

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 14202 - L2 Version 1
Chandra X-Ray Center

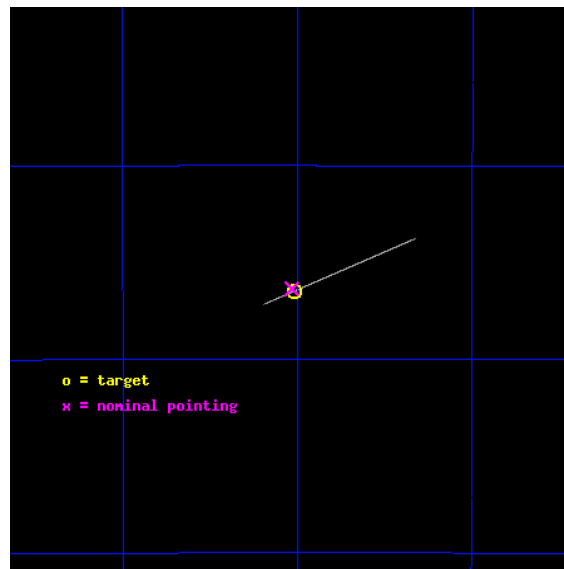
L2 Processing Date : Apr 11 2012

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1 Front

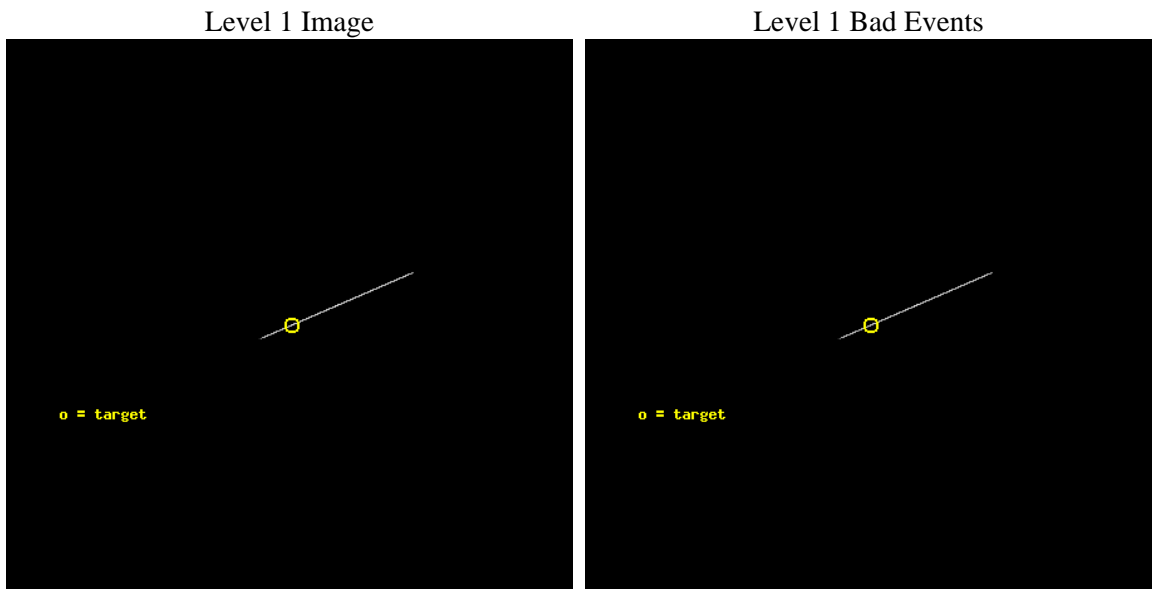
| | | |
|----------|--|---------------------------------------|
| seq_num | 501779 | Sequence number |
| obs_id | 14202 | Observation id |
| title | Measuring the Spin-Down and Dipole Magnetic Field of the CCO Pulsar 1E 1207.4-5209 | Proposal title |
| observer | Prof. Jules Halpern | Principal investigator |
| object | 1E1207.4-5209 | Source name |
| ra_targ | 182.50375 | Observer's specified target RA [deg] |
| dec_targ | -52.441222 | Observer's specified target Dec [deg] |
| ra_nom | 182.50786753821 | Nominal RA [deg] |
| dec_nom | -52.439513035823 | Nominal Dec [deg] |
| roll_nom | 336.79064010609 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 33175.25 | Sum of GTIs [s] |
| livetime | 33045.659179688 | Livetime [s] |
| ontime7 | 33175.25 | Sum of GTIs [s] |
| l2events | 127119 | Number of level 2 events |



2 OBI

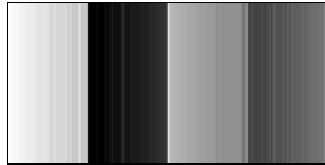
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|--------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 33000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.3 | Processing system revision | ontime | 33175.25 | Sum of GTIs [s] |
| caldbver | 4.4.9 | | ontime7 | 33175.25 | Sum of GTIs [s] |
| date | 2012-04-11T14:27:08 | Date and time of file creation | l1events | 385139 | Number of level 1 events |
| revision | 1 | Processing version of data | | | |

2.1.4 Events

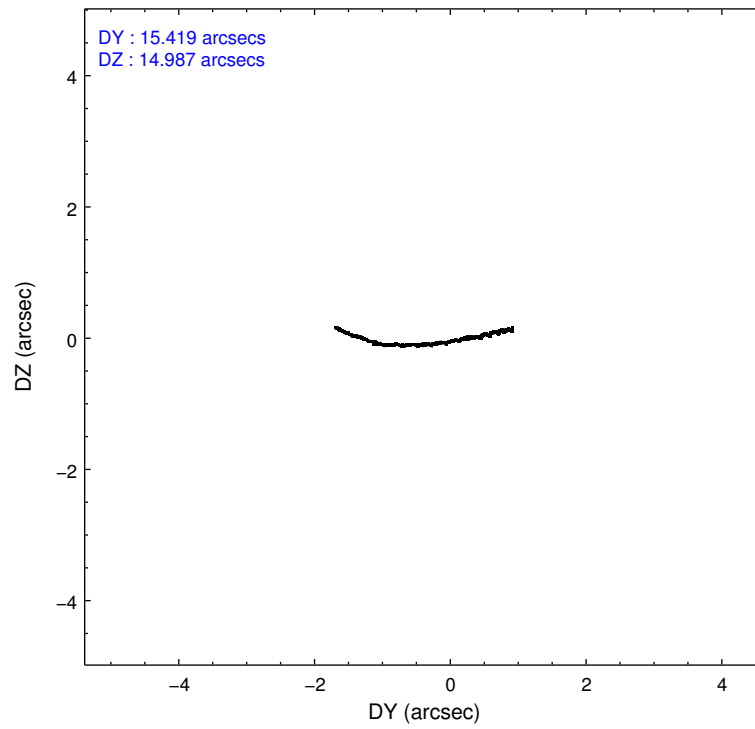
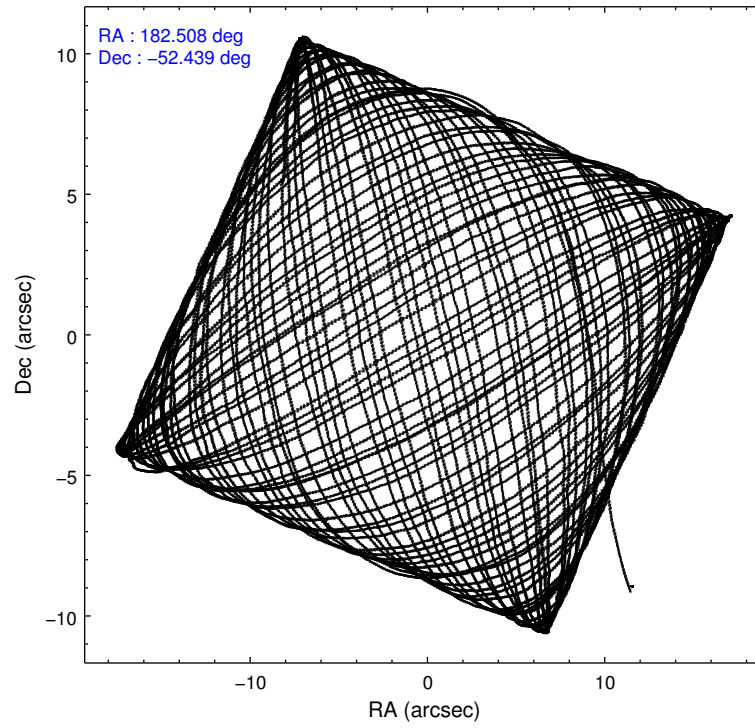
| | ccd 7 |
|-----------------|--------------|
| level 1 events | 385139 |
| rejected events | 253009 |
| rejected % | 65% |

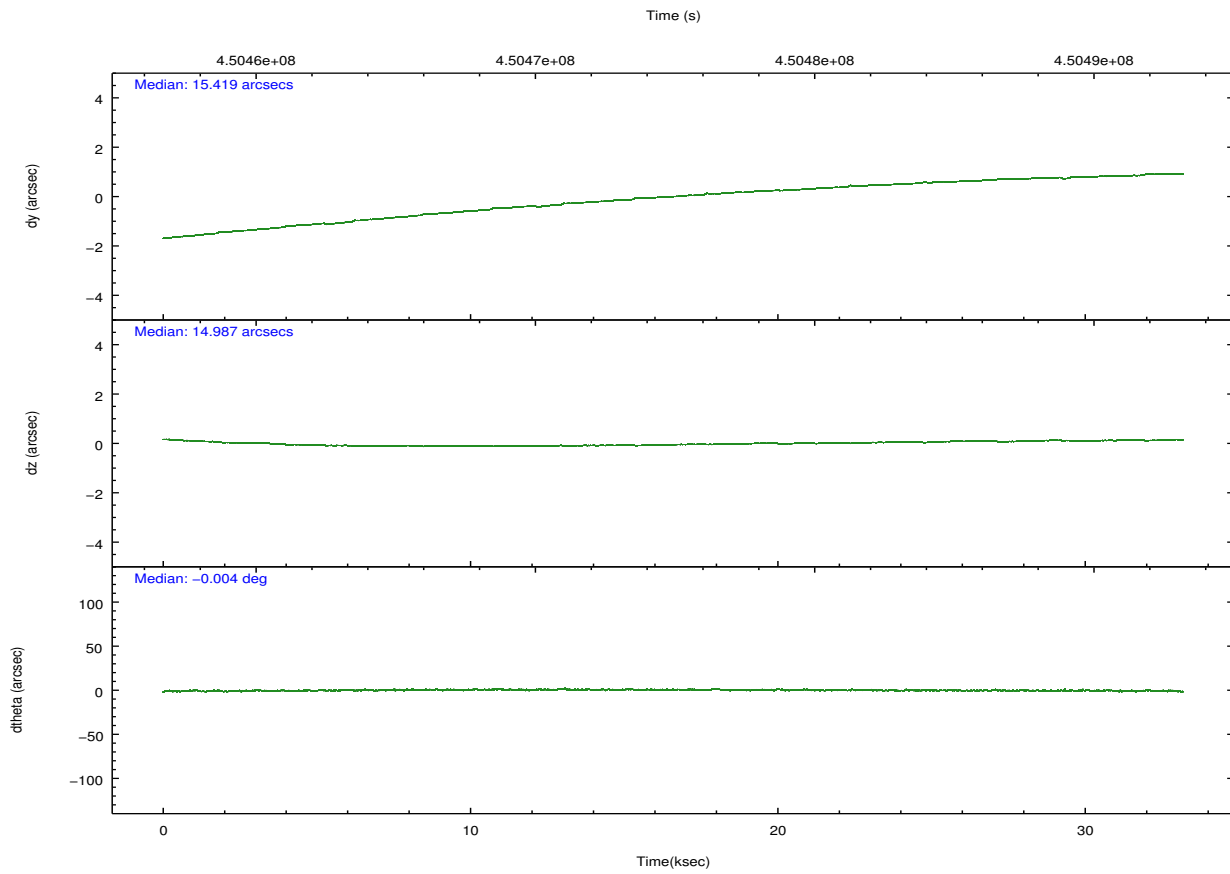
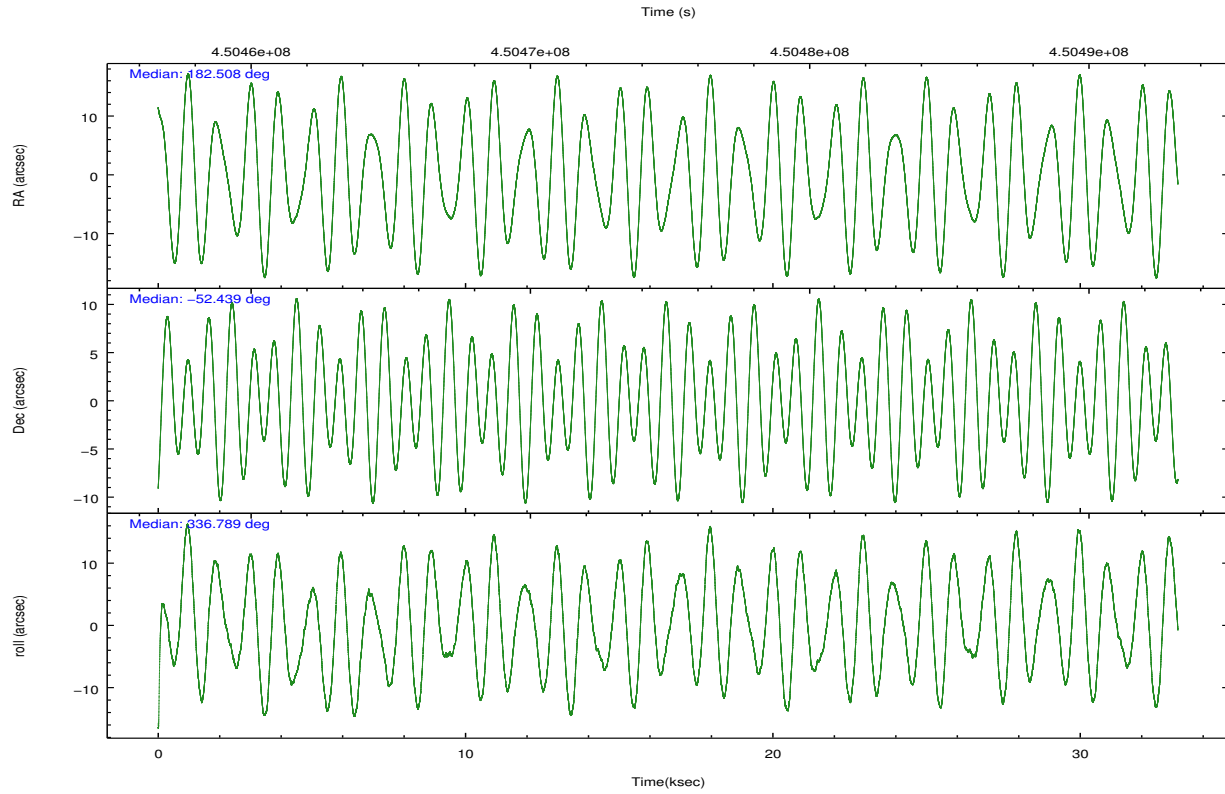
| | ccd 7 |
|----------------|--------------|
| grade 0 events | 13643 |
| | 3% |
| grade 1 events | 353 |
| | 0% |
| grade 2 events | 35161 |
| | 9% |
| grade 3 events | 8234 |
| | 2% |
| grade 4 events | 8062 |
| | 2% |
| grade 5 events | 25633 |
| | 6% |
| grade 6 events | 67238 |
| | 17% |
| grade 7 events | 226815 |
| | 58% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-7 | ACIS-7 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | CC33_FAINT | CC33_FAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 182.463382 | 182.5078675382067 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | -52.443103 | -52.43951303582325 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 336.598750 | 336.7906401060926 | [s] Primary exposure time | 0.000000 | 0 |
| [s] Window start time (MET) | 446947266.184000 | 446947266.184000 | | | |
| [s] Window stop time (MET) | 452217606.184000 | 452217606.184000 | | | |
| [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) | 450458515.184000 | 450457894.96868 | | | |
| Observation start date | 2012-04-10T15:20:49 | 2012-04-10T15:11:34 | | | |
| [s] Observation end time (MET) | 450491515.184000 | 450492306.2705 | | | |
| Observation end date | 2012-04-11T00:30:49 | 2012-04-11T00:45:06 | | | |
| Read mode | CONTINUOUS | CONTINUOUS | | | |

2.3 Aspect





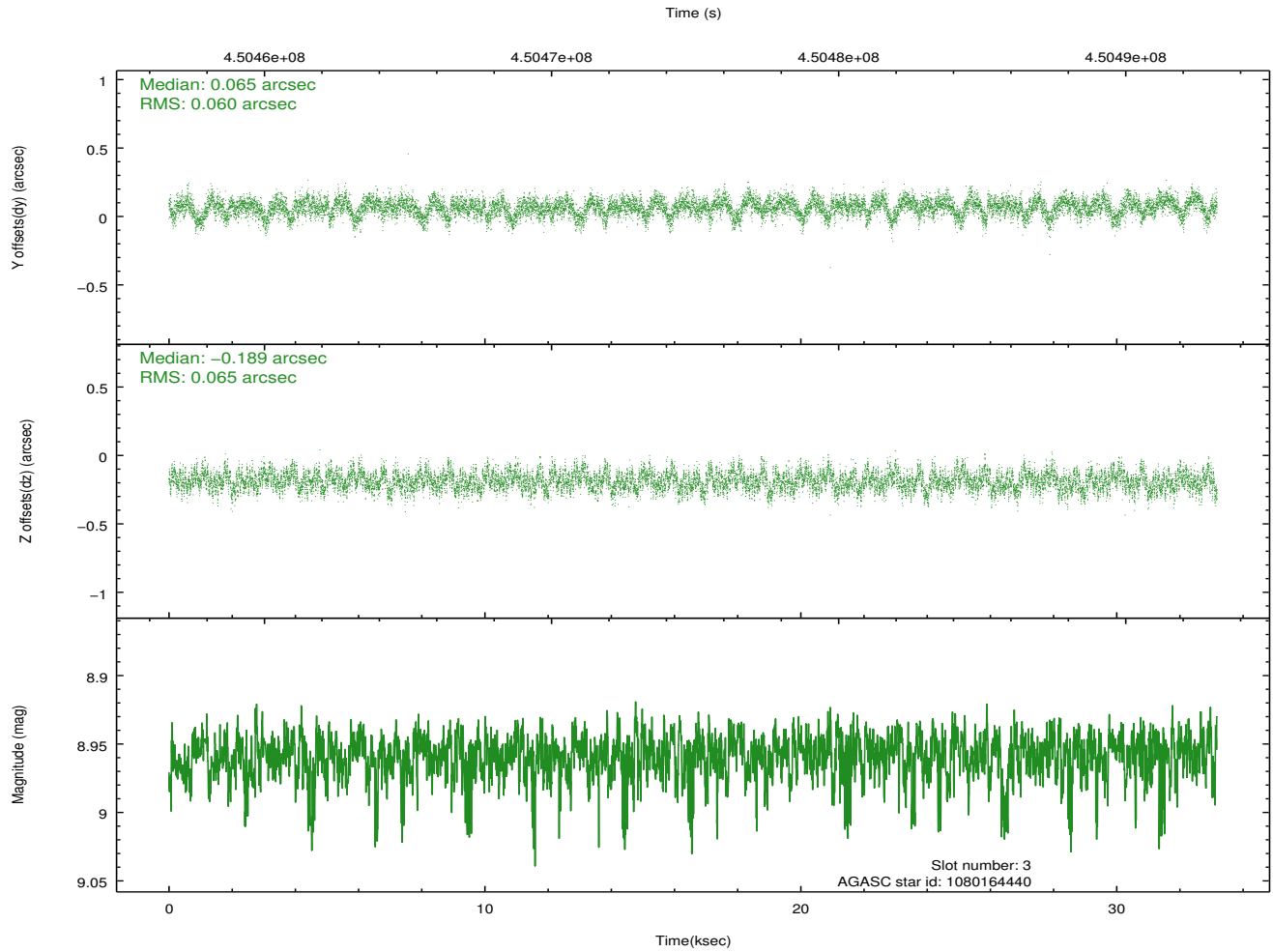
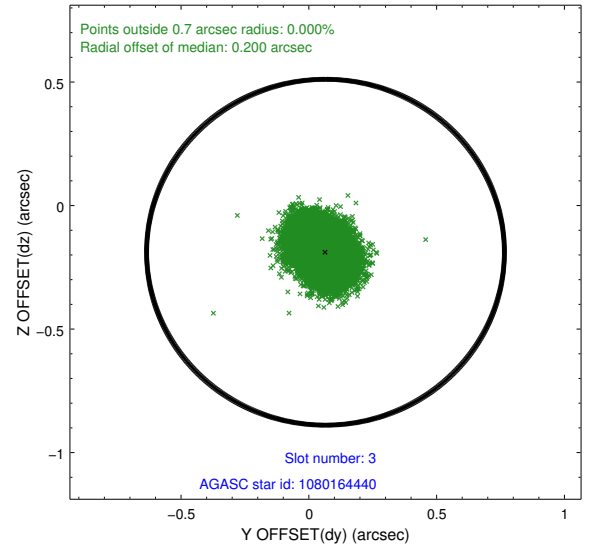
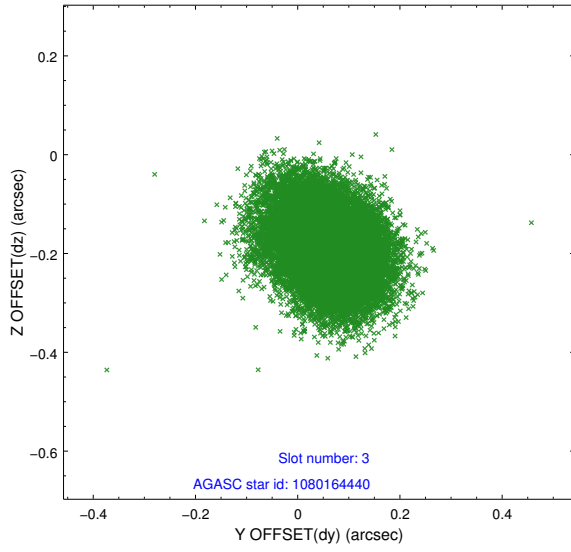
Slot Statistics

| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | ACIS-S-2 | 6.93 | 8093 | -0.118 | -0.004 | 0.015 | 0.042 | 0.000000 | 0.000000 | -768.37 | -1736.37 |
| 1 | FID | ACIS-S-4 | 7.03 | 8092 | 0.220 | 0.057 | 0.014 | 0.022 | 0.000000 | 0.000000 | 2145.21 | 172.12 |
| 2 | FID | ACIS-S-5 | 7.05 | 8091 | -0.130 | -0.046 | 0.026 | 0.057 | 0.000000 | 0.000000 | -1821.18 | 165.75 |
| 3 | GUIDE | 1080164440 | 8.96 | 16179 | 0.065 | -0.189 | 0.094 | 0.152 | 181.986340 | -52.264623 | -1218.17 | 168.86 |
| 4 | GUIDE | 1131414168 | 8.95 | 16180 | -0.140 | 0.032 | 0.087 | 0.144 | 183.224863 | -52.915912 | 2196.50 | -913.50 |
| 5 | GUIDE | 1131423616 | 8.87 | 16132 | 0.073 | 0.148 | 0.115 | 0.193 | 182.073492 | -52.590429 | -570.60 | -827.40 |
| 6 | GUIDE | 1131424824 | 9.24 | 16172 | 0.159 | 0.159 | 0.111 | 0.170 | 181.758646 | -52.547110 | -1263.86 | -963.20 |
| 7 | GUIDE | 1080309976 | 9.35 | 16179 | -0.144 | -0.152 | 0.102 | 0.165 | 183.762069 | -52.214320 | 2311.88 | 1869.91 |

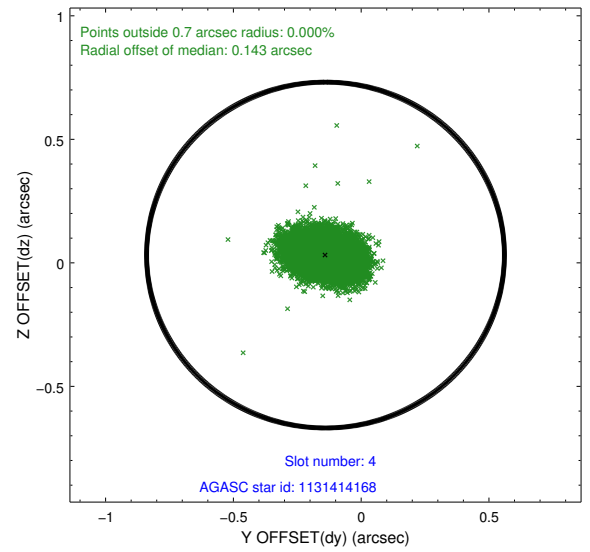
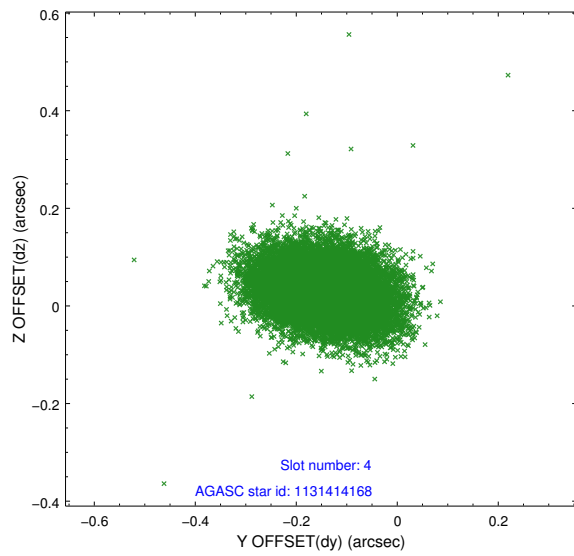
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2.4 Star Slots

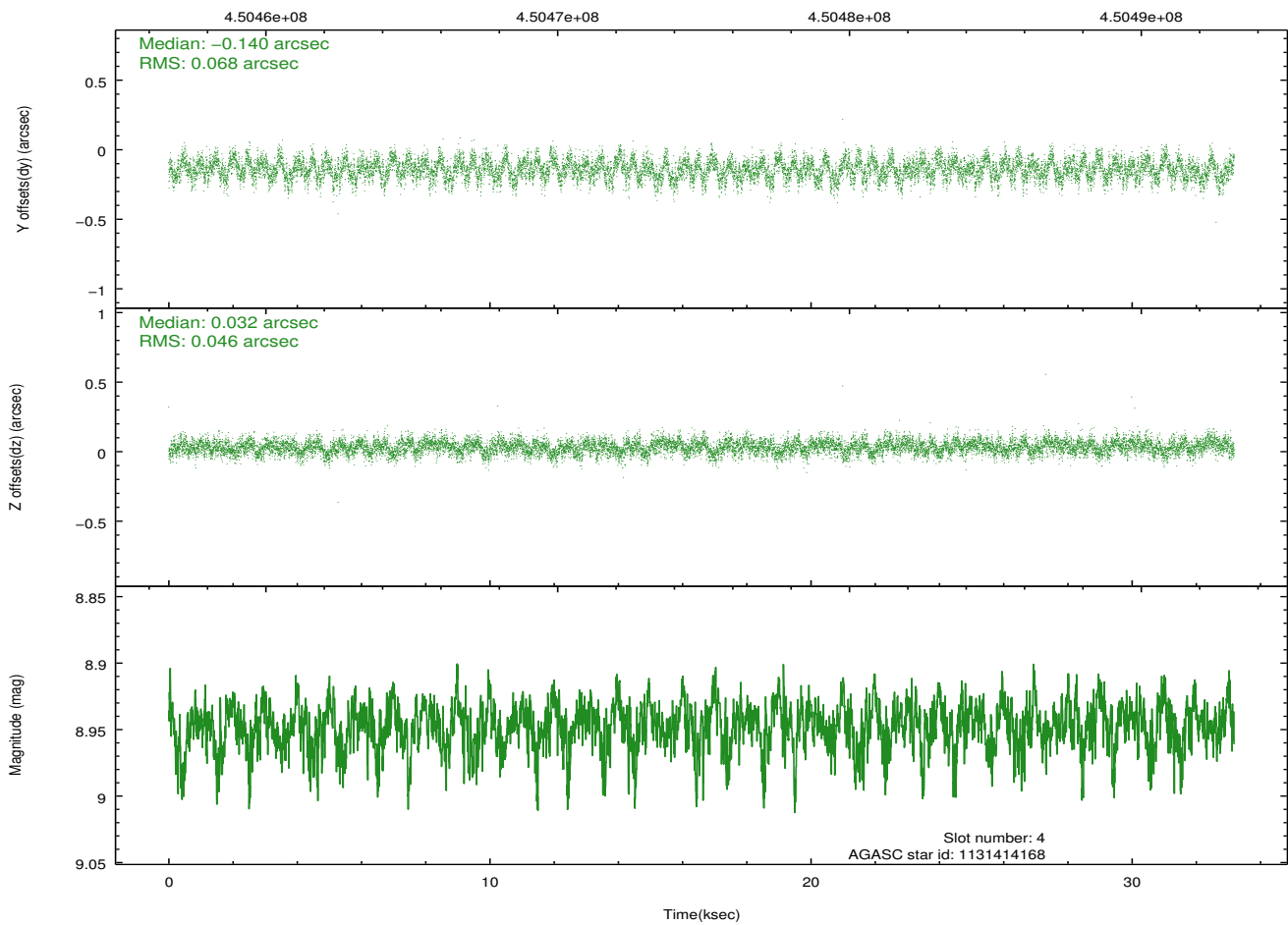
2.4.1 Slot 3



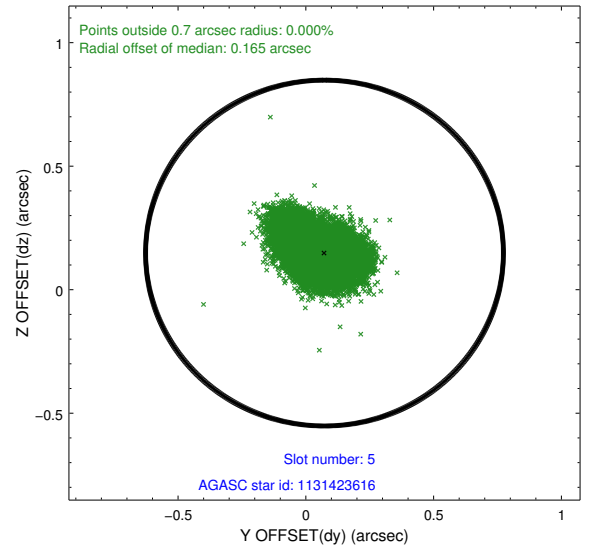
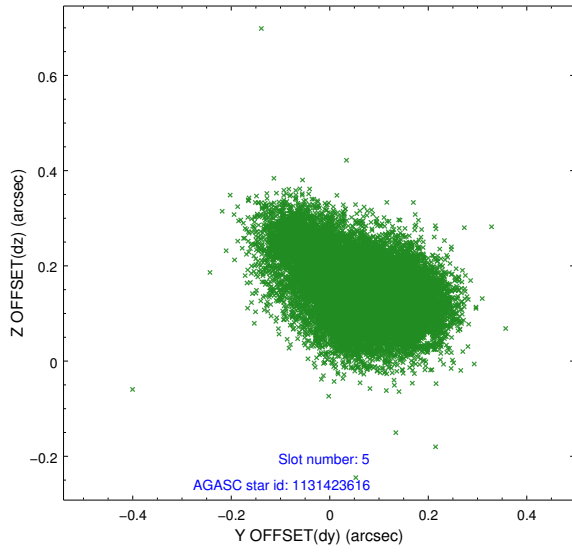
2.4.2 Slot 4



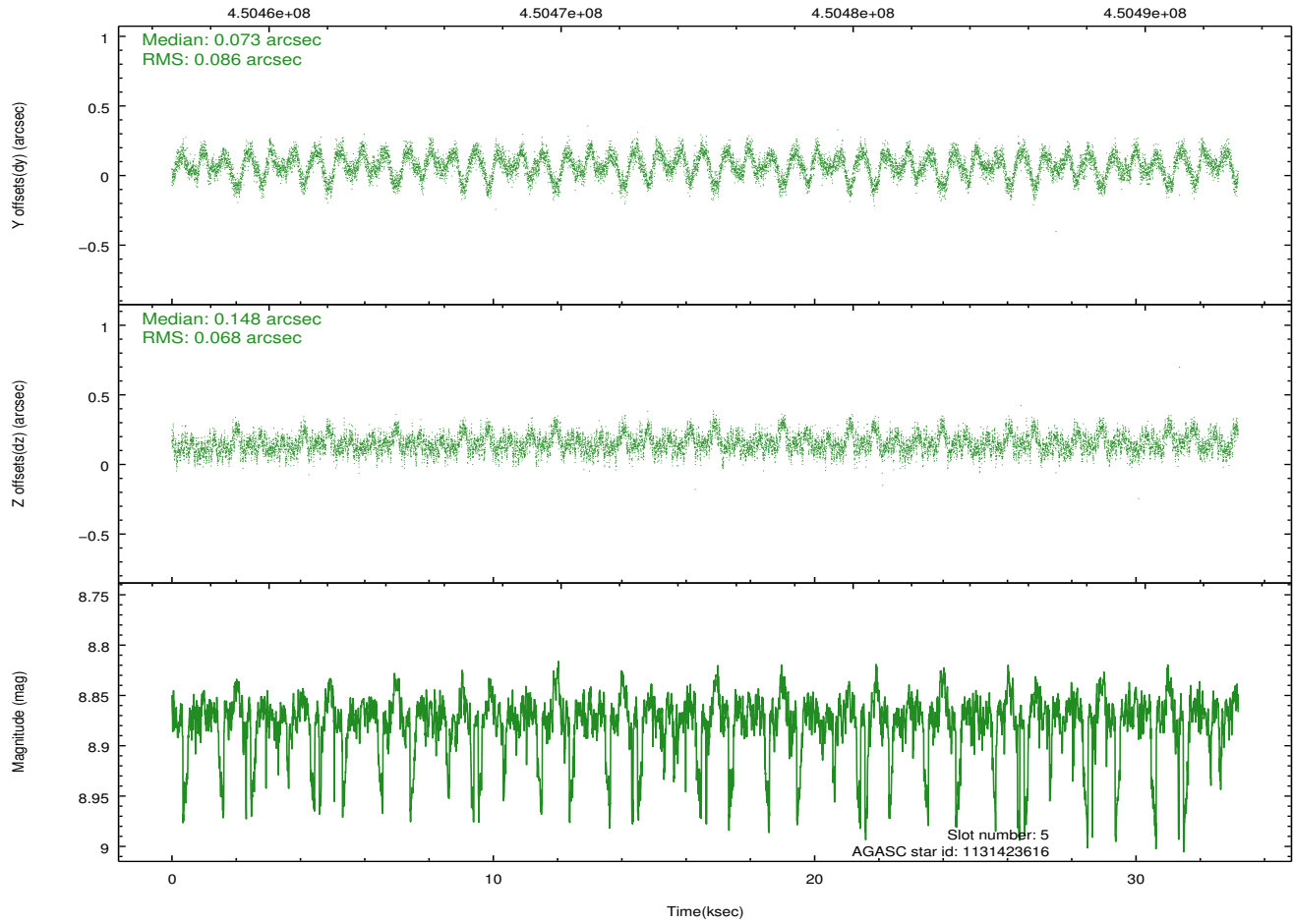
Time (s)



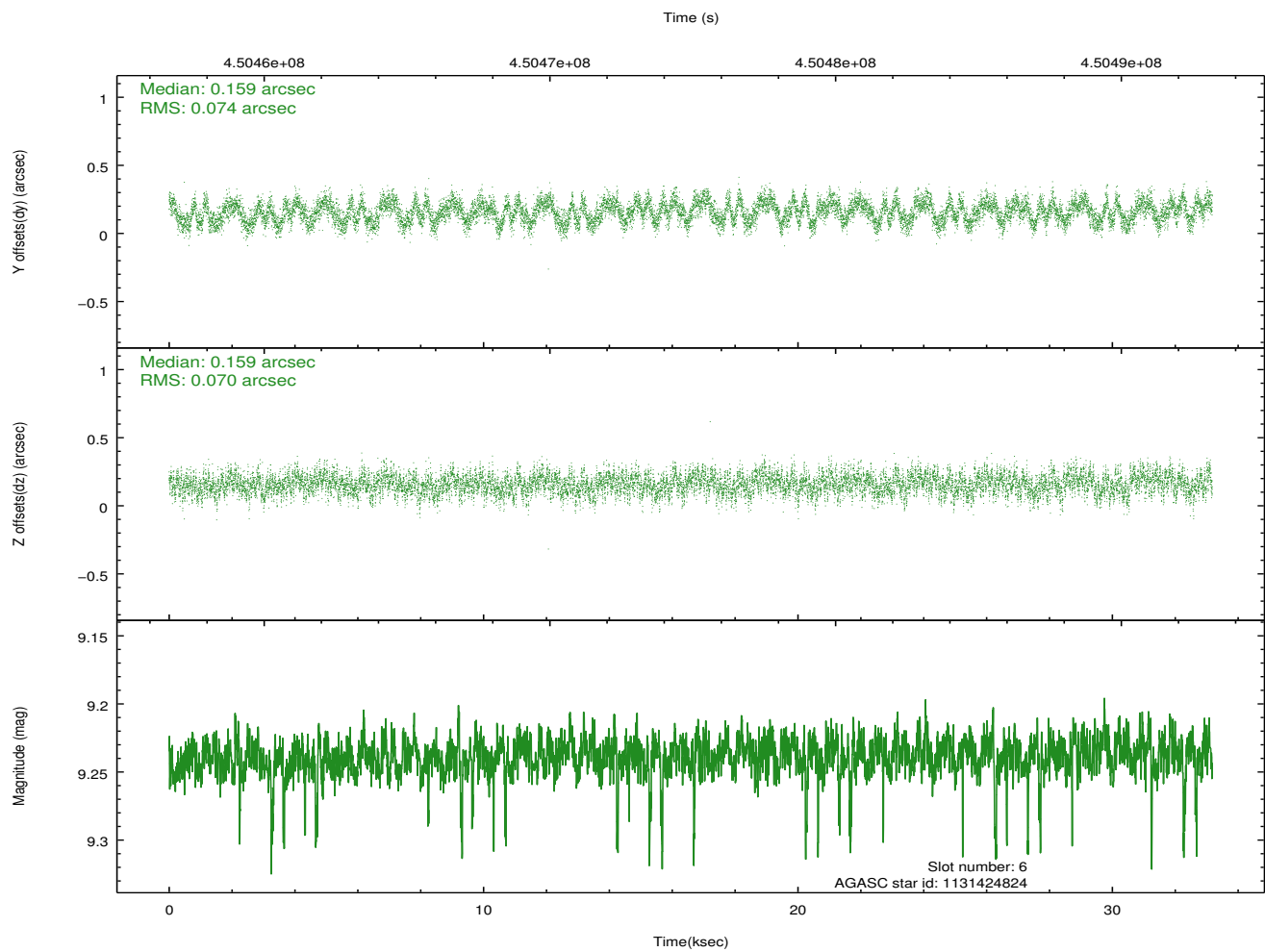
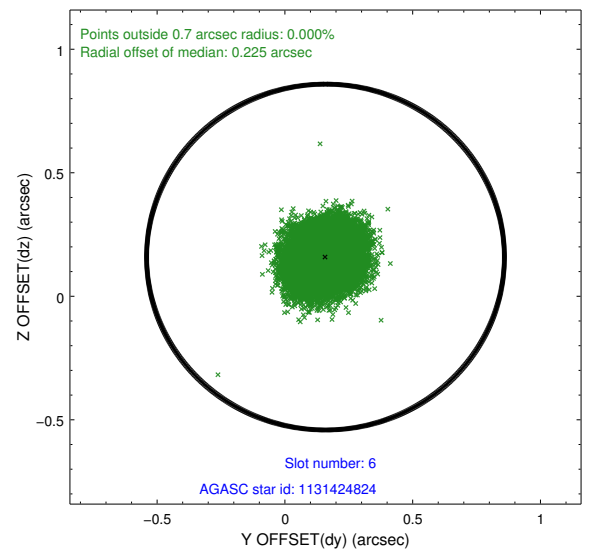
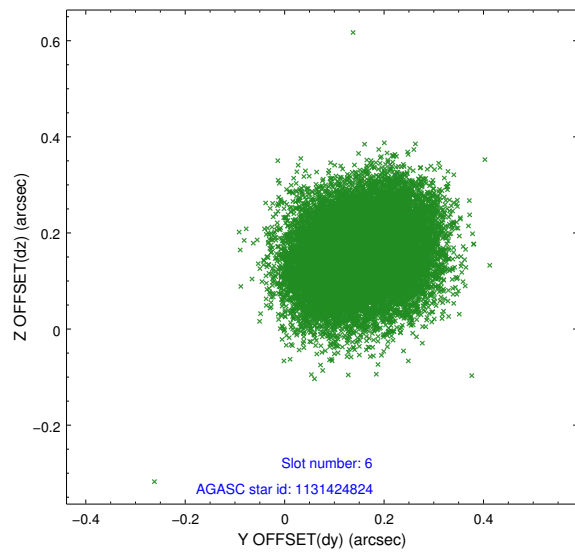
2.4.3 Slot 5



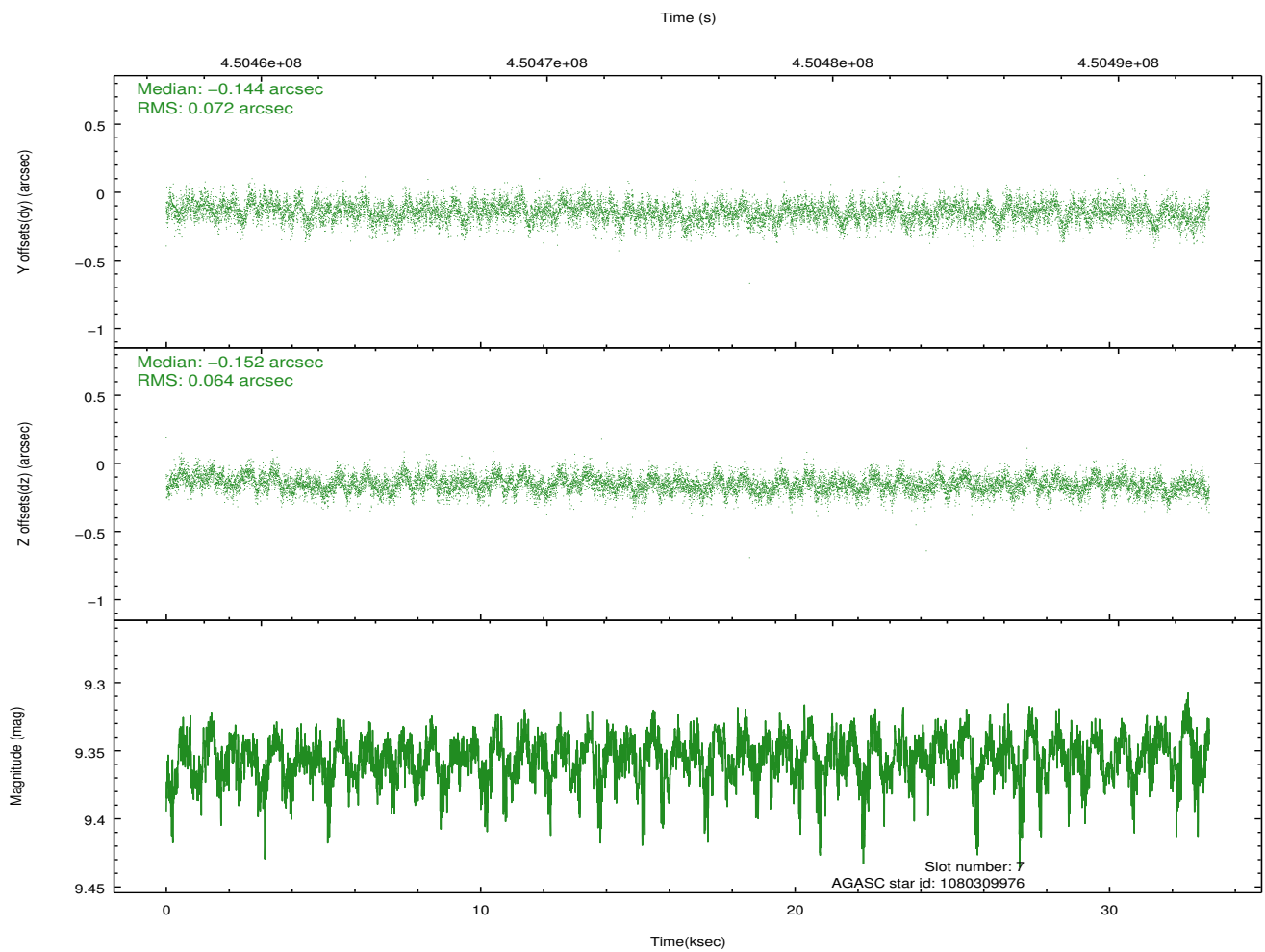
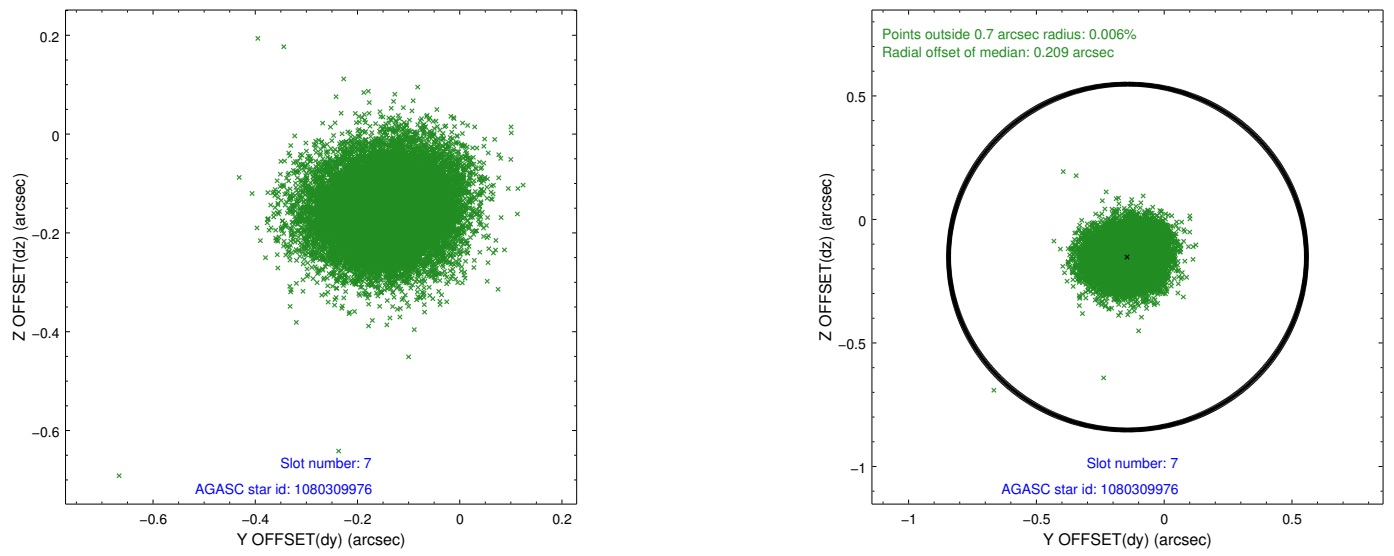
Time (s)



2.4.4 Slot 6

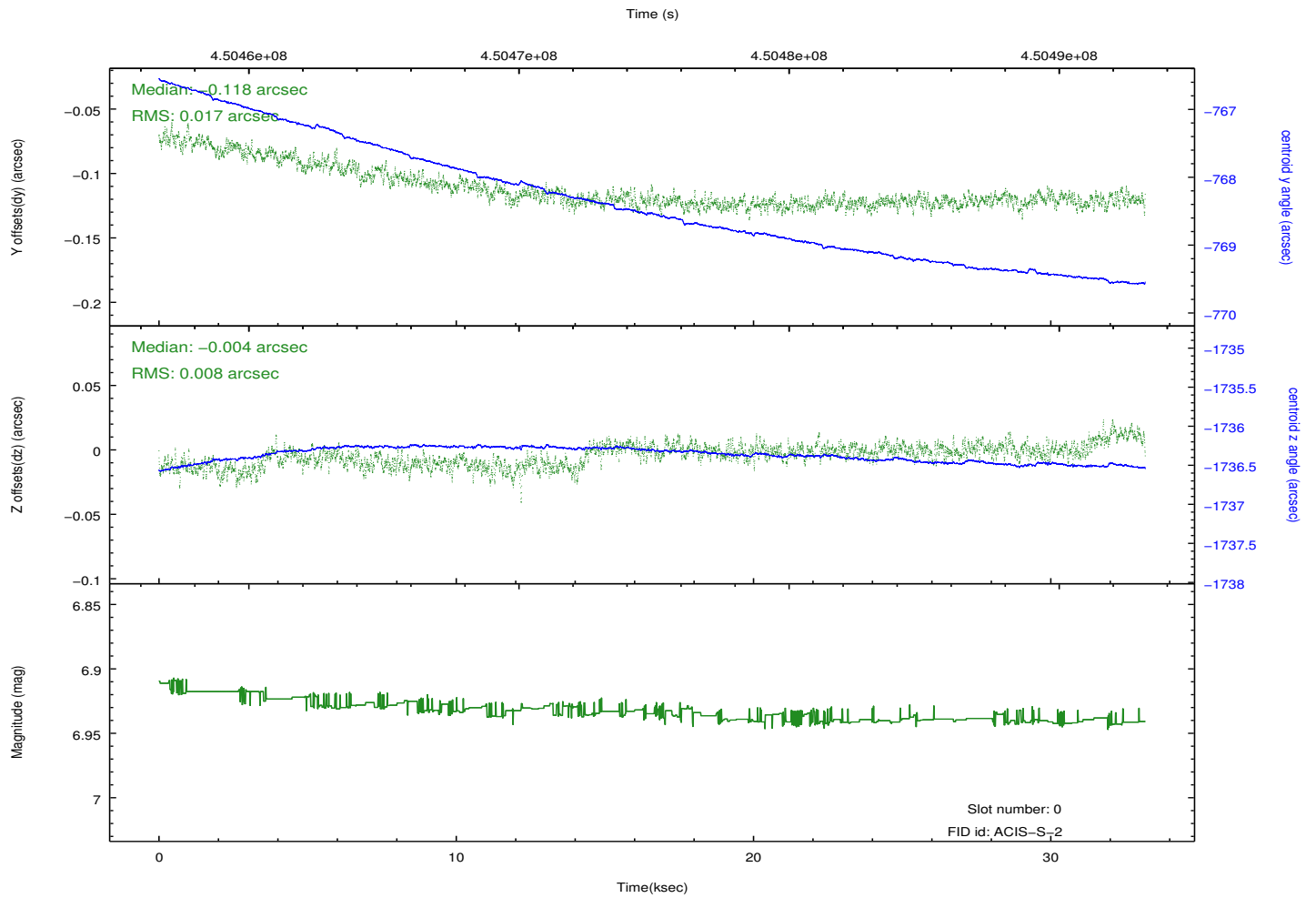
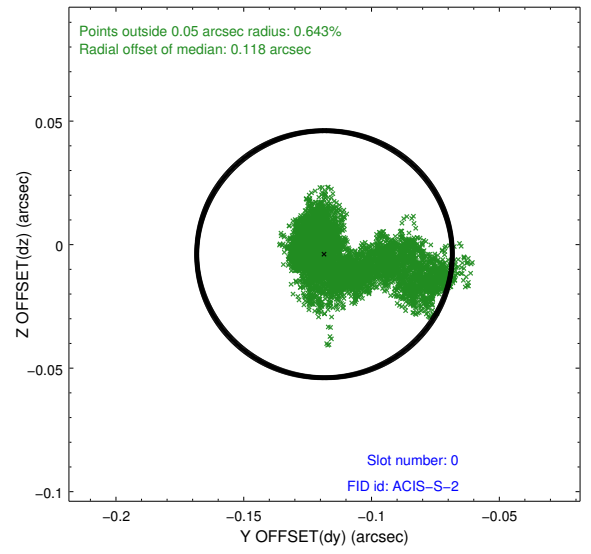
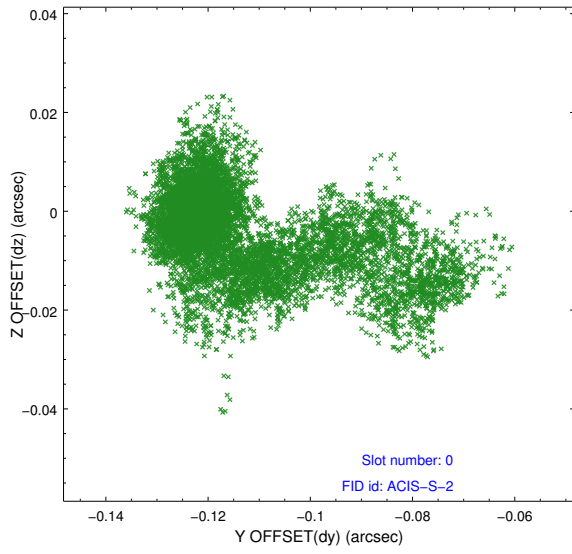


2.4.5 Slot 7

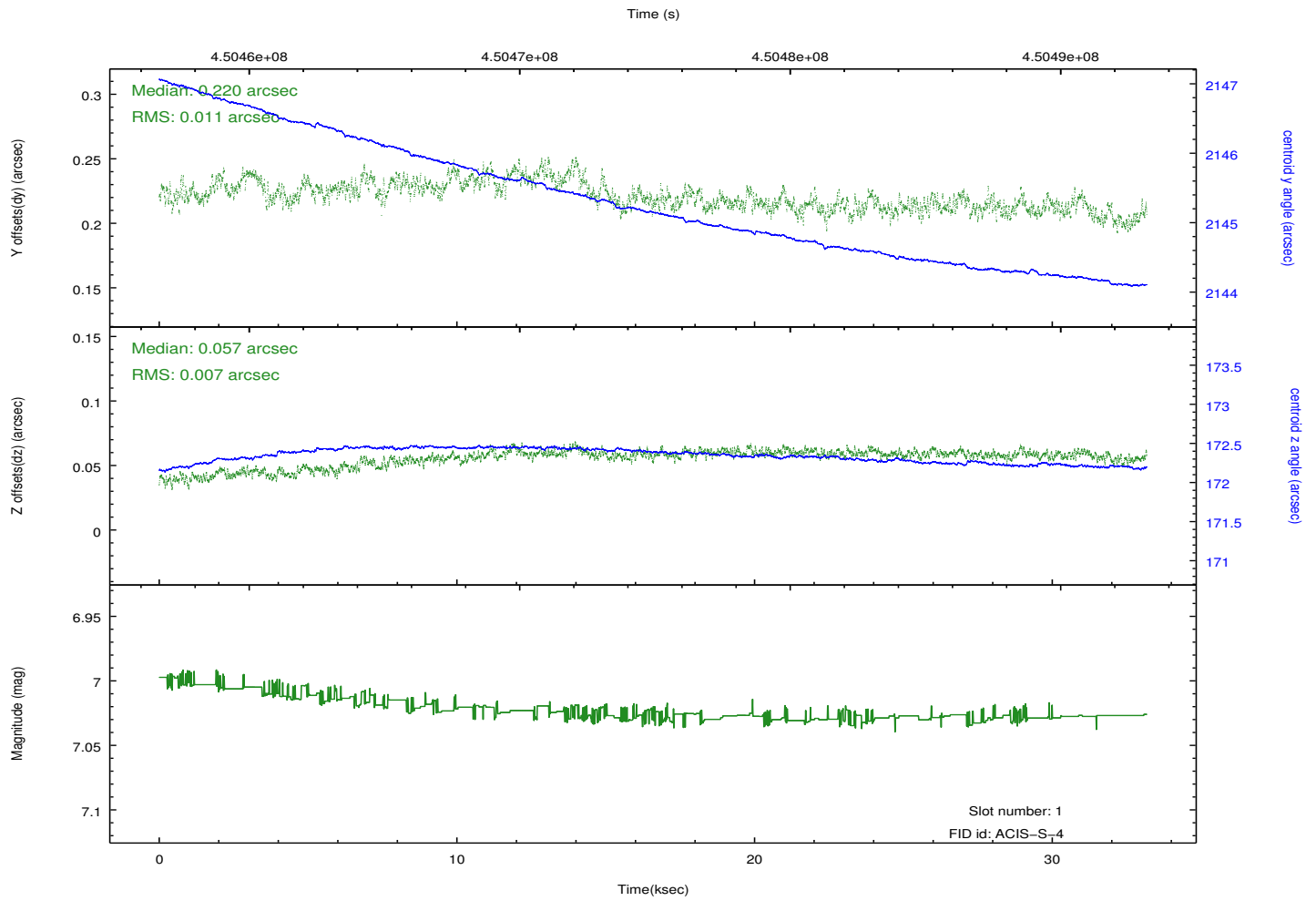
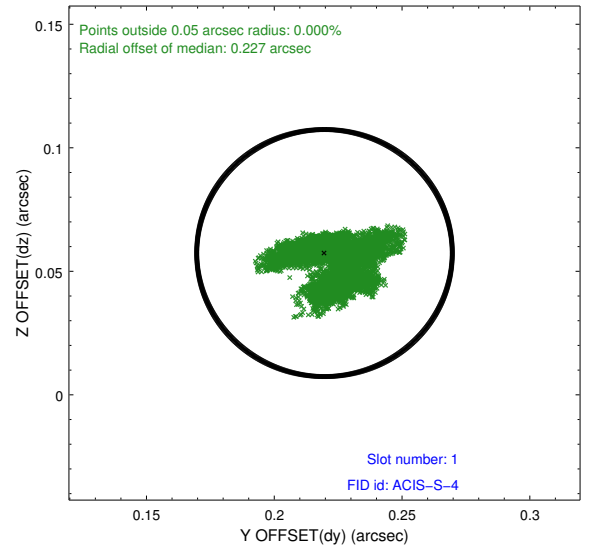
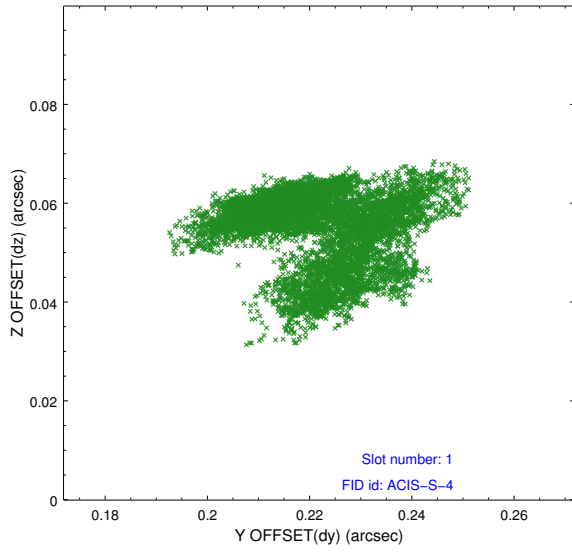


2.5 FID Slots

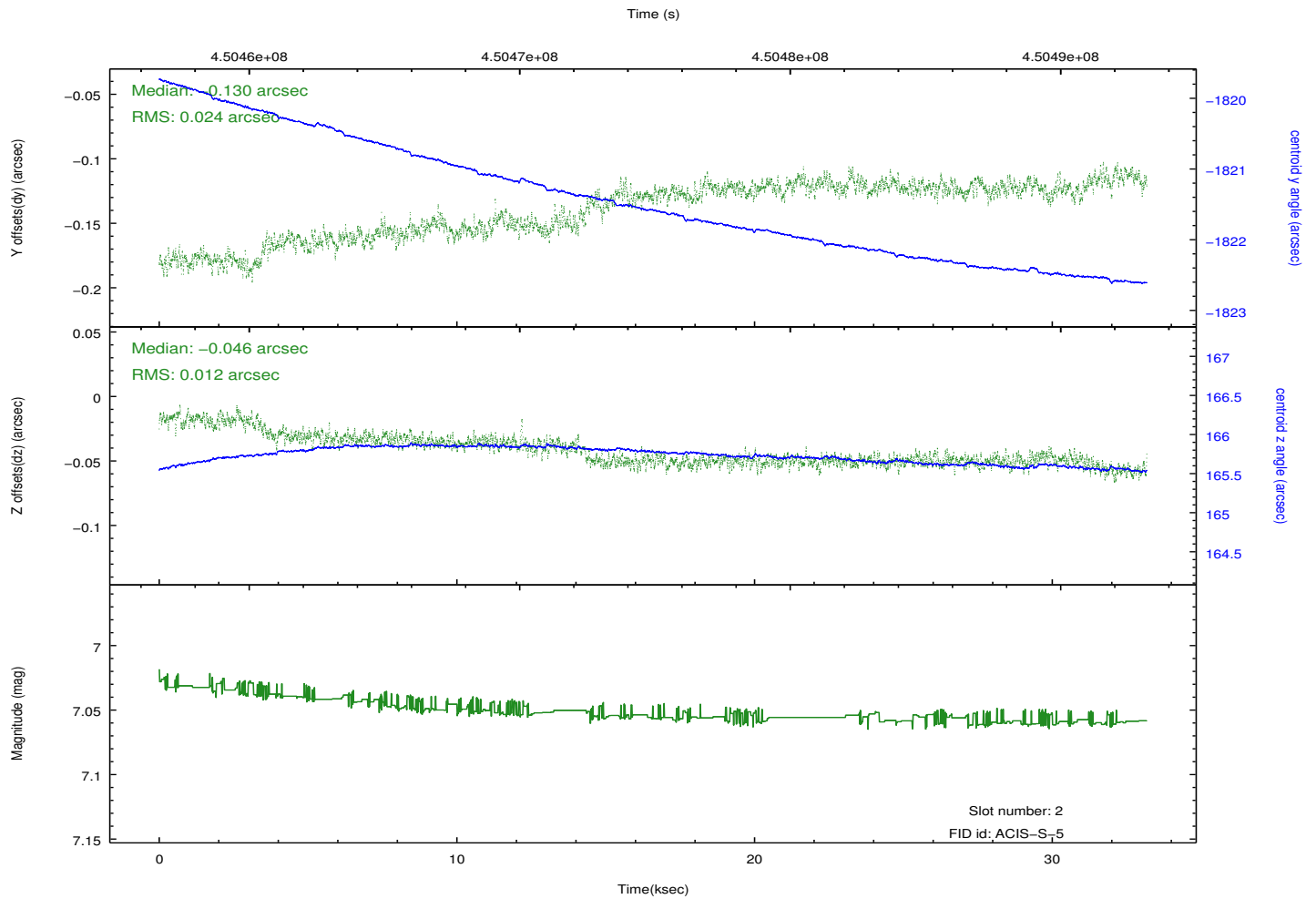
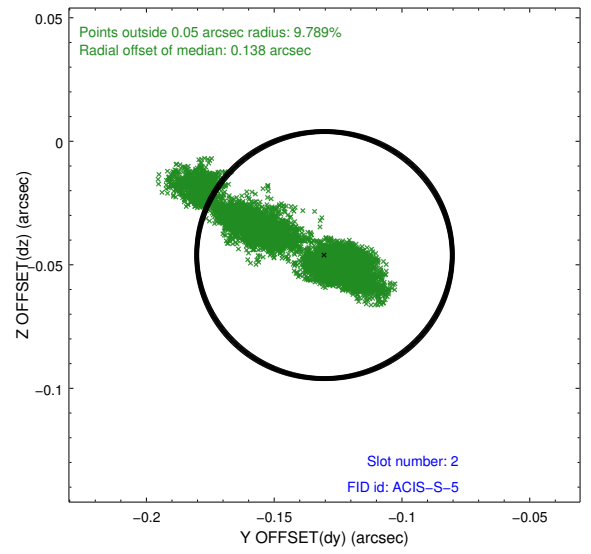
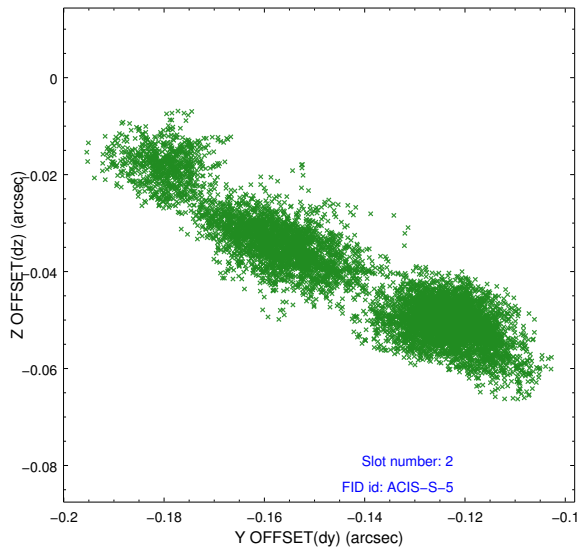
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|-------------|
| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2012.04.12 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 33.17525 |

A.2 Comments

Joint proposal with XMM. Time constraint met.