

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3943 - L2 Version 3  
Chandra X-Ray Center

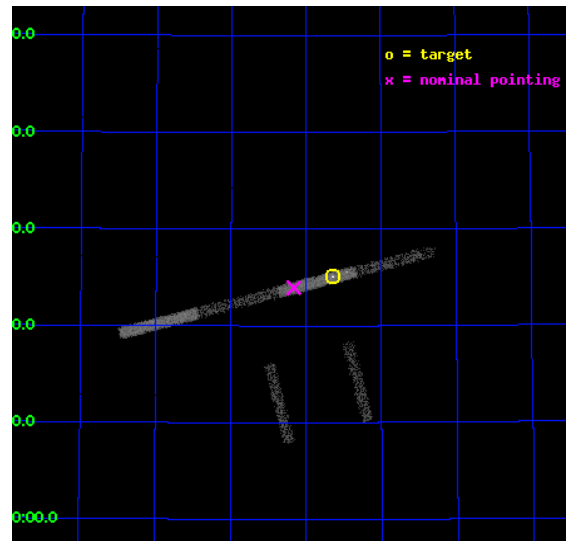
L2 Processing Date : Nov 5 2012

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# 1 Front

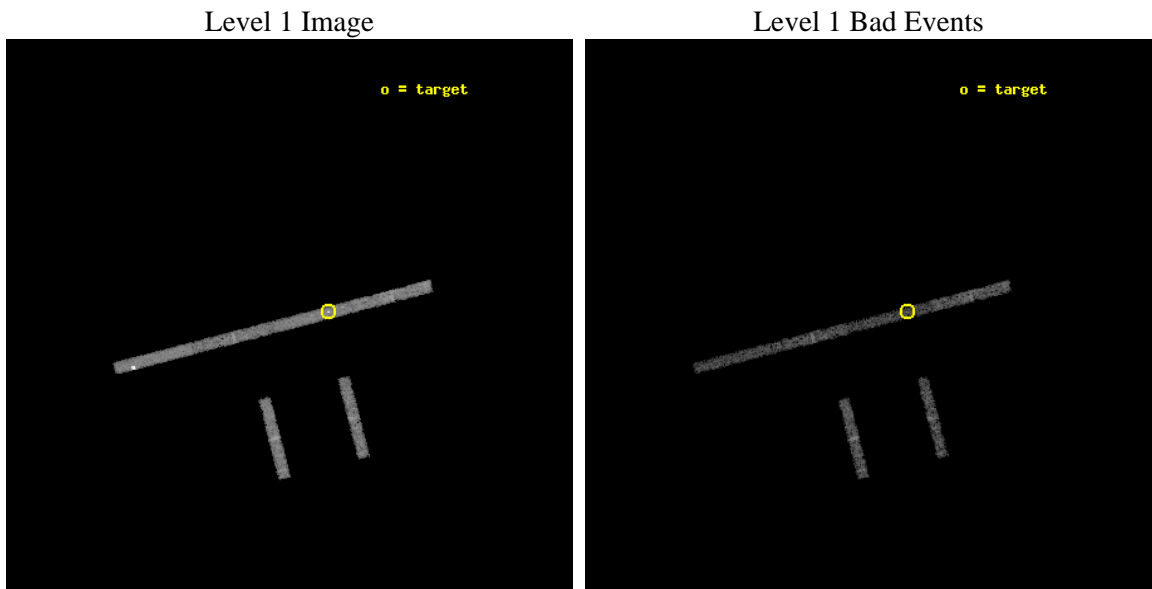
seq_num	600317	Sequence number
obs_id	3943	Observation id
title	PROBING THE SPECTRAL VARIABILITY OF THE ULTRALUMINOUS X-RAY SOURCE NGC 5204 X-1	Proposal title
observer	Dr Timothy Roberts	Principal investigator
object	NGC 5204 X-1	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	202.410833	Observer's specified target RA [deg]
dec_targ	58.418333	Observer's specified target Dec [deg]
ra_nom	202.54057914796	Nominal RA [deg]
dec_nom	58.398980865916	Nominal Dec [deg]
roll_nom	345.49396544102	Nominal Roll [deg]
revision	3	Processing version of data
ontime	5183.4999117255	Sum of GTIs [s]
livetime	4896.4292591599	Livetime [s]
ontime2	5183.4999117255	Sum of GTIs [s]
ontime3	5183.4999117255	Sum of GTIs [s]
ontime5	5183.4999117255	Sum of GTIs [s]
ontime6	5183.4999117255	Sum of GTIs [s]
ontime7	5183.4999117255	Sum of GTIs [s]
ontime8	5183.4999117255	Sum of GTIs [s]
l2events	10797	Number of level 2 events



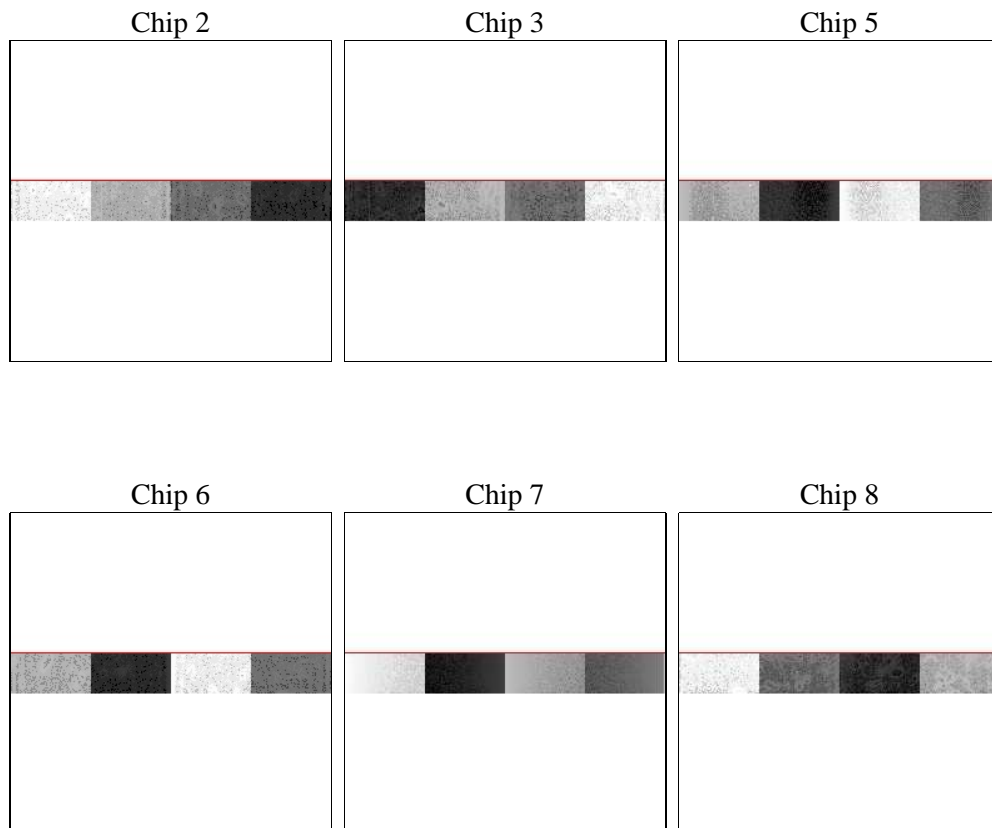
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5002.055000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	5183.4999117255	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime2	5183.4999117255	Sum of GTIs [s]
date	2012-11-05T02:41:24	Date and time of file creation	ontime3	5183.4999117255	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	5183.4999117255	Sum of GTIs [s]
			ontime6	5183.4999117255	Sum of GTIs [s]
			ontime7	5183.4999117255	Sum of GTIs [s]
			ontime8	5183.4999117255	Sum of GTIs [s]
			l1events	52462	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	7153	5957	14662	6248	9702	8740
rejected events	6393	5374	4745	5572	4333	7268
rejected %	89%	90%	32%	89%	44%	83%

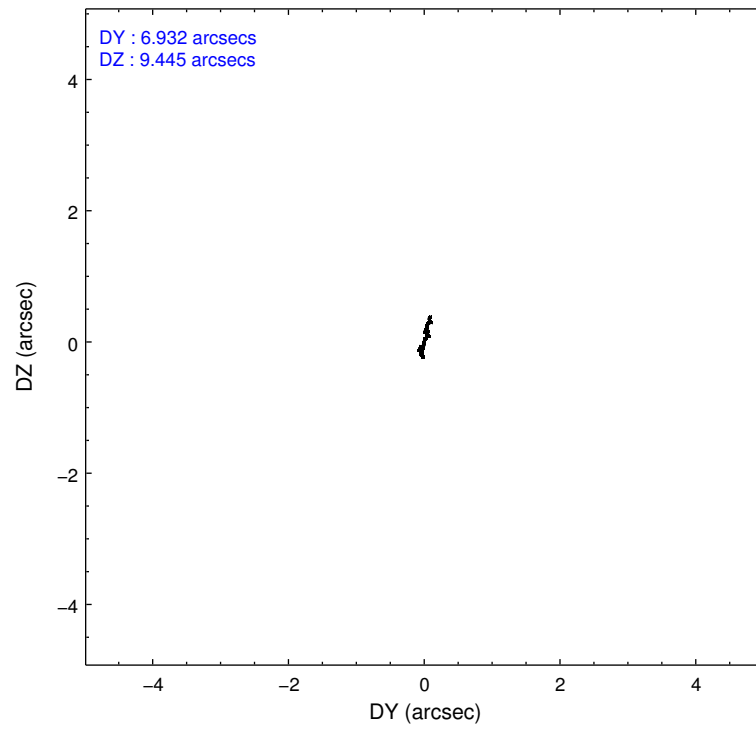
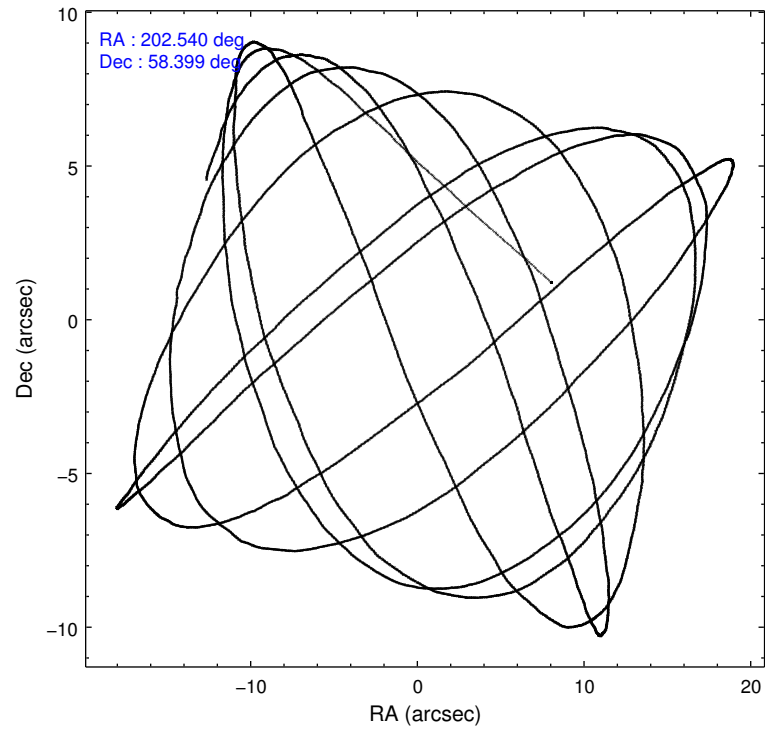
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	296	262	6397	285	1170	440
	4%	4%	43%	4%	12%	5%
grade 1 events	2	2	39	0	22	1
	0%	0%	0%	0%	0%	0%
grade 2 events	130	93	1988	121	1149	296
	1%	1%	13%	1%	11%	3%
grade 3 events	129	94	253	105	669	178
	1%	1%	1%	1%	6%	2%
grade 4 events	126	80	297	101	616	185
	1%	1%	2%	1%	6%	2%
grade 5 events	194	230	589	203	656	250
	2%	3%	4%	3%	6%	2%
grade 6 events	127	106	1745	131	2052	470
	1%	1%	11%	2%	21%	5%
grade 7 events	6149	5090	3354	5302	3368	6920
	85%	85%	22%	84%	34%	79%

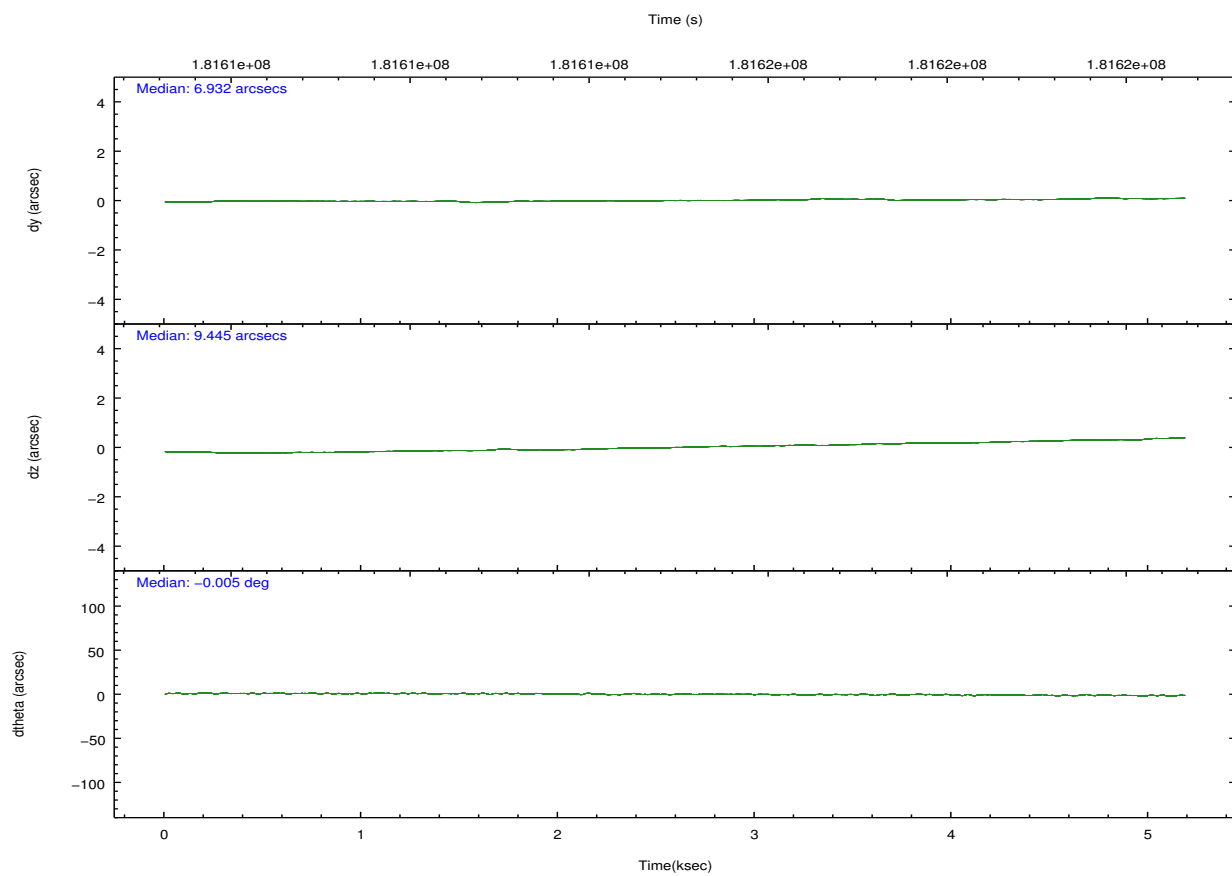
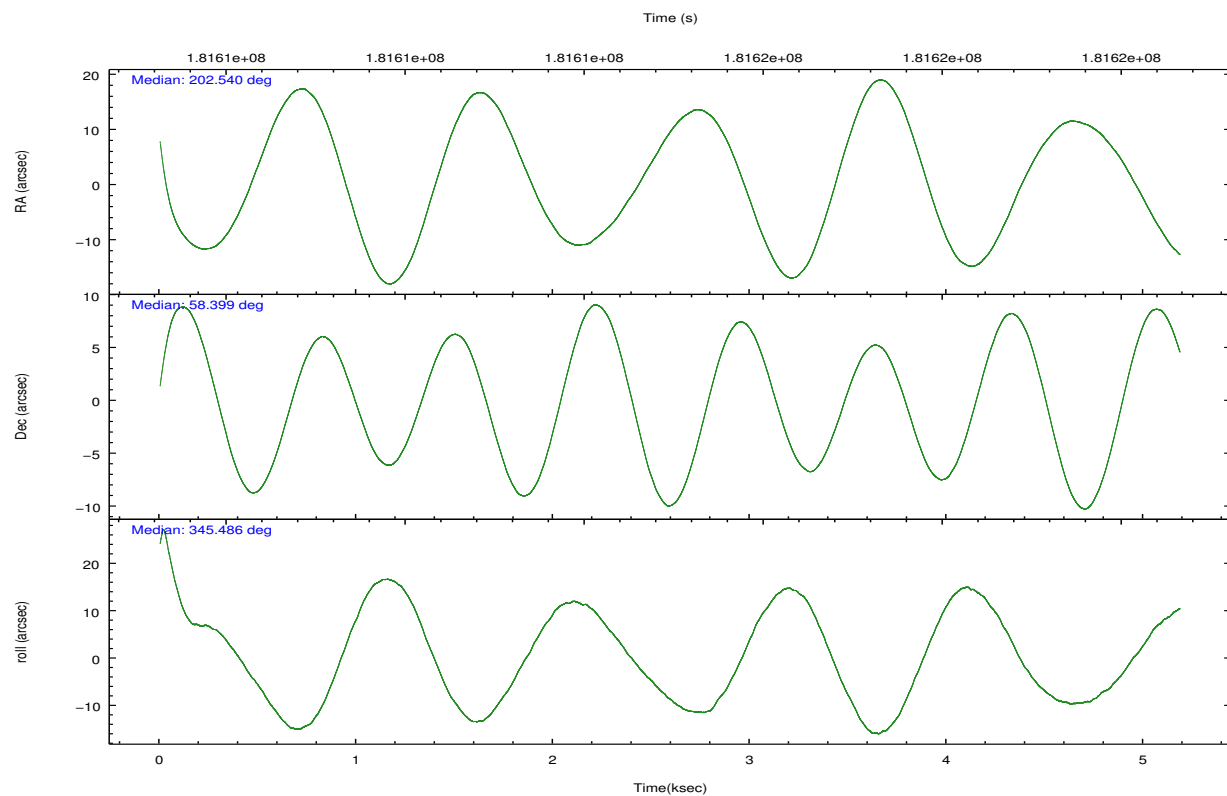


## 2.2 Compared Parameters

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	202.490739	202.5405791479624	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	58.391242	58.39898086591561	Subarray start row	449	449
[deg] Pointing Roll	345.379720	345.4939654410218	Subarray row count	128	128
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	0.7
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	181612077.184000	181611074.04019			
Observation start date	2003-10-03T23:46:53	2003-10-03T23:31:14			
[s] Observation end time (MET)	181617079.184000	181617393.67796			
Observation end date	2003-10-04T01:10:15	2003-10-04T01:16:33			
Read mode	TIMED	TIMED			

## 2.3 Aspect



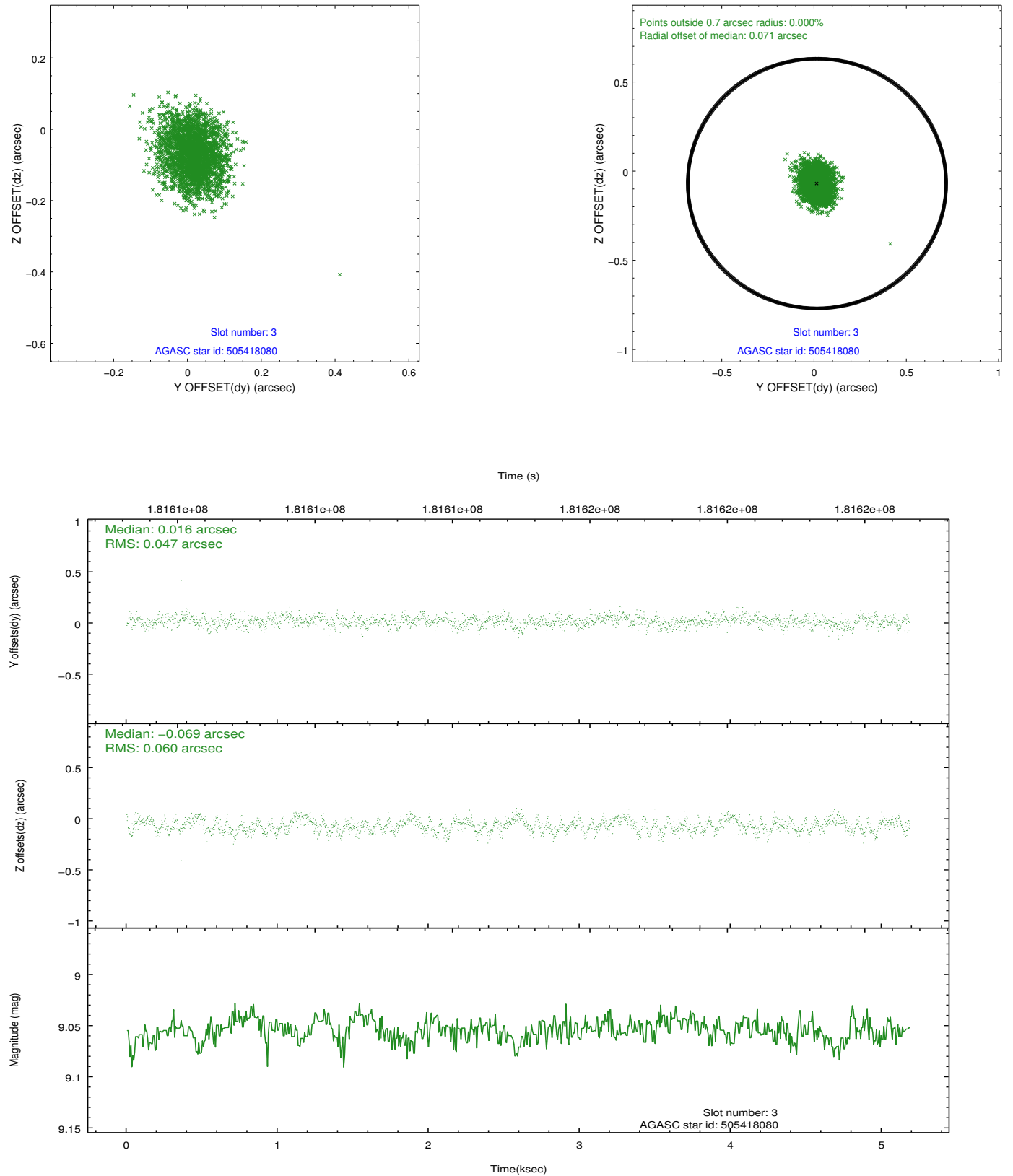


### Slot Statistics

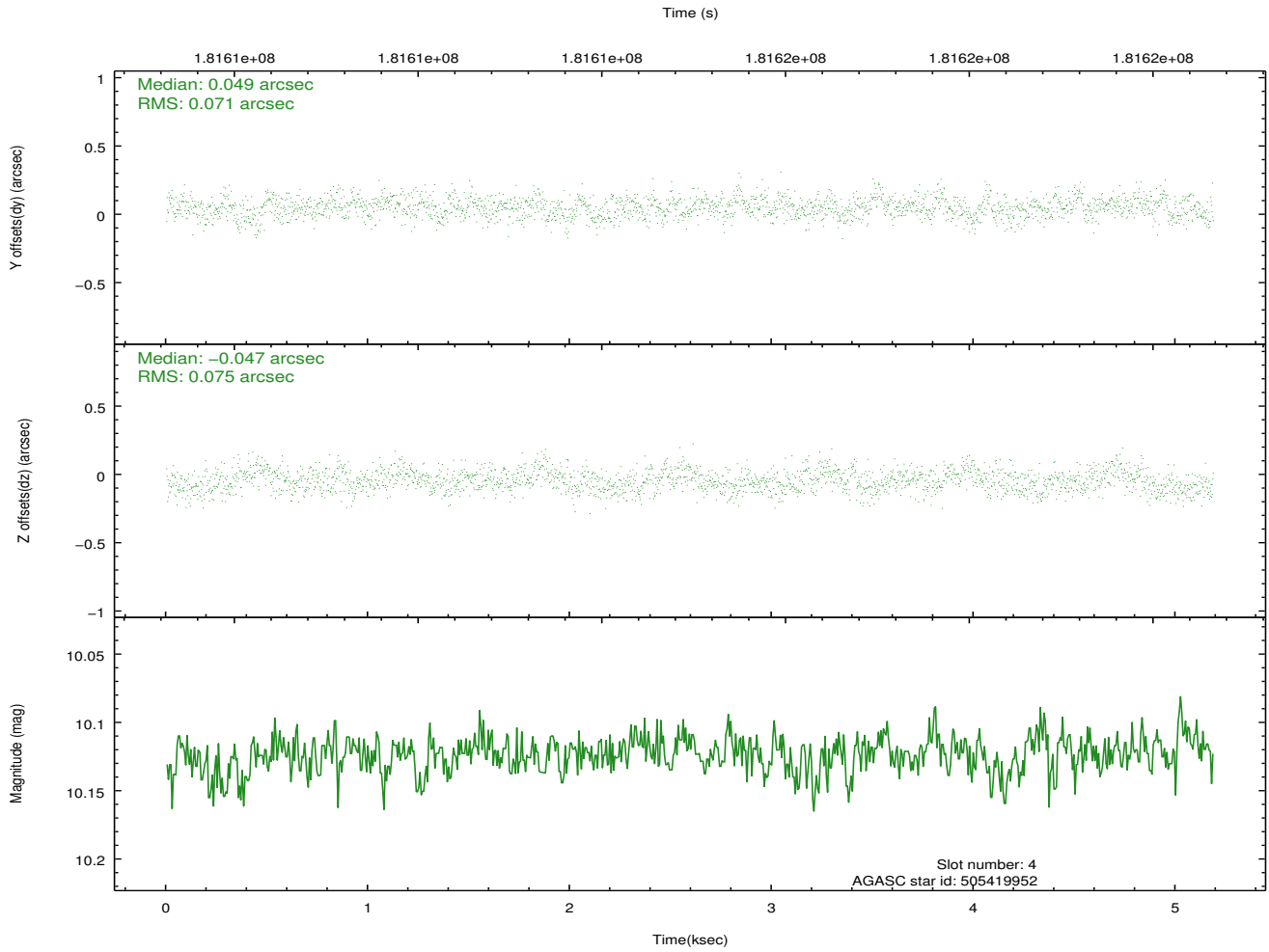
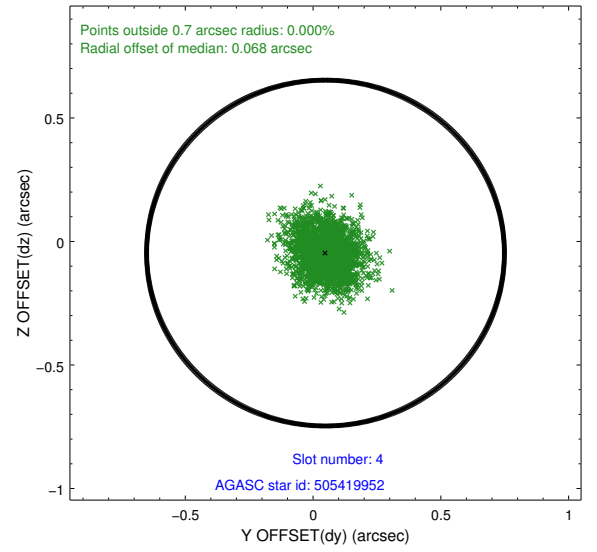
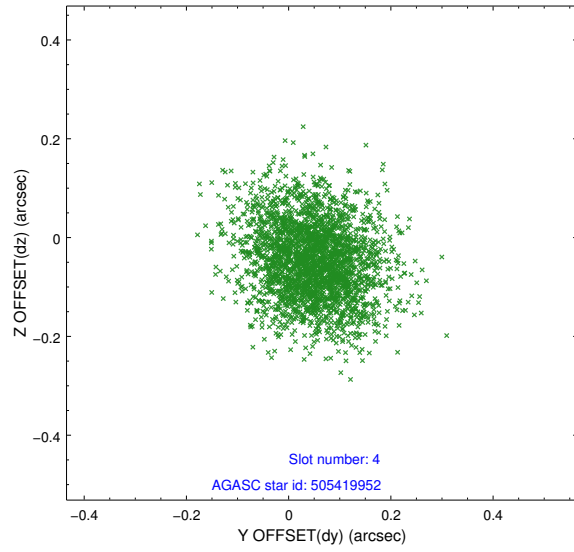
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	1265	-0.046	-0.036	0.008	0.013	0.000000	0.000000	-759.71	-1730.69
1	FID	ACIS-S-4	7.20	1265	0.077	0.032	0.006	0.010	0.000000	0.000000	2153.14	176.69
2	FID	ACIS-S-5	7.23	1265	-0.062	0.013	0.008	0.013	0.000000	0.000000	-1811.09	171.63
3	GUIDE	505418080	9.05	2528	0.016	-0.069	0.081	0.128	201.533017	58.898788	-2187.44	1330.56
4	GUIDE	505419952	10.12	2526	0.049	-0.047	0.109	0.180	201.880700	58.804366	-1477.95	1157.38
5	GUIDE	505421936	8.87	2530	-0.027	0.102	0.076	0.125	201.854843	57.887820	-721.40	-2054.66
6	GUIDE	505421968	8.21	2530	0.026	-0.035	0.070	0.111	202.022601	58.209270	-694.26	-855.86
7	GUIDE	505422344	8.62	2528	-0.061	0.048	0.061	0.098	202.767077	57.846963	1007.04	-1761.36

## 2.4 Star Slots

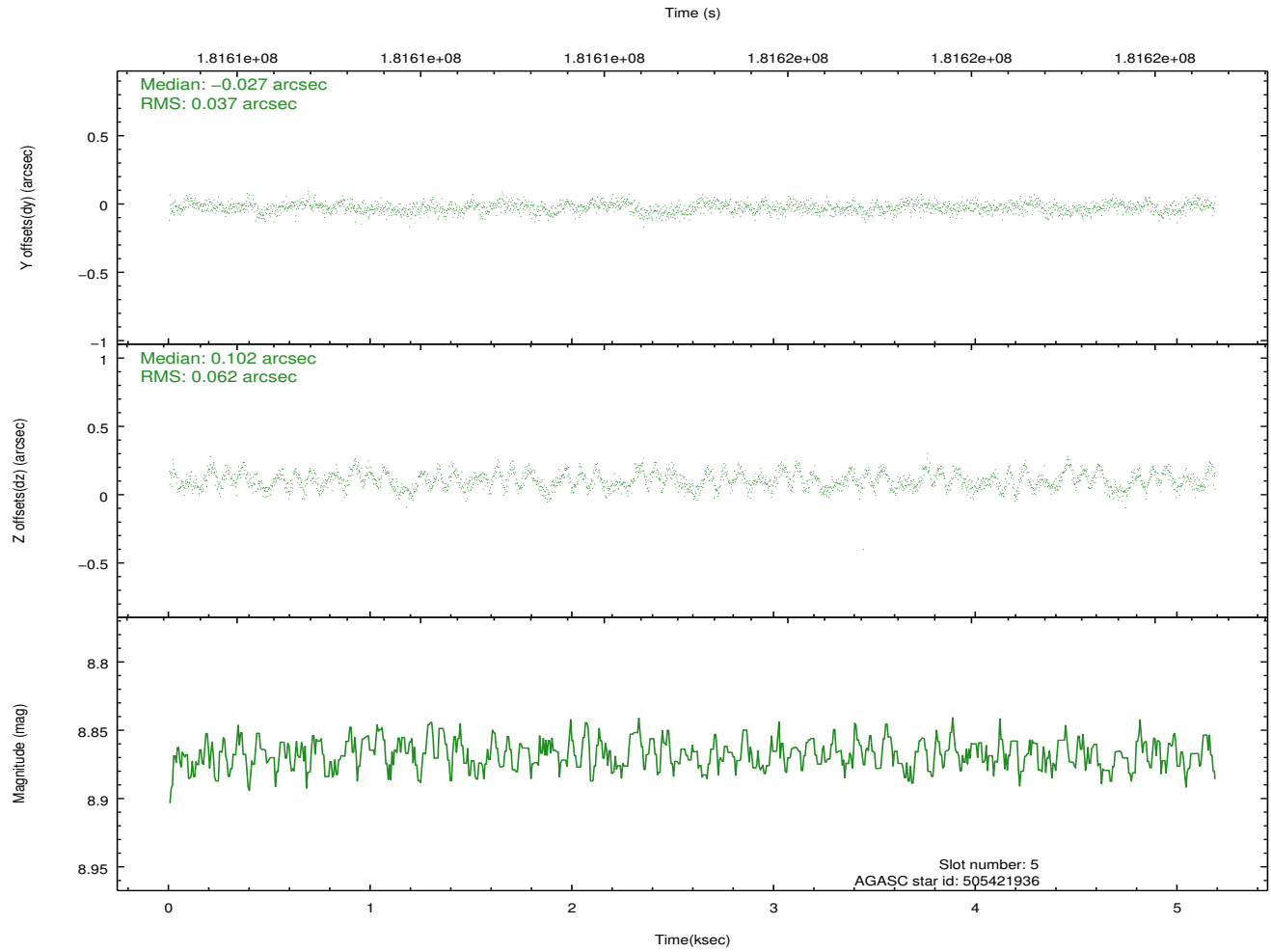
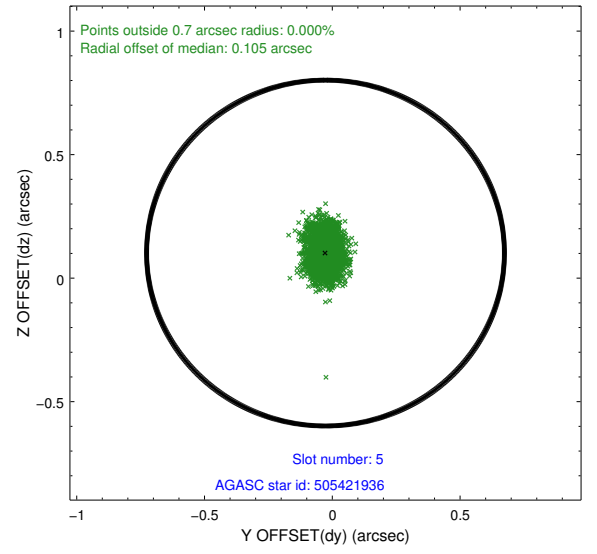
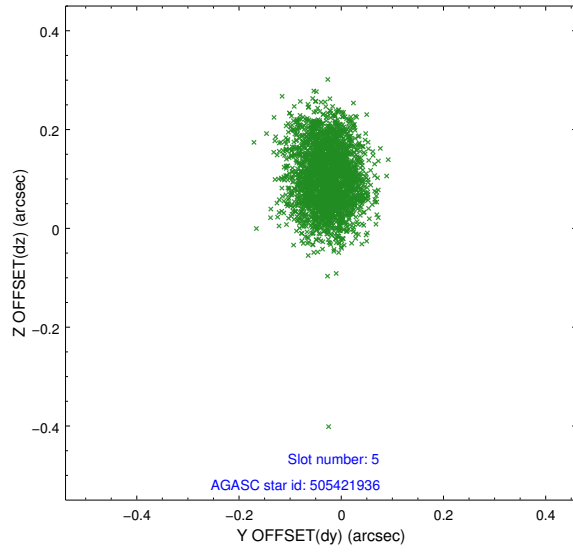
### 2.4.1 Slot 3



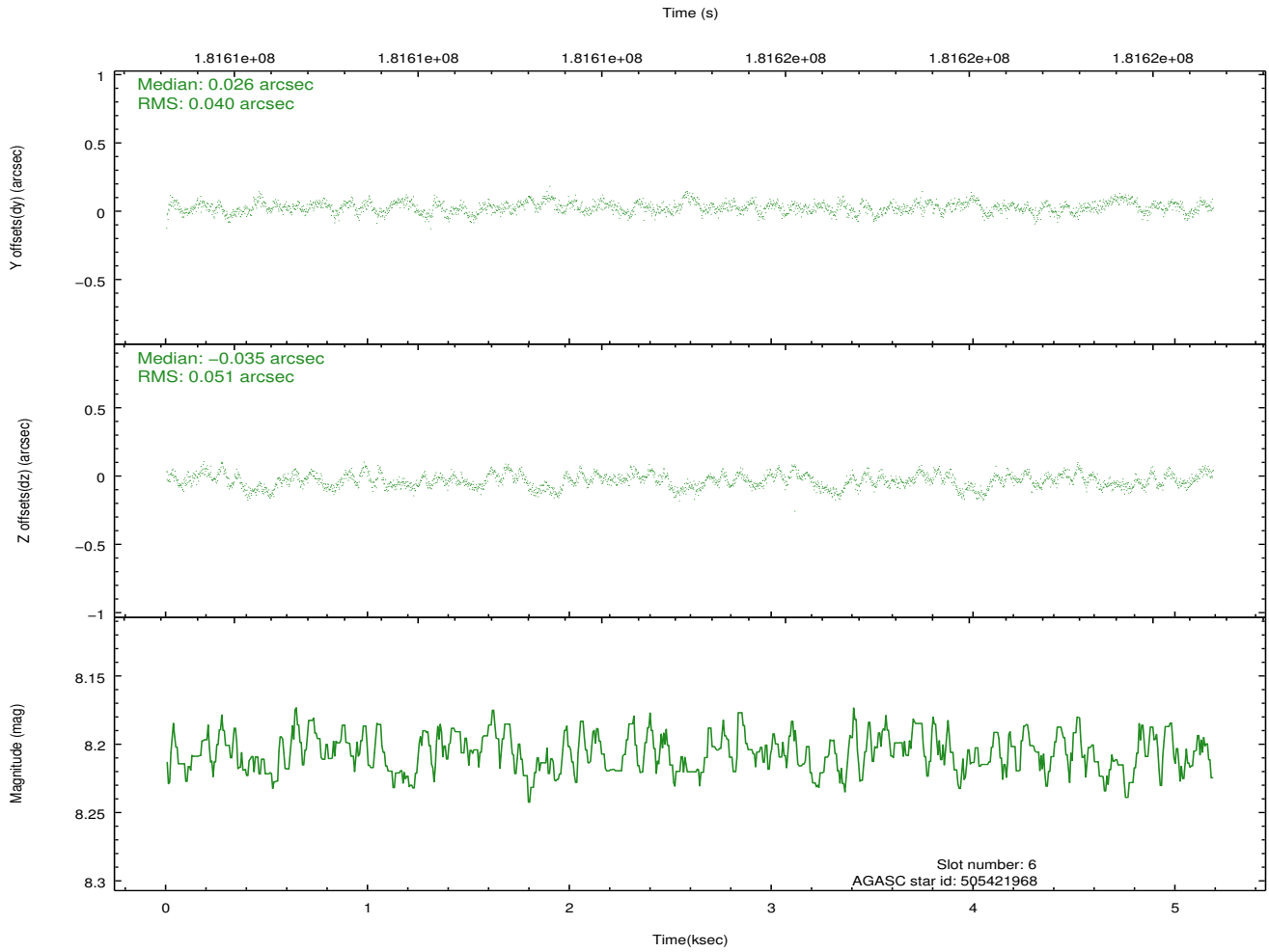
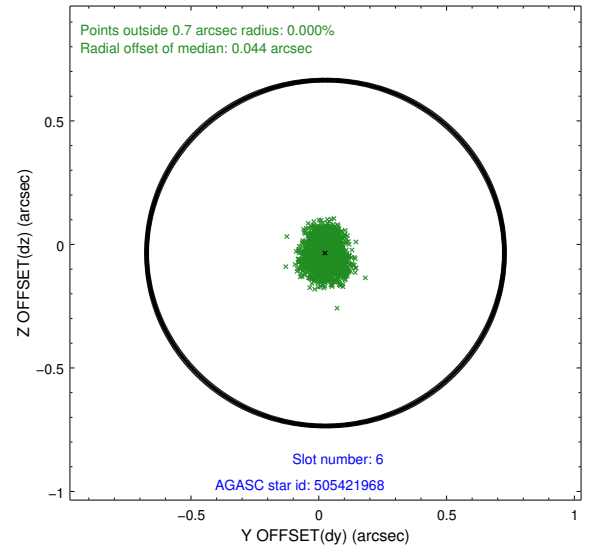
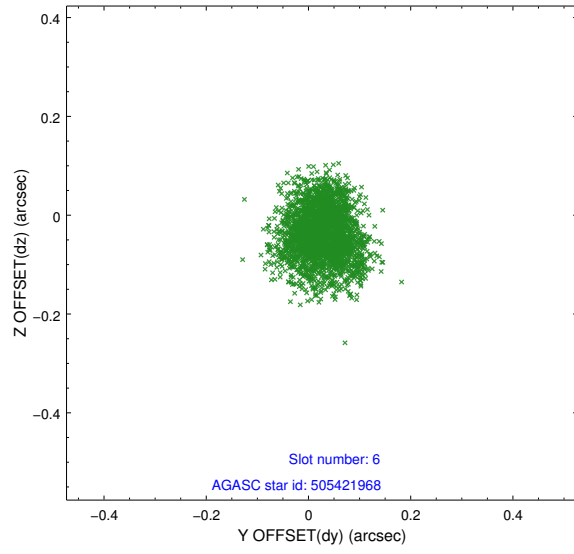
## 2.4.2 Slot 4



### 2.4.3 Slot 5

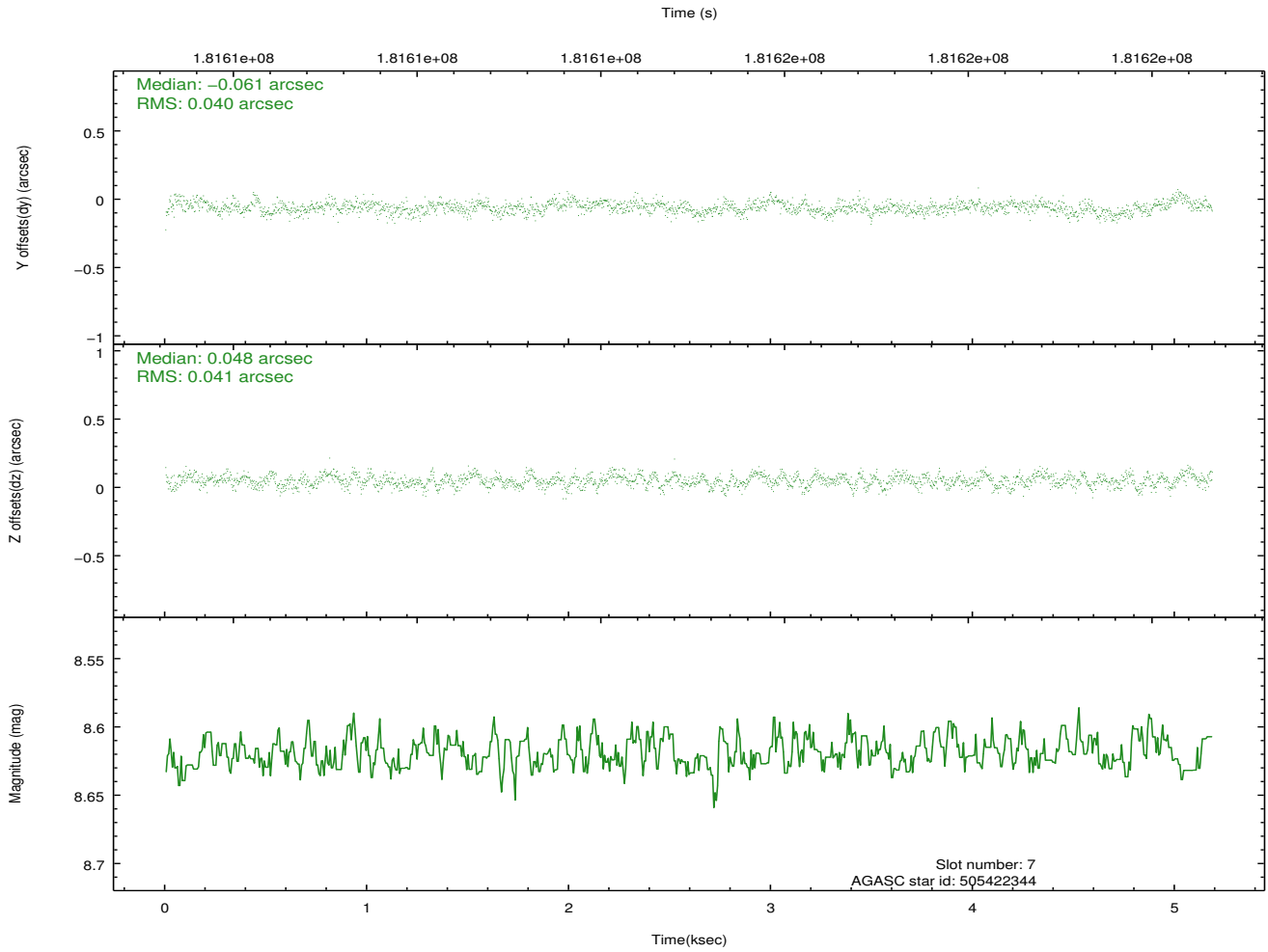
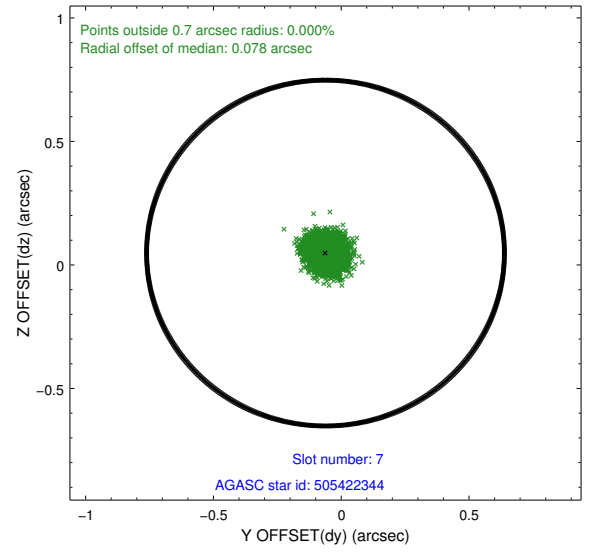
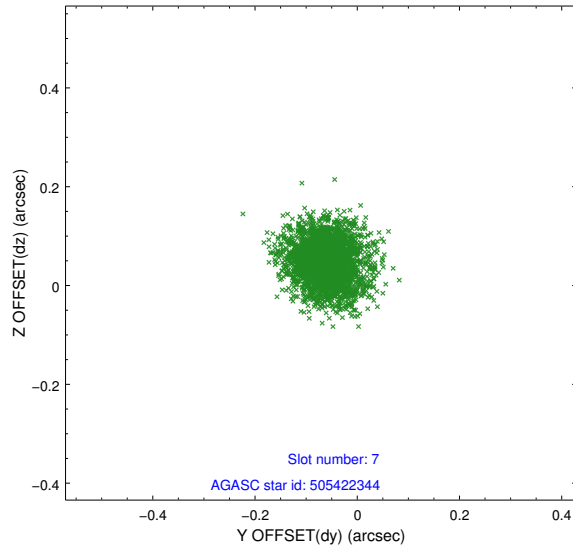


## 2.4.4 Slot 6



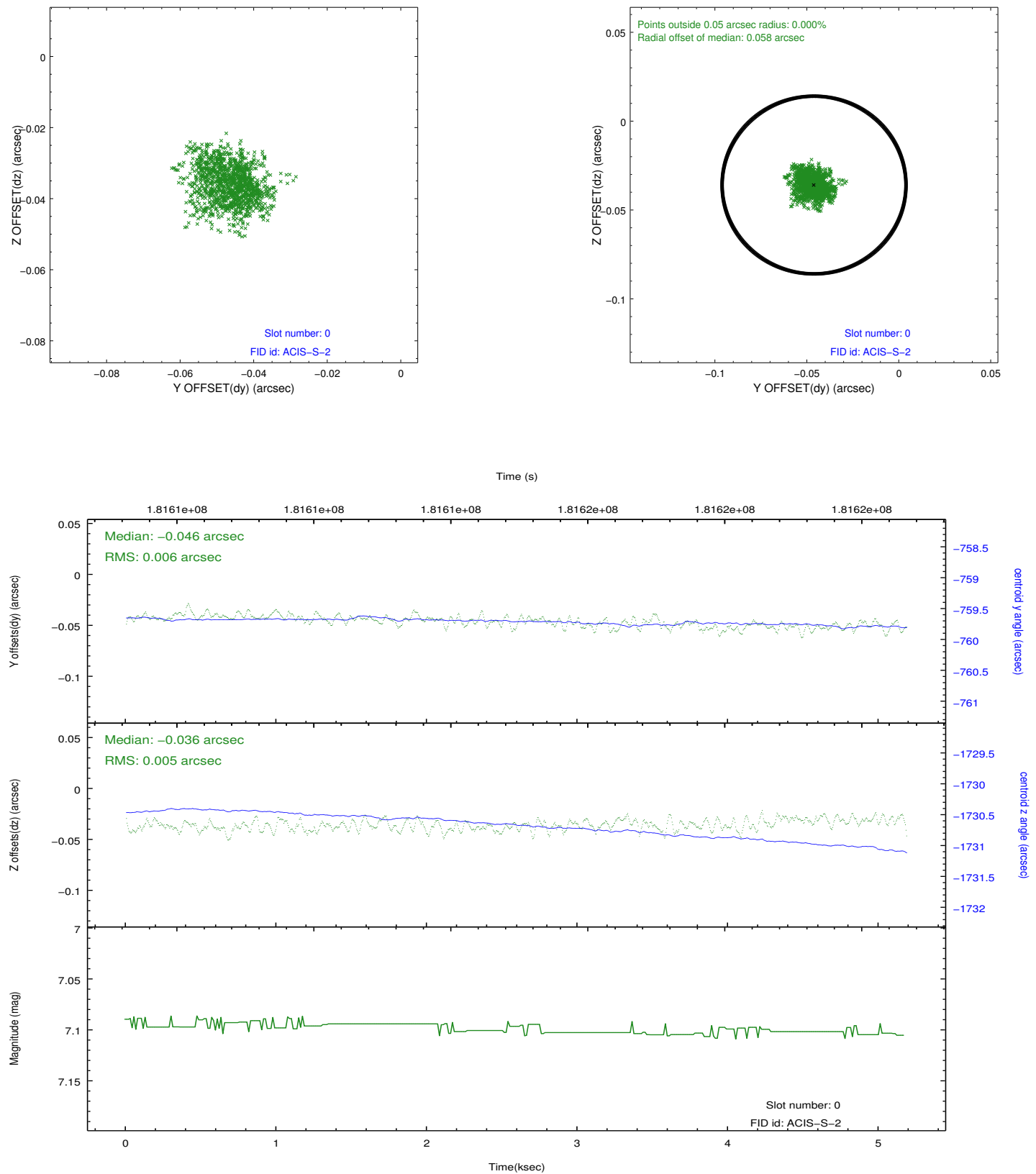


## 2.4.5 Slot 7

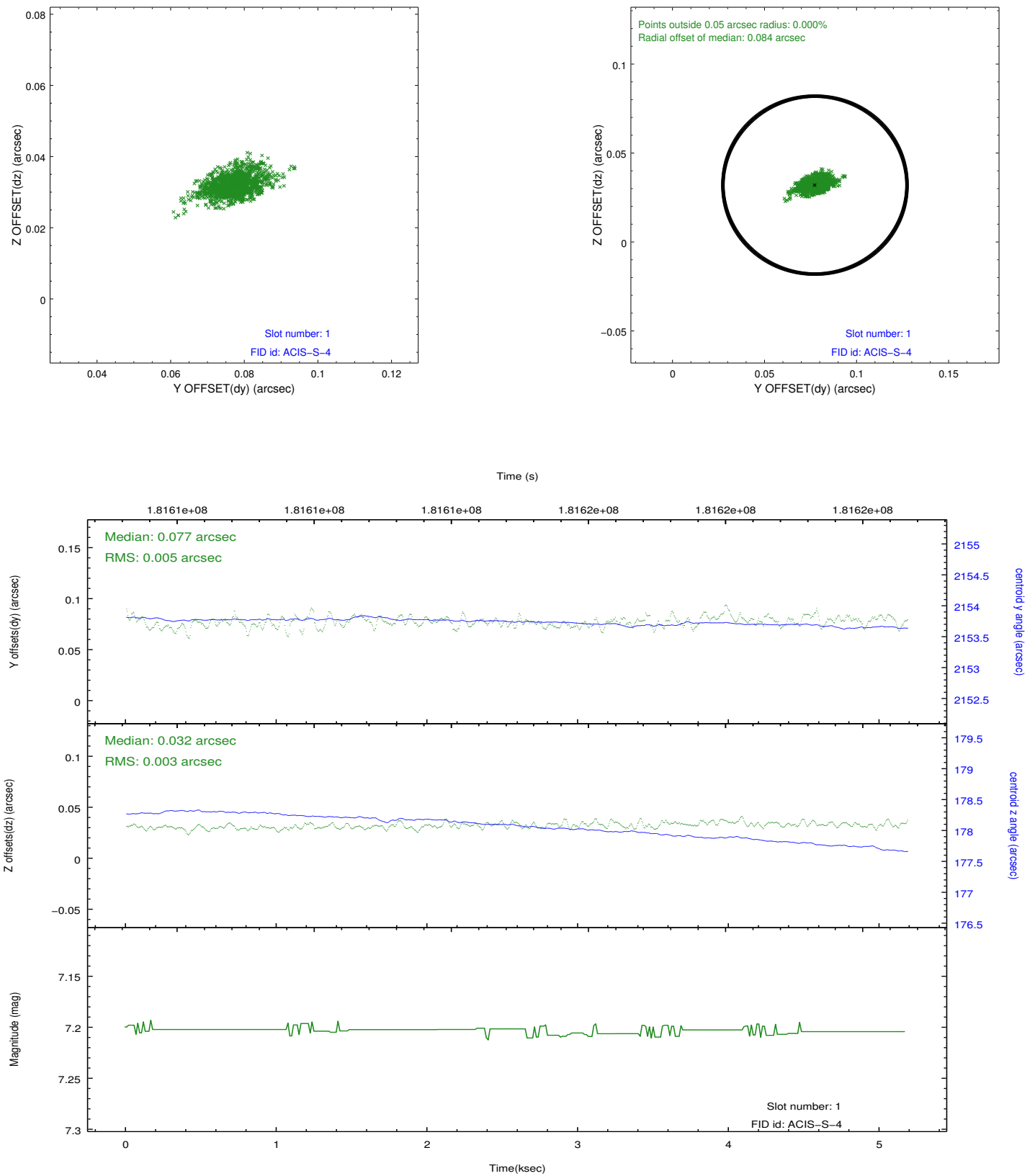


## 2.5 FID Slots

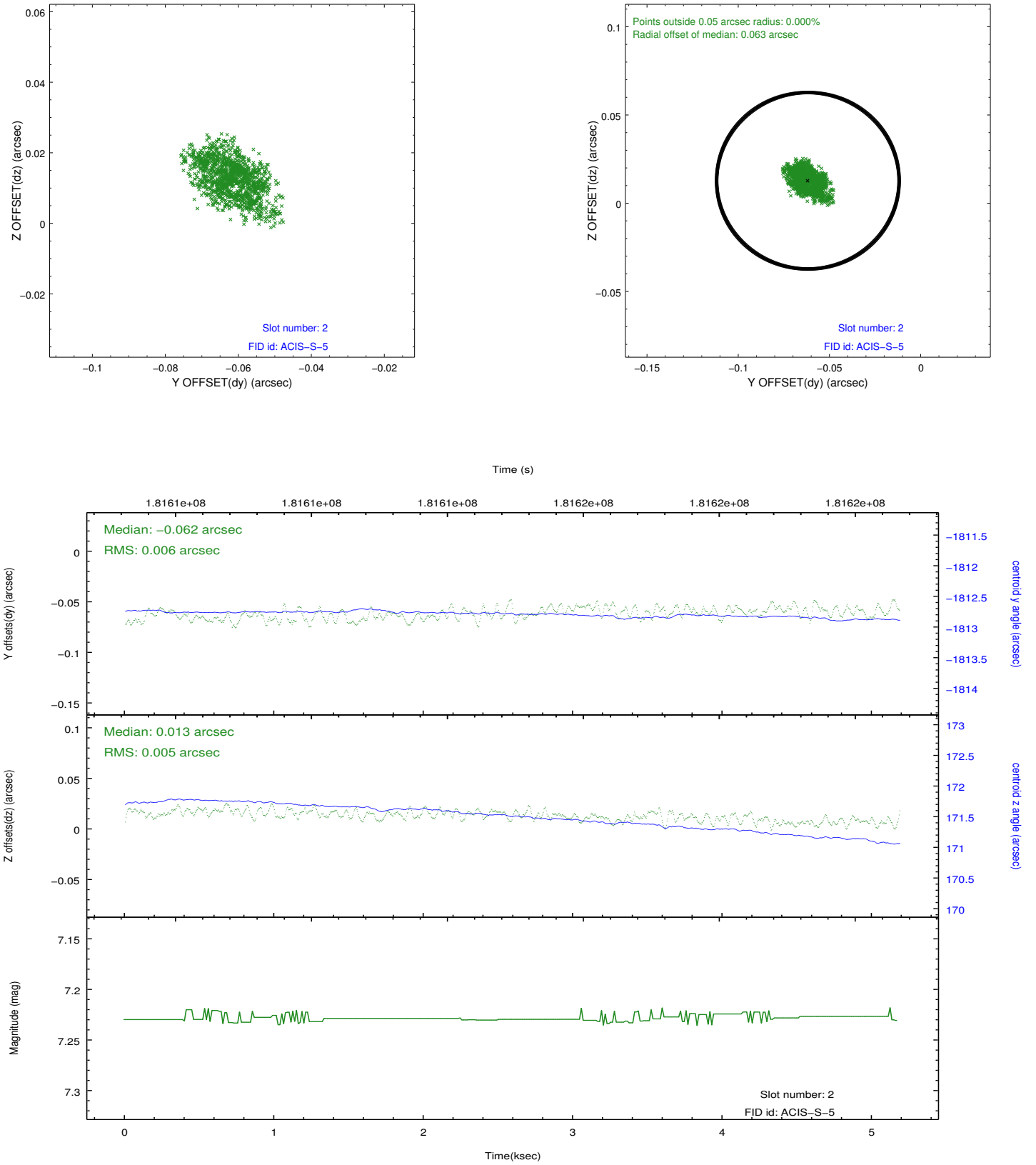
### 2.5.1 Slot 0



## 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)	2012.11.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.183

### **A.2 Comments**