V&V Reference Report
L2 ASCDS Version : 7.6.10

Observation 263 - L2 Version 4
Chandra X-Ray Center

L2 Processing Date : Nov 20 2007

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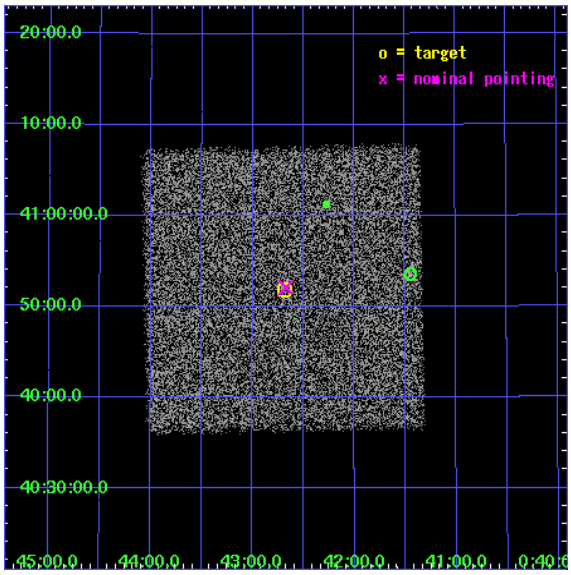
1 Front

seq_num	600023
obs_id	263
title	MONITORING M31
observer	Dr. Stephen Murray
object	M31 - South 1
ra_targ	10.67
dec_targ	40.865
ra_nom	10.667961954867
dec_nom	40.868747100472
roll_nom	133.88146060495
revision	4
ontime	1190.2812946141
livetime	1184.2200974109
l2events	35561

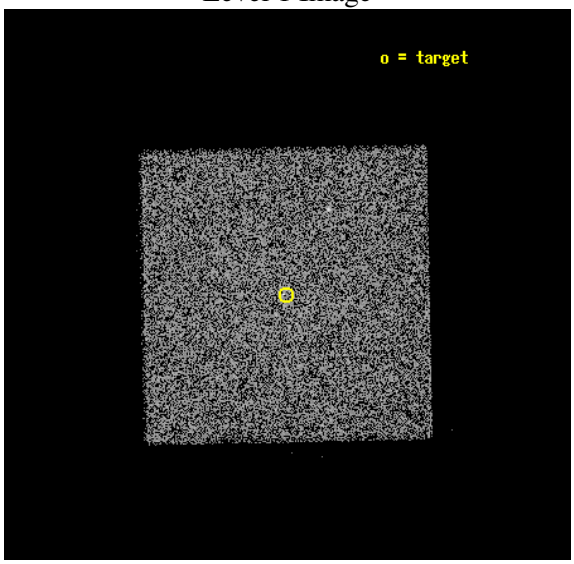


2 OBI

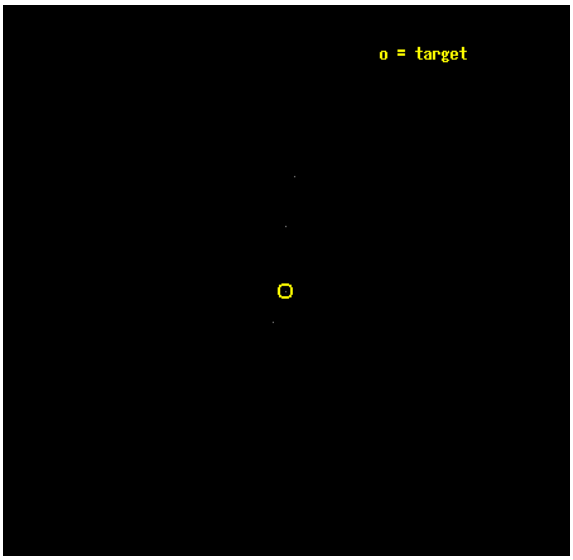
2.1 OBI

2.1.1 Images

Level 1 Image



Level 1 Bad Events



2.1.2 Parameters

obi_num	0
ascdsver	7.6.11.2
caldbver	3.4.1
date	2007-11-20T13:39:05
revision	4

sched_exp_time	1000.000000
ontime	1190.2812946141
l1events	53237

2.1.3 Events

Level 1 Events

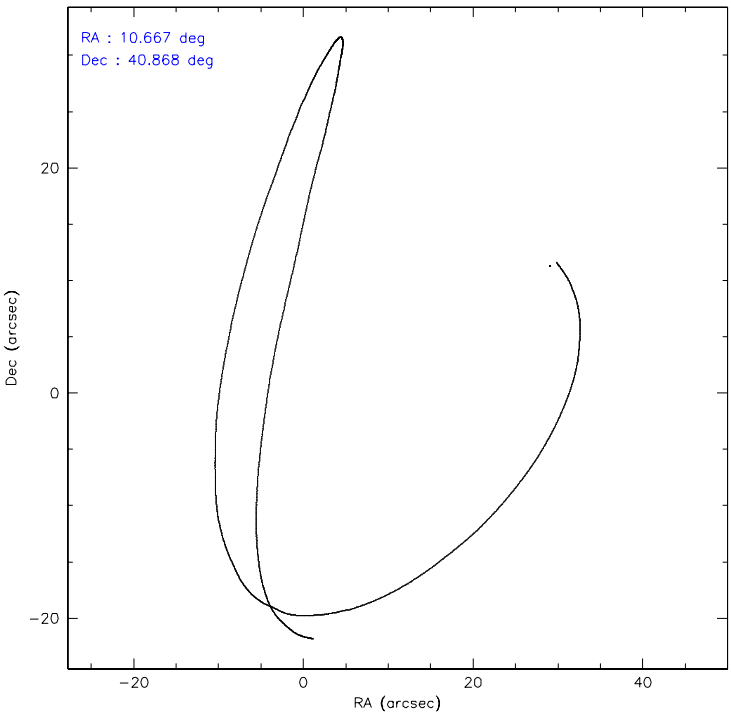
	segment 0
level 1 events	53237
rejected events	1770
rejected %	3%

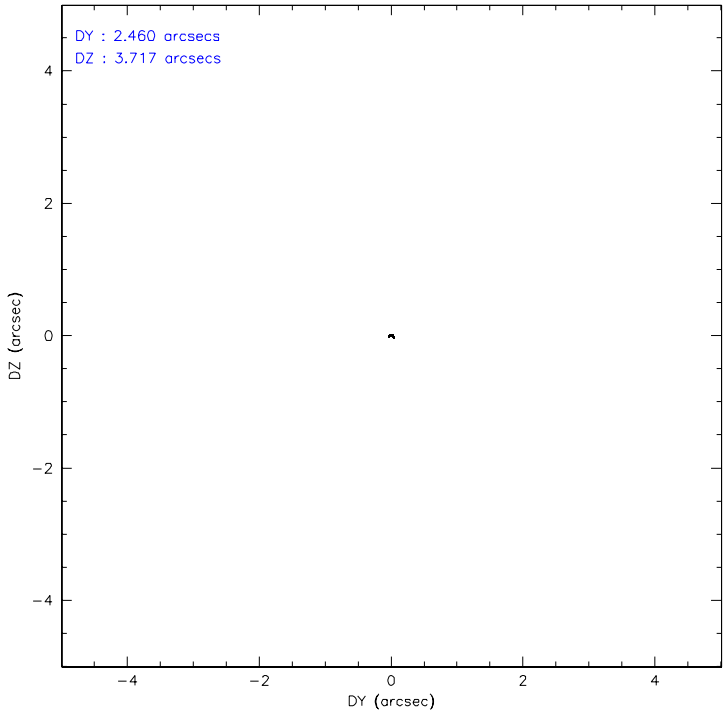
2.2 Compared Parameters

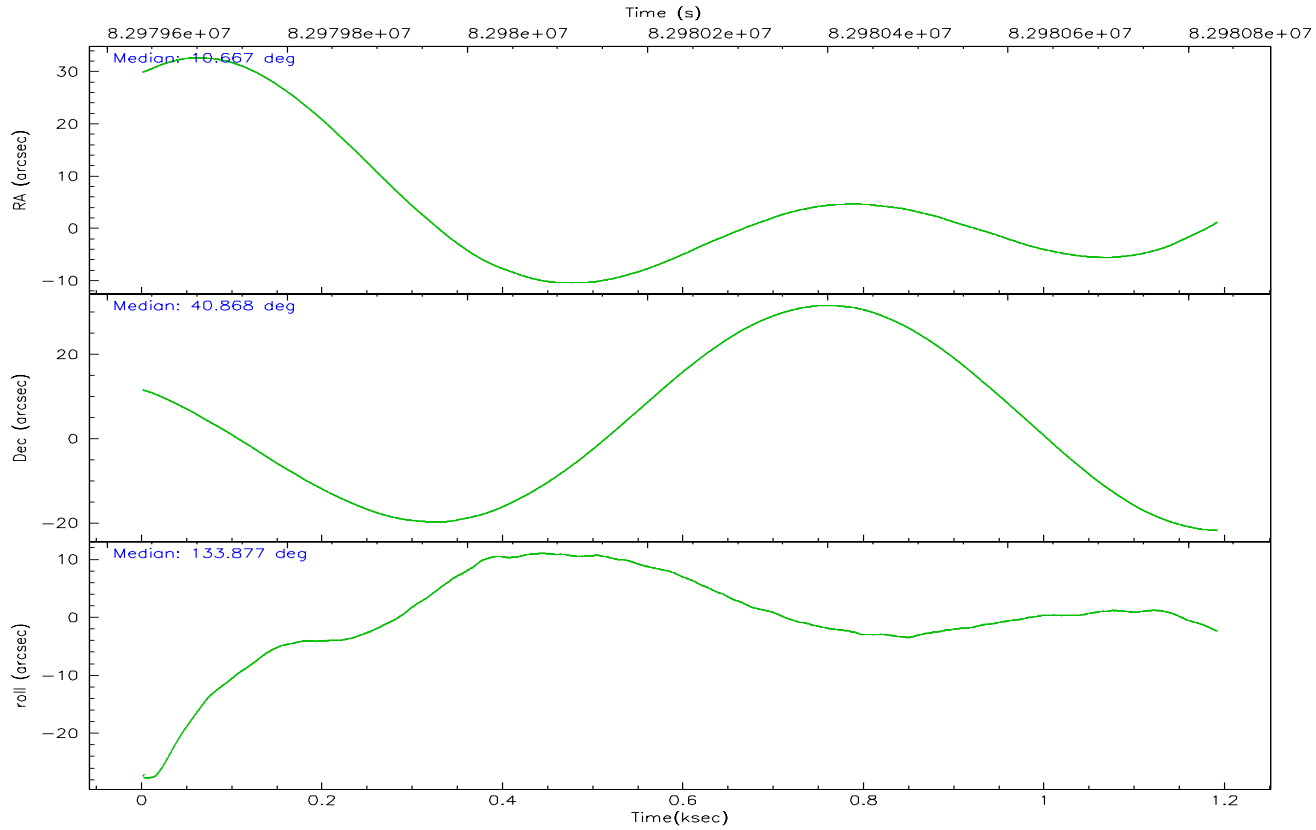
Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-I	HRC-I
Grating	NONE	NONE
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
Pointing RA	10.702654	10.66796195486656
Pointing Dec	40.861955	40.86874710047231
Pointing Roll	133.954235	133.881460604949
SIM focus pos (mm)	-1.040293	-1.038866356238299
SIM defocus (mm)	0	0.00142626442057514 1
SIM translation stage pos (mm)	126.985494	126.9854943052878
SIM translation stage offset (mm)	0	-5.413686238853188e-06
Observation start time	82979833.184000	82979456.95755599
Observation start date	2000-08-18T09:56:09	2000-08-18T09:50:56
Observation end time	82980833.184000	82980966.782612
Observation end date	2000-08-18T10:12:49	2000-08-18T10:16:06

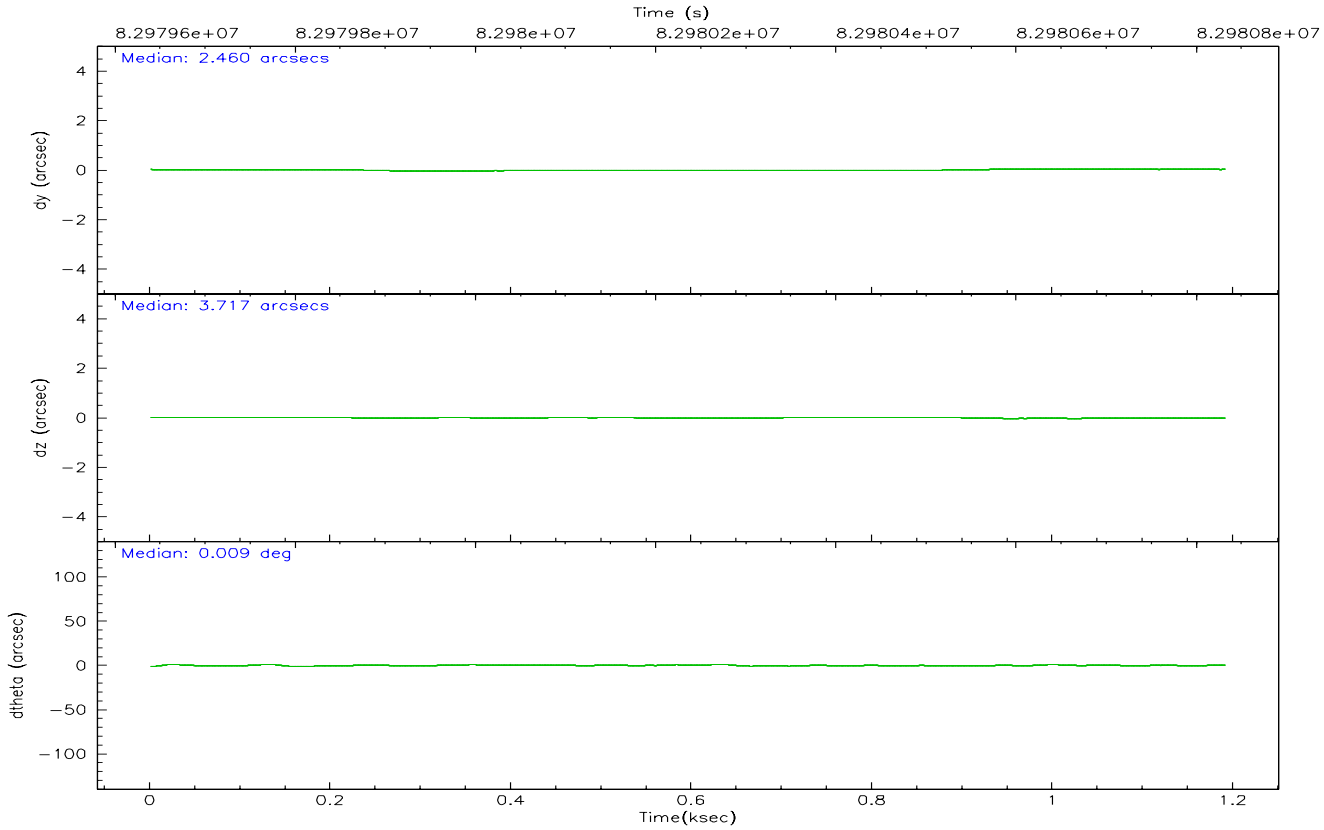
Parameter	Planned	Actual
Obspar format version number	6	6
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED

2.3 Aspect


RA : 10.667 deg
Dec : 40.868 deg
Dec (arcsec)
RA (arcsec)
20
0
−20
−20
0
20
40


DY : 2.460 arcsecs
DZ : 3.717 arcsecs
DZ (arcsec)
DY (arcsec)
4
2
0
−2
−4
−4
−2
0
2
4


Time (s)
8.29796e+07
8.29798e+07
8.298e+07
8.29802e+07
8.29804e+07
8.29806e+07
8.29808e+07
Median: 10.667 deg
RA (arcsec)
Median: 40.868 deg
Dec (arcsec)
Median: 133.877 deg
roll (arcsec)
Time(ksec)

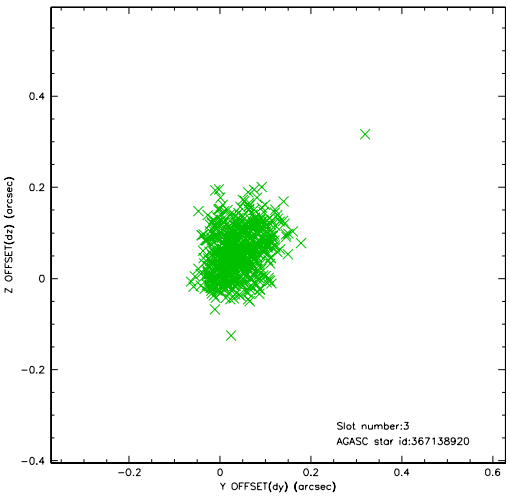

Time (s)
8.29796e+07
8.29798e+07
8.298e+07
8.29802e+07
8.29804e+07
8.29806e+07
8.29808e+07
Median: 2.460 arcsecs
dy (arcsec)
Median: 3.717 arcsecs
dz (arcsec)
Median: 0.009 deg
dtheta (arcsec)
Time(ksec)

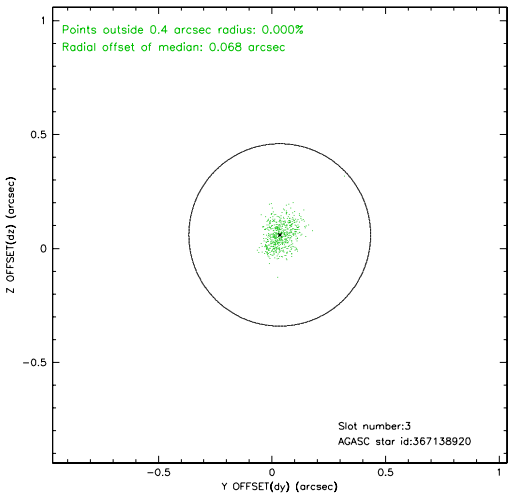
Slot Statistics

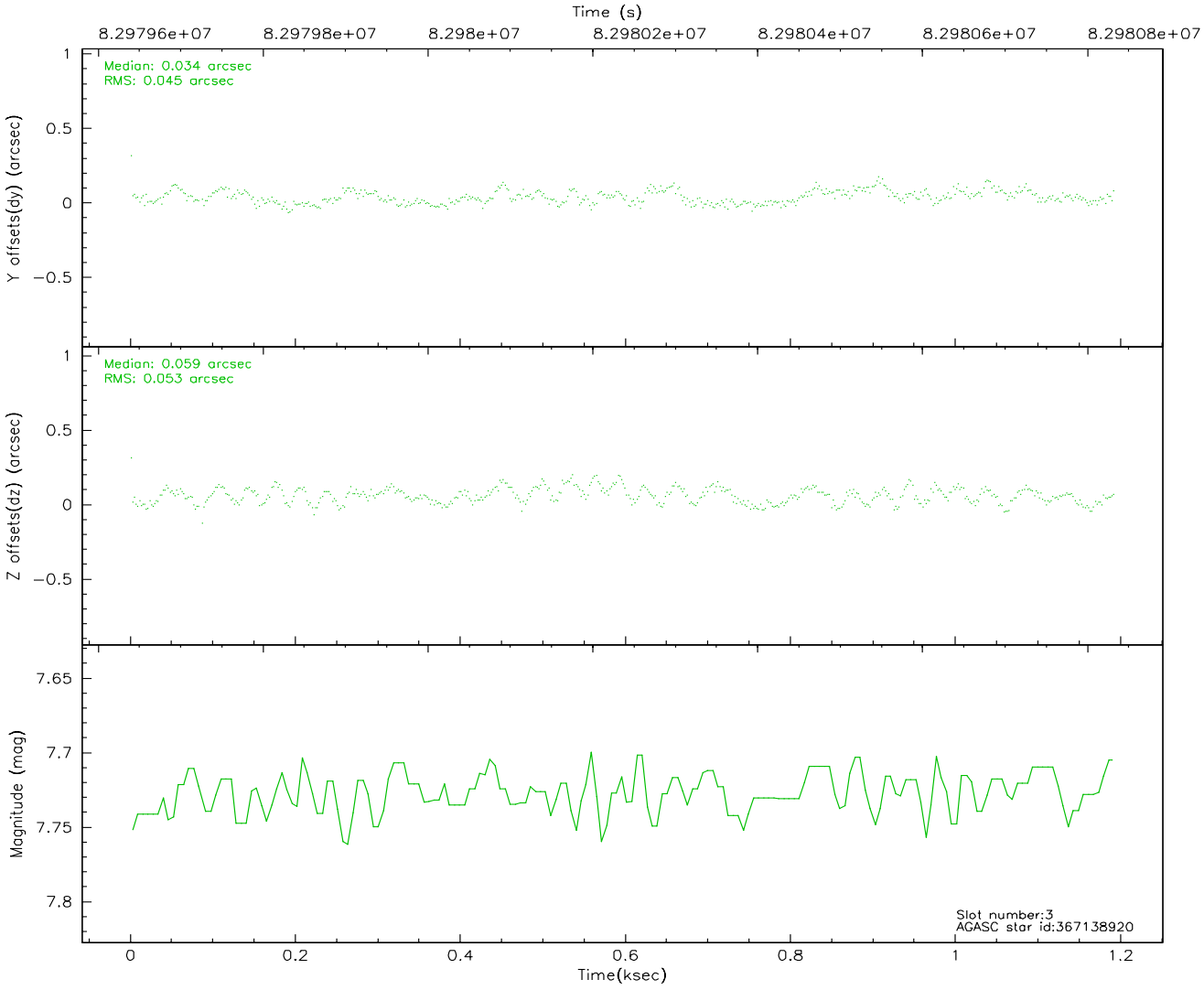
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-I-1	6.96	291	0.063	0.045	0.006	0.010	0.000000	0.000000	-757.88	-1291.46
1	FID	HRC-I-3	7.04	291	0.025	-0.066	0.007	0.011	0.000000	0.000000	-1188.98	1008.56
2	FID	HRC-I-4	6.98	291	0.026	-0.068	0.005	0.009	0.000000	0.000000	1280.81	1014.03
3	GUIDE	367138920	7.73	581	0.034	0.059	0.074	0.113	11.513485	40.808909	-1660.94	-1465.15
4	GUIDE	367144424	8.65	582	0.041	-0.206	0.059	0.100	10.464515	40.309136	-978.67	1848.59
5	GUIDE	367663272	9.31	582	-0.136	0.116	0.104	0.175	10.656279	41.699429	2257.99	-1999.41
6	GUIDE	367658664	9.60	582	-0.162	0.113	0.097	0.159	10.374070	41.369746	1939.74	-634.07
7	GUIDE	367141456	9.47	581	0.227	-0.098	0.110	0.167	10.733182	40.145955	-1907.94	1727.36

2.4 Star Slots

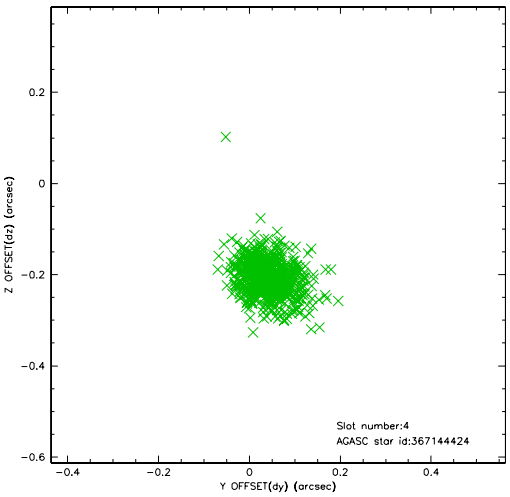
2.4.1 Slot 3

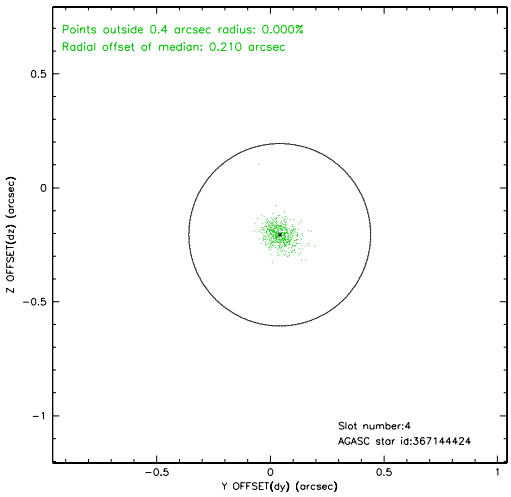


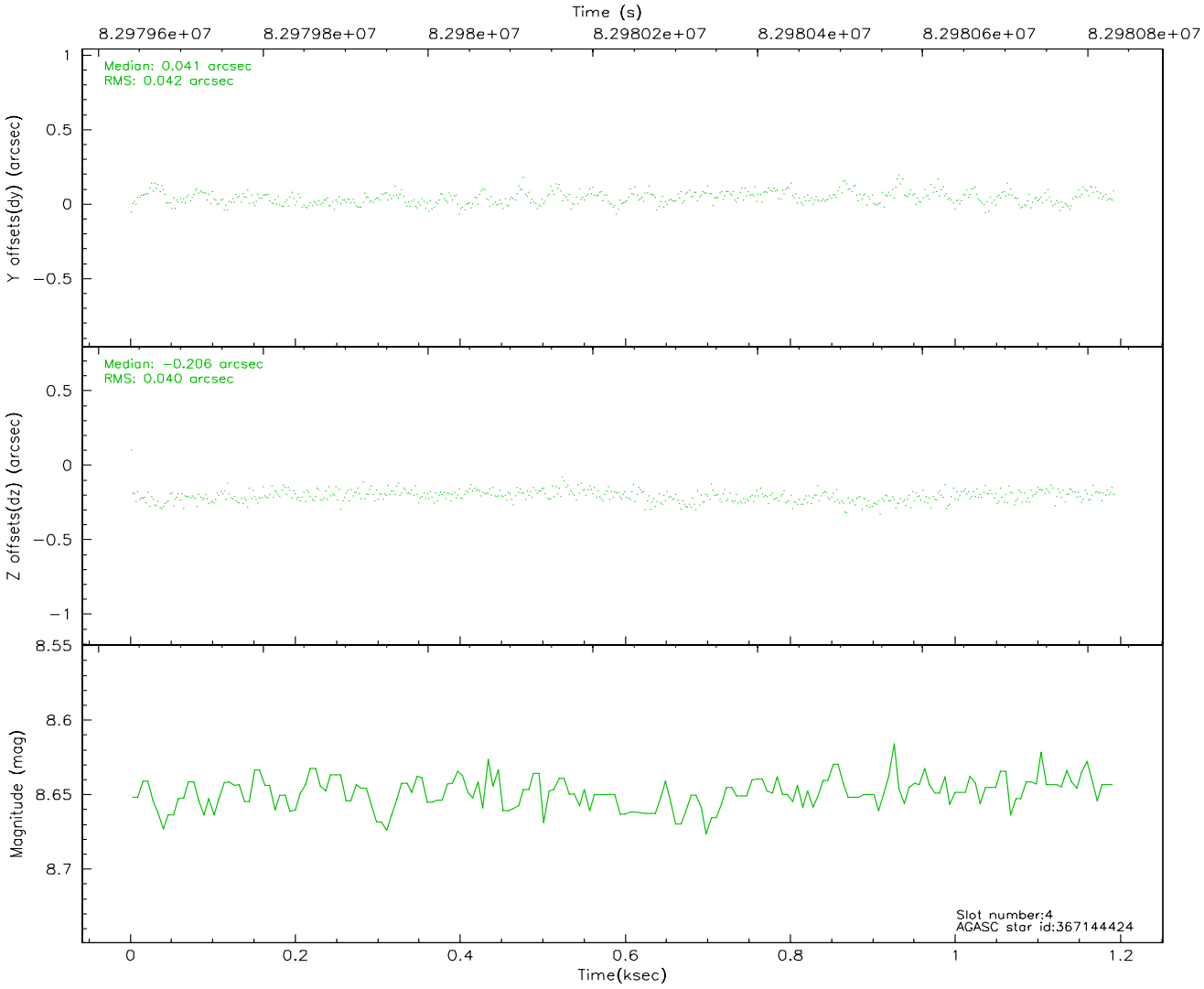




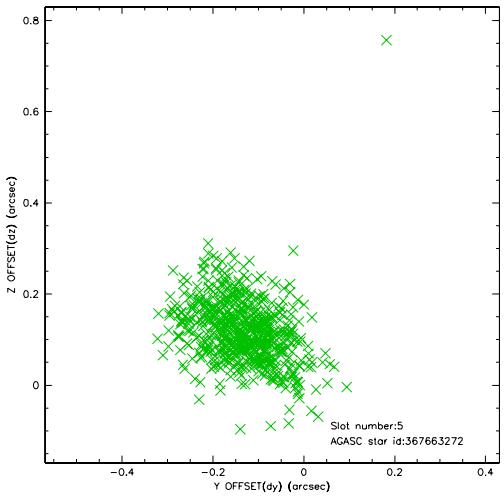
2.4.2 Slot 4

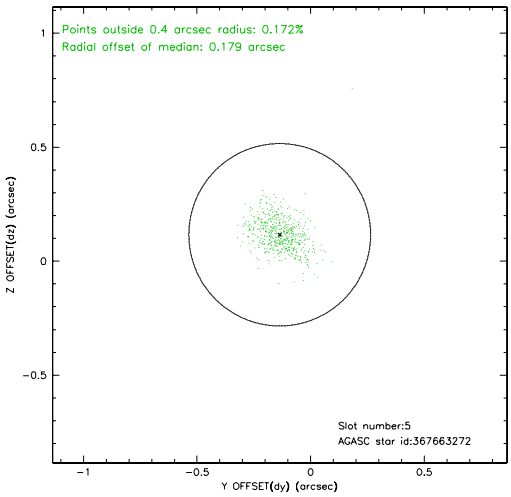

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:4
AGASC star id:367144424

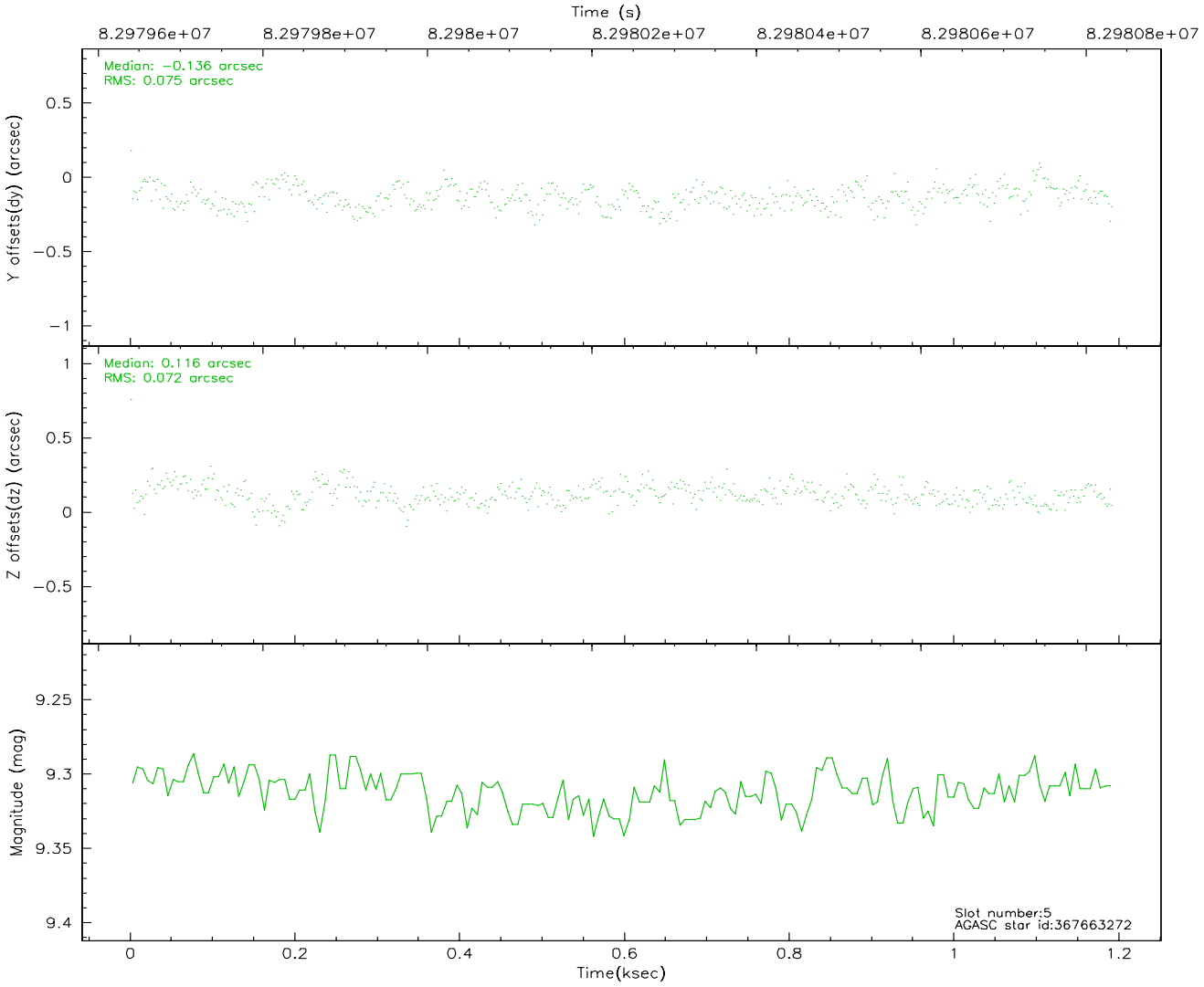

Points outside 0.4 arcsec radius: 0.000%
Radial offset of median: 0.210 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:4
AGASC star id:367144424


Time (s)
Median: 0.041 arcsec
RMS: 0.042 arcsec
Y offsets(dy) (arcsec)
Median: −0.206 arcsec
RMS: 0.040 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:4
AGASC star id:367144424
Time(ksec)

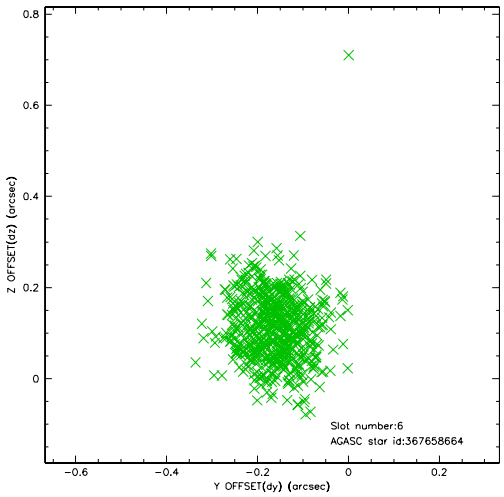
2.4.3 Slot 5

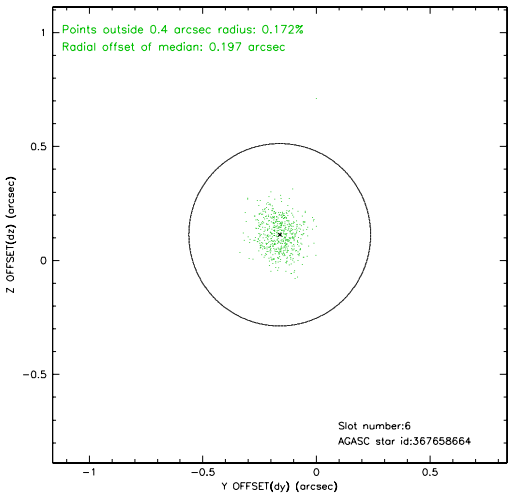

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:5
AGASC star id:367663272

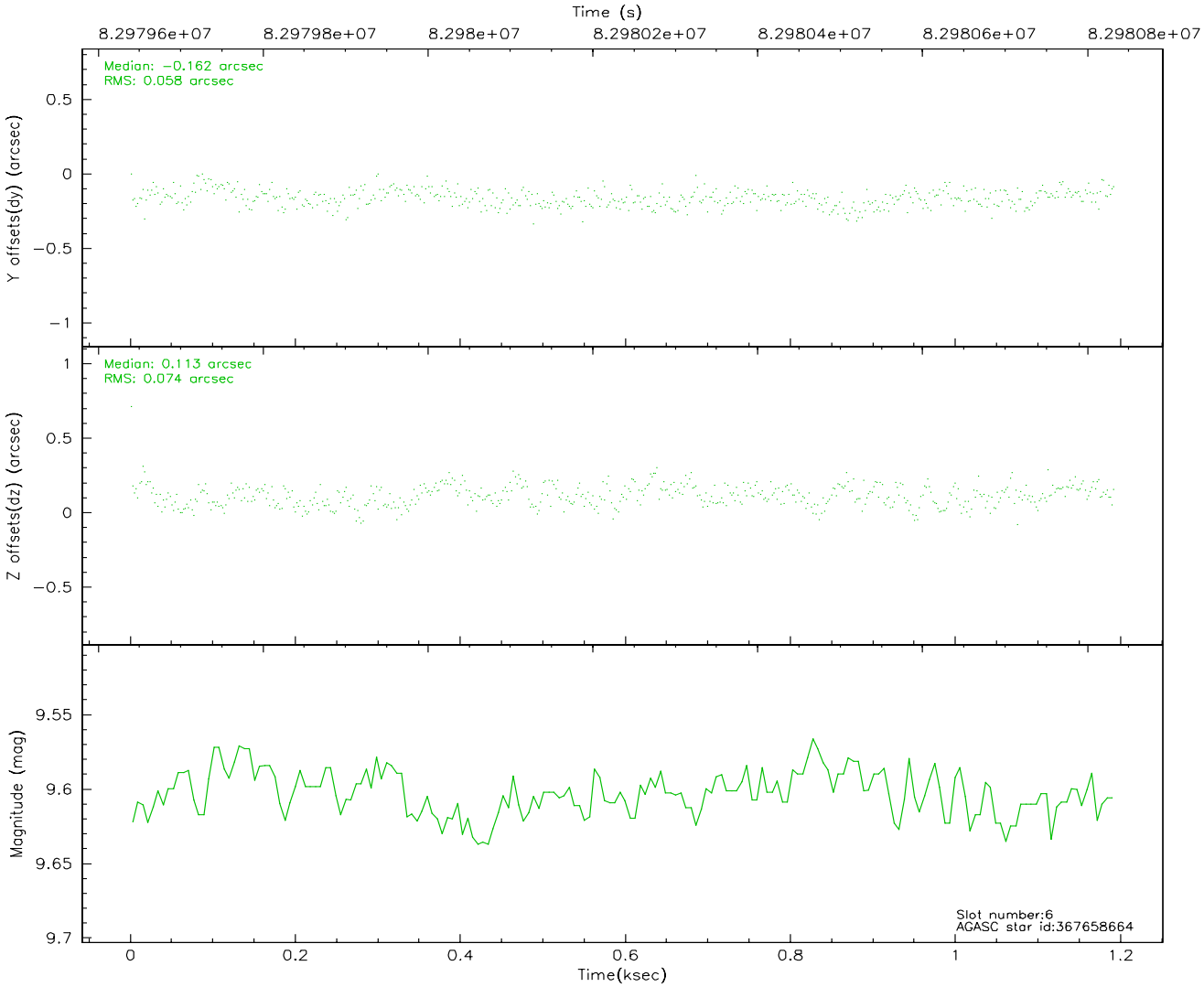

Points outside 0.4 arcsec radius: 0.172%
Radial offset of median: 0.179 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:5
AGASC star id:367663272


Time (s)
Median: −0.136 arcsec
RMS: 0.075 arcsec
Y offsets(dy) (arcsec)
Median: 0.116 arcsec
RMS: 0.072 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:5
AGASC star id:367663272
Time(ksec)

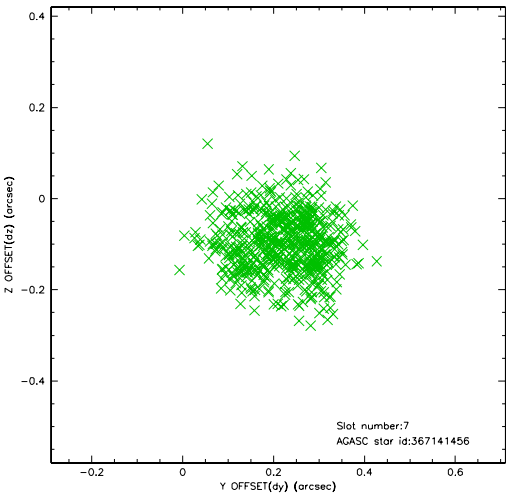
2.4.4 Slot 6

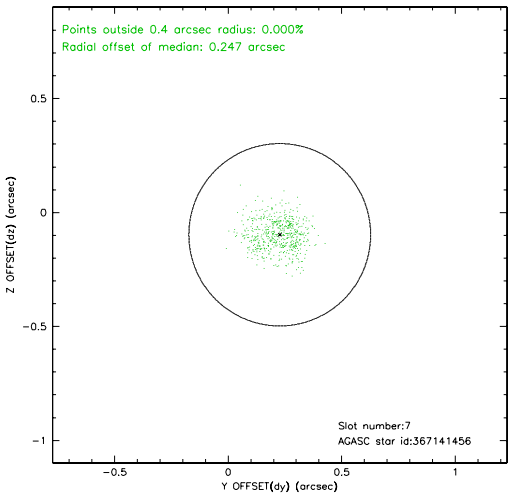

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:6
AGASC star id:367658664

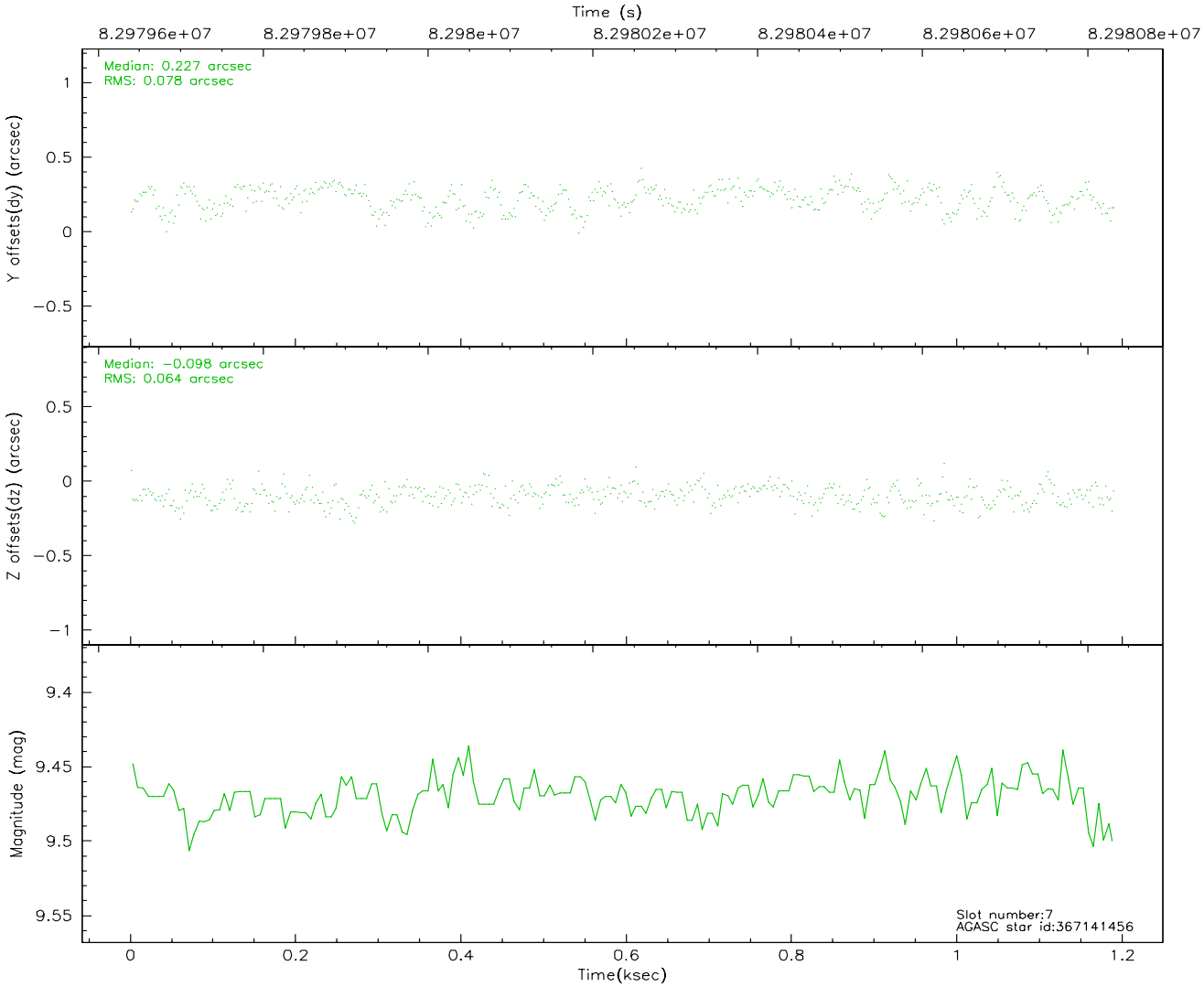

Points outside 0.4 arcsec radius: 0.172%
Radial offset of median: 0.197 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:6
AGASC star id:367658664


Time (s)
Median: −0.162 arcsec
RMS: 0.058 arcsec
Y offsets(dy) (arcsec)
Median: 0.113 arcsec
RMS: 0.074 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:6
AGASC star id:367658664
Time(ksec)

2.4.5 Slot 7

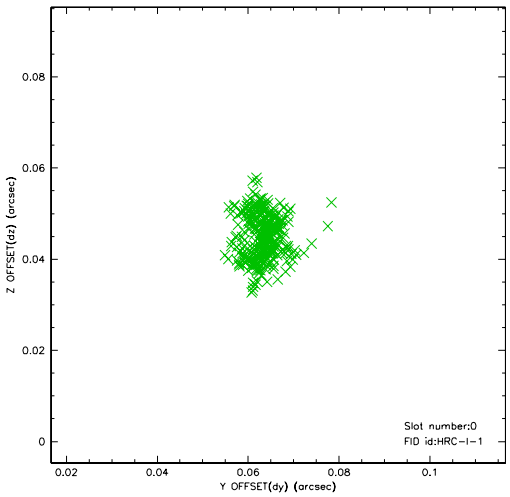

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:7
AGASC star id:367141456

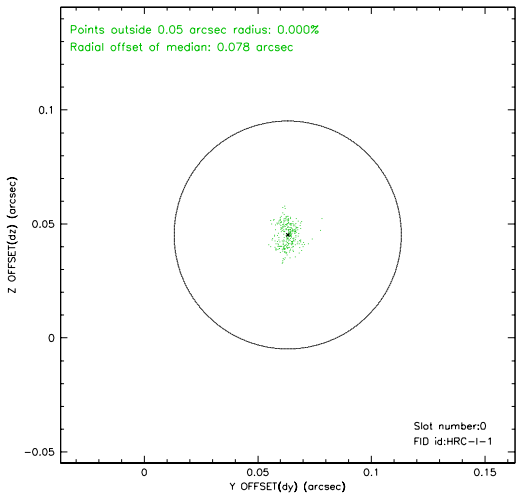

Points outside 0.4 arcsec radius: 0.000%
Radial offset of median: 0.247 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:7
AGASC star id:367141456

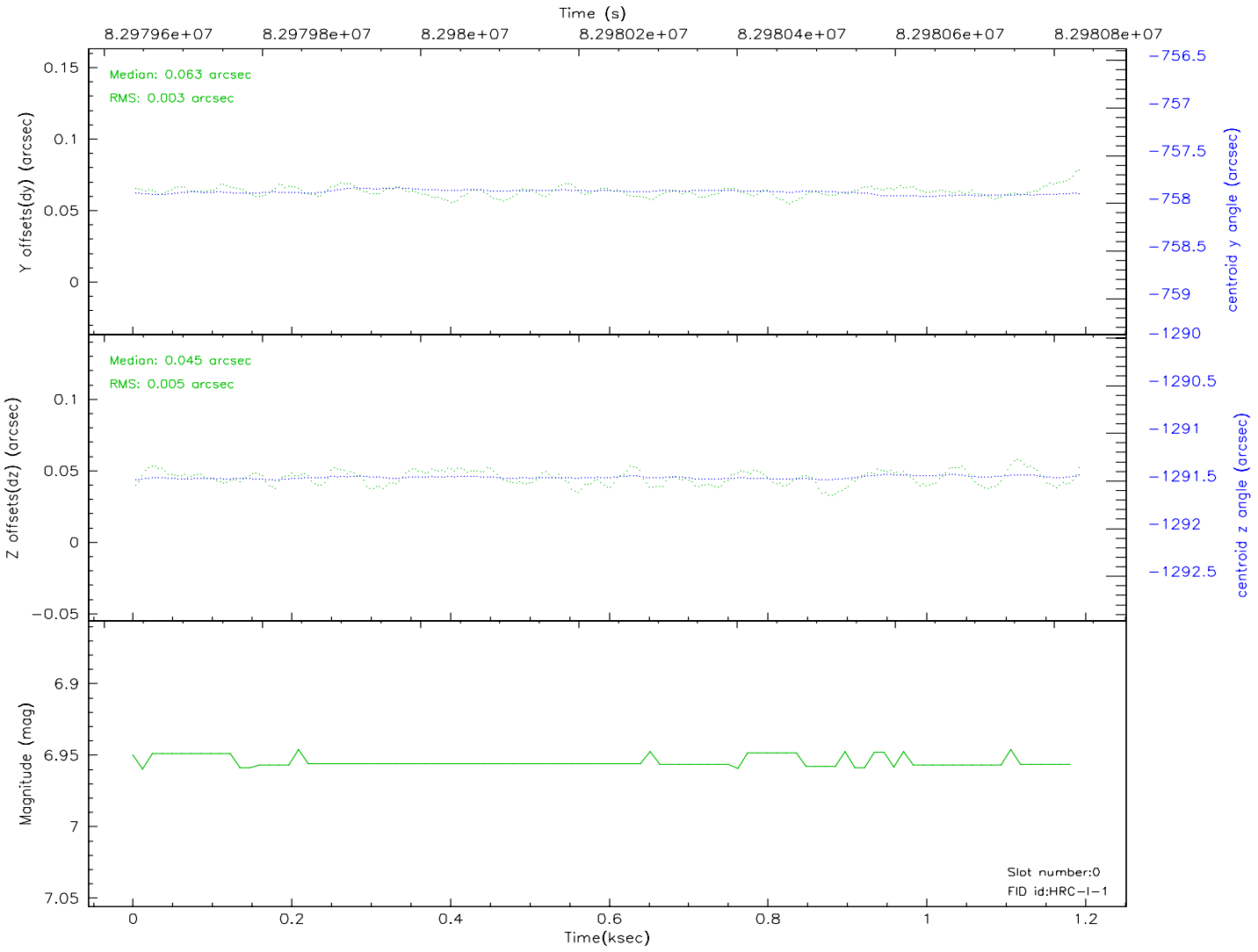

Time (s)
Median: 0.227 arcsec
RMS: 0.078 arcsec
Y offsets(dy) (arcsec)
Median: −0.098 arcsec
RMS: 0.064 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:7
AGASC star id:367141456
Time(ksec)

2.5 FID Slots

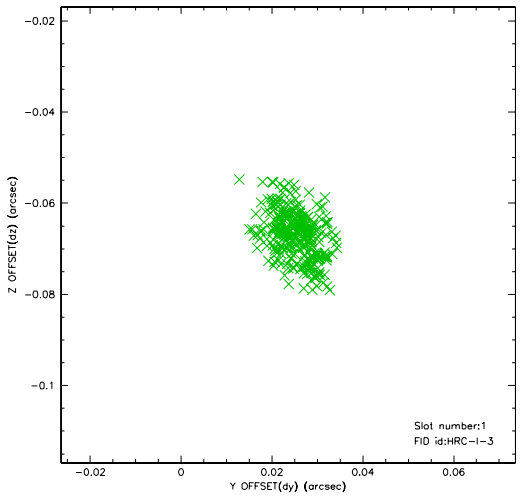
2.5.1 Slot 0

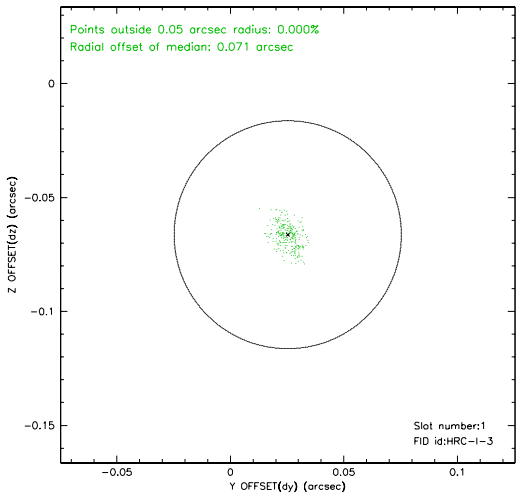


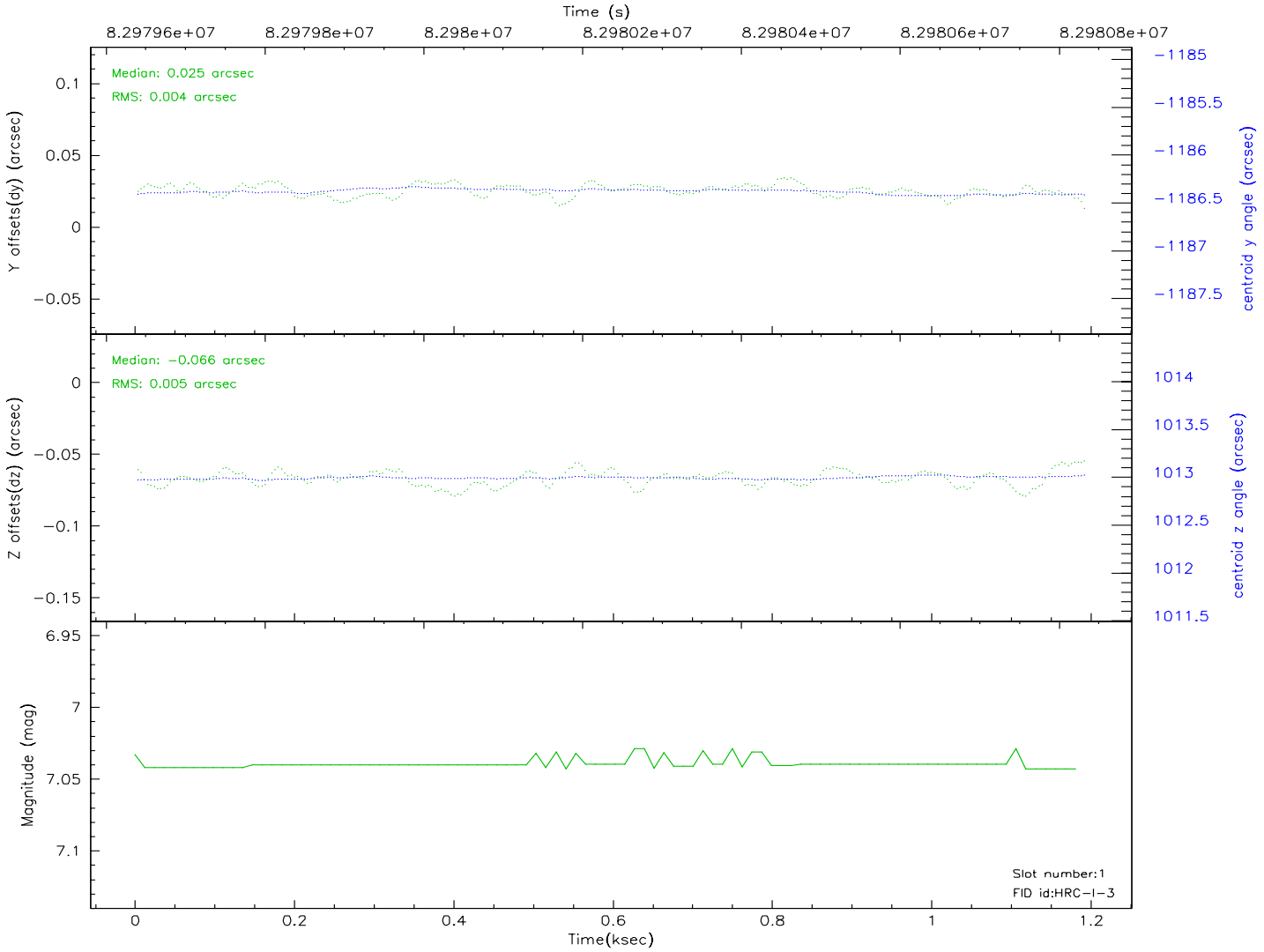




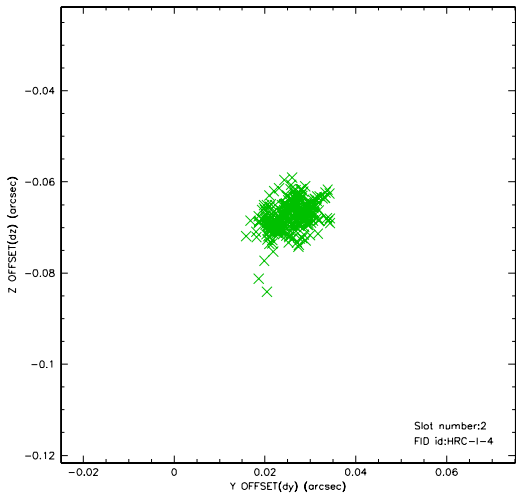
2.5.2 Slot 1

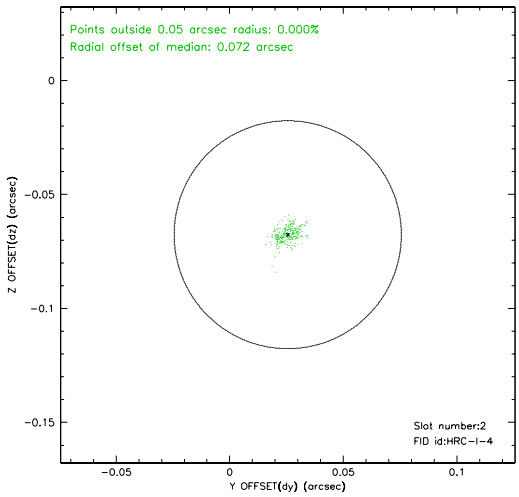

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:1
FID id:HRC-I-3

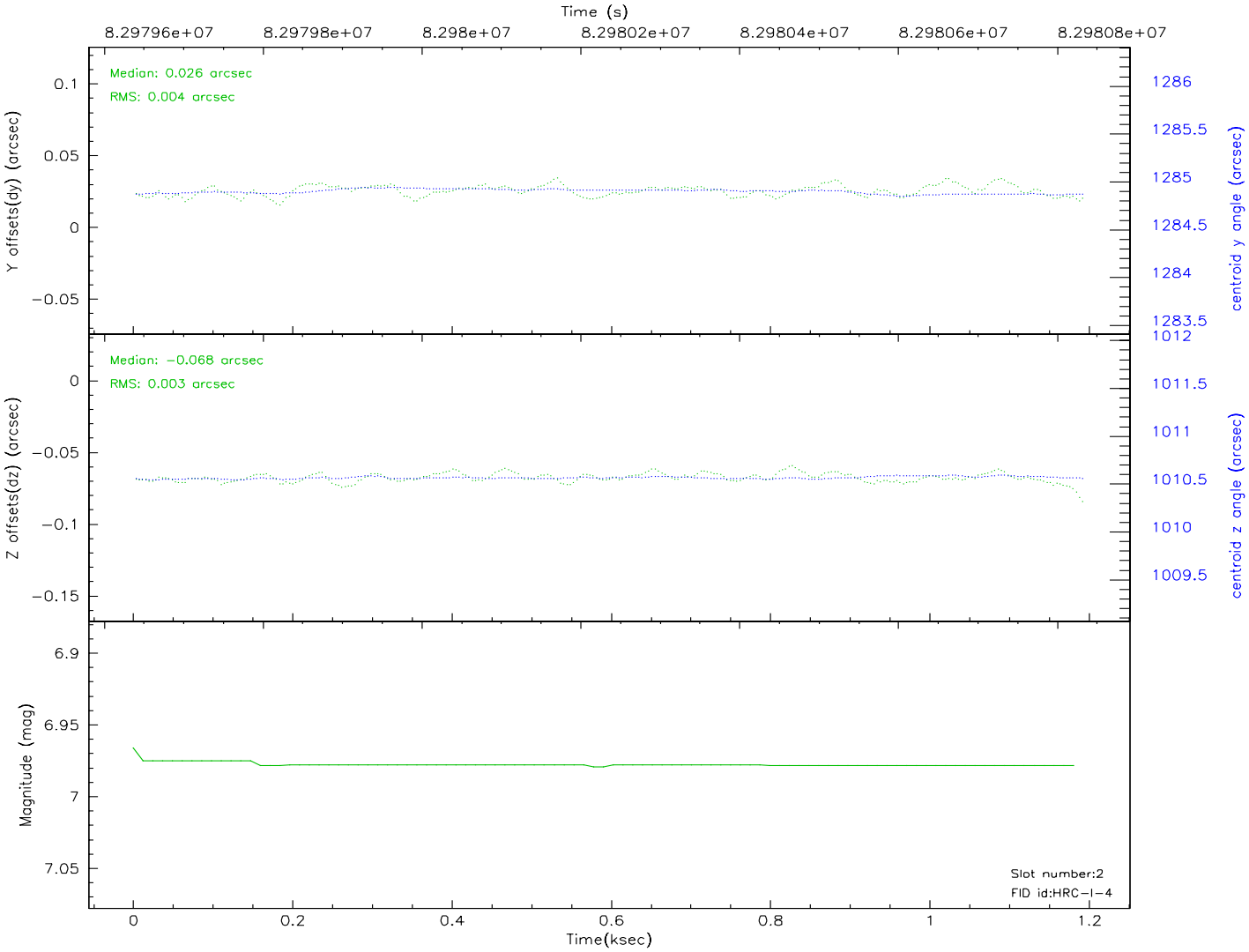

Points outside 0.05 arcsec radius: 0.000%
Radial offset of median: 0.071 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:1
FID id:HRC-I-3


Time (s)
Median: 0.025 arcsec
RMS: 0.004 arcsec
Y offsets(dy) (arcsec)
centroid y angle (arcsec)
Median: −0.066 arcsec
RMS: 0.005 arcsec
Z offsets(dz) (arcsec)
centroid z angle (arcsec)
Magnitude (mag)
Slot number:1
FID id:HRC-I-3
Time(ksec)

2.5.3 Slot 2

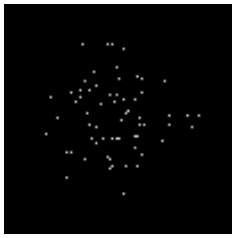

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:2
FID id:HRC-I-4


Points outside 0.05 arcsec radius: 0.000%
Radial offset of median: 0.072 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:2
FID id:HRC-I-4

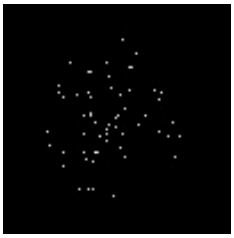

Time (s)
Median: 0.026 arcsec
RMS: 0.004 arcsec
Y offsets(dy) (arcsec)
centroid y angle (arcsec)
Median: −0.068 arcsec
RMS: 0.003 arcsec
Z offsets(dz) (arcsec)
centroid z angle (arcsec)
Magnitude (mag)
Slot number:2
FID id:HRC-I-4
Time(ksec)

3 Point Sources

10.21 arcmin



14.00 arcmin



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2007.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.19

A.2 Comments

```
The current observation has been reprocessed as part of Repro III ('C'
supplement) the purpose of which is to update all HRC-I ObsIDs since
Jan 2000 to the latest calibrations available for that
configuration. Specifically, we are updating the DEGAP solution and
the Gain Maps applied. For more information see the Repro IIIC web page
at:

http://asc.harvard.edu/cda/repro3.html#IIIc

and the associated links.
```