

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5630 - L2 Version 4
Chandra X-Ray Center

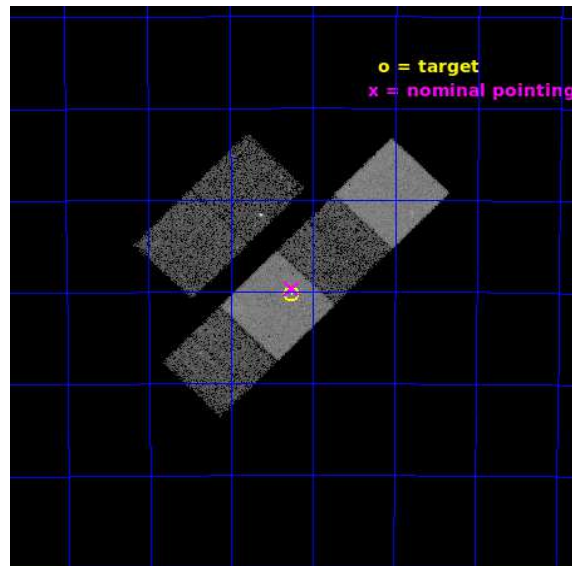
L2 Processing Date : Oct 6 2020

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1 Front

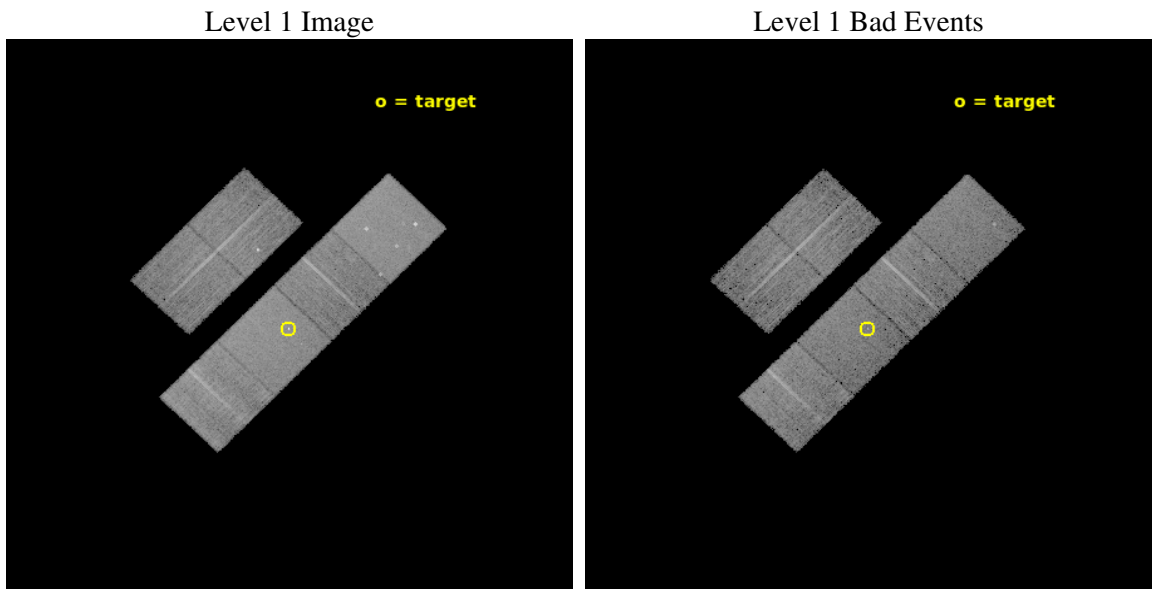
| | | |
|----------|---|---|
| seq_num | 701053 | Sequence number |
| obs_id | 5630 | Observation id |
| title | THE X-RAY PROPERTIES OF HIGHER REDSHIFT RED AGN | Proposal title |
| observer | Belinda Wilkes | Principal investigator |
| object | 2MASS J19491596-5510125 | Source name |
| dtycycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 297.316667 | Observer's specified target RA [deg] |
| dec_targ | -55.170167 | Observer's specified target Dec [deg] |
| ra_nom | 297.31371837626 | Nominal RA [deg] |
| dec_nom | -55.161392231225 | Nominal Dec [deg] |
| roll_nom | 134.3903742085 | Nominal Roll [deg] |
| revision | 4 | Processing version of data |
| ontime | 8958.5536945462 | Sum of GTIs [s] |
| livetime | 8845.1150934725 | Livetime [s] |
| ontime2 | 8958.5947345495 | Sum of GTIs [s] |
| ontime3 | 8958.4305745363 | Sum of GTIs [s] |
| ontime5 | 8958.5126545429 | Sum of GTIs [s] |
| ontime6 | 8958.4716145396 | Sum of GTIs [s] |
| ontime7 | 8958.5536945462 | Sum of GTIs [s] |
| ontime8 | 8958.3895345628 | Sum of GTIs [s] |
| l2events | 110624 | Number of level 2 events |



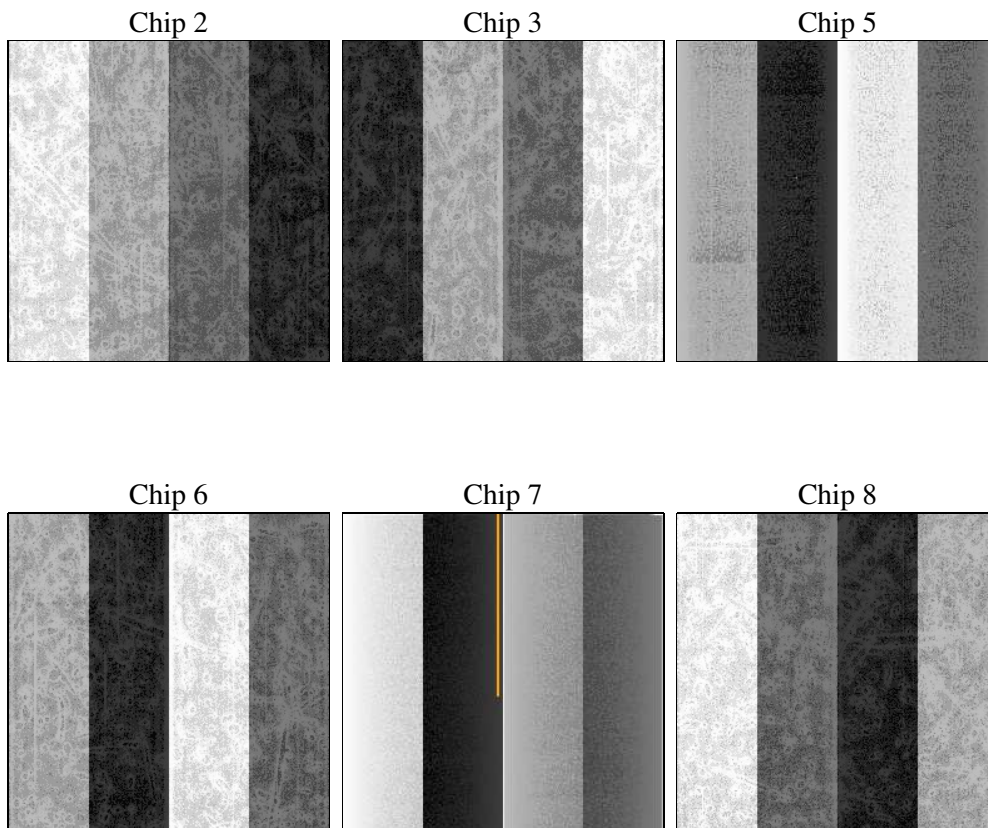
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 9000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10.9.1 | Processing system revision | ontime | 8958.5536945462 | Sum of GTIs [s] |
| caldbver | 4.9.2 | | ontime2 | 8958.5947345495 | Sum of GTIs [s] |
| date | 2020-10-06T21:27:13 | Date and time of file creation | ontime3 | 8958.4305745363 | Sum of GTIs [s] |
| revision | 4 | Processing version of data | ontime5 | 8958.5126545429 | Sum of GTIs [s] |
| | | | ontime6 | 8958.4716145396 | Sum of GTIs [s] |
| | | | ontime7 | 8958.5536945462 | Sum of GTIs [s] |
| | | | ontime8 | 8958.3895345628 | Sum of GTIs [s] |
| | | | l1events | 468173 | Number of level 1 events |

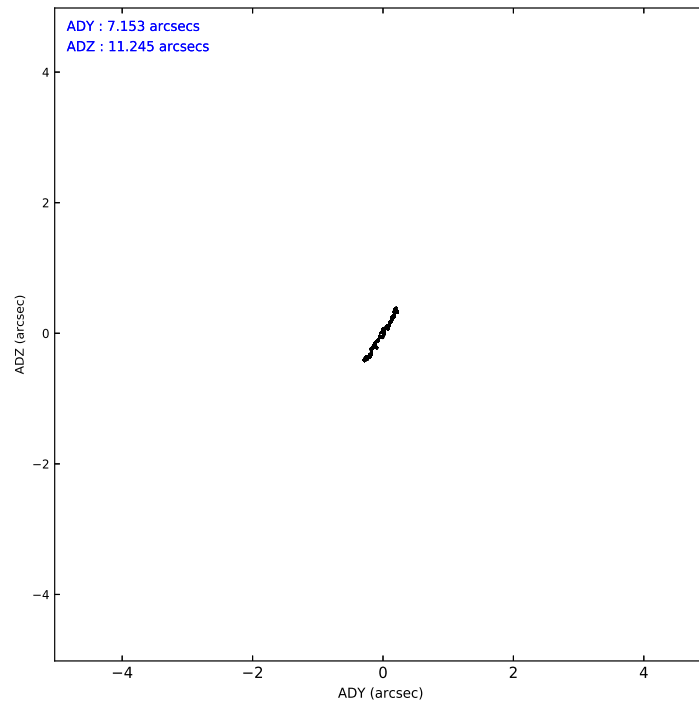
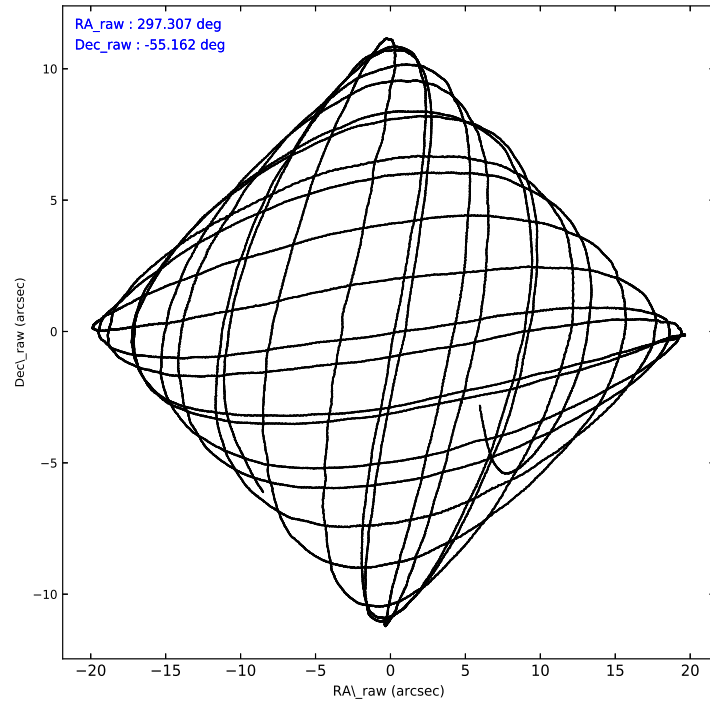
2.1.4 Events

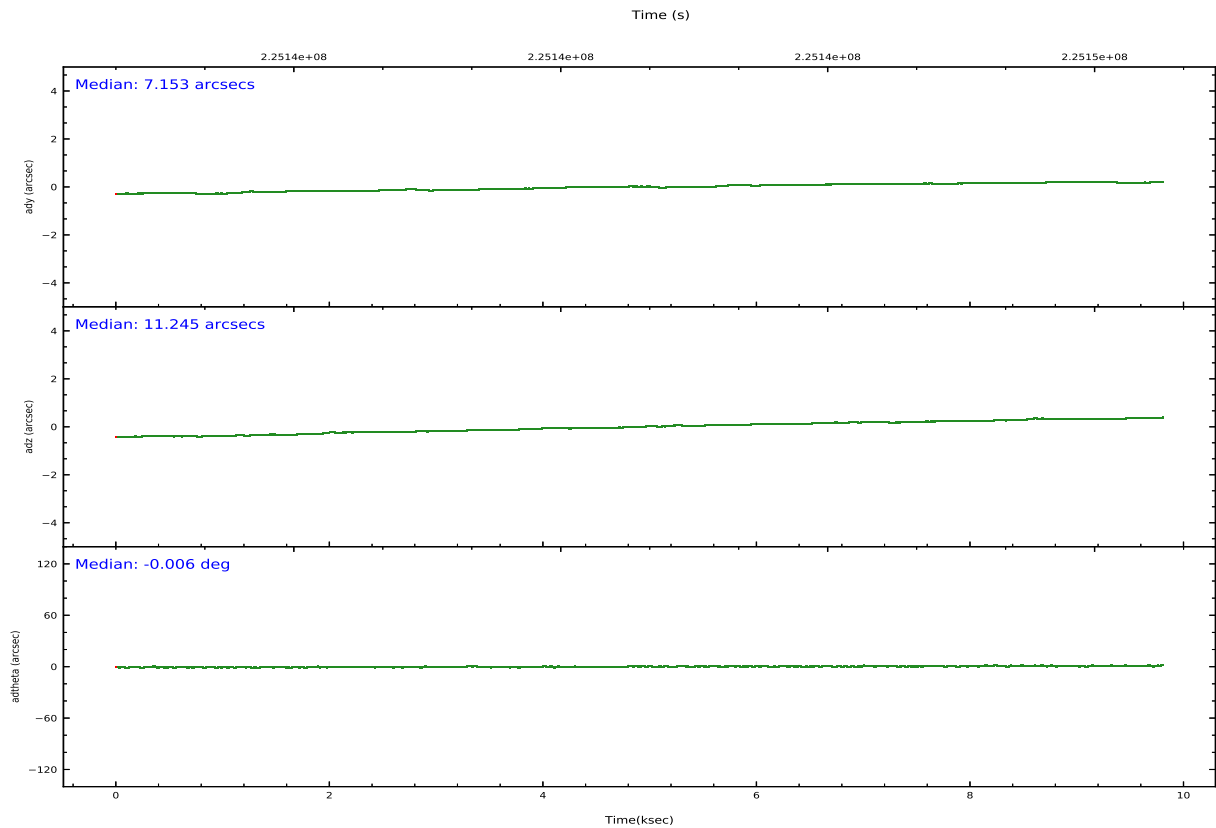
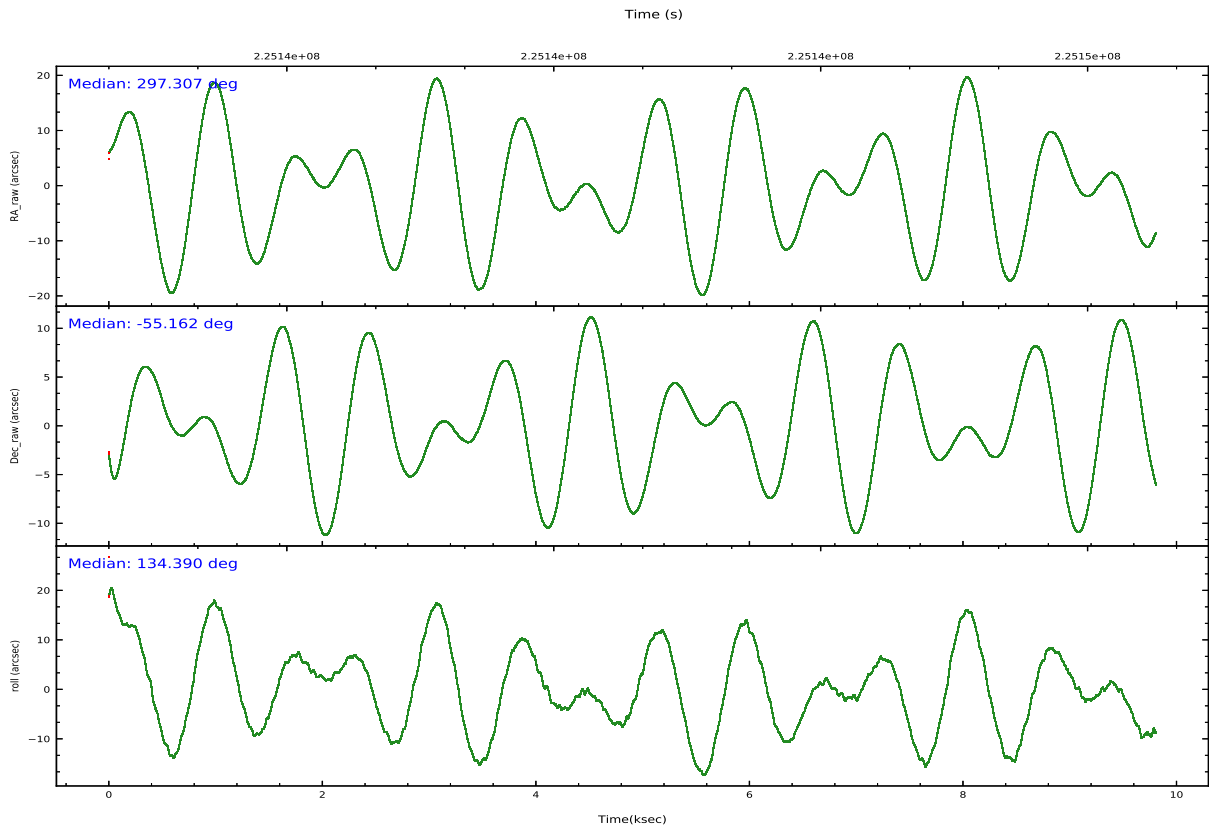
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|-------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 65916 | 61707 | 97906 | 66492 | 89747 | 86405 | grade 0 events | 4679 | 3836 | 5344 | 3633 | 4045 | 7060 |
| rejected events | 56514 | 53274 | 52547 | 57824 | 50749 | 64995 | | 7% | 6% | 5% | 5% | 4% | 8% |
| rejected % | 85% | 86% | 53% | 86% | 56% | 75% | grade 1 events | 48 | 39 | 186 | 26 | 91 | 77 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 1861 | 1716 | 13492 | 1863 | 7811 | 4352 |
| | | | | | | | | 2% | 2% | 13% | 2% | 8% | 5% |
| | | | | | | | grade 3 events | 748 | 715 | 1738 | 760 | 3551 | 2510 |
| | | | | | | | | 1% | 1% | 1% | 1% | 3% | 2% |
| | | | | | | | grade 4 events | 709 | 747 | 1728 | 704 | 3542 | 2383 |
| | | | | | | | | 1% | 1% | 1% | 1% | 3% | 2% |
| | | | | | | | grade 5 events | 2494 | 2866 | 7076 | 2918 | 8156 | 3859 |
| | | | | | | | | 3% | 4% | 7% | 4% | 9% | 4% |
| | | | | | | | grade 6 events | 1409 | 1424 | 23094 | 1721 | 20083 | 5115 |
| | | | | | | | | 2% | 2% | 23% | 2% | 22% | 5% |
| | | | | | | | grade 7 events | 53968 | 50364 | 45248 | 54867 | 42468 | 61049 |
| | | | | | | | | 81% | 81% | 46% | 82% | 47% | 70% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar version number | 8 | 8 |
| Detector | ACIS-235678 | ACIS-235678 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | FAINT | FAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 297.353214 | 297.31371837626 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | -55.169129 | -55.161392231225 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 134.272223 | 134.3903742085 | [s] Primary exposure time | 0.000000 | 3.2 |
| [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) | 225139142.184000 | 225137872.13977 | | | |
| Observation start date | 2005-02-18T18:37:58 | 2005-02-18T18:17:52 | | | |
| [s] Observation end time (MET) | 225148142.184000 | 225149268.60278 | | | |
| Observation end date | 2005-02-18T21:07:58 | 2005-02-18T21:27:48 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



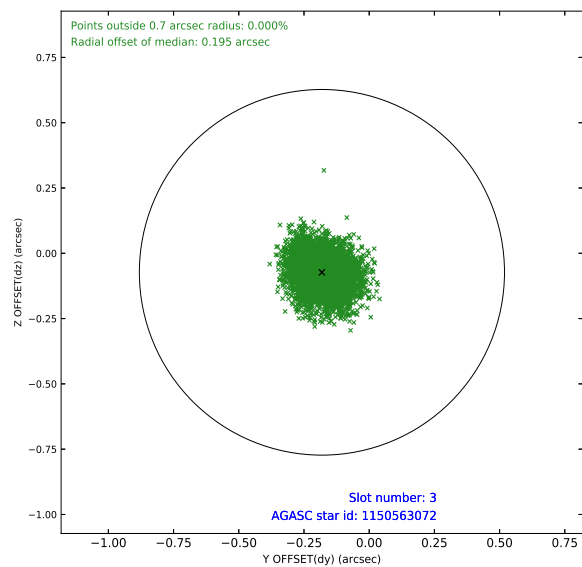
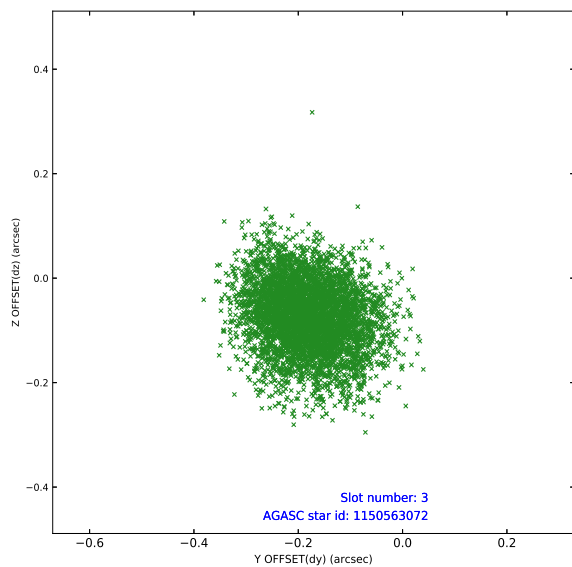


Slot Statistics

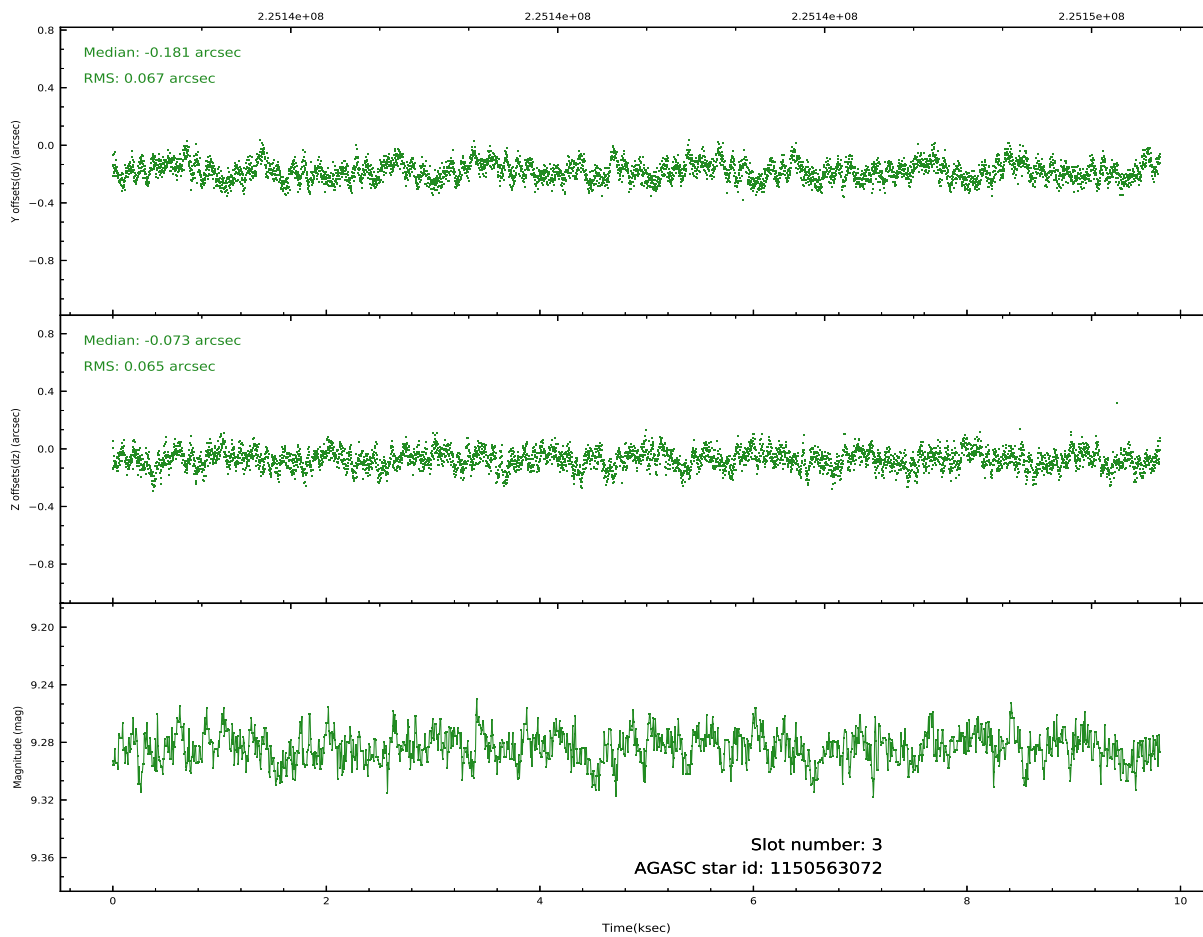
| slot | status | used | id | mag | n_pts | frac_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mea |
|------|--------|------|------------|------|-------|----------|--------|--------|-------|-------|------------|------------|----------|-------|
| 0 | FID | | ACIS-S-2 | 7.10 | 2392 | 1.000 | -0.070 | -0.051 | 0.011 | 0.017 | 0.000000 | 0.000000 | -759.91 | -1732 |
| 1 | FID | | ACIS-S-4 | 7.20 | 2393 | 1.000 | 0.138 | 0.047 | 0.006 | 0.011 | 0.000000 | 0.000000 | 2153.27 | 175 |
| 2 | FID | | ACIS-S-5 | 7.23 | 2393 | 1.000 | -0.099 | 0.012 | 0.011 | 0.018 | 0.000000 | 0.000000 | -1812.14 | 169 |
| 3 | GUIDE | used | 1150563072 | 9.28 | 4784 | 1.000 | -0.181 | -0.073 | 0.100 | 0.160 | 296.403777 | -55.285043 | 1050.28 | 1694 |
| 4 | GUIDE | used | 1150683080 | 8.45 | 4784 | 1.000 | 0.075 | 0.018 | 0.065 | 0.107 | 297.306836 | -54.888638 | 790.54 | -635 |
| 5 | GUIDE | used | 1150683376 | 8.62 | 4786 | 1.000 | -0.078 | 0.137 | 0.072 | 0.121 | 297.355078 | -54.524093 | 1660.50 | -1623 |
| 6 | GUIDE | used | 1150683784 | 8.66 | 4785 | 1.000 | 0.096 | -0.176 | 0.069 | 0.108 | 296.840045 | -54.917208 | 1388.36 | 129 |
| 7 | GUIDE | used | 1150685296 | 8.25 | 4783 | 1.000 | 0.088 | 0.099 | 0.067 | 0.103 | 297.953238 | -55.420860 | -1507.88 | -241 |

2.4 Star Slots

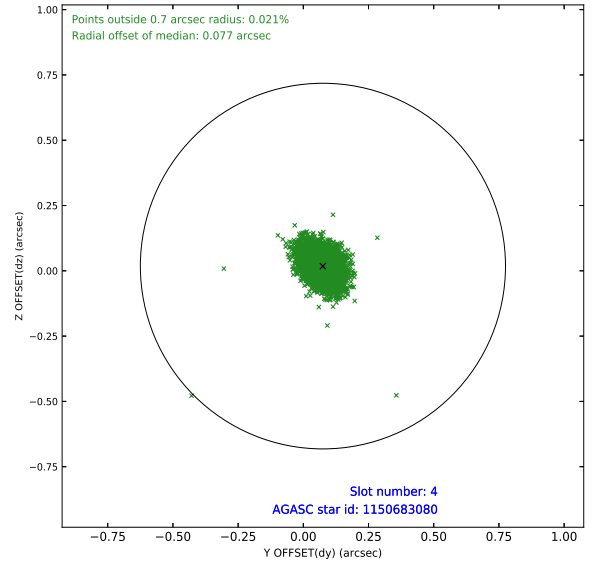
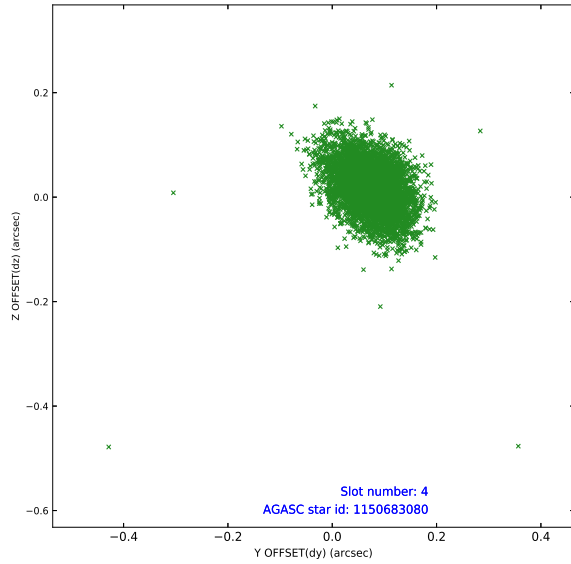
2.4.1 Slot 3



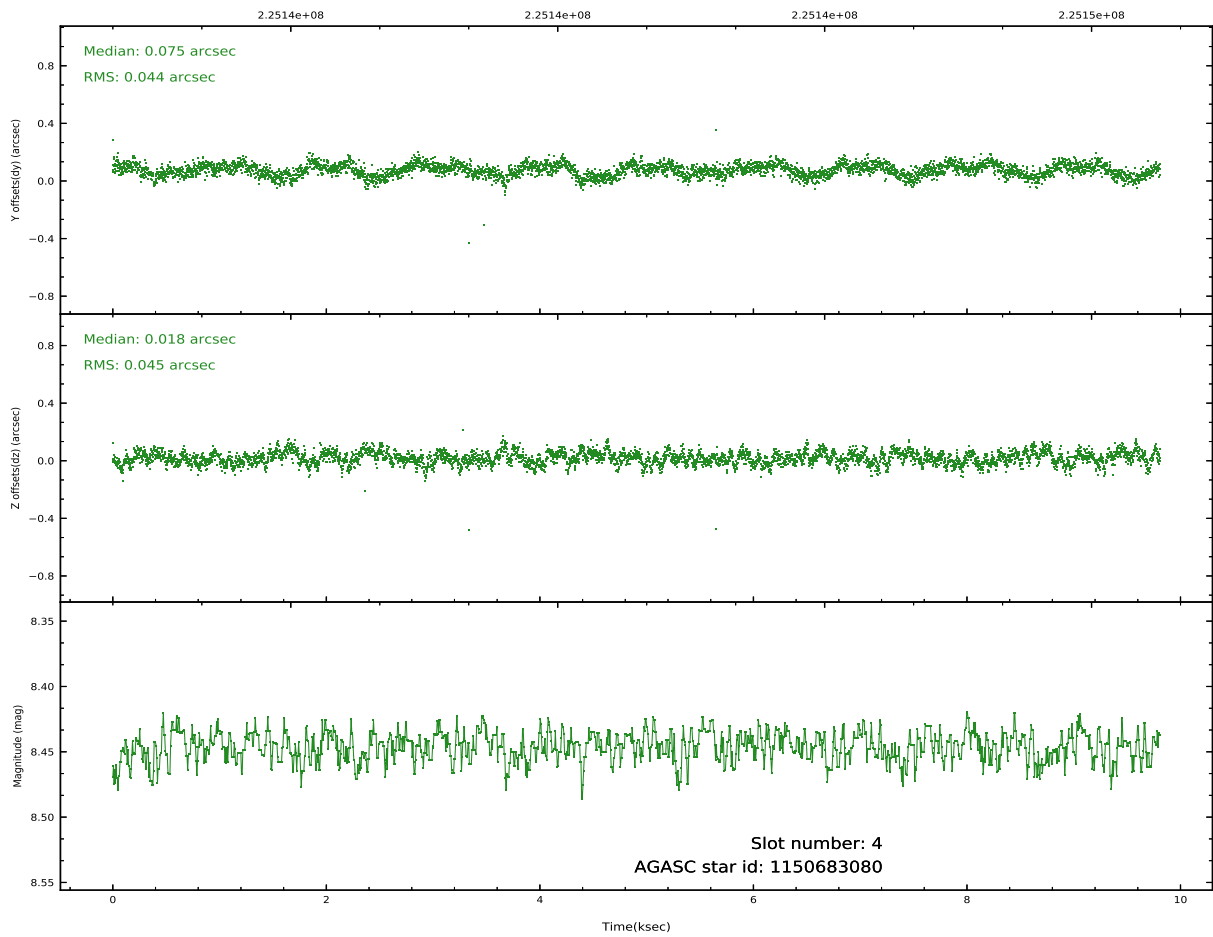
Time (s)



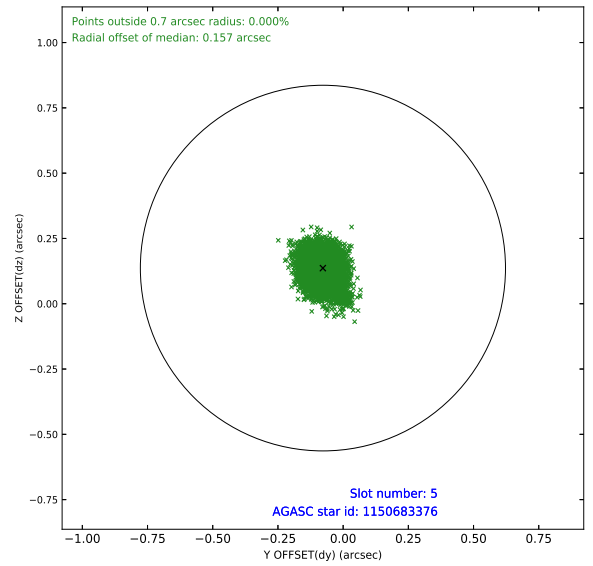
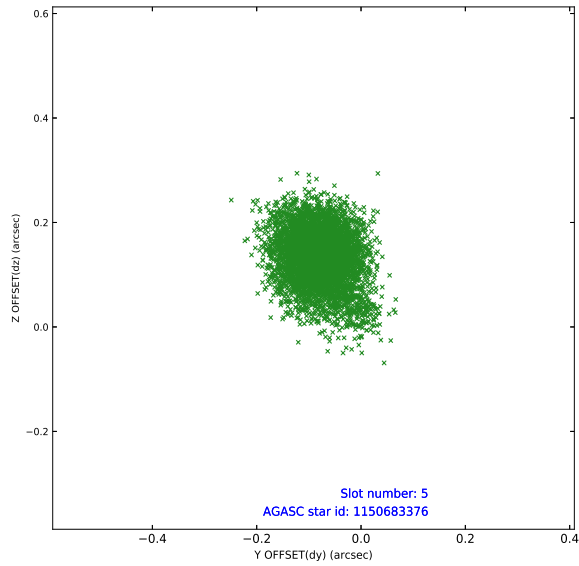
2.4.2 Slot 4



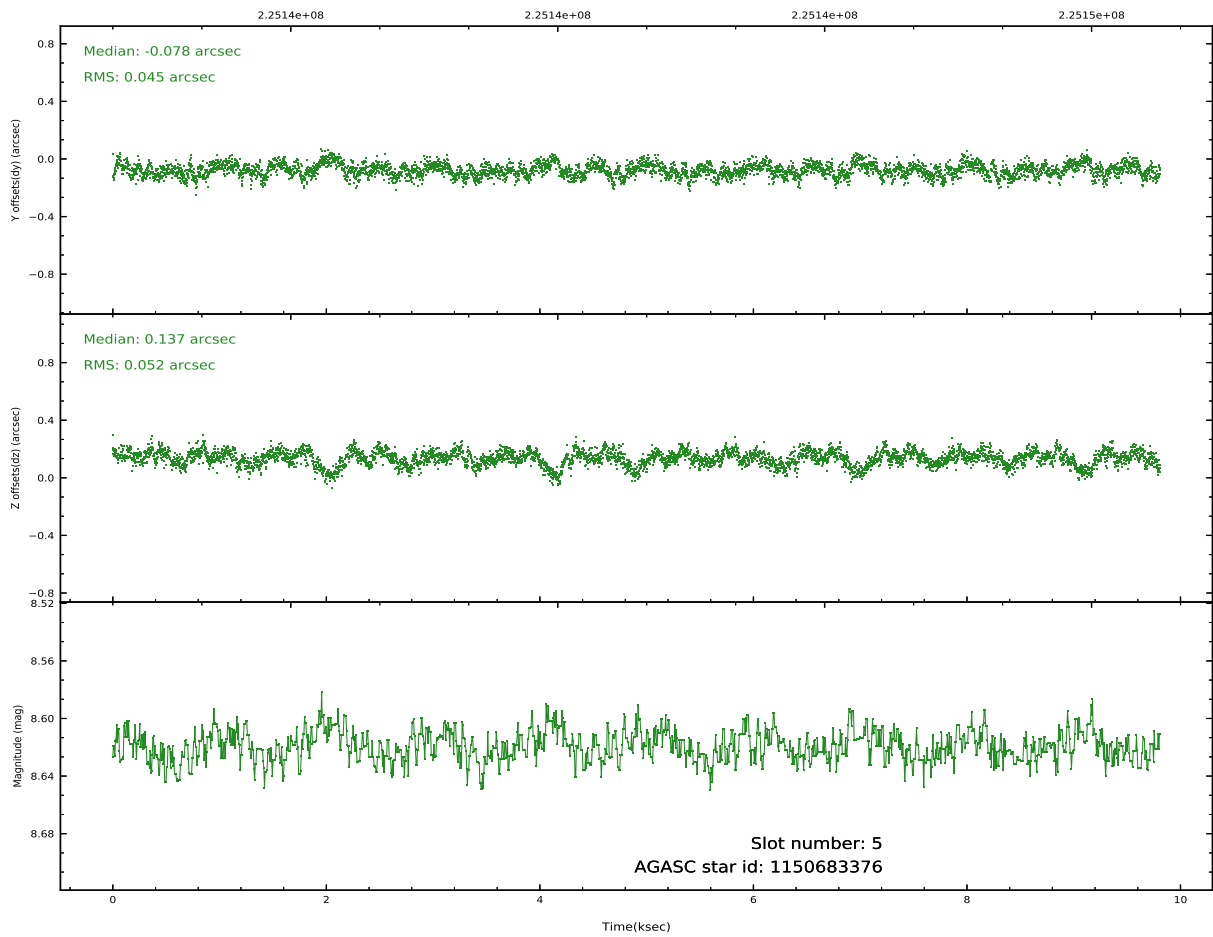
Time (s)



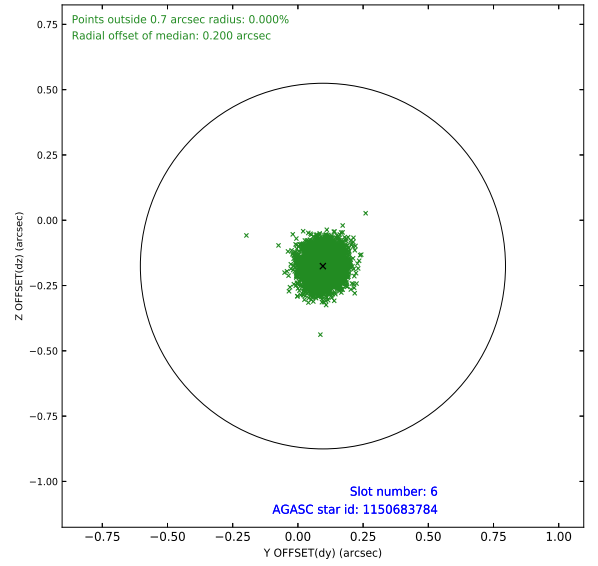
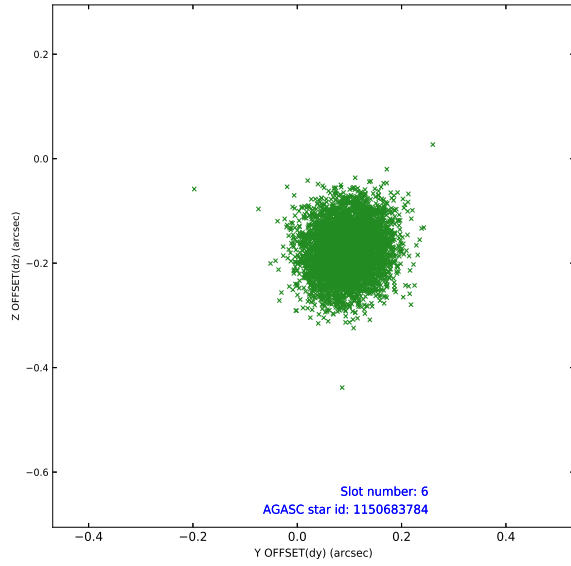
2.4.3 Slot 5



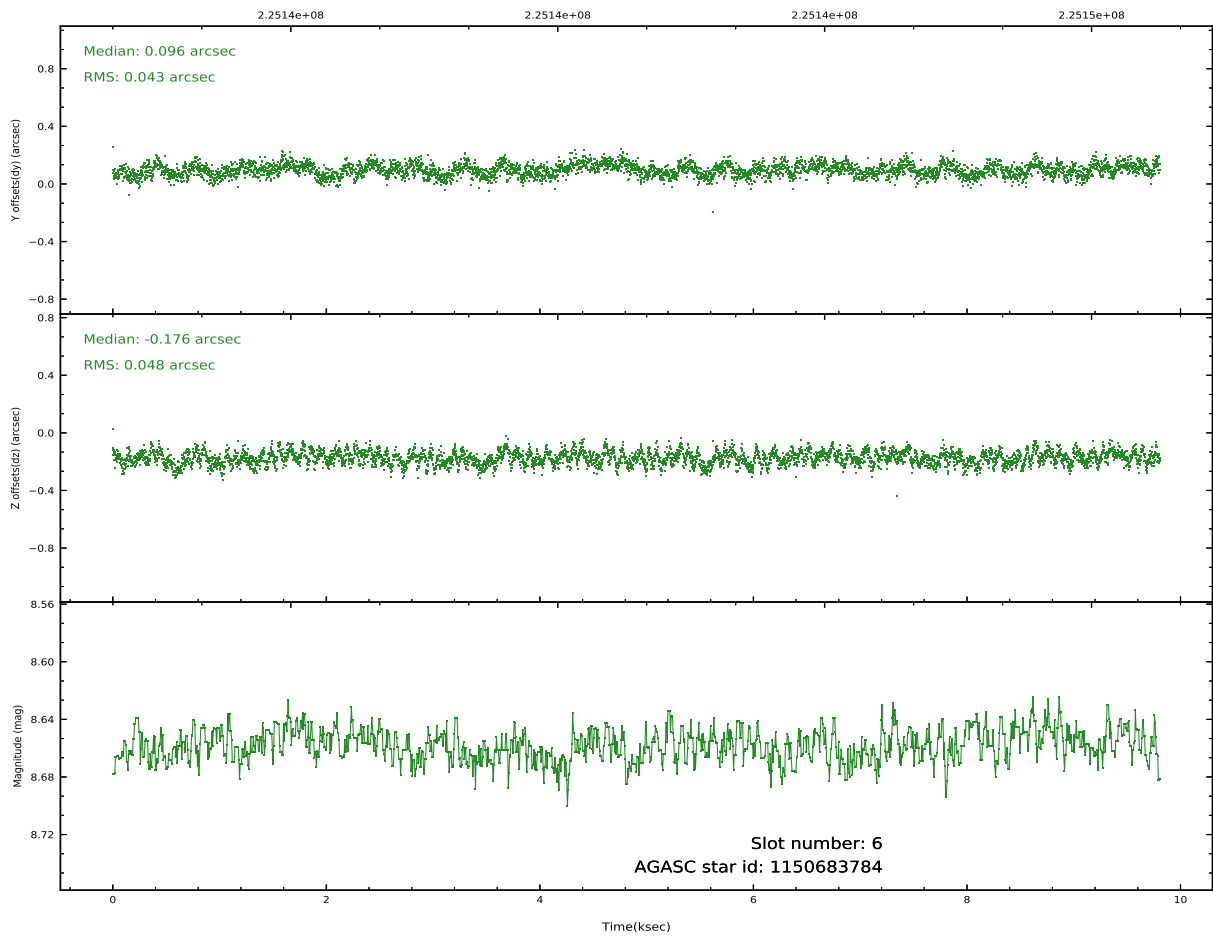
Time (s)



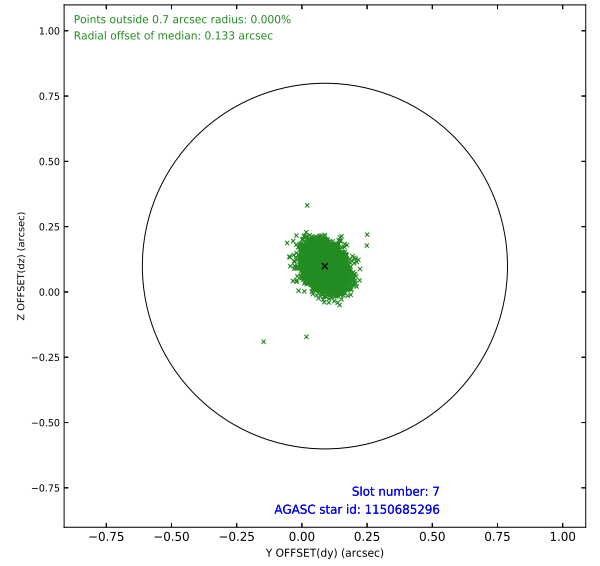
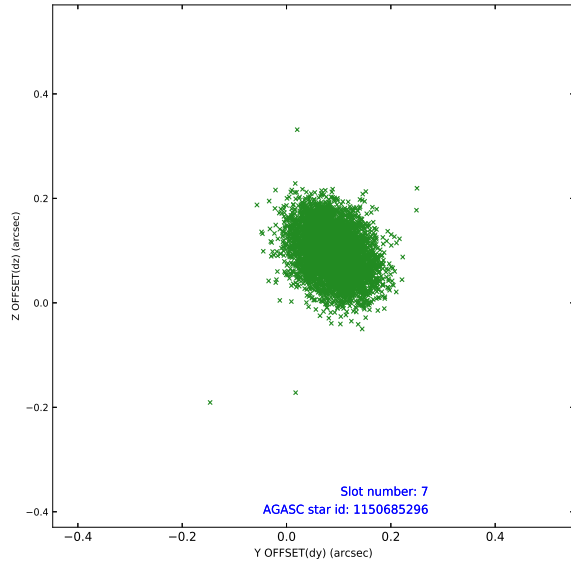
2.4.4 Slot 6



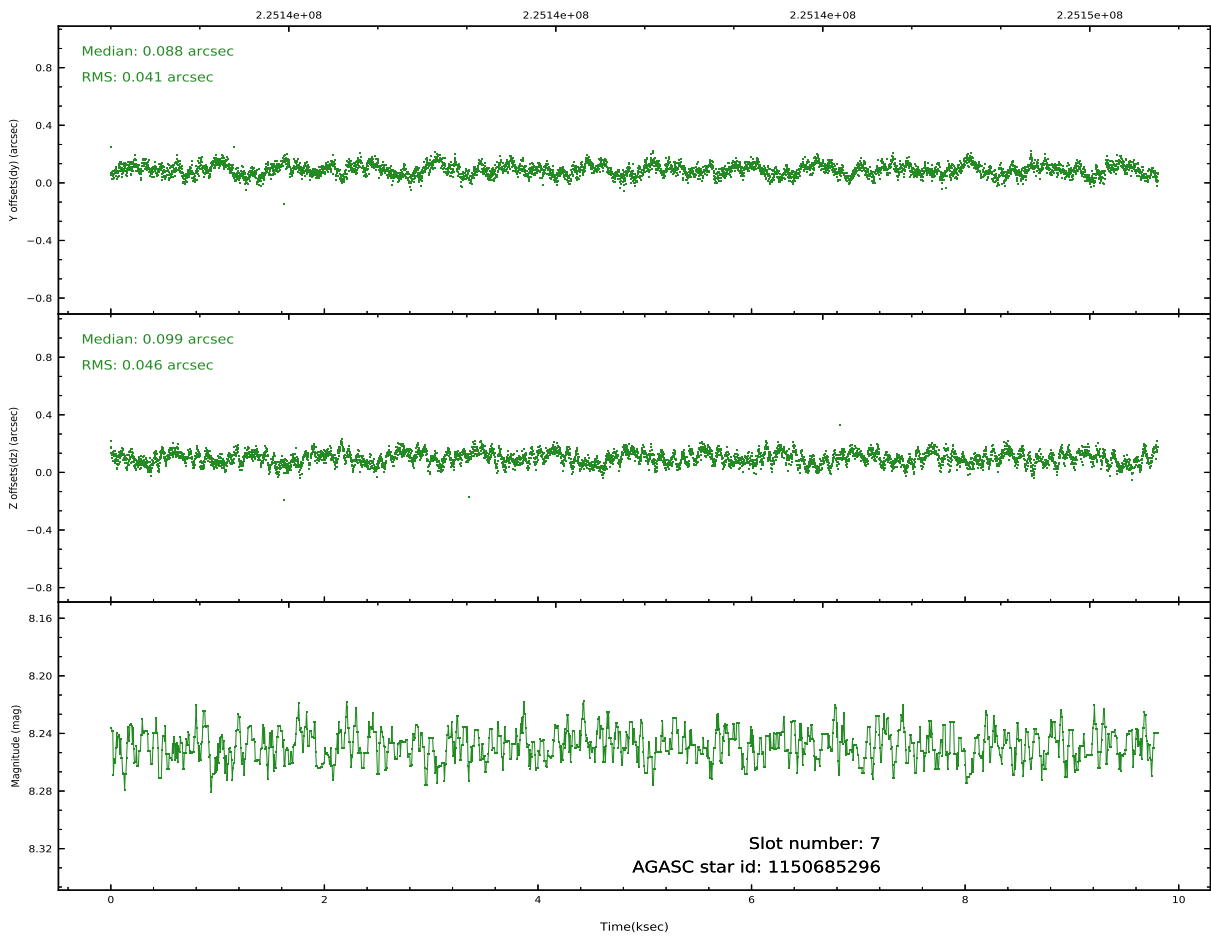
Time (s)



2.4.5 Slot 7

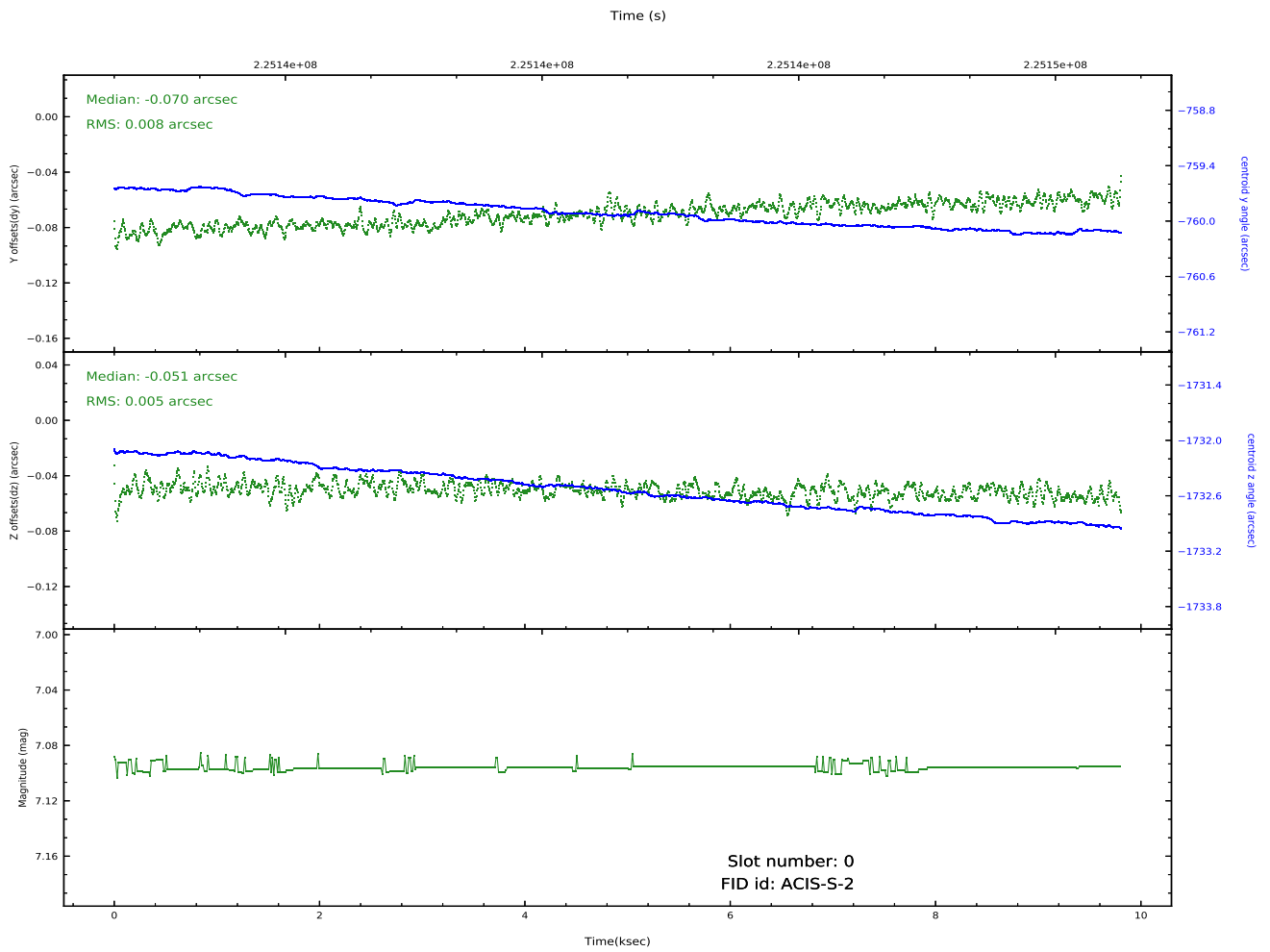
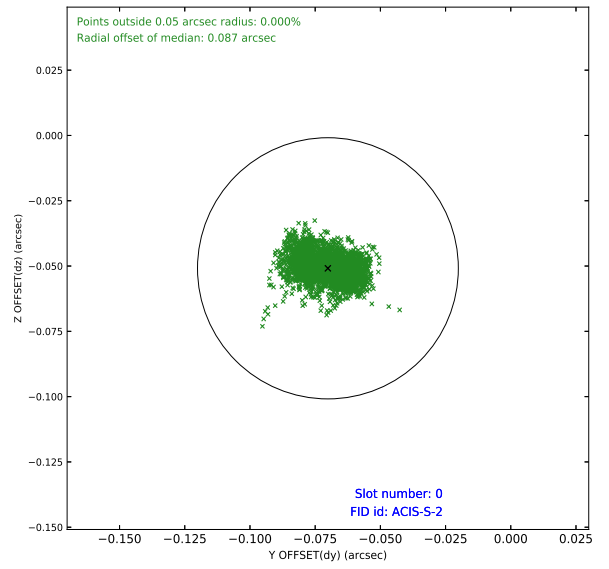
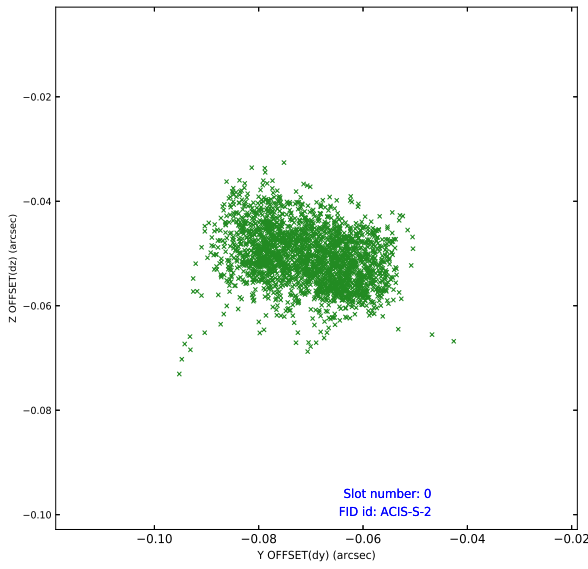


Time (s)

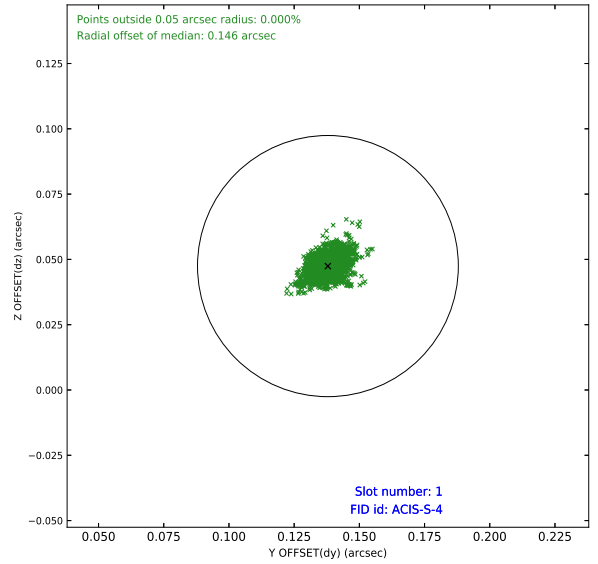
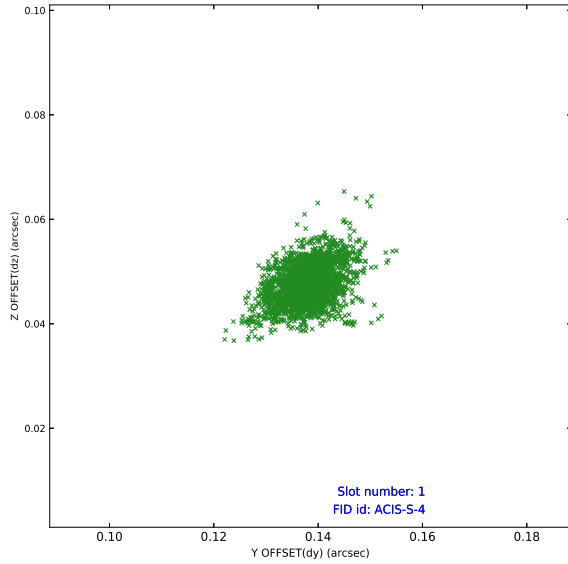


2.5 FID Slots

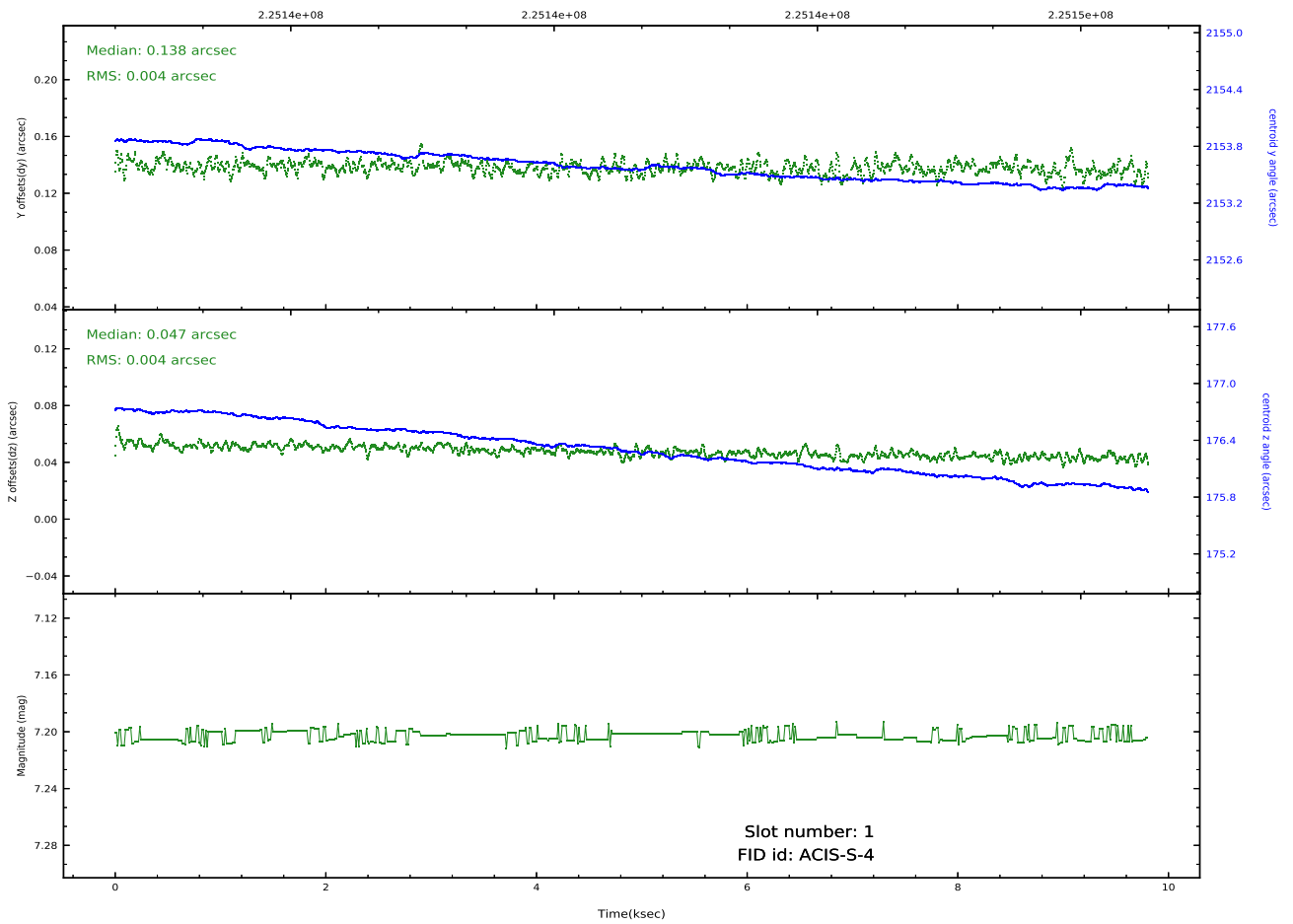
2.5.1 Slot 0



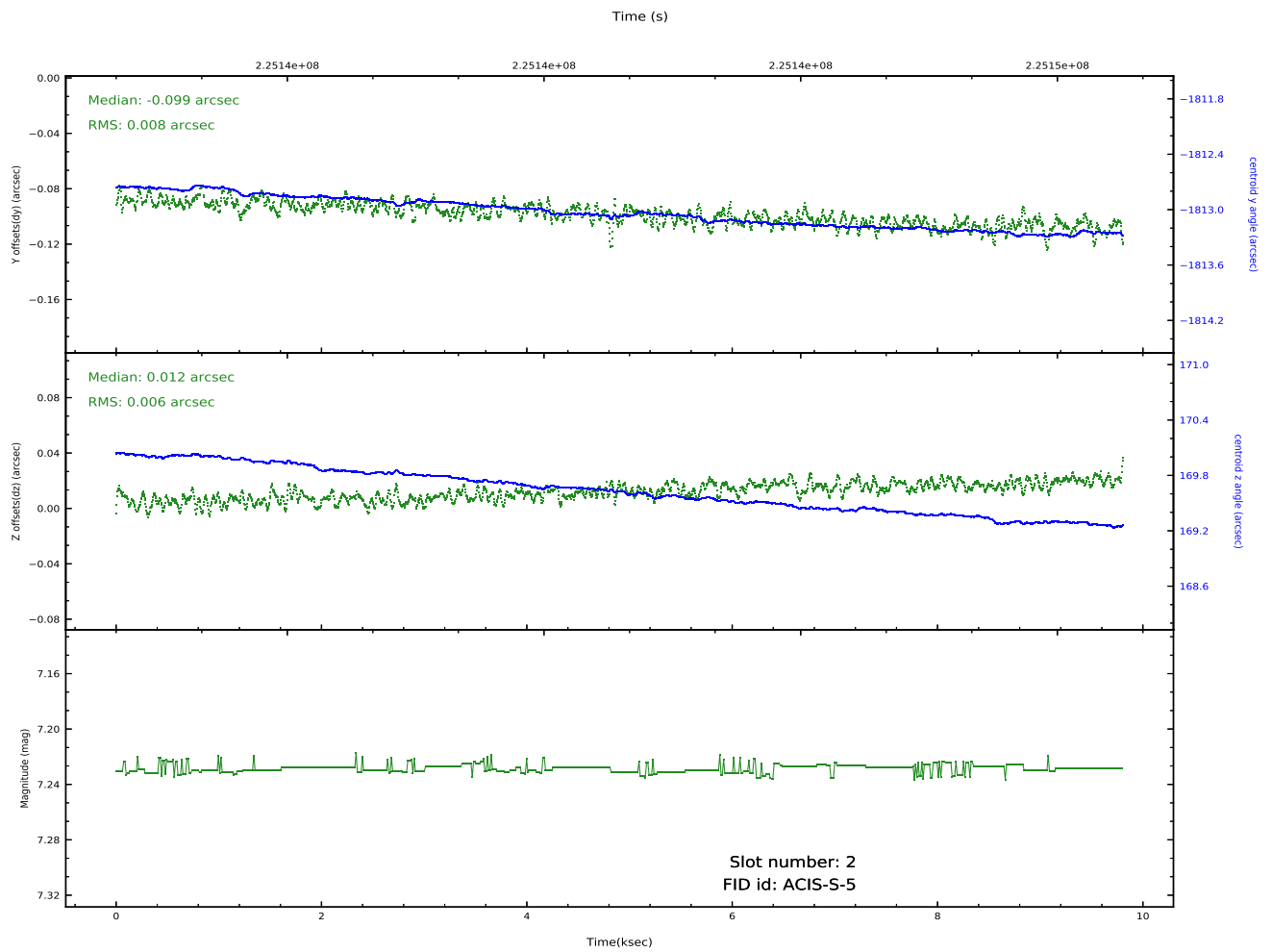
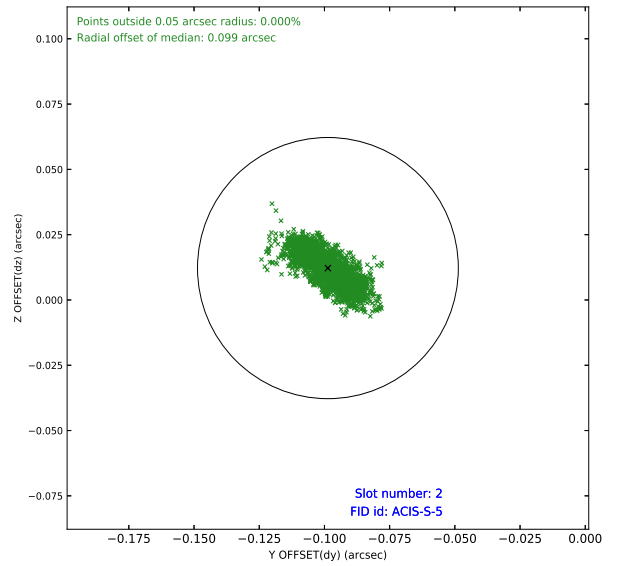
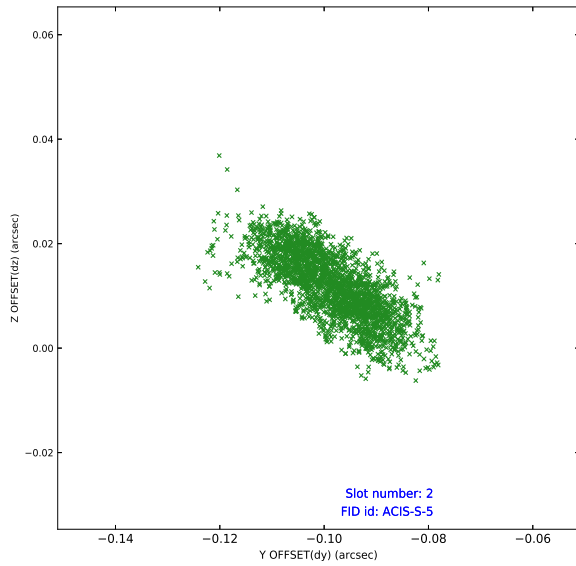
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|---------------|
| V&V Scientist | Beth Sundheim |
| V&V Date (YYYY-MM-DD) | 2020.10.07 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 8.959999 |

A.2 Comments