

V&V Reference Report

L2 ASCDS Version : 8.4.3.1

Observation 6868 - L2 Version 2
Chandra X-Ray Center

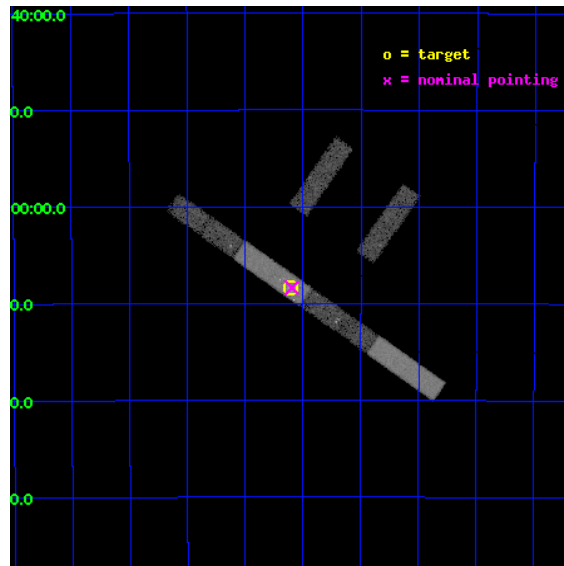
L2 Processing Date : Mar 30 2012

Contents

| | | |
|----------|-------------------------------|-----------|
| 1 | Front | 2 |
| 2 | OBI | 3 |
| 2.1 | OBI | 3 |
| 2.1.1 | Images | 3 |
| 2.1.2 | Bias | 3 |
| 2.1.3 | Parameters | 4 |
| 2.1.4 | Events | 4 |
| 2.2 | Compared Parameters | 5 |
| 2.3 | Aspect | 6 |
| 2.4 | Star Slots | 9 |
| 2.4.1 | Slot 3 | 9 |
| 2.4.2 | Slot 4 | 10 |
| 2.4.3 | Slot 5 | 11 |
| 2.4.4 | Slot 6 | 12 |
| 2.4.5 | Slot 7 | 13 |
| 2.5 | FID Slots | 14 |
| 2.5.1 | Slot 0 | 14 |
| 2.5.2 | Slot 1 | 15 |
| 2.5.3 | Slot 2 | 16 |
| A | Summary | 17 |
| A.1 | Status | 17 |
| A.2 | Comments | 17 |

1 Front

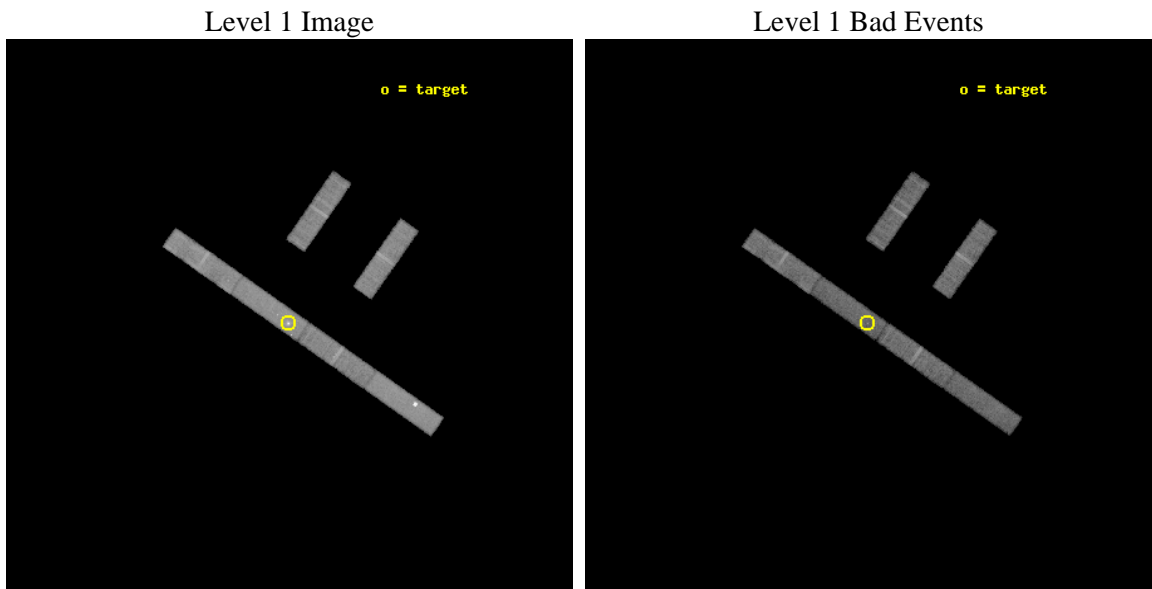
| | | |
|----------|---|---|
| seq_num | 701286 | Sequence number |
| obs_id | 6868 | Observation id |
| title | Short-time monitoring of the extreme variations in NGC~1365 | Propos |
| observer | Dr Guido Risaliti | Principal investigator |
| object | NGC 1365 | Source name |
| dtycycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 53.401667 | Observer's specified target RA [deg] |
| dec_targ | -36.140278 | Observer's specified target Dec [deg] |
| ra_nom | 53.399190988428 | Nominal RA [deg] |
| dec_nom | -36.13960406028 | Nominal Dec [deg] |
| roll_nom | 214.98946336357 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 15151.399917871 | Sum of GTIs [s] |
| livetime | 14606.446671158 | Livetime [s] |
| ontime2 | 15151.399917871 | Sum of GTIs [s] |
| ontime3 | 15151.399917871 | Sum of GTIs [s] |
| ontime5 | 15151.399917871 | Sum of GTIs [s] |
| ontime6 | 15151.399917871 | Sum of GTIs [s] |
| ontime7 | 15151.399917871 | Sum of GTIs [s] |
| ontime8 | 15151.399917871 | Sum of GTIs [s] |
| l2events | 65879 | Number of level 2 events |



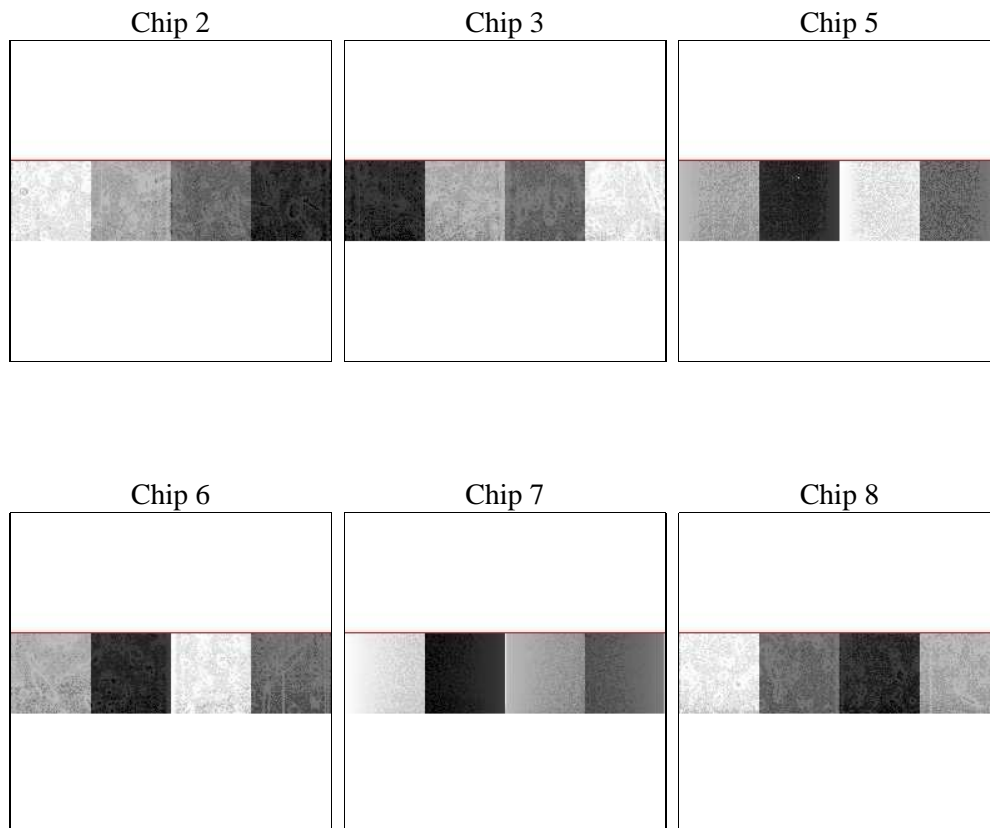
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 15000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.3 | Processing system revision | ontime | 15151.399917871 | Sum of GTIs [s] |
| caldbver | 4.4.8 | | ontime2 | 15151.399917871 | Sum of GTIs [s] |
| date | 2012-03-30T05:30:28 | Date and time of file creation | ontime3 | 15151.399917871 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime5 | 15151.399917871 | Sum of GTIs [s] |
| | | | ontime6 | 15151.399917871 | Sum of GTIs [s] |
| | | | ontime7 | 15151.399917871 | Sum of GTIs [s] |
| | | | ontime8 | 15151.399917871 | Sum of GTIs [s] |
| | | | l1events | 319524 | Number of level 1 events |

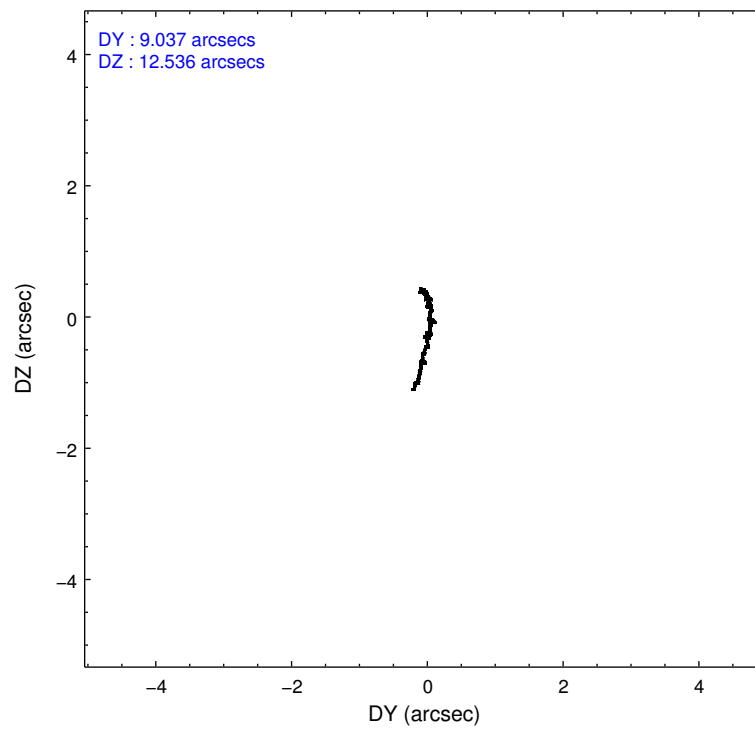
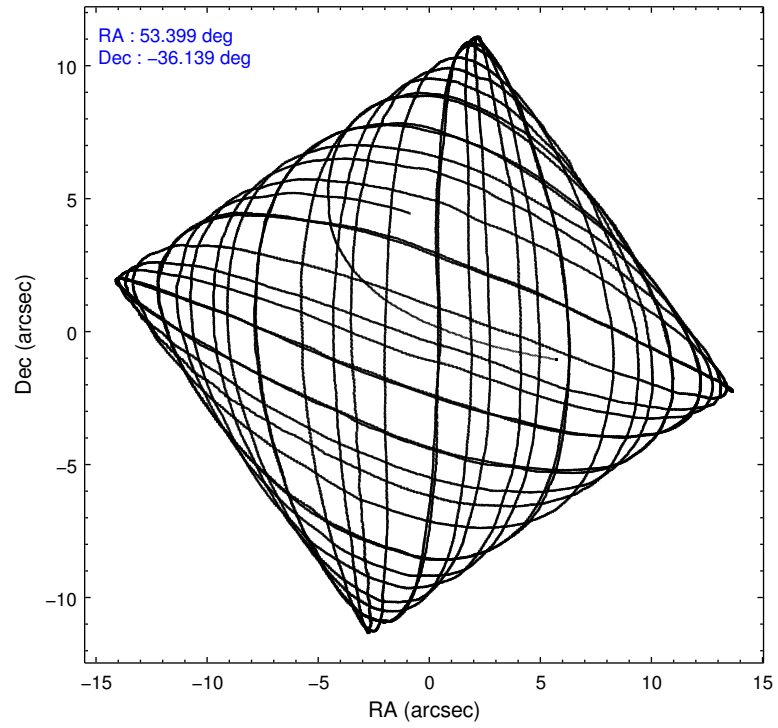
2.1.4 Events

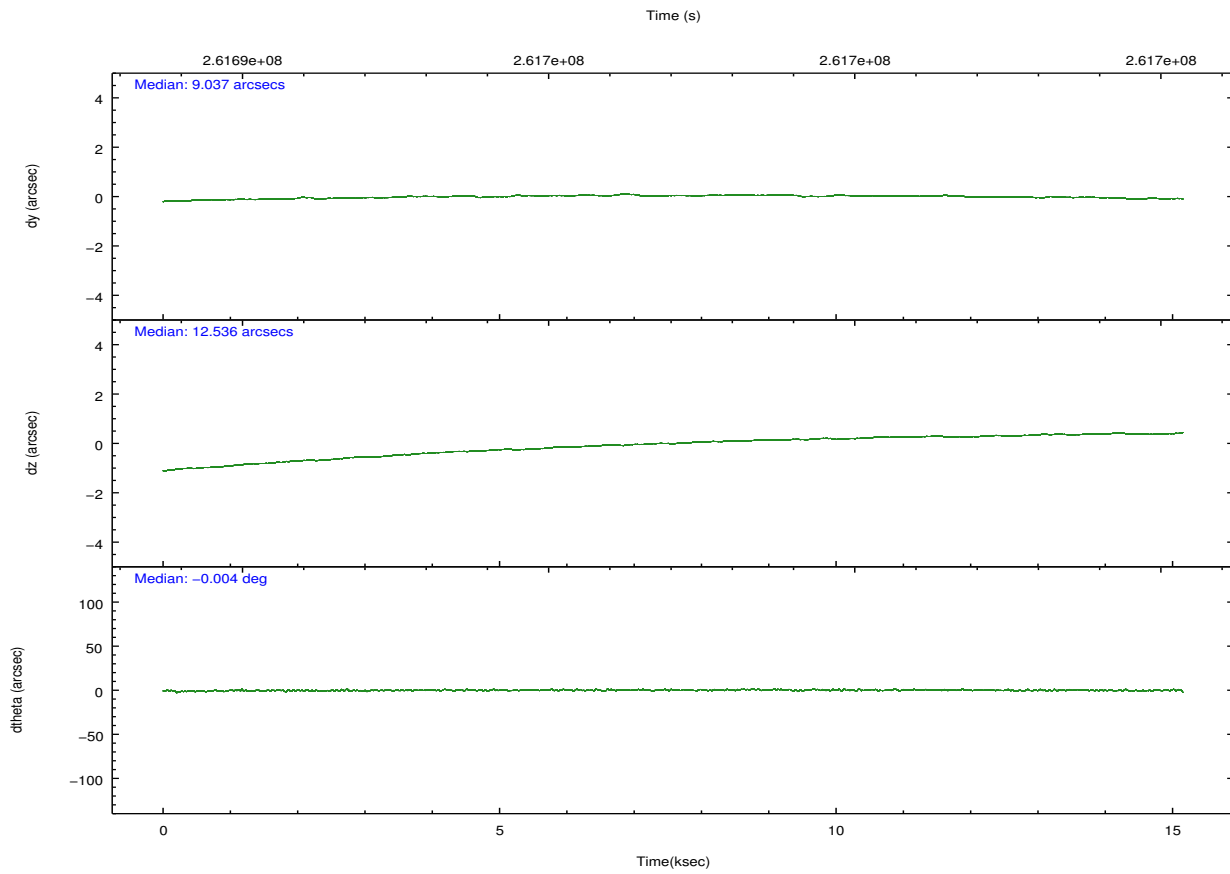
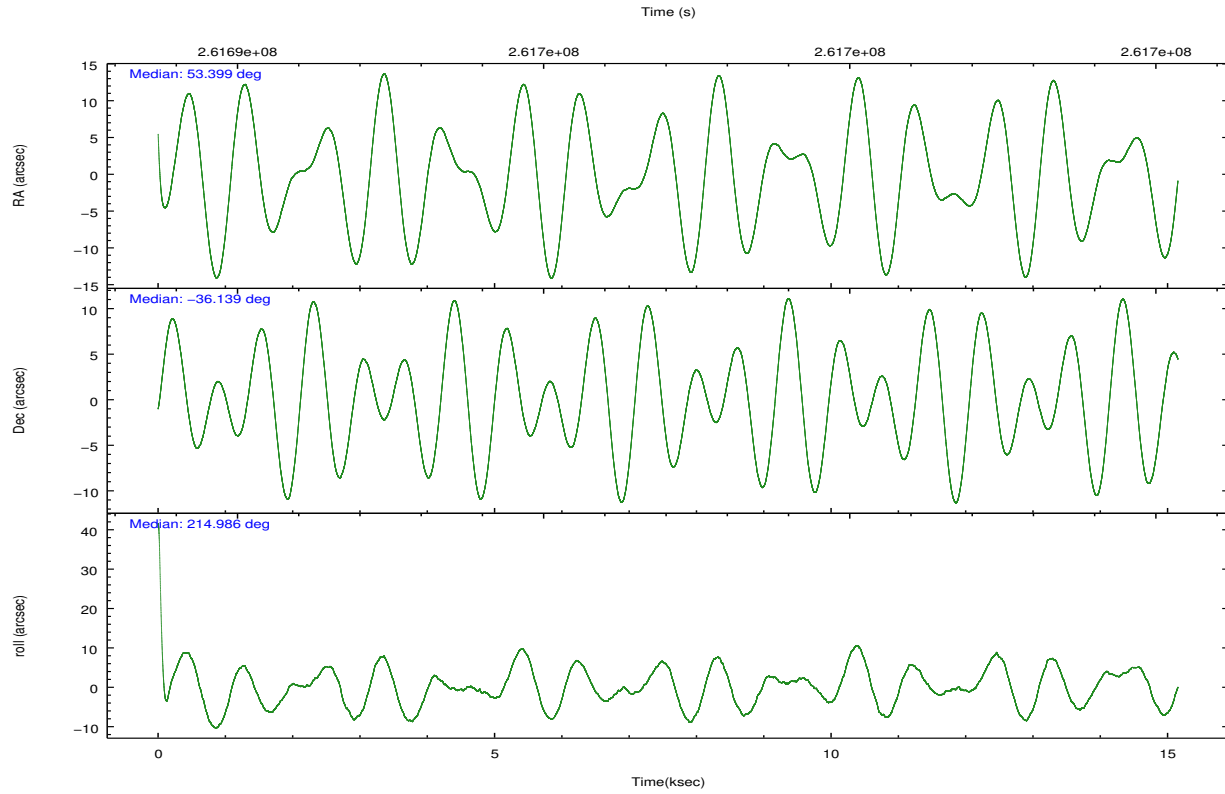
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|-------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 47426 | 41707 | 70193 | 43734 | 60212 | 56252 | grade 0 events | 2086 | 2011 | 14879 | 2131 | 4278 | 3327 |
| rejected events | 42498 | 37258 | 34827 | 38778 | 32860 | 46053 | | 4% | 4% | 21% | 4% | 7% | 5% |
| rejected % | 89% | 89% | 49% | 88% | 54% | 81% | grade 1 events | 21 | 17 | 89 | 20 | 87 | 25 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 1099 | 793 | 8007 | 1003 | 6568 | 2271 |
| | | | | | | | | 2% | 1% | 11% | 2% | 10% | 4% |
| | | | | | | | grade 3 events | 660 | 688 | 1622 | 681 | 3013 | 1244 |
| | | | | | | | | 1% | 1% | 2% | 1% | 5% | 2% |
| | | | | | | | grade 4 events | 673 | 624 | 1462 | 667 | 3041 | 1247 |
| | | | | | | | | 1% | 1% | 2% | 1% | 5% | 2% |
| | | | | | | | grade 5 events | 1571 | 1690 | 4778 | 1739 | 5154 | 2322 |
| | | | | | | | | 3% | 4% | 6% | 3% | 8% | 4% |
| | | | | | | | grade 6 events | 913 | 838 | 13202 | 987 | 12780 | 3079 |
| | | | | | | | | 1% | 2% | 18% | 2% | 21% | 5% |
| | | | | | | | grade 7 events | 40403 | 35046 | 26154 | 36506 | 25291 | 42737 |
| | | | | | | | | 85% | 84% | 37% | 83% | 42% | 75% |

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 | 53.413061 | 53.39919098842813 | Subarray requested | CUSTOM | 1/4 |
| [deg] Pointing Dec | -36.114790 | -36.13960406027974 | Subarray start row | 385 | 385 |
| [deg] Pointing Roll | 214.840979 | 214.9894633635691 | Subarray row count | 256 | 256 |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | Alternating exposures requested | N | N |
| [mm] SIM defocus | 0 | 0.001444936568705701 | [s] Primary exposure time | 0.000000 | 1.1 |
| [mm] SIM translation stage pos | -190.132523 | -190.1425803651734 | | | |
| [mm] SIM translation stage offset | 0 | 0.01005778216563158 | | | |
| [s] Observation start time (MET) | 261689610.184000 | 261687855.79465 | | | |
| Observation start date | 2006-04-17T19:32:25 | 2006-04-17T19:04:15 | | | |
| [s] Observation end time (MET) | 261704610.184000 | 261705988.0455 | | | |
| Observation end date | 2006-04-17T23:42:25 | 2006-04-18T00:06:28 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



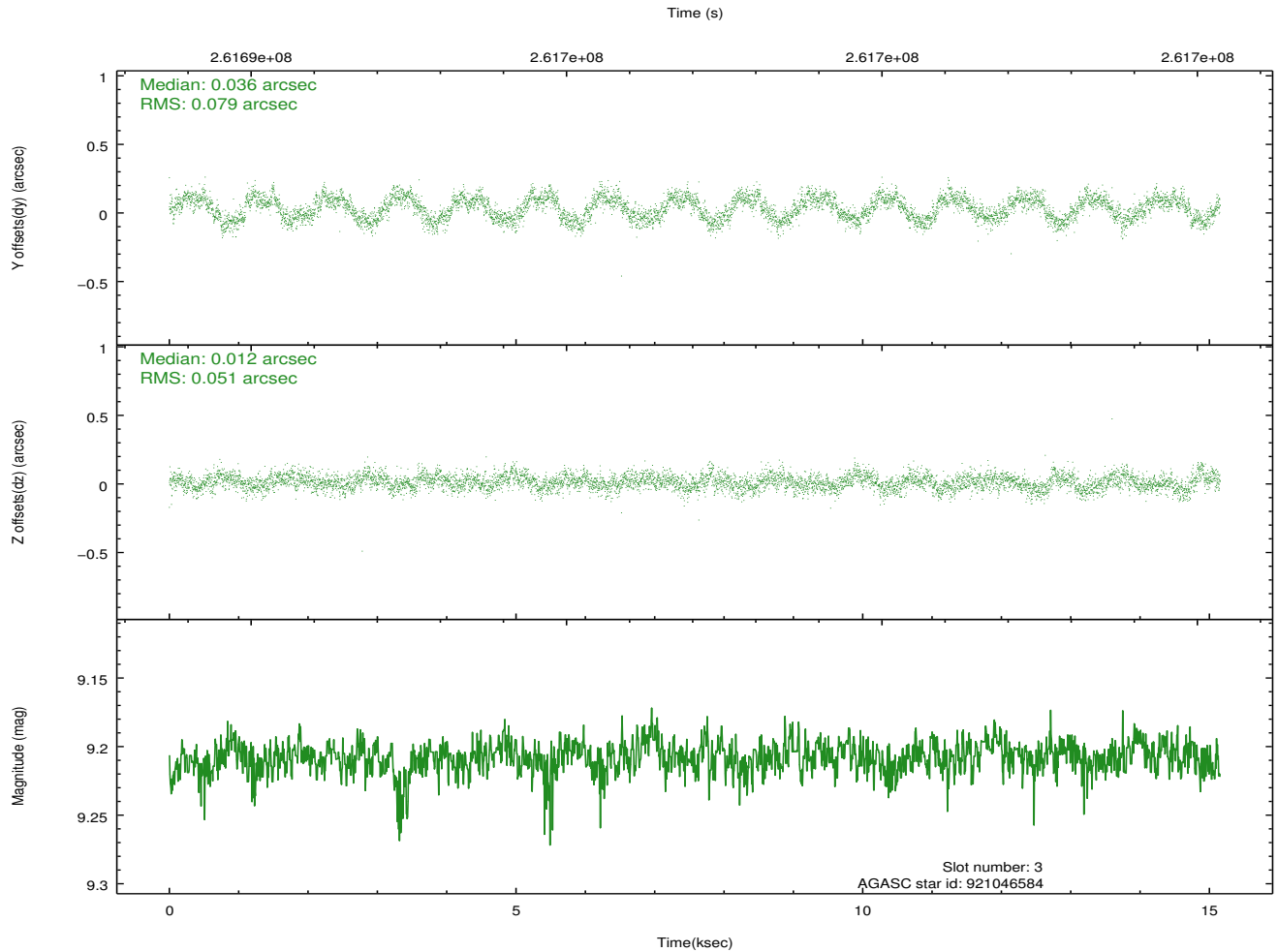
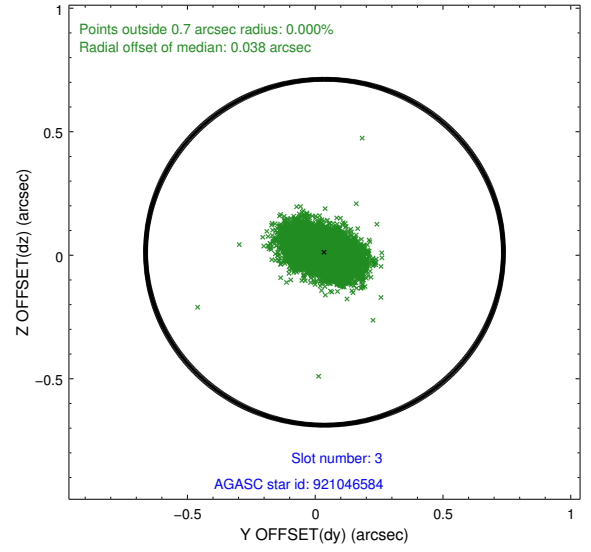
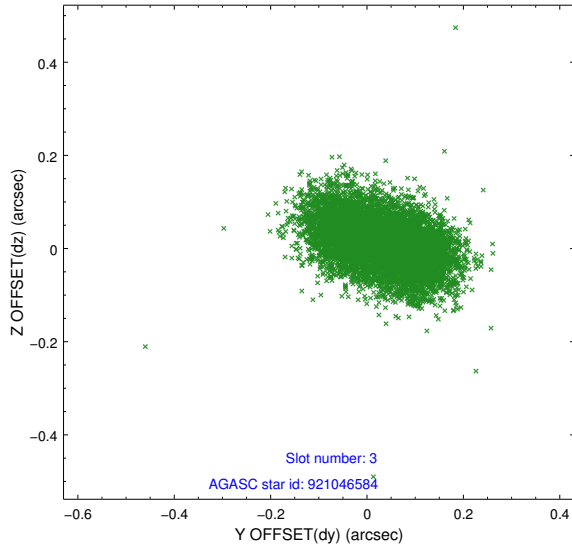


Slot Statistics

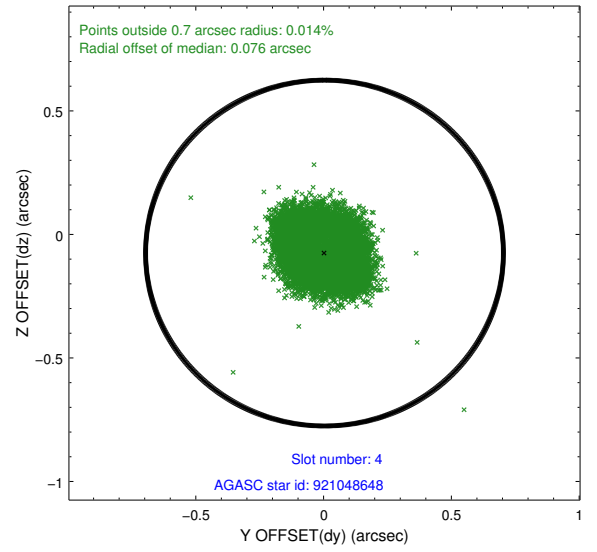
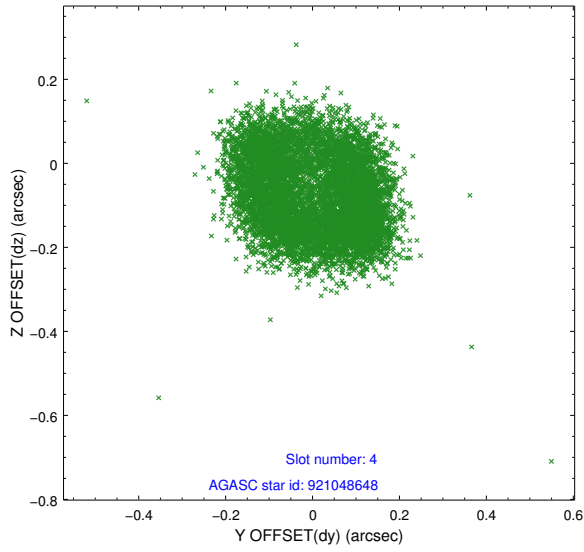
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|-----------|------------|----------|----------|
| 0 | FID | ACIS-S-1 | 7.19 | 3696 | -0.023 | -0.046 | 0.026 | 0.045 | 0.000000 | 0.000000 | 934.15 | -1729.38 |
| 1 | FID | ACIS-S-4 | 7.20 | 3695 | 0.052 | 0.022 | 0.011 | 0.020 | 0.000000 | 0.000000 | 2151.82 | 174.53 |
| 2 | FID | ACIS-S-6 | 7.35 | 3697 | -0.052 | 0.036 | 0.018 | 0.027 | 0.000000 | 0.000000 | 400.48 | 812.26 |
| 3 | GUIDE | 921046584 | 9.21 | 7389 | 0.036 | 0.012 | 0.101 | 0.158 | 53.976815 | -36.314393 | -928.91 | 1528.48 |
| 4 | GUIDE | 921048648 | 9.03 | 7390 | 0.004 | -0.075 | 0.150 | 0.206 | 53.884610 | -35.870023 | -1630.84 | 65.73 |
| 5 | GUIDE | 921967072 | 7.68 | 7393 | -0.037 | -0.024 | 0.081 | 0.126 | 54.269247 | -36.292226 | -1668.09 | 1952.94 |
| 6 | GUIDE | 921970016 | 9.39 | 7383 | 0.055 | 0.074 | 0.095 | 0.156 | 54.228536 | -36.081558 | -2011.20 | 1266.74 |
| 7 | GUIDE | 921050696 | 9.68 | 7379 | -0.052 | 0.013 | 0.126 | 0.209 | 52.859413 | -36.623296 | 2361.11 | 593.15 |

2.4 Star Slots

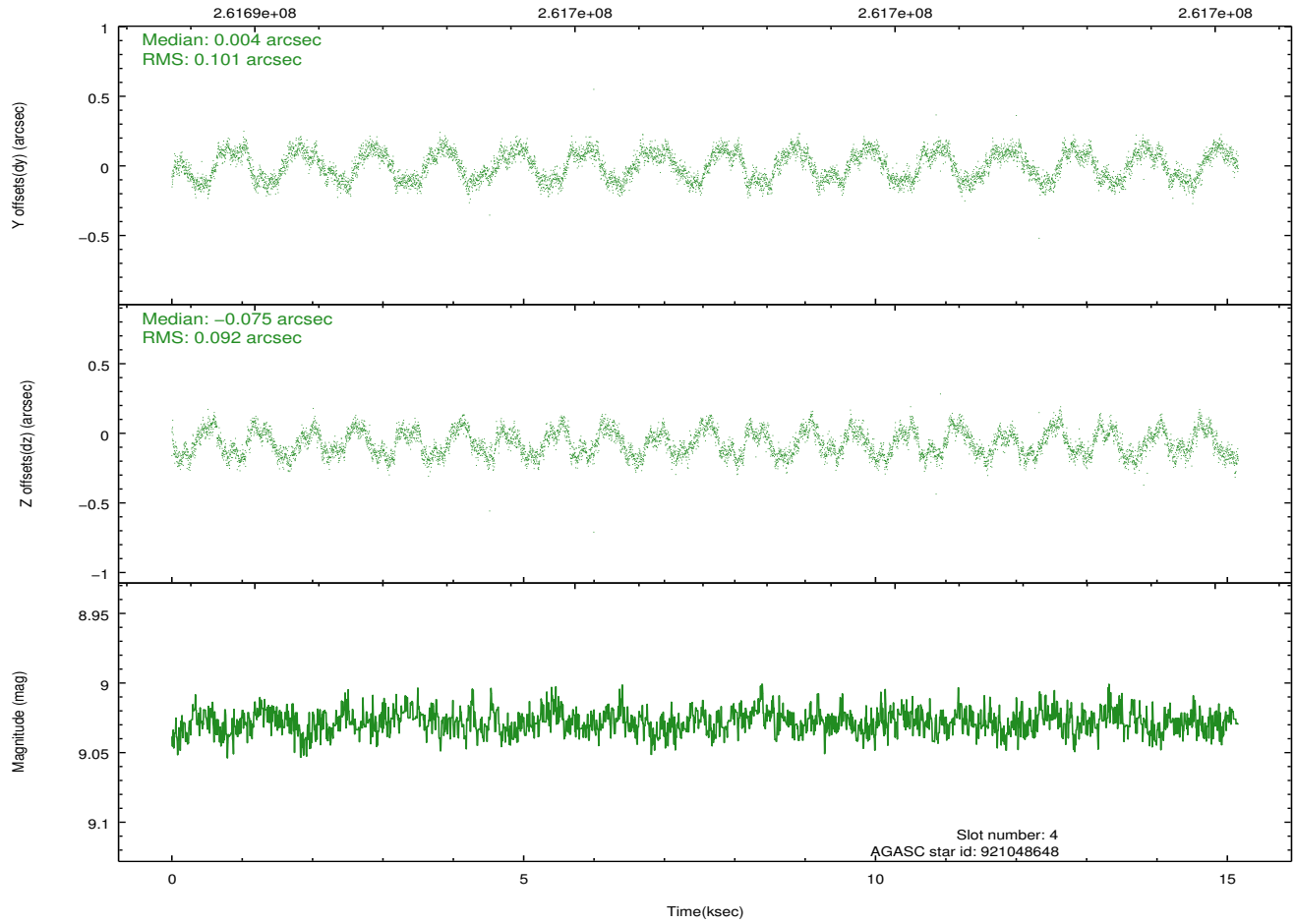
2.4.1 Slot 3



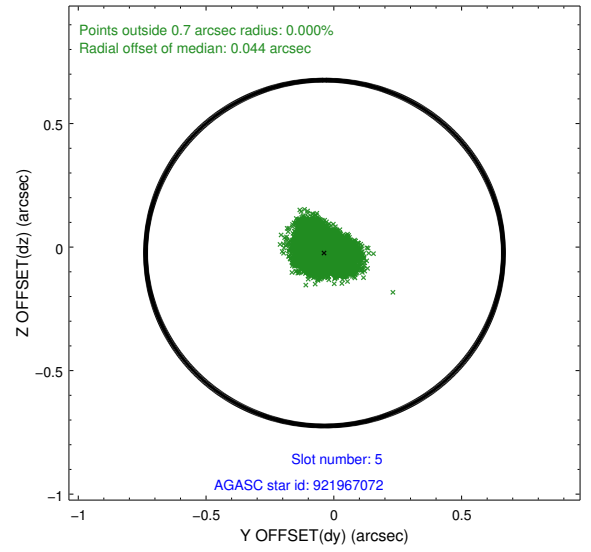
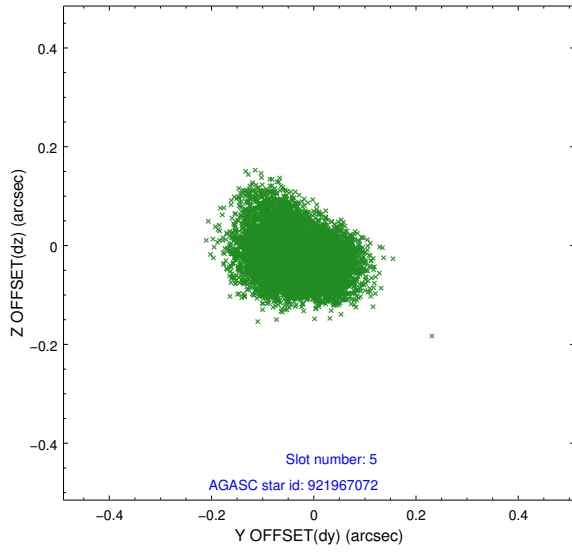
2.4.2 Slot 4



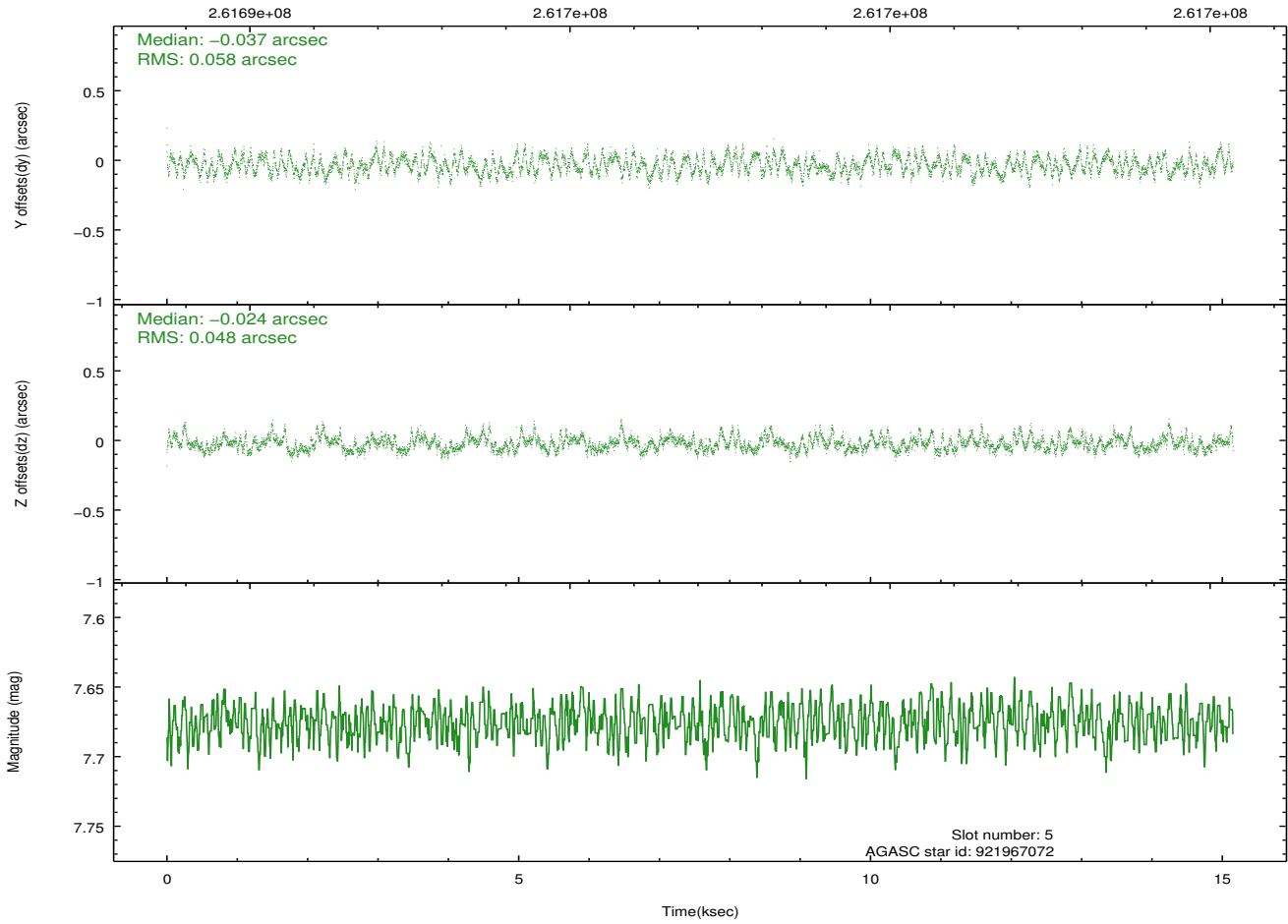
Time (s)



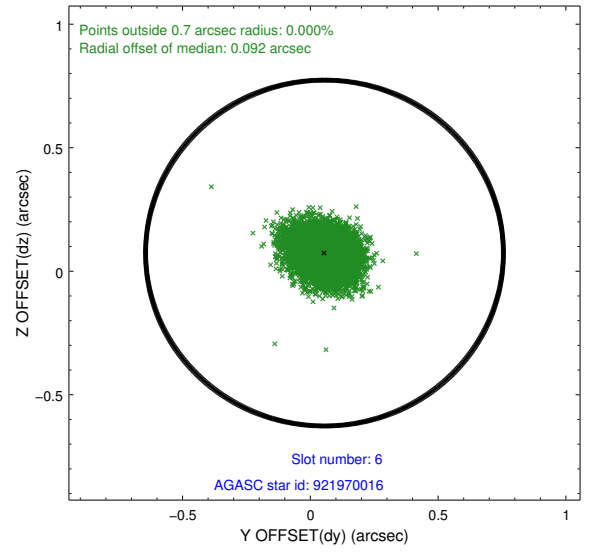
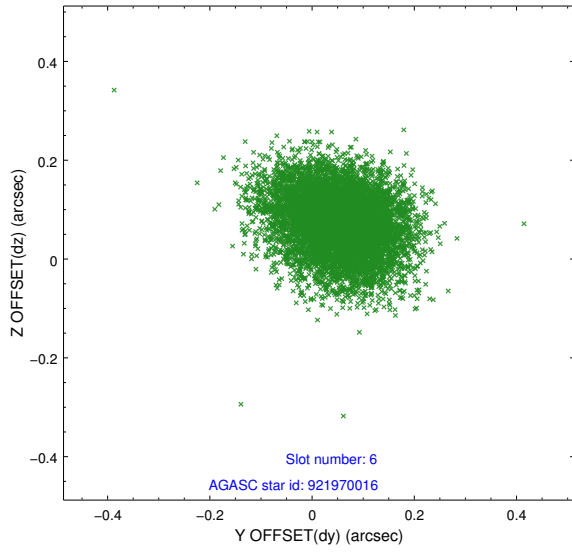
2.4.3 Slot 5



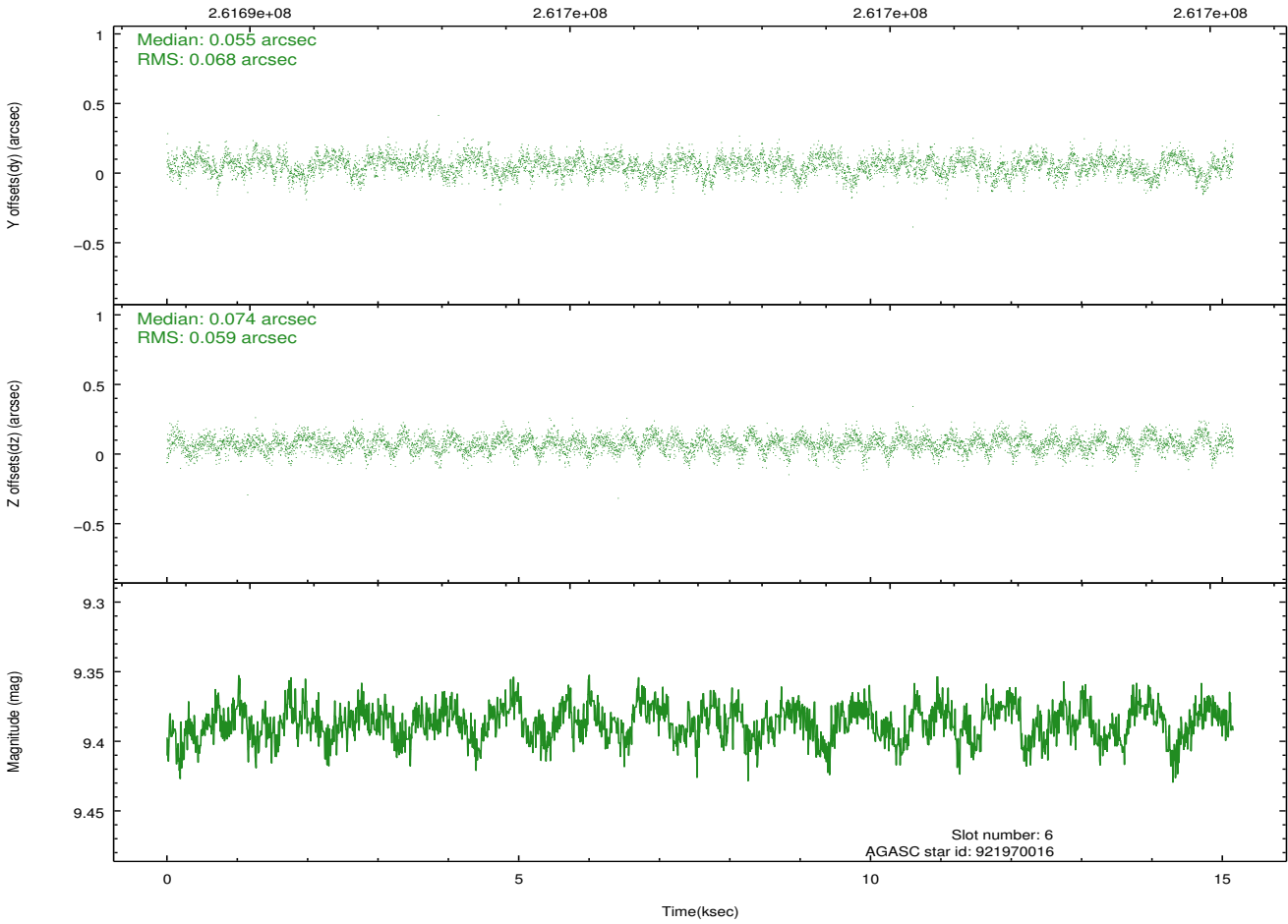
Time (s)



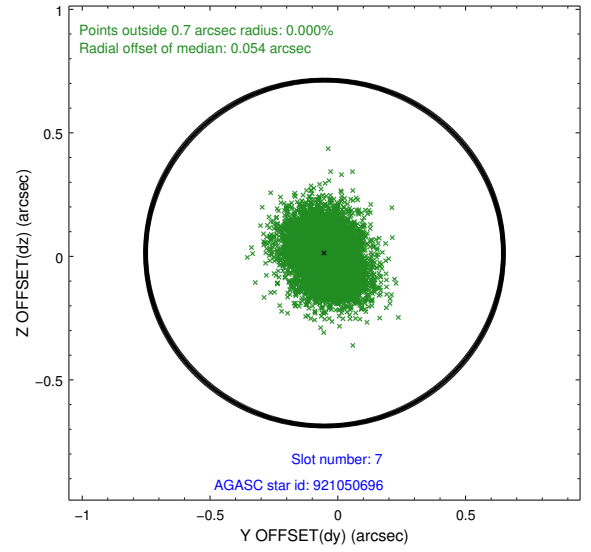
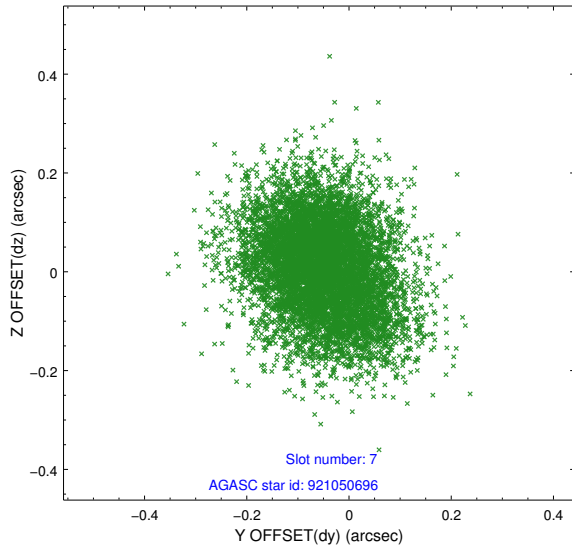
2.4.4 Slot 6



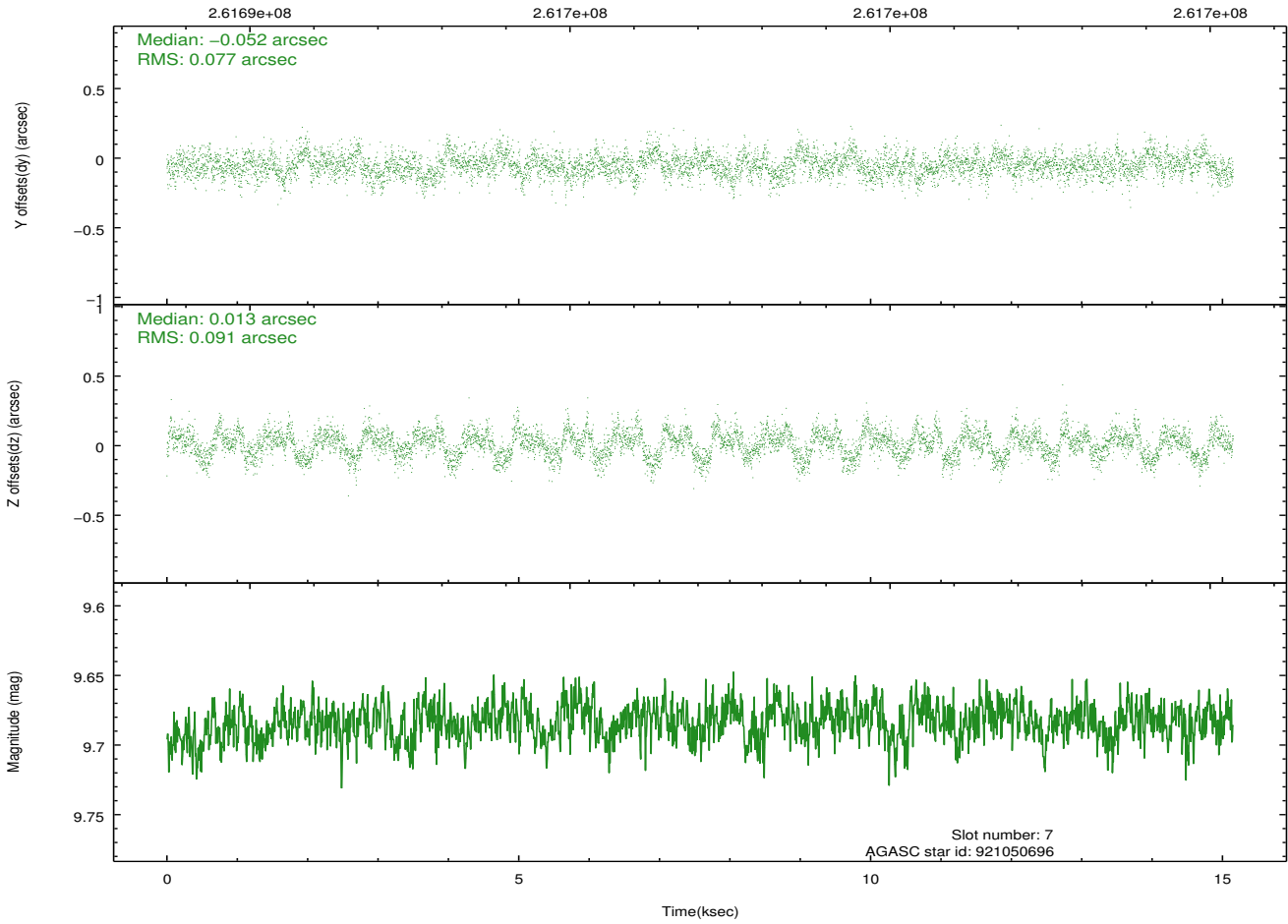
Time (s)



2.4.5 Slot 7

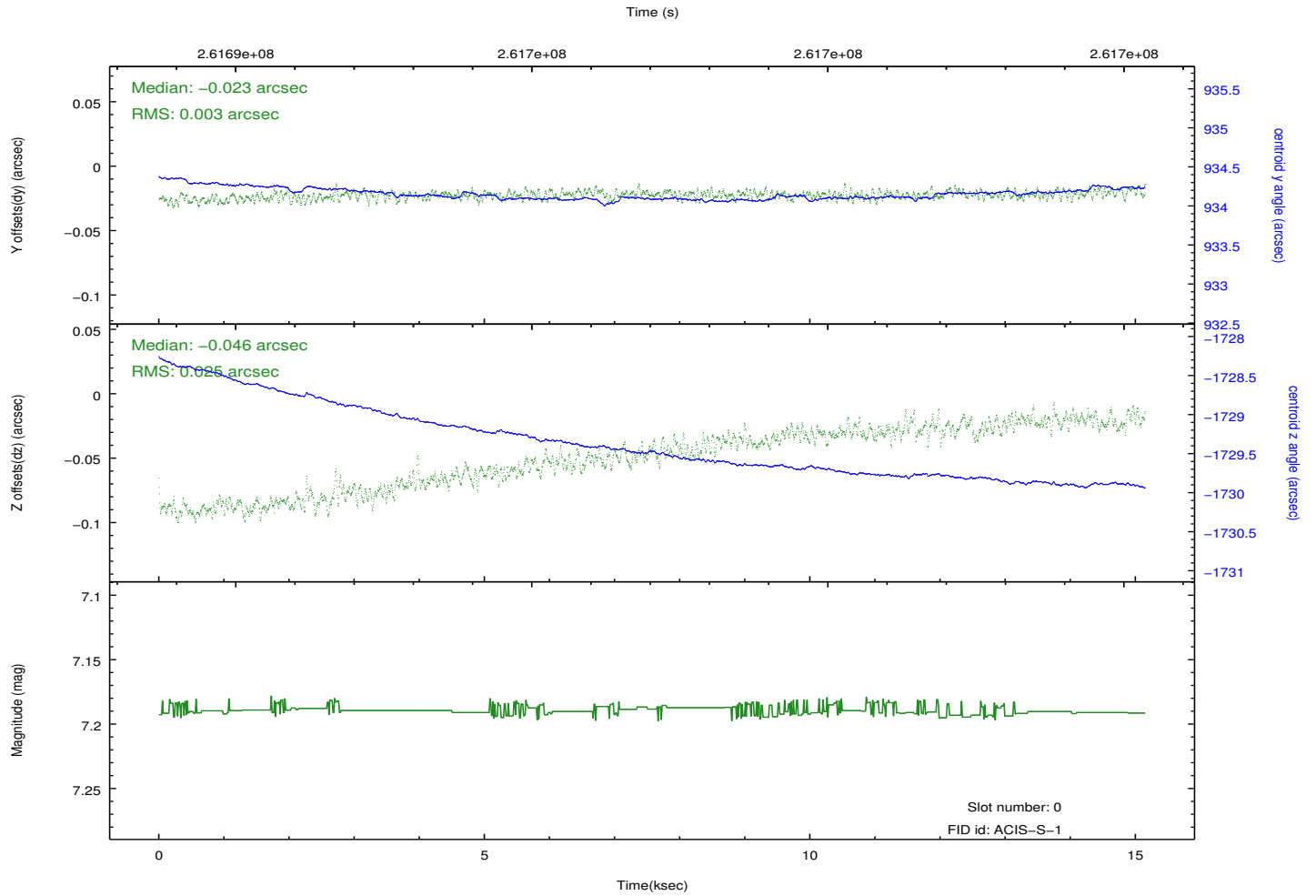
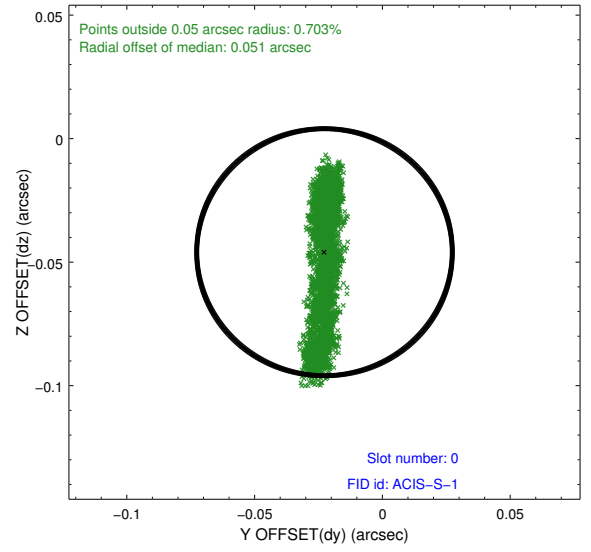
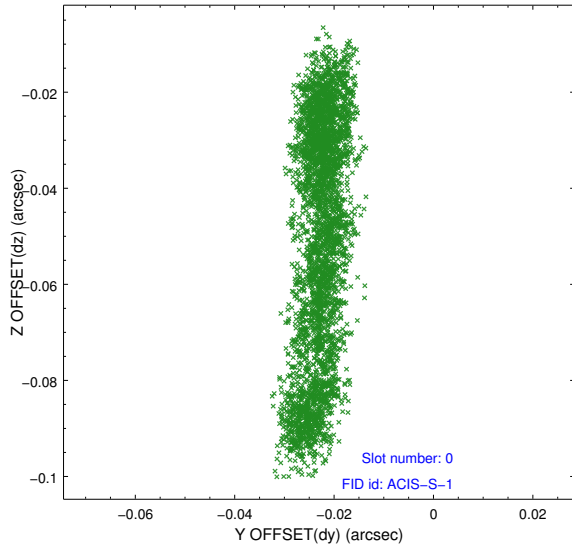


Time (s)

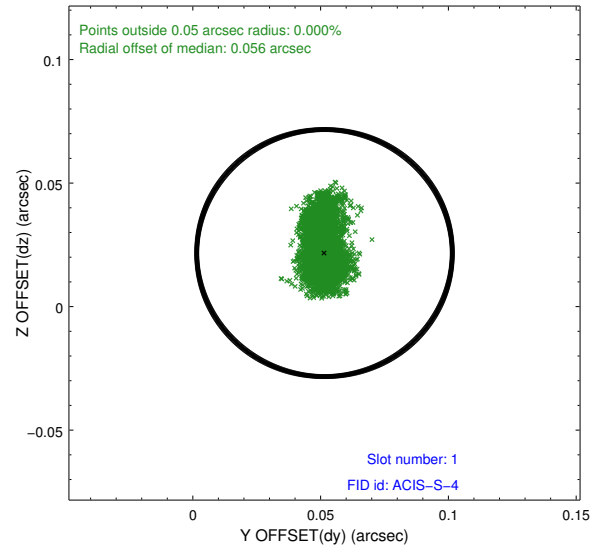
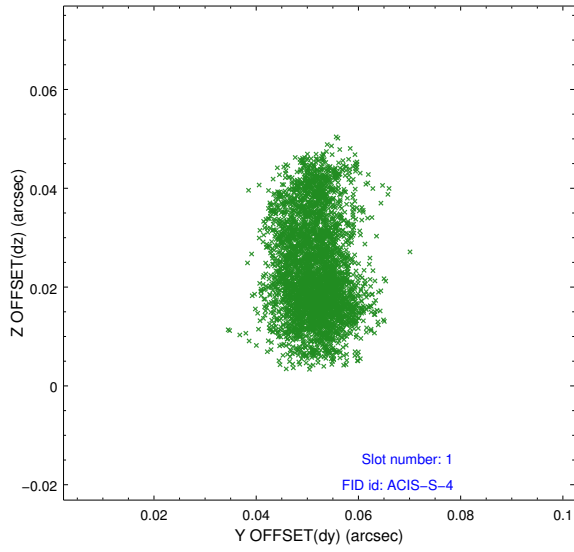


2.5 FID Slots

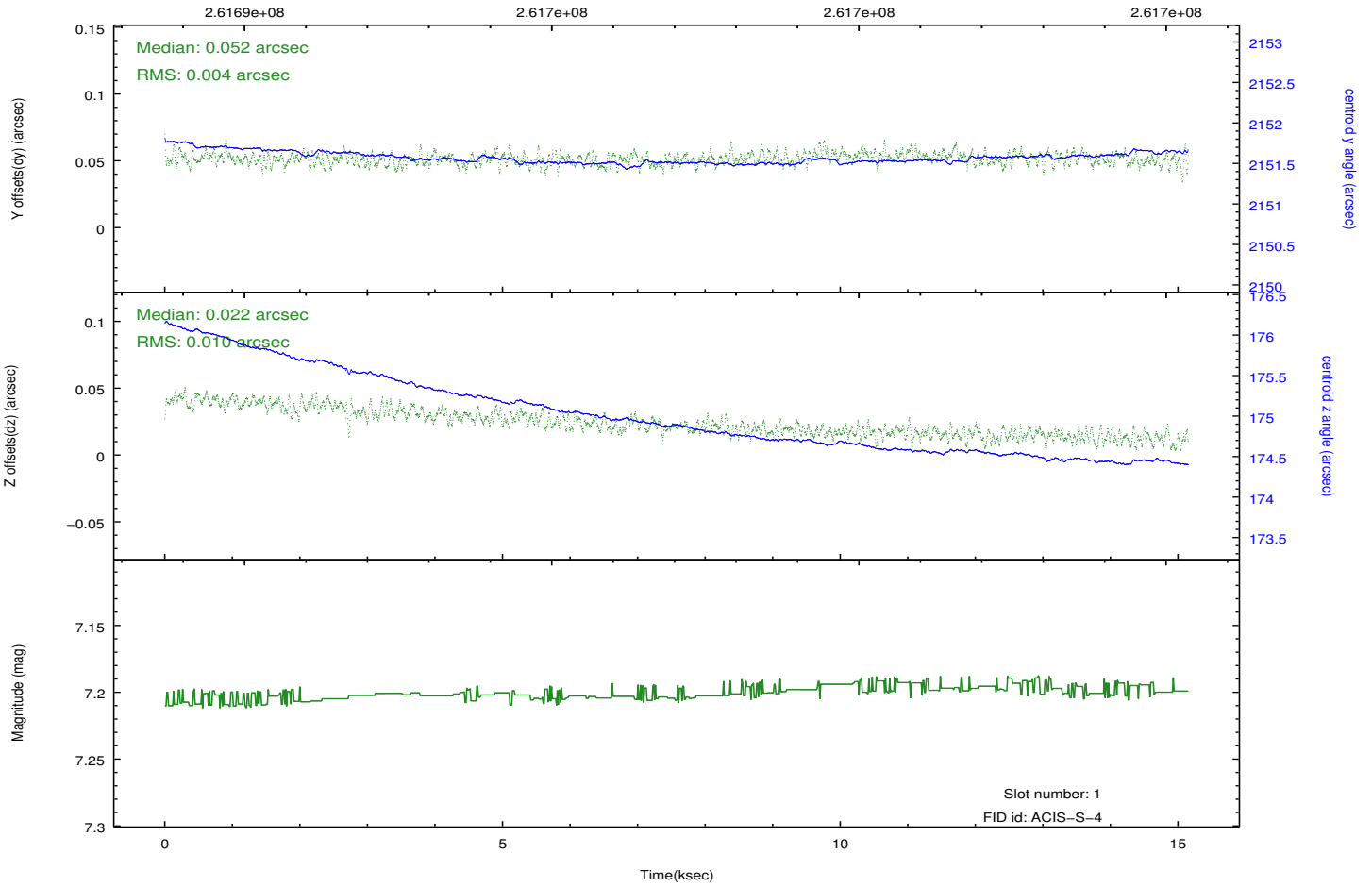
2.5.1 Slot 0



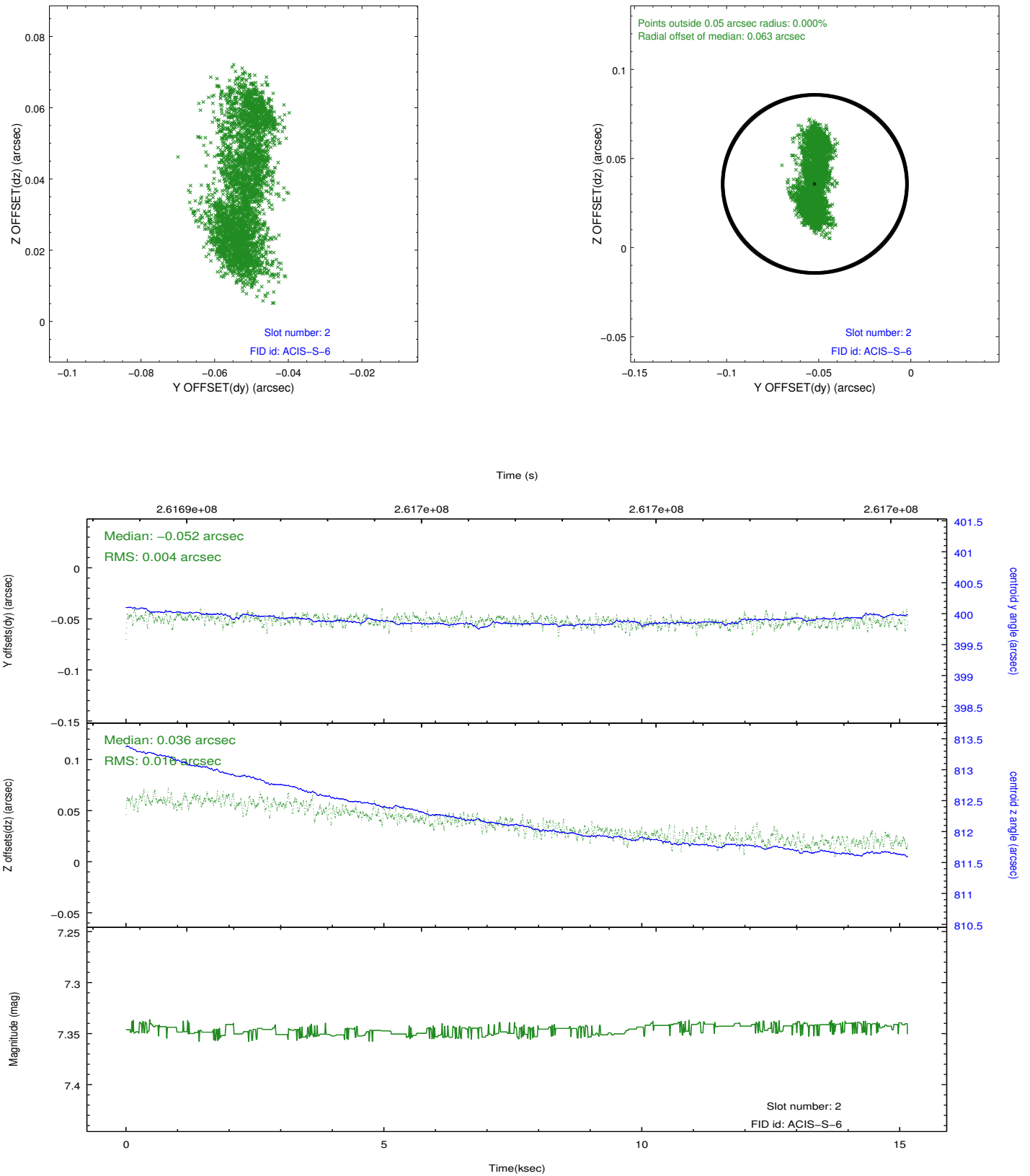
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|---------------|
| V&V Scientist | Beth Sundheim |
| V&V Date (YYYY-MM-DD) | 2012.04.02 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 15.1513999 |

A.2 Comments