

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 11693 - L2 Version 2
Chandra X-Ray Center

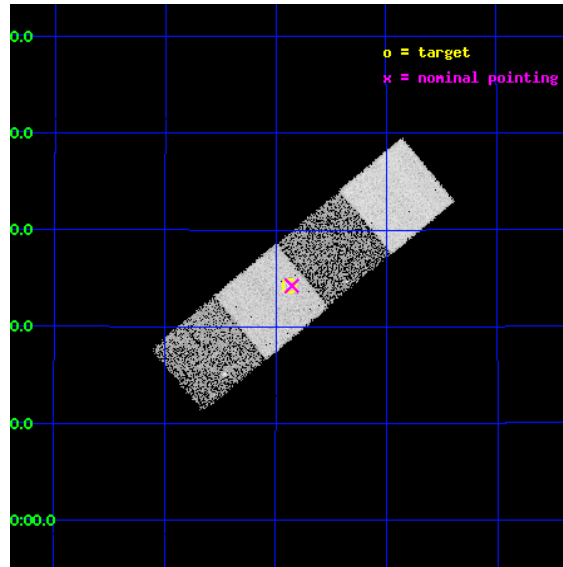
L2 Processing Date : Jun 23 2012

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

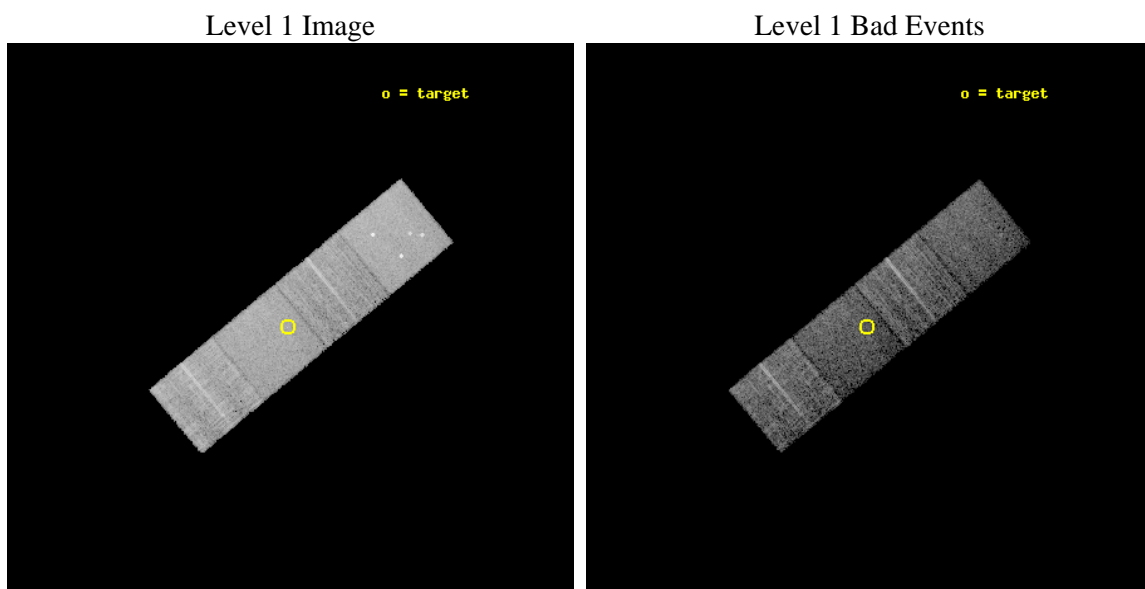
| | | |
|----------|---|---|
| seq_num | 702278 | Sequence number |
| obs_id | 11693 | Observation id |
| title | Chandra survey of Polar Broad Absorption-Line Quasars | Proposal tit |
| observer | Dr. Kajal Ghosh | Principal investigator |
| object | SDSS J134652.72+392411.8 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 206.719583 | Observer's specified target RA [deg] |
| dec_targ | 39.403278 | Observer's specified target Dec [deg] |
| ra_nom | 206.7134180844 | Nominal RA [deg] |
| dec_nom | 39.403987033218 | Nominal Dec [deg] |
| roll_nom | 140.27045075403 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 6047.4760325551 | Sum of GTIs [s] |
| livetime | 5968.4613061027 | Livetime [s] |
| ontime5 | 6047.4349925518 | Sum of GTIs [s] |
| ontime6 | 6047.3939525485 | Sum of GTIs [s] |
| ontime7 | 6047.4760325551 | Sum of GTIs [s] |
| ontime8 | 6047.3529125452 | Sum of GTIs [s] |
| l2events | 67223 | Number of level 2 events |



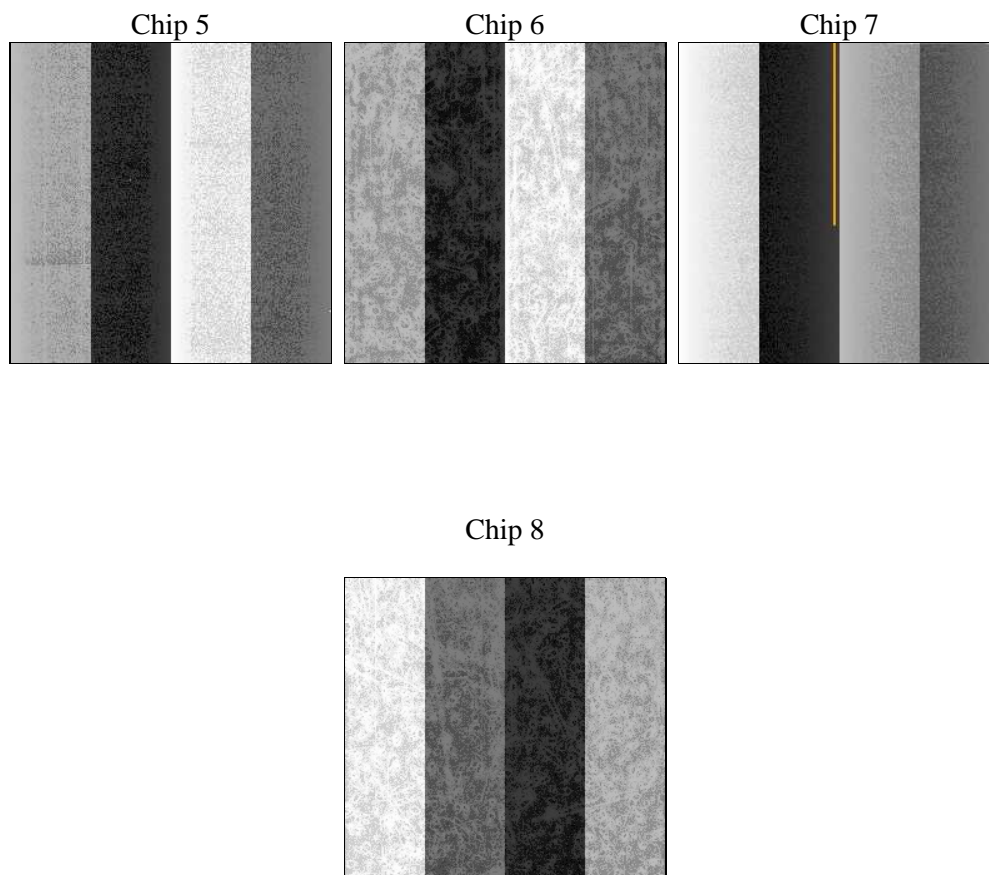
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 6000.529000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 6047.4760325551 | Sum of GTIs [s] |
| caldsver | 4.4.10 | | ontime5 | 6047.4349925518 | Sum of GTIs [s] |
| date | 2012-06-23T04:35:43 | Date and time of file creation | ontime6 | 6047.3939525485 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime7 | 6047.4760325551 | Sum of GTIs [s] |
| | | | ontime8 | 6047.3529125452 | Sum of GTIs [s] |
| | | | l1events | 238948 | Number of level 1 events |

2.1.4 Events

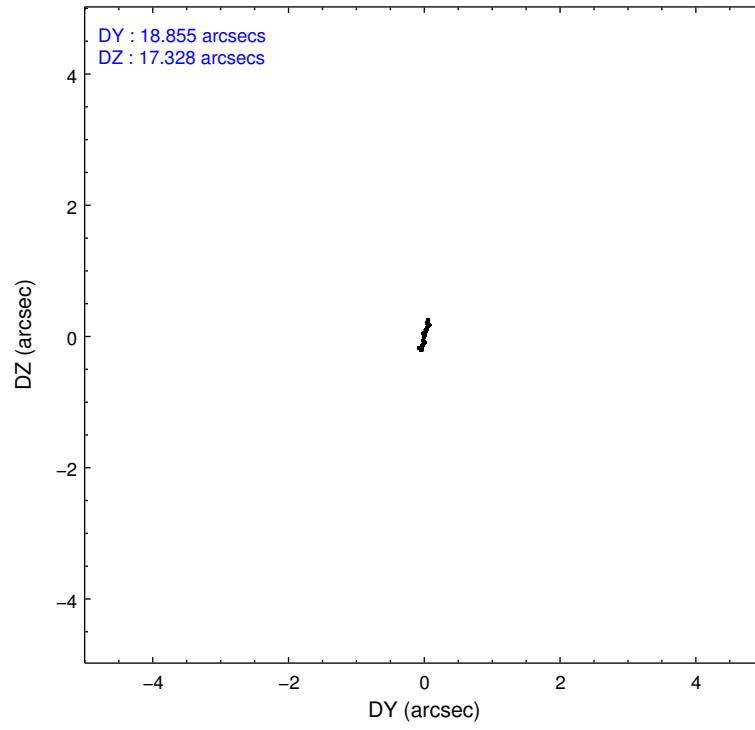
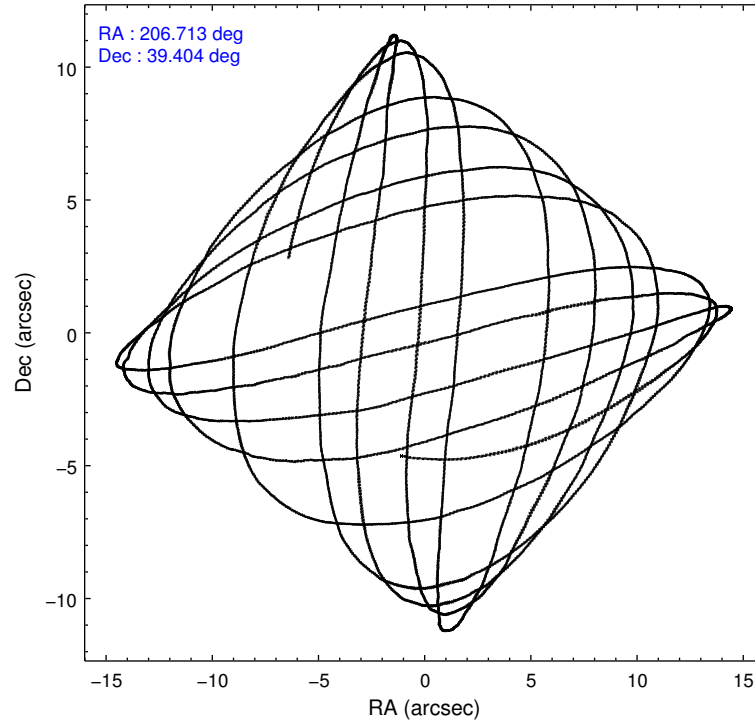
| | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|-------|-------|-------|
| level 1 events | 71984 | 47808 | 57530 | 61626 |
| rejected events | 35705 | 42603 | 31917 | 45590 |
| rejected % | 49% | 89% | 55% | 73% |

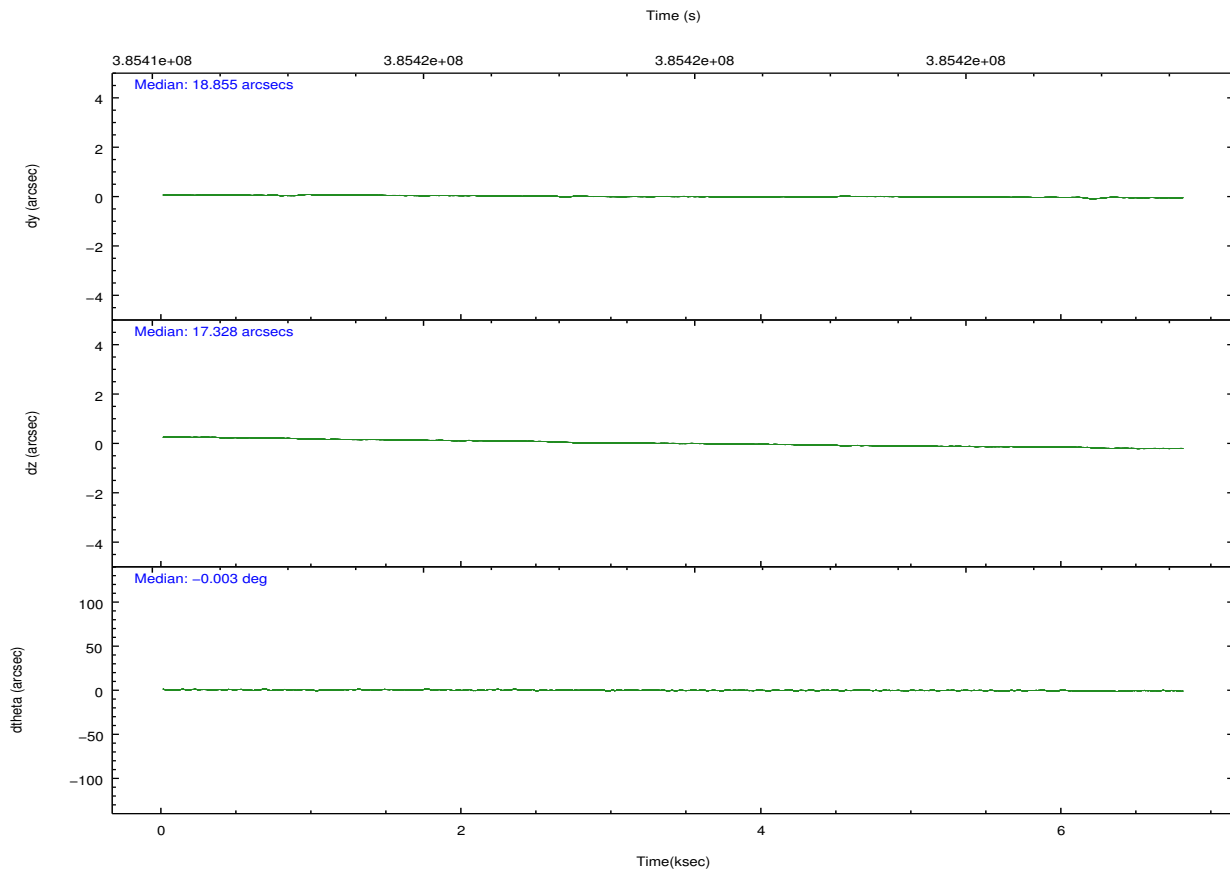
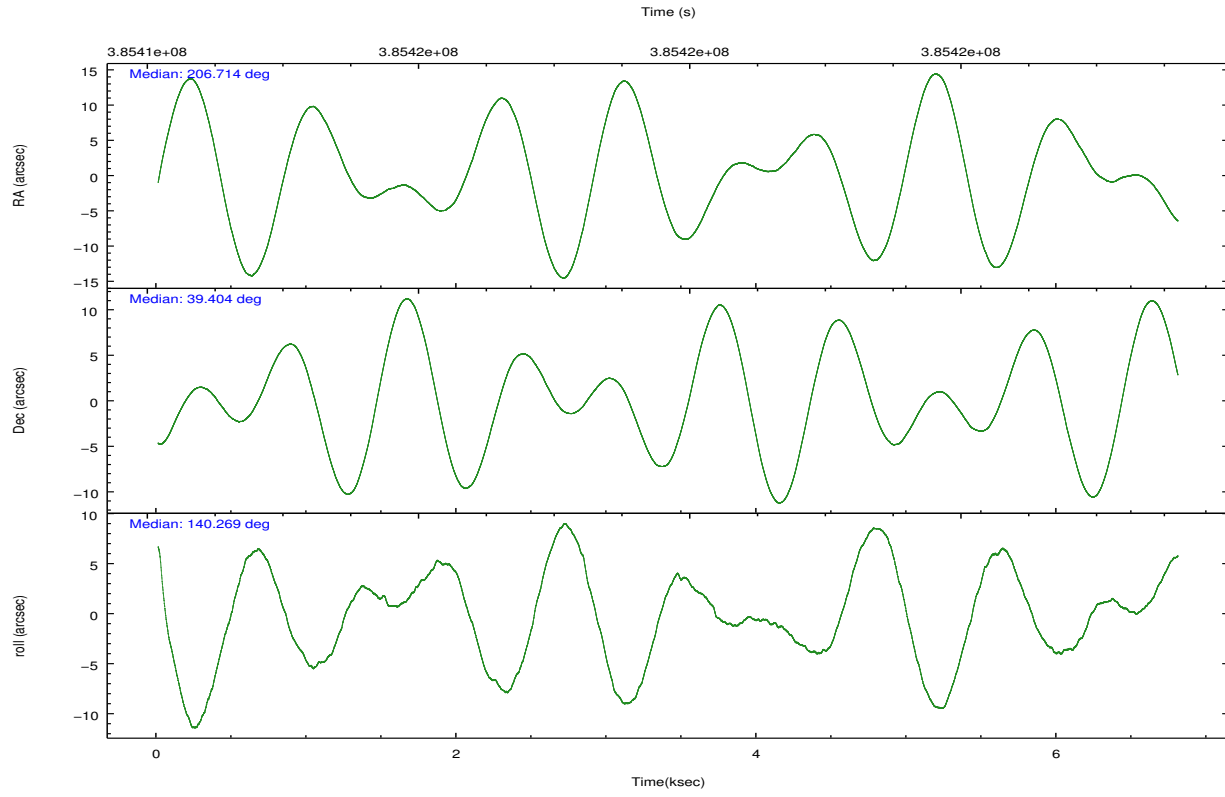
| | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|----------------|-------|-------|-------|-------|
| grade 0 events | 5364 | 1888 | 2374 | 4731 |
| | 7% | 3% | 4% | 7% |
| grade 1 events | 192 | 32 | 93 | 56 |
| | 0% | 0% | 0% | 0% |
| grade 2 events | 10234 | 1116 | 5267 | 3716 |
| | 14% | 2% | 9% | 6% |
| grade 3 events | 1380 | 516 | 2219 | 1770 |
| | 1% | 1% | 3% | 2% |
| grade 4 events | 1320 | 546 | 2320 | 1657 |
| | 1% | 1% | 4% | 2% |
| grade 5 events | 5338 | 2127 | 5958 | 3118 |
| | 7% | 4% | 10% | 5% |
| grade 6 events | 18025 | 1145 | 13474 | 4170 |
| | 25% | 2% | 23% | 6% |
| grade 7 events | 30131 | 40438 | 25825 | 42408 |
| | 41% | 84% | 44% | 68% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-5678 | ACIS-5678 | 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 | 206.748316 | 206.7134180844017 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 39.399694 | 39.40398703321797 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 140.091672 | 140.2704507540321 | [s] Primary exposure time | 0.000000 | 3.1 |
| [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) | 385415246.184000 | 385414069.98982 | | | |
| Observation start date | 2010-03-19T19:46:20 | 2010-03-19T19:27:49 | | | |
| [s] Observation end time (MET) | 385421247.184000 | 385421473.05269 | | | |
| Observation end date | 2010-03-19T21:26:21 | 2010-03-19T21:31:13 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



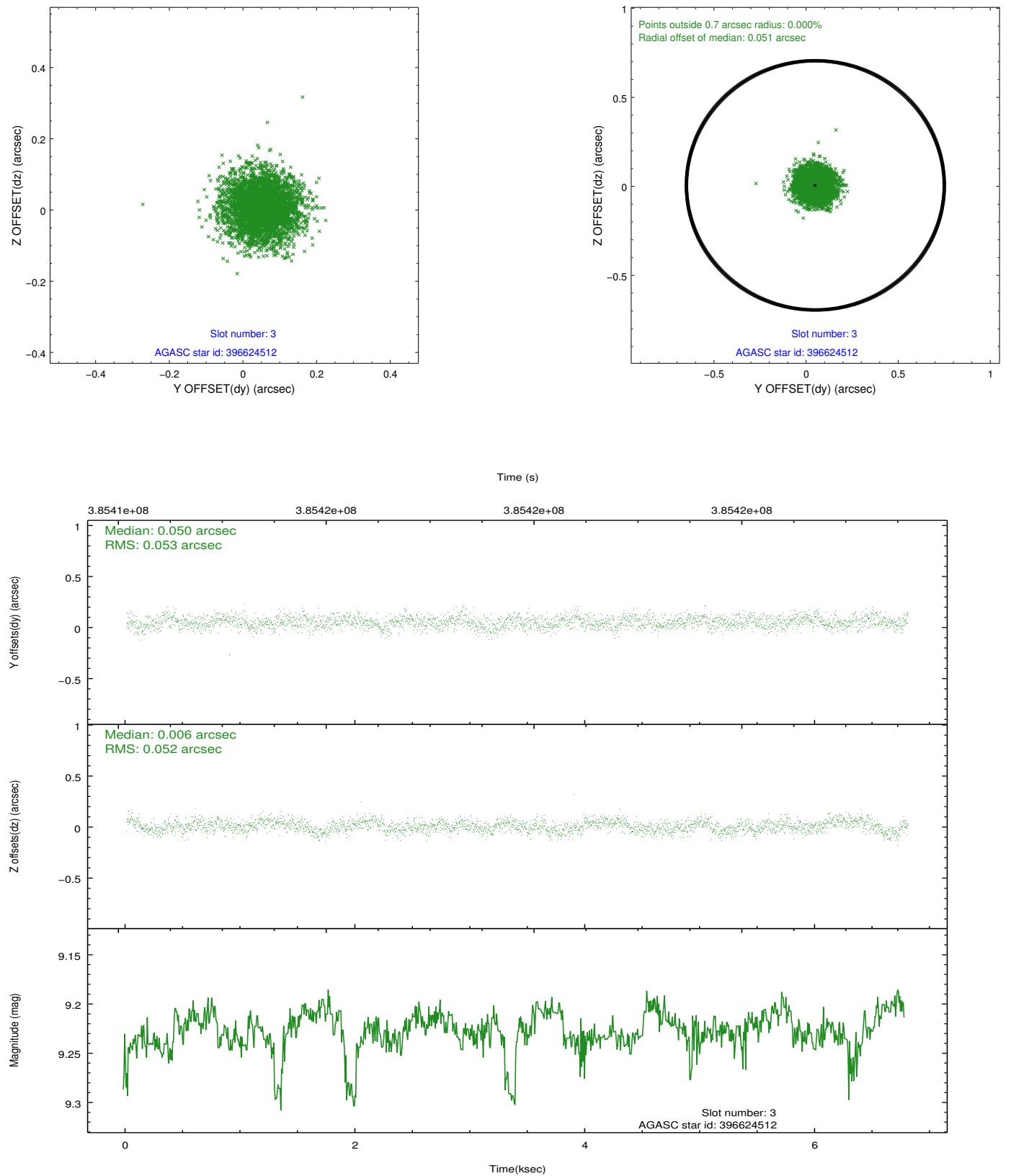


Slot Statistics

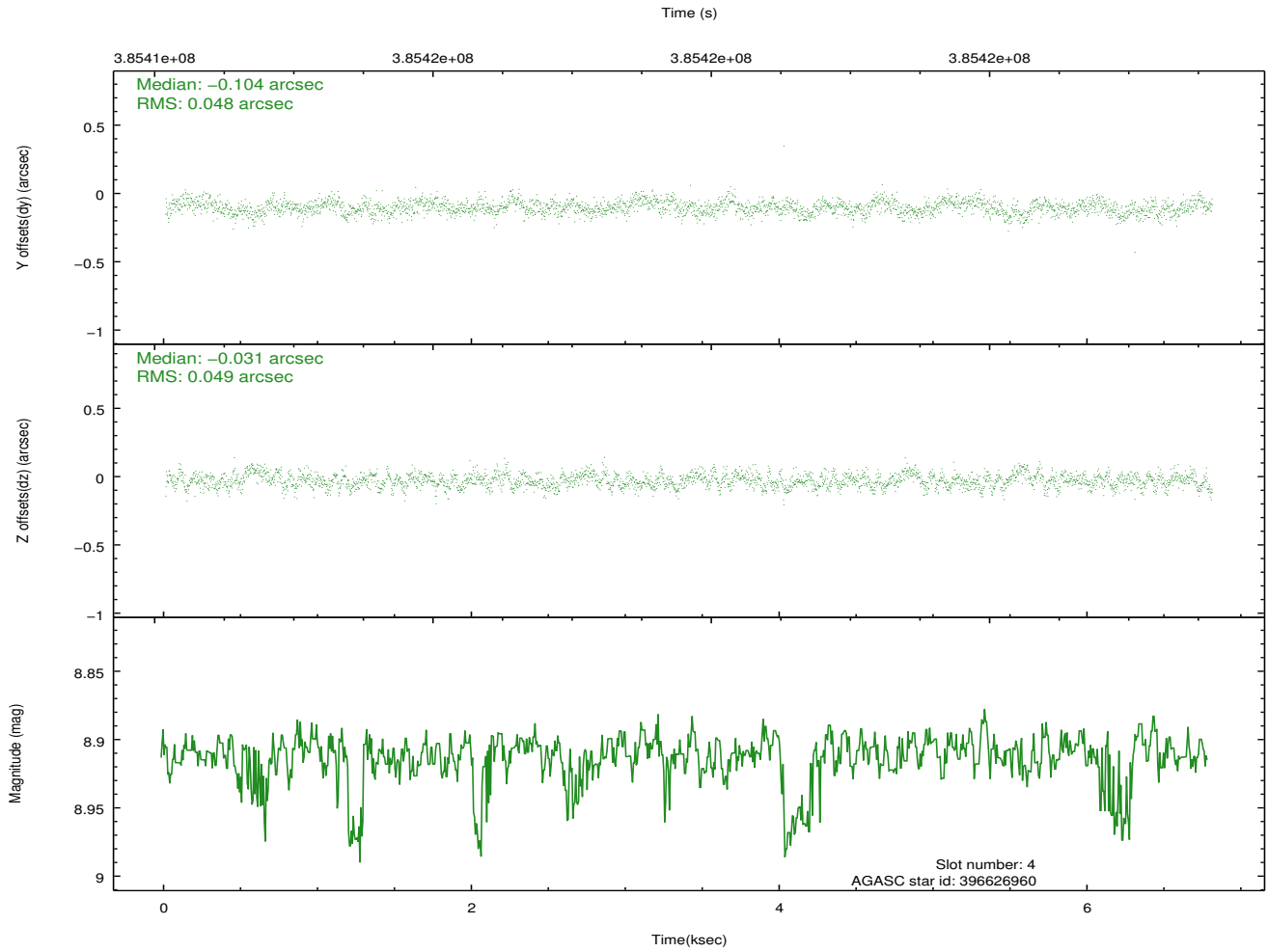
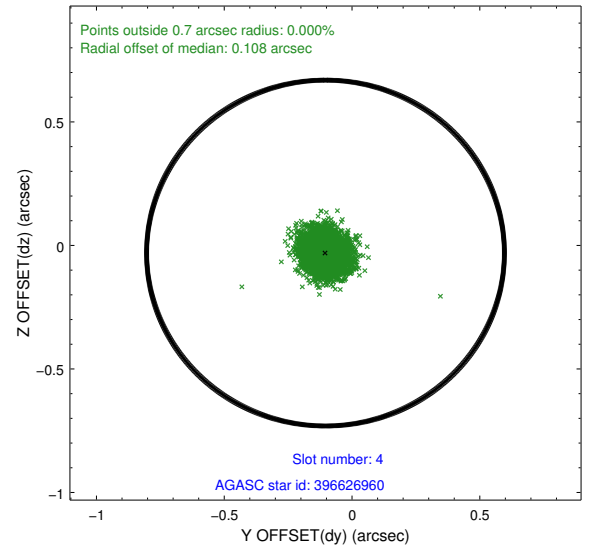
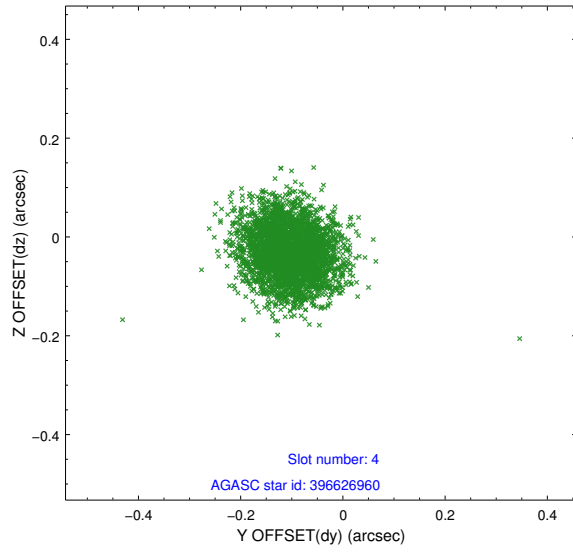
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-2 | 6.93 | 1659 | -0.070 | -0.034 | 0.007 | 0.012 | 0.000000 | 0.000000 | -772.05 | -1738.74 |
| 1 | FID | ACIS-S-4 | 7.00 | 1659 | 0.207 | 0.043 | 0.005 | 0.010 | 0.000000 | 0.000000 | 2141.16 | 168.86 |
| 2 | FID | ACIS-S-5 | 7.04 | 1659 | -0.168 | -0.000 | 0.007 | 0.012 | 0.000000 | 0.000000 | -1823.85 | 163.55 |
| 3 | GUIDE | 396624512 | 9.23 | 3310 | 0.050 | 0.006 | 0.079 | 0.125 | 206.103431 | 39.636762 | 1922.99 | 488.67 |
| 4 | GUIDE | 396626960 | 8.91 | 3315 | -0.104 | -0.031 | 0.073 | 0.117 | 205.846144 | 39.249132 | 1589.03 | 2020.42 |
| 5 | GUIDE | 396756344 | 9.31 | 3311 | -0.070 | -0.087 | 0.096 | 0.150 | 207.498072 | 39.403733 | -1584.25 | -1354.93 |
| 6 | GUIDE | 396756960 | 6.84 | 3318 | -0.004 | 0.140 | 0.060 | 0.095 | 207.237657 | 39.542547 | -709.98 | -1268.72 |
| 7 | GUIDE | 396764240 | 8.89 | 3315 | 0.127 | -0.029 | 0.069 | 0.111 | 206.944609 | 38.893259 | -1591.50 | 1045.35 |

2.4 Star Slots

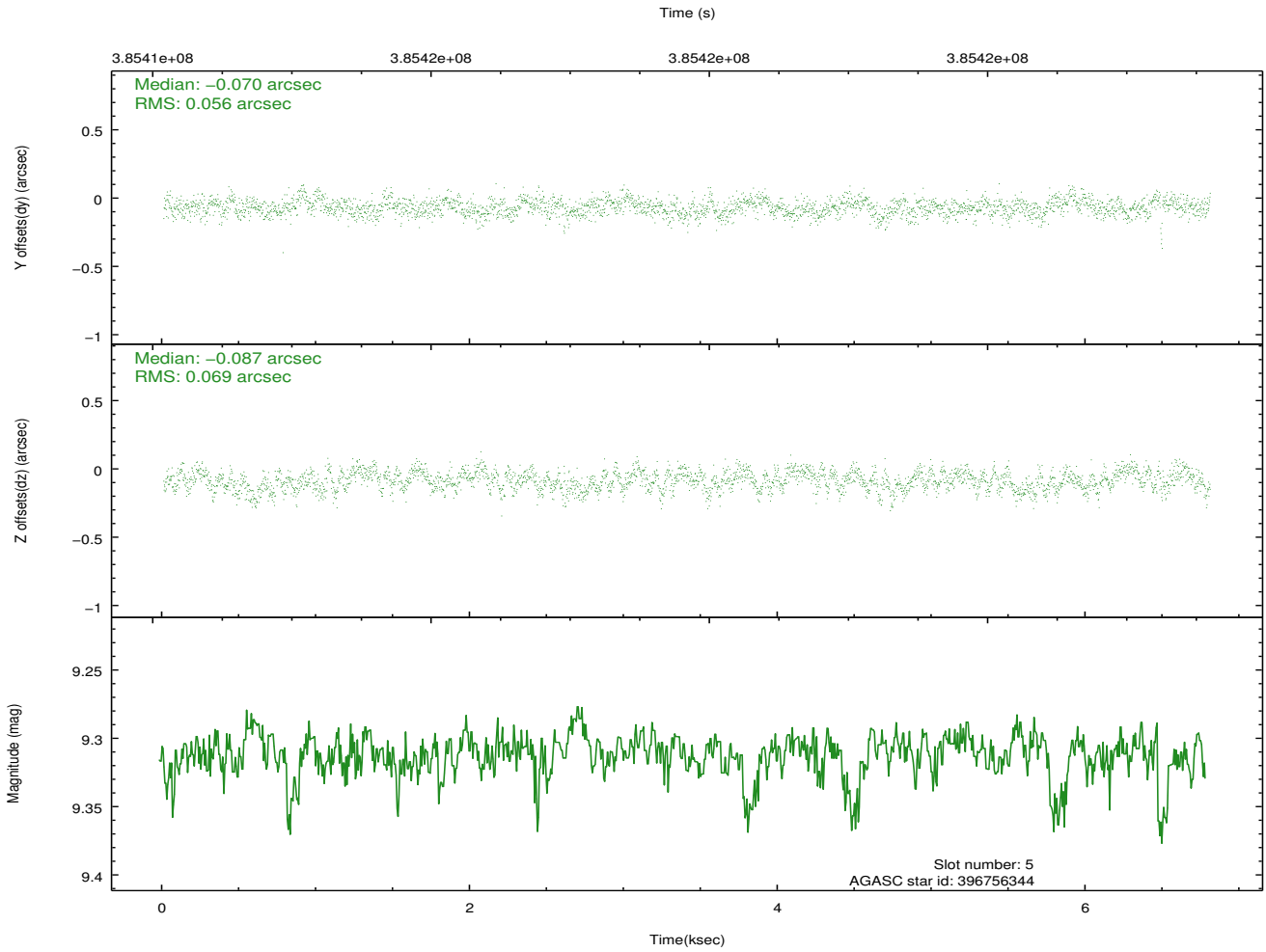
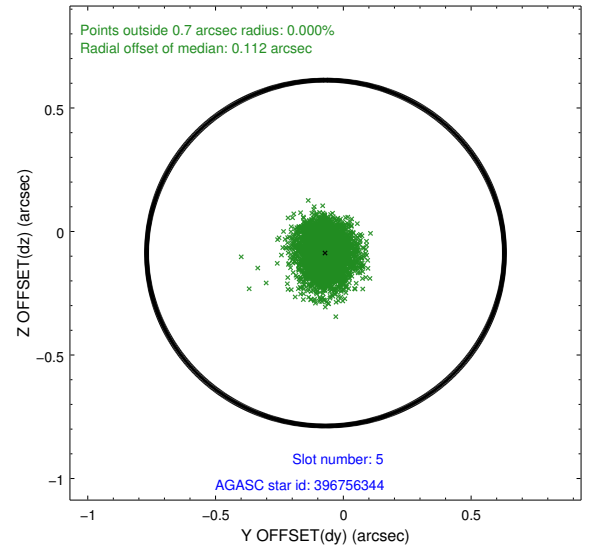
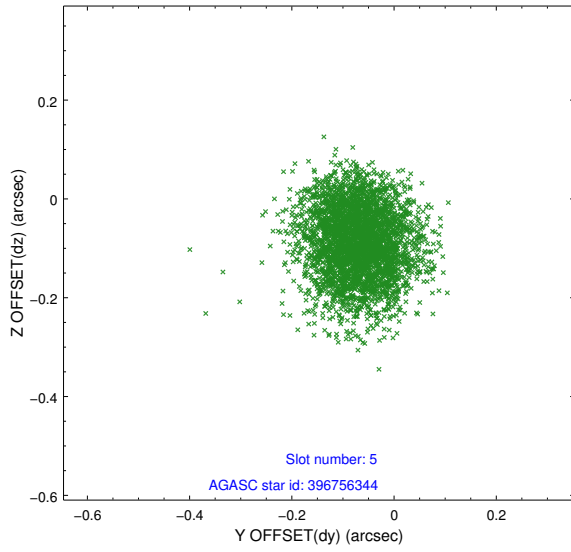
2.4.1 Slot 3



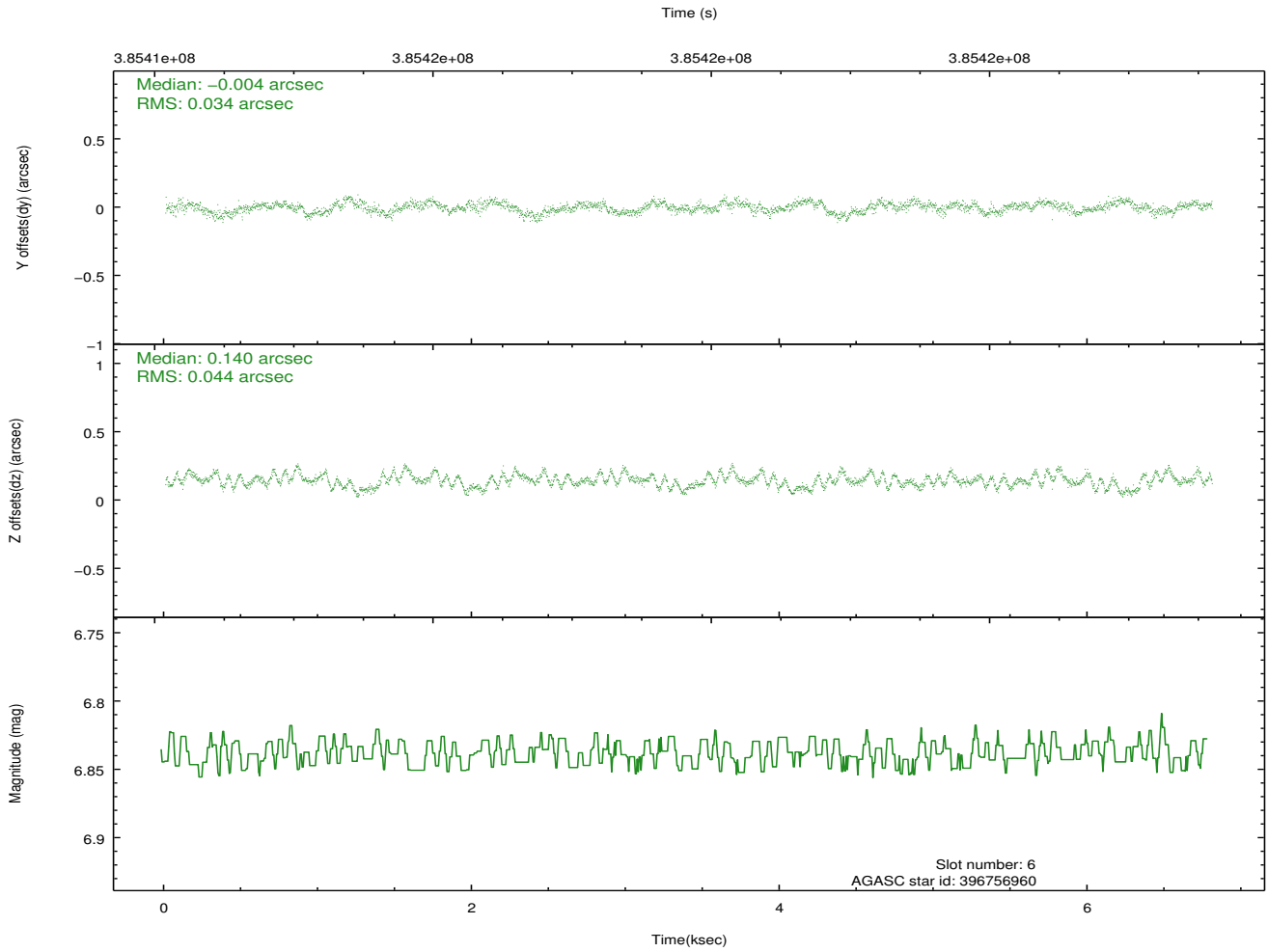
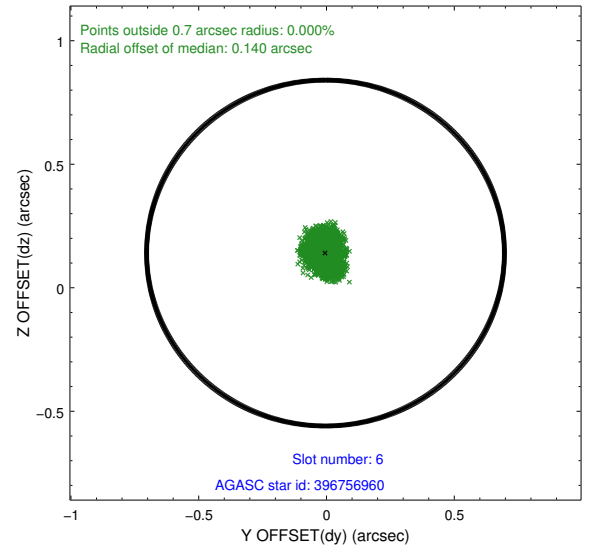
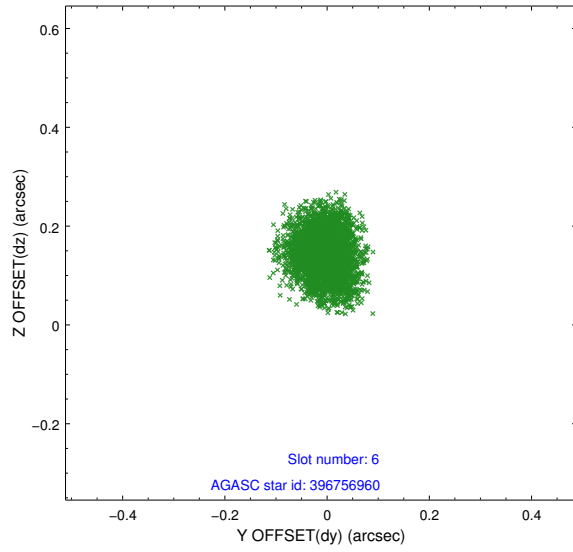
2.4.2 Slot 4



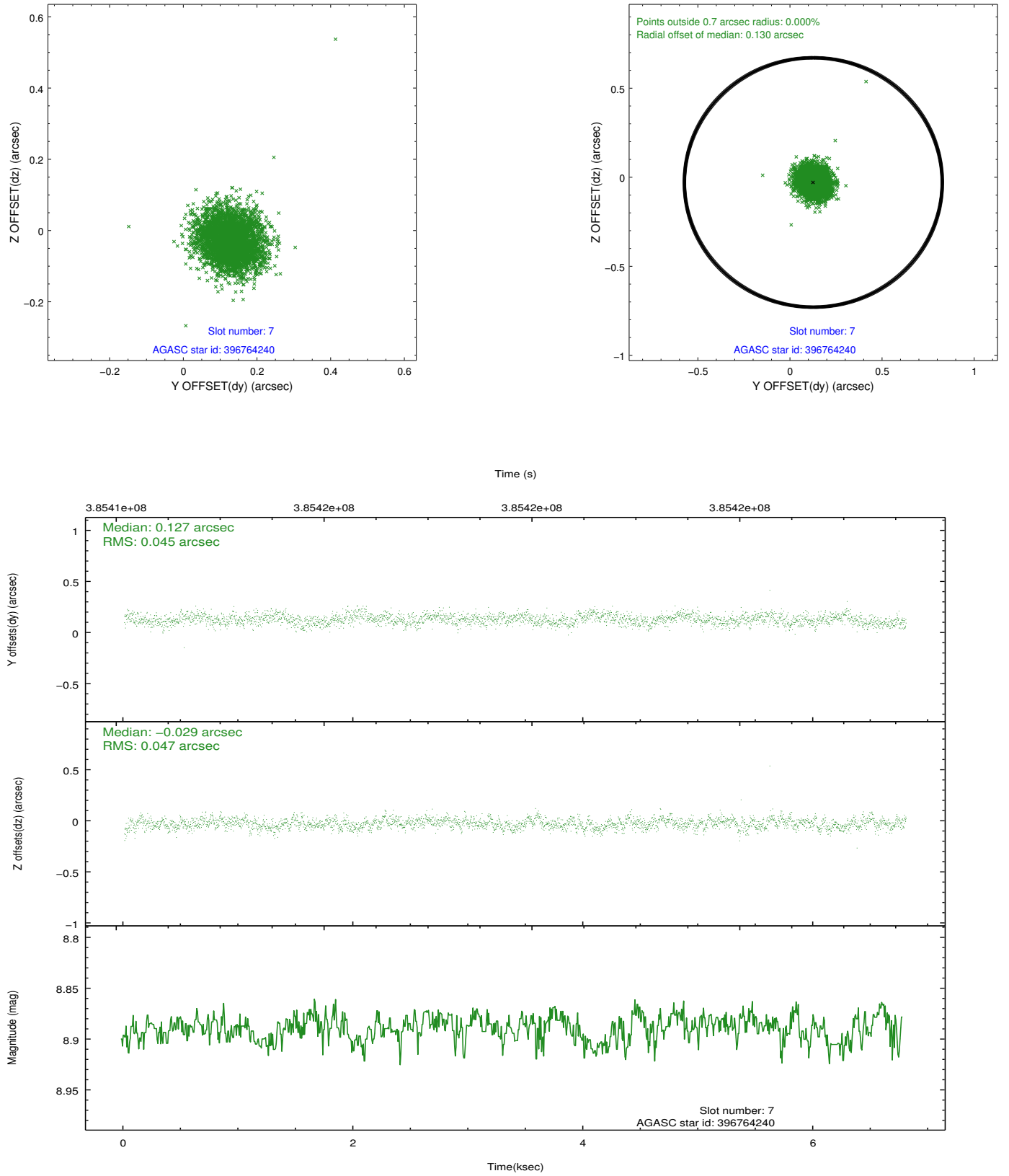
2.4.3 Slot 5



2.4.4 Slot 6

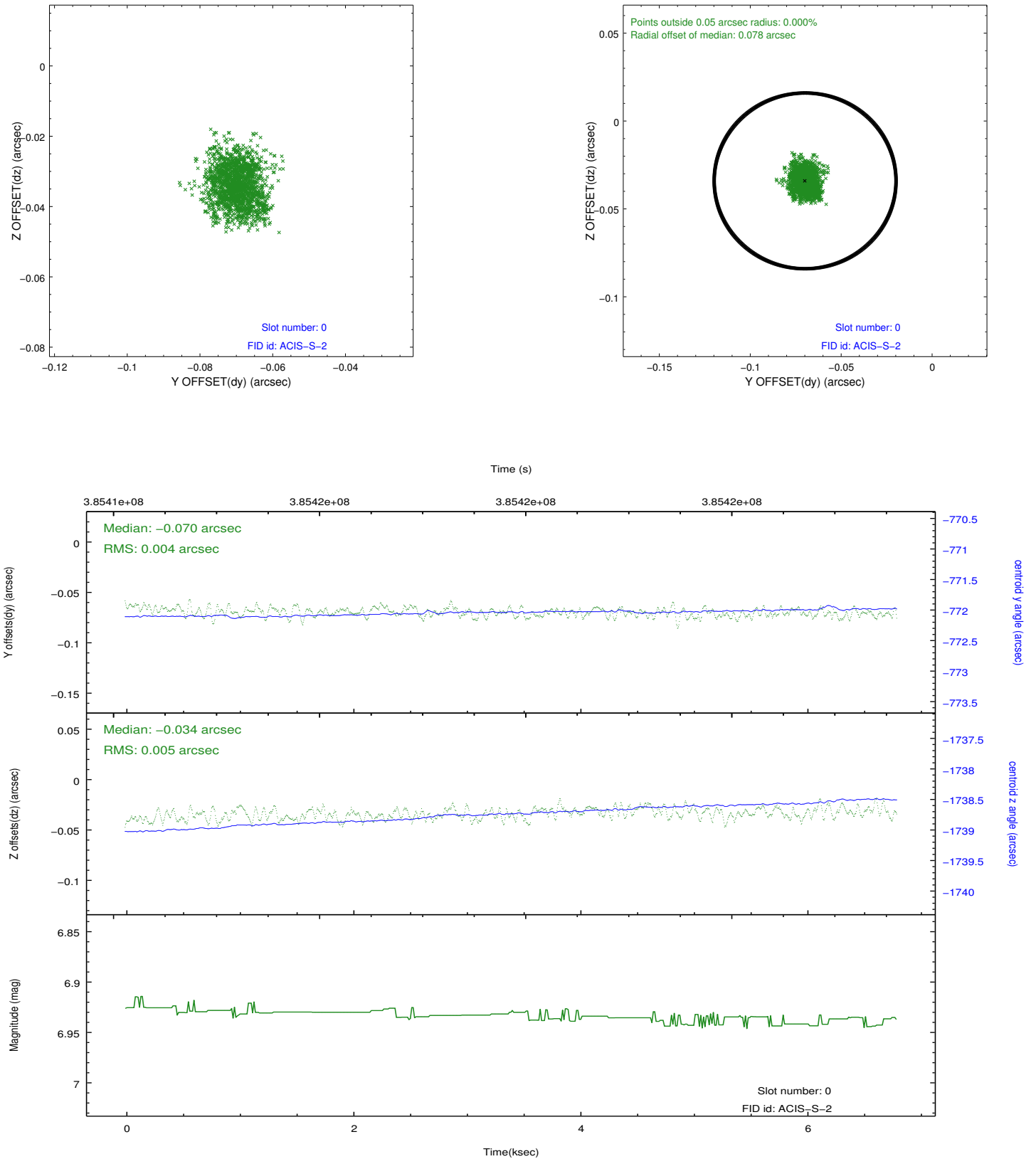


2.4.5 Slot 7

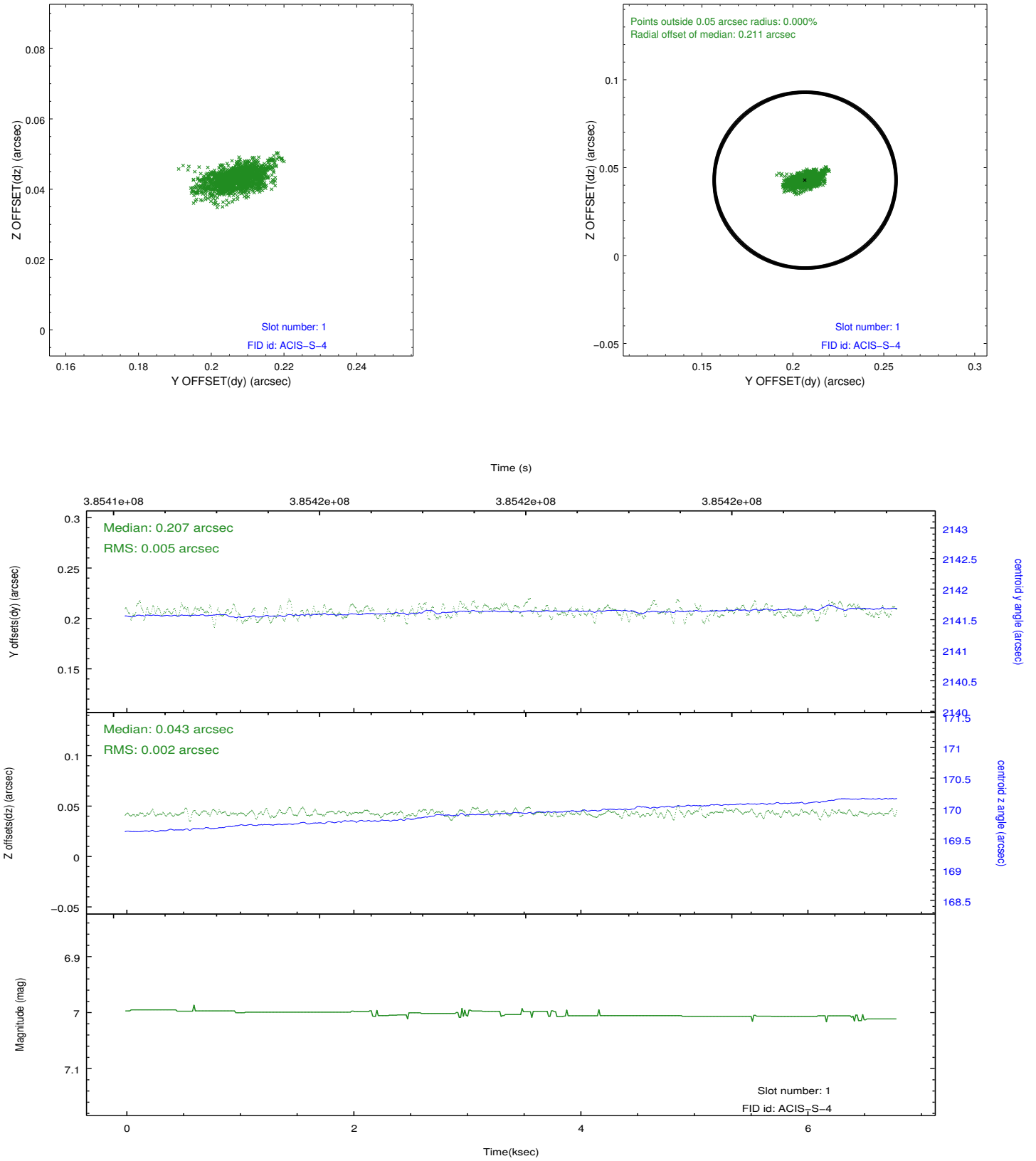


2.5 FID Slots

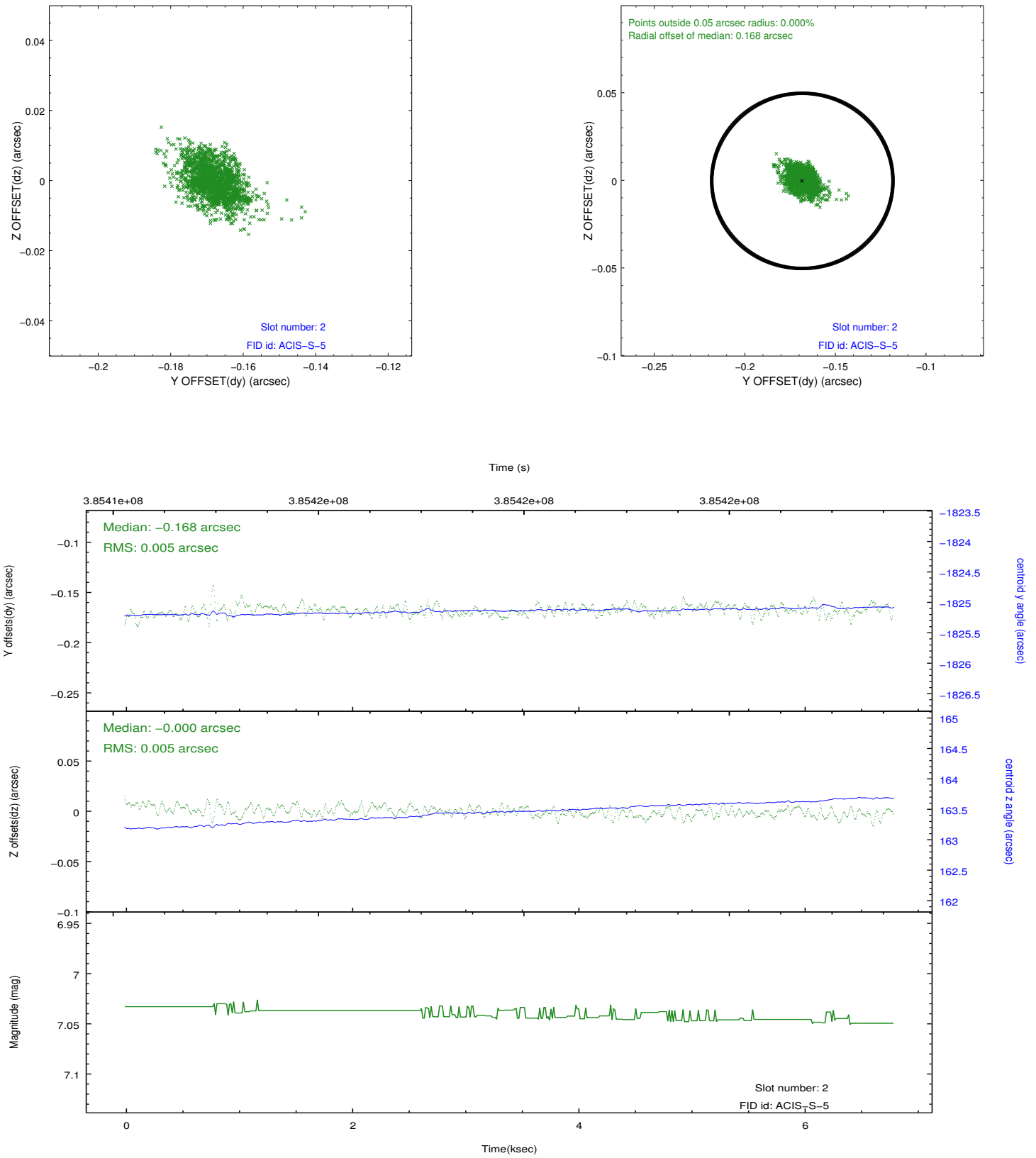
2.5.1 Slot 0



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) | 2012.06.28 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 6.0474760303497 |

A.2 Comments