

# V&V Reference Report

## L2 ASCDS Version : 8.1.2

Observation 133 - L2 Version 3  
Chandra X-Ray Center

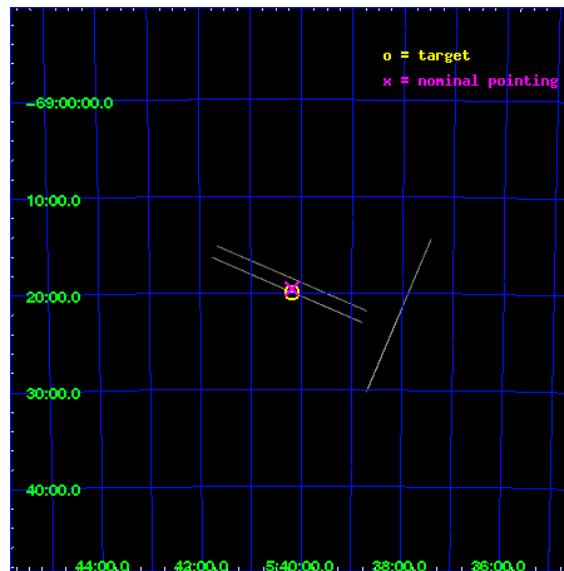
L2 Processing Date : Dec 17 2009

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# 1 Front

seq_num	590001	Sequence number
obs_id	133	Observation id
title	VERIFICATION OF AXAF TIMING CAPABILITY	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	PSR B0540-69	Source name
ra_targ	85.04625	Observer's specified target RA
dec_targ	-69.332	Observer's specified target Dec
ra_nom	85.046470343944	Nominal RA
dec_nom	-69.326305463647	Nominal Dec
roll_nom	113.1835669436	Nominal Roll
revision	3	Processing version of data
ontime	10148.75	Sum of GTIs [s]
livetime	10109.106445312	Livetime [s]
ontime0	10148.75	Sum of GTIs [s]
ontime1	10148.75	Sum of GTIs [s]
ontime2	10148.75	Sum of GTIs [s]
ontime3	10148.75	Sum of GTIs [s]
ontime6	10148.75	Sum of GTIs [s]
ontime7	10148.75	Sum of GTIs [s]
l2events	138431	Number of level 2 events

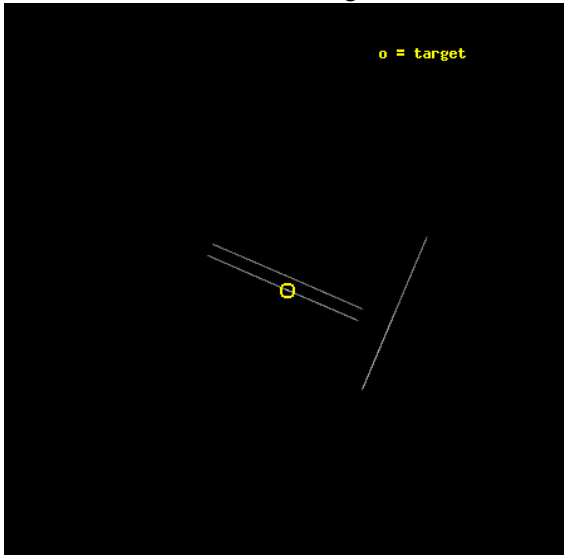


## 2 OBI

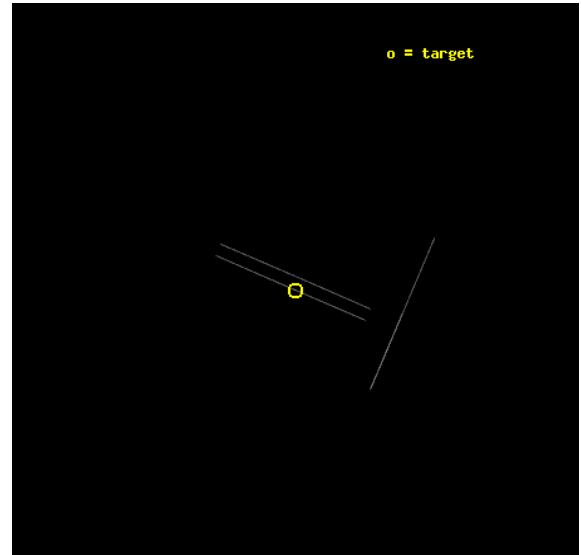
### 2.1 OBI

#### 2.1.1 Images

Level 1 Image



Level 1 Bad Events



## 2.1.2 Parameters

obi_num	1	Obi number	sched_exp_time	10000.000000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	10148.75	Sum of GTIs [s]
caldbver	4.1.4	&#160	ontime0	10148.75	Sum of GTIs [s]
date	2009-12-17T09:26:38	Date and time of file creation	ontime1	10148.75	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	10148.75	Sum of GTIs [s]
			ontime3	10148.75	Sum of GTIs [s]
			ontime6	10148.75	Sum of GTIs [s]
			ontime7	10148.75	Sum of GTIs [s]
			l1events	161840	Number of level 1 events

## 2.1.3 Events

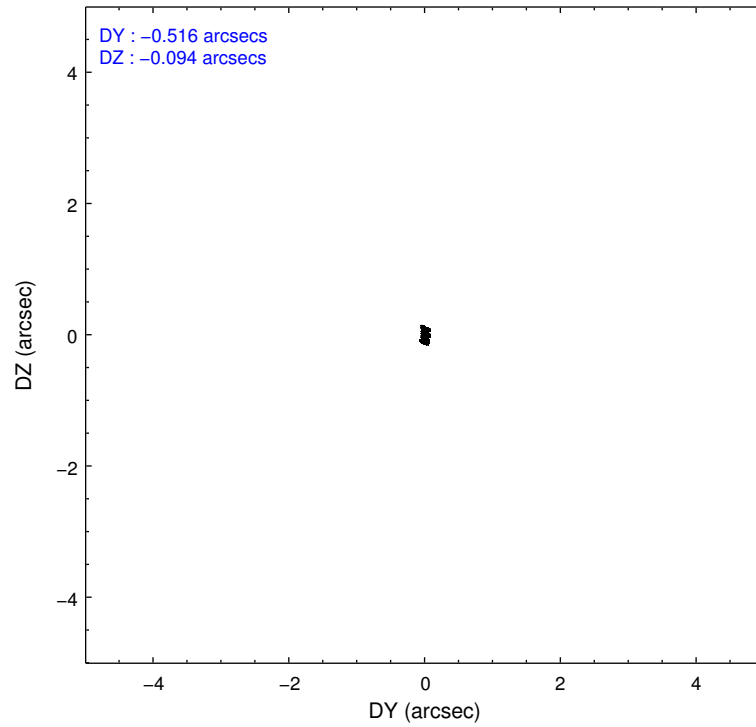
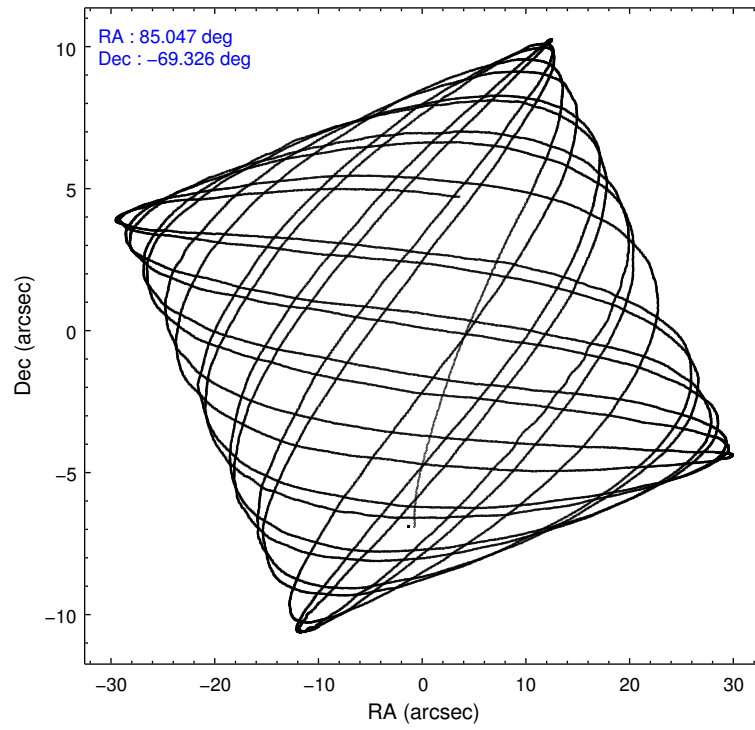
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	14223	15754	14655	55088	16331	45789
rejected events	2050	2129	2028	2546	1910	5615
rejected %	14%	13%	13%	4%	11%	12%

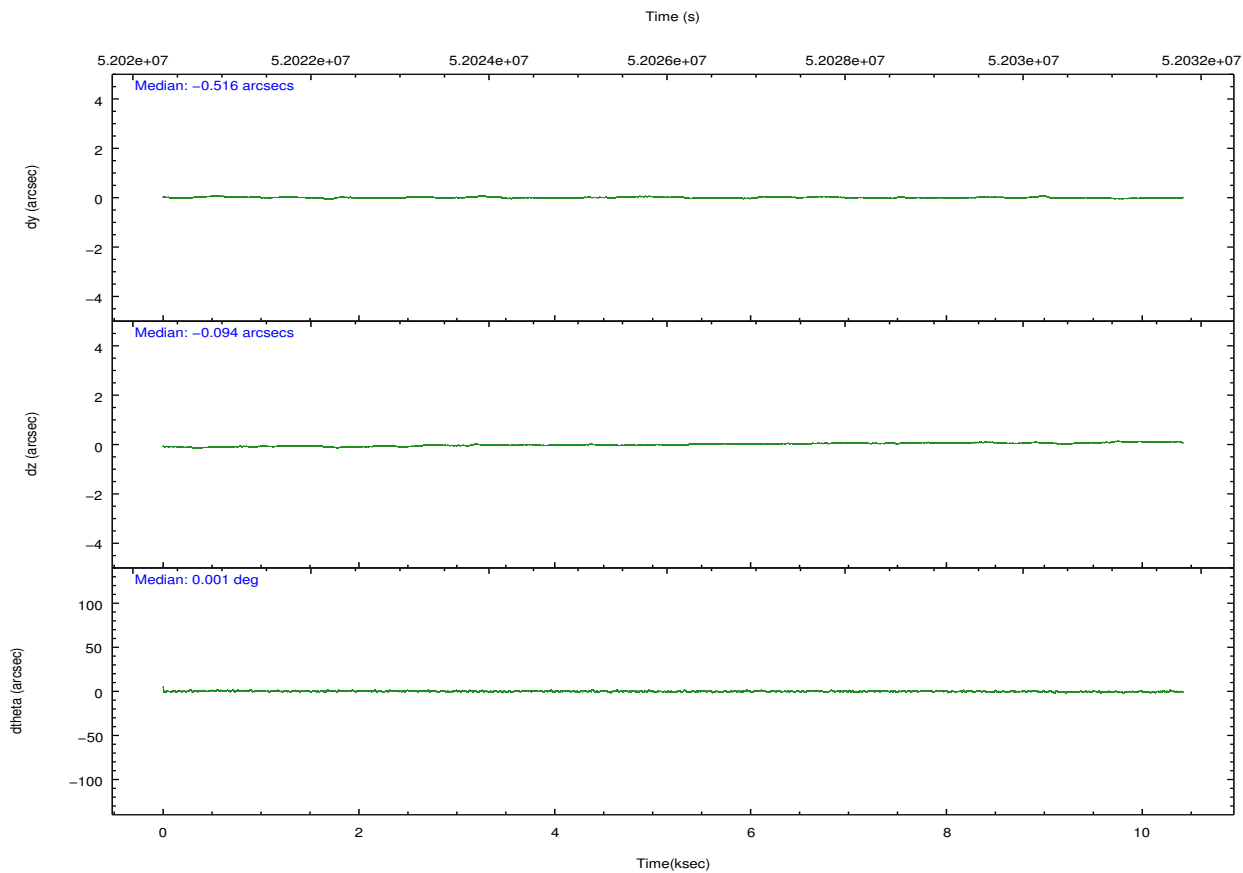
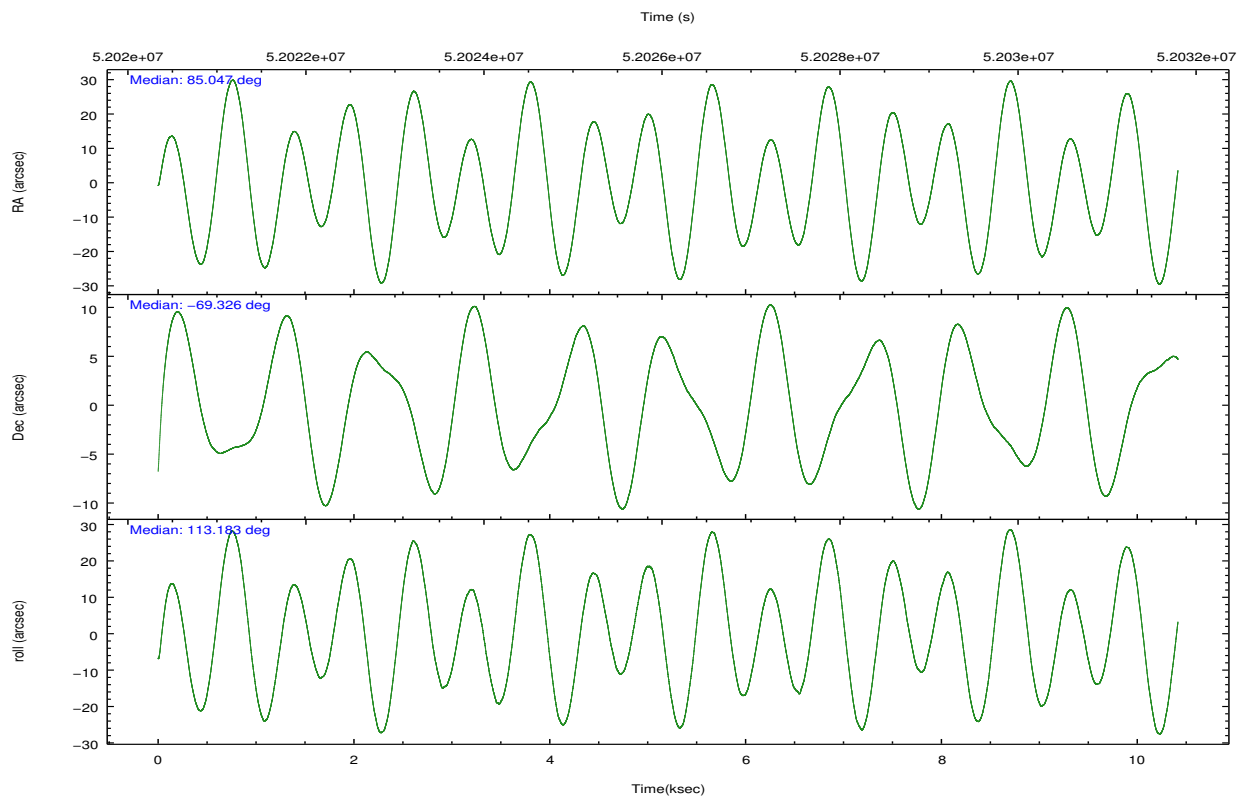
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	3708	5613	4237	33934	4913	5806
	26%	35%	28%	61%	30%	12%
grade 1 events	47	71	61	208	54	109
	0%	0%	0%	0%	0%	0%
grade 2 events	1934	2223	2057	7835	2689	8696
	13%	14%	14%	14%	16%	18%
grade 3 events	2653	2059	2468	4164	2580	4653
	18%	13%	16%	7%	15%	10%
grade 4 events	2369	2115	2562	3821	2497	4103
	16%	13%	17%	6%	15%	8%
grade 5 events	1997	2057	1966	2321	1855	5477
	14%	13%	13%	4%	11%	11%
grade 6 events	1515	1616	1304	2805	1743	16945
	10%	10%	8%	5%	10%	37%
grade 7 events	0	0	0	0	0	0
	0%	0%	0%	0%	0%	0%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	CC33_GRADED	CC33_GRADED	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	85.108534	85.04647034394415	Subarray requested	NONE	NONE
Pointing Dec	-69.343679	-69.32630546364734	Alternating exposures requested	N	N
Pointing Roll	113.032957	113.1835669435951	Primary exposure time	0.000000	0
SIM focus pos (mm)	-0.782348	-0.7362356599963374			
SIM defocus (mm)	0	0.04611255558364913			
SIM translation stage pos (mm)	-233.592463	-233.5874344608287			
SIM translation stage offset (mm)	0	-0.005018542100998502			
Observation start time	52021275.184000	52019386.118931			
Observation start date	1999-08-26T02:20:11	1999-08-26T01:49:46			
Observation end time	52031275.184000	52031409.369364			
Observation end date	1999-08-26T05:06:51	1999-08-26T05:10:09			
Read mode	CONTINUOUS	CONTINUOUS			

## 2.3 Aspect



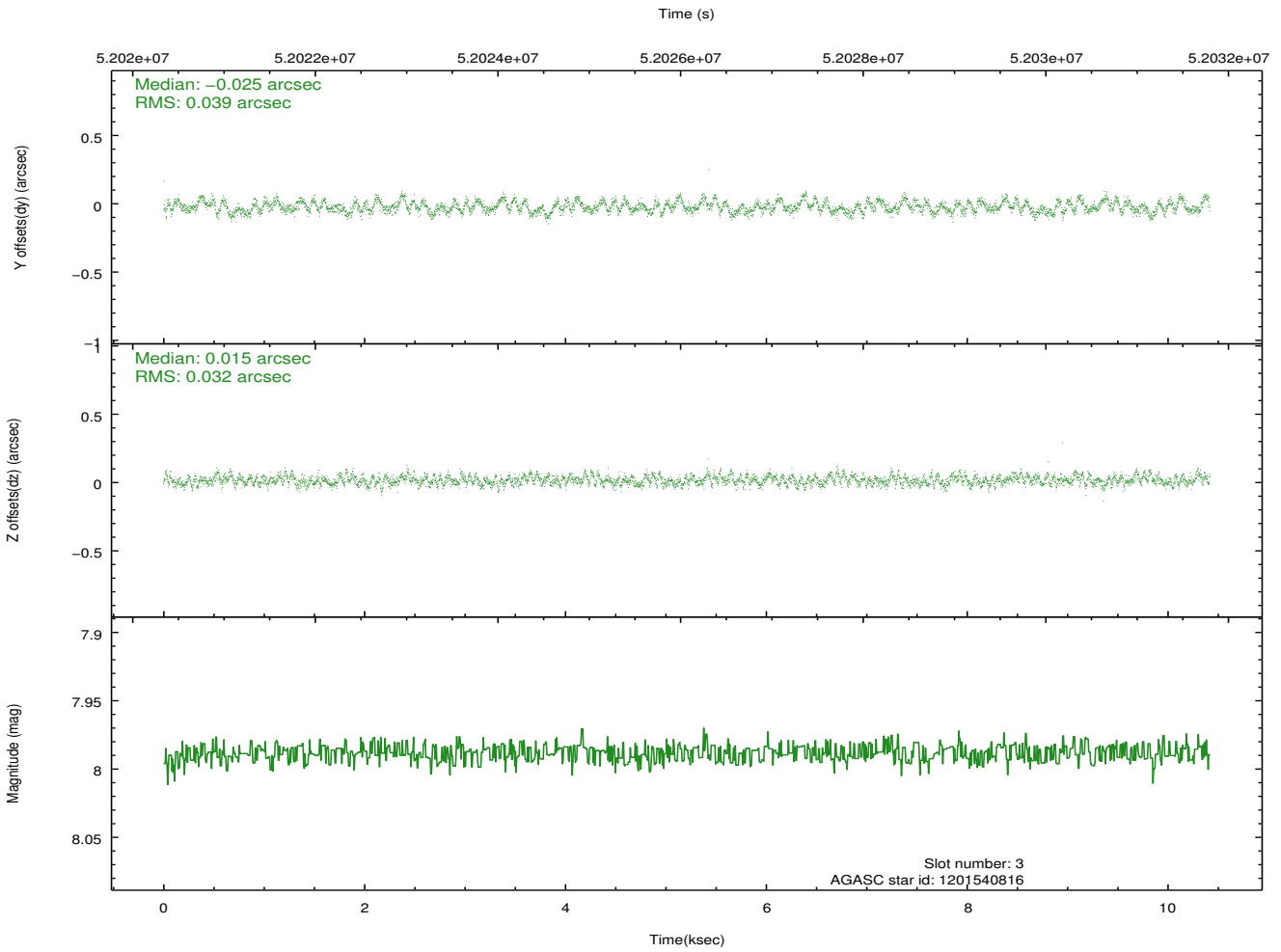
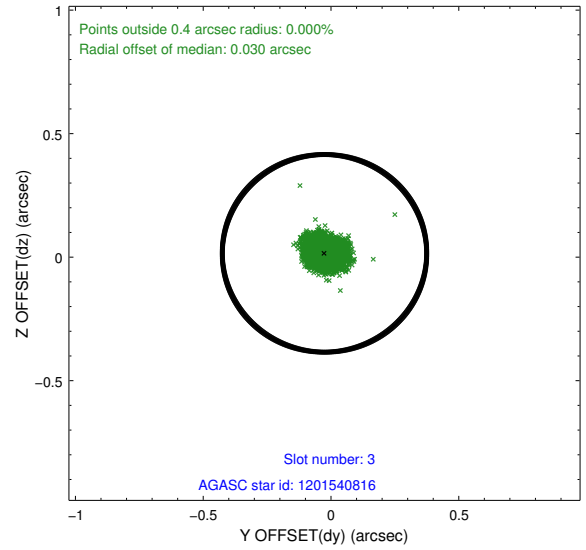
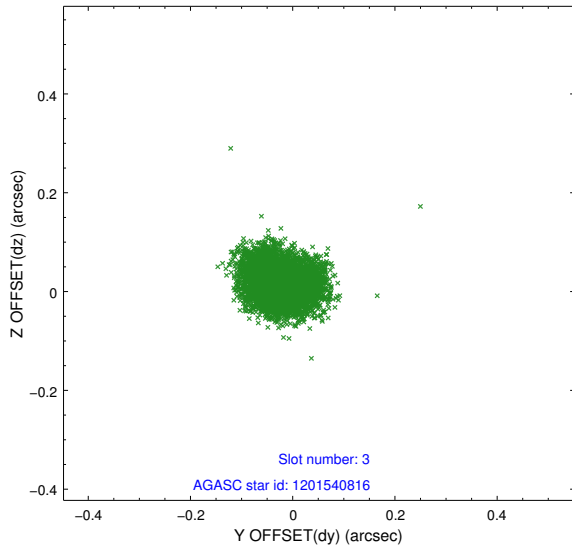


### Slot Statistics

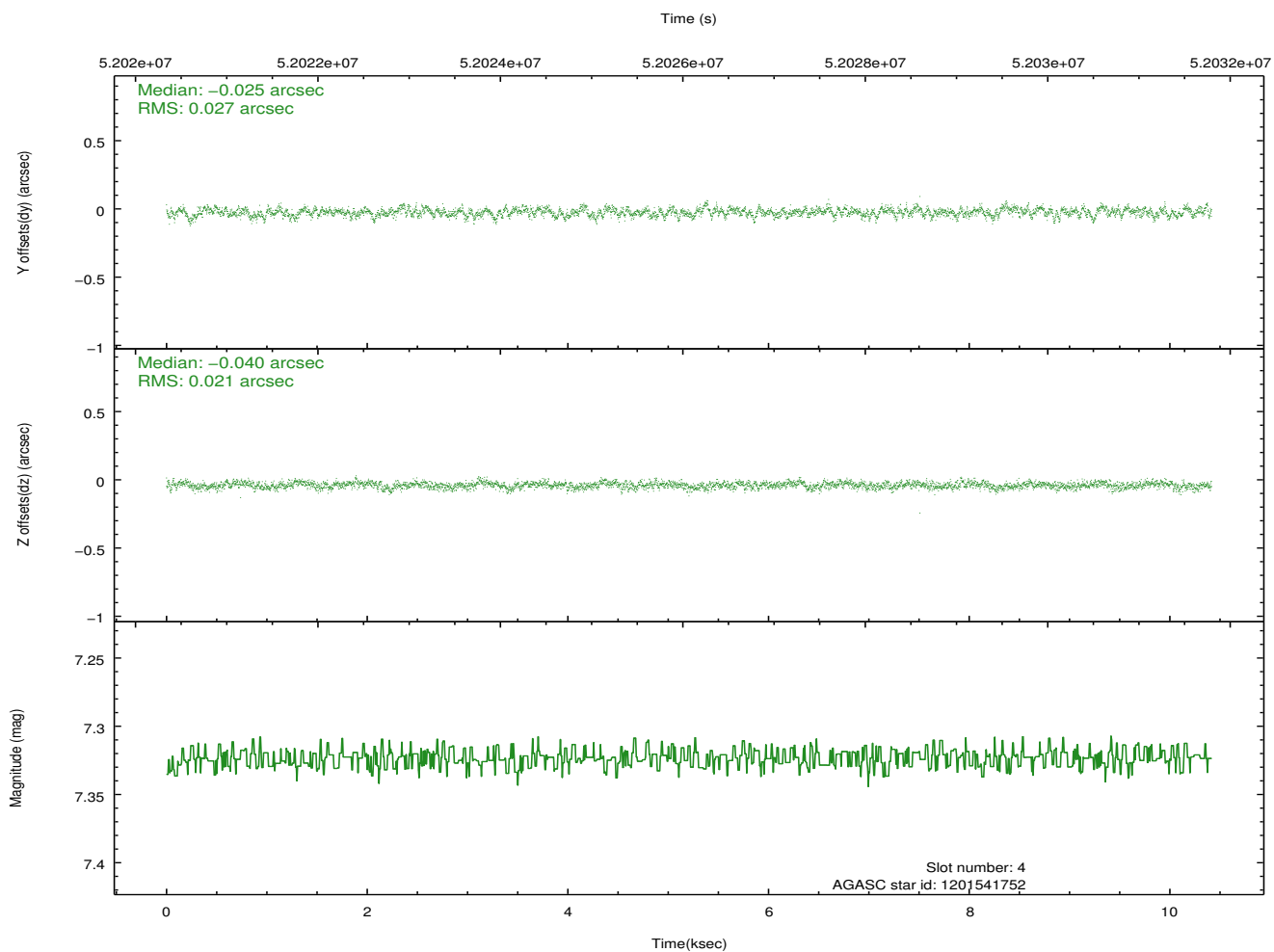
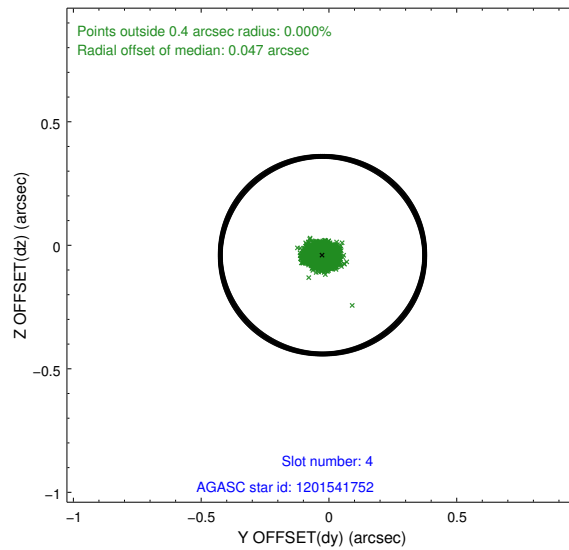
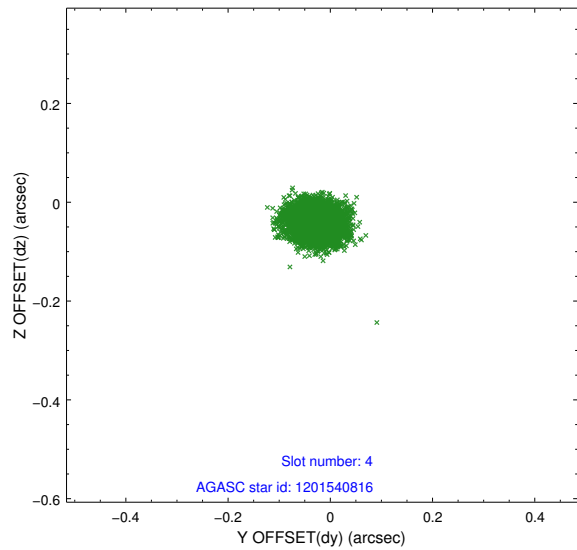
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.21	5081	-0.031	0.056	0.009	0.017	0.000000	0.000000	-753.85	-829.38
1	FID	ACIS-I-4	7.24	5081	0.134	0.011	0.007	0.014	0.000000	0.000000	2160.41	1076.52
2	FID	ACIS-I-5	7.23	5082	-0.205	0.001	0.009	0.015	0.000000	0.000000	-1807.53	1074.76
3	GUIDE	1201540816	7.99	5080	-0.025	0.015	0.054	0.084	86.998494	-69.749817	-2300.15	-1580.57
4	GUIDE	1201541752	7.32	5080	-0.025	-0.040	0.036	0.061	85.373891	-70.033762	-2414.87	671.84
5	GUIDE	1201019200	9.49	5076	0.017	-0.007	0.082	0.131	84.213591	-68.777384	2324.31	279.26
6	GUIDE	1200886544	9.58	5071	0.036	0.030	0.094	0.153	82.995430	-69.160893	1621.92	2251.07
7	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

## 2.4 Star Slots

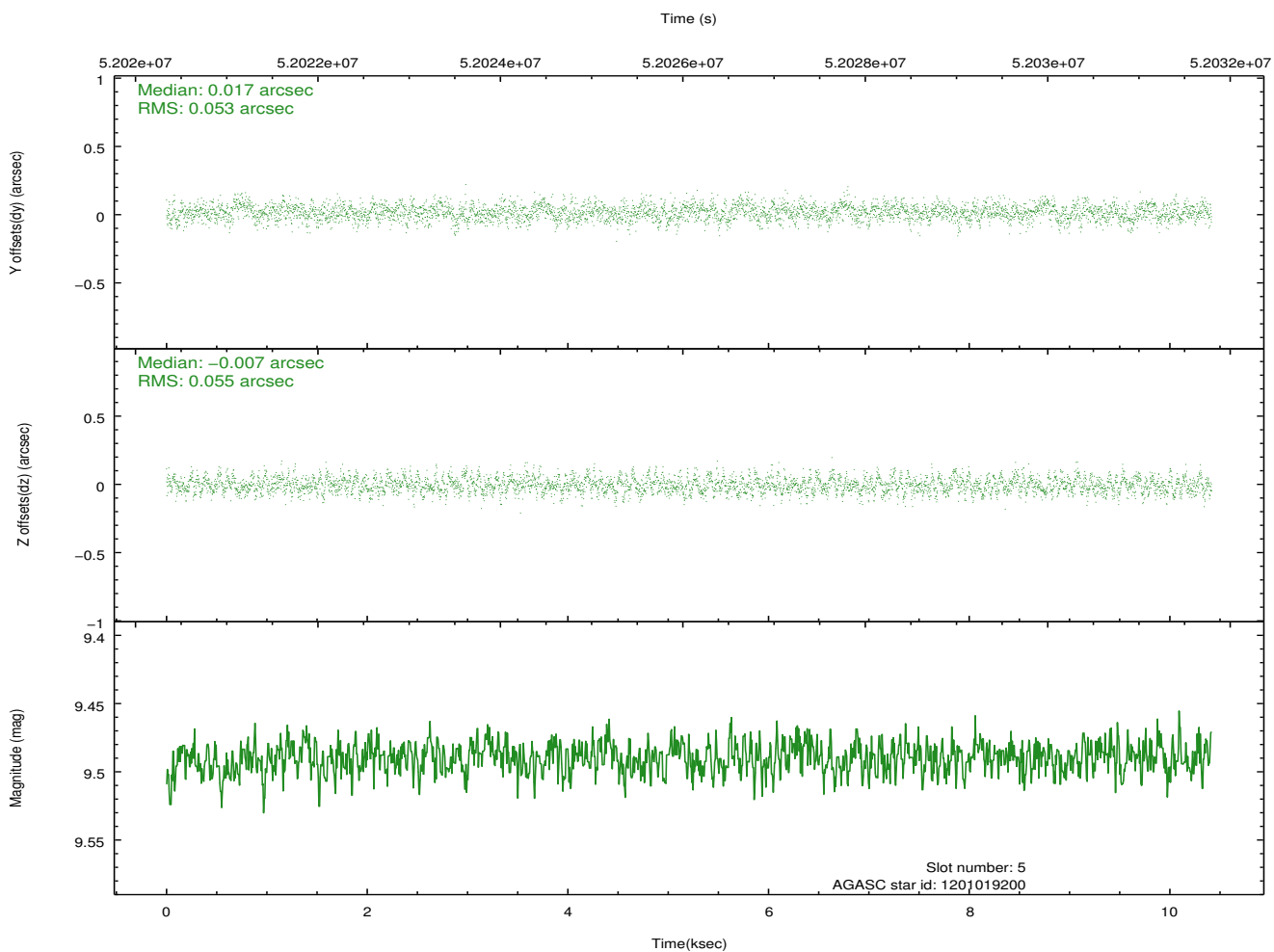
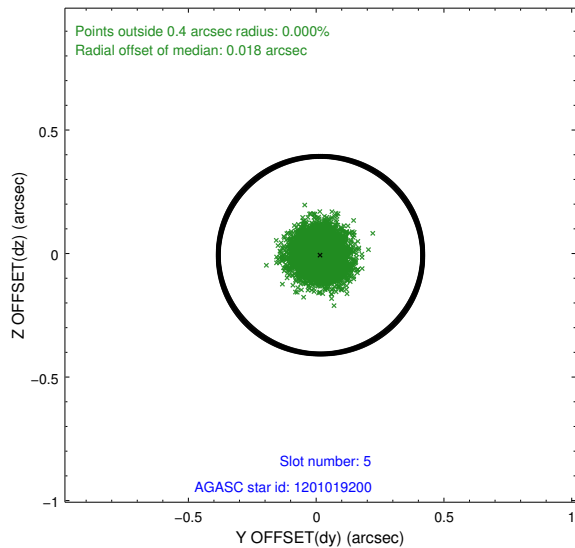
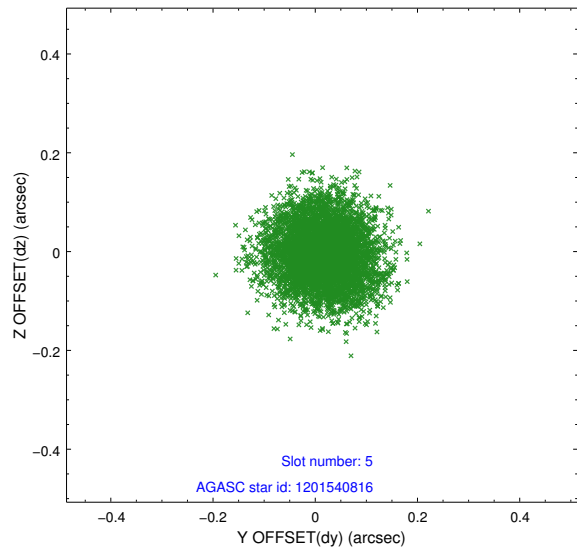
### 2.4.1 Slot 3



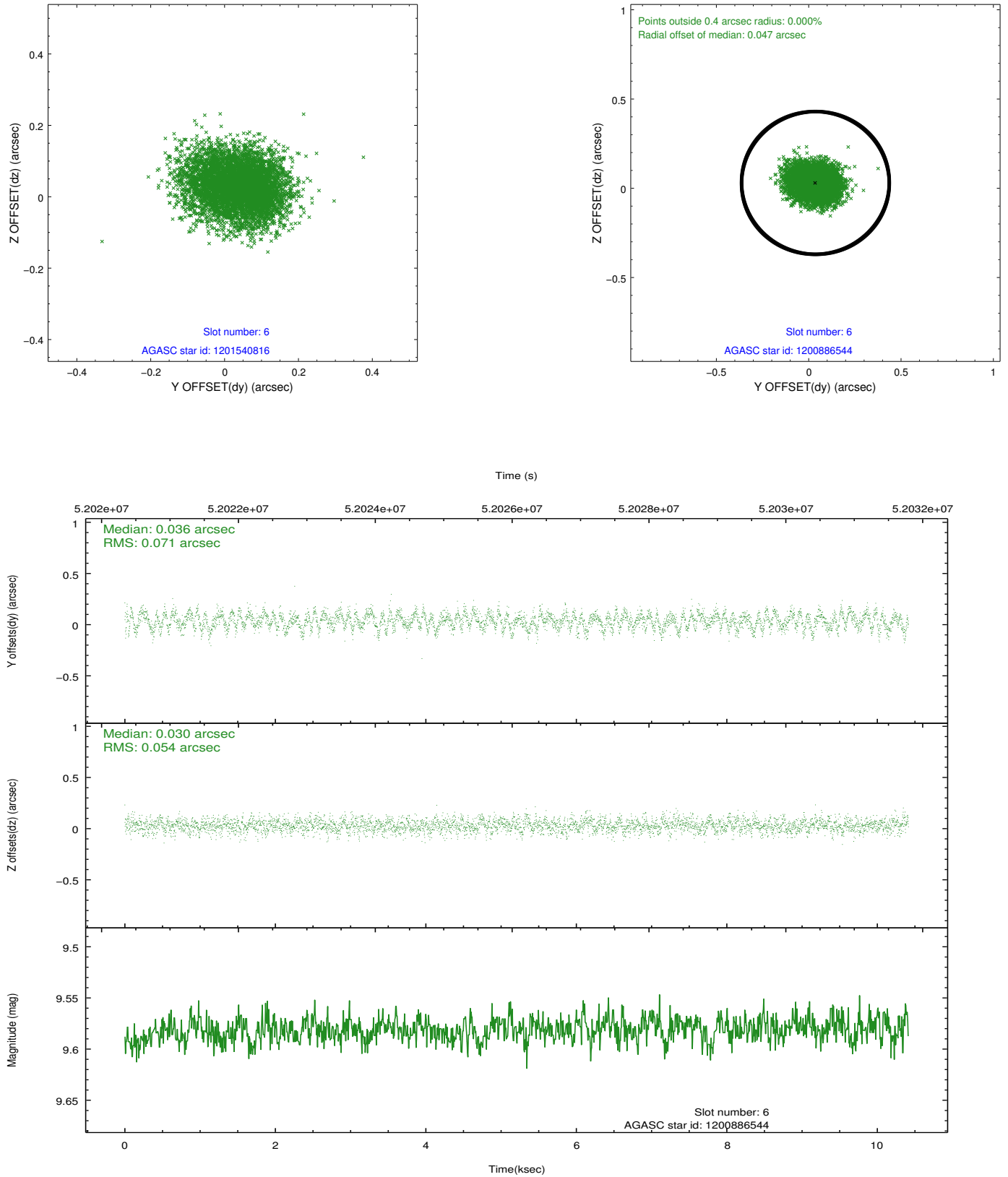
## 2.4.2 Slot 4



### 2.4.3 Slot 5

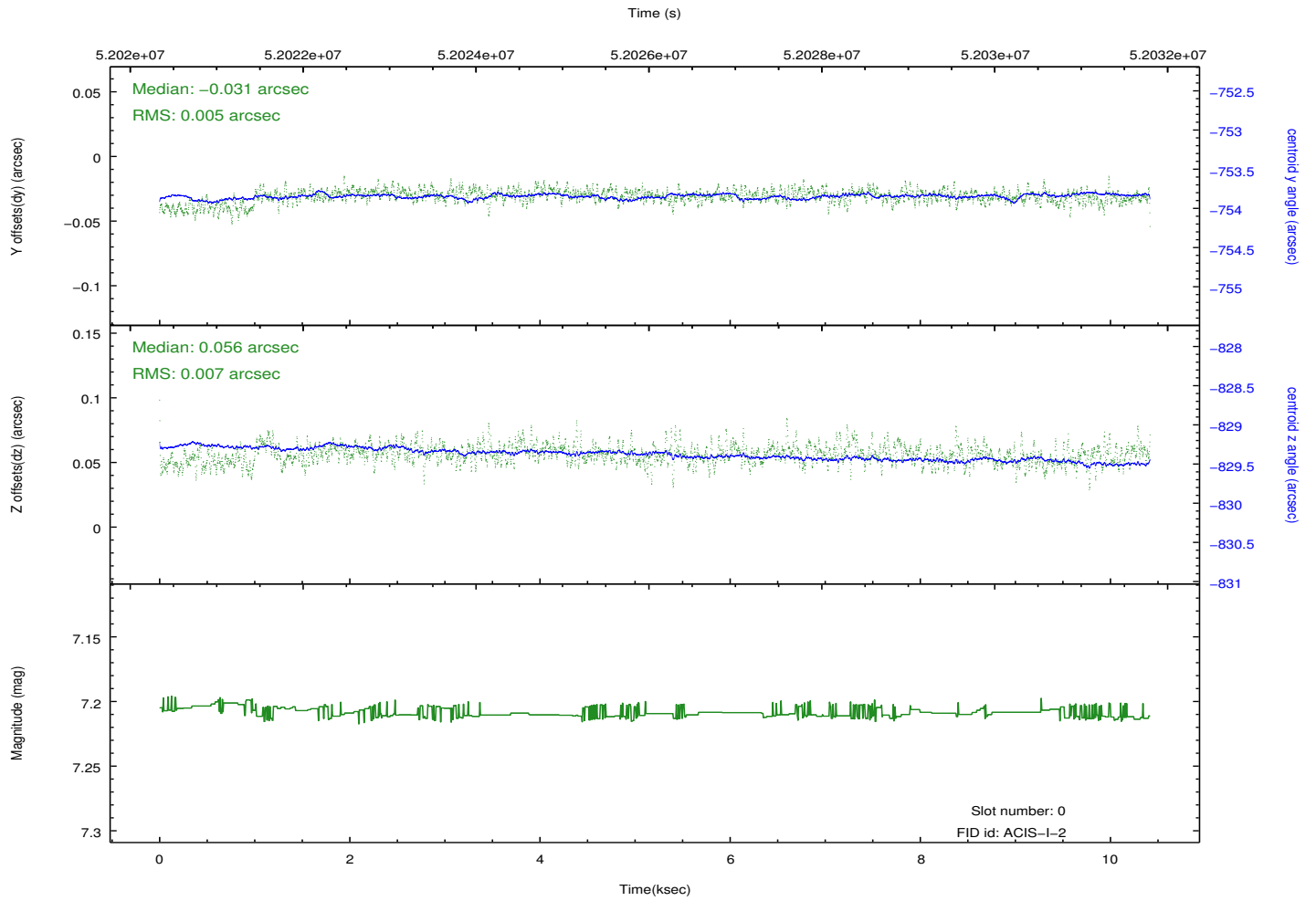
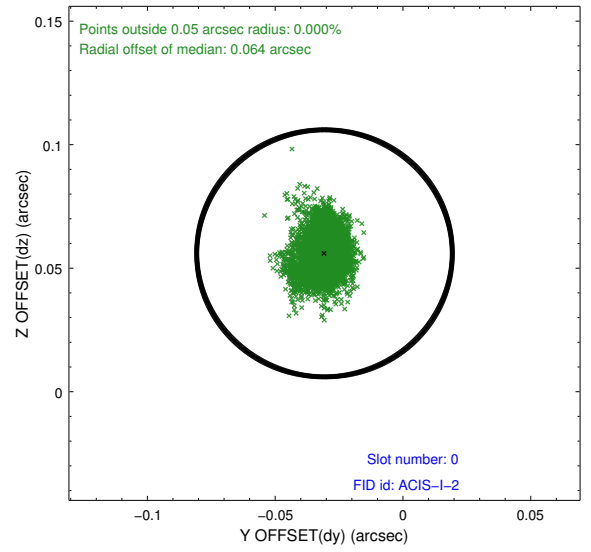
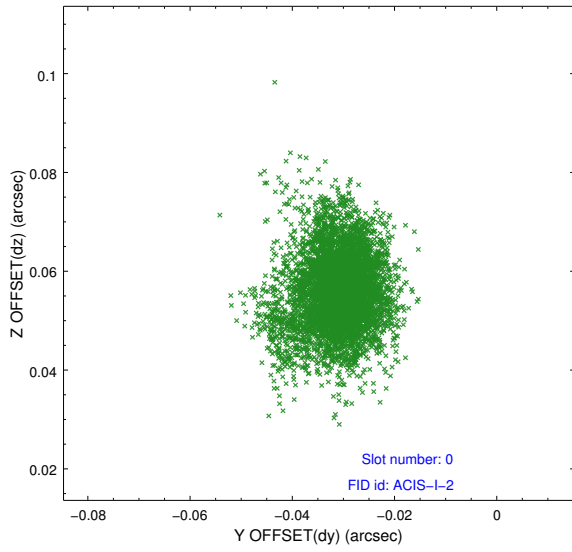


## 2.4.4 Slot 6

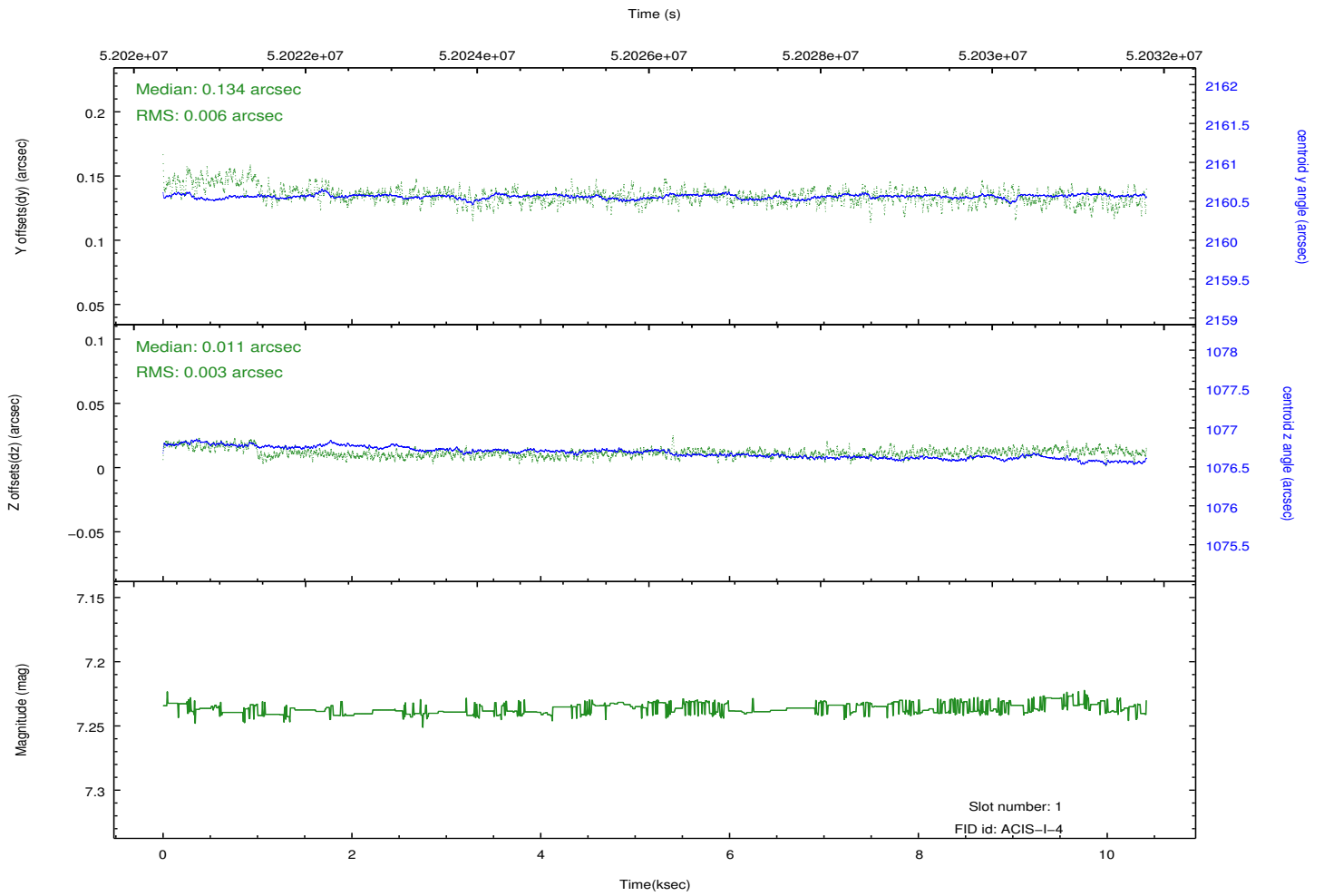
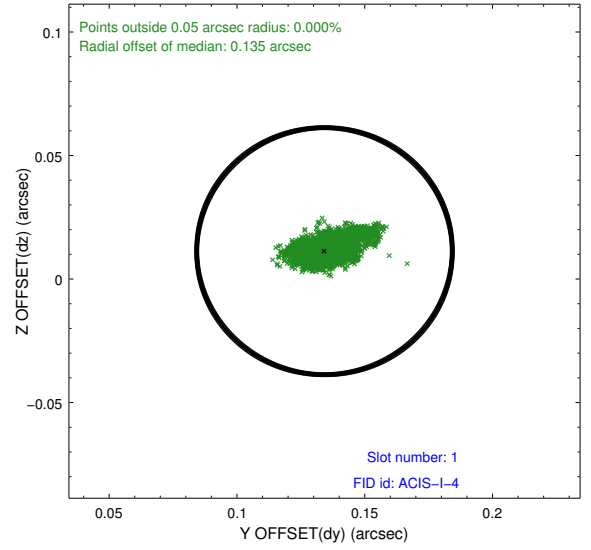
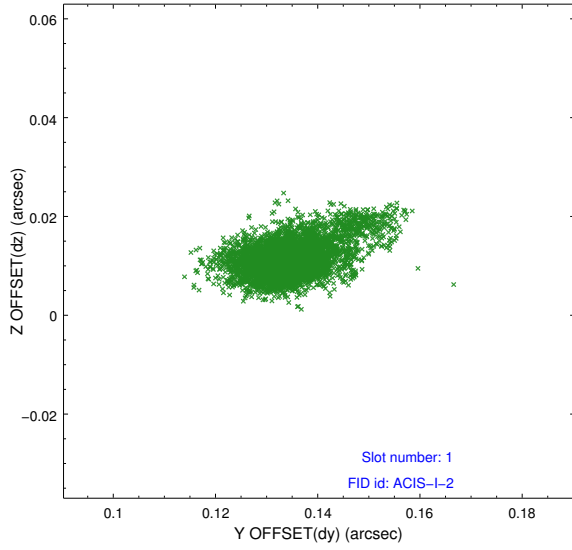


## 2.5 FID Slots

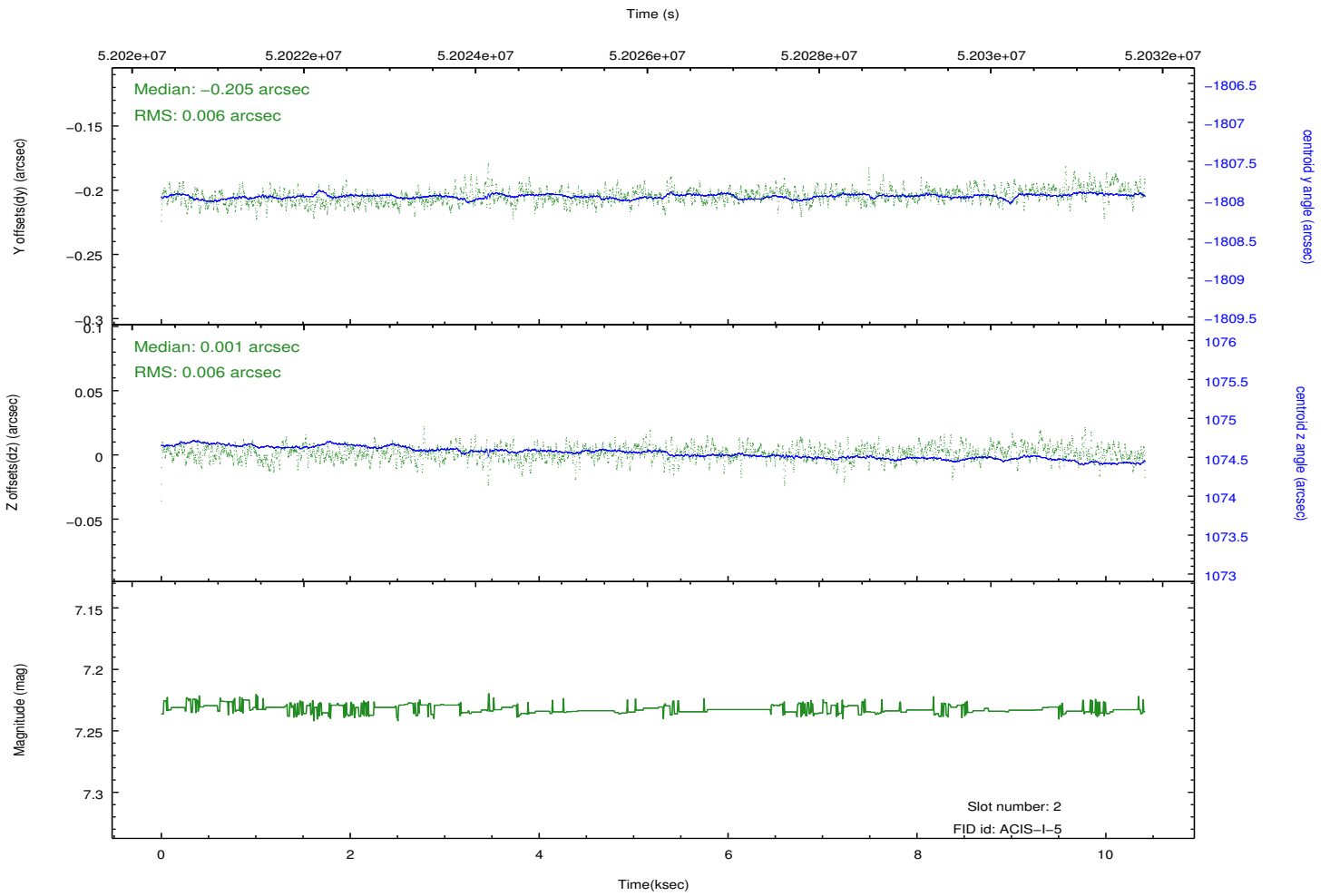
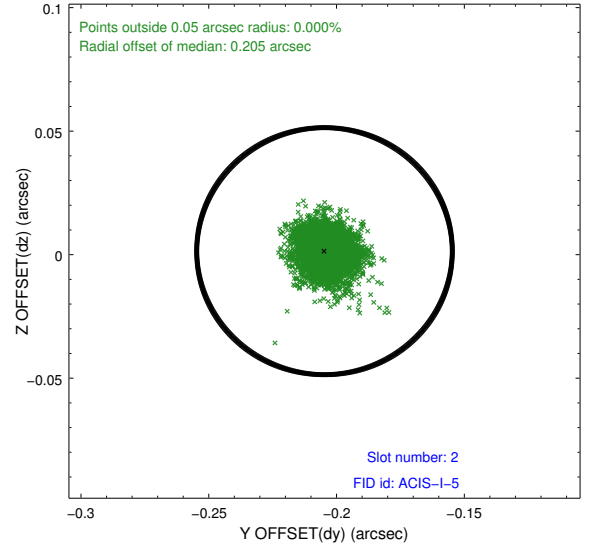
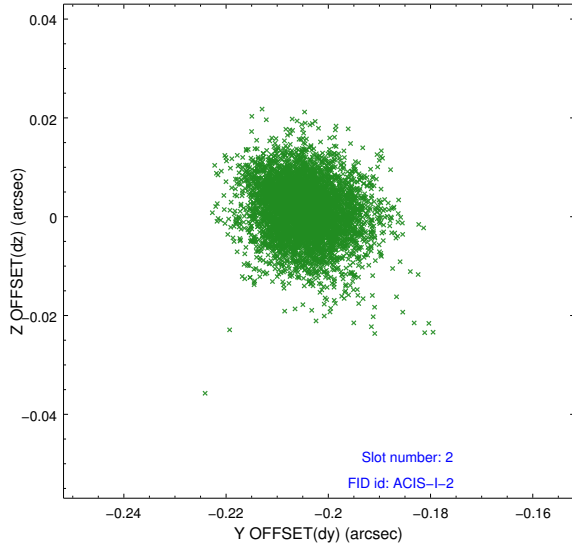
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Glenn Allen
V&V Date (YYYY-MM-DD)	2010.02.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.149

## A.2 Comments