

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 10229 - L2 Version 4
Chandra X-Ray Center

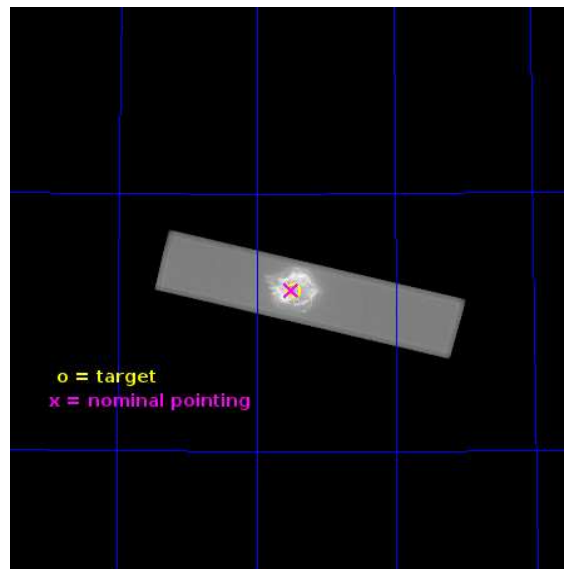
L2 Processing Date : Jun 29 2013

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1 Front

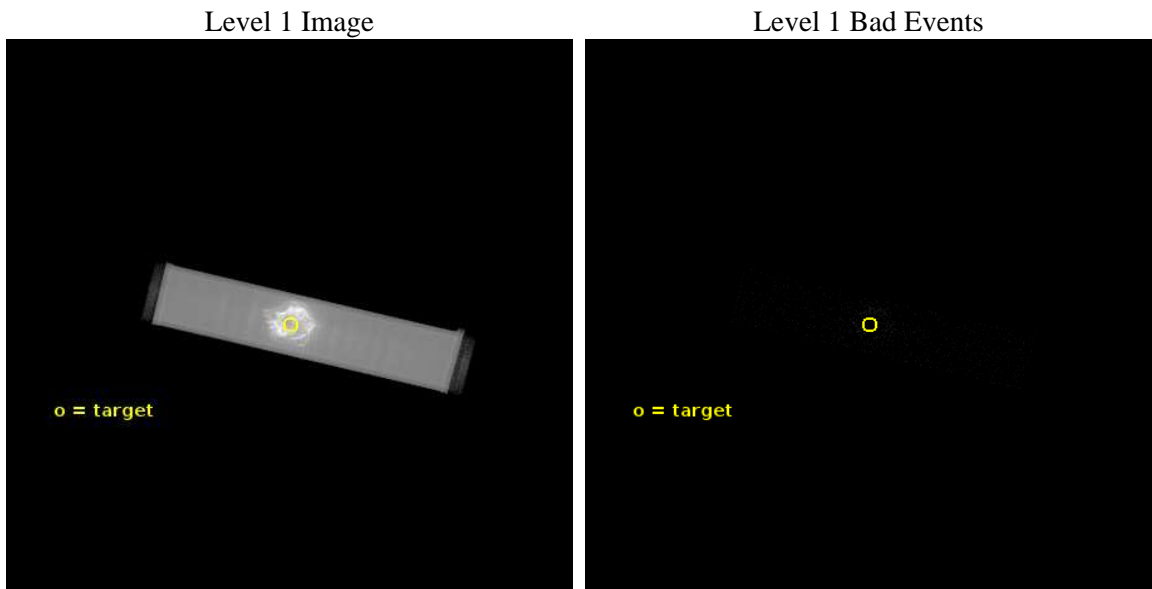
| | | |
|----------|--|---------------------------------------|
| seq_num | 501151 | Sequence number |
| obs_id | 10229 | Observation id |
| title | The Spin and Magnetic Moment of the Neutron Star in Cassiopeia A | P |
| observer | Prof. Deepto Chakrabarty | Principal investigator |
| object | Cas A CCO | Source name |
| ra_targ | 350.86625 | Observer's specified target RA [deg] |
| dec_targ | 58.811806 | Observer's specified target Dec [deg] |
| ra_nom | 350.87522594169 | Nominal RA [deg] |
| dec_nom | 58.812891442055 | Nominal Dec [deg] |
| roll_nom | 13.659649417083 | Nominal Roll [deg] |
| revision | 4 | Processing version of data |
| ontime | 48969.633684456 | [s] |
| livetime | 48433.734694403 | Ontime multiplied by DTCOR |
| l2events | 6765819 | 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 | 48842.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10 | Processing system revision | ontime | 48969.633684456 | [s] |
| caldsver | 4.5.7 | | l1events | 7910766 | Number of level 1 events |
| date | 2013-06-29T05:21:11 | Date and time of file creation | | | |
| revision | 4 | Processing version of data | | | |

2.1.3 Events

Level 1 Events

| | segment 1 | segment 2 | segment 3 |
|-----------------|----------------------|----------------------|----------------------|
| level 1 events | 4206 | 7906546 | 14 |
| rejected events | 86 | 87988 | 8 |
| rejected % | 2% | 1% | 57% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|-----------------------|----------------------|------------------------------|-----------|---------|
| Instrument | HRC | HRC | Obspar format version number | 7 | 7 |
| Detector | HRC-S | HRC-S | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | OBSERVING | OBSERVING | | | |
| Observation mode | POINTING | POINTING | | | |
| [deg] Pointing RA | 350.837085 | 350.8752259416852 | | | |
| [deg] Pointing Dec | 58.792026 | 58.81289144205549 | | | |
| [deg] Pointing Roll | 13.624948 | 13.65964941708345 | | | |
| [mm] SIM focus pos | -1.533336 | -1.526339935833849 | | | |
| [mm] SIM defocus | 7.710433287538843e-07 | 0.006996703570447904 | | | |
| [mm] SIM translation stage pos | 250.455976 | 250.466033080201 | | | |
| [mm] SIM translation stage offset | 0 | -0.01005468664627074 | | | |
| [s] Observation start time (MET) | 354288944.184000 | 354287459.33878 | | | |
| Observation start date | 2009-03-24T13:34:38 | 2009-03-24T13:10:59 | | | |
| [s] Observation end time (MET) | 354337786.184000 | 354339054.76634 | | | |
| Observation end date | 2009-03-25T03:08:40 | 2009-03-25T03:30:54 | | | |

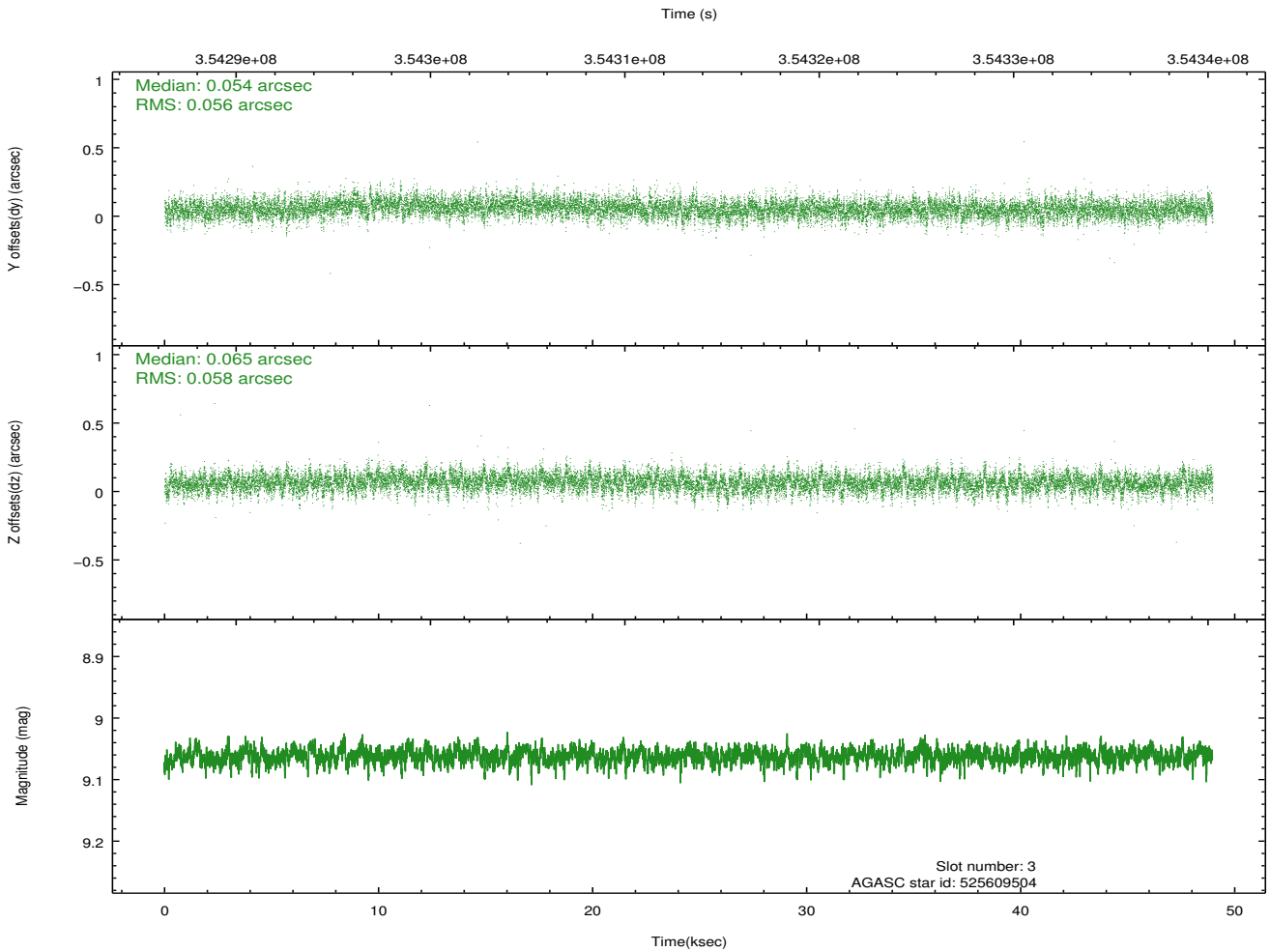
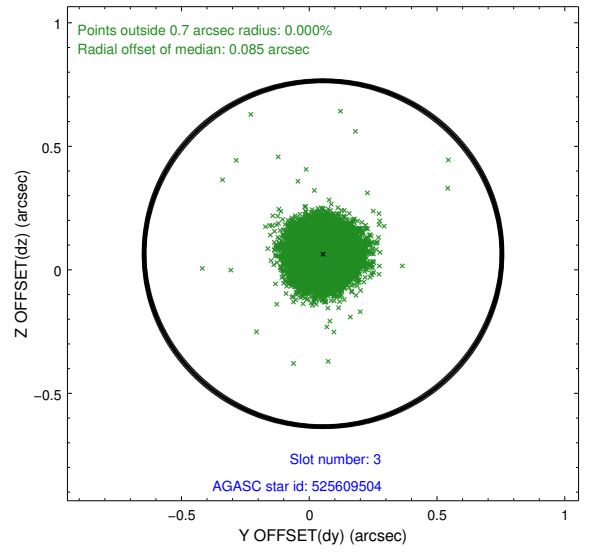
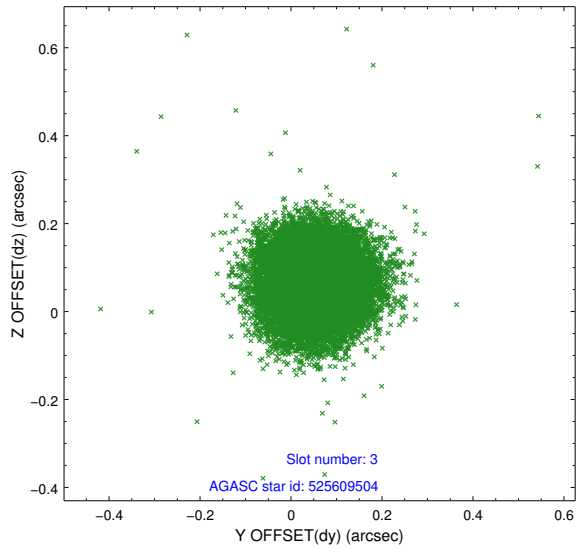
2.3 Aspect

Slot Statistics

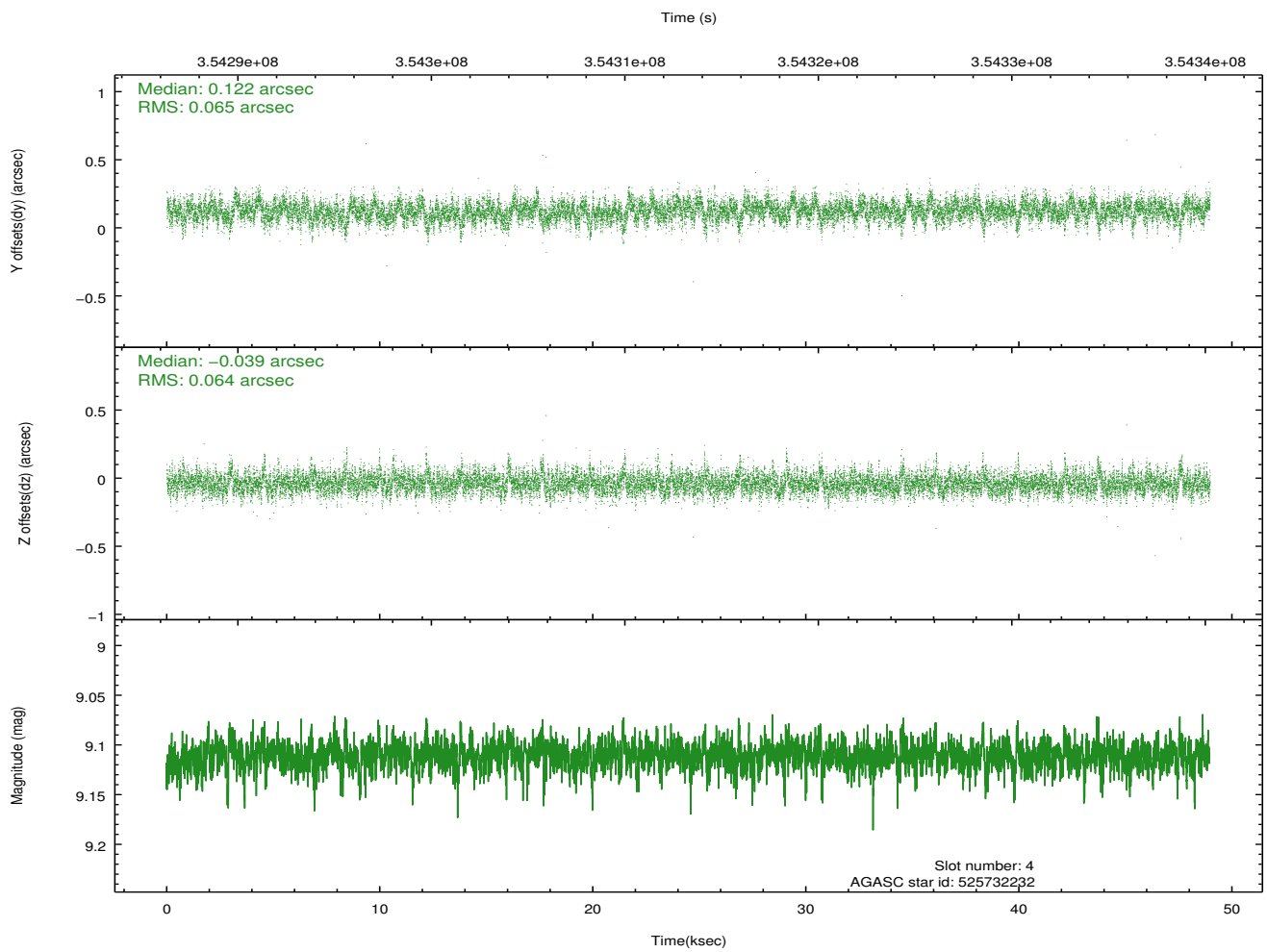
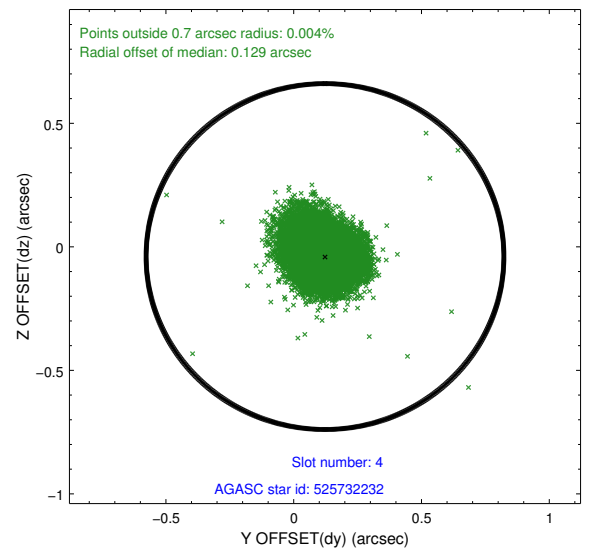
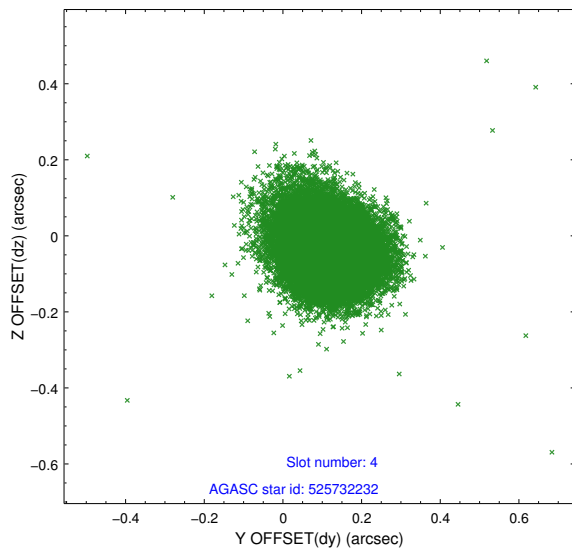
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | HRC-S-1 | 6.99 | 11944 | 0.037 | -0.172 | 0.018 | 0.065 | 0.000000 | 0.000000 | -1169.42 | -465.23 |
| 1 | FID | HRC-S-3 | 6.99 | 11944 | 0.124 | -0.066 | 0.021 | 0.075 | 0.000000 | 0.000000 | -1172.19 | 564.38 |
| 2 | FID | HRC-S-4 | 6.93 | 11944 | 0.228 | -0.060 | 0.010 | 0.017 | 0.000000 | 0.000000 | 1228.87 | 567.09 |
| 3 | GUIDE | 525609504 | 9.06 | 23867 | 0.054 | 0.065 | 0.085 | 0.140 | 349.896632 | 58.356658 | -2092.51 | -1092.52 |
| 4 | GUIDE | 525732232 | 9.11 | 23868 | 0.122 | -0.039 | 0.096 | 0.160 | 351.669550 | 58.757012 | 1484.28 | -480.48 |
| 5 | GUIDE | 525732488 | 8.41 | 23879 | -0.046 | 0.045 | 0.077 | 0.124 | 350.087090 | 58.516915 | -1601.46 | -622.61 |
| 6 | GUIDE | 525736400 | 9.06 | 23867 | 0.073 | -0.084 | 0.091 | 0.155 | 350.974563 | 59.175145 | 571.49 | 1280.93 |
| 7 | GUIDE | 525732528 | 9.34 | 23844 | -0.199 | 0.012 | 0.113 | 0.184 | 351.607241 | 59.298932 | 1807.41 | 1448.24 |

2.4 Star Slots

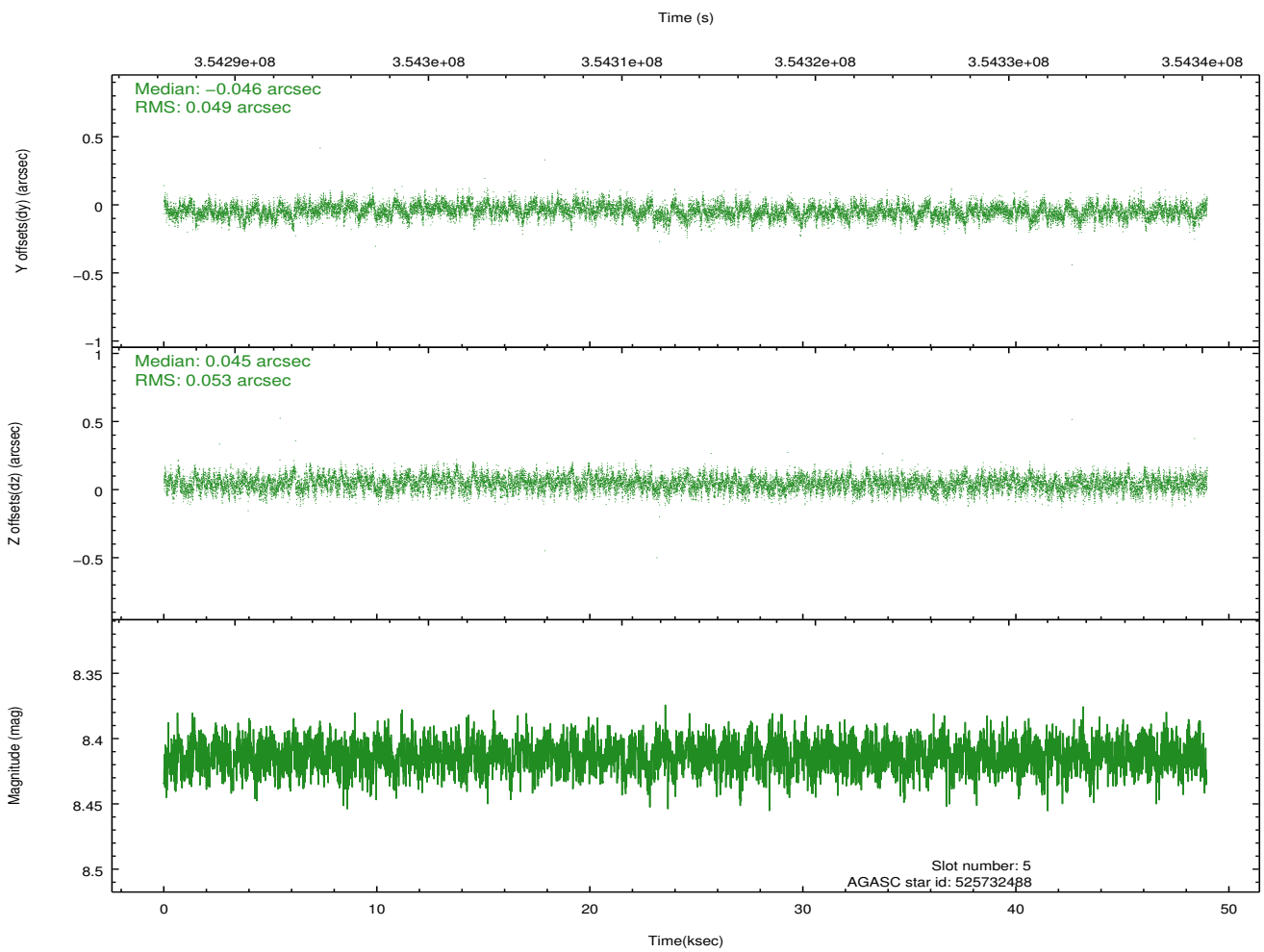
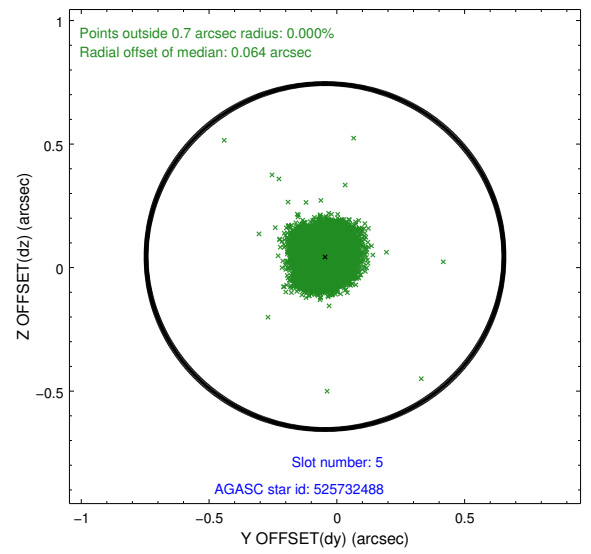
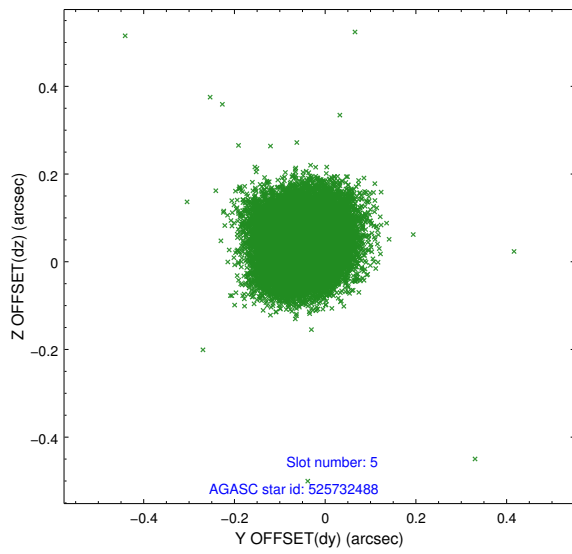
2.4.1 Slot 3



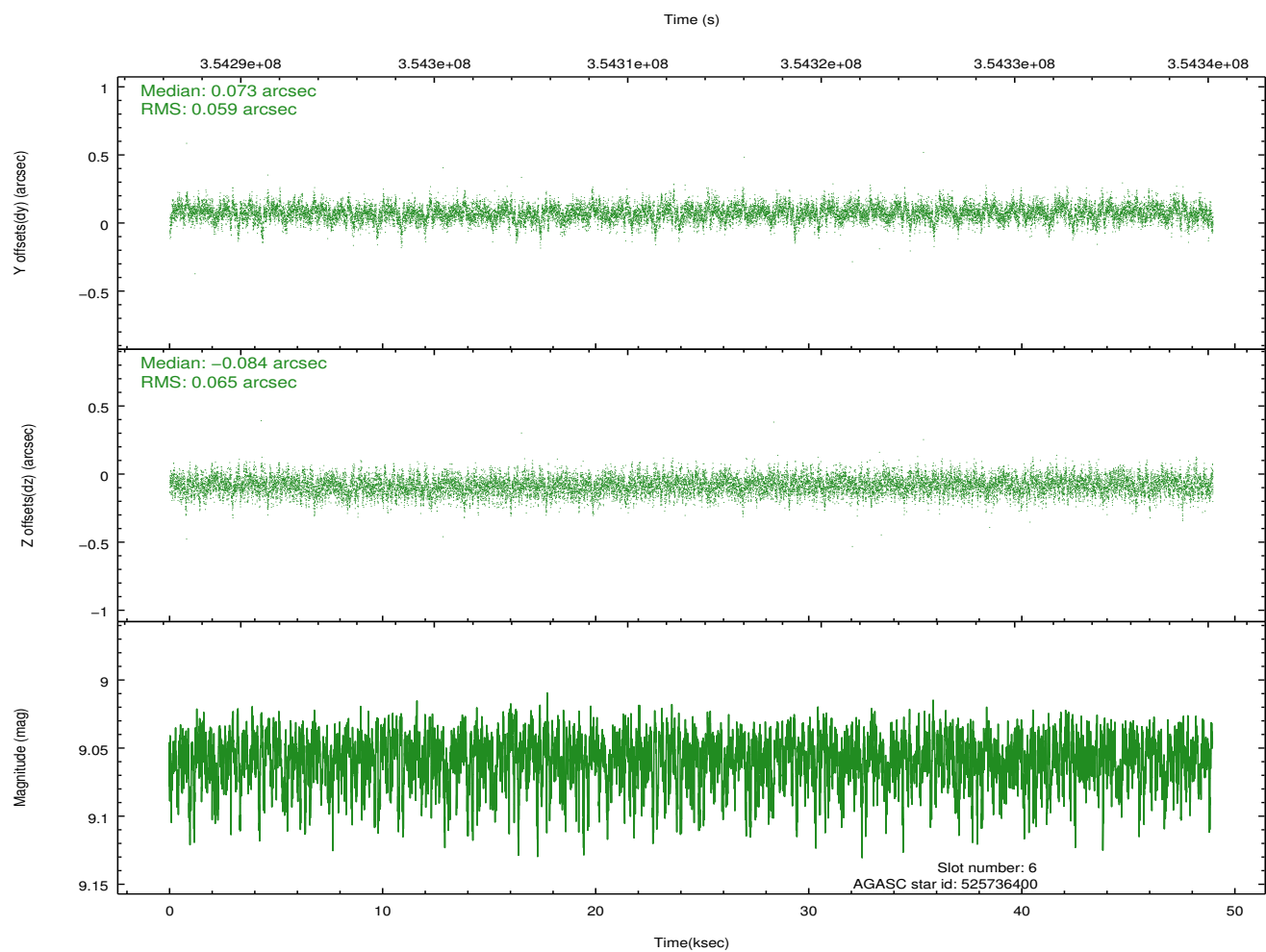
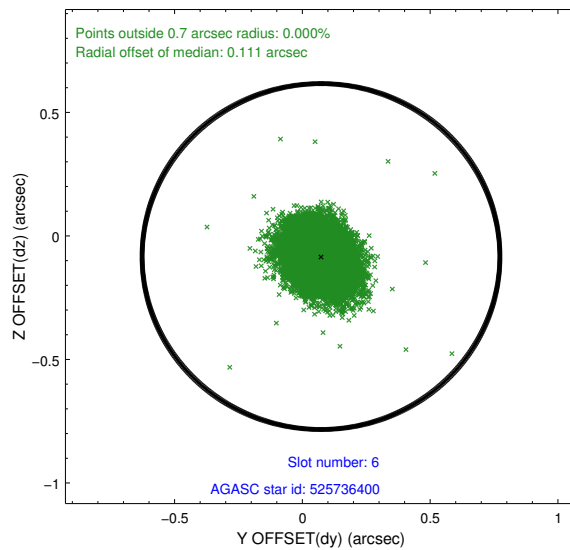
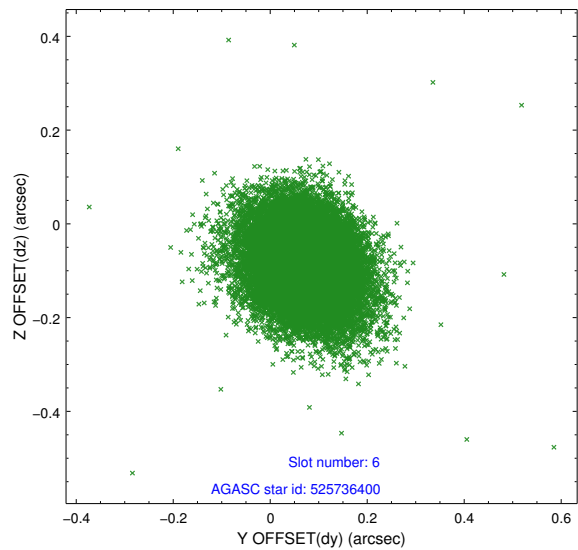
2.4.2 Slot 4



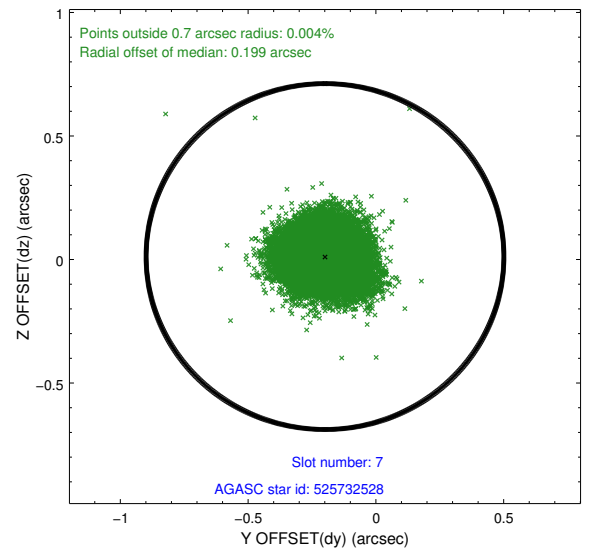
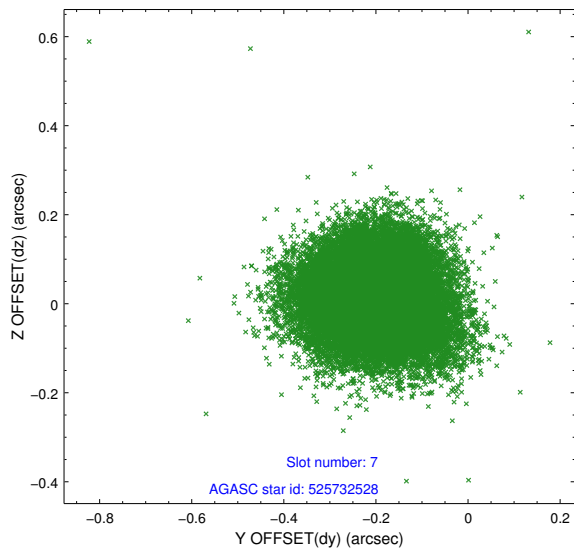
2.4.3 Slot 5



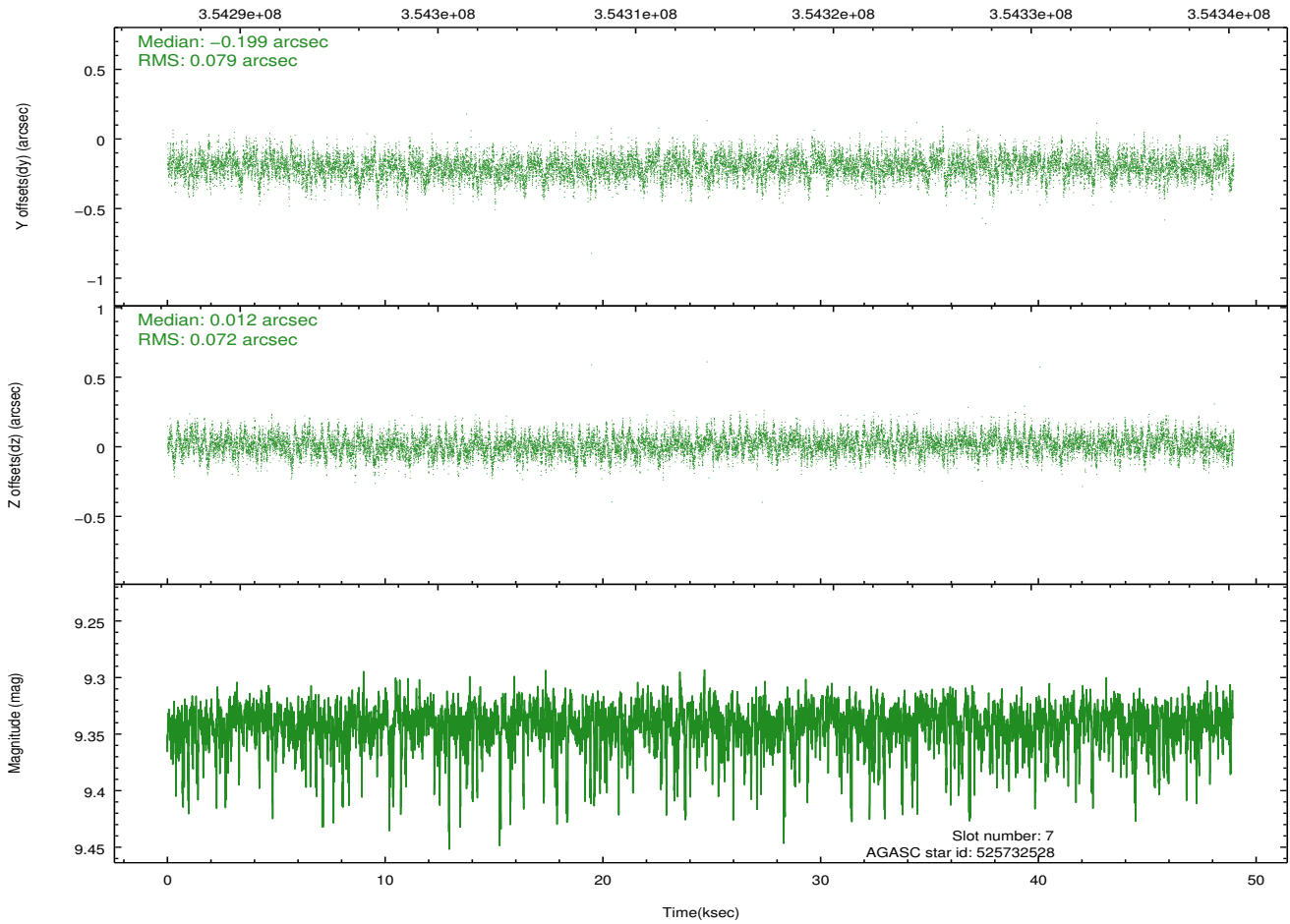
2.4.4 Slot 6



2.4.5 Slot 7

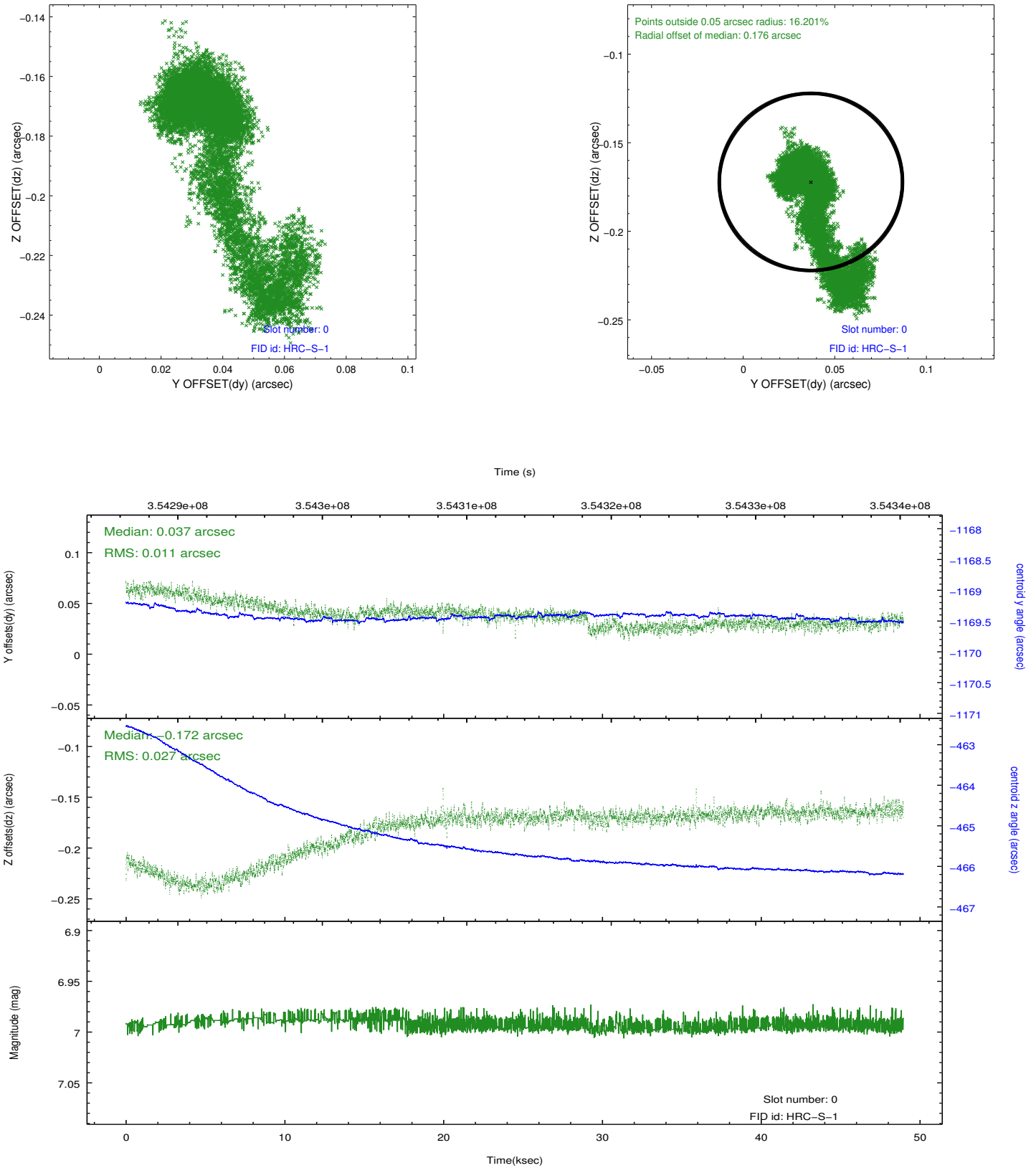


Time (s)

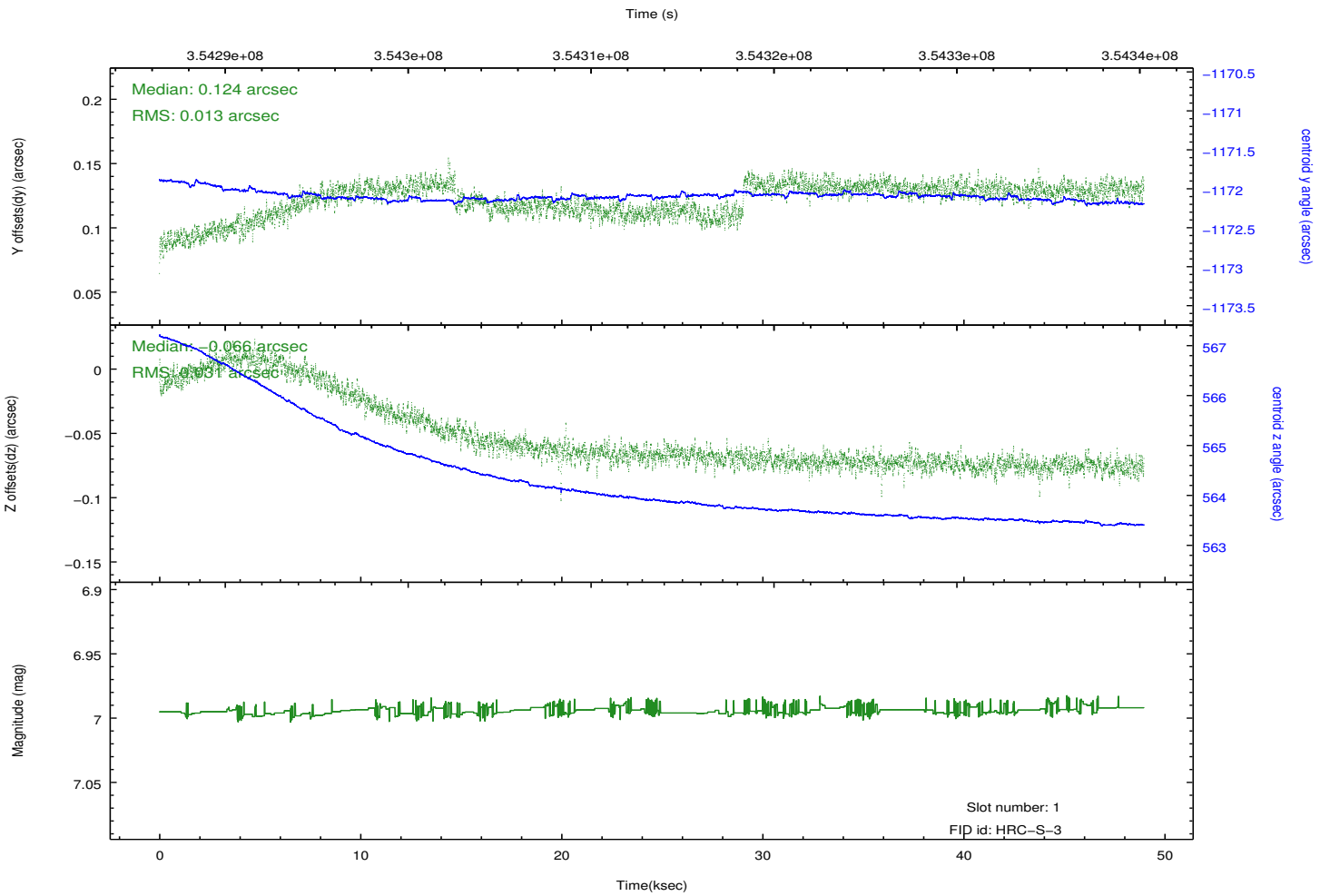
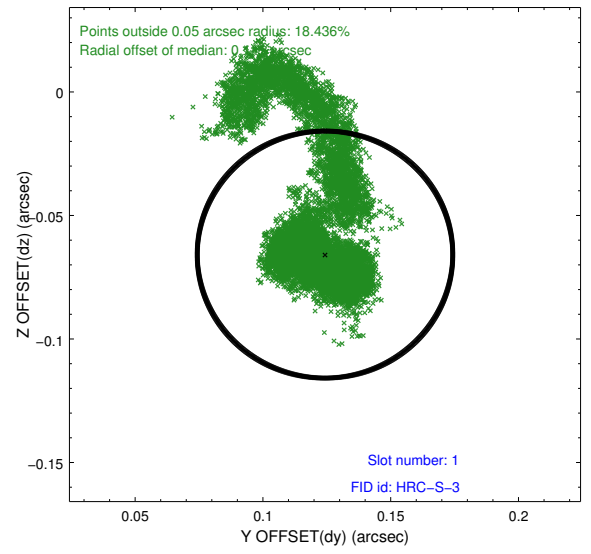
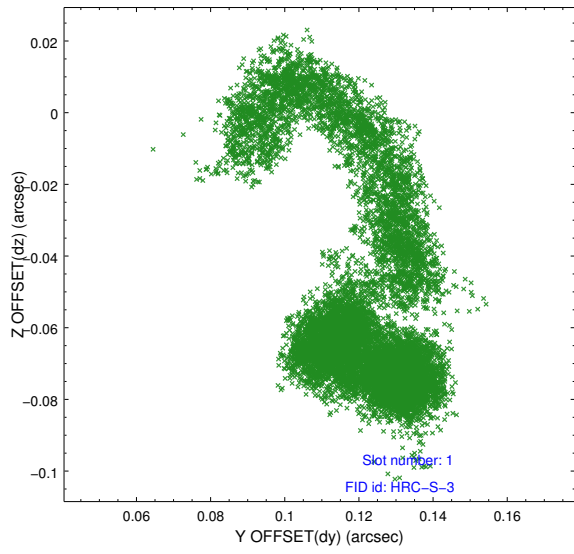


2.5 FID Slots

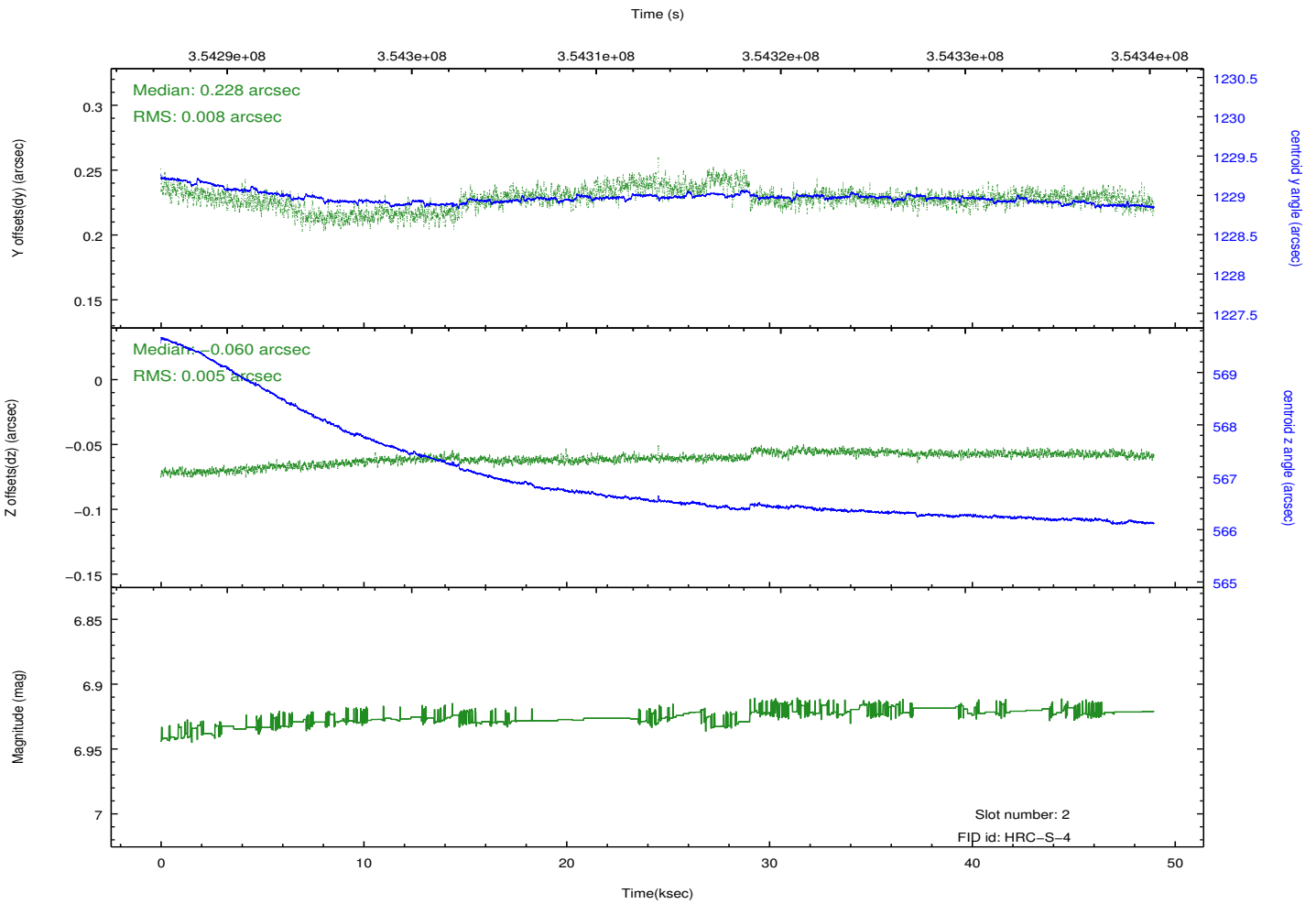
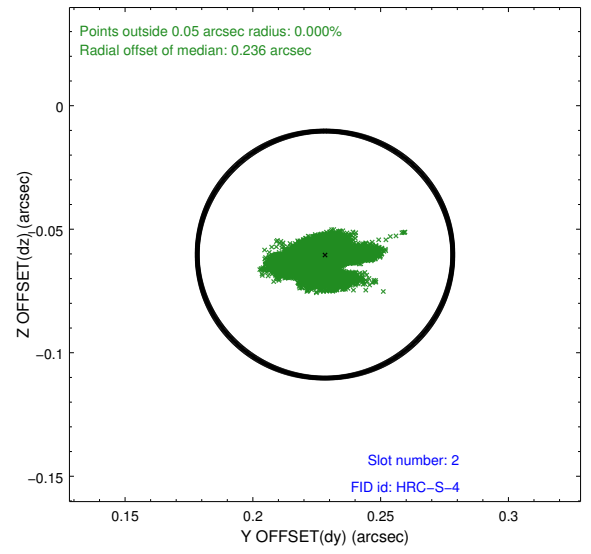
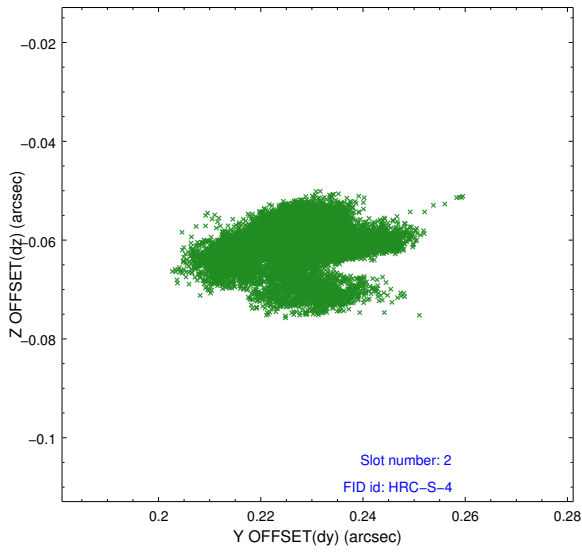
2.5.1 Slot 0



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) | 2013.07.01 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 48.9696336 |

A.2 Comments