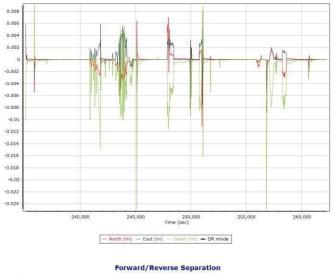
Date: April

20, 2018 Page 1

# Appendix E: GPS Processing Blocks 06, 07, 08, and 14

Blocks 06, 07, 08 GPS and IMU Processing Reports MISSION 1 (022018)

Project: Texas West Central LiDAR Date: April 20, 2018 Page 2 of 68

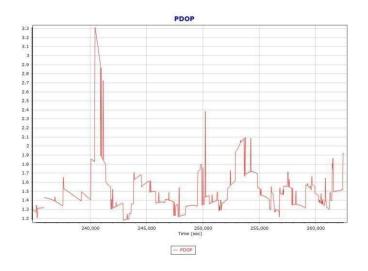


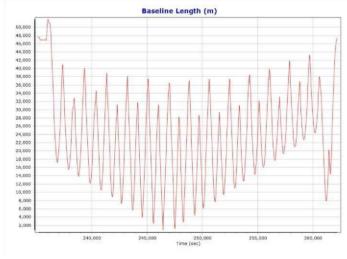




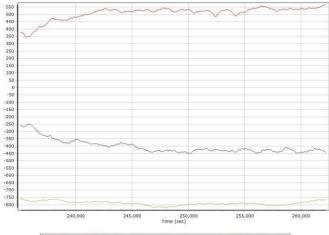
- Number of GPS - Number of GLONASS - Number of Q2SS - Number of BEIDOU - Total Number

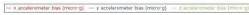
Project: Texas West Central LiDAR Date: April 20, 2018 Page 3 of 68





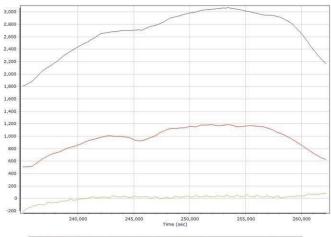






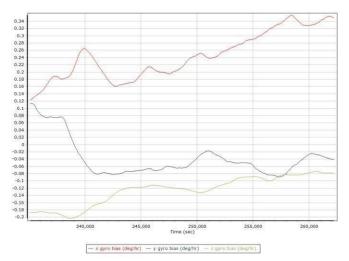
Project: Texas West Central LiDAR Date: April 20, 2018 Page 4 of 68

#### Accelerometer Scale Error (ppm)



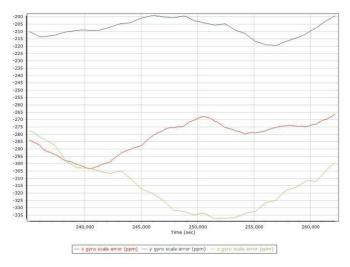
🗕 x accelerometer scale error (ppm) — y accelerometer scale error (ppm) — z accelerometer scale error (ppm)





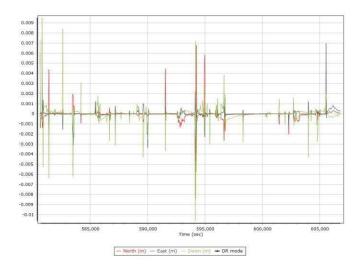
Project: Texas West Central LiDAR Date: April 20, 2018 Page 5 of 68

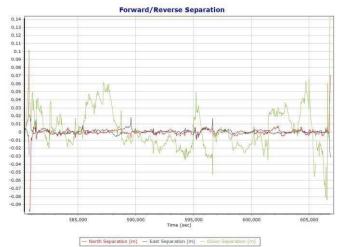
#### Gyro Scale Error (ppm)

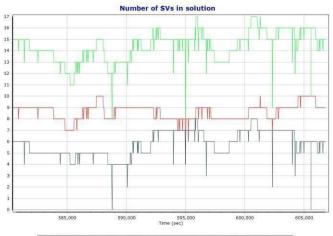


MISSION 2 (024018)

Project: Texas West Central LiDAR Date: April 20, 2018 Page 6 of 68

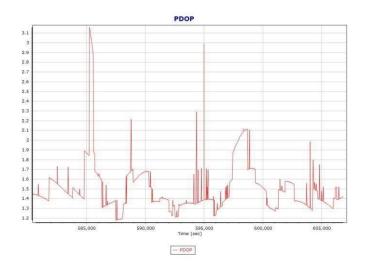


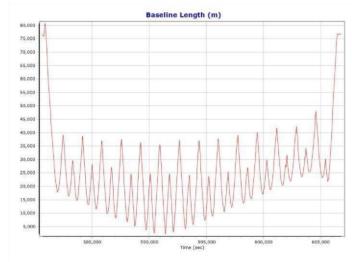




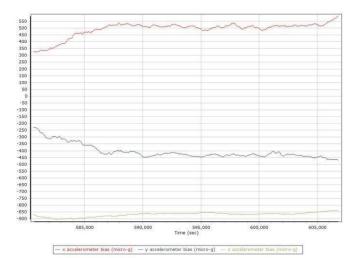
- Number of GPS - Number of GLONASS - Number of QZSS - Number of BEIDOU - Total Number

Project: Texas West Central LiDAR Date: April 20, 2018 Page 7 of 68



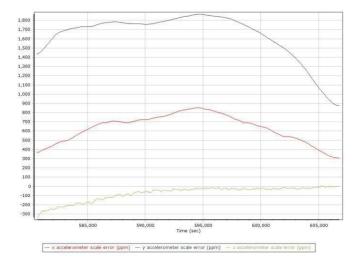


Accelerometer Bias (micro-g)

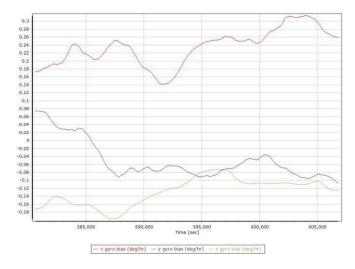


Project: Texas West Central LiDAR Date: April 20, 2018 Page 8 of 68

#### Accelerometer Scale Error (ppm)

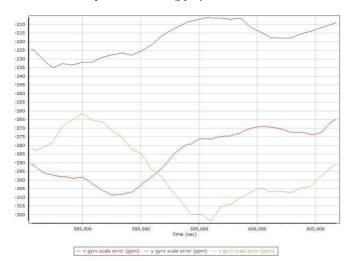


Gyro Bias (deg/h)



Project: Texas West Central LiDAR Date: April 20, 2018 Page 9 of 68

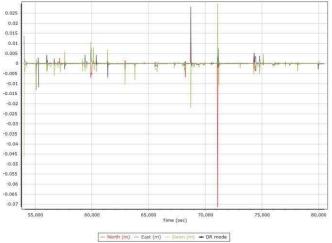
## Gyro Scale Error (ppm)

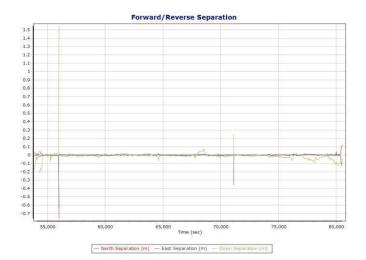


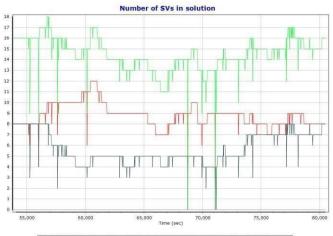
Project: Texas West Central LiDAR Date: April 20, 2018 Page 10 of 35

# MISSION 3 (022518)

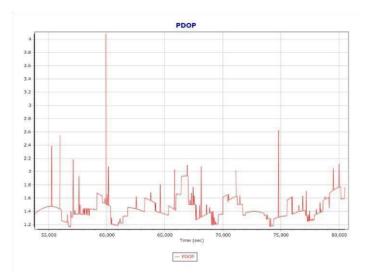
Project: Texas West Central LiDAR Date: April 20, 2018 Page 11 of 68



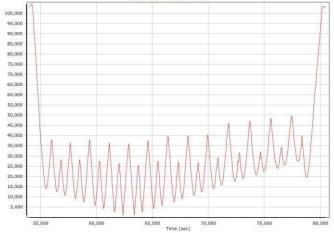




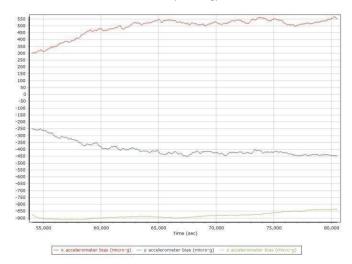






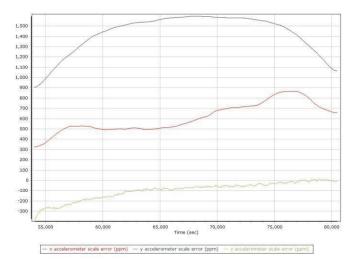


Accelerometer Bias (micro-g)

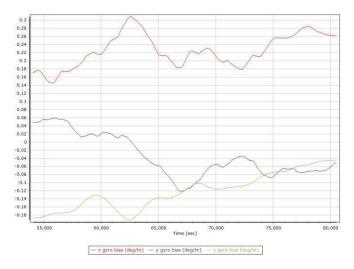


Project: Texas West Central LiDAR Date: April 20, 2018 Page 13 of 68

#### Accelerometer Scale Error (ppm)

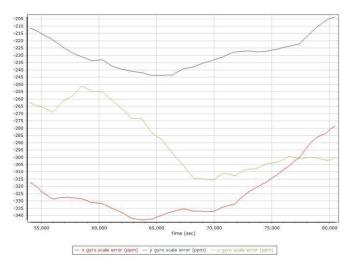






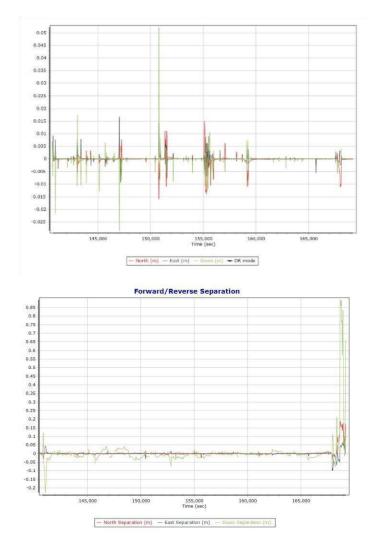
Project: Texas West Central LiDAR Date: April 20, 2018 Page 14 of 68

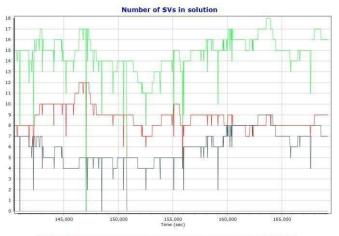
#### Gyro Scale Error (ppm)



**MISSION 4 (022618)** 

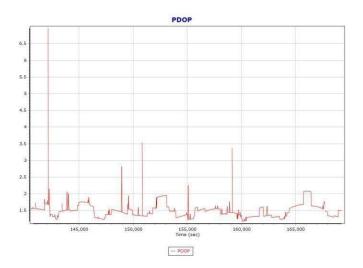
Project: Texas West Central LiDAR Date: April 20, 2018 Page 15 of 68

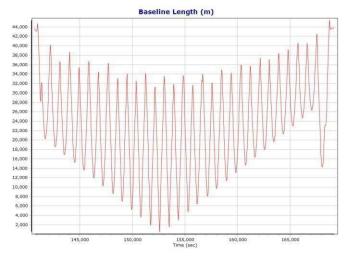




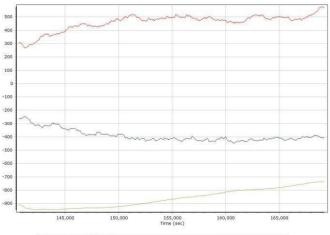


Project: Texas West Central LiDAR Date: April 20, 2018 Page 16 of 68





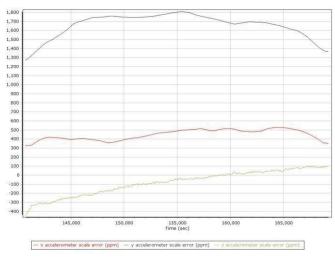




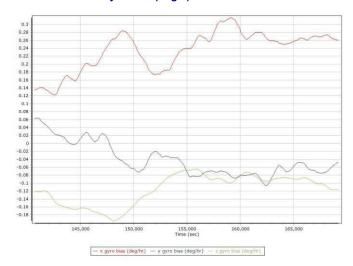
🗕 x accelerometer bias (micro-g) — γ accelerometer bias (micro-g) — z accelerometer bias (micro-g)

Project: Texas West Central LiDAR Date: April 20, 2018 Page 17 of 68



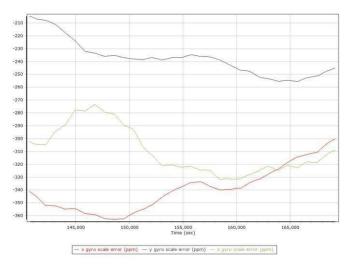




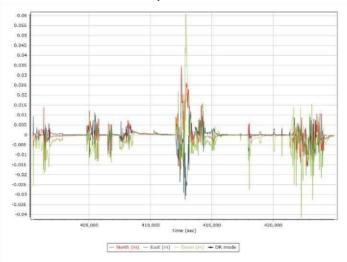


Project: Texas West Central LiDAR Date: April 20, 2018 Page 18 of 68

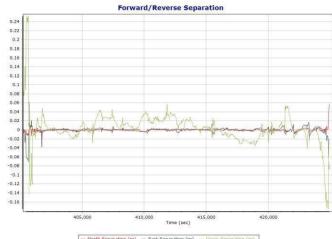
## Gyro Scale Error (ppm)



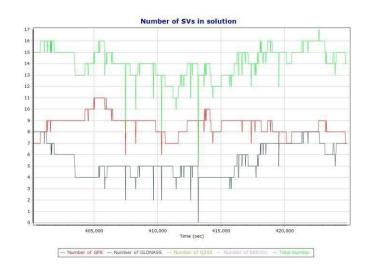
# MISSION 5 (030118)



Project: Texas West Central LiDAR Date: April 20, 2018 Page 19 of 68

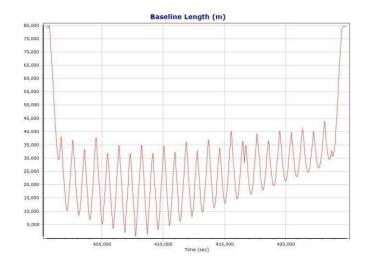


- North Separation (m) - East Separation (m)

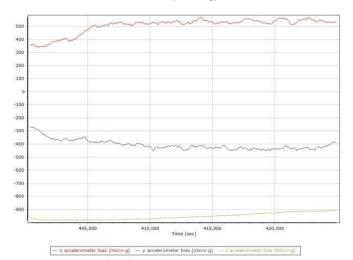




Project: Texas West Central LiDAR Date: April 20, 2018 Page 20 of 68

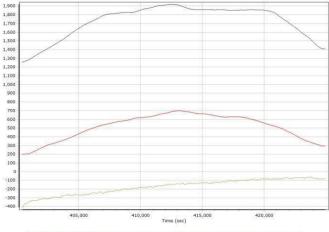


Accelerometer Bias (micro-g)



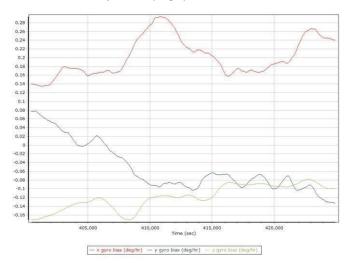
Project: Texas West Central LiDAR Date: April 20, 2018 Page 21 of 68

#### Accelerometer Scale Error (ppm)



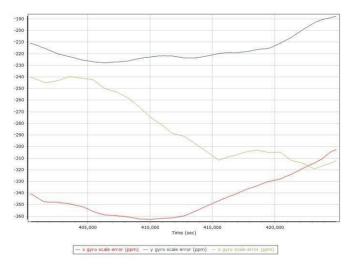
— x accelerometer scale error (ppm) — y accelerometer scale error (ppm) — z accelerometer scale error (ppm)





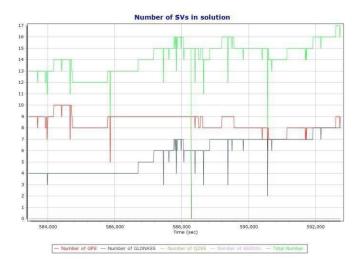
Project: Texas West Central LiDAR Date: April 20, 2018 Page 22 of 68

#### Gyro Scale Error (ppm)

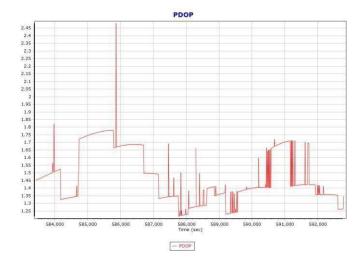


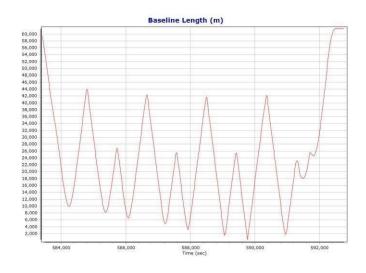
**MISSION 6 (031018A)** 



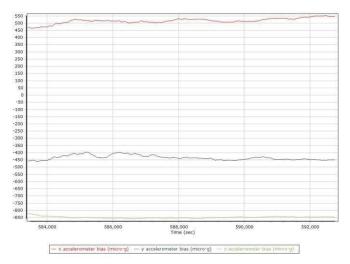


Project: Texas West Central LiDAR Date: May 10, 2018 Page 24 of 68



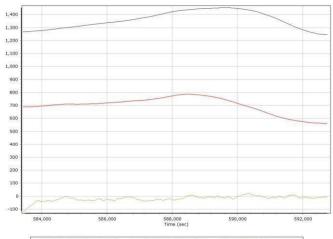


#### Accelerometer Bias (micro-g)



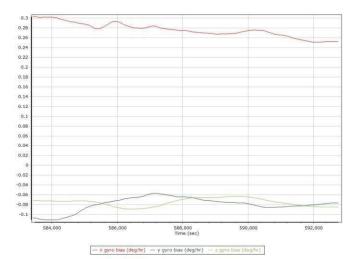
Project: Texas West Central LiDAR Date: May 10, 2018 Page 25 of 68

Accelerometer Scale Error (ppm)



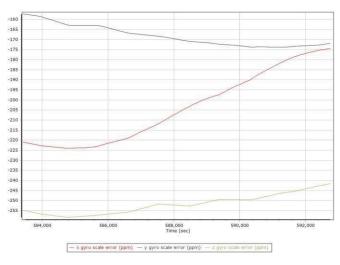
🕂 x accelerometer scale error (ppm) — y accelerometer scale error (ppm) — z accelerometer scale error (pp

Gyro Bias (deg/h)

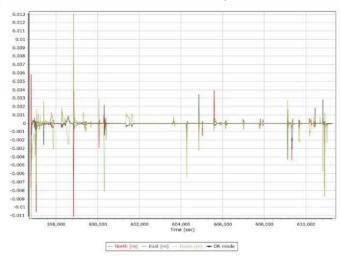


## Project: Texas West Central LiDAR Date: May 10, 2018 Page 26 of 68

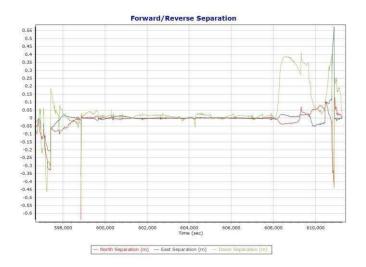


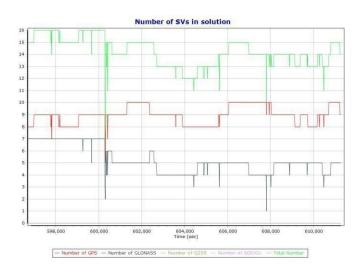


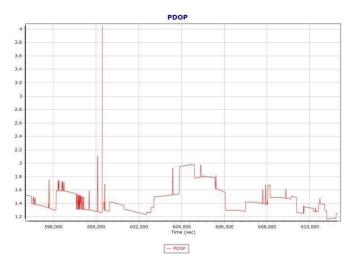
# MISSION 7 (031018B)



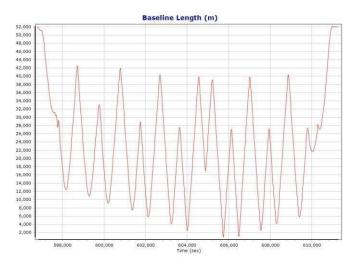
## Project: Texas West Central LiDAR Date: May 10, 2018 Page 27 of 68



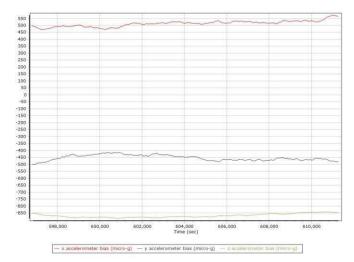




## Project: Texas West Central LiDAR Date: May 10, 2018 Page 28 of 68

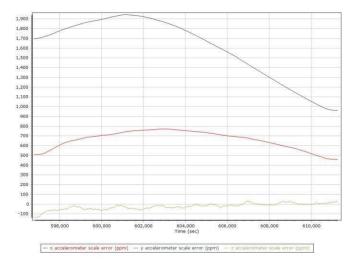


Accelerometer Bias (micro-g)

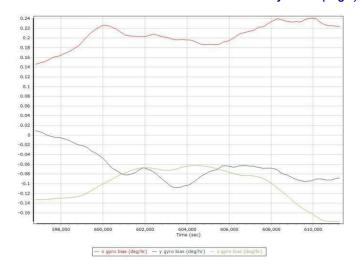


Project: Texas West Central LiDAR Date: May 10, 2018 Page 29 of 68

## Accelerometer Scale Error (ppm)

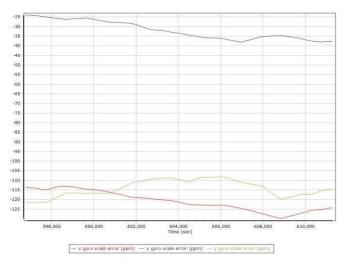


Gyro Bias (deg/h)

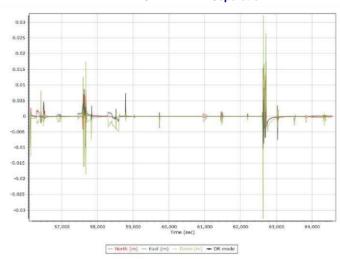


## Project: Texas West Central LiDAR Date: May 10, 2018 Page 30 of 68

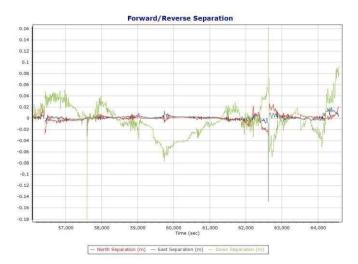
#### Gyro Scale Error (ppm)

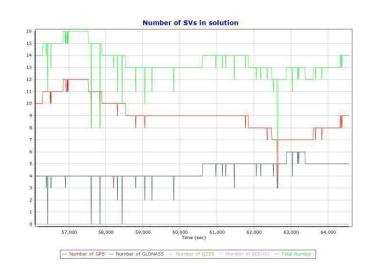


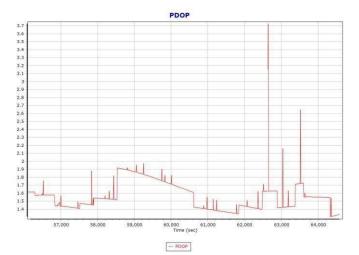
## **MISSION 8 (031118)**



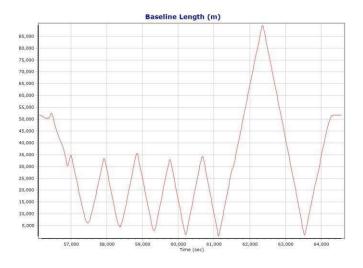




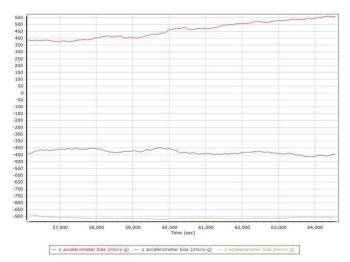




## Project: Texas West Central LiDAR Date: May 10, 2018 Page 32 of 68

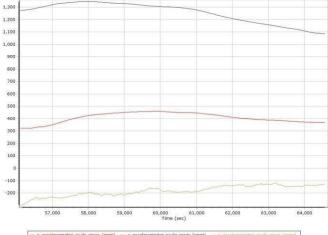


Accelerometer Bias (micro-g)



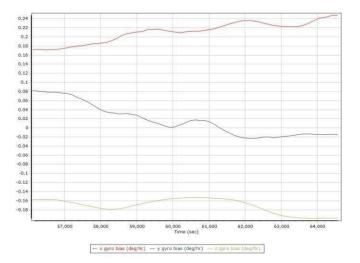
Project: Texas West Central LiDAR Date: May 10, 2018 Page 33 of 68

## Accelerometer Scale Error (ppm)



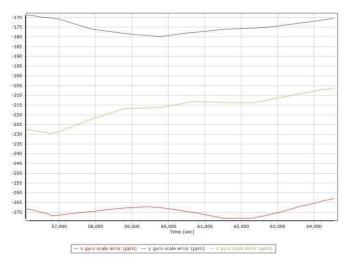
— x accelerometer scale error (ppm) — y accelerometer scale error (ppm) — z accelerometer scale error (ppm)

#### Gyro Bias (deg/h)

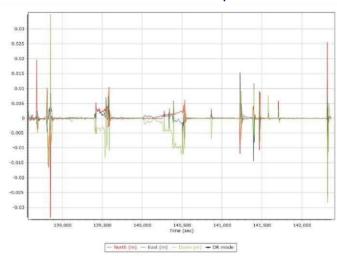


Project: Texas West Central LiDAR Date: May 10, 2018 Page 34 of 68

## Gyro Scale Error (ppm)

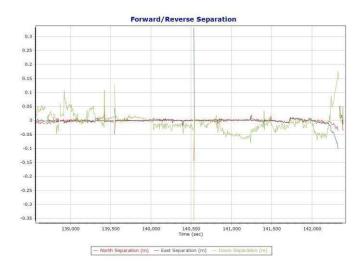


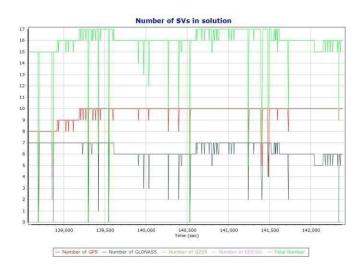
# MISSION 9 (031218)

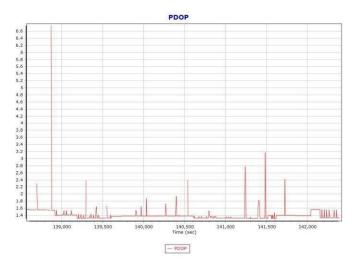




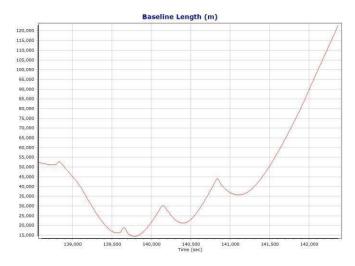
## Project: Texas West Central LiDAR Date: May 10, 2018 Page 35 of 68



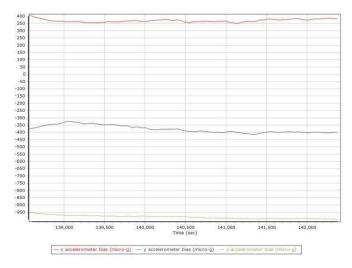




## Project: Texas West Central LiDAR Date: May 10, 2018 Page 36 of 68

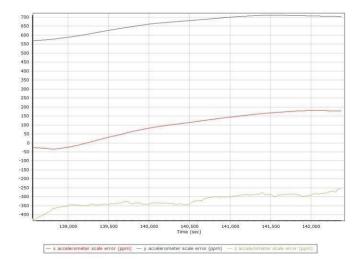


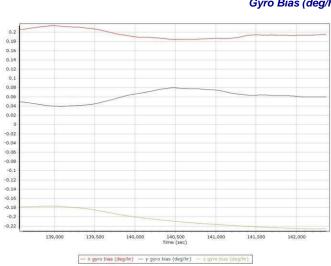
Accelerometer Bias (micro-g)



Accelerometer Scale Error (ppm)

# Project: Texas West Central LiDAR Date: May 10, 2018 Page $37 ext{ of } 68$

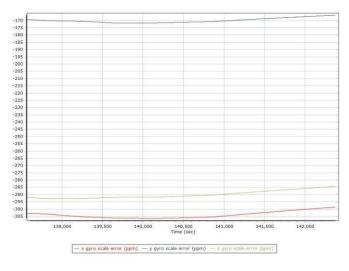




## Gyro Bias (deg/h)

Project: Texas West Central LiDAR Date: May 10, 2018 Page 38 of 68

## Gyro Scale Error (ppm)



## **GPS Processing Blocks 14**

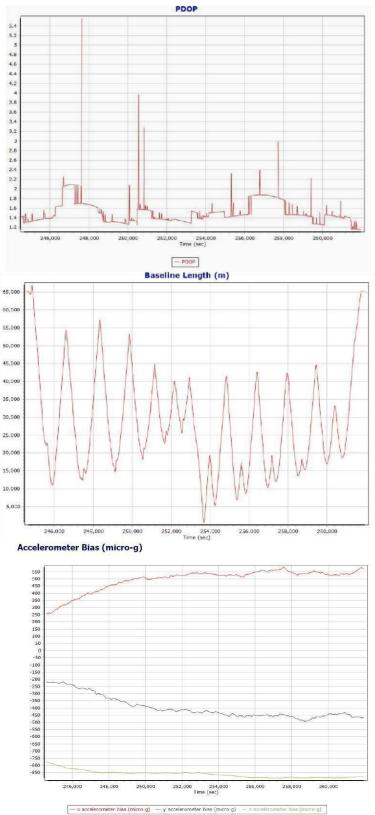
GPS and IMU Processing Reports MISSION 1 (032018) Project: Texas West Central LiDAR Date: May 10, 2018 Page 39 of 68

### SBET IAKAR Separation



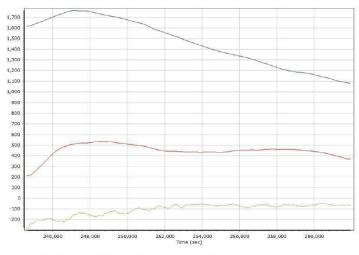
- Number of GPS - Number of GLONASS - Number of QZSS - Number of BEIDOU - Total Number

Project: Texas West Central LiDAR Date: May 10, 2018 Page 40 of 68



Project: Texas West Central LiDAR Date: May 10, 2018 Page **41** of **68** 

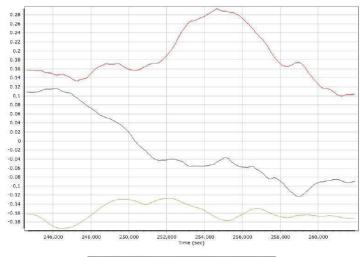


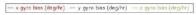


— x accelerometer scale error (ppm) — γ accelerometer scale error (ppm) — z accelerometer scale error (ppm)

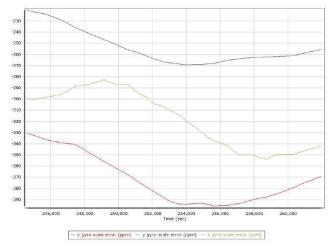
Project: Texas West Central LiDAR Date: May 10, 2018 Page 42 of 68

## Gyro Bias (deg/h)





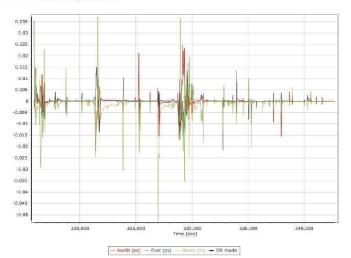




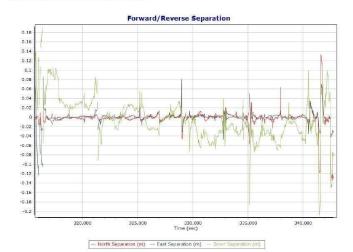
MISSION 2 (032118)

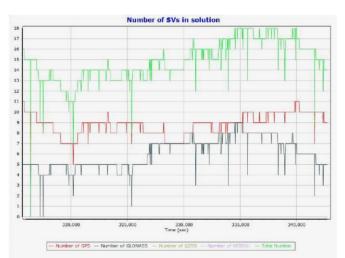
Project: Texas West Central LiDAR Date: May 10, 2018 Page **43** of **68** 

### SBET IAKAR Separation

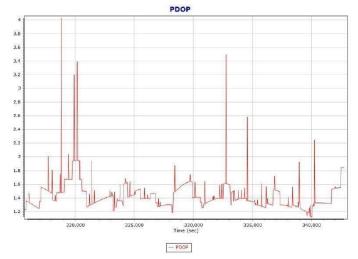


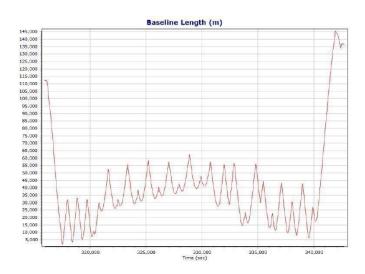
#### Forward/Reverse Separation



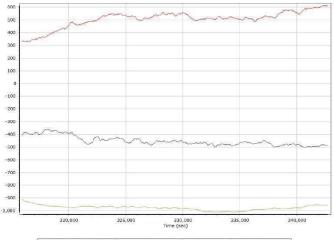


Project: Texas West Central LiDAR Date: May 10, 2018 Page 44 of 68



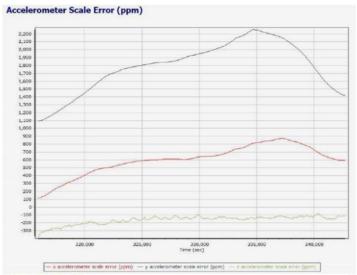


Accelerometer Bias (micro-g)

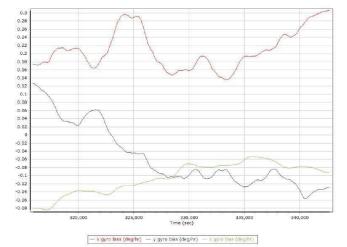


🕂 x accelerometer bias (micro-g) — y accelerometer bias (micro-g) — z accelerometer bias (micro-g)

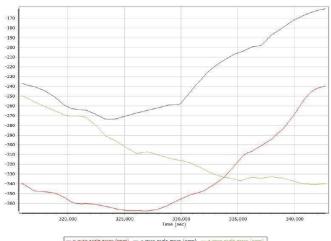
Project: Texas West Central LiDAR Date: May 10, 2018 Page 45 of 68











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

Date: May 10, 2018 Page 9 of 28 Project: Texas West Central LiDAR Date: May 10, 2018 Page 47 of

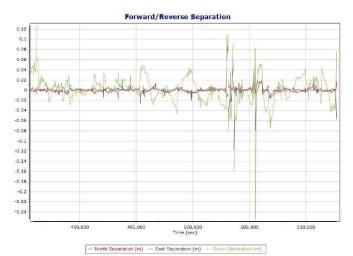
Date: May 10, 2018 Page 9 of 25

MISSION 3 (033018)

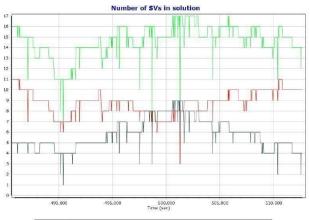
## SBET IAKAR Separation



## Forward/Reverse Separation



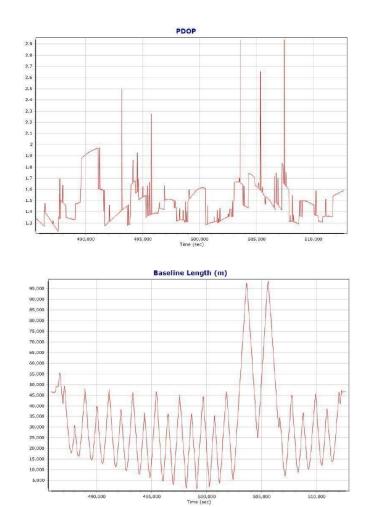




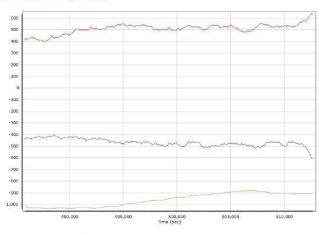
- Number of GPS - Number of GLONASS - Number of QZSS - Number of BEIDOU - Total Number

Page 49 of

28



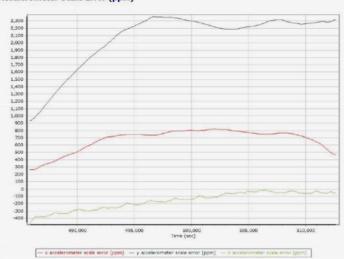
Accelerometer Bias (micro-g)



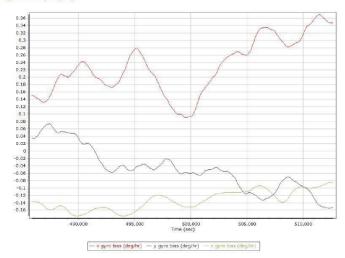
— x accelerometer bias (micro-g) — y accelerometer bias (micro-g) — z accelerometer bias (micro-g)



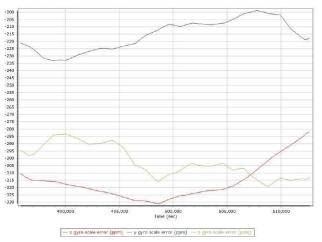
Accelerometer Scale Error (ppm)



Gyro Bias (deg/h)



## Gyro Scale Error (ppm)



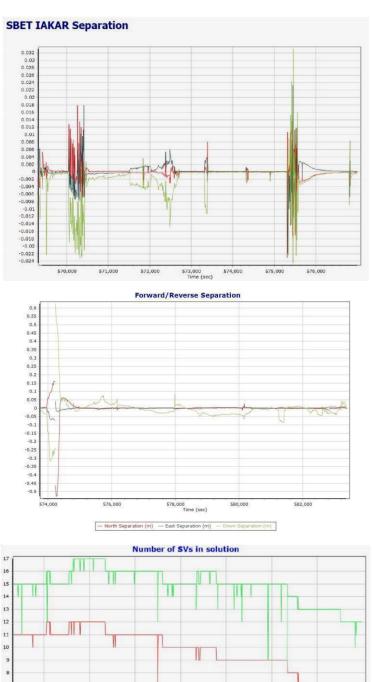
Page 51 of

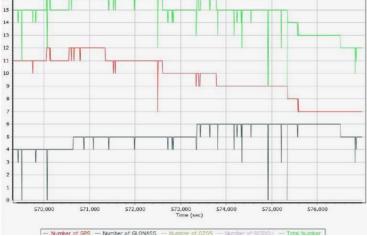
Page 14

Date: May 10, 2018 Page 13 of 25

MISSION 4 (033118)

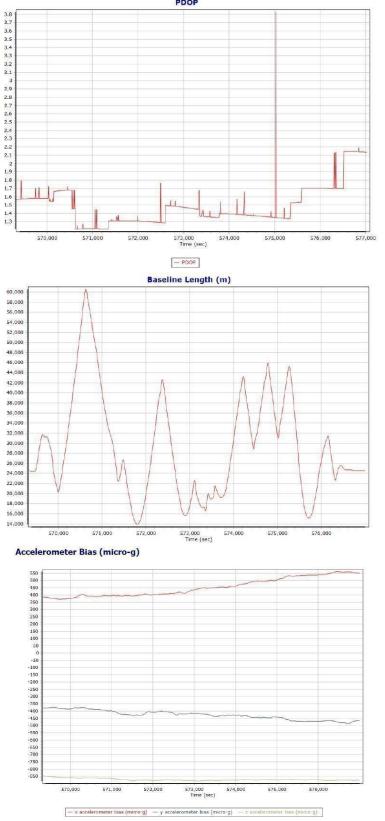






Date: May 10, 2018 Page 15 of 25

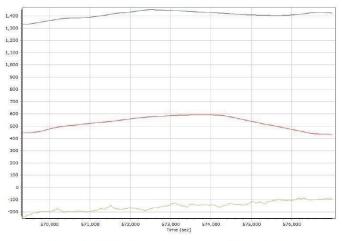
Project: Texas West Central LiDAR Date: May 10, 2018 Page 16

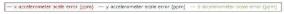




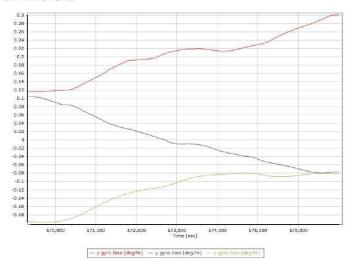
Page 16 of 25

### Accelerometer Scale Error (ppm)

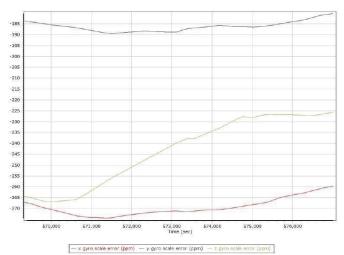


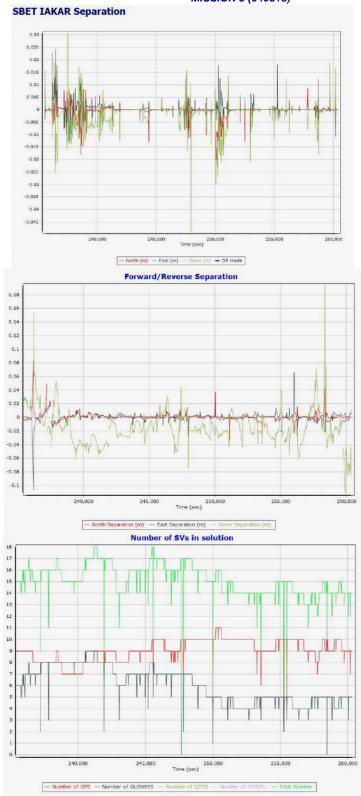


#### Gyro Bias (deg/h)





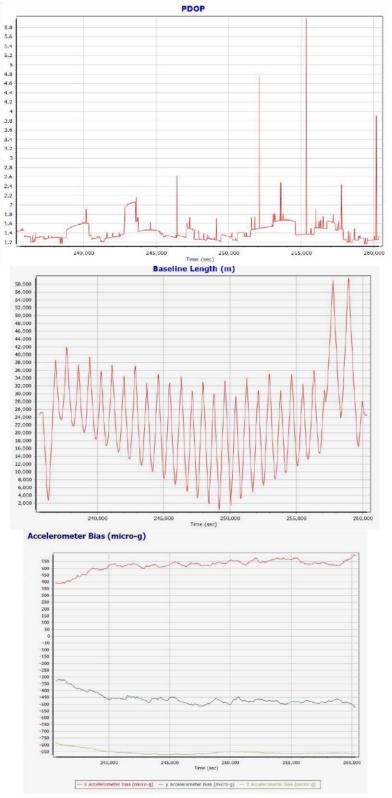




MISSION 5 (040318)

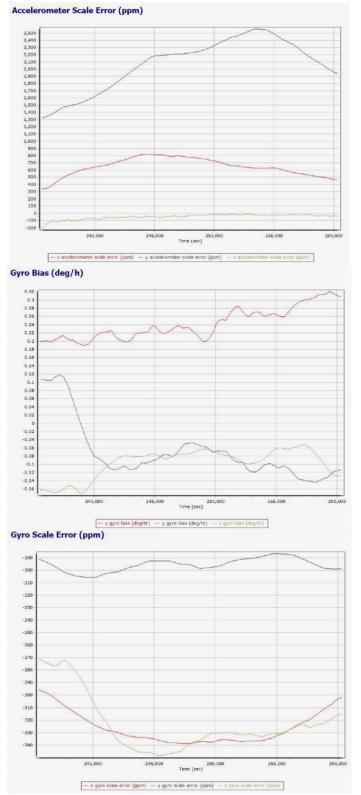
Date: May 10, 2018 Page 19 of 25 Date: May 10, 2018

 $\begin{array}{l} \mbox{Project: Texas West Central LiDAR} \\ \mbox{Page 58 of 66} \end{array}$ 



Date: May 10, 2018 Page 21 of 25 Date: May 10, 2018 Page 60 of 66

Project: Texas West Central LiDAR



Project: Texas West Central LiDAR

Date: May 10, 2018 Page 62 of 66

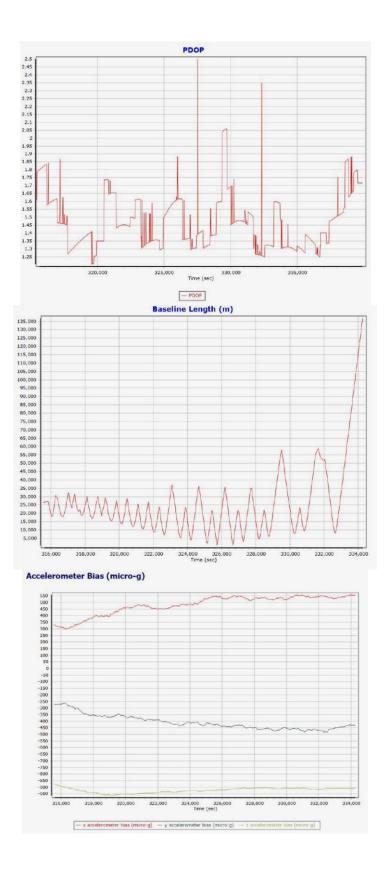
MISSION 6 (040418)

### SBET IAKAR Separation



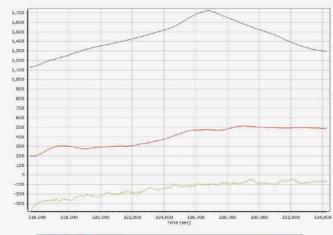






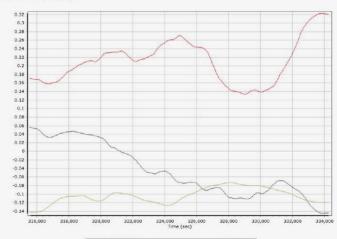
Date: April 20, 2018 Page 65 of 66

#### Accelerometer Scale Error (ppm)



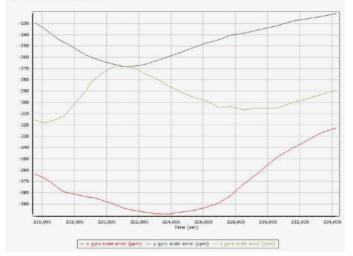
- x accelerometer scale error (ppm) - y accelerometer scale error (ppm) - z accelerometer scale error (ppm)











Date: April 20, 2018 Page 66 of 66