

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 1635 - L2 Version 3
Chandra X-Ray Center

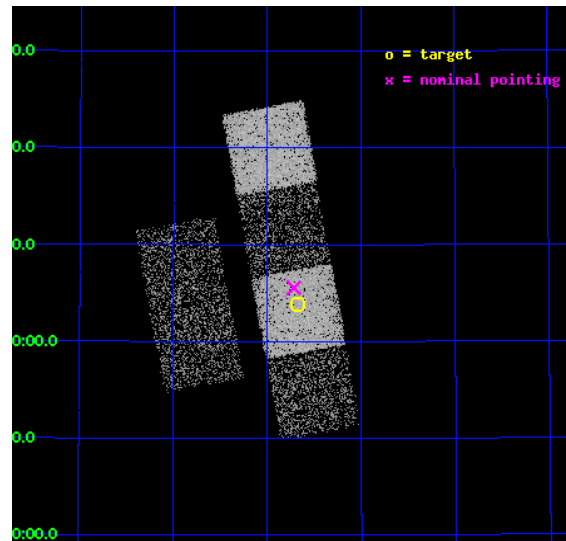
L2 Processing Date : Sep 2 2012

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1 Front

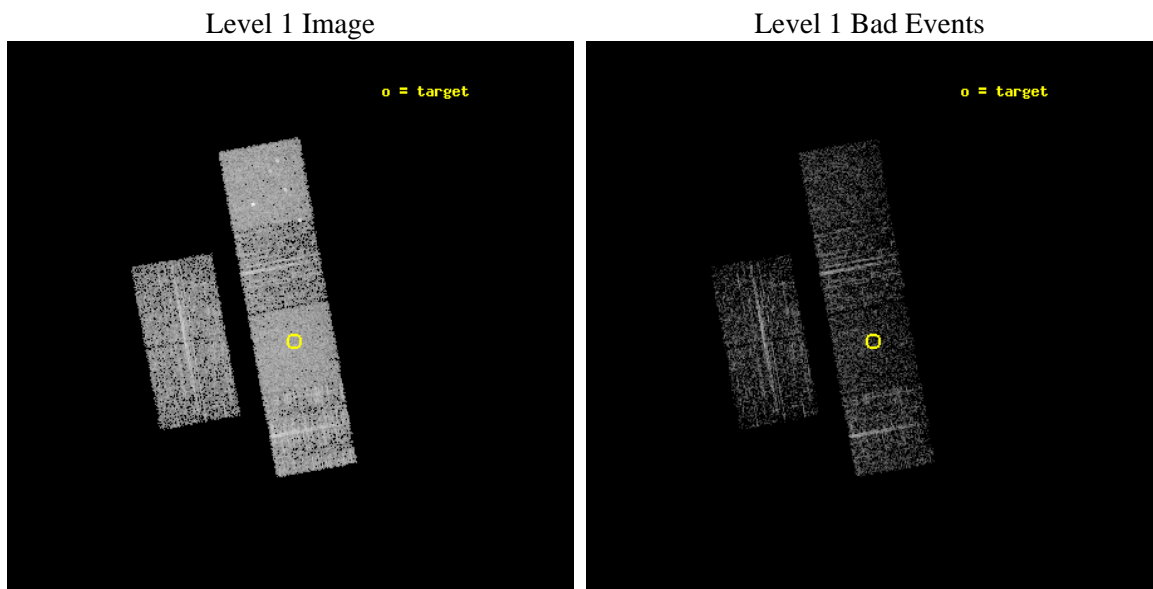
| | | |
|----------|--|---|
| seq_num | 700251 | Sequence number |
| obs_id | 1635 | Observation id |
| title | THE X-RAY PROPERTIES OF LOW-LUMINOSITY ACTIVE GALACTIC NUCLEI IN NEARBY GALAXIES | Proposal title |
| observer | Professor Gordon Garmire | Principal investigator |
| object | NGC 2541 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 123.668333 | Observer's specified target RA [deg] |
| dec_targ | 49.064167 | Observer's specified target Dec [deg] |
| ra_nom | 123.67922424165 | Nominal RA [deg] |
| dec_nom | 49.092574952373 | Nominal Dec [deg] |
| roll_nom | 79.728292622051 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 1951.1066079885 | Sum of GTIs [s] |
| livetime | 1926.4005213028 | Livetime [s] |
| ontime2 | 1947.9066678286 | Sum of GTIs [s] |
| ontime3 | 1950.9834879935 | Sum of GTIs [s] |
| ontime5 | 1951.0655679852 | Sum of GTIs [s] |
| ontime6 | 1951.0245279968 | Sum of GTIs [s] |
| ontime7 | 1951.1066079885 | Sum of GTIs [s] |
| ontime8 | 1950.9424479902 | Sum of GTIs [s] |
| l2events | 29297 | Number of level 2 events |



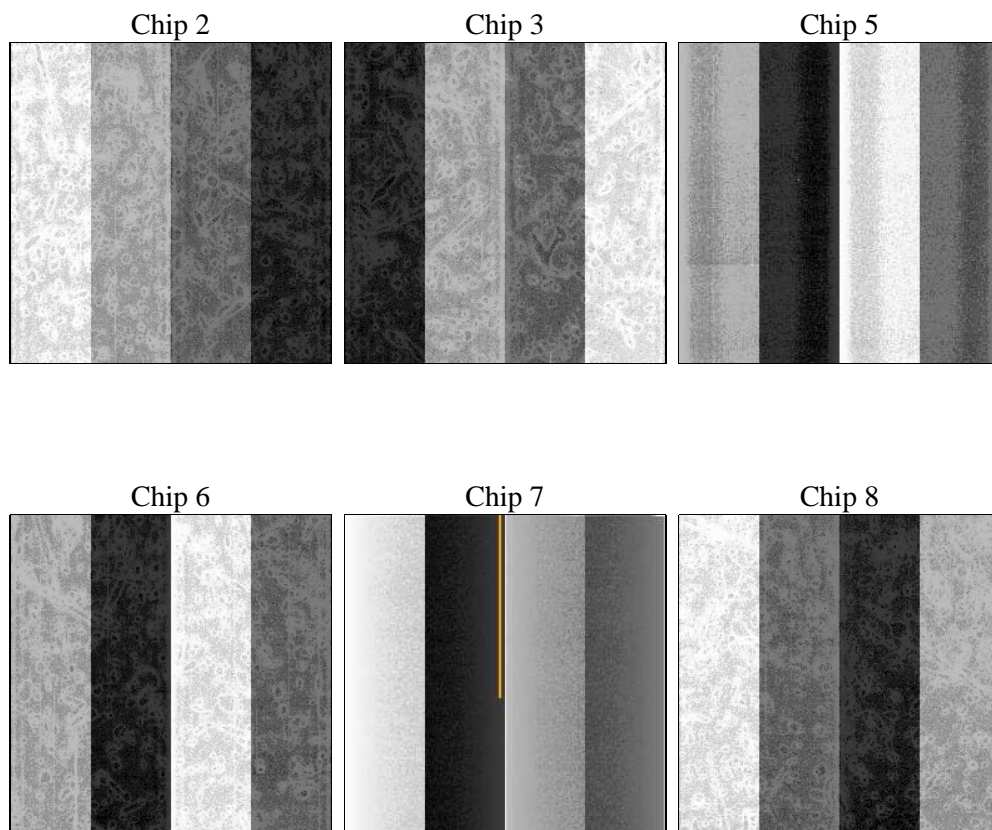
2 OBI

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 | 1951.1066079885 | Sum of GTIs [s] |
| caldsver | 4.5.1.1 | | ontime2 | 1947.9066678286 | Sum of GTIs [s] |
| date | 2012-09-02T23:37:00 | Date and time of file creation | ontime3 | 1950.9834879935 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime5 | 1951.0655679852 | Sum of GTIs [s] |
| | | | ontime6 | 1951.0245279968 | Sum of GTIs [s] |
| | | | ontime7 | 1951.1066079885 | Sum of GTIs [s] |
| | | | ontime8 | 1950.9424479902 | Sum of GTIs [s] |
| | | | l1events | 108315 | Number of level 1 events |

2.1.4 Events

| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 14287 | 13549 | 23151 | 14605 | 21081 | 21642 |
| rejected events | 12404 | 11898 | 9927 | 12736 | 9576 | 13875 |
| rejected % | 86% | 87% | 42% | 87% | 45% | 64% |

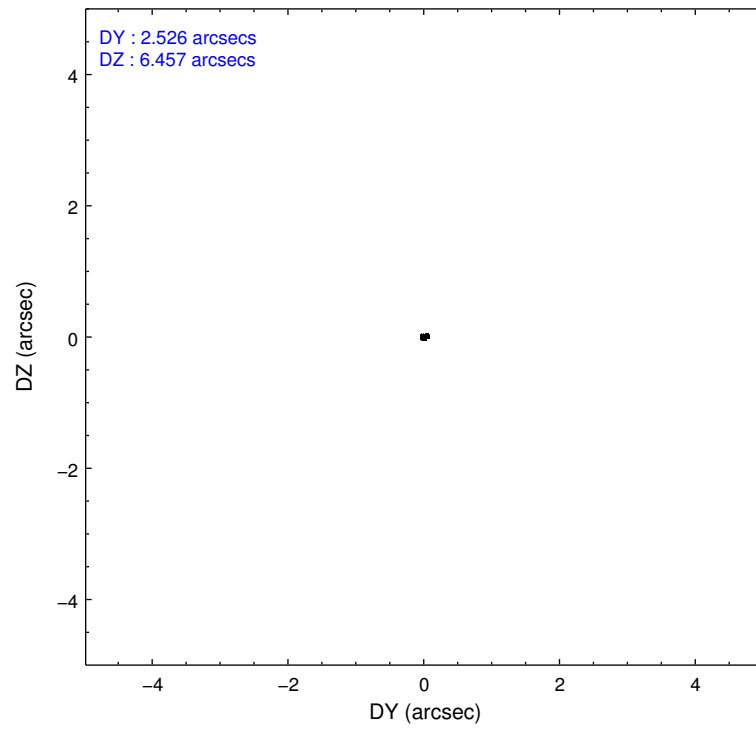
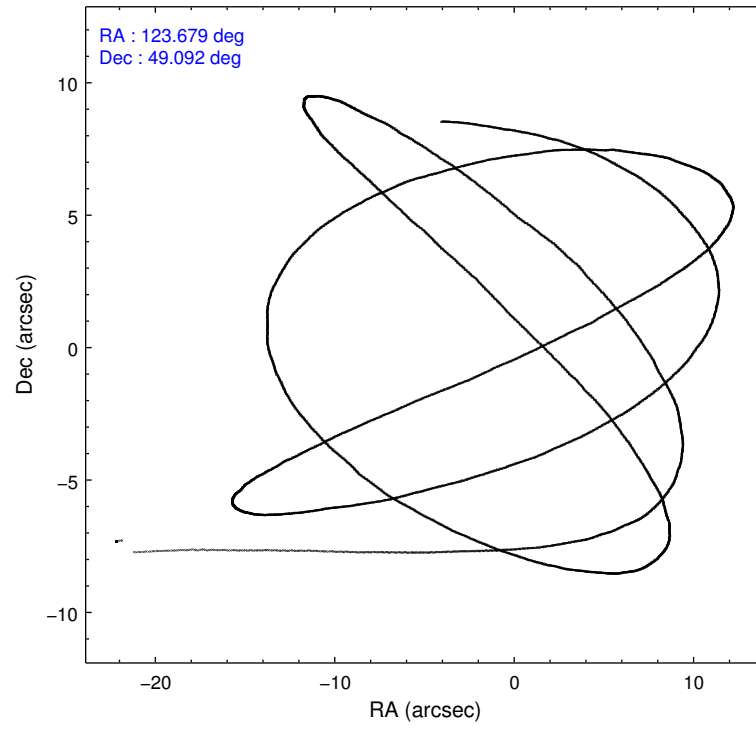
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|----------------|-------|-------|-------|-------|-------|-------|
| grade 0 events | 859 | 758 | 2510 | 846 | 1326 | 2331 |
| | 6% | 5% | 10% | 5% | 6% | 10% |
| grade 1 events | 4 | 5 | 30 | 4 | 21 | 15 |
| | 0% | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 413 | 329 | 3498 | 418 | 2276 | 1334 |
| | 2% | 2% | 15% | 2% | 10% | 6% |
| grade 3 events | 137 | 141 | 728 | 118 | 1014 | 1144 |
| | 0% | 1% | 3% | 0% | 4% | 5% |
| grade 4 events | 150 | 133 | 726 | 144 | 998 | 1011 |
| | 1% | 0% | 3% | 0% | 4% | 4% |
| grade 5 events | 440 | 459 | 1442 | 524 | 1608 | 746 |
| | 3% | 3% | 6% | 3% | 7% | 3% |
| grade 6 events | 333 | 293 | 5788 | 349 | 5910 | 1961 |
| | 2% | 2% | 25% | 2% | 28% | 9% |
| grade 7 events | 11951 | 11431 | 8429 | 12202 | 7928 | 13100 |
| | 83% | 84% | 36% | 83% | 37% | 60% |

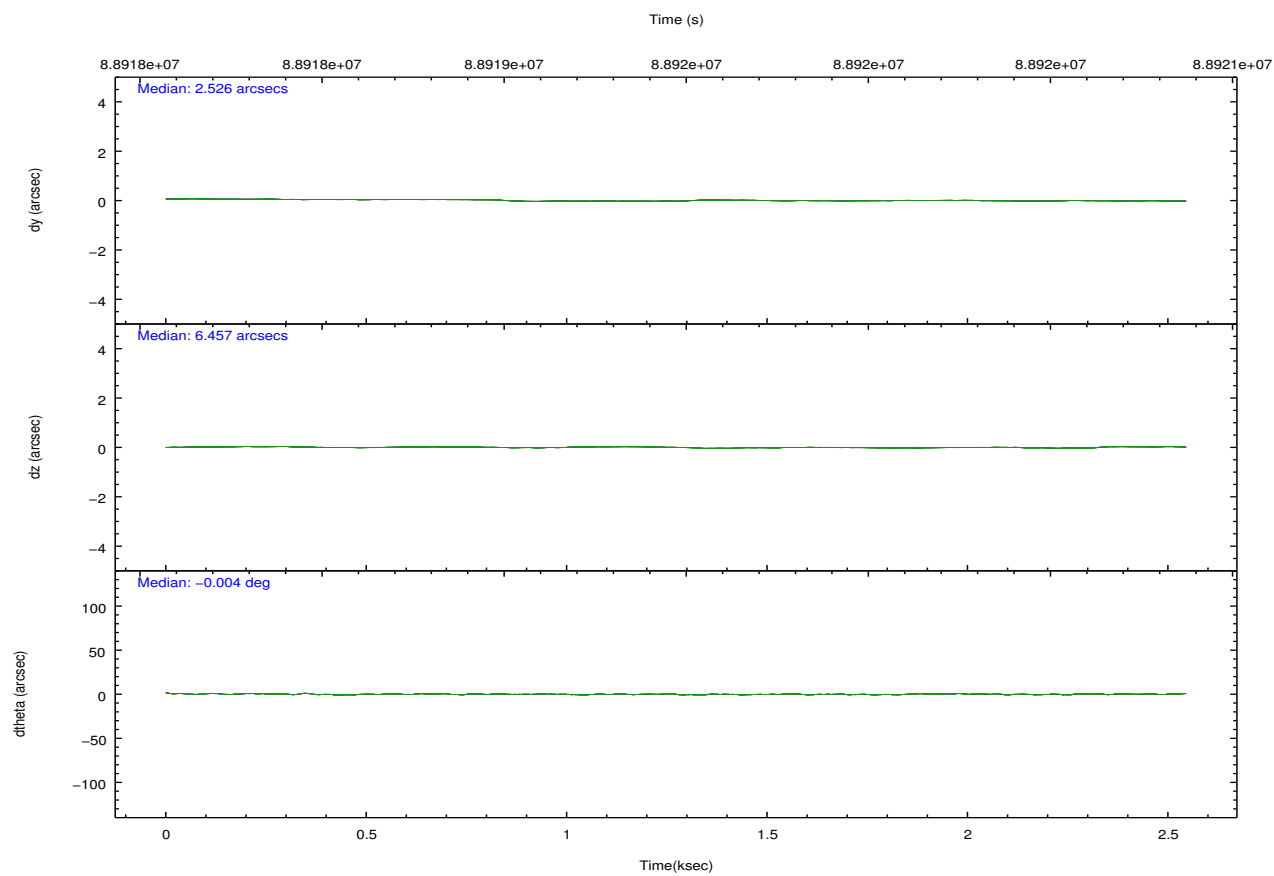
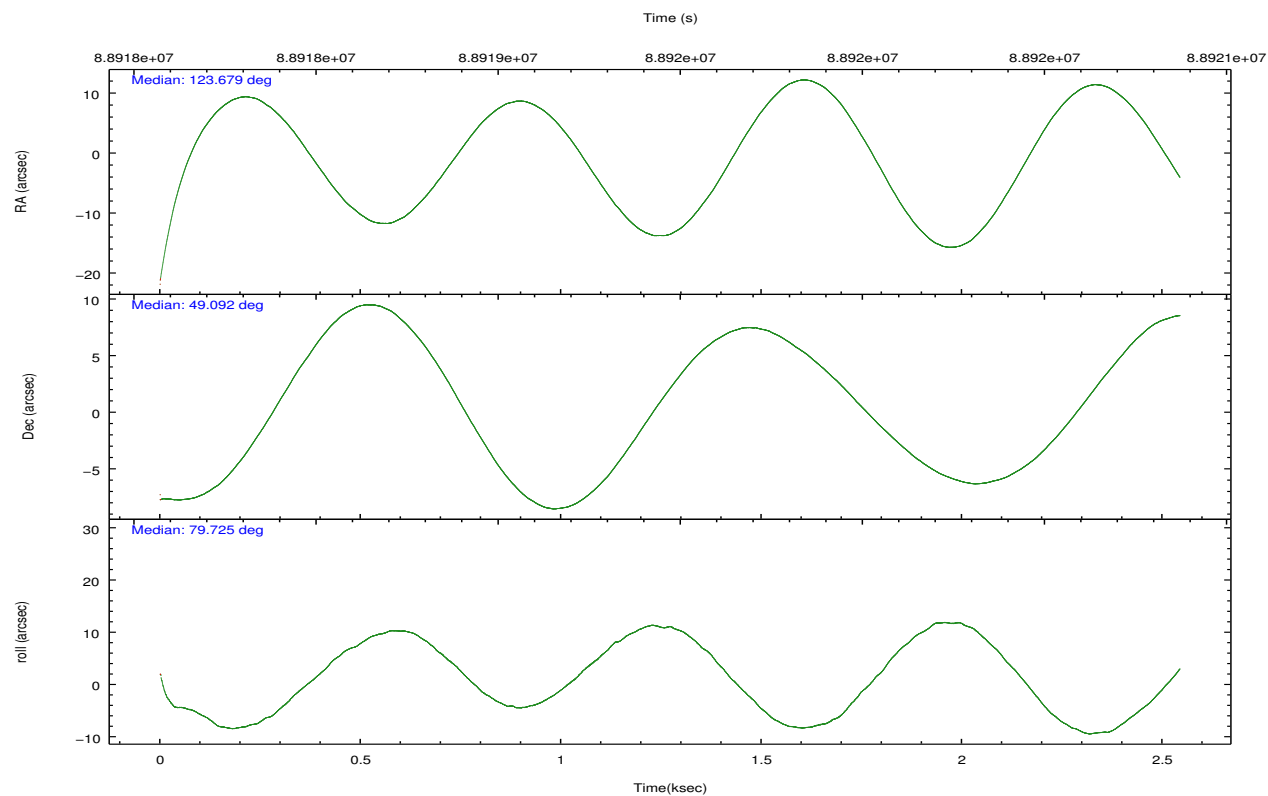
2.2 Compared Parameters

| 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 | 123.693417 | 123.6792242416525 |
| [deg] Pointing Dec | 49.066910 | 49.09257495237289 |
| [deg] Pointing Roll | 79.561001 | 79.7282926220513 |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 |
| [mm] SIM defocus | 0 | 0.001444936568705701 |
| [mm] SIM translation stage pos | -190.132523 | -190.1400660498719 |
| [mm] SIM translation stage offset | 0 | 0.00754346686406393 |
| [s] Observation start time (MET) | 88918744.184000 | 88917606.59361701 |
| Observation start date | 2000-10-26T03:38:00 | 2000-10-26T03:20:06 |
| [s] Observation end time (MET) | 88920744.184000 | 88921165.906252 |
| Observation end date | 2000-10-26T04:11:20 | 2000-10-26T04:19:25 |
| 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



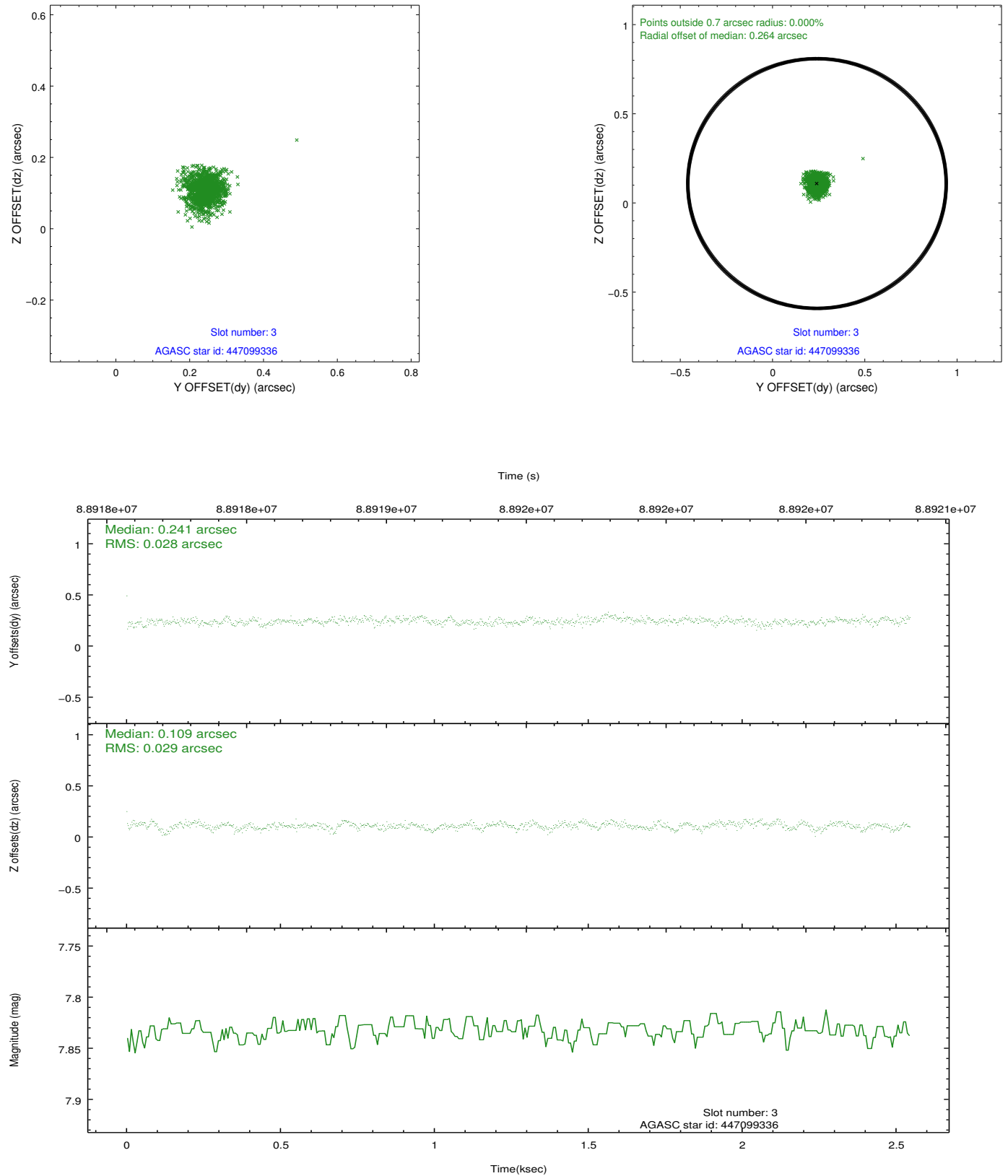


Slot Statistics

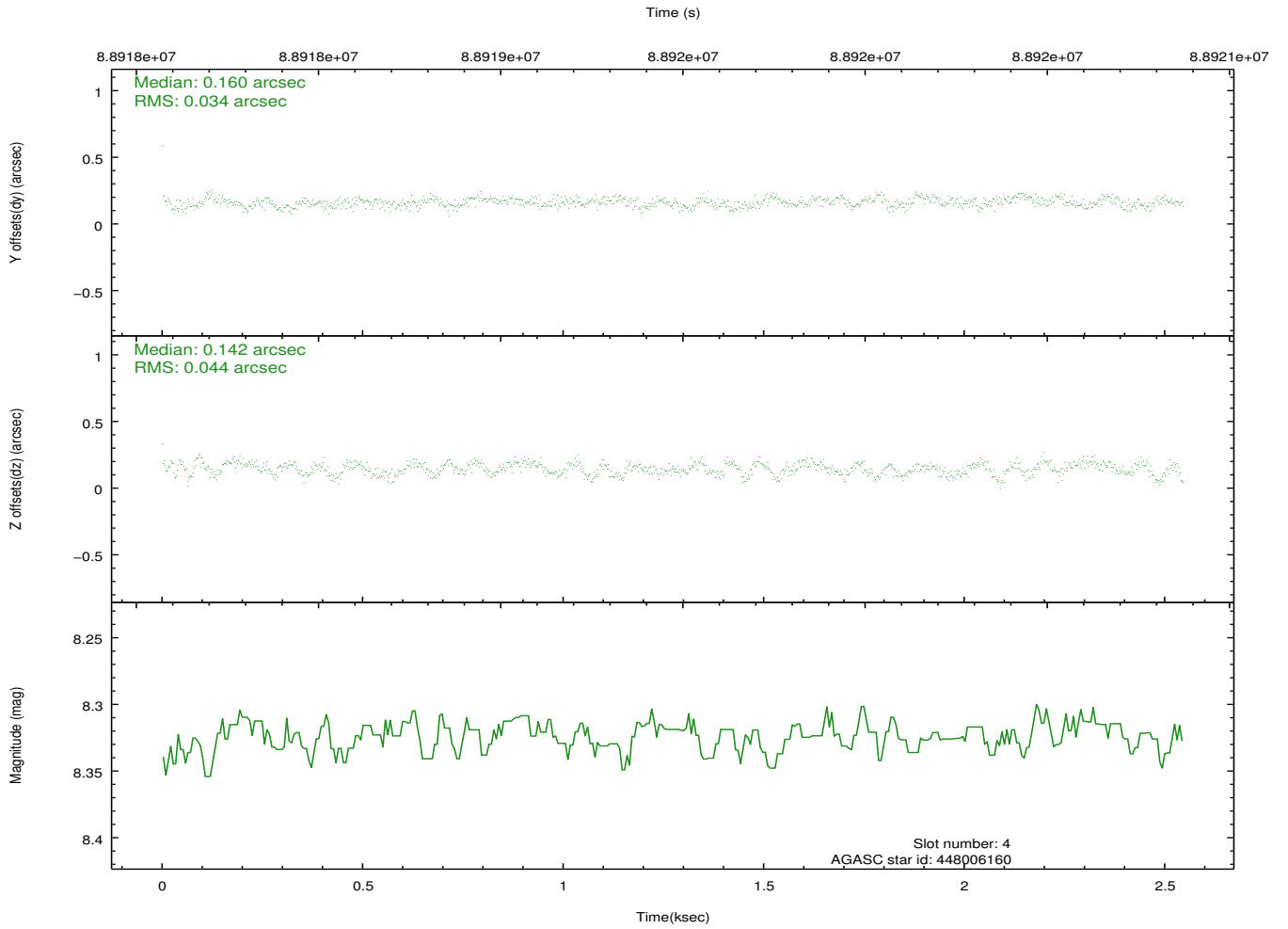
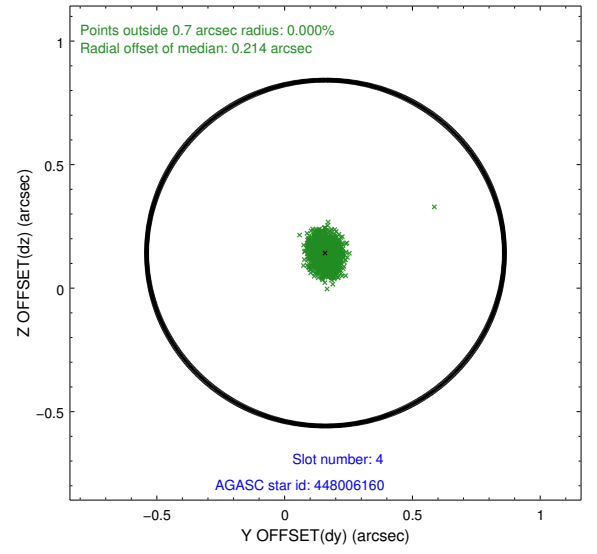
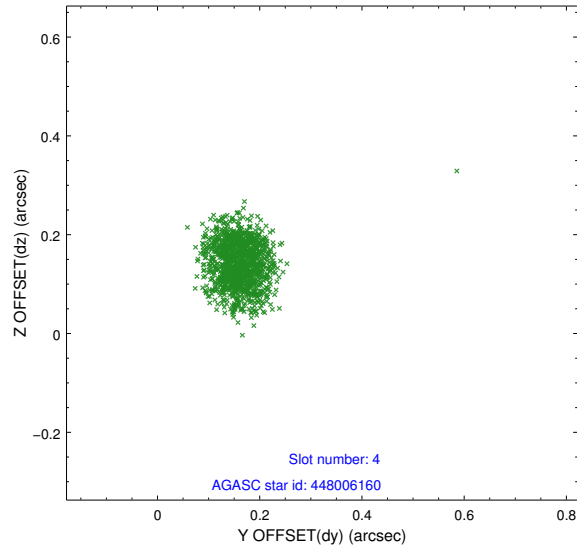
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-3 | 7.36 | 621 | -0.083 | -0.066 | 0.006 | 0.010 | 0.000000 | 0.000000 | 57.94 | -1856.74 |
| 1 | FID | ACIS-S-4 | 7.20 | 621 | -0.012 | 0.075 | 0.006 | 0.010 | 0.000000 | 0.000000 | 2158.26 | 178.10 |
| 2 | FID | ACIS-S-5 | 7.23 | 619 | 0.067 | 0.001 | 0.006 | 0.012 | 0.000000 | 0.000000 | -1804.65 | 174.83 |
| 3 | GUIDE | 447099336 | 7.83 | 1242 | 0.241 | 0.109 | 0.042 | 0.069 | 123.619219 | 48.437866 | -2257.11 | -235.97 |
| 4 | GUIDE | 448006160 | 8.32 | 1242 | 0.160 | 0.142 | 0.058 | 0.093 | 124.237130 | 48.566527 | -1532.16 | -1599.46 |
| 5 | GUIDE | 448011160 | 8.68 | 1241 | 0.008 | 0.120 | 0.074 | 0.122 | 124.762426 | 49.446093 | 1813.89 | -2211.09 |
| 6 | GUIDE | 447088560 | 8.99 | 1240 | -0.264 | -0.146 | 0.057 | 0.096 | 123.501593 | 49.653293 | 1998.46 | 820.62 |
| 7 | GUIDE | 447096968 | 9.23 | 1240 | -0.145 | -0.224 | 0.088 | 0.153 | 122.968729 | 49.579442 | 1519.20 | 2000.06 |

2.4 Star Slots

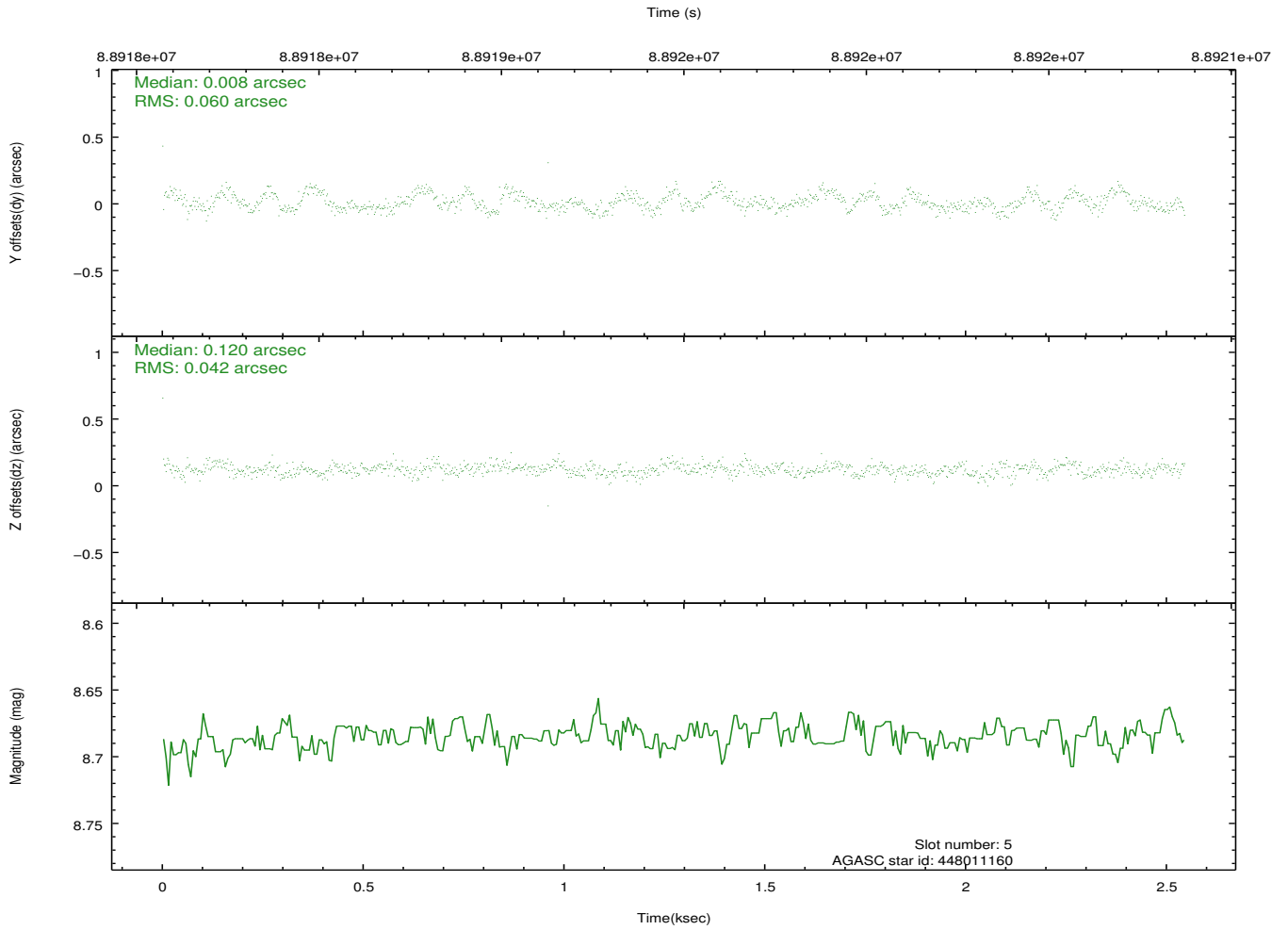
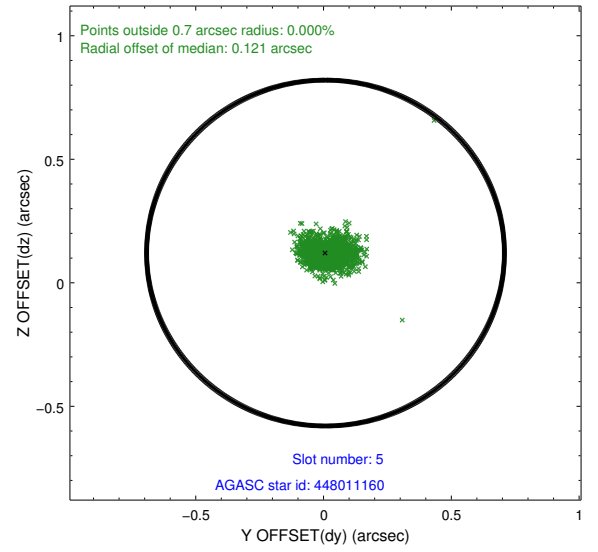
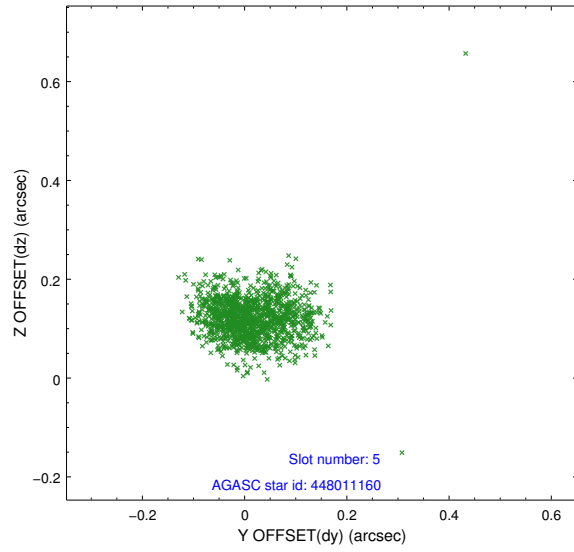
2.4.1 Slot 3



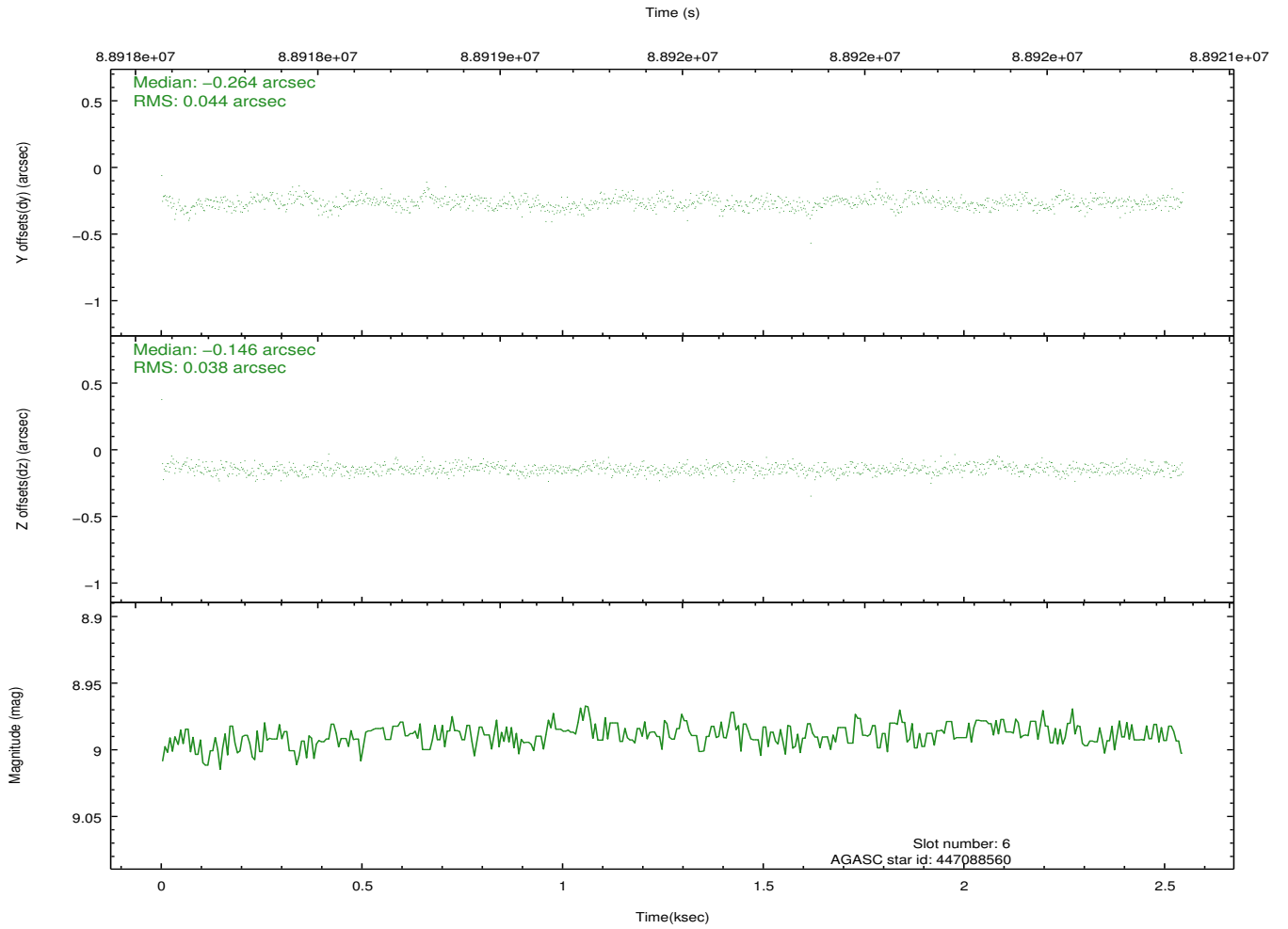
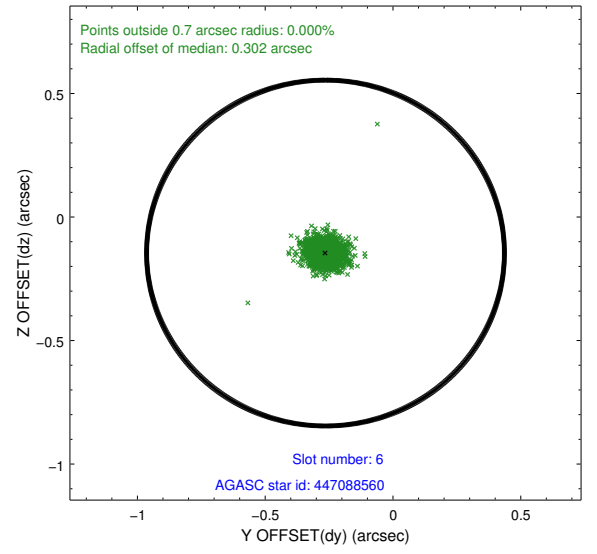
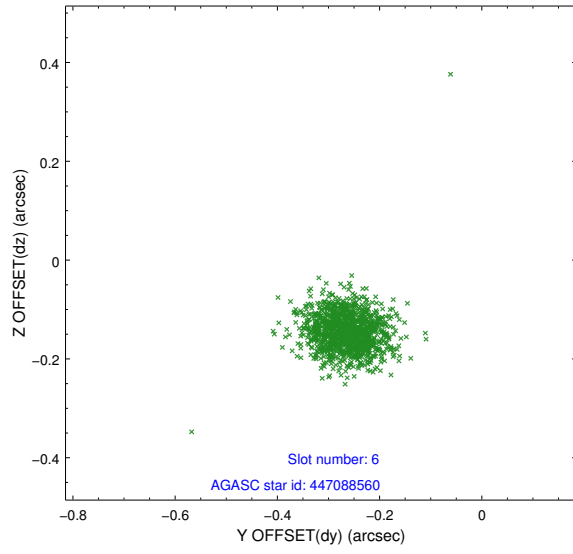
2.4.2 Slot 4



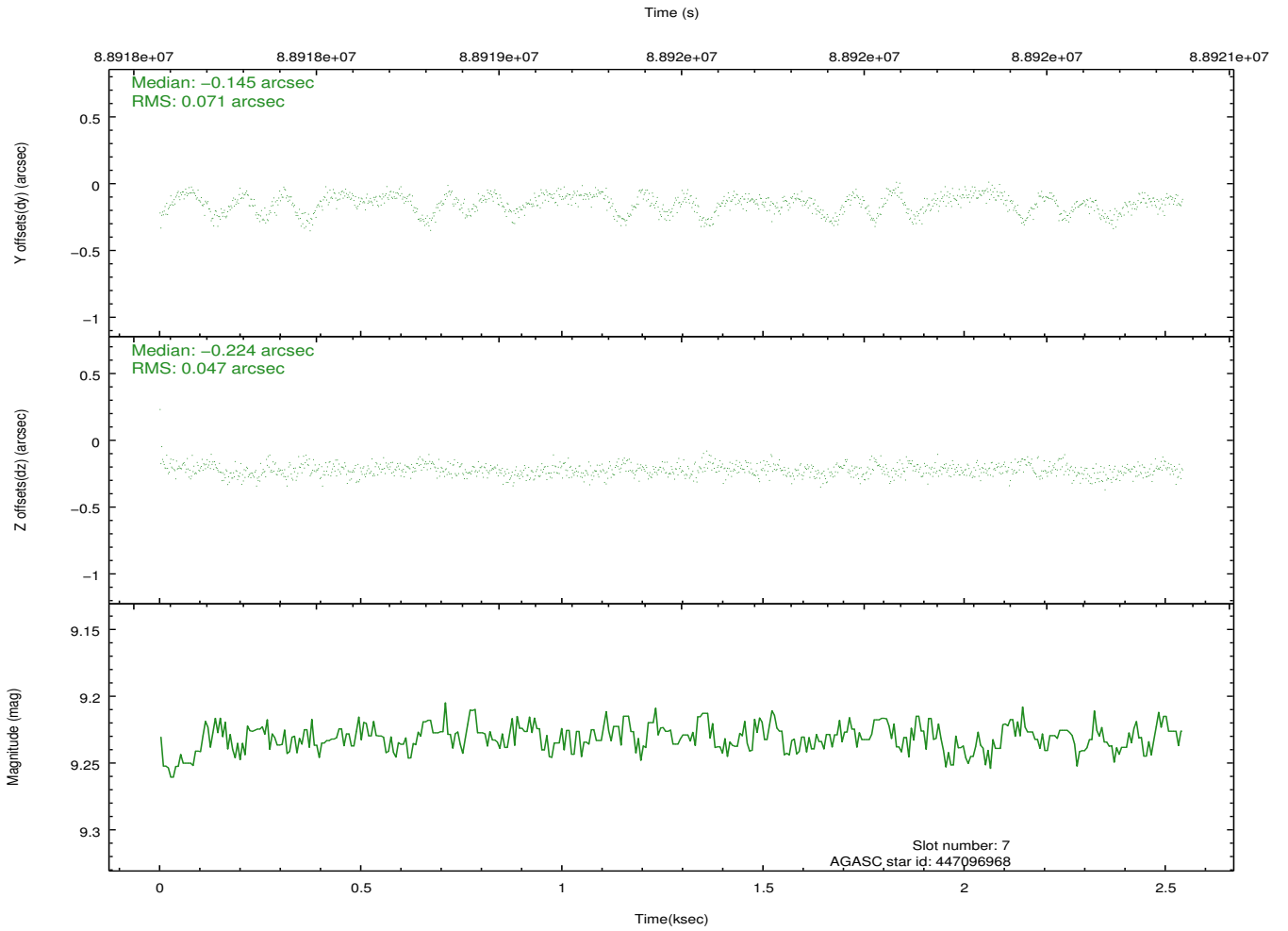
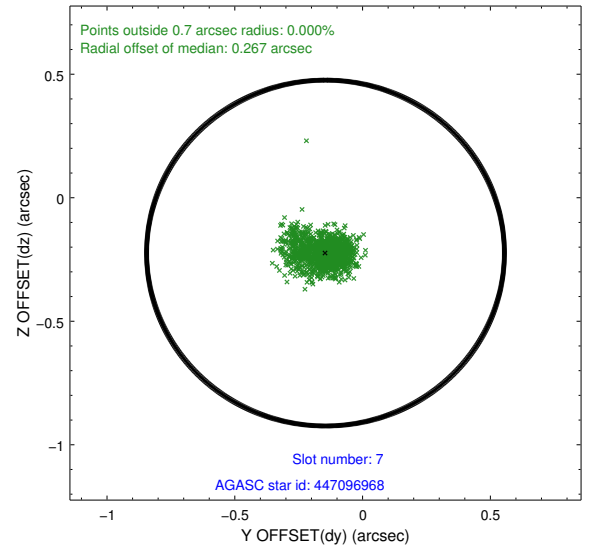
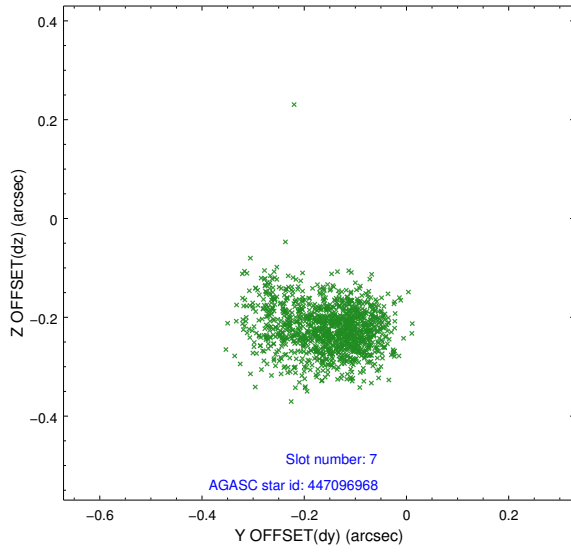
2.4.3 Slot 5



2.4.4 Slot 6

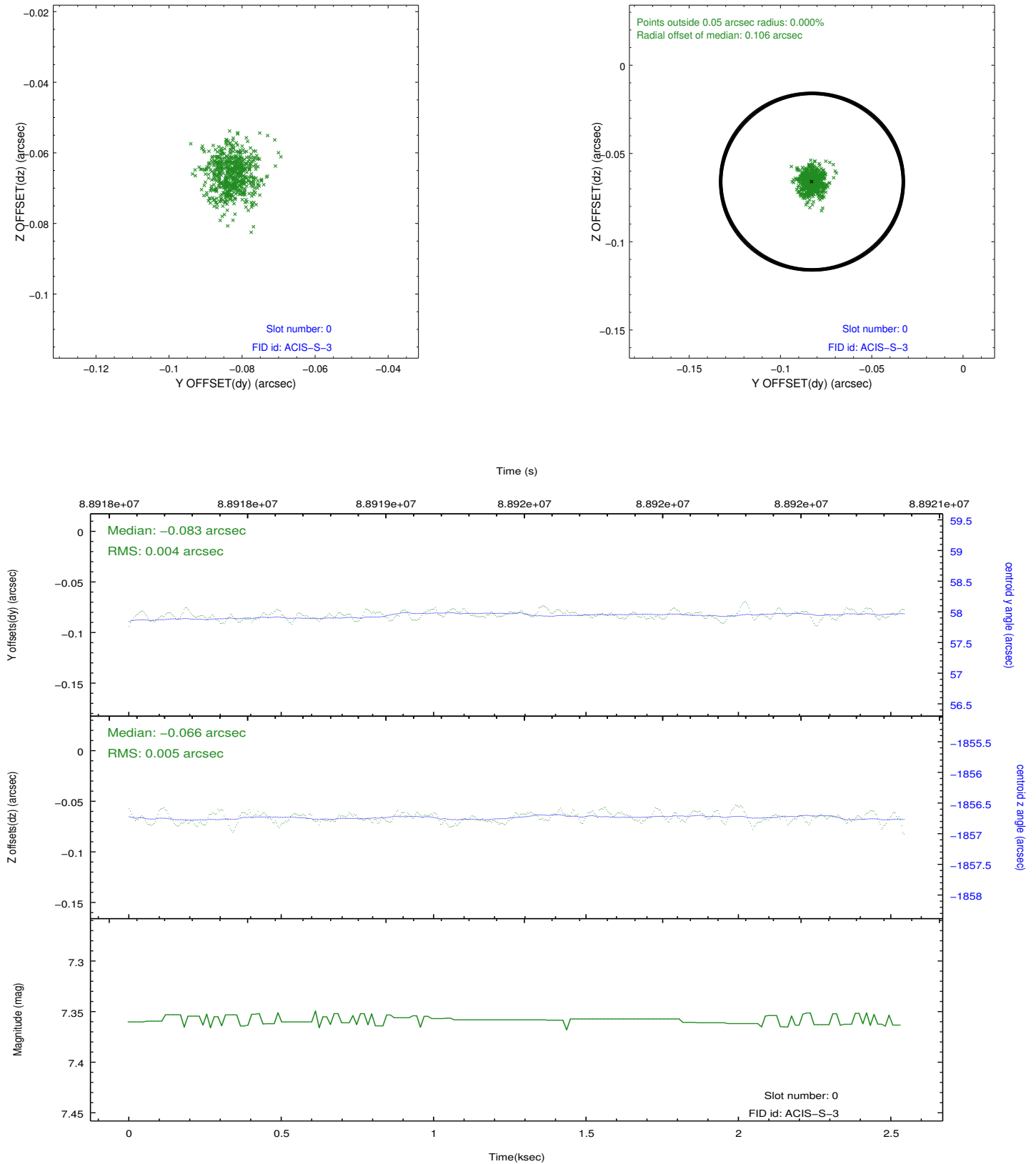


2.4.5 Slot 7

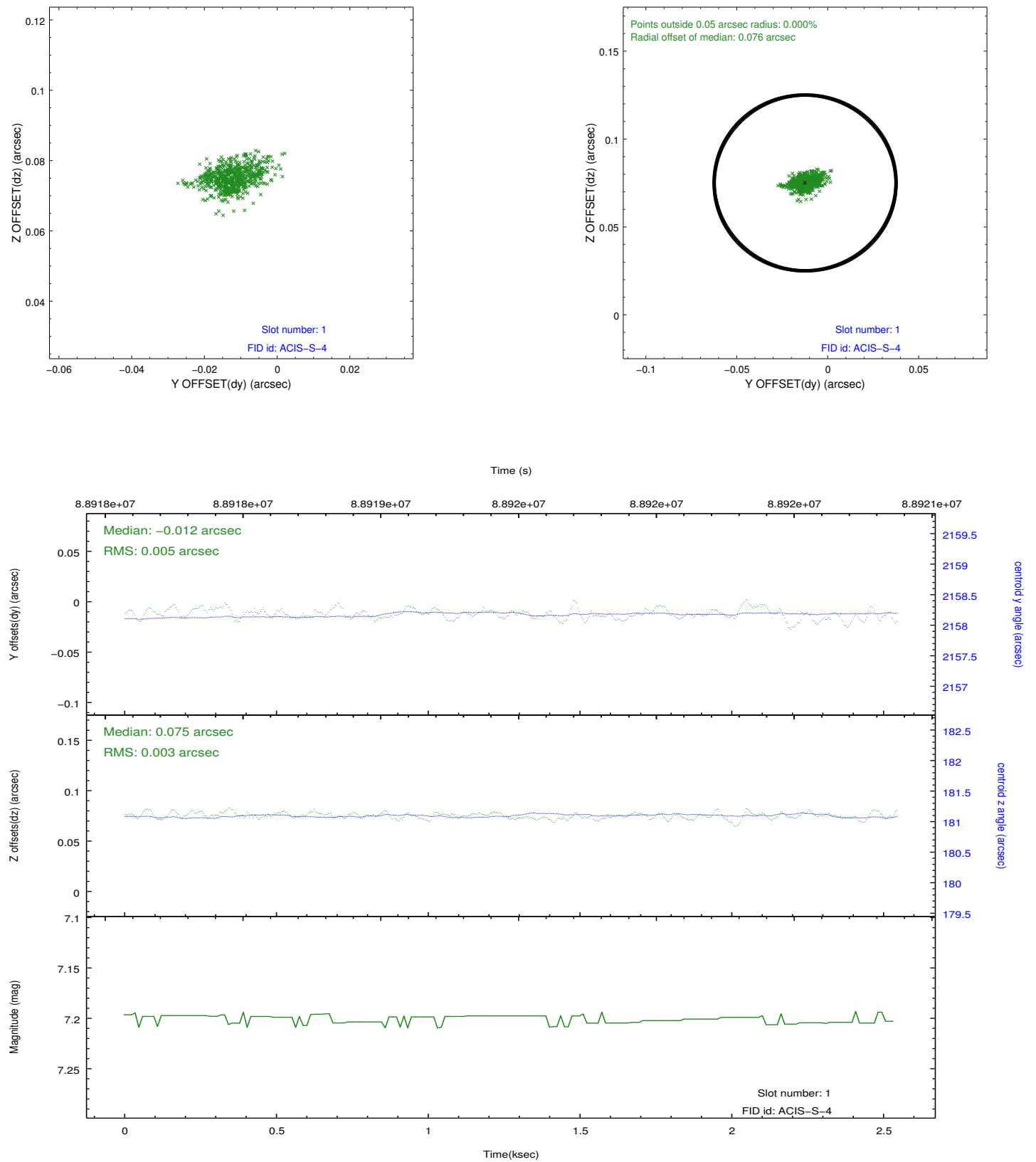


2.5 FID Slots

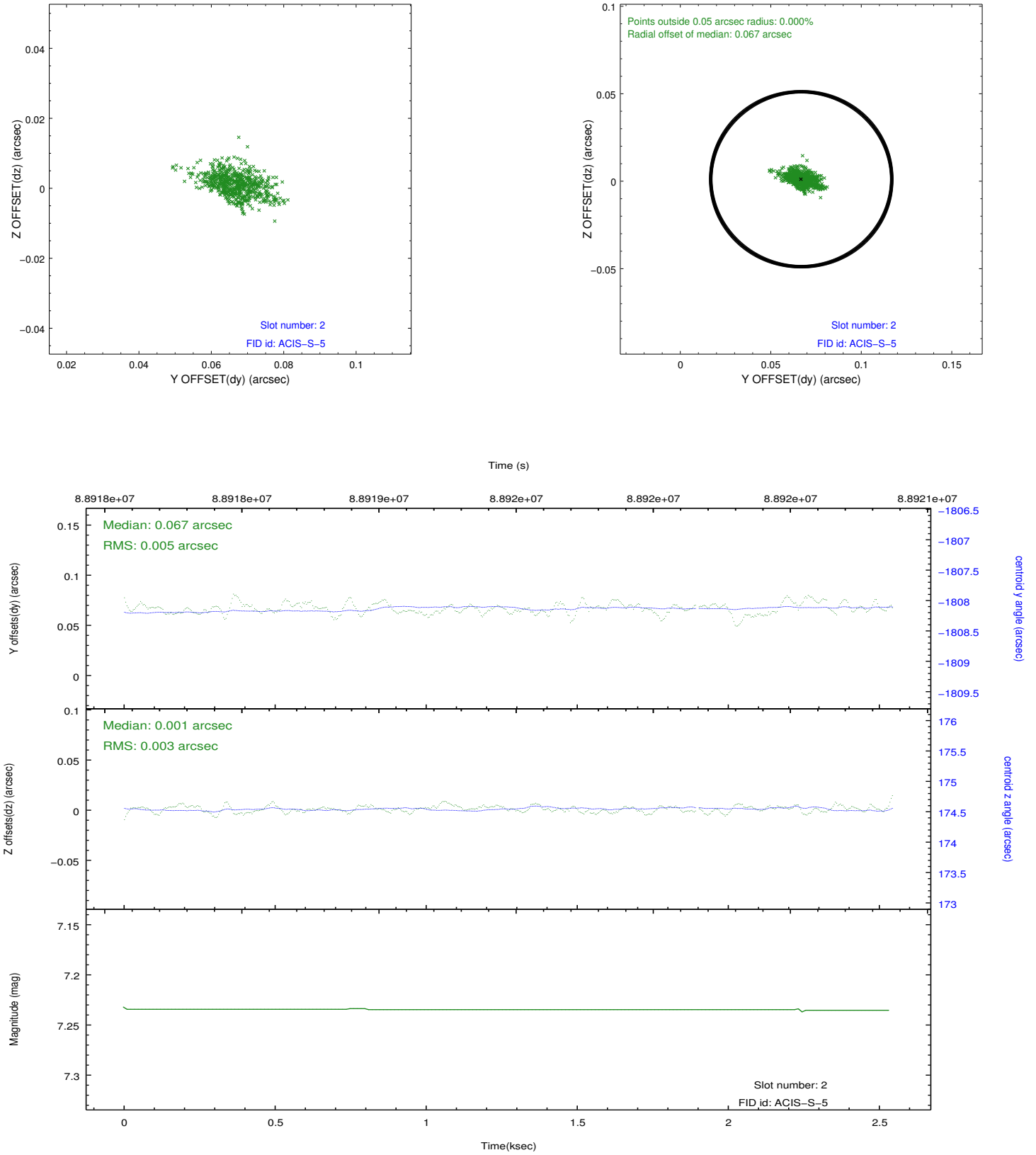
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|---------------|
| V&V Scientist | Beth Sundheim |
| V&V Date (YYYY-MM-DD) | 2012.09.10 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 1.952 |

A.2 Comments