

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 1981 - L2 Version 3
Chandra X-Ray Center

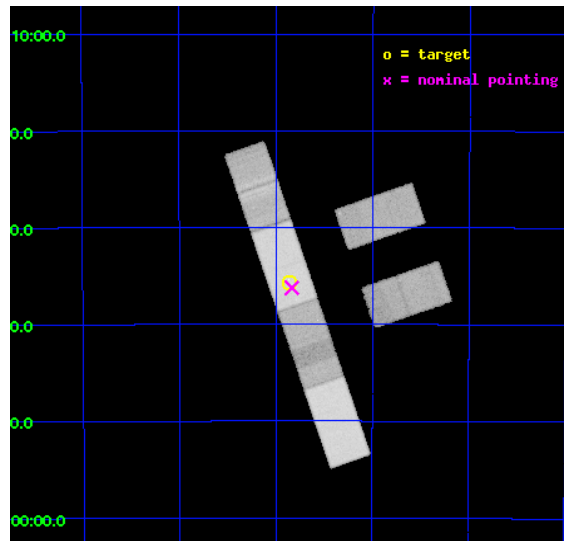
L2 Processing Date : Sep 25 2012

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

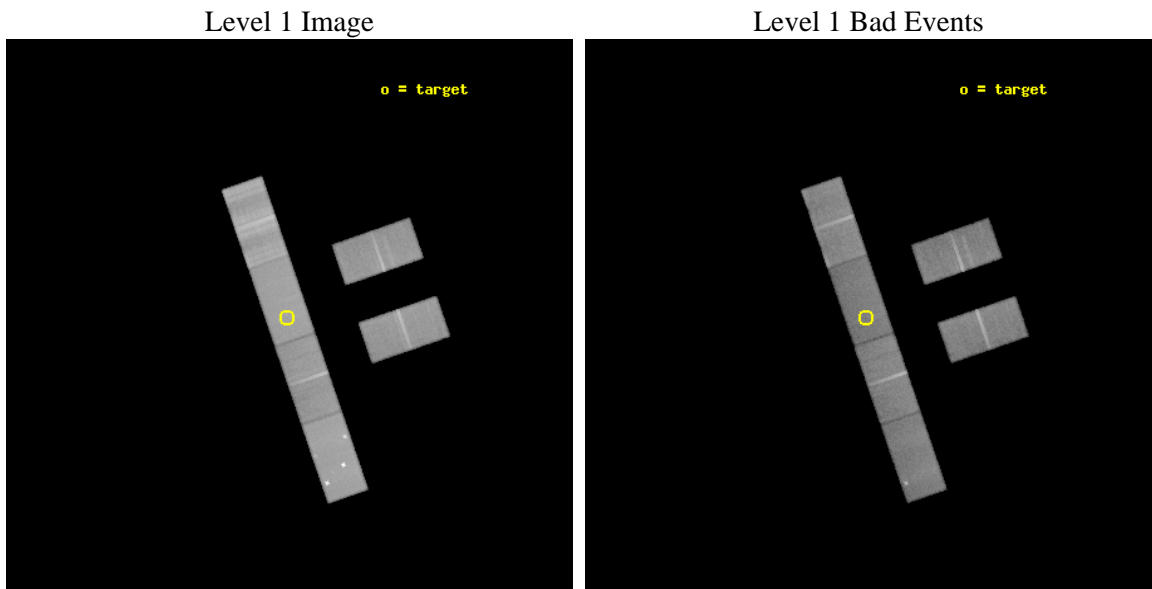
| | | |
|----------|--|---|
| seq_num | 500158 | Sequence number |
| obs_id | 1981 | Observation id |
| title | A STUDY OF THE SOFT GAMMA REPEATER SGR 1627-41 IN QUIESCENCE | Propo |
| observer | Dr. CHRYSsa KOUVELIOTOU | Principal investigator |
| object | SGR 1627-41 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 248.965833 | Observer's specified target RA [deg] |
| dec_targ | -47.595556 | Observer's specified target Dec [deg] |
| ra_nom | 248.95879544709 | Nominal RA [deg] |
| dec_nom | -47.604062992347 | Nominal Dec [deg] |
| roll_nom | 251.03848285687 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 50045.399917156 | Sum of GTIs [s] |
| livetime | 48929.800466519 | Livetime [s] |
| ontime2 | 50045.399917156 | Sum of GTIs [s] |
| ontime3 | 50045.399917156 | Sum of GTIs [s] |
| ontime5 | 50045.399917156 | Sum of GTIs [s] |
| ontime6 | 50043.558907062 | Sum of GTIs [s] |
| ontime7 | 50045.399917156 | Sum of GTIs [s] |
| ontime8 | 50045.399917156 | Sum of GTIs [s] |
| l2events | 453054 | Number of level 2 events |



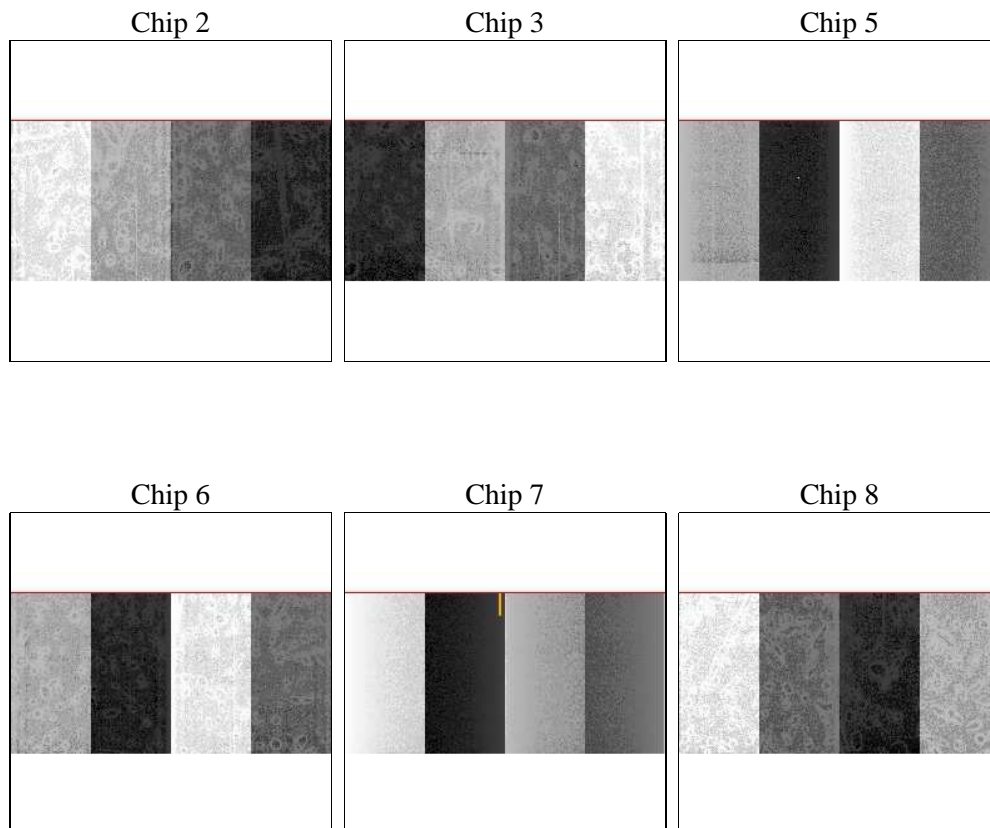
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 3 | Obi number | sched_exp_time | 50000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 50045.399917156 | Sum of GTIs [s] |
| caldbver | 4.5.1.1 | | ontime2 | 50045.399917156 | Sum of GTIs [s] |
| date | 2012-09-25T02:55:22 | Date and time of file creation | ontime3 | 50045.399917156 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime5 | 50045.399917156 | Sum of GTIs [s] |
| | | | ontime6 | 50043.558907062 | Sum of GTIs [s] |
| | | | ontime7 | 50045.399917156 | Sum of GTIs [s] |
| | | | ontime8 | 50045.399917156 | Sum of GTIs [s] |
| | | | l1events | 1503770 | Number of level 1 events |

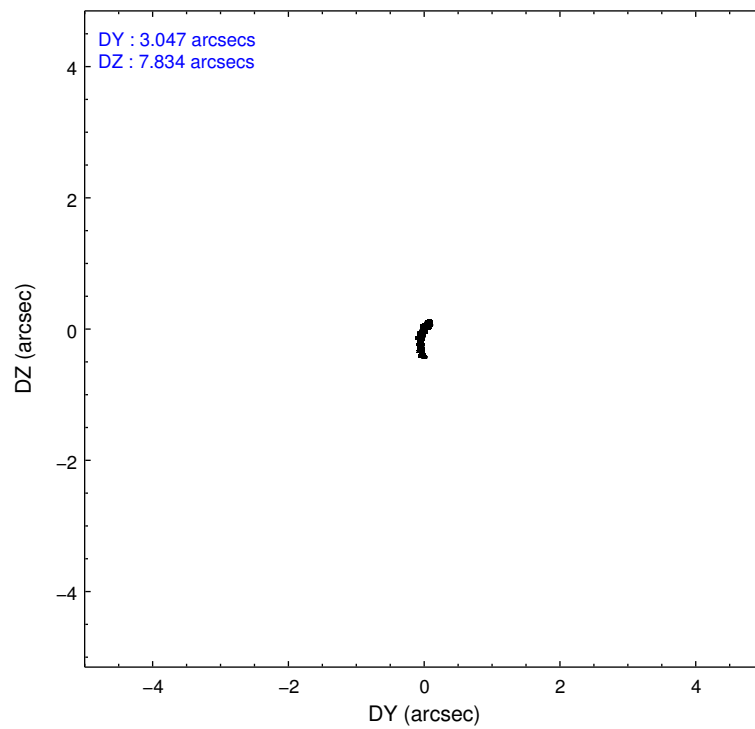
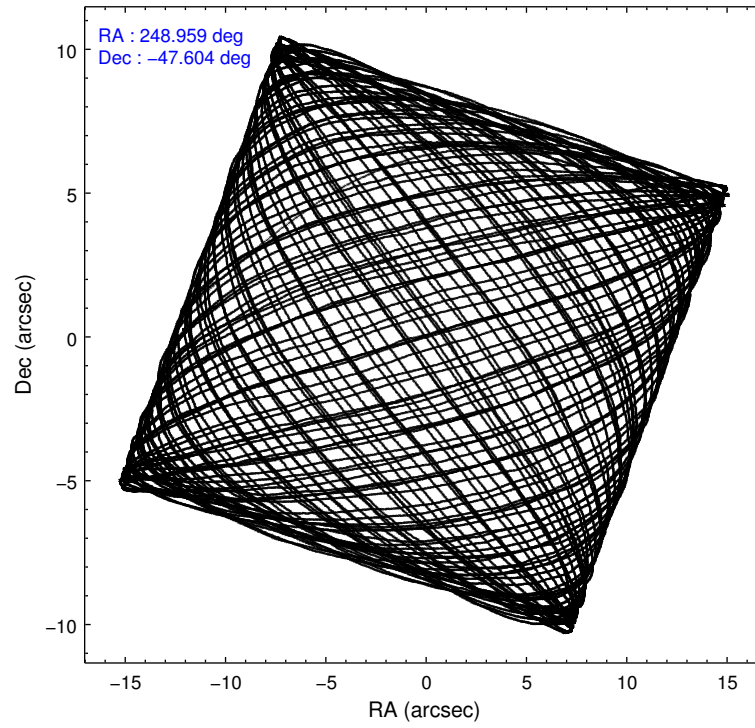
2.1.4 Events

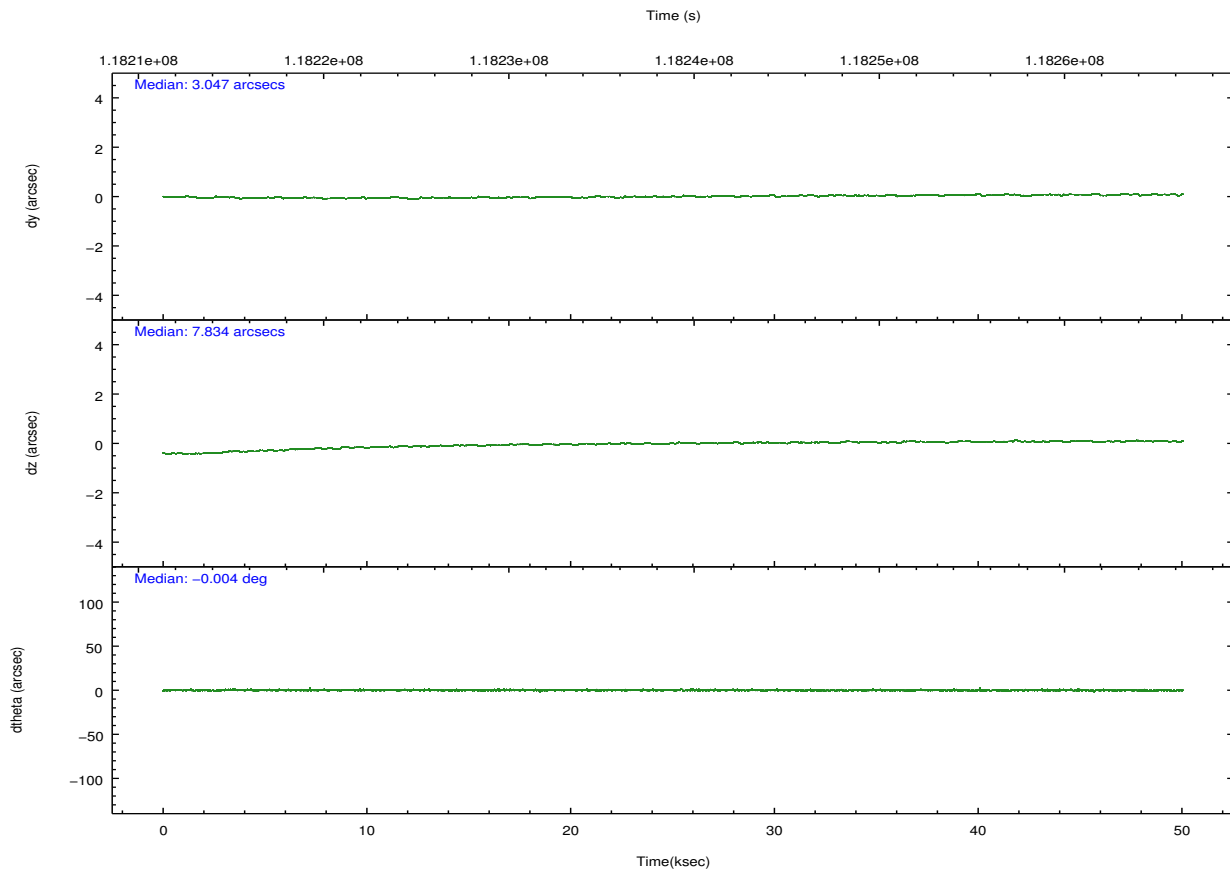
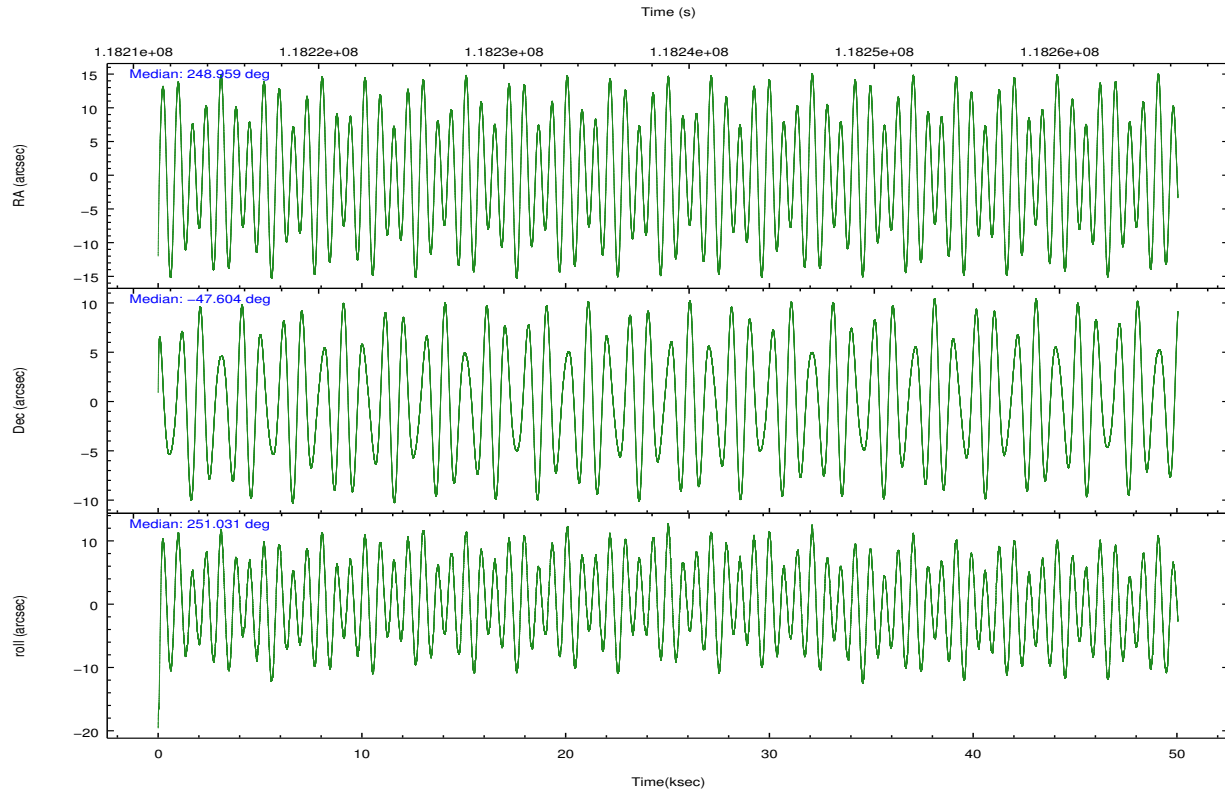
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|--------|--------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|-------|--------|
| level 1 events | 201626 | 193325 | 308449 | 201660 | 253793 | 344917 | grade 0 events | 21511 | 19301 | 47267 | 22566 | 16656 | 62843 |
| rejected events | 156974 | 149954 | 125593 | 153956 | 114576 | 181411 | | 10% | 9% | 15% | 11% | 6% | 18% |
| rejected % | 77% | 77% | 40% | 76% | 45% | 52% | grade 1 events | 88 | 84 | 400 | 108 | 254 | 366 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 10136 | 11255 | 49168 | 12019 | 28587 | 24994 |
| | | | | | | | | 5% | 5% | 15% | 5% | 11% | 7% |
| | | | | | | | grade 3 events | 2647 | 2544 | 9878 | 2796 | 13152 | 25288 |
| | | | | | | | | 1% | 1% | 3% | 1% | 5% | 7% |
| | | | | | | | grade 4 events | 2956 | 2570 | 9437 | 2723 | 13369 | 22498 |
| | | | | | | | | 1% | 1% | 3% | 1% | 5% | 6% |
| | | | | | | | grade 5 events | 5326 | 5775 | 18895 | 6419 | 19661 | 8688 |
| | | | | | | | | 2% | 2% | 6% | 3% | 7% | 2% |
| | | | | | | | grade 6 events | 7607 | 7901 | 68011 | 7842 | 68141 | 28854 |
| | | | | | | | | 3% | 4% | 22% | 3% | 26% | 8% |
| | | | | | | | grade 7 events | 151355 | 143895 | 105393 | 147187 | 93973 | 171386 |
| | | | | | | | | 75% | 74% | 34% | 72% | 37% | 49% |

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 | 248.950603 | 248.9587954470907 | Subarray requested | CUSTOM | 1/2 |
| [deg] Pointing Dec | -47.577364 | -47.60406299234652 | Subarray start row | 257 | 257 |
| [deg] Pointing Roll | 250.875807 | 251.0384828568689 | Subarray row count | 512 | 512 |
| [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 | 1.8 |
| [mm] SIM translation stage pos | -190.132523 | -190.1400660498719 | | | |
| [mm] SIM translation stage offset | 0 | 0.00754346686406393 | | | |
| [s] Observation start time (MET) | 118213889.184000 | 118212939.00448 | | | |
| Observation start date | 2001-09-30T05:10:25 | 2001-09-30T04:55:39 | | | |
| [s] Observation end time (MET) | 118263889.184000 | 118264600.54403 | | | |
| Observation end date | 2001-09-30T19:03:45 | 2001-09-30T19:16:40 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



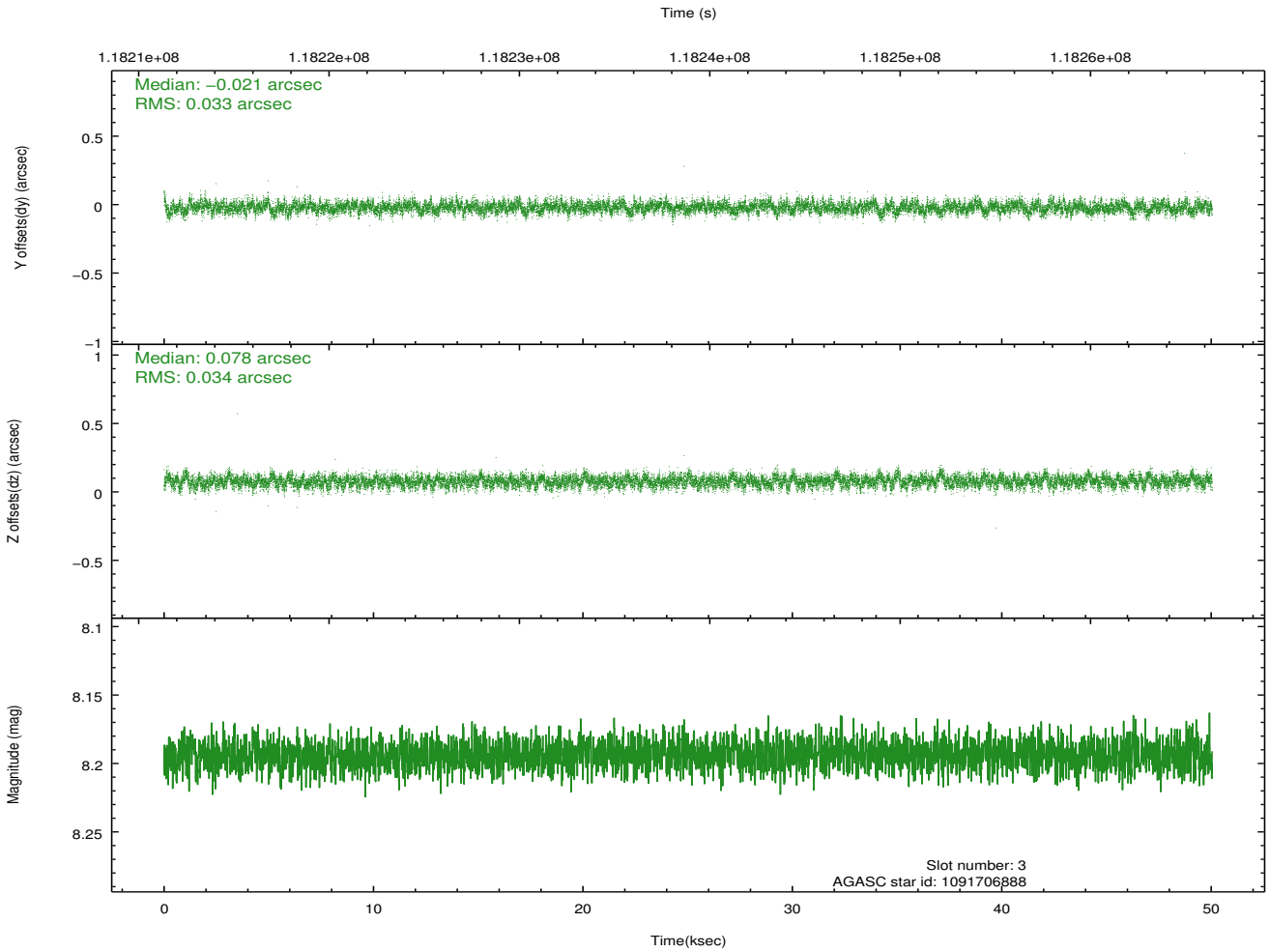
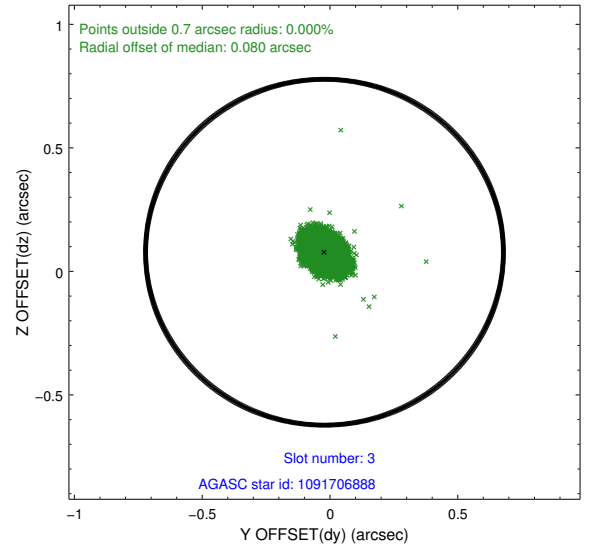
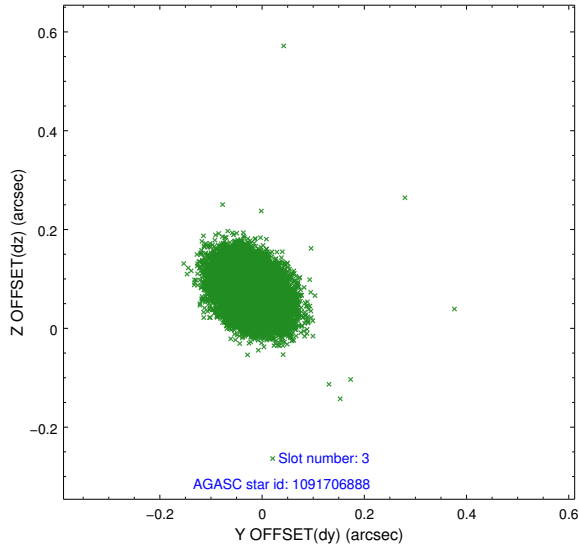


Slot Statistics

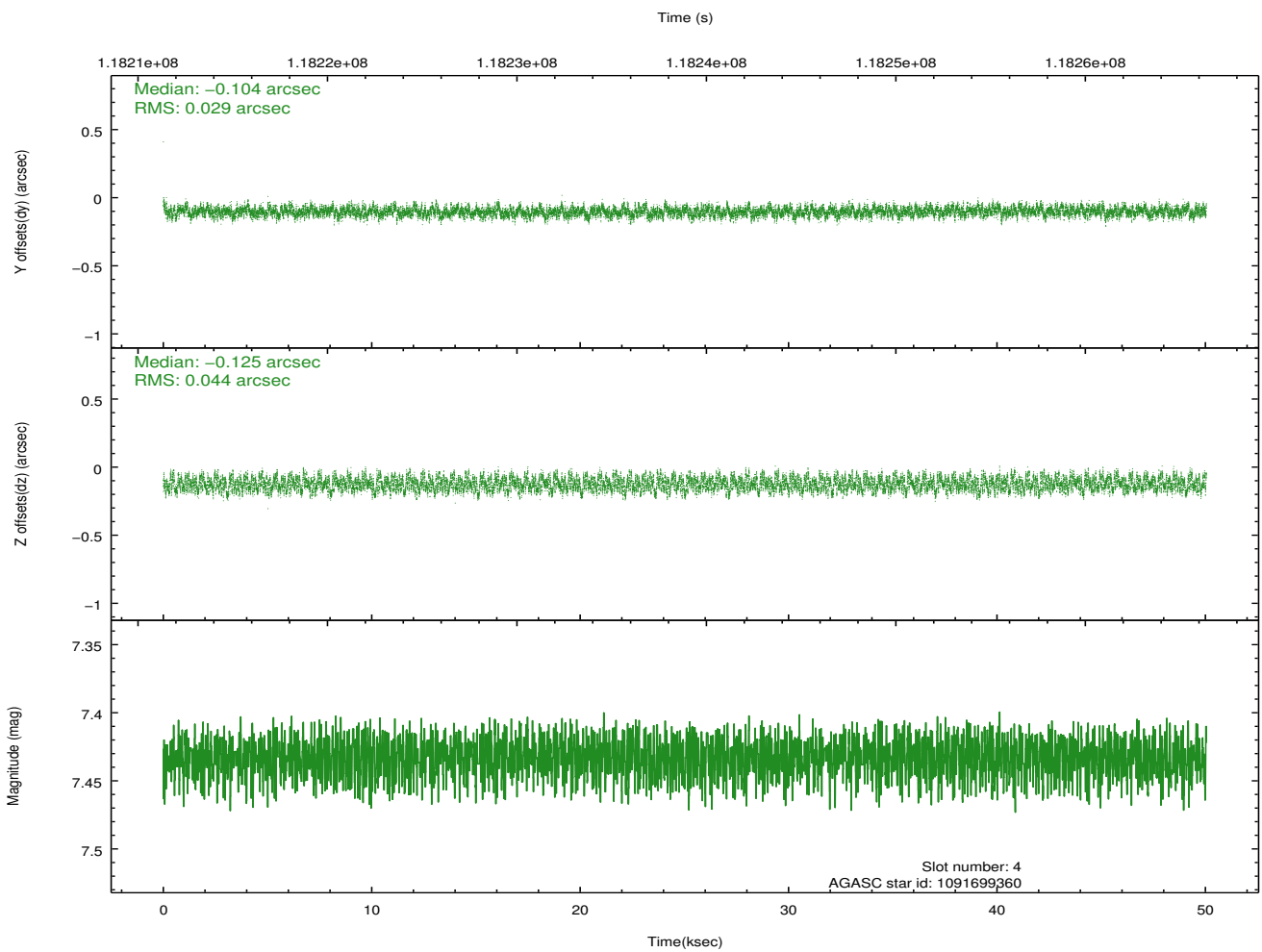
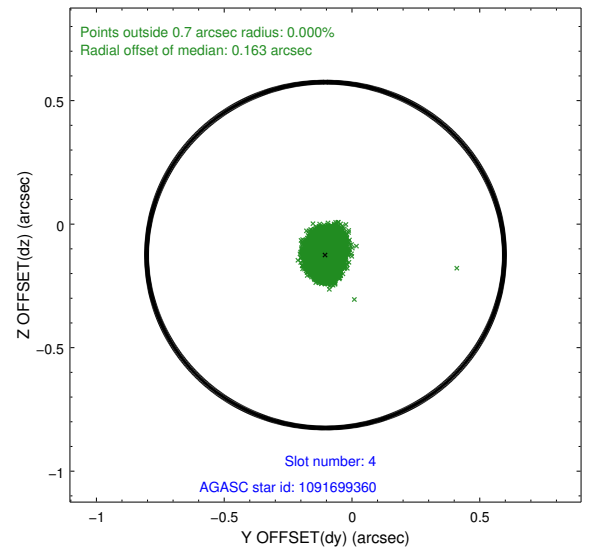
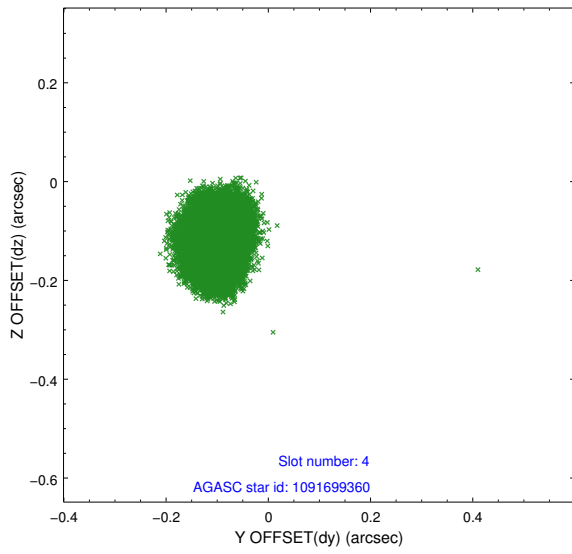
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.11 | 12207 | 0.012 | 0.019 | 0.006 | 0.010 | 0.000000 | 0.000000 | -755.68 | -1728.95 |
| 1 | FID | ACIS-S-4 | 7.19 | 12207 | -0.037 | -0.003 | 0.006 | 0.011 | 0.000000 | 0.000000 | 2157.55 | 179.53 |
| 2 | FID | ACIS-S-6 | 7.36 | 12205 | -0.003 | -0.008 | 0.007 | 0.012 | 0.000000 | 0.000000 | 406.26 | 816.90 |
| 3 | GUIDE | 1091706888 | 8.19 | 24411 | -0.021 | 0.078 | 0.050 | 0.082 | 249.740289 | -47.400823 | -1221.83 | 1613.69 |
| 4 | GUIDE | 1091699360 | 7.43 | 24415 | -0.104 | -0.125 | 0.058 | 0.089 | 248.660725 | -47.004364 | -1714.48 | -1347.32 |
| 5 | GUIDE | 1091717336 | 8.15 | 24413 | -0.067 | -0.075 | 0.055 | 0.089 | 248.227678 | -47.298446 | -362.49 | -1993.26 |
| 6 | GUIDE | 1091698696 | 8.81 | 24376 | 0.180 | 0.068 | 0.062 | 0.101 | 248.529134 | -48.079711 | 2043.69 | -363.38 |
| 7 | GUIDE | 1091709800 | 9.19 | 24360 | 0.010 | 0.058 | 0.076 | 0.122 | 249.801955 | -47.310212 | -1578.62 | 1652.72 |

2.4 Star Slots

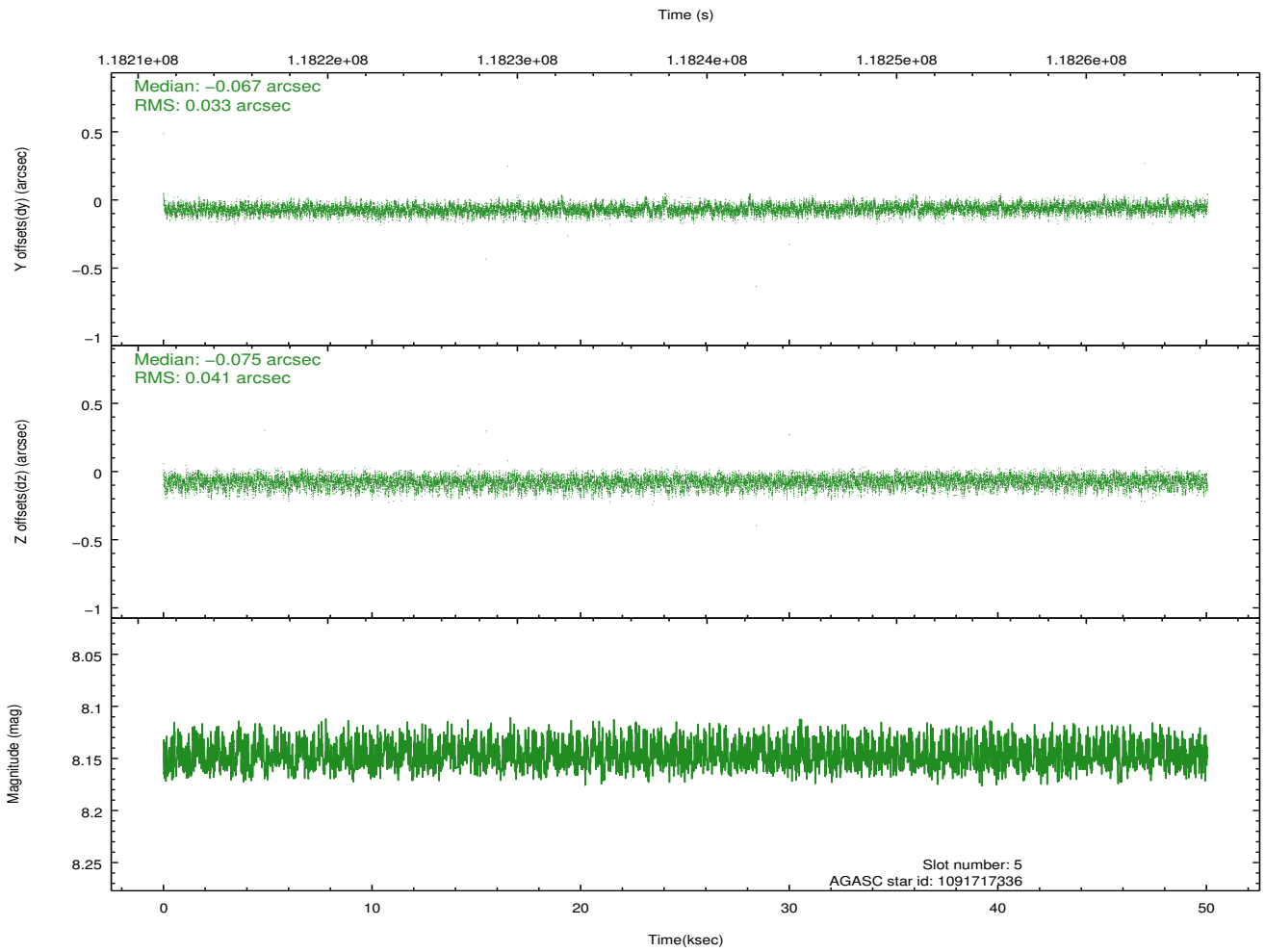
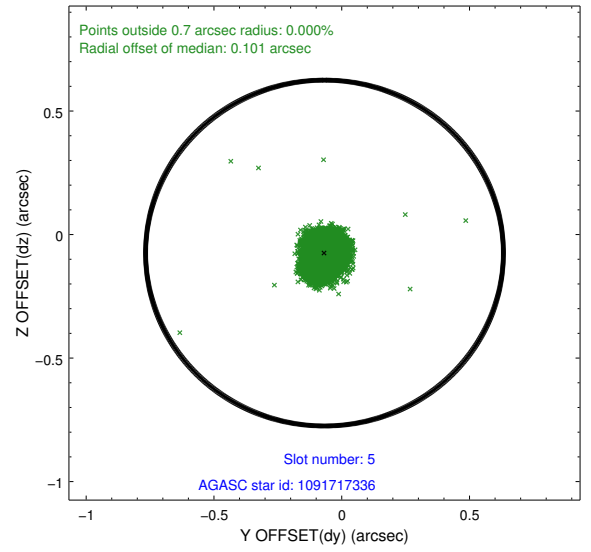
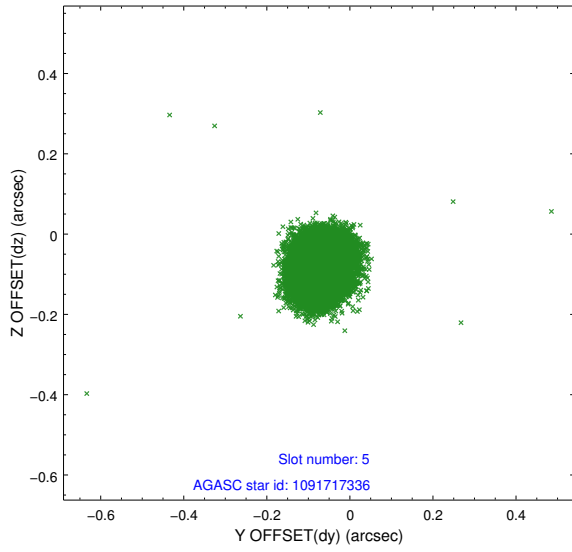
2.4.1 Slot 3



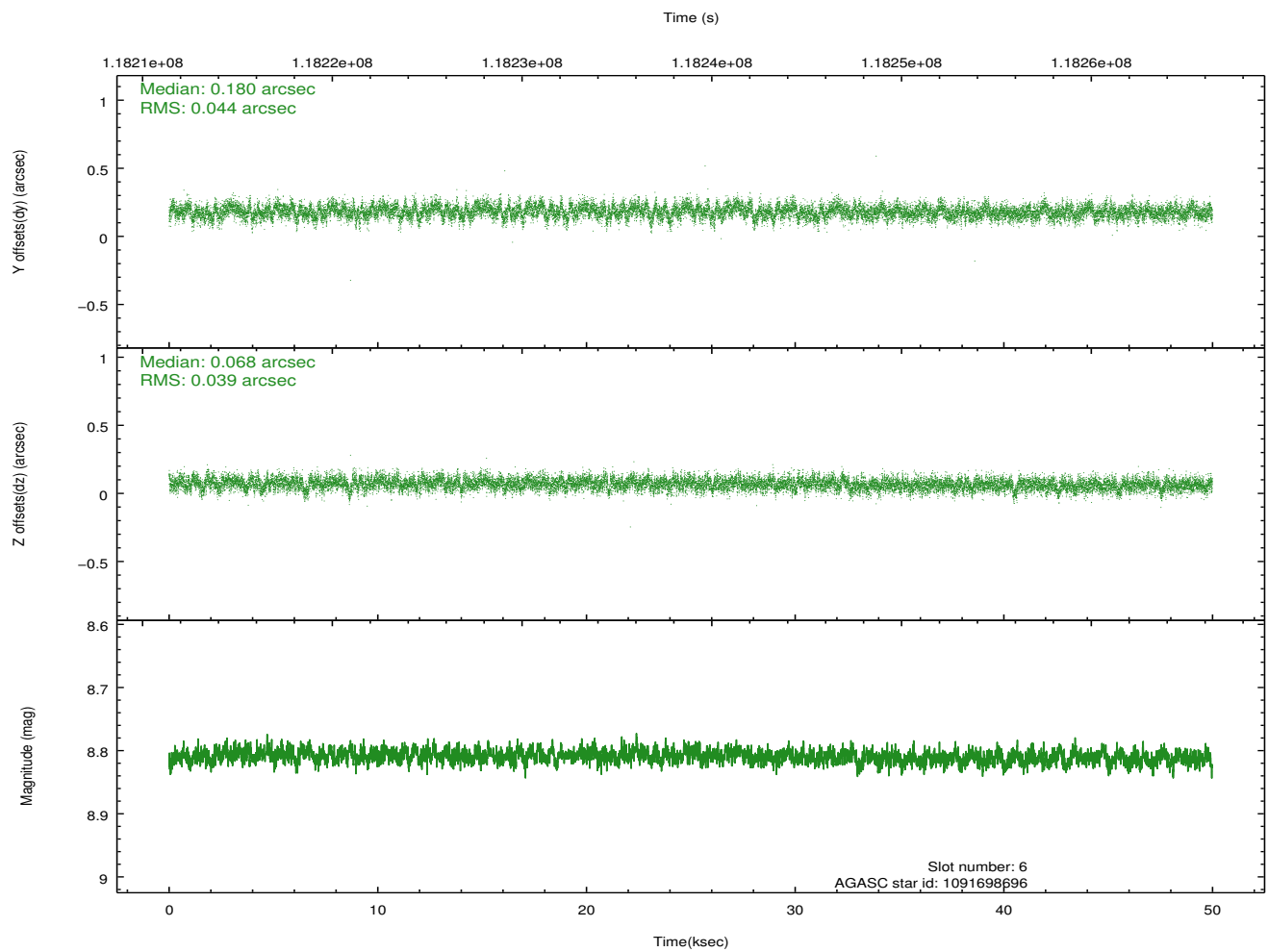
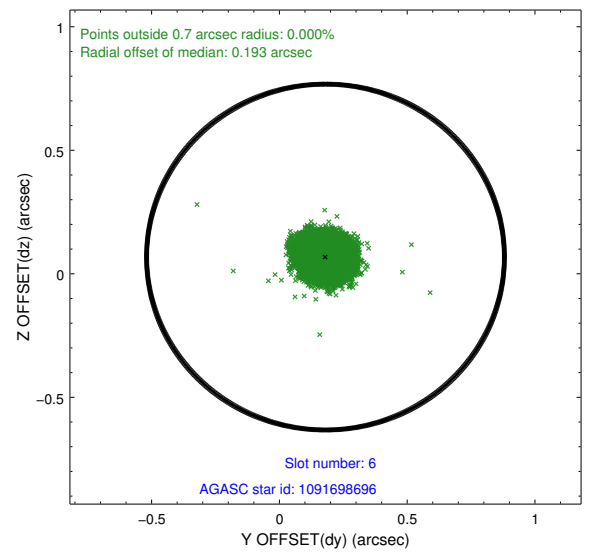
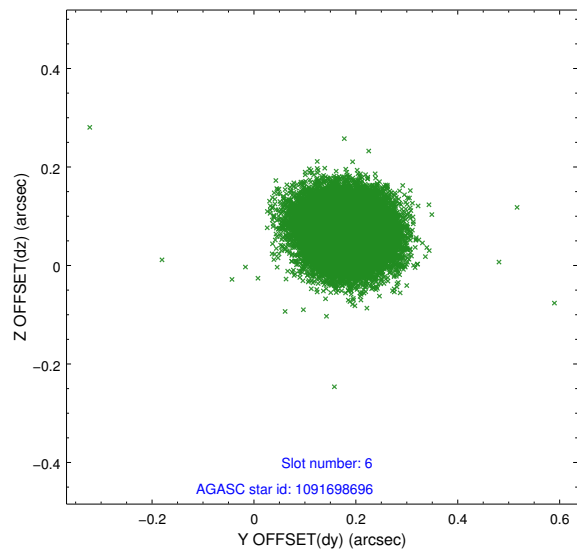
2.4.2 Slot 4



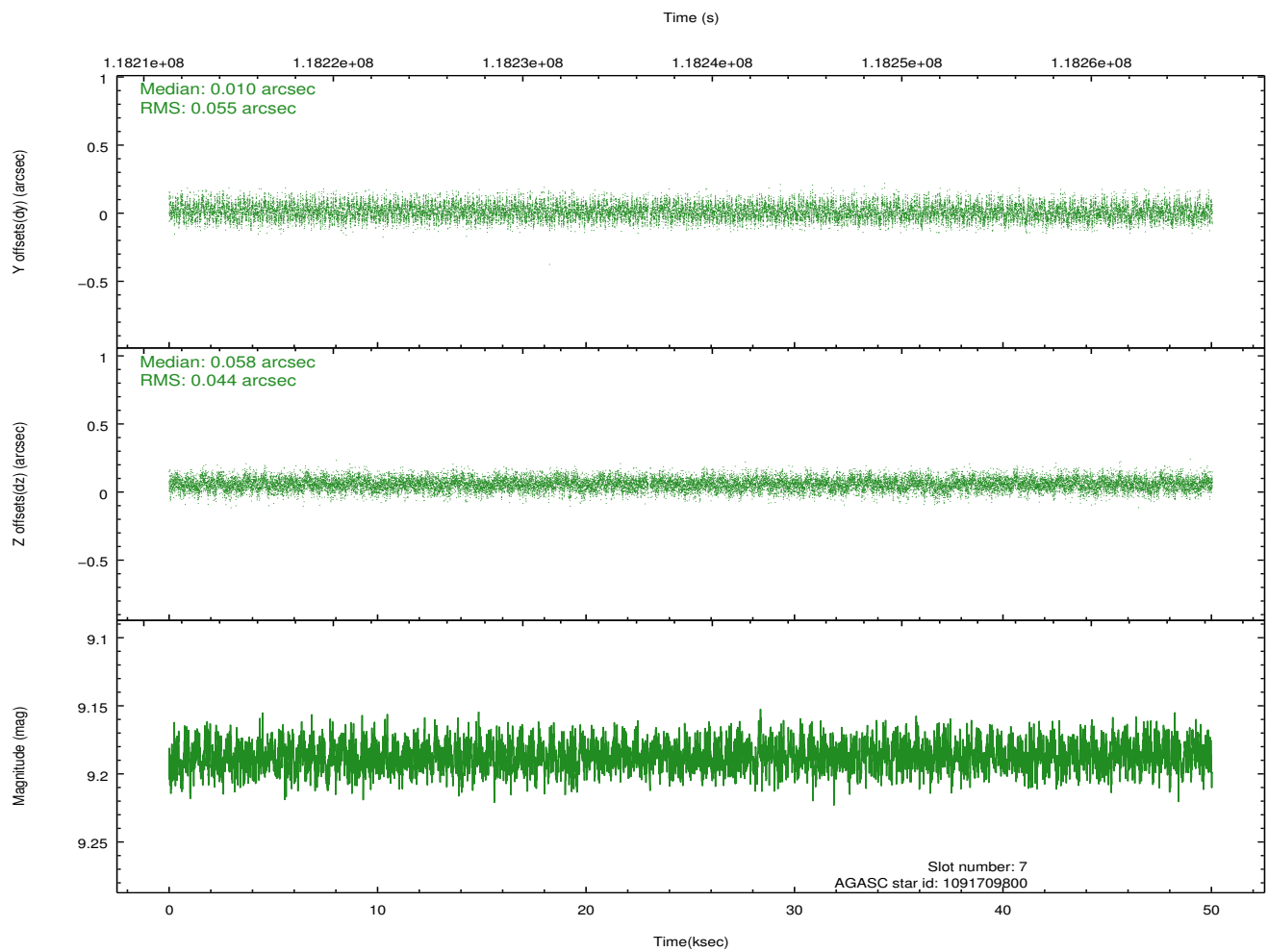
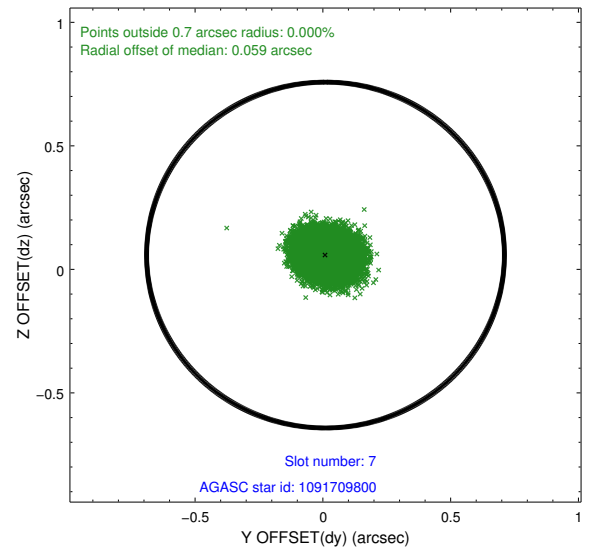
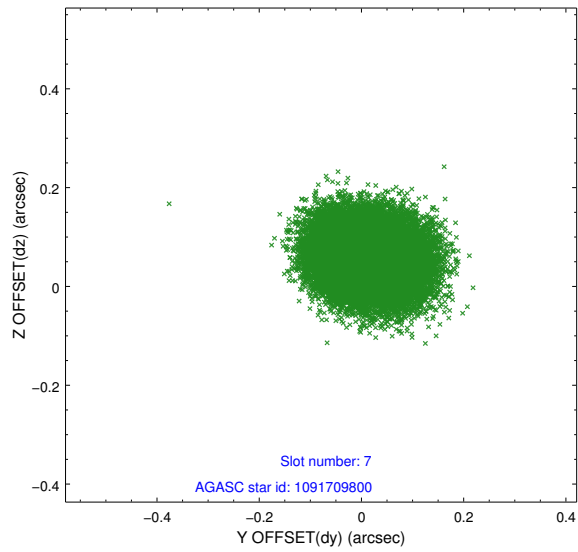
2.4.3 Slot 5



2.4.4 Slot 6

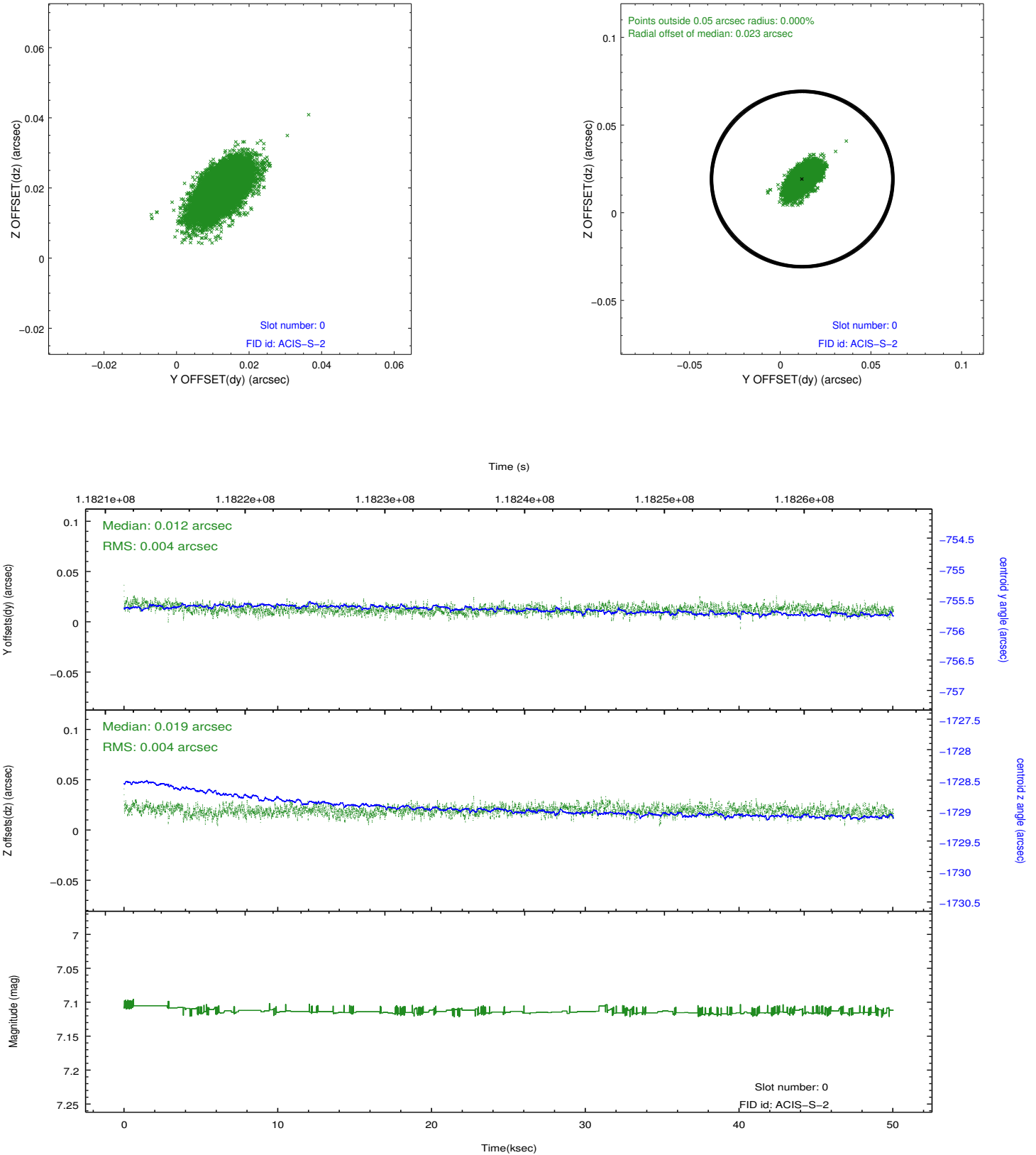


2.4.5 Slot 7

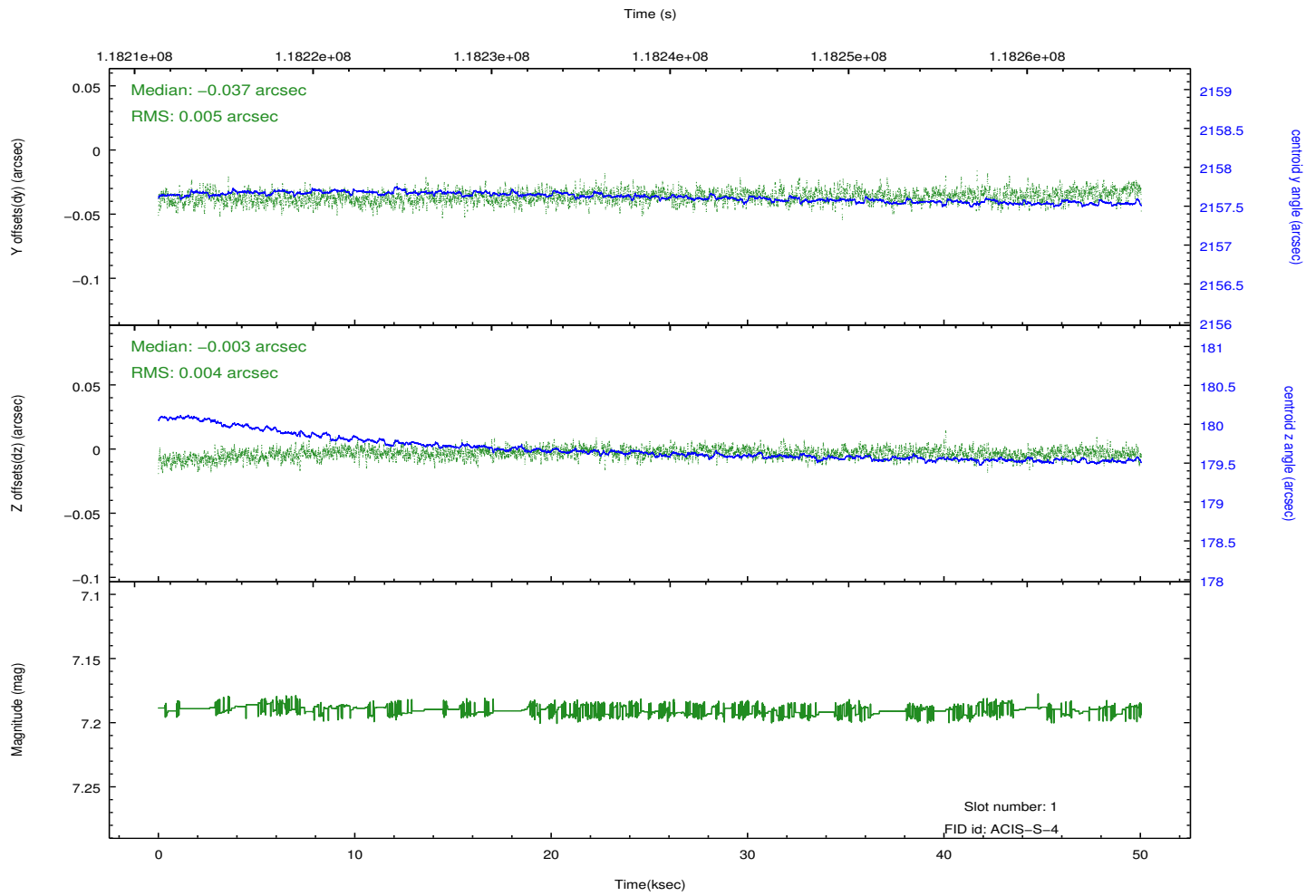
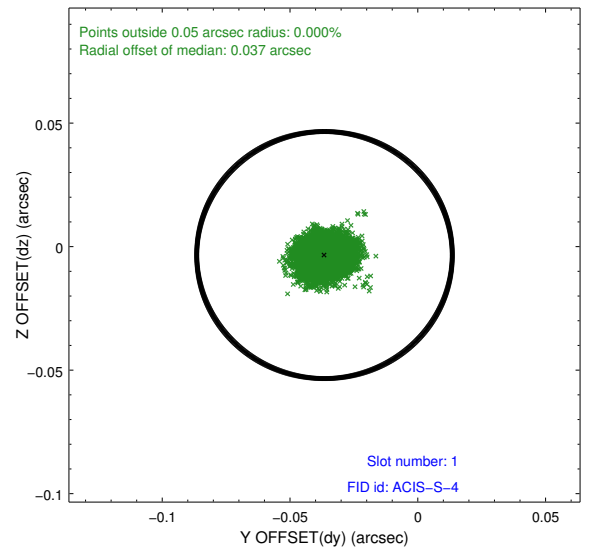
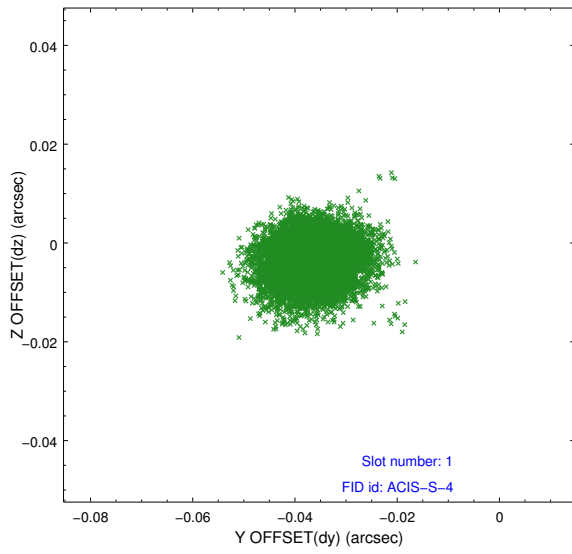


2.5 FID Slots

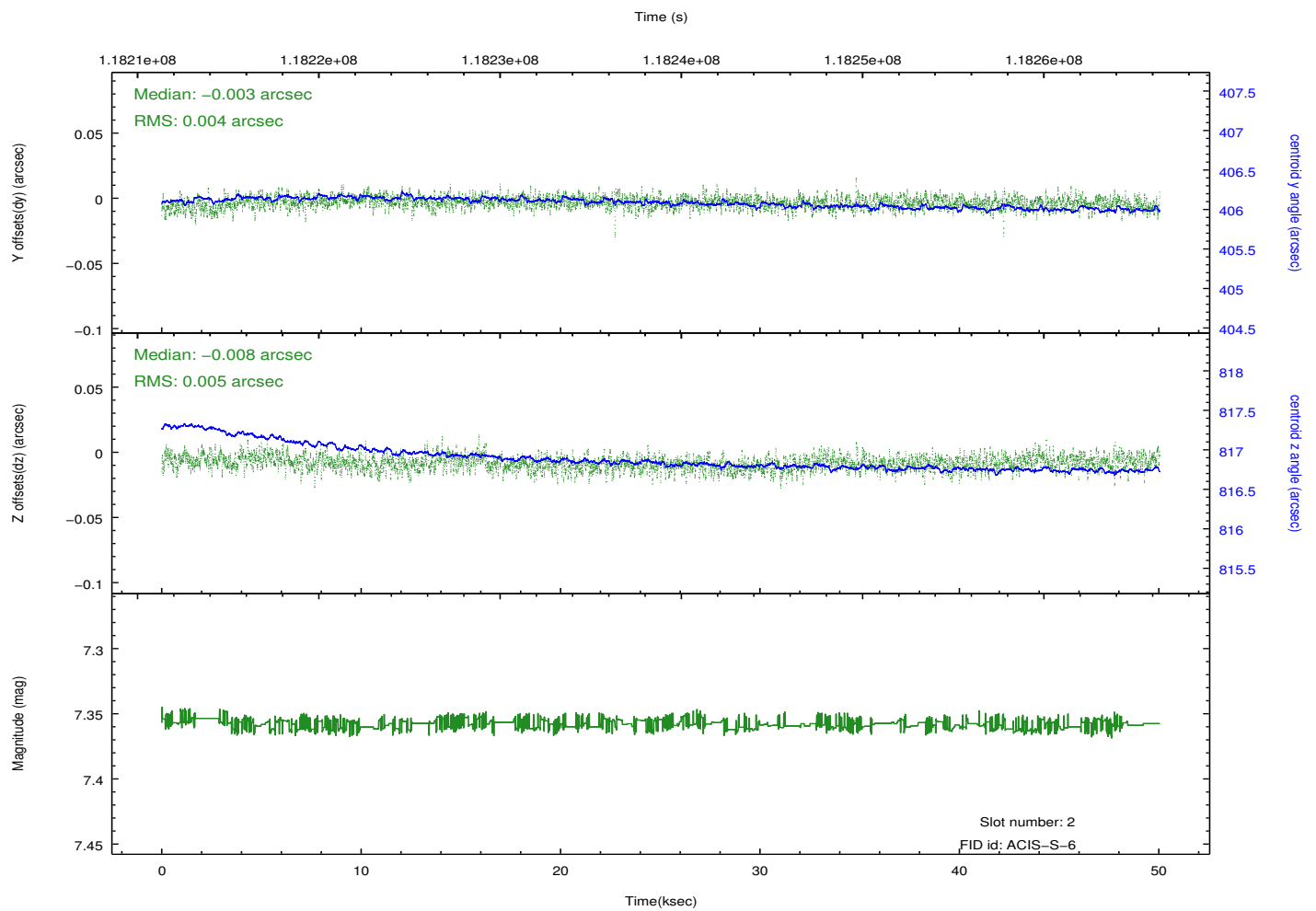
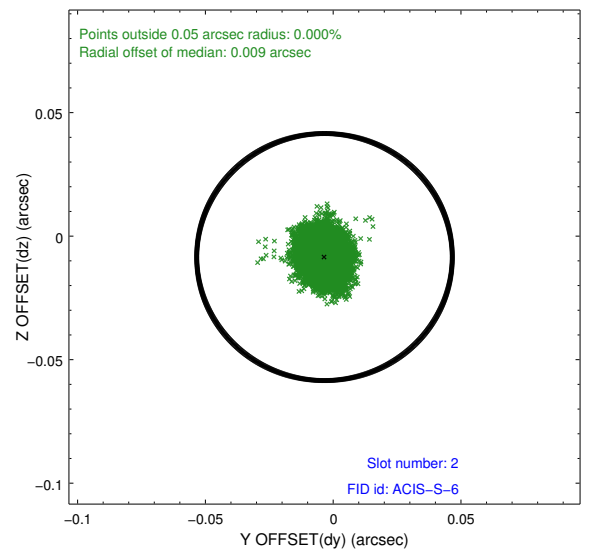
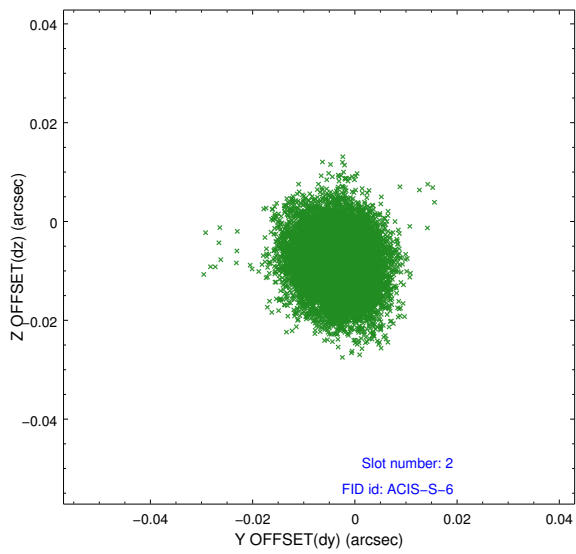
2.5.1 Slot 0



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) | 2012.09.27 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 50.045 |

A.2 Comments