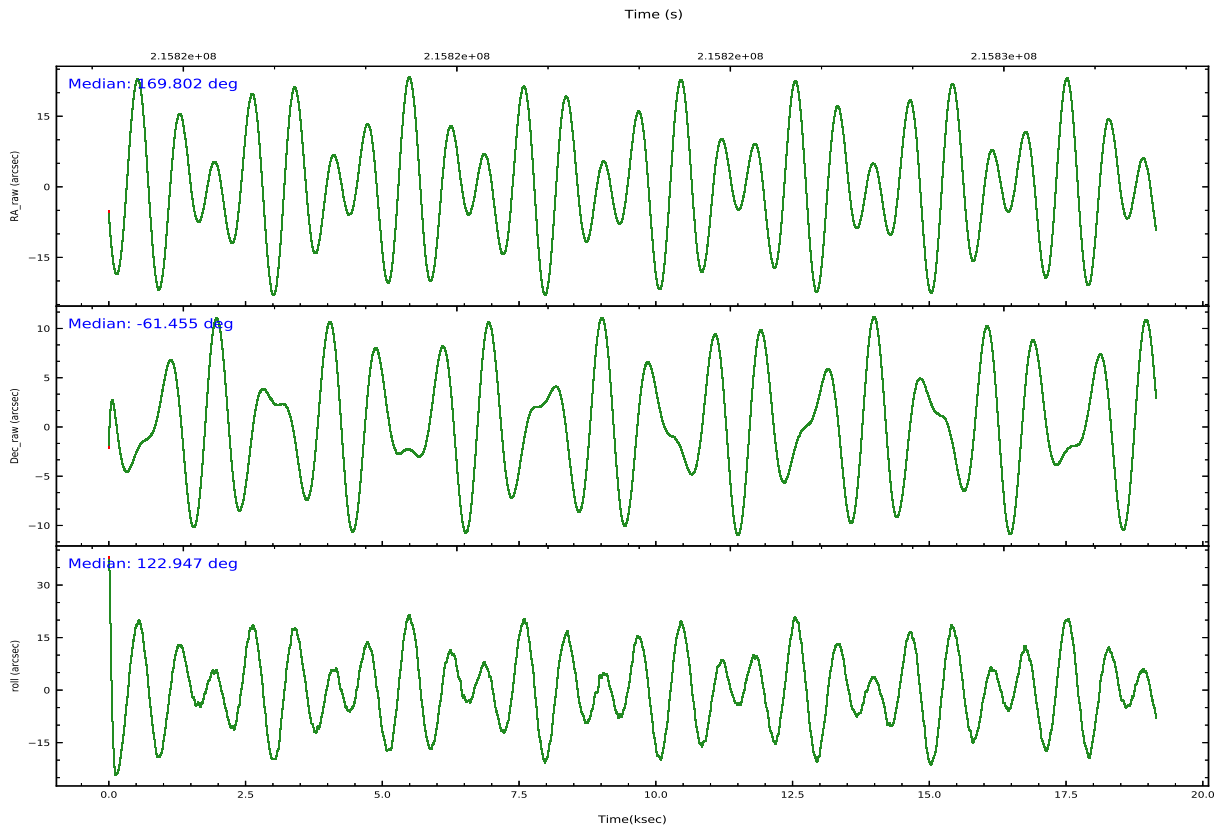
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	137100	121885	152507	131055	121040	154704	grade 0 events	4714	4325	9983	6946	6227	8954
rejected events	125111	110867	76681	116098	64077	121111		3%	3%	6%	5%	5%	5%
rejected %	91%	90%	50%	88%	52%	78%	grade 1 events	73	67	141	64	107	88
								0%	0%	0%	0%	0%	0%
							grade 2 events	2874	2474	21996	2921	11856	8331
								2%	2%	14%	2%	9%	5%
							grade 3 events	1309	1267	2959	1509	5782	4210
								0%	1%	1%	1%	4%	2%
							grade 4 events	1399	1297	2976	1510	5545	3833
								1%	1%	1%	1%	4%	2%
							grade 5 events	3621	4170	12679	4282	13299	6361
								2%	3%	8%	3%	10%	4%
							grade 6 events	2217	2137	41000	2646	29861	9737
								1%	1%	26%	2%	24%	6%
							grade 7 events	120893	106148	60773	111177	48363	113190
								88%	87%	39%	84%	39%	73%

## 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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	169.853254	169.81101903603	Subarray requested	NONE	NONE
[deg] Pointing Dec	-61.466930	-61.454860506767	Alternating exposures requested	N	N
[deg] Pointing Roll	122.837997	122.94669007627	[s] Primary exposure time	0.000000	3.2
[deg] Roll angle	140.000000	140.000000			
[deg] Roll tolerance	20.000000	20.000000			
Roll constraint allows 180D rotation	N	N			
[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)	215813785.184000	215812334.5947			
Observation start date	2004-11-02T20:15:21	2004-11-02T19:52:14			
[s] Observation end time (MET)	215832785.184000	215833684.32066			
Observation end date	2004-11-03T01:32:01	2004-11-03T01:48:04			
Read mode	TIMED	TIMED			

## 2.3 Aspect



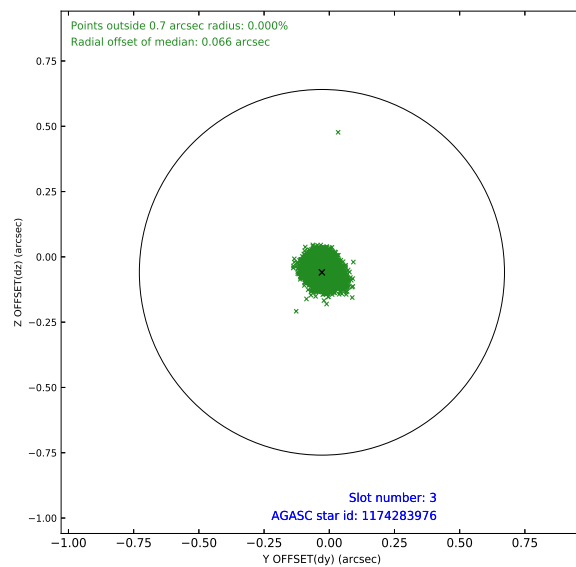
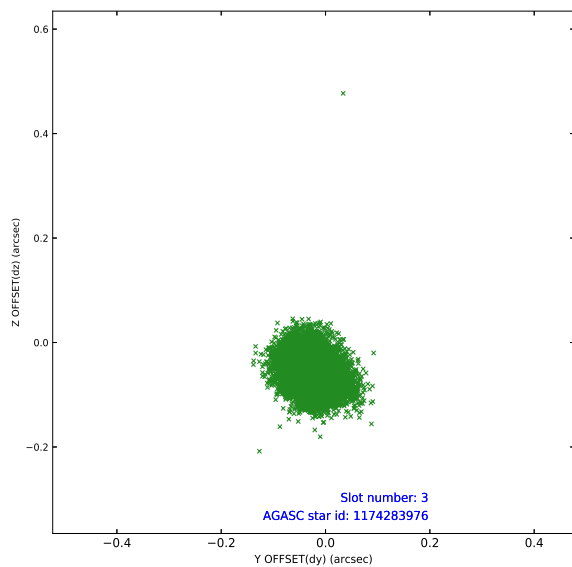


### Slot Statistics

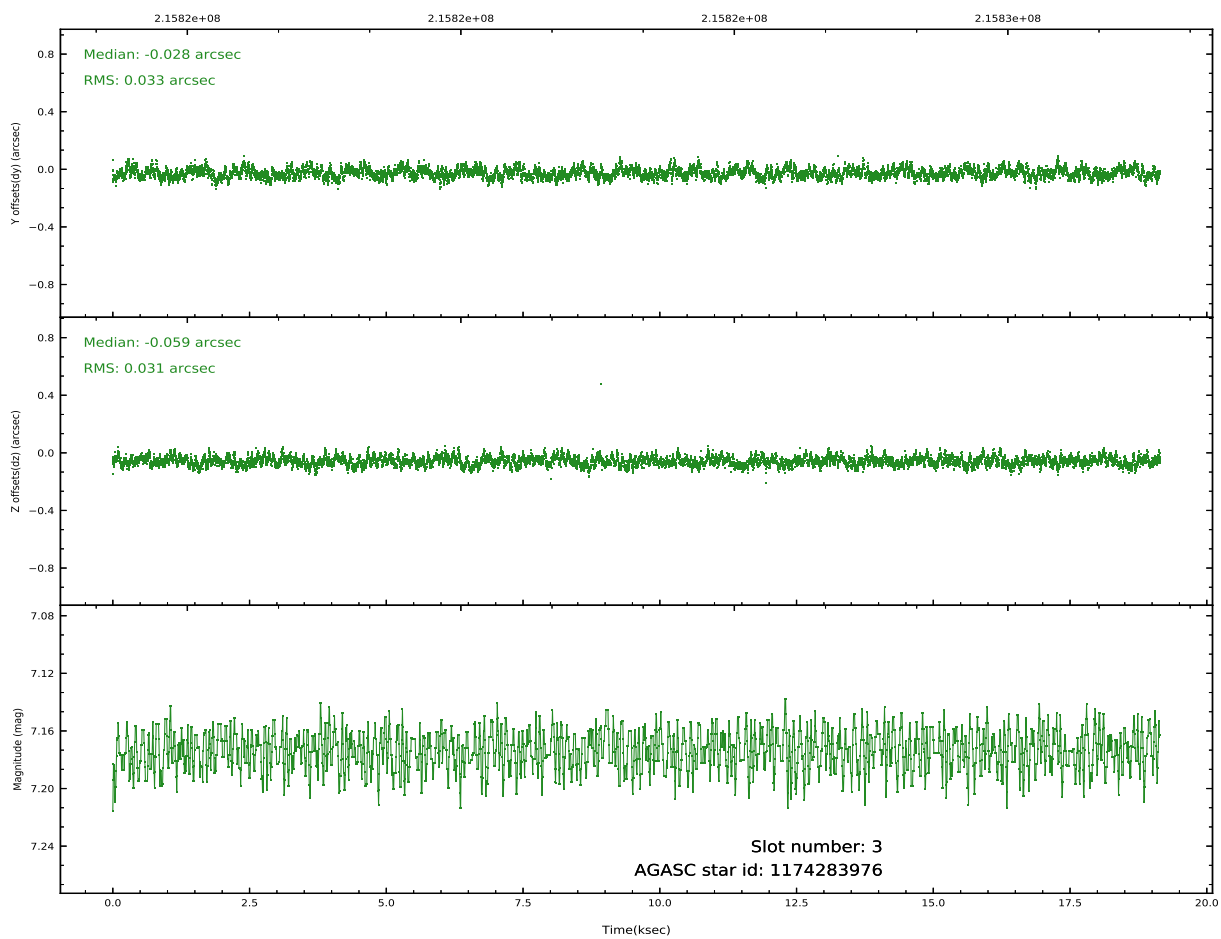
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	4671	1.000	-0.036	-0.067	0.007	0.011	0.000000	0.000000	-760.60	-1733
1	FID		ACIS-S-4	7.20	4671	1.000	0.127	0.035	0.006	0.011	0.000000	0.000000	2152.73	174
2	FID		ACIS-S-5	7.23	4671	1.000	-0.122	0.041	0.007	0.012	0.000000	0.000000	-1813.29	168
3	GUIDE	used	1174283976	7.17	9339	1.000	-0.028	-0.059	0.049	0.078	170.390254	-61.226219	221.10	-1249
4	GUIDE	used	1174289064	7.59	9334	1.000	-0.001	0.010	0.058	0.094	169.403245	-61.635432	-94.46	977
5	GUIDE	used	1174290744	8.19	9338	1.000	0.016	0.005	0.061	0.094	171.197974	-61.558775	-1547.47	-1744
6	GUIDE	used	1174294448	8.41	9333	1.000	0.005	0.029	0.060	0.100	169.819774	-60.897022	1755.88	-1063
7	GUIDE	used	1174808080	8.71	9333	1.000	0.008	0.014	0.062	0.099	169.528961	-61.918631	-1069.15	1344

## 2.4 Star Slots

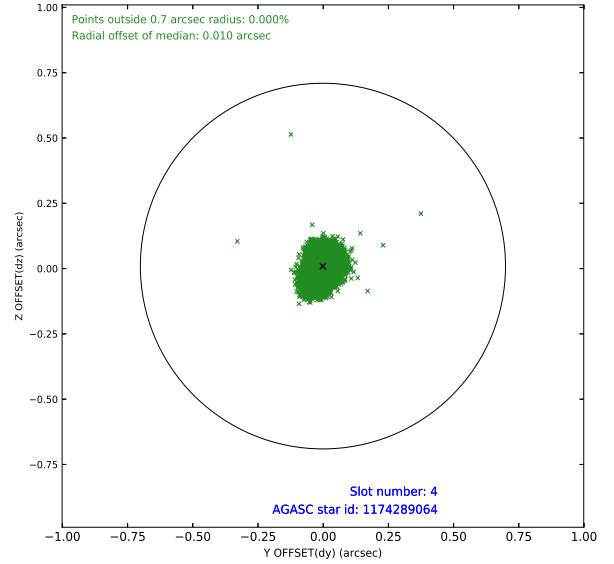
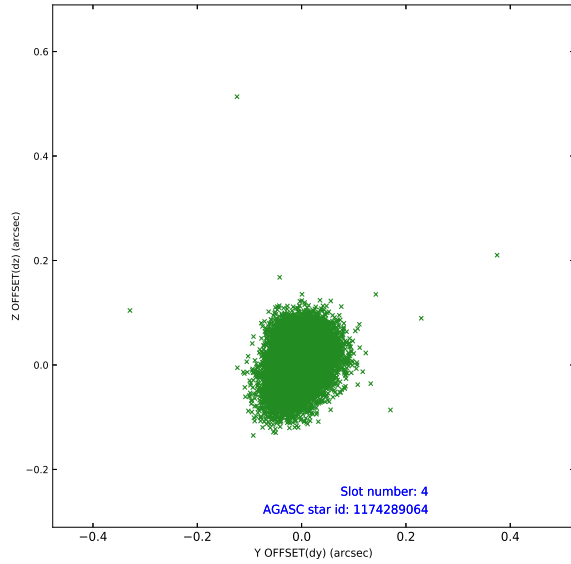
### 2.4.1 Slot 3



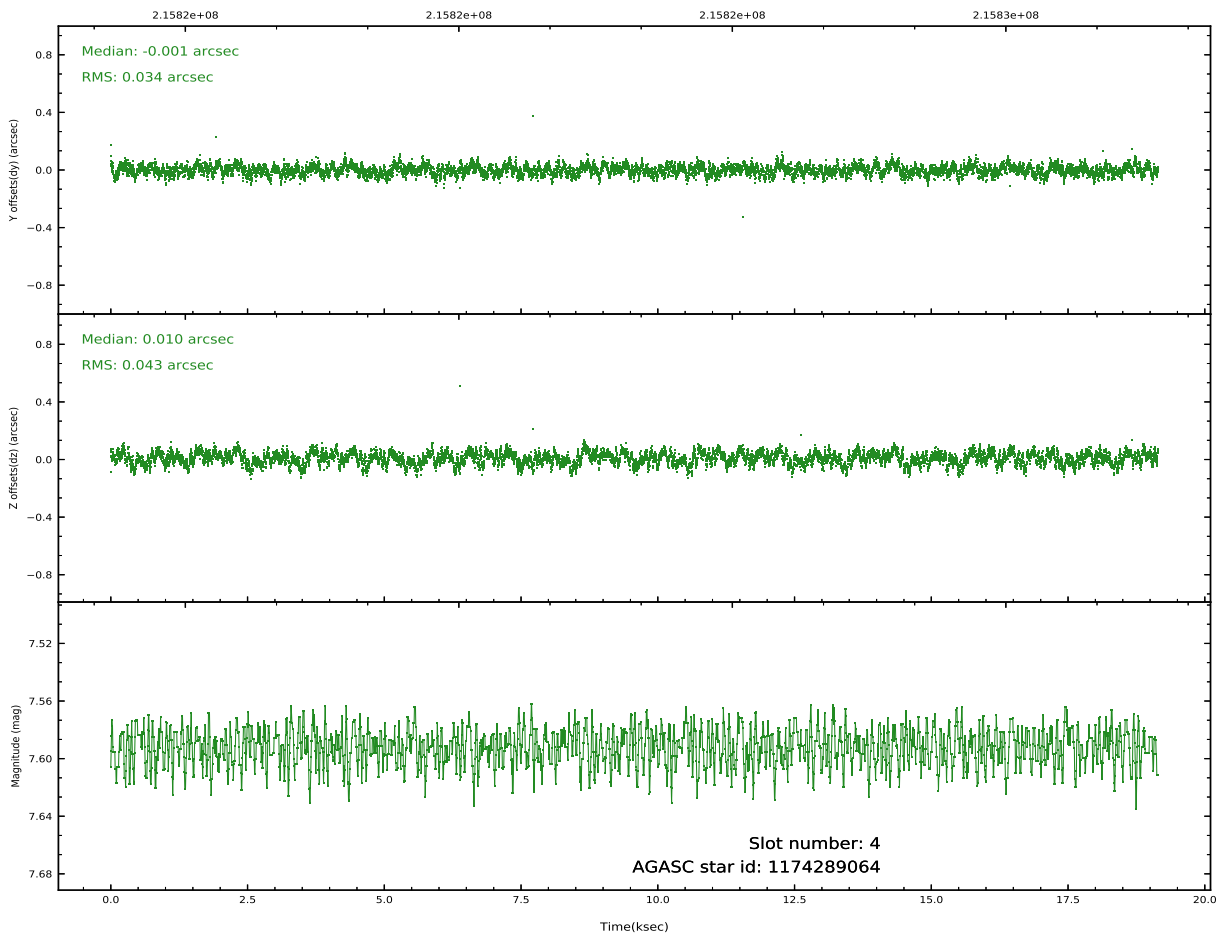
Time (s)



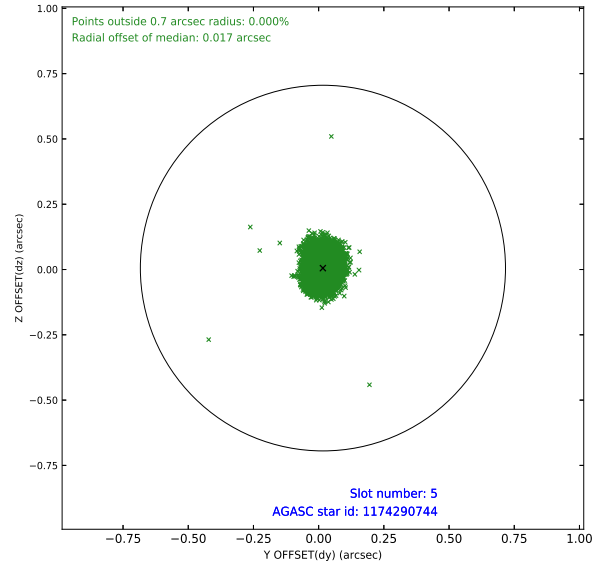
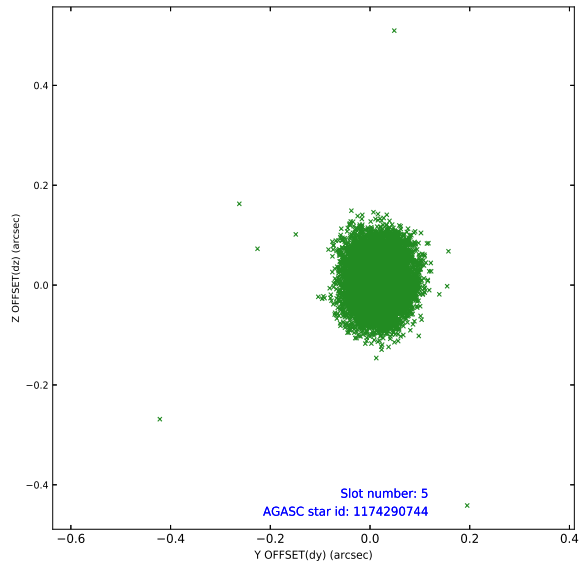
## 2.4.2 Slot 4



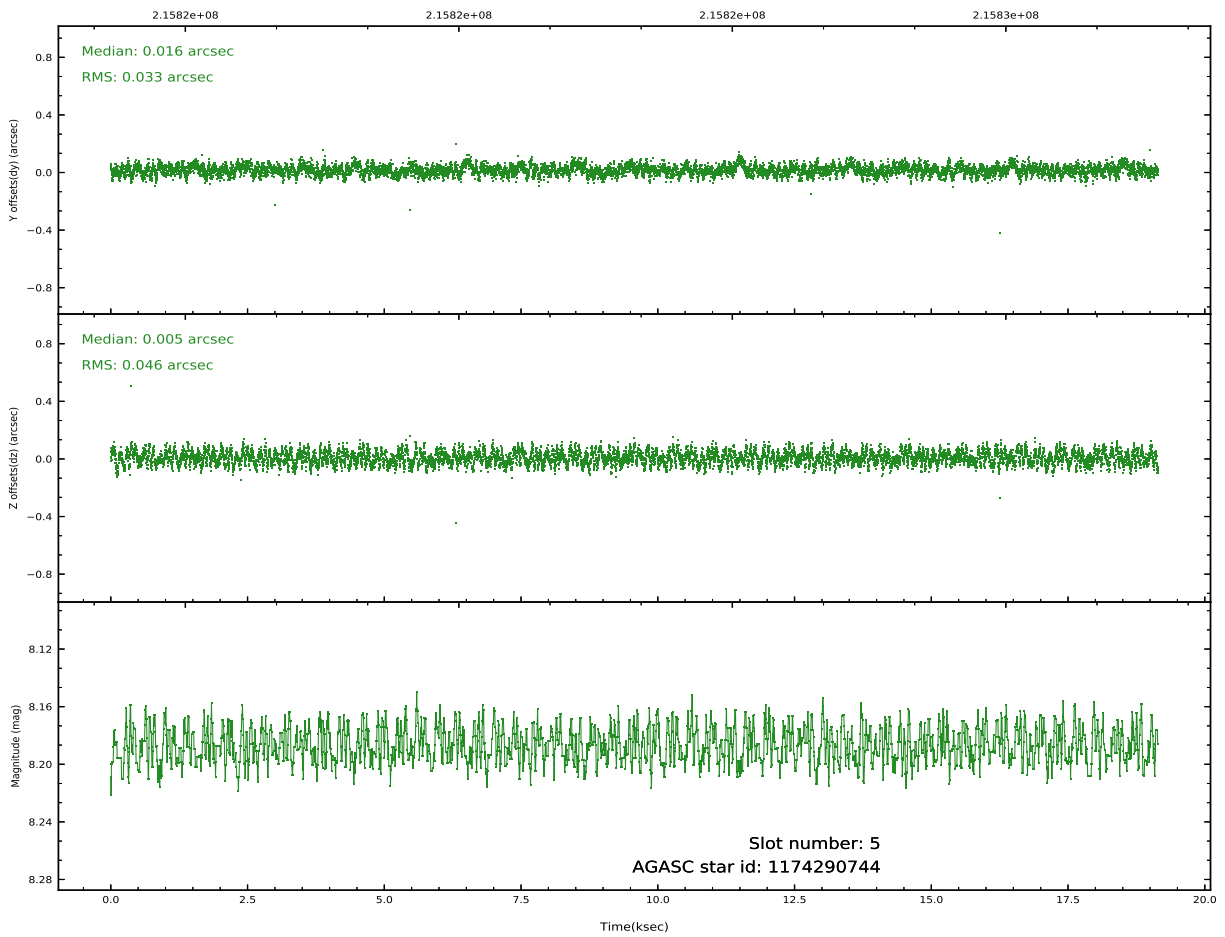
Time (s)



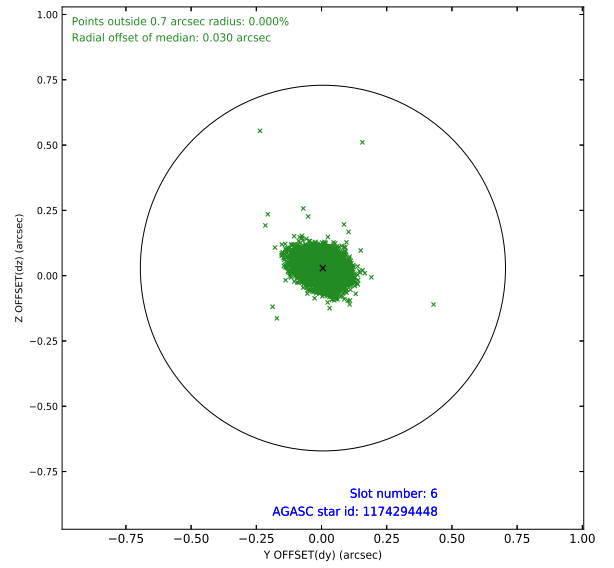
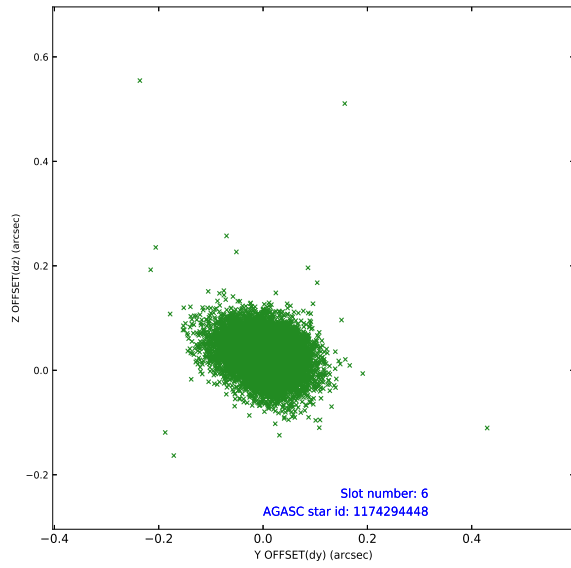
### 2.4.3 Slot 5



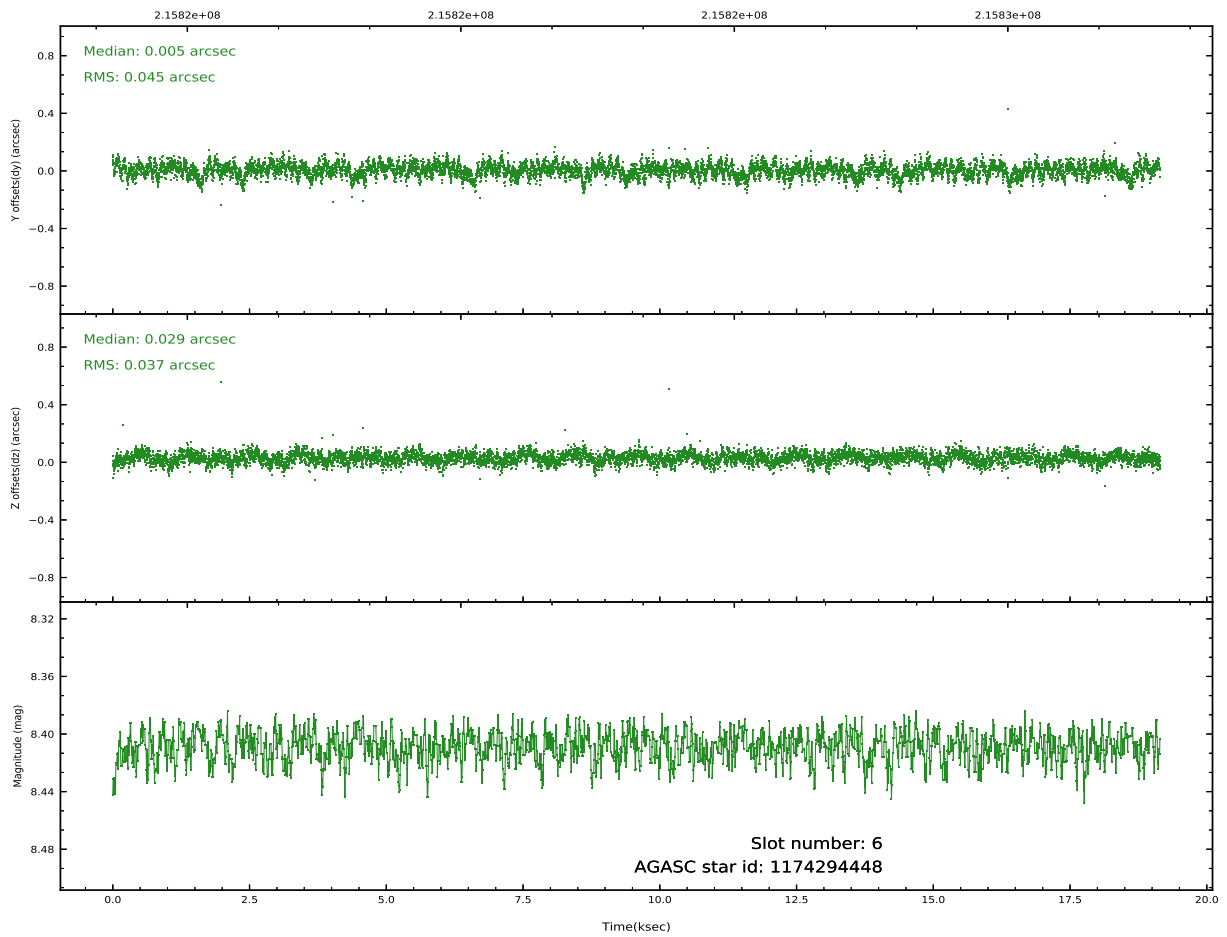
Time (s)



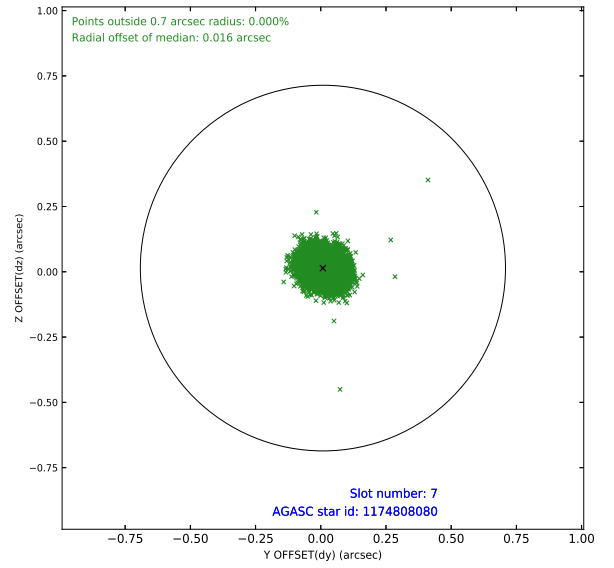
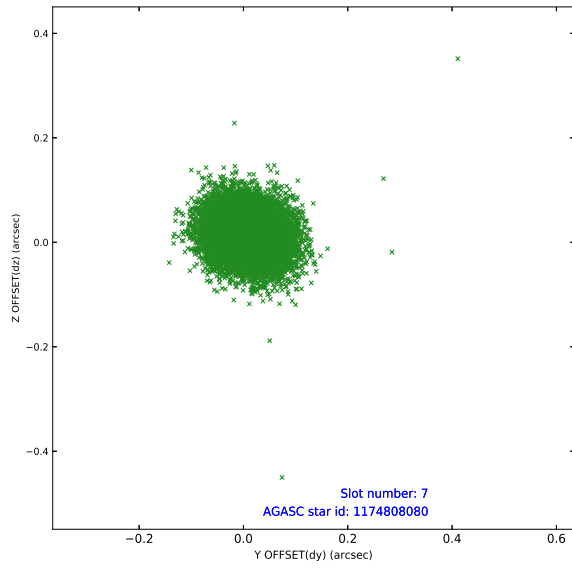
## 2.4.4 Slot 6



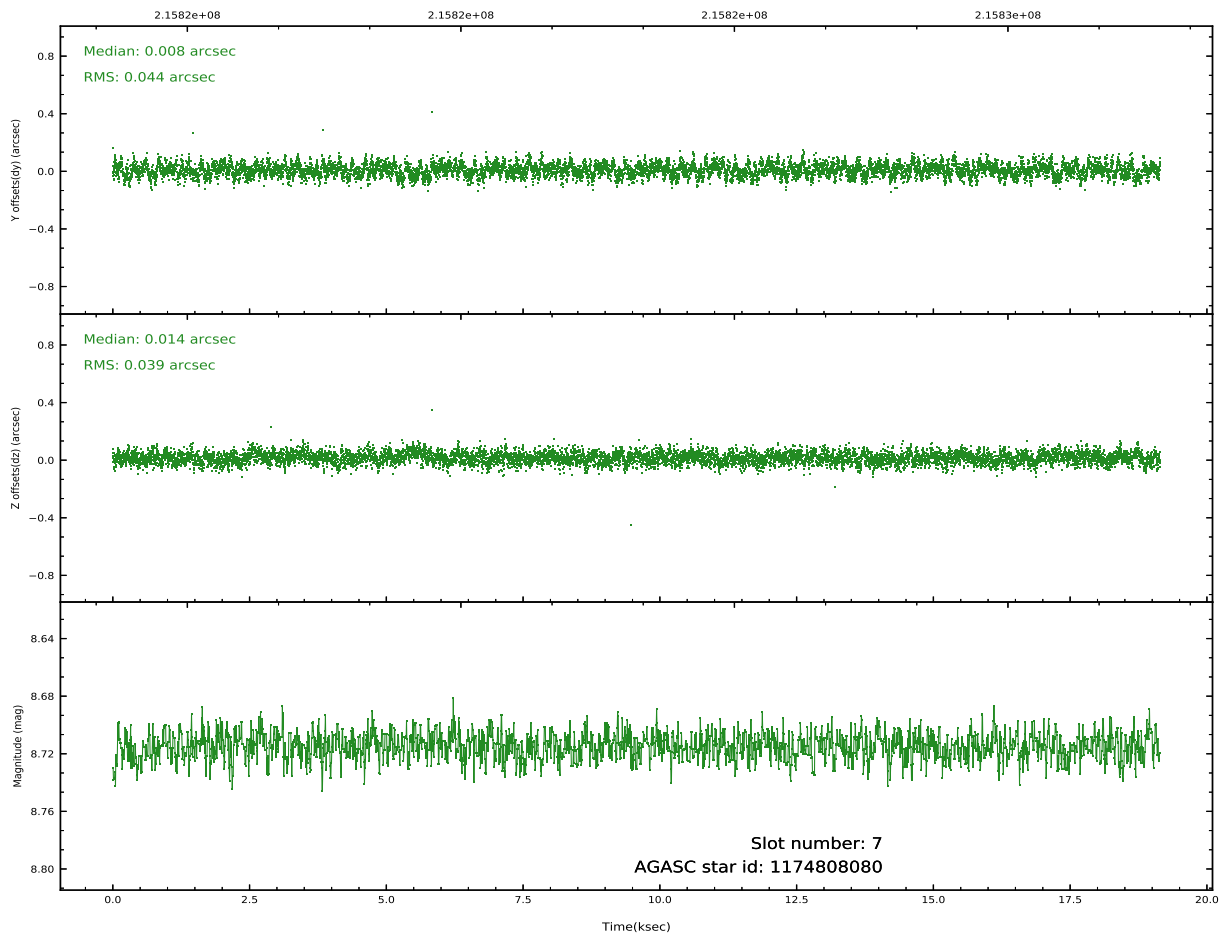
Time (s)



## 2.4.5 Slot 7

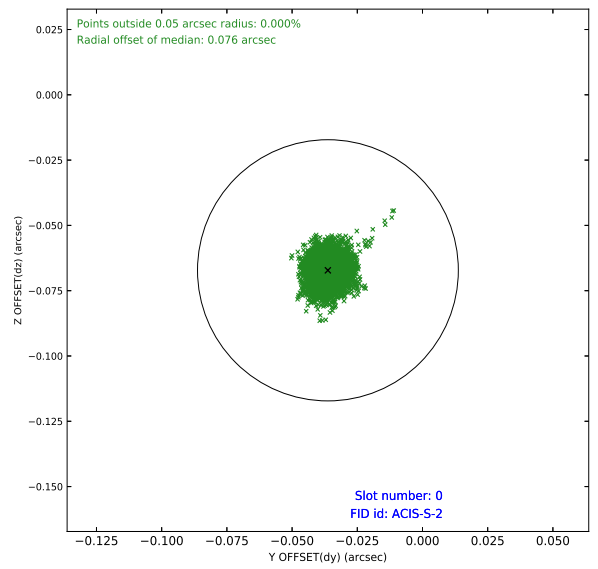
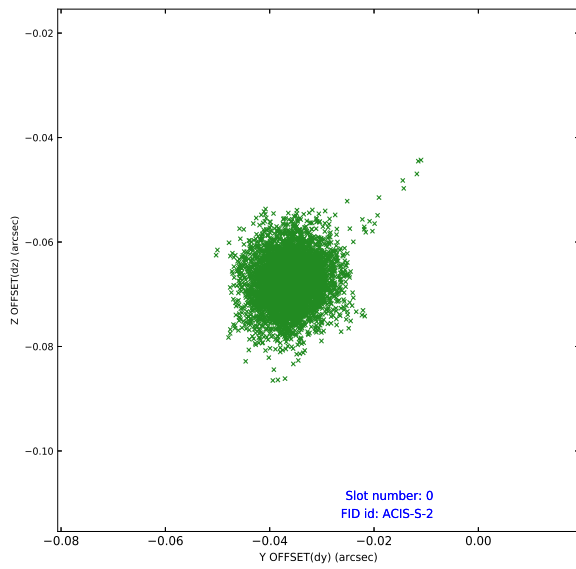


Time (s)

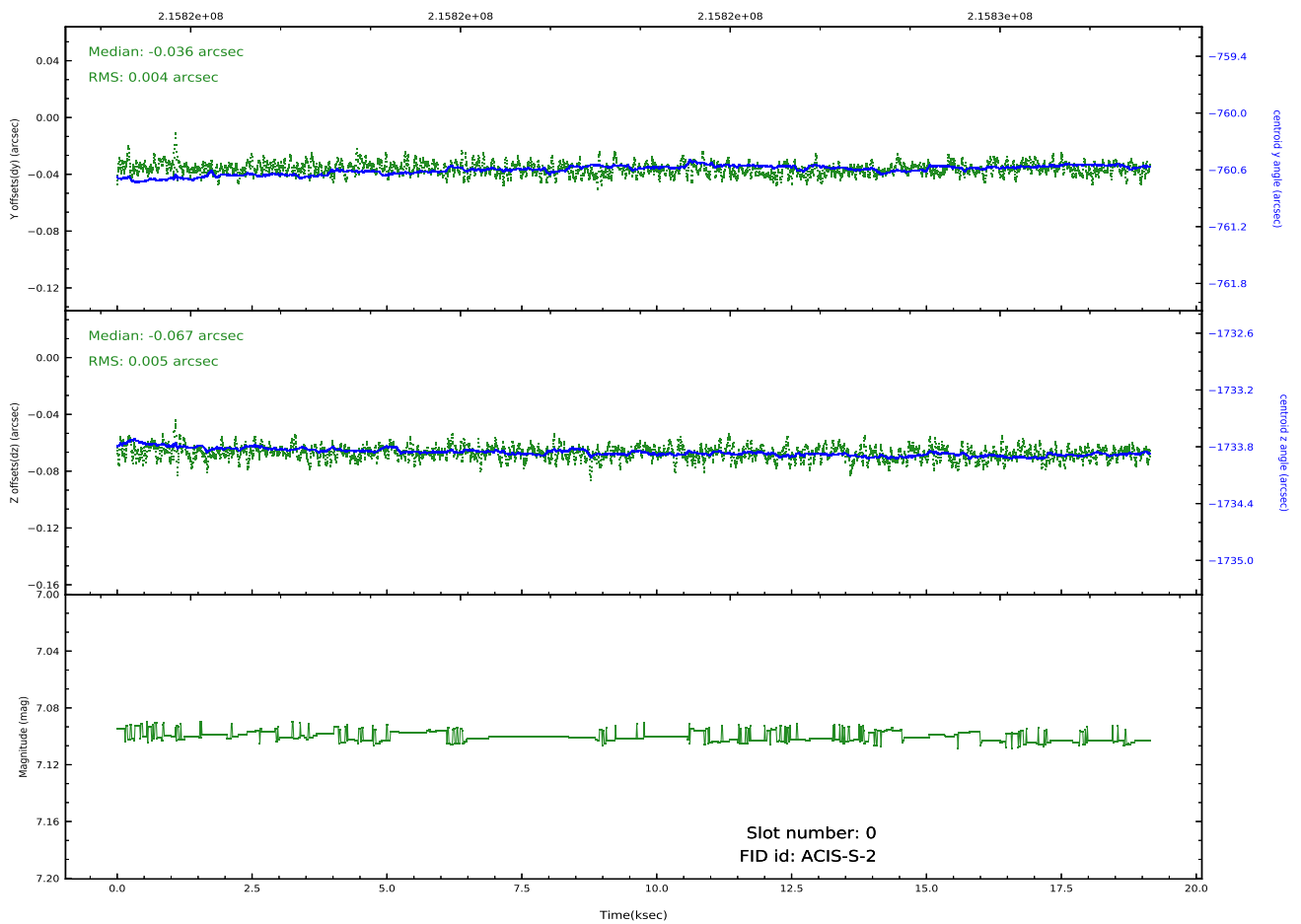


## 2.5 FID Slots

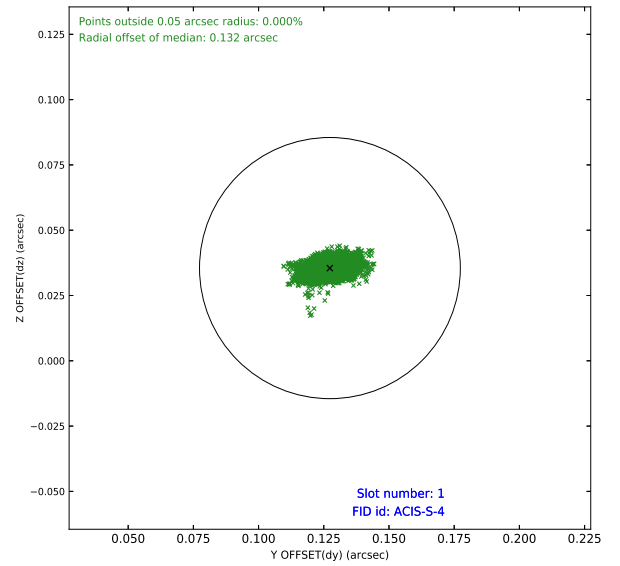
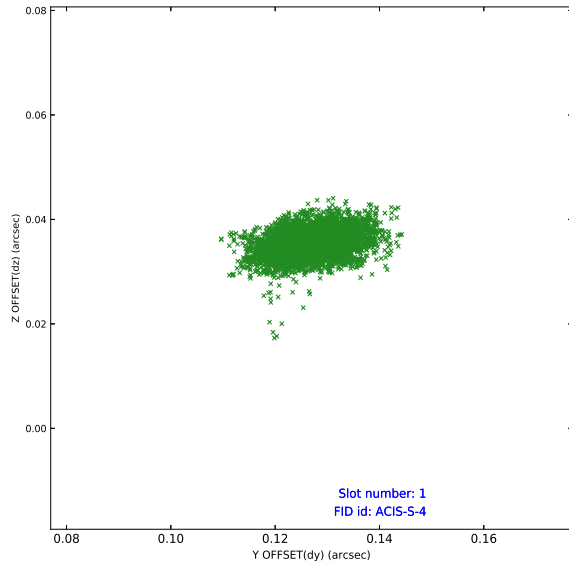
### 2.5.1 Slot 0



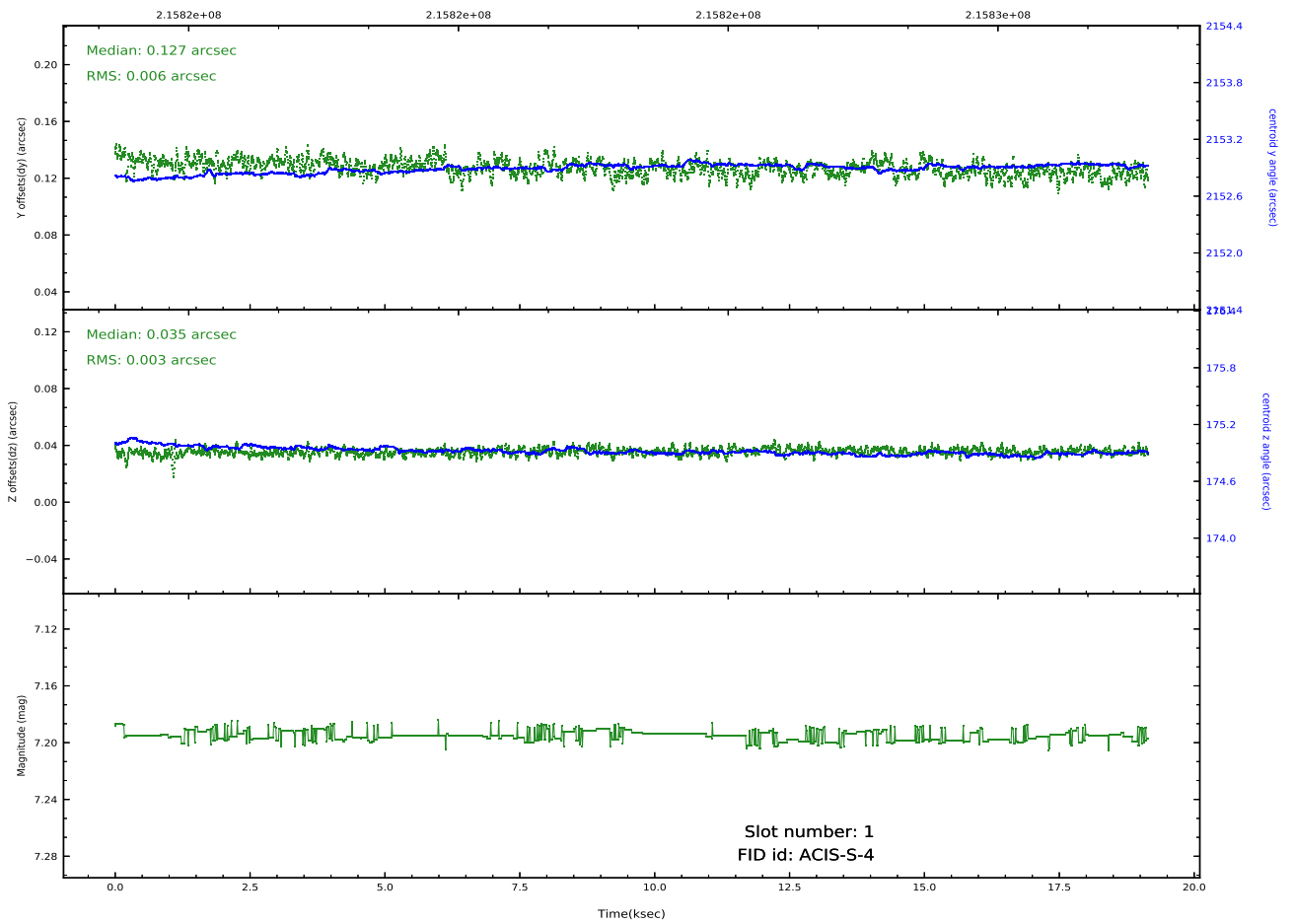
Time (s)



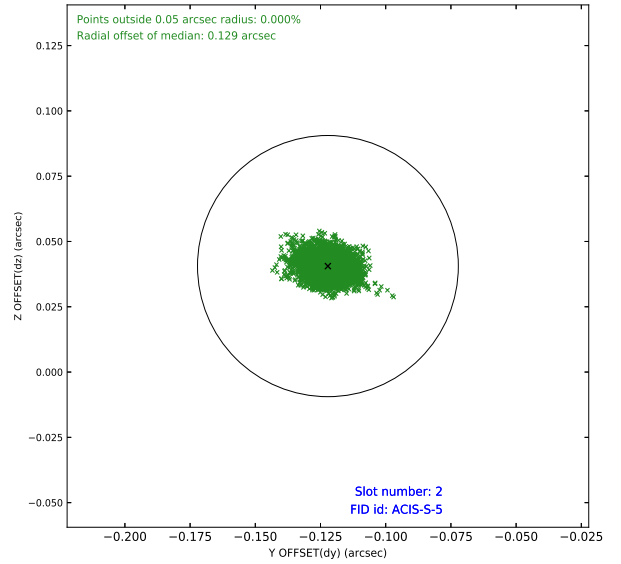
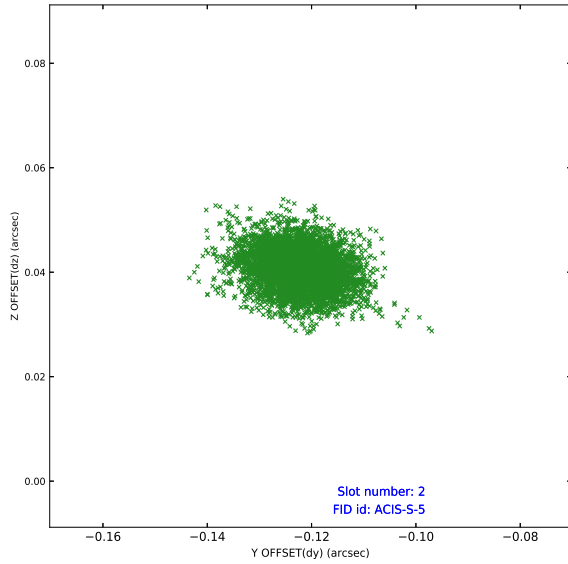
## 2.5.2 Slot 1



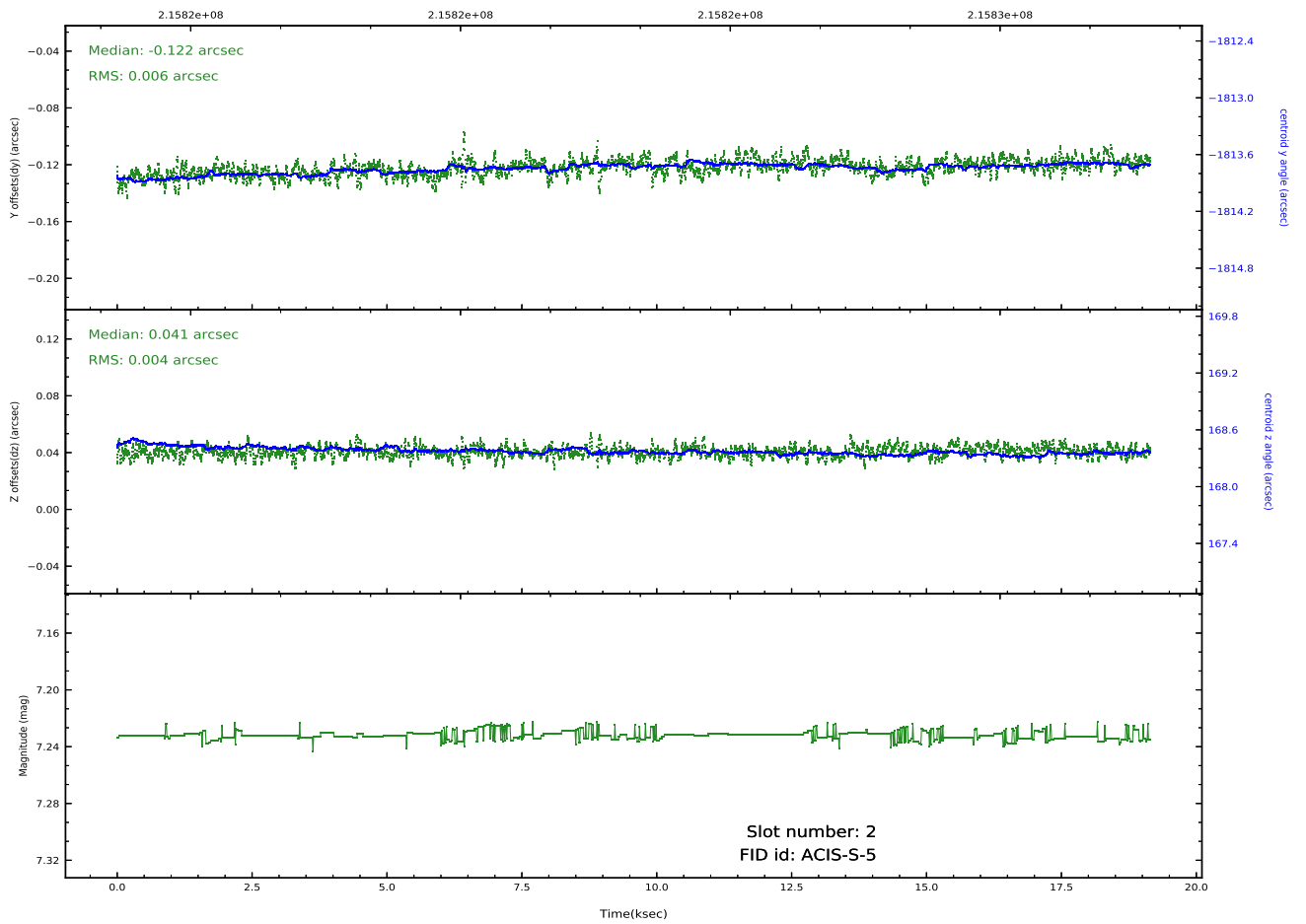
Time (s)



### 2.5.3 Slot 2



Time (s)



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.139

## A.2 Comments

Roll constraint was met.