

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 309 - L2 Version 4  
Chandra X-Ray Center

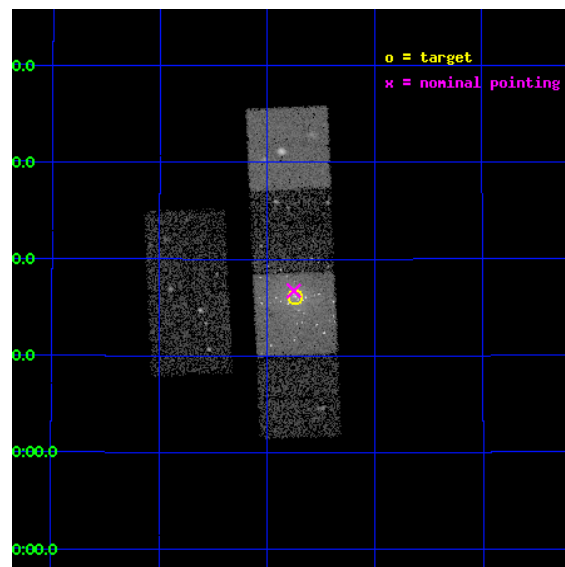
L2 Processing Date : Aug 28 2012

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# 1 Front

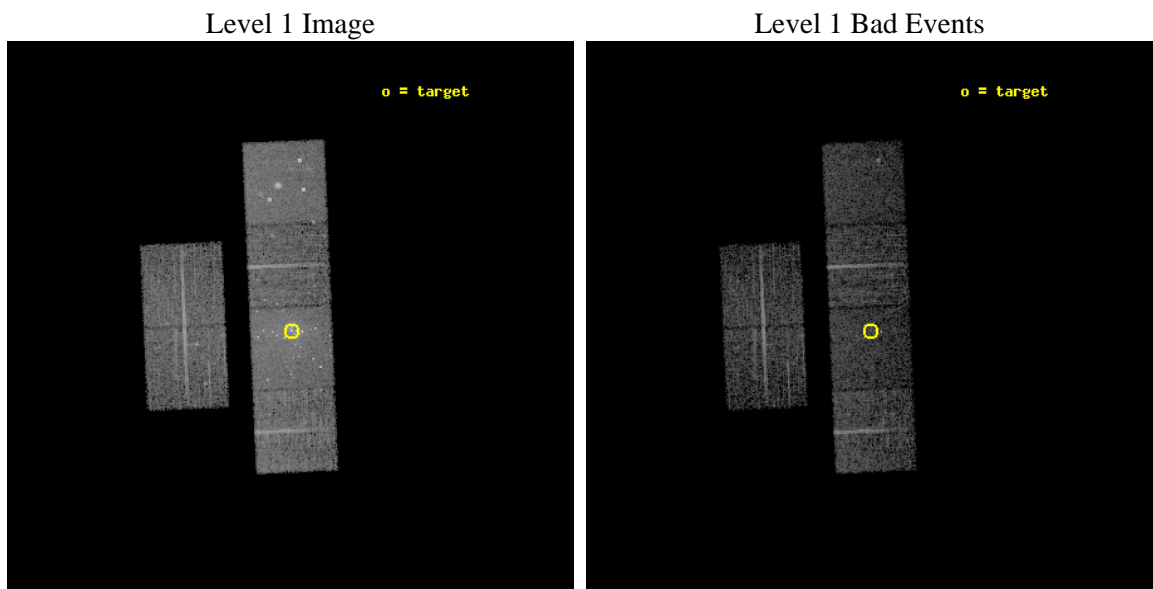
seq_num	600069	Sequence number
obs_id	309	Observation id
title	M31 MONITORING (FOLLOWUP)	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	M31 TRANSIENT TBD	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	10.685	Observer's specified target RA [deg]
dec_targ	41.268972	Observer's specified target Dec [deg]
ra_nom	10.688001439274	Nominal RA [deg]
dec_nom	41.278769773108	Nominal Dec [deg]
roll_nom	87.532275233726	Nominal Roll [deg]
revision	4	Processing version of data
ontime	5155.2000047863	Sum of GTIs [s]
livetime	5089.9217582369	Livetime [s]
ontime2	5155.2000047863	Sum of GTIs [s]
ontime3	5155.2000047863	Sum of GTIs [s]
ontime5	5155.2000047863	Sum of GTIs [s]
ontime6	5155.2000047863	Sum of GTIs [s]
ontime7	5155.2000047863	Sum of GTIs [s]
ontime8	5155.2000047863	Sum of GTIs [s]
l2events	74876	Number of level 2 events



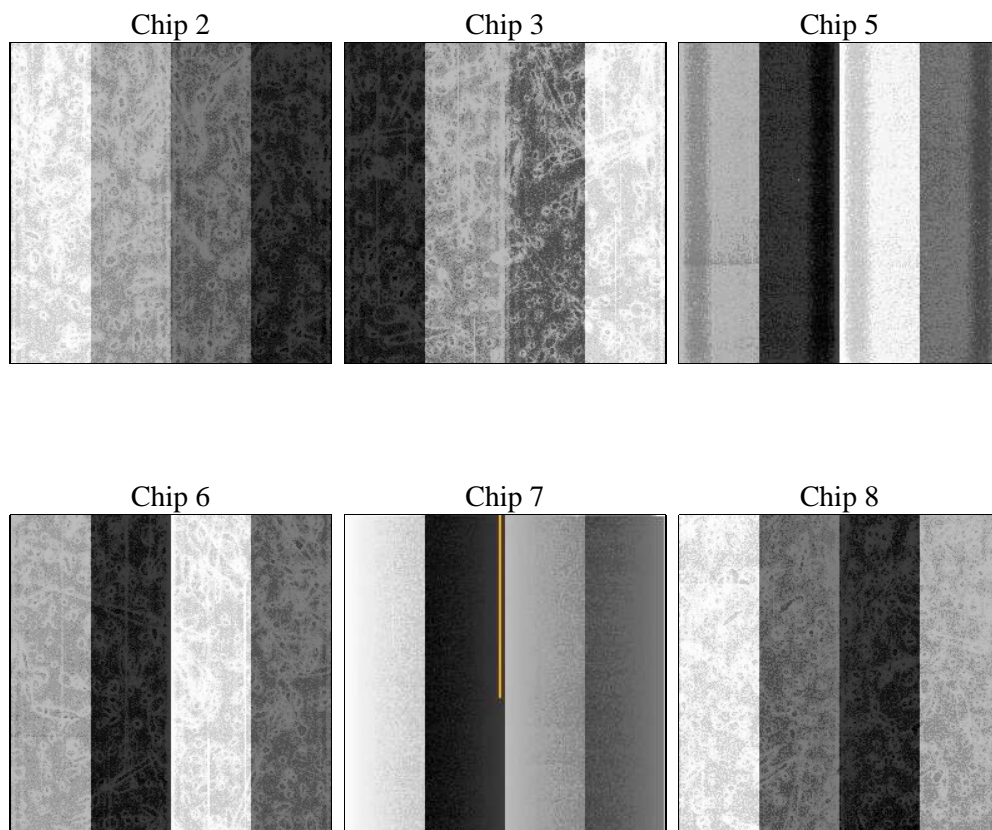
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	5155.2000047863	Sum of GTIs [s]
caldbver	4.5.1.1	&#160	ontime2	5155.2000047863	Sum of GTIs [s]
date	2012-08-28T18:44:07	Date and time of file creation	ontime3	5155.2000047863	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	5155.2000047863	Sum of GTIs [s]
			ontime6	5155.2000047863	Sum of GTIs [s]
			ontime7	5155.2000047863	Sum of GTIs [s]
			ontime8	5155.2000047863	Sum of GTIs [s]
			l1events	263559	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	34828	34435	50161	36815	63166	44154	grade 0 events	1913	2164	5790	3182	8486	3018
rejected events	30819	30153	24104	31229	25452	35255		5%	6%	11%	8%	13%	6%
rejected %	88%	87%	48%	84%	40%	79%	grade 1 events	17	17	321	39	139	13
								0%	0%	0%	0%	0%	0%
							grade 2 events	855	739	6943	869	8643	1894
								2%	2%	13%	2%	13%	4%
							grade 3 events	324	385	1179	421	4040	932
								0%	1%	2%	1%	6%	2%
							grade 4 events	350	372	1109	411	3958	839
								1%	1%	2%	1%	6%	1%
							grade 5 events	1081	1167	3460	1339	4438	1714
								3%	3%	6%	3%	7%	3%
							grade 6 events	585	642	11127	725	12724	2241
								1%	1%	22%	1%	20%	5%
							grade 7 events	29703	28949	20232	29829	20738	33503
								85%	84%	40%	81%	32%	75%

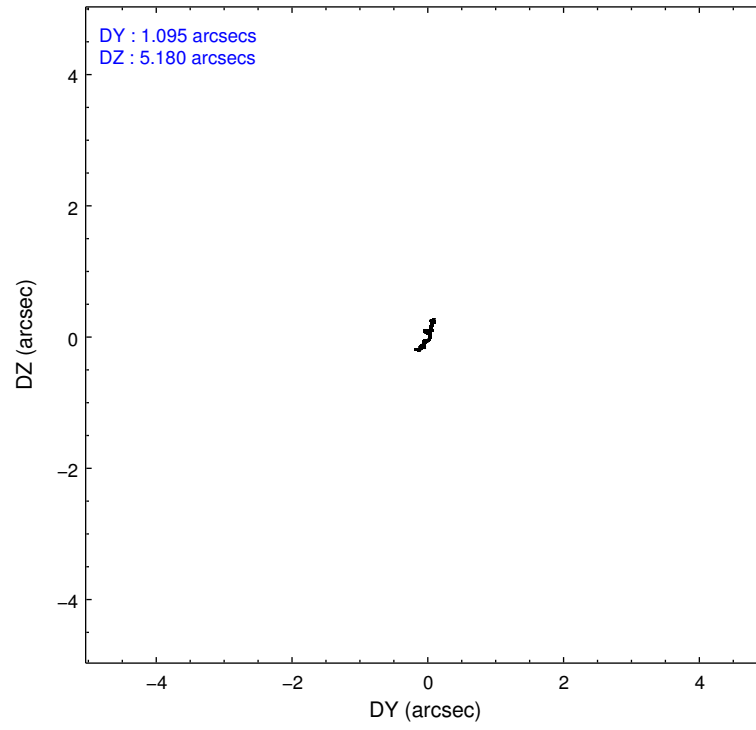
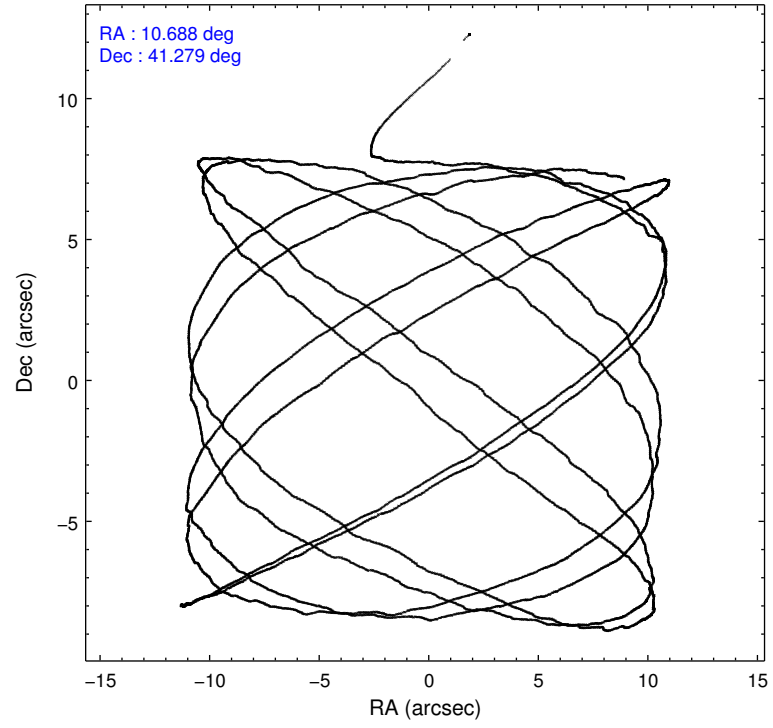


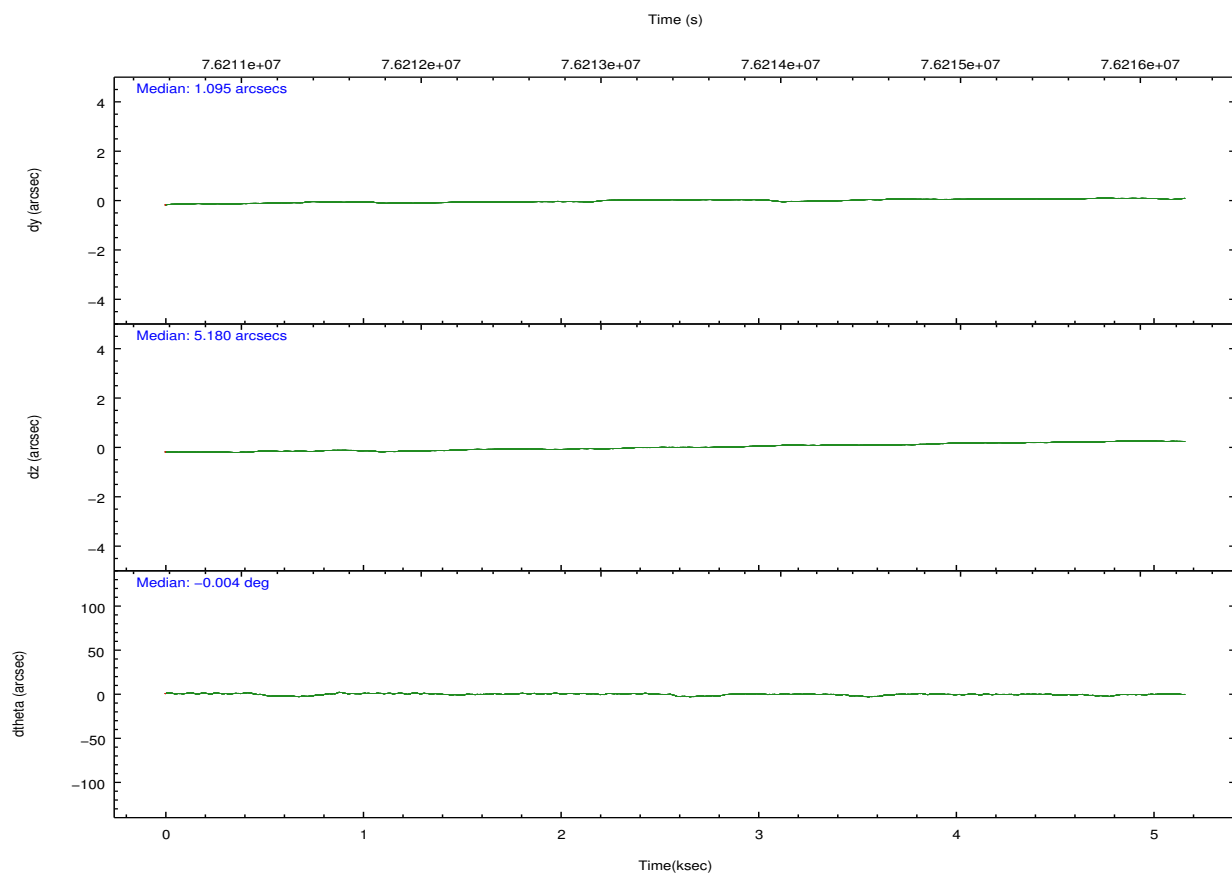
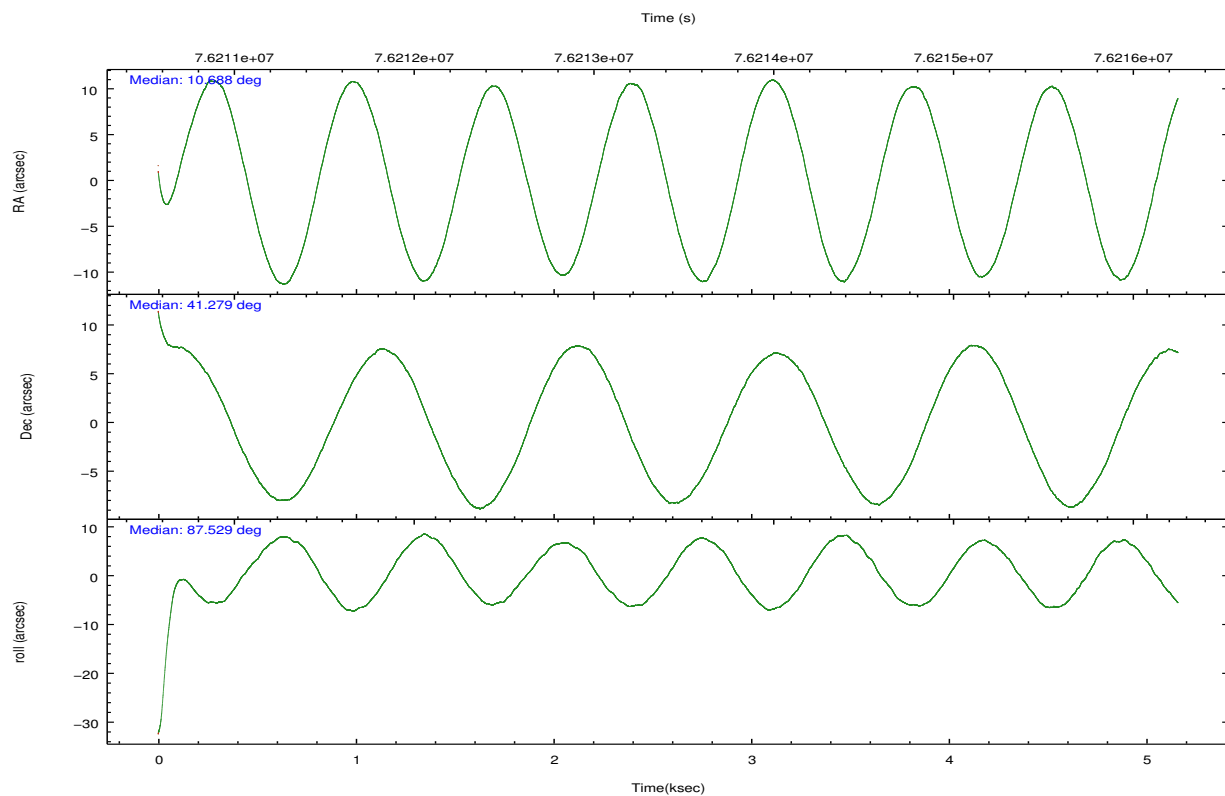
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-235678	ACIS-235678
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	10.704971	10.68800143927427
[deg] Pointing Dec	41.254439	41.27876977310754
[deg] Pointing Roll	87.364541	87.53227523372571
[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)	76210990.184000	76209849.331939
Observation start date	2000-06-01T01:42:06	2000-06-01T01:24:09
[s] Observation end time (MET)	76215990.184000	76216597.932188
Observation end date	2000-06-01T03:05:26	2000-06-01T03:16:37
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



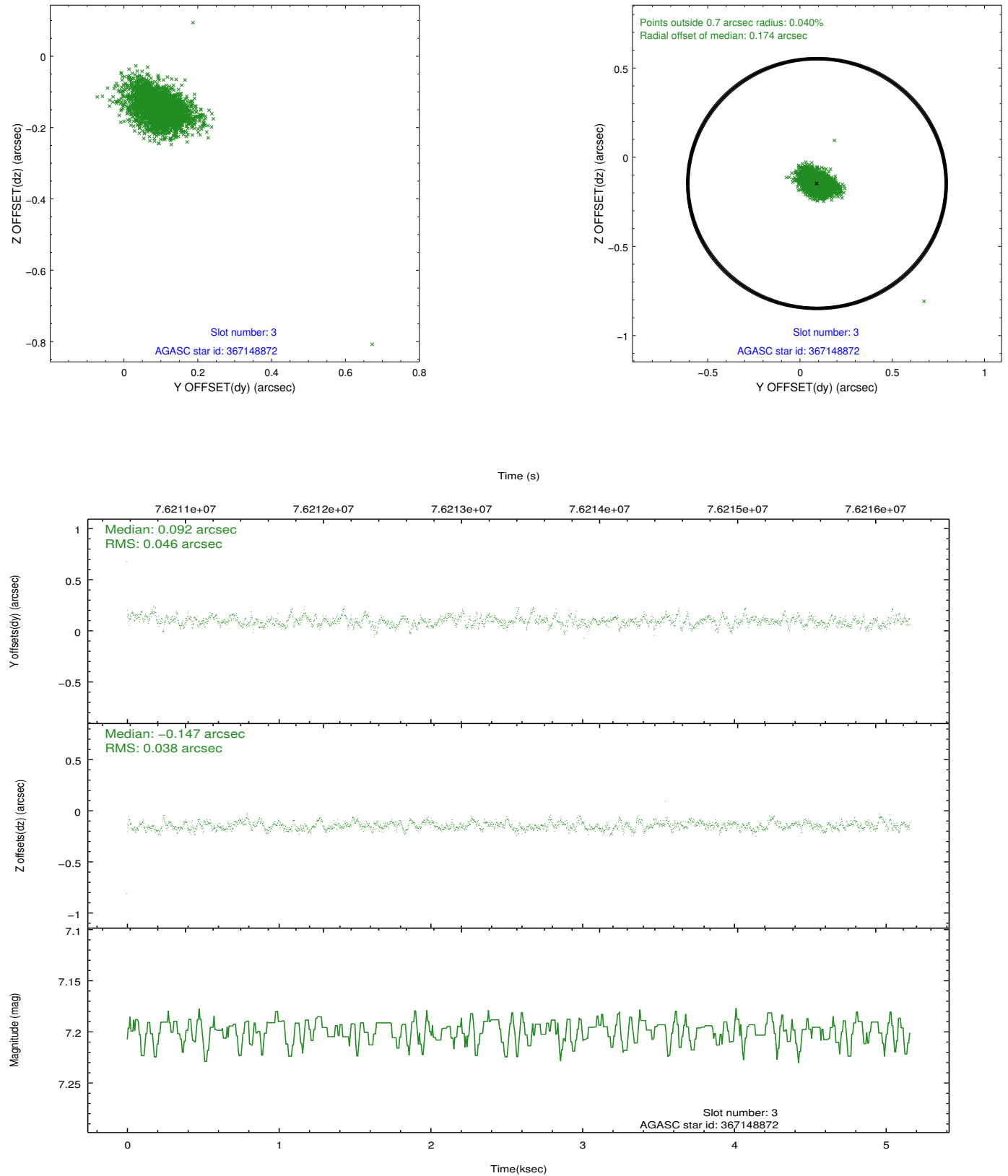


### Slot Statistics

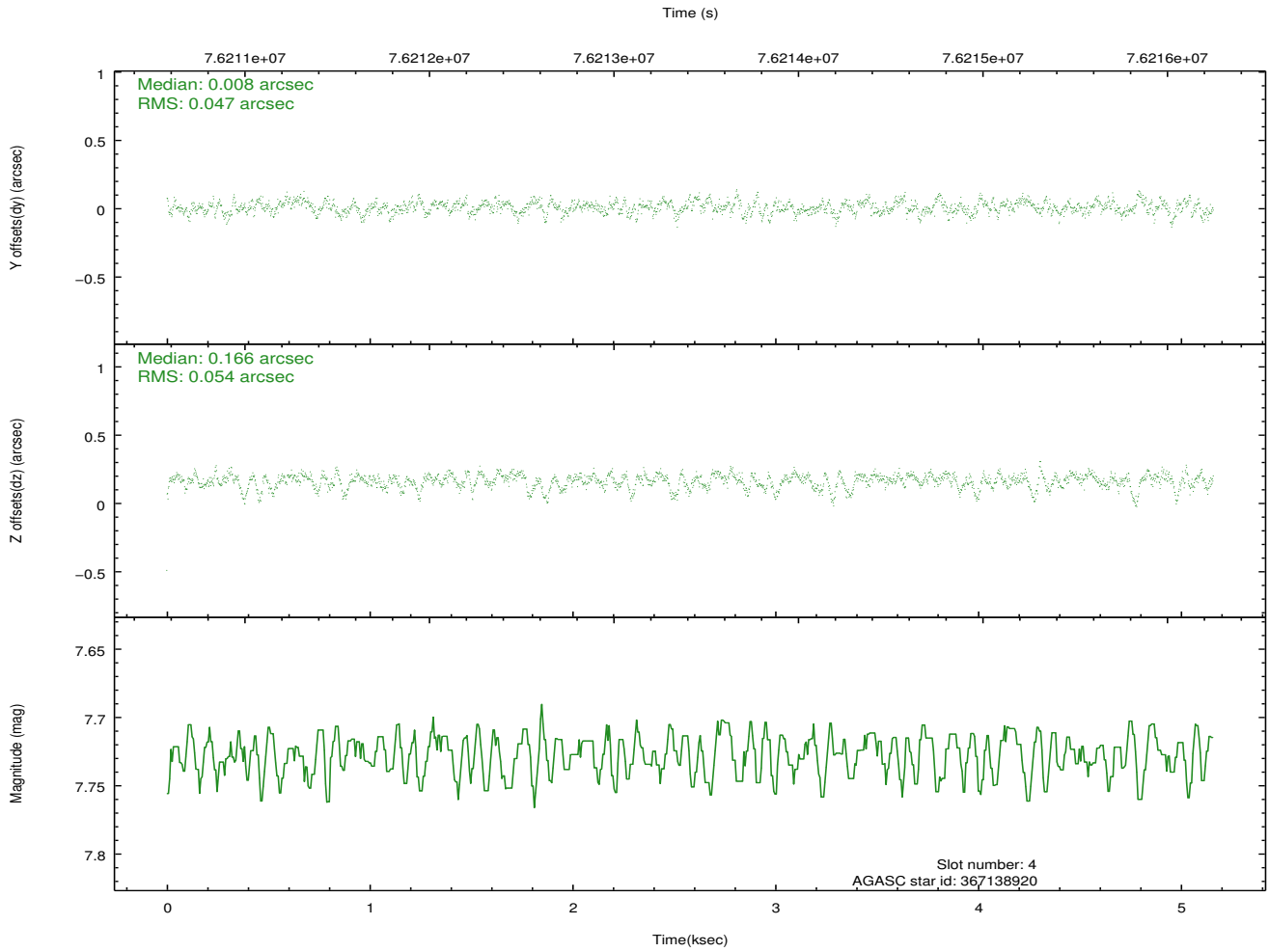
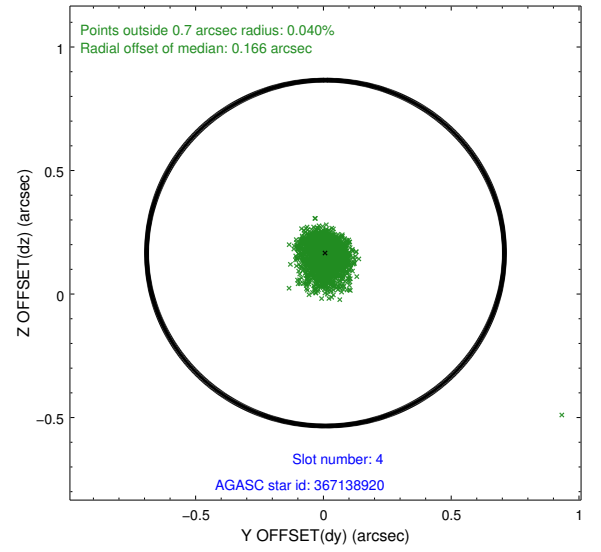
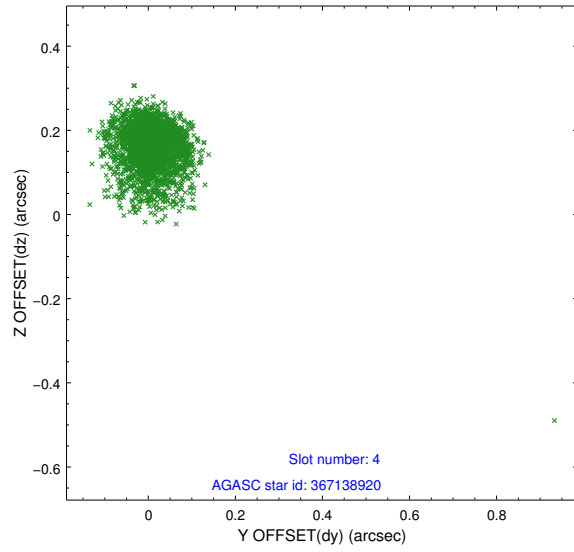
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	1259	-0.038	-0.005	0.009	0.015	0.000000	0.000000	-753.70	-1726.32
1	FID	ACIS-S-4	7.21	1258	0.004	0.020	0.008	0.018	0.000000	0.000000	2159.08	180.99
2	FID	ACIS-S-5	7.23	1258	0.004	-0.006	0.010	0.019	0.000000	0.000000	-1804.99	175.96
3	GUIDE	367148872	7.20	2517	0.092	-0.147	0.060	0.102	10.505940	40.688258	-2060.90	448.99
4	GUIDE	367138920	7.73	2517	0.008	0.166	0.069	0.121	11.513485	40.808909	-1491.96	-2273.64
5	GUIDE	367674552	8.84	2518	-0.082	0.105	0.063	0.110	11.016238	41.570845	1176.80	-785.59
6	GUIDE	367658664	9.58	2517	-0.016	-0.055	0.100	0.165	10.374070	41.369746	375.19	912.02
7	GUIDE	367665472	9.48	2517	-0.005	-0.063	0.088	0.144	10.241611	41.730843	1658.95	1323.15

## 2.4 Star Slots

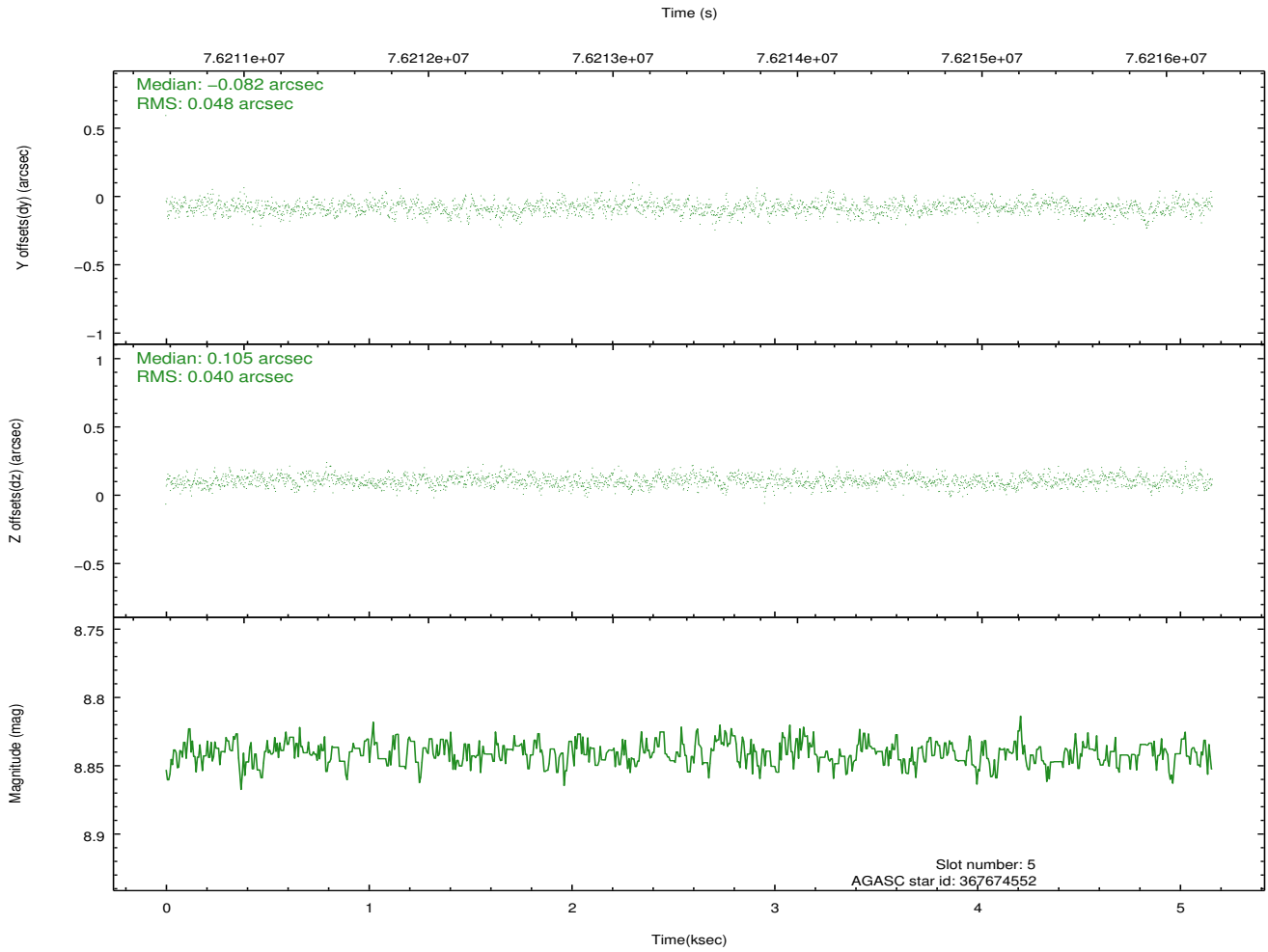
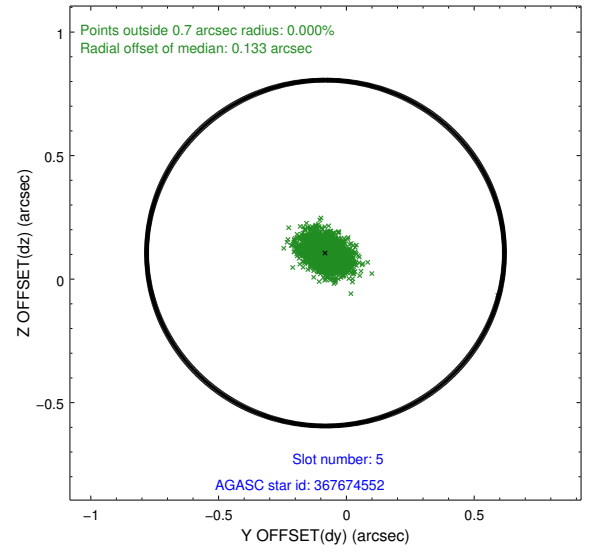
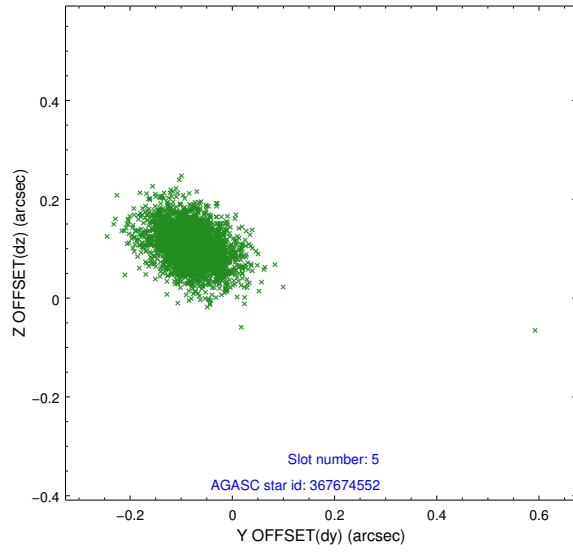
### 2.4.1 Slot 3



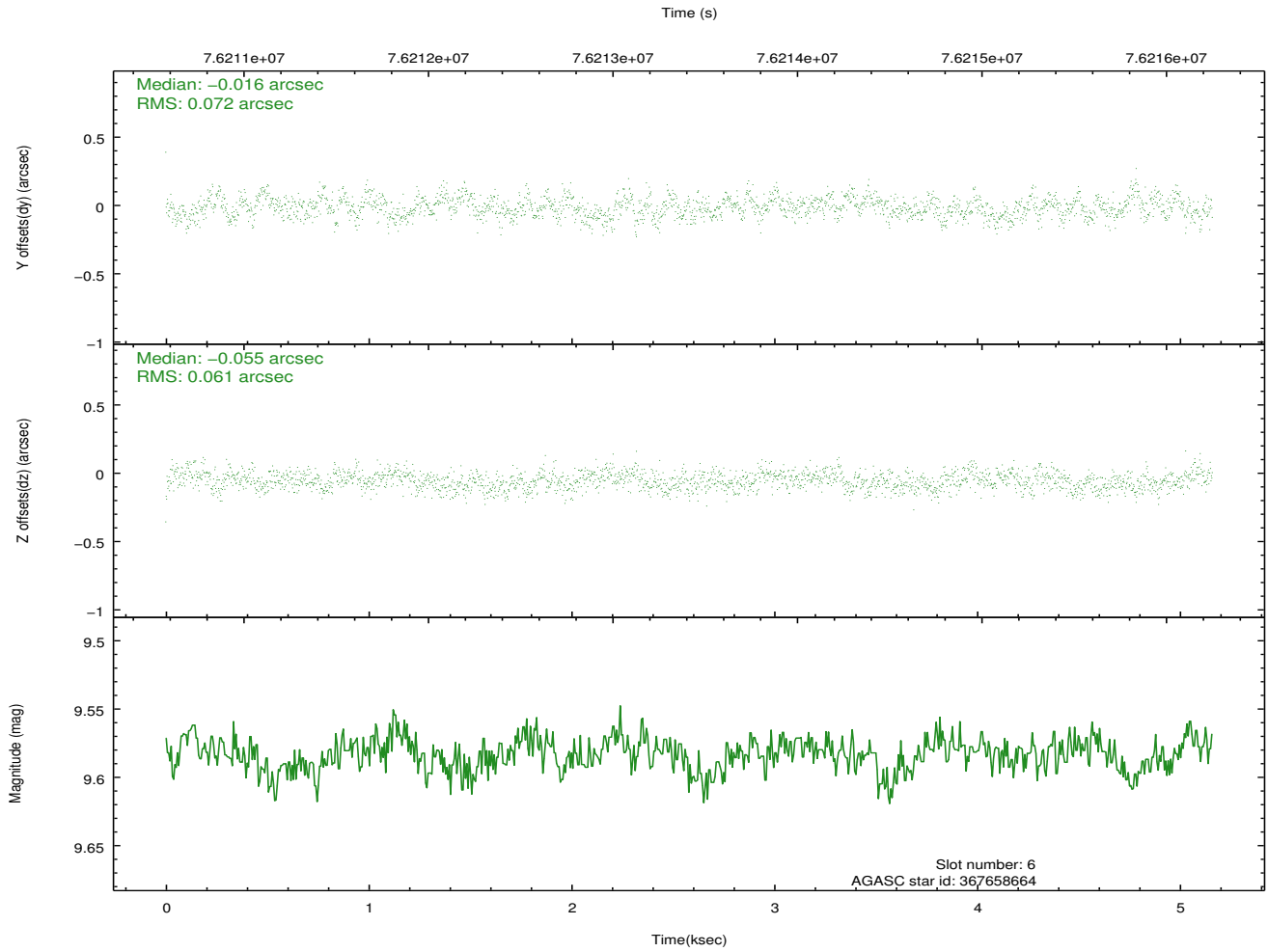
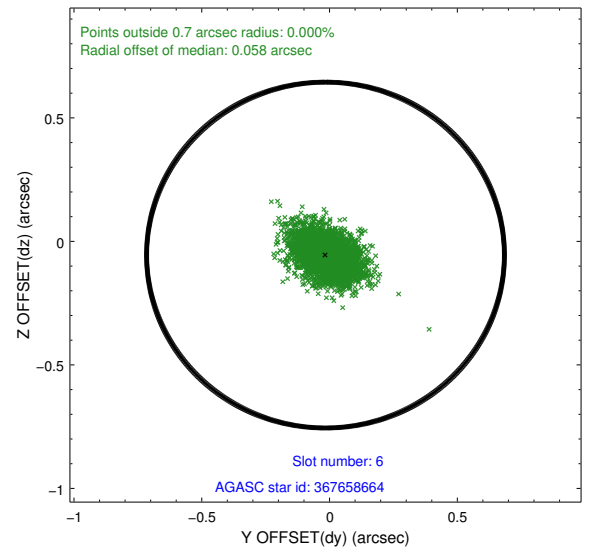
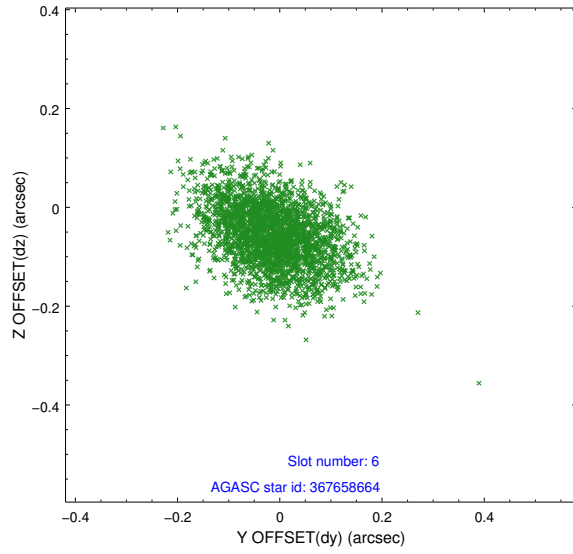
## 2.4.2 Slot 4



### 2.4.3 Slot 5

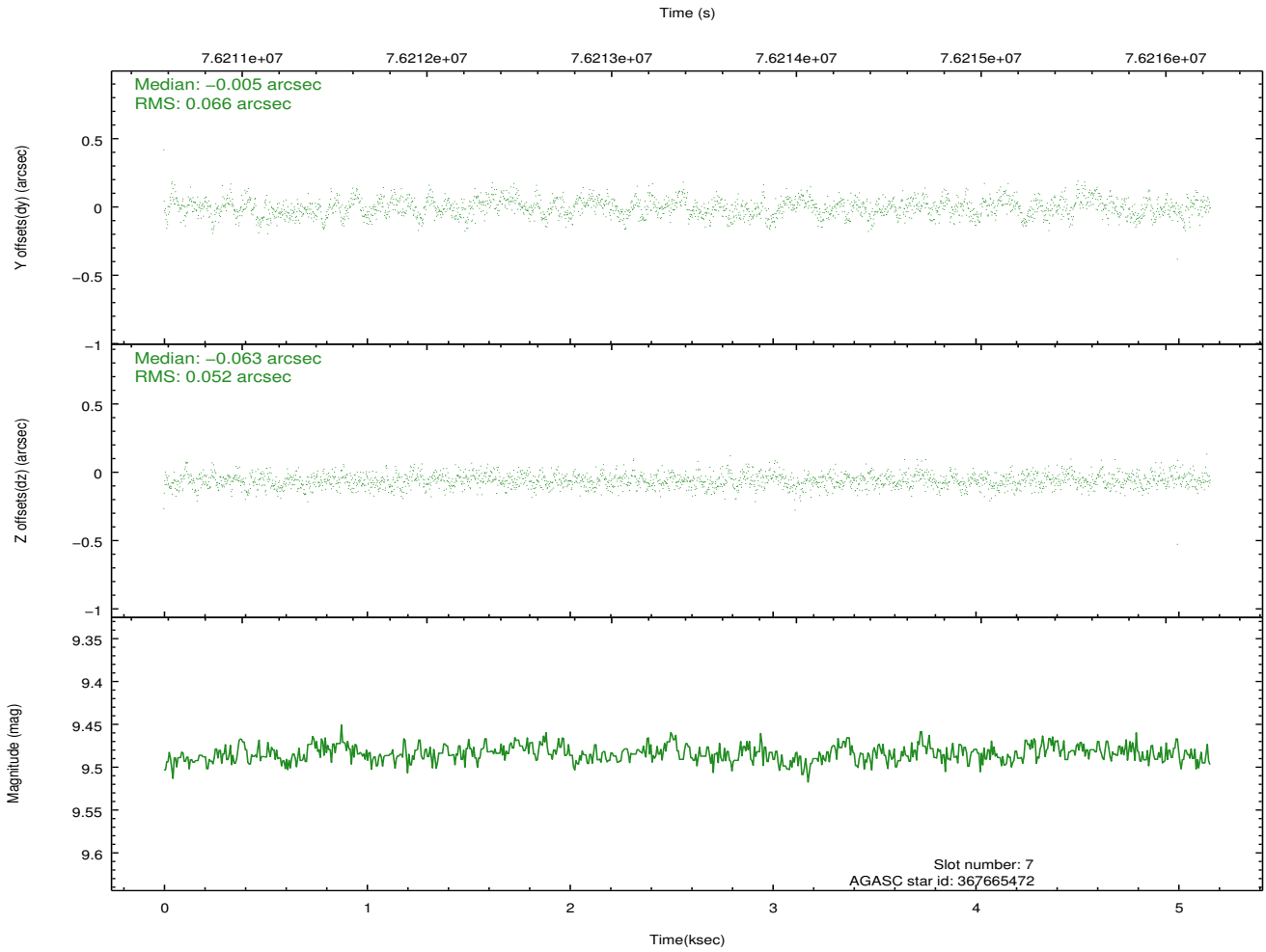
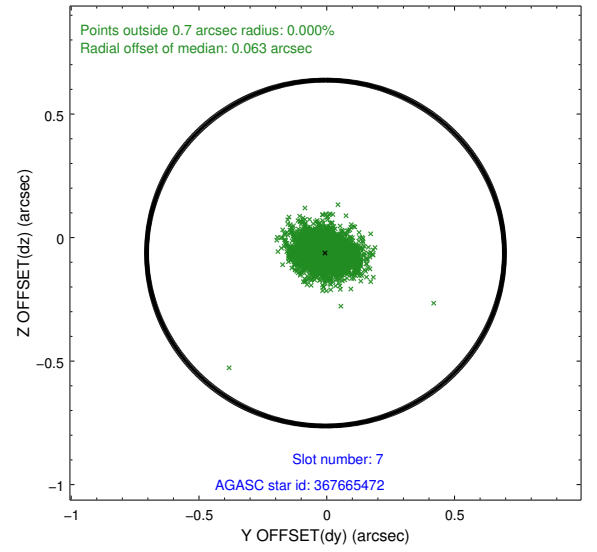
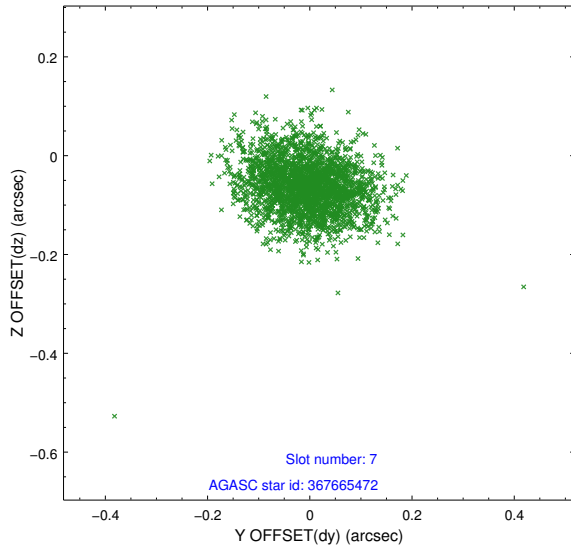


## 2.4.4 Slot 6



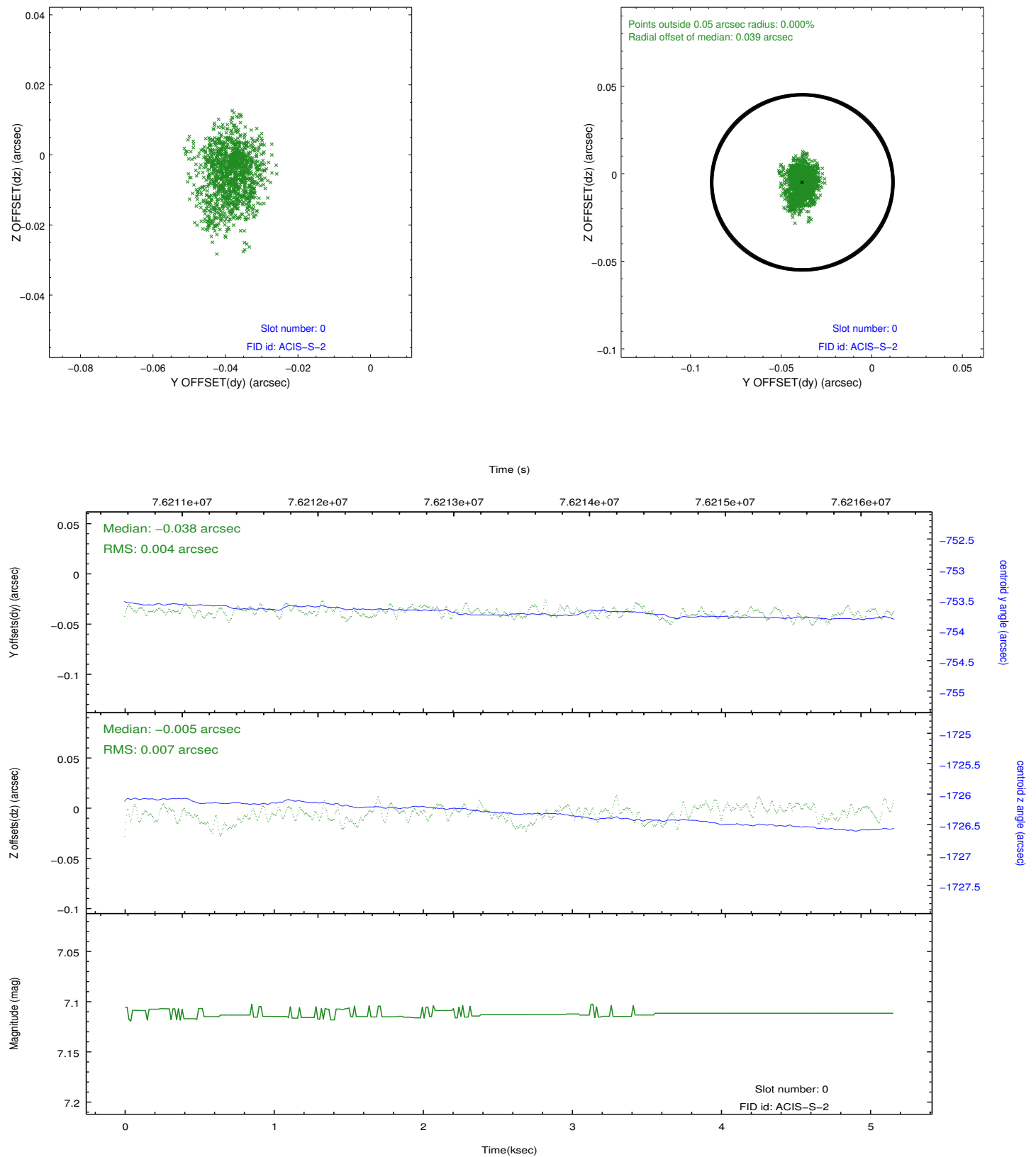


## 2.4.5 Slot 7

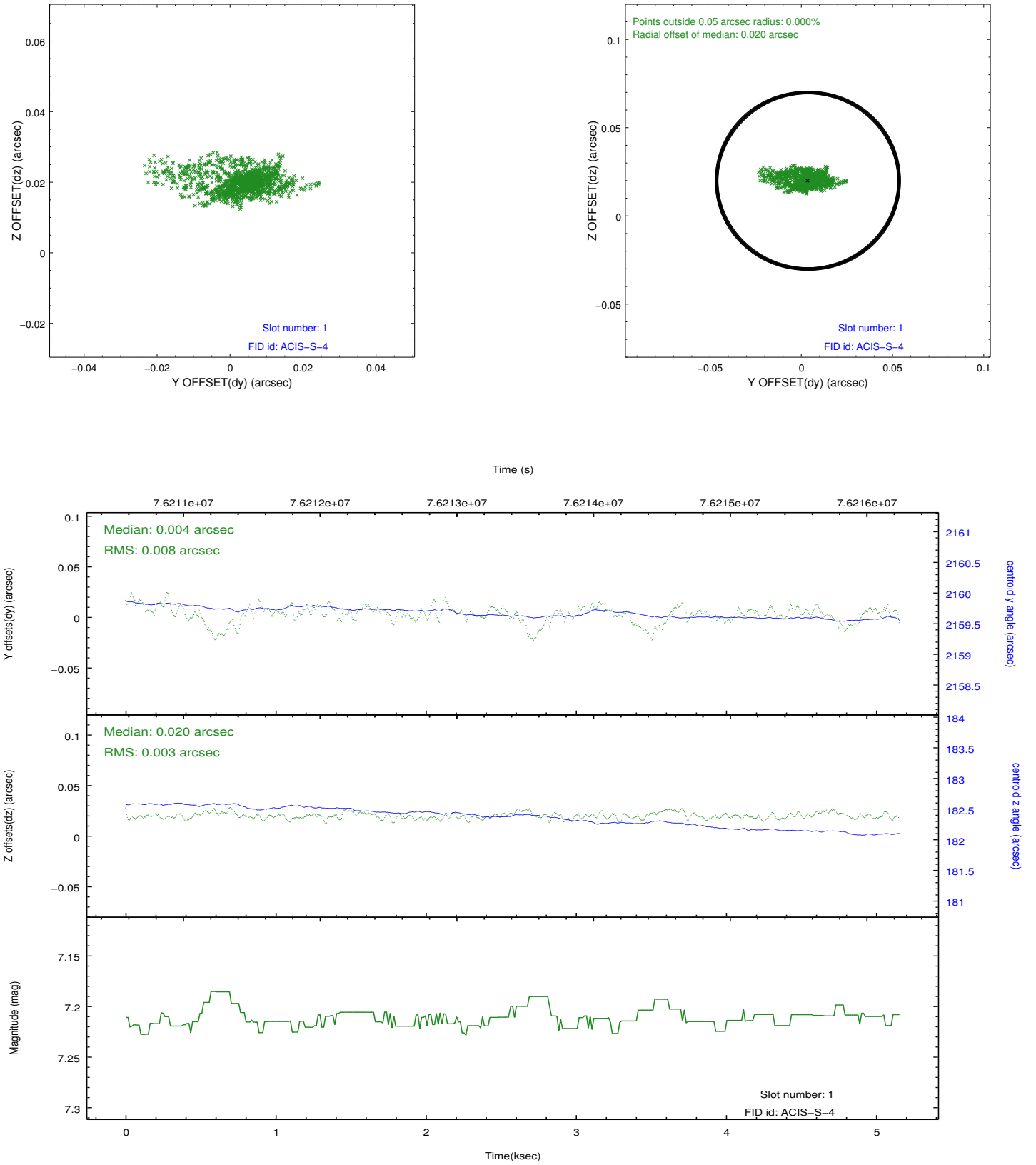


## 2.5 FID Slots

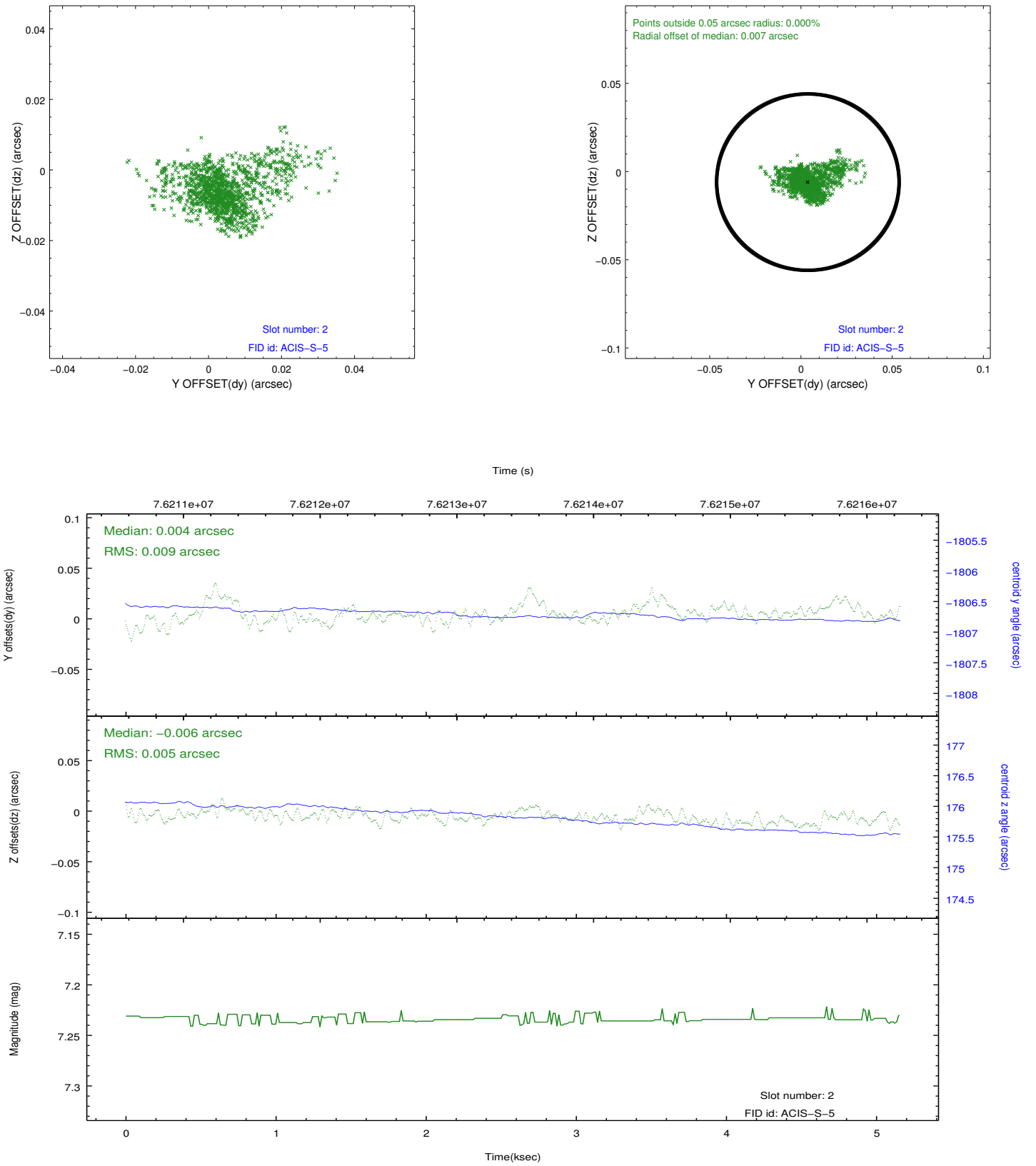
### 2.5.1 Slot 0



## 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)	2012.08.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.155

### A.2 Comments