

V&V Reference Report

L2 ASCDS Version : 8.2.1

Observation 143 - L2 Version 3
Chandra X-Ray Center

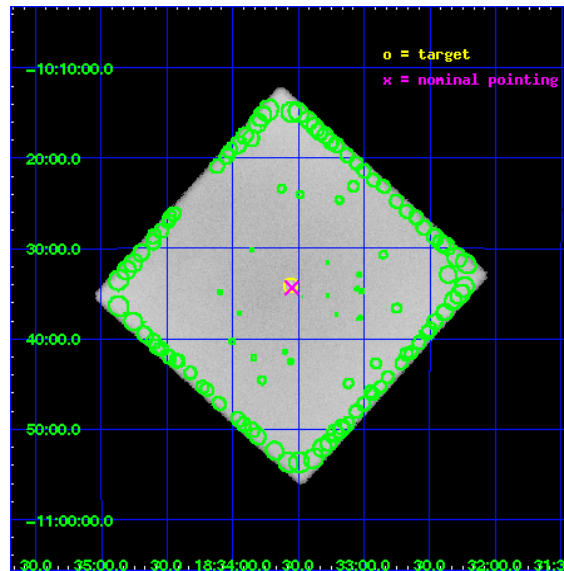
L2 Processing Date : Jan 13 2010

Contents

| | | |
|----------|-------------------------------|-----------|
| 1 | Front | 2 |
| 2 | OBI | 3 |
| 2.1 | OBI | 3 |
| 2.1.1 | Images | 3 |
| 2.1.2 | Parameters | 4 |
| 2.1.3 | Events | 4 |
| 2.2 | Compared Parameters | 5 |
| 2.3 | Aspect | 6 |
| 2.4 | Star Slots | 9 |
| 2.4.1 | Slot 3 | 9 |
| 2.4.2 | Slot 4 | 10 |
| 2.4.3 | Slot 5 | 11 |
| 2.4.4 | Slot 6 | 12 |
| 2.4.5 | Slot 7 | 13 |
| 2.5 | FID Slots | 14 |
| 2.5.1 | Slot 0 | 14 |
| 2.5.2 | Slot 1 | 15 |
| 2.5.3 | Slot 2 | 16 |
| 3 | Point Sources | 17 |
| A | Summary | 18 |
| A.1 | Status | 18 |
| A.2 | Comments | 18 |

1 Front

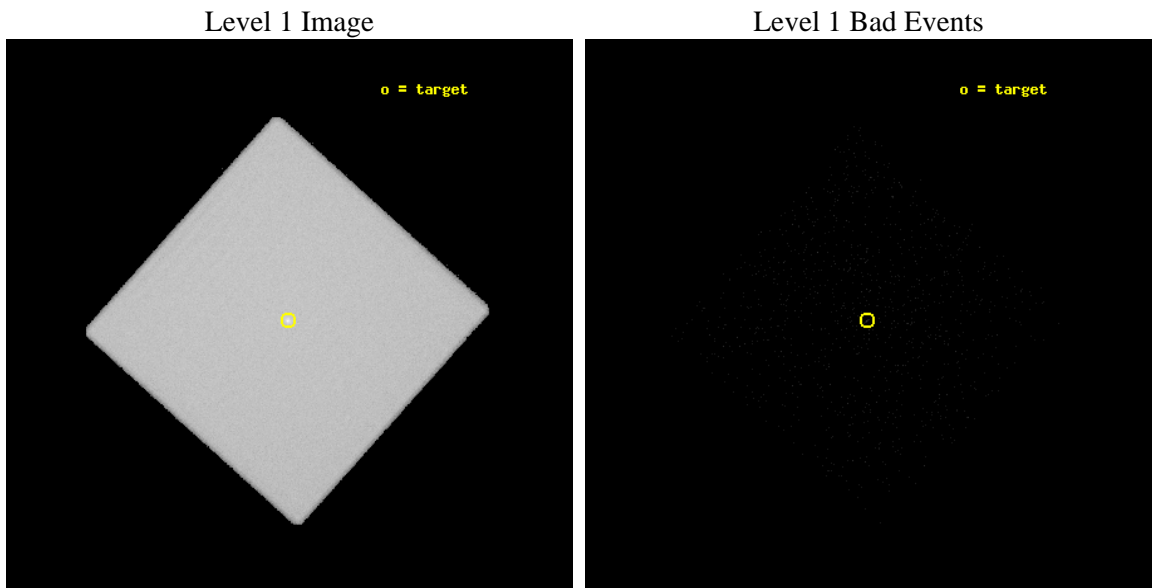
| | | |
|----------|-----------------------------------|---------------------------------|
| seq_num | 590011 | Sequence number |
| obs_id | 143 | Observation id |
| title | HRC RESPONSE TO CONTINUUM SOURCE. | Proposal title |
| observer | Dr. CXC Calibration | Principal investigator |
| object | G21.5-0.9 [HRC-I, Offsets=0,0,0] | Source name |
| ra_targ | 278.389583 | Observer's specified target RA |
| dec_targ | -10.568528 | Observer's specified target Dec |
| ra_nom | 278.38728881566 | Nominal RA |
| dec_nom | -10.572826517419 | Nominal Dec |
| roll_nom | 266.91773534201 | Nominal Roll |
| revision | 3 | Processing version of data |
| ontime | 15212.281796217 | [s] |
| livetime | 13823.009180587 | Ontime multiplied by DTCOR |
| l2events | 1538498 | Number of level 2 events |



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|-------------------------------------|
| obi_num | 0 | Obi number | sched_exp_time | 15000.000000 | Scheduled observation exposure time |
| ascdsver | 8.2.1 | Processing system revision | ontime | 15212.281796217 | [s] |
| caldbver | 4.1.5 | | ll events | 2794217 | Number of level 1 events |
| date | 2010-01-13T03:05:14 | Date and time of file creation | | | |
| revision | 3 | Processing version of data | | | |

2.1.3 Events

Level 1 Events

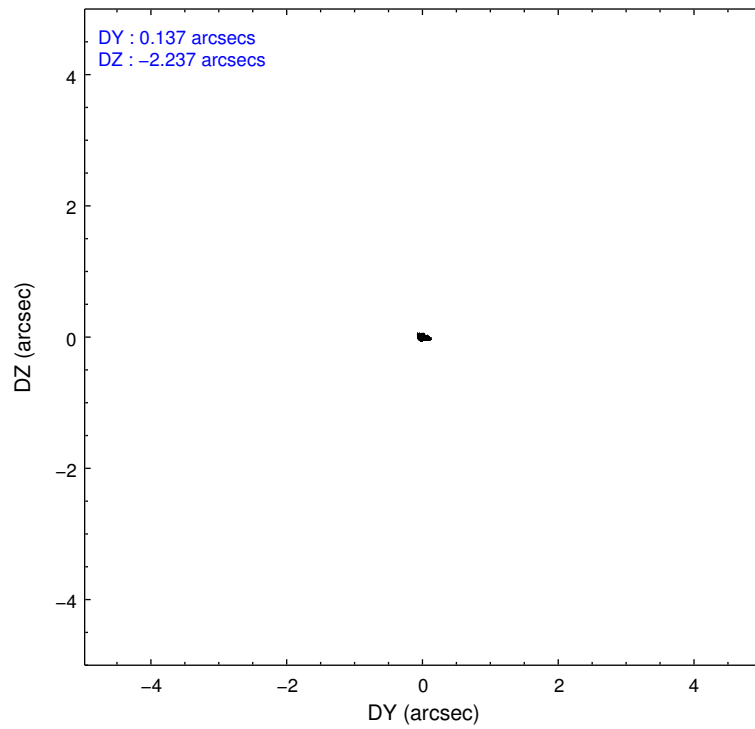
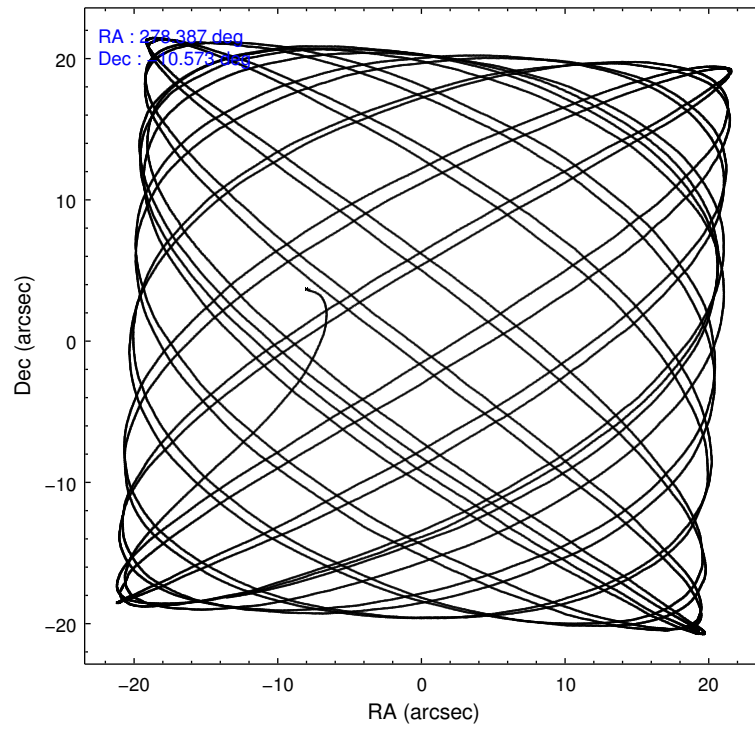
| | segment 0 |
|-----------------|----------------------|
| level 1 events | 2794217 |
| rejected events | 10253 |
| rejected % | 0% |

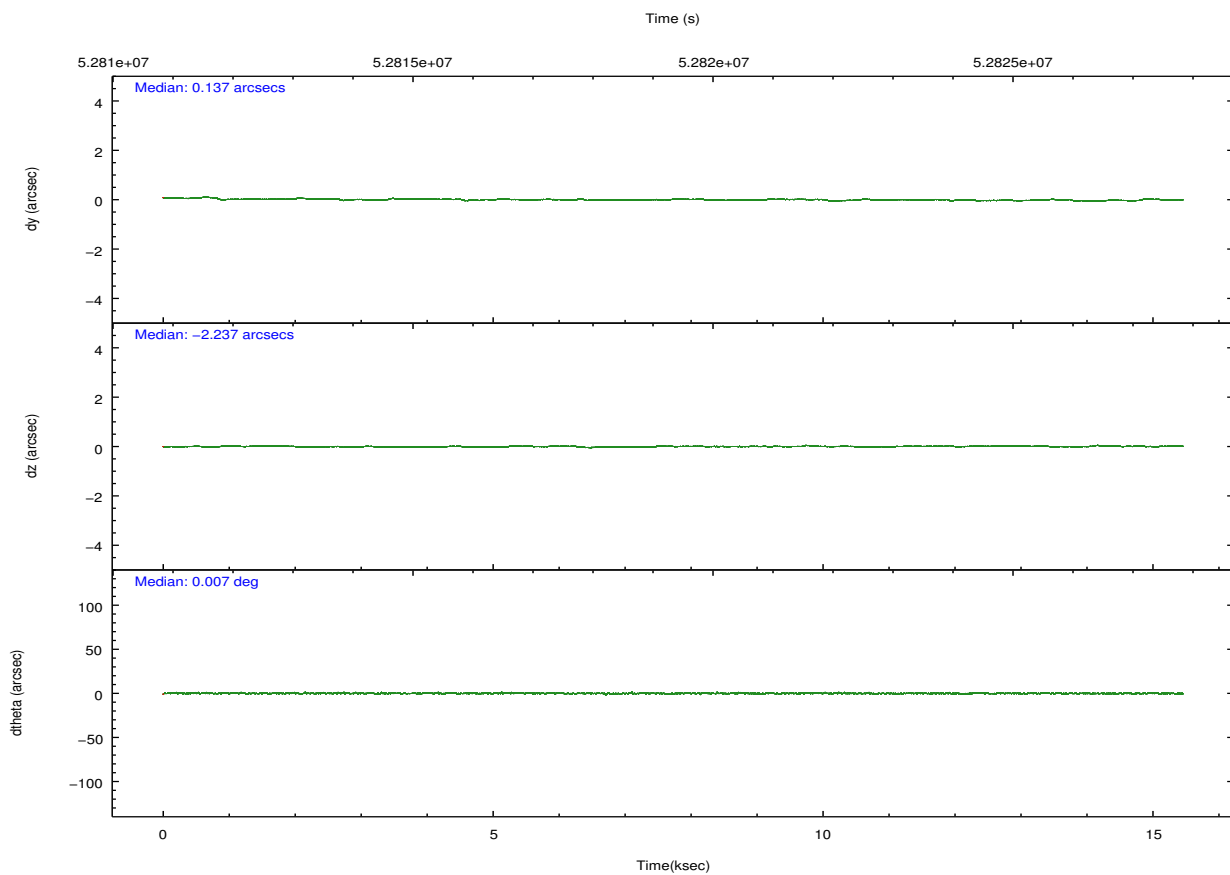
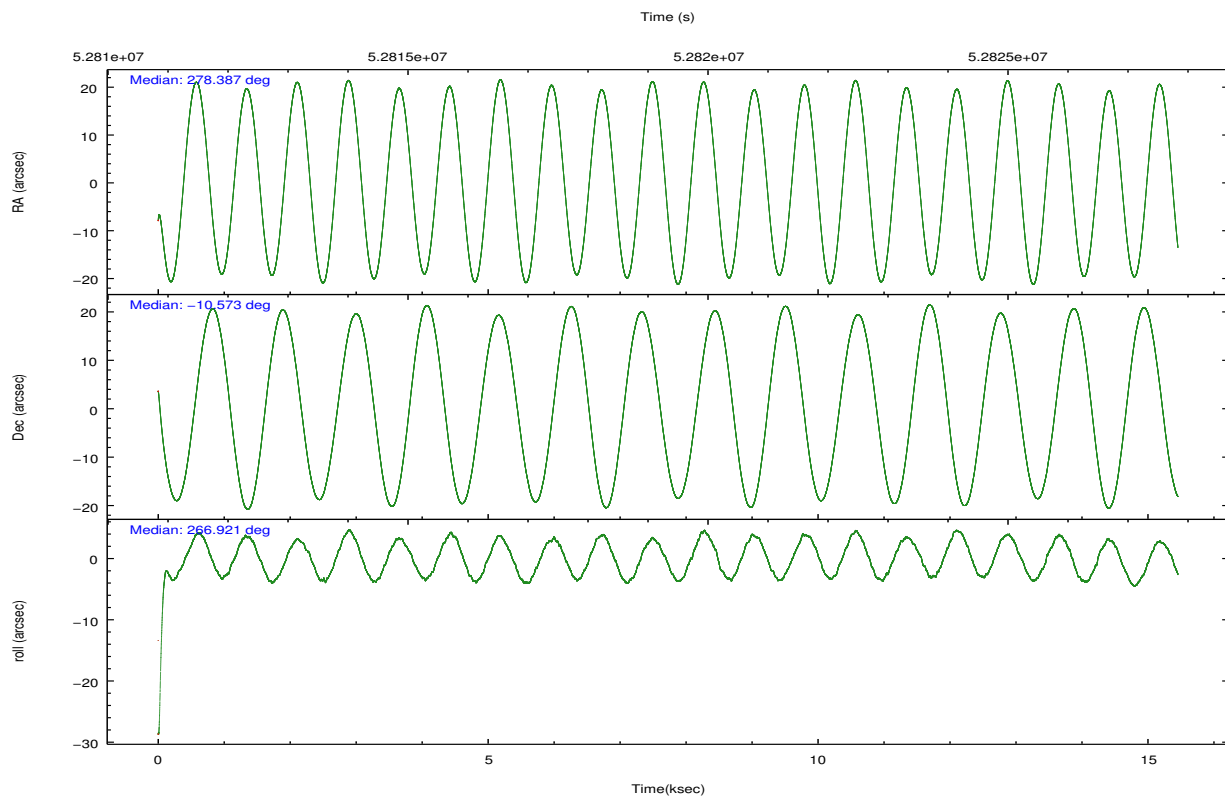
2.2 Compared Parameters

| Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|
| Instrument | HRC | HRC |
| Detector | HRC-I | HRC-I |
| Grating | NONE | NONE |
| Data mode | OBSERVING | OBSERVING |
| Observation mode | POINTING | POINTING |
| Pointing RA | 278.374695 | 278.3872888156551 |
| Pointing Dec | -10.548406 | -10.57282651741919 |
| Pointing Roll | 267.010940 | 266.917735342005 |
| SIM focus pos (mm) | -1.040293 | -1.016036269358593 |
| SIM defocus (mm) | 0 | 0.02425635130028114 |
| SIM translation stage pos (mm) | 126.985494 | 126.9829799899862 |
| SIM translation stage offset (mm) | 0 | 0.002508901615314585 |
| Observation start time | 52812064.184000 | 52810500.622357 |
| Observation start date | 1999-09-04T06:00:00 | 1999-09-04T05:35:00 |
| Observation end time | 52827064.184000 | 52827197.360456 |
| Observation end date | 1999-09-04T10:10:00 | 1999-09-04T10:13:17 |

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

2.3 Aspect



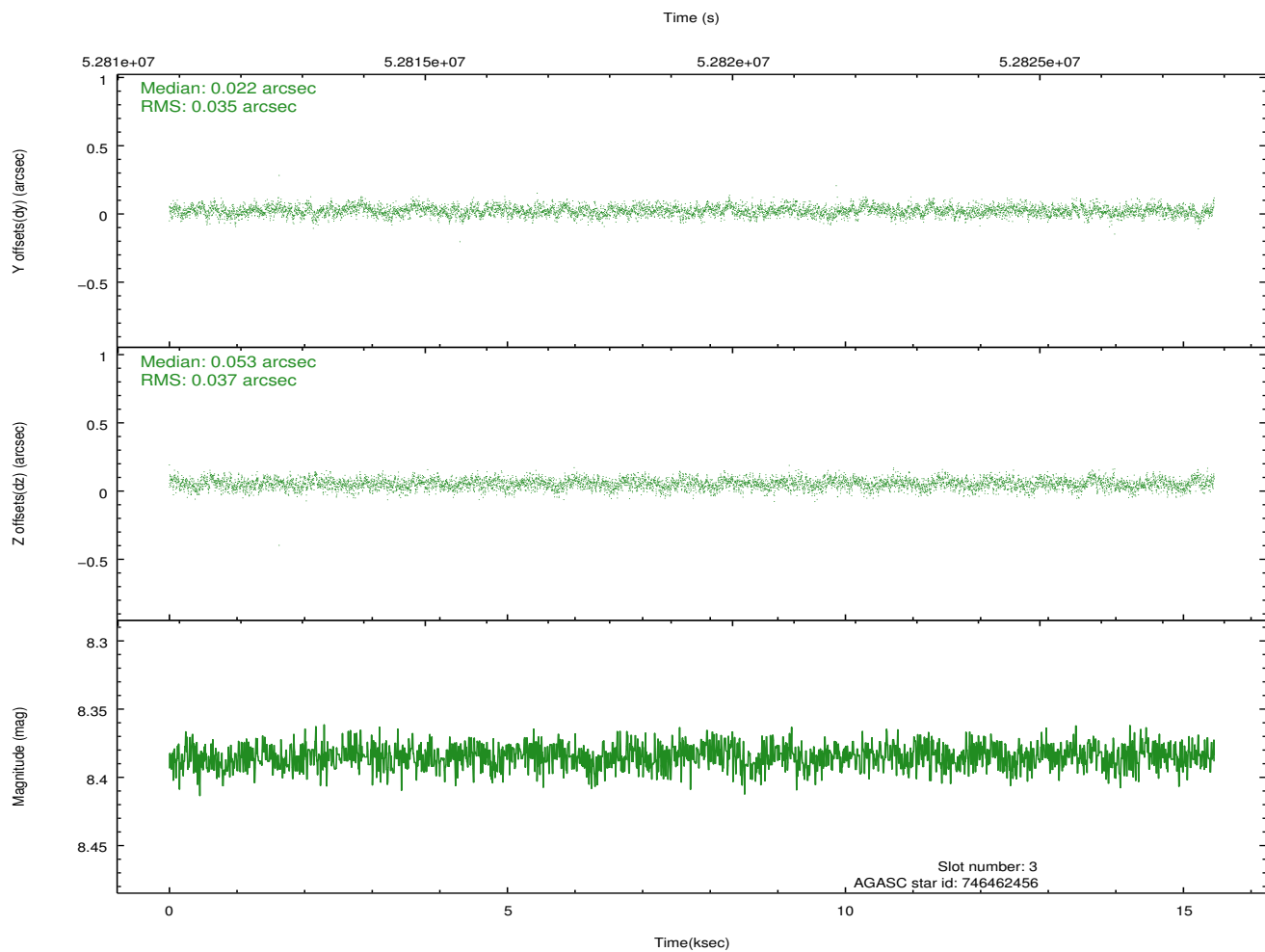
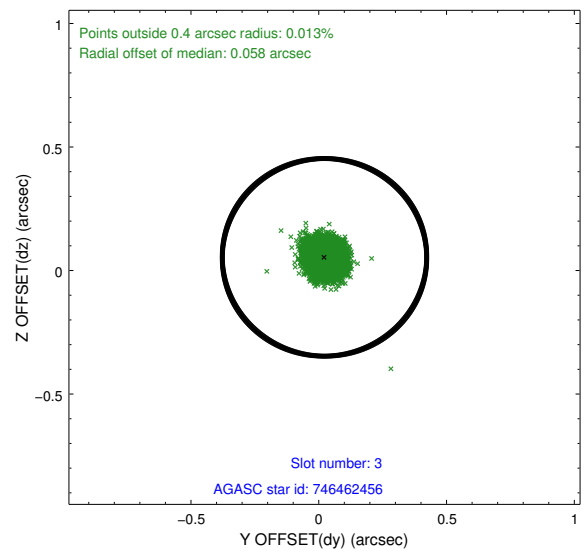
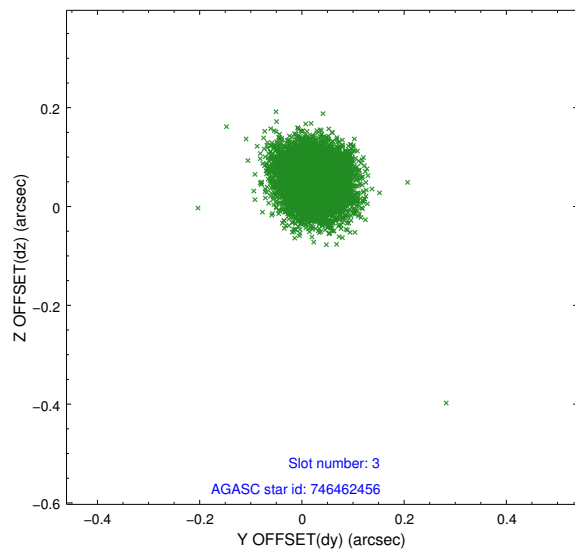


Slot Statistics

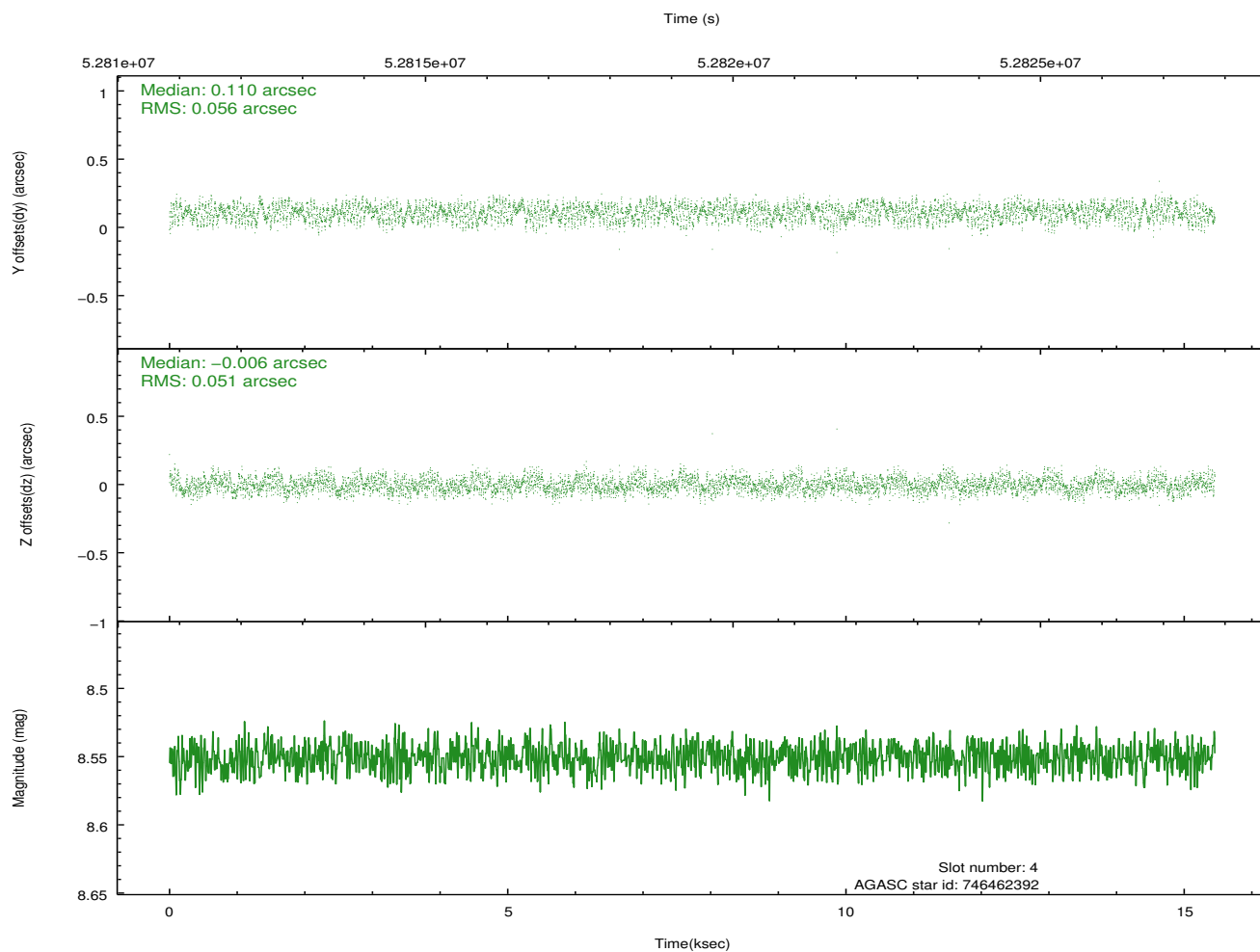
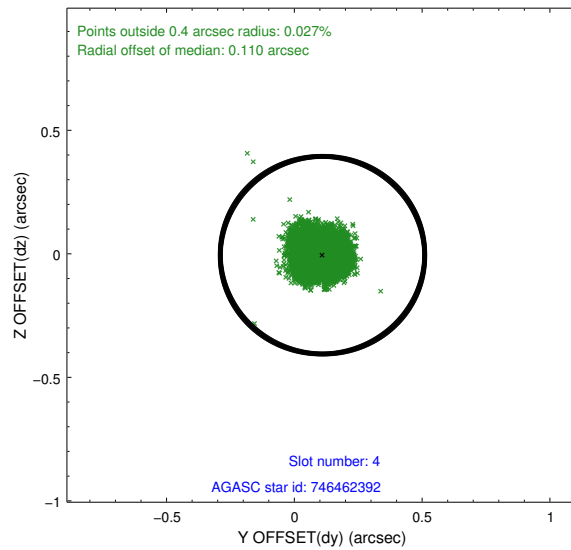
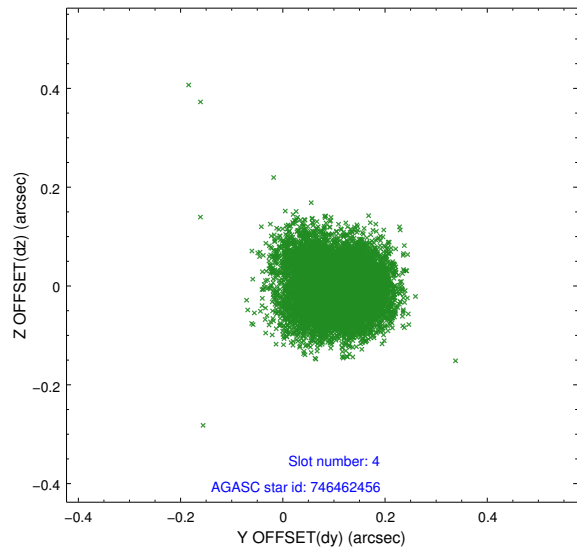
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | HRC-I-1 | 6.95 | 7539 | 0.031 | -0.108 | 0.006 | 0.010 | 0.000000 | 0.000000 | -755.47 | -1285.48 |
| 1 | FID | HRC-I-3 | 7.04 | 7540 | 0.046 | 0.030 | 0.007 | 0.011 | 0.000000 | 0.000000 | -1184.12 | 1019.04 |
| 2 | FID | HRC-I-4 | 6.97 | 7540 | 0.036 | -0.011 | 0.005 | 0.009 | 0.000000 | 0.000000 | 1287.10 | 1016.99 |
| 3 | GUIDE | 746462456 | 8.38 | 7537 | 0.022 | 0.053 | 0.053 | 0.087 | 278.652171 | -10.530173 | -117.52 | 977.55 |
| 4 | GUIDE | 746462392 | 8.55 | 7540 | 0.110 | -0.006 | 0.082 | 0.126 | 279.038421 | -10.890715 | 1109.79 | 2407.77 |
| 5 | GUIDE | 746460272 | 8.93 | 7536 | -0.068 | 0.021 | 0.076 | 0.120 | 278.847488 | -10.152127 | -1511.87 | 1599.43 |
| 6 | GUIDE | 746460328 | 9.81 | 7533 | -0.064 | -0.077 | 0.126 | 0.204 | 278.603974 | -9.898096 | -2381.53 | 690.43 |
| 7 | GUIDE | 746461728 | 9.80 | 7526 | -0.002 | 0.002 | 0.100 | 0.159 | 278.986921 | -10.530755 | -175.77 | 2160.98 |

2.4 Star Slots

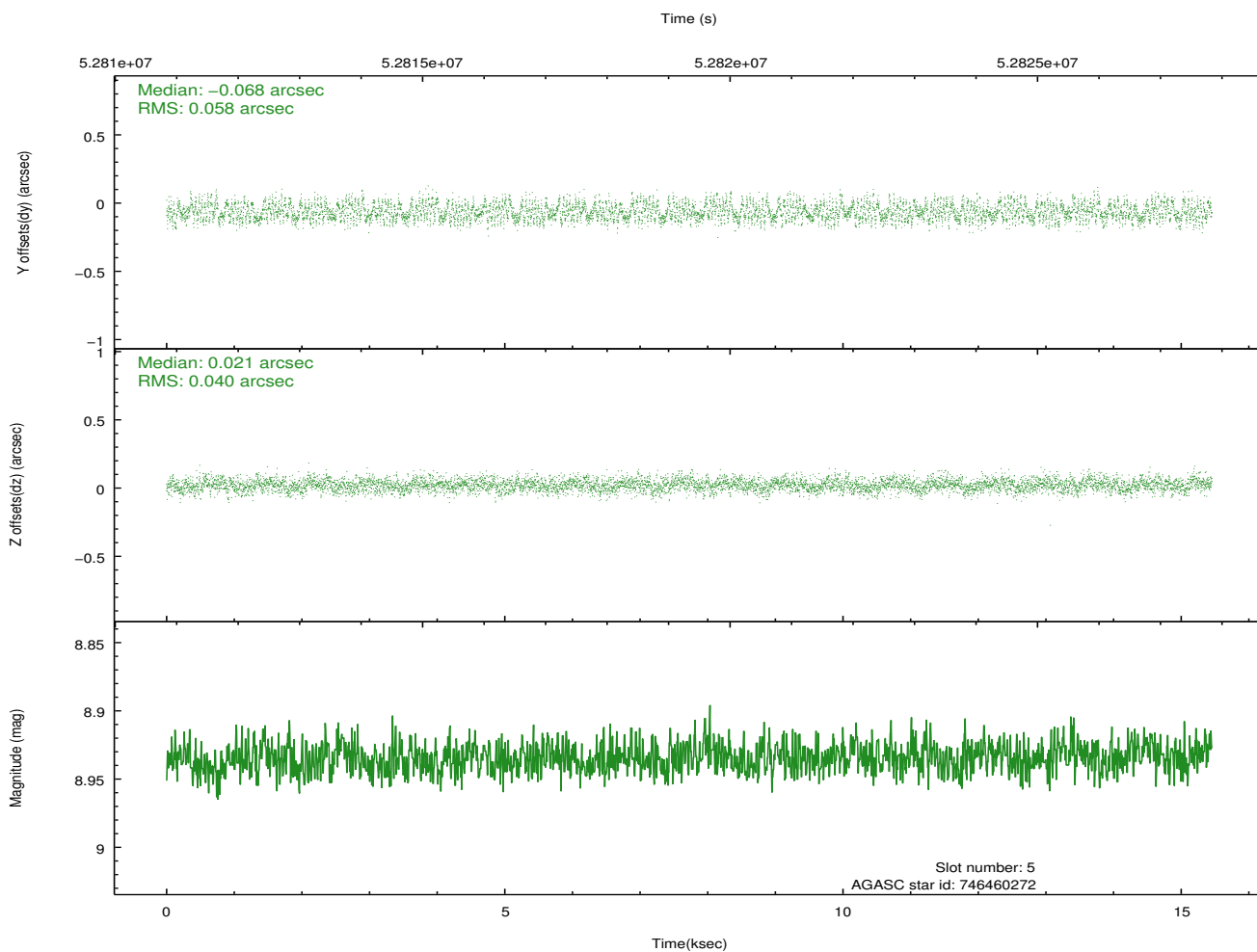
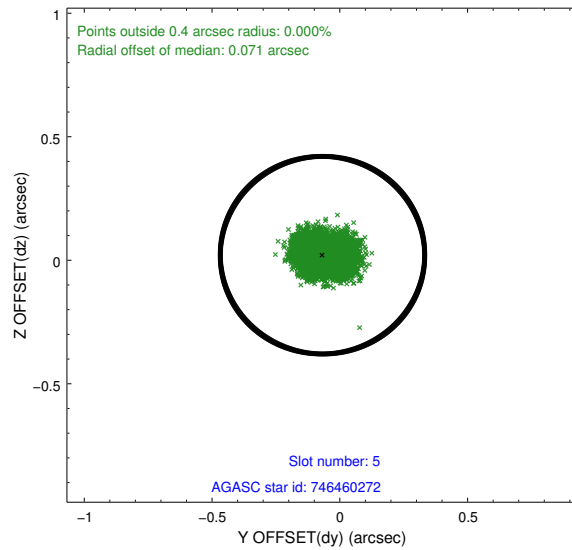
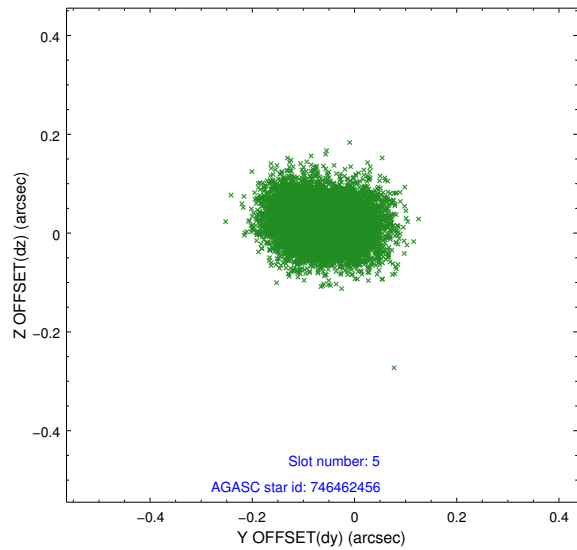
2.4.1 Slot 3



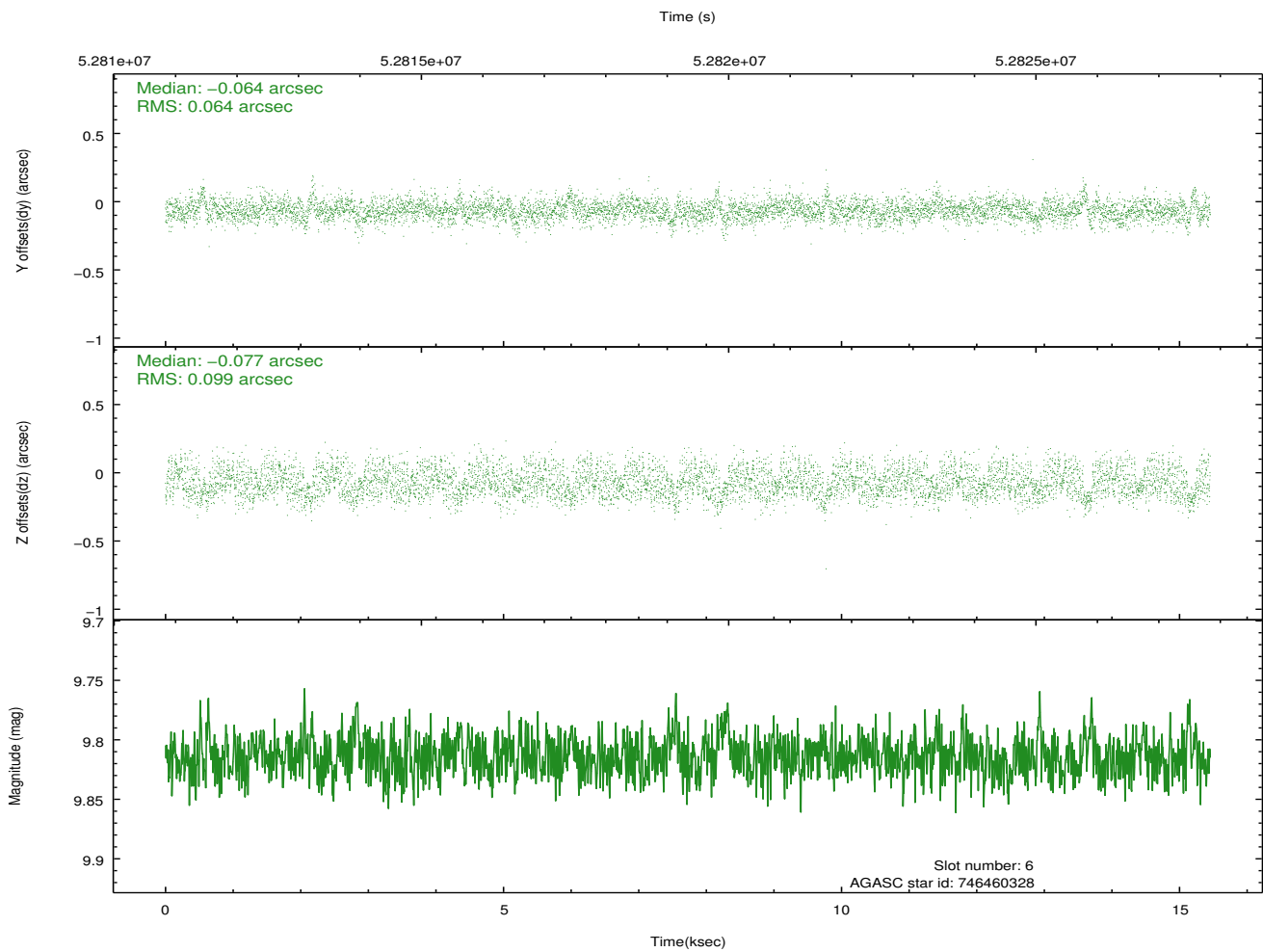
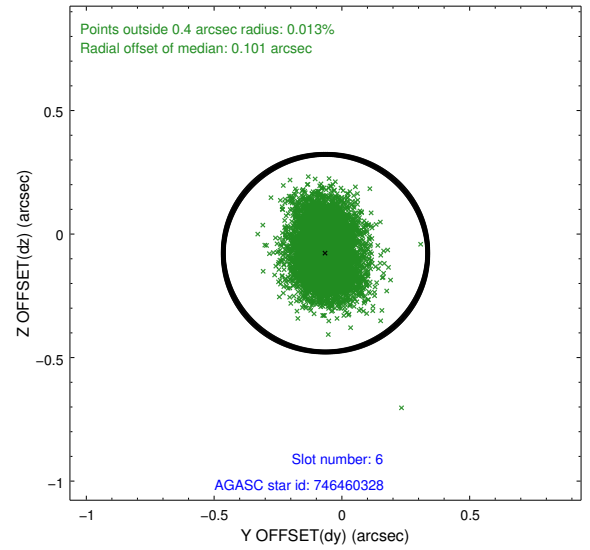
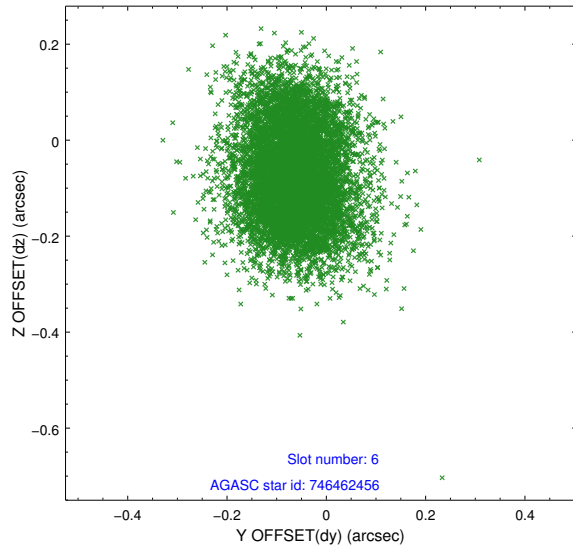
2.4.2 Slot 4



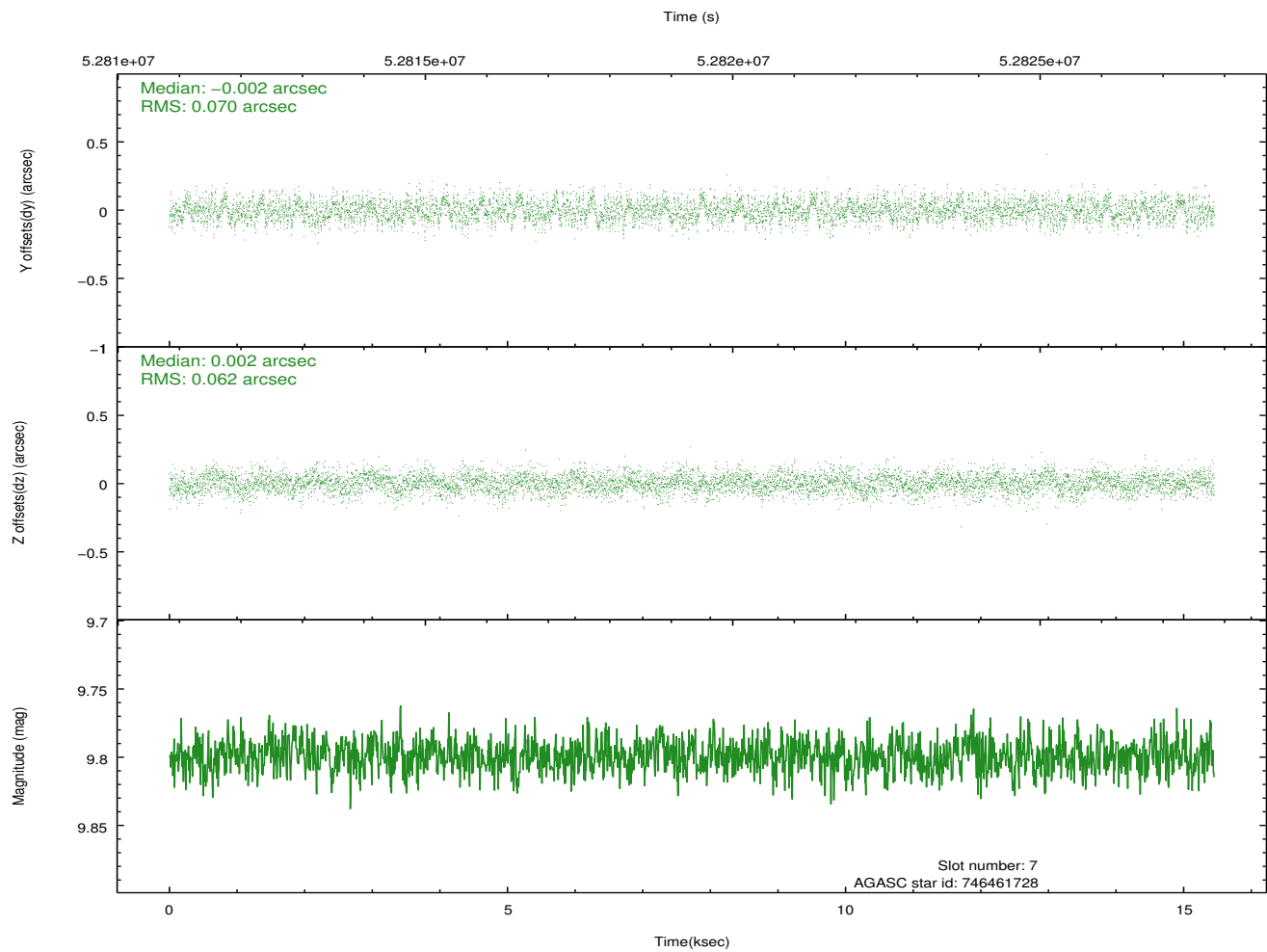
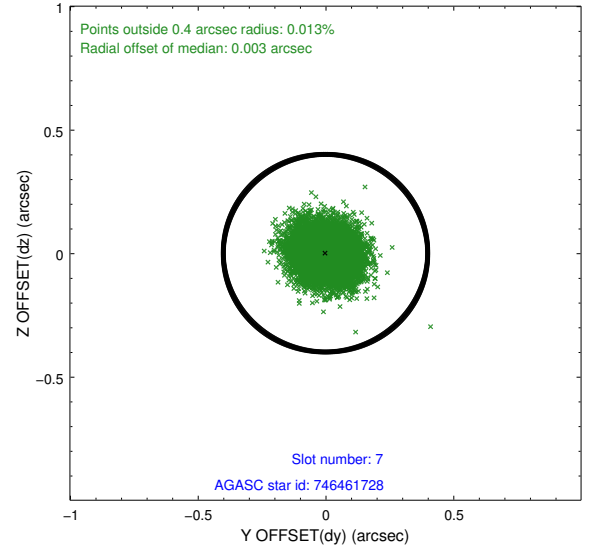
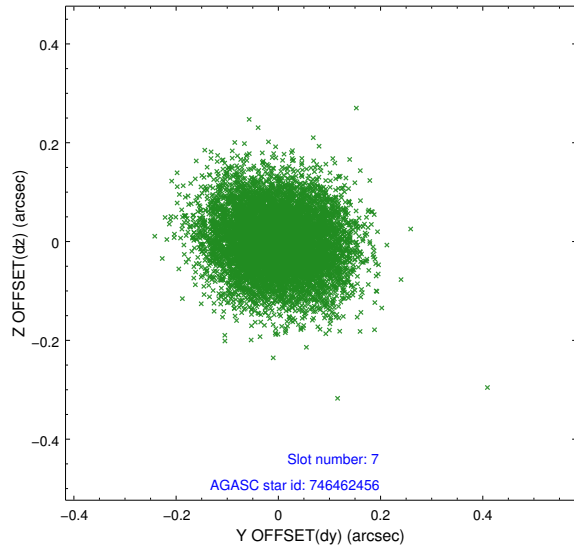
2.4.3 Slot 5



2.4.4 Slot 6

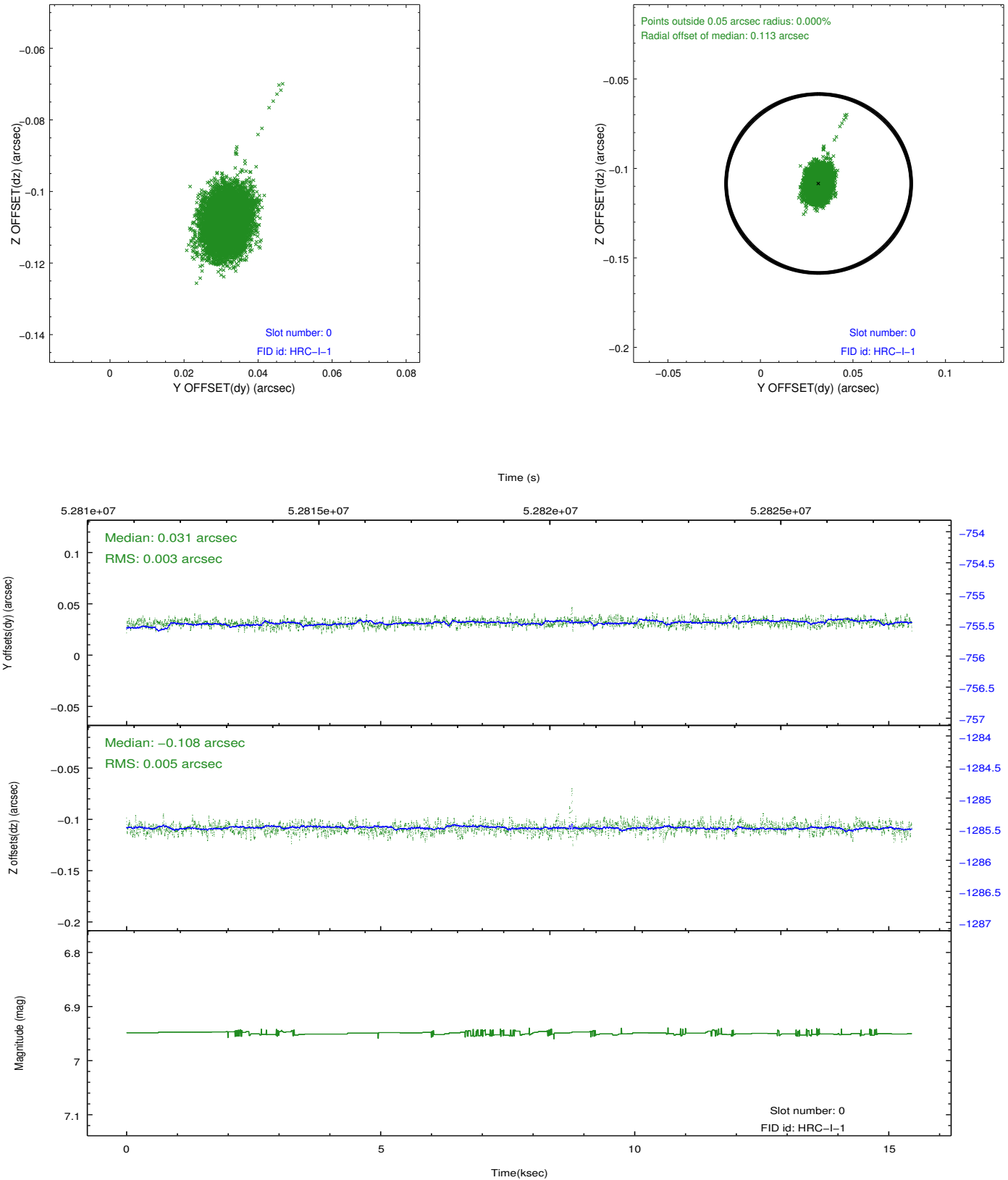


2.4.5 Slot 7

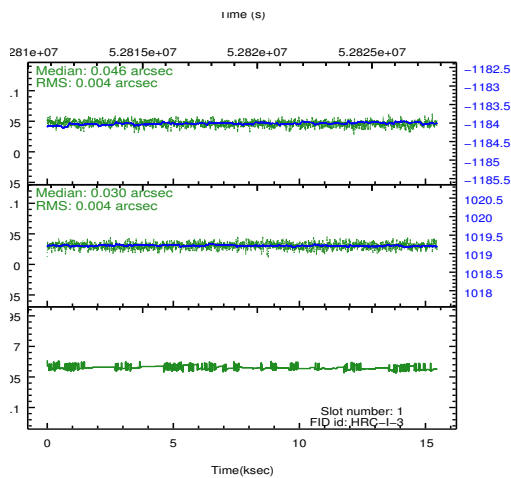
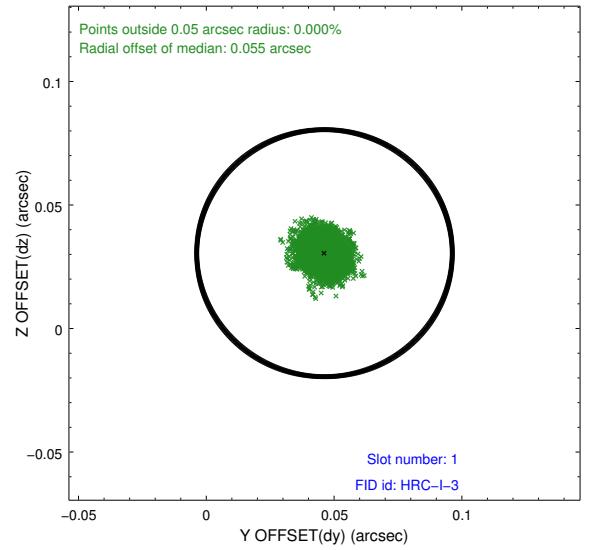
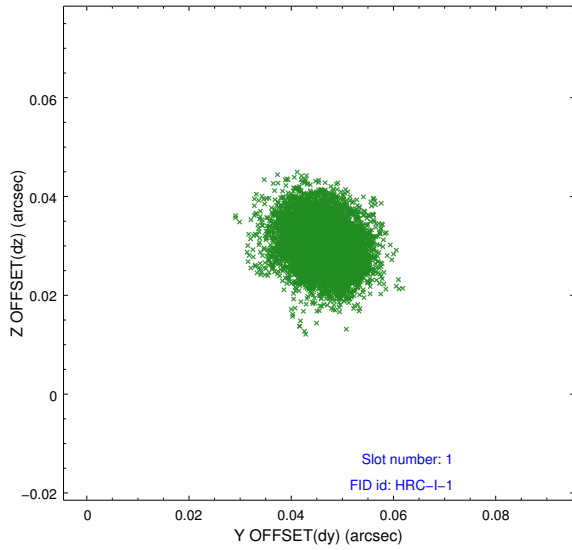


2.5 FID Slots

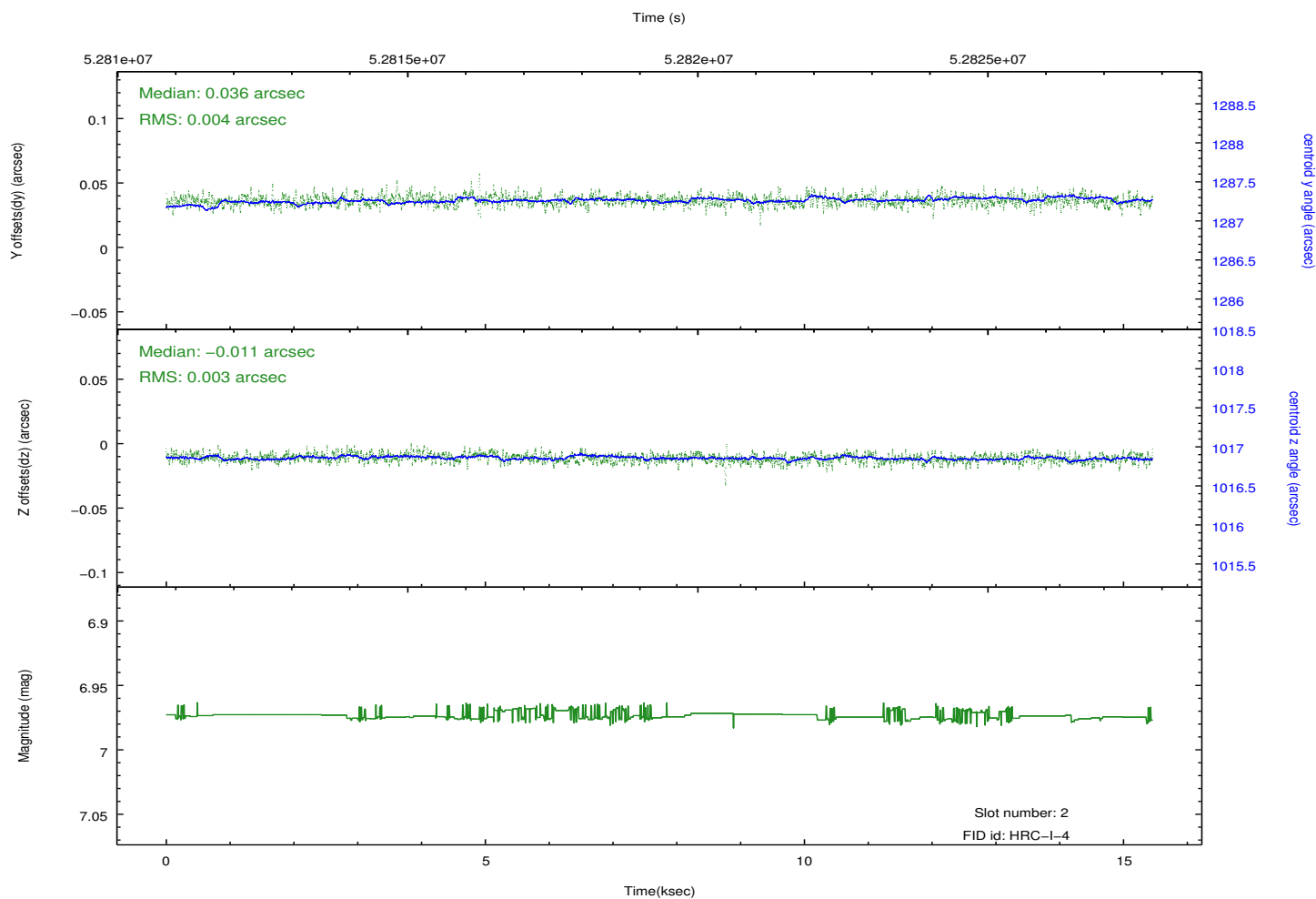
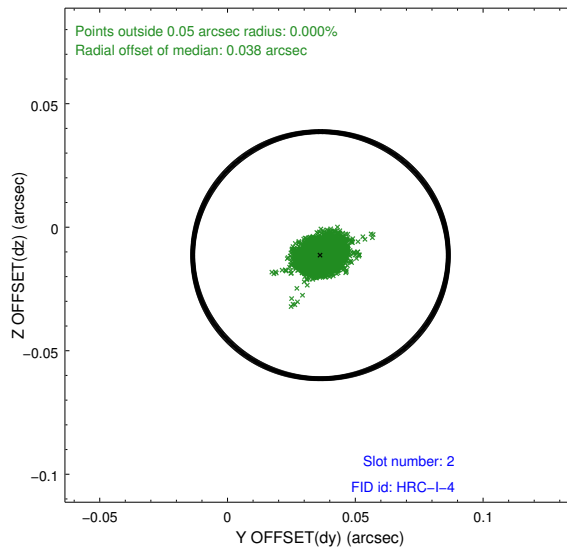
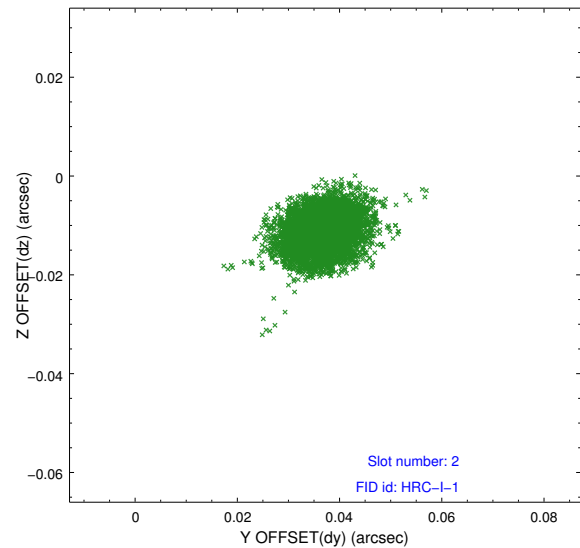
2.5.1 Slot 0



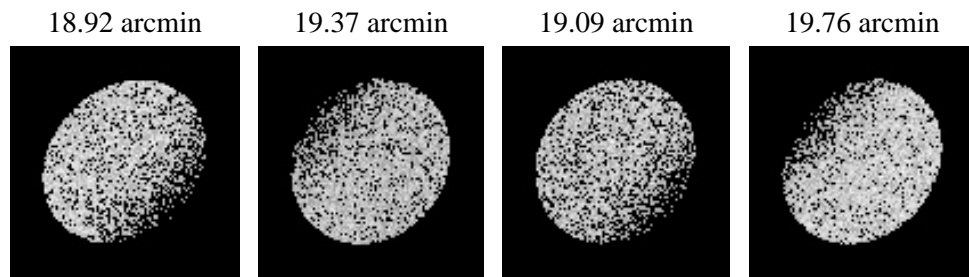
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

| | |
|----------------------------|-------------|
| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2010.01.29 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 15.206 |

A.2 Comments

This target is a Standard Candle with well known continuum spectrum. It is used to measure absolute sensitivity and to monitor detector performance.===

DTF is low for most of the observations, with associated high count rates.