

# V&V Reference Report

## L2 ASCDS Version : 8.5

Observation 4939 - L2 Version 3  
Chandra X-Ray Center

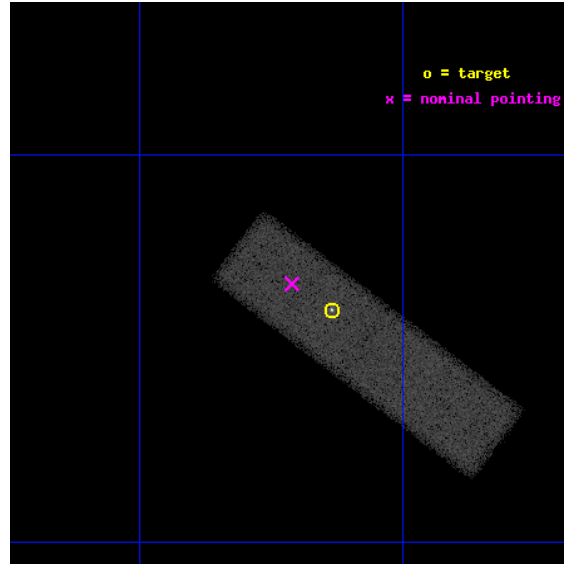
L2 Processing Date : Dec 12 2012

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# 1 Front

seq_num	800390	Sequence number
obs_id	4939	Observation id
title	X-RAY OBSERVATIONS OF GALAXY GROUPS ASSOCIATED WITH GRAVITATIONAL LENSES	Proposal title
observer	Professor Gordon Garmire	Principal investigator
object	B1422+231	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	216.15875	Observer's specified target RA [deg]
dec_targ	22.9335	Observer's specified target Dec [deg]
ra_nom	216.17779159393	Nominal RA [deg]
dec_nom	22.944613983163	Nominal Dec [deg]
roll_nom	37.132716587647	Nominal Roll [deg]
revision	3	Processing version of data
ontime	50177.559727639	Sum of GTIs [s]
livetime	47729.059000893	Livetime [s]
ontime7	50177.559727639	Sum of GTIs [s]
l2events	65023	Number of level 2 events

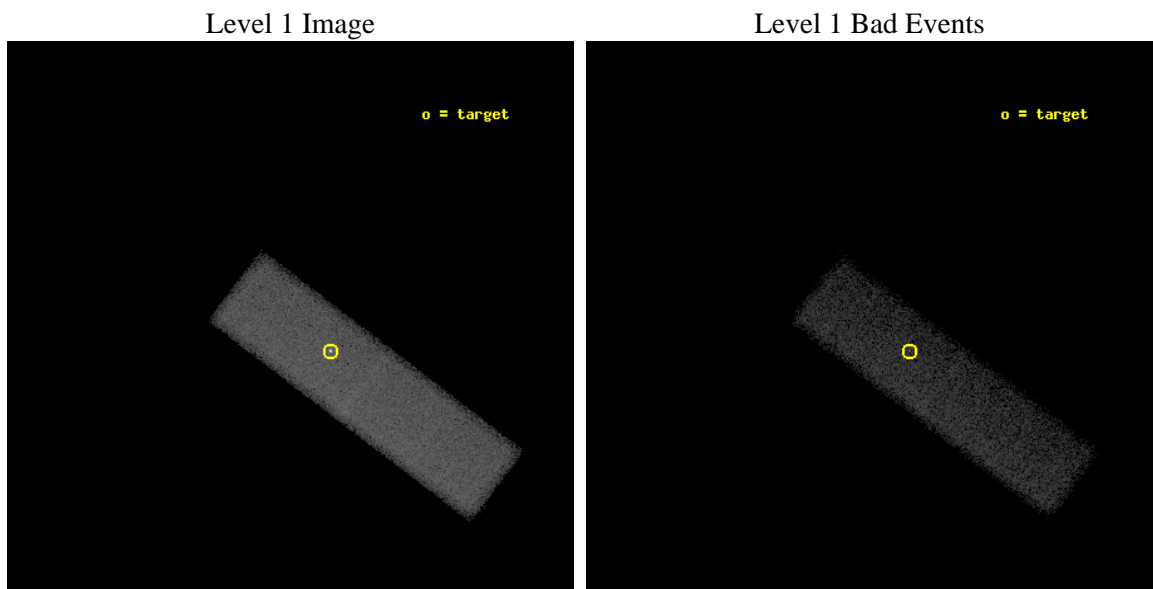




## 2 OBI

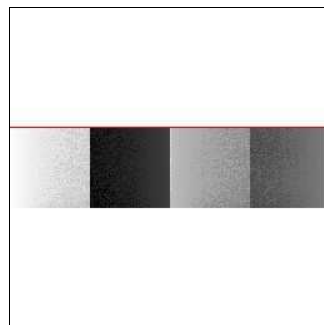
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	50000.000000	[s] Scheduled observation exposure time
ascdsver	8.5	Processing system revision	ontime	50177.559727639	Sum of GTIs [s]
caldsver	4.5.4	&#160	ontime7	50177.559727639	Sum of GTIs [s]
date	2012-12-12T12:36:12	Date and time of file creation	l1events	139275	Number of level 1 events
revision	3	Processing version of data			

### 2.1.4 Events

	<b>ccd 7</b>
level 1 events	139275
rejected events	72483
rejected %	52%

	<b>ccd 7</b>
grade 0 events	8039
	5%
grade 1 events	158
	0%
grade 2 events	13553
	9%
grade 3 events	7441
	5%
grade 4 events	7202
	5%
grade 5 events	12523
	8%
grade 6 events	30812
	22%
grade 7 events	59547
	42%

## 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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	216.166669	216.1777915939253	Subarray requested	CUSTOM	1/4
[deg] Pointing Dec	22.919387	22.94461398316296	Subarray start row	385	385
[deg] Pointing Roll	36.980417	37.1327165876474	Subarray row count	256	256
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	0.8
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	218303201.184000	218302327.23145			
Observation start date	2004-12-01T15:45:37	2004-12-01T15:32:07			
[s] Observation end time (MET)	218353201.184000	218354164.55878			
Observation end date	2004-12-02T05:38:57	2004-12-02T05:56:04			
Read mode	TIMED	TIMED			

## 2.3 Aspect

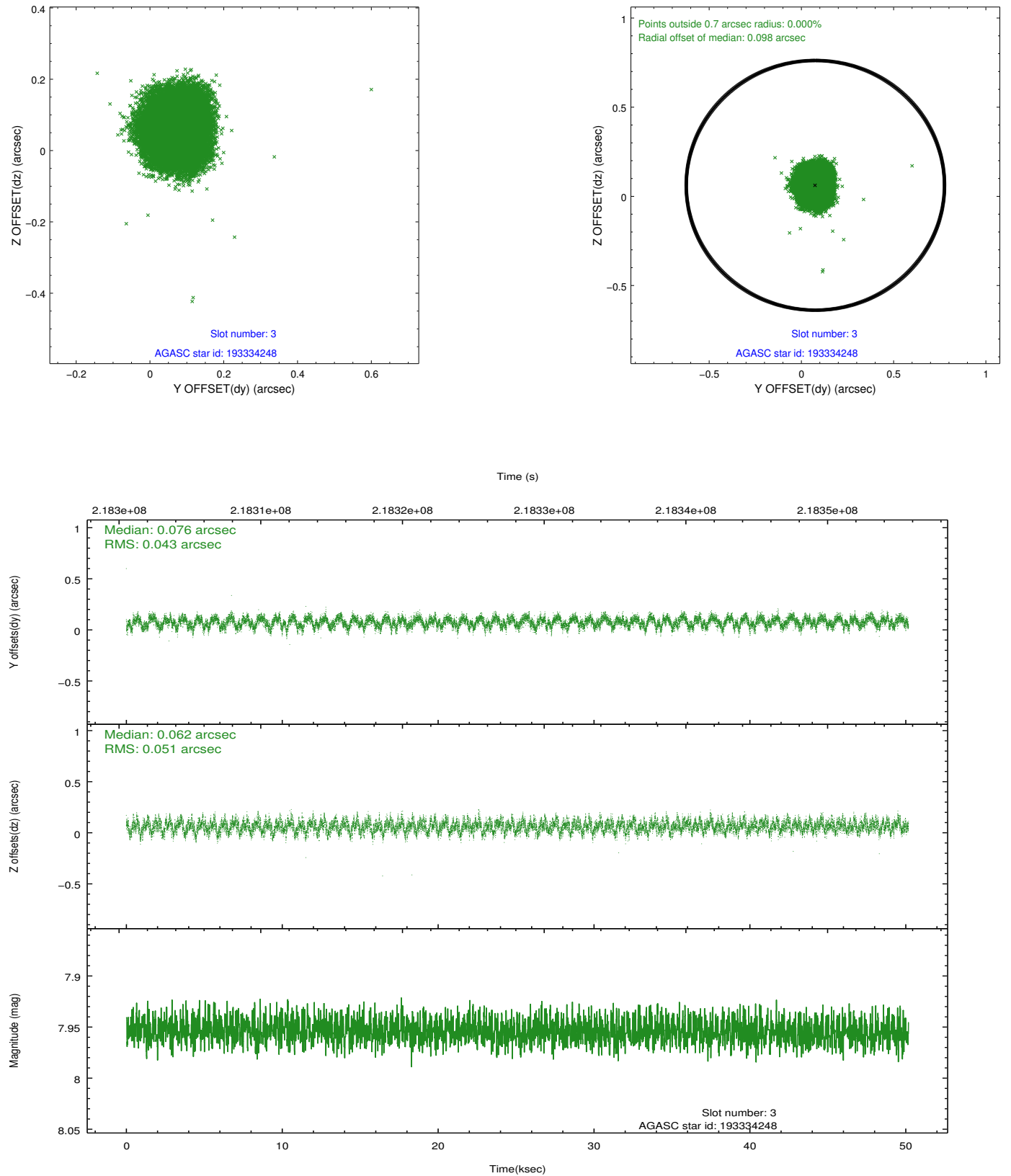


### Slot Statistics

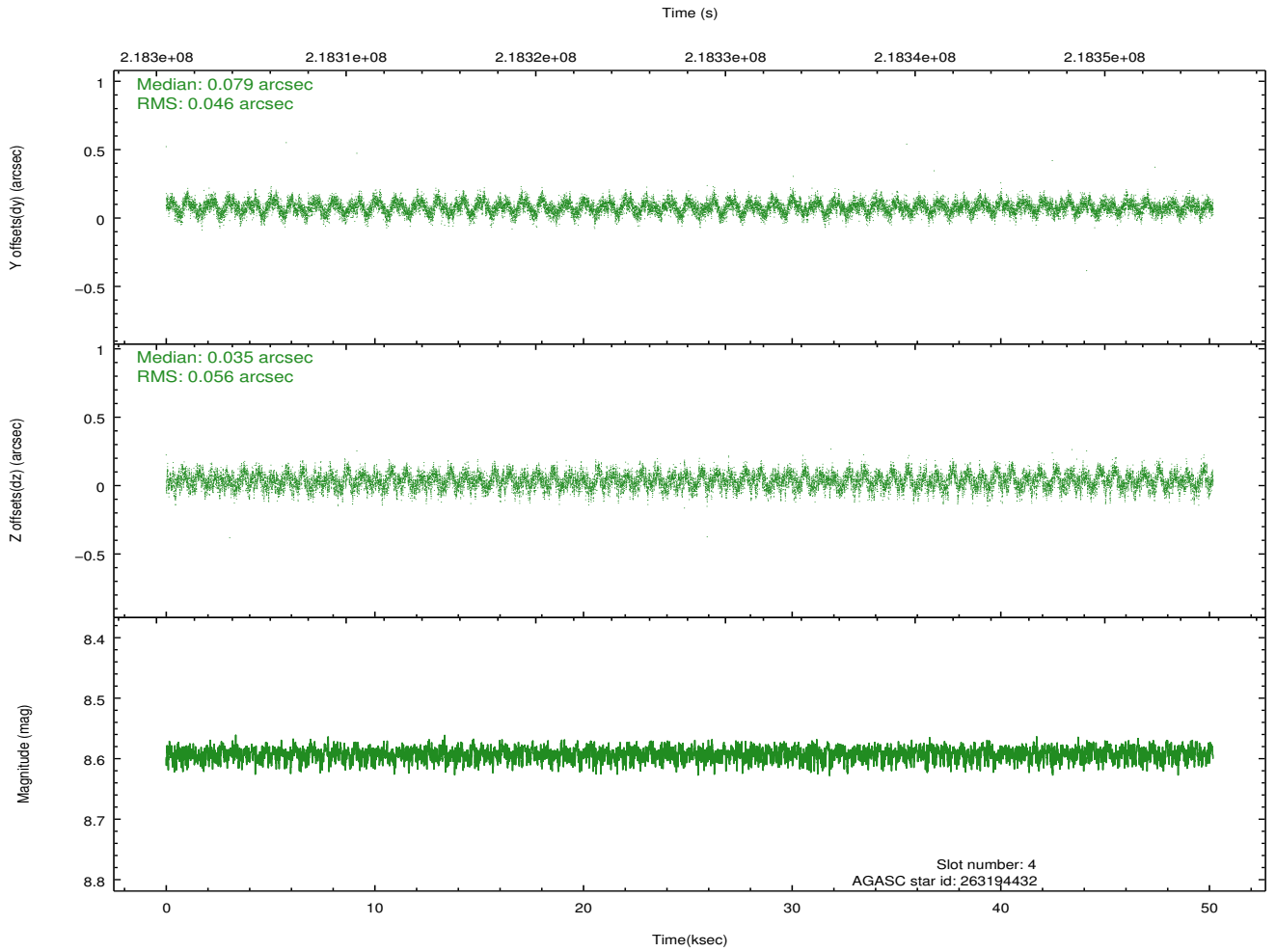
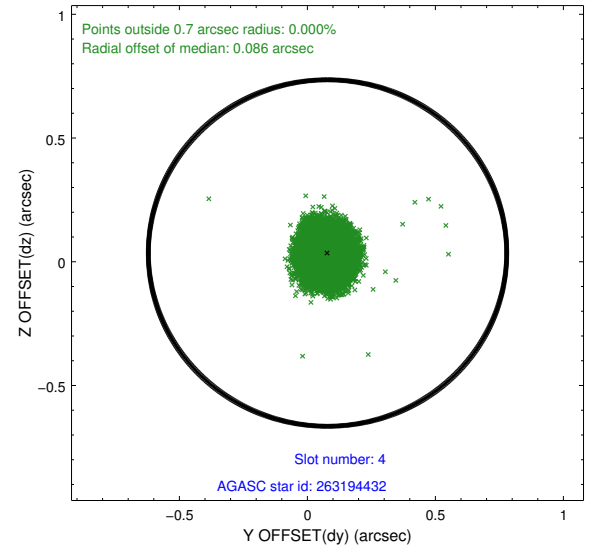
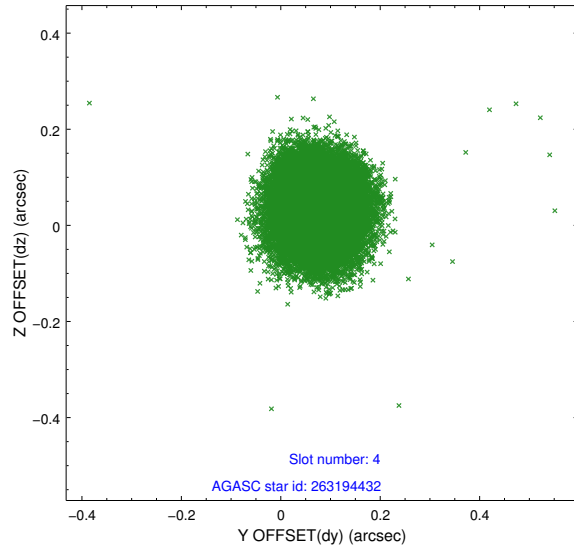
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	12239	-0.009	-0.034	0.008	0.012	0.000000	0.000000	-760.32	-1733.84
1	FID	ACIS-S-4	7.20	12238	0.064	0.014	0.008	0.015	0.000000	0.000000	2153.06	174.69
2	FID	ACIS-S-5	7.23	12239	-0.085	0.029	0.012	0.019	0.000000	0.000000	-1813.25	168.38
3	GUIDE	193334248	7.95	24476	0.076	0.062	0.072	0.112	215.839819	22.271930	-2270.71	-1206.10
4	GUIDE	263194432	8.59	24469	0.079	0.035	0.077	0.122	216.192636	22.671847	-466.79	-763.56
5	GUIDE	263196048	8.70	24469	-0.022	-0.005	0.058	0.095	216.468737	22.828170	604.15	-864.11
6	GUIDE	263198168	8.83	24476	-0.140	0.141	0.071	0.116	216.844674	22.716629	1362.99	-1932.25
7	GUIDE	263200584	9.67	24454	0.011	-0.233	0.106	0.176	215.715152	23.220906	-538.82	1767.38

## 2.4 Star Slots

### 2.4.1 Slot 3

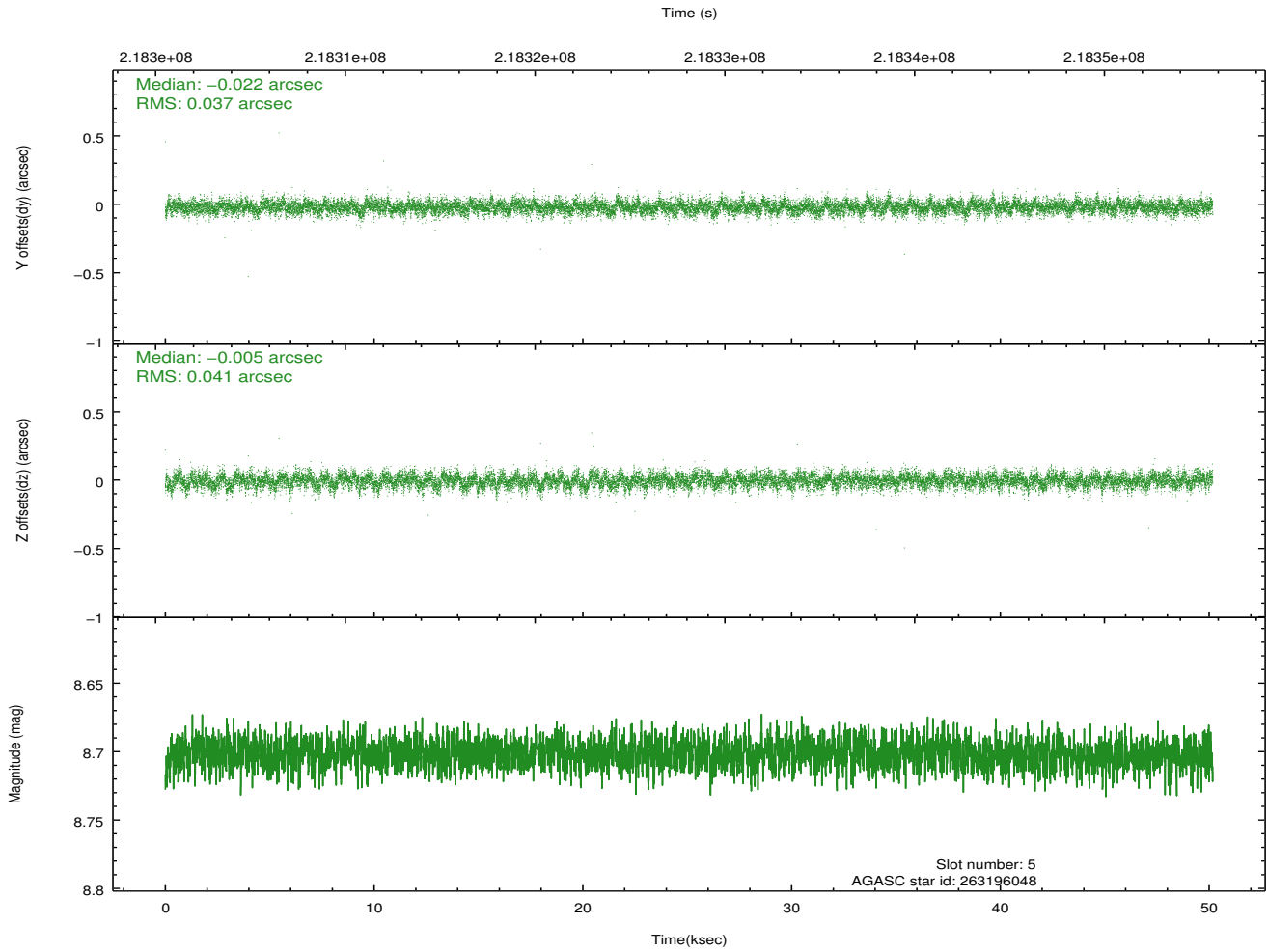
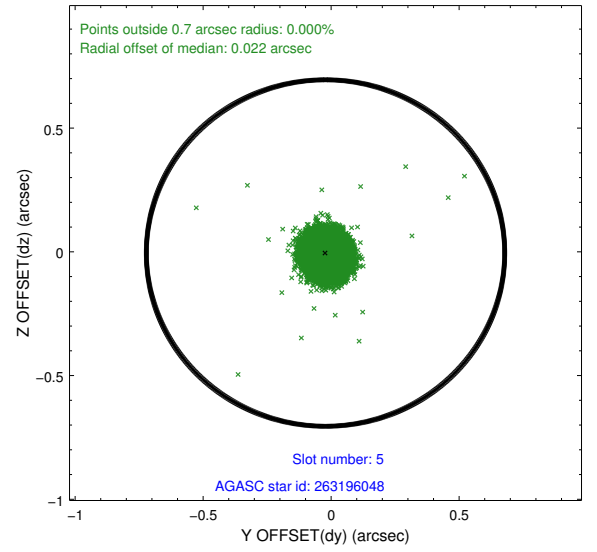
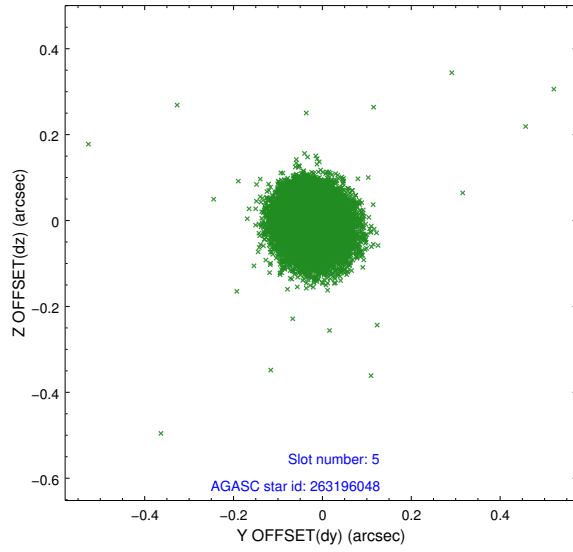


## 2.4.2 Slot 4

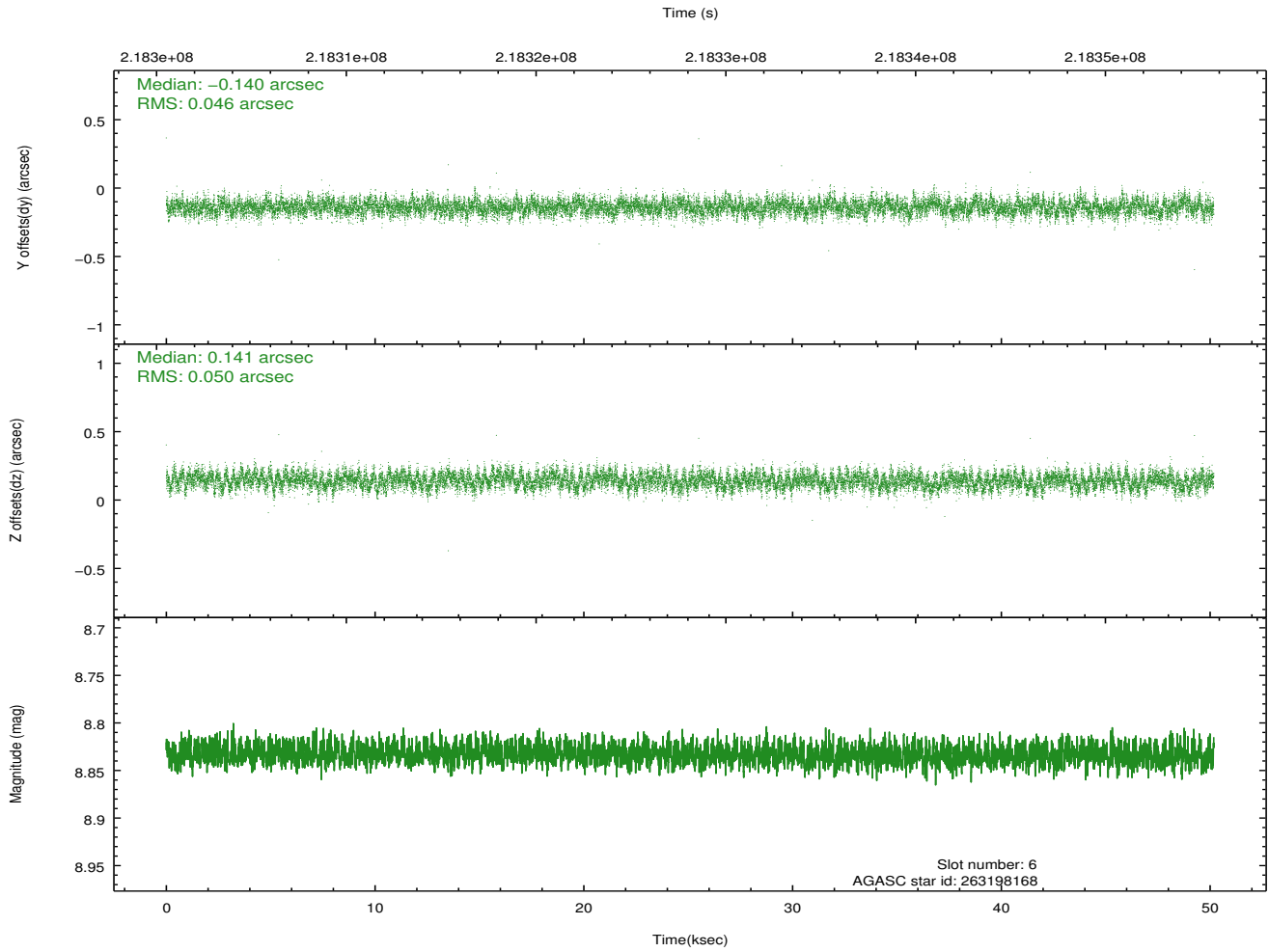
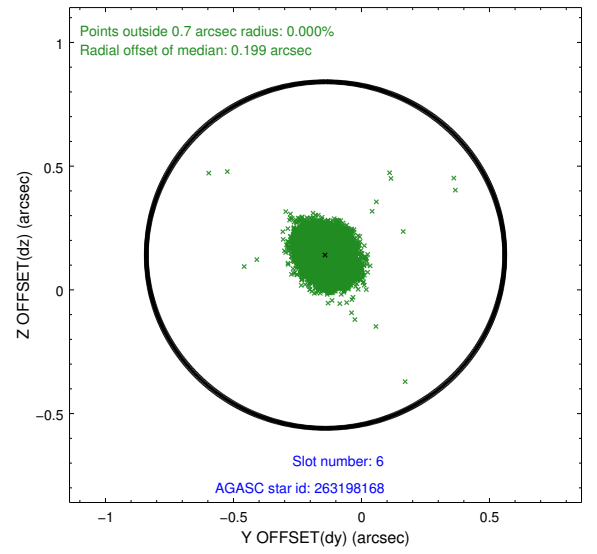
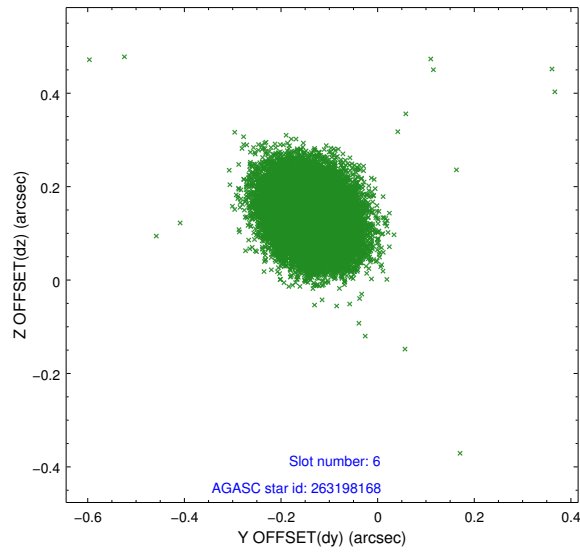




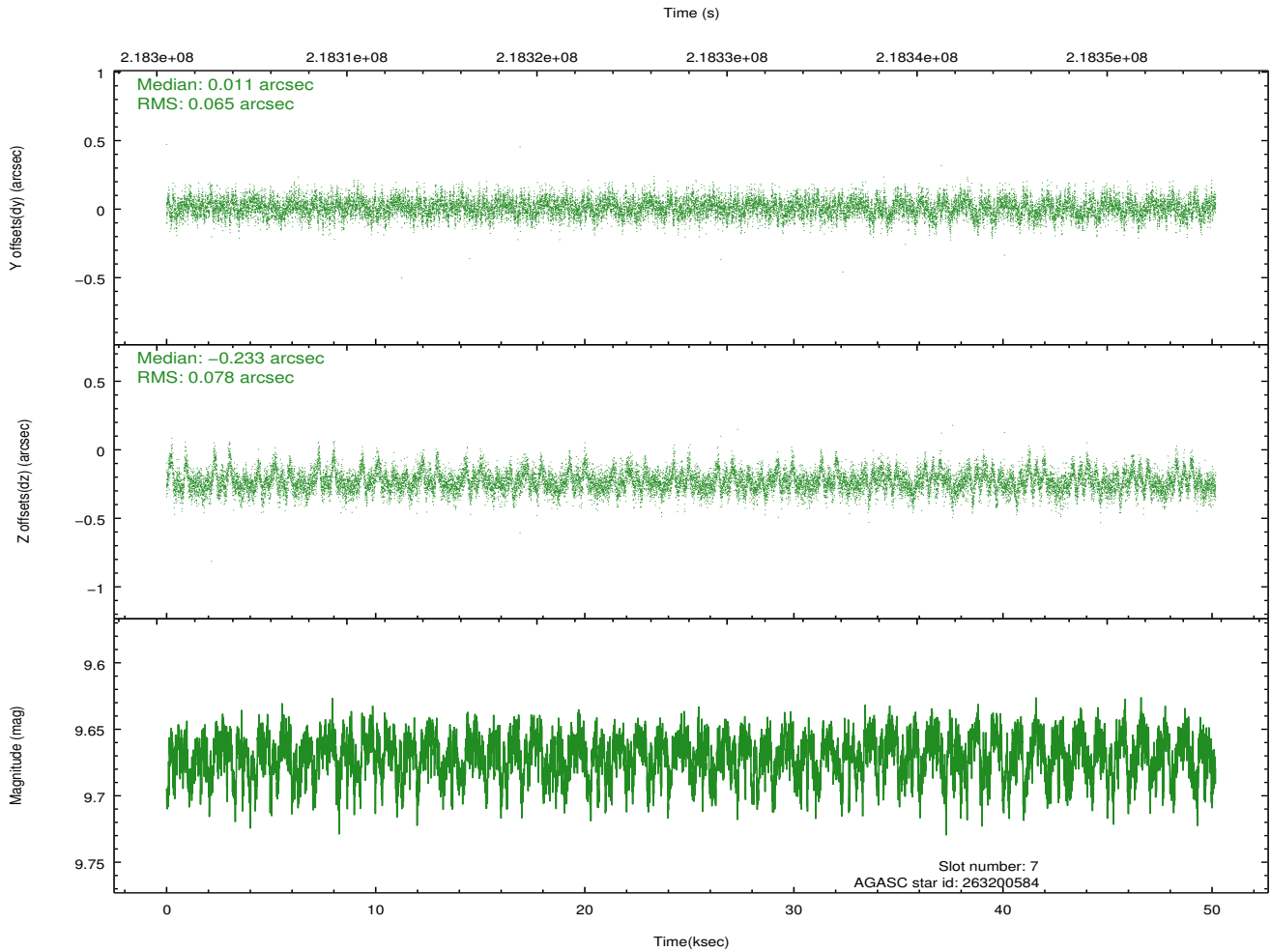
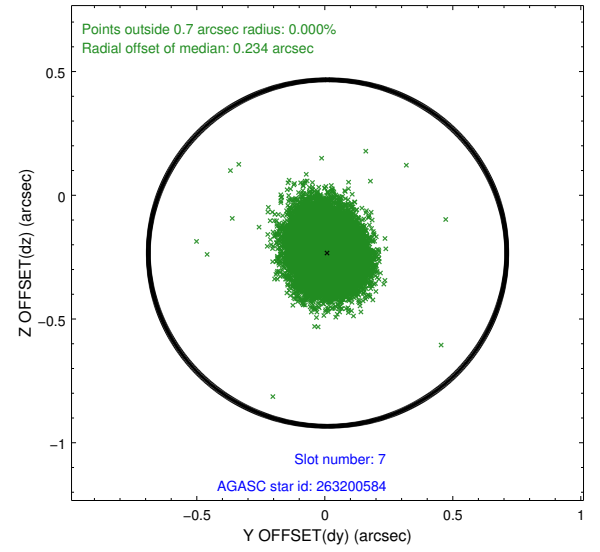
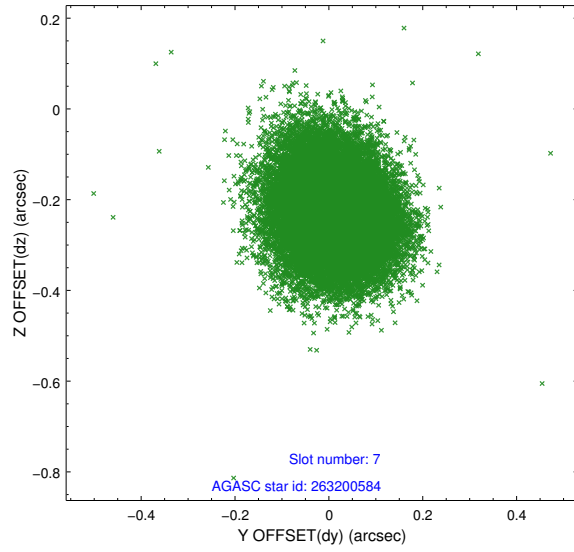
### 2.4.3 Slot 5



## 2.4.4 Slot 6

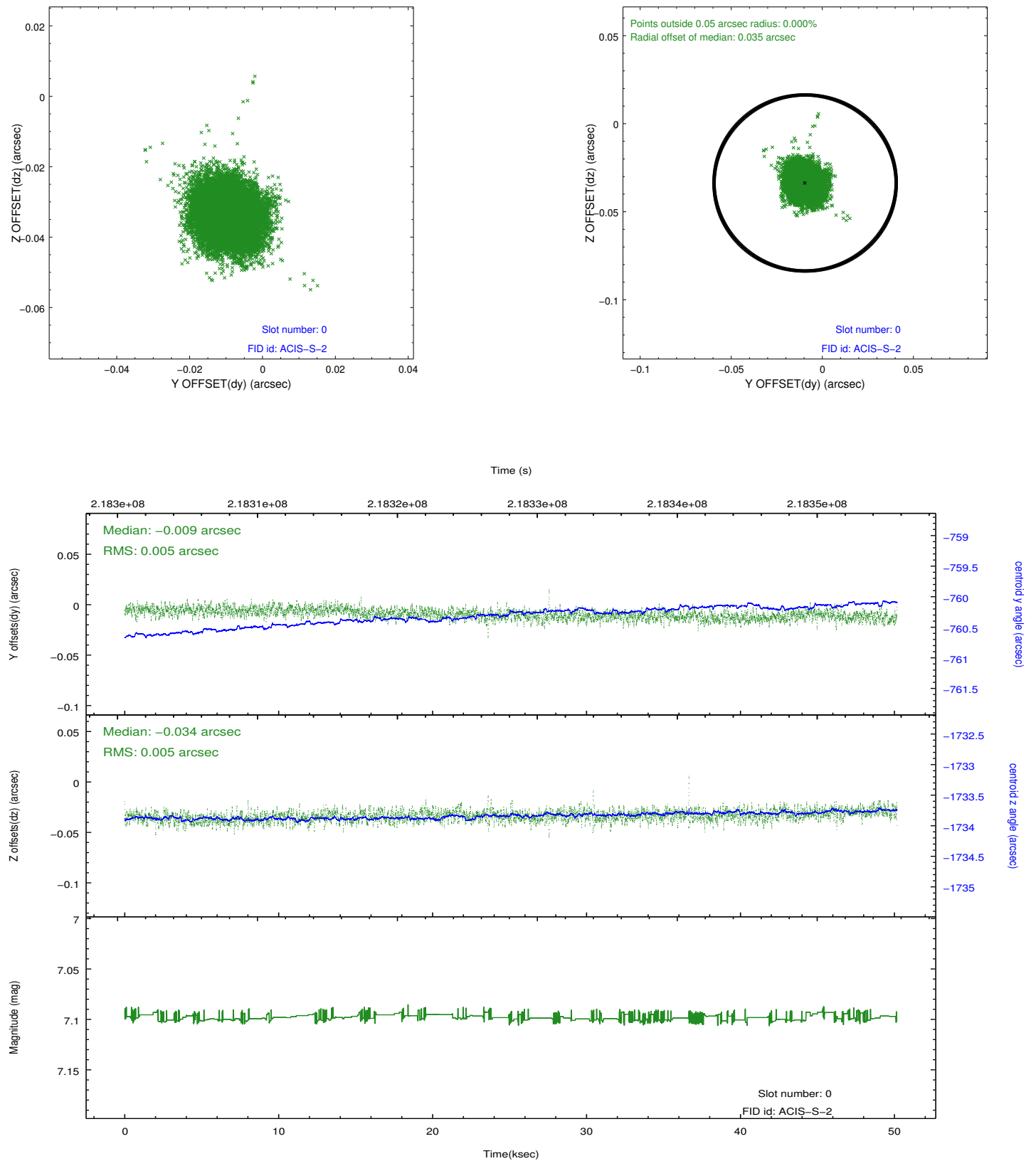


## 2.4.5 Slot 7

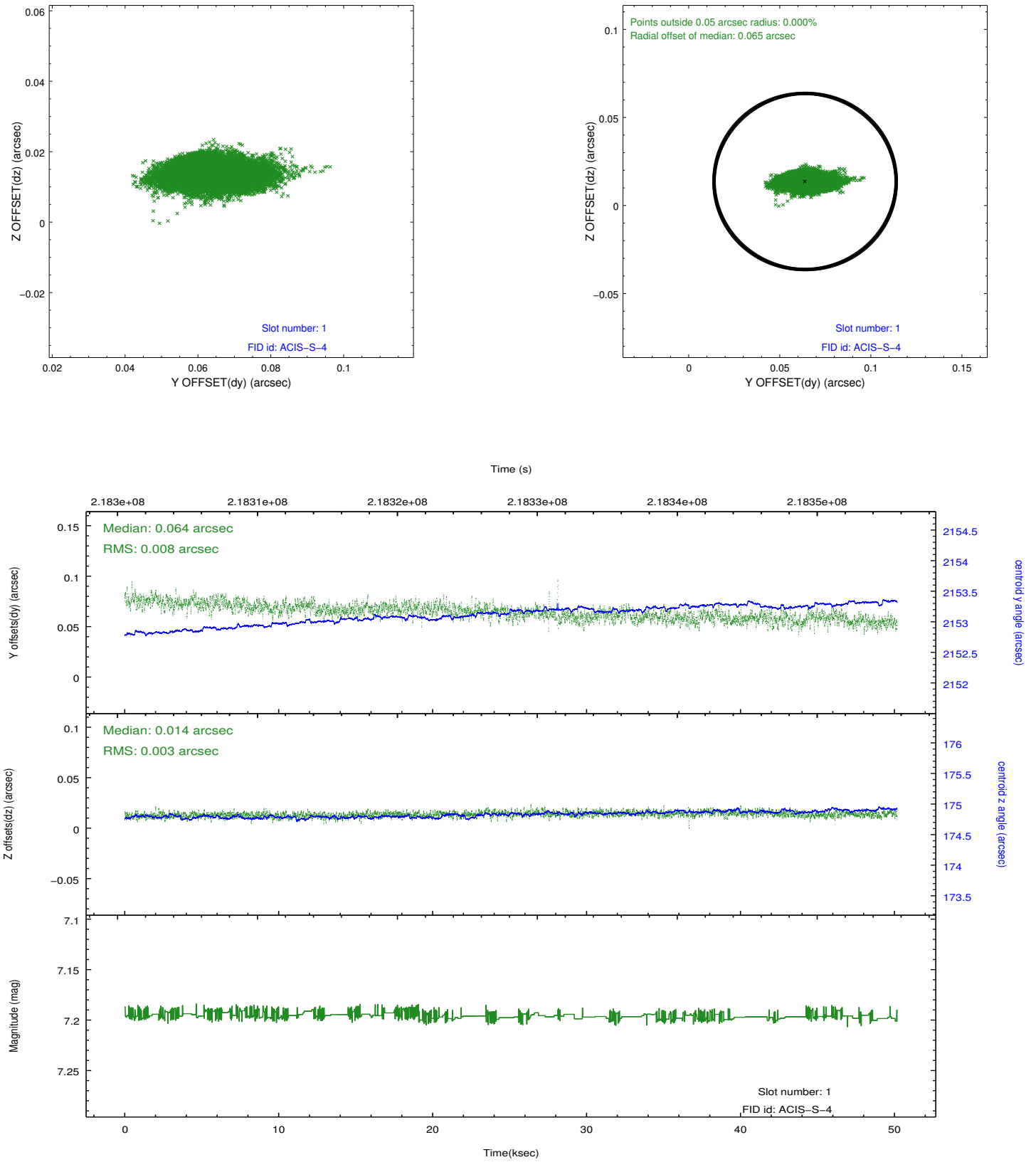


## 2.5 FID Slots

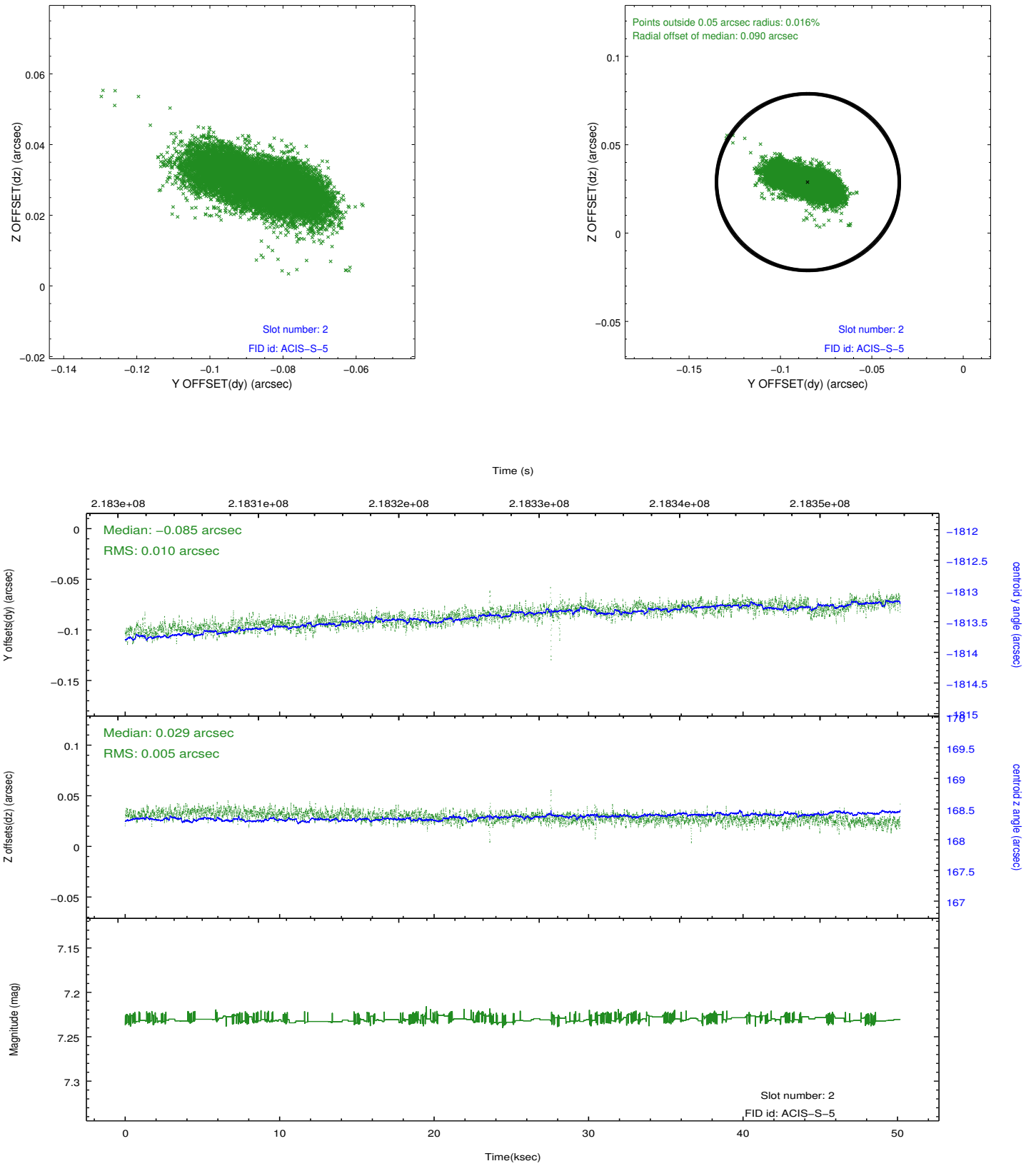
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## **A Summary**

### **A.1 Status**

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2013.01.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	50.17755

### **A.2 Comments**