

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 5484 - L2 Version 2
Chandra X-Ray Center

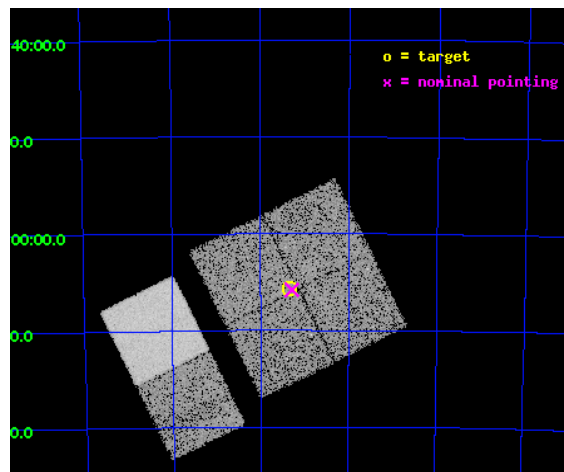
L2 Processing Date : Mar 24 2012

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1 Front

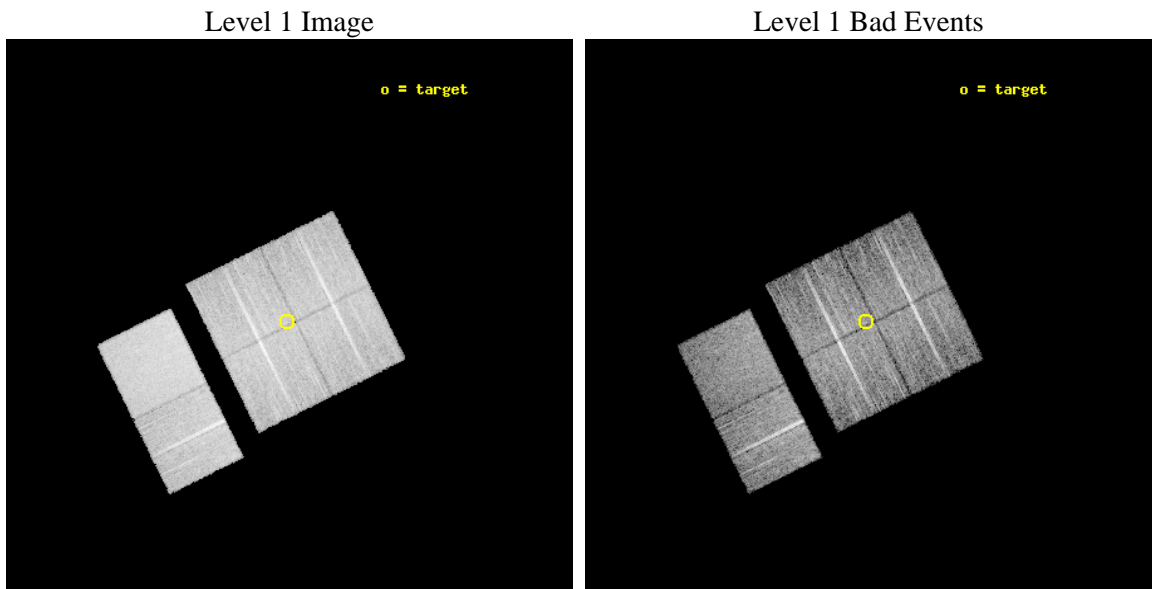
| | | |
|----------|---|---|
| seq_num | 400414 | Sequence number |
| obs_id | 5484 | Observation id |
| title | Discovering X-ray pulsars in the Wing of the Small Magellanic Cloud | |
| observer | Prof Malcolm Coe | Principal investigator |
| object | SMCwing 5 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 17.833333 | Observer's specified target RA [deg] |
| dec_targ | -72.093889 | Observer's specified target Dec [deg] |
| ra_nom | 17.821798368083 | Nominal RA [deg] |
| dec_nom | -72.096903363321 | Nominal Dec [deg] |
| roll_nom | 243.64289299008 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 9638.3999640942 | Sum of GTIs [s] |
| livetime | 9516.3527402011 | Livetime [s] |
| ontime0 | 9638.3999640942 | Sum of GTIs [s] |
| ontime1 | 9638.3999640942 | Sum of GTIs [s] |
| ontime2 | 9638.3999640942 | Sum of GTIs [s] |
| ontime3 | 9638.3999640942 | Sum of GTIs [s] |
| ontime6 | 9635.159003824 | Sum of GTIs [s] |
| ontime7 | 9638.3999640942 | Sum of GTIs [s] |
| l2events | 85627 | Number of level 2 events |



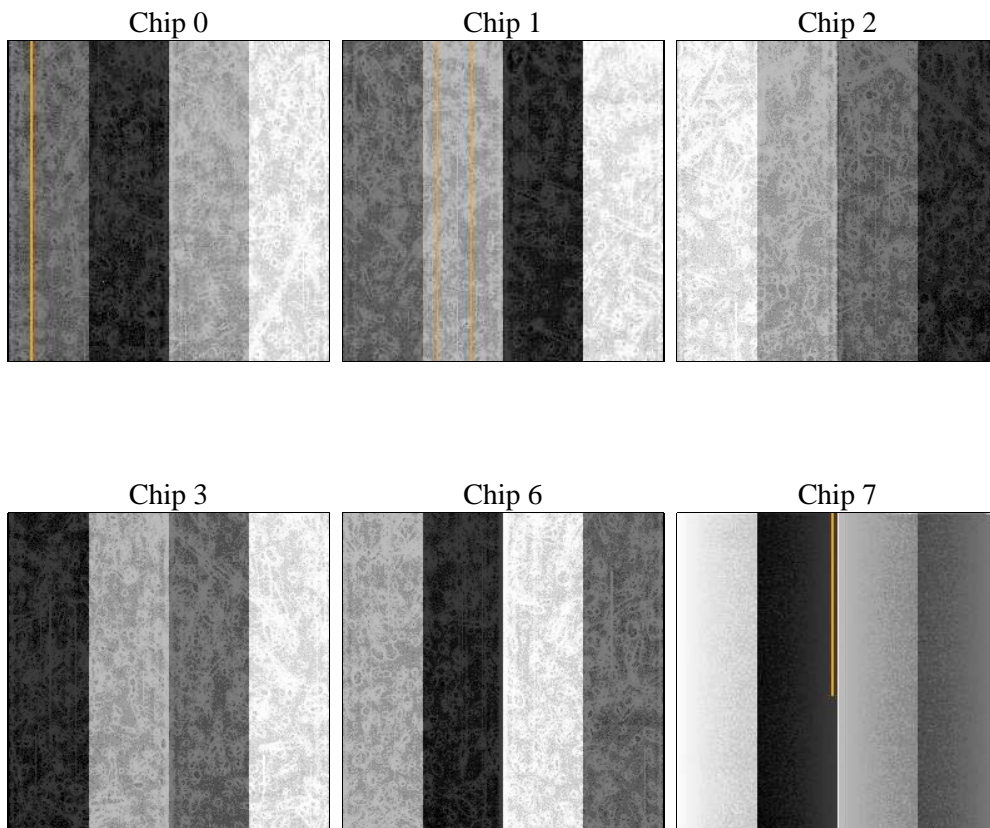
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 9882.536000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.3 | Processing system revision | ontime | 9638.3999640942 | Sum of GTIs [s] |
| caldsver | 4.4.8 | | ontime0 | 9638.3999640942 | Sum of GTIs [s] |
| date | 2012-03-25T00:13:42 | Date and time of file creation | ontime1 | 9638.3999640942 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime2 | 9638.3999640942 | Sum of GTIs [s] |
| | | | ontime3 | 9638.3999640942 | Sum of GTIs [s] |
| | | | ontime6 | 9635.159003824 | Sum of GTIs [s] |
| | | | ontime7 | 9638.3999640942 | Sum of GTIs [s] |
| | | | l1events | 499740 | Number of level 1 events |

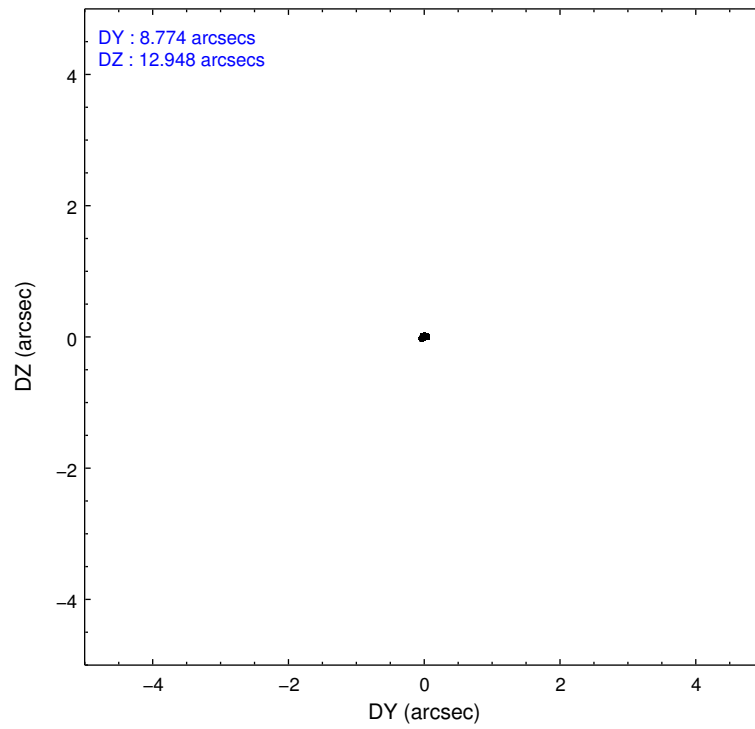
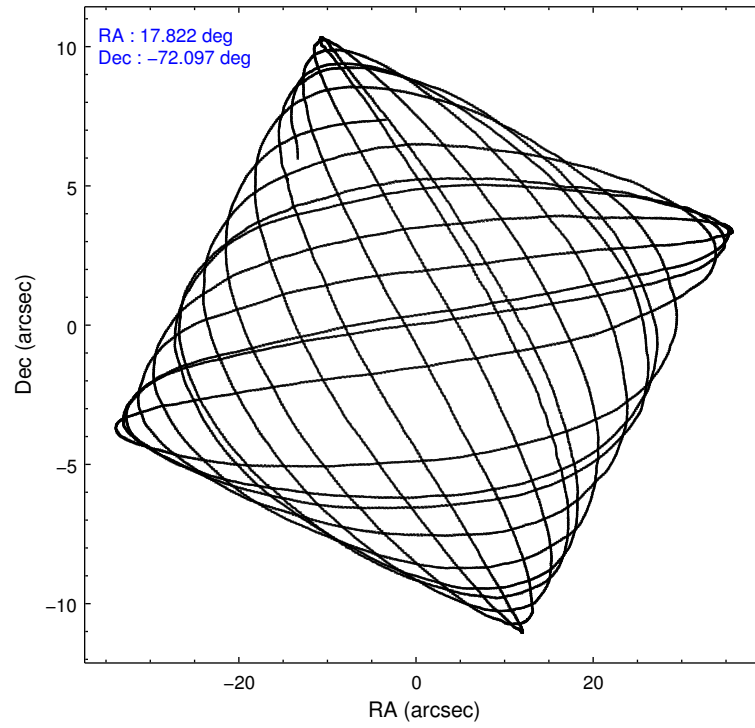
2.1.4 Events

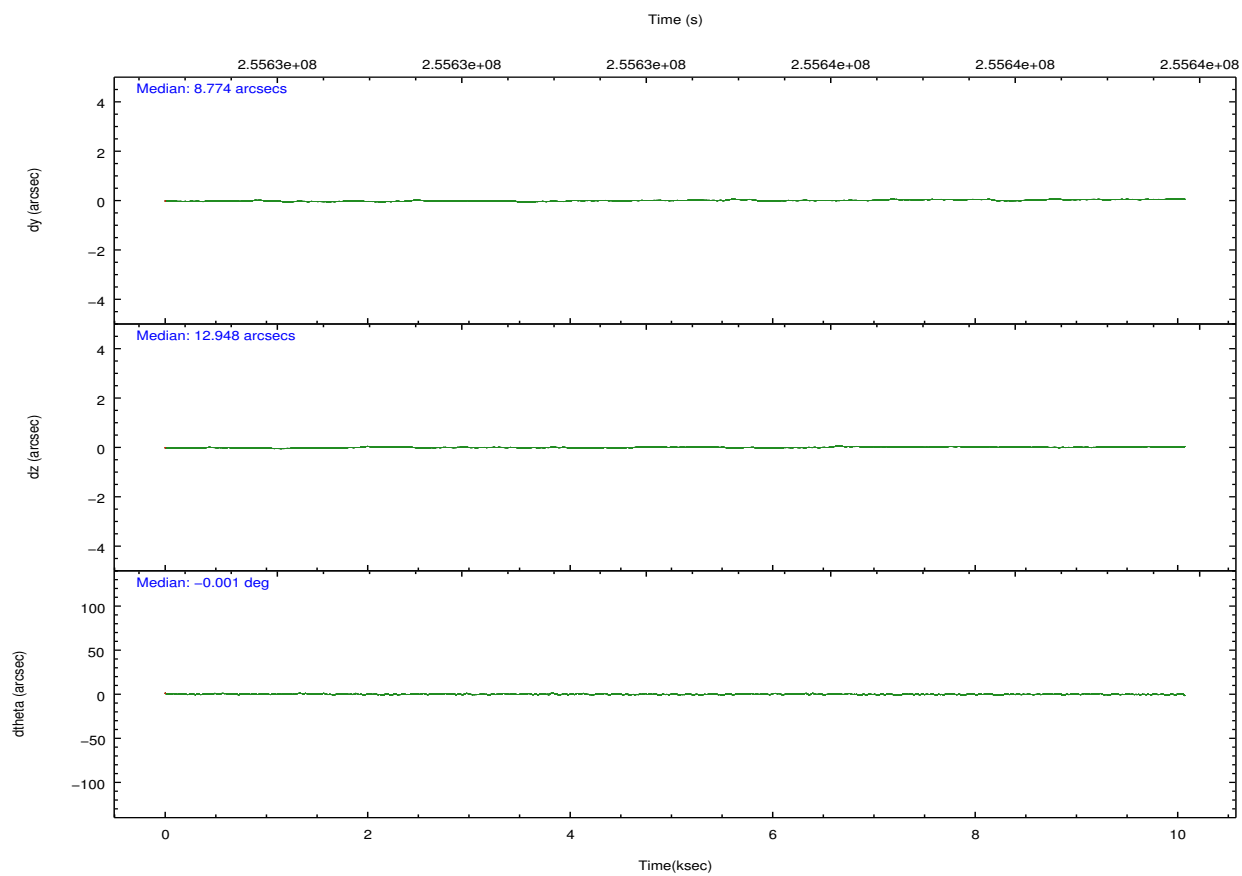
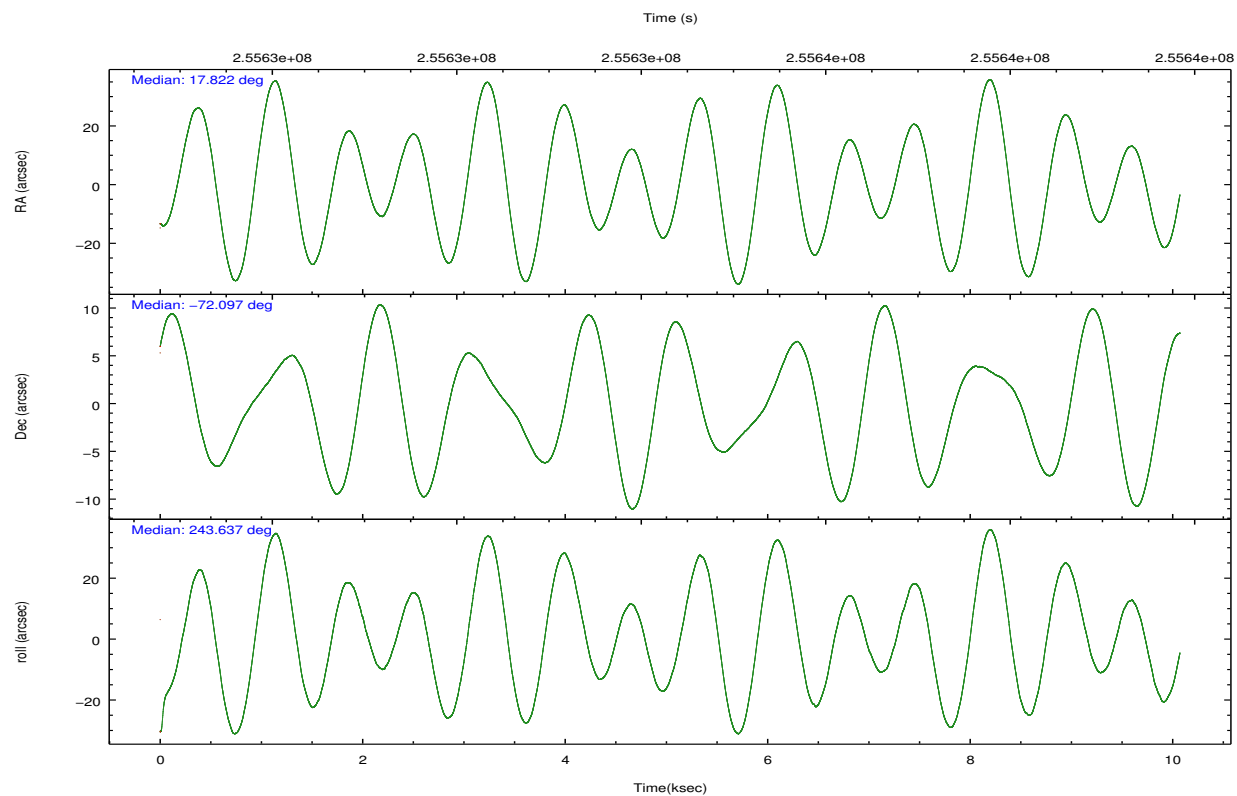
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 | | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 |
|-----------------|-------|-------|-------|-------|-------|--------|----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 73614 | 73215 | 81331 | 77158 | 83543 | 110879 | grade 0 events | 4146 | 3825 | 4215 | 3921 | 3661 | 3963 |
| rejected events | 63952 | 63291 | 71900 | 67970 | 73952 | 65343 | | 5% | 5% | 5% | 5% | 4% | 3% |
| rejected % | 86% | 86% | 88% | 88% | 88% | 58% | grade 1 events | 44 | 49 | 43 | 60 | 42 | 98 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 2046 | 2226 | 1945 | 1767 | 2059 | 9131 |
| | | | | | | | | 2% | 3% | 2% | 2% | 2% | 8% |
| | | | | | | | grade 3 events | 917 | 999 | 870 | 933 | 940 | 3987 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 3% |
| | | | | | | | grade 4 events | 850 | 958 | 924 | 910 | 897 | 4001 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 3% |
| | | | | | | | grade 5 events | 3124 | 3459 | 3064 | 3621 | 3859 | 10429 |
| | | | | | | | | 4% | 4% | 3% | 4% | 4% | 9% |
| | | | | | | | grade 6 events | 1705 | 1923 | 1486 | 1664 | 2042 | 24490 |
| | | | | | | | | 2% | 2% | 1% | 2% | 2% | 22% |
| | | | | | | | grade 7 events | 60782 | 59776 | 68784 | 64282 | 70043 | 54780 |
| | | | | | | | | 82% | 81% | 84% | 83% | 83% | 49% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|-----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-012367 | ACIS-012367 | 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 | 17.815893 | 17.82179836808299 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | -72.069591 | -72.09690336332127 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 243.428600 | 243.6428929900765 | [s] Primary exposure time | 0.000000 | 3.2 |
| [mm] SIM focus pos | -0.782348 | -0.7809083437167272 | | | |
| [mm] SIM defocus | 0 | 0.001439871863259334 | | | |
| [mm] SIM translation stage pos | -233.592463 | -233.5874344608287 | | | |
| [mm] SIM translation stage offset | 0 | -0.005018542100998502 | | | |
| [s] Observation start time (MET) | 255629468.184000 | 255629092.81283 | | | |
| Observation start date | 2006-02-06T16:10:03 | 2006-02-06T16:04:52 | | | |
| [s] Observation end time (MET) | 255639351.184000 | 255639591.37581 | | | |
| Observation end date | 2006-02-06T18:54:46 | 2006-02-06T18:59:51 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



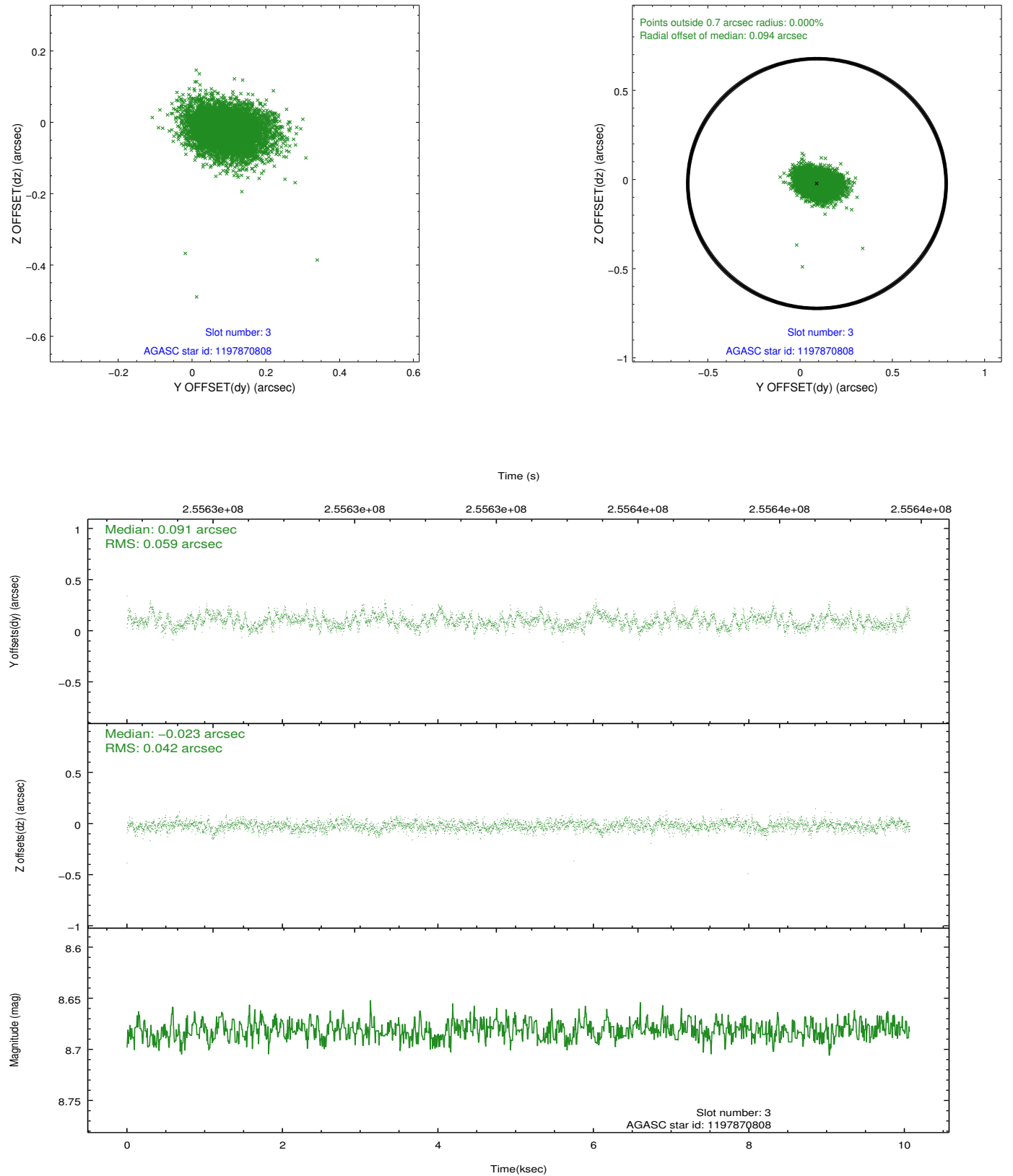


Slot Statistics

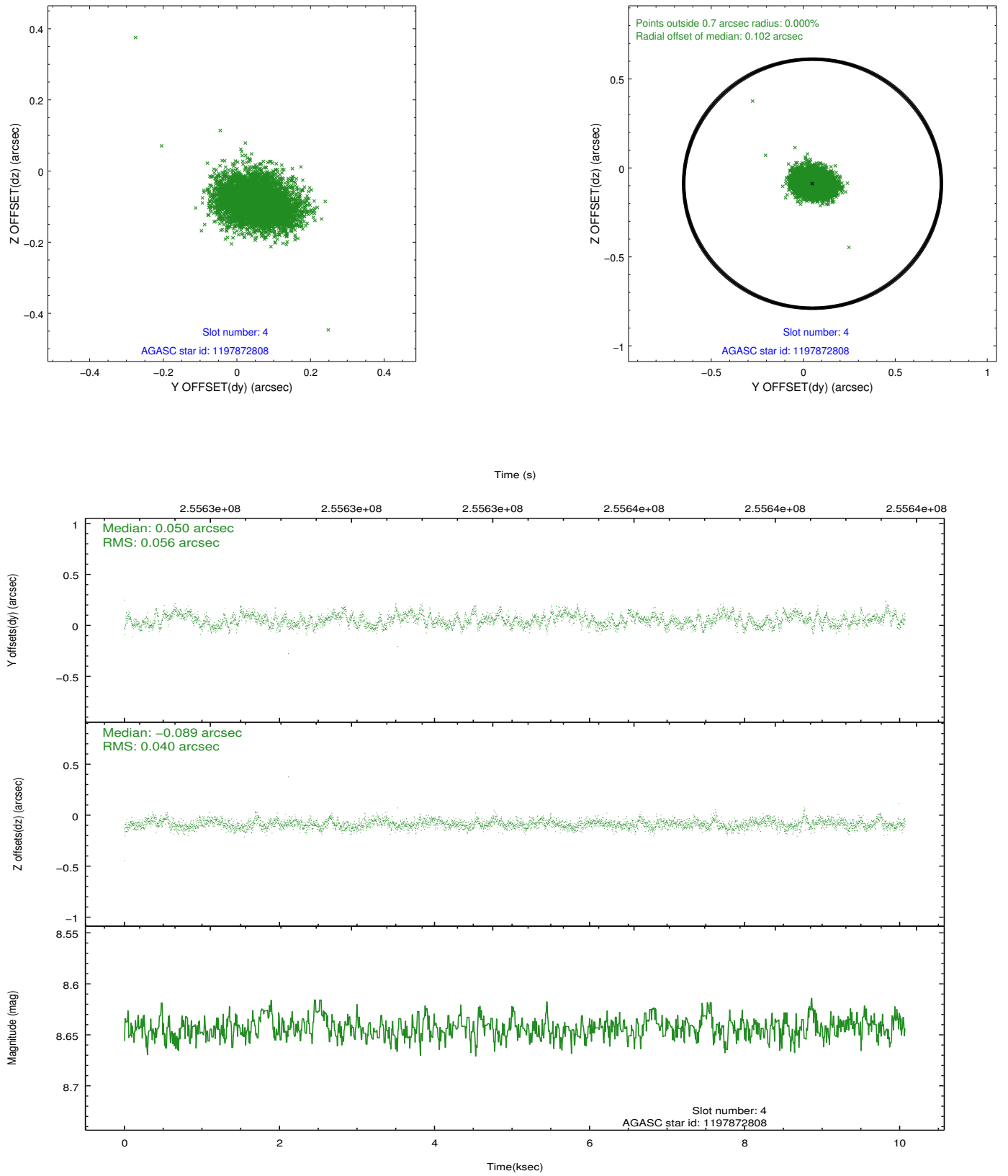
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------------|------|-------|--------|--------|-------|-------|-----------|------------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.24 | 2457 | 0.043 | 0.020 | 0.006 | 0.011 | 0.000000 | 0.000000 | 930.89 | -836.49 |
| 1 | FID | ACIS-I-5 | 7.22 | 2457 | -0.187 | 0.063 | 0.006 | 0.010 | 0.000000 | 0.000000 | -1817.13 | 1060.82 |
| 2 | FID | ACIS-I-6 | 7.25 | 2457 | 0.052 | -0.013 | 0.006 | 0.010 | 0.000000 | 0.000000 | 395.90 | 1705.81 |
| 3 | GUIDE | 1197870808 | 8.68 | 4913 | 0.091 | -0.023 | 0.076 | 0.123 | 20.372965 | -71.772536 | -2189.11 | 2123.72 |
| 4 | GUIDE | 1197872808 | 8.64 | 4909 | 0.050 | -0.089 | 0.072 | 0.117 | 19.928844 | -71.802779 | -1884.46 | 1713.77 |
| 5 | GUIDE | 1197884712 | 8.31 | 4912 | 0.001 | 0.095 | 0.062 | 0.101 | 16.087398 | -72.252690 | 1462.35 | -1388.10 |
| 6 | GUIDE | 1197885328 | 7.25 | 4911 | 0.036 | 0.103 | 0.055 | 0.086 | 16.283090 | -71.733943 | -287.15 | -2076.69 |
| 7 | GUIDE | 1198283128 | 7.95 | 4913 | -0.179 | -0.086 | 0.051 | 0.081 | 17.272580 | -72.642428 | 2107.83 | 401.92 |

2.4 Star Slots

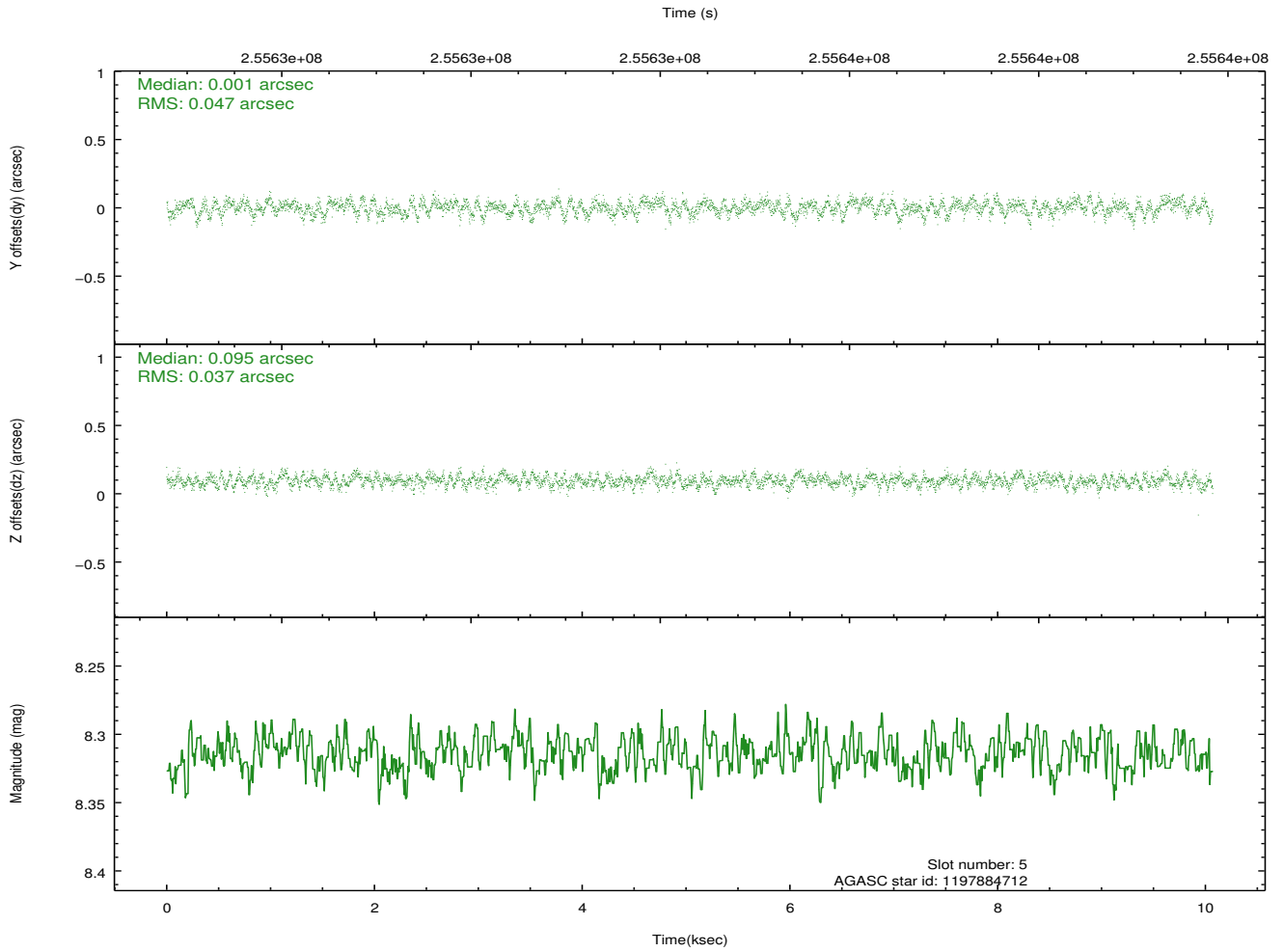
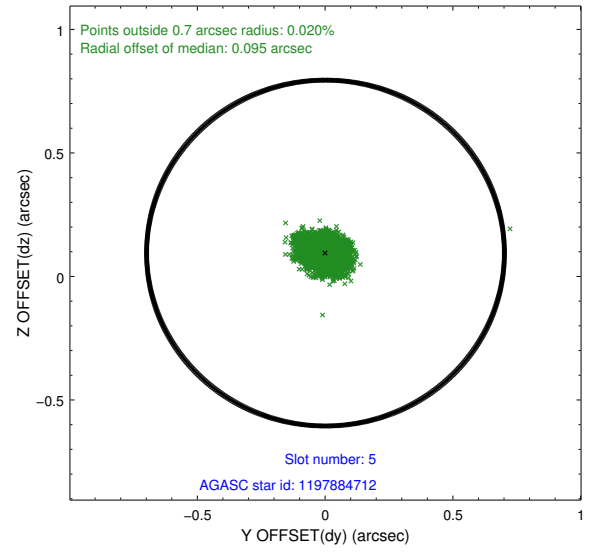
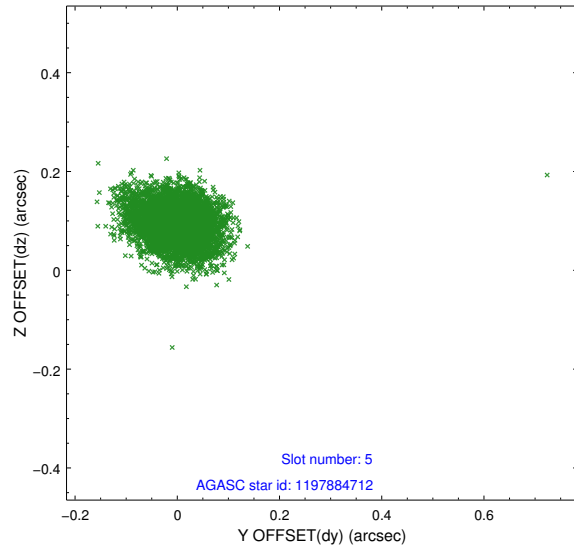
2.4.1 Slot 3



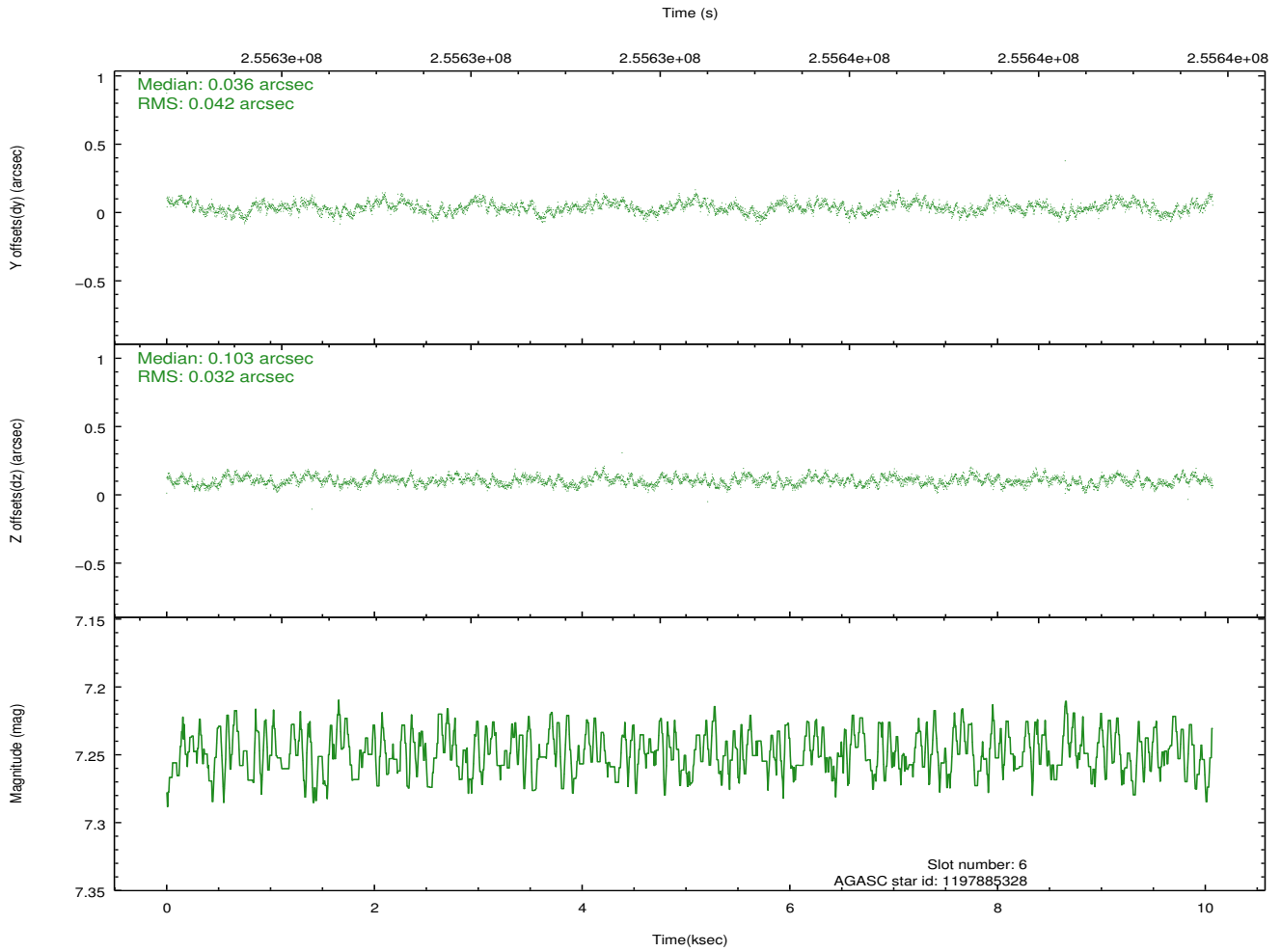
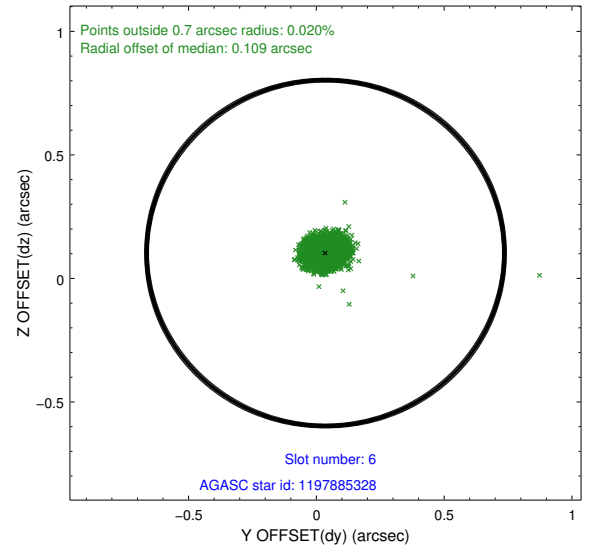
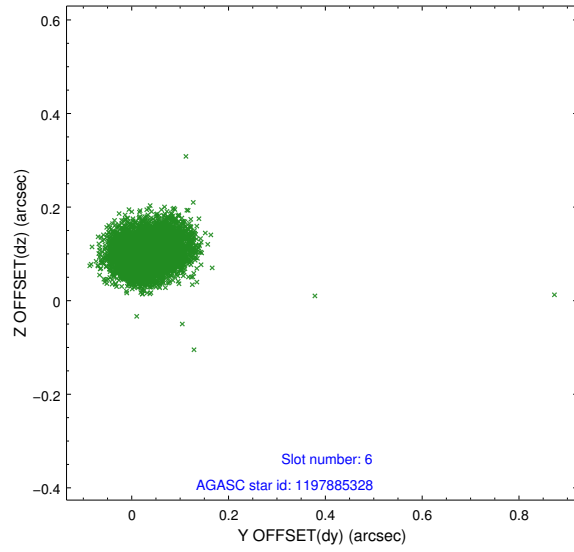
2.4.2 Slot 4



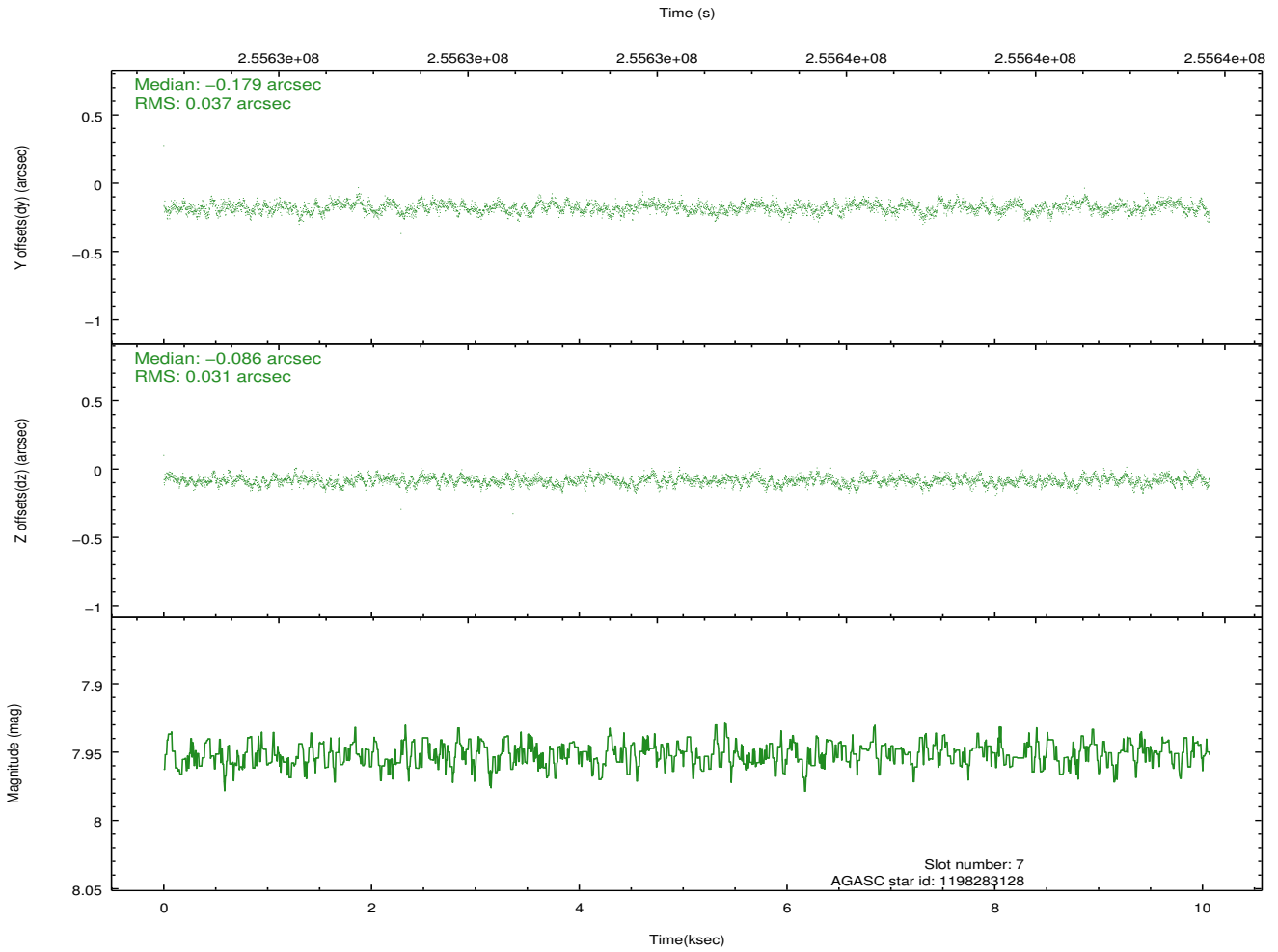
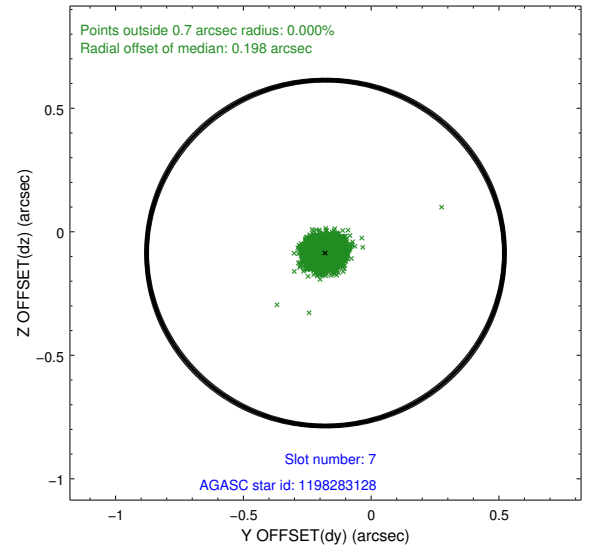
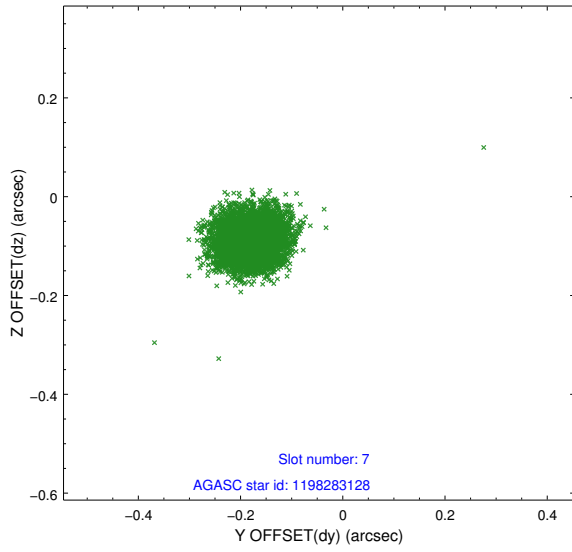
2.4.3 Slot 5



2.4.4 Slot 6

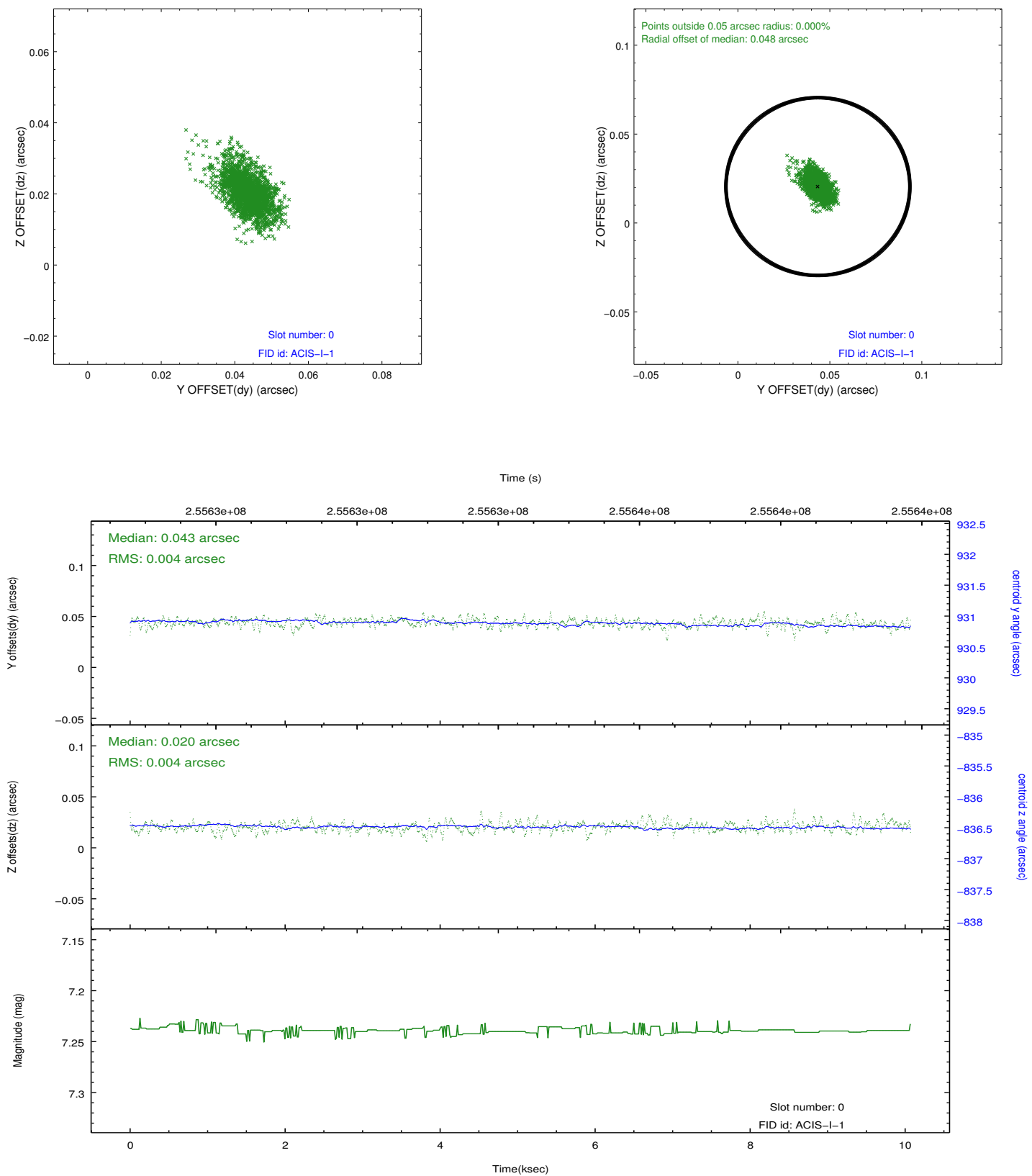


2.4.5 Slot 7

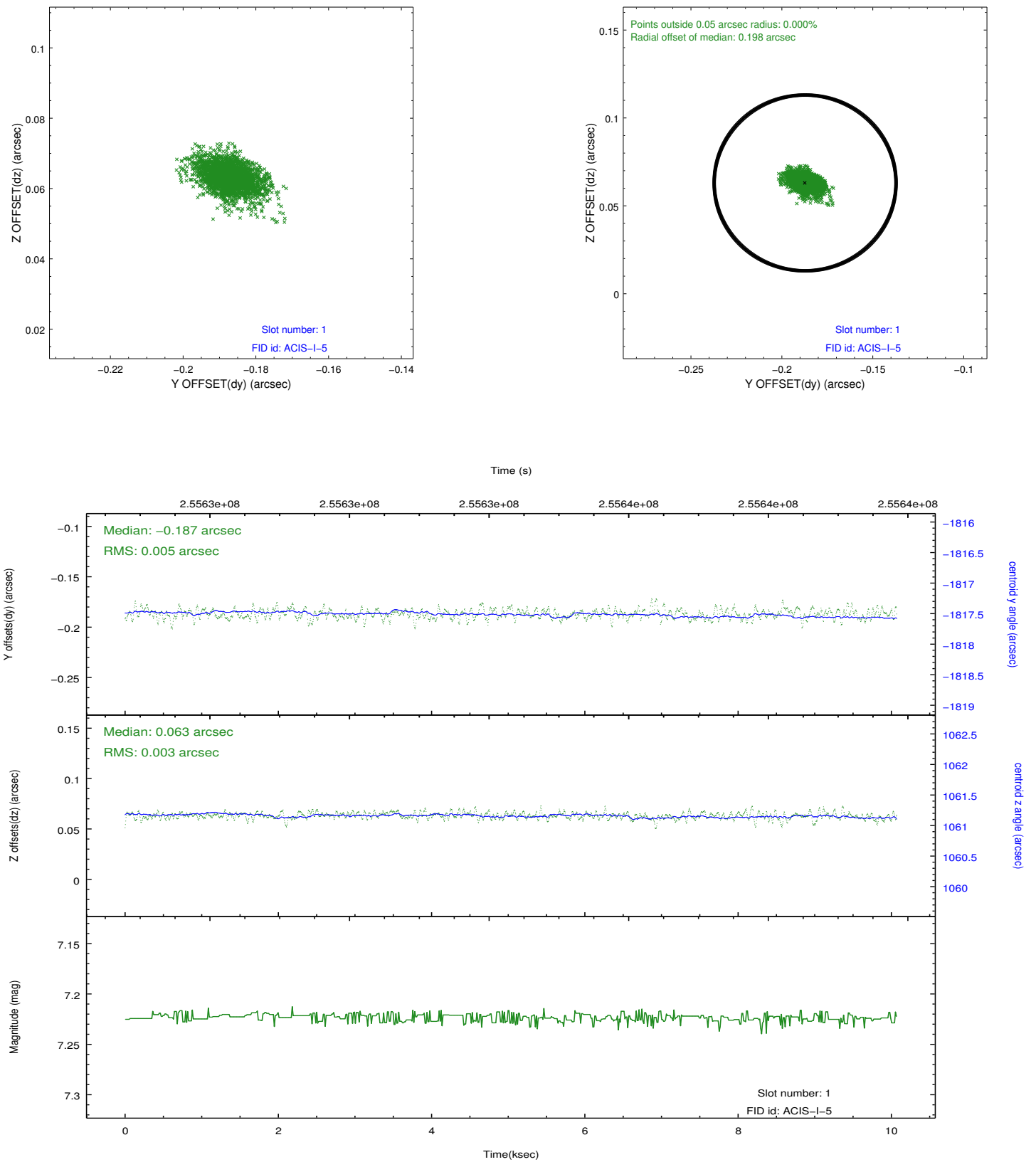


2.5 FID Slots

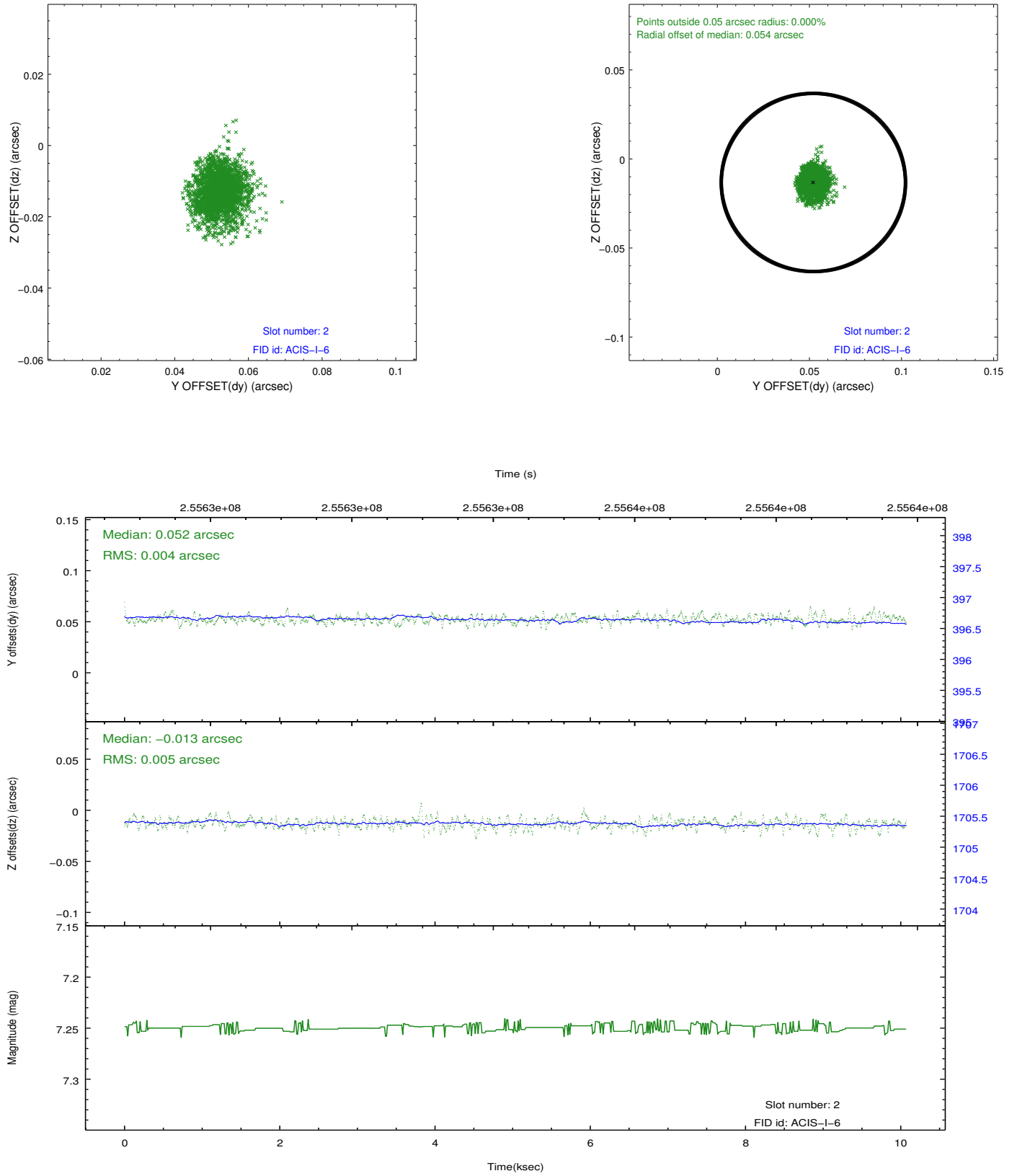
2.5.1 Slot 0



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) | 2012.03.27 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 9.63839996 |

A.2 Comments