

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 4629 - L2 Version 4  
Chandra X-Ray Center

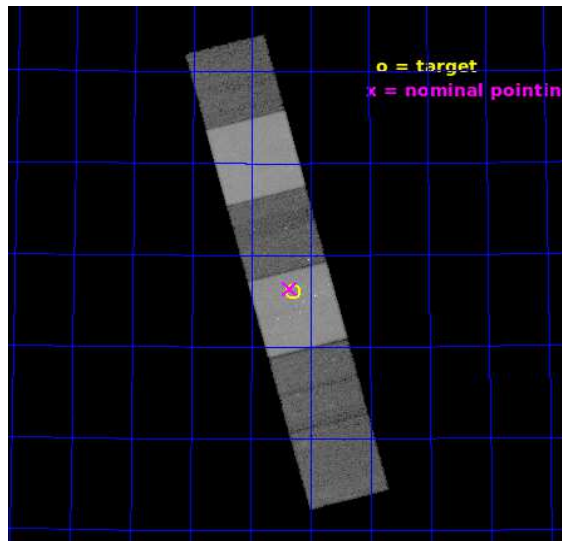
L2 Processing Date : Oct 2 2020

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# 1 Front

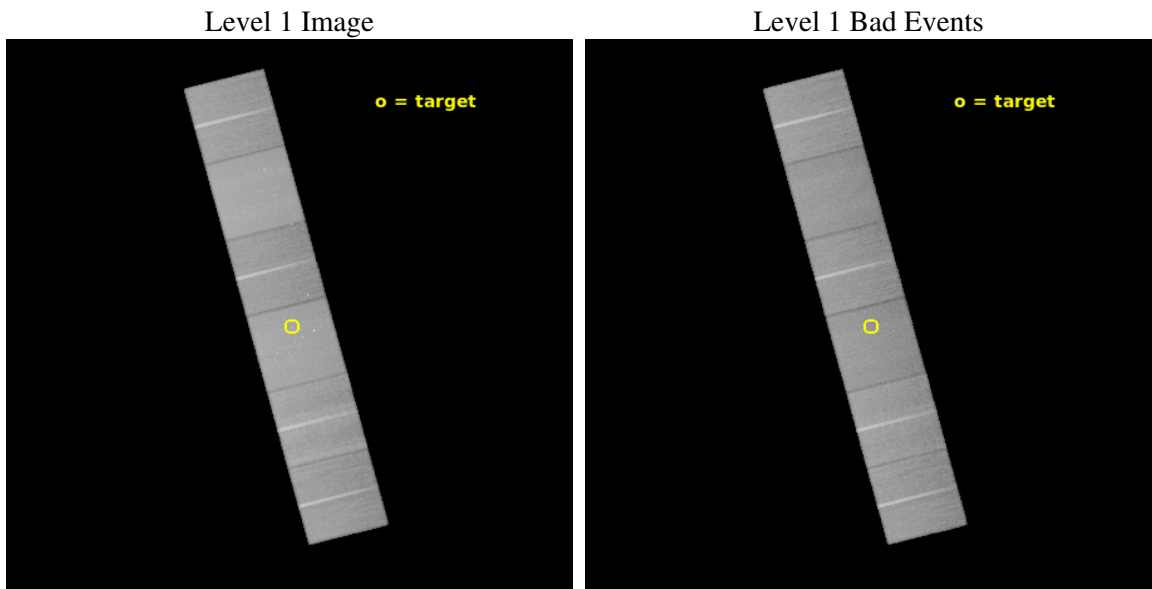
seq_num	500454	Sequence number
obs_id	4629	Observation id
title	Prompt Chandra Observations of Nearby Supernovae	Proposal title
observer	Prof. Walter Lewin	Principal investigator
object	SN 2004dj	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	114.32125	Observer's specified target RA [deg]
dec_targ	65.599528	Observer's specified target Dec [deg]
ra_nom	114.3368319854	Nominal RA [deg]
dec_nom	65.605992683626	Nominal Dec [deg]
roll_nom	75.2209685672	Nominal Roll [deg]
revision	4	Processing version of data
ontime	45142.399831831	Sum of GTIs [s]
livetime	44570.779583671	Livetime [s]
ontime4	45142.399831831	Sum of GTIs [s]
ontime5	45142.399831831	Sum of GTIs [s]
ontime6	45139.15884164	Sum of GTIs [s]
ontime7	45142.399831831	Sum of GTIs [s]
ontime8	45139.158961177	Sum of GTIs [s]
ontime9	45142.399831831	Sum of GTIs [s]
l2events	553513	Number of level 2 events



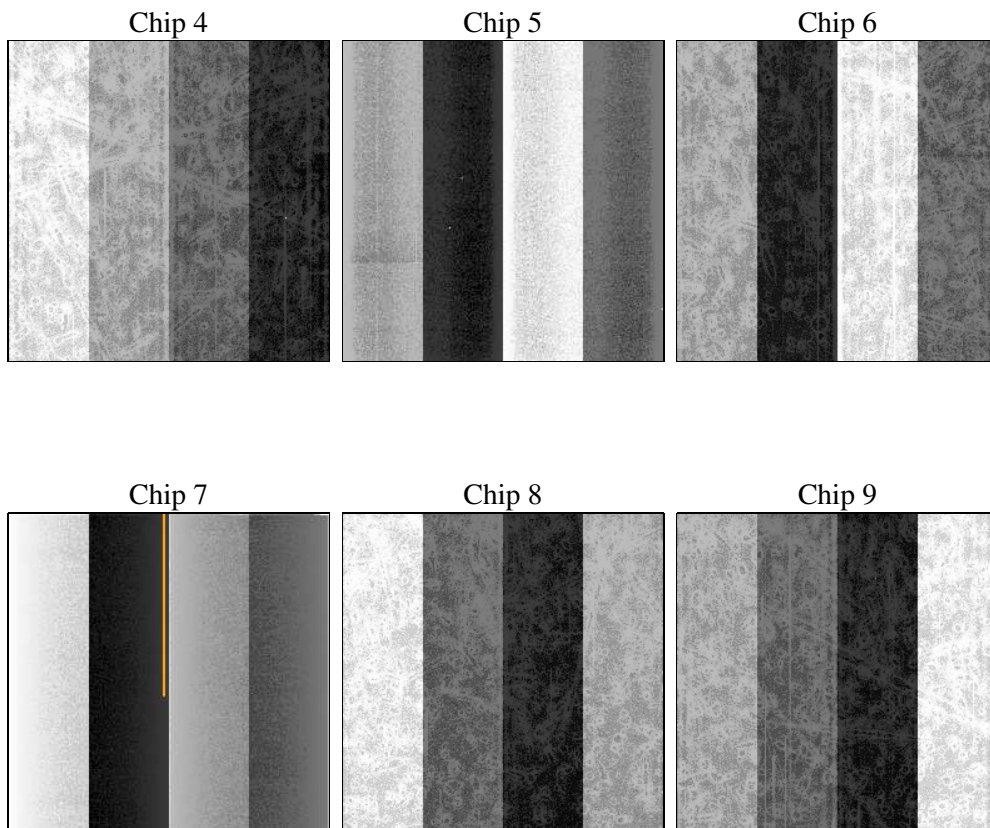
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	45000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	45142.399831831	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime4	45142.399831831	Sum of GTIs [s]
date	2020-10-02T21:00:45	Date and time of file creation	ontime5	45142.399831831	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	45139.15884164	Sum of GTIs [s]
			ontime7	45142.399831831	Sum of GTIs [s]
			ontime8	45139.158961177	Sum of GTIs [s]
			ontime9	45142.399831831	Sum of GTIs [s]
			l1events	2497465	Number of level 1 events

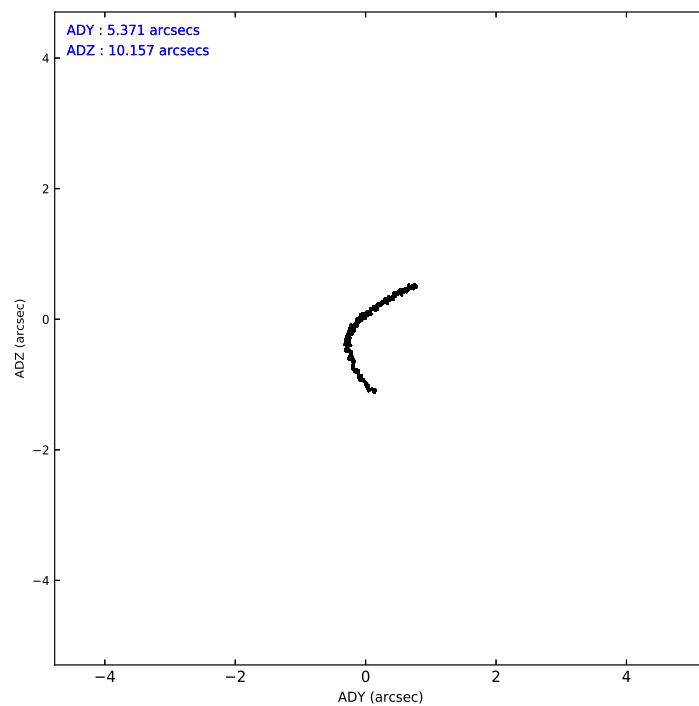
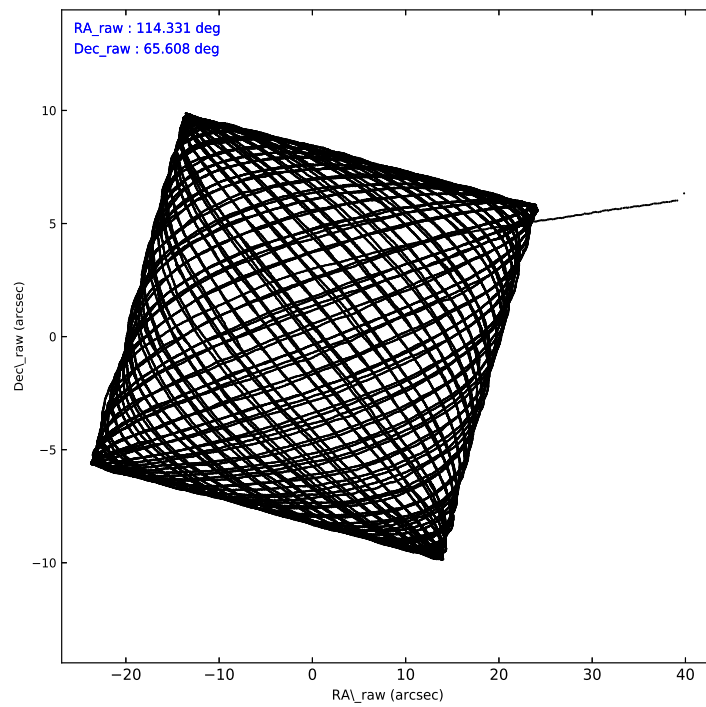
### 2.1.4 Events

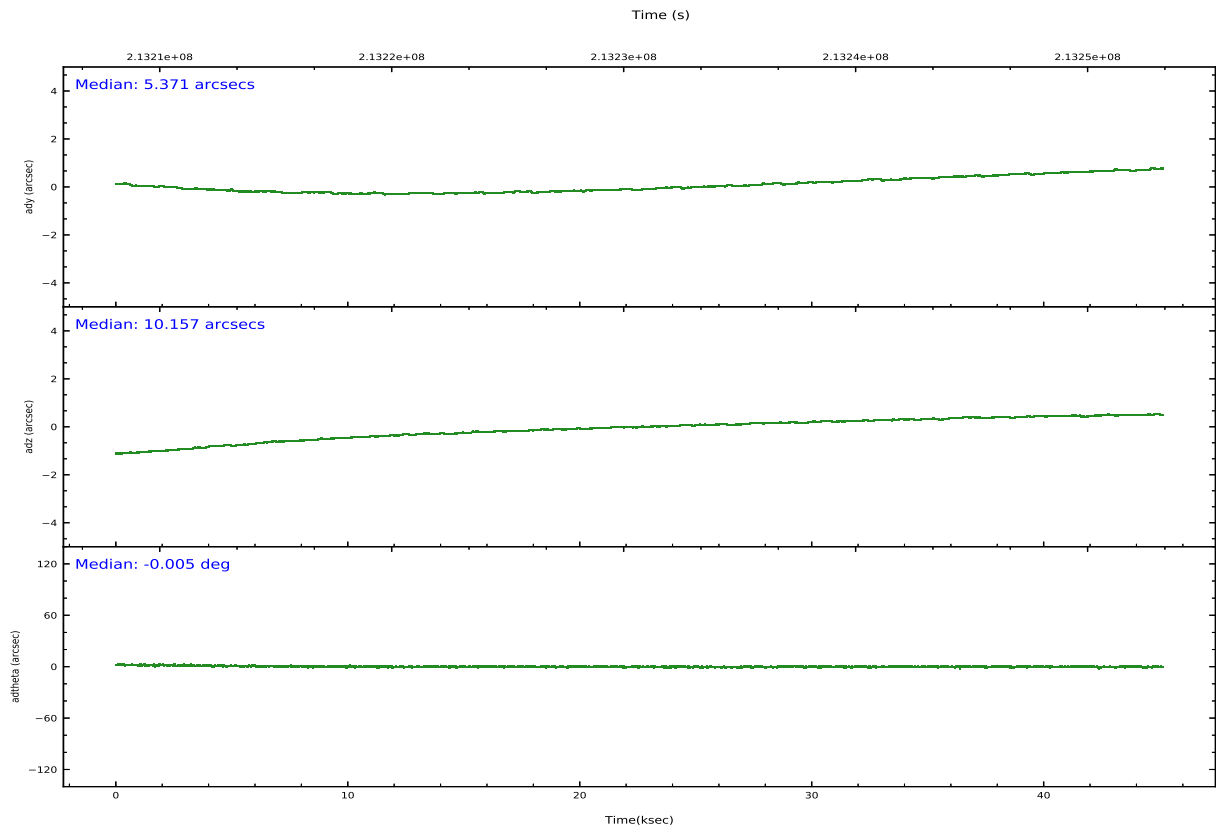
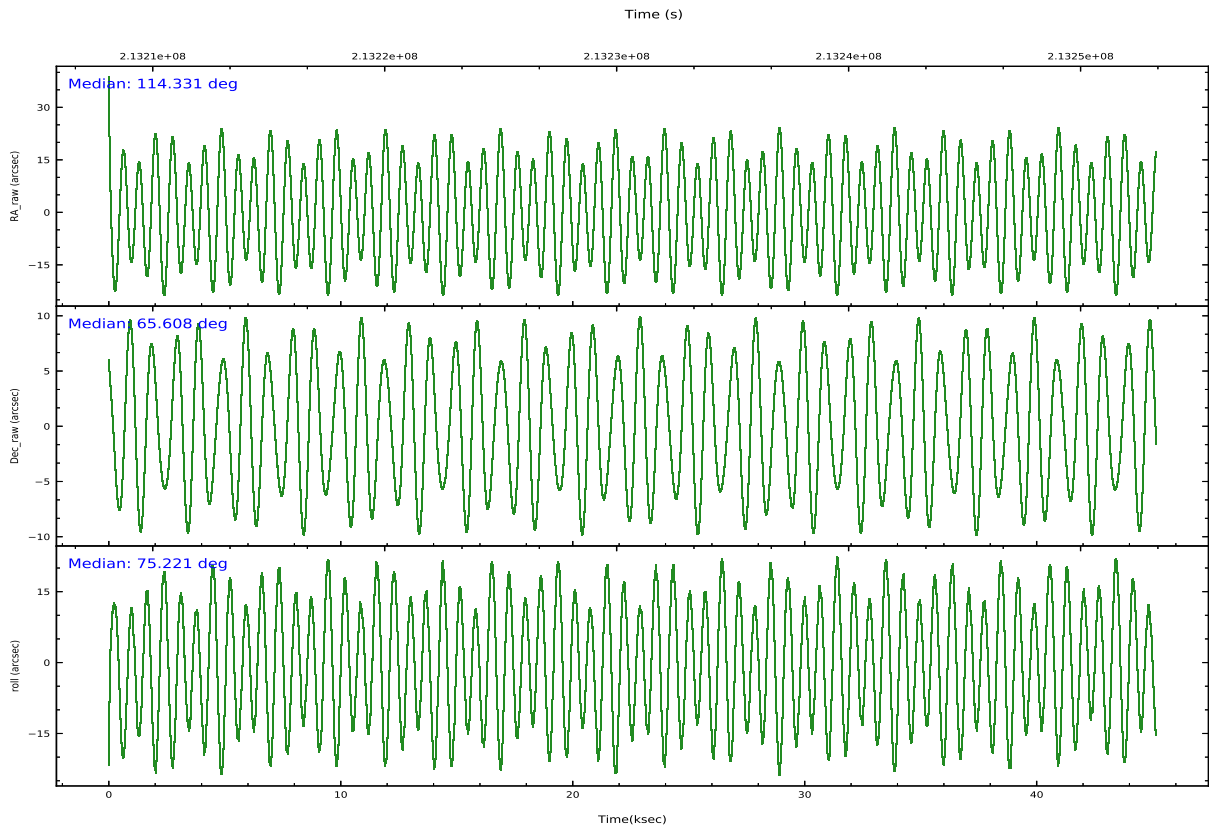
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	386479	501653	352231	470516	438992	347594	grade 0 events	18628	14578	17019	19274	28703	17423
rejected events	343970	278435	310436	272517	347843	305655		4%	2%	4%	4%	6%	5%
rejected %	89%	55%	88%	57%	79%	87%	grade 1 events	349	569	197	482	266	215
								0%	0%	0%	0%	0%	0%
							grade 2 events	8750	67844	8648	39993	20060	8174
								2%	13%	2%	8%	4%	2%
							grade 3 events	4299	9008	4081	17490	9741	4205
								1%	1%	1%	3%	2%	1%
							grade 4 events	4175	8586	3948	17527	9104	4156
								1%	1%	1%	3%	2%	1%
							grade 5 events	15226	37247	15686	44116	21144	16853
								3%	7%	4%	9%	4%	4%
							grade 6 events	6701	123479	8130	103917	23643	8034
								1%	24%	2%	22%	5%	2%
							grade 7 events	328351	240342	294522	227717	326331	288534
								84%	47%	83%	48%	74%	83%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-456789	ACIS-456789	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	114.349252	114.3368319854	Subarray requested	NONE	NONE
[deg] Pointing Dec	65.582110	65.605992683626	Alternating exposures requested	N	N
[deg] Pointing Roll	75.048027	75.2209685672	[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)	213208257.184000	213207126.31561			
Observation start date	2004-10-03T16:29:53	2004-10-03T16:12:06			
[s] Observation end time (MET)	213253257.184000	213254697.59273			
Observation end date	2004-10-04T04:59:53	2004-10-04T05:24:57			
Read mode	TIMED	TIMED			

## 2.3 Aspect



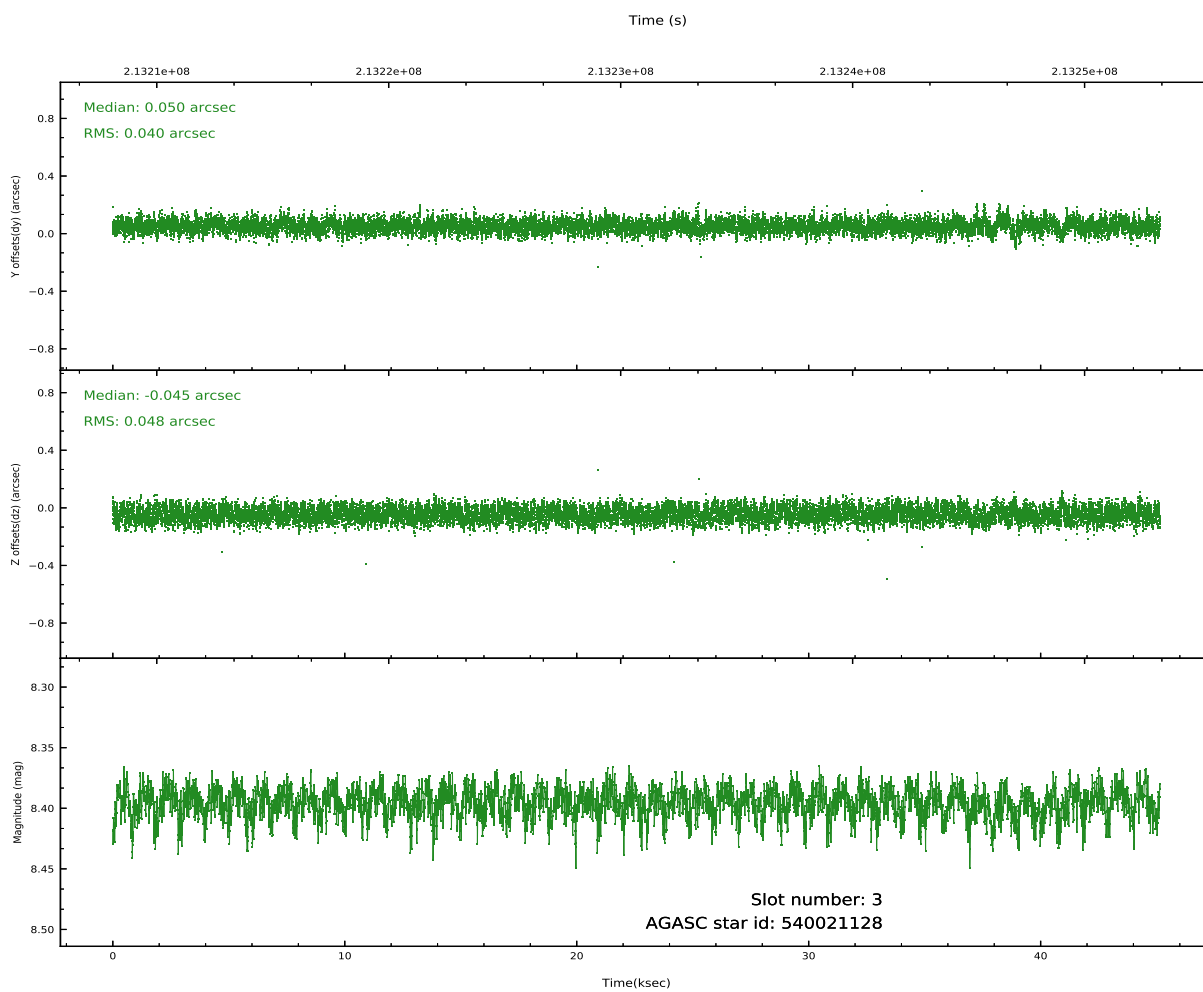
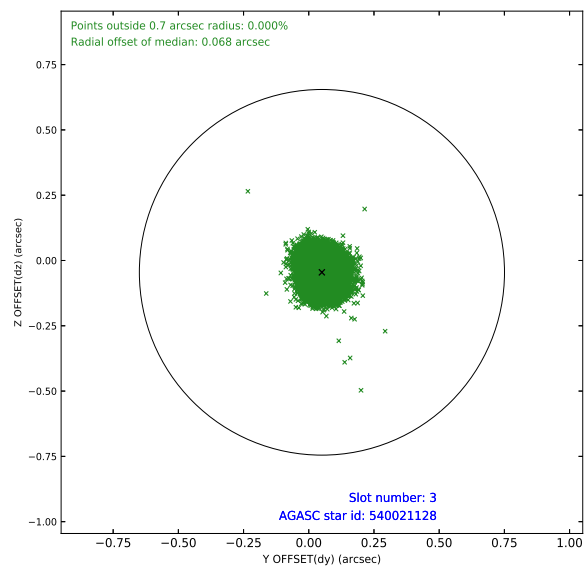
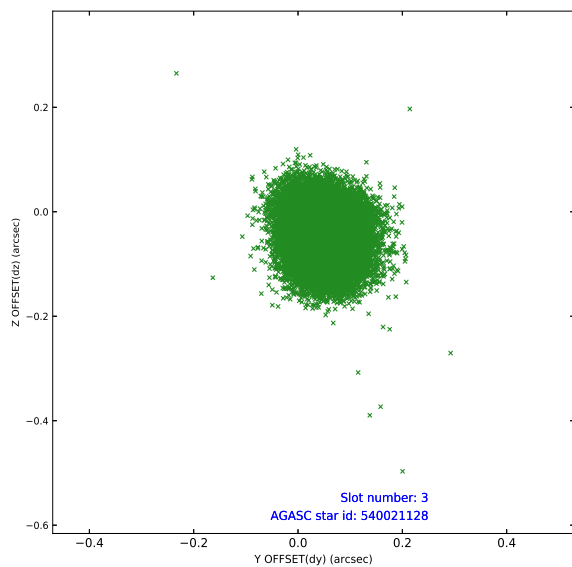


### Slot Statistics

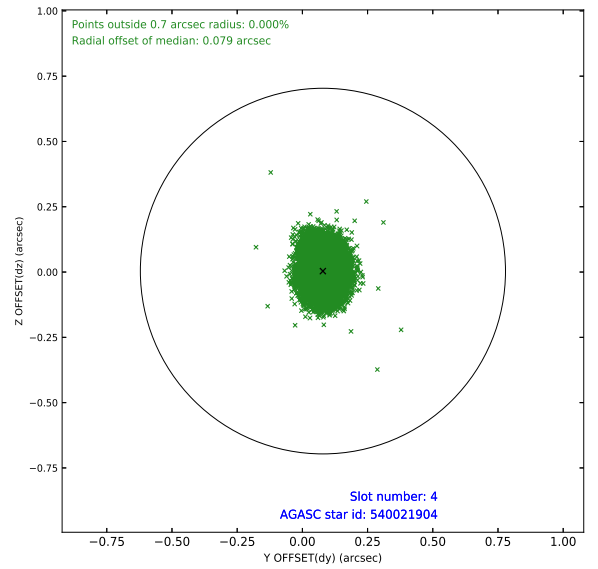
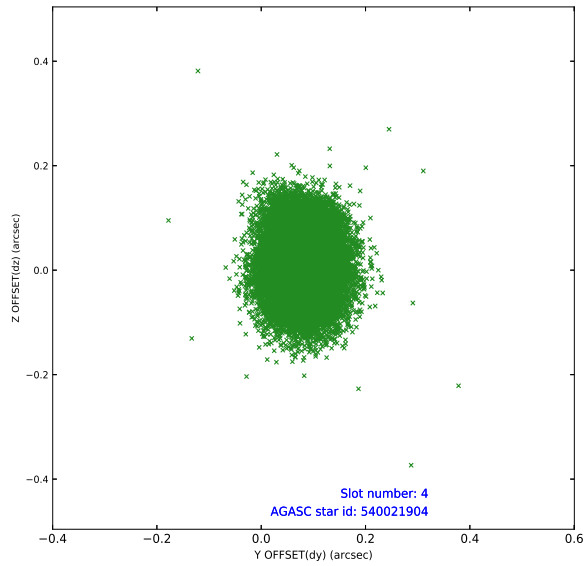
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-1	7.18	11011	1.000	0.022	-0.044	0.025	0.036	0.000000	0.000000	937.89	-1726
1	FID		ACIS-S-5	7.23	11012	1.000	-0.122	-0.008	0.014	0.024	0.000000	0.000000	-1811.24	170
2	FID		ACIS-S-6	7.35	11012	1.000	0.079	0.067	0.031	0.044	0.000000	0.000000	403.52	814
3	GUIDE	used	540021128	8.40	22021	1.000	0.050	-0.045	0.067	0.105	114.291258	65.330448	-897.36	-149
4	GUIDE	used	540021904	8.75	22013	1.000	0.079	0.004	0.073	0.119	114.203372	65.242134	-1238.68	-103
5	GUIDE	used	540540984	9.09	22011	1.000	0.005	0.088	0.072	0.117	115.004403	66.050286	1880.35	-488
6	GUIDE	used	540548768	8.50	21986	1.000	-0.036	-0.200	0.064	0.101	113.788166	65.673634	107.11	889
7	GUIDE	used	540153792	9.34	22010	1.000	-0.100	0.157	0.119	0.195	115.938716	65.425474	98.46	-2436

## 2.4 Star Slots

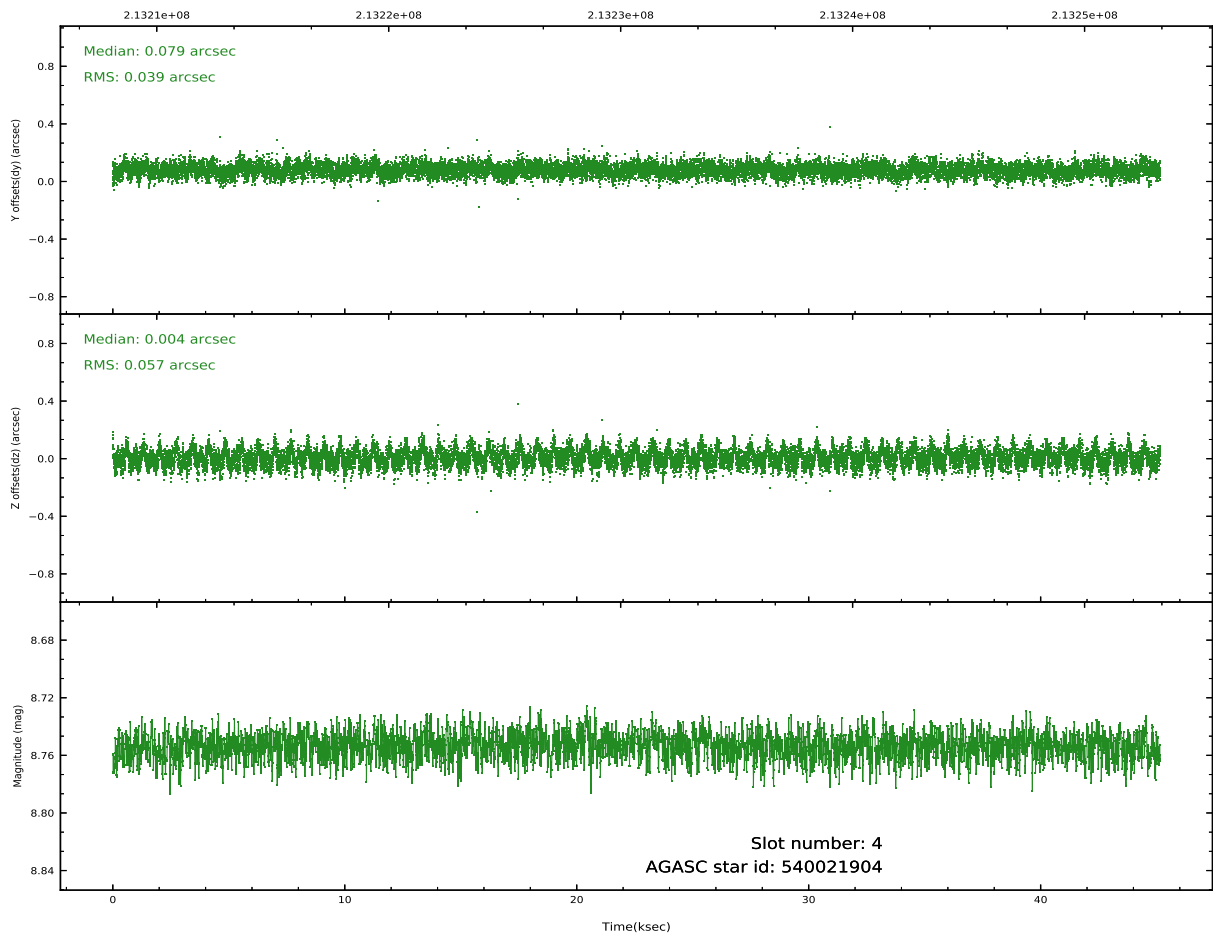
### 2.4.1 Slot 3



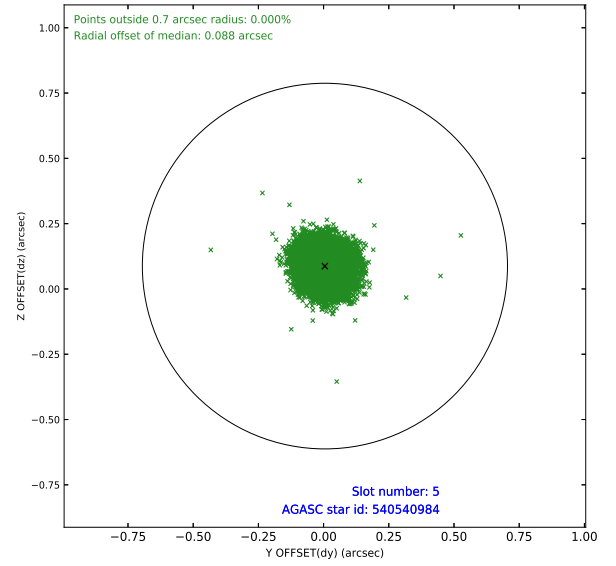
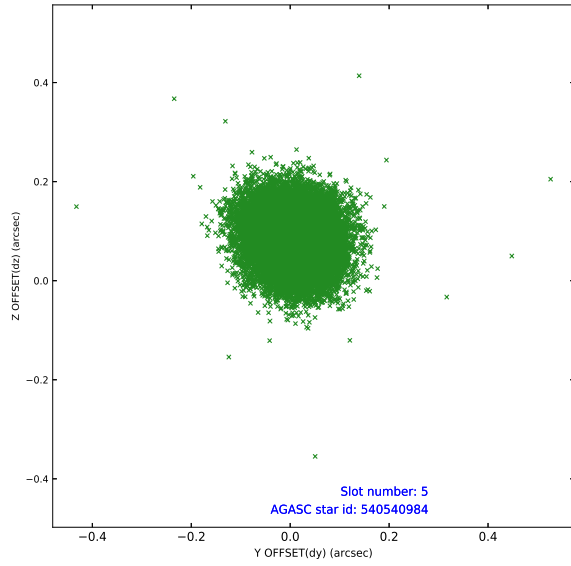
## 2.4.2 Slot 4



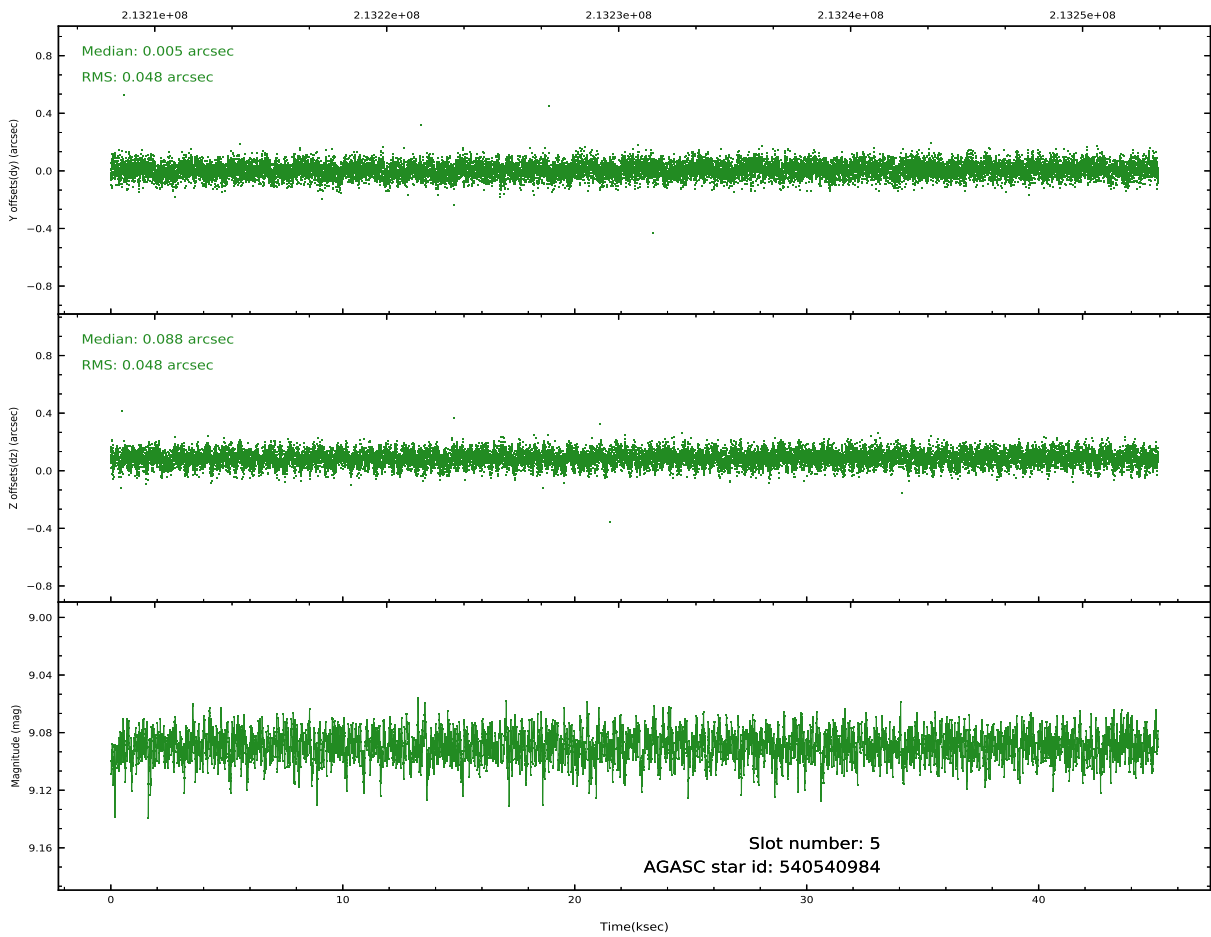
Time (s)



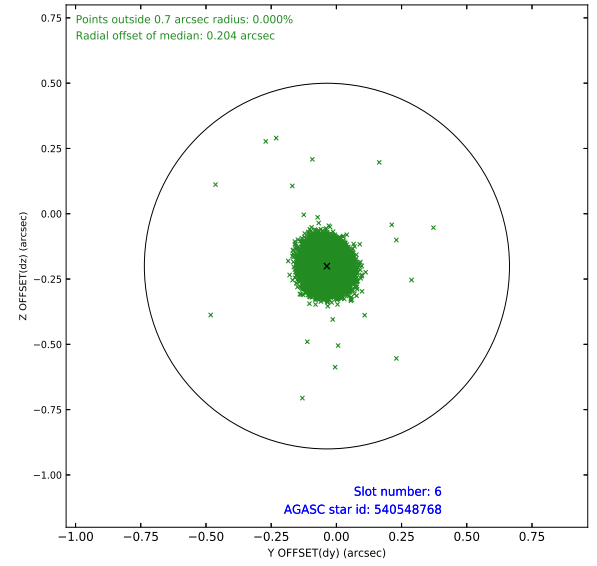
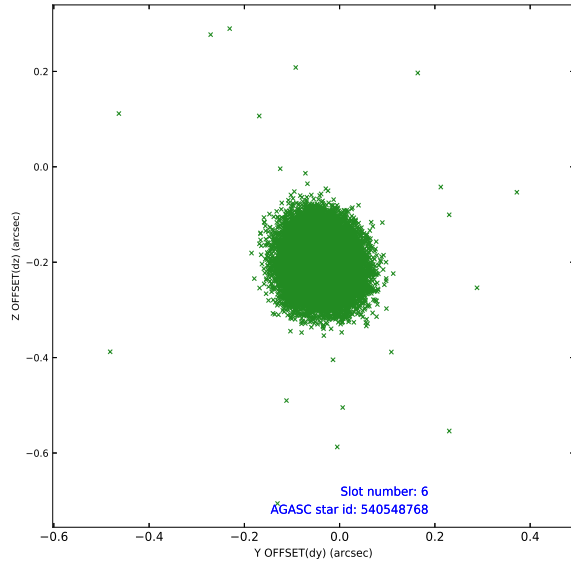
### 2.4.3 Slot 5



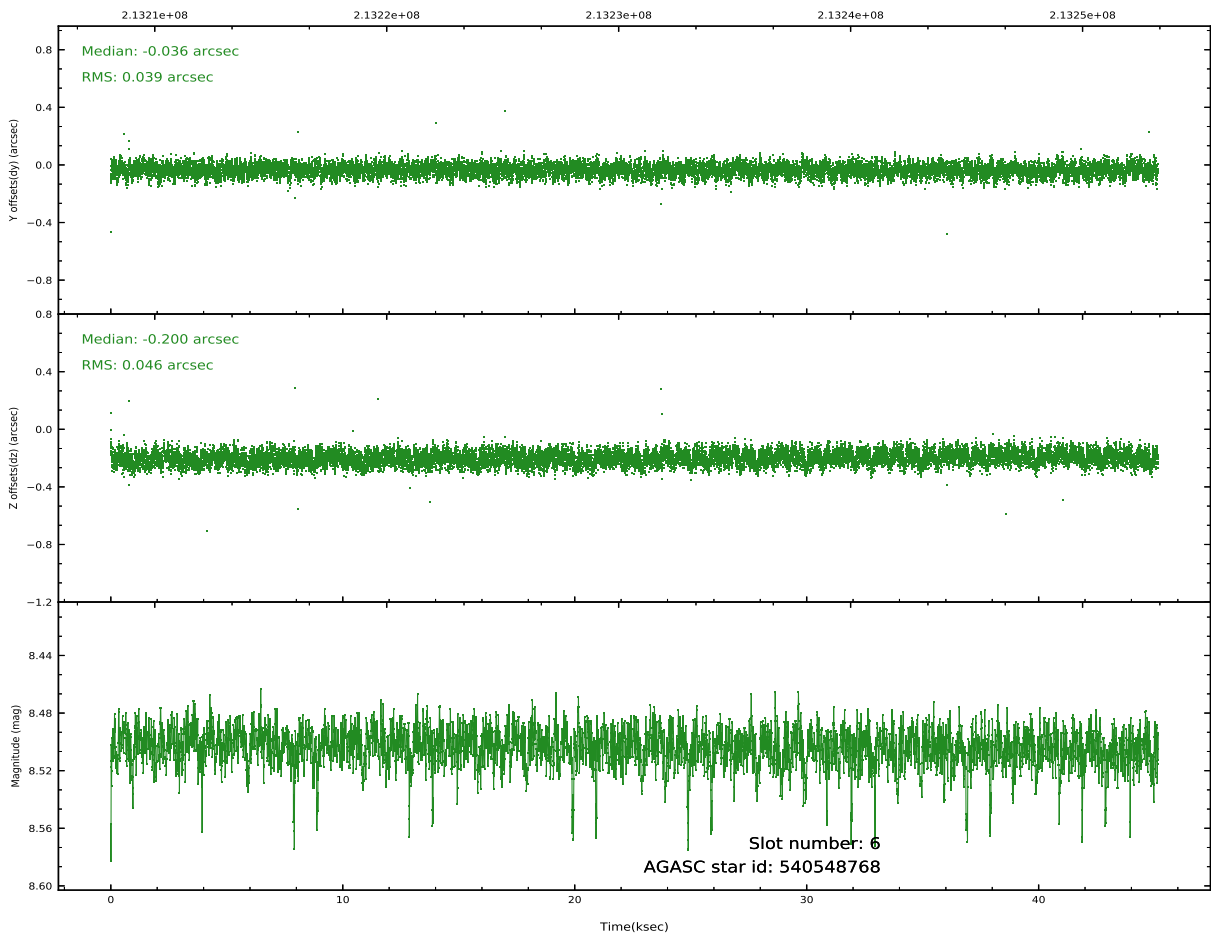
Time (s)



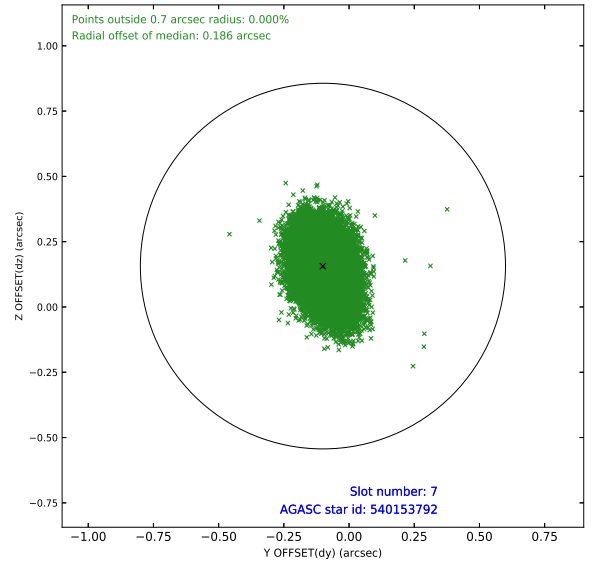
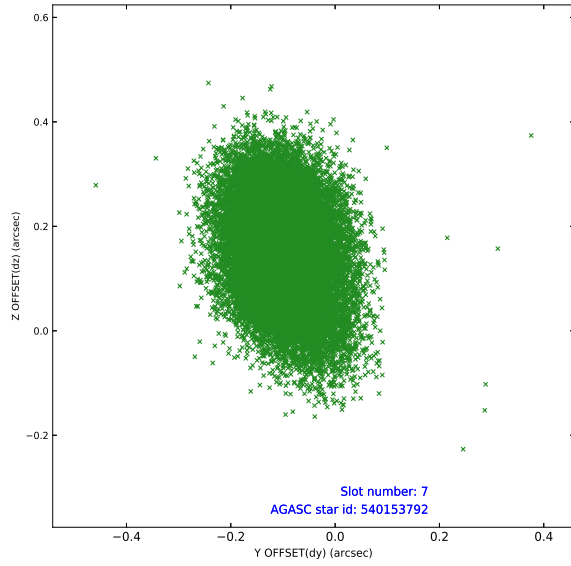
## 2.4.4 Slot 6



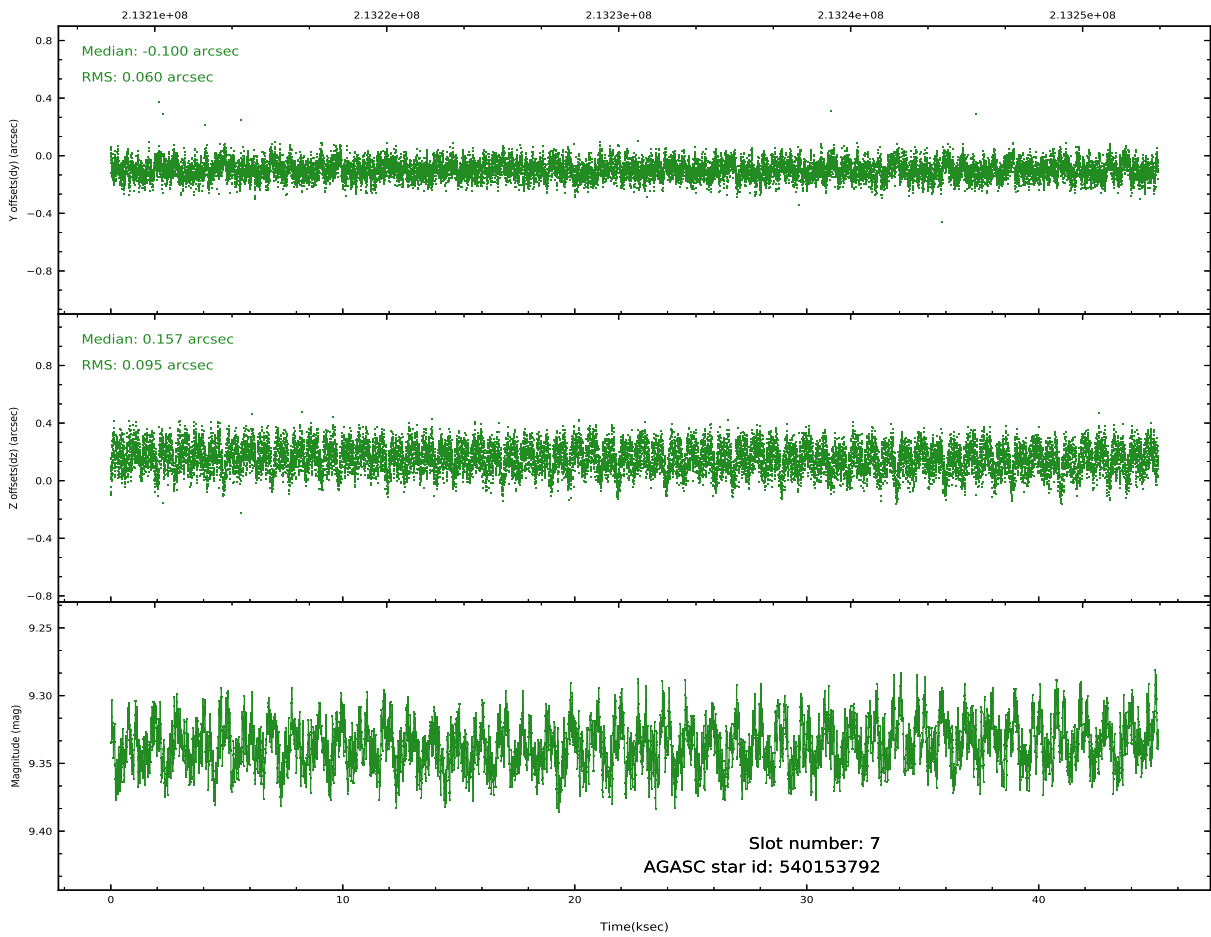
Time (s)



## 2.4.5 Slot 7

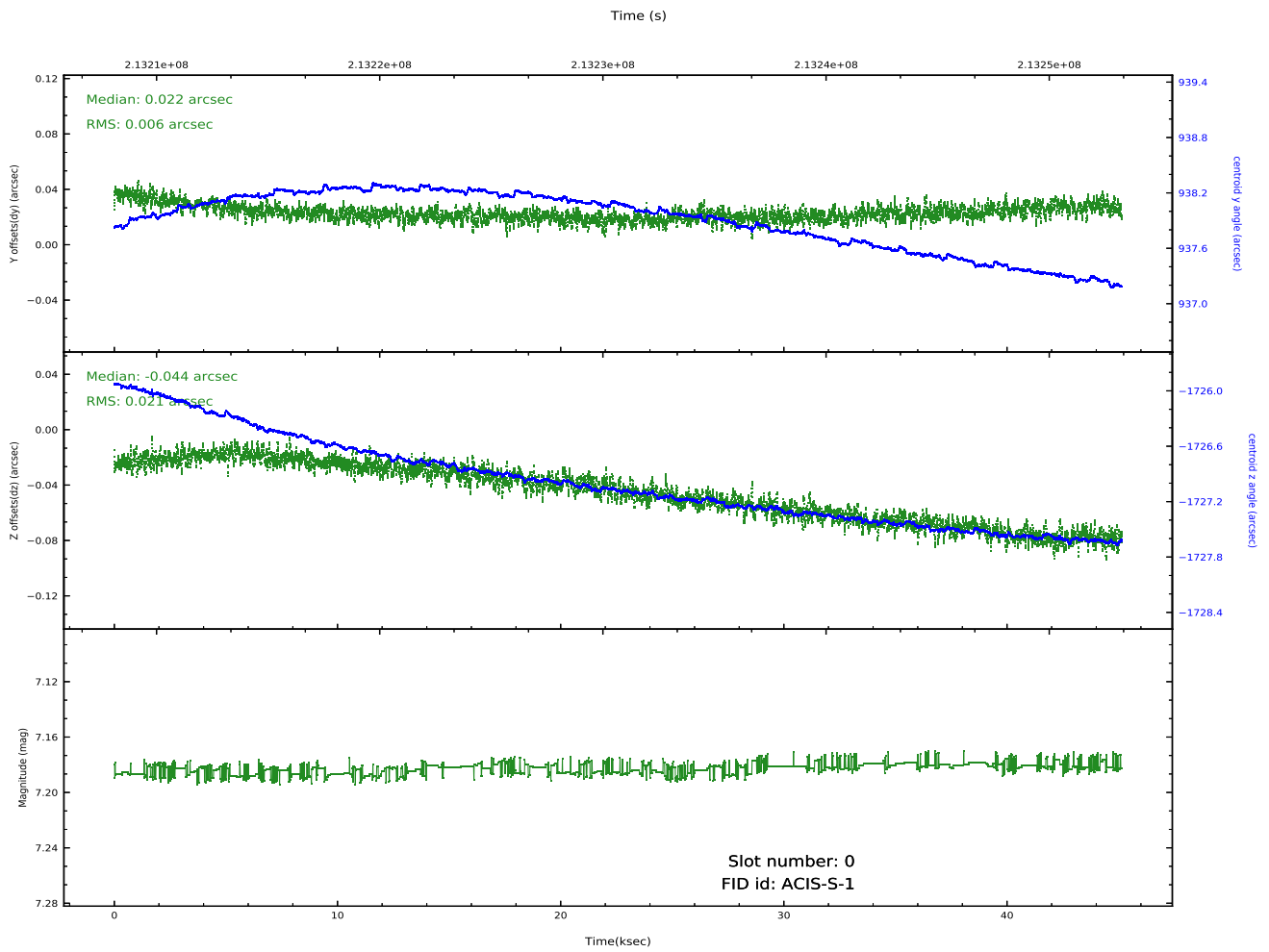
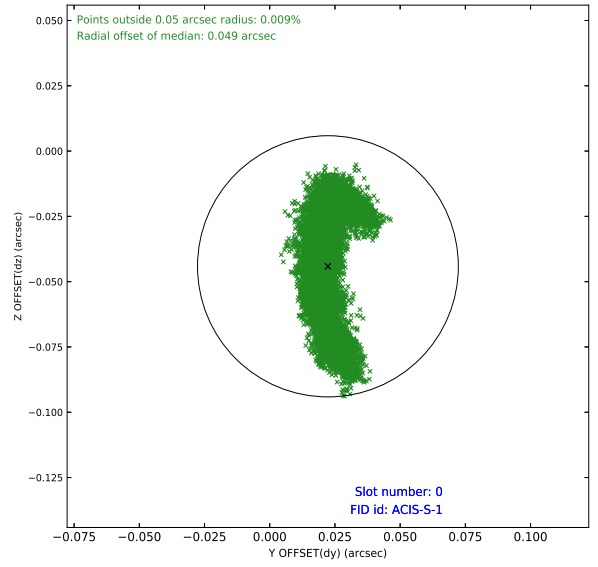
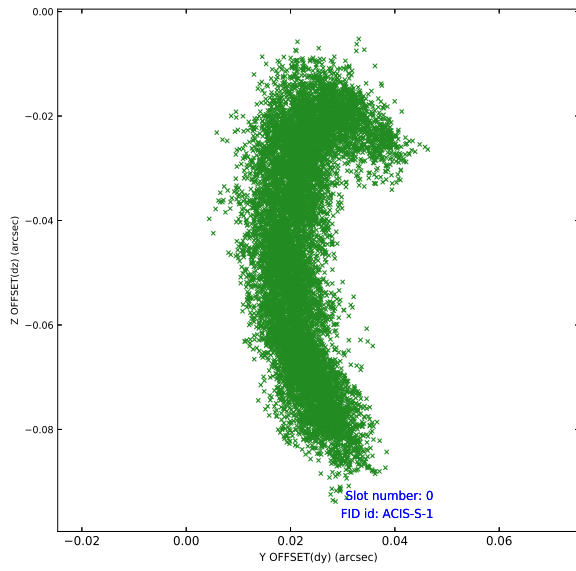


Time (s)

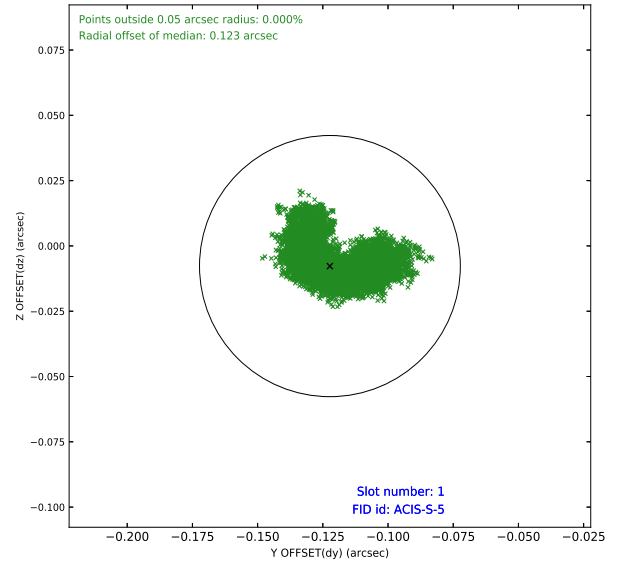
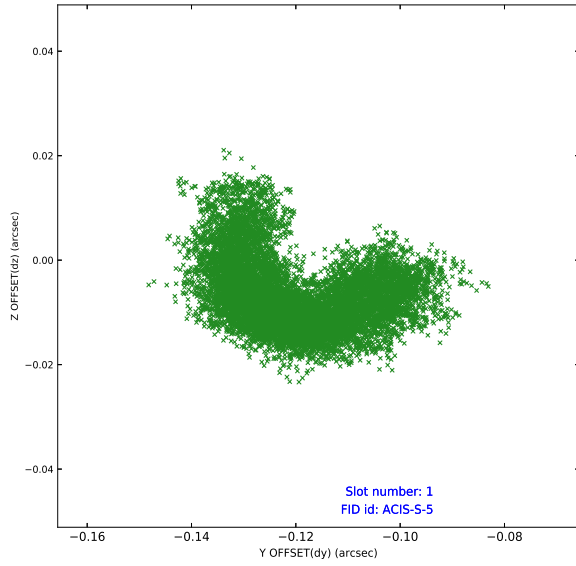


## 2.5 FID Slots

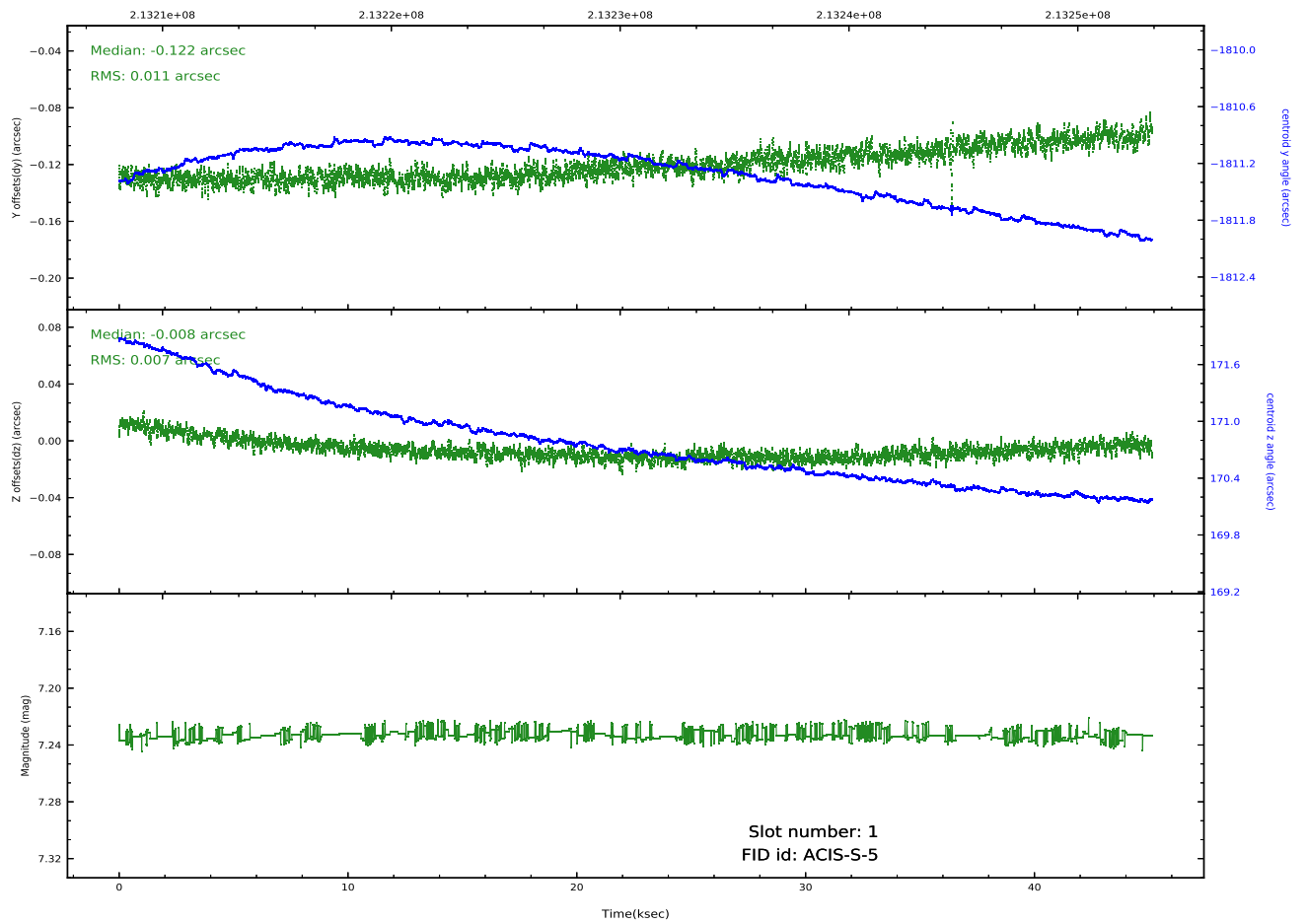
### 2.5.1 Slot 0



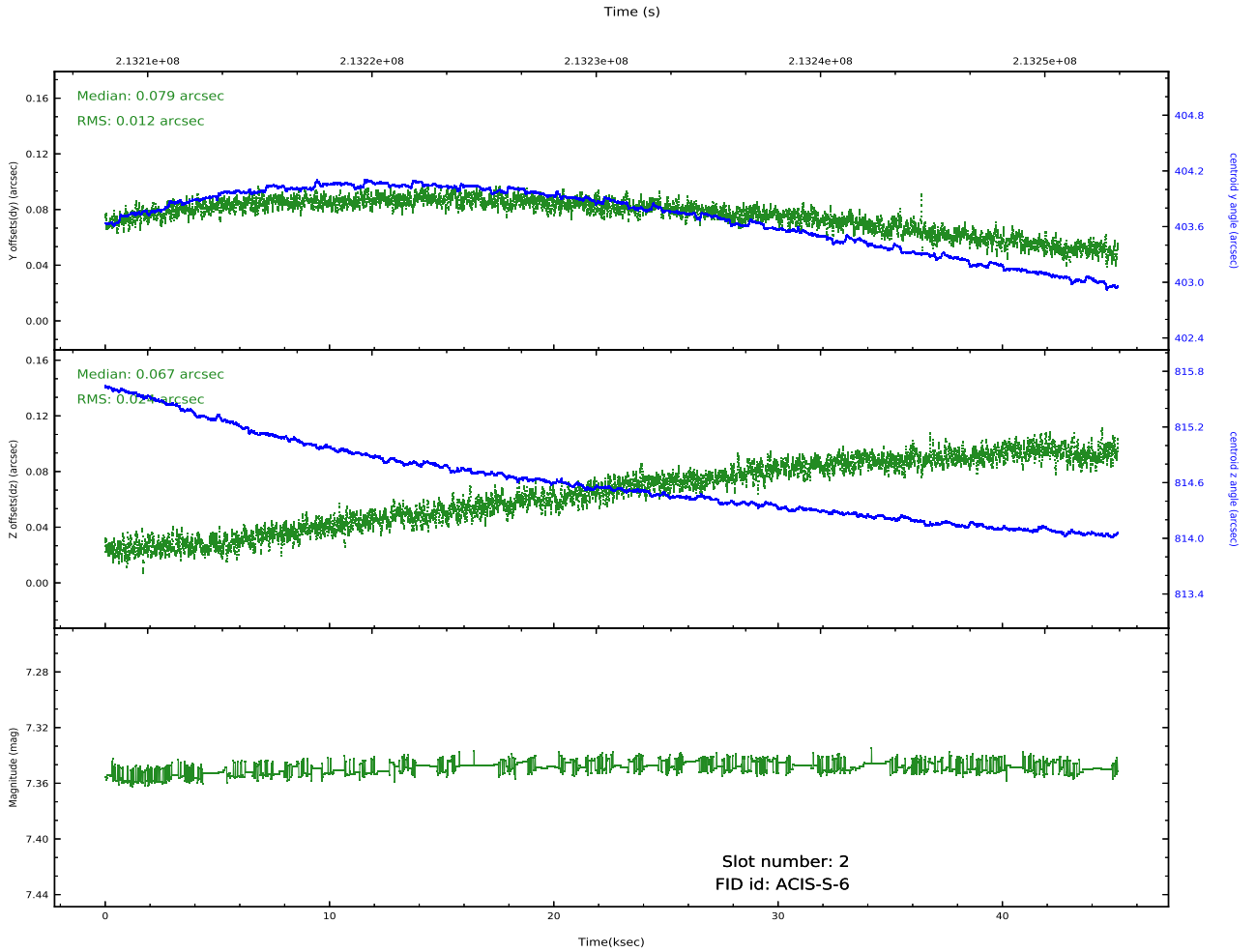
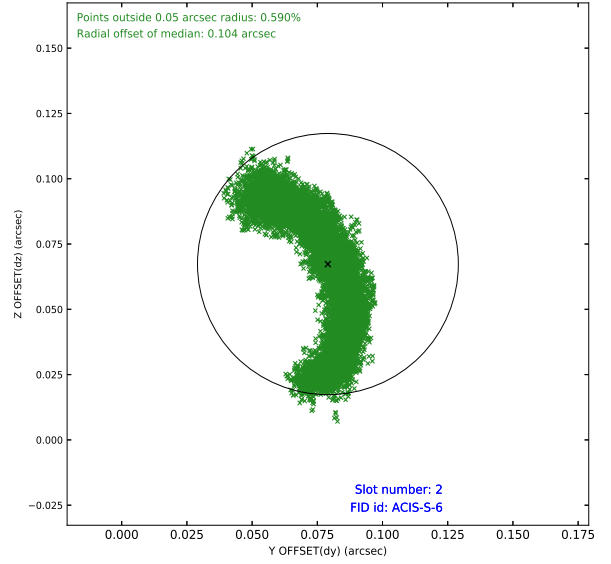
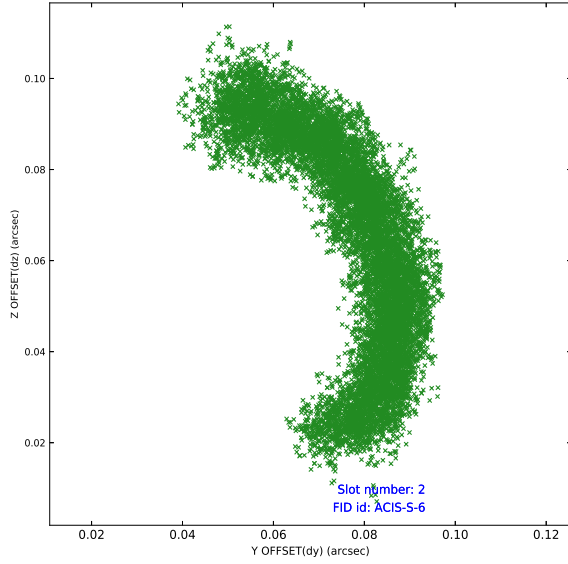
## 2.5.2 Slot 1



Time (s)



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	45.142

## A.2 Comments