

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 19950 - L2 Version 1
Chandra X-Ray Center

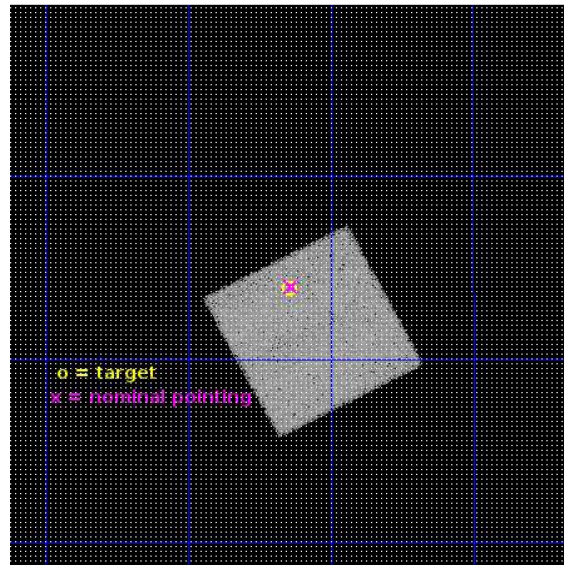
L2 Processing Date : Dec 3 2016

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1 Front

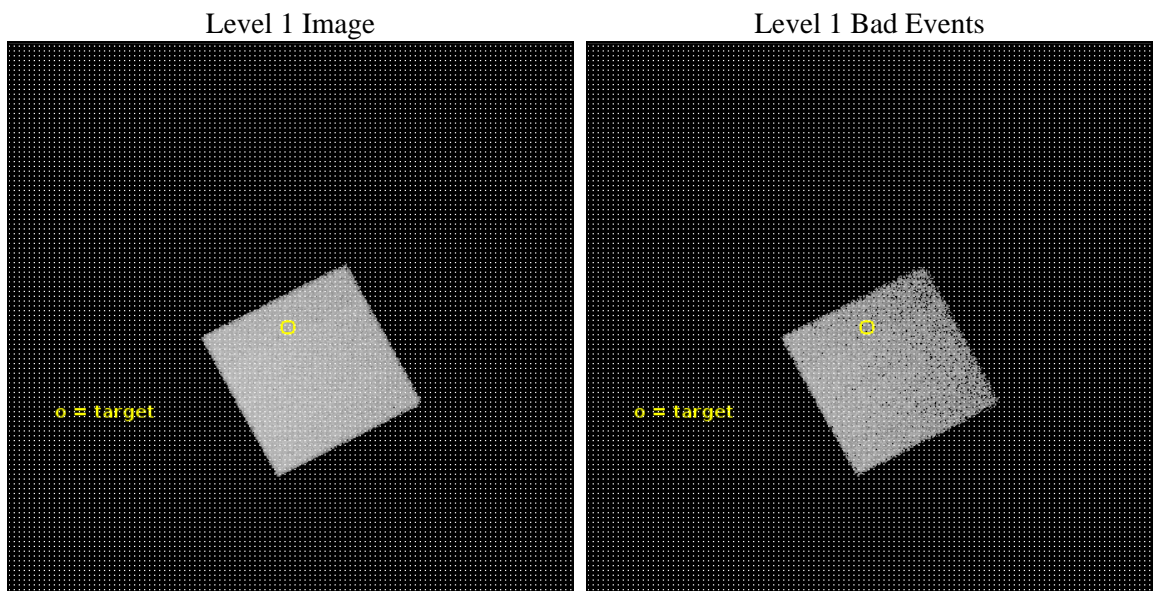
| | | |
|----------|--------------------------------------|---|
| seq_num | 300339 | Sequence number |
| obs_id | 19950 | Observation id |
| title | Locating the shocks in nova remnants | Proposal title |
| observer | Dr Thomas Nelson | Principal investigator |
| object | V959 Mon | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 99.91125 | Observer's specified target RA [deg] |
| dec_targ | 5.897778 | Observer's specified target Dec [deg] |
| ra_nom | 99.909361679938 | Nominal RA [deg] |
| dec_nom | 5.8994876698792 | Nominal Dec [deg] |
| roll_nom | 62.156816384317 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 21090.0 | Sum of GTIs [s] |
| livetime | 20805.38236919 | Livetime [s] |
| ontime7 | 21090.0 | Sum of GTIs [s] |
| l2events | 77757 | Number of level 2 events |



2 OBI

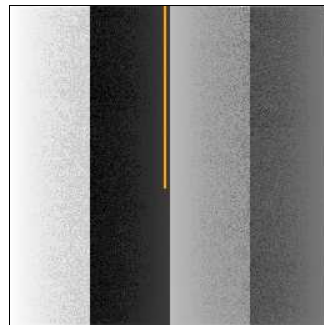
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|--------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 21000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10.5.2 | Processing system revision | ontime | 21090.0 | Sum of GTIs [s] |
| caldsver | 4.7.2 | | ontime7 | 21090.0 | Sum of GTIs [s] |
| date | 2016-12-04T00:58:55 | Date and time of file creation | l1events | 185870 | Number of level 1 events |
| revision | 1 | Processing version of data | | | |

2.1.4 Events

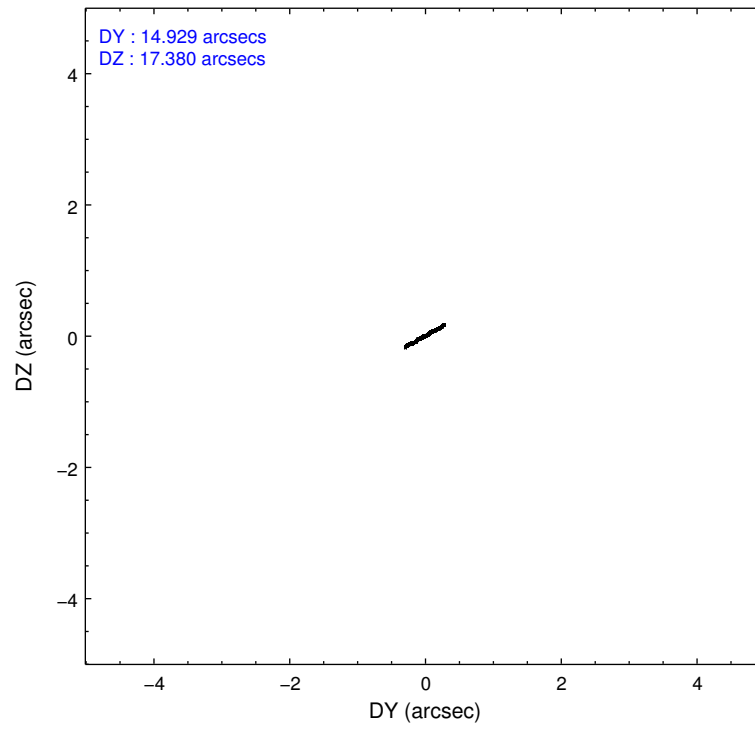
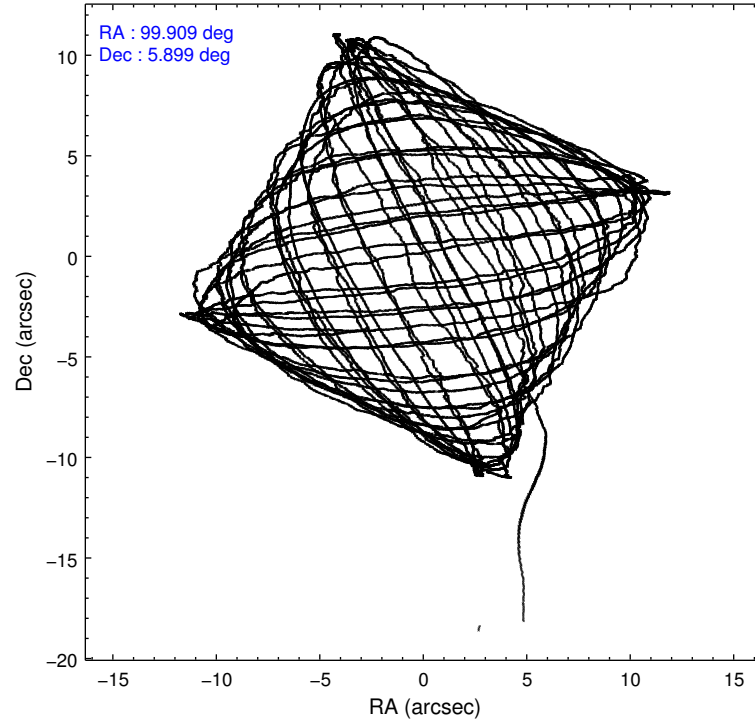
| | |
|-----------------|--------------|
| | ccd 7 |
| level 1 events | 185870 |
| rejected events | 106012 |
| rejected % | 57% |

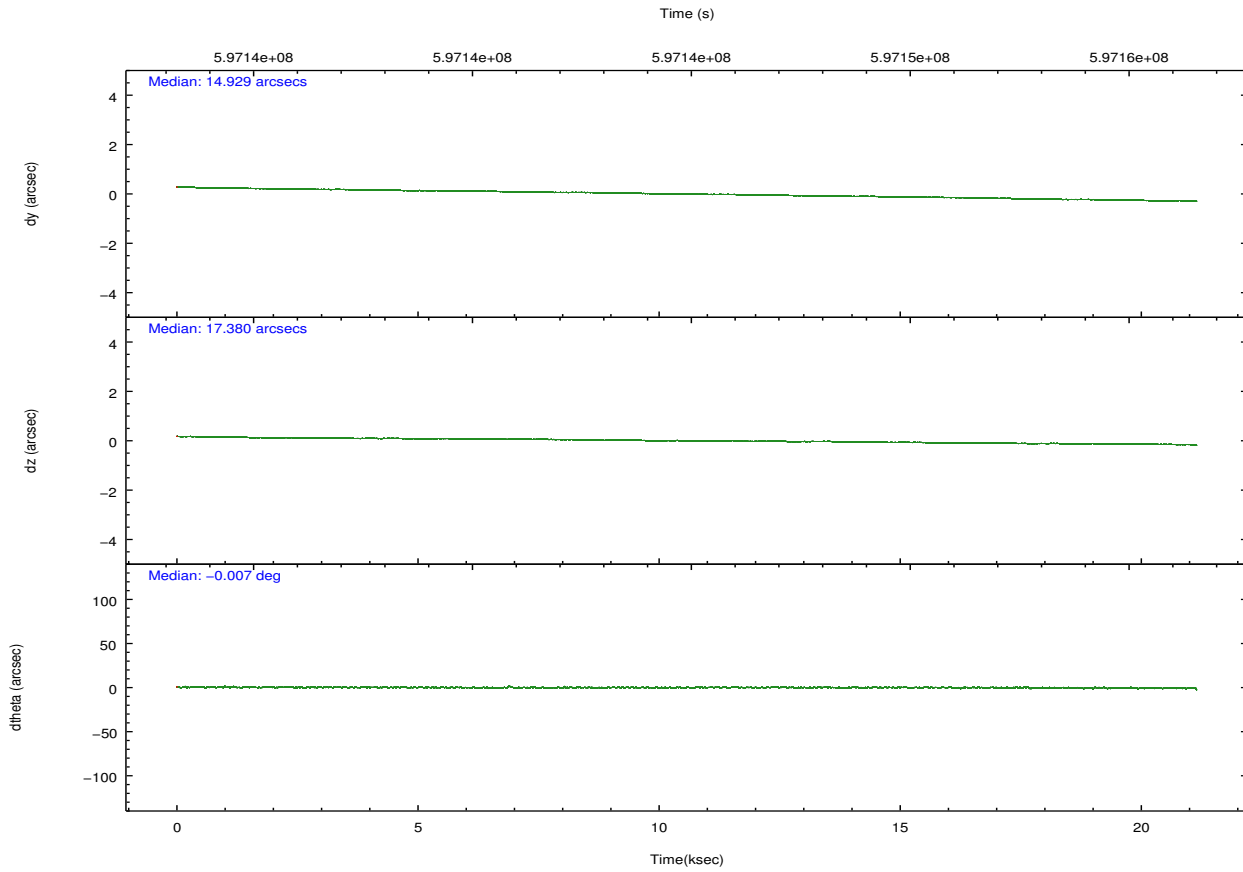
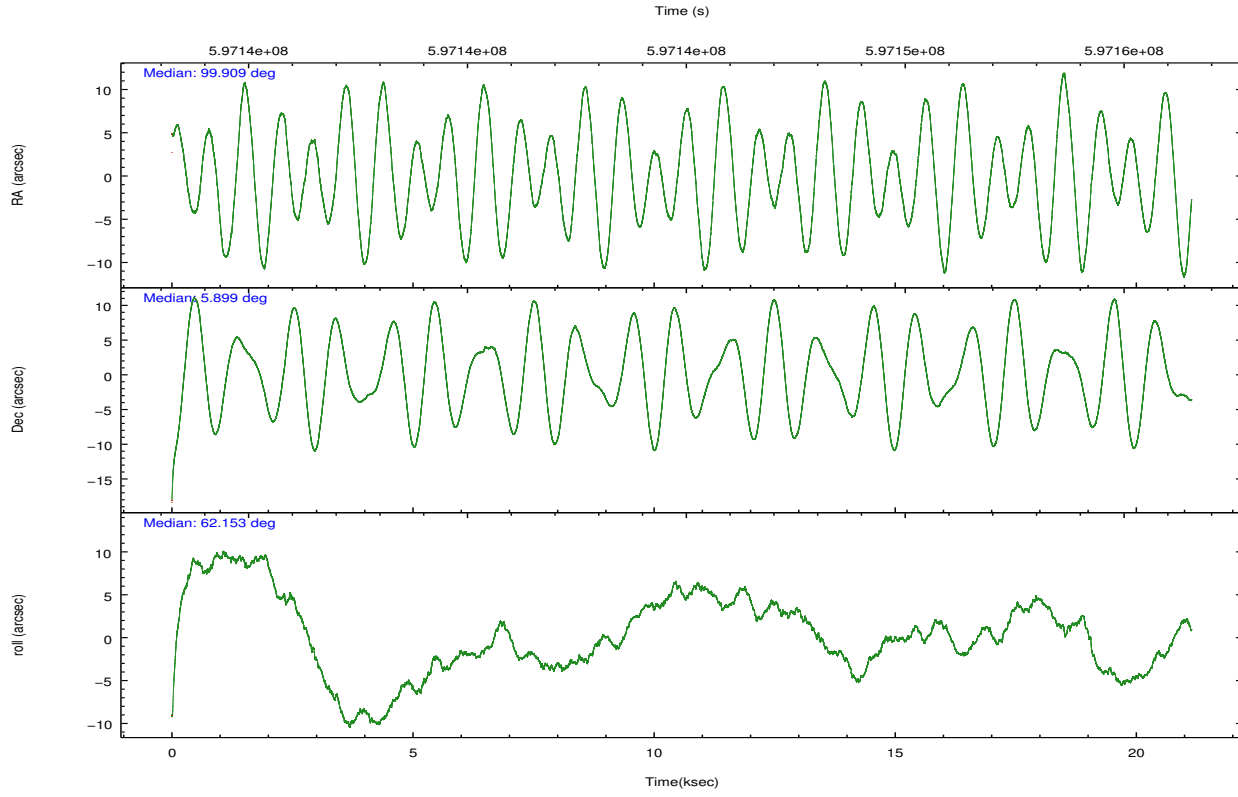
| | |
|----------------|--------------|
| | ccd 7 |
| grade 0 events | 6389 |
| | 3% |
| grade 1 events | 209 |
| | 0% |
| grade 2 events | 16850 |
| | 9% |
| grade 3 events | 6045 |
| | 3% |
| grade 4 events | 5694 |
| | 3% |
| grade 5 events | 17436 |
| | 9% |
| grade 6 events | 44905 |
| | 24% |
| grade 7 events | 88342 |
| | 47% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-7 | ACIS-7 | 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 | 99.910772 | 99.9093616799377 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 5.872092 | 5.899487669879221 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 62.000054 | 62.15681638431688 | [s] Primary exposure time | 0.000000 | 3 |
| [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) | 597134471.184000 | 597133042.21984 | | | |
| Observation start date | 2016-12-03T06:40:03 | 2016-12-03T06:17:22 | | | |
| [s] Observation end time (MET) | 597155471.184000 | 597156514.20869 | | | |
| Observation end date | 2016-12-03T12:30:03 | 2016-12-03T12:48:34 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



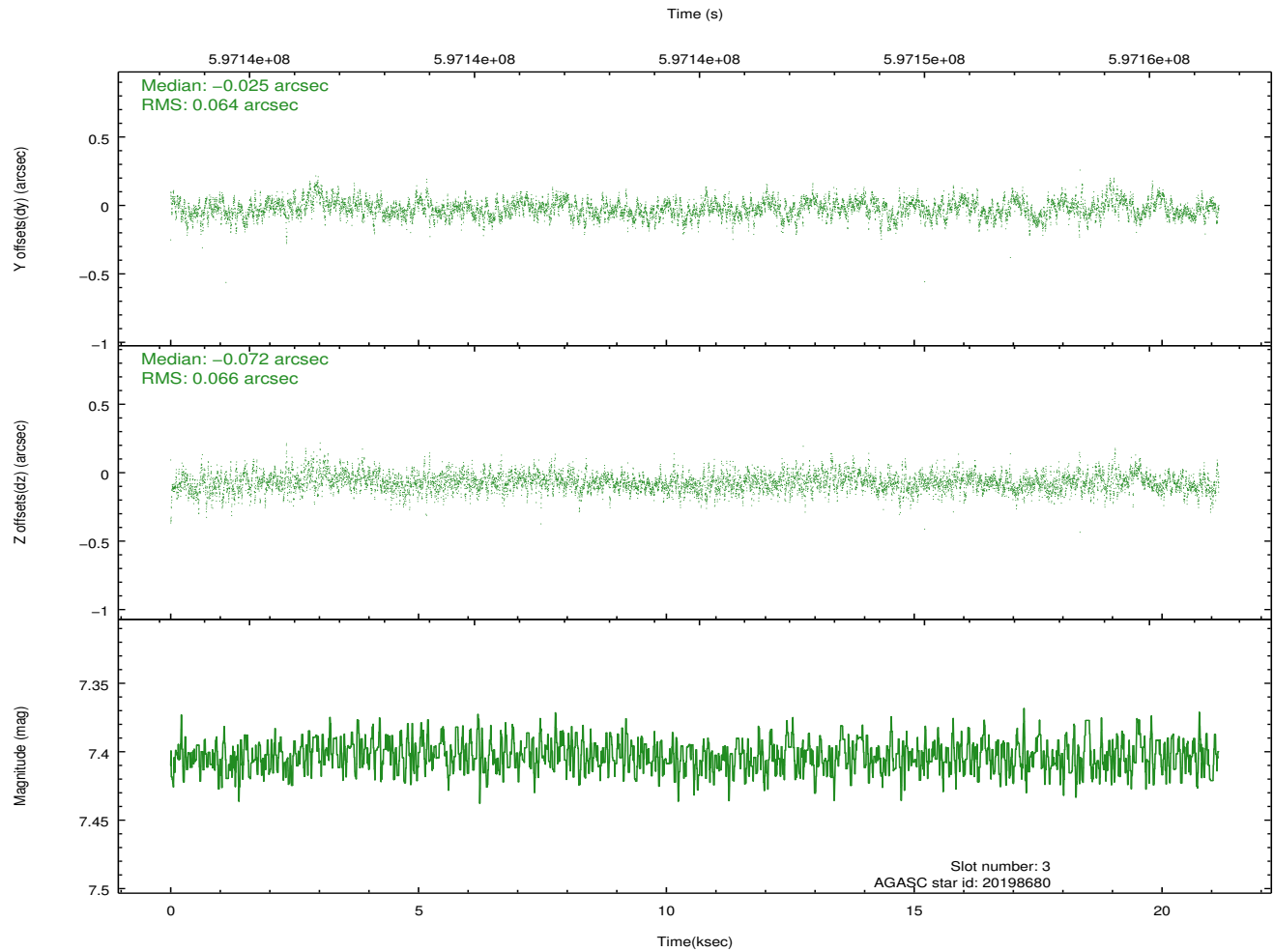
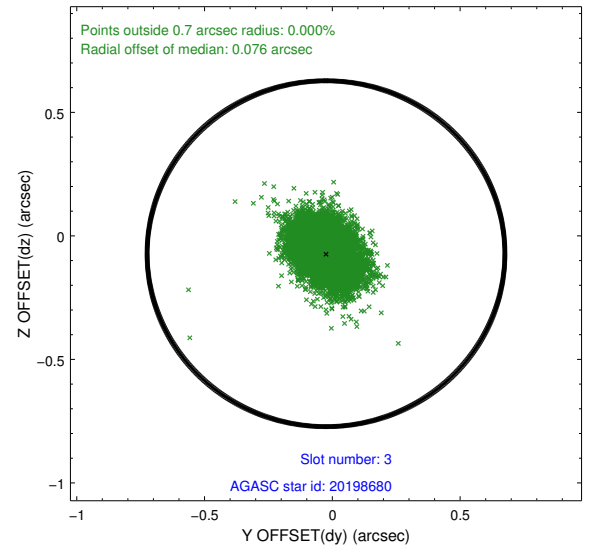
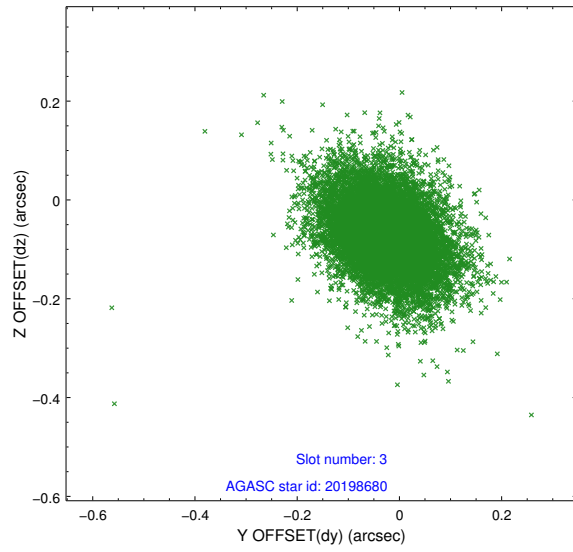


Slot Statistics

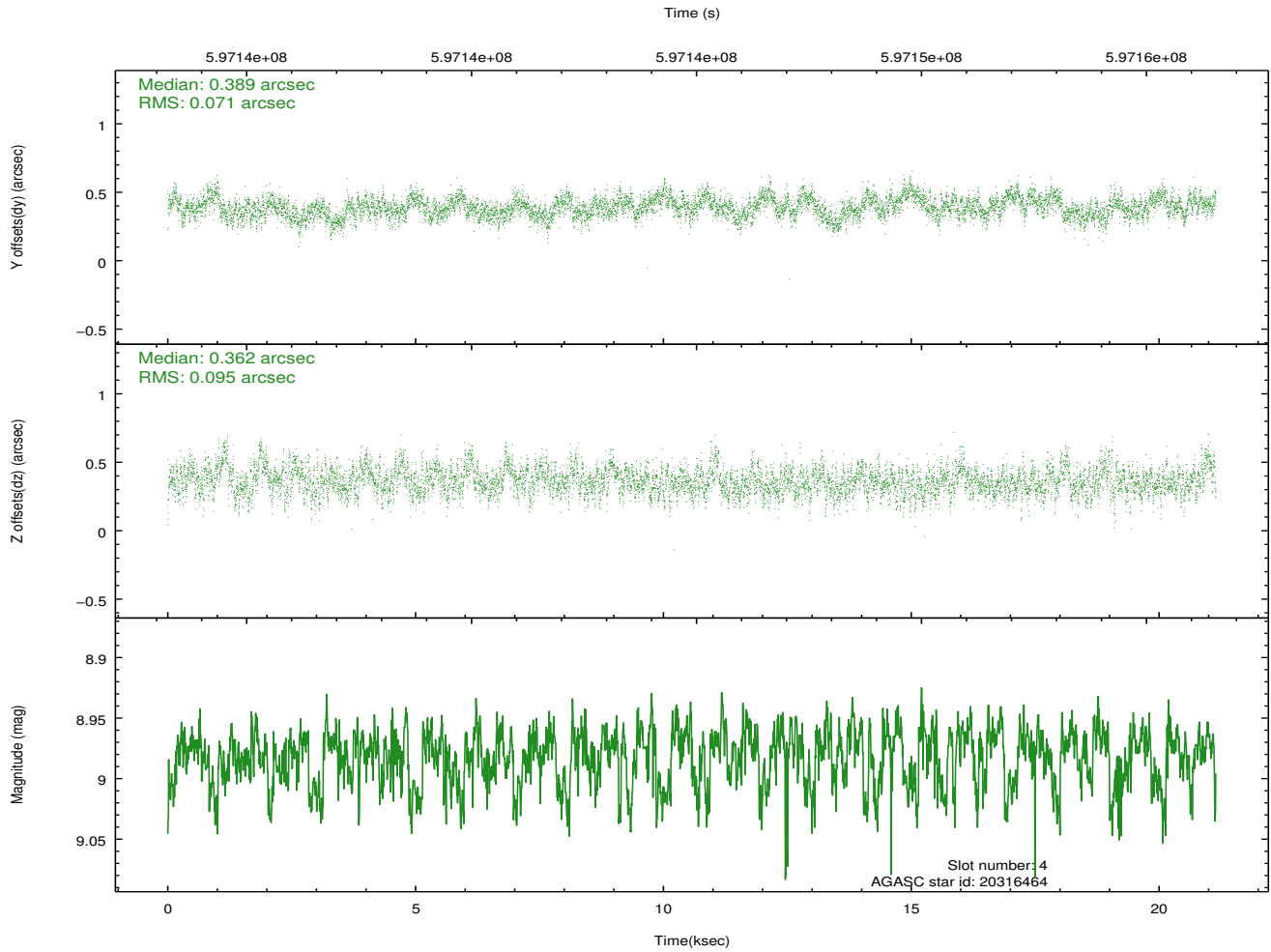
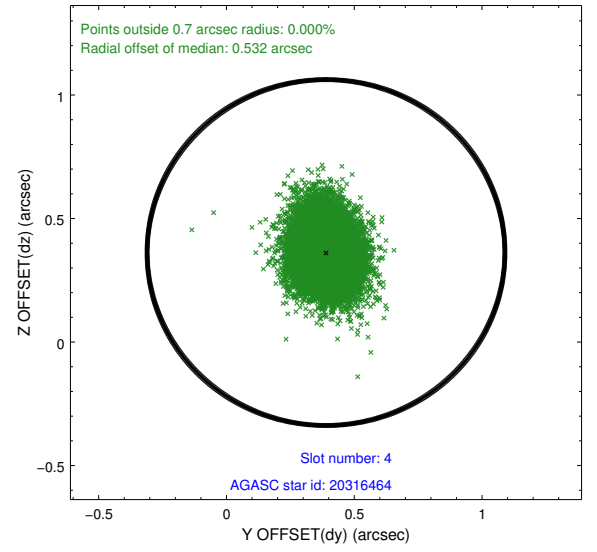
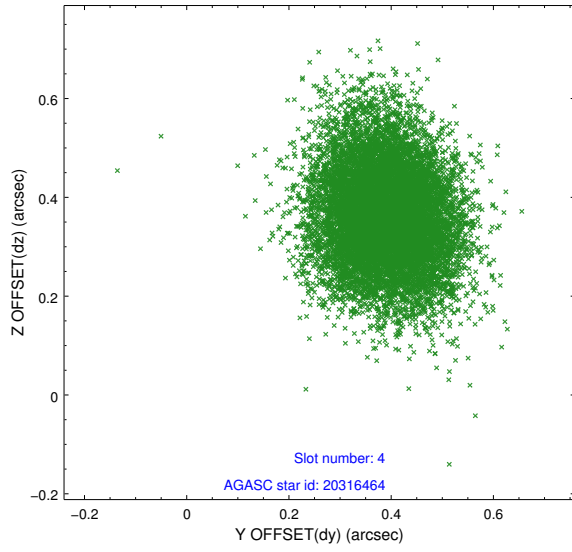
| slot | status | used | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------|----------|------|-------|--------|--------|-------|-------|------------|----------|----------|----------|
| 0 | FID | | ACIS-S-1 | 7.22 | 5159 | 0.148 | -0.071 | 0.007 | 0.013 | 0.000000 | 0.000000 | 928.33 | -1734.45 |
| 1 | FID | | ACIS-S-5 | 7.24 | 5159 | -0.299 | 0.080 | 0.007 | 0.012 | 0.000000 | 0.000000 | -1821.05 | 163.02 |
| 2 | FID | | ACIS-S-6 | 7.37 | 5158 | 0.129 | 0.003 | 0.007 | 0.012 | 0.000000 | 0.000000 | 393.64 | 807.14 |
| 3 | GUIDE | used | 20198680 | 7.40 | 10316 | -0.025 | -0.072 | 0.095 | 0.163 | 99.264537 | 5.519391 | -2207.00 | 1449.51 |
| 4 | GUIDE | used | 20316464 | 8.98 | 10302 | 0.389 | 0.362 | 0.125 | 0.208 | 100.282040 | 5.470405 | -651.26 | -1852.83 |
| 5 | GUIDE | used | 20341424 | 8.41 | 10313 | 0.255 | 0.418 | 0.102 | 0.174 | 99.923691 | 5.185077 | -2161.49 | -1201.80 |
| 6 | GUIDE | used | 20860472 | 7.02 | 10314 | -0.168 | -0.266 | 0.106 | 0.190 | 100.133111 | 6.371245 | 1960.10 | 141.21 |
| 7 | GUIDE | used | 20864528 | 7.41 | 10314 | -0.461 | -0.442 | 0.107 | 0.182 | 99.593328 | 6.317246 | 881.92 | 1755.21 |

2.4 Star Slots

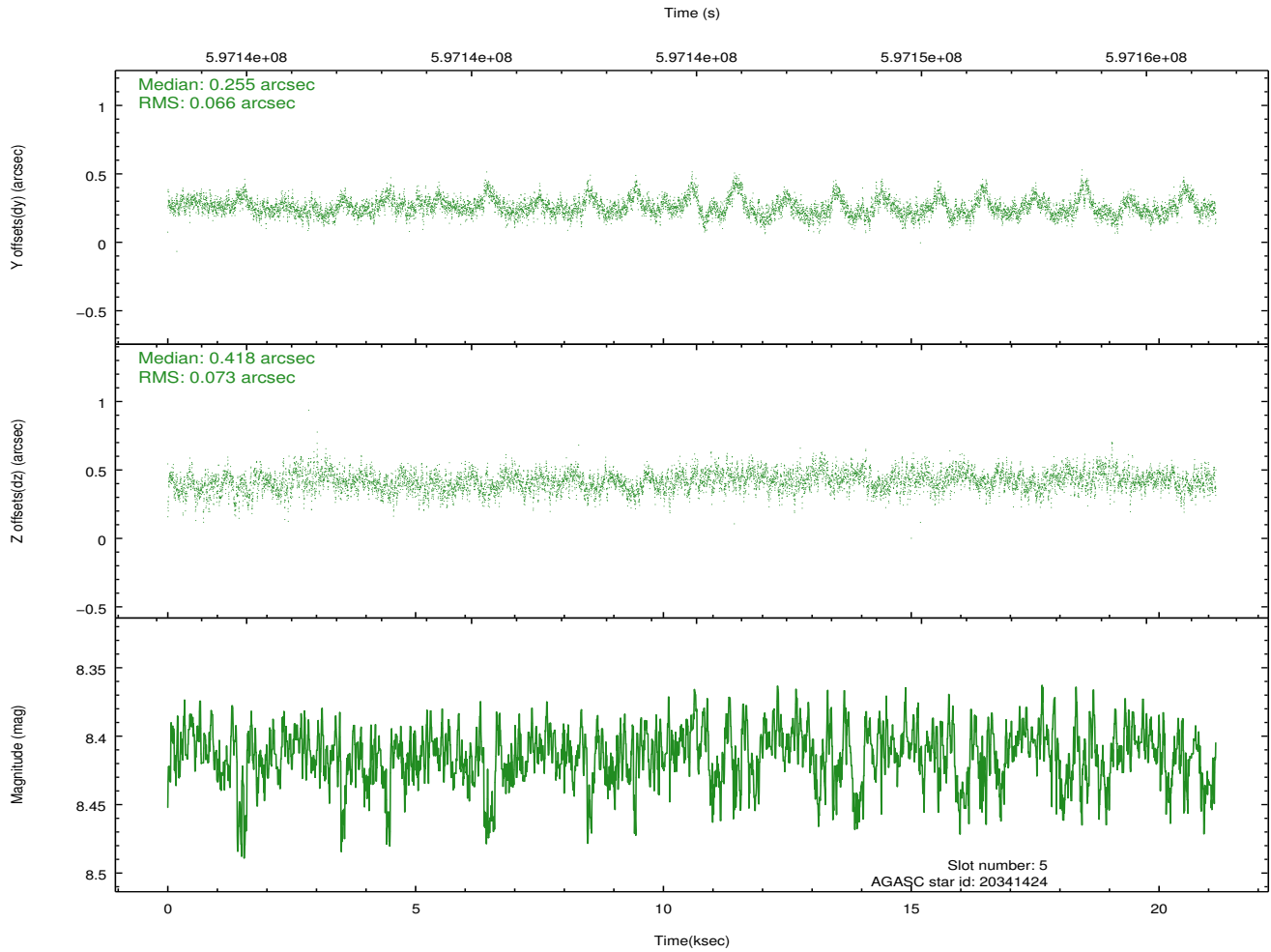
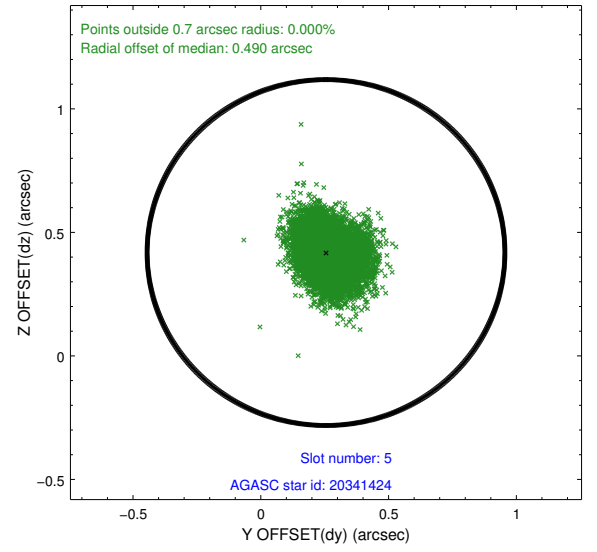
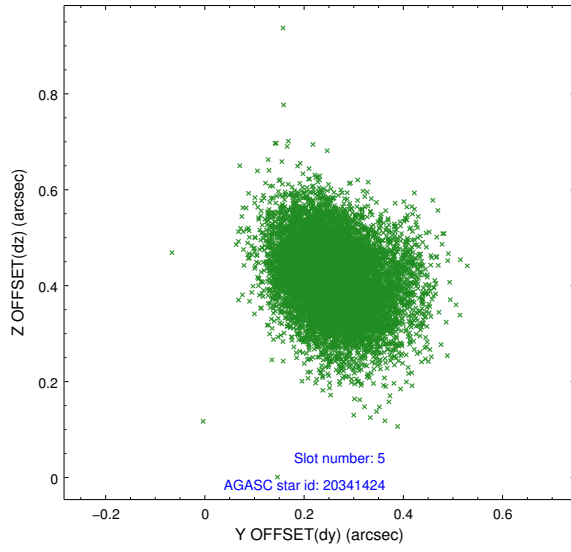
2.4.1 Slot 3



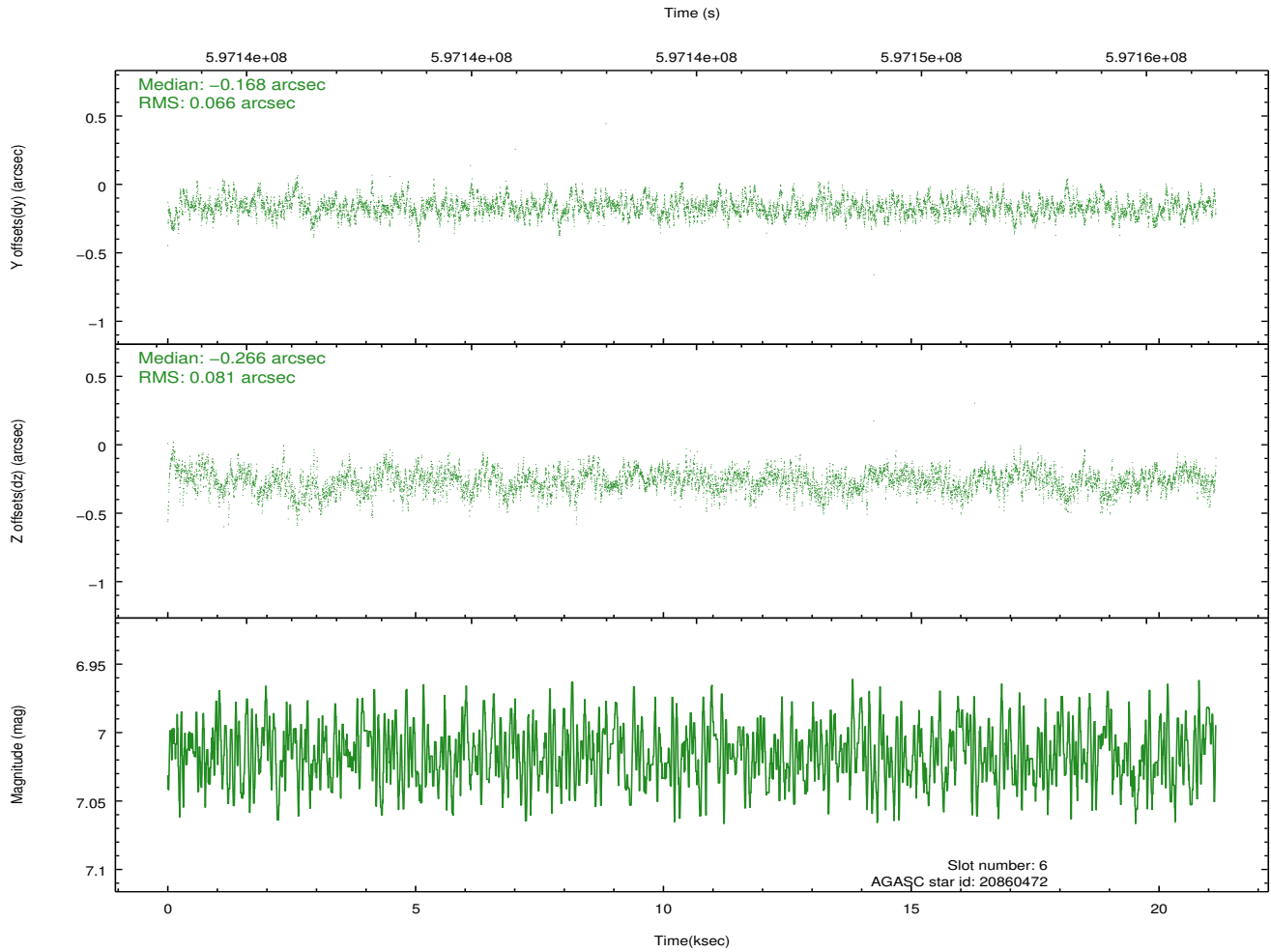
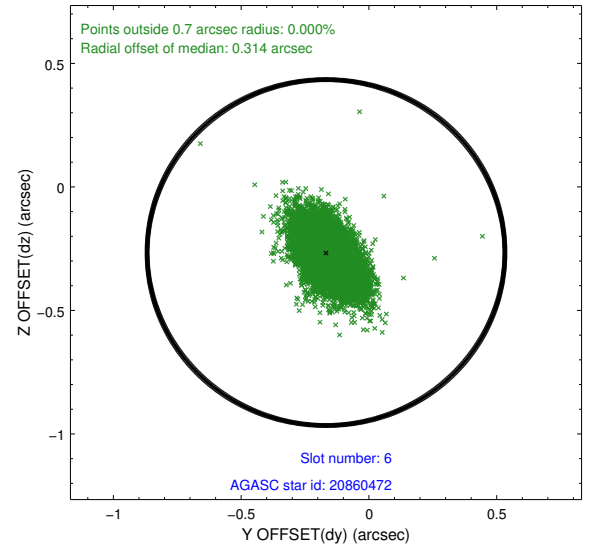
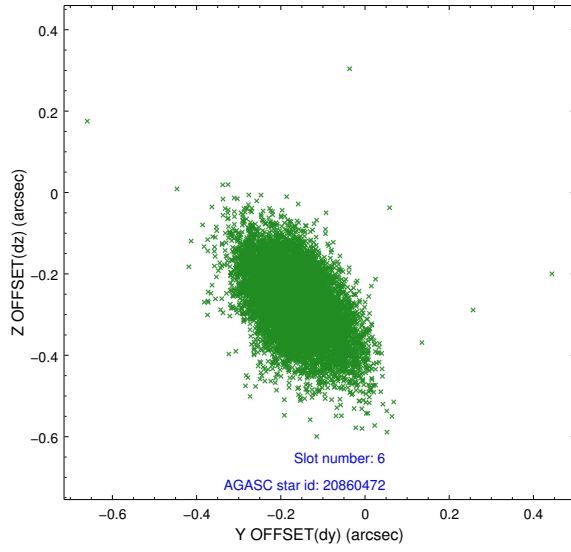
2.4.2 Slot 4



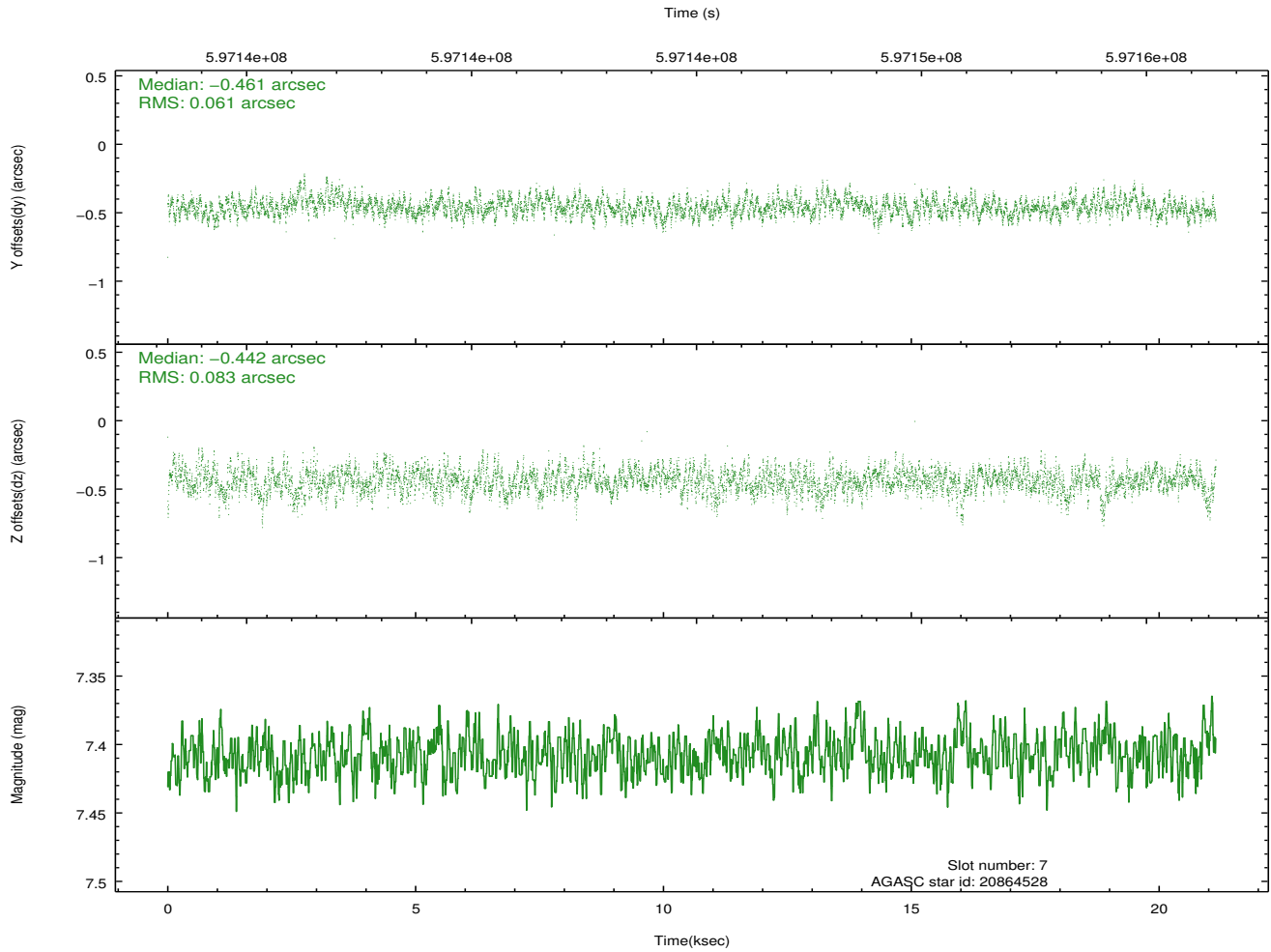
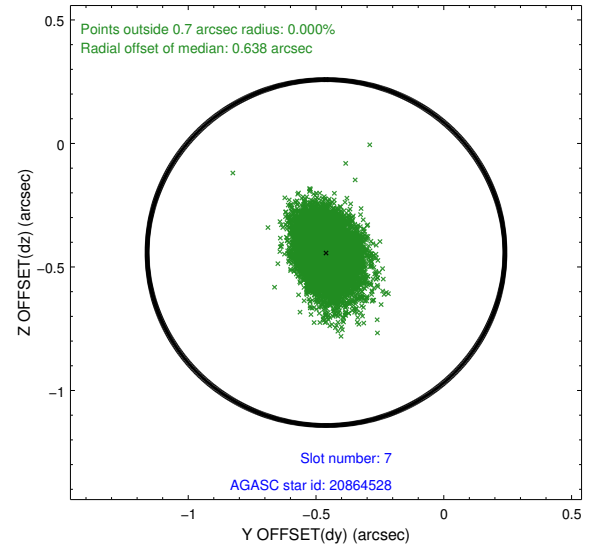
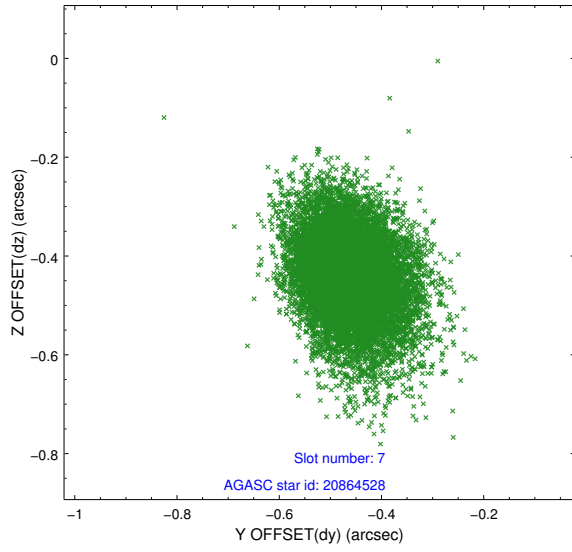
2.4.3 Slot 5



2.4.4 Slot 6

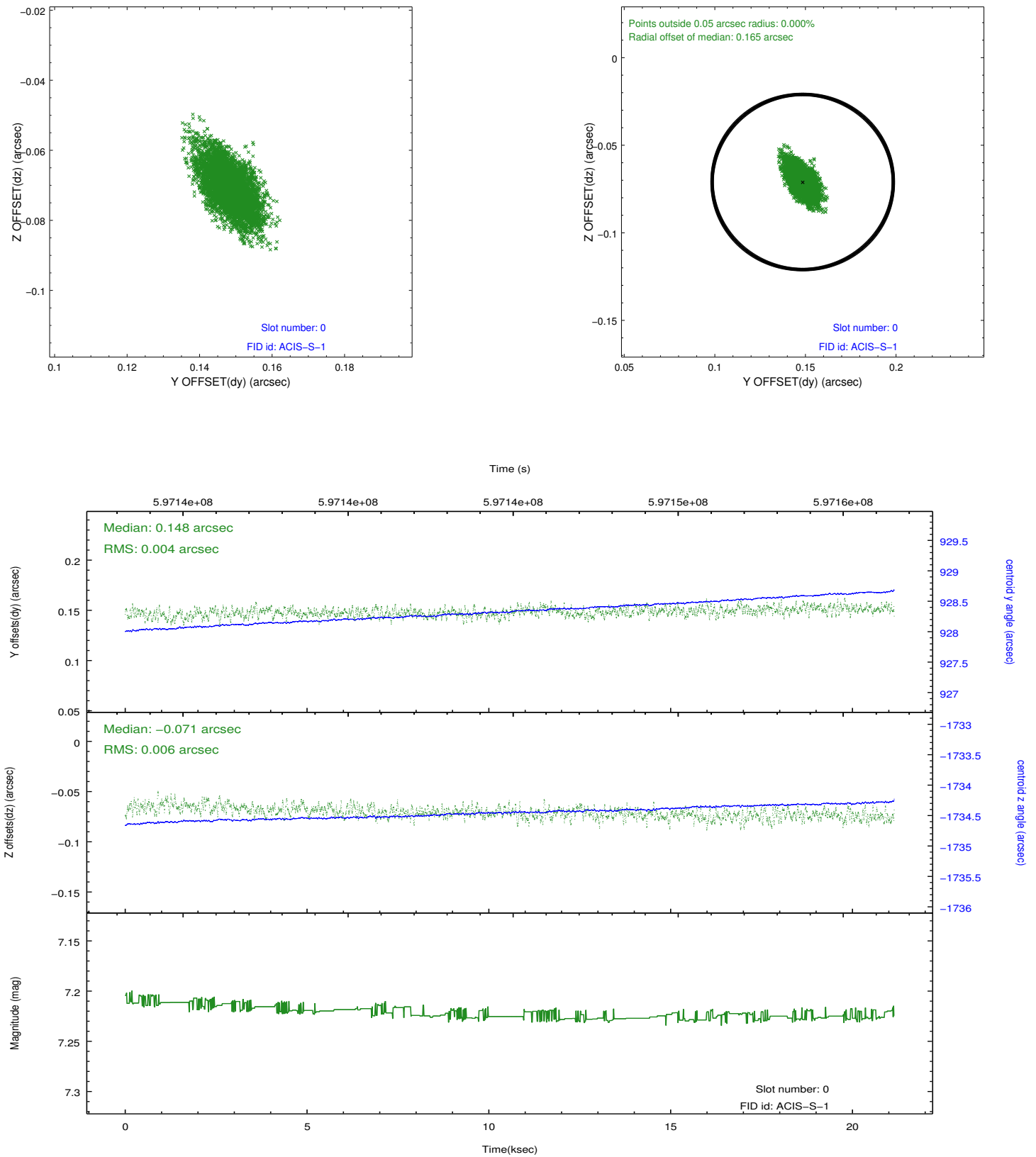


2.4.5 Slot 7

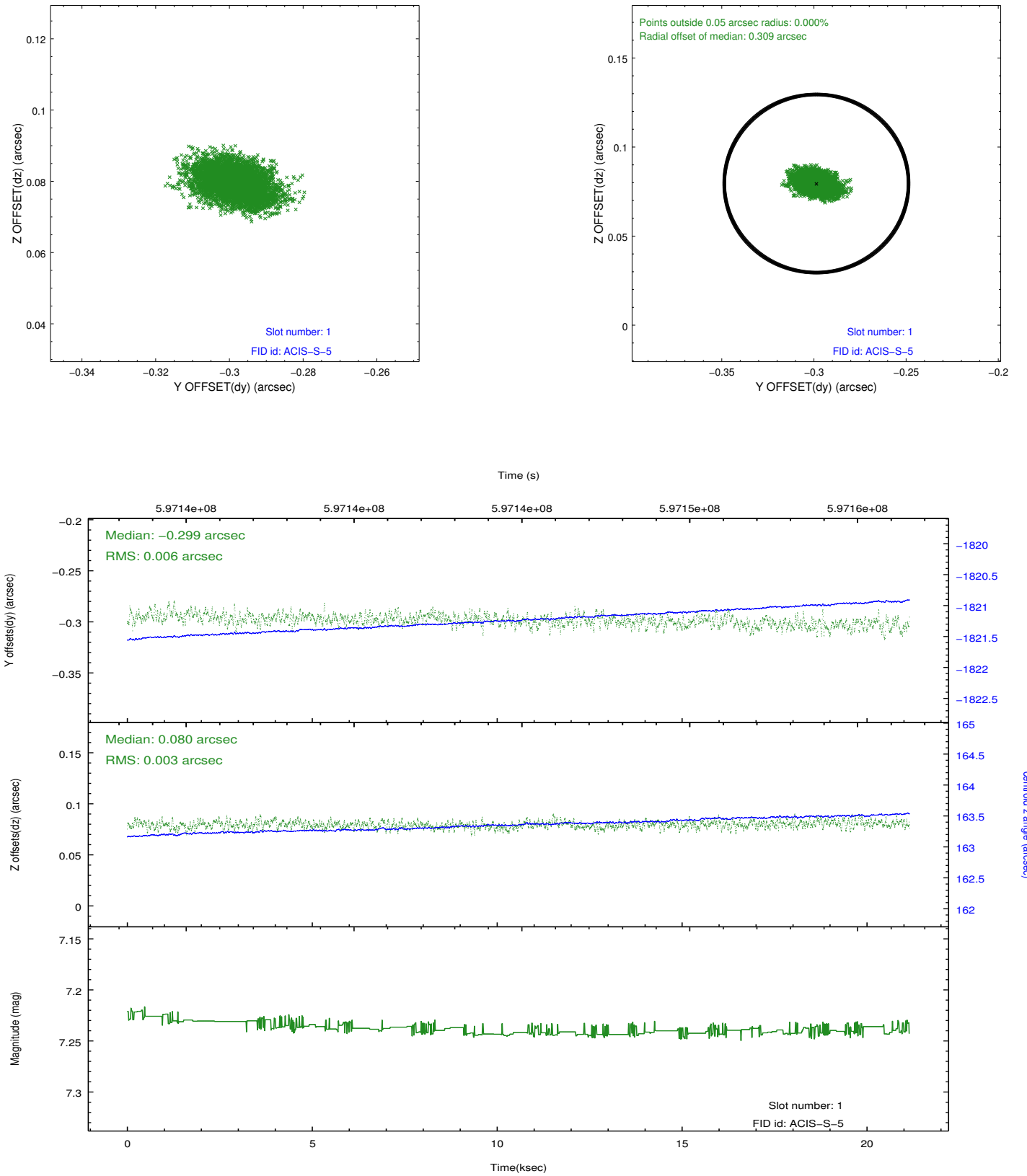


2.5 FID Slots

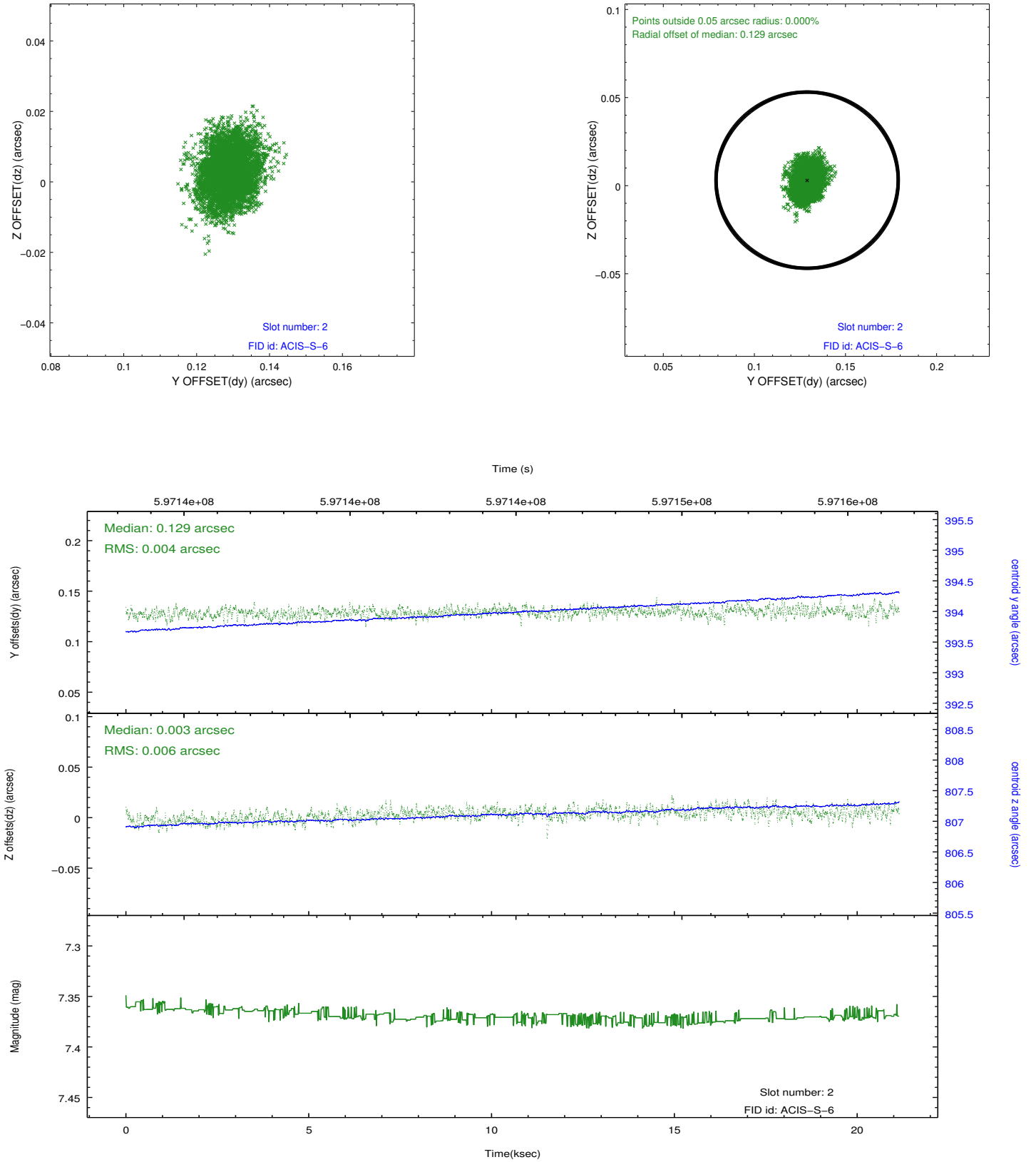
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|-------------|
| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2016.12.05 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 21.09 |

A.2 Comments