

V&V Reference Report

L2 ASCDS Version : 8.2.1

Observation 1119 - L2 Version 4

Chandra X-Ray Center

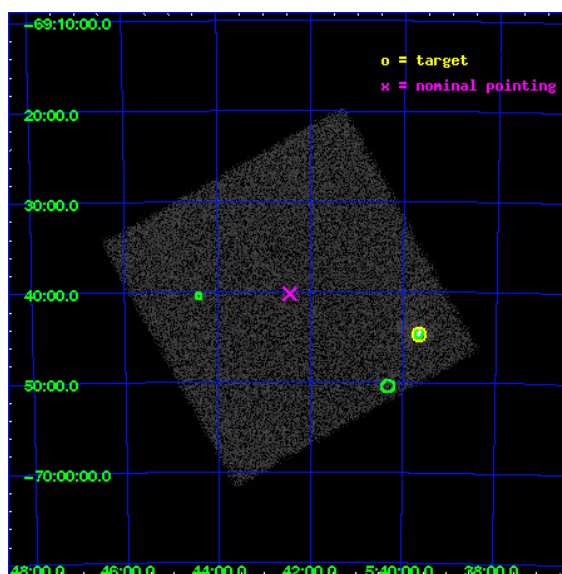
L2 Processing Date : Feb 1 2010

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1 Front

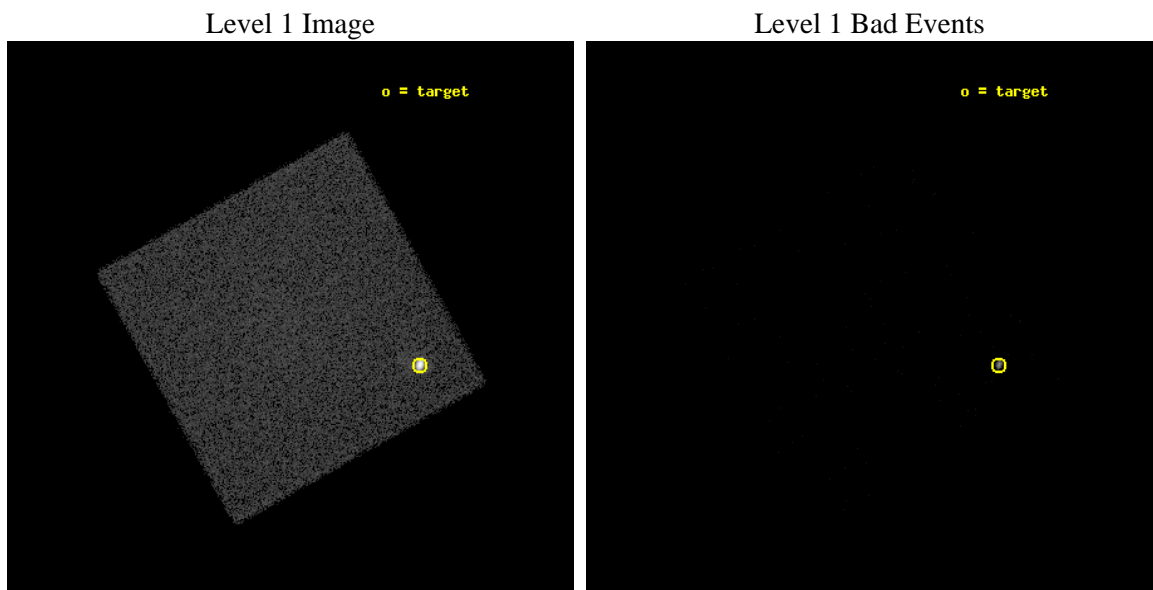
| | | |
|----------|---------------------|---------------------------------|
| seq_num | 480069 | Sequence number |
| obs_id | 1119 | Observation id |
| title | | Proposal title |
| observer | Dr. CXC Calibration | Principal investigator |
| object | LMC X-1 | Source name |
| ra_targ | 84.914583 | Observer's specified target RA |
| dec_targ | -69.743611 | Observer's specified target Dec |
| ra_nom | 85.611275166722 | Nominal RA |
| dec_nom | -69.671083554129 | Nominal Dec |
| roll_nom | 105.84307819011 | Nominal Roll |
| revision | 4 | Processing version of data |
| ontime | 1795.0313144624 | [s] |
| livetime | 1779.6674051512 | Ontime multiplied by DTCOR |
| l2events | 82481 | Number of level 2 events |



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|-------------------------------------|
| obi_num | 0 | Obi number | sched_exp_time | 2000.000000 | Scheduled observation exposure time |
| ascdsver | 8.2.1 | Processing system revision | ontime | 1795.0313144624 | [s] |
| caldbver | 4.1.5 | | l1events | 127918 | Number of level 1 events |
| date | 2010-02-01T19:32:56 | Date and time of file creation | | | |
| revision | 4 | Processing version of data | | | |

2.1.3 Events

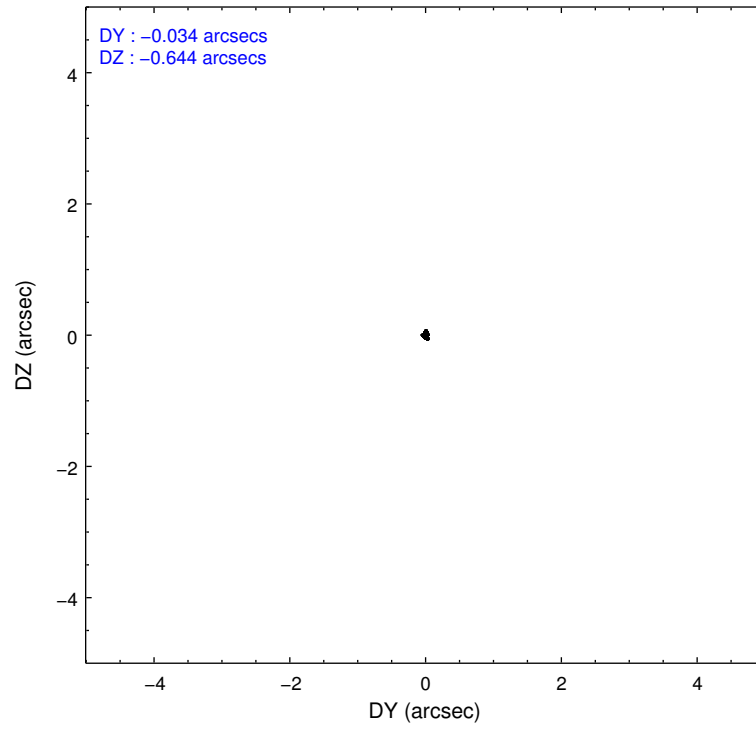
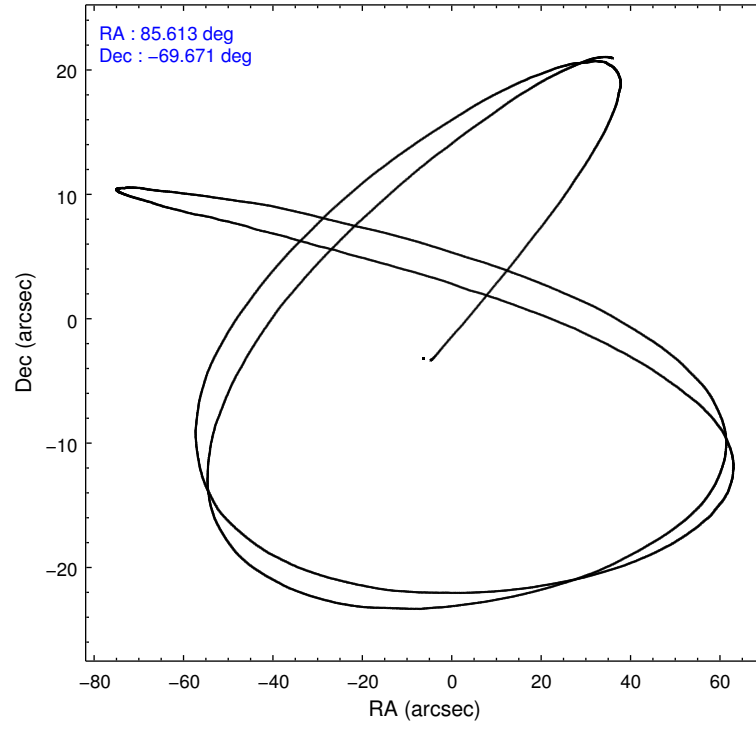
Level 1 Events

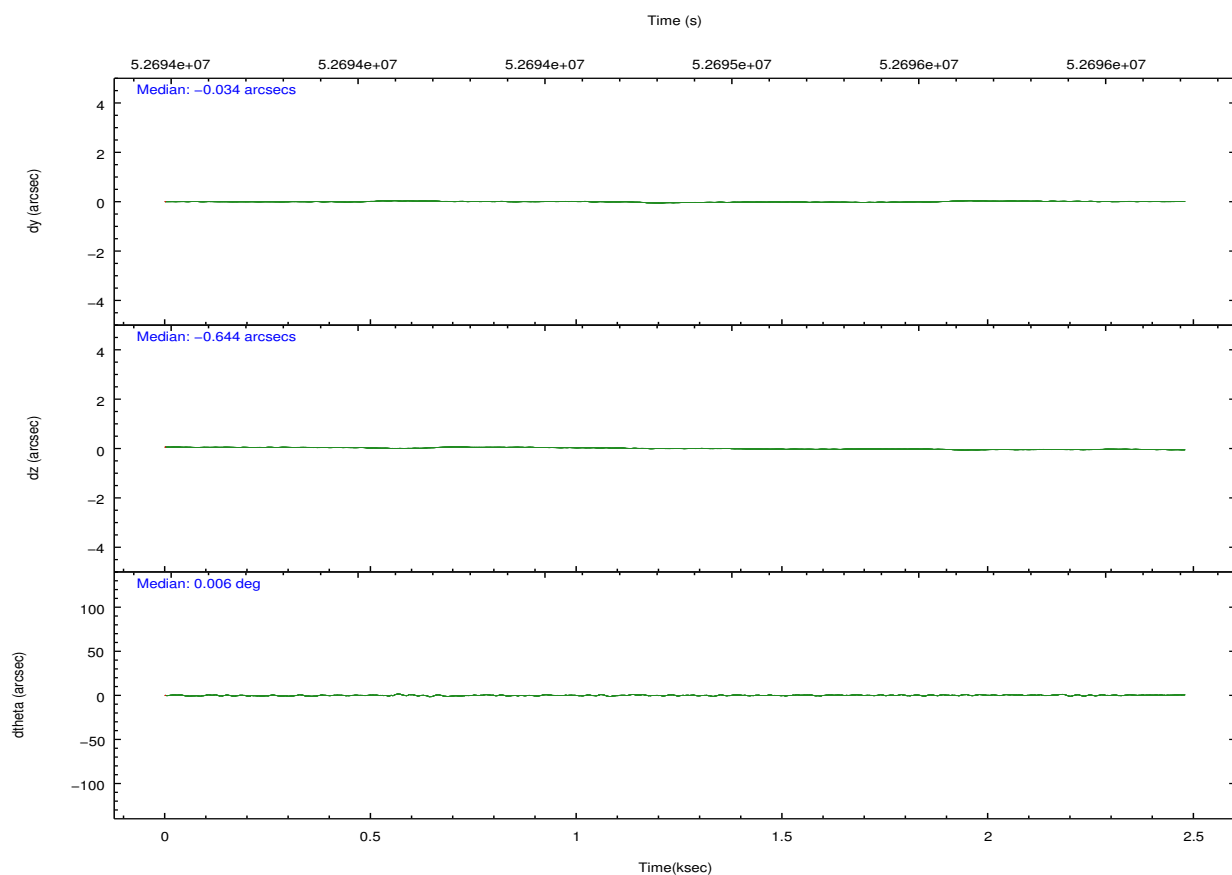
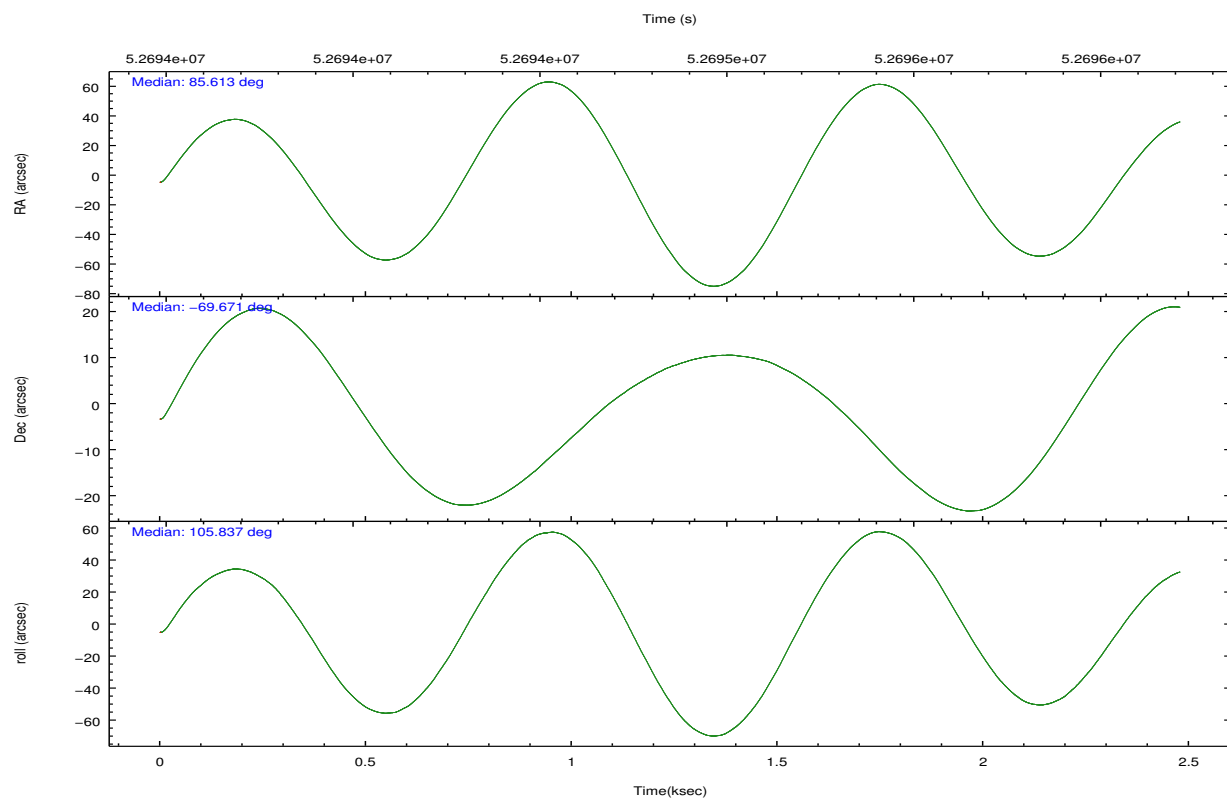
| | |
|-----------------|----------------------|
| | segment 0 |
| level 1 events | 127918 |
| rejected events | 3498 |
| rejected % | 2% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|------------------------|------------------------------|-----------|---------|
| Instrument | HRC | HRC | Obspar format version number | 6 | 6 |
| Detector | HRC-I | HRC-I | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | OBSERVING | OBSERVING | | | |
| Observation mode | POINTING | POINTING | | | |
| Pointing RA | 85.667615 | 85.61127516672198 | | | |
| Pointing Dec | -69.690621 | -69.6710835541292 | | | |
| Pointing Roll | 105.991394 | 105.8430781901141 | | | |
| SIM focus pos (mm) | -1.040293 | -1.300001029371461 | | | |
| SIM defocus (mm) | 0 | -0.259708408712586 | | | |
| SIM translation stage pos (mm) | 126.985494 | 126.9854943052878 | | | |
| SIM translation stage offset (mm) | 0 | -5.413686238853188e-06 | | | |
| Observation start time | 52694088.184000 | 52693421.530654 | | | |
| Observation start date | 1999-09-02T21:13:44 | 1999-09-02T21:03:41 | | | |
| Observation end time | 52696088.184000 | 52696958.293281 | | | |
| Observation end date | 1999-09-02T21:47:04 | 1999-09-02T22:02:38 | | | |

2.3 Aspect



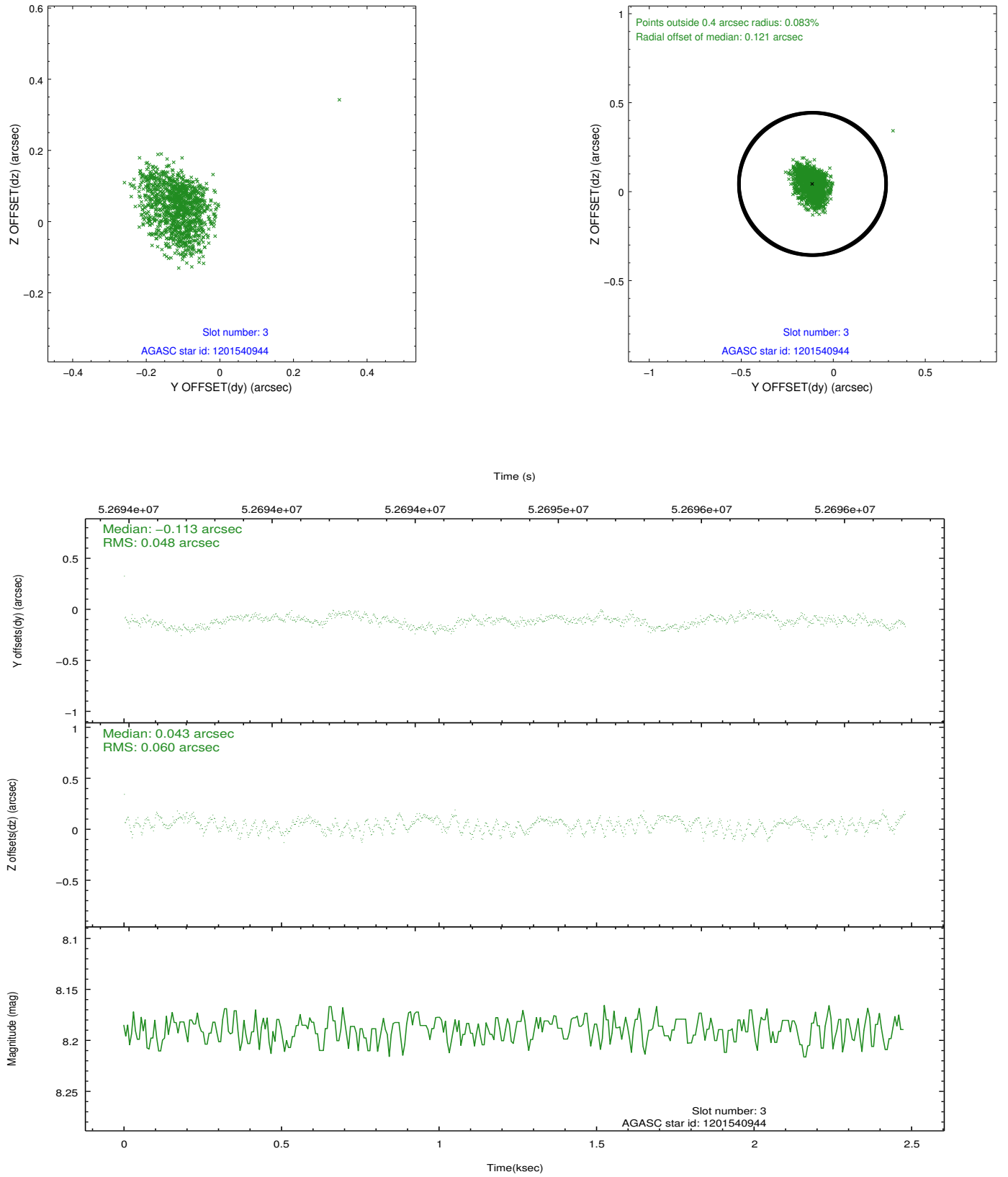


Slot Statistics

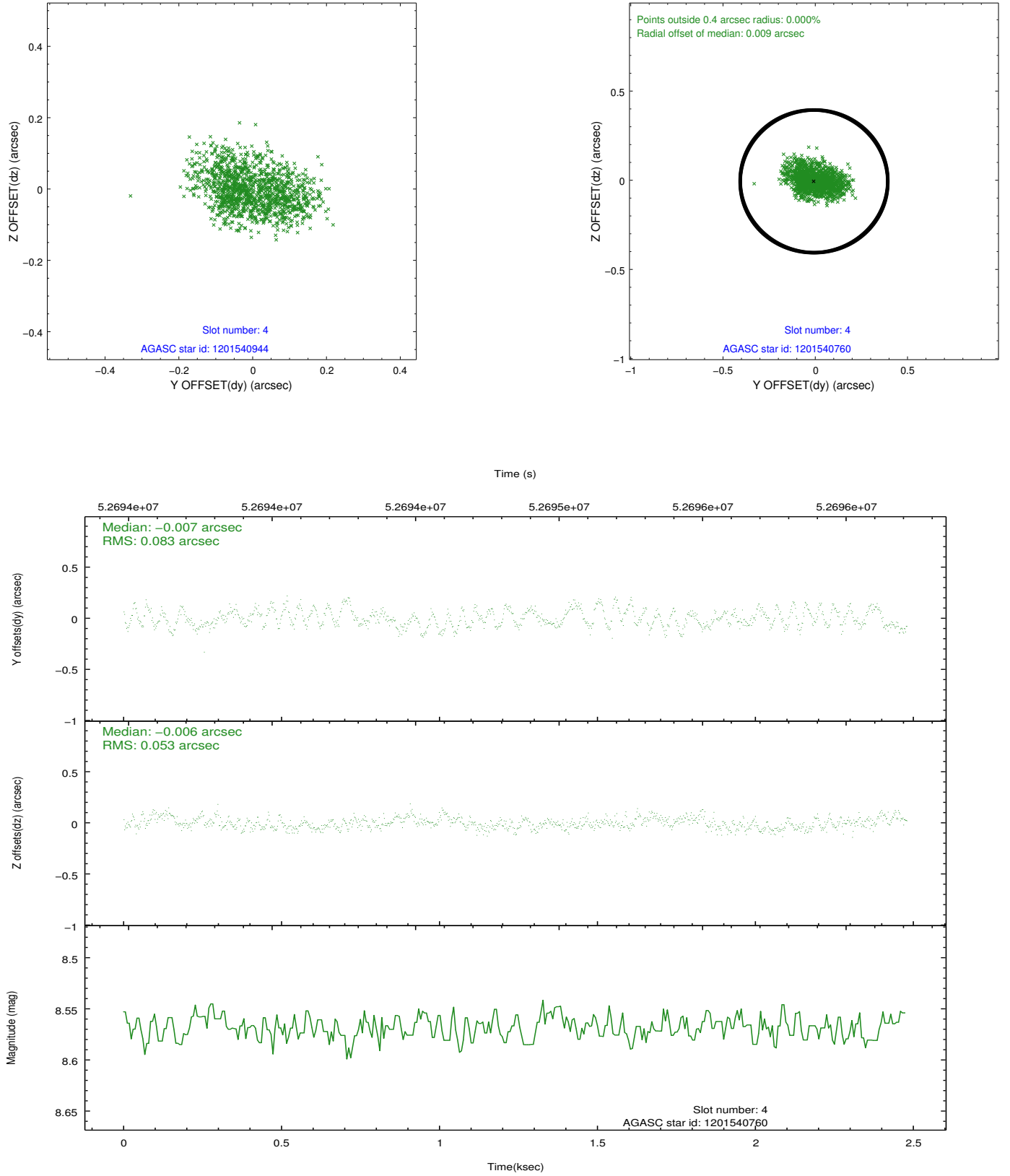
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|---------|------------|-------|-------|--------|--------|-------|-------|-----------|------------|----------|----------|
| 0 | FID | HRC-I-1 | 6.96 | 1210 | -0.001 | -0.065 | 0.006 | 0.010 | 0.000000 | 0.000000 | -755.28 | -1287.10 |
| 1 | FID | HRC-I-3 | 7.04 | 1210 | 0.057 | -0.035 | 0.007 | 0.011 | 0.000000 | 0.000000 | -1184.43 | 1016.35 |
| 2 | FID | HRC-I-4 | 6.98 | 1208 | 0.058 | 0.011 | 0.005 | 0.009 | 0.000000 | 0.000000 | 1286.43 | 1016.02 |
| 3 | GUIDE | 1201540944 | 8.19 | 1210 | -0.113 | 0.043 | 0.082 | 0.130 | 87.496877 | -69.685010 | -644.36 | -2192.45 |
| 4 | GUIDE | 1201540760 | 8.57 | 1210 | -0.007 | -0.006 | 0.106 | 0.168 | 84.403691 | -70.419249 | -2118.83 | 2192.05 |
| 5 | OMITTED | | 0.00 | 0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000 | 0.000000 | 0.00 | 0.00 |
| 6 | GUIDE | 1201017424 | 10.23 | 1210 | 0.094 | 0.056 | 0.130 | 0.215 | 85.854985 | -69.248506 | 1461.00 | -664.83 |
| 7 | GUIDE | 1201540376 | 9.26 | 1209 | -0.012 | -0.075 | 0.159 | 0.284 | 87.370568 | -69.787305 | -946.24 | -1931.46 |

2.4 Star Slots

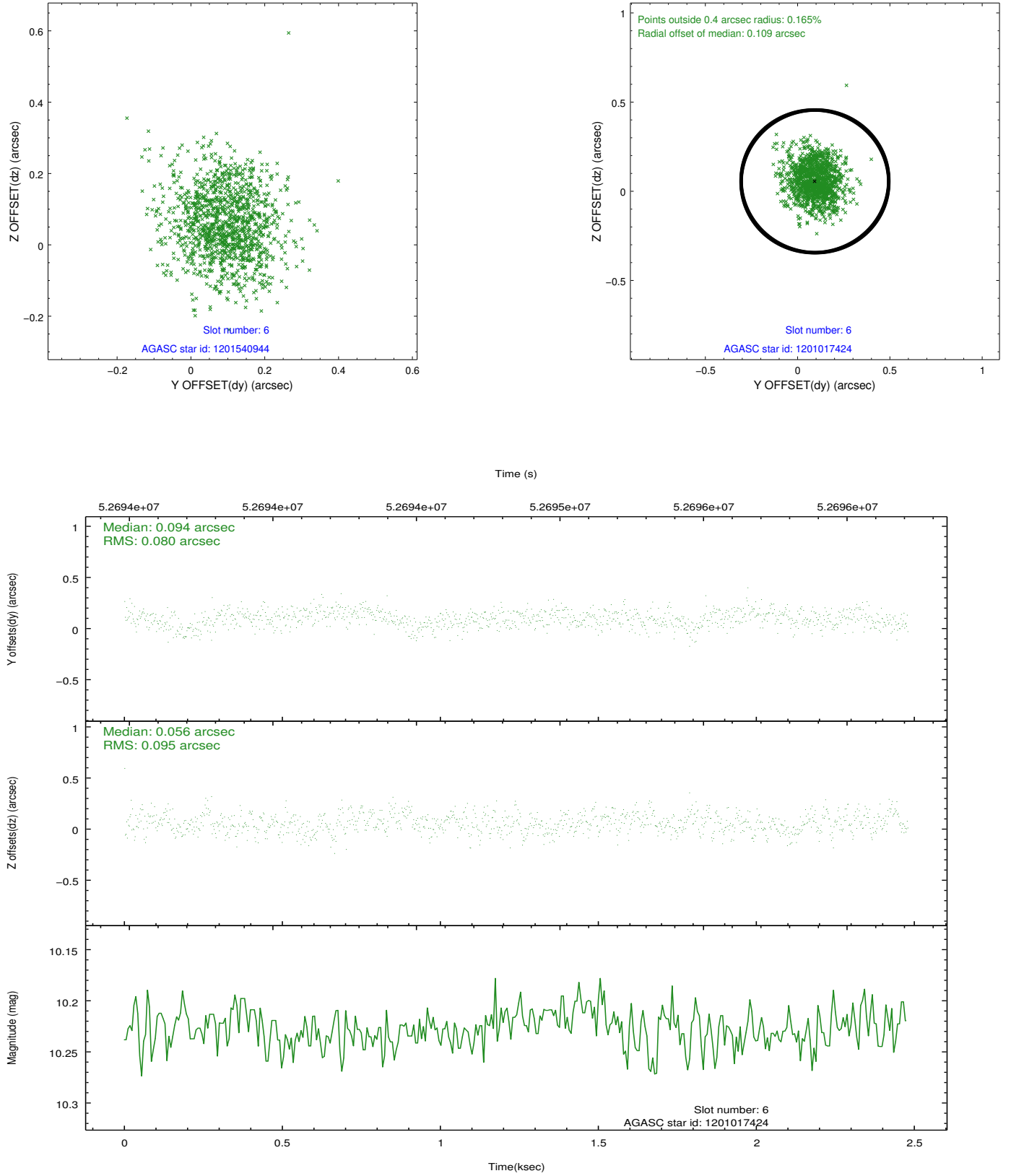
2.4.1 Slot 3



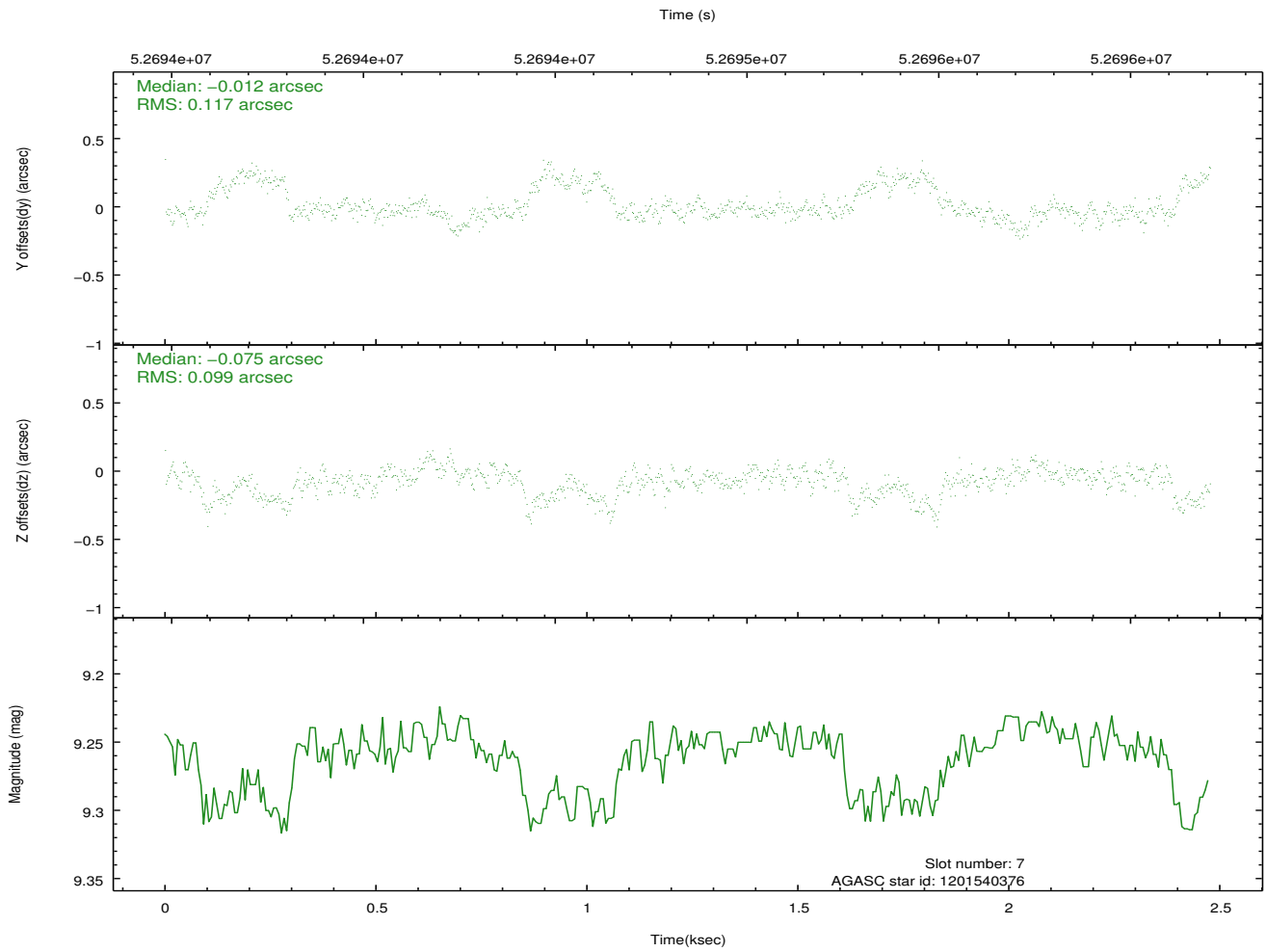
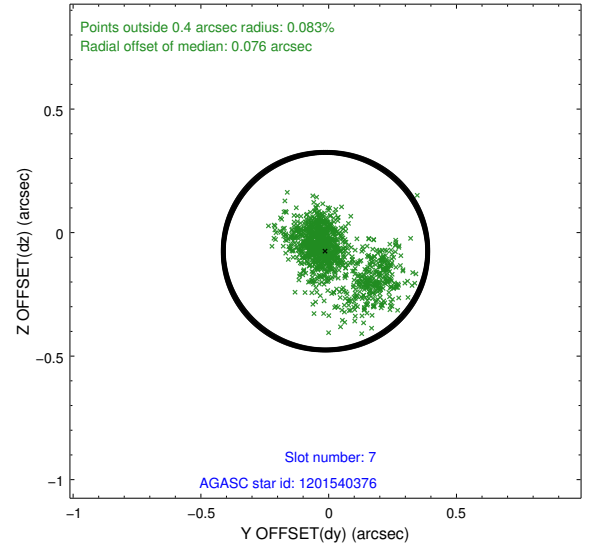
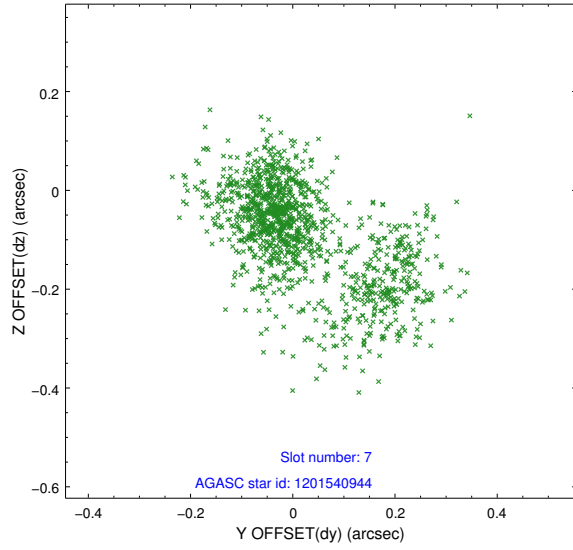
2.4.2 Slot 4



2.4.3 Slot 6

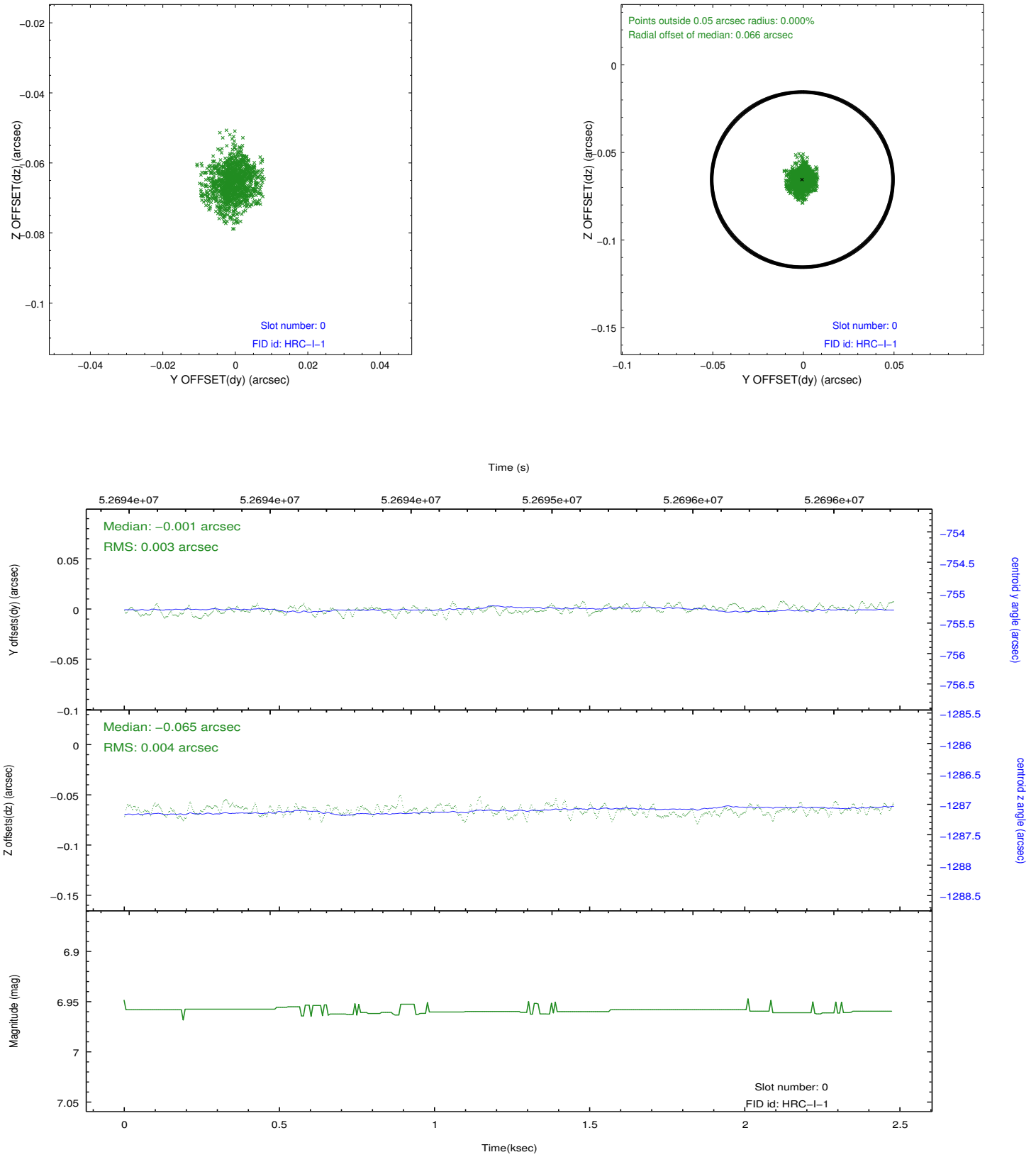


2.4.4 Slot 7

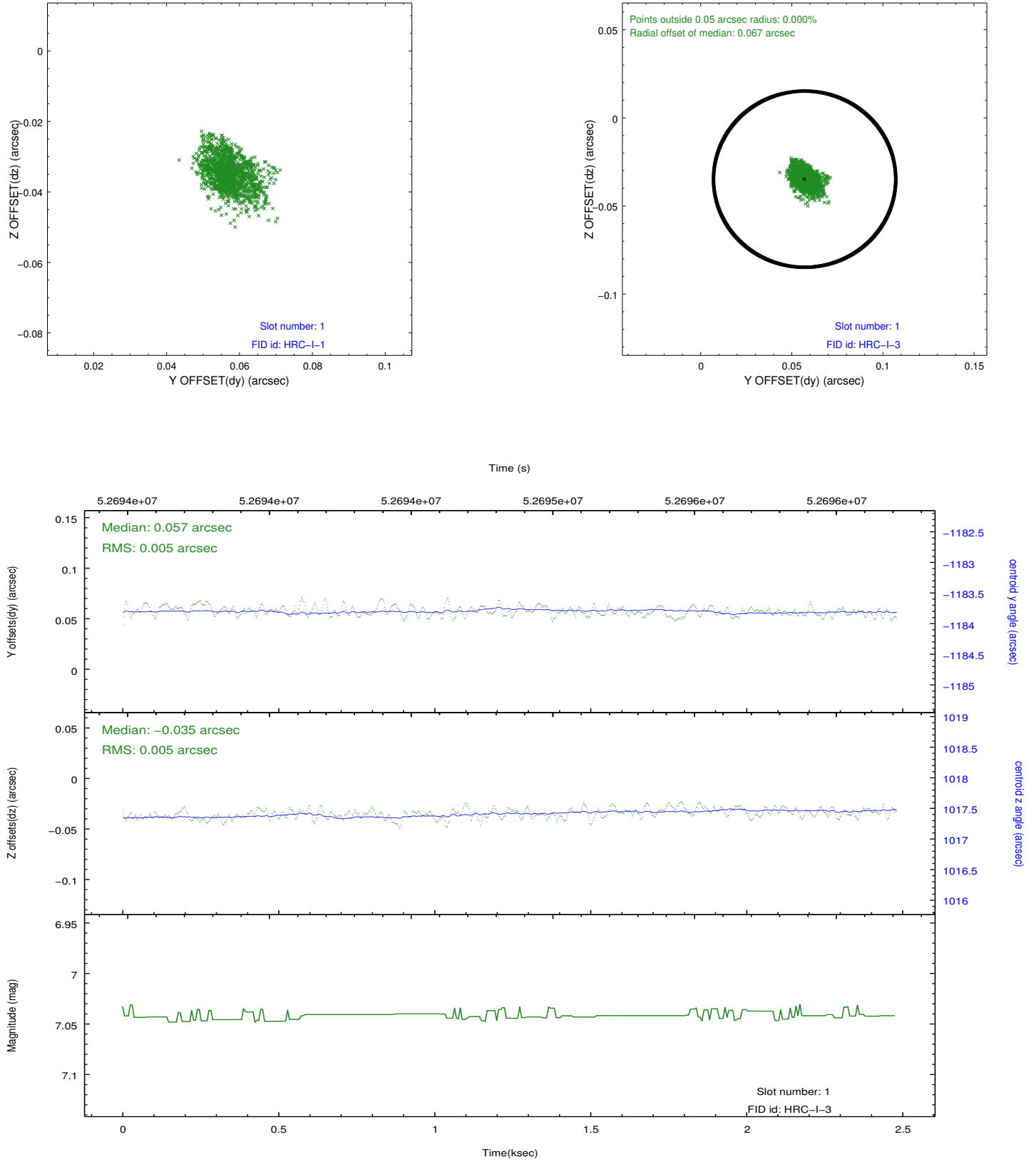


2.5 FID Slots

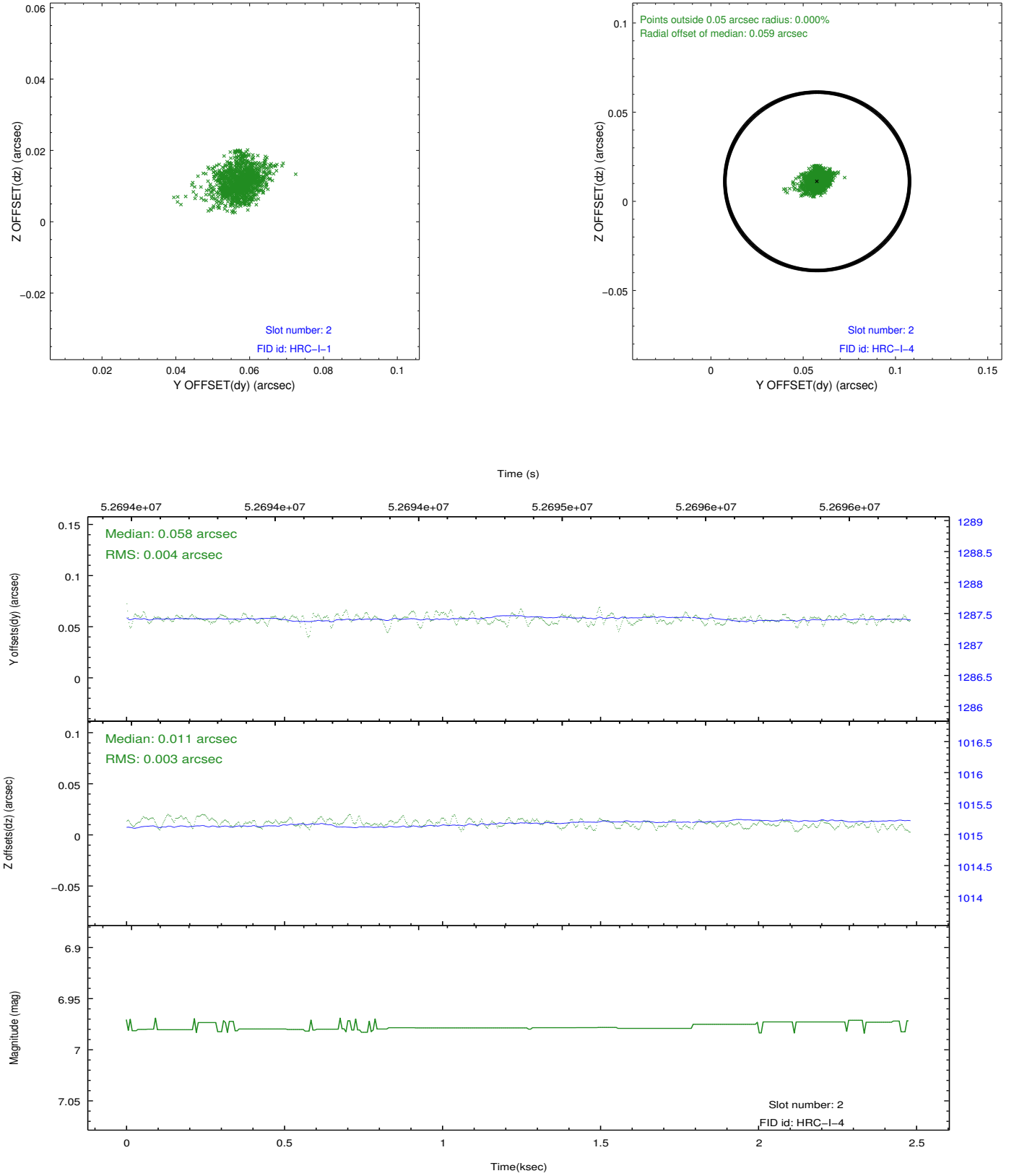
2.5.1 Slot 0



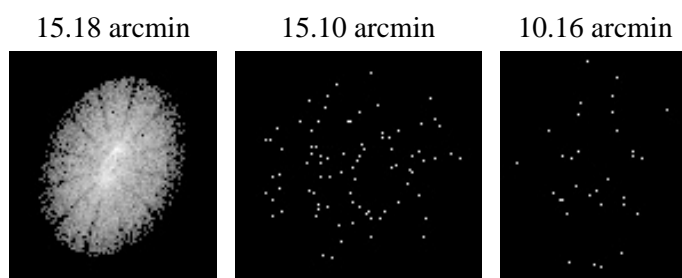
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

| | |
|----------------------------|-------------|
| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2010.02.02 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 1.792 |

A.2 Comments

HRC boresight and focus series. Target is very off-axis. ===Charge time for this ObsId remains at original value of 1.792 ks, although with the current processing the charge time would have been 1.795 ksec. ===The guide star in slot 7 was removed from the aspect solution due to

poor data quality. The aspect solution is not expected to be degraded by removing one guide star from the solution.