

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 279 - L2 Version 7
Chandra X-Ray Center

L2 Processing Date : May 7 2013

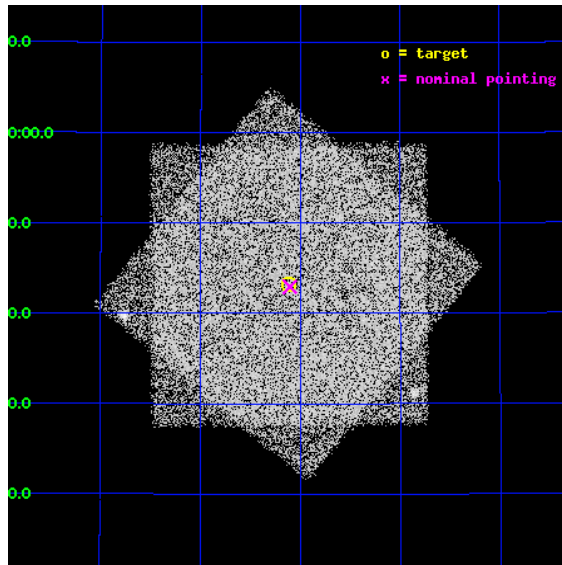
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1 Front

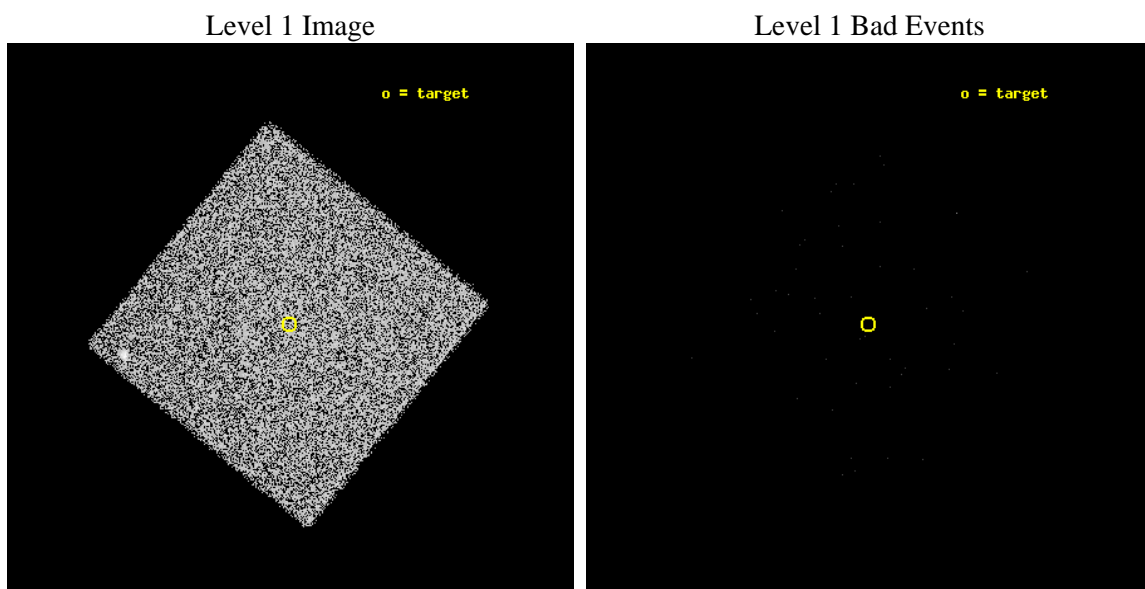
| | | |
|----------|-----------------|---------------------------------------|
| seq_num | 600039 | Sequence number |
| obs_id | 279 | Observation id |
| title | MONITORING M31 | Proposal title |
| observer | Dr Steve Murray | Principal investigator |
| object | M31 - North 1 | Source name |
| ra_targ | 11.029167 | Observer's specified target RA [deg] |
| dec_targ | 41.721111 | Observer's specified target Dec [deg] |
| ra_nom | 11.026003548475 | Nominal RA [deg] |
| dec_nom | 41.715858835754 | Nominal Dec [deg] |
| roll_nom | 264.22340658654 | Nominal Roll [deg] |
| revision | 7 | Processing version of data |
| ontime | 2699.3375980482 | [s] |
| livetime | 2683.8701977744 | Ontime multiplied by DTCOR |
| l2events | 73077 | 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 | 1000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.5.1.1 | Processing system revision | ontime | 1275.3562961072 | [s] |
| caldsver | 4.5.6 | | l1events | 58764 | Number of level 1 events |
| date | 2013-05-07T16:40:59 | Date and time of file creation | | | |
| revision | 7 | Processing version of data | | | |

2.1.3 Events

Level 1 Events

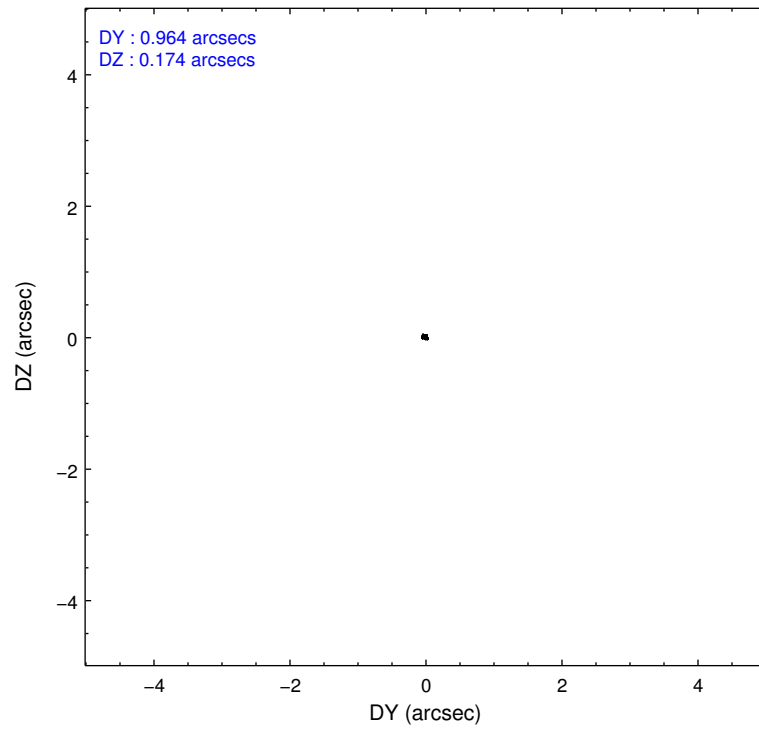
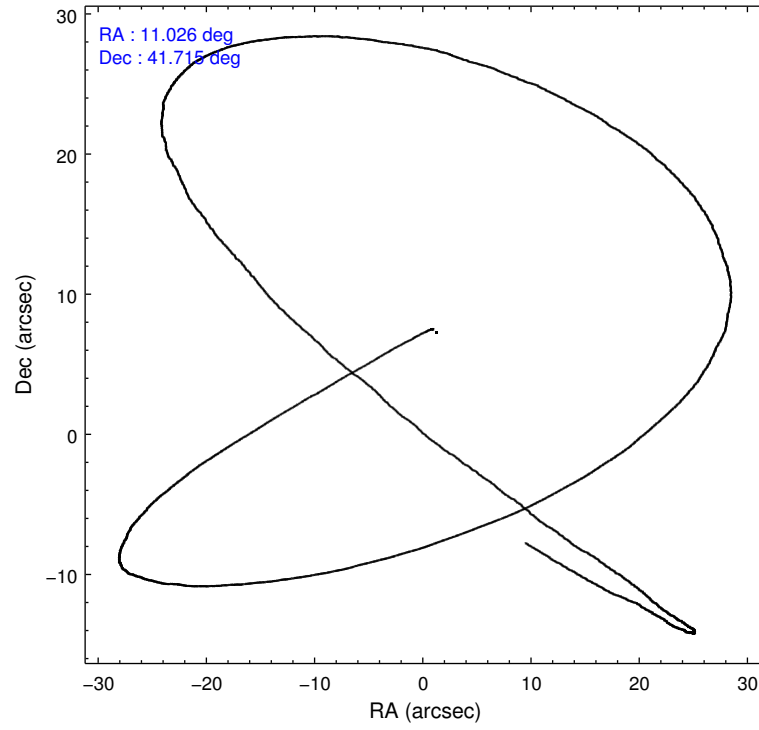
| | |
|-----------------|----------------------|
| | segment 0 |
| level 1 events | 58764 |
| rejected events | 2353 |
| rejected % | 4% |

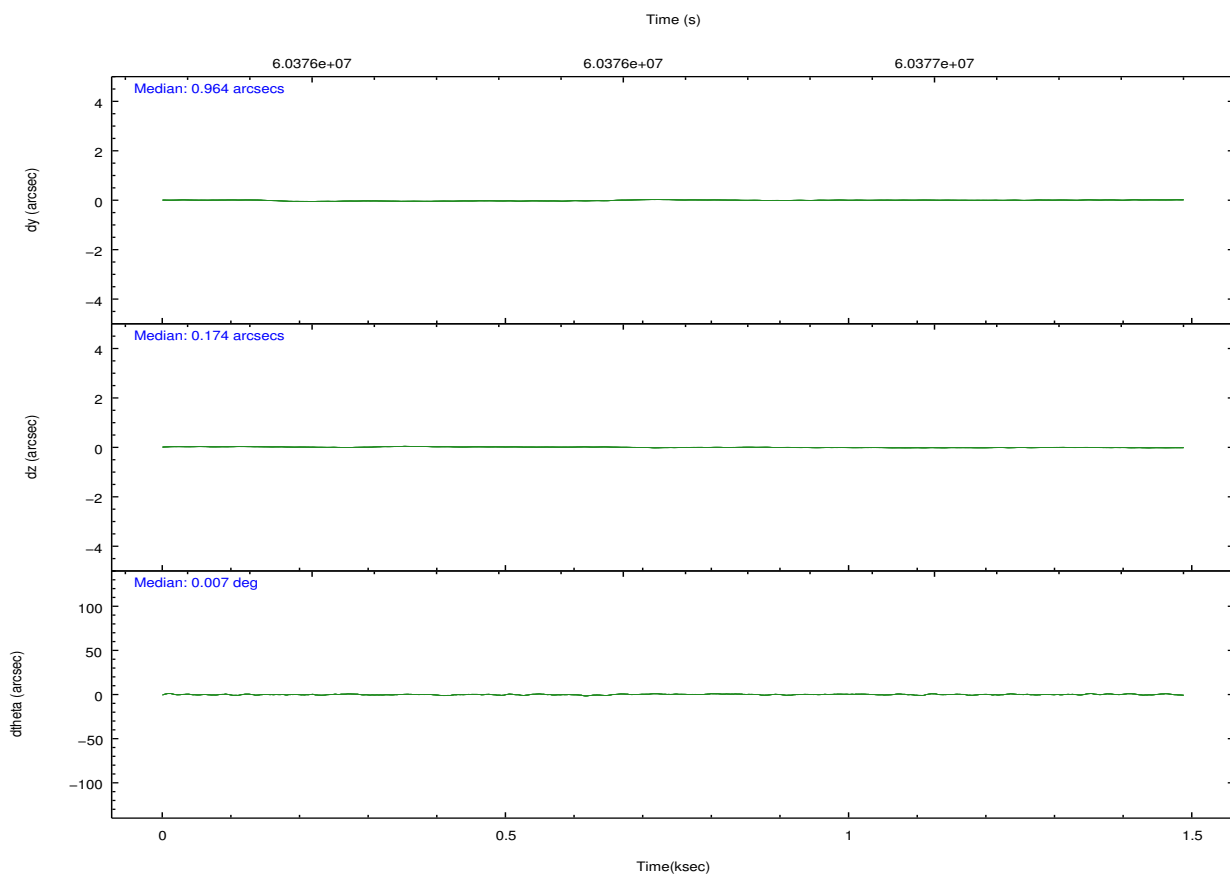
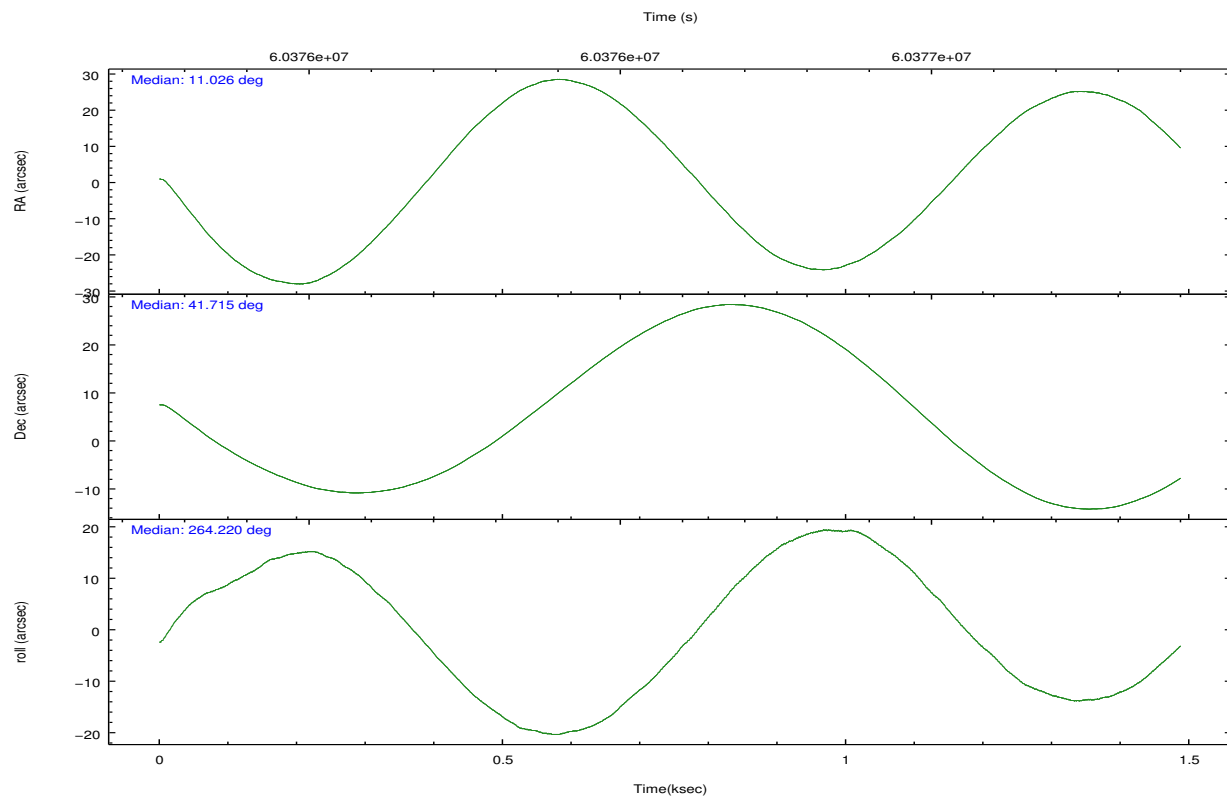
2.2 Compared Parameters

| Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|
| Instrument | HRC | HRC |
| Detector | HRC-I | HRC-I |
| Grating | NONE | NONE |
| Data mode | OBSERVING | OBSERVING |
| Observation mode | POINTING | POINTING |
| [deg] Pointing RA | 11.010843 | 11.02600354847498 |
| [deg] Pointing Dec | 41.741892 | 41.71585883575374 |
| [deg] Pointing Roll | 264.328982 | 264.2234065865383 |
| [mm] SIM focus pos | -1.040293 | -1.038866356238299 |
| [mm] SIM defocus | 0 | 0.001426264420575141 |
| [mm] SIM translation stage pos | 126.985494 | 126.9829799899862 |
| [mm] SIM translation stage offset | 0 | 0.002508901615314585 |
| [s] Observation start time (MET) | 60376325.184000 | 60375658.950258 |
| Observation start date | 1999-11-30T19:11:01 | 1999-11-30T19:00:58 |
| [s] Observation end time (MET) | 60377325.184000 | 60377459.362823 |
| Observation end date | 1999-11-30T19:27:41 | 1999-11-30T19:30:59 |

| Parameter | Planned | Actual |
|------------------------------|-----------|---------|
| Obspar format version number | 7 | 7 |
| Obspar file type | PREDICTED | ACTUAL |
| Obspar update status | NONE | UPDATED |

2.3 Aspect



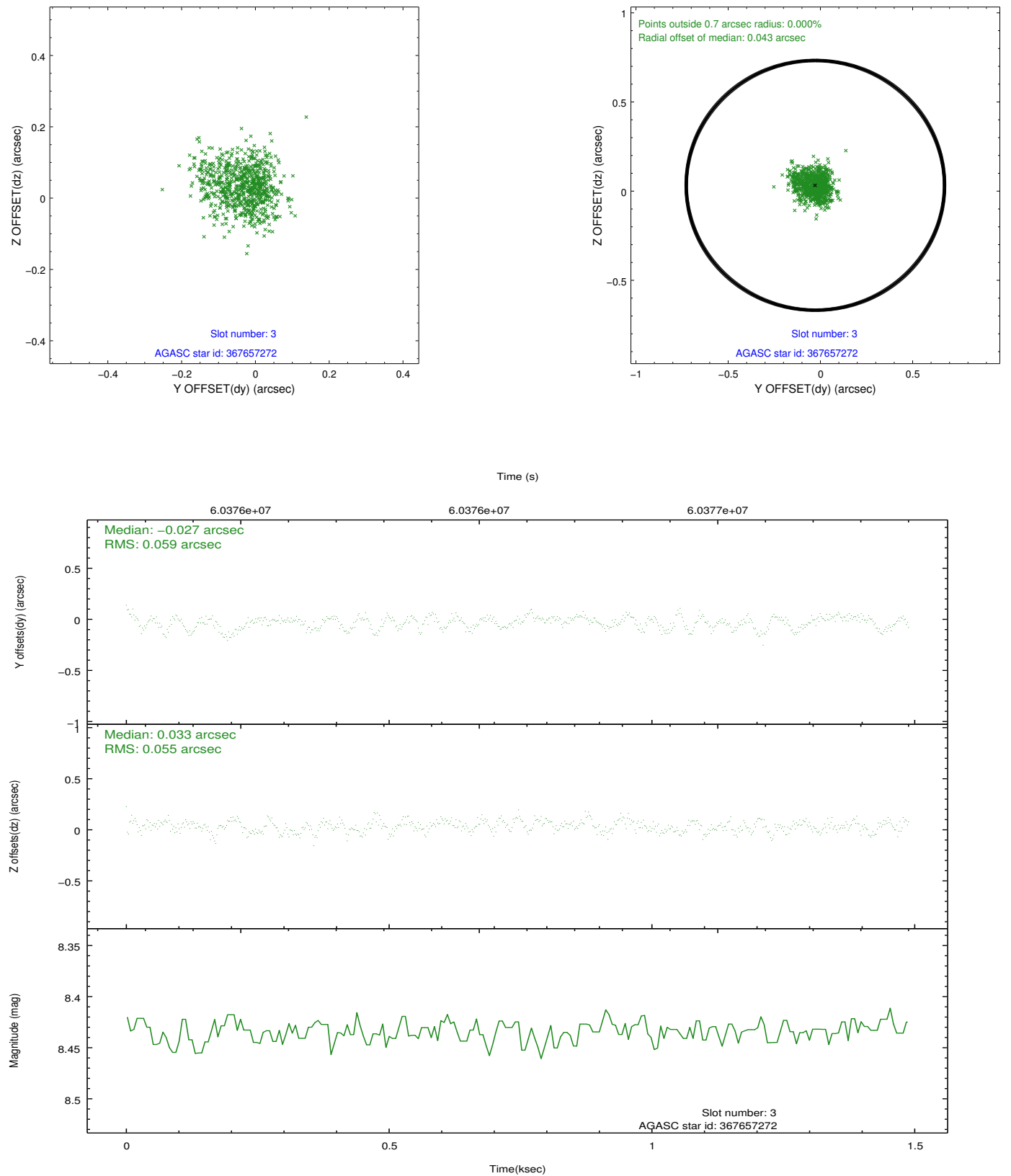


Slot Statistics

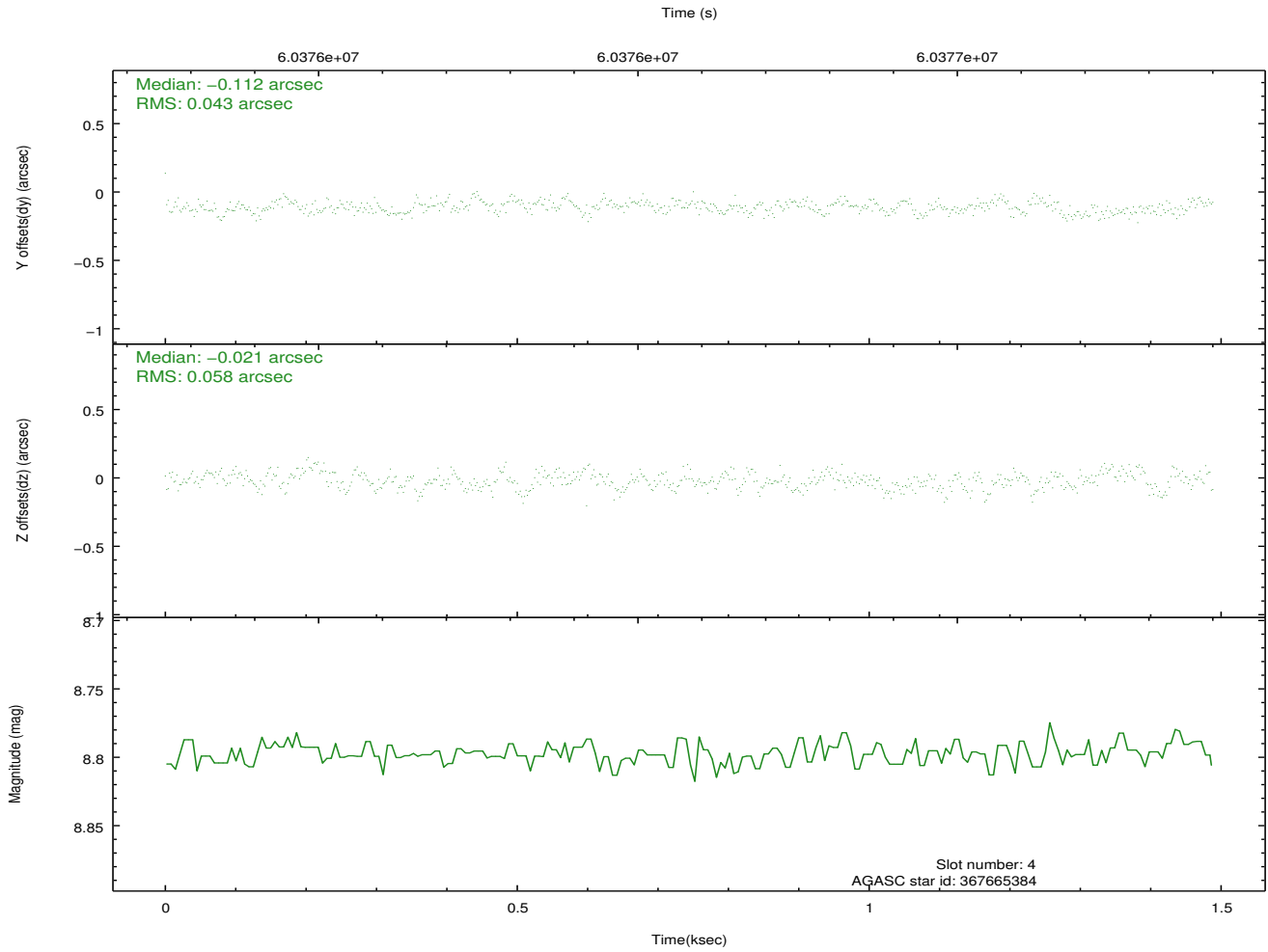
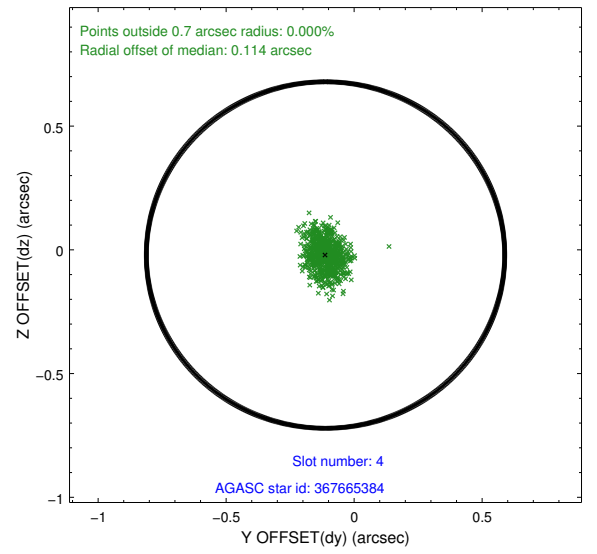
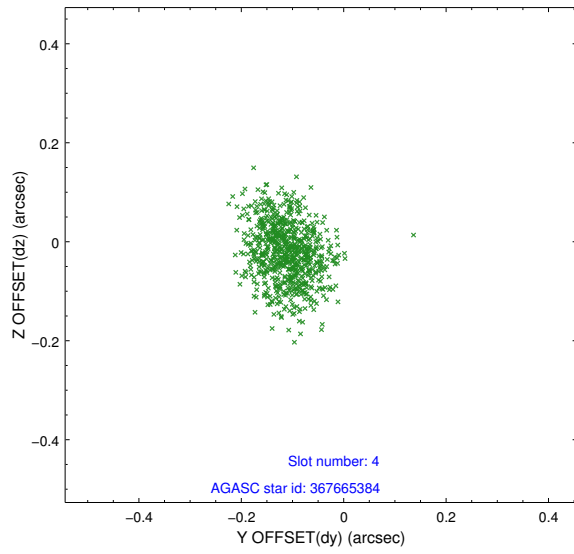
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|-----------|-----------|----------|----------|
| 0 | FID | HRC-I-2 | 6.98 | 727 | 0.006 | -0.029 | 0.005 | 0.010 | 0.000000 | 0.000000 | 856.29 | -1289.40 |
| 1 | FID | HRC-I-3 | 7.03 | 727 | 0.055 | -0.061 | 0.006 | 0.009 | 0.000000 | 0.000000 | -1183.66 | 1014.87 |
| 2 | FID | HRC-I-4 | 6.97 | 727 | 0.057 | 0.003 | 0.005 | 0.009 | 0.000000 | 0.000000 | 1284.82 | 1015.77 |
| 3 | GUIDE | 367657272 | 8.43 | 727 | -0.027 | 0.033 | 0.086 | 0.135 | 11.834471 | 41.298907 | 1352.49 | 2372.37 |
| 4 | GUIDE | 367665384 | 8.80 | 727 | -0.112 | -0.021 | 0.076 | 0.120 | 10.414363 | 42.275730 | -1762.77 | -1769.38 |
| 5 | GUIDE | 367657896 | 9.02 | 727 | 0.174 | -0.005 | 0.074 | 0.123 | 11.197765 | 41.313576 | 1477.97 | 651.96 |
| 6 | GUIDE | 367670520 | 9.25 | 727 | -0.073 | -0.018 | 0.090 | 0.147 | 11.265516 | 42.371946 | -2326.75 | 449.62 |
| 7 | GUIDE | 367658664 | 9.60 | 725 | 0.044 | 0.009 | 0.103 | 0.167 | 10.374070 | 41.369746 | 1490.16 | -1580.42 |

2.4 Star Slots

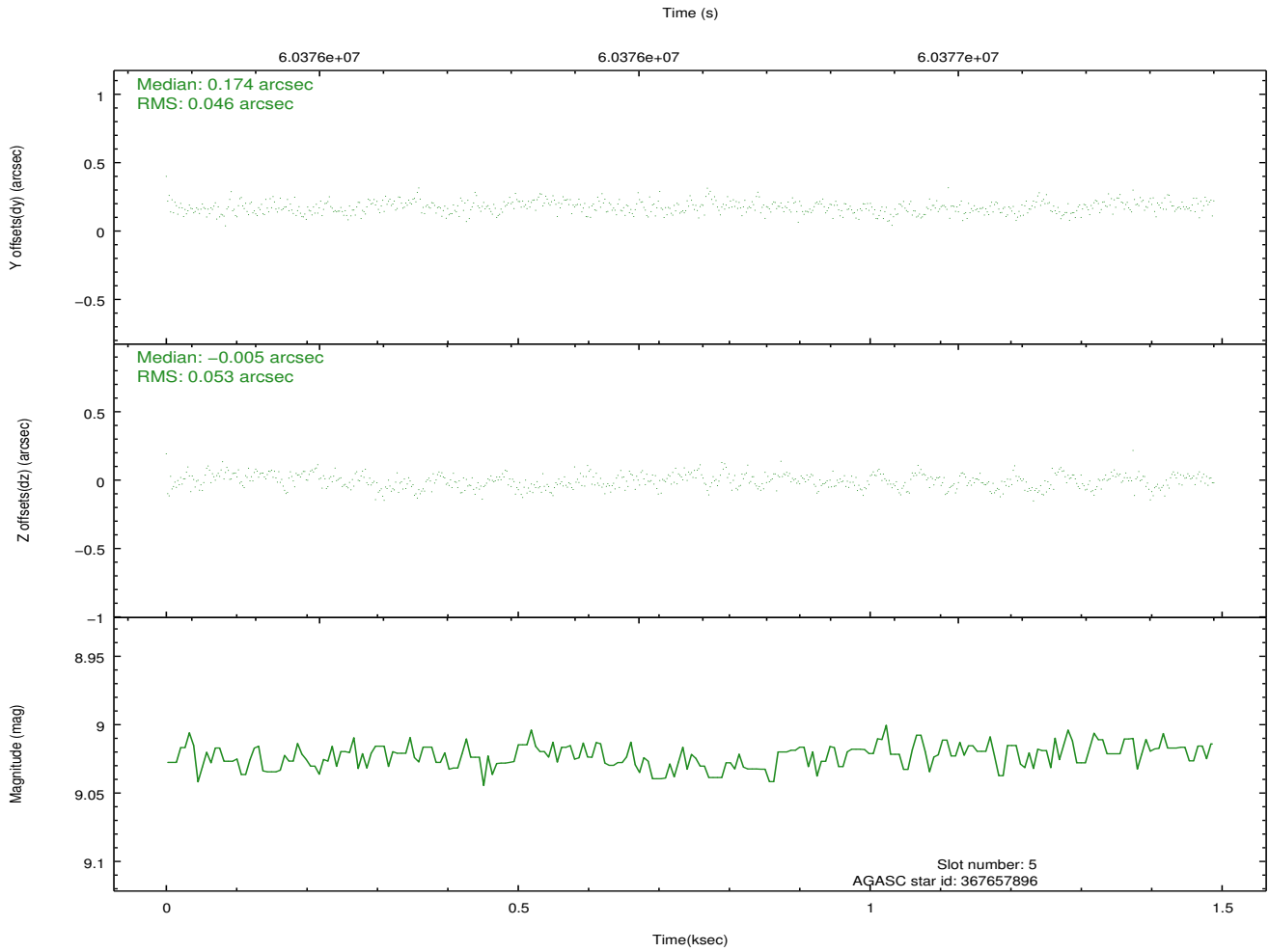
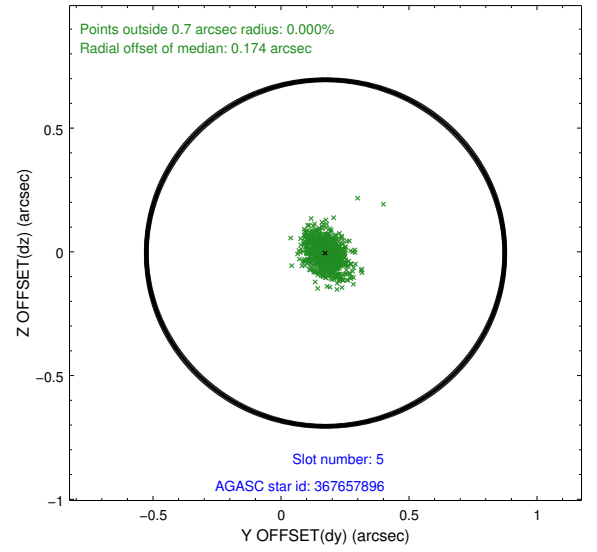
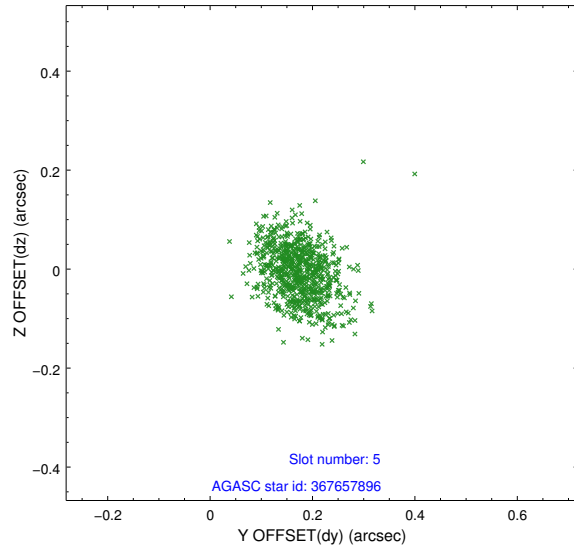
2.4.1 Slot 3



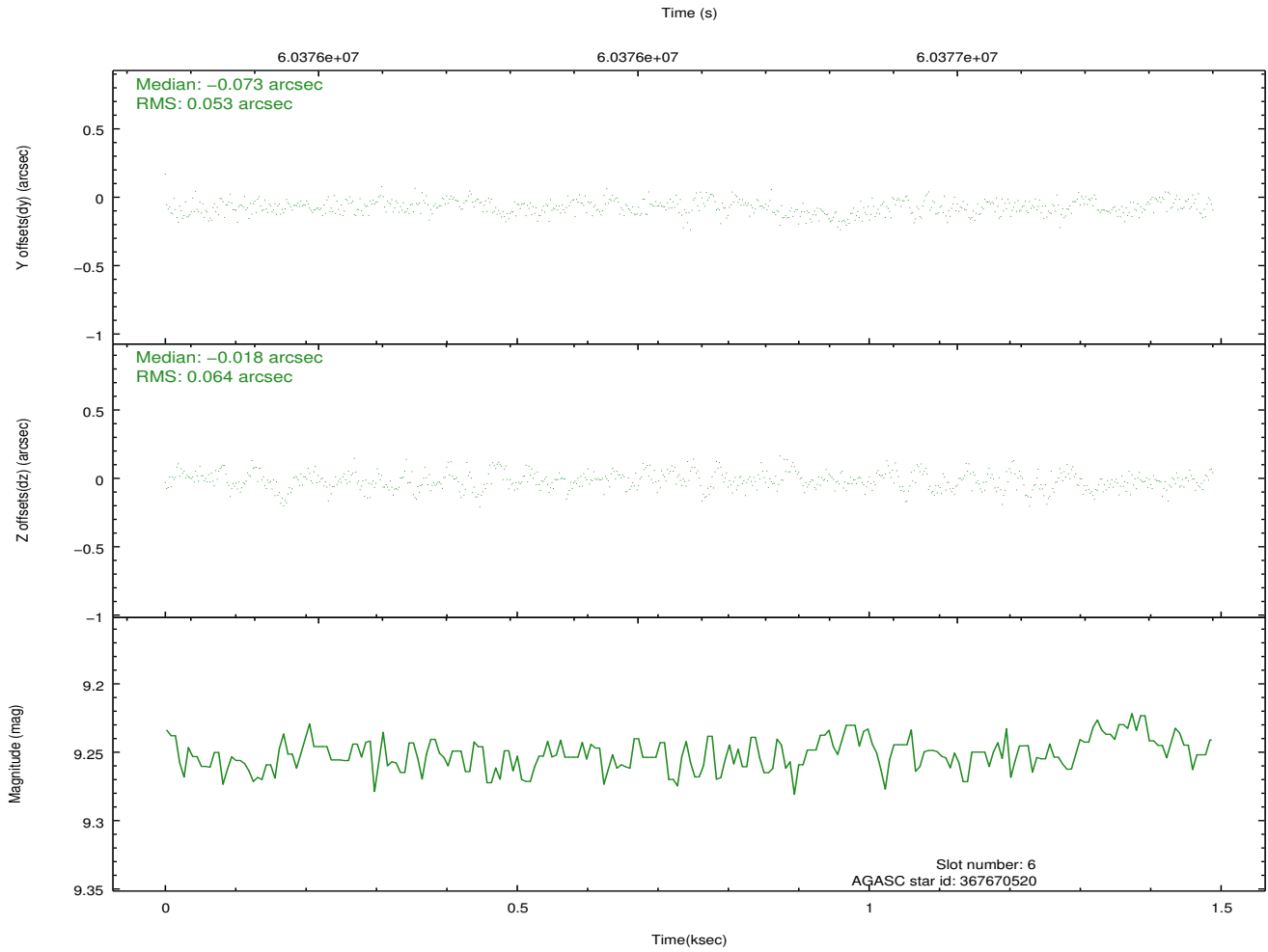
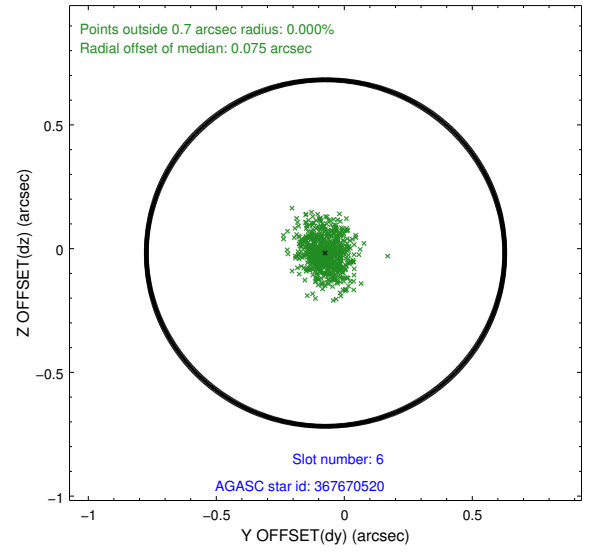
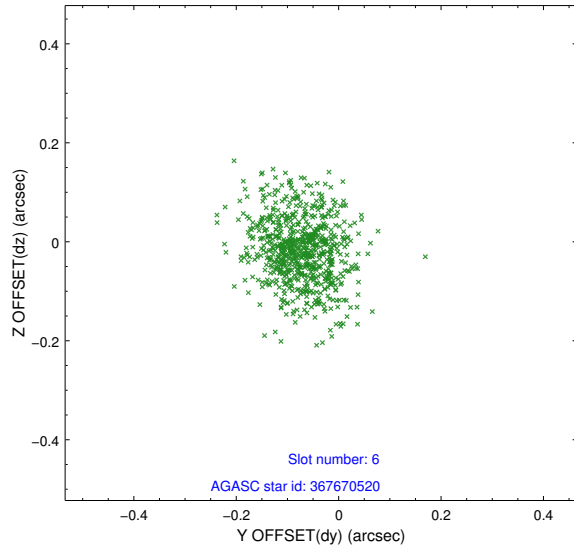
2.4.2 Slot 4



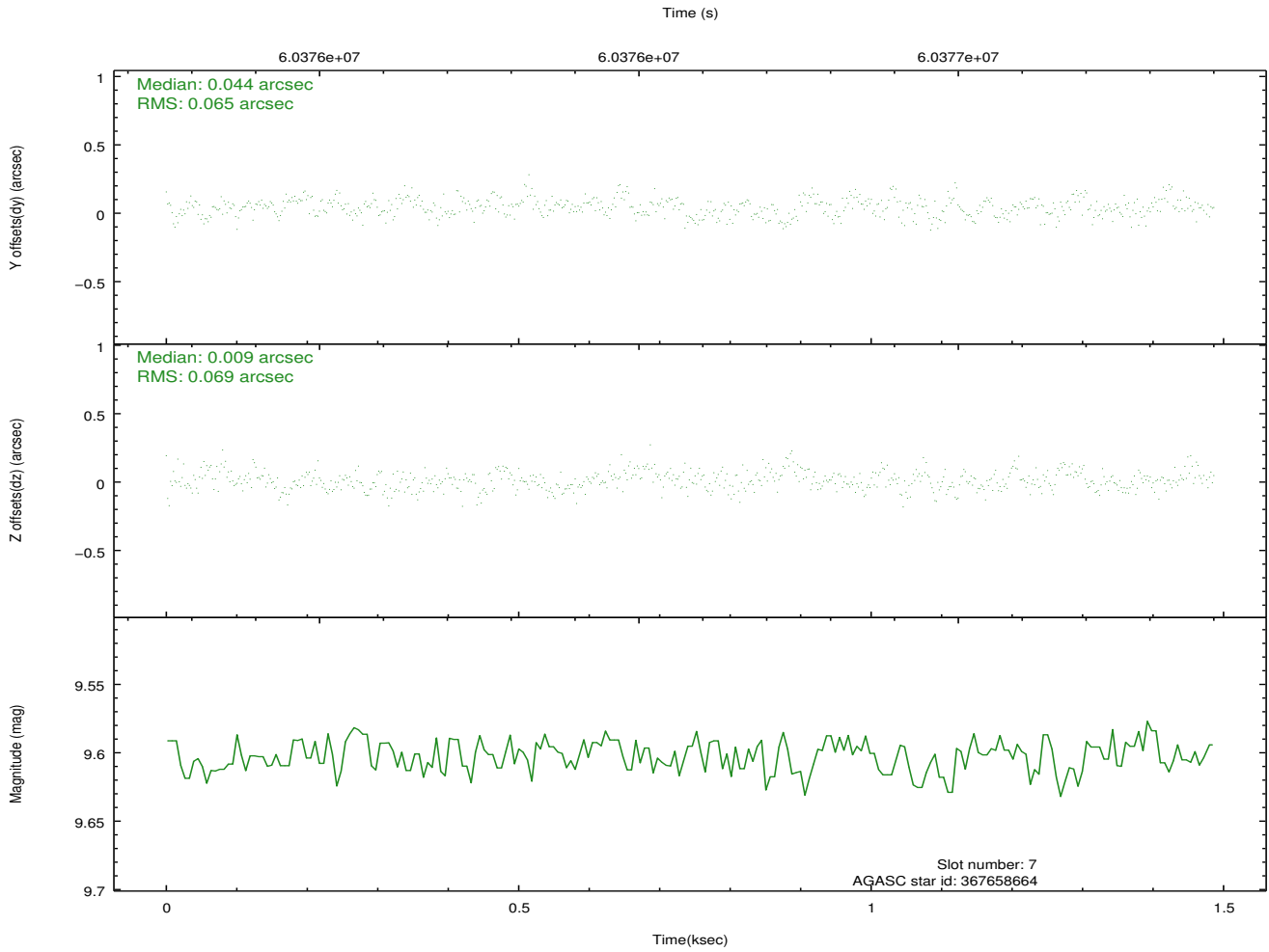
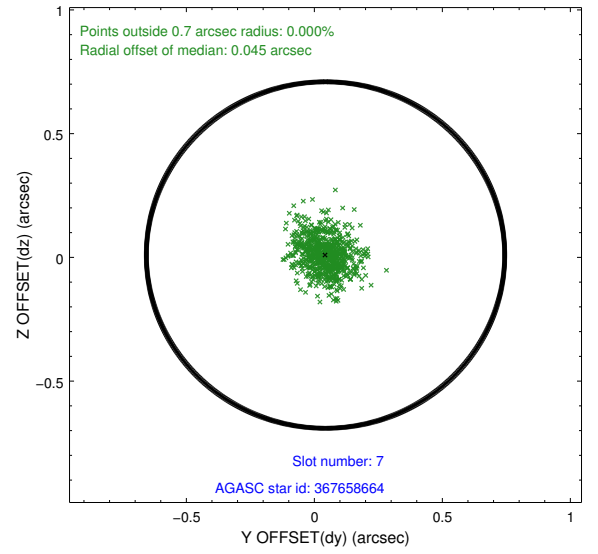
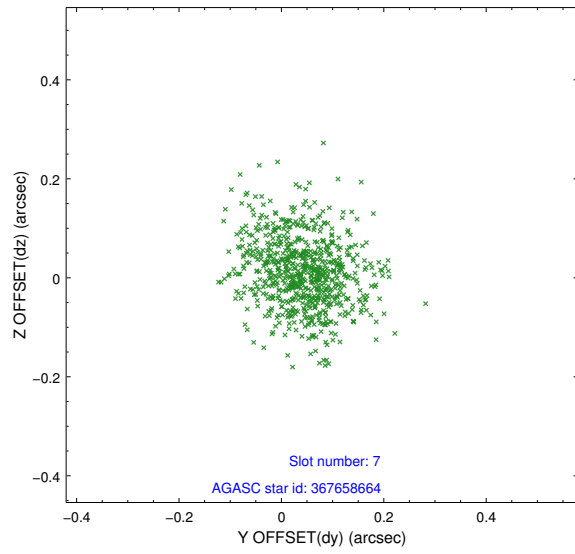
2.4.3 Slot 5



2.4.4 Slot 6

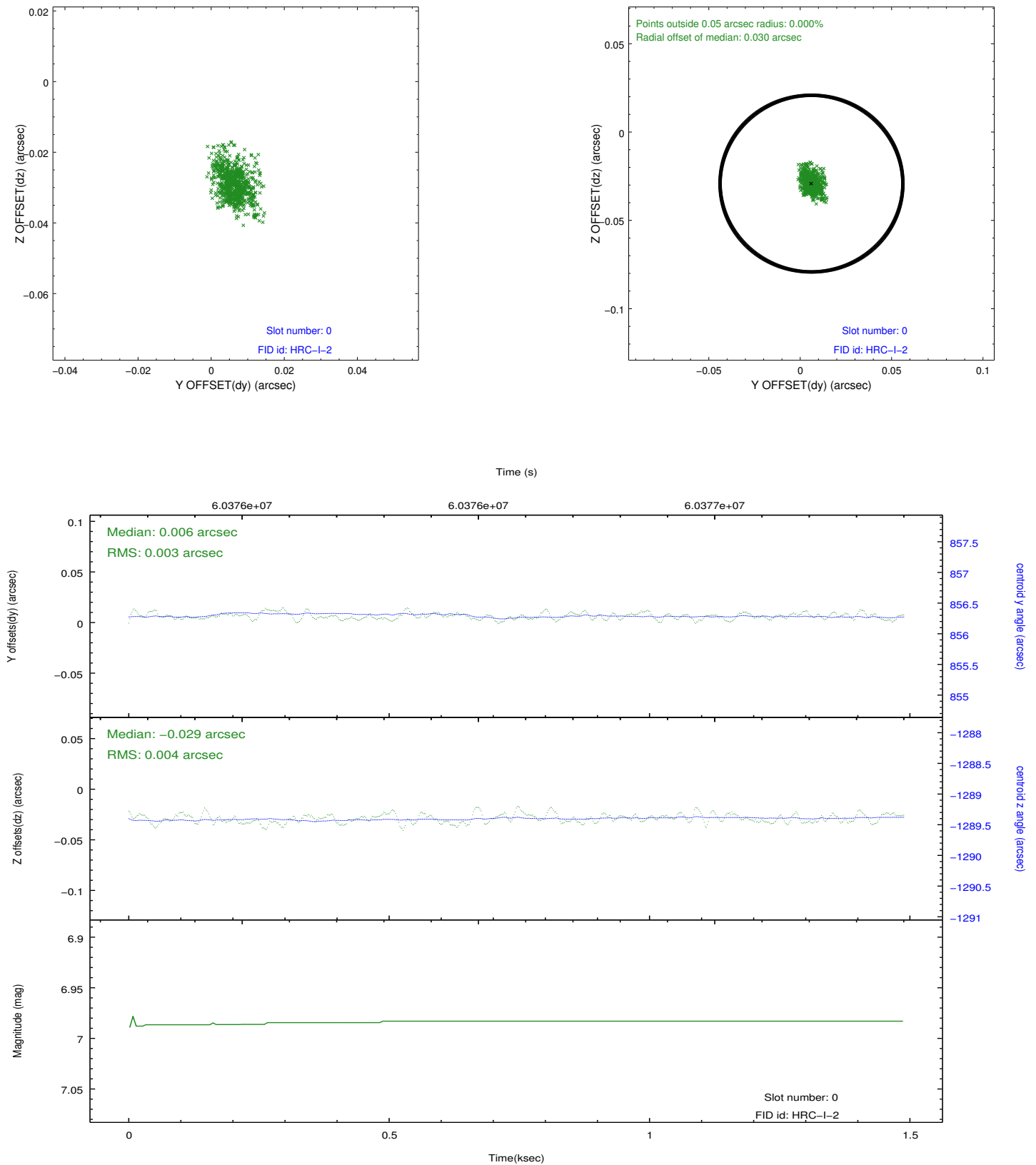


2.4.5 Slot 7

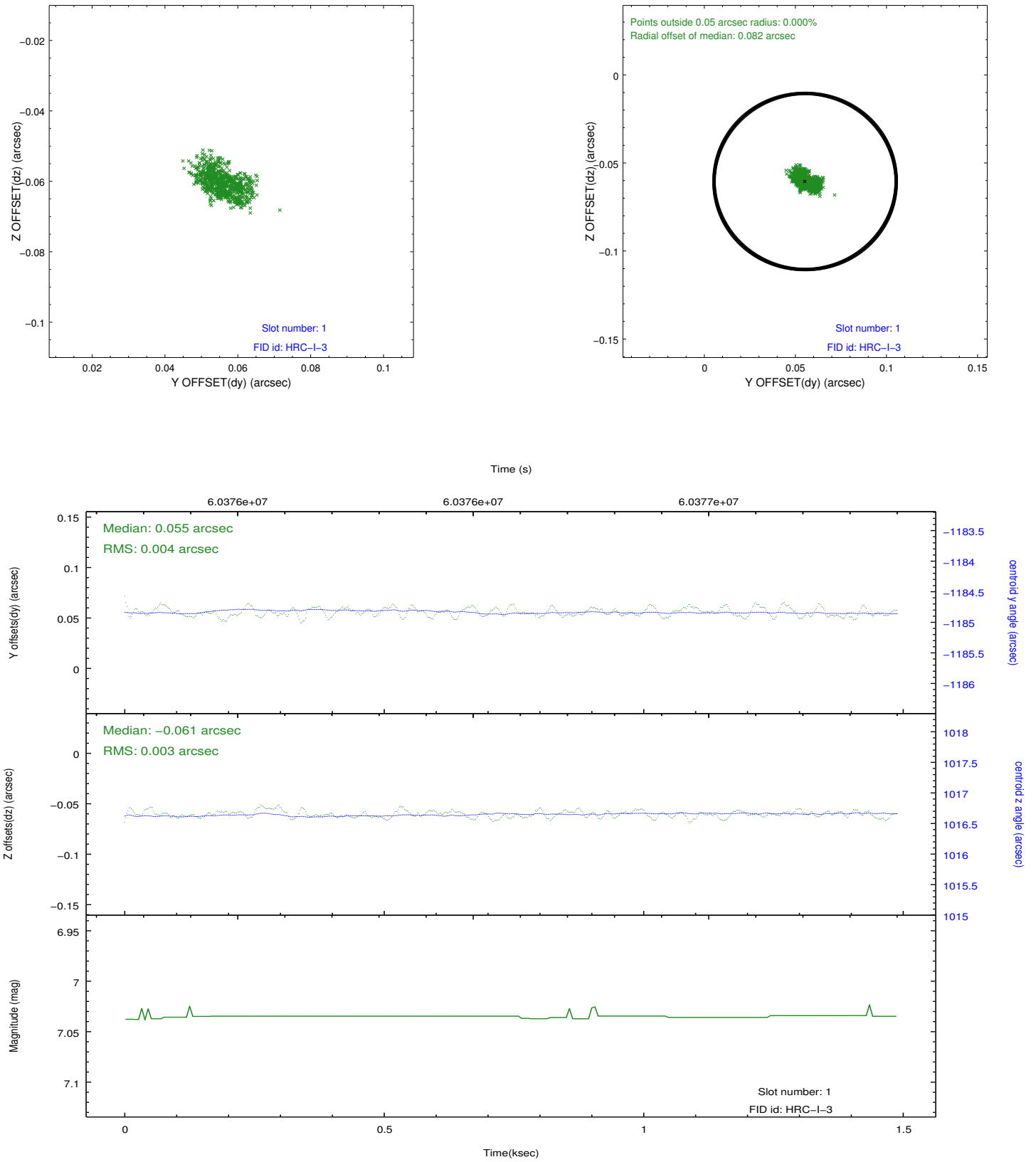


2.5 FID Slots

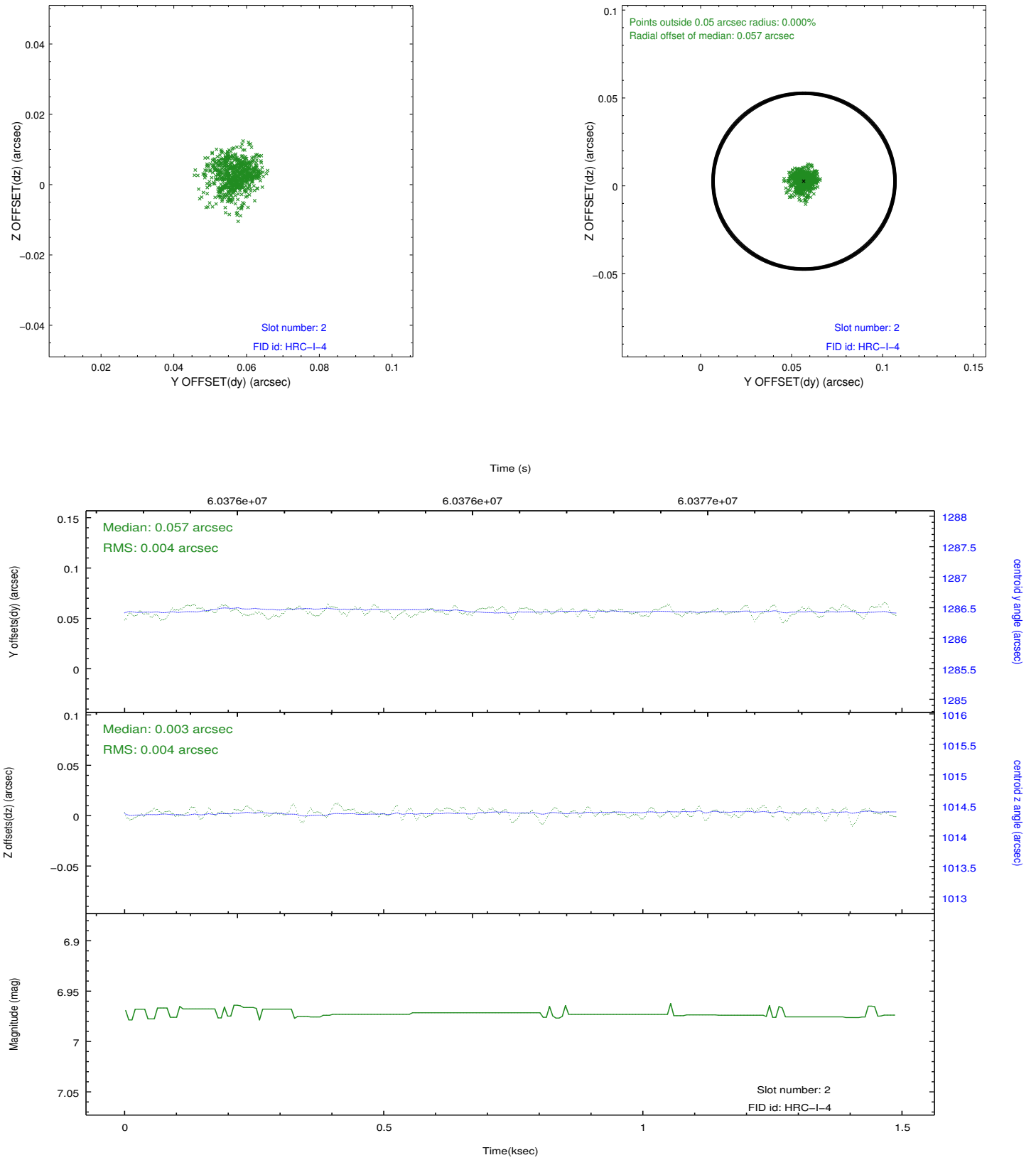
2.5.1 Slot 0



2.5.2 Slot 1



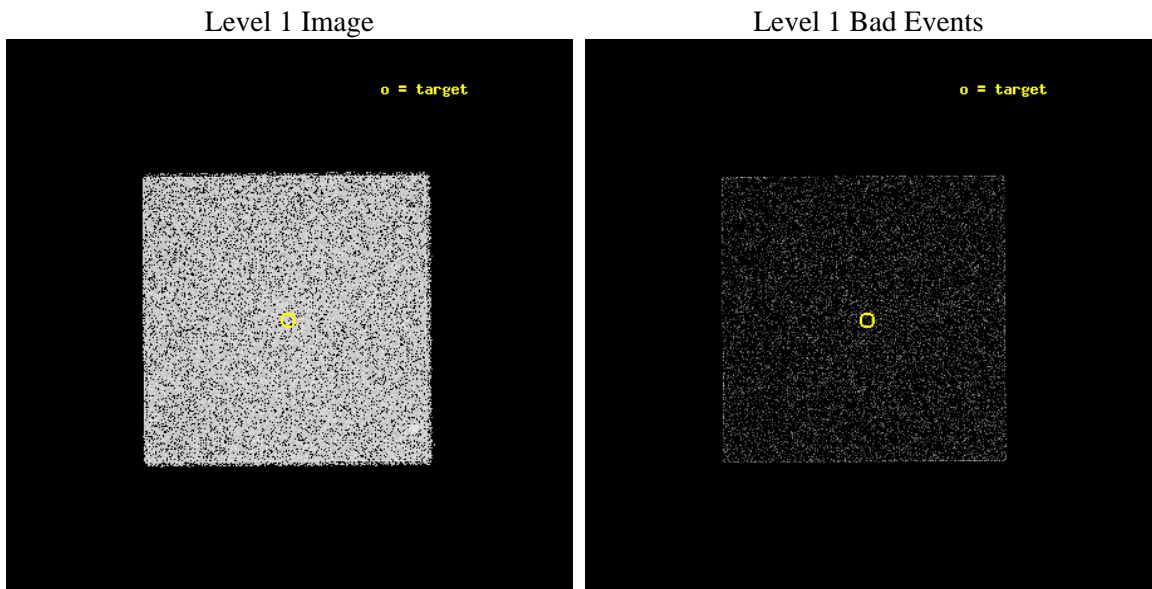
2.5.3 Slot 2



3 OBI

3.1 OBI

3.1.1 Images



3.1.2 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|----------------|---|
| obi_num | 1 | Obi number | sched_exp_time | 1000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.5.1.1 | Processing system revision | ontime | 1423.981301941 | [s] |
| caldbver | 4.5.6 | | l1events | 111085 | Number of level 1 events |
| date | 2013-05-07T16:40:16 | Date and time of file creation | | | |
| revision | 7 | Processing version of data | | | |

3.1.3 Events

Level 1 Events

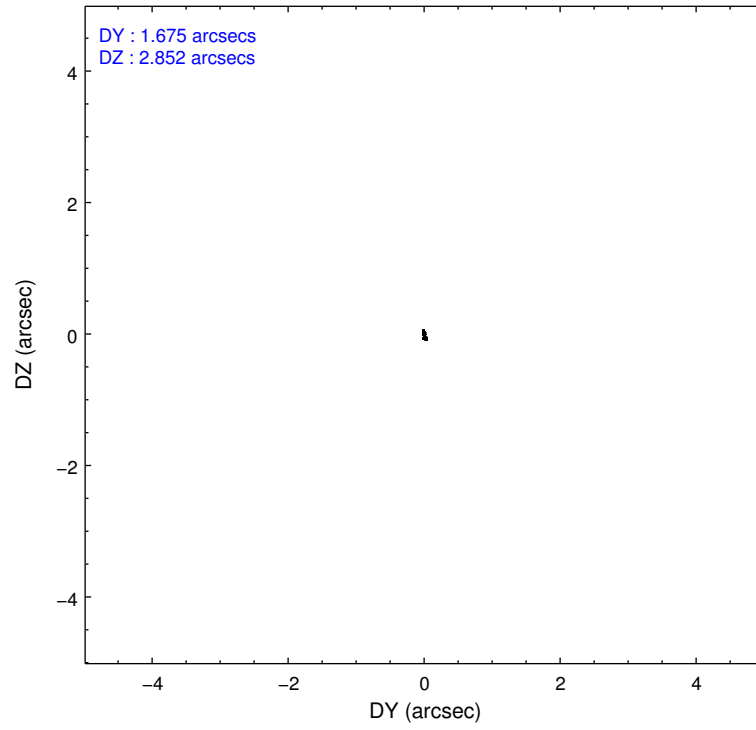
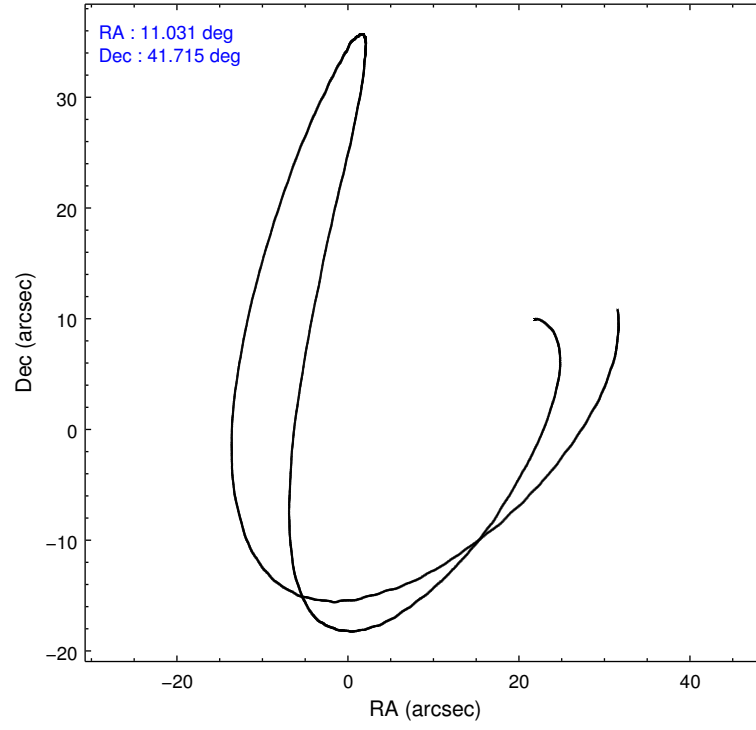
| | |
|-----------------|----------------------|
| | segment 0 |
| level 1 events | 111085 |
| rejected events | 54789 |
| rejected % | 49% |

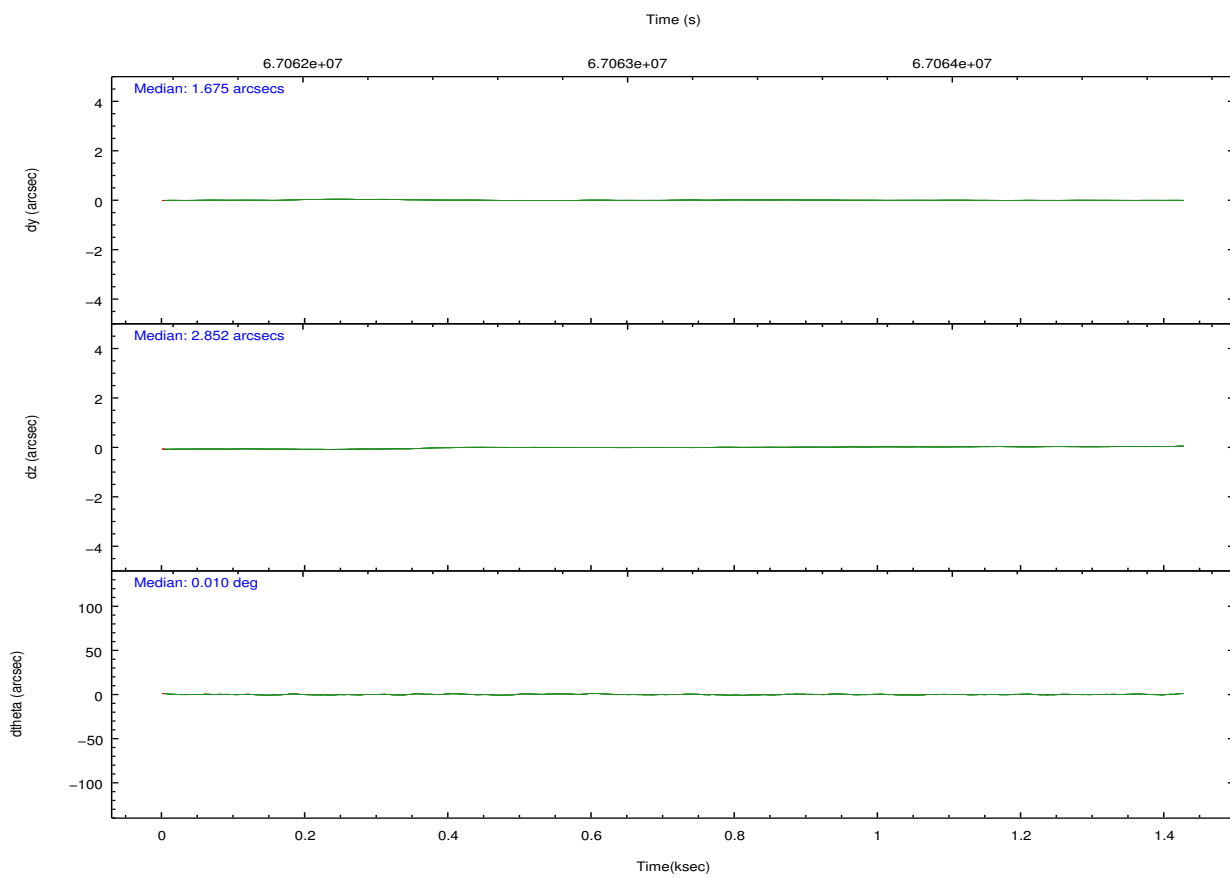
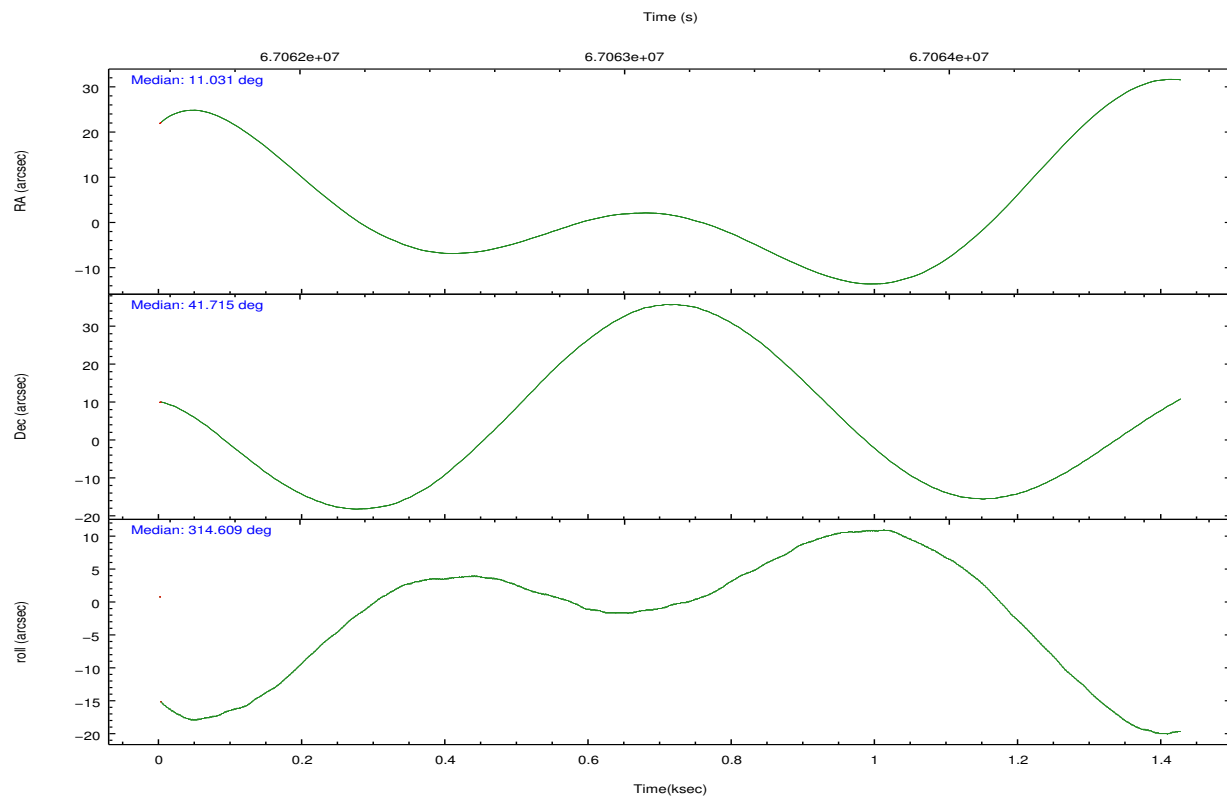
3.2 Compared Parameters

| Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|
| Instrument | HRC | HRC |
| Detector | HRC-I | HRC-I |
| Grating | NONE | NONE |
| Data mode | OBSERVING | OBSERVING |
| Observation mode | POINTING | POINTING |
| [deg] Pointing RA | 10.996022 | 11.03210816004468 |
| [deg] Pointing Dec | 41.723821 | 41.71574696956663 |
| [deg] Pointing Roll | 314.732130 | 314.6126091070928 |
| [mm] SIM focus pos | -1.040293 | -1.038866356238299 |
| [mm] SIM defocus | 0 | 0.001426264420575141 |
| [mm] SIM translation stage pos | 126.985494 | 126.9829799899862 |
| [mm] SIM translation stage offset | 0 | 0.002508901615314585 |
| [s] Observation start time (MET) | 67062785.184000 | 67062111.905468 |
| Observation start date | 2000-02-16T04:32:01 | 2000-02-16T04:21:51 |
| [s] Observation end time (MET) | 67063785.184000 | 67064912.71807 |
| Observation end date | 2000-02-16T04:48:41 | 2000-02-16T05:08:32 |

| Parameter | Planned | Actual |
|------------------------------|-----------|---------|
| Obspar format version number | 7 | 7 |
| Obspar file type | PREDICTED | ACTUAL |
| Obspar update status | NONE | UPDATED |

3.3 Aspect



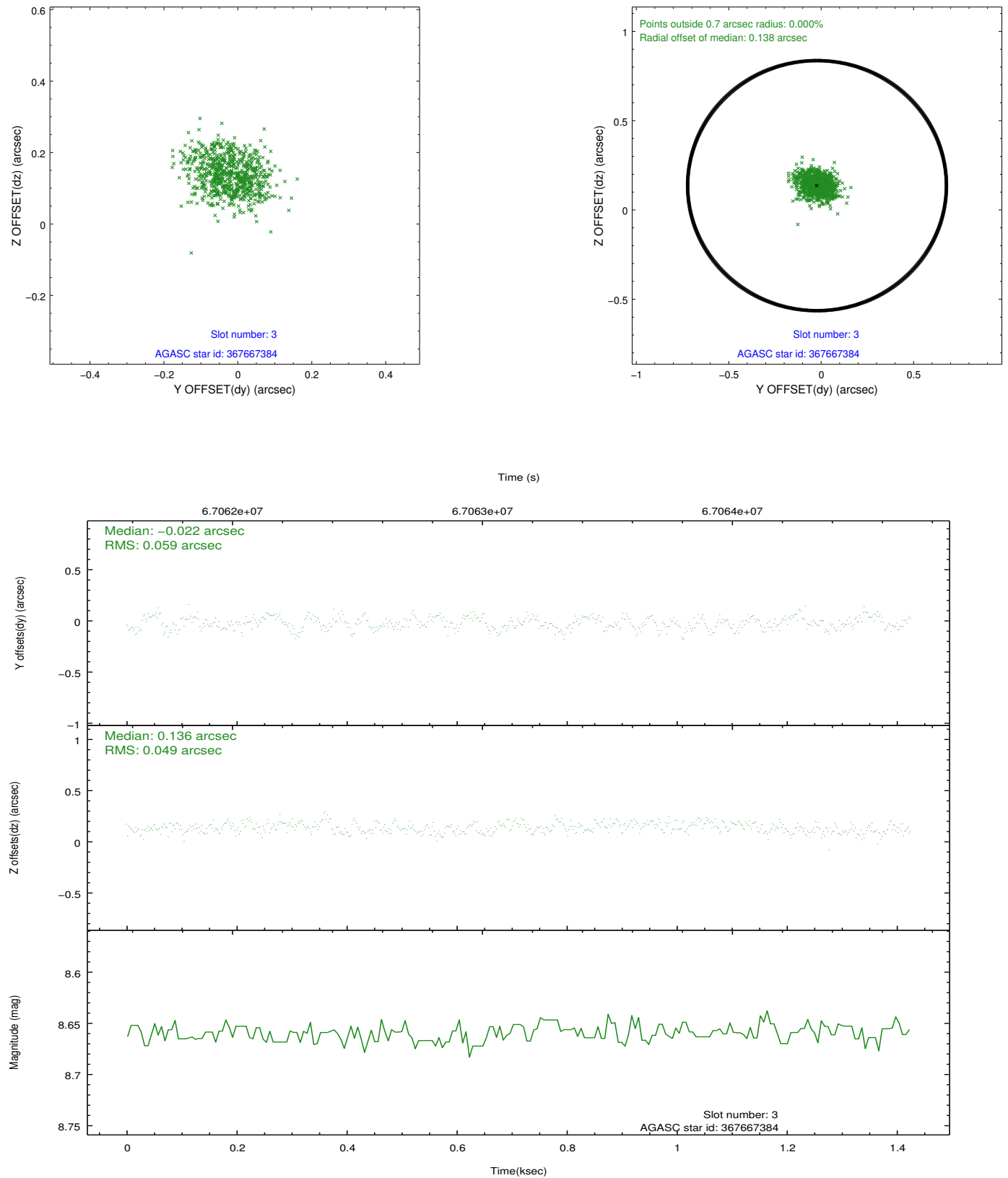


Slot Statistics

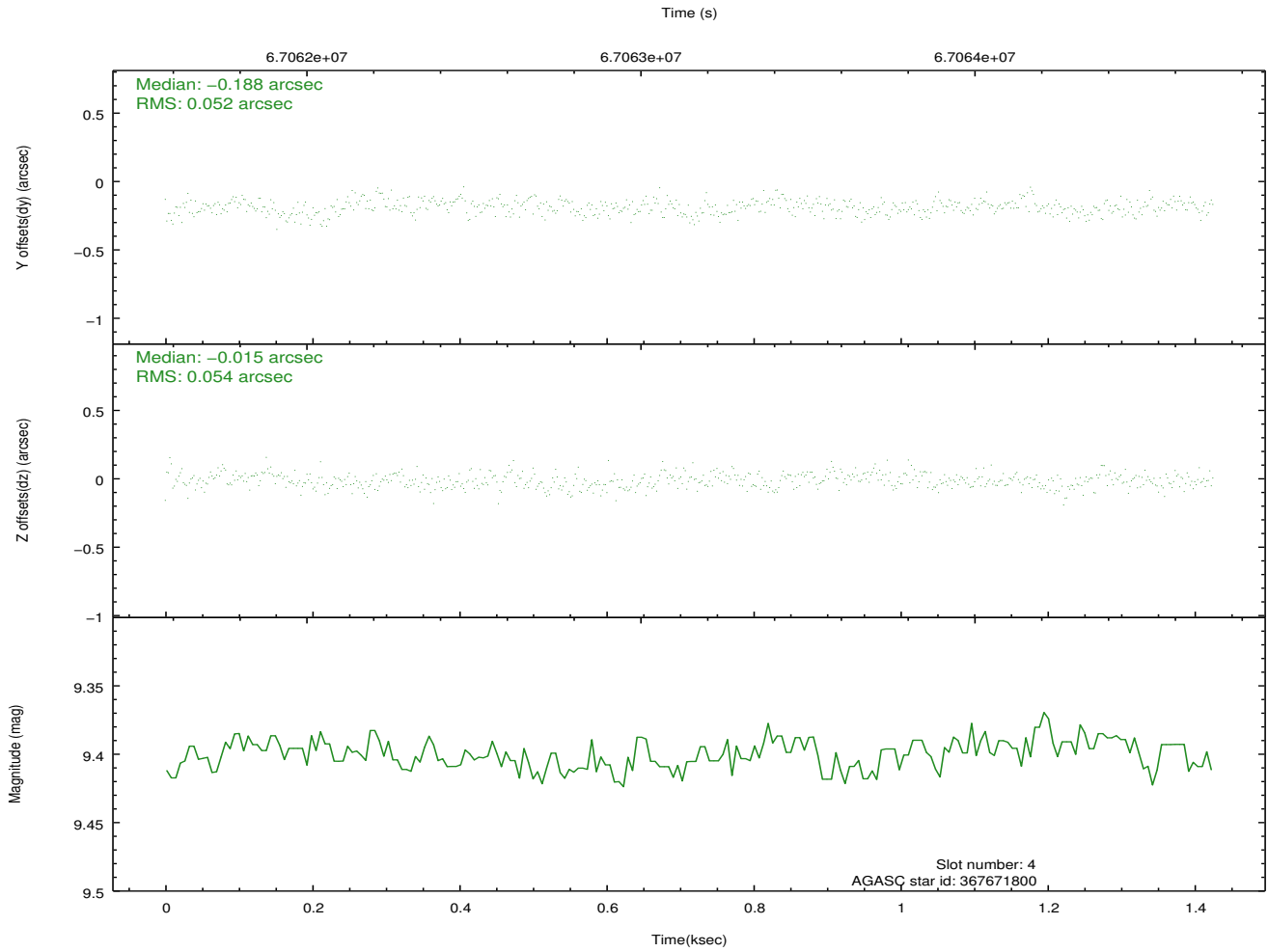
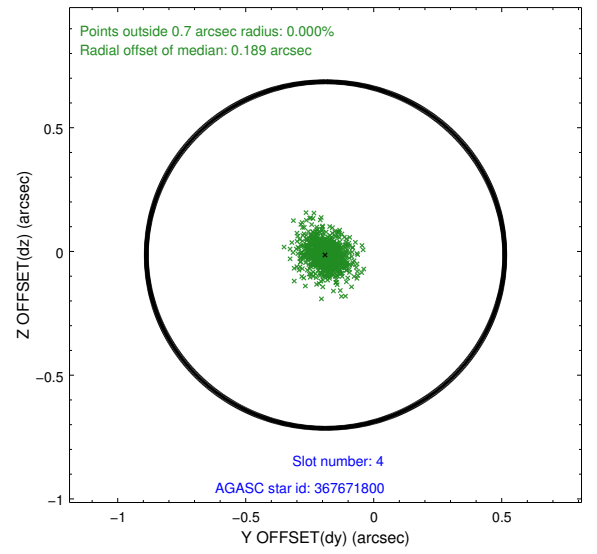
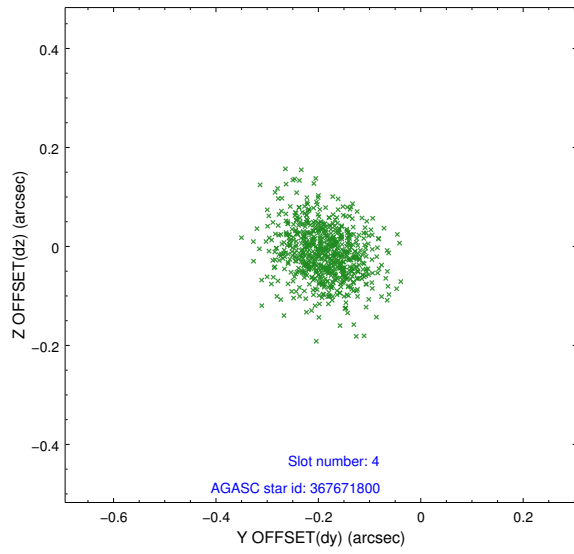
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|-----------|-----------|----------|----------|
| 0 | FID | HRC-I-2 | 6.98 | 727 | 0.006 | -0.029 | 0.005 | 0.010 | 0.000000 | 0.000000 | 856.29 | -1289.40 |
| 1 | FID | HRC-I-3 | 7.03 | 727 | 0.055 | -0.061 | 0.006 | 0.009 | 0.000000 | 0.000000 | -1183.66 | 1014.87 |
| 2 | FID | HRC-I-4 | 6.97 | 727 | 0.057 | 0.003 | 0.005 | 0.009 | 0.000000 | 0.000000 | 1284.82 | 1015.77 |
| 3 | GUIDE | 367657272 | 8.43 | 727 | -0.027 | 0.033 | 0.086 | 0.135 | 11.834471 | 41.298907 | 1352.49 | 2372.37 |
| 4 | GUIDE | 367665384 | 8.80 | 727 | -0.112 | -0.021 | 0.076 | 0.120 | 10.414363 | 42.275730 | -1762.77 | -1769.38 |
| 5 | GUIDE | 367657896 | 9.02 | 727 | 0.174 | -0.005 | 0.074 | 0.123 | 11.197765 | 41.313576 | 1477.97 | 651.96 |
| 6 | GUIDE | 367670520 | 9.25 | 727 | -0.073 | -0.018 | 0.090 | 0.147 | 11.265516 | 42.371946 | -2326.75 | 449.62 |
| 7 | GUIDE | 367658664 | 9.60 | 725 | 0.044 | 0.009 | 0.103 | 0.167 | 10.374070 | 41.369746 | 1490.16 | -1580.42 |

3.4 Star Slots

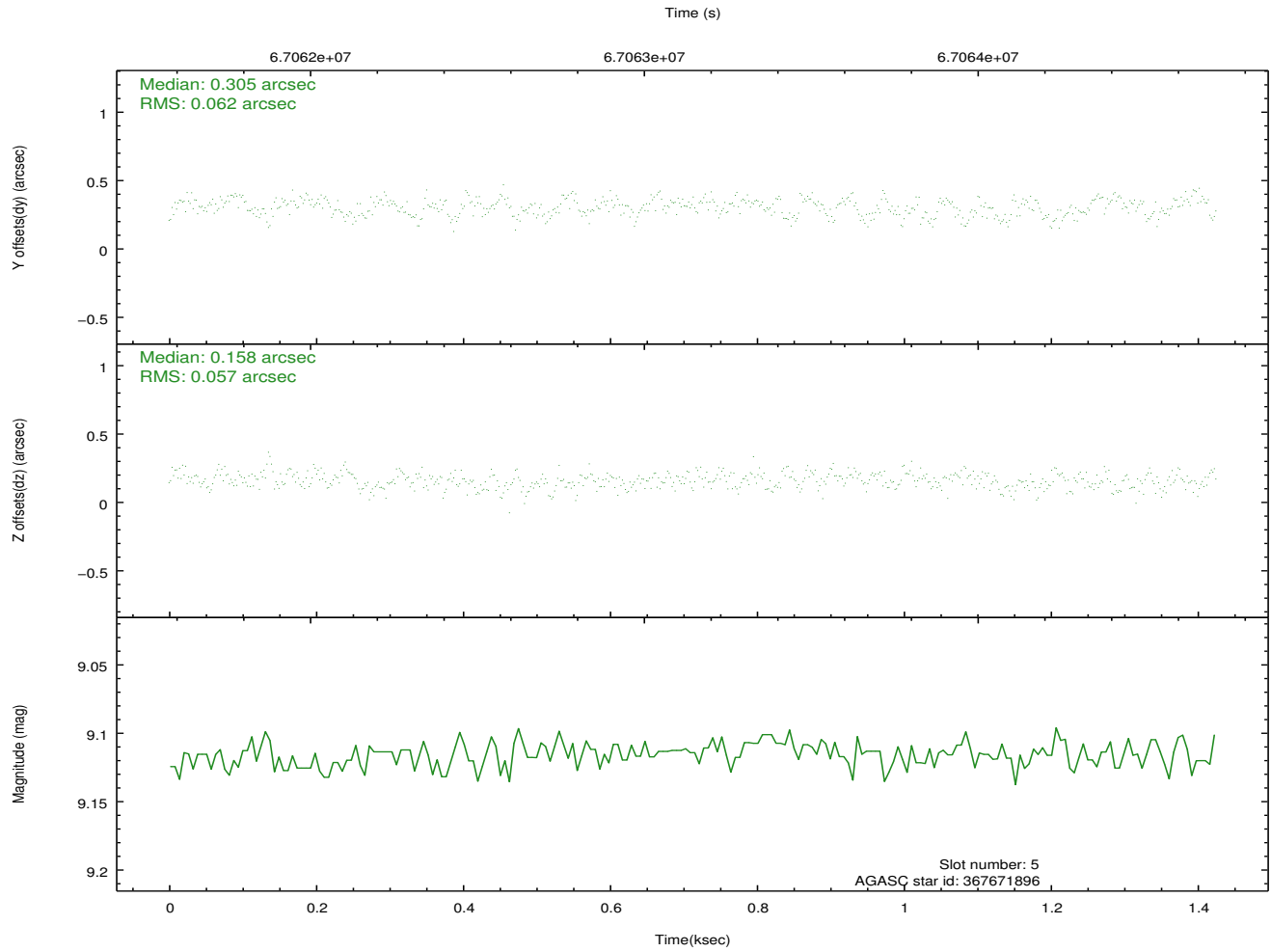
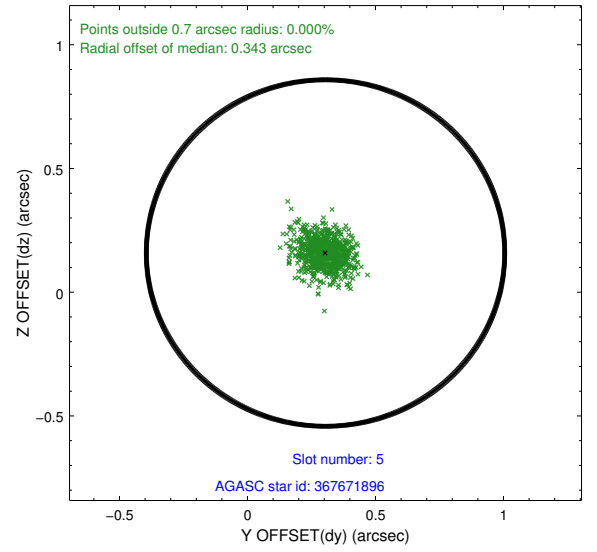
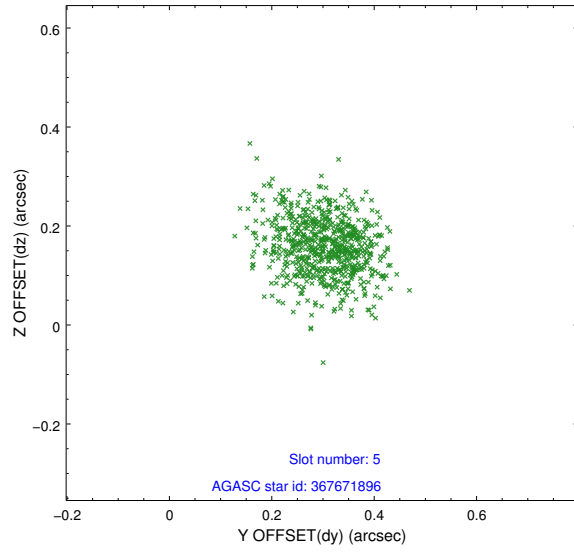
3.4.1 Slot 3



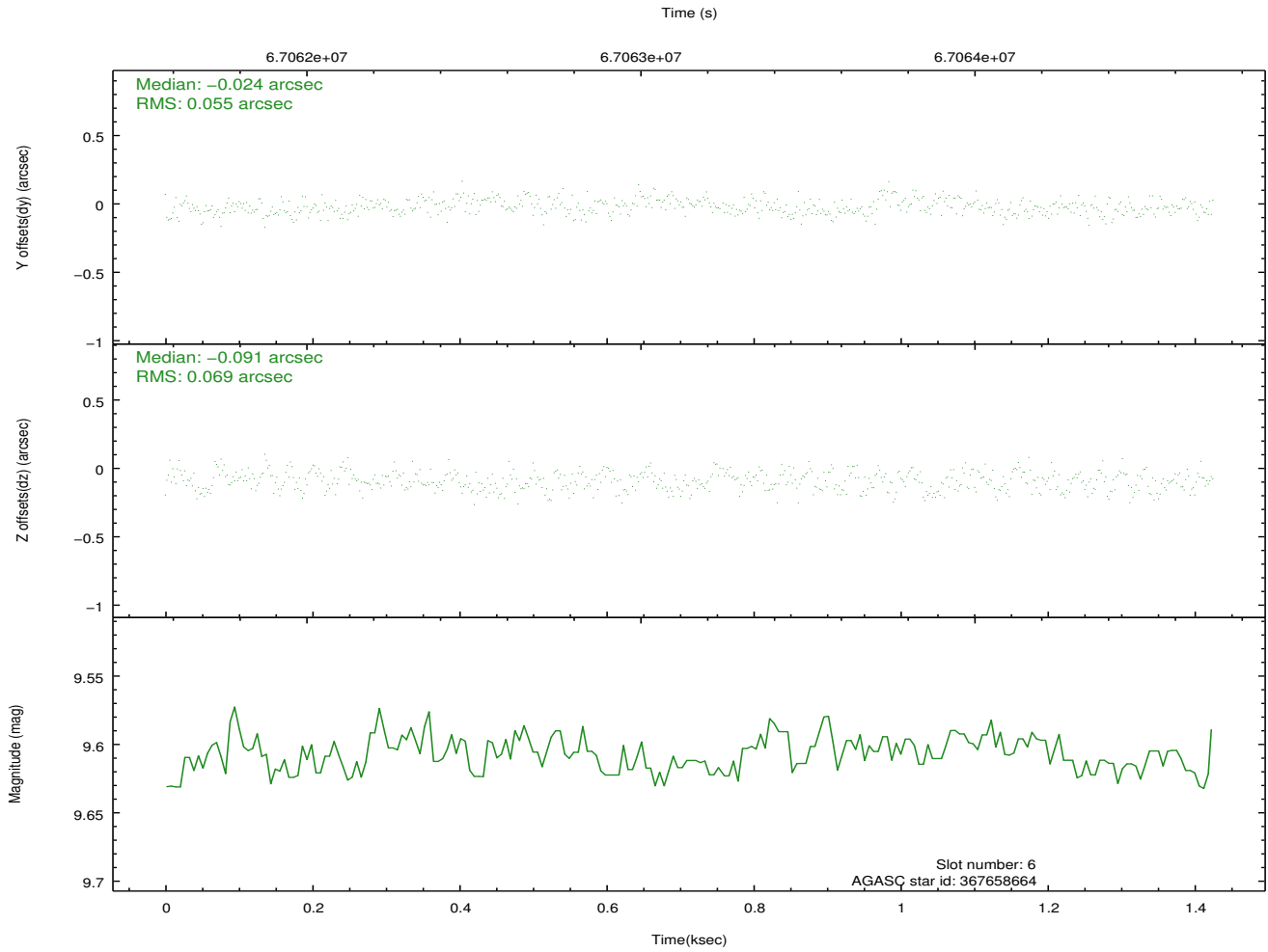
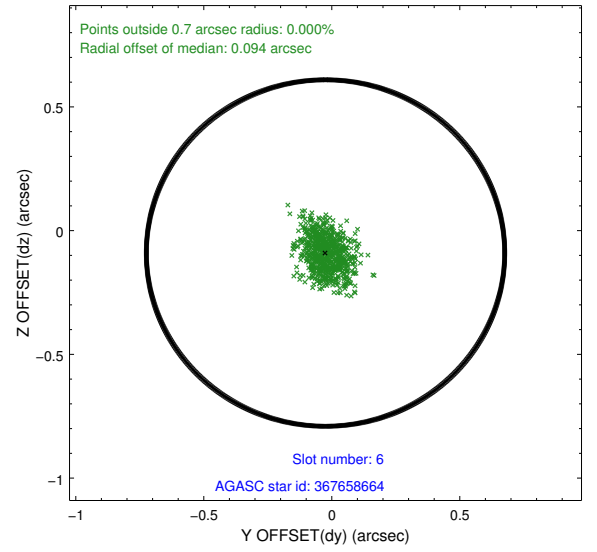
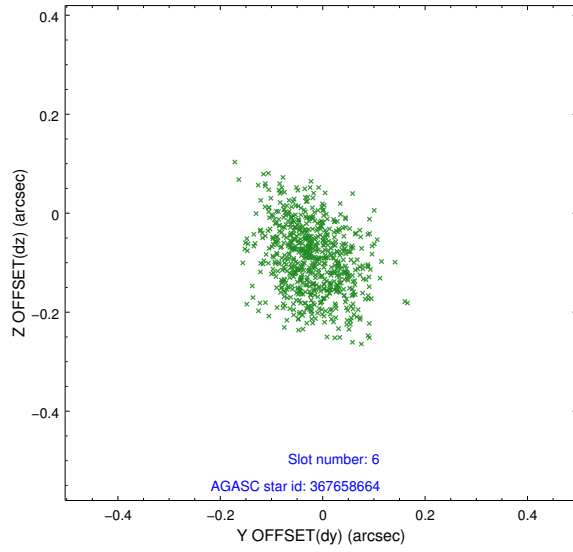
3.4.2 Slot 4



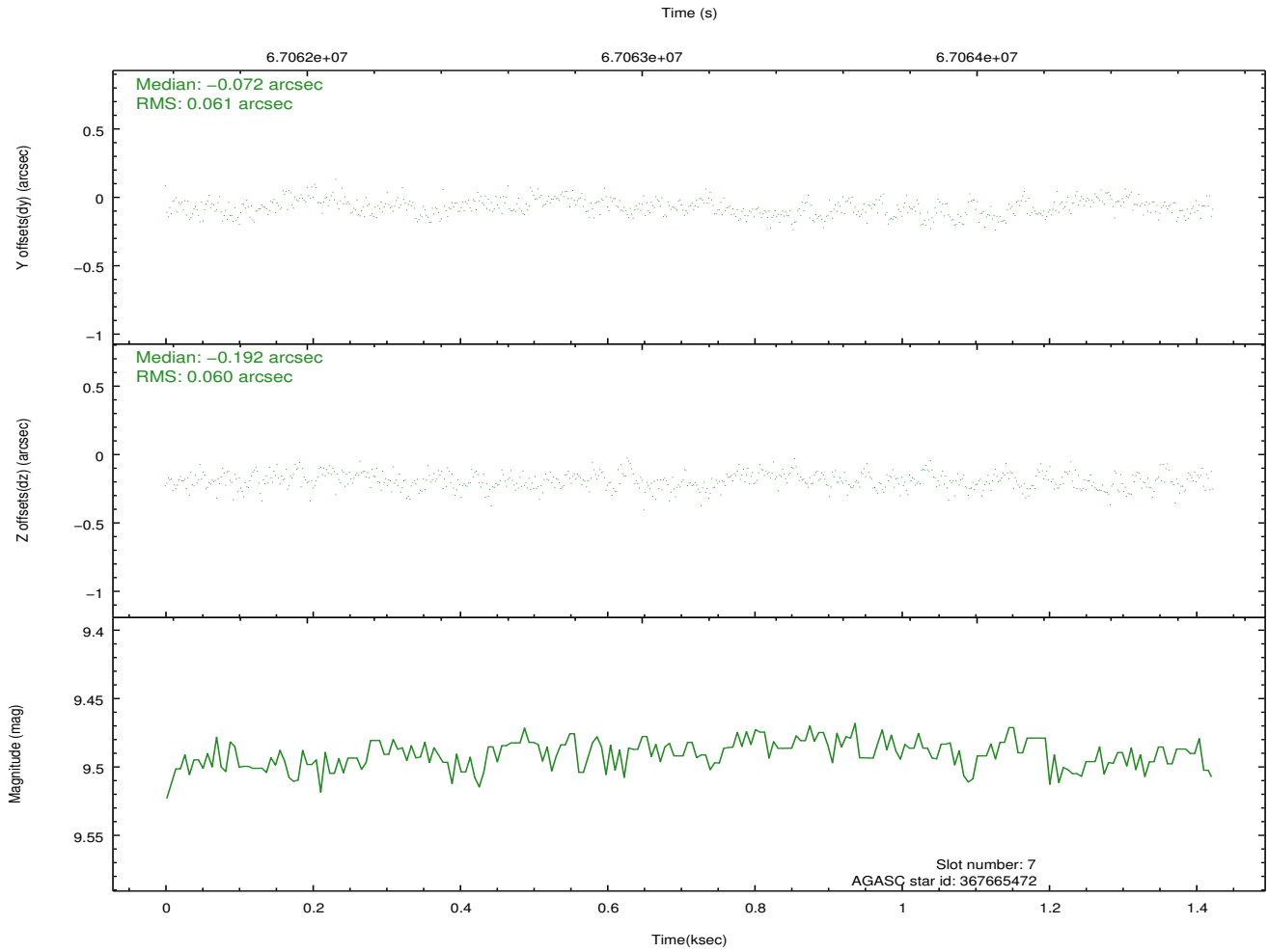
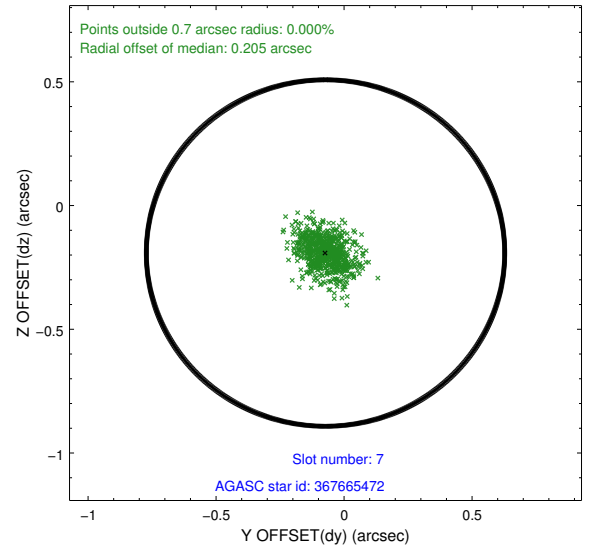
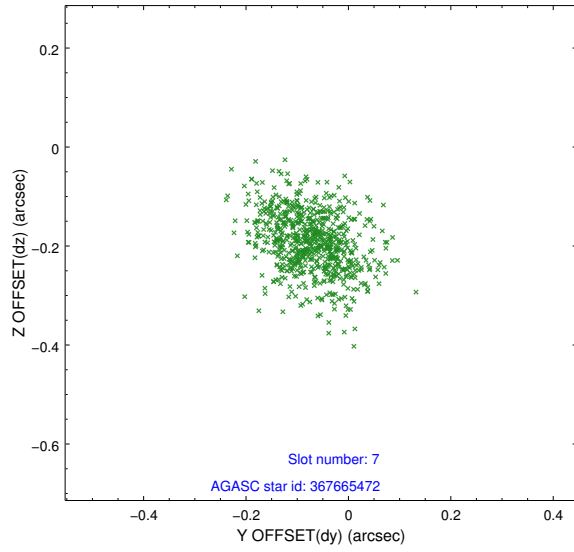
3.4.3 Slot 5



3.4.4 Slot 6

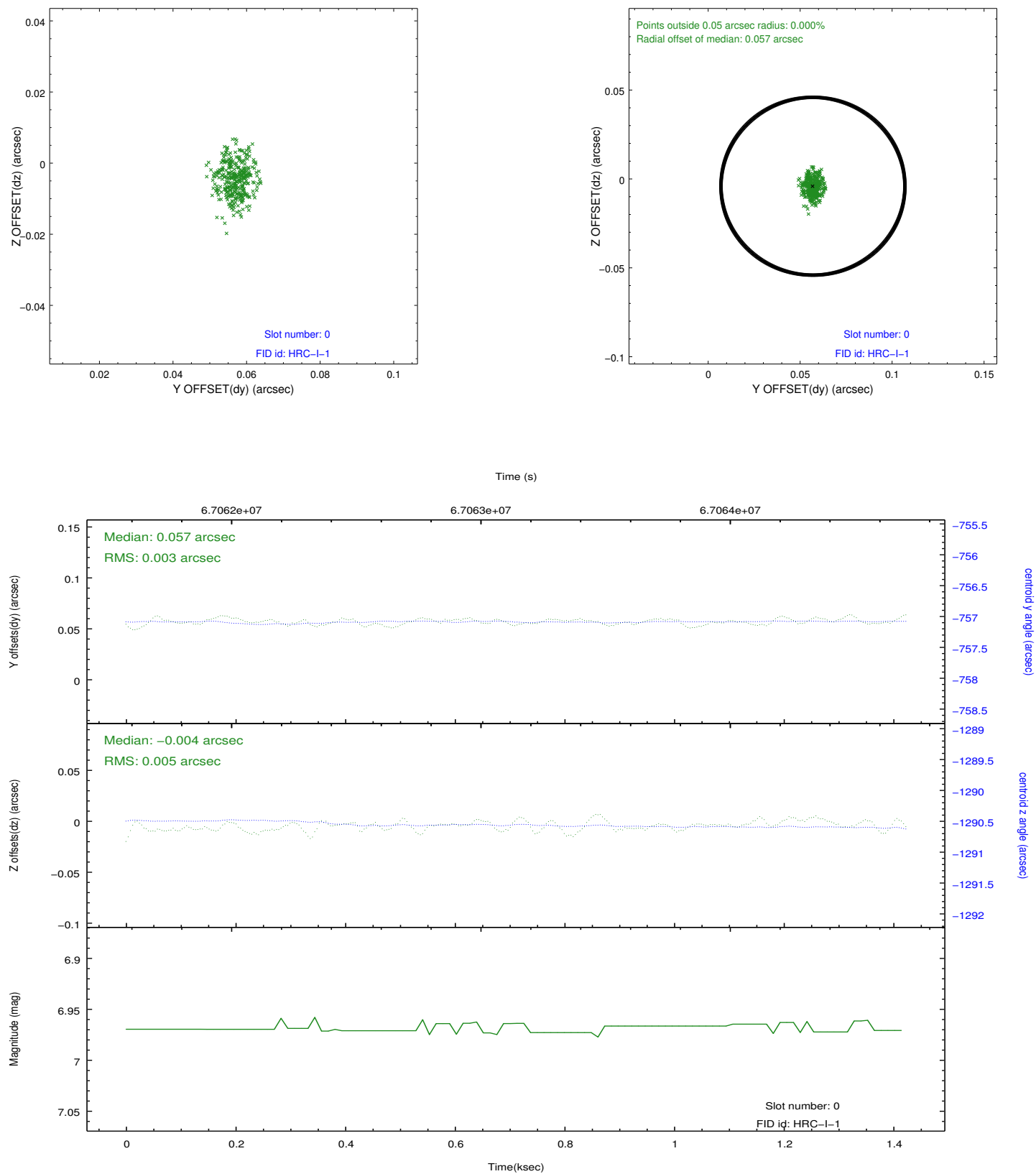


3.4.5 Slot 7

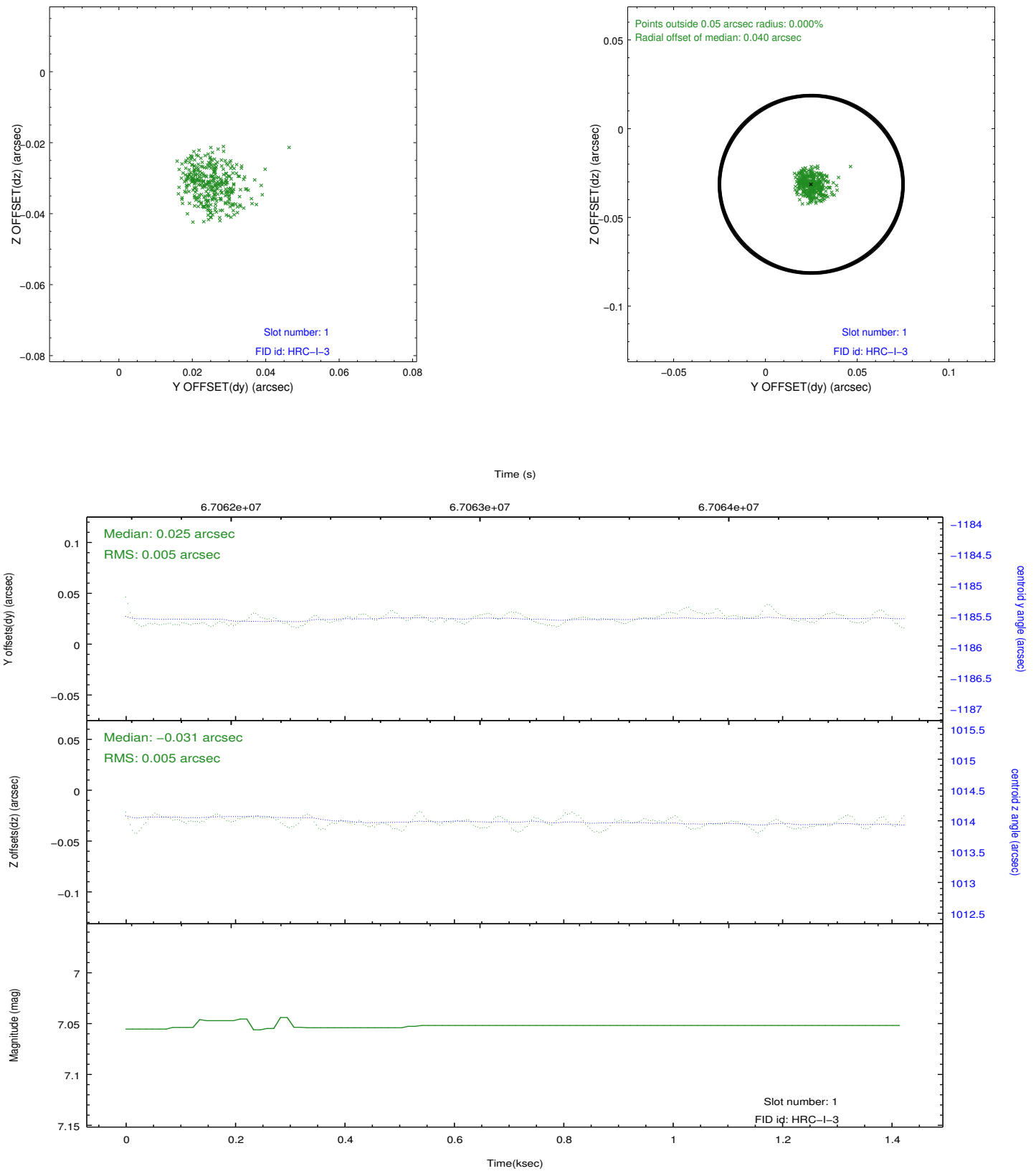


3.5 FID Slots

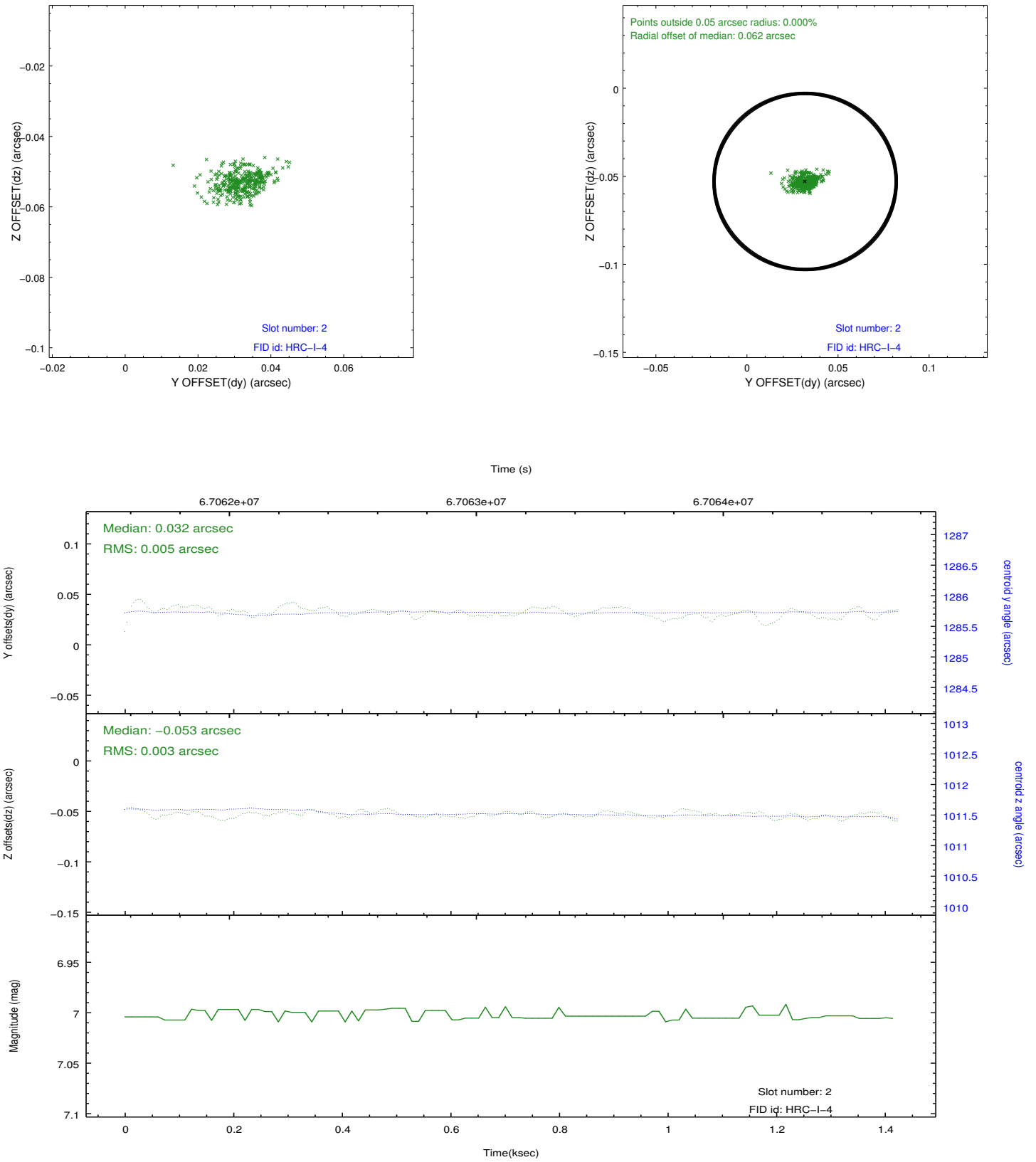
3.5.1 Slot 0



3.5.2 Slot 1



3.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|-------------|
| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2013.05.15 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 2.697 |

A.2 Comments