

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 12870 - L2 Version 2  
Chandra X-Ray Center

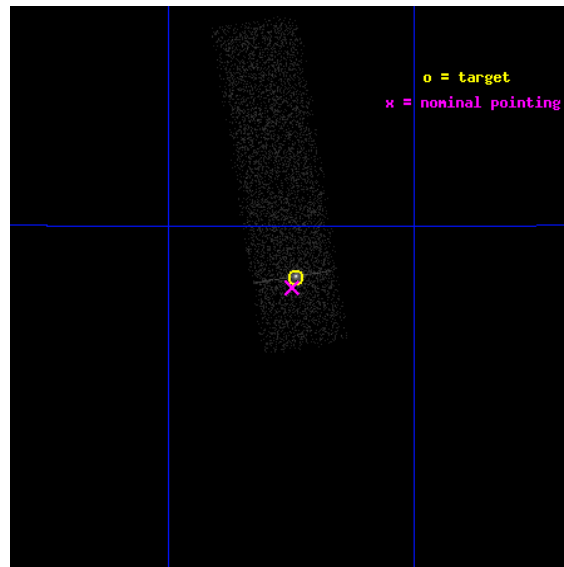
L2 Processing Date : Jul 7 2012

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 6 . . . . .	12
2.4.5	Slot 7 . . . . .	13
2.5	FID Slots . . . . .	14
2.5.1	Slot 0 . . . . .	14
2.5.2	Slot 1 . . . . .	15
2.5.3	Slot 2 . . . . .	16
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

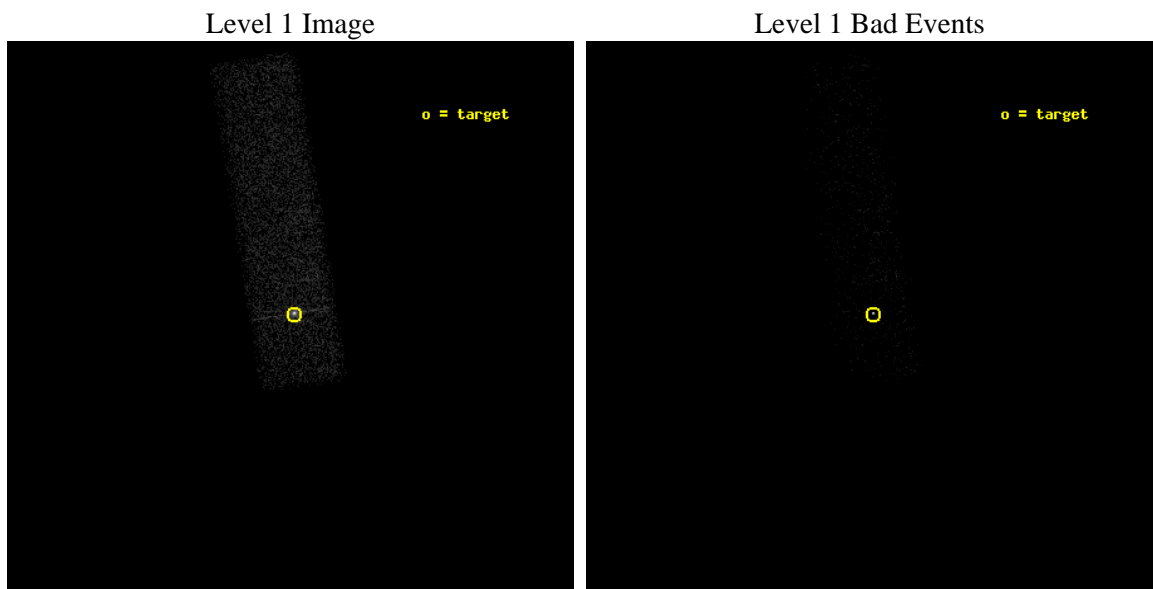
seq_num	702503	Sequence number
obs_id	12870	Observation id
title	Chandra Survey of Hard X-ray Selected Merging AGN Hosts	Proposal t
observer	Dr. Richard Mushotzky	Principal investigator
object	NGC 931	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	37.06	Observer's specified target RA [deg]
dec_targ	31.311	Observer's specified target Dec [deg]
ra_nom	37.062298006792	Nominal RA [deg]
dec_nom	31.306552893745	Nominal Dec [deg]
roll_nom	260.92477523086	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5026.4000749588	Sum of GTIs [s]
livetime	4781.1281983818	Livetime [s]
ontime7	5026.4000749588	Sum of GTIs [s]
l2events	10706	Number of level 2 events



## 2 OBI

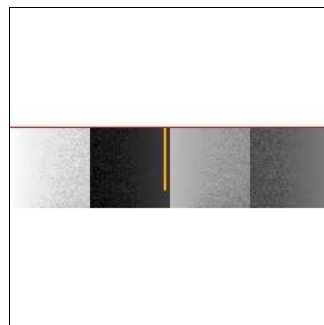
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	5026.4000749588	Sum of GTIs [s]
caldbver	4.5.0	&#160	ontime7	5026.4000749588	Sum of GTIs [s]
date	2012-07-07T17:01:30	Date and time of file creation	l1events	18732	Number of level 1 events
revision	2	Processing version of data			

### 2.1.4 Events

	<b>ccd 7</b>
level 1 events	18732
rejected events	7822
rejected %	41%

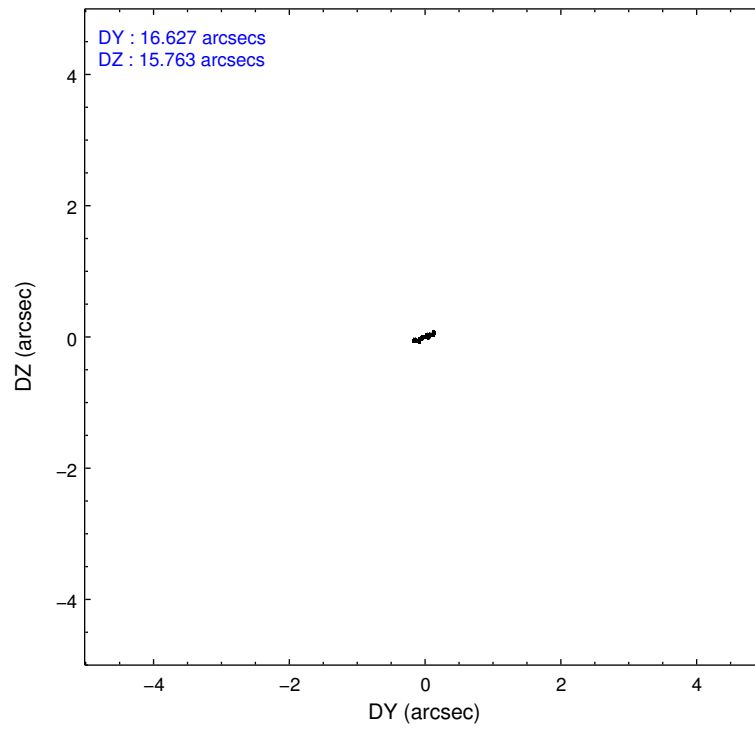
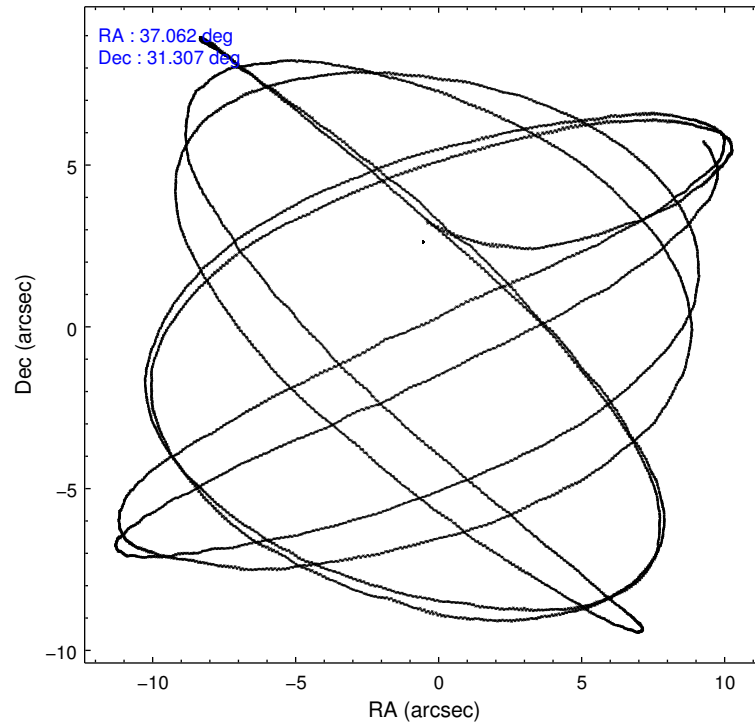
	<b>ccd 7</b>
grade 0 events	1478
	7%
grade 1 events	144
	0%
grade 2 events	2251
	12%
grade 3 events	1134
	6%
grade 4 events	1143
	6%
grade 5 events	1844
	9%
grade 6 events	4906
	26%
grade 7 events	5832
	31%

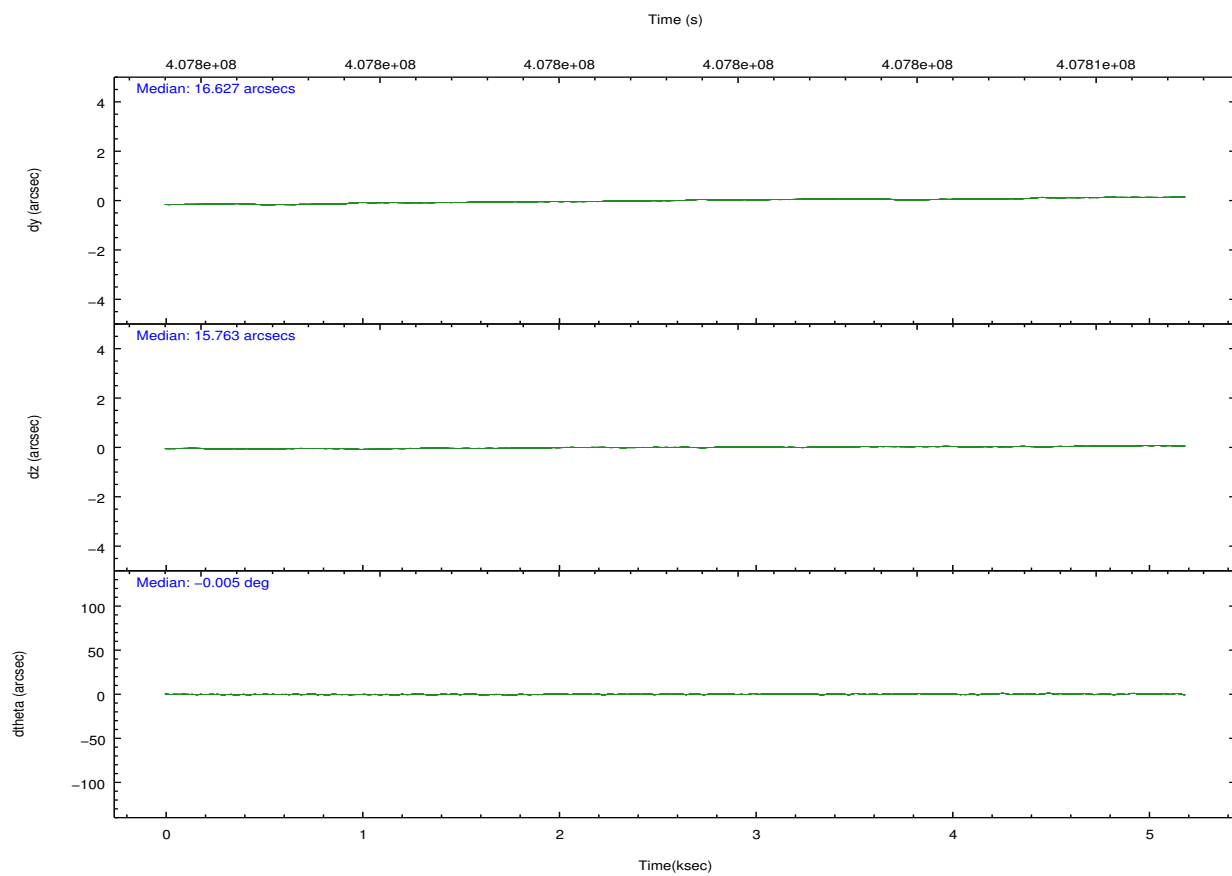
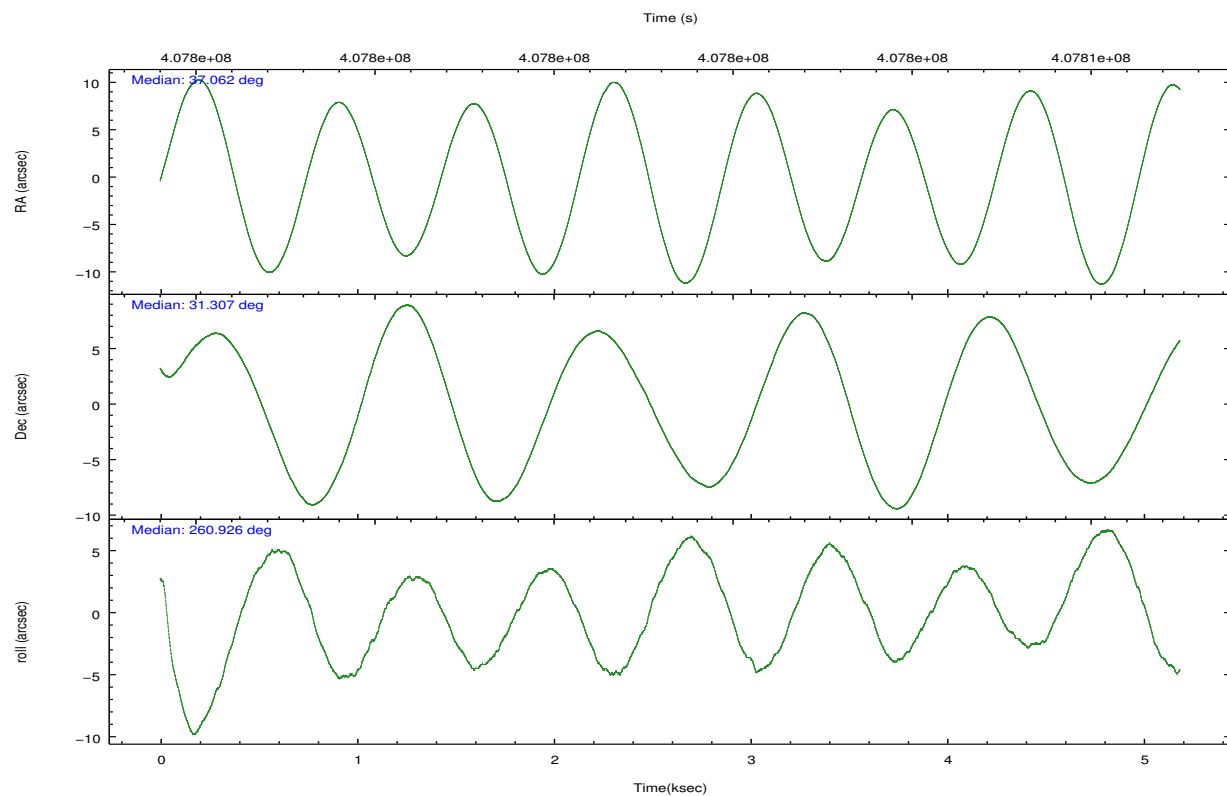


## 2.2 Compared Parameters

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	37.050340	37.06229800679219	Subarray requested	CUSTOM	1/4
[deg] Pointing Dec	31.331928	31.30655289374458	Subarray start row	385	385
[deg] Pointing Roll	260.774337	260.9247752308591	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)	407801236.184000	407800502.14736			
Observation start date	2010-12-03T22:06:10	2010-12-03T21:55:02			
[s] Observation end time (MET)	407806236.184000	407806924.28519			
Observation end date	2010-12-03T23:29:30	2010-12-03T23:42:04			
Read mode	TIMED	TIMED			

## 2.3 Aspect



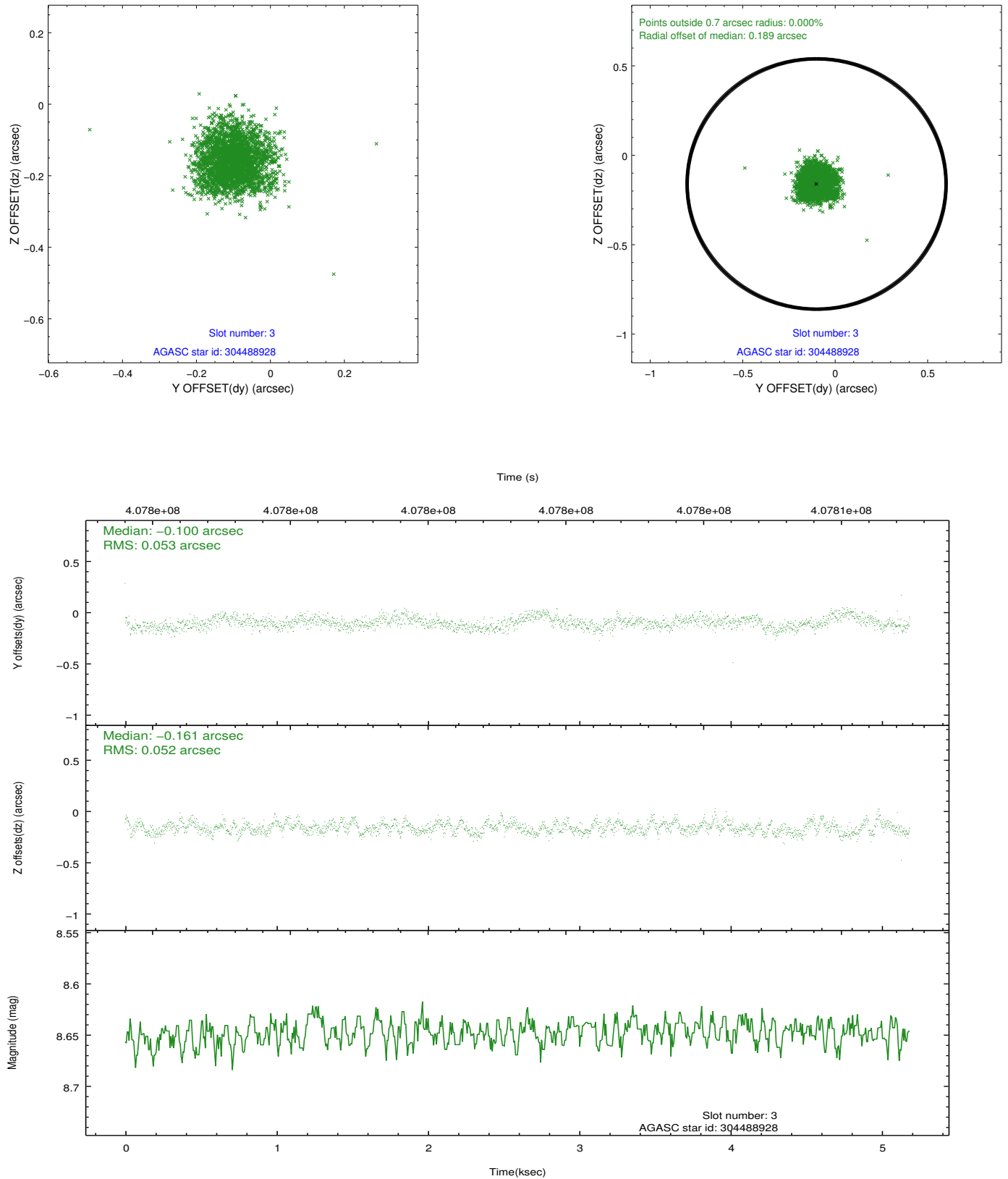


### Slot Statistics

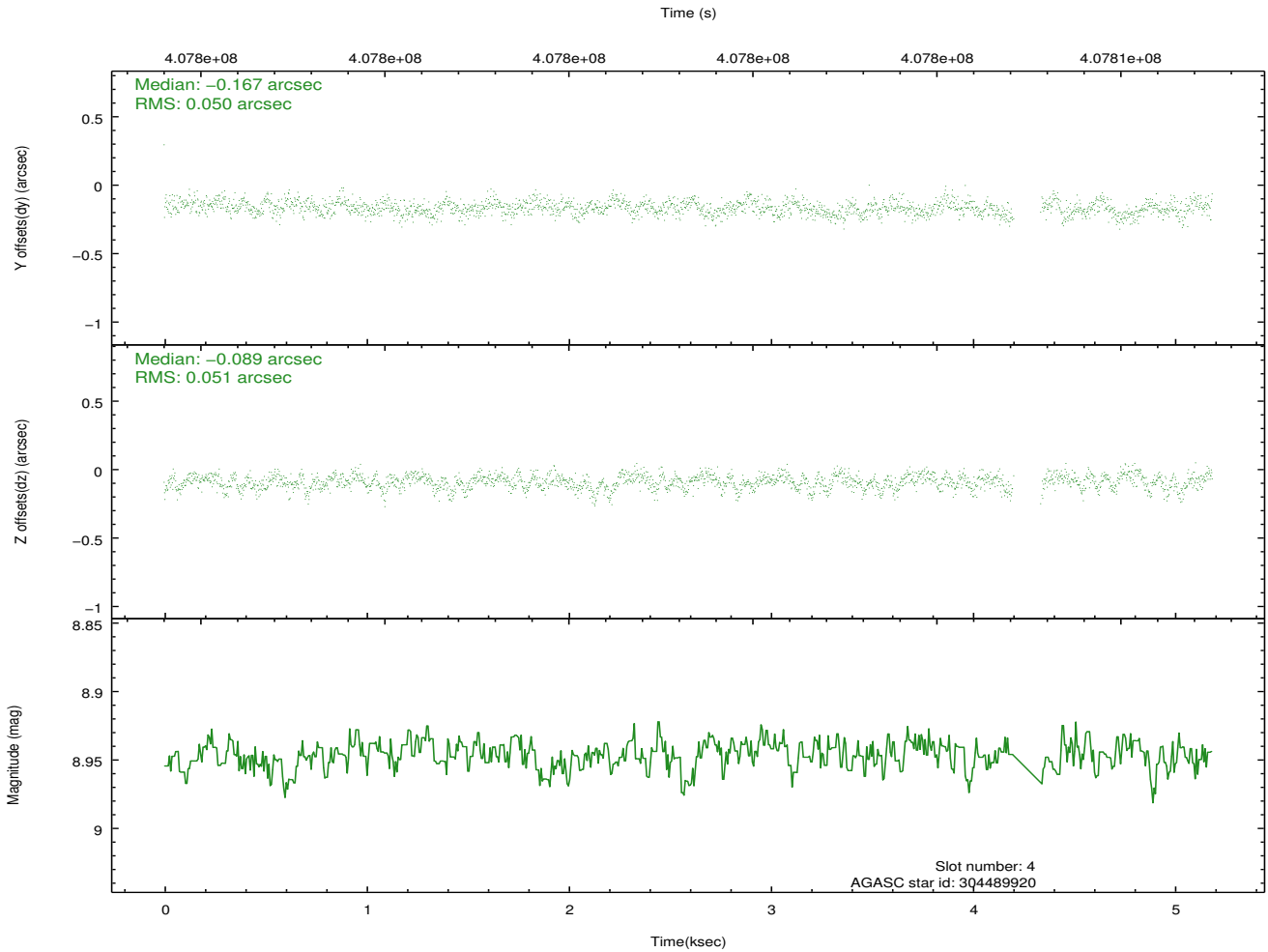
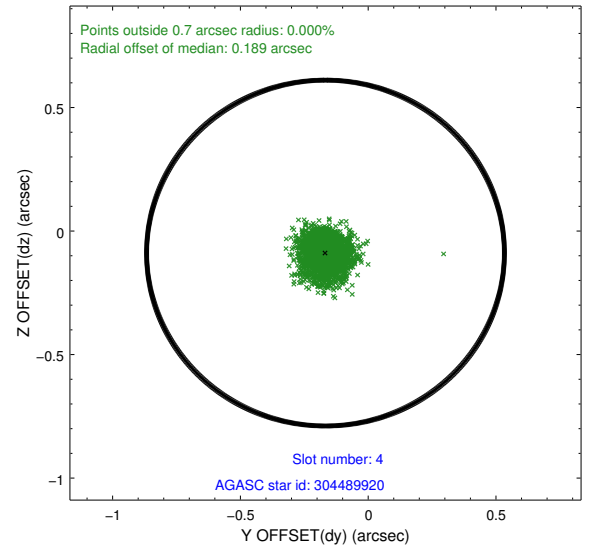
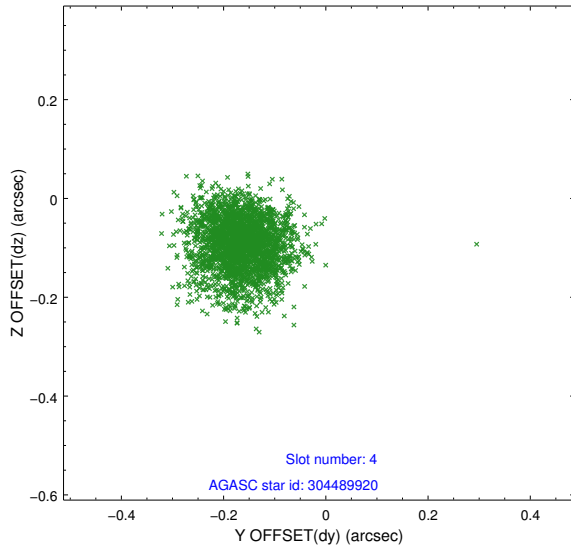
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.93	1265	-0.091	-0.004	0.006	0.011	0.000000	0.000000	-769.71	-1737.17
1	FID	ACIS-S-4	7.01	1265	0.168	0.045	0.005	0.011	0.000000	0.000000	2143.28	170.17
2	FID	ACIS-S-5	7.05	1265	-0.107	-0.032	0.006	0.012	0.000000	0.000000	-1821.09	165.06
3	GUIDE	304488928	8.65	2529	-0.100	-0.161	0.079	0.123	36.290494	31.295864	495.93	-2287.53
4	GUIDE	304489920	8.95	2461	-0.167	-0.089	0.076	0.126	37.004568	31.865503	-1872.91	-447.06
5	GUIDE	304492312	8.76	2529	-0.029	0.011	0.072	0.117	36.717724	30.765020	2178.02	-688.88
6	GUIDE	304493688	7.35	2530	0.531	0.097	0.057	0.094	36.521322	30.906645	1771.62	-1368.30
7	GUIDE	305007200	7.76	2530	-0.237	0.143	0.071	0.111	36.541032	31.879306	-1697.76	-1853.71

## 2.4 Star Slots

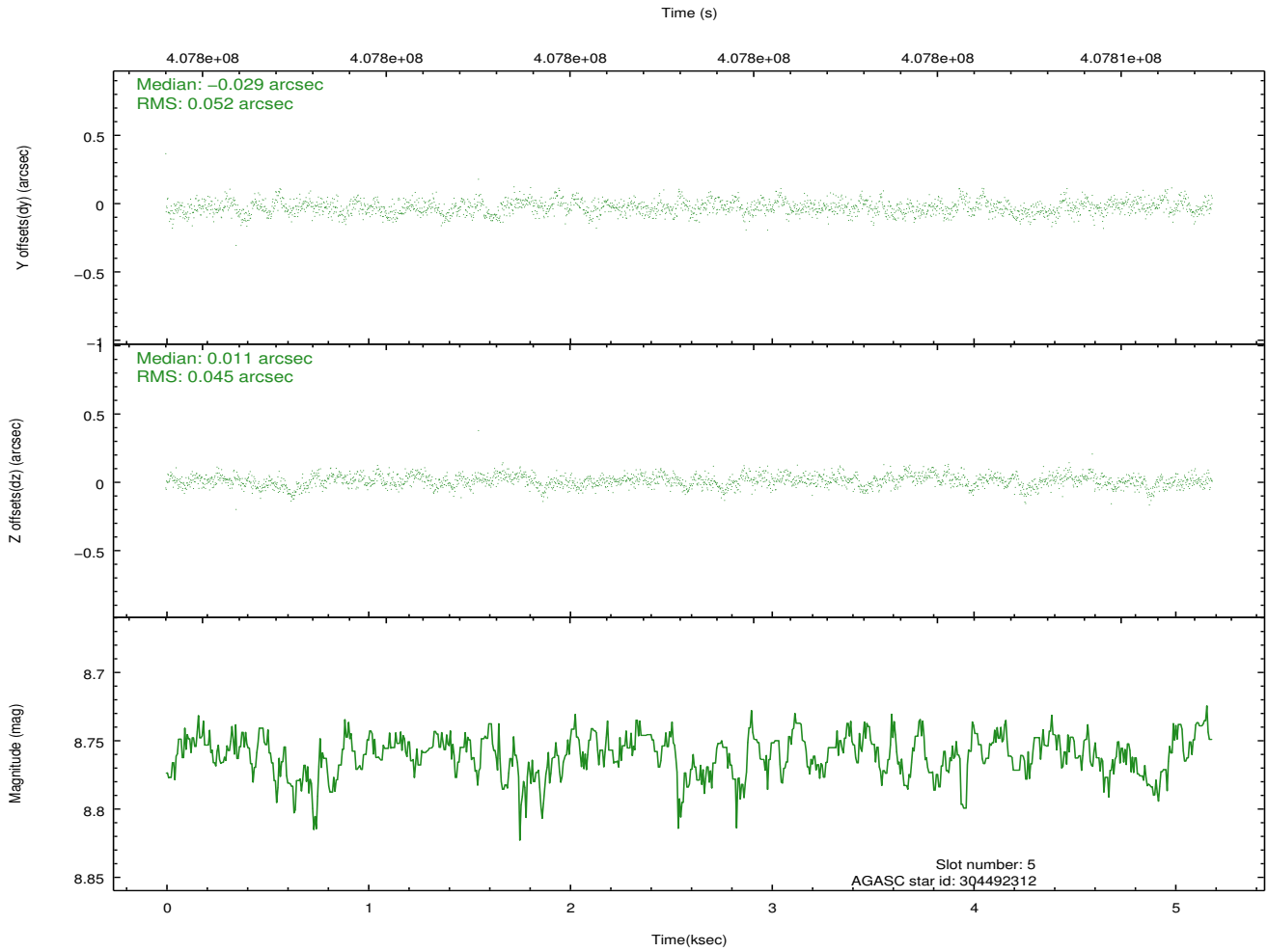
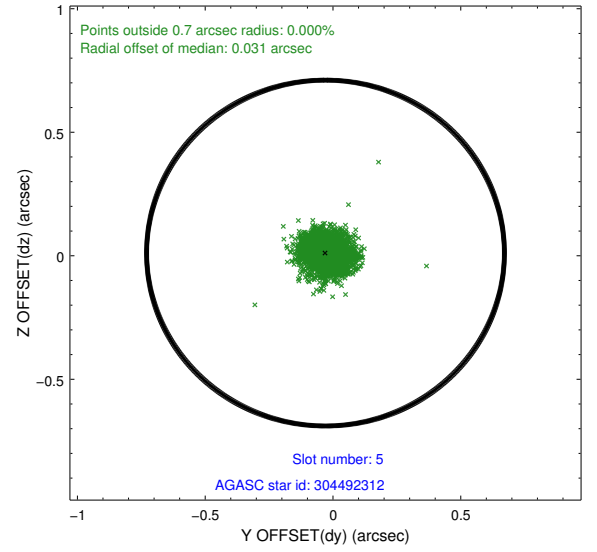
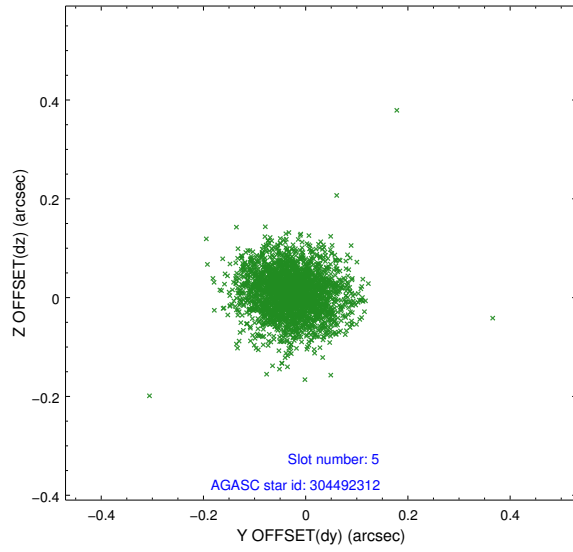
### 2.4.1 Slot 3



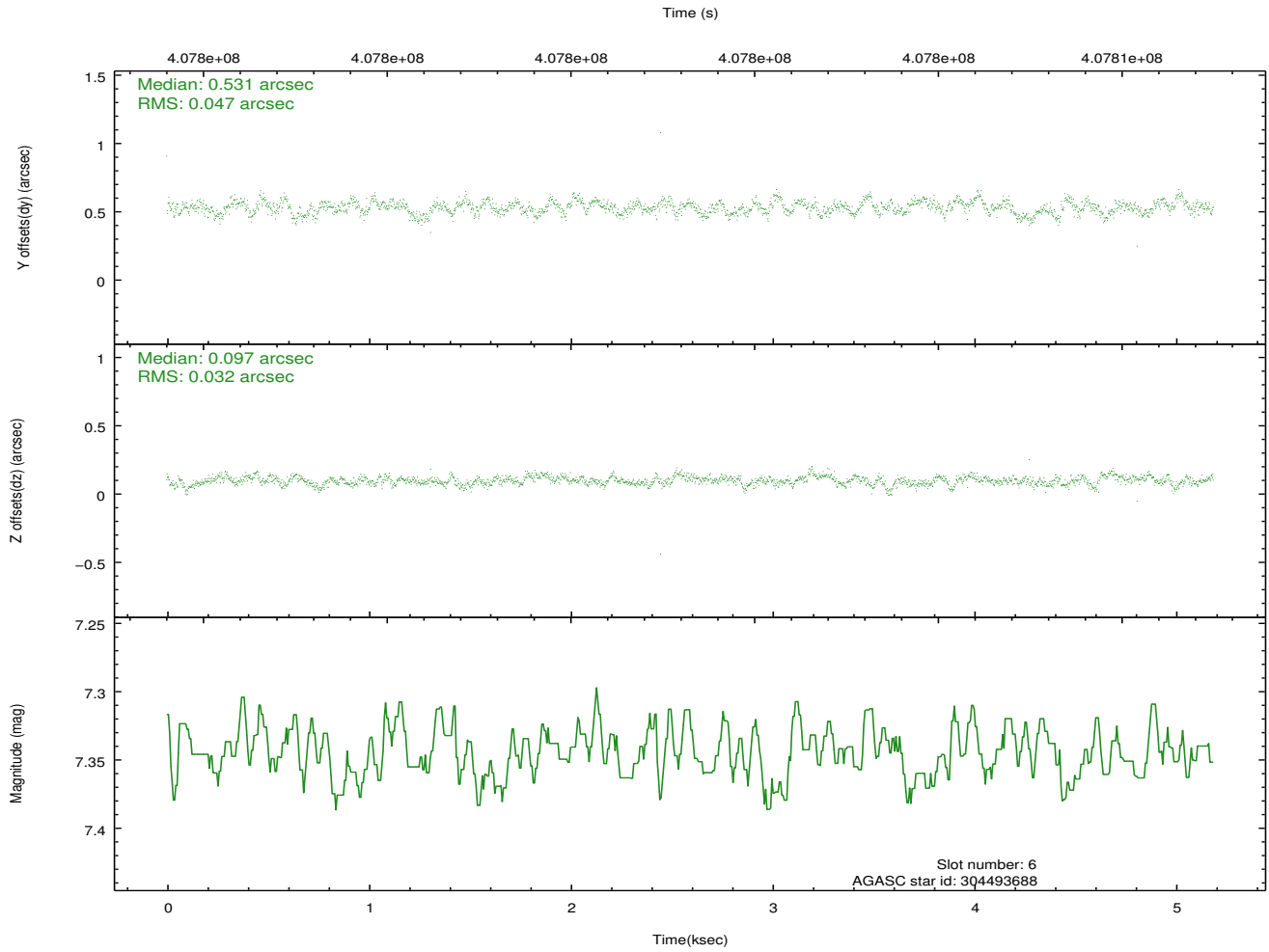
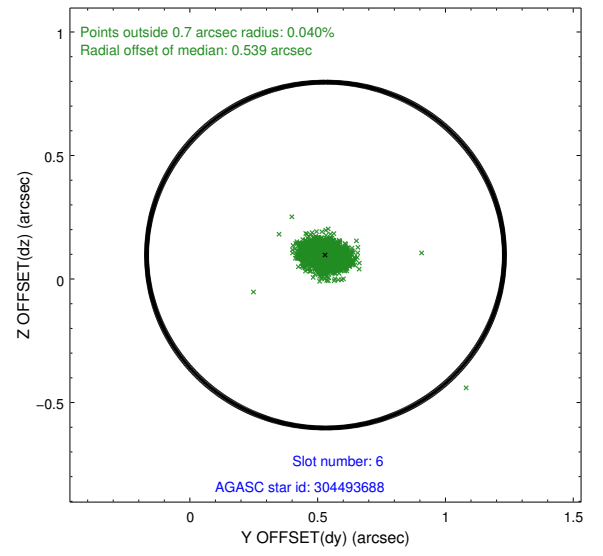
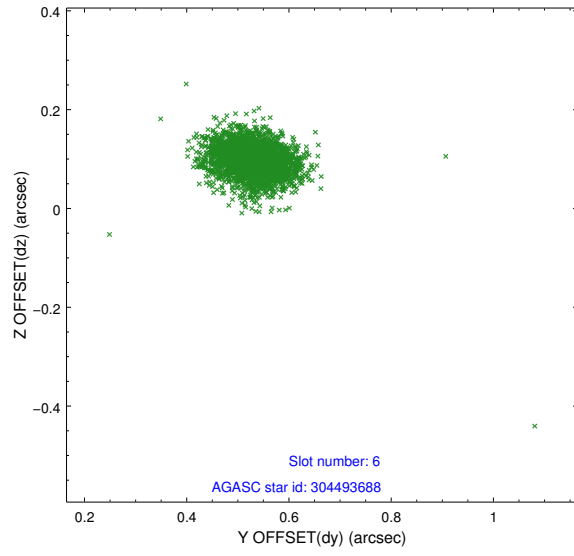
## 2.4.2 Slot 4



### 2.4.3 Slot 5

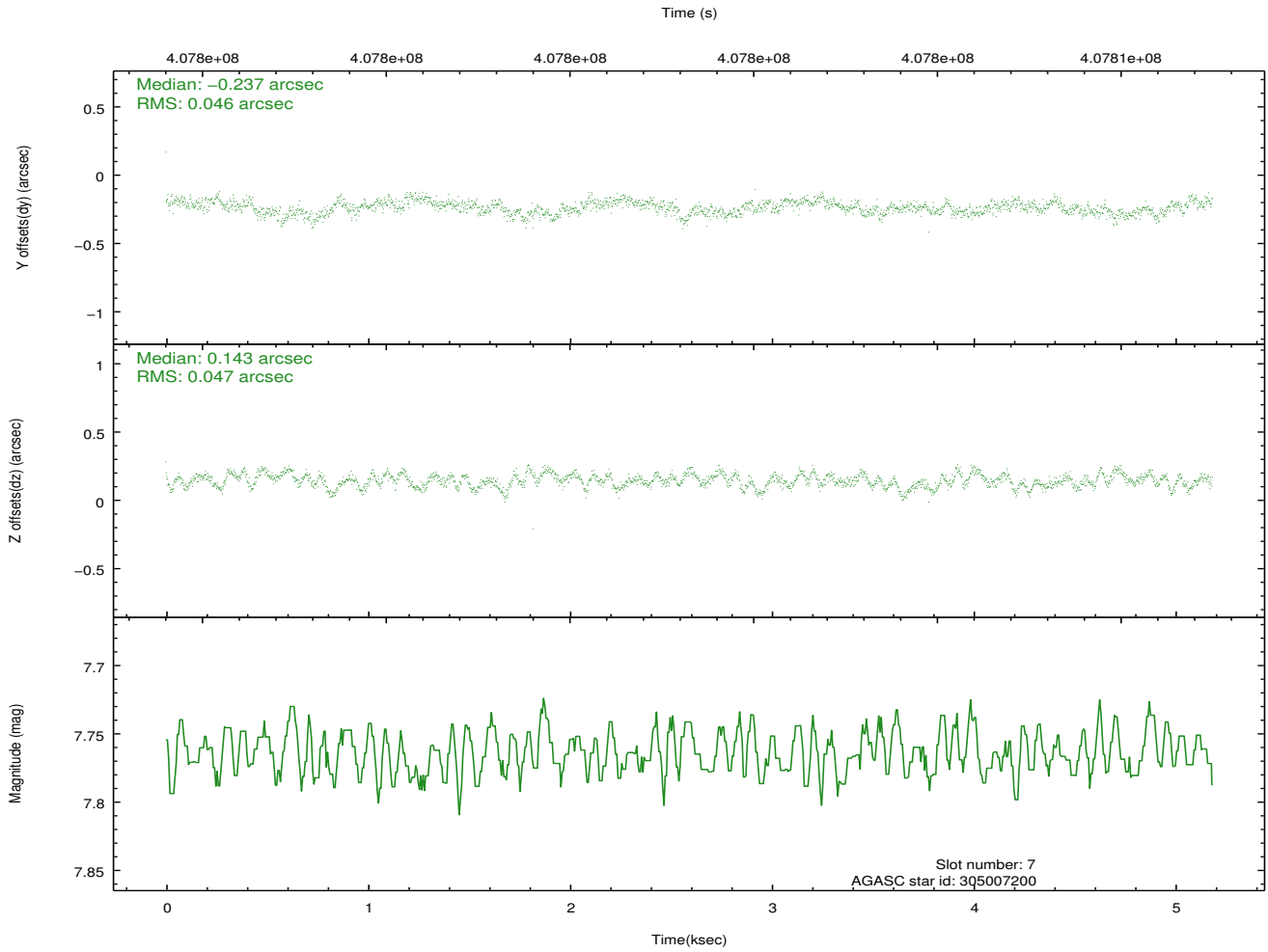
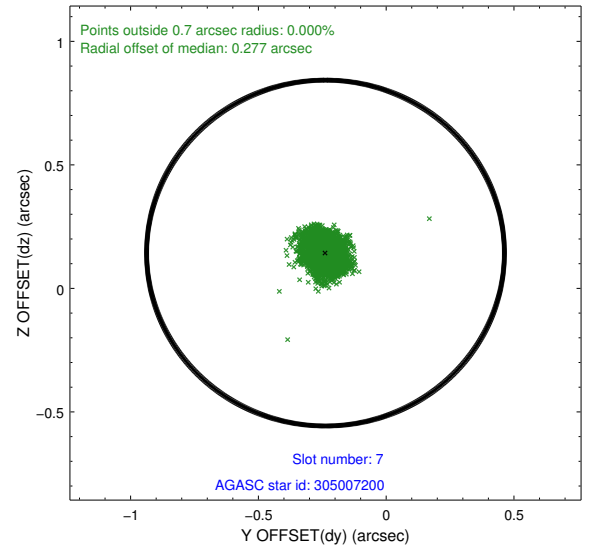
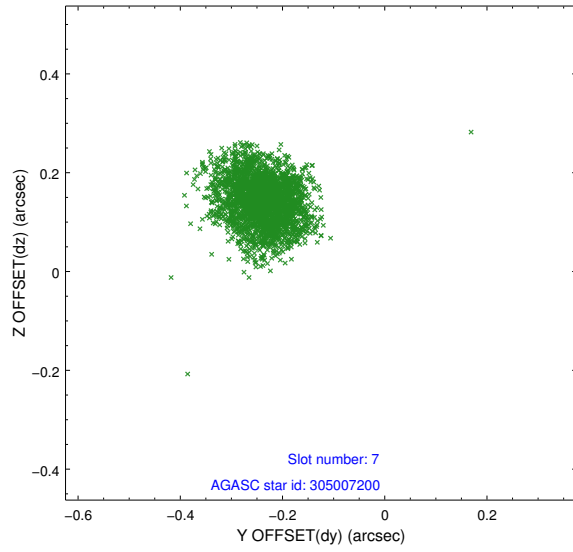


## 2.4.4 Slot 6



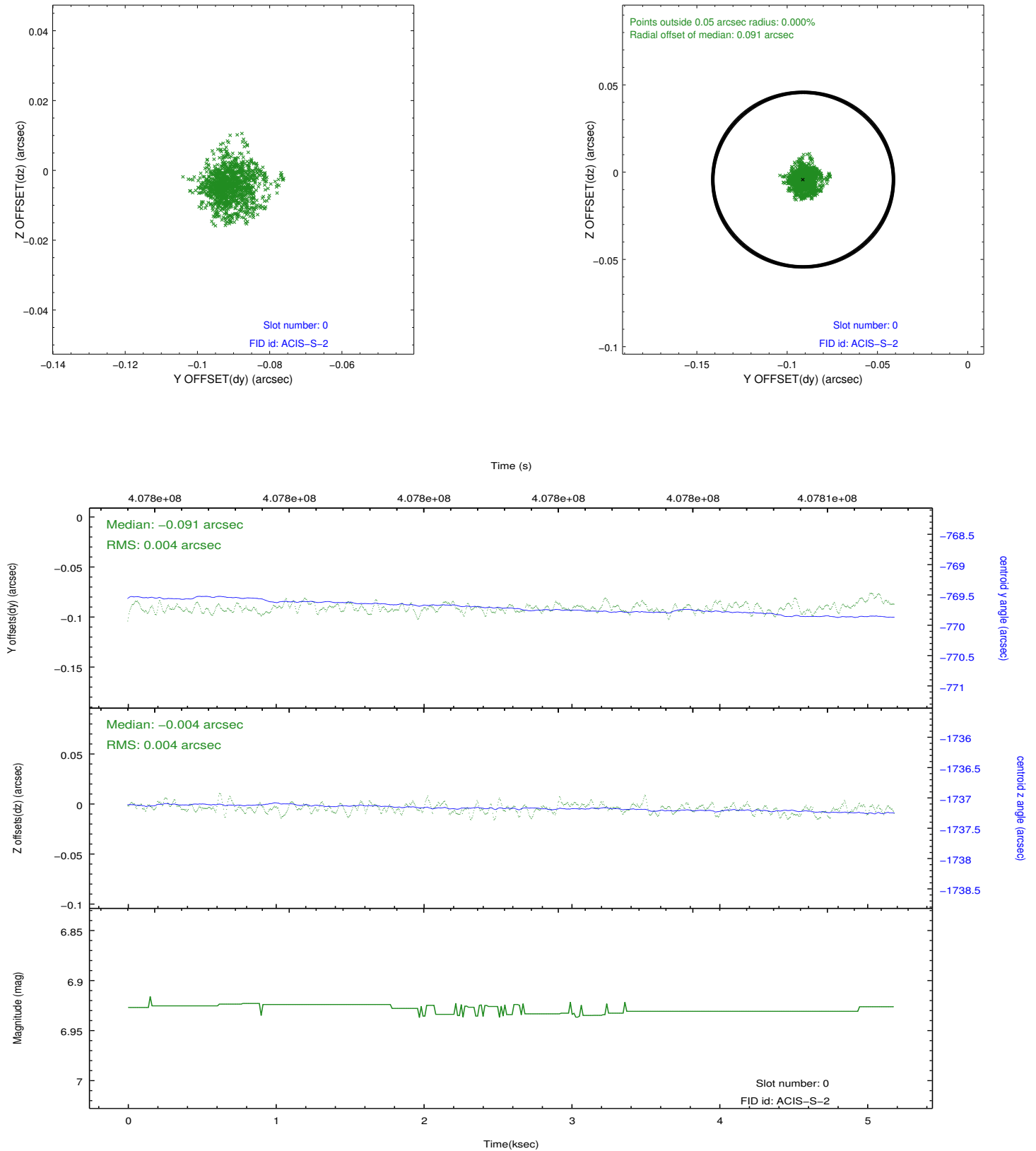


## 2.4.5 Slot 7

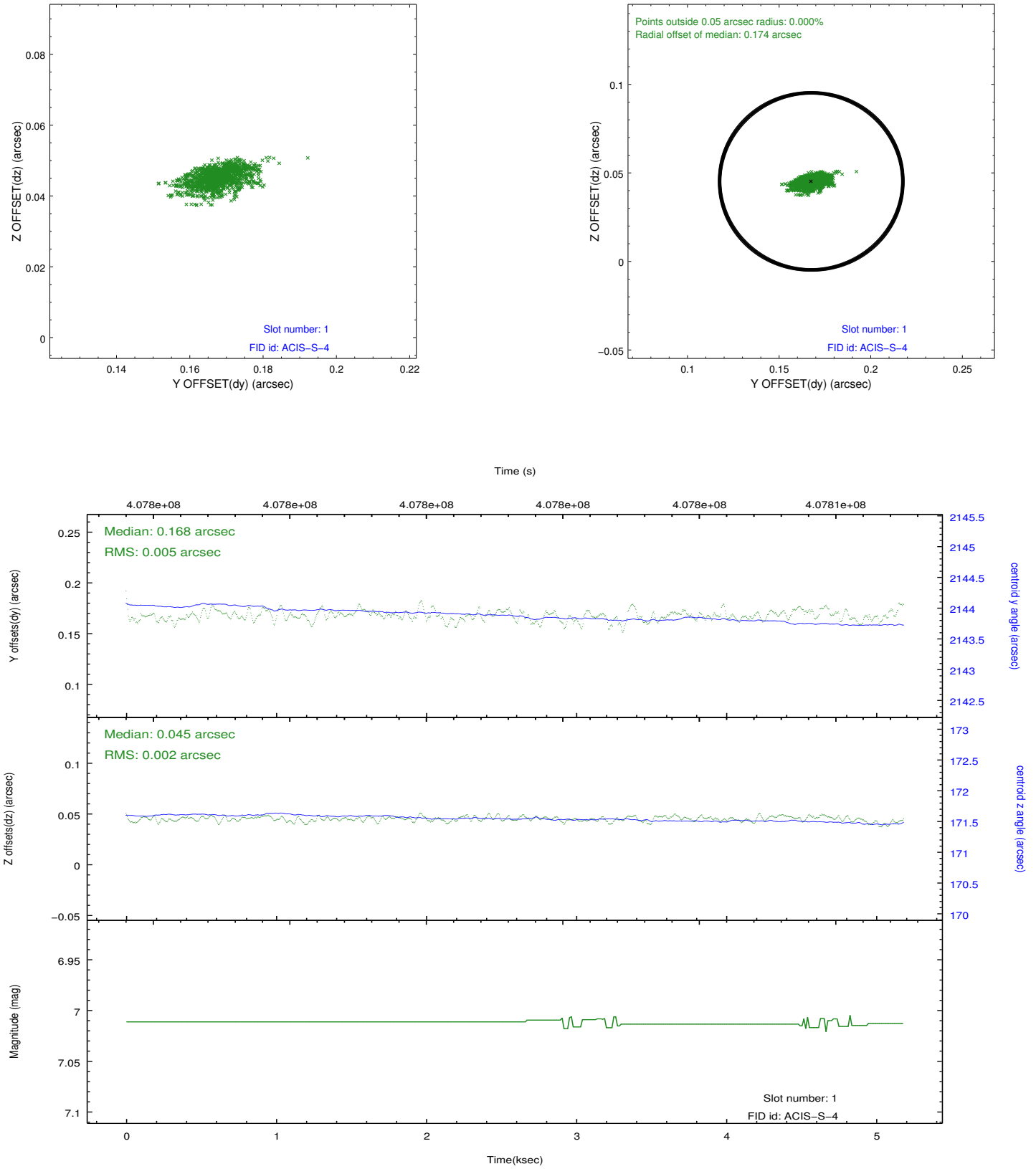


## 2.5 FID Slots

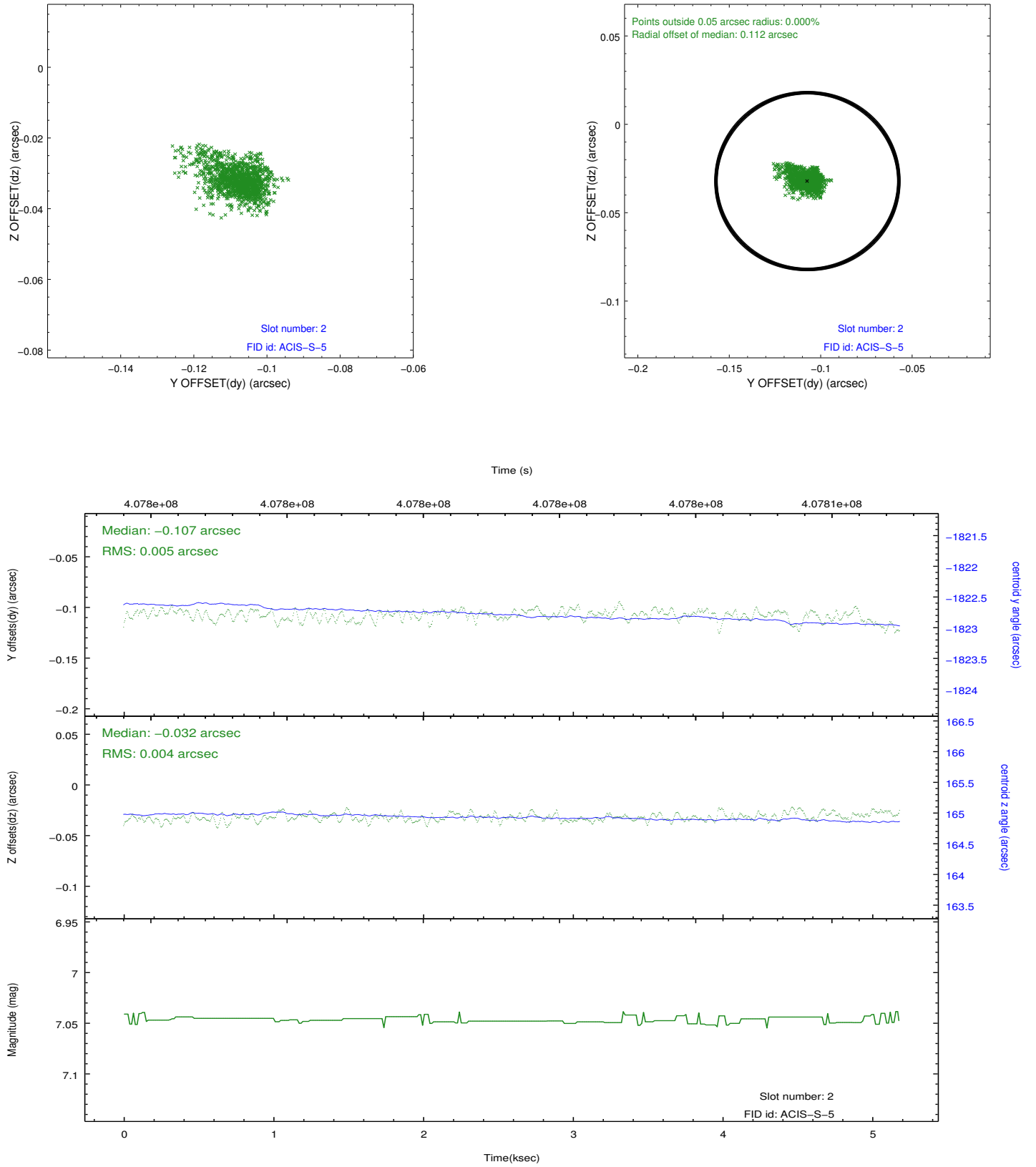
### 2.5.1 Slot 0



## 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)	2012.07.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.0264000749588

### **A.2 Comments**