

# V&V Reference Report

## L2 ASCDS Version : 7.6.10

Observation 869 - L2 Version 001  
Chandra X-Ray Center

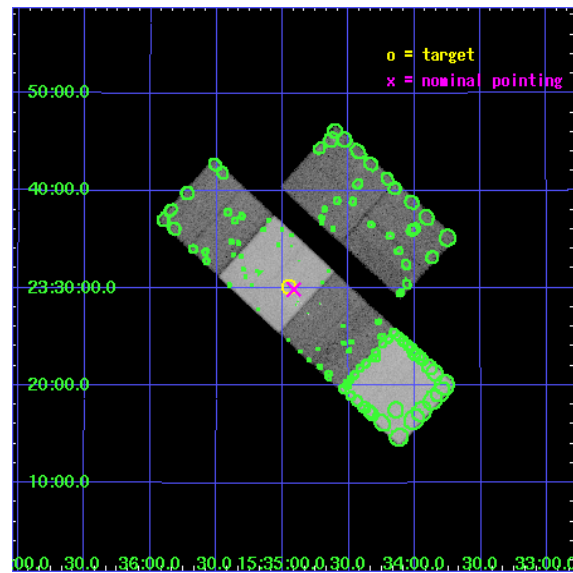
L2 Processing Date : May 27 2007

## 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>3</b>	<b>Point Sources</b>	<b>17</b>
<b>A</b>	<b>Summary</b>	<b>18</b>
A.1	Status . . . . .	18
A.2	Comments . . . . .	18

# 1 Front

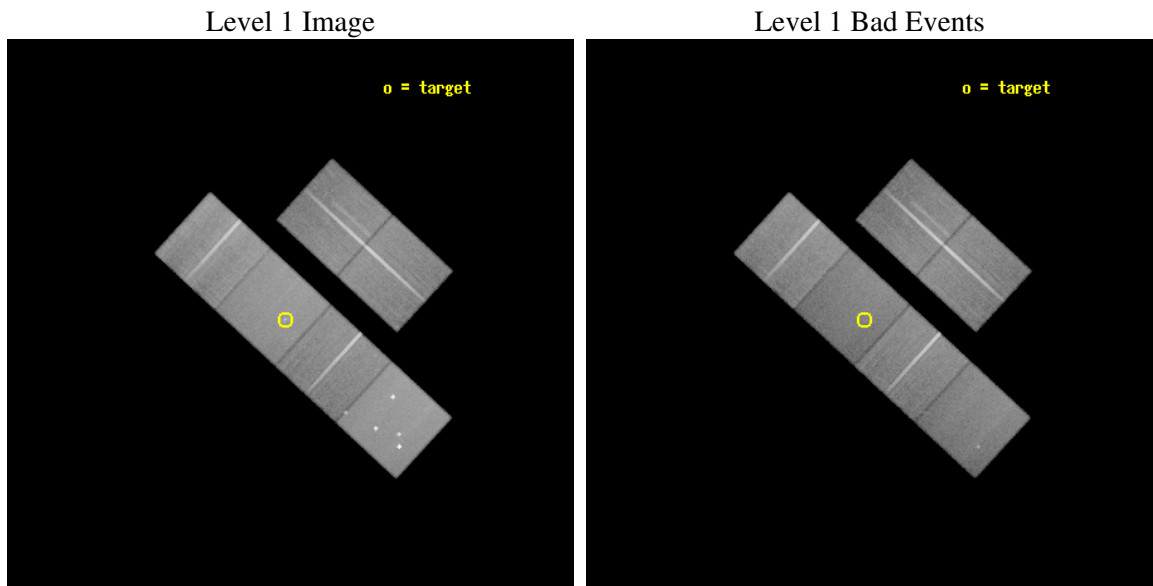
seq_num	700174
obs_id	869
title	AXAF INVESTIGATION OF THE ARCHETYPAL ULIRG: ARP 220
observer	Dr. David Clements
object	ARP 220
dtcycle	0
cycle	P
ra_targ	233.737917
dec_targ	23.503333
ra_nom	233.72870890273
dec_nom	23.498003078344
roll_nom	222.61560656356
revision	3
ontime	57219.036262199
livetime	56494.49437188
ontime2	57212.554261953
ontime3	57219.036182448
ontime5	57222.277222455
ontime6	57222.277152687
ontime7	57219.036262199
ontime8	57215.79516238
l2events	547539



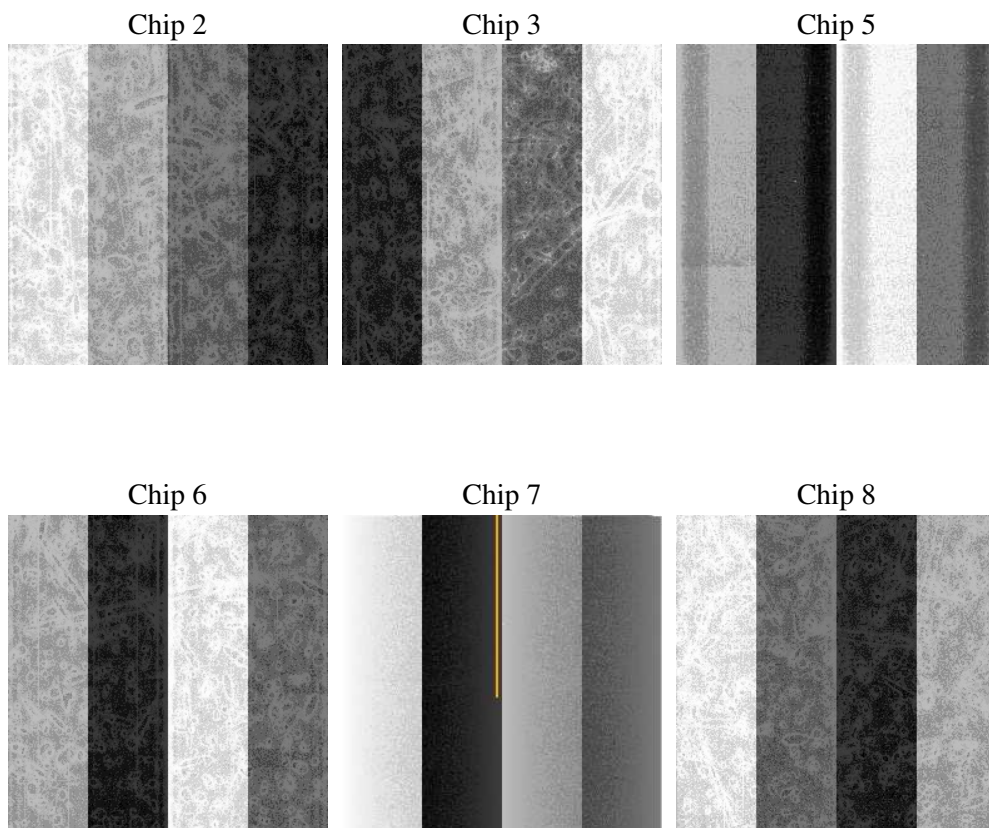
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.10
caldsver	3.4.0
date	2007-05-27T13:19:25
revision	3

sched_exp_time	57280.000000
ontime	57219.036262199
ontime2	57212.554261953
ontime3	57219.036182448
ontime5	57222.277222455
ontime6	57222.277152687
ontime7	57219.036262199
ontime8	57215.79516238
l1events	2518873

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	382040	360917	500530	370858	442395	462133
rejected events	341115	320201	257579	327002	250125	368762
rejected %	89%	88%	51%	88%	56%	79%

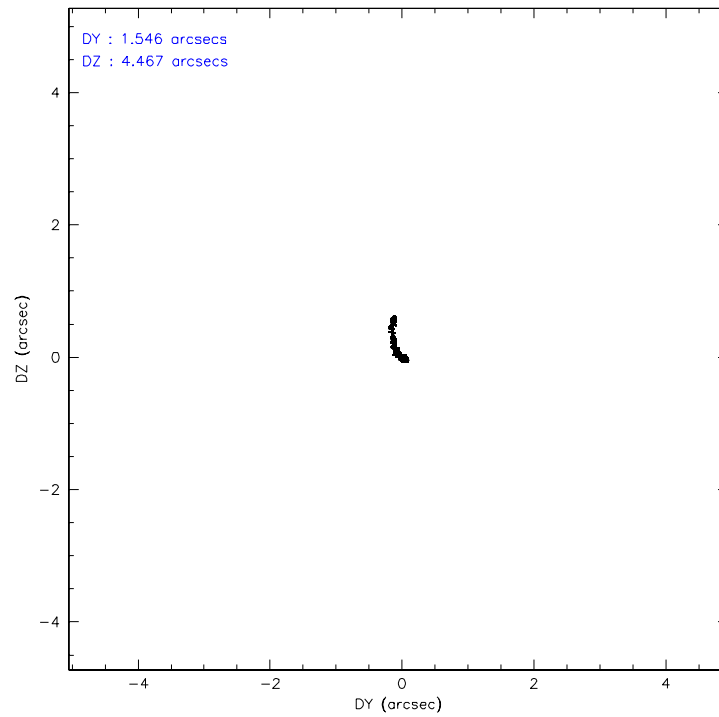
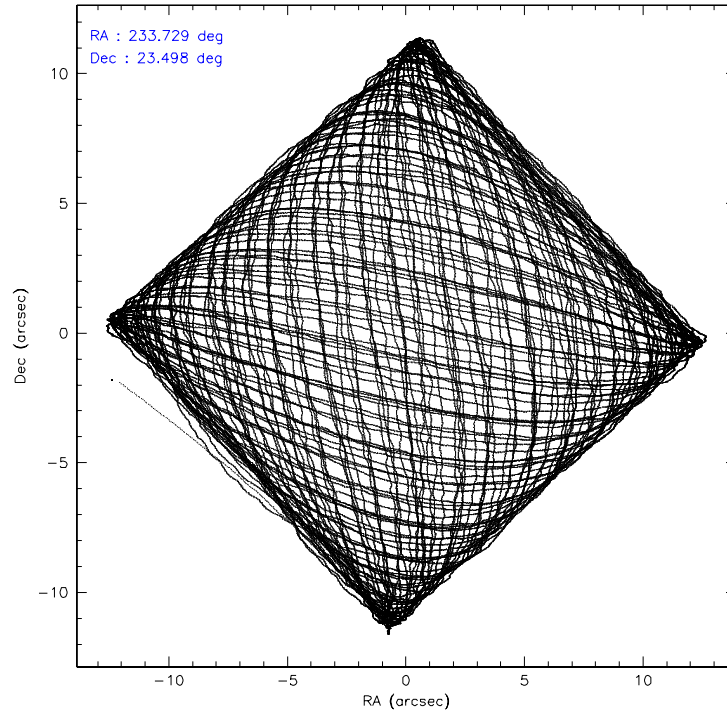
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	17685	18296	44402	19333	21279	31001
	4%	5%	8%	5%	4%	6%
grade 1 events	153	158	1351	159	382	264
	0%	0%	0%	0%	0%	0%
grade 2 events	8610	7799	64689	8365	38271	19392
	2%	2%	12%	2%	8%	4%
grade 3 events	3887	3841	10349	4128	17989	10382
	1%	1%	2%	1%	4%	2%
grade 4 events	3784	3767	10090	4150	17819	9427
	0%	1%	2%	1%	4%	2%
grade 5 events	11556	12820	36957	13895	42178	17758
	3%	3%	7%	3%	9%	3%
grade 6 events	6962	7015	113429	7884	96924	23198
	1%	1%	22%	2%	21%	5%
grade 7 events	329403	307221	219263	312944	207553	350711
	86%	85%	43%	84%	46%	75%

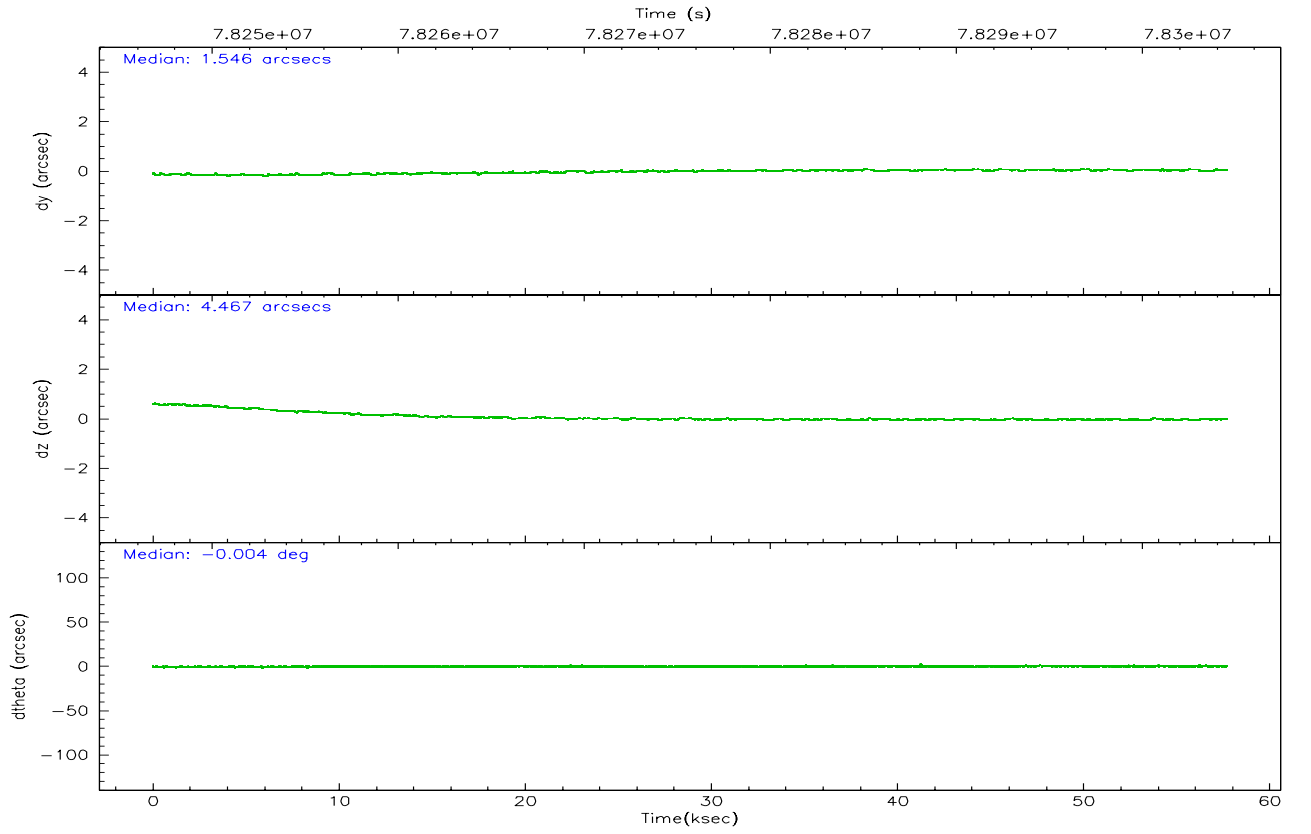
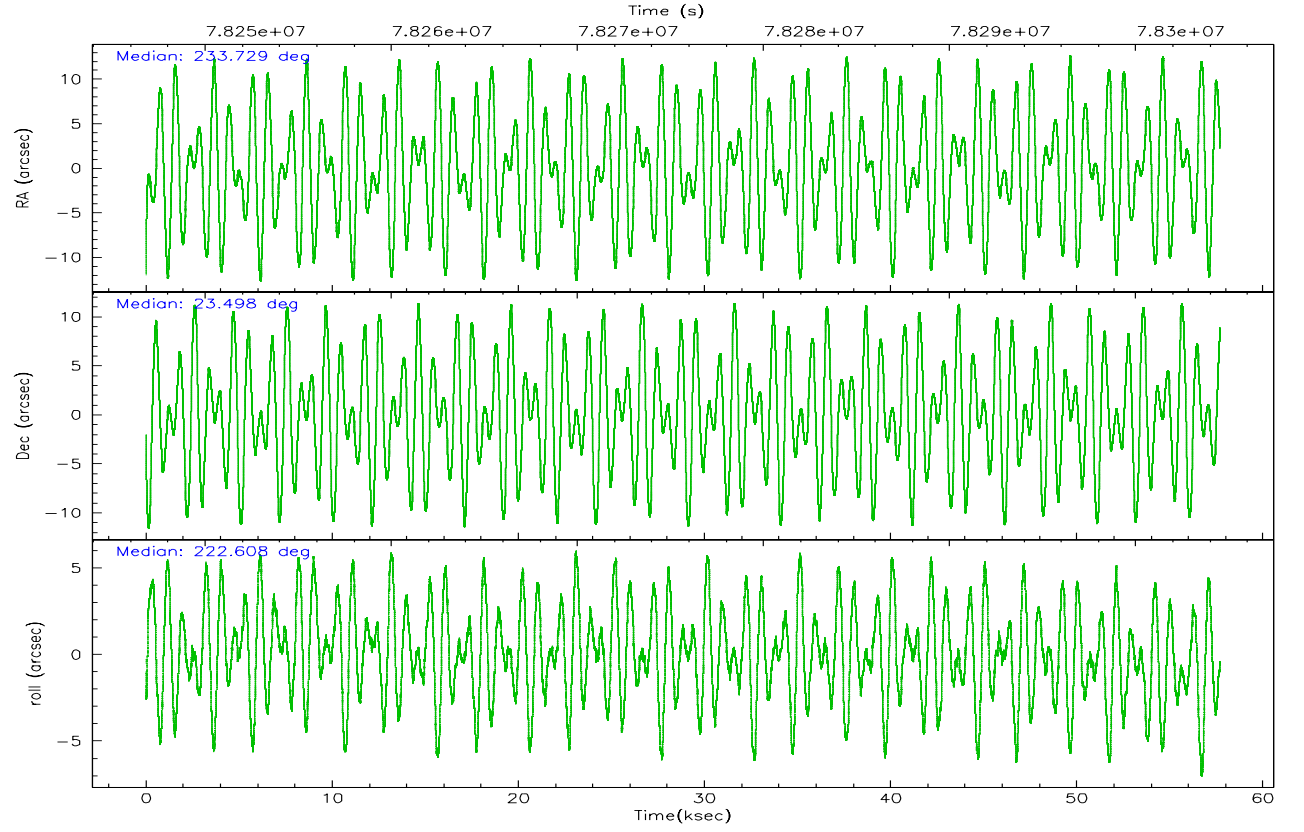


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-235678	ACIS-235678	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
Pointing RA	233.737511	233.7287089027331	Subarray requested	NONE	NONE
Pointing Dec	23.524226	23.49800307834391	Alternating exposures requested	N	N
Pointing Roll	222.455446	222.615606563556	Primary exposure time	3.200000	3.2
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1425803651734			
SIM translation stage offset (mm)	0	0.01005778216563158			
Observation start time	78247253.184000	78246174.36944801			
Observation start date	2000-06-24T15:19:49	2000-06-24T15:02:54			
Observation end time	78304533.184000	78304759.271608			
Observation end date	2000-06-25T07:14:29	2000-06-25T07:19:19			
Read mode	TIMED	TIMED			

## 2.3 Aspect



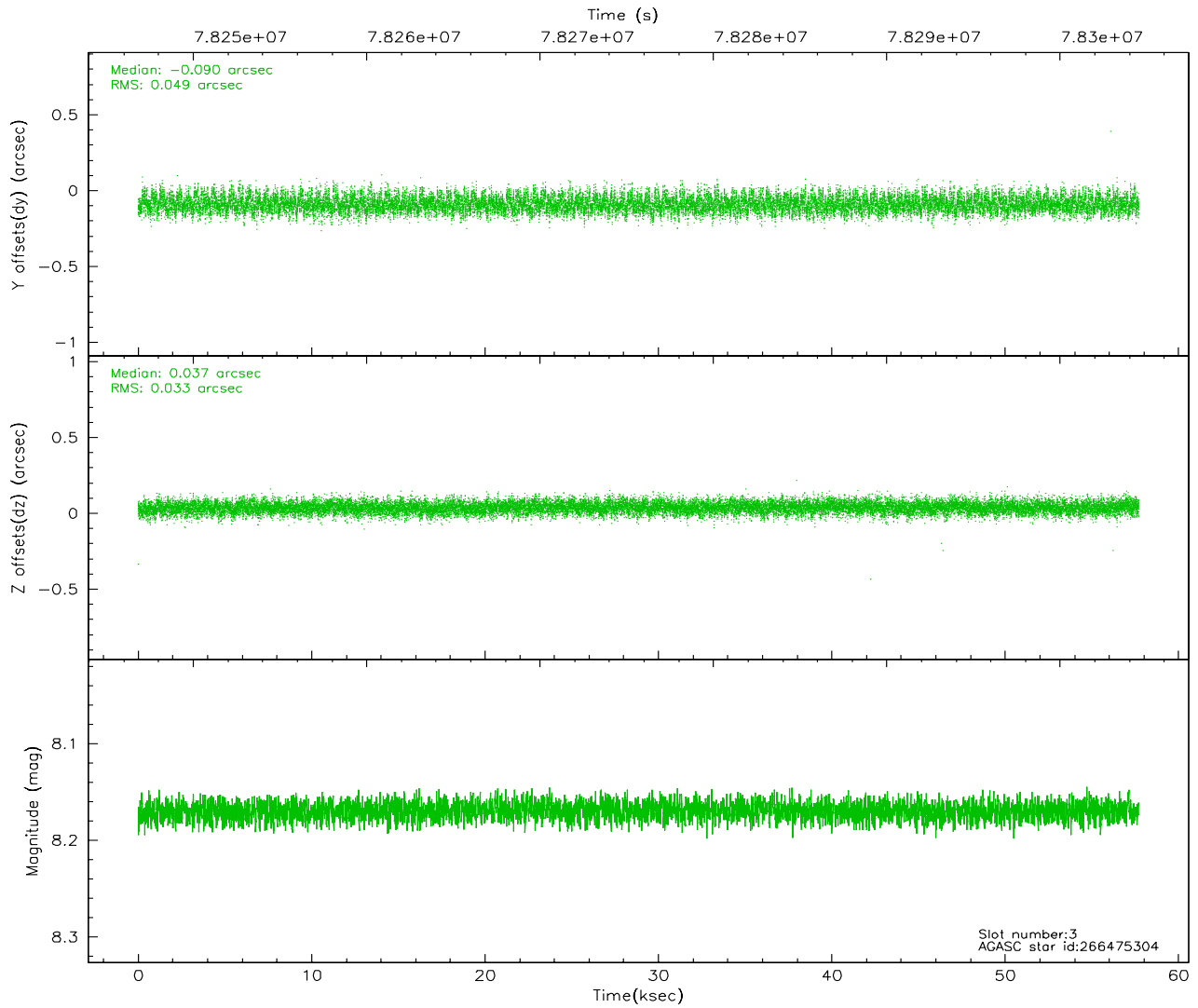
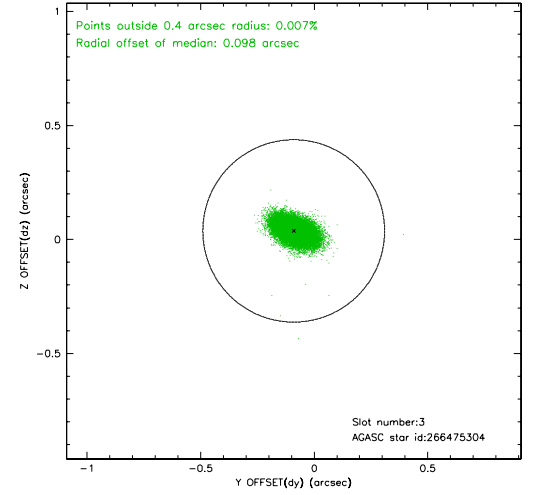
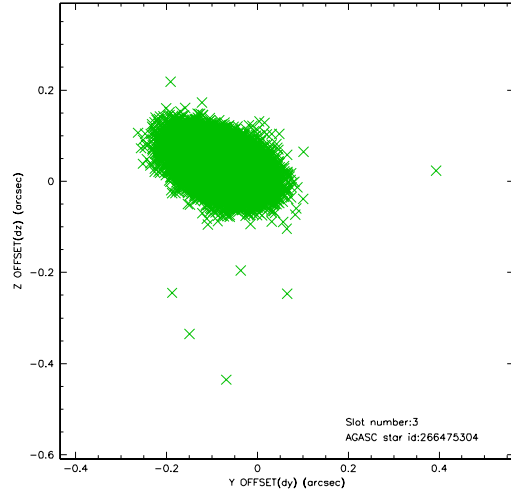


### Slot Statistics

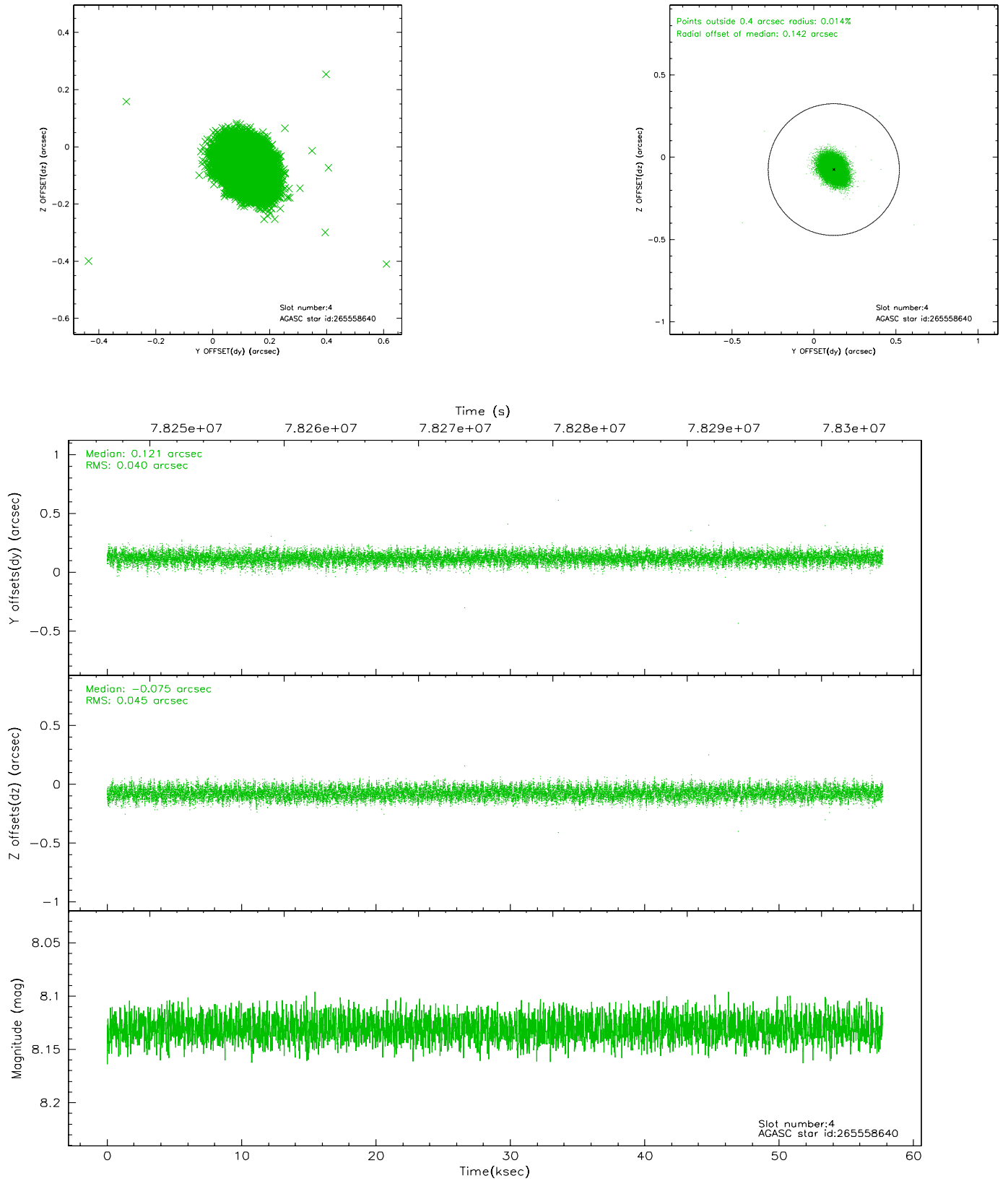
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	14073	0.005	0.011	0.006	0.010	0.000000	0.000000	-754.12	-1725.58
1	FID	ACIS-S-4	7.21	14073	-0.023	-0.004	0.006	0.010	0.000000	0.000000	2159.15	182.92
2	FID	ACIS-S-6	7.36	14072	-0.010	0.000	0.007	0.012	0.000000	0.000000	407.80	820.28
3	GUIDE	266475304	8.17	28139	-0.090	0.037	0.062	0.106	234.426224	23.481202	-1577.24	1645.59
4	GUIDE	265558640	8.13	28141	0.121	-0.075	0.064	0.104	233.589053	23.210181	1125.40	502.95
5	GUIDE	265561672	8.42	28136	0.090	-0.037	0.071	0.120	233.051219	23.521427	1674.90	-1525.11
6	GUIDE	265564608	8.57	28143	-0.012	-0.022	0.083	0.133	233.145057	23.882493	565.90	-2270.62
7	GUIDE	266471224	9.19	28134	-0.116	0.095	0.110	0.181	234.621444	23.463460	-2012.47	2125.42

## 2.4 Star Slots

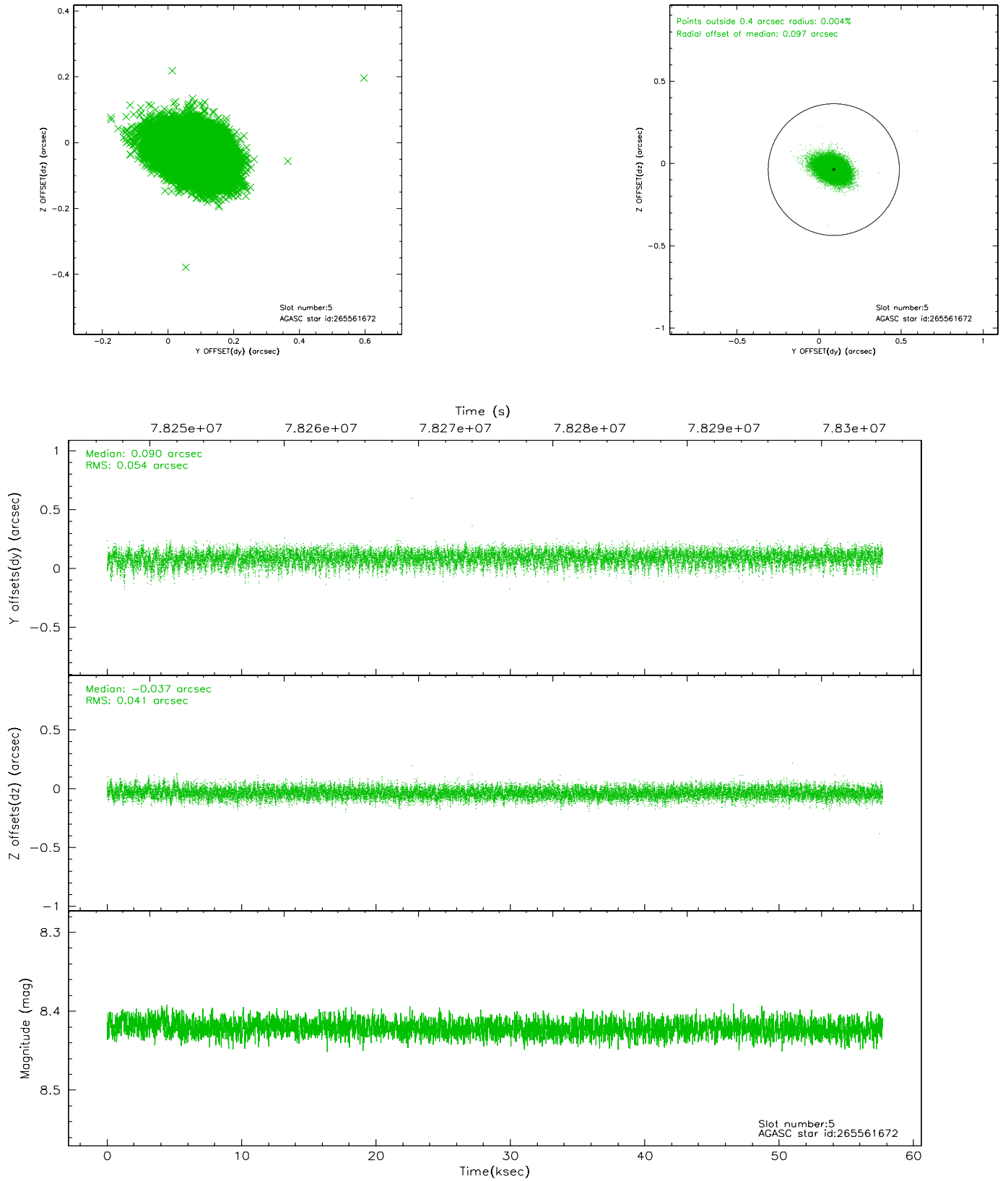
### 2.4.1 Slot 3



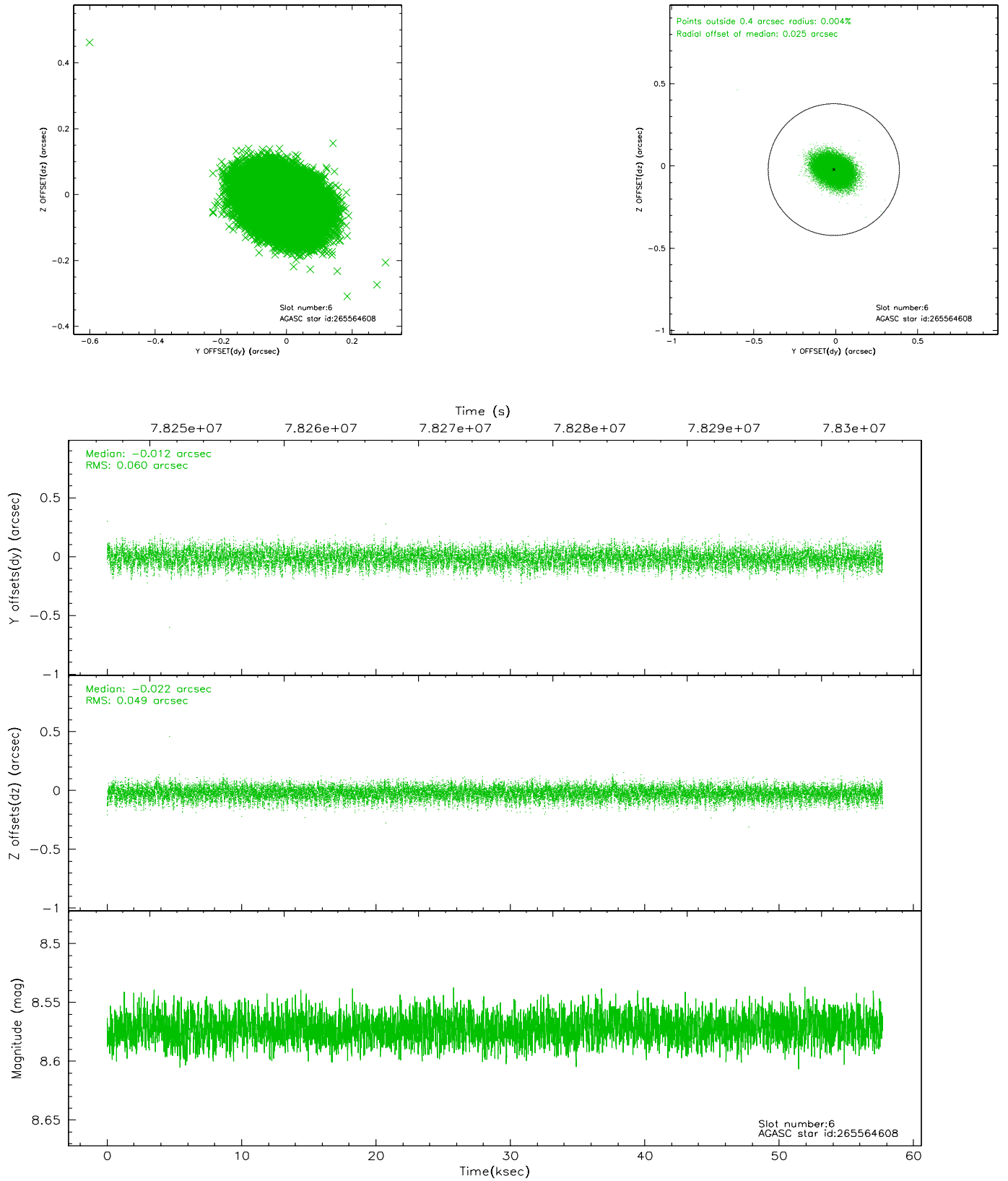
## 2.4.2 Slot 4



### 2.4.3 Slot 5

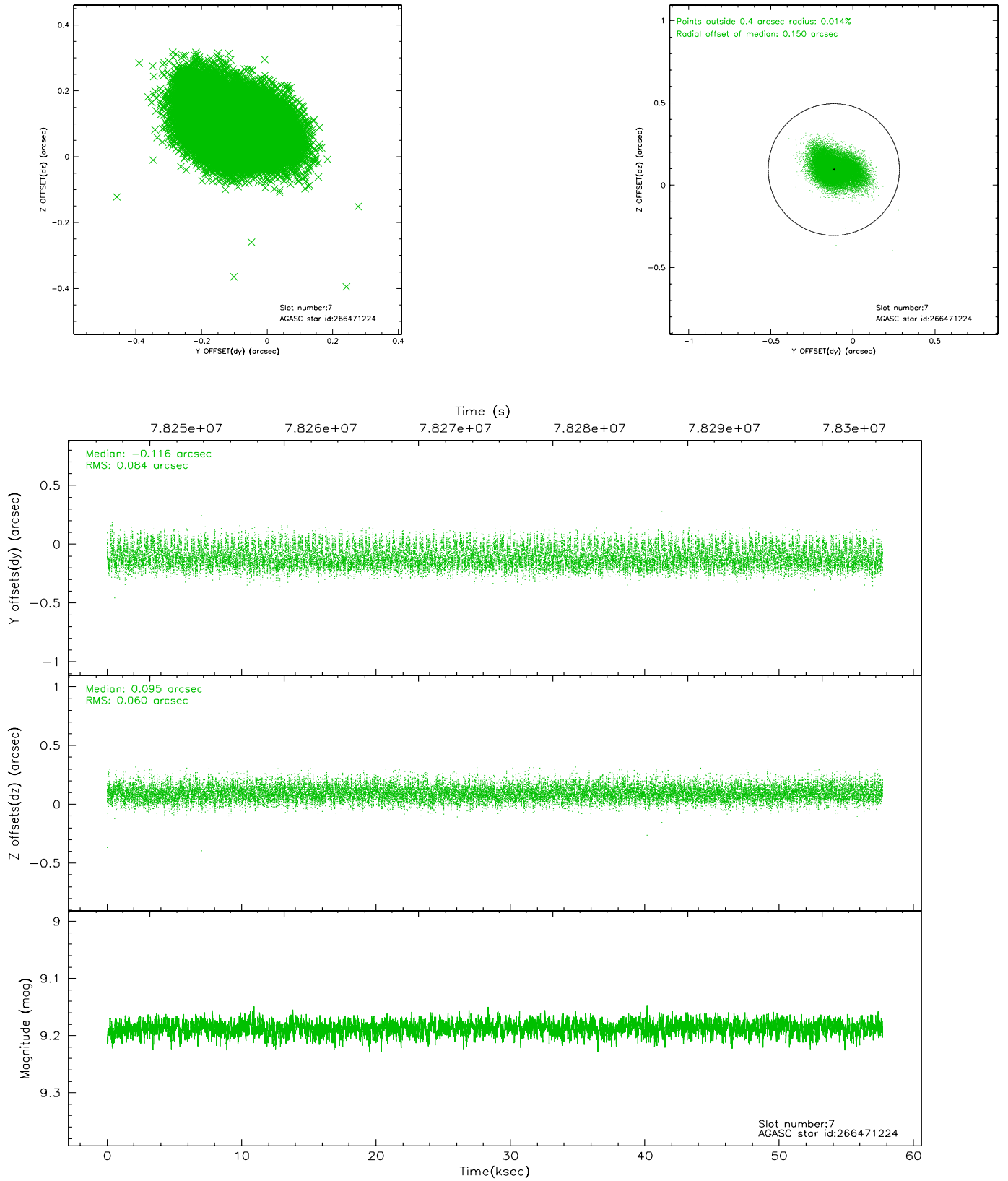


## 2.4.4 Slot 6



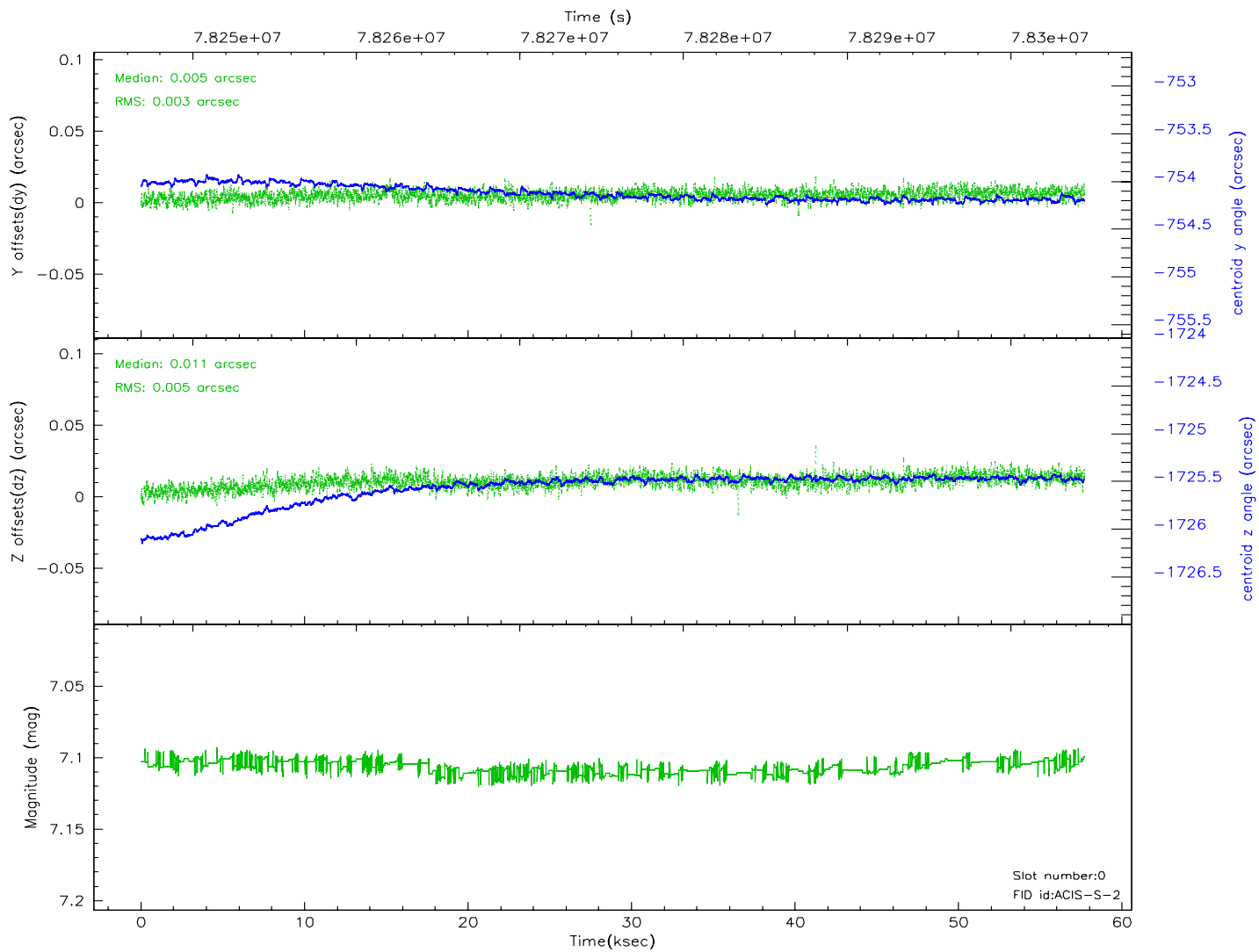
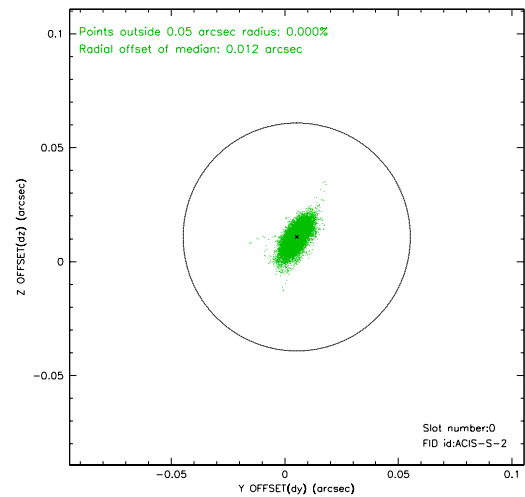
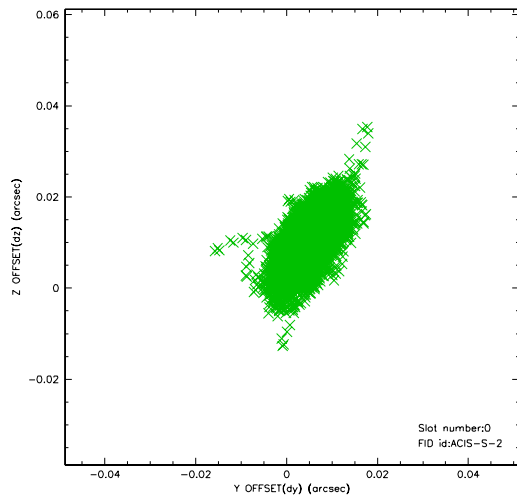


## 2.4.5 Slot 7

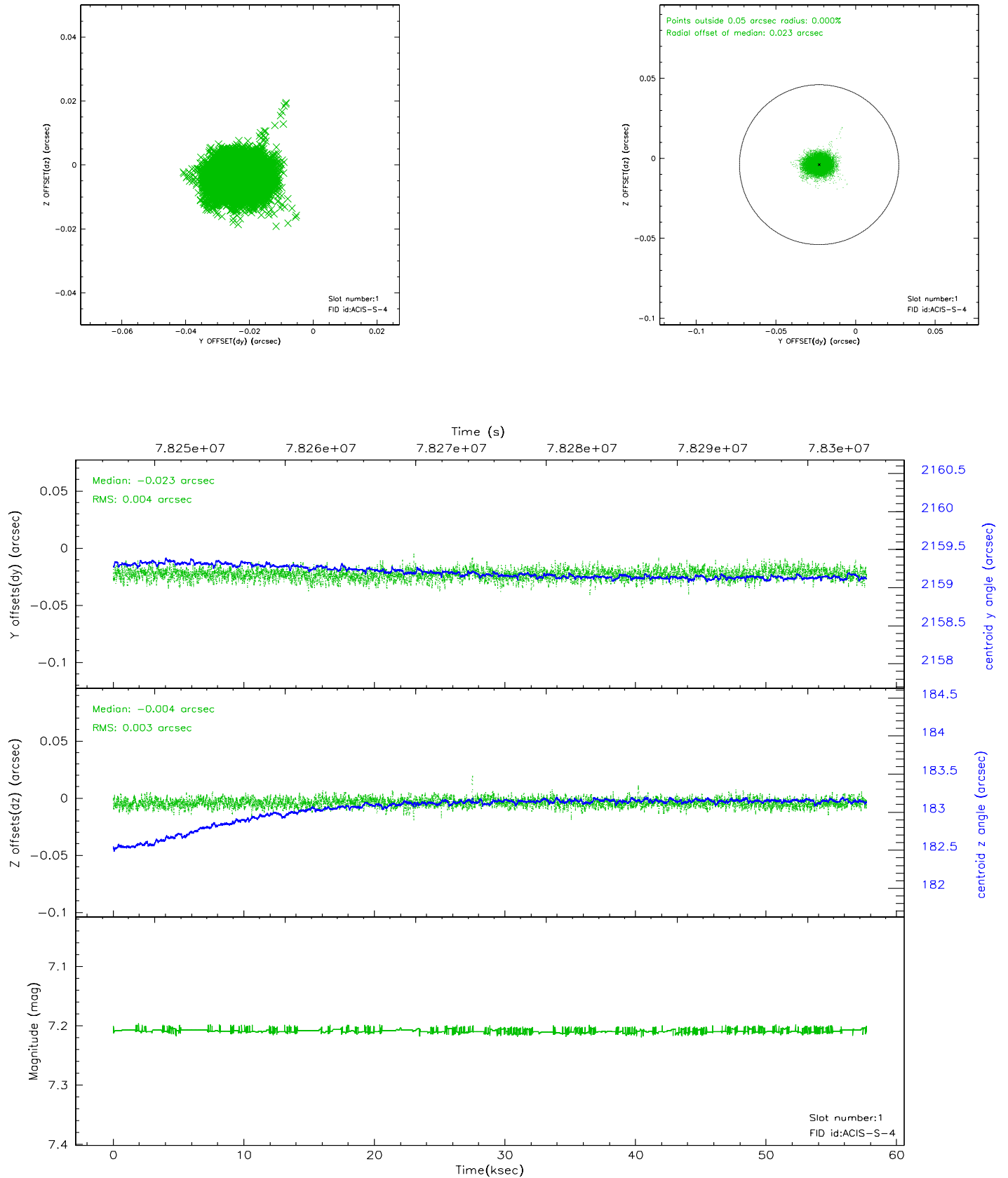


## 2.5 FID Slots

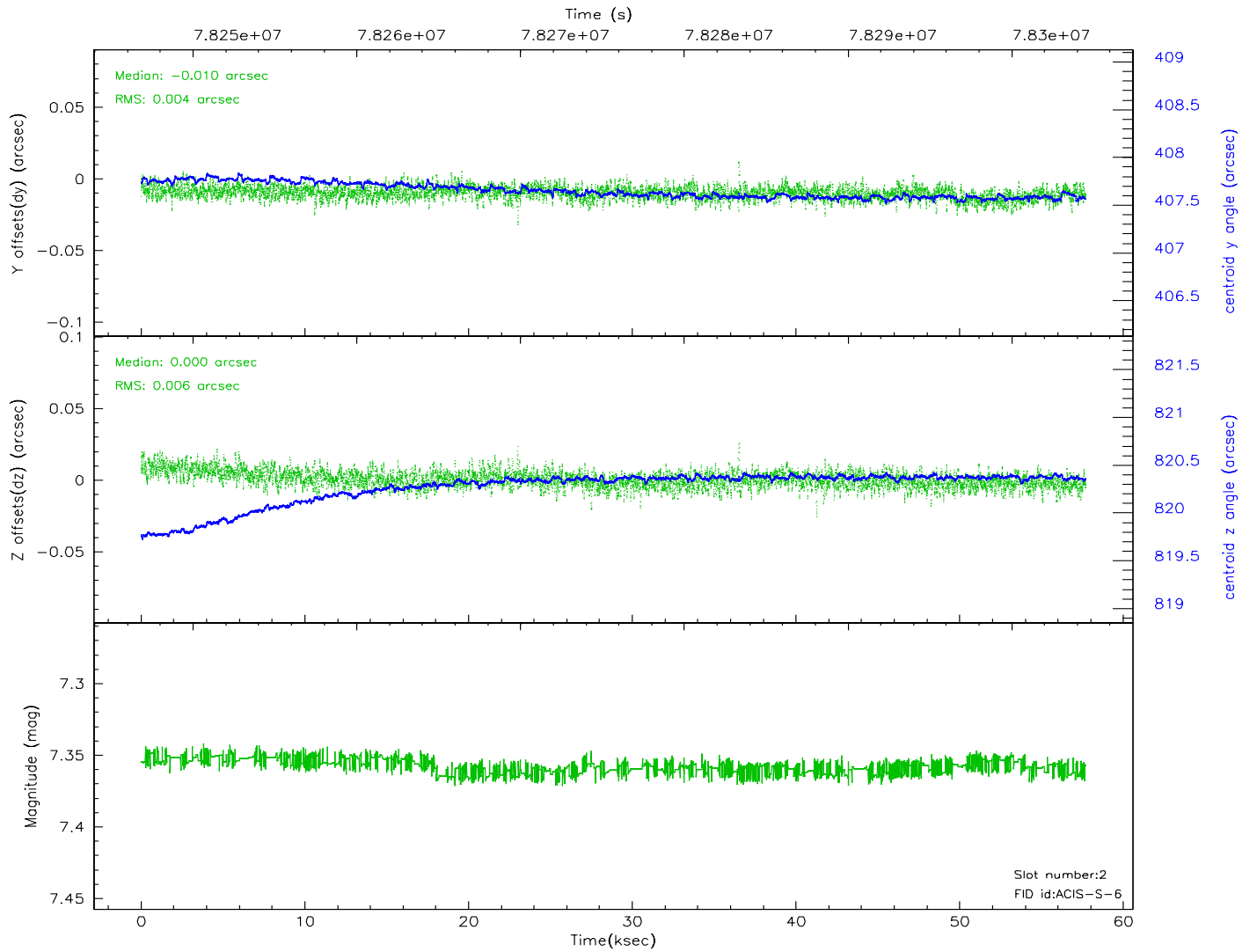
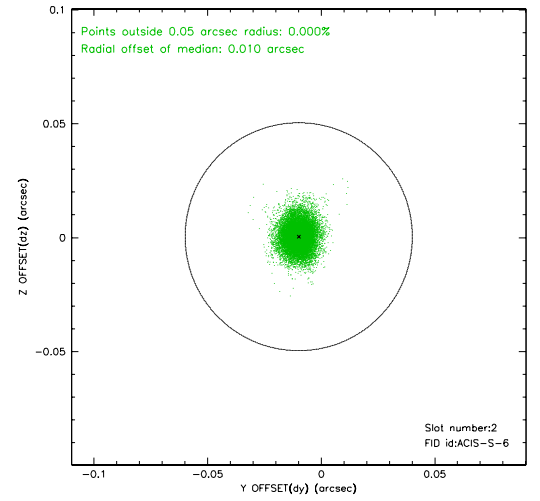
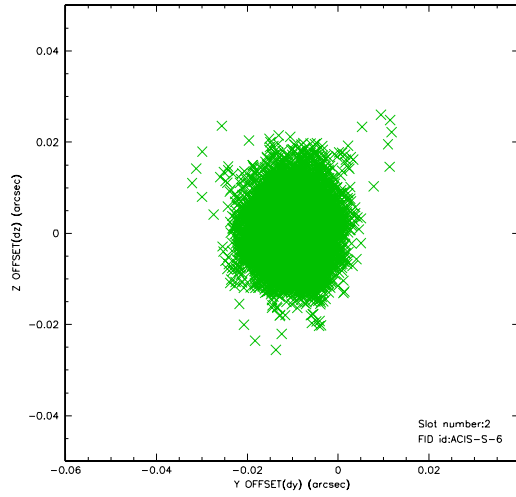
### 2.5.1 Slot 0



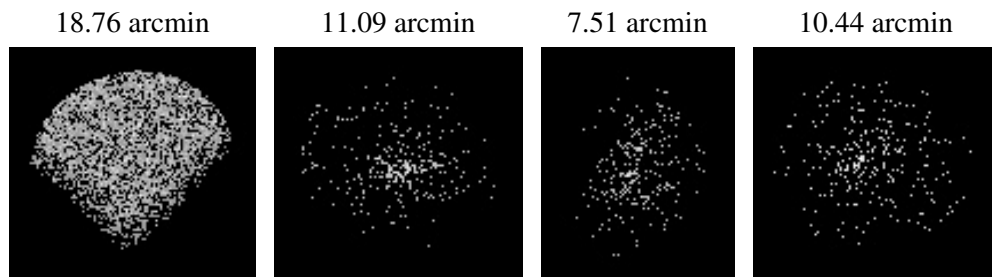
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2007.05.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	57.18

### A.2 Comments