

# V&V Reference Report

## L2 ASCDS Version : 7.6.10

Observation 1031 - L2 Version 001  
Chandra X-Ray Center

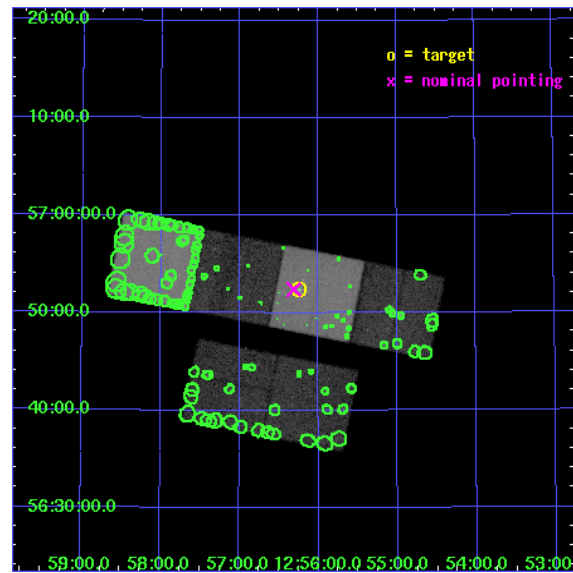
L2 Processing Date : Jun 12 2007

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# 1 Front

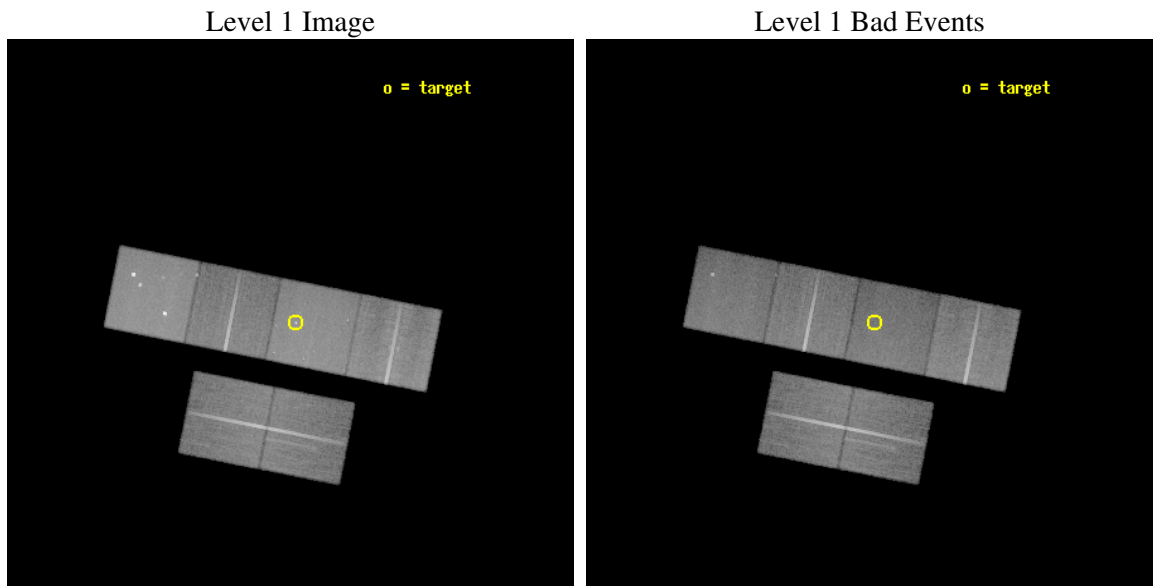
seq_num	700389
obs_id	1031
title	OBSERVATION OF MKR 231
observer	Prof. Gordon Garmire
object	Mrk 231
dtcycle	0
cycle	P
ra_targ	194.059583
dec_targ	56.873694
ra_nom	194.07765211934
dec_nom	56.873837998625
roll_nom	11.229408884957
revision	2
ontime	39756.800037026
livetime	39253.375496287
ontime2	39756.800037026
ontime3	39756.800037026
ontime5	39756.800037026
ontime6	39753.559046865
ontime7	39756.800037026
ontime8	39753.559076786
l2events	430032



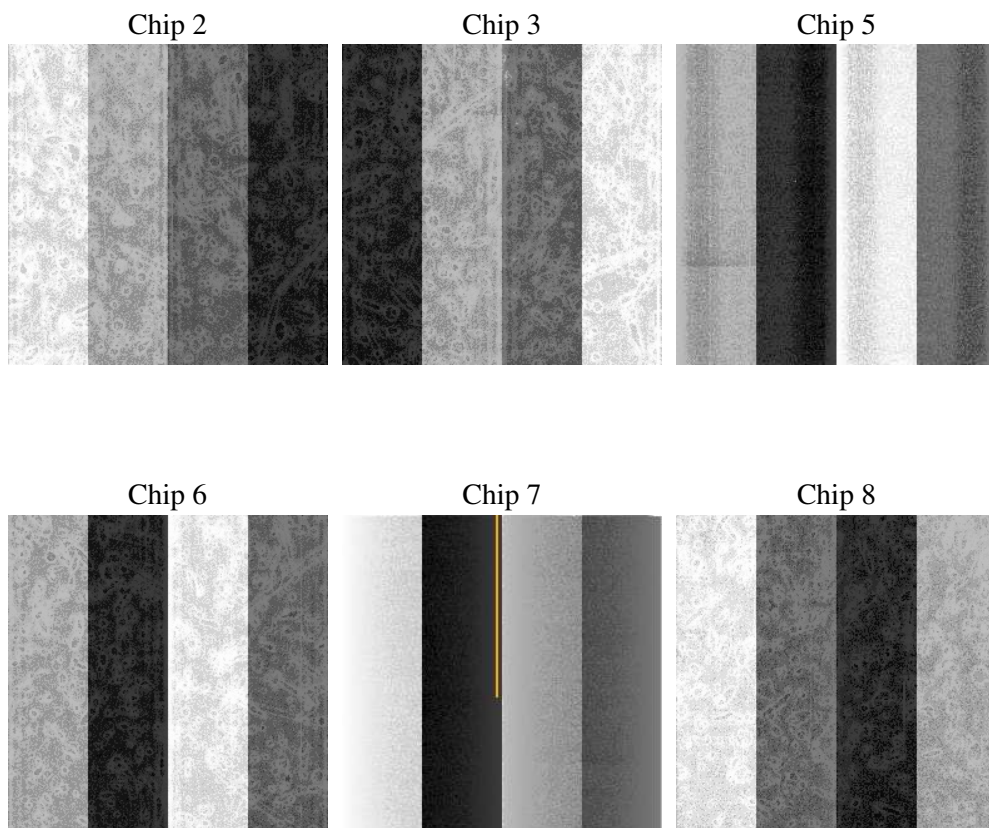
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.10
caldsver	3.4.0
date	2007-06-12T13:20:41
revision	2

sched_exp_time	40000.000000
ontime	39756.800037026
ontime2	39756.800037026
ontime3	39756.800037026
ontime5	39756.800037026
ontime6	39753.559046865
ontime7	39756.800037026
ontime8	39753.559076786
l1events	1816740

### 2.1.4 Events

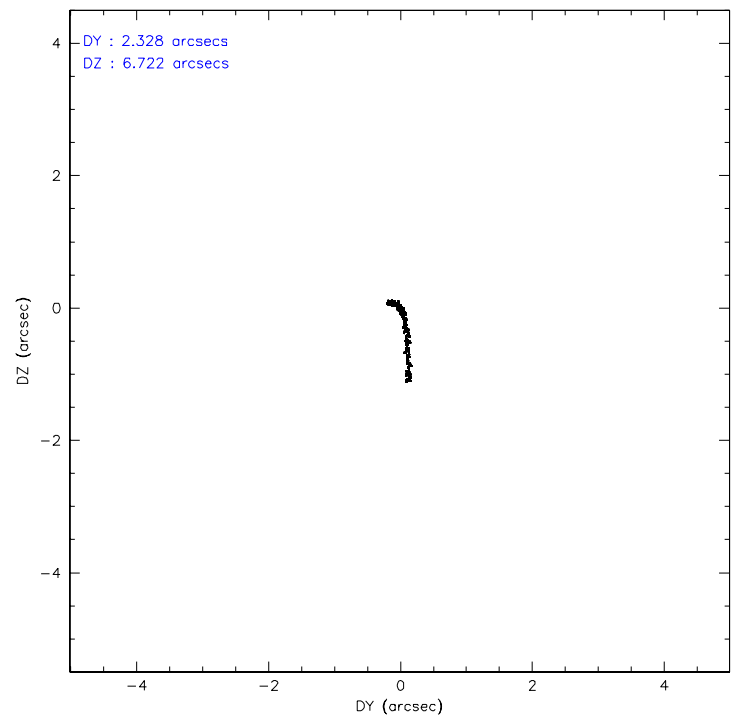
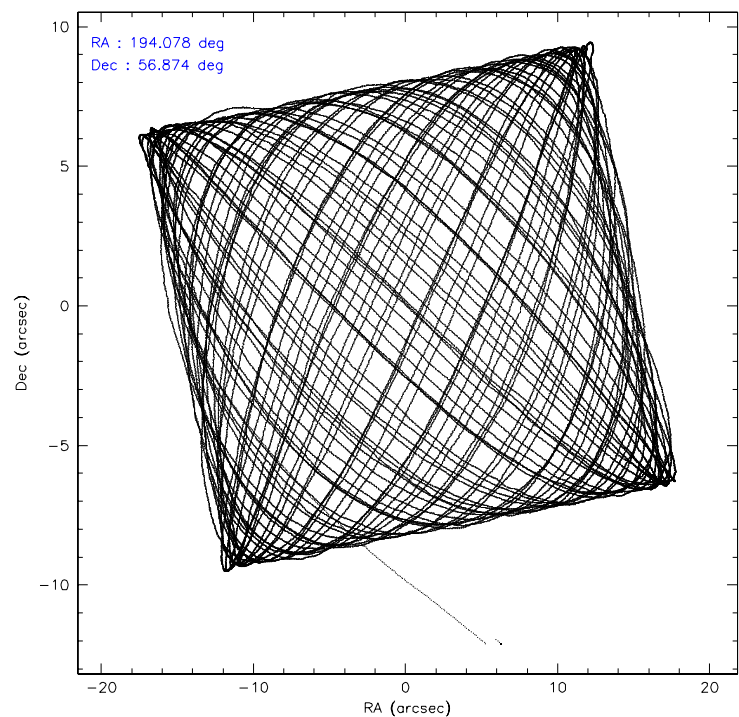
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	260703	248108	380127	258720	342097	326985
rejected events	232529	220214	188979	229844	182466	261105
rejected %	89%	88%	49%	88%	53%	79%

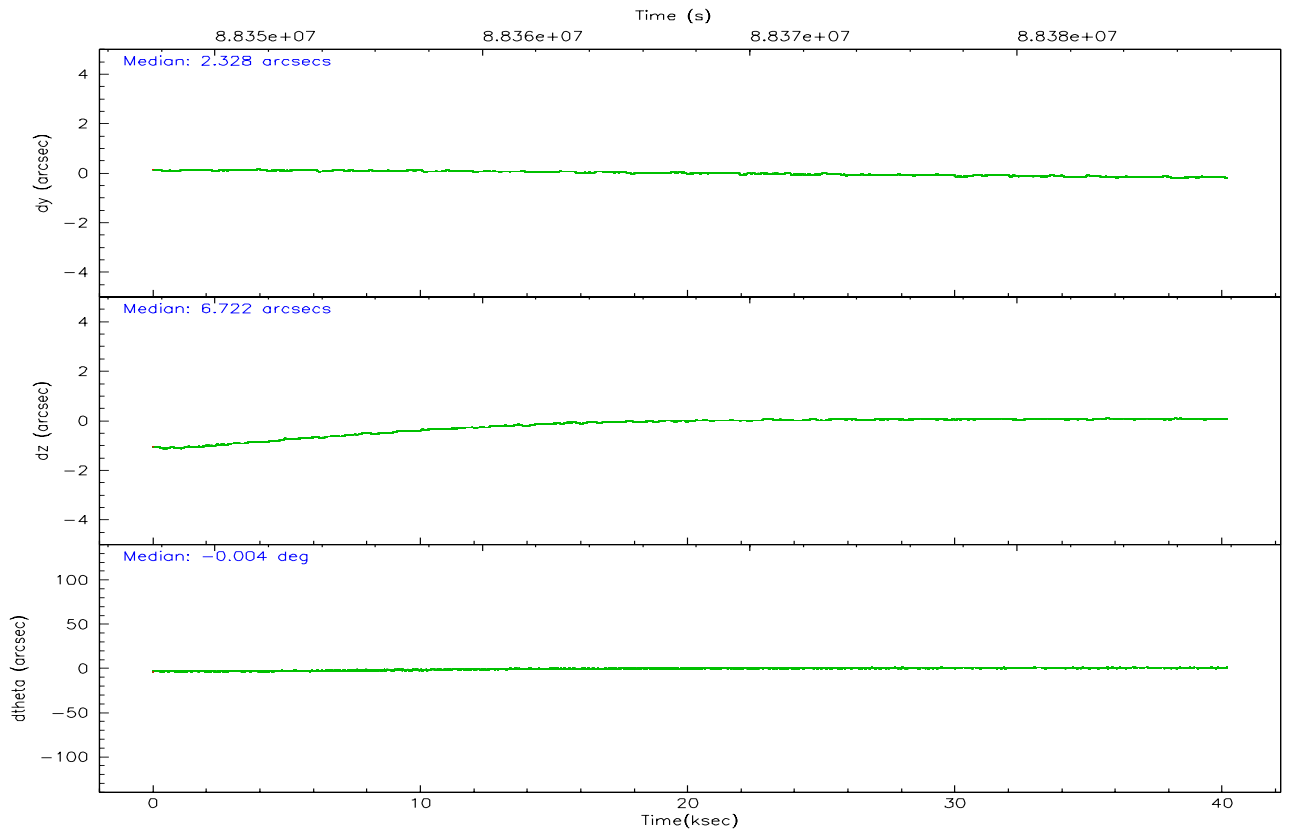
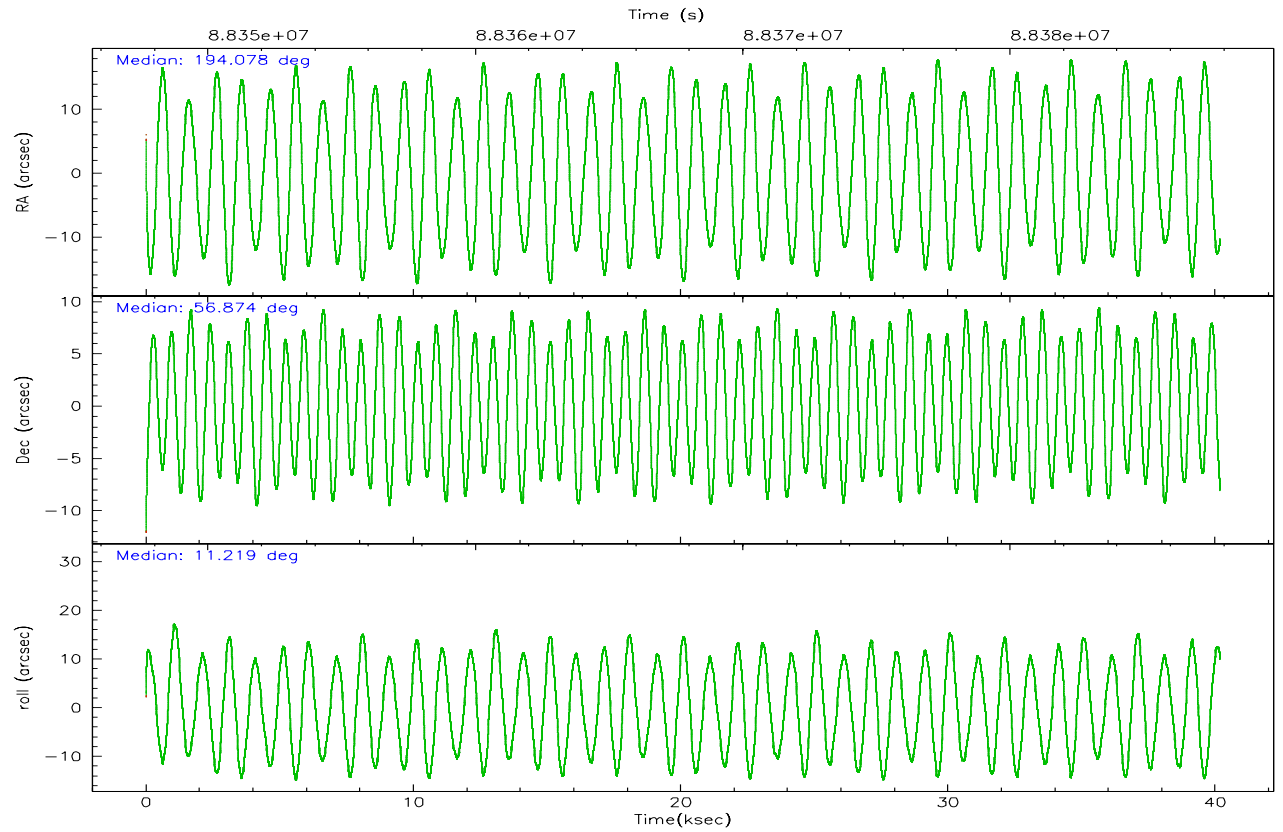
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	12170	12219	30635	11946	17985	21428
	4%	4%	8%	4%	5%	6%
grade 1 events	93	101	1776	108	303	197
	0%	0%	0%	0%	0%	0%
grade 2 events	5918	5399	52715	5656	31292	13529
	2%	2%	13%	2%	9%	4%
grade 3 events	2710	2670	8612	2870	14332	7424
	1%	1%	2%	1%	4%	2%
grade 4 events	2710	2725	8509	2839	14390	6699
	1%	1%	2%	1%	4%	2%
grade 5 events	8478	9284	26486	10069	30361	12827
	3%	3%	6%	3%	8%	3%
grade 6 events	4668	4888	90711	5568	81656	16801
	1%	1%	23%	2%	23%	5%
grade 7 events	223956	210822	160683	219664	151778	248080
	85%	84%	42%	84%	44%	75%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
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
Pointing RA	194.040262	194.0776521193422	Subarray requested	NONE	NONE
Pointing Dec	56.855656	56.87383799862539	Alternating exposures requested	N	N
Pointing Roll	11.104087	11.229408884957	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1425803651734			
SIM translation stage offset (mm)	0	0.01005778216563158			
Observation start time	88347869.184000	88347064.40954			
Observation start date	2000-10-19T13:03:25	2000-10-19T12:51:04			
Observation end time	88387869.184000	88388367.298601			
Observation end date	2000-10-20T00:10:05	2000-10-20T00:19:27			
Read mode	TIMED	TIMED			

2.3 Aspect





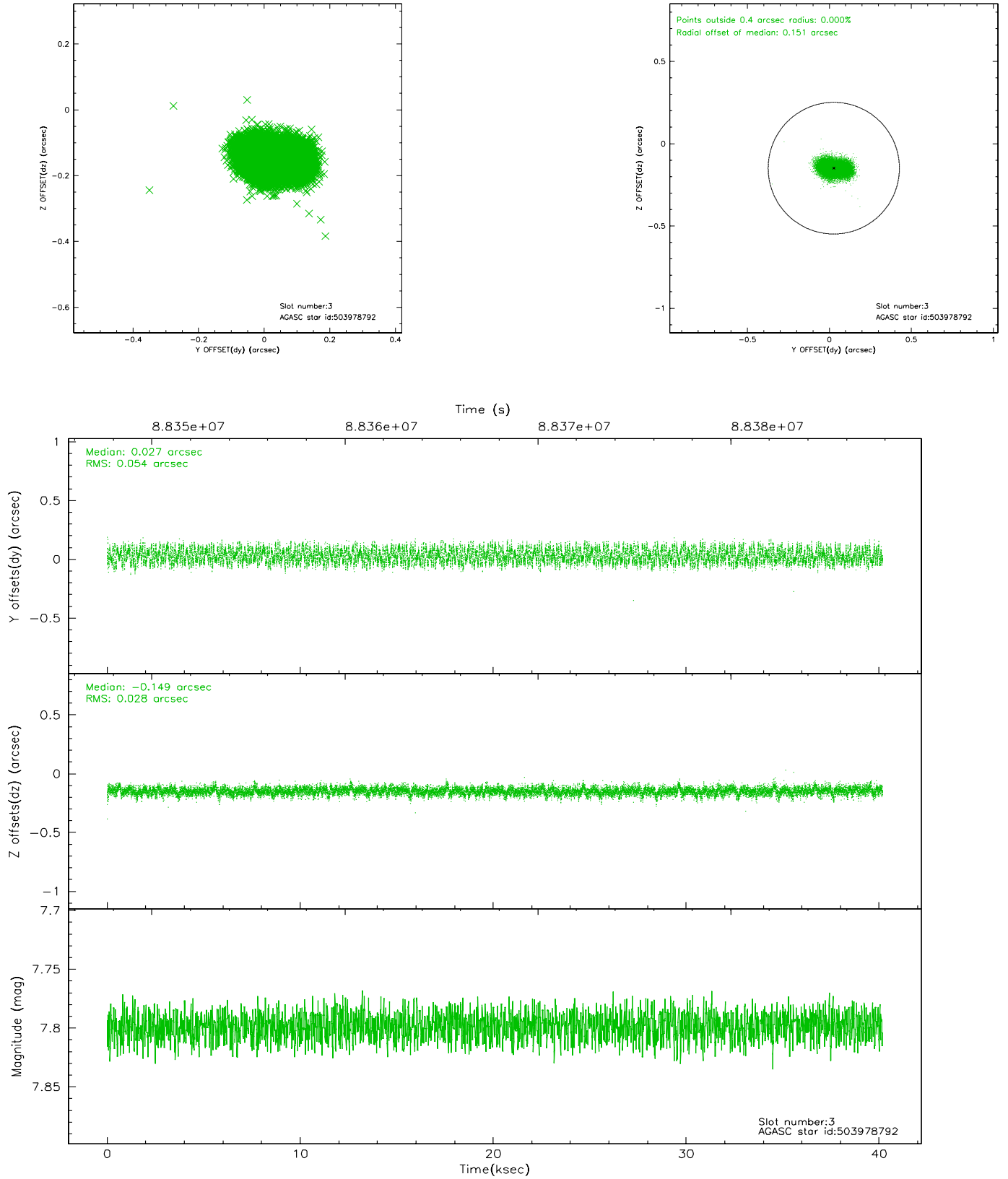
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	9801	-0.021	0.019	0.010	0.017	0.000000	0.000000	-754.96	-1727.61
1	FID	ACIS-S-4	7.20	9800	-0.058	0.005	0.012	0.024	0.000000	0.000000	2158.27	180.86
2	FID	ACIS-S-5	7.23	9799	0.047	-0.016	0.008	0.013	0.000000	0.000000	-1807.72	174.50
3	GUIDE	503978792	7.80	19601	0.027	-0.149	0.066	0.103	192.862042	57.373424	-1881.98	2288.90
4	GUIDE	503979408	7.69	19602	-0.055	-0.097	0.048	0.078	193.466022	56.819966	-1134.45	96.77
5	GUIDE	503979936	8.60	19601	-0.073	0.082	0.058	0.094	194.419806	56.566429	538.39	-1163.99
6	GUIDE	503977472	8.71	19600	0.082	0.155	0.058	0.093	193.107383	56.634174	-1963.66	-414.13
7	GUIDE	503978872	9.47	19595	0.017	0.009	0.076	0.126	193.810866	57.011691	-333.41	638.97

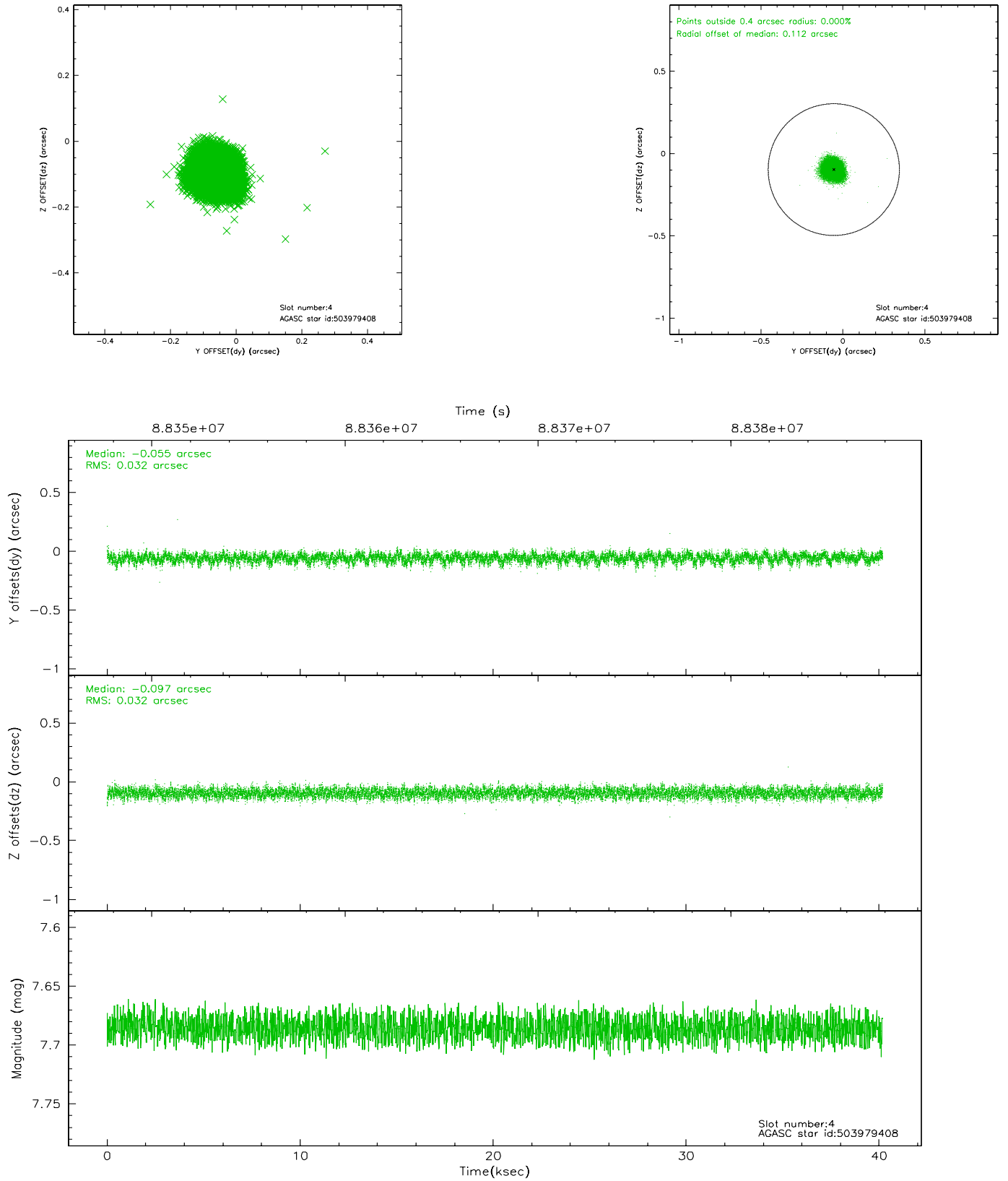


## 2.4 Star Slots

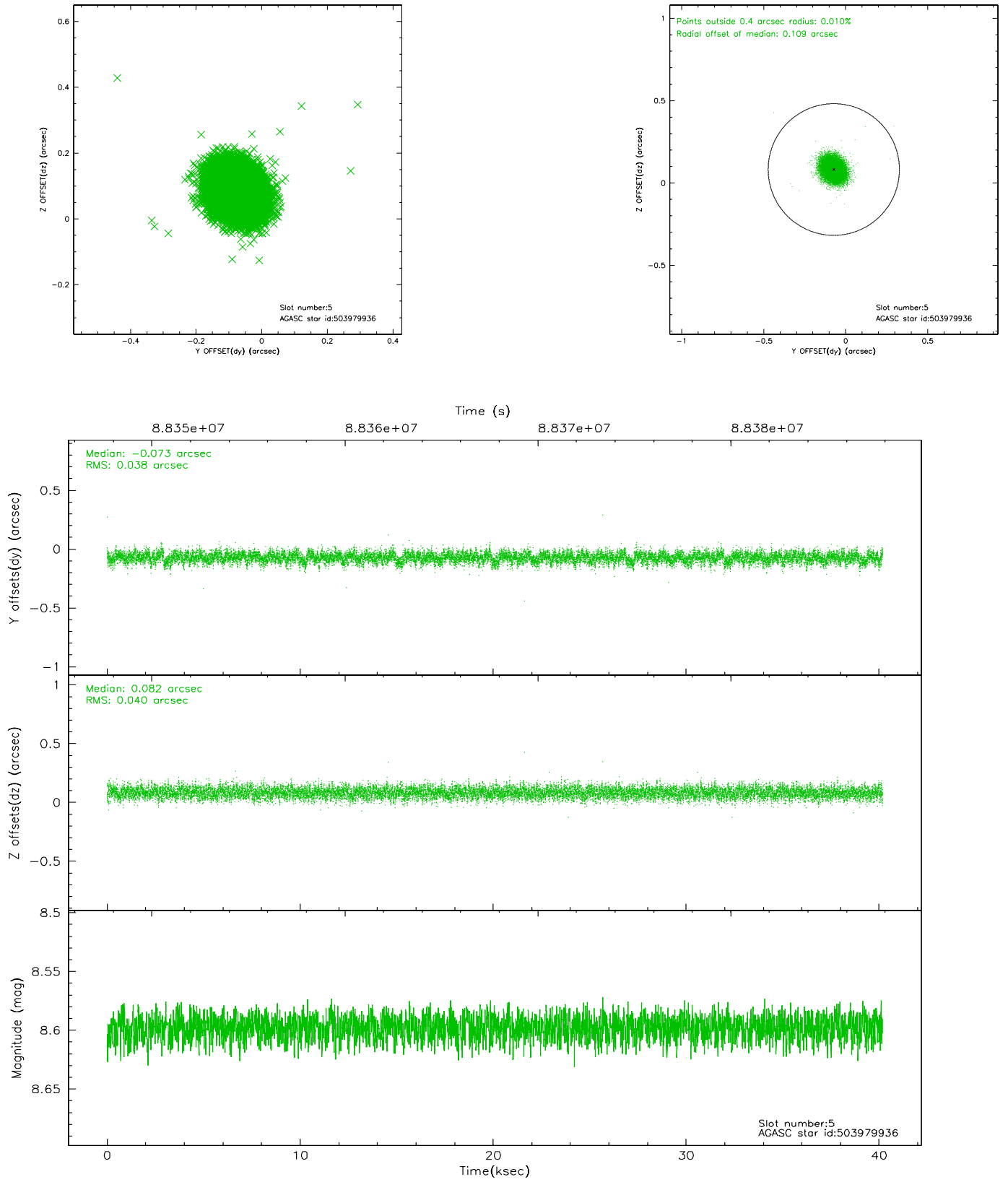
### 2.4.1 Slot 3



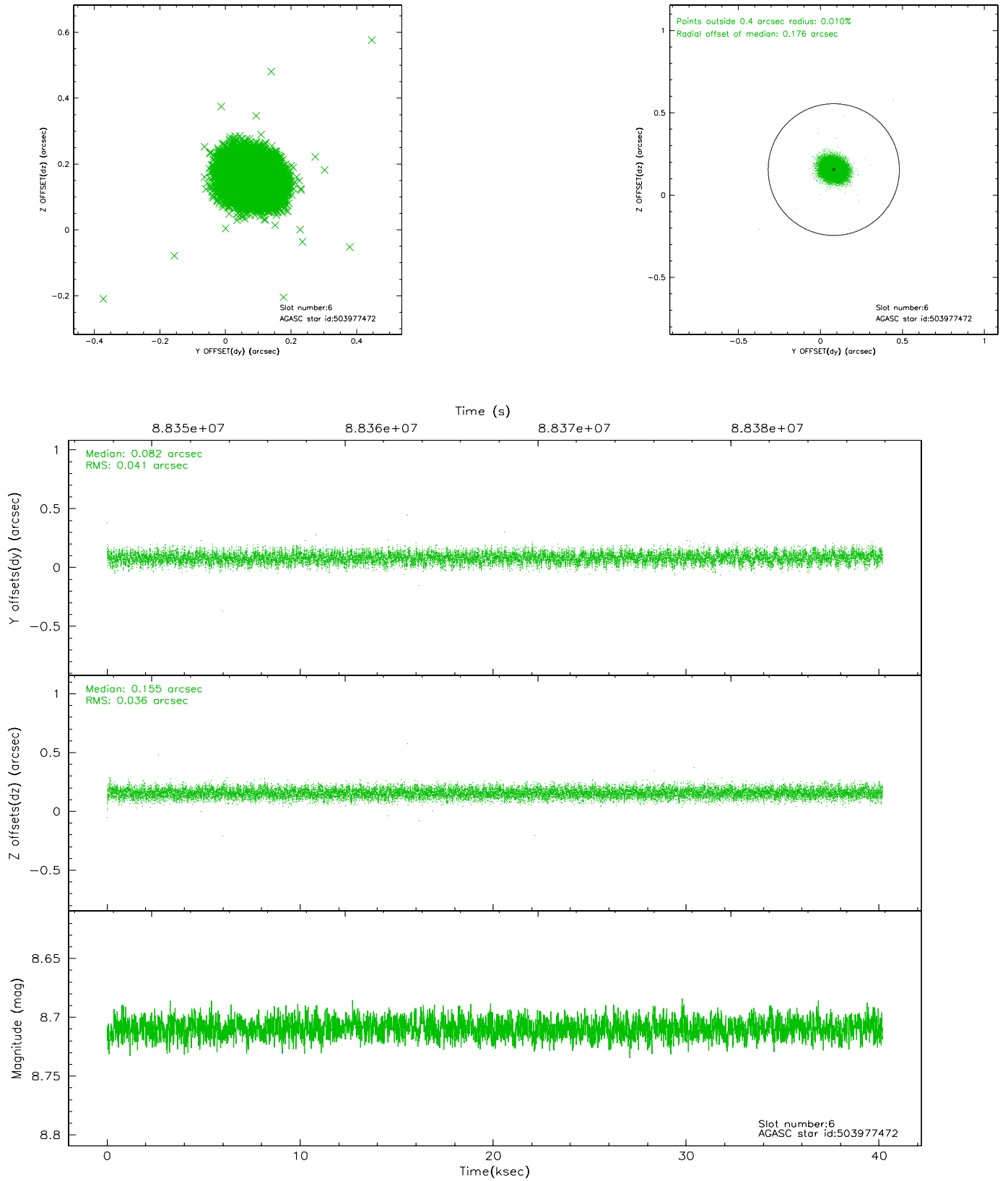
## 2.4.2 Slot 4



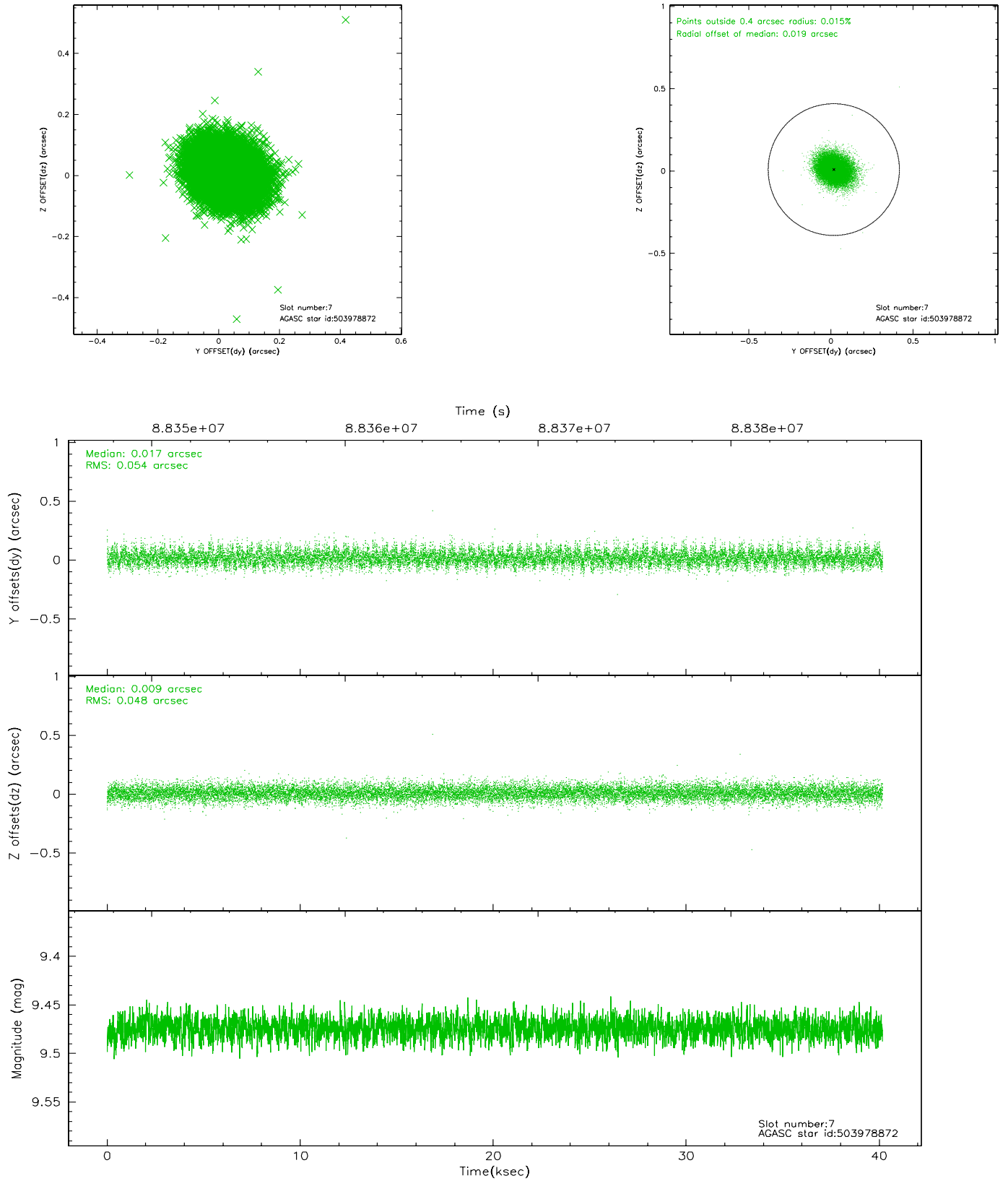
### 2.4.3 Slot 5



## 2.4.4 Slot 6

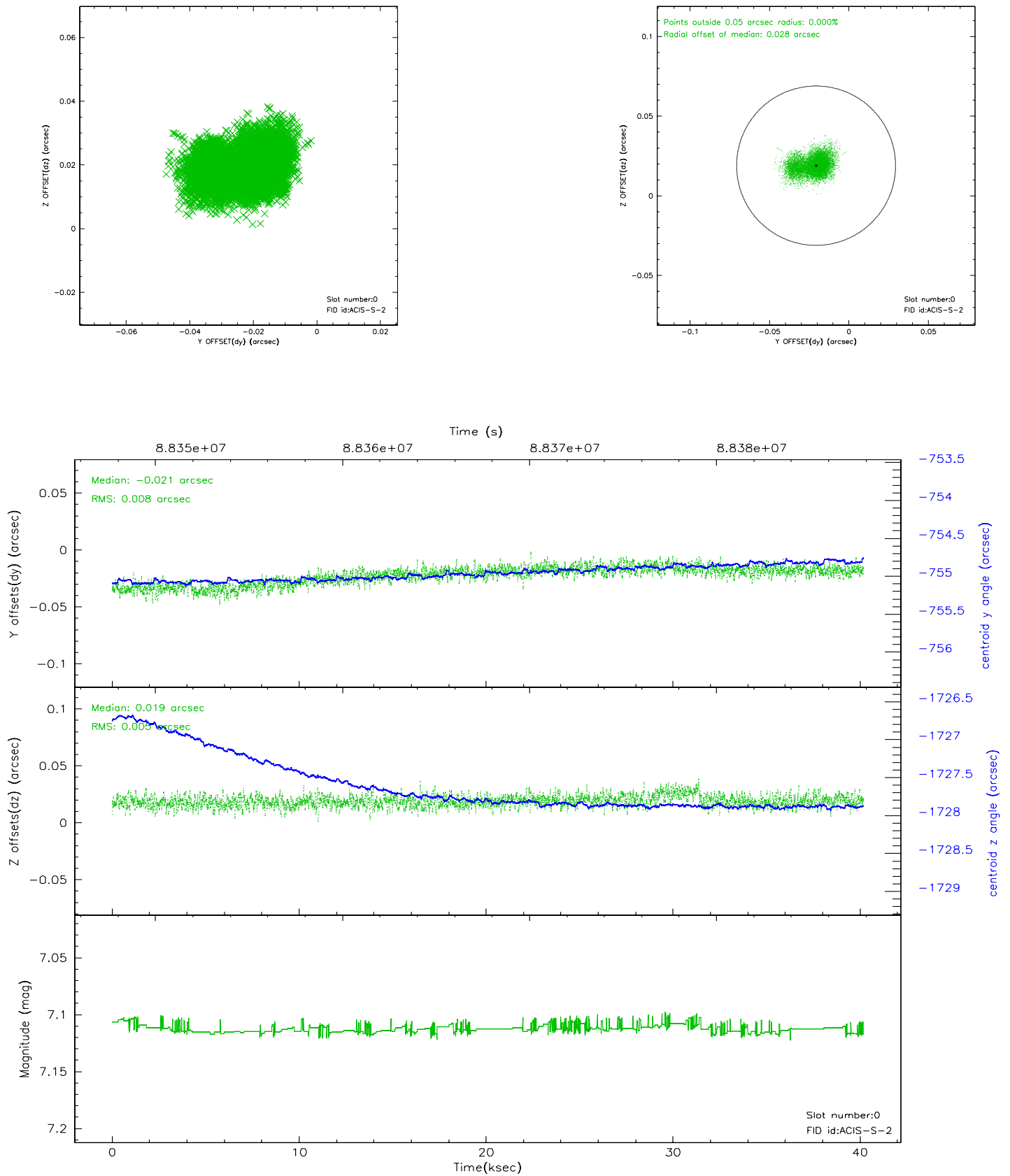


## 2.4.5 Slot 7

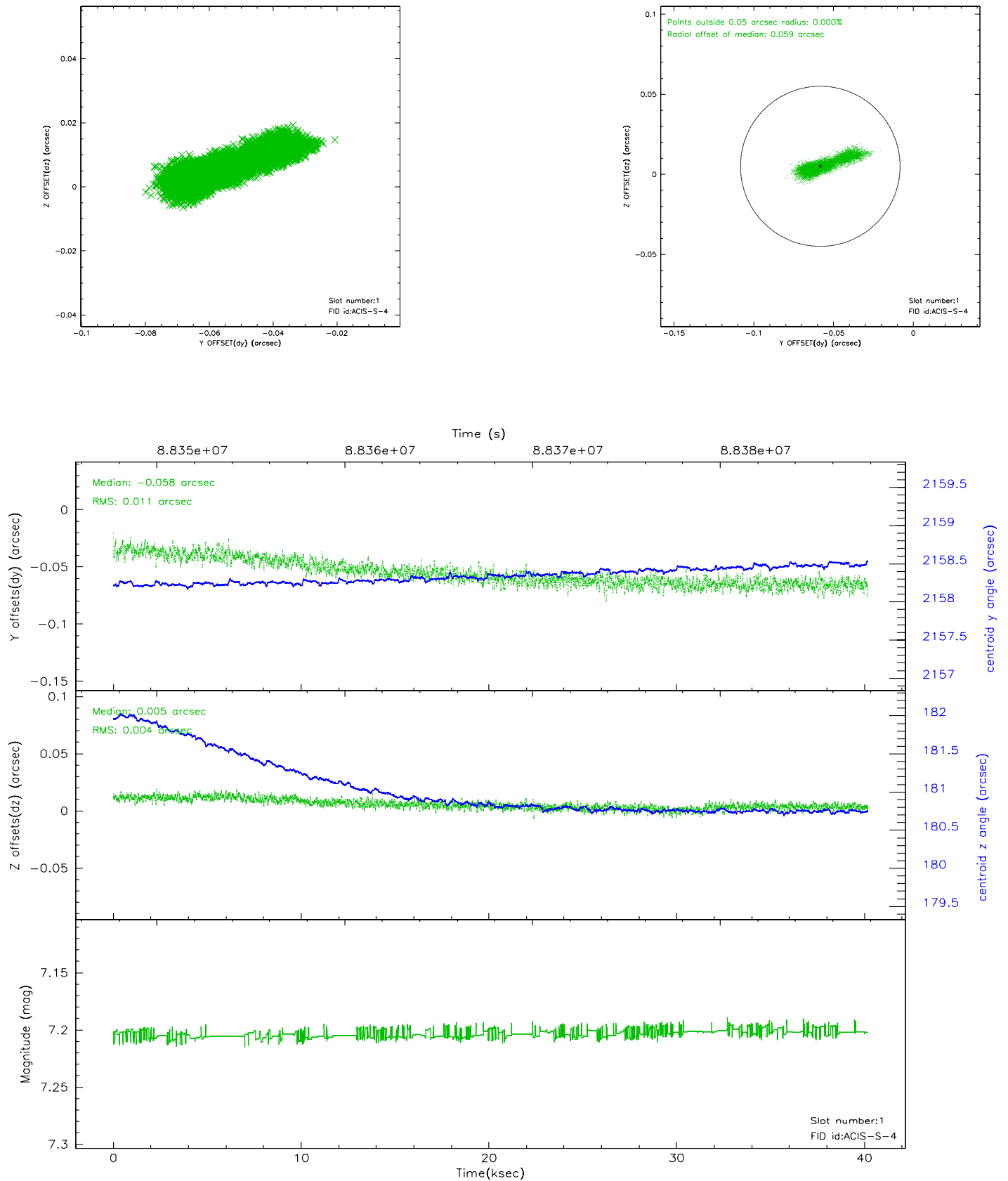


## 2.5 FID Slots

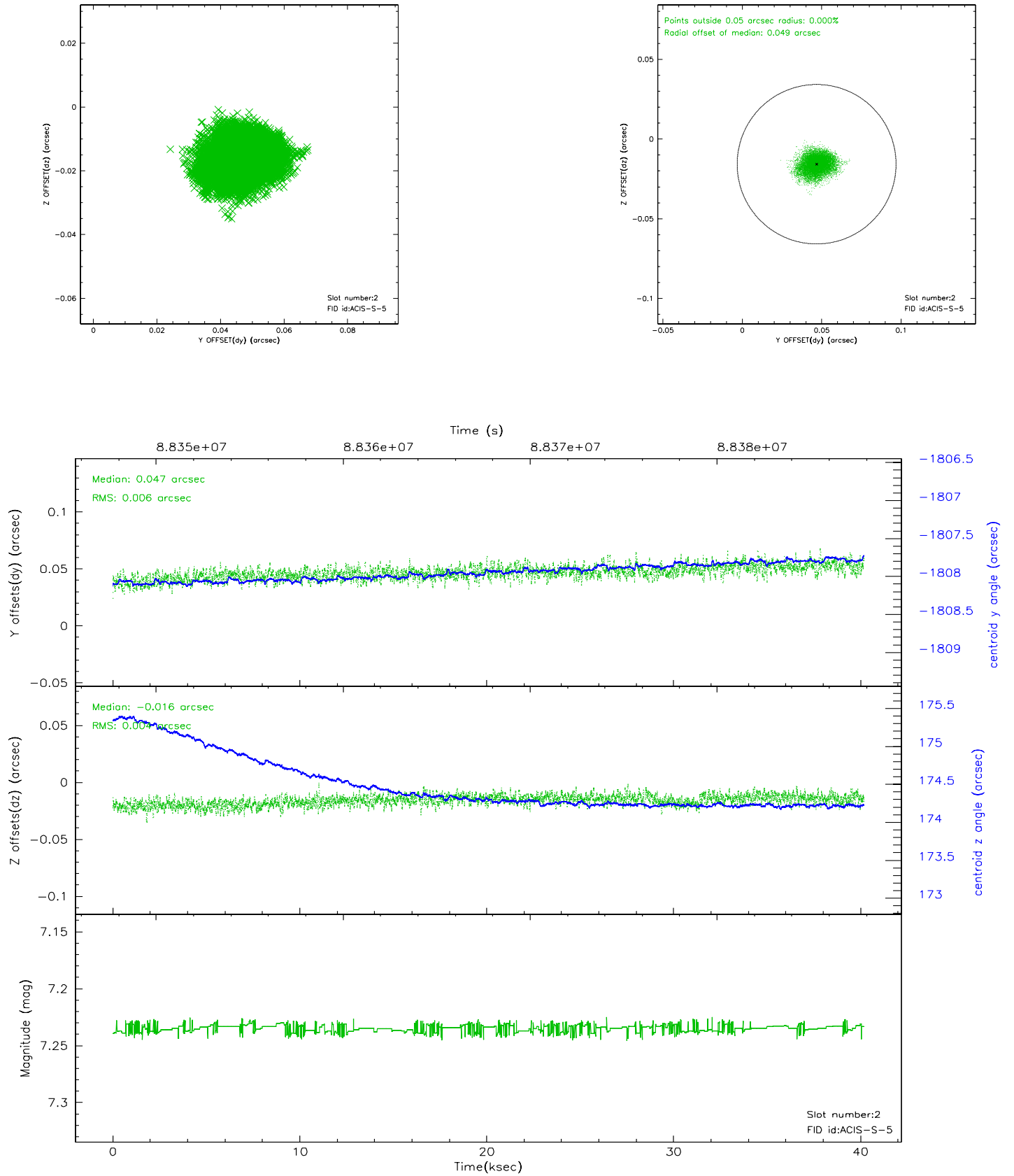
### 2.5.1 Slot 0



## 2.5.2 Slot 1

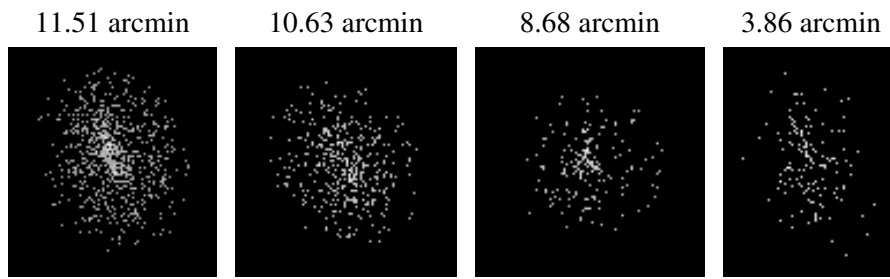


### 2.5.3 Slot 2





### 3 Point Sources



## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2007.06.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	39.76

### A.2 Comments