

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 12414 - L2 Version 2  
Chandra X-Ray Center

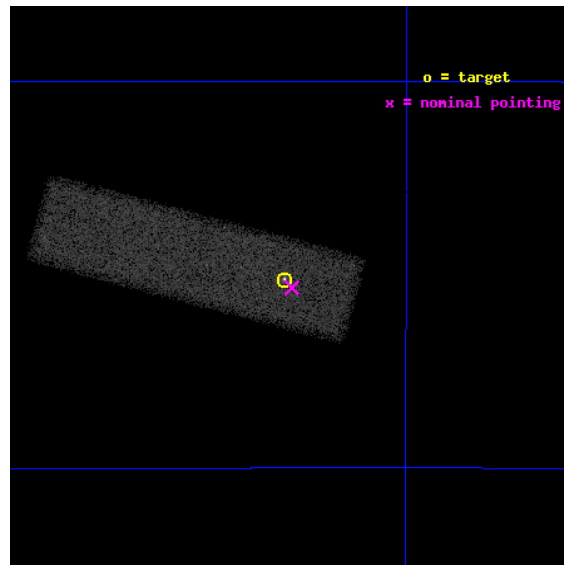
L2 Processing Date : Mar 18 2012

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# 1 Front

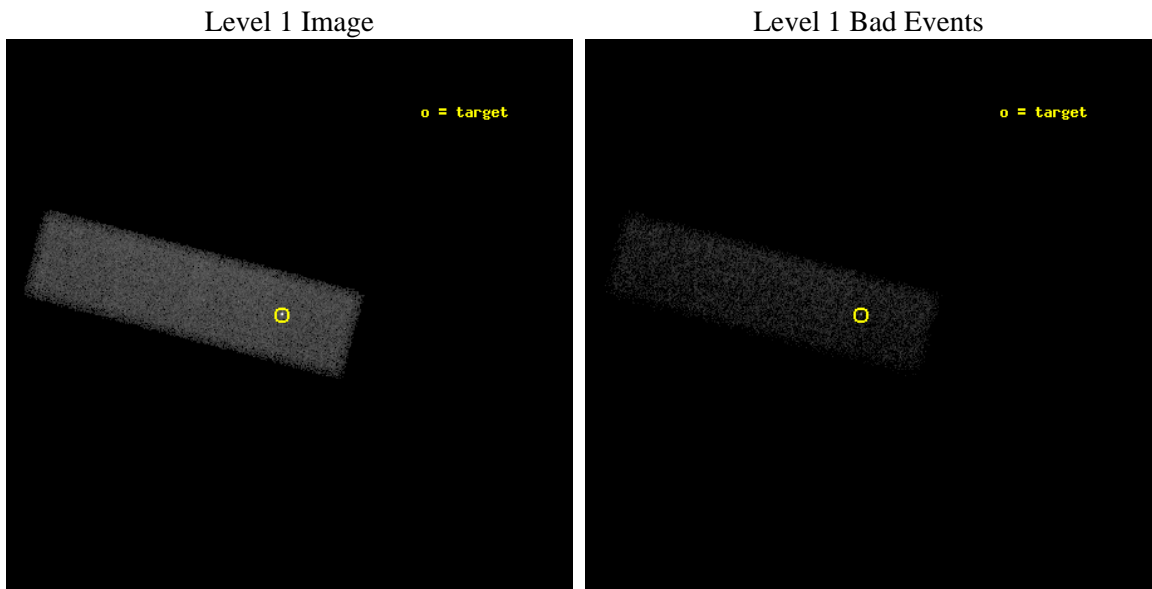
seq_num	401155	Sequence number
obs_id	12414	Observation id
title	Crustal cooling of the neutron star in EXO 0748-676	Proposal title
observer	Nathalie Degenaar	Principal investigator
object	EXO 0748-676	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	117.140833	Observer's specified target RA [deg]
dec_targ	-67.752389	Observer's specified target Dec [deg]
ra_nom	117.13200453076	Nominal RA [deg]
dec_nom	-67.755887446782	Nominal Dec [deg]
roll_nom	194.5741523585	Nominal Roll [deg]
revision	2	Processing version of data
ontime	40026.400596499	Sum of GTIs [s]
livetime	38073.243219347	Livetime [s]
ontime7	40026.400596499	Sum of GTIs [s]
l2events	43522	Number of level 2 events



## 2 OBI

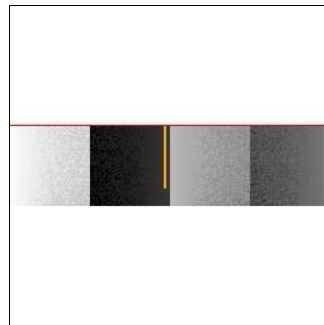
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	40000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	40026.400596499	Sum of GTIs [s]
caldbver	4.4.8	&#160	ontime7	40026.400596499	Sum of GTIs [s]
date	2012-03-18T19:35:17	Date and time of file creation	l1events	86258	Number of level 1 events
revision	2	Processing version of data			

### 2.1.4 Events

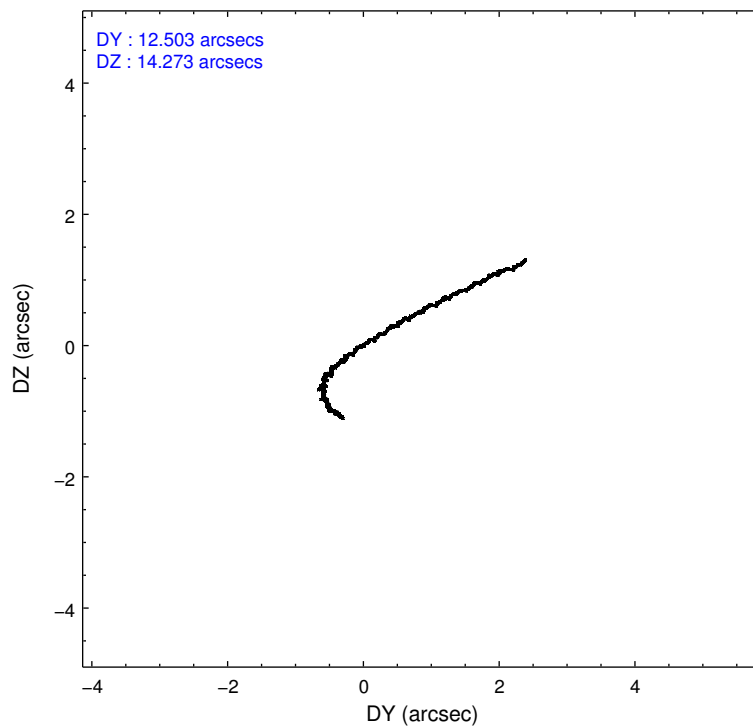
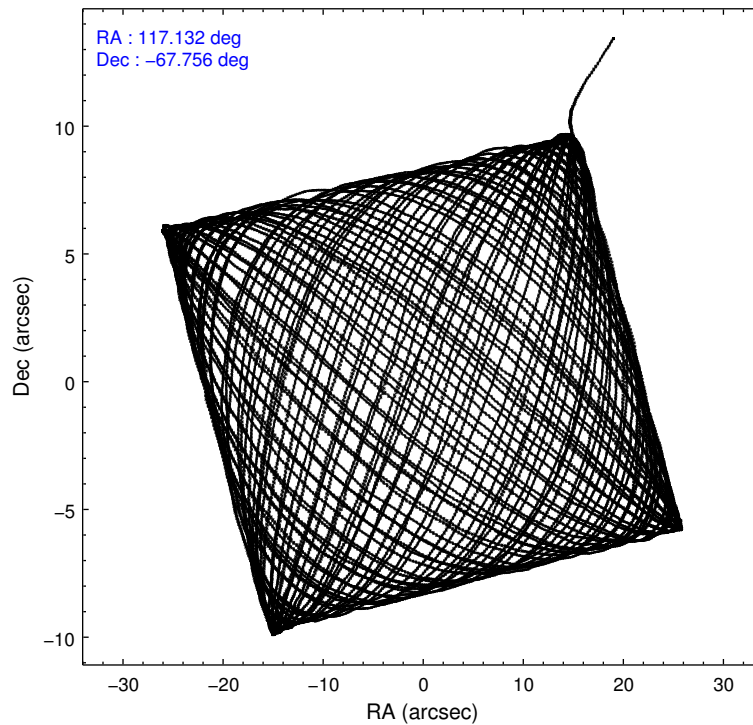
	<b>ccd 7</b>
level 1 events	86258
rejected events	41358
rejected %	47%

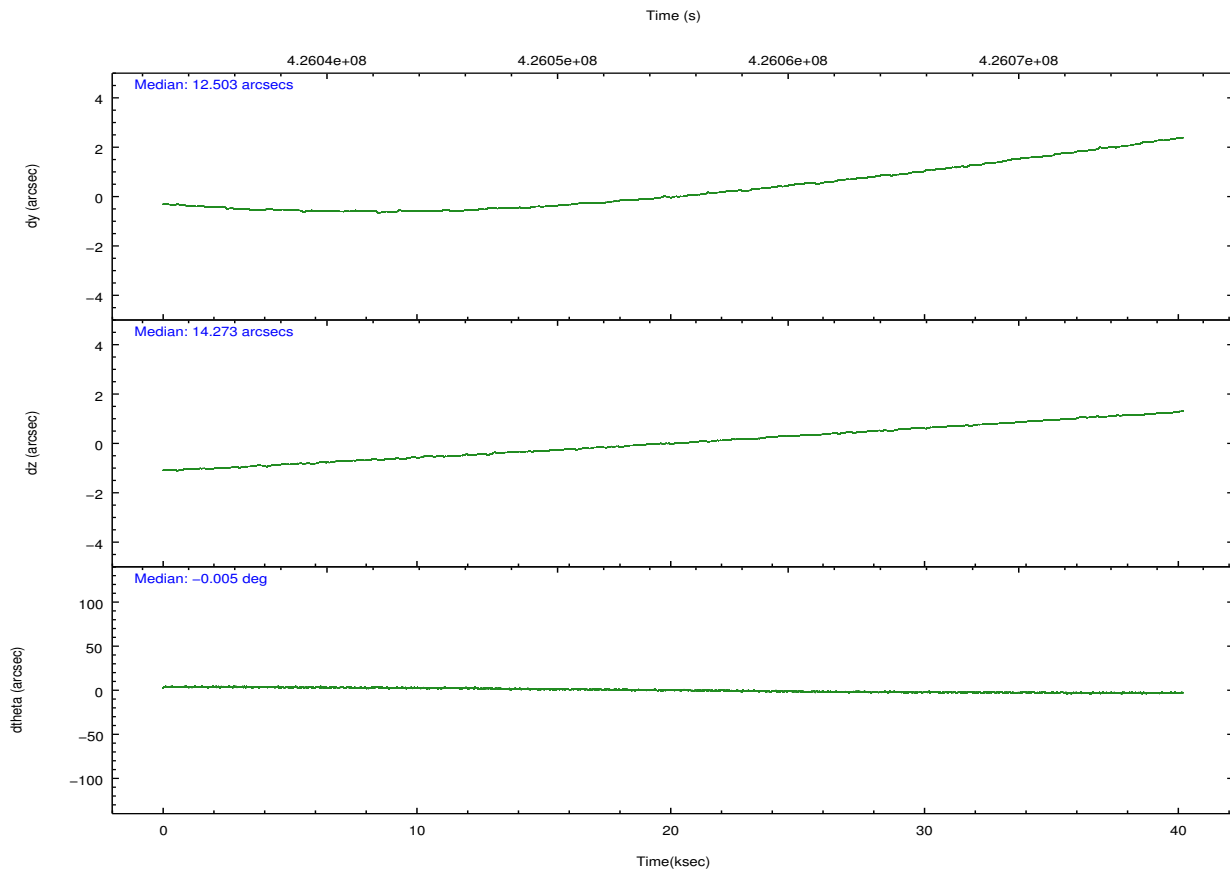
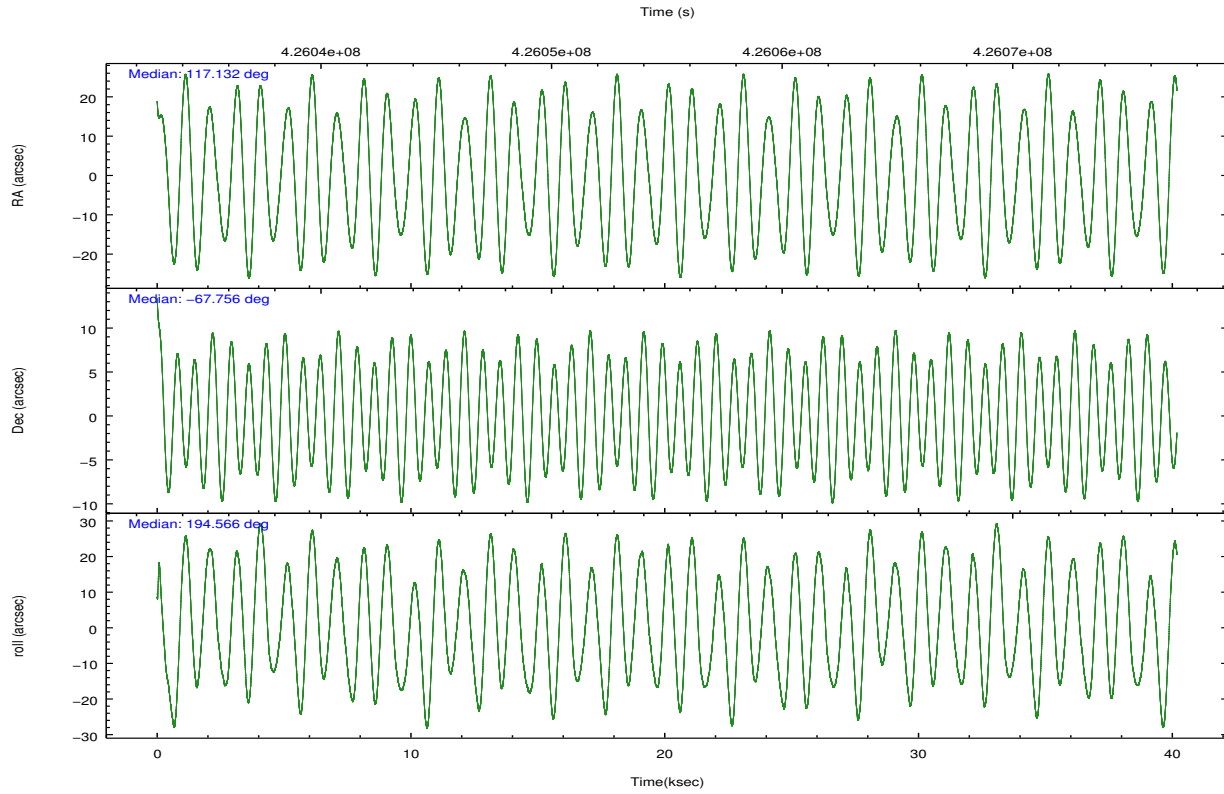
	<b>ccd 7</b>
grade 0 events	5815
	6%
grade 1 events	132
	0%
grade 2 events	9466
	10%
grade 3 events	5149
	5%
grade 4 events	5039
	5%
grade 5 events	8685
	10%
grade 6 events	19431
	22%
grade 7 events	32541
	37%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	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	117.182668	117.1320045307586	Subarray requested	CUSTOM	1/4
[deg] Pointing Dec	-67.736427	-67.75588744678168	Subarray start row	385	385
[deg] Pointing Roll	194.464421	194.5741523585023	Subarray row count	256	256
[s] Window start time (MET)	424483266.184000	424483266.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	440294466.184000	440294466.184000	[s] Primary exposure time	0.000000	0.8
[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)	426035094.184000	426034026.67974			
Observation start date	2011-07-02T23:03:48	2011-07-02T22:47:06			
[s] Observation end time (MET)	426075094.184000	426076317.15695			
Observation end date	2011-07-03T10:10:28	2011-07-03T10:31:57			
Read mode	TIMED	TIMED			

## 2.3 Aspect



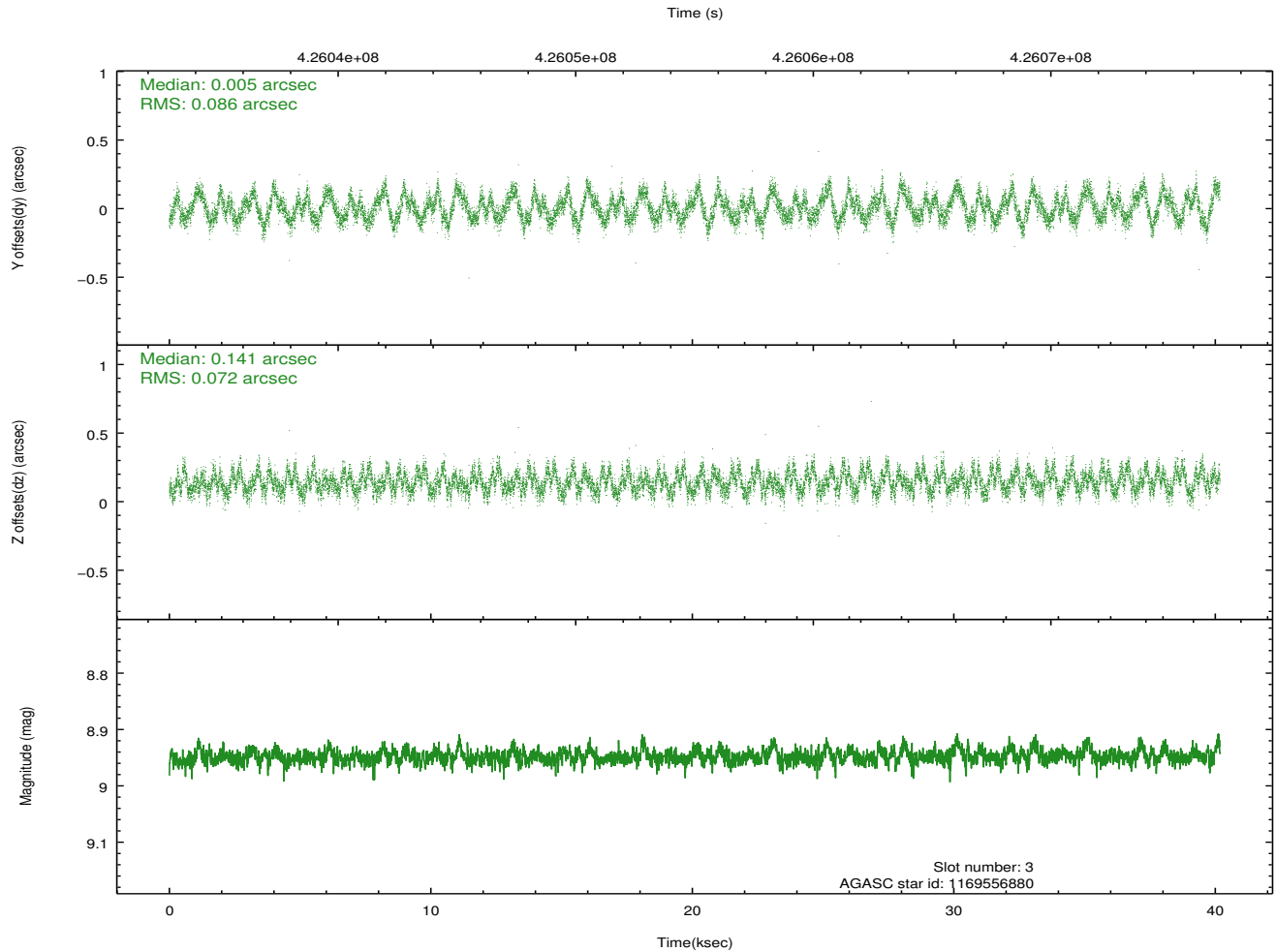
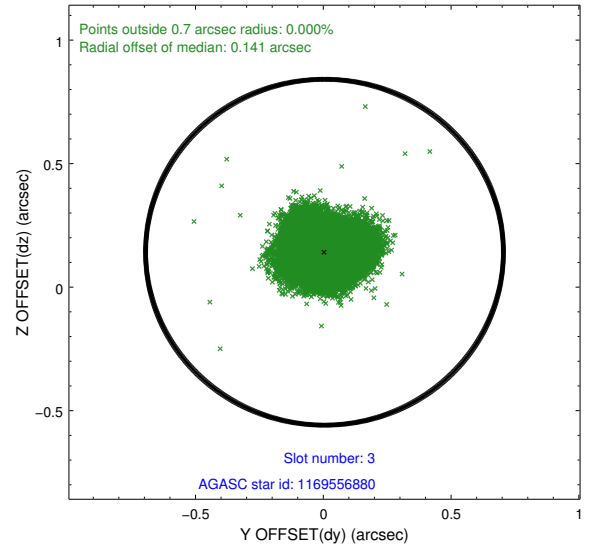
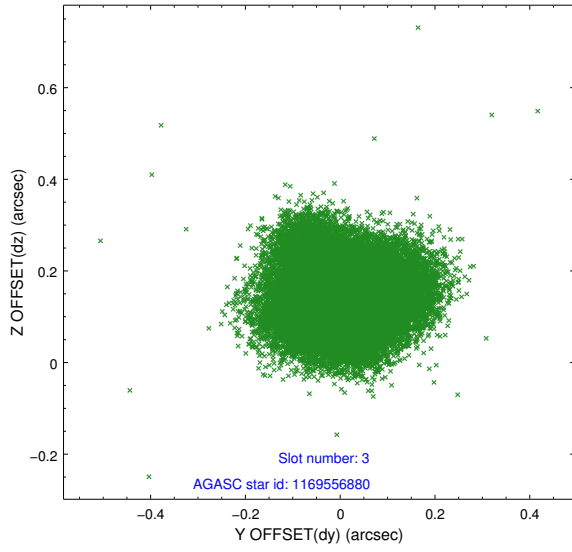


### Slot Statistics

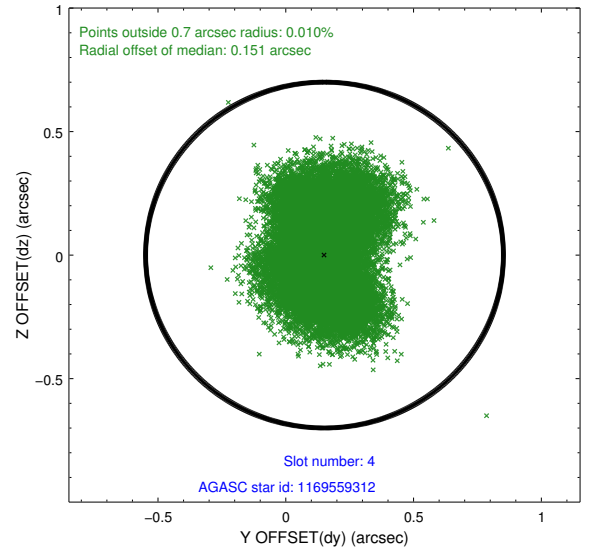
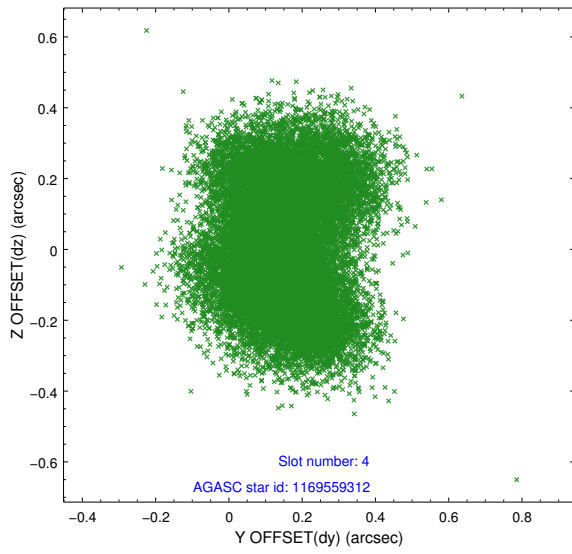
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-4	7.01	9801	0.124	0.009	0.021	0.041	0.000000	0.000000	2147.73	173.10
1	FID	ACIS-S-5	7.05	9800	-0.163	0.003	0.030	0.062	0.000000	0.000000	-1818.74	166.57
2	FID	ACIS-S-6	7.16	9800	0.011	0.001	0.020	0.035	0.000000	0.000000	395.86	810.32
3	GUIDE	1169556880	8.95	19591	0.005	0.141	0.122	0.181	118.476472	-67.455164	-1977.29	-516.20
4	GUIDE	1169559312	9.97	19441	0.151	0.000	0.225	0.337	117.264973	-67.339053	-466.94	-1355.73
5	GUIDE	1203258824	9.88	19564	0.007	0.041	0.163	0.288	118.613315	-67.511932	-2103.28	-268.51
6	GUIDE	1203245384	8.56	19600	-0.176	-0.224	0.091	0.149	117.096059	-68.354351	666.69	2125.59
7	GUIDE	1203247528	9.77	19529	0.007	0.042	0.220	0.328	119.162312	-68.080327	-2256.00	1904.82

## 2.4 Star Slots

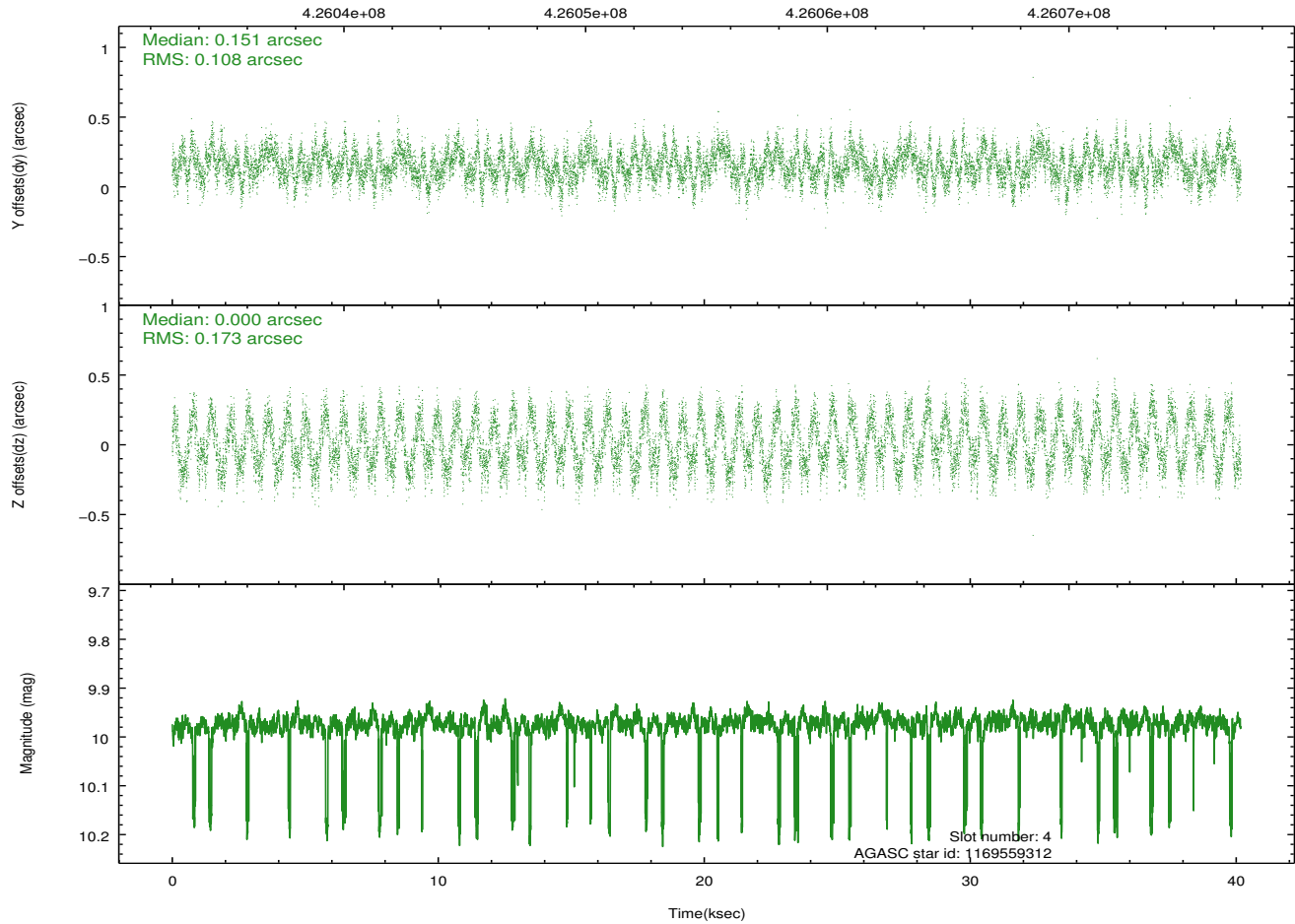
### 2.4.1 Slot 3



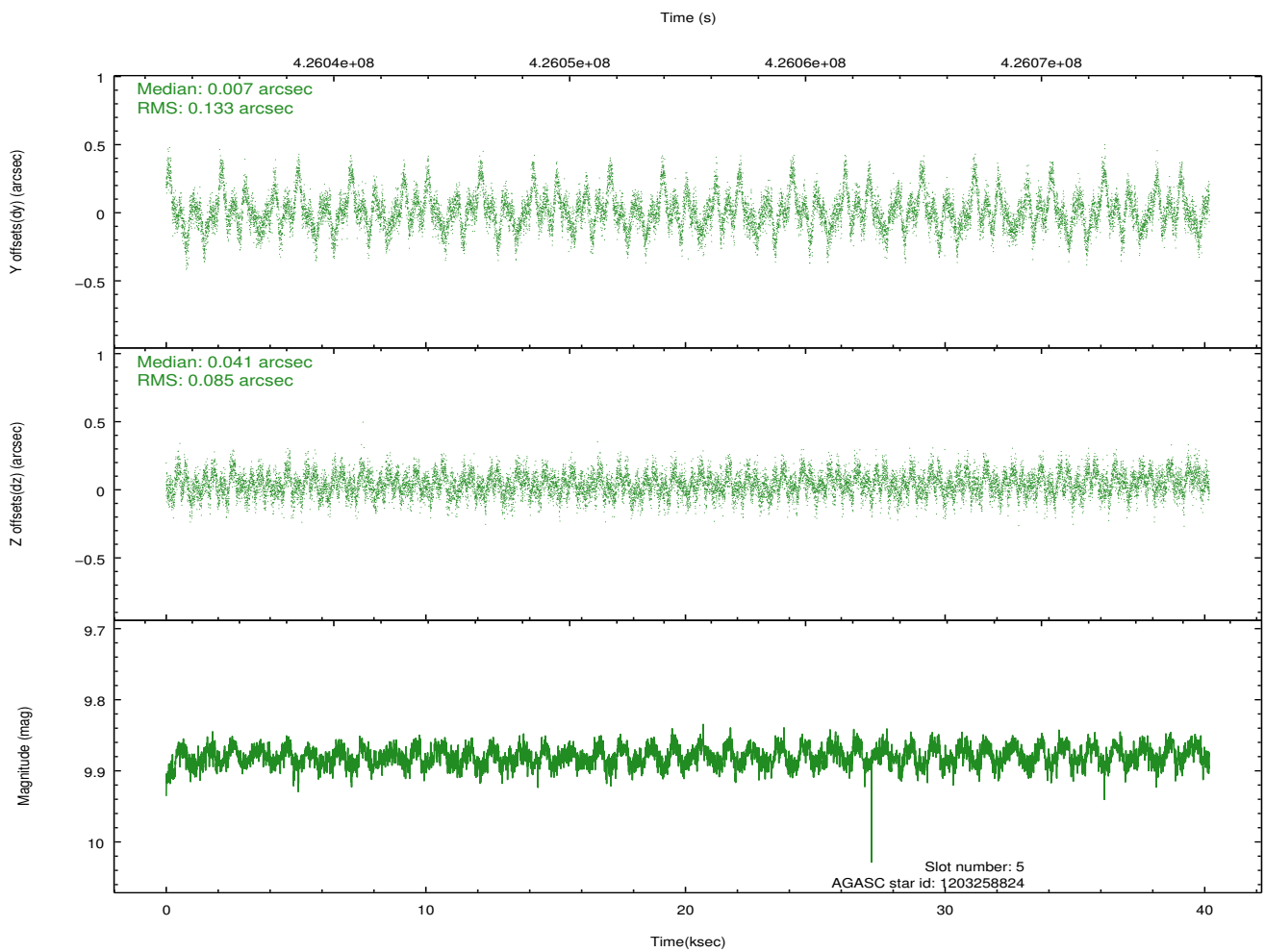
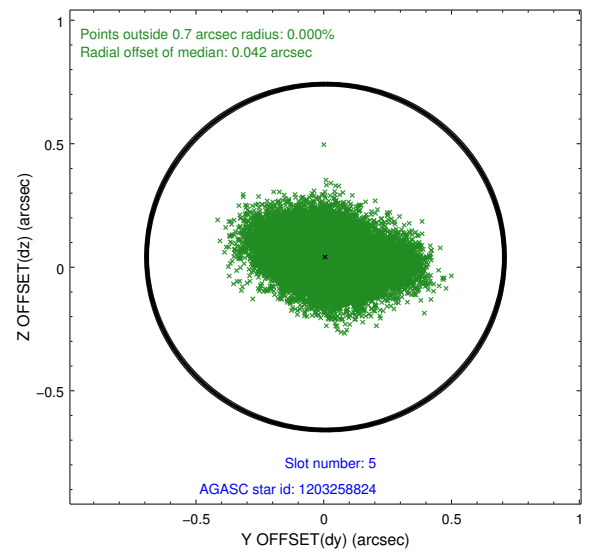
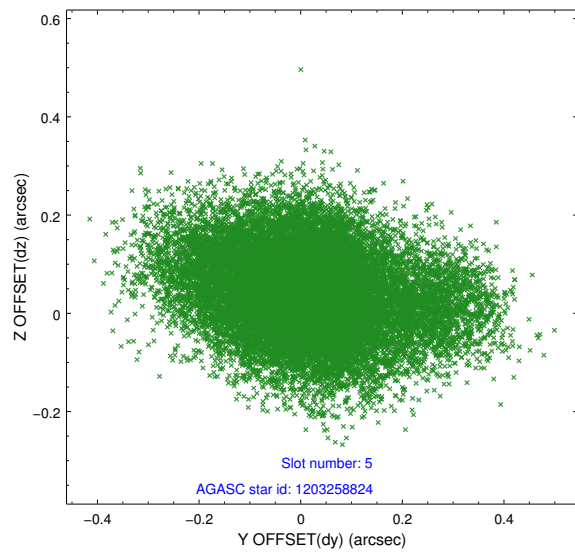
## 2.4.2 Slot 4



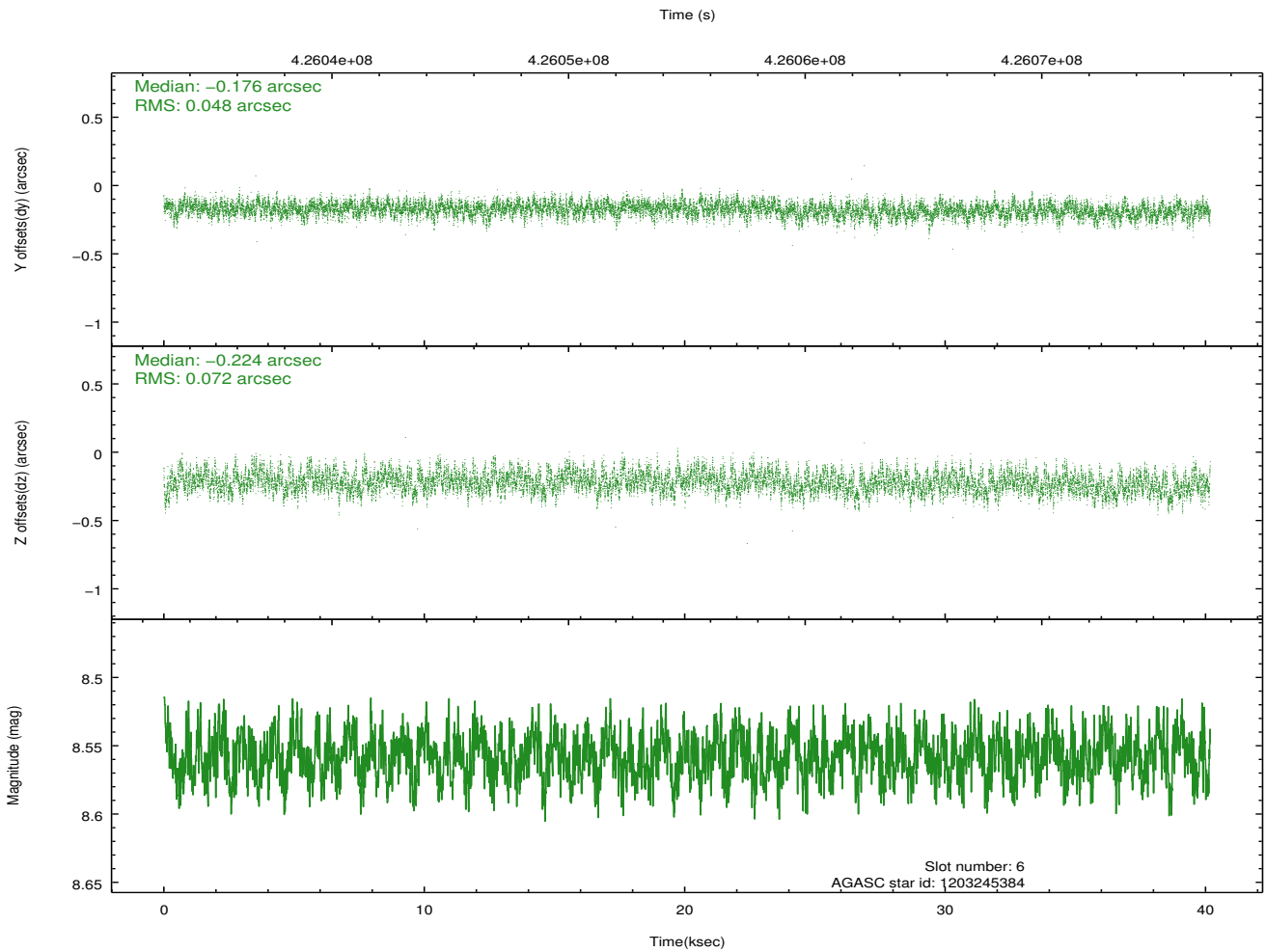
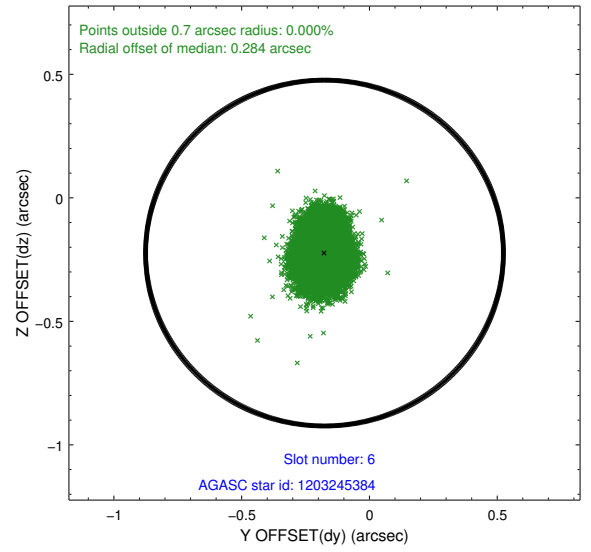
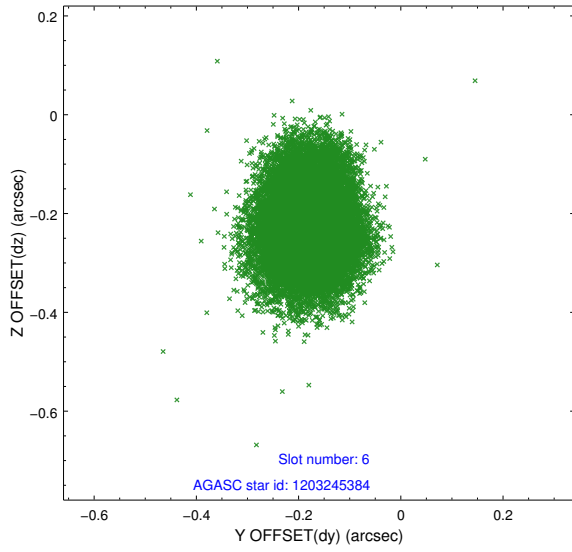
Time (s)



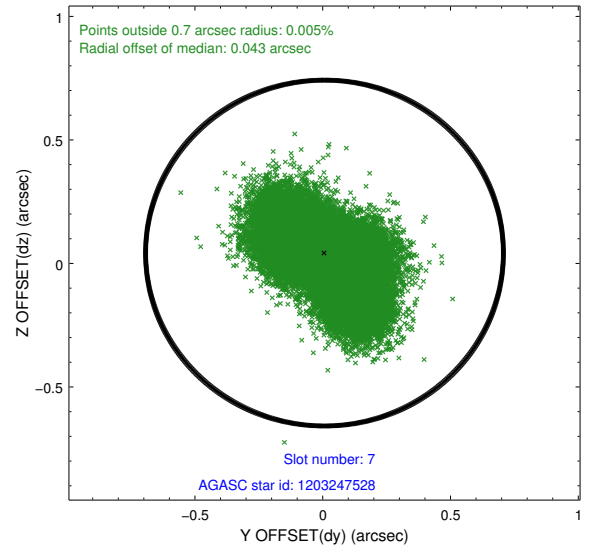
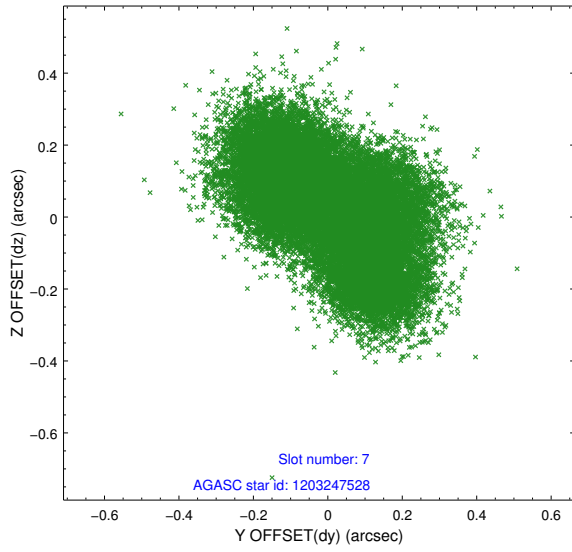
### 2.4.3 Slot 5



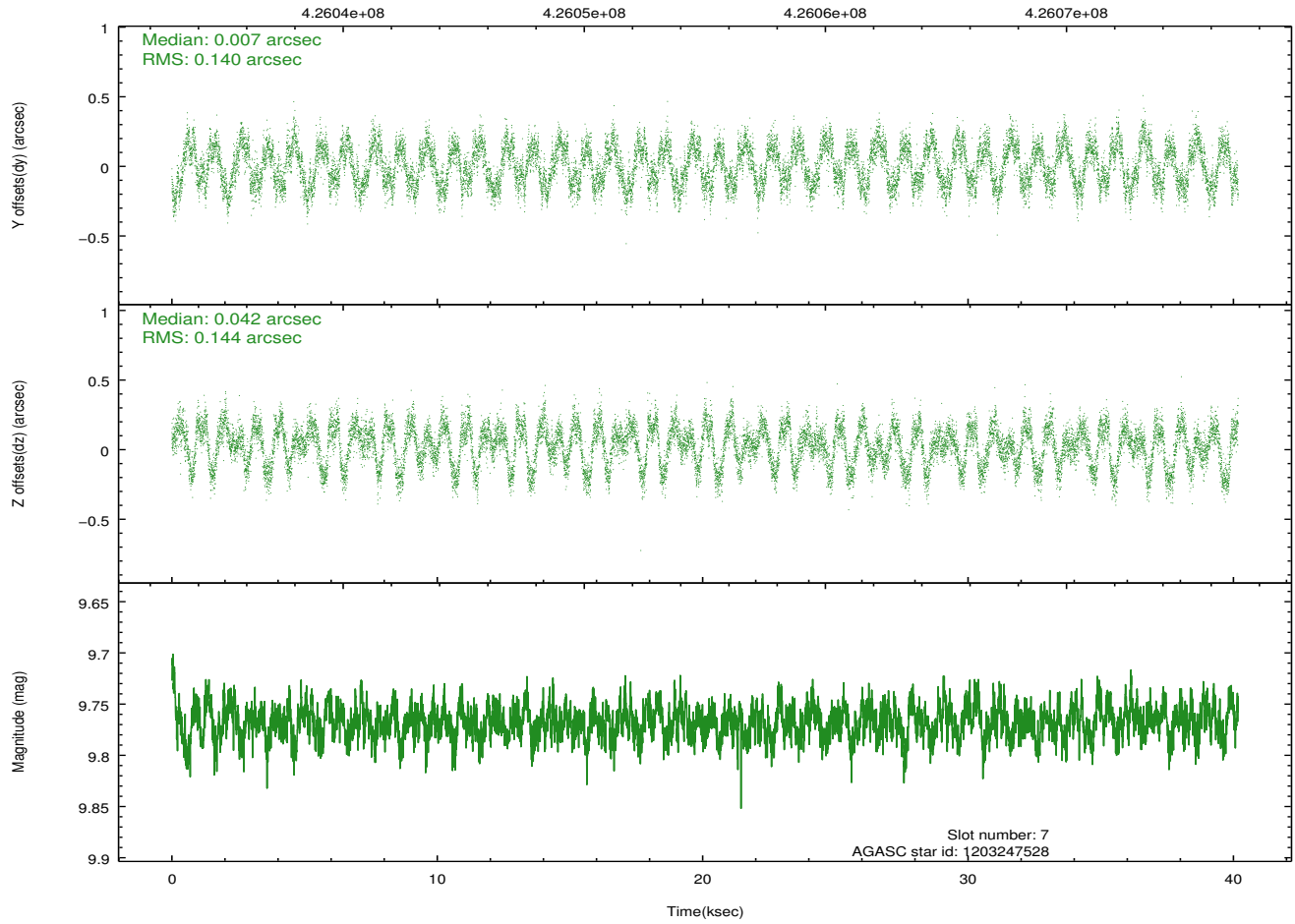
## 2.4.4 Slot 6



## 2.4.5 Slot 7

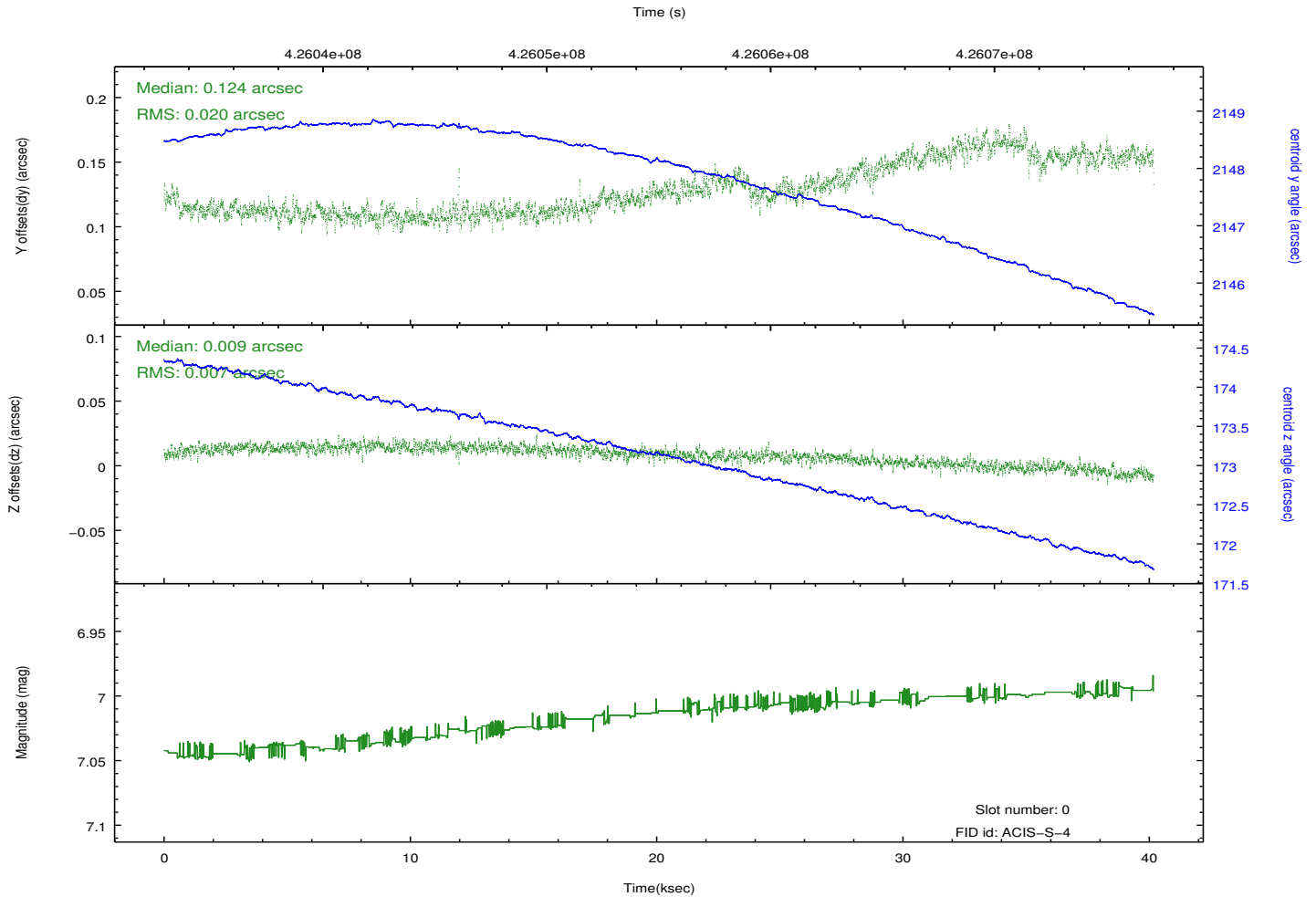
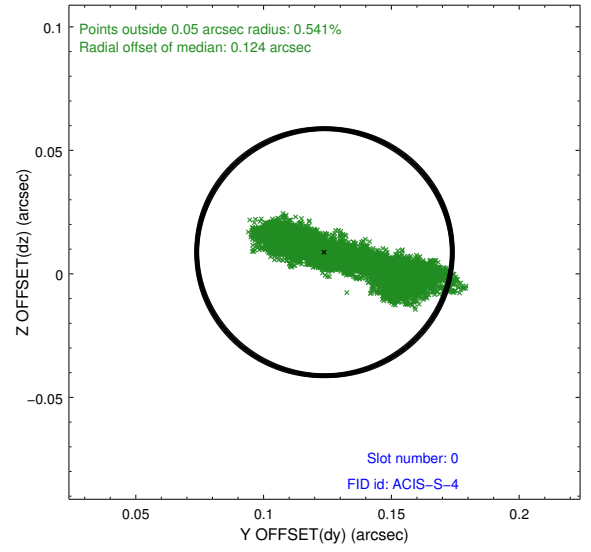
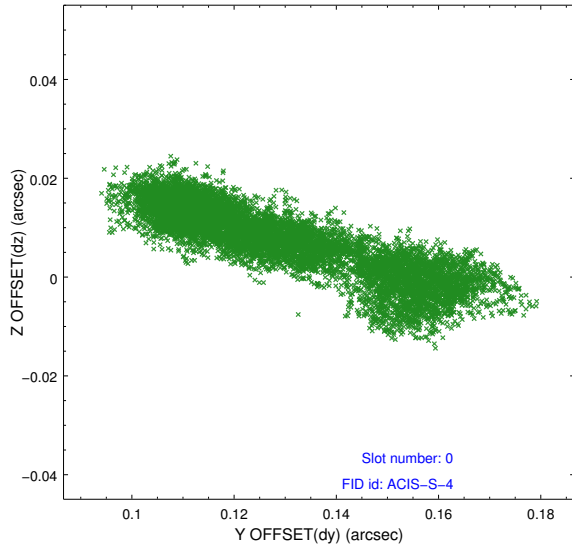


Time (s)

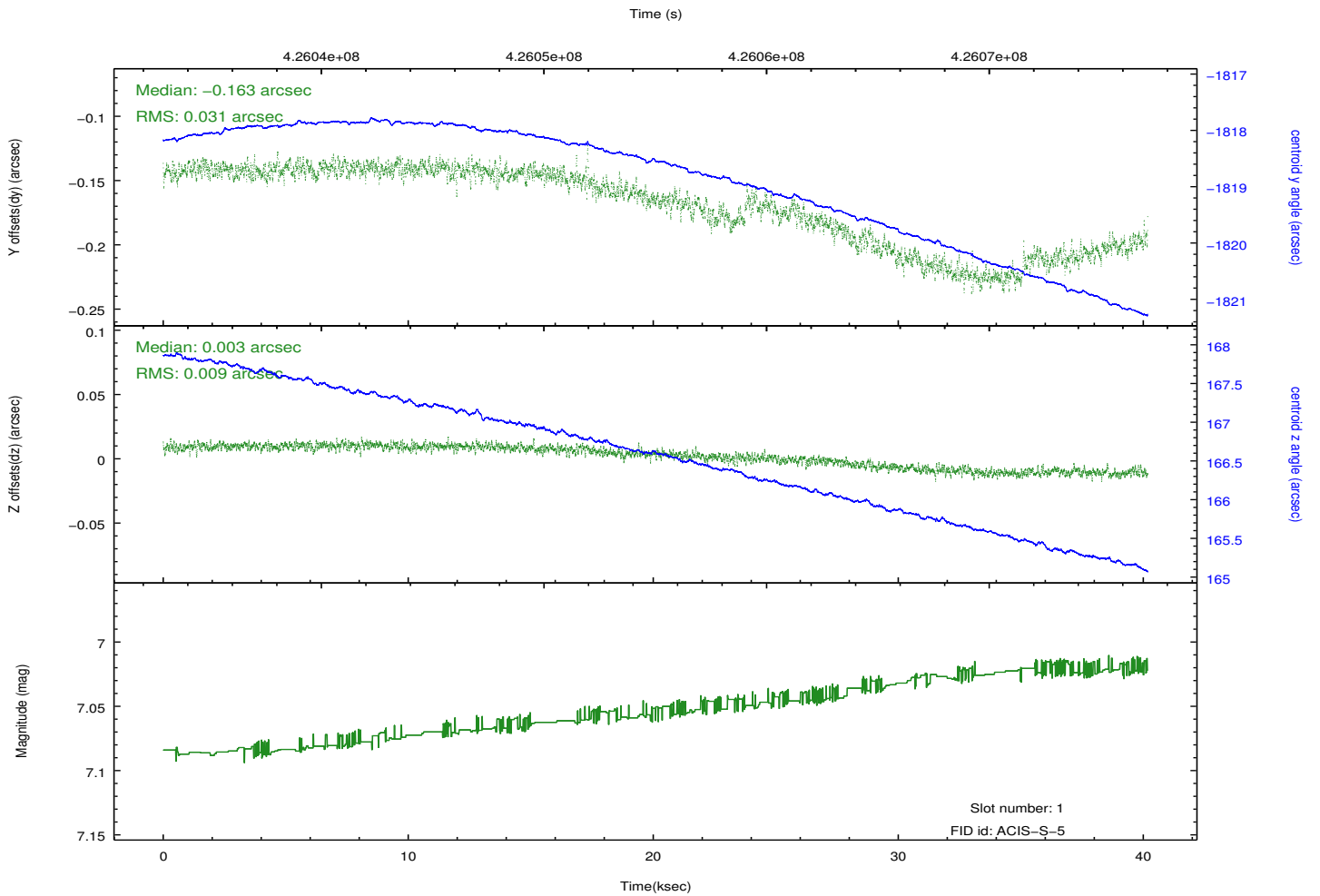
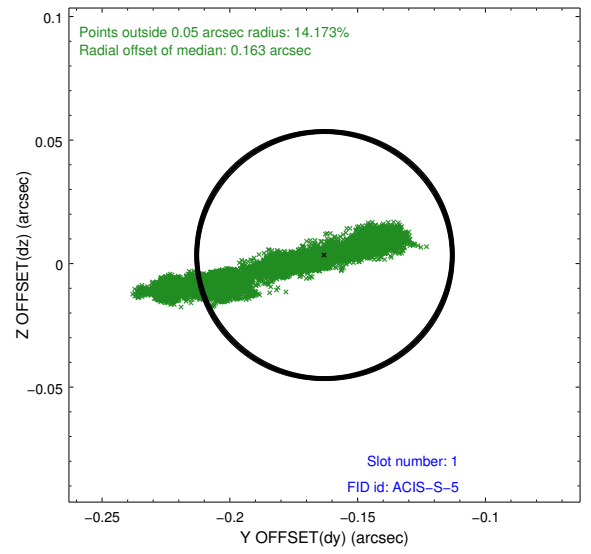
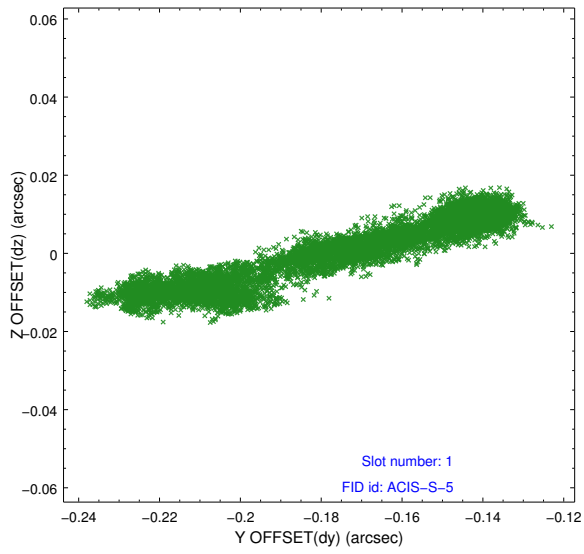


## 2.5 FID Slots

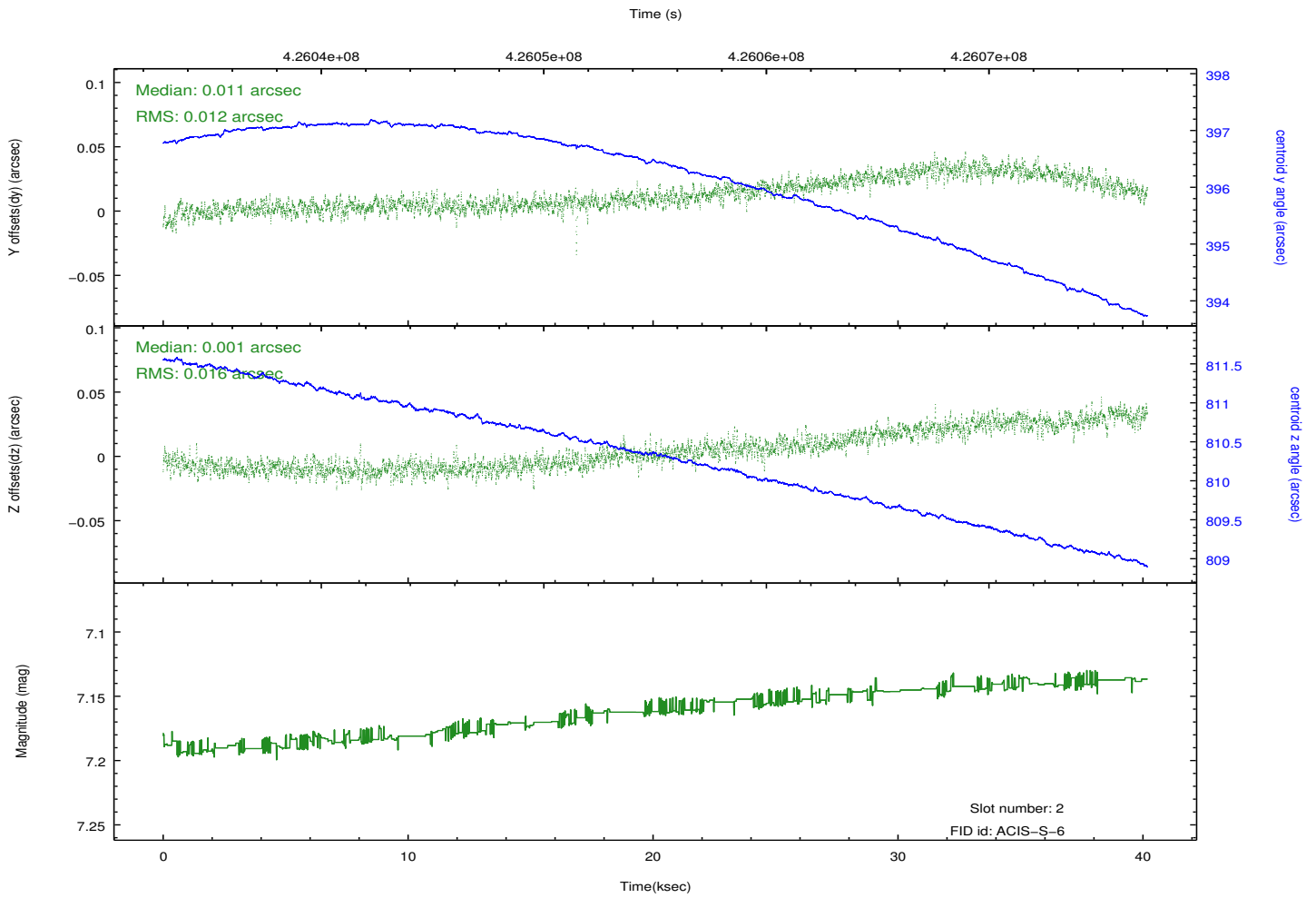
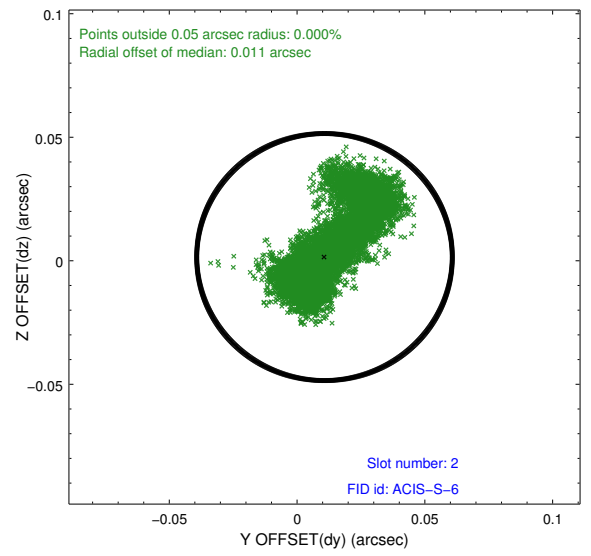
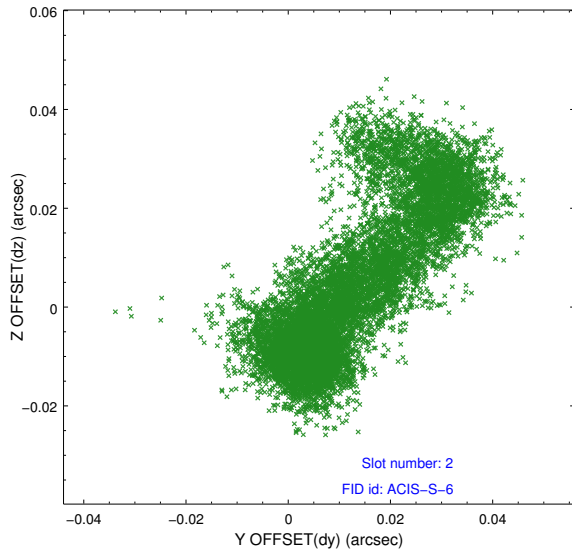
### 2.5.1 Slot 0



## 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)	2012.03.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	40.026400596499

## A.2 Comments

Window constraint met.