V&V Reference Report
L2 ASCDS Version : 7.6.7

Observation 4533 - L2 Version 002
Chandra X-Ray Center

L2 Processing Date: Feb 21 2006

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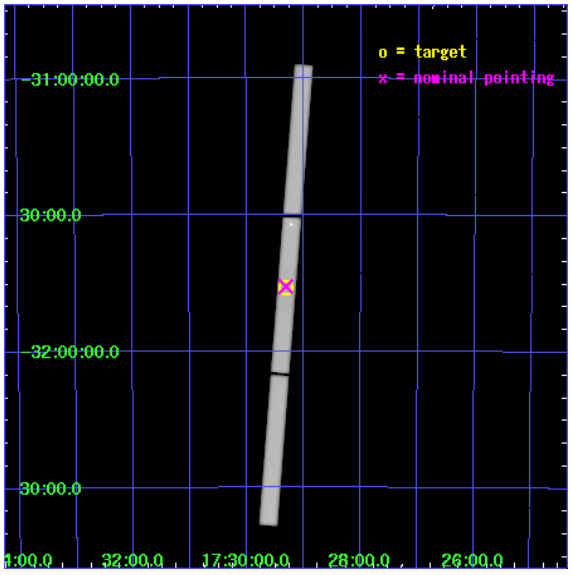
1 Front

seq_num	300127
obs_id	4533
title	Multiwavelength Target of Opportunity Observations of One Bright Nova in Outburst
observer	Professor Sumner Starrfield
object	V1187 Sco
ra_targ	262.328333
dec_targ	-31.767083
ra_nom	262.32805224013
dec_nom	-31.762436663055
roll_nom	94.426900809727
revision	2
ontime	26126.482431591
livetime	25926.200273234
l2events	1711469

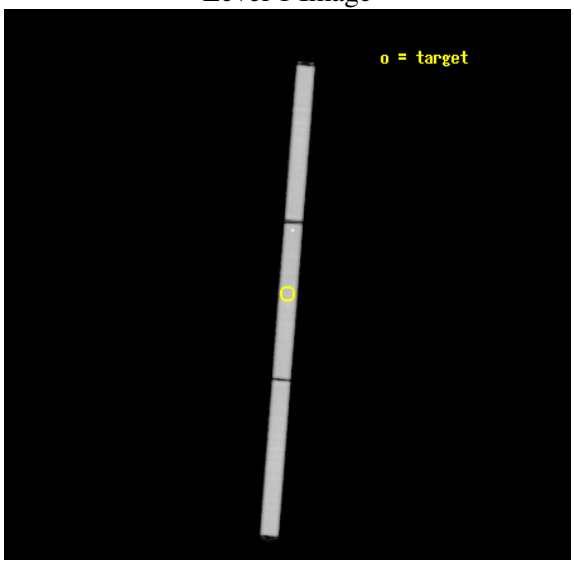


2 OBI

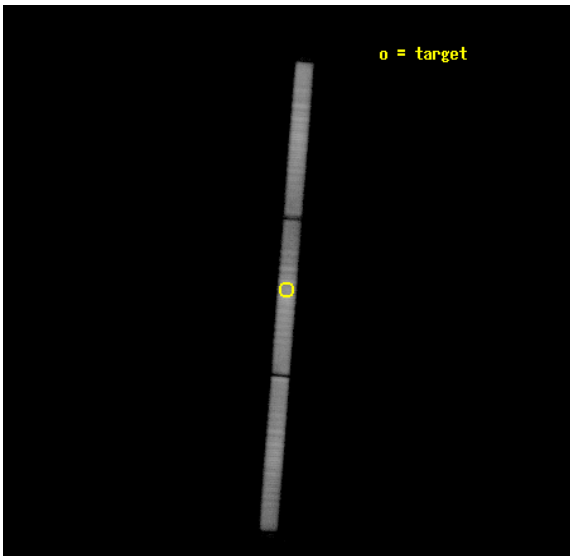
2.1 OBI

2.1.1 Images

Level 1 Image



Level 1 Bad Events



2.1.2 Parameters

obi_num	0
ascdsver	7.6.7
caldbver	3.2.1
date	2006-02-21T13:59:09
revision	2

sched_exp_time	26000.000000
ontime	26127.507431626
l1events	2480075

2.1.3 Events

Level 1 Events

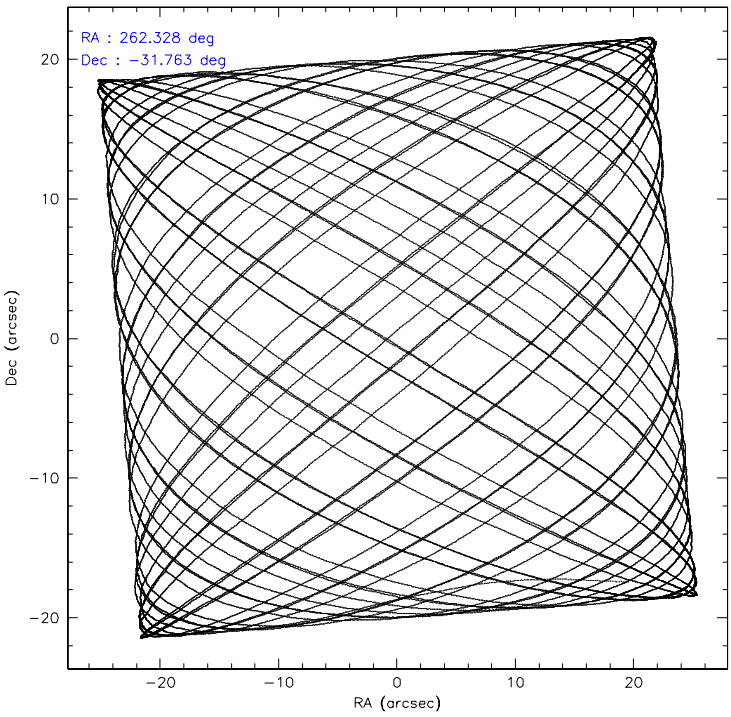
	segment 1	**segment 2**	**segment 3**
level 1 events	856708	803847	819520
rejected events	178582	186641	204915
rejected %	20%	23%	25%

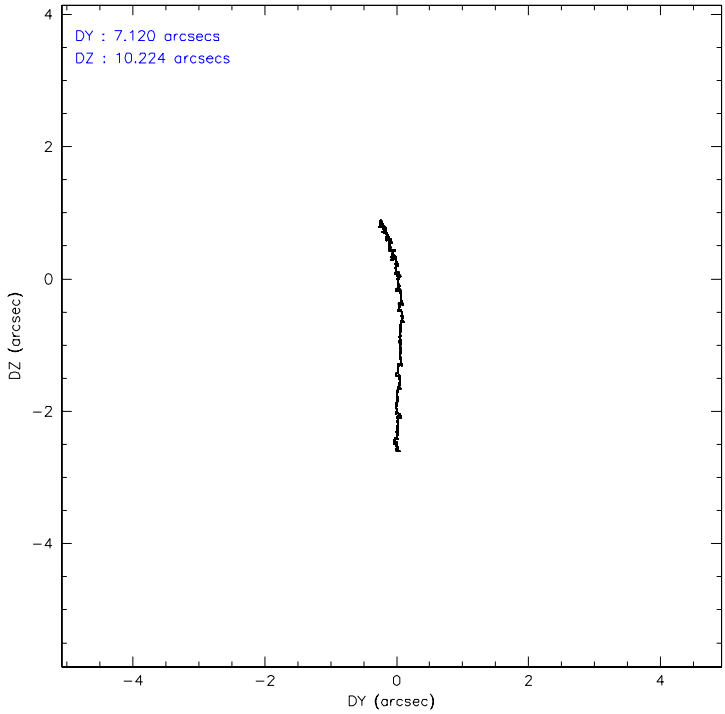
2.2 Compared Parameters

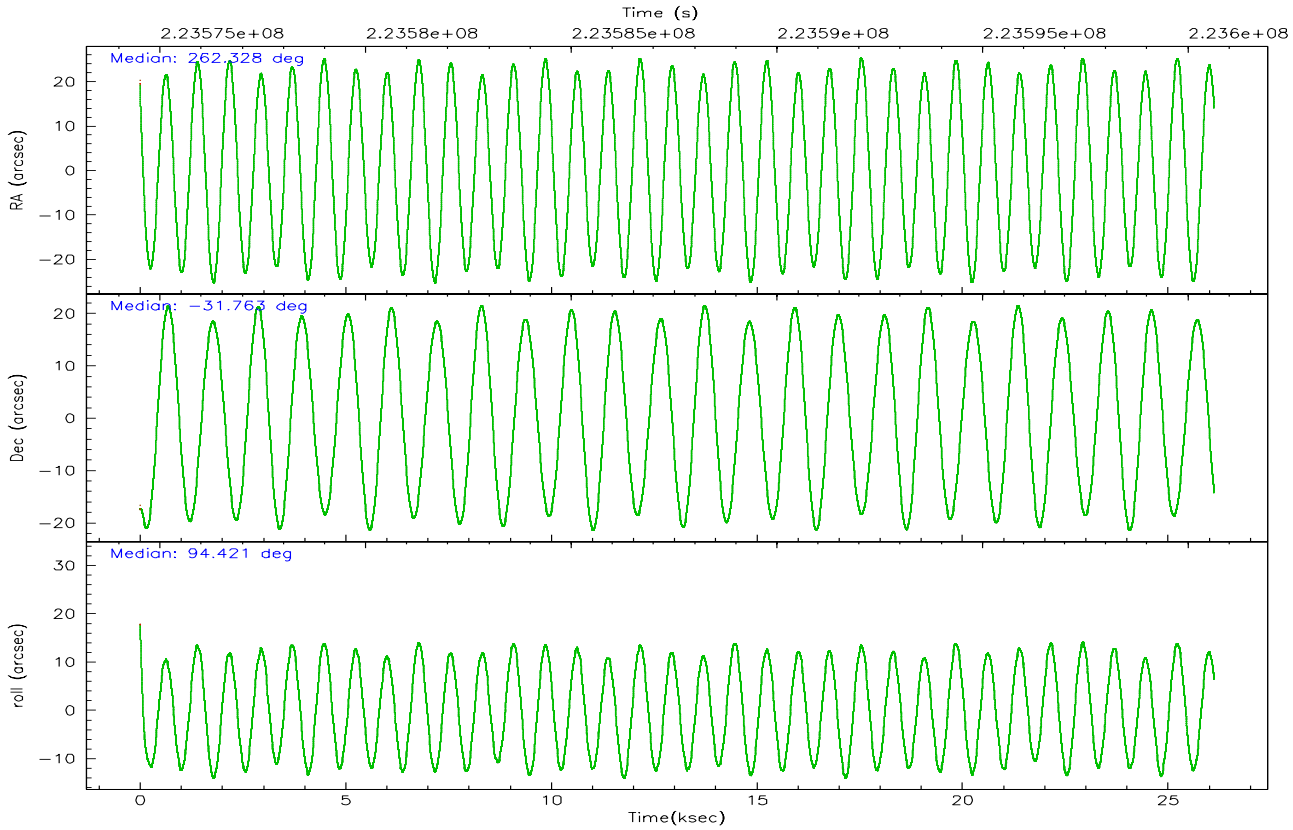
Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-S	HRC-S
Grating	LETG	LETG
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
Pointing RA	262.348432	262.3280522401308
Pointing Dec	-31.785166	-31.76243666305468
Pointing Roll	94.370293	94.42690080972747
SIM focus pos (mm)	-1.429586	-1.428180813131781
SIM defocus (mm)	0.1037507710433287	0.1051558262725154
SIM translation stage pos (mm)	250.455976	250.466033080201
SIM translation stage offset (mm)	0	-0.01005468664627074
Observation start time	223574635.184000	223573335.644
Observation start date	2005-01-31T16:02:51	2005-01-31T15:42:15
Observation end time	223600635.184000	223601538.00778
Observation end date	2005-01-31T23:16:11	2005-01-31T23:32:18

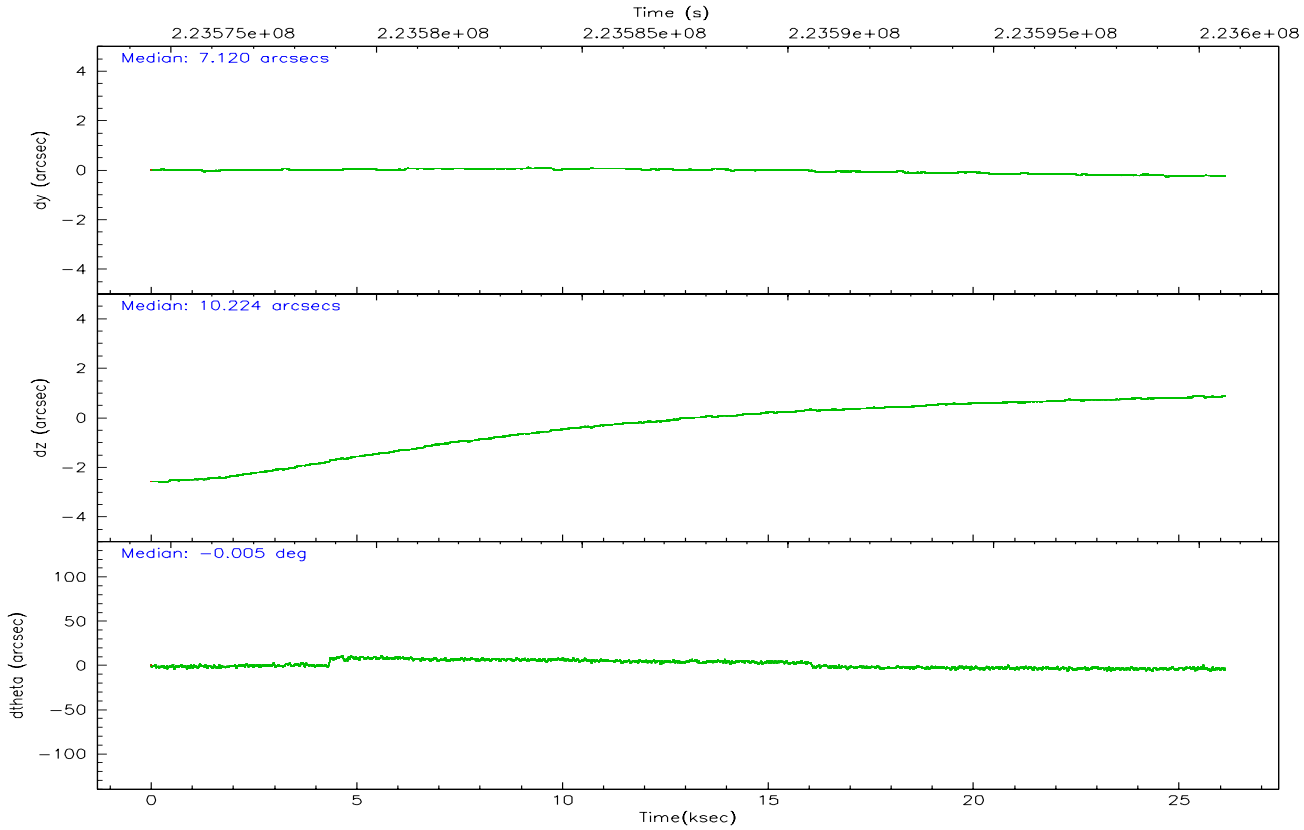
Parameter	Planned	Actual
Obspar format version number	6	6
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED

2.3 Aspect


RA : 262.328 deg
Dec : −31.763 deg
Dec (arcsec)
RA (arcsec)
20
10
0
−10
−20
−20
−10
0
10
20


DY : 7.120 arcsecs
DZ : 10.224 arcsecs
DZ (arcsec)
DY (arcsec)
4
2
0
−2
−4
−4
−2
0
2
4


Time (s)
2.23575e+08
2.2358e+08
2.23585e+08
2.2359e+08
2.23595e+08
2.236e+08
Median: 262.328 deg
RA (arcsec)
Median: −31.763 deg
Dec (arcsec)
Median: 94.421 deg
roll (arcsec)
Time(ksec)

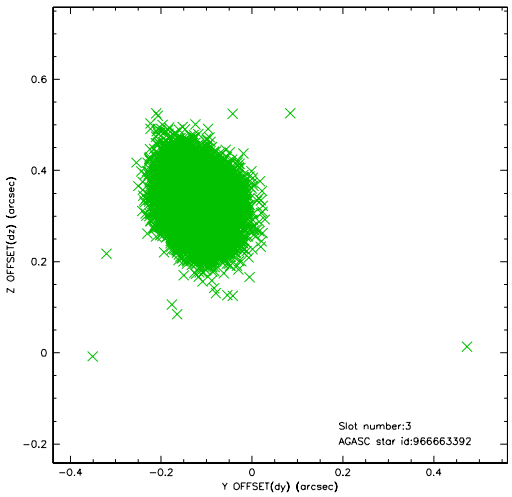

Time (s)
2.23575e+08
2.2358e+08
2.23585e+08
2.2359e+08
2.23595e+08
2.236e+08
Median: 7.120 arcsecs
dy (arcsec)
Median: 10.224 arcsecs
dz (arcsec)
Median: −0.005 deg
dtheta (arcsec)
Time(ksec)

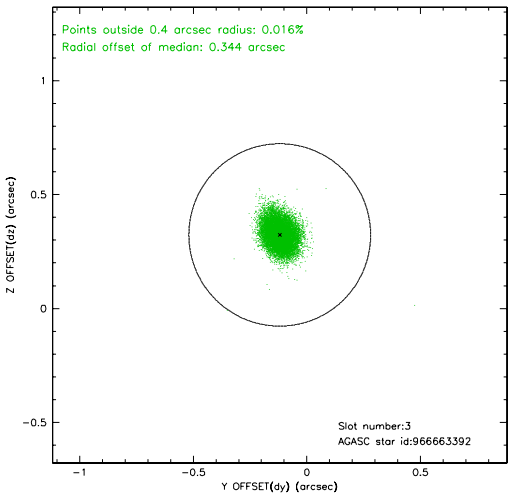
Slot Statistics

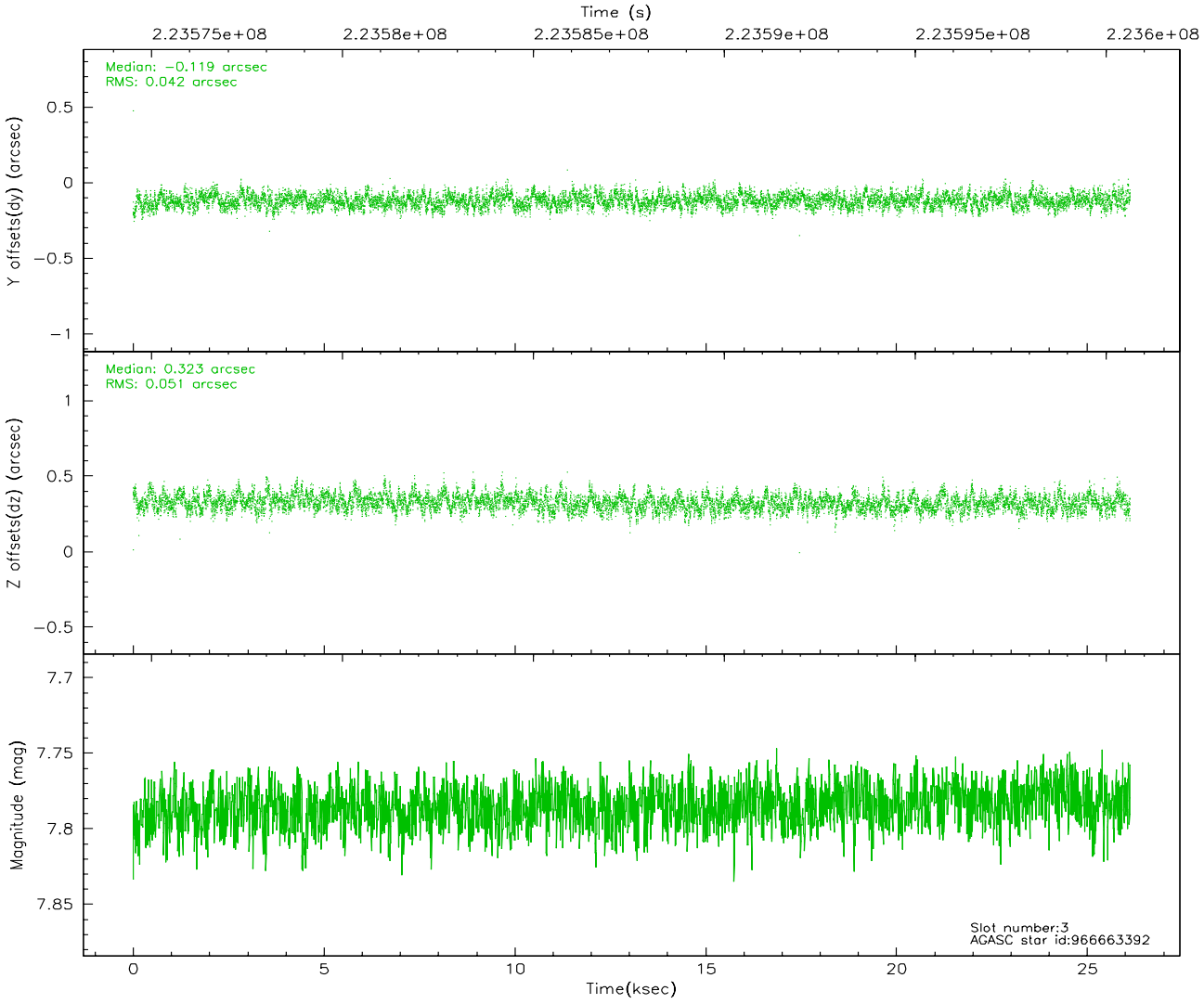
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	7.02	6371	0.083	-0.187	0.029	0.060	0.000000	0.000000	-1161.26	-458.57
1	FID	HRC-S-3	7.03	6373	0.098	-0.032	0.030	0.058	0.000000	0.000000	-1164.18	571.03
2	FID	HRC-S-4	6.98	6373	0.207	-0.080	0.010	0.017	0.000000	0.000000	1236.91	573.77
3	GUIDE	966663392	7.78	12746	-0.119	0.323	0.070	0.113	263.029690	-31.549104	681.97	-2147.68
4	GUIDE	967181504	7.86	12742	-0.003	-0.244	0.080	0.126	261.671808	-32.022142	-699.78	2124.30
5	GUIDE	967183712	9.02	12733	0.220	0.173	0.093	0.152	263.055109	-32.283332	-1958.65	-2007.01
6	GUIDE	966663720	7.84	12740	-0.081	-0.089	0.064	0.103	262.170068	-31.384212	1480.46	436.85
7	GUIDE	966659496	7.39	12743	-0.022	-0.165	0.076	0.116	262.303854	-31.534290	911.27	67.67

2.4 Star Slots

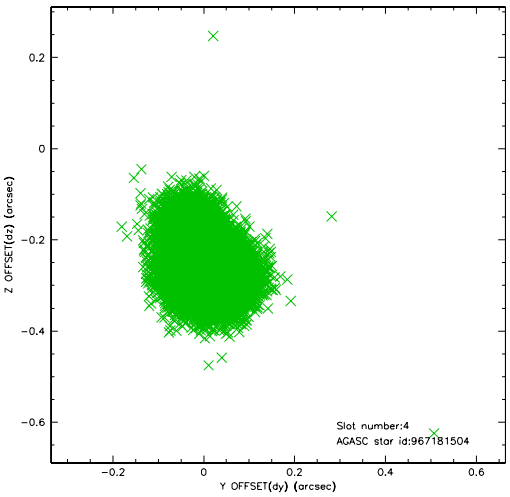
2.4.1 Slot 3

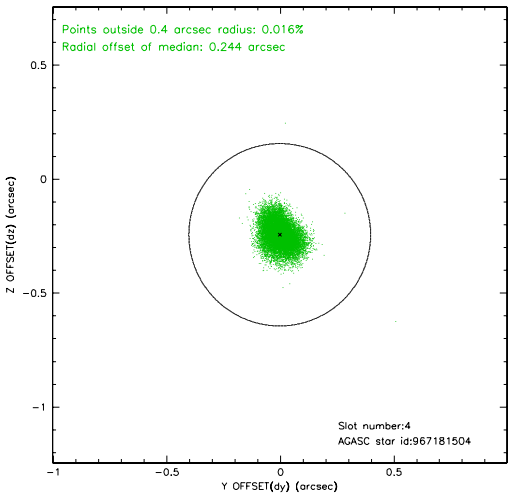


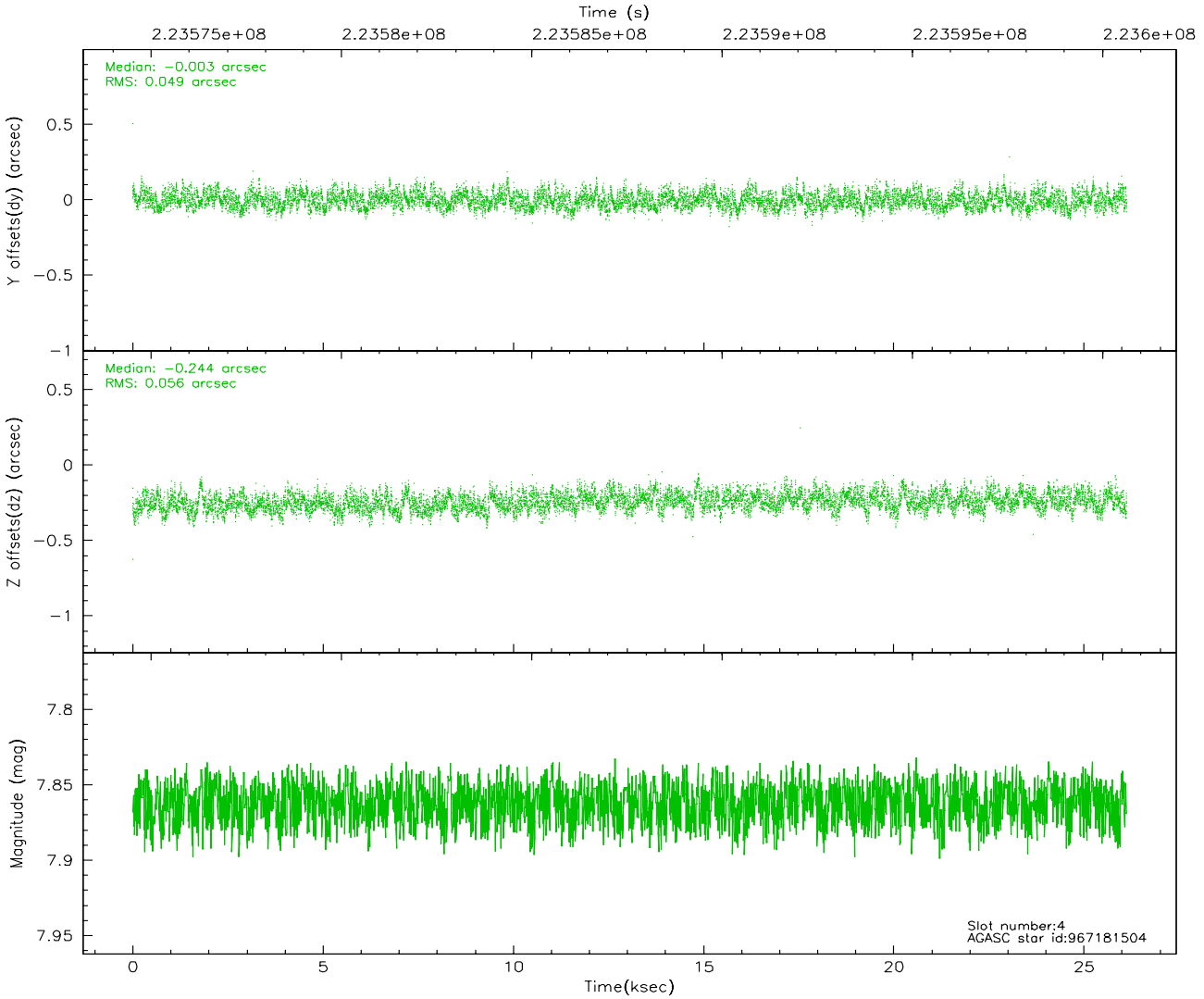




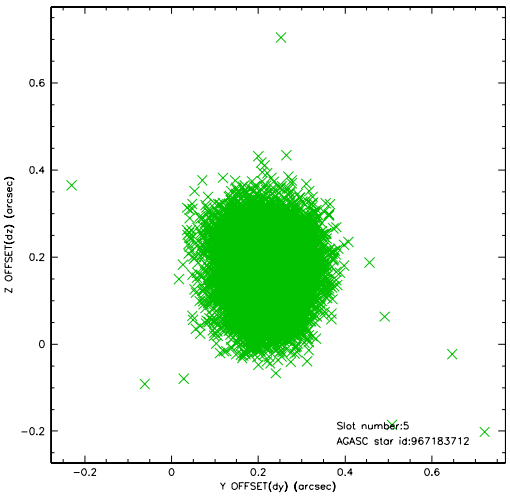
2.4.2 Slot 4

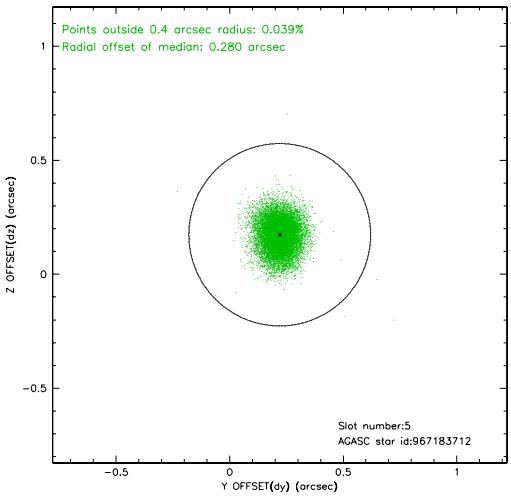

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:4
AGASC star id:967181504

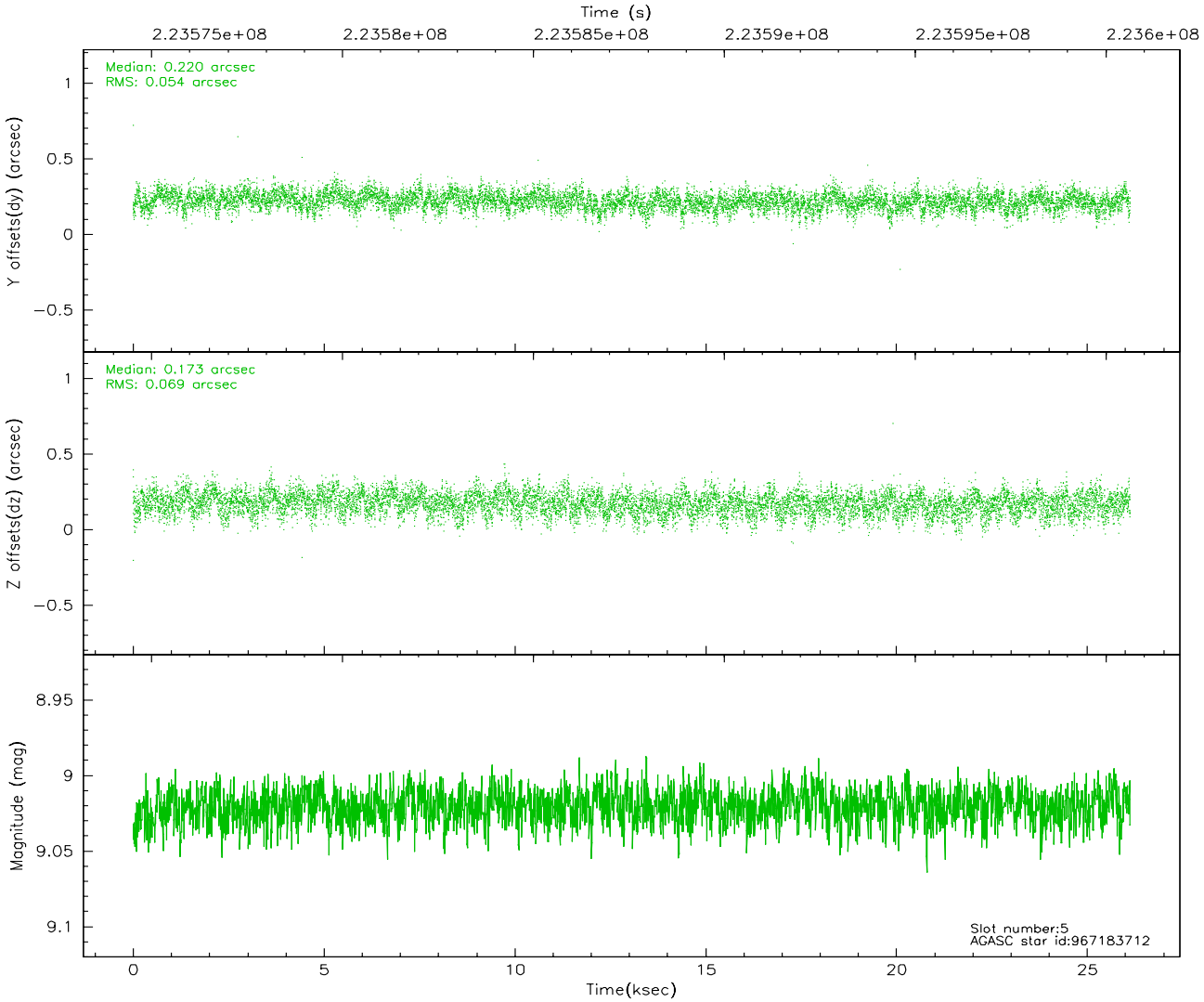

Points outside 0.4 arcsec radius: 0.016%
Radial offset of median: 0.244 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:4
AGASC star id:967181504


Time (s)
Median: −0.003 arcsec
RMS: 0.049 arcsec
Y offsets(dy) (arcsec)
Median: −0.244 arcsec
RMS: 0.056 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:4
AGASC star id:967181504
Time(ksec)

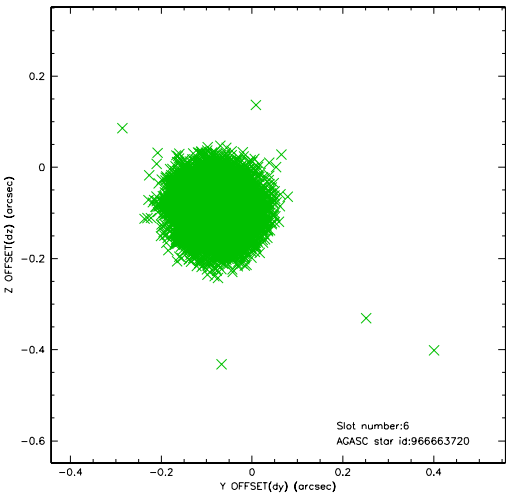
2.4.3 Slot 5

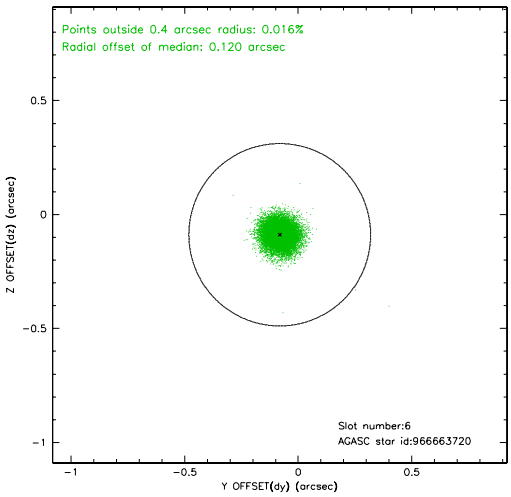

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:5
AGASC star id:967183712

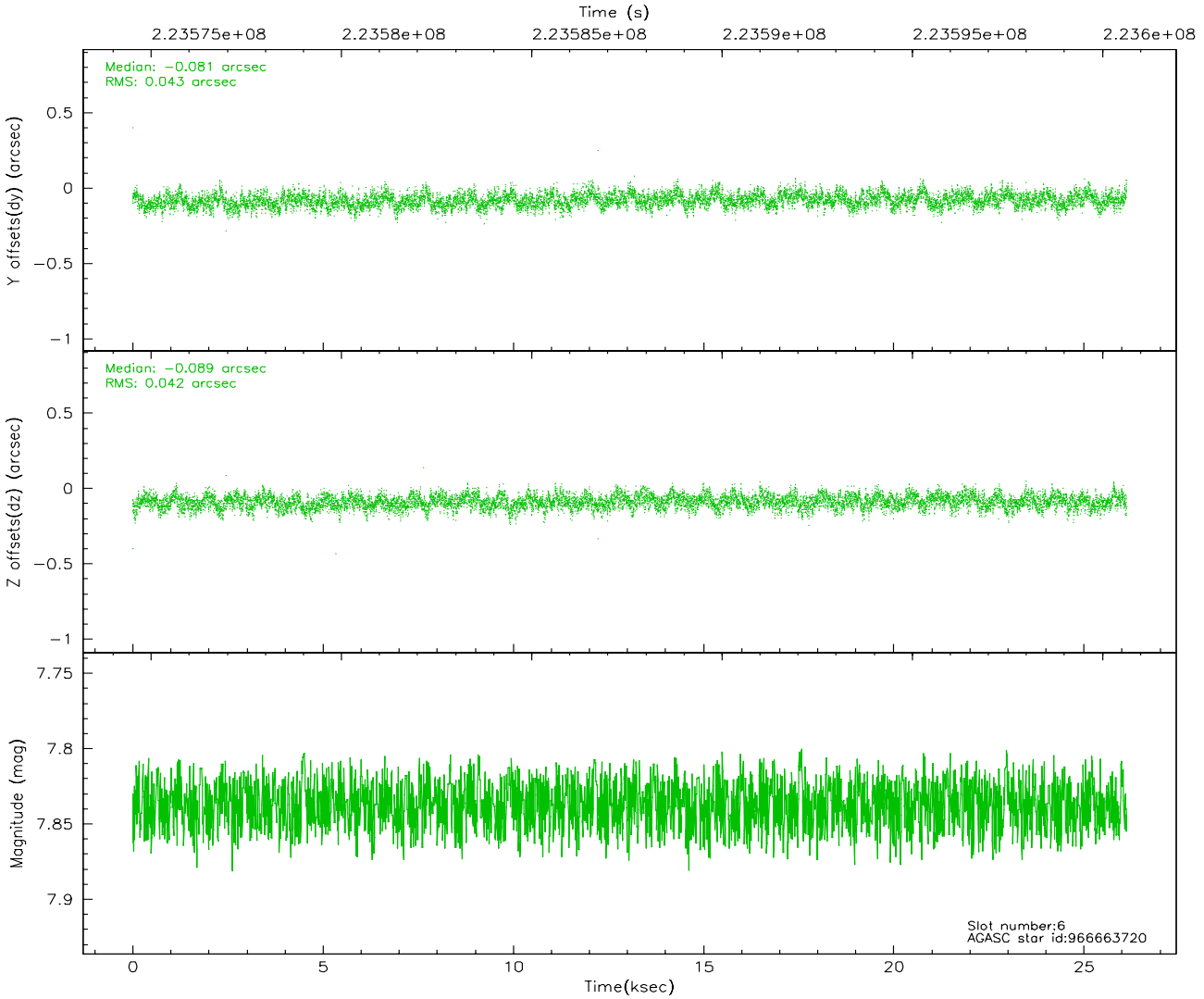

Points outside 0.4 arcsec radius: 0.039%
Radial offset of median: 0.280 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:5
AGASC star id:967183712


Time (s)
2.23575e+08
2.2358e+08
2.23585e+08
2.2359e+08
2.23595e+08
2.236e+08
Median: 0.220 arcsec
RMS: 0.054 arcsec
Y offsets(dy) (arcsec)
Median: 0.173 arcsec
RMS: 0.069 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:5
AGASC star id:967183712
Time(ksec)

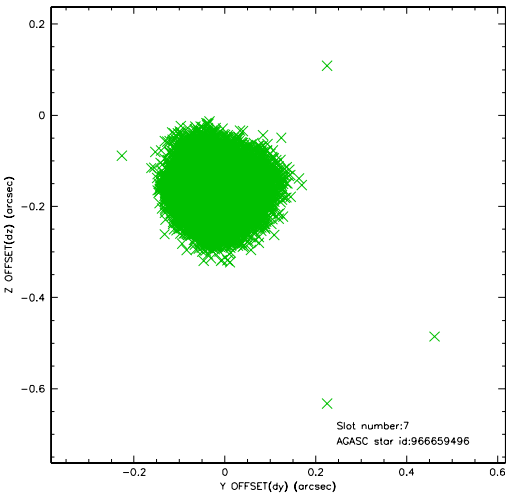
2.4.4 Slot 6

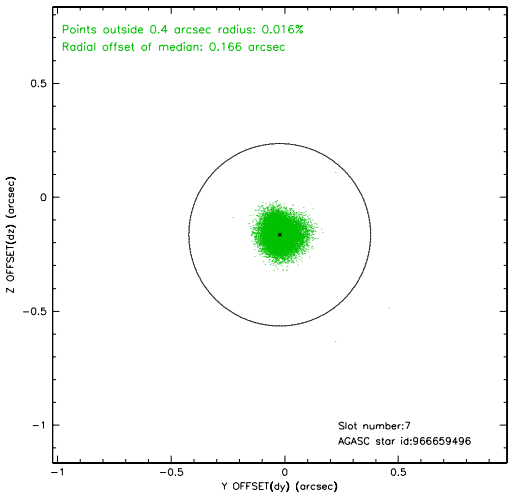

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:6
AGASC star id:966663720

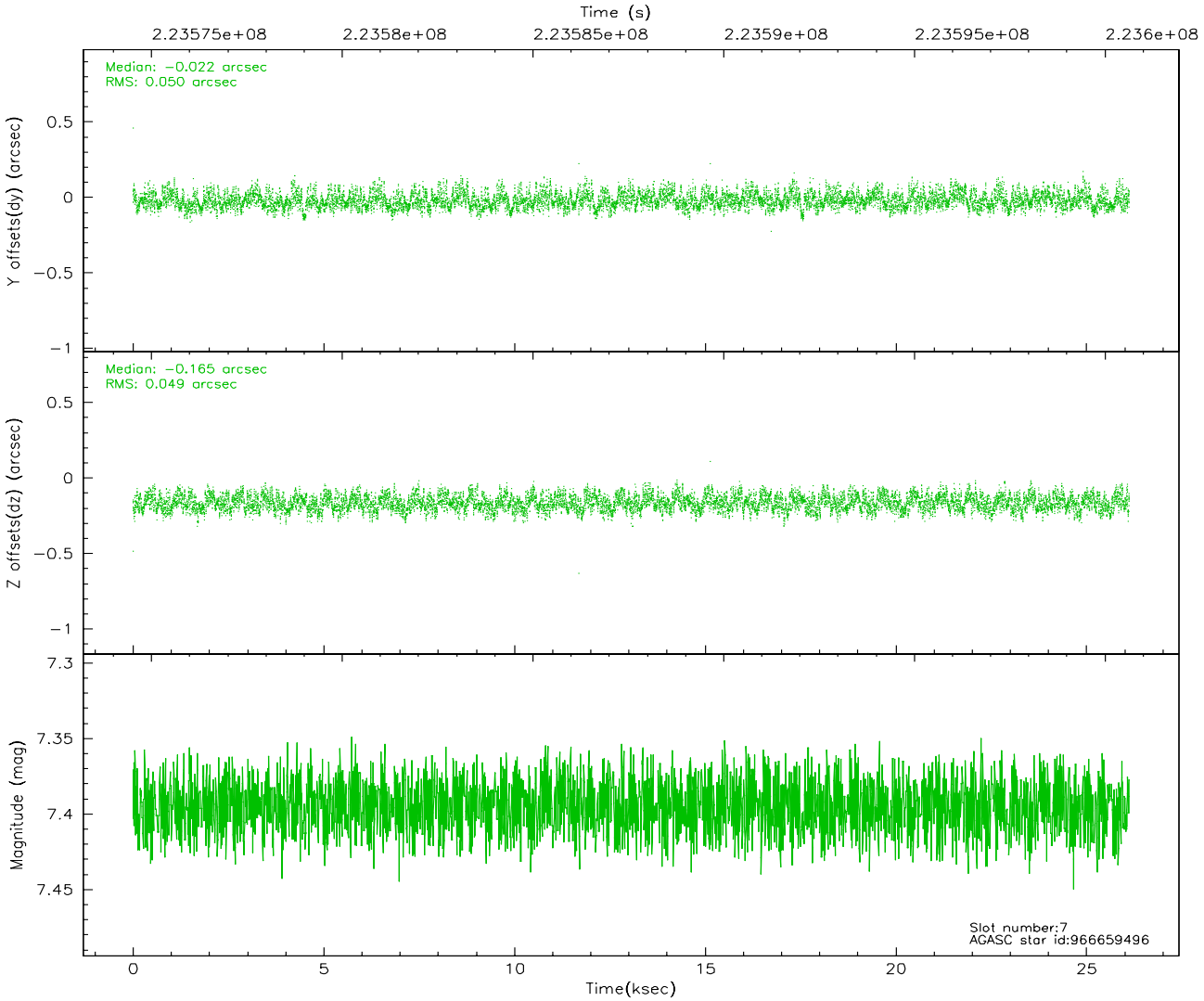

Points outside 0.4 arcsec radius: 0.016%
Radial offset of median: 0.120 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:6
AGASC star id:966663720


Time (s)
Median: −0.081 arcsec
RMS: 0.043 arcsec
Y offsets(dy) (arcsec)
Median: −0.089 arcsec
RMS: 0.042 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:6
AGASC star id:966663720
Time(ksec)

2.4.5 Slot 7

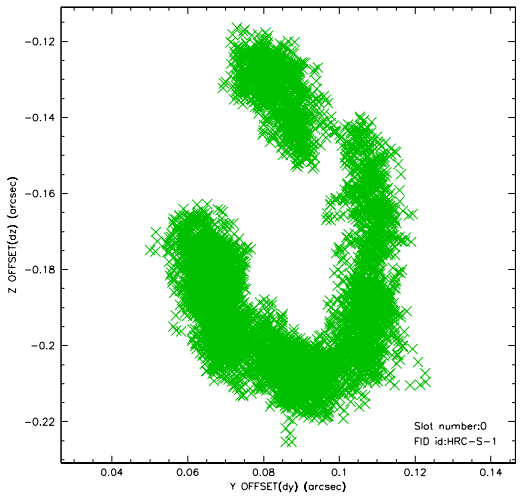

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:7
AGASC star id:966659496

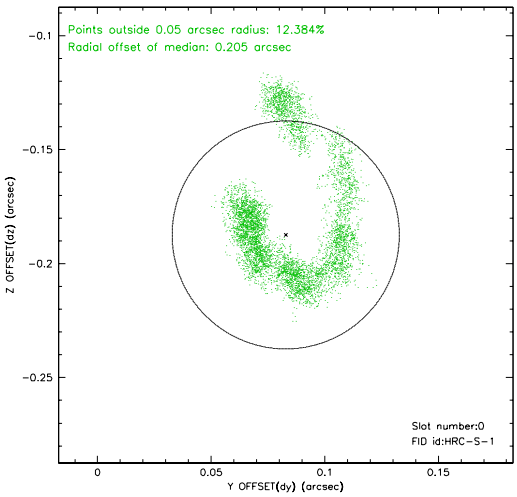

Points outside 0.4 arcsec radius: 0.016%
Radial offset of median: 0.166 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:7
AGASC star id:966659496

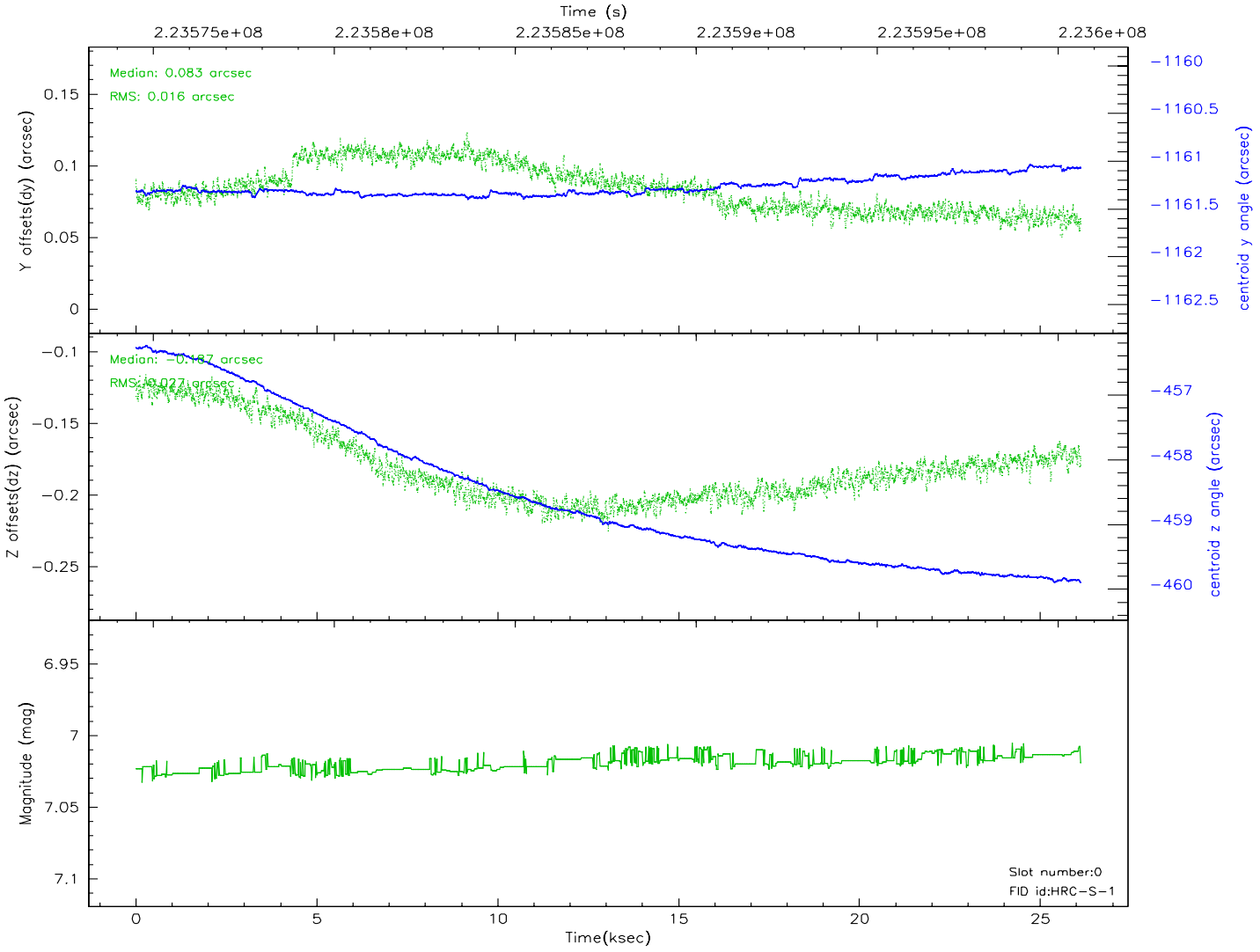

Time (s)
Median: −0.022 arcsec
RMS: 0.050 arcsec
Y offsets(dy) (arcsec)
Median: −0.165 arcsec
RMS: 0.049 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:7
AGASC star id:966659496
Time(ksec)

2.5 FID Slots

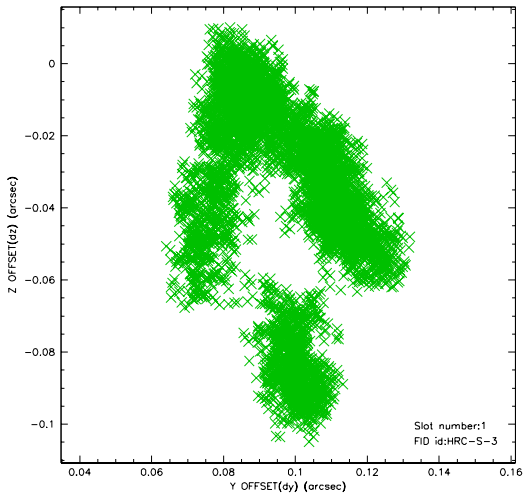
2.5.1 Slot 0

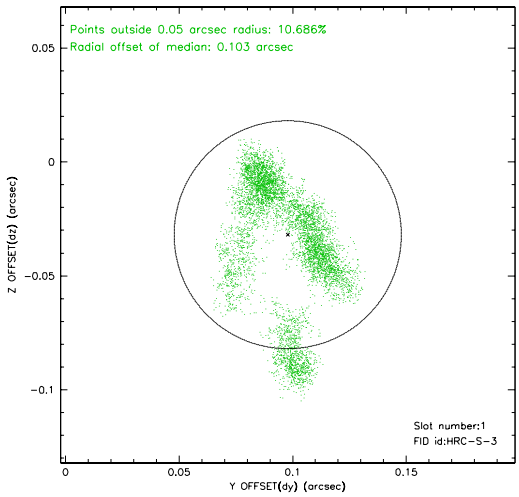


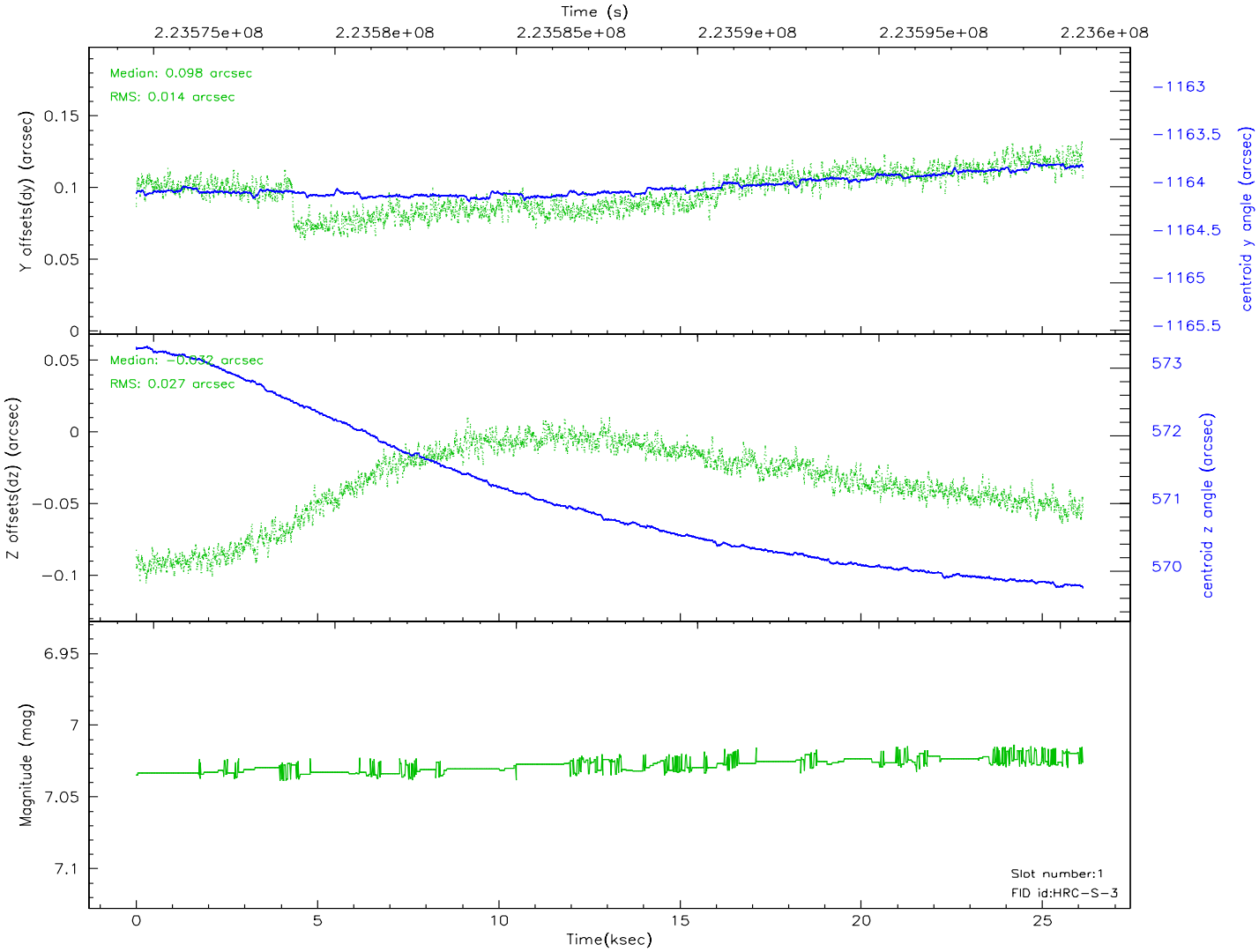




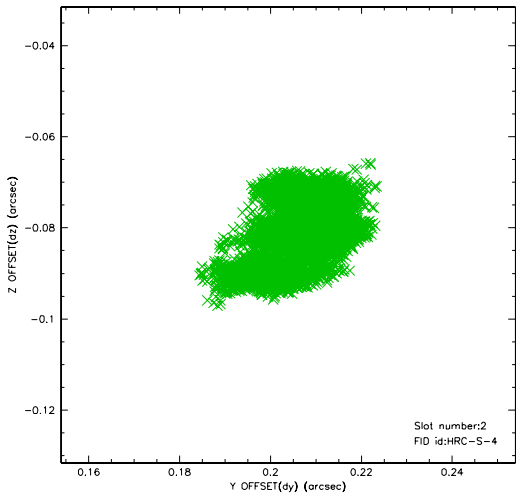
2.5.2 Slot 1

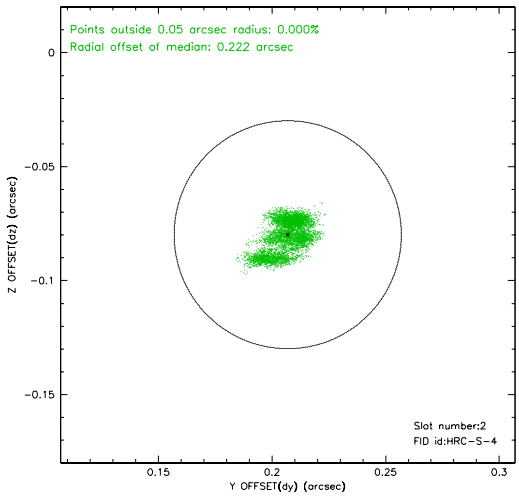

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:1
FID id:HRC-S-3

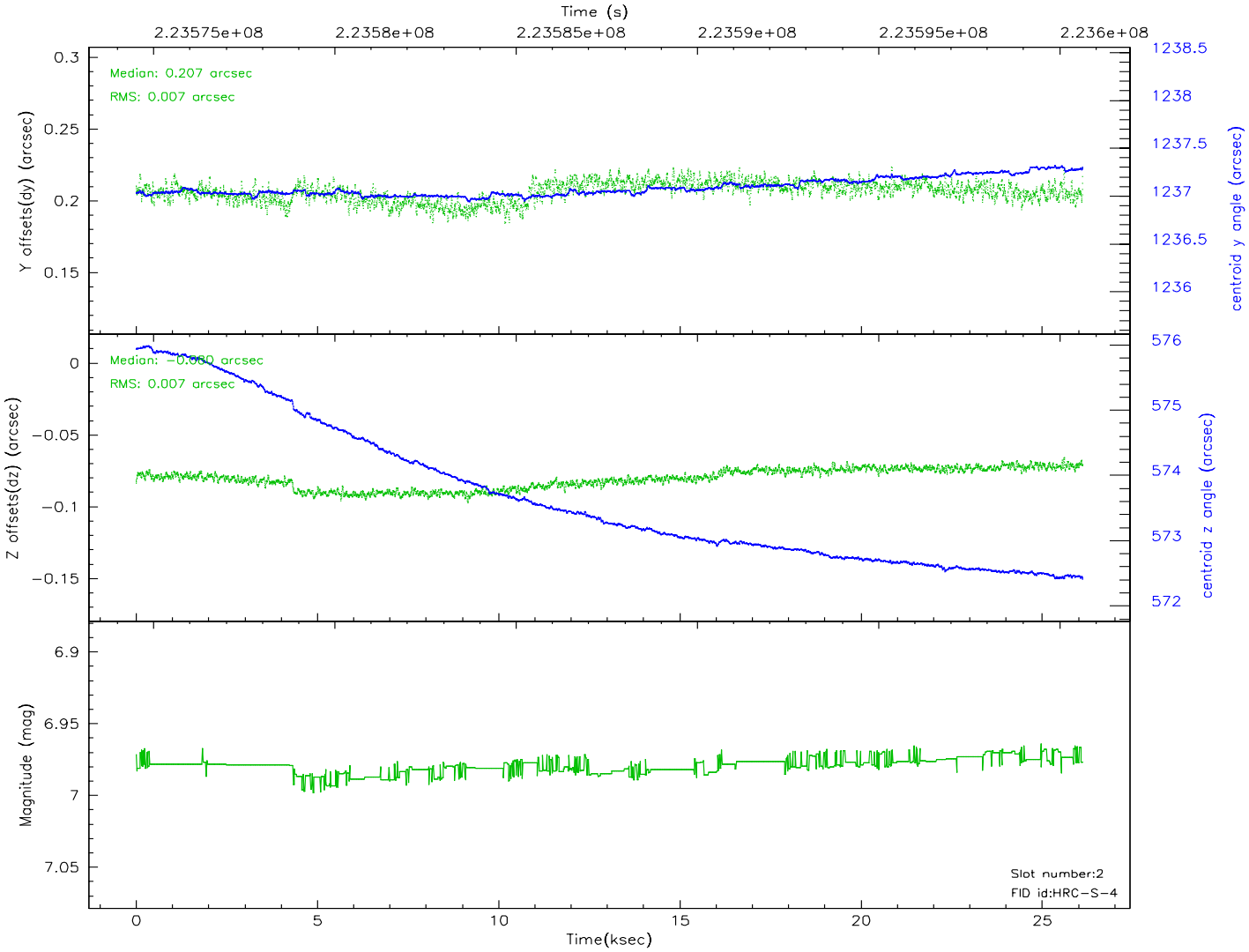

Points outside 0.05 arcsec radius: 10.686%
Radial offset of median: 0.103 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:1
FID id:HRC-S-3


Time (s)
Median: 0.098 arcsec
RMS: 0.014 arcsec
Y offsets(dy) (arcsec)
centroid y angle (arcsec)
Median: −0.032 arcsec
RMS: 0.027 arcsec
Z offsets(dz) (arcsec)
centroid z angle (arcsec)
Magnitude (mag)
Slot number:1
FID id:HRC-S-3
Time(ksec)

2.5.3 Slot 2

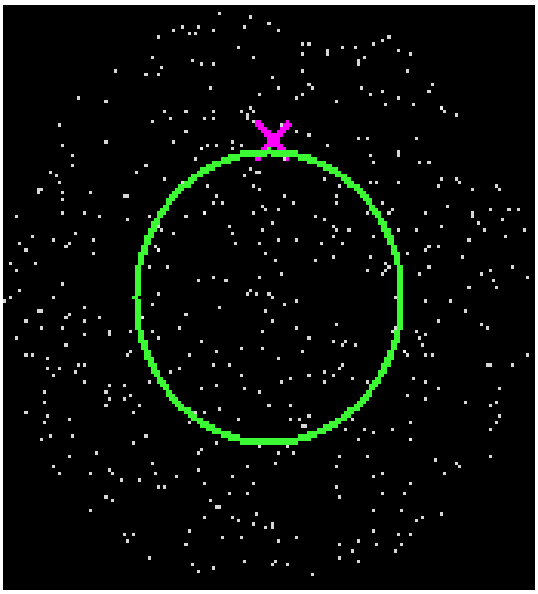

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:2
FID id:HRC-S-4


Points outside 0.05 arcsec radius: 0.000%
Radial offset of median: 0.222 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:2
FID id:HRC-S-4

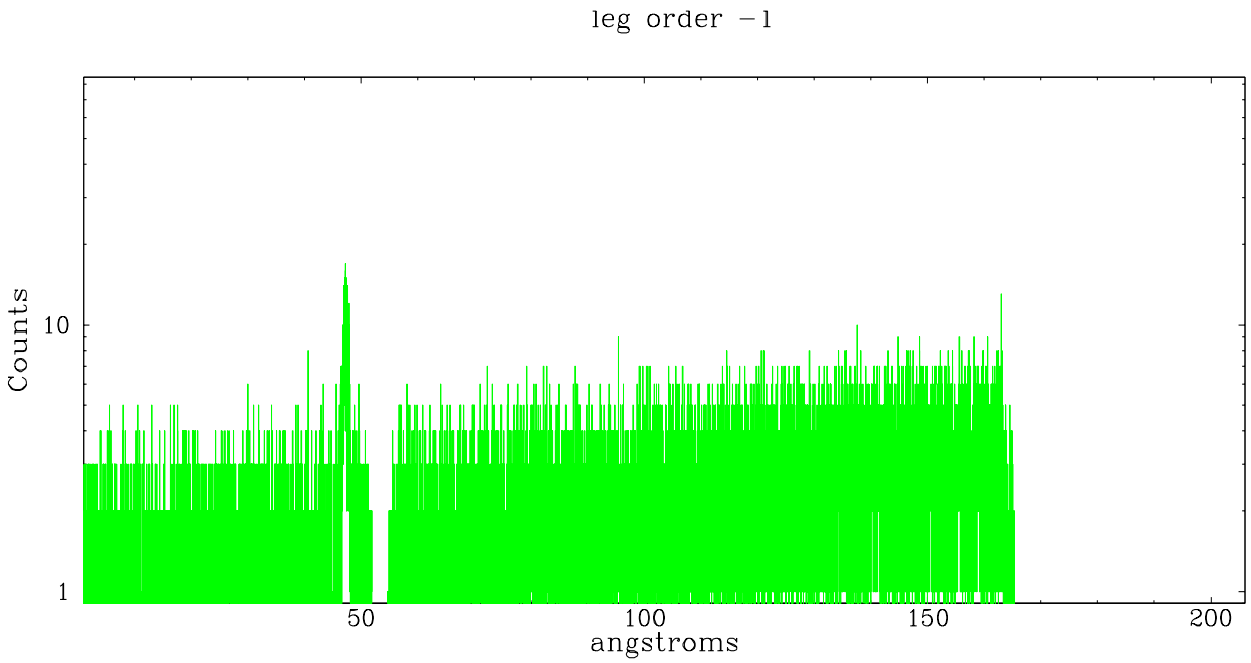

Time (s)
Median: 0.207 arcsec
RMS: 0.007 arcsec
Y offsets(dy) (arcsec)
centroid y angle (arcsec)
Median: −0.000 arcsec
RMS: 0.007 arcsec
Z offsets(dz) (arcsec)
centroid z angle (arcsec)
Magnitude (mag)
Slot number:2
FID id:HRC-S-4
Time(ksec)

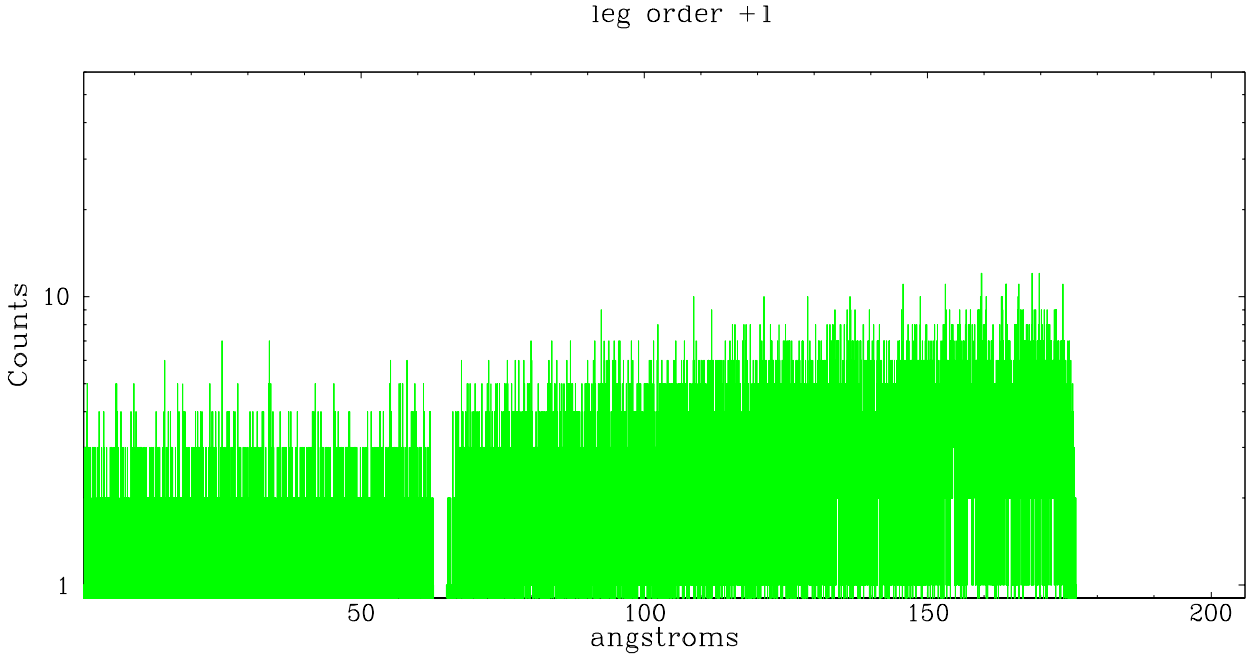
3 Gratings

3.1 LETG Arm



LETG Zero Order


leg order −1
Counts
10
1
50
100
150
200
angstroms


leg order +1
Counts
10
1
50
100
150
200
angstroms

A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2006.02.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	26.12648

A.2 Comments

```
Count rate spikes several times during the first half of the
observation.
```