
AEROoffice V5.5 2017-01-17
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Dongle-ID: 3-3541217

Boresight Misalignment Calculations
10/06/2019 15:46:20

Project: PNOA_190531SVZ1
Projectfile: C:\AEROofficeV51\PROYECTOS\03-PROYECTOS_EAGLE\18_0036_PNOA_CLM-SUR_Ea100_2019\PROCESO\190531SVZ1\PNOA_190531SVZ1.aop

Used input data:

Platform Solution: C:\AEROofficeV51\PROYECTOS\03-PROYECTOS_EAGLE\18_0036_PNOA_CLM-SUR_Ea100_2019\PROCESO\190531SVZ1\work\PNOA_190531SVZ1.aps
Event Mark File : C:\AEROofficeV51\PROYECTOS\03-PROYECTOS_EAGLE\18_0036_PNOA_CLM-SUR_Ea100_2019\PROCESO\190531SVZ1\work\PNOA_190531SVZ1_C.aom
AT Result File : C:\AEROofficeV51\PROYECTOS\03-PROYECTOS_EAGLE\18_0036_PNOA_CLM-SUR_Ea100_2019\POLCAL\at\xyzopk_310519.txt
Importformat File: C:\AEROofficeV51\FORMATOS\PTOFORMAT

Coordinate system scalefactor correction for height applied
Using DTM

Local Coordinate System:
UTM - WGS84 SPH - ellipsoidal Altitude
System defined in: built-in coordinate system
Selected Zone: 30N
Meridian Convergence corrected

Loading INS Data
577 usable events found

Loading AT Data
AT input: angles found
54 AT Data Sets imported

54 events with matching eventnumbers found.

Postion offset for the single events [m]:

| | number | time | east | north | alt | d east | d north | d alt |
|-----------|--------|-----------|--------|--------|--------|--------|---------|--------|
| position: | 5130 | 479849.11 | 0.009 | -0.003 | -2.020 | 0.009 | -0.003 | -0.192 |
| position: | 5131 | 479861.82 | -0.002 | 0.011 | -1.958 | -0.002 | 0.011 | -0.130 |
| position: | 5132 | 479874.59 | 0.017 | 0.014 | -1.956 | 0.017 | 0.014 | -0.128 |
| position: | 5133 | 479887.42 | 0.008 | -0.018 | -1.961 | 0.008 | -0.018 | -0.133 |
| position: | 5134 | 479900.20 | 0.022 | 0.024 | -1.840 | 0.022 | 0.024 | -0.012 |
| position: | 5135 | 479912.99 | 0.004 | 0.006 | -1.876 | 0.004 | 0.006 | -0.048 |
| position: | 5136 | 479925.71 | 0.015 | -0.003 | -1.875 | 0.015 | -0.003 | -0.047 |
| position: | 5137 | 479938.39 | 0.015 | 0.016 | -1.778 | 0.015 | 0.016 | 0.050 |
| position: | 5138 | 479951.13 | 0.020 | 0.000 | -1.795 | 0.020 | 0.000 | 0.033 |
| position: | 5139 | 479963.86 | 0.014 | 0.006 | -1.766 | 0.014 | 0.006 | 0.062 |
| position: | 5140 | 479976.52 | 0.005 | 0.007 | -1.680 | 0.005 | 0.007 | 0.148 |
| position: | 5141 | 479989.18 | -0.007 | 0.003 | -1.645 | -0.007 | 0.003 | 0.183 |
| position: | 5142 | 480001.95 | -0.009 | 0.010 | -1.755 | -0.009 | 0.010 | 0.073 |
| position: | 5143 | 480014.61 | 0.003 | -0.002 | -1.618 | 0.003 | -0.002 | 0.210 |
| position: | 5236 | 481383.59 | -0.001 | 0.003 | -1.652 | -0.001 | 0.003 | 0.176 |
| position: | 5237 | 481396.32 | 0.012 | 0.010 | -1.709 | 0.012 | 0.010 | 0.119 |
| position: | 5238 | 481409.04 | -0.010 | 0.000 | -1.737 | -0.010 | 0.000 | 0.091 |
| position: | 5239 | 481421.70 | 0.018 | -0.023 | -1.825 | 0.018 | -0.023 | 0.003 |
| position: | 5240 | 481434.44 | -0.045 | -0.019 | -1.827 | -0.045 | -0.019 | 0.001 |
| position: | 5241 | 481447.30 | -0.021 | 0.014 | -1.835 | -0.021 | 0.014 | -0.006 |
| position: | 5242 | 481460.21 | -0.037 | 0.009 | -1.787 | -0.037 | 0.009 | 0.041 |
| position: | 5243 | 481472.98 | -0.010 | -0.008 | -1.829 | -0.010 | -0.008 | -0.001 |
| position: | 5244 | 481485.72 | -0.026 | -0.010 | -1.903 | -0.026 | -0.010 | -0.075 |
| position: | 5245 | 481498.46 | -0.008 | -0.003 | -1.943 | -0.008 | -0.003 | -0.115 |
| position: | 5246 | 481511.23 | -0.007 | -0.013 | -1.843 | -0.007 | -0.013 | -0.015 |
| position: | 5247 | 481523.90 | -0.006 | 0.004 | -2.060 | -0.006 | 0.004 | -0.231 |
| position: | 5248 | 481536.46 | -0.025 | -0.010 | -1.962 | -0.025 | -0.010 | -0.134 |
| position: | 5249 | 481548.92 | -0.011 | -0.006 | -1.923 | -0.011 | -0.006 | -0.095 |
| position: | 5291 | 482230.89 | 0.013 | -0.006 | -2.008 | 0.013 | -0.006 | -0.180 |
| position: | 5292 | 482243.07 | 0.013 | -0.007 | -1.946 | 0.013 | -0.007 | -0.118 |
| position: | 5293 | 482255.42 | 0.041 | 0.025 | -1.879 | 0.041 | 0.025 | -0.051 |
| position: | 5294 | 482267.86 | 0.020 | -0.017 | -1.962 | 0.020 | -0.017 | -0.134 |
| position: | 5295 | 482280.36 | 0.041 | -0.013 | -1.827 | 0.041 | -0.013 | 0.001 |
| position: | 5296 | 482292.70 | 0.023 | 0.011 | -1.772 | 0.023 | 0.011 | 0.056 |
| position: | 5297 | 482305.04 | 0.007 | 0.005 | -1.836 | 0.007 | 0.005 | -0.008 |
| position: | 5298 | 482317.52 | 0.026 | -0.015 | -1.777 | 0.026 | -0.015 | 0.051 |
| position: | 5299 | 482330.01 | -0.021 | -0.008 | -1.808 | -0.021 | -0.008 | 0.020 |
| position: | 5300 | 482342.54 | 0.009 | 0.005 | -1.784 | 0.008 | 0.005 | 0.044 |
| position: | 5301 | 482354.96 | 0.008 | -0.008 | -1.660 | 0.008 | -0.008 | 0.168 |
| position: | 5302 | 482367.23 | 0.007 | 0.005 | -1.686 | 0.007 | 0.005 | 0.142 |
| position: | 5303 | 482379.53 | 0.002 | 0.015 | -1.643 | 0.001 | 0.015 | 0.185 |
| position: | 5392 | 484214.57 | -0.007 | 0.020 | -1.681 | -0.007 | 0.020 | 0.147 |
| position: | 5393 | 484226.96 | -0.003 | 0.006 | -1.745 | -0.003 | 0.006 | 0.083 |
| position: | 5394 | 484239.54 | -0.030 | 0.013 | -1.790 | -0.030 | 0.013 | 0.038 |
| position: | 5395 | 484252.14 | -0.016 | -0.018 | -1.682 | -0.016 | -0.018 | 0.146 |
| position: | 5396 | 484264.75 | 0.000 | -0.006 | -1.743 | 0.000 | -0.006 | 0.085 |

position: 5397 484277.35 -0.003 0.010 -1.803 -0.003 0.010 0.025
position: 5398 484289.95 0.005 -0.011 -1.841 0.005 -0.011 -0.013
position: 5399 484302.33 -0.023 -0.007 -1.884 -0.023 -0.007 -0.056
position: 5400 484314.68 0.006 -0.009 -1.881 0.006 -0.009 -0.053
position: 5401 484327.07 -0.013 0.003 -1.880 -0.013 0.003 -0.052
position: 5402 484339.38 -0.015 -0.010 -1.964 -0.015 -0.010 -0.136
position: 5403 484351.66 -0.008 0.006 -1.935 -0.008 0.006 -0.106
position: 5404 484363.87 -0.017 -0.007 -1.940 -0.017 -0.007 -0.112

Average position offset:
East: 0.000 m
North: 0.000 m
Alt: -1.828 m
Position offset RMS:
East: 0.018 m
North: 0.011 m
Alt: 0.108 m

Misalignment angles for the single events [deg]:

| | number | time | roll | pitch | yaw | d roll | d pitch | d yaw |
|--------|--------|-----------|---------|--------|---------|---------|---------|---------|
| angle: | 5130 | 479849.11 | -0.1242 | 0.1234 | -0.2535 | 0.0007 | -0.0006 | -0.0038 |
| angle: | 5131 | 479861.82 | -0.1242 | 0.1238 | -0.2527 | 0.0007 | -0.0002 | -0.0030 |
| angle: | 5132 | 479874.59 | -0.1242 | 0.1241 | -0.2524 | 0.0007 | 0.0001 | -0.0027 |
| angle: | 5133 | 479887.42 | -0.1240 | 0.1244 | -0.2523 | 0.0009 | 0.0004 | -0.0026 |
| angle: | 5134 | 479900.20 | -0.1245 | 0.1242 | -0.2523 | 0.0004 | 0.0002 | -0.0026 |
| angle: | 5135 | 479912.99 | -0.1244 | 0.1239 | -0.2521 | 0.0005 | -0.0001 | -0.0023 |
| angle: | 5136 | 479925.71 | -0.1240 | 0.1236 | -0.2517 | 0.0009 | -0.0004 | -0.0020 |
| angle: | 5137 | 479938.39 | -0.1244 | 0.1239 | -0.2520 | 0.0005 | 0.0000 | -0.0023 |
| angle: | 5138 | 479951.13 | -0.1241 | 0.1237 | -0.2519 | 0.0008 | -0.0003 | -0.0022 |
| angle: | 5139 | 479963.86 | -0.1239 | 0.1229 | -0.2523 | 0.0010 | -0.0011 | -0.0025 |
| angle: | 5140 | 479976.52 | -0.1248 | 0.1238 | -0.2521 | 0.0001 | -0.0002 | -0.0024 |
| angle: | 5141 | 479989.18 | -0.1244 | 0.1237 | -0.2527 | 0.0005 | -0.0003 | -0.0030 |
| angle: | 5142 | 480001.95 | -0.1245 | 0.1230 | -0.2526 | 0.0004 | -0.0010 | -0.0029 |
| angle: | 5143 | 480014.61 | -0.1248 | 0.1228 | -0.2531 | 0.0001 | -0.0012 | -0.0034 |
| angle: | 5236 | 481383.59 | -0.1254 | 0.1234 | -0.2468 | -0.0005 | -0.0005 | 0.0030 |
| angle: | 5237 | 481396.32 | -0.1253 | 0.1232 | -0.2452 | -0.0004 | -0.0008 | 0.0045 |
| angle: | 5238 | 481409.04 | -0.1255 | 0.1223 | -0.2449 | -0.0006 | -0.0017 | 0.0049 |
| angle: | 5239 | 481421.70 | -0.1253 | 0.1234 | -0.2446 | -0.0003 | -0.0006 | 0.0051 |
| angle: | 5240 | 481434.44 | -0.1252 | 0.1256 | -0.2444 | -0.0003 | 0.0016 | 0.0054 |
| angle: | 5241 | 481447.30 | -0.1246 | 0.1246 | -0.2448 | 0.0003 | 0.0006 | 0.0049 |
| angle: | 5242 | 481460.21 | -0.1247 | 0.1241 | -0.2450 | 0.0002 | 0.0002 | 0.0047 |
| angle: | 5243 | 481472.98 | -0.1251 | 0.1244 | -0.2452 | -0.0002 | 0.0005 | 0.0045 |
| angle: | 5244 | 481485.72 | -0.1250 | 0.1245 | -0.2449 | -0.0001 | 0.0005 | 0.0048 |
| angle: | 5245 | 481498.46 | -0.1248 | 0.1247 | -0.2449 | 0.0001 | 0.0007 | 0.0049 |
| angle: | 5246 | 481511.23 | -0.1246 | 0.1242 | -0.2457 | 0.0003 | 0.0002 | 0.0040 |
| angle: | 5247 | 481523.90 | -0.1245 | 0.1246 | -0.2456 | 0.0004 | 0.0007 | 0.0041 |
| angle: | 5248 | 481536.46 | -0.1253 | 0.1247 | -0.2460 | -0.0003 | 0.0007 | 0.0037 |
| angle: | 5249 | 481548.92 | -0.1249 | 0.1242 | -0.2460 | 0.0000 | 0.0002 | 0.0037 |
| angle: | 5291 | 482230.89 | -0.1242 | 0.1231 | -0.2502 | 0.0008 | -0.0009 | -0.0005 |
| angle: | 5292 | 482243.07 | -0.1245 | 0.1234 | -0.2504 | 0.0004 | -0.0005 | -0.0007 |
| angle: | 5293 | 482255.42 | -0.1247 | 0.1230 | -0.2510 | 0.0002 | -0.0009 | -0.0013 |
| angle: | 5294 | 482267.86 | -0.1243 | 0.1233 | -0.2511 | 0.0006 | -0.0006 | -0.0014 |
| angle: | 5295 | 482280.36 | -0.1248 | 0.1235 | -0.2515 | 0.0001 | -0.0005 | -0.0017 |
| angle: | 5296 | 482292.70 | -0.1246 | 0.1236 | -0.2518 | 0.0003 | -0.0004 | -0.0020 |
| angle: | 5297 | 482305.04 | -0.1246 | 0.1236 | -0.2518 | 0.0004 | -0.0003 | -0.0021 |
| angle: | 5298 | 482317.52 | -0.1248 | 0.1232 | -0.2526 | 0.0001 | -0.0008 | -0.0029 |
| angle: | 5299 | 482330.01 | -0.1248 | 0.1238 | -0.2533 | 0.0001 | -0.0002 | -0.0035 |
| angle: | 5300 | 482342.54 | -0.1246 | 0.1236 | -0.2527 | 0.0003 | -0.0003 | -0.0029 |
| angle: | 5301 | 482354.96 | -0.1243 | 0.1234 | -0.2524 | 0.0006 | -0.0006 | -0.0027 |
| angle: | 5302 | 482367.23 | -0.1244 | 0.1237 | -0.2523 | 0.0005 | -0.0003 | -0.0026 |
| angle: | 5303 | 482379.53 | -0.1243 | 0.1237 | -0.2524 | 0.0007 | -0.0003 | -0.0027 |
| angle: | 5392 | 484214.57 | -0.1271 | 0.1239 | -0.2504 | -0.0022 | -0.0001 | -0.0006 |
| angle: | 5393 | 484226.96 | -0.1273 | 0.1242 | -0.2500 | -0.0023 | 0.0003 | -0.0003 |
| angle: | 5394 | 484239.54 | -0.1266 | 0.1238 | -0.2492 | -0.0017 | -0.0002 | 0.0005 |
| angle: | 5395 | 484252.14 | -0.1264 | 0.1241 | -0.2488 | -0.0015 | 0.0001 | 0.0009 |
| angle: | 5396 | 484264.75 | -0.1256 | 0.1243 | -0.2490 | -0.0007 | 0.0003 | 0.0007 |
| angle: | 5397 | 484277.35 | -0.1256 | 0.1248 | -0.2485 | -0.0007 | 0.0008 | 0.0013 |
| angle: | 5398 | 484289.95 | -0.1259 | 0.1253 | -0.2485 | -0.0009 | 0.0013 | 0.0012 |
| angle: | 5399 | 484302.33 | -0.1255 | 0.1247 | -0.2490 | -0.0006 | 0.0007 | 0.0007 |
| angle: | 5400 | 484314.68 | -0.1254 | 0.1249 | -0.2488 | -0.0005 | 0.0009 | 0.0009 |
| angle: | 5401 | 484327.07 | -0.1254 | 0.1246 | -0.2493 | -0.0005 | 0.0006 | 0.0004 |
| angle: | 5402 | 484339.38 | -0.1256 | 0.1249 | -0.2499 | -0.0007 | 0.0009 | -0.0001 |
| angle: | 5403 | 484351.66 | -0.1250 | 0.1255 | -0.2509 | -0.0001 | 0.0016 | -0.0012 |
| angle: | 5404 | 484363.87 | -0.1243 | 0.1258 | -0.2517 | 0.0006 | 0.0018 | -0.0020 |

Average Boresight Angles:
Roll: -0.1249 deg
Pitch: 0.1240 deg
Yaw: -0.2497 deg
Boresight Angle RMS:
Roll: 0.0007 deg
Pitch: 0.0007 deg
Yaw: 0.0029 deg

Success!!
Boresight Calculation finished