V&V Reference Report
L2 ASCDS Version : 7.6.8.1

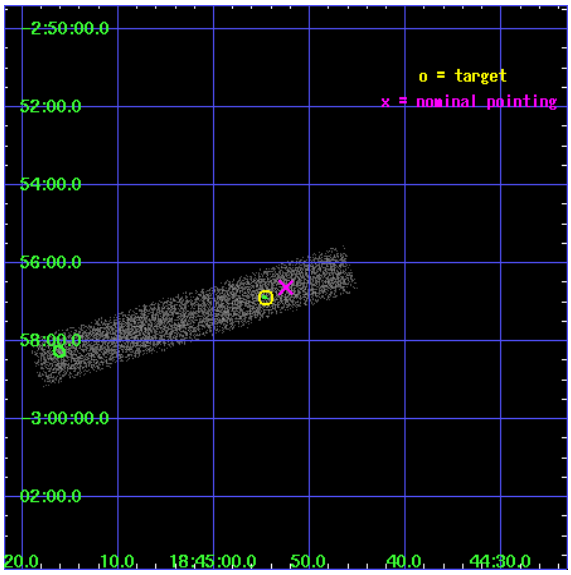
Observation 3891 - L2 Version 001
Chandra X-Ray Center

L2 Processing Date : Aug 10 2006

Contents

1 Front

seq_num	500370
obs_id	3891
title	IS AX J1845-0258 AN ANOMALOUS X-RAY PULSAR?
observer	Professor Victoria Kaspi
object	AX J1845-0258
dtycycle	0
cycle	P
ra_targ	281.2275
dec_targ	-2.948056
ra_nom	281.21885027151
dec_nom	-2.9437067647324
roll_nom	163.23861308496
revision	2
ontime	19291.877187401
livetime	17496.714300201
ontime7	19291.877187401
l2events	8253

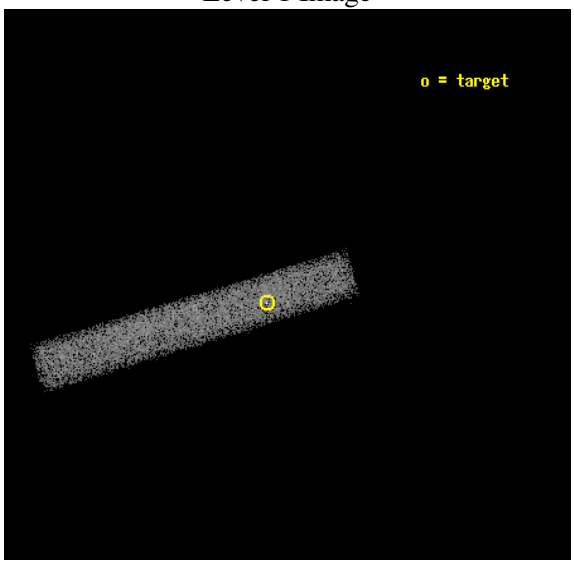


2 OBI

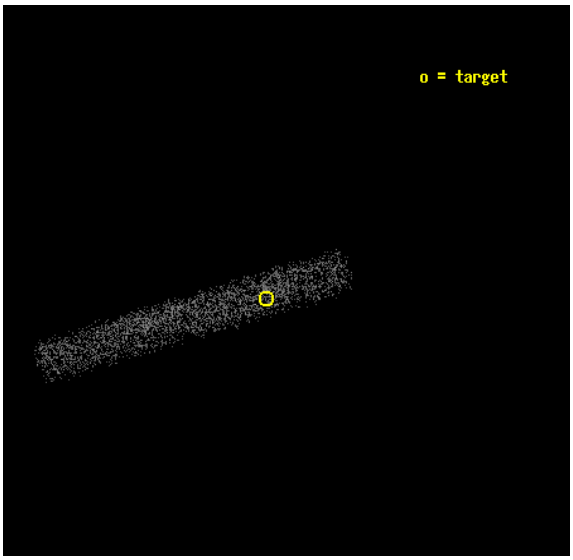
2.1 OBI

2.1.1 Images

Level 1 Image



Level 1 Bad Events



2.1.2 Bias

Chip 7

2.1.3 Parameters

obi_num	1
ascdsver	7.6.8.1
caldbver	3.2.2
date	2006-08-10T03:39:52
revision	2

sched_exp_time	19000.000000
ontime	19858.048973739
ontime7	19858.048973739
l1events	20751

2.1.4 Events

	ccd 7
level 1 events	20751
rejected events	12121
rejected %	58%

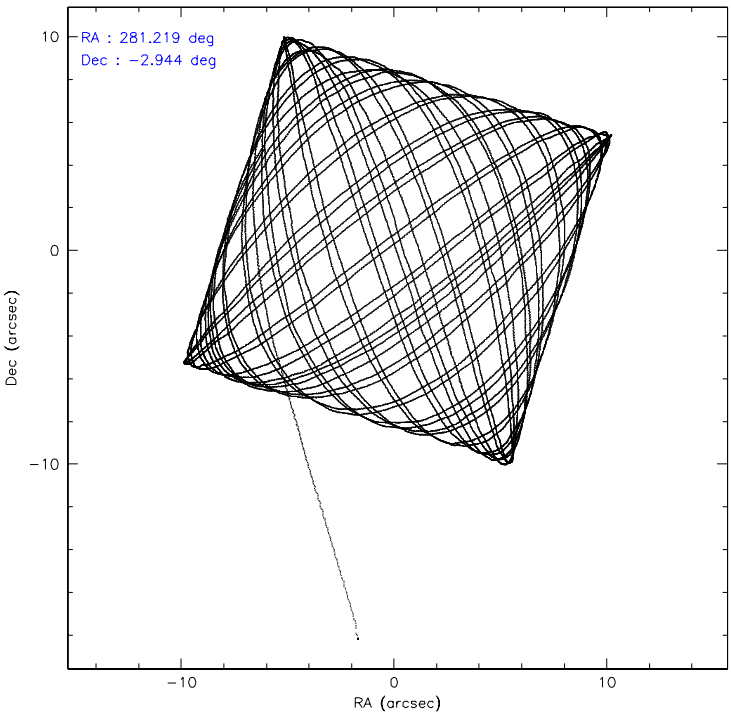
	ccd 7
grade 0 events	663
	3%
grade 1 events	13
	0%
grade 2 events	2056
	9%
grade 3 events	892
	4%
grade 4 events	896
	4%
grade 5 events	1460
	7%
grade 6 events	4431
	21%
grade 7 events	10340
	49%

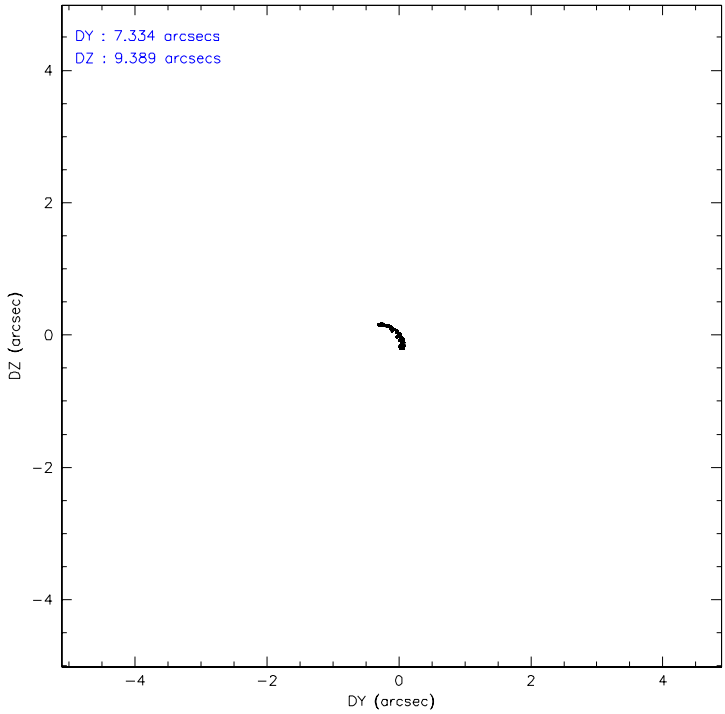
2.2 Compared Parameters

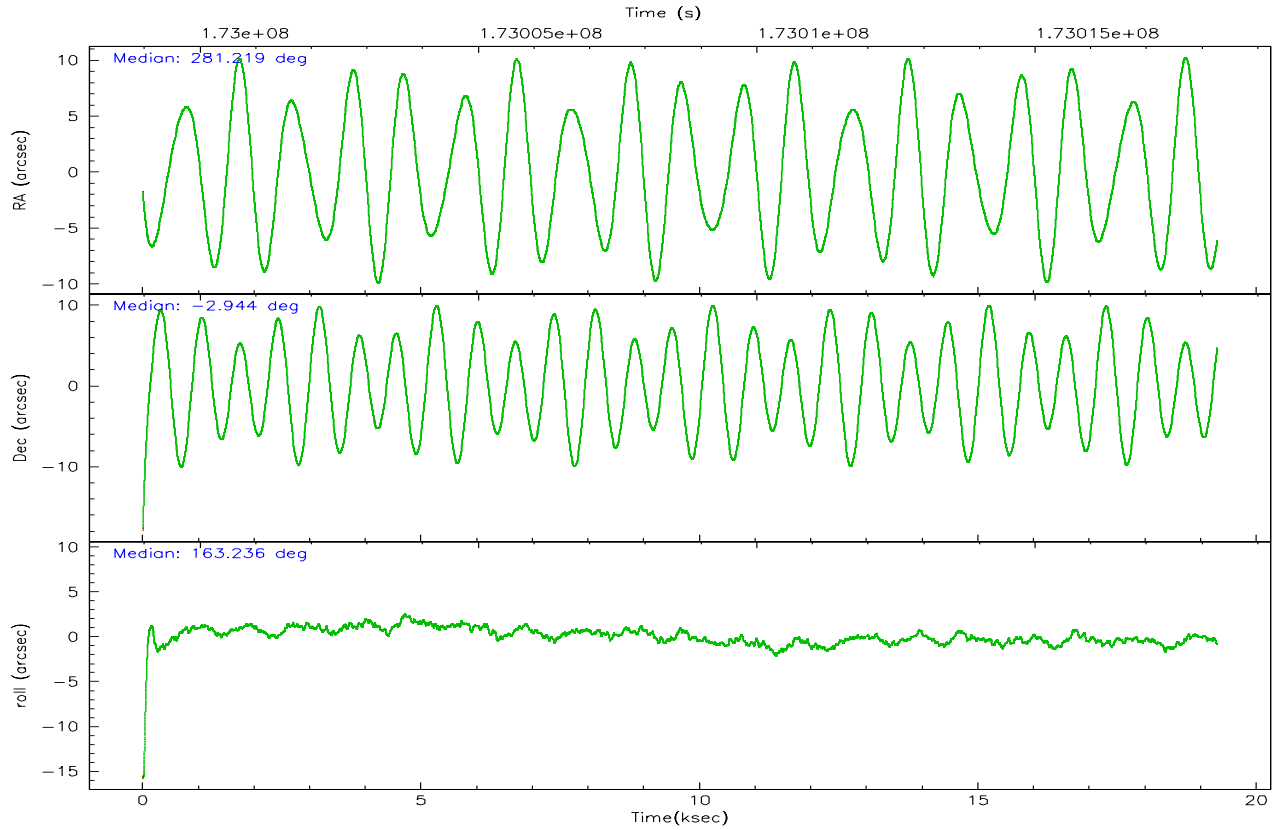
Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-7	ACIS-7
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
Pointing RA	281.245319	281.2188502715132
Pointing Dec	-2.937096	-2.943706764732404
Pointing Roll	163.083355	163.2386130849606
SIM focus pos (mm)	-0.684267	-0.6828225247311905
SIM defocus (mm)	0	0.001444936568705701
SIM translation stage pos (mm)	-190.132523	-190.1400660498719
SIM translation stage offset (mm)	0	0.00754346686406393
Observation start time	172999277.184000	172998252.87209
Observation start date	2003-06-26T07:20:13	2003-06-26T07:04:12
Observation end time	173018277.184000	173019490.36049
Observation end date	2003-06-26T12:36:53	2003-06-26T12:58:10
Read mode	TIMED	TIMED

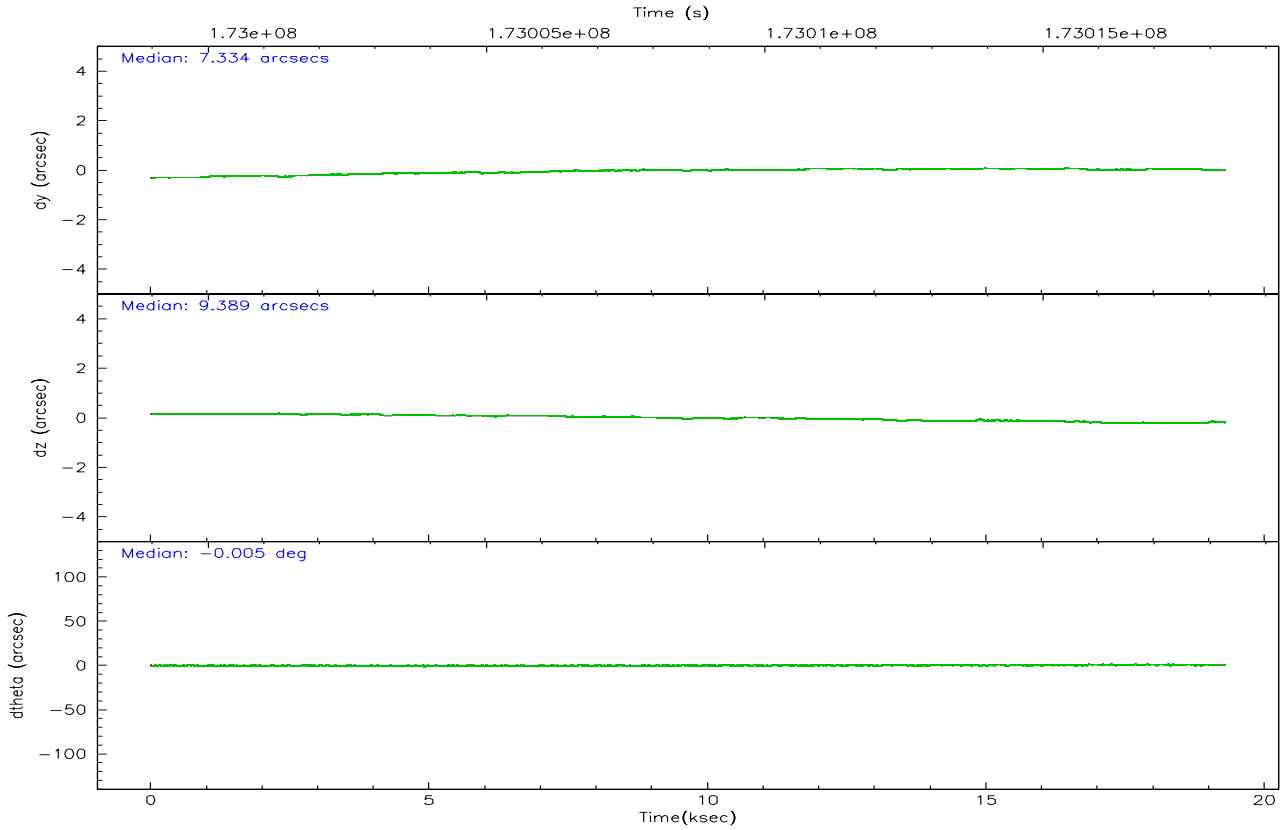
Parameter	Planned	Actual
Obspar format version number	6	6
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
On-chip summing requested	N	N
Subarray requested	1/8	1/8
Subarray start row	0	449
Subarray row count	1024	128
Alternating exposures requested	N	N
Primary exposure time	0.000000	0.4

2.3 Aspect


RA : 281.219 deg
Dec : −2.944 deg
10
0
−10
Dec (arcsec)
−10
0
10
RA (arcsec)


DY : 7.334 arcsecs
DZ : 9.389 arcsecs
4
2
0
−2
−4
DZ (arcsec)
−4
−2
0
2
4
DY (arcsec)


Time (s)
1.73e+08
1.73005e+08
1.7301e+08
1.73015e+08
Median: 281.219 deg
RA (arcsec)
Median: −2.944 deg
Dec (arcsec)
Median: 163.236 deg
roll (arcsec)
Time(ksec)

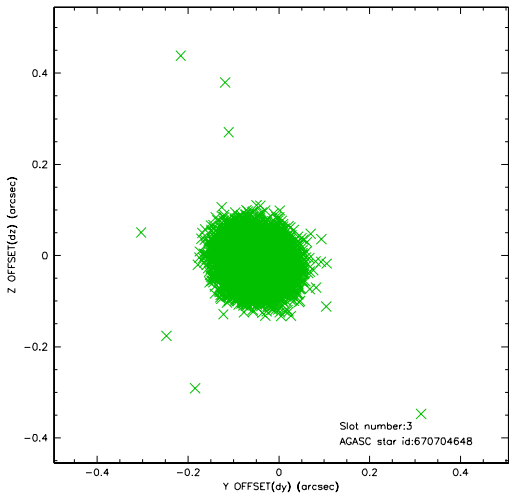

Time (s)
1.73e+08
1.73005e+08
1.7301e+08
1.73015e+08
Median: 7.334 arcsecs
dy (arcsec)
Median: 9.389 arcsecs
dz (arcsec)
Median: −0.005 deg
dtheta (arcsec)
Time(ksec)

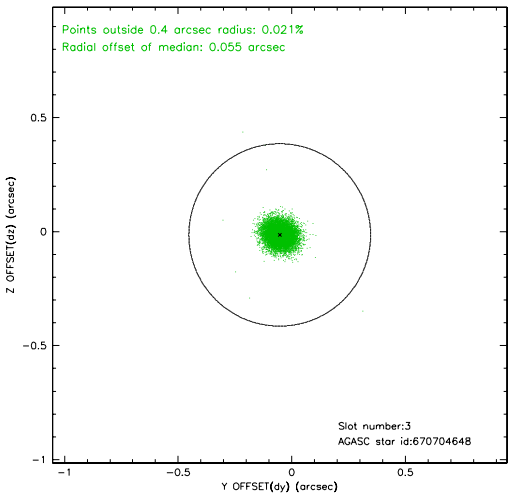
Slot Statistics

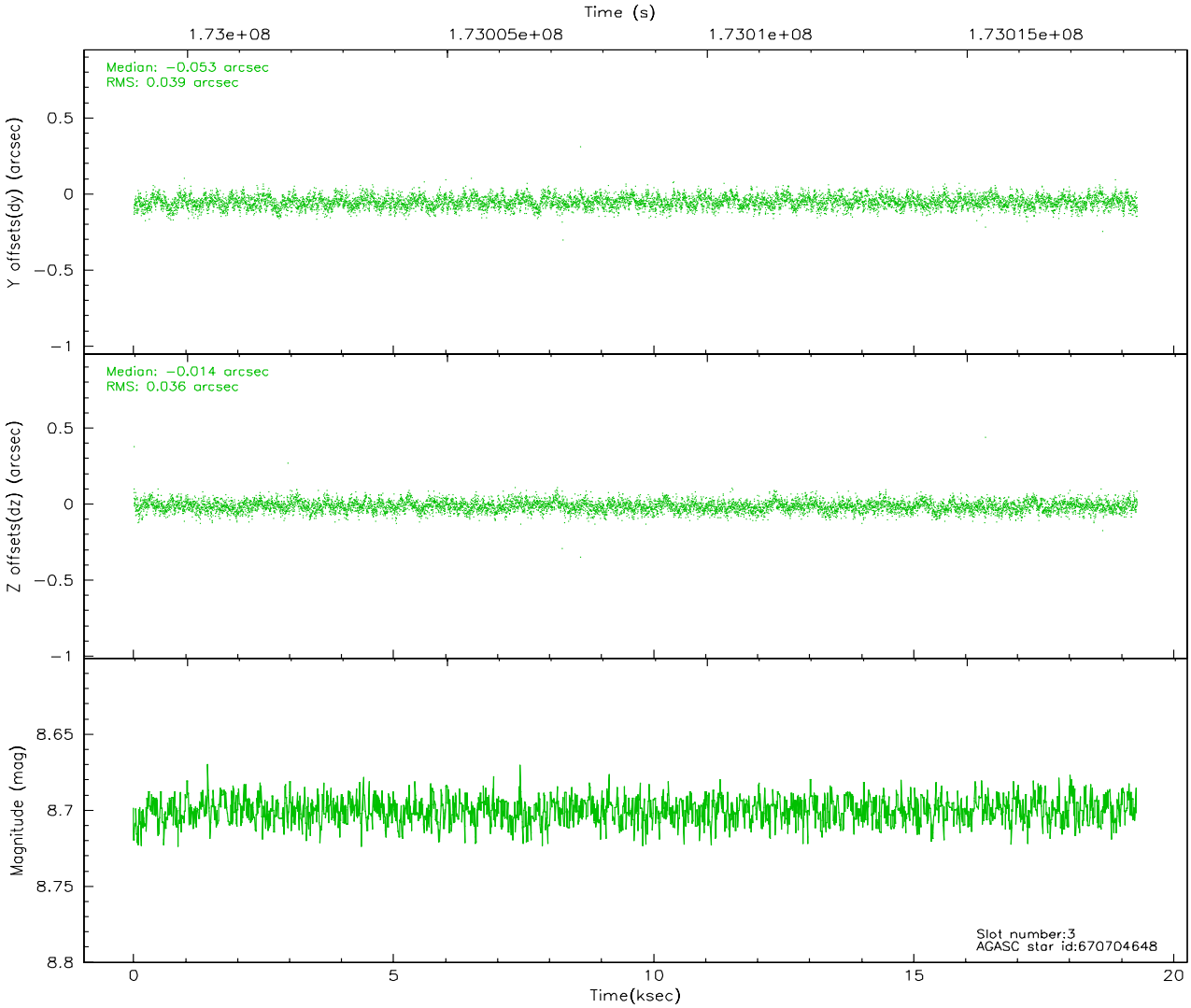
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	4706	-0.021	-0.002	0.008	0.014	0.000000	0.000000	-760.04	-1730.63
1	FID	ACIS-S-4	7.20	4706	0.016	0.010	0.006	0.011	0.000000	0.000000	2153.16	177.70
2	FID	ACIS-S-5	7.23	4706	-0.027	0.000	0.010	0.018	0.000000	0.000000	-1812.65	171.53
3	GUIDE	670704648	8.70	9412	-0.053	-0.014	0.055	0.091	280.736676	-2.935747	1750.82	528.01
4	GUIDE	670713072	9.00	9408	0.003	-0.031	0.088	0.136	281.205407	-3.604132	-561.47	2339.22
5	GUIDE	670713328	7.56	9412	-0.114	-0.022	0.056	0.087	280.824681	-3.187771	1183.71	1303.89
6	GUIDE	670714008	9.02	9412	0.032	0.058	0.075	0.121	281.129237	-3.153193	172.97	865.99
7	GUIDE	670830264	8.74	9410	0.129	0.008	0.072	0.115	281.361536	-3.231556	-707.99	892.80

2.4 Star Slots

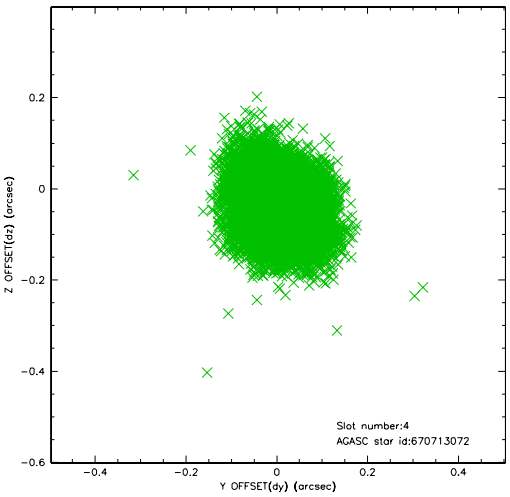
2.4.1 Slot 3

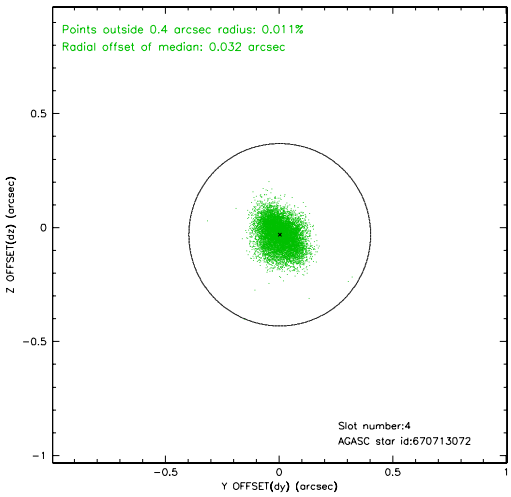


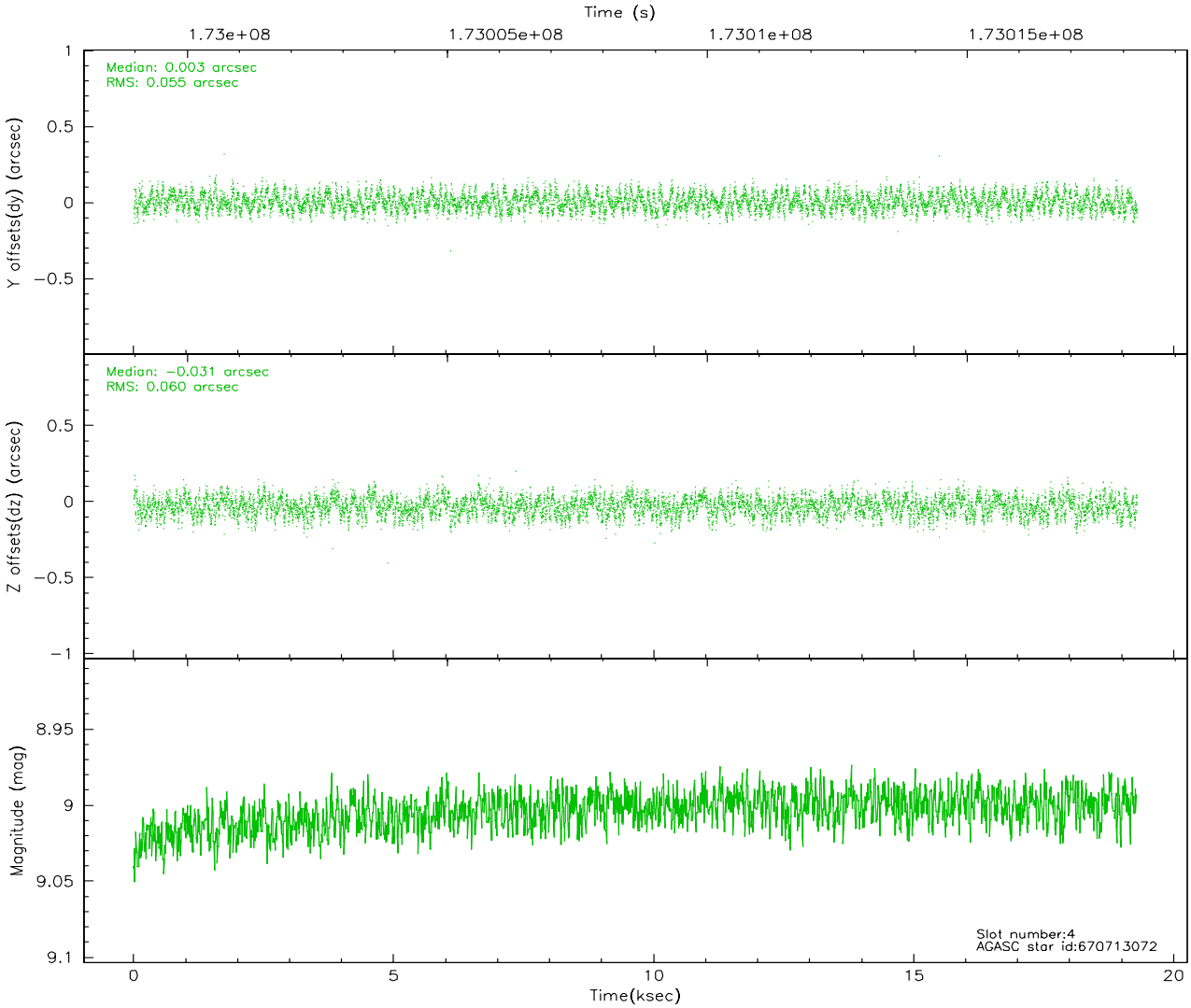




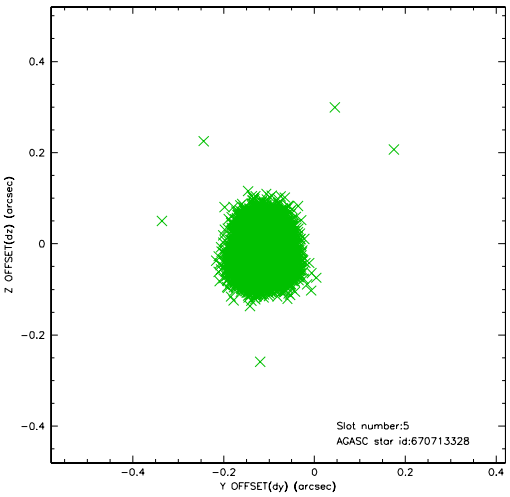
2.4.2 Slot 4

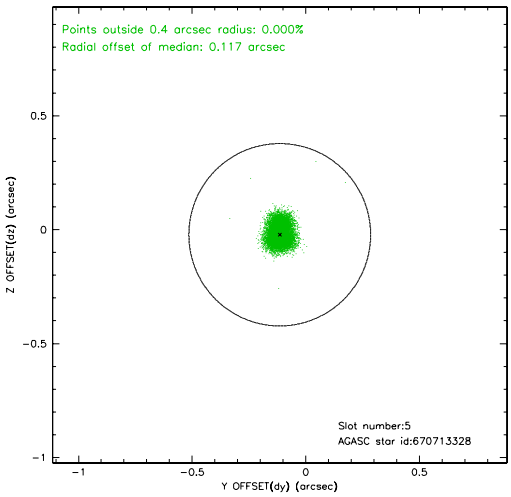

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:4
AGASC star id:670713072

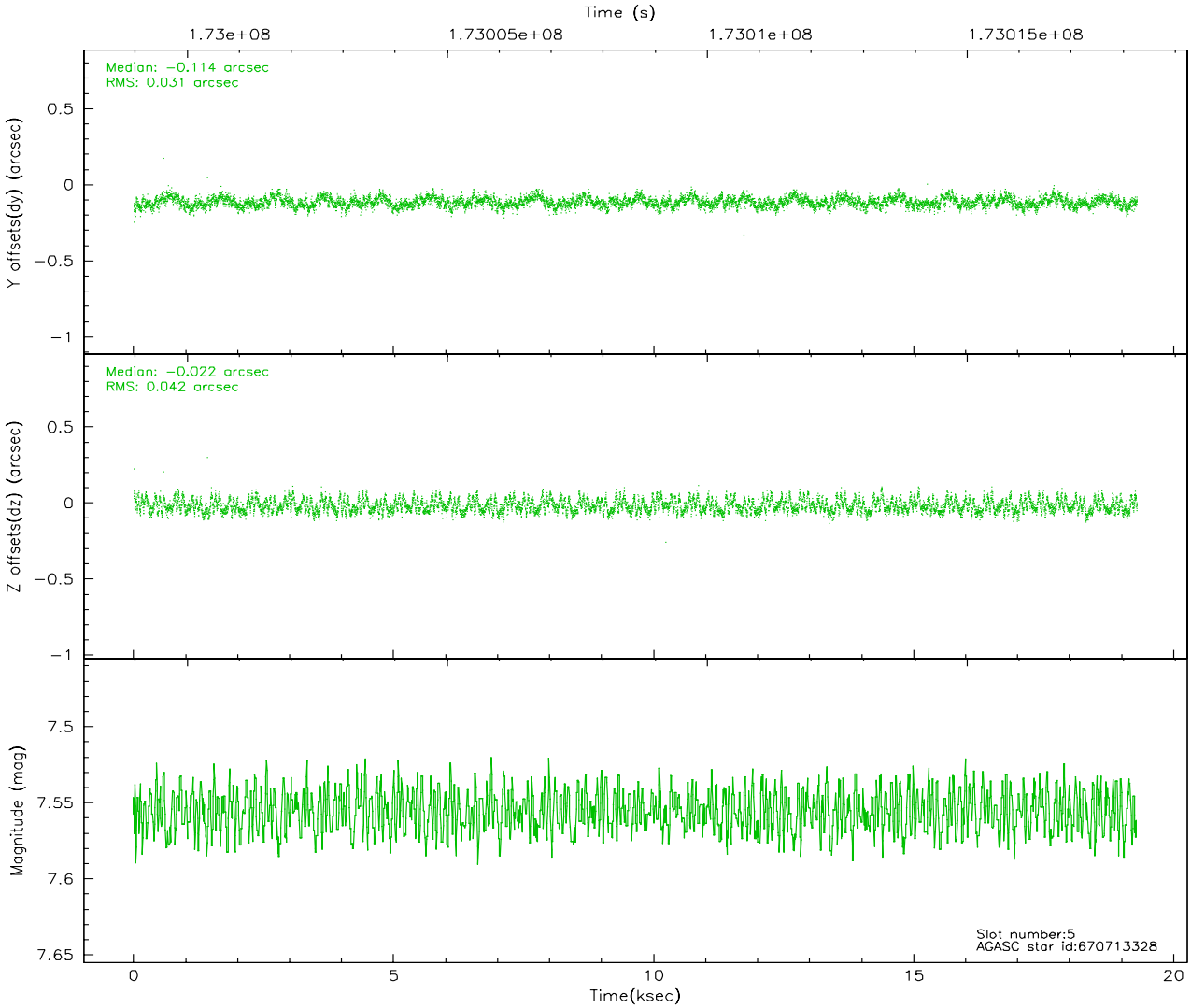

Points outside 0.4 arcsec radius: 0.011%
Radial offset of median: 0.032 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:4
AGASC star id:670713072


Time (s)
1.73e+08
1.73005e+08
1.7301e+08
1.73015e+08
Median: 0.003 arcsec
RMS: 0.055 arcsec
Y offsets(dy) (arcsec)
Median: −0.031 arcsec
RMS: 0.060 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:4
AGASC star id:670713072
Time(ksec)

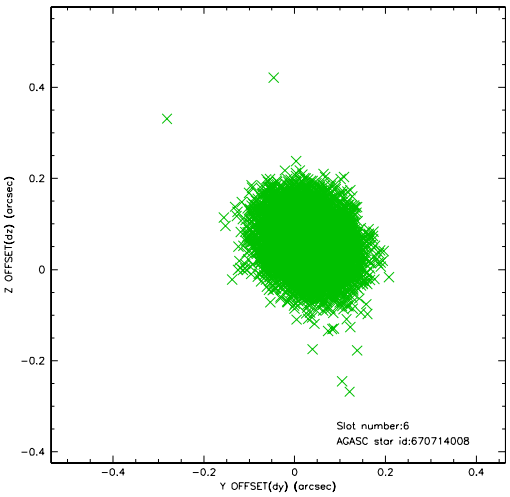
2.4.3 Slot 5

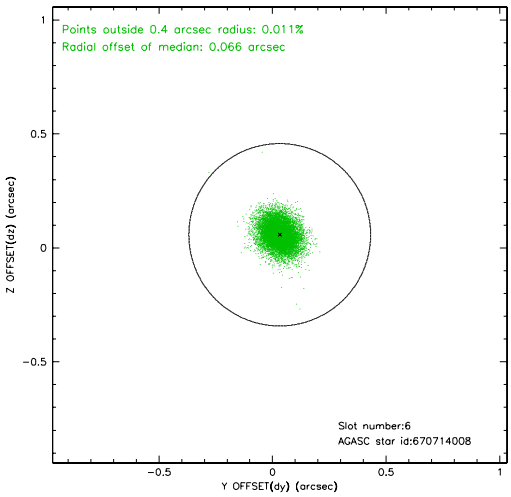

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:5
AGASC star id:670713328

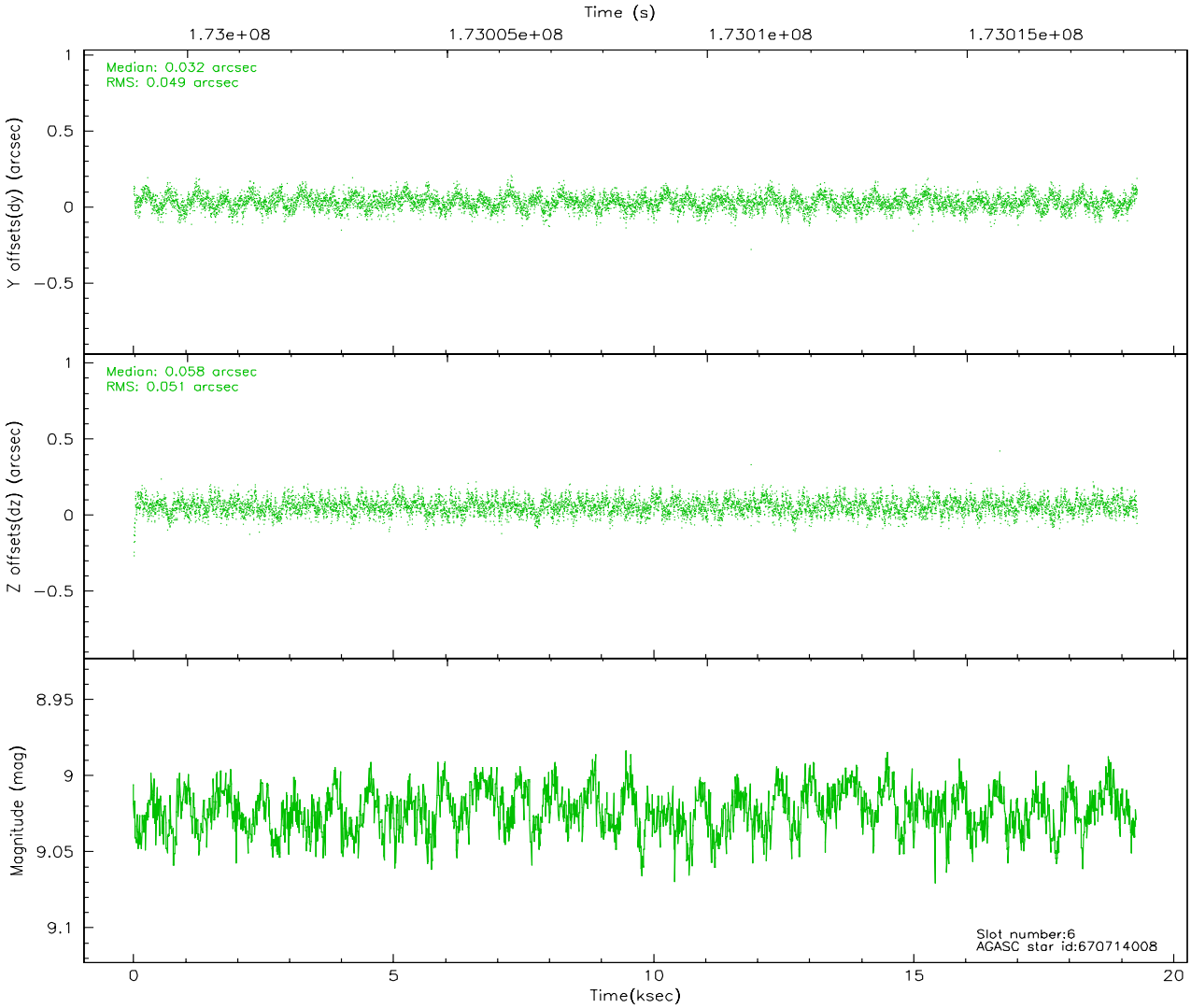

Points outside 0.4 arcsec radius: 0.000%
Radial offset of median: 0.117 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:5
AGASC star id:670713328


Time (s)
1.73e+08
1.73005e+08
1.7301e+08
1.73015e+08
Median: −0.114 arcsec
RMS: 0.031 arcsec
Y offsets(dy) (arcsec)
Median: −0.022 arcsec
RMS: 0.042 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:5
AGASC star id:670713328
Time(ksec)

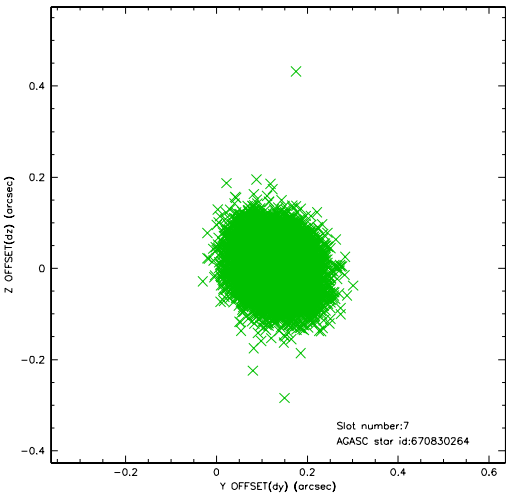
2.4.4 Slot 6

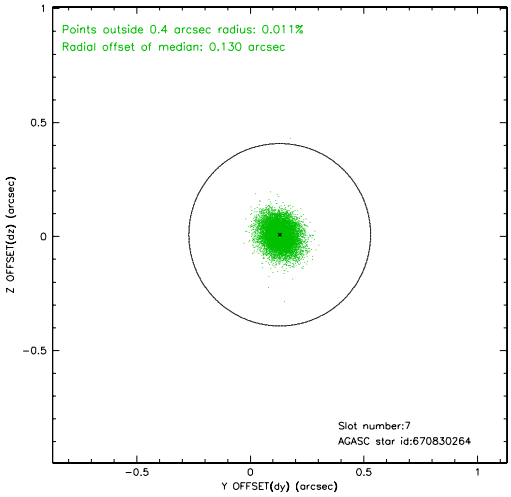

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:6
AGASC star id:670714008

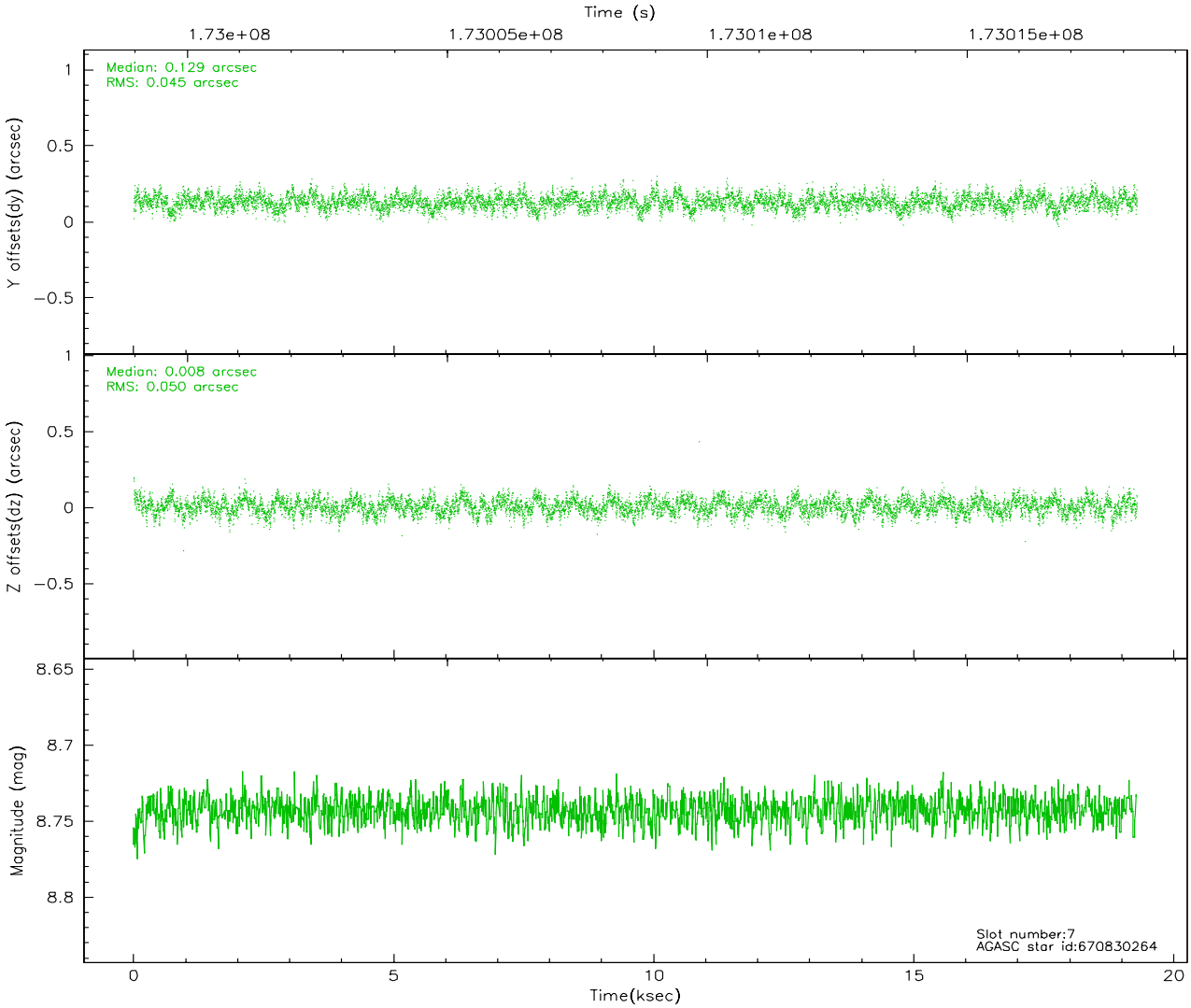

Points outside 0.4 arcsec radius: 0.011%
Radial offset of median: 0.066 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:6
AGASC star id:670714008


Time (s)
1.73e+08
1.73005e+08
1.7301e+08
1.73015e+08
Median: 0.032 arcsec
RMS: 0.049 arcsec
Y offsets(dy) (arcsec)
Median: 0.058 arcsec
RMS: 0.051 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:6
AGASC star id:670714008
Time(ksec)

2.4.5 Slot 7

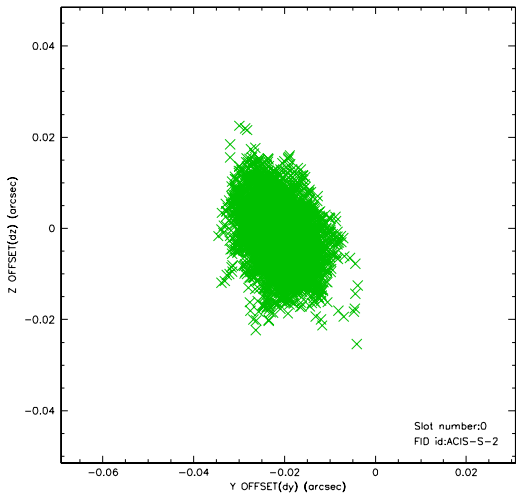

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:7
AGASC star id:670830264

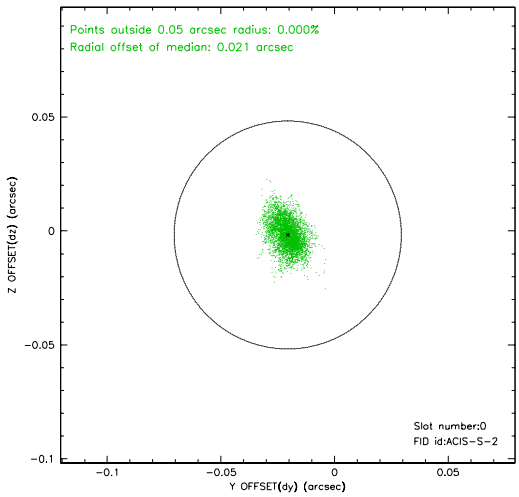

Points outside 0.4 arcsec radius: 0.011%
Radial offset of median: 0.130 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:7
AGASC star id:670830264

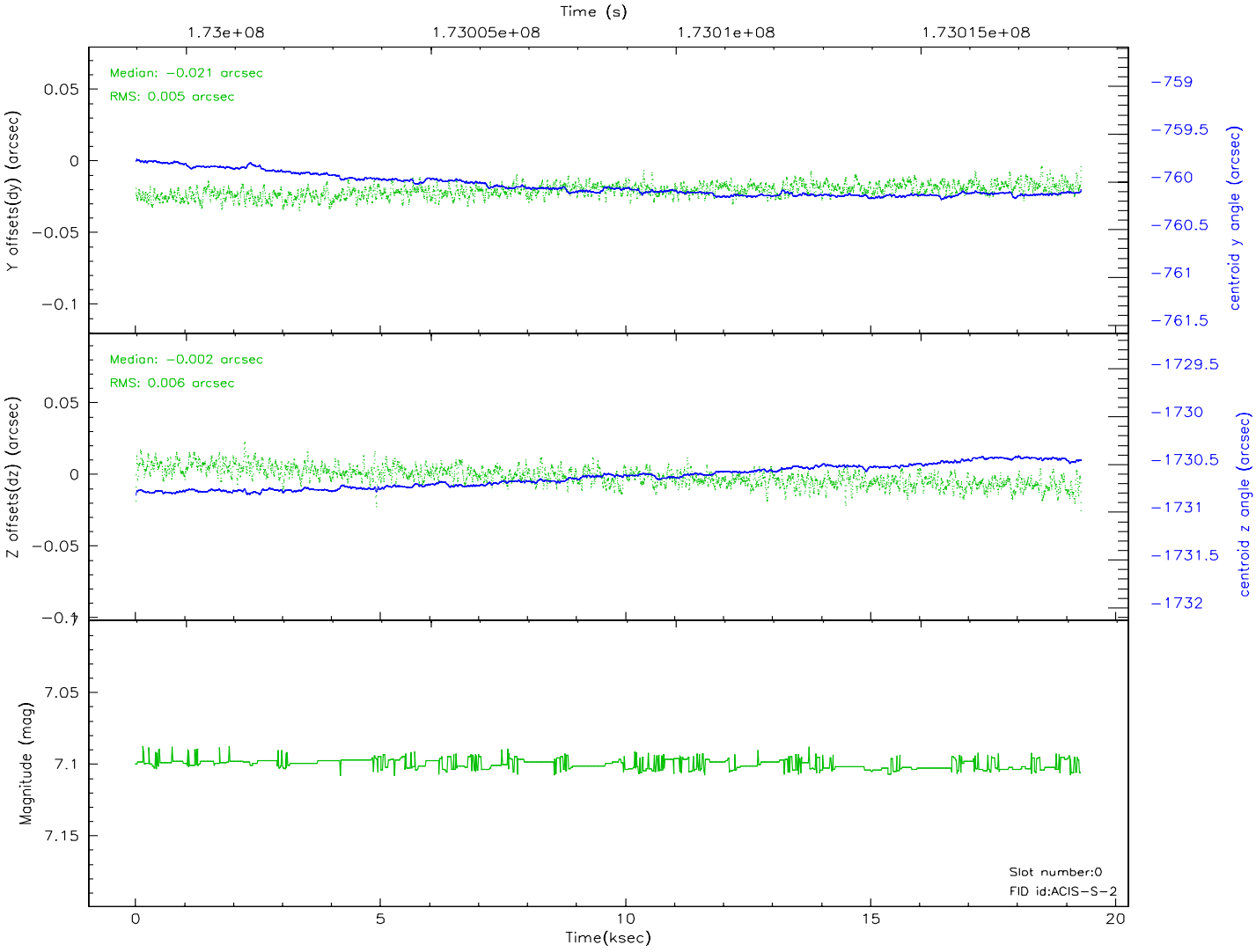

Time (s)
1.73e+08
1.73005e+08
1.7301e+08
1.73015e+08
Median: 0.129 arcsec
RMS: 0.045 arcsec
Y offsets(dy) (arcsec)
Median: 0.008 arcsec
RMS: 0.050 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:7
AGASC star id:670830264
Time(ksec)

2.5 FID Slots

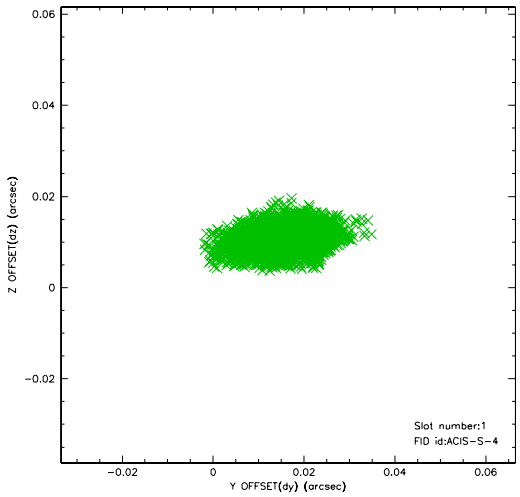
2.5.1 Slot 0

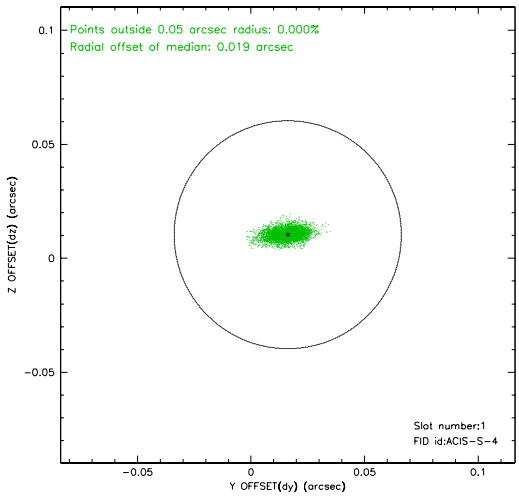


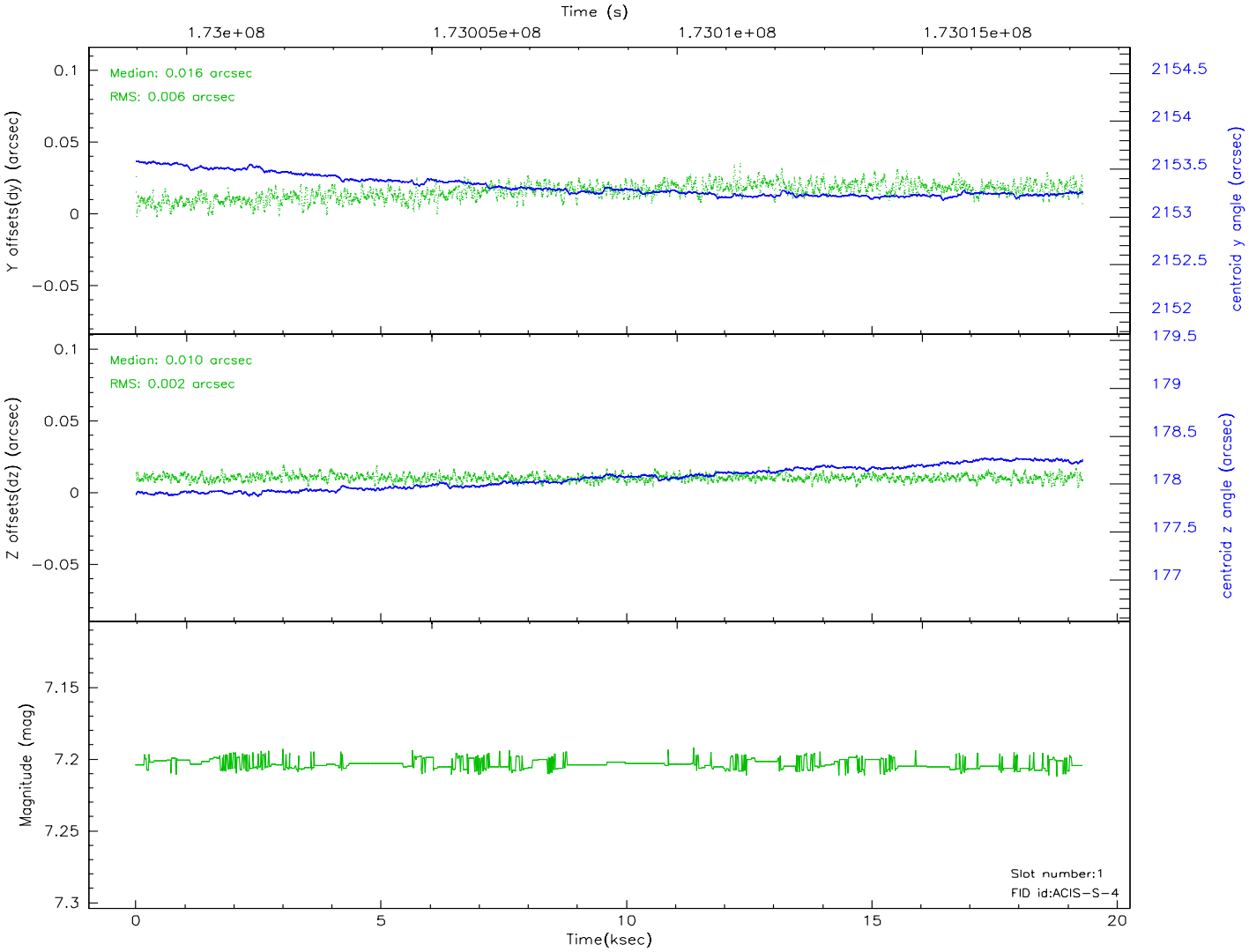




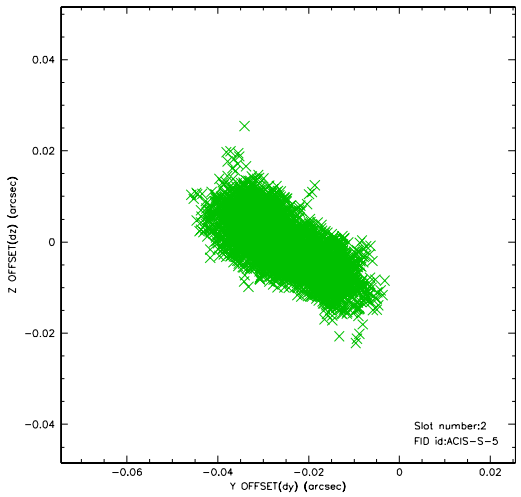
2.5.2 Slot 1

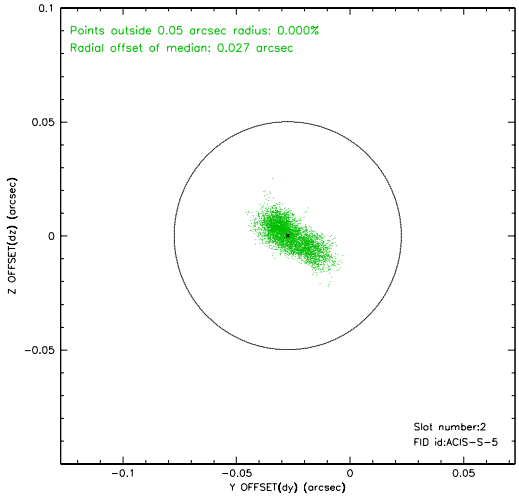

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:1
FID id:ACIS-S-4

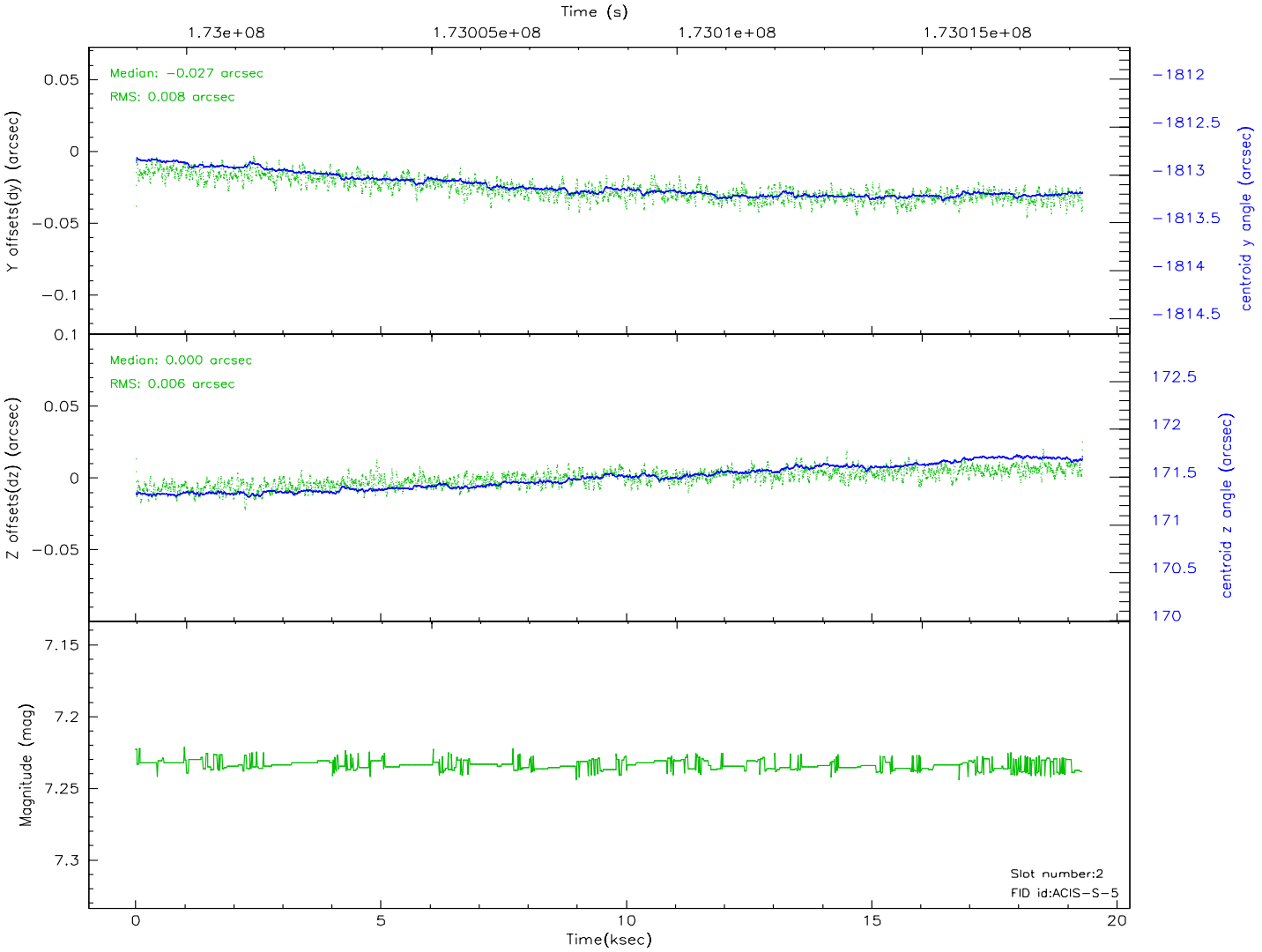

Points outside 0.05 arcsec radius: 0.000%
Radial offset of median: 0.019 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:1
FID id:ACIS-S-4


Time (s)
1.73e+08
1.73005e+08
1.7301e+08
1.73015e+08
Median: 0.016 arcsec
RMS: 0.006 arcsec
Y offsets(dy) (arcsec)
centroid y angle (arcsec)
Median: 0.010 arcsec
RMS: 0.002 arcsec
Z offsets(dz) (arcsec)
centroid z angle (arcsec)
Magnitude (mag)
Slot number:1
FID id:ACIS-S-4
Time(ksec)

2.5.3 Slot 2


Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:2
FID id:ACIS-S-5


Points outside 0.05 arcsec radius: 0.000%
Radial offset of median: 0.027 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:2
FID id:ACIS-S-5


Time (s)
1.73e+08
1.73005e+08
1.7301e+08
1.73015e+08
Median: −0.027 arcsec
RMS: 0.008 arcsec
Y offsets(dy) (arcsec)
centroid y angle (arcsec)
Median: 0.000 arcsec
RMS: 0.006 arcsec
Z offsets(dz) (arcsec)
centroid z angle (arcsec)
Magnitude (mag)
Slot number:2
FID id:ACIS-S-5
Time(ksec)

3 Point Sources

A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.08.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.291

A.2 Comments

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The ACIS focal plane temperature was above calibration limits for the
first 2 ksec of the observation.

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.
```