

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 1619 - L2 Version 3  
Chandra X-Ray Center

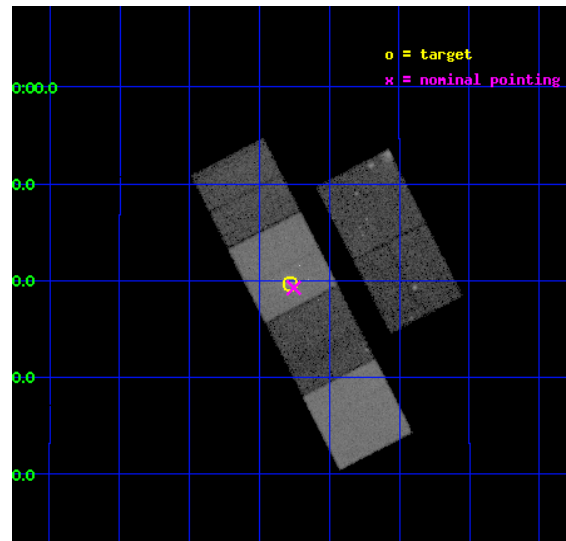
L2 Processing Date : Sep 17 2012

## 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	700235	Sequence number
obs_id	1619	Observation id
title	STUDIES OF RADIO JETS AND THE NARROW LINE REGIONS OF ACTIVE GALAXIES	&#160
observer	Professor Andrew Wilson	Principal investigator
object	NGC4388	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	186.444583	Observer's specified target RA [deg]
dec_targ	12.662083	Observer's specified target Dec [deg]
ra_nom	186.43847613275	Nominal RA [deg]
dec_nom	12.654348374662	Nominal Dec [deg]
roll_nom	242.80751583196	Nominal Roll [deg]
revision	3	Processing version of data
ontime	20230.400018826	Sum of GTIs [s]
livetime	19974.230512503	Livetime [s]
ontime2	20230.400018826	Sum of GTIs [s]
ontime3	20227.159058586	Sum of GTIs [s]
ontime5	20230.400018826	Sum of GTIs [s]
ontime6	20230.400018826	Sum of GTIs [s]
ontime7	20230.400018826	Sum of GTIs [s]
ontime8	20230.400018826	Sum of GTIs [s]
l2events	232868	Number of level 2 events

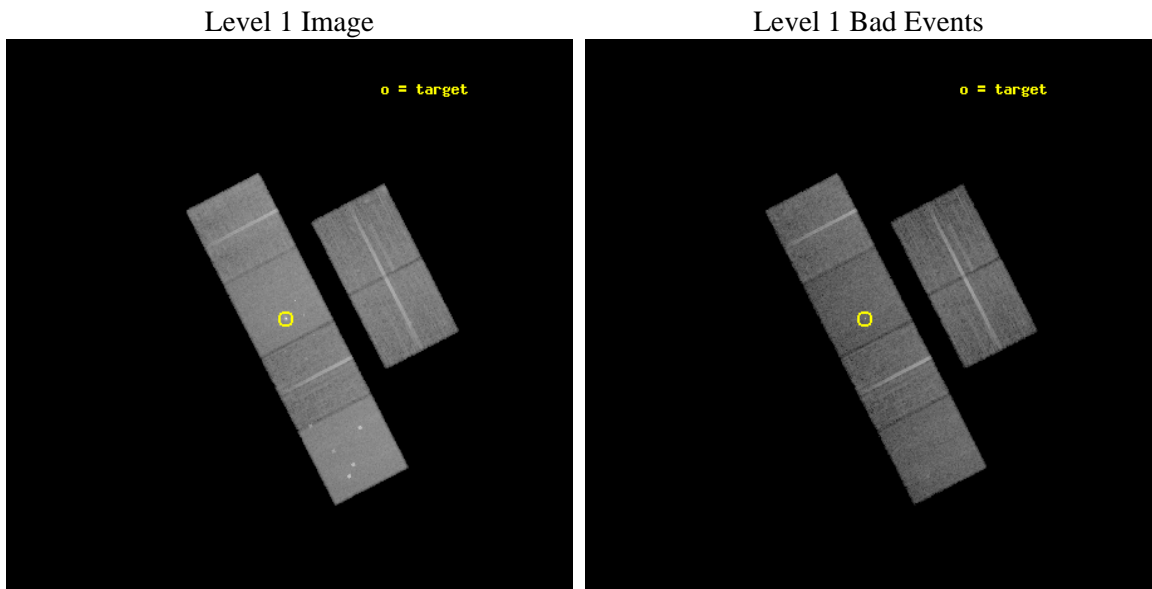




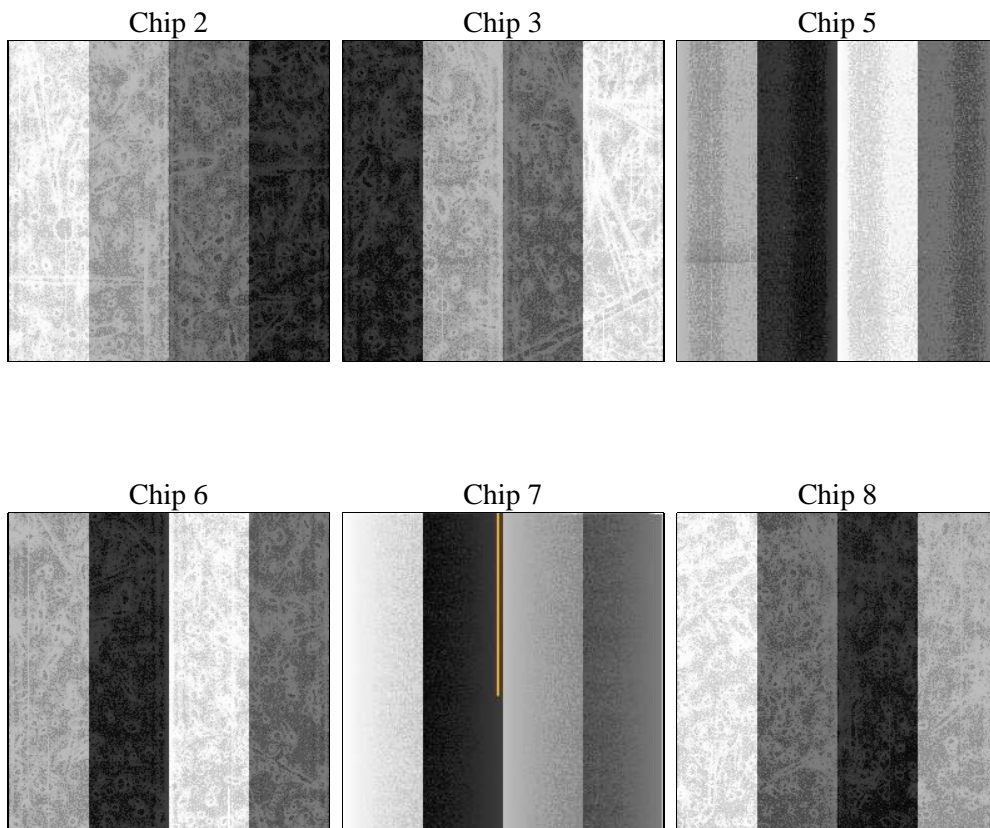
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	20280.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	20230.400018826	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime2	20230.400018826	Sum of GTIs [s]
date	2012-09-17T18:50:18	Date and time of file creation	ontime3	20227.159058586	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	20230.400018826	Sum of GTIs [s]
			ontime6	20230.400018826	Sum of GTIs [s]
			ontime7	20230.400018826	Sum of GTIs [s]
			ontime8	20230.400018826	Sum of GTIs [s]
			l1events	950722	Number of level 1 events

### 2.1.4 Events

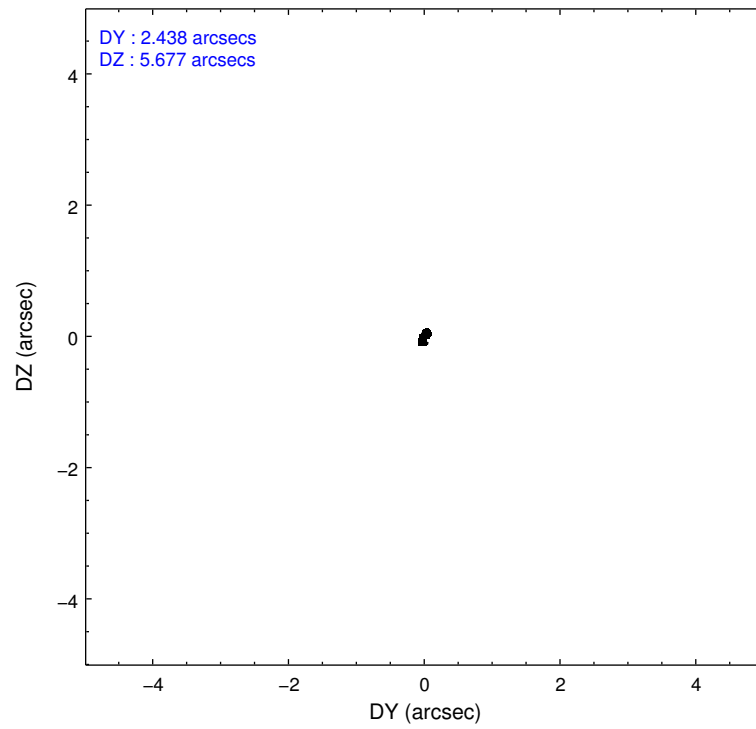
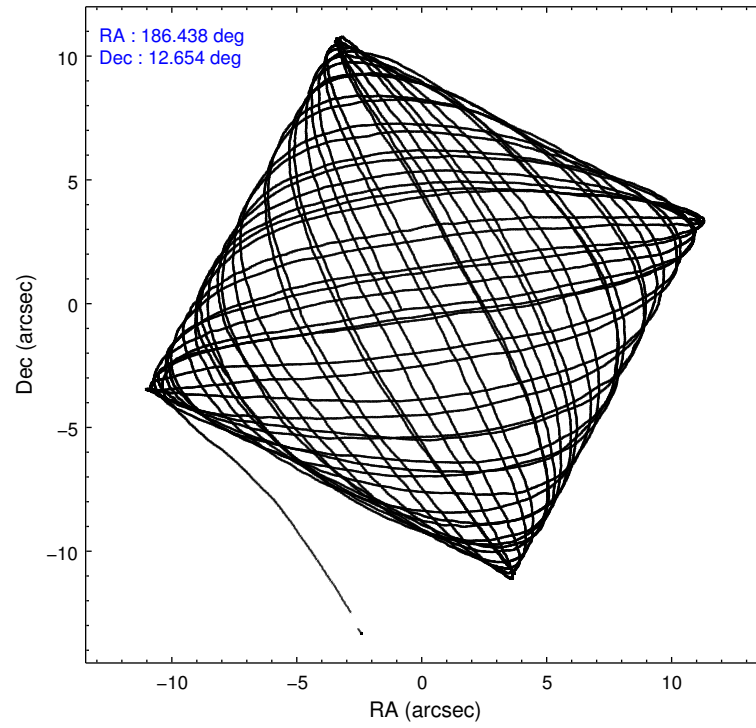
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	141147	134843	189737	133221	180376	171398	grade 0 events	7914	10850	13427	9180	11358	16699
rejected events	124324	114906	99794	114529	96944	131369		5%	8%	7%	6%	6%	9%
rejected %	88%	85%	52%	85%	53%	76%	grade 1 events	77	94	360	74	204	134
								0%	0%	0%	0%	0%	0%
							grade 2 events	3402	3289	25109	3382	17173	7662
								2%	2%	13%	2%	9%	4%
							grade 3 events	1409	1505	4075	1553	7885	3748
								0%	1%	2%	1%	4%	2%
							grade 4 events	1365	1575	3827	1564	8047	3483
								0%	1%	2%	1%	4%	2%
							grade 5 events	4684	5064	14416	5642	16242	7114
								3%	3%	7%	4%	9%	4%
							grade 6 events	2736	2725	43544	3019	38997	8447
								1%	2%	22%	2%	21%	4%
							grade 7 events	119560	109741	84979	108807	80470	124111
								84%	81%	44%	81%	44%	72%

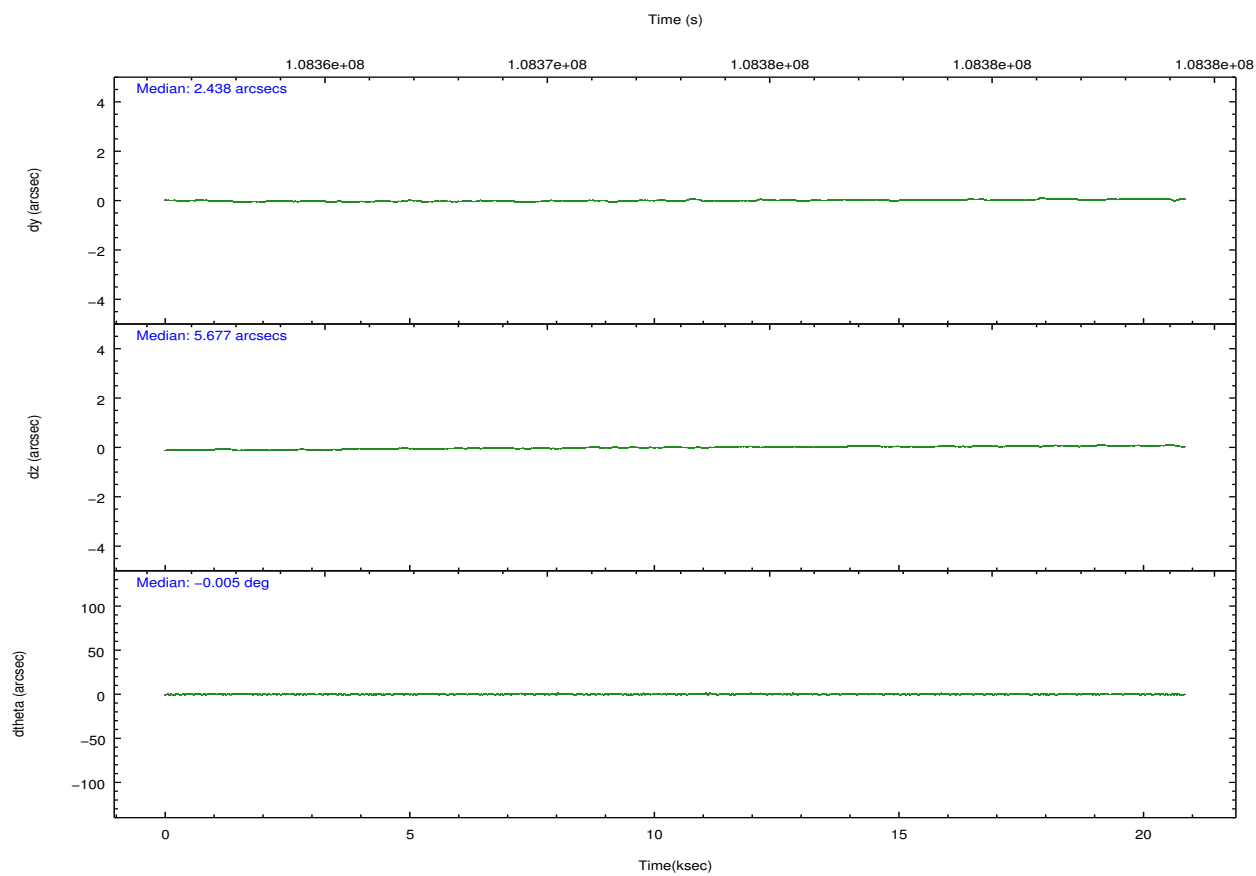
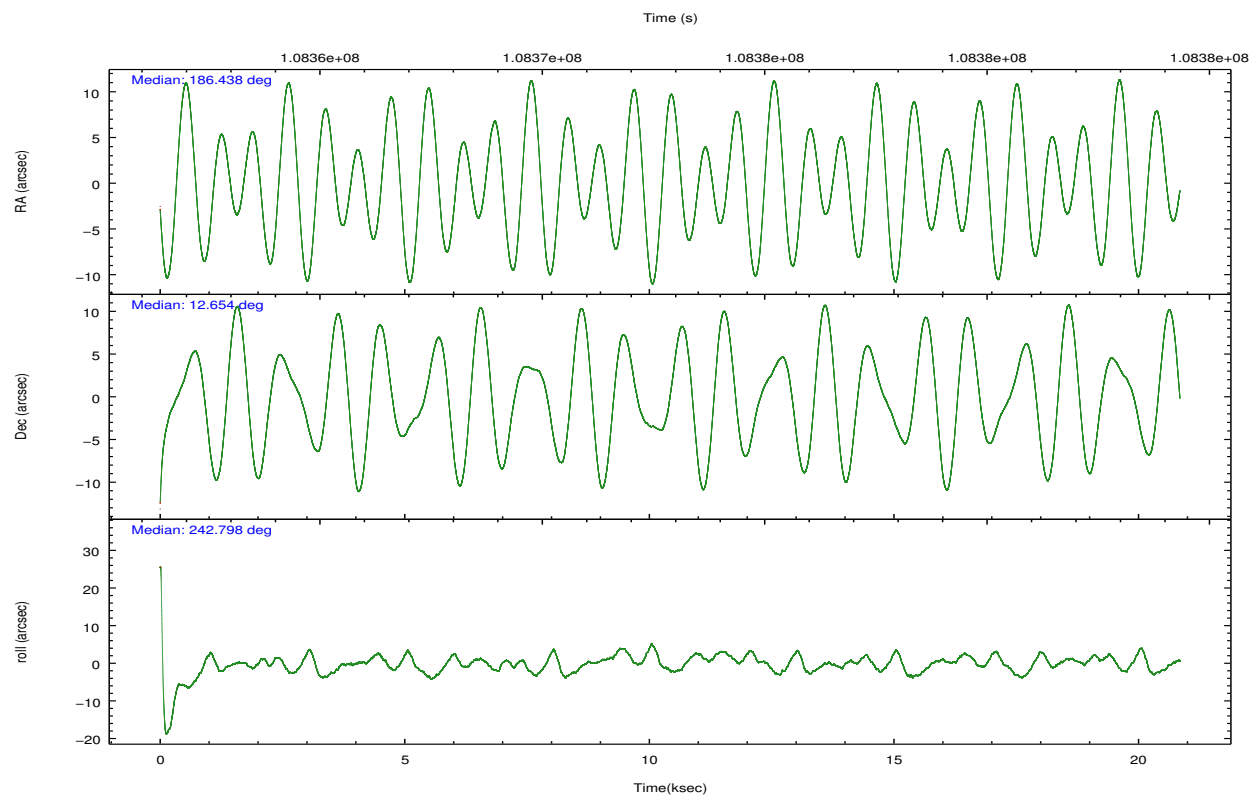
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-235678	ACIS-235678
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	186.436830	186.438476132748
[deg] Pointing Dec	12.681571	12.65434837466161
[deg] Pointing Roll	242.651223	242.8075158319625
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1400660498719
[mm] SIM translation stage offset	0	0.00754346686406393
[s] Observation start time (MET)	108363015.184000	108361864.5173
Observation start date	2001-06-08T04:49:11	2001-06-08T04:31:04
[s] Observation end time (MET)	108383295.184000	108383826.68066
Observation end date	2001-06-08T10:27:11	2001-06-08T10:37:06
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	3.2

## 2.3 Aspect



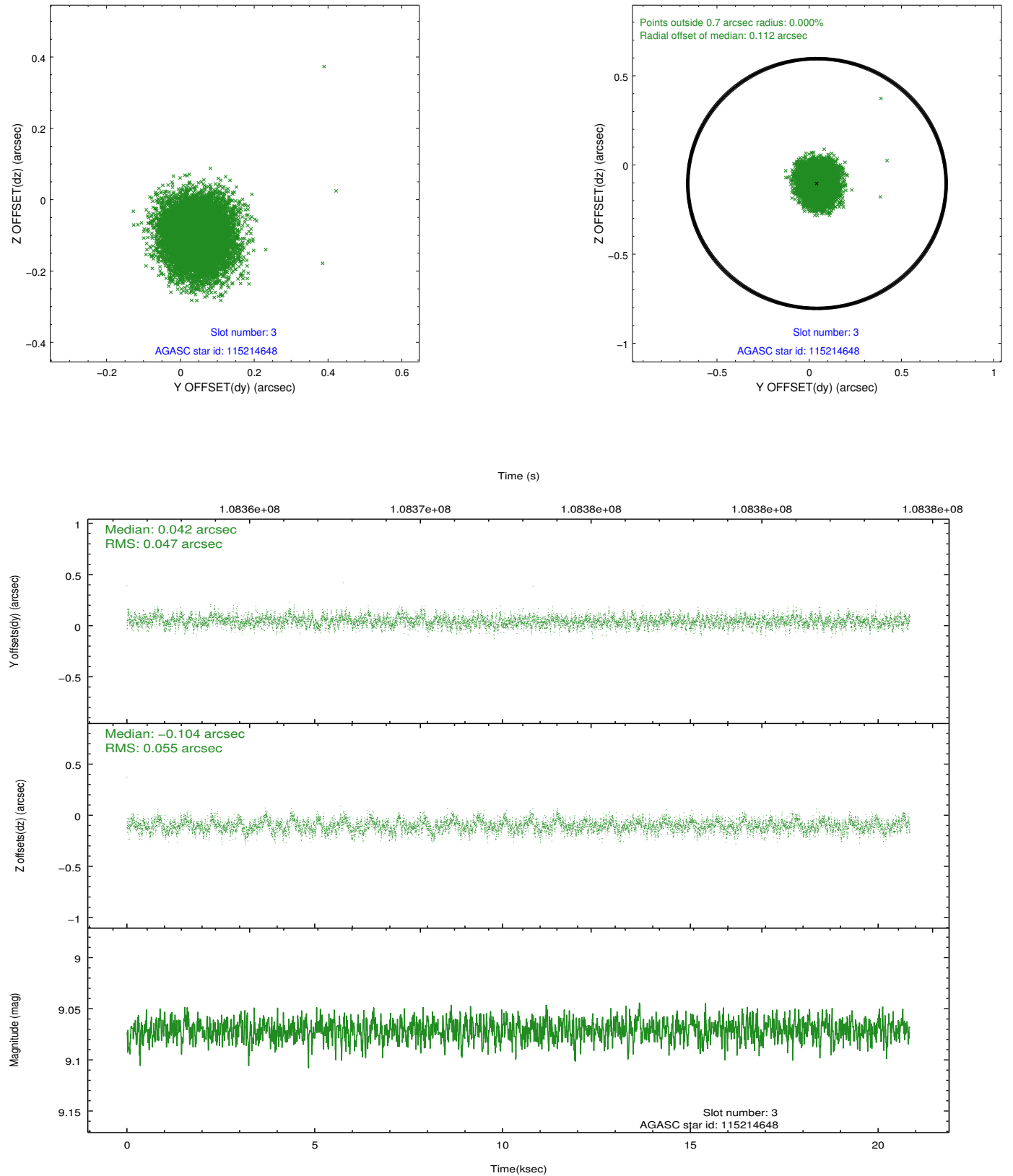


### Slot Statistics

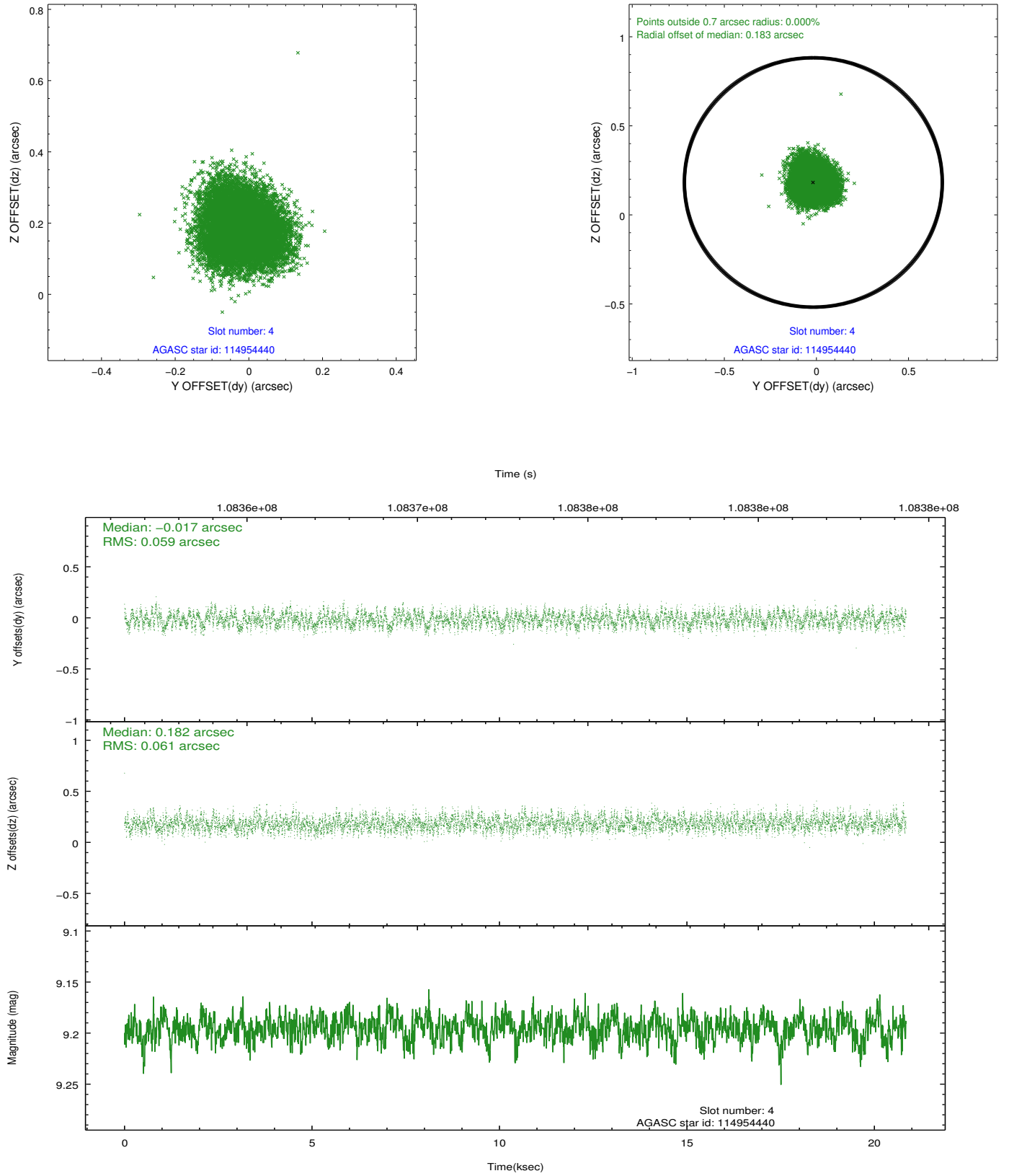
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	5085	-0.038	-0.002	0.006	0.010	0.000000	0.000000	-755.06	-1726.82
1	FID	ACIS-S-4	7.20	5085	-0.023	0.019	0.006	0.010	0.000000	0.000000	2158.11	181.58
2	FID	ACIS-S-5	7.24	5085	0.029	-0.008	0.006	0.010	0.000000	0.000000	-1807.66	175.32
3	GUIDE	115214648	9.07	10168	0.042	-0.104	0.078	0.125	185.771147	12.685188	1059.89	-2083.35
4	GUIDE	114954440	9.19	10167	-0.017	0.182	0.092	0.142	186.915066	12.219118	703.63	2259.56
5	GUIDE	115216184	9.65	10155	-0.018	-0.117	0.100	0.157	185.973150	12.580247	1071.22	-1279.14
6	GUIDE	115215984	9.99	10161	-0.032	-0.059	0.131	0.214	186.134733	12.875031	-132.18	-1261.58
7	GUIDE	114957008	8.24	10169	0.032	0.095	0.074	0.119	186.894794	12.099160	1119.77	2395.19

## 2.4 Star Slots

### 2.4.1 Slot 3

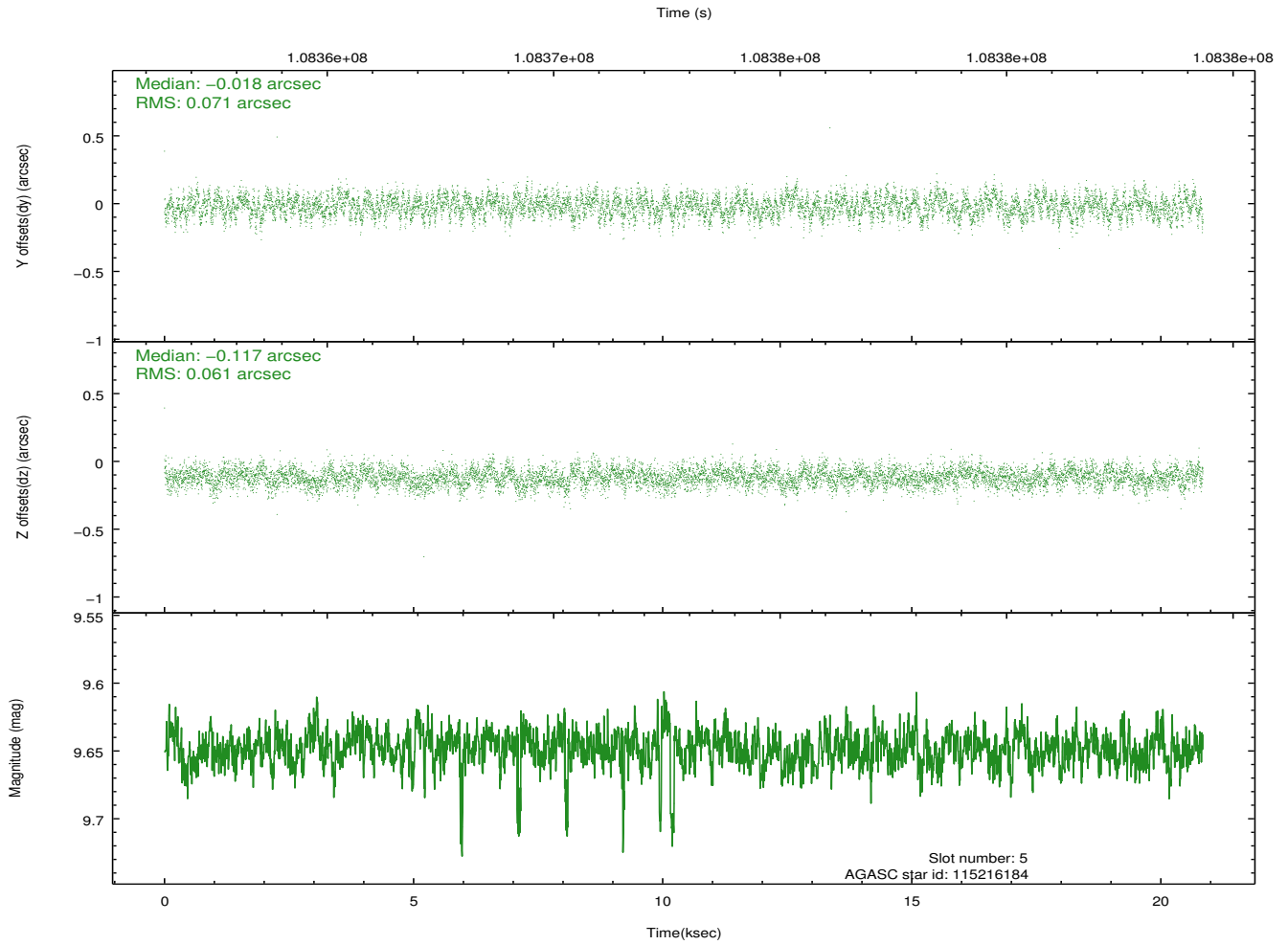
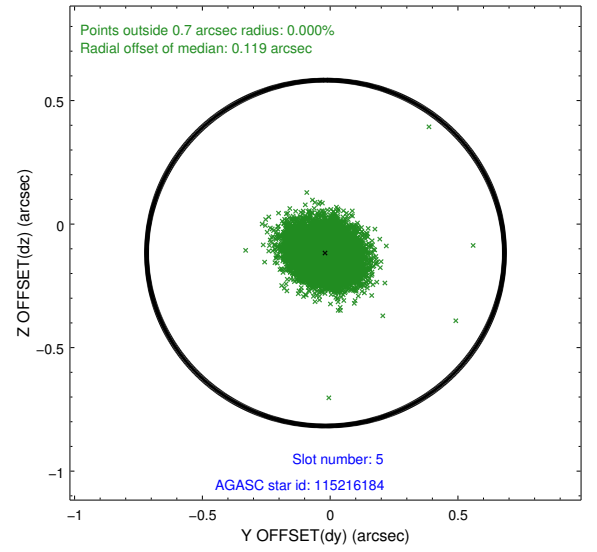
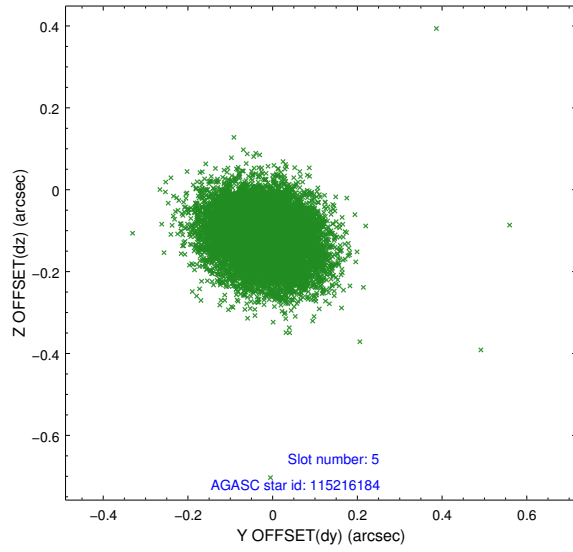


## 2.4.2 Slot 4

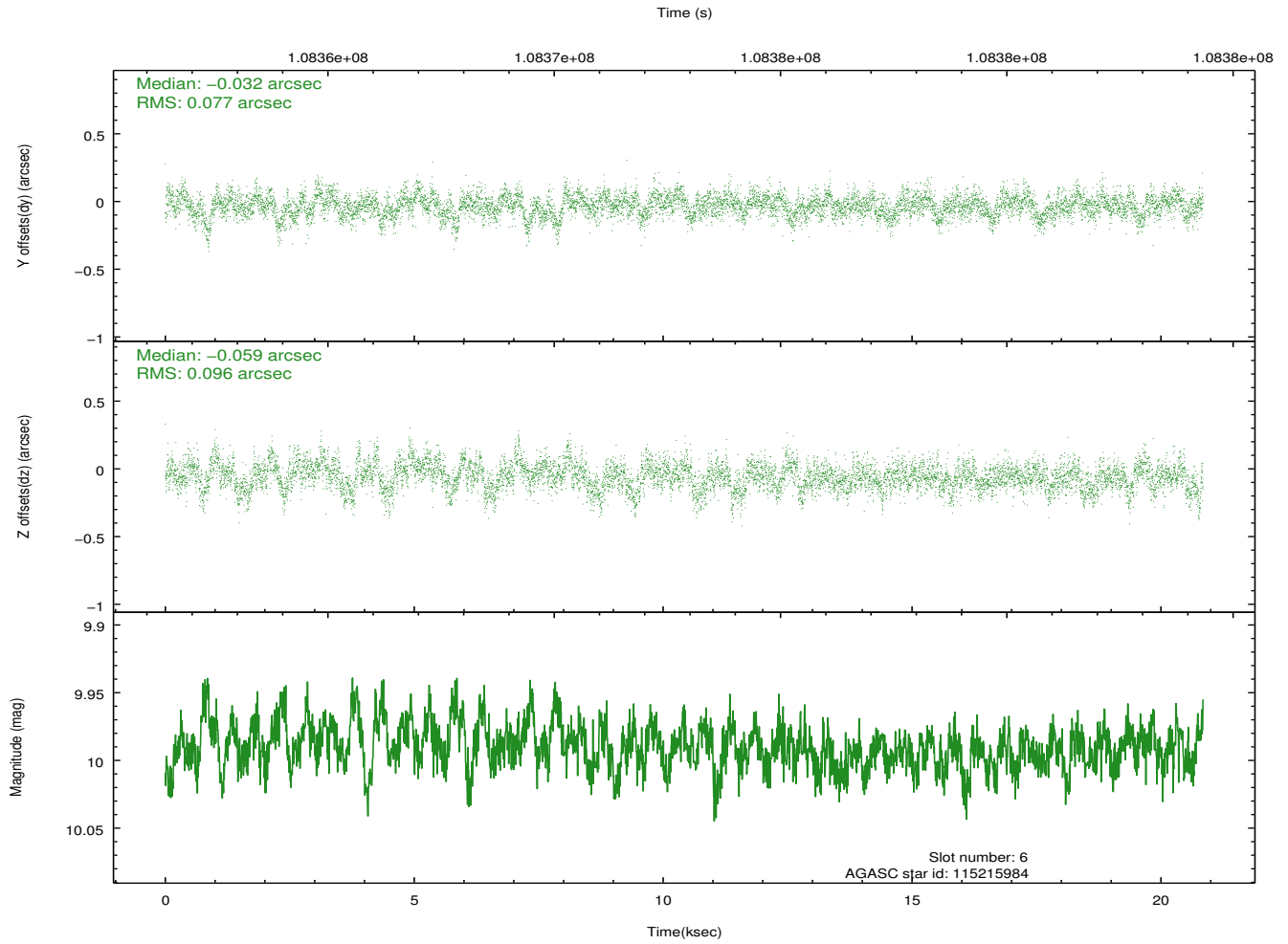
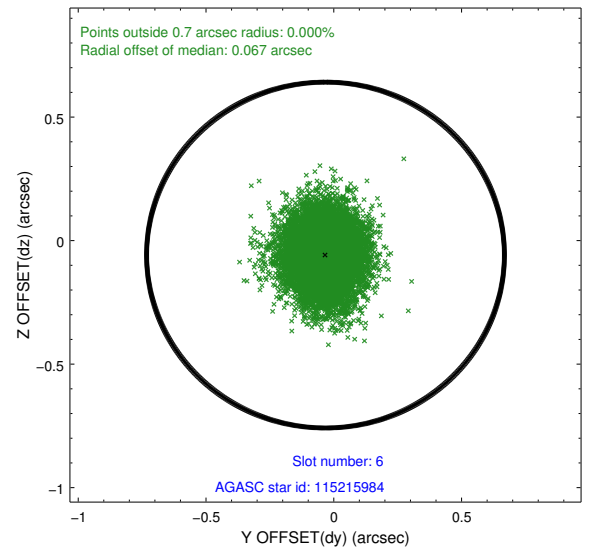
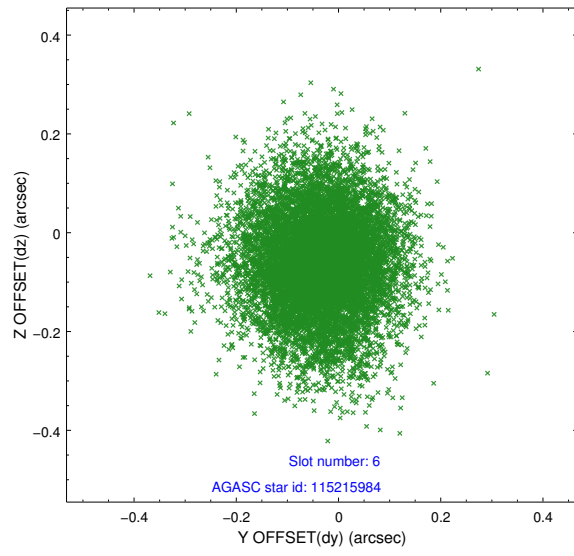




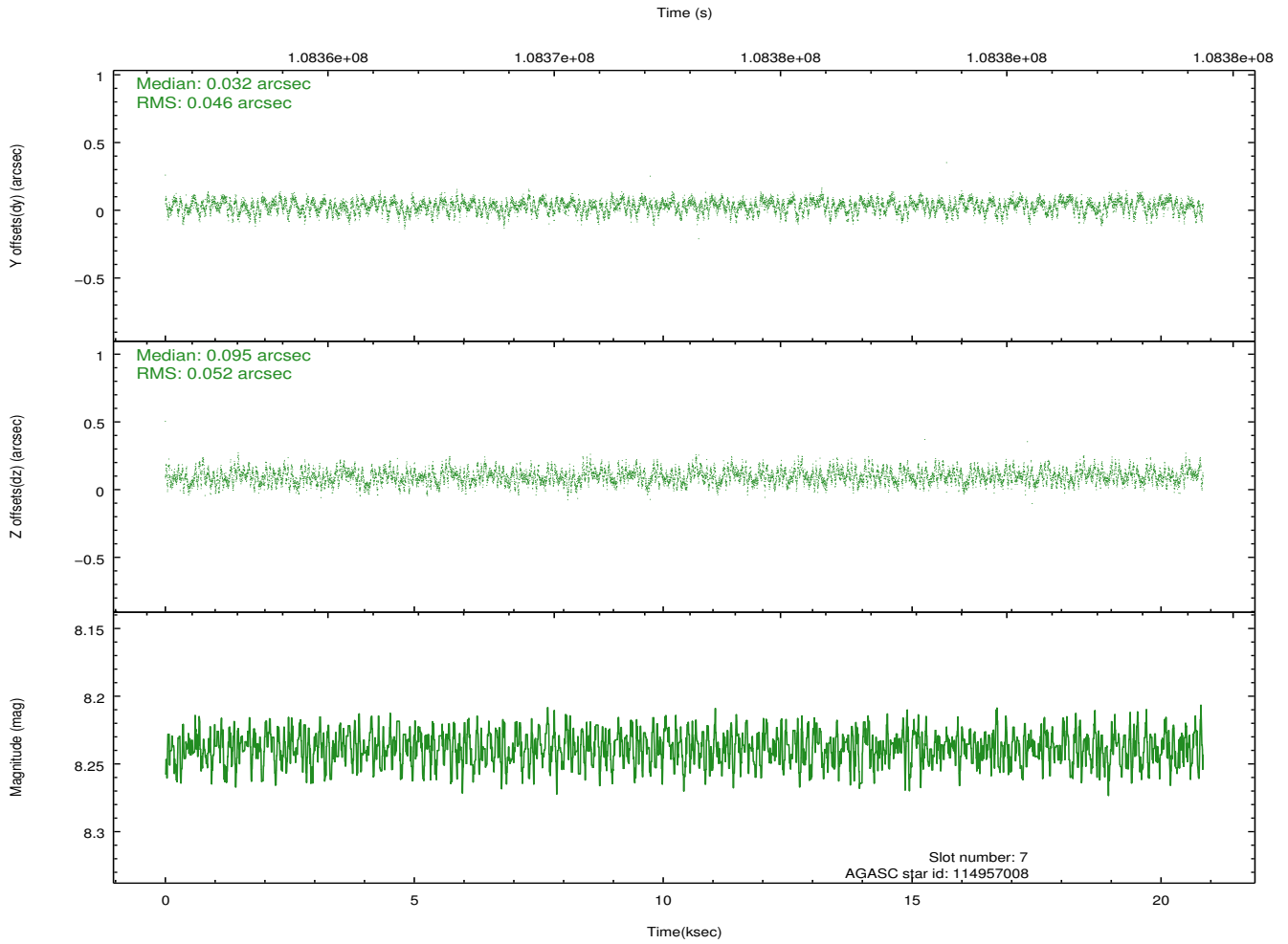
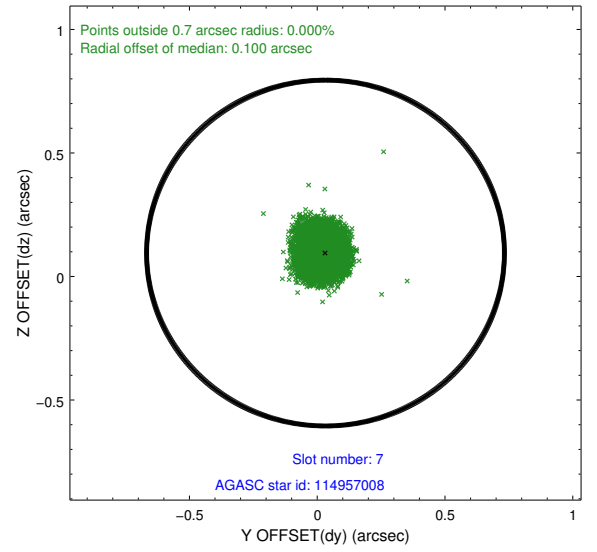
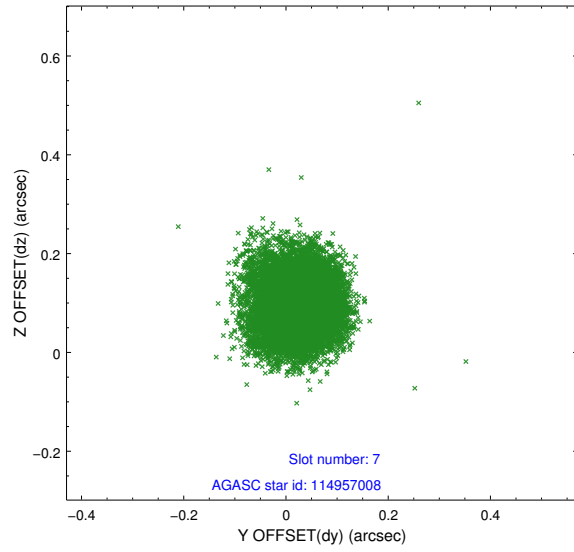
### 2.4.3 Slot 5



## 2.4.4 Slot 6

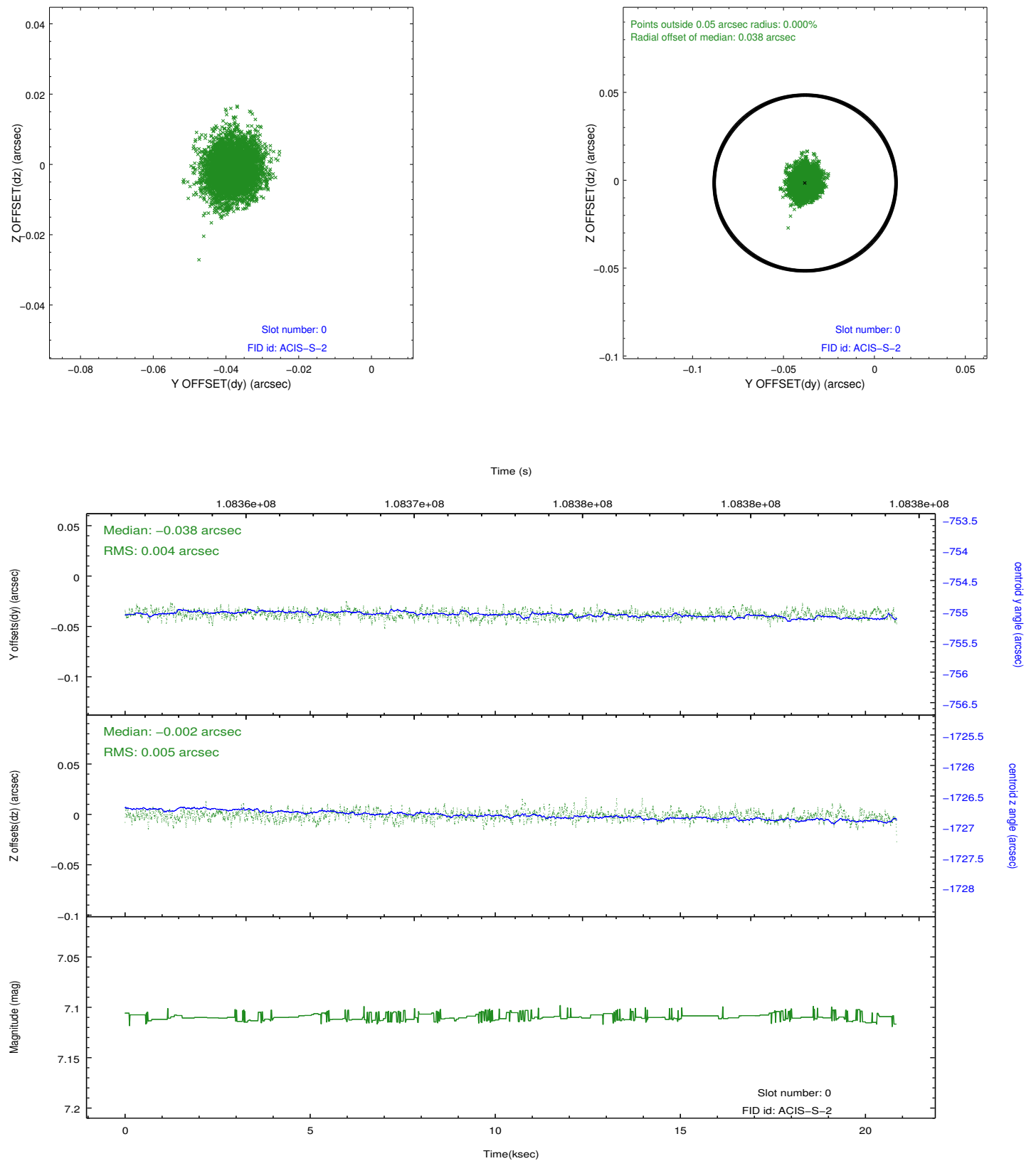


## 2.4.5 Slot 7

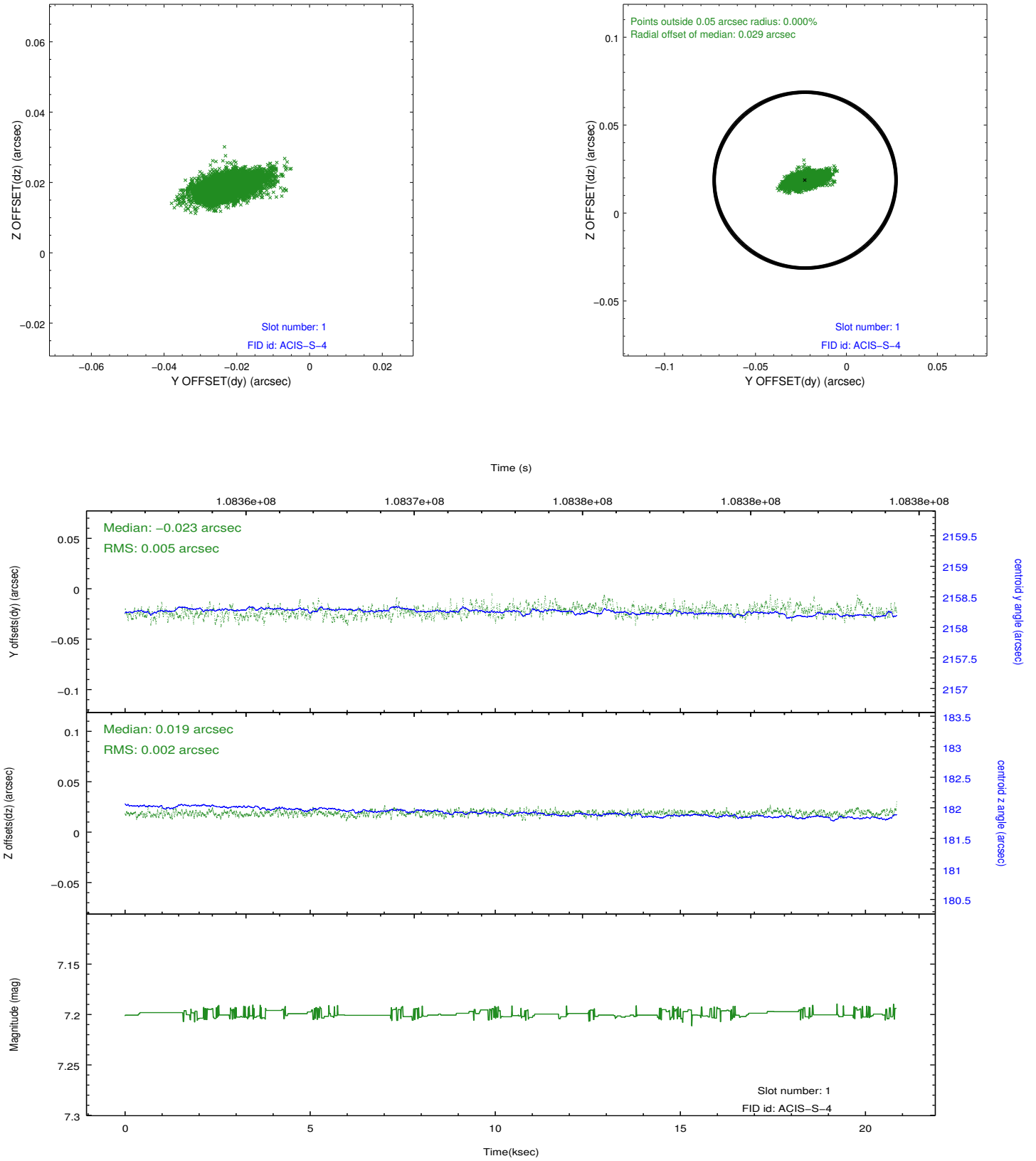


## 2.5 FID Slots

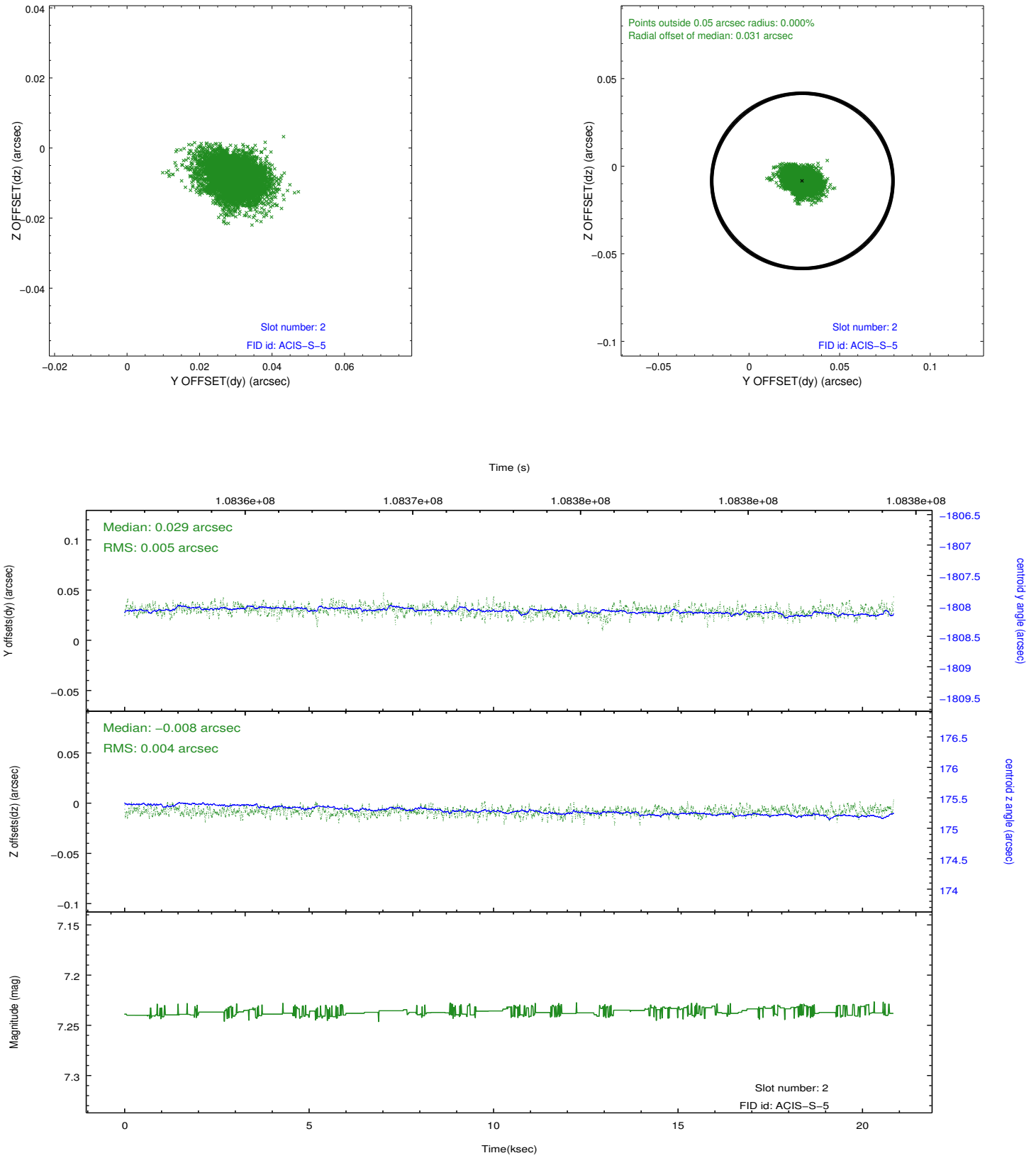
### 2.5.1 Slot 0



## 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)	2012.09.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.227

### A.2 Comments