

# V&V Reference Report

## L2 ASCDS Version : 7.6.10

Observation 1803 - L2 Version 4  
Chandra X-Ray Center

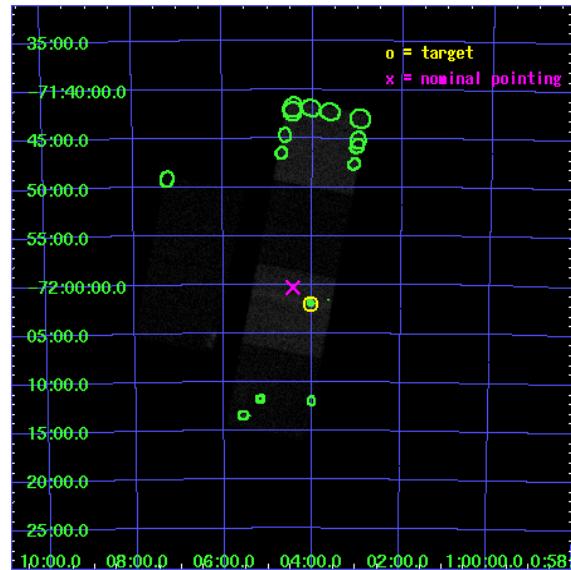
L2 Processing Date : Nov 20 2008

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# 1 Front

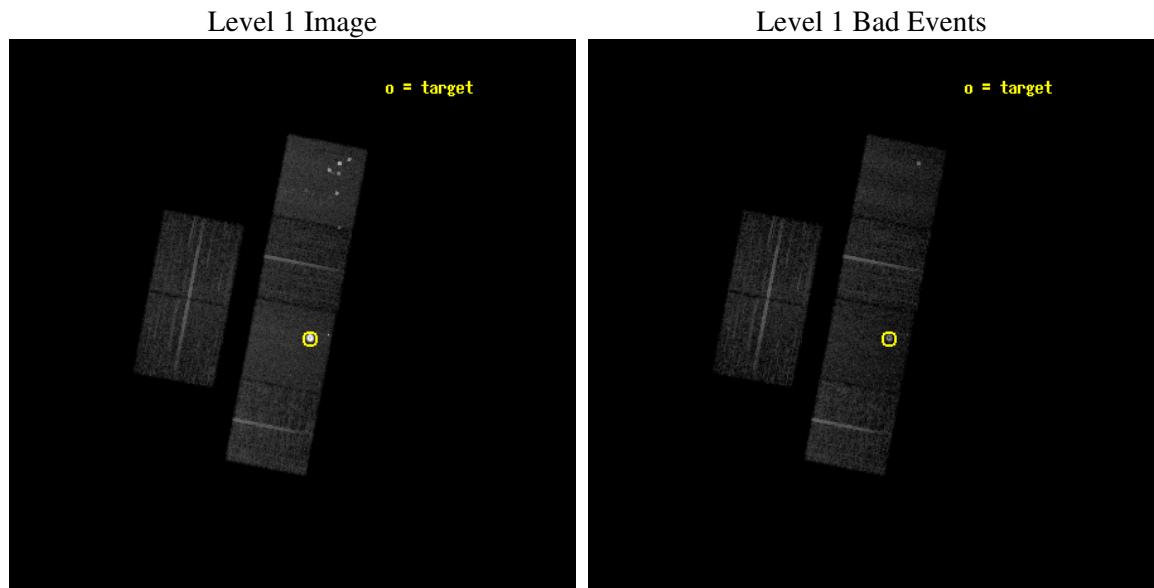
seq_num	590216
obs_id	1803
title	ACIS CHIP RESPONSE TO LINES WITH E=0.6-1.5 KEV
observer	Dr. CXC Calibration
object	E0102-72.3 [Chip S3, T=110, Offsets=-1,2,0]
dtycycle	0
cycle	P
ra_targ	16.01
dec_targ	-72.032028
ra_nom	16.108841744081
dec_nom	-72.004842806414
roll_nom	101.04047943542
revision	4
ontime	8083.2000075281
livetime	7980.845661914
ontime2	8083.2000075281
ontime3	8083.2000075281
ontime5	8083.2000075281
ontime6	8083.2000075281
ontime7	8083.2000075281
ontime8	8083.2000075281
l2events	146795



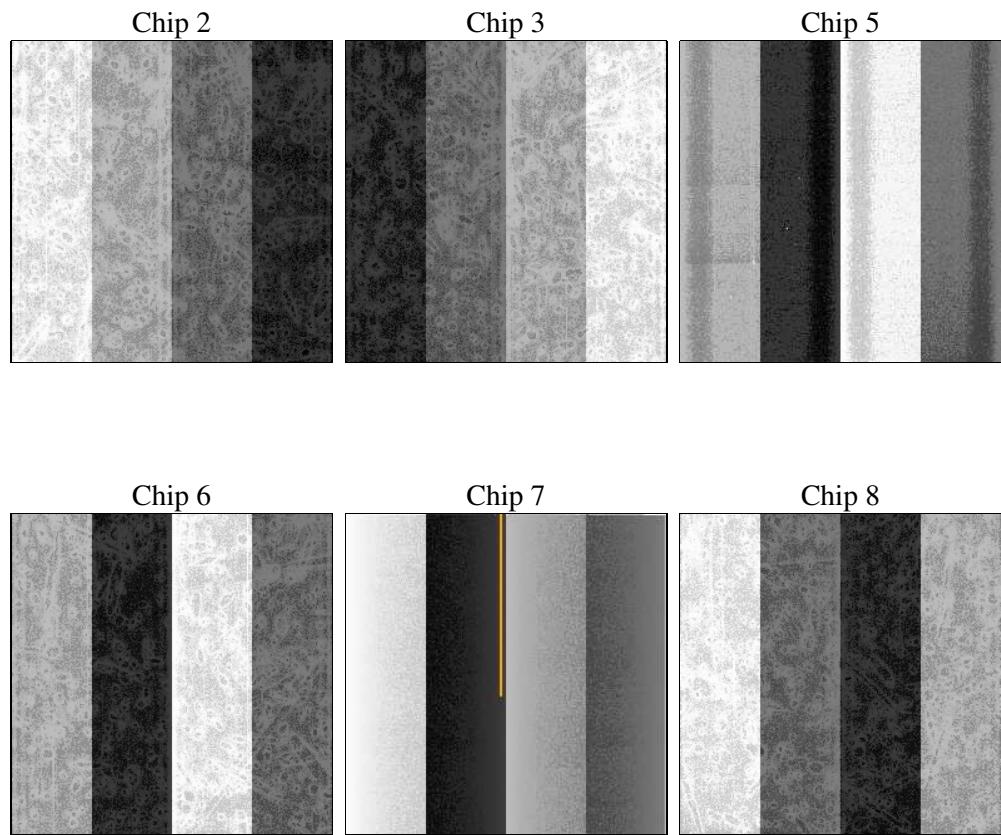
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.11.9
caldbver	3.5.0
date	2008-11-20T15:05:40
revision	4

sched_exp_time	7920.000000
ontime	8083.2000075281
ontime2	8083.2000075281
ontime3	8083.2000075281
ontime5	8083.2000075281
ontime6	8083.2000075281
ontime7	8083.2000075281
ontime8	8083.2000075281
l1events	488438

### 2.1.4 Events

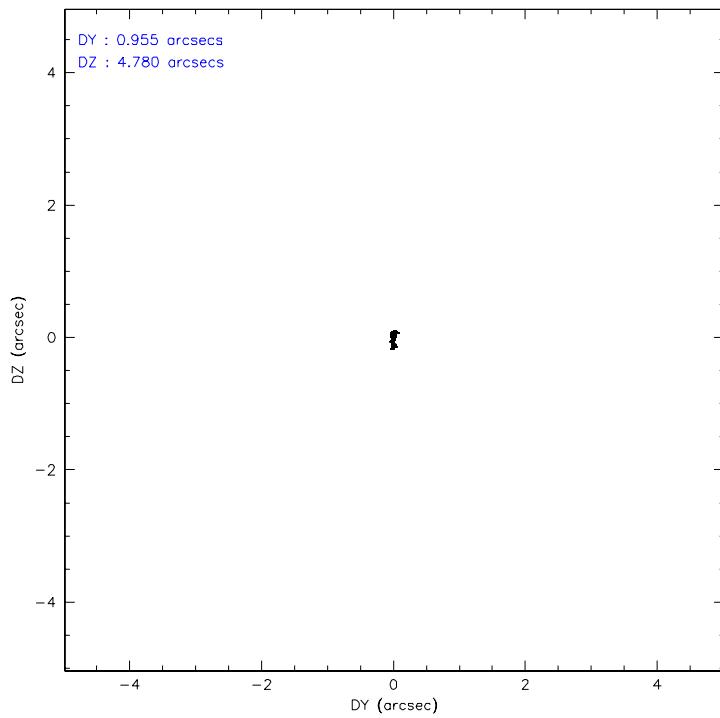
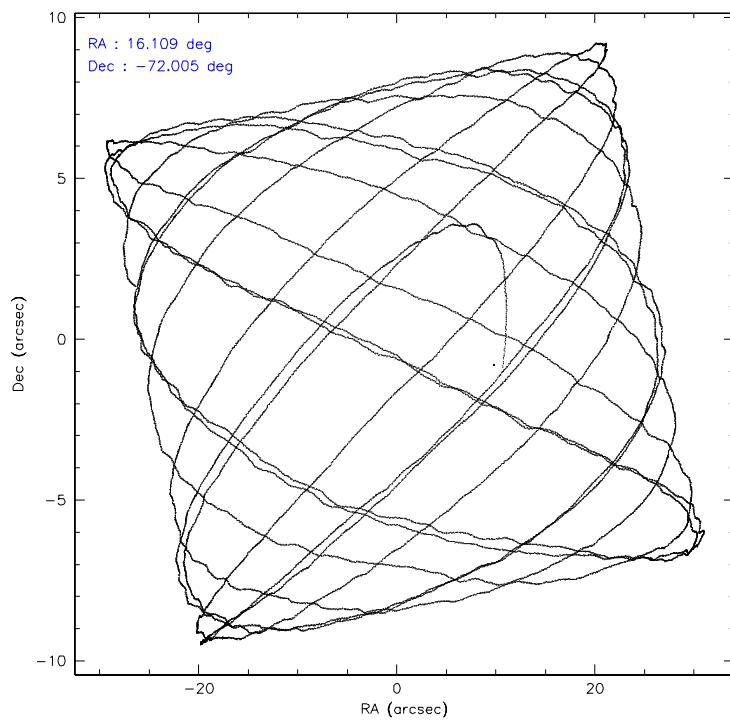
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	61907	58787	88055	59917	146410	73362
rejected events	56605	52866	49215	54063	48562	61080
rejected %	91%	89%	55%	90%	33%	83%

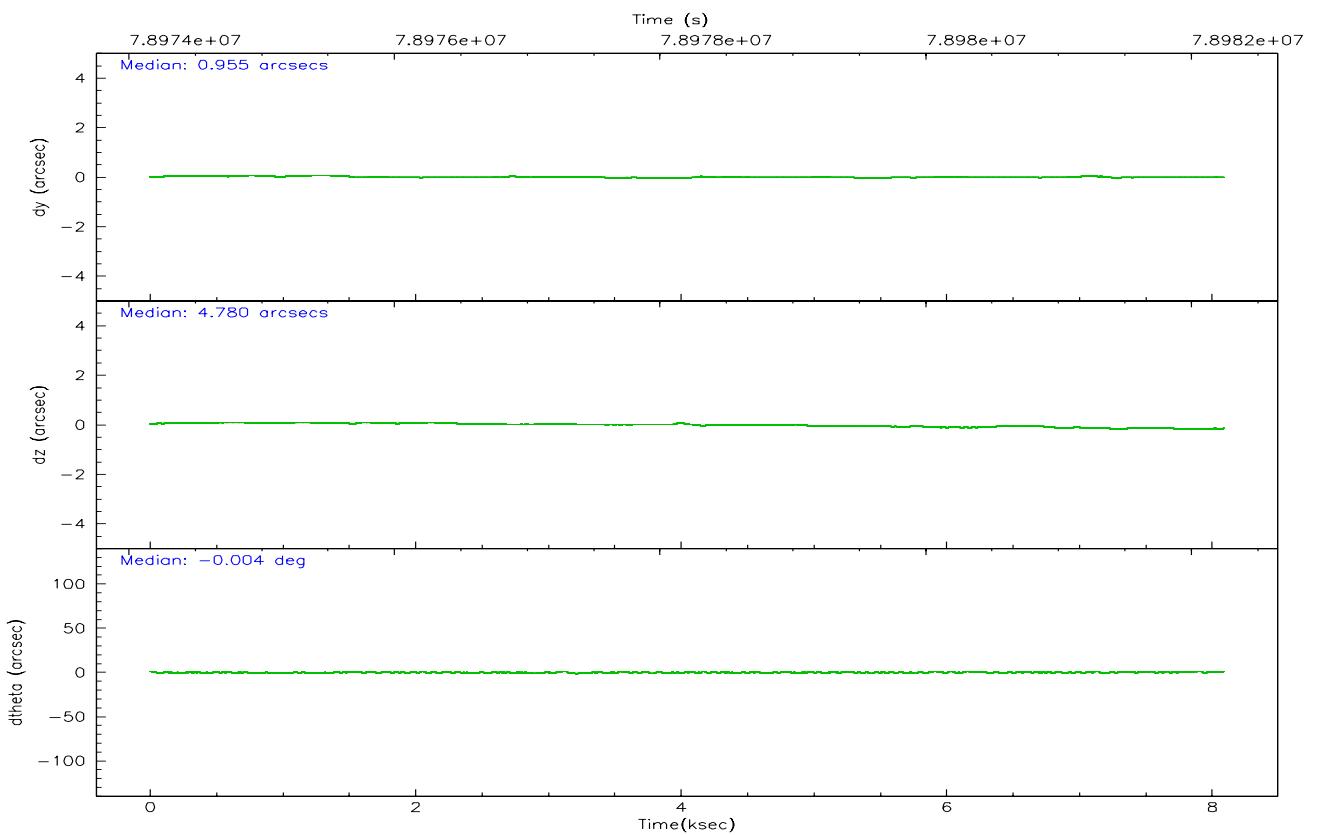
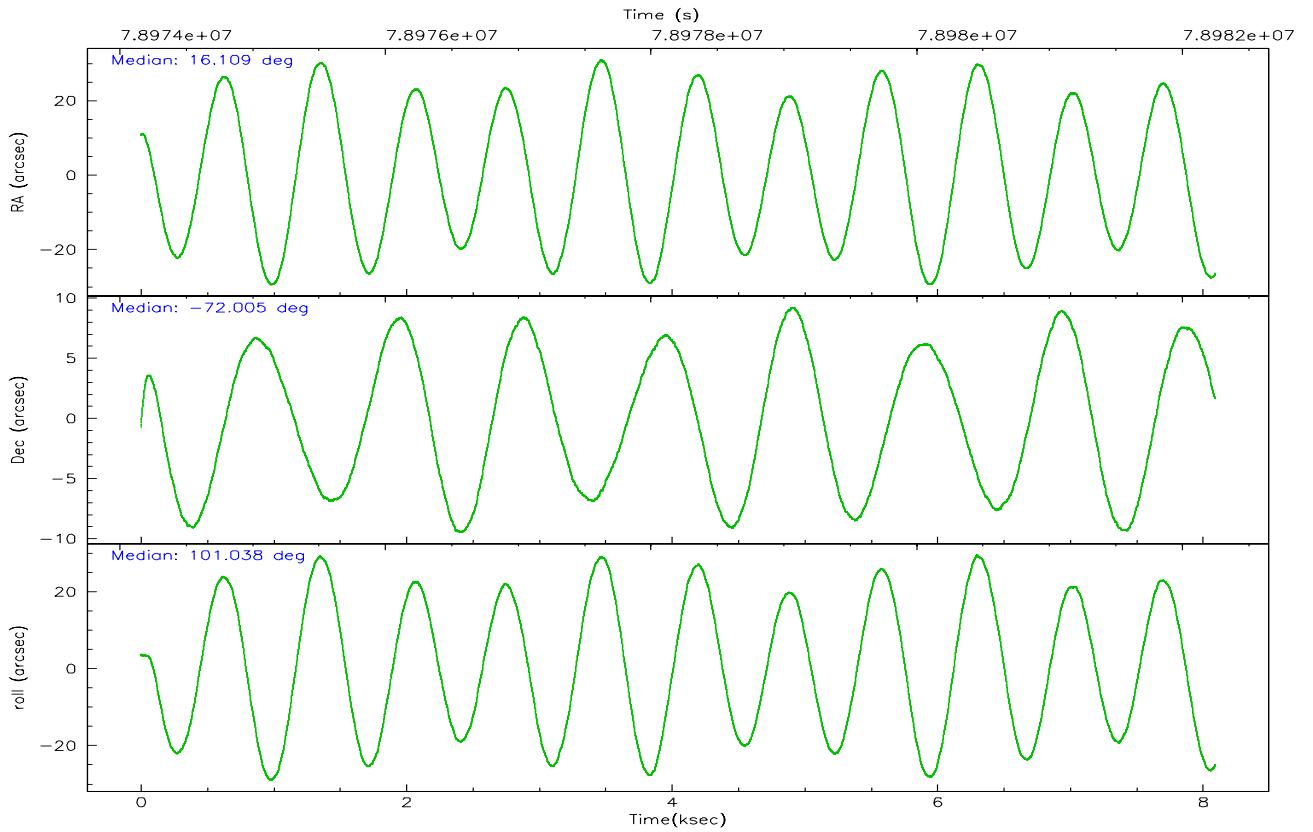
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	1198	1556	10704	1353	26698	3494
	1%	2%	12%	2%	18%	4%
grade 1 events	5	14	782	7	578	26
	0%	0%	0%	0%	0%	0%
grade 2 events	2249	2384	8826	2322	25244	4147
	3%	4%	10%	3%	17%	5%
grade 3 events	398	388	1218	387	11398	920
	0%	0%	1%	0%	7%	1%
grade 4 events	373	384	988	415	10540	839
	0%	0%	1%	0%	7%	1%
grade 5 events	1156	1286	3009	1362	5545	1861
	1%	2%	3%	2%	3%	2%
grade 6 events	1435	1589	19610	1748	27112	3652
	2%	2%	22%	2%	18%	4%
grade 7 events	55093	51186	42918	52323	39295	58423
	88%	87%	48%	87%	26%	79%

## 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	16.167579	16.10884174408061	Subarray requested	NONE	NONE
Pointing Dec	-72.025412	-72.00484280641427	Alternating exposures requested	N	N
Pointing Roll	100.939726	101.040479435425	Primary exposure time	3.200000	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	78974329.184000	78972985.49624699			
Observation start date	2000-07-03T01:17:45	2000-07-03T00:56:25			
Observation end time	78982249.184000	78982383.209093			
Observation end date	2000-07-03T03:29:45	2000-07-03T03:33:03			
Read mode	TIMED	TIMED			

## 2.3 Aspect



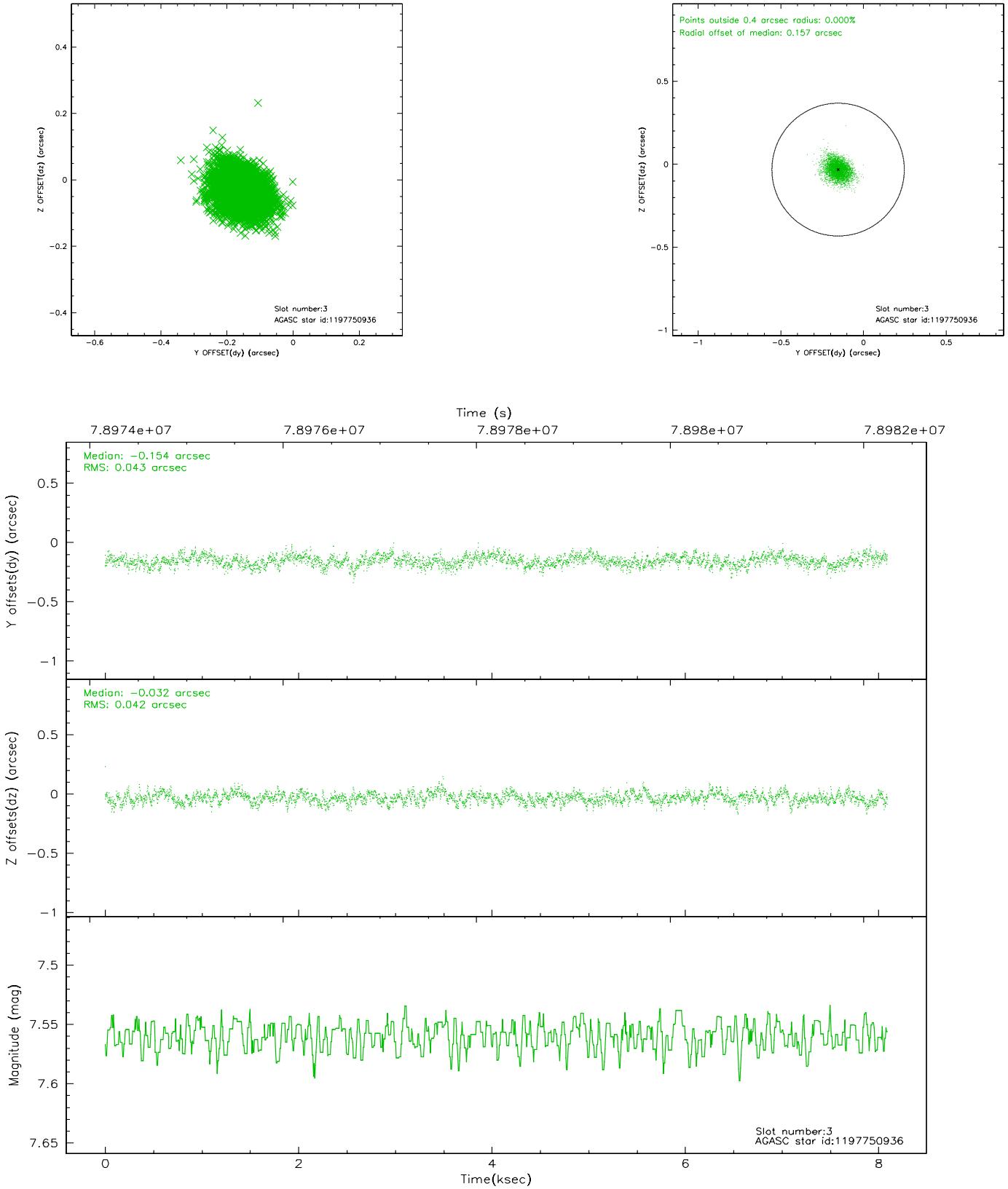


### Slot Statistics

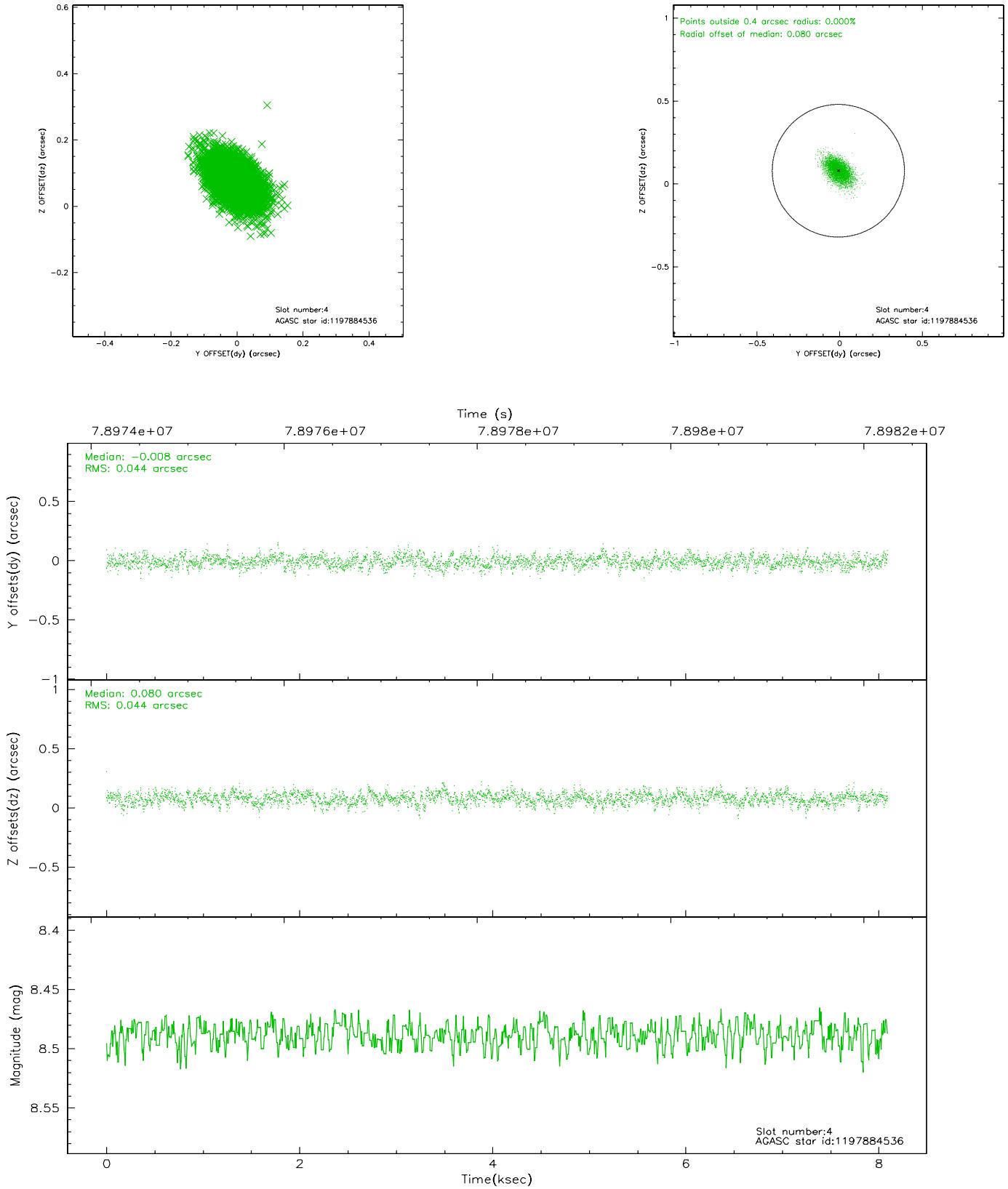
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	1973	0.000	0.004	0.005	0.009	0.000000	0.000000	-753.55	-1725.81
1	FID	ACIS-S-4	7.21	1973	-0.031	0.001	0.005	0.009	0.000000	0.000000	2159.39	181.94
2	FID	ACIS-S-6	7.35	1973	0.003	0.002	0.007	0.011	0.000000	0.000000	409.34	820.13
3	GUIDE	1197750936	7.56	3947	-0.154	-0.032	0.064	0.105	15.387940	-71.549550	1845.22	547.86
4	GUIDE	1197884536	8.49	3946	-0.008	0.080	0.065	0.111	17.160729	-71.835289	452.50	-1222.52
5	GUIDE	1197884712	8.31	3945	-0.012	-0.059	0.070	0.119	16.087398	-72.252690	-786.09	240.97
6	GUIDE	1197750640	9.73	3945	0.121	0.008	0.105	0.173	15.758835	-72.088048	-136.59	487.18
7	GUIDE	1197749664	9.57	3944	0.049	0.006	0.091	0.148	15.809015	-72.366369	-1131.57	616.86

## 2.4 Star Slots

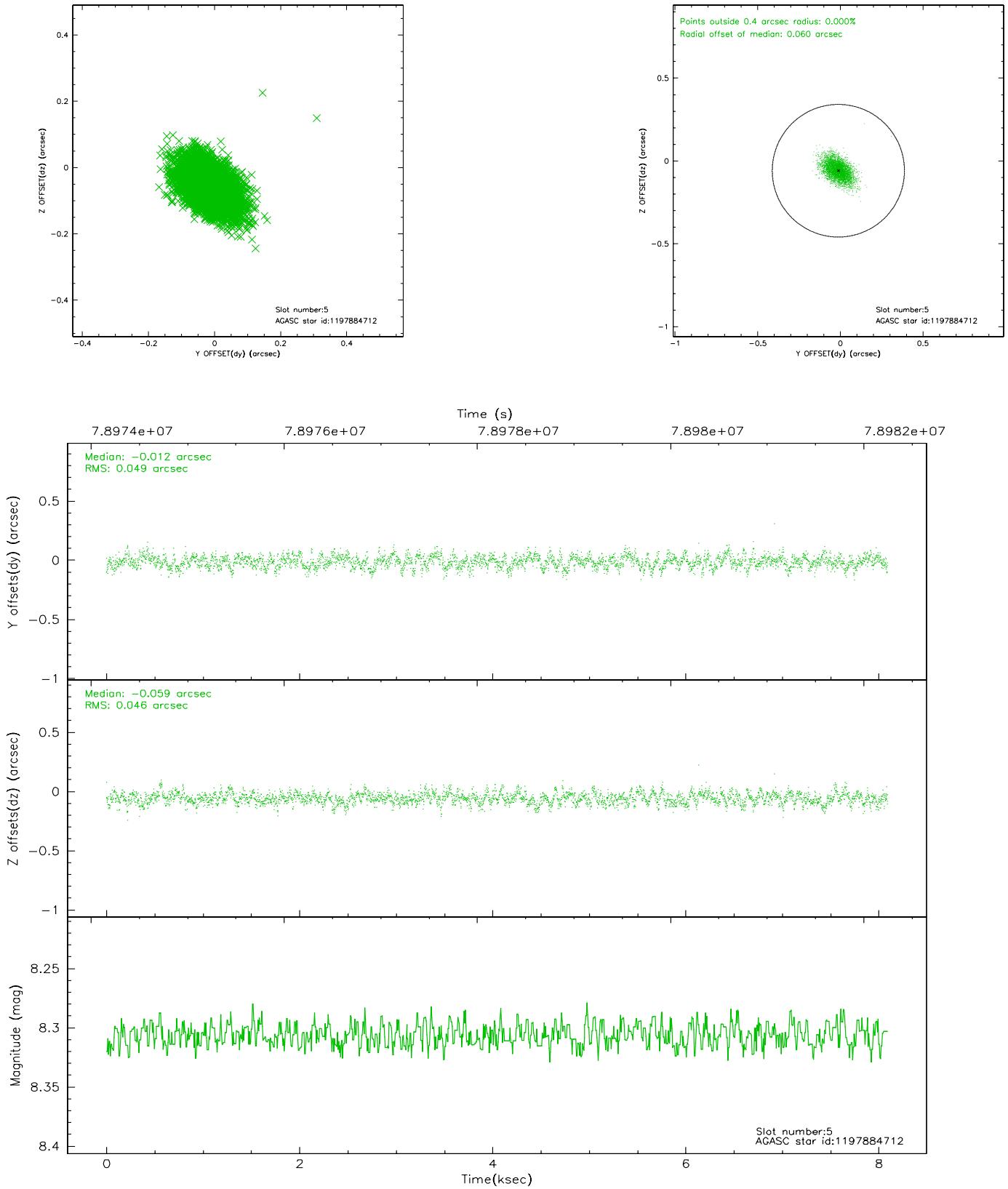
### 2.4.1 Slot 3



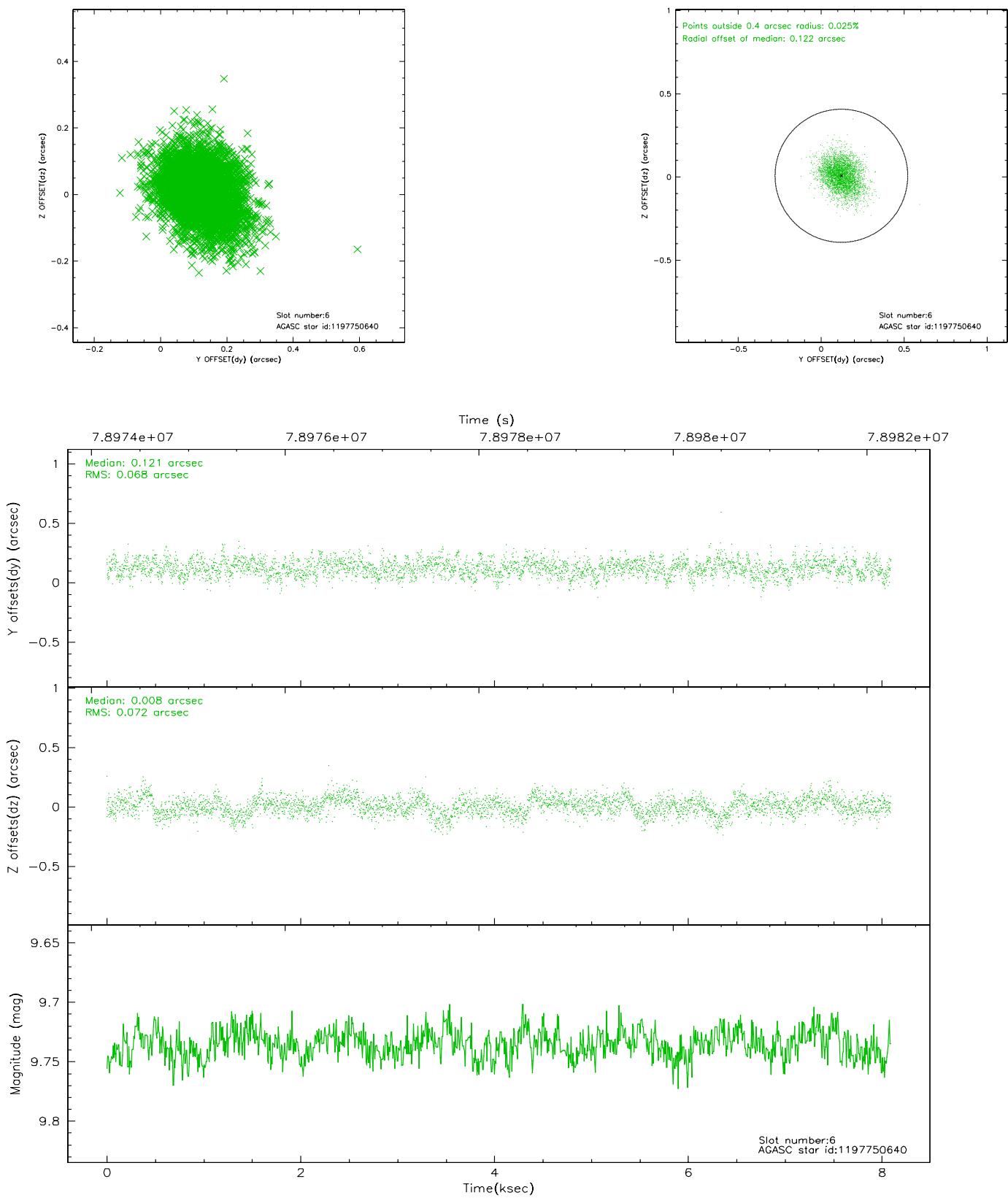
## 2.4.2 Slot 4



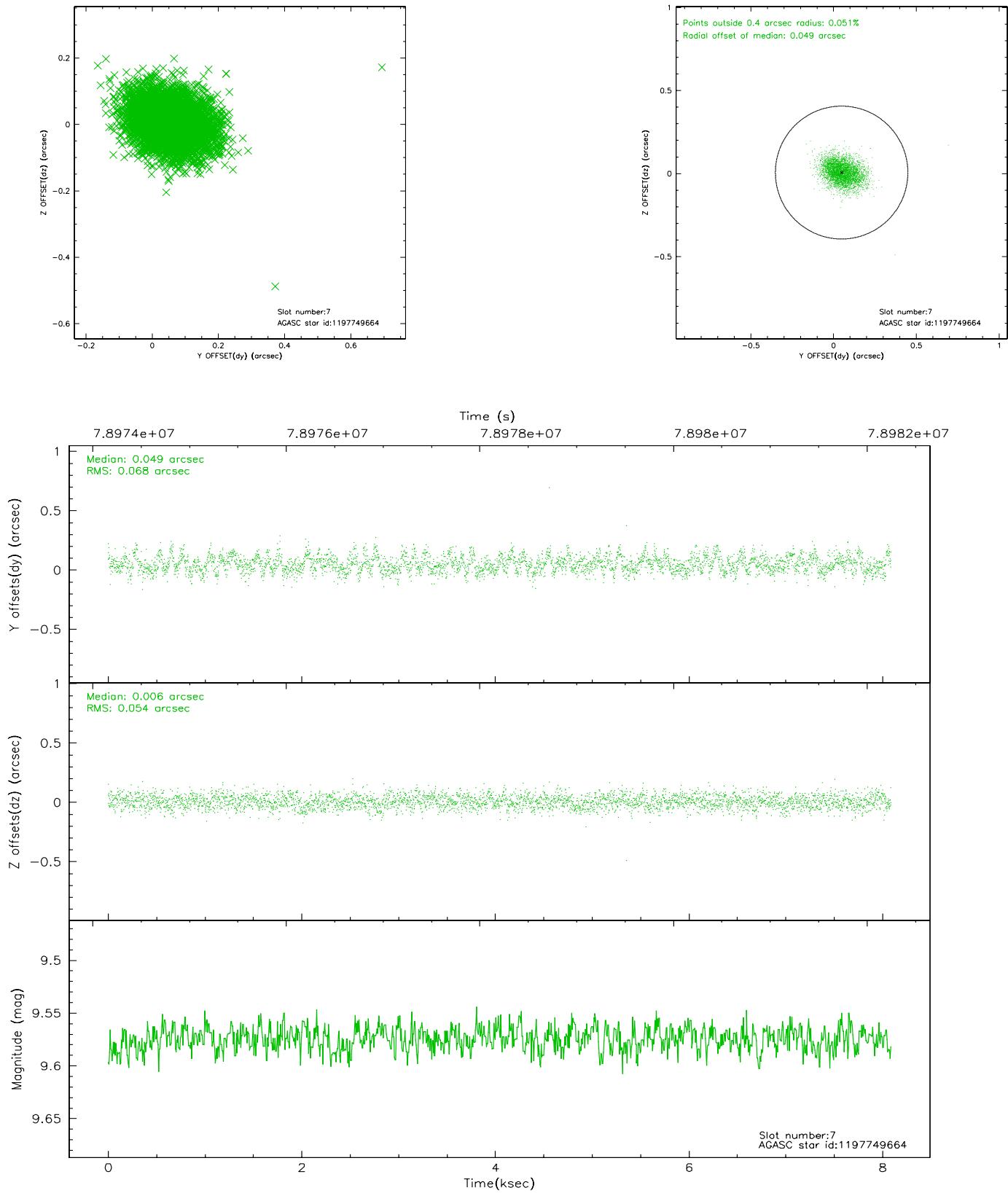
### 2.4.3 Slot 5



## 2.4.4 Slot 6

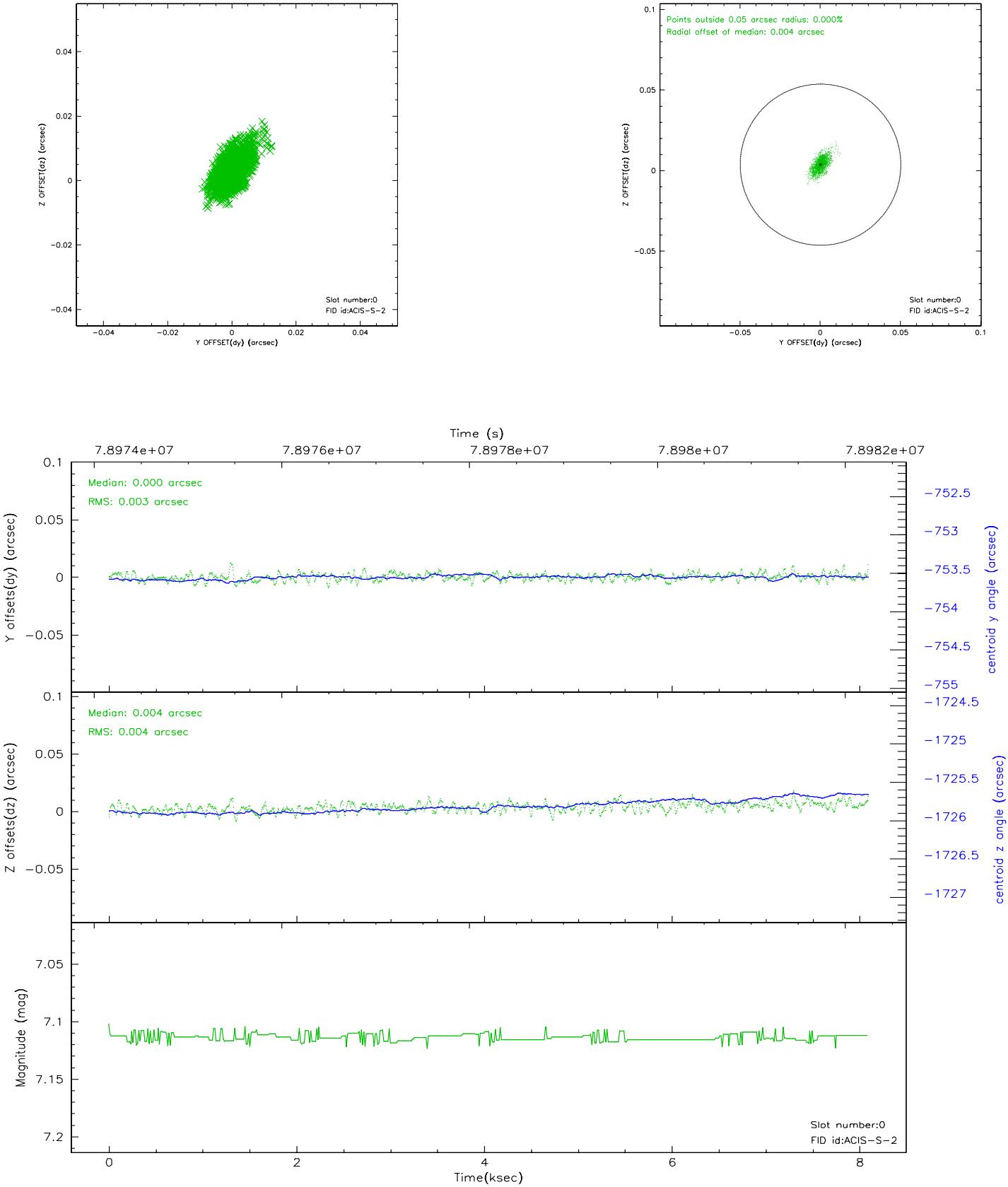


## 2.4.5 Slot 7

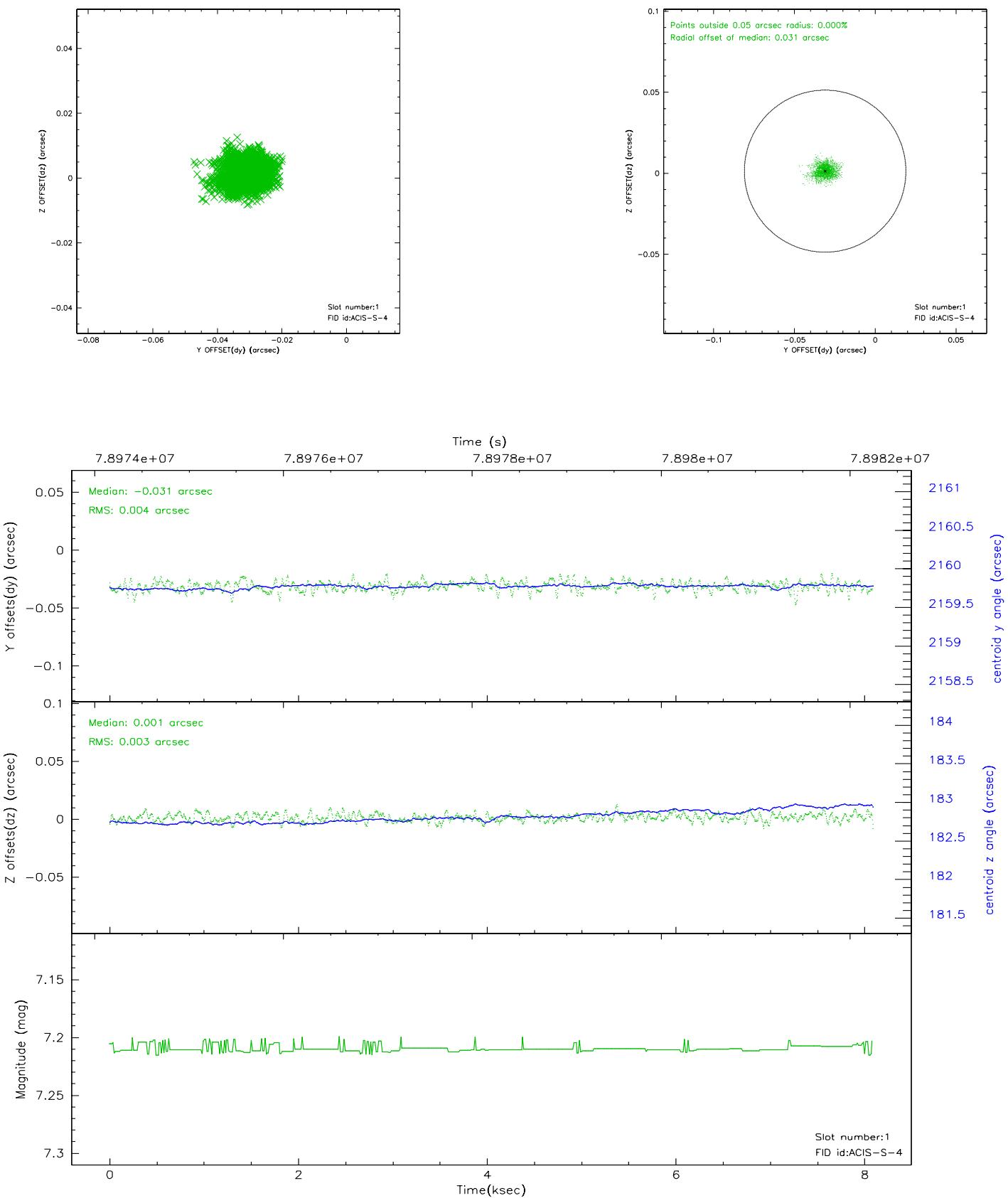


## 2.5 FID Slots

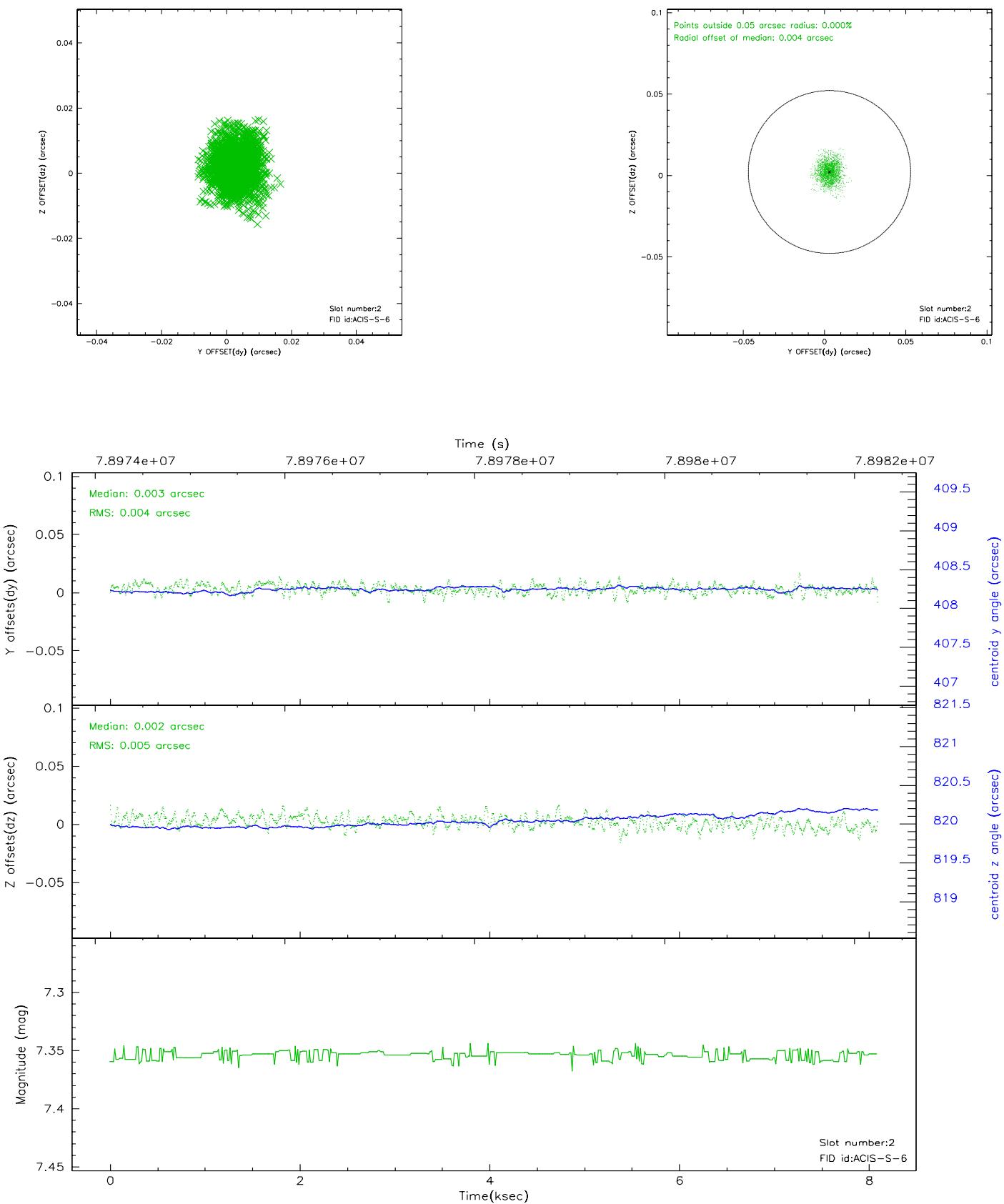
### 2.5.1 Slot 0



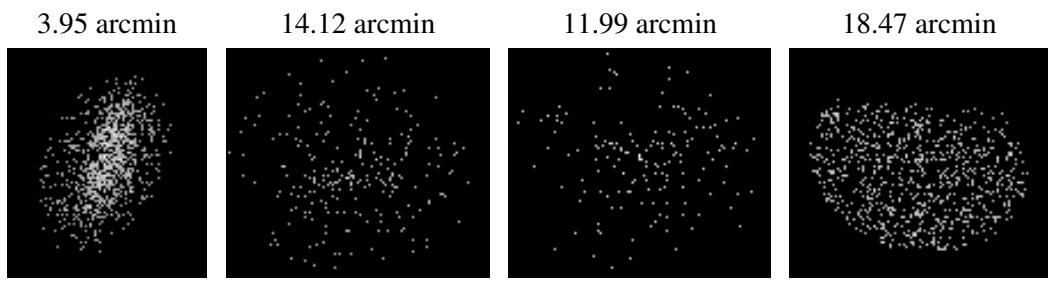
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2008.11.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.083

## A.2 Comments

This calibration observation was acquired with the focal plane temperature raised from -120C to -110C, for attempted recalibration of ACIS for the 1999-09-16 through 2000-01-28 period.

=====

This reprocessing of the data applies no CTI correction because none is available for that temperature.

=====

Focal plane temperature is warmer than -118.7 C degrees during the entire observation. This temperature is the upper limit of the verified ACIS calibration for the front-illuminated chips. The focal plane temperature is warmer than -116.7 degrees C for approximately the entire observation.

This temperature is the upper limit of the verified ACIS calibration for the back-illuminated chips. The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C. 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. This calibration observation was acquired with the focal plane temperature raised from -120C to -110C, for attempted recalibration of ACIS for the

1999-09-16 through 2000-01-28 period.

=====

This reprocessing of the data applies no CTI correction because none is available for that temperature.

=====

Focal plane temperature is warmer than -118.7 C degrees during the entire observation. This temperature is the upper limit of the verified ACIS

calibration for the front-illuminated chips. The focal plane temperature

is warmer than -116.7 degrees C for approximately the entire observation.

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