

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 383 - L2 Version 3
Chandra X-Ray Center

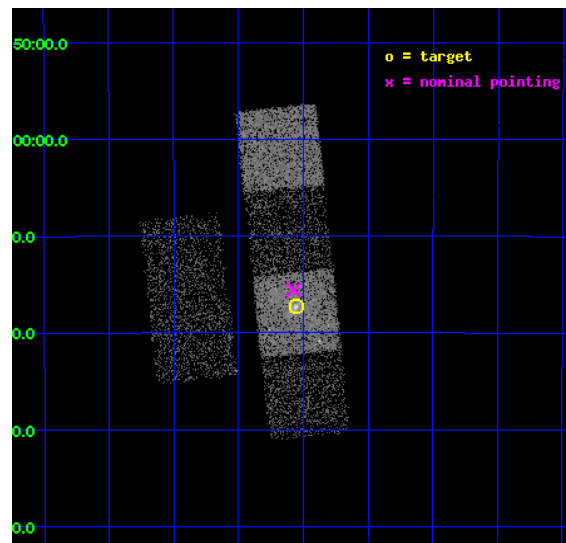
L2 Processing Date : Aug 31 2012

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1 Front

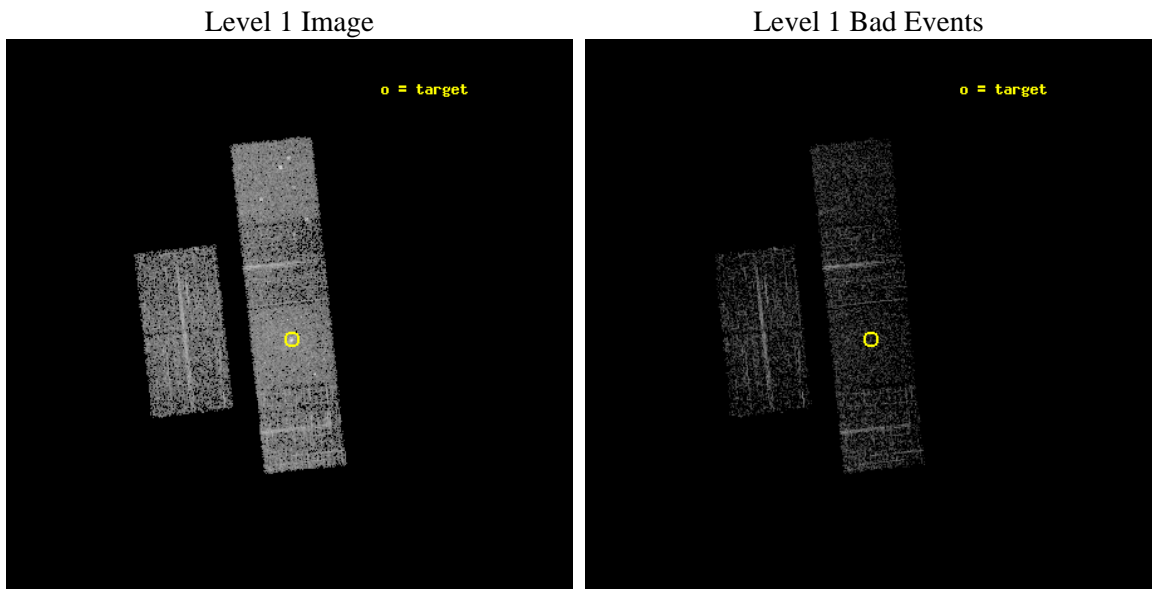
| | | |
|----------|--|---|
| seq_num | 700055 | Sequence number |
| obs_id | 383 | Observation id |
| title | LOW-LUMINOSITY ACTIVE GALACTIC NUCLEI IN NEARBY GALAXIES | Proposal |
| observer | Professor Gordon Garmire | Principal investigator |
| object | NGC 253 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 11.887917 | Observer's specified target RA [deg] |
| dec_targ | -25.288333 | Observer's specified target Dec [deg] |
| ra_nom | 11.893295708952 | Nominal RA [deg] |
| dec_nom | -25.259310069621 | Nominal Dec [deg] |
| roll_nom | 83.92043579957 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 2160.0000019968 | Sum of GTIs [s] |
| livetime | 2132.6487813756 | Livetime [s] |
| ontime2 | 2160.0000019968 | Sum of GTIs [s] |
| ontime3 | 2160.0000019968 | Sum of GTIs [s] |
| ontime5 | 2160.0000019968 | Sum of GTIs [s] |
| ontime6 | 2160.0000019968 | Sum of GTIs [s] |
| ontime7 | 2160.0000019968 | Sum of GTIs [s] |
| ontime8 | 2160.0000019968 | Sum of GTIs [s] |
| l2events | 23856 | Number of level 2 events |



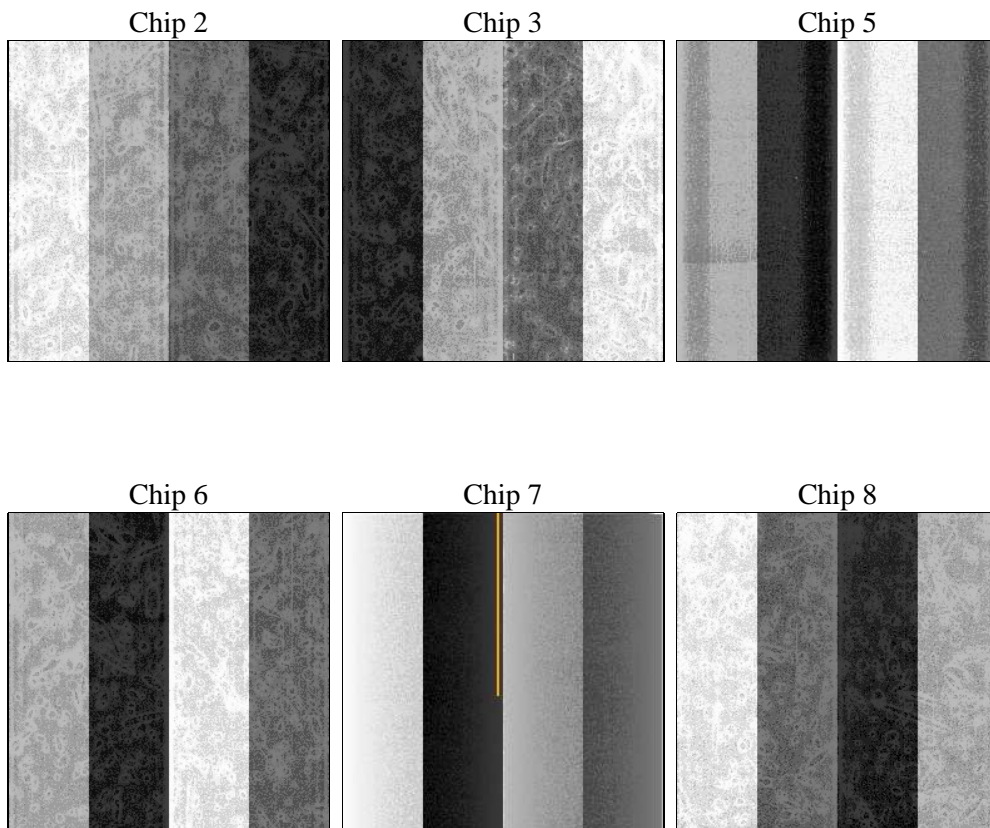
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 2000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 2160.0000019968 | Sum of GTIs [s] |
| caldsver | 4.5.1.1 | | ontime2 | 2160.0000019968 | Sum of GTIs [s] |
| date | 2012-08-31T12:33:45 | Date and time of file creation | ontime3 | 2160.0000019968 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime5 | 2160.0000019968 | Sum of GTIs [s] |
| | | | ontime6 | 2160.0000019968 | Sum of GTIs [s] |
| | | | ontime7 | 2160.0000019968 | Sum of GTIs [s] |
| | | | ontime8 | 2160.0000019968 | Sum of GTIs [s] |
| | | | l1events | 122150 | Number of level 1 events |

2.1.4 Events

| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 16839 | 16204 | 24663 | 17377 | 25019 | 22048 |
| rejected events | 15427 | 14814 | 15535 | 15682 | 14205 | 18137 |
| rejected % | 91% | 91% | 62% | 90% | 56% | 82% |

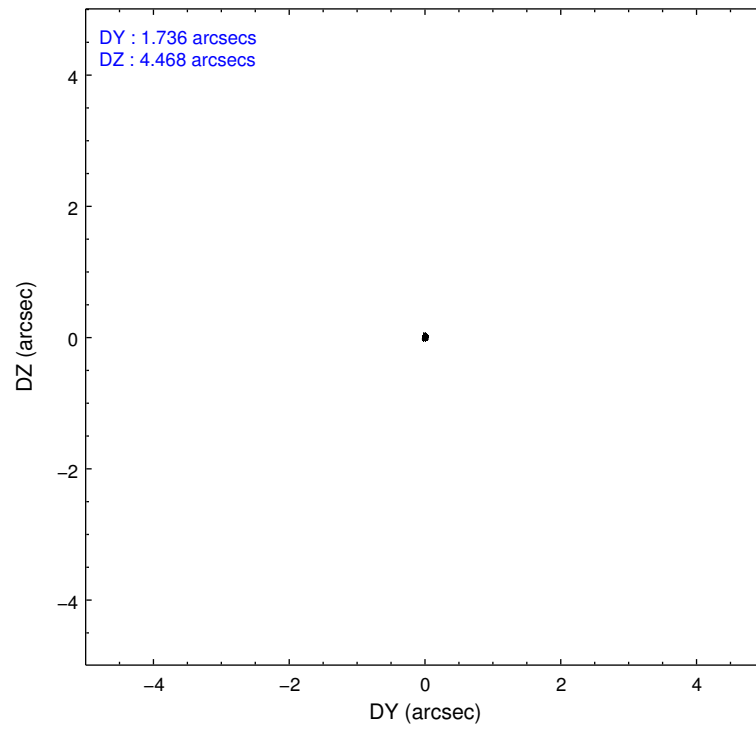
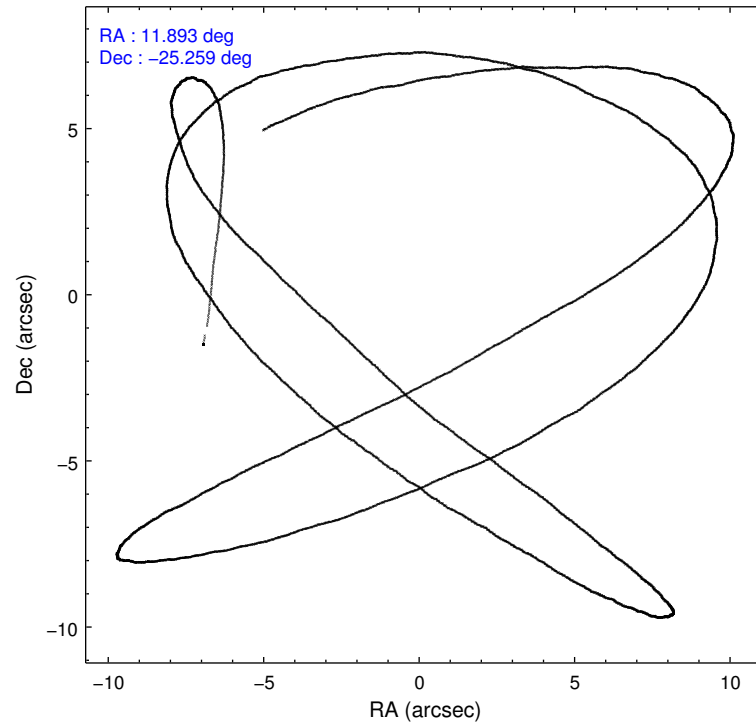
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|----------------|-------|-------|-------|-------|-------|-------|
| grade 0 events | 807 | 874 | 2389 | 1063 | 2265 | 1752 |
| | 4% | 5% | 9% | 6% | 9% | 7% |
| grade 1 events | 5 | 5 | 89 | 7 | 28 | 15 |
| | 0% | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 421 | 391 | 3182 | 503 | 2701 | 1011 |
| | 2% | 2% | 12% | 2% | 10% | 4% |
| grade 3 events | 159 | 157 | 539 | 177 | 1254 | 690 |
| | 0% | 0% | 2% | 1% | 5% | 3% |
| grade 4 events | 175 | 164 | 576 | 184 | 1311 | 609 |
| | 1% | 1% | 2% | 1% | 5% | 2% |
| grade 5 events | 543 | 575 | 1894 | 680 | 2035 | 821 |
| | 3% | 3% | 7% | 3% | 8% | 3% |
| grade 6 events | 379 | 310 | 5601 | 393 | 5778 | 1266 |
| | 2% | 1% | 22% | 2% | 23% | 5% |
| grade 7 events | 14350 | 13728 | 10393 | 14370 | 9647 | 15884 |
| | 85% | 84% | 42% | 82% | 38% | 72% |

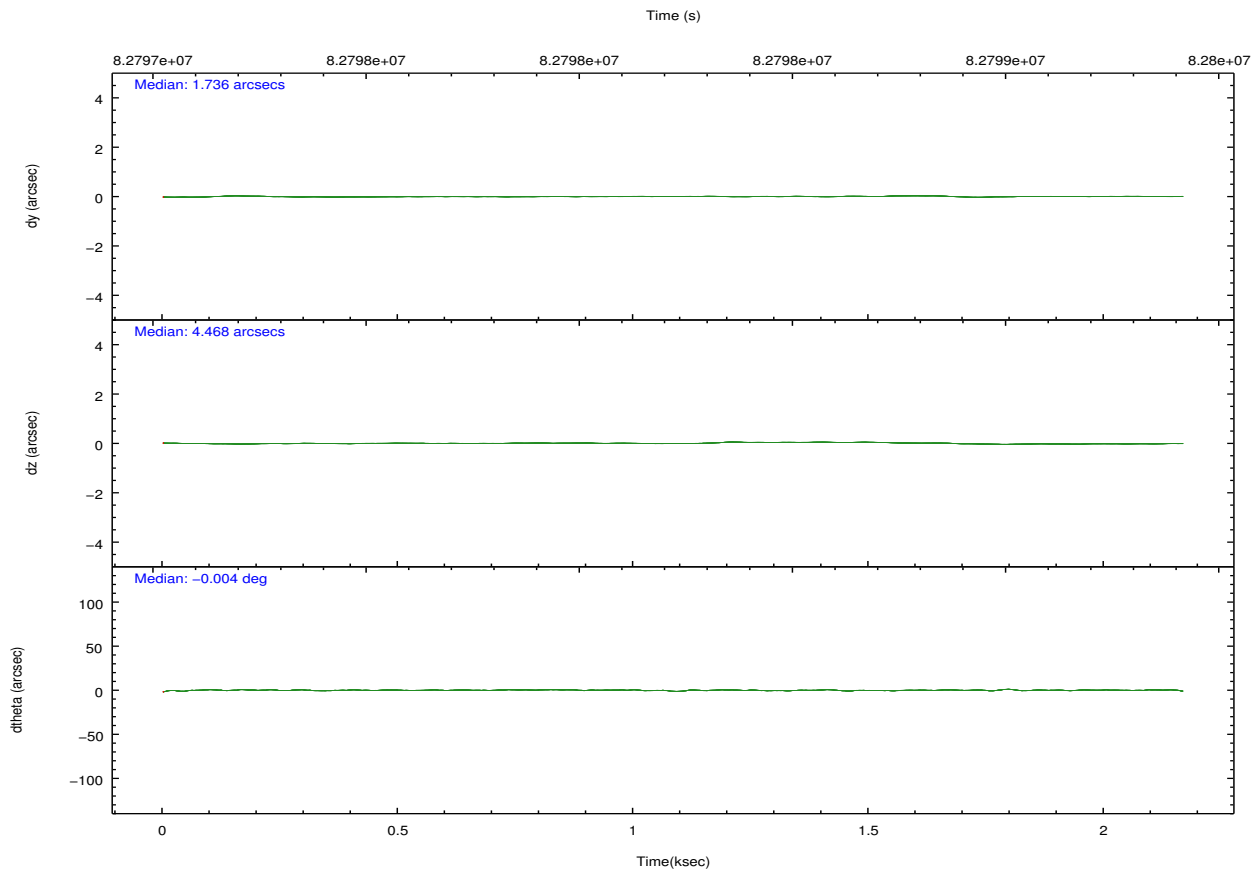
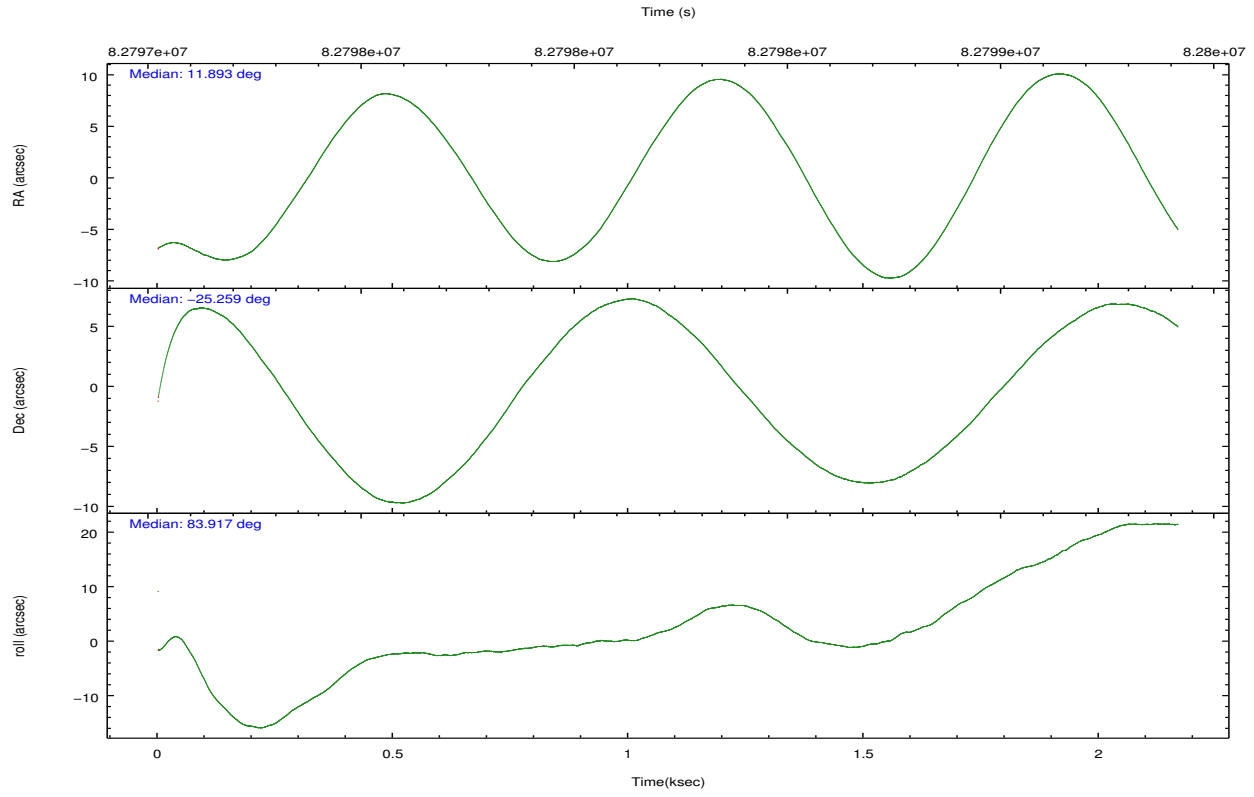
2.2 Compared Parameters

| Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|
| Instrument | ACIS | ACIS |
| Detector | ACIS-235678 | ACIS-235678 |
| Grating | NONE | NONE |
| Data mode | FAINT | FAINT |
| Observation mode | POINTING | POINTING |
| [deg] Pointing RA | 11.905825 | 11.89329570895234 |
| [deg] Pointing Dec | -25.284400 | -25.25931006962134 |
| [deg] Pointing Roll | 83.769219 | 83.92043579957023 |
| [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) | 82797305.184000 | 82795769.775675 |
| Observation start date | 2000-08-16T07:14:01 | 2000-08-16T06:49:29 |
| [s] Observation end time (MET) | 82799305.184000 | 82799918.97583 |
| Observation end date | 2000-08-16T07:47:21 | 2000-08-16T07:58:38 |
| Read mode | TIMED | TIMED |

| Parameter | Planned | Actual |
|---------------------------------------|-----------|---------|
| Obspar format version number | 7 | 7 |
| Obspar file type | PREDICTED | ACTUAL |
| Obspar update status | NONE | UPDATED |
| Number of optional ACIS chips dropped | 0 | 0 |
| On-chip summing requested | N | N |
| Subarray requested | NONE | NONE |
| Alternating exposures requested | N | N |
| [s] Primary exposure time | 0.000000 | 3.2 |

2.3 Aspect



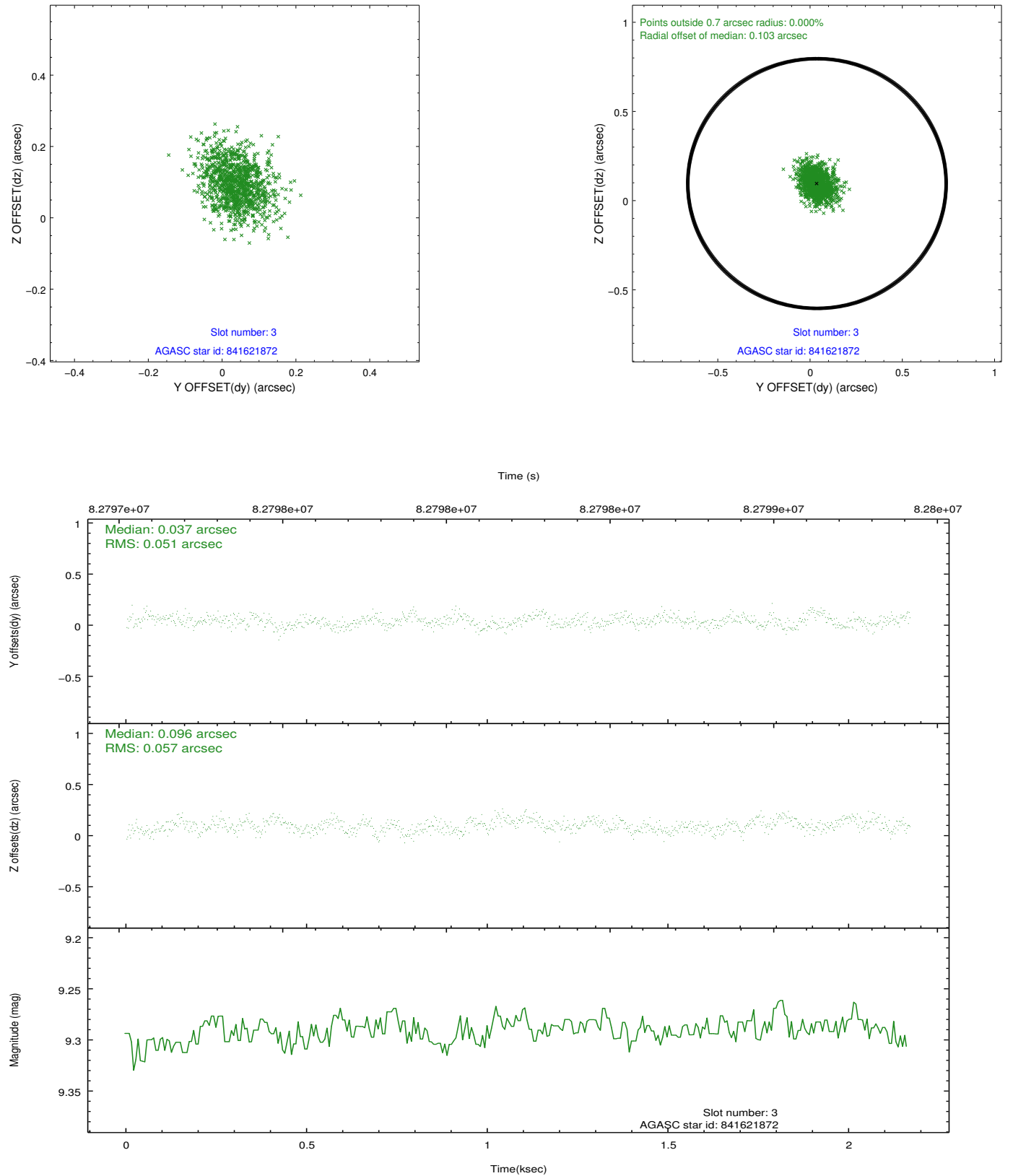


Slot Statistics

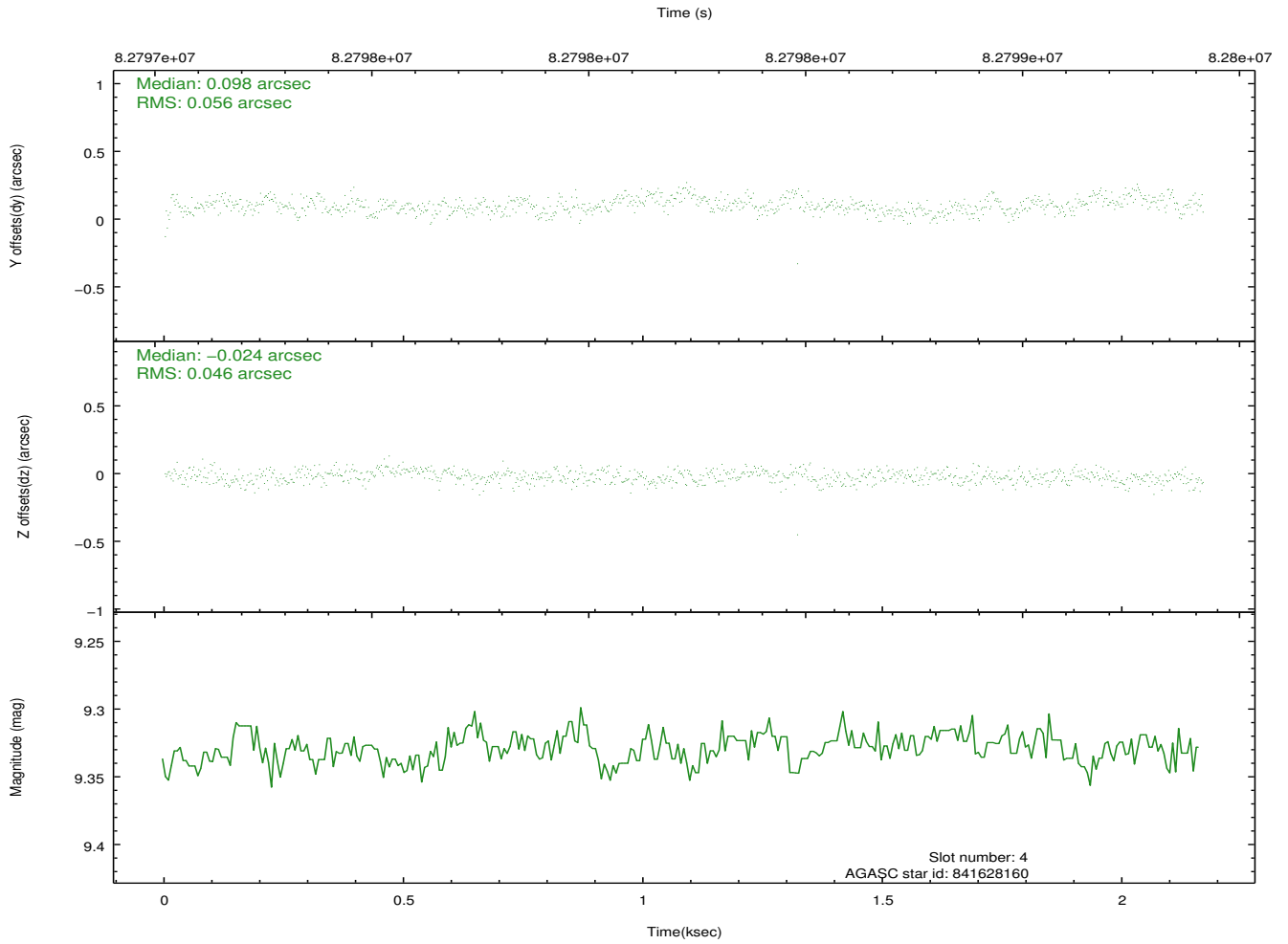
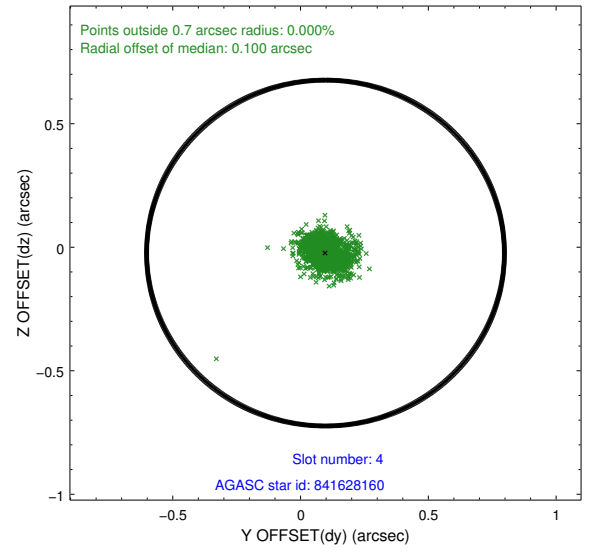
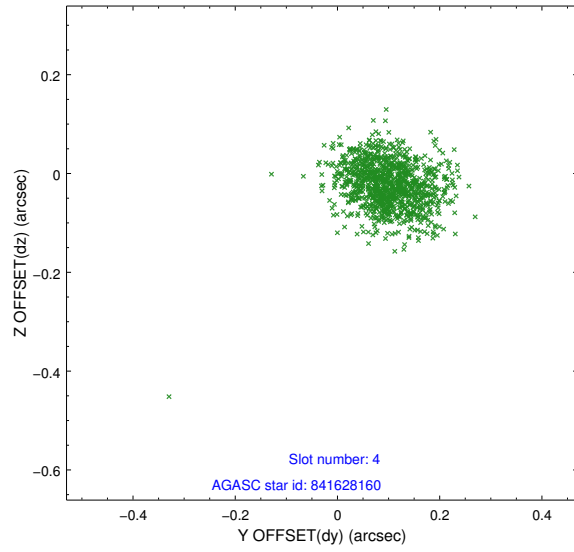
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|-------|-------|--------|--------|-------|-------|-----------|------------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.11 | 529 | -0.025 | -0.011 | 0.006 | 0.010 | 0.000000 | 0.000000 | -754.38 | -1725.52 |
| 1 | FID | ACIS-S-4 | 7.21 | 529 | -0.009 | 0.015 | 0.005 | 0.009 | 0.000000 | 0.000000 | 2157.57 | 179.87 |
| 2 | FID | ACIS-S-5 | 7.24 | 529 | 0.002 | 0.005 | 0.006 | 0.010 | 0.000000 | 0.000000 | -1803.30 | 176.98 |
| 3 | GUIDE | 841621872 | 9.29 | 1058 | 0.037 | 0.096 | 0.082 | 0.135 | 12.339829 | -25.439870 | -405.39 | -1463.09 |
| 4 | GUIDE | 841628160 | 9.33 | 1058 | 0.098 | -0.024 | 0.074 | 0.125 | 11.565969 | -25.537708 | -1028.06 | 997.23 |
| 5 | GUIDE | 841618680 | 9.77 | 1056 | -0.035 | -0.021 | 0.082 | 0.135 | 11.627778 | -24.869126 | 1385.63 | 1066.37 |
| 6 | GUIDE | 841616192 | 10.35 | 1056 | -0.105 | -0.051 | 0.121 | 0.192 | 11.575284 | -24.800163 | 1615.59 | 1264.38 |
| 7 | BAD | 841625328 | 10.70 | 362 | 0.268 | 0.064 | 0.158 | 0.238 | 12.150623 | -25.891705 | -2083.31 | -1021.67 |

2.4 Star Slots

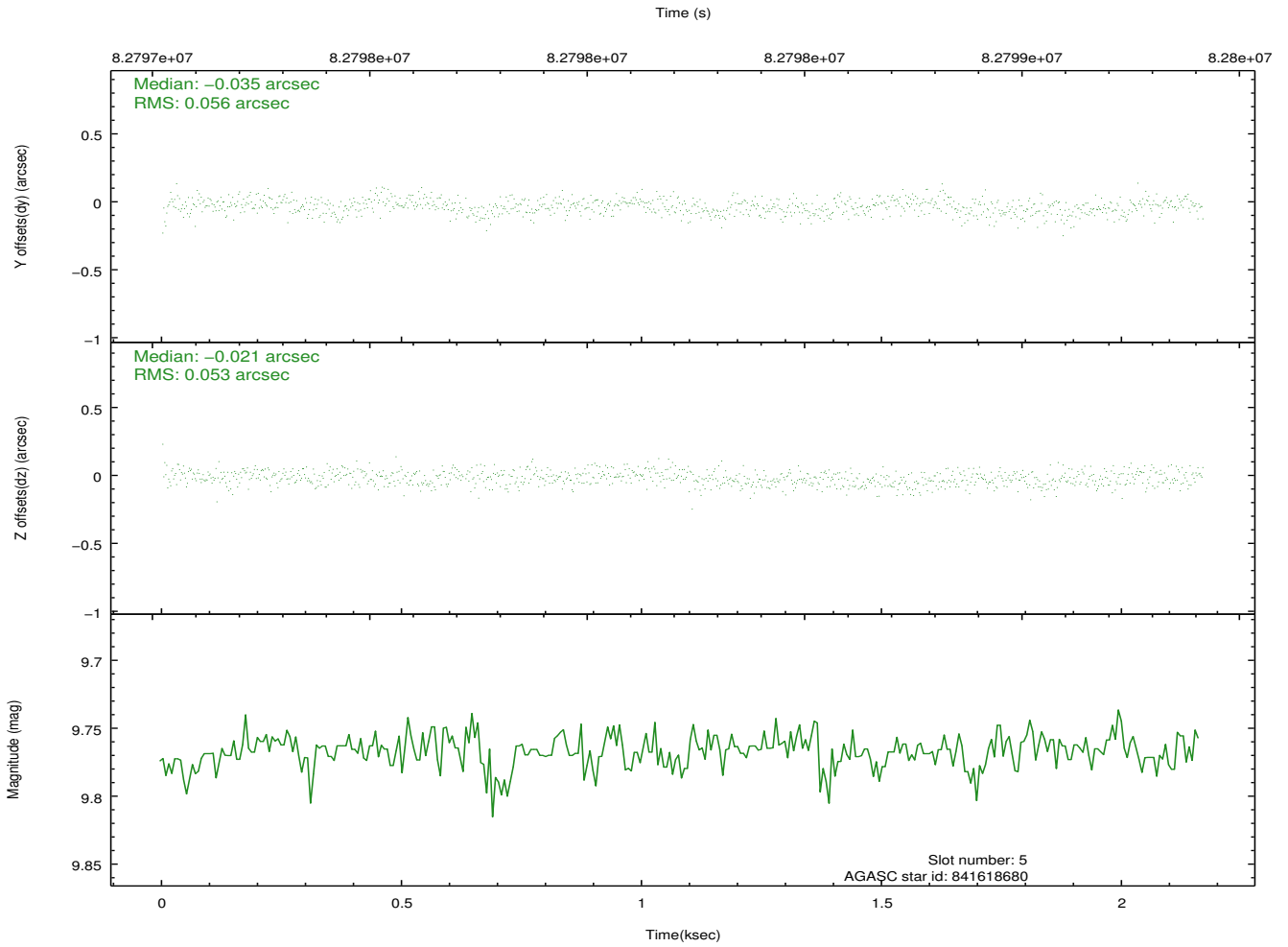
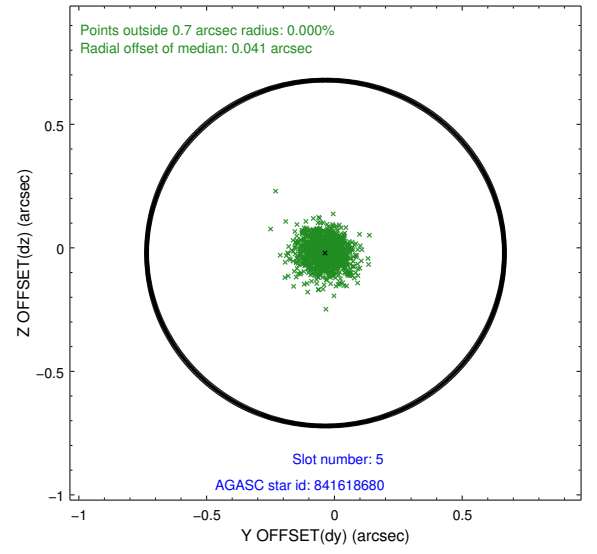
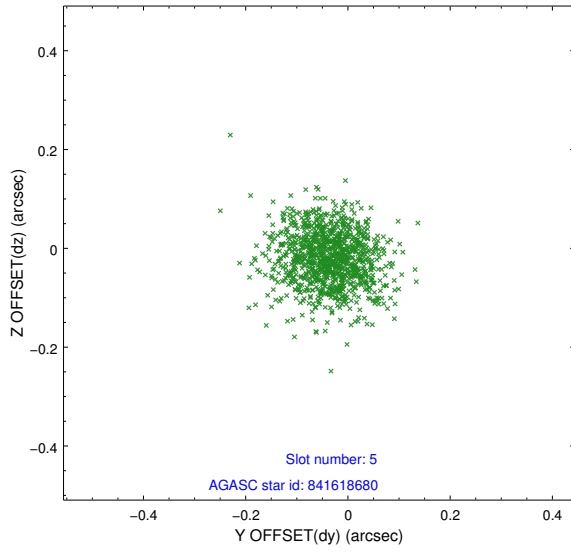
2.4.1 Slot 3



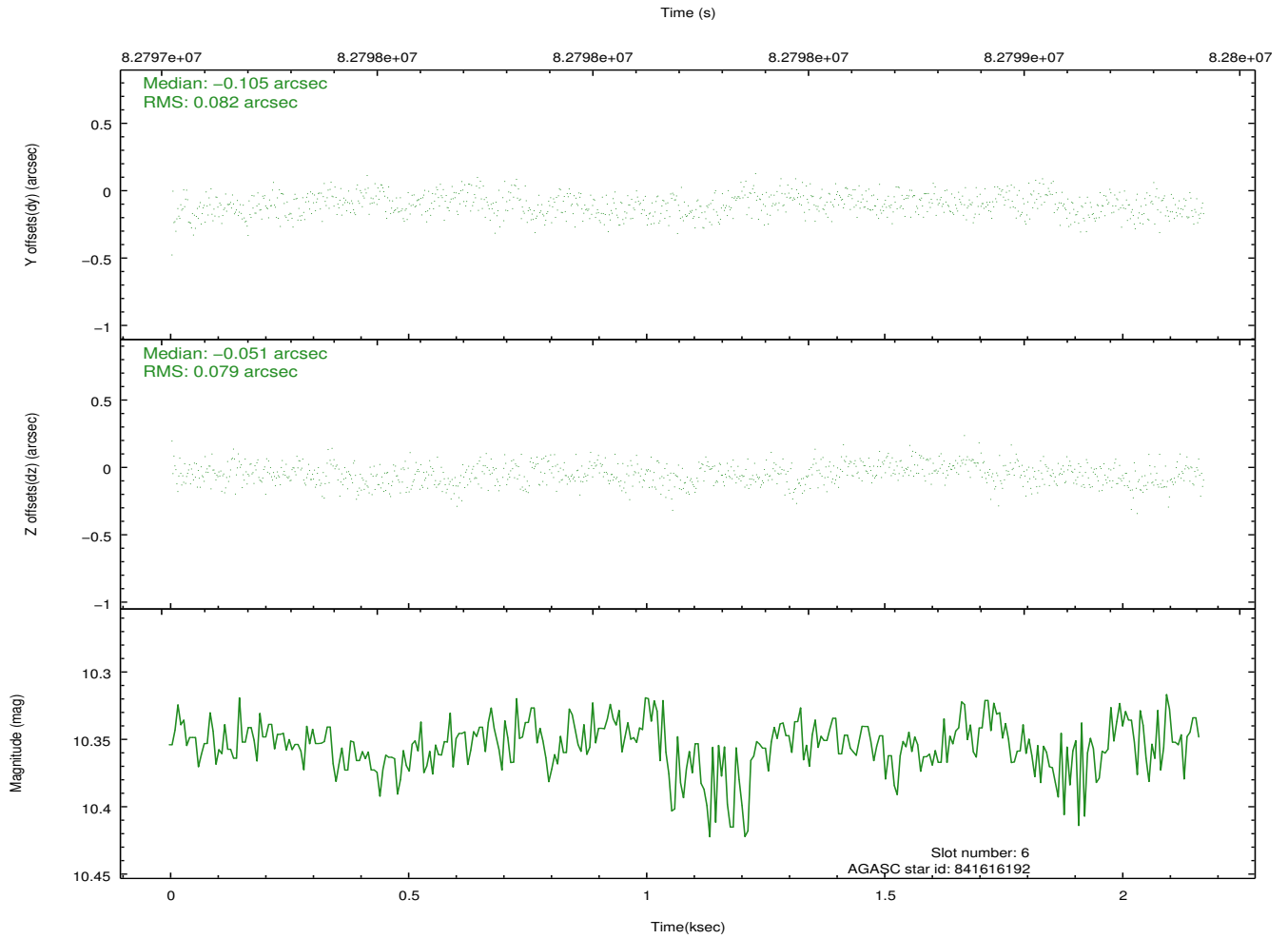
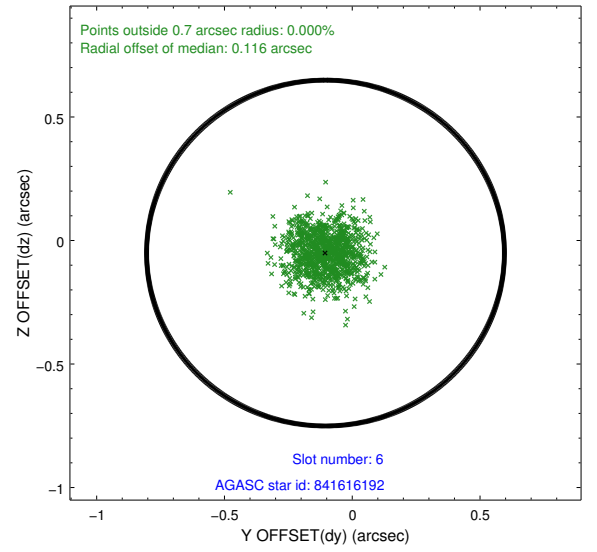
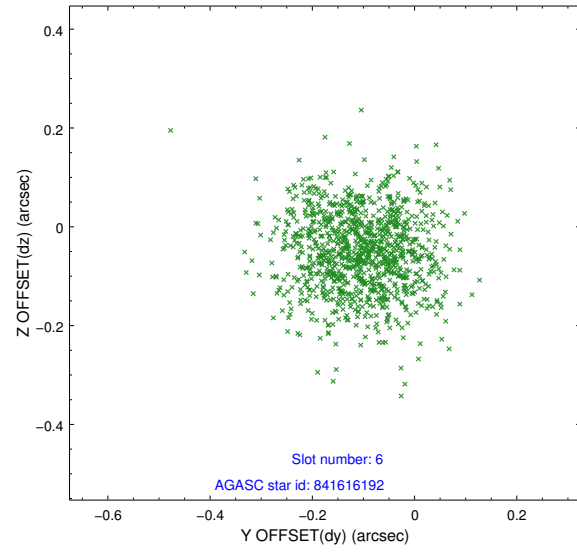
2.4.2 Slot 4



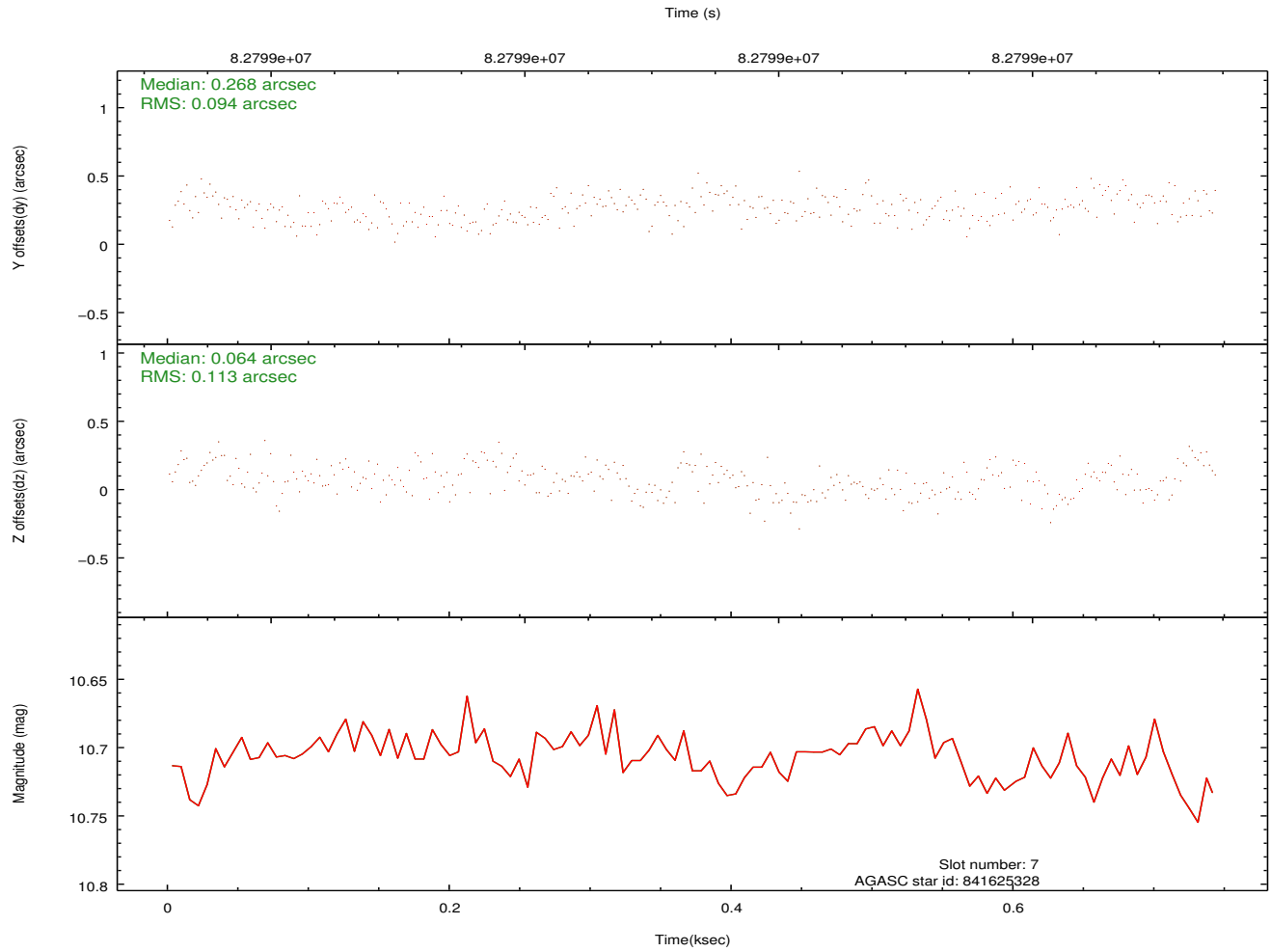
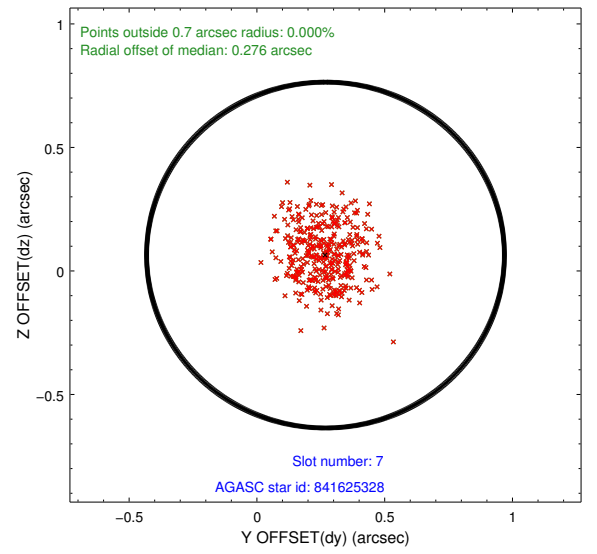
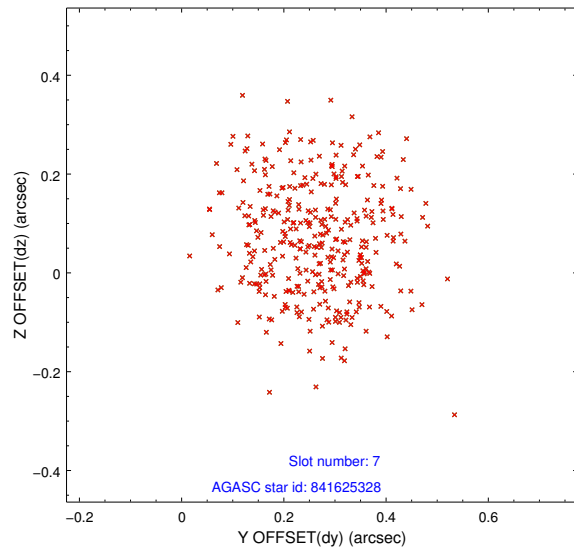
2.4.3 Slot 5



2.4.4 Slot 6

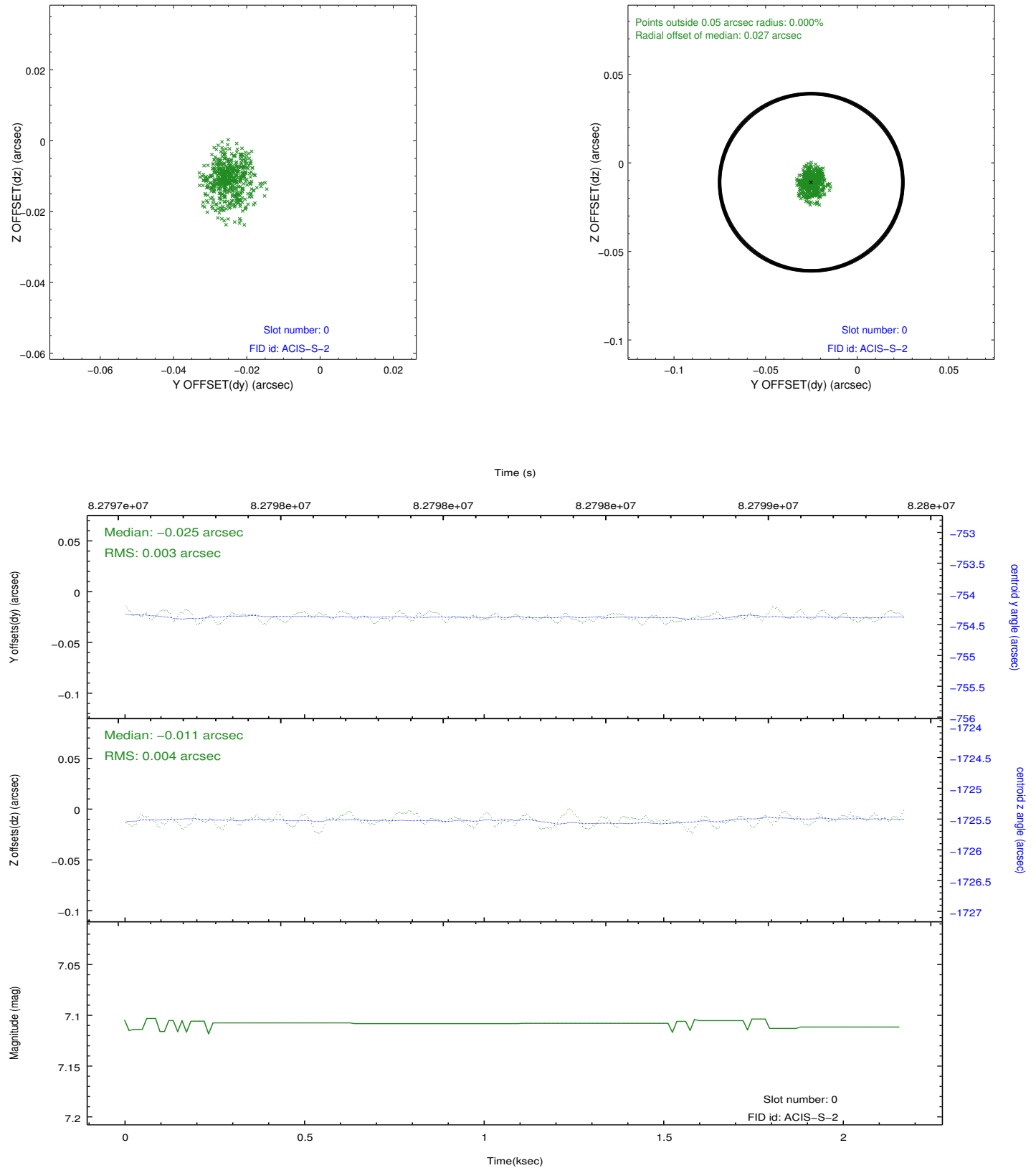


2.4.5 Slot 7

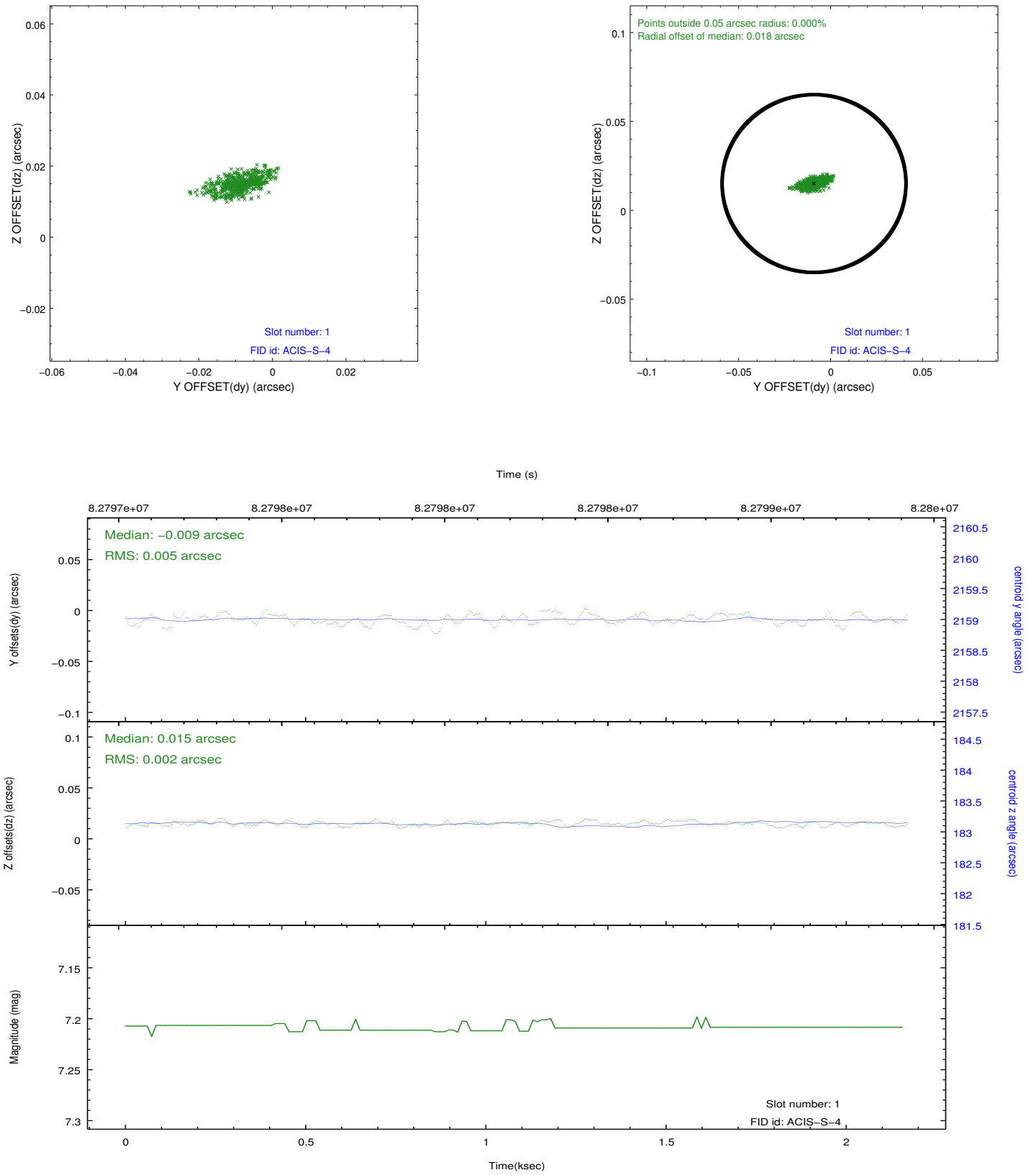


2.5 FID Slots

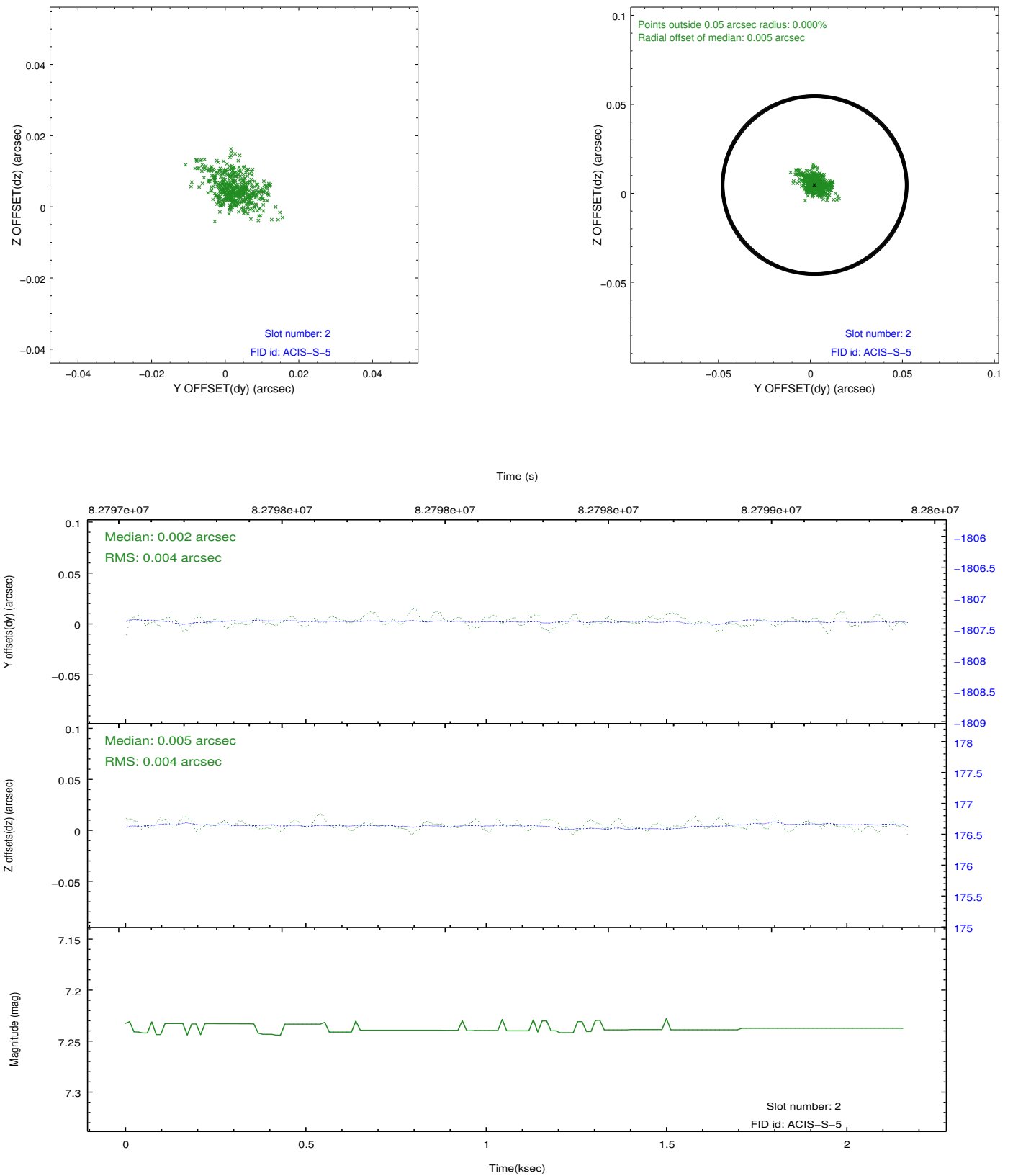
2.5.1 Slot 0



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) | 2012.09.05 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 2.156 |

A.2 Comments