

# V&V Reference Report

## L2 ASCDS Version : 7.6.7.2

Observation 4481 - L2 Version 001  
Chandra X-Ray Center

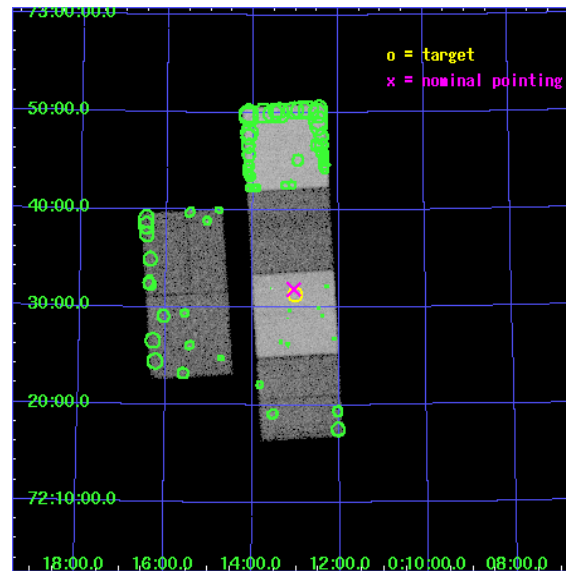
L2 Processing Date : May 1 2006

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# 1 Front

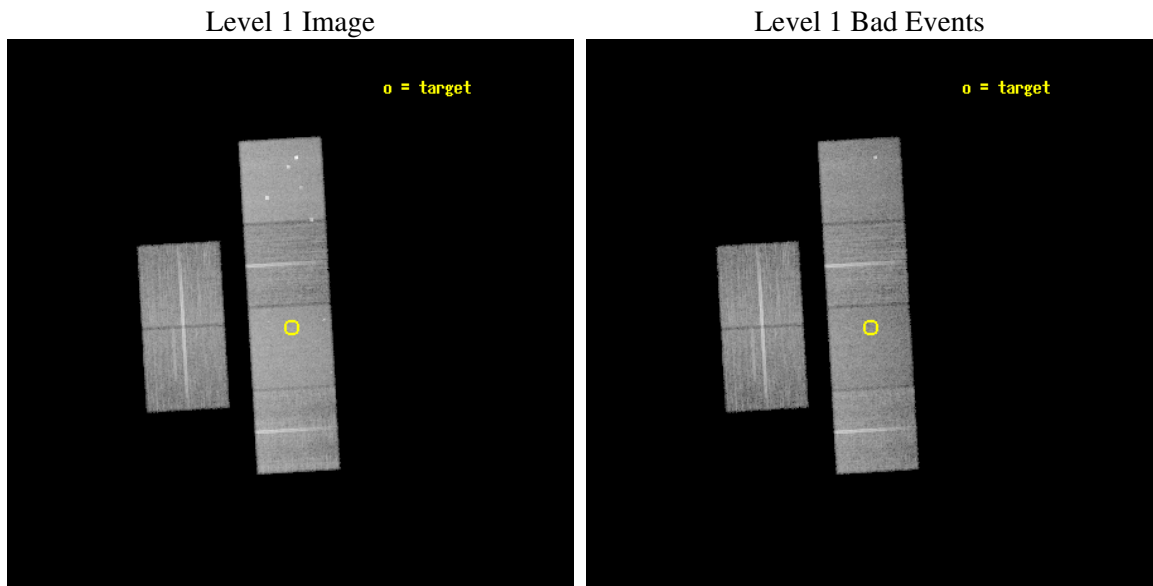
seq_num	200250
obs_id	4481
title	The Early Onset of X-ray Emission from Planetary Nebulae
observer	Prof. Joel Kastner
object	NGC 40
dtcycle	0
cycle	P
ra_targ	3.254167
dec_targ	72.521944
ra_nom	3.261639140705
dec_nom	72.531341700627
roll_nom	86.673555576014
revision	2
ontime	20143.999924958
livetime	19888.924468647
ontime2	20143.999924958
ontime3	20143.999924958
ontime5	20143.999924958
ontime6	20143.999924958
ontime7	20143.999924958
ontime8	20143.999924958
l2events	228153



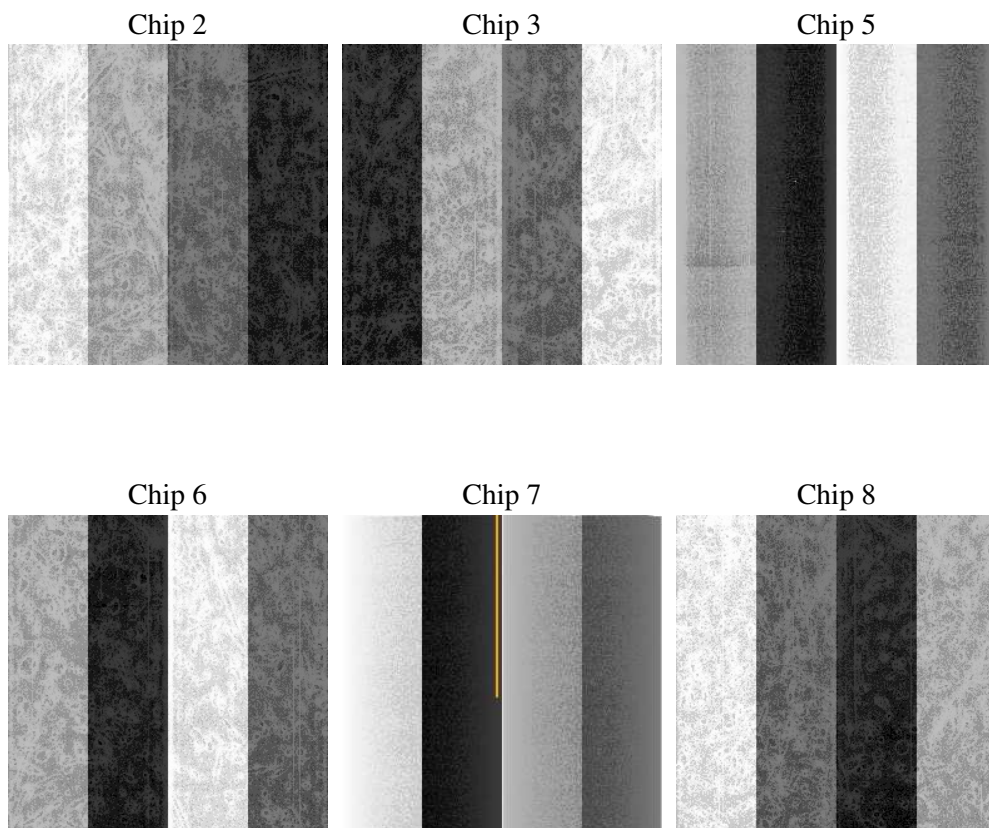
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.7.2
caldsver	3.2.1
date	2006-05-01T16:04:34
revision	2

sched_exp_time	20000.000000
ontime	20149.304011911
ontime2	20149.30398199
ontime3	20149.30398199
ontime5	20149.304011911
ontime6	20149.304011911
ontime7	20149.304011911
ontime8	20149.30398199
l1events	1043725

### 2.1.4 Events

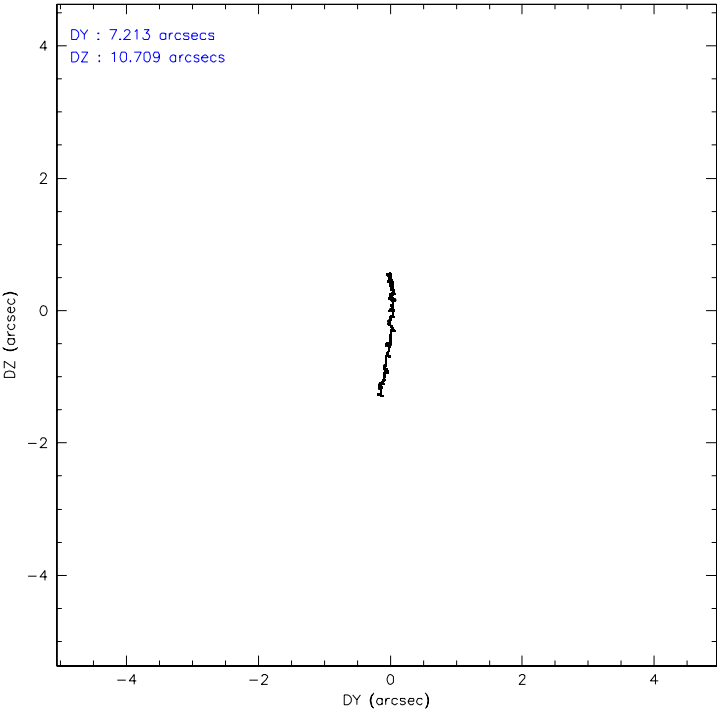
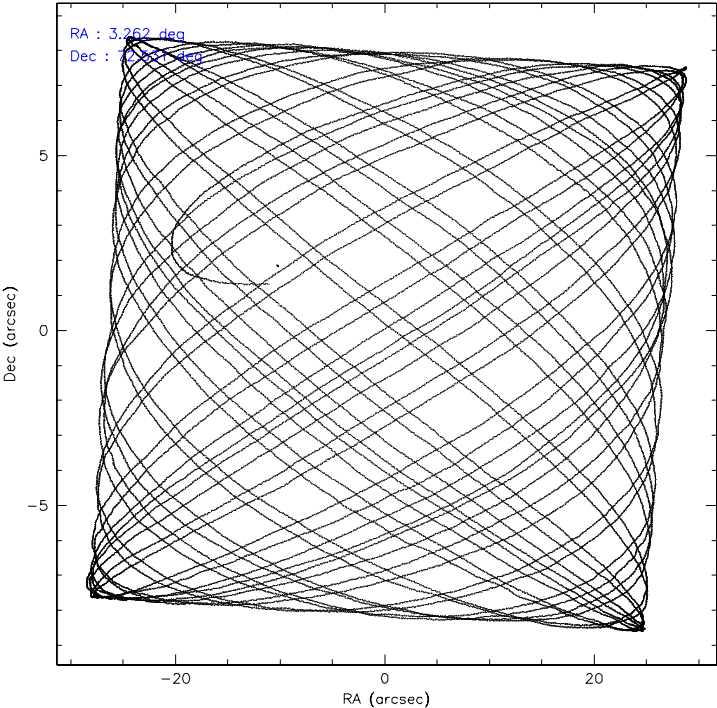
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	153106	140711	219552	146517	198961	184878
rejected events	135565	123177	122150	128958	122175	145082
rejected %	88%	87%	55%	88%	61%	78%

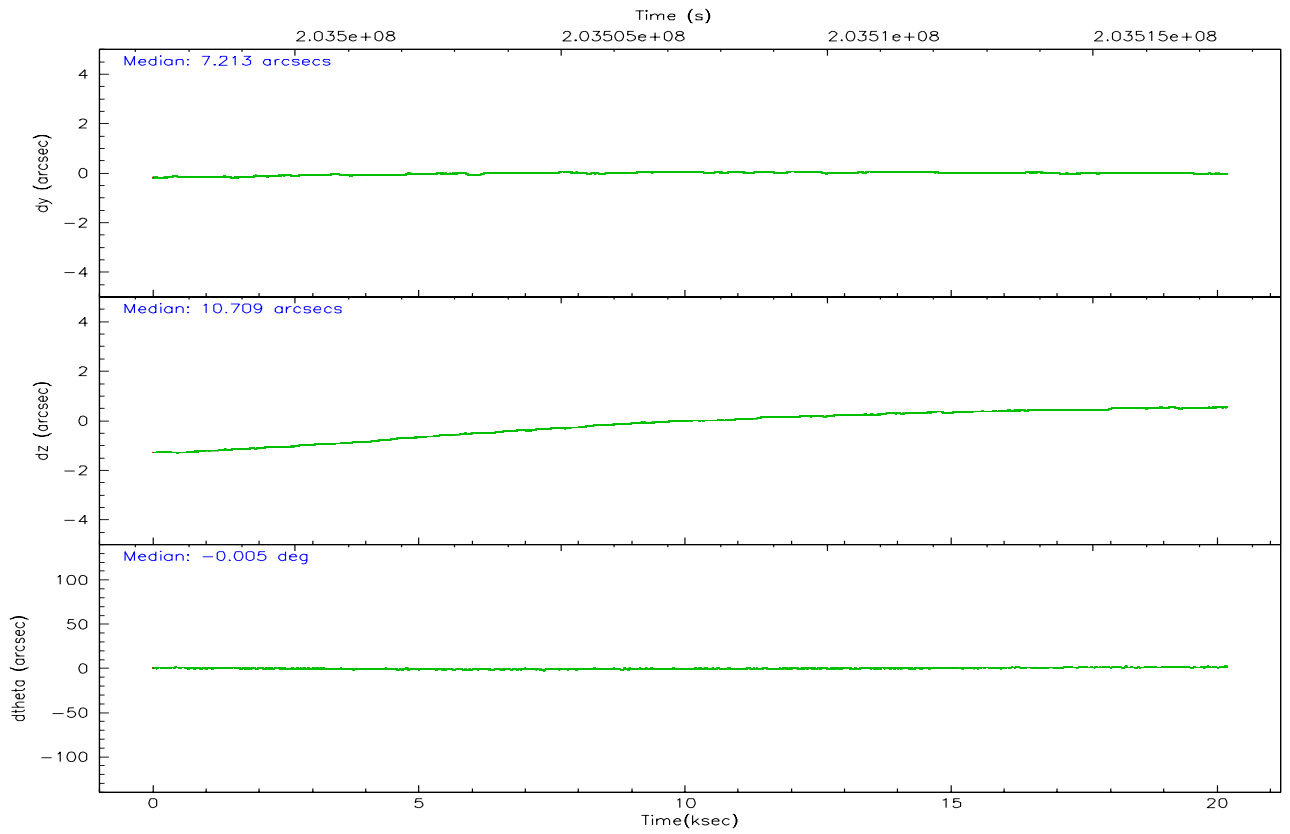
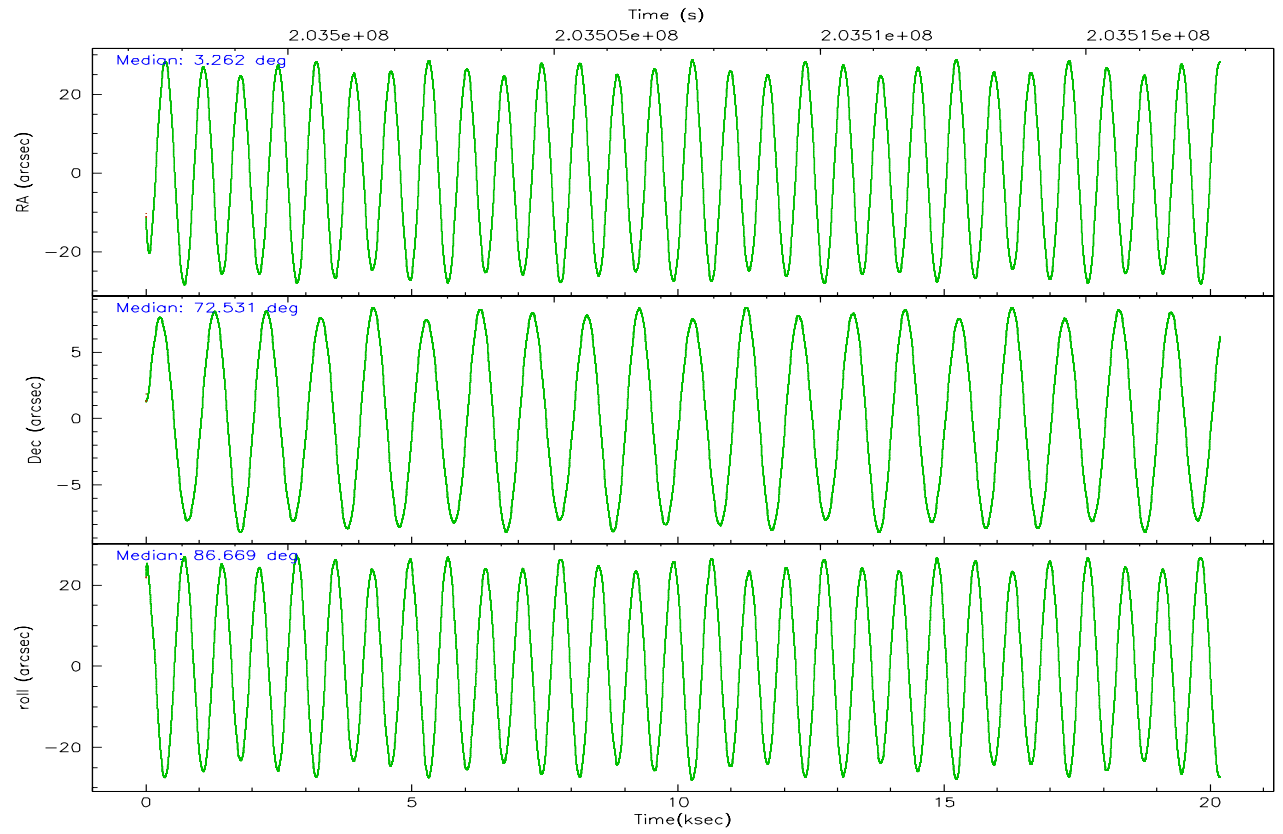
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	7953	8066	8597	6995	4705	12877
	5%	5%	3%	4%	2%	6%
grade 1 events	85	88	354	72	123	145
	0%	0%	0%	0%	0%	0%
grade 2 events	3543	3257	29799	3609	19213	8635
	2%	2%	13%	2%	9%	4%
grade 3 events	1645	1745	2327	1739	4013	4013
	1%	1%	1%	1%	2%	2%
grade 4 events	1635	1614	2031	1701	3804	3881
	1%	1%	0%	1%	1%	2%
grade 5 events	5649	6496	10420	6795	12813	8927
	3%	4%	4%	4%	6%	4%
grade 6 events	2767	2852	54661	3517	45062	10394
	1%	2%	24%	2%	22%	5%
grade 7 events	129829	116593	111363	122089	109228	136006
	84%	82%	50%	83%	54%	73%

## 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	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	NONE	NONE
Pointing RA	3.303392	3.261639140705028	Alternating exposures requested	N	N
Pointing Dec	72.507188	72.531341700627	Primary exposure time	0.000000	3.2
Pointing Roll	86.477094	86.67355557601411			
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	203497519.184000	203496466.02115			
Observation start date	2004-06-13T07:04:15	2004-06-13T06:47:46			
Observation end time	203517519.184000	203518274.43462			
Observation end date	2004-06-13T12:37:35	2004-06-13T12:51:14			
Read mode	TIMED	TIMED			

2.3 Aspect





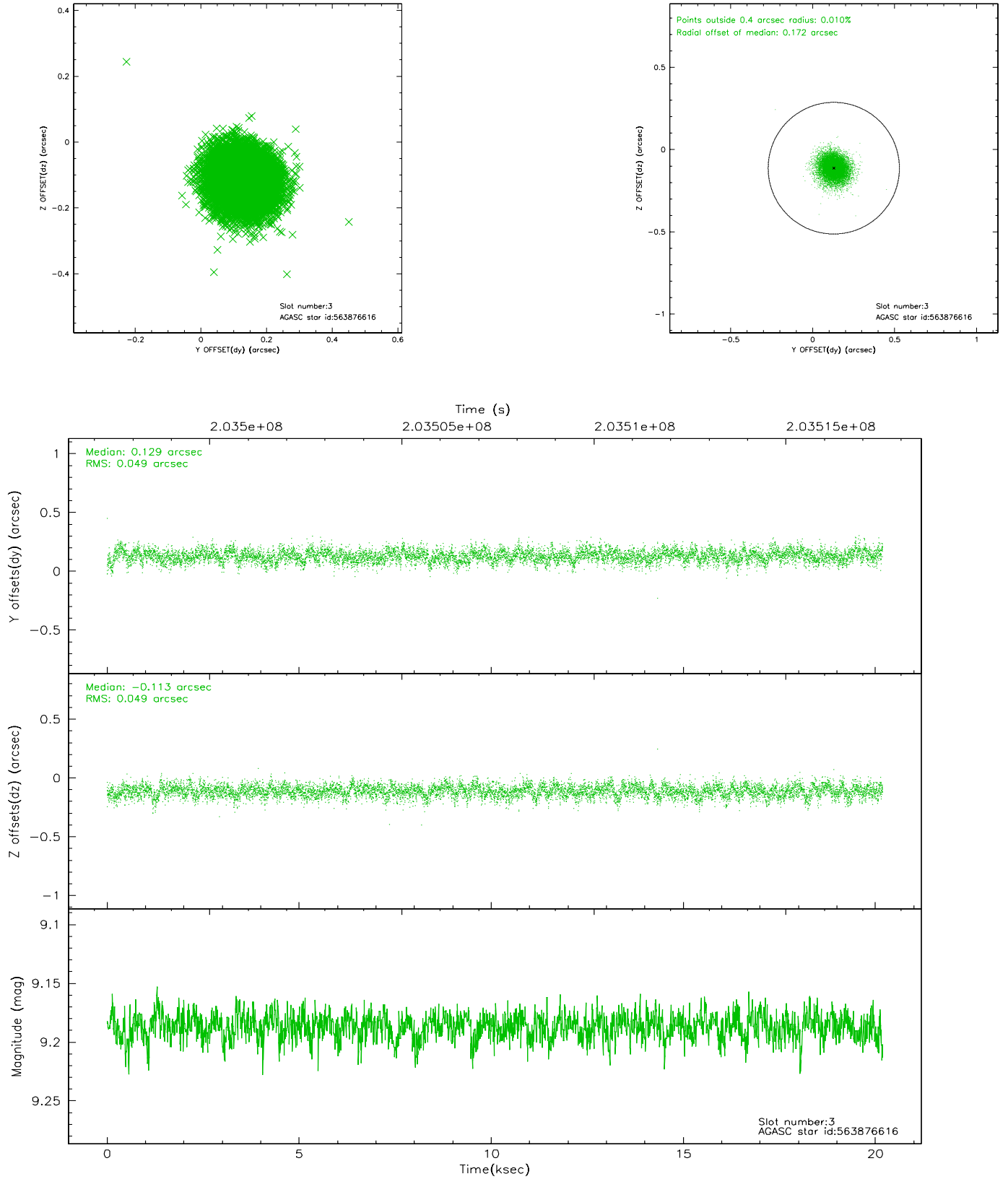
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	4925	-0.002	-0.030	0.026	0.047	0.000000	0.000000	936.08	-1727.40
1	FID	ACIS-S-4	7.20	4925	0.018	0.027	0.018	0.037	0.000000	0.000000	2153.60	176.62
2	FID	ACIS-S-5	7.23	4925	-0.042	0.015	0.011	0.015	0.000000	0.000000	-1812.60	170.39
3	GUIDE	563876616	9.19	9843	0.129	-0.113	0.073	0.121	3.202309	72.464947	-158.13	100.11
4	GUIDE	563881704	8.65	9841	-0.092	-0.033	0.061	0.100	2.231330	72.827527	1091.16	1209.00
5	GUIDE	563884680	9.10	9840	-0.035	0.006	0.067	0.108	2.193111	73.018551	1776.61	1279.04
6	GUIDE	563885032	7.20	9847	-0.124	0.140	0.057	0.098	4.825464	73.122582	2329.42	-1449.70
7	GUIDE	563883920	9.01	9835	0.117	-0.004	0.084	0.143	1.145559	71.968522	-2039.94	2282.93

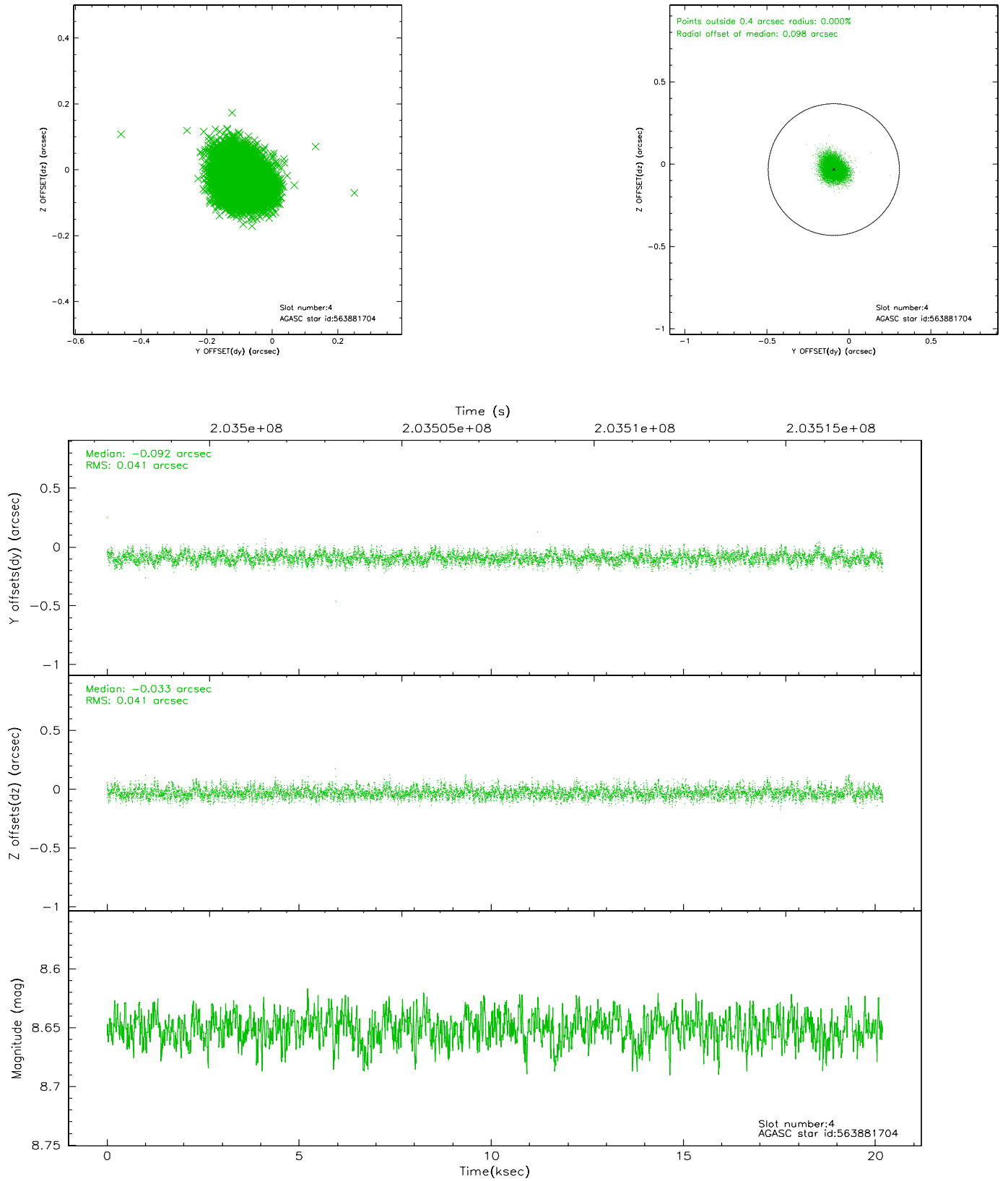


## 2.4 Star Slots

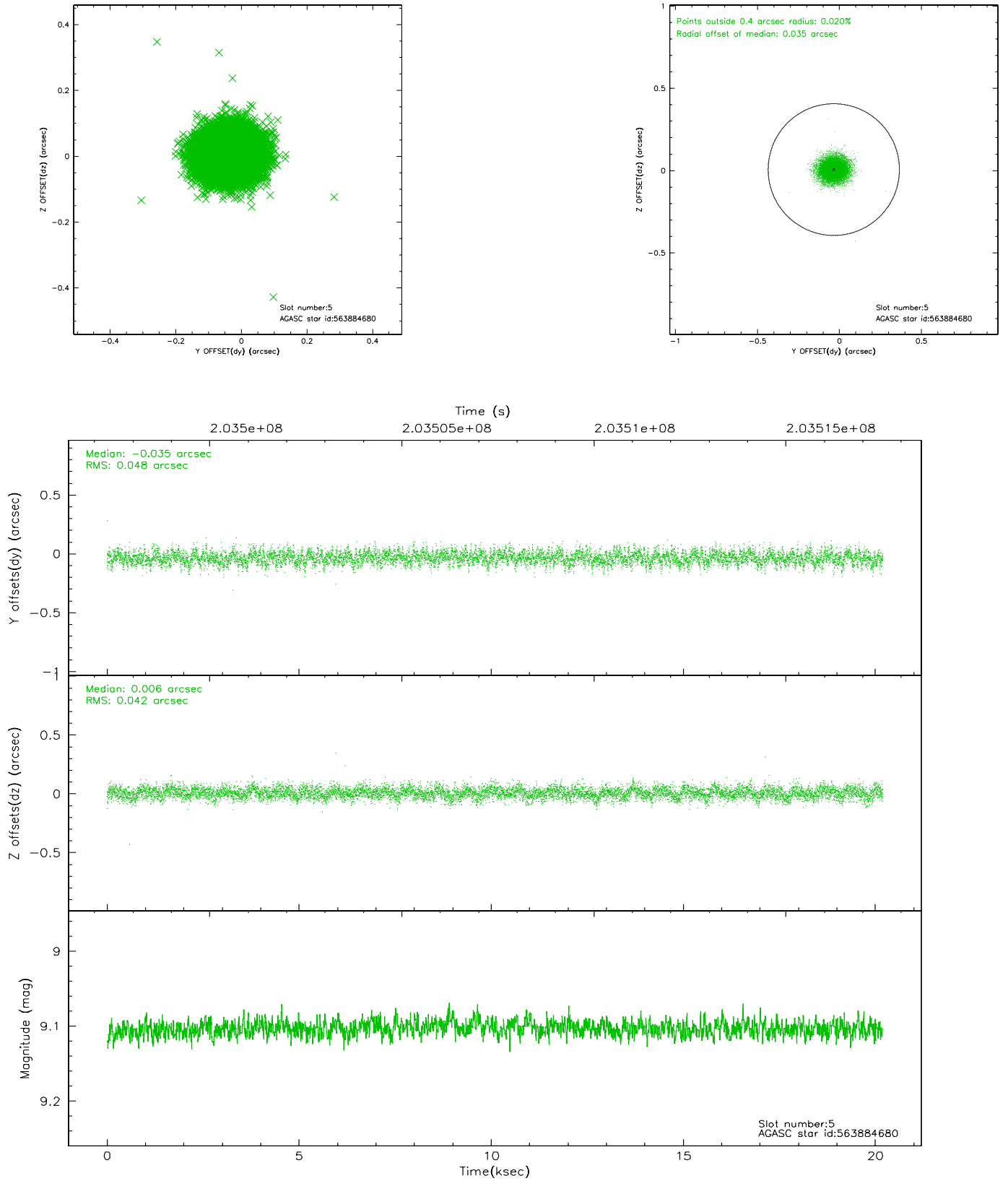
### 2.4.1 Slot 3



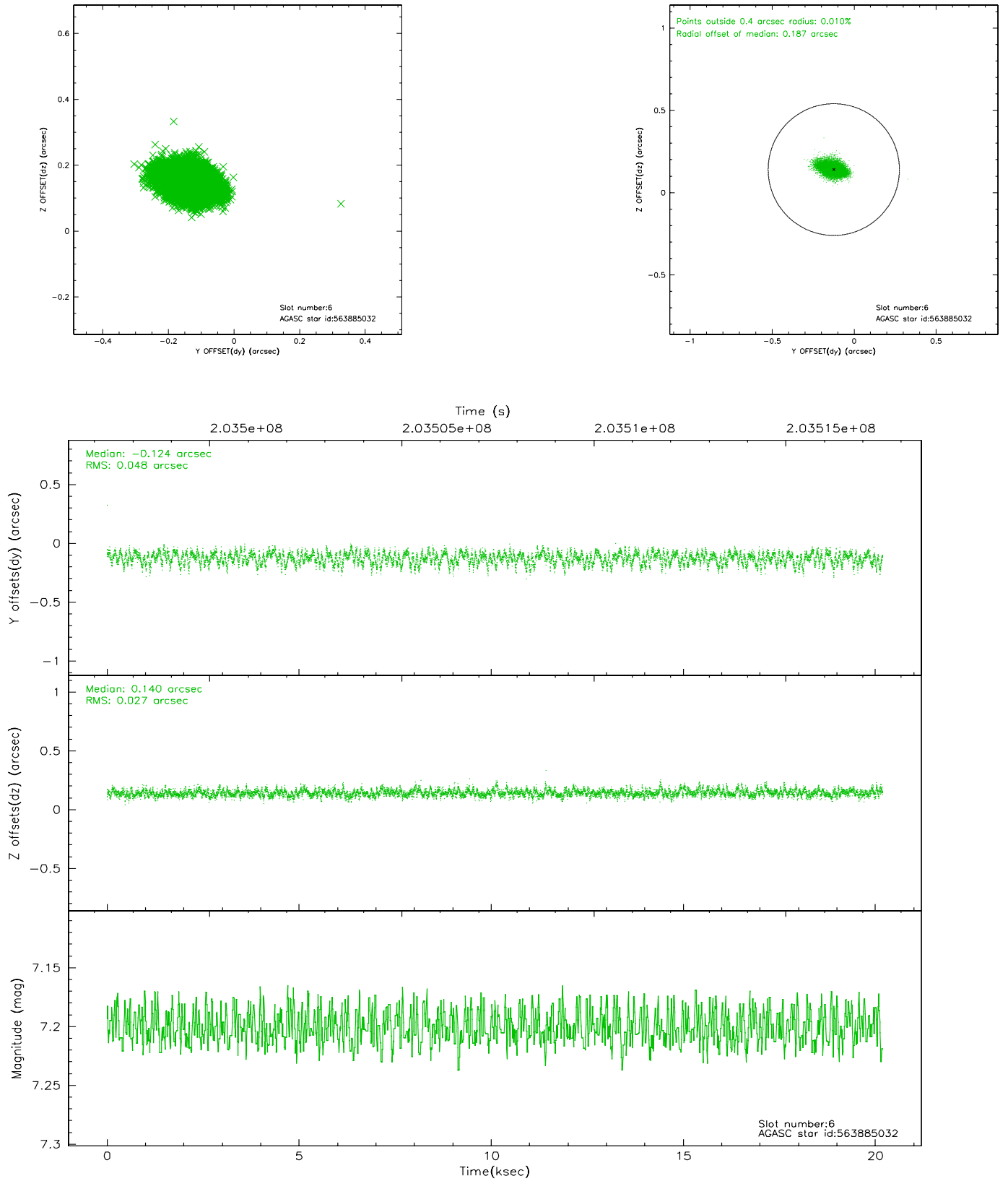
## 2.4.2 Slot 4



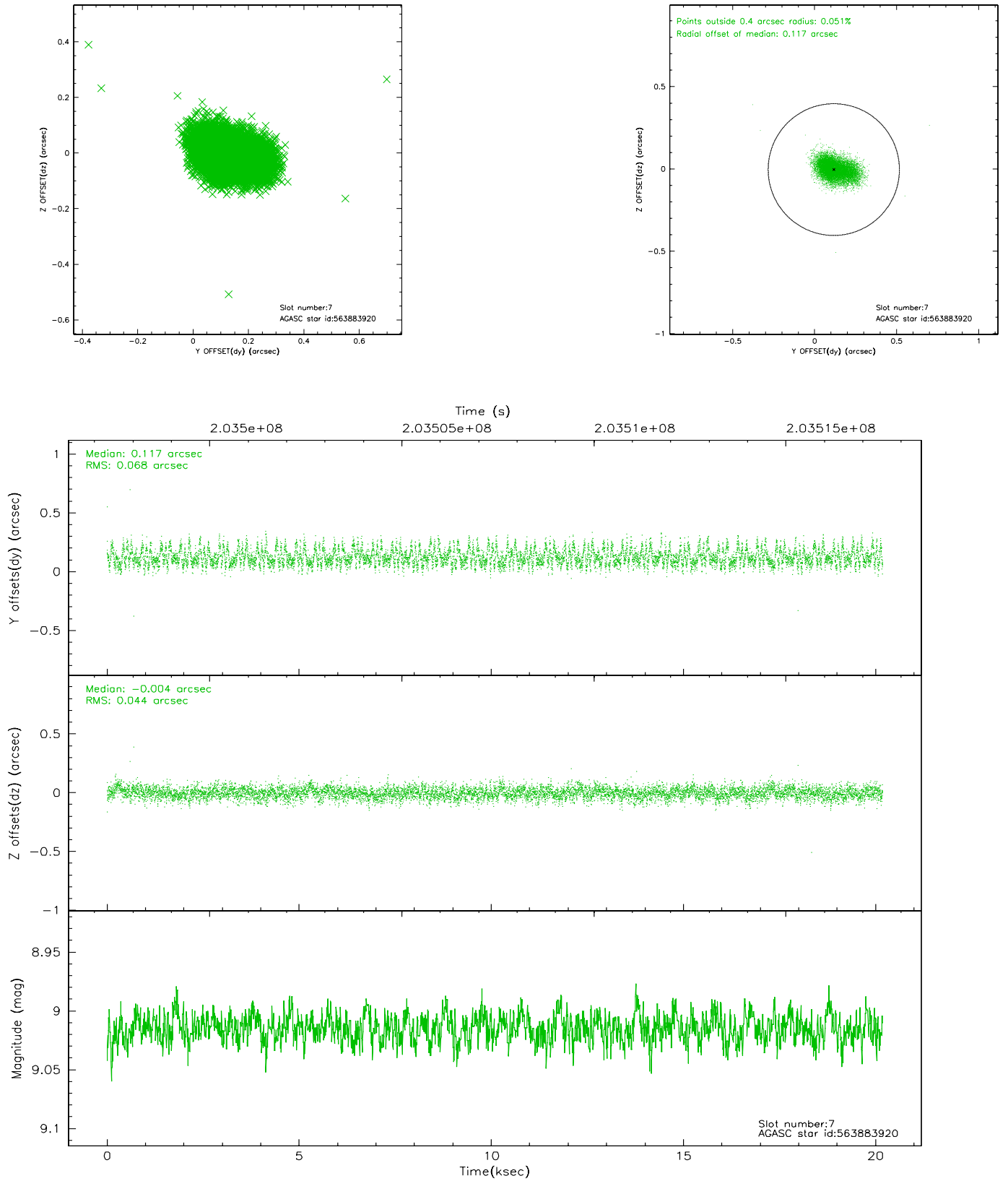
### 2.4.3 Slot 5



## 2.4.4 Slot 6

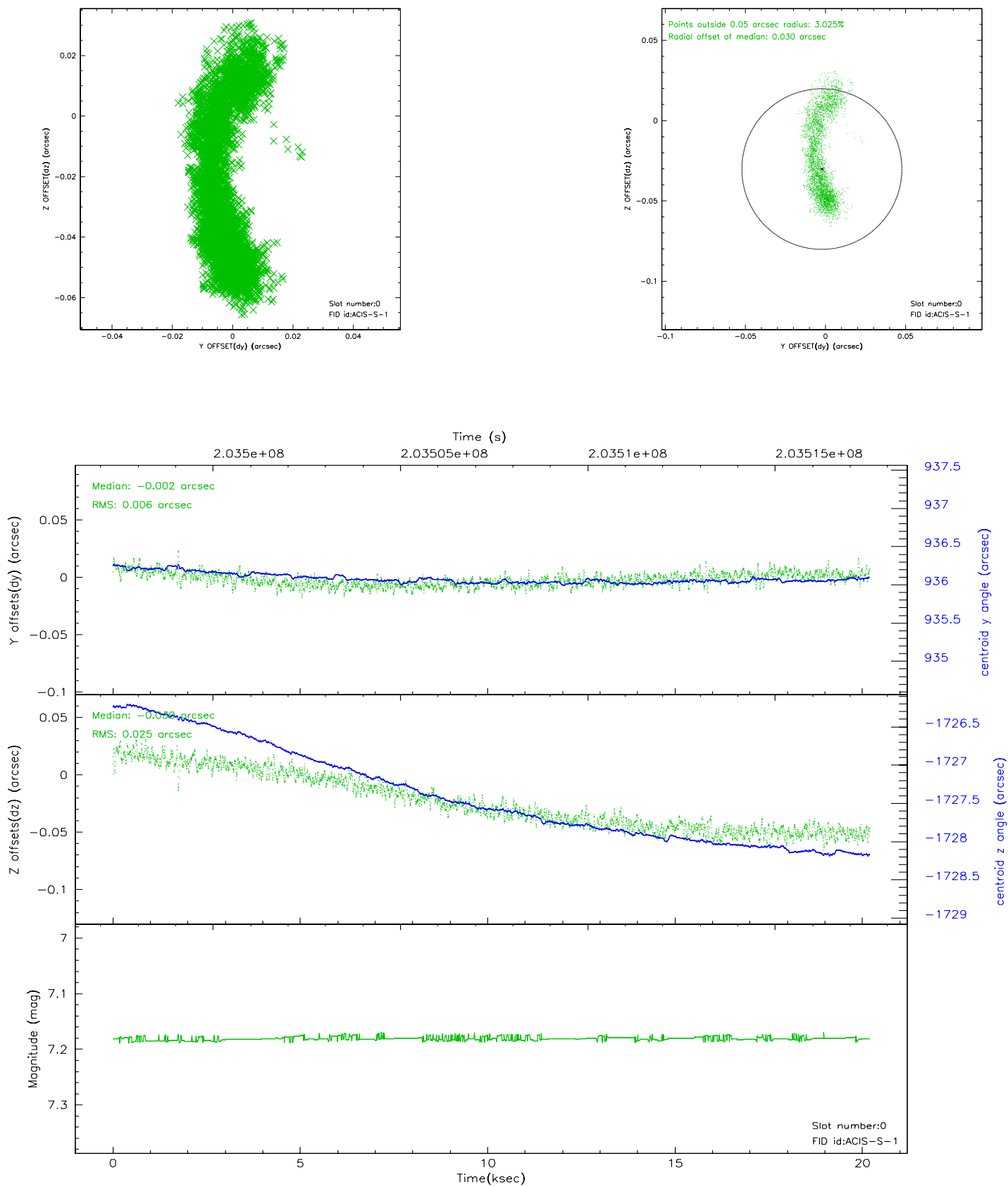


## 2.4.5 Slot 7

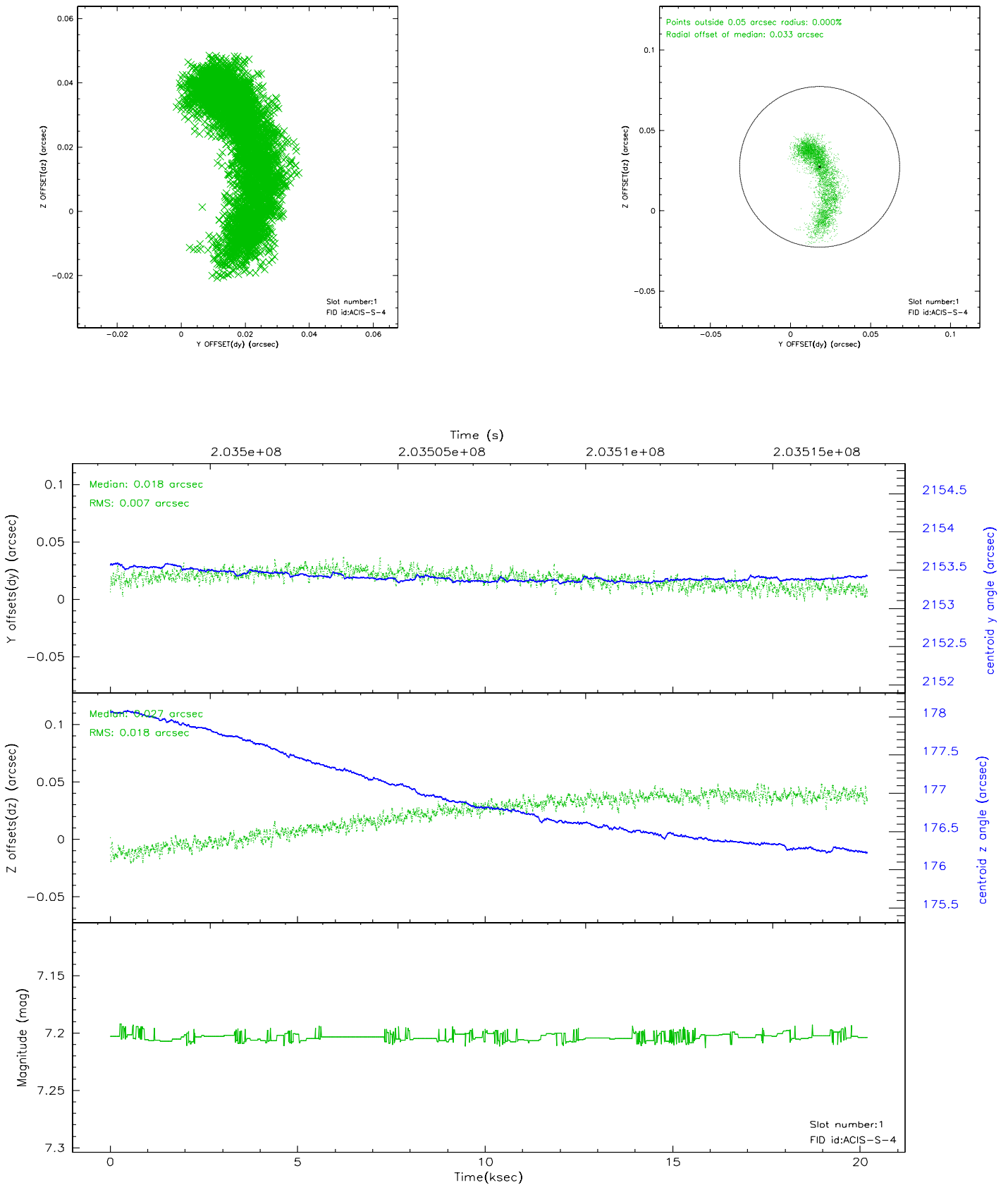


## 2.5 FID Slots

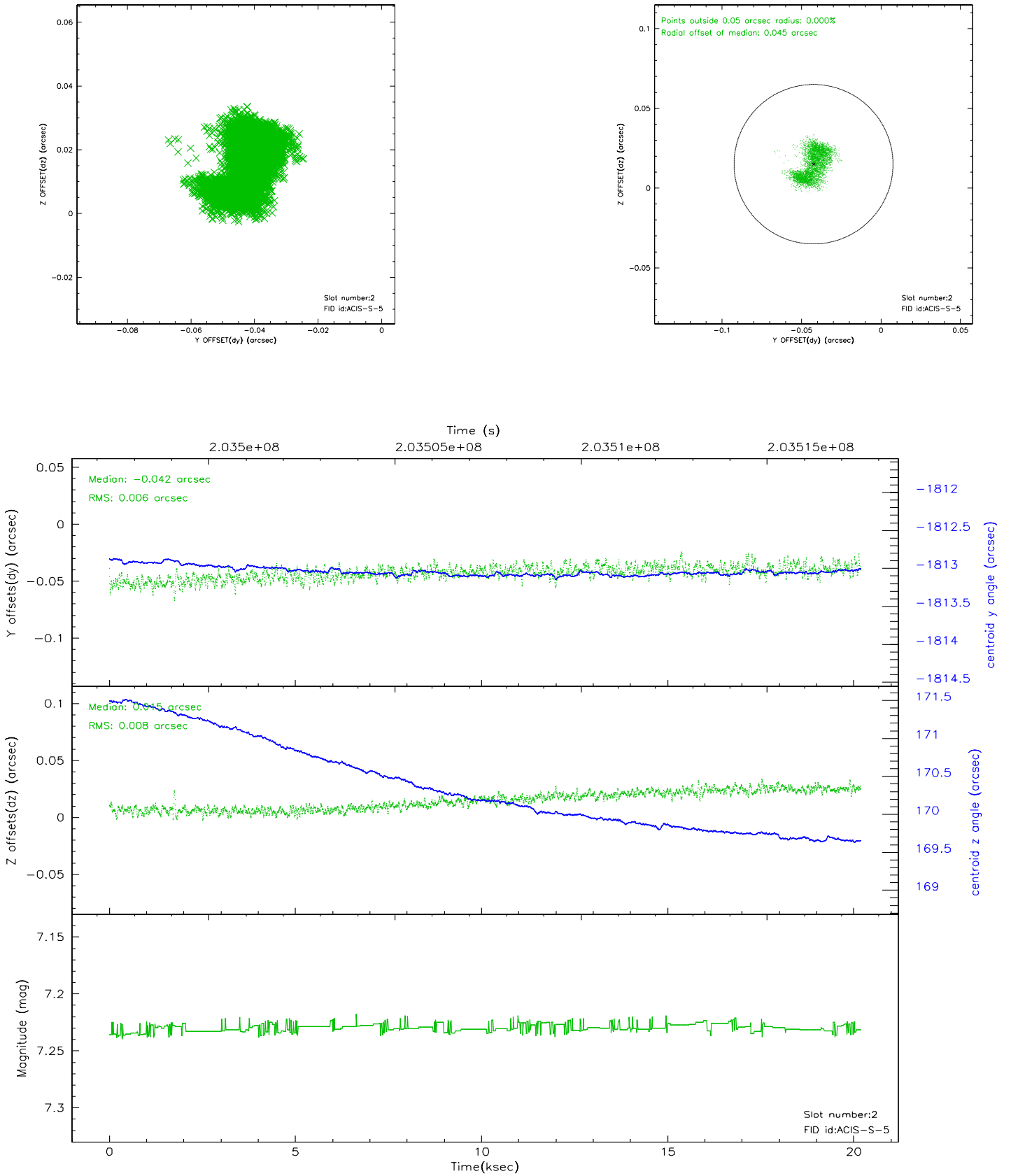
### 2.5.1 Slot 0



## 2.5.2 Slot 1

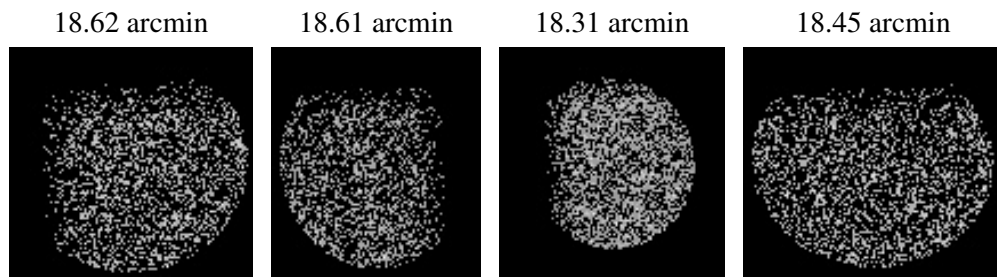


### 2.5.3 Slot 2





### 3 Point Sources



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2006.05.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.143

### A.2 Comments