

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5388 - L2 Version 4  
Chandra X-Ray Center

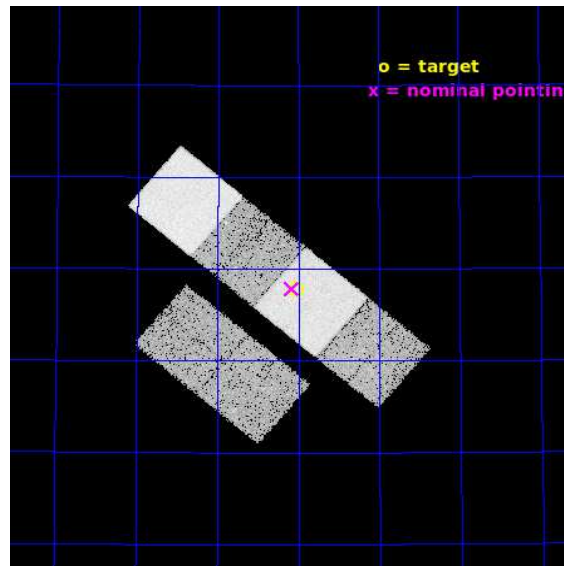
L2 Processing Date : Oct 7 2020

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 6 . . . . .	12
2.4.5	Slot 7 . . . . .	13
2.5	FID Slots . . . . .	14
2.5.1	Slot 0 . . . . .	14
2.5.2	Slot 1 . . . . .	15
2.5.3	Slot 2 . . . . .	16
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

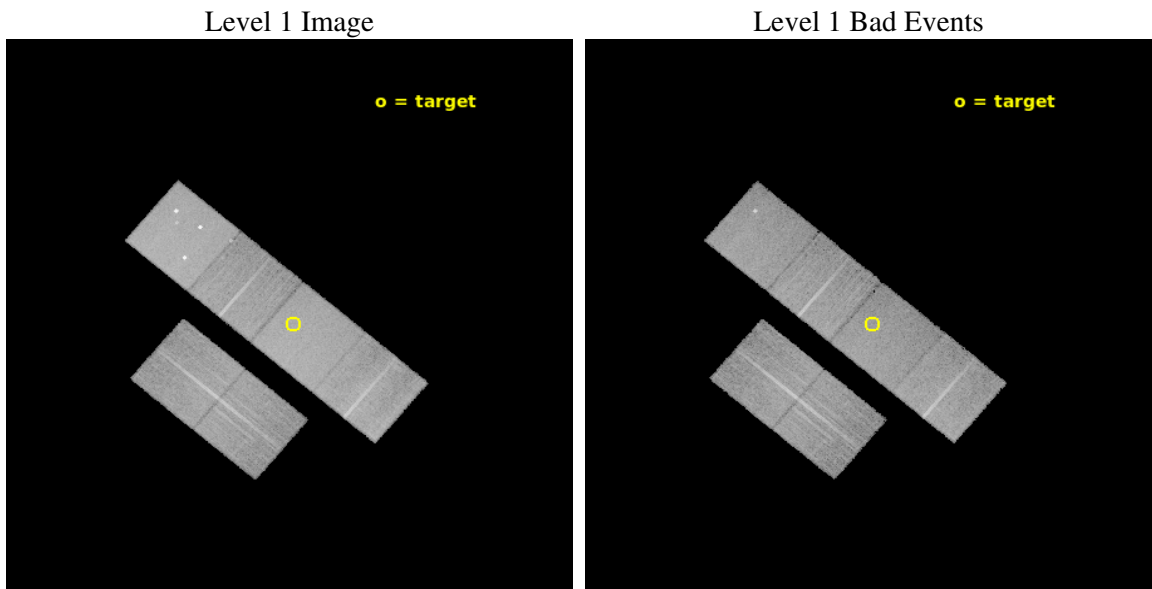
seq_num	200323	Sequence number
obs_id	5388	Observation id
title	The puzzle of X-ray emission from magnetic stars without convective envelopes	Proposal title
observer	J rgen Schmitt	Principal investigator
object	HD 208095	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	328.004167	Observer's specified target RA [deg]
dec_targ	55.79675	Observer's specified target Dec [deg]
ra_nom	328.01963851767	Nominal RA [deg]
dec_nom	55.797711794999	Nominal Dec [deg]
roll_nom	40.12892263365	Nominal Roll [deg]
revision	4	Processing version of data
ontime	14457.599946141	Sum of GTIs [s]
livetime	14274.529110302	Livetime [s]
ontime2	14457.599946141	Sum of GTIs [s]
ontime3	14454.358975857	Sum of GTIs [s]
ontime5	14457.599946141	Sum of GTIs [s]
ontime6	14457.599946141	Sum of GTIs [s]
ontime7	14457.599946141	Sum of GTIs [s]
ontime8	14457.563701749	Sum of GTIs [s]
l2events	171459	Number of level 2 events



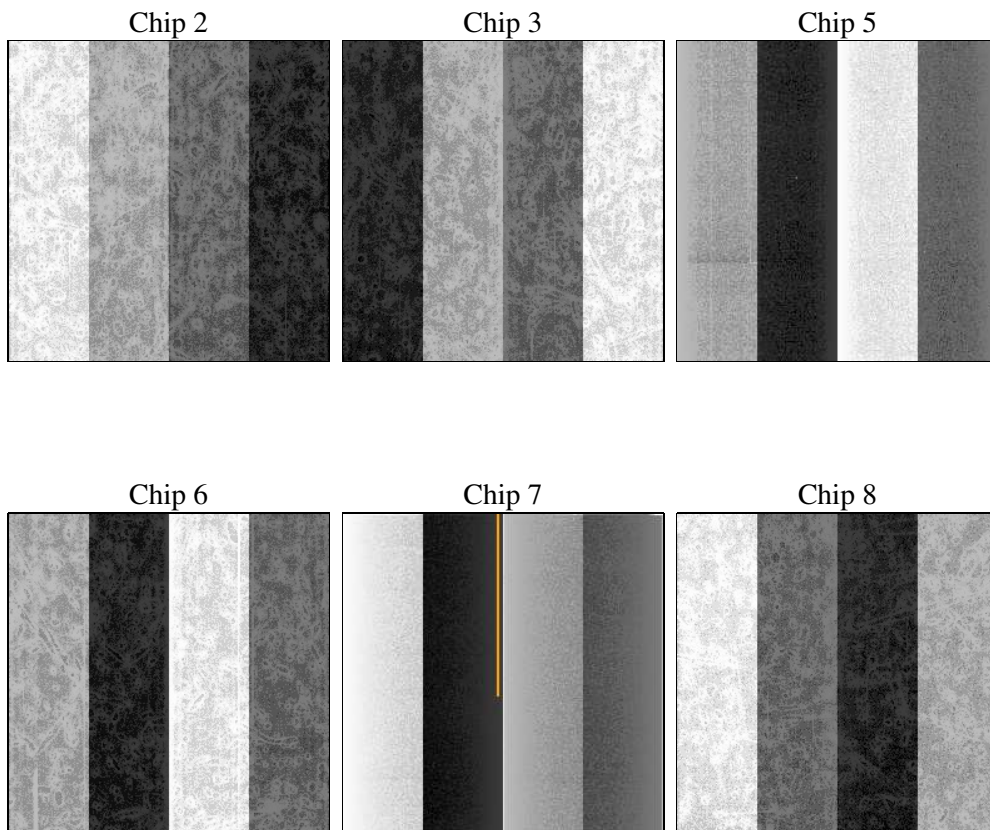
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	14500.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	14457.599946141	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime2	14457.599946141	Sum of GTIs [s]
date	2020-10-07T10:49:18	Date and time of file creation	ontime3	14454.358975857	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	14457.599946141	Sum of GTIs [s]
			ontime6	14457.599946141	Sum of GTIs [s]
			ontime7	14457.599946141	Sum of GTIs [s]
			ontime8	14457.563701749	Sum of GTIs [s]
			l1events	770319	Number of level 1 events

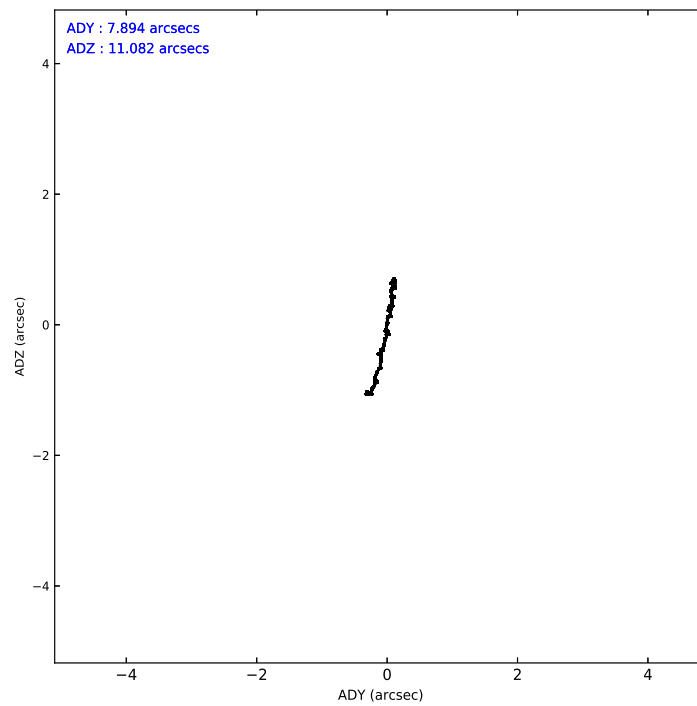
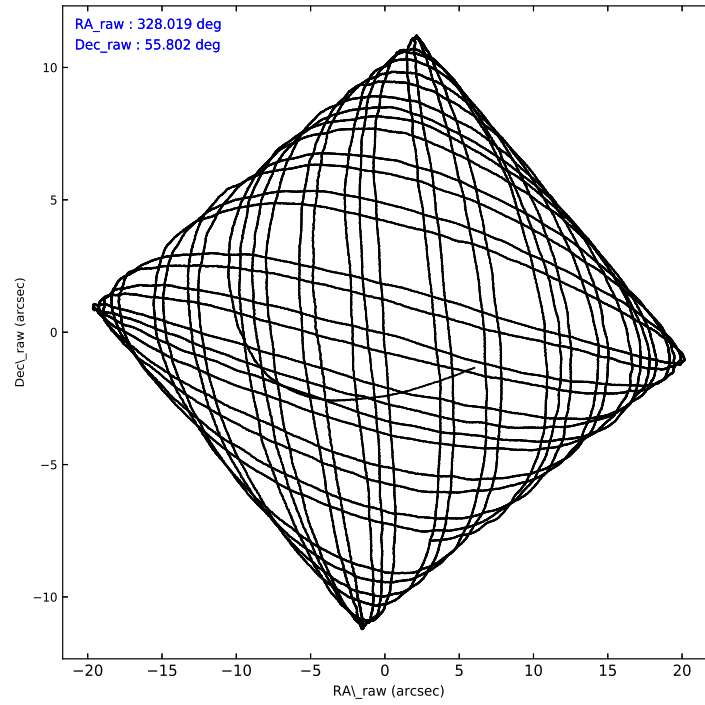
### 2.1.4 Events

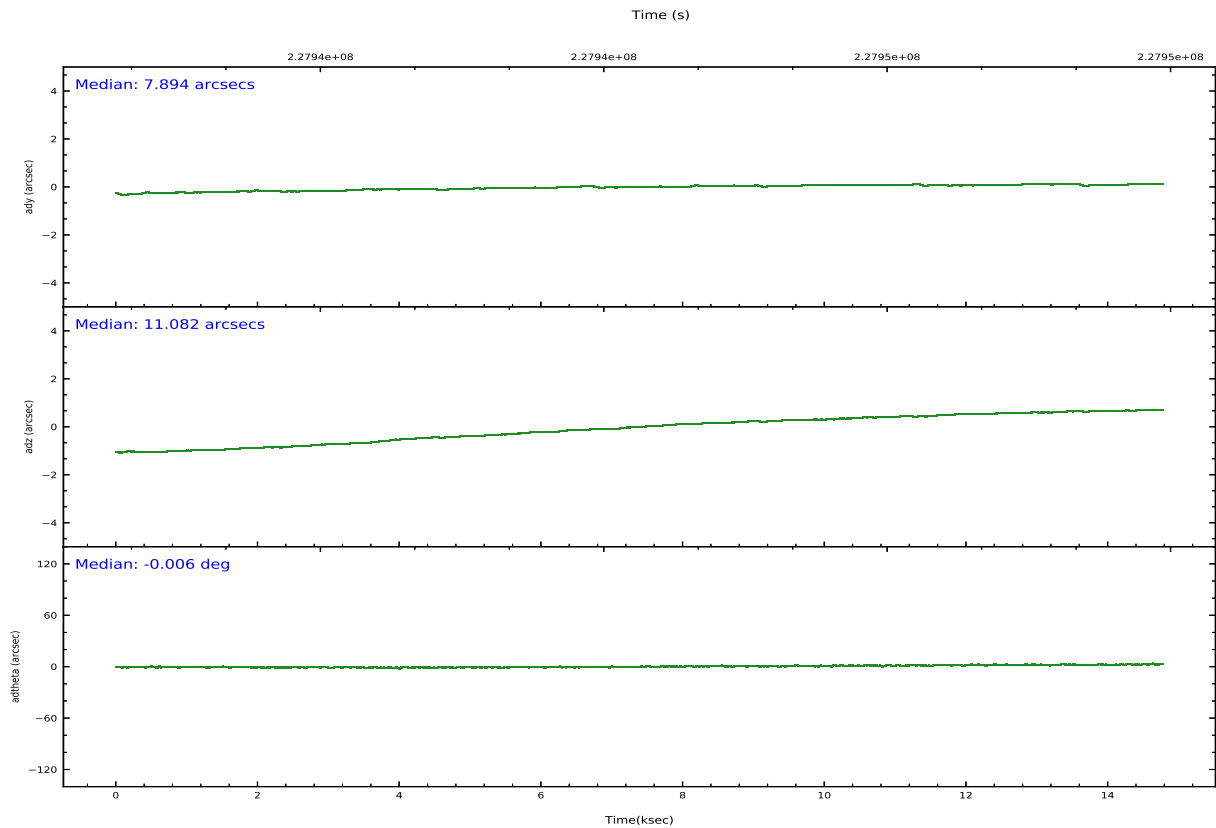
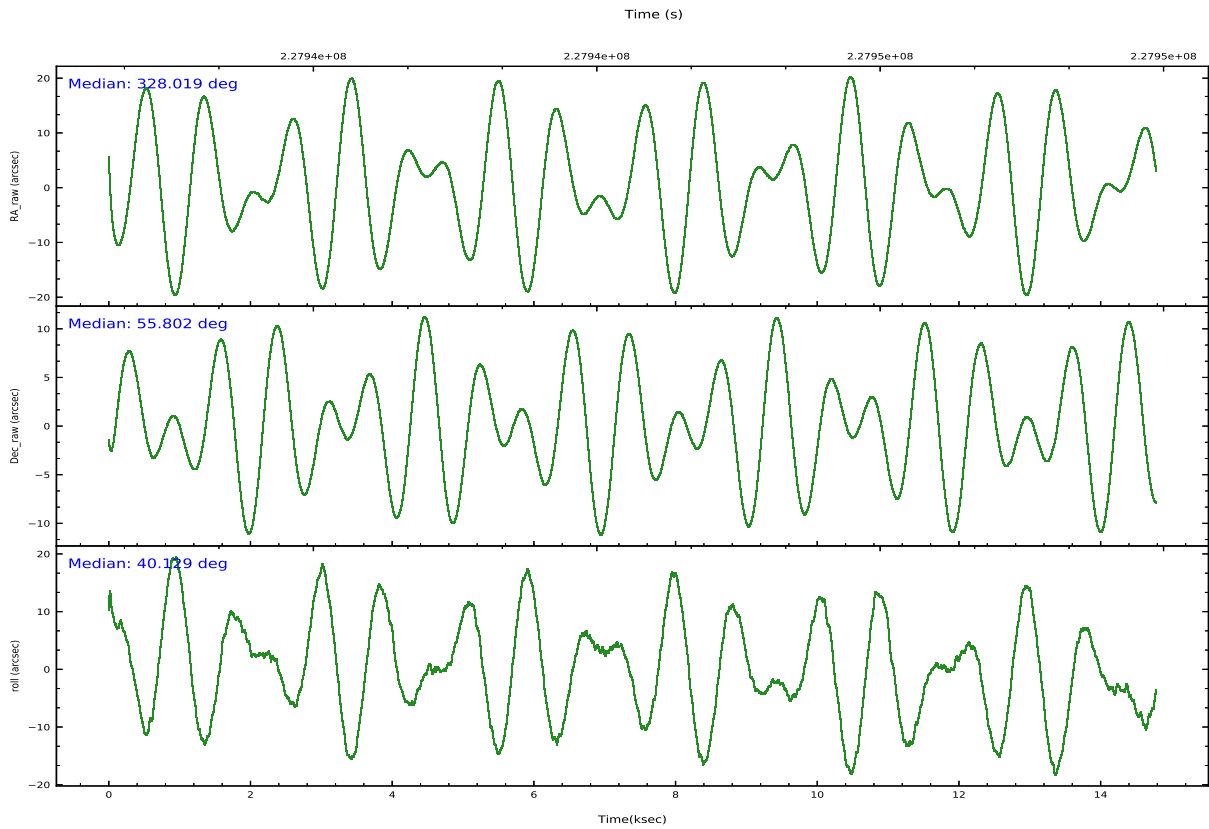
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	108892	103702	168997	109807	145126	133795	grade 0 events	5688	5270	12066	5137	5255	9058
rejected events	95997	91436	88916	96919	85461	104885		5%	5%	7%	4%	3%	6%
rejected %	88%	88%	52%	88%	58%	78%	grade 1 events	64	74	217	51	124	79
								0%	0%	0%	0%	0%	0%
							grade 2 events	2583	2449	23322	2684	11899	6472
								2%	2%	13%	2%	8%	4%
							grade 3 events	1249	1210	2914	1222	5411	3050
								1%	1%	1%	1%	3%	2%
							grade 4 events	1244	1217	2840	1210	5073	2864
								1%	1%	1%	1%	3%	2%
							grade 5 events	4295	4803	12649	4964	14207	6642
								3%	4%	7%	4%	9%	4%
							grade 6 events	2134	2121	38954	2635	32043	7468
								1%	2%	23%	2%	22%	5%
							grade 7 events	91635	86558	76035	91904	71114	98162
								84%	83%	44%	83%	49%	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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	328.003224	328.01963851767	Subarray requested	NONE	NONE
[deg] Pointing Dec	55.775863	55.797711794999	Alternating exposures requested	N	N
[deg] Pointing Roll	39.983527	40.12892263365	[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	-190.145094680475			
[mm] SIM translation stage offset	0	0.01257209746719923			
[s] Observation start time (MET)	227937397.184000	227936379.02908			
Observation start date	2005-03-23T03:55:33	2005-03-23T03:39:39			
[s] Observation end time (MET)	227951897.184000	227953207.99235			
Observation end date	2005-03-23T07:57:13	2005-03-23T08:20:07			
Read mode	TIMED	TIMED			

## 2.3 Aspect





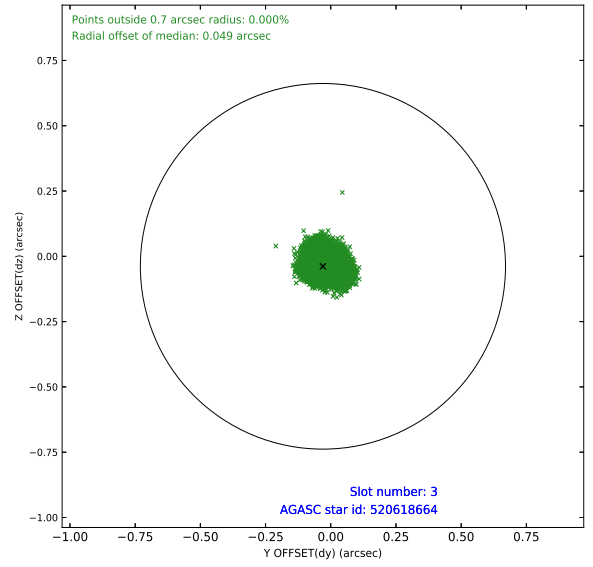
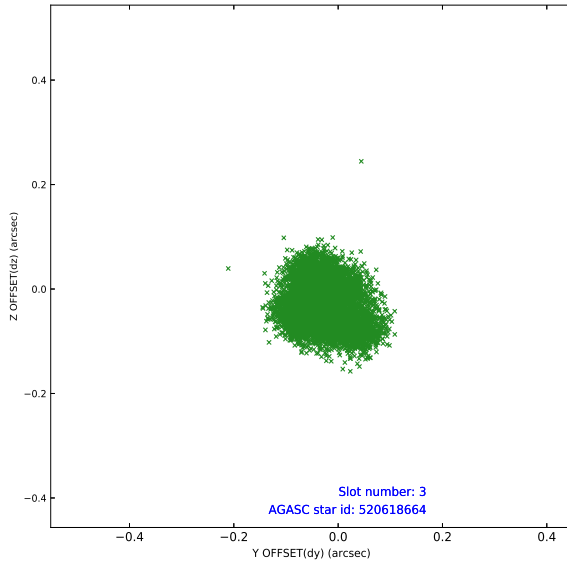
### Slot Statistics

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	3605	1.000	-0.065	-0.053	0.012	0.018	0.000000	0.000000	-760.64	-1732
1	FID		ACIS-S-4	7.20	3605	1.000	0.158	0.045	0.009	0.015	0.000000	0.000000	2152.65	176
2	FID		ACIS-S-5	7.23	3605	1.000	-0.125	0.017	0.008	0.014	0.000000	0.000000	-1813.21	169
3	GUIDE	used	520618664	6.77	7212	1.000	-0.030	-0.038	0.067	0.102	328.279876	56.212557	1435.43	849
4	GUIDE	used	520631488	8.76	7212	1.000	-0.002	0.075	0.072	0.116	327.475774	56.103532	-50.90	1587
5	GUIDE	used	520633488	9.02	7207	1.000	-0.008	-0.066	0.075	0.125	327.975448	55.254427	-1249.62	-1401
6	GUIDE	used	520634688	9.17	7212	1.000	0.068	0.075	0.099	0.159	327.685137	55.411733	-1339.18	-585
7	GUIDE	used	520637896	7.68	7210	1.000	-0.030	-0.043	0.049	0.083	328.127923	55.039850	-1505.33	-2195

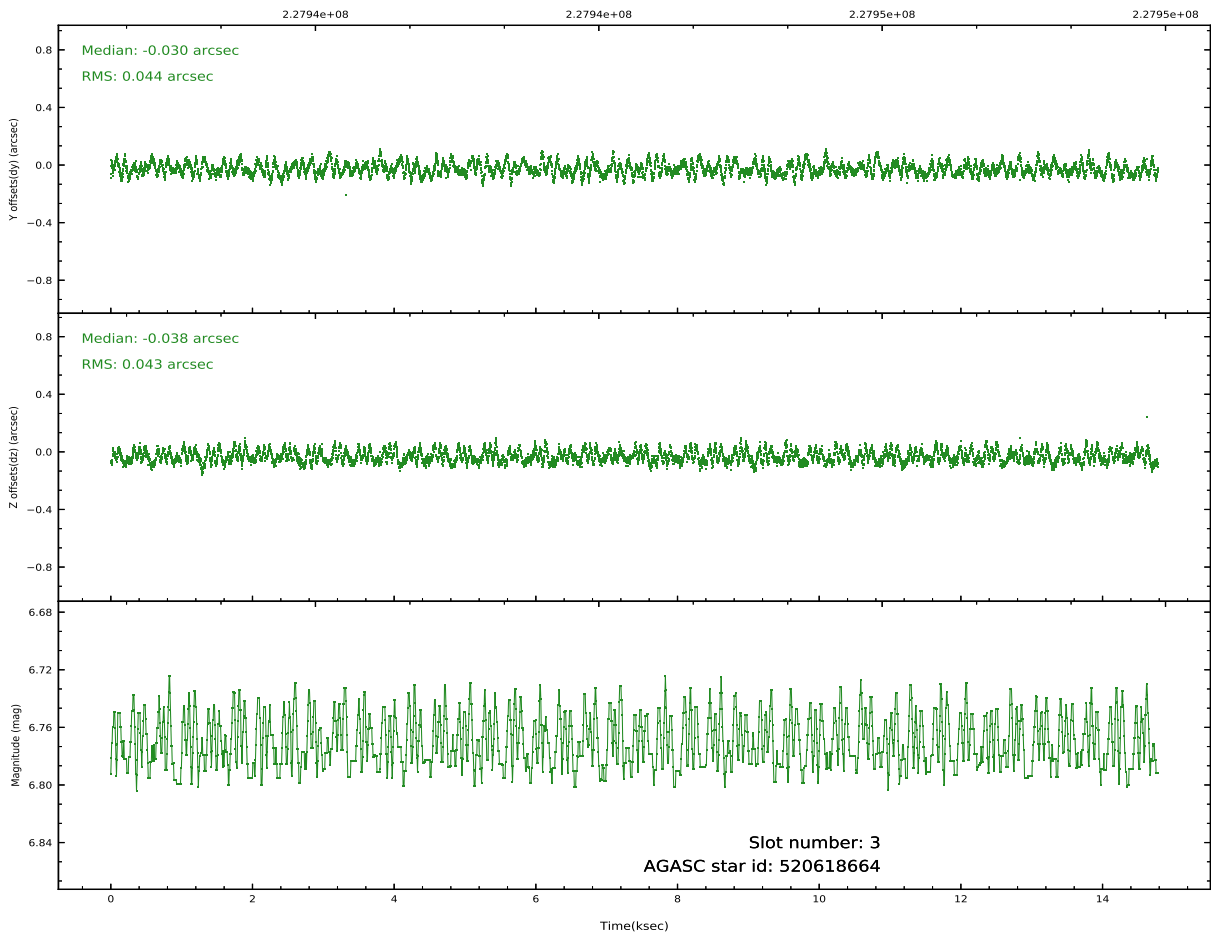
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## 2.4 Star Slots

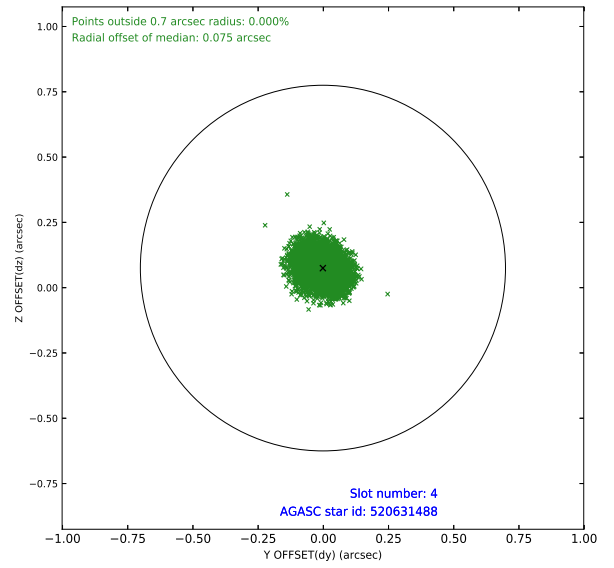
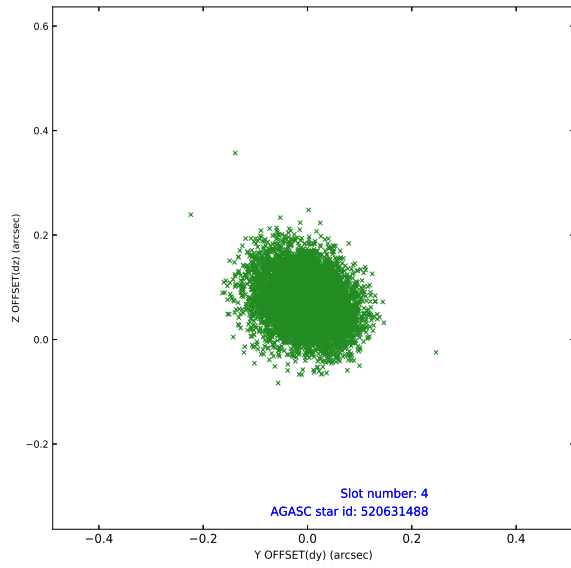
### 2.4.1 Slot 3



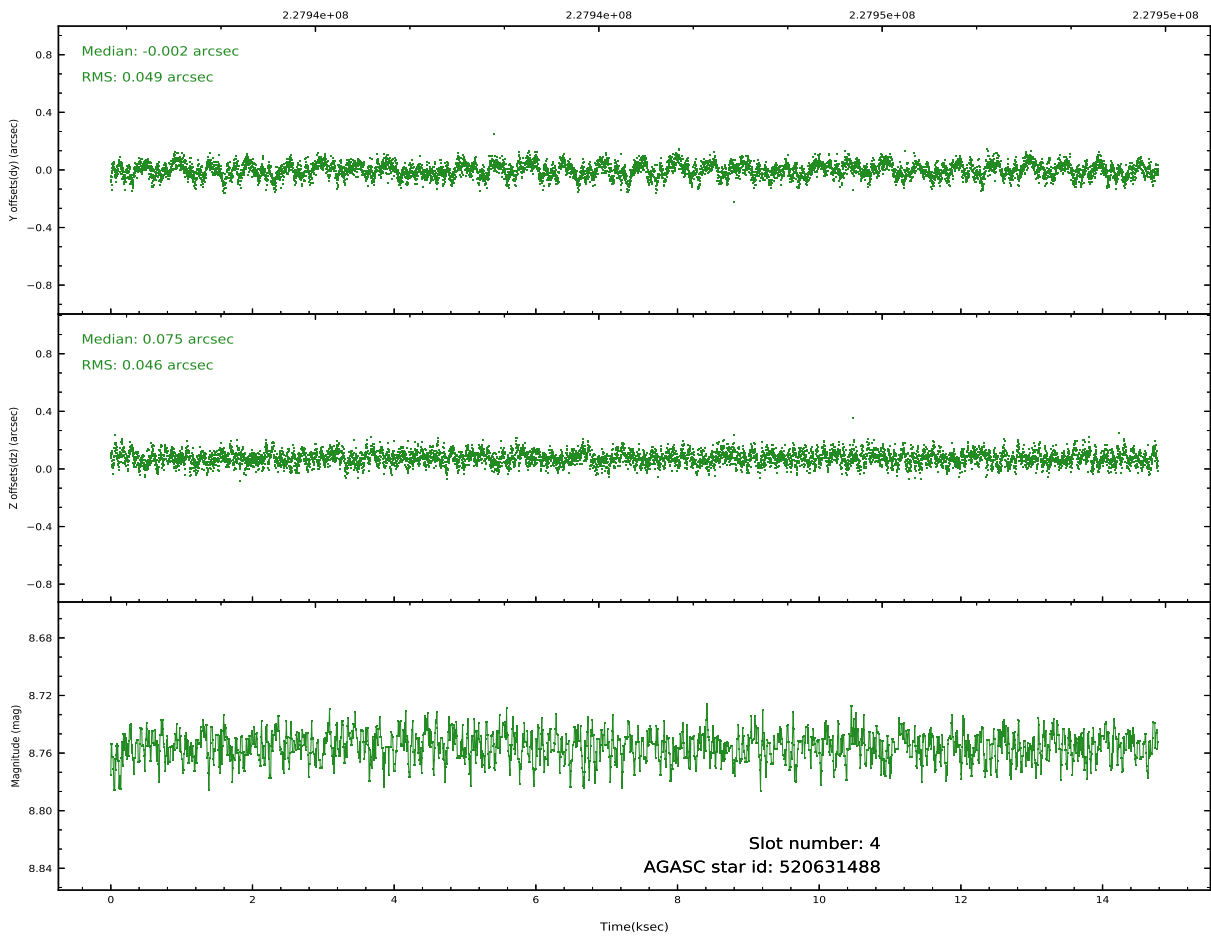
Time (s)



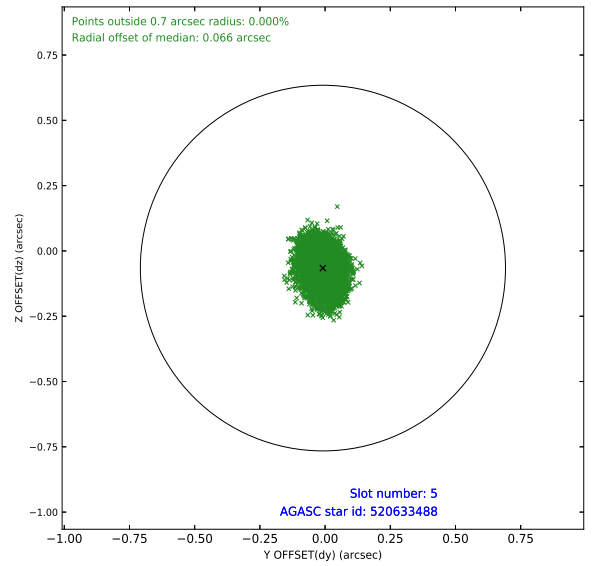
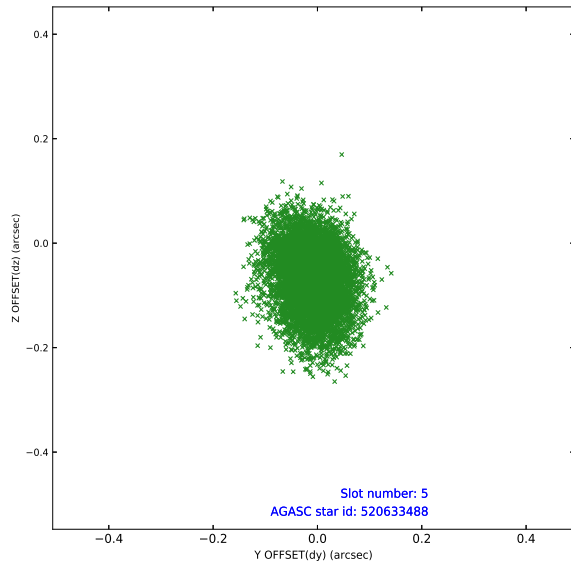
## 2.4.2 Slot 4



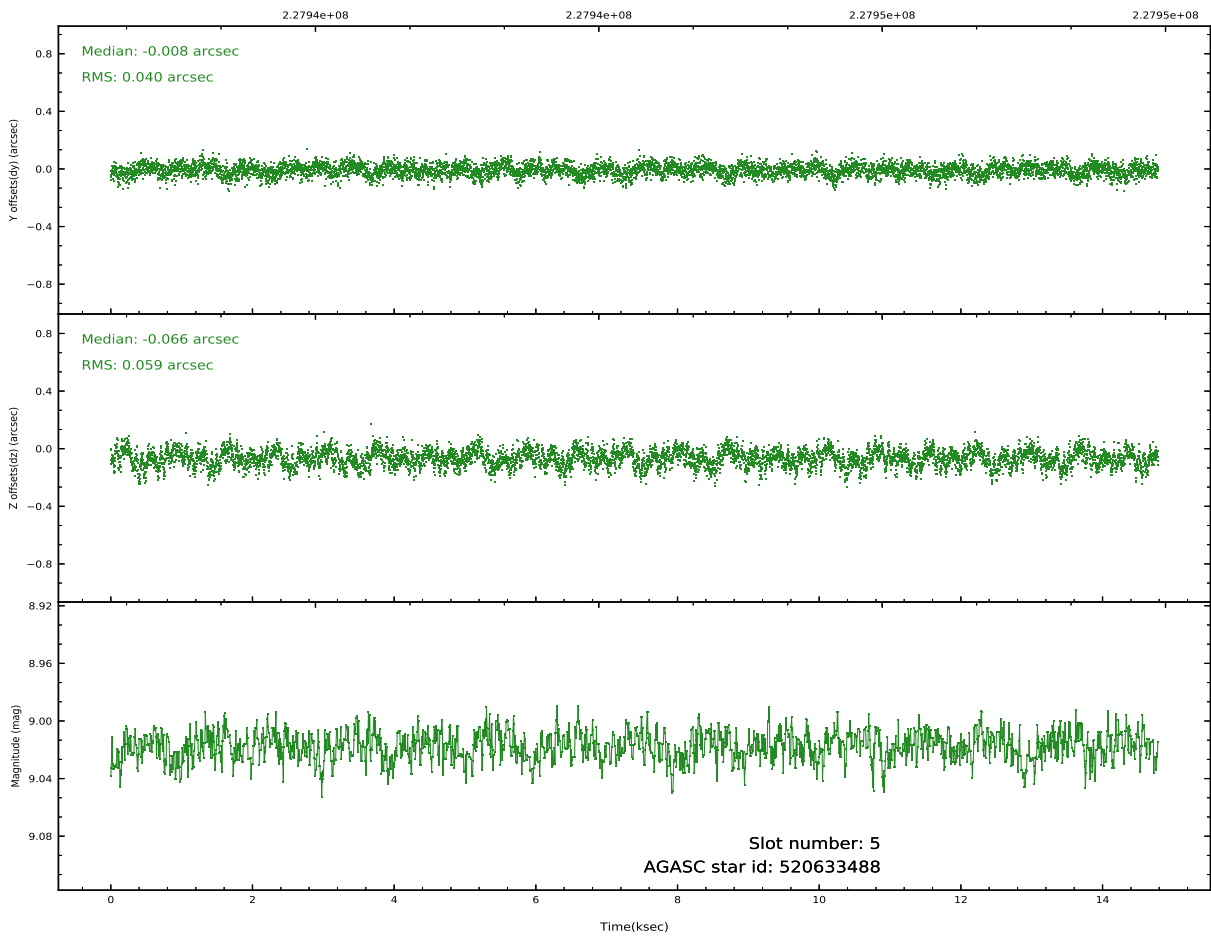
Time (s)



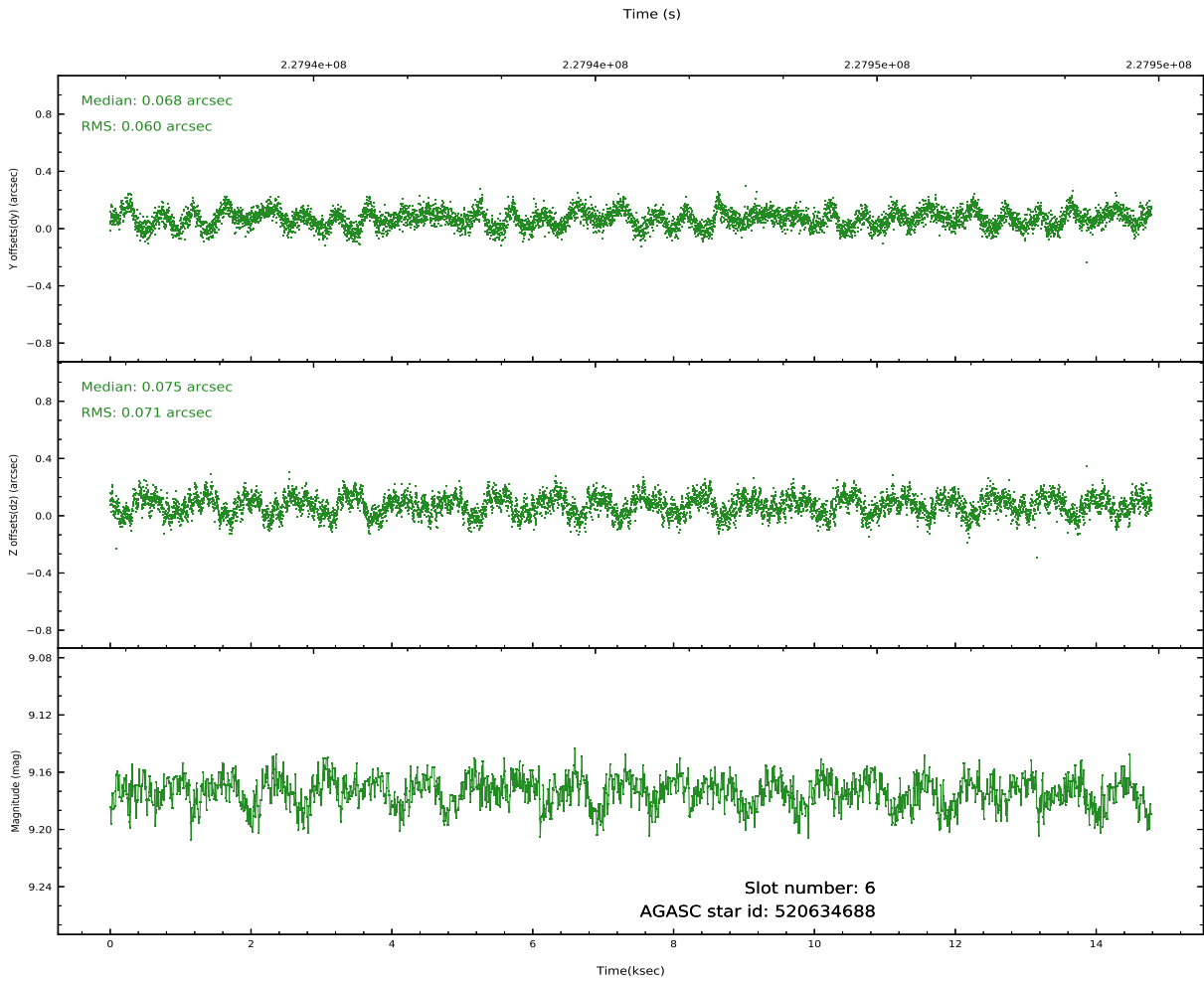
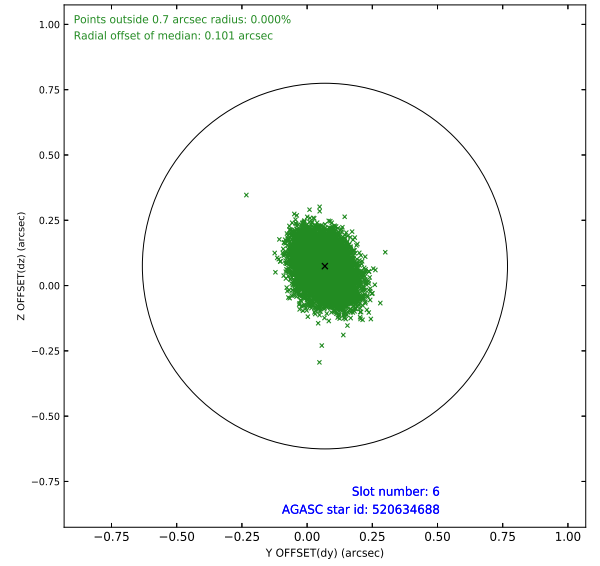
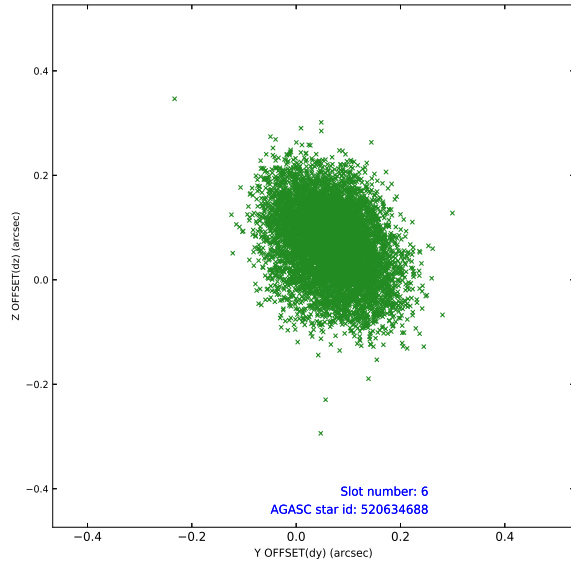
### 2.4.3 Slot 5



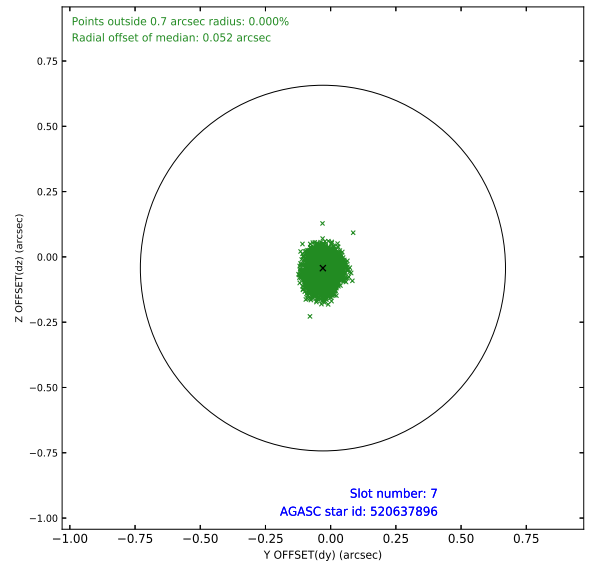
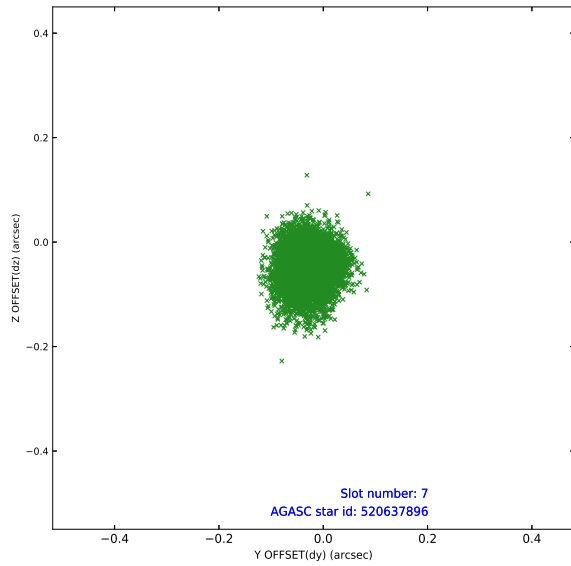
Time (s)



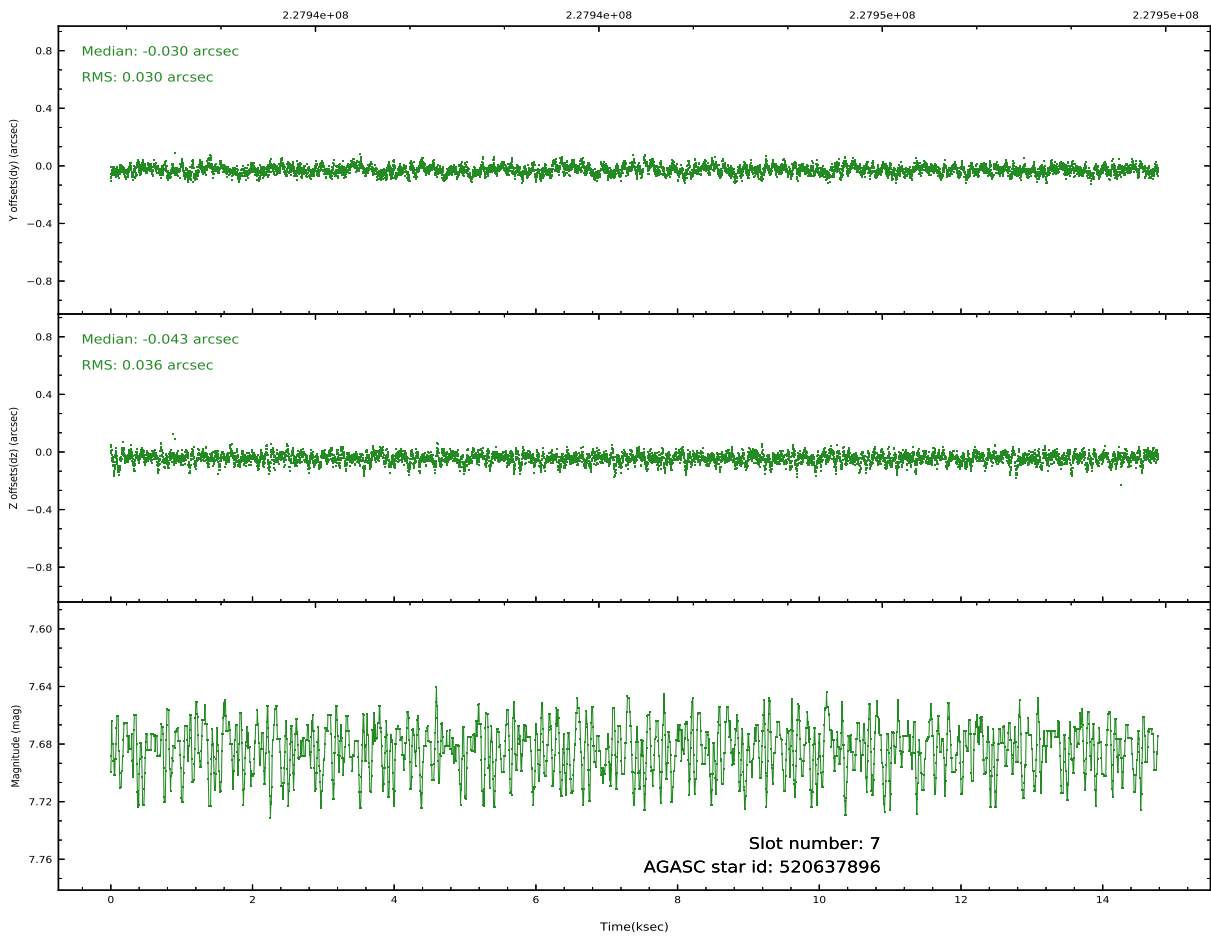
## 2.4.4 Slot 6



## 2.4.5 Slot 7

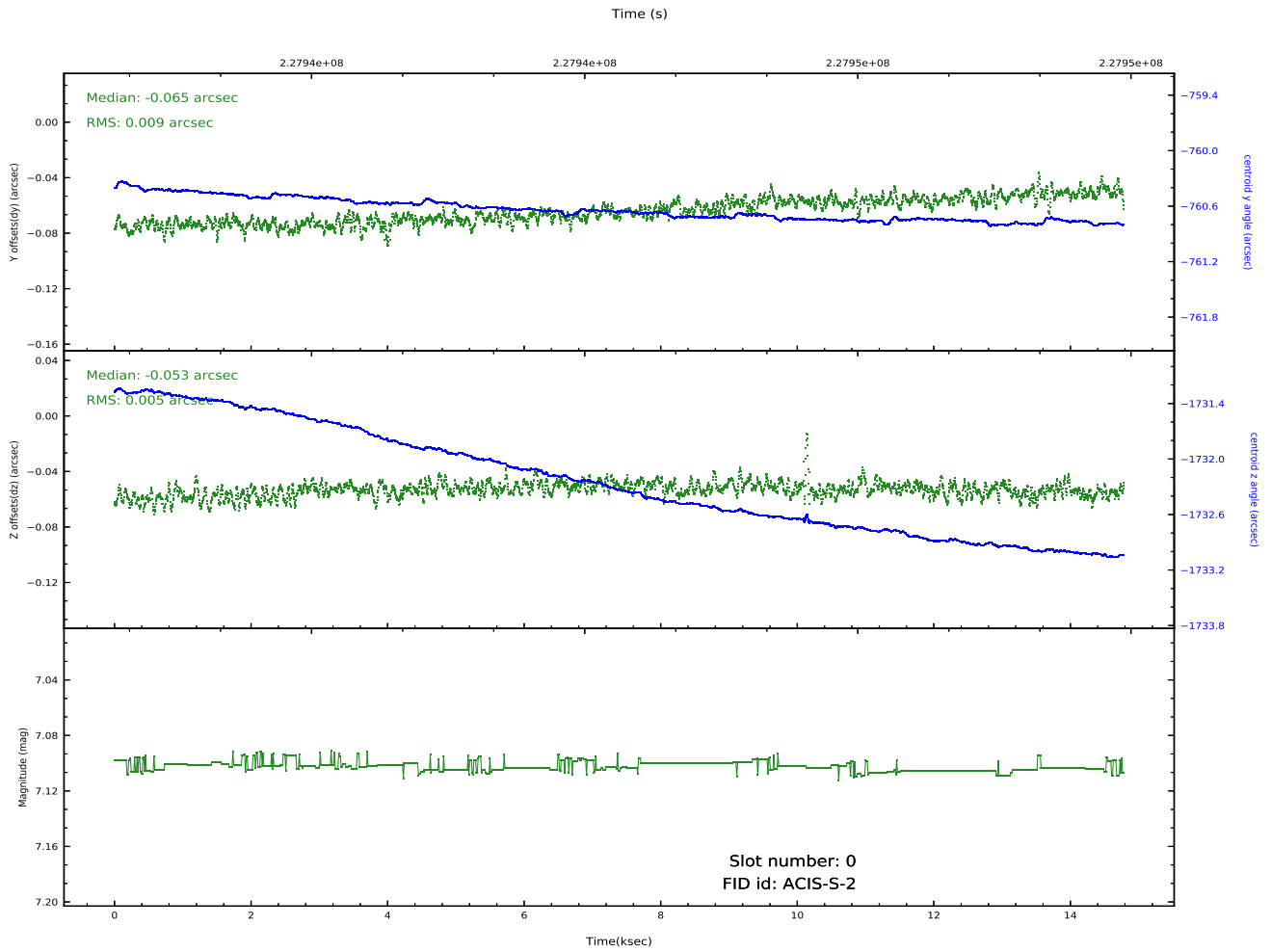
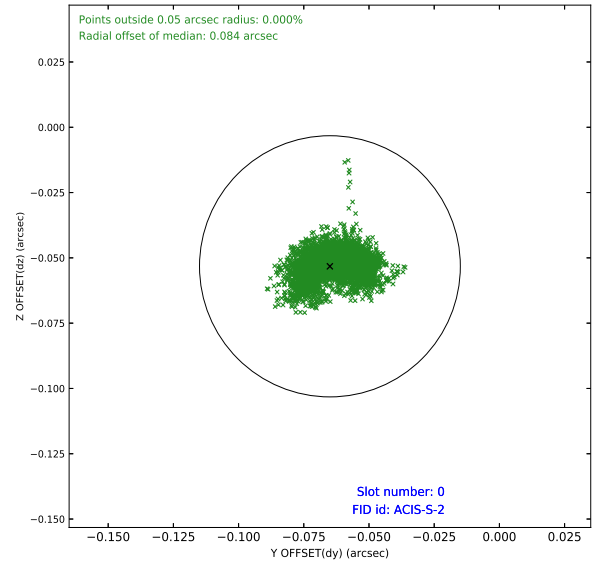
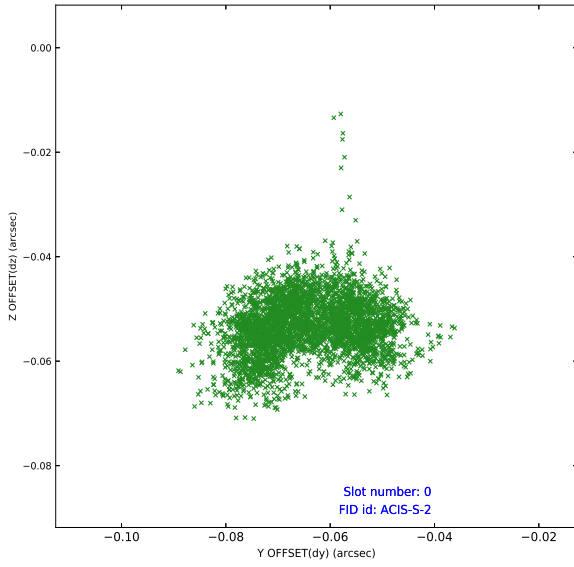


Time (s)

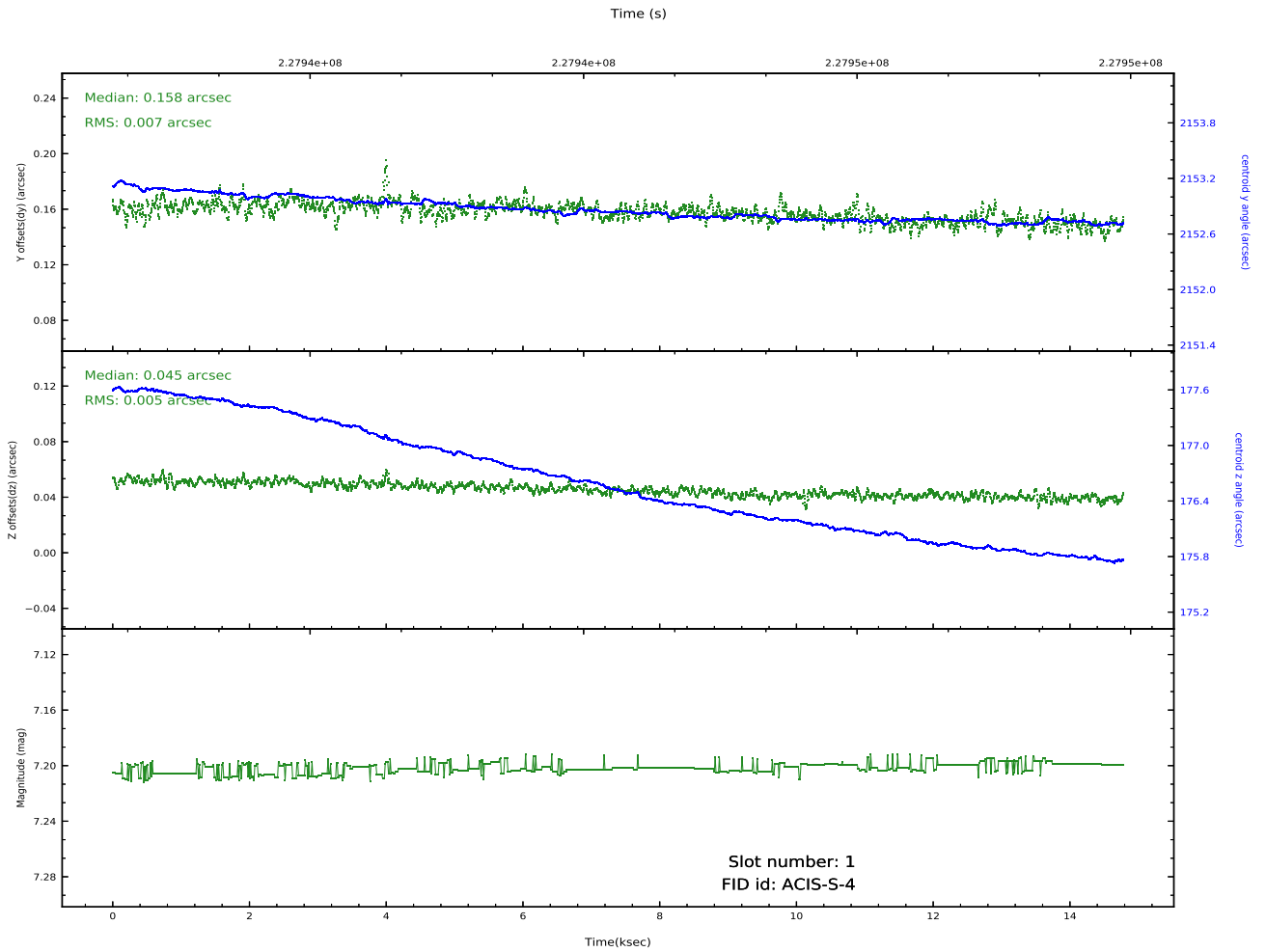
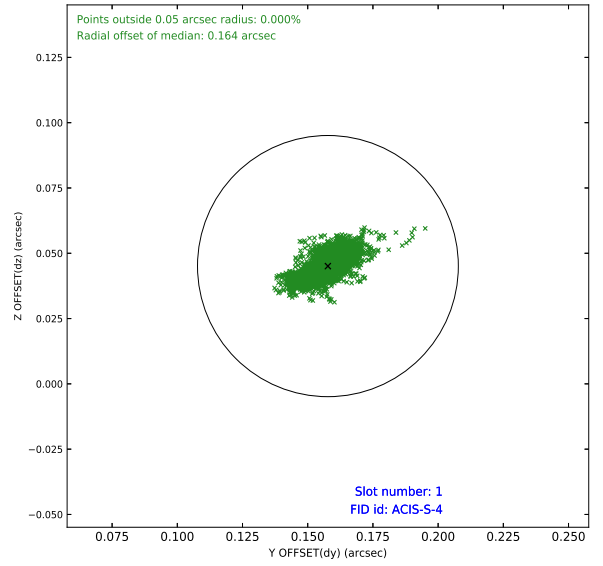
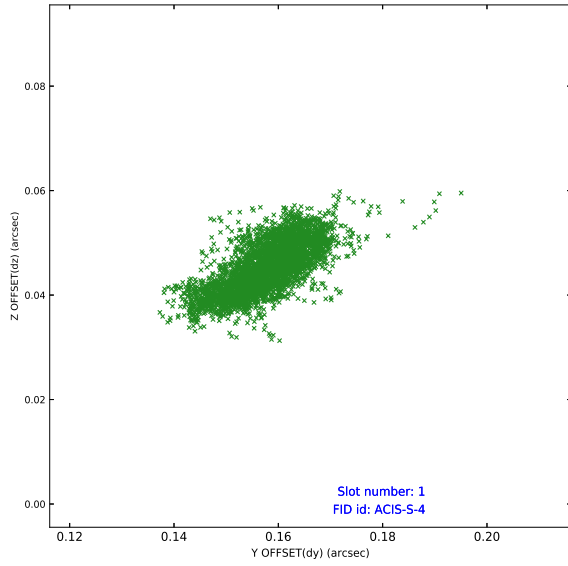


## 2.5 FID Slots

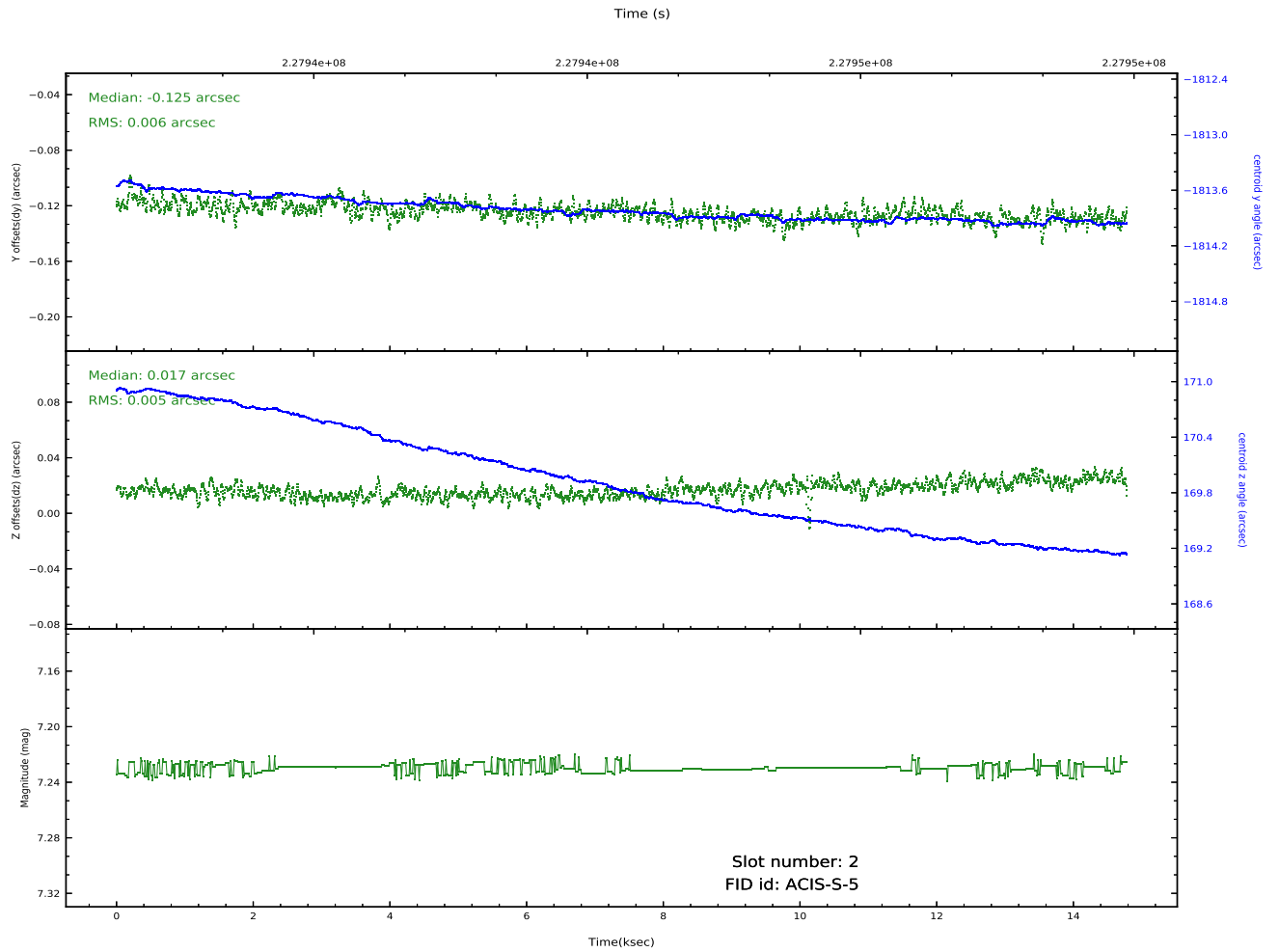
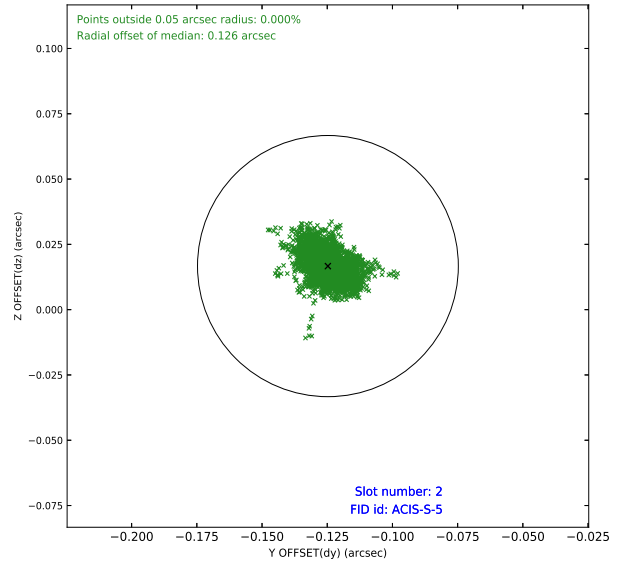
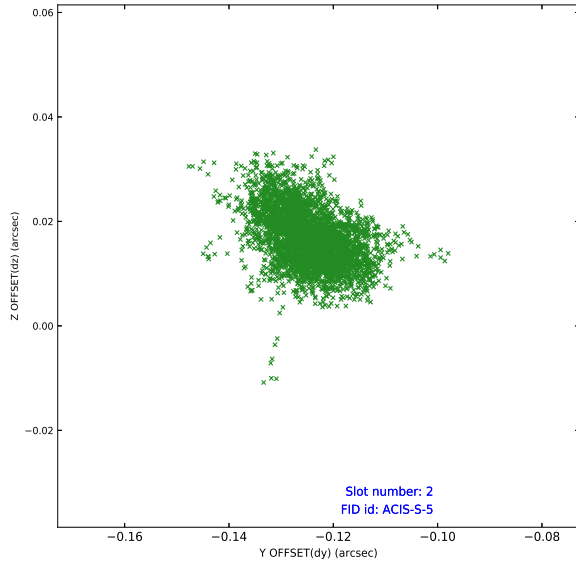
### 2.5.1 Slot 0



## 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)	2020.10.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.45759

## A.2 Comments