

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 6657 - L2 Version 2
Chandra X-Ray Center

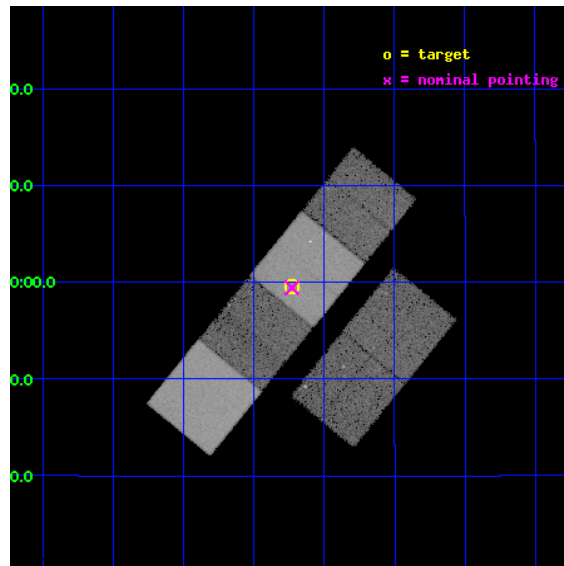
L2 Processing Date : Mar 18 2012

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1 Front

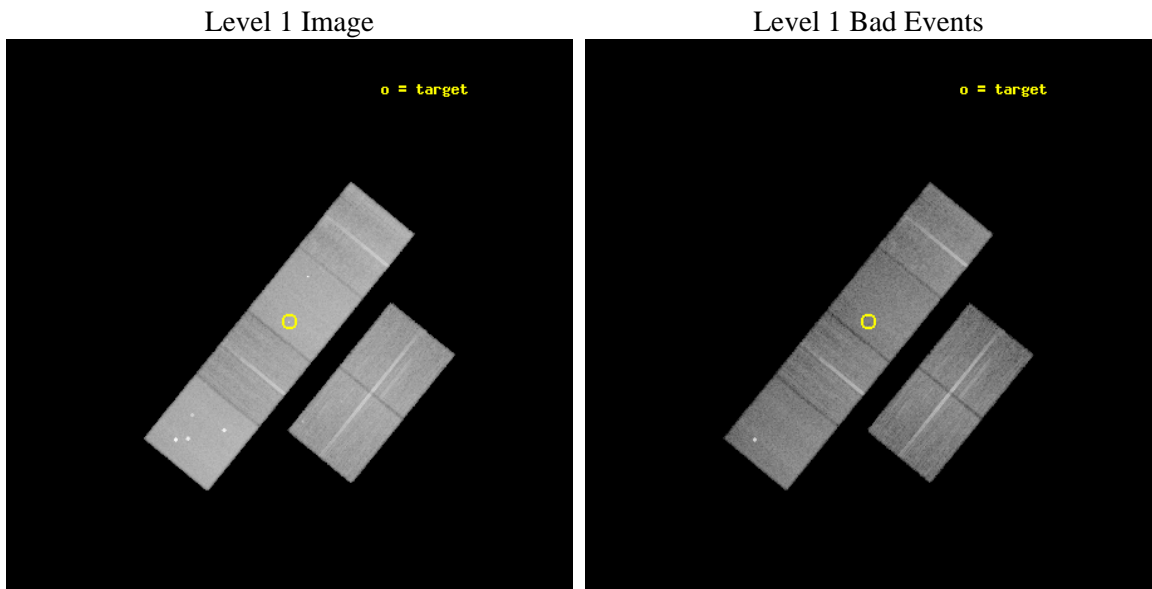
| | | |
|----------|--|---|
| seq_num | 500611 | Sequence number |
| obs_id | 6657 | Observation id |
| title | The old pulsar B1929+10 and its surroundings | Proposal title |
| observer | Prof. Gordon Garmire | Principal investigator |
| object | PSR B1929+10 | Source name |
| dtycycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 293.058096 | Observer's specified target RA [deg] |
| dec_targ | 10.992417 | Observer's specified target Dec [deg] |
| ra_nom | 293.05754551932 | Nominal RA [deg] |
| dec_nom | 10.99042606666 | Nominal Dec [deg] |
| roll_nom | 309.16246854813 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 21164.799921155 | Sum of GTIs [s] |
| livetime | 20896.798480641 | Livetime [s] |
| ontime2 | 21164.799921155 | Sum of GTIs [s] |
| ontime3 | 21164.799921155 | Sum of GTIs [s] |
| ontime5 | 21164.799921155 | Sum of GTIs [s] |
| ontime6 | 21161.558980763 | Sum of GTIs [s] |
| ontime7 | 21164.799921155 | Sum of GTIs [s] |
| ontime8 | 21164.799921155 | Sum of GTIs [s] |
| l2events | 278989 | Number of level 2 events |



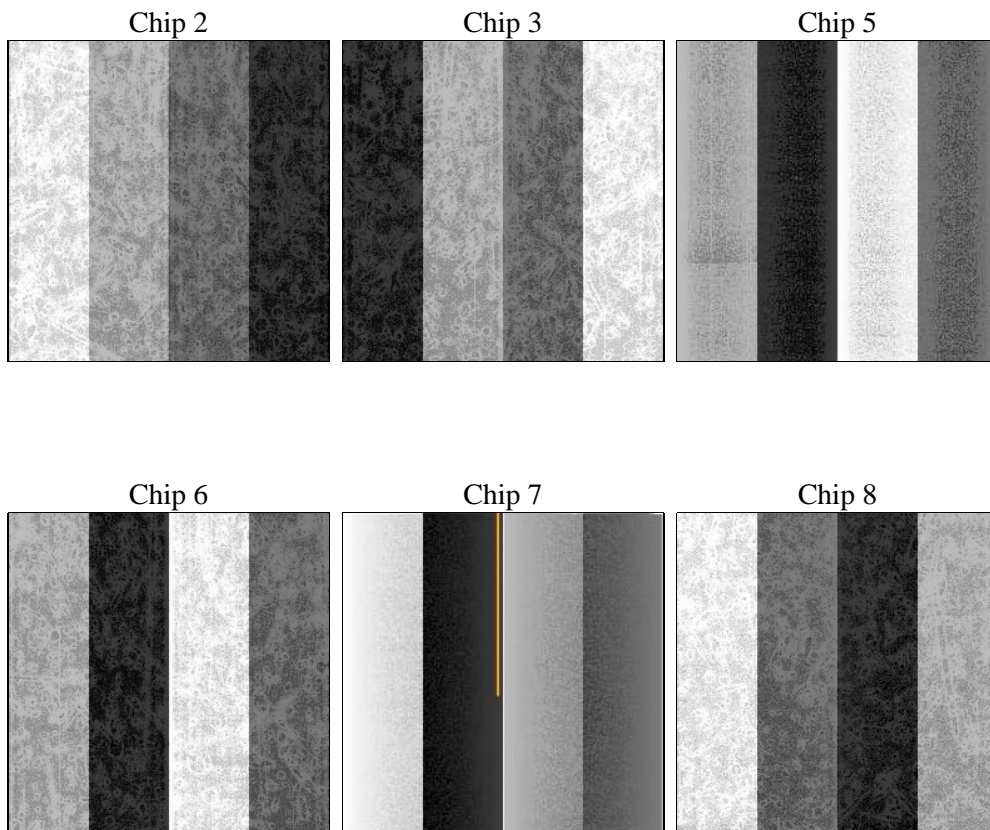
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 21000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.3 | Processing system revision | ontime | 21164.799921155 | Sum of GTIs [s] |
| caldbver | 4.4.8 | | ontime2 | 21164.799921155 | Sum of GTIs [s] |
| date | 2012-03-18T09:24:06 | Date and time of file creation | ontime3 | 21164.799921155 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime5 | 21164.799921155 | Sum of GTIs [s] |
| | | | ontime6 | 21161.558980763 | Sum of GTIs [s] |
| | | | ontime7 | 21164.799921155 | Sum of GTIs [s] |
| | | | ontime8 | 21164.799921155 | Sum of GTIs [s] |
| | | | l1events | 1220459 | Number of level 1 events |

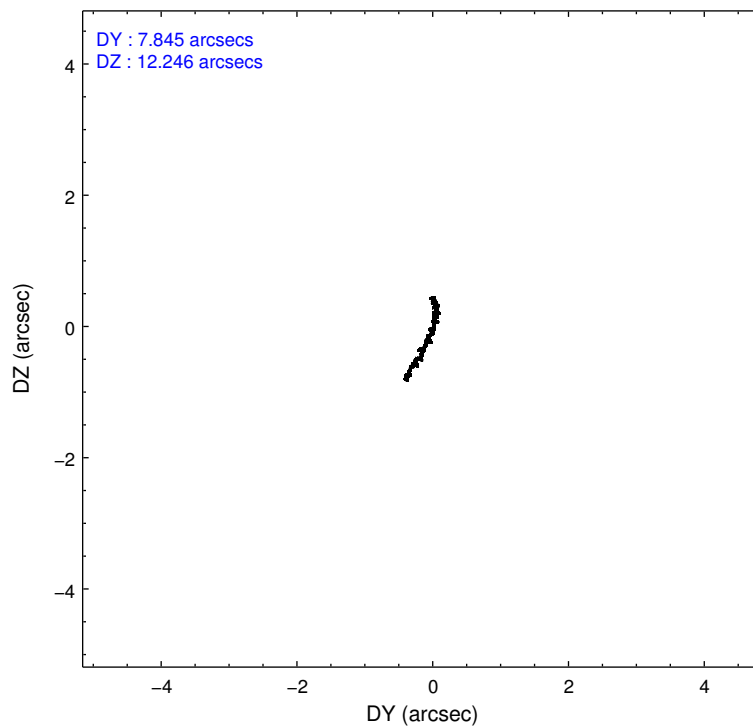
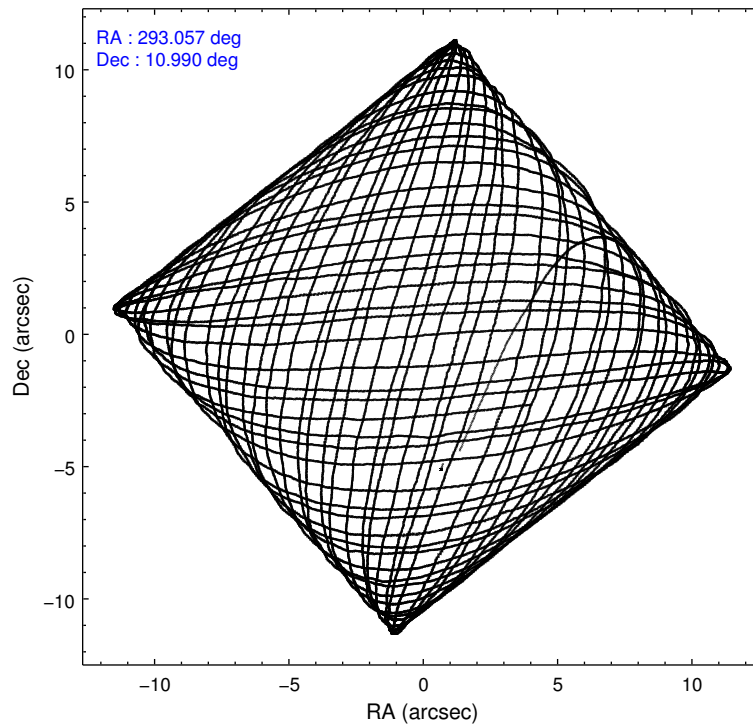
2.1.4 Events

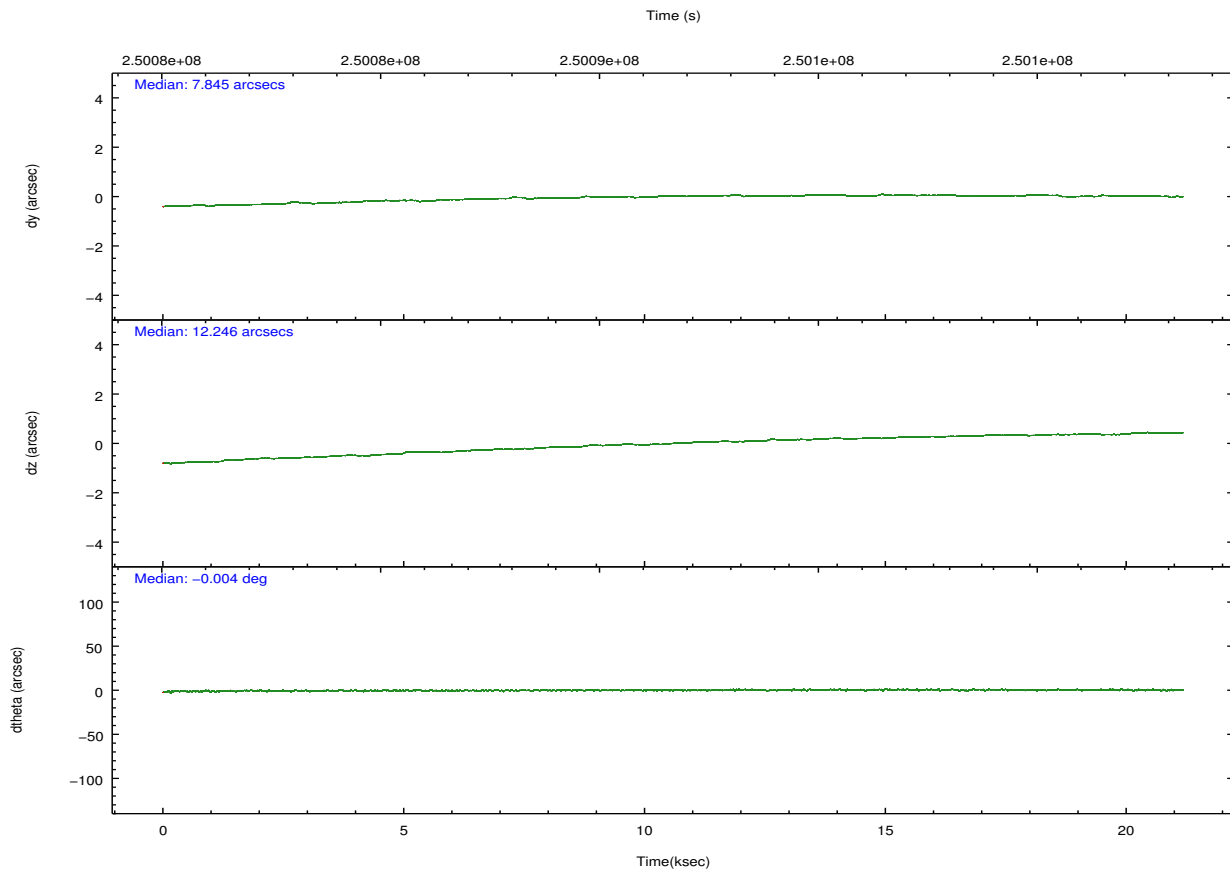
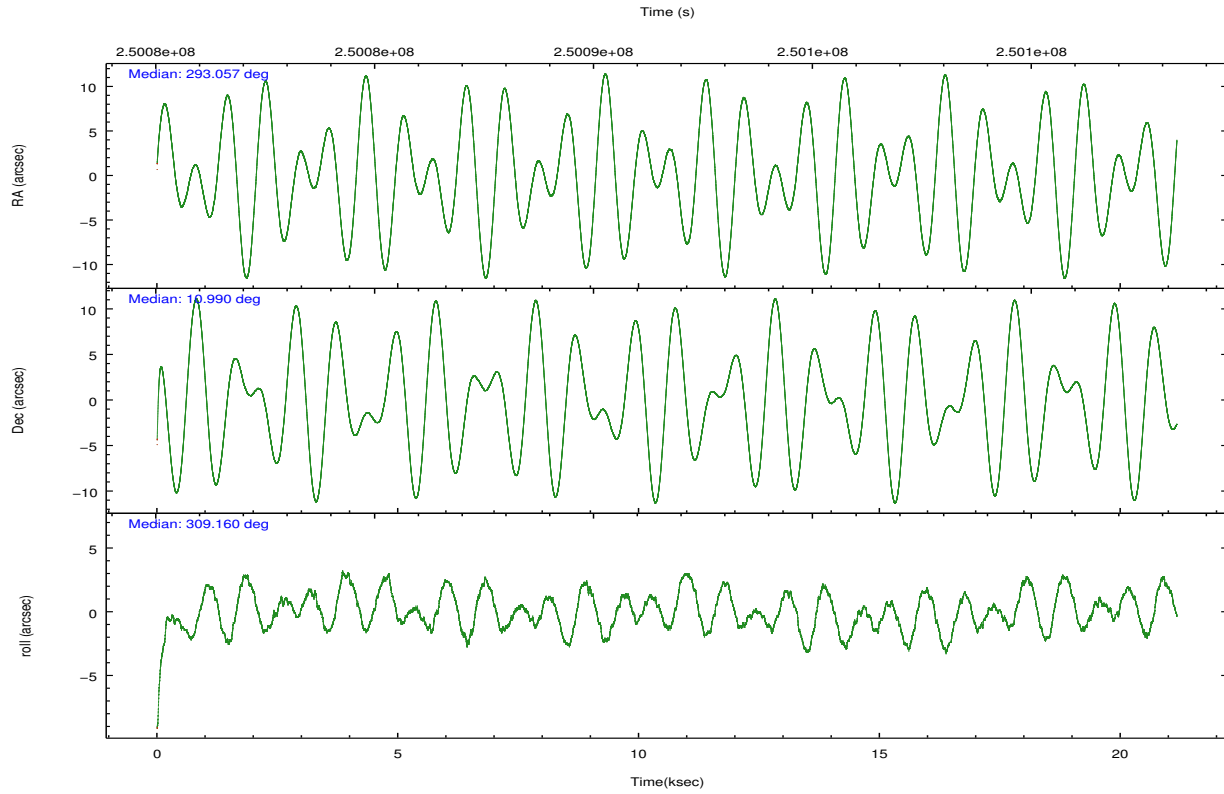
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|--------|--------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|--------|--------|
| level 1 events | 173424 | 162098 | 265912 | 169527 | 235247 | 214251 | grade 0 events | 9431 | 8941 | 17092 | 8138 | 9148 | 15221 |
| rejected events | 152693 | 142002 | 142025 | 149210 | 136755 | 167007 | | 5% | 5% | 6% | 4% | 3% | 7% |
| rejected % | 88% | 87% | 53% | 88% | 58% | 77% | grade 1 events | 122 | 128 | 323 | 76 | 253 | 149 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 4265 | 3810 | 36571 | 4233 | 20104 | 10345 |
| | | | | | | | | 2% | 2% | 13% | 2% | 8% | 4% |
| | | | | | | | grade 3 events | 1877 | 1995 | 4501 | 2022 | 8798 | 5141 |
| | | | | | | | | 1% | 1% | 1% | 1% | 3% | 2% |
| | | | | | | | grade 4 events | 1923 | 1972 | 4141 | 1945 | 8823 | 4845 |
| | | | | | | | | 1% | 1% | 1% | 1% | 3% | 2% |
| | | | | | | | grade 5 events | 6520 | 7765 | 18768 | 8041 | 22178 | 10391 |
| | | | | | | | | 3% | 4% | 7% | 4% | 9% | 4% |
| | | | | | | | grade 6 events | 3381 | 3499 | 62412 | 4114 | 52207 | 11891 |
| | | | | | | | | 1% | 2% | 23% | 2% | 22% | 5% |
| | | | | | | | grade 7 events | 145905 | 133988 | 122104 | 140958 | 113736 | 156268 |
| | | | | | | | | 84% | 82% | 45% | 83% | 48% | 72% |

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 | VFAINT | VFAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 293.031480 | 293.0575455193234 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 10.999780 | 10.99042606666029 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 309.010819 | 309.1624685481311 | [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 | -190.1425803651734 | | | |
| [mm] SIM translation stage offset | 0 | 0.01005778216563158 | | | |
| [s] Observation start time (MET) | 250081266.184000 | 250080134.10579 | | | |
| Observation start date | 2005-12-04T11:00:02 | 2005-12-04T10:42:14 | | | |
| [s] Observation end time (MET) | 250102266.184000 | 250103242.73185 | | | |
| Observation end date | 2005-12-04T16:50:02 | 2005-12-04T17:07:22 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



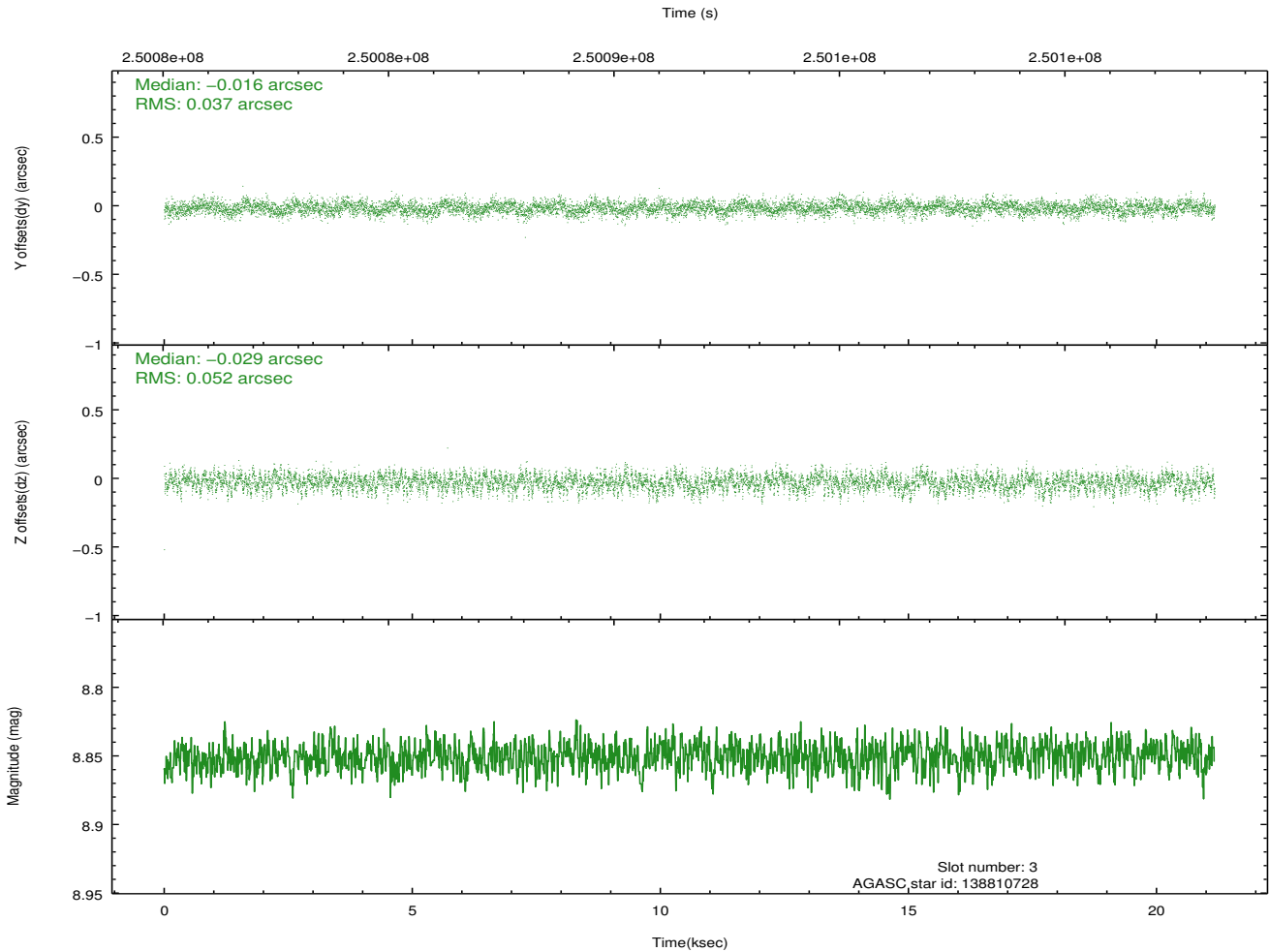
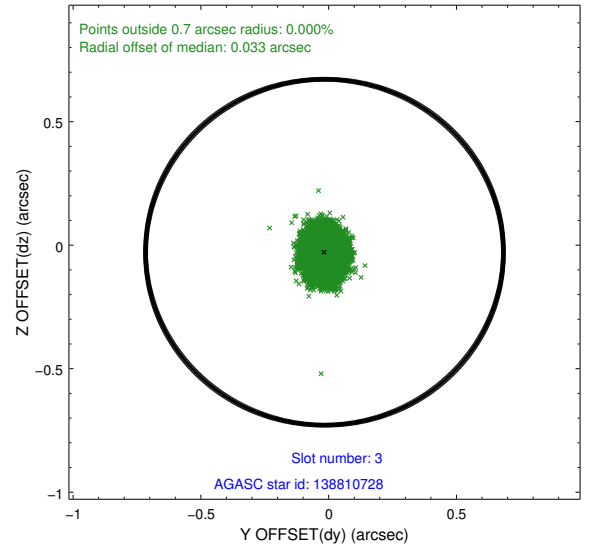
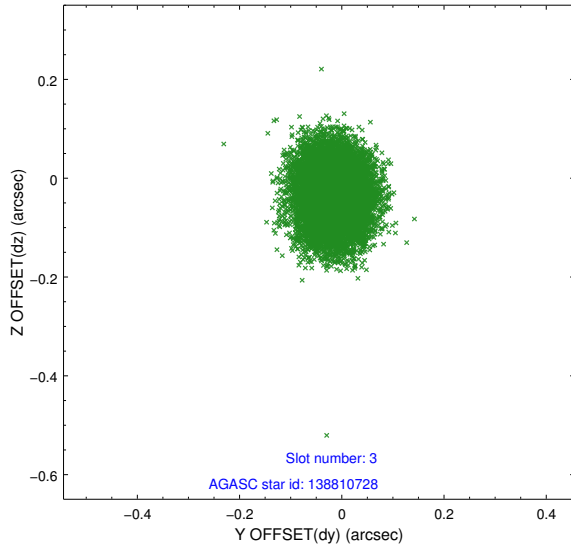


Slot Statistics

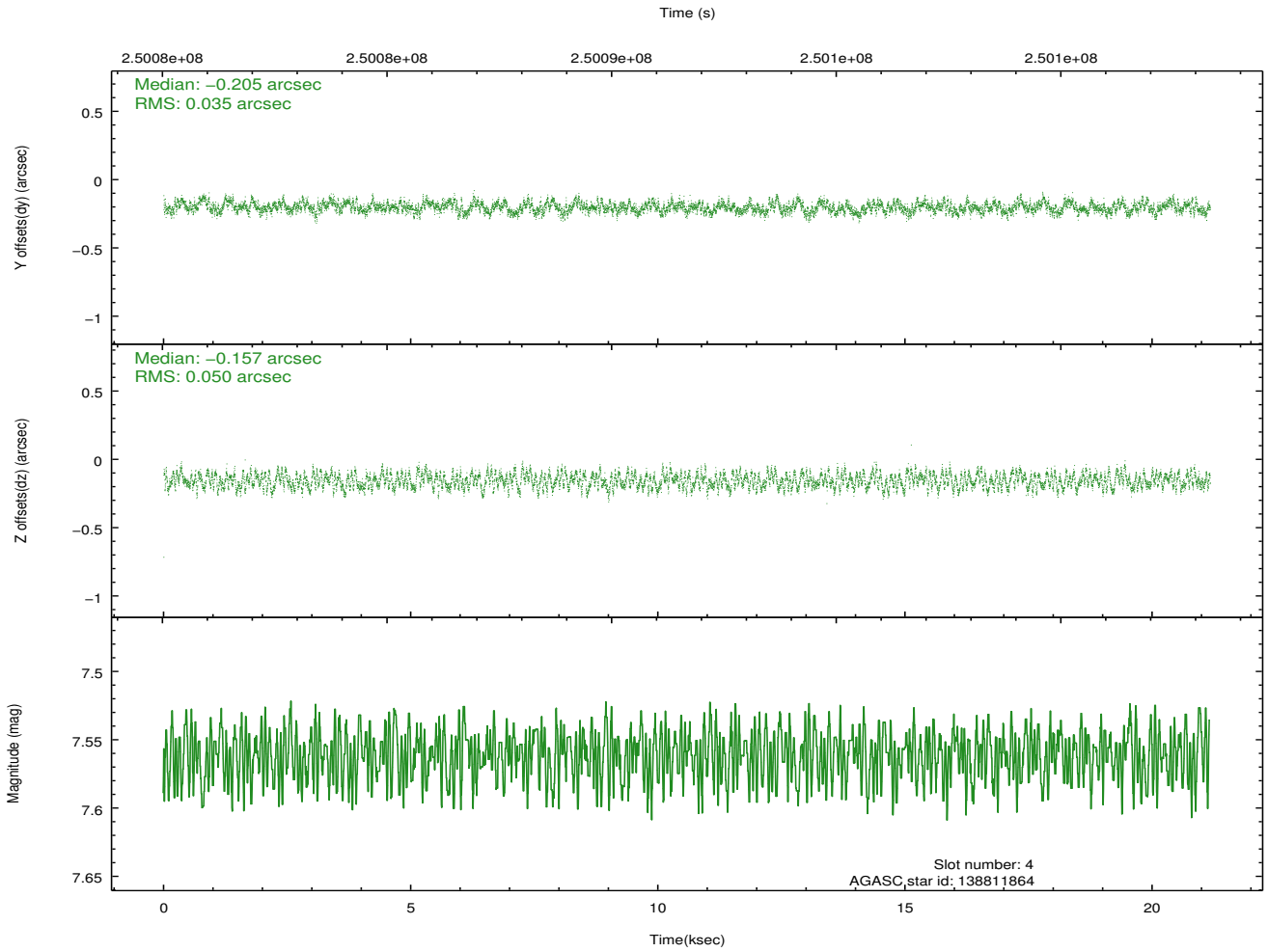
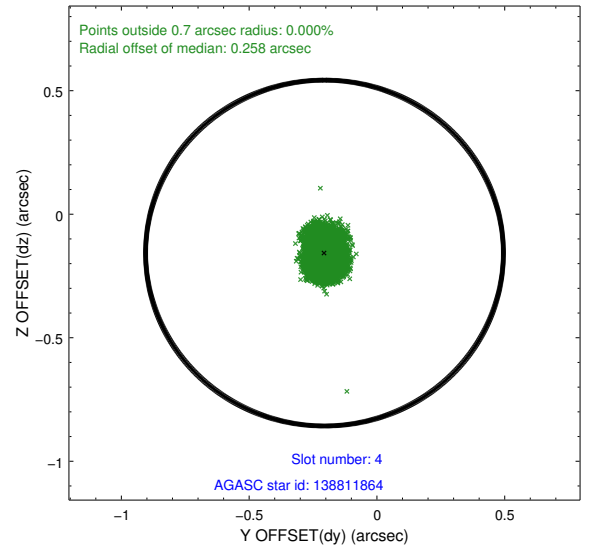
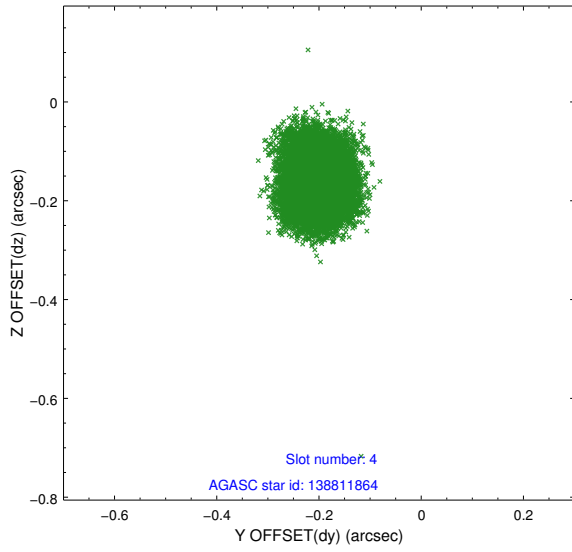
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-1 | 7.19 | 5165 | 0.077 | -0.085 | 0.017 | 0.024 | 0.000000 | 0.000000 | 935.53 | -1729.16 |
| 1 | FID | ACIS-S-5 | 7.24 | 5165 | -0.084 | 0.057 | 0.011 | 0.024 | 0.000000 | 0.000000 | -1813.49 | 168.41 |
| 2 | FID | ACIS-S-6 | 7.35 | 5165 | -0.013 | 0.038 | 0.023 | 0.032 | 0.000000 | 0.000000 | 400.86 | 812.50 |
| 3 | GUIDE | 138810728 | 8.85 | 10324 | -0.016 | -0.029 | 0.067 | 0.110 | 292.568685 | 11.088559 | -1278.12 | -1068.19 |
| 4 | GUIDE | 138811864 | 7.56 | 10328 | -0.205 | -0.157 | 0.066 | 0.101 | 292.193282 | 11.026987 | -1943.69 | -2237.58 |
| 5 | GUIDE | 138944608 | 8.82 | 10304 | 0.125 | 0.179 | 0.066 | 0.109 | 293.762373 | 10.804438 | 2171.02 | 1567.80 |
| 6 | GUIDE | 138950544 | 9.08 | 10327 | 0.146 | -0.017 | 0.073 | 0.120 | 293.596757 | 10.776492 | 1882.07 | 1048.90 |
| 7 | GUIDE | 138954992 | 6.97 | 10328 | -0.055 | 0.025 | 0.060 | 0.094 | 293.660265 | 10.952713 | 1529.09 | 1621.99 |

2.4 Star Slots

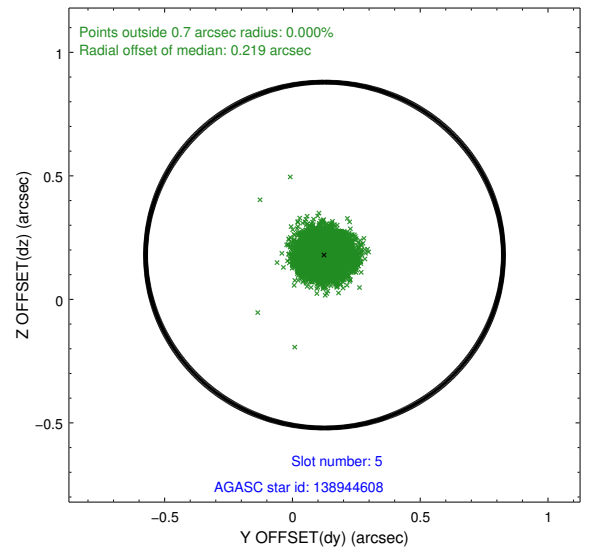
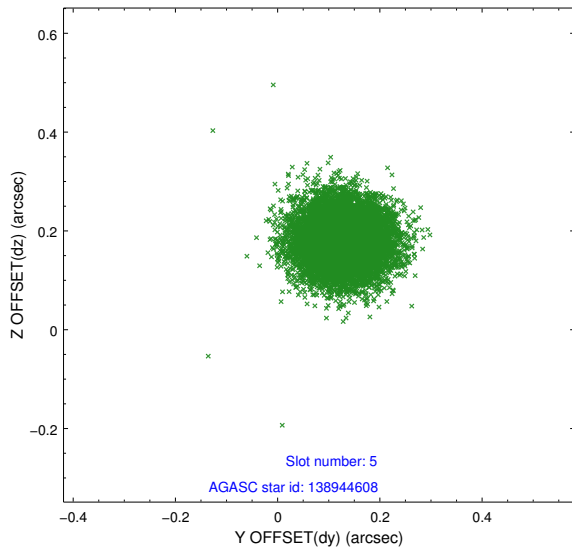
2.4.1 Slot 3



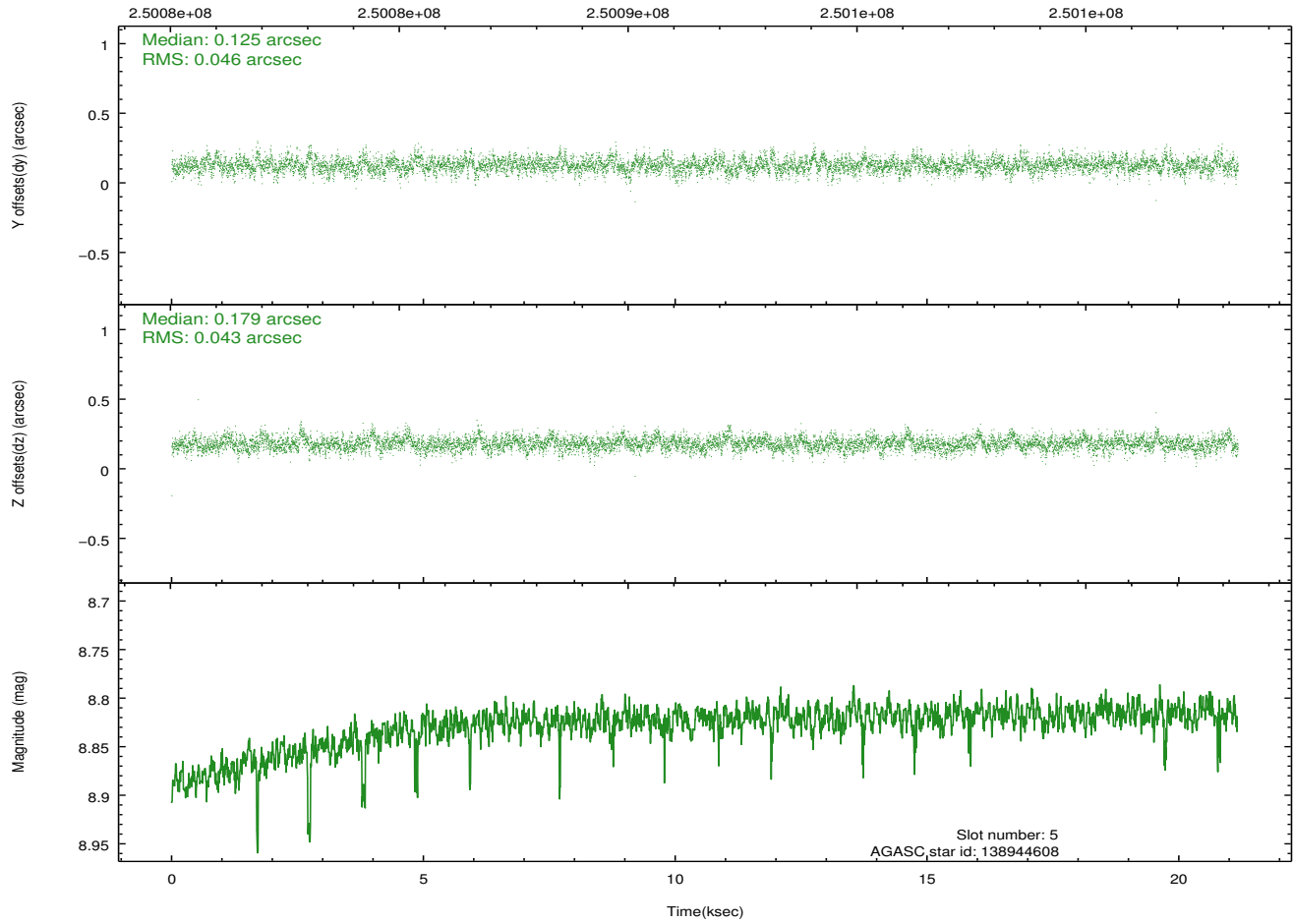
2.4.2 Slot 4



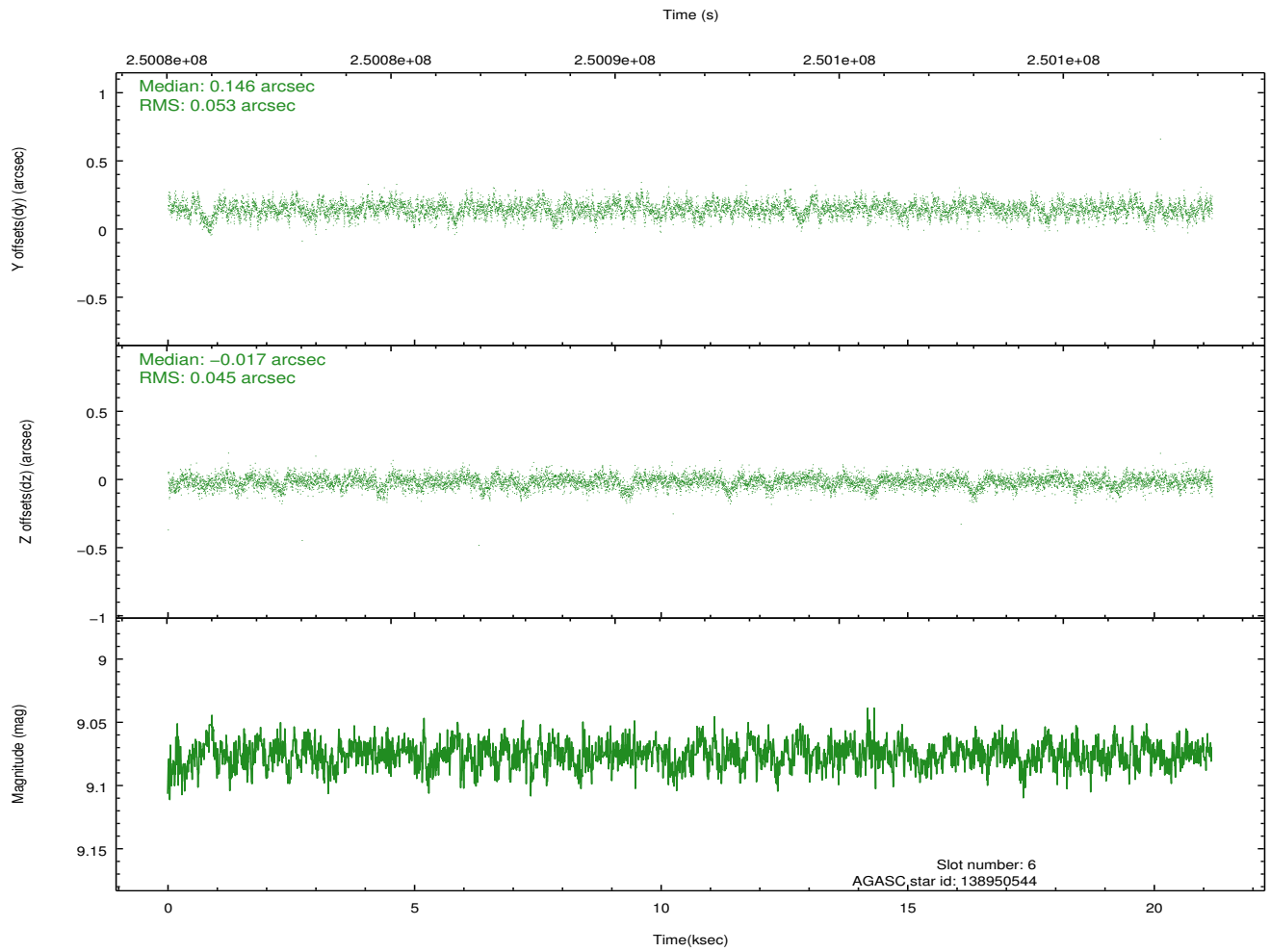
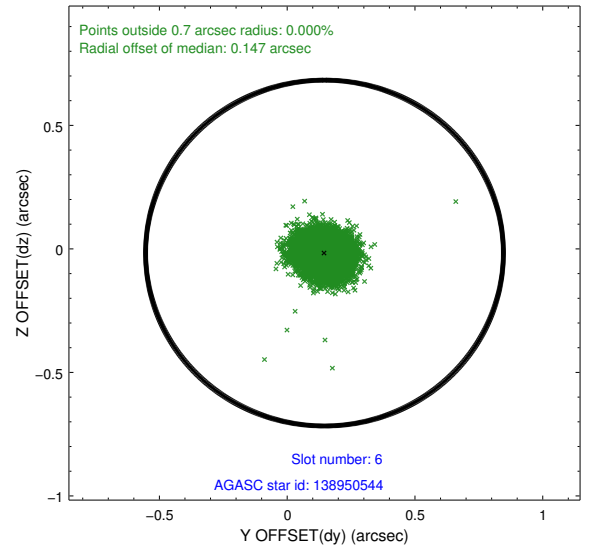
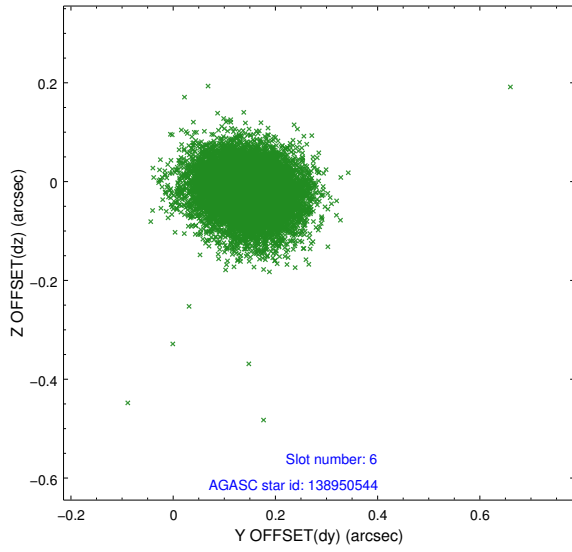
2.4.3 Slot 5



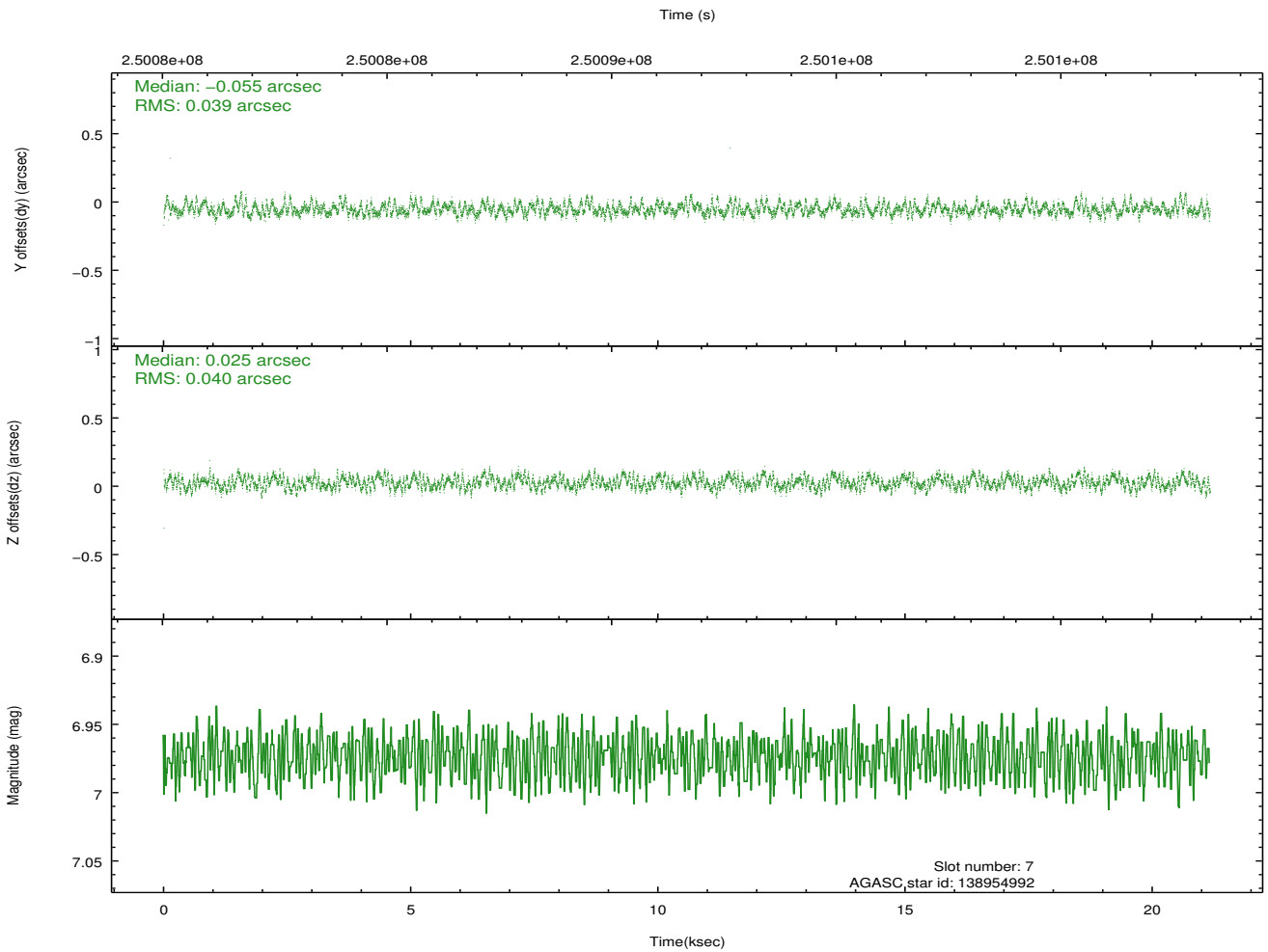
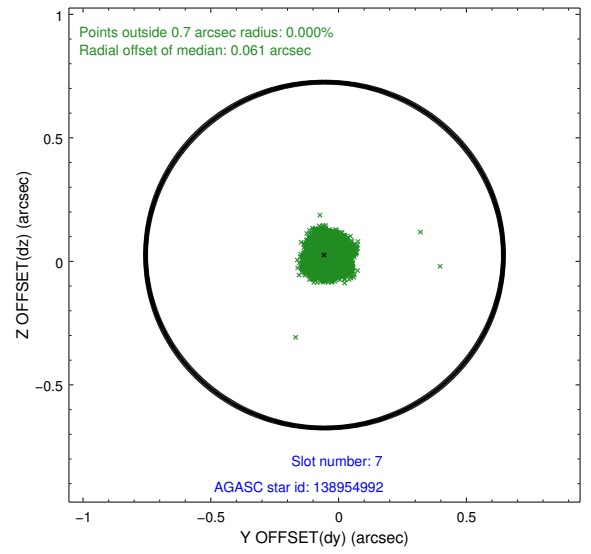
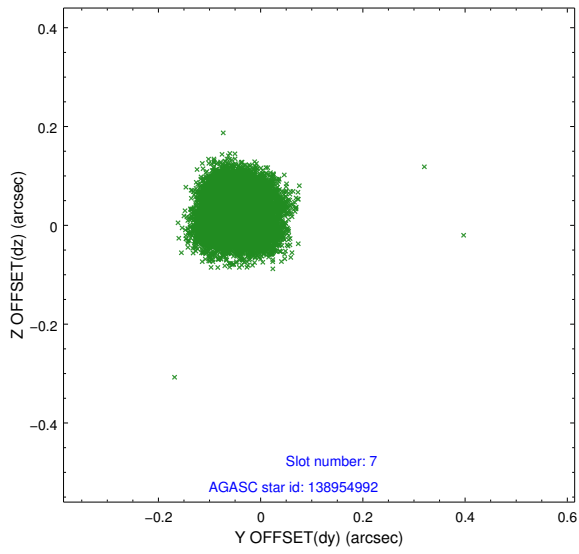
Time (s)



2.4.4 Slot 6

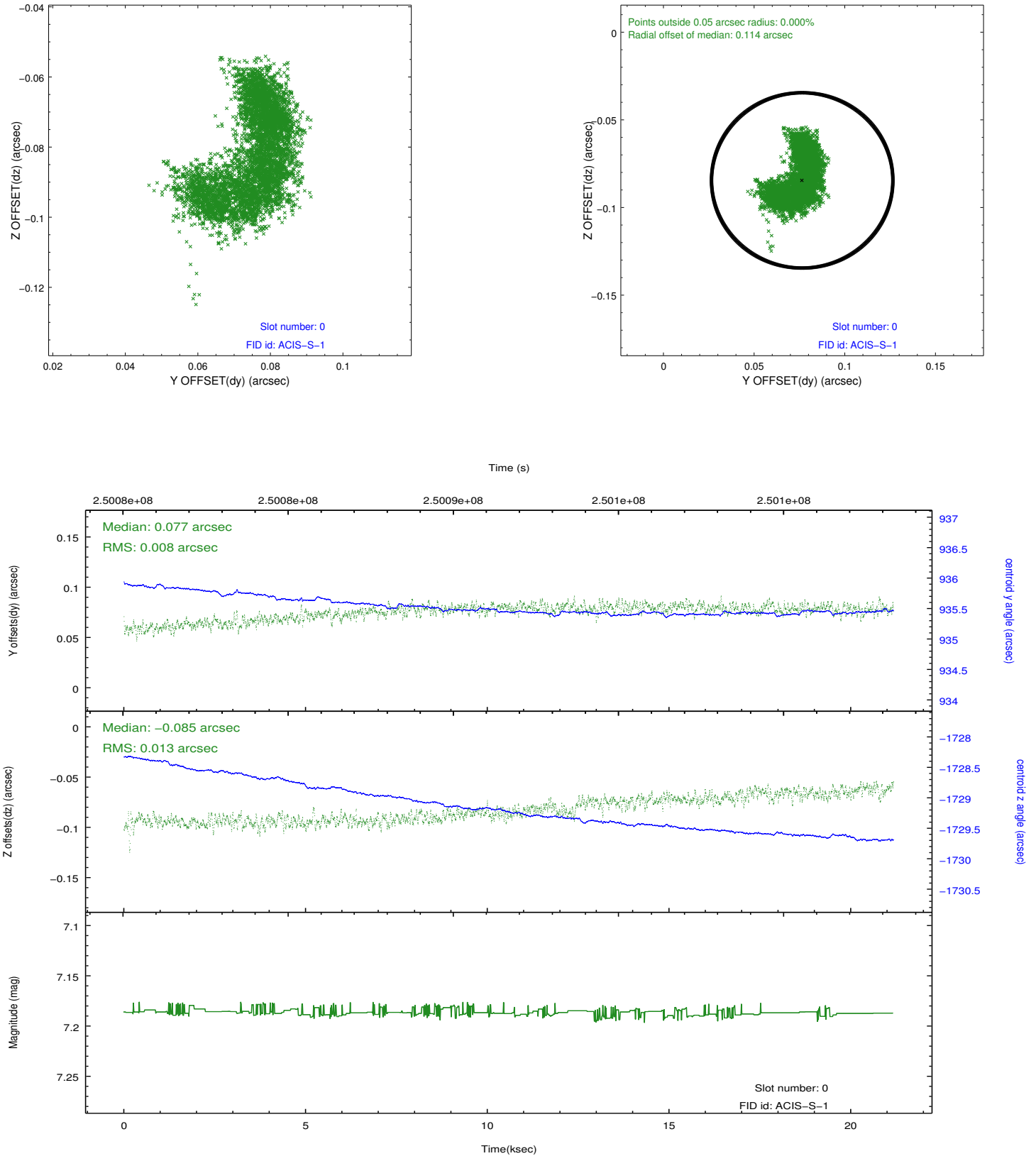


2.4.5 Slot 7

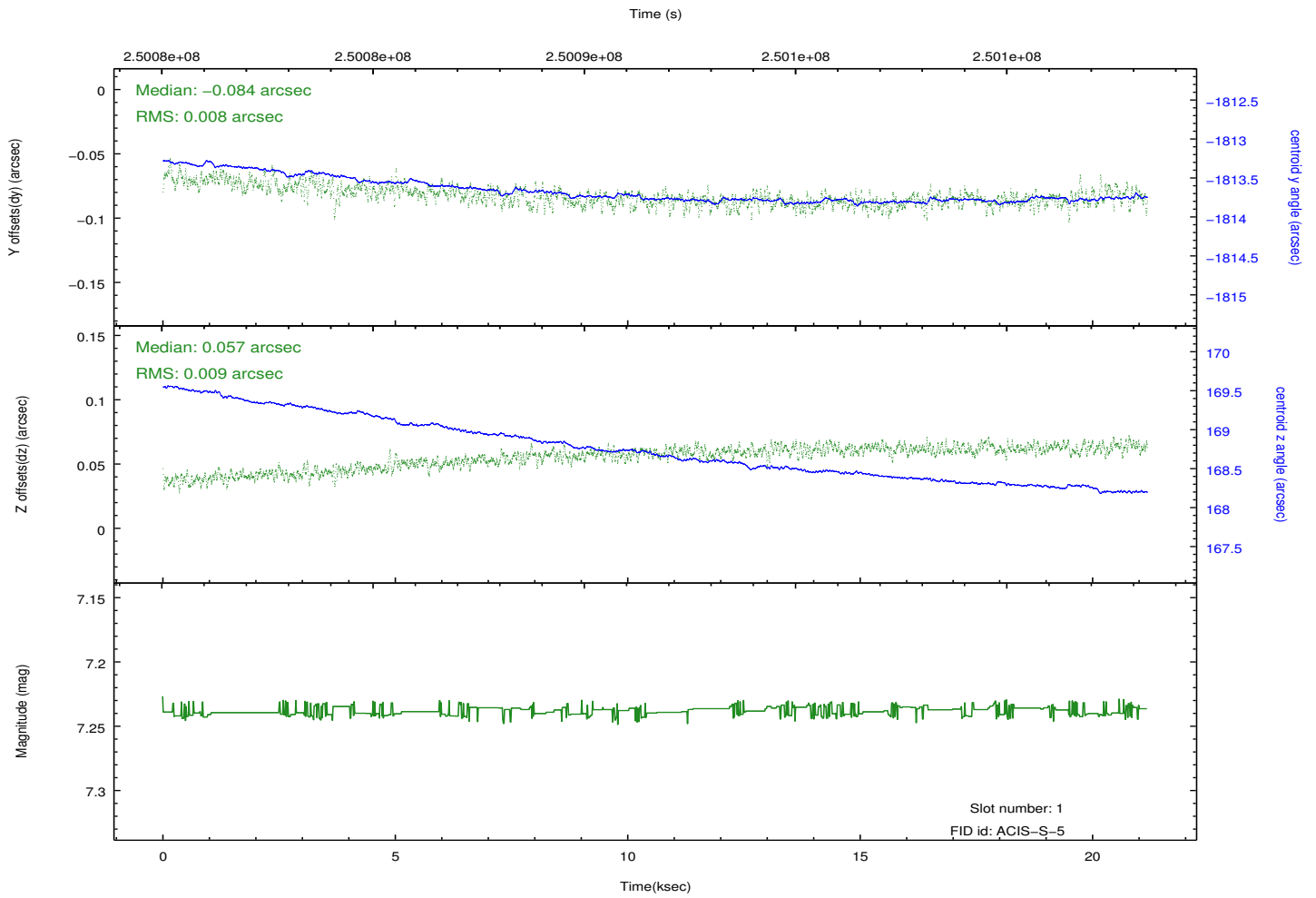
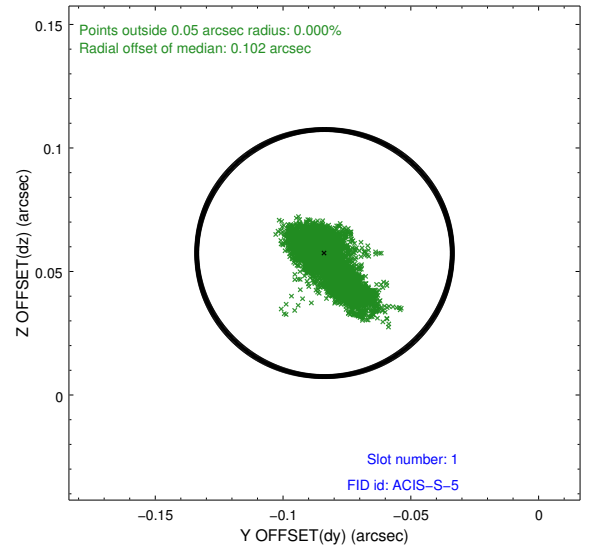
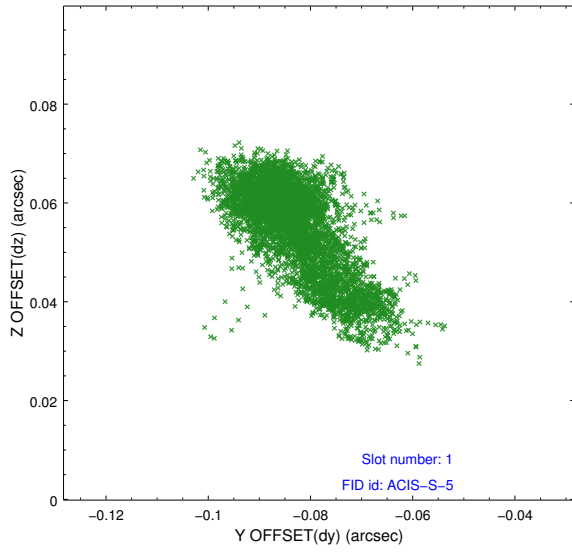


2.5 FID Slots

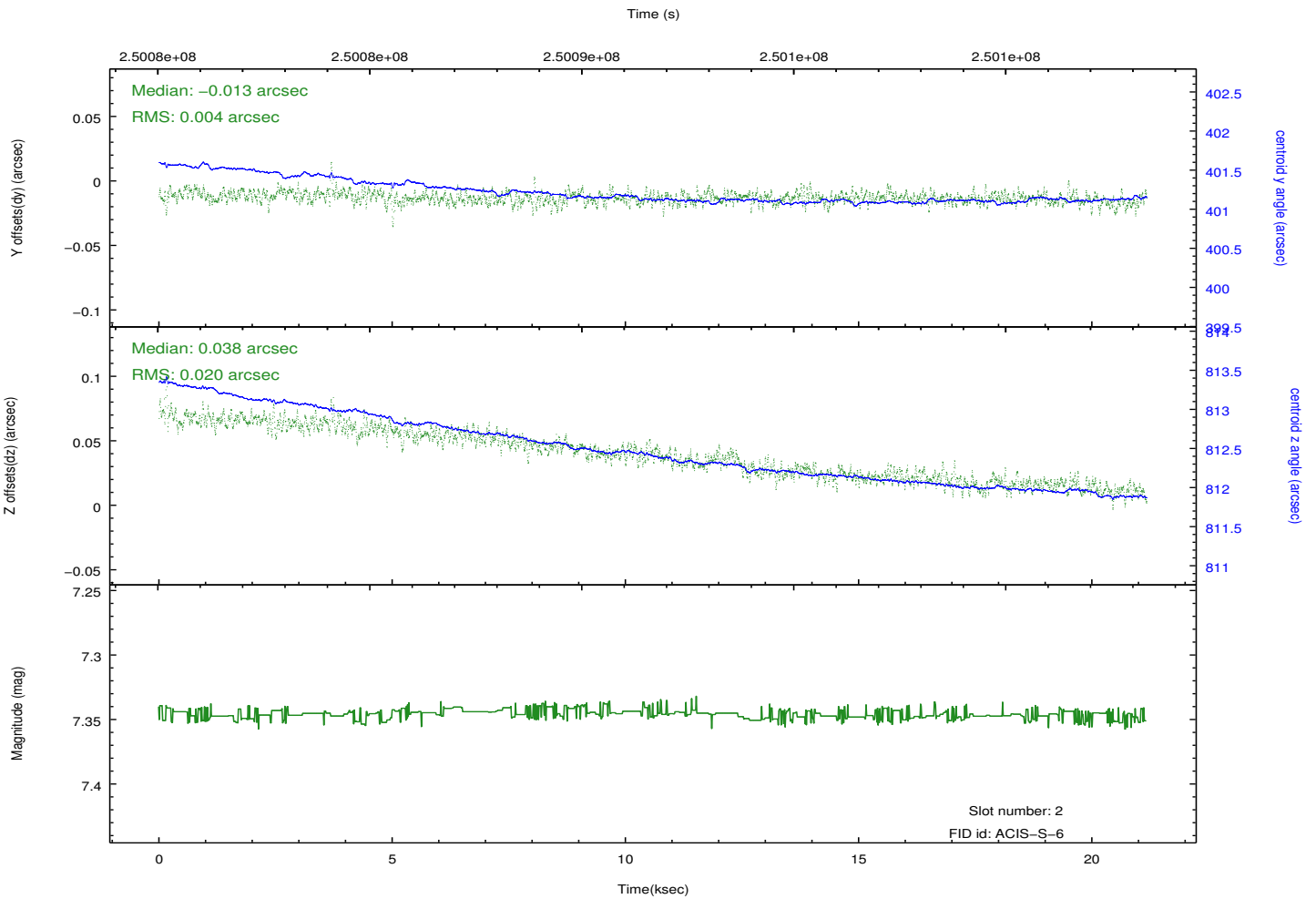
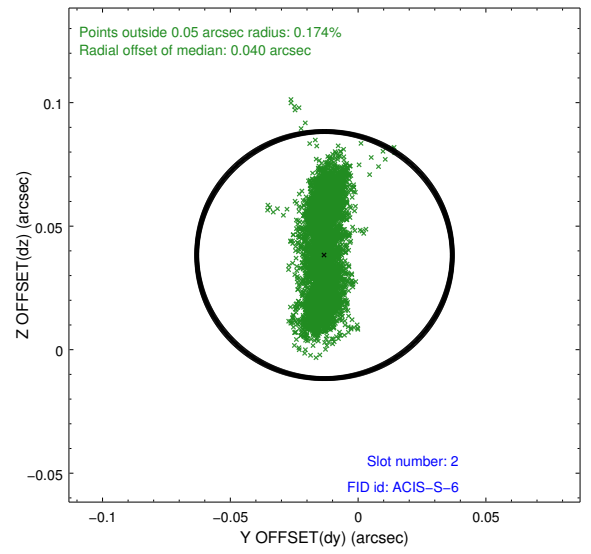
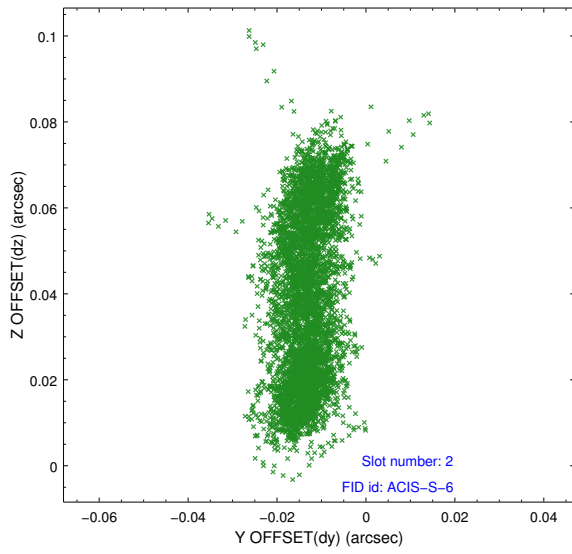
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|---------------|
| V&V Scientist | Beth Sundheim |
| V&V Date (YYYY-MM-DD) | 2012.03.21 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 21.16479 |

A.2 Comments