

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12909 - L2 Version 2
Chandra X-Ray Center

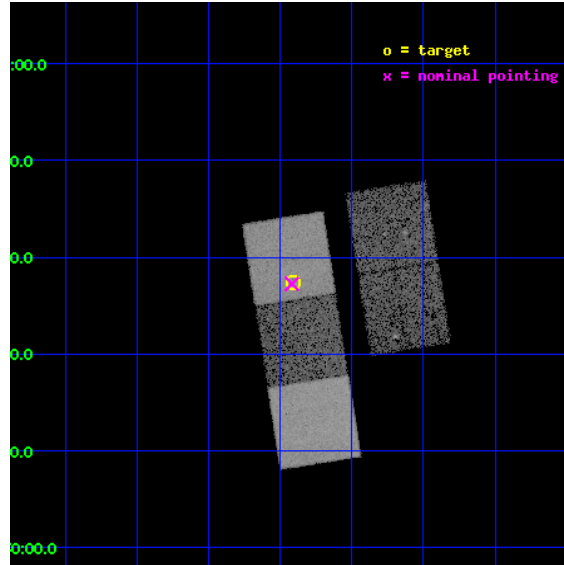
L2 Processing Date : Feb 22 2012

Contents

| | | |
|----------|-------------------------------|-----------|
| 1 | Front | 2 |
| 2 | OBI | 3 |
| 2.1 | OBI | 3 |
| 2.1.1 | Images | 3 |
| 2.1.2 | Bias | 3 |
| 2.1.3 | Parameters | 4 |
| 2.1.4 | Events | 4 |
| 2.2 | Compared Parameters | 5 |
| 2.3 | Aspect | 6 |
| 2.4 | Star Slots | 9 |
| 2.4.1 | Slot 3 | 9 |
| 2.4.2 | Slot 4 | 10 |
| 2.4.3 | Slot 5 | 11 |
| 2.4.4 | Slot 6 | 12 |
| 2.4.5 | Slot 7 | 13 |
| 2.5 | FID Slots | 14 |
| 2.5.1 | Slot 0 | 14 |
| 2.5.2 | Slot 1 | 15 |
| 2.5.3 | Slot 2 | 16 |
| A | Summary | 17 |
| A.1 | Status | 17 |
| A.2 | Comments | 17 |

1 Front

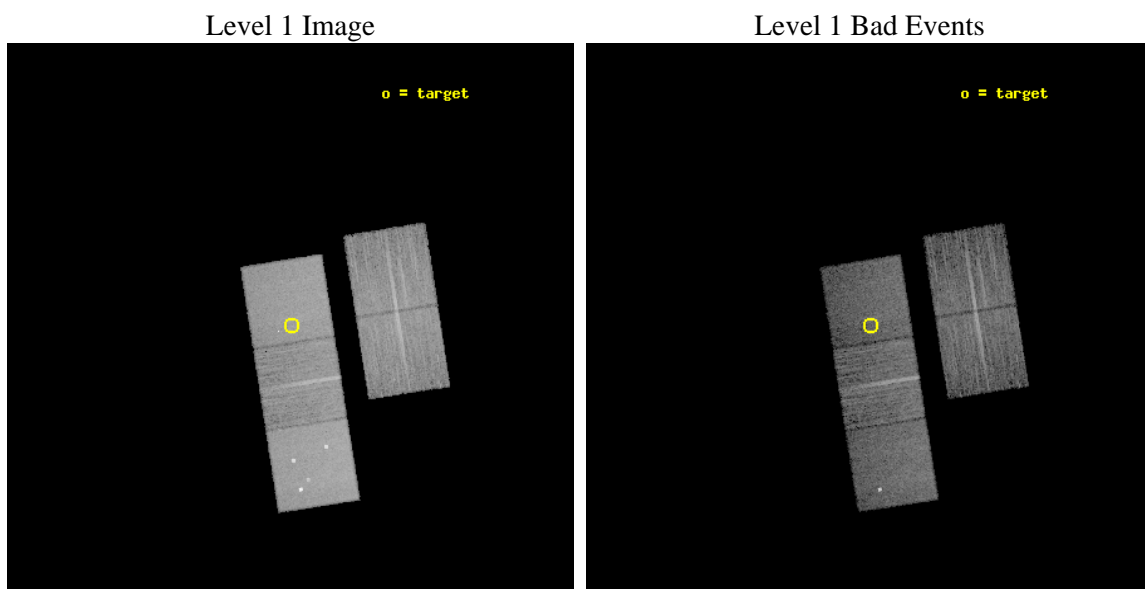
| | | |
|----------|---|---|
| seq_num | 801046 | Sequence number |
| obs_id | 12909 | Observation id |
| title | Abell 1882: A Proto-cluster at Low Redshift | Proposal title |
| observer | Professor Christopher Miller | Principal investigator |
| object | A1882b | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 213.602083 | Observer's specified target RA [deg] |
| dec_targ | -0.377194 | Observer's specified target Dec [deg] |
| ra_nom | 213.60436028989 | Nominal RA [deg] |
| dec_nom | -0.37920703979425 | Nominal Dec [deg] |
| roll_nom | 261.04767035729 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 13376.500102878 | Sum of GTIs [s] |
| livetime | 13201.726281397 | Livetime [s] |
| ontime2 | 13376.500102878 | Sum of GTIs [s] |
| ontime3 | 13376.500102878 | Sum of GTIs [s] |
| ontime5 | 13376.500102878 | Sum of GTIs [s] |
| ontime6 | 13376.500102878 | Sum of GTIs [s] |
| ontime7 | 13376.500102878 | Sum of GTIs [s] |
| l2events | 136171 | Number of level 2 events |



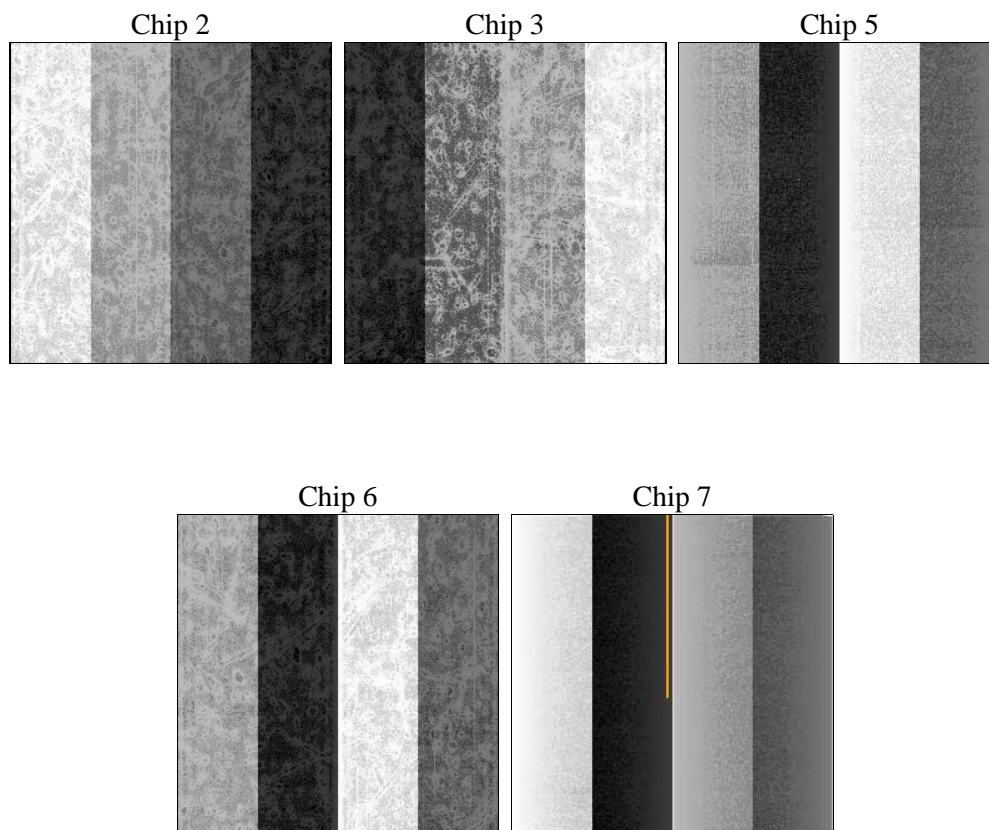
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 13333.333000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.3 | Processing system revision | ontime | 13376.500102878 | Sum of GTIs [s] |
| caldsver | 4.4.8 | | ontime2 | 13376.500102878 | Sum of GTIs [s] |
| date | 2012-02-22T06:54:12 | Date and time of file creation | ontime3 | 13376.500102878 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime5 | 13376.500102878 | Sum of GTIs [s] |
| | | | ontime6 | 13376.500102878 | Sum of GTIs [s] |
| | | | ontime7 | 13376.500102878 | Sum of GTIs [s] |
| | | | l1events | 505938 | Number of level 1 events |

2.1.4 Events

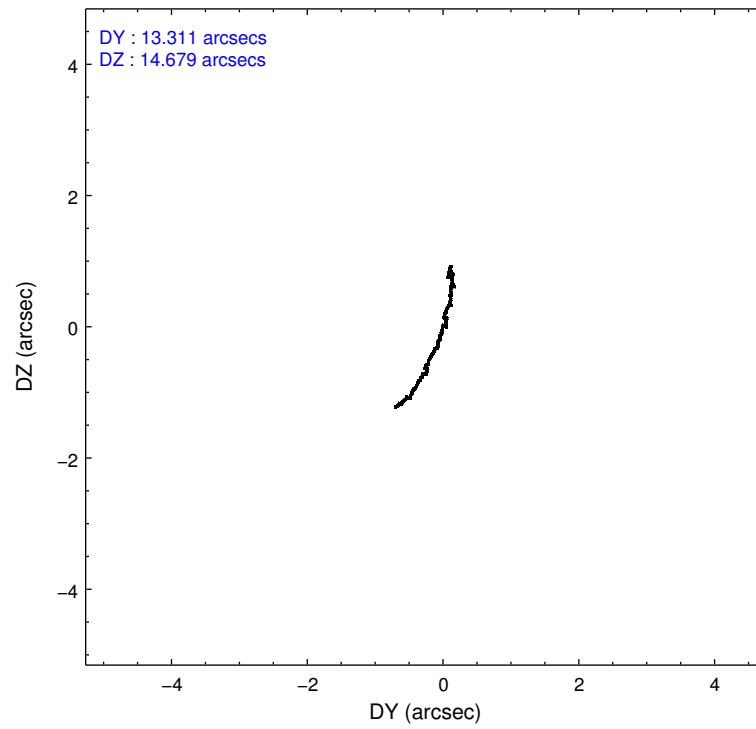
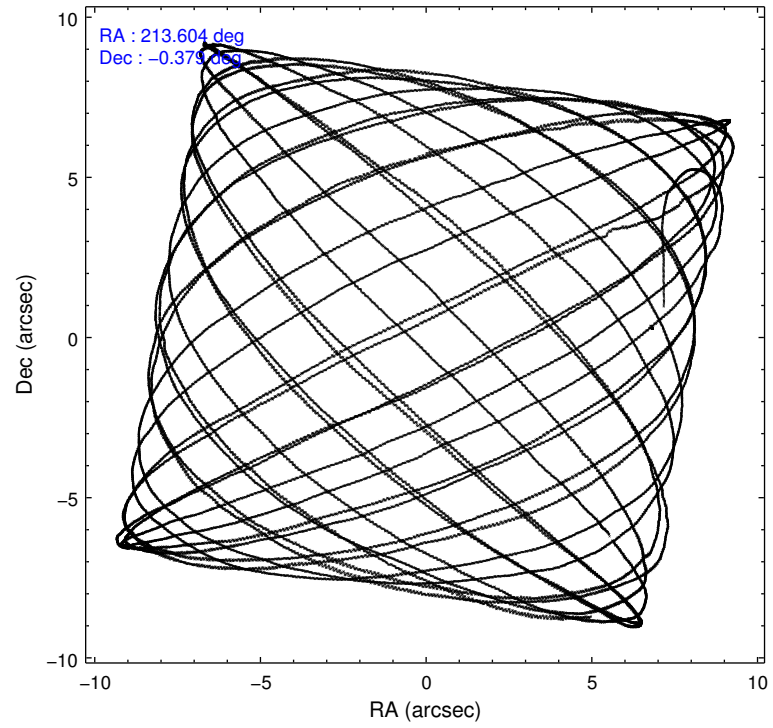
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 |
|-----------------|-------|-------|--------|-------|--------|
| level 1 events | 83464 | 81096 | 142293 | 87744 | 111341 |
| rejected events | 74252 | 72095 | 71451 | 77563 | 60649 |
| rejected % | 88% | 88% | 50% | 88% | 54% |

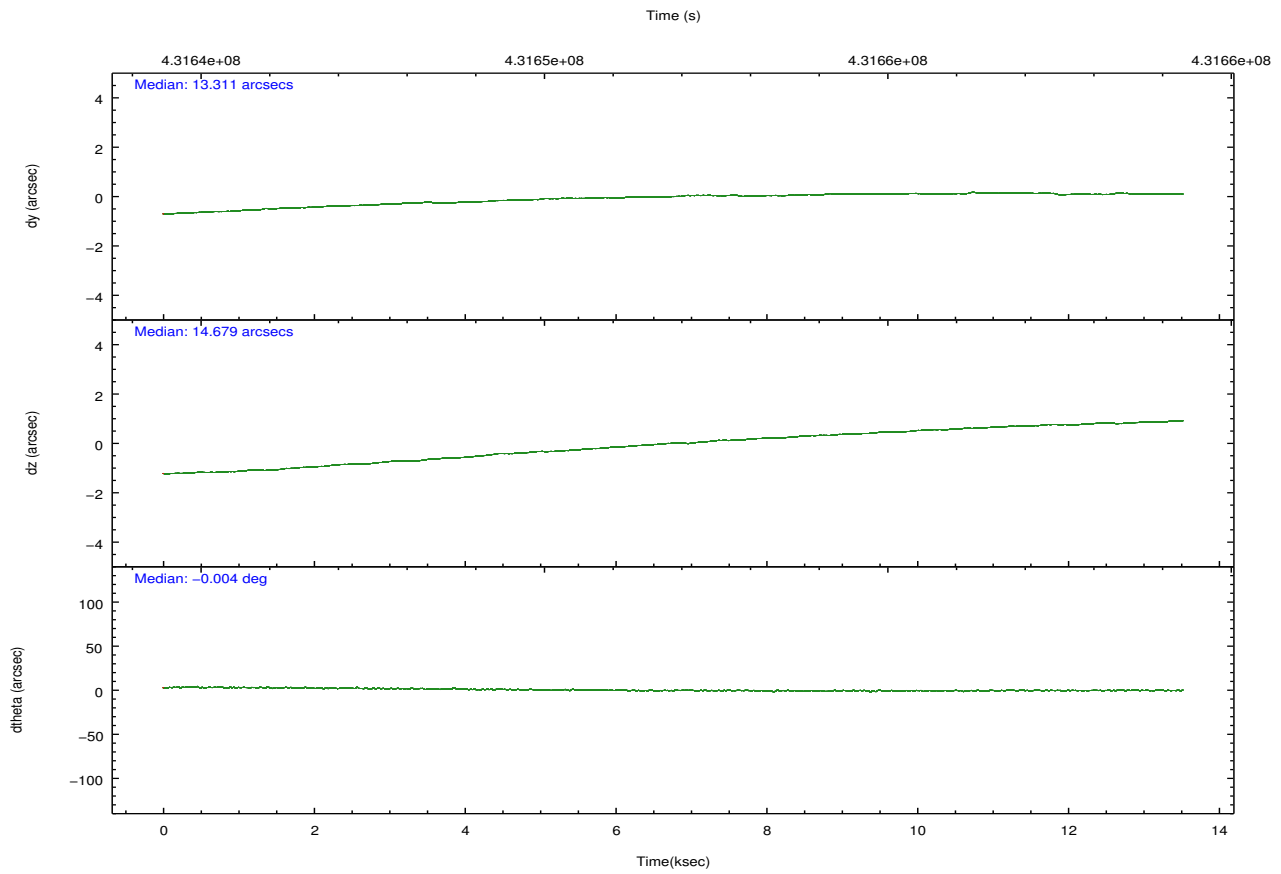
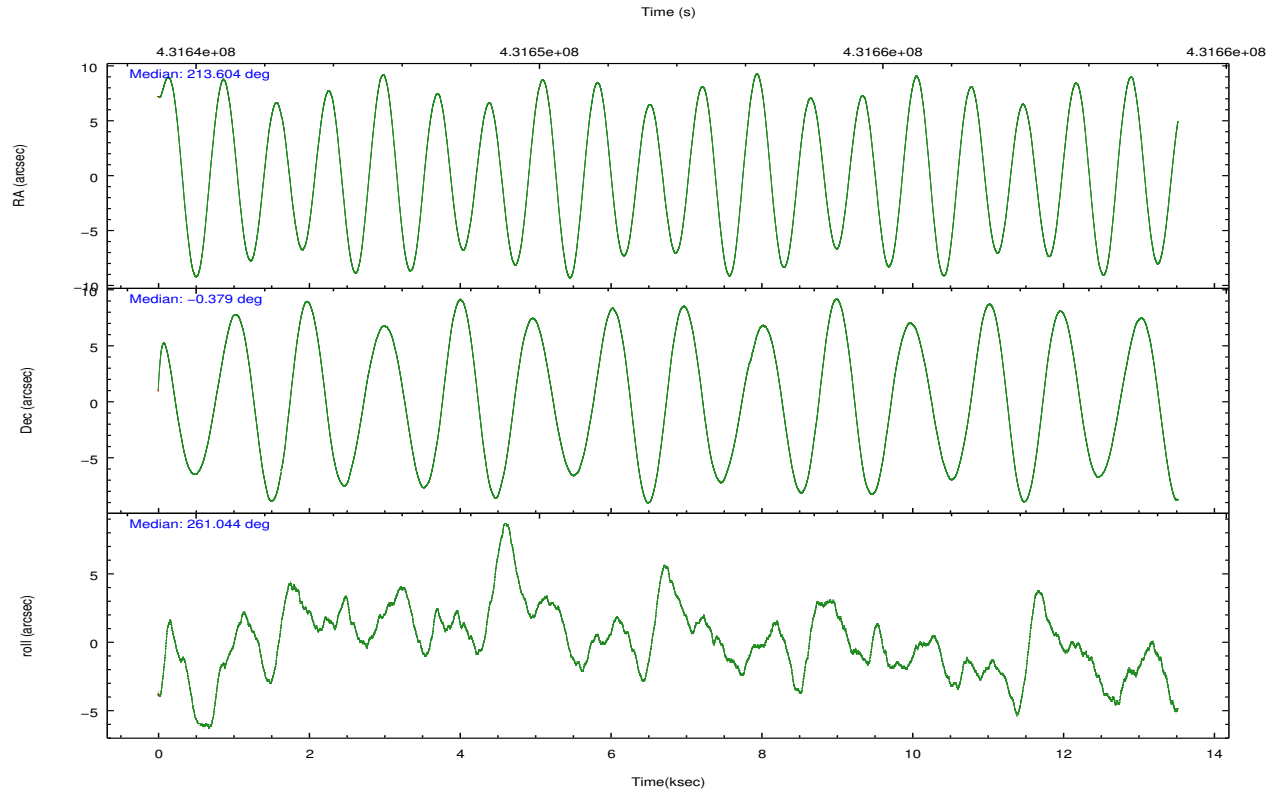
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 |
|----------------|-------|-------|-------|-------|-------|
| grade 0 events | 3297 | 3195 | 8508 | 3633 | 5044 |
| | 3% | 3% | 5% | 4% | 4% |
| grade 1 events | 36 | 46 | 243 | 35 | 124 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 2323 | 1929 | 22498 | 2318 | 10446 |
| | 2% | 2% | 15% | 2% | 9% |
| grade 3 events | 901 | 952 | 2484 | 1019 | 4444 |
| | 1% | 1% | 1% | 1% | 3% |
| grade 4 events | 978 | 1023 | 2364 | 981 | 4409 |
| | 1% | 1% | 1% | 1% | 3% |
| grade 5 events | 3325 | 4101 | 11227 | 4042 | 11511 |
| | 3% | 5% | 7% | 4% | 10% |
| grade 6 events | 1714 | 1905 | 35006 | 2233 | 26359 |
| | 2% | 2% | 24% | 2% | 23% |
| grade 7 events | 70890 | 67945 | 59963 | 73483 | 49004 |
| | 84% | 83% | 42% | 83% | 44% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-23567 | ACIS-23567 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | VFAINT | VFAINT | CCD I0 on | N | N |
| Observation mode | POINTING | POINTING | CCD I1 on | N | N |
| [deg] Pointing RA | 213.594181 | 213.6043602898896 | CCD I2 on | O1 | Y |
| [deg] Pointing Dec | -0.353811 | -0.3792070397942481 | CCD I3 on | Y | Y |
| [deg] Pointing Roll | 260.890987 | 261.0476703572876 | CCD S0 on | N | N |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | CCD S1 on | Y | Y |
| [mm] SIM defocus | 0 | 0.001444936568705701 | CCD S2 on | Y | Y |
| [mm] SIM translation stage pos | -190.132523 | -190.1400660498719 | CCD S3 on | Y | Y |
| [mm] SIM translation stage offset | 0 | 0.00754346686406393 | CCD S4 on | N | N |
| [s] Observation start time (MET) | 431645303.184000 | 431644335.40116 | CCD S5 on | N | N |
| Observation start date | 2011-09-05T21:27:17 | 2011-09-05T21:12:15 | Number of optional ACIS chips dropped | 0 | 0 |
| [s] Observation end time (MET) | 431658636.184000 | 431659545.88946 | On-chip summing requested | N | N |
| Observation end date | 2011-09-06T01:09:30 | 2011-09-06T01:25:45 | Subarray requested | NONE | NONE |
| Read mode | TIMED | TIMED | Alternating exposures requested | N | N |
| | | | [s] Primary exposure time | 0.000000 | 3.1 |

2.3 Aspect



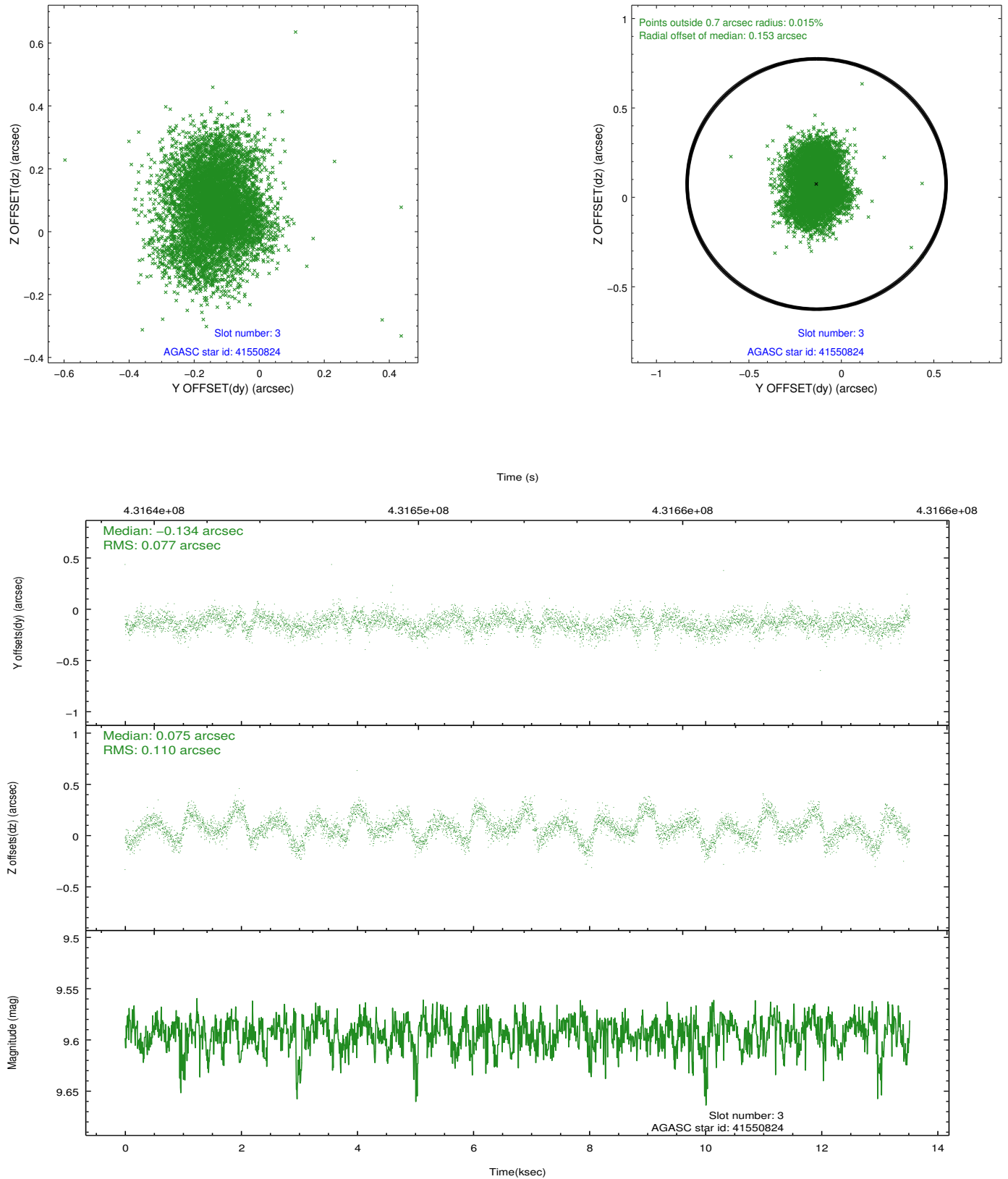


Slot Statistics

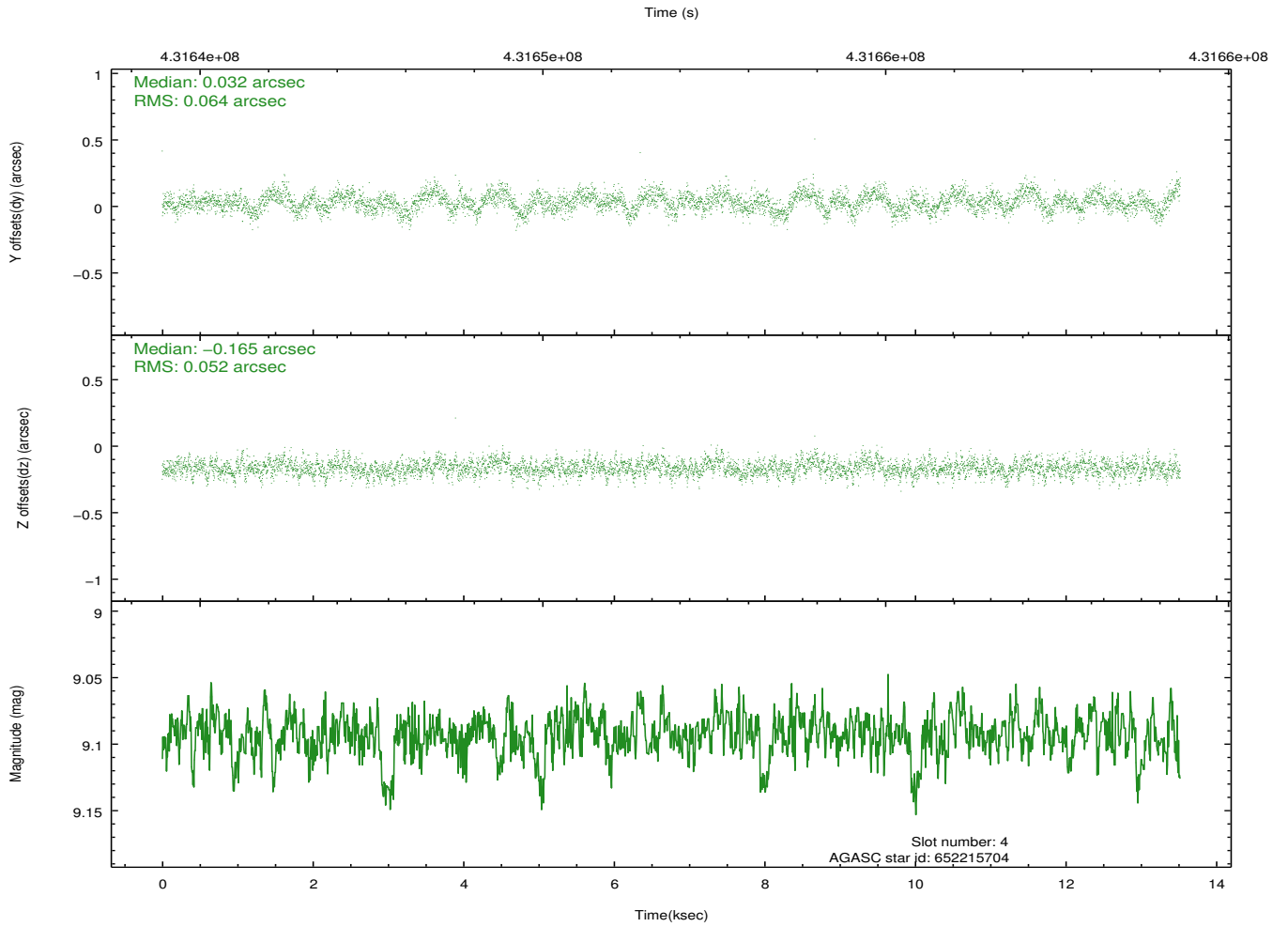
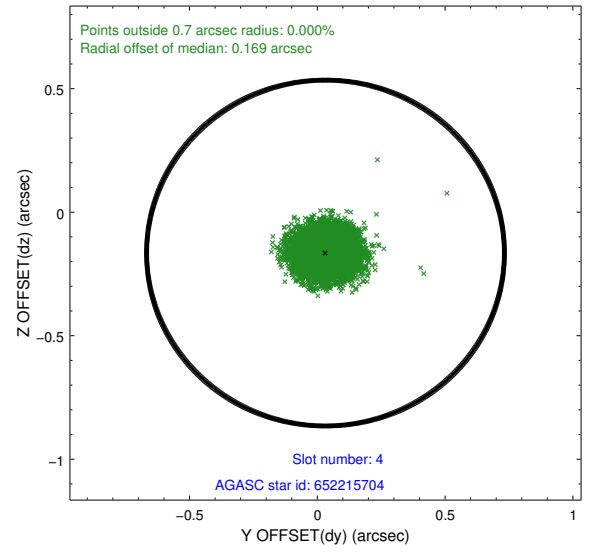
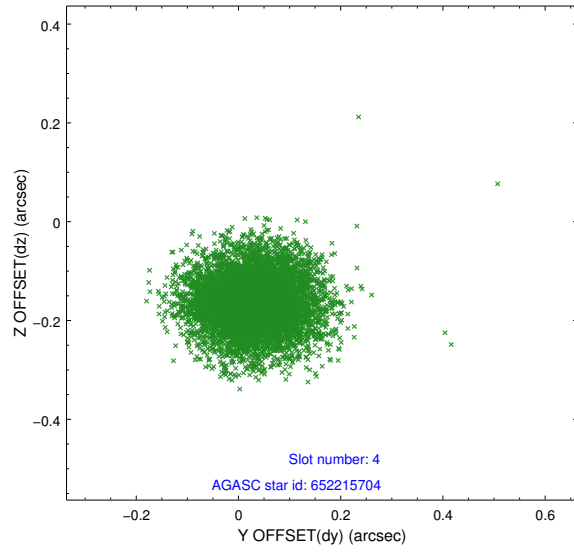
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|-------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-2 | 6.89 | 3298 | -0.068 | -0.034 | 0.018 | 0.034 | 0.000000 | 0.000000 | -766.18 | -1736.01 |
| 1 | FID | ACIS-S-4 | 6.97 | 3299 | 0.239 | 0.041 | 0.021 | 0.050 | 0.000000 | 0.000000 | 2147.22 | 172.20 |
| 2 | FID | ACIS-S-5 | 7.01 | 3299 | -0.201 | 0.000 | 0.016 | 0.027 | 0.000000 | 0.000000 | -1818.72 | 166.21 |
| 3 | GUIDE | 41550824 | 9.59 | 6590 | -0.134 | 0.075 | 0.142 | 0.235 | 213.709216 | 0.254022 | -2225.97 | 62.04 |
| 4 | GUIDE | 652215704 | 9.09 | 6595 | 0.032 | -0.165 | 0.088 | 0.142 | 213.594661 | -0.601169 | 878.68 | 142.60 |
| 5 | GUIDE | 652223856 | 9.10 | 6597 | -0.069 | 0.001 | 0.129 | 0.206 | 214.256332 | -0.079315 | -1351.57 | 2198.24 |
| 6 | GUIDE | 652224488 | 6.10 | 6597 | 0.086 | 0.134 | 0.104 | 0.156 | 213.419957 | -0.845464 | 1848.13 | -335.67 |
| 7 | GUIDE | 652223976 | 10.36 | 6536 | 0.087 | -0.014 | 0.298 | 0.488 | 214.287184 | -0.125851 | -1204.56 | 2333.42 |

2.4 Star Slots

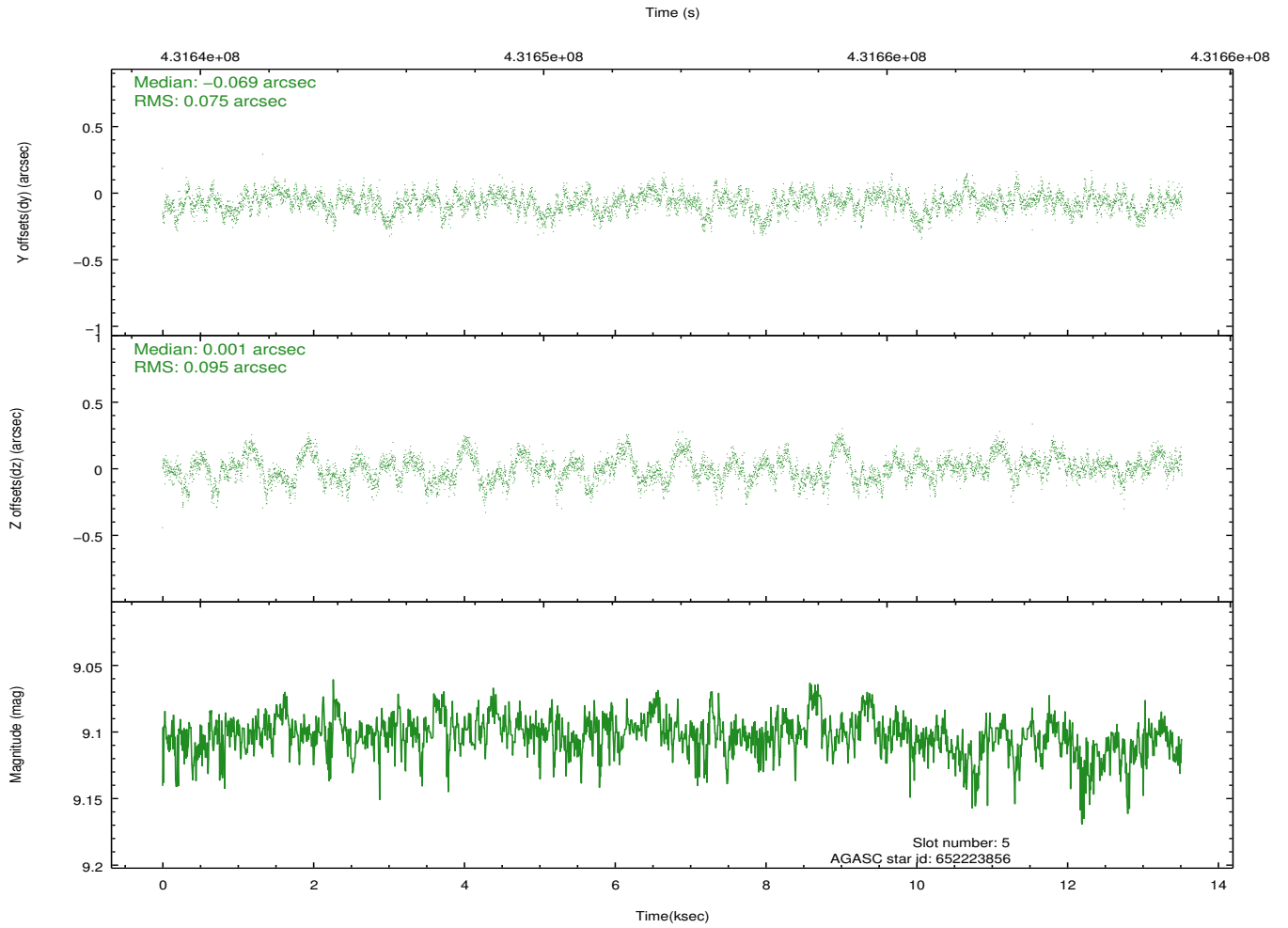
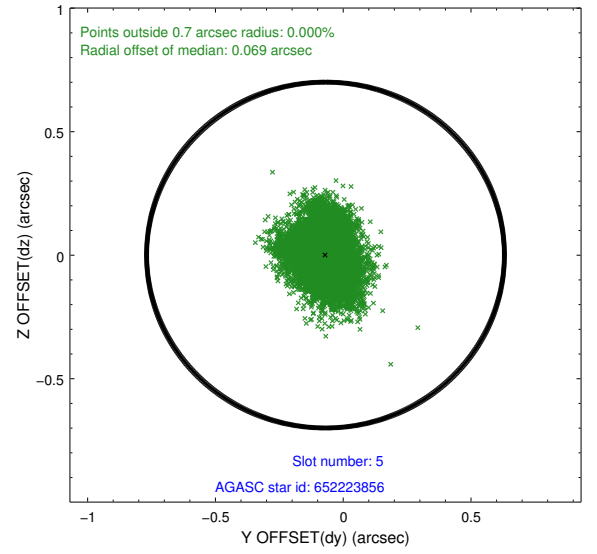
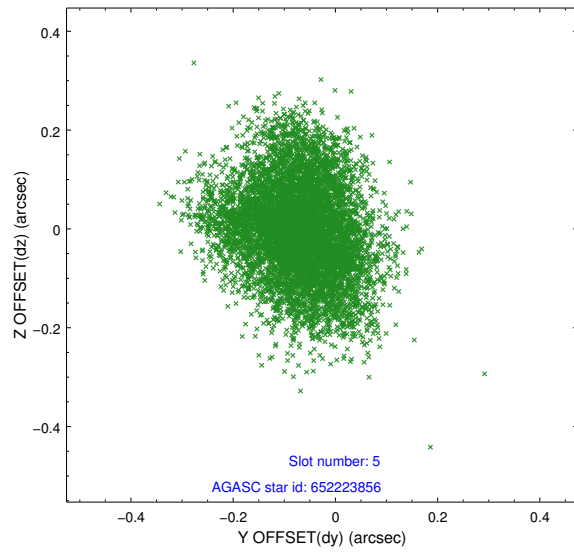
2.4.1 Slot 3



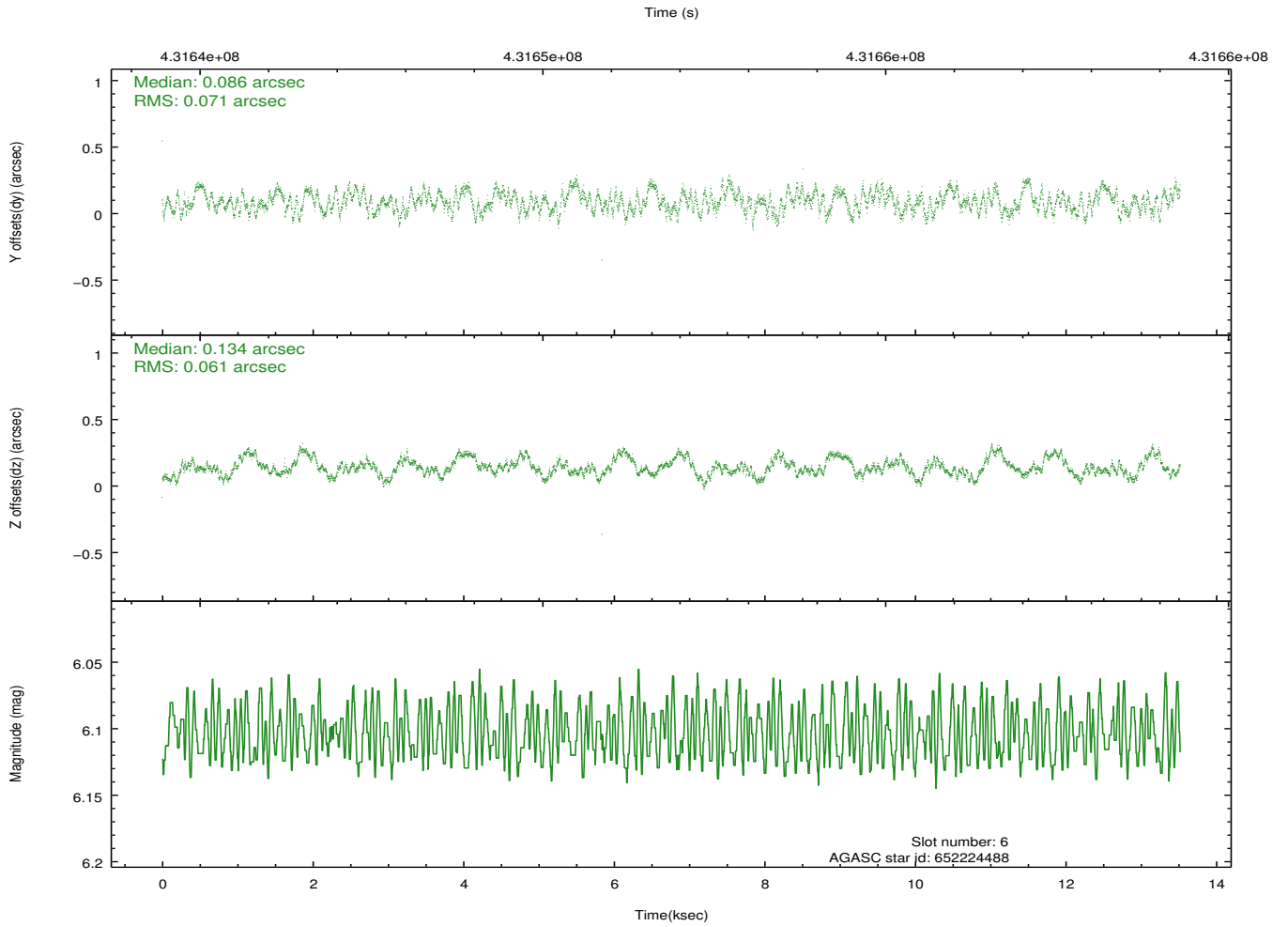
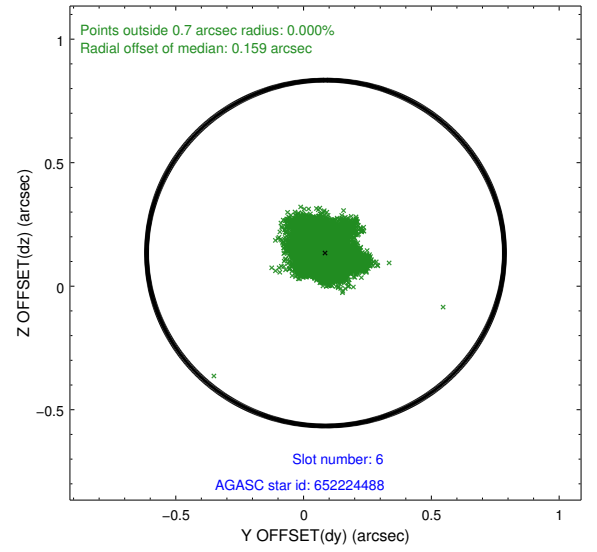
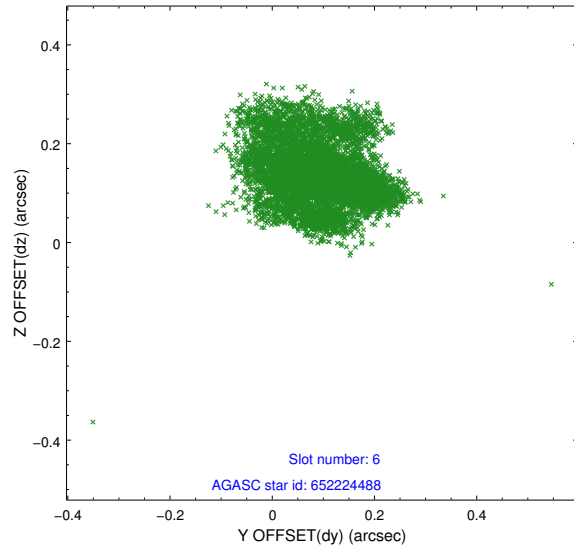
2.4.2 Slot 4



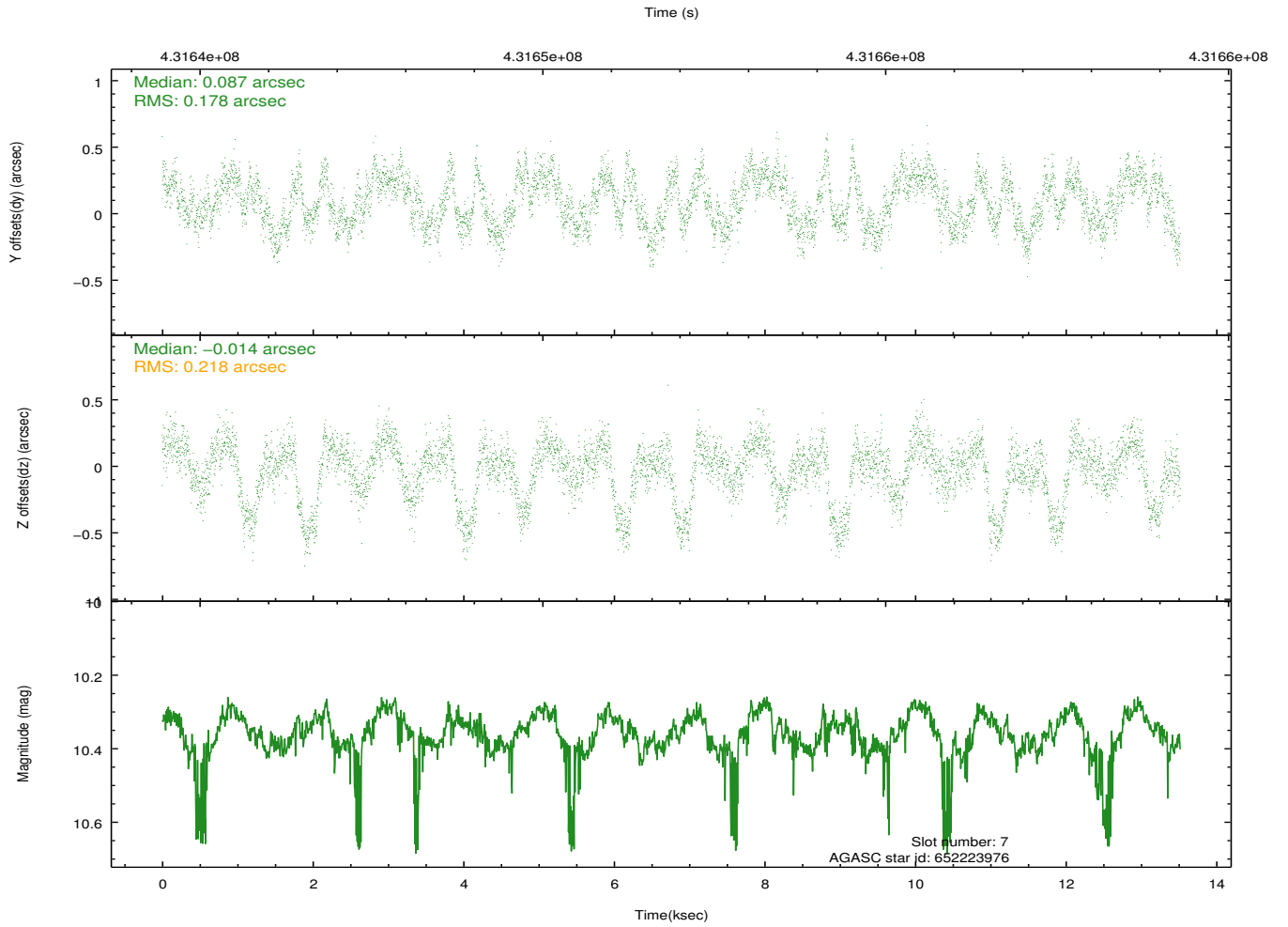
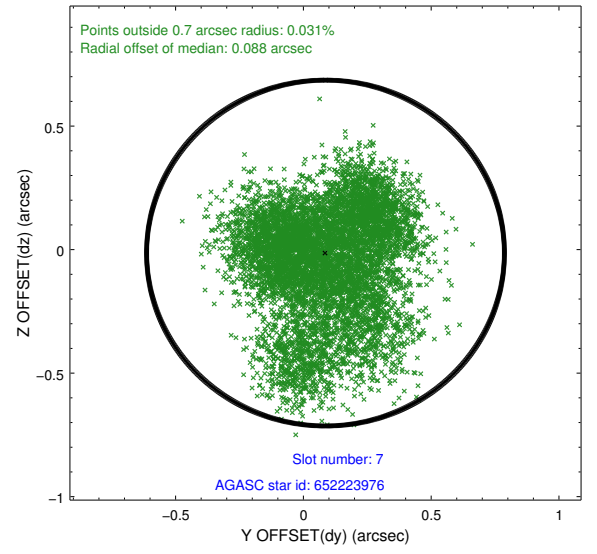
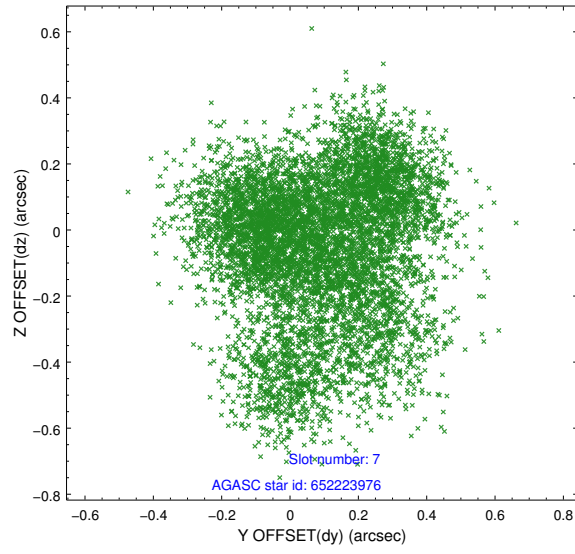
2.4.3 Slot 5



2.4.4 Slot 6

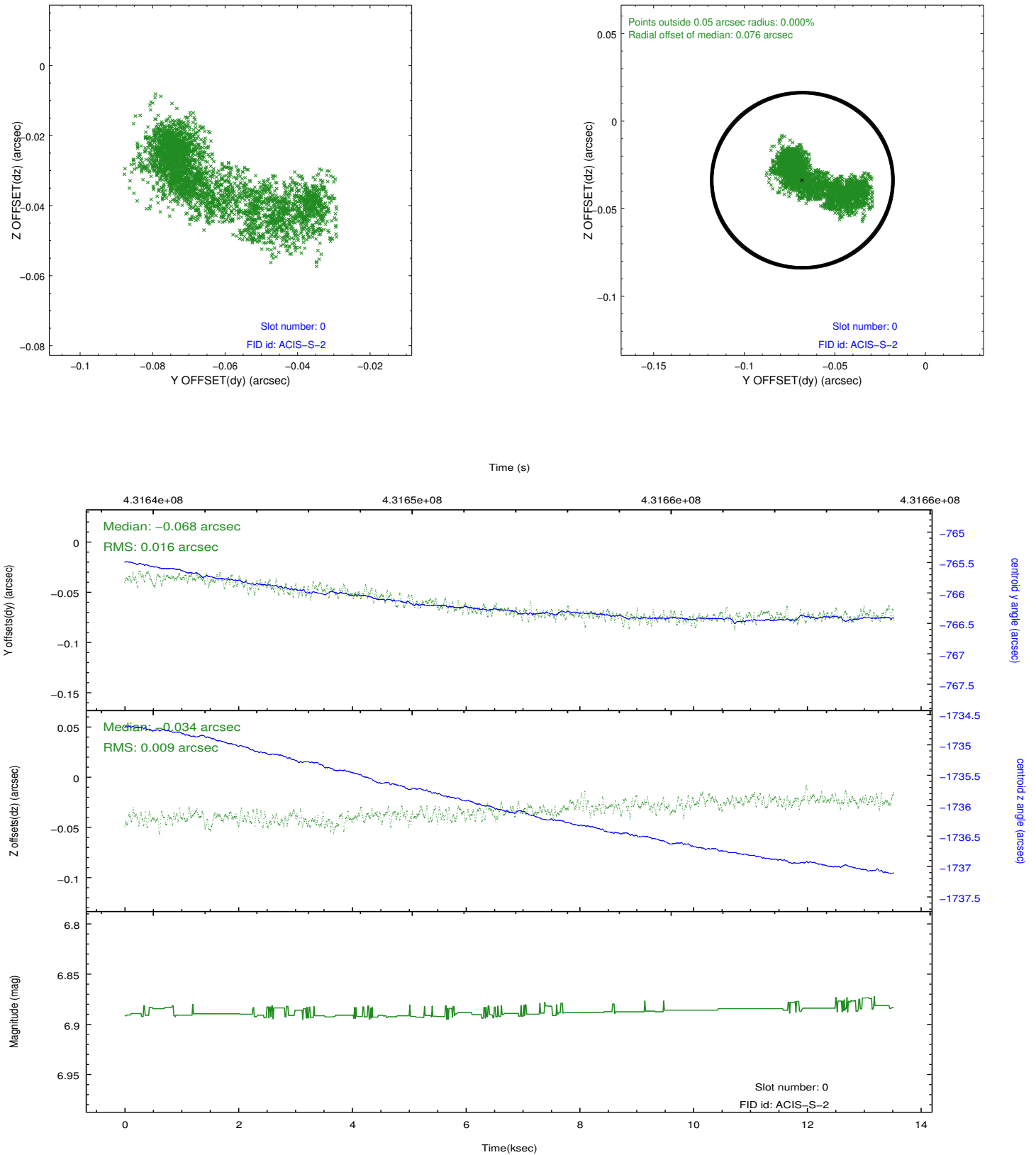


2.4.5 Slot 7

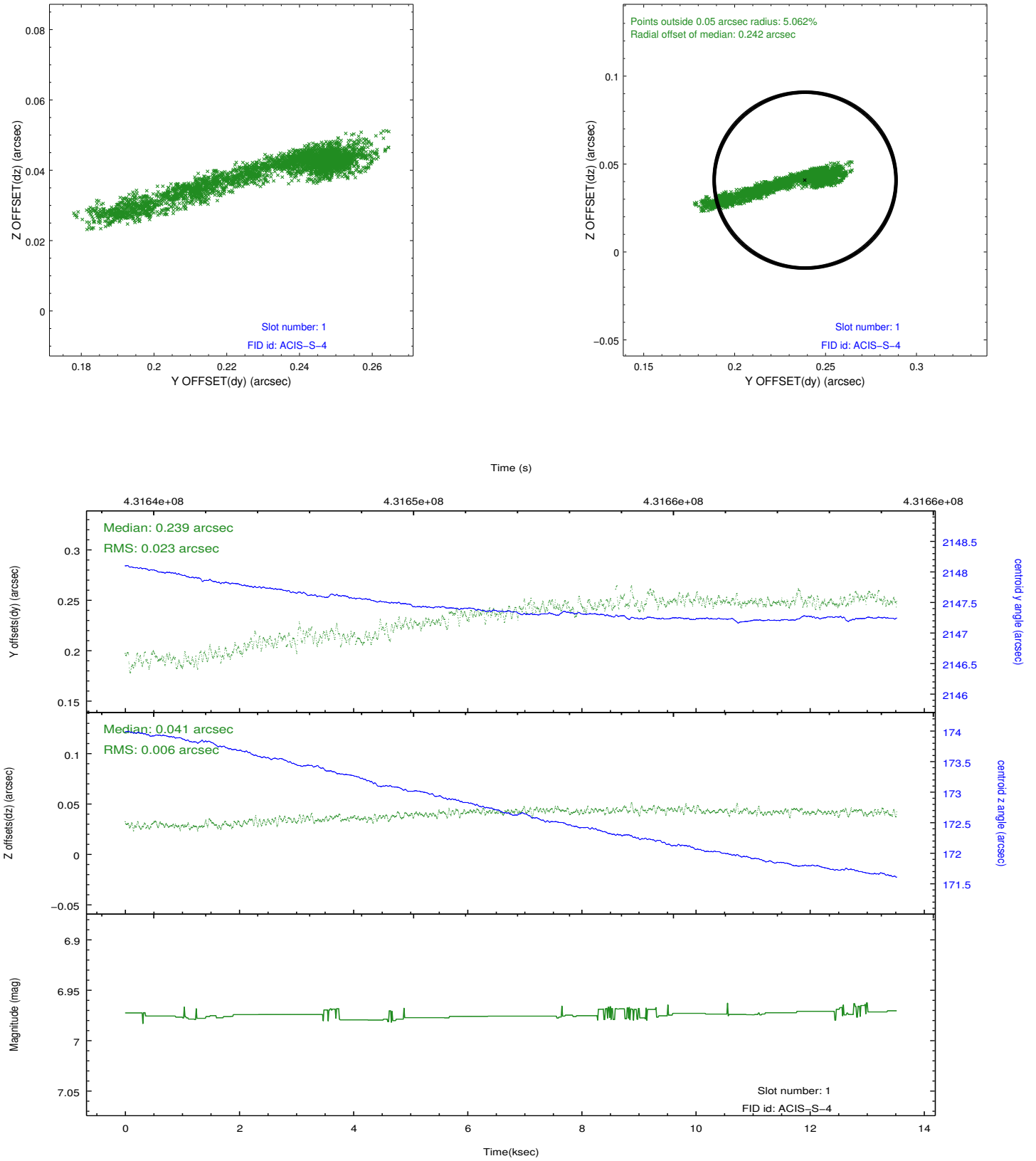


2.5 FID Slots

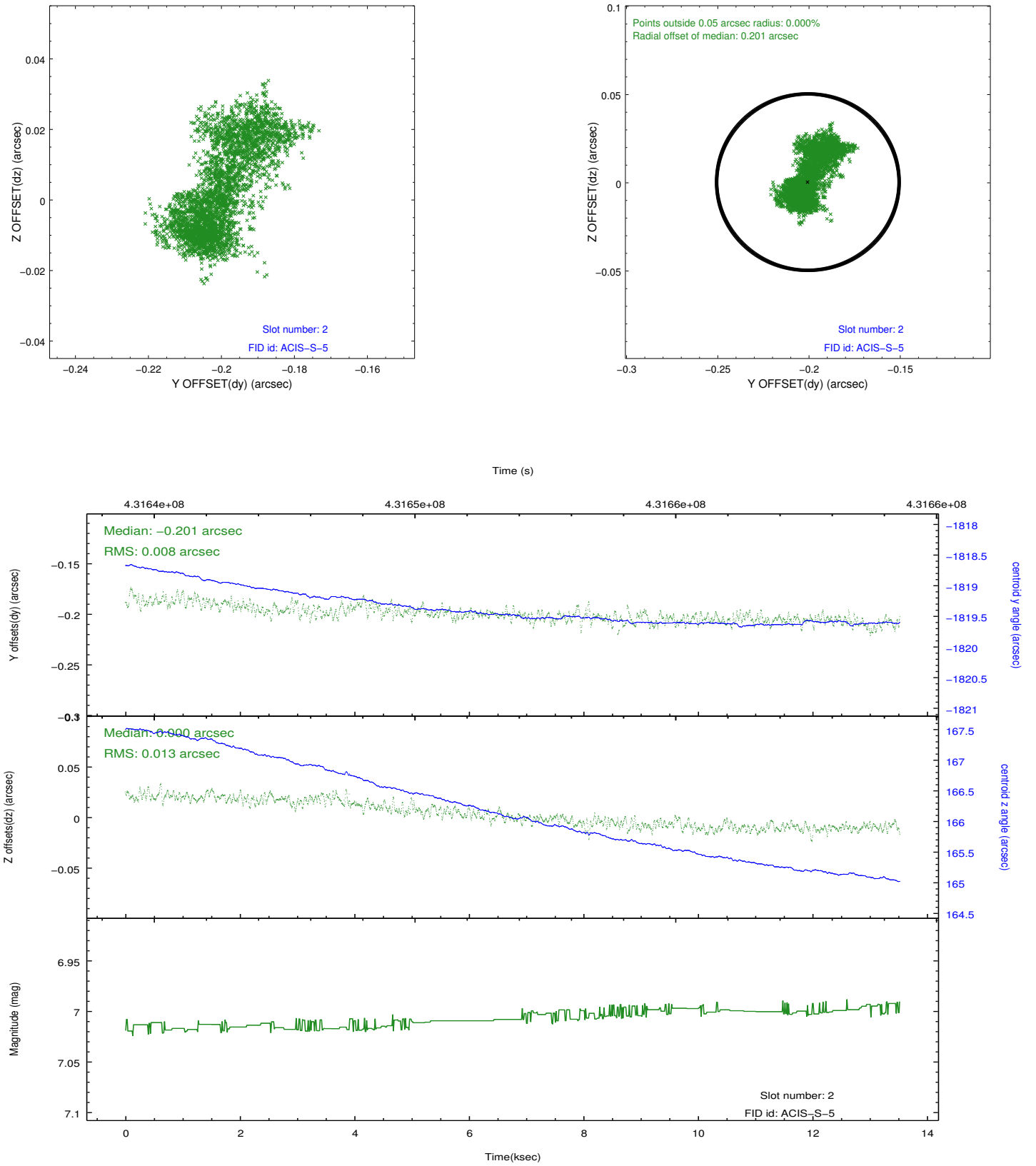
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|-----------------|
| V&V Scientist | Jen Lauer |
| V&V Date (YYYY-MM-DD) | 2012.02.22 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 13.376500102878 |

A.2 Comments