

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4362 - L2 Version 5  
Chandra X-Ray Center

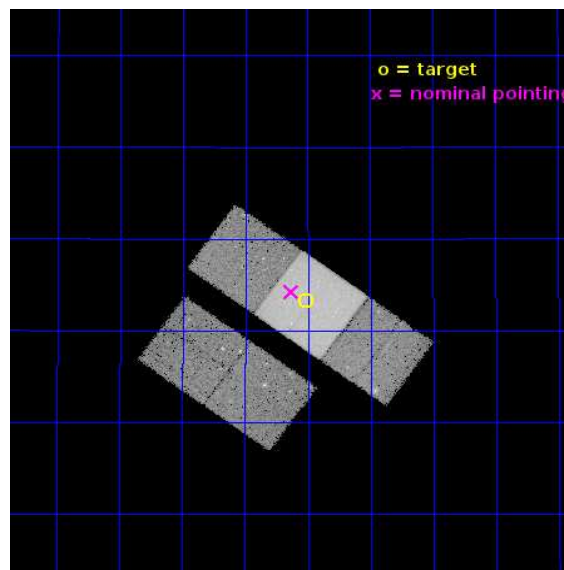
L2 Processing Date : Jul 27 2015

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# 1 Front

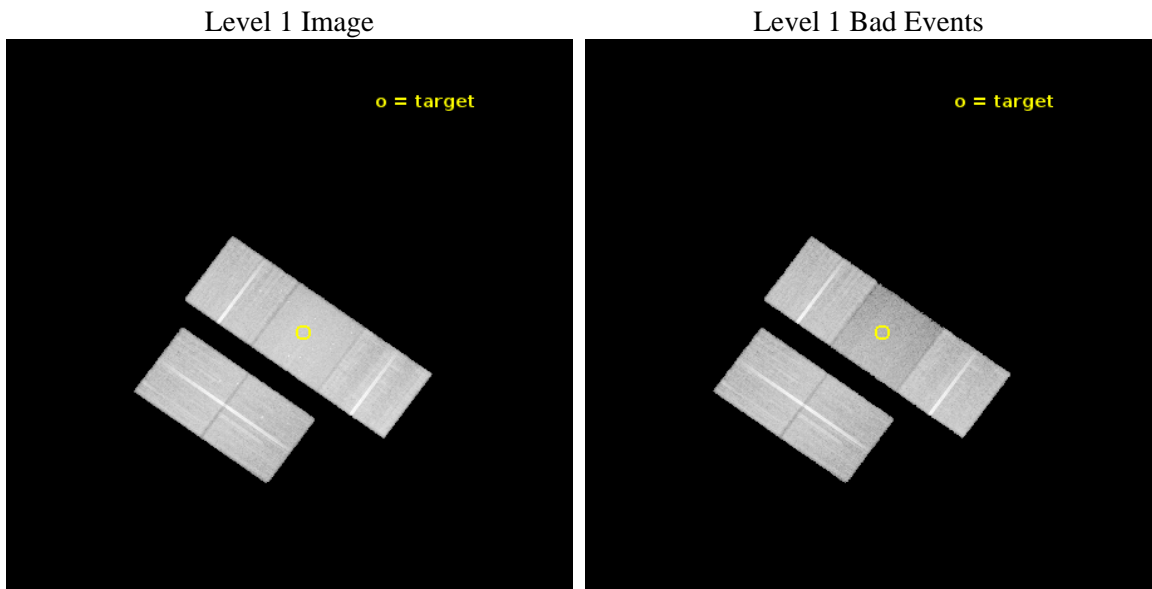
seq_num	800291	Sequence number
obs_id	4362	Observation id
title	MAPPING DARK MATTER IN A COLLING FLOW CLUSTER AND A DARK CLUMP	Pro
observer	Professor Gordon Garmire	Principal investigator
object	RCS1325+2858	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	201.629458	Observer's specified target RA [deg]
dec_targ	29.0555	Observer's specified target Dec [deg]
ra_nom	201.65756039965	Nominal RA [deg]
dec_nom	29.071069442495	Nominal Dec [deg]
roll_nom	35.835369661599	Nominal Roll [deg]
revision	5	Processing version of data
ontime	43938.781129271	Sum of GTIs [s]
livetime	43364.688606557	Livetime [s]
ontime2	43932.499178886	Sum of GTIs [s]
ontime3	43935.640169024	Sum of GTIs [s]
ontime6	43935.640149117	Sum of GTIs [s]
ontime7	43938.781129271	Sum of GTIs [s]
ontime8	43938.781129271	Sum of GTIs [s]
l2events	199759	Number of level 2 events



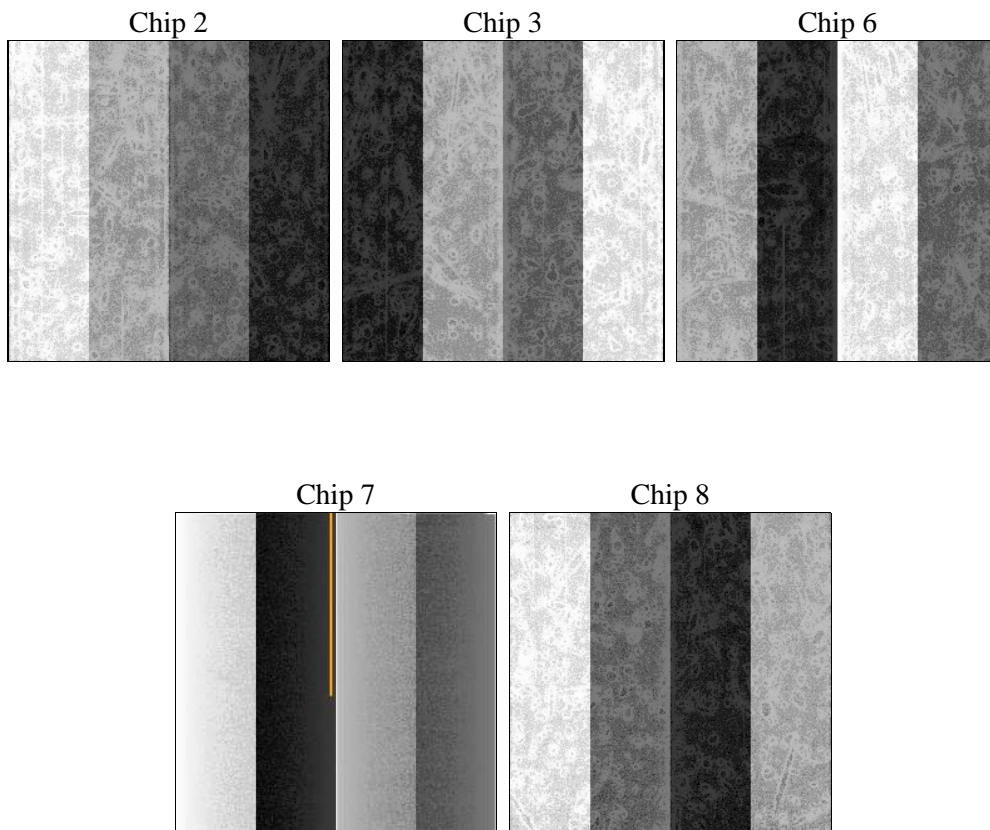
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	43792.034000	[s] Scheduled observation exposure time
ascdsver	10.4.1	Processing system revision	ontime	43938.781129271	Sum of GTIs [s]
caldbver	4.6.8	&#160	ontime2	43932.499178886	Sum of GTIs [s]
date	2015-07-27T16:35:49	Date and time of file creation	ontime3	43935.640169024	Sum of GTIs [s]
revision	5	Processing version of data	ontime6	43935.640149117	Sum of GTIs [s]
			ontime7	43938.781129271	Sum of GTIs [s]
			ontime8	43938.781129271	Sum of GTIs [s]
			l1events	1072262	Number of level 1 events

### 2.1.4 Events

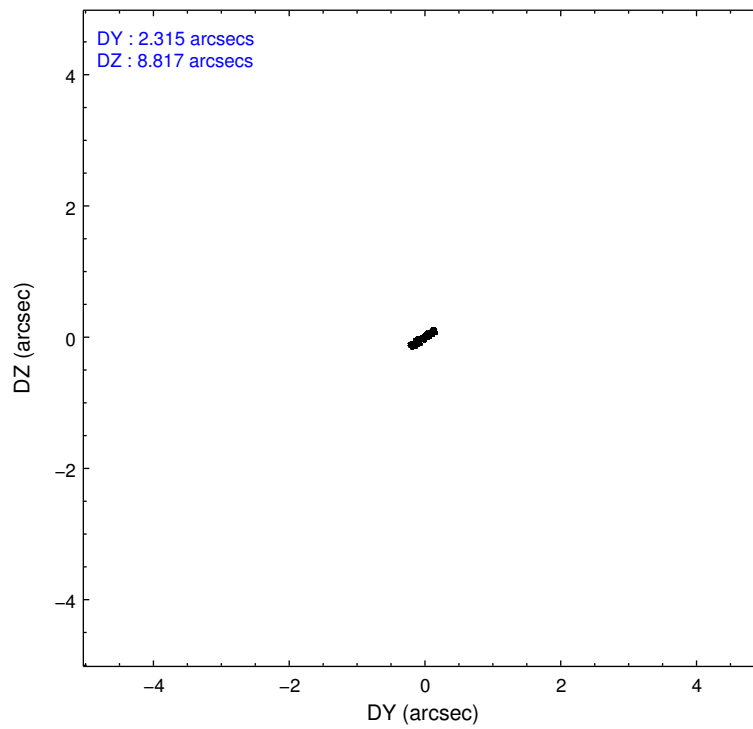
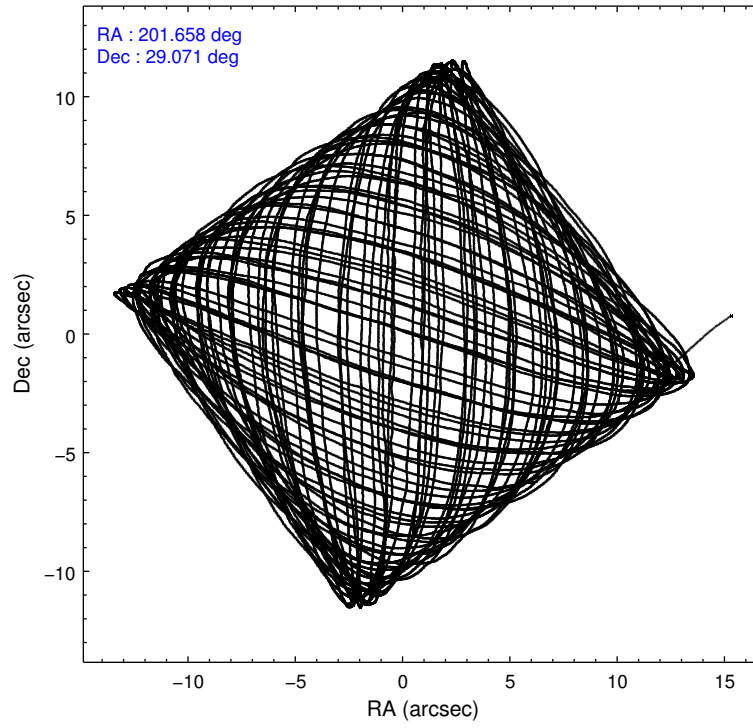
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	209386	191706	204829	216403	249938
rejected events	187968	171596	180715	92158	189610
rejected %	89%	89%	88%	42%	75%

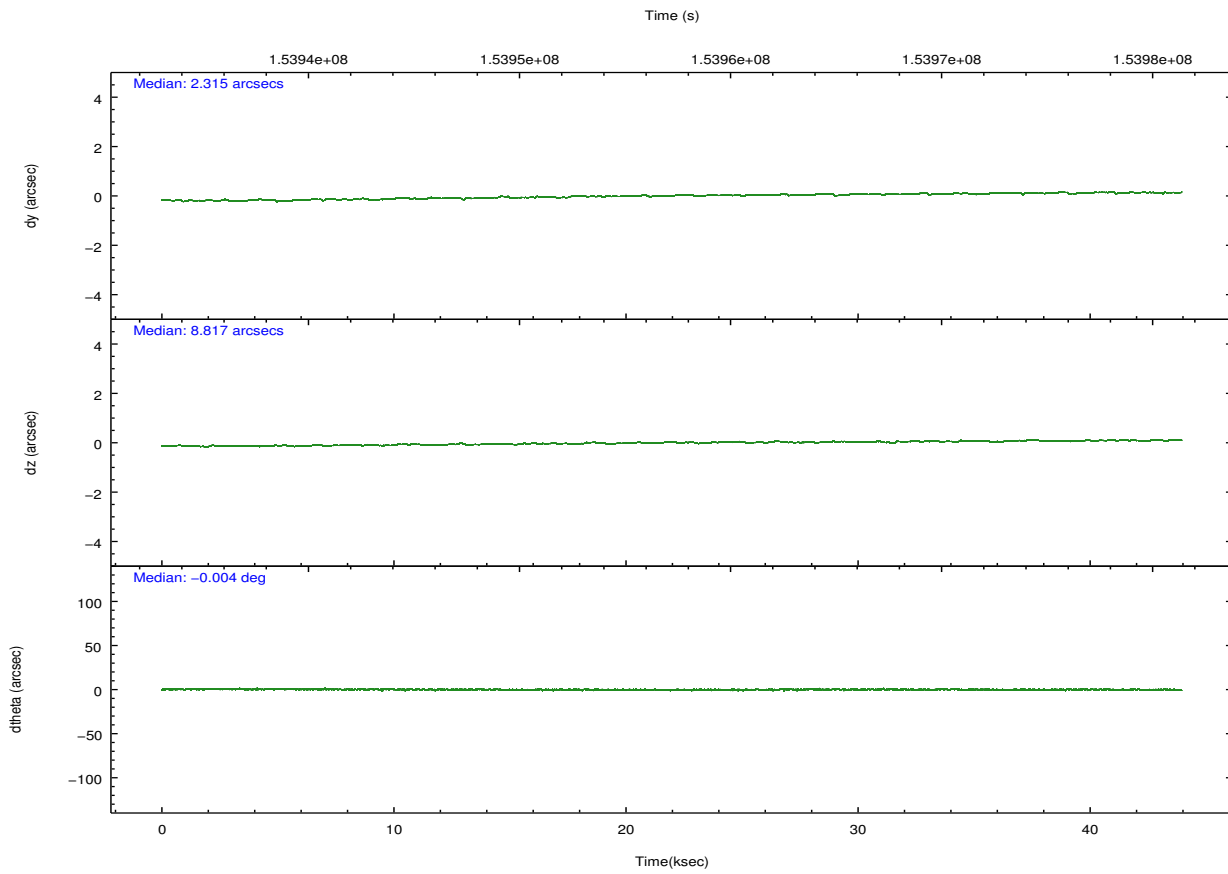
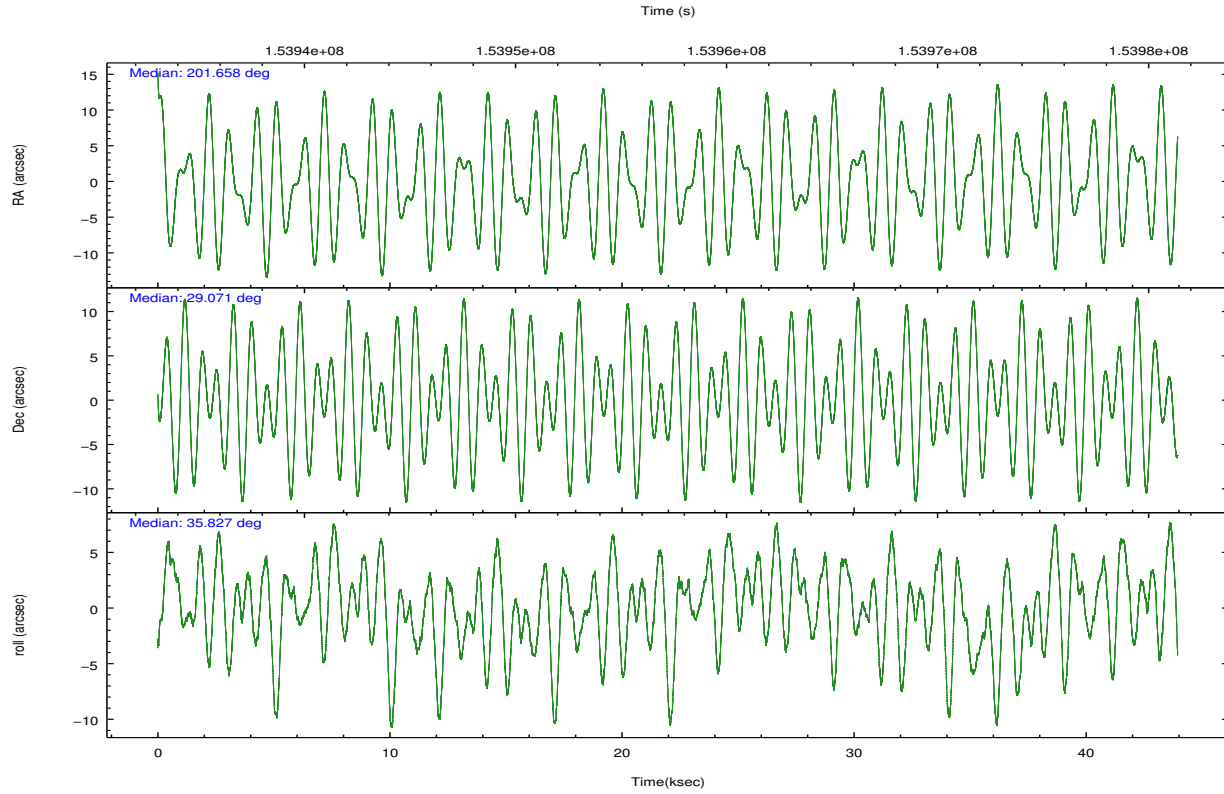
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	9060	8427	10689	13883	19655
	4%	4%	5%	6%	7%
grade 1 events	83	110	88	181	204
	0%	0%	0%	0%	0%
grade 2 events	4480	4037	4617	24943	12479
	2%	2%	2%	11%	4%
grade 3 events	2291	2157	2410	11594	7132
	1%	1%	1%	5%	2%
grade 4 events	2199	2189	2305	11373	6536
	1%	1%	1%	5%	2%
grade 5 events	5383	6300	6489	19397	9699
	2%	3%	3%	8%	3%
grade 6 events	3391	3304	4099	62486	14588
	1%	1%	2%	28%	5%
grade 7 events	182499	165182	174132	72546	179645
	87%	86%	85%	33%	71%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	201.645181	201.6575603996477	Subarray requested	NONE	NONE
[deg] Pointing Dec	29.046083	29.07106944249514	Alternating exposures requested	N	N
[deg] Pointing Roll	35.684755	35.83536966159933	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	153935401.184000	153934403.14495			
Observation start date	2002-11-17T15:48:57	2002-11-17T15:33:23			
[s] Observation end time (MET)	153979193.184000	153979507.24683			
Observation end date	2002-11-18T03:58:49	2002-11-18T04:05:07			
Read mode	TIMED	TIMED			

## 2.3 Aspect



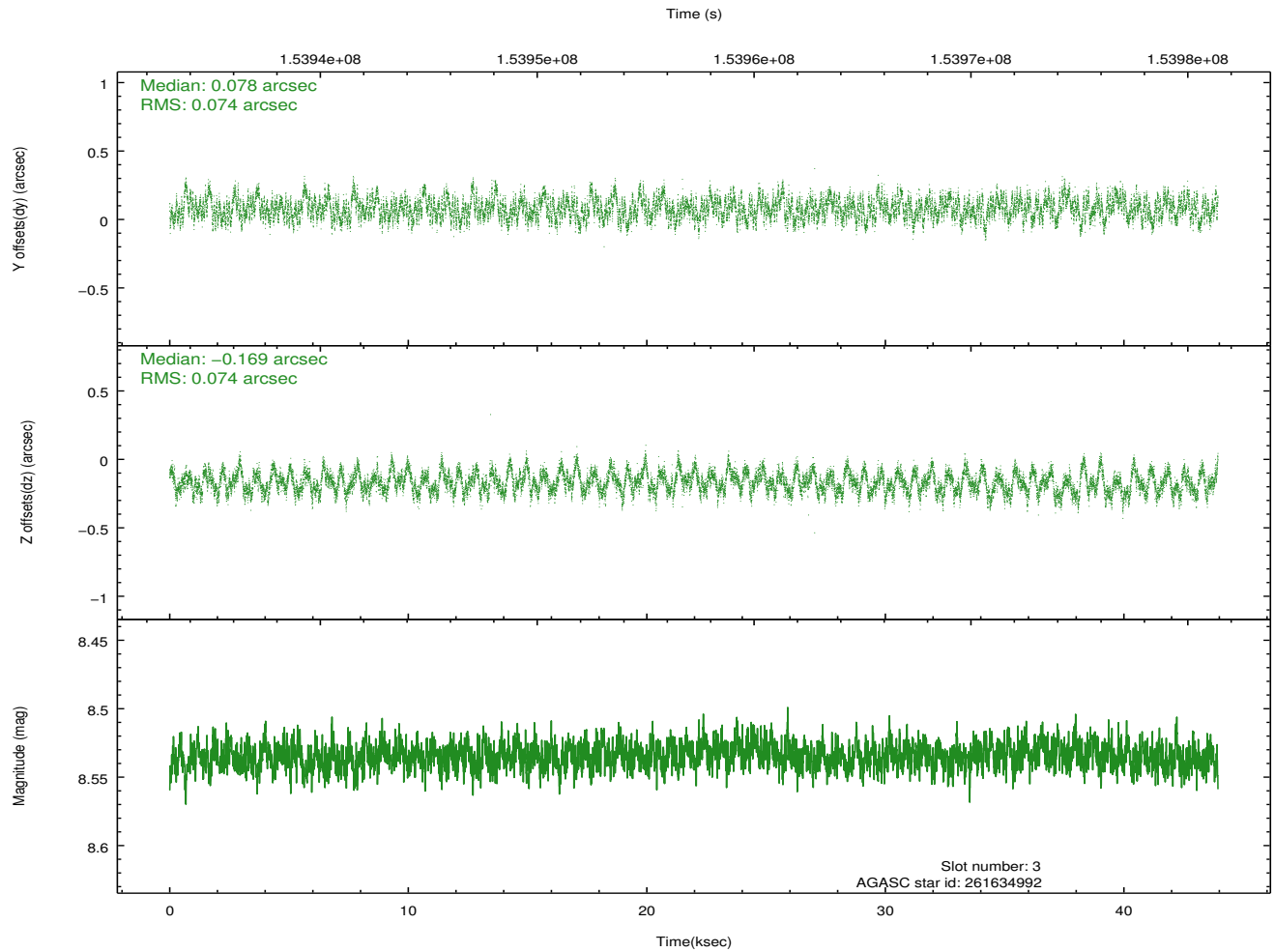
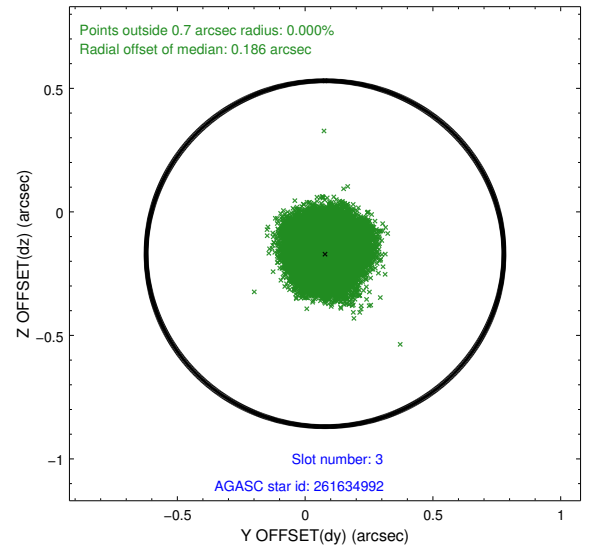
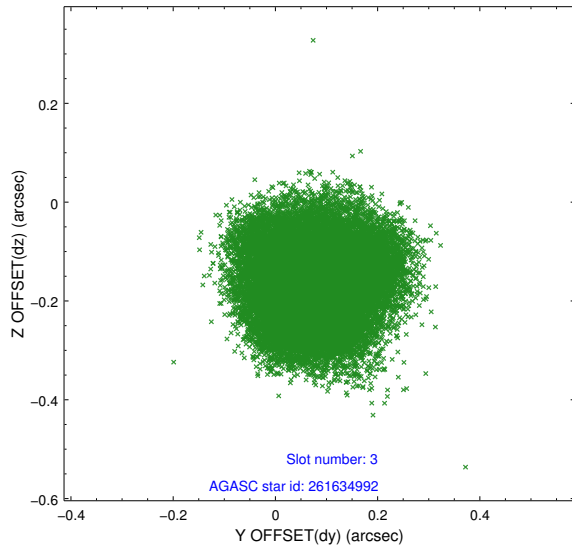


### Slot Statistics

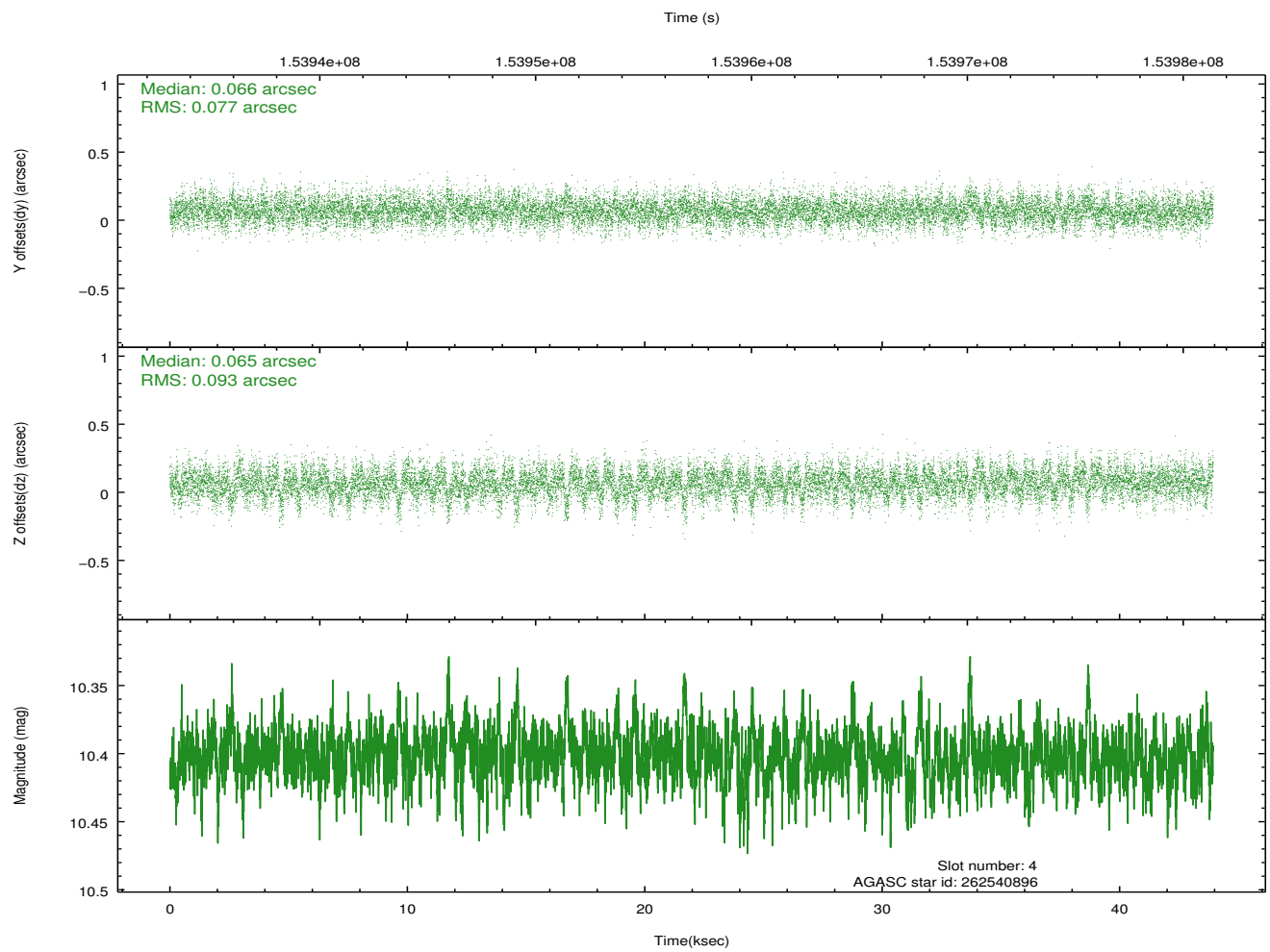
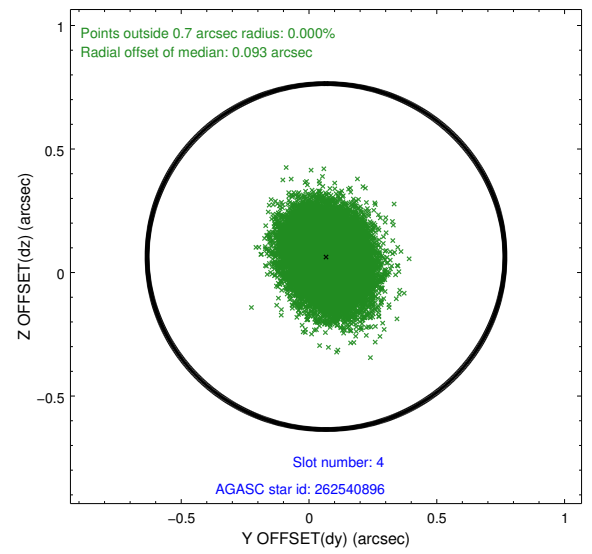
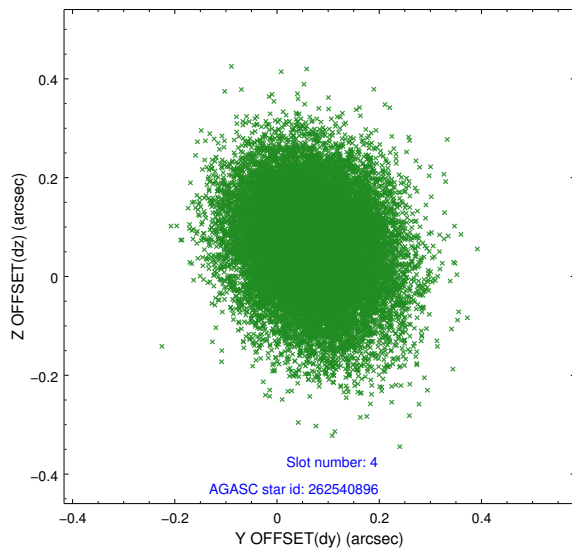
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.10	10717	-0.026	-0.011	0.013	0.020	0.000000	0.000000	-754.96	-1729.97
1	FID		ACIS-S-4	7.20	10716	-0.004	0.016	0.019	0.030	0.000000	0.000000	2158.34	178.52
2	FID		ACIS-S-5	7.24	10717	0.001	0.003	0.012	0.019	0.000000	0.000000	-1807.76	172.20
3	GUIDE	used	261634992	8.53	21432	0.078	-0.169	0.115	0.173	200.763863	29.074625	-2187.11	1709.31
4	GUIDE	used	262540896	10.40	21414	0.066	0.065	0.128	0.211	201.581459	28.629851	-1038.00	-1099.26
5	GUIDE	used	262543840	10.21	21410	-0.083	-0.181	0.201	0.331	201.181001	29.472362	-285.80	2097.51
6	GUIDE	used	262540176	9.85	21395	-0.027	0.134	0.137	0.227	201.603393	28.198584	-1887.70	-2400.54
7	GUIDE	used	262541520	9.87	21329	-0.044	0.147	0.151	0.245	202.020350	28.446195	-294.37	-2444.95

## 2.4 Star Slots

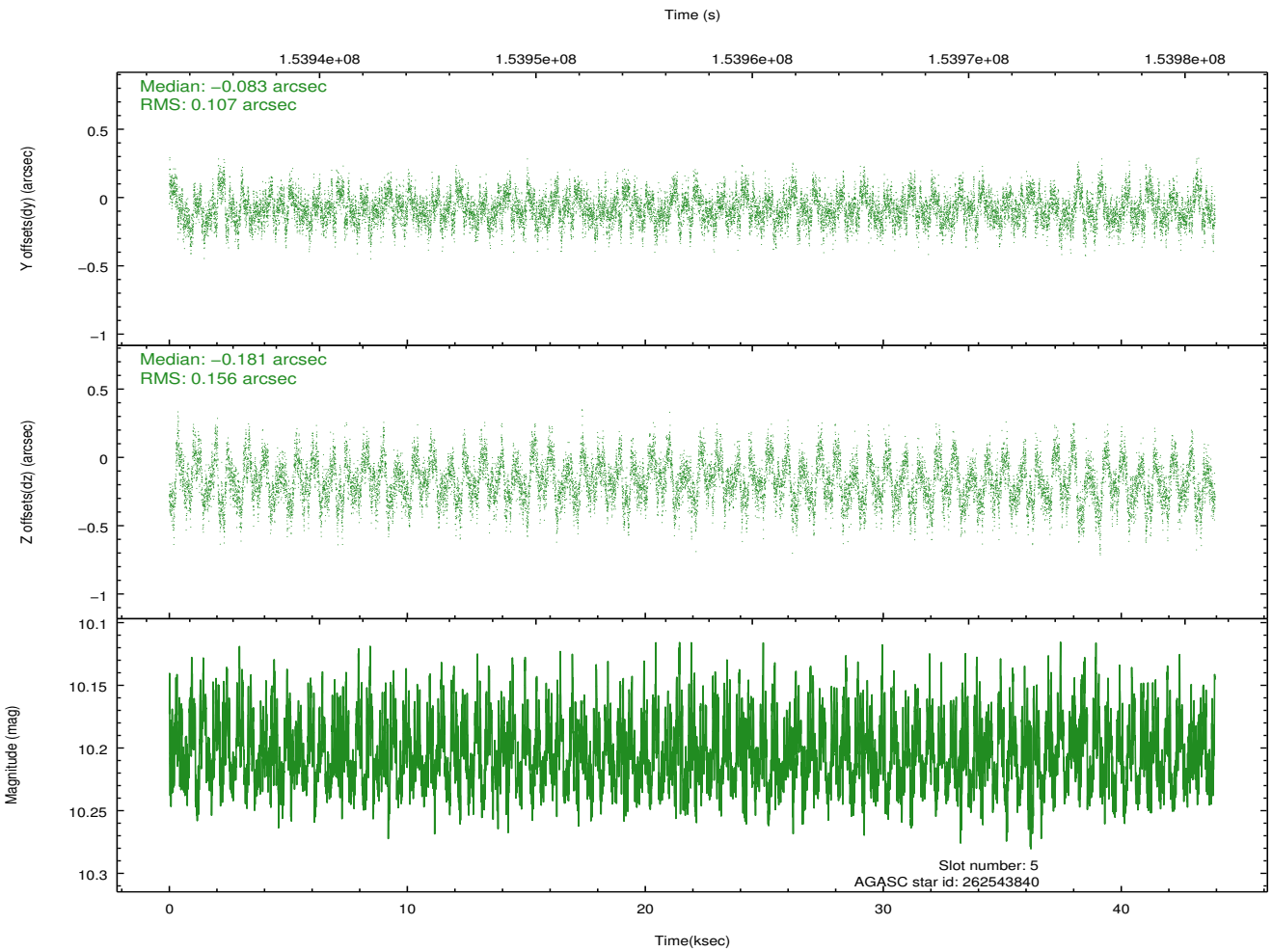
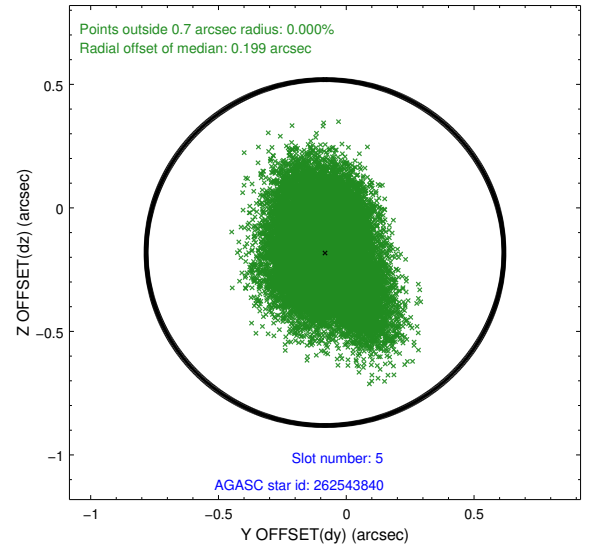
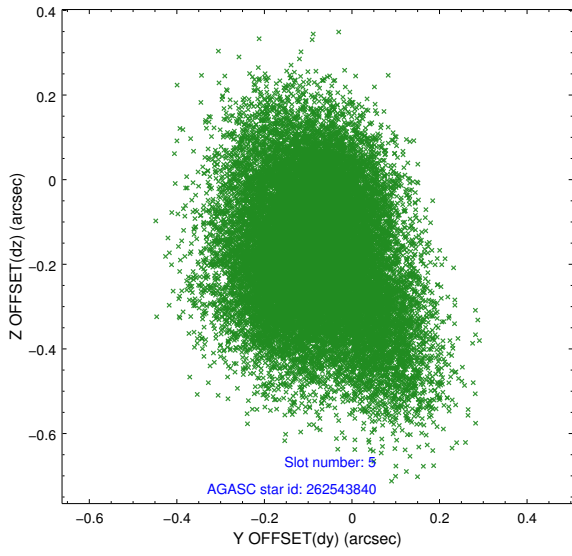
### 2.4.1 Slot 3



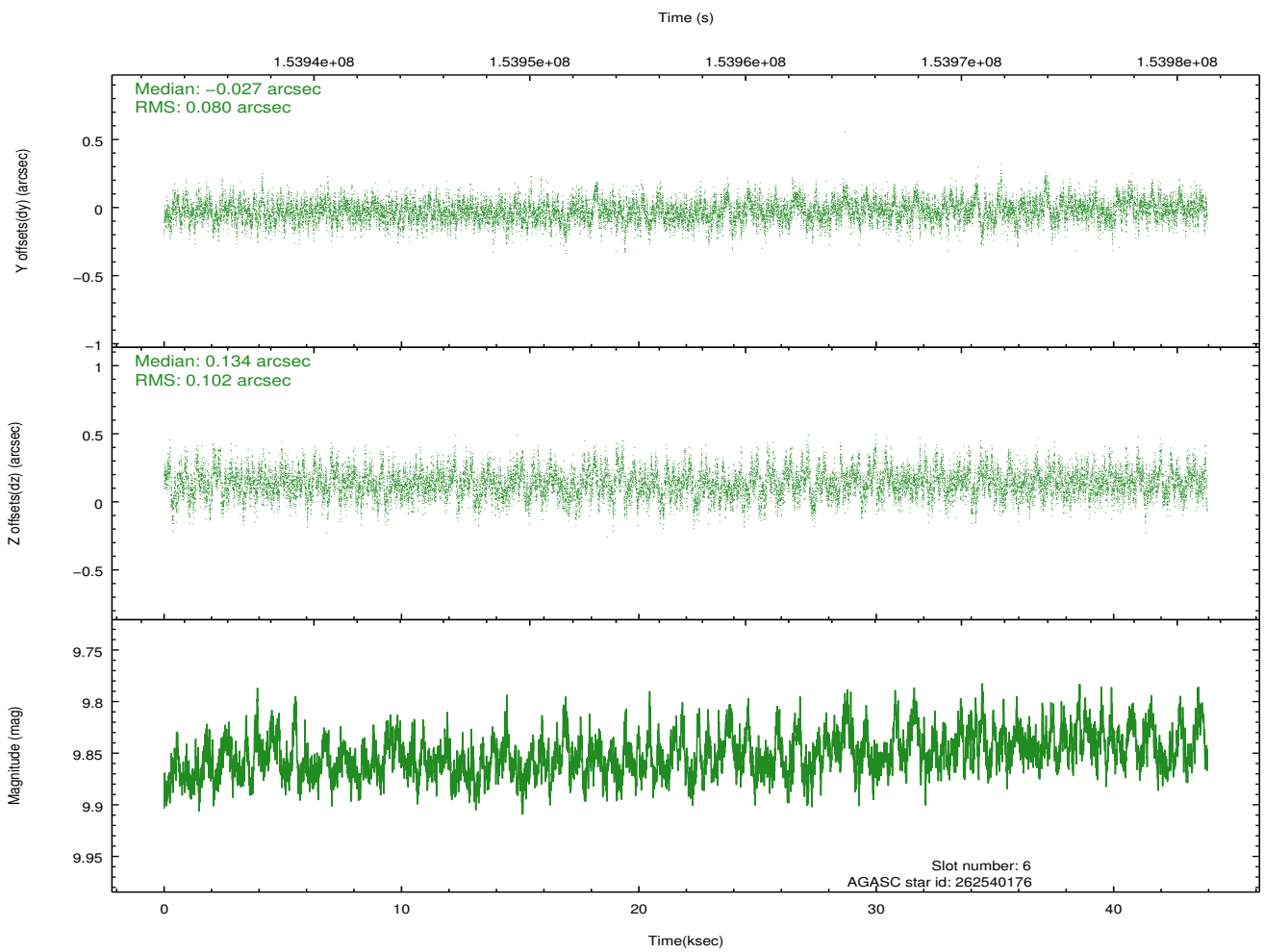
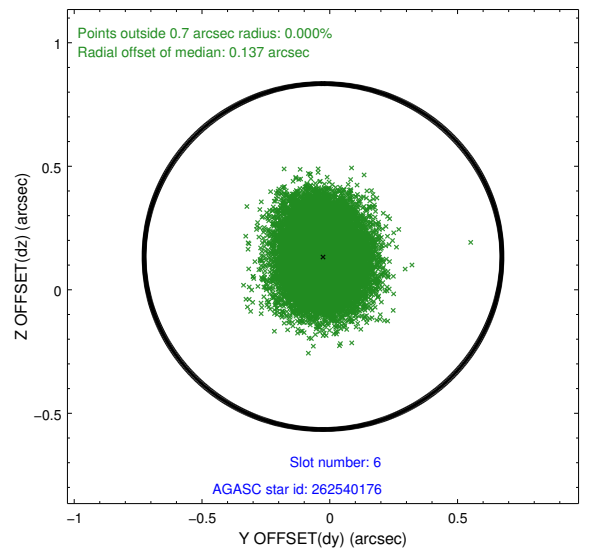
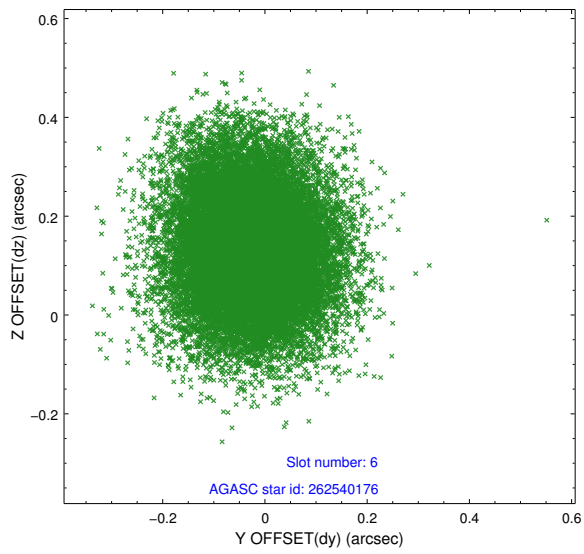
## 2.4.2 Slot 4



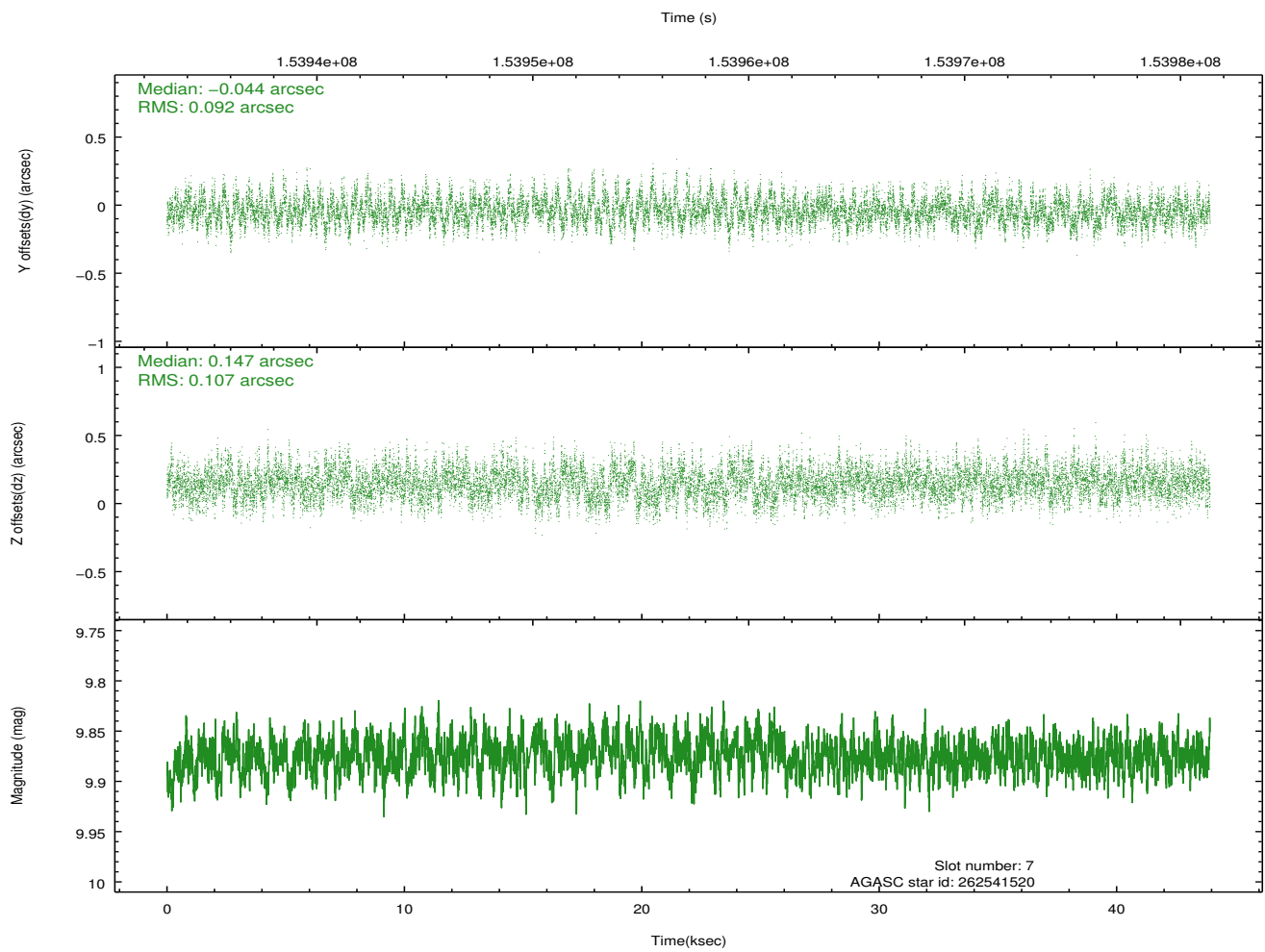
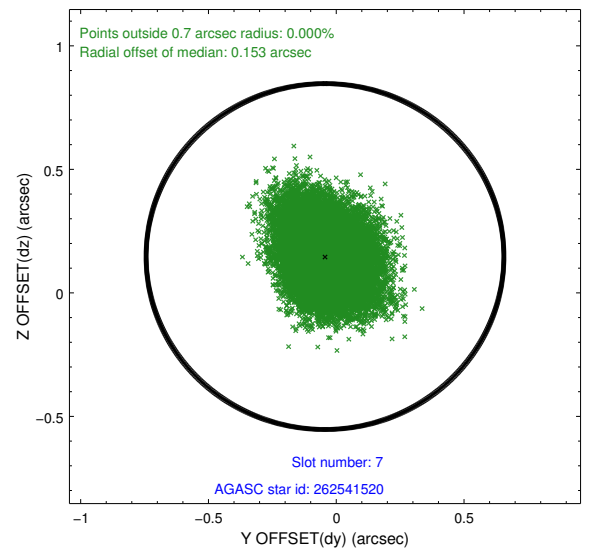
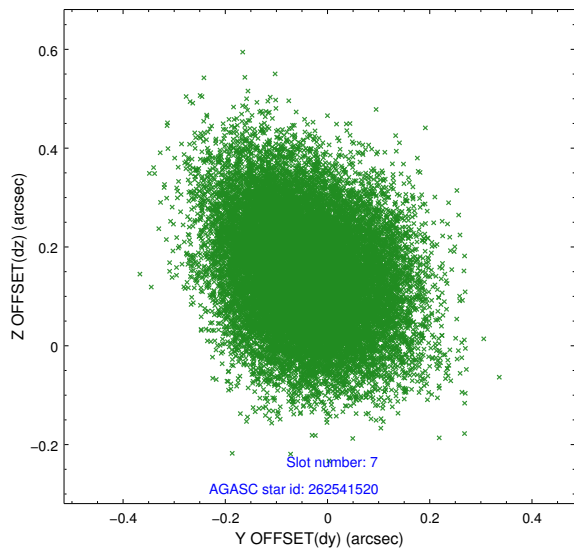
### 2.4.3 Slot 5



## 2.4.4 Slot 6

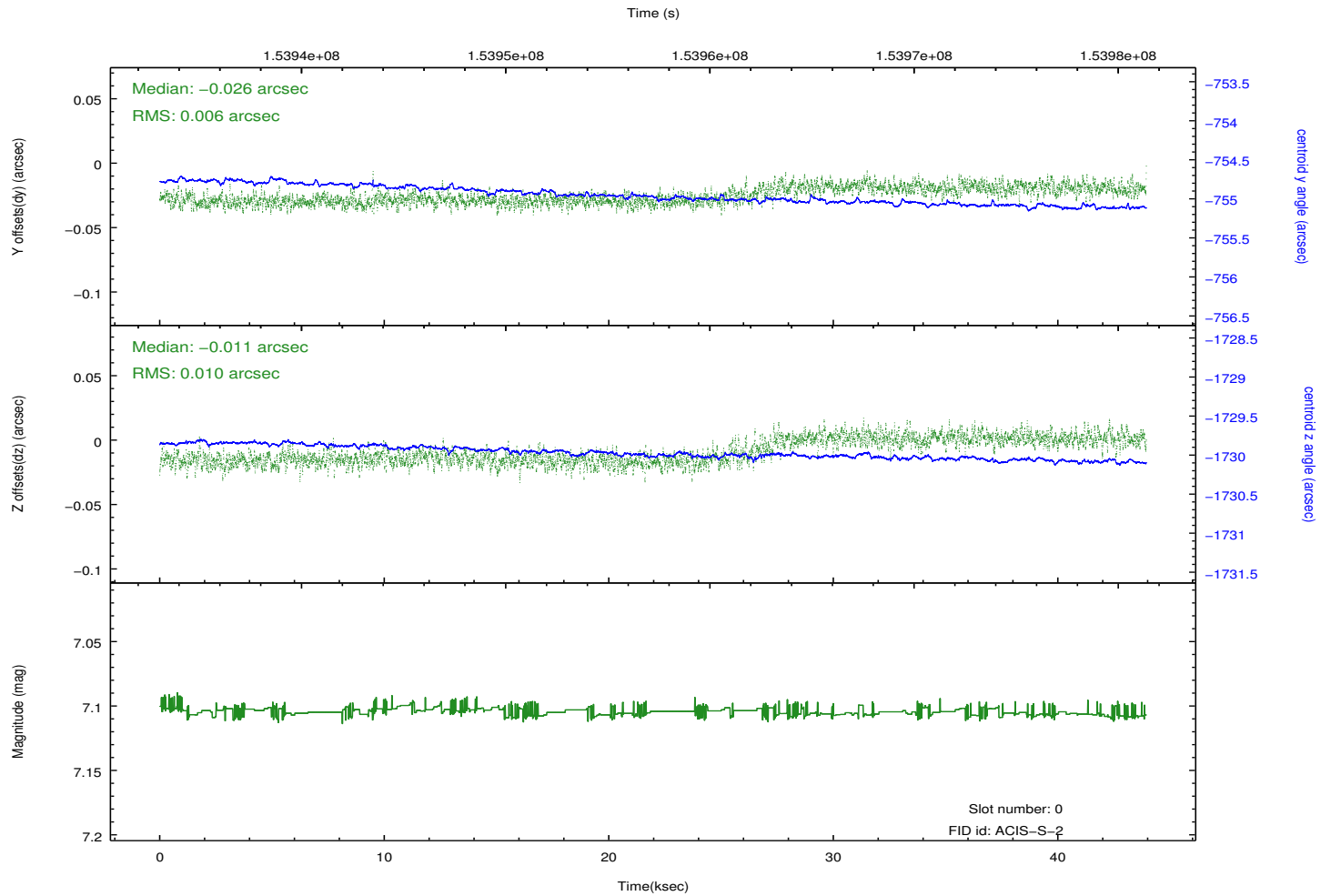
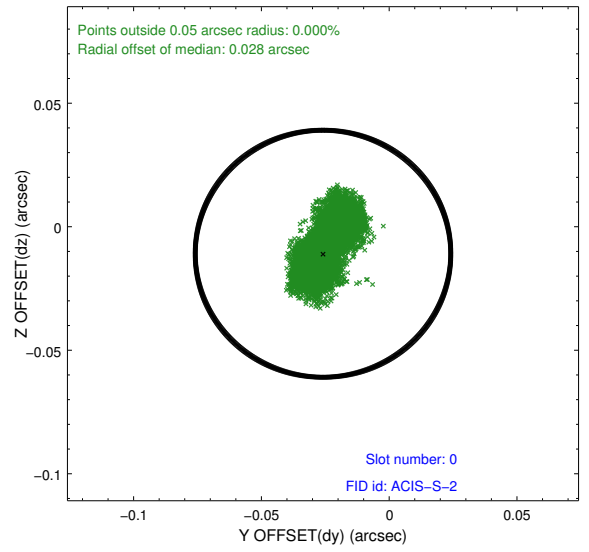
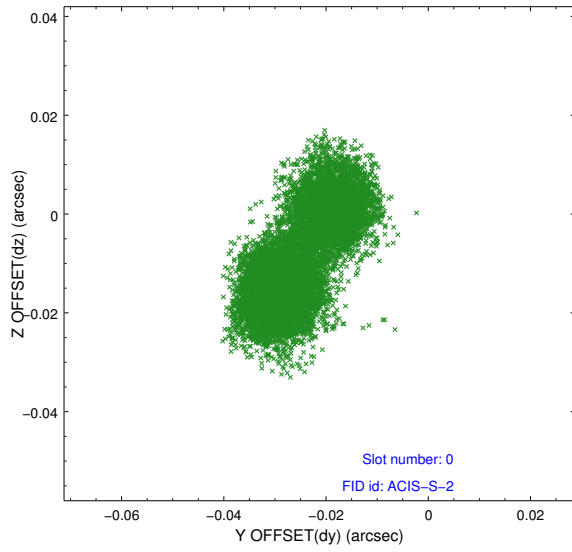


## 2.4.5 Slot 7

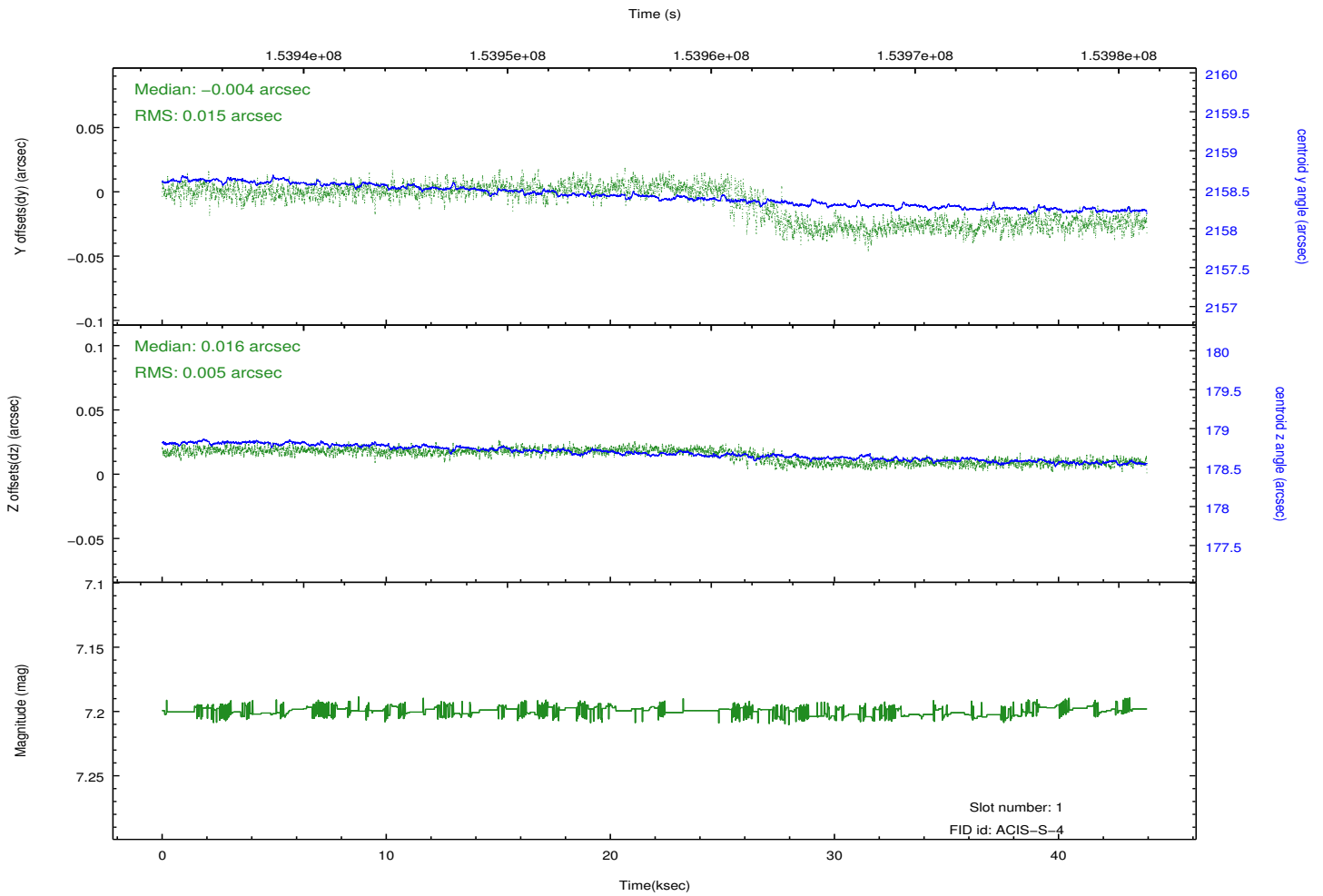
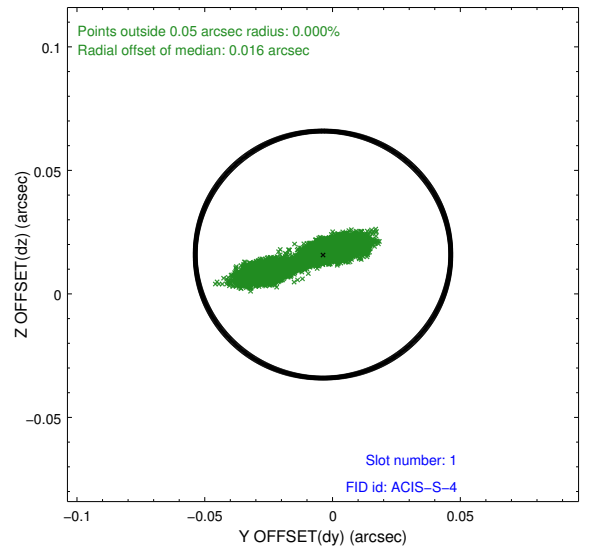
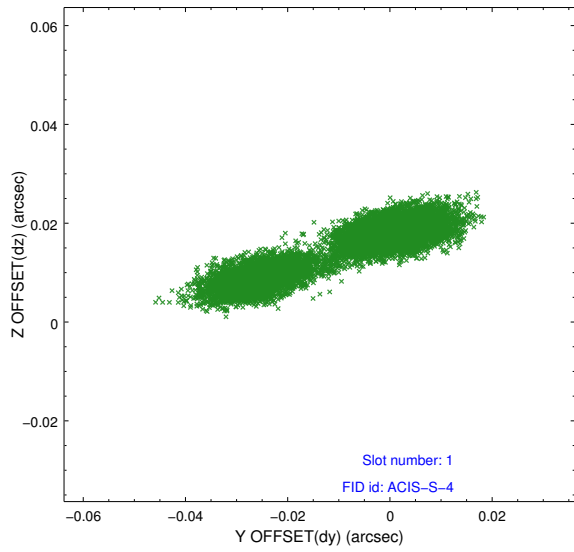


## 2.5 FID Slots

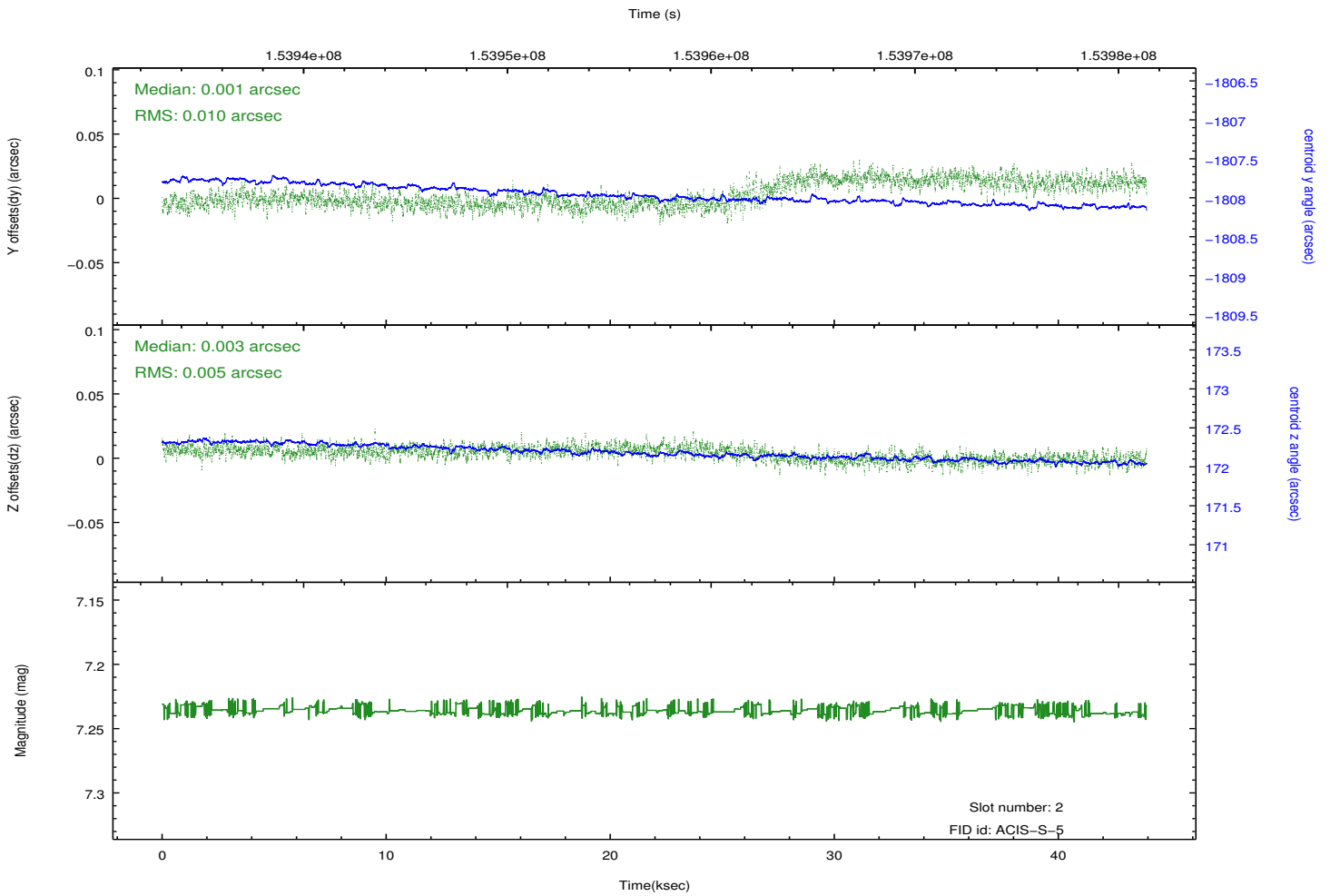
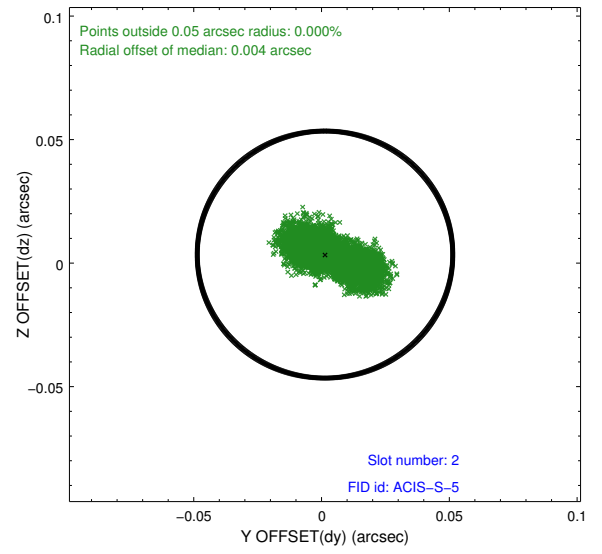
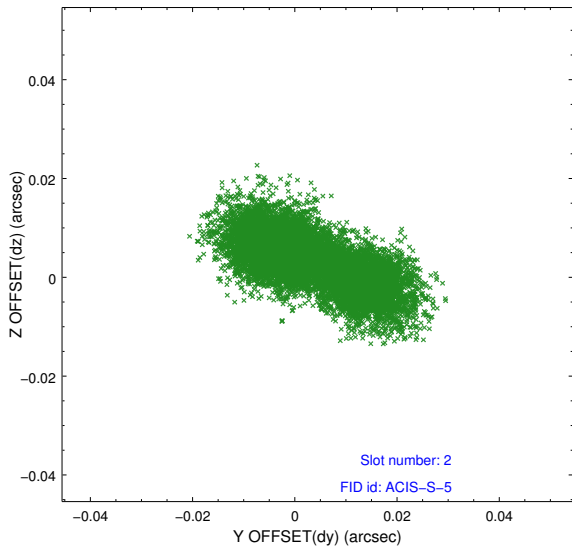
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2015.07.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	43.94

## A.2 Comments

Because an aspect solution is determined in a finite time interval, a small number of events registered within the delta time before the first aspect solution do not have proper sky coordinates. We apply a manual workaround to exclude those events with incorrect sky positions until the complete s/w resolution is obtained.