

# V&V Reference Report

## L2 ASCDS Version : 7.6.8

Observation 3589 - L2 Version 001  
Chandra X-Ray Center

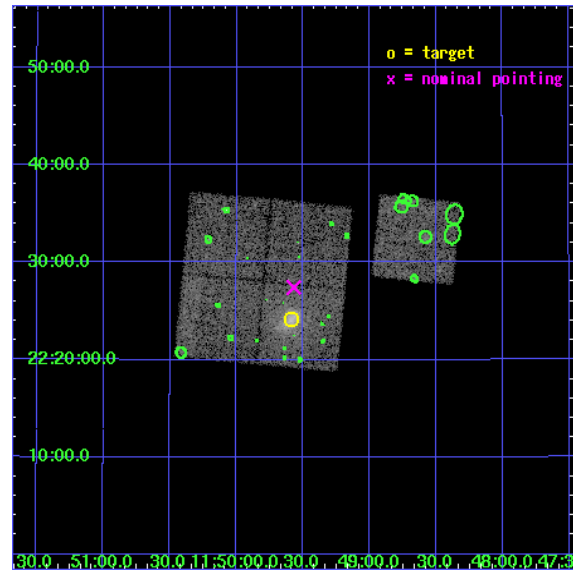
L2 Processing Date : Jul 20 2006

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# 1 Front

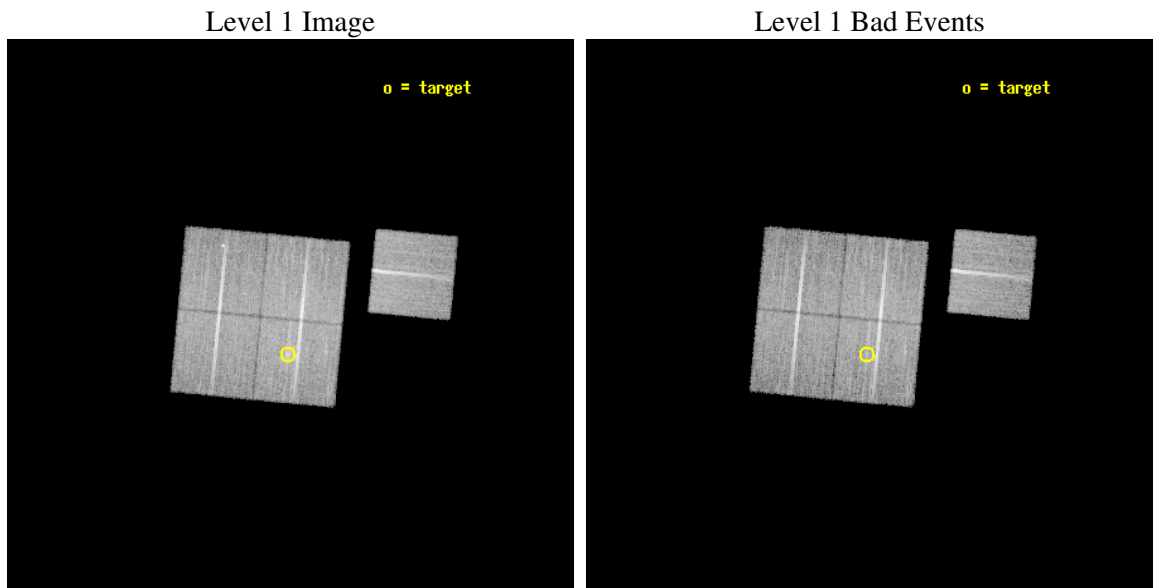
seq_num	800310
obs_id	3589
title	X-RAY/SZ DETERMINATION OF COSMOLOGICAL PARAMETERS
observer	DR. LEON VANSPEYBROECK
object	MACS-J1149.5+2223
dtcycle	0
cycle	P
ra_targ	177.395833
dec_targ	22.403
ra_nom	177.39234568207
dec_nom	22.457185768683
roll_nom	95.493824805597
revision	3
ontime	20314.258980691
livetime	20048.838231969
ontime0	20311.117990464
ontime1	20317.399960935
ontime2	20311.117970645
ontime3	20314.258980691
ontime6	20317.399960935
l2events	52856



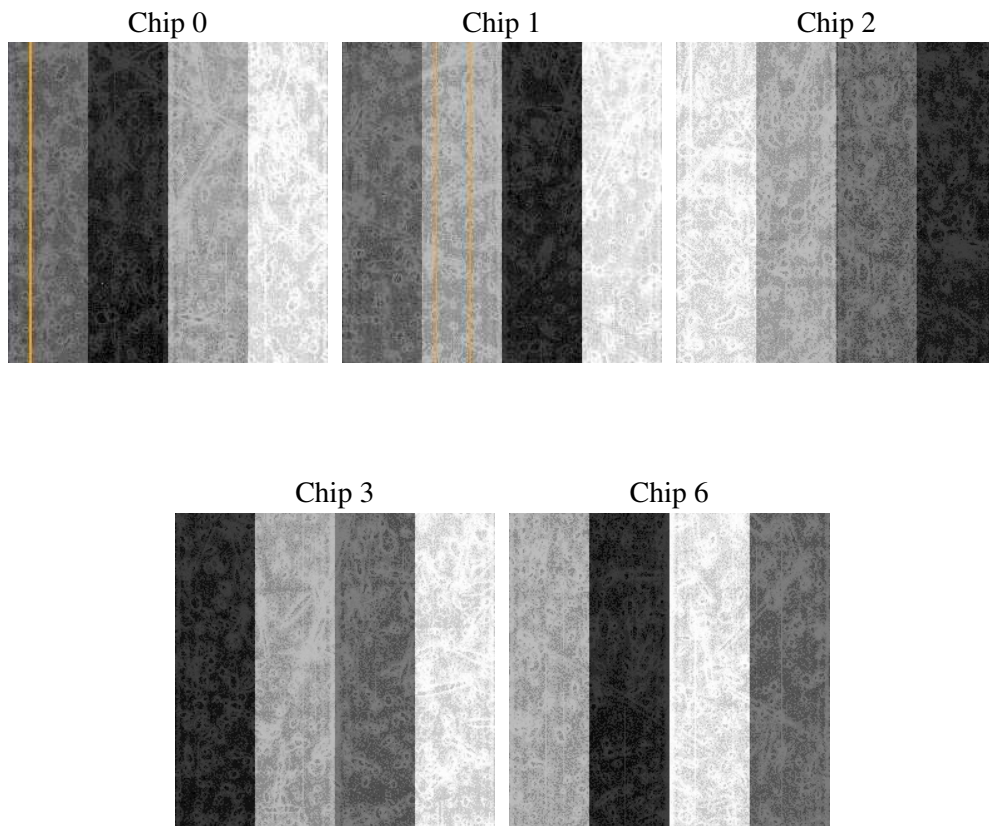
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.8
caldsver	3.2.2
date	2006-07-20T22:39:30
revision	3

sched_exp_time	20200.000000
ontime	20319.189643204
ontime0	20316.048712701
ontime1	20322.330623448
ontime2	20316.048603356
ontime3	20319.189643204
ontime6	20322.330613524
l1events	568188

### 2.1.4 Events

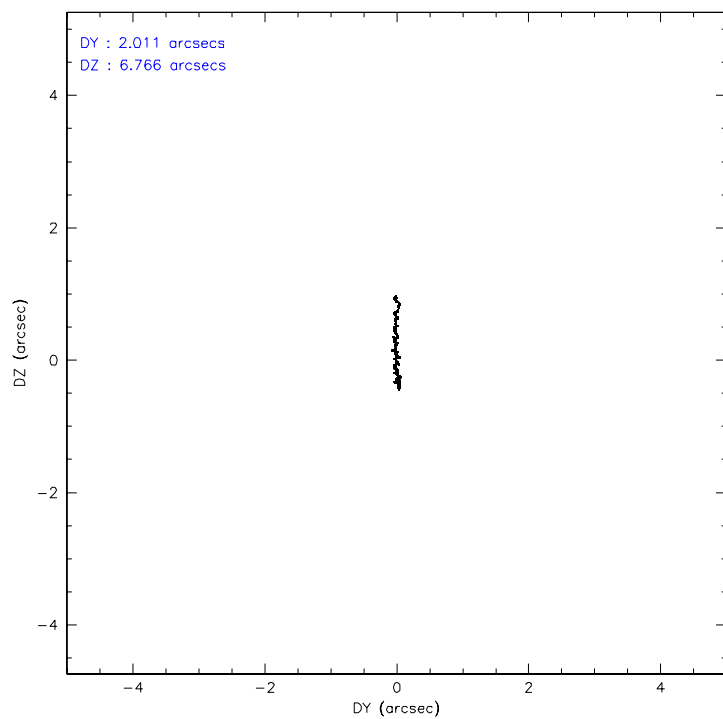
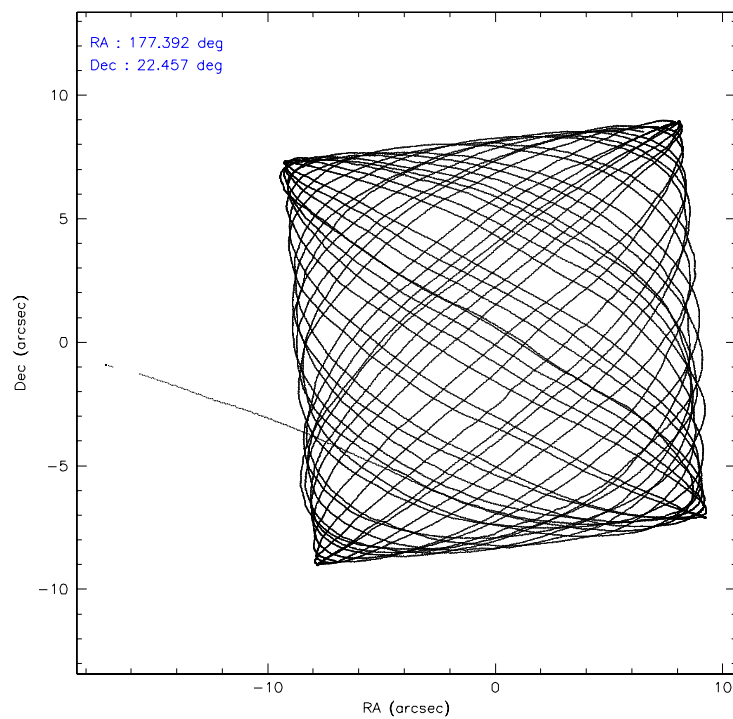
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	105826	106459	122198	121477	112228
rejected events	94485	94117	111277	105105	100845
rejected %	89%	88%	91%	86%	89%

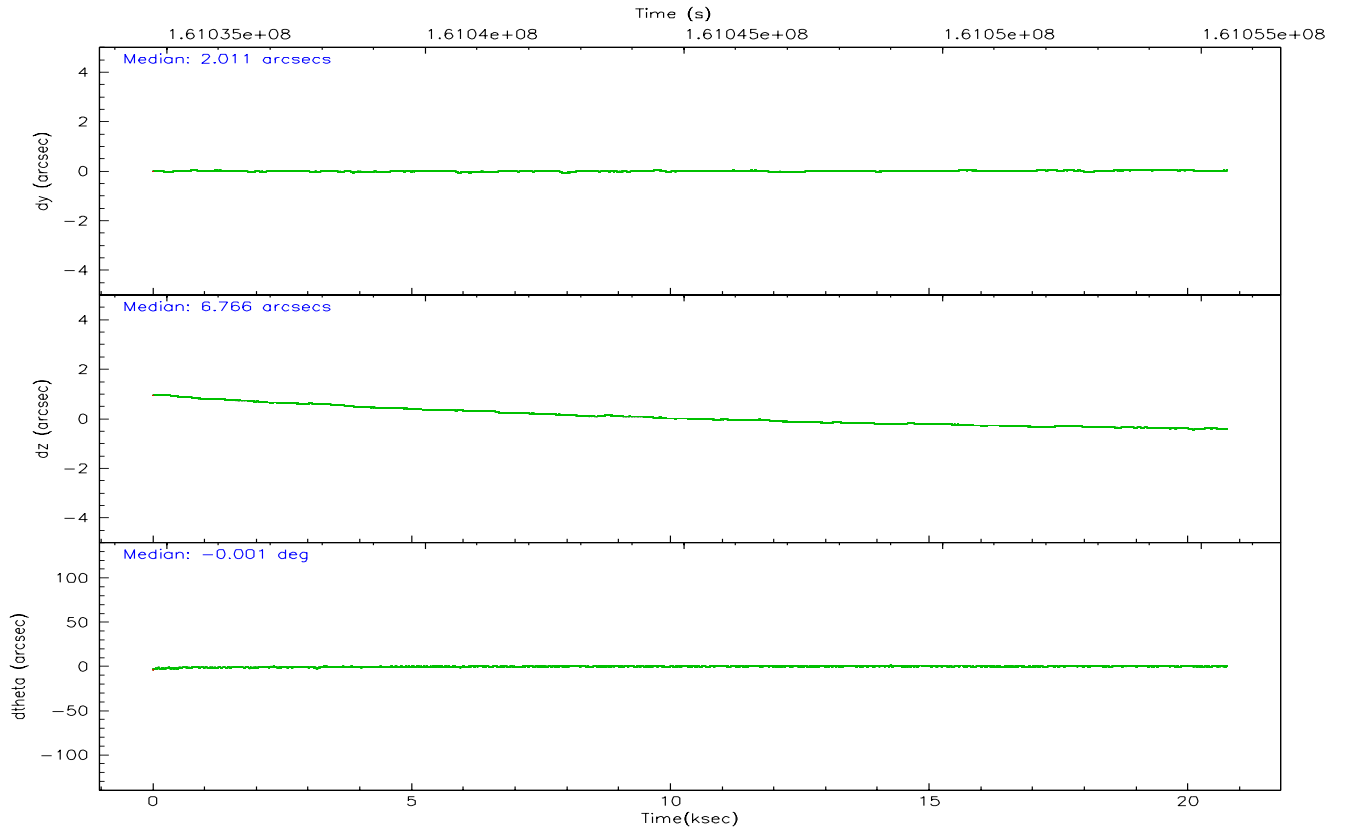
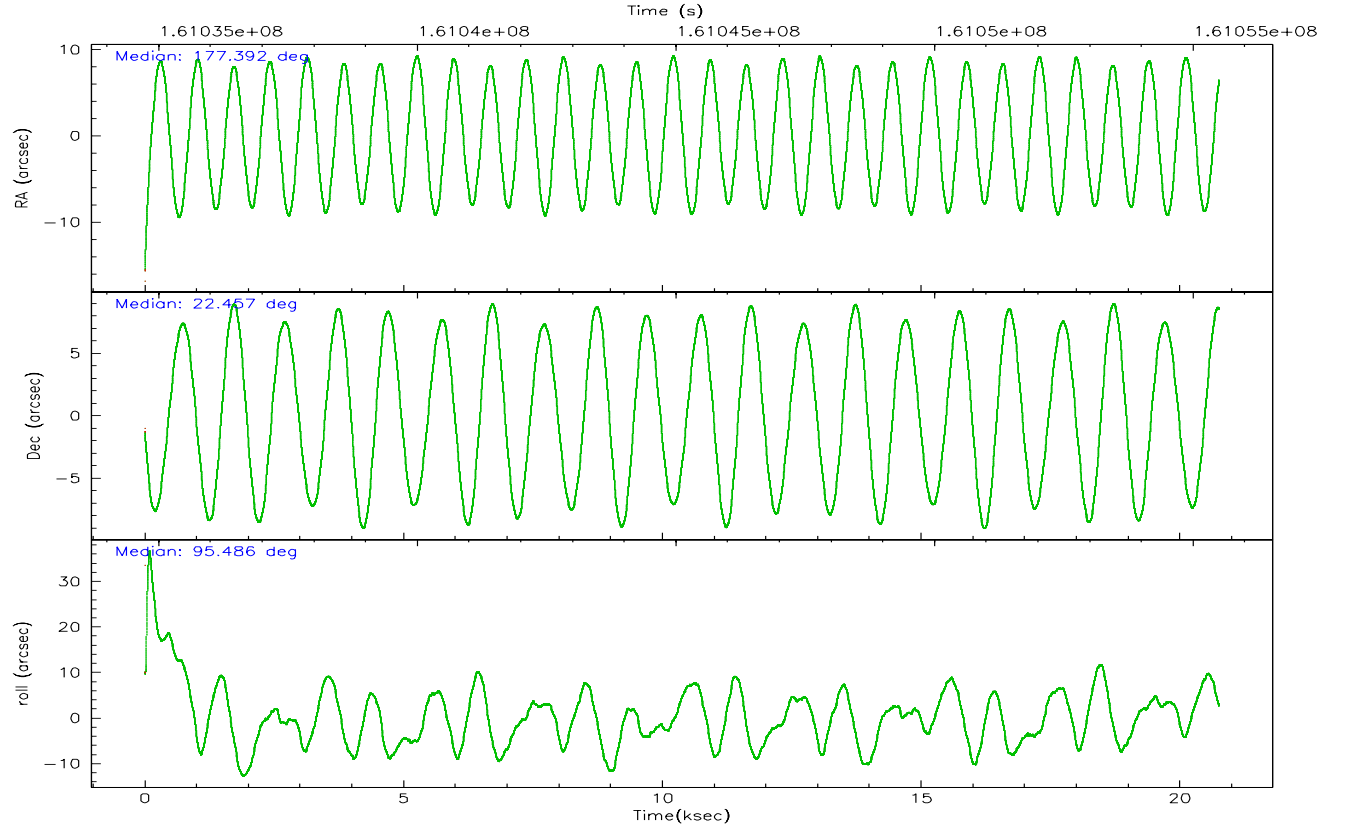
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	4256	4539	4051	8653	4163
	4%	4%	3%	7%	3%
grade 1 events	53	50	48	80	43
	0%	0%	0%	0%	0%
grade 2 events	2488	2613	2457	2772	2345
	2%	2%	2%	2%	2%
grade 3 events	1282	1427	1242	1406	1257
	1%	1%	1%	1%	1%
grade 4 events	1232	1402	1203	1374	1275
	1%	1%	0%	1%	1%
grade 5 events	3852	4032	3696	4255	4267
	3%	3%	3%	3%	3%
grade 6 events	2084	2365	1970	2174	2343
	1%	2%	1%	1%	2%
grade 7 events	90579	90031	107531	100763	96535
	85%	84%	87%	82%	86%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	NONE	NONE
Pointing RA	177.409655	177.3923456820652	Alternating exposures requested	N	N
Pointing Dec	22.434971	22.45718576868337	Primary exposure time	0.000000	3.1
Pointing Roll	95.278554	95.49382480559672			
SIM focus pos (mm)	-0.782348	-0.7809083437167272			
SIM defocus (mm)	0	0.001439871863259334			
SIM translation stage pos (mm)	-225.840463	-225.8433433320239			
SIM translation stage offset (mm)	-7.752	-7.749109670905796			
Observation start time	161035298.184000	161034154.60414			
Observation start date	2003-02-07T20:00:34	2003-02-07T19:42:34			
Observation end time	161055498.184000	161056157.76757			
Observation end date	2003-02-08T01:37:14	2003-02-08T01:49:17			
Read mode	TIMED	TIMED			

## 2.3 Aspect





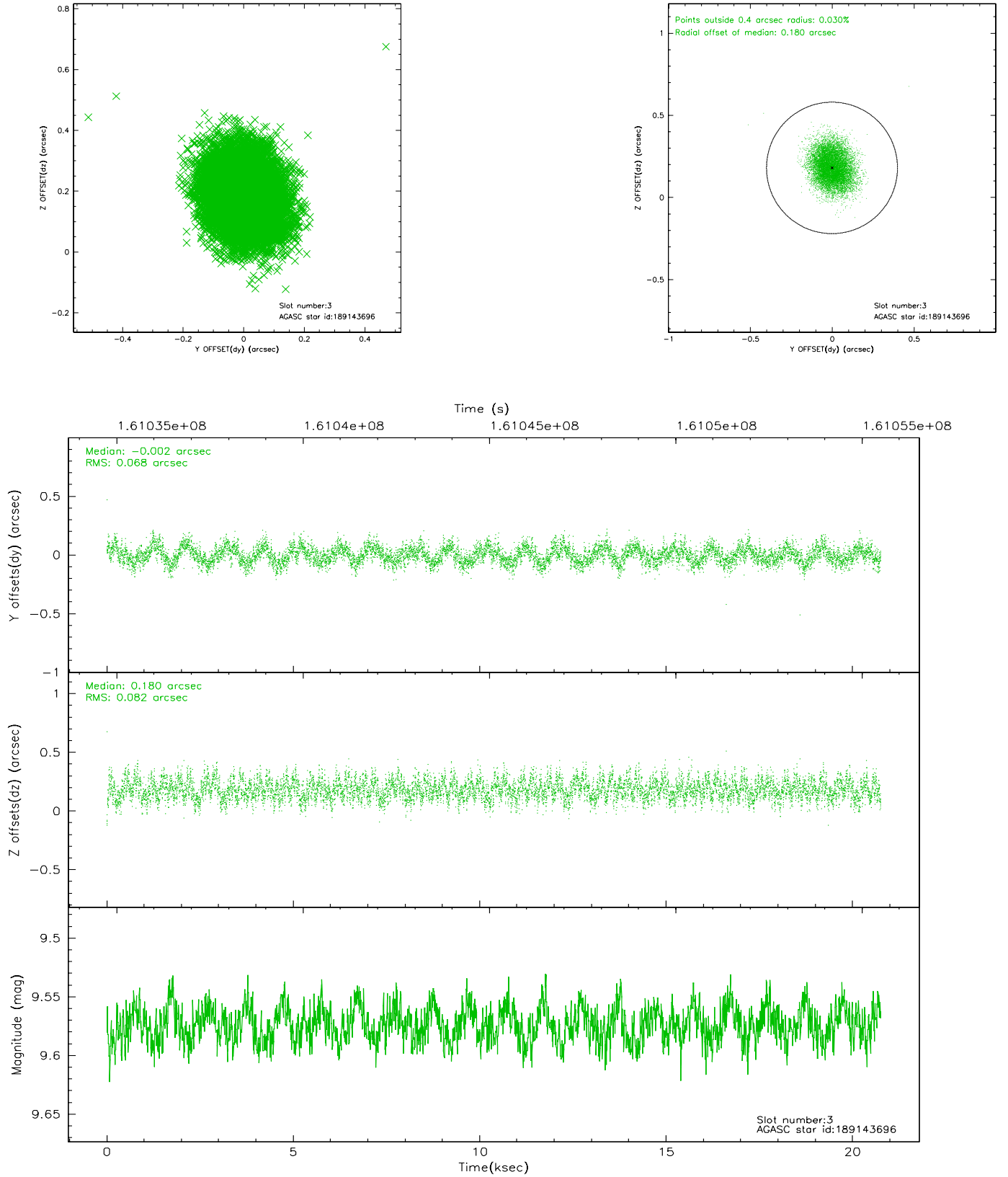
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.23	5064	0.061	-0.024	0.012	0.029	0.000000	0.000000	937.71	-989.36
1	FID	ACIS-I-5	7.23	5063	-0.127	0.090	0.008	0.016	0.000000	0.000000	-1810.46	908.16
2	FID	ACIS-I-6	7.27	5064	-0.025	0.003	0.011	0.017	0.000000	0.000000	403.01	1552.75
3	GUIDE	189143696	9.57	10121	-0.002	0.180	0.114	0.179	178.041363	22.456622	-110.81	-2099.89
4	GUIDE	189147384	9.74	10038	0.045	0.156	0.124	0.193	177.889709	22.114499	-1293.03	-1488.46
5	GUIDE	189148592	9.37	10059	0.098	-0.110	0.090	0.150	177.434258	22.088632	-1248.86	32.77
6	GUIDE	260186640	9.83	10103	-0.105	-0.071	0.178	0.279	176.898277	22.985190	2131.09	1505.58
7	GUIDE	189148400	9.59	10114	-0.026	-0.157	0.105	0.168	176.690054	22.445682	264.68	2380.31

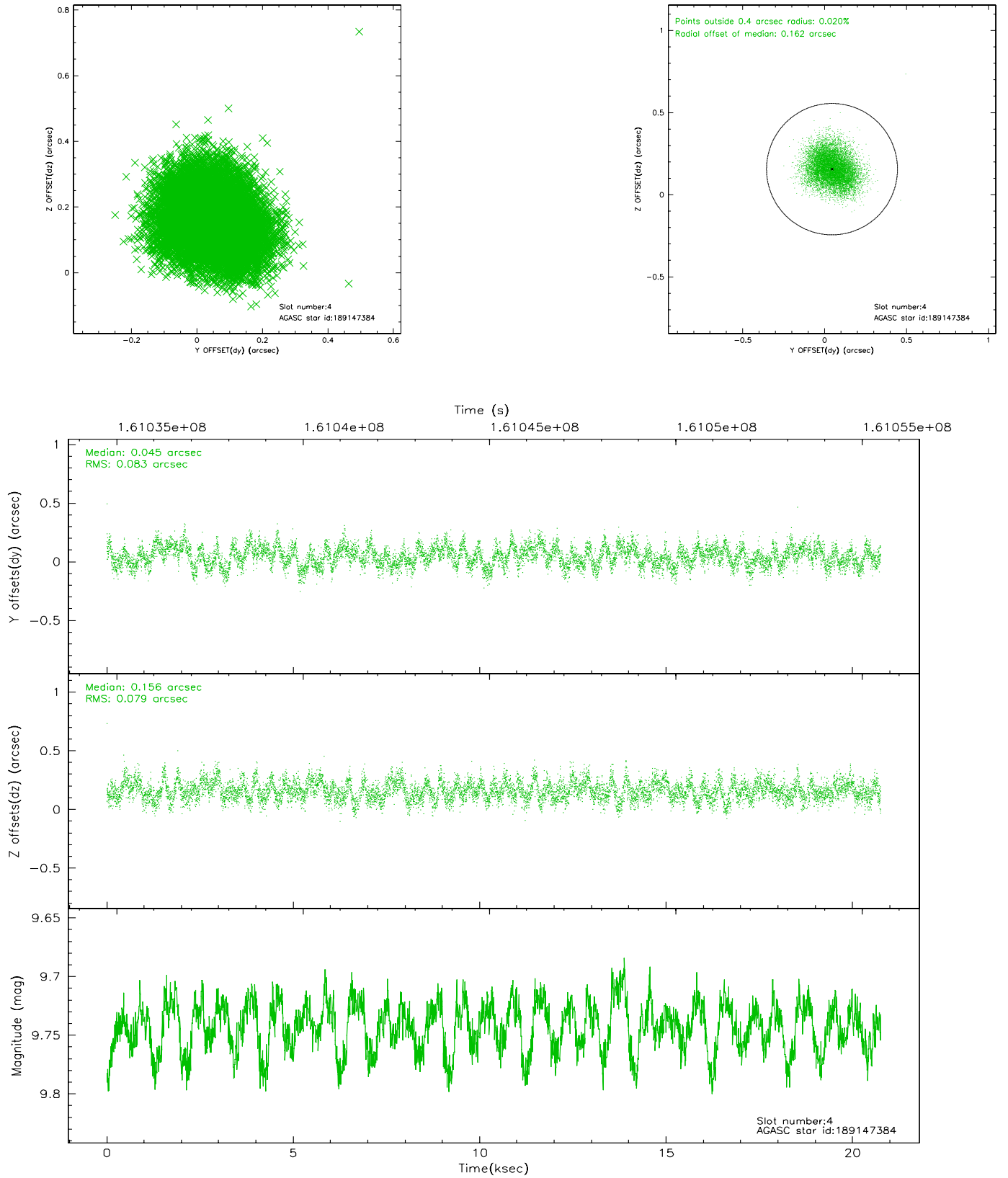


## 2.4 Star Slots

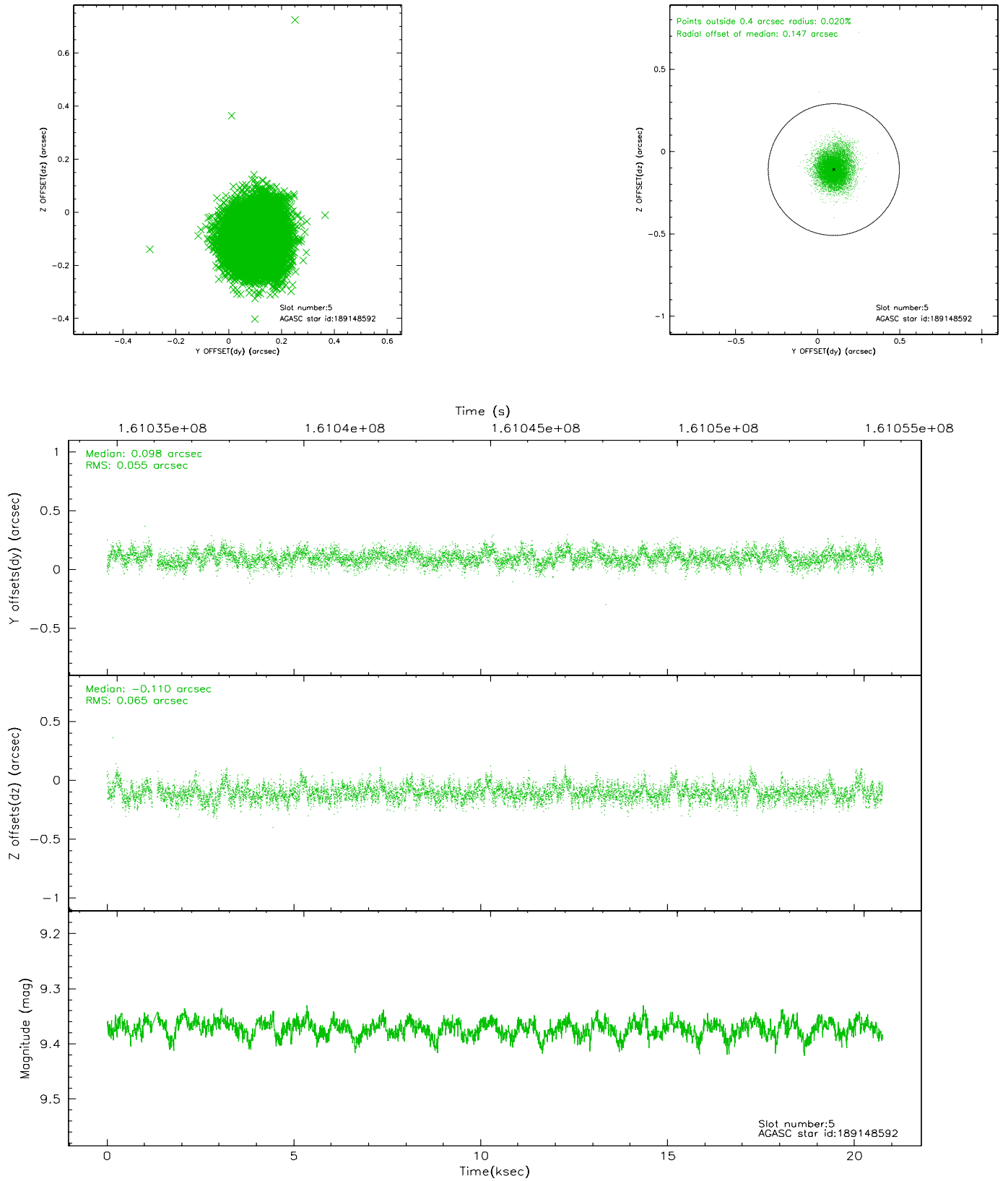
### 2.4.1 Slot 3



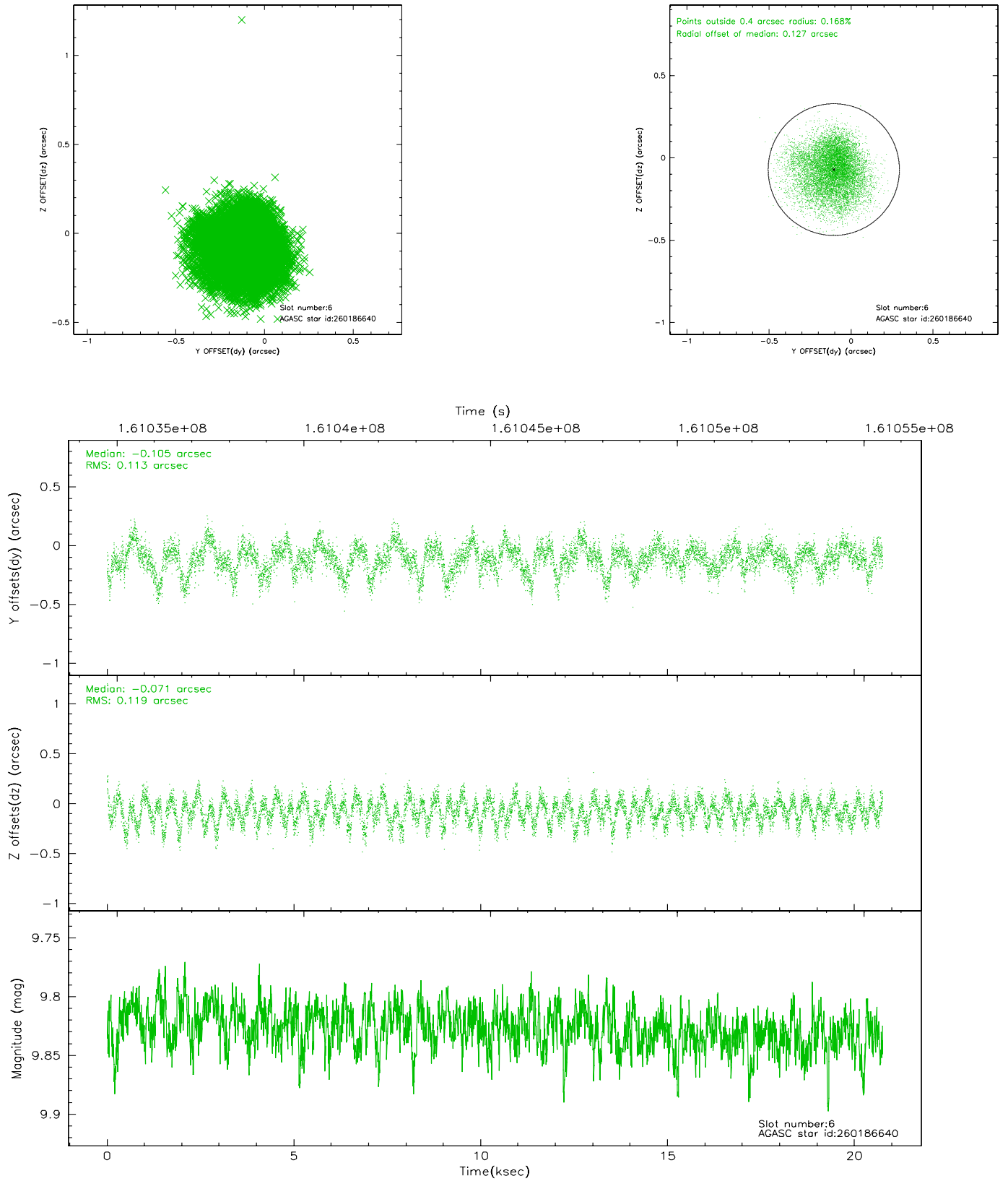
## 2.4.2 Slot 4



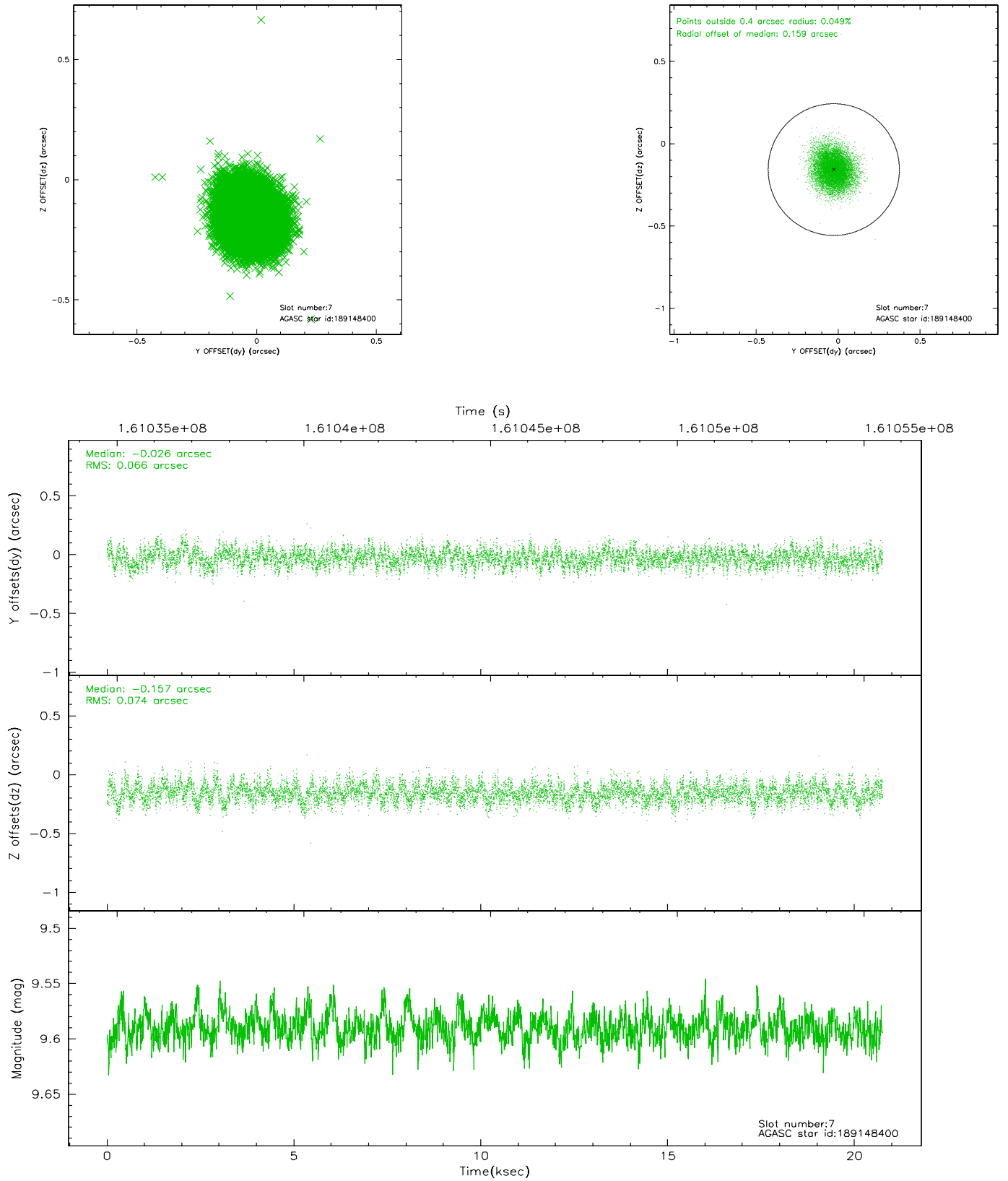
### 2.4.3 Slot 5



## 2.4.4 Slot 6

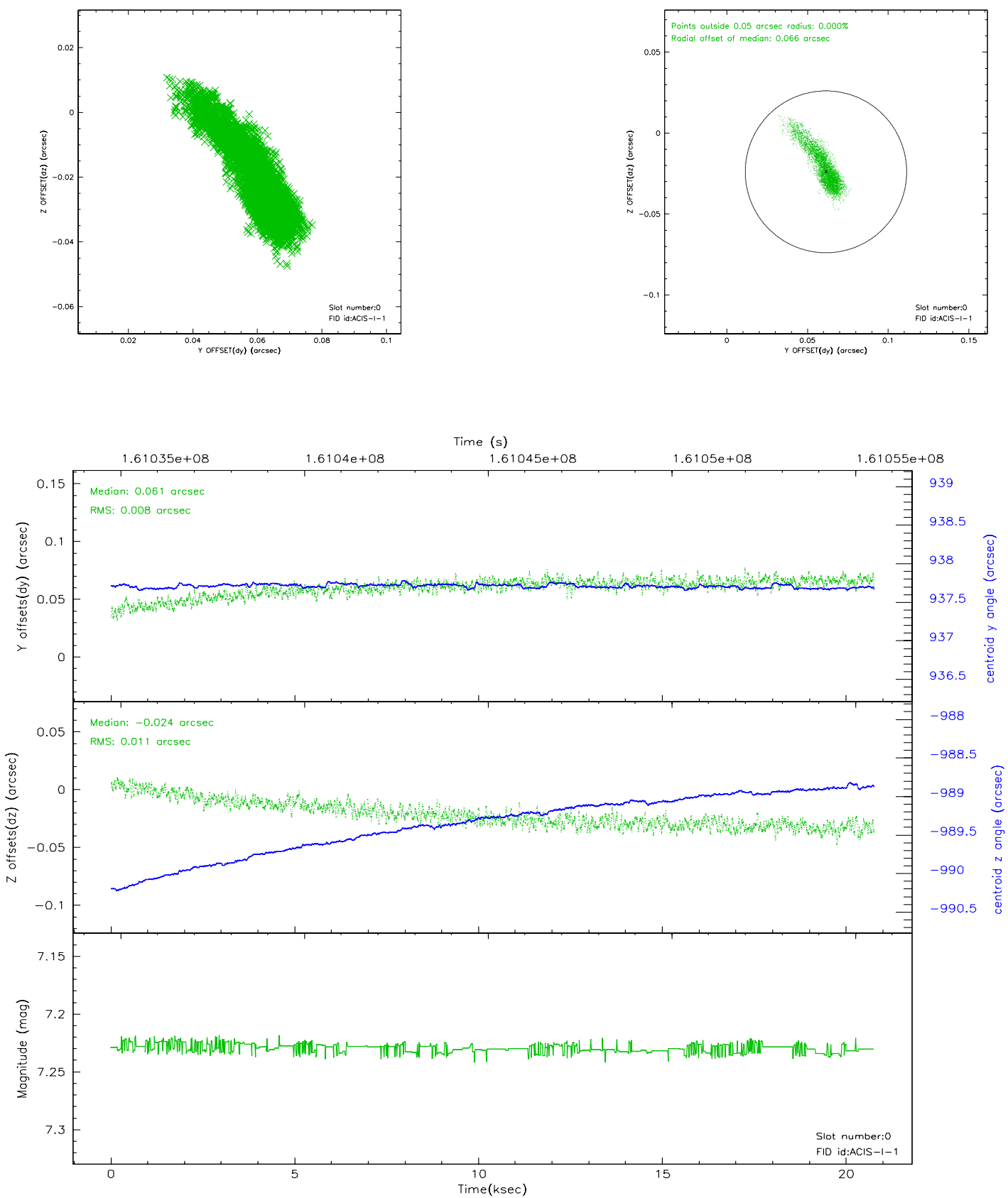


## 2.4.5 Slot 7

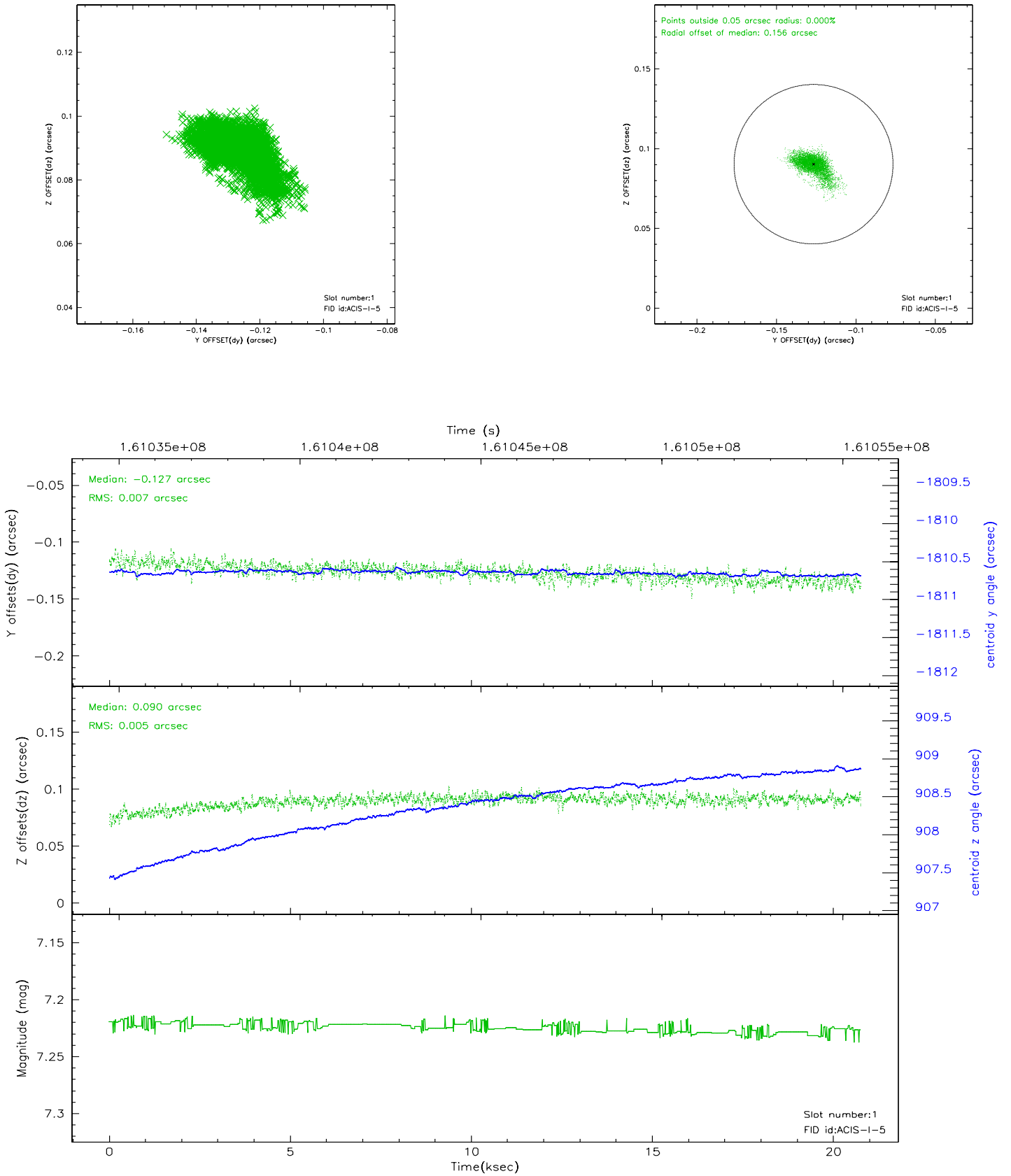


## 2.5 FID Slots

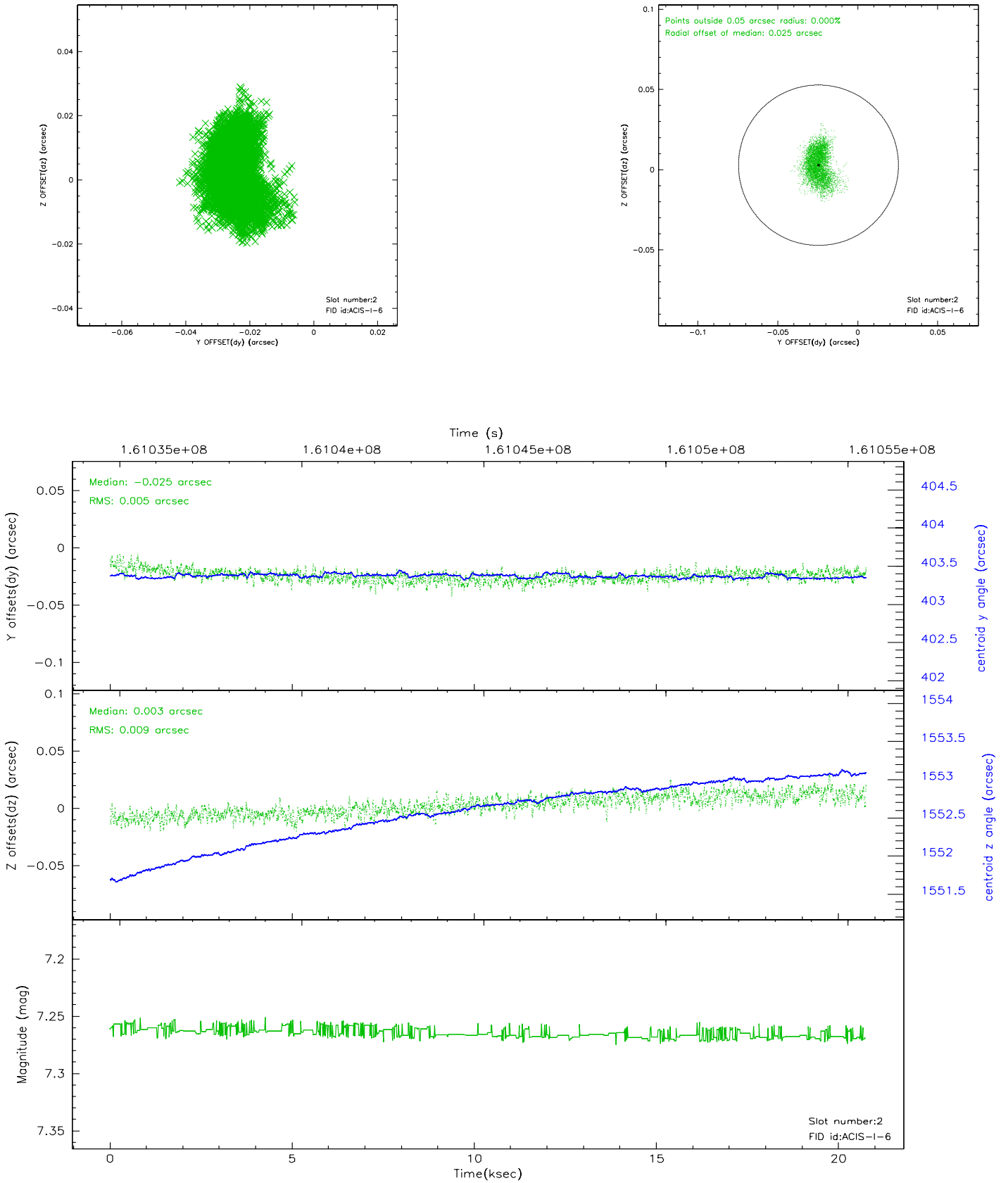
### 2.5.1 Slot 0



## 2.5.2 Slot 1

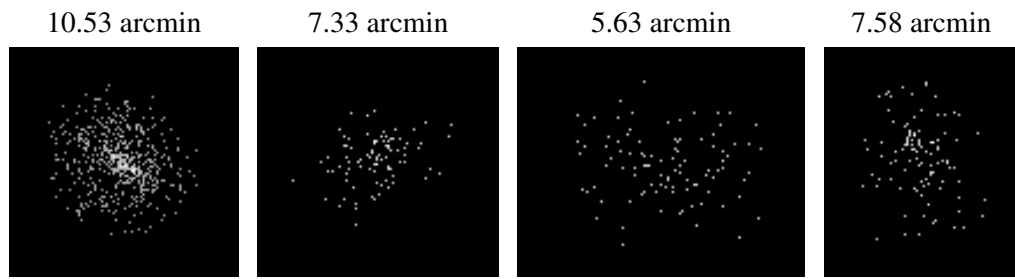


### 2.5.3 Slot 2





### 3 Point Sources



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.07.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.314

## A.2 Comments

Focal plane temperature is warmer than -188.7 degrees C during the last ksec of the observation. The ACIS spectral response calibration is less accurate at these warmer temperatures. The ACIS spectral response calibration is less accurate for the front-illuminated chips at these warmer temperatures than it is at -119.7 C.

The back illuminated chips are not affected in this observation. Users whose science objectives depend on the most accurate spectral response (ie: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.