

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2920 - L2 Version 3  
Chandra X-Ray Center

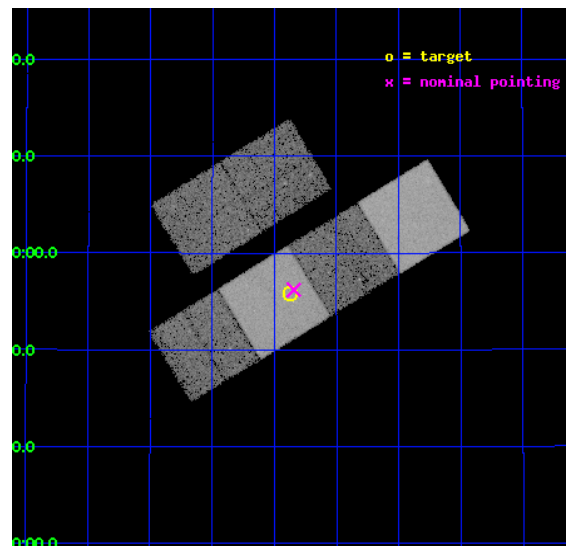
L2 Processing Date : Oct 3 2012

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# 1 Front

seq_num	600257	Sequence number
obs_id	2920	Observation id
title	FURTHER PROBING THE NATURE OF SUPER-LUMINOUS X-RAY SOURCES IN NEARBY GALAXIES	Proposal title
observer	Dr Timothy Roberts	Principal investigator
object	NGC 4136 X-1	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	182.344167	Observer's specified target RA [deg]
dec_targ	29.930278	Observer's specified target Dec [deg]
ra_nom	182.33578819939	Nominal RA [deg]
dec_nom	29.936696663098	Nominal Dec [deg]
roll_nom	148.62790594351	Nominal Roll [deg]
revision	3	Processing version of data
ontime	18750.711065367	Sum of GTIs [s]
livetime	18513.278271534	Livetime [s]
ontime2	18753.993085623	Sum of GTIs [s]
ontime3	18753.828925624	Sum of GTIs [s]
ontime5	18753.911005616	Sum of GTIs [s]
ontime6	18753.869965628	Sum of GTIs [s]
ontime7	18750.711065367	Sum of GTIs [s]
ontime8	18750.546935275	Sum of GTIs [s]
l2events	196324	Number of level 2 events

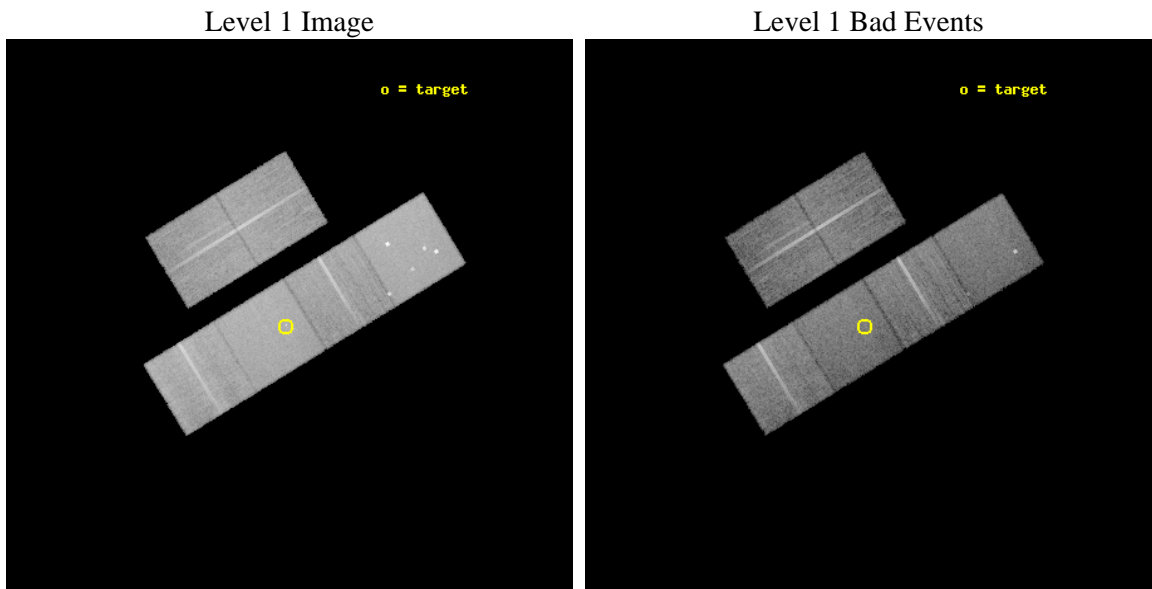




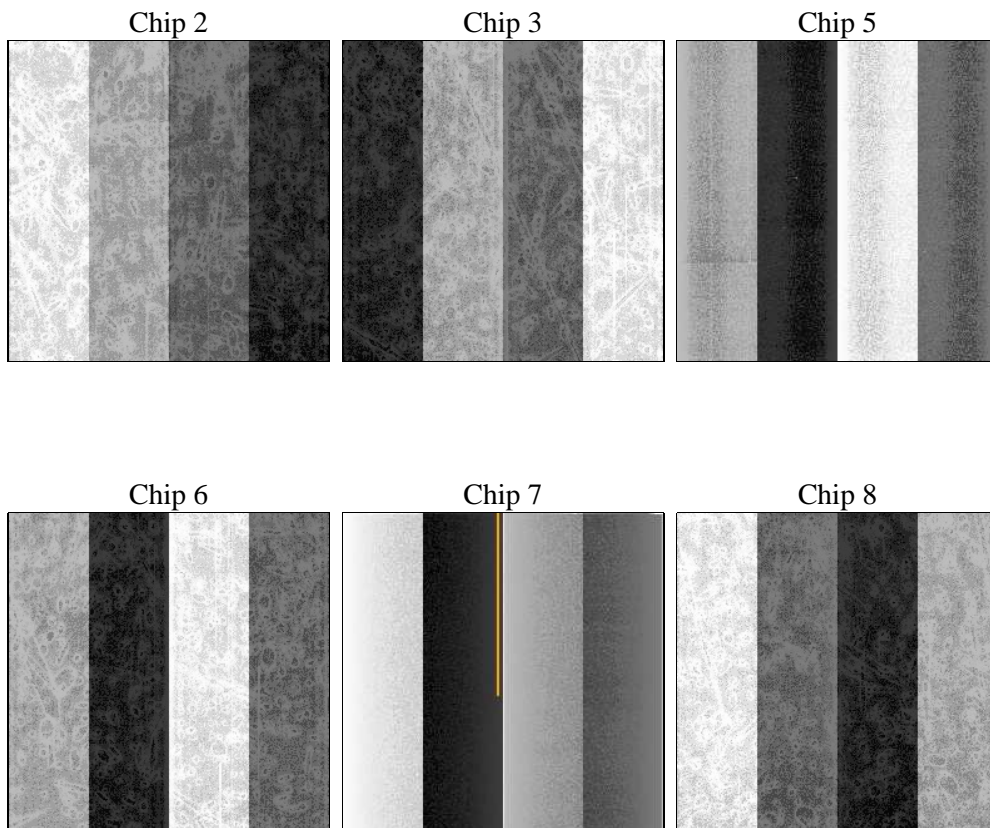
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	19000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	18750.711065367	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime2	18753.993085623	Sum of GTIs [s]
date	2012-10-03T03:48:15	Date and time of file creation	ontime3	18753.828925624	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	18753.911005616	Sum of GTIs [s]
			ontime6	18753.869965628	Sum of GTIs [s]
			ontime7	18750.711065367	Sum of GTIs [s]
			ontime8	18750.546935275	Sum of GTIs [s]
			l1events	904882	Number of level 1 events

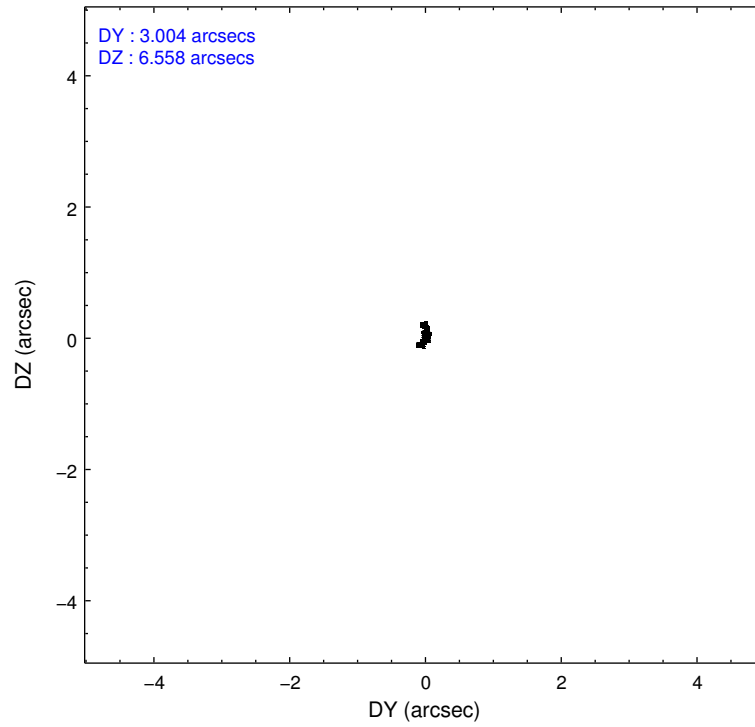
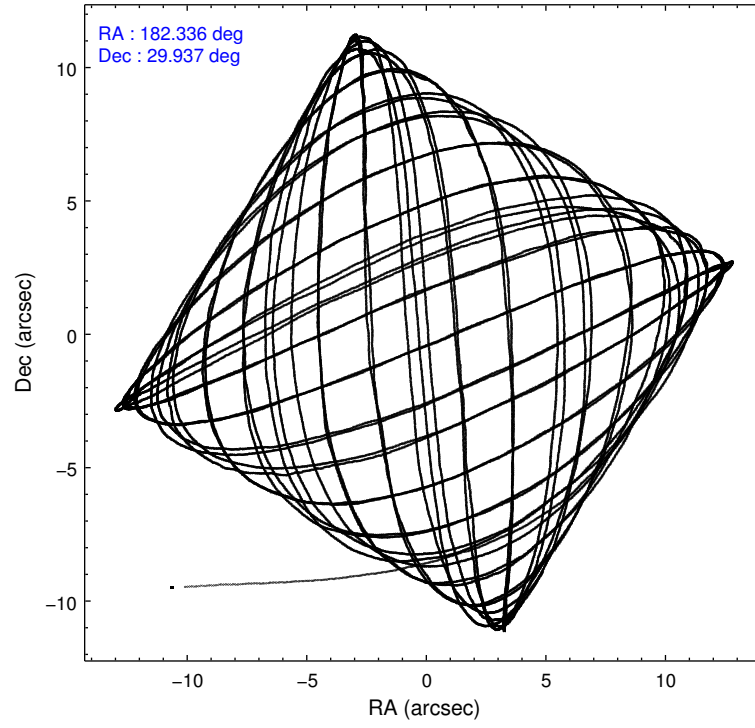
### 2.1.4 Events

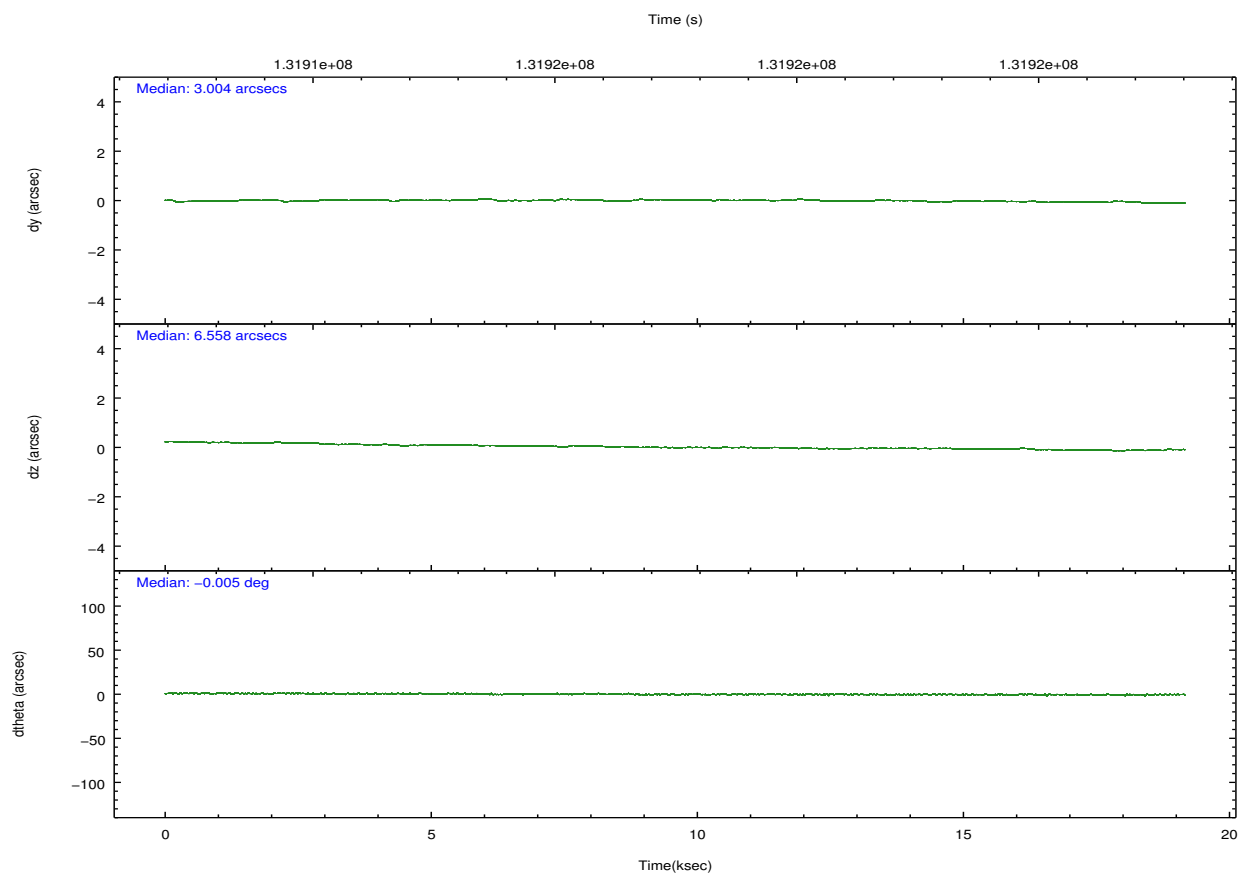
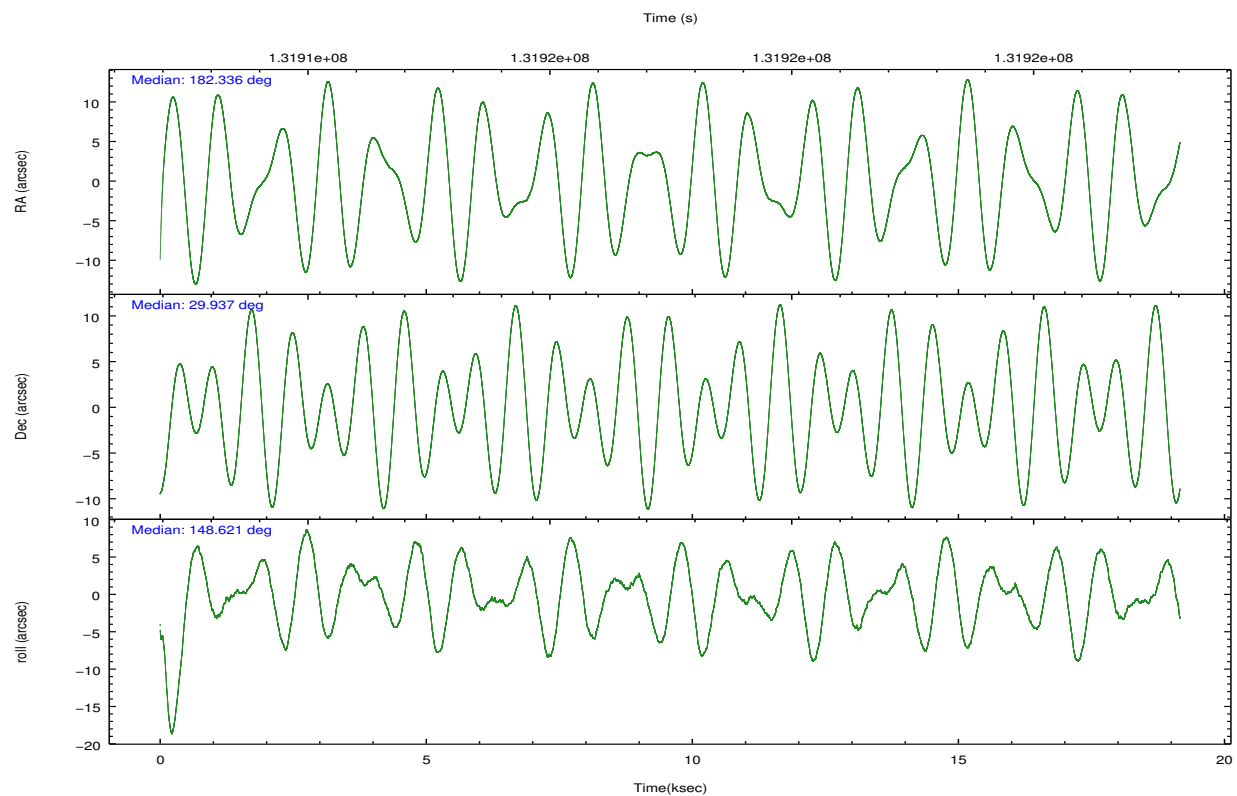
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	129715	121997	189928	129061	167774	166407	grade 0 events	5860	6011	13615	5605	6699	10844
rejected events	115312	107639	100310	114656	98283	131247		4%	4%	7%	4%	3%	6%
rejected %	88%	88%	52%	88%	58%	78%	grade 1 events	73	55	326	50	189	121
								0%	0%	0%	0%	0%	0%
							grade 2 events	3196	2875	25318	3029	13920	7421
								2%	2%	13%	2%	8%	4%
							grade 3 events	1309	1416	3573	1453	6179	4016
								1%	1%	1%	1%	3%	2%
							grade 4 events	1335	1453	3384	1395	6167	3693
								1%	1%	1%	1%	3%	2%
							grade 5 events	4515	4867	13946	5356	16077	6942
								3%	3%	7%	4%	9%	4%
							grade 6 events	2706	2607	43756	2923	36552	9193
								2%	2%	23%	2%	21%	5%
							grade 7 events	110721	102713	86010	109250	81991	124177
								85%	84%	45%	84%	48%	74%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	182.367231	182.3357881993871	Subarray requested	NONE	NONE
[deg] Pointing Dec	29.936399	29.93669666309758	Alternating exposures requested	N	N
[deg] Pointing Roll	148.455583	148.6279059435068	[s] Primary exposure time	0.000000	3.2
[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)	131908067.184000	131907126.6157			
Observation start date	2002-03-07T17:06:43	2002-03-07T16:52:06			
[s] Observation end time (MET)	131927067.184000	131927445.70403			
Observation end date	2002-03-07T22:23:23	2002-03-07T22:30:45			
Read mode	TIMED	TIMED			

## 2.3 Aspect



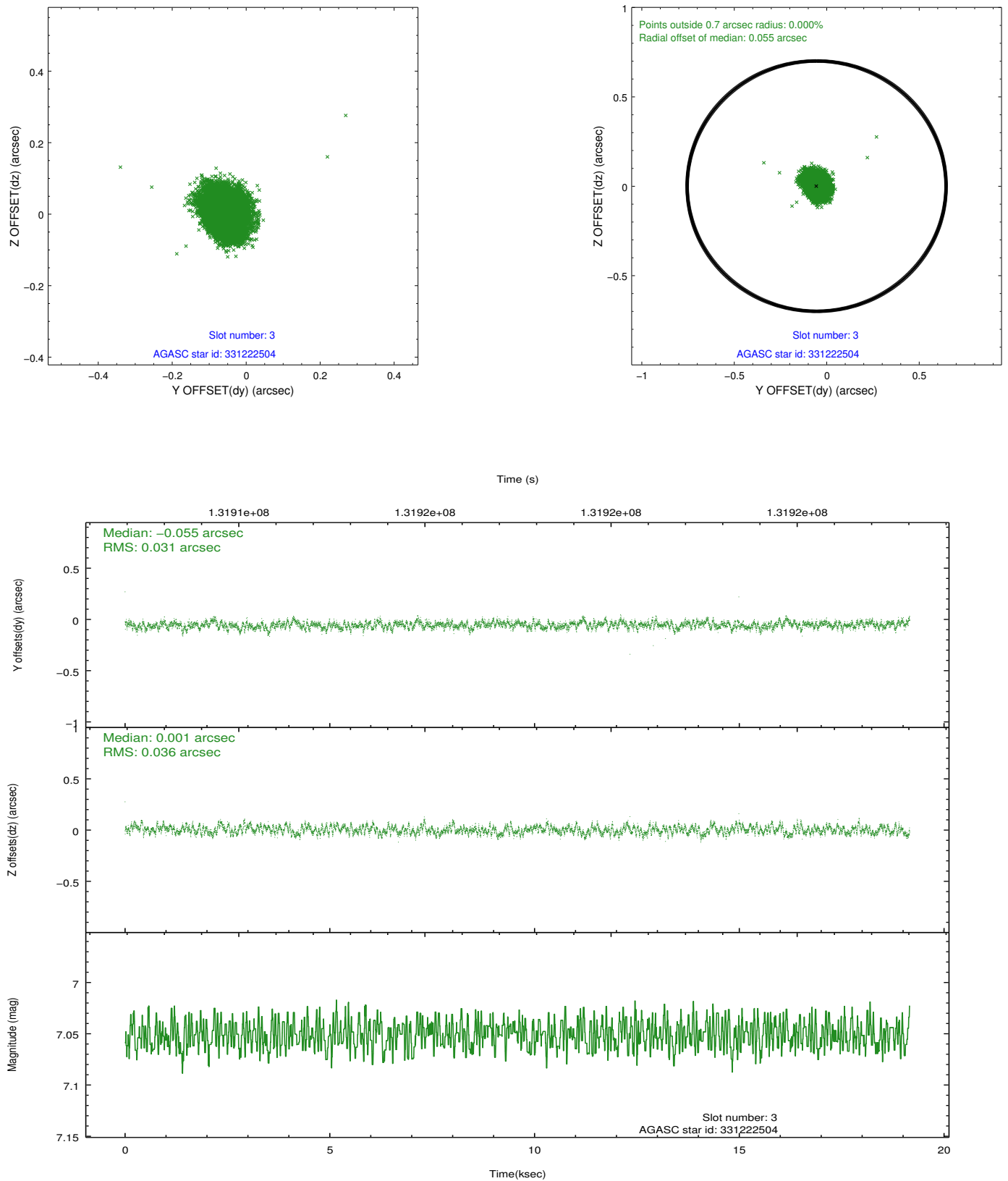


### Slot Statistics

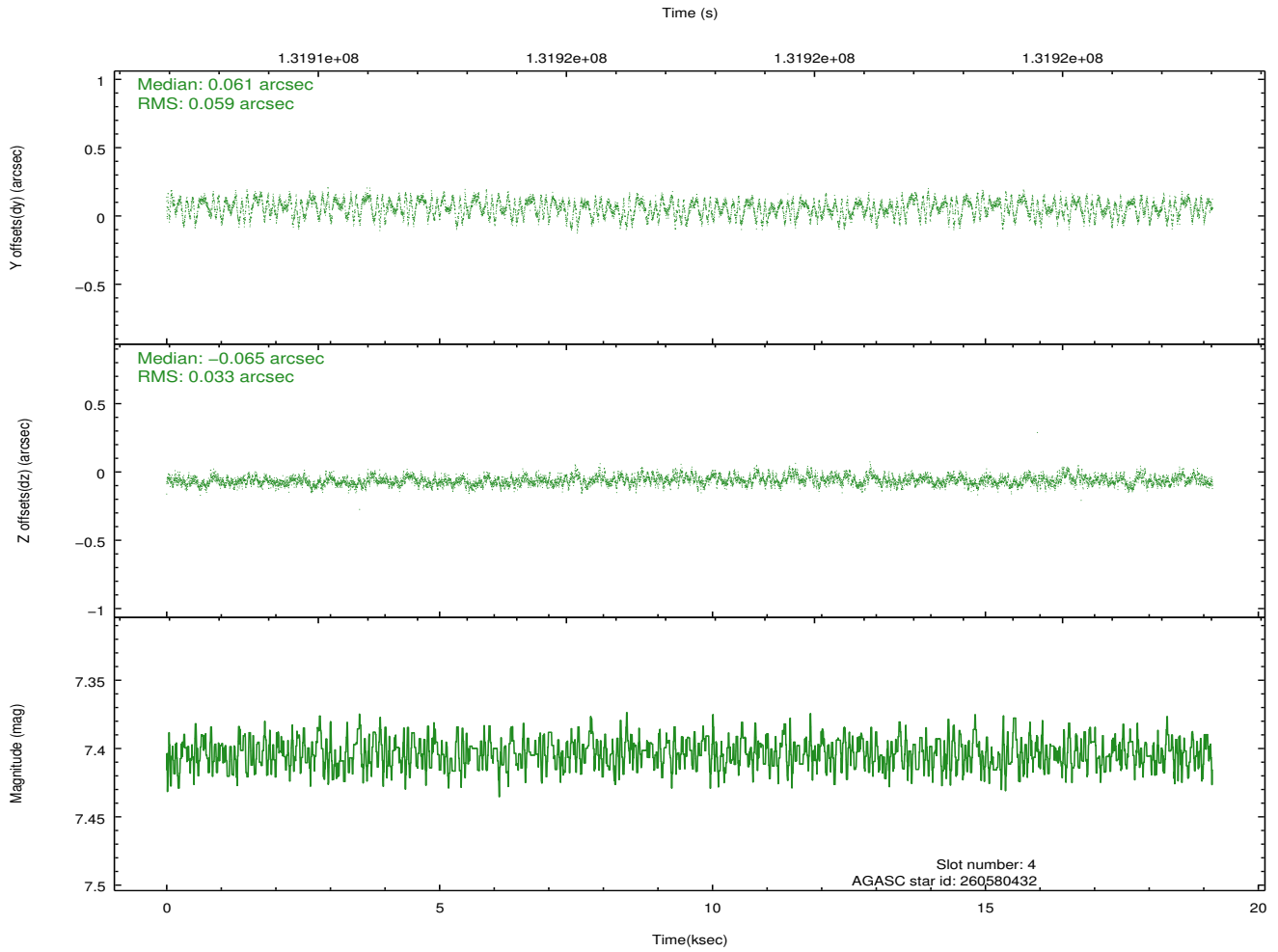
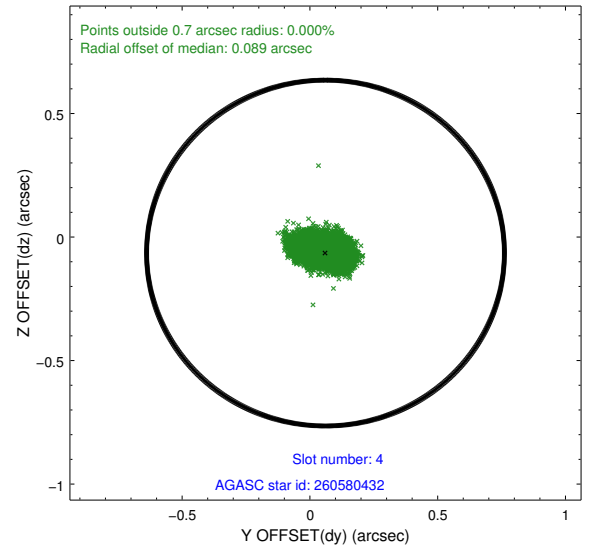
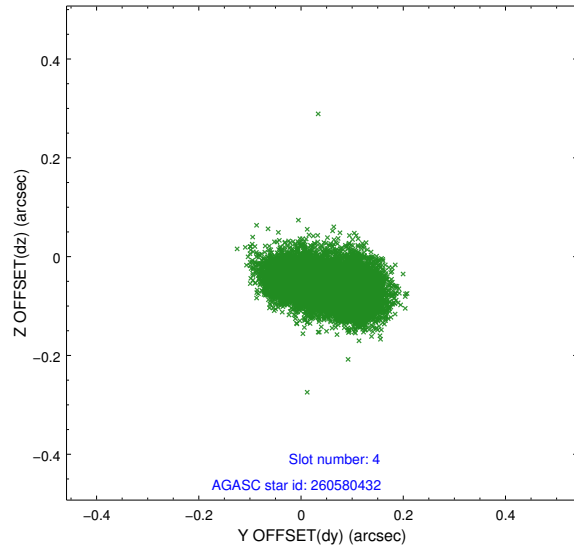
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	4672	-0.024	0.011	0.007	0.011	0.000000	0.000000	-755.63	-1727.74
1	FID	ACIS-S-4	7.20	4672	-0.026	0.008	0.006	0.010	0.000000	0.000000	2157.52	180.58
2	FID	ACIS-S-5	7.24	4674	0.019	-0.011	0.006	0.011	0.000000	0.000000	-1808.20	174.40
3	GUIDE	331222504	7.05	9347	-0.055	0.001	0.050	0.080	182.064211	30.275360	1441.64	-548.43
4	GUIDE	260580432	7.40	9347	0.061	-0.065	0.072	0.117	182.615916	29.068189	-2302.07	2252.84
5	GUIDE	331224640	7.84	9347	-0.076	0.084	0.048	0.078	181.937429	30.420434	2049.54	-789.06
6	GUIDE	260576048	7.88	9345	0.066	-0.040	0.057	0.091	182.340266	29.460601	-824.27	1503.30
7	GUIDE	260571904	9.45	9342	0.006	0.020	0.090	0.143	183.167466	29.996113	-2009.40	-1496.09

## 2.4 Star Slots

### 2.4.1 Slot 3

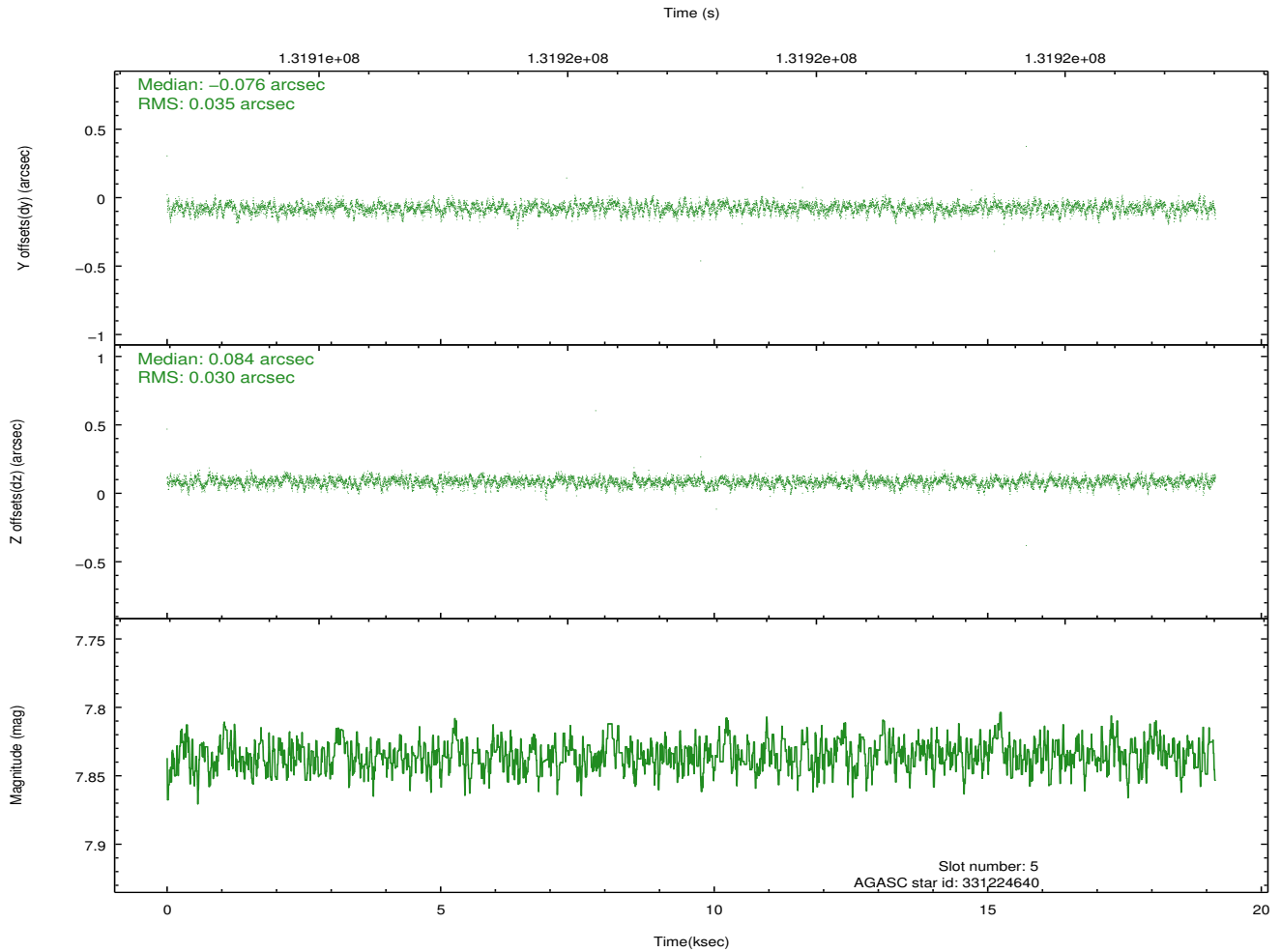
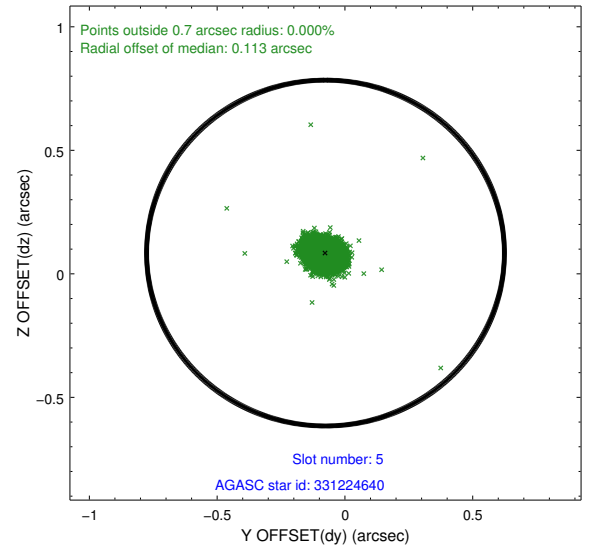
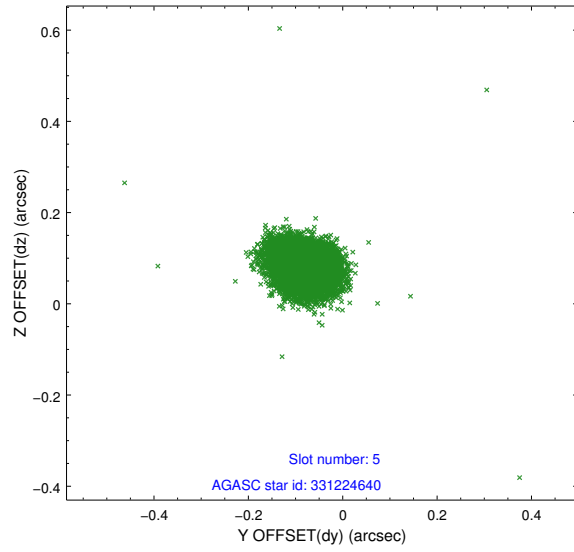


## 2.4.2 Slot 4

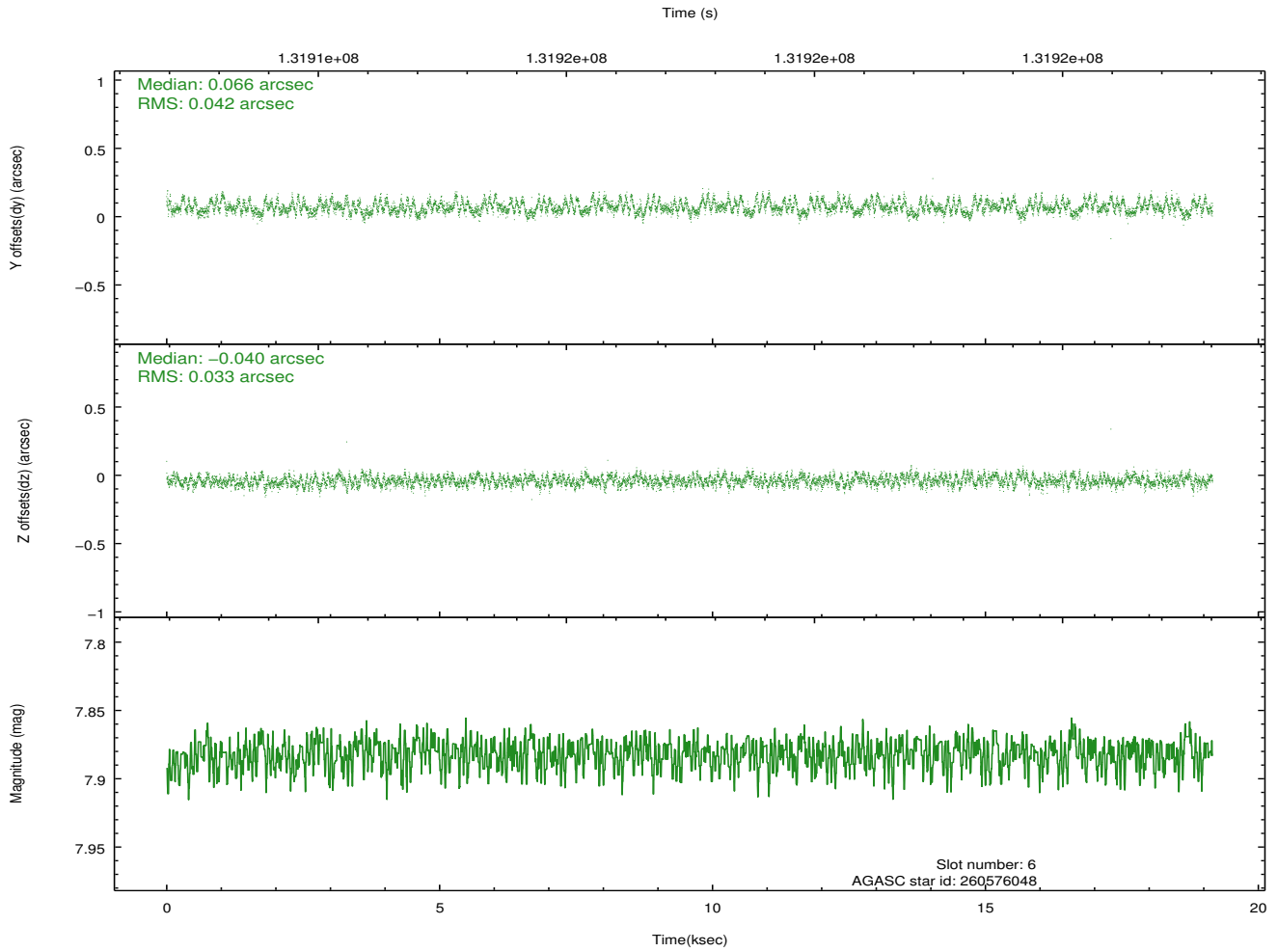
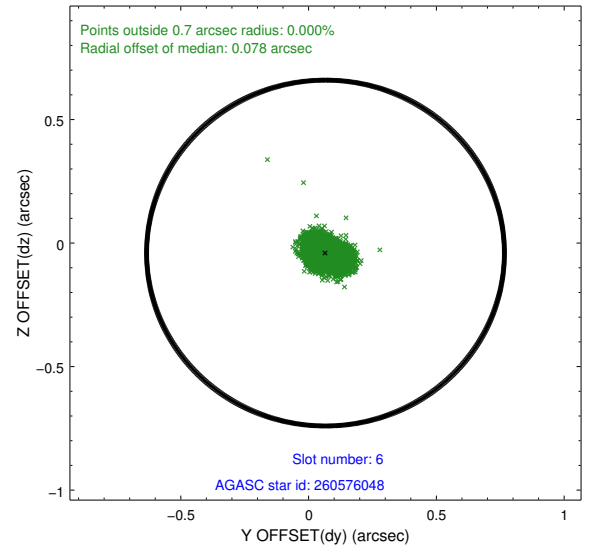
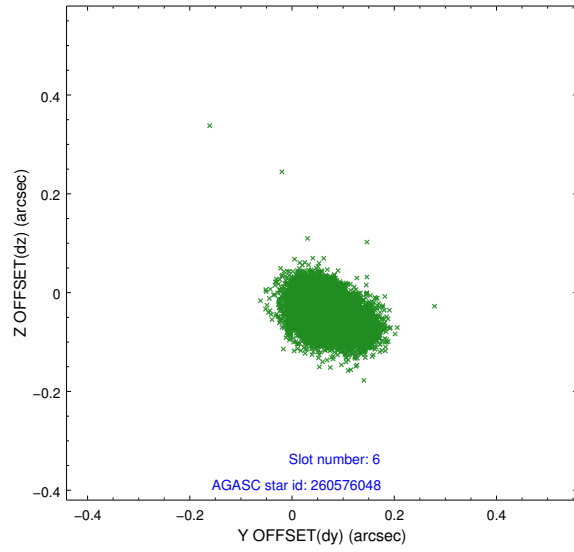




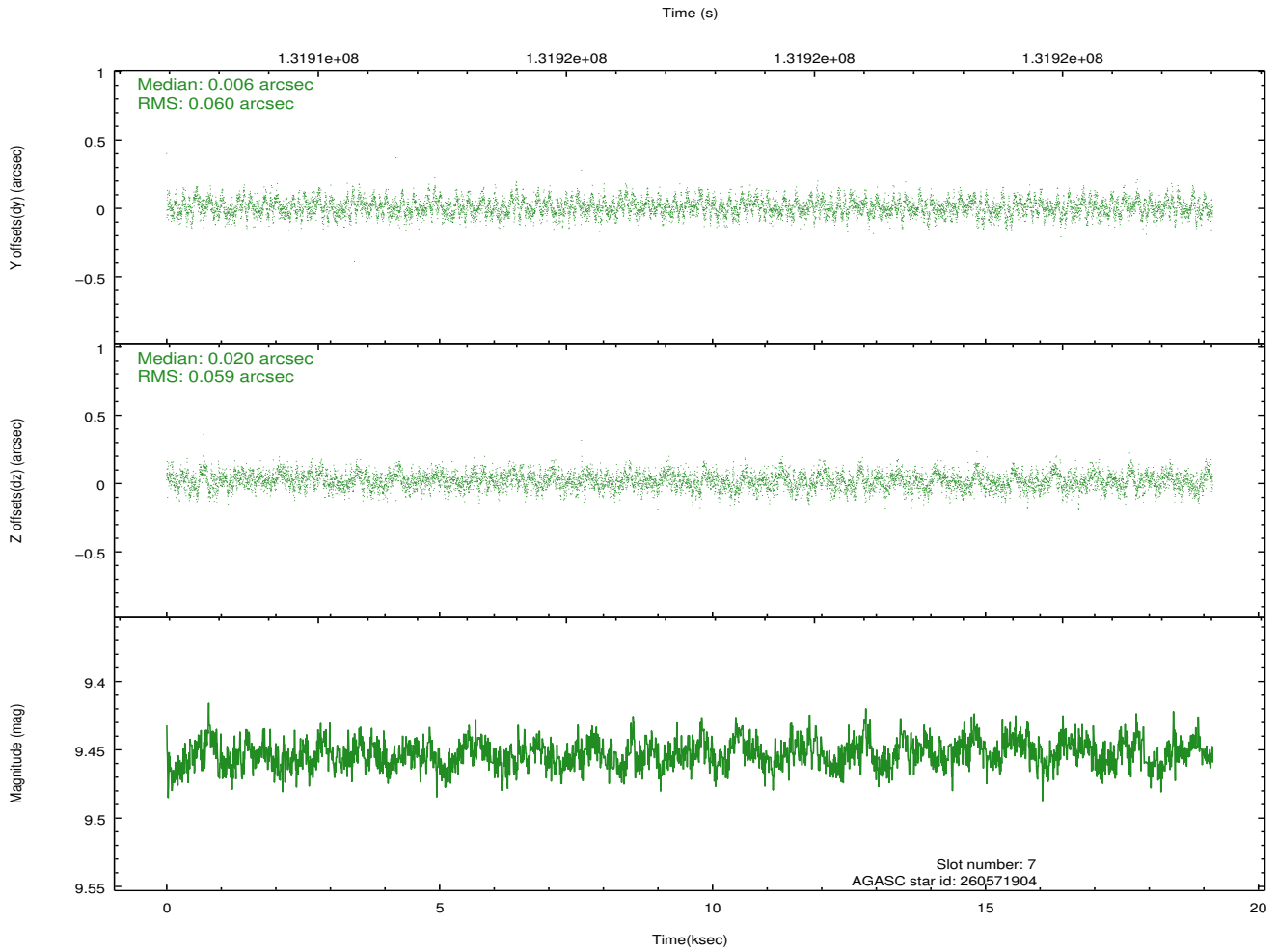
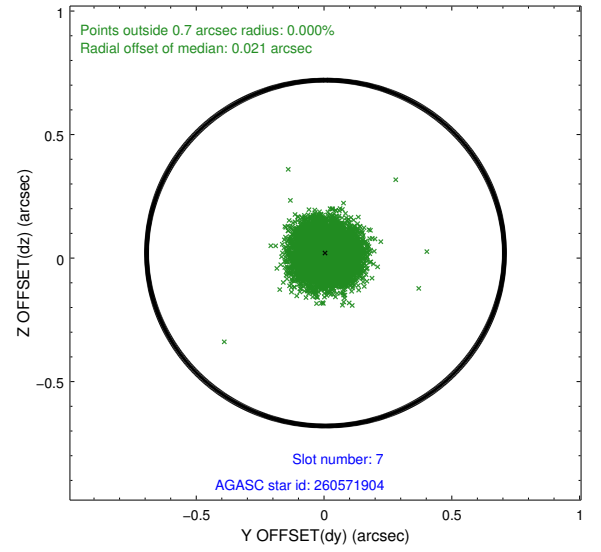
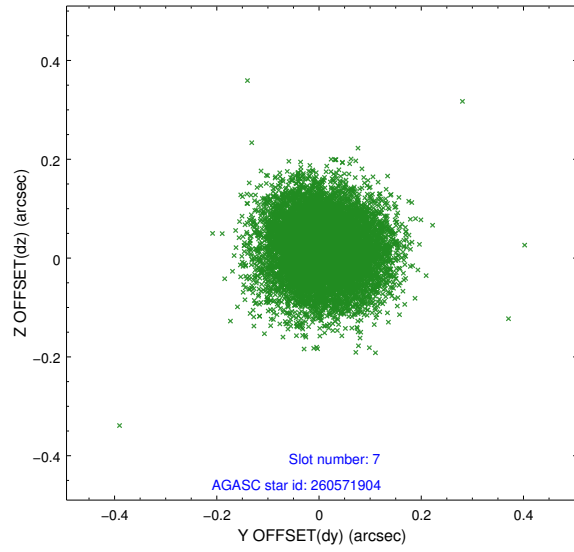
### 2.4.3 Slot 5



## 2.4.4 Slot 6

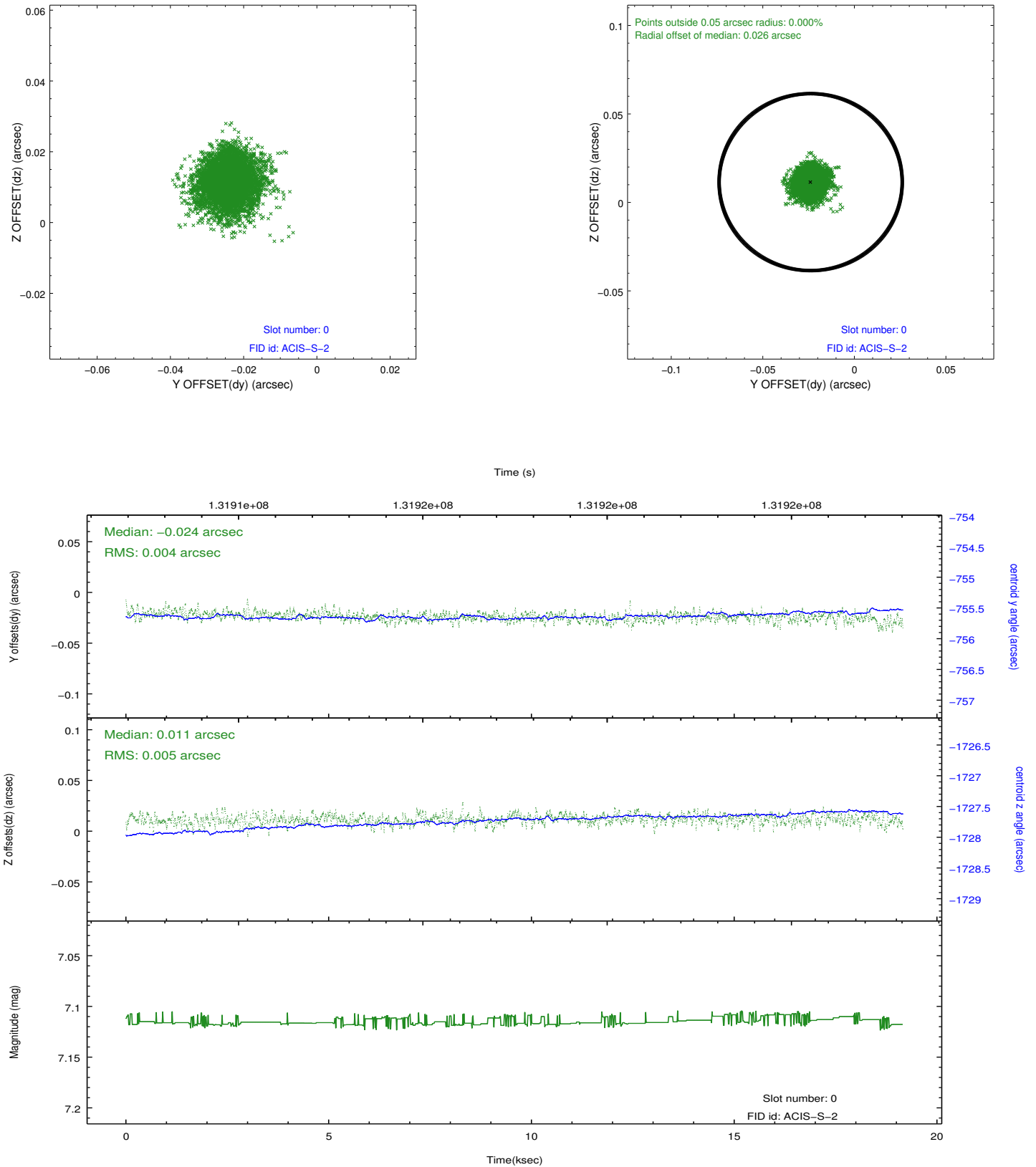


## 2.4.5 Slot 7

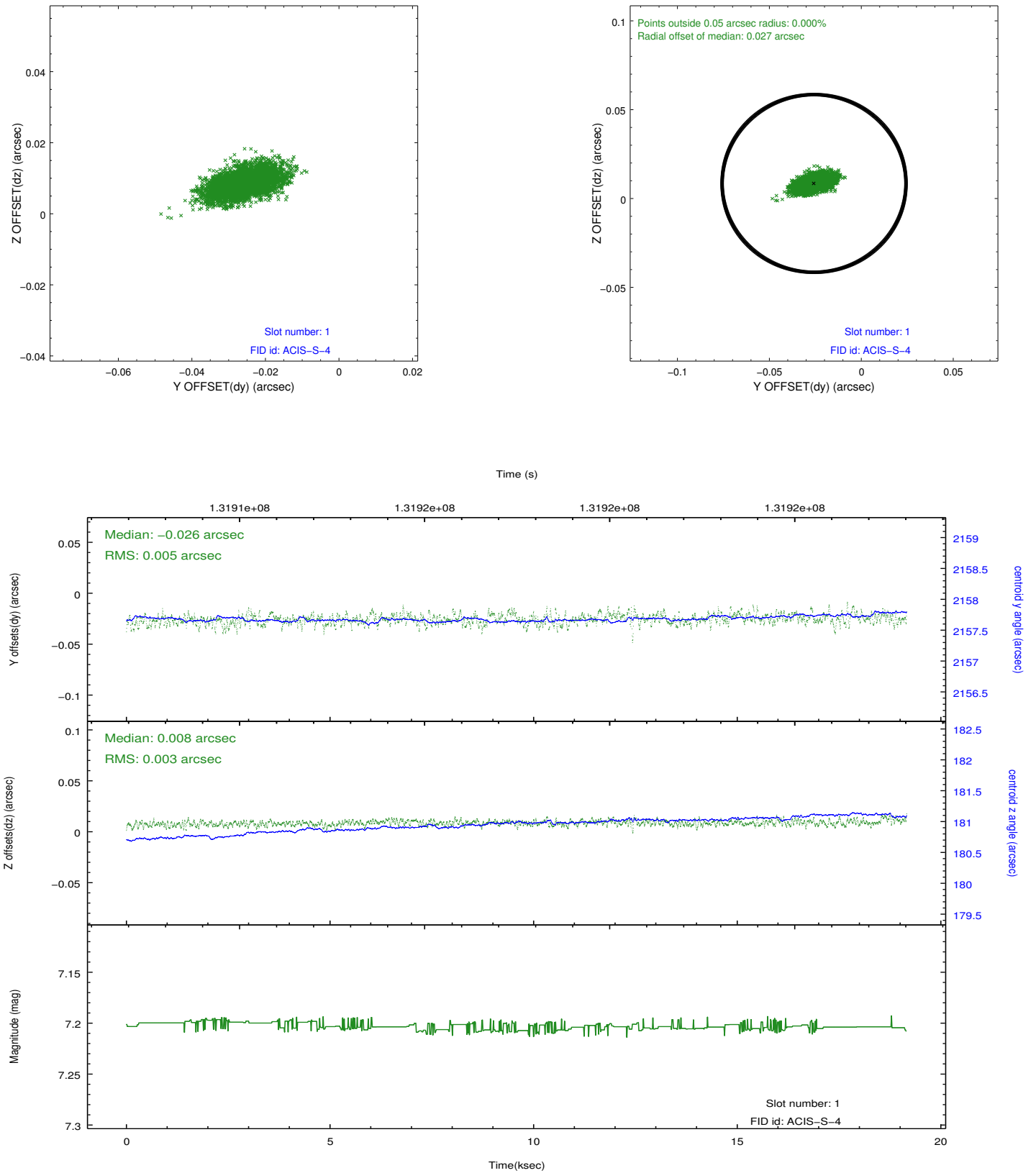


## 2.5 FID Slots

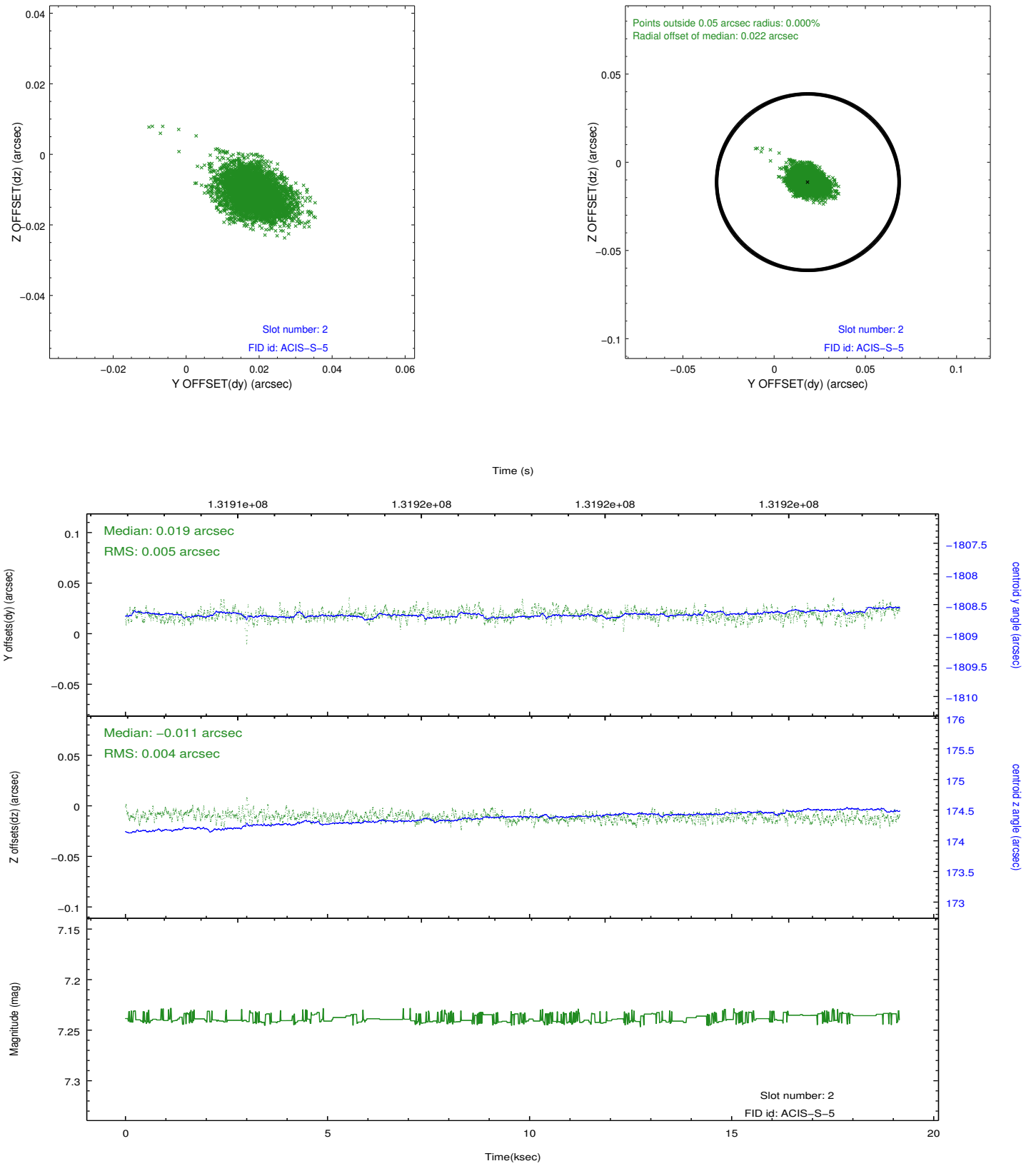
### 2.5.1 Slot 0



## 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)	2012.10.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	18.752

### **A.2 Comments**