

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 2249 - L2 Version 3
Chandra X-Ray Center

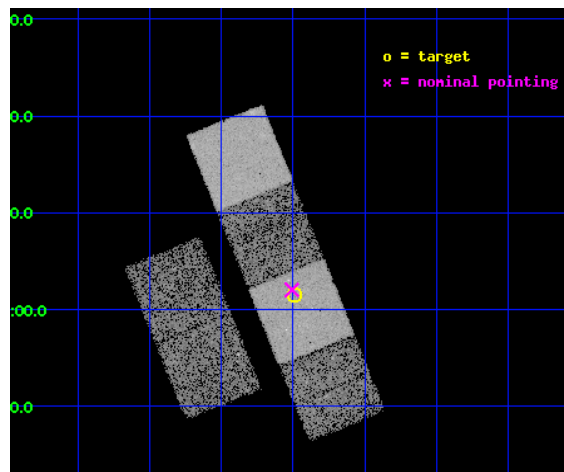
L2 Processing Date : Sep 6 2012

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 |
| A | Summary | 17 |
| A.1 | Status | 17 |
| A.2 | Comments | 17 |

1 Front

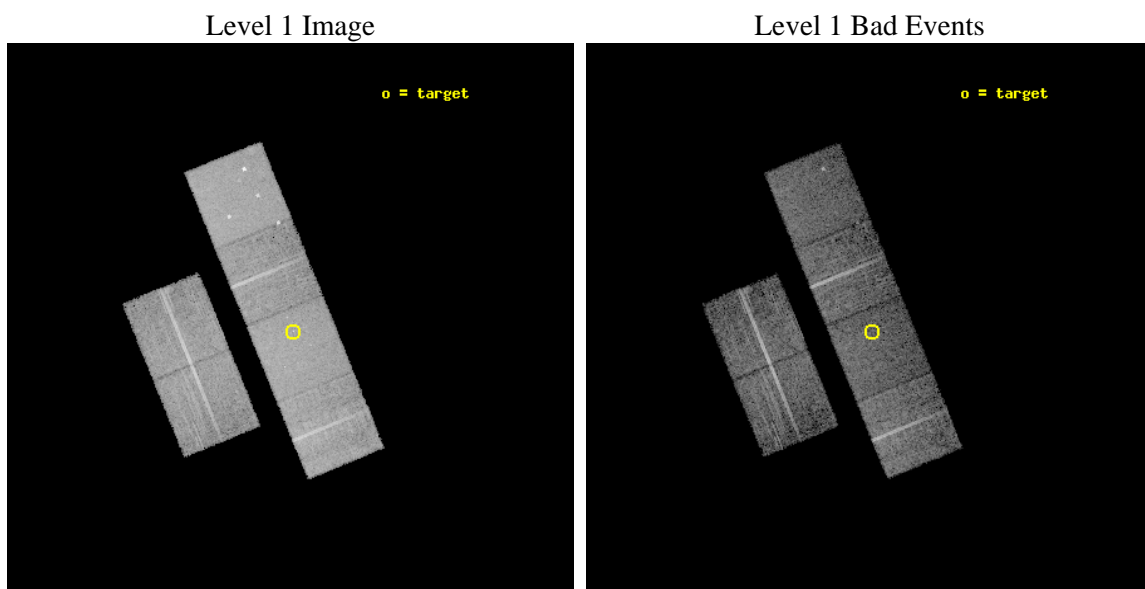
| | | |
|----------|---|---|
| seq_num | 900076 | Sequence number |
| obs_id | 2249 | Observation id |
| title | THE NATURE OF NARROW-LINE, FIR-LUMINOUS, X-RAY GALAXIES | Proposal t |
| observer | PROFESSOR TOM SHANKS | Principal investigator |
| object | RXJ13434+0001 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 205.871667 | Observer's specified target RA [deg] |
| dec_targ | 0.025833 | Observer's specified target Dec [deg] |
| ra_nom | 205.87698038137 | Nominal RA [deg] |
| dec_nom | 0.034160599494703 | Nominal Dec [deg] |
| roll_nom | 67.776807542086 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 9948.8000092506 | Sum of GTIs [s] |
| livetime | 9822.8223130853 | Livetime [s] |
| ontime2 | 9948.8000092506 | Sum of GTIs [s] |
| ontime3 | 9948.8000092506 | Sum of GTIs [s] |
| ontime5 | 9948.8000092506 | Sum of GTIs [s] |
| ontime6 | 9948.8000092506 | Sum of GTIs [s] |
| ontime7 | 9948.8000092506 | Sum of GTIs [s] |
| ontime8 | 9948.8000092506 | Sum of GTIs [s] |
| l2events | 94387 | Number of level 2 events |



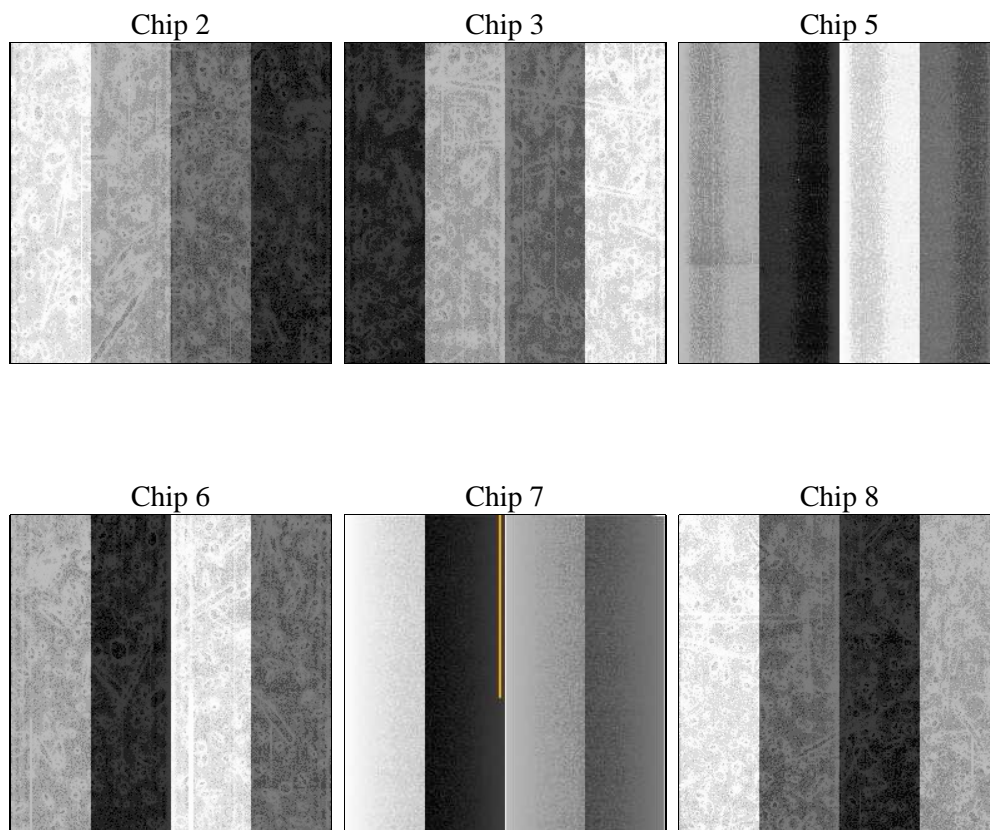
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 10000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 9948.8000092506 | Sum of GTIs [s] |
| caldsver | 4.5.1.1 | | ontime2 | 9948.8000092506 | Sum of GTIs [s] |
| date | 2012-09-06T09:27:52 | Date and time of file creation | ontime3 | 9948.8000092506 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime5 | 9948.8000092506 | Sum of GTIs [s] |
| | | | ontime6 | 9948.8000092506 | Sum of GTIs [s] |
| | | | ontime7 | 9948.8000092506 | Sum of GTIs [s] |
| | | | ontime8 | 9948.8000092506 | Sum of GTIs [s] |
| | | | l1events | 420817 | Number of level 1 events |

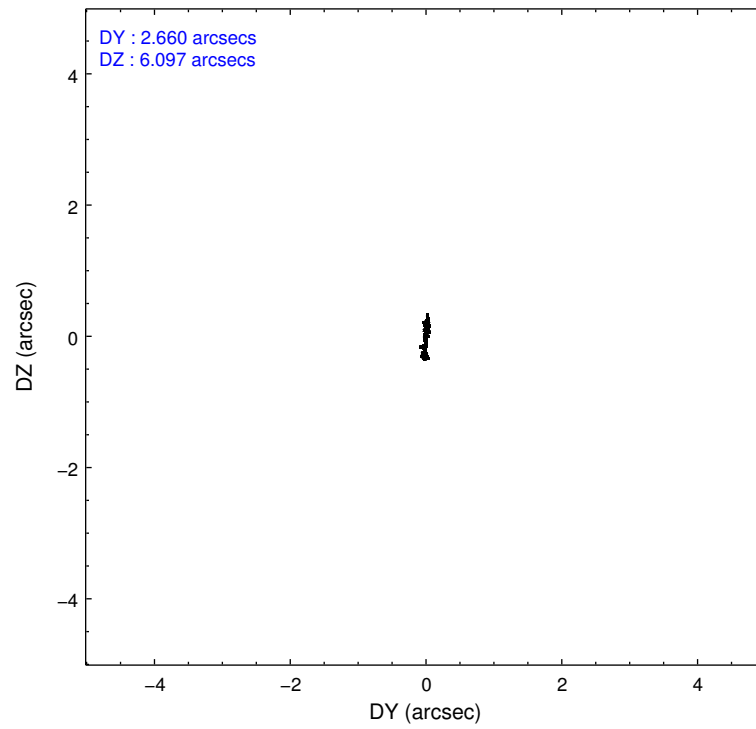
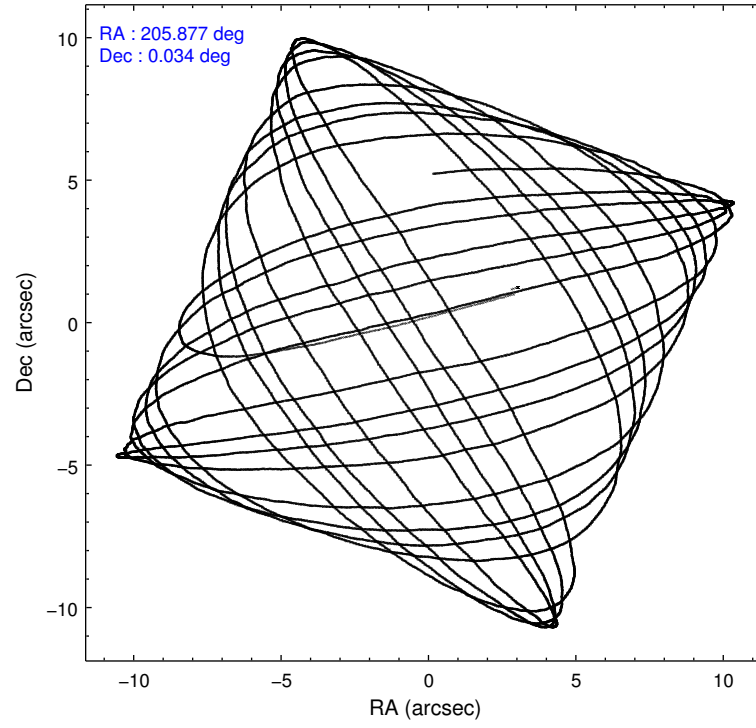
2.1.4 Events

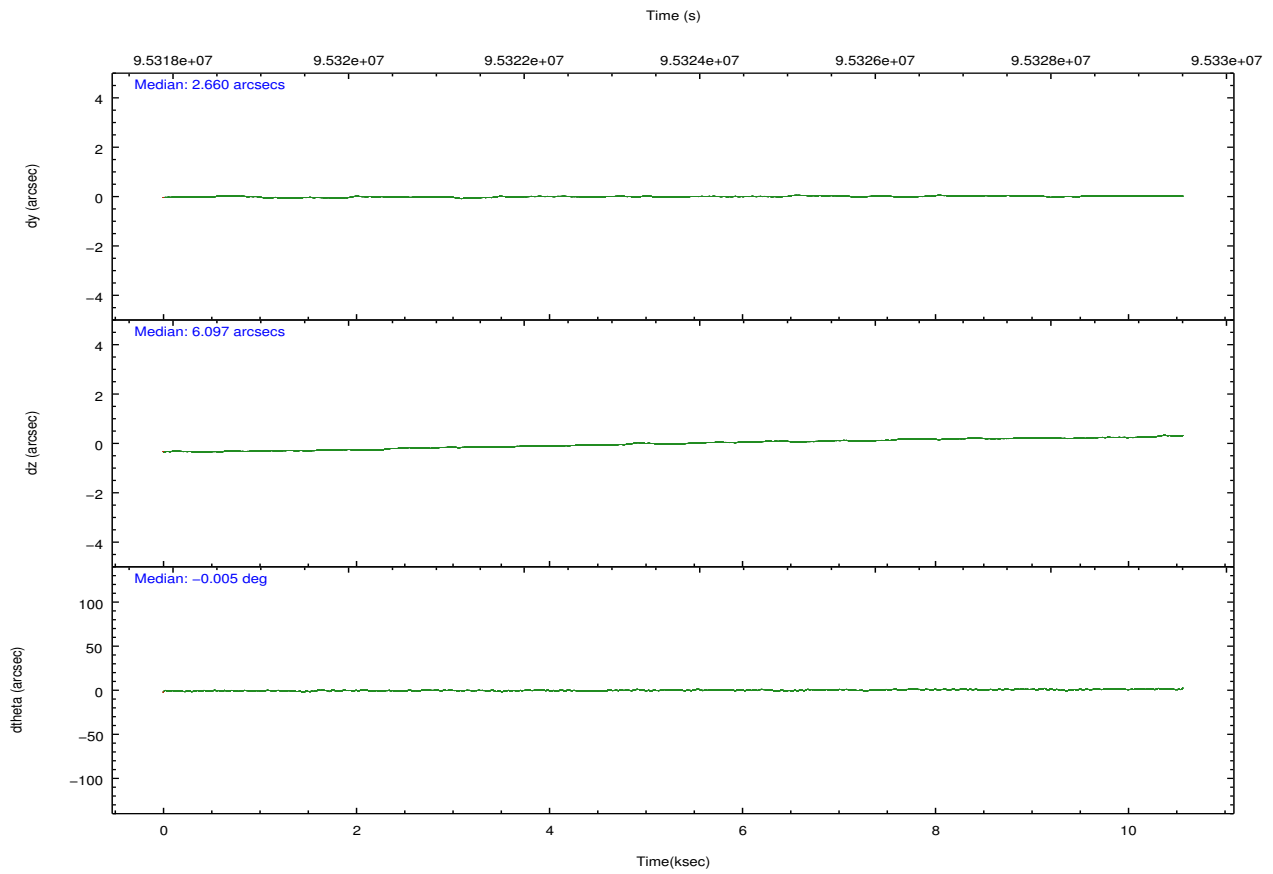
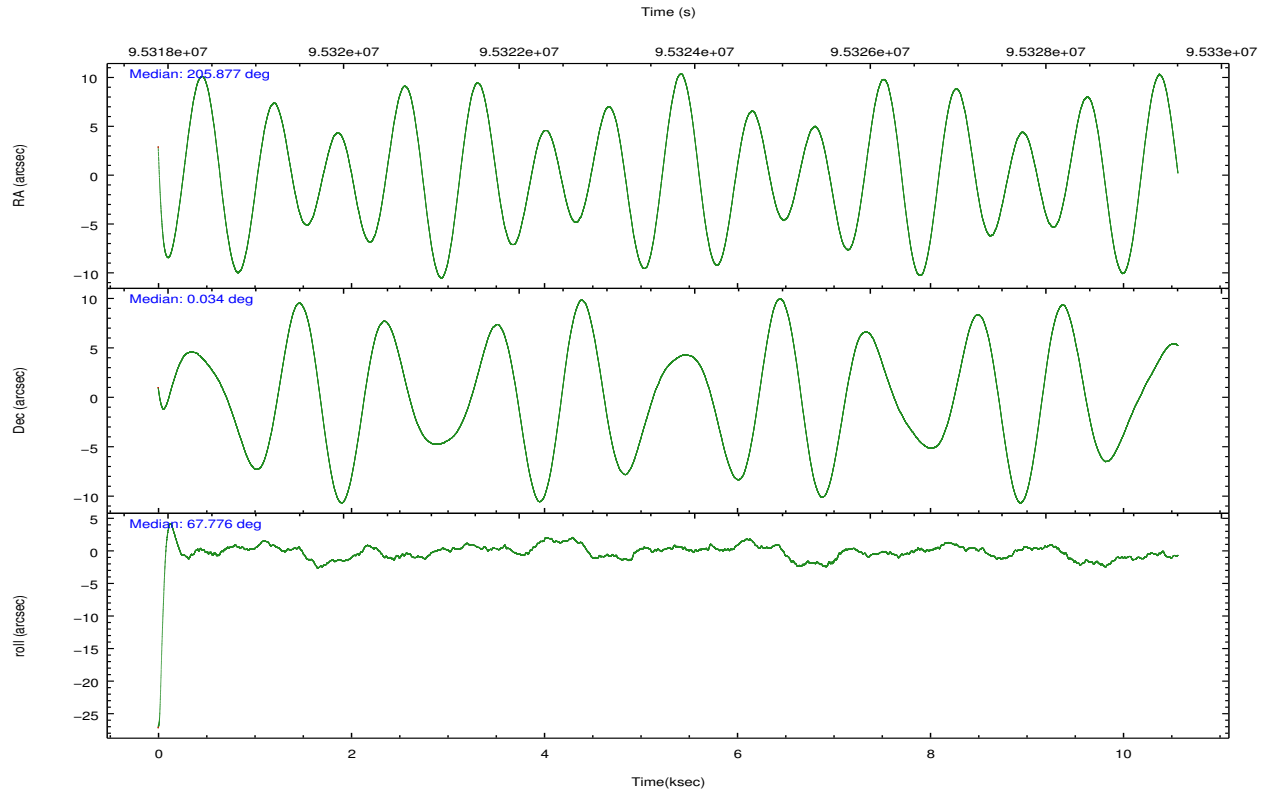
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|-------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 61793 | 58141 | 86686 | 60310 | 76765 | 77122 | grade 0 events | 3247 | 3111 | 6317 | 3193 | 3419 | 5172 |
| rejected events | 54594 | 51198 | 45281 | 52883 | 43888 | 61278 | | 5% | 5% | 7% | 5% | 4% | 6% |
| rejected % | 88% | 88% | 52% | 87% | 57% | 79% | grade 1 events | 24 | 28 | 170 | 23 | 64 | 42 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 1504 | 1376 | 11900 | 1443 | 6362 | 3365 |
| | | | | | | | | 2% | 2% | 13% | 2% | 8% | 4% |
| | | | | | | | grade 3 events | 642 | 619 | 1678 | 722 | 3020 | 1700 |
| | | | | | | | | 1% | 1% | 1% | 1% | 3% | 2% |
| | | | | | | | grade 4 events | 617 | 643 | 1754 | 704 | 2941 | 1681 |
| | | | | | | | | 0% | 1% | 2% | 1% | 3% | 2% |
| | | | | | | | grade 5 events | 2081 | 2203 | 6194 | 2475 | 7079 | 3100 |
| | | | | | | | | 3% | 3% | 7% | 4% | 9% | 4% |
| | | | | | | | grade 6 events | 1192 | 1196 | 19778 | 1366 | 17154 | 3935 |
| | | | | | | | | 1% | 2% | 22% | 2% | 22% | 5% |
| | | | | | | | grade 7 events | 52486 | 48965 | 38895 | 50384 | 36726 | 58127 |
| | | | | | | | | 84% | 84% | 44% | 83% | 47% | 75% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-235678 | ACIS-235678 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | FAINT | FAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 205.880886 | 205.8769803813651 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 0.007076 | 0.03416059949470322 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 67.620213 | 67.77680754208575 | [s] Primary exposure time | 0.000000 | 3.2 |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | | | |
| [mm] SIM defocus | 0 | 0.001444936568705701 | | | |
| [mm] SIM translation stage pos | -190.132523 | -190.1425803651734 | | | |
| [mm] SIM translation stage offset | 0 | 0.01005778216563158 | | | |
| [s] Observation start time (MET) | 95318981.184000 | 95317820.61267 | | | |
| Observation start date | 2001-01-08T05:28:37 | 2001-01-08T05:10:20 | | | |
| [s] Observation end time (MET) | 95328981.184000 | 95329115.08810399 | | | |
| Observation end date | 2001-01-08T08:15:17 | 2001-01-08T08:18:35 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



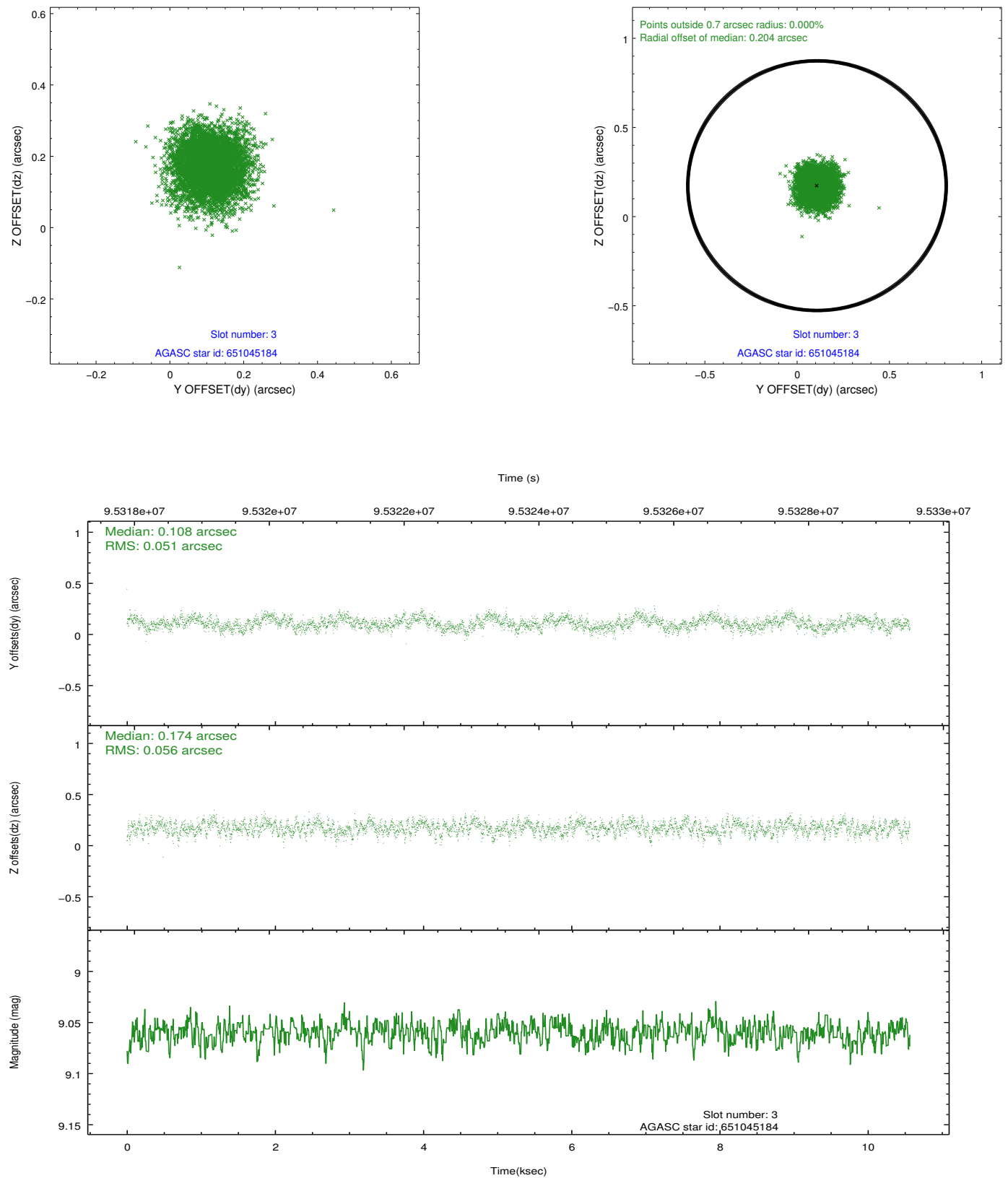


Slot Statistics

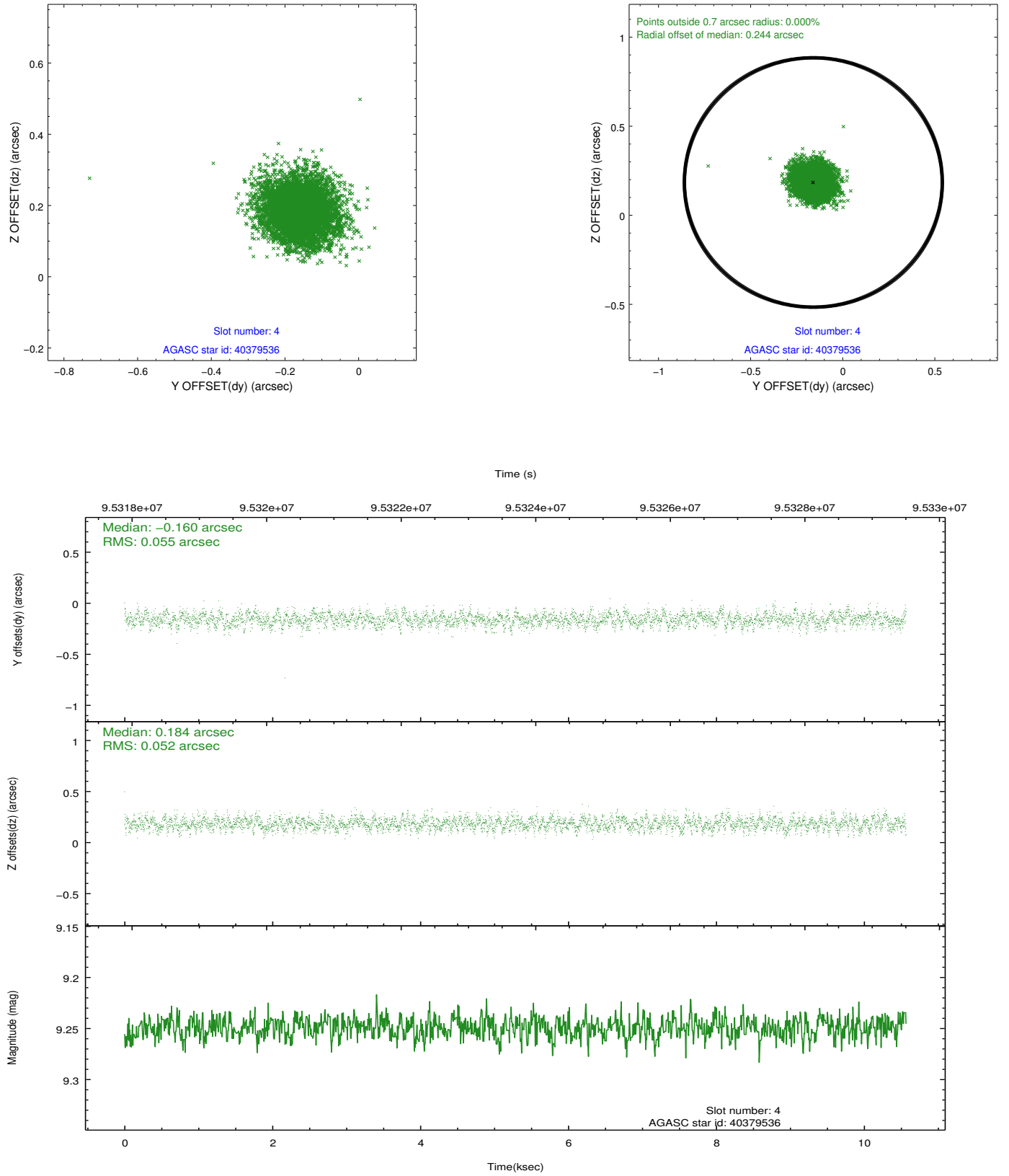
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|-------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.11 | 2578 | -0.026 | 0.017 | 0.008 | 0.014 | 0.000000 | 0.000000 | -755.29 | -1727.16 |
| 1 | FID | ACIS-S-4 | 7.21 | 2578 | -0.035 | 0.008 | 0.008 | 0.017 | 0.000000 | 0.000000 | 2157.73 | 180.85 |
| 2 | FID | ACIS-S-5 | 7.24 | 2578 | 0.029 | -0.016 | 0.007 | 0.012 | 0.000000 | 0.000000 | -1807.47 | 175.00 |
| 3 | GUIDE | 651045184 | 9.06 | 5153 | 0.108 | 0.174 | 0.081 | 0.130 | 206.266135 | -0.772896 | -2066.95 | -2352.16 |
| 4 | GUIDE | 40379536 | 9.25 | 5153 | -0.160 | 0.184 | 0.080 | 0.127 | 206.530552 | 0.347967 | 2026.18 | -1696.36 |
| 5 | GUIDE | 651041072 | 9.82 | 5154 | 0.191 | -0.252 | 0.099 | 0.163 | 205.728858 | -0.270240 | -1129.55 | 124.62 |
| 6 | GUIDE | 40380232 | 9.74 | 5153 | 0.042 | -0.309 | 0.093 | 0.157 | 205.925897 | 0.181116 | 642.19 | 87.67 |
| 7 | GUIDE | 40380264 | 10.00 | 5150 | -0.183 | 0.202 | 0.105 | 0.177 | 206.518842 | 0.165369 | 1402.81 | -1907.22 |

2.4 Star Slots

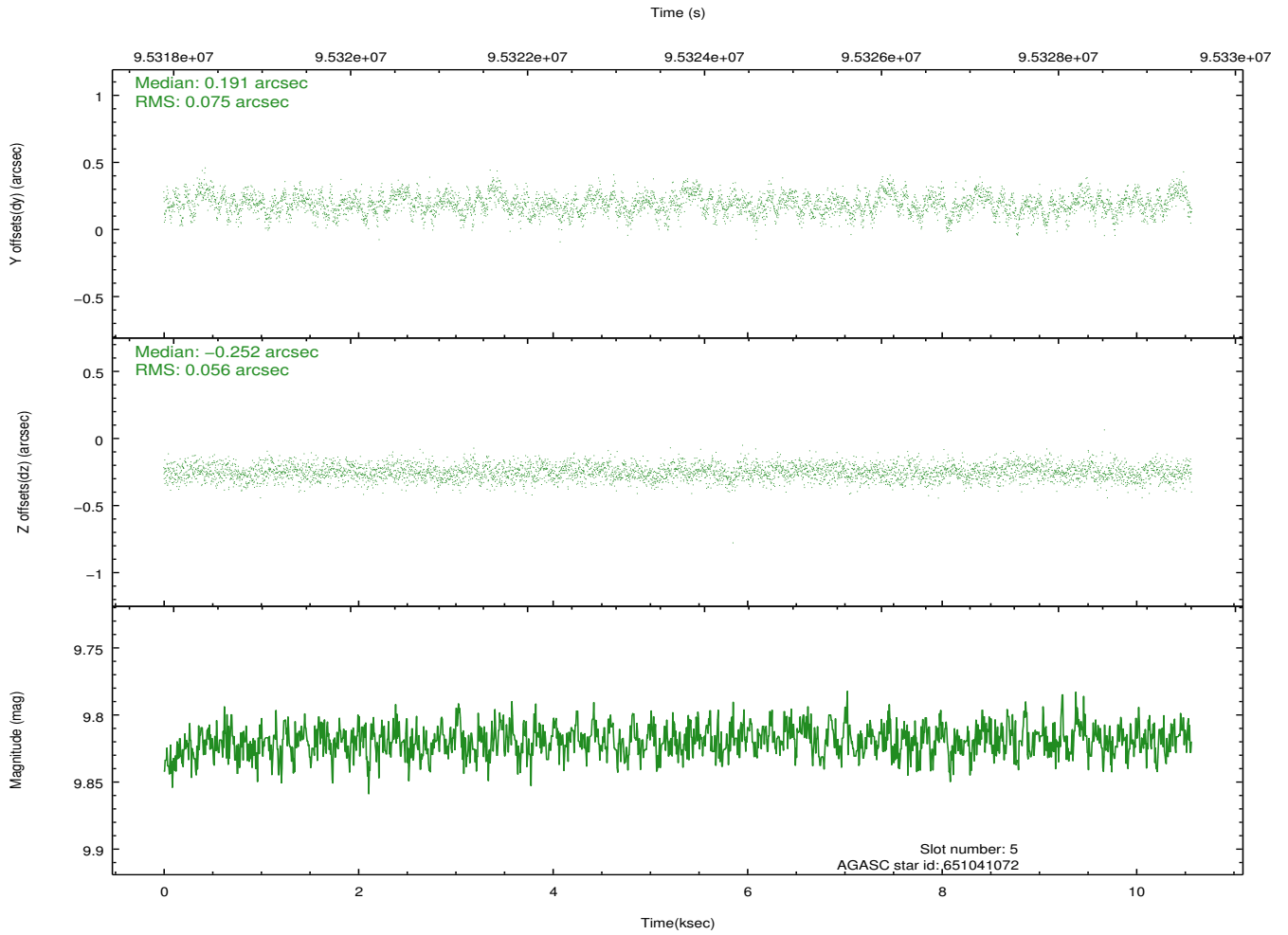
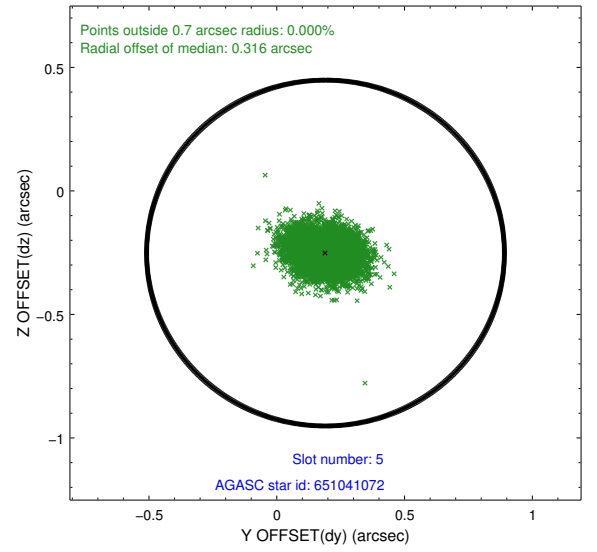
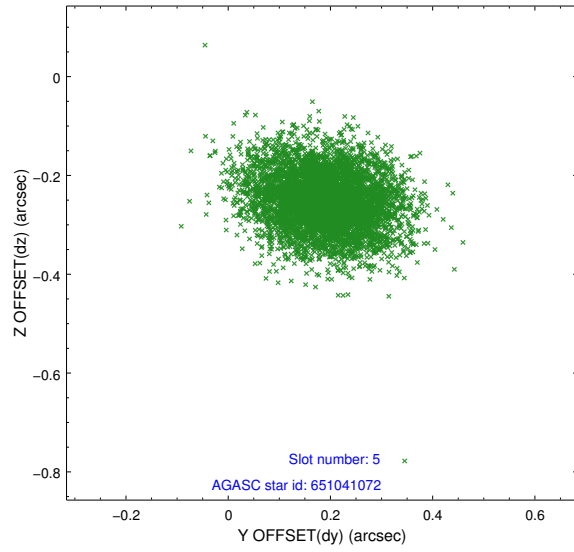
2.4.1 Slot 3



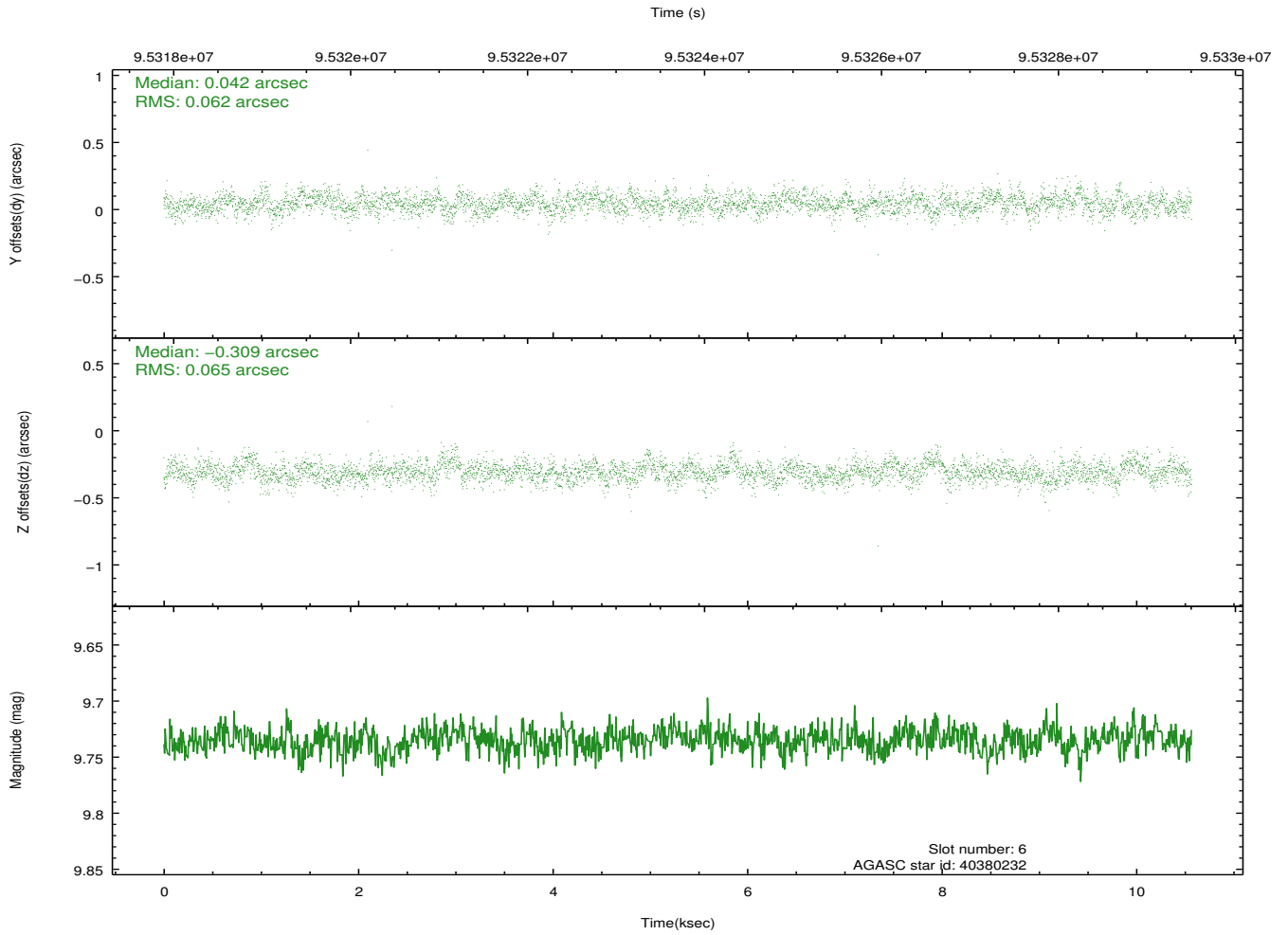
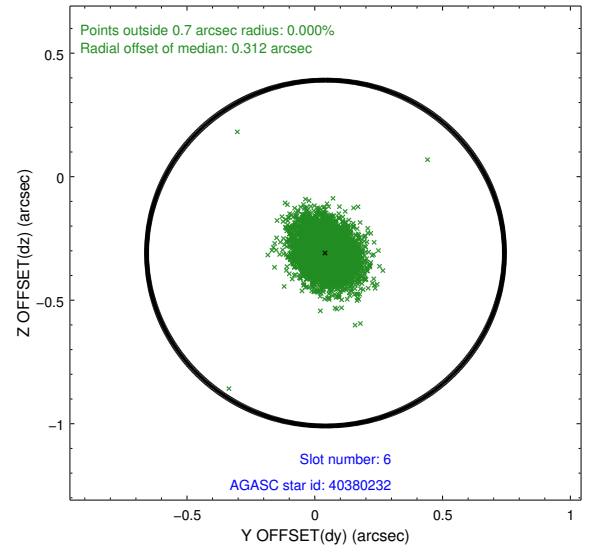
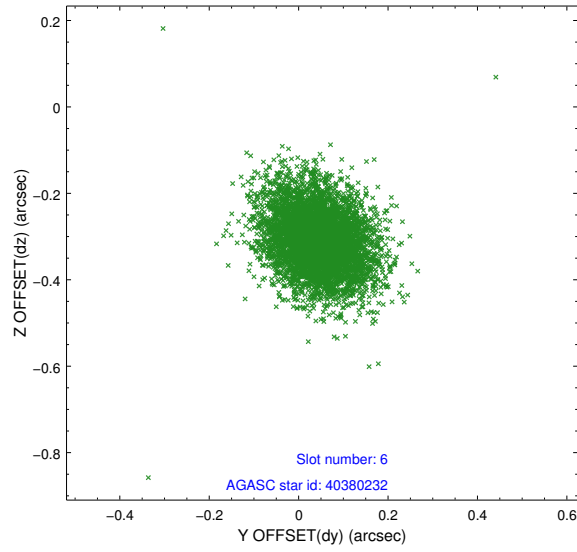
2.4.2 Slot 4



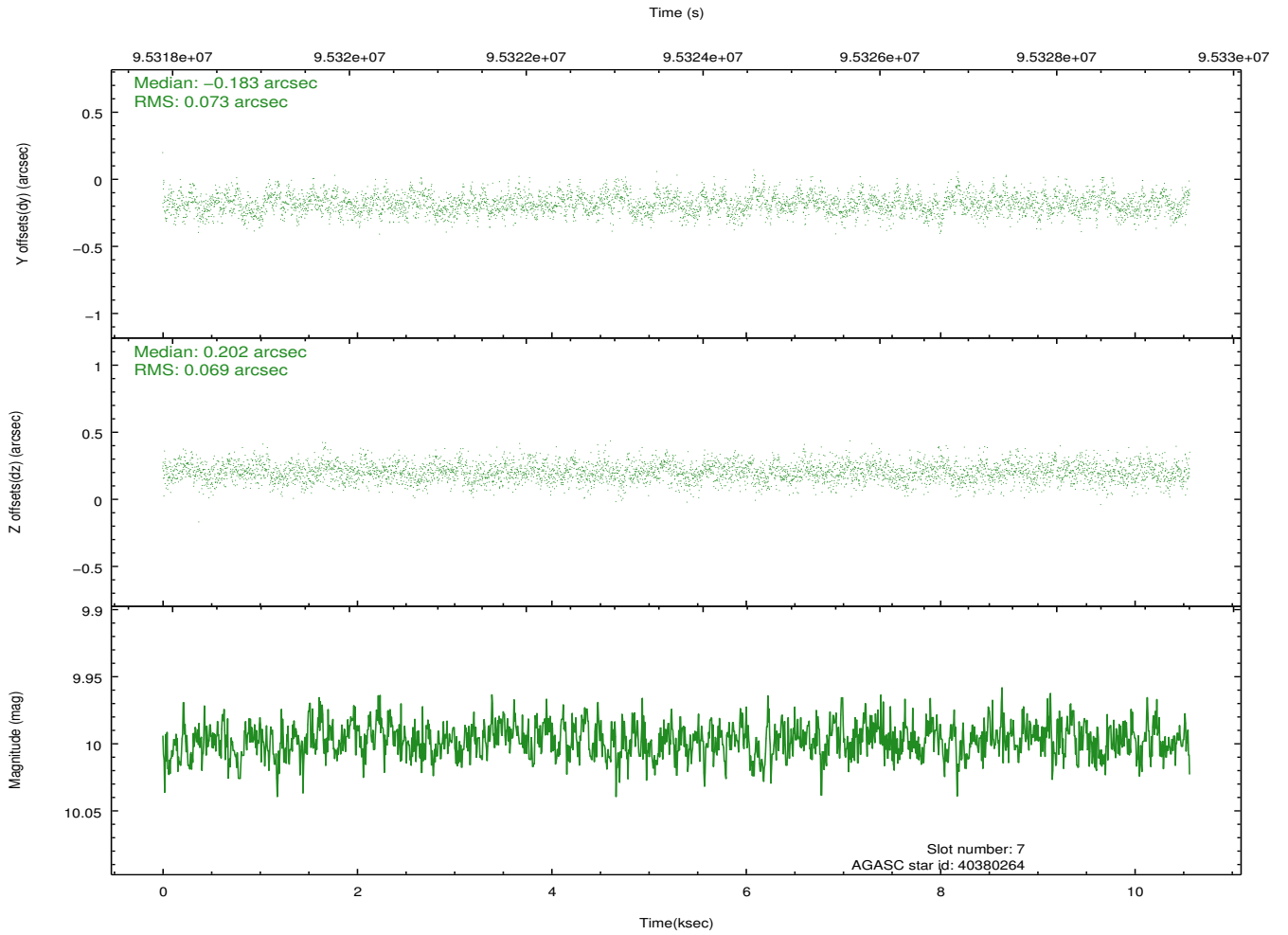
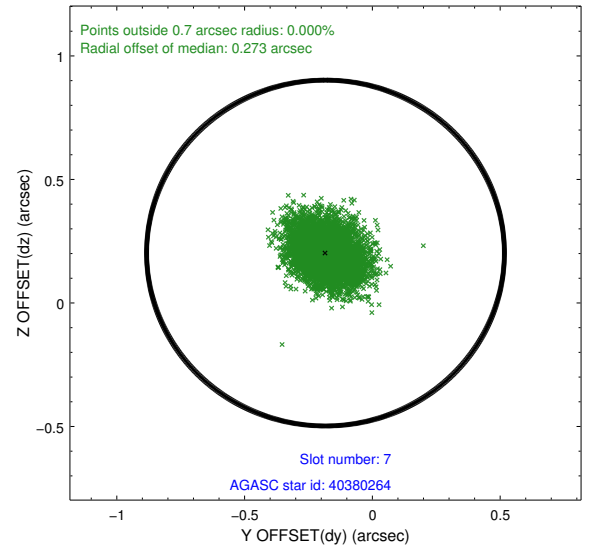
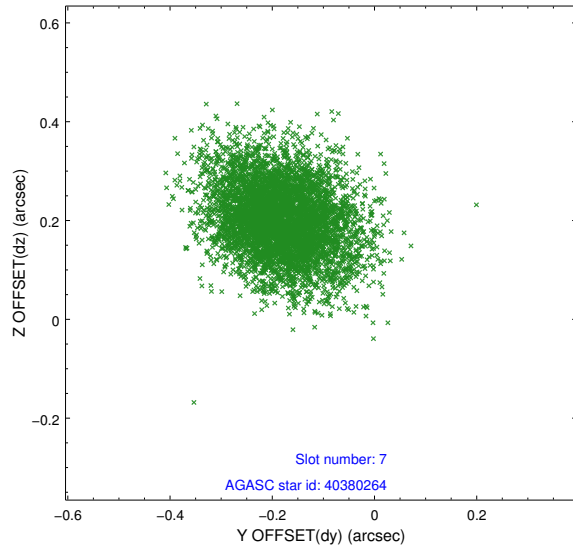
2.4.3 Slot 5



2.4.4 Slot 6

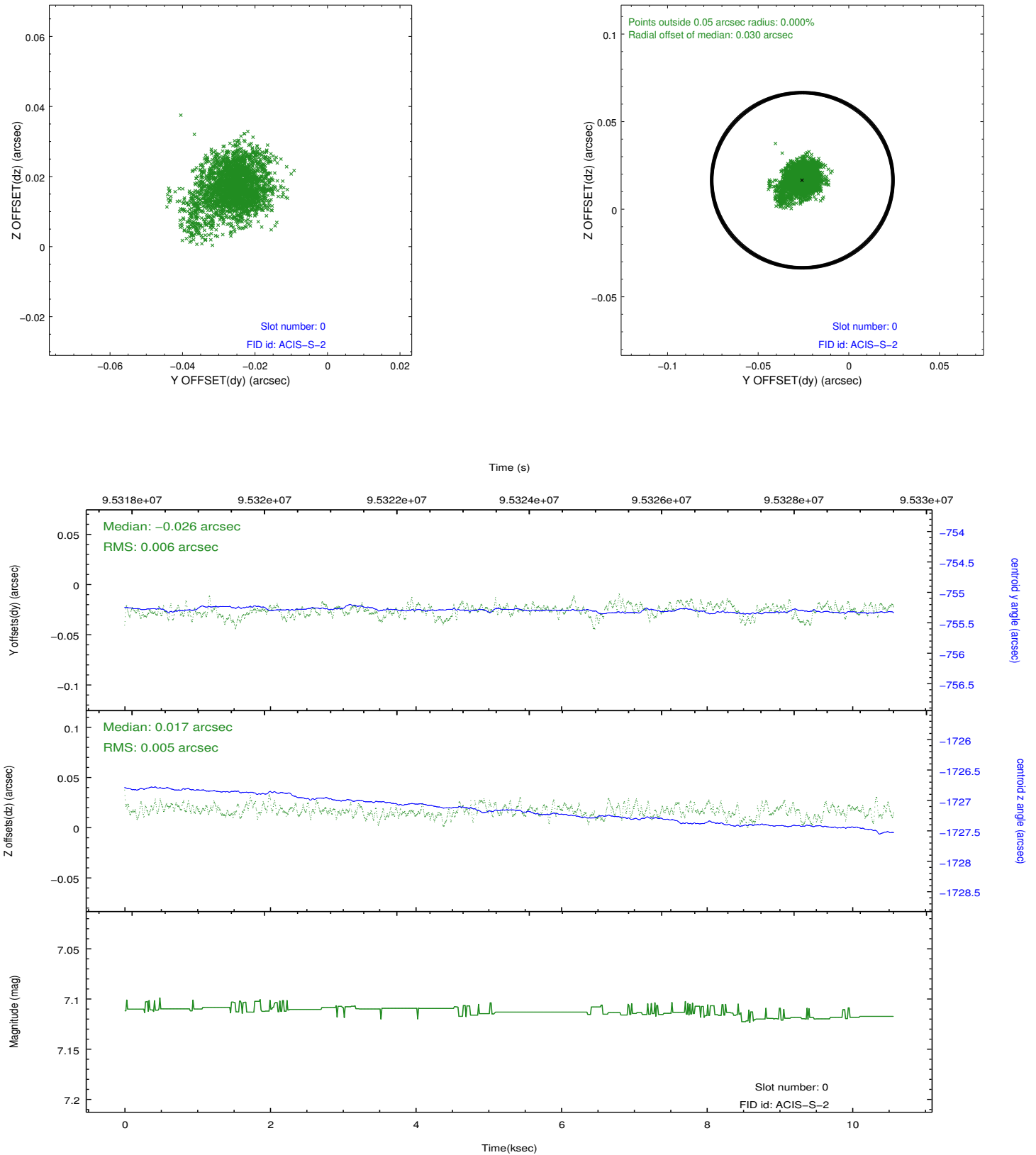


2.4.5 Slot 7

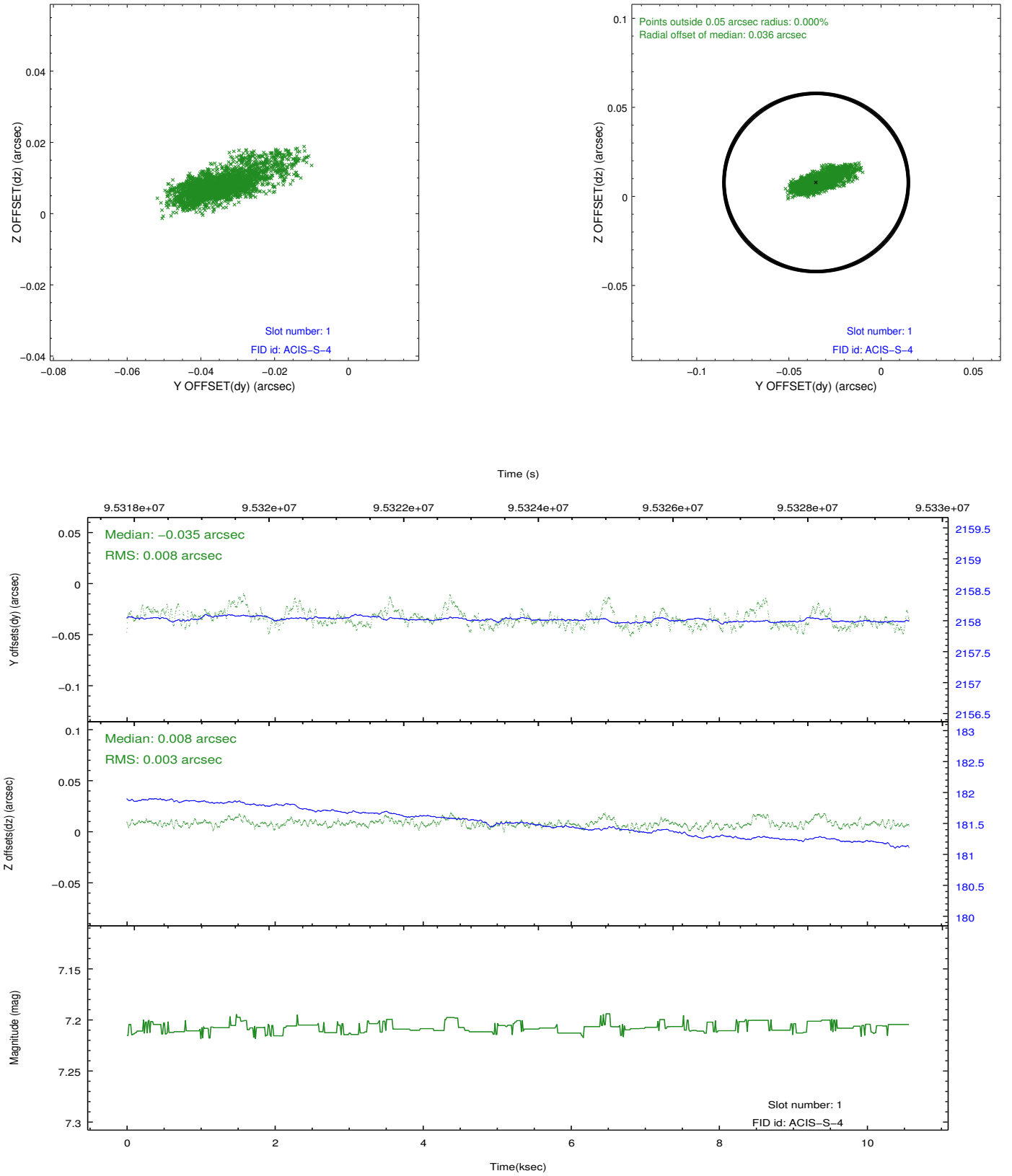


2.5 FID Slots

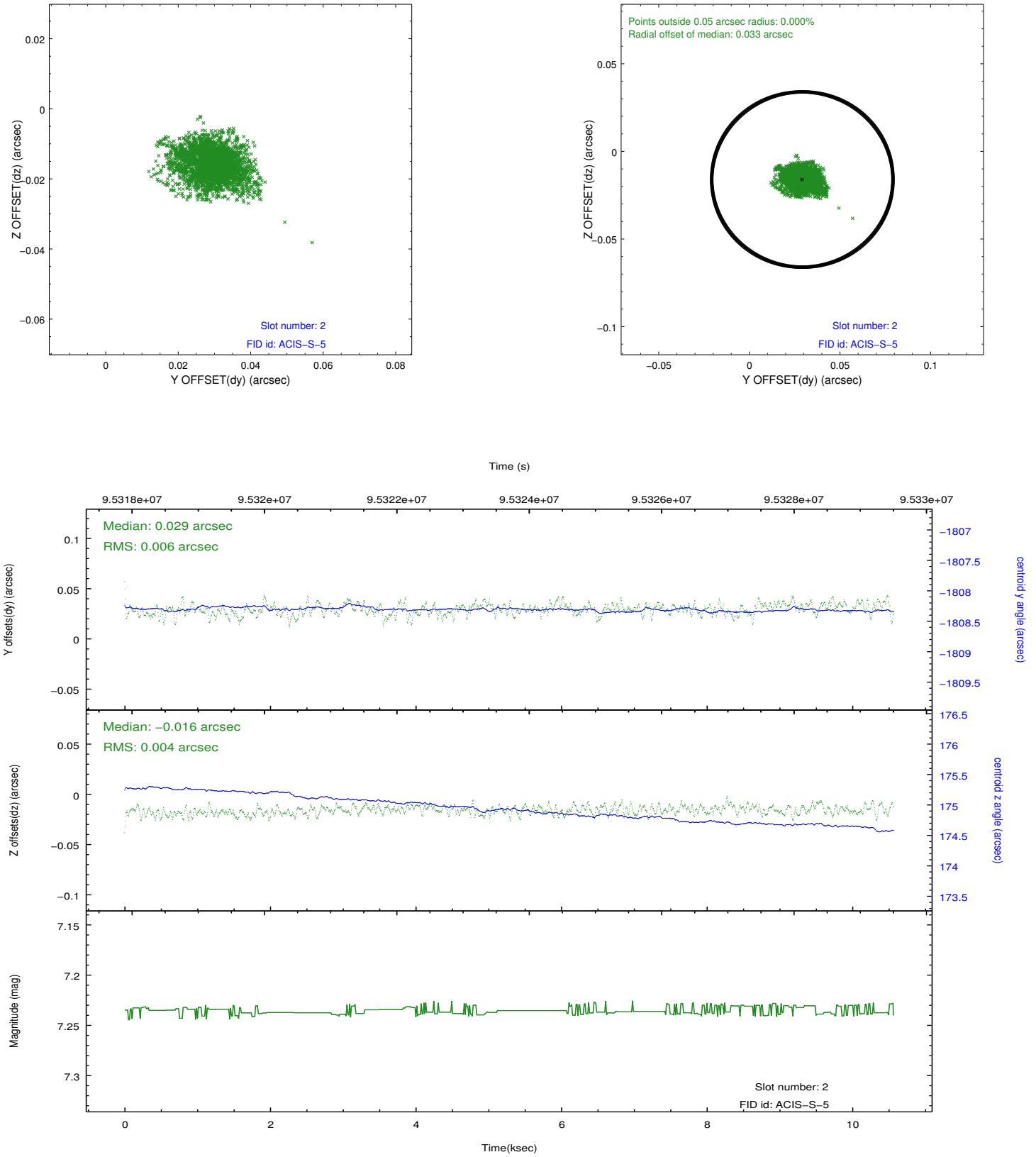
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|------------|
| V&V Scientist | Jen Lauer |
| V&V Date (YYYY-MM-DD) | 2012.09.14 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 9.952 |

A.2 Comments