

V&V Reference Report

L2 ASCDS Version : 7.6.8

Observation 5148 - L2 Version 001

Chandra X-Ray Center

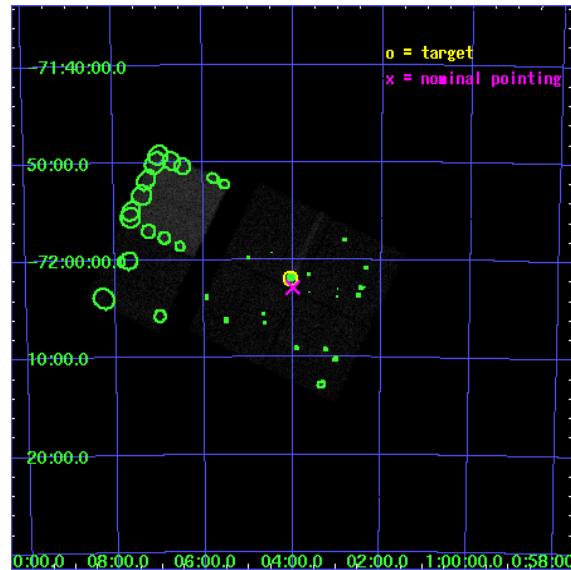
L2 Processing Date : Jun 22 2006

Contents

| | | |
|----------|-------------------------------|-----------|
| 1 | Front | 2 |
| 2 | OBI | 3 |
| 2.1 | OBI | 3 |
| 2.1.1 | Images | 3 |
| 2.1.2 | Bias | 3 |
| 2.1.3 | Parameters | 4 |
| 2.1.4 | 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

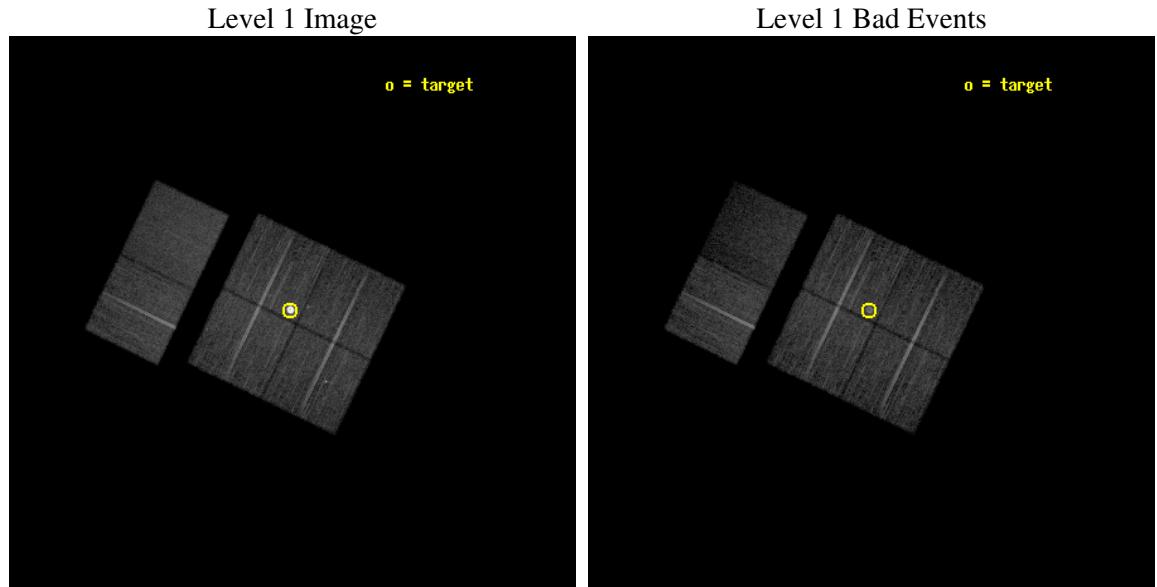
| | |
|----------|--|
| seq_num | 590346 |
| obs_id | 5148 |
| title | AO5A ACIS-I Calibration Observations of E0102-72 |
| observer | Dr. CXC Calibration |
| object | E0102-72[I3,-120,-0.5,0.5,0] |
| dtycycle | 0 |
| cycle | P |
| ra_targ | 16.01 |
| dec_targ | -72.032028 |
| ra_nom | 15.997974269515 |
| dec_nom | -72.047767006185 |
| roll_nom | 295.78700789087 |
| revision | 2 |
| ontime | 19529.517986715 |
| livetime | 19282.223470703 |
| ontime0 | 19535.999927223 |
| ontime1 | 19529.518016607 |
| ontime2 | 19535.999927223 |
| ontime3 | 19529.517986715 |
| ontime6 | 19535.999927223 |
| ontime7 | 19532.758956939 |
| l2events | 146070 |



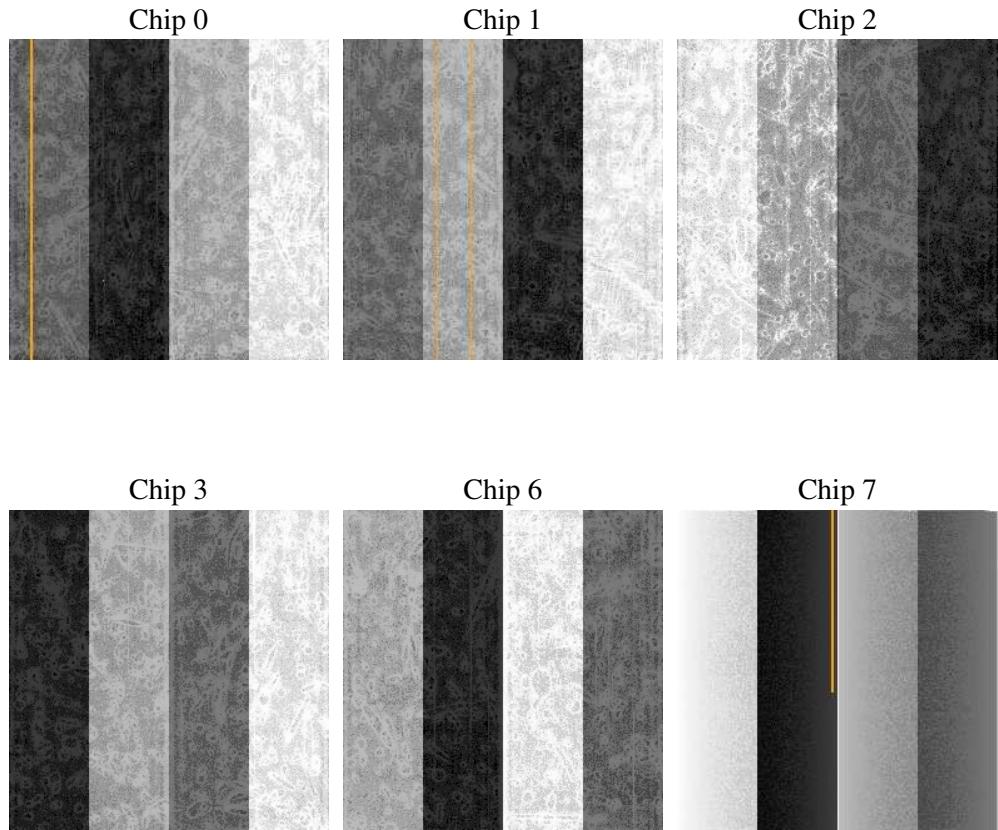
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | |
|----------|---------------------|
| obi_num | 0 |
| ascdsver | 7.6.8 |
| caldbver | 3.2.2 |
| date | 2006-06-22T04:56:50 |
| revision | 2 |

| | |
|----------------|-----------------|
| sched_exp_time | 19781.000000 |
| ontime | 19533.514598697 |
| ontime0 | 19539.996539205 |
| ontime1 | 19533.514628589 |
| ontime2 | 19539.996539205 |
| ontime3 | 19533.514598697 |
| ontime6 | 19539.996539205 |
| ontime7 | 19536.75558883 |
| l1events | 614947 |

2.1.4 Events

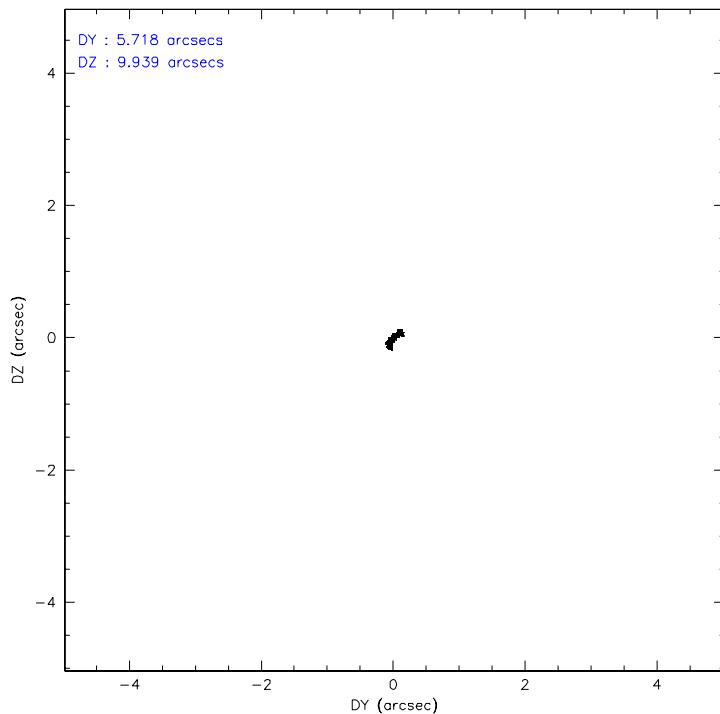
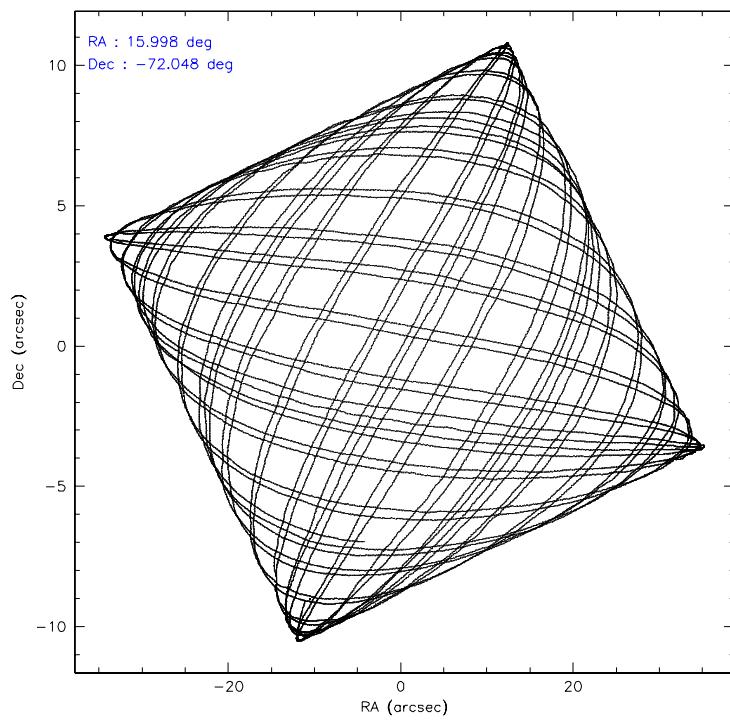
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 |
|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|
| level 1 events | 87861 | 84430 | 97953 | 157939 | 98023 | 88741 |
| rejected events | 77166 | 74055 | 87628 | 83876 | 88452 | 48190 |
| rejected % | 87% | 87% | 89% | 53% | 90% | 54% |

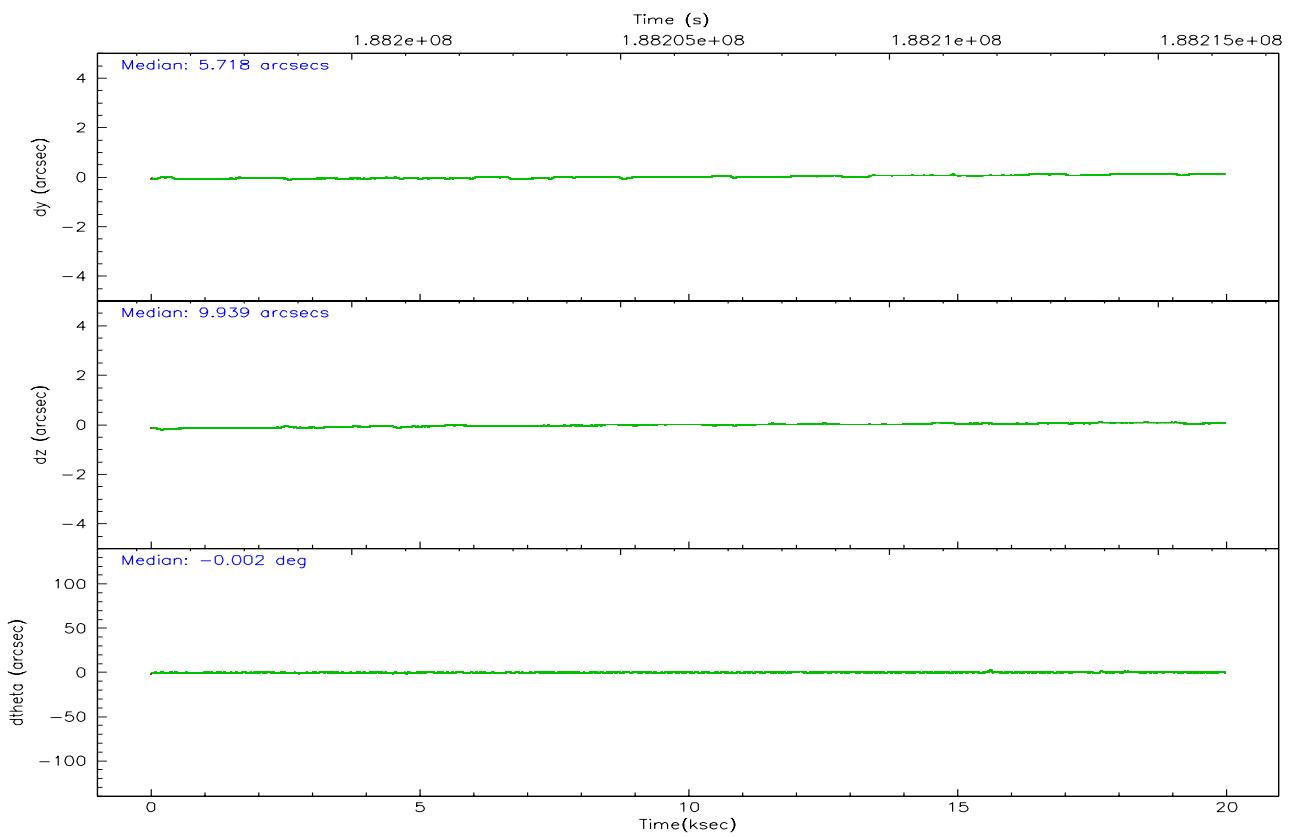
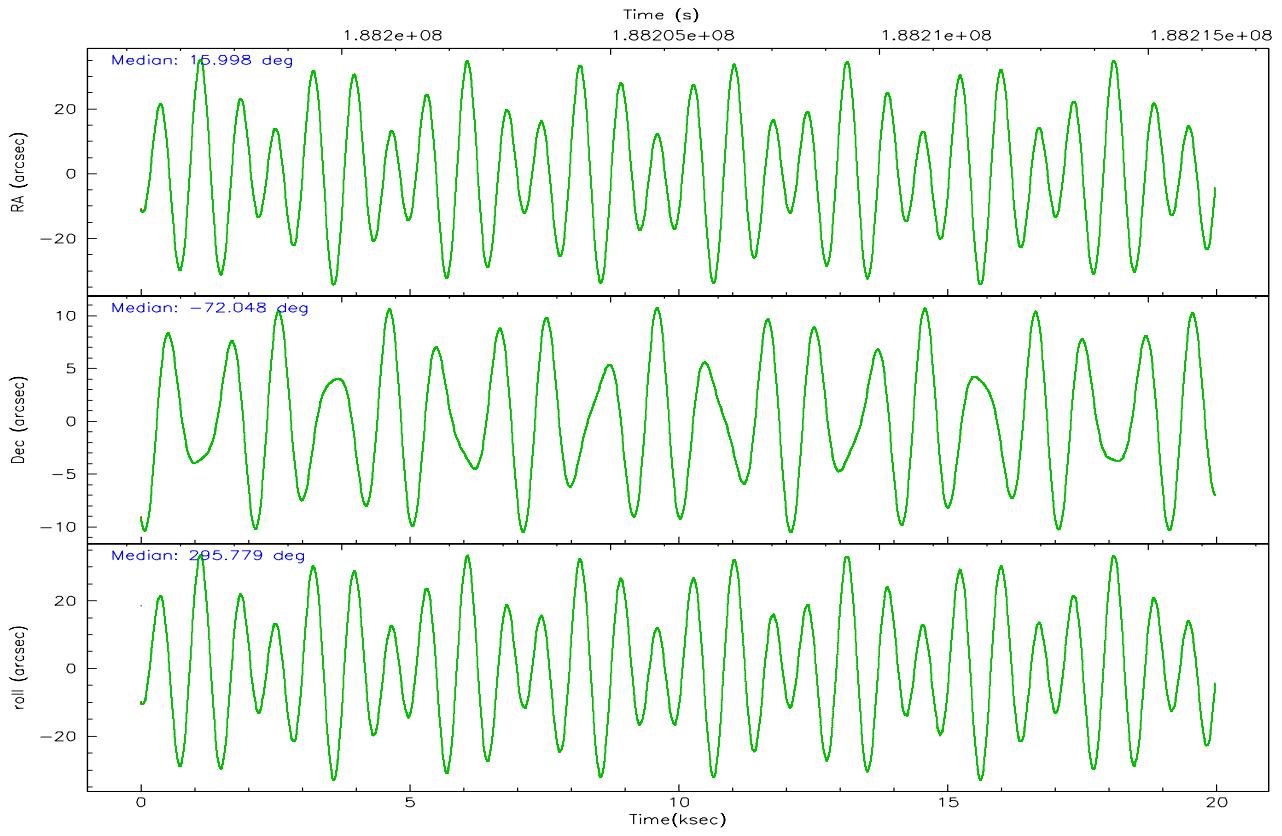
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 |
|----------------|--------------|--------------|--------------|--------------|--------------|--------------|
| grade 0 events | 4602 | 4127 | 4566 | 62141 | 3450 | 2773 |
| | 5% | 4% | 4% | 39% | 3% | 3% |
| grade 1 events | 46 | 37 | 53 | 690 | 45 | 61 |
| | 0% | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 2320 | 2091 | 2120 | 5951 | 2060 | 10244 |
| | 2% | 2% | 2% | 3% | 2% | 11% |
| grade 3 events | 1141 | 1160 | 985 | 2035 | 1019 | 2594 |
| | 1% | 1% | 1% | 1% | 1% | 2% |
| grade 4 events | 982 | 1103 | 1045 | 2002 | 1055 | 2540 |
| | 1% | 1% | 1% | 1% | 1% | 2% |
| grade 5 events | 2791 | 3006 | 2585 | 3227 | 3318 | 7129 |
| | 3% | 3% | 2% | 2% | 3% | 8% |
| grade 6 events | 1651 | 1896 | 1614 | 1949 | 1990 | 22406 |
| | 1% | 2% | 1% | 1% | 2% | 25% |
| grade 7 events | 74328 | 71010 | 84985 | 79944 | 85086 | 40994 |
| | 84% | 84% | 86% | 50% | 86% | 46% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|-----------------------|---------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 6 | 6 |
| Detector | ACIS-012367 | ACIS-012367 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | VFAINT | VFAINT | On-chip summing requested | N | N |
| Observation mode | POINTING | POINTING | Subarray requested | NONE | NONE |
| Pointing RA | 15.924417 | 15.99797426951542 | Alternating exposures requested | N | N |
| Pointing Dec | -72.032447 | -72.04776700618457 | Primary exposure time | 0.000000 | 3.2 |
| Pointing Roll | 295.508352 | 295.7870078908718 | | | |
| Window start time | 181353664.184000 | 181353664.184000 | | | |
| Window stop time | 189216064.184000 | 189216064.184000 | | | |
| SIM focus pos (mm) | -0.782348 | -0.7809083437167272 | | | |
| SIM defocus (mm) | 0 | 0.001439871863259334 | | | |
| SIM translation stage pos (mm) | -233.592463 | -233.5874344608287 | | | |
| SIM translation stage offset (mm) | 0 | -0.005018542100998502 | | | |
| Observation start time | 188196463.184000 | 188196087.39985 | | | |
| Observation start date | 2003-12-19T04:46:39 | 2003-12-19T04:41:27 | | | |
| Observation end time | 188216244.184000 | 188216378.30073 | | | |
| Observation end date | 2003-12-19T10:16:20 | 2003-12-19T10:19:38 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect





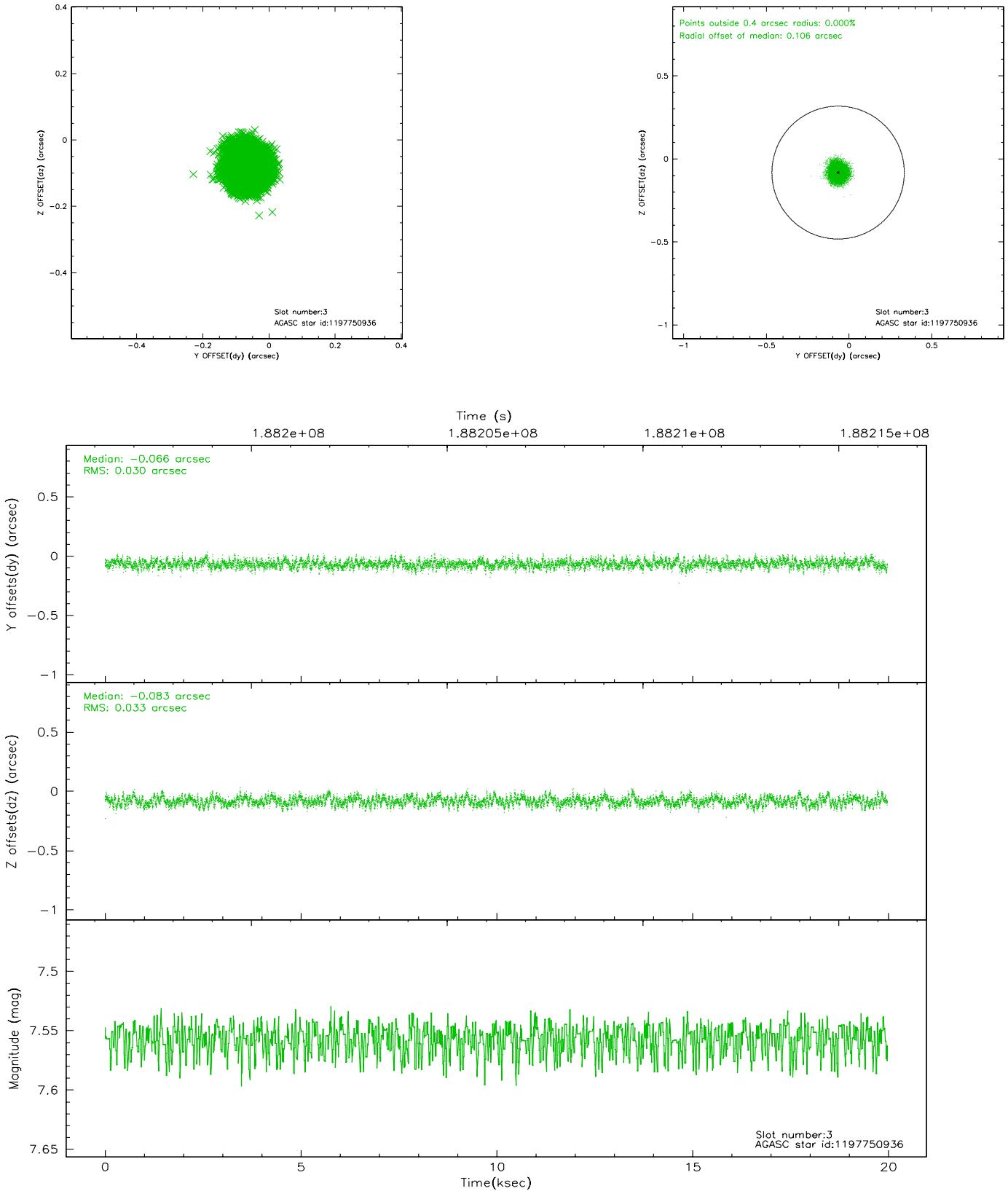
Slot Statistics

| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------------|------|-------|--------|--------|-------|-------|-----------|------------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.24 | 4870 | -0.014 | 0.048 | 0.006 | 0.011 | 0.000000 | 0.000000 | 933.97 | -833.35 |
| 1 | FID | ACIS-I-5 | 7.23 | 4869 | -0.114 | 0.024 | 0.006 | 0.010 | 0.000000 | 0.000000 | -1814.14 | 1064.02 |
| 2 | FID | ACIS-I-6 | 7.25 | 4869 | 0.037 | -0.002 | 0.007 | 0.011 | 0.000000 | 0.000000 | 399.36 | 1708.71 |
| 3 | GUIDE | 1197750936 | 7.56 | 9740 | -0.066 | -0.083 | 0.048 | 0.075 | 15.387940 | -71.549550 | -1829.44 | 195.61 |
| 4 | GUIDE | 1197884536 | 8.50 | 9735 | 0.070 | 0.058 | 0.067 | 0.107 | 17.160729 | -71.835289 | -30.37 | 1551.93 |
| 5 | GUIDE | 1197884712 | 8.30 | 9737 | 0.096 | 0.050 | 0.063 | 0.101 | 16.087398 | -72.252690 | 793.19 | -179.66 |
| 6 | GUIDE | 1197885328 | 7.22 | 9740 | -0.002 | -0.036 | 0.074 | 0.114 | 16.283090 | -71.733943 | -794.31 | 827.96 |
| 7 | GUIDE | 1198189696 | 7.38 | 9738 | -0.094 | 0.010 | 0.063 | 0.095 | 15.223750 | -72.697522 | 1842.15 | -1709.53 |

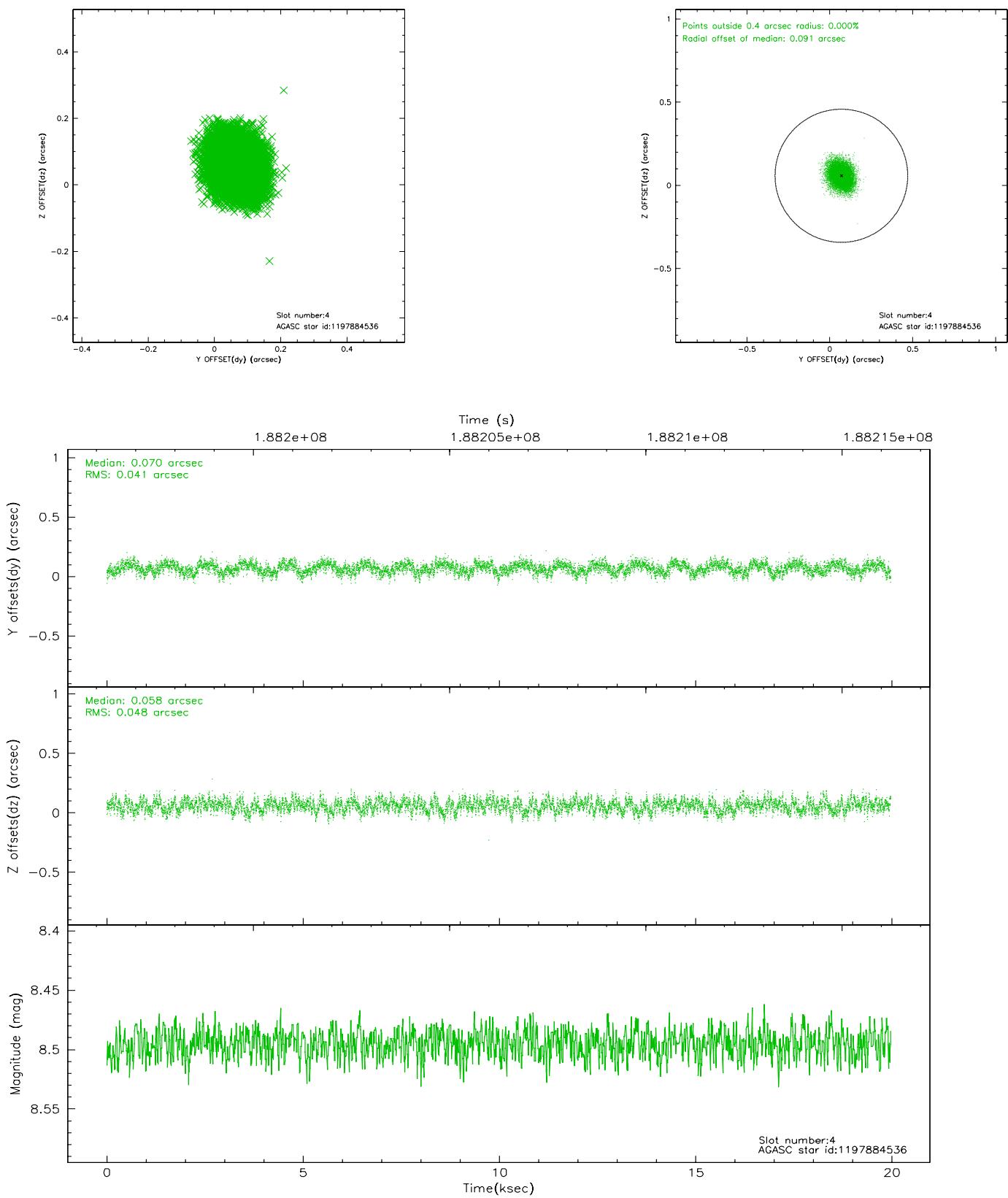
∞

2.4 Star Slots

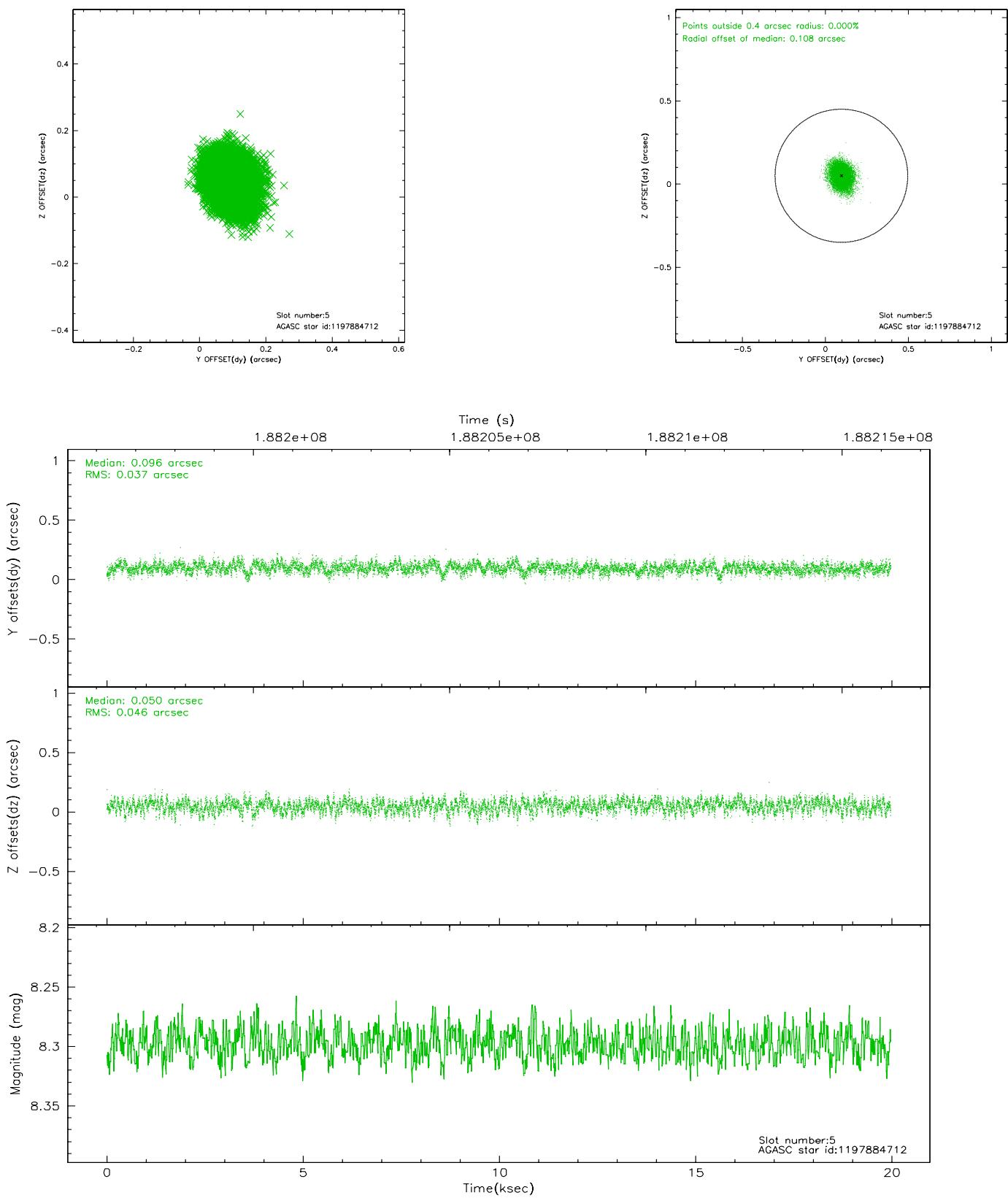
2.4.1 Slot 3



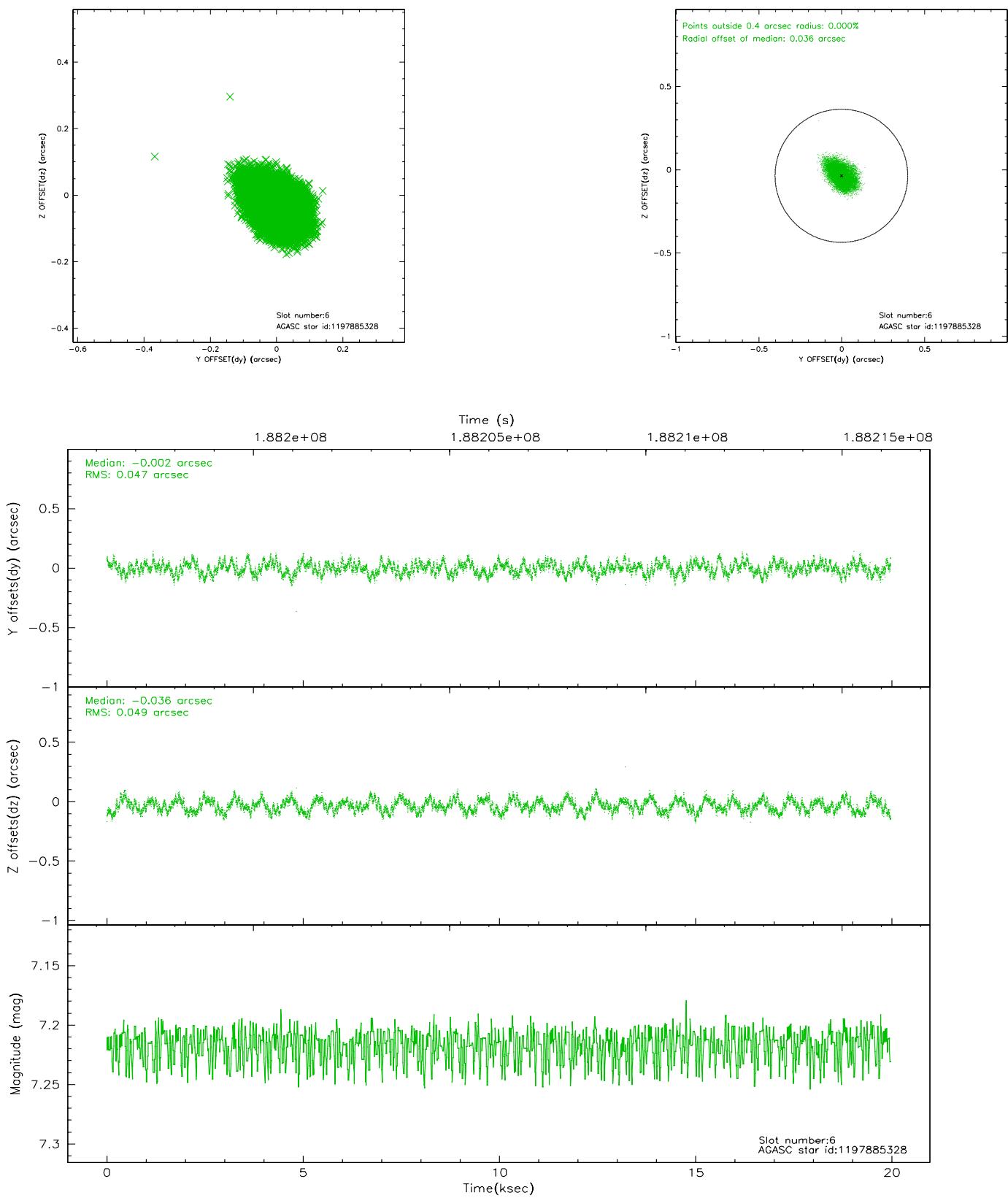
2.4.2 Slot 4



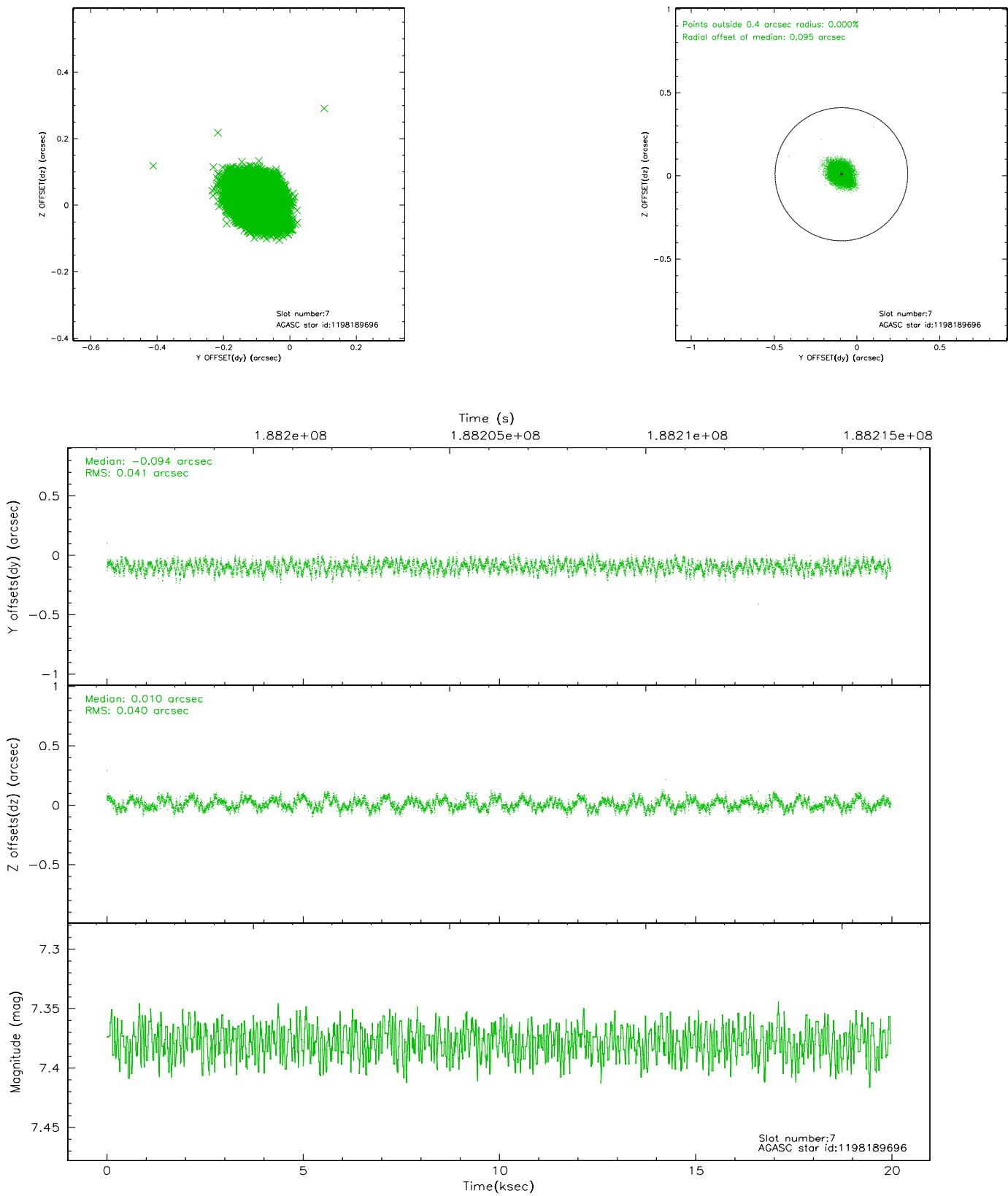
2.4.3 Slot 5



2.4.4 Slot 6

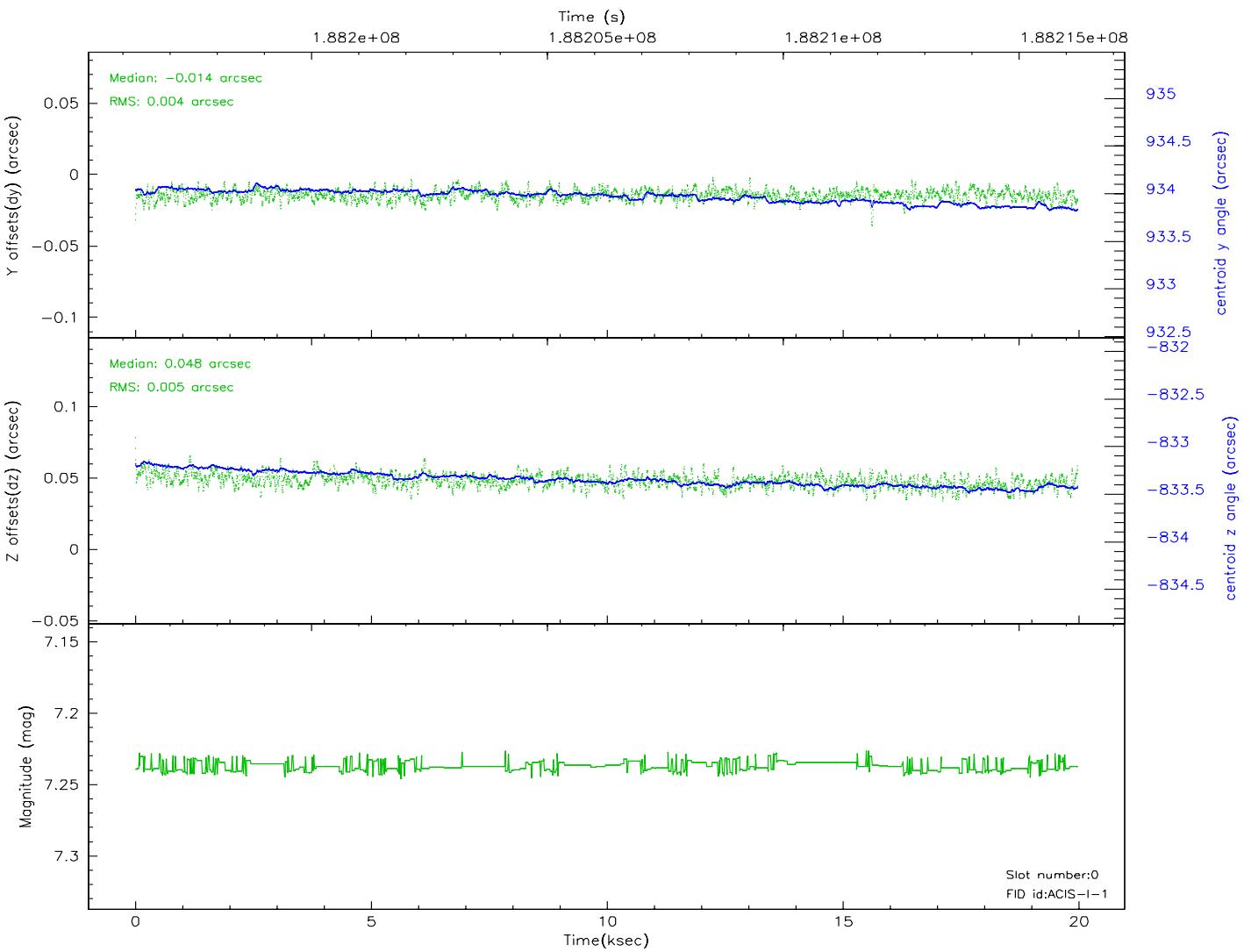
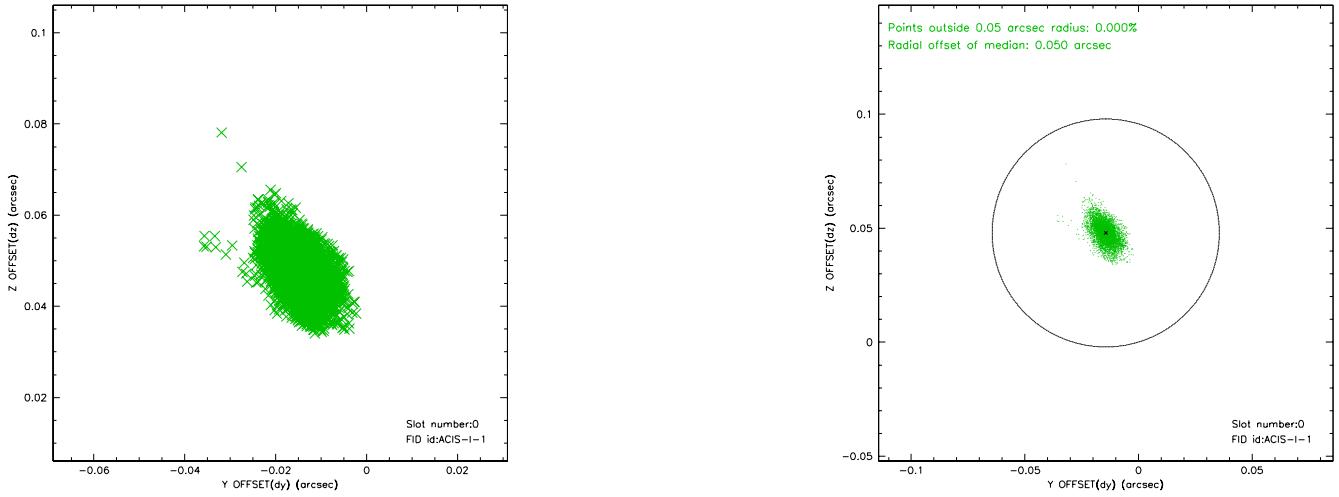


2.4.5 Slot 7

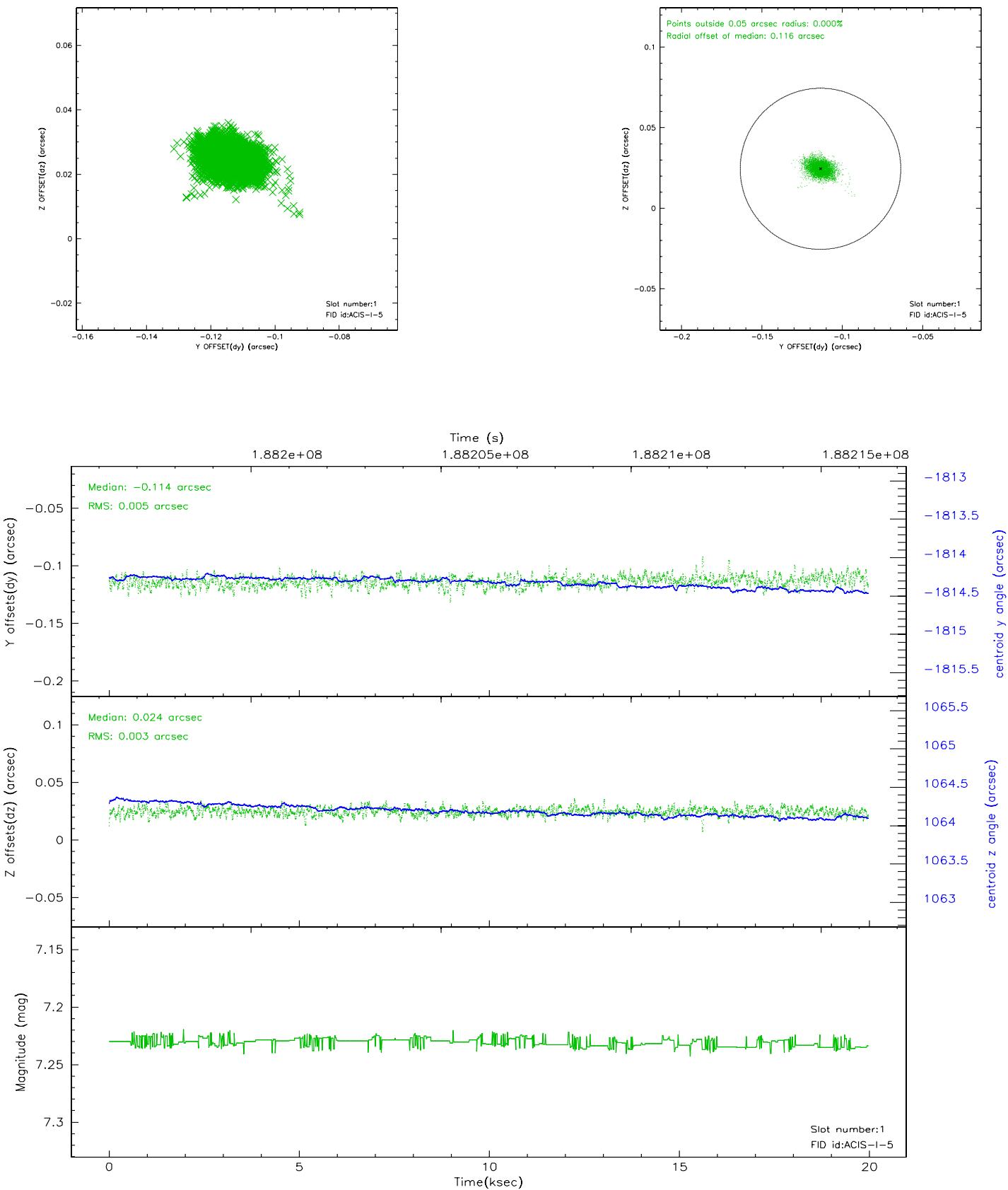


2.5 FID Slots

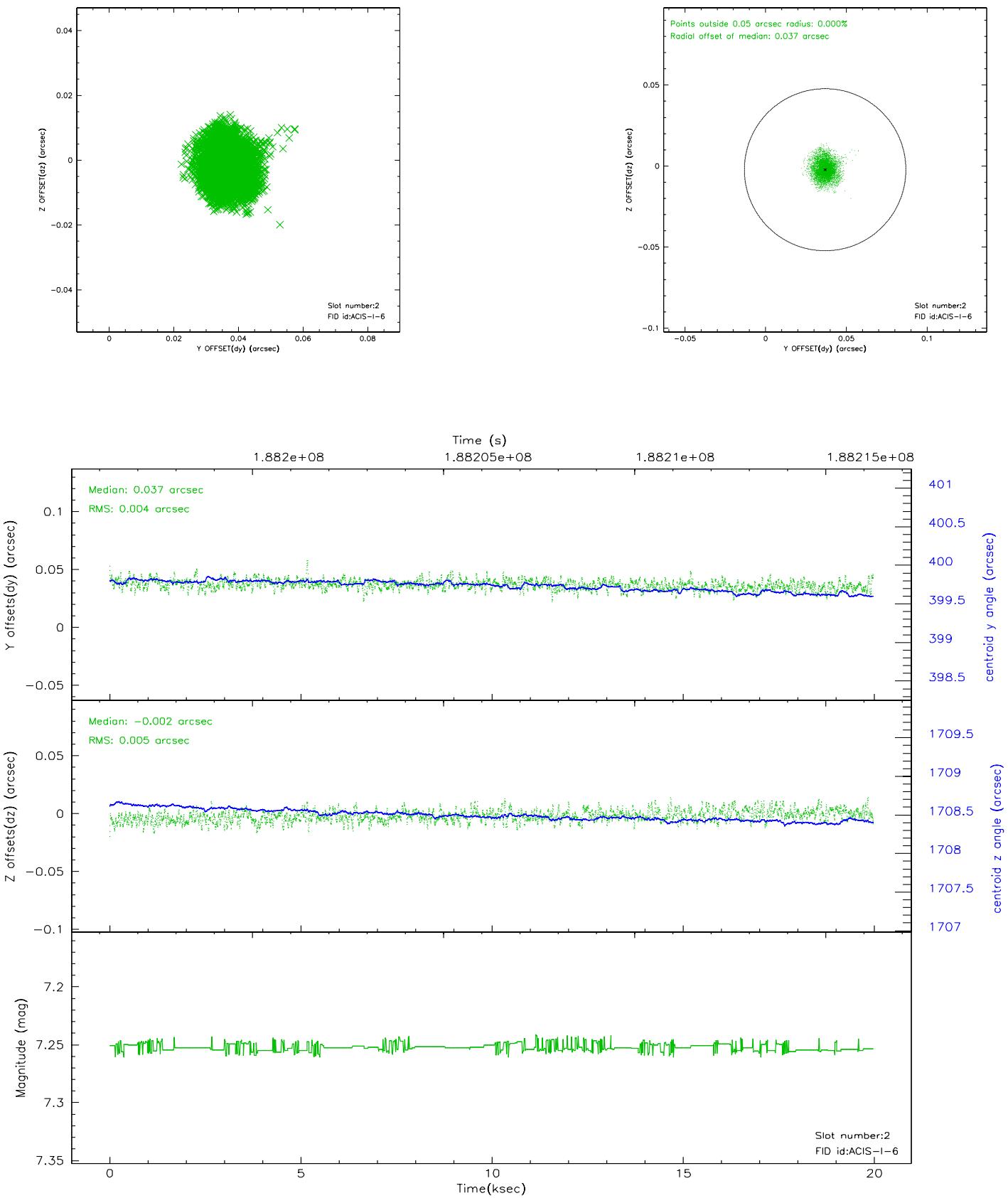
2.5.1 Slot 0



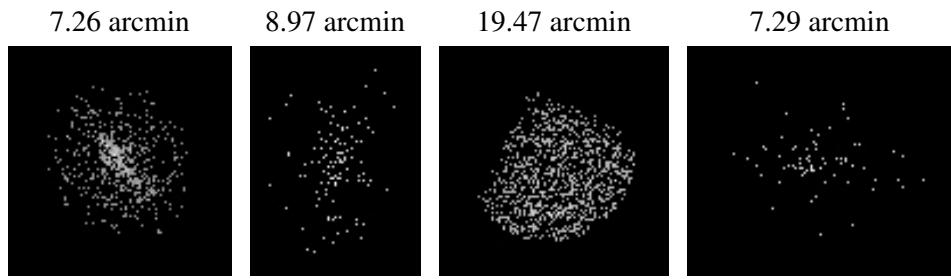
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

| | |
|----------------------------|------------|
| V&V Scientist | Jen Lauer |
| V&V Date (YYYY-MM-DD) | 2006.06.22 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 19.532 |

A.2 Comments

Window constraint met.