

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 6355 - L2 Version 3
Chandra X-Ray Center

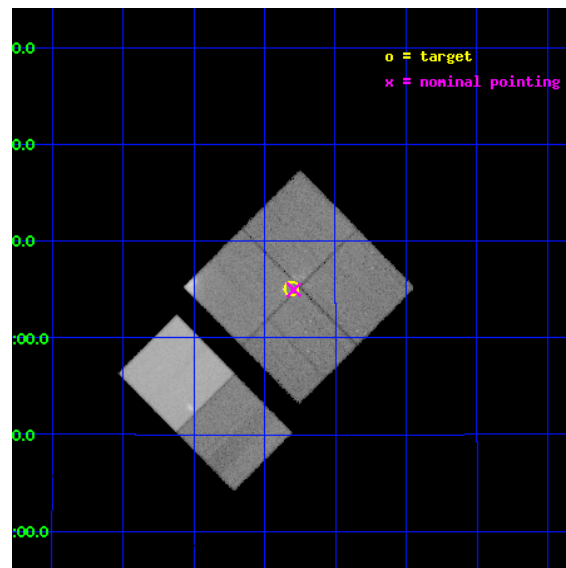
L2 Processing Date : Dec 27 2012

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1 Front

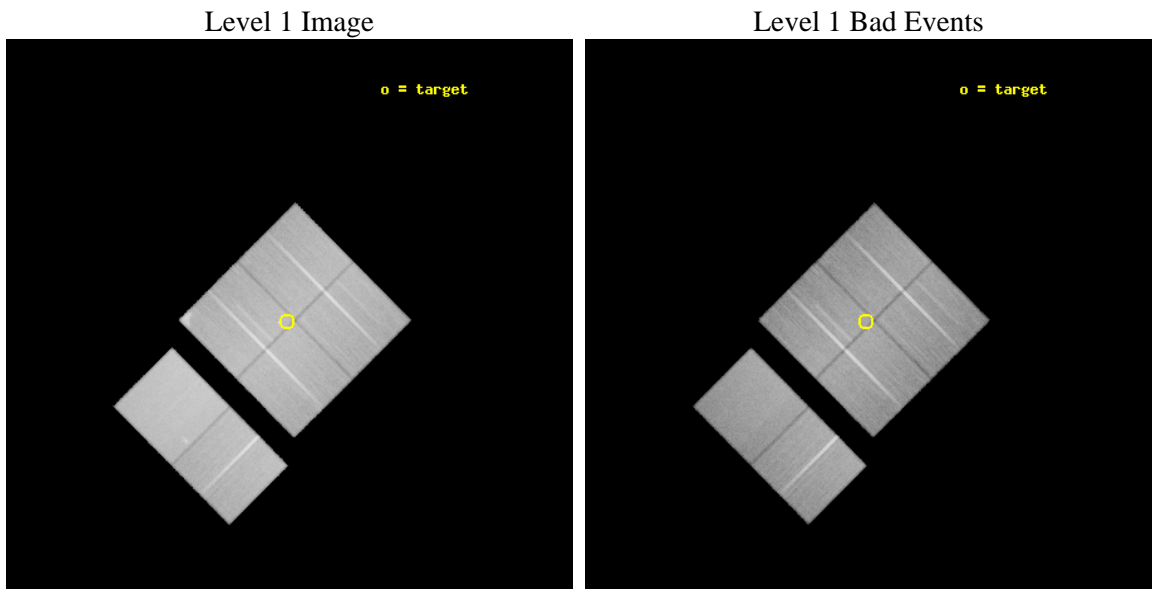
| | | |
|----------|--|---|
| seq_num | 900393 | Sequence number |
| obs_id | 6355 | Observation id |
| title | ACIS-I Reveals a 60 Mega Kelvin Cocoon Surrounding a Galactic Star Burst Monster | Proposal title |
| observer | Dr. Masahiro Tsujimoto | Principal investigator |
| object | W49A | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 287.5775 | Observer's specified target RA [deg] |
| dec_targ | 9.084444 | Observer's specified target Dec [deg] |
| ra_nom | 287.57313599341 | Nominal RA [deg] |
| dec_nom | 9.0826702967498 | Nominal Dec [deg] |
| roll_nom | 225.20937359838 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 63956.971349508 | Sum of GTIs [s] |
| livetime | 63147.109668015 | Livetime [s] |
| ontime0 | 63950.366259009 | Sum of GTIs [s] |
| ontime1 | 63953.64827922 | Sum of GTIs [s] |
| ontime2 | 63956.930309504 | Sum of GTIs [s] |
| ontime3 | 63956.971349508 | Sum of GTIs [s] |
| ontime6 | 63950.571478754 | Sum of GTIs [s] |
| ontime7 | 63957.012389511 | Sum of GTIs [s] |
| l2events | 542467 | Number of level 2 events |



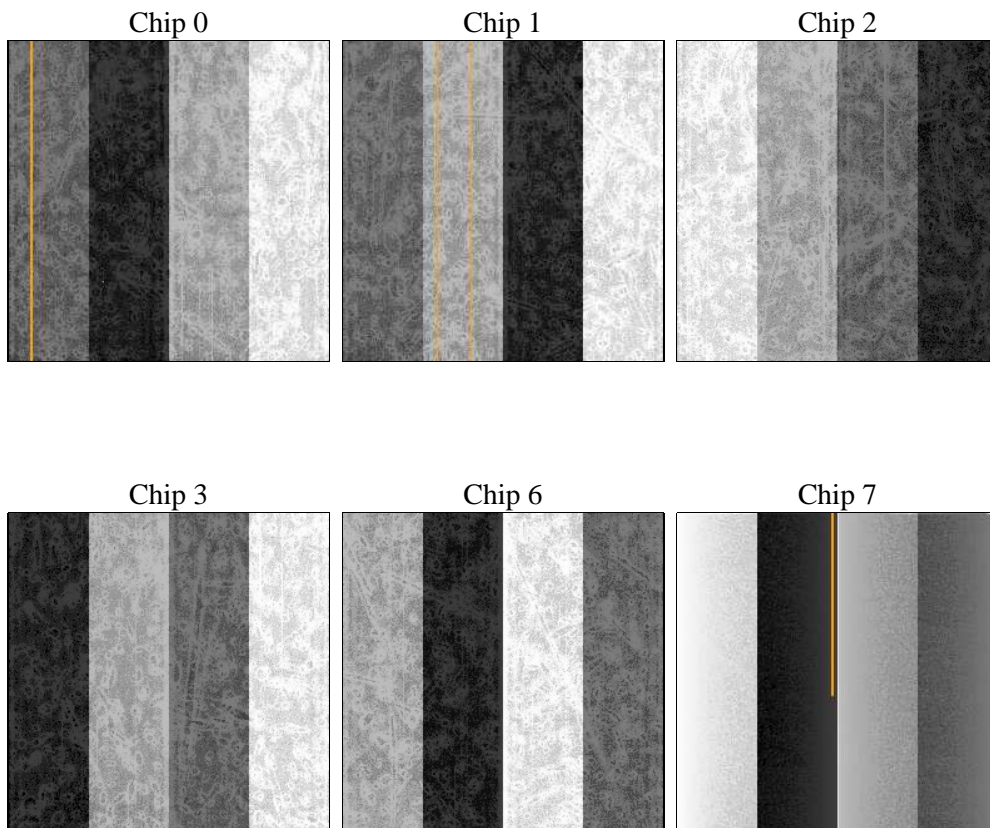
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 1 | Obi number | sched_exp_time | 64000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.5.1.1 | Processing system revision | ontime | 63956.971349508 | Sum of GTIs [s] |
| caldsver | 4.5.5 | | ontime0 | 63950.366259009 | Sum of GTIs [s] |
| date | 2012-12-27T04:31:34 | Date and time of file creation | ontime1 | 63953.64827922 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime2 | 63956.930309504 | Sum of GTIs [s] |
| | | | ontime3 | 63956.971349508 | Sum of GTIs [s] |
| | | | ontime6 | 63950.571478754 | Sum of GTIs [s] |
| | | | ontime7 | 63957.012389511 | Sum of GTIs [s] |
| | | | l1events | 2970648 | 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 | 435342 | 442293 | 468271 | 488619 | 494598 | 641525 | grade 0 events | 26165 | 25410 | 27219 | 39573 | 23184 | 23993 |
| rejected events | 373452 | 377439 | 407322 | 410827 | 434500 | 374722 | | 6% | 5% | 5% | 8% | 4% | 3% |
| rejected % | 85% | 85% | 86% | 84% | 87% | 58% | grade 1 events | 277 | 212 | 281 | 360 | 250 | 645 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 13907 | 15018 | 12909 | 14390 | 13808 | 53706 |
| | | | | | | | | 3% | 3% | 2% | 2% | 2% | 8% |
| | | | | | | | grade 3 events | 5638 | 5799 | 5267 | 6133 | 5394 | 23816 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 3% |
| | | | | | | | grade 4 events | 5249 | 5752 | 5520 | 6230 | 5335 | 23406 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 3% |
| | | | | | | | grade 5 events | 18893 | 20103 | 17936 | 20917 | 22396 | 60877 |
| | | | | | | | | 4% | 4% | 3% | 4% | 4% | 9% |
| | | | | | | | grade 6 events | 10932 | 12876 | 10037 | 11470 | 12379 | 141897 |
| | | | | | | | | 2% | 2% | 2% | 2% | 2% | 22% |
| | | | | | | | grade 7 events | 354281 | 357123 | 389102 | 389546 | 411852 | 313185 |
| | | | | | | | | 81% | 80% | 83% | 79% | 83% | 48% |

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 | VFAINT | VFAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 287.580125 | 287.5731359934078 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 9.109197 | 9.082670296749795 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 224.999582 | 225.2093735983755 | [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) | 239562410.184000 | 239561247.42167 | | | |
| Observation start date | 2005-08-04T17:05:46 | 2005-08-04T16:47:27 | | | |
| [s] Observation end time (MET) | 239626410.184000 | 239627282.0247 | | | |
| Observation end date | 2005-08-05T10:52:26 | 2005-08-05T11:08:02 | | | |
| Read mode | TIMED | TIMED | | | |

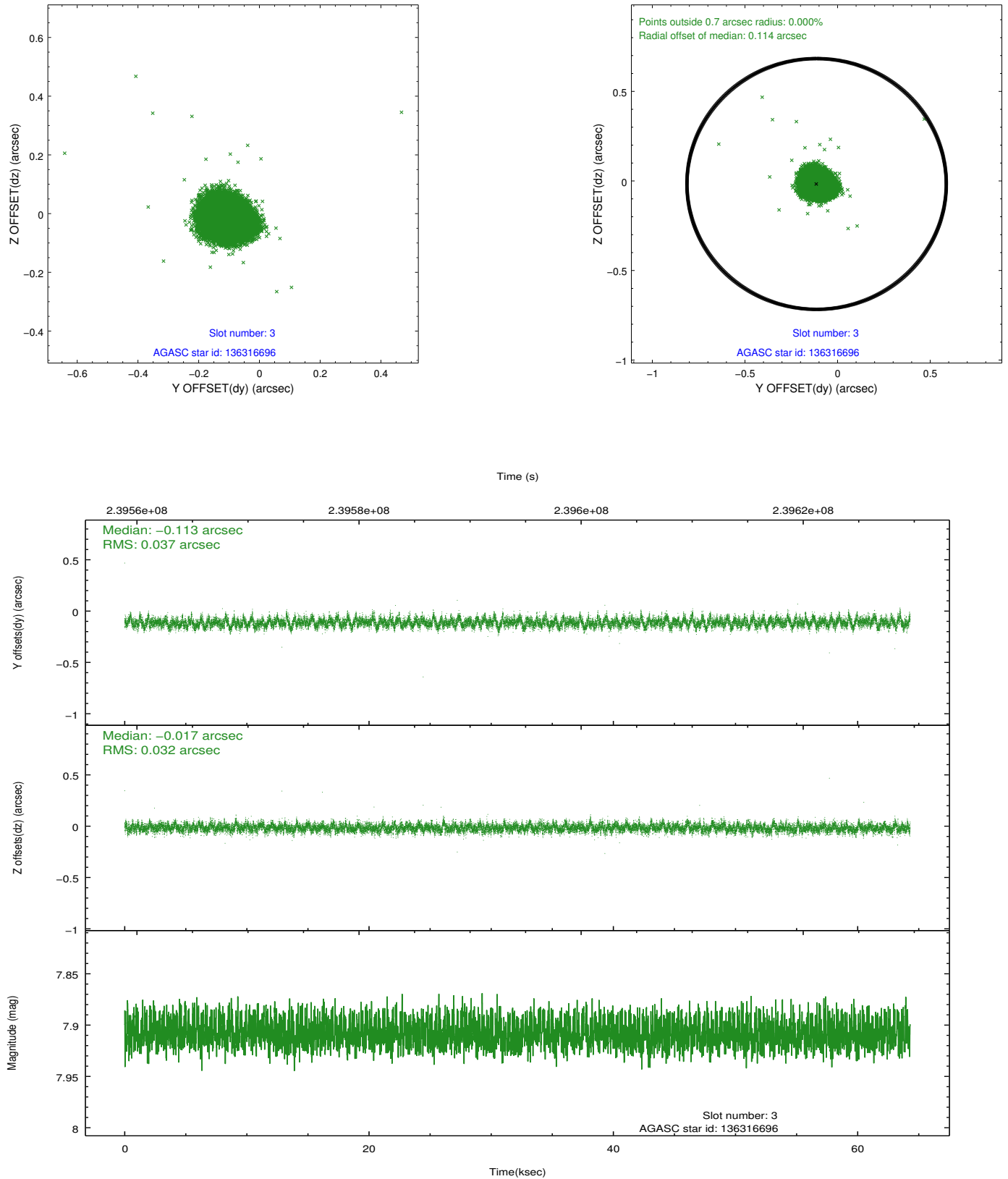
2.3 Aspect

Slot Statistics

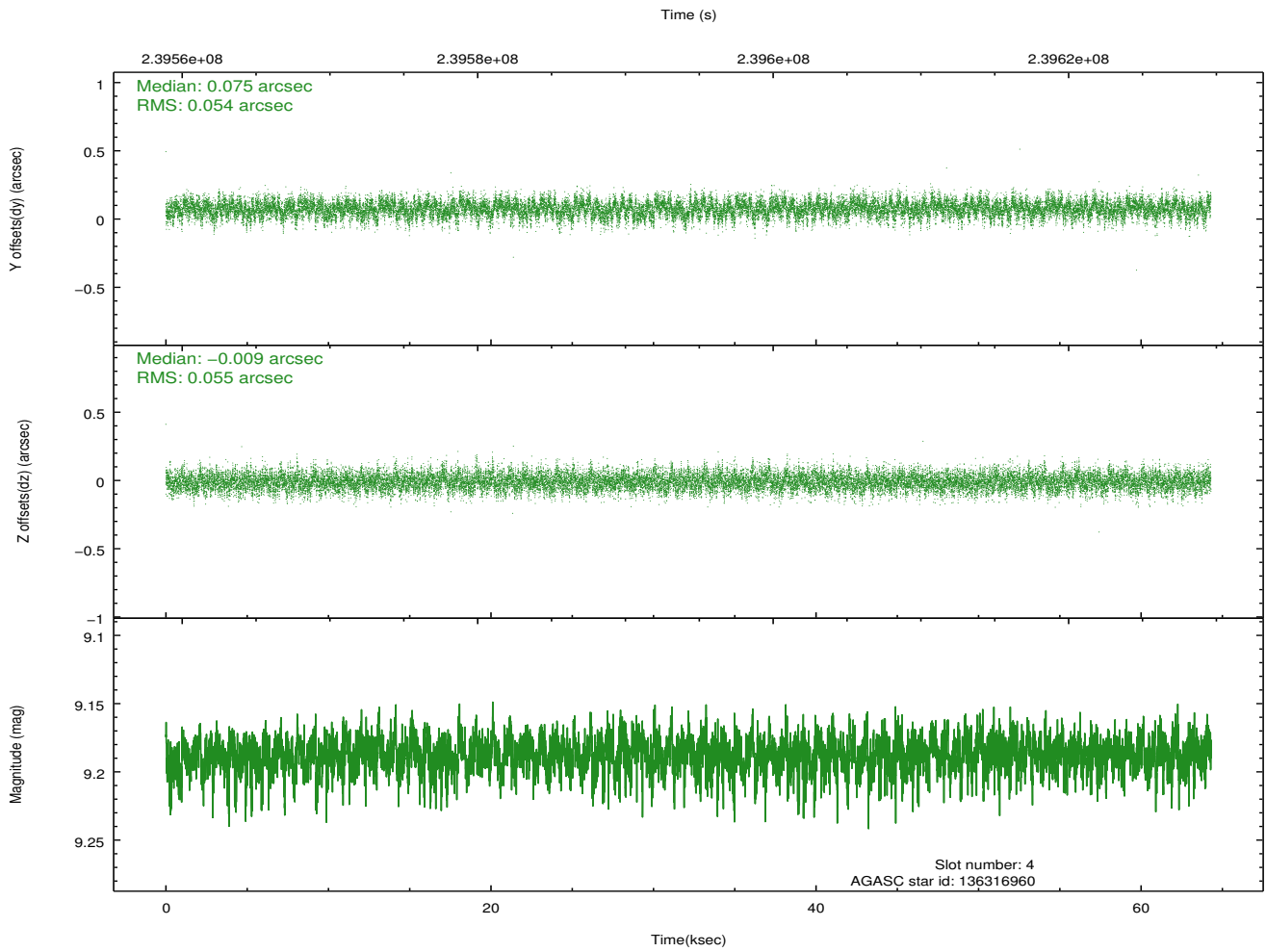
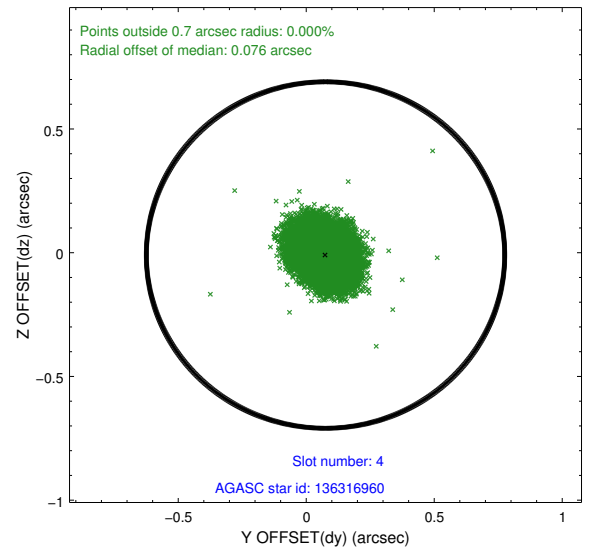
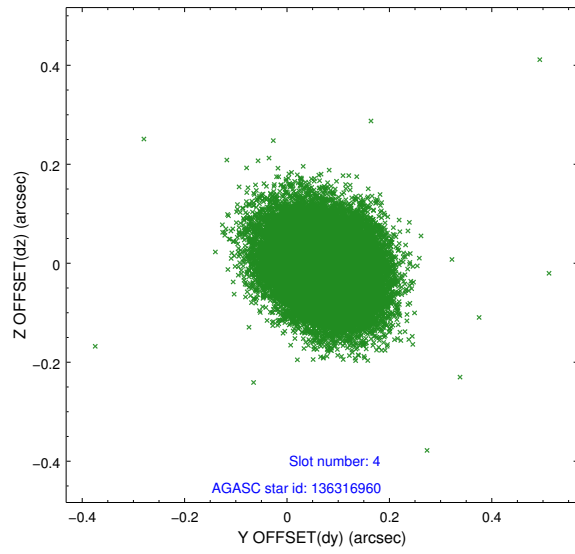
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|----------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.25 | 15681 | 0.006 | 0.015 | 0.016 | 0.050 | 0.000000 | 0.000000 | 932.54 | -833.66 |
| 1 | FID | ACIS-I-5 | 7.23 | 15684 | -0.161 | 0.027 | 0.010 | 0.028 | 0.000000 | 0.000000 | -1815.76 | 1063.89 |
| 2 | FID | ACIS-I-6 | 7.25 | 15683 | 0.062 | 0.029 | 0.012 | 0.028 | 0.000000 | 0.000000 | 398.19 | 1708.32 |
| 3 | GUIDE | 136316696 | 7.91 | 31366 | -0.113 | -0.017 | 0.051 | 0.083 | 287.190166 | 9.367792 | 321.13 | -1638.23 |
| 4 | GUIDE | 136316960 | 9.19 | 31354 | 0.075 | -0.009 | 0.082 | 0.134 | 287.104881 | 9.133555 | 1132.22 | -1256.93 |
| 5 | GUIDE | 136317344 | 9.26 | 31347 | 0.182 | -0.009 | 0.085 | 0.139 | 287.032148 | 8.921467 | 1855.56 | -900.83 |
| 6 | GUIDE | 136979696 | 9.39 | 31350 | -0.017 | 0.124 | 0.085 | 0.138 | 287.607746 | 9.703592 | -1582.02 | -1443.59 |
| 7 | GUIDE | 136451040 | 7.20 | 31360 | -0.126 | -0.094 | 0.051 | 0.084 | 287.806788 | 8.498975 | 982.49 | 2124.09 |

2.4 Star Slots

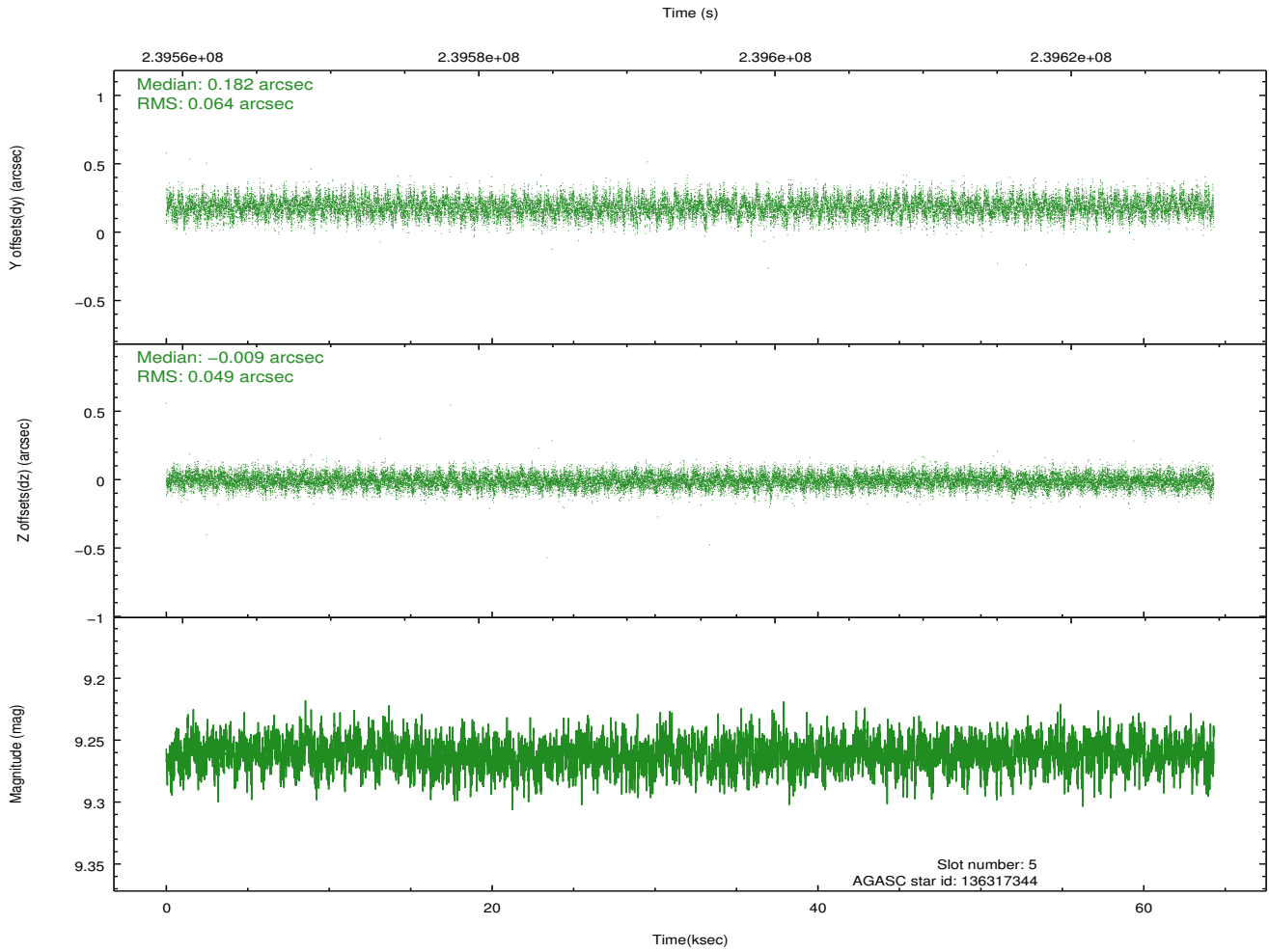
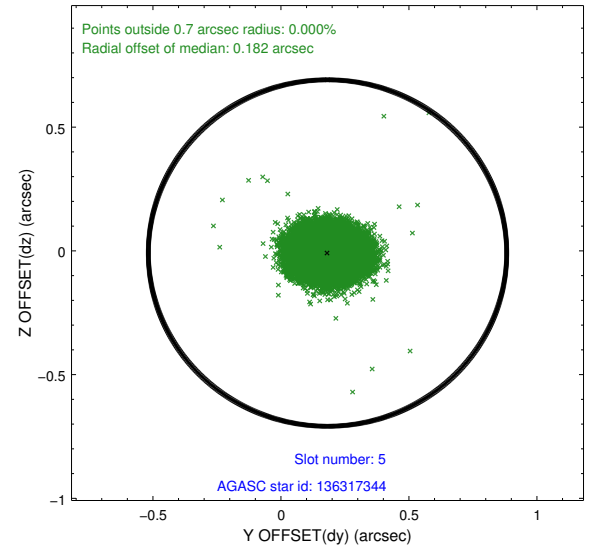
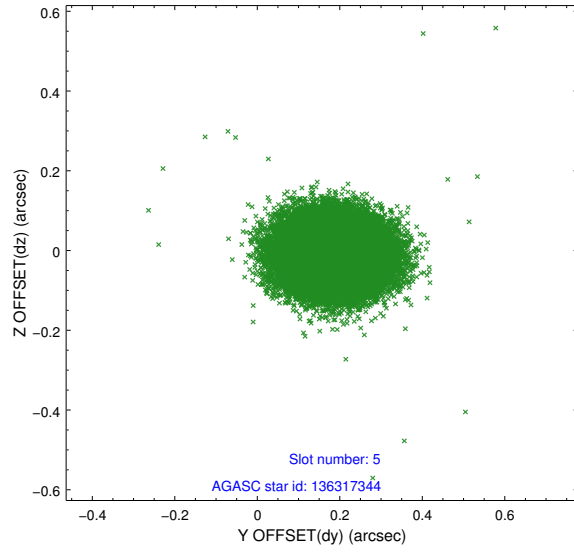
2.4.1 Slot 3



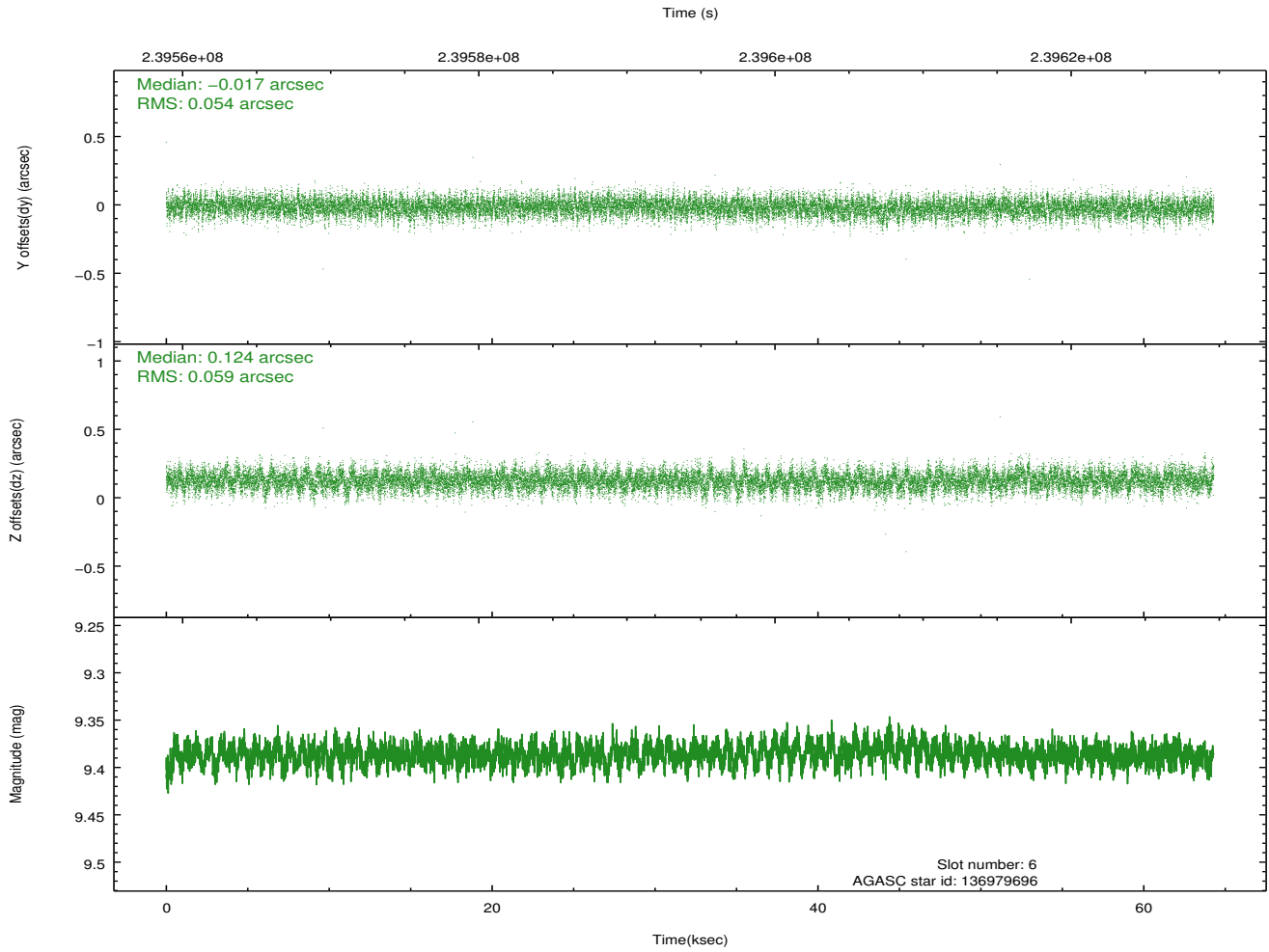
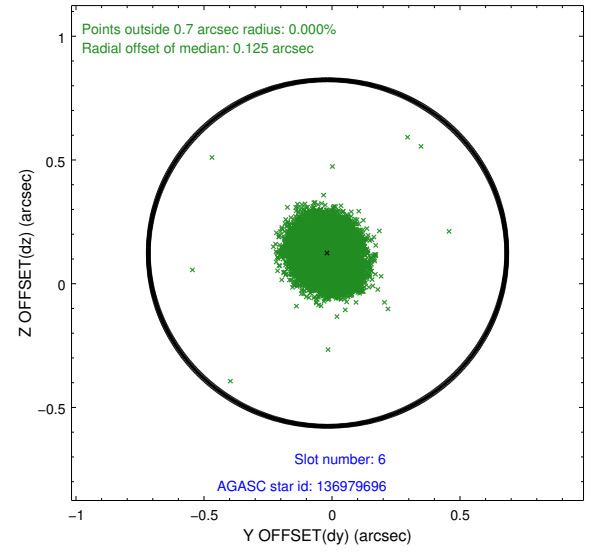
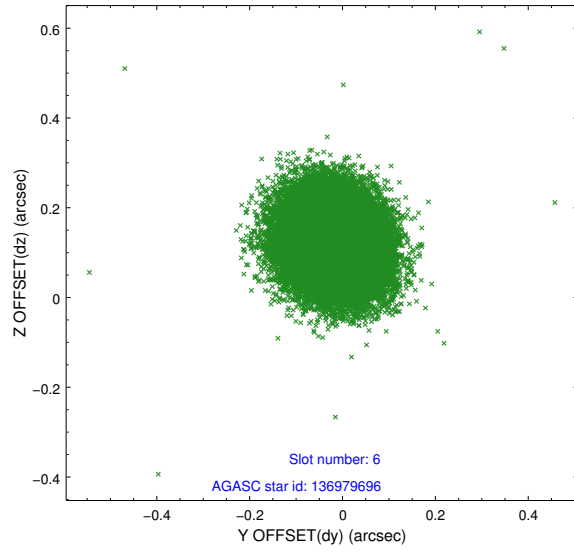
2.4.2 Slot 4



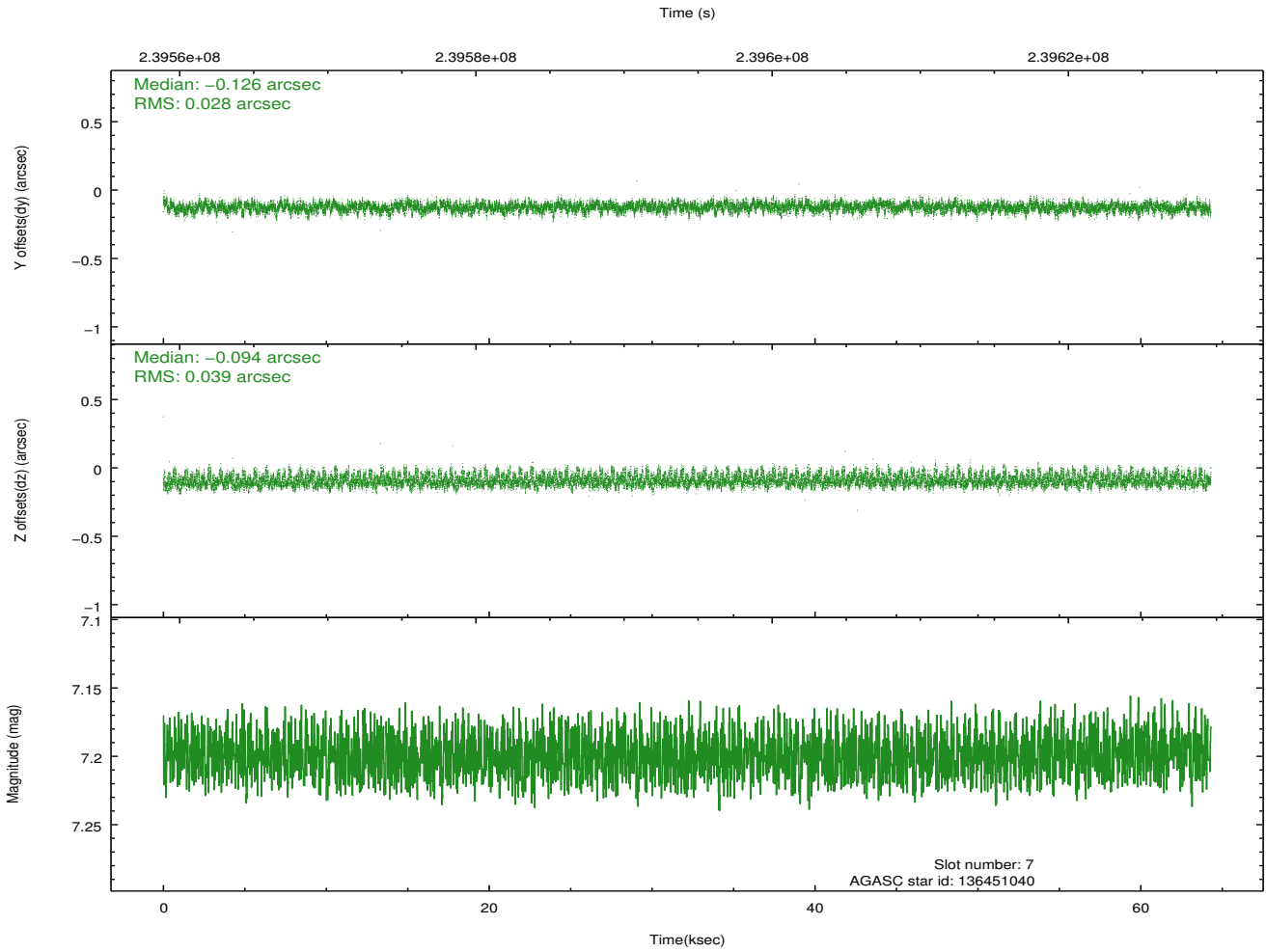
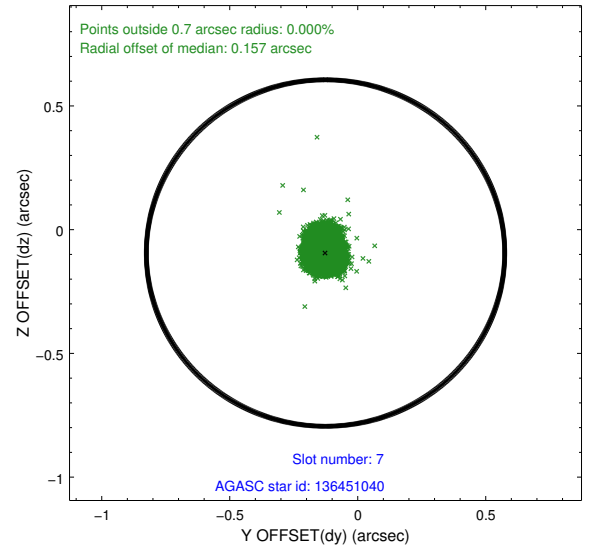
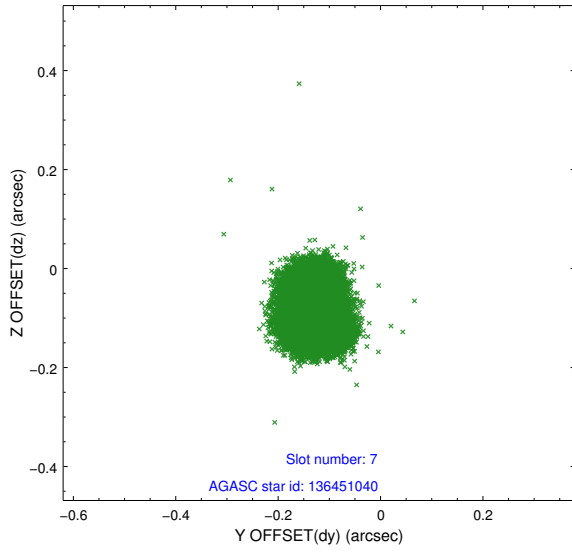
2.4.3 Slot 5



2.4.4 Slot 6

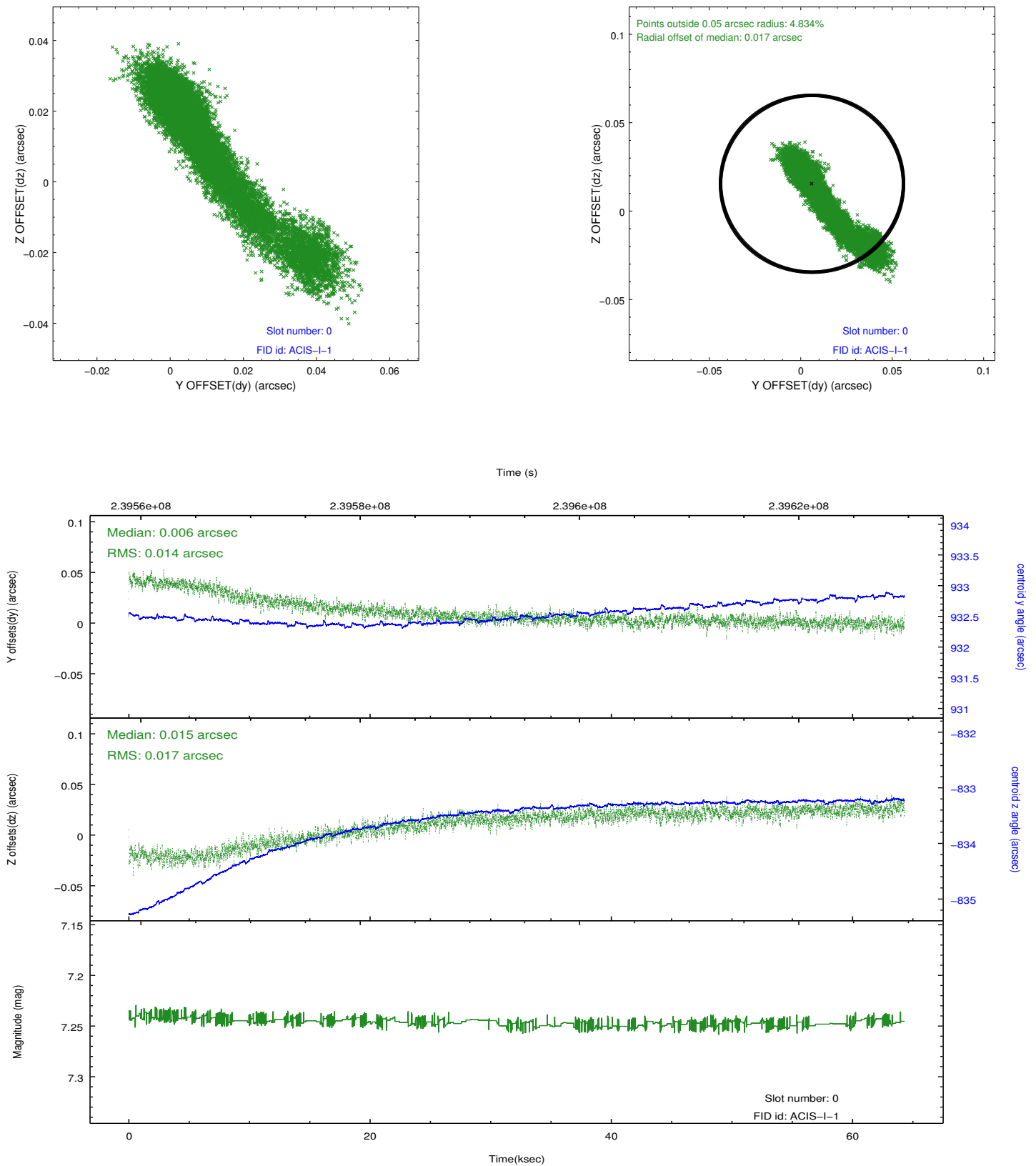


2.4.5 Slot 7

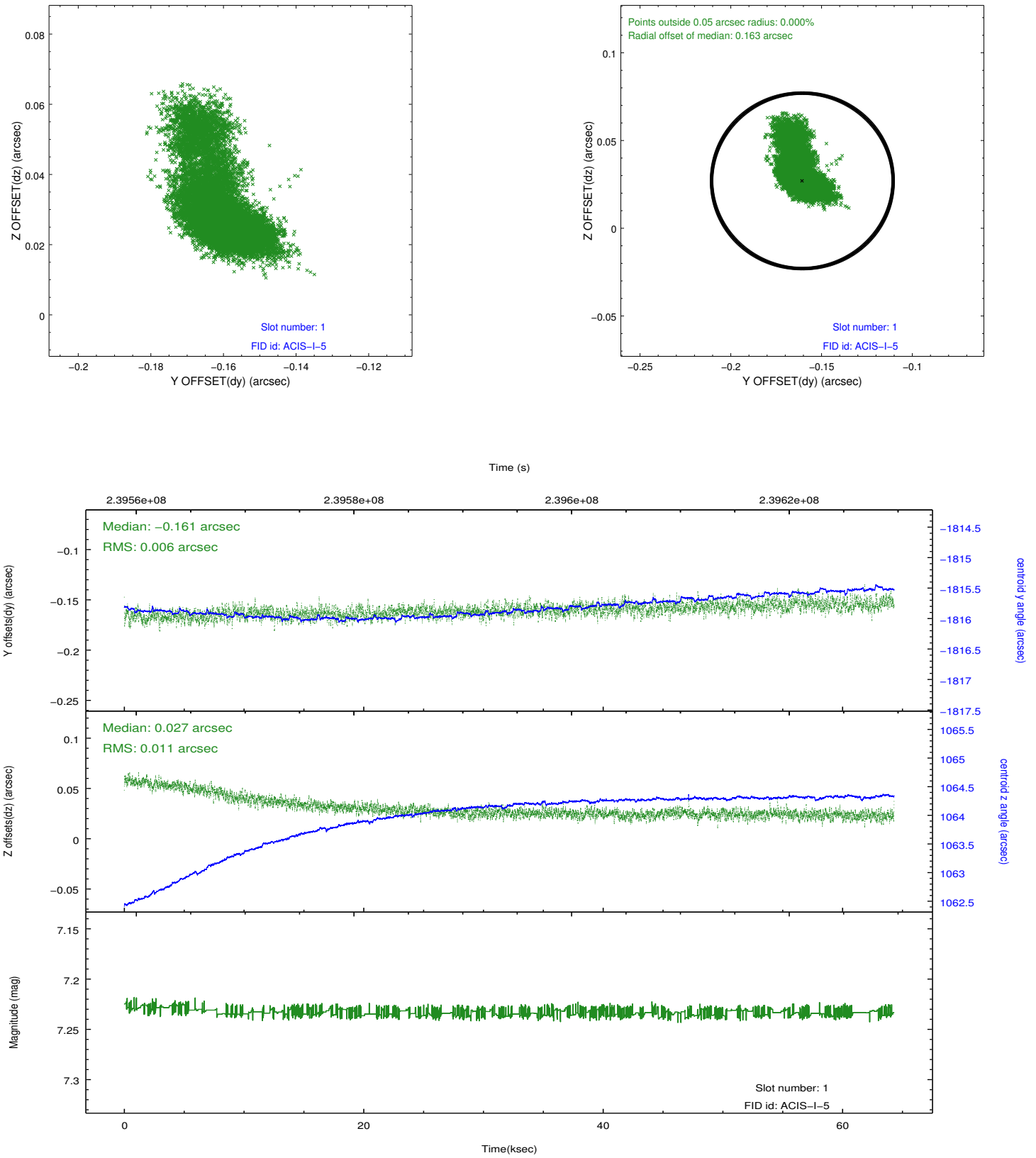


2.5 FID Slots

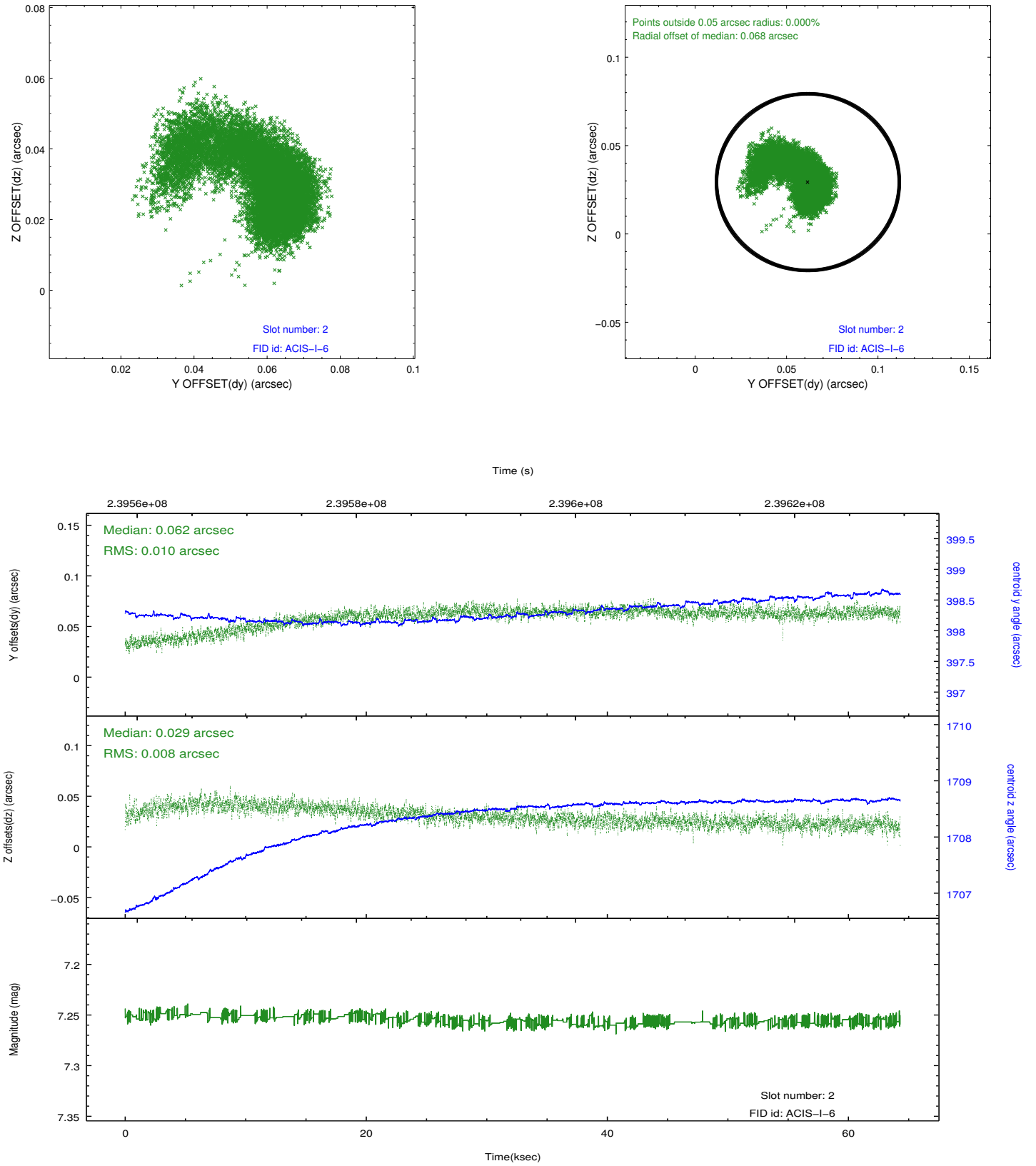
2.5.1 Slot 0



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) | 2013.01.24 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 63.96137 |

A.2 Comments