

# V&V Reference Report

## L2 ASCDS Version : 10.4.2.1

Observation 17040 - L2 Version 1  
Chandra X-Ray Center

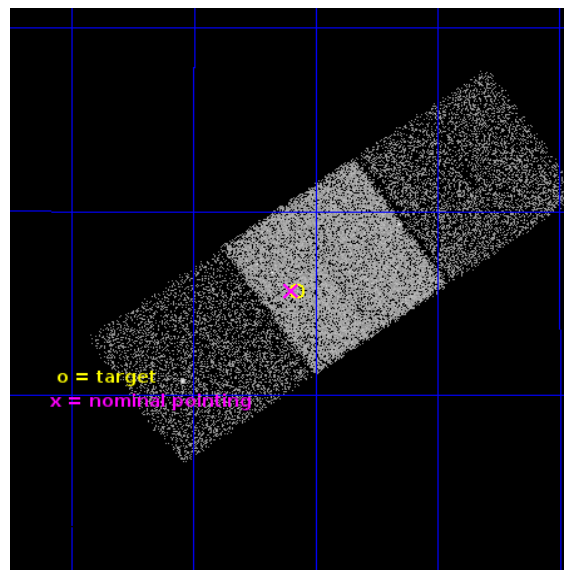
L2 Processing Date : Nov 15 2015

## 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

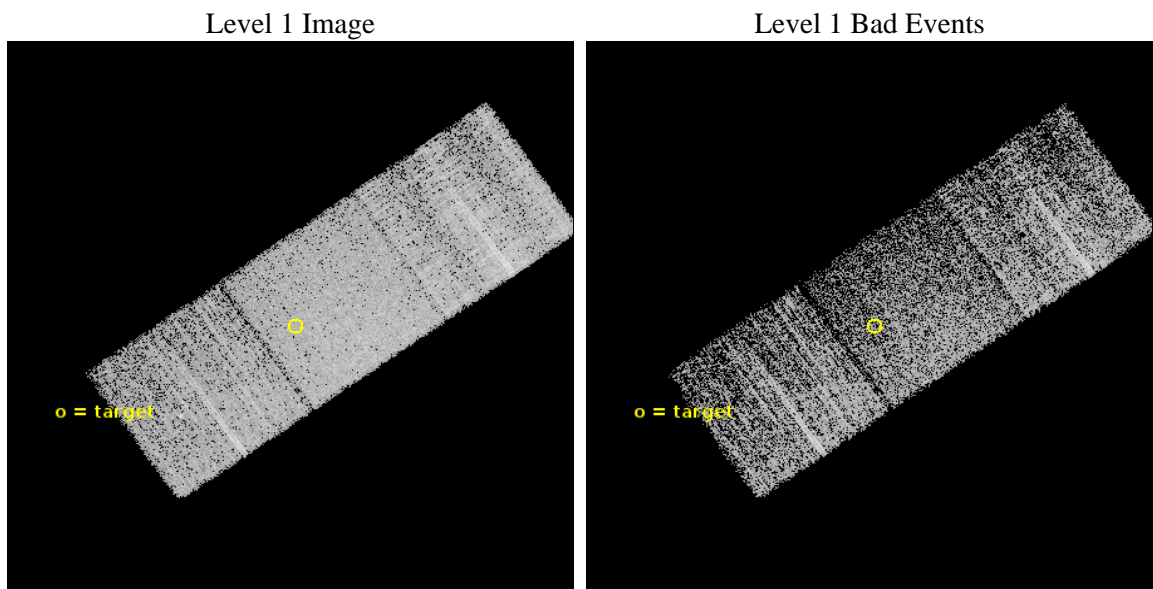
seq_num	703044	Sequence number
obs_id	17040	Observation id
title	The Nature of Quasars with Redshifted Broad Absorption Lines	Propo
observer	Prof. William Brandt	Principal investigator
object	SDSS J1724+3135	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	261.018333	Observer's specified target RA [deg]
dec_targ	31.594333	Observer's specified target Dec [deg]
ra_nom	261.02470149827	Nominal RA [deg]
dec_nom	31.594727839146	Nominal Dec [deg]
roll_nom	324.86286570033	Nominal Roll [deg]
revision	1	Processing version of data
ontime	10016.100077152	Sum of GTIs [s]
livetime	9885.2323558987	Livetime [s]
ontime6	10012.959106922	Sum of GTIs [s]
ontime7	10016.100077152	Sum of GTIs [s]
ontime8	10016.100077152	Sum of GTIs [s]
l2events	41714	Number of level 2 events



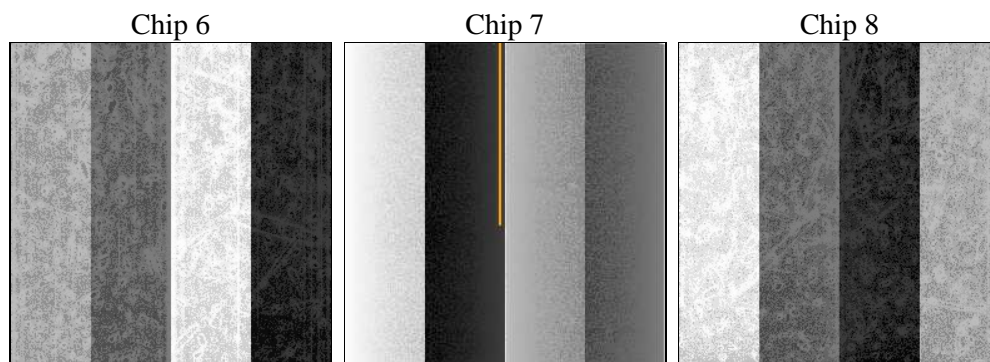
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9900.000000	[s] Scheduled observation exposure time
ascdsver	10.4.2.1	Processing system revision	ontime	10016.100077152	Sum of GTIs [s]
caldsver	4.6.10a	&#160	ontime6	10012.959106922	Sum of GTIs [s]
date	2015-11-15T14:24:33	Date and time of file creation	ontime7	10016.100077152	Sum of GTIs [s]
revision	1	Processing version of data	ontime8	10016.100077152	Sum of GTIs [s]
			l1events	189858	Number of level 1 events

### 2.1.4 Events

	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>
level 1 events	51610	69445	68803
rejected events	45268	39027	49485
rejected %	87%	56%	71%

	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>
grade 0 events	2210	2778	5629
	4%	4%	8%
grade 1 events	24	78	58
	0%	0%	0%
grade 2 events	1397	6270	4616
	2%	9%	6%
grade 3 events	688	2587	1929
	1%	3%	2%
grade 4 events	640	2474	1883
	1%	3%	2%
grade 5 events	2695	7071	3910
	5%	10%	5%
grade 6 events	1408	16315	5263
	2%	23%	7%
grade 7 events	42548	31872	45515
	82%	45%	66%

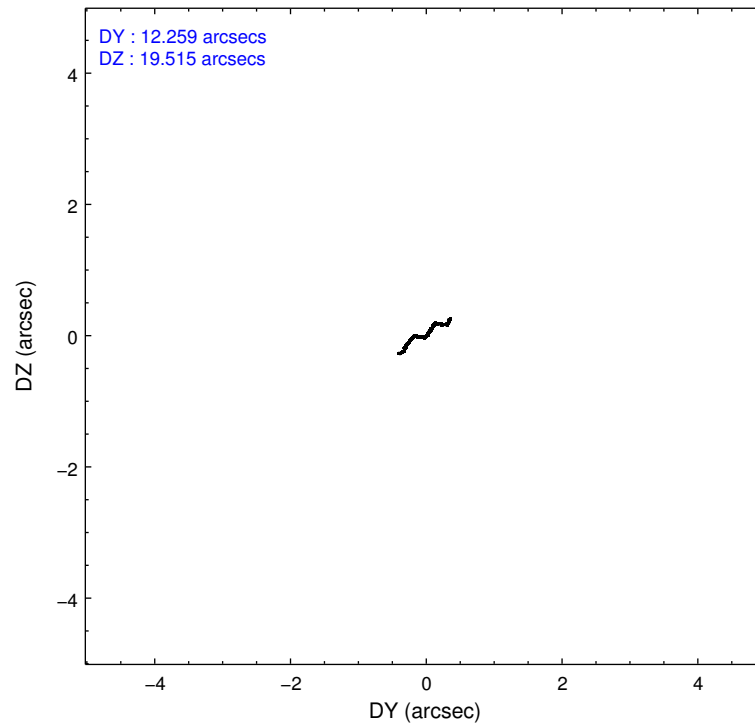
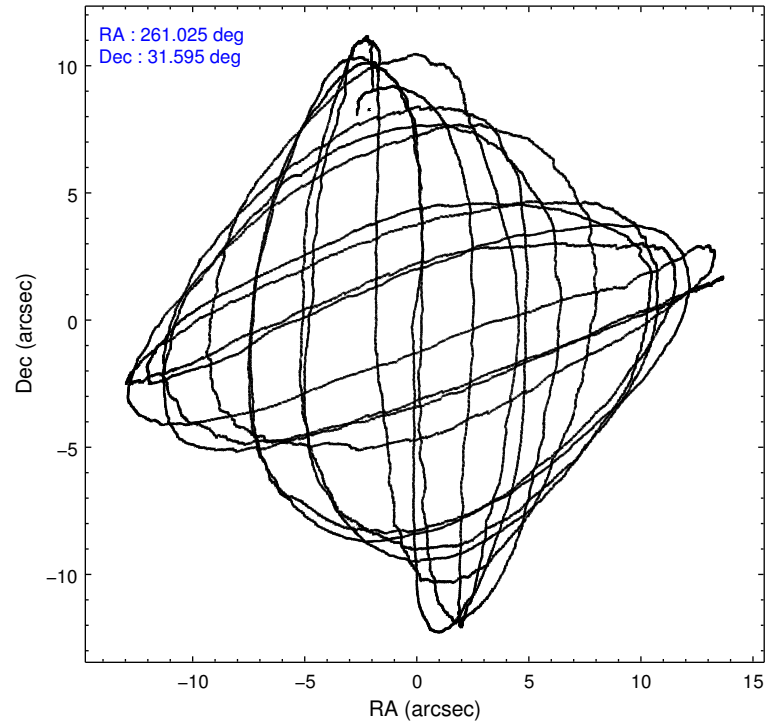


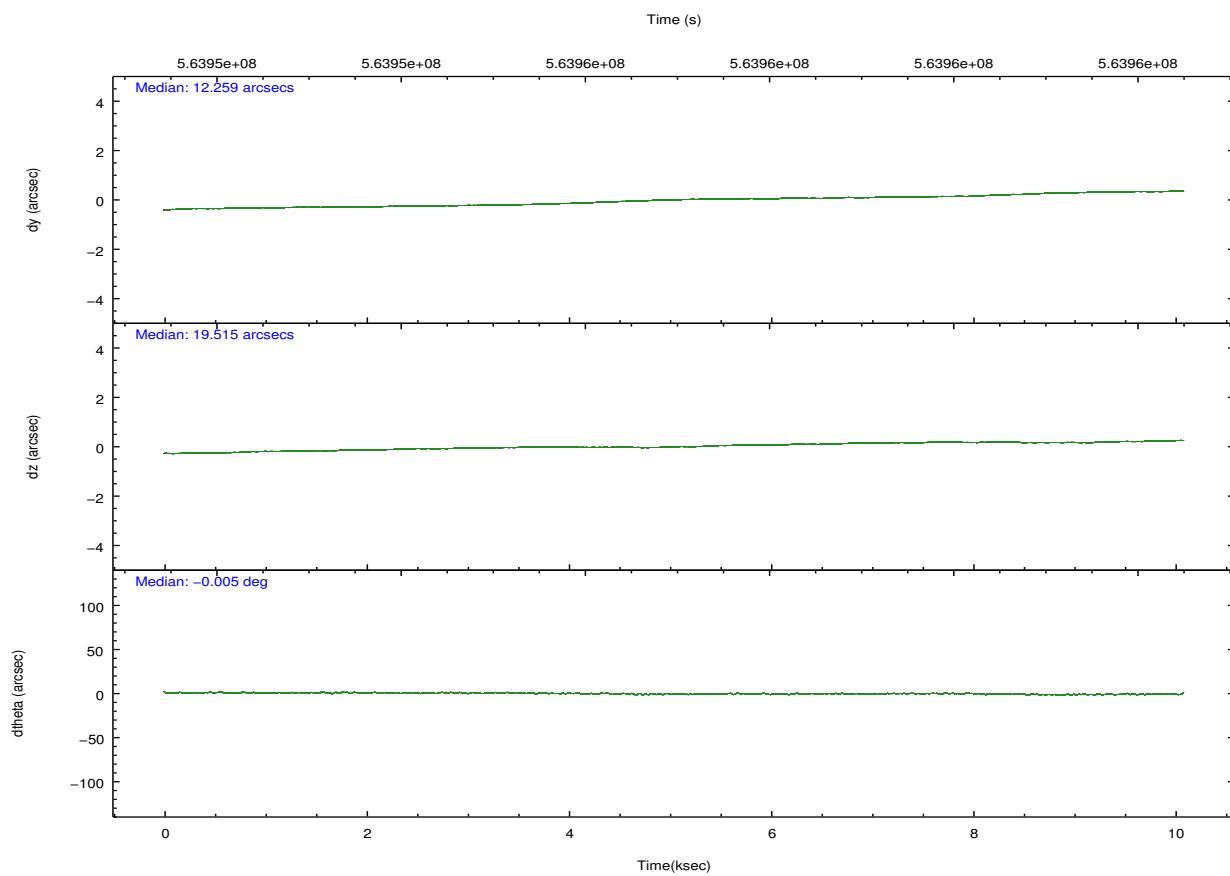
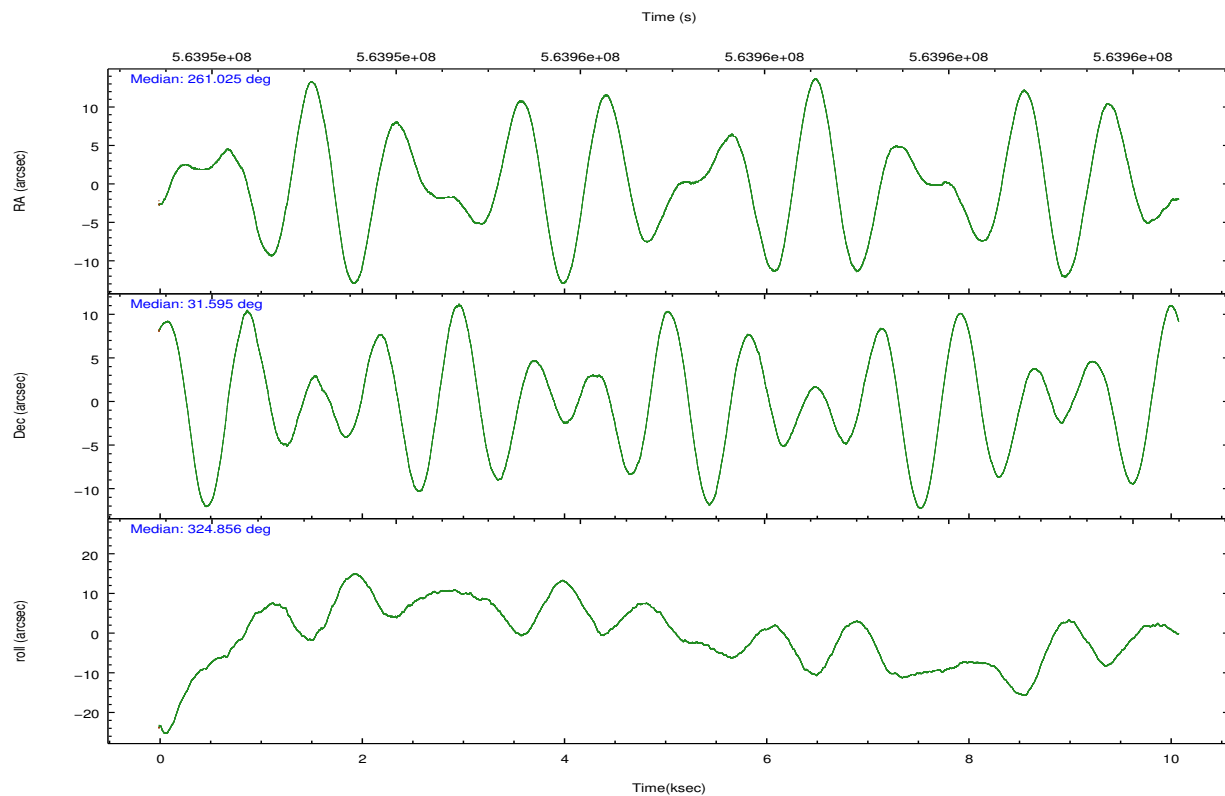
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-678	ACIS-678
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	260.992572	261.0247014982717
[deg] Pointing Dec	31.596787	31.59472783914576
[deg] Pointing Roll	324.723087	324.8628657003289
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1425803651734
[mm] SIM translation stage offset	0	0.01005778216563158
[s] Observation start time (MET)	563952109.184000	563950946.01071
Observation start date	2015-11-15T05:20:41	2015-11-15T05:02:26
[s] Observation end time (MET)	563962009.184000	563962980.5363899
Observation end date	2015-11-15T08:05:41	2015-11-15T08:23:00
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



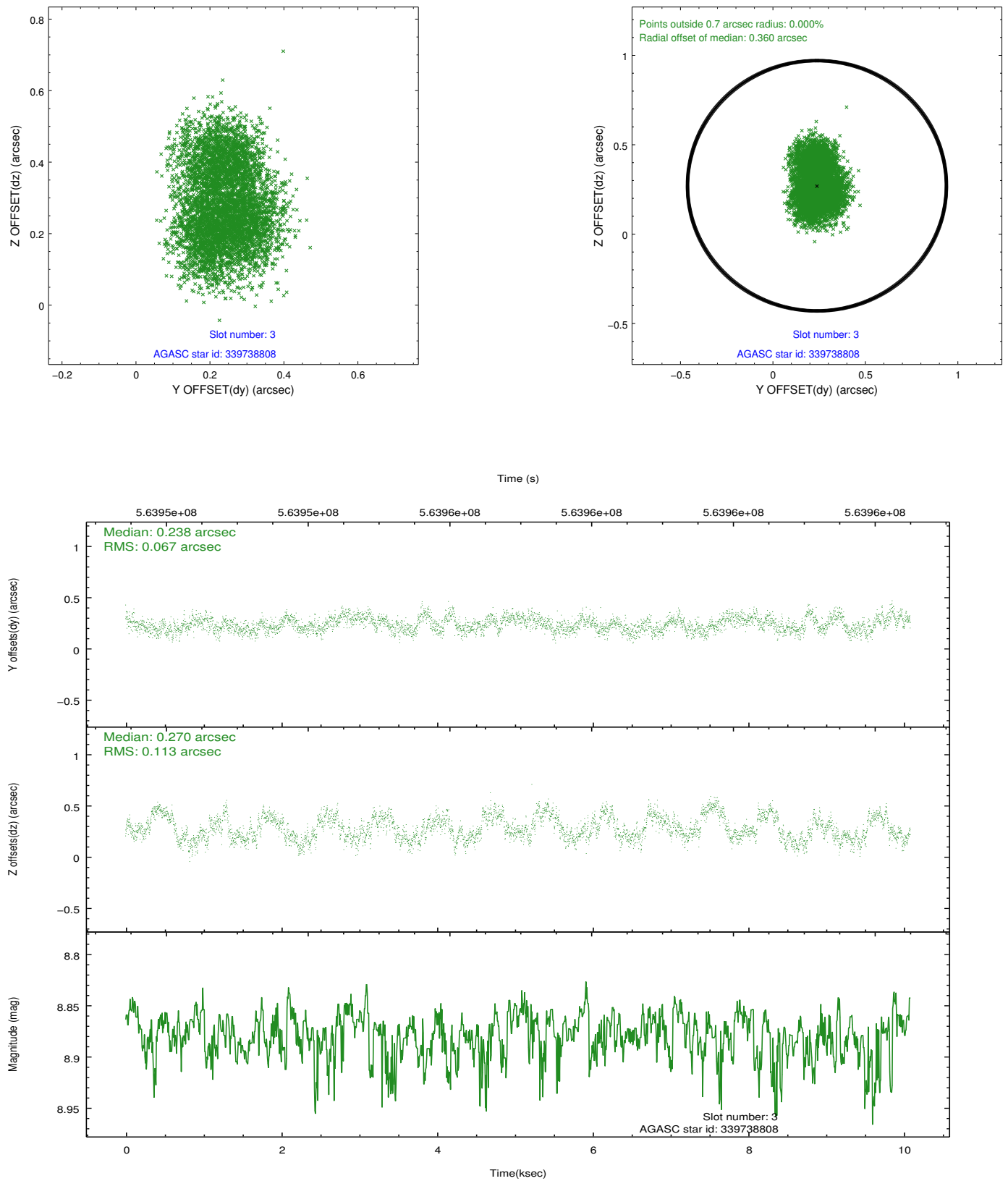


### Slot Statistics

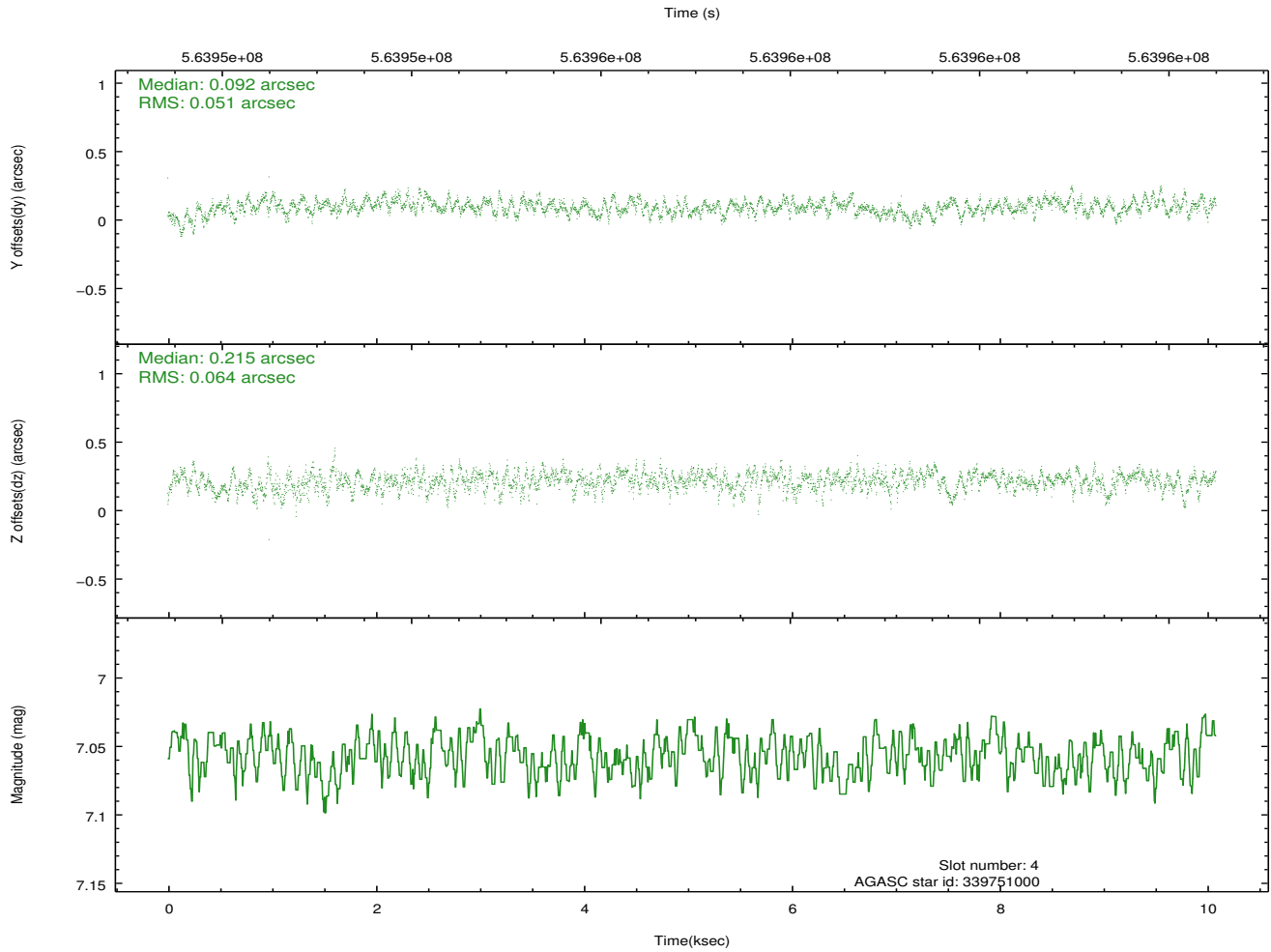
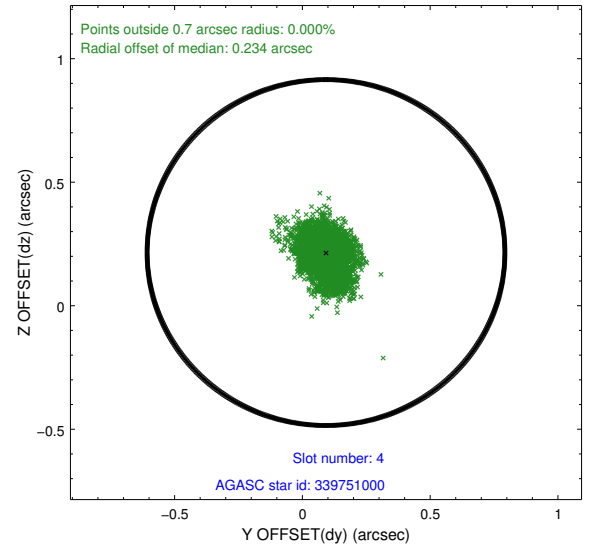
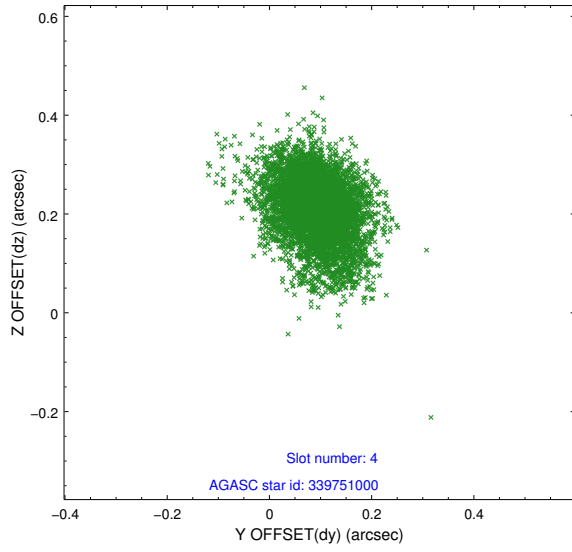
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.10	2459	-0.129	-0.073	0.008	0.017	0.000000	0.000000	-765.22	-1741.07
1	FID		ACIS-S-4	7.21	2461	0.352	0.082	0.007	0.013	0.000000	0.000000	2148.27	167.07
2	FID		ACIS-S-5	7.23	2460	-0.254	-0.000	0.009	0.017	0.000000	0.000000	-1817.55	161.19
3	GUIDE	used	339738808	8.88	4919	0.238	0.270	0.143	0.222	260.388344	31.860977	-2059.34	-286.51
4	GUIDE	used	339751000	7.06	4920	0.092	0.215	0.086	0.147	260.311297	31.256901	-1008.75	-2204.34
5	GUIDE	used	341453648	8.69	4920	0.077	-0.061	0.096	0.152	261.092485	31.170206	1138.28	-1075.98
6	GUIDE	used	341451568	8.90	4917	-0.086	-0.229	0.105	0.173	261.842957	31.461183	2408.61	1117.29
7	GUIDE	used	341973056	7.62	4919	-0.322	-0.201	0.097	0.155	261.162193	32.290362	-1020.59	2336.92

## 2.4 Star Slots

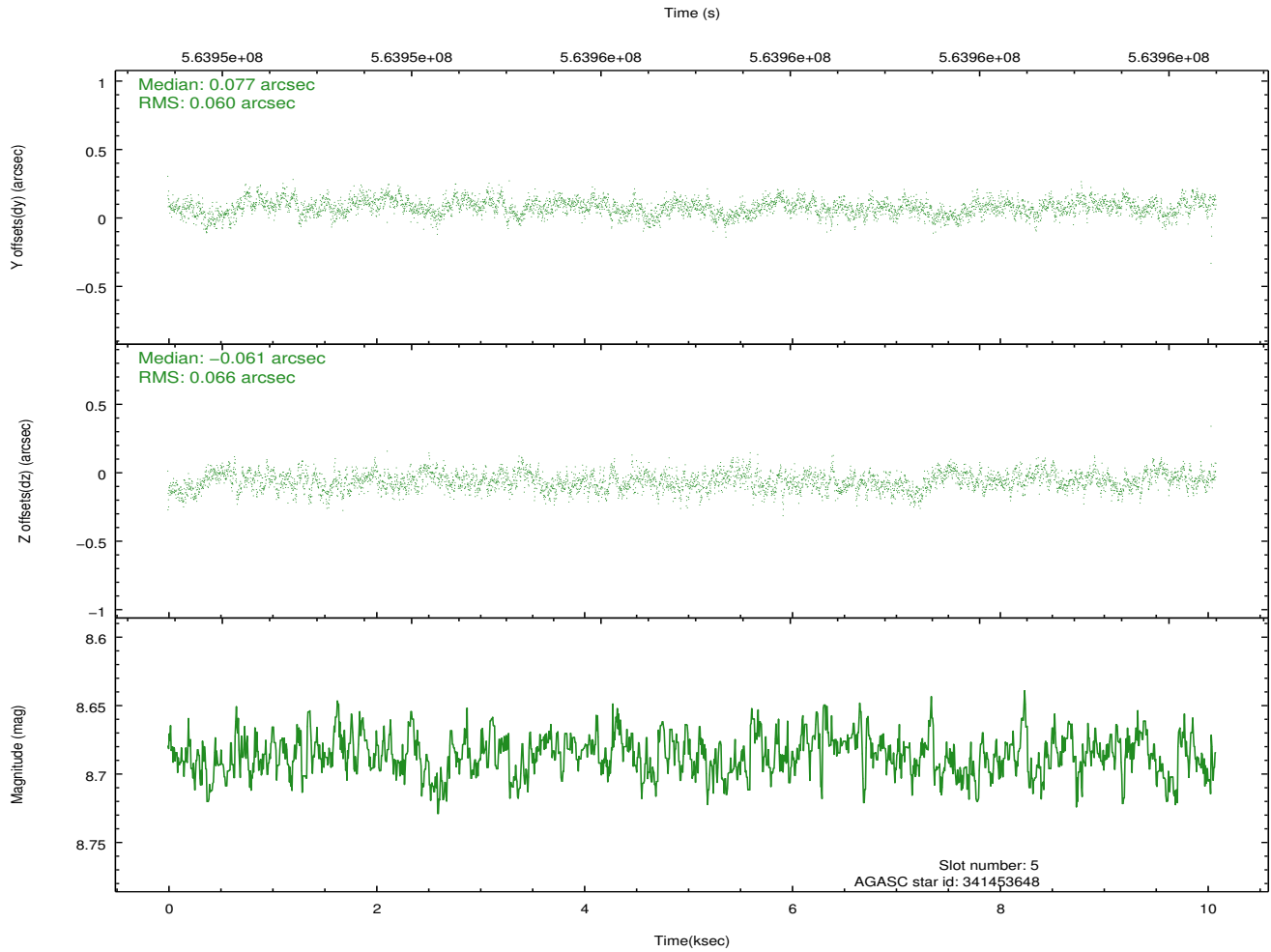
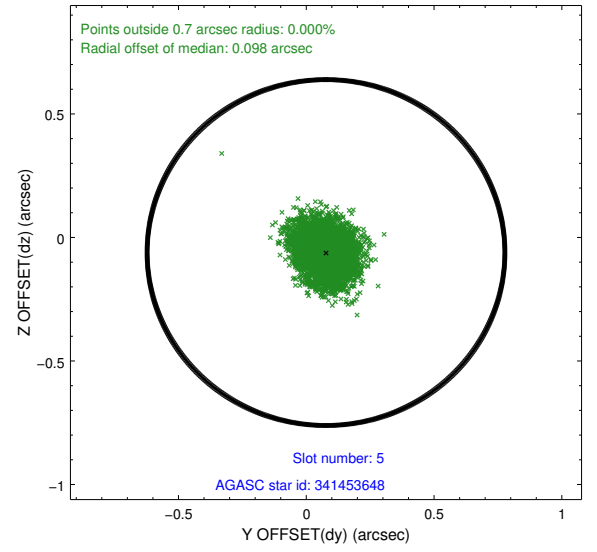
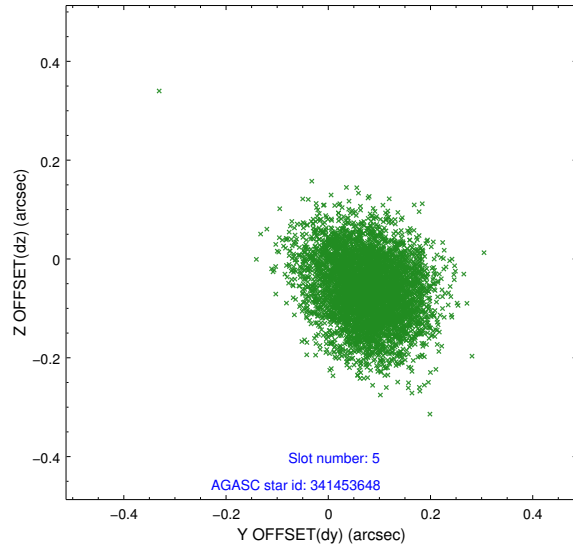
### 2.4.1 Slot 3



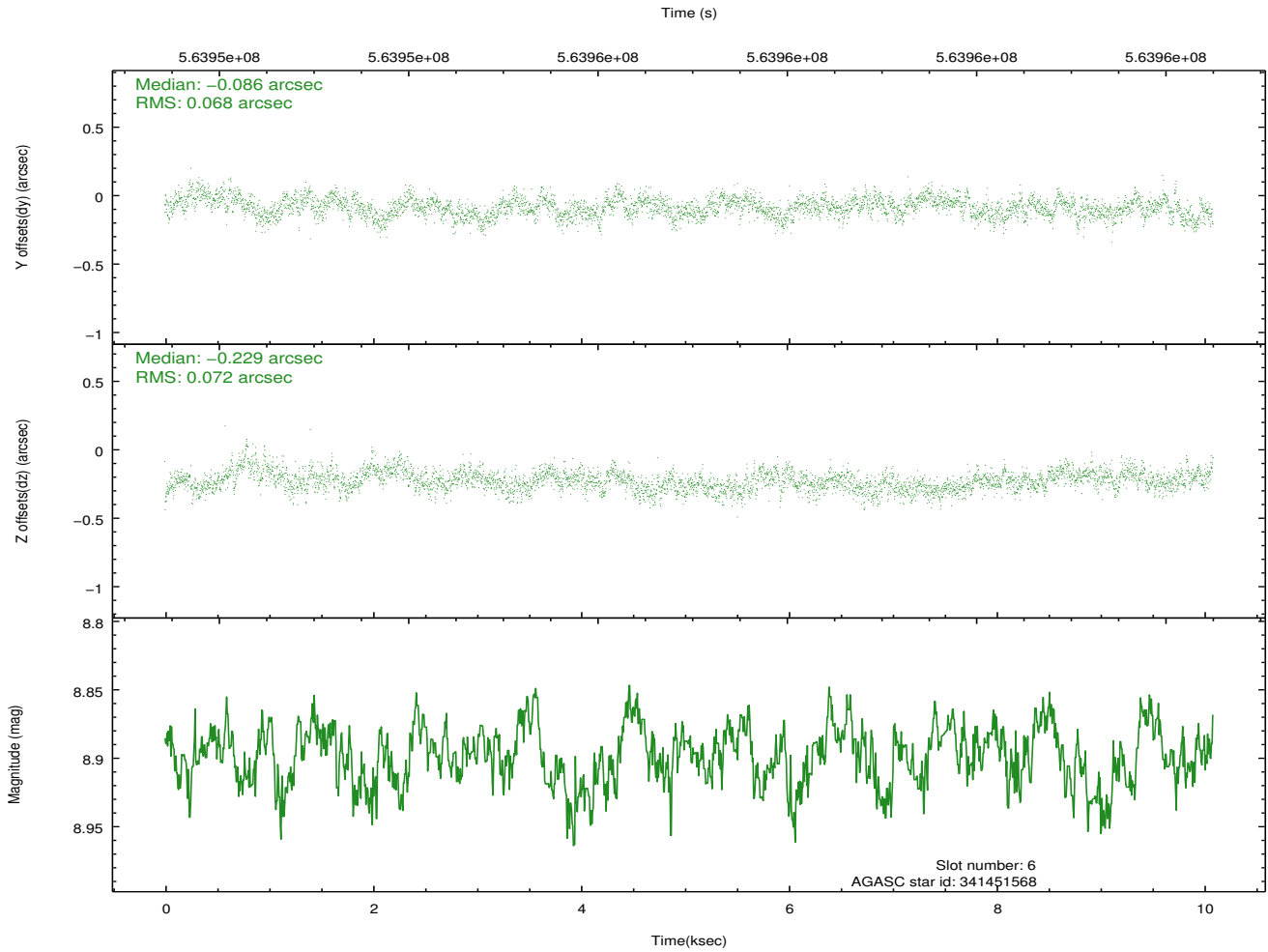
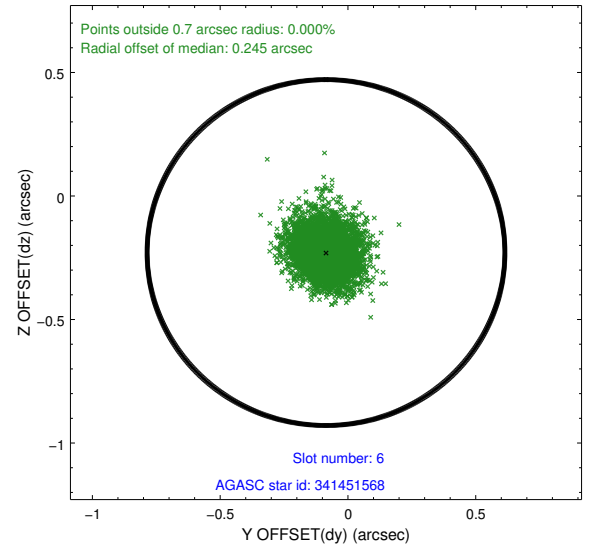
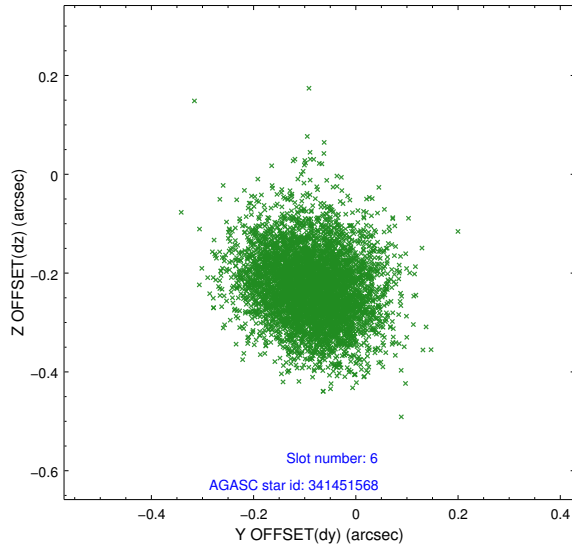
## 2.4.2 Slot 4



### 2.4.3 Slot 5

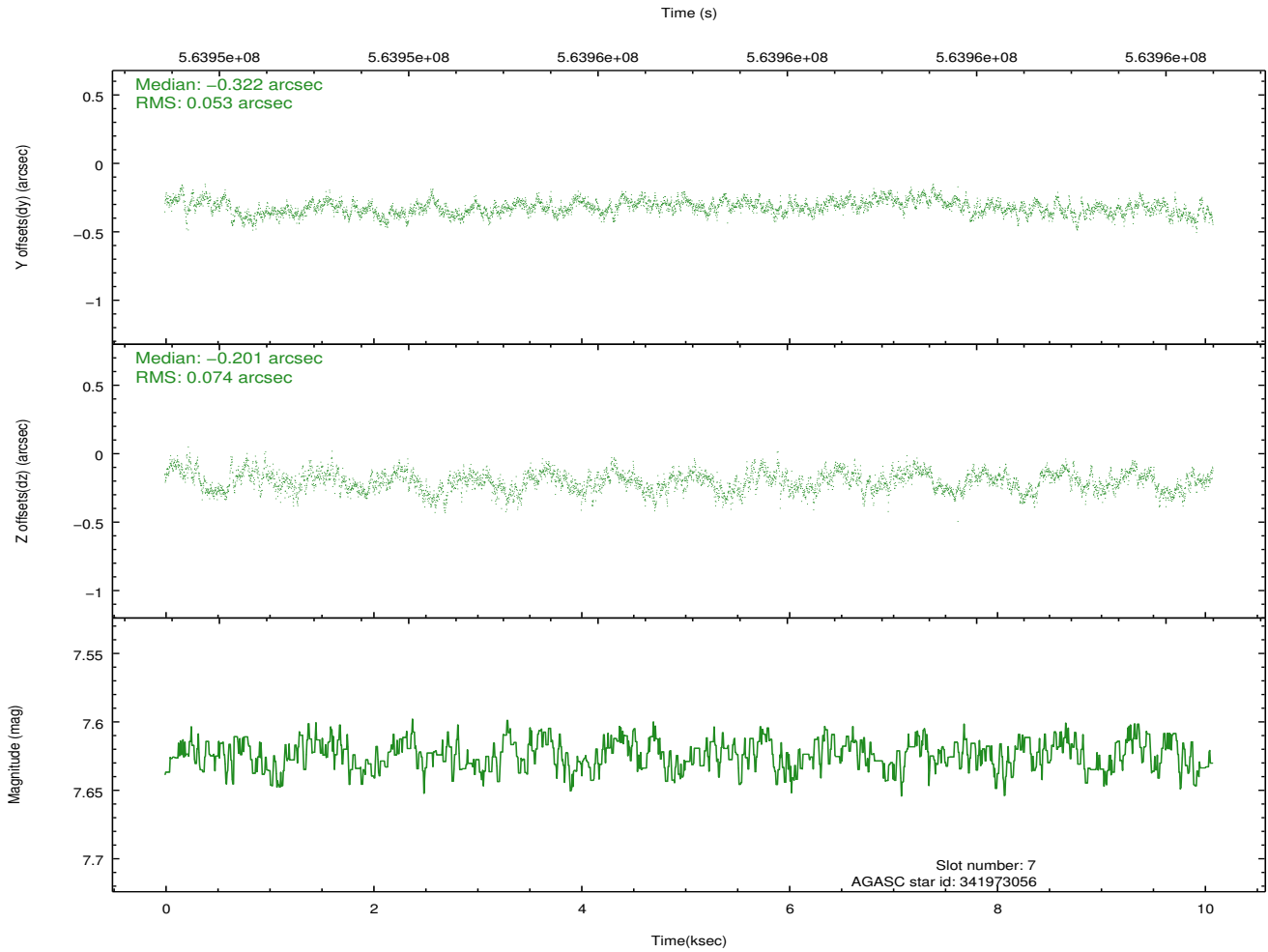
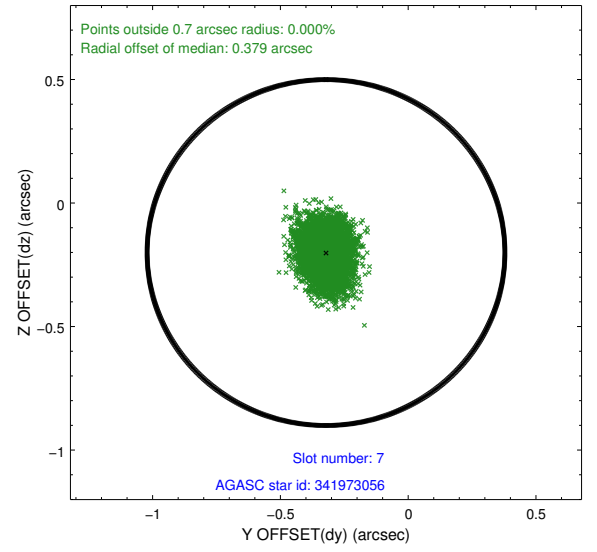
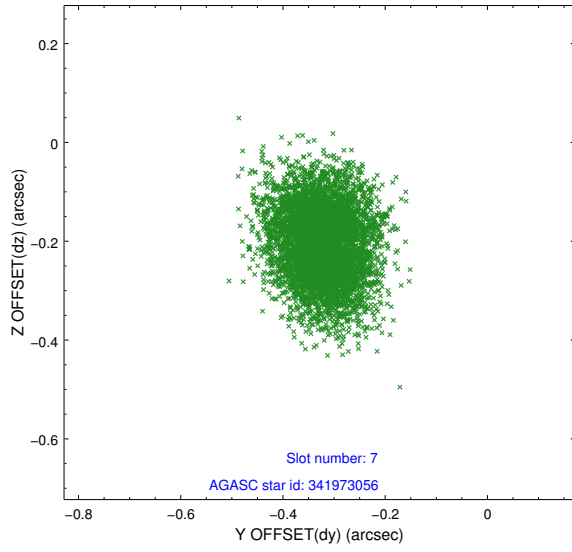


## 2.4.4 Slot 6



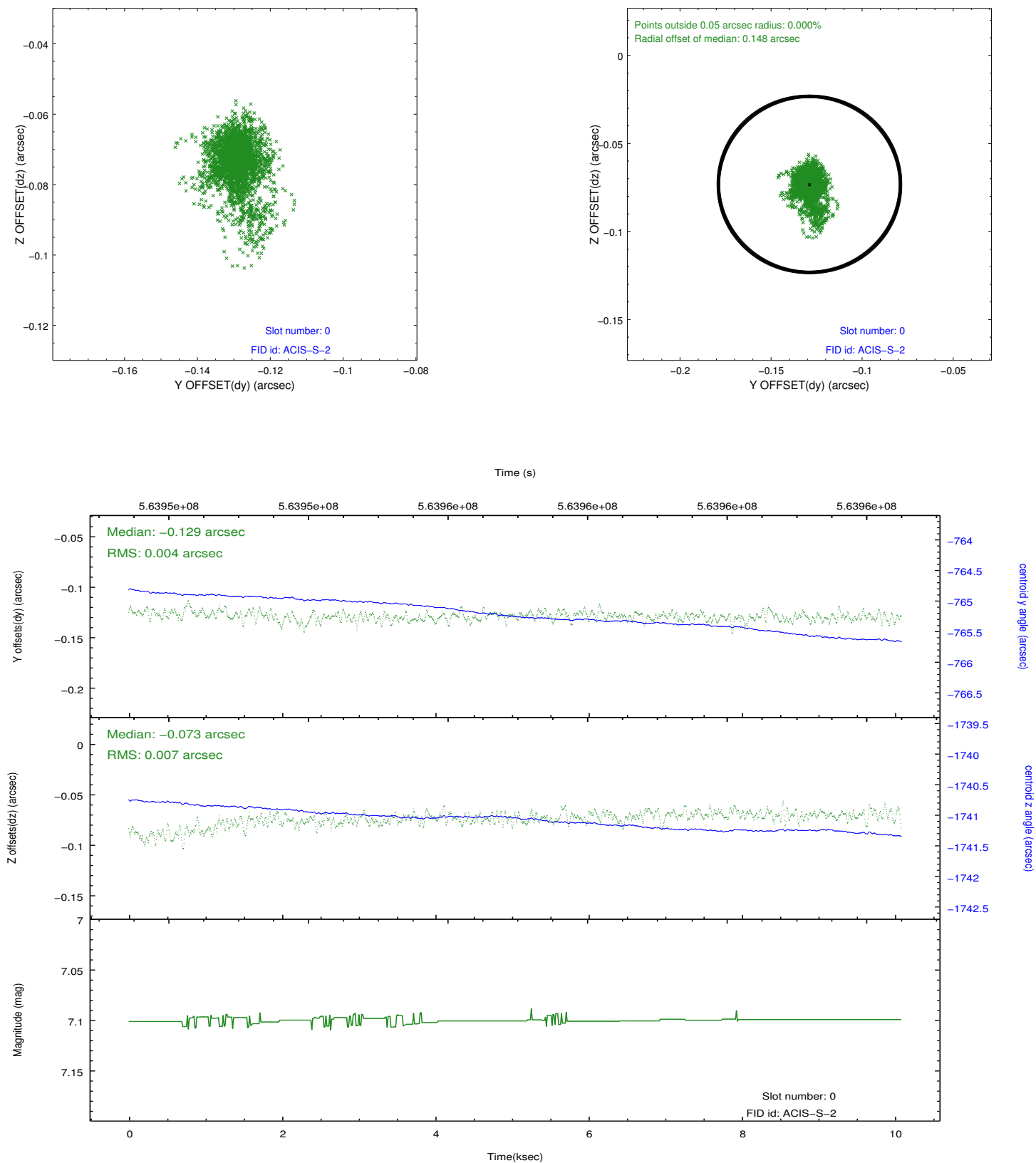


## 2.4.5 Slot 7

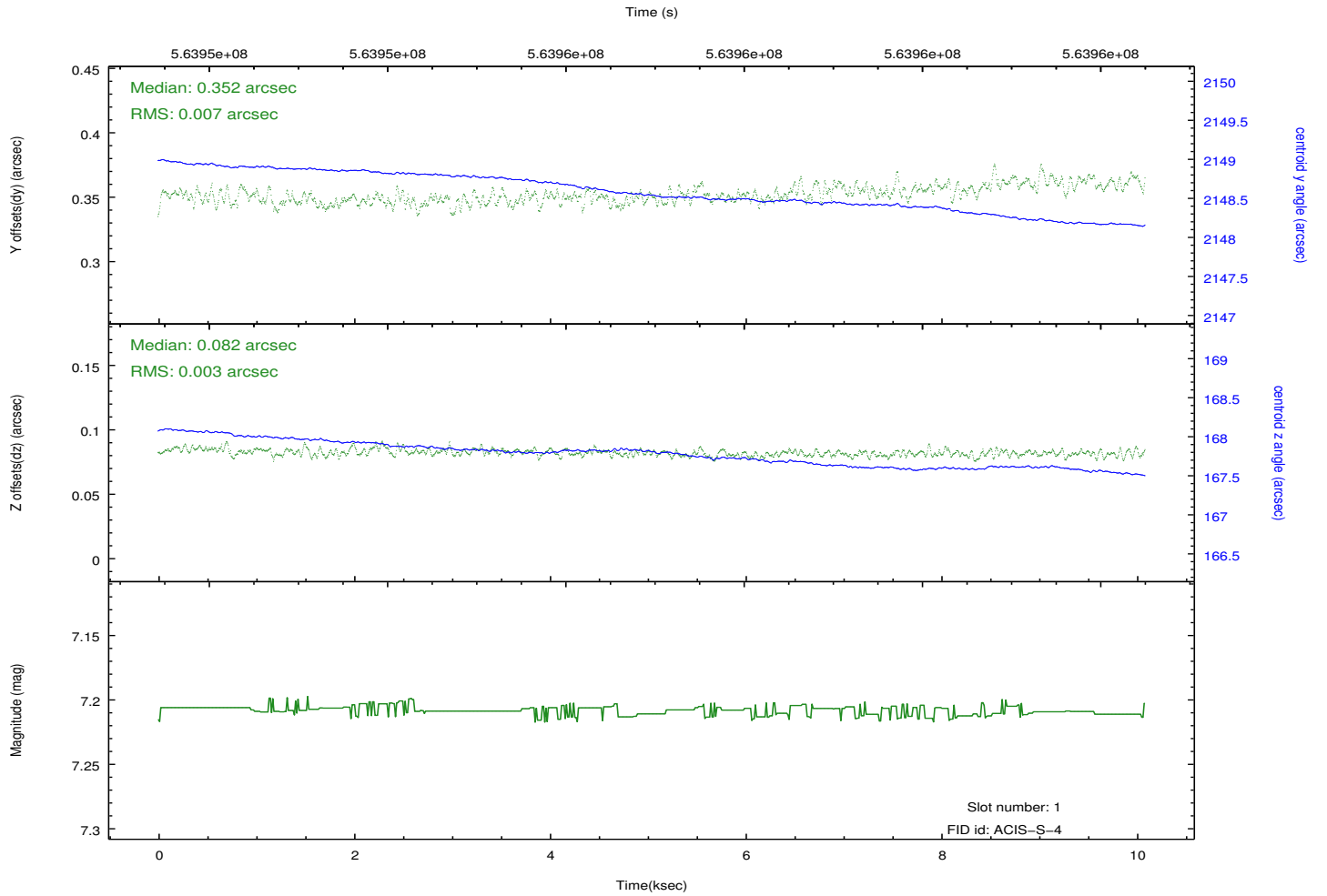
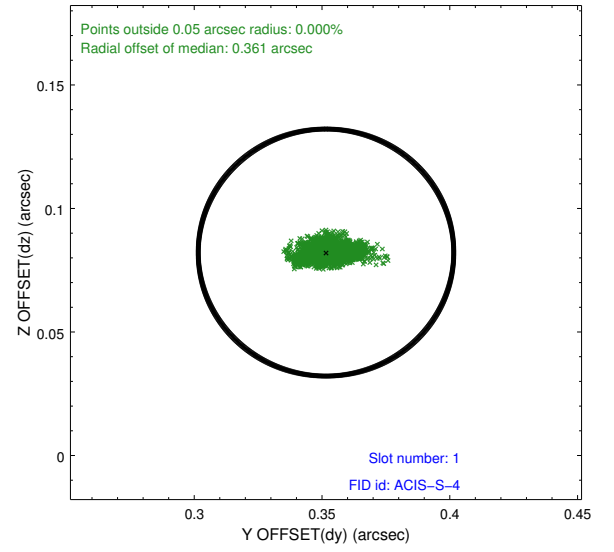
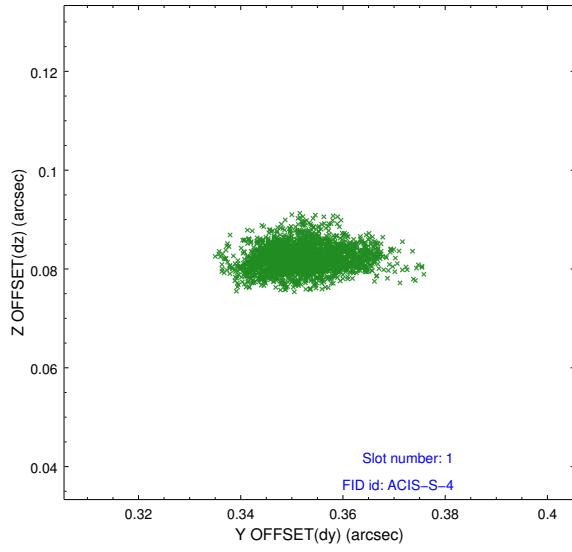


# 2.5 FID Slots

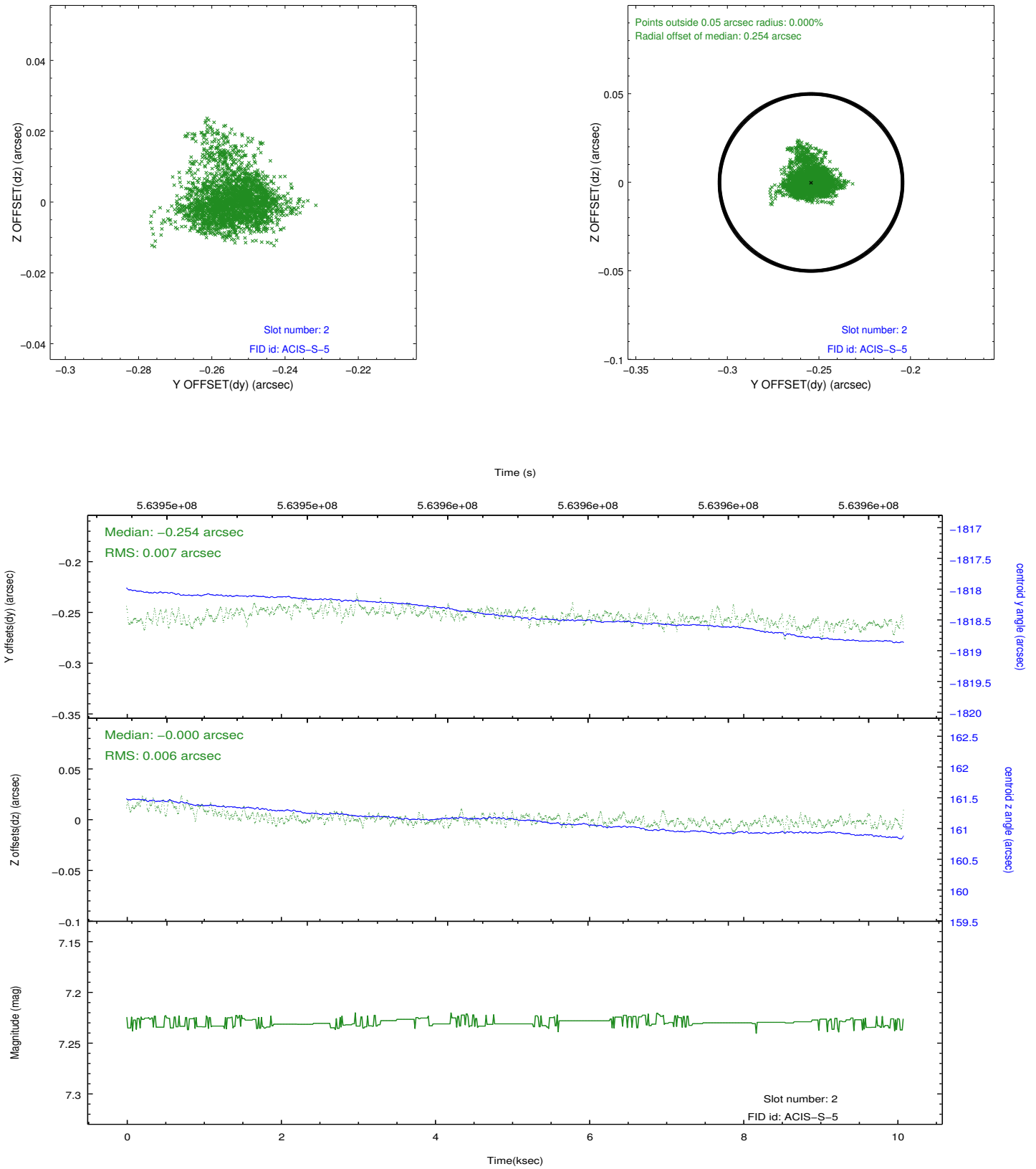
## 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2015.11.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.016100077152

### A.2 Comments