



This is the attached Matrix Convention document

Flash the IMU.
No more batch files.

You can enter the MATRIX you define
and over-ride my method

Strapdown Inertial Reference Unit Setup

Inertial Measurement Unit Type: AG17 [AG: 21,24] Import

Body to Sensor Alignment

Rotation about NOSE Body Axis: 0.0000 °

Rotation about RWing Body Axis: 0.0000 °

Rotation about DOWN Body Axis: 0.0000 °

X: 1.000000 Y: 0.000000 Z: 0.000000 NOSE

Y: 0.000000 X: 1.000000 Z: 0.000000 RIGHT WING

Z: 0.000000 Y: 0.000000 X: 1.000000 DOWN

Use MATRIX - disable Rotation Angles

Accelerometer Case-Axis Error Model

| | | | | |
|--------------|--------------------|--------------------|--------------------|--------------|
| Noise | x: 0 | y: 0 | z: 0 | μg / Hz |
| Bias | x: 0 | y: 0 | z: 0 | μg |
| Scale Factor | x: 0 | y: 0 | z: 0 | PPM |
| Misalignment | φ _x : 0 | φ _y : 0 | φ _z : 0 | milli radian |

Rate Sensor Case-Axis Error Model

| | | | | |
|--------------|--------------------|--------------------|--------------------|--------------|
| Noise | x: 0 | y: 0 | z: 0 | °/ Hz / Hz |
| Bias | x: 0 | y: 0 | z: 0 | °/ Hz |
| Scale Factor | x: 0 | y: 0 | z: 0 | PPM |
| Misalignment | ψ _x : 0 | ψ _y : 0 | ψ _z : 0 | milli radian |

Msc Data Items (may not be relevant for all IRU types)

Use External Data Clock (otherwise use MFIO clock)

Use Internal Data Clock switching to UE Clock after 5 Seconds

Output Continuous Idle Flags

Output Continuous Closing Flags

Status Word #1: 0 Status Word #2: 0

Data Base Tools

+ Verbiage Apply Error Models

This is the Clock delay CUBIC needs. We found the associated firmware and are converting it to the new MFIO

This will produce ASCII data files that provide time tagged engineer output. (for analysis only)