

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 1740 - L2 Version 5  
Chandra X-Ray Center

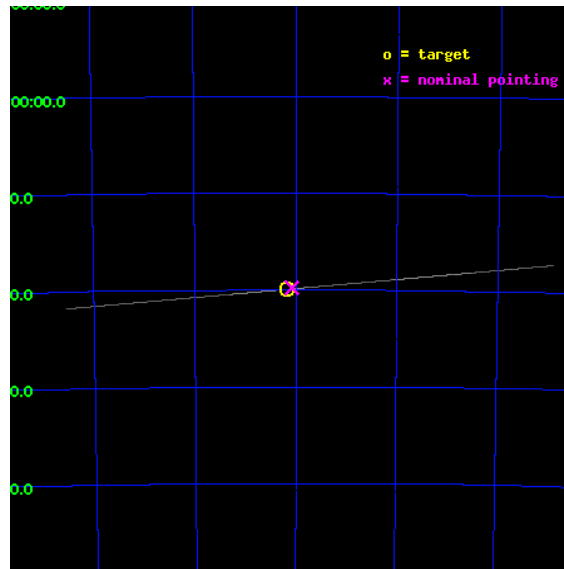
L2 Processing Date : Aug 29 2012

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# 1 Front

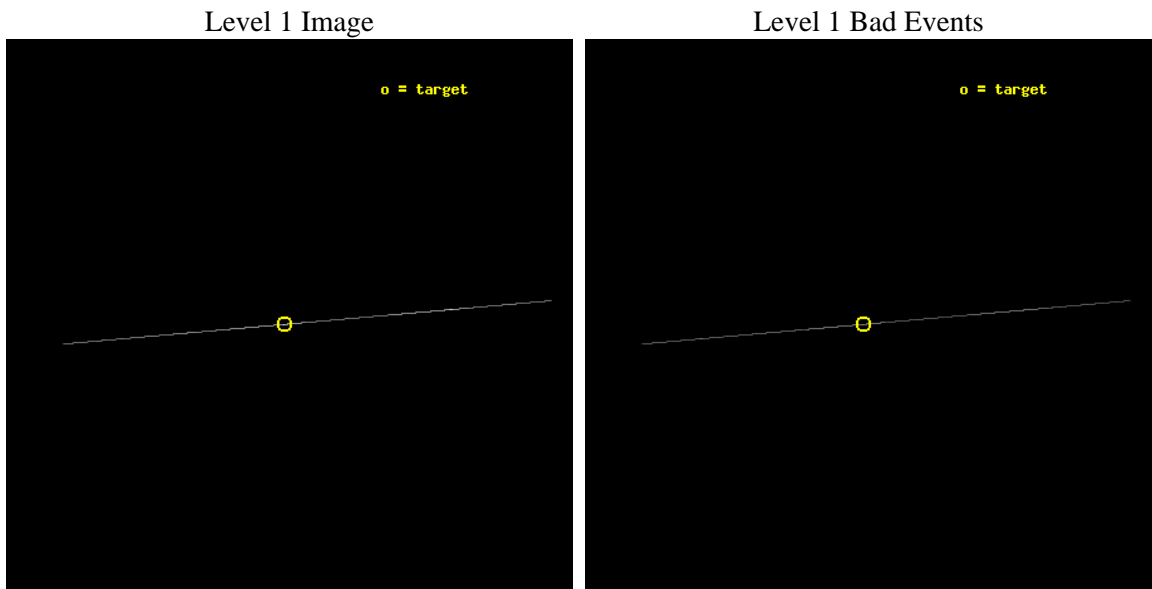
seq_num	590189	Sequence number
obs_id	1740	Observation id
title	VERIFICATION OF AXAF TIMING CAPABILITY	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	PSR B0540-69	Source name
ra_targ	85.04625	Observer's specified target RA [deg]
dec_targ	-69.332	Observer's specified target Dec [deg]
ra_nom	85.019088688572	Nominal RA [deg]
dec_nom	-69.329337777332	Nominal Dec [deg]
roll_nom	174.94269458045	Nominal Roll [deg]
revision	5	Processing version of data
ontime	10932.25	Sum of GTIs [s]
livetime	10889.545898438	Livetime [s]
ontime4	10932.25	Sum of GTIs [s]
ontime5	10932.25	Sum of GTIs [s]
ontime6	10932.25	Sum of GTIs [s]
ontime7	10932.25	Sum of GTIs [s]
ontime8	10930.790088519	Sum of GTIs [s]
ontime9	10930.790089026	Sum of GTIs [s]
l2events	189046	Number of level 2 events



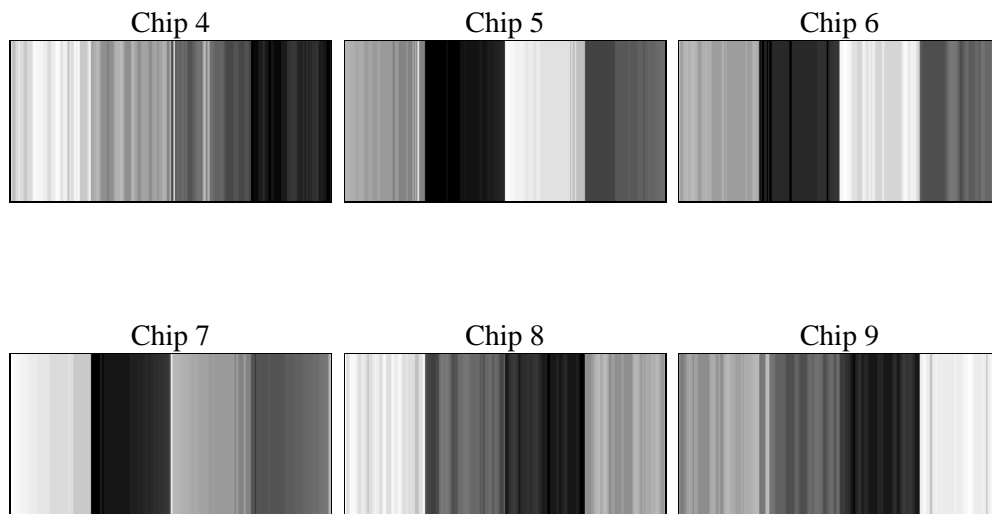
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9885.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	10932.25	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime4	10932.25	Sum of GTIs [s]
date	2012-08-29T07:52:59	Date and time of file creation	ontime5	10932.25	Sum of GTIs [s]
revision	5	Processing version of data	ontime6	10932.25	Sum of GTIs [s]
			ontime7	10932.25	Sum of GTIs [s]
			ontime8	10930.790088519	Sum of GTIs [s]
			ontime9	10930.790089026	Sum of GTIs [s]
			l1events	252740	Number of level 1 events

### 2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	17308	70569	16896	103427	27900	16640
rejected events	2286	6144	2436	7982	3447	3089
rejected %	13%	8%	14%	7%	12%	18%

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	2079	19081	2536	21548	5370	2020
	12%	27%	15%	20%	19%	12%
grade 1 events	50	99	54	178	94	122
	0%	0%	0%	0%	0%	0%
grade 2 events	6369	17165	5556	24439	7431	4850
	36%	24%	32%	23%	26%	29%
grade 3 events	2051	2003	1952	10313	3111	1853
	11%	2%	11%	9%	11%	11%
grade 4 events	2207	1908	1930	9932	3081	2066
	12%	2%	11%	9%	11%	12%
grade 5 events	2232	6030	2380	7766	3350	2964
	12%	8%	14%	7%	12%	17%
grade 6 events	2320	24283	2488	29251	5463	2765
	13%	34%	14%	28%	19%	16%
grade 7 events	0	0	0	0	0	0
	0%	0%	0%	0%	0%	0%

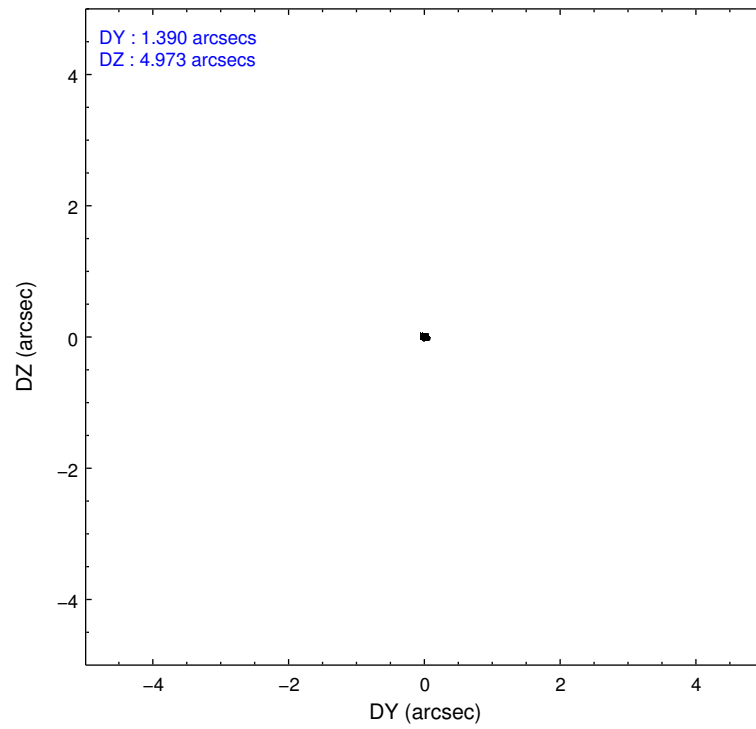
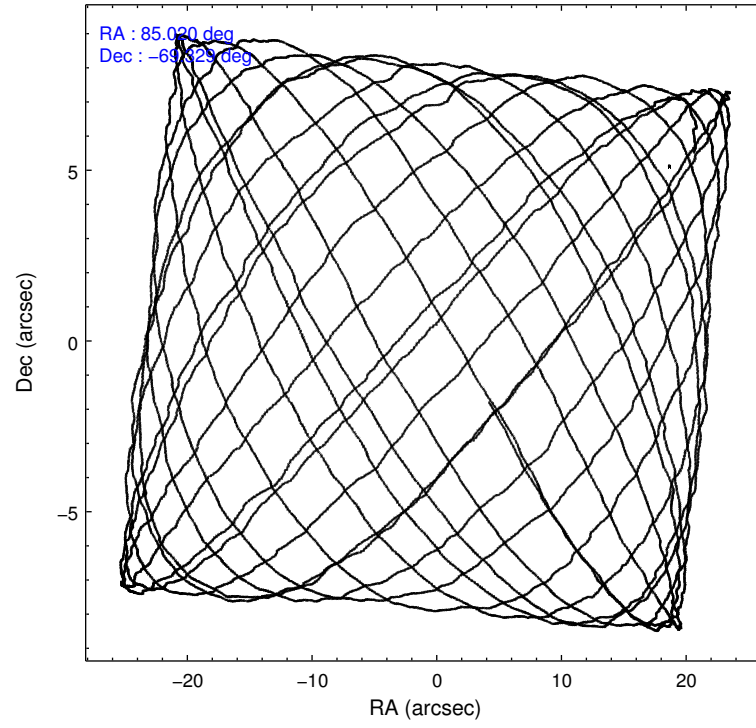


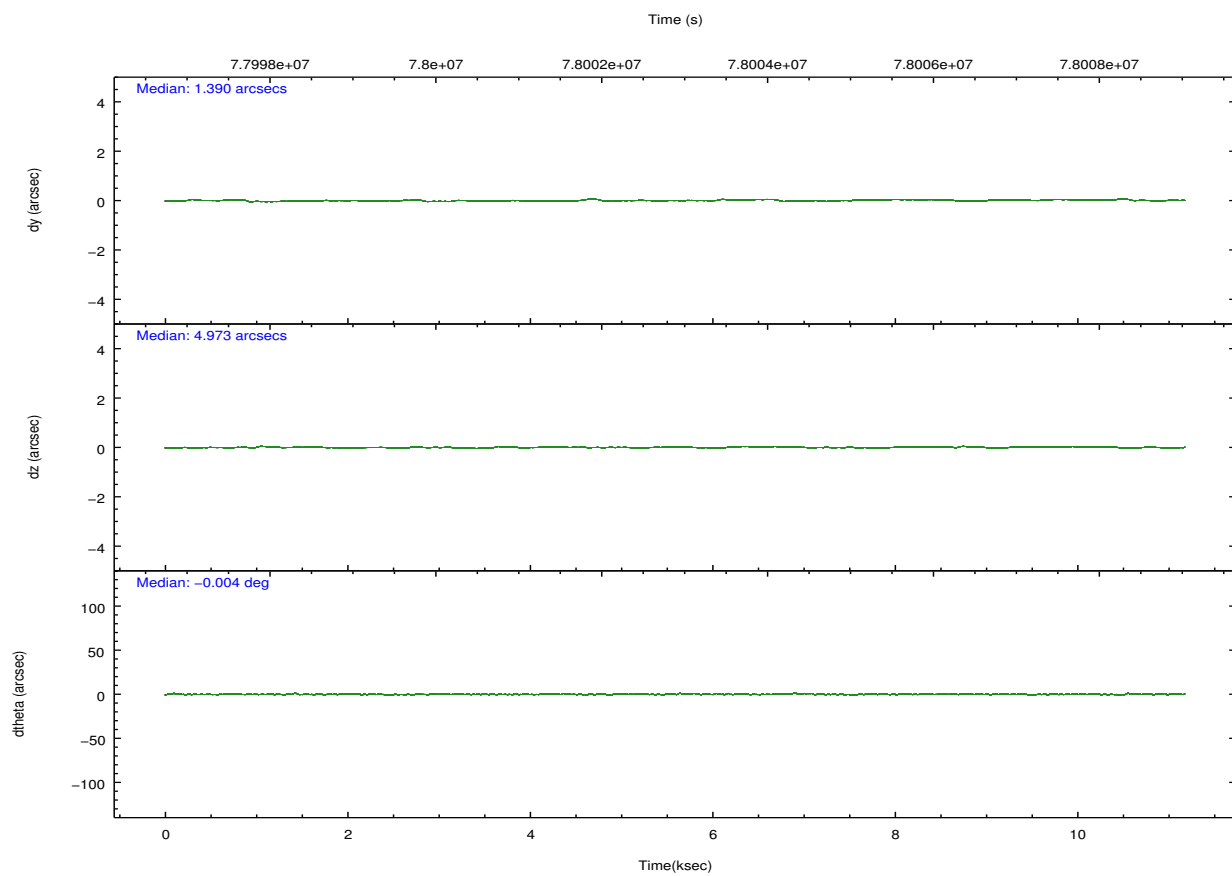
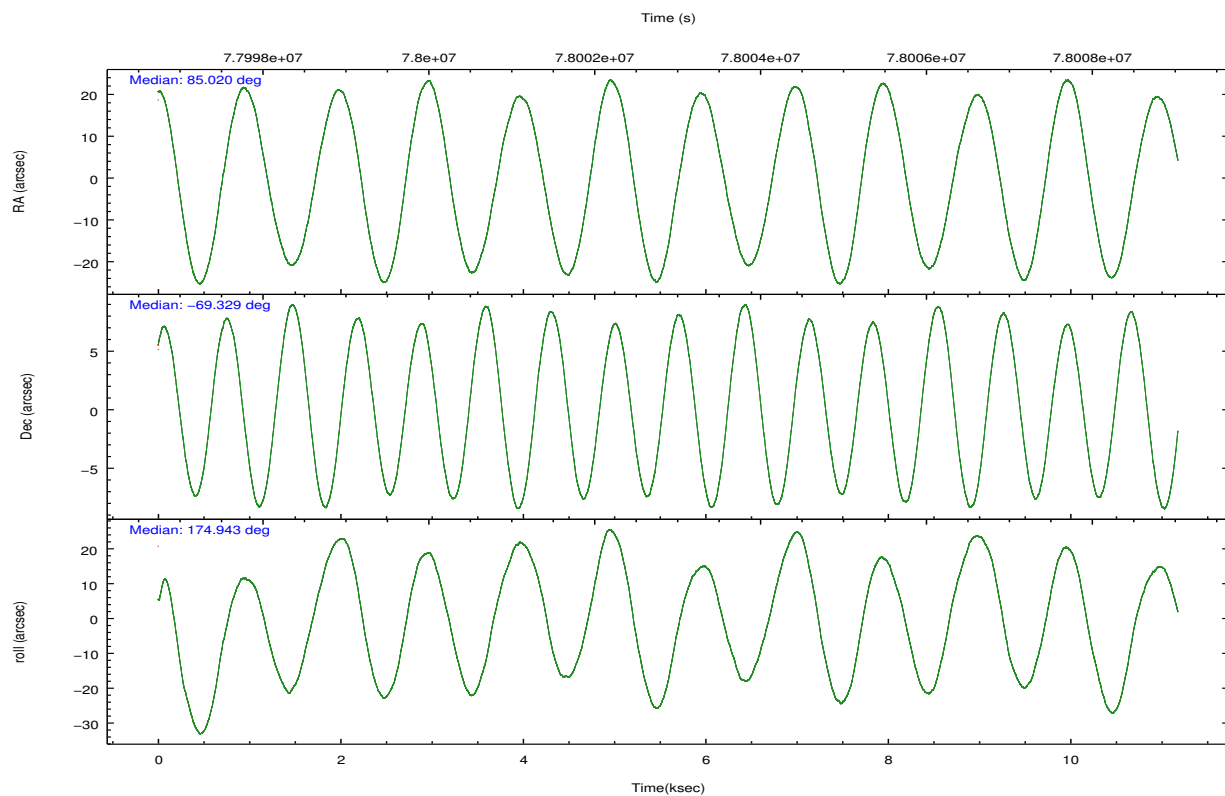
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-456789	ACIS-456789
Grating	NONE	NONE
Data mode	CC33_FAINT	CC33_FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	85.089266	85.01908868857232
[deg] Pointing Dec	-69.317636	-69.32933777733186
[deg] Pointing Roll	174.851727	174.9426945804456
[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)	77998585.184000	77997077.835265
Observation start date	2000-06-21T18:15:21	2000-06-21T17:51:17
[s] Observation end time (MET)	78008470.184000	78008662.385692
Observation end date	2000-06-21T21:00:06	2000-06-21T21:04:22
Read mode	CONTINUOUS	CONTINUOUS

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	0

## 2.3 Aspect



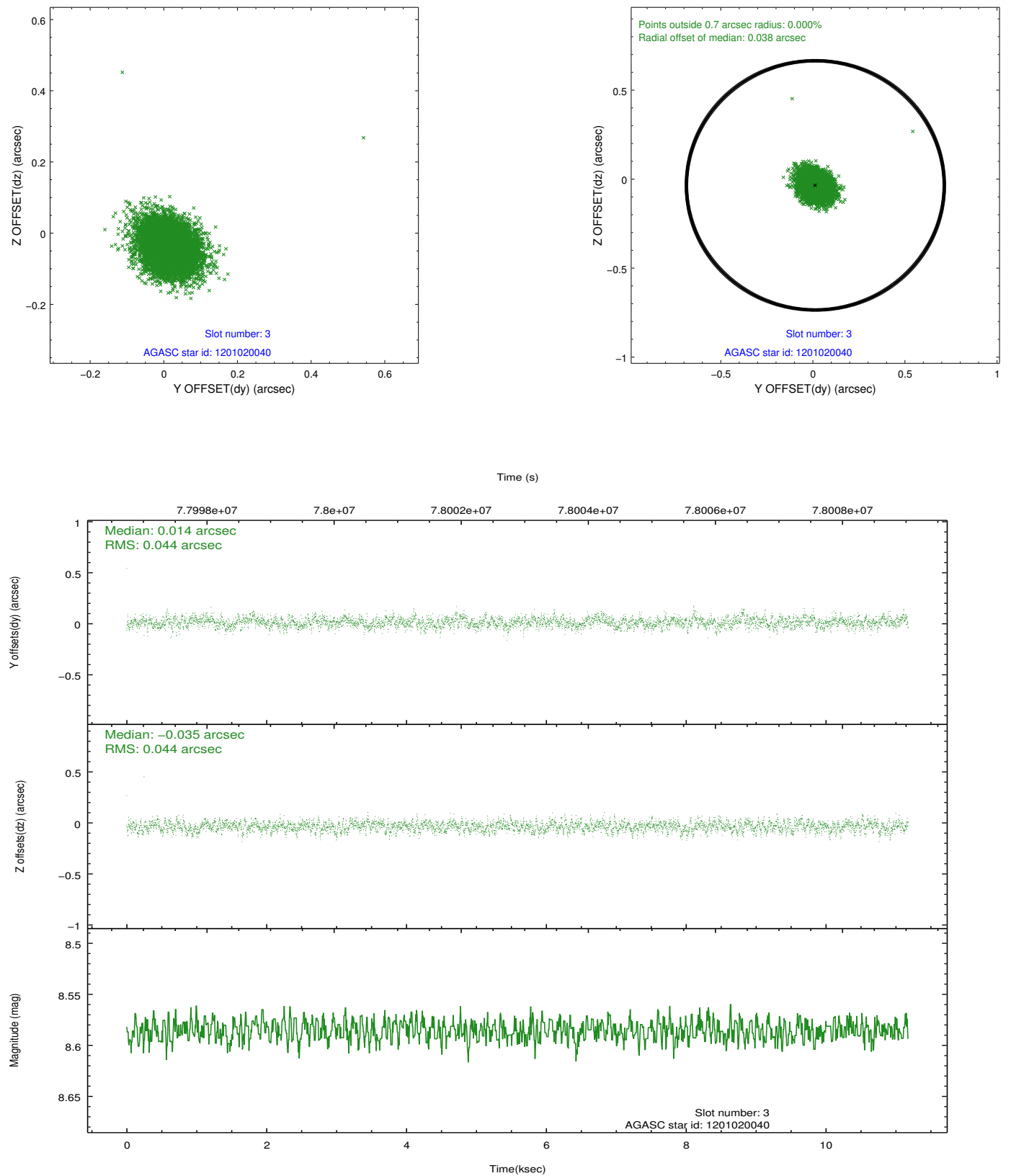


### Slot Statistics

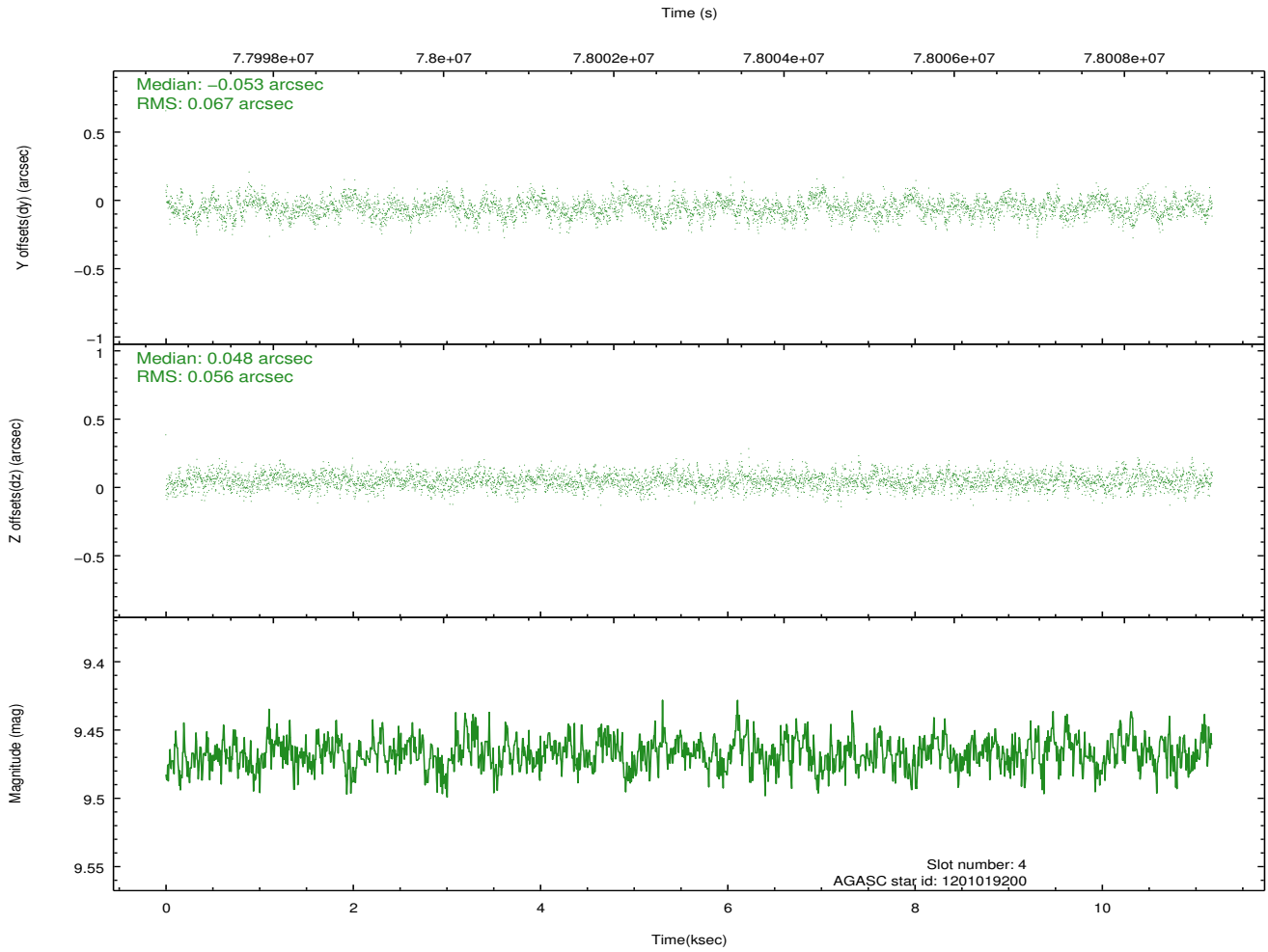
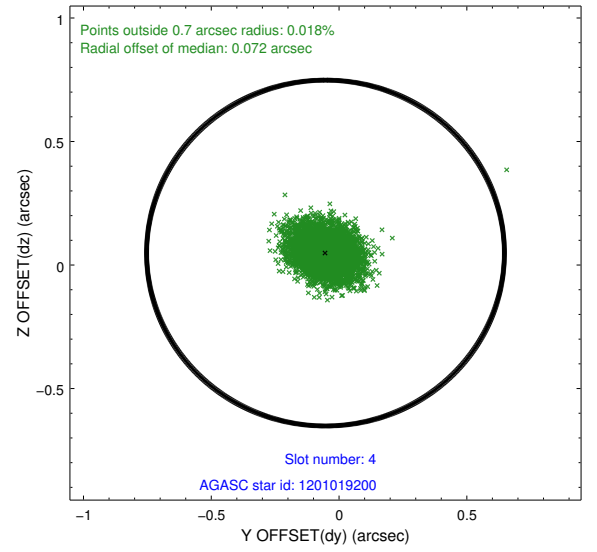
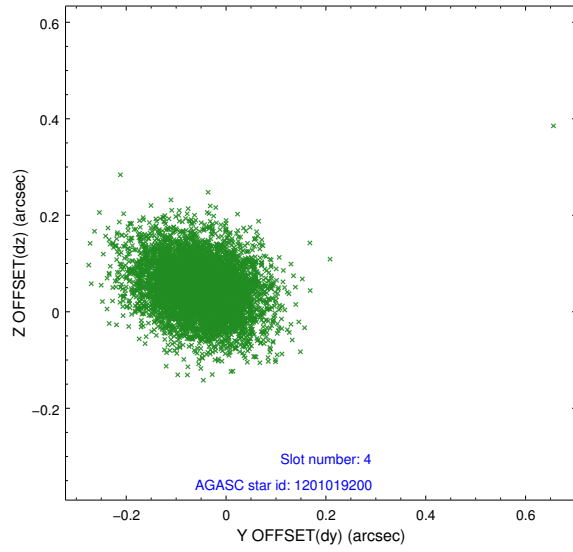
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	2727	-0.037	-0.004	0.007	0.011	0.000000	0.000000	-754.02	-1726.09
1	FID	ACIS-S-4	7.21	2725	0.001	0.019	0.006	0.011	0.000000	0.000000	2159.08	181.95
2	FID	ACIS-S-5	7.23	2727	0.005	-0.006	0.007	0.011	0.000000	0.000000	-1806.24	176.11
3	GUIDE	1201020040	8.59	5451	0.014	-0.035	0.065	0.105	85.379163	-68.879396	-231.75	-1603.63
4	GUIDE	1201019200	9.47	5451	-0.053	0.048	0.091	0.150	84.213591	-68.777384	1311.55	-1826.23
5	GUIDE	1201406992	9.26	5451	0.061	-0.042	0.086	0.138	83.682859	-69.471866	1718.05	732.84
6	GUIDE	1200885760	9.46	5449	-0.104	0.070	0.092	0.151	83.723637	-68.777667	1946.53	-1755.87
7	GUIDE	1201020088	10.58	5449	0.082	-0.042	0.136	0.225	86.319248	-68.997756	-1476.88	-1273.30

## 2.4 Star Slots

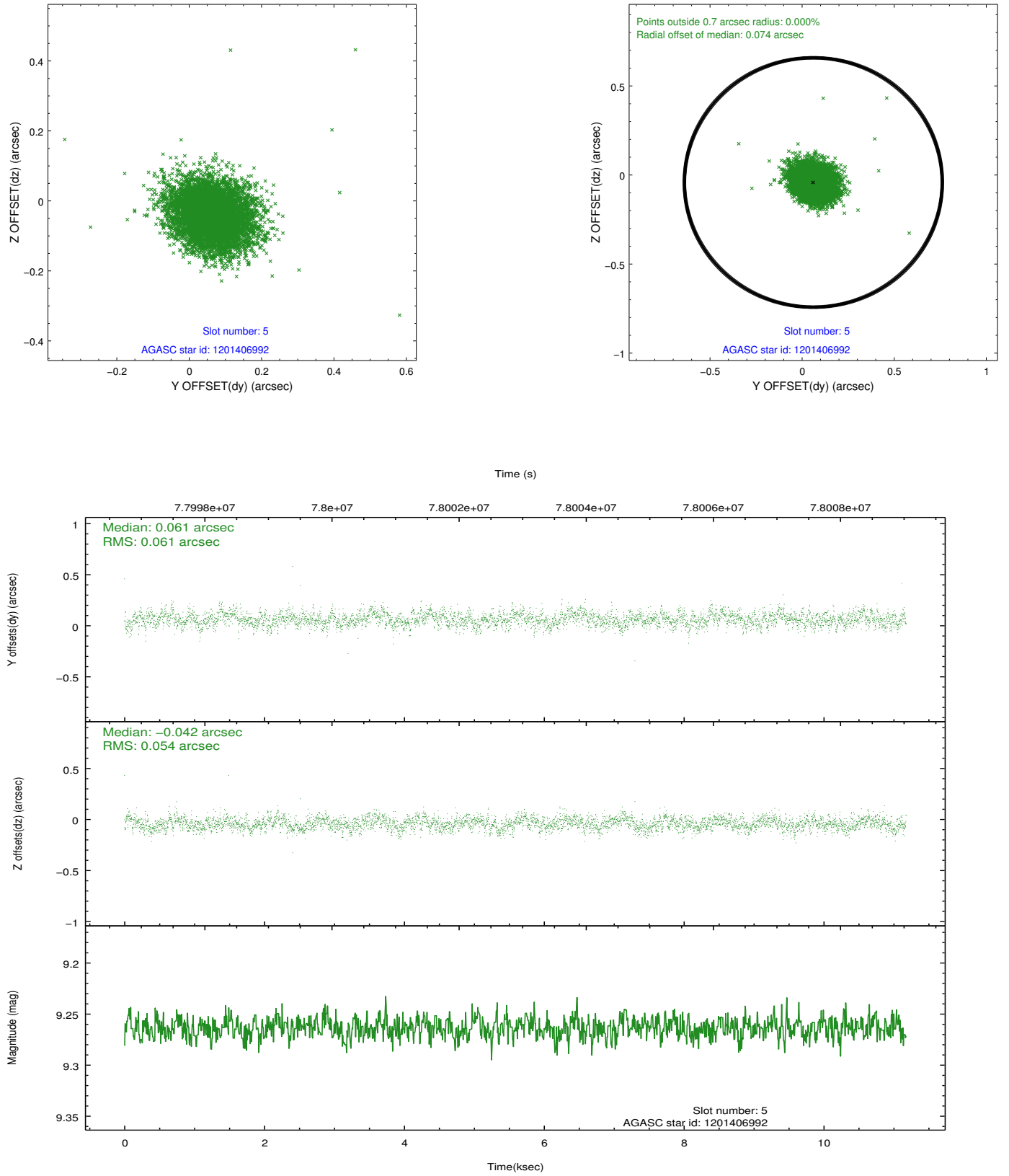
### 2.4.1 Slot 3



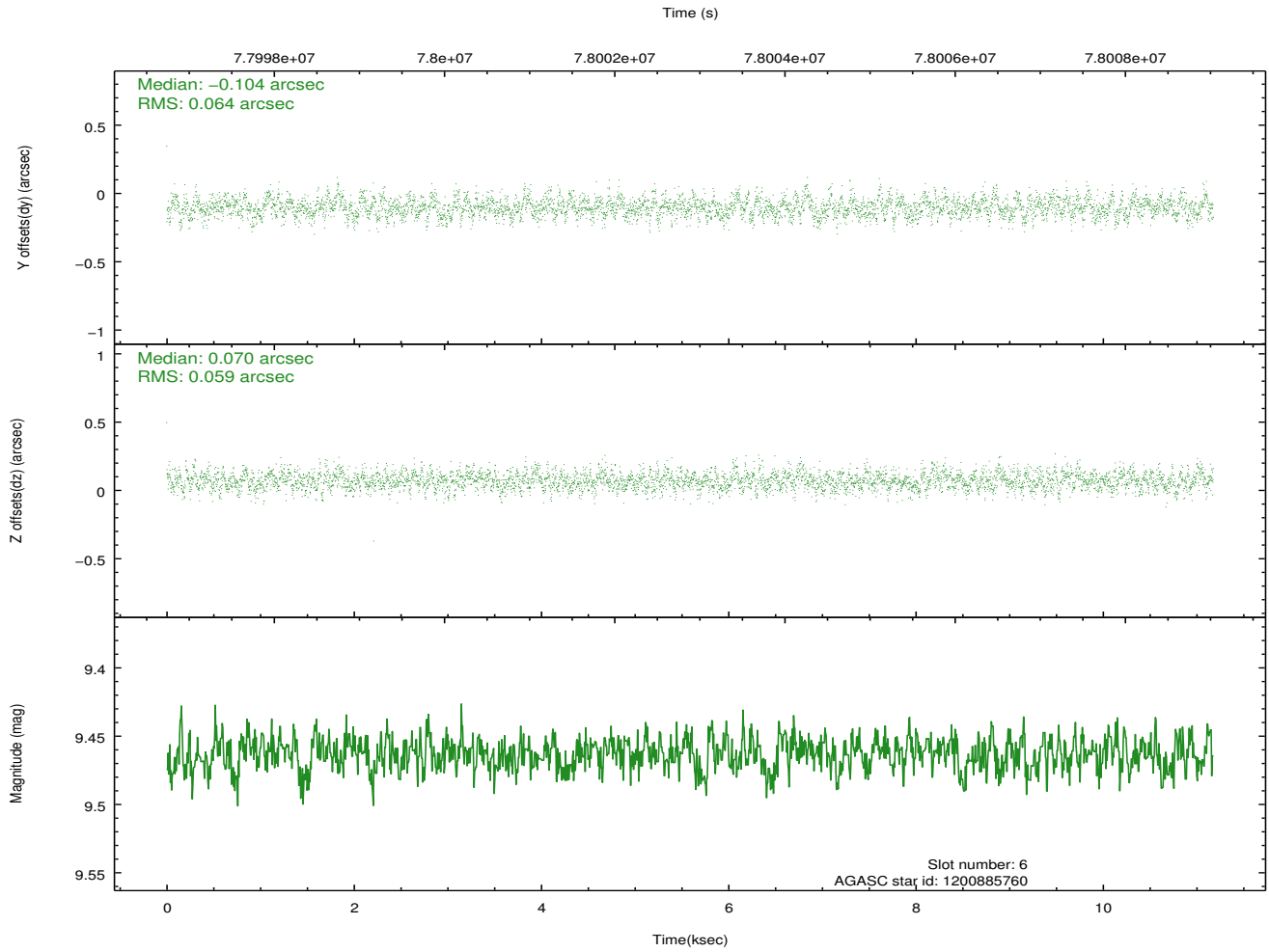
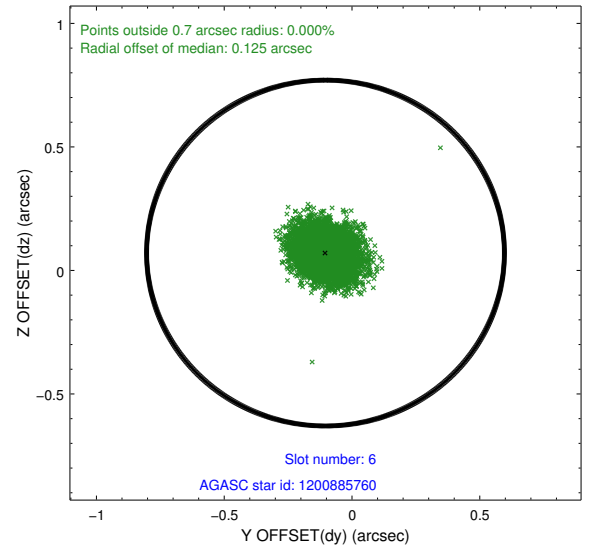
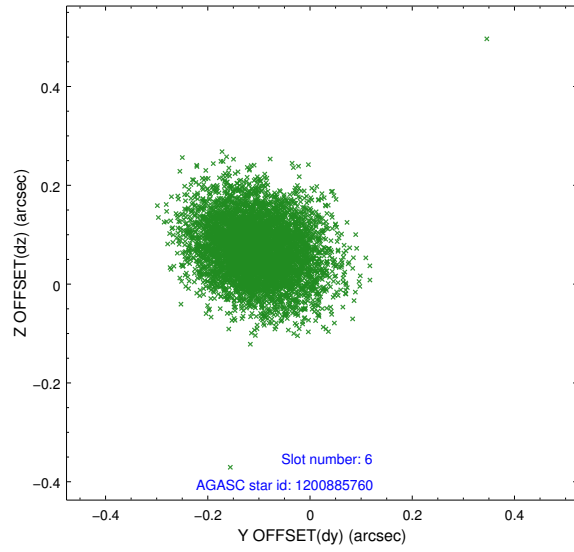
## 2.4.2 Slot 4



### 2.4.3 Slot 5

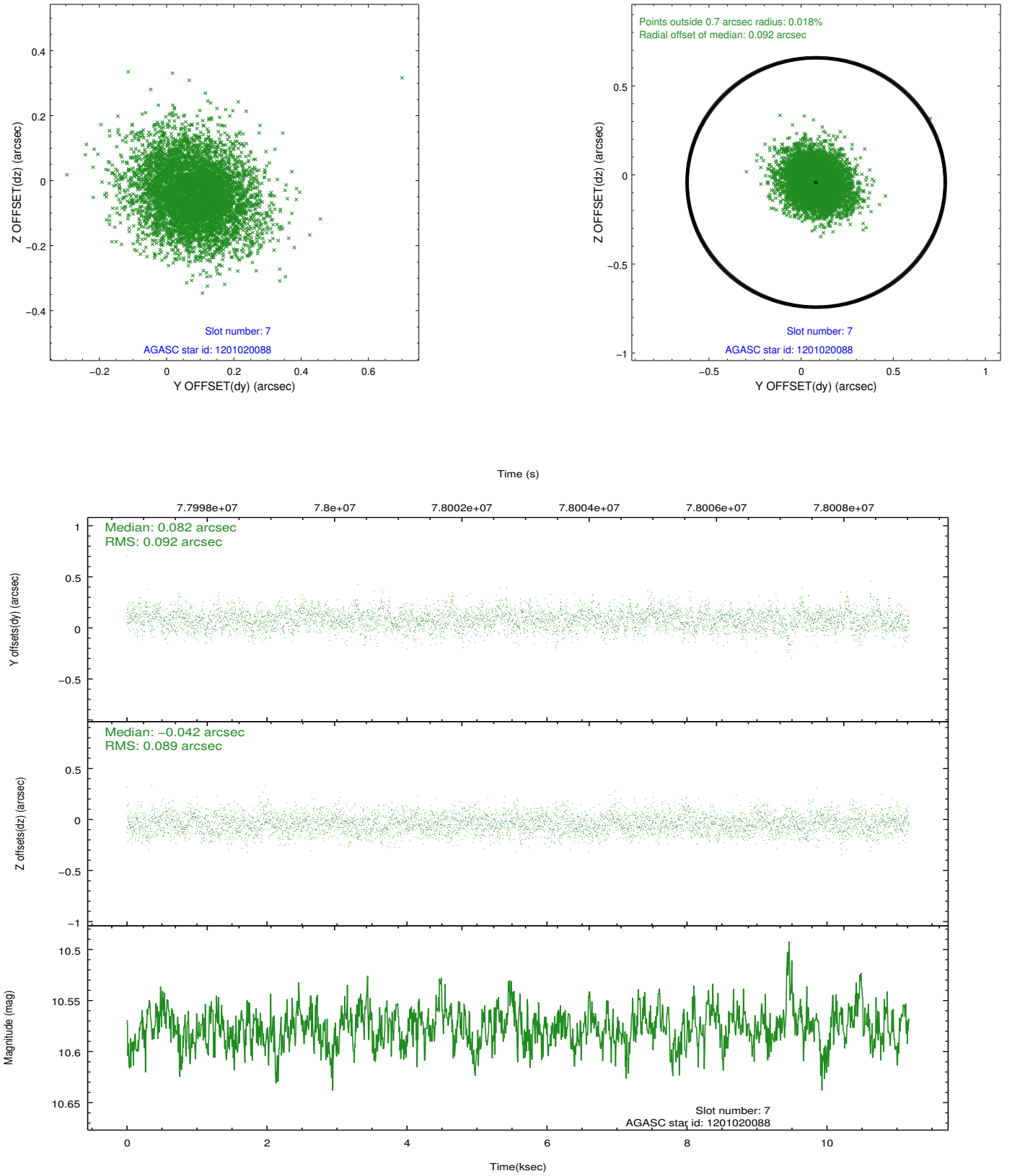


## 2.4.4 Slot 6



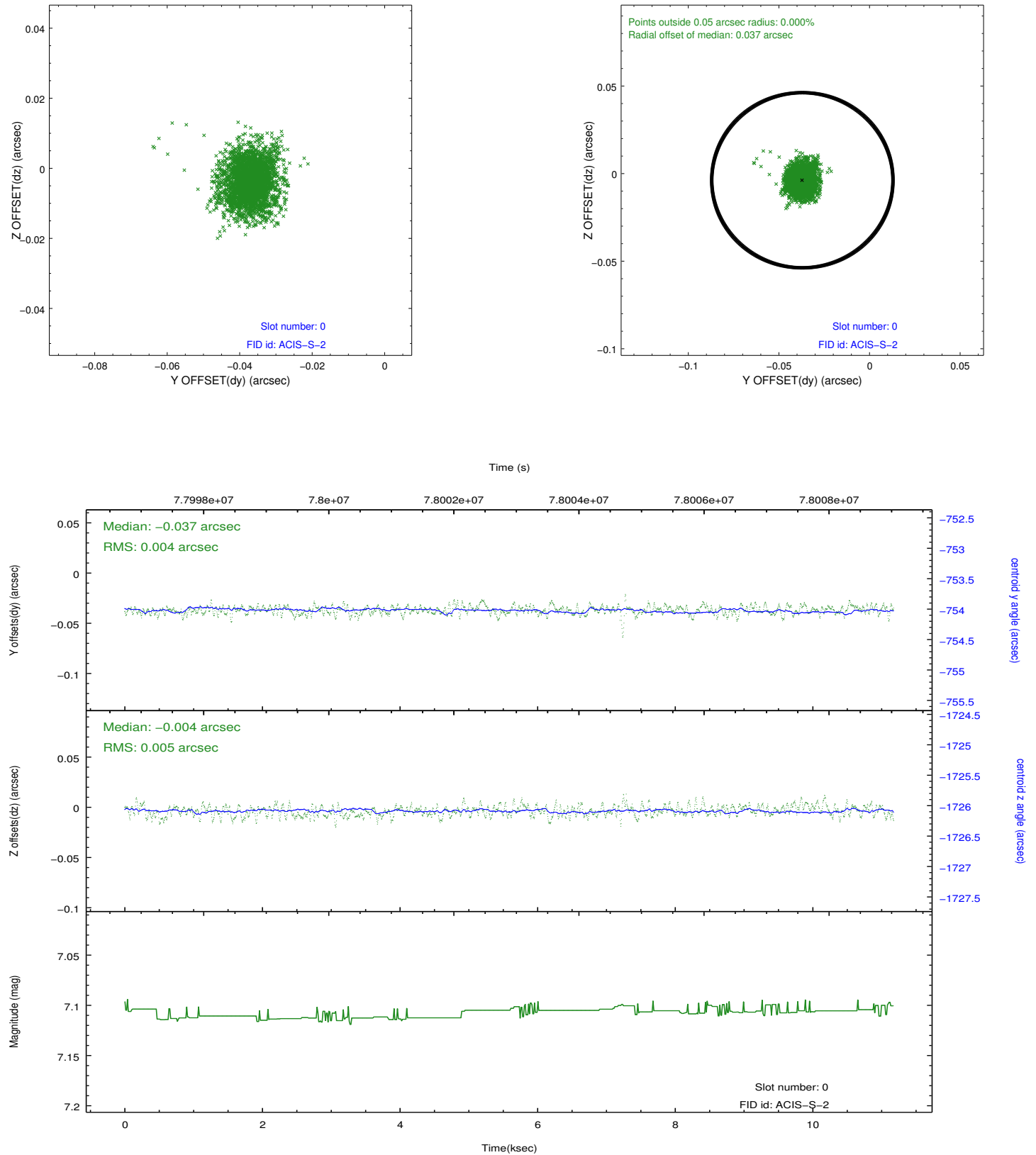


## 2.4.5 Slot 7

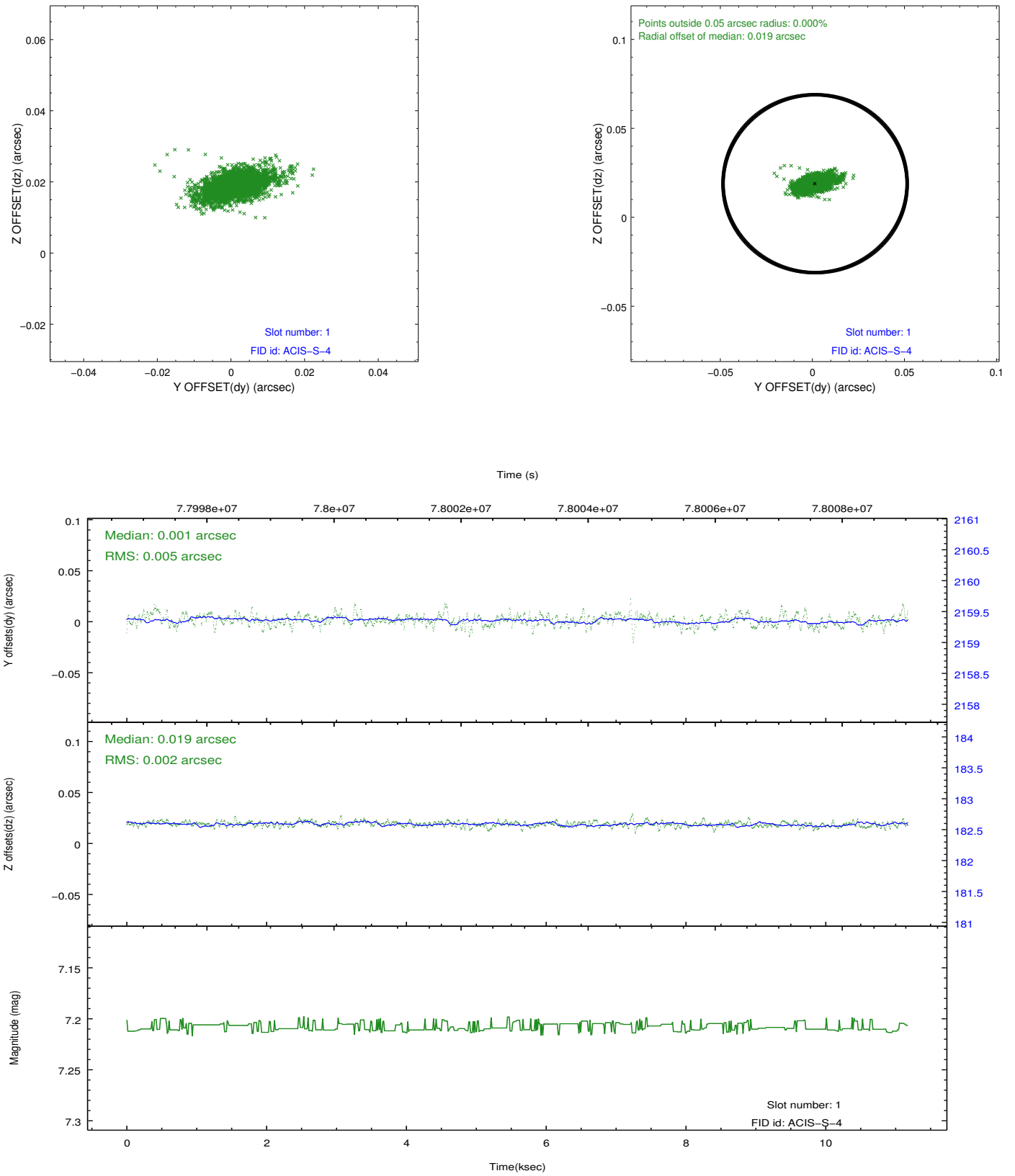


## 2.5 FID Slots

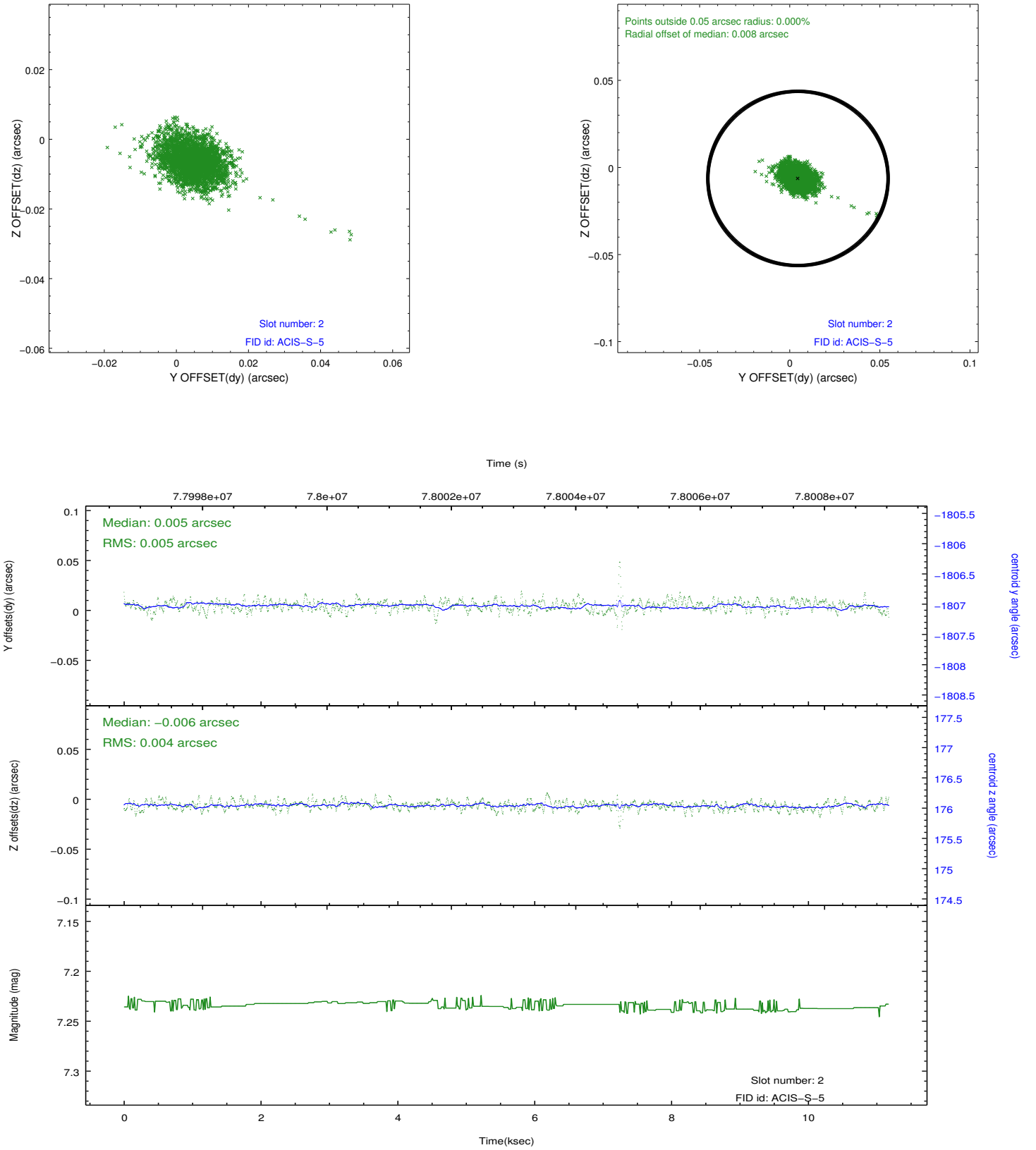
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.08.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.935

### A.2 Comments