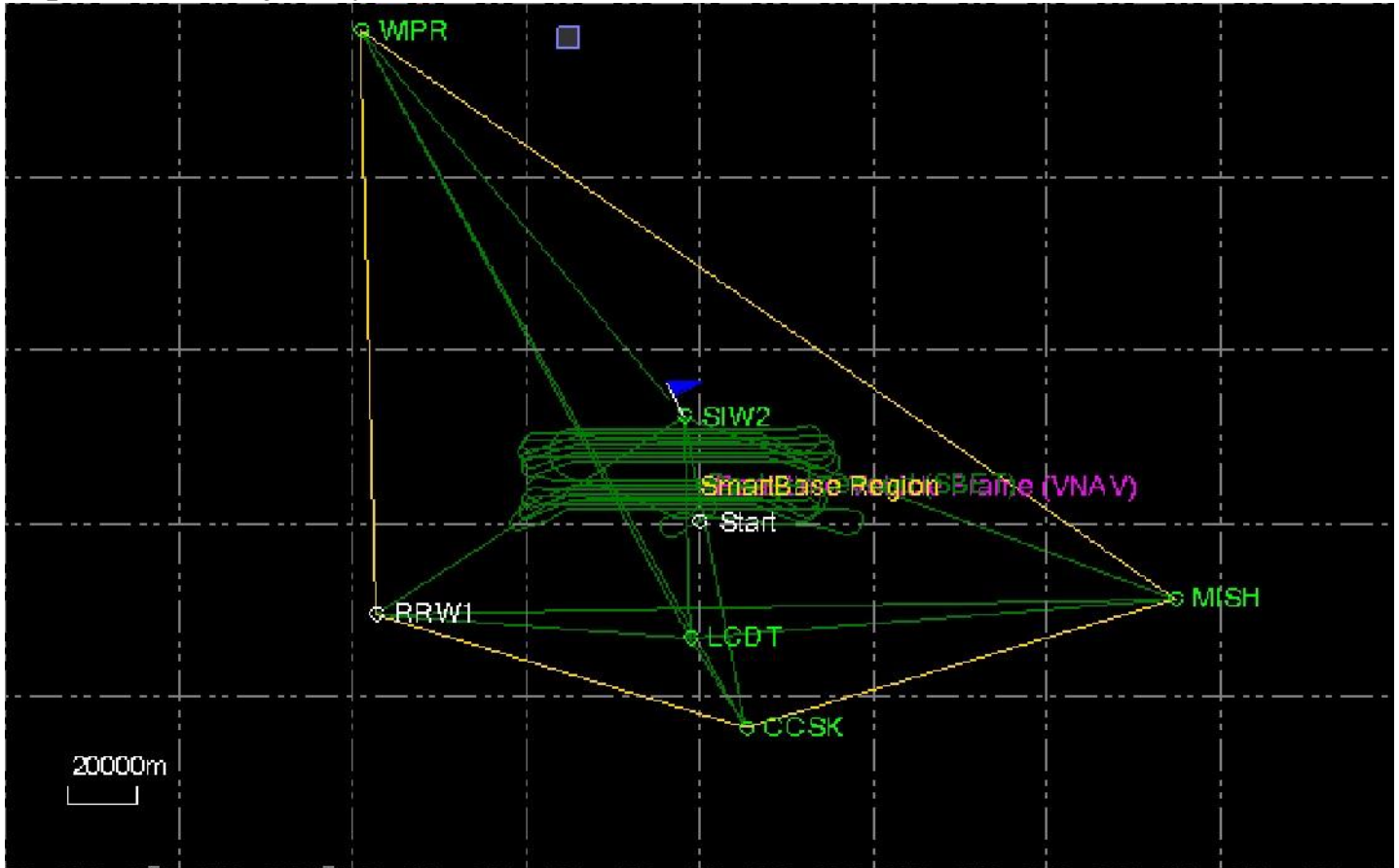


Appendix C: GPS and IMU Processing Reports for Each Mission

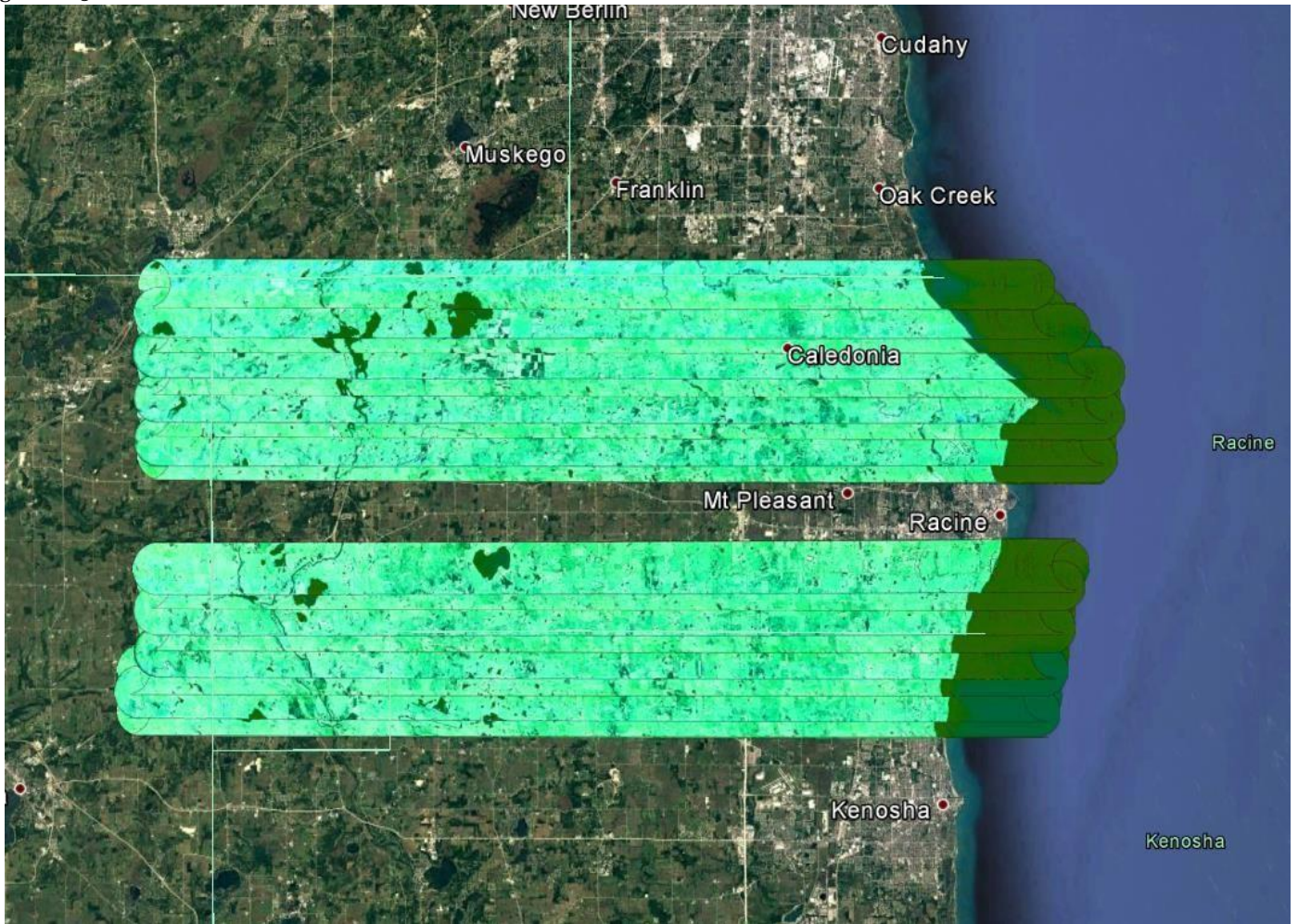
COLLECTION 1

Brick WI
Sortie a01-s01-0076
04/17/2017

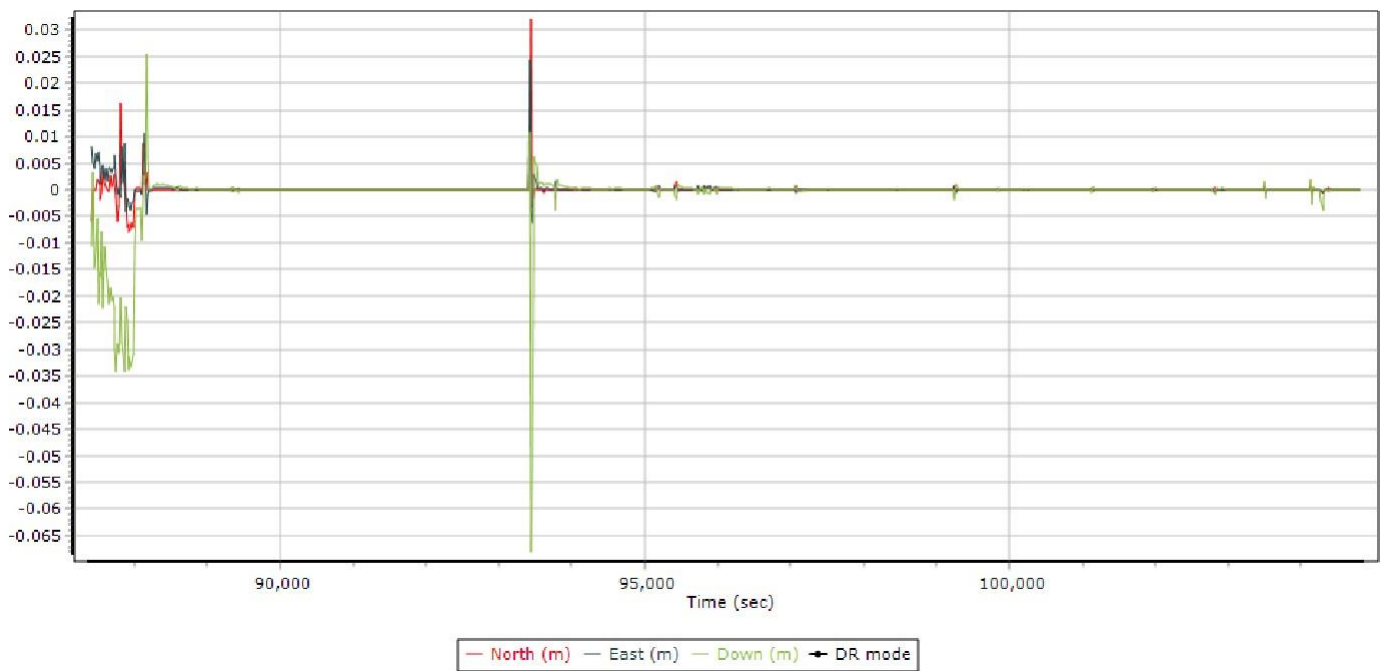
Map Run with Trajectory 1: Sortie a01-s01-0076



Swath Width, Waterfall View 1: Sortie a01-s01-0076

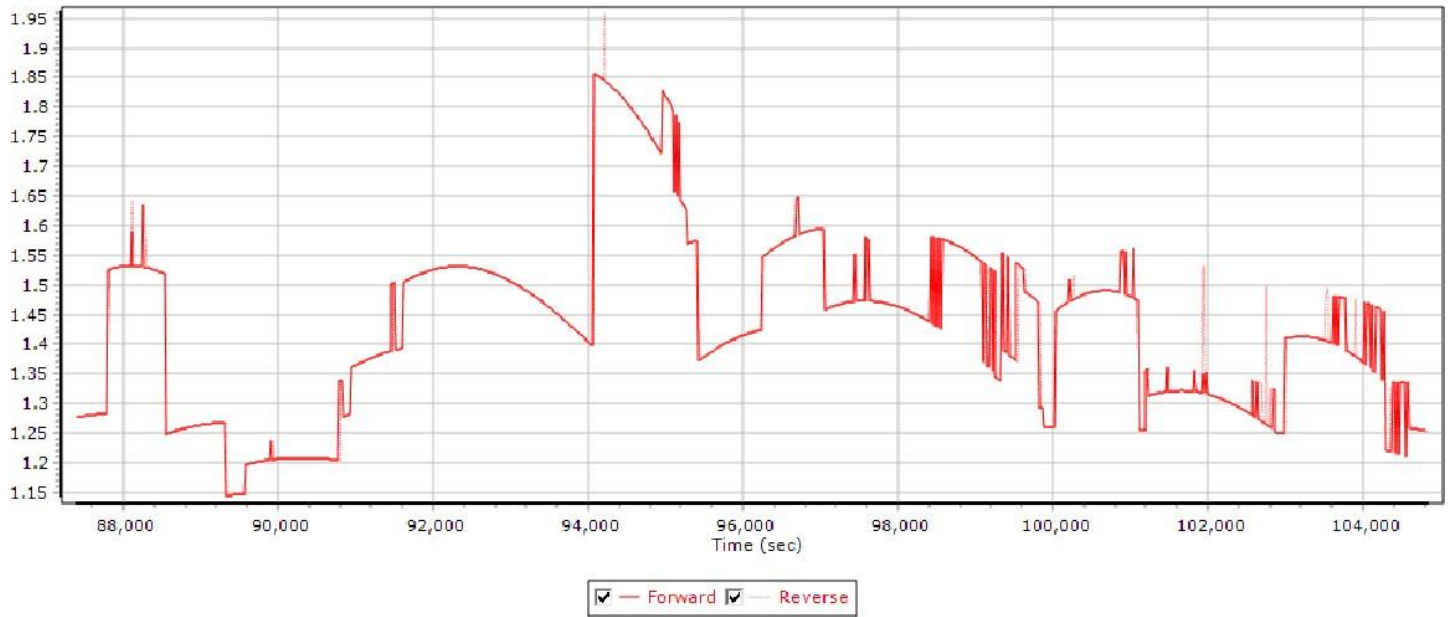


Combined SBET IAKAR Separation 1: Sortie a01-s01-0076



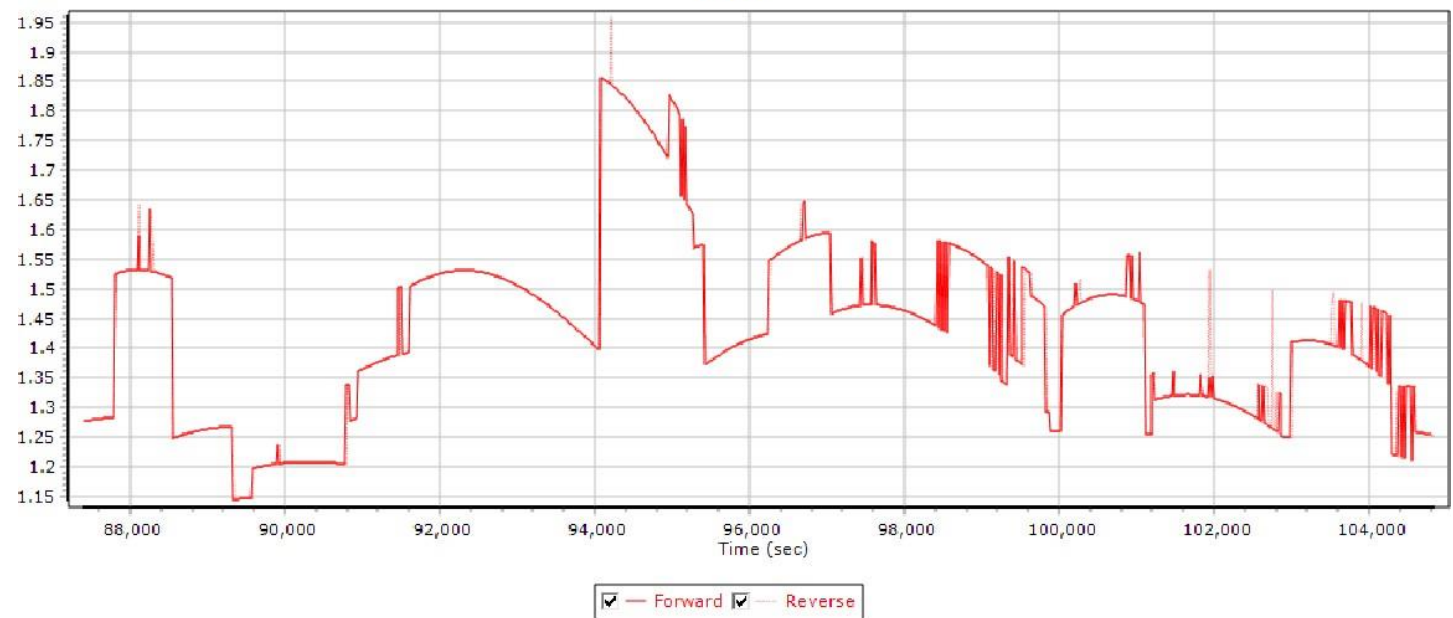
PDOP Plots 1: Sortie a01-s01-0076

PDOP

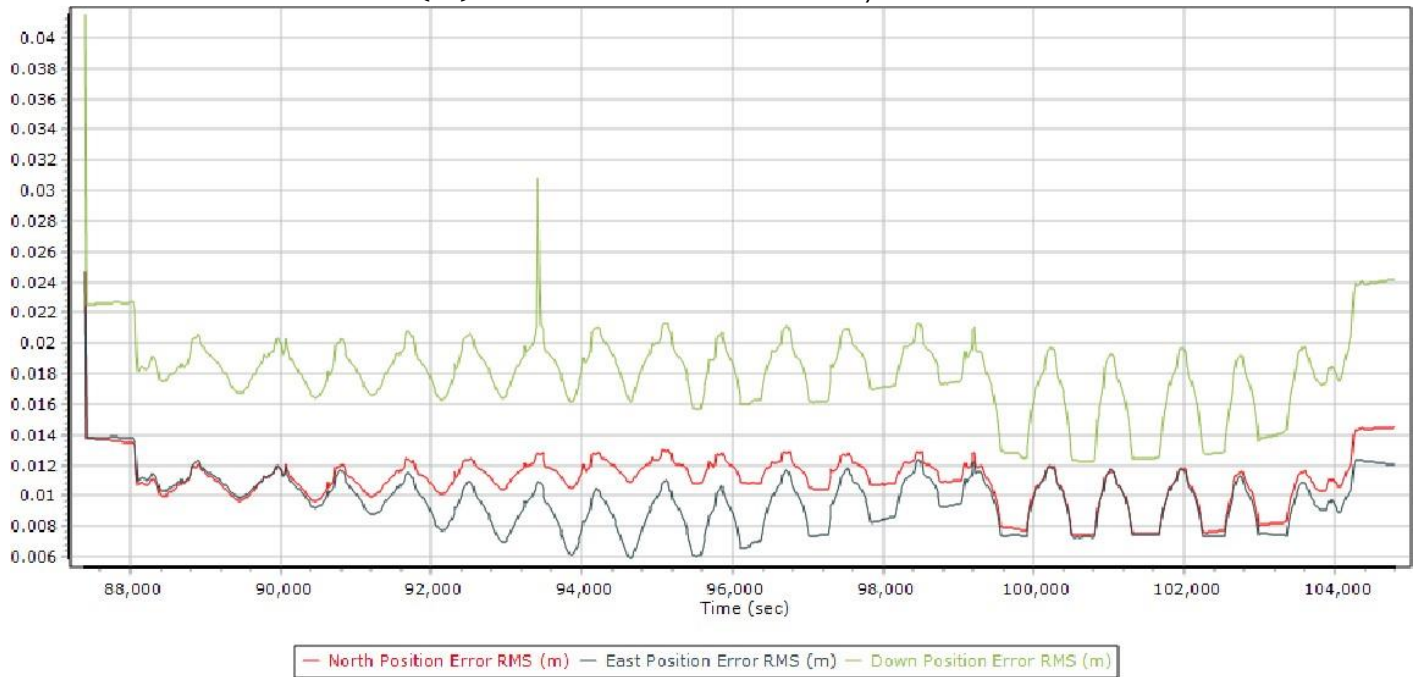


Number of Satellites (>6) Plots 1: Sortie a01-s01-0076

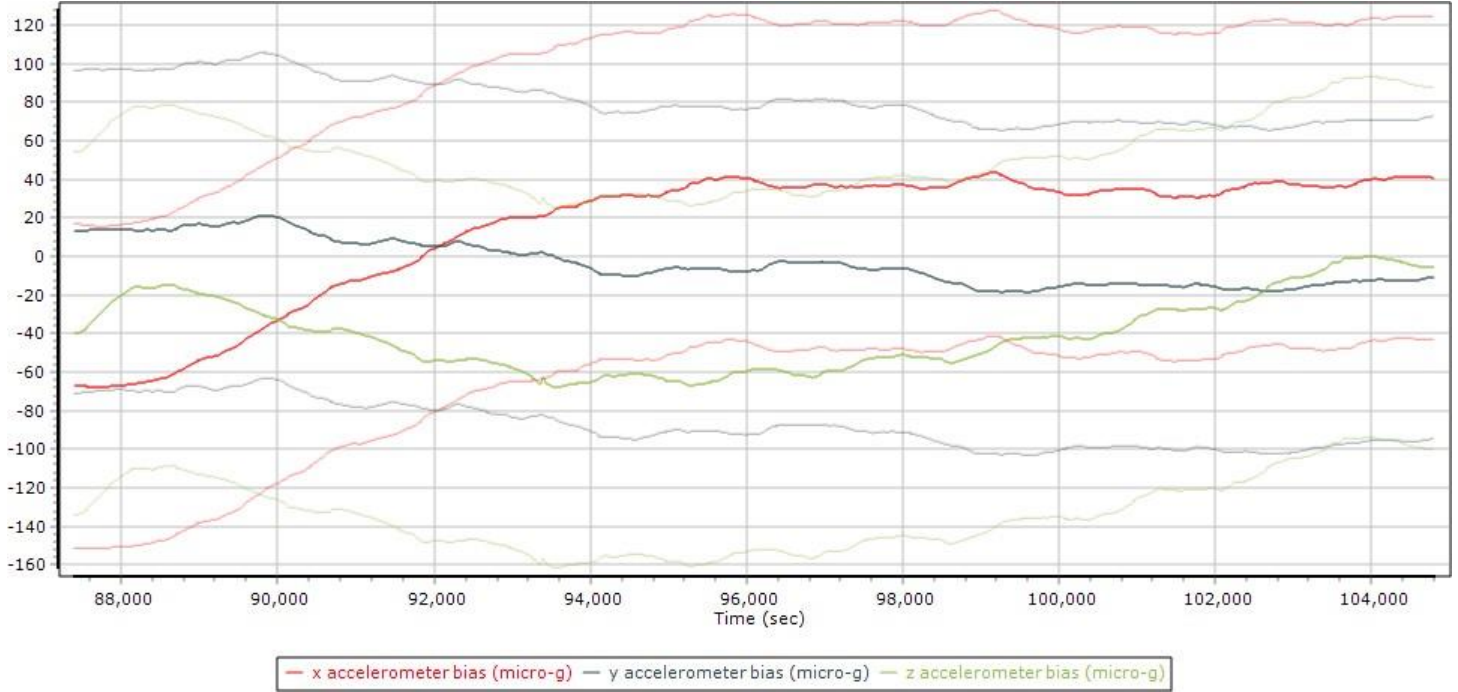
PDOP



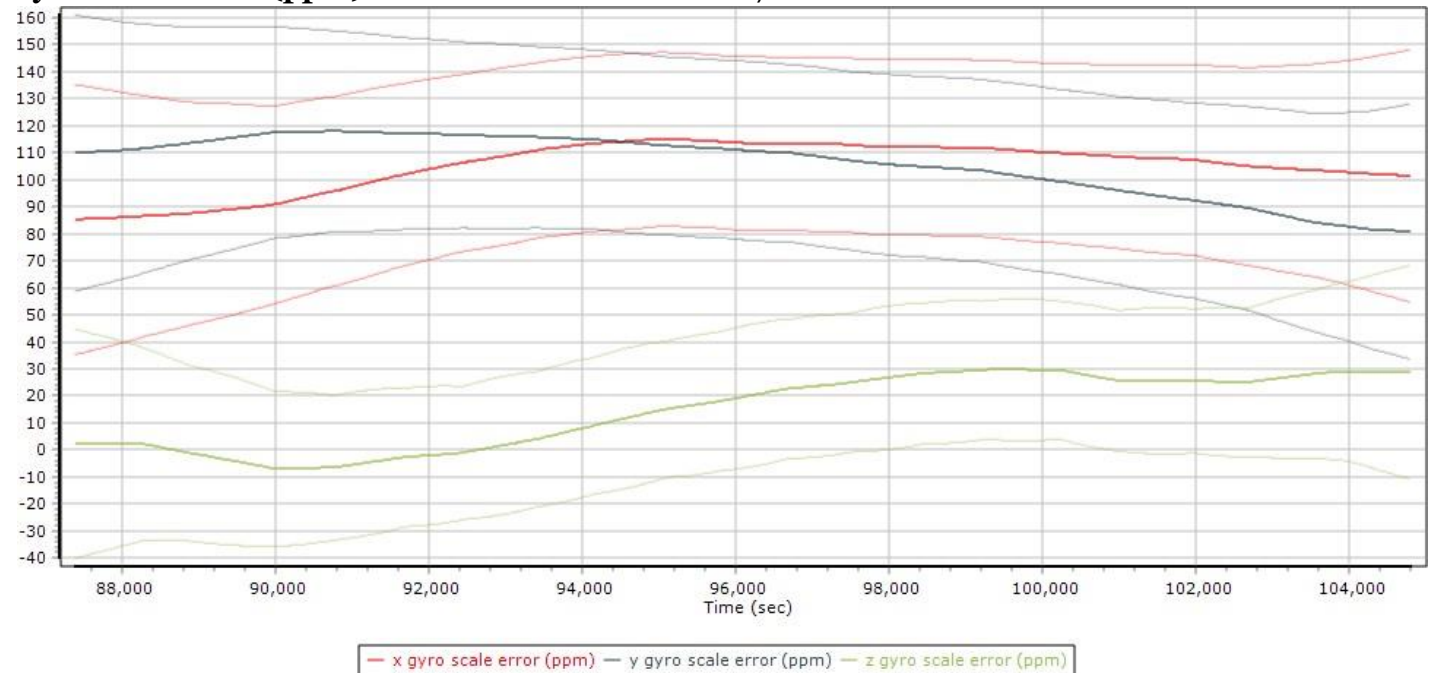
Sensor Position Error RMS (m) Plots 1: Sortie a01-s01-0076



Accelerometer Scale Bias Error Plots 1: Sortie a01-s01-0076

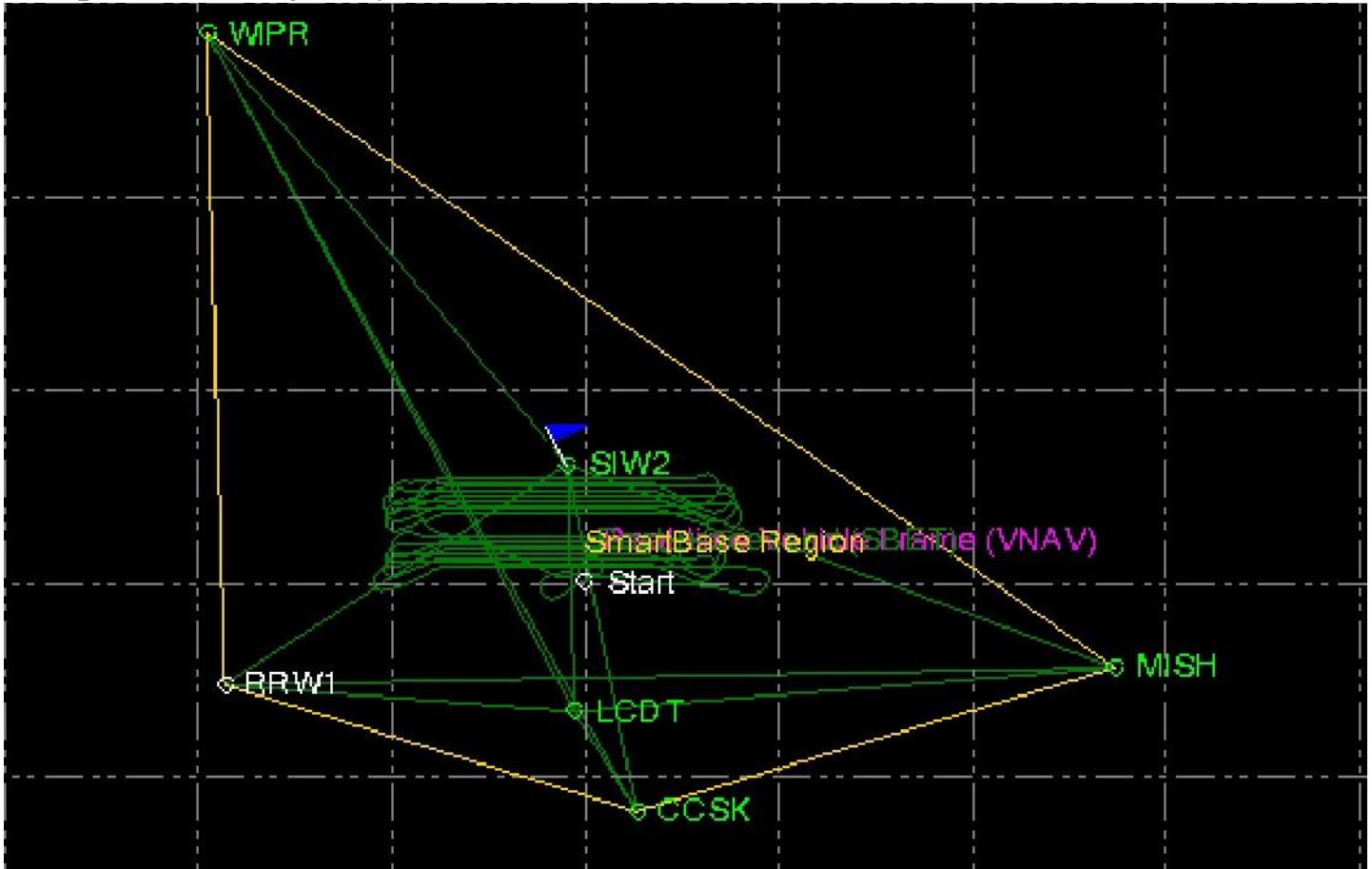


Gyro Scale Error (ppm) Plots 1: Sortie a01-s01-0076

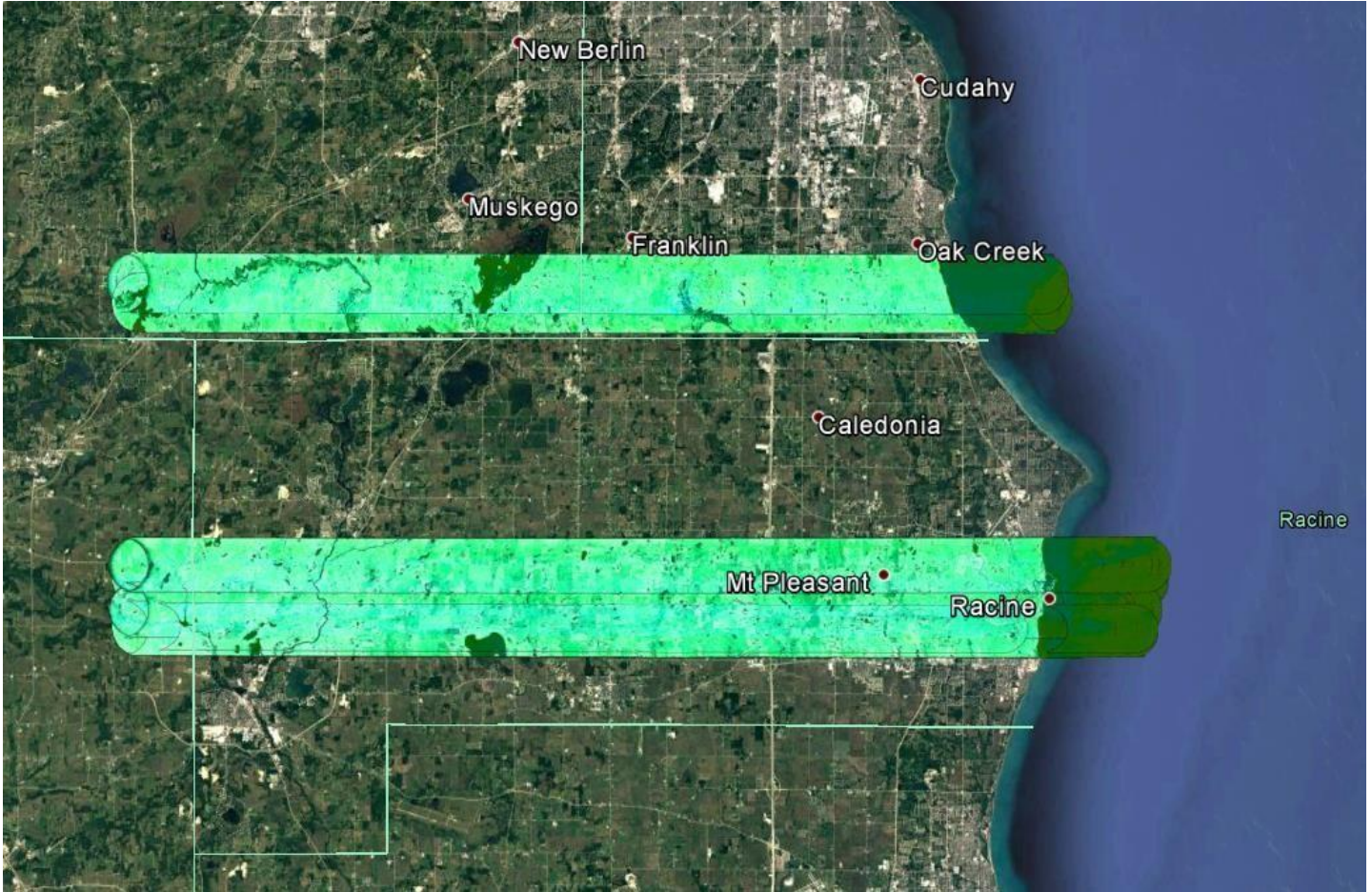


Sortie a01-s01-0077
04/17/2017

Map Run with Trajectory 2: Sortie a01-s01-0077



Swath Width, Waterfall View 2: Sortie a01-s01-0077



Combined SBET IAKAR Separation 2: Sortie a01-s01-0077

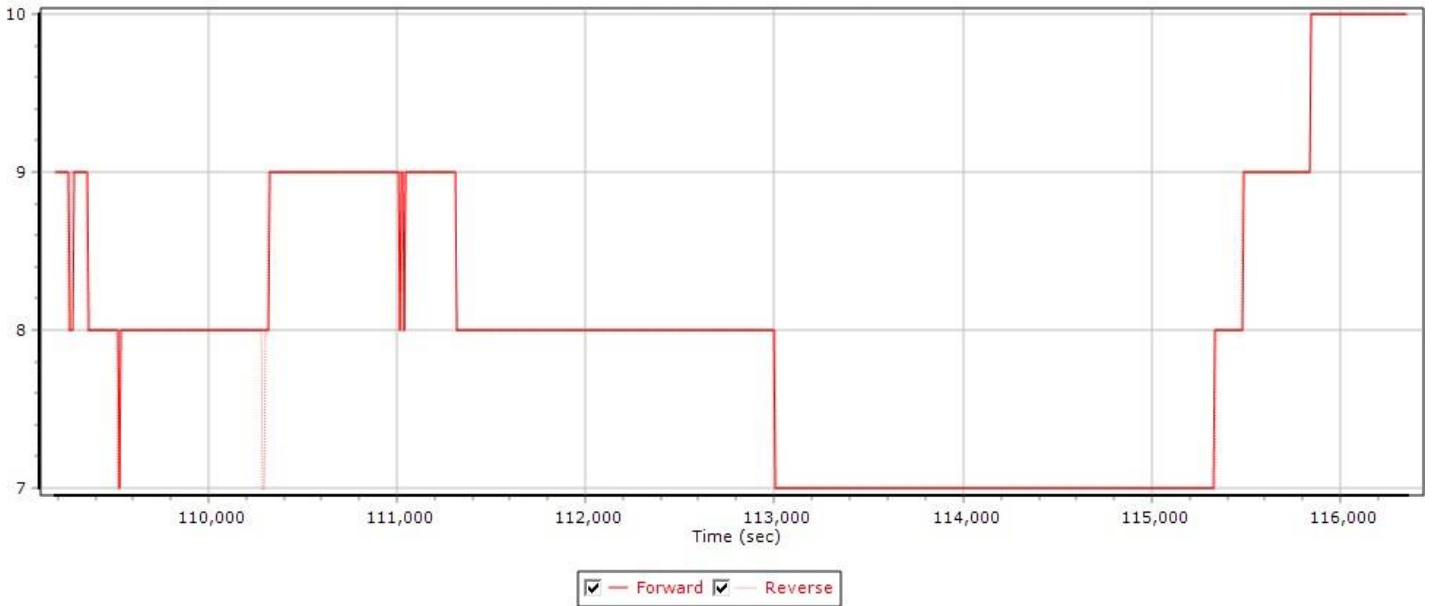


PDOP Plots 2: Sortie a03-s02-0213

PDOP

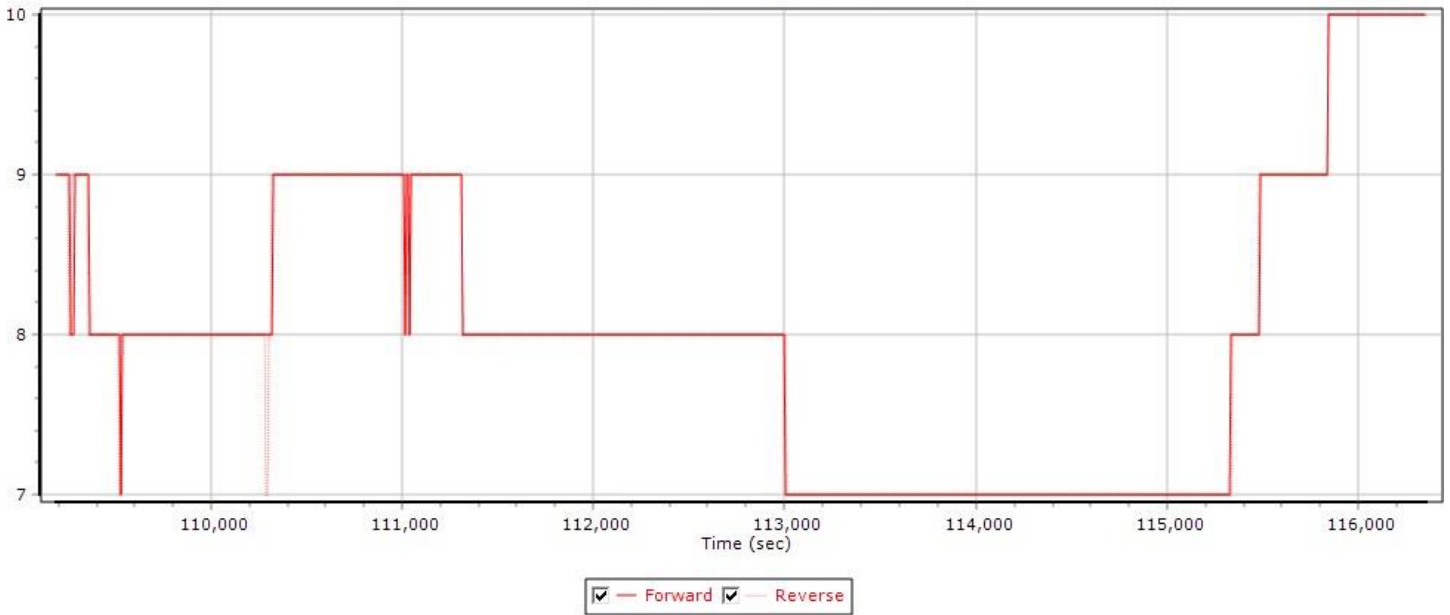


Number of Satellites (>6) Plots 2: Sortie a01-s01-0077
Number of GPS Satellites

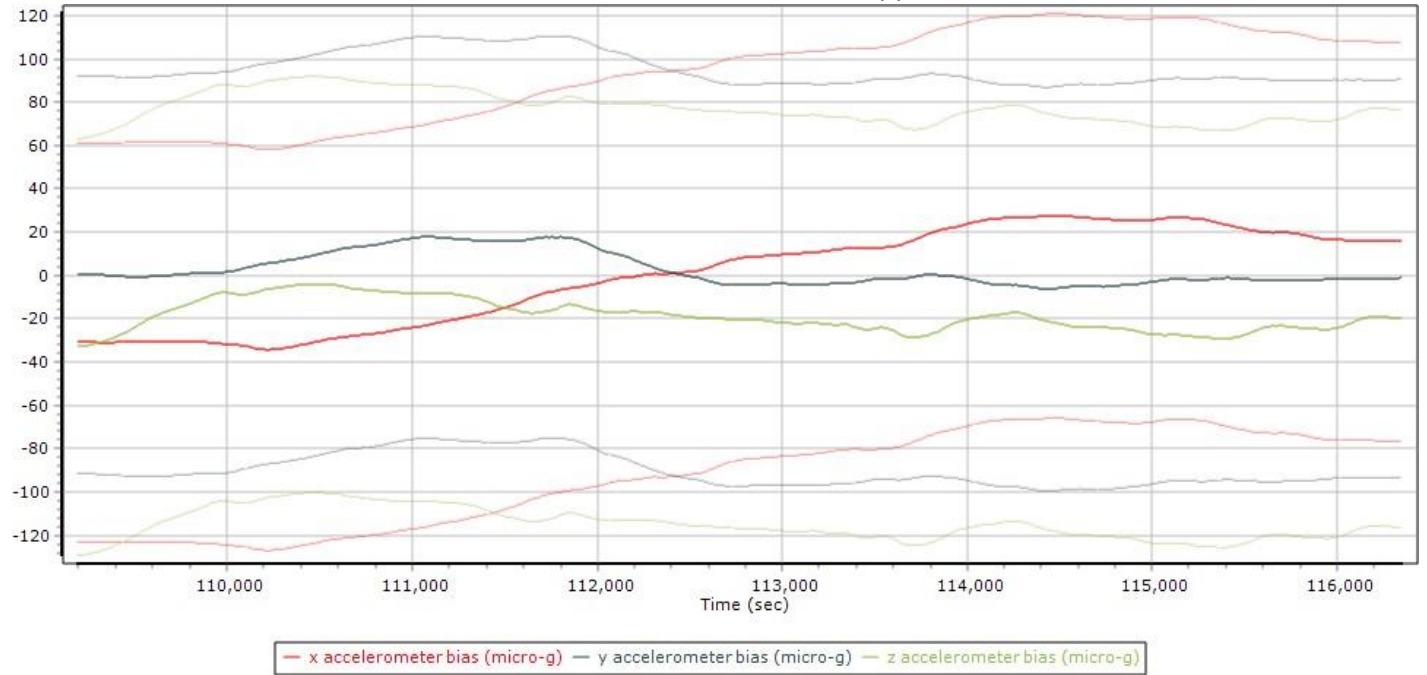


Sensor Position Error RMS (m) Plots 2: Sortie a01-s01-0077

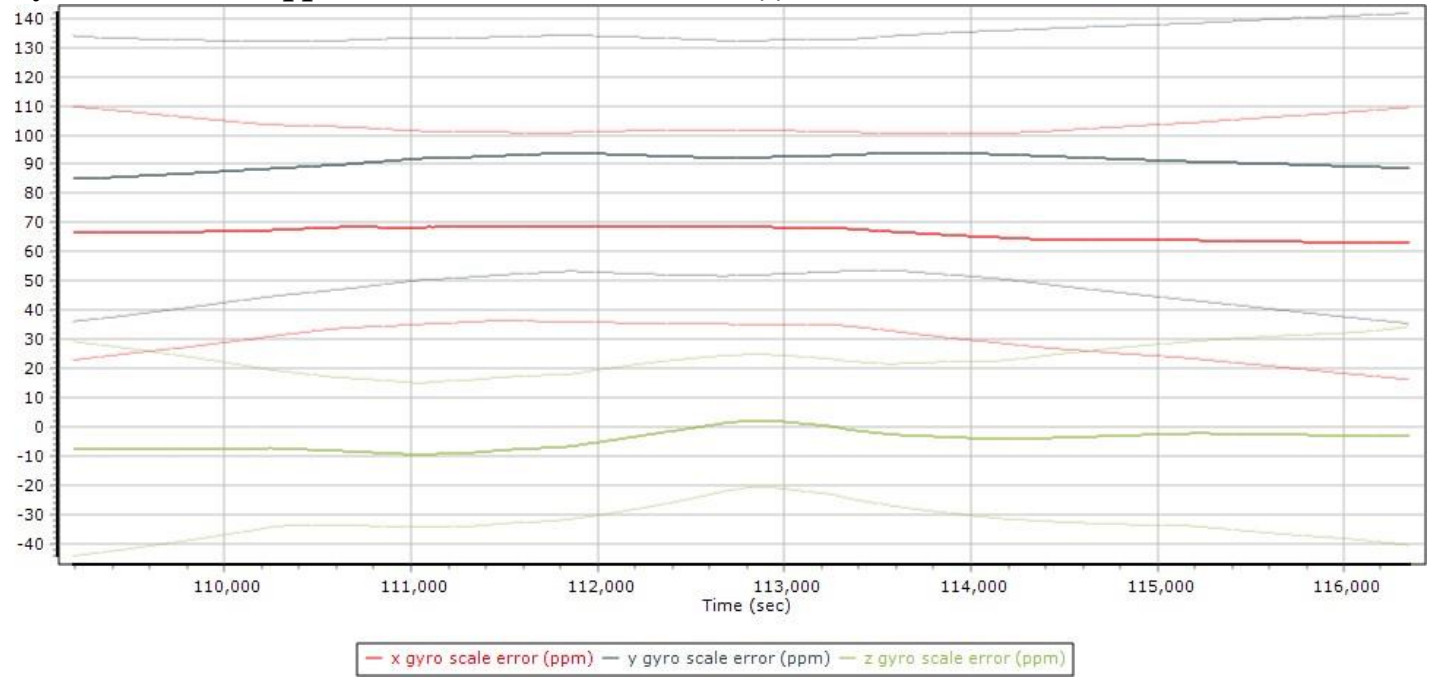
Number of GPS Satellites



Accelerometer Scale Bias Error Plots 2: Sortie a01-s01-0077



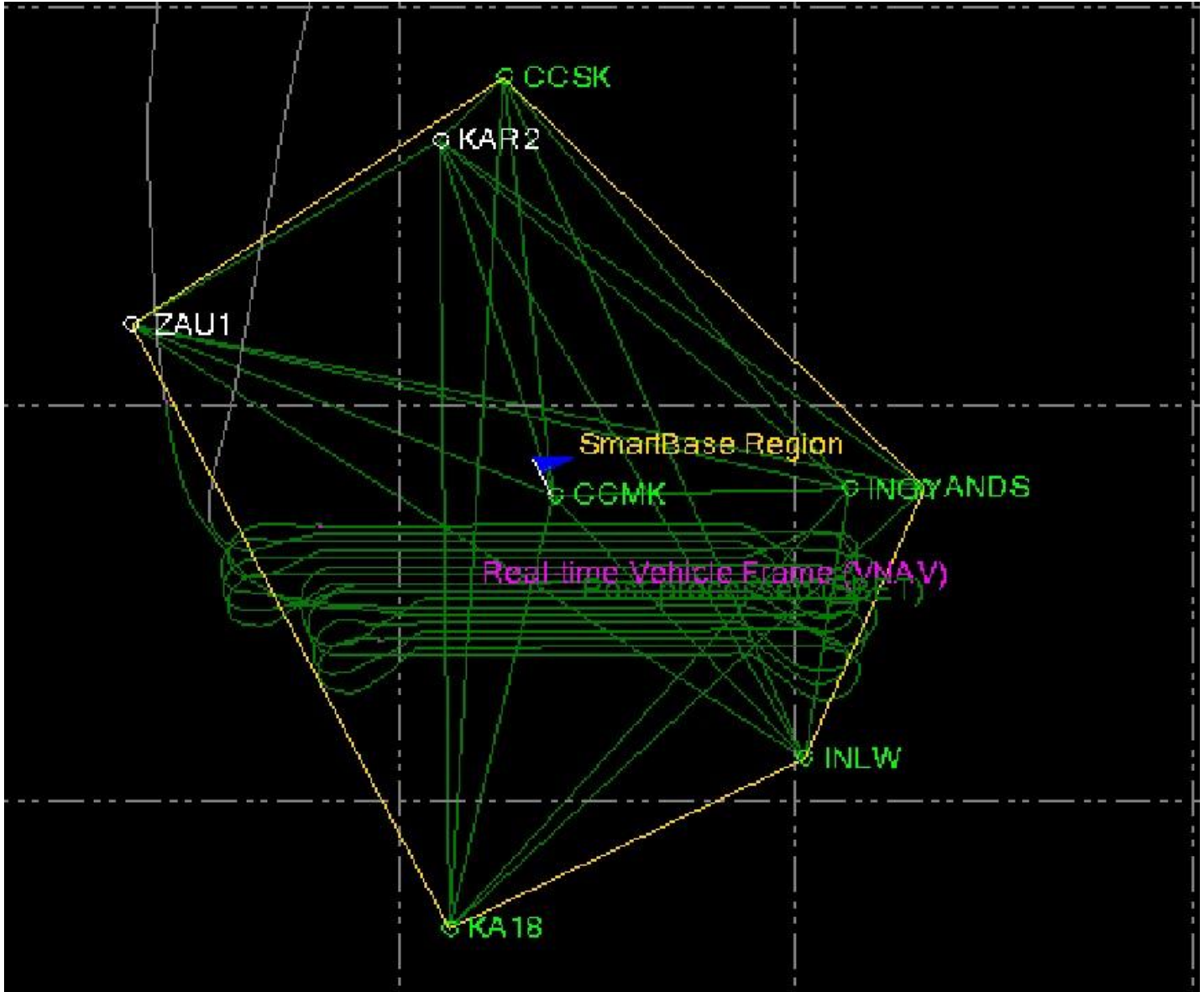
Gyro Scale Error (ppm) Plots 2: Sortie a01-s01-0077



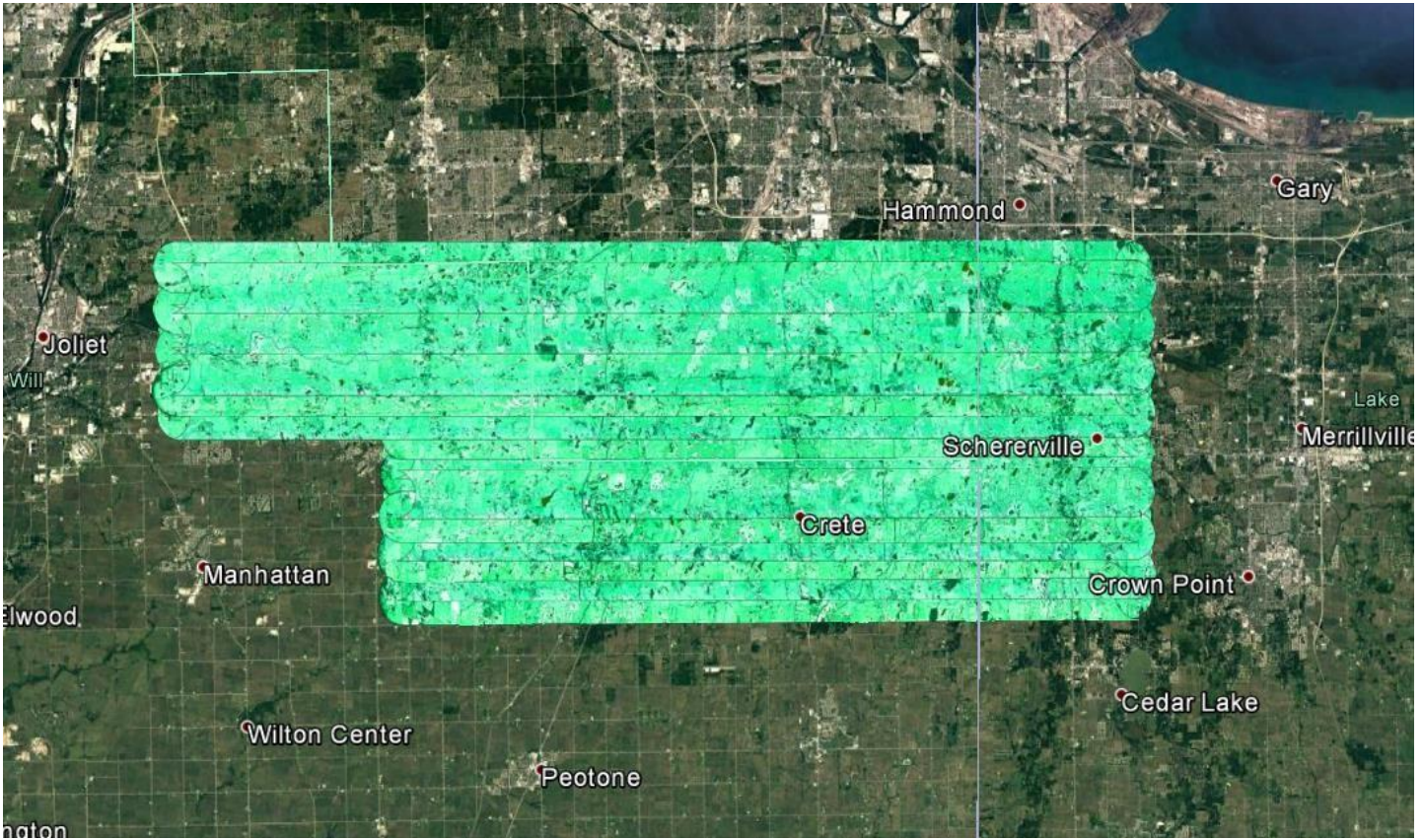
COLLECTION 3

Brick Chicago
Sortie a03-s02-0212
04/17/2017

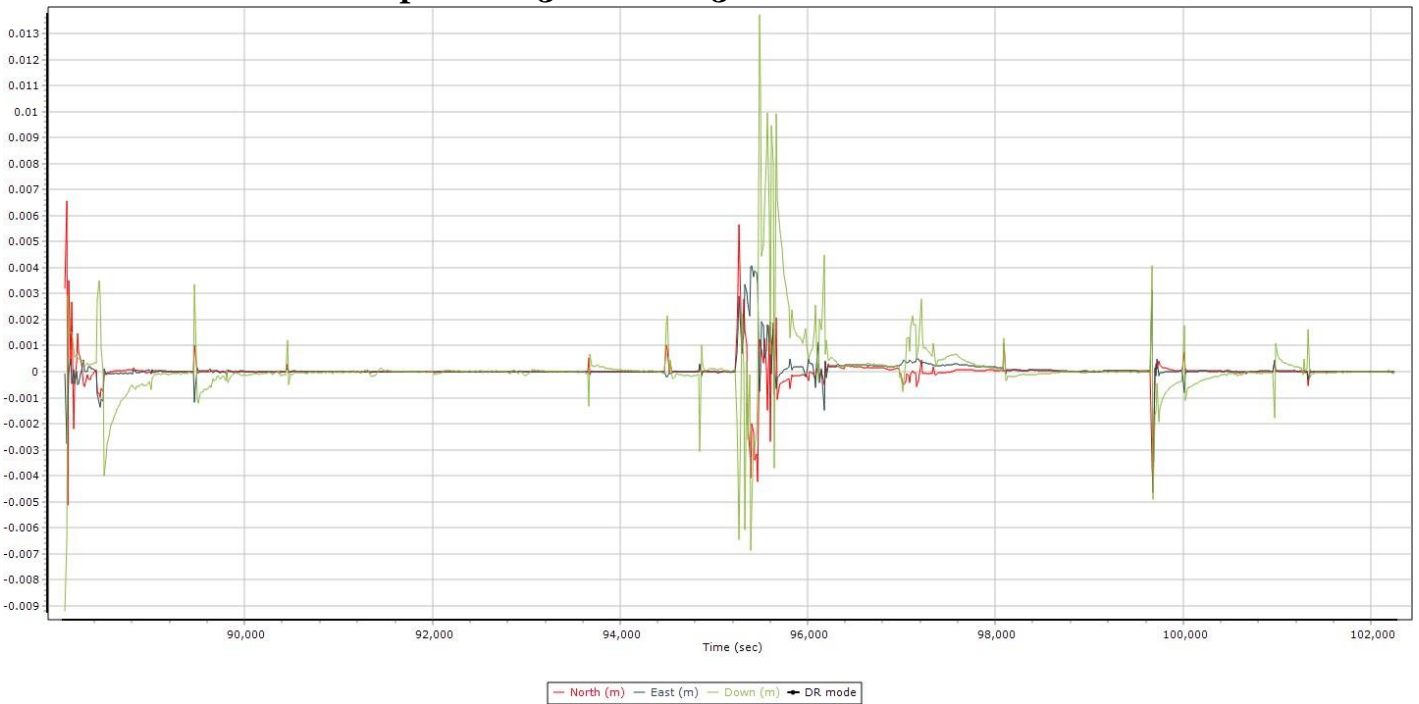
Map Run with Trajectory 3: Sortie a03-s02-0212



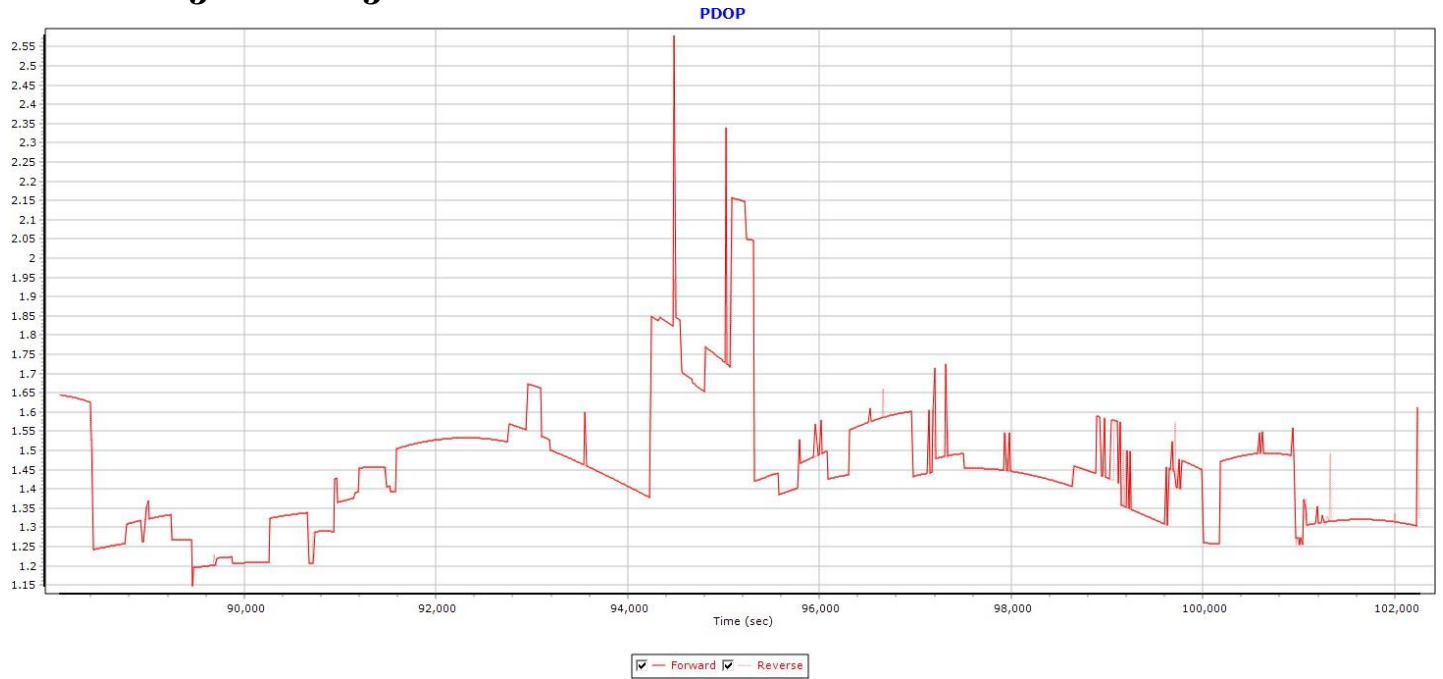
Swath Width, Waterfall View 3: Sortie a03-s02-0212



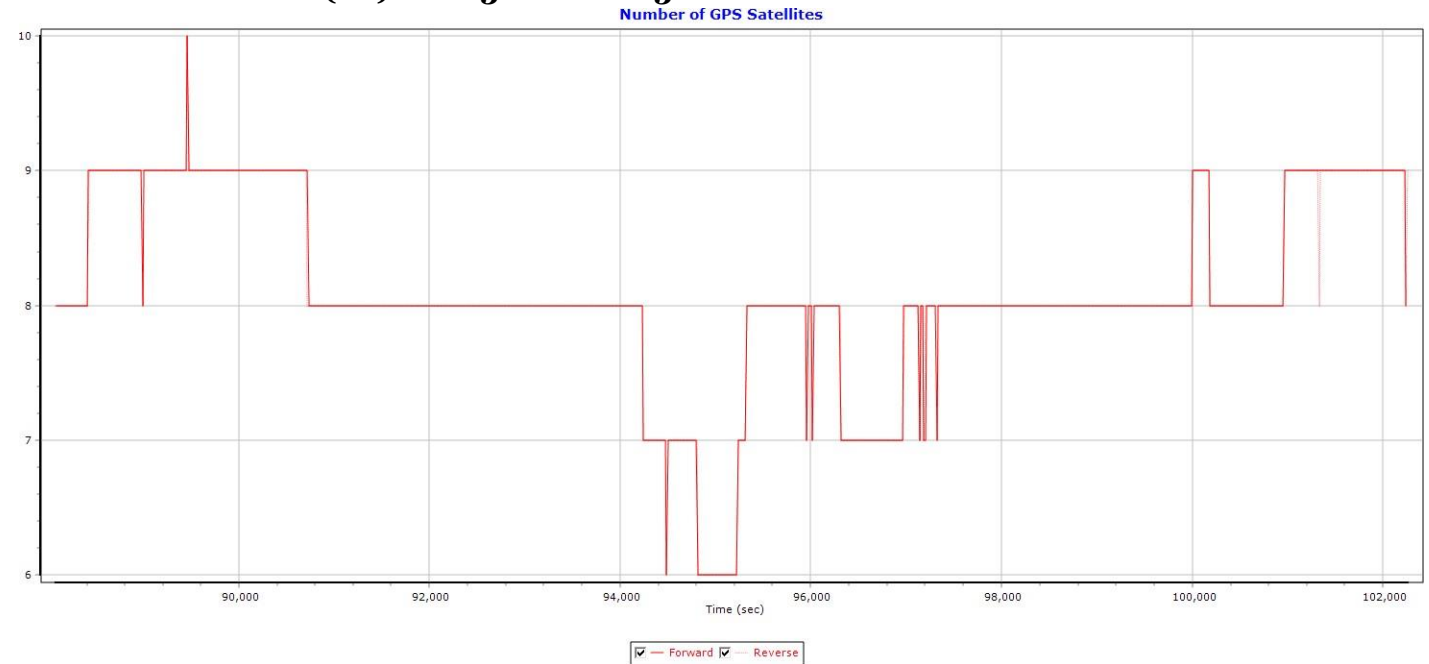
Combined SBET IAKAR Separation 3: Sortie a03-s02-0212



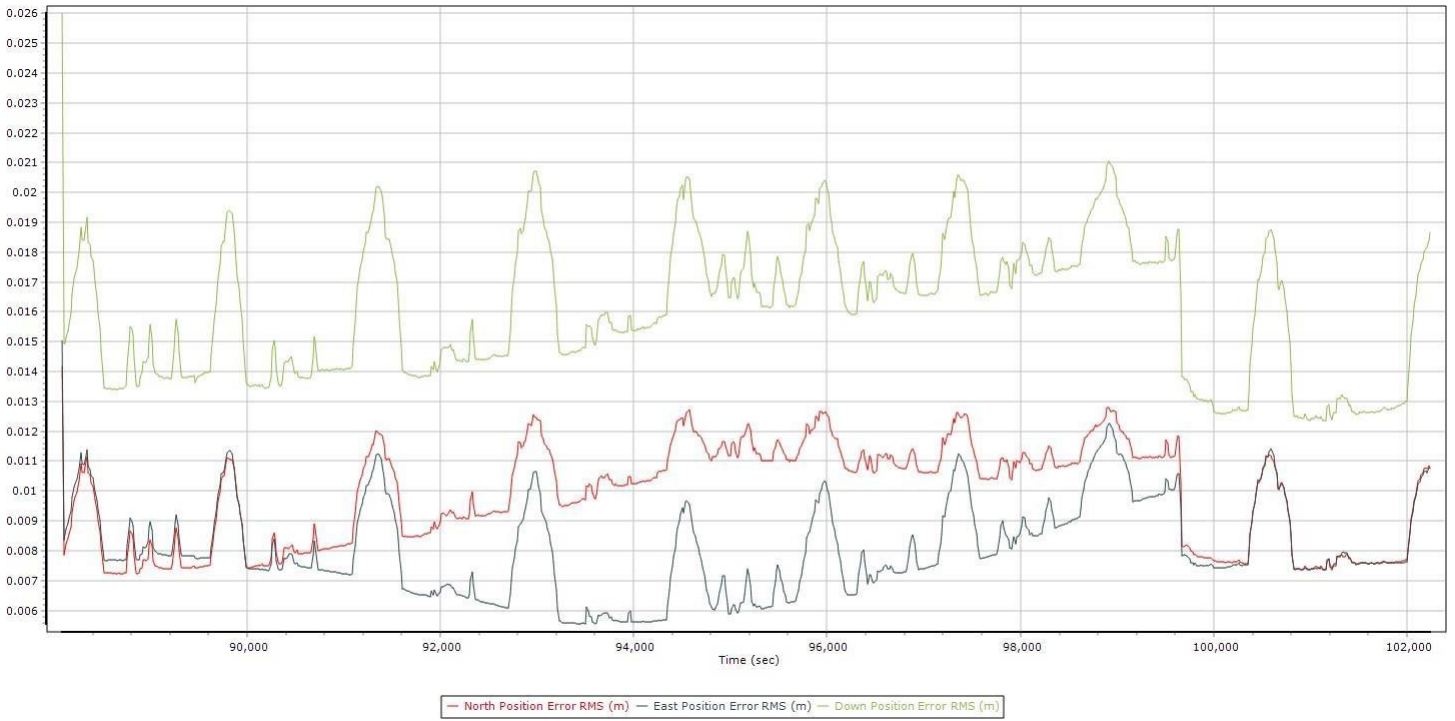
PDOP Plots 3: Sortie a03-s02-0212



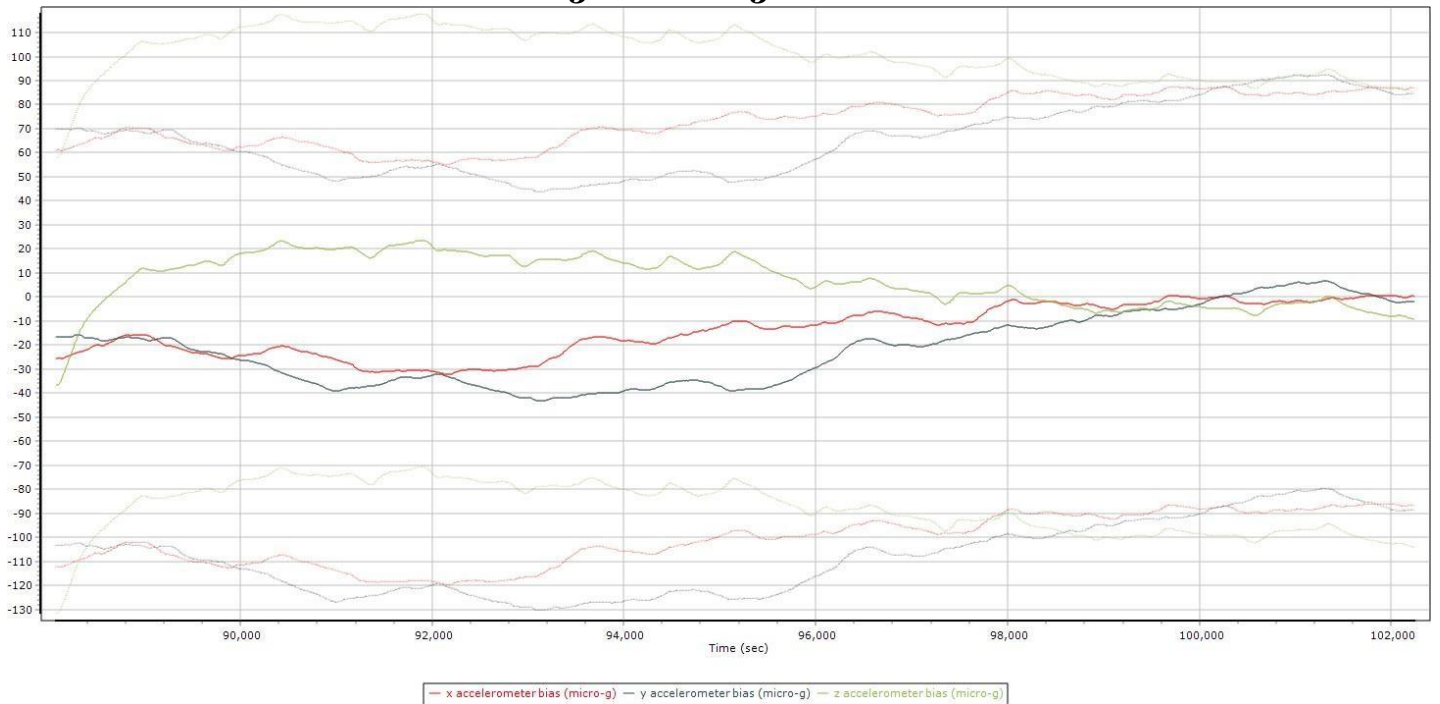
Number of Satellites (>6) Plots 3: Sortie a03-s02-0212



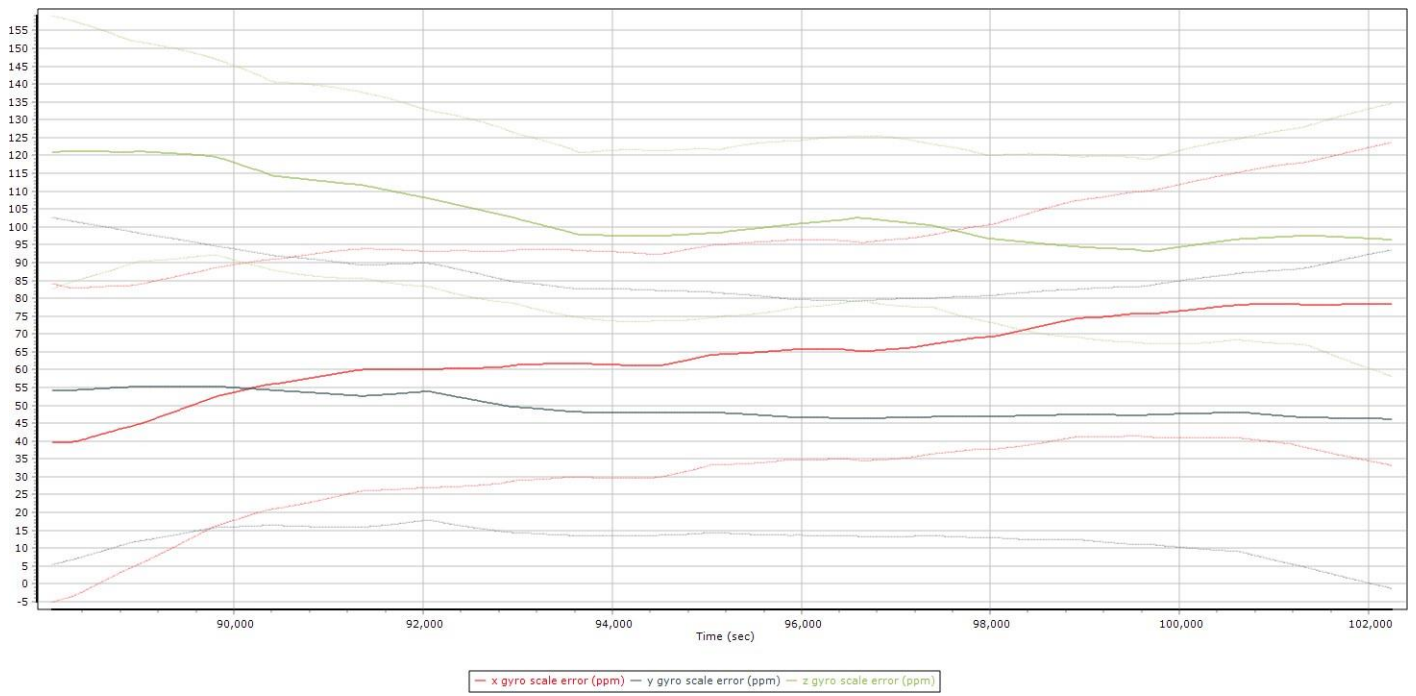
Sensor Position Error RMS (m) Plots 3: Sortie a03-s02-0212



Accelerometer Scale Bias Error Plots 3: Sortie a03-s02-0212



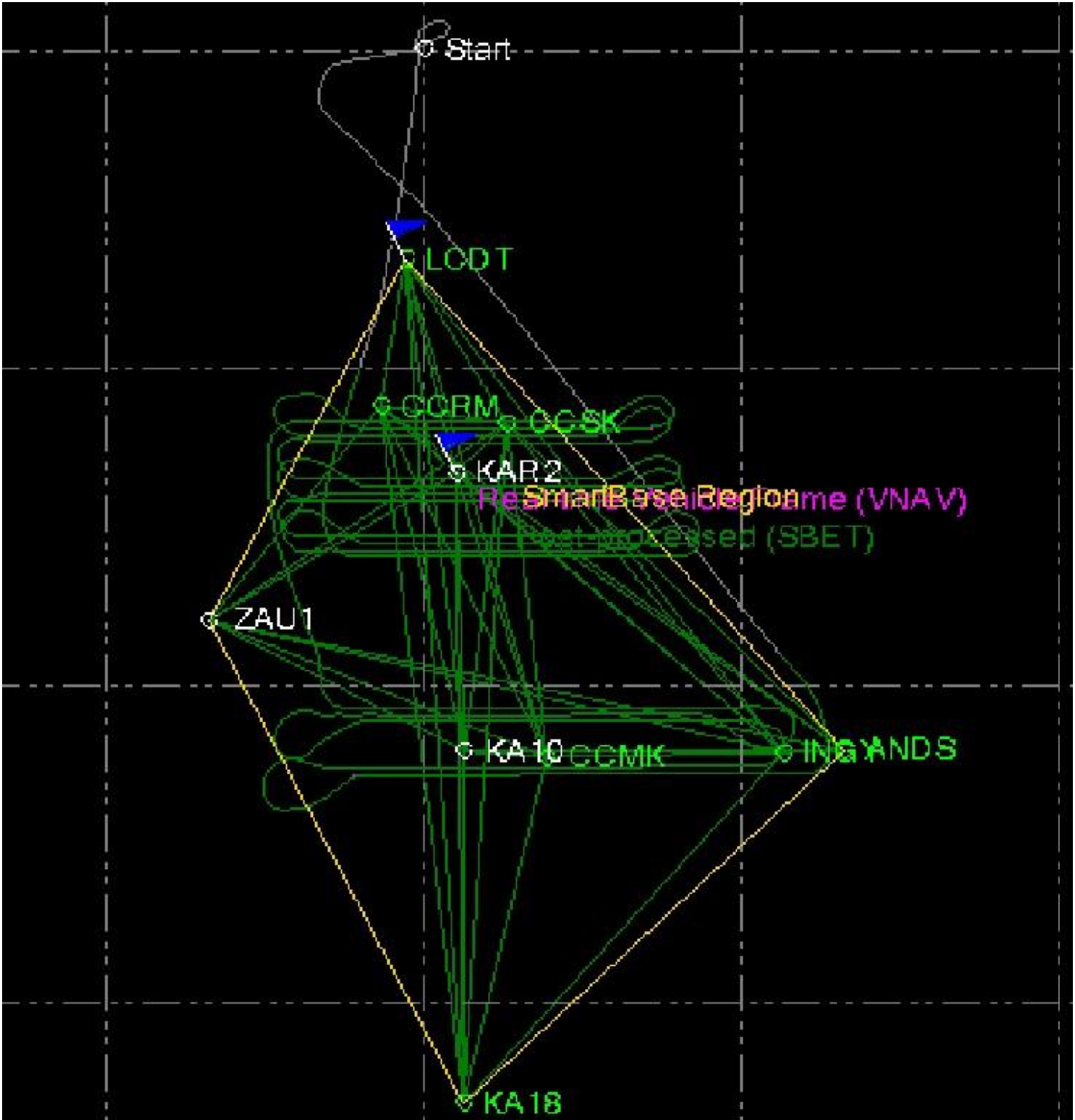
Gyro Scale Error (ppm) Plots 3: Sortie a03-s02-0212



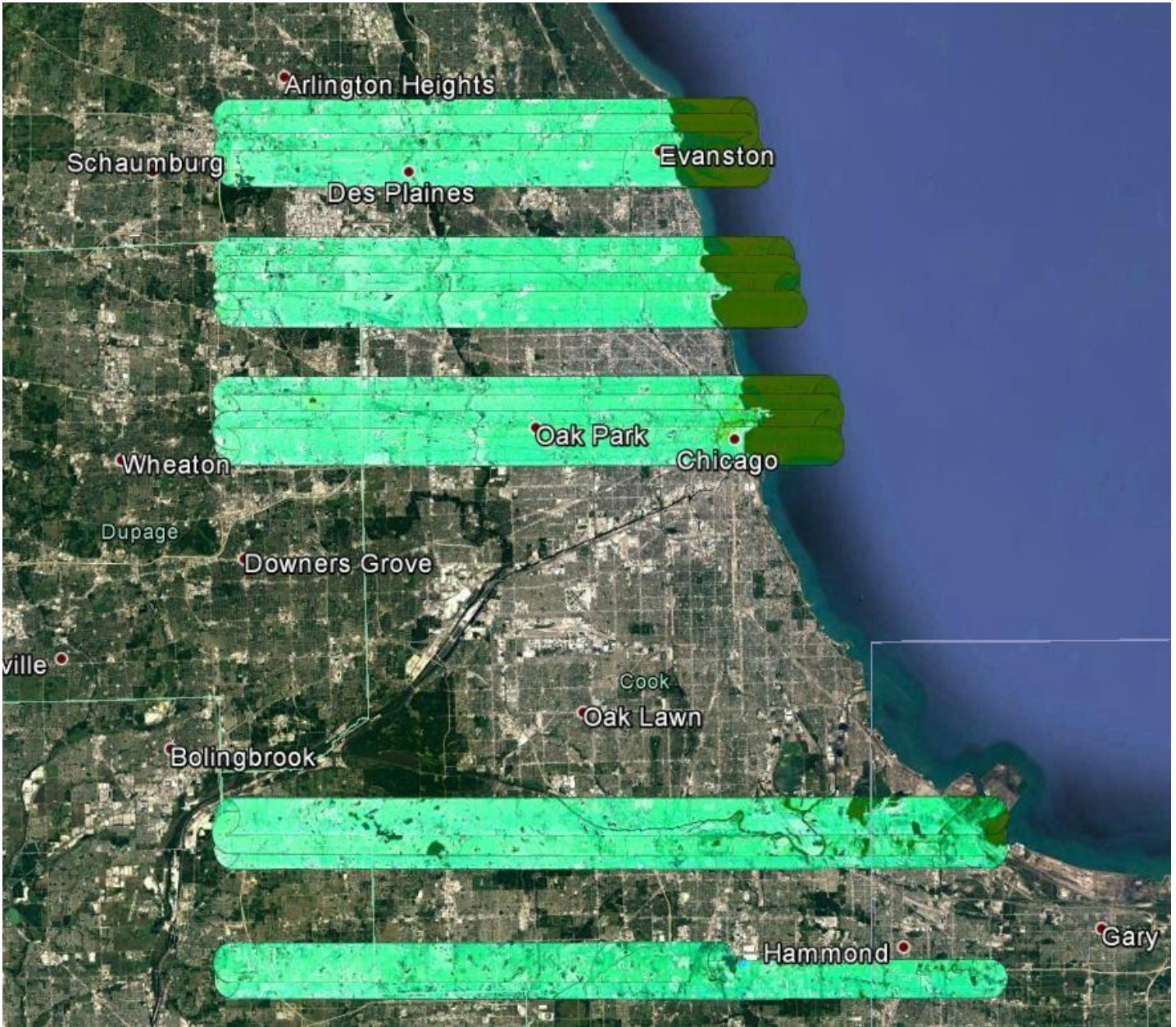
COLLECTION 4

Brick: "Chicago"
Sortie a03-s02-0213
04/17/2017

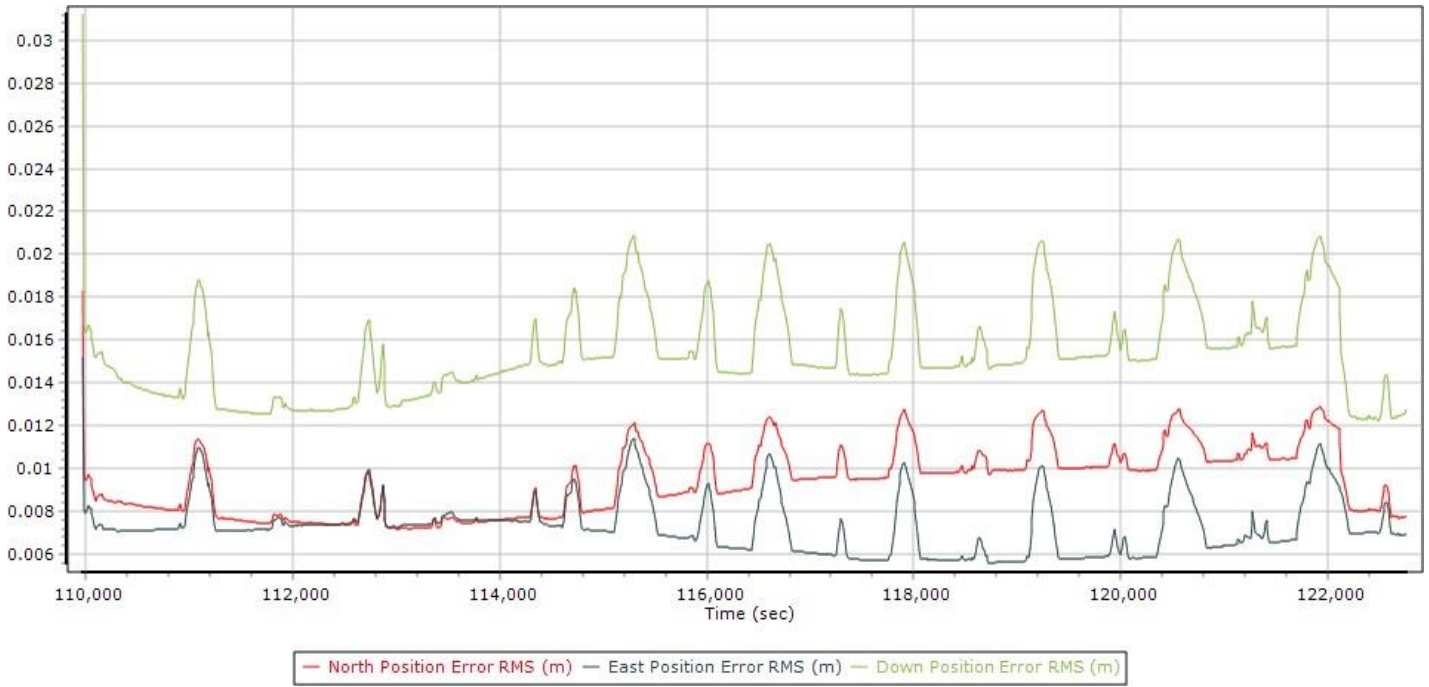
Map Run with Trajectory 4: Sortie a03-s02-0213



Swath Width, Waterfall View 4: Sortie a03-s02-0213

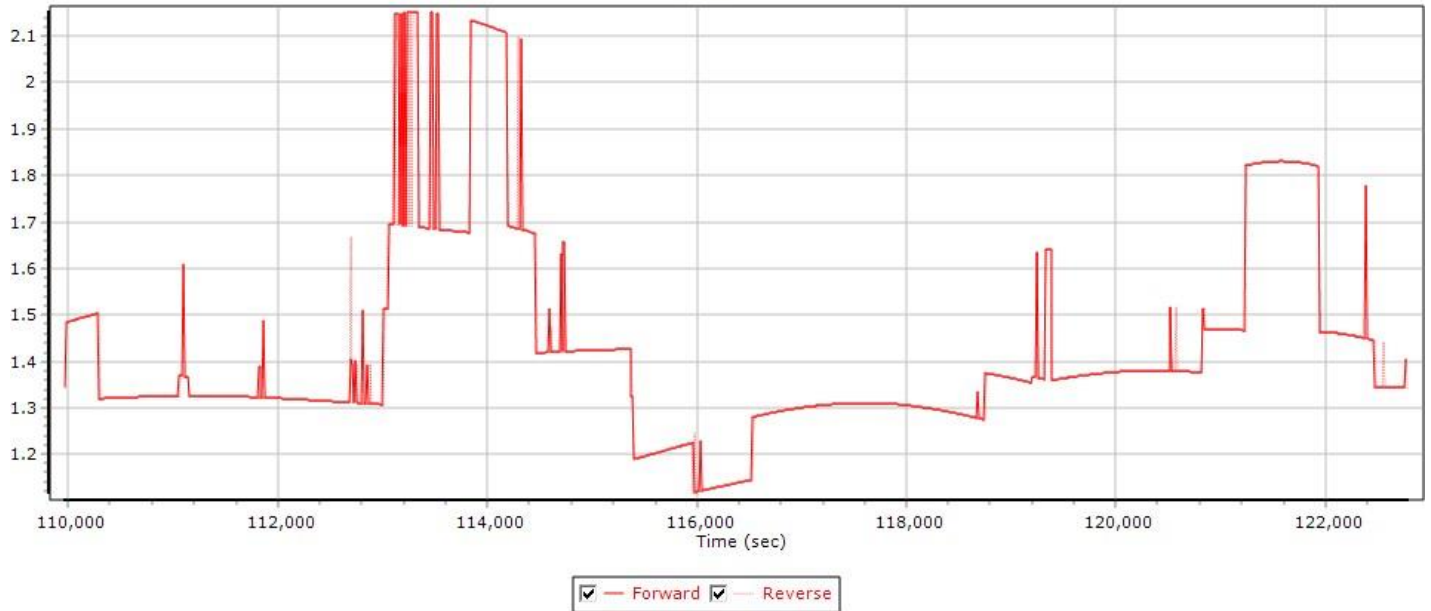


Combined SBET IAKAR Separation 4: Sortie a03-s02-0213

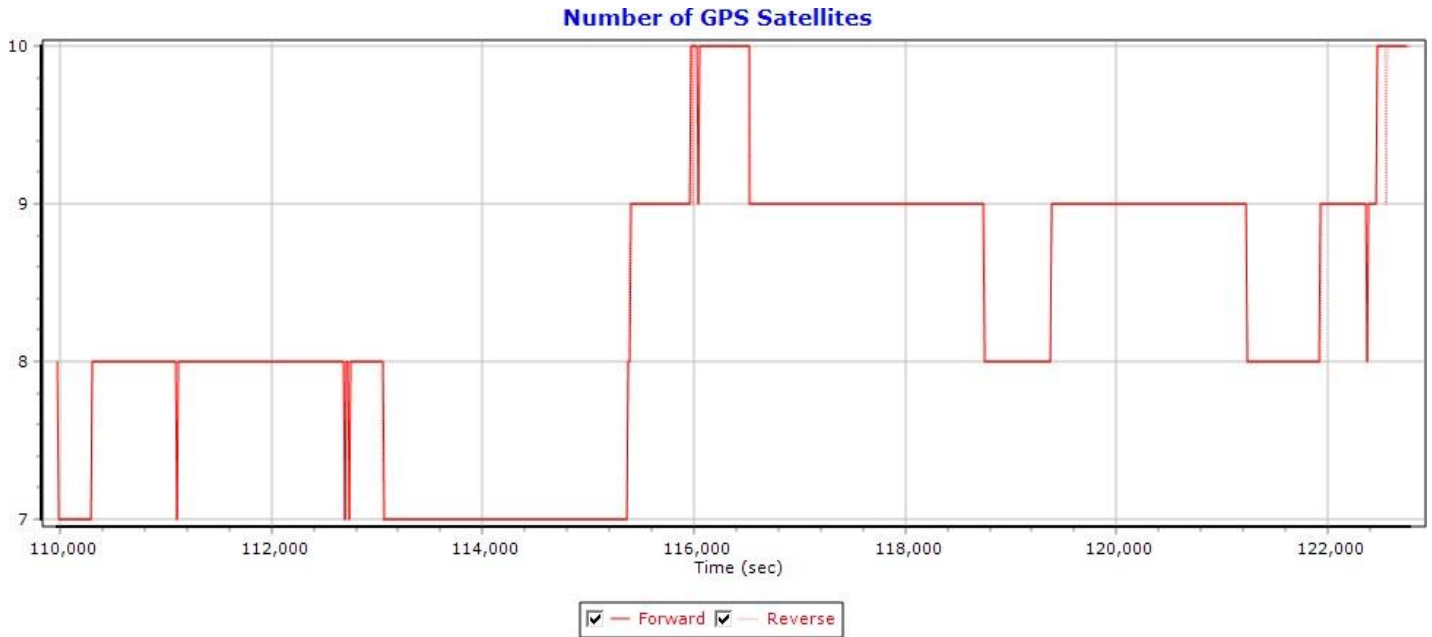


PDOP Plots 4: Sortie a03-s02-0213

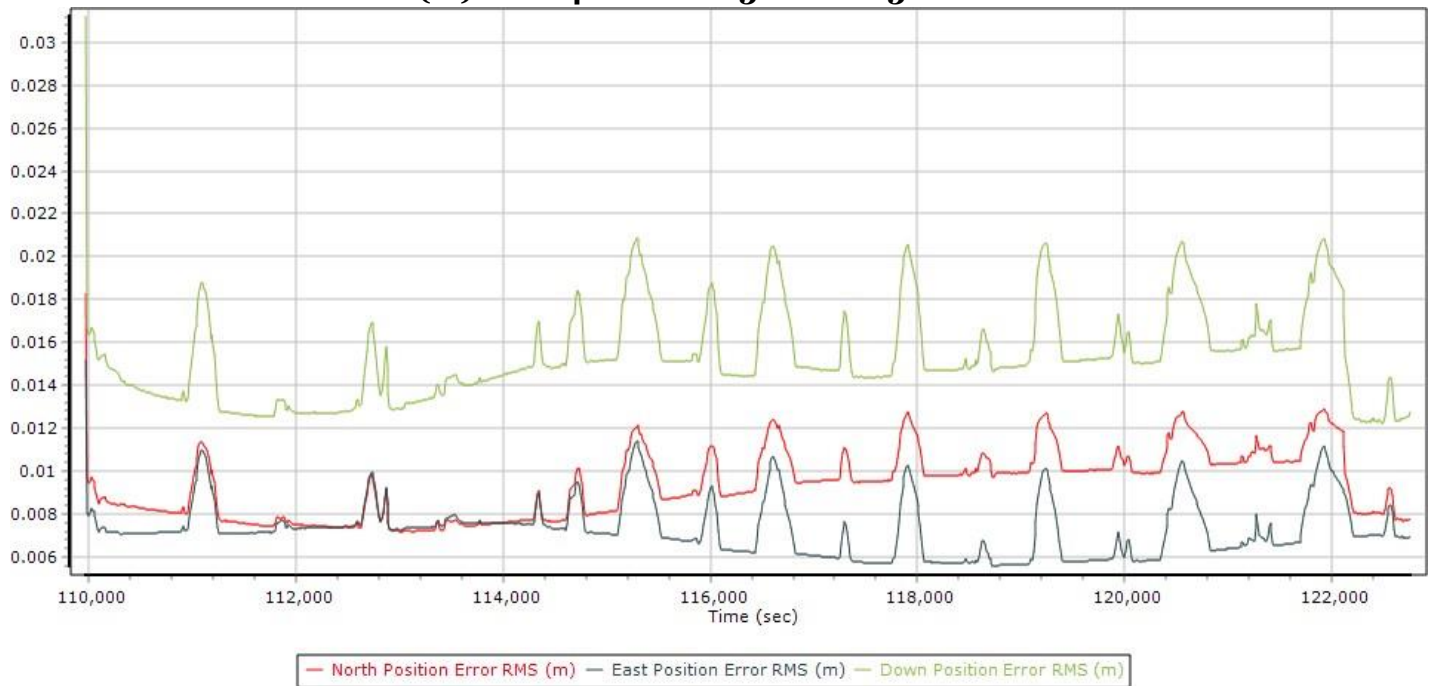
PDOP



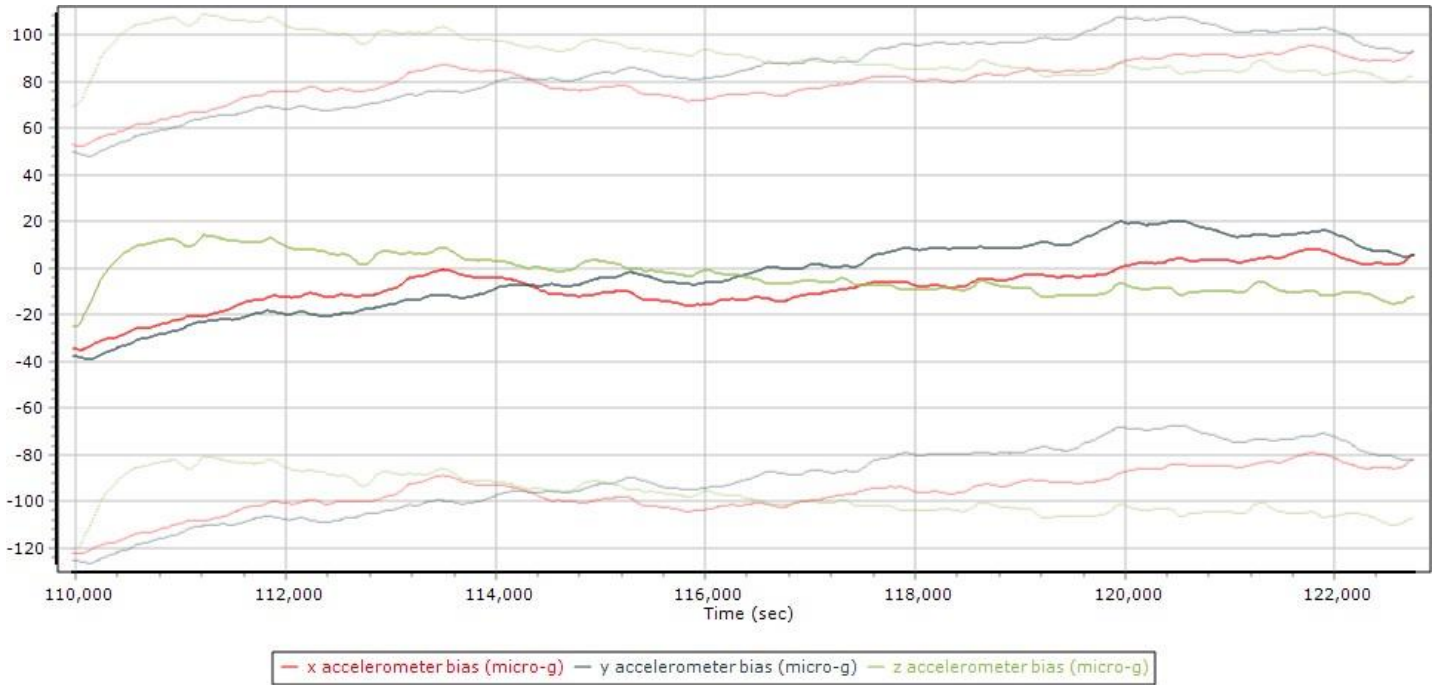
Number of Satellites (>6) Plots 4: Sortie a03-s02-0213



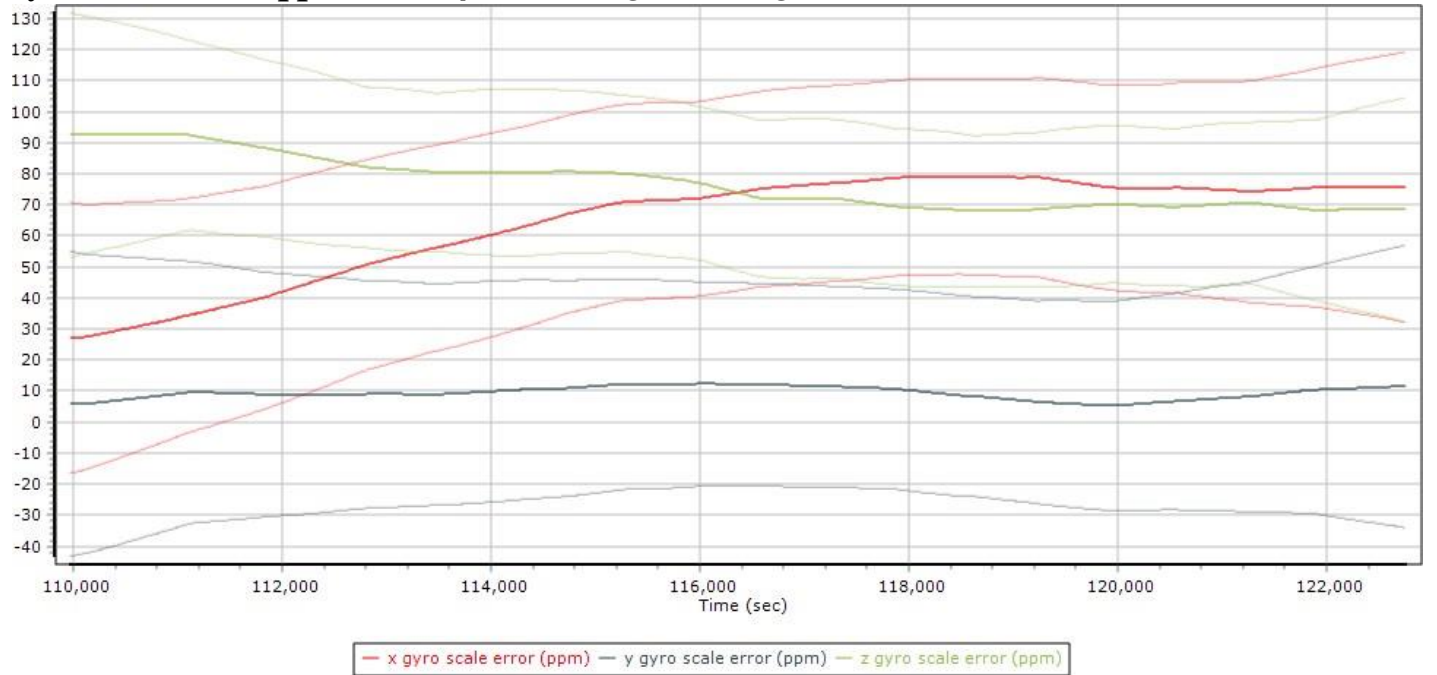
Sensor Position Error RMS (m) Plots 4: Sortie a03-s02-0213



Accelerometer Scale Bias Error Plots 4: Sortie a03-s02-0213

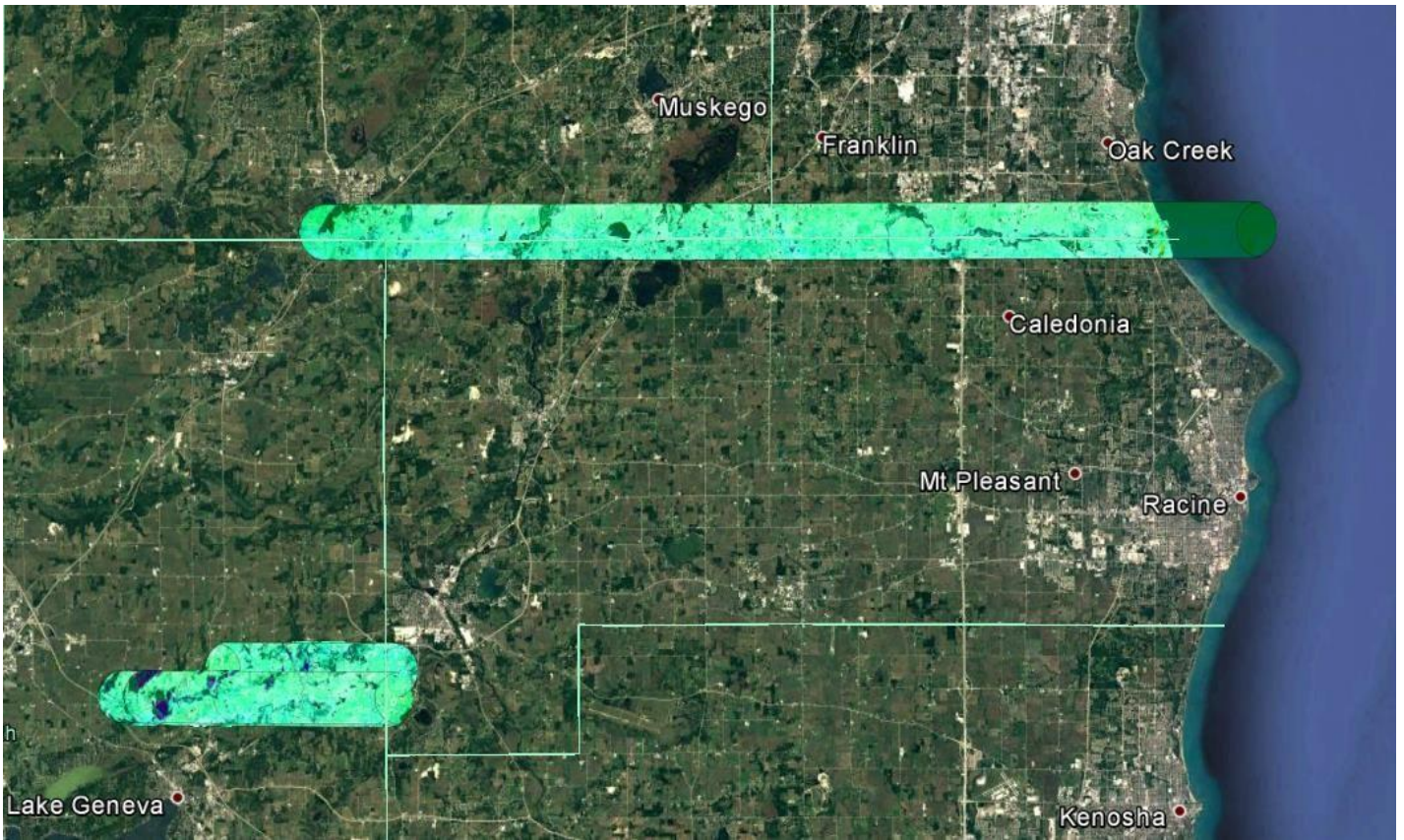


Gyro Scale Error (ppm) Plots 4: Sortie a03-s02-0213

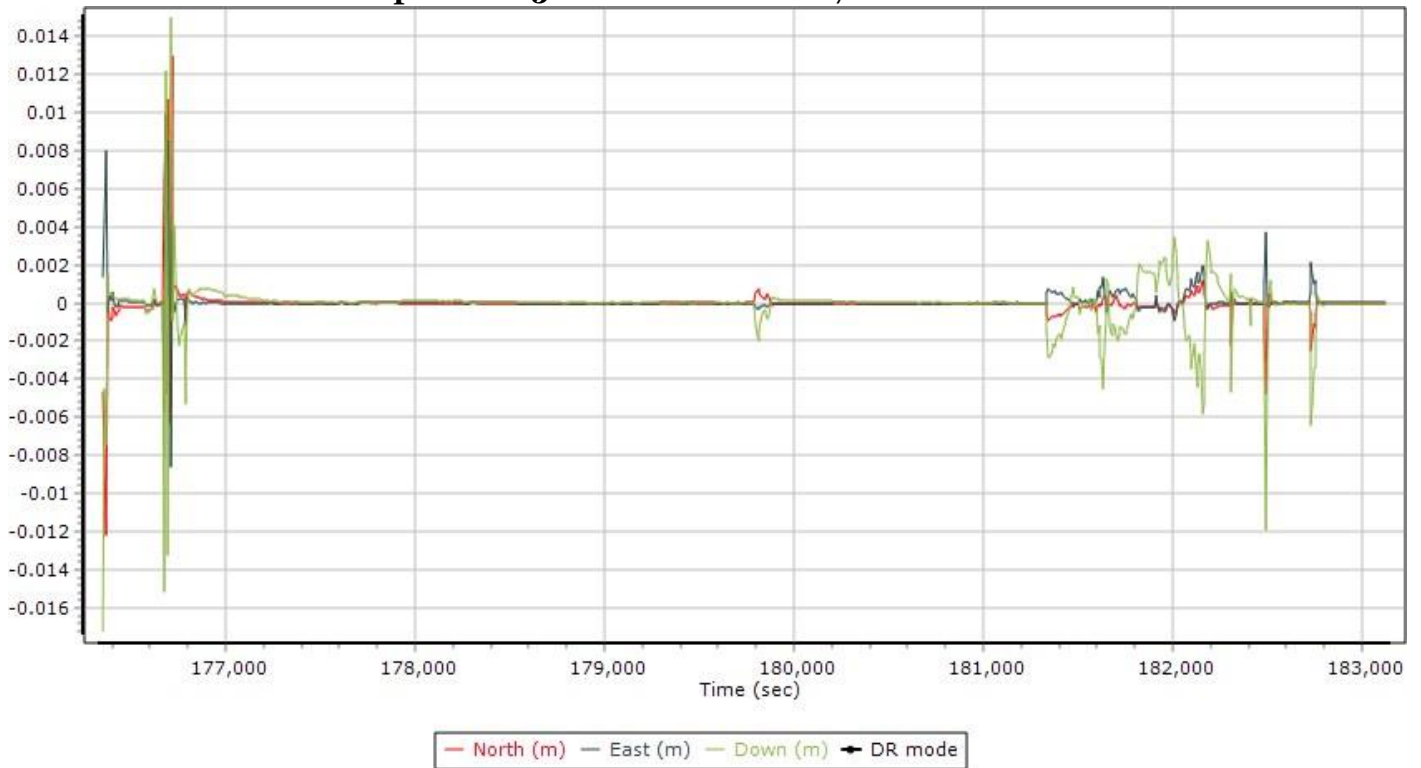


COLLECTION 5

Brick 1 & WI
Sortie a01-s01-0078
04/18/2017

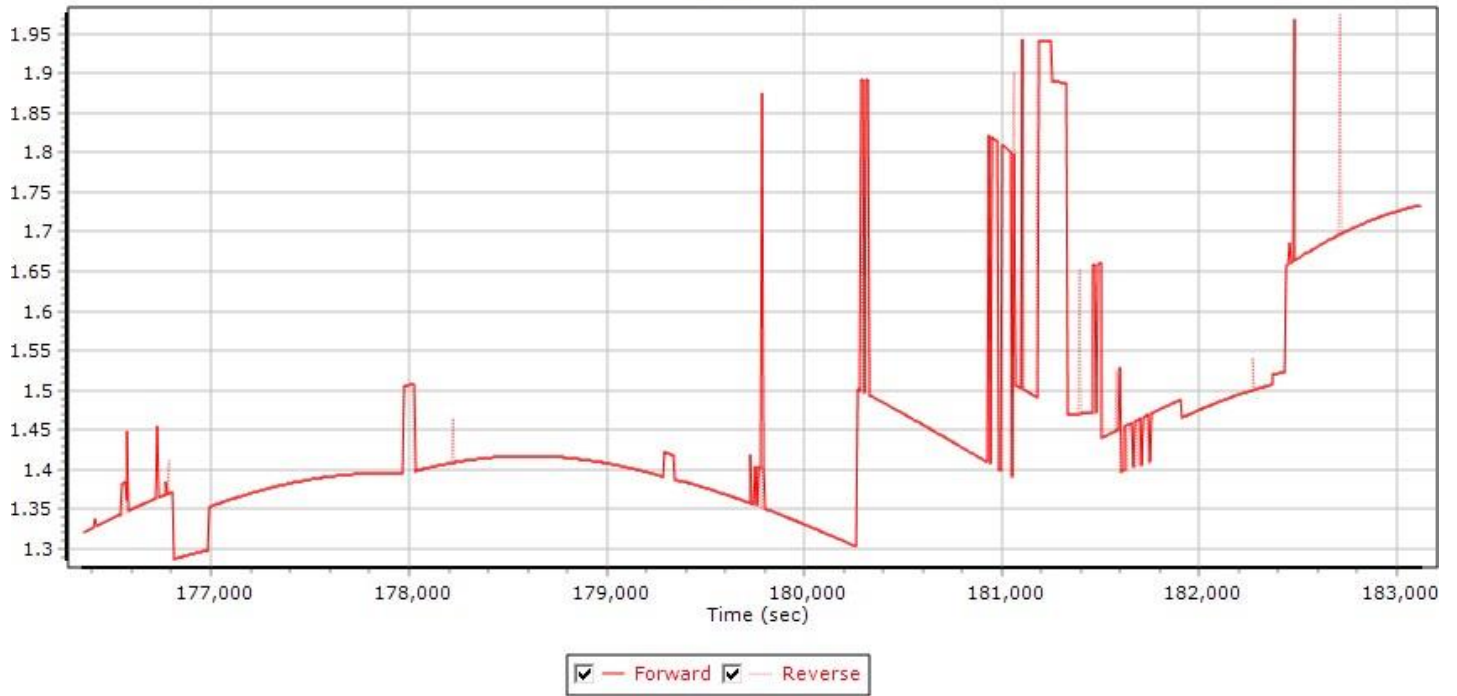


Combined SBET IAKAR Separation 5: Sortie a01-s01-0078



PDOP Plots 5: Sortie a01-s01-0078

PDOP



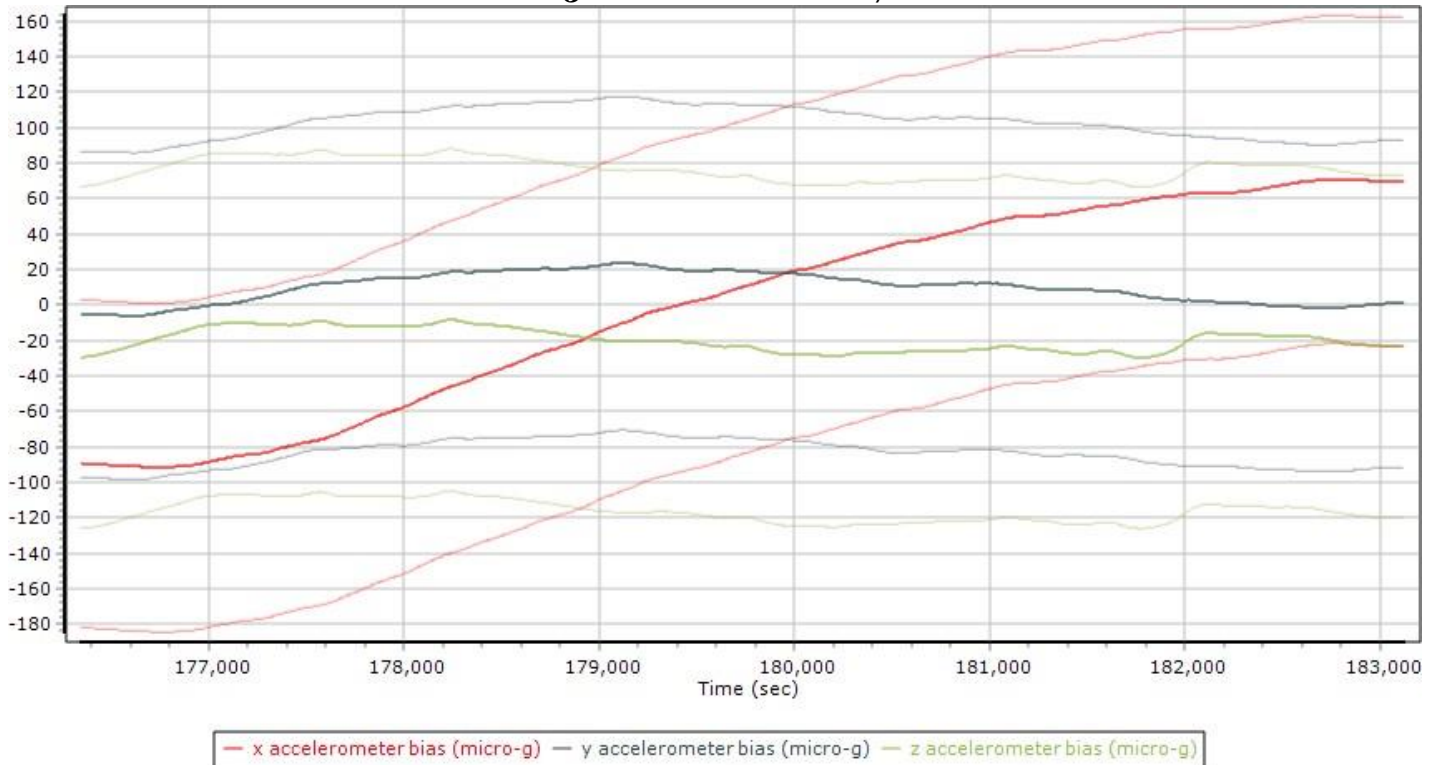
Number of Satellites (>6) Plots 5: Sortie a01-s01-0078 Number of GPS Satellites



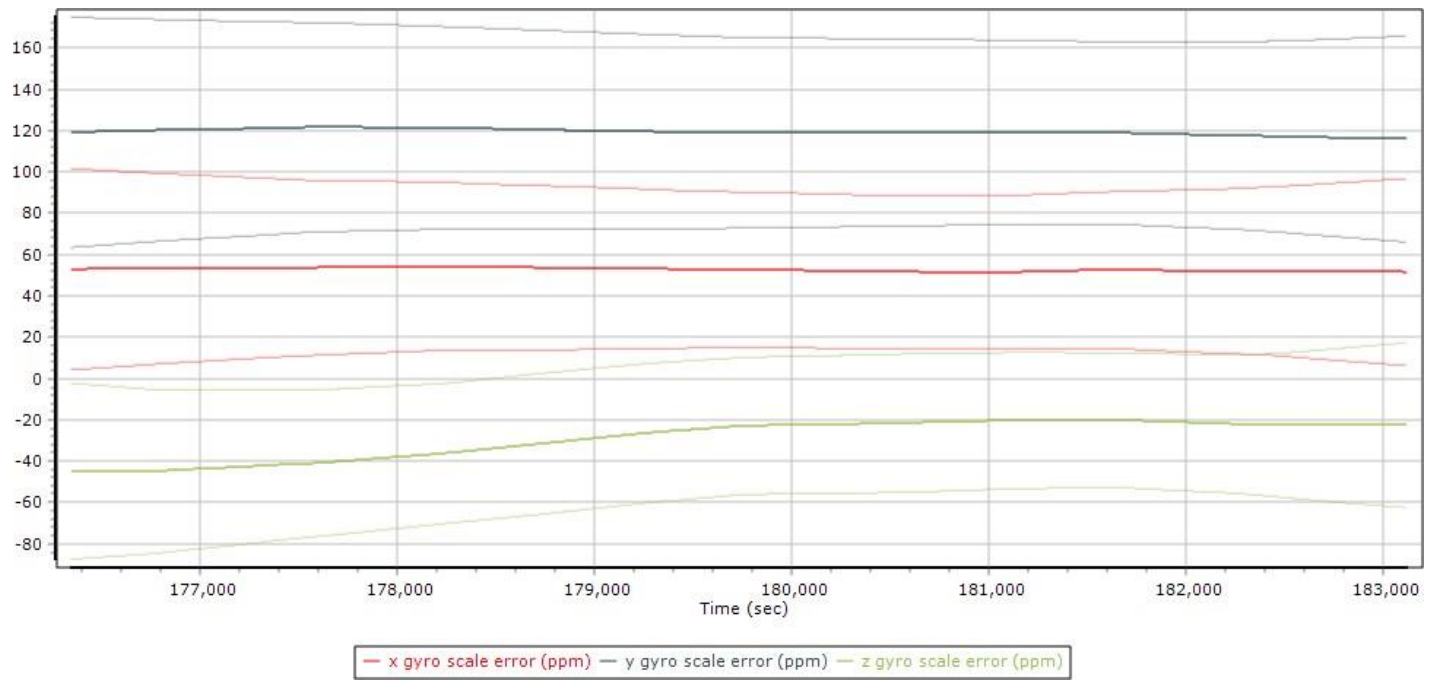
Sensor Position Error RMS (m) Plots 5: Sortie a01-s01-0078



Accelerometer Scale Bias Error Plots 5: Sortie a01-s01-0078



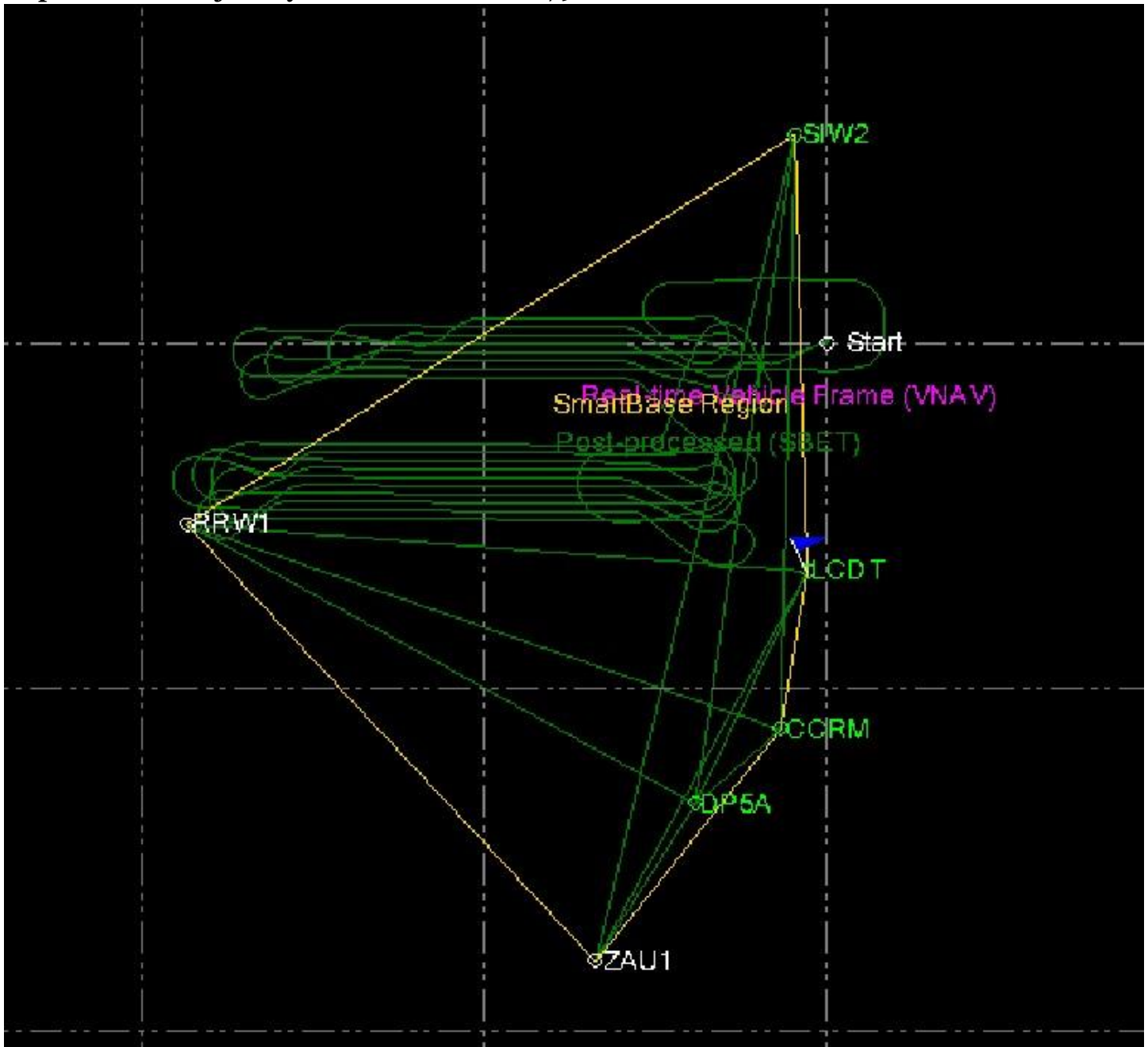
Gyro Scale Error (ppm) Plots 5: Sortie a01-s01-0078



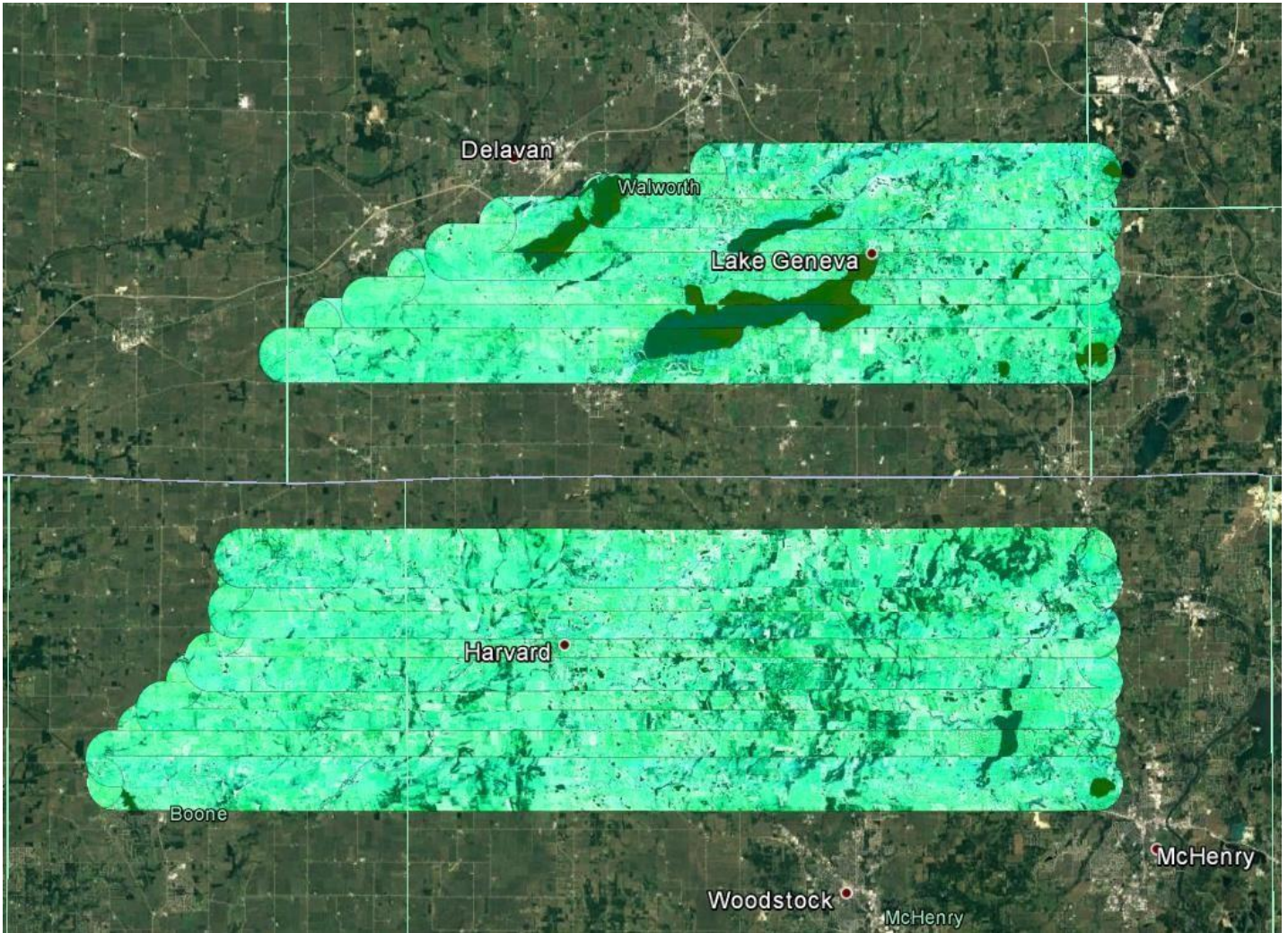
COLLECTION 6

Brick 1
Sortie a01-s01-0079
04/18/2017

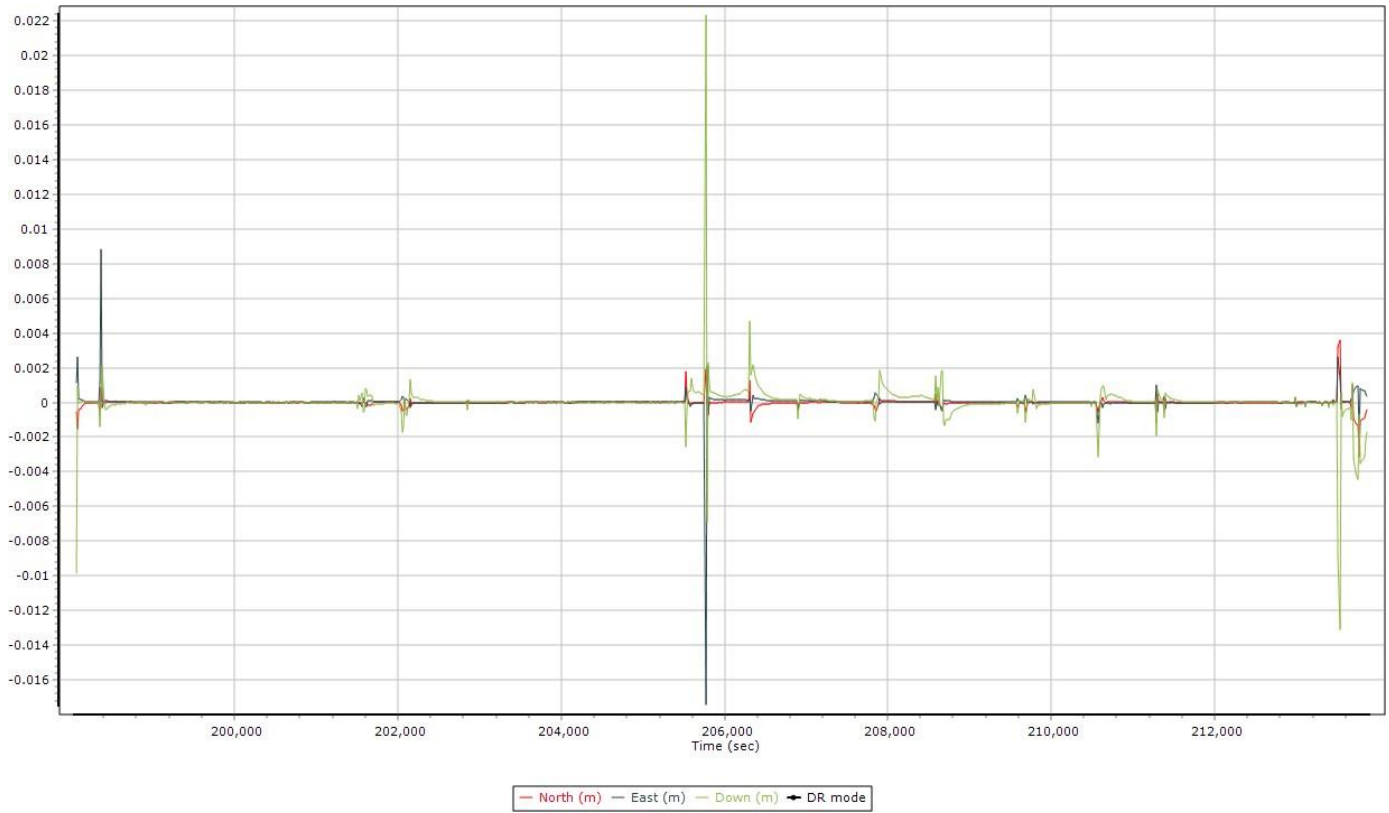
Map Run with Trajectory 6: Sortie a01-s01-0079



Swath Width, Waterfall View 7: Sortie a01-s01-0079

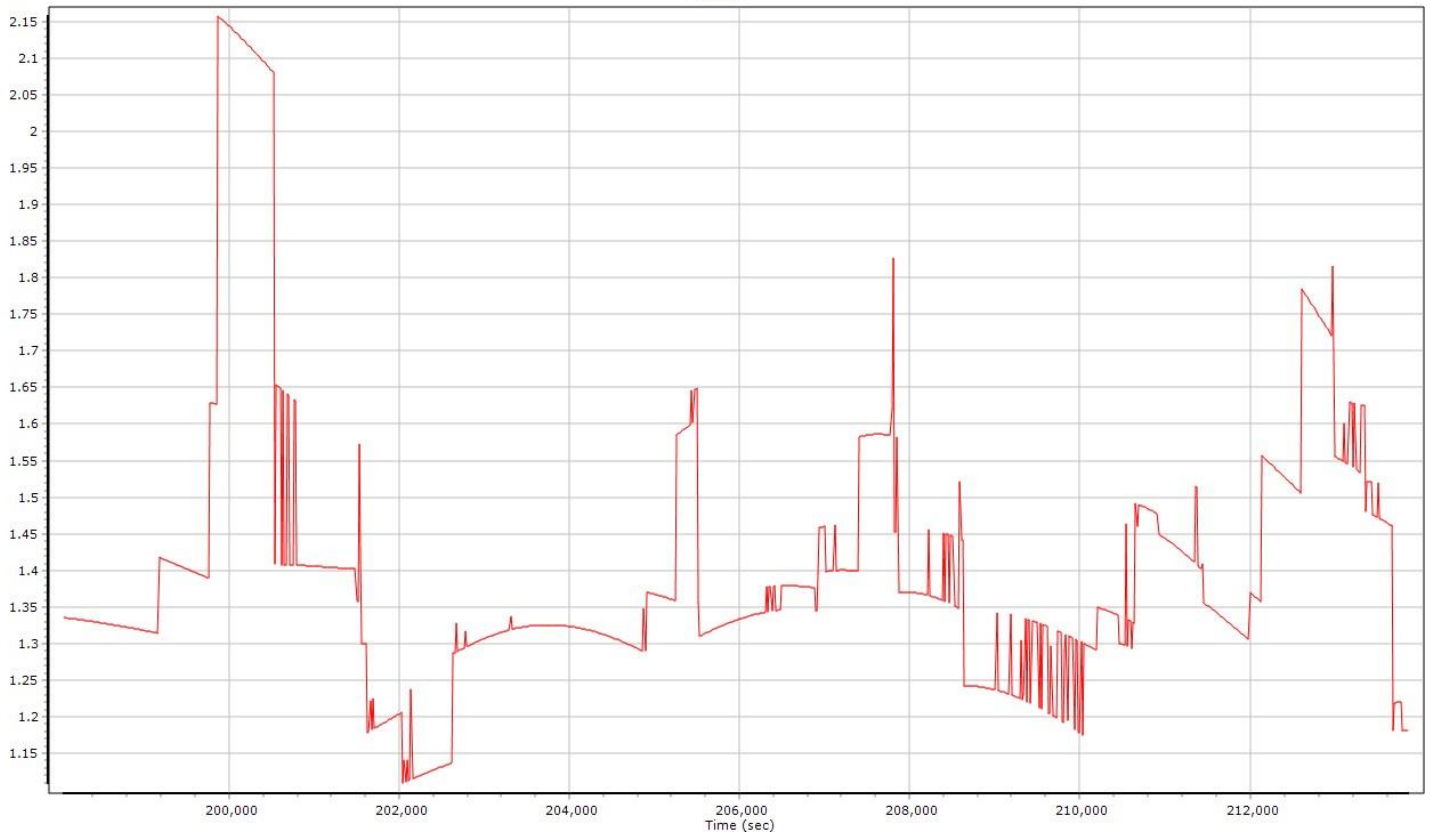


Combined SBET IAKAR Separation 7: Sortie a01-s01-0079

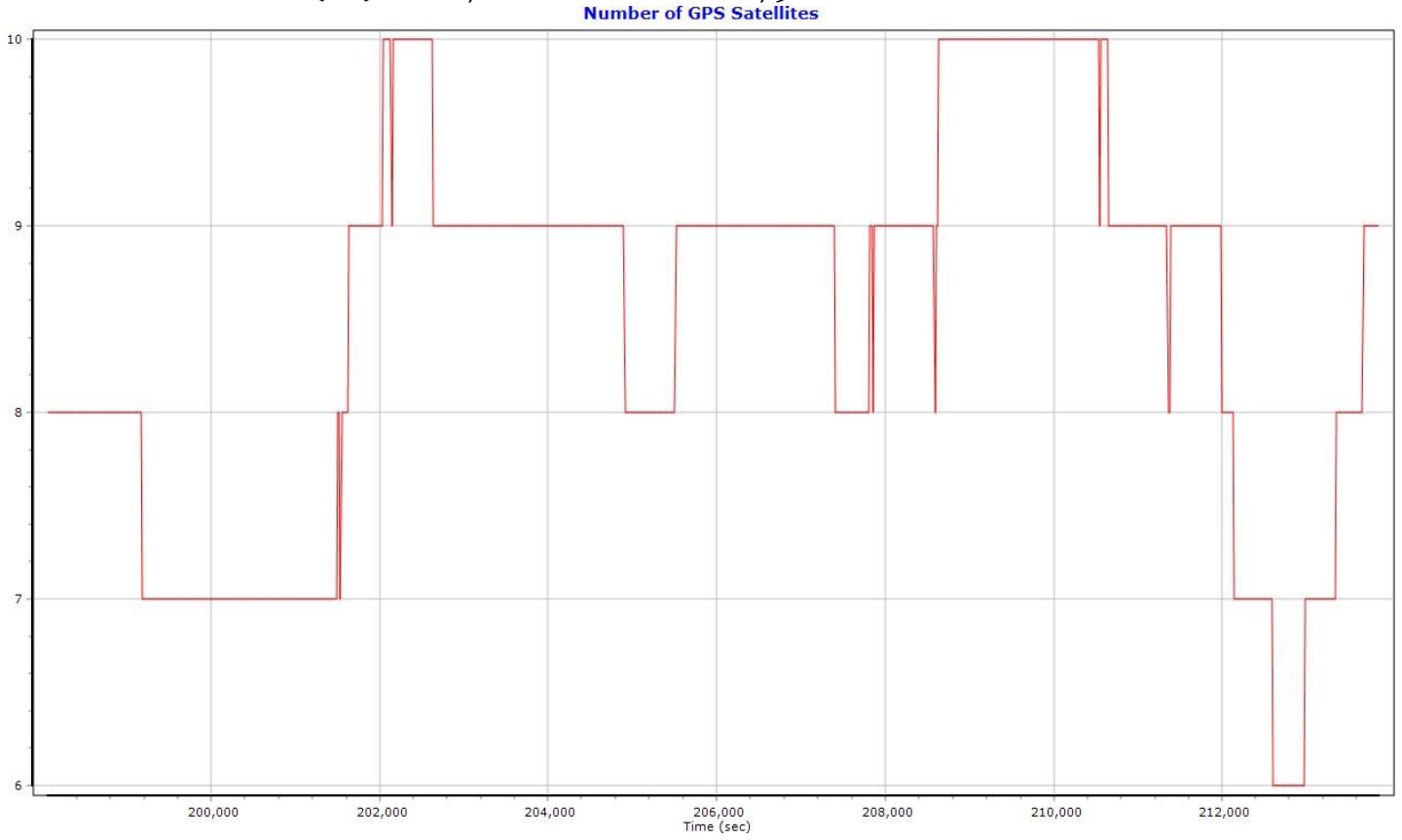


PDOP Plots 7: Sortie a01-s01-0079

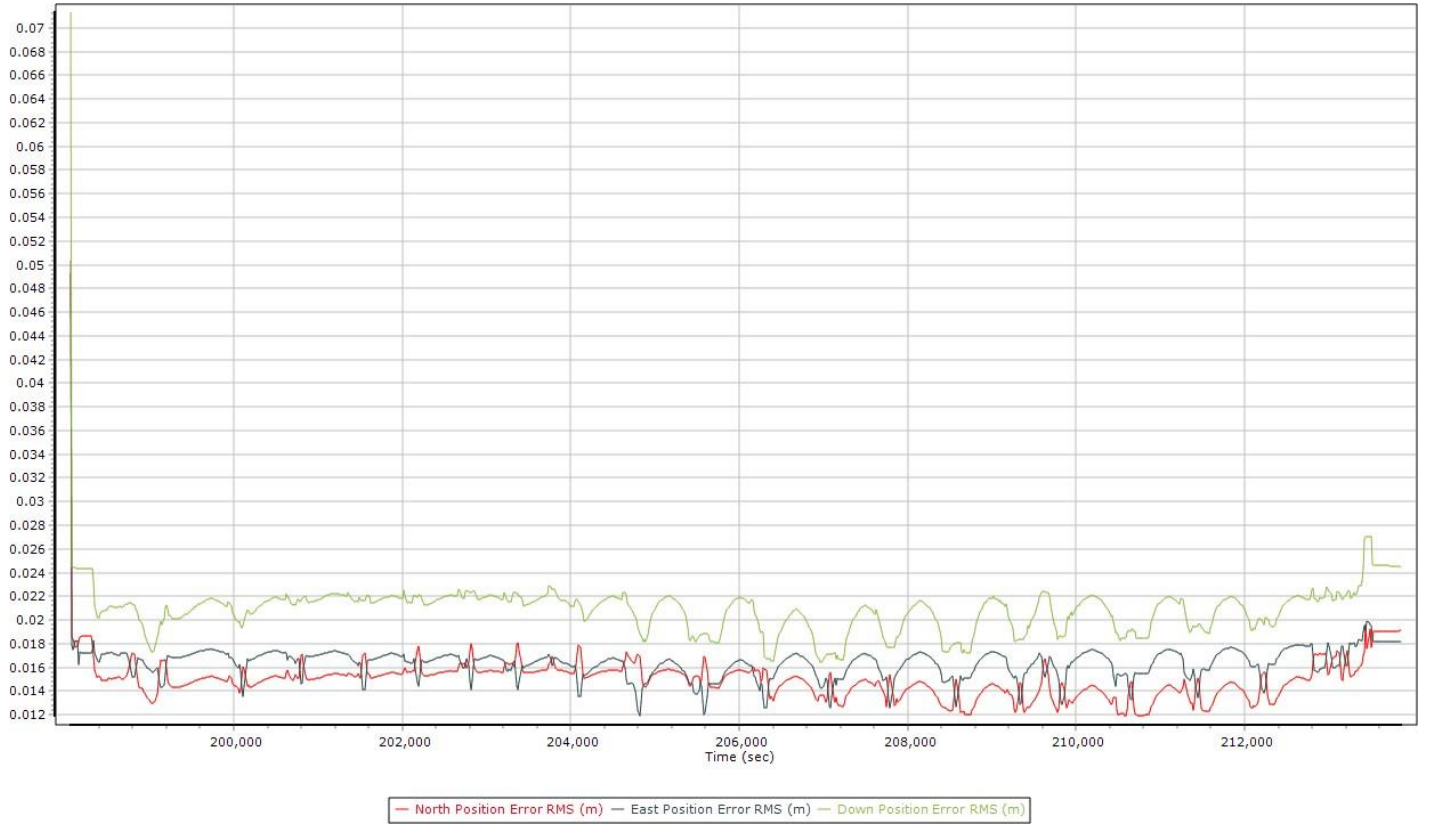
PDOP



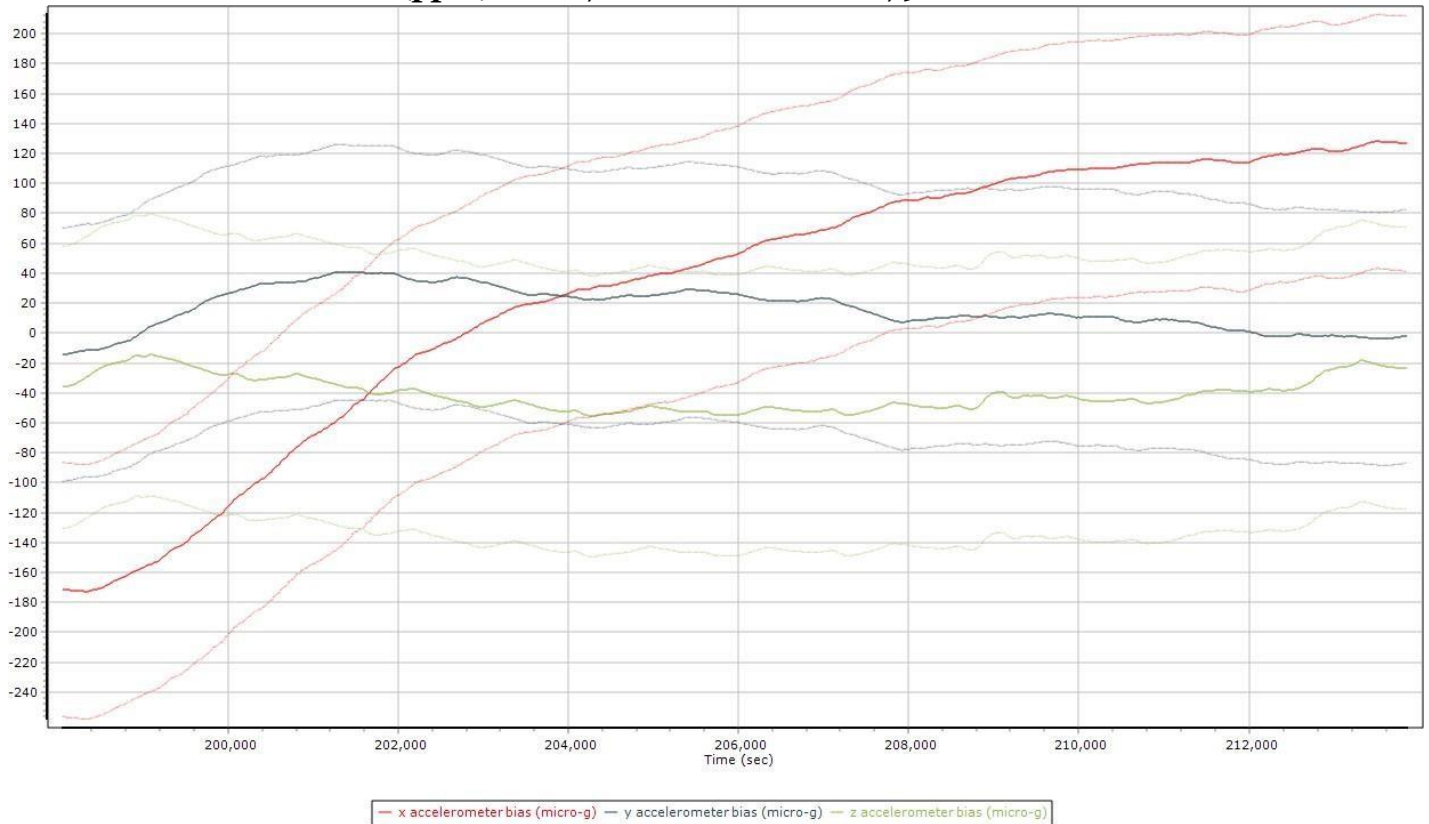
Number of Satellites (>6) Plots 7: Sortie a01-s01-0079



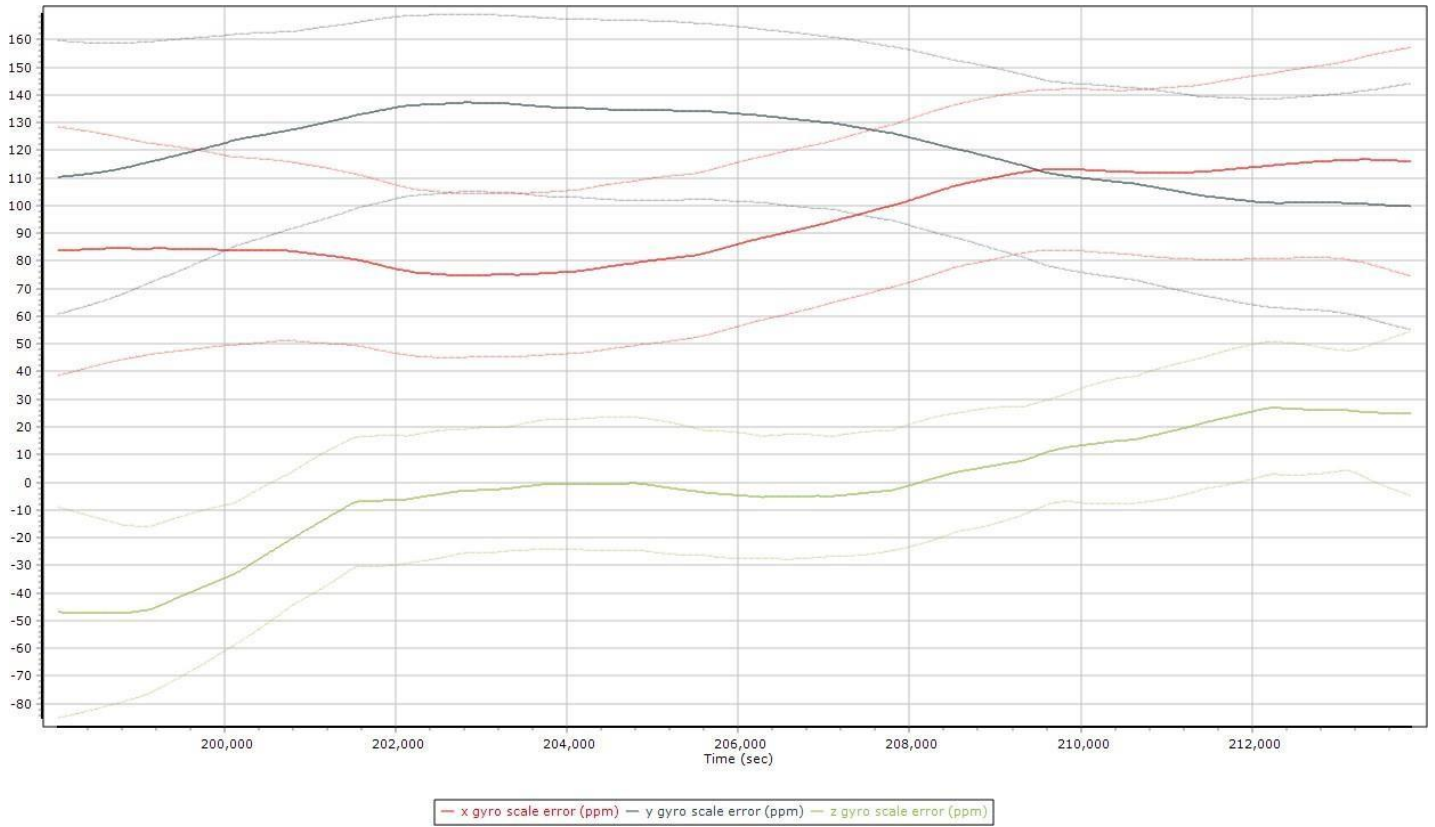
Sensor Position Error RMS (m) Plots 7: Sortie a01-s01-0079



Accelerometer Scale Error (ppm) Plots 7: Sortie a01-s01-0079



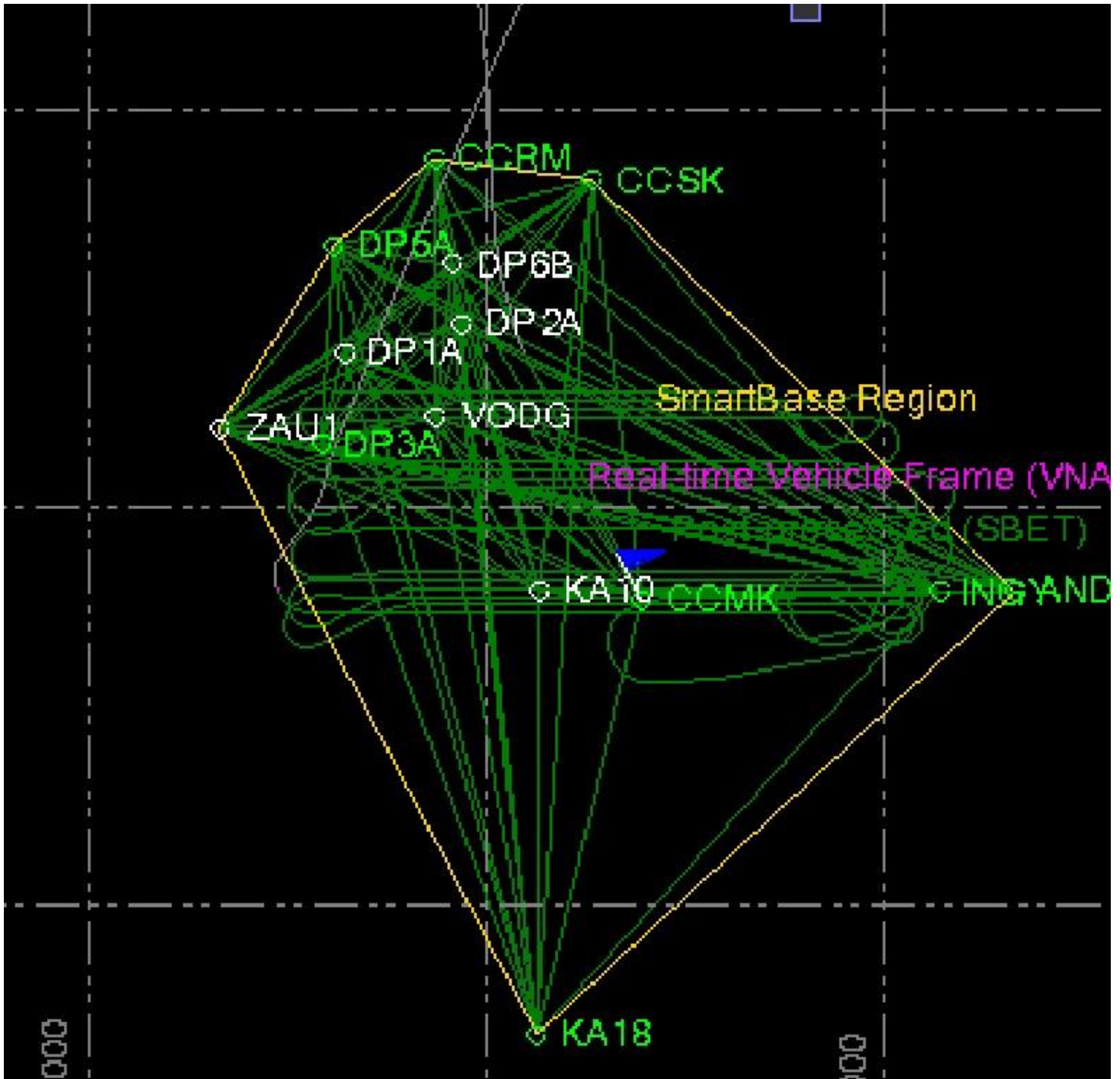
Gyro Scale Error (ppm) Plots 7: Sortie a01-s01-0079



COLLECTION 7

Brick Chicago
Sortie a03-s02-0214
04/18/2017

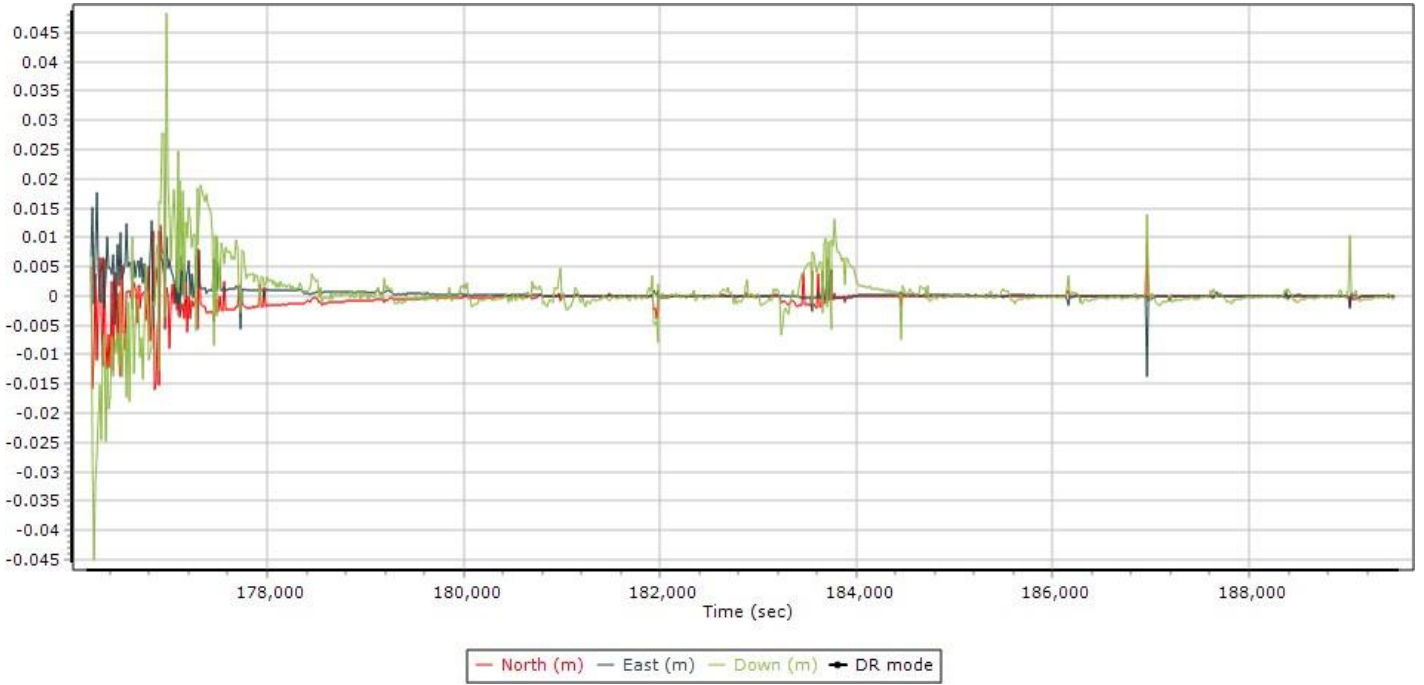
Map Run with Trajectory 7: Sortie a03-s02-0214



Swath Width, Waterfall View 7: Sortie a03-s02-0214

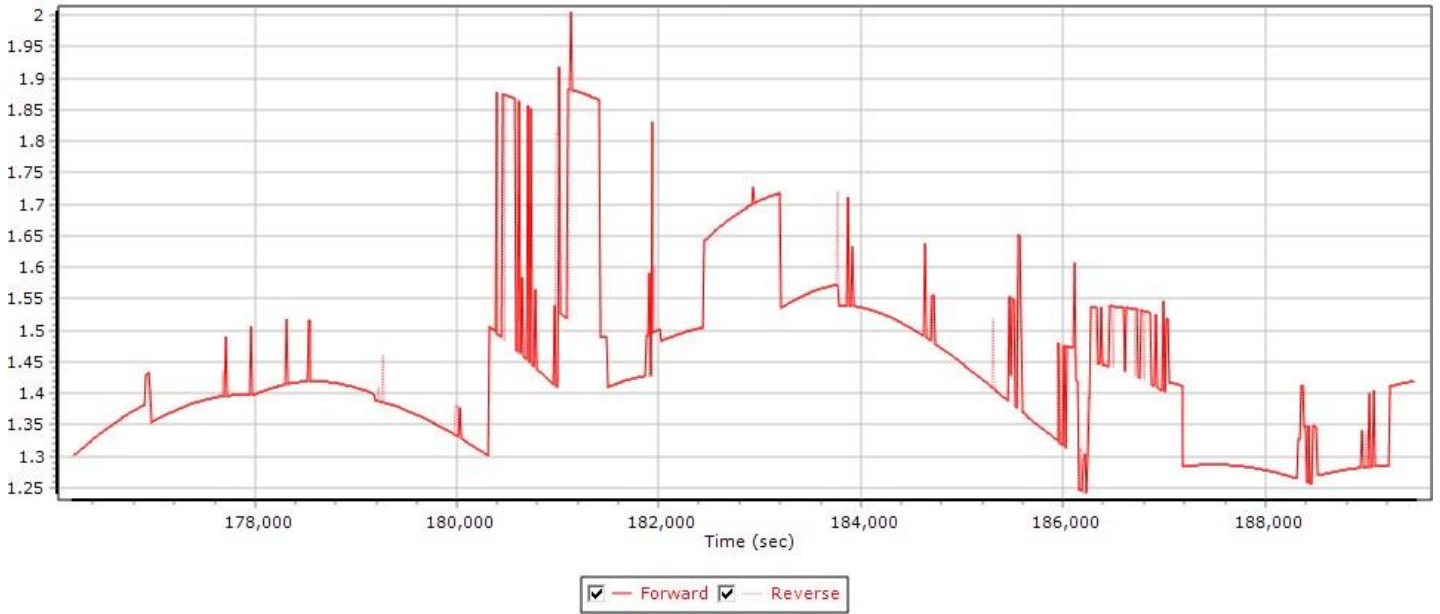


Combined SBET IAKAR Separation 7: Sortie a03-s02-0214

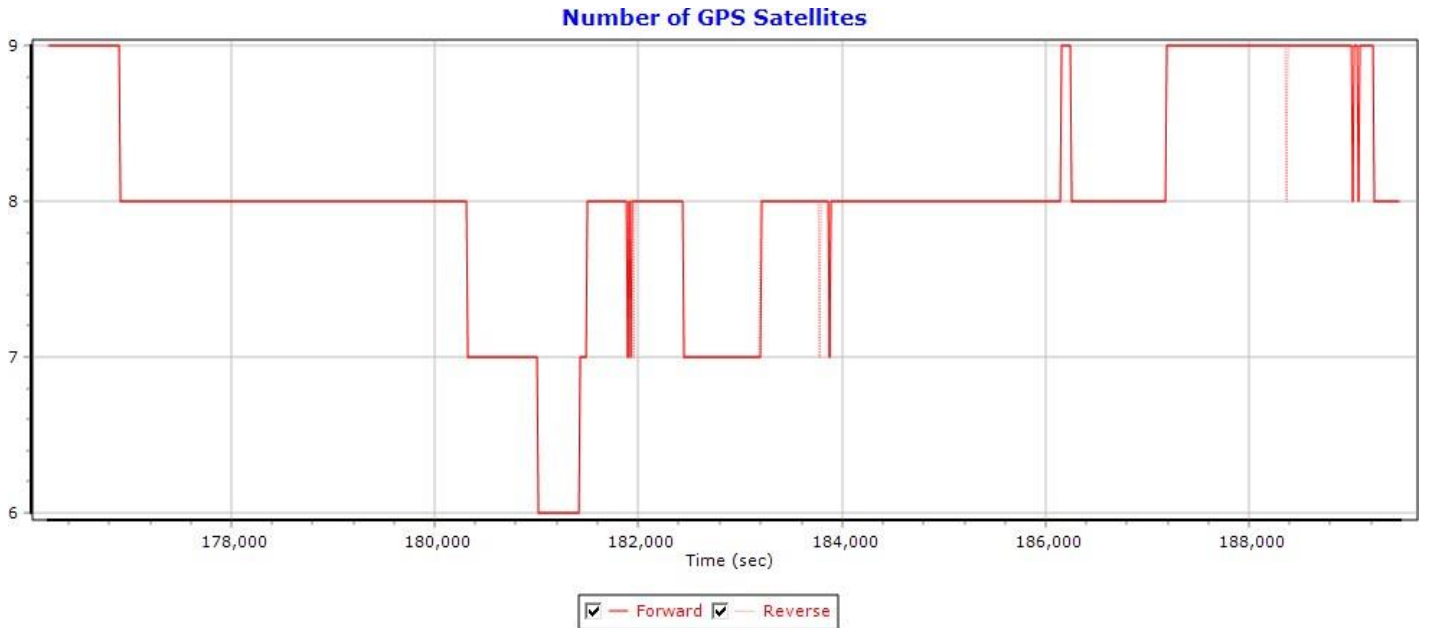


PDOP Plots 7: Sortie a03-s02-0214

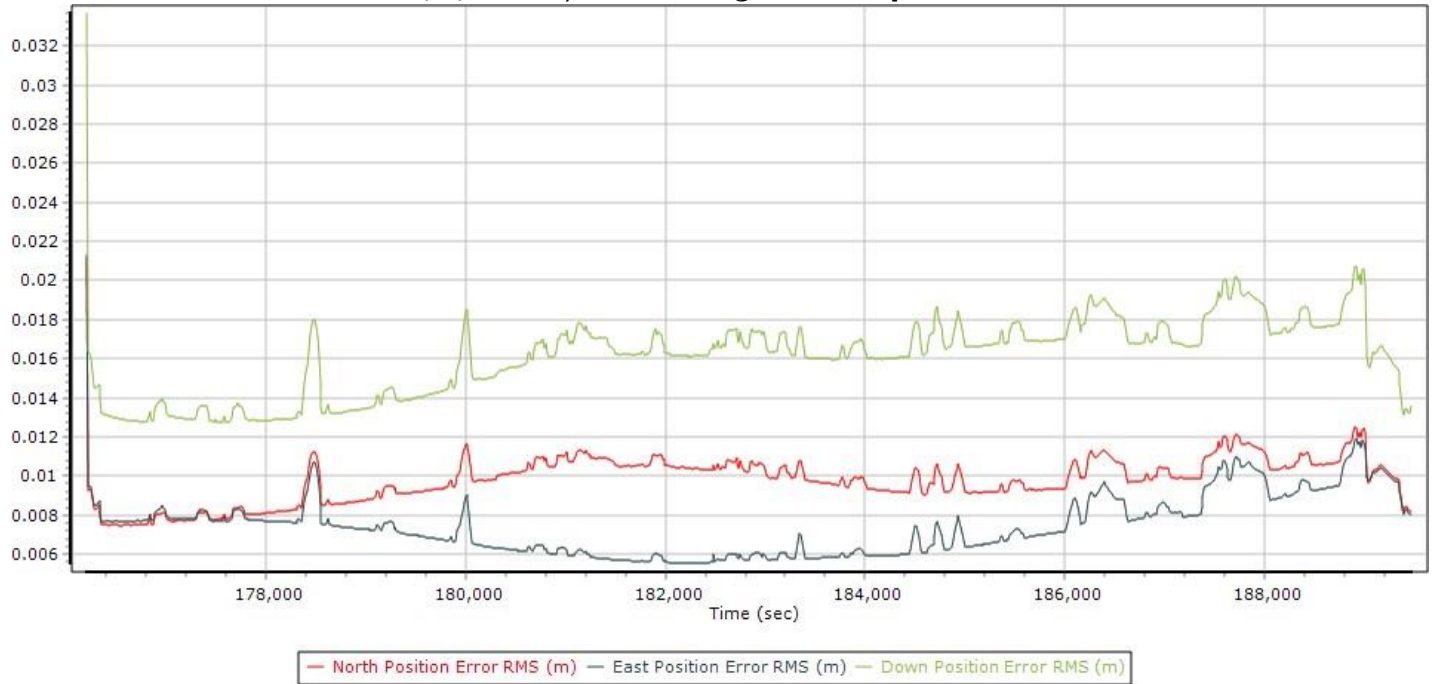
PDOP



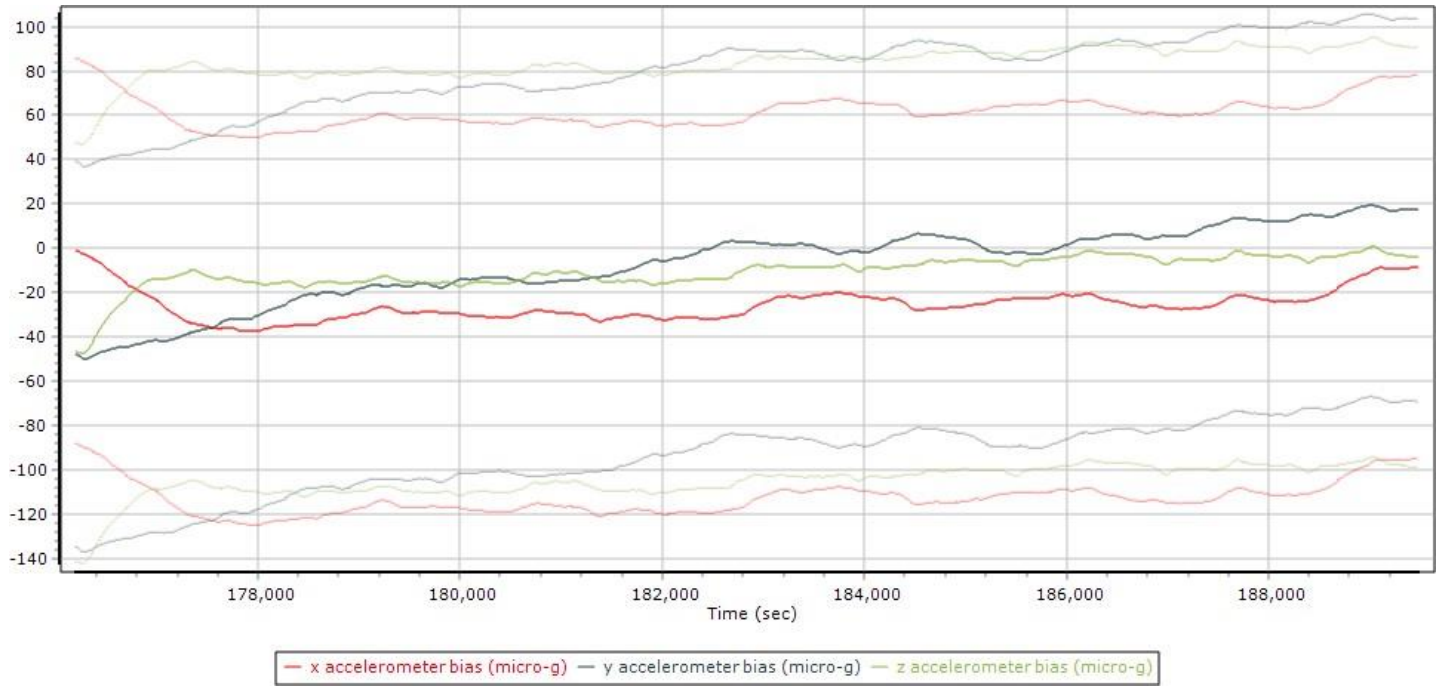
Number of Satellites (>6) Plots 7: Sortie a03-s02-0214



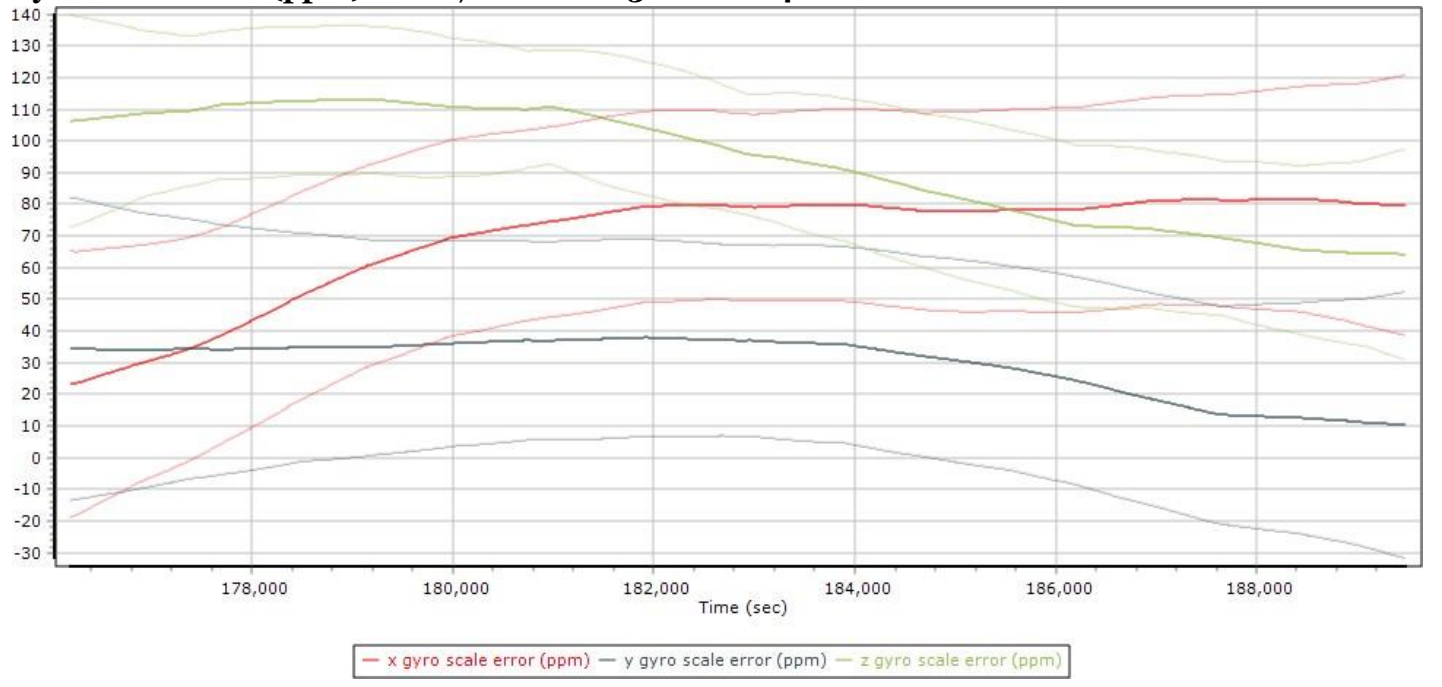
Sensor Position Error RMS (m) Plots 7: Sortie a03-s02-0214



Accelerometer Scale Bias Error Plots 7: Sortie a03-s02-0214



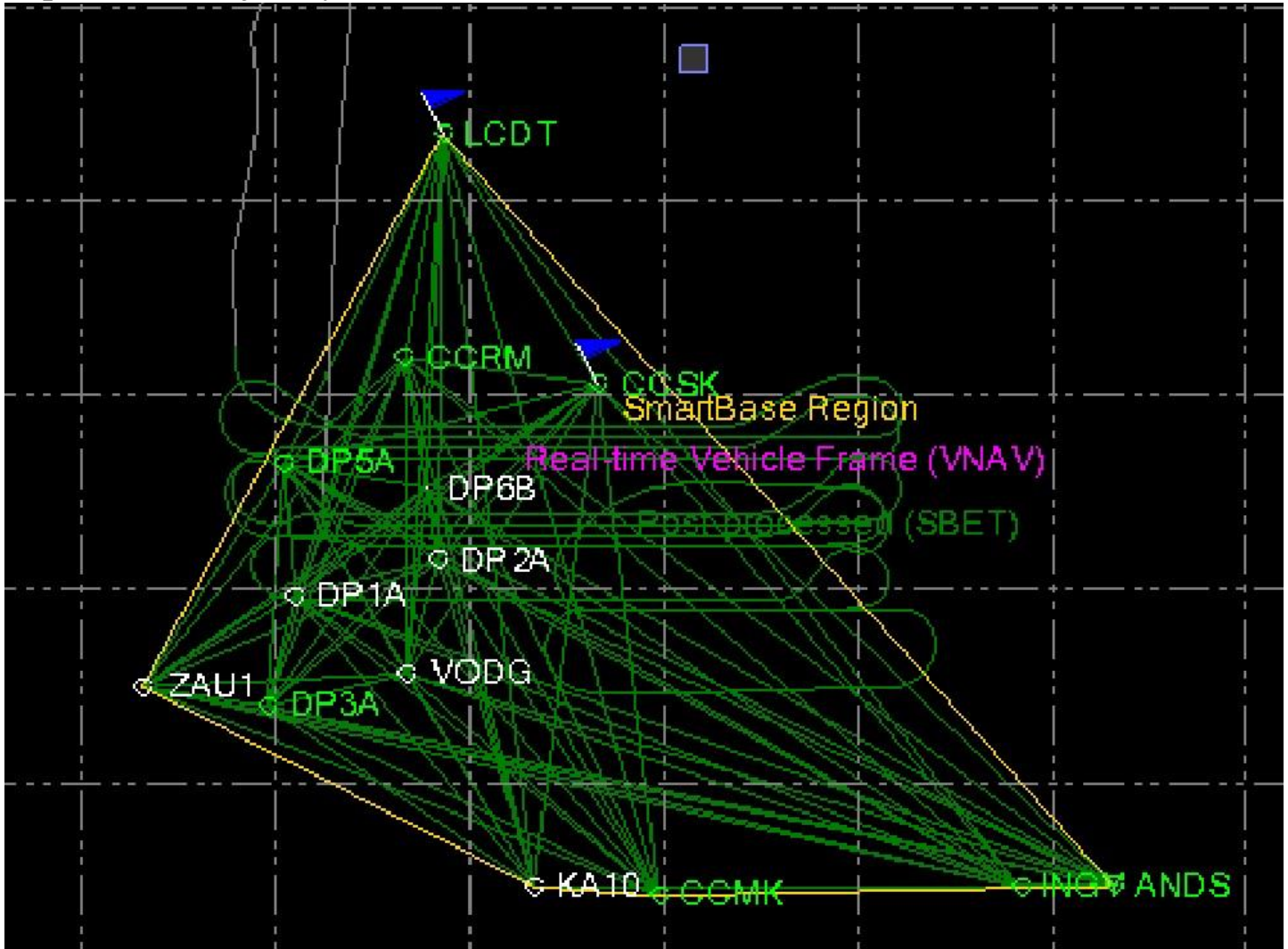
Gyro Scale Error (ppm) Plots 7: Sortie a03-s02-0214



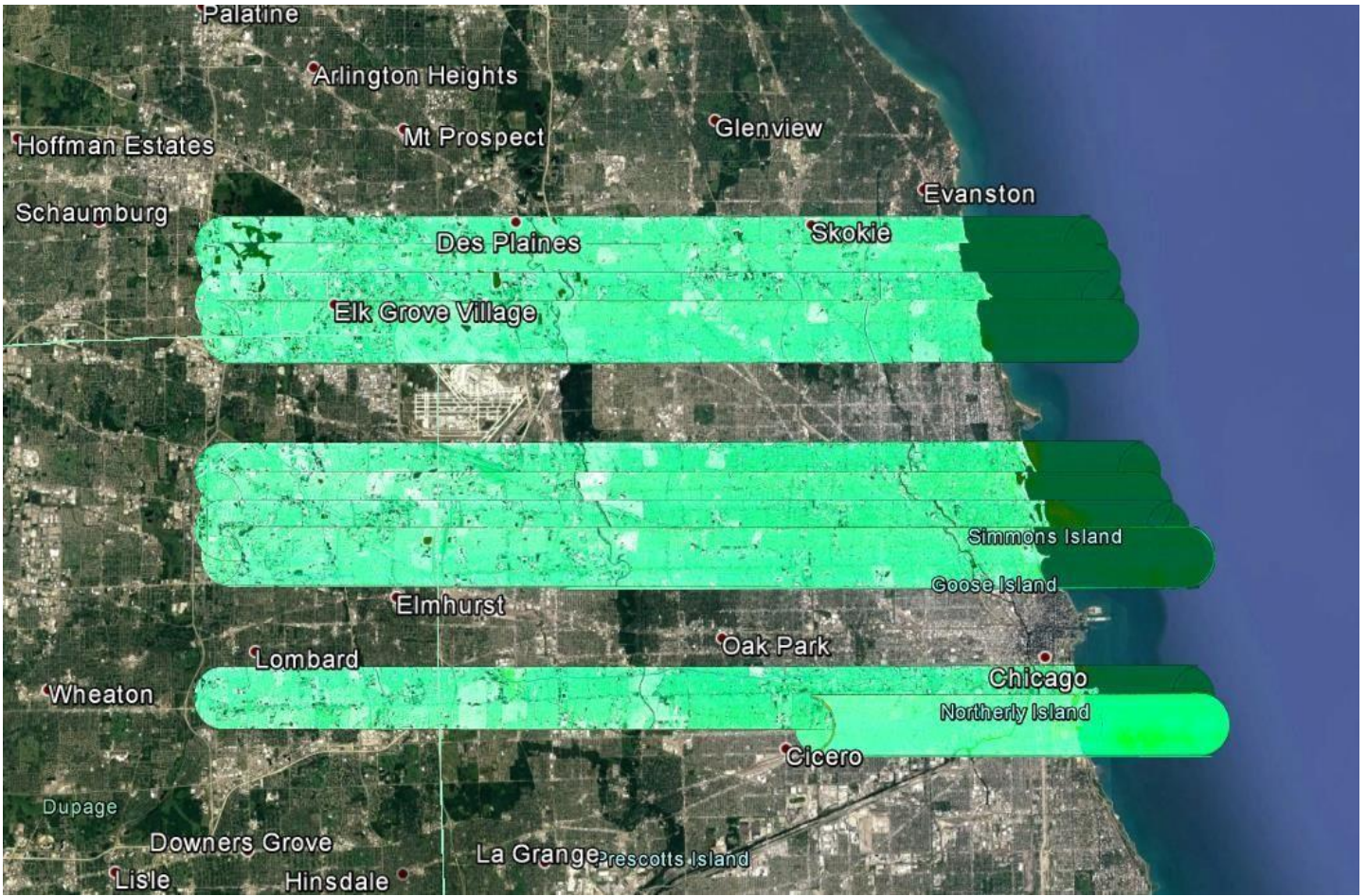
COLLECTION 8

Brick Chicago
Sortie a03-s02-0215
04/18/2017

Map Run with Trajectory 8: Sortie a03-s02-0215



Swath Width, Waterfall View 8: Sortie a03-s02-0215

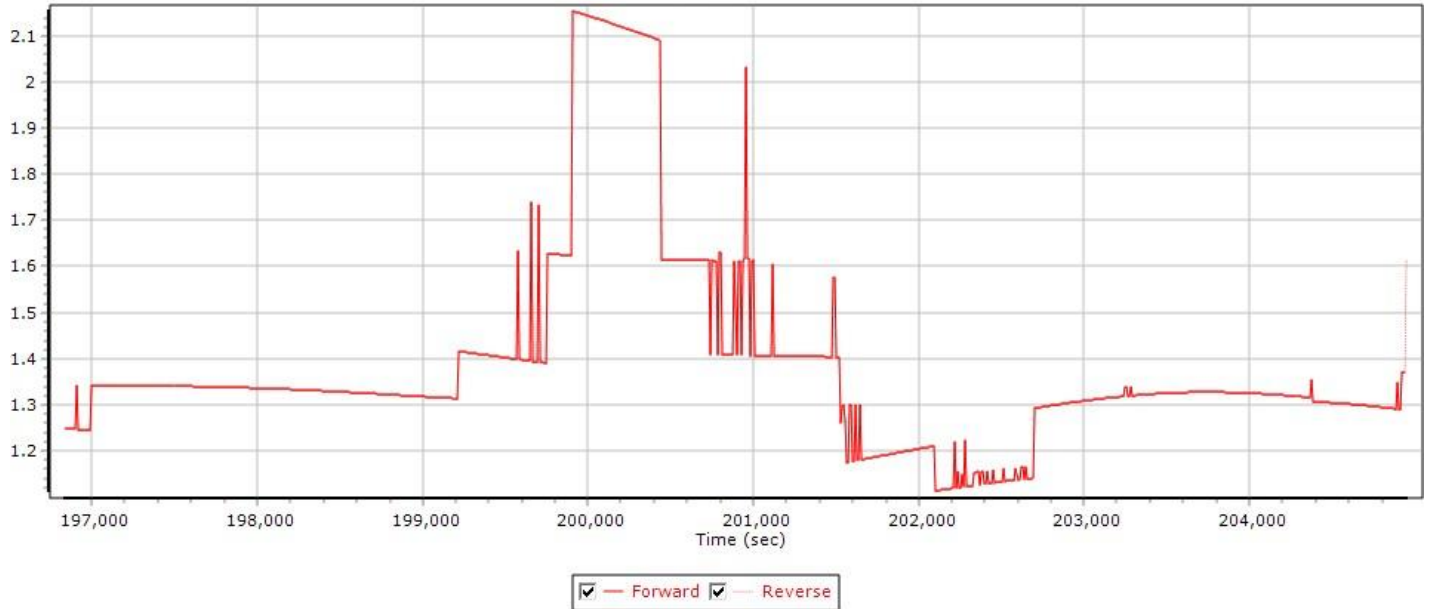


Combined SBET IAKAR Separation 8: Sortie a03-s02-0215



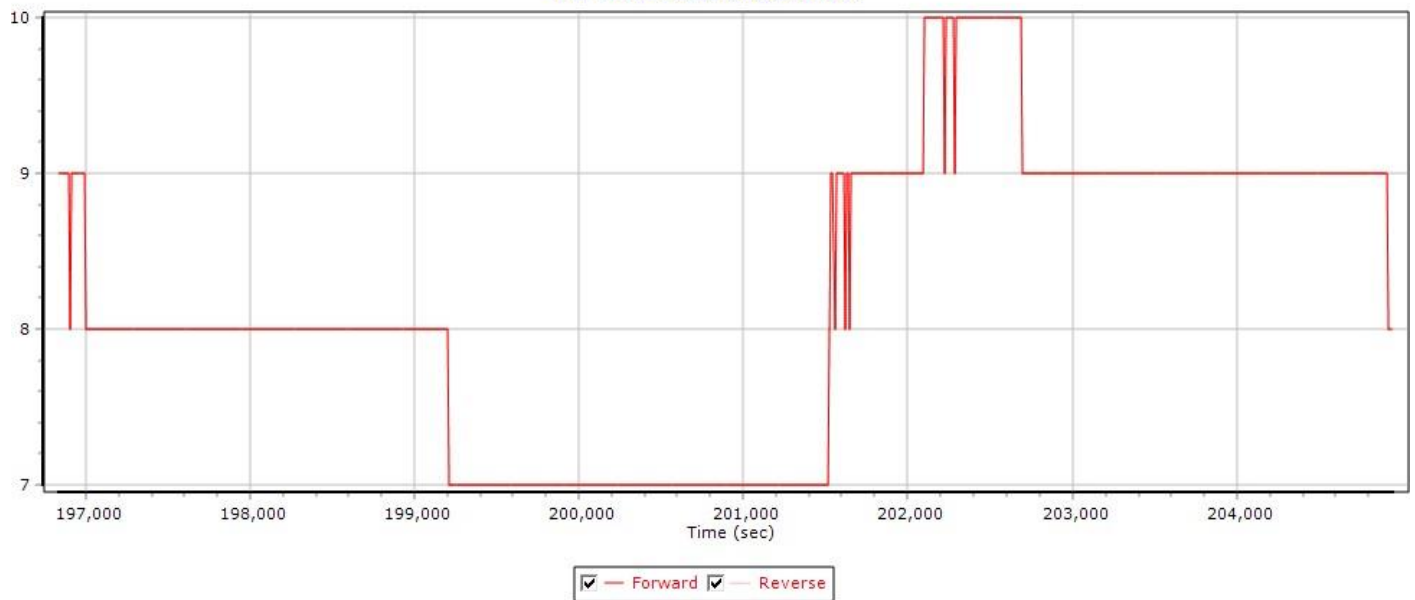
PDOP Plots 8: Sortie a03-s02-0215

PDOP

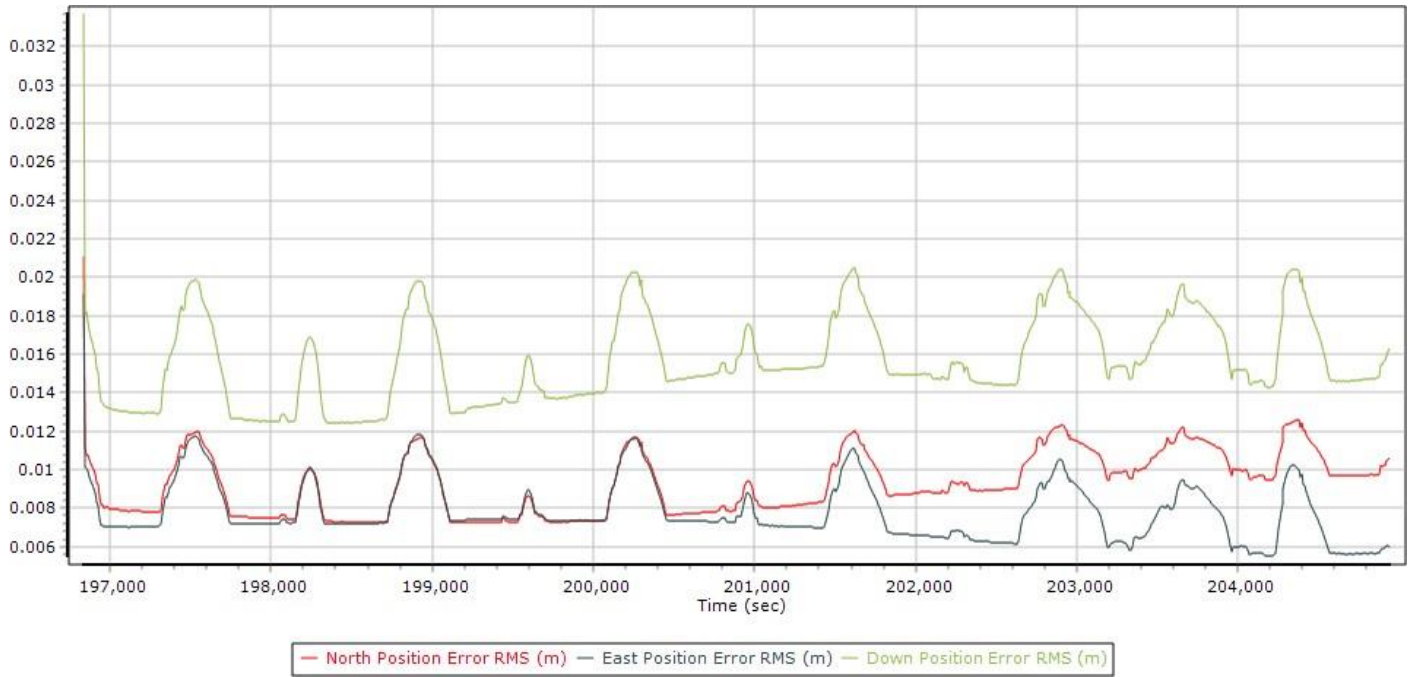


Number of Satellites (>6) Plots 8: Sortie a03-s02-0215

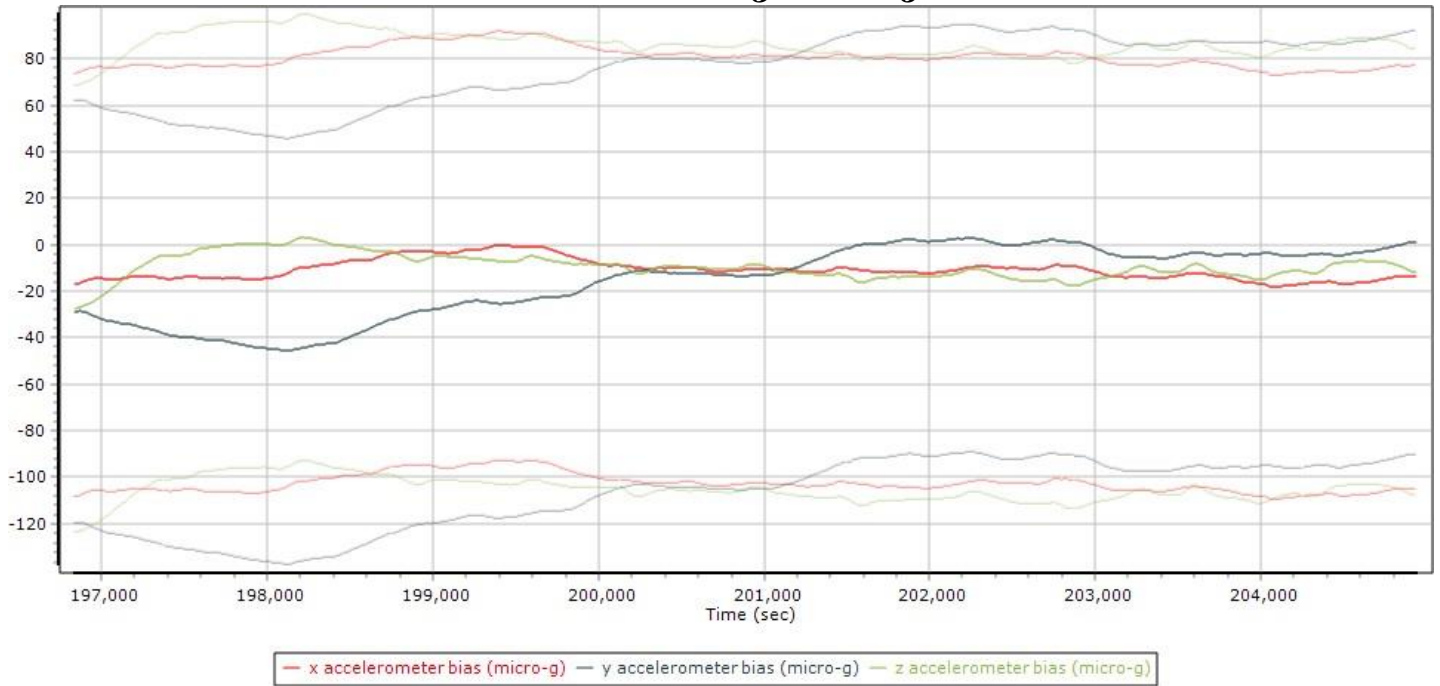
Number of GPS Satellites



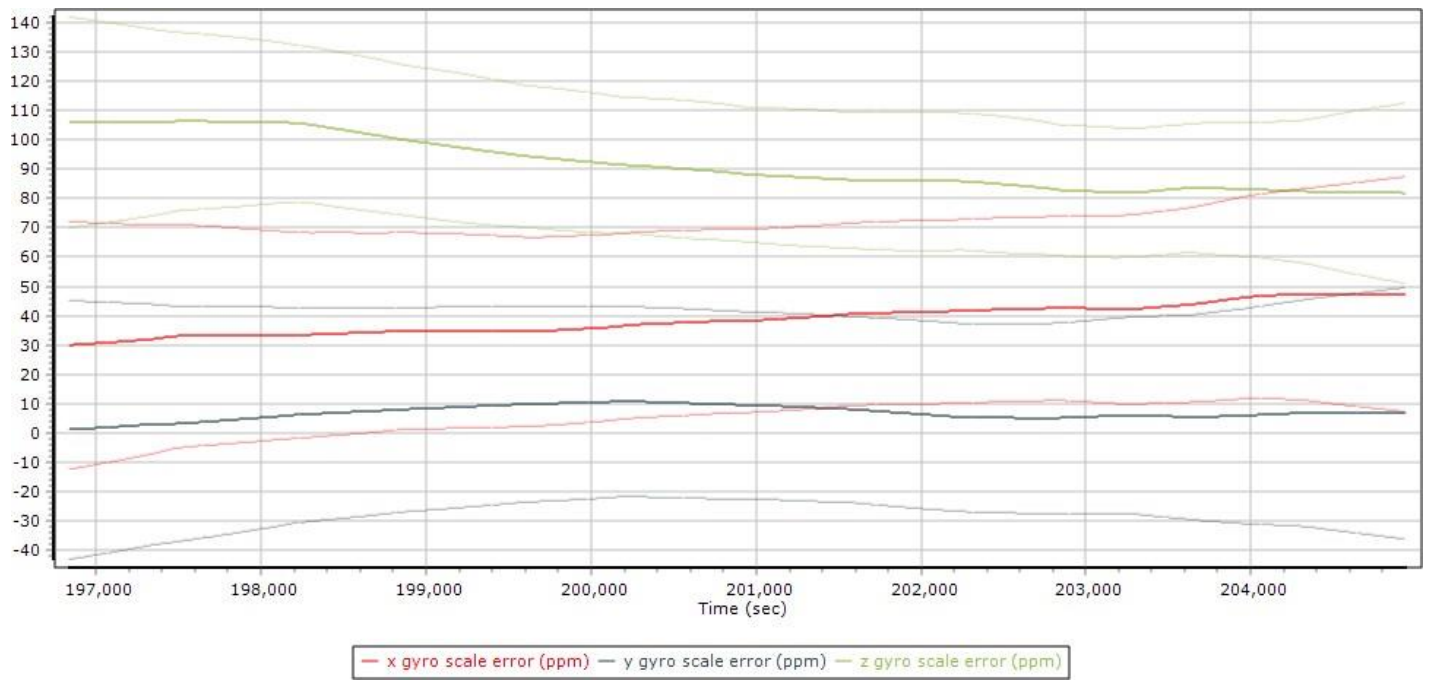
Sensor Position Error RMS (m) Plots 8: Sortie a03-s02-0215



Accelerometer Scale Bias Error Plots 8: Sortie a03-s02-0215



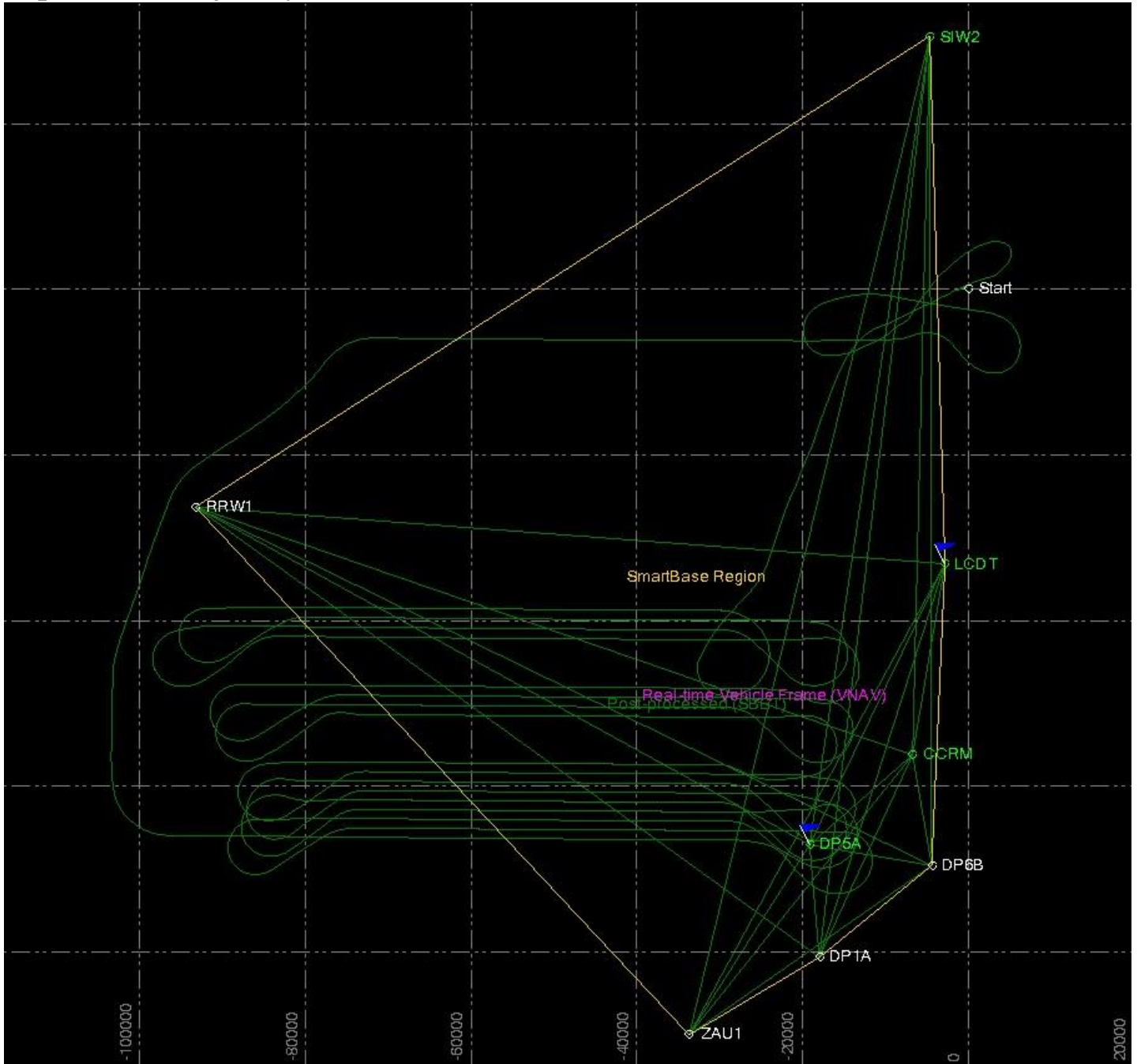
Gyro Scale Error (ppm) Plots 8: Sortie a03-s02-0215



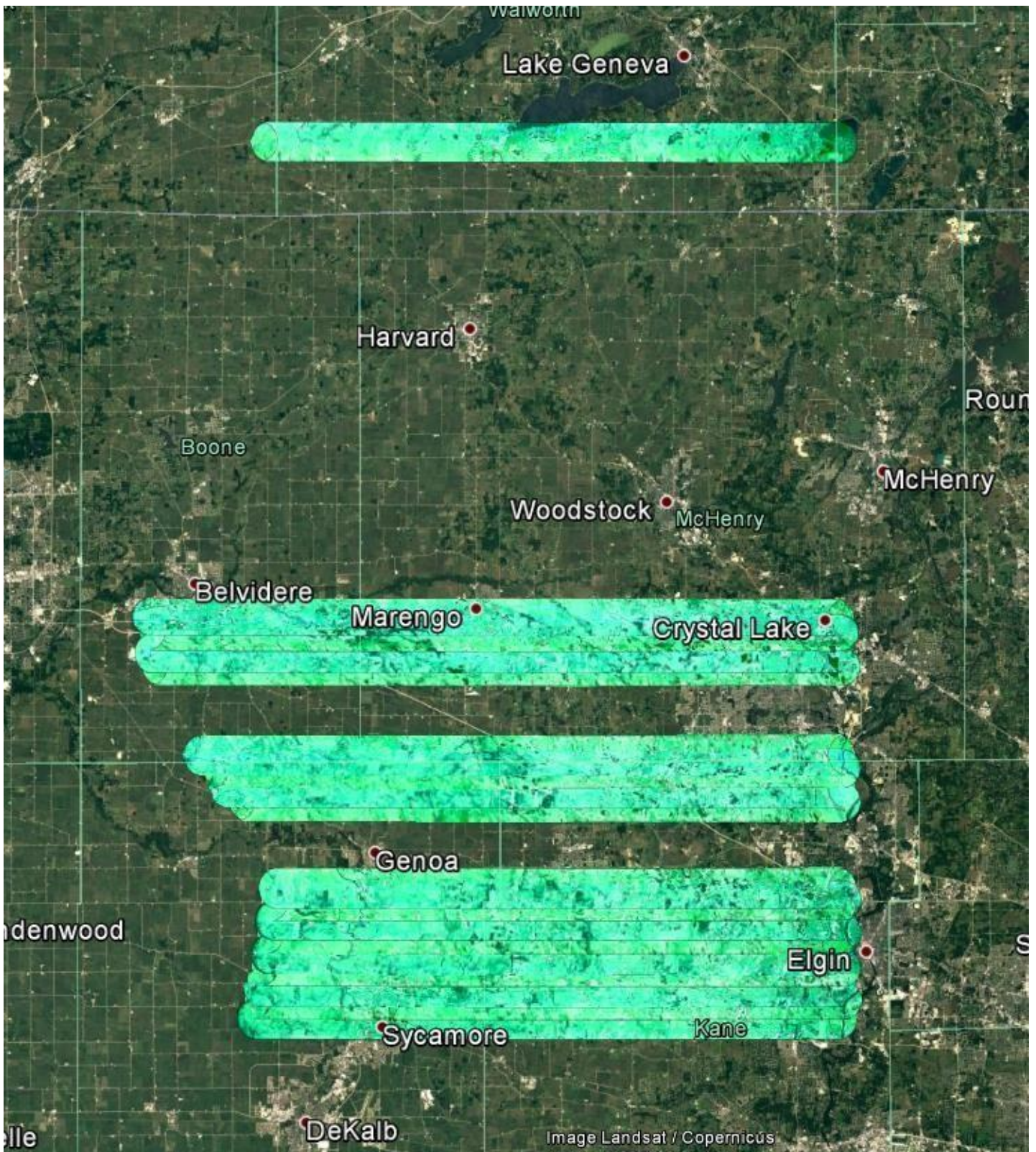
COLLECTION 9

Brick 1
Sortie a01-s01-0080
04/22/2017

Map Run with Trajectory 9: Sortie a01-s01-0080



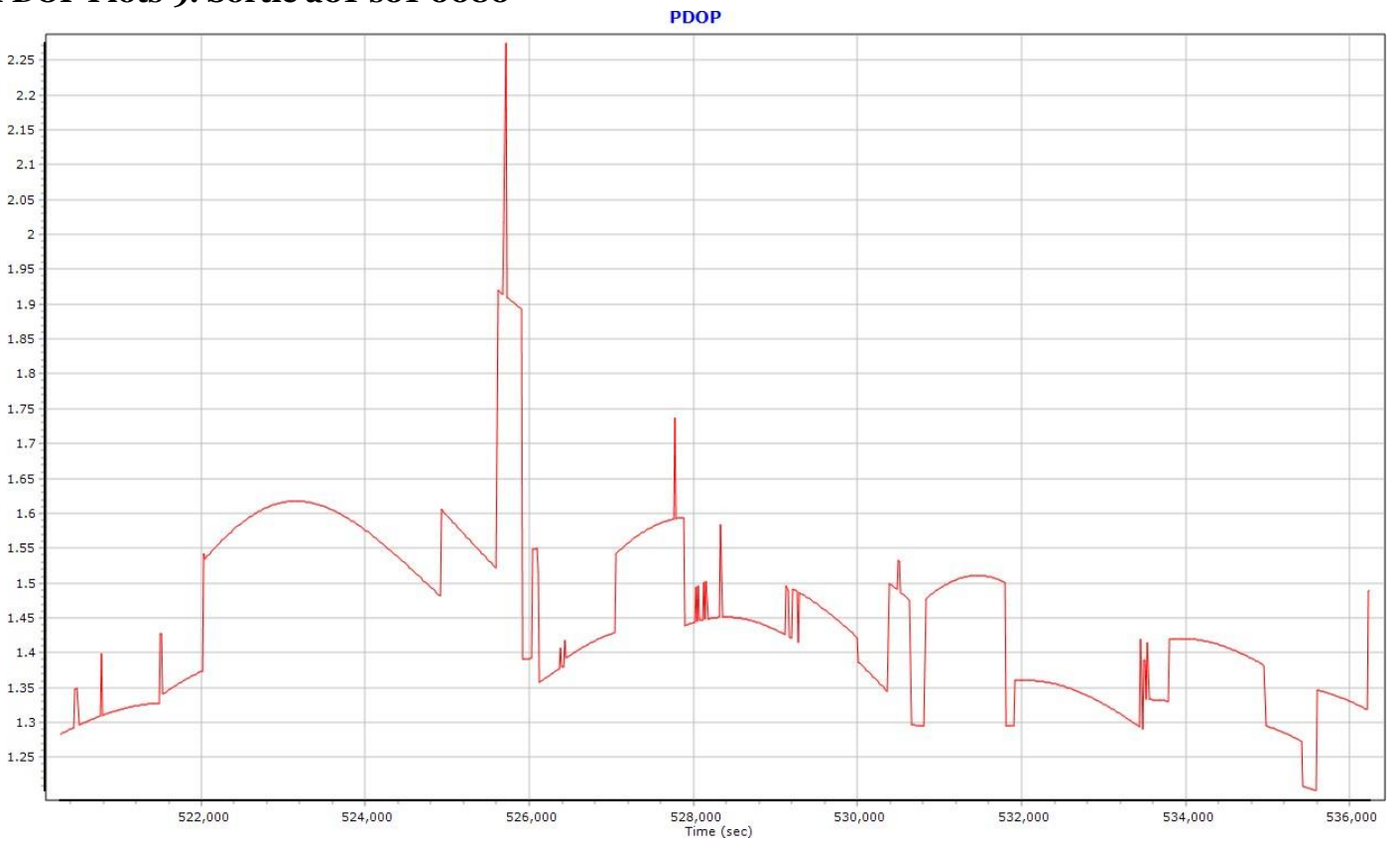
Swath Width, Waterfall View 9: Sortie a01-s01-0080



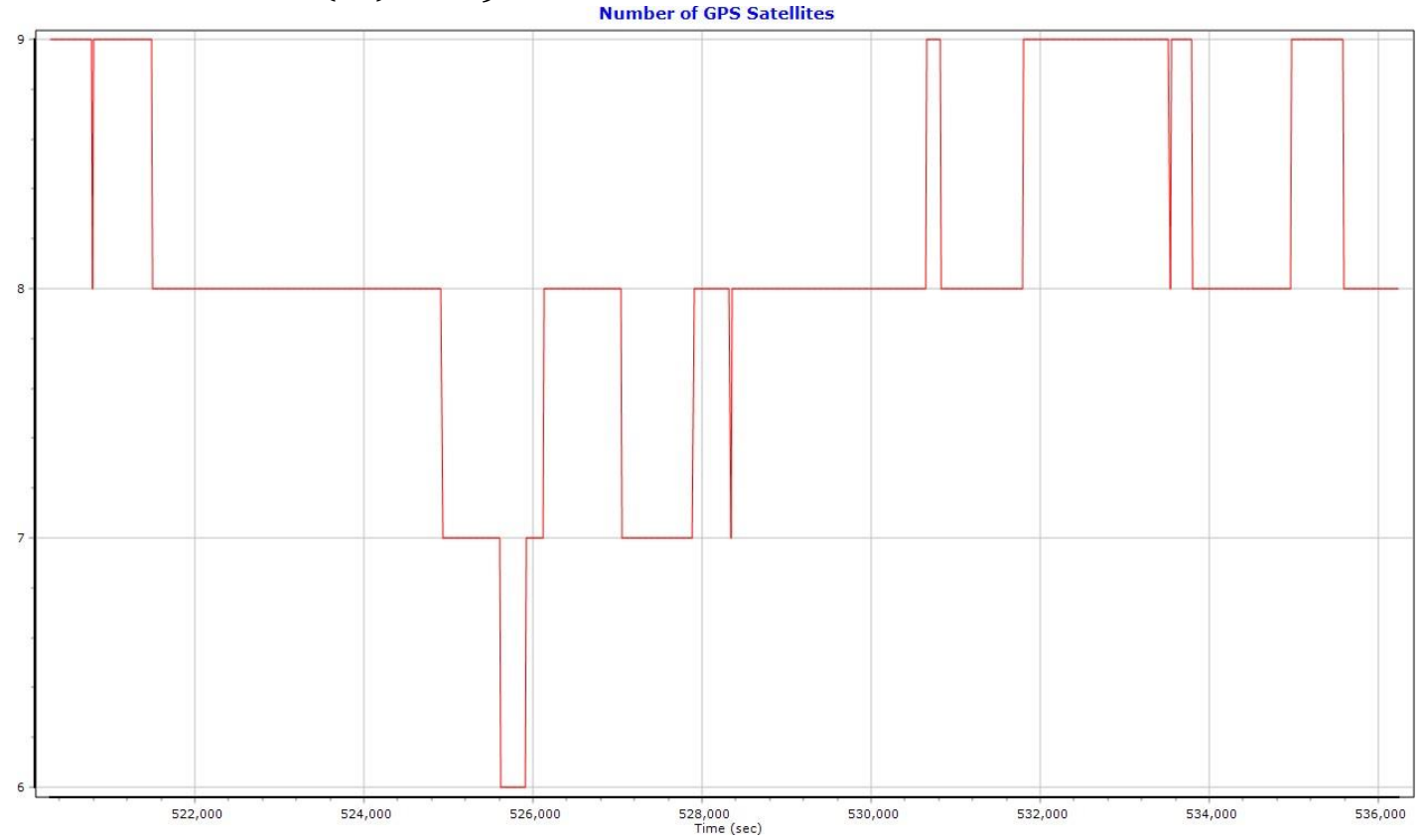
Combined SBET IAKAR Separation 9: Sortie a01-s01-0080



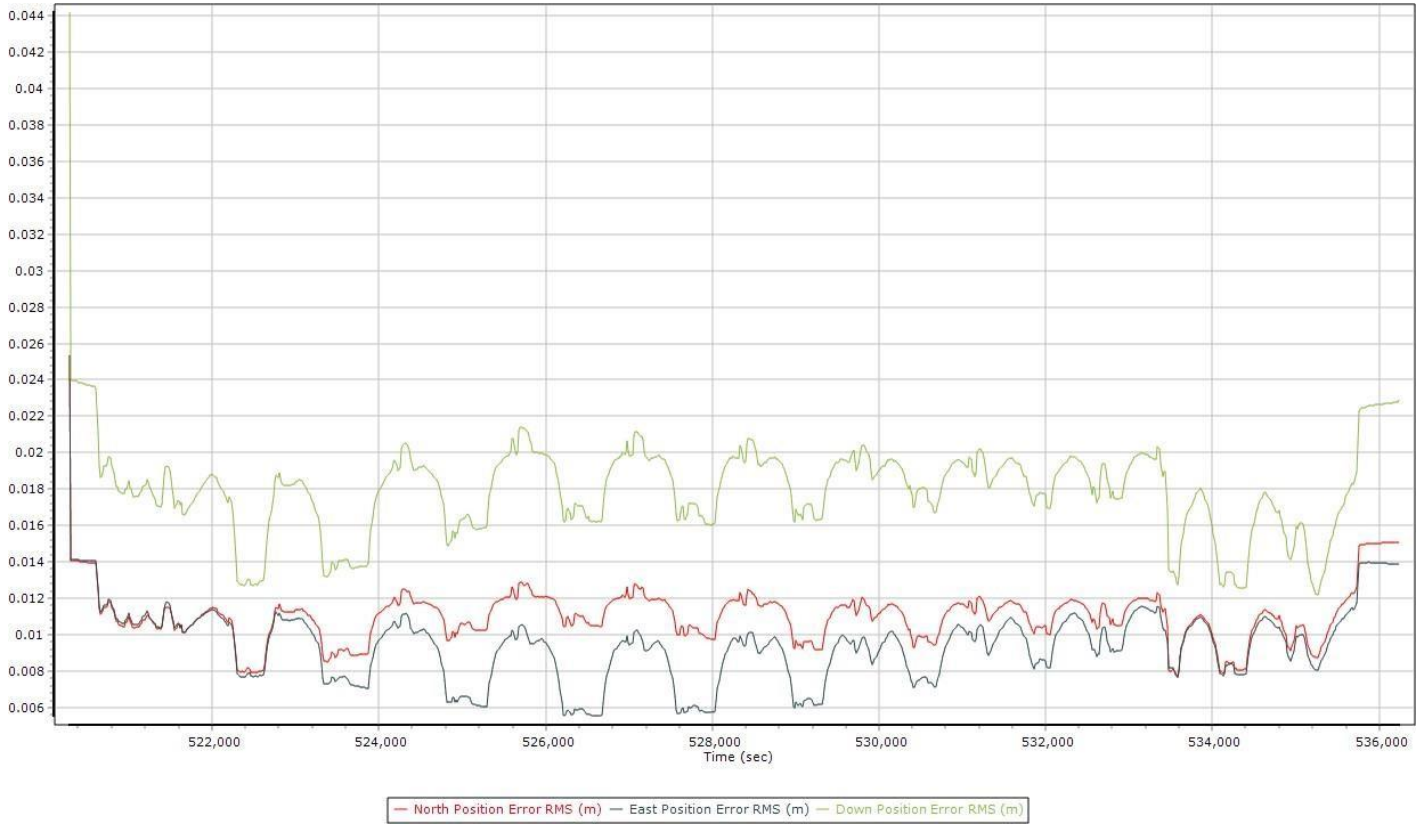
PDOP Plots 9: Sortie a01-s01-0080



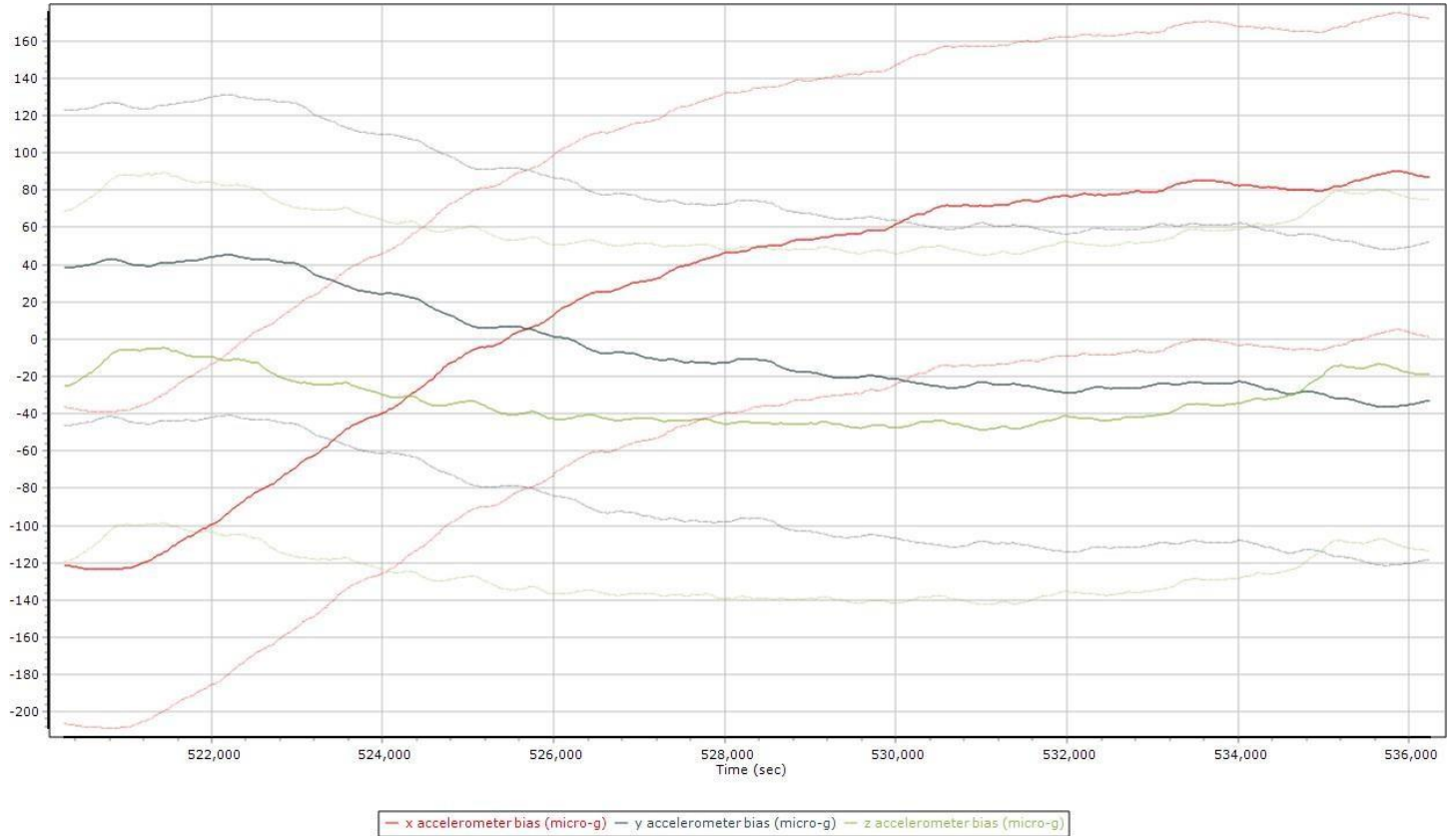
Number of Satellites (>6) Plots 9: Sortie a01-s01-0080



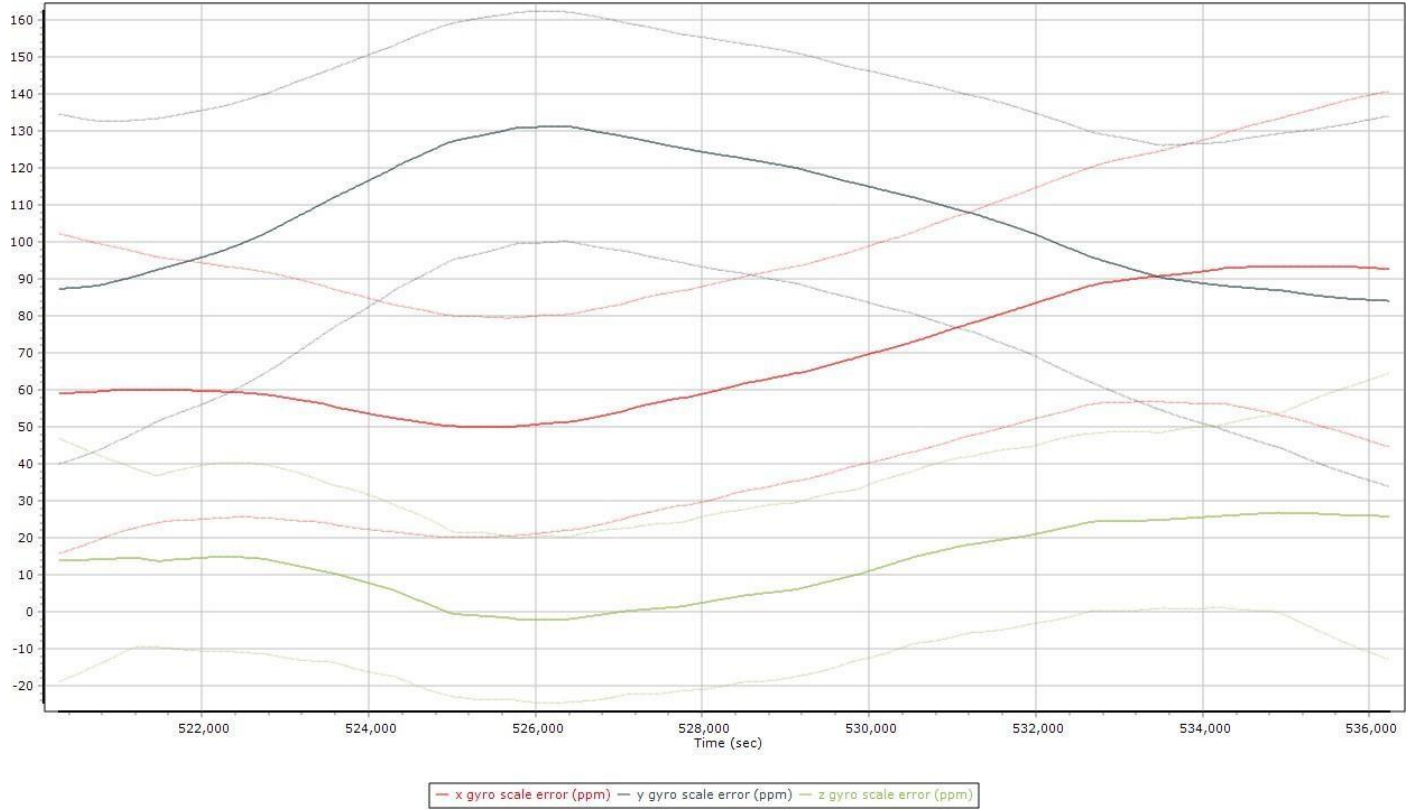
Sensor Position Error RMS (m) Plots 9: Sortie a01-s01-0080



Accelerometer Scale Bias Error Plots 9: Sortie a01-s01-0080



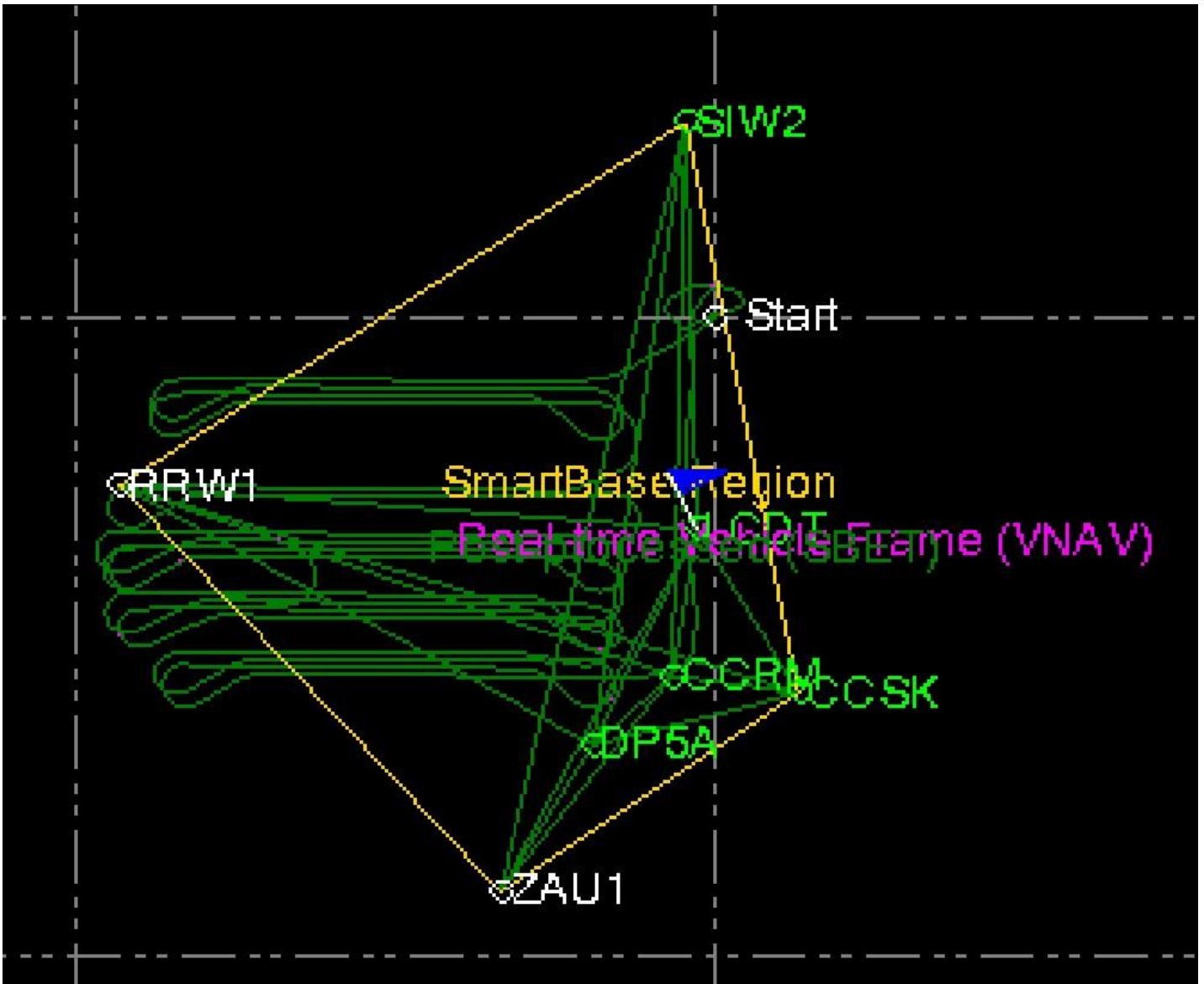
Gyro Scale Error (ppm) Plots 9: Sortie a01-s01-0080



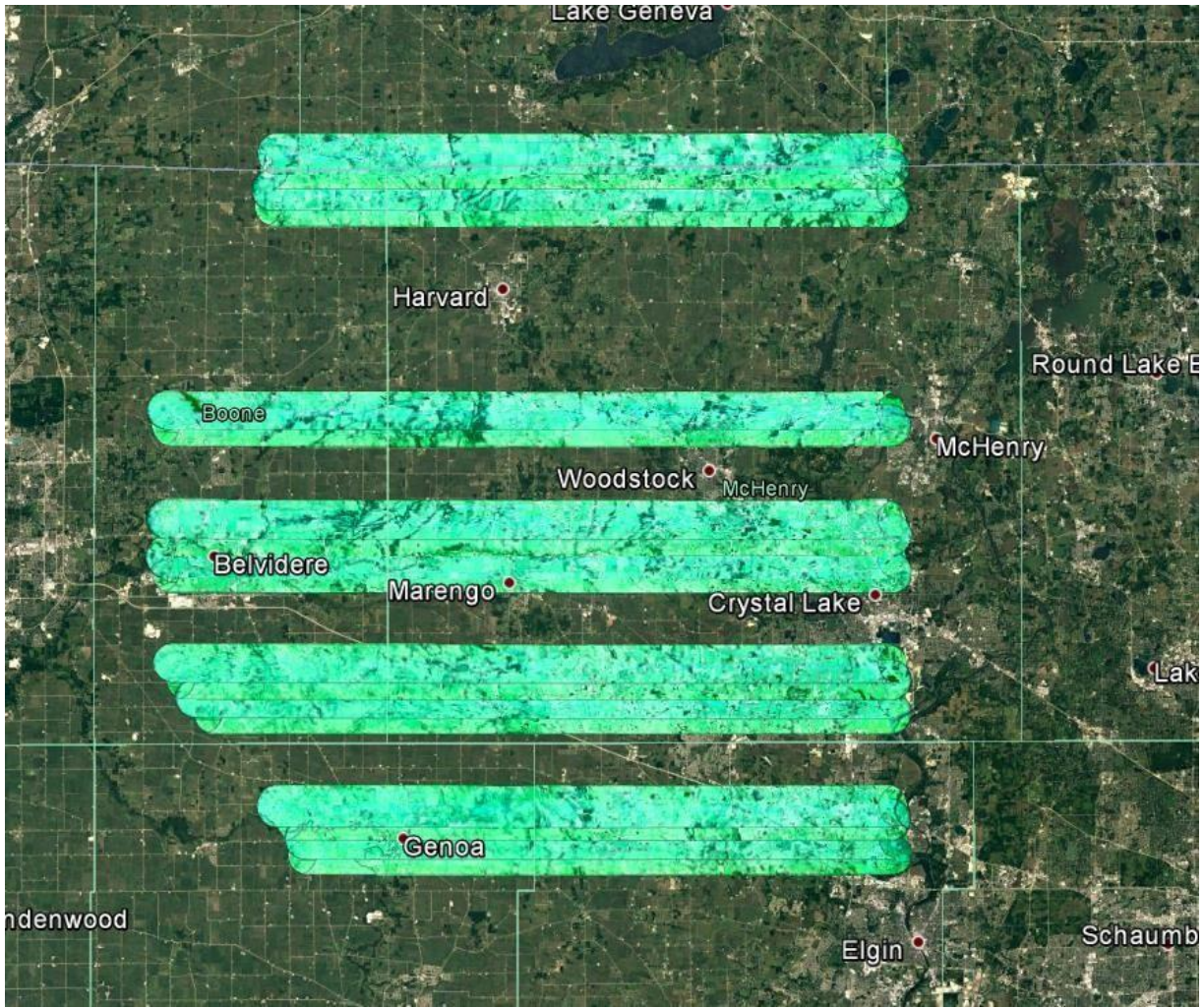
COLLECTION 10

Brick
Sortie a01-s01-0081
04/22/2017

Map Run with Trajectory 10: Sortie a01-s01-0081



Swath Width, Waterfall View 10: Sortie a01-s01-0081

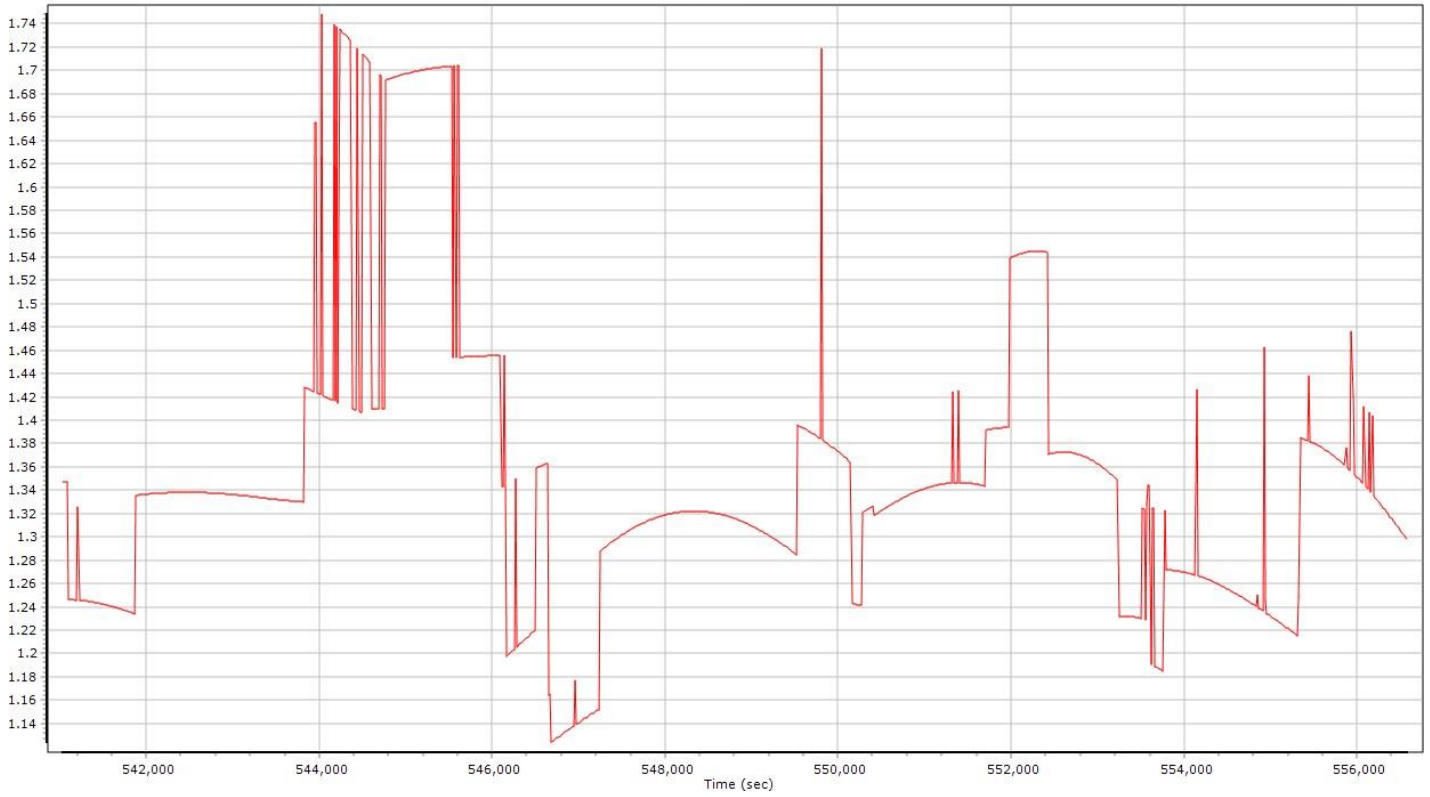


Combined SBET IAKAR Separation 10: Sortie a01-s01-0081

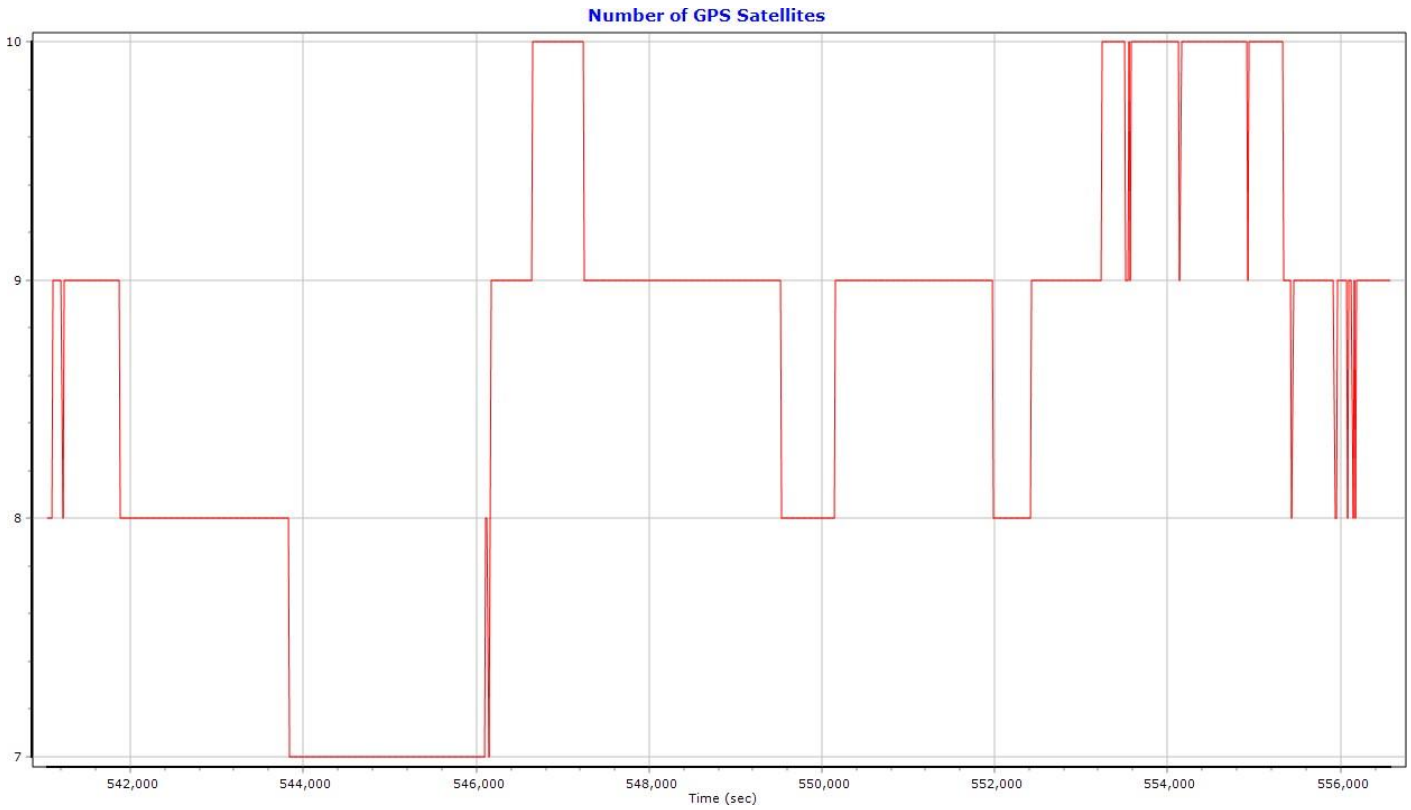


PDOP Plots 10: Sortie a01-s01-0081

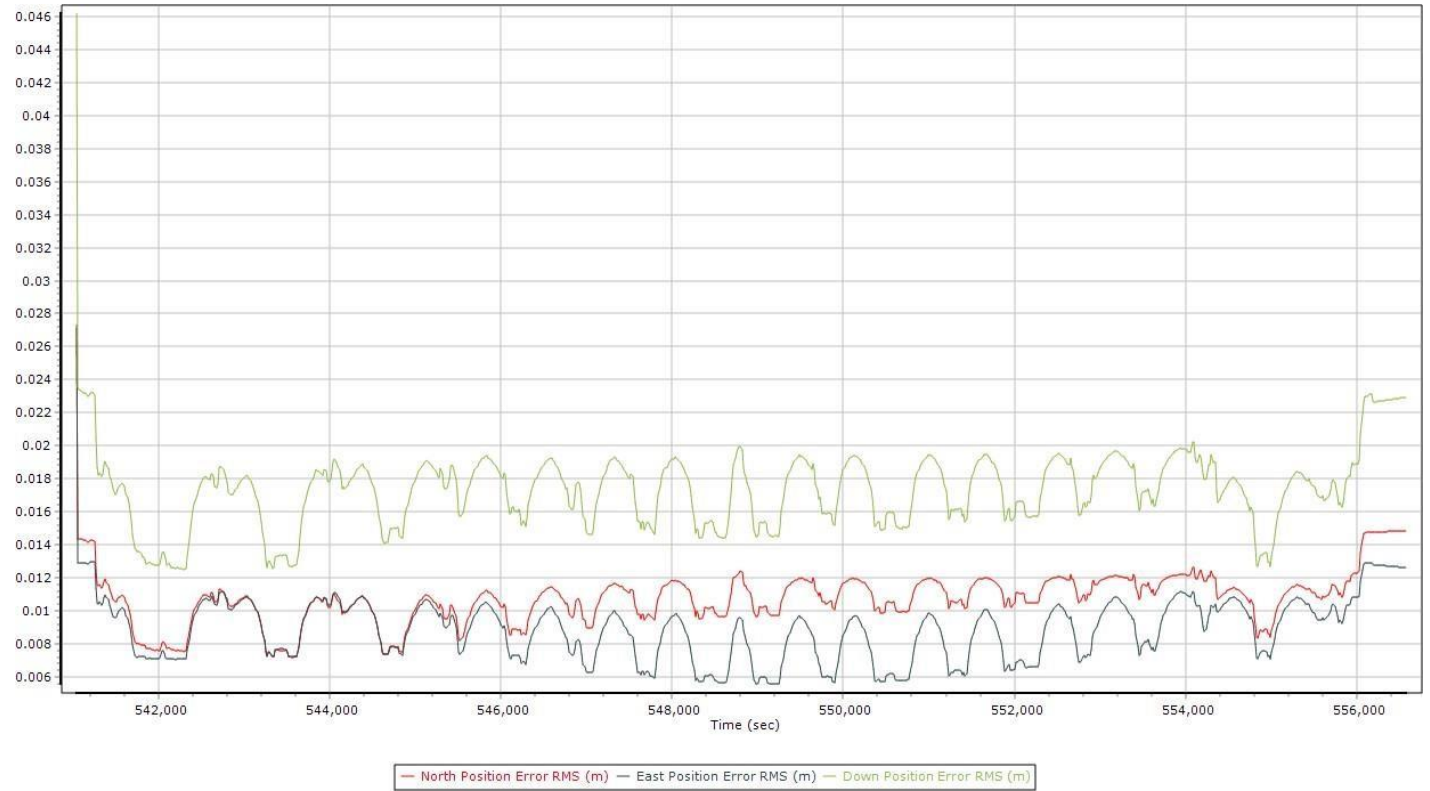
PDOP



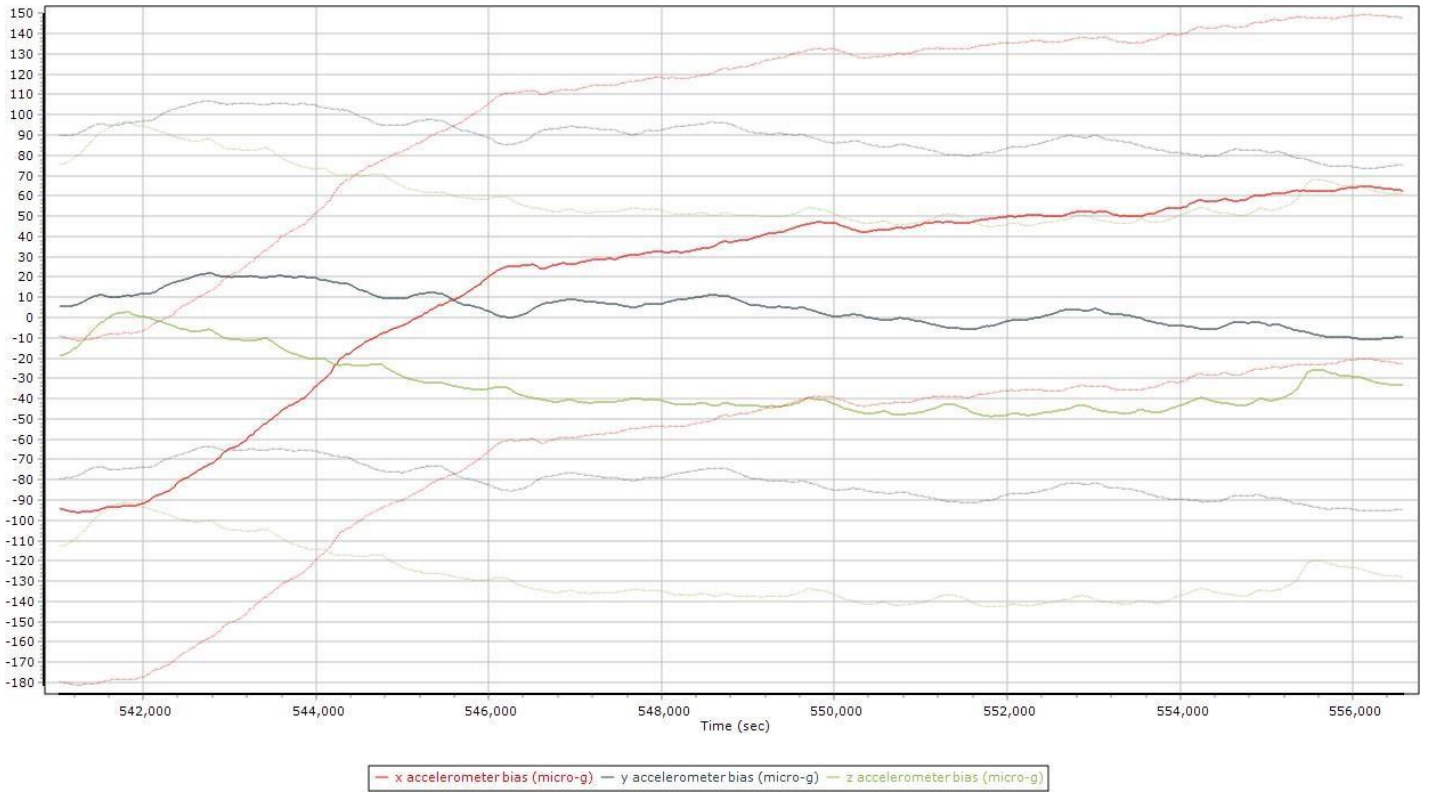
Number of Satellites (>6) Plots 10: Sortie a01-s01-0081



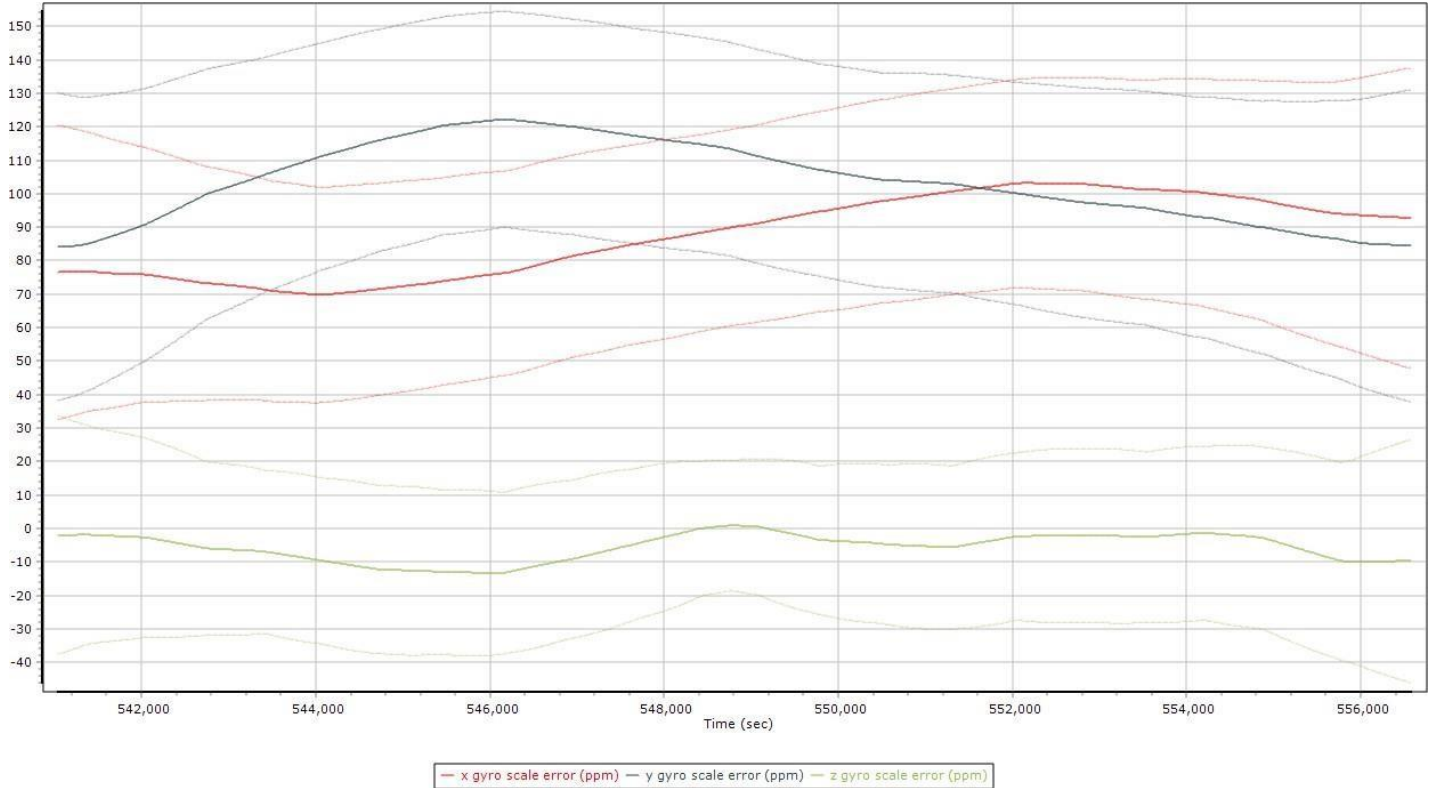
Sensor Position Error RMS (m) Plots 10: Sortie a01-s01-0081



Accelerometer Scale Bias Error Plots 10: Sortie a01-s01-0081



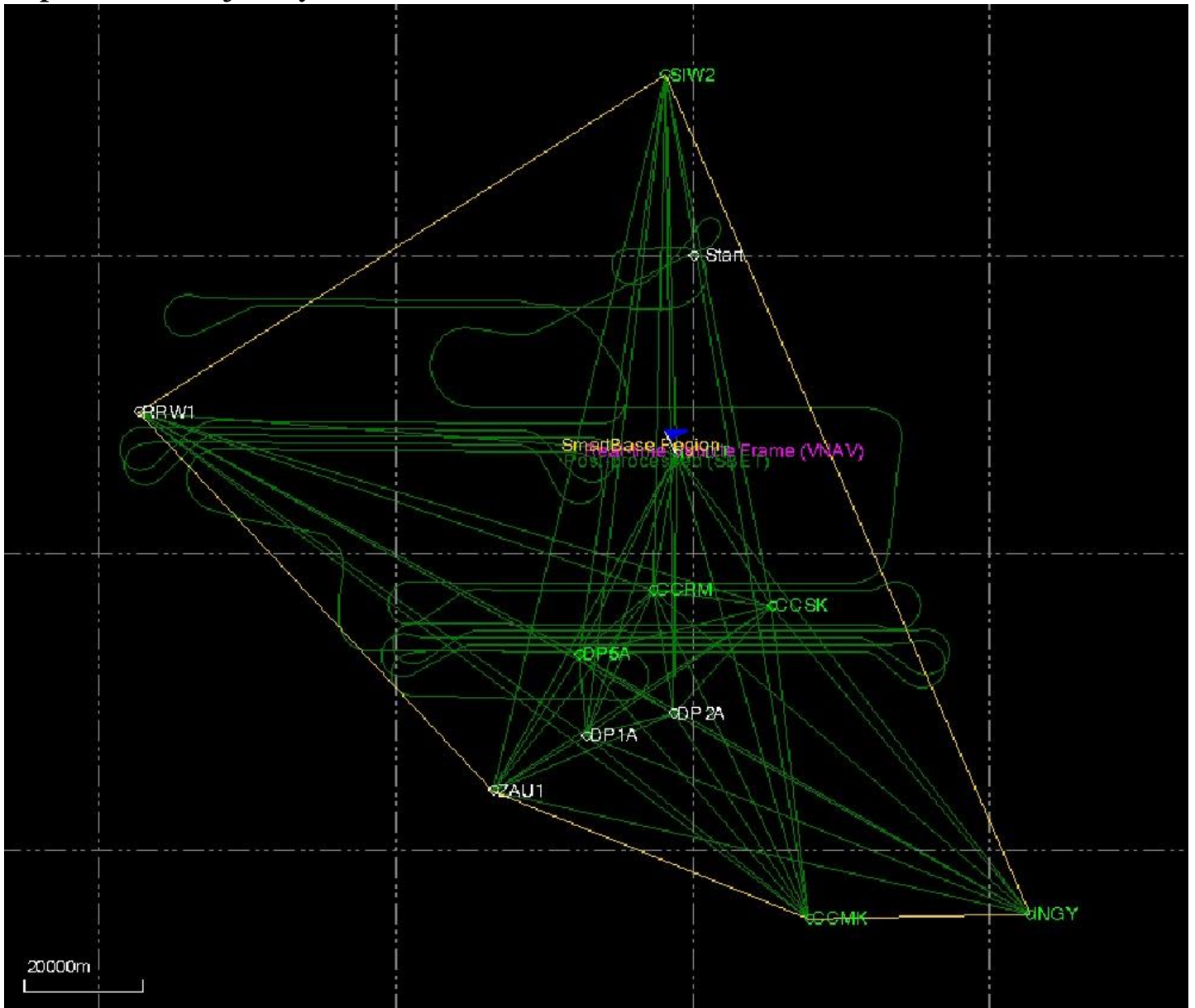
Gyro Scale Error (ppm) Plots 10: Sortie a01-s01-0081



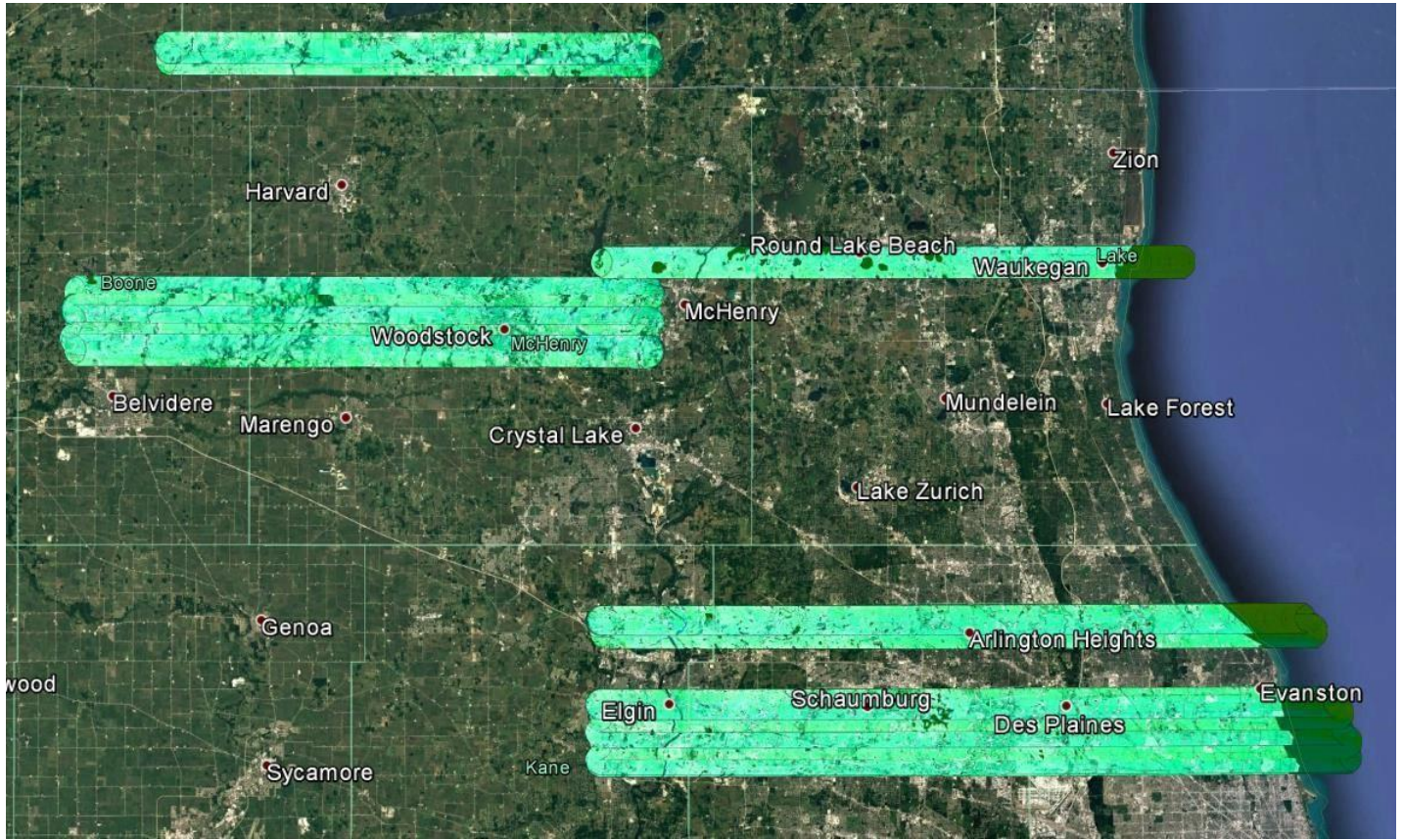
COLLECTION 11

Brick 1 & 2
Sortie a01-s01-0082
04/23/2017

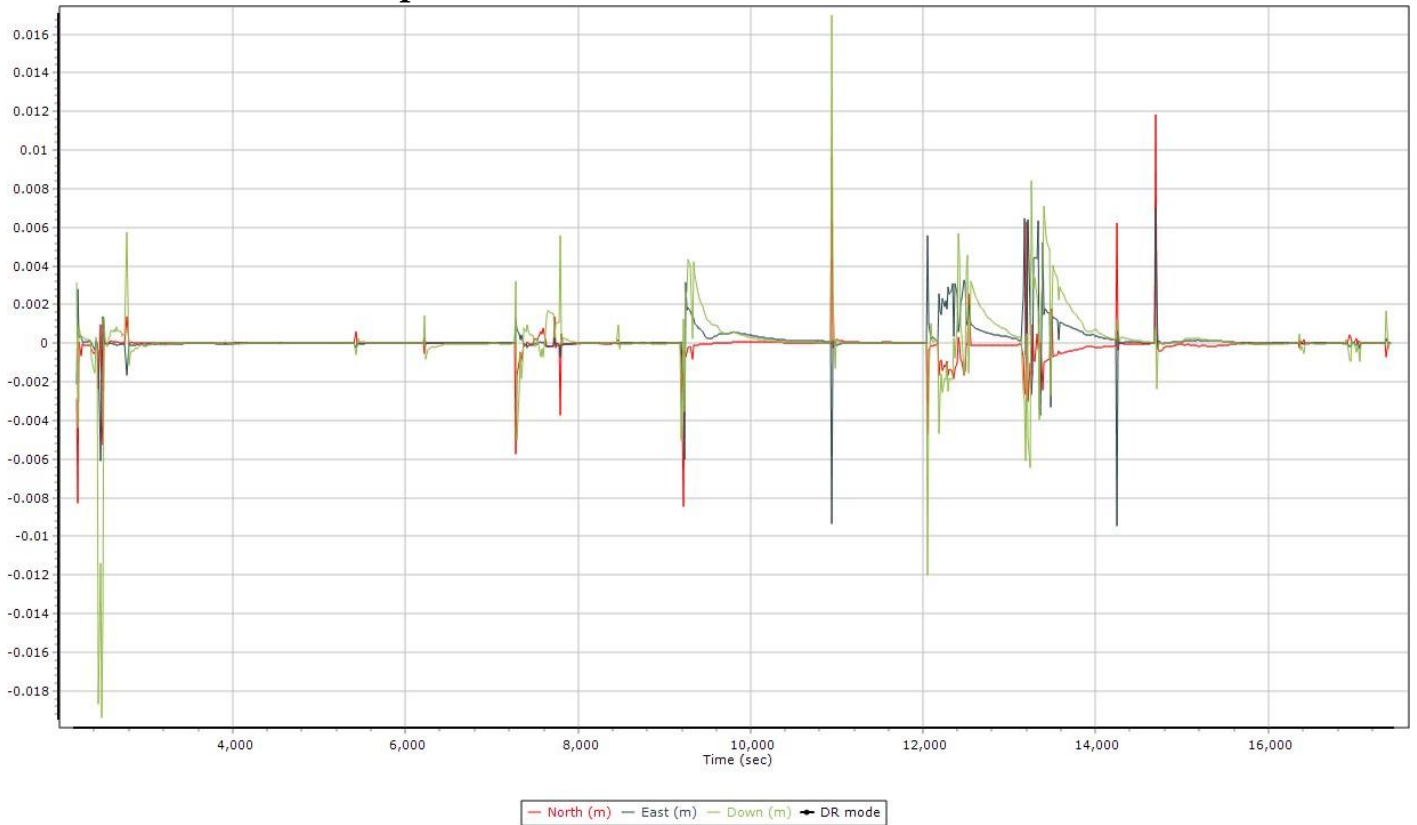
Map Run with Trajectory 11: Sortie a01-s01-0082



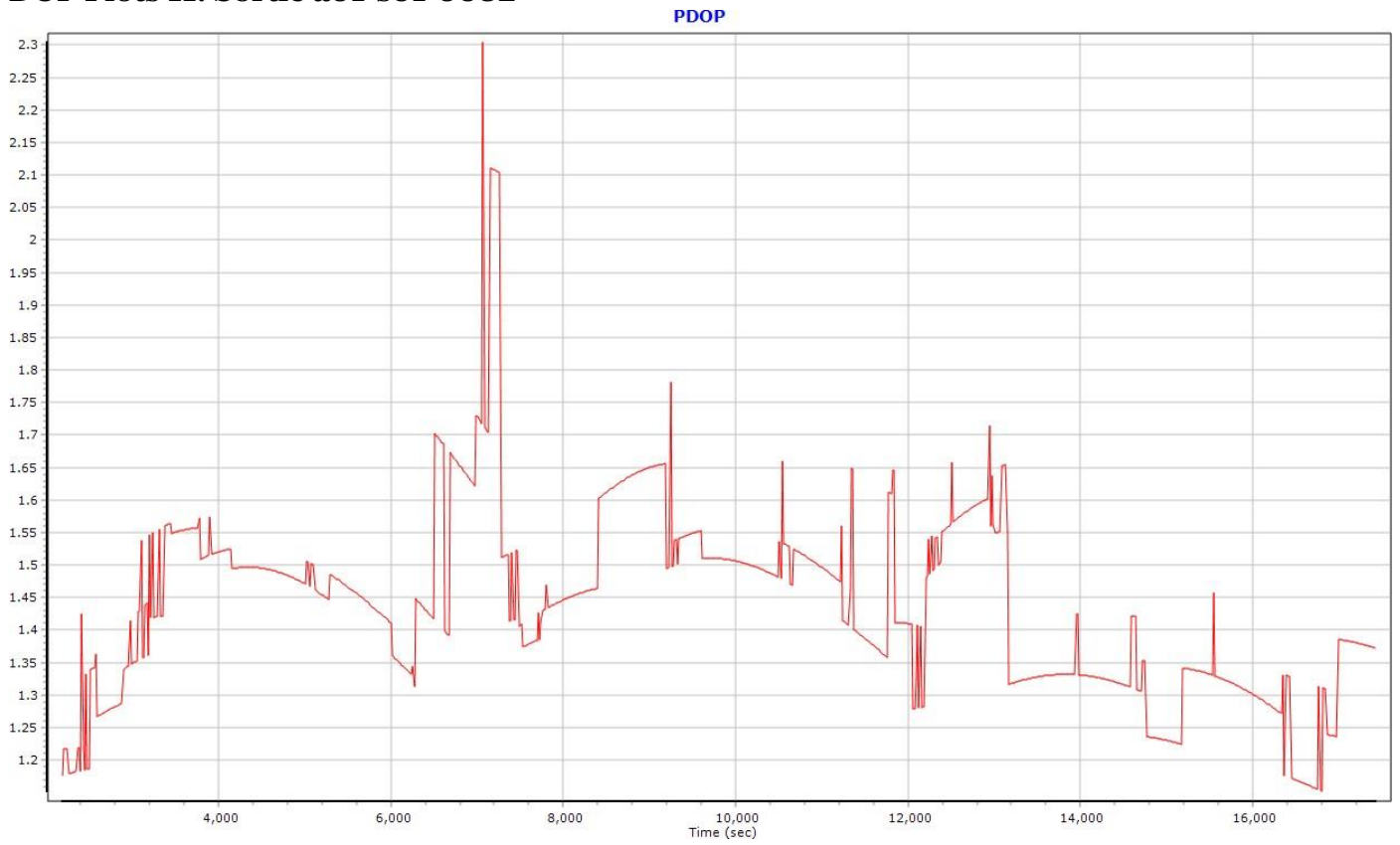
Swath Width, Waterfall View 11: Sortie a01-s01-0082



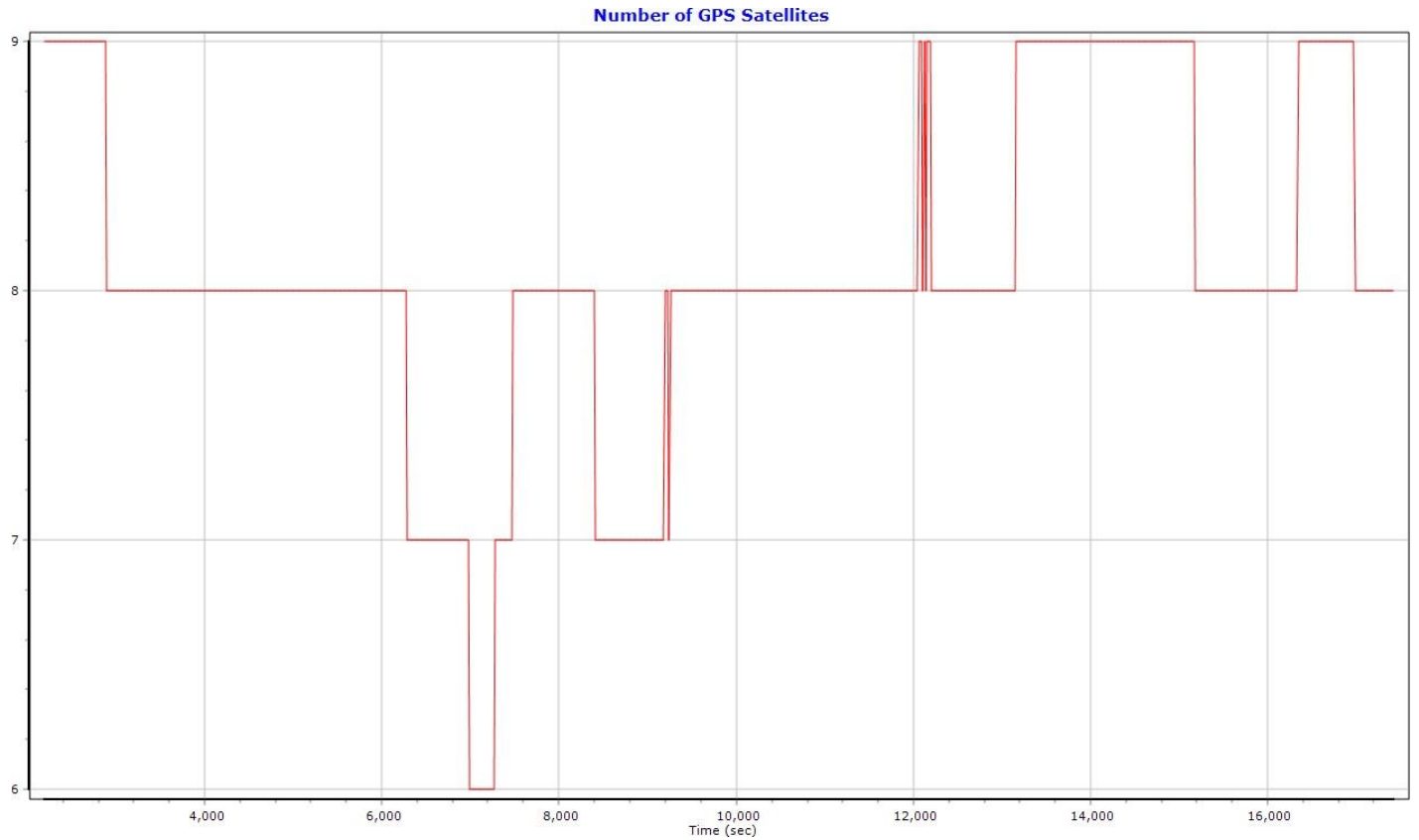
Combined SBET IAKAR Separation 11: Sortie a01-s01-0082



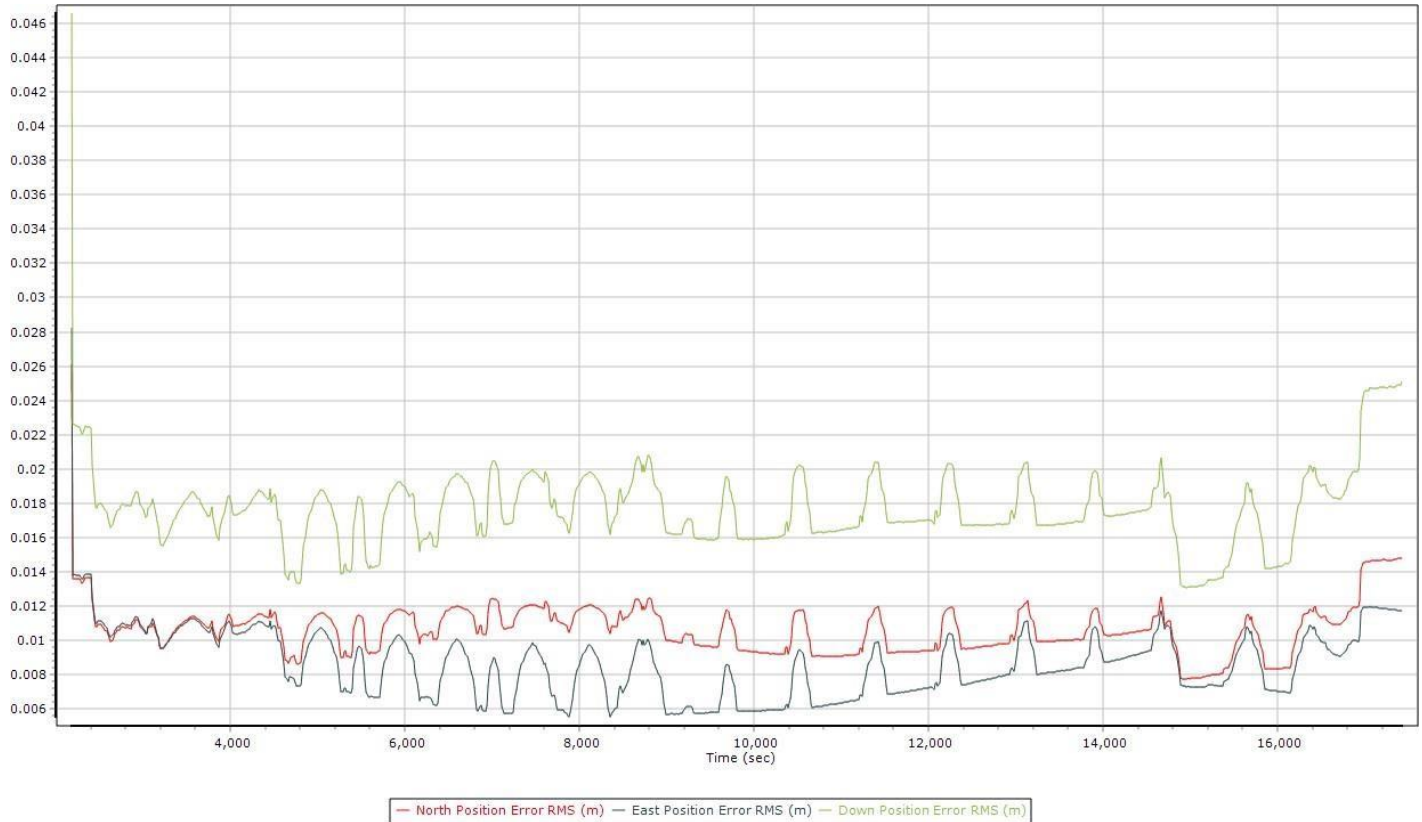
PDOP Plots 11: Sortie a01-s01-0082



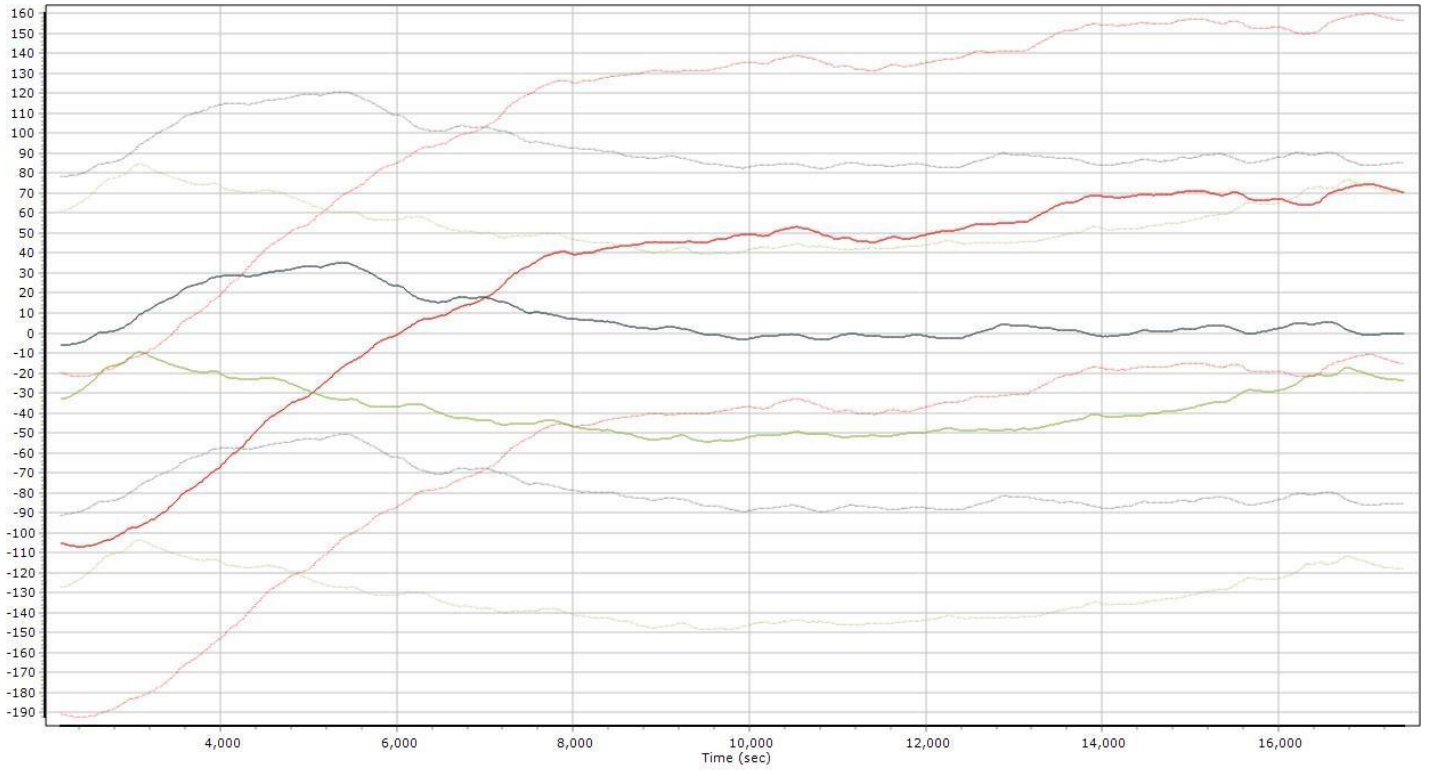
Number of Satellites (>6) Plots 11: Sortie a01-s01-0082



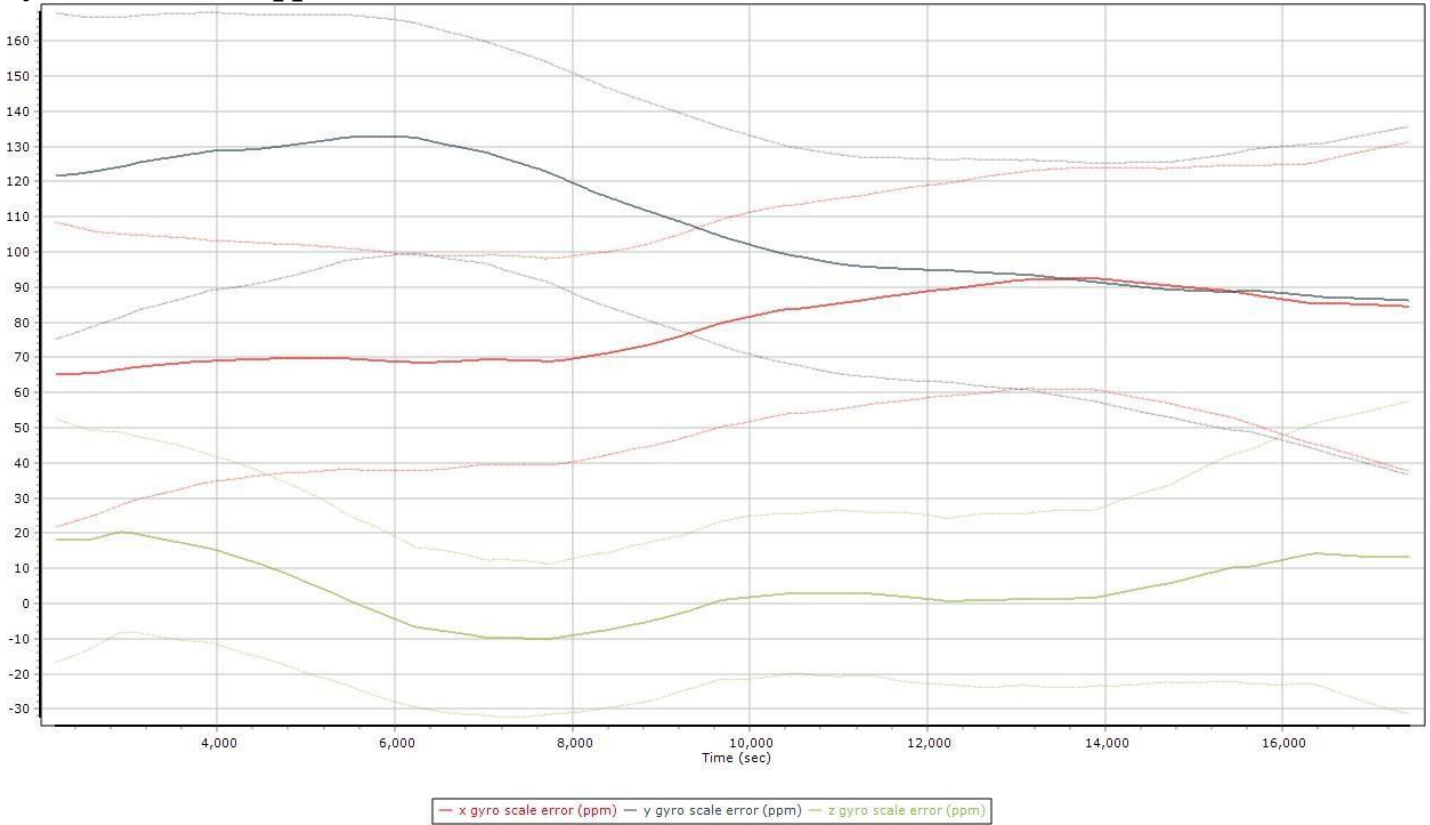
Sensor Position Error RMS (m) Plots 11: Sortie a01-s01-0082



Accelerometer Scale Bias Error Plots 11: Sortie a01-s01-0082



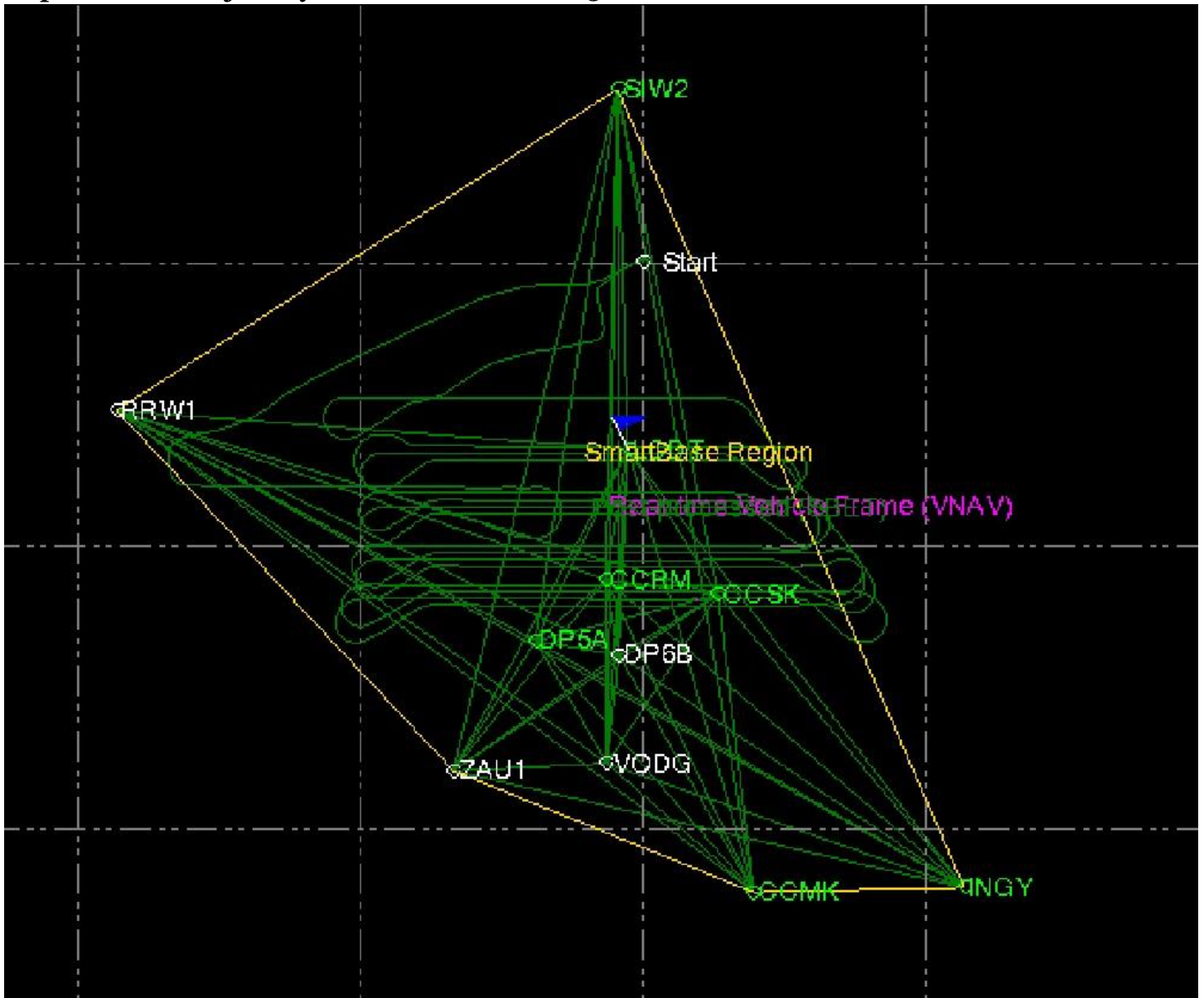
Gyro Scale Error (ppm) Plots 11: Sortie a01-s01-0082



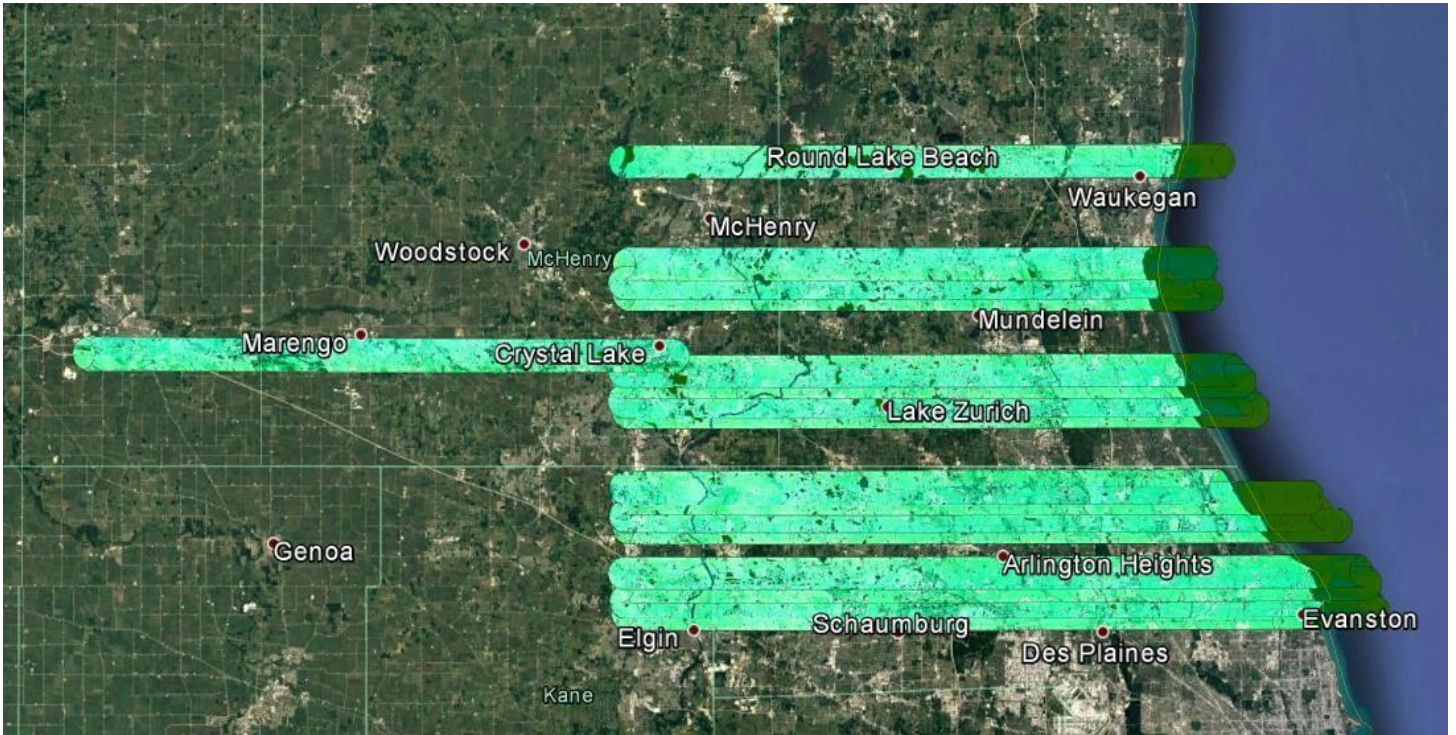
COLLECTION 12

Brick 2
Sortie a01-s01-0083
04/23/2017

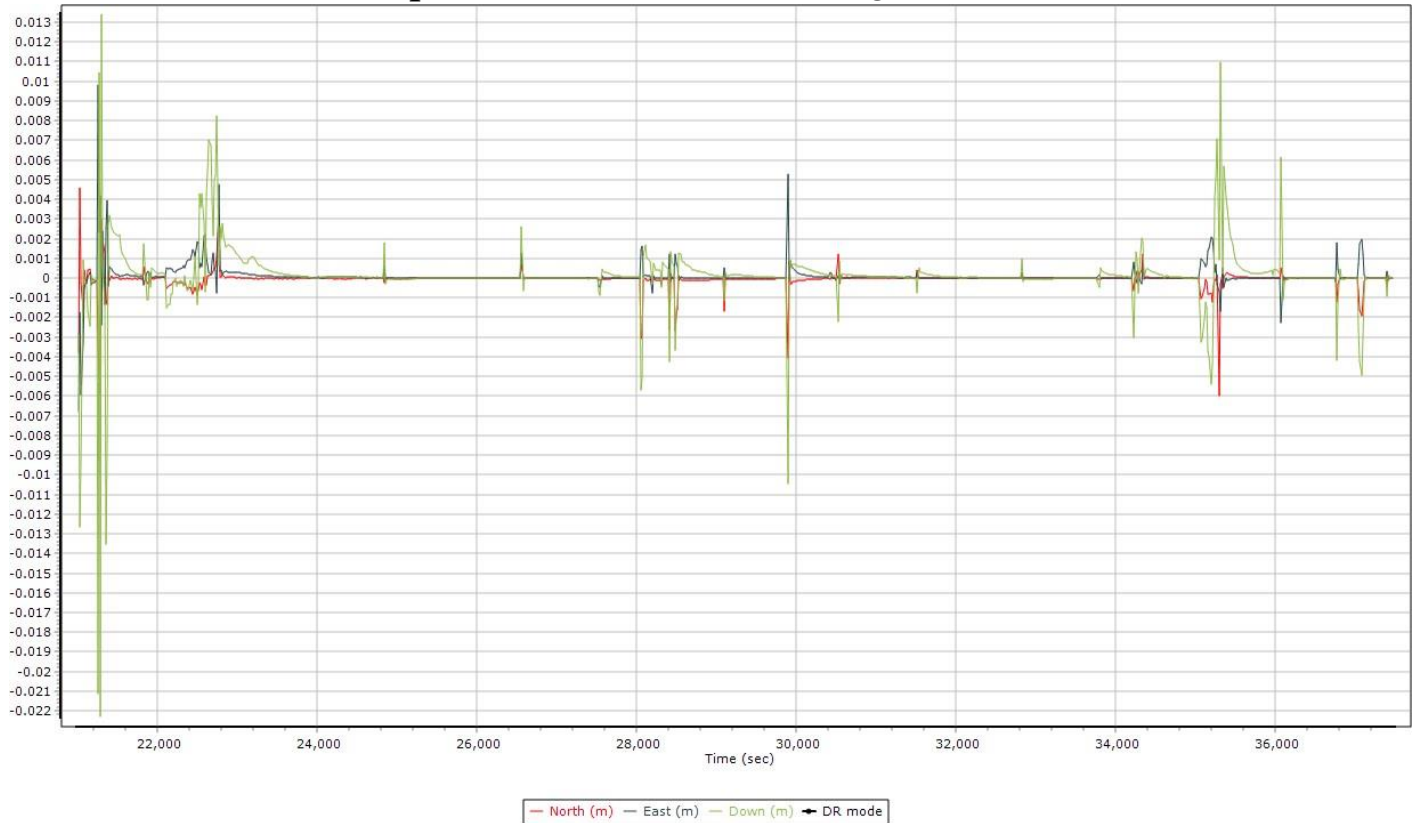
Map Run with Trajectory 12: Sortie a01-s0-0083



Swath Width, Waterfall View 12: Sortie a01-s0-0083

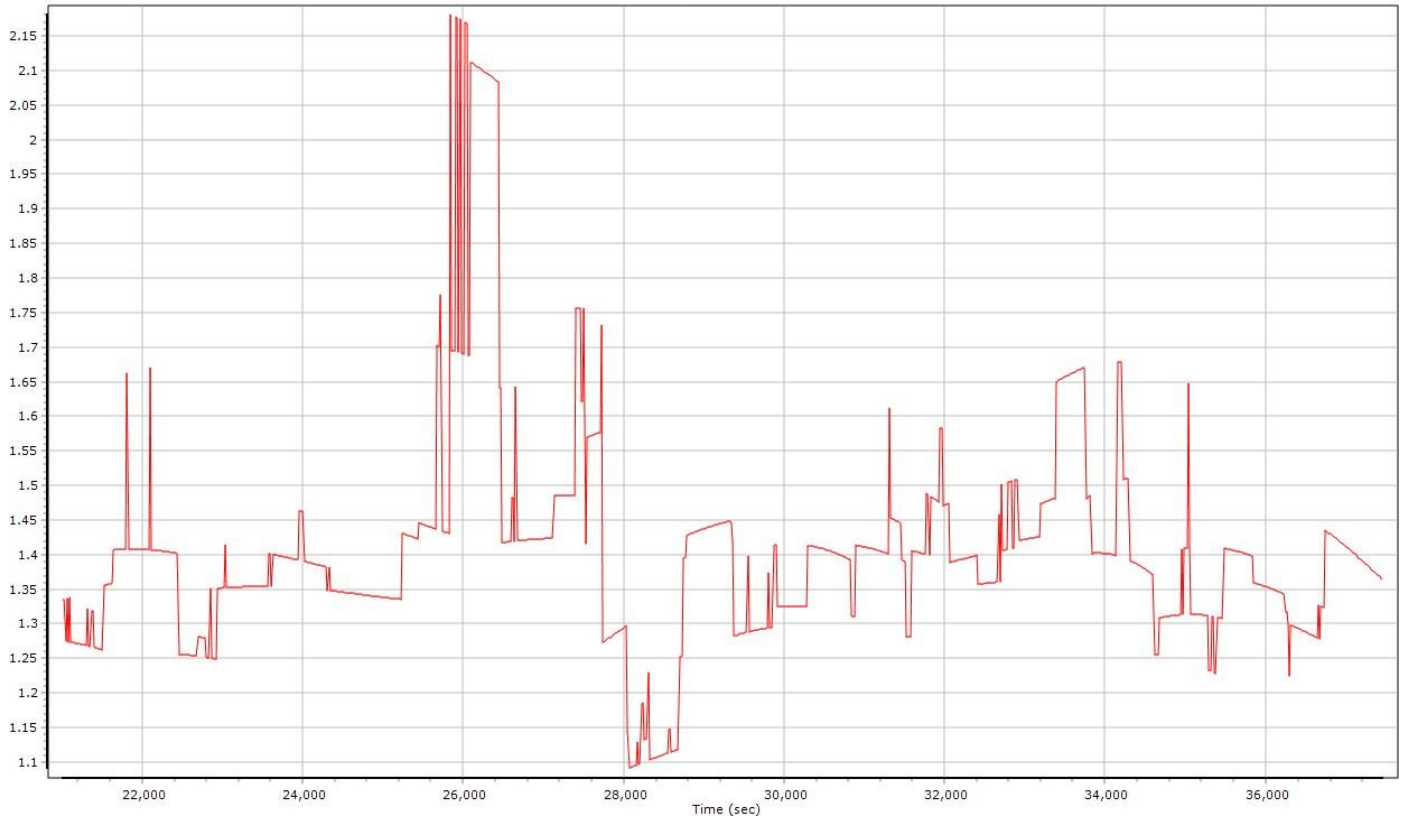


Combined SBET IAKAR Separation 12: Sortie a01-so-0083



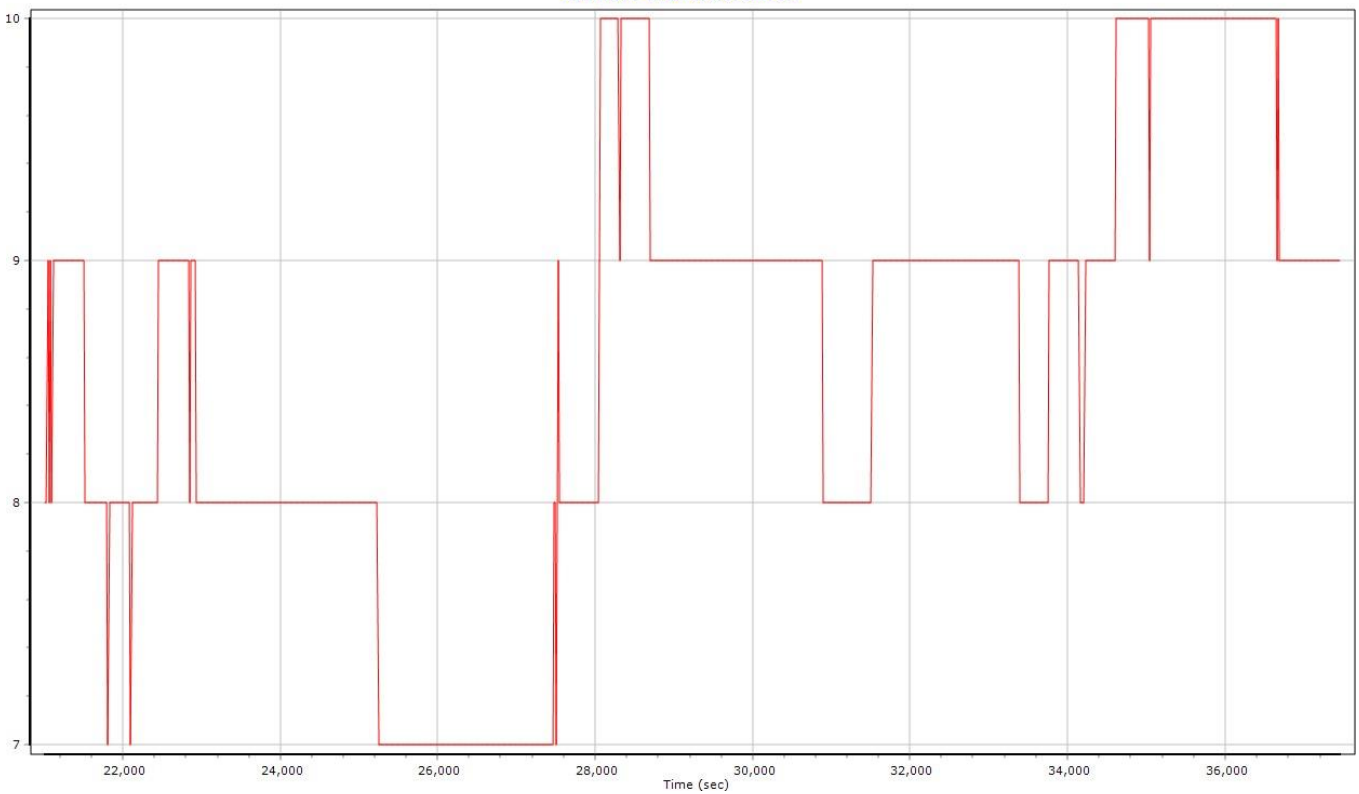
PDOP Plots 12: Sortie a01-so-0083

PDOP

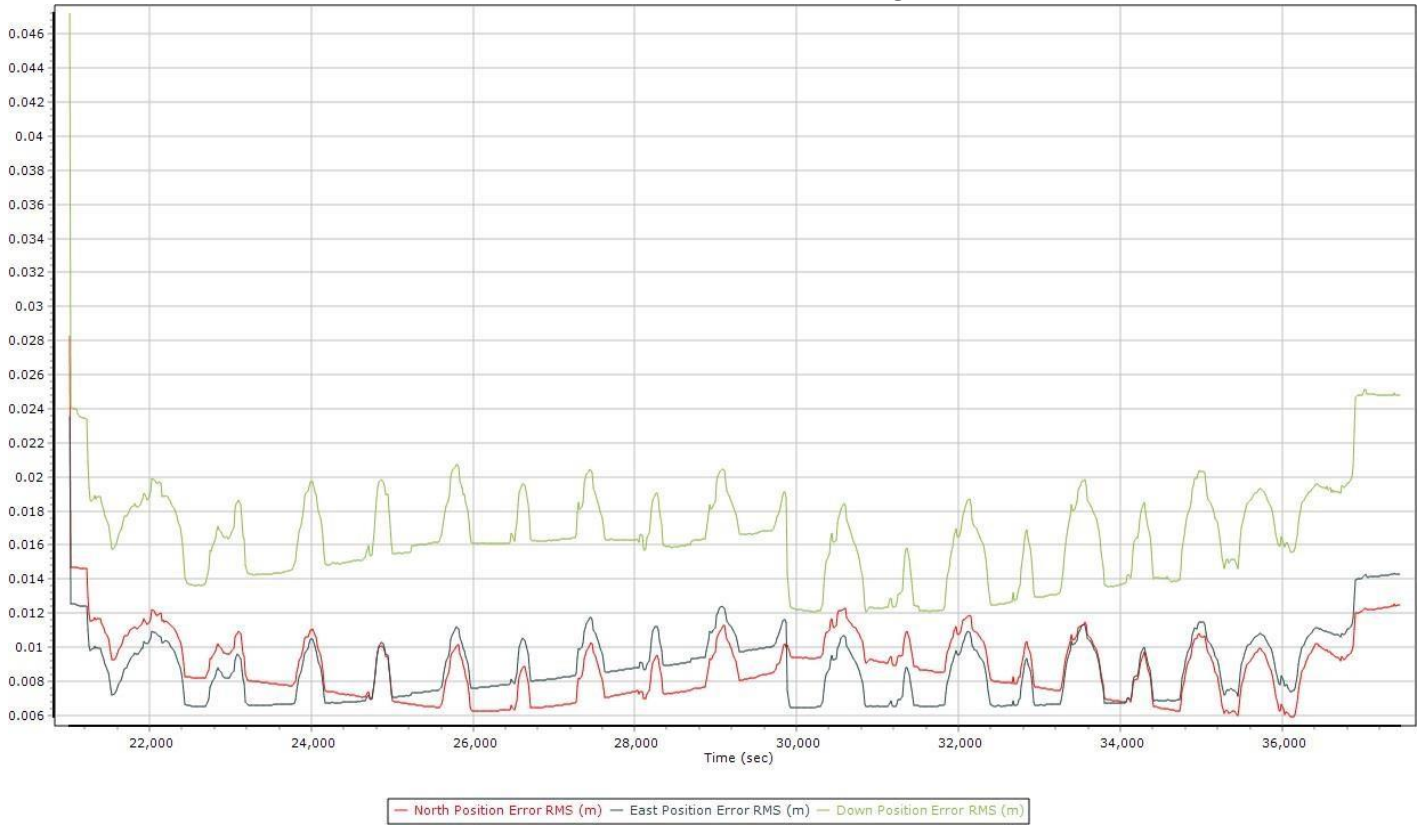


Number of Satellites (>6) Plots 12: Sortie a01-s0-0083

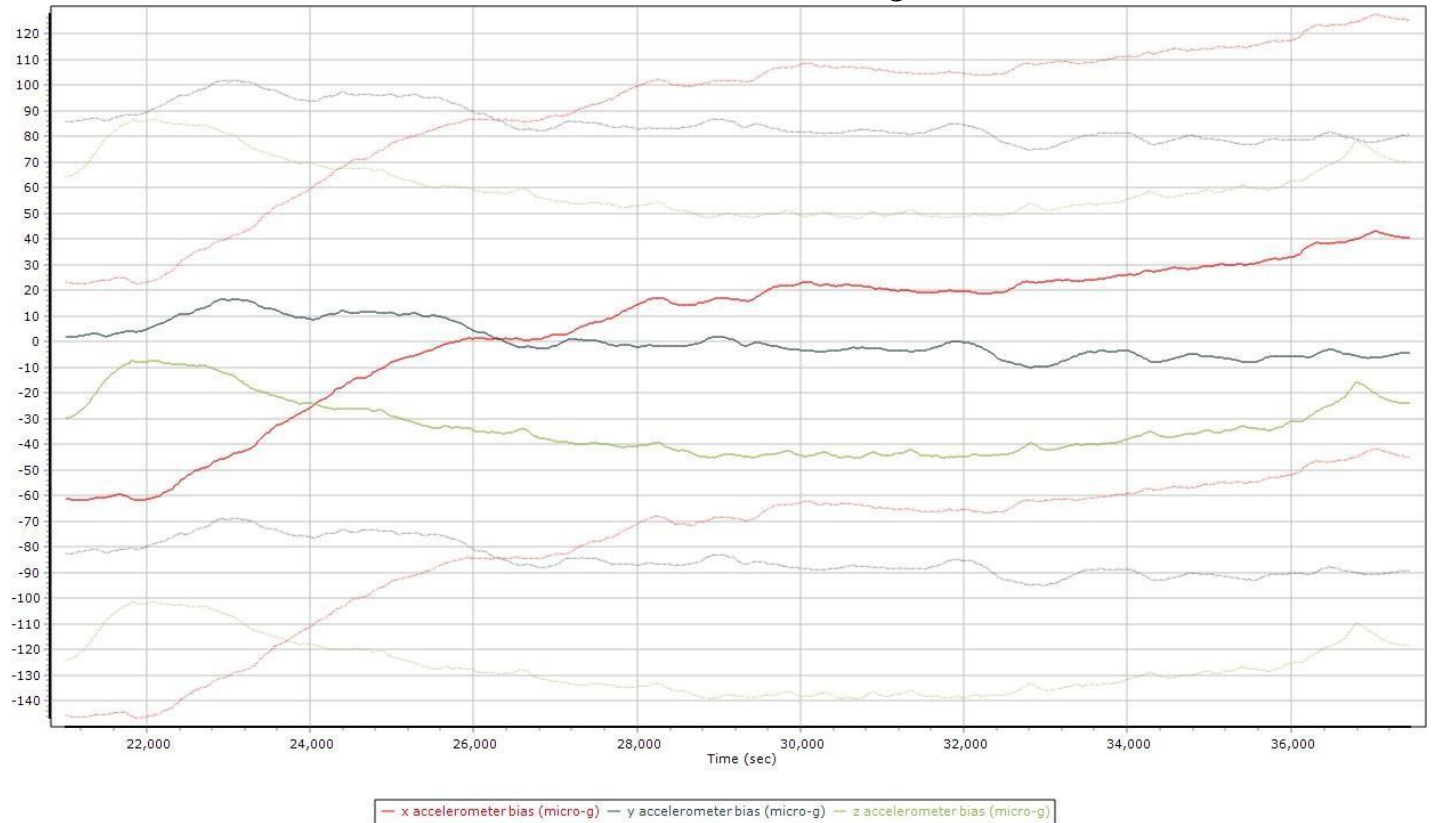
Number of GPS Satellites



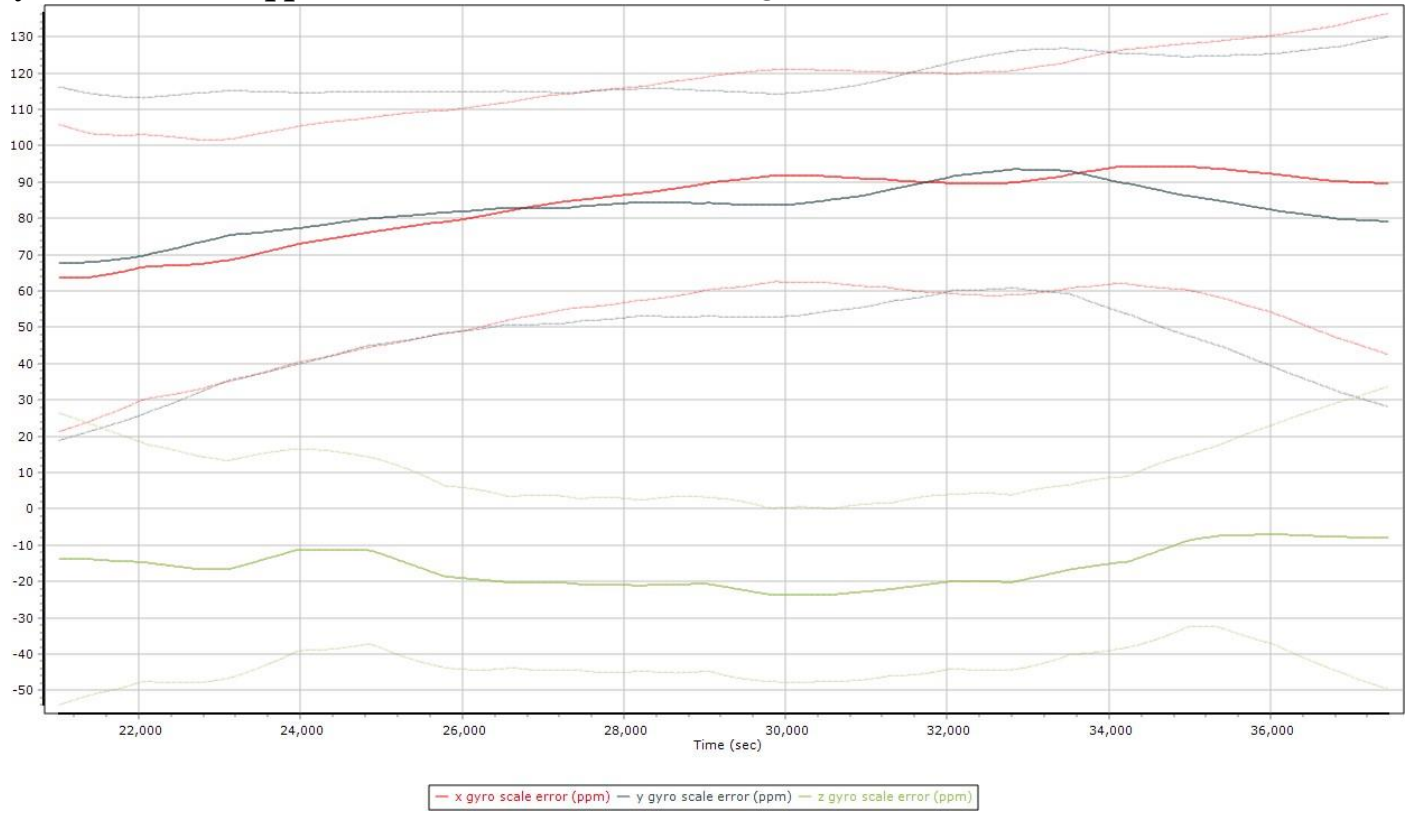
Sensor Position Error RMS (m) Plots 12: Sortie a01-so-0083



Accelerometer Scale Bias Error Plots 12: Sortie a01-so-0083



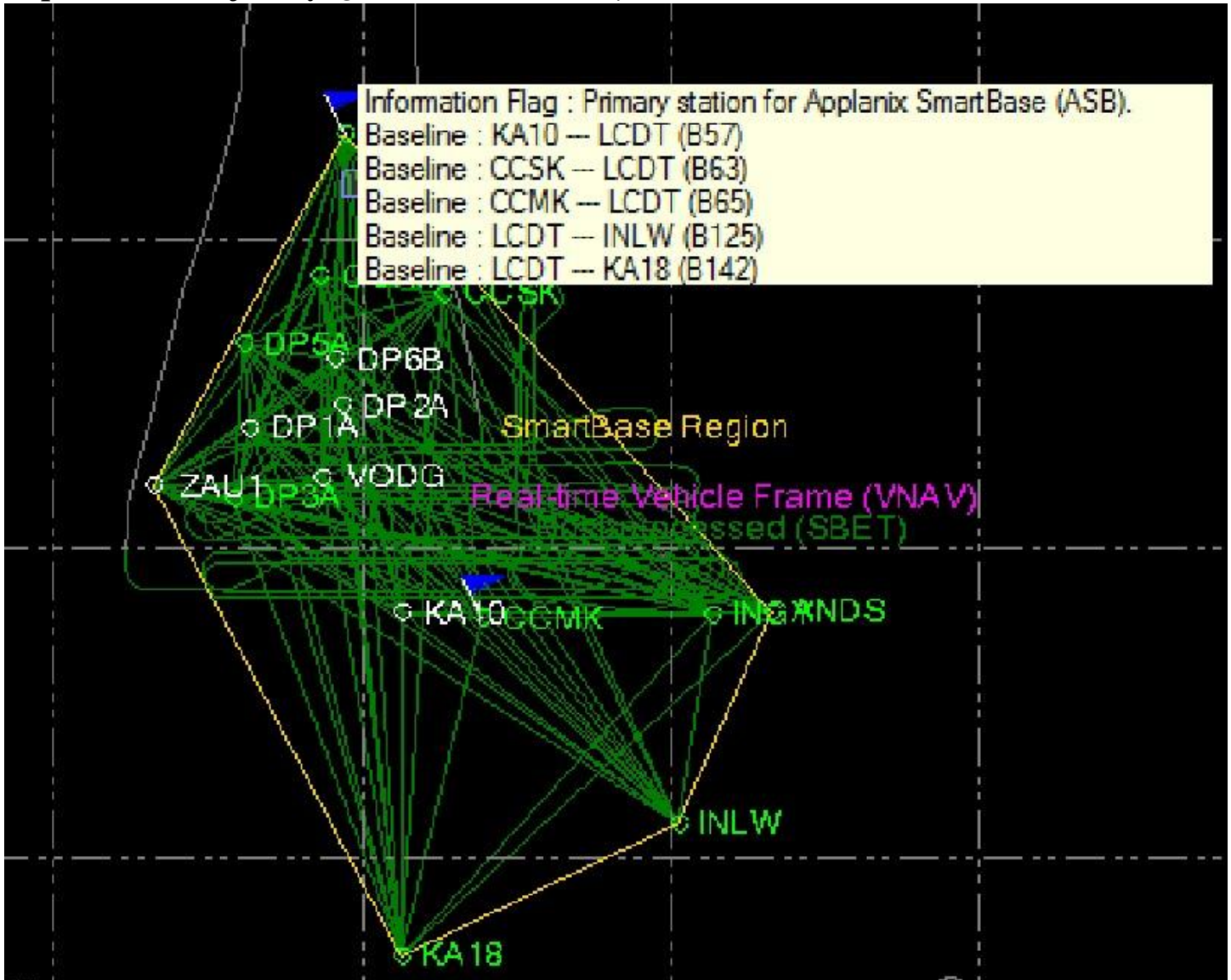
Gyro Scale Error (ppm) Plots 12: Sortie a01-so-0083



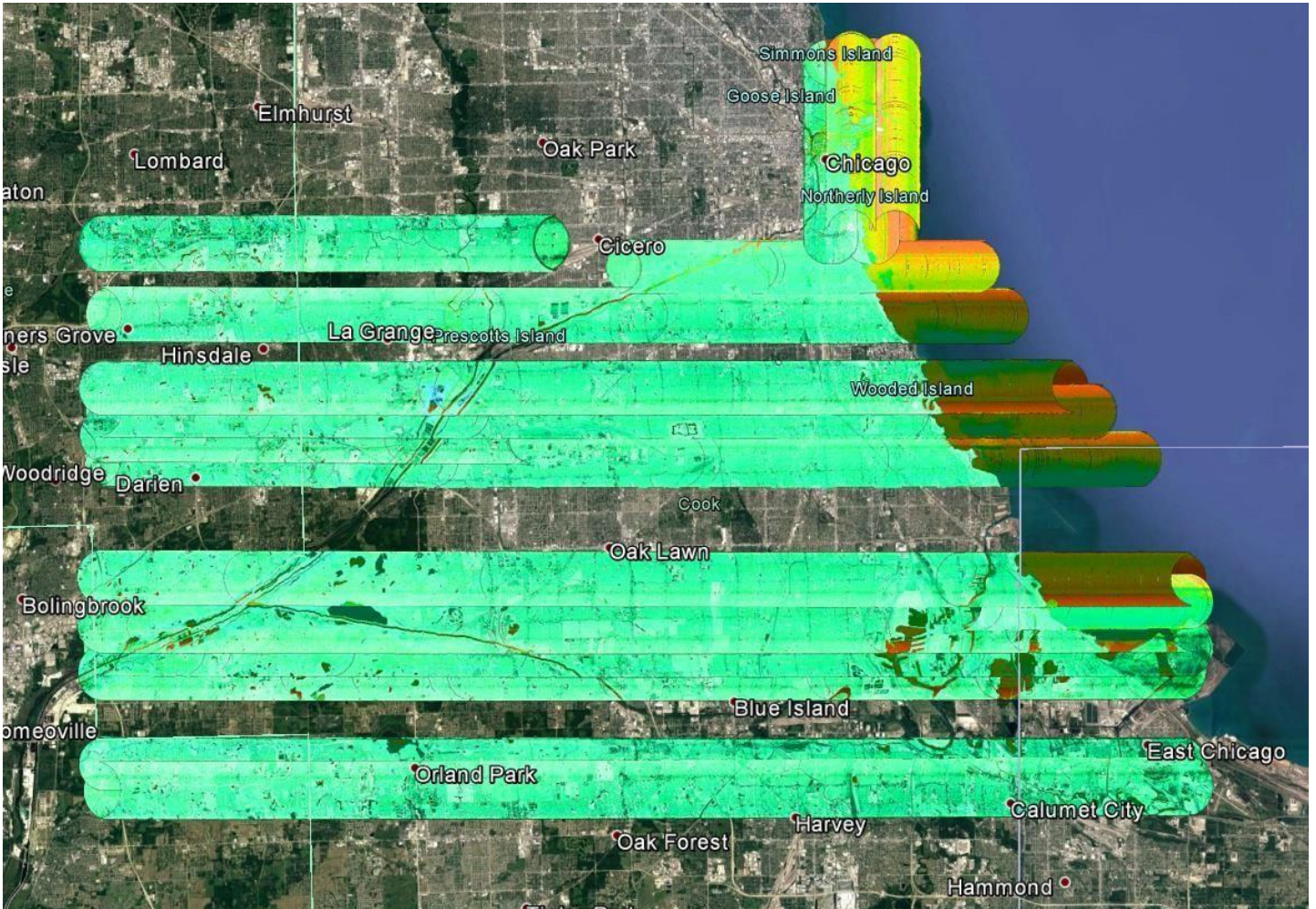
COLLECTION 13

Brick Chicago / Downtown
Sortie a02-s02-0217
04/23/2017

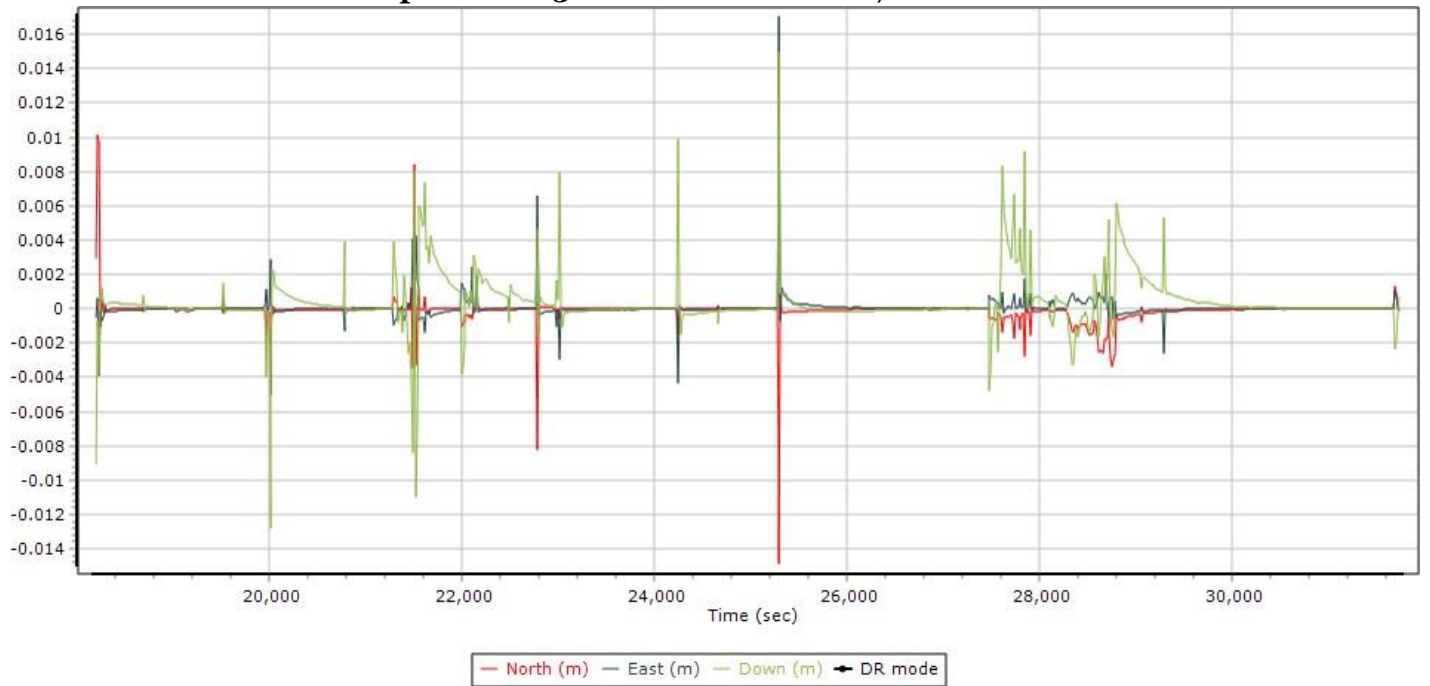
Map Run with Trajectory 13: Sortie a02-s02-0217



Swath Width, Waterfall View 13: Sortie a02-s02-0217

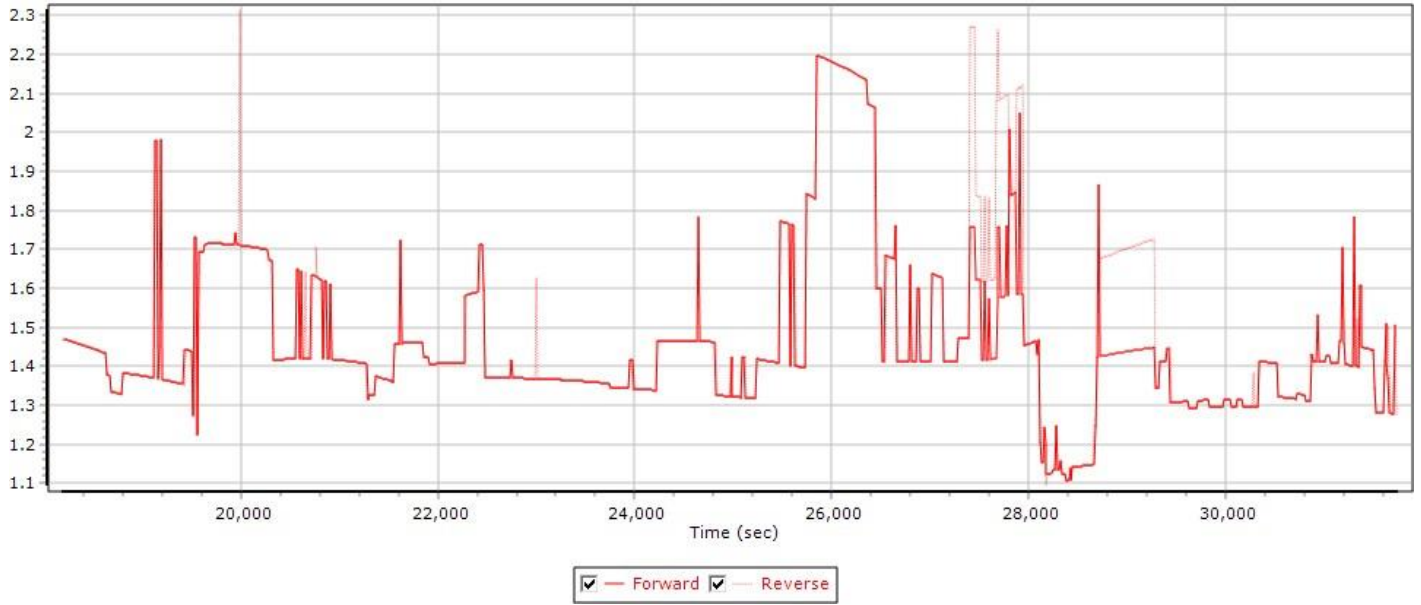


Combined SBET IAKAR Separation 13: Sortie a02-s02-0217



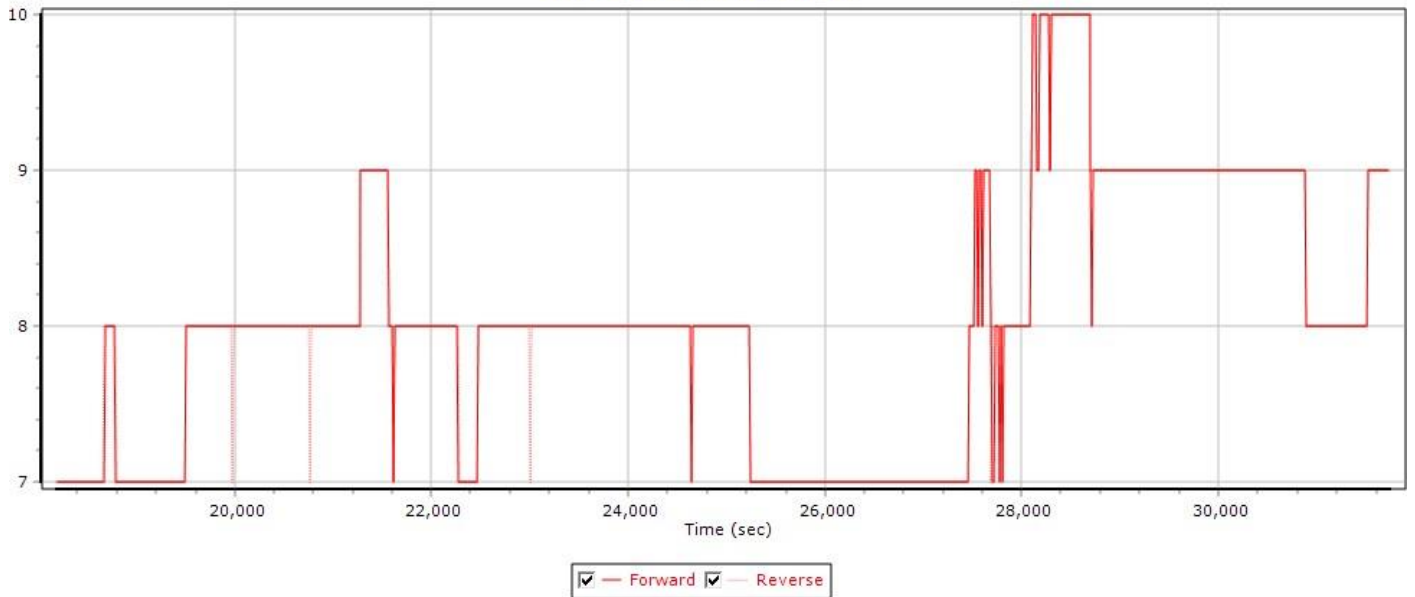
PDOP Plots 13: Sortie a02-s02-0217

PDOP

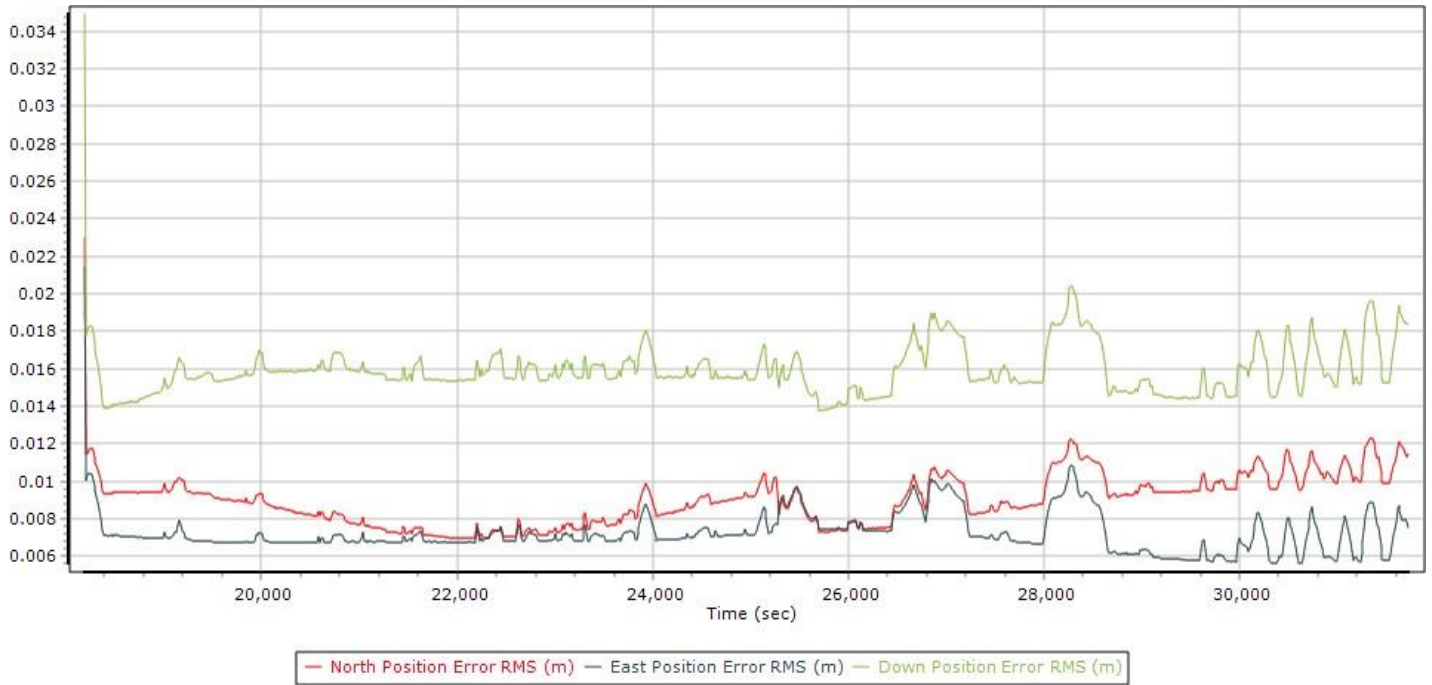


Number of Satellites (>6) Plots 13: Sortie a02-s02-0217

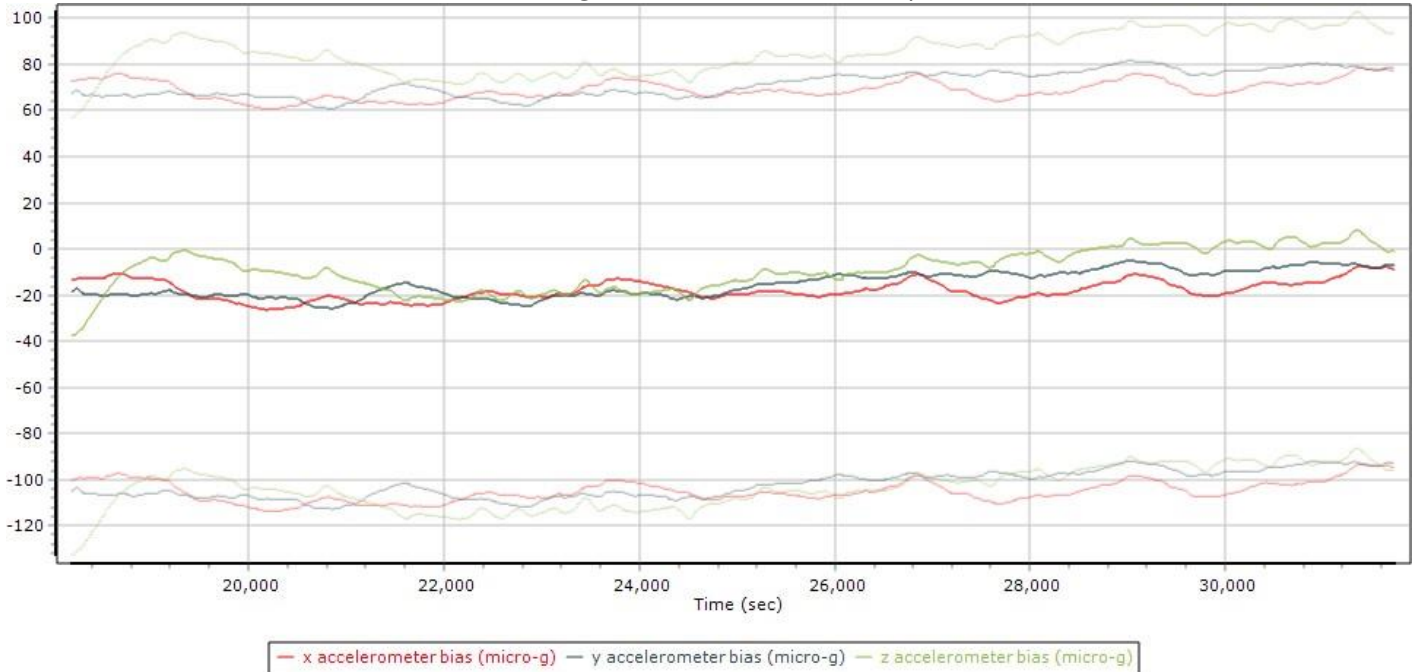
Number of GPS Satellites



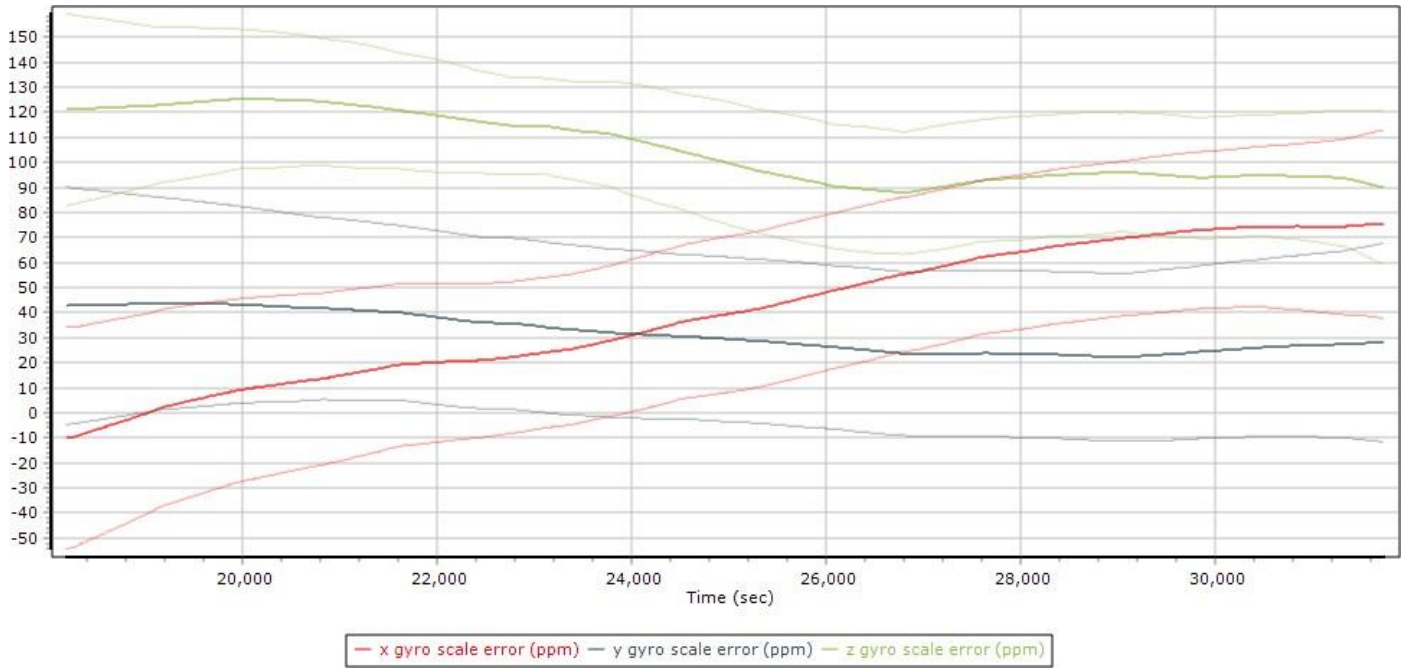
Sensor Position Error RMS (m) Plots 13: Sortie a02-s02-0217



Accelerometer Scale Bias Error Plots 13: Sortie a02-s02-0217



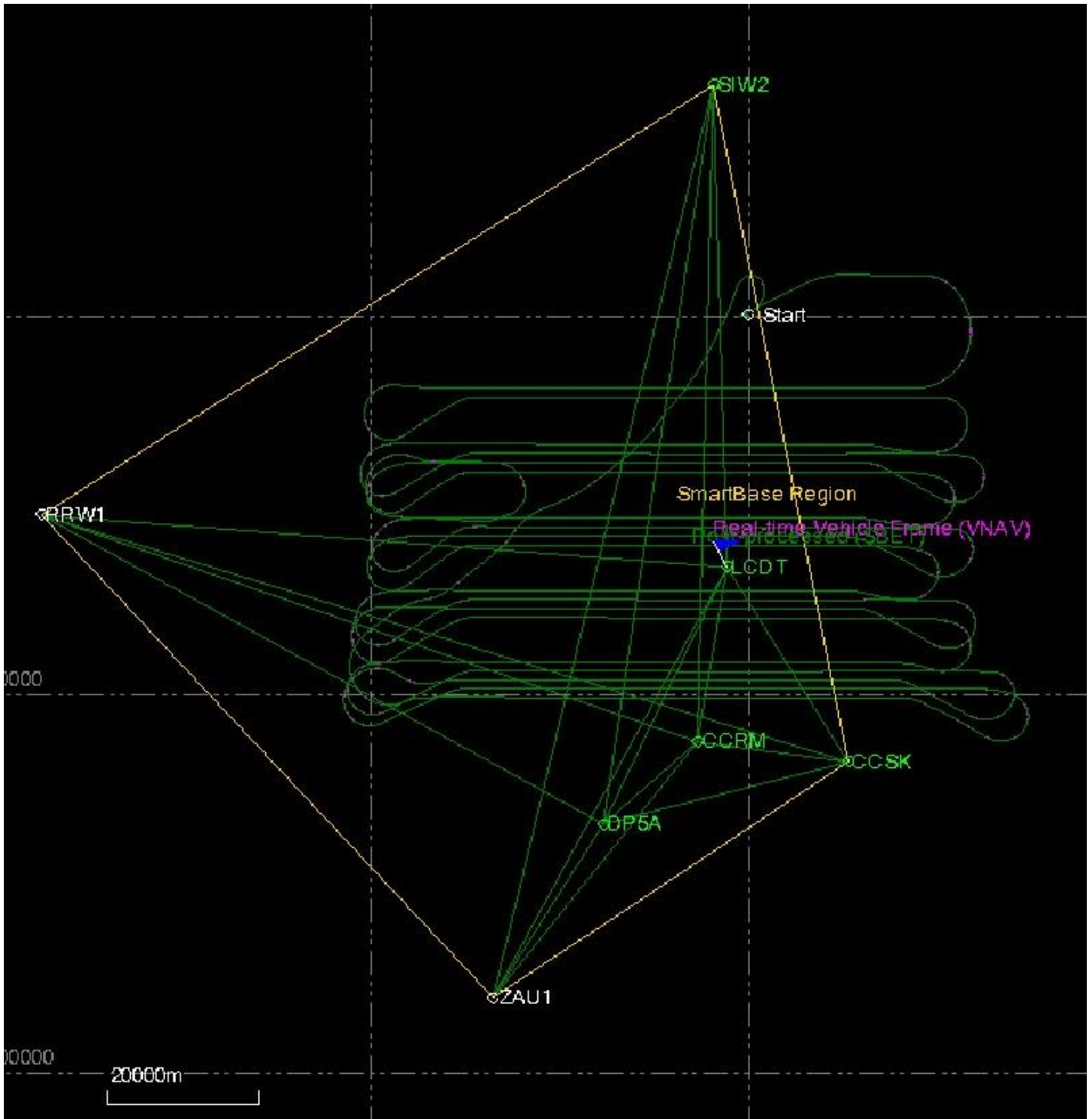
Gyro Scale Error (ppm) Plots 13: Sortie a02-s02-0217



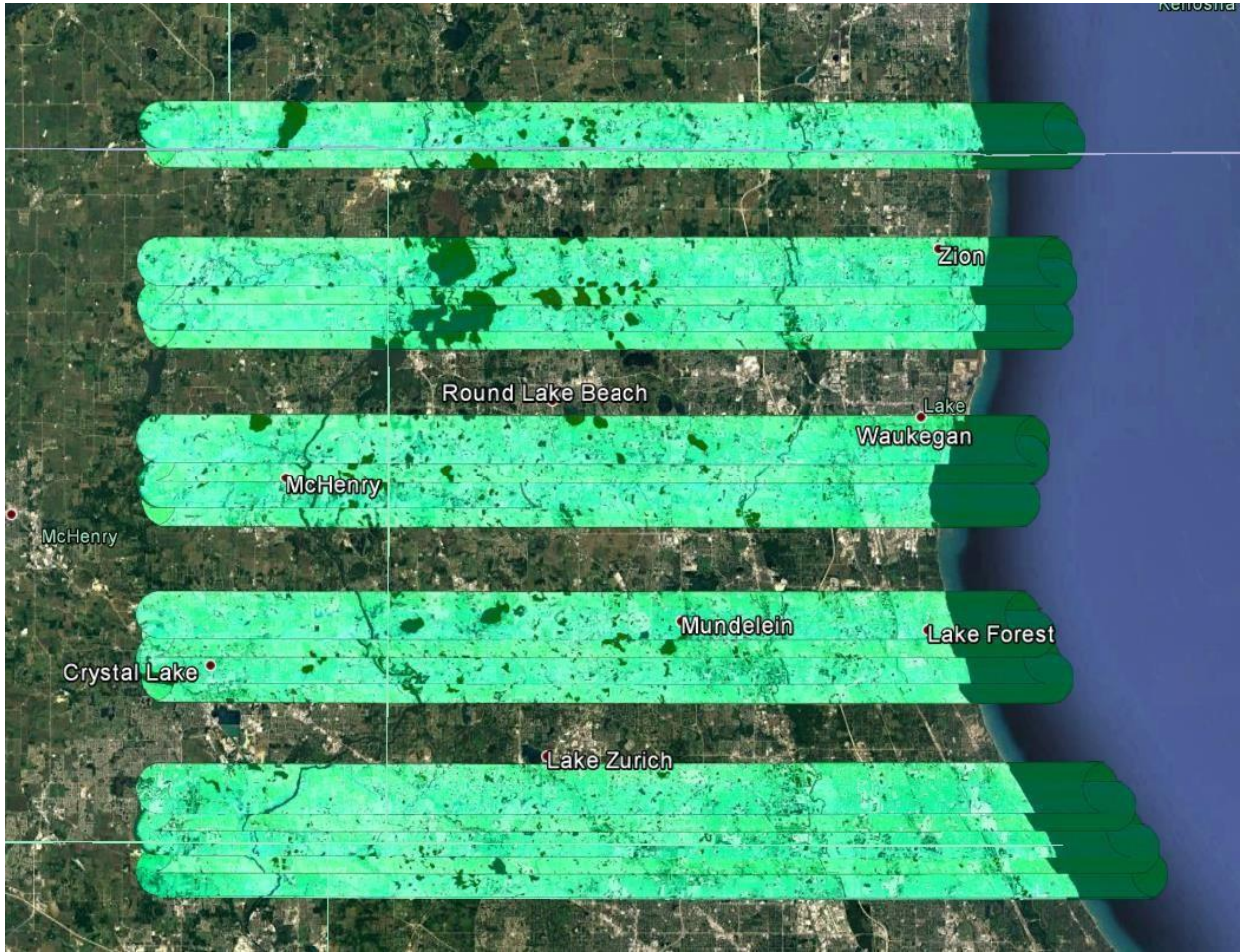
COLLECTION 14

Brick 2
Sortie a01-s01-0084
04/24/2017

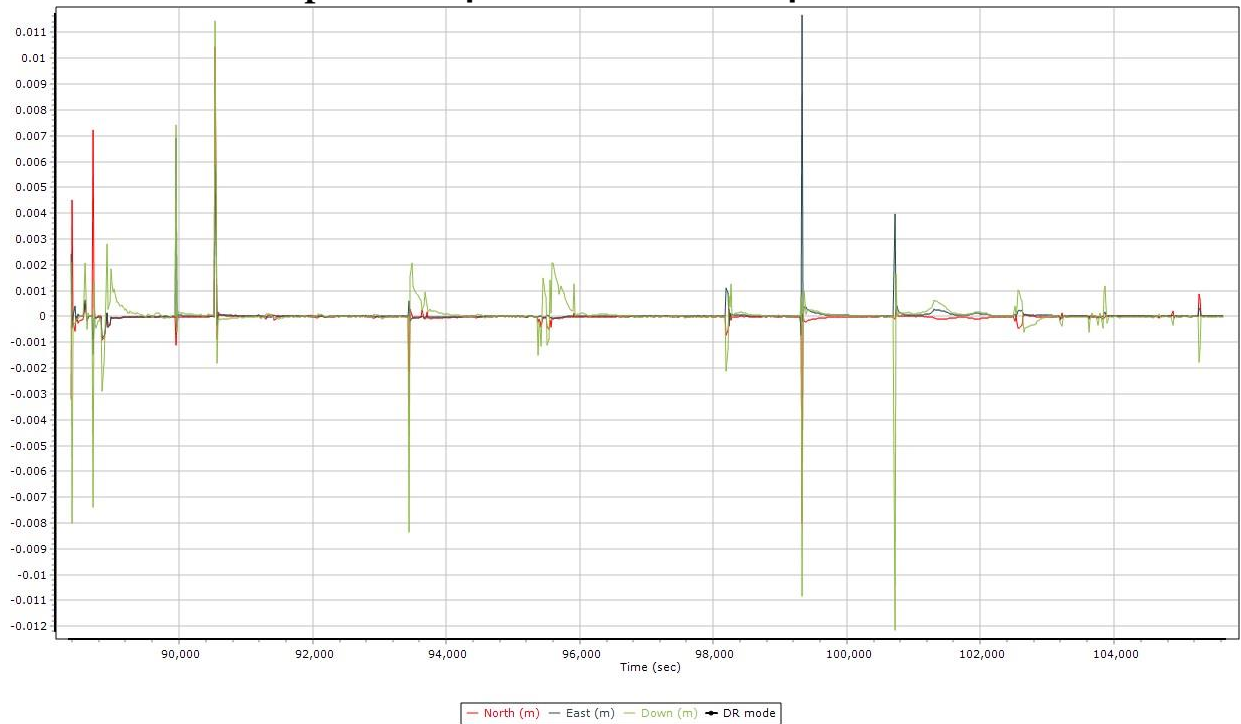
Map Run with Trajectory 14: Sortie a01-s01-0084



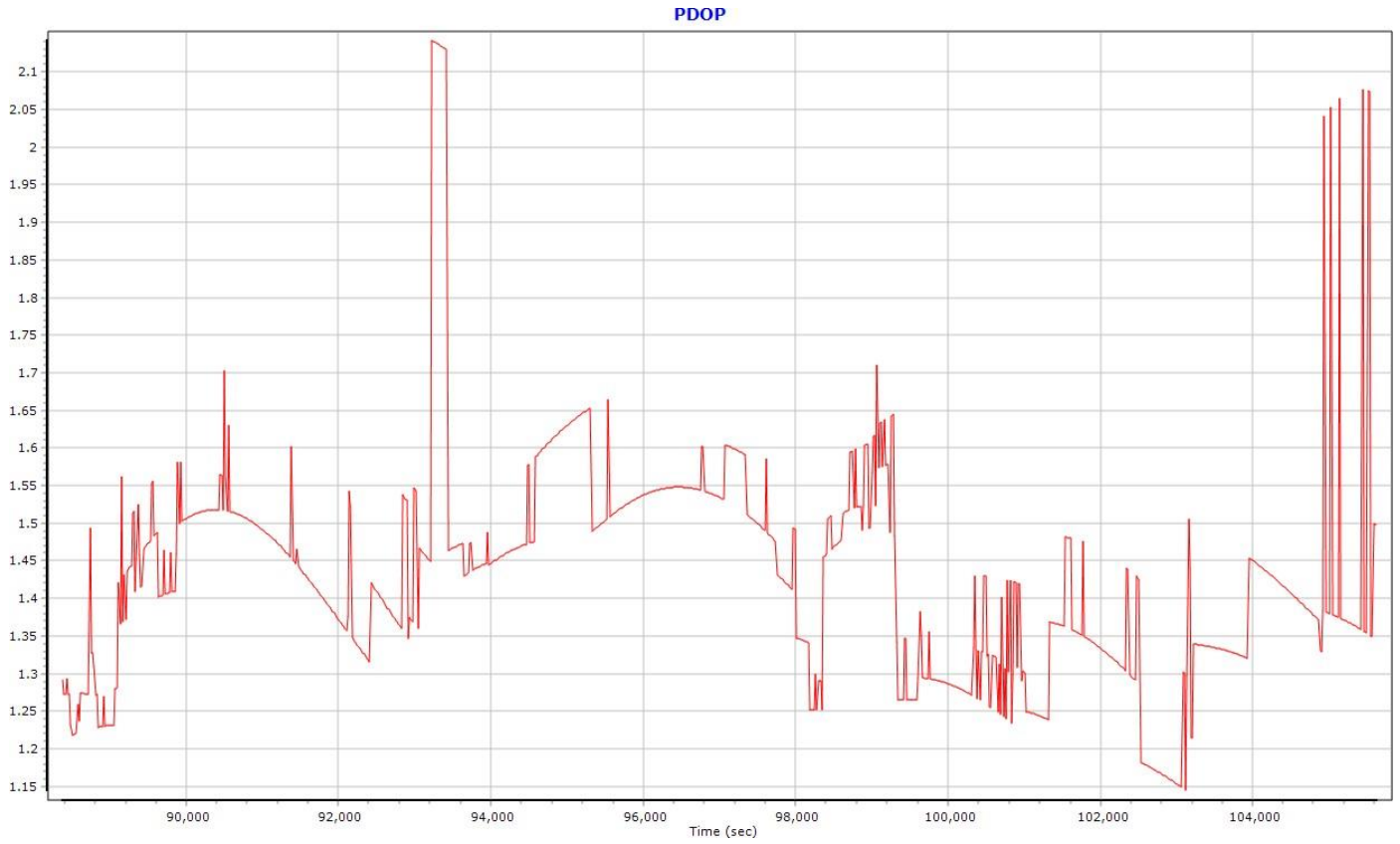
Swath Width, Waterfall View 14: Sortie a01-s01-0084



Combined SBET IAKAR Separation 14: Sortie a01-s01-0084

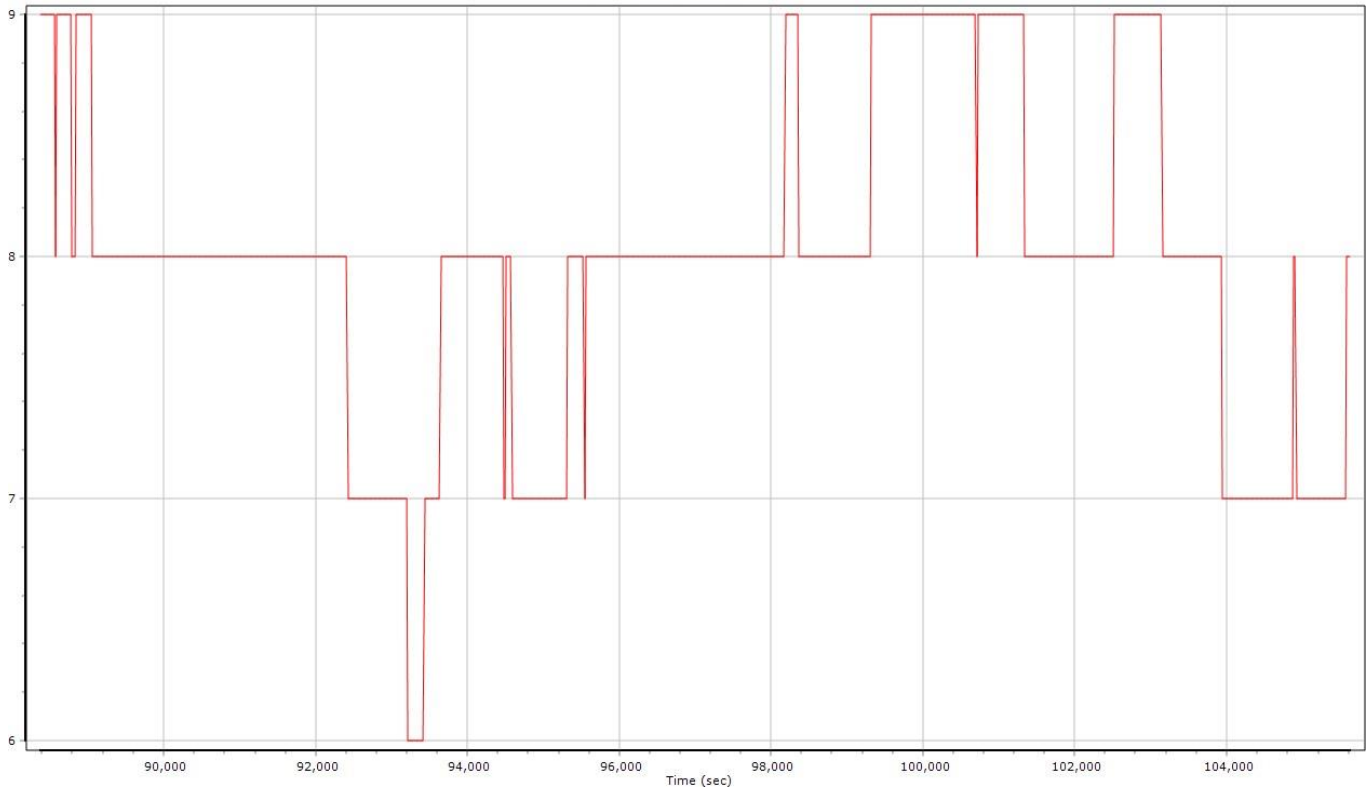


PDOP Plots 14: Sortie a01-s01-0084

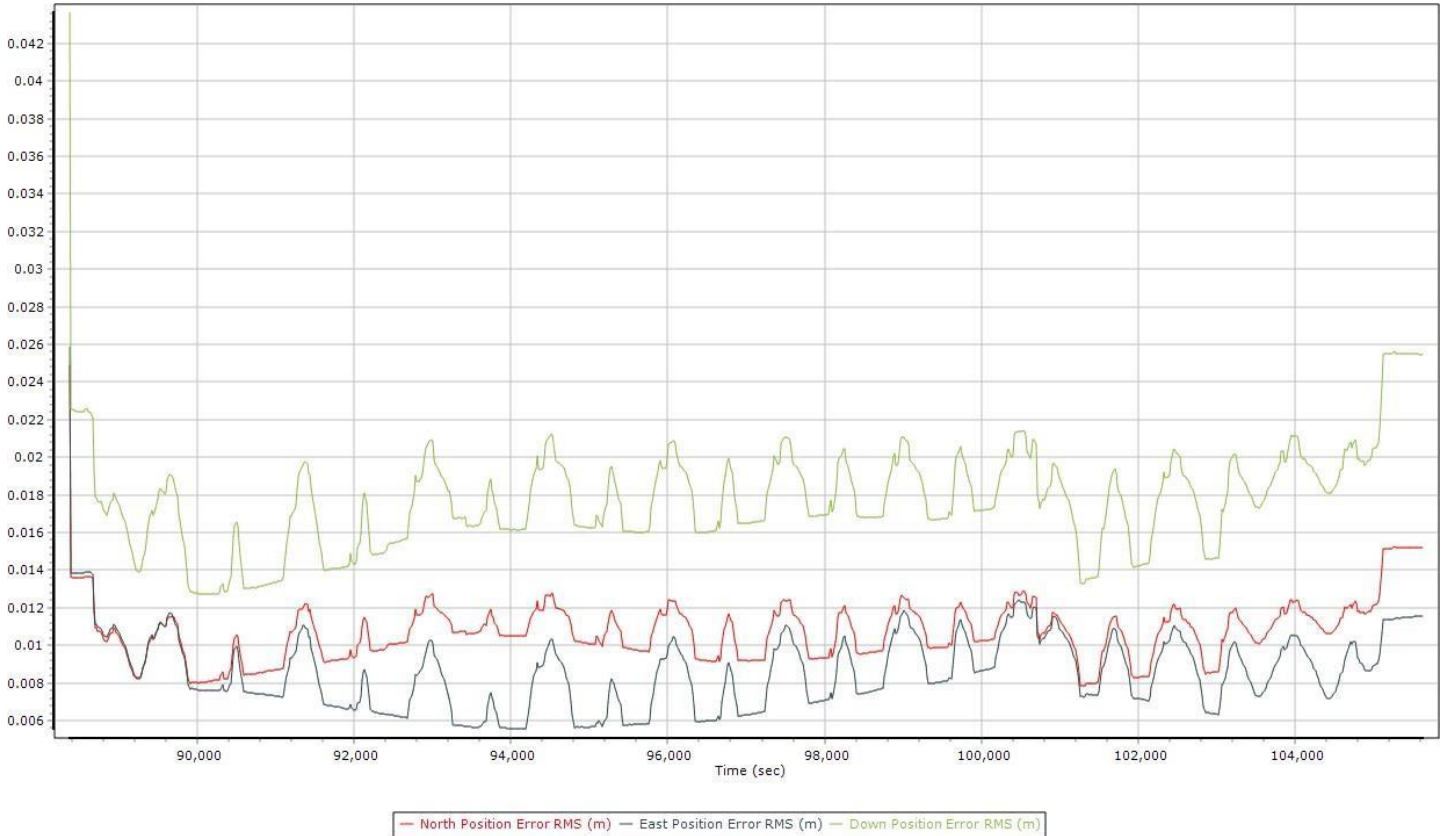


Number of Satellites (>6) Plots 14: Sortie a01-s01-0084

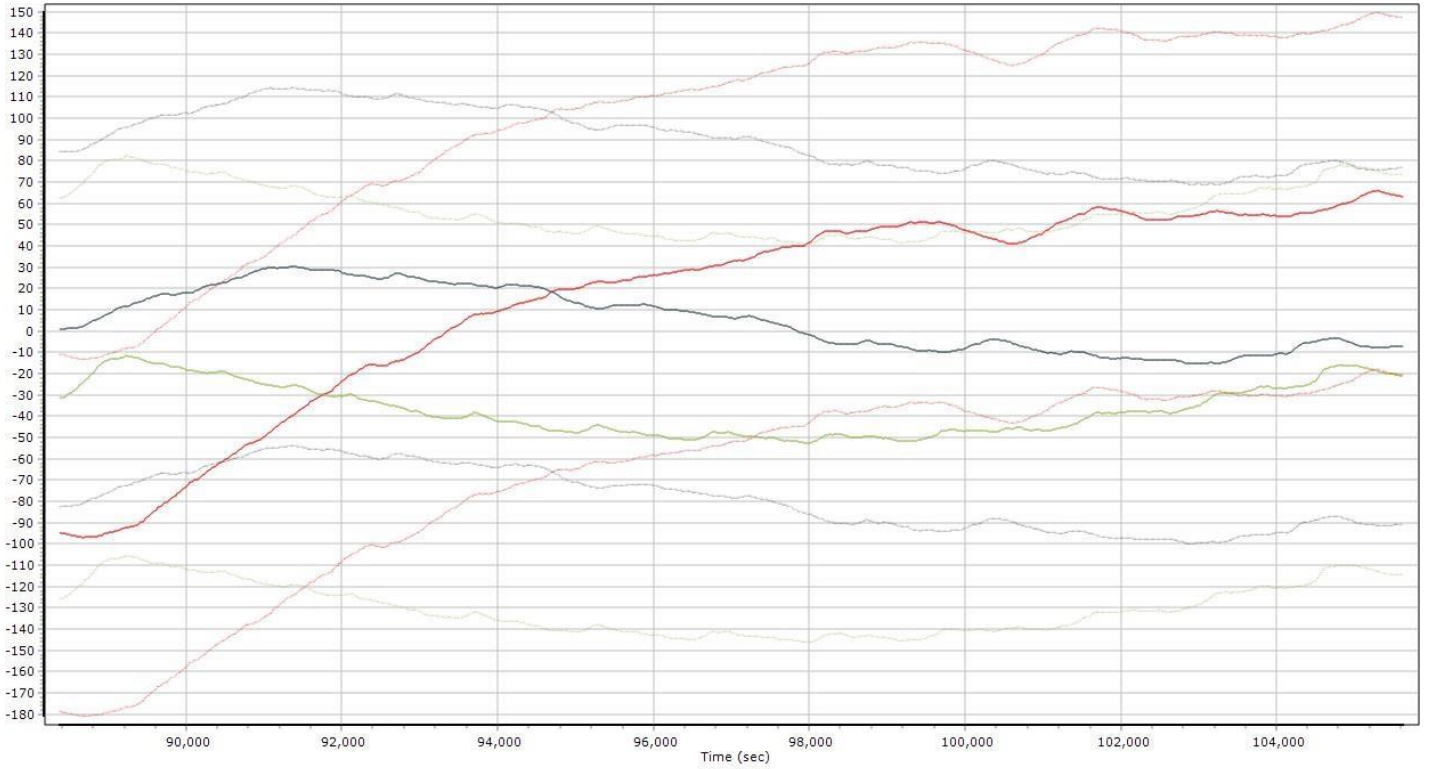
Number of GPS Satellites



Sensor Position Error RMS (m) Plots 14: Sortie a01-s01-0084

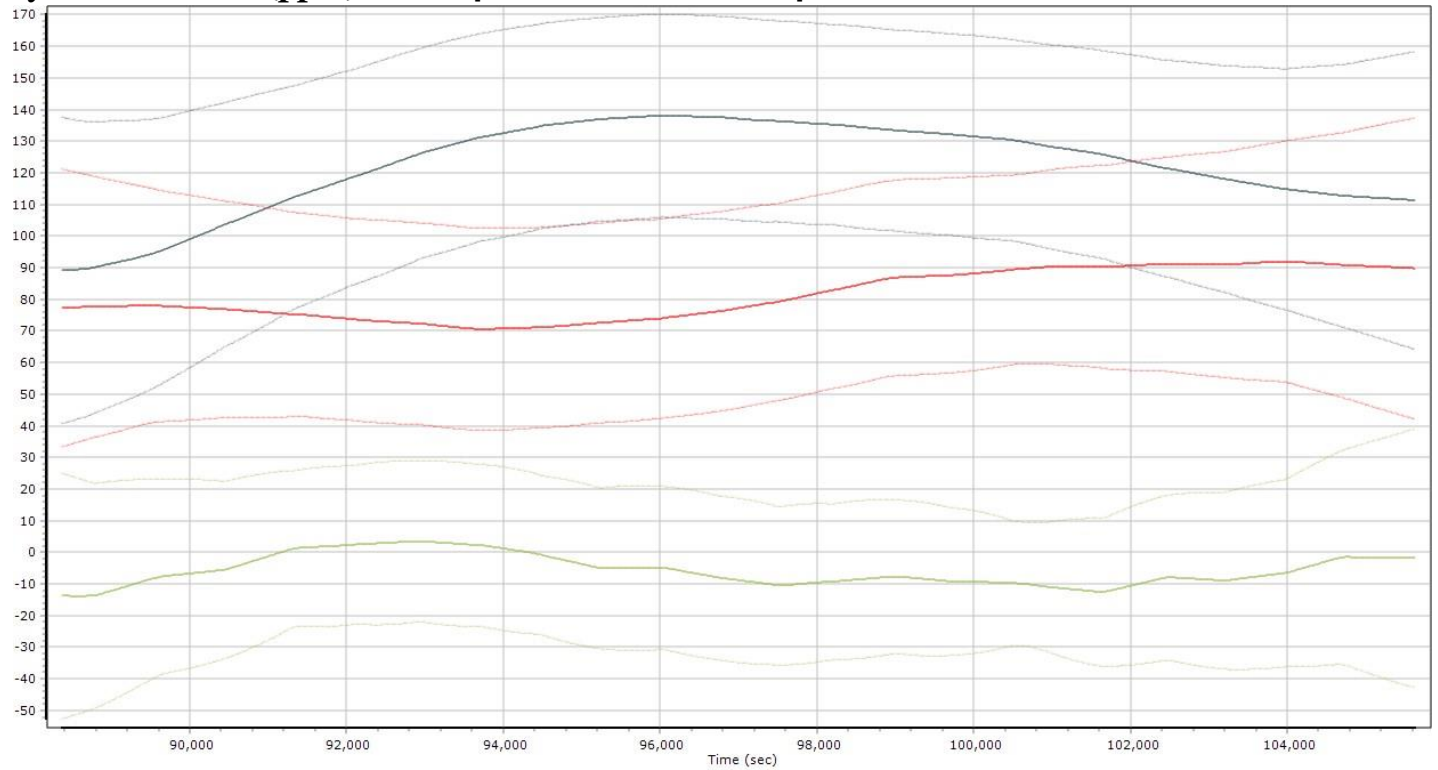


Accelerometer Scale Bias Error Plots 14: Sortie a01-s01-0084

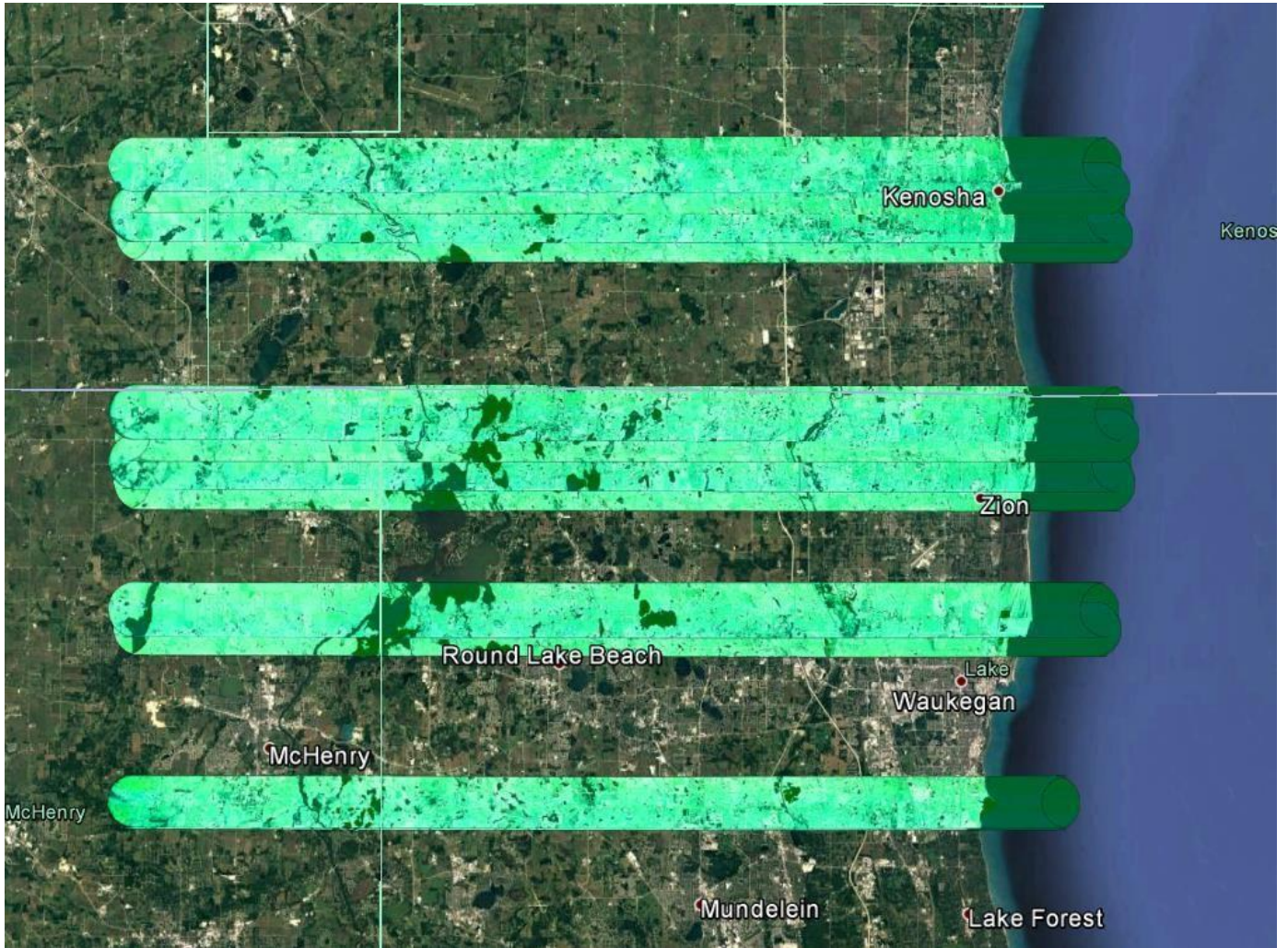


x accelerometer bias (micro-g) y accelerometer bias (micro-g) z accelerometer bias (micro-g)

Gyro Scale Error (ppm) Plots 14: Sortie a01-s01-0084



x gyro scale error (ppm) y gyro scale error (ppm) z gyro scale error (ppm)

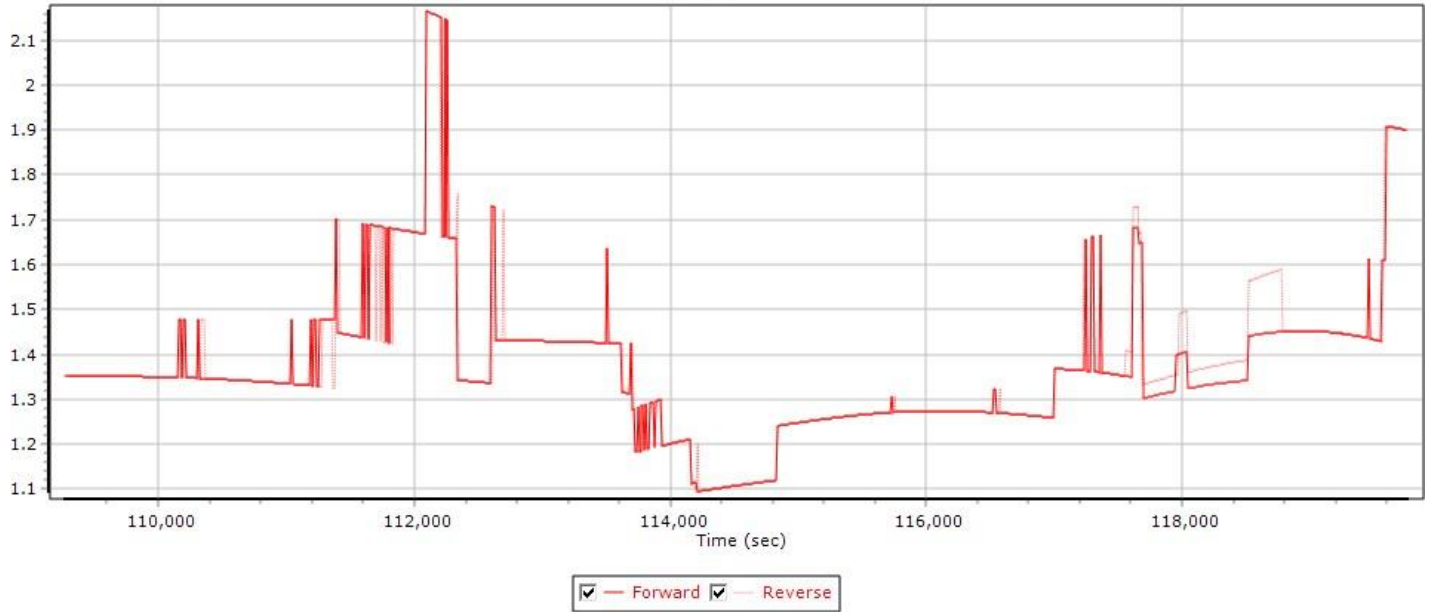


Combined SBET IAKAR Separation 15: Sortie a01-s01-0085



PDOP Plots 15: Sortie a01-s01-0085

PDOP

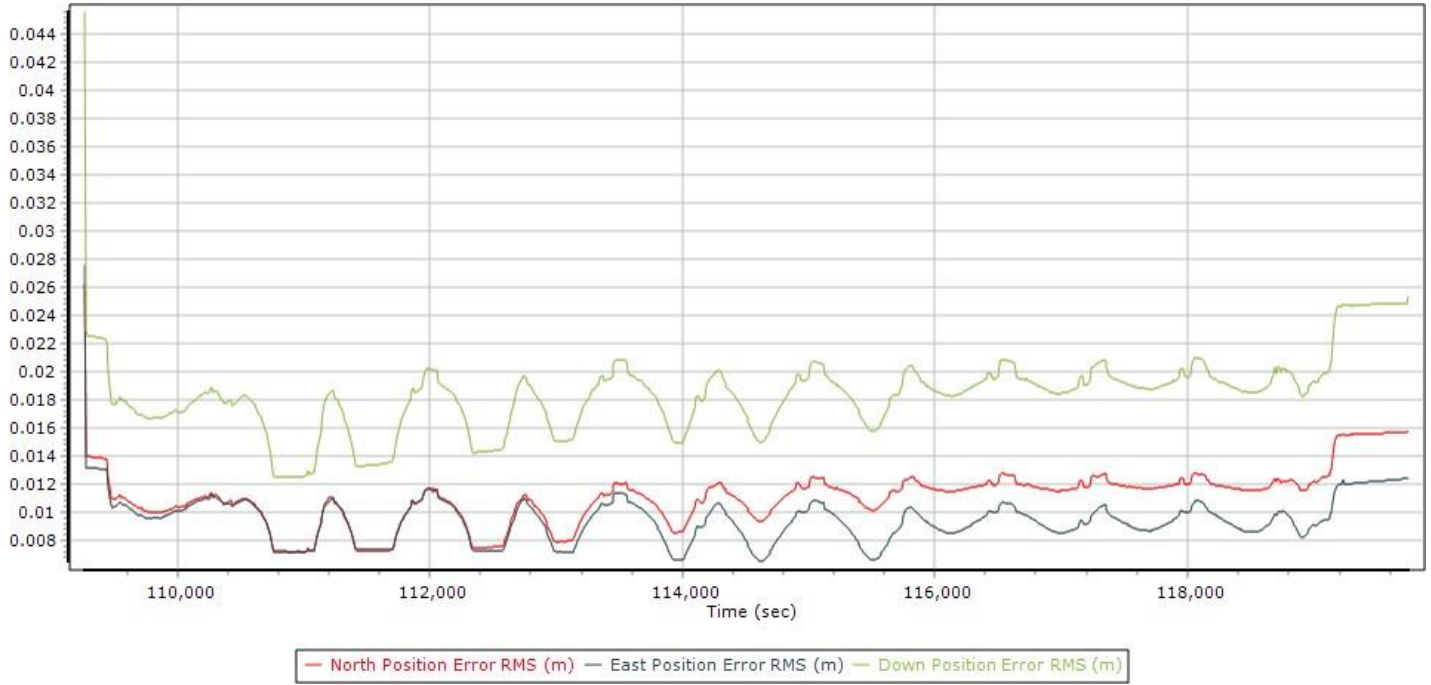


Number of Satellites (>6) Plots 15: Sortie a01-s01-0085

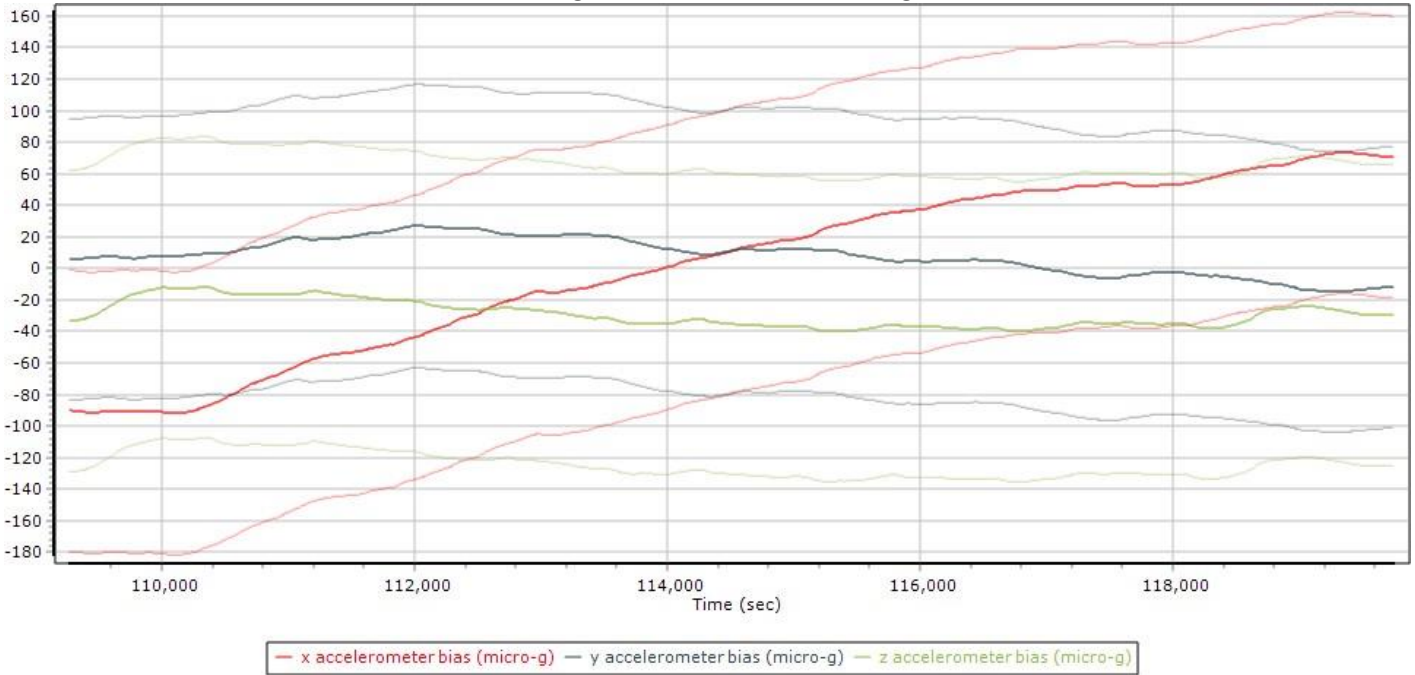
Number of GPS Satellites



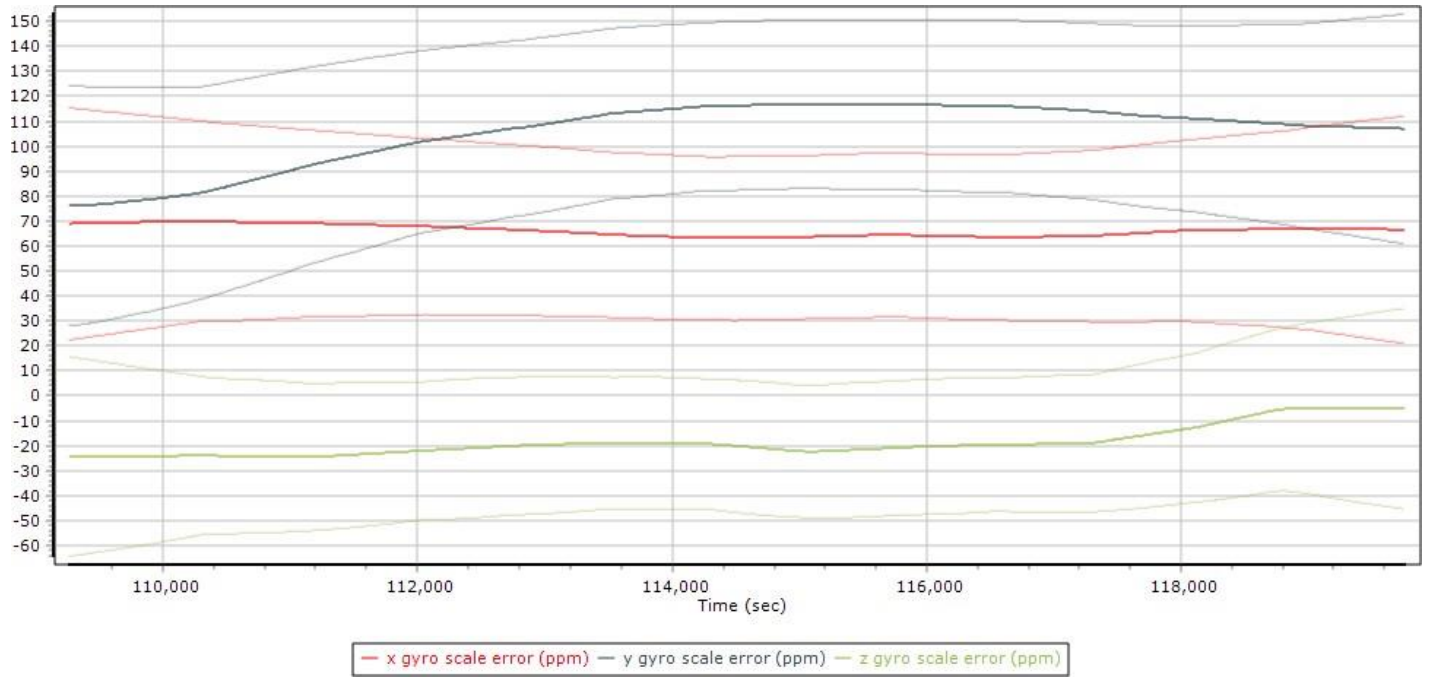
Sensor Position Error RMS (m) Plots 15: Sortie a01-s01-0085



Accelerometer Scale Bias Error Plots 15: Sortie a01-s01-0085



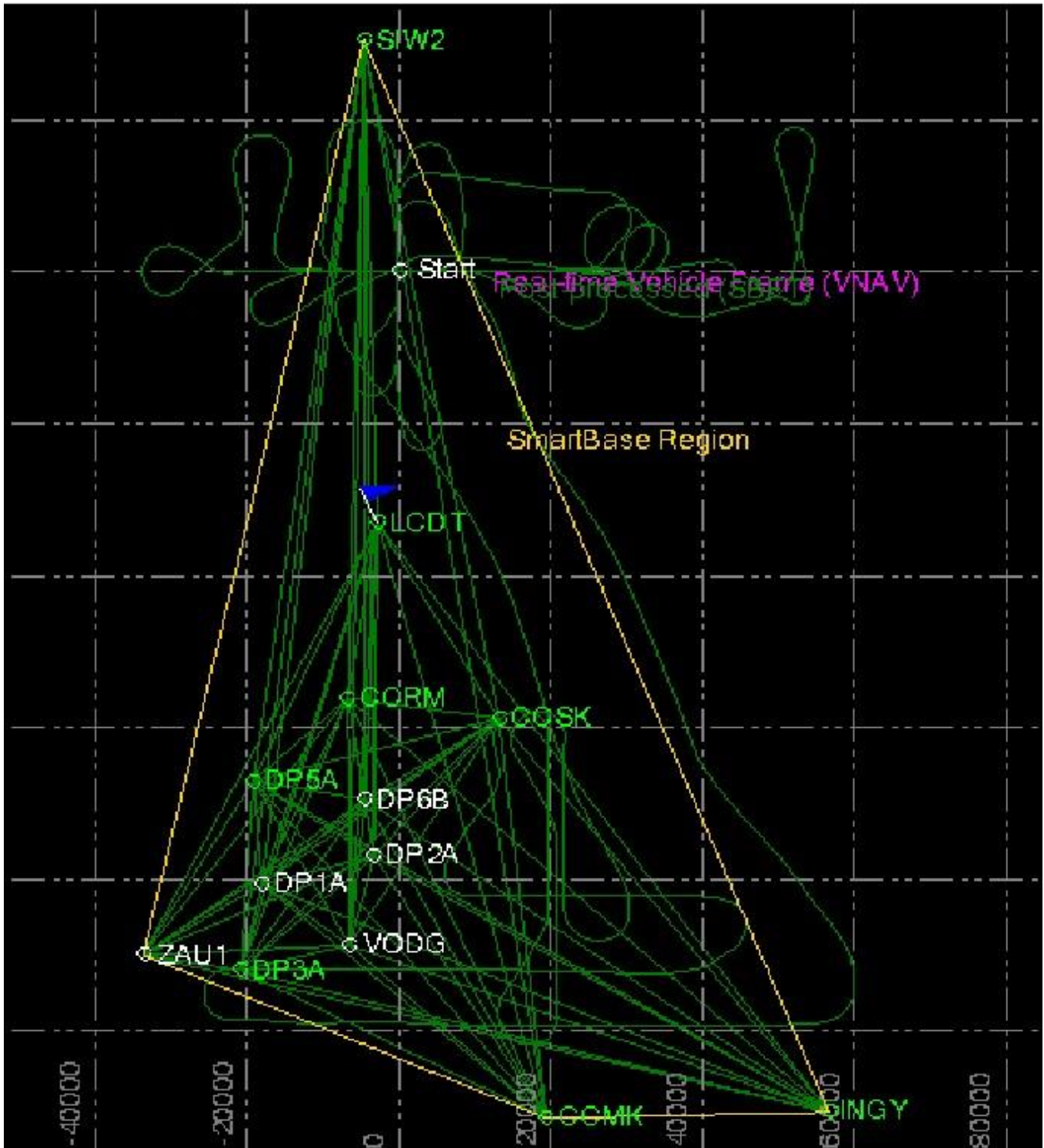
Gyro Scale Error (ppm) Plots 15: Sortie a01-s01-0085



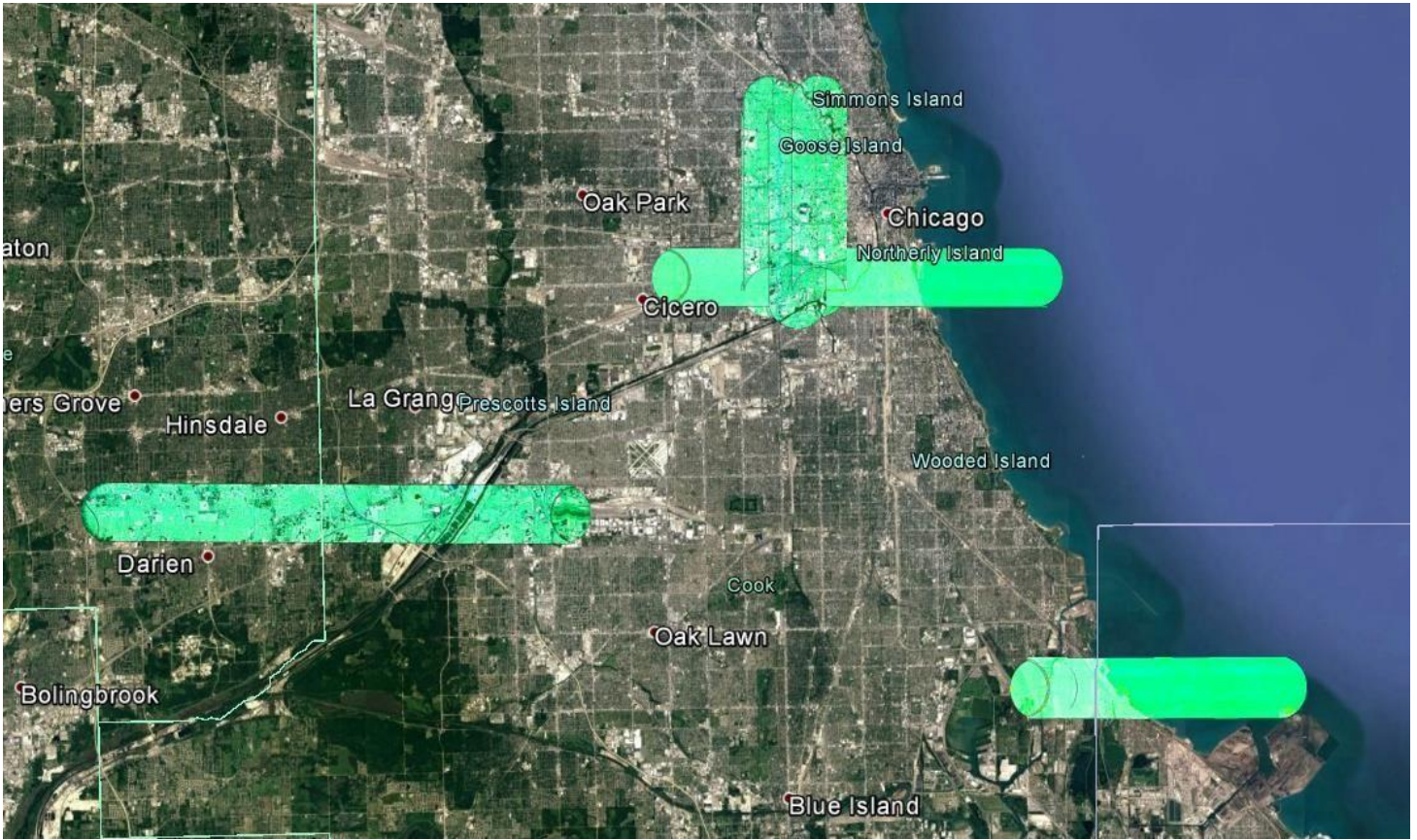
COLLECTION 16

Brick Chicago / Downtown
Sortie a02-s02-0218
04/24/2017

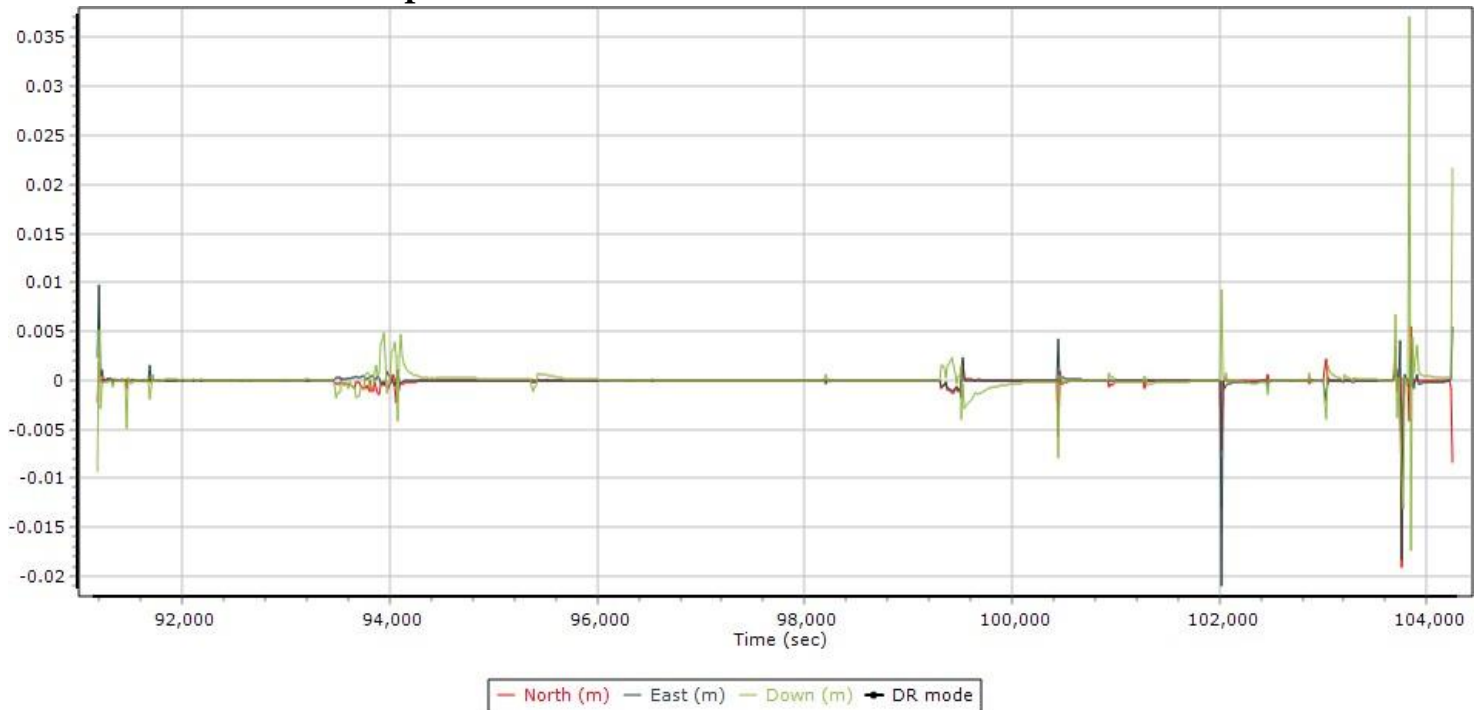
Map Run with Trajectory 16: Sortie a02-s02-0218



Swath Width, Waterfall View 16: Sortie a02-s02-0218

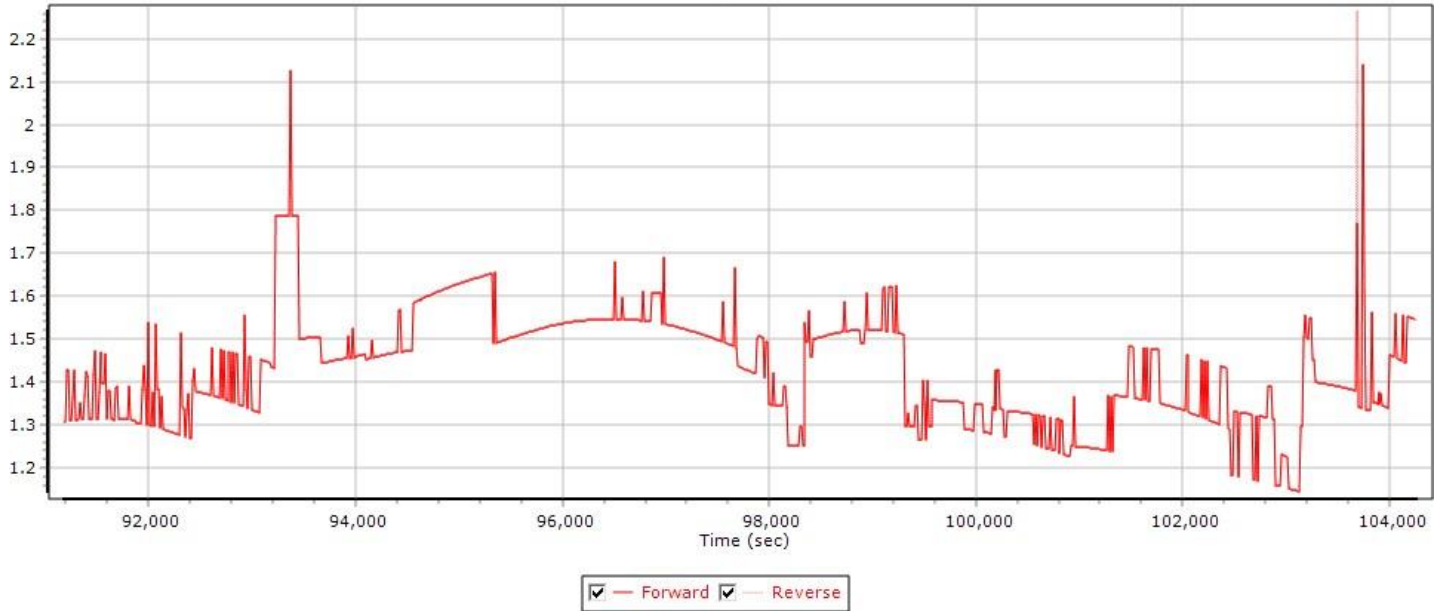


Combined SBET IAKAR Separation 16: Sortie a02-s02-0218

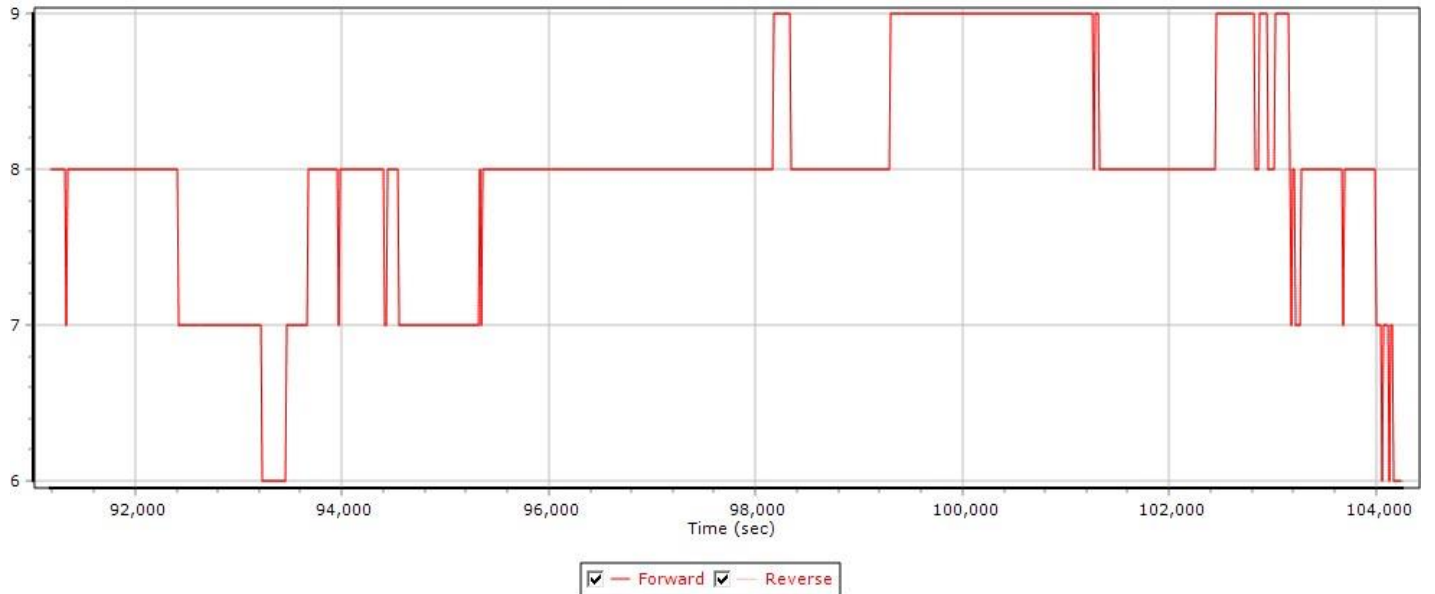


PDOP Plots 16: Sortie a02-s02-0218

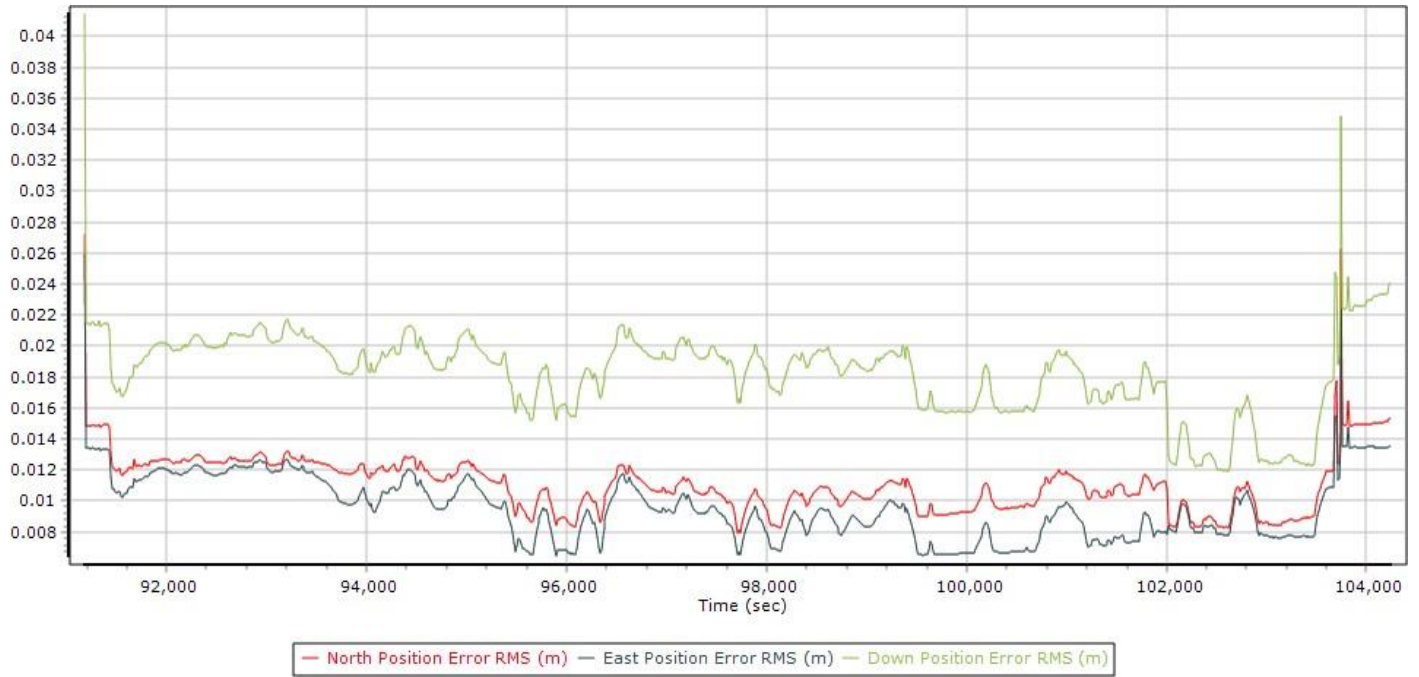
PDOP



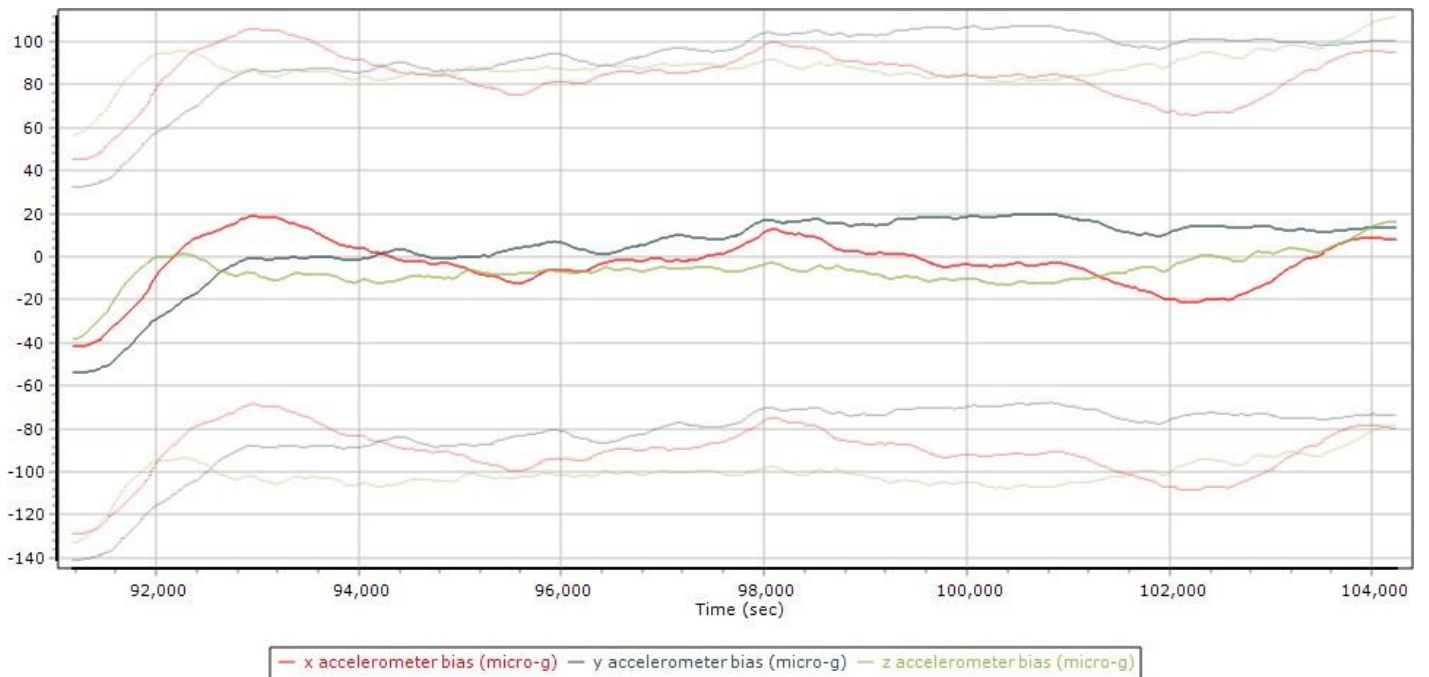
Number of Satellites (>6) Plots 16: Sortie a02-s02-0218
Number of GPS Satellites



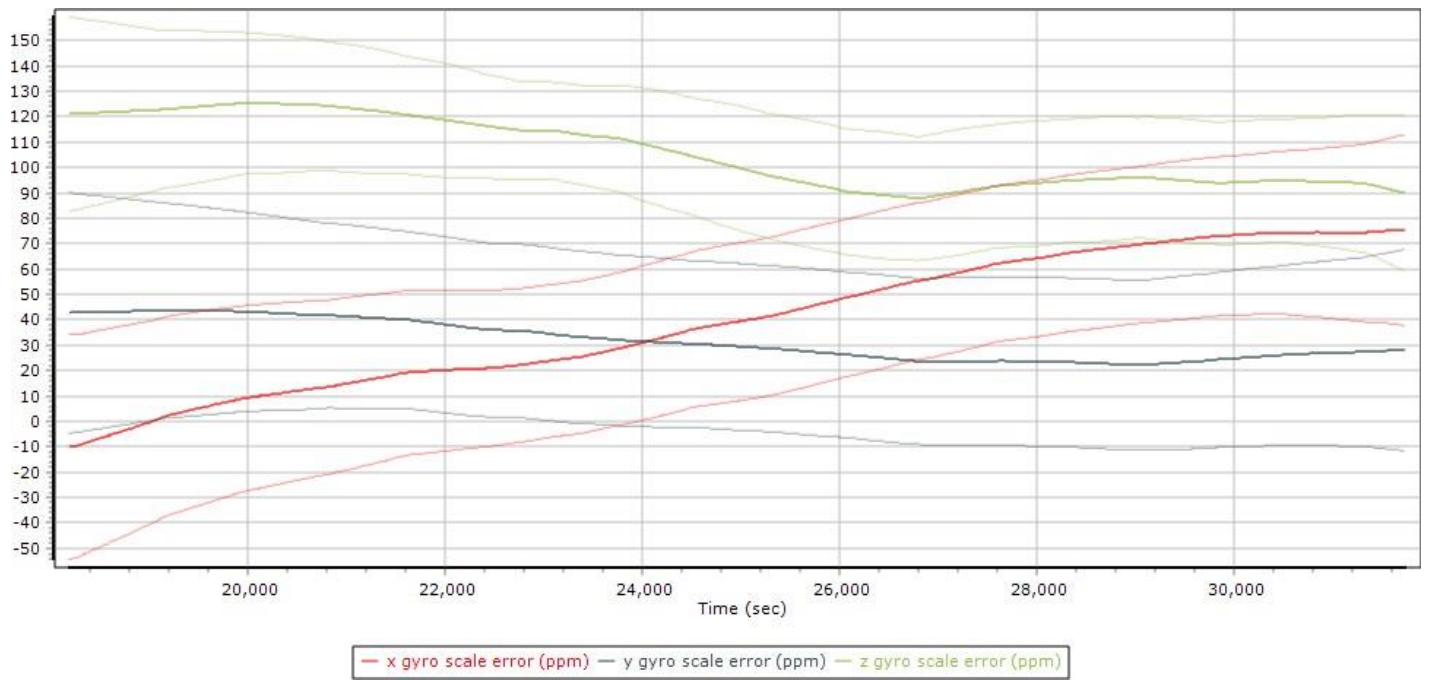
Sensor Position Error RMS (m) Plots 16: Sortie a02-s02-0218



Accelerometer Scale Bias Error Plots 16: Sortie a02-s02-0218



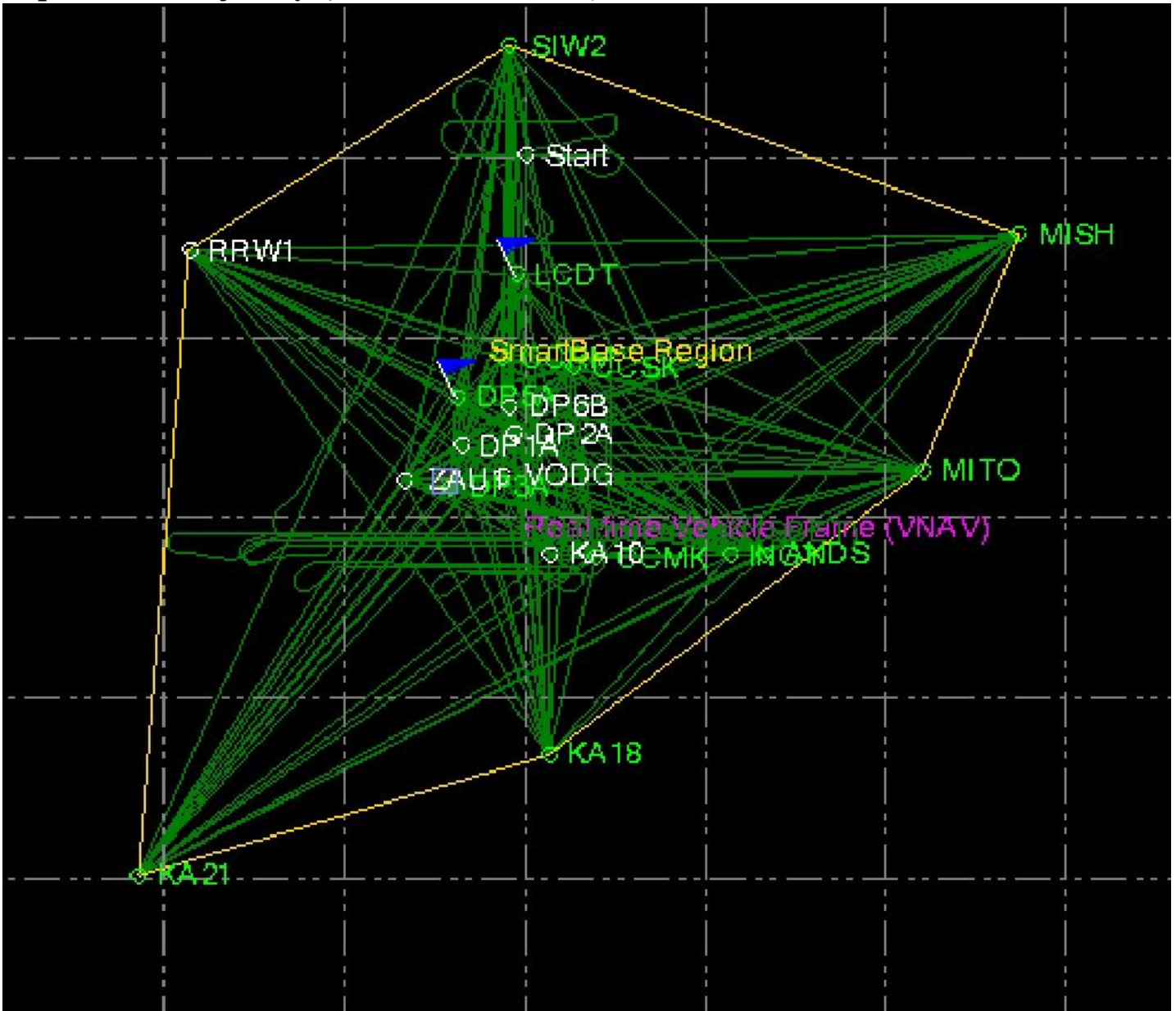
Gyro Scale Error (ppm) Plots 16: Sortie a02-s02-0218



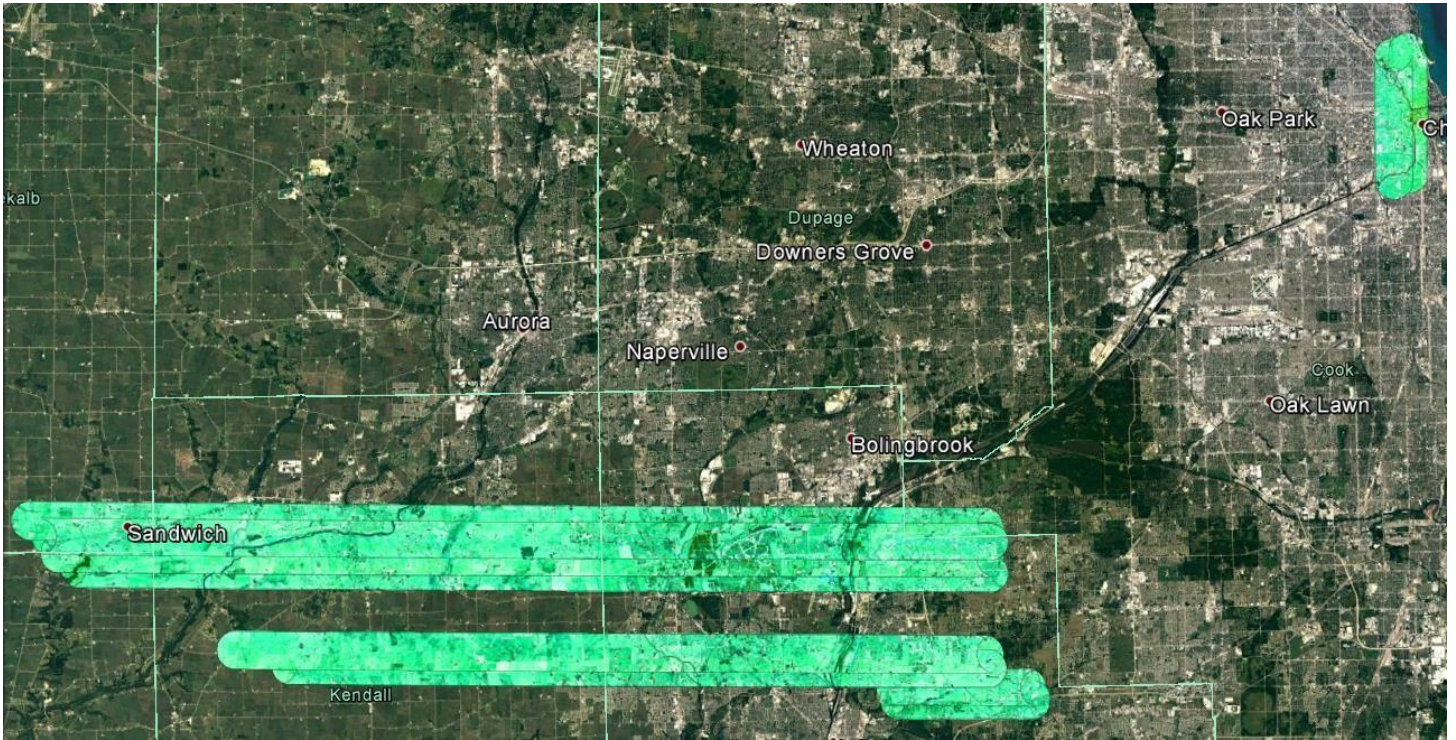
COLLECTION 17

Brick 3 / Downtown Sortie
a02-s02-0219
04/24/2017

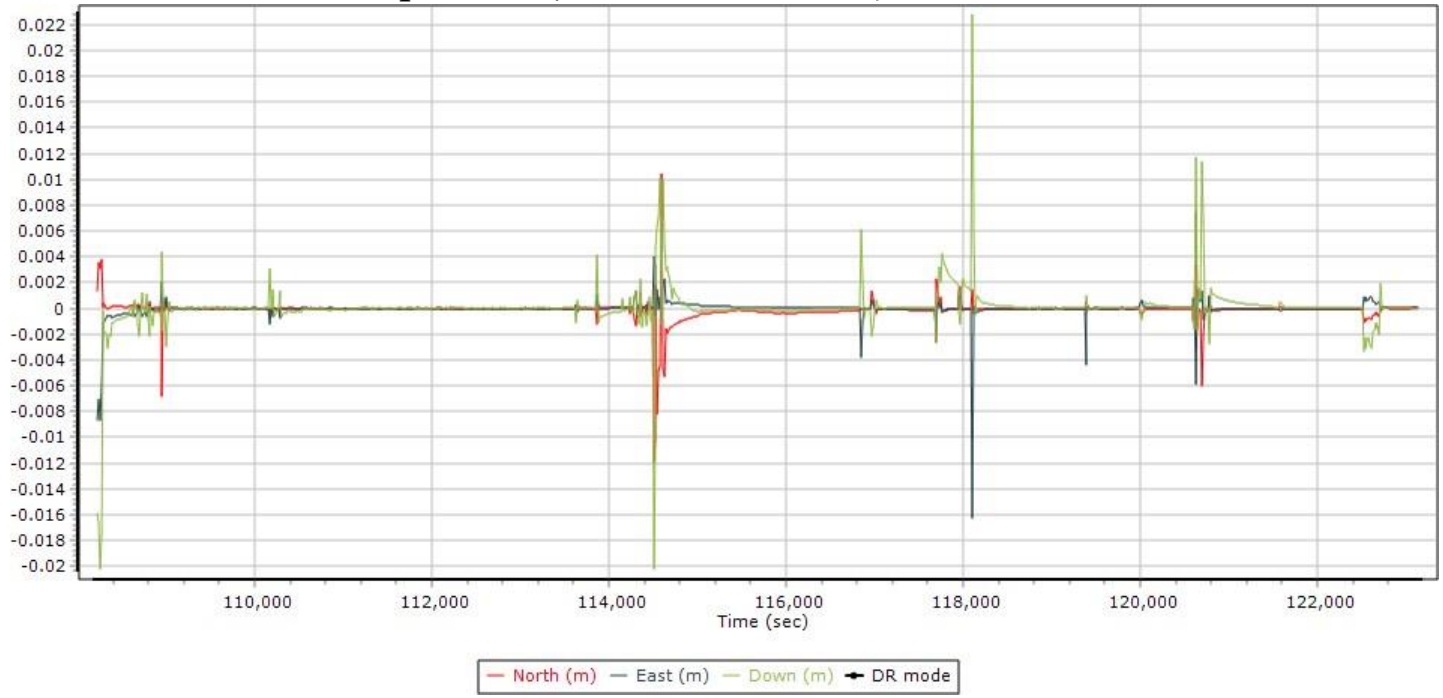
Map Run with Trajectory 17: Sortie a02-s02-0219



Swath Width, Waterfall View 17: Sortie a02-s02-0219

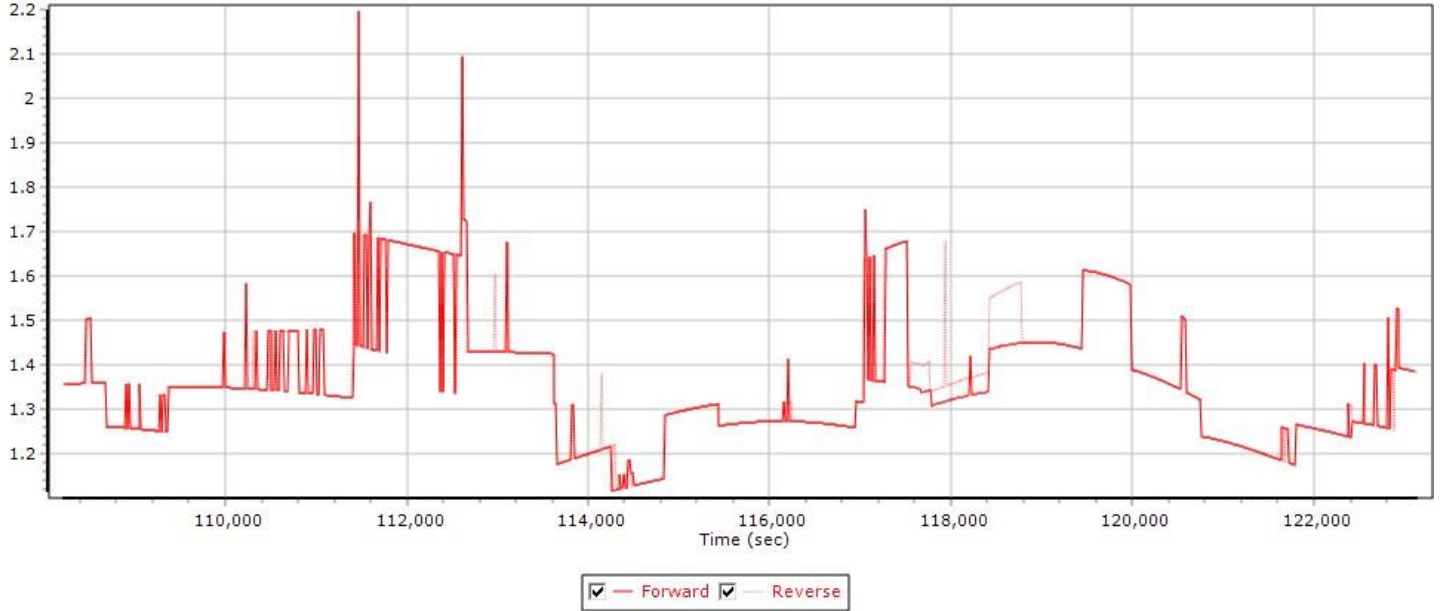


Combined SBET IAKAR Separation 17: Sortie a02-s02-0219

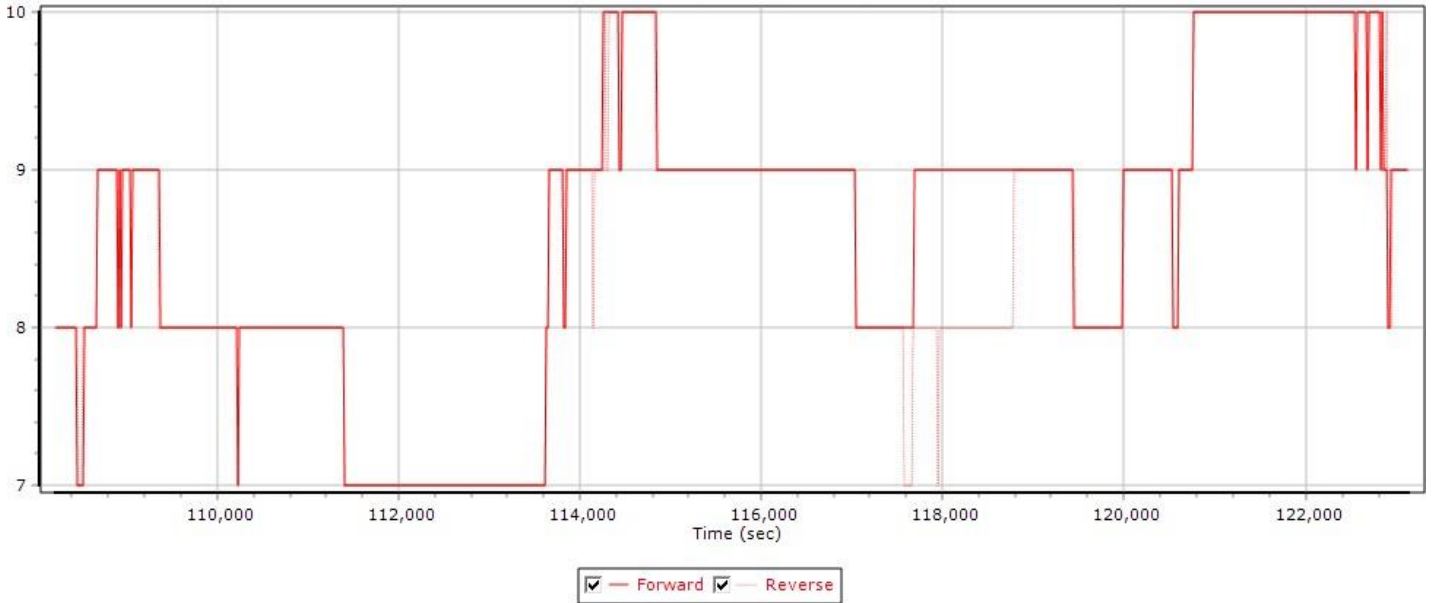


PDOP Plots 17: Sortie a02-s02-0219

PDOP



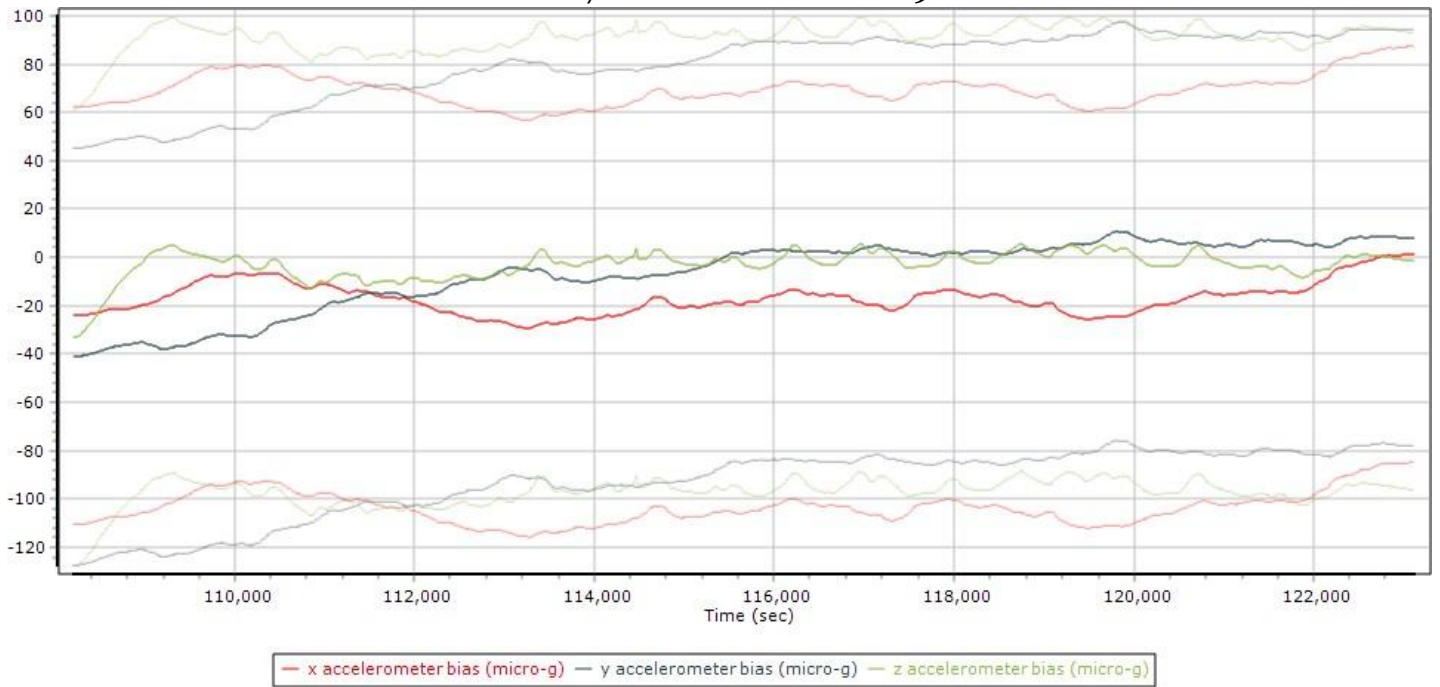
Number of Satellites (>6) Plots 17: Sortie a02-s02-0219
Number of GPS Satellites



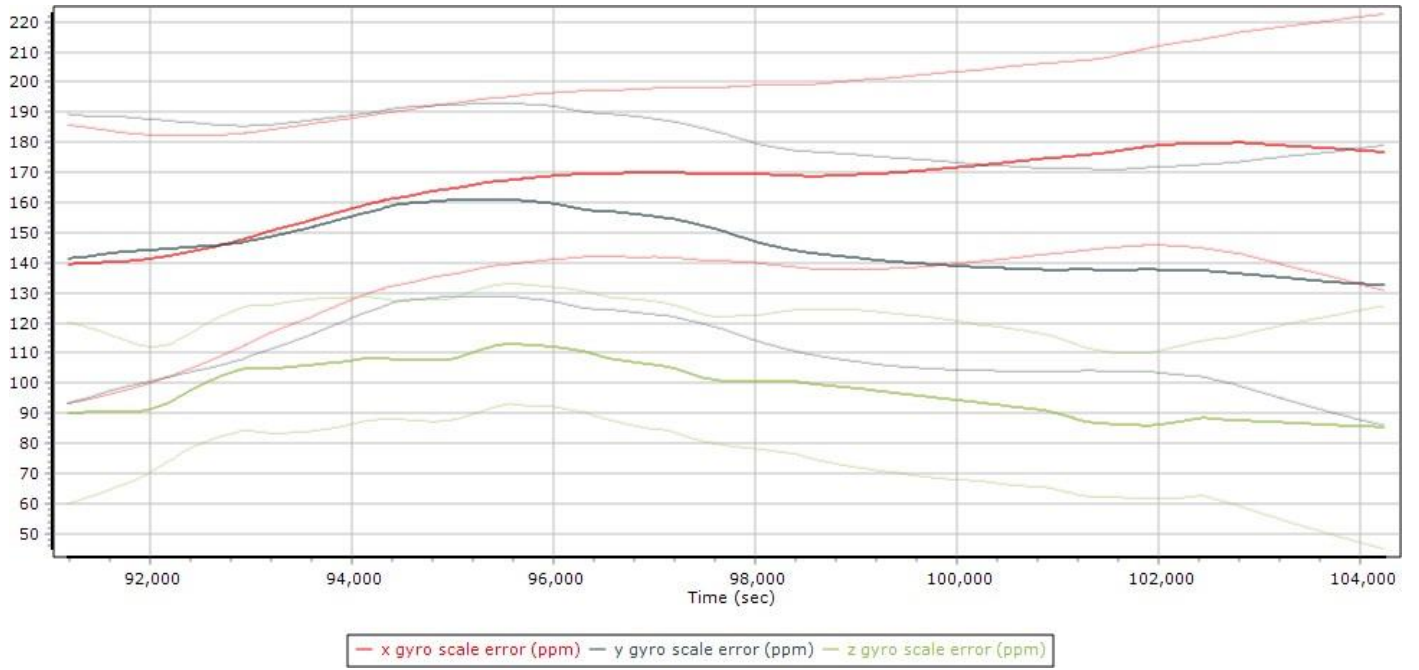
Sensor Position Error RMS (m) Plots 17: Sortie a02-s02-0219



Accelerometer Scale Bias Error Plots 17: Sortie a02-s02-0219



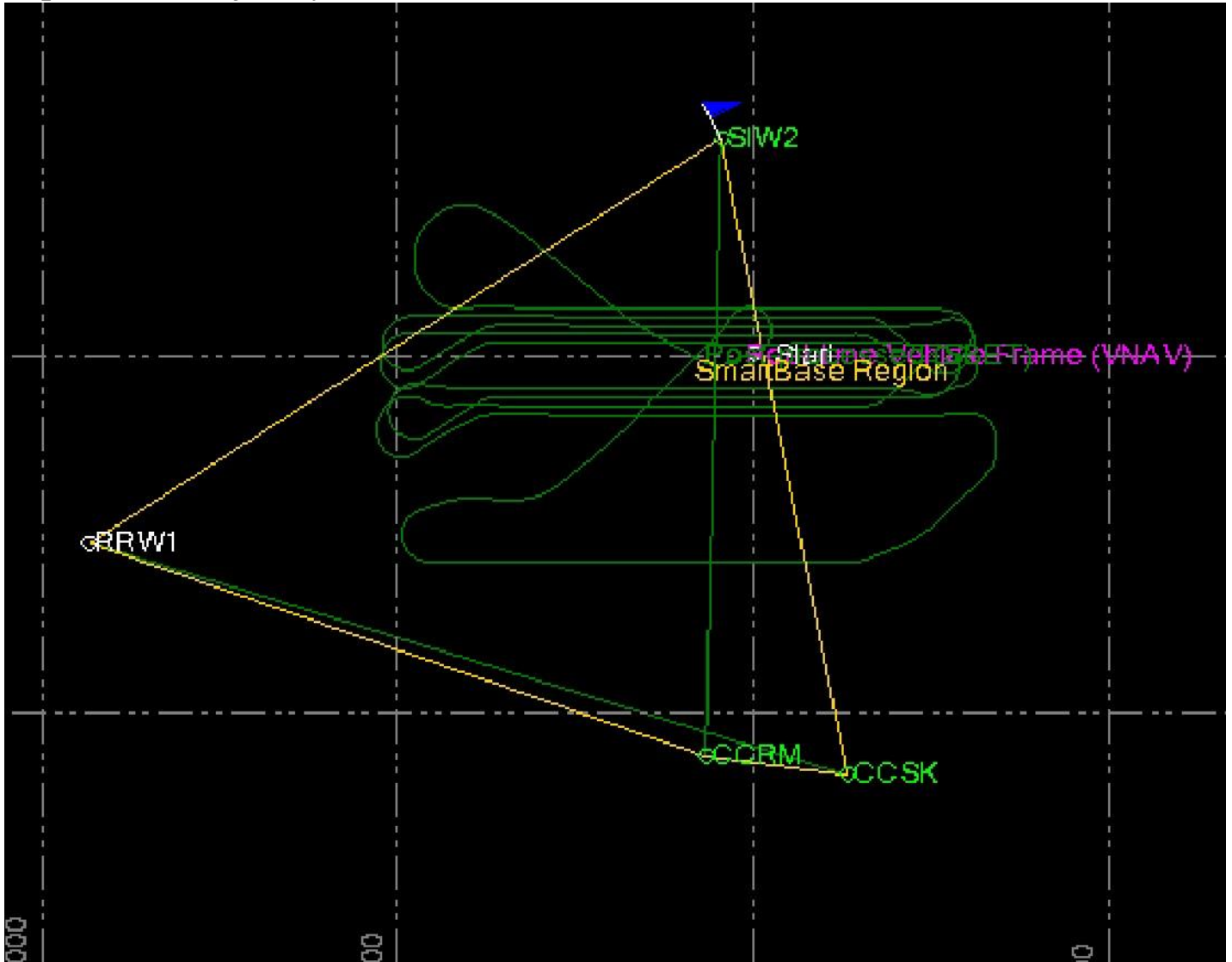
Gyro Scale Error (ppm) Plots 17: Sortie a02-s02-0219



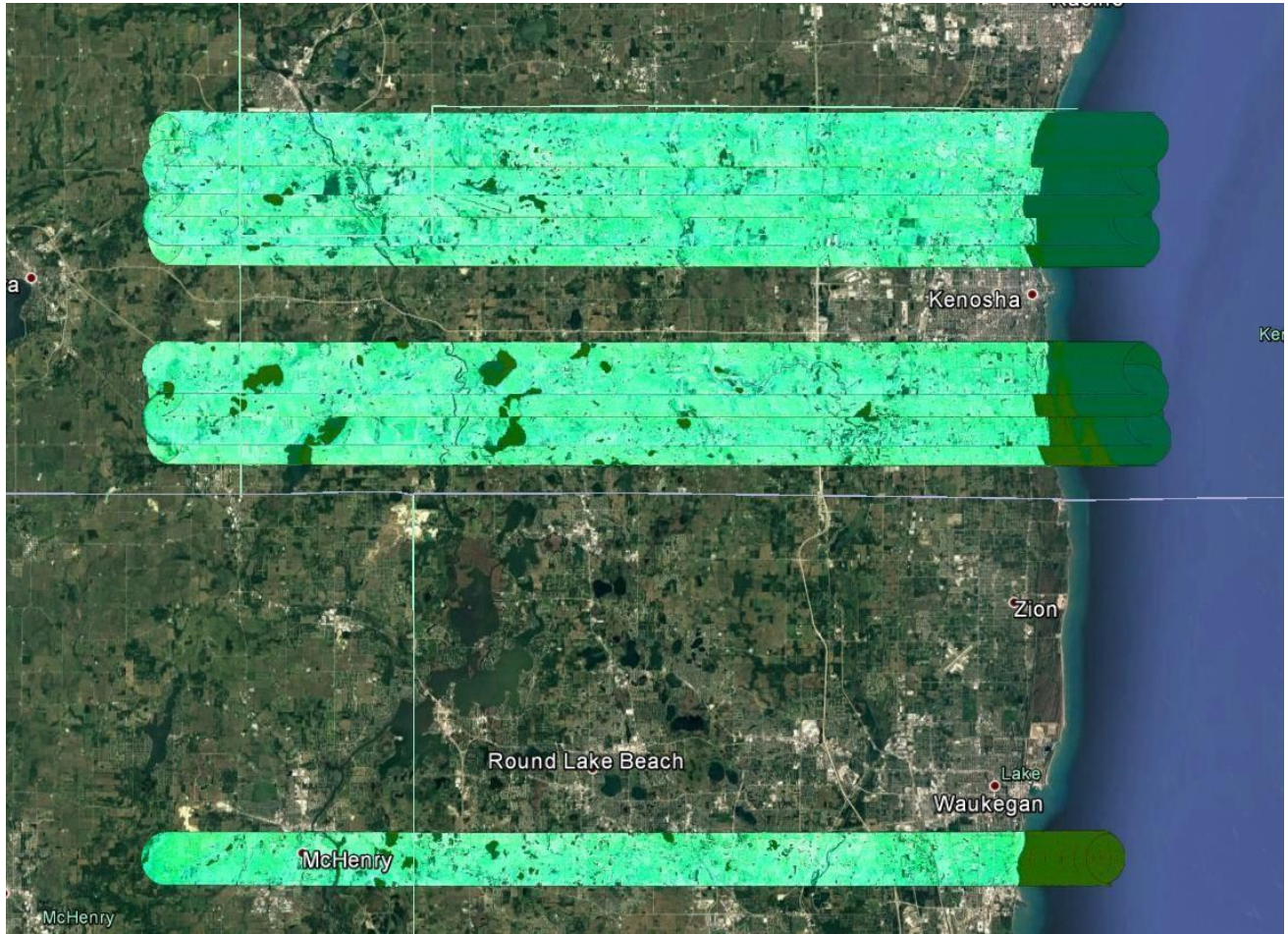
COLLECTION 18

Brick 2 / WI
Sortie a01-s01-0086
04/25/2017

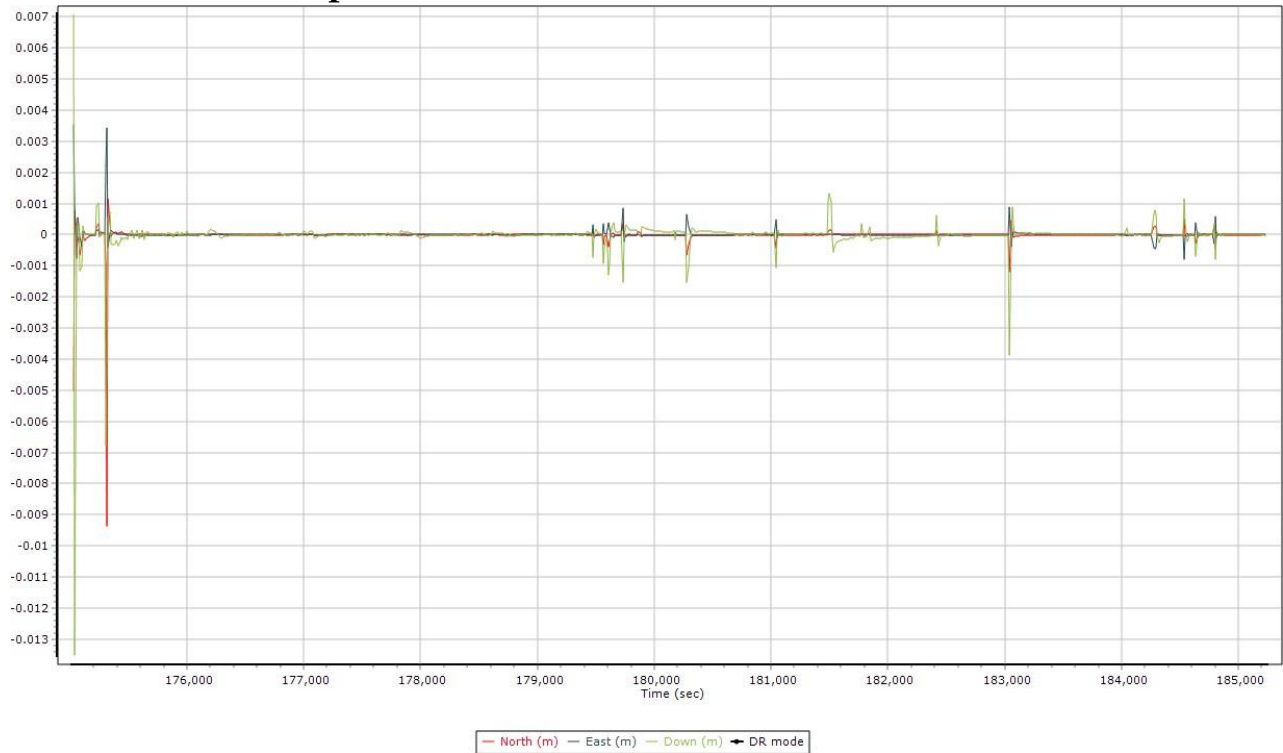
Map Run with Trajectory 18: Sortie a01-s01-0086



Swath Width, Waterfall View 18: Sortie a01-s01-0086



Combined SBET IAKAR Separation 18: Sortie a01-s01-0086

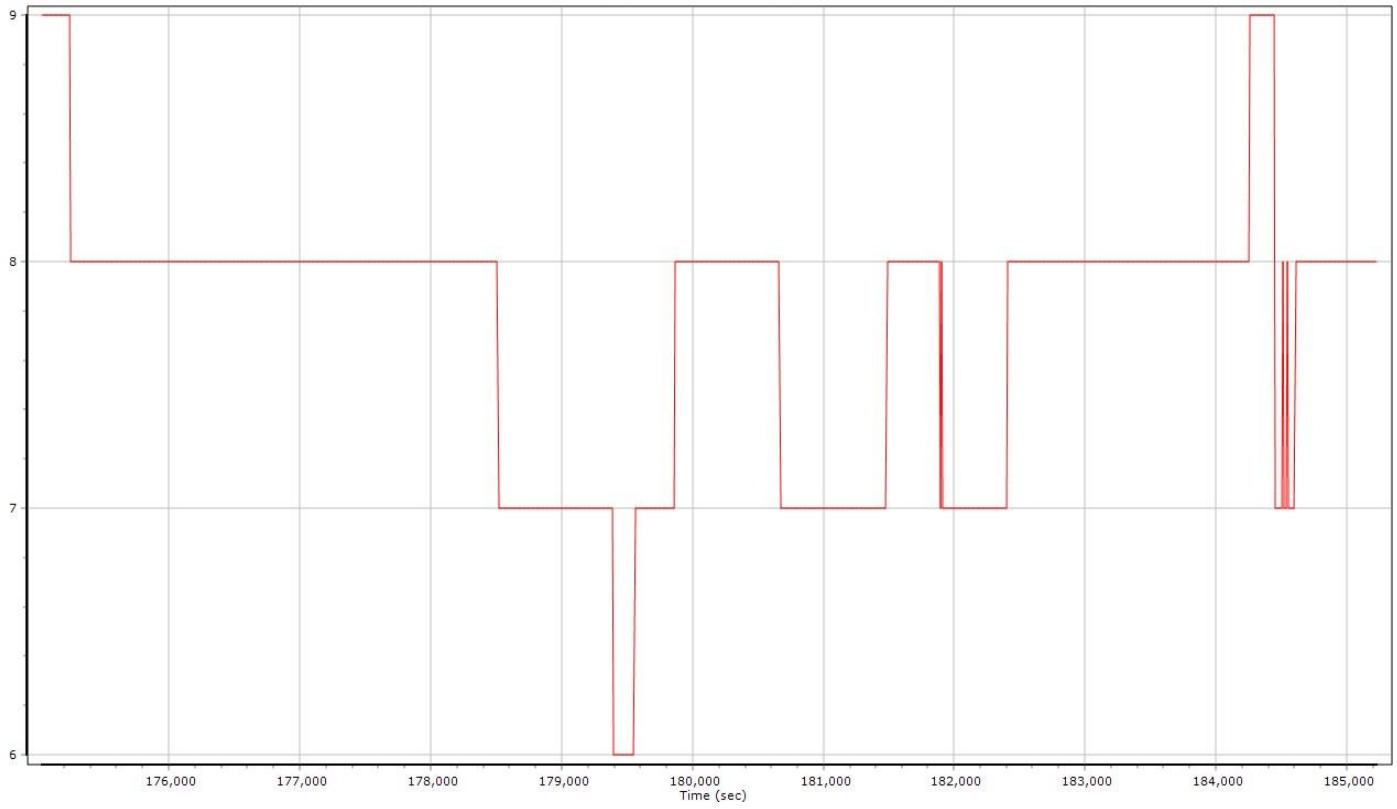


PDOP Plots 18: Sortie a01-s01-0086

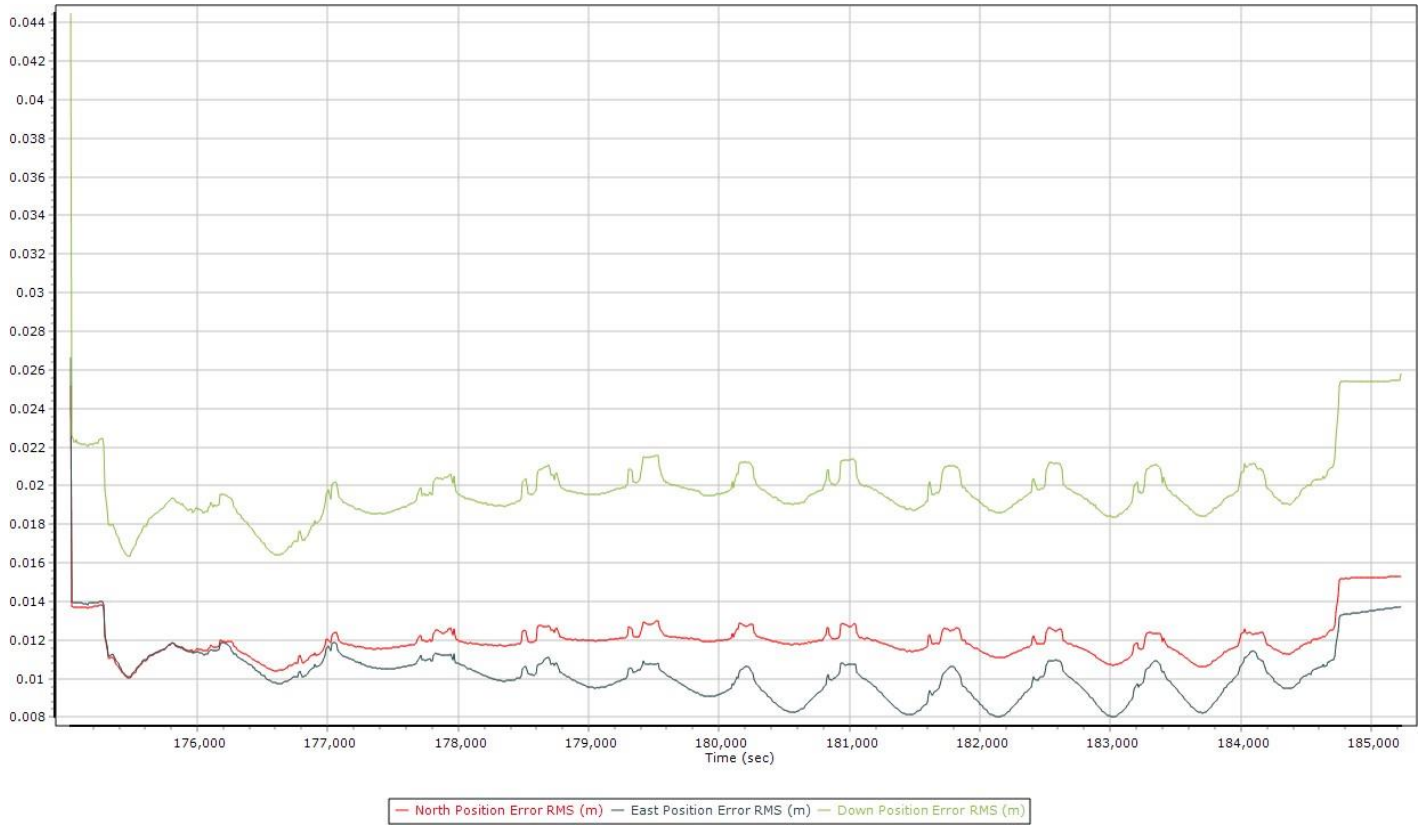


Number of Satellites (>6) Plots 18: Sortie a01-s01-0086

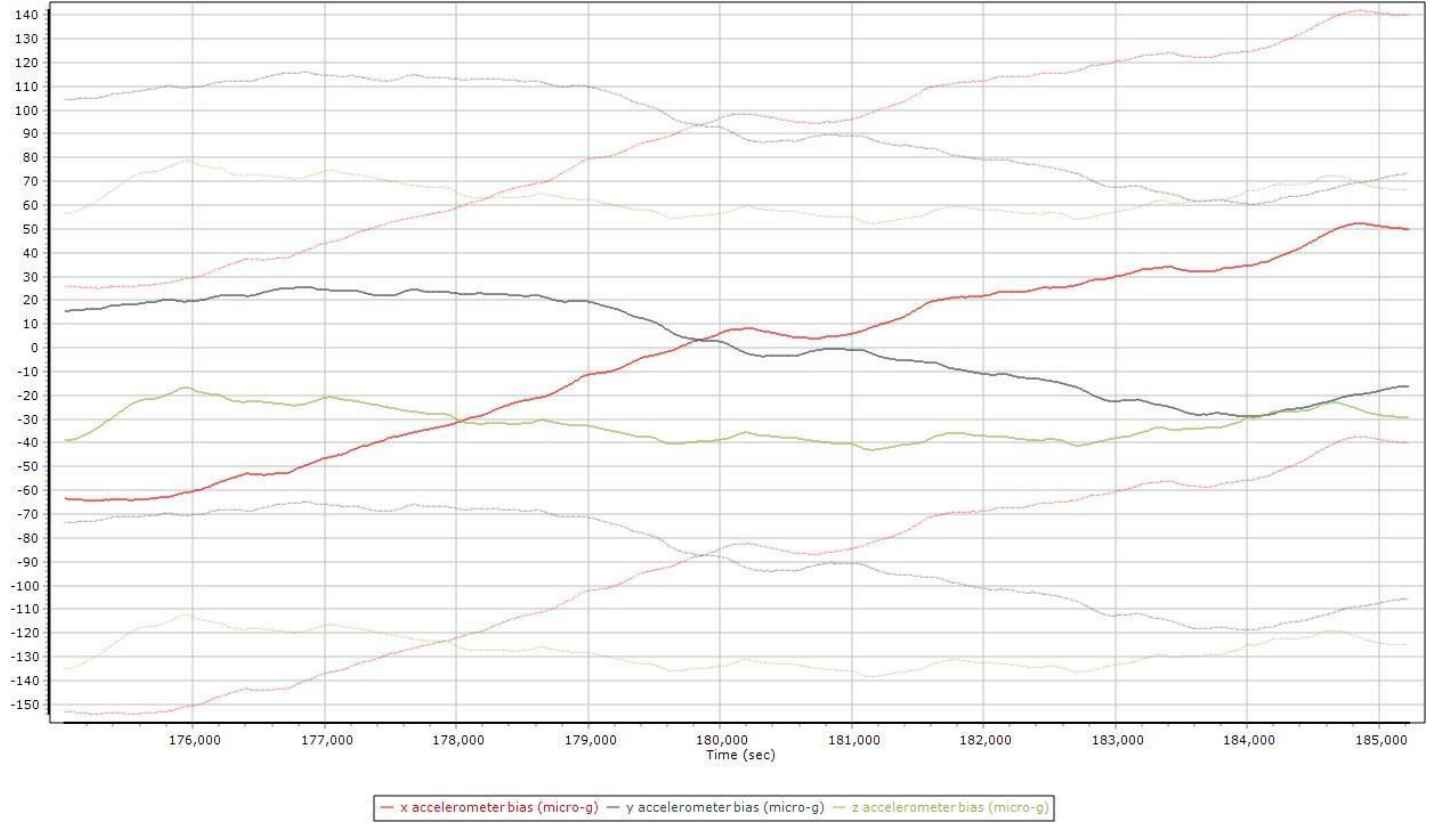
Number of GPS Satellites



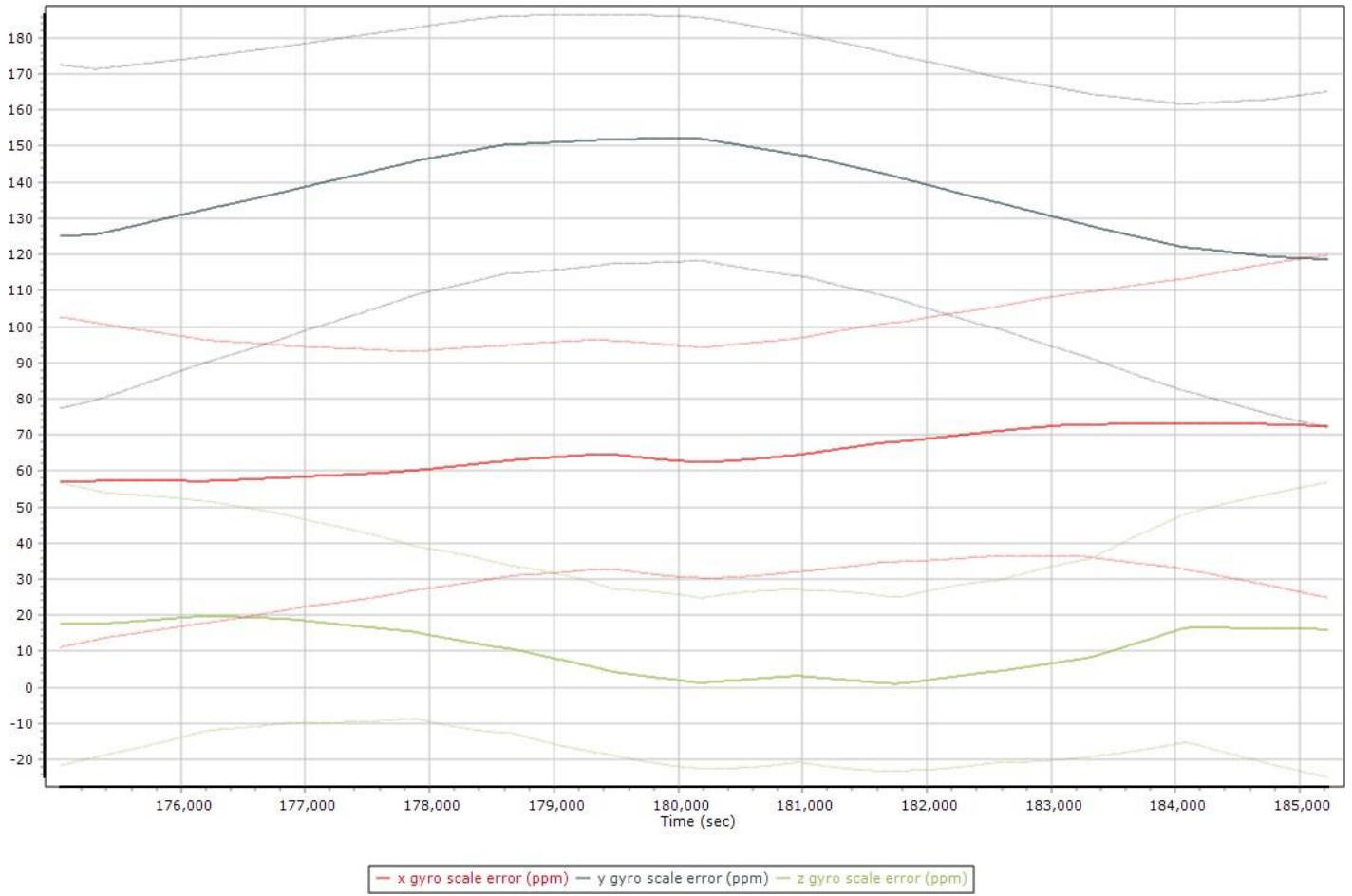
Sensor Position Error RMS (m) Plots 18: Sortie a01-s01-0086



Accelerometer Scale Bias Error Plots 18: Sortie a01-s01-0086



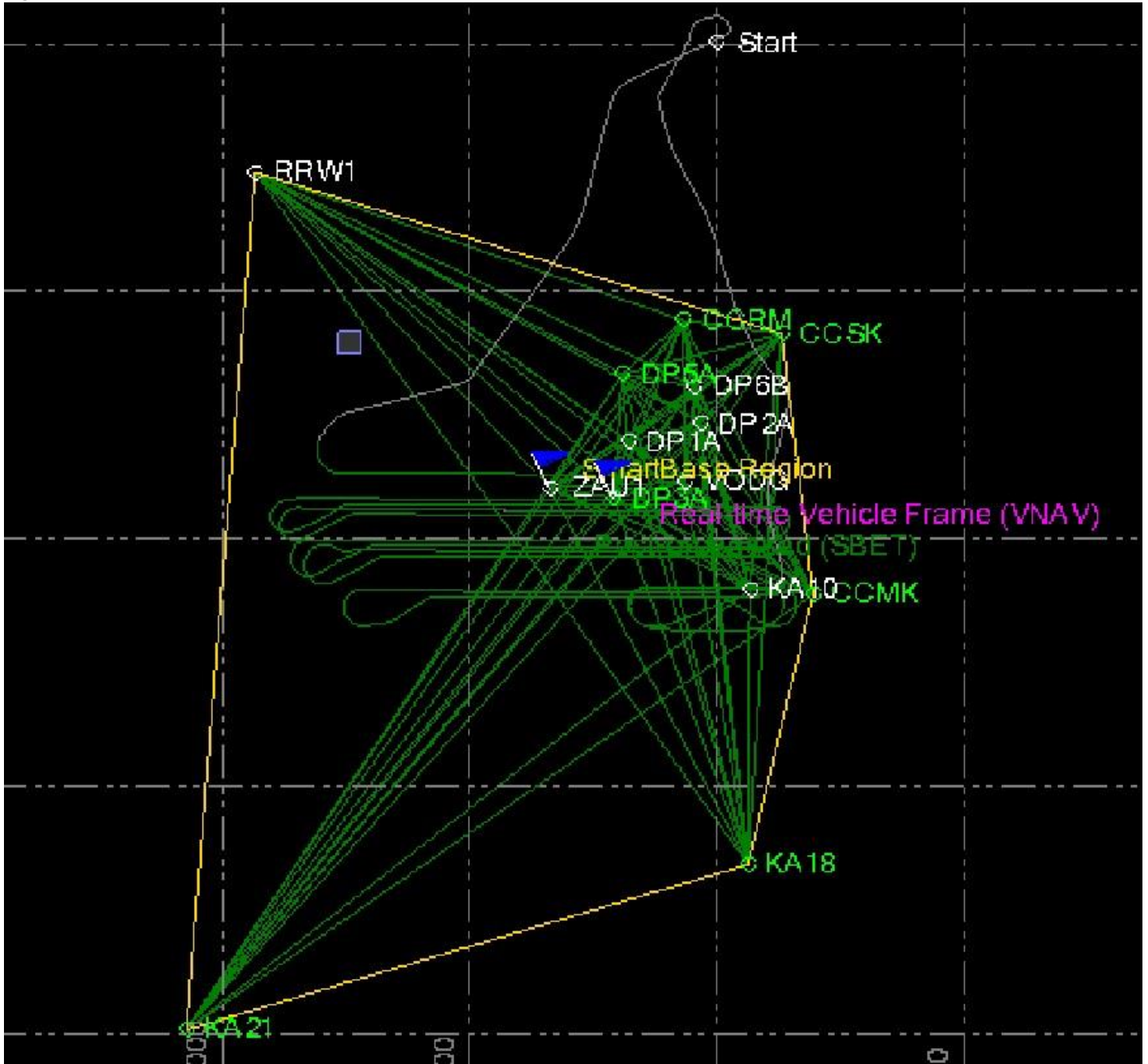
Gyro Scale Error (ppm) Plots 18: Sortie a01-s01-0086



COLLECTION 19

Brick 3
Sortie a02-s02-0220
04/25/2017

Map Run with Trajectory 19: Sortie a02-s02-0220



Swath Width, Waterfall View 19: Sortie a02-s02-0220



Combined SBET IAKAR Separation 19: Sortie a02-s02-0220



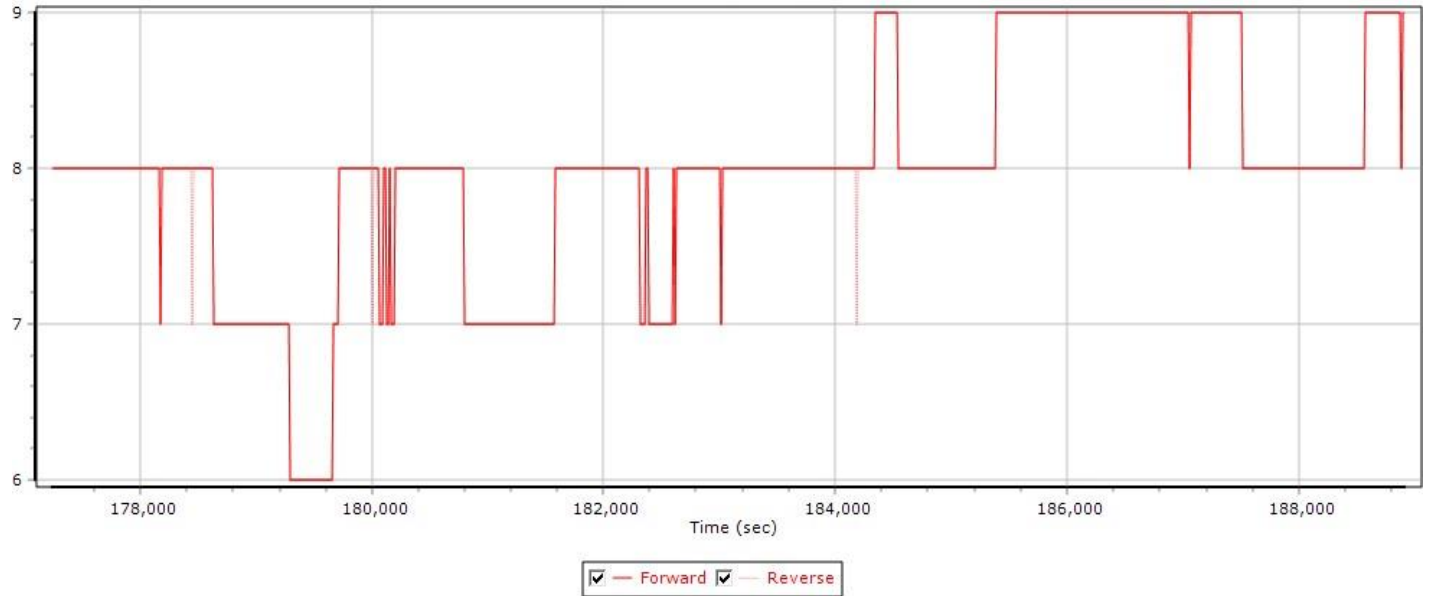
PDOP Plots 19: Sortie a02-s02-0220

PDOP

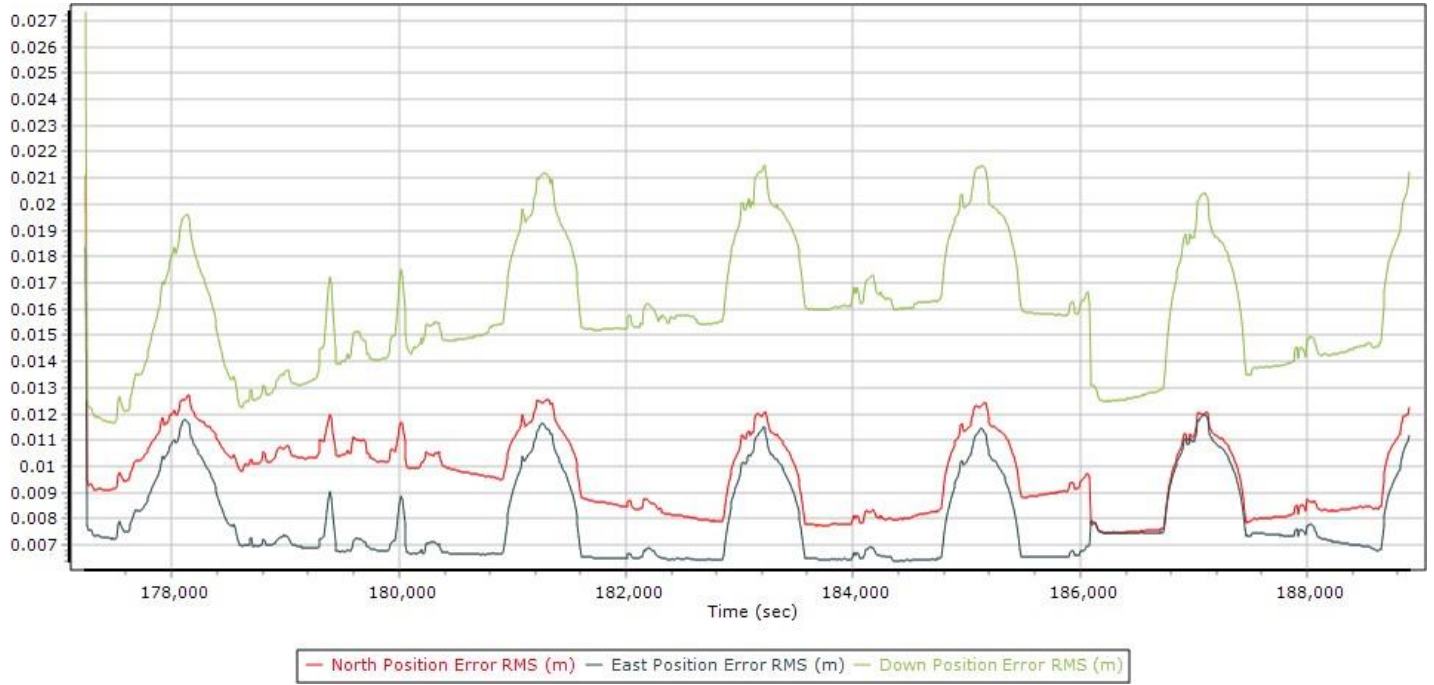


Number of Satellites (>6) Plots 19: Sortie a02-s02-0220

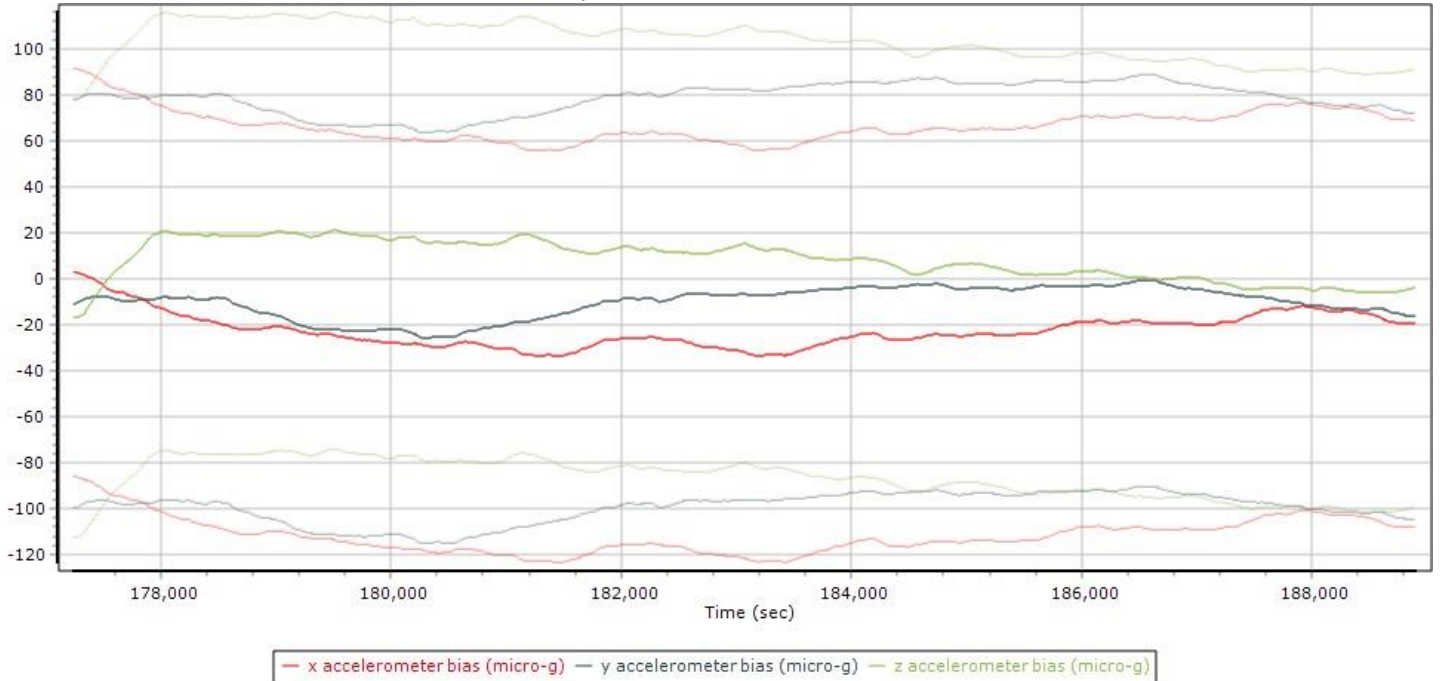
Number of GPS Satellites



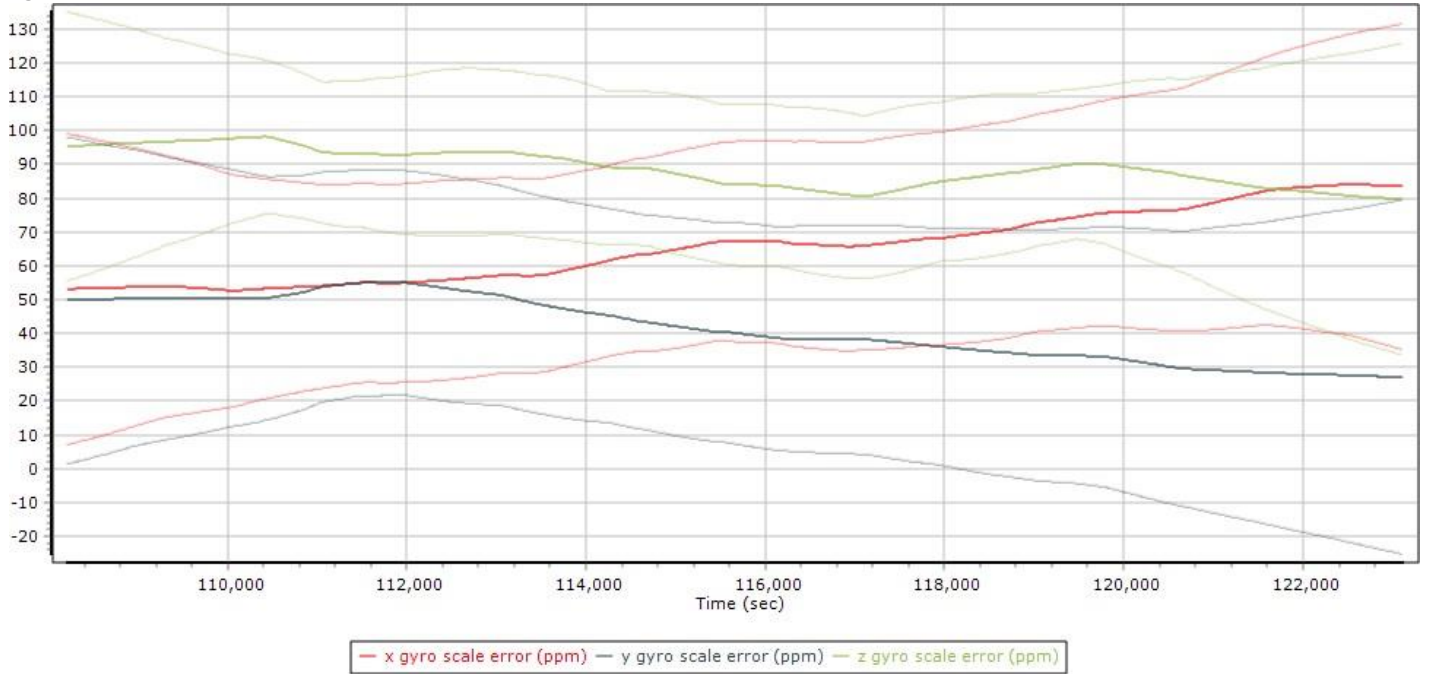
Sensor Position Error RMS (m) Plots 19: Sortie a02-s02-0220



Accelerometer Scale Bias Error Plots 19: Sortie a02-s02-0220



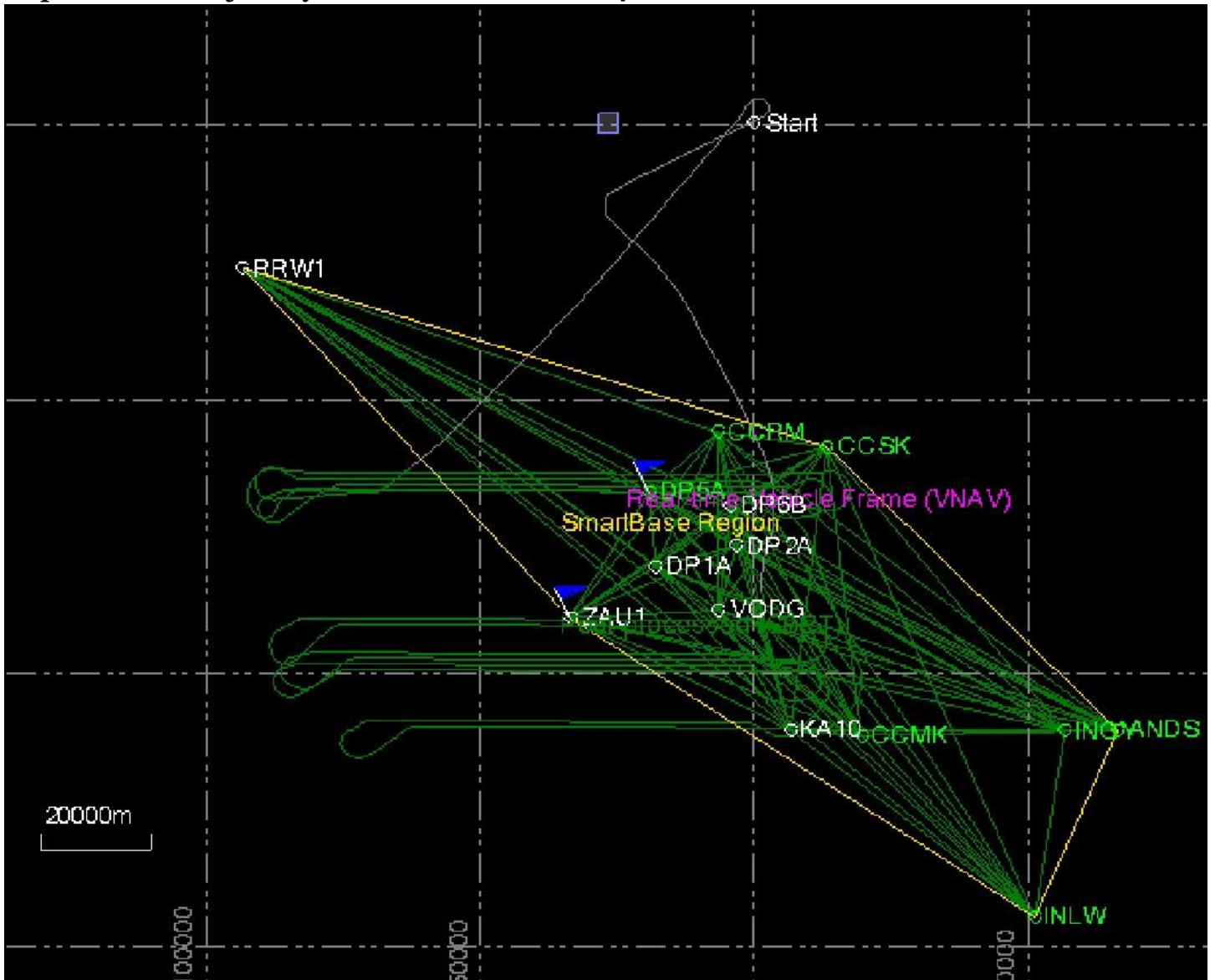
Gyro Scale Error (ppm) Plots 19: Sortie a02-s02-0220



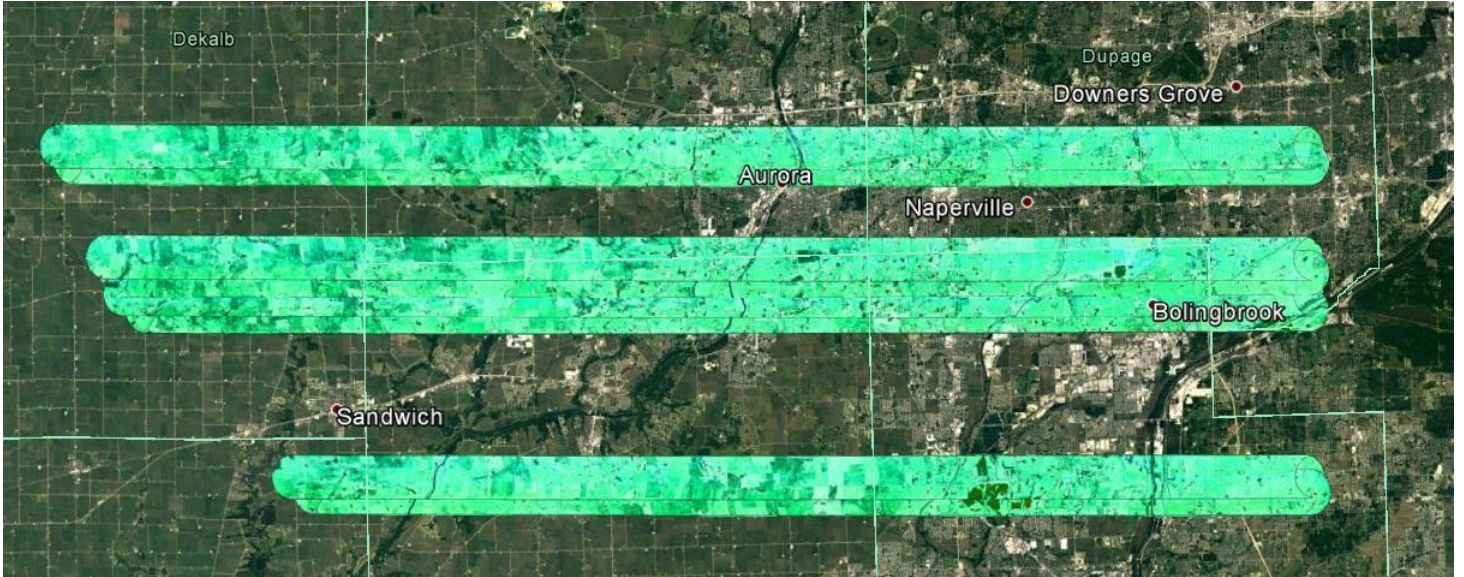
COLLECTION 20

Brick 3
Sortie a02-s02-0224
05/05/2017

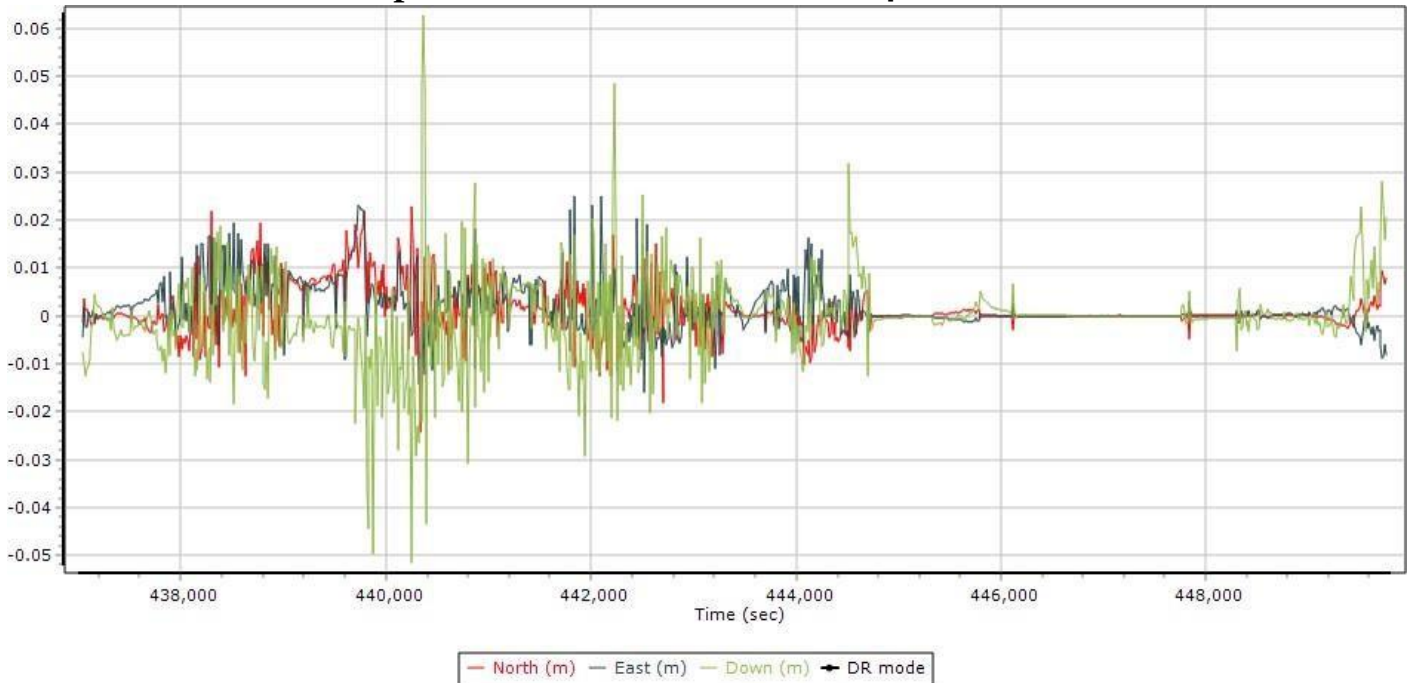
Map Run with Trajectory 20: Sortie a02-s02-0224



Swath Width, Waterfall View 20: Sortie a02-s02-0224

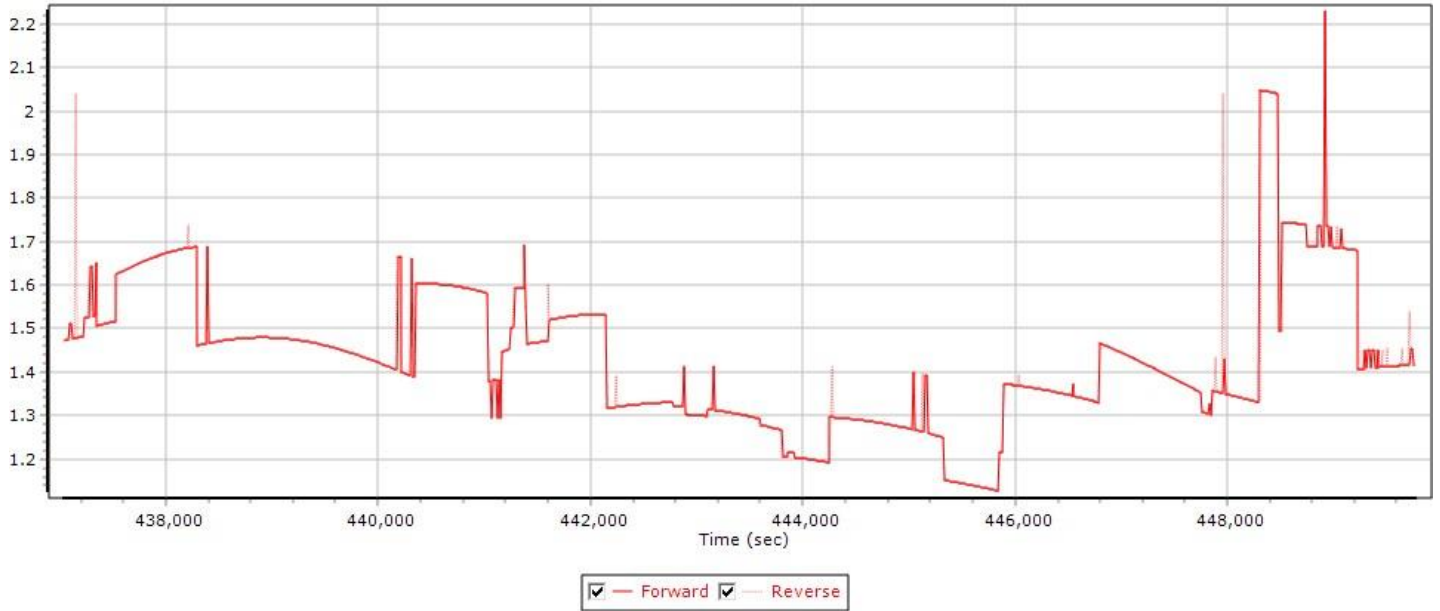


Combined SBET IAKAR Separation 20: Sortie a02-s02-0224

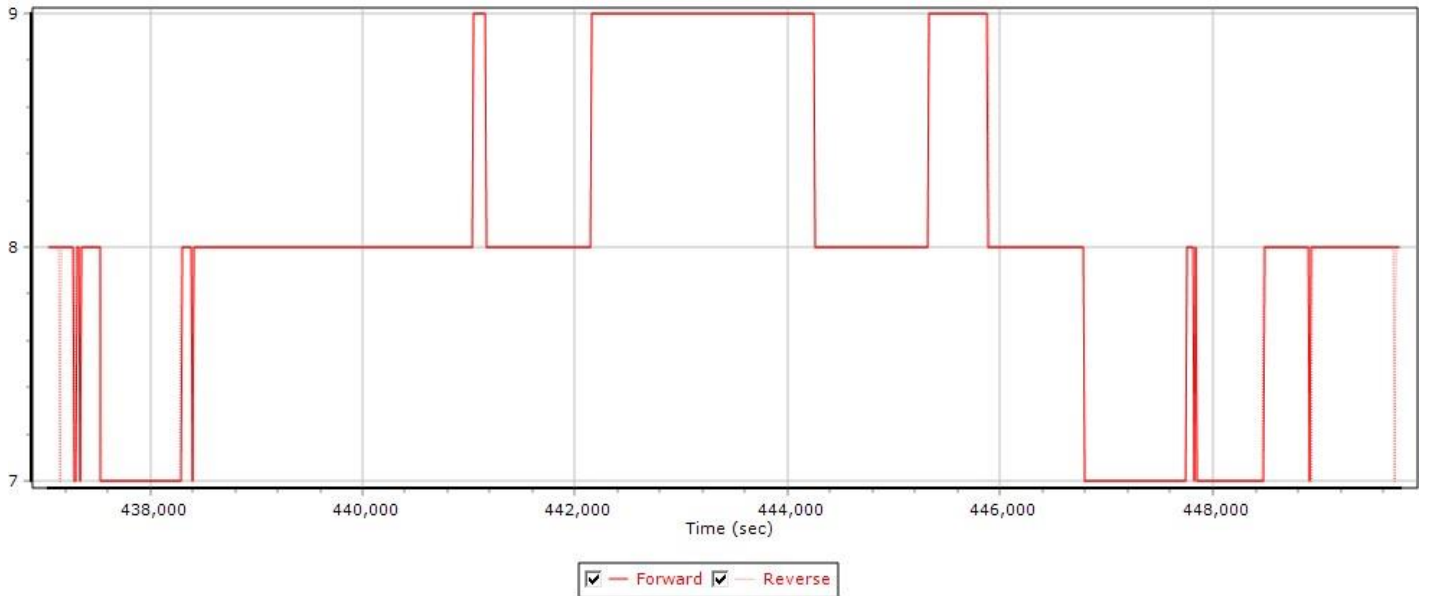


PDOP Plots 20: Sortie a02-s02-0224

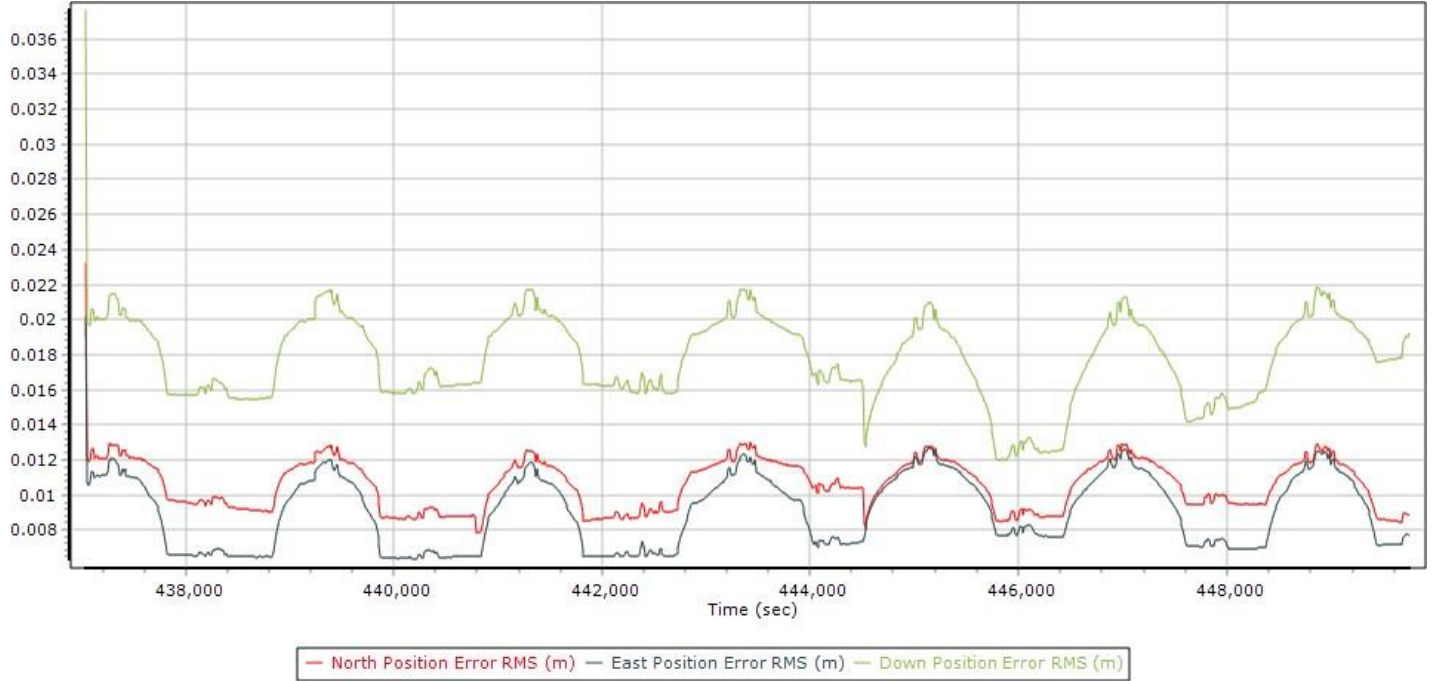
PDOP



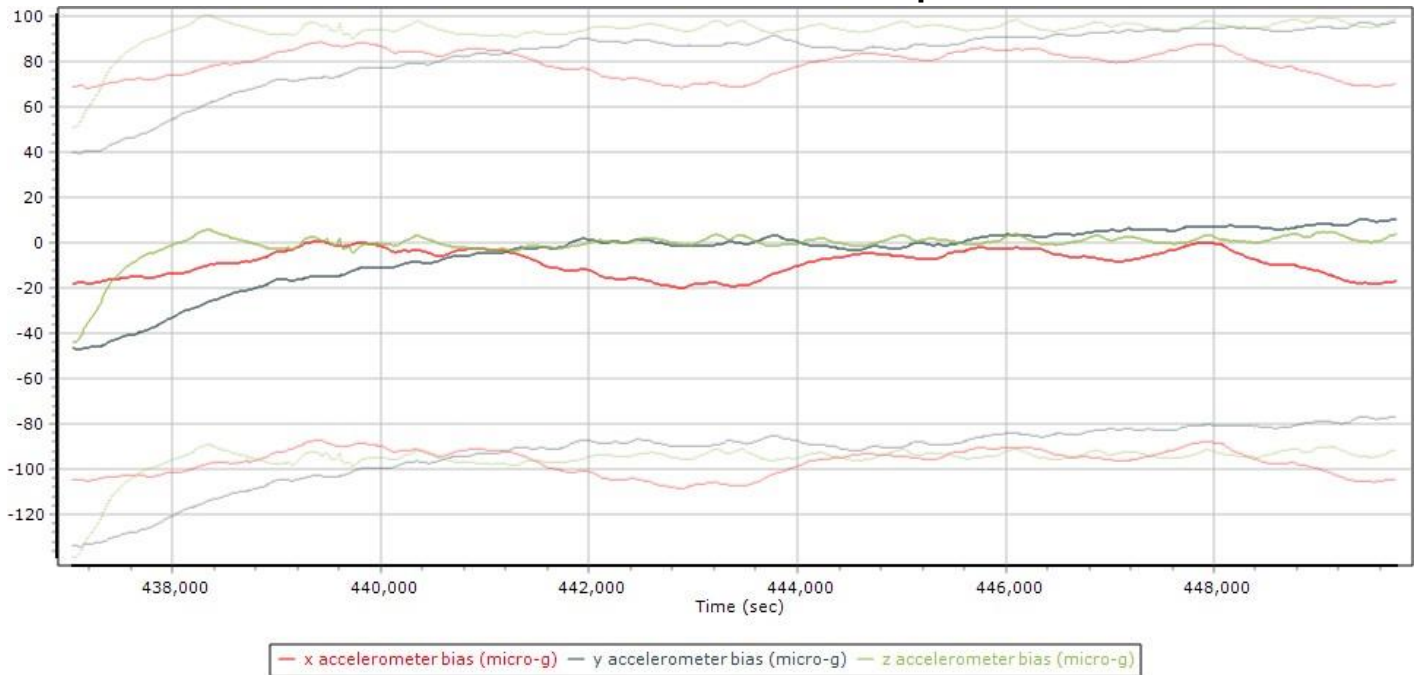
Number of Satellites (>6) Plots 20: Sortie a02-s02-0224
Number of GPS Satellites



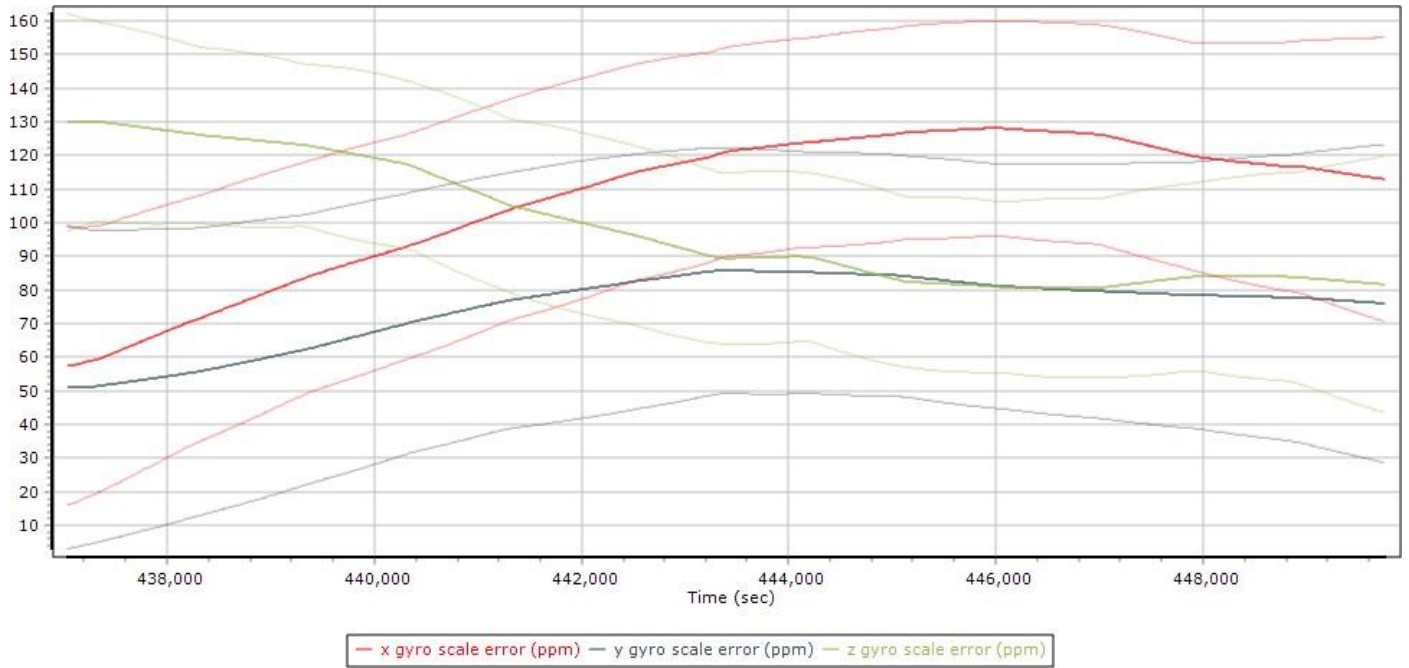
Sensor Position Error RMS (m) Plots 20: Sortie a02-s02-0224



Accelerometer Scale Bias Error Plots 20: Sortie a02-s02-0224



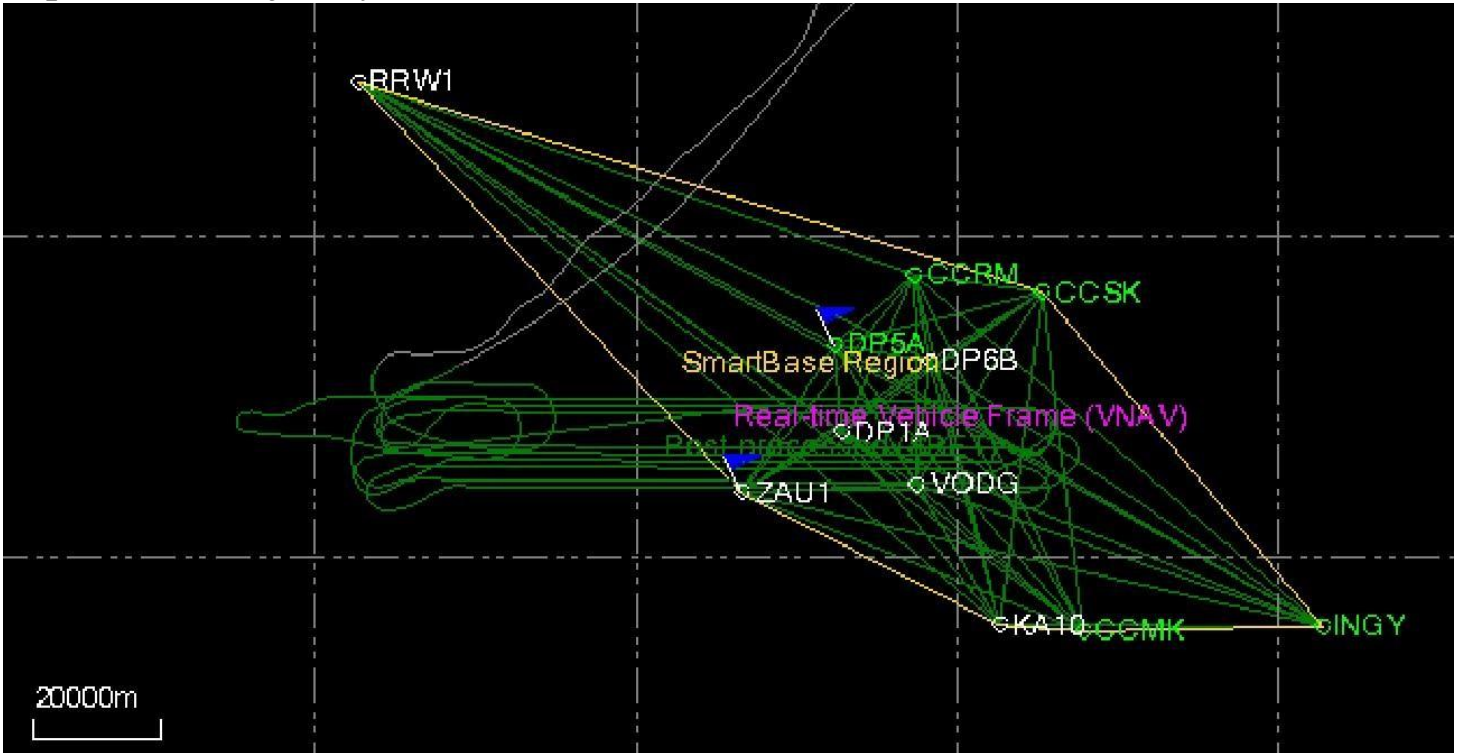
Gyro Scale Error (ppm) Plots 20: Sortie a02-s02-0224



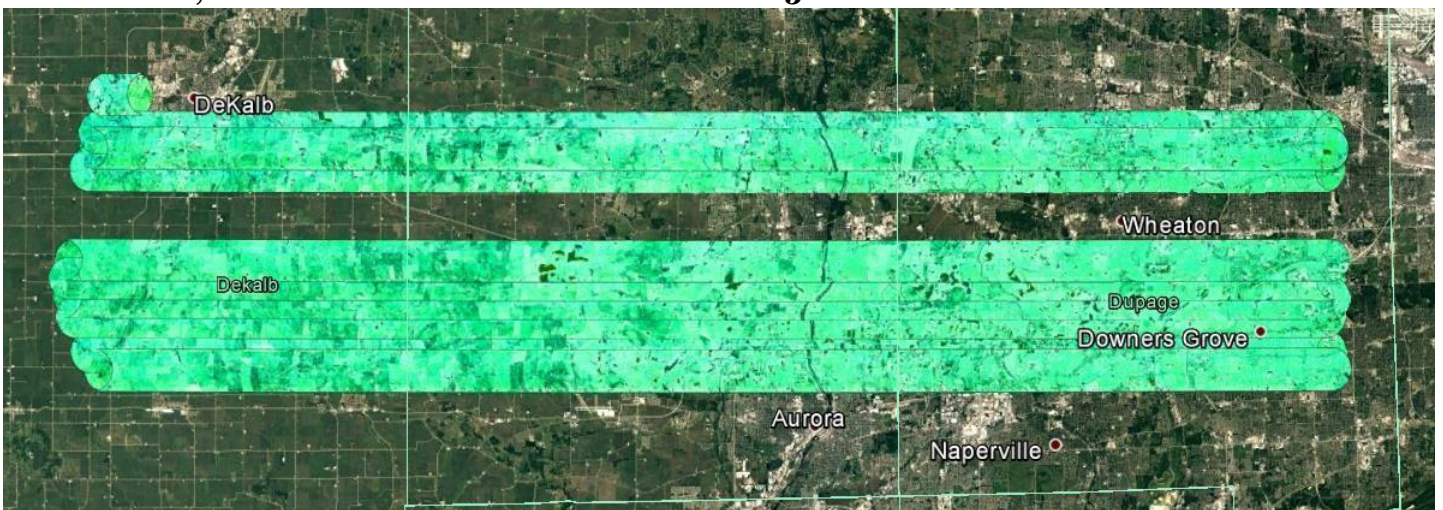
COLLECTION 21

Brick 3
Sortie a02-s02-0225
05/05/2017

Map Run with Trajectory 21: Sortie a02-s02-0225



Swath Width, Waterfall View 21: Sortie a02-s02-0225

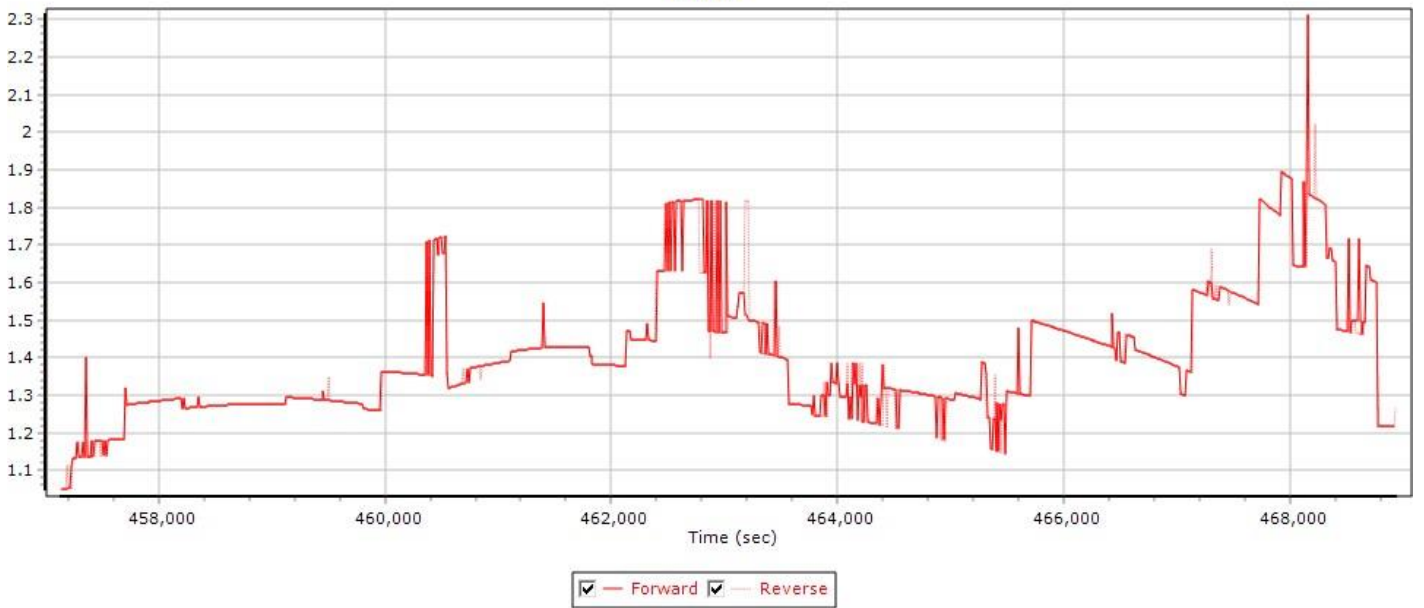


Combined SBET IAKAR Separation 21: Sortie a02-s02-0225

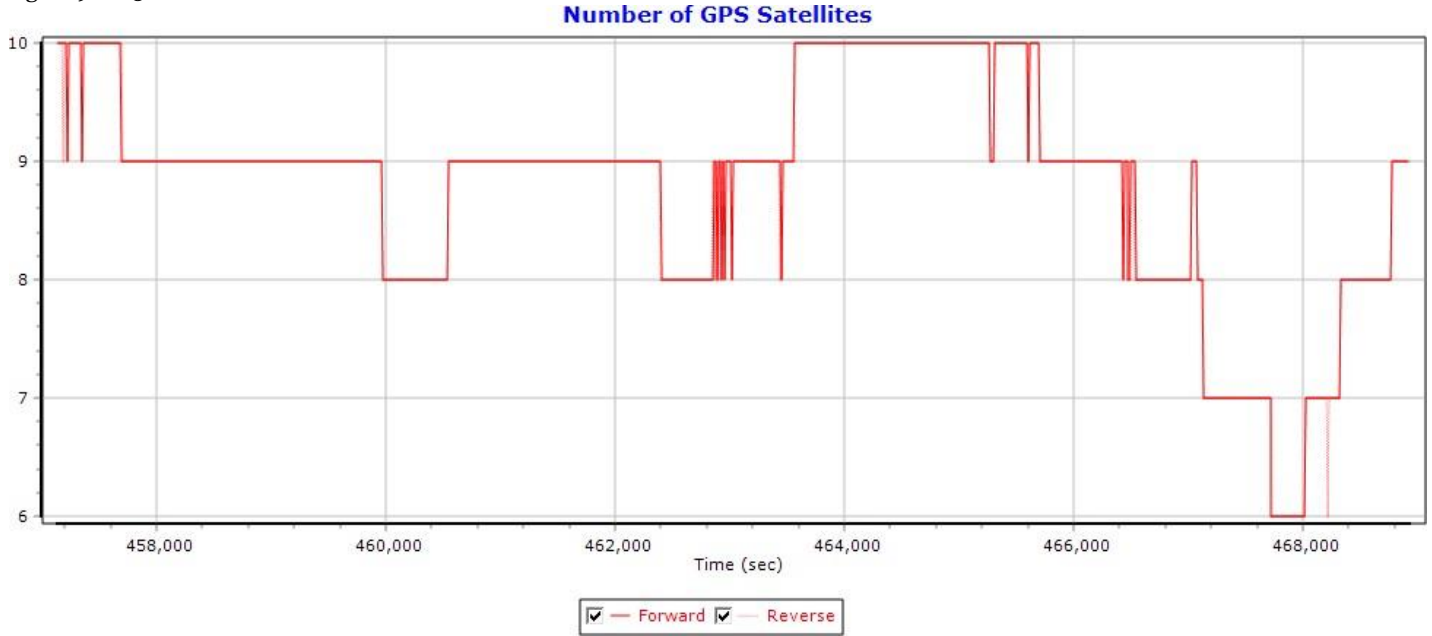


PDOP Plots 21: Sortie a02-s02-0225

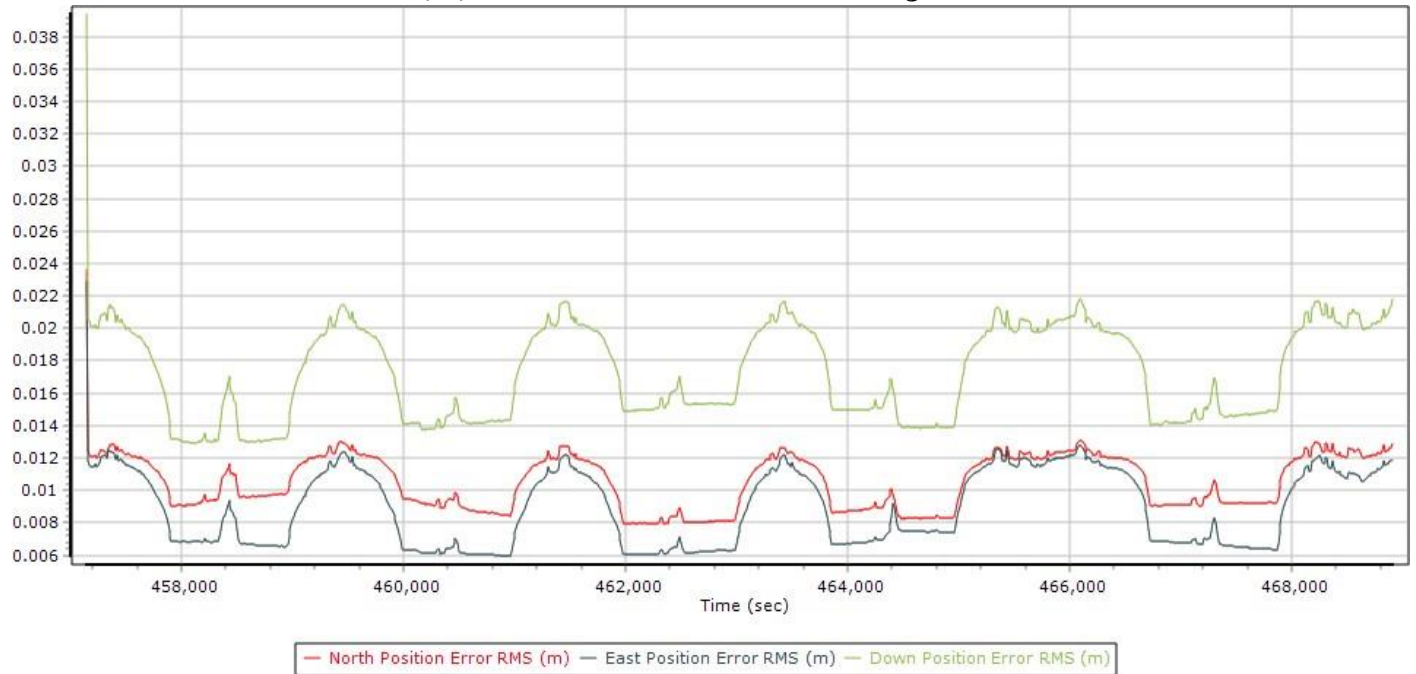
PDOP



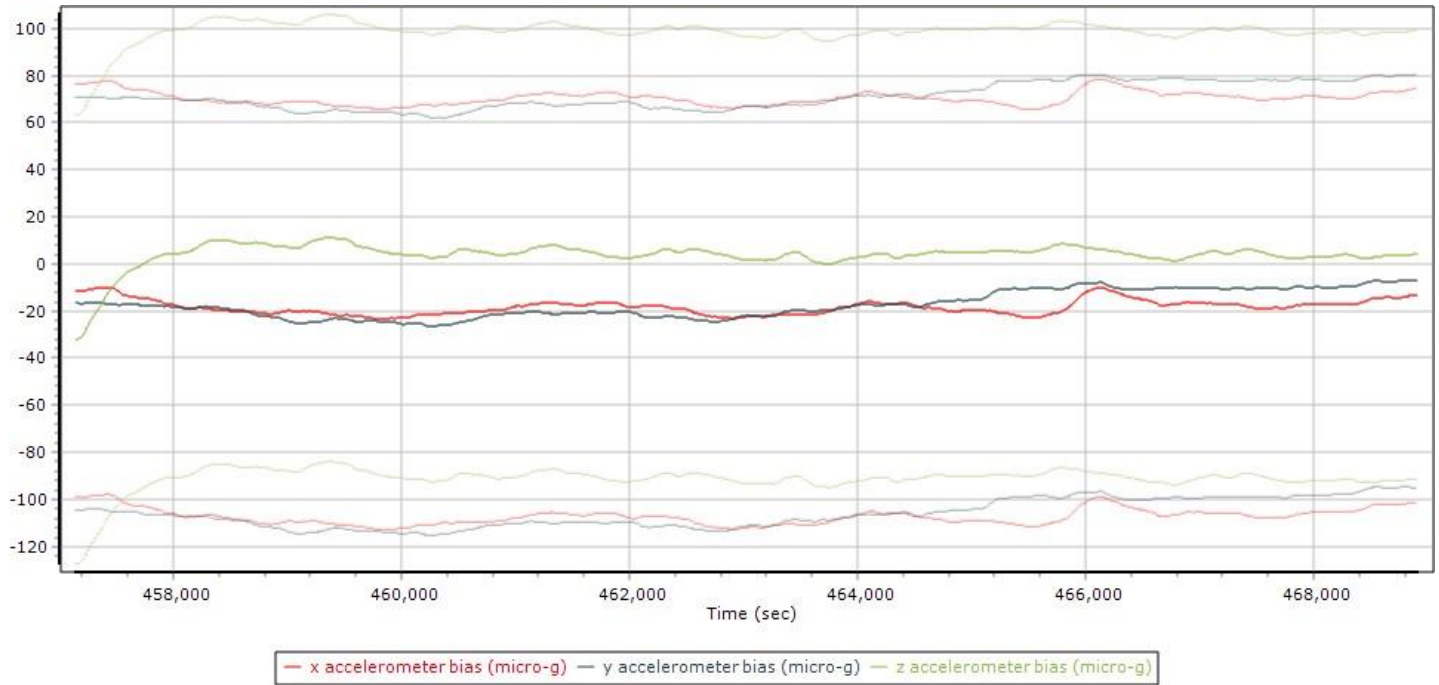
Number of Satellites (>6) Plots 21: Sortie a02-s02-0225



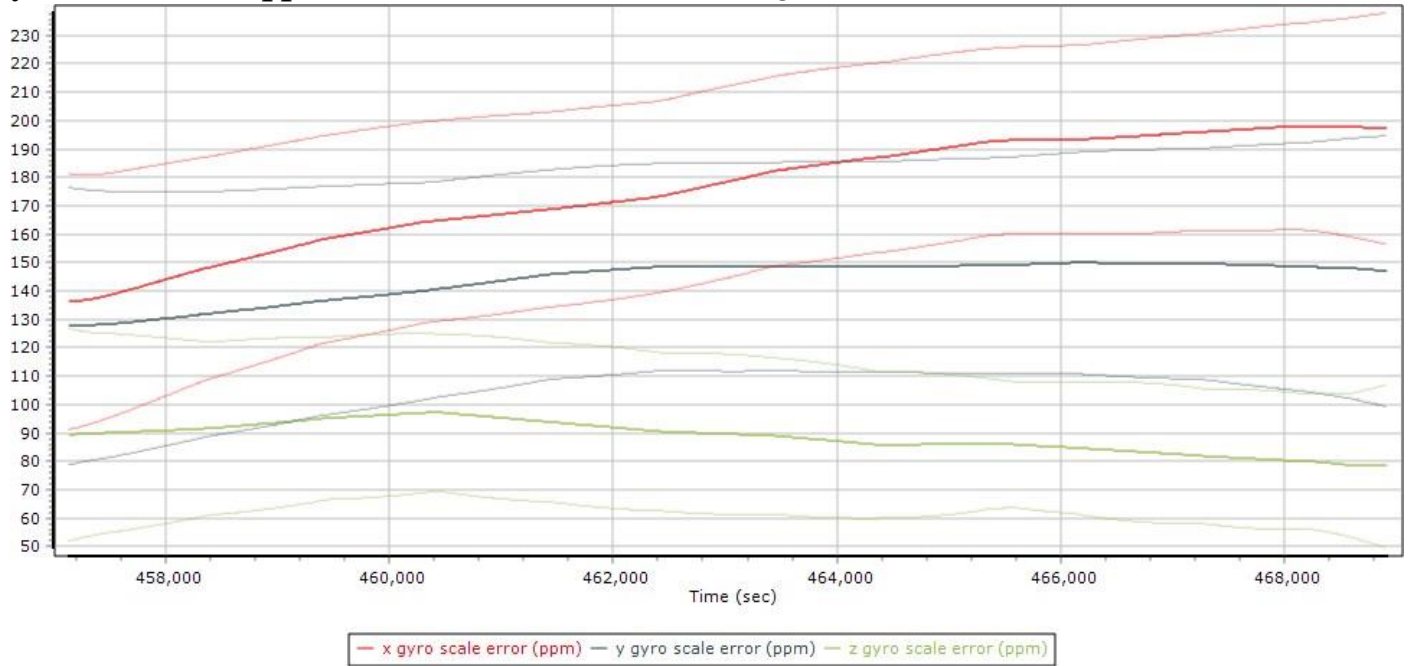
Sensor Position Error RMS (m) Plots 21: Sortie a02-s02-0225



Accelerometer Scale Bias Error Plots 21: Sortie a02-s02-0225



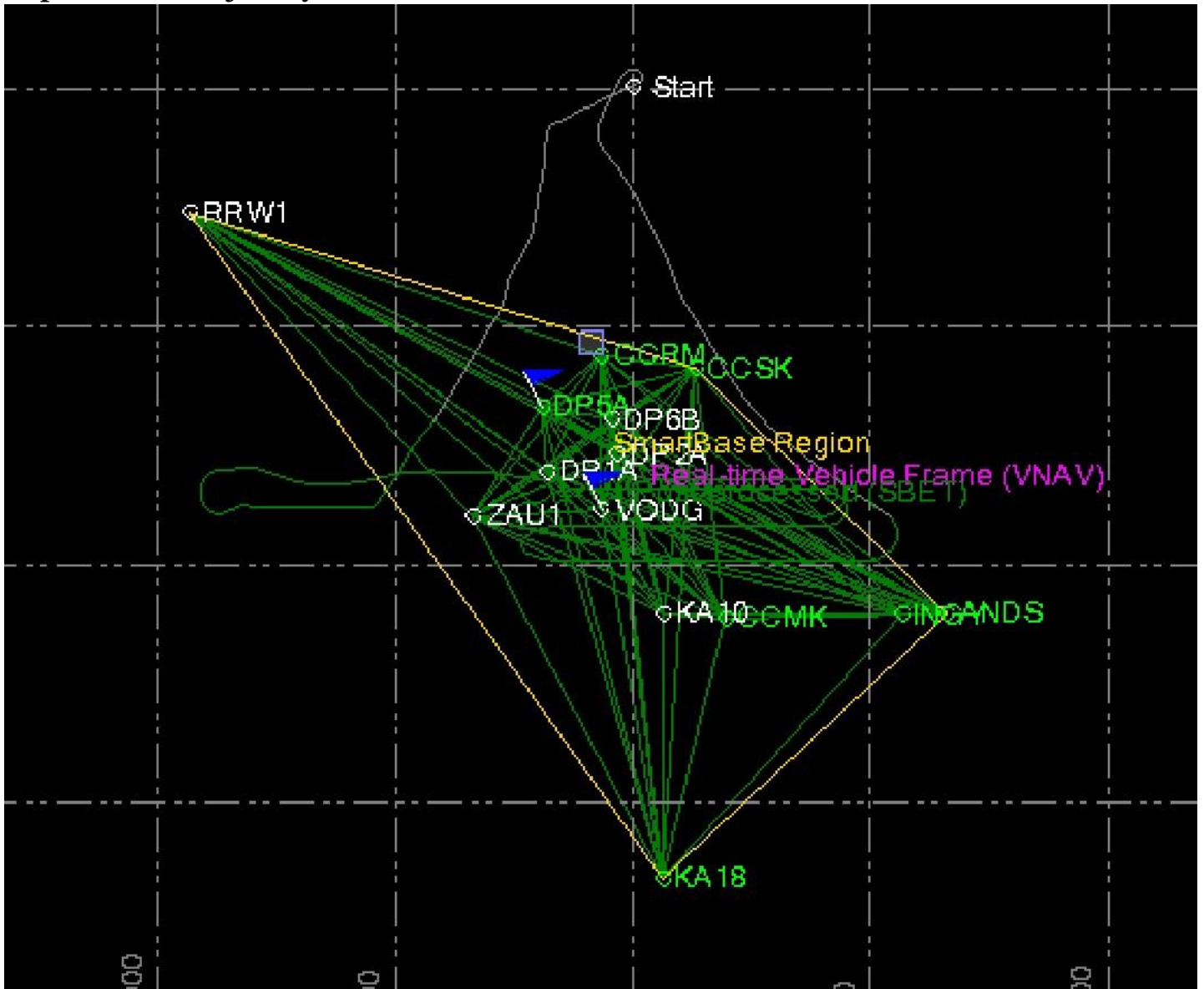
Gyro Scale Error (ppm) Plots 21: Sortie a02-s02-0225



COLLECTION 22

Brick 3 / Chicago (Cicero Railyard)
Sortie a02-s02-0226
05/07/2017

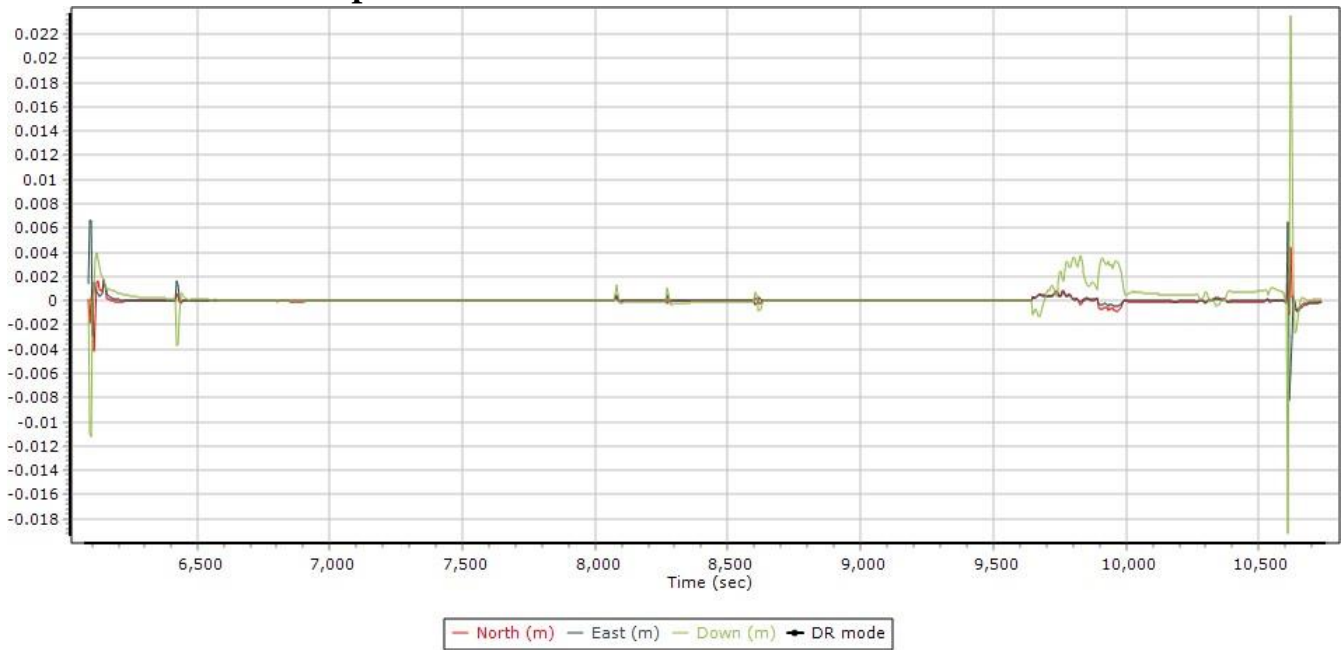
Map Run with Trajectory 22: Sortie a02-s02-0226



Swath Width, Waterfall View 22: Sortie a02-s02-0226



Combined SBET IAKAR Separation 22: Sortie a02-s02-0226



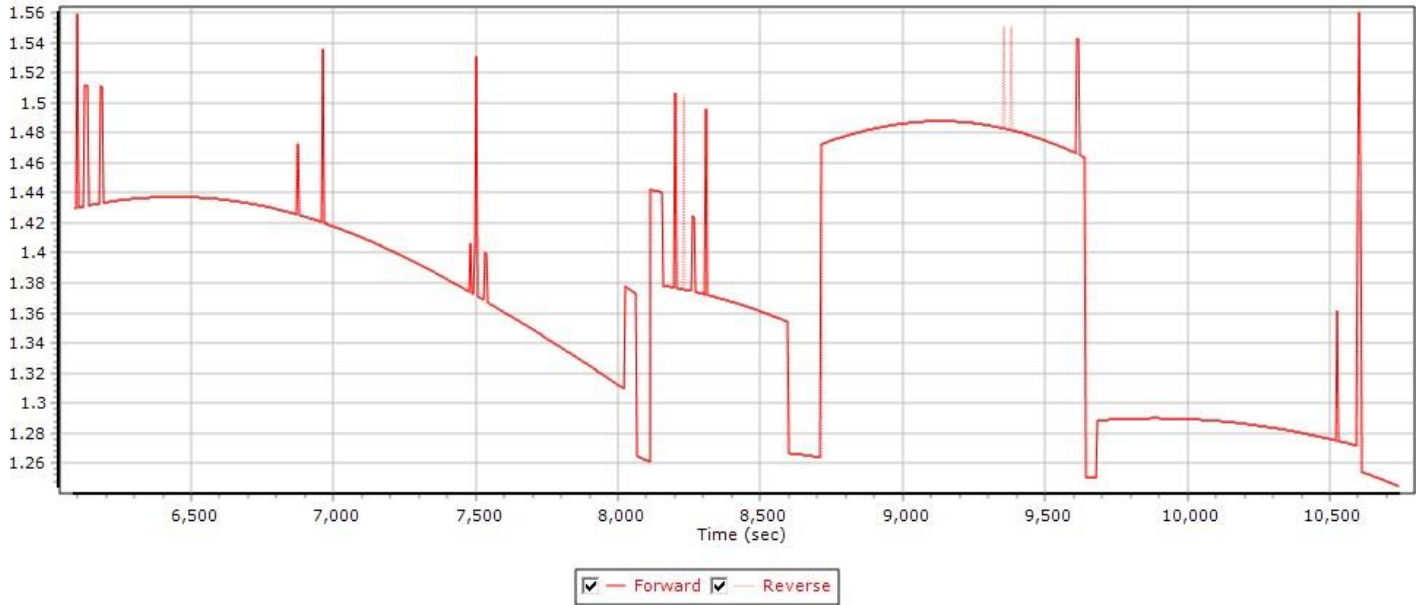
PDOP Plots 22: Sortie a02-s02-0226

PDOP

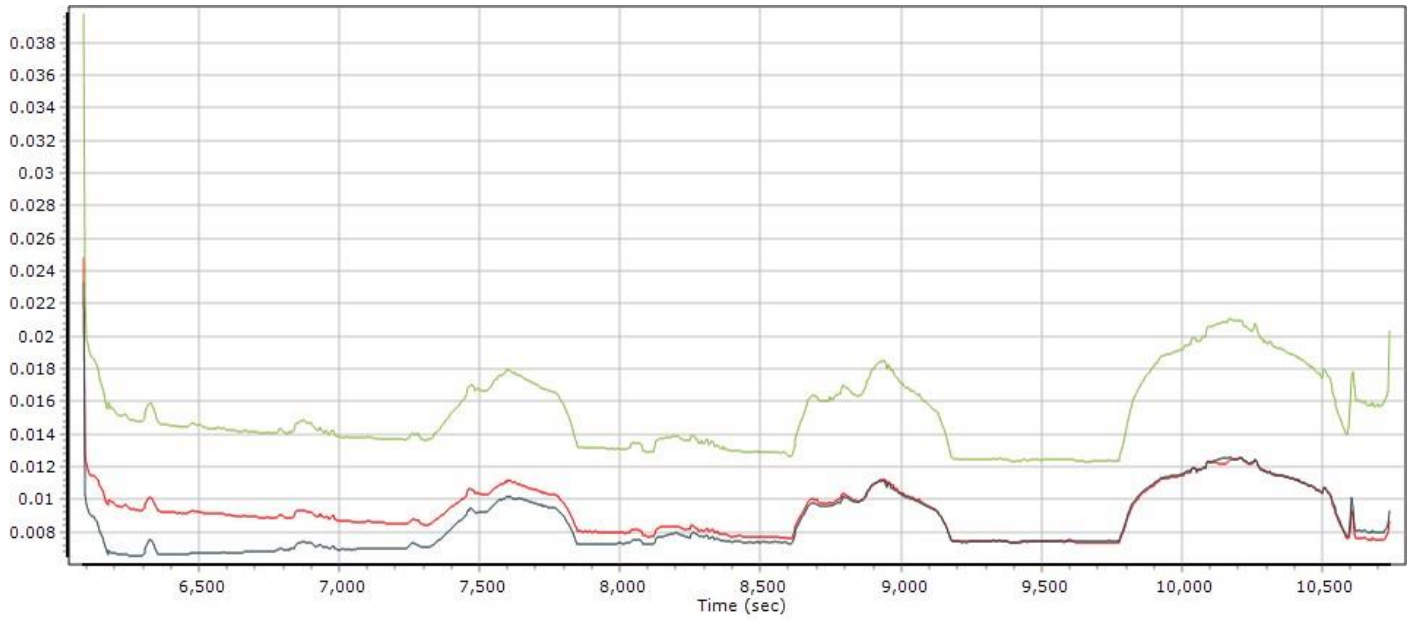


Number of Satellites (>6) Plots 22: Sortie a02-s02-0226

PDOP

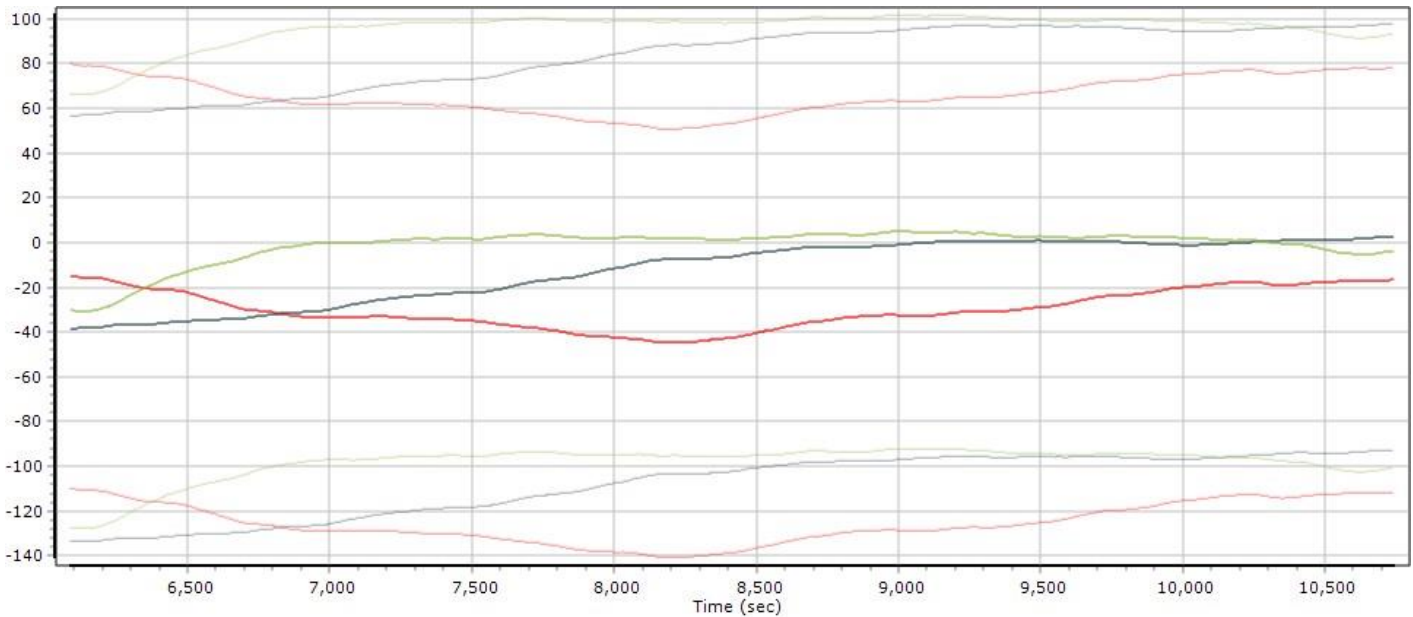


Sensor Position Error RMS (m) Plots 22: Sortie a02-s02-0226



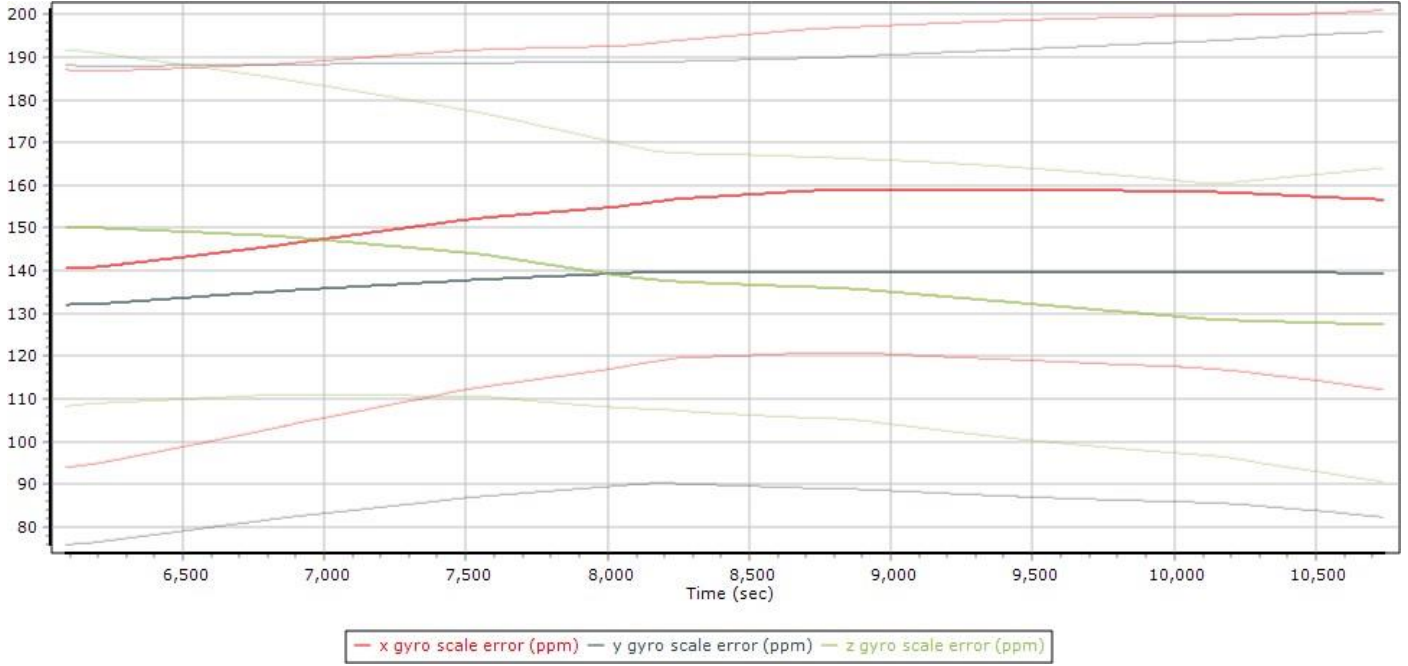
— North Position Error RMS (m) — East Position Error RMS (m) — Down Position Error RMS (m)

Accelerometer Scale Bias Error Plots 22: Sortie a02-s02-0226



— x accelerometer bias (micro-g) — y accelerometer bias (micro-g) — z accelerometer bias (micro-g)

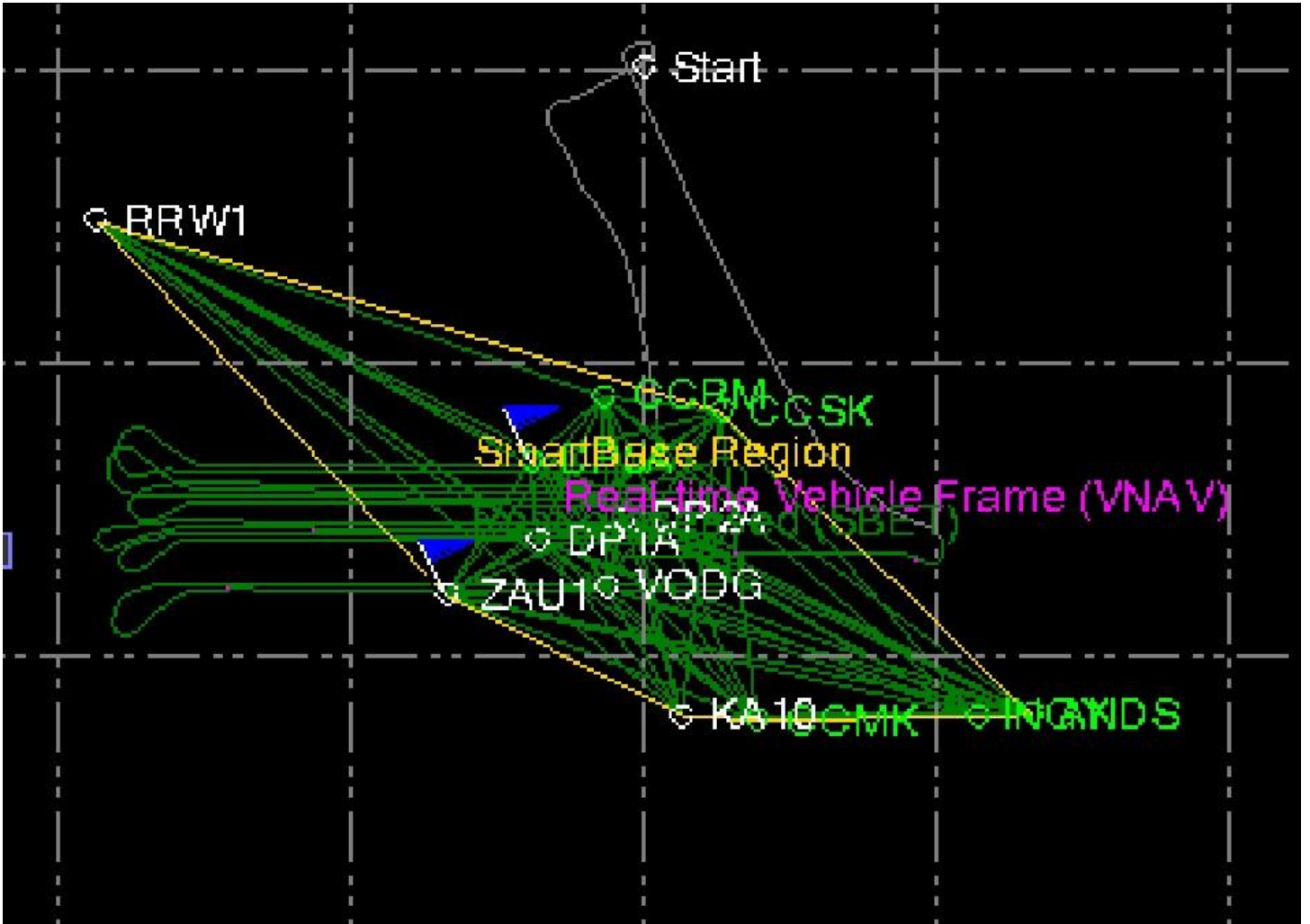
Gyro Scale Error (ppm) Plots 22: Sortie a02-s02-0226



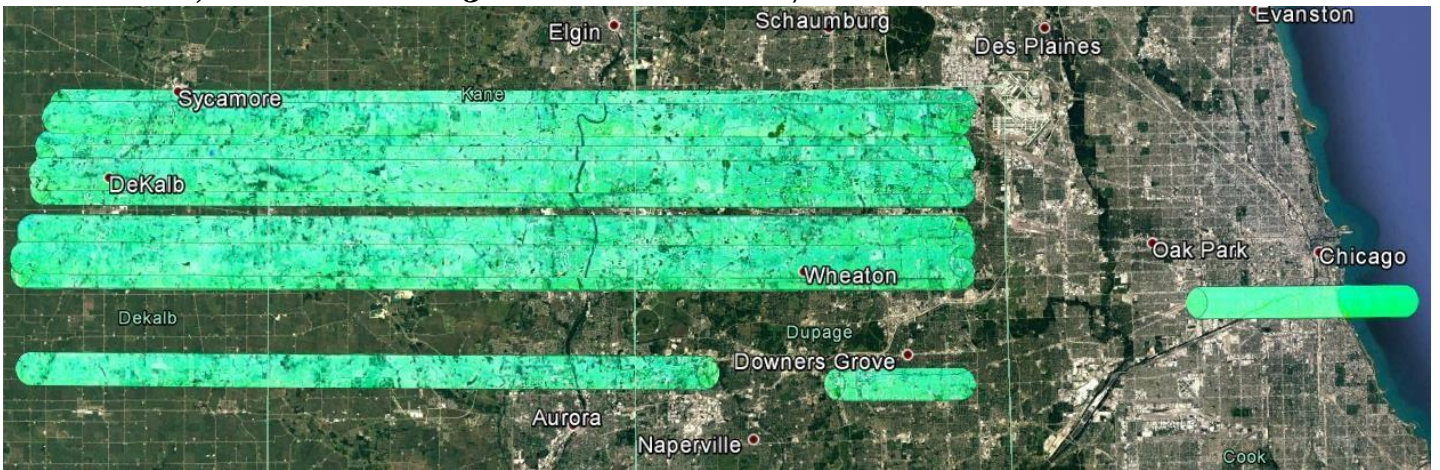
COLLECTION 23

Brick 3 / Chicago (Cicero Railyard)
Sortie a02-s02-0227
05/08/2017

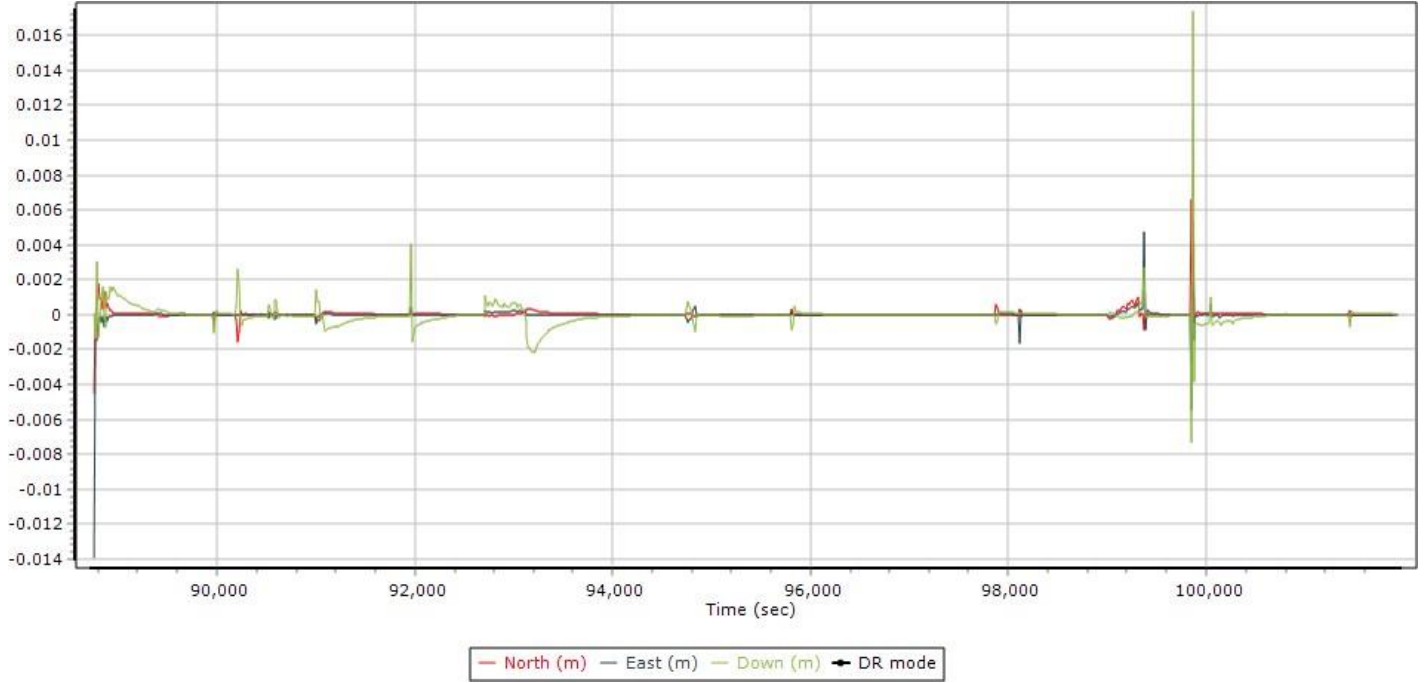
Map Run with Trajectory 23: Sortie a02-s02-0227



Swath Width, Waterfall View 23: Sortie a02-s02-0227

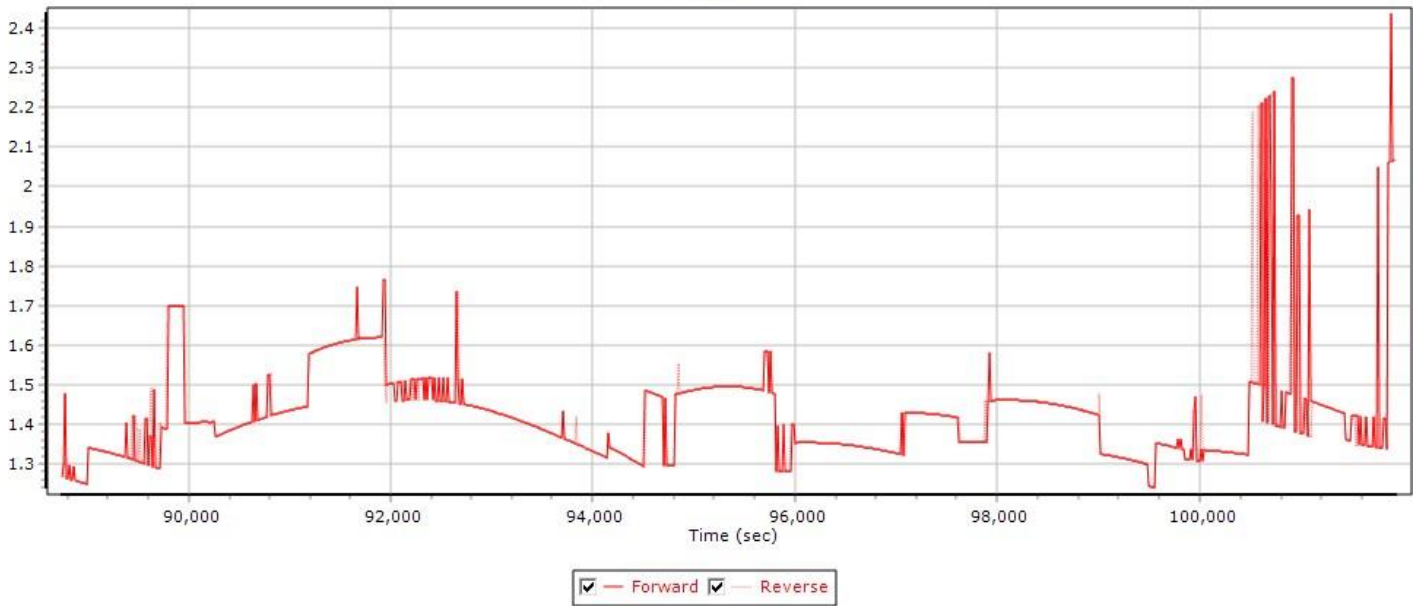


Combined SBET IAKAR Separation 23: Sortie a02-s02-0227

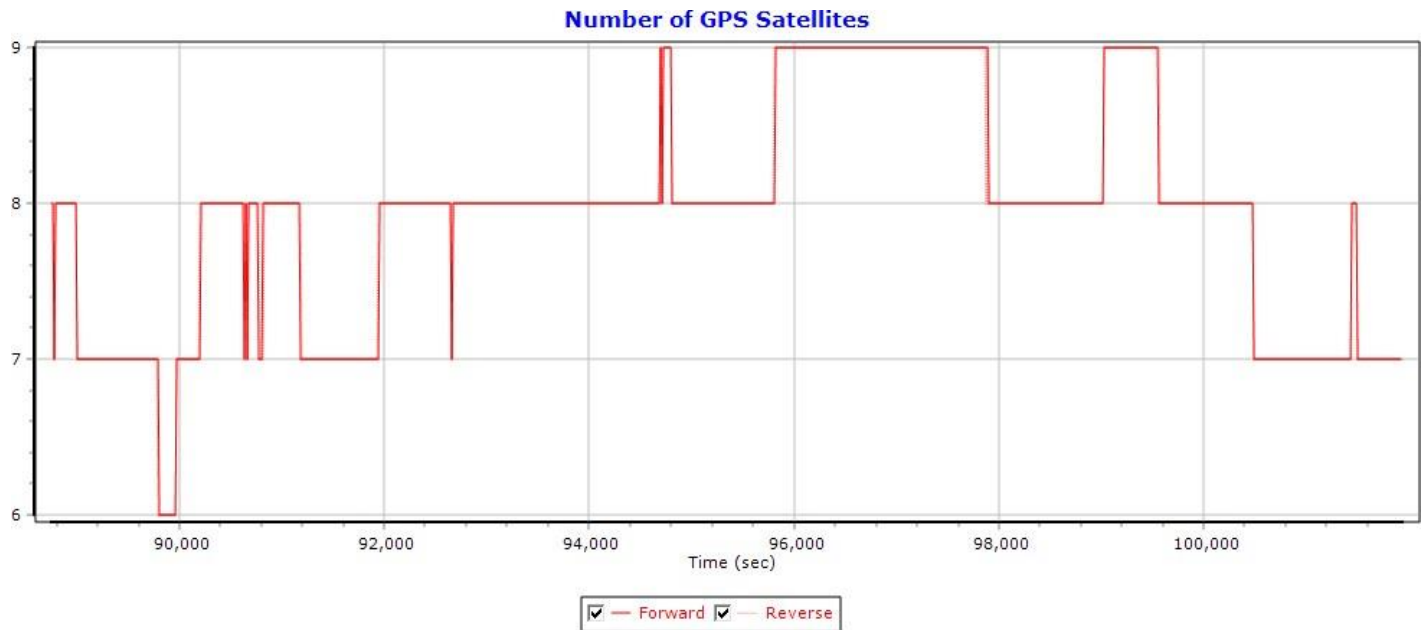


PDOP Plots 23: Sortie a02-s02-0227

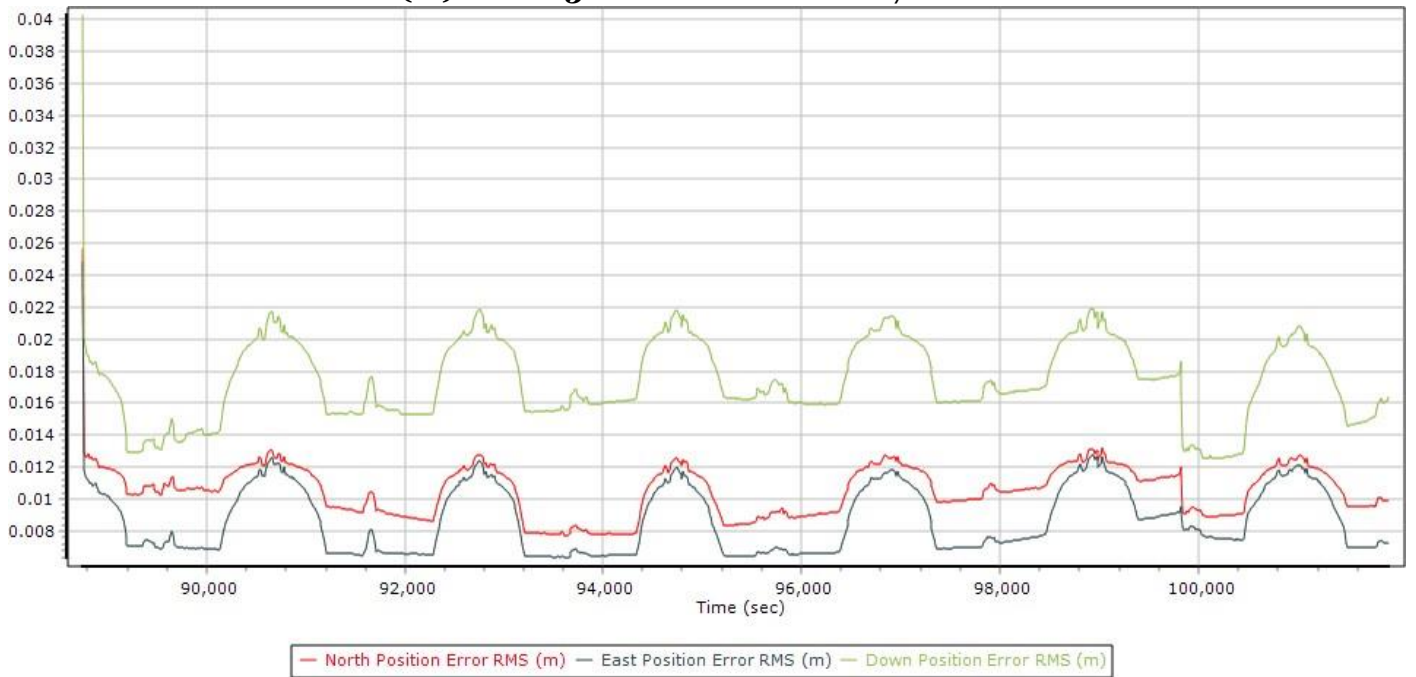
PDOP



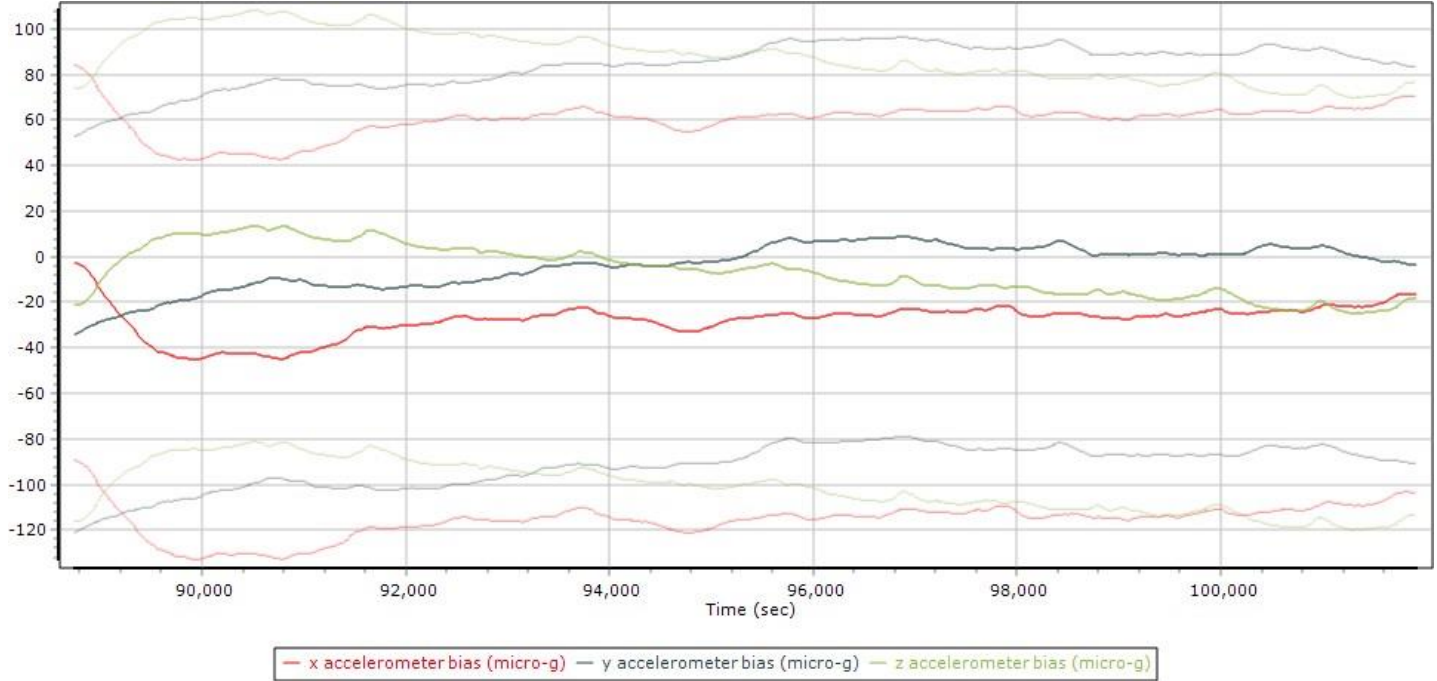
Number of Satellites (>6) Plots 23: Sortie a02-s02-0227



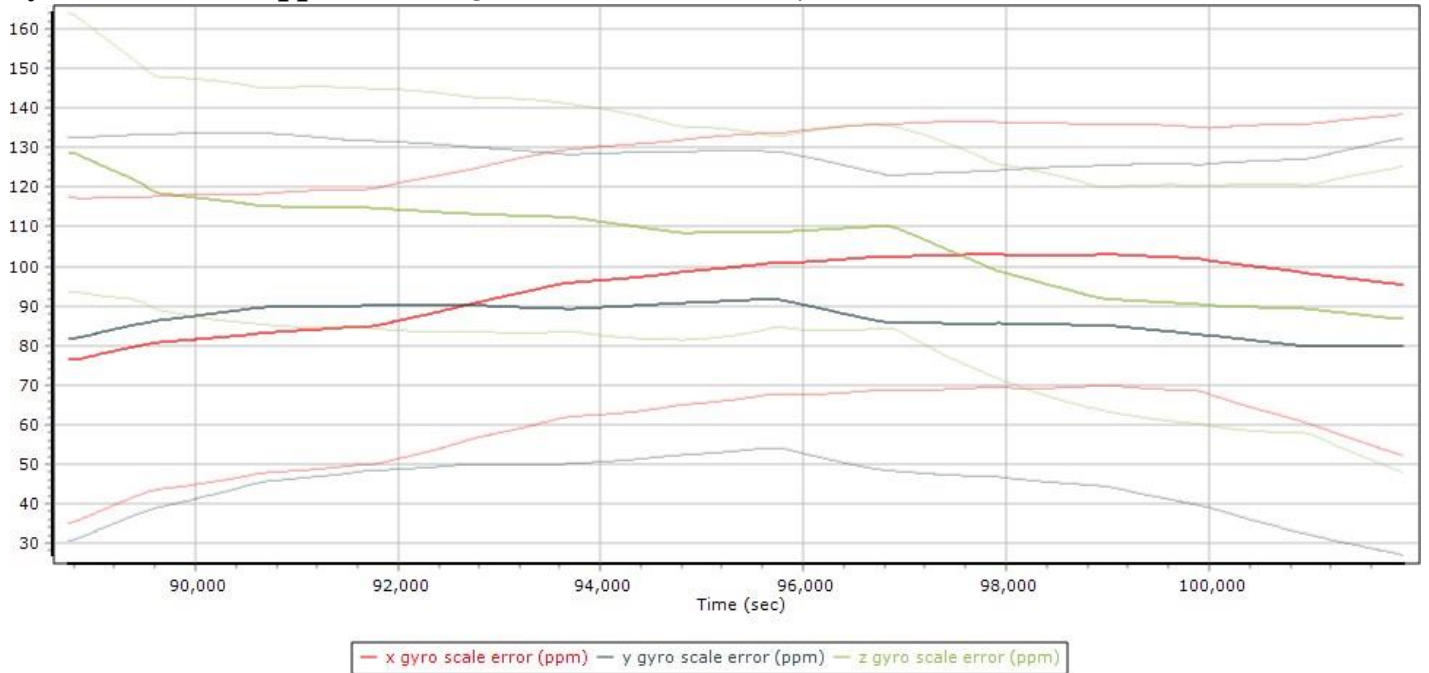
Sensor Position Error RMS (m) Plots 23: Sortie a02-s02-0227



Accelerometer Scale Bias Error Plots 23: Sortie a02-s02-0227



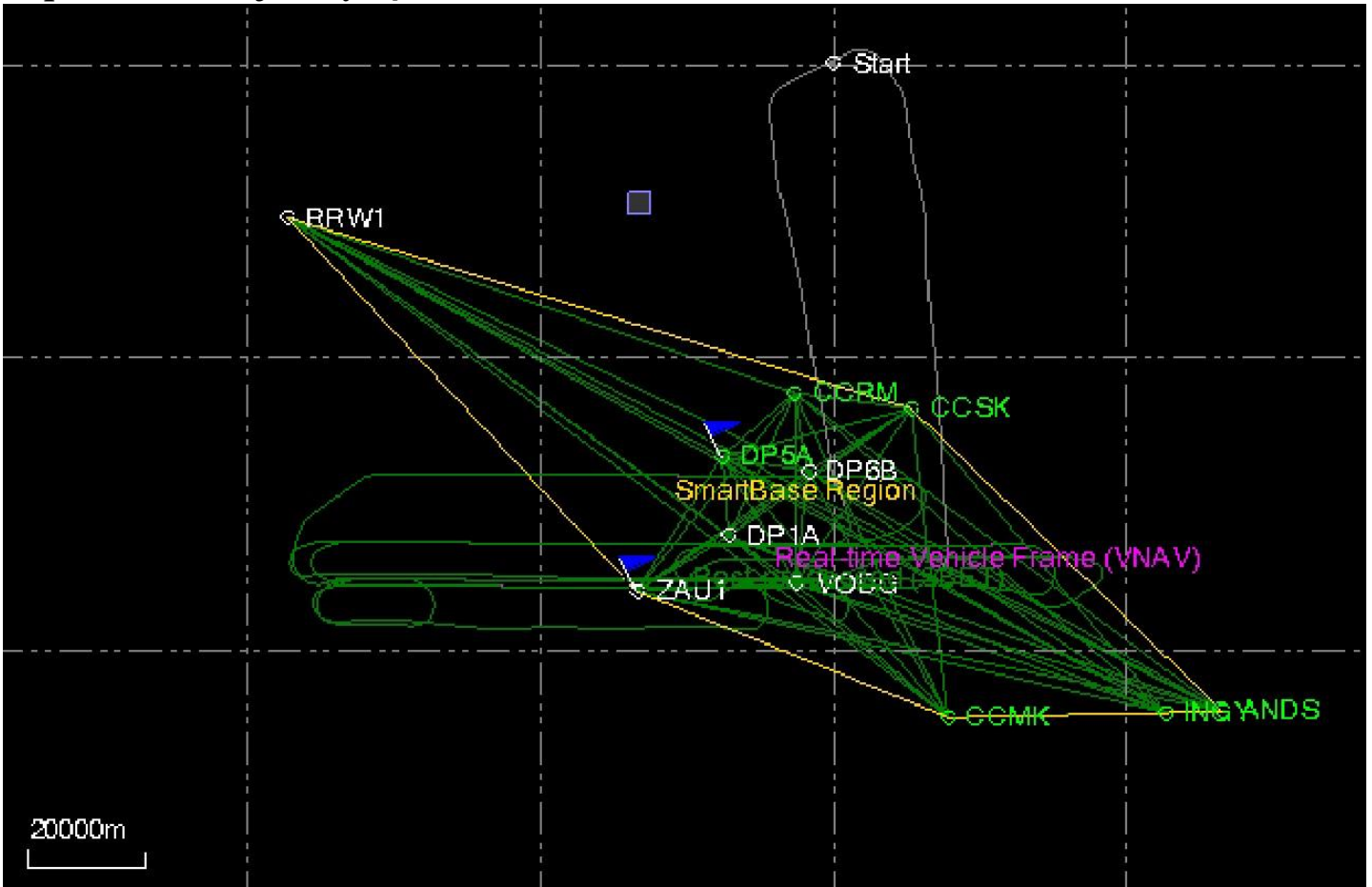
Gyro Scale Error (ppm) Plots 23: Sortie a02-s02-0227



COLLECTION 24

Brick 3 / Chicago (Cicero Railyard)
Sortie a02-s02-0228
05/08/2017

Map Run with Trajectory 24: Sortie a02-s02-0228



Swath Width, Waterfall View 24: Sortie a02-s02-0228

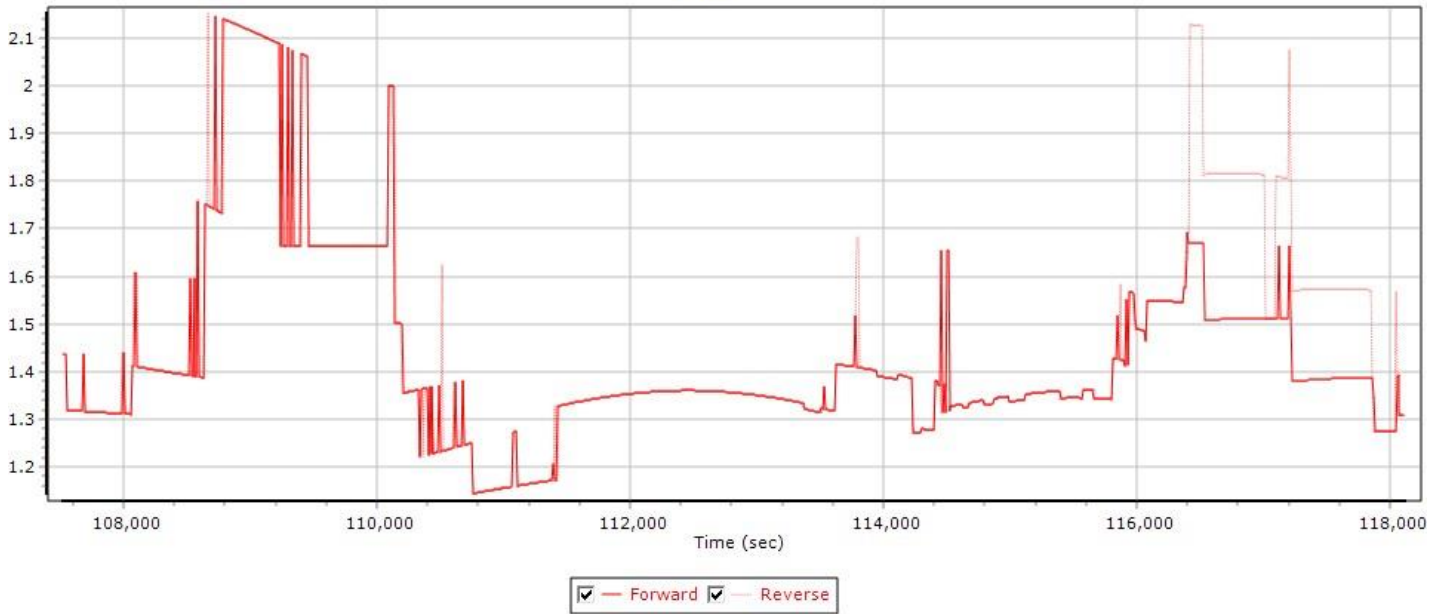


Combined SBET IAKAR Separation 24: Sortie a02-s02-0228

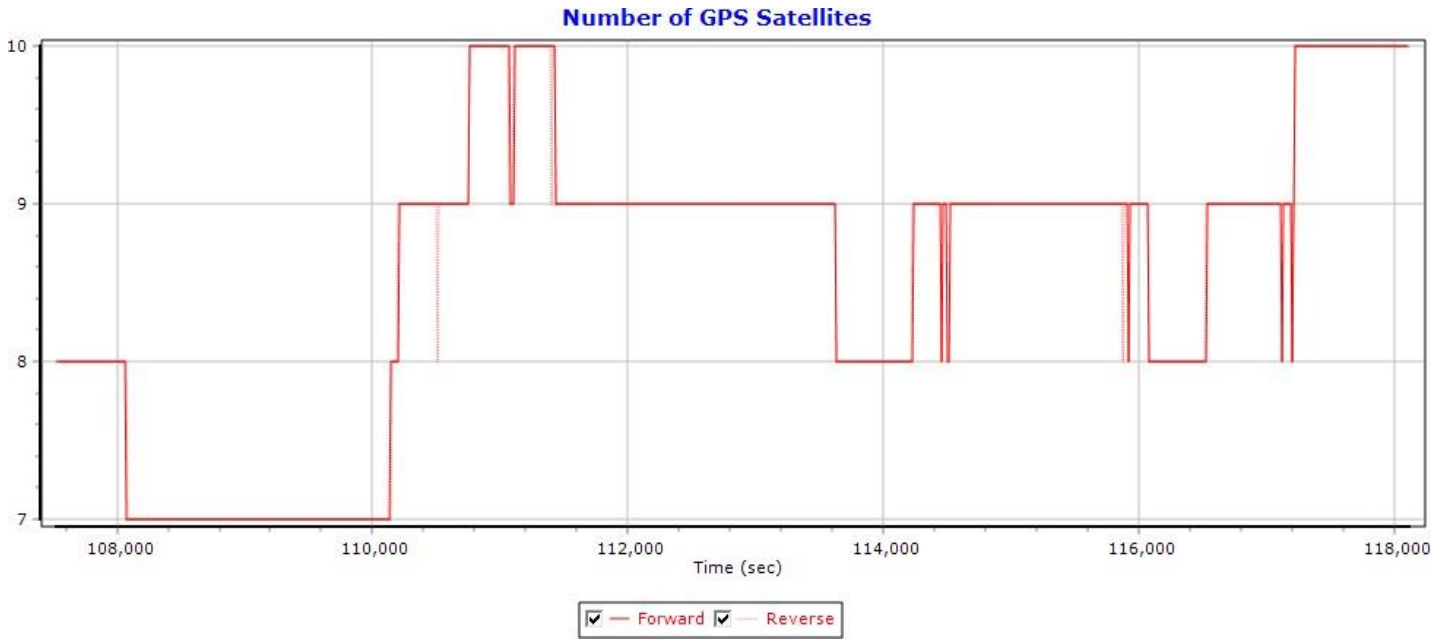


PDOP Plots 24: Sortie a02-s02-0228

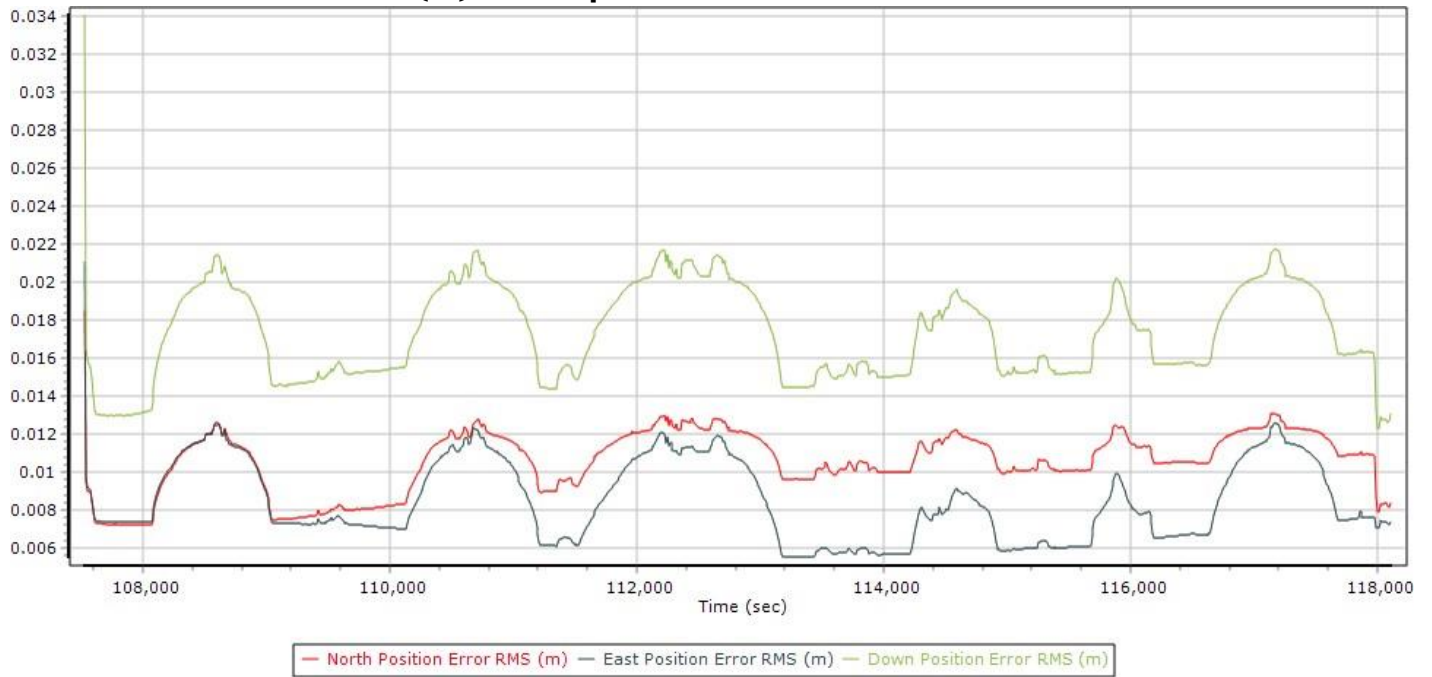
PDOP



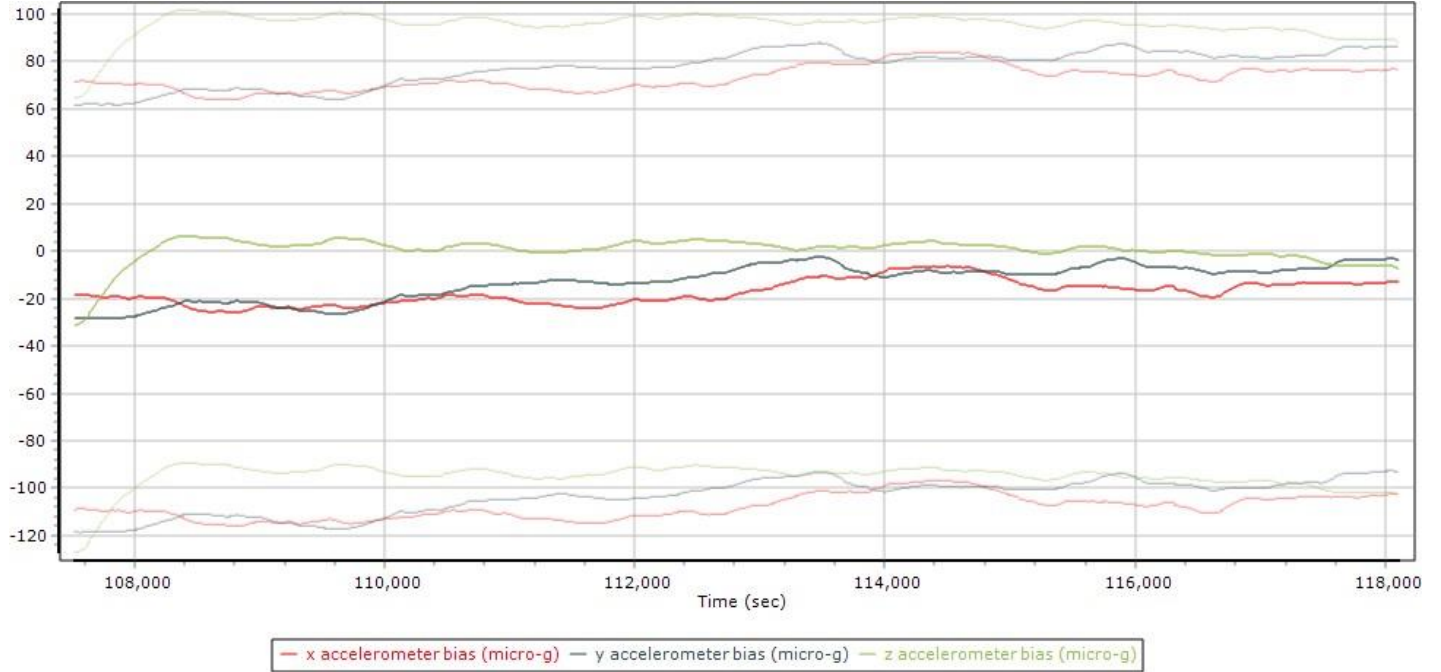
Number of Satellites (>6) Plots 24: Sortie a02-s02-0228



Sensor Position Error RMS (m) Plots 24: Sortie a02-s02-0228



Accelerometer Scale Bias Error Plots 24: Sortie a02-s02-0228



Gyro Scale Error (ppm) Plots 24: Sortie a02-s02-0228

