

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 3074 - L2 Version 3
Chandra X-Ray Center

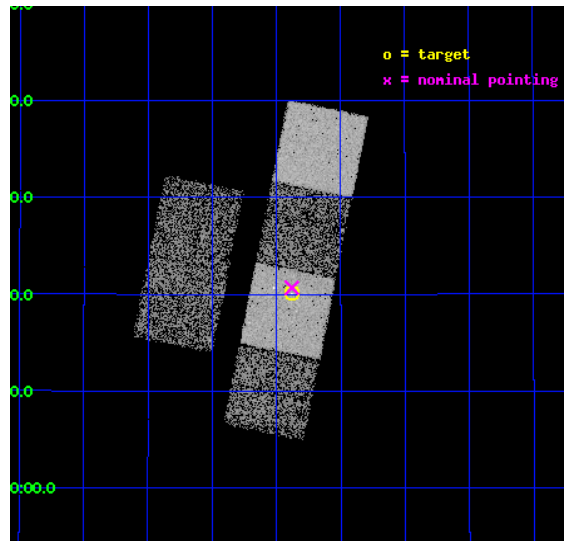
L2 Processing Date : Oct 23 2012

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1 Front

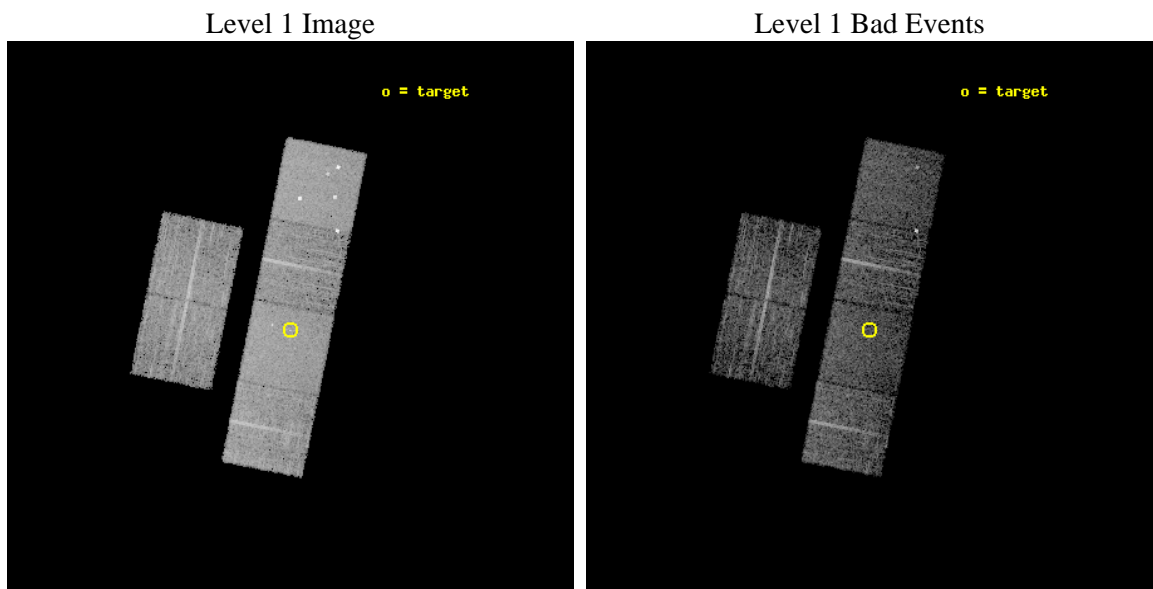
| | | |
|----------|---|---|
| seq_num | 700513 | Sequence number |
| obs_id | 3074 | Observation id |
| title | X-RAY WEAK BROAD-LINE QUASARS: ABSORPTION OR INTRINSIC X_RAY WEAKNESS ? | Proposal title |
| observer | Dr Guido Risaliti | Principal investigator |
| object | HS 1251+2636 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 193.595417 | Observer's specified target RA [deg] |
| dec_targ | 26.334972 | Observer's specified target Dec [deg] |
| ra_nom | 193.59520961083 | Nominal RA [deg] |
| dec_nom | 26.344583065102 | Nominal Dec [deg] |
| roll_nom | 101.39229352333 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 5756.7999785542 | Sum of GTIs [s] |
| livetime | 5683.903910897 | Livetime [s] |
| ontime2 | 5756.7999785542 | Sum of GTIs [s] |
| ontime3 | 5756.7999785542 | Sum of GTIs [s] |
| ontime5 | 5756.7999785542 | Sum of GTIs [s] |
| ontime6 | 5756.7999785542 | Sum of GTIs [s] |
| ontime7 | 5756.7999785542 | Sum of GTIs [s] |
| ontime8 | 5753.5589982867 | Sum of GTIs [s] |
| l2events | 56491 | Number of level 2 events |



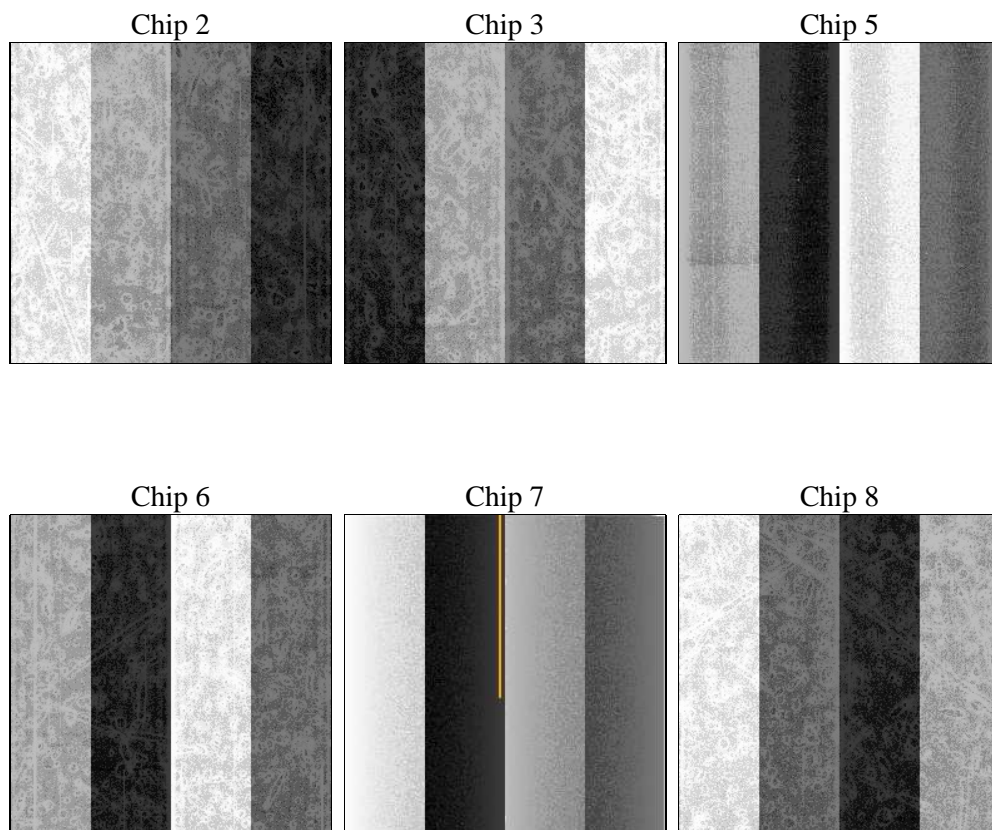
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 1 | Obi number | sched_exp_time | 6000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 5756.7999785542 | Sum of GTIs [s] |
| caldsver | 4.5.2 | | ontime2 | 5756.7999785542 | Sum of GTIs [s] |
| date | 2012-10-23T08:59:38 | Date and time of file creation | ontime3 | 5756.7999785542 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime5 | 5756.7999785542 | Sum of GTIs [s] |
| | | | ontime6 | 5756.7999785542 | Sum of GTIs [s] |
| | | | ontime7 | 5756.7999785542 | Sum of GTIs [s] |
| | | | ontime8 | 5753.5589982867 | Sum of GTIs [s] |
| | | | l1events | 258081 | Number of level 1 events |

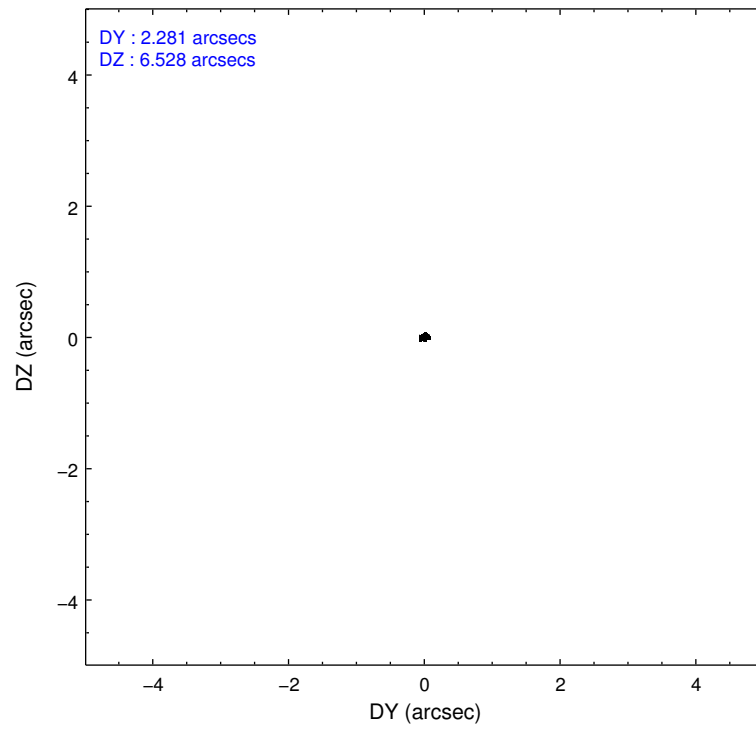
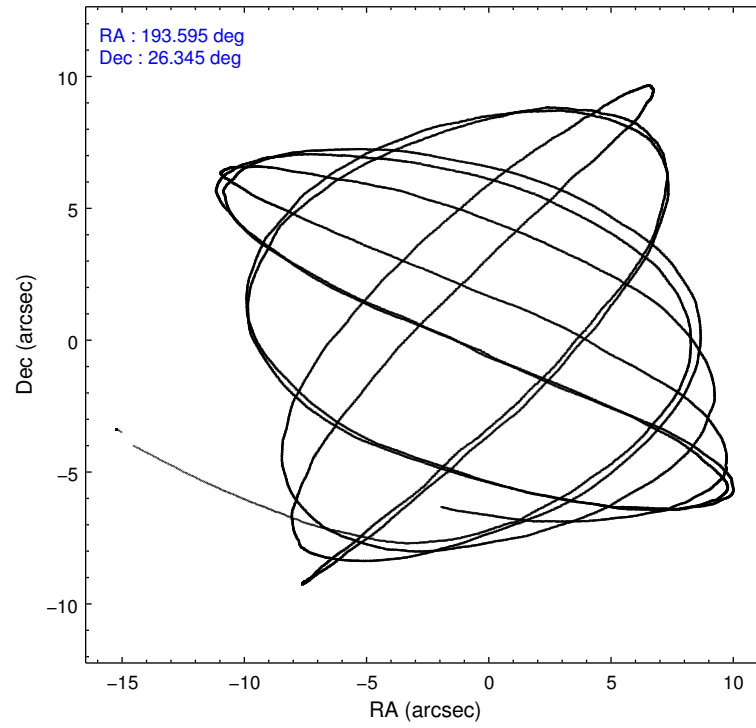
2.1.4 Events

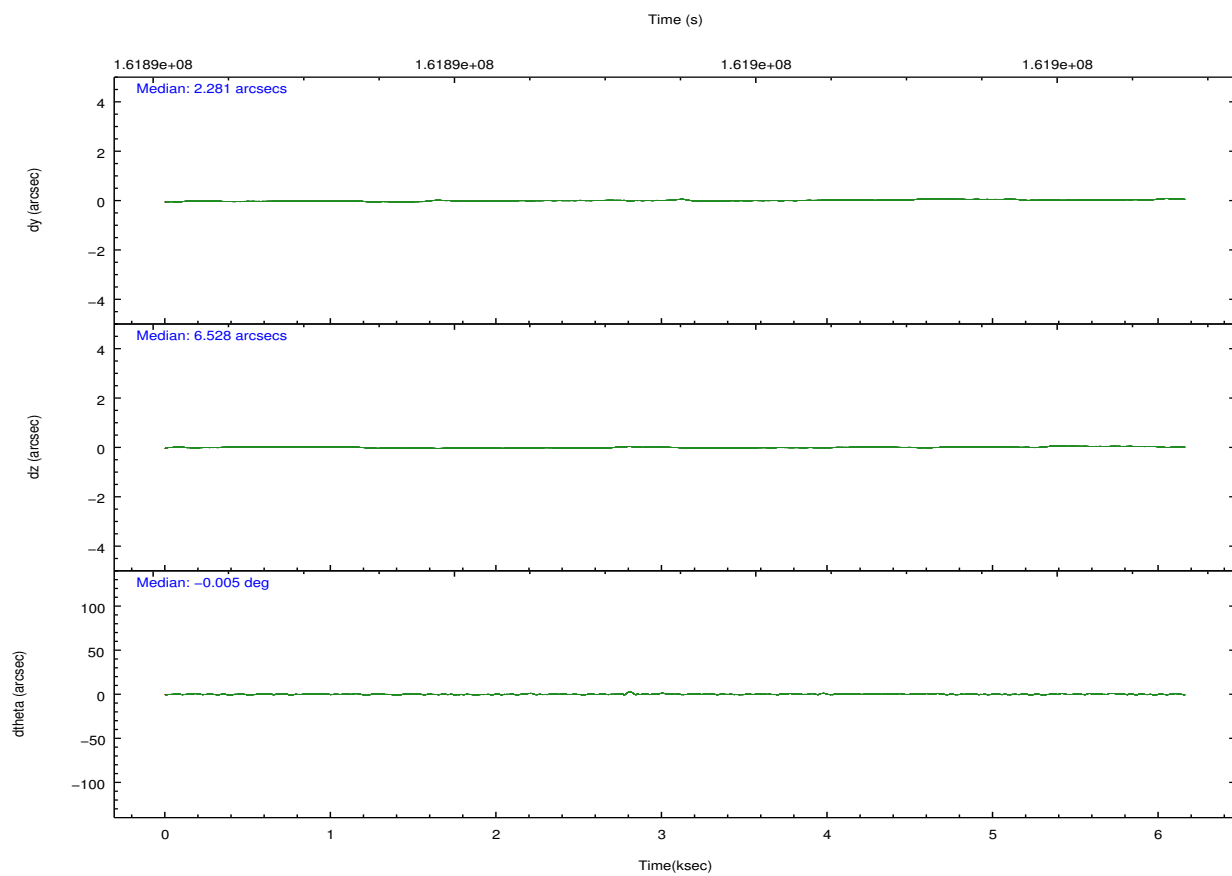
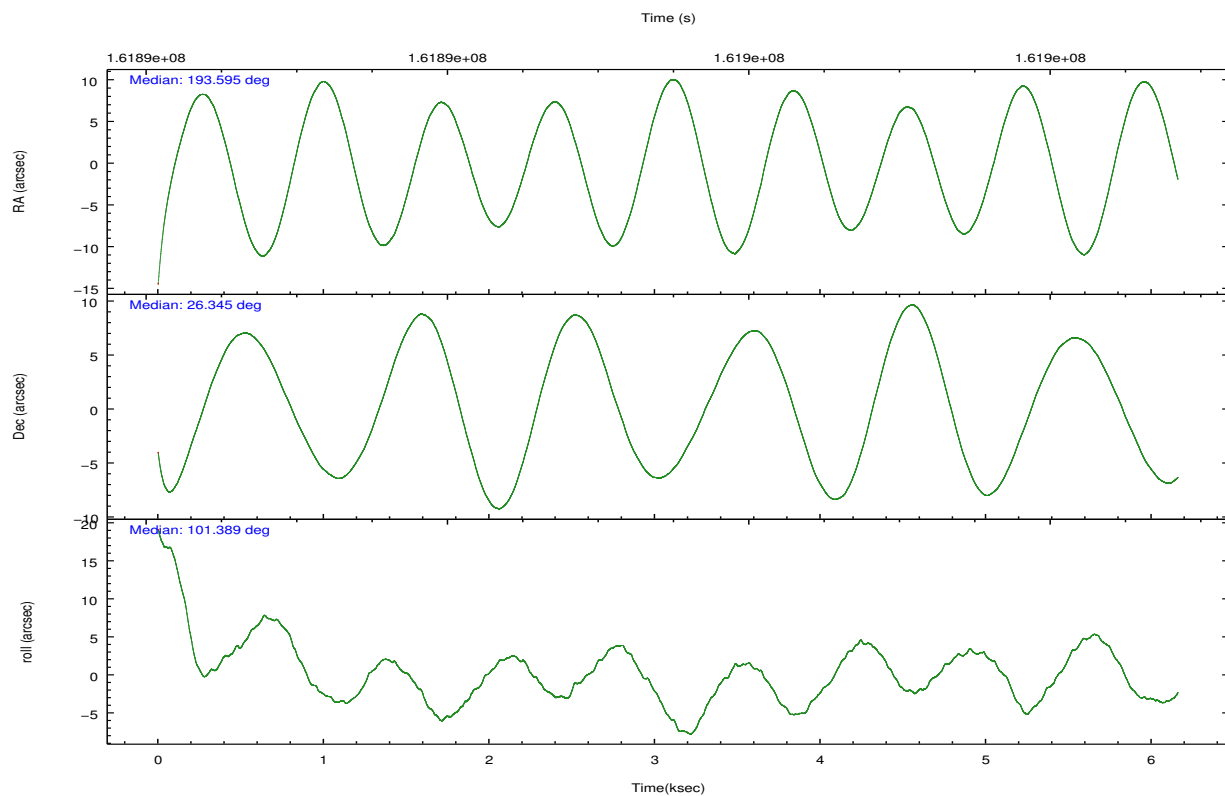
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|-------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 36906 | 34157 | 57047 | 35867 | 47809 | 46295 | grade 0 events | 1741 | 1885 | 5970 | 1643 | 1999 | 2922 |
| rejected events | 32857 | 30053 | 29007 | 31678 | 27801 | 37326 | | 4% | 5% | 10% | 4% | 4% | 6% |
| rejected % | 89% | 87% | 50% | 88% | 58% | 80% | grade 1 events | 26 | 20 | 684 | 13 | 36 | 33 |
| | | | | | | | | 0% | 0% | 1% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 809 | 744 | 7316 | 867 | 3918 | 1915 |
| | | | | | | | | 2% | 2% | 12% | 2% | 8% | 4% |
| | | | | | | | grade 3 events | 416 | 382 | 1083 | 426 | 1830 | 939 |
| | | | | | | | | 1% | 1% | 1% | 1% | 3% | 2% |
| | | | | | | | grade 4 events | 397 | 381 | 922 | 430 | 1841 | 844 |
| | | | | | | | | 1% | 1% | 1% | 1% | 3% | 1% |
| | | | | | | | grade 5 events | 1336 | 1506 | 4206 | 1617 | 4591 | 1997 |
| | | | | | | | | 3% | 4% | 7% | 4% | 9% | 4% |
| | | | | | | | grade 6 events | 689 | 717 | 12781 | 827 | 10443 | 2373 |
| | | | | | | | | 1% | 2% | 22% | 2% | 21% | 5% |
| | | | | | | | grade 7 events | 31492 | 28522 | 24085 | 30044 | 23151 | 35272 |
| | | | | | | | | 85% | 83% | 42% | 83% | 48% | 76% |

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 | 193.615566 | 193.5952096108331 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 26.324457 | 26.34458306510205 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 101.226628 | 101.39229352333 | [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 | -190.1400660498719 | | | |
| [mm] SIM translation stage offset | 0 | 0.00754346686406393 | | | |
| [s] Observation start time (MET) | 161892547.184000 | 161891514.86515 | | | |
| Observation start date | 2003-02-17T18:08:03 | 2003-02-17T17:51:54 | | | |
| [s] Observation end time (MET) | 161898547.184000 | 161899488.34049 | | | |
| Observation end date | 2003-02-17T19:48:03 | 2003-02-17T20:04:48 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



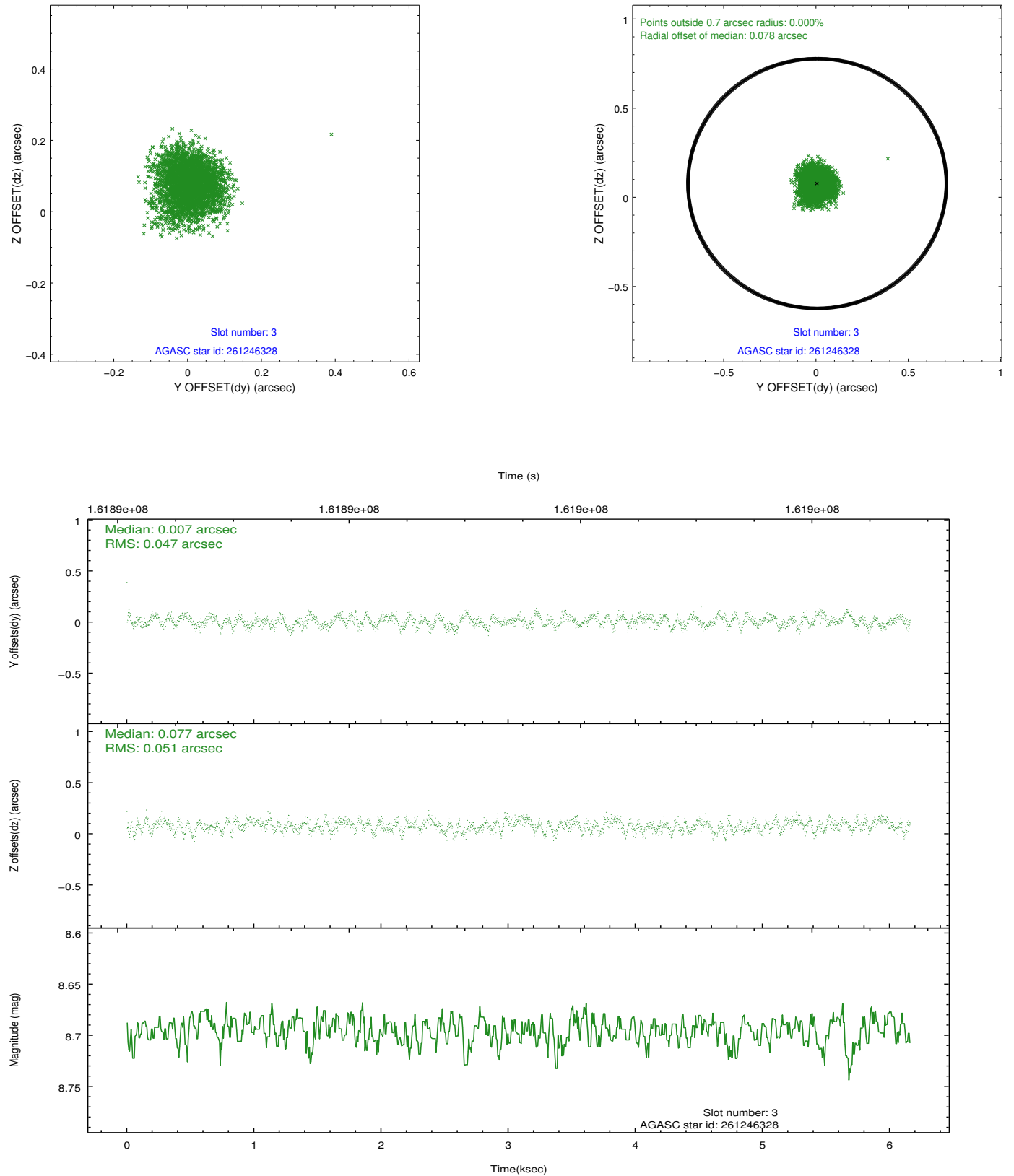


Slot Statistics

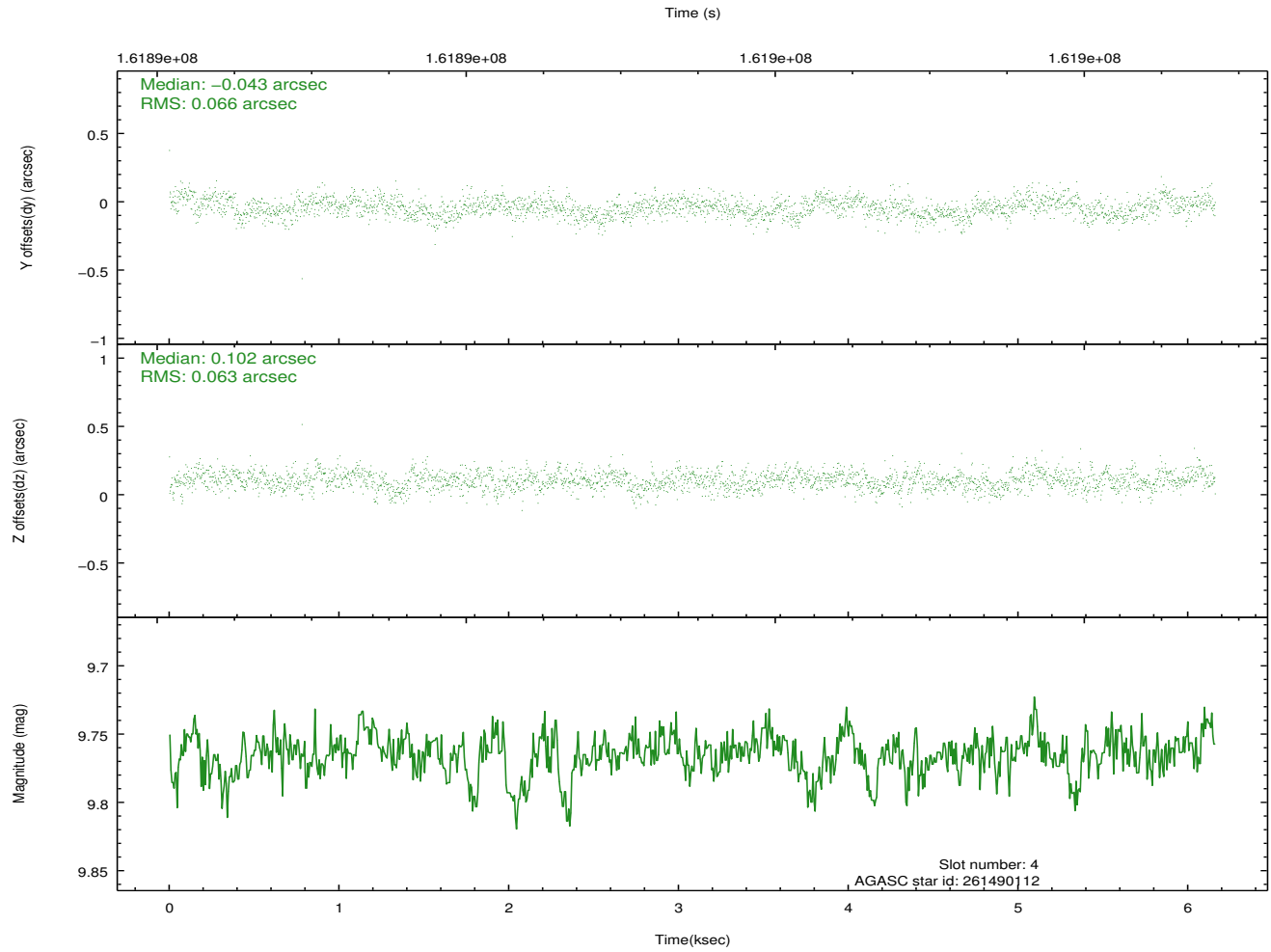
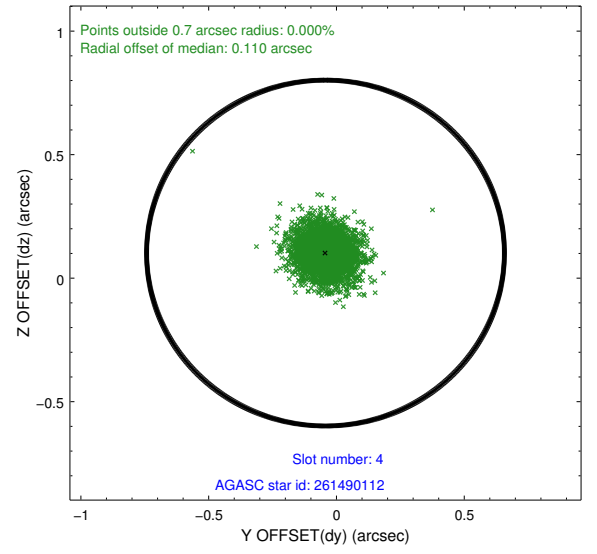
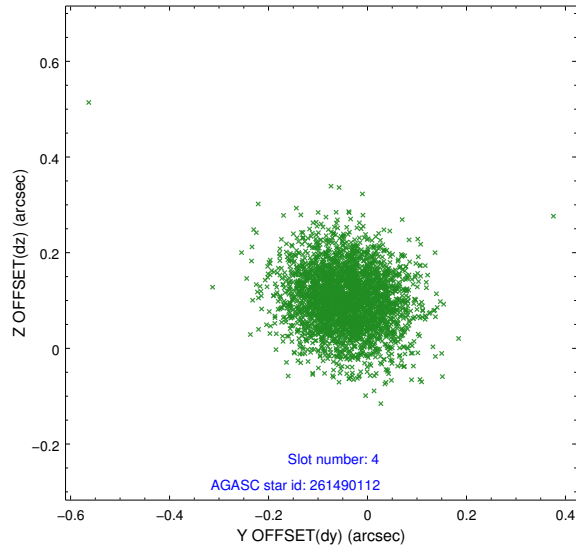
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.11 | 1503 | -0.044 | 0.002 | 0.007 | 0.011 | 0.000000 | 0.000000 | -754.92 | -1727.69 |
| 1 | FID | ACIS-S-4 | 7.20 | 1503 | -0.005 | 0.020 | 0.005 | 0.010 | 0.000000 | 0.000000 | 2157.93 | 179.87 |
| 2 | FID | ACIS-S-5 | 7.24 | 1503 | 0.017 | -0.014 | 0.006 | 0.010 | 0.000000 | 0.000000 | -1806.50 | 174.53 |
| 3 | GUIDE | 261246328 | 8.70 | 3006 | 0.007 | 0.077 | 0.074 | 0.118 | 194.437444 | 25.936229 | -1880.26 | -2339.17 |
| 4 | GUIDE | 261490112 | 9.76 | 3006 | -0.043 | 0.102 | 0.096 | 0.159 | 194.017210 | 26.469930 | 263.42 | -1372.34 |
| 5 | GUIDE | 261508488 | 9.45 | 3005 | -0.093 | -0.092 | 0.108 | 0.170 | 193.081632 | 26.490574 | 925.27 | 1570.25 |
| 6 | GUIDE | 261242160 | 8.49 | 3005 | 0.154 | -0.051 | 0.066 | 0.107 | 193.867779 | 25.738065 | -2228.63 | -390.85 |
| 7 | GUIDE | 261491608 | 9.99 | 2997 | -0.024 | -0.031 | 0.135 | 0.234 | 193.422918 | 26.972540 | 2408.64 | 152.49 |

2.4 Star Slots

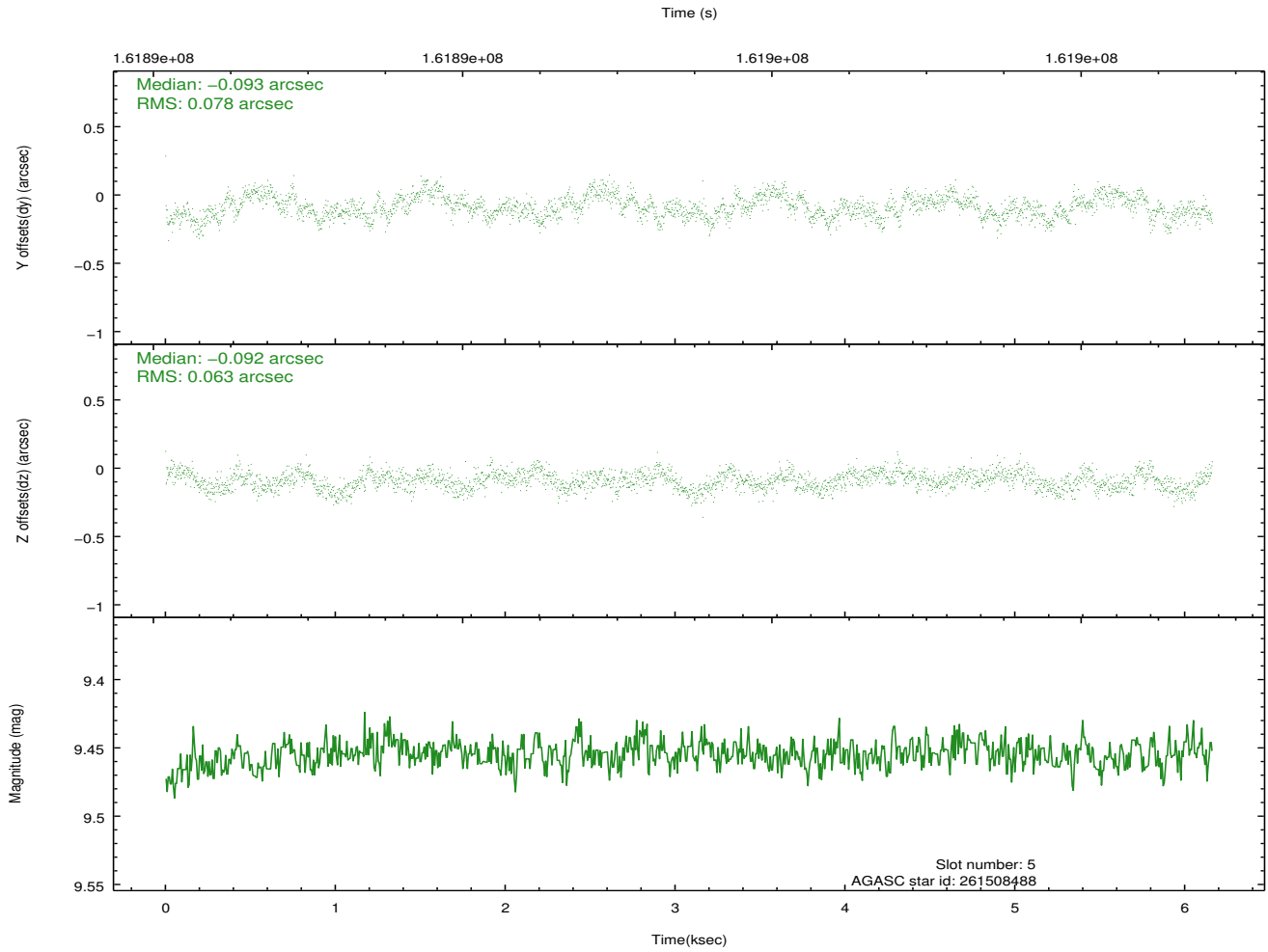
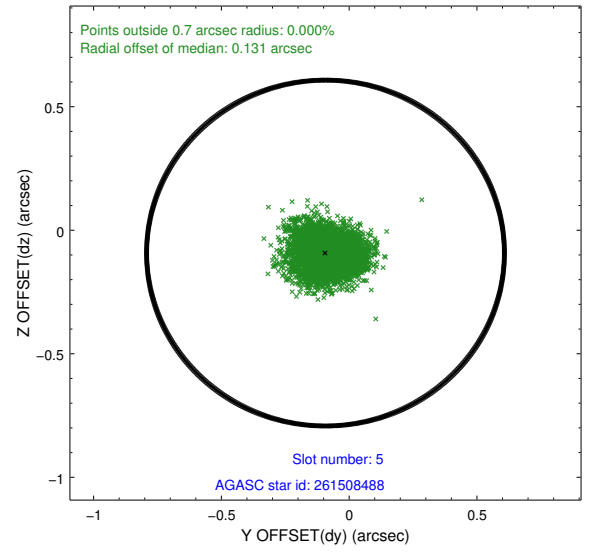
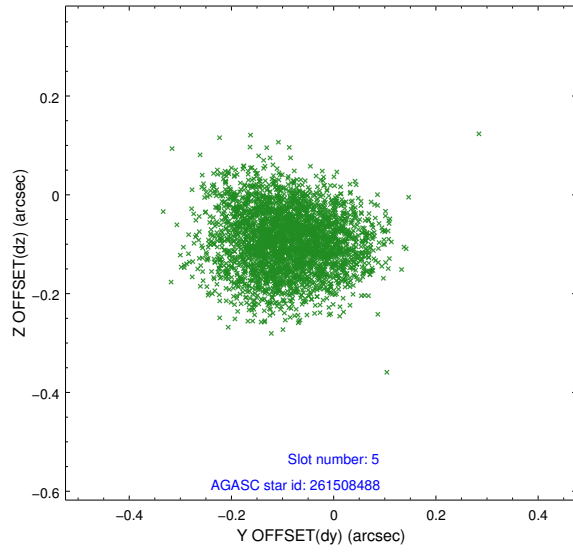
2.4.1 Slot 3



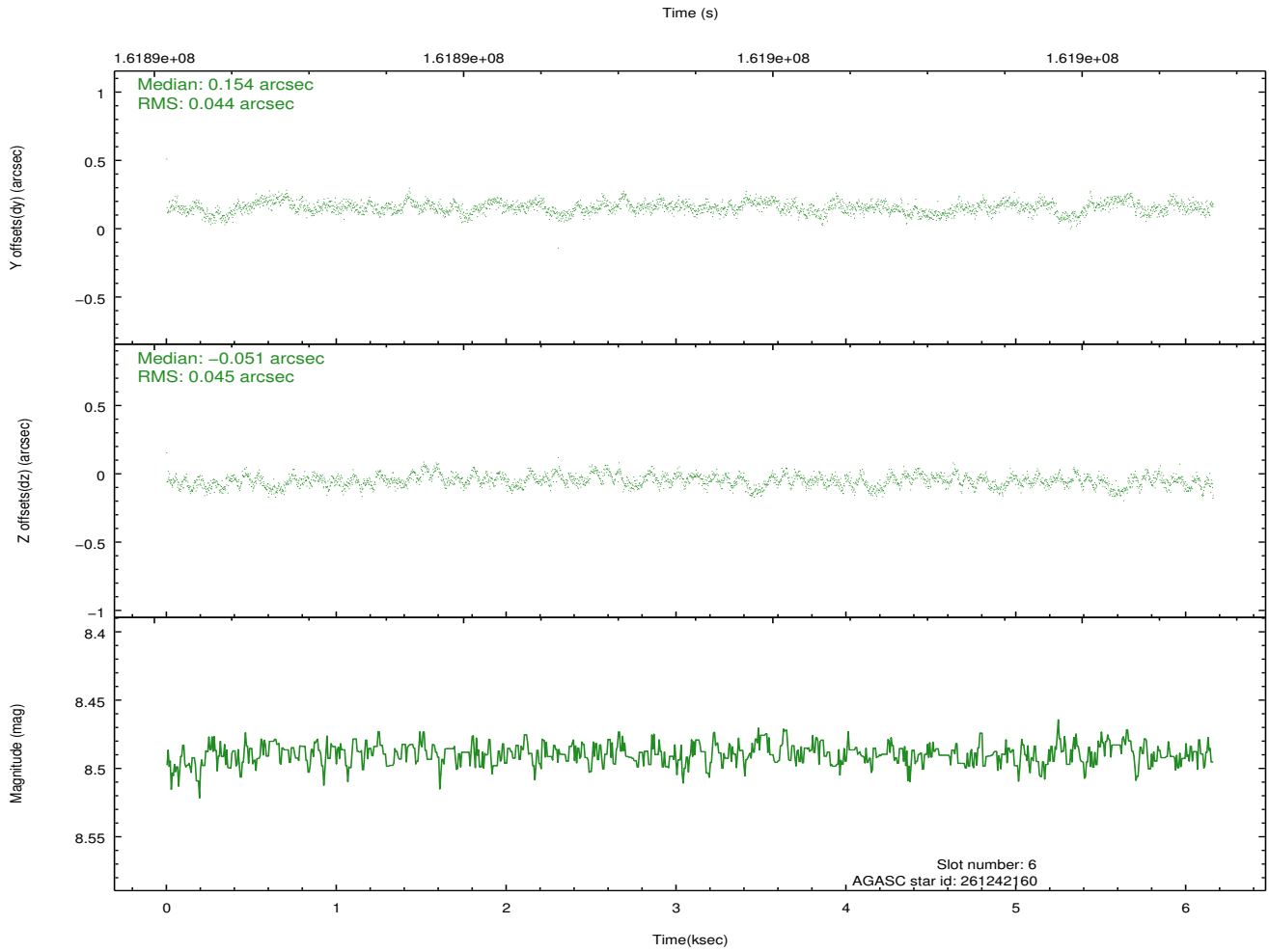
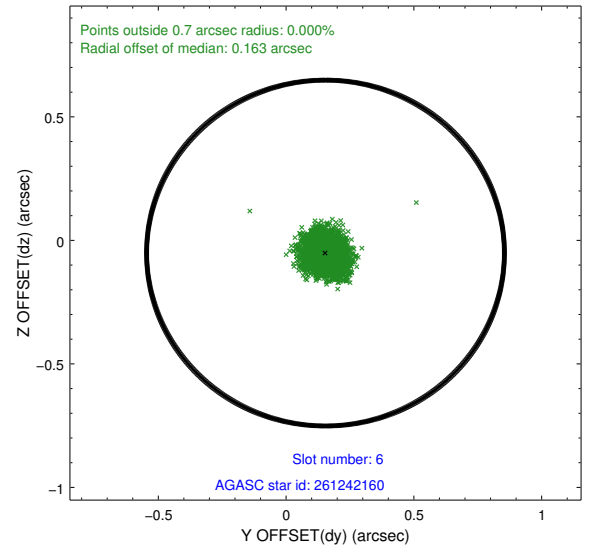
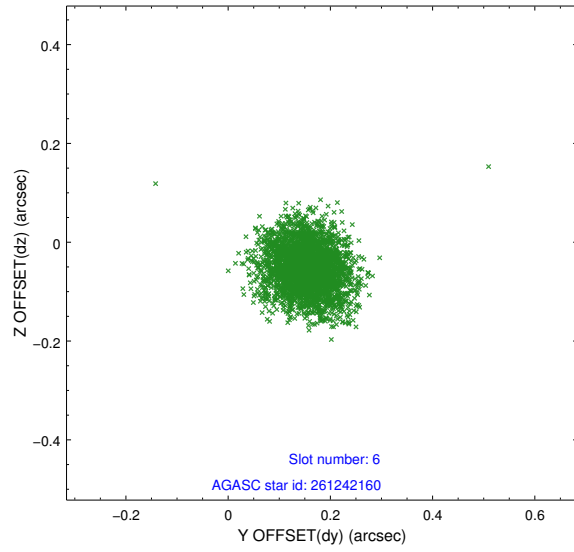
2.4.2 Slot 4



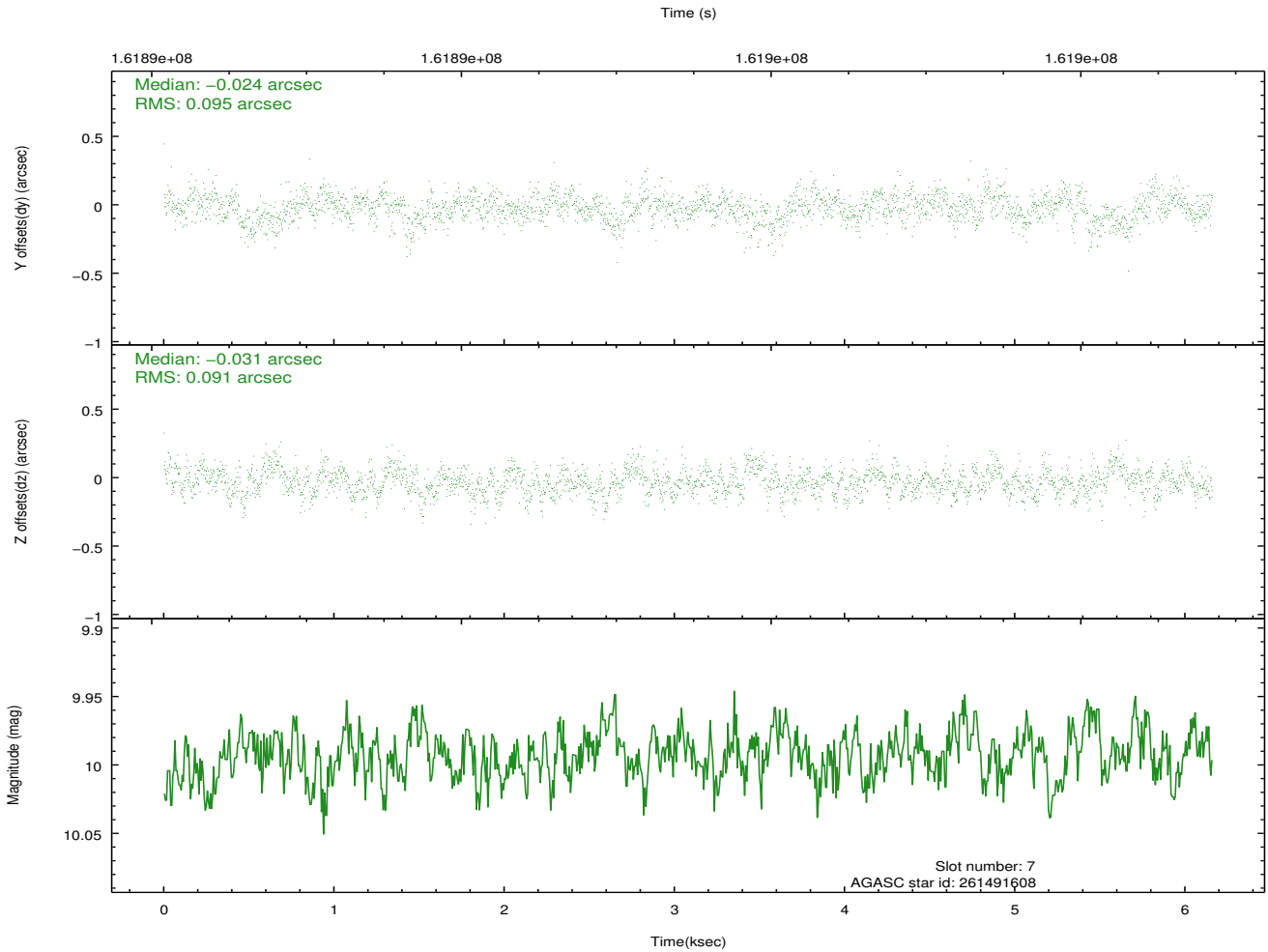
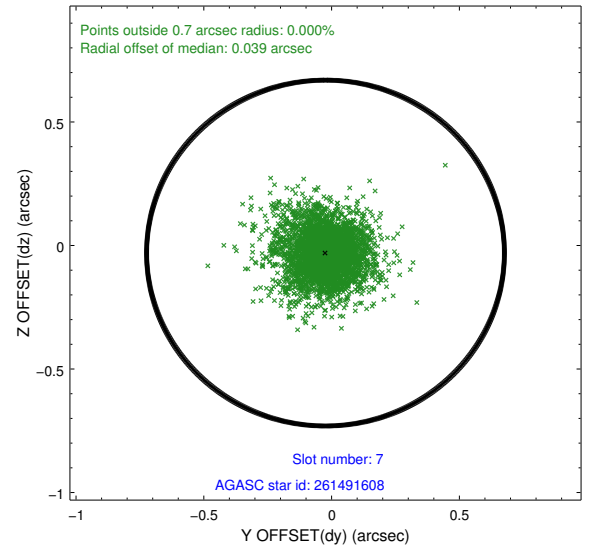
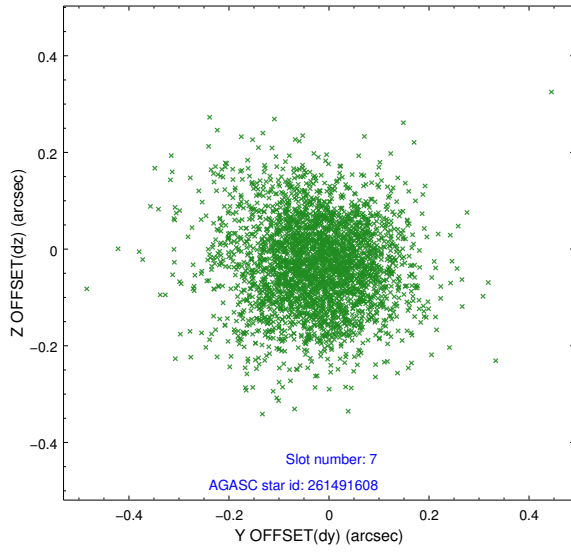
2.4.3 Slot 5



2.4.4 Slot 6

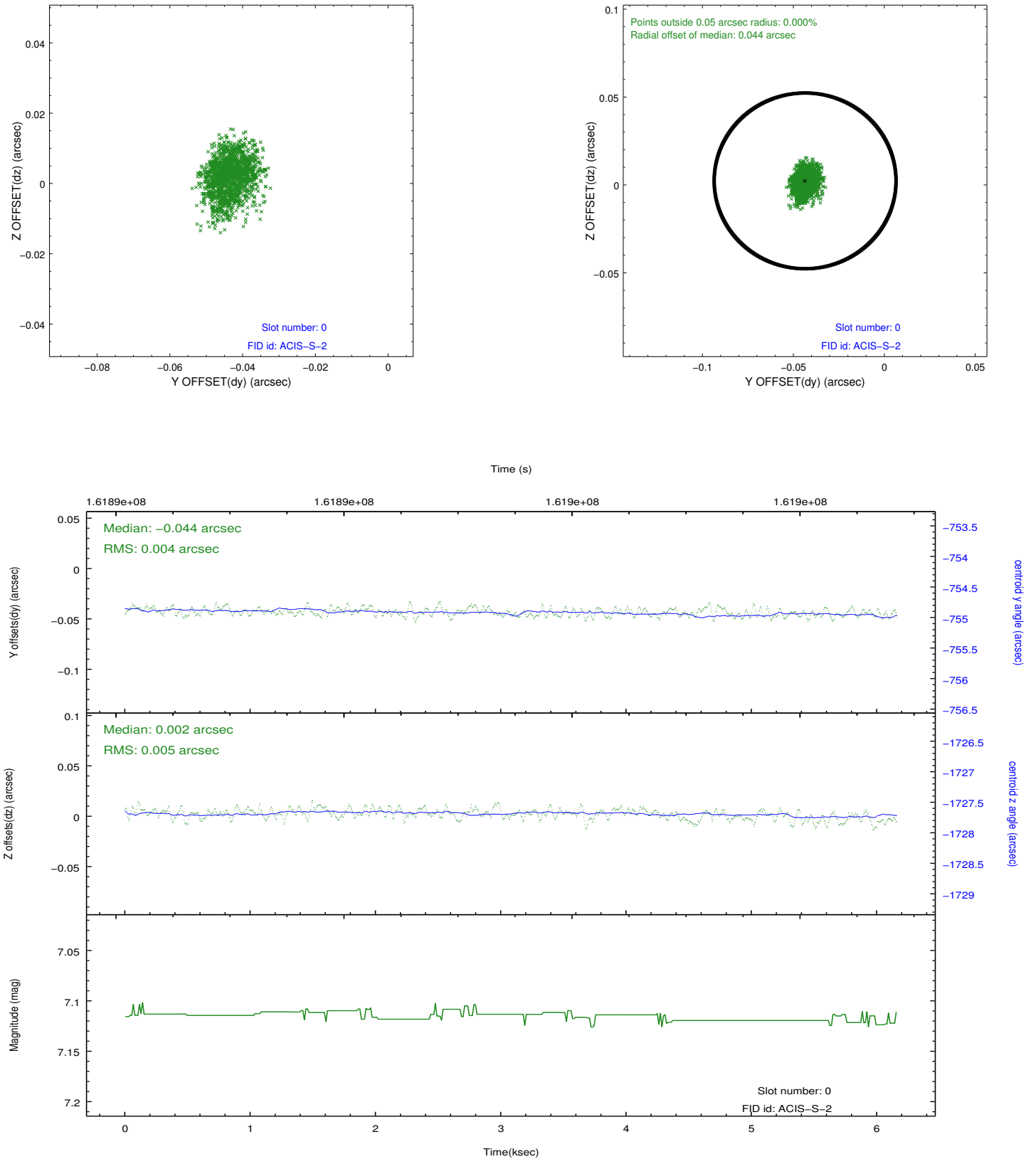


2.4.5 Slot 7

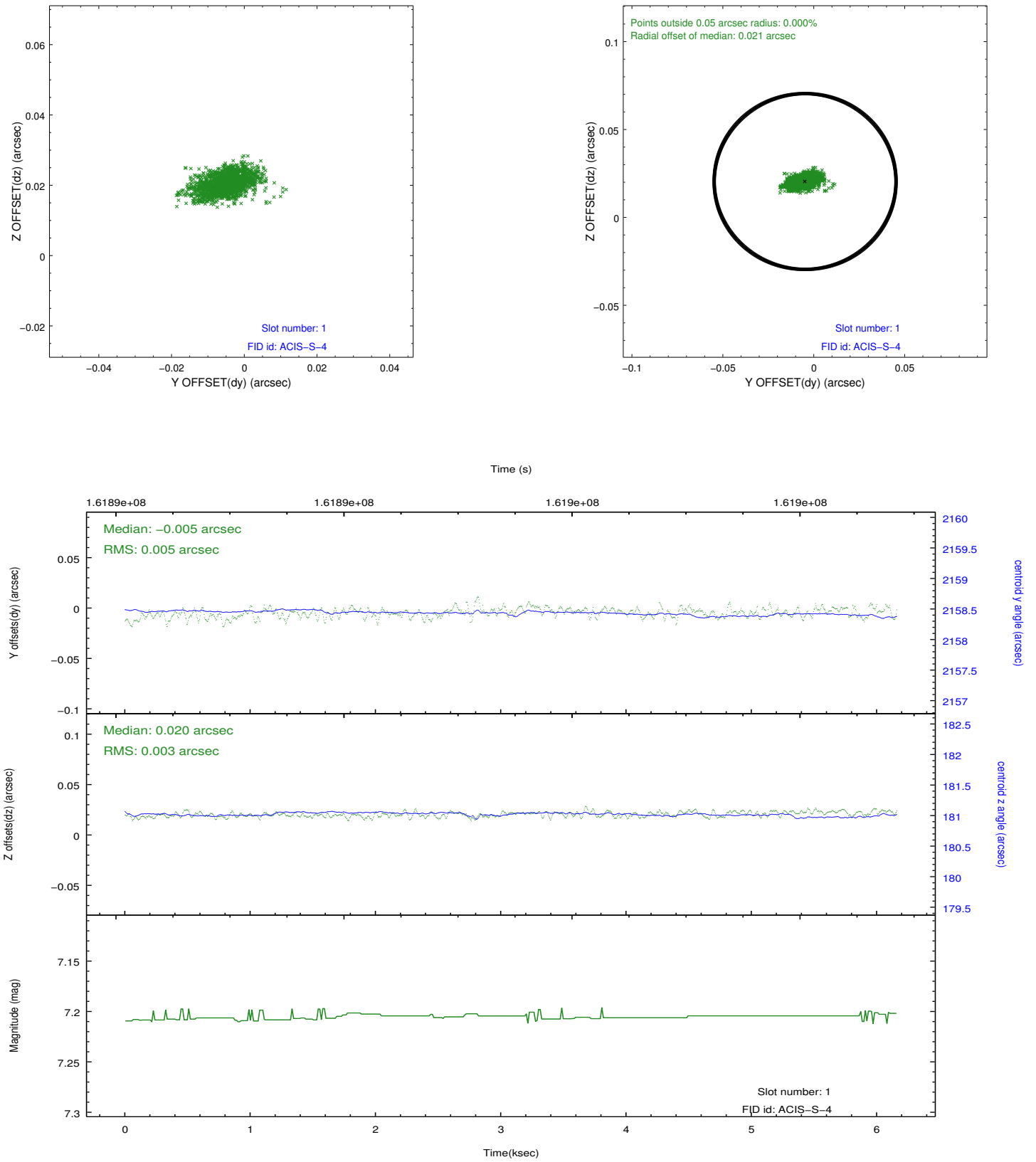


2.5 FID Slots

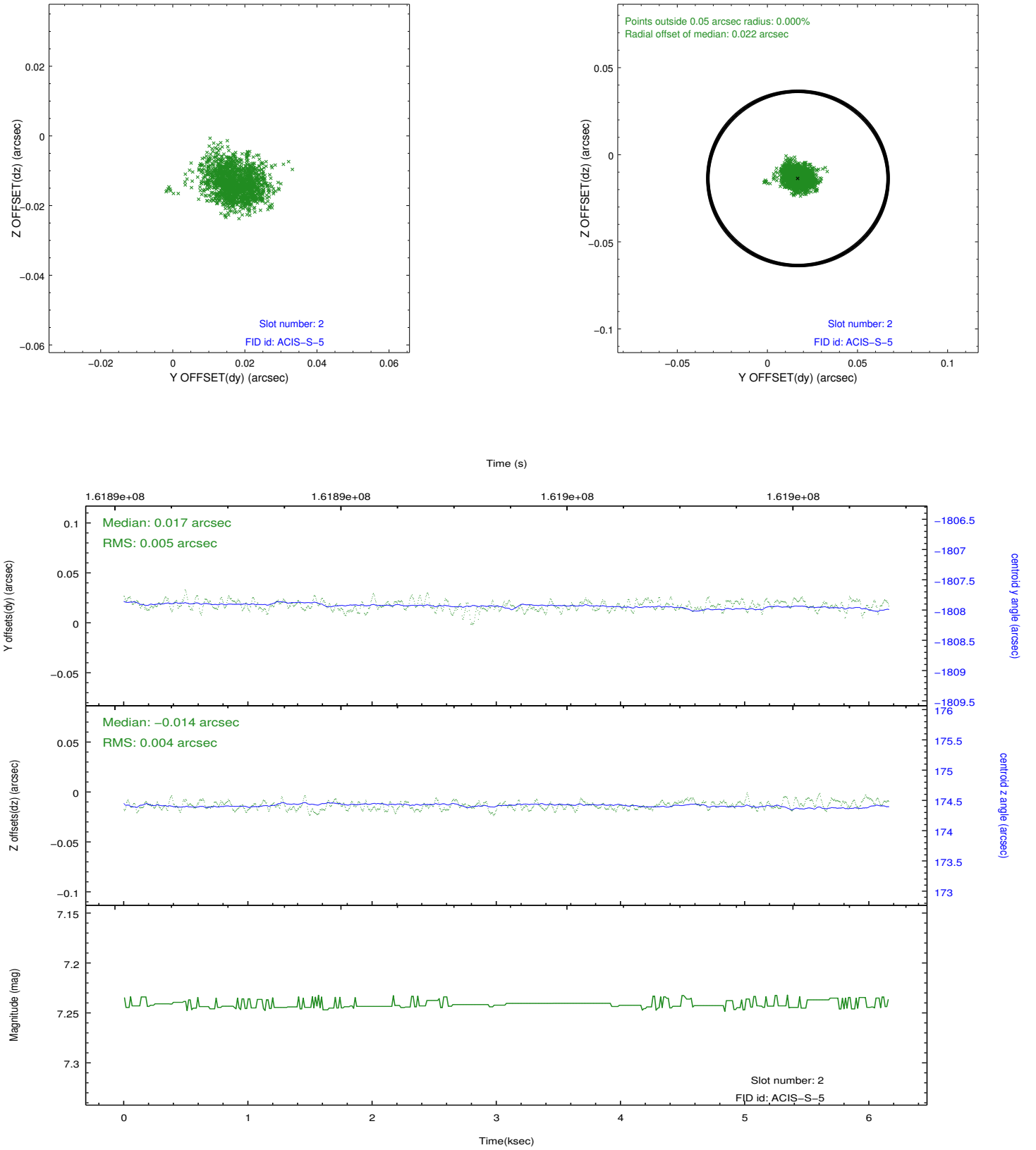
2.5.1 Slot 0



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) | 2012.11.06 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 5.76 |

A.2 Comments