

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 9780 - L2 Version 2
Chandra X-Ray Center

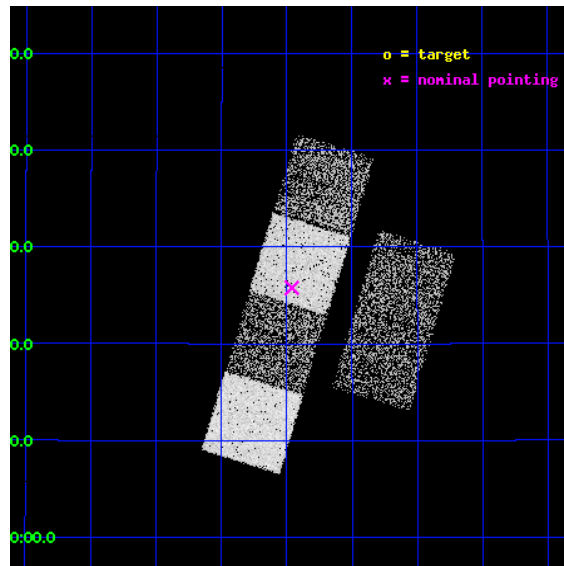
L2 Processing Date : May 7 2012

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1 Front

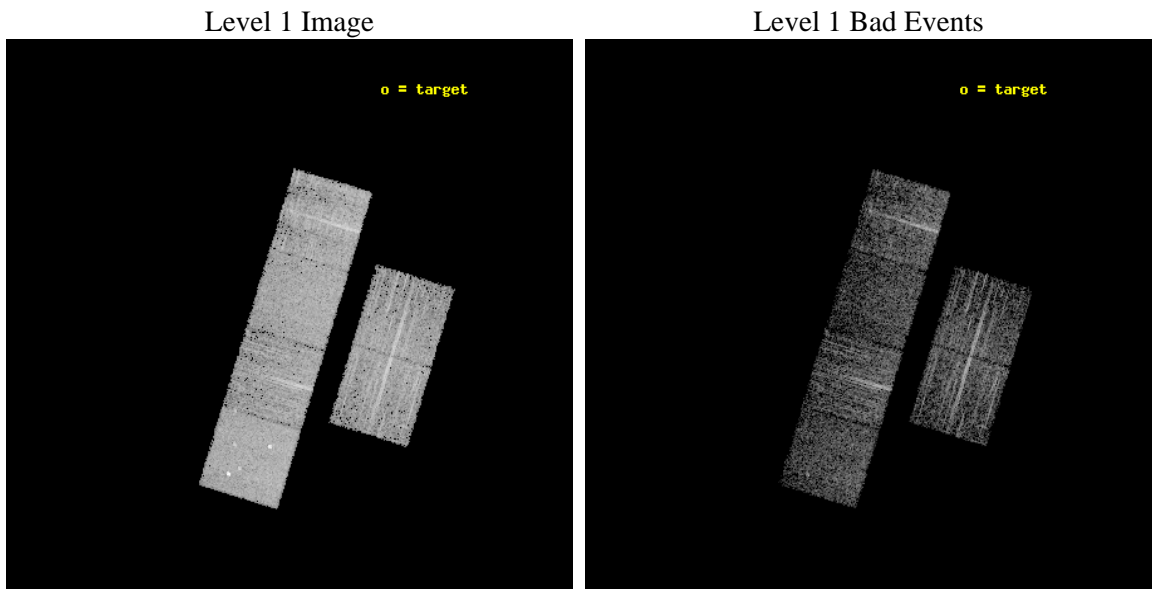
| | | |
|----------|---|---|
| seq_num | 100070 | Sequence number |
| obs_id | 9780 | Observation id |
| title | High Resolution Imaging and Spectroscopy of 8P/Tuttle | Proposal tit |
| observer | Dr Damian Christian | Principal investigator |
| object | 8P/Tuttle (2008) | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 24.054167 | Observer's specified target RA [deg] |
| dec_targ | 26.219722 | Observer's specified target Dec [deg] |
| ra_nom | 24.365201097839 | Nominal RA [deg] |
| dec_nom | 24.429697834022 | Nominal Dec [deg] |
| roll_nom | 286.89998626152 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 3187.1999881864 | Sum of GTIs [s] |
| livetime | 3146.8417428345 | Livetime [s] |
| ontime2 | 3187.1999881864 | Sum of GTIs [s] |
| ontime3 | 3187.1999881864 | Sum of GTIs [s] |
| ontime5 | 3187.1999881864 | Sum of GTIs [s] |
| ontime6 | 3187.1999881864 | Sum of GTIs [s] |
| ontime7 | 3187.1999881864 | Sum of GTIs [s] |
| ontime8 | 3187.1999881864 | Sum of GTIs [s] |
| l2events | 39996 | Number of level 2 events |



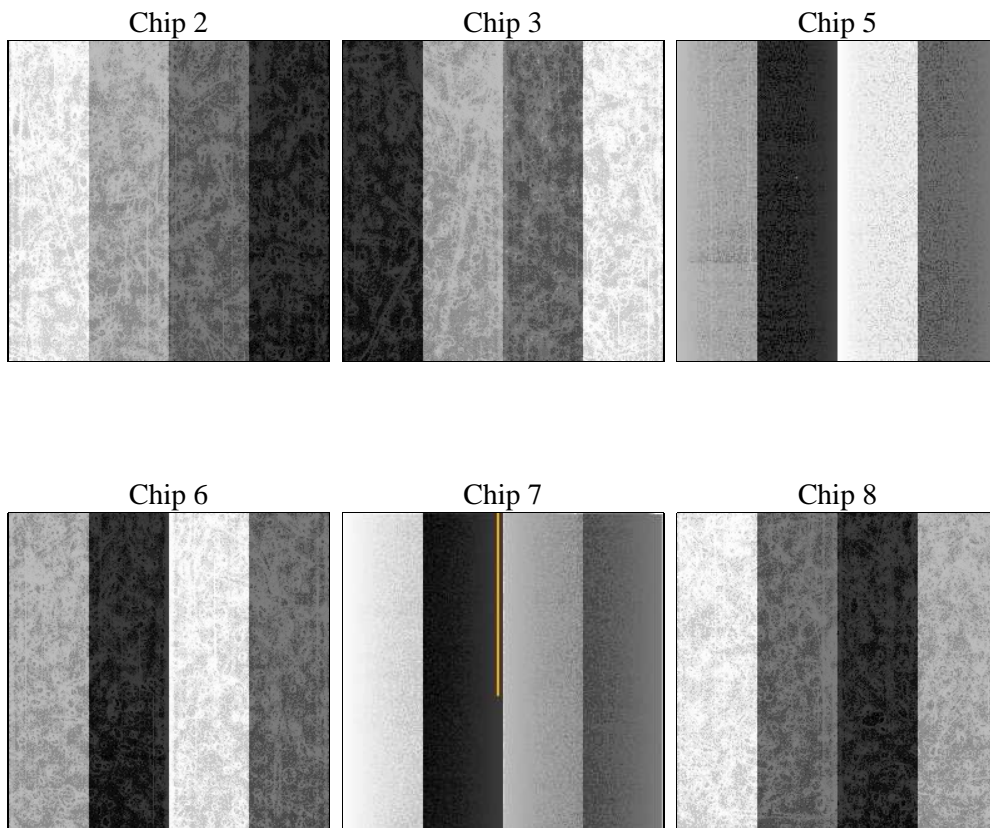
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 3000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.4 | Processing system revision | ontime | 3187.1999881864 | Sum of GTIs [s] |
| caldsver | 4.4.9 | | ontime2 | 3187.1999881864 | Sum of GTIs [s] |
| date | 2012-05-07T14:11:02 | Date and time of file creation | ontime3 | 3187.1999881864 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime5 | 3187.1999881864 | Sum of GTIs [s] |
| | | | ontime6 | 3187.1999881864 | Sum of GTIs [s] |
| | | | ontime7 | 3187.1999881864 | Sum of GTIs [s] |
| | | | ontime8 | 3187.1999881864 | Sum of GTIs [s] |
| | | | l1events | 196480 | Number of level 1 events |

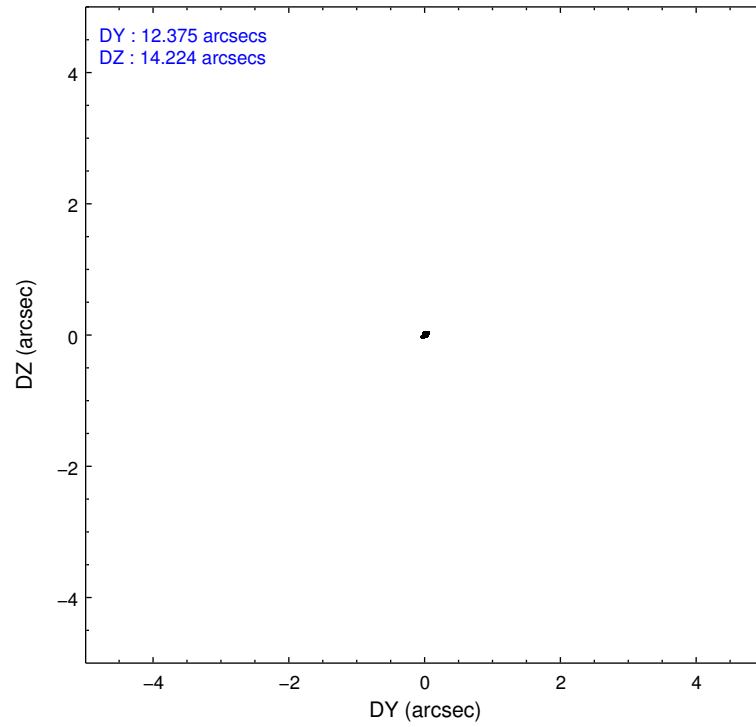
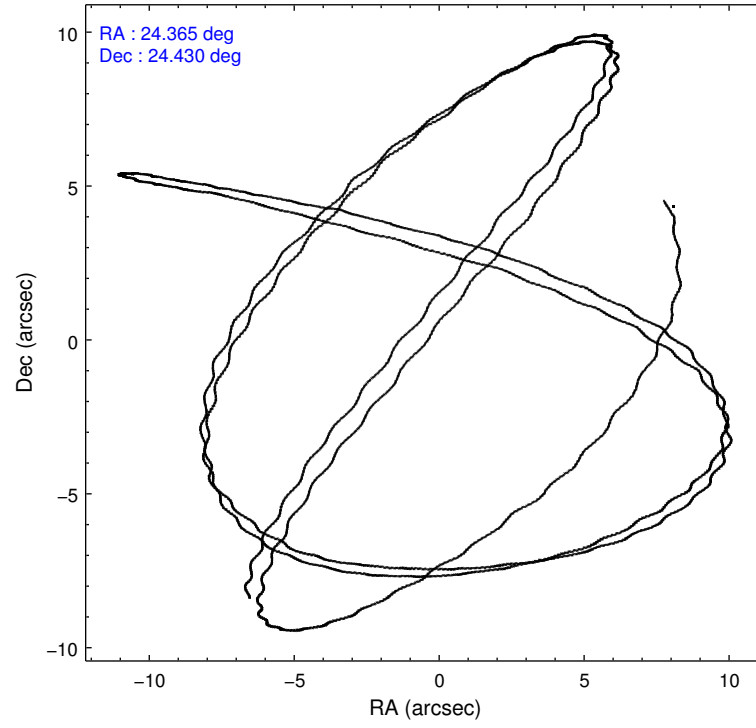
2.1.4 Events

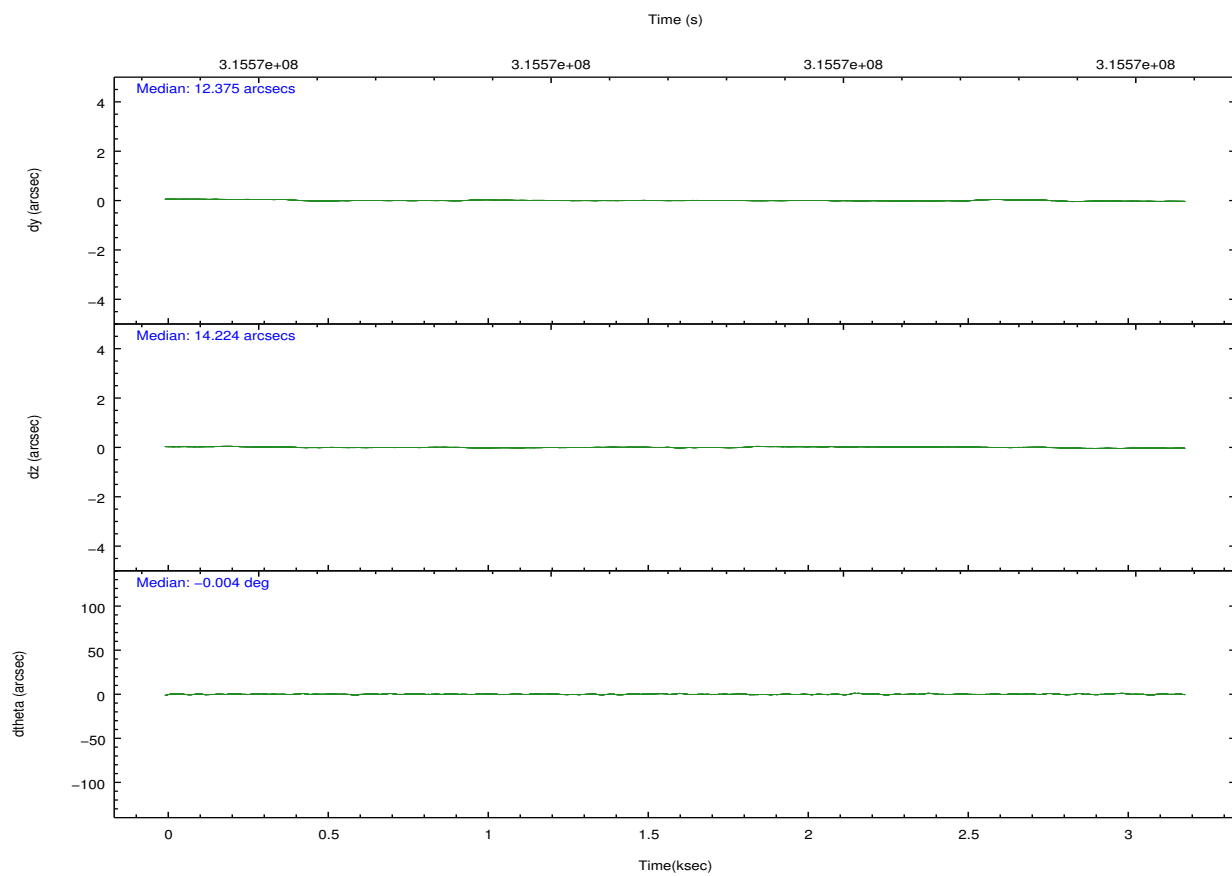
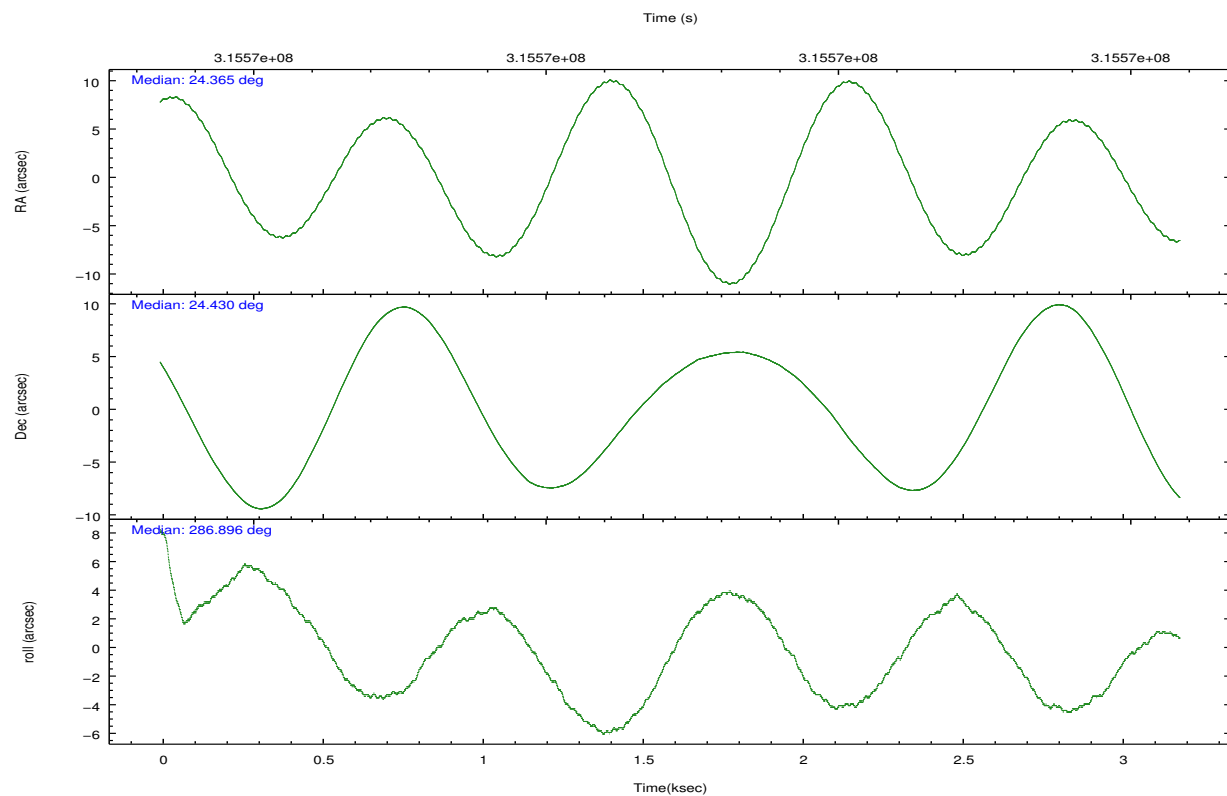
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|-------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 29463 | 27190 | 40738 | 29653 | 33206 | 36230 | grade 0 events | 988 | 928 | 3004 | 1143 | 2045 | 2887 |
| rejected events | 26864 | 24780 | 21709 | 26858 | 19070 | 27676 | | 3% | 3% | 7% | 3% | 6% | 7% |
| rejected % | 91% | 91% | 53% | 90% | 57% | 76% | grade 1 events | 14 | 15 | 137 | 9 | 44 | 29 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 691 | 581 | 6069 | 680 | 3160 | 2133 |
| | | | | | | | | 2% | 2% | 14% | 2% | 9% | 5% |
| | | | | | | | grade 3 events | 315 | 307 | 805 | 313 | 1422 | 1058 |
| | | | | | | | | 1% | 1% | 1% | 1% | 4% | 2% |
| | | | | | | | grade 4 events | 308 | 312 | 811 | 320 | 1415 | 969 |
| | | | | | | | | 1% | 1% | 1% | 1% | 4% | 2% |
| | | | | | | | grade 5 events | 953 | 1193 | 3070 | 1237 | 3398 | 1740 |
| | | | | | | | | 3% | 4% | 7% | 4% | 10% | 4% |
| | | | | | | | grade 6 events | 550 | 542 | 10288 | 628 | 7621 | 2305 |
| | | | | | | | | 1% | 1% | 25% | 2% | 22% | 6% |
| | | | | | | | grade 7 events | 25644 | 23312 | 16554 | 25323 | 14101 | 25109 |
| | | | | | | | | 87% | 85% | 40% | 85% | 42% | 69% |

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 | 24.342924 | 24.36520109783856 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 24.448134 | 24.42969783402176 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 286.752558 | 286.8999862615177 | [s] Primary exposure time | 0.000000 | 3.2 |
| [s] Window start time (MET) | 314928065.184000 | 314928065.184000 | | | |
| [s] Window stop time (MET) | 316828805.184000 | 316828805.184000 | | | |
| [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) | 315568017.184000 | 315567640.89207 | | | |
| Observation start date | 2008-01-01T09:45:52 | 2008-01-01T09:40:40 | | | |
| [s] Observation end time (MET) | 315571017.184000 | 315571151.00474 | | | |
| Observation end date | 2008-01-01T10:35:52 | 2008-01-01T10:39:11 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



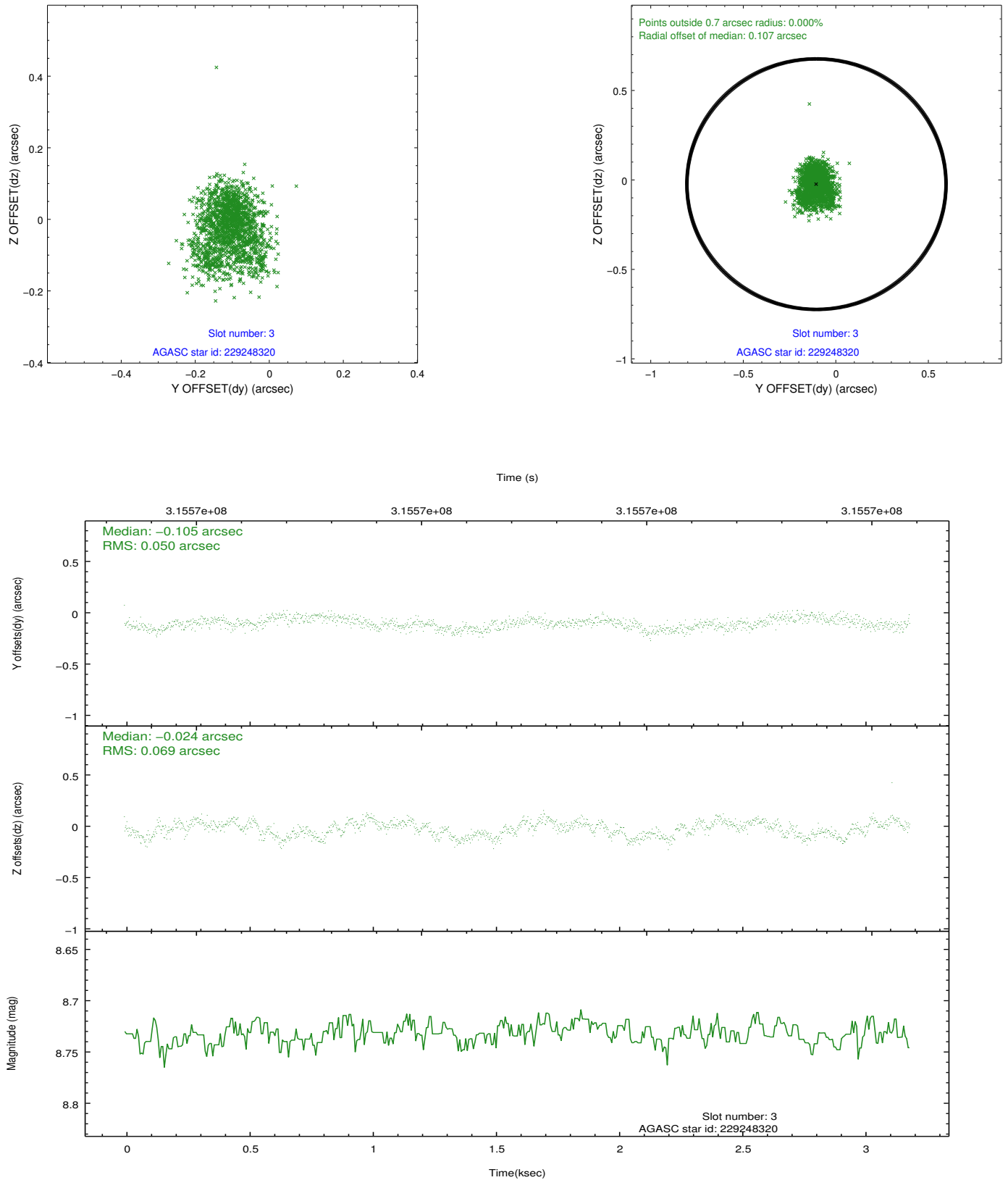


Slot Statistics

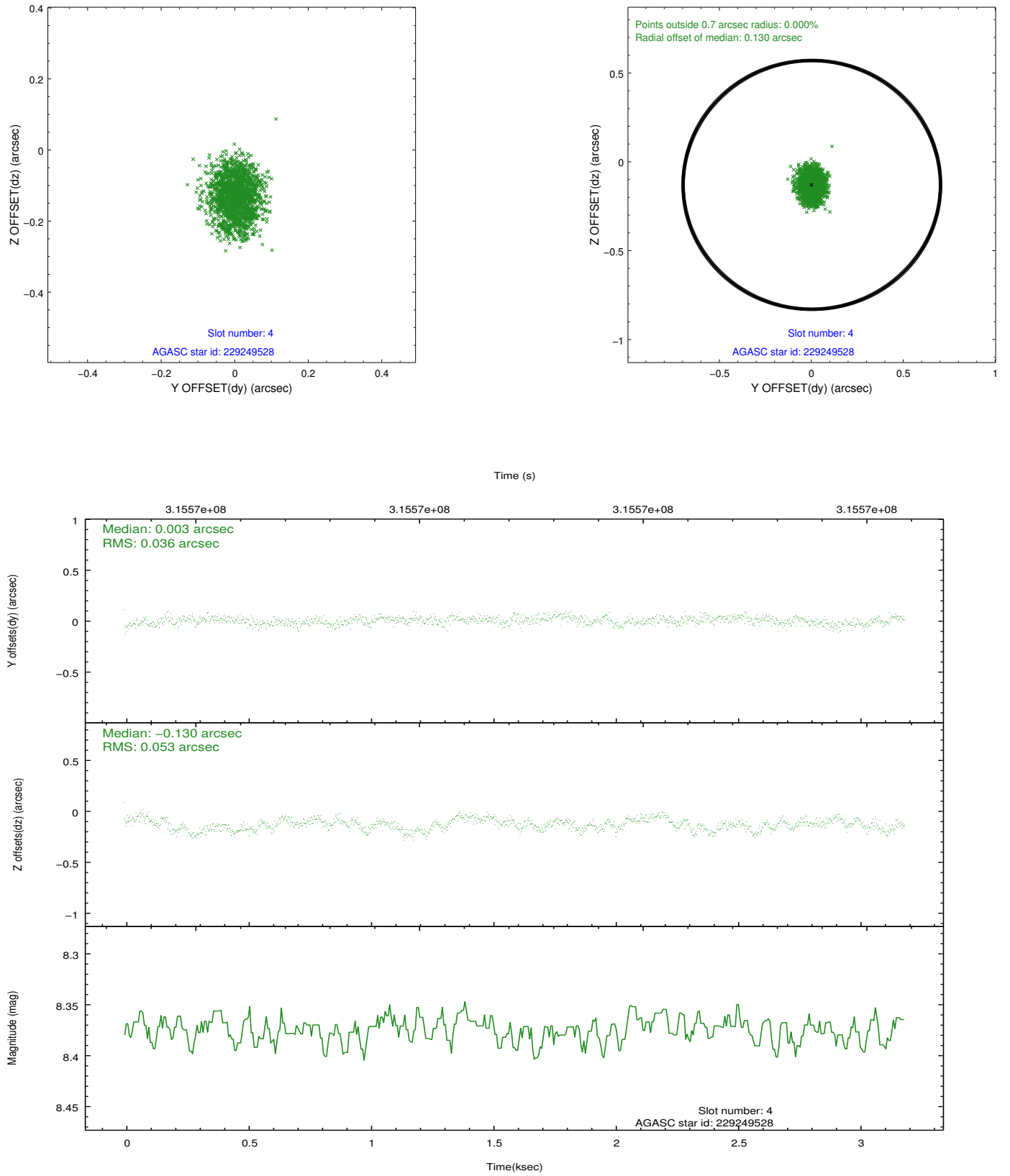
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|-----------|-----------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.09 | 778 | -0.042 | -0.039 | 0.007 | 0.012 | 0.000000 | 0.000000 | -765.30 | -1735.63 |
| 1 | FID | ACIS-S-4 | 7.19 | 778 | 0.142 | 0.031 | 0.006 | 0.010 | 0.000000 | 0.000000 | 2147.23 | 170.88 |
| 2 | FID | ACIS-S-5 | 7.23 | 778 | -0.131 | 0.017 | 0.007 | 0.011 | 0.000000 | 0.000000 | -1815.69 | 166.77 |
| 3 | GUIDE | 229248320 | 8.73 | 1553 | -0.105 | -0.024 | 0.092 | 0.142 | 23.746592 | 24.889471 | -2086.65 | -1405.76 |
| 4 | GUIDE | 229249528 | 8.37 | 1554 | 0.003 | -0.130 | 0.069 | 0.109 | 24.395659 | 24.629567 | -576.90 | 352.50 |
| 5 | GUIDE | 229250008 | 9.21 | 1556 | 0.149 | 0.265 | 0.090 | 0.144 | 24.918884 | 24.309304 | 1019.22 | 1667.09 |
| 6 | GUIDE | 229255600 | 8.39 | 1556 | 0.035 | -0.166 | 0.054 | 0.090 | 24.102689 | 24.216856 | 570.09 | -994.09 |
| 7 | GUIDE | 229639104 | 8.92 | 1555 | -0.079 | 0.061 | 0.065 | 0.106 | 24.766939 | 25.096434 | -1838.31 | 1996.35 |

2.4 Star Slots

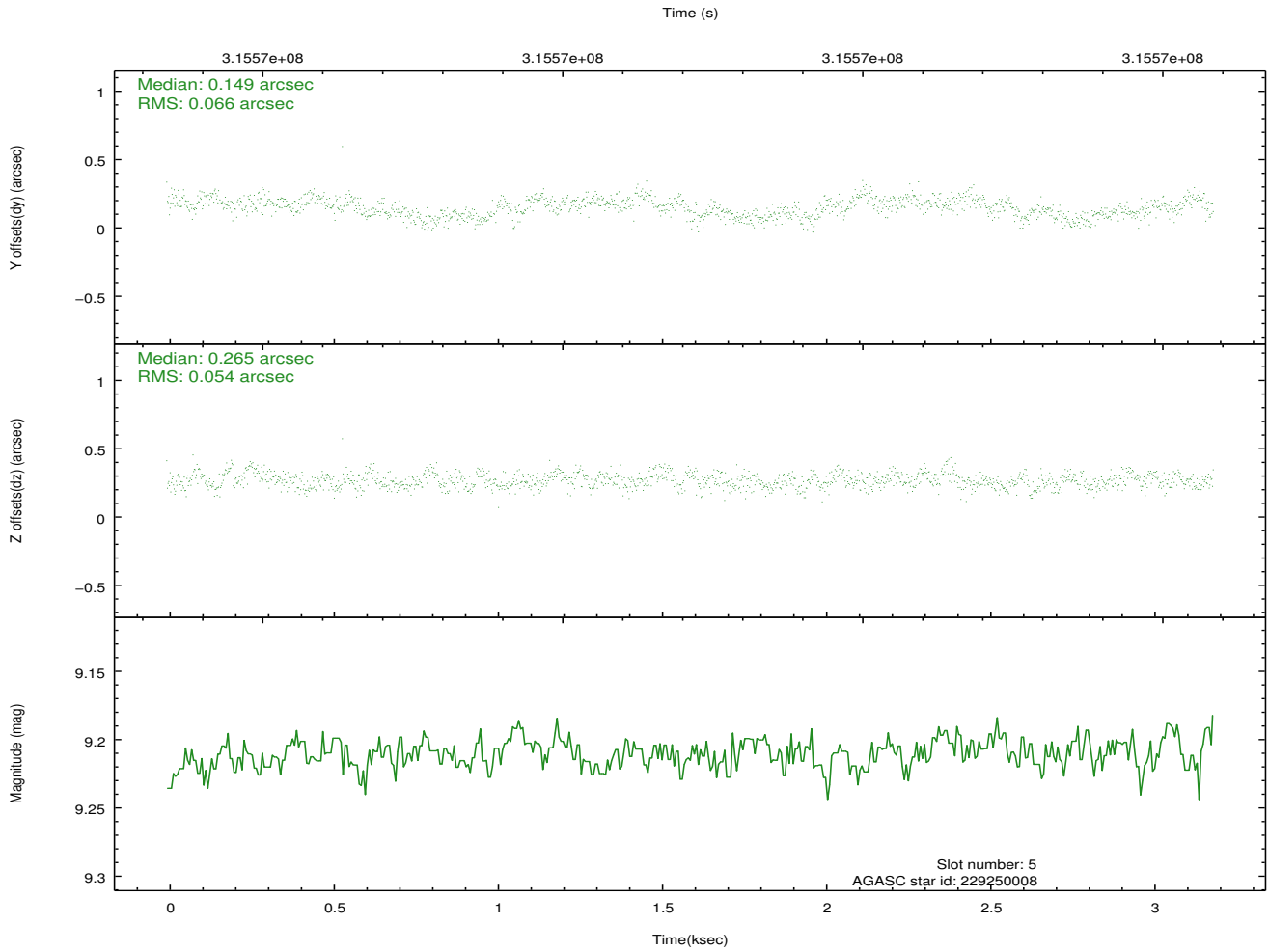
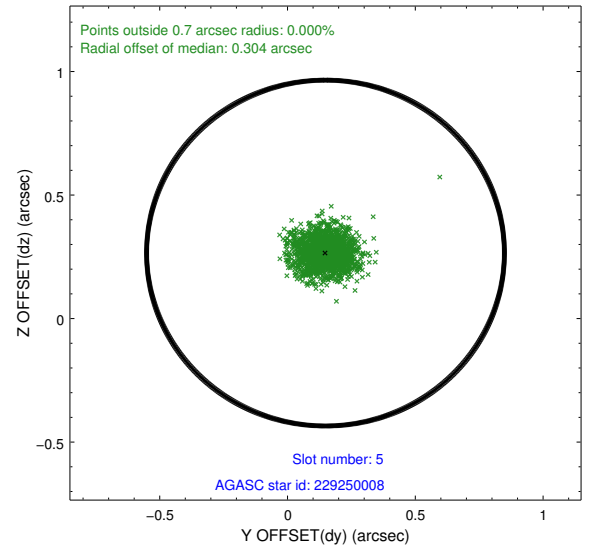
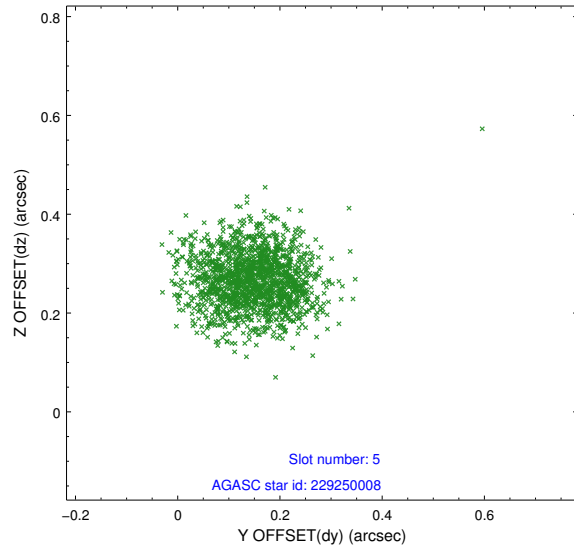
2.4.1 Slot 3



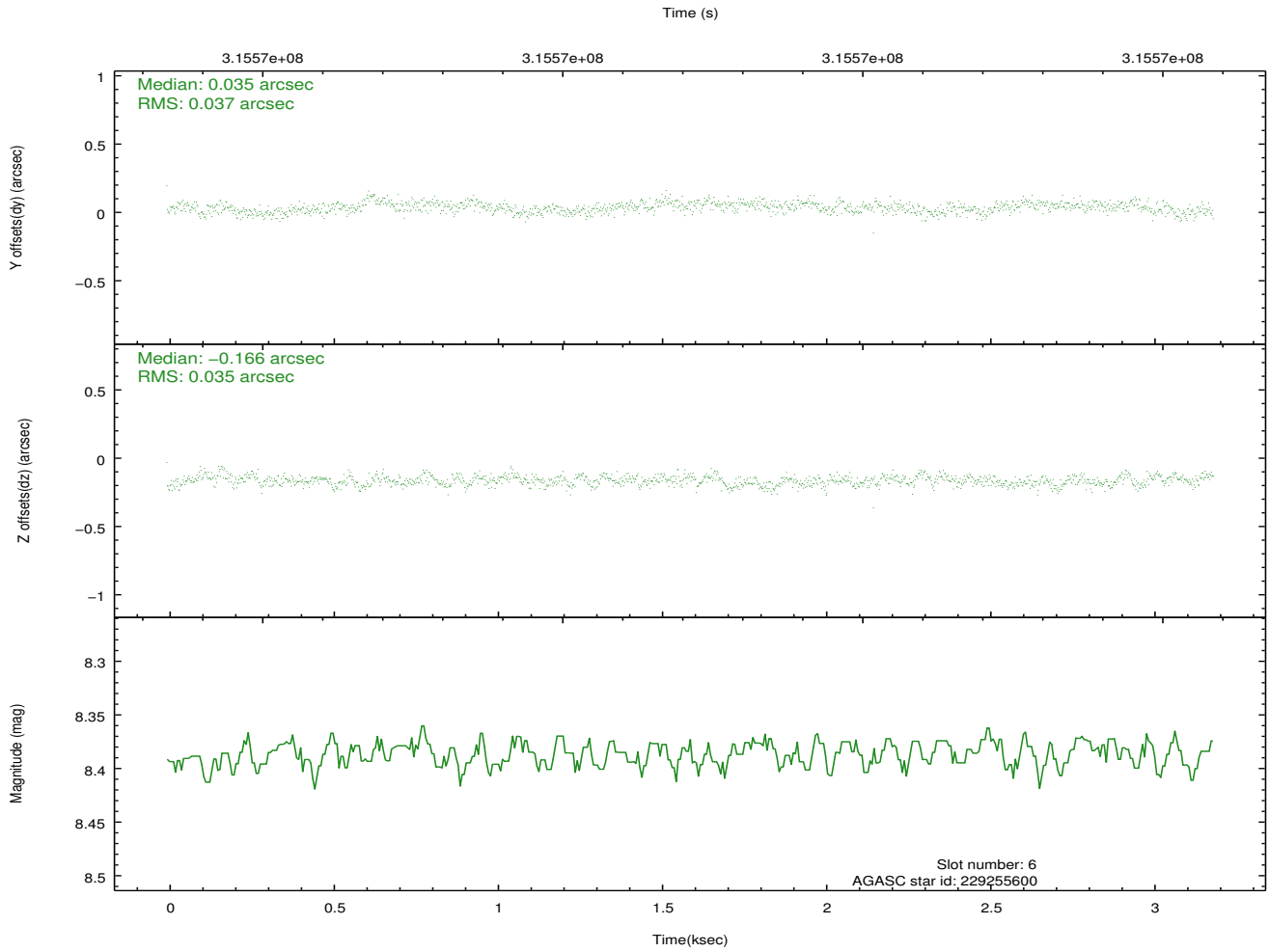
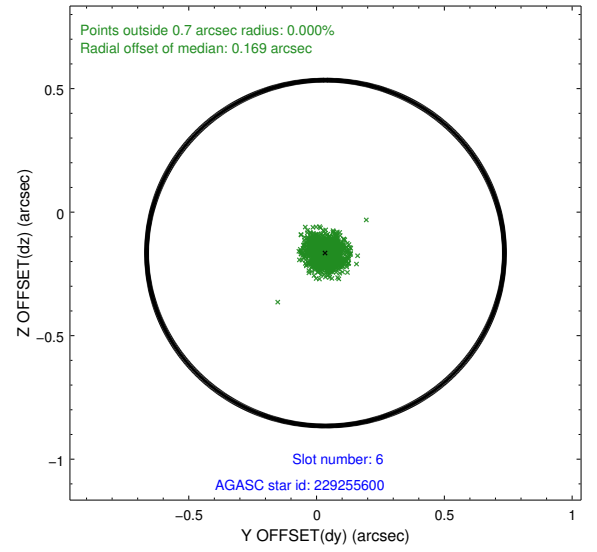
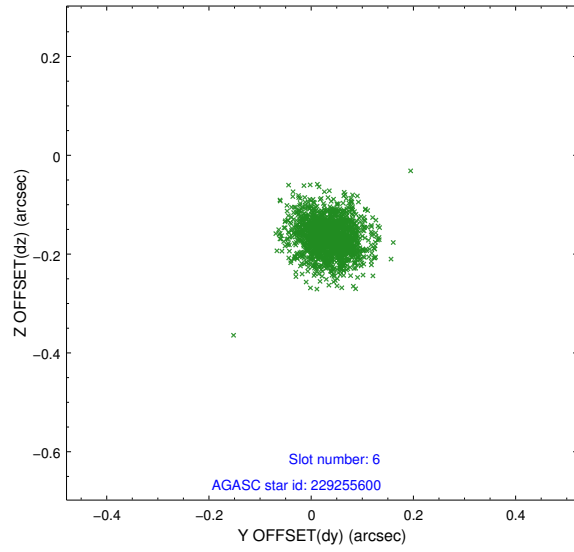
2.4.2 Slot 4



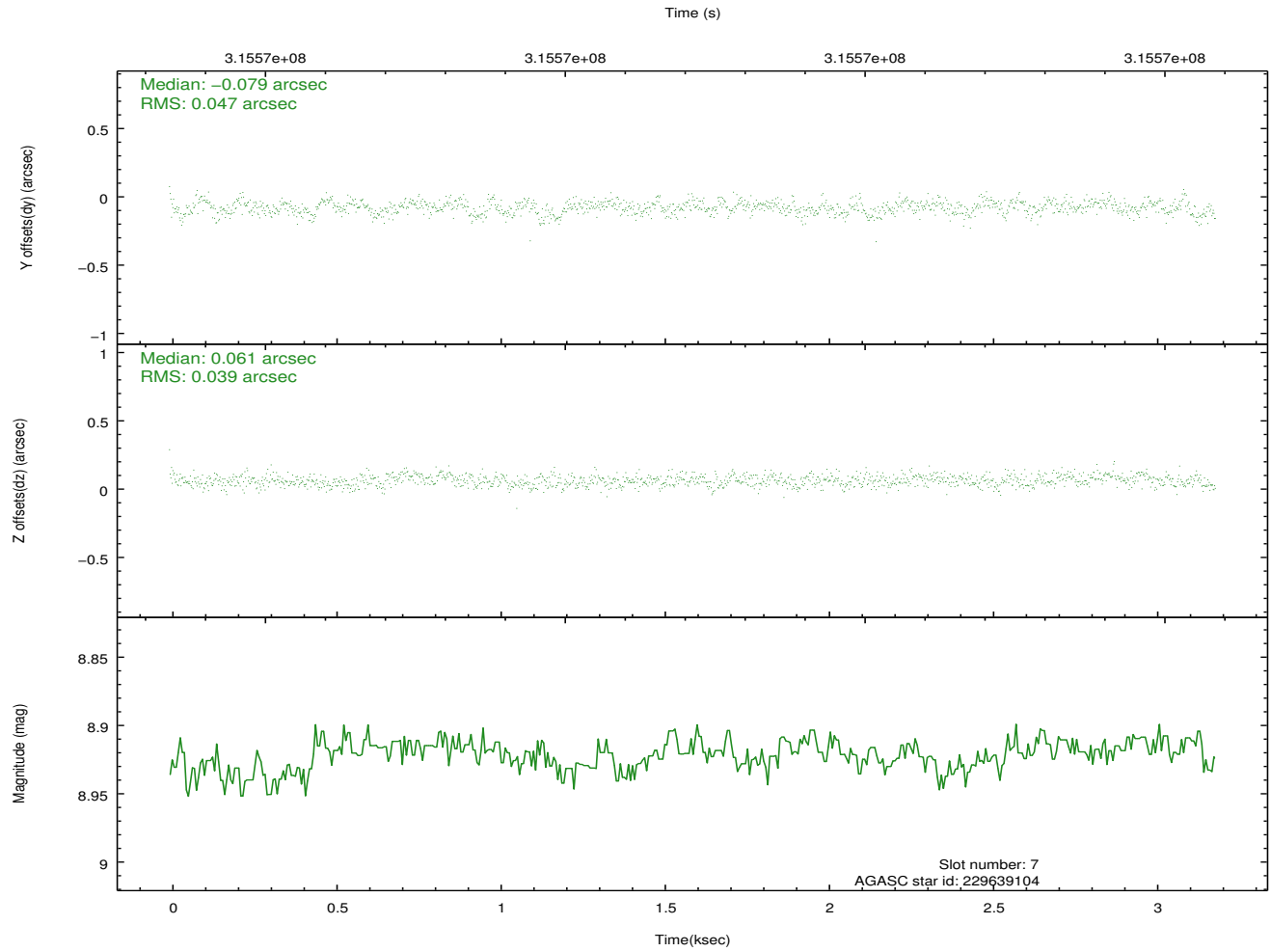
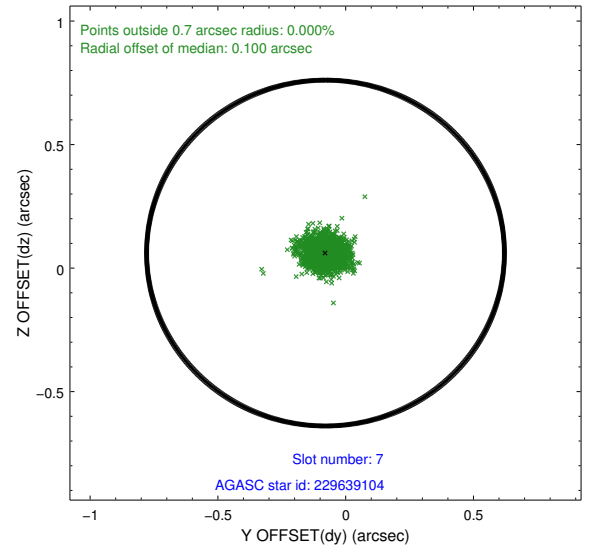
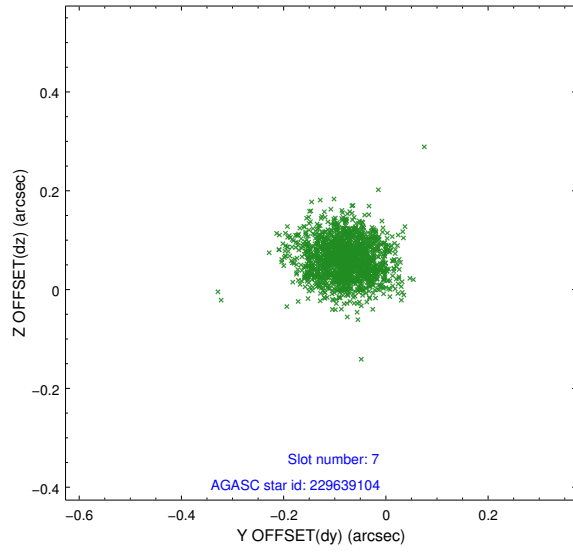
2.4.3 Slot 5



2.4.4 Slot 6

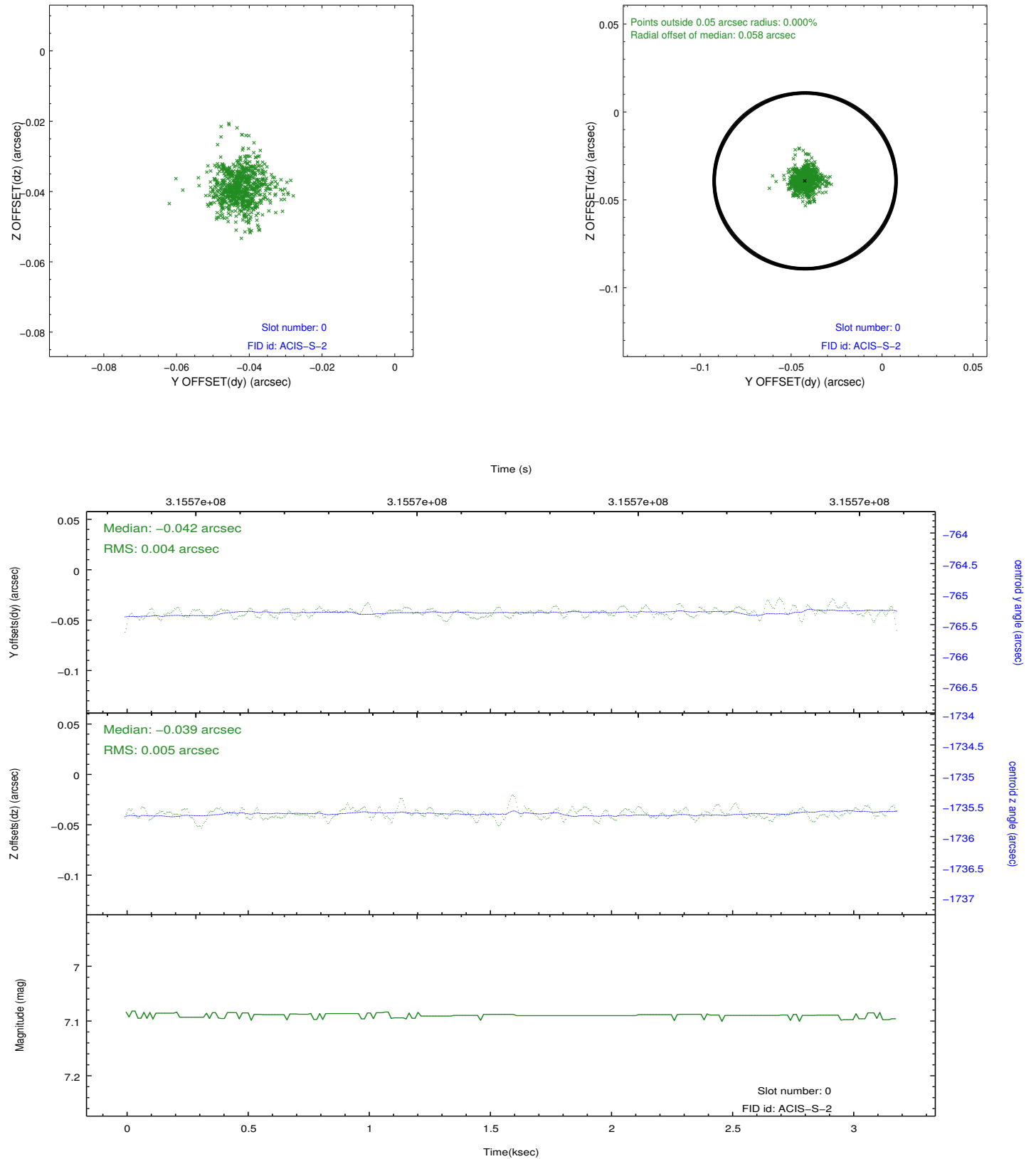


2.4.5 Slot 7

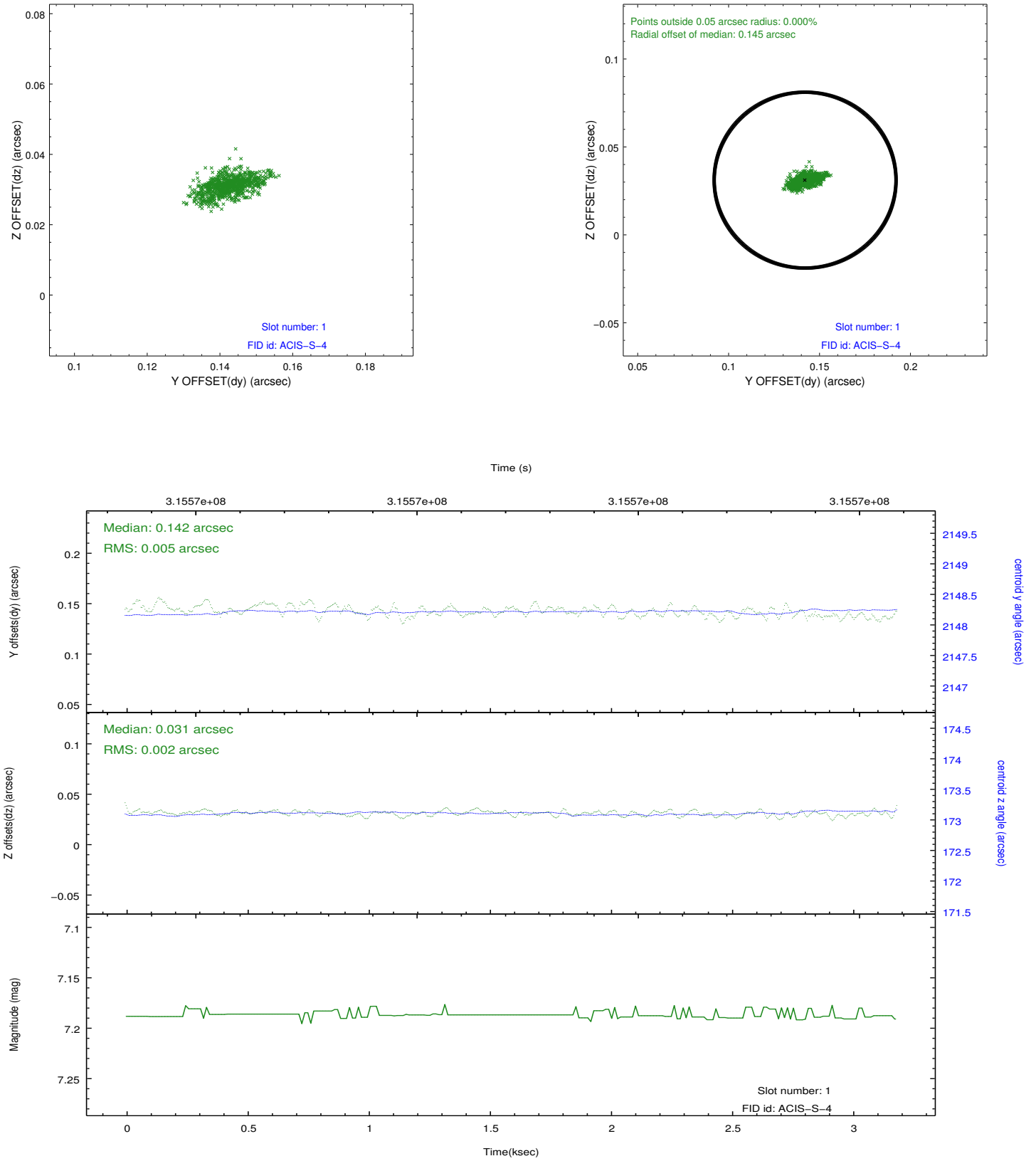


2.5 FID Slots

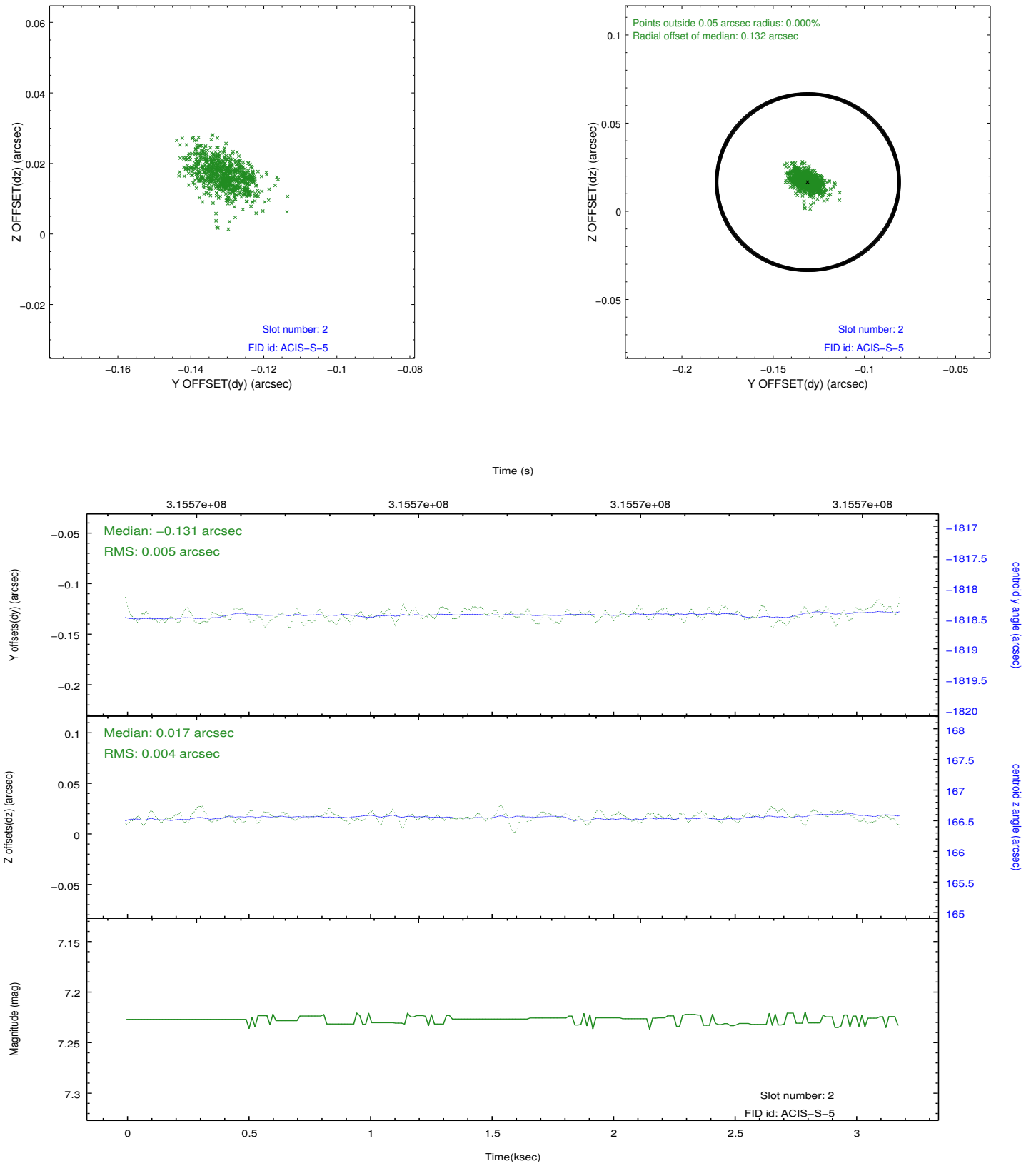
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|---------------|
| V&V Scientist | Beth Sundheim |
| V&V Date (YYYY-MM-DD) | 2012.05.09 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 3.18719998 |

A.2 Comments

Window preference met.