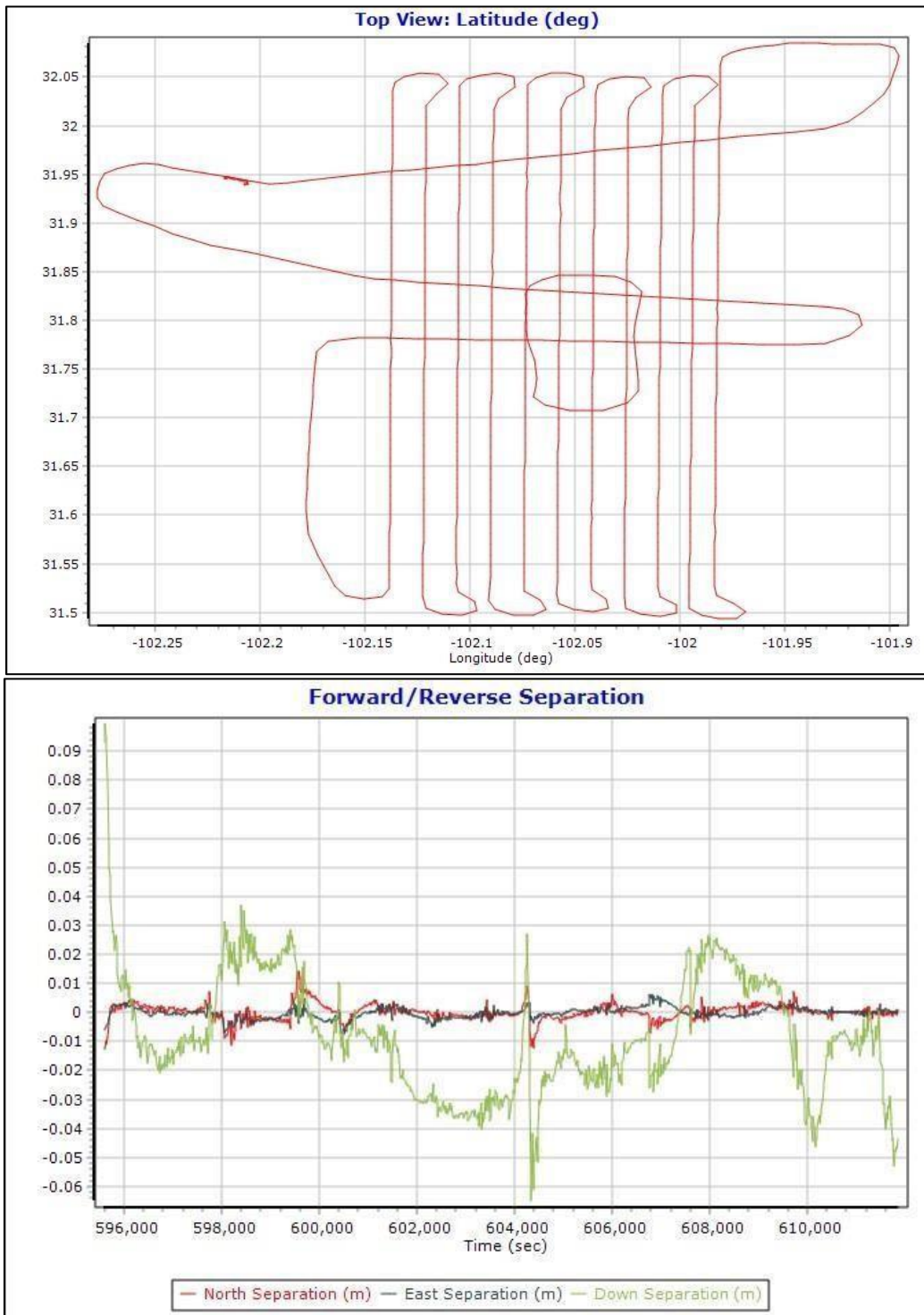
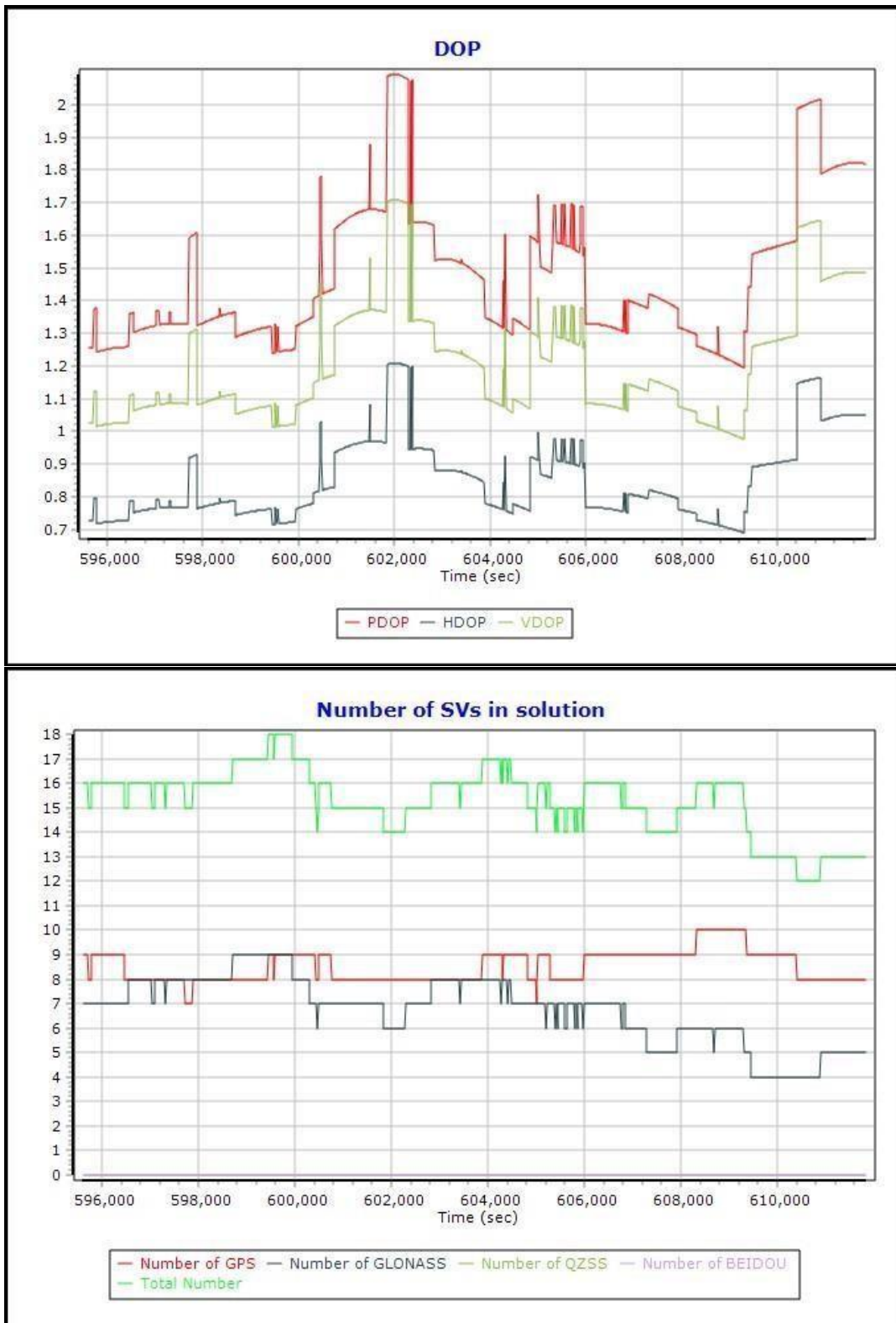


## **Appendix D: GPS Processing Block 04 and Block 05**

### **Block 04**

## GPS and IMU Processing Reports for Each Mission FEBRUARY 10, 2018





Processing Summary Information

Processing Summary Information Program: POSPac MMS

Version: 8.1.6388.30062

Project: \\sa\data\riegl\18047\20180210\_TX

Solution Type: IN-Fusion SmartBase

Fixed: 16268 (99.99%)

Float: 0 (0.00%)

No Solution: 1 (0.01%)

Number of Epochs:

Total in RAW file: 16277

No processed position: 9

Fwd/Rev Separation RMS Values (m):

North: 0.002

East: 0.002

Height: 0.017

Fwd/Rev Sep. RMS for 25%-75% weighting (m): 8138 occurrences

North: 0.002

East: 0.002

Height: 0.014

Quality Number Percentages:

Q 0: 100.0 %

Position Standard Deviation Percentages (%):

0.00 - 0.10 m: 100

0.10 - 0.30 m: 0

0.30 - 1.00 m: 0  
 1.00 - 5.00 m: 0  
 5.00 m + over: 0

Percentages of epochs with DD\_DOP over 10.00: 0 %

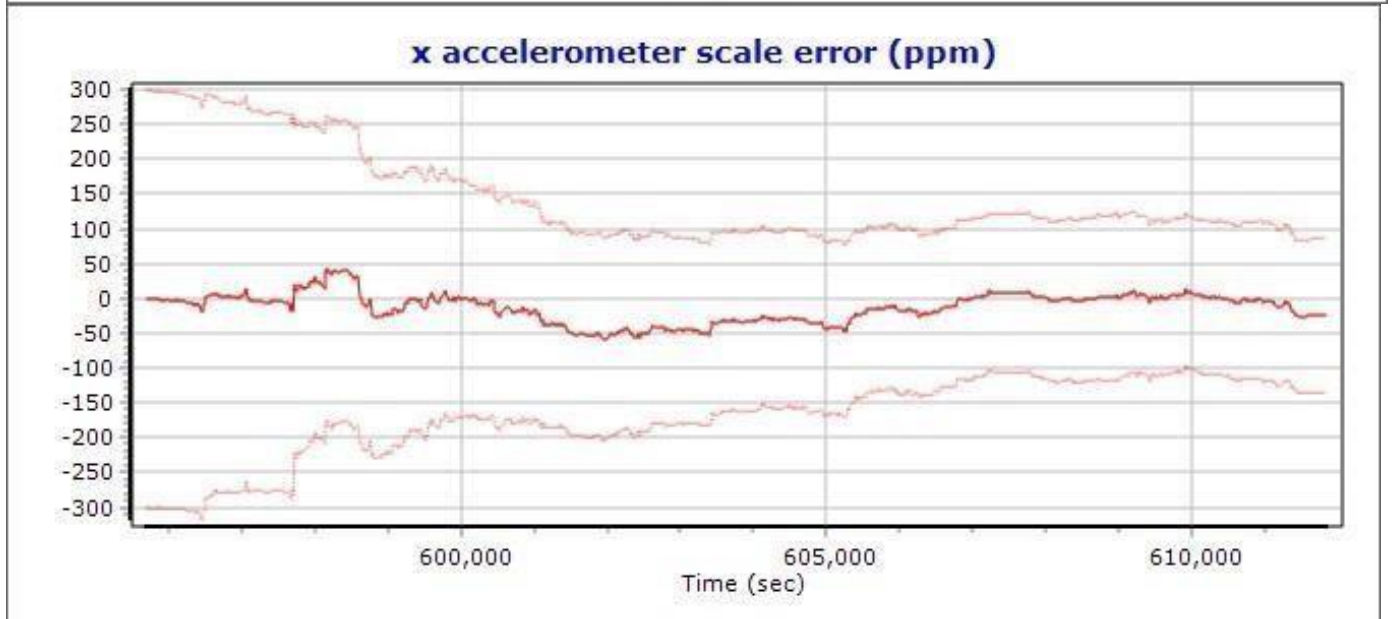
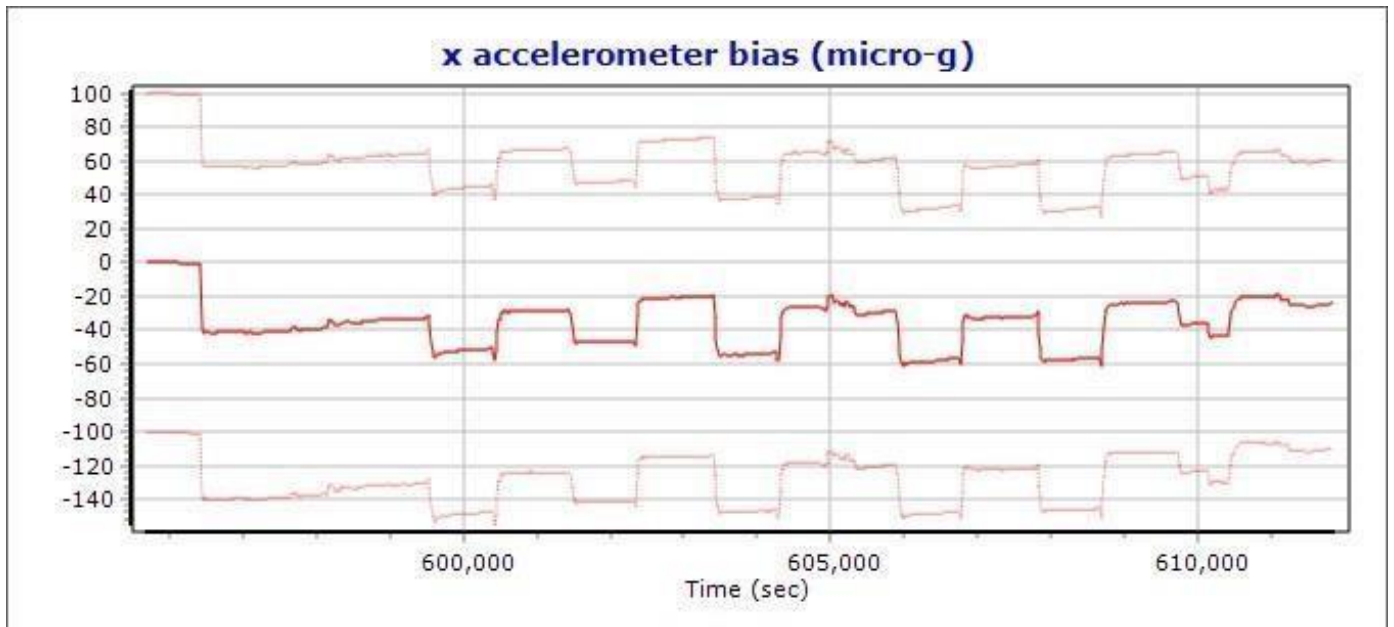
DOP over Tol: 1.49%

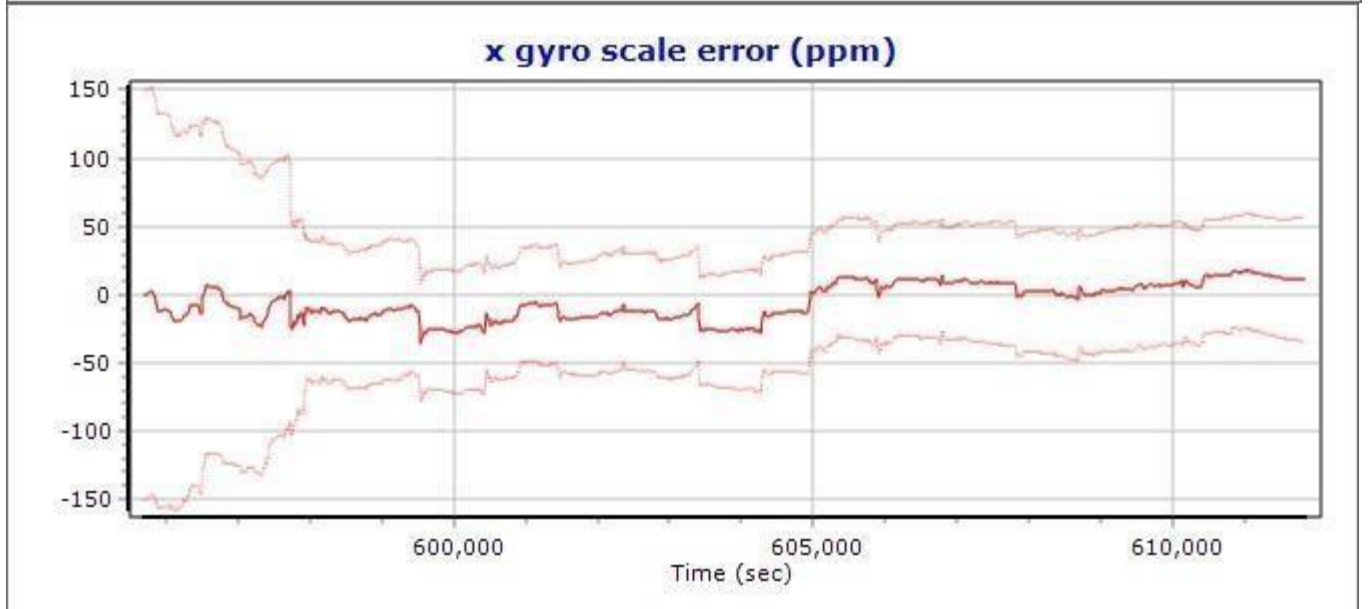
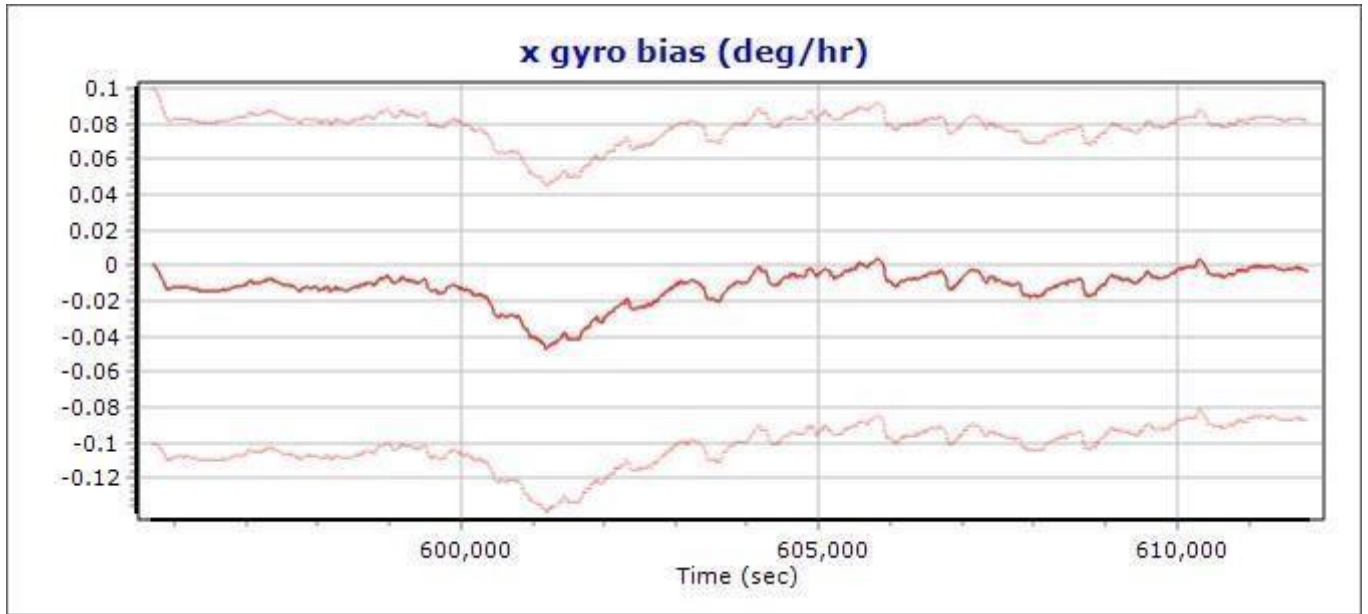
Baseline Distances (km):

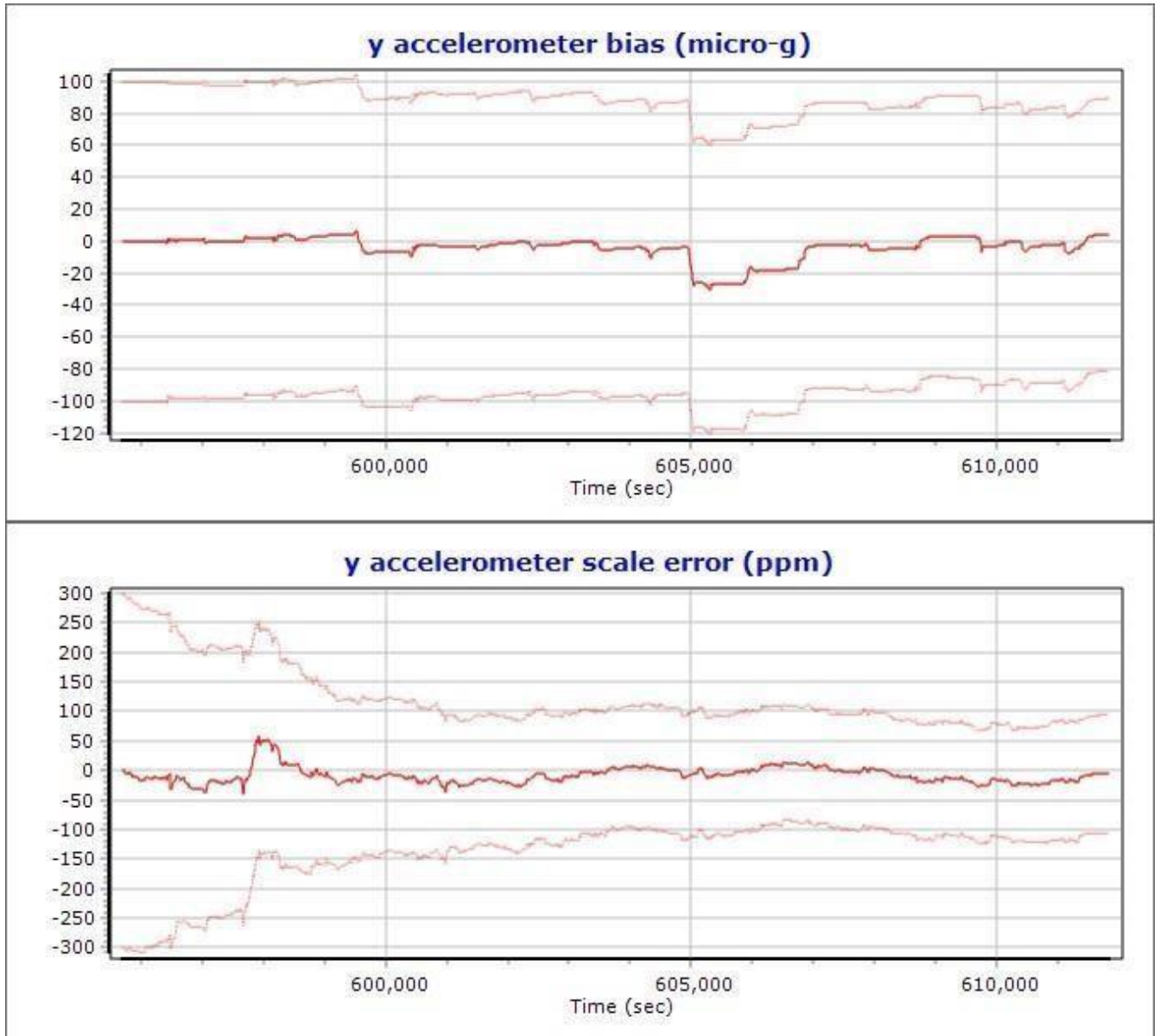
Maximum: 37.45  
 Minimum: 0.49  
 Average: 17.31  
 First Epoch: 17.8  
 Last Epoch: 17.81

**CORS Base Stations**

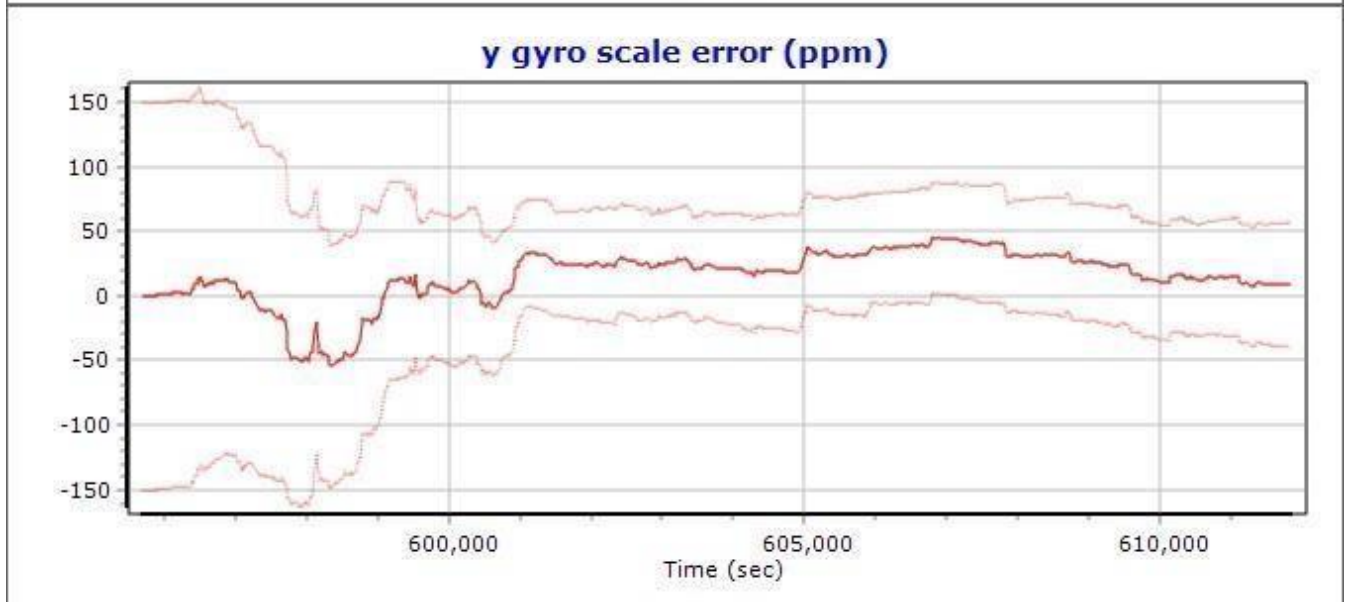
<b>Station</b>	<b>Original</b>			<b>Adjusted</b>		
TXSO	N32°08'28.21594"	W101°48'27.40138"	801.518	N32°08'28.21640"	W101°48'27.40219"	801.528
TXOE	N31°52'24.51759"	W102°18'50.27493"	856.094			
TXCE	N31°25'22.08559"	W102°21'27.22542"	754.414	N31°25'22.08573"	W102°21'27.22586"	754.407
TXAD	N32°18'28.83162"	W102°32'36.98730"	946.850	N32°18'28.83181"	W102°32'36.98758"	946.866
txbl	N31°11'33.83463"	W101°28'25.21493"	804.756	N31°11'33.84900"	W101°28'25.25640"	803.579
txbg	N32°16'03.21215"	W101°28'32.92203"	737.772	N32°16'03.22730"	W101°28'32.96382"	736.638

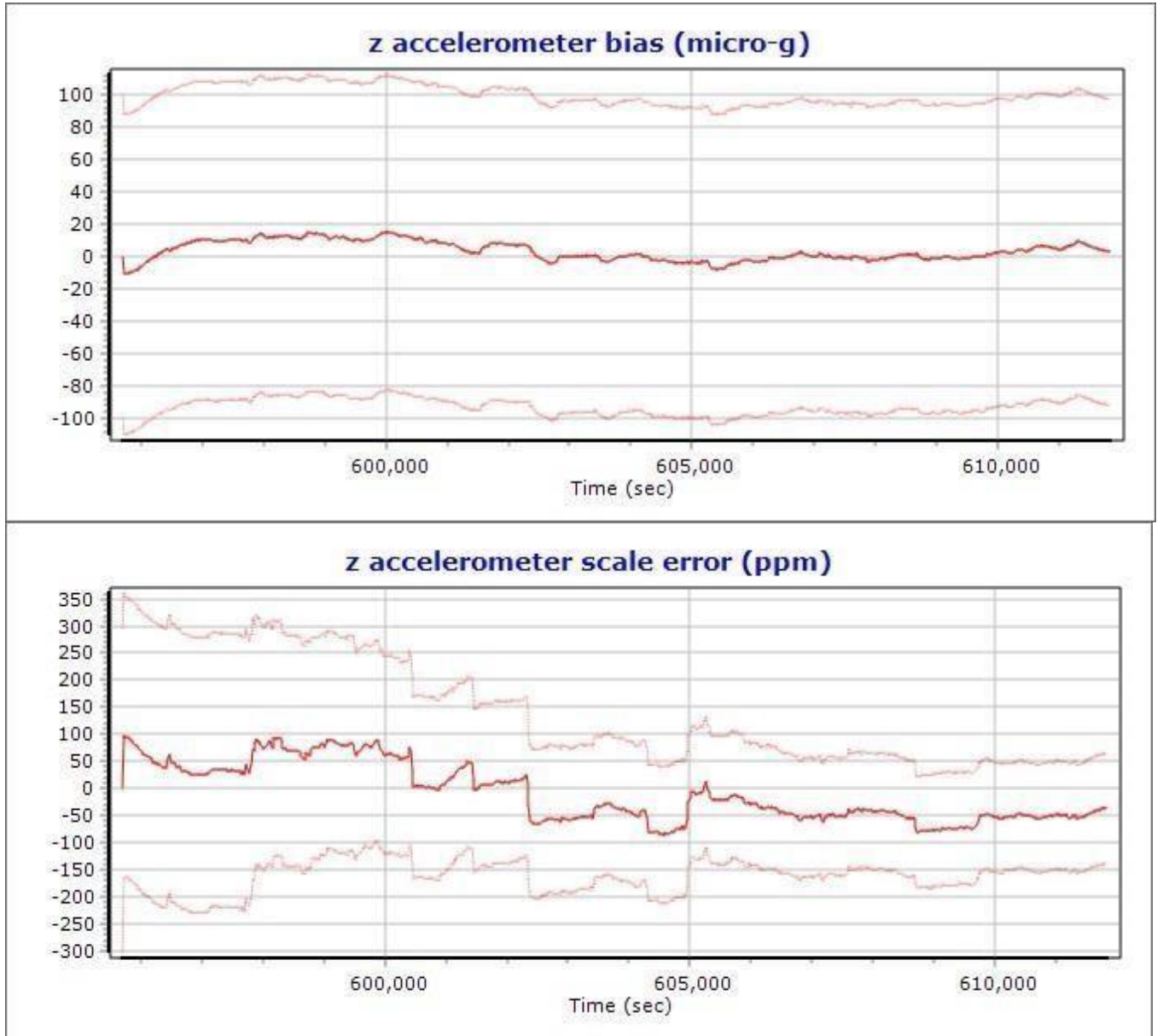


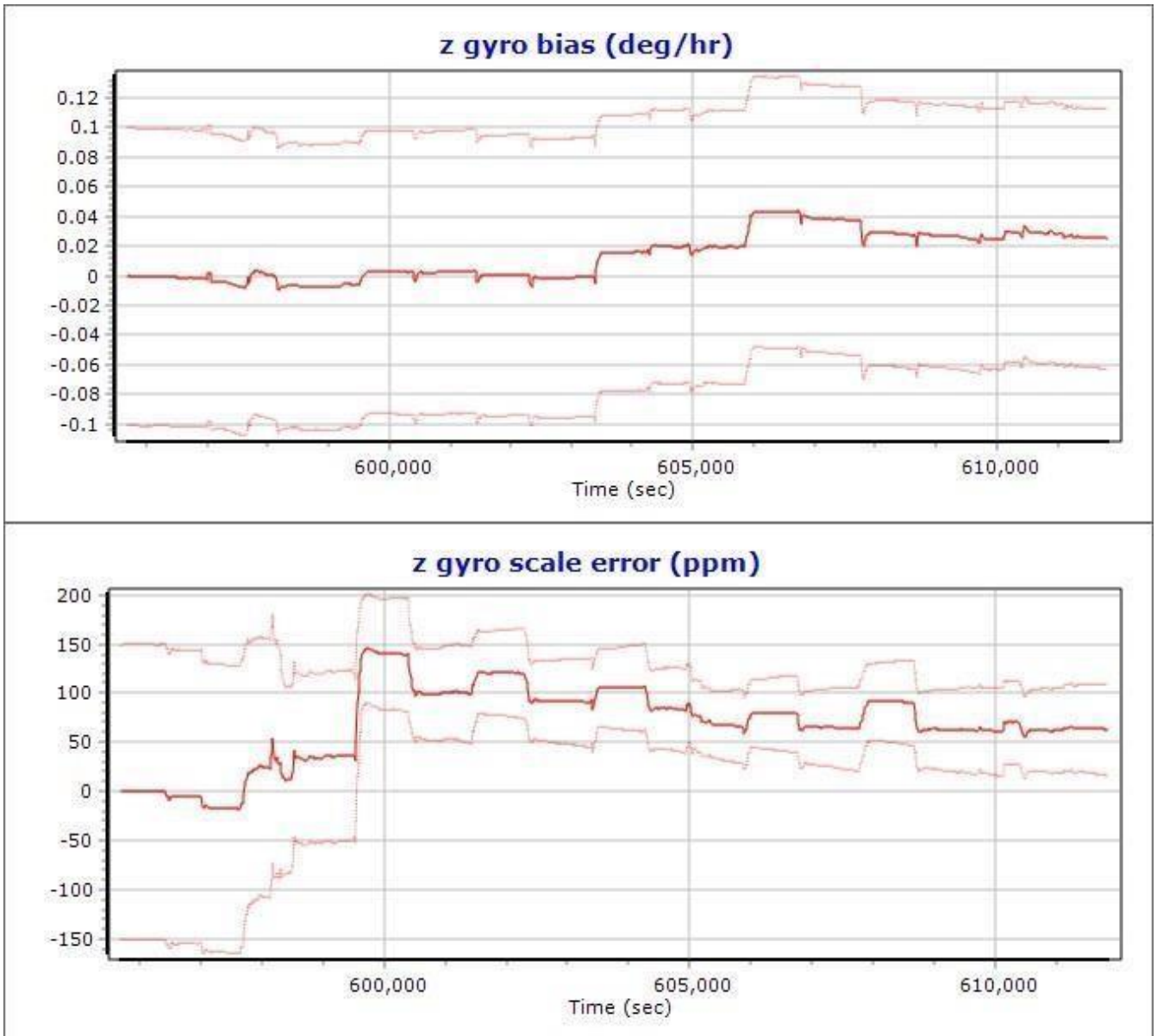




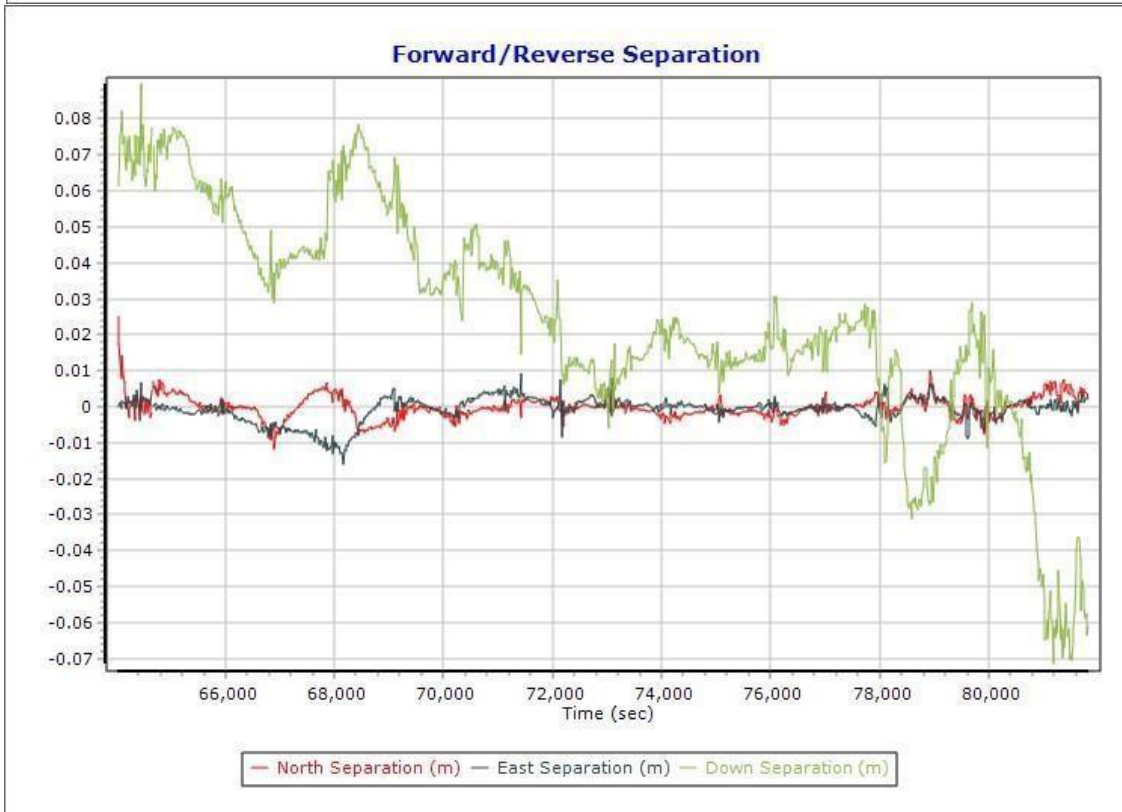
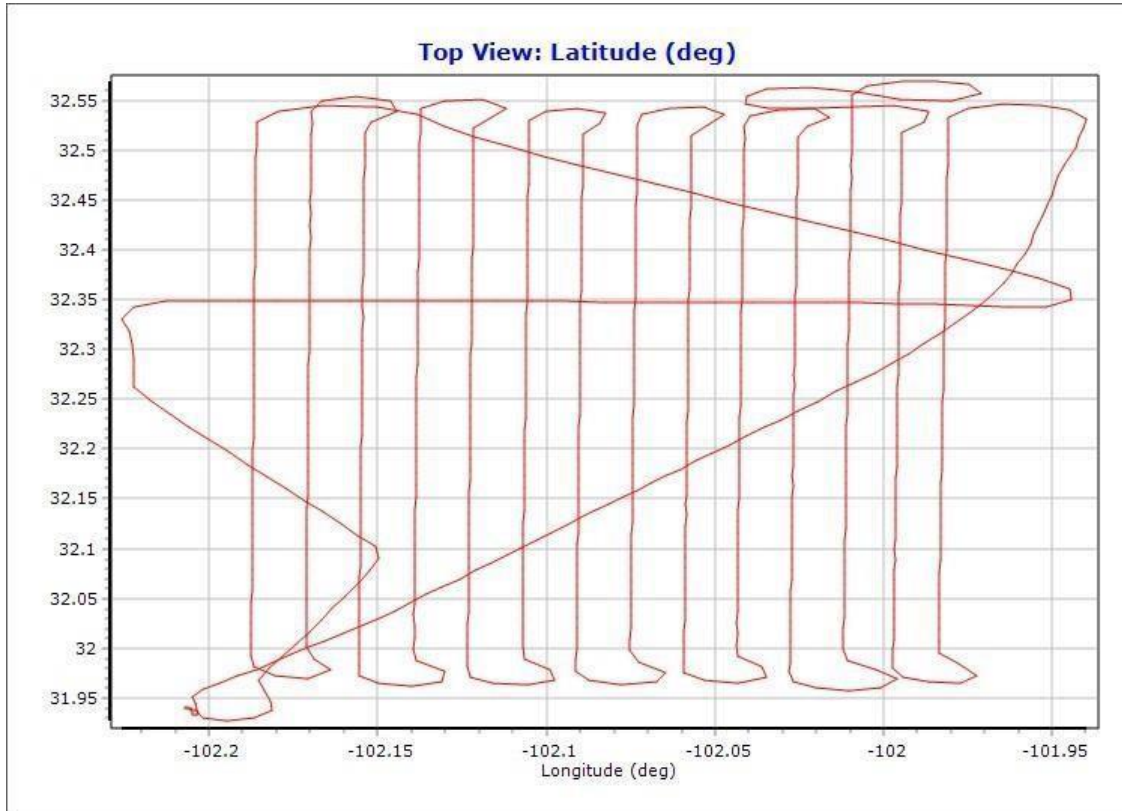


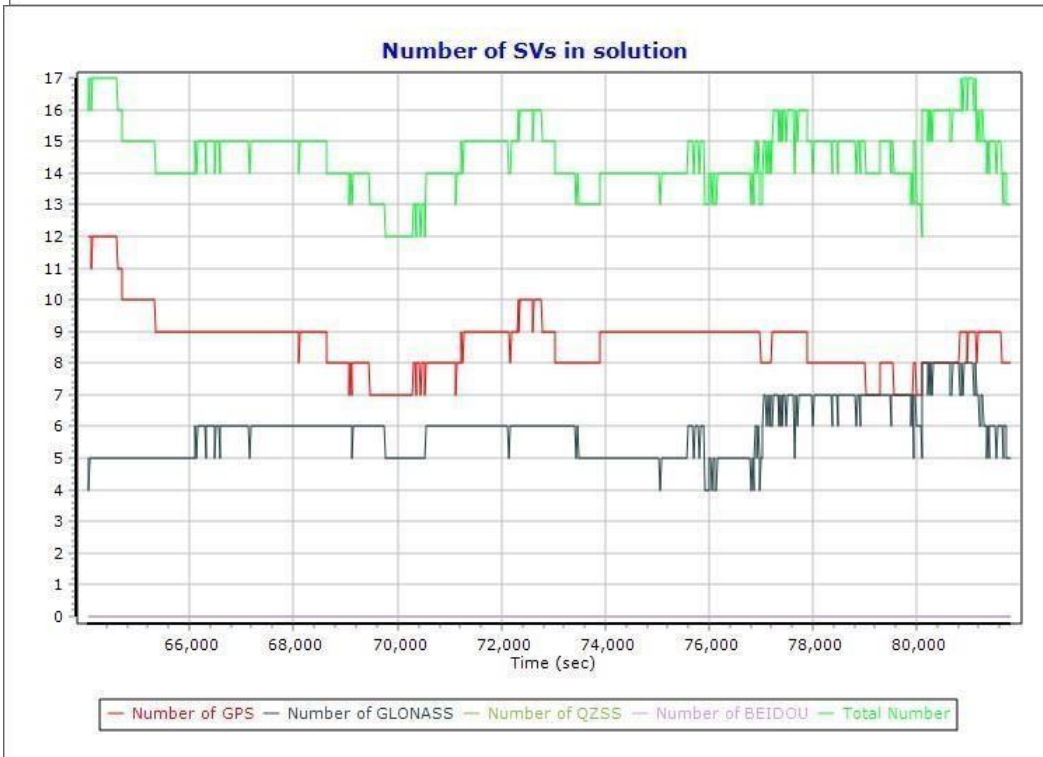
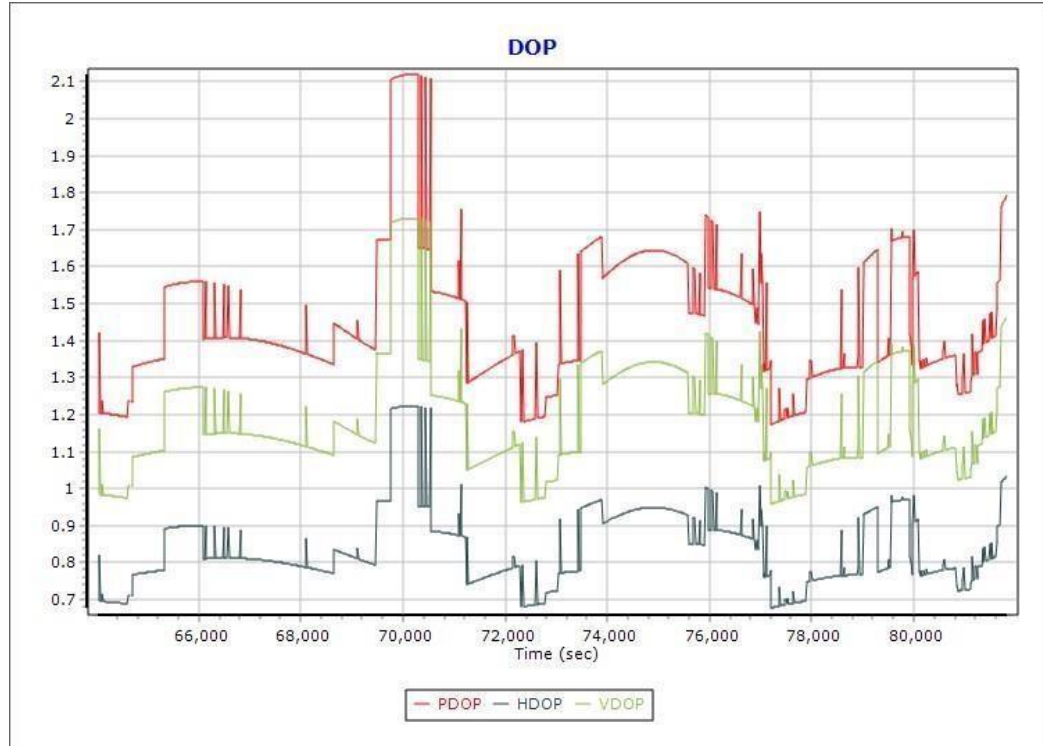






**FEBRUARY 11, 2018**





## Processing Summary Information

### Processing Summary Information

Program: POSpac MMS  
Version: 8.1.6388.30062  
Project: \\sa\data\riegl\18047\20180211\_TX

Solution Type: IN-Fusion SmartBase

Fixed: 17804	(99.99%)
Float: 0	(0.00%)
No Solution: 1	(0.01%)

Number of Epochs:

Total in RAW file: 17825  
No processed position: 21

Fwd/Rev Separation RMS Values (m):

North: 0.003  
East: 0.003  
Height: 0.040

Fwd/Rev Sep. RMS for 25%-75% weighting (m): 8912 occurrences

North: 0.002  
East: 0.002  
Height: 0.031

Quality Number Percentages:

Q 0: 100.0 %

Position Standard Deviation Percentages (%):

0.00 - 0.10 m: 100  
 0.10 - 0.30 m: 0  
 0.30 - 1.00 m: 0  
 1.00 - 5.00 m: 0  
 5.00 m + over: 0

Percentages of epochs with DD\_DOP over 10.00: 0 %

DOP over Tol: 1.46%

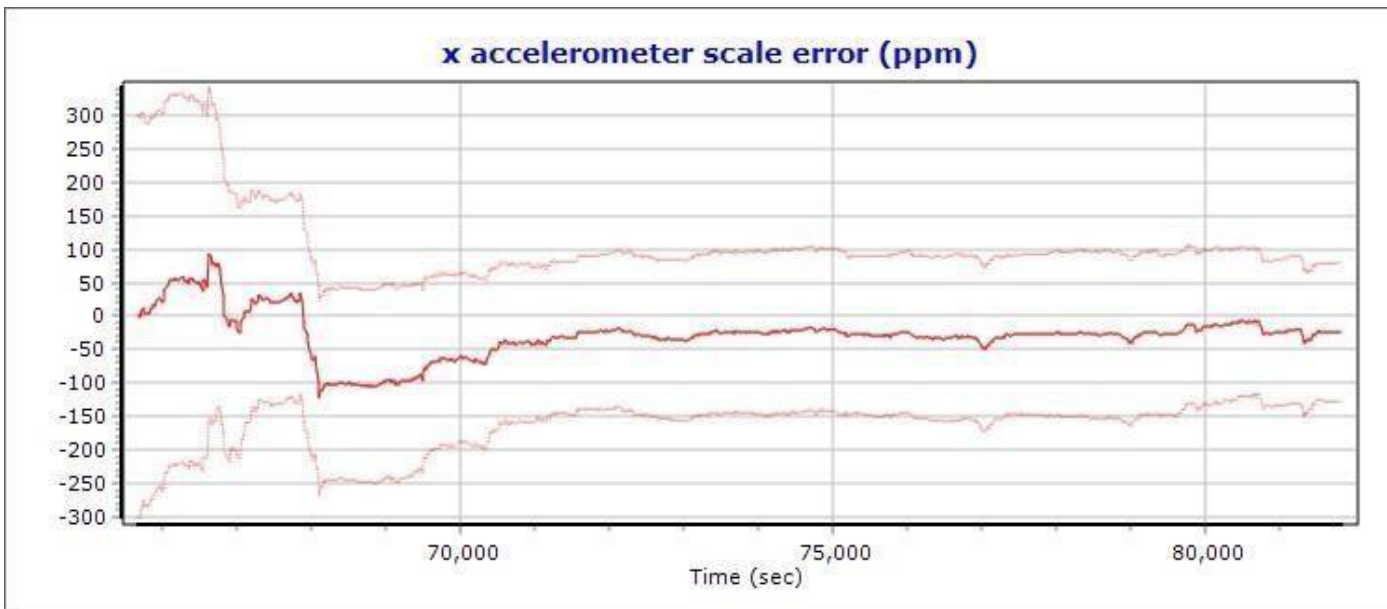
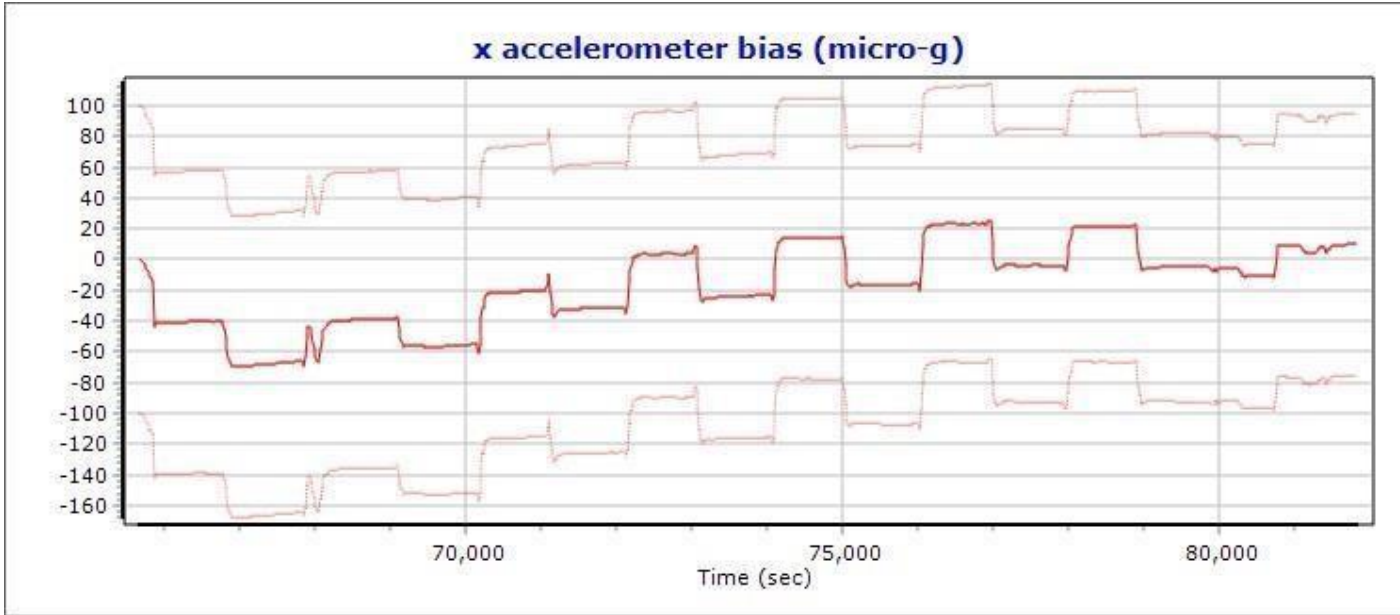
Baseline Distances (km):

Maximum: 38.08  
 Minimum: 0.49  
 Average: 19.71  
 First Epoch: 37.02  
 Last Epoch: 37.01

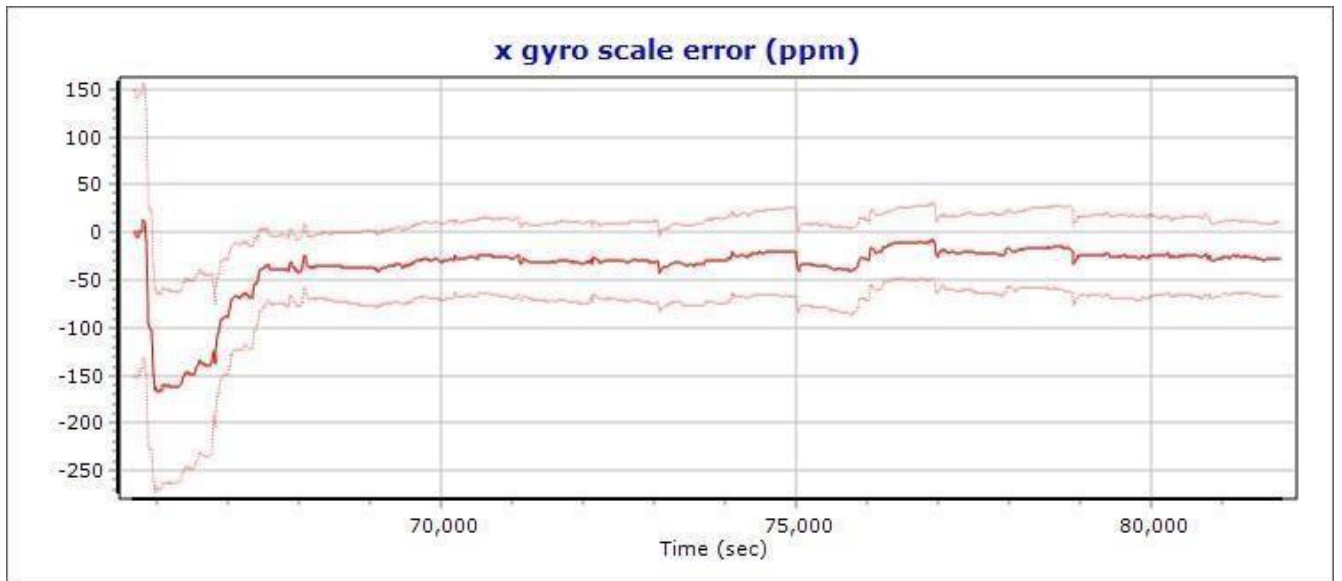
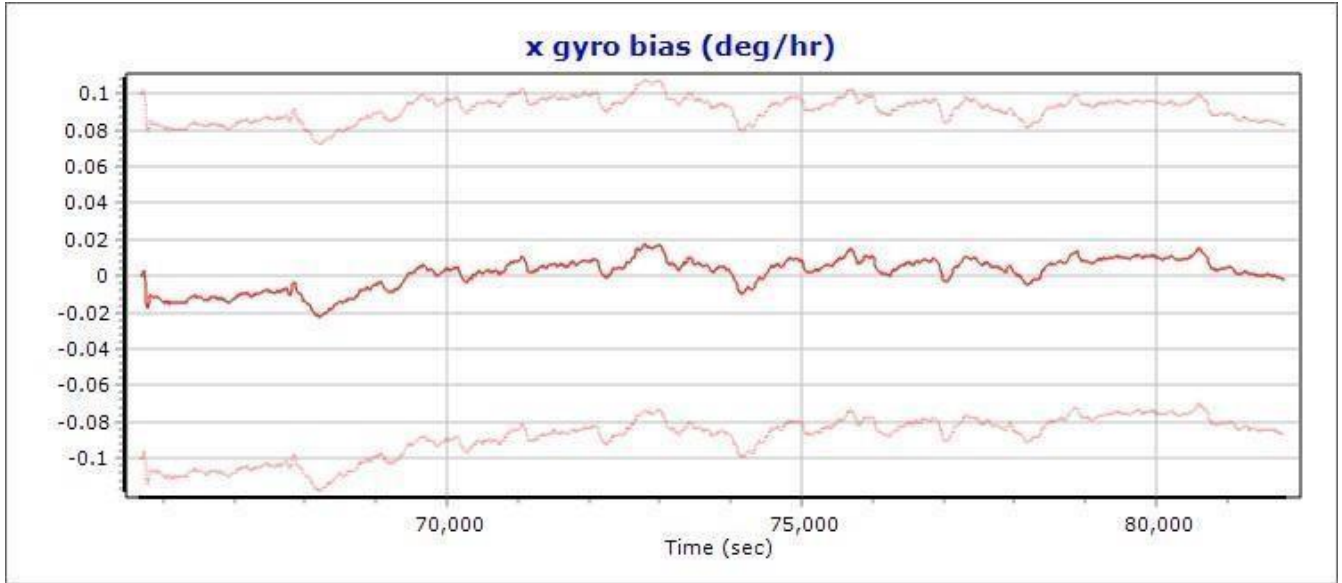
### CORS Base Stations

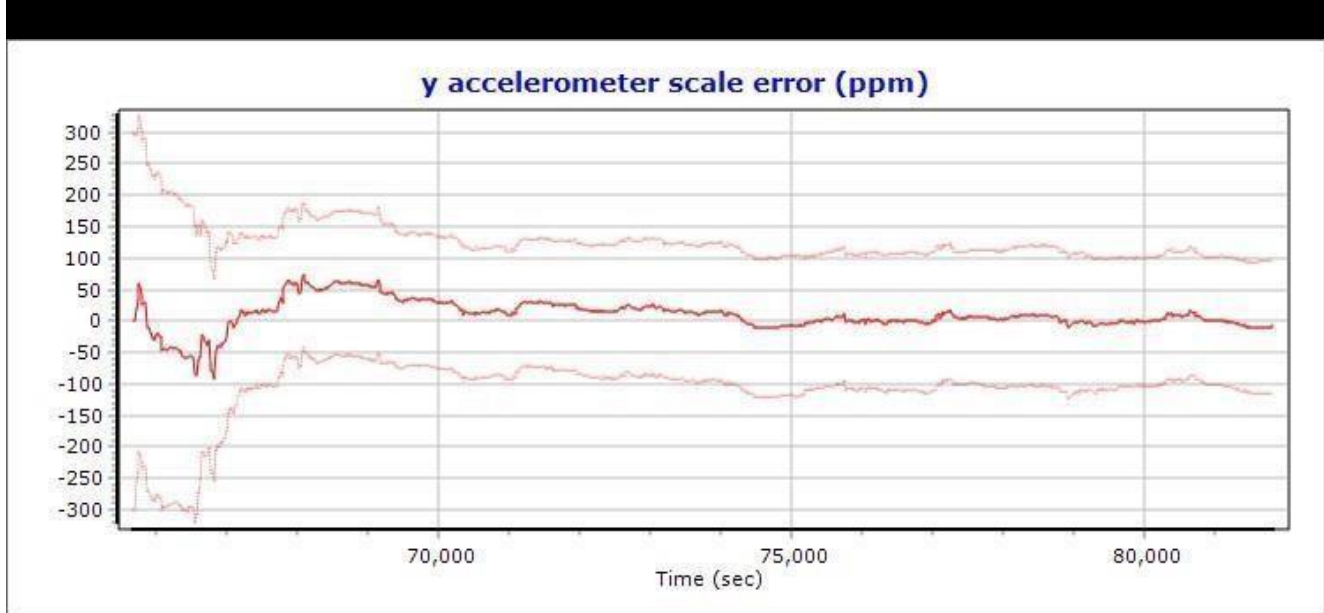
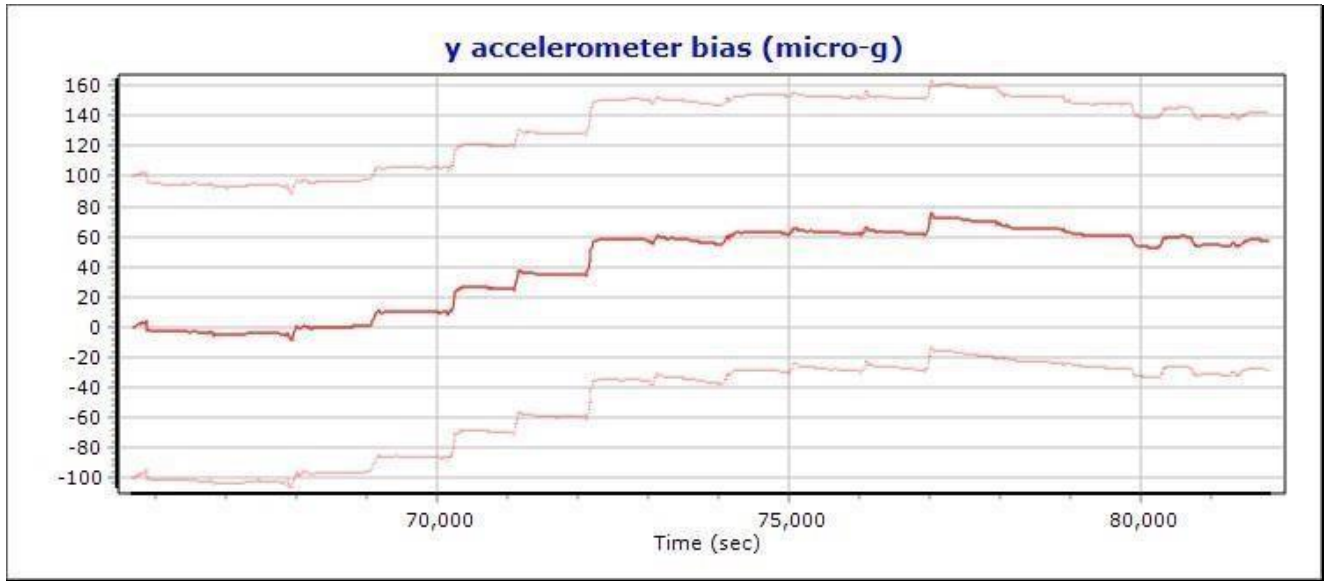
Station	Original			Adjusted		
	N	E	U	N	E	U
TXSC	N31°50'29.77677"	W101°00'38.30280"	679.283	N31°50'29.77663"	W101°00'38.30249"	679.293
TXP2	N33°10'55.80259"	W102°49'05.38270"	1089.713	N33°10'55.80214"	W102°49'05.38244"	1089.726
TXP1	N33°10'57.08881"	W101°22'47.67644"	767.614	N33°10'57.08841"	W101°22'47.67598"	767.590
TXMC	N31°07'55.57702"	W102°13'56.82357"	724.080	N31°07'55.57664"	W102°13'56.82342"	724.074
TXLU	N33°32'07.50652"	W101°50'34.20529"	956.019	N33°32'07.50627"	W101°50'34.20510"	956.005
TXLA	N32°45'40.91675"	W101°56'38.21350"	891.645	N32°45'40.91645"	W101°56'38.21295"	891.629
TXMH	N31°33'27.83676"	W102°53'38.43949"	773.391	N31°33'27.83646"	W102°53'38.43931"	773.386
TXKM	N31°50'33.37111"	W103°06'31.30047"	847.990	N31°50'33.37098"	W103°06'31.30015"	847.999
TXBL	N31°11'33.83463"	W101°28'25.21493"	804.756	N31°11'33.84829"	W101°28'25.25601"	803.578
TXBG	N32°16'03.21215"	W101°28'32.92203"	737.772	N32°16'03.22679"	W101°28'32.96339"	736.635

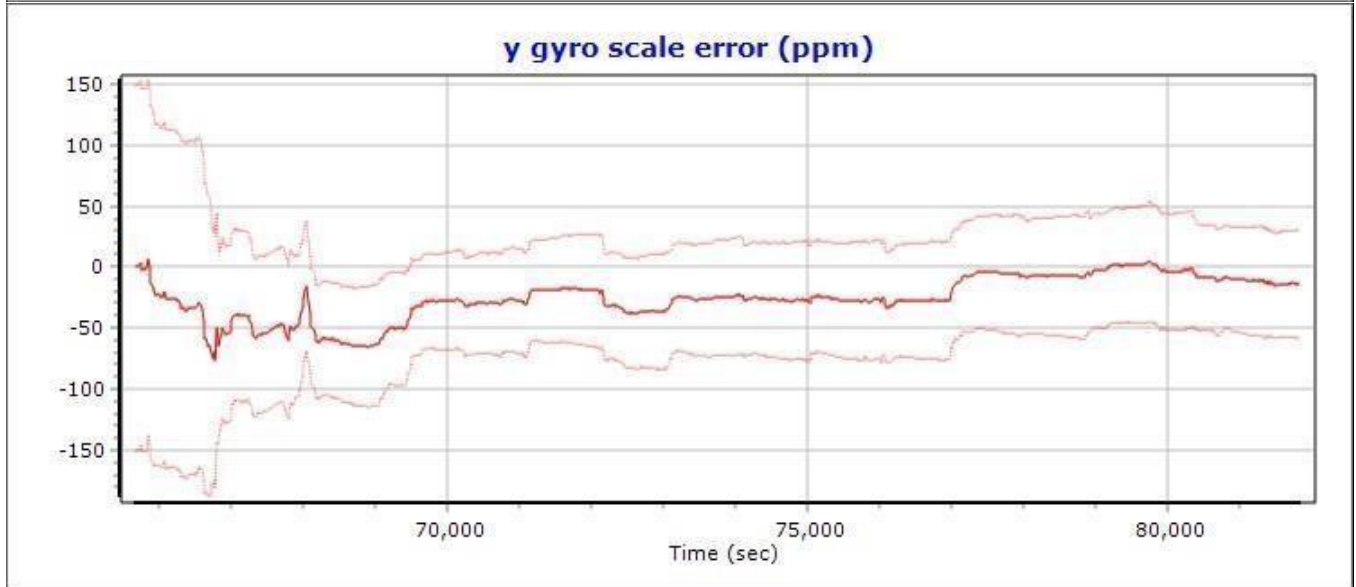
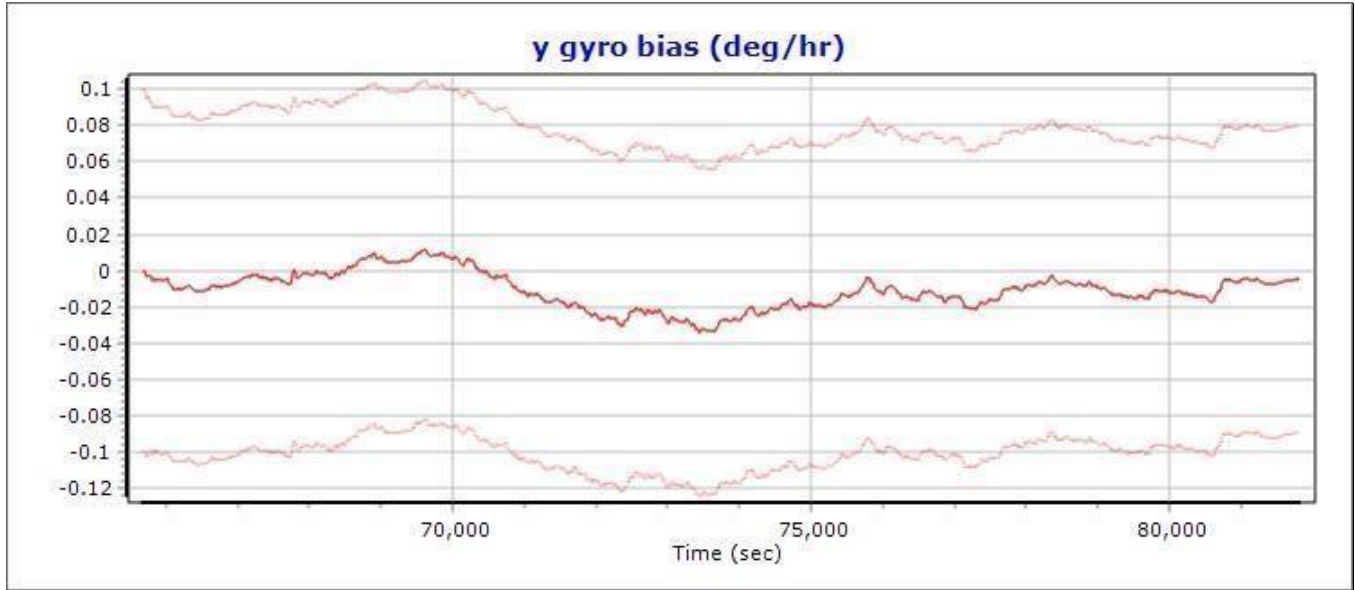
TXSO	N32°08'28.21591"	W101°48'27.40166"	801.517			
TXS3	N32°42'42.42349"	W102°37'47.28470"	977.768	N32°42'42.42286"	W102°37'47.28443"	977.750
TXOE	N31°52'24.51763"	W102°18'50.27460"	856.094	N31°52'24.51706"	W102°18'50.27451"	856.088
TXCE	N31°25'22.08558"	W102°21'27.22542"	754.414	N31°25'22.08525"	W102°21'27.22523"	754.404
TXAD	N32°18'28.83162"	W102°32'36.98731"	946.850	N32°18'28.83135"	W102°32'36.98703"	946.855

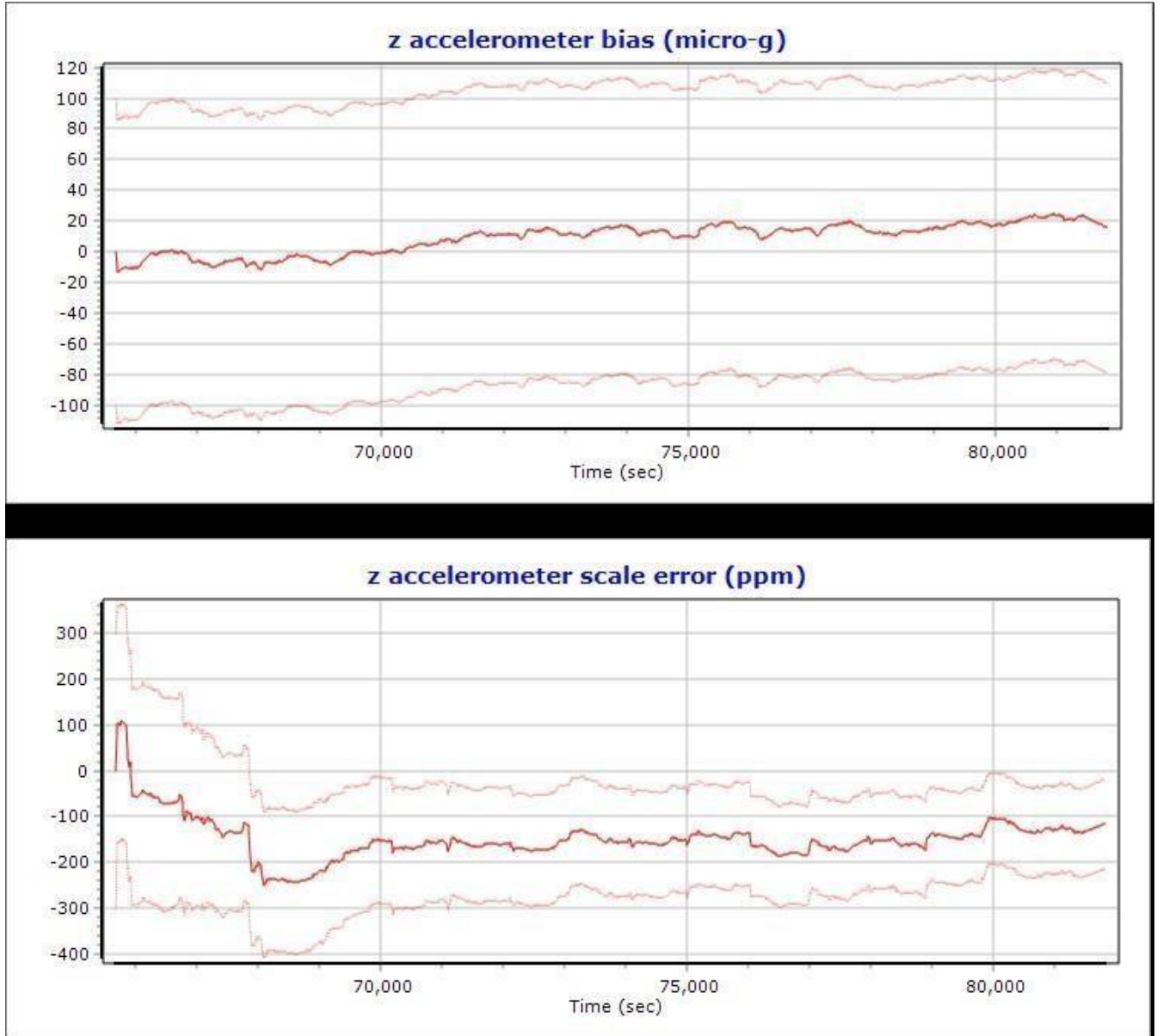


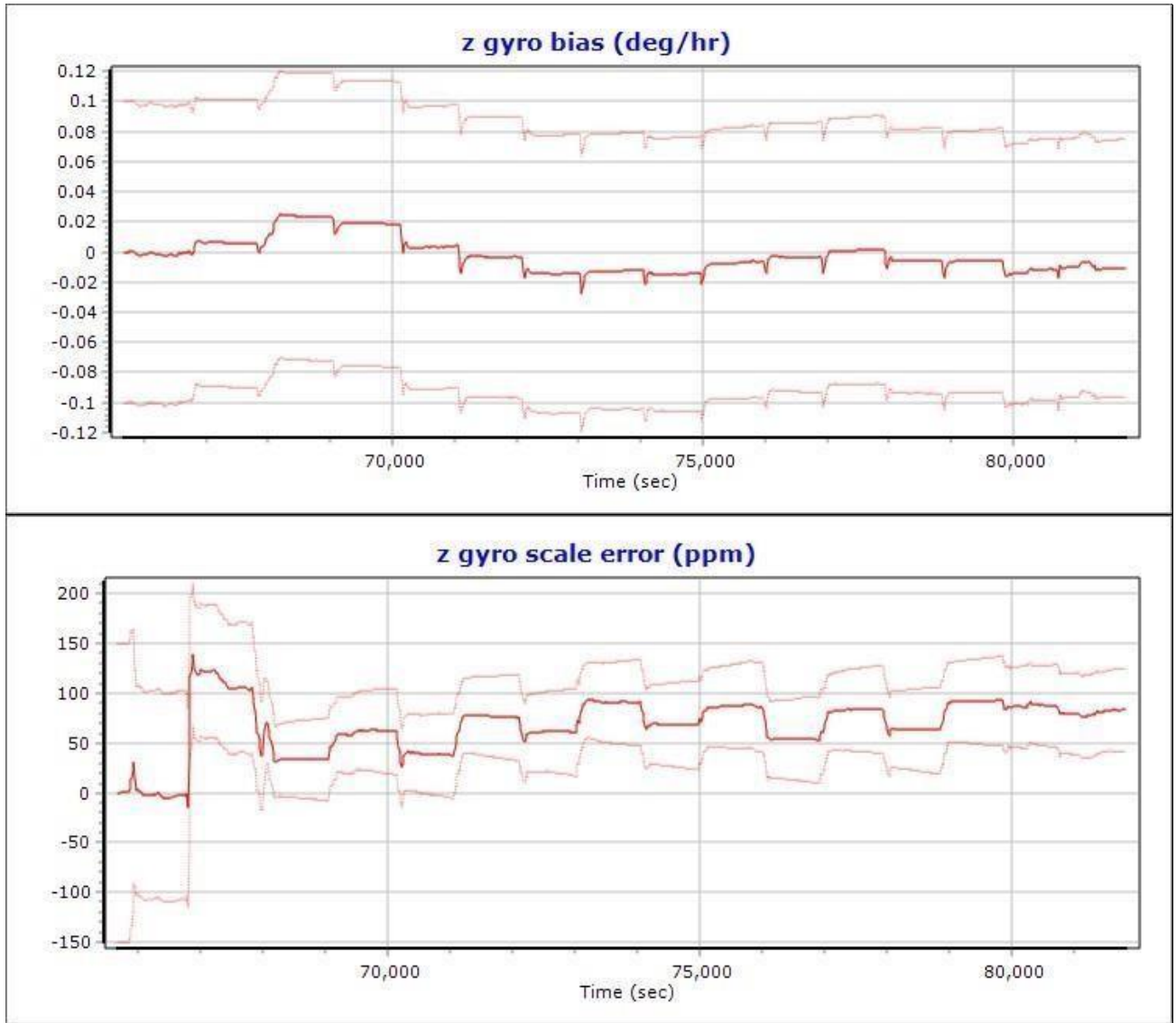




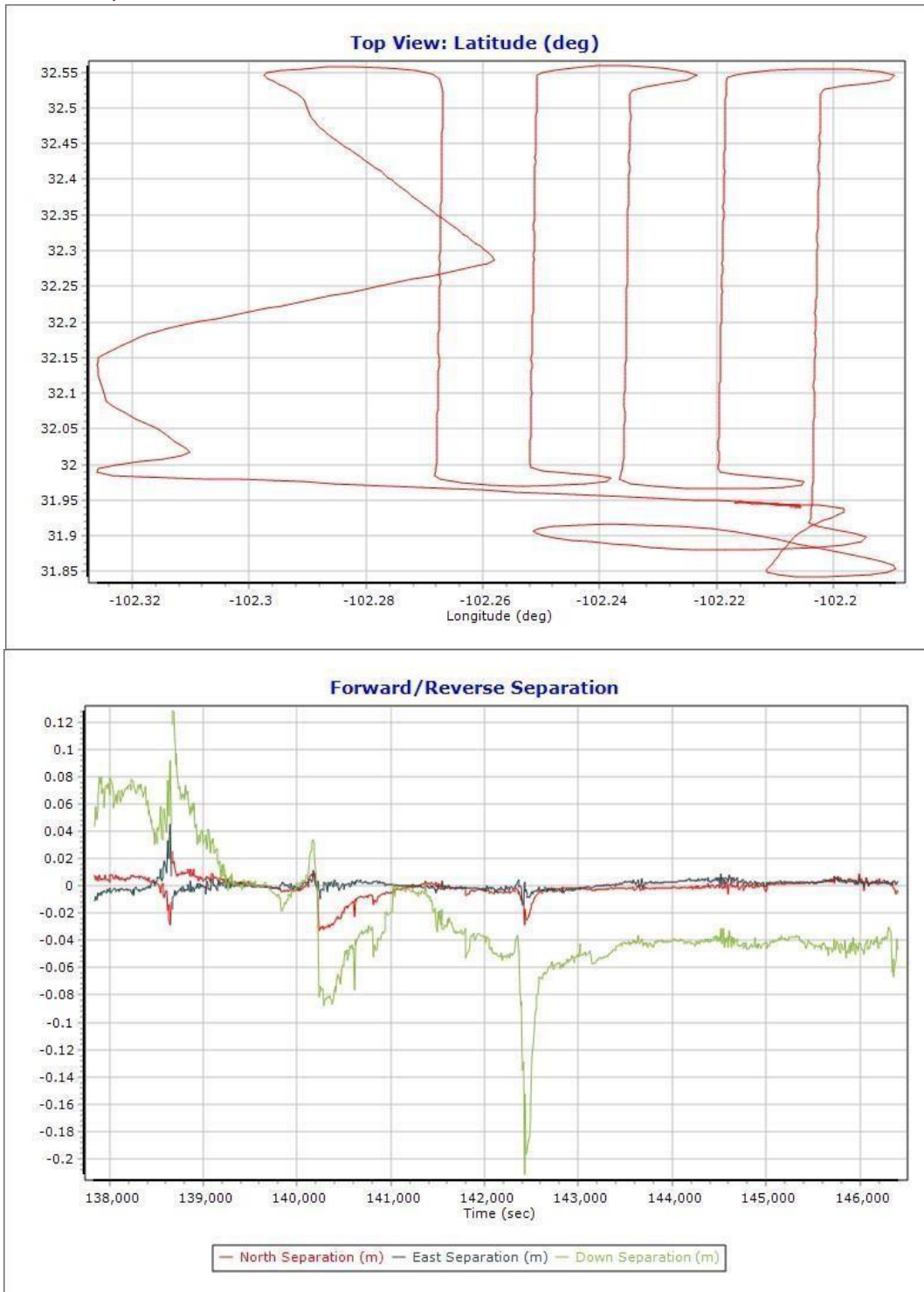


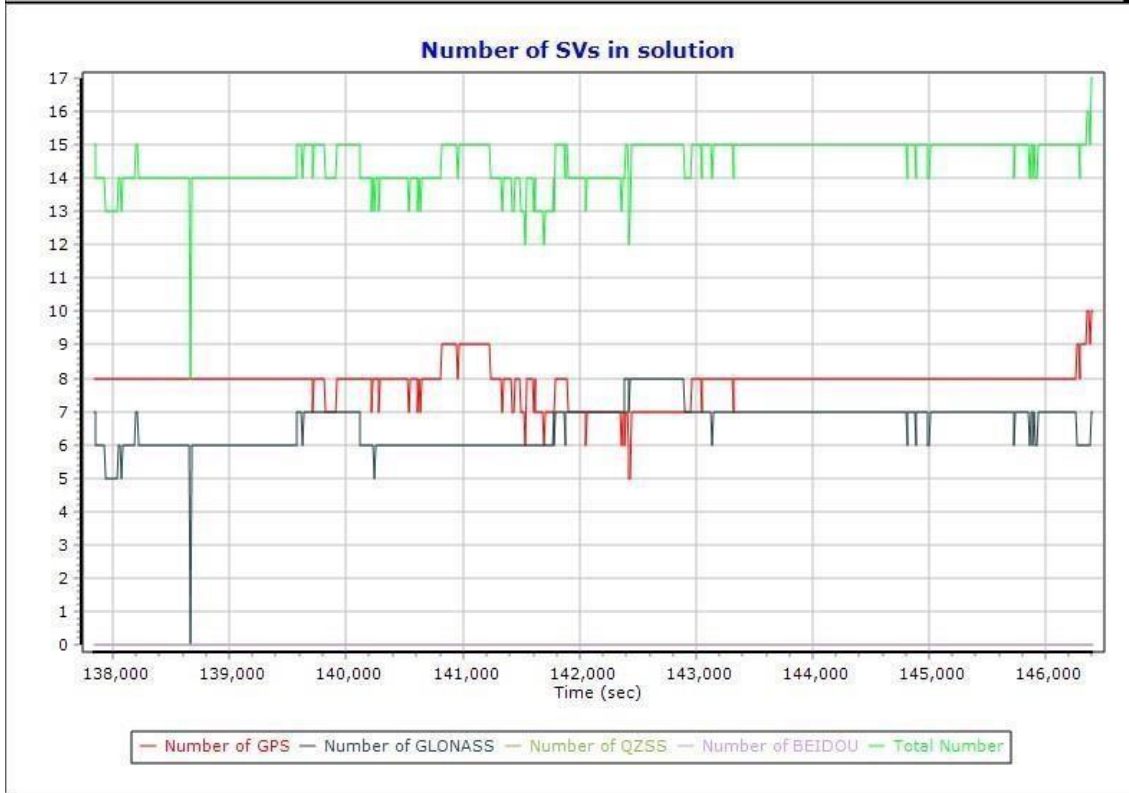
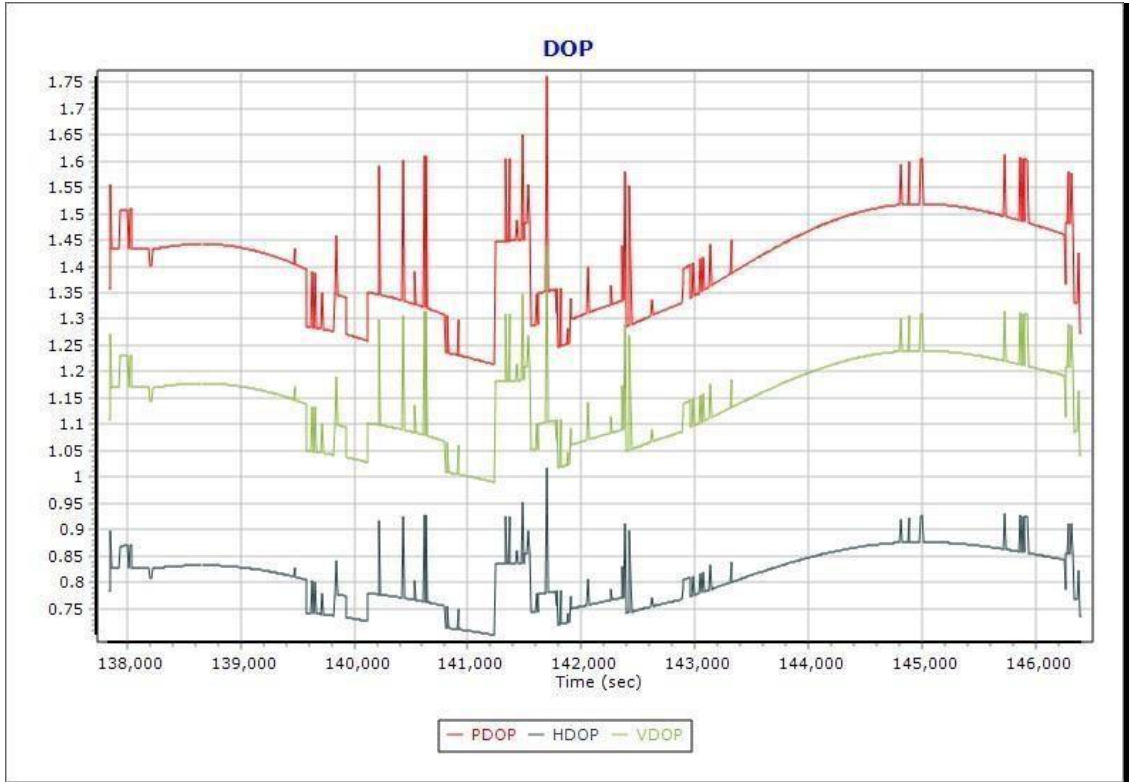






### FEBRUARY 12, 2018 MISSION 1









## Processing Summary Information

### Processing Summary Information

Program: POSPac MMS  
Version: 8.1.6388.30062  
Project: \\sa\data\riegl\18047\20180212\_TX\_A

Solution Type: IN-Fusion SmartBase

Fixed: 8588	(99.99%)
Float: 0	(0.00%)
No Solution: 1	(0.01%)

Number of Epochs:

Total in RAW file: 8593  
No processed position: 5

Fwd/Rev Separation RMS Values (m):

North: 0.007  
East: 0.004  
Height: 0.049

Fwd/Rev Sep. RMS for 25%-75% weighting (m): 4296 occurrences

North: 0.009  
East: 0.003  
Height: 0.052

Quality Number Percentages:

Q 0: 100.0 %

Position Standard Deviation Percentages (%):

0.00 - 0.10 m: 100  
 0.10 - 0.30 m: 0  
 0.30 - 1.00 m: 0  
 1.00 - 5.00 m: 0  
 5.00 m + over: 0

Percentages of epochs with DD\_DOP over 10.00: 0 %

DOP over Tol: 1.41%

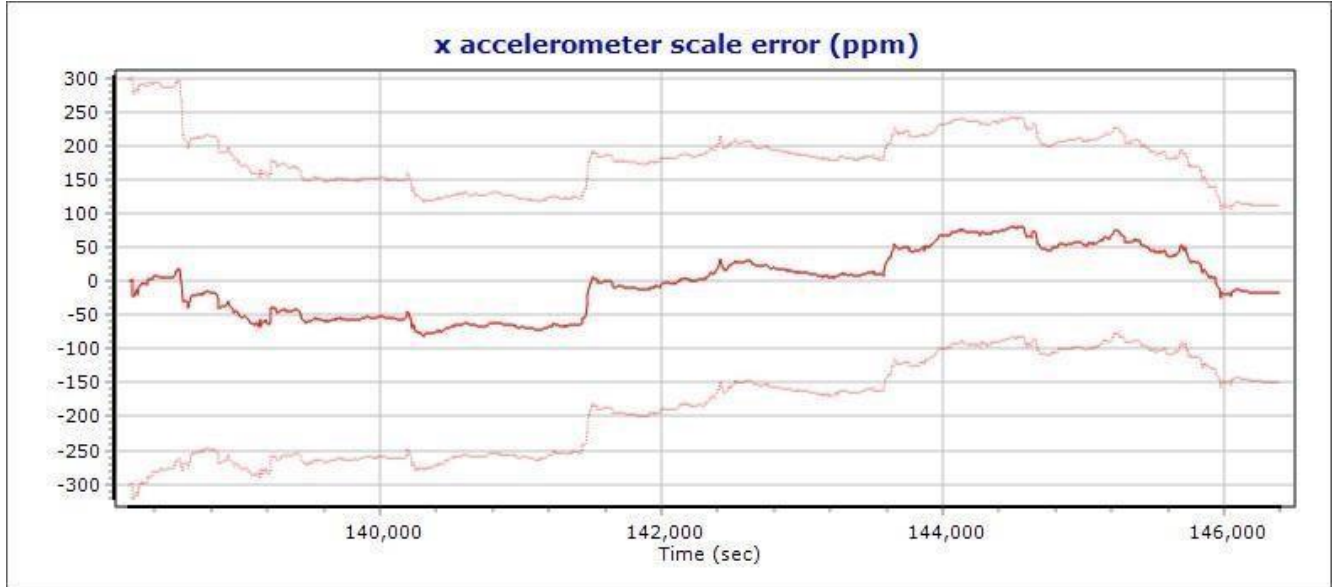
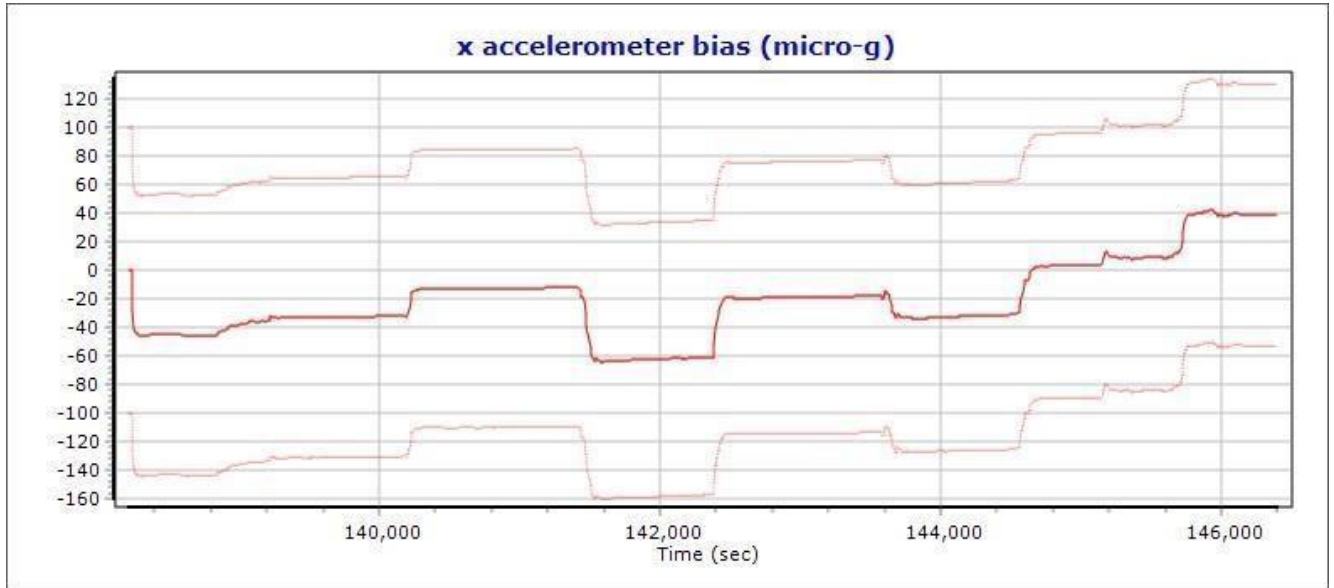
Baseline Distances (km):

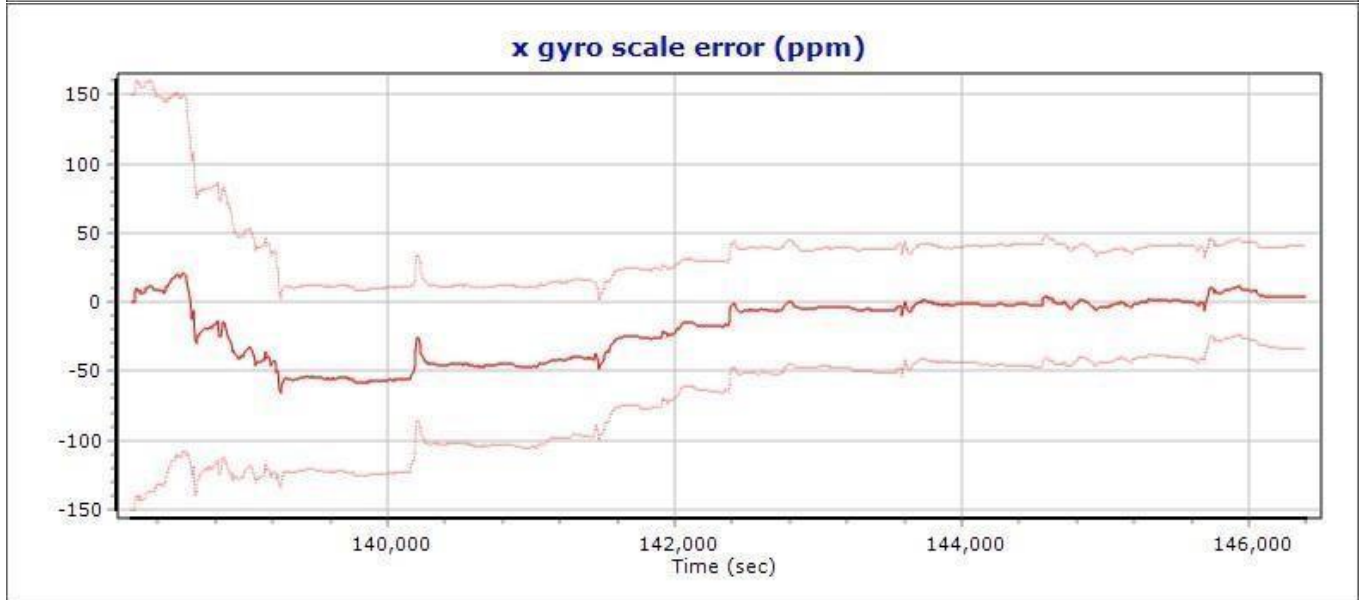
Maximum: 41.89  
 Minimum: 0.52  
 Average: 21.03  
 First Epoch: 27.04  
 Last Epoch: 27

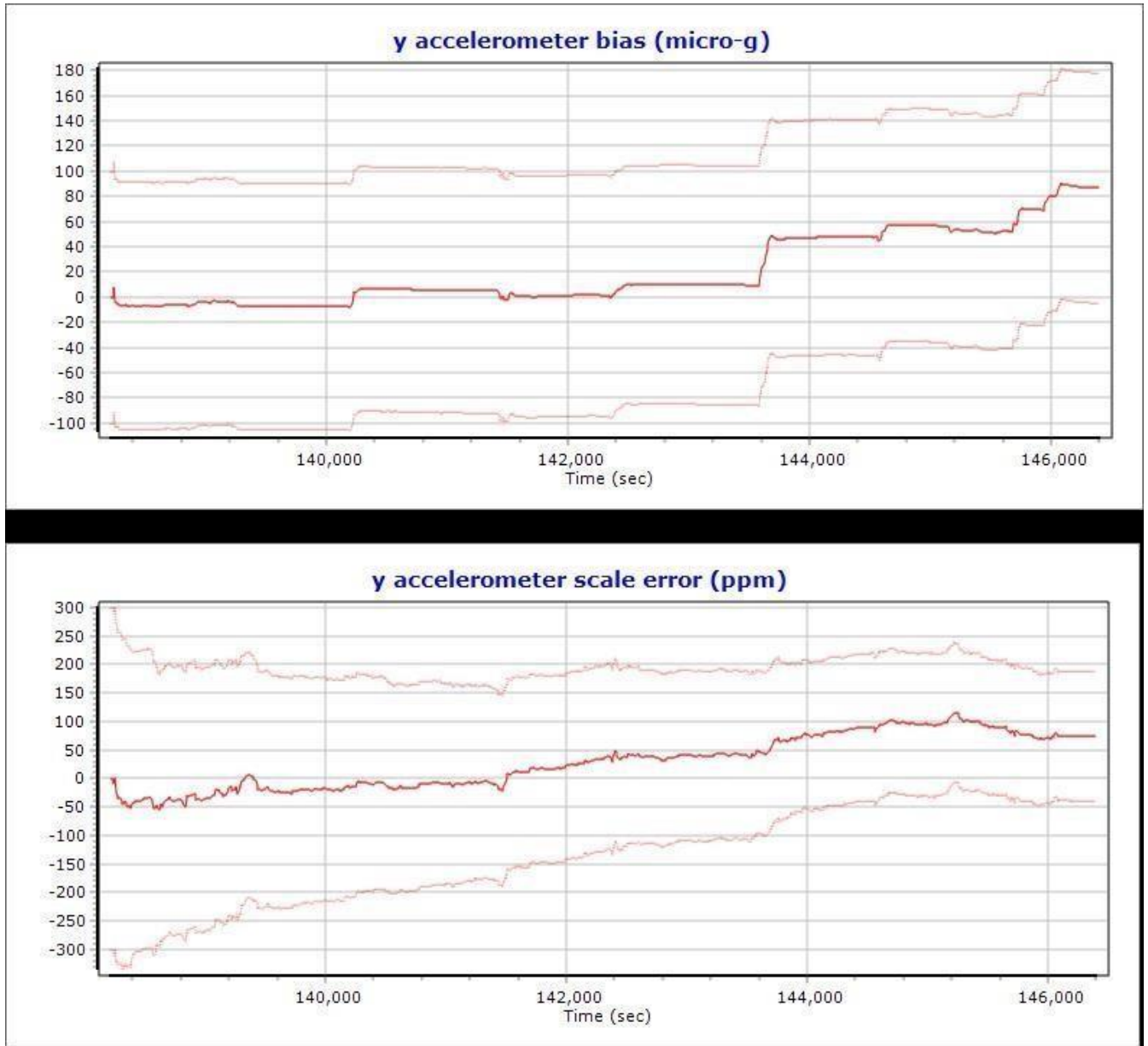
**CORS Base Stations**

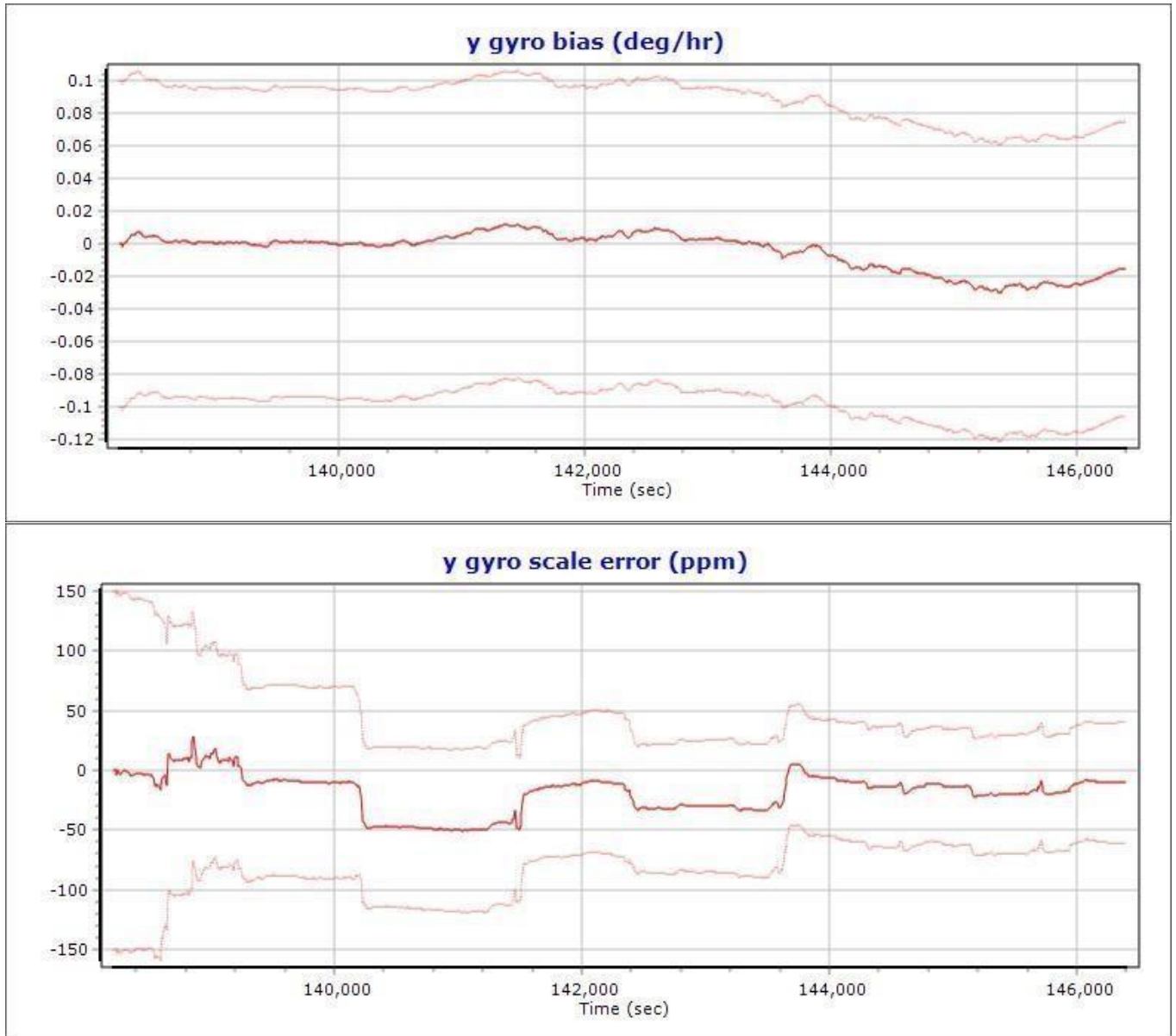
Station	Original			Adjusted		
txso	N32°08'28.20116"	W101°48'27.35930"	802.648	N32°08'28.21641"	W101°48'27.40204"	801.522
txs3	N32°42'42.40870"	W102°37'47.24152"	978.869	N32°42'42.42336"	W102°37'47.28481"	977.754
txmh	N31°33'27.82278"	W102°53'38.39692"	774.513	N31°33'27.83701"	W102°53'38.43969"	773.389
txkm	N31°50'33.35706"	W103°06'31.25754"	849.099	N31°50'33.37154"	W103°06'31.30065"	848.000
txce	N31°25'22.07150"	W102°21'27.18333"	755.550	N31°25'22.08581"	W102°21'27.22577"	754.403
txbl	N31°11'33.83463"	W101°28'25.21493"	804.756	N31°11'33.84894"	W101°28'25.25634"	803.584
txbg	N32°16'03.21215"	W101°28'32.92203"	737.772	N32°16'03.22736"	W101°28'32.96375"	736.637
TXSC	N31°50'29.77677"	W101°00'38.30280"	679.283	N31°50'29.77721"	W101°00'38.30289"	679.298
TXOE	N31°52'24.51759"	W102°18'50.27494"	856.094			

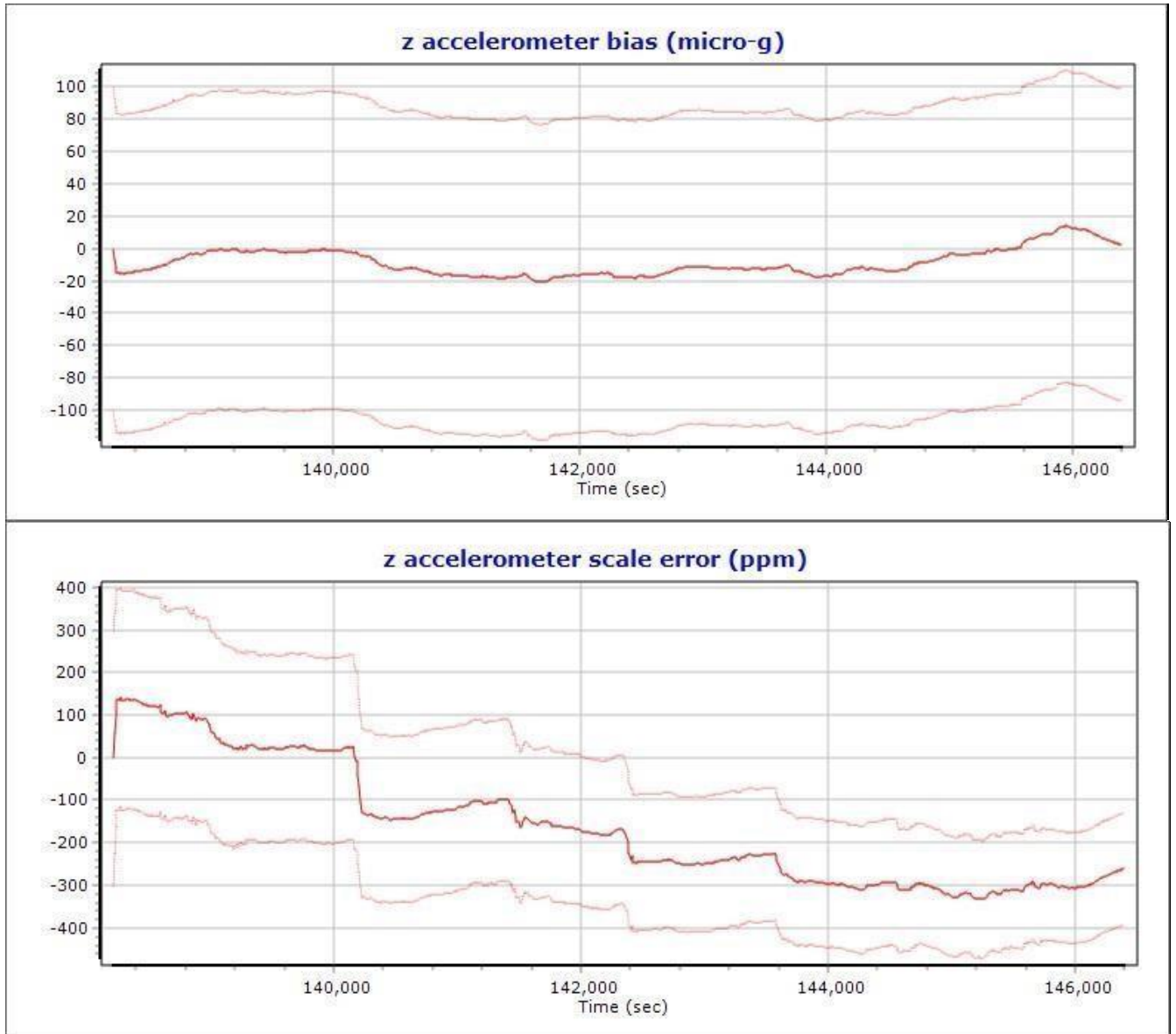
TXMC	N31°07'55.57702"	W102°13'56.82357"	724.080	N31°07'55.57726"	W102°13'56.82371"	724.076
TXLA	N32°45'40.91675"	W101°56'38.21350"	891.645	N32°45'40.91694"	W101°56'38.21336"	891.636
TXAD	N32°18'28.83162"	W102°32'36.98731"	946.850	N32°18'28.83188"	W102°32'36.98739"	946.861

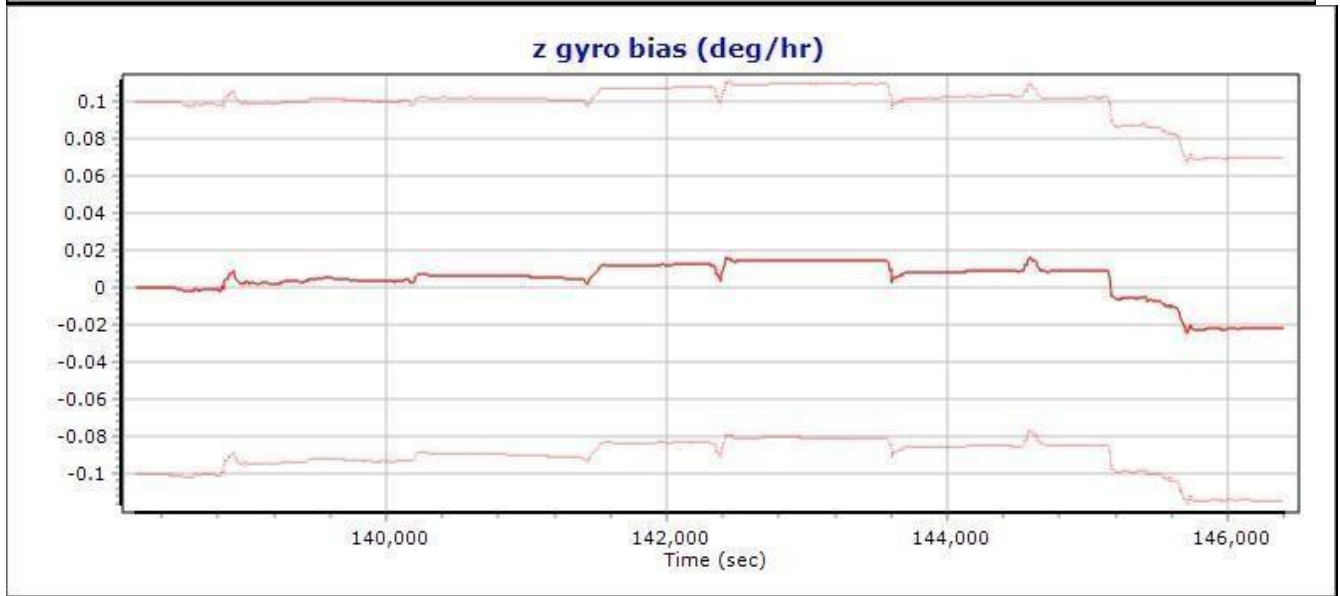
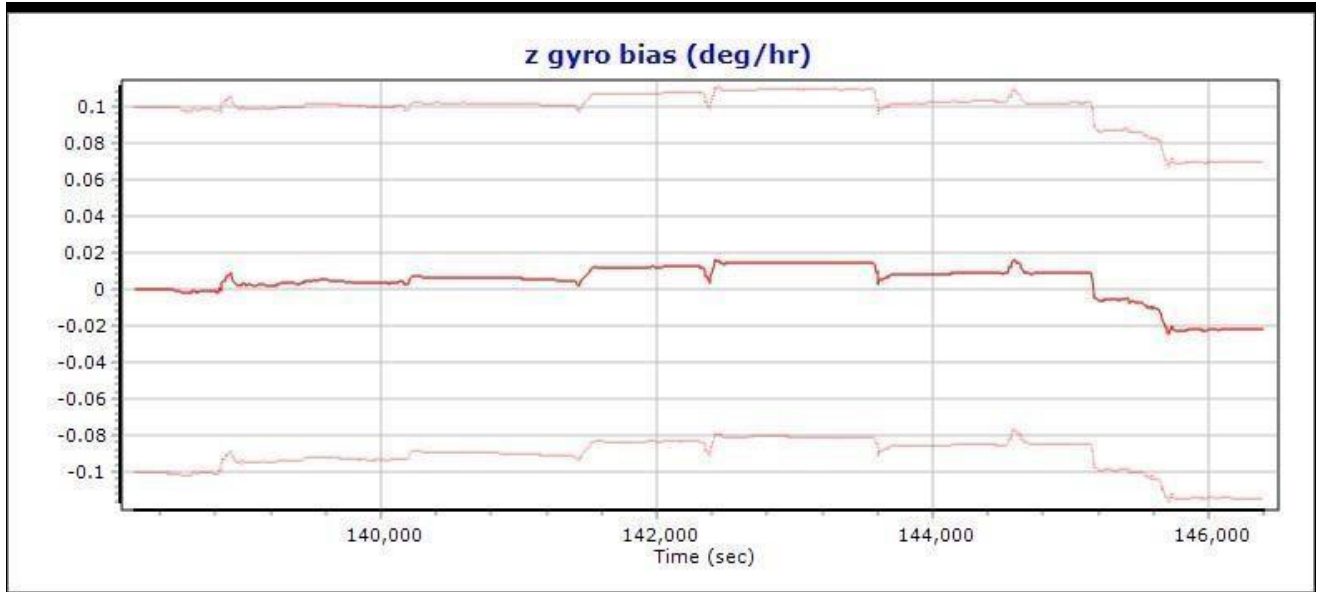






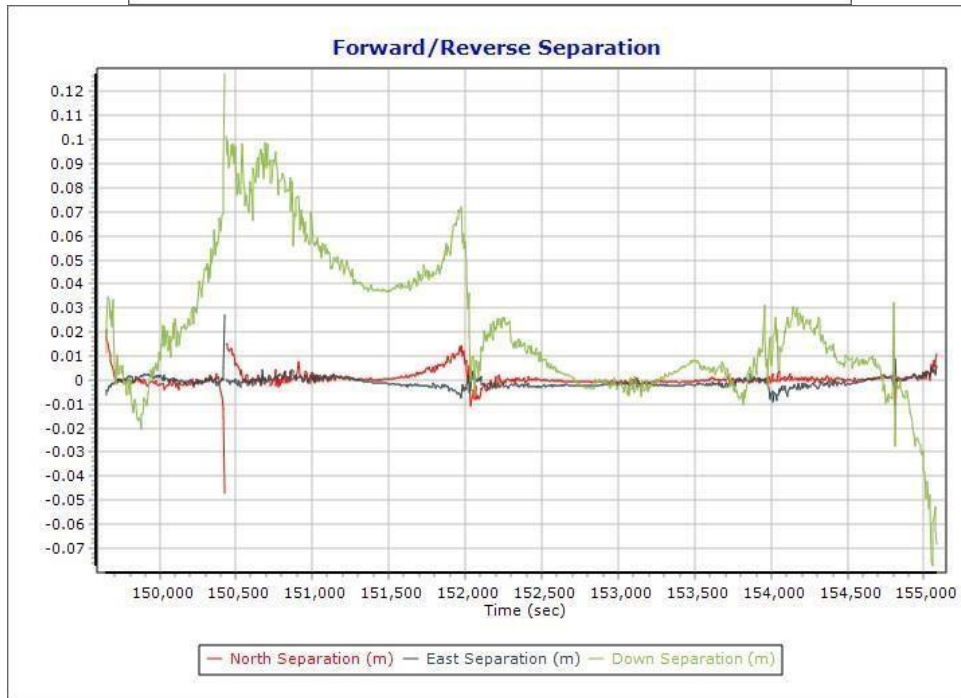
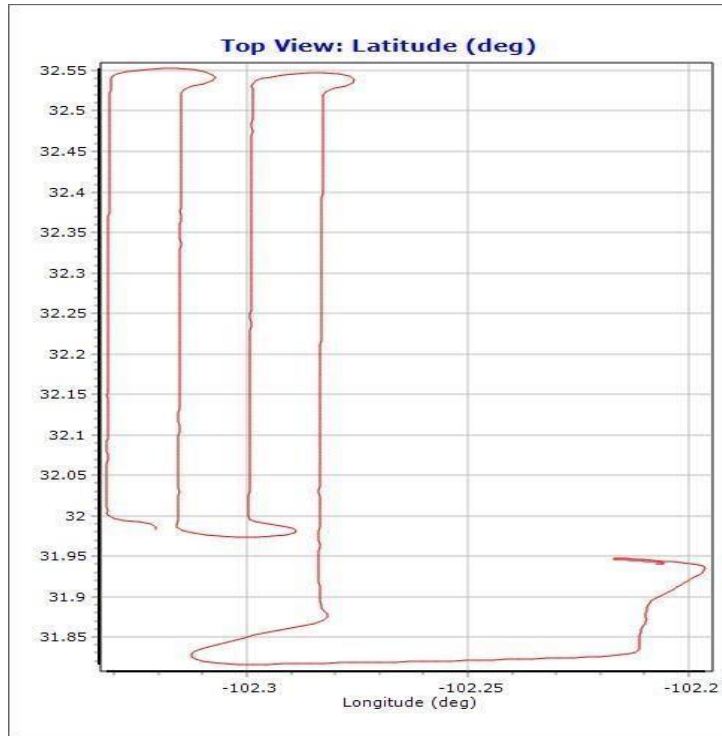


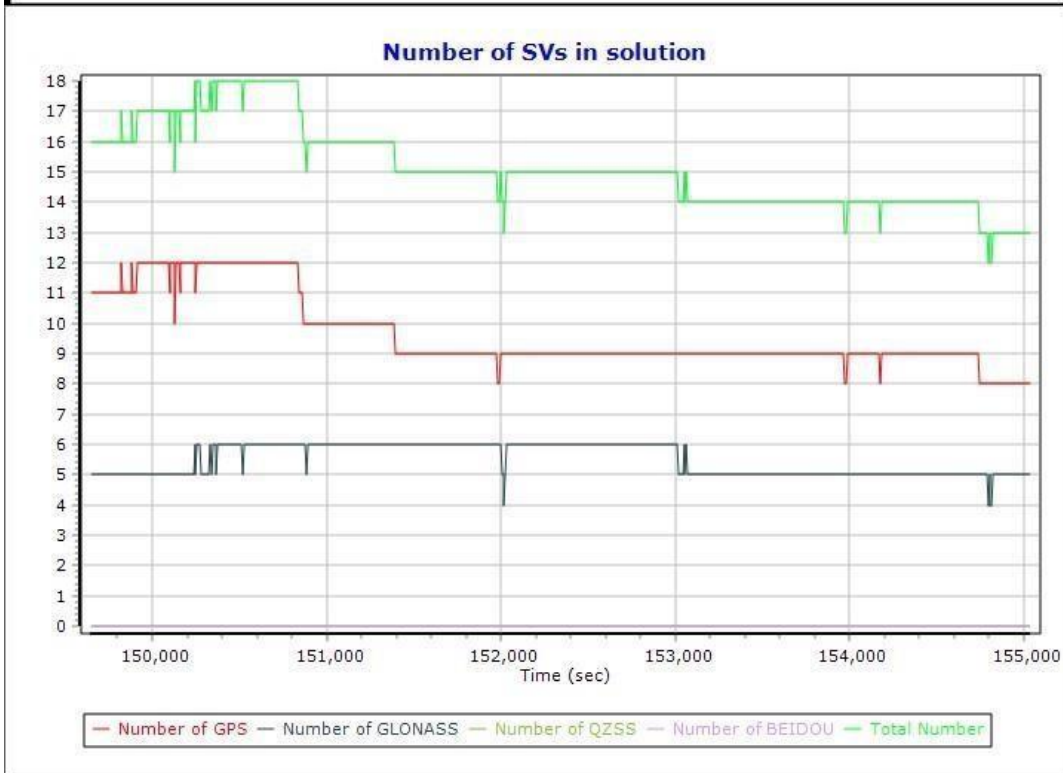
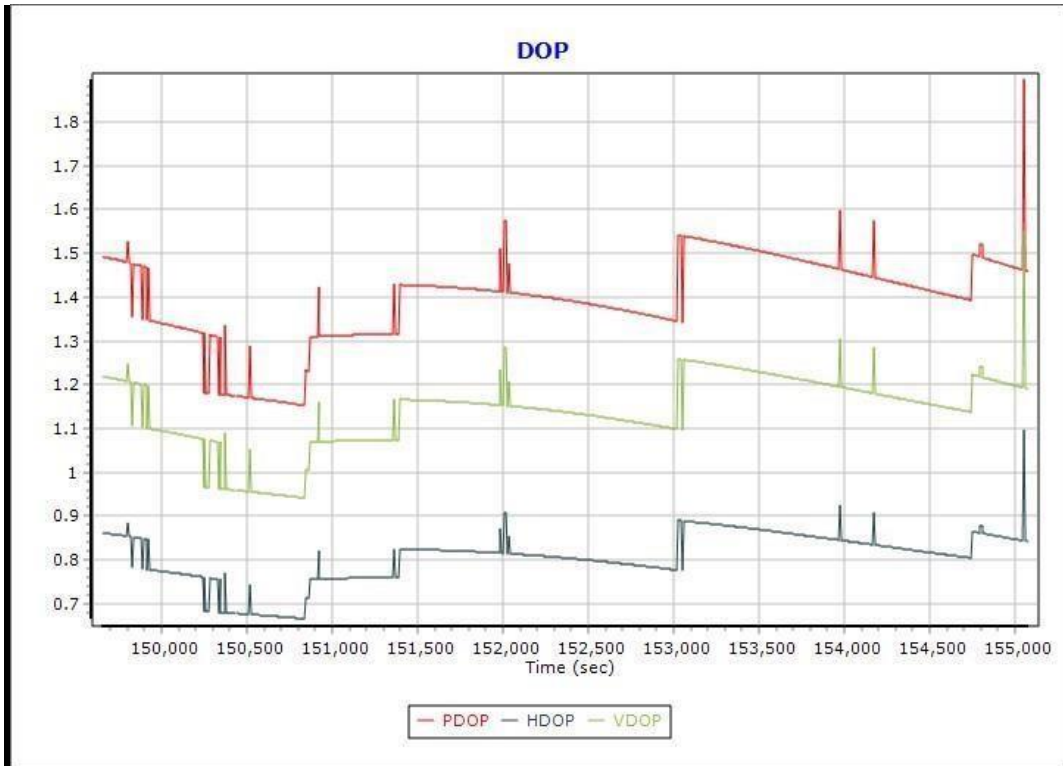




**FEBRUARY 12, 2018 MISSION 2**







## Processing Summary Information

### Processing Summary Information

Program: POSPac MMS  
Version: 8.1.6388.30062  
Project: \\sa\data\riegl\18047\20180212\_TX\_B

Solution Type: IN-Fusion SmartBase

Fixed: 5402	(99.98%)
Float: 0	(0.00%)
No Solution: 1	(0.02%)

Number of Epochs:

Total in RAW file: 5446  
No processed position: 44

Fwd/Rev Separation RMS Values (m):

North: 0.004  
East: 0.002  
Height: 0.037

Fwd/Rev Sep. RMS for 25%-75% weighting (m): 2723 occurrences

North: 0.003  
East: 0.002  
Height: 0.030

Quality Number Percentages:

Q 0: 100.0 %

Position Standard Deviation Percentages (%):

0.00 - 0.10 m: 100  
 0.10 - 0.30 m: 0  
 0.30 - 1.00 m: 0  
 1.00 - 5.00 m: 0  
 5.00 m + over: 0

Percentages of epochs with DD\_DOP over 10.00: 0 %

DOP over Tol: 1.39%

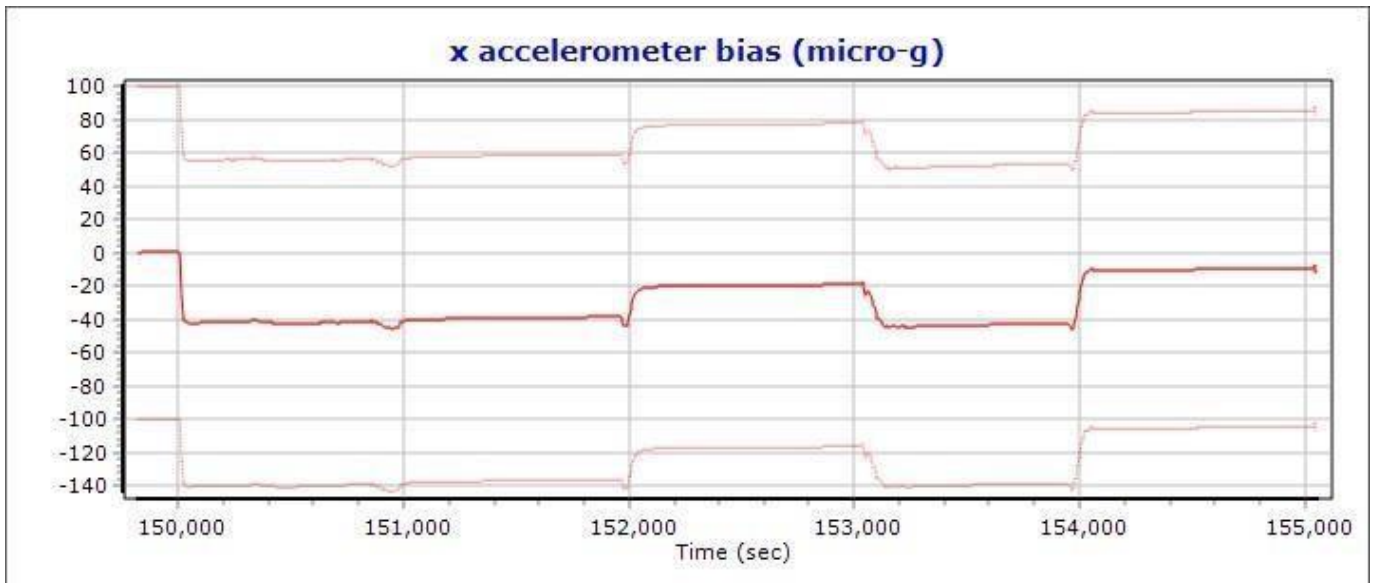
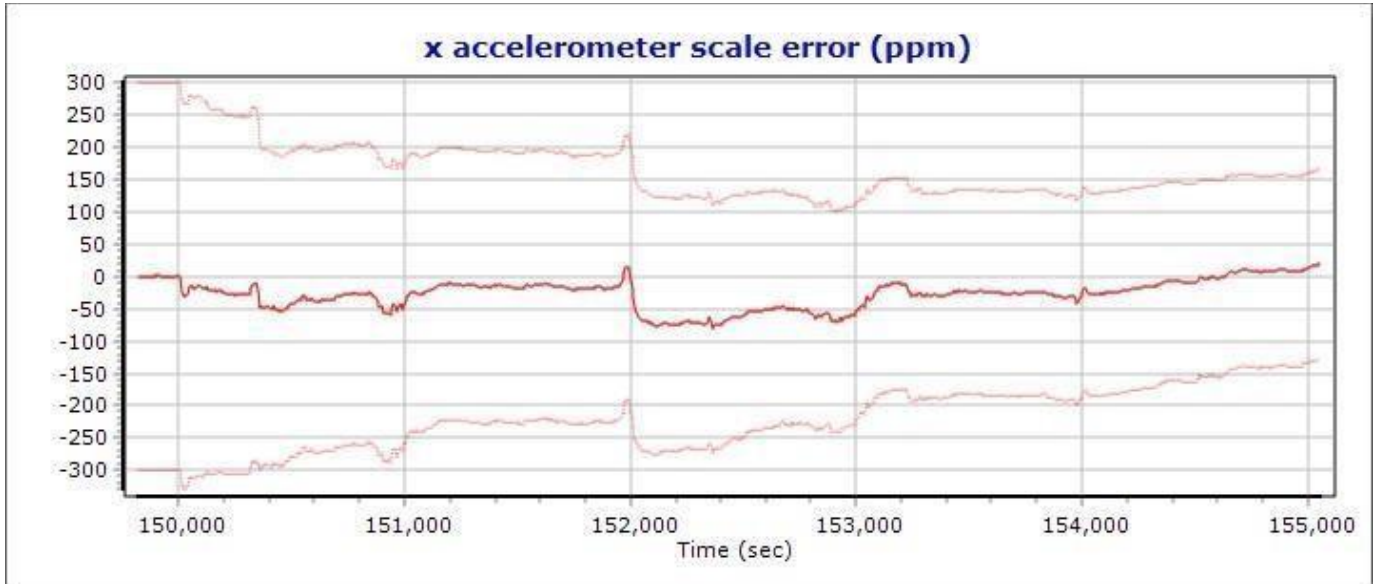
Baseline Distances (km):

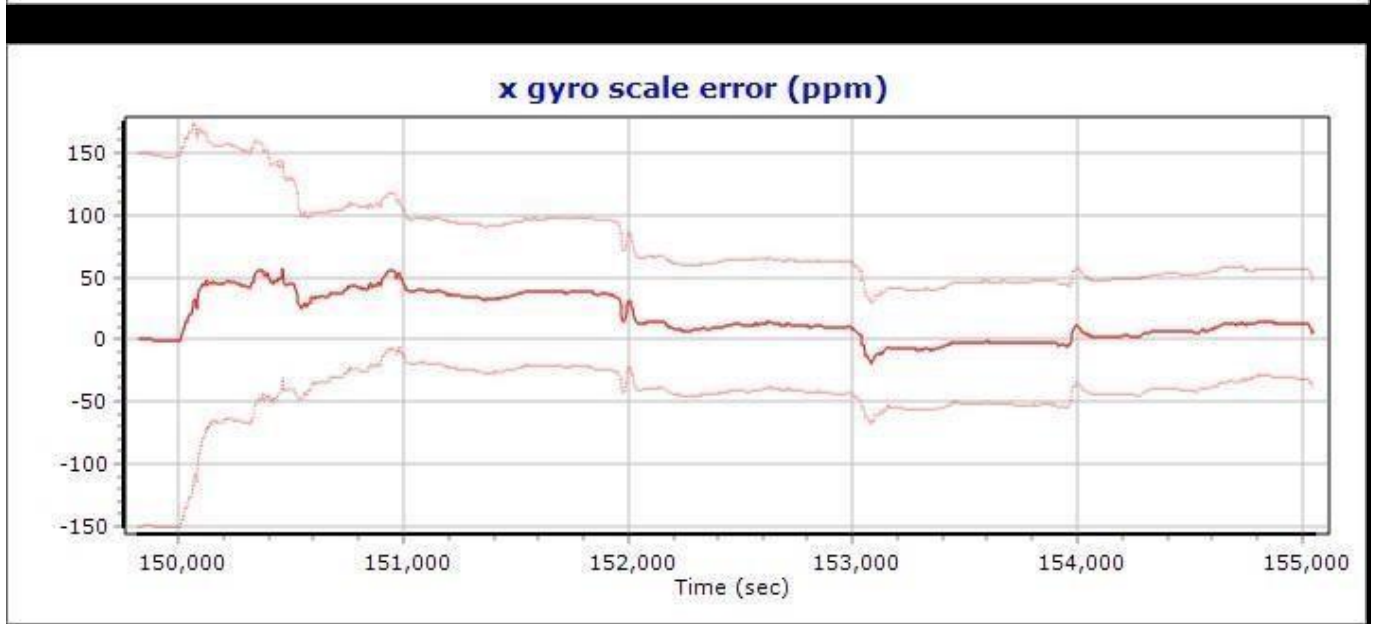
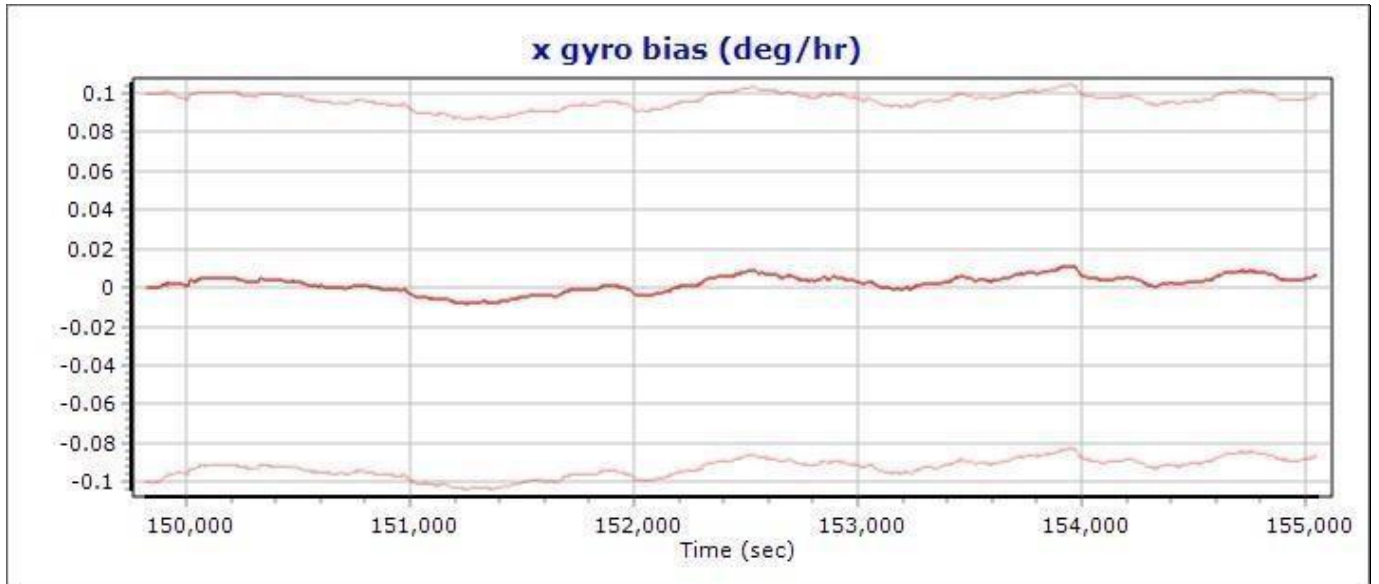
Maximum: 42.89  
 Minimum: 0.42  
 Average: 21.54  
 First Epoch: 26.27  
 Last Epoch: 19.03

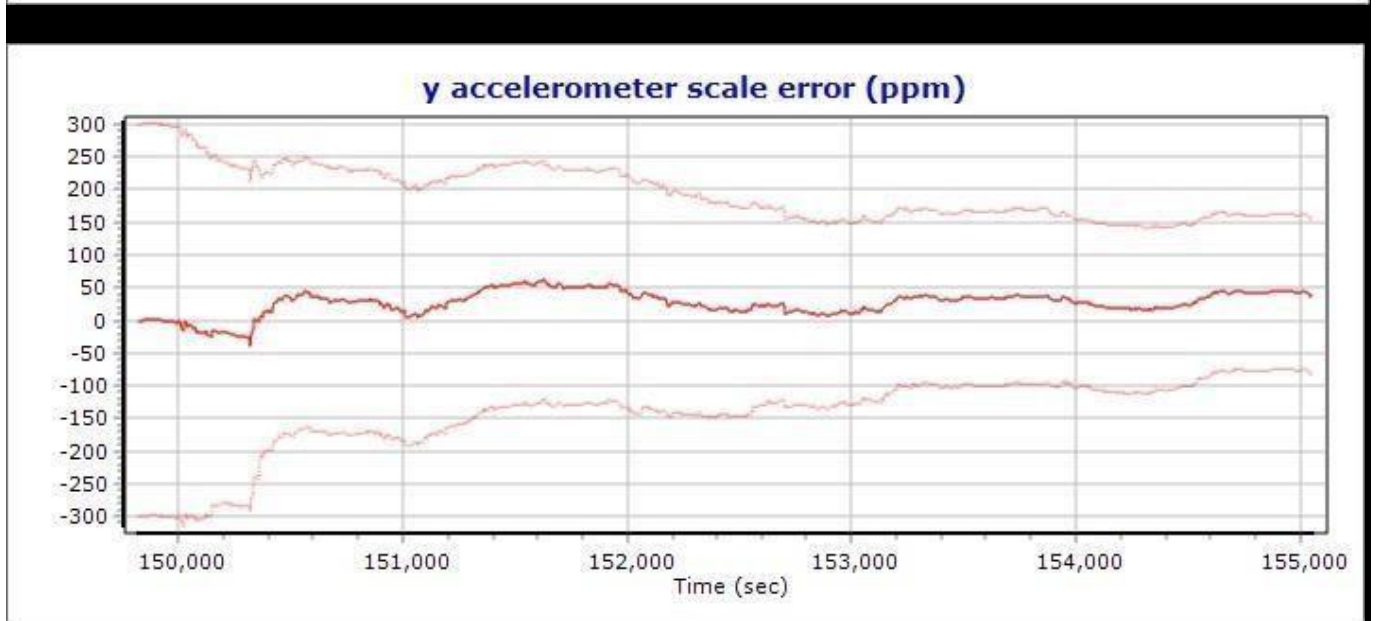
**CORS Base Stations**

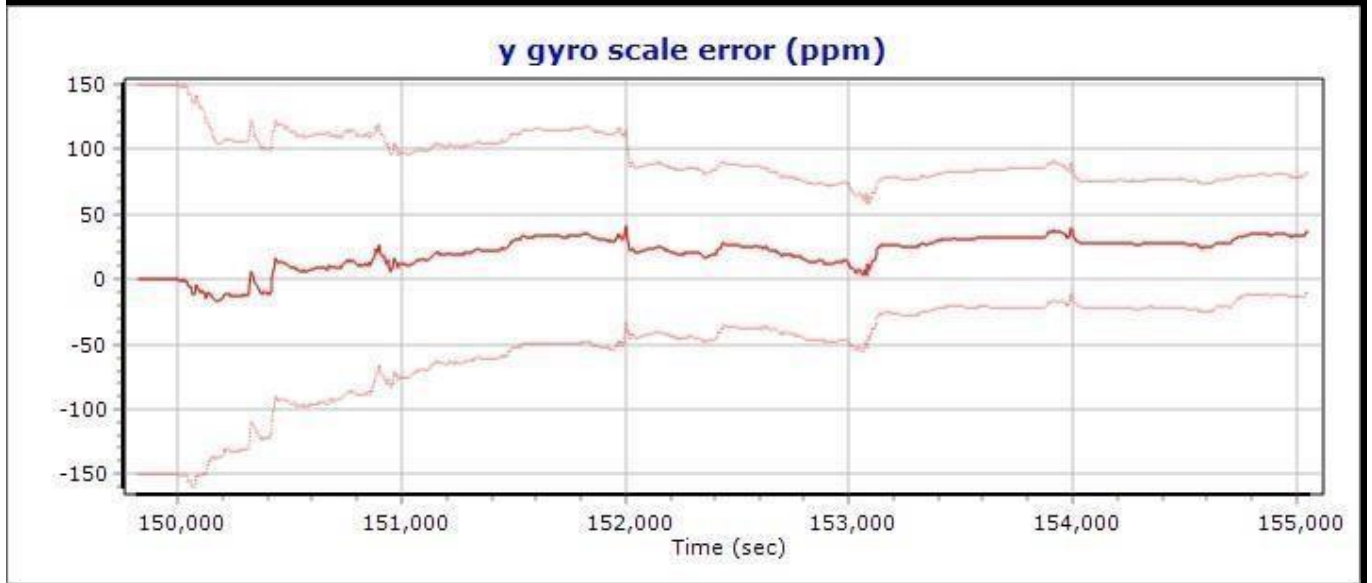
Station	Original			Adjusted		
TXAD	N32°18'28.83158"	W102°32'36.98765"	946.849			
TXSO	N32°08'28.21594"	W101°48'27.40138"	801.518	N32°08'28.21614"	W101°48'27.40232"	801.507
TXS3	N32°42'42.42349"	W102°37'47.28471"	977.768	N32°42'42.42313"	W102°37'47.28507"	977.732
TXOE	N31°52'24.51763"	W102°18'50.27460"	856.094	N31°52'24.51733"	W102°18'50.27519"	856.077
TXLA	N32°45'40.91675"	W101°56'38.21350"	891.645	N32°45'40.91667"	W101°56'38.21363"	891.623

TXCE	N31°25'22.08558"	W102°21'27.22542"	754.414	N31°25'22.08555"	W102°21'27.22601"	754.390
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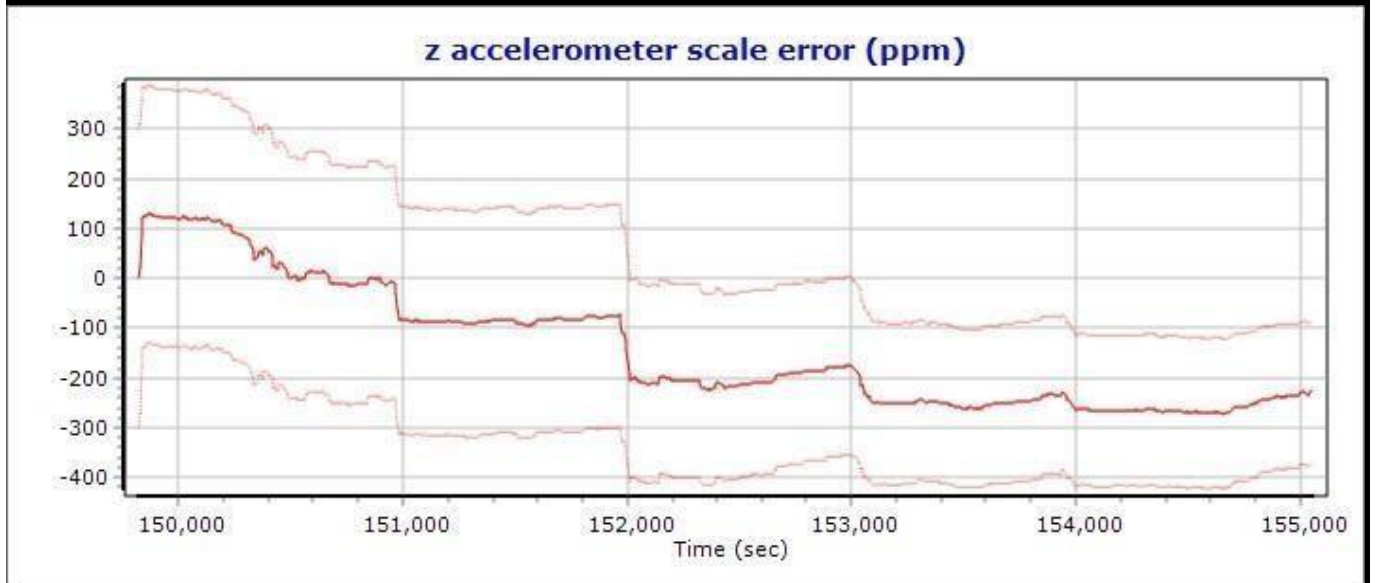


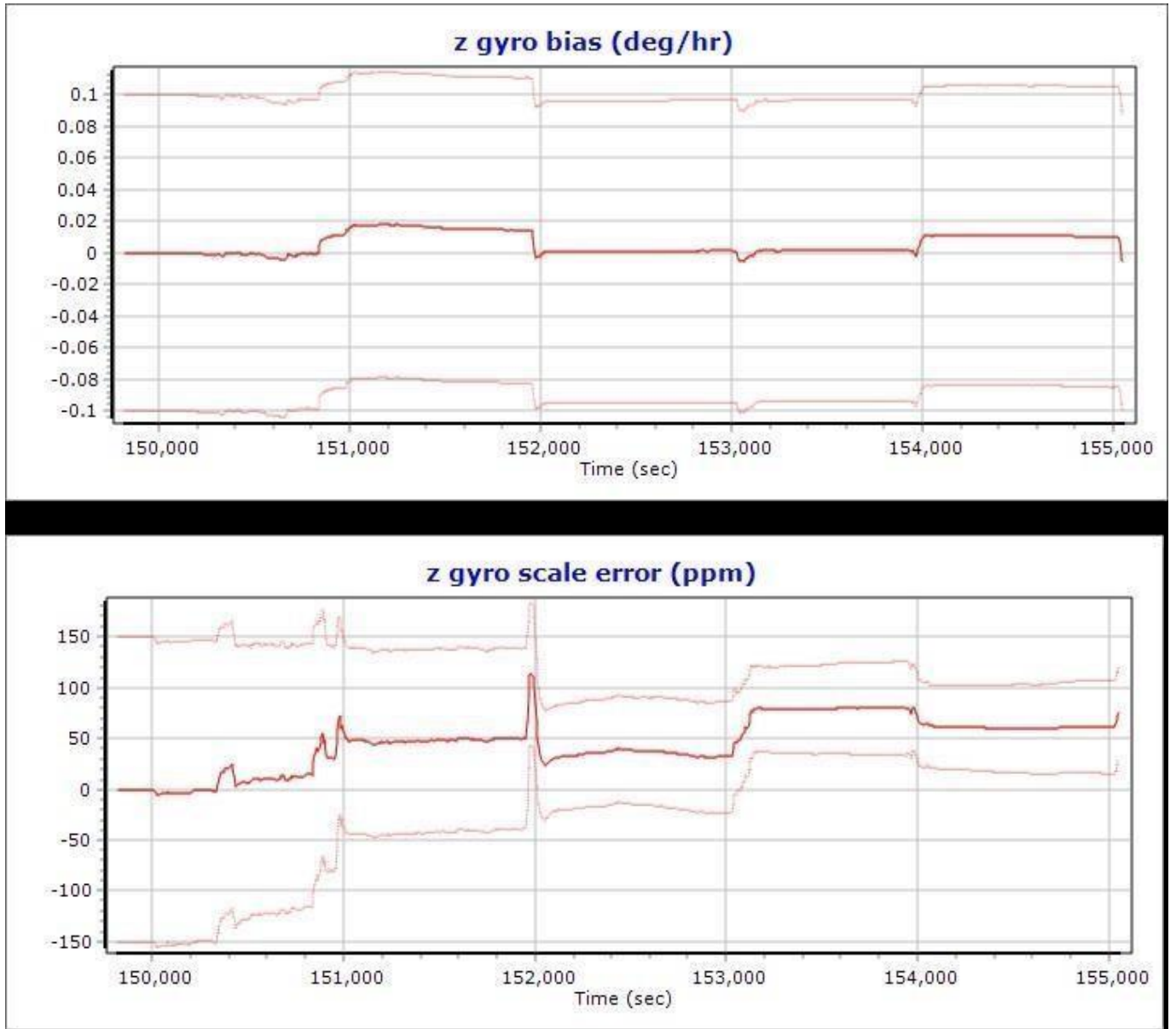








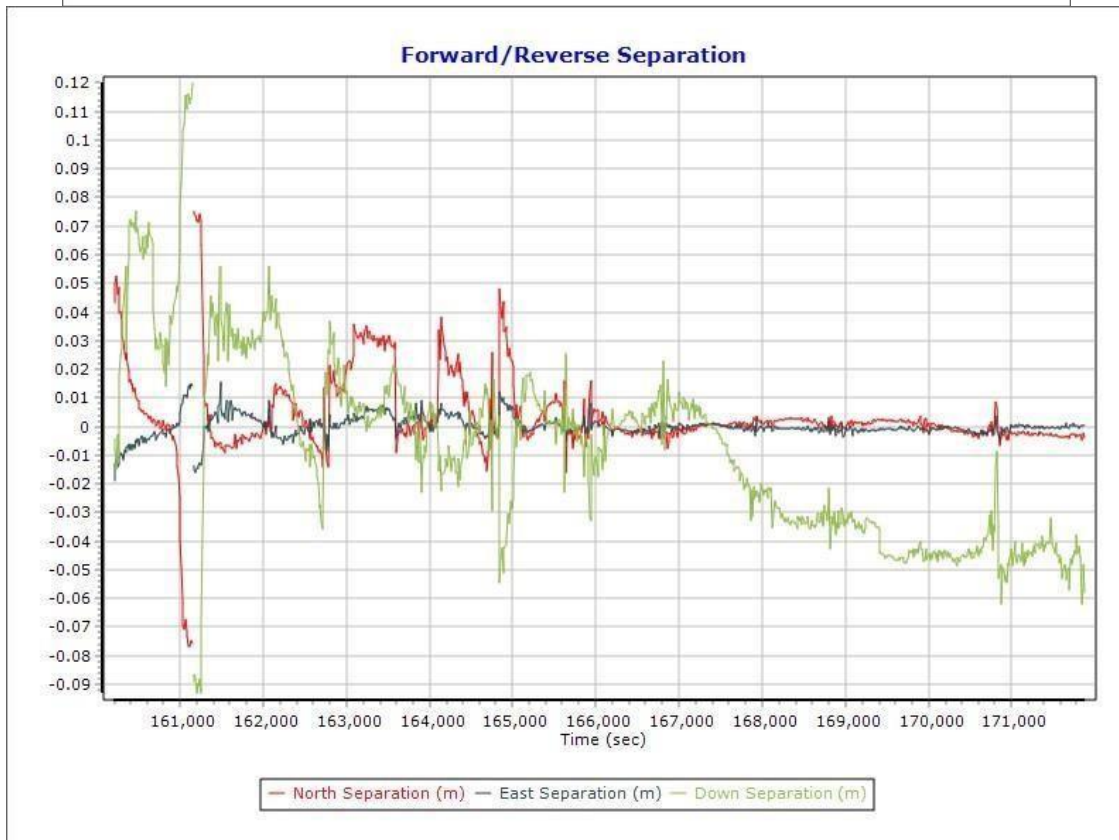
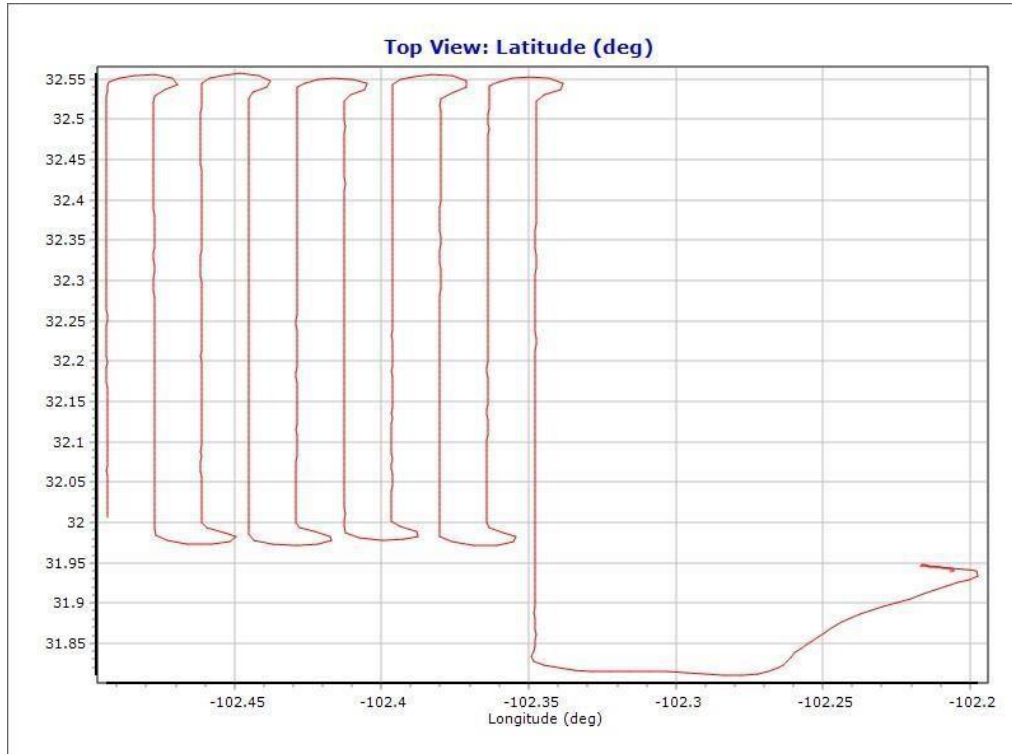


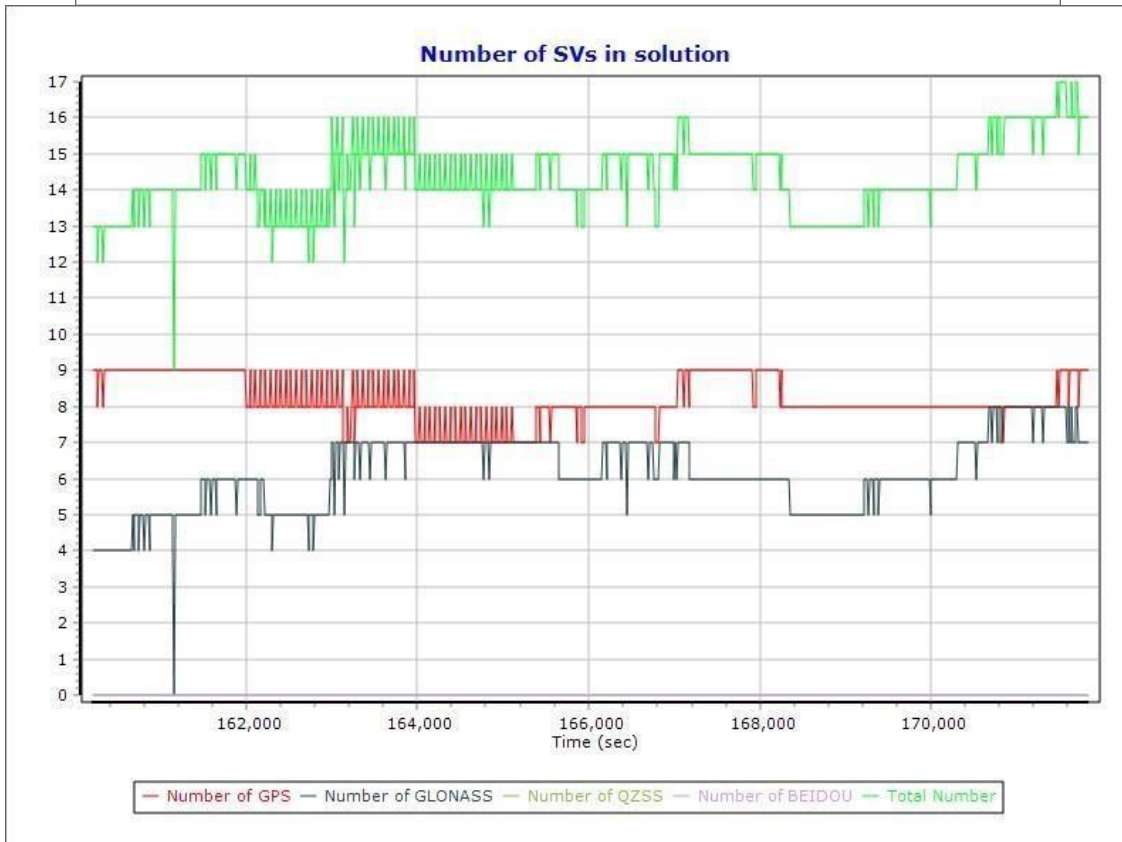
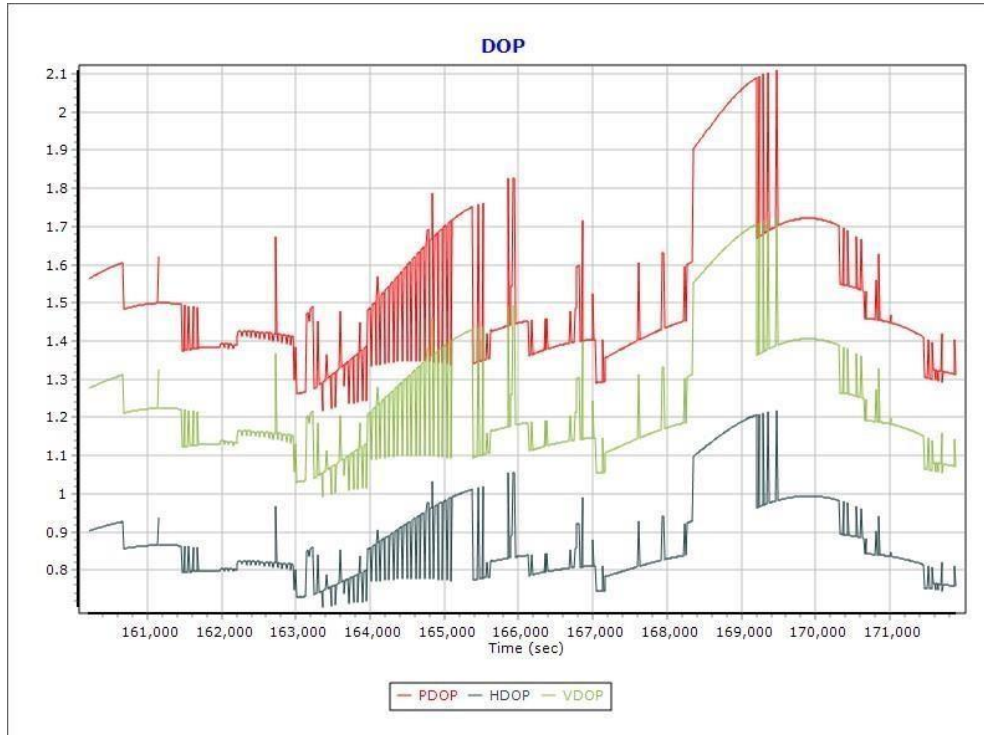


April 23, 2018

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**FEBRUARY 12, 2018 MISSION 3**





## Processing Summary Information

### Processing Summary Information

Program: POSPac MMS  
Version: 8.1.6388.30062  
Project: \\sa\data\riegl\18047\20180212\_TX\_C

Solution Type: IN-Fusion SmartBase

Fixed: 11660	(99.99%)
Float: 0	(0.00%)
No Solution: 1	(0.01%)

Number of Epochs:

Total in RAW file: 11701  
No processed position: 41

Fwd/Rev Separation RMS Values (m):

North: 0.015  
East: 0.004  
Height: 0.034

Fwd/Rev Sep. RMS for 25%-75% weighting (m): 5850 occurrences

North: 0.012  
East: 0.003  
Height: 0.017

Quality Number Percentages:

Q 0: 100.0 %

Position Standard Deviation Percentages (%):

0.00 - 0.10 m: 100

0.10 - 0.30 m: 0

0.30 - 1.00 m: 0

1.00 - 5.00 m: 0

5.00 m + over: 0

Percentages of epochs with DD\_DOP over 10.00: 0 %

DOP over Tol: 1.52%

Baseline Distances (km):

Maximum: 46.34

Minimum: 0.23

Average: 20.73

First Epoch: 35.37

Last Epoch: 23.41

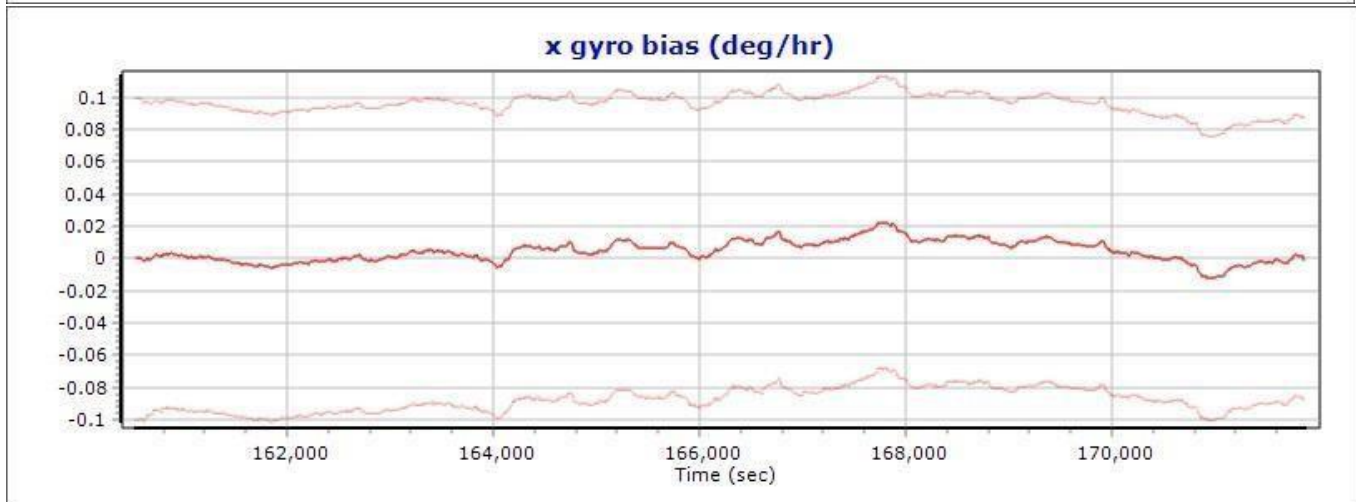
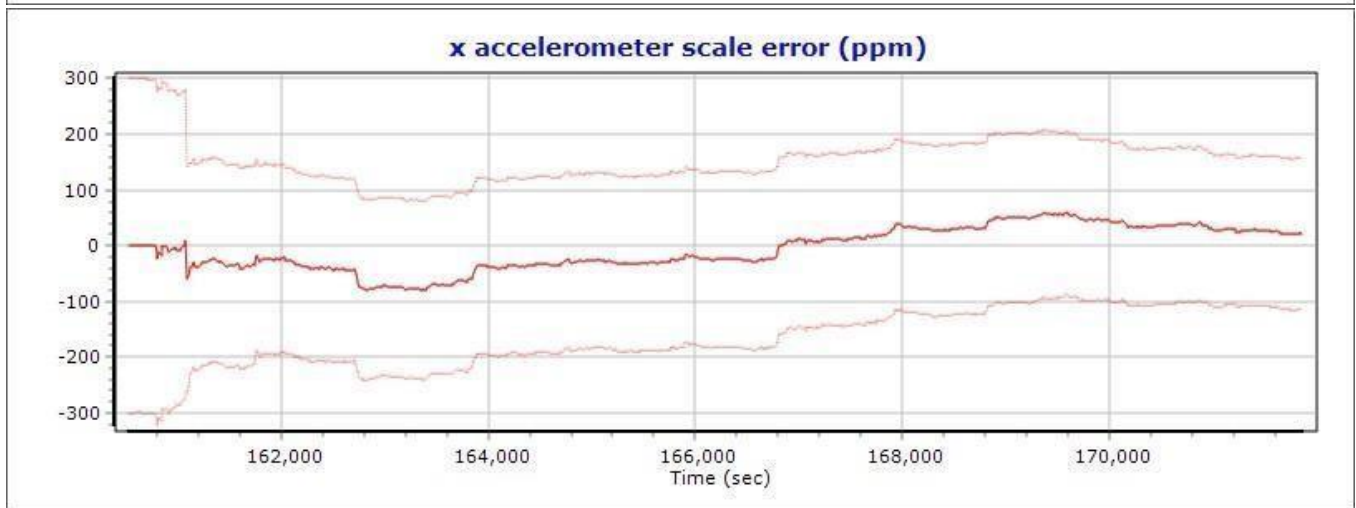
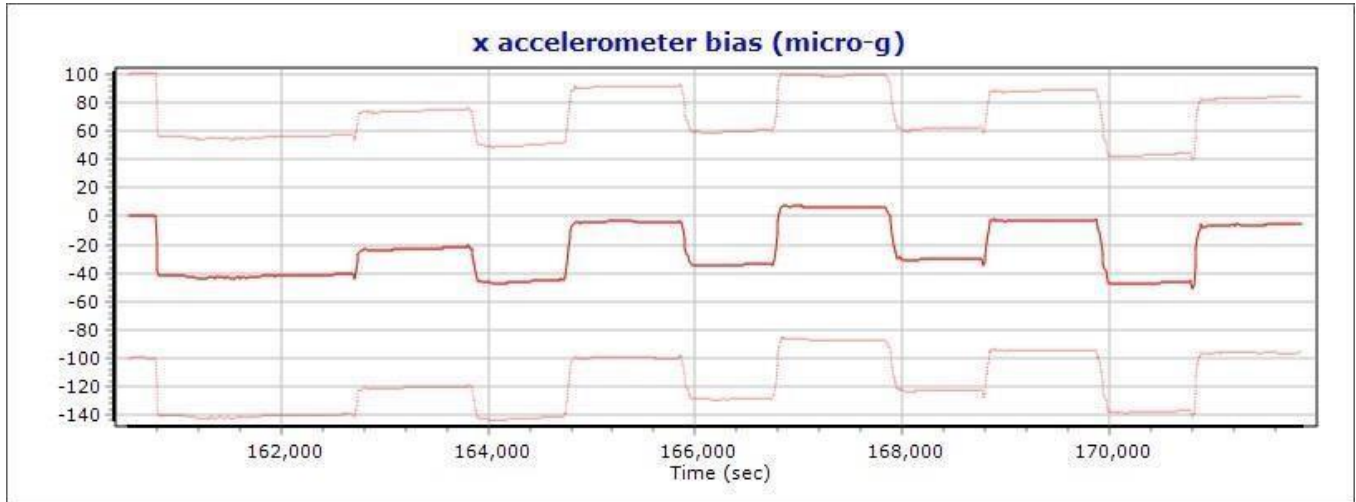
**CORS Base Stations**

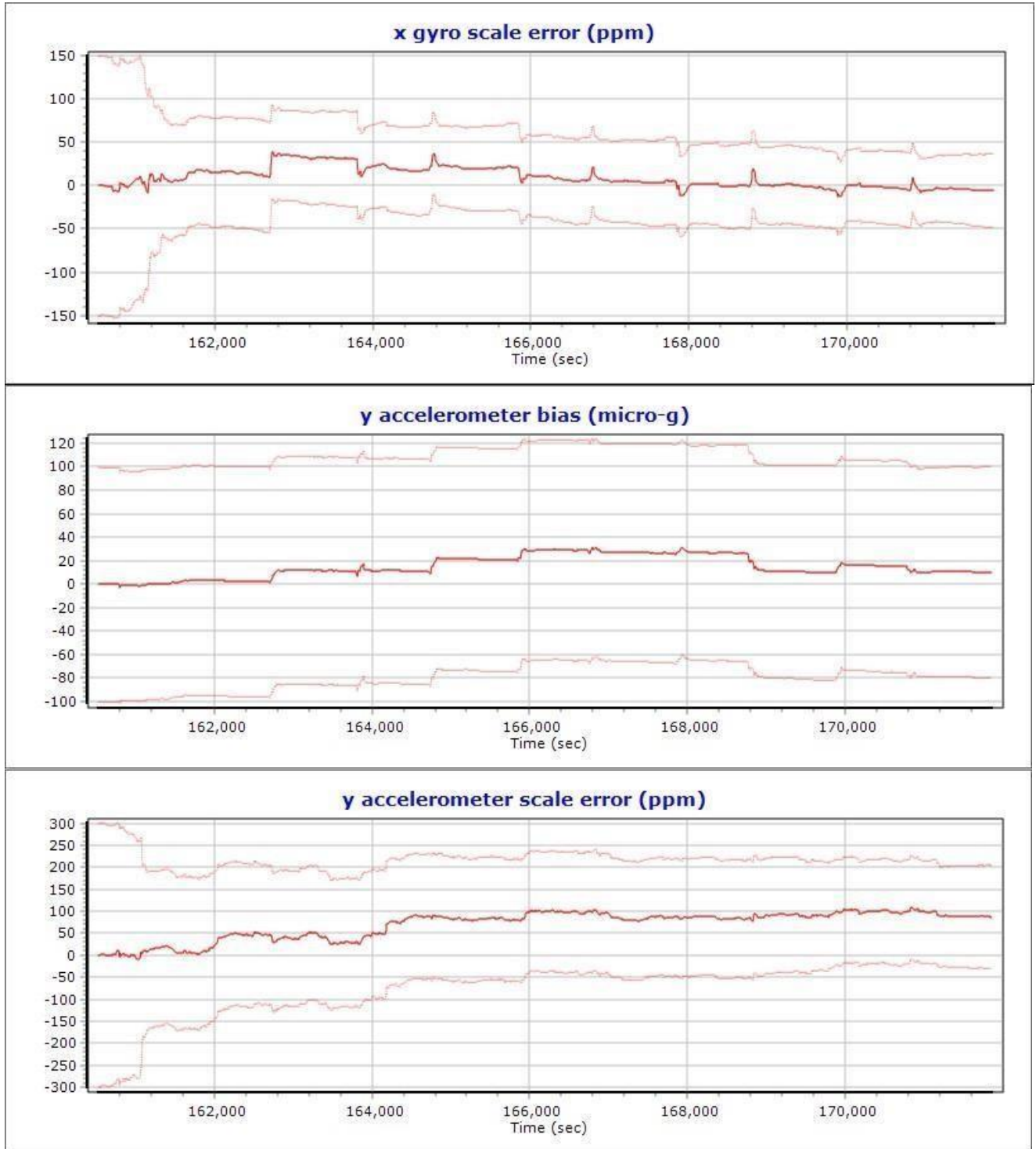
<b>Station</b>	<b>Original</b>			<b>Adjusted</b>		
txmh	N31°33'27.82278"	W102°53'38.39692"	774.513	N31°33'27.83670"	W102°53'38.43993"	773.377
txad	N32°18'28.83158"	W102°32'36.98765"	946.849	N32°18'28.83158"	W102°32'36.98765"	946.849

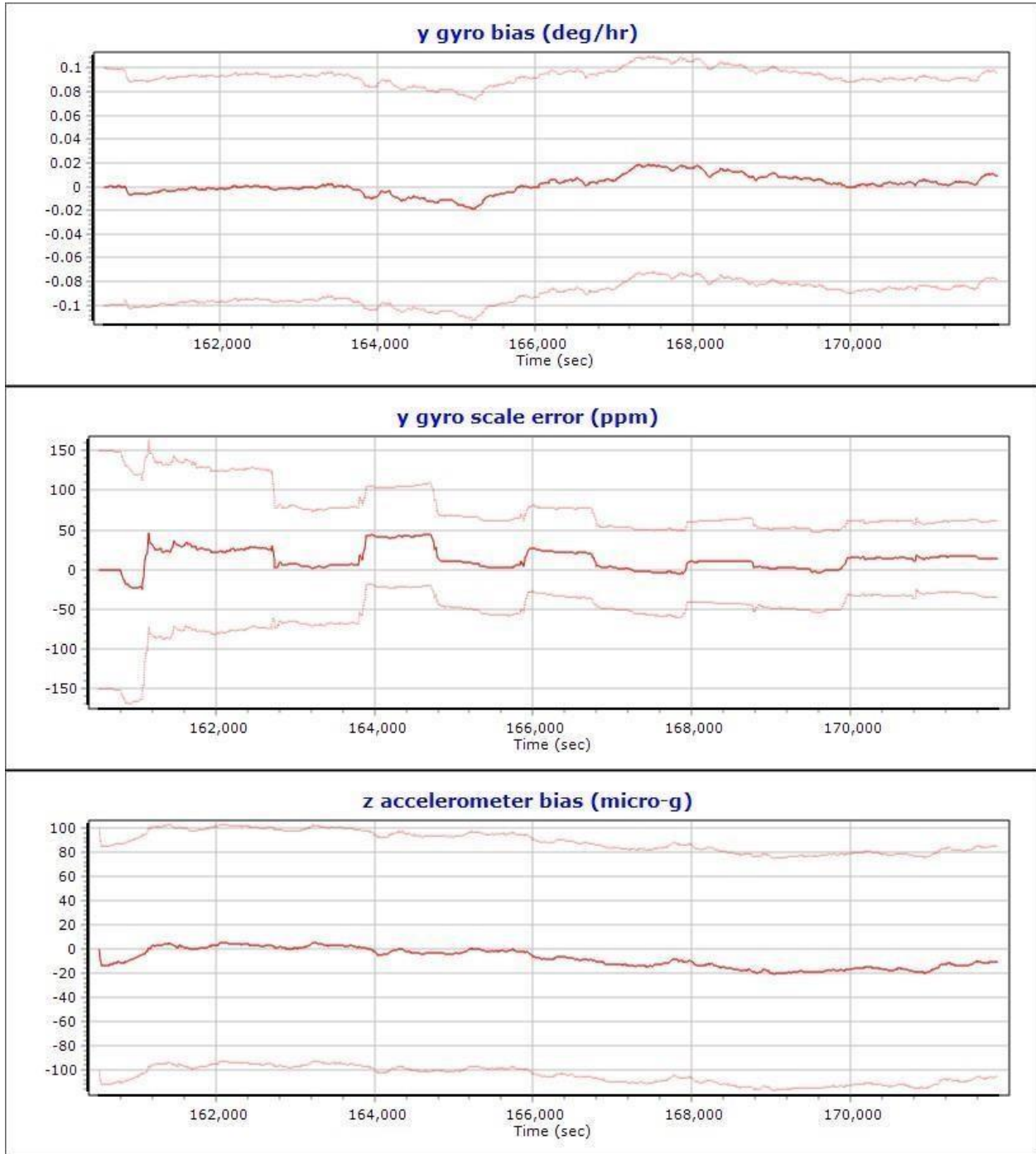
TXSO	N32°08'28.21594"	W101°48'27.40138"	801.518	N32°08'28.21612"	W101°48'27.40223"	801.509
TXS3	N32°42'42.42349"	W102°37'47.28471"	977.768	N32°42'42.42313"	W102°37'47.28512"	977.737

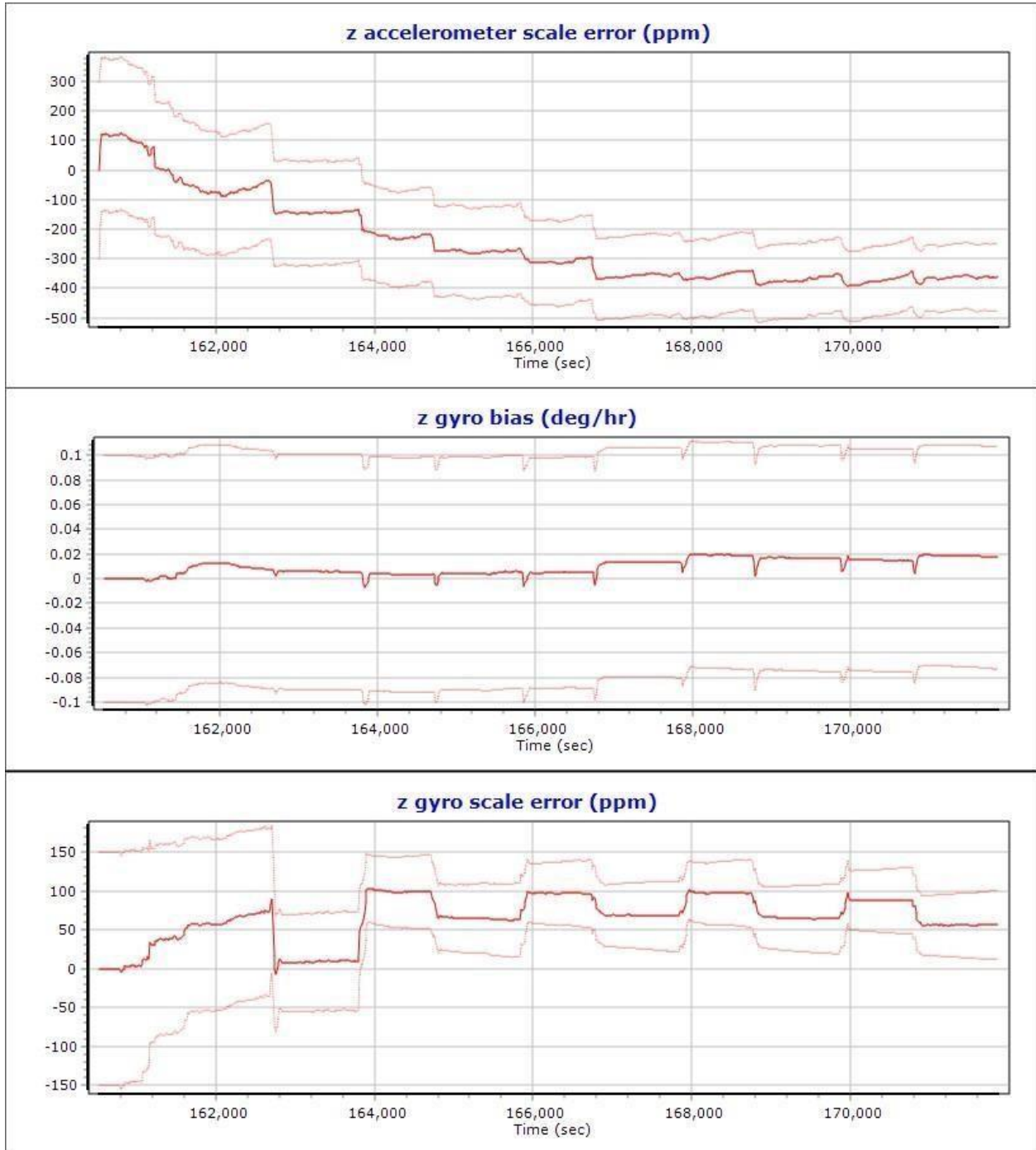
TXLA	N32°45'40.91675"	W101°56'38.21350"	891.645	N32°45'40.91670"	W101°56'38.21359"	891.622
TXKM	N31°50'33.37111"	W103°06'31.30047"	847.990	N31°50'33.37126"	W103°06'31.30090"	847.988
TXOE	N31°52'24.51759"	W102°18'50.27494"	856.094	N31°52'24.51731"	W102°18'50.27512"	856.079
TXCE	N31°25'22.08558"	W102°21'27.22542"	754.414	N31°25'22.08553"	W102°21'27.22595"	754.389



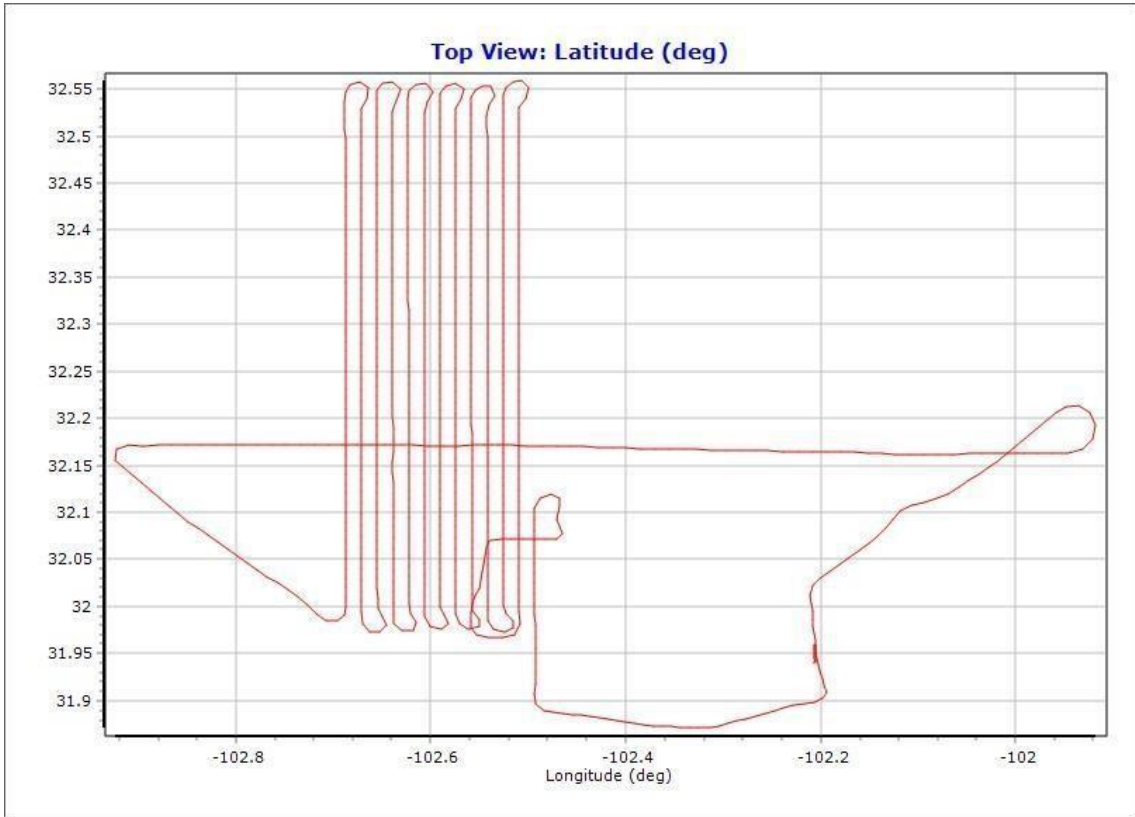


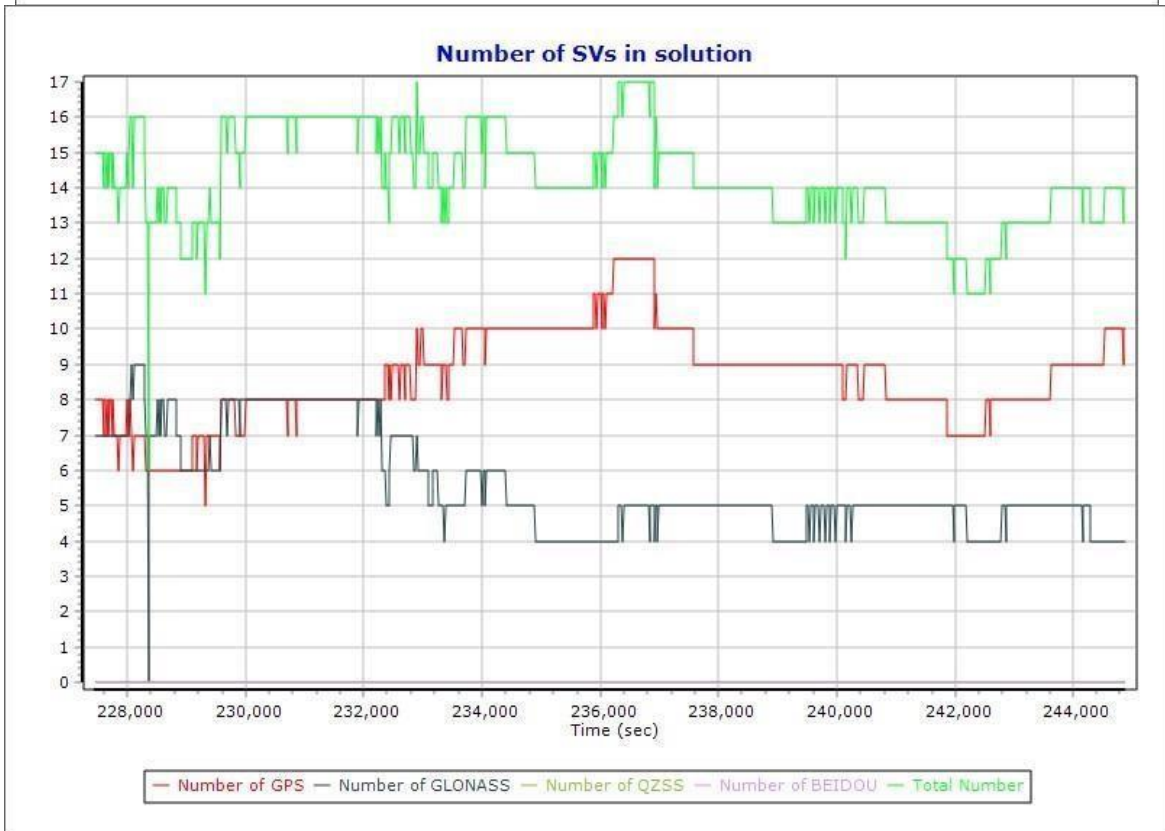
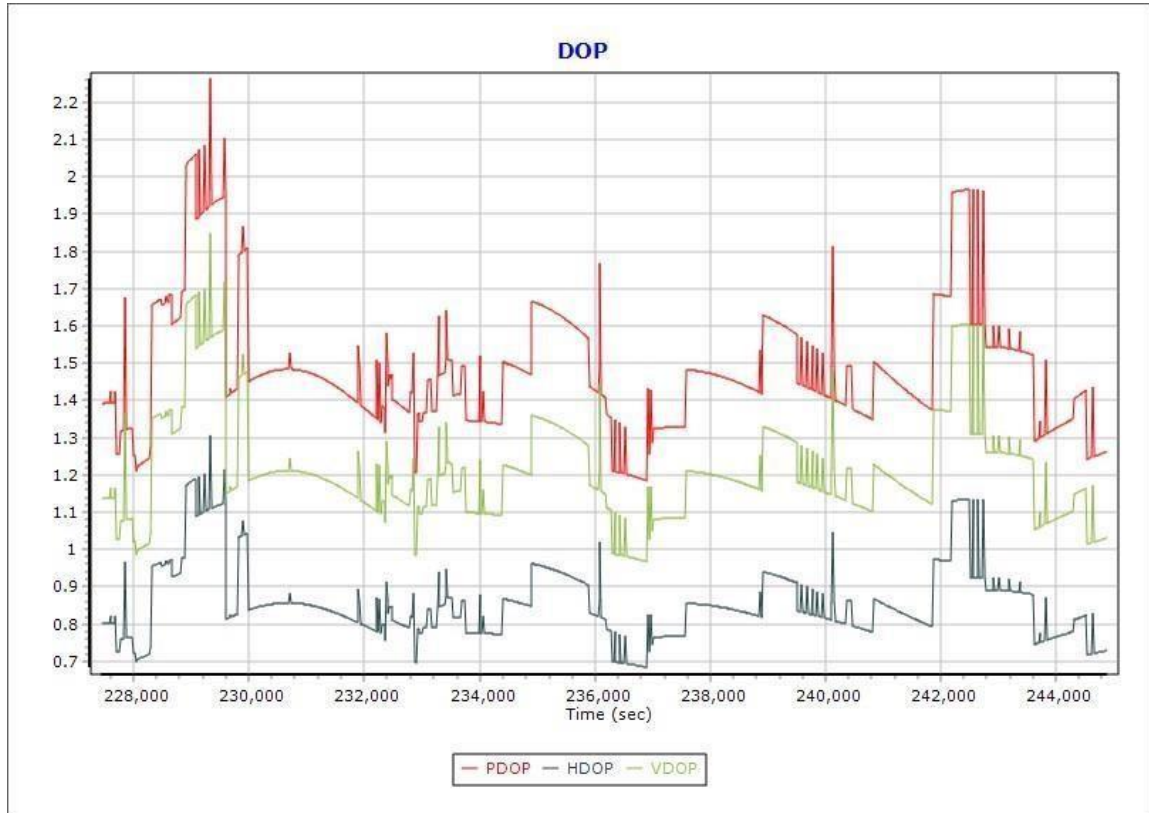






**FEBRUARY 13, 2018 MISSION 1**





## Processing Summary Information

### Processing Summary Information

Program: POSPac MMS  
Version: 8.1.6388.30062  
Project: \\sa\data\riegl\18047\20180213\_TX\_A

Solution Type: IN-Fusion SmartBase

Fixed: 17462	(99.99%)
Float: 0	(0.00%)
No Solution: 1	(0.01%)

Number of Epochs:

Total in RAW file: 17468  
No processed position: 6

Fwd/Rev Separation RMS Values (m):

North: 0.007  
East: 0.004  
Height: 0.070

Fwd/Rev Sep. RMS for 25%-75% weighting (m): 8733 occurrences

North: 0.004  
East: 0.003  
Height: 0.037

Quality Number Percentages:

Q 0: 100.0 %

Position Standard Deviation Percentages (%):

0.00 - 0.10 m: 100  
 0.10 - 0.30 m: 0  
 0.30 - 1.00 m: 0  
 1.00 - 5.00 m: 0  
 5.00 m + over: 0

Percentages of epochs with DD\_DOP over 10.00: 0 %

DOP over Tol: 1.48%

Baseline Distances (km):

Maximum: 57.1  
 Minimum: 0.3  
 Average: 24.11  
 First Epoch: 41.19  
 Last Epoch: 41.19

**CORS Base Stations**

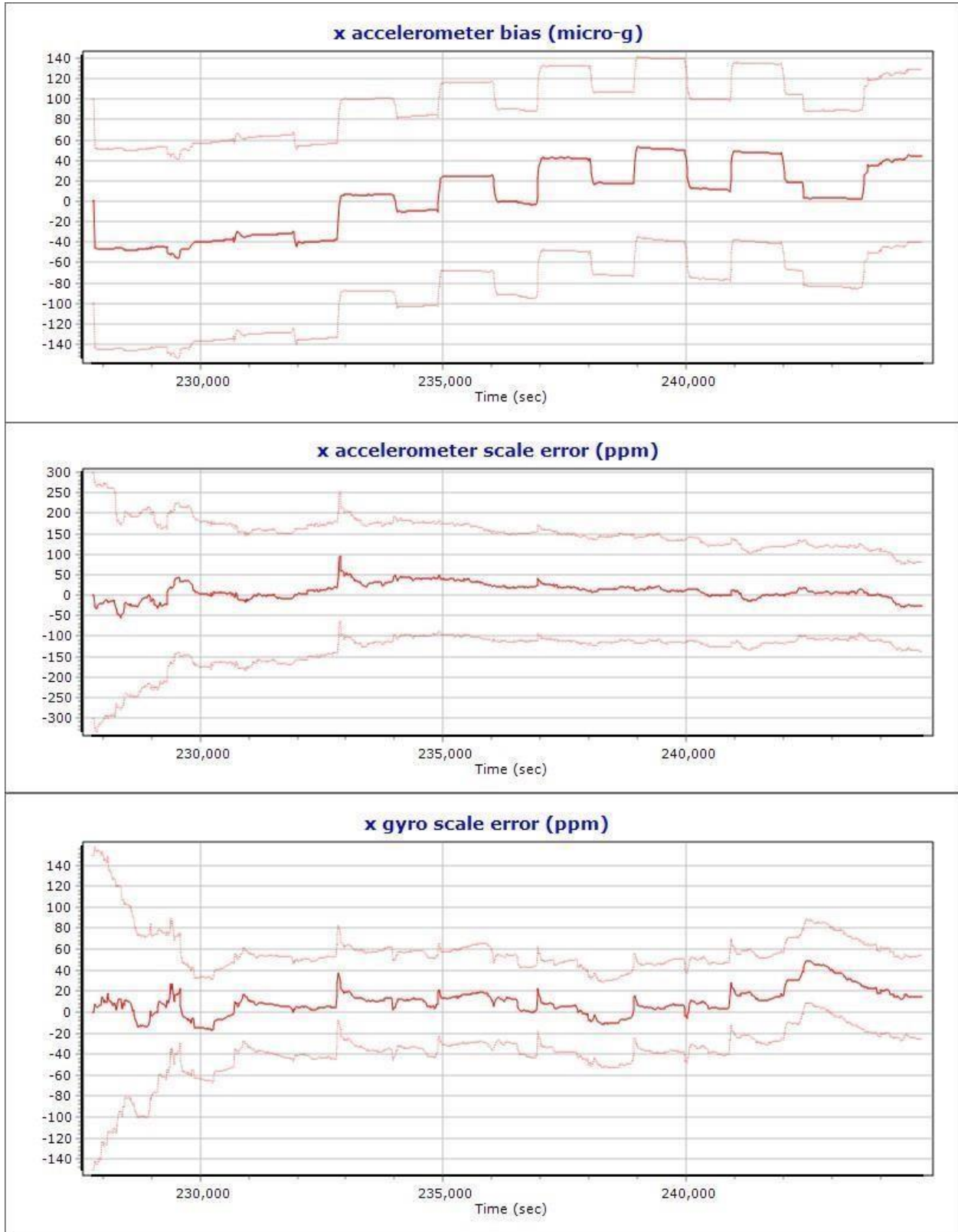
Station	Original			Adjusted		
TXAD	N32°18'28.83158"	W102°32'36.98765"	946.849			
TXSO	N32°08'28.21594"	W101°48'27.40138"	801.518	N32°08'28.21611"	W101°48'27.40228"	801.510
TXS3	N32°42'42.42349"	W102°37'47.28471"	977.768	N32°42'42.42314"	W102°37'47.28497"	977.725
TXOE	N31°52'24.51763"	W102°18'50.27461"	856.094	N31°52'24.51723"	W102°18'50.27505"	856.081
TXMH	N31°33'27.83676"	W102°53'38.43950"	773.391	N31°33'27.83658"	W102°53'38.43978"	773.376
TXKM	N31°50'33.37111"	W103°06'31.30048"	847.990	N31°50'33.37119"	W103°06'31.30081"	847.985

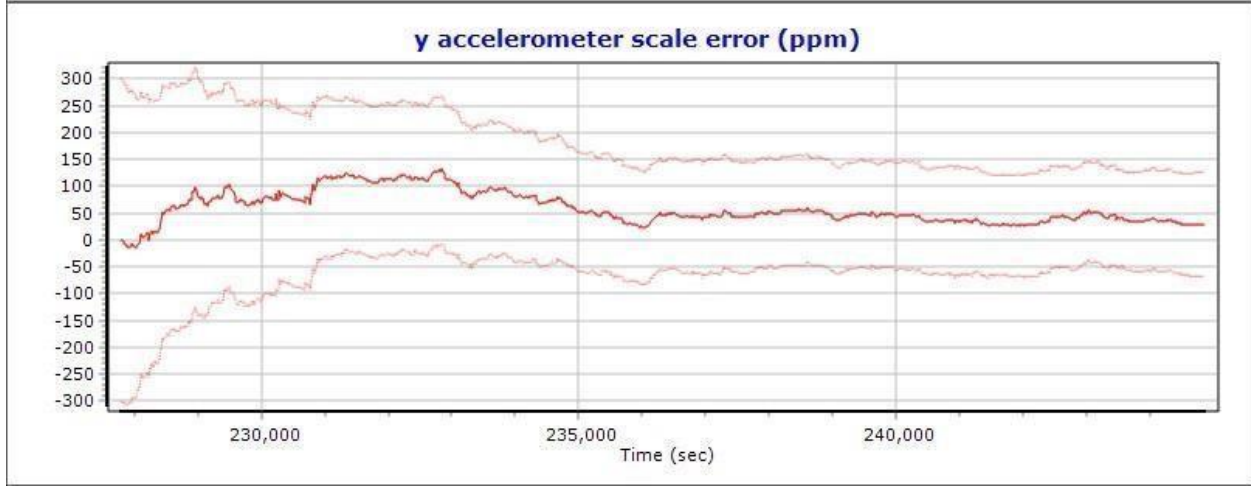
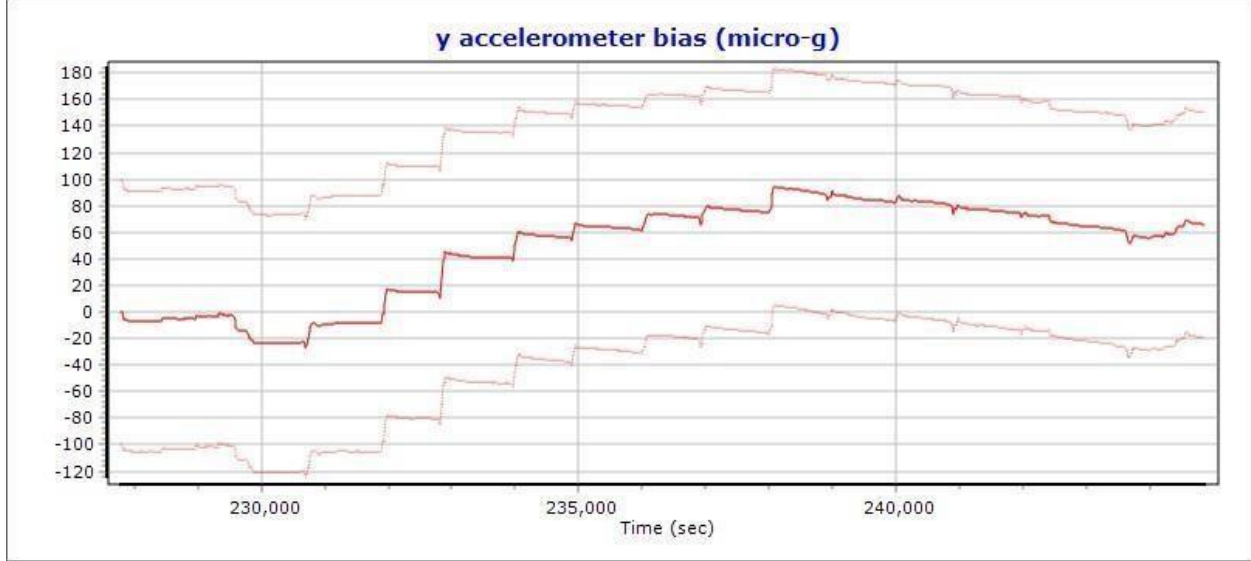
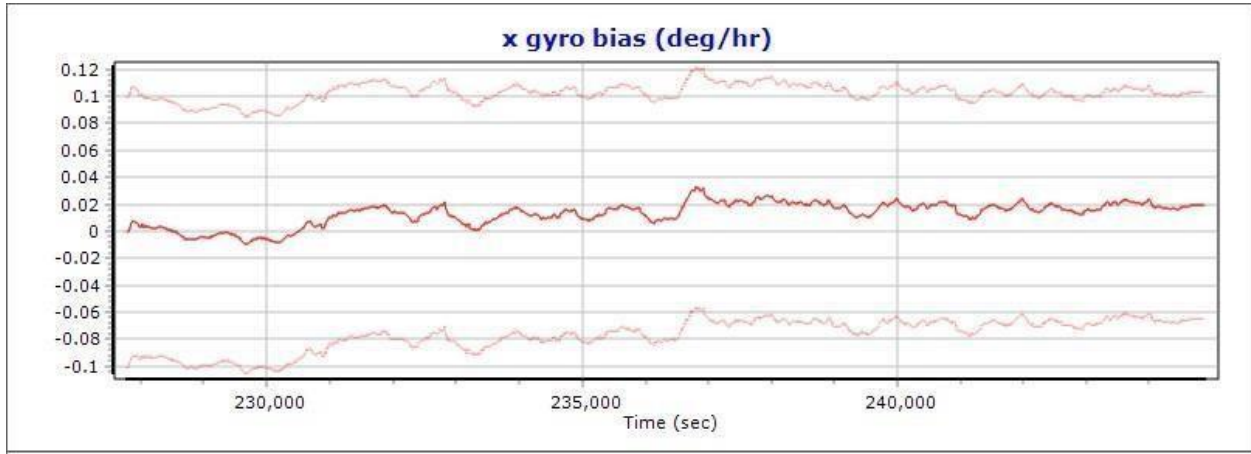


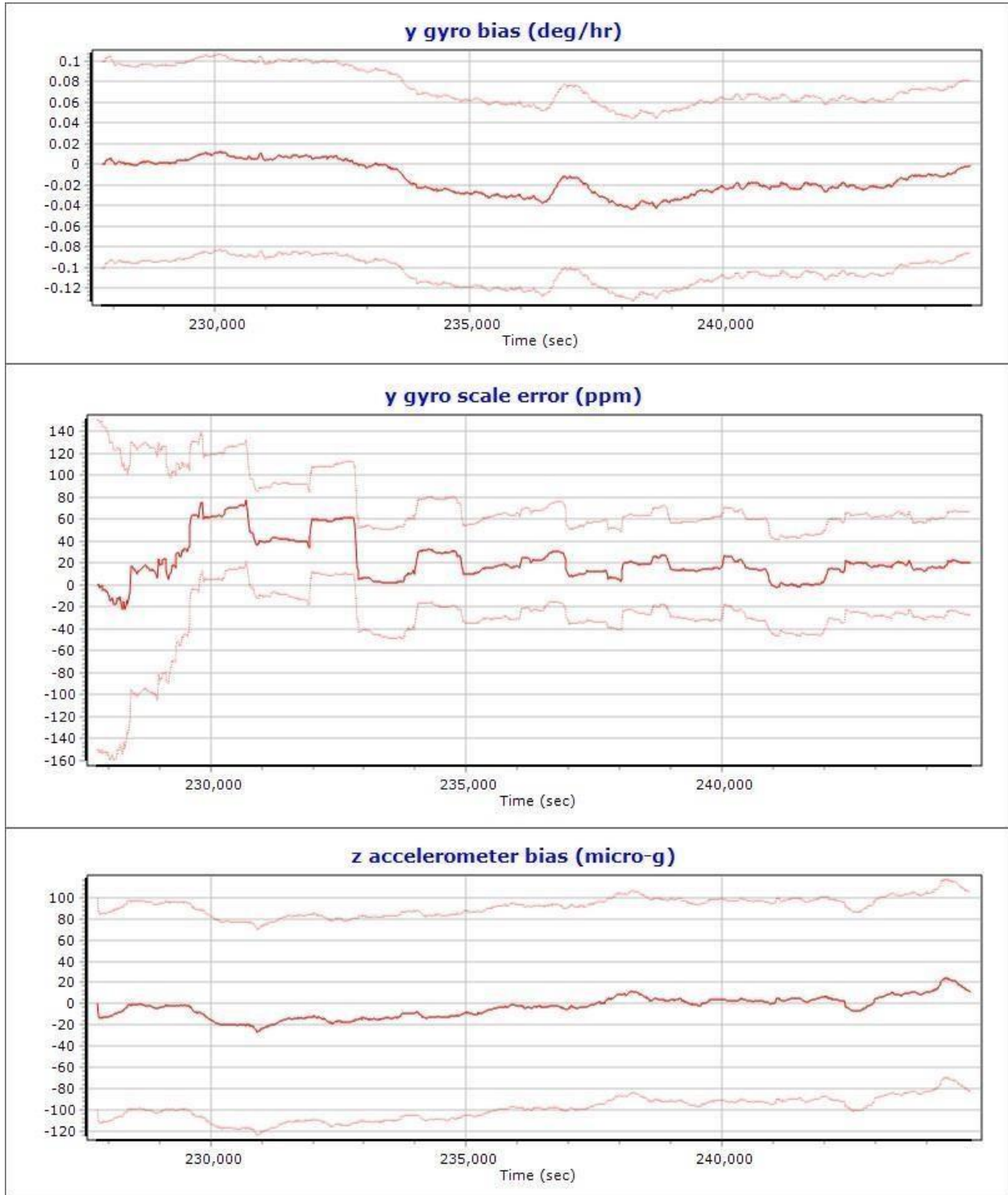


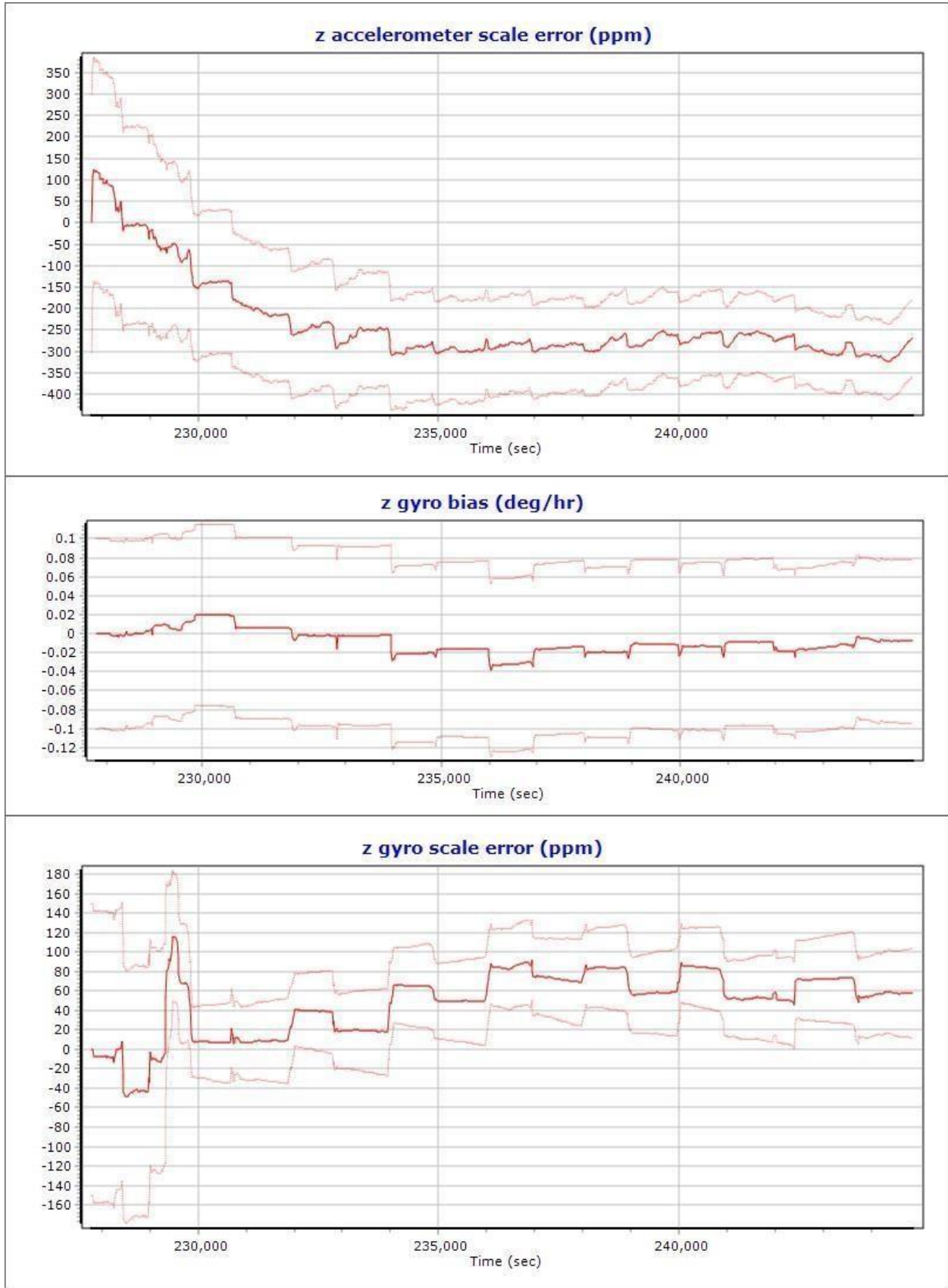
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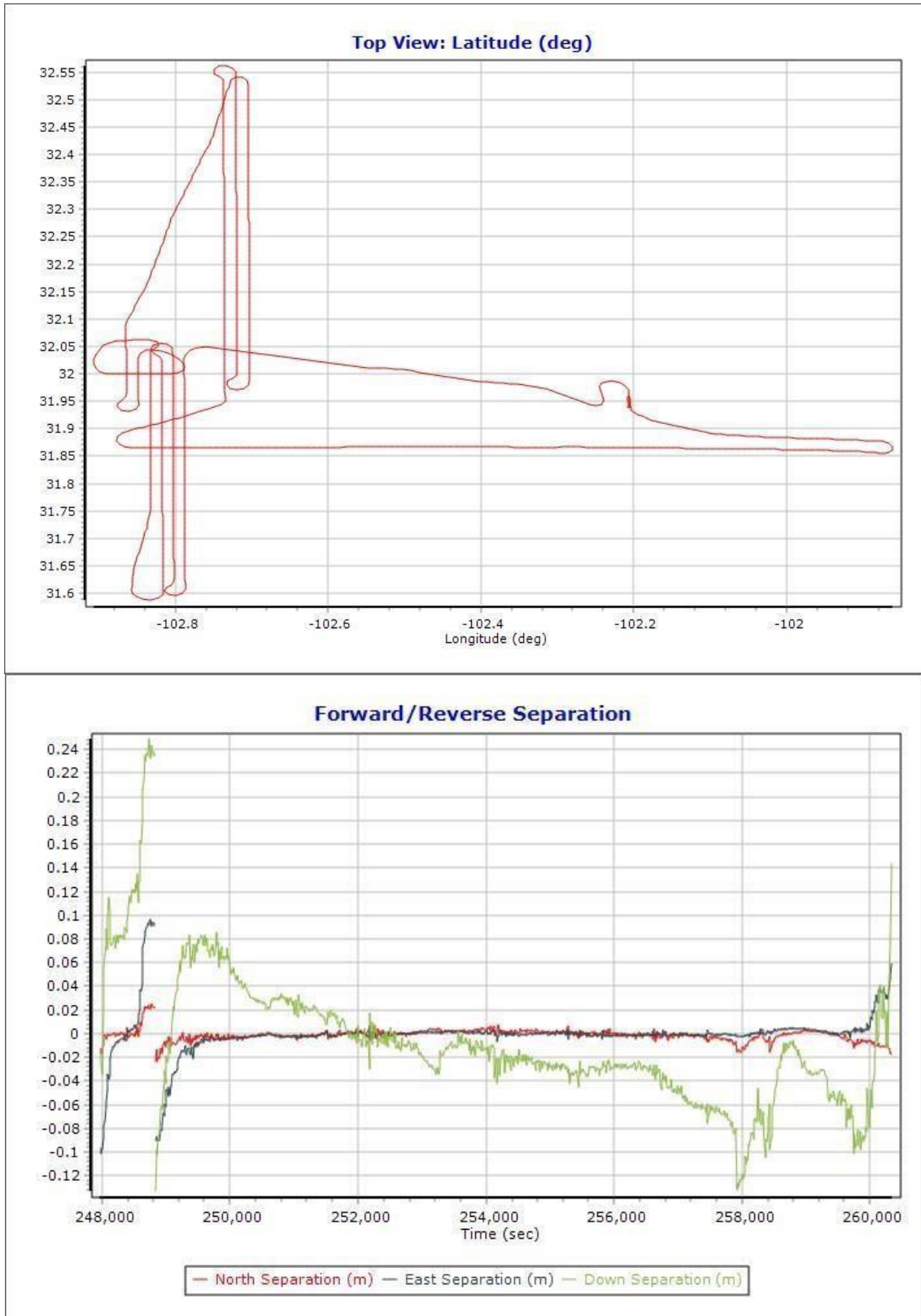


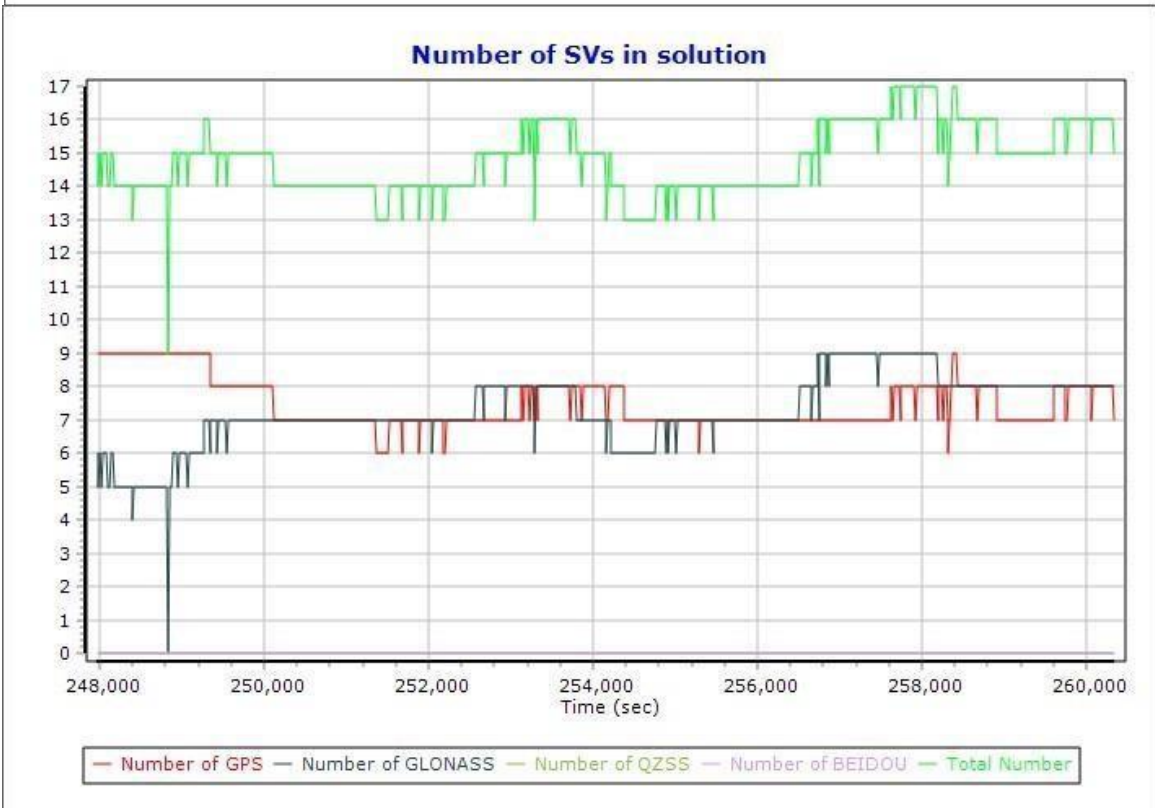
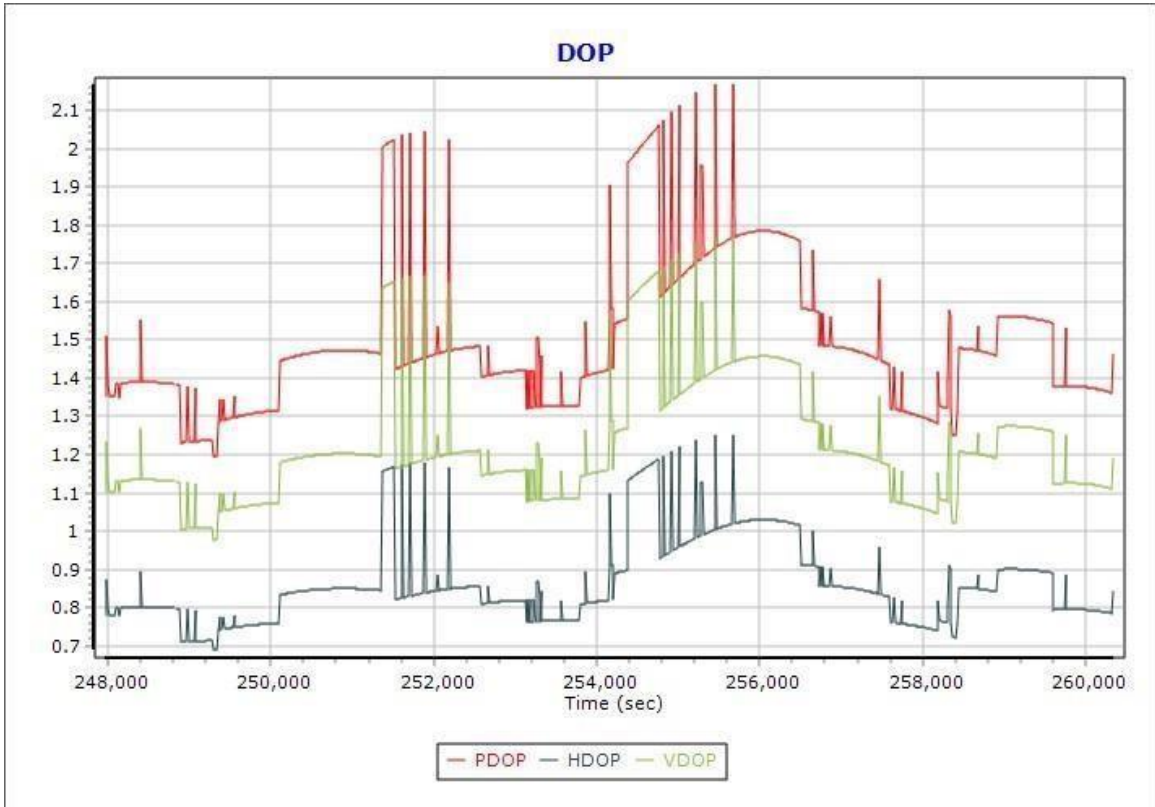






## FEBRUARY 13, 2018 MISSION 2







## Processing Summary Information

### Processing Summary Information

Program: POSpac MMS  
Version: 8.1.6388.30062  
Project: \\sa\data\riegl\18047\20180213\_TX\_B

Solution Type: IN-Fusion SmartBase

Fixed: 12399	(99.99%)
Float: 0	(0.00%)
No Solution: 1	(0.01%)

Number of Epochs:

Total in RAW file: 12401  
No processed position: 2

Fwd/Rev Separation RMS Values (m):

North: 0.005  
East: 0.019  
Height: 0.057

Fwd/Rev Sep. RMS for 25%-75% weighting (m): 6200 occurrences

North: 0.002  
East: 0.001  
Height: 0.026

Quality Number Percentages:

Q 0: 100.0 %

Position Standard Deviation Percentages (%):

0.00 - 0.10 m: 99.952  
 0.10 - 0.30 m: 0.048  
 0.30 - 1.00 m: 0  
 1.00 - 5.00 m: 0  
 5.00 m + over: 0

Percentages of epochs with DD\_DOP over 10.00: 0 %

DOP over Tol: 1.50%

Baseline Distances (km):

Maximum: 72.05  
 Minimum: 1.39  
 Average: 32.95  
 First Epoch: 38.16  
 Last Epoch: 38.23

**CORS Base Stations**

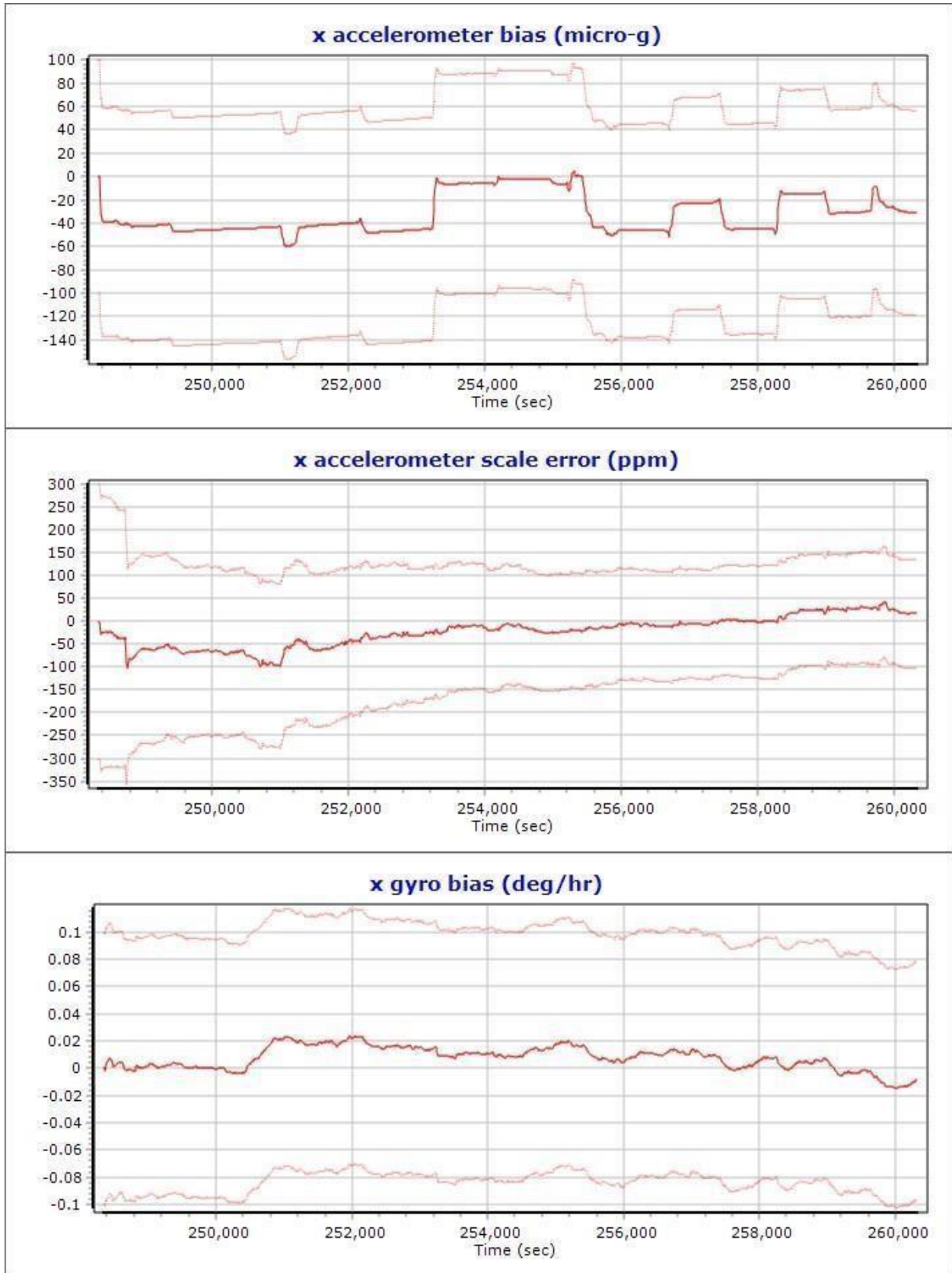
Station	Original			Adjusted		
TXKM	N31°50'33.37107"	W103°06'31.30077"	847.988			
TXSO	N32°08'28.21594"	W101°48'27.40138"	801.518	N32°08'28.21597"	W101°48'27.40211"	801.513
TXS3	N32°42'42.42349"	W102°37'47.28471"	977.768	N32°42'42.42303"	W102°37'47.28493"	977.728
TXOE	N31°52'24.51763"	W102°18'50.27461"	856.094	N31°52'24.51716"	W102°18'50.27501"	856.085
TXMH	N31°33'27.83676"	W102°53'38.43950"	773.391	N31°33'27.83648"	W102°53'38.43975"	773.380
TXCE	N31°25'22.08558"	W102°21'27.22543"	754.414	N31°25'22.08527"	W102°21'27.22584"	754.397

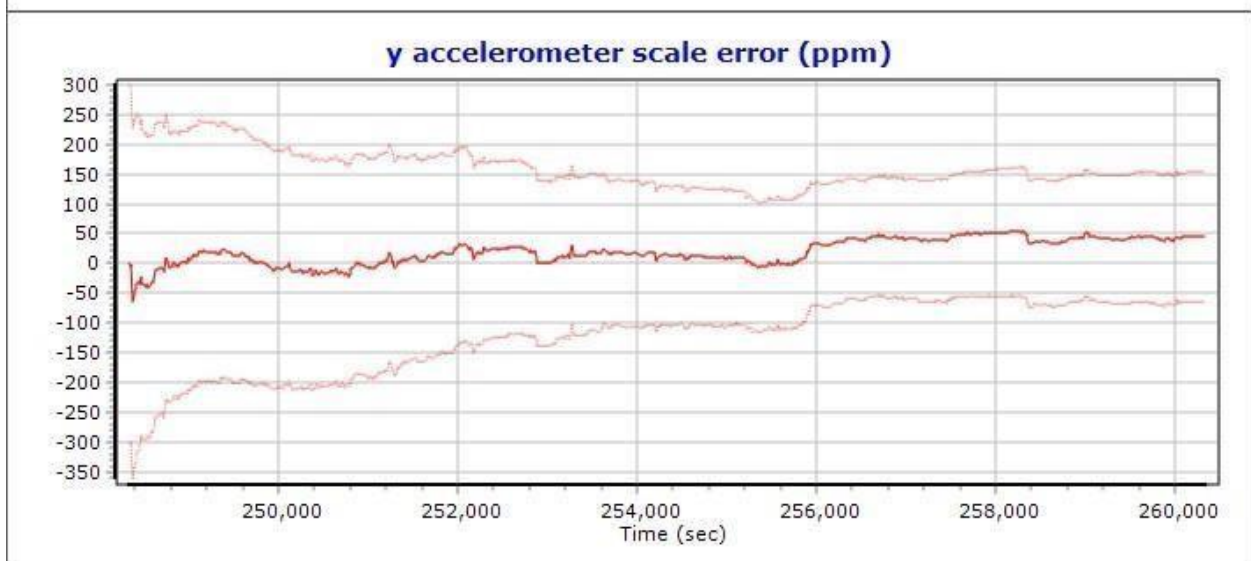
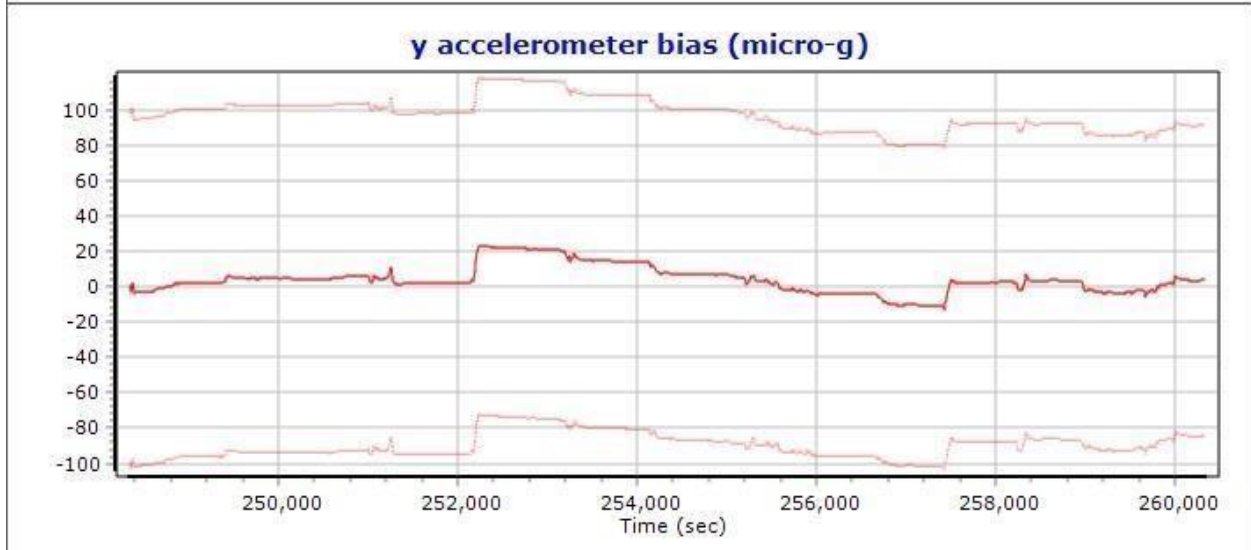
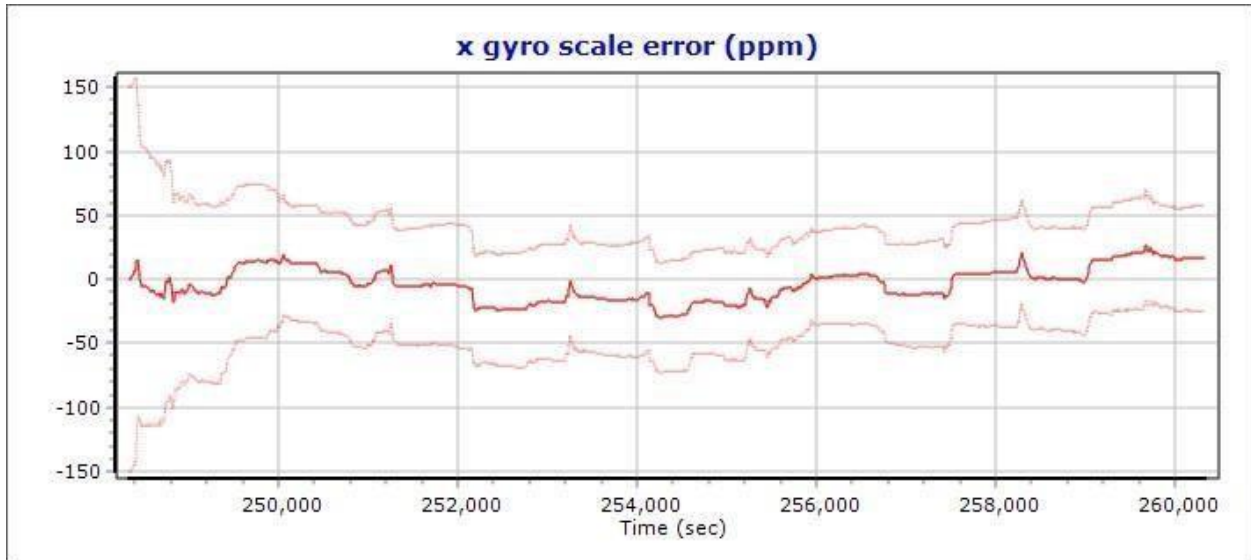
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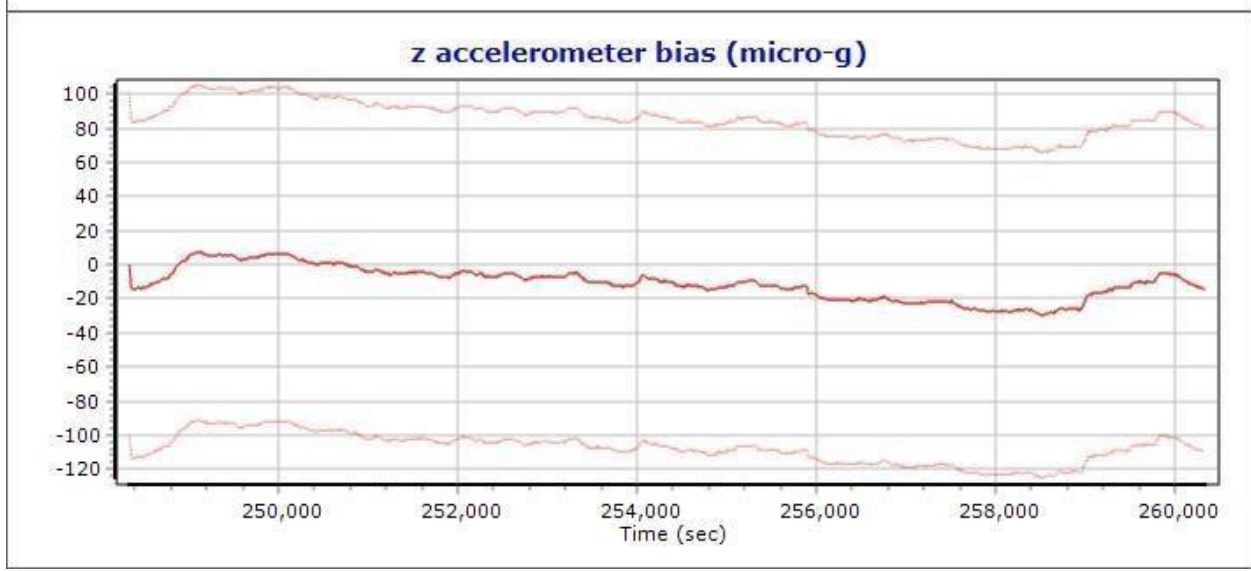
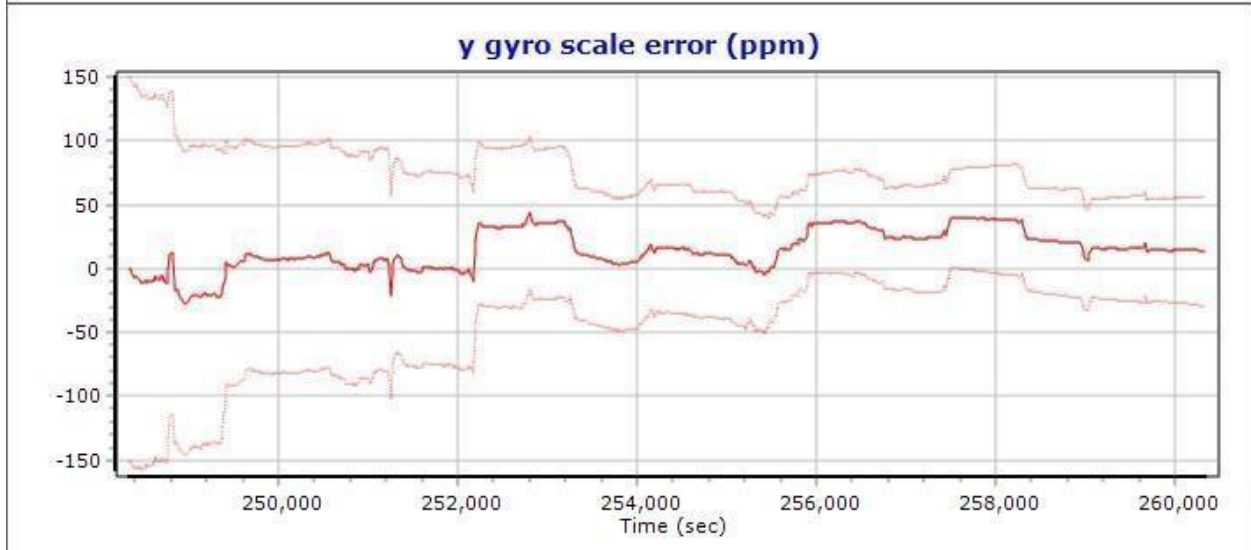
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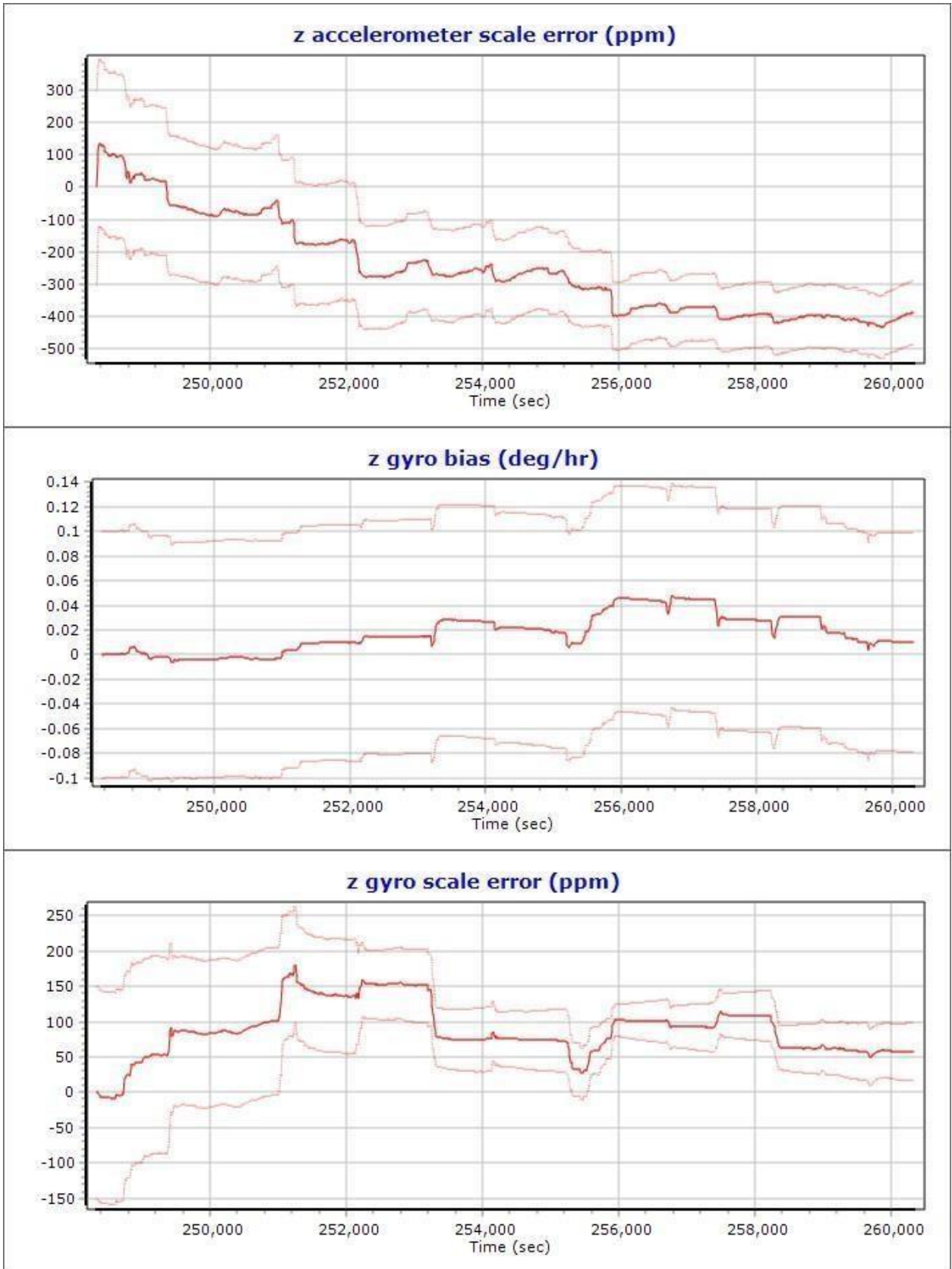
TXAD	N32°18'28.83162"	W102°32'36.98731"	946.850	N32°18'28.83144"	W102°32'36.98764"	946.853
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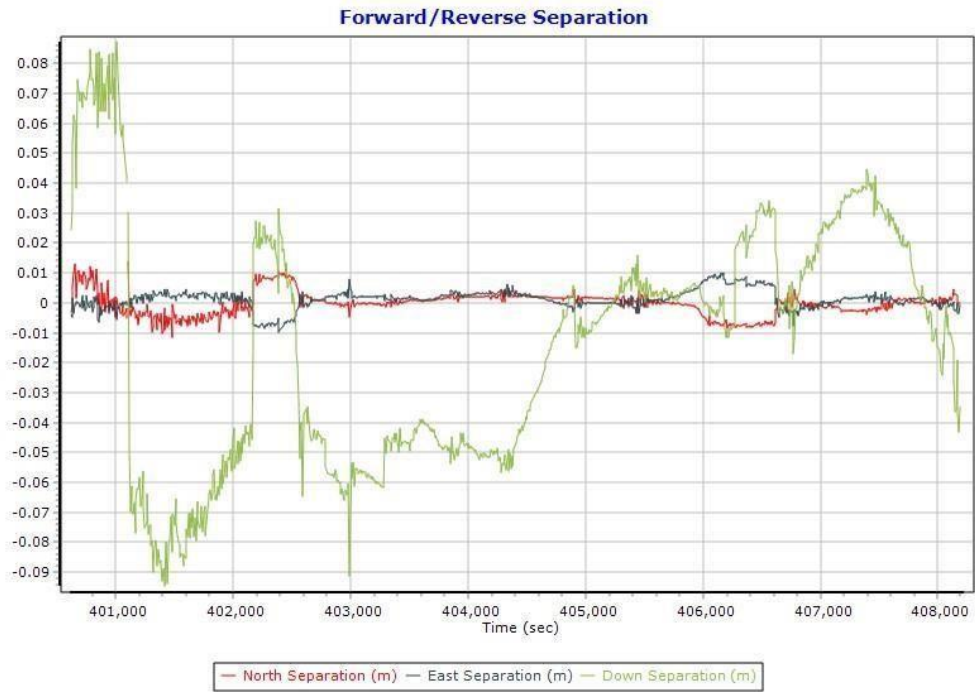
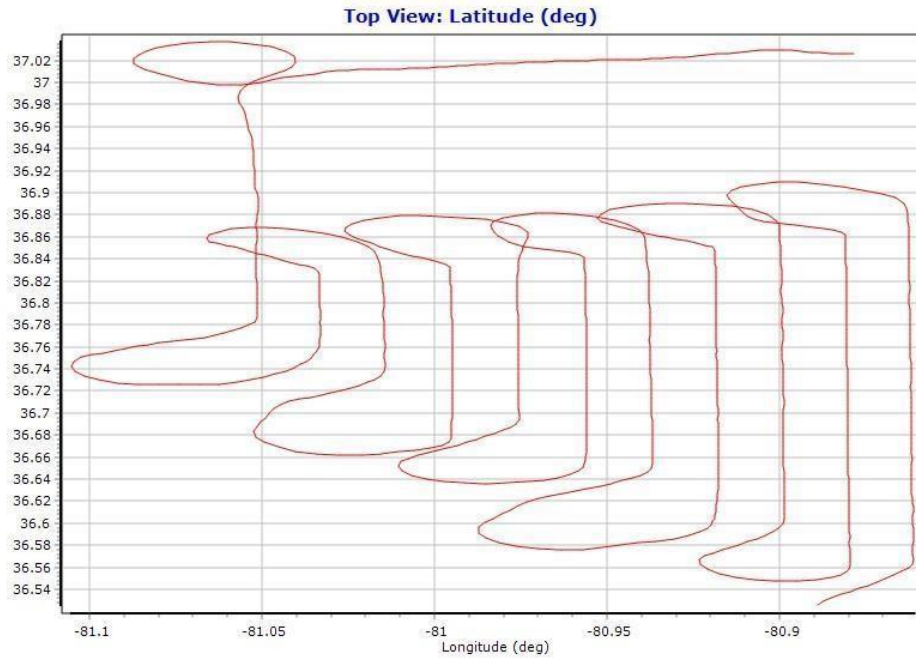


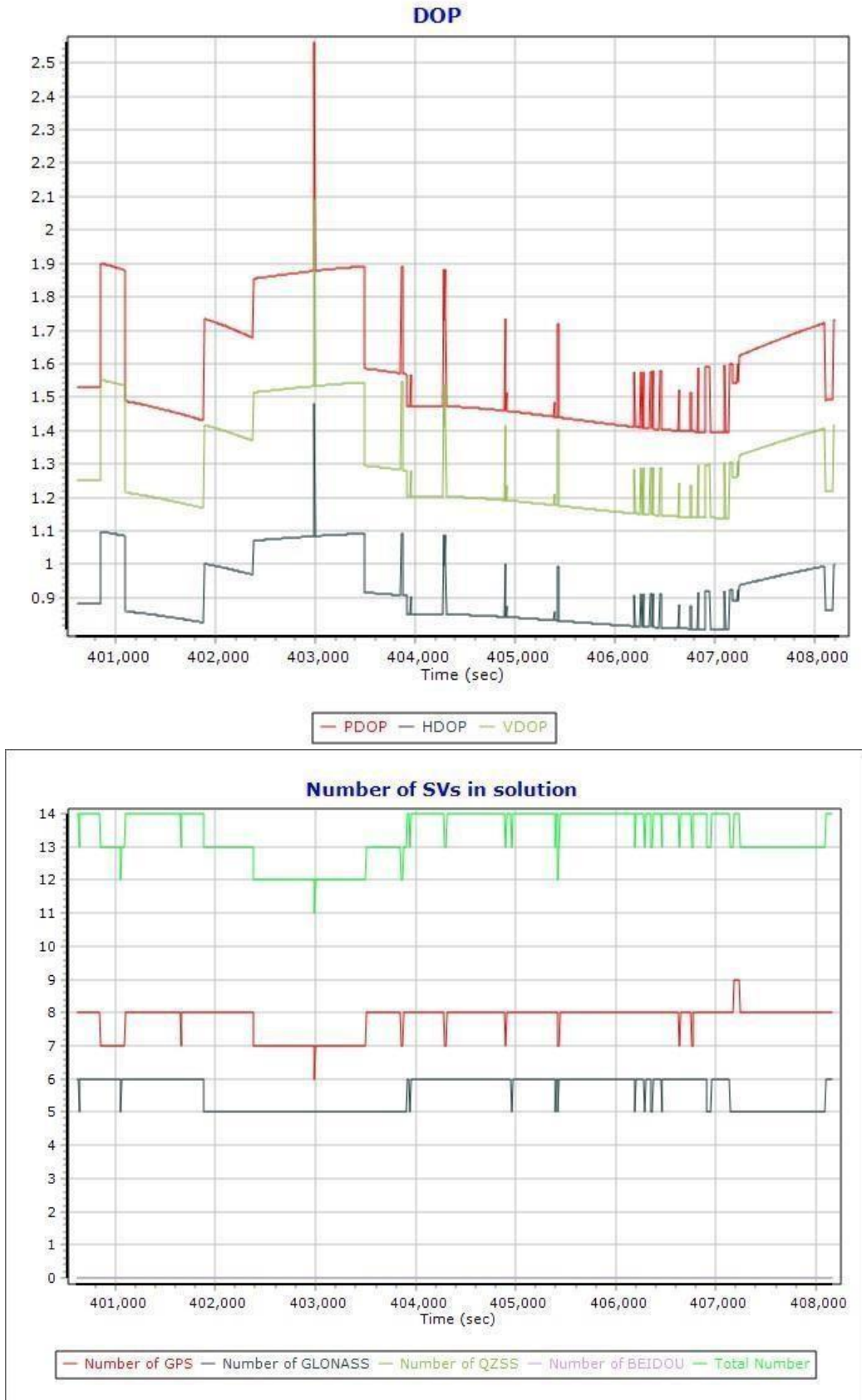






## FEBRUARY 14, 2018 MISSION 1





Processing Summary Information

## Processing Summary Information

Program: POSPac MMS  
Version: 8.1.6388.30062  
Project: \\sa\data\riegl\18047\20180214\_TX\_A

Solution Type: IN-Fusion SmartBase

Fixed: 16268	(99.99%)
Float: 0	(0.00%)
No Solution: 1	(0.01%)

Number of Epochs:

Total in RAW file: 16295  
No processed position: 27

Fwd/Rev Separation RMS Values (m):

North: 0.004  
East: 0.002  
Height: 0.031

Fwd/Rev Sep. RMS for 25%-75% weighting (m): 8147 occurrences

North: 0.002  
East: 0.002  
Height: 0.018

Quality Number Percentages:

Q 0: 100.0 %

Position Standard Deviation Percentages (%):

0.00 - 0.10 m: 100  
0.10 - 0.30 m: 0  
0.30 - 1.00 m: 0  
1.00 - 5.00 m: 0  
5.00 m + over: 0

Percentages of epochs with DD\_DOP over 10.00: 0 %

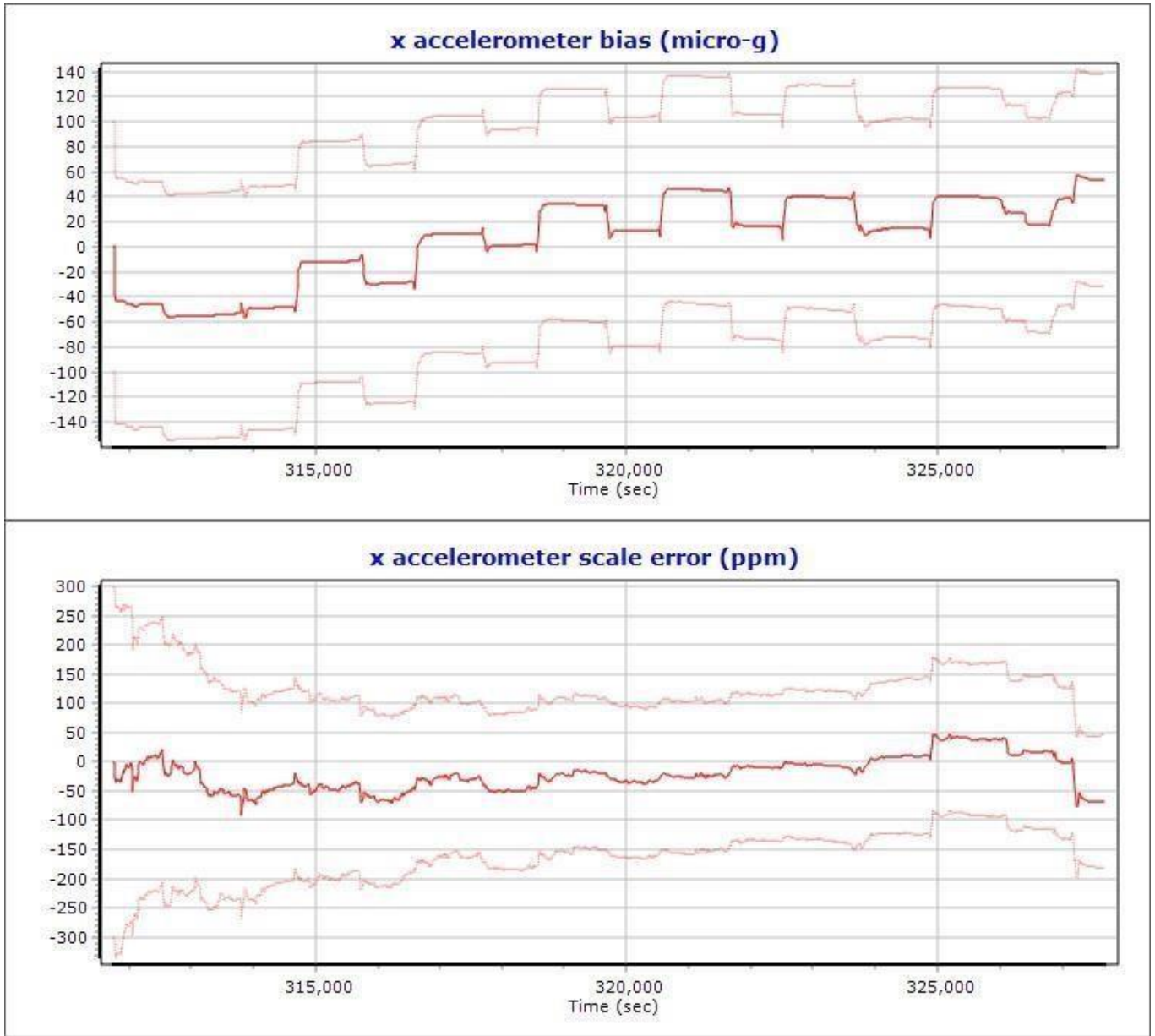
DOP over Tol: 1.44%

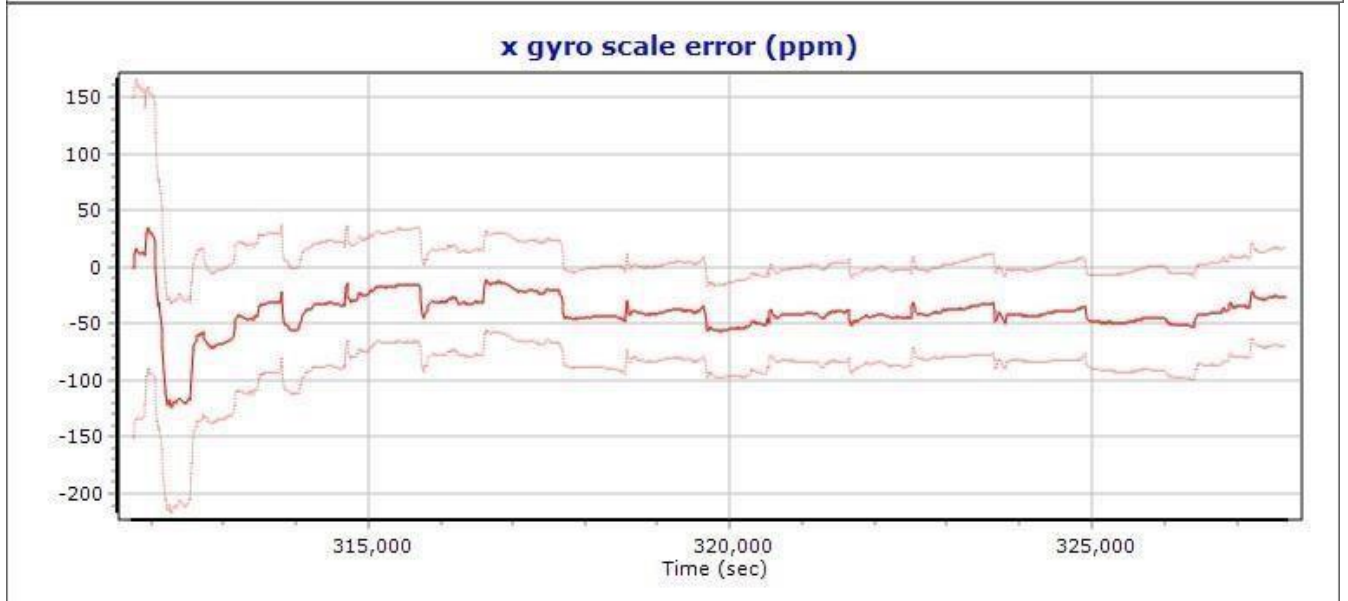
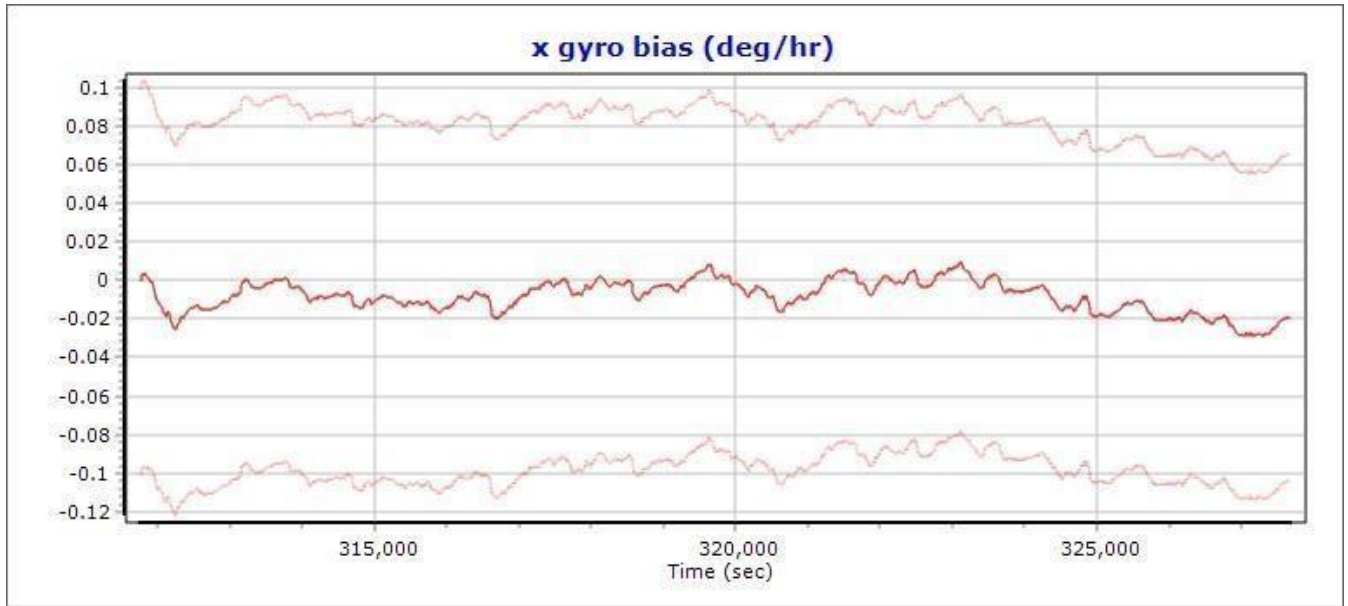
Baseline Distances (km):

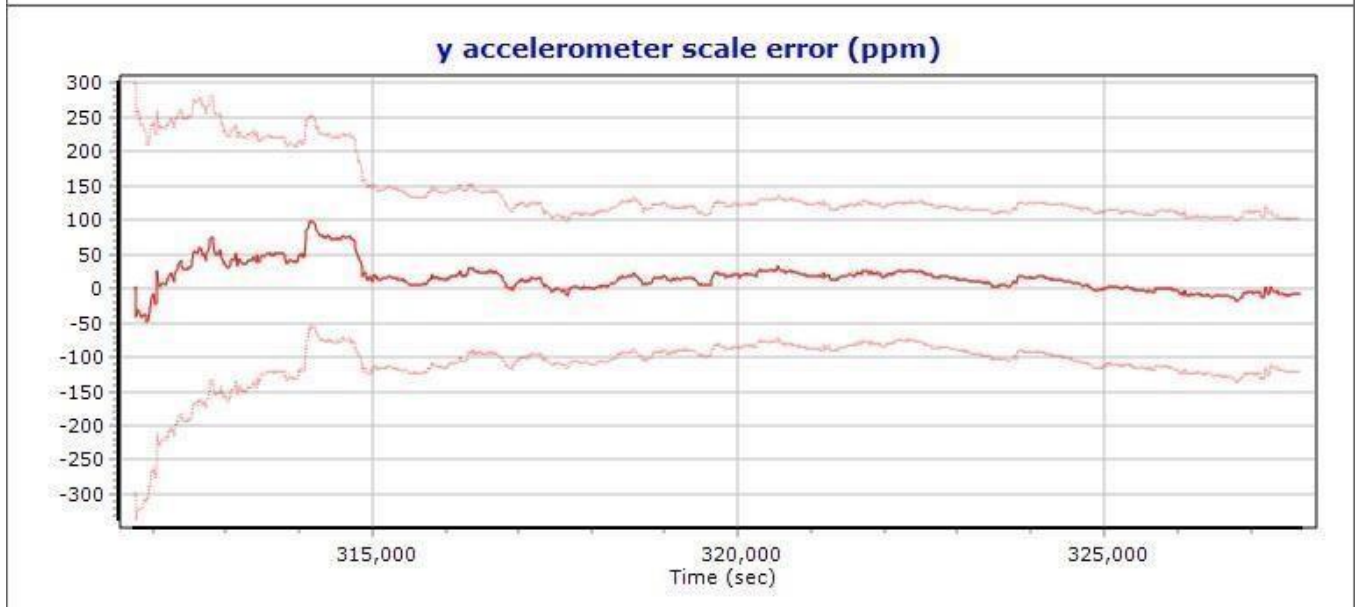
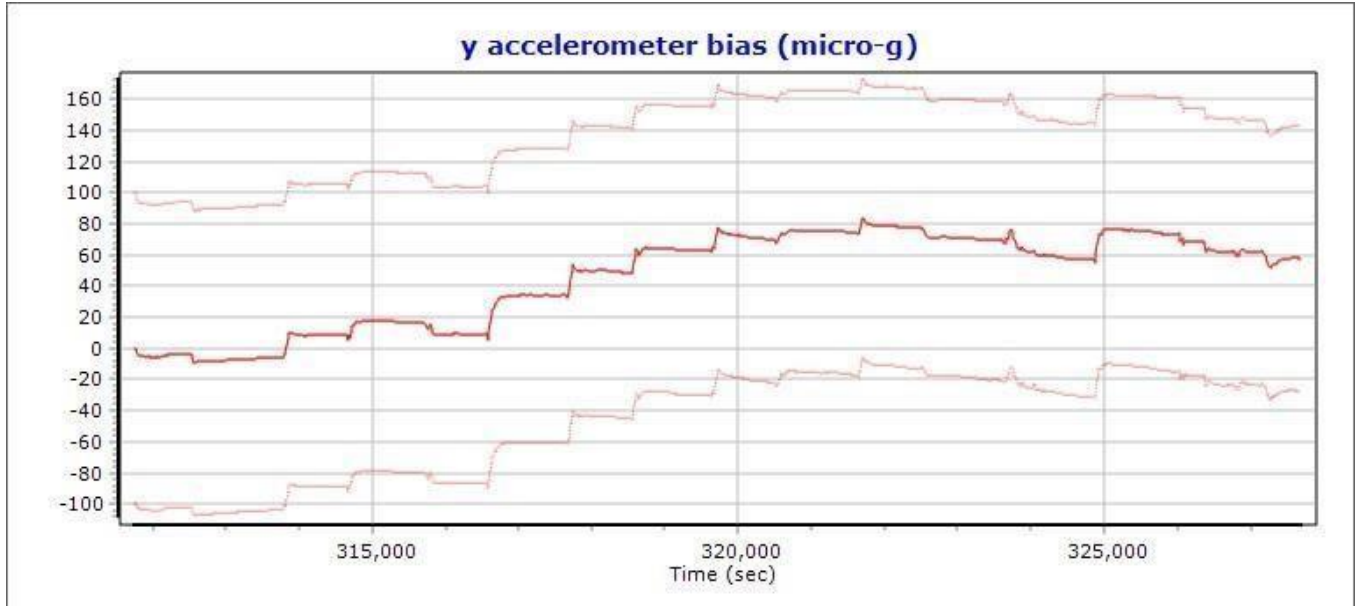
Maximum: 38.93  
Minimum: 0.29  
Average: 17.98  
First Epoch: 16.57  
Last Epoch: 16.57

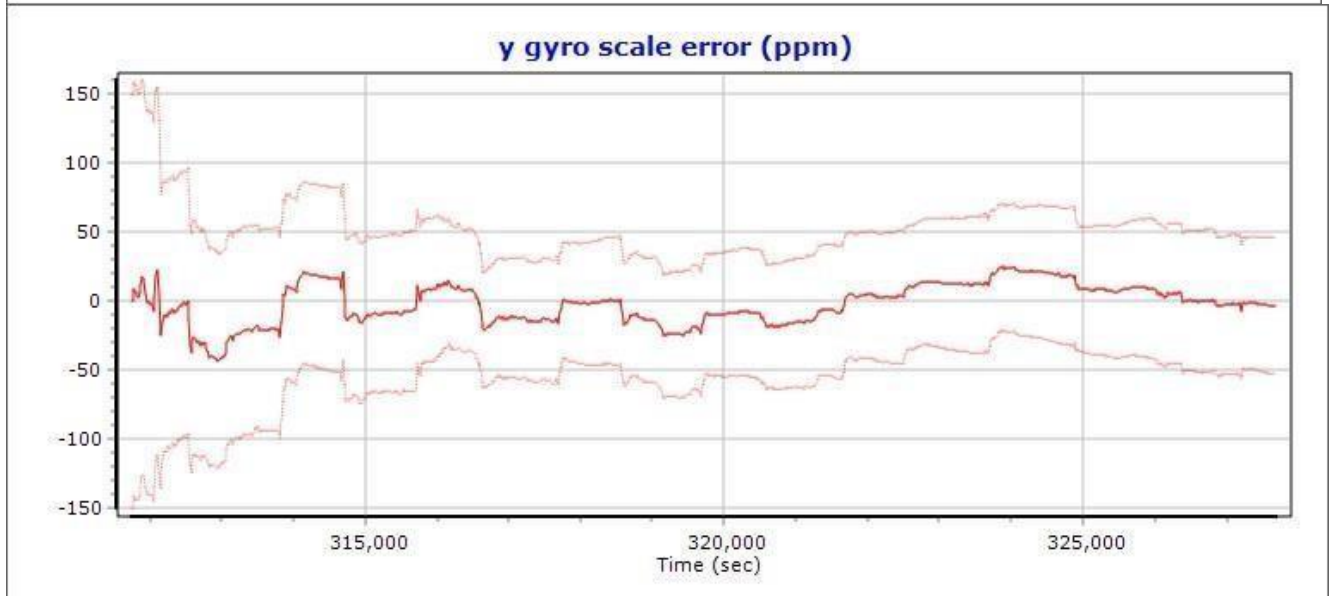
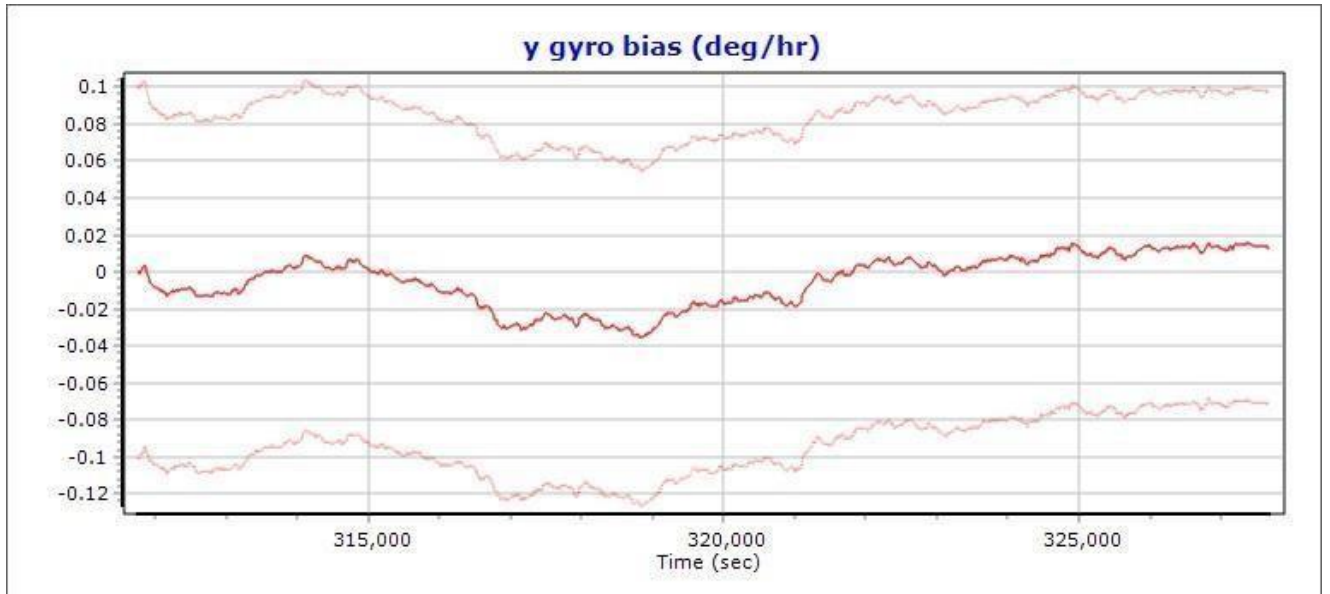
**CORS Base Stations**

Station	Original			Adjusted		
TXOE	N31°52'24.51759"	W102°18'50.27494"	856.094			
TXSO	N32°08'28.21594"	W101°48'27.40138"	801.518	N32°08'28.21632"	W101°48'27.40201"	801.525
TXAD	N32°18'28.83162"	W102°32'36.98731"	946.850	N32°18'28.83177"	W102°32'36.98759"	946.862
TXMH	N31°33'27.83676"	W102°53'38.43950"	773.391	N31°33'27.83695"	W102°53'38.43965"	773.385
TXMC	N31°07'55.57702"	W102°13'56.82357"	724.080	N31°07'55.57720"	W102°13'56.82367"	724.073
TXCE	N31°25'22.08558"	W102°21'27.22543"	754.414	N31°25'22.08575"	W102°21'27.22578"	754.403

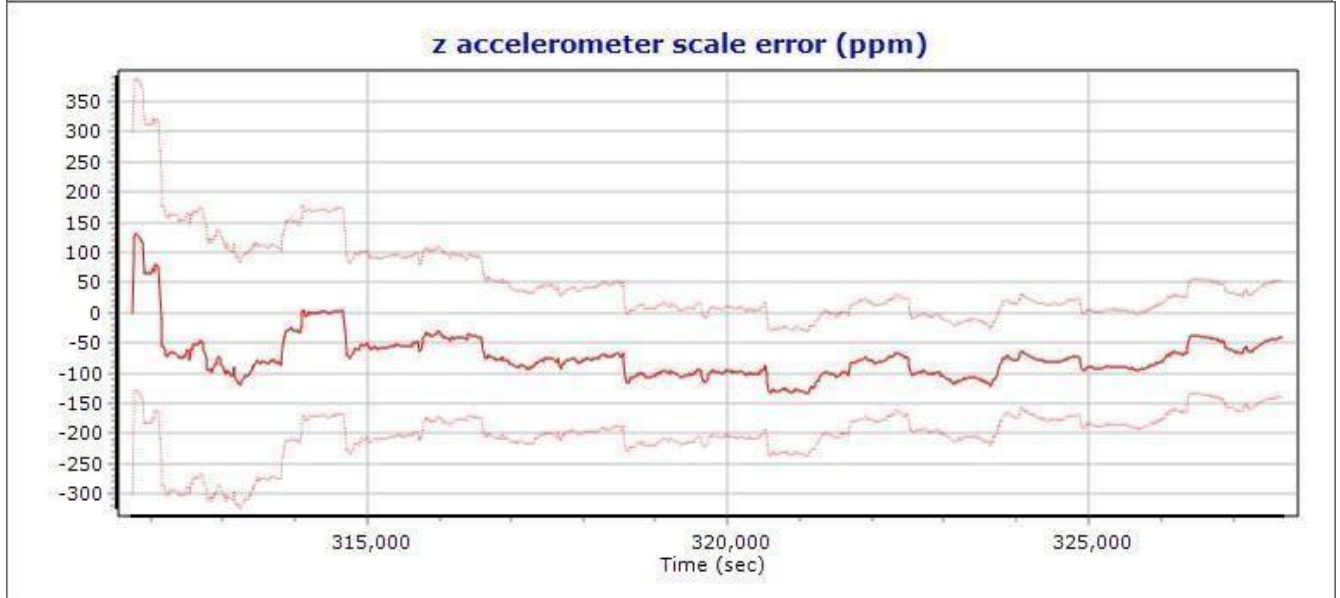
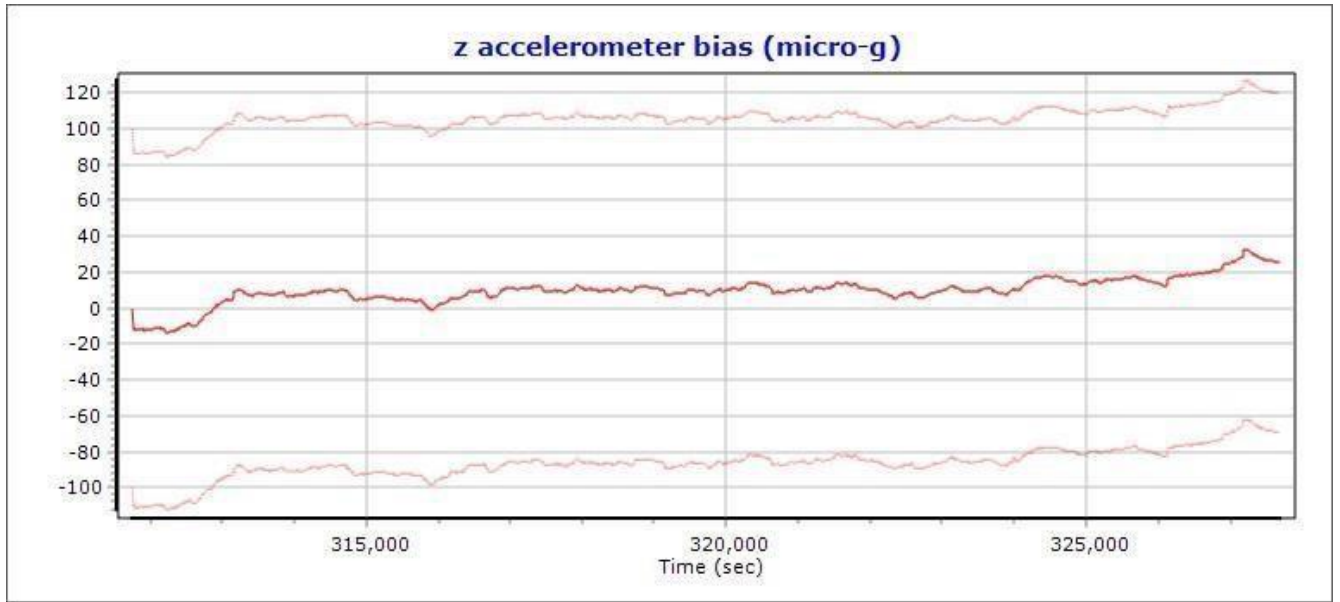


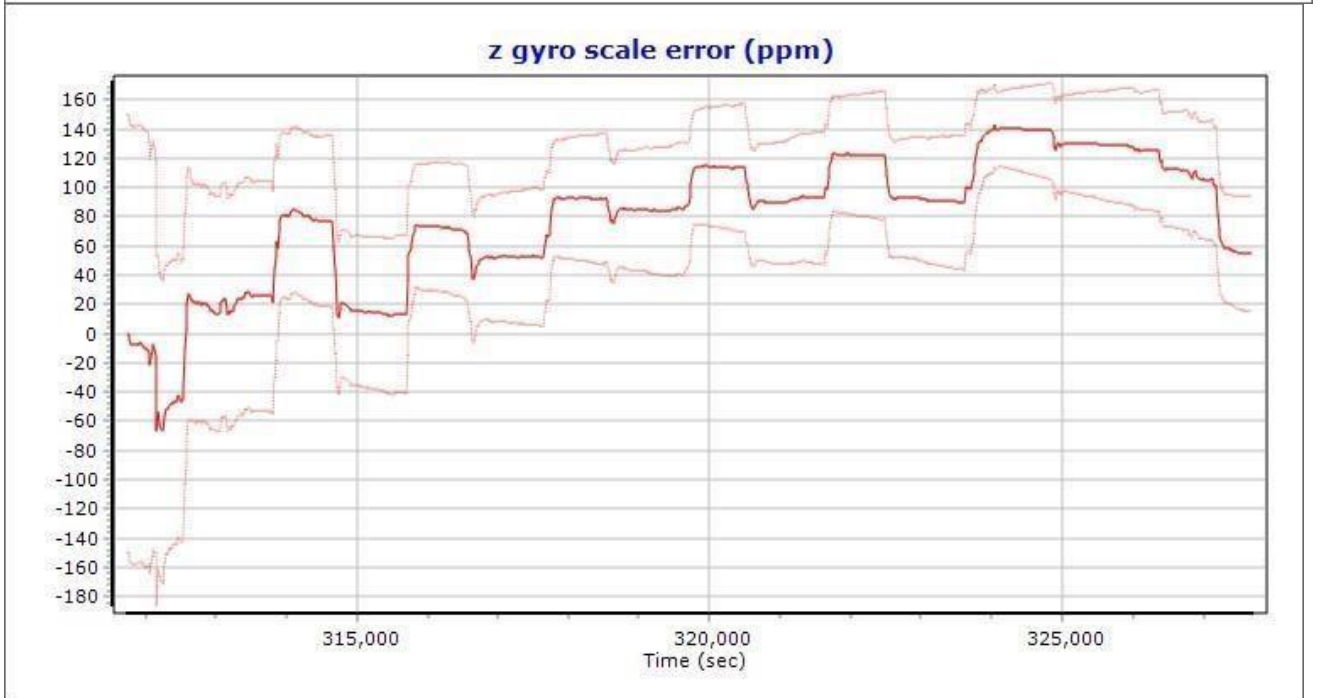
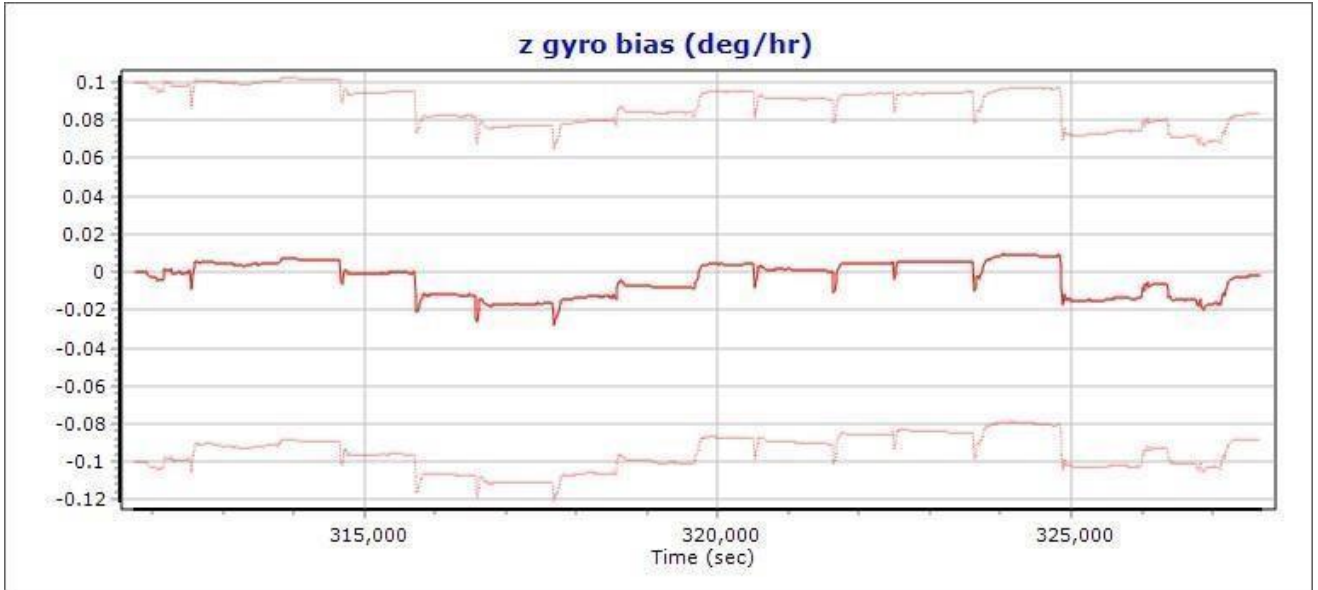




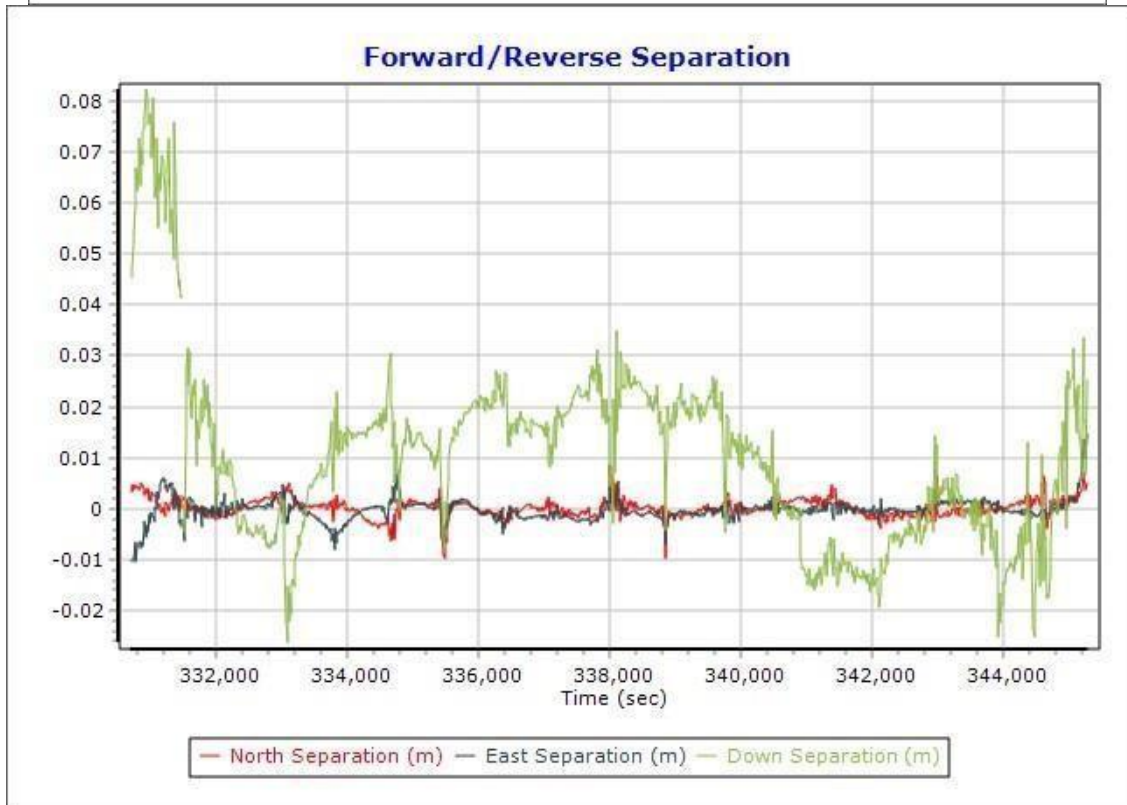
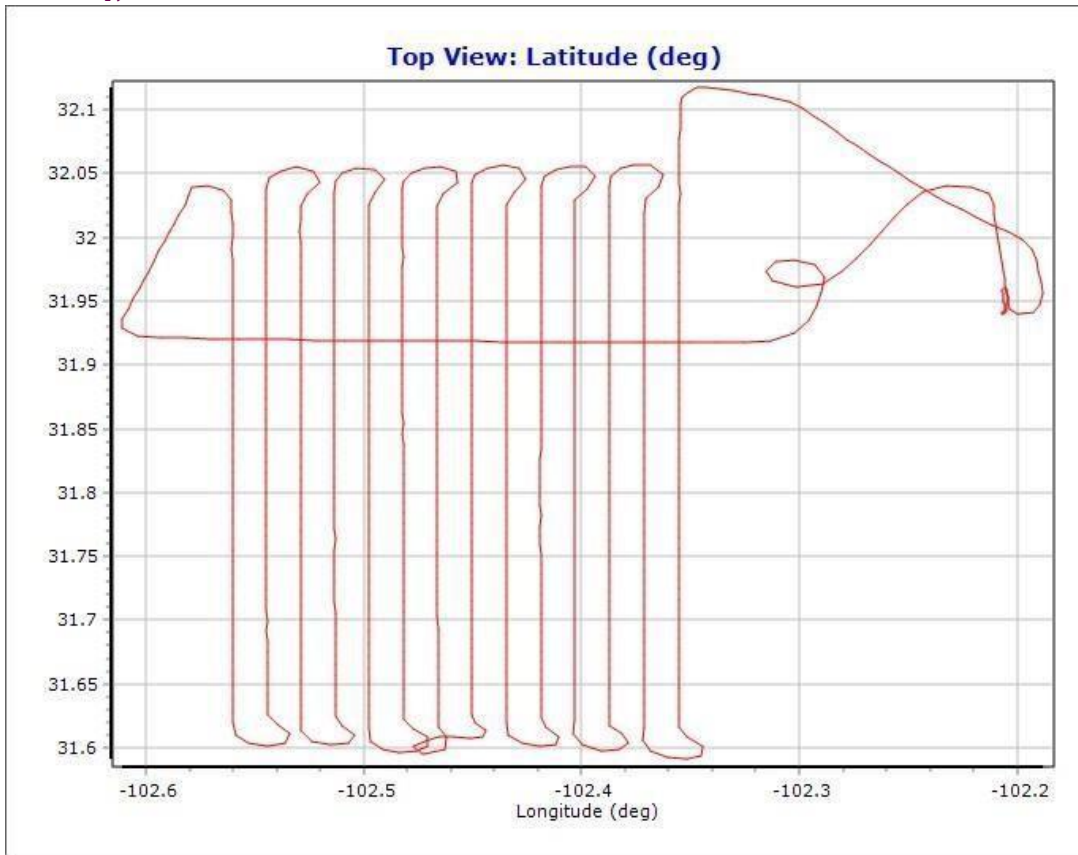


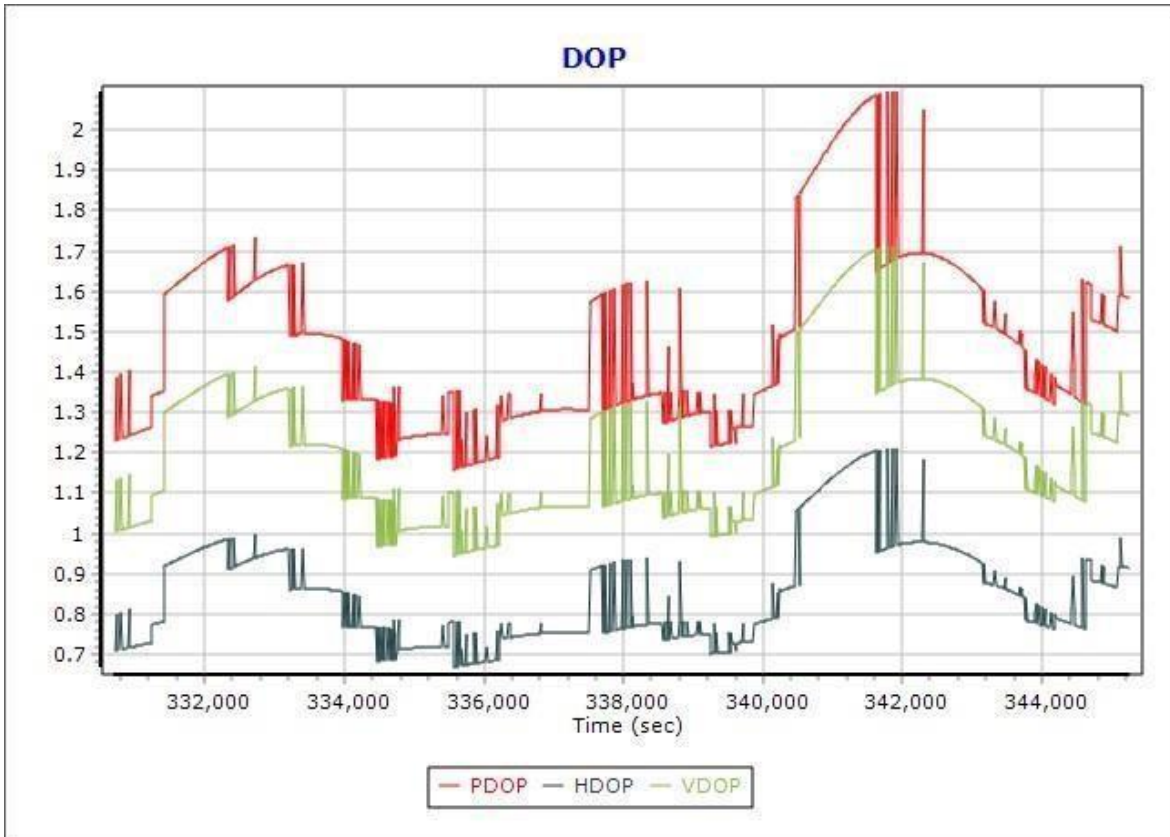






### FEBRUARY 14, 2018 MISSION 2





Processing Summary Information

## Processing Summary Information

Program: POSPac MMS  
Version: 8.1.6388.30062  
Project: \\sa\data\riegl\18047\20180212\_TX\_B

Solution Type: IN-Fusion SmartBase

Fixed: 14561	(99.99%)
Float: 0	(0.00%)
No Solution: 1	(0.01%)

Number of Epochs:

Total in RAW file: 14597  
No processed position: 36

Fwd/Rev Separation RMS Values (m):

North: 0.002  
East: 0.002  
Height: 0.021

Fwd/Rev Sep. RMS for 25%-75% weighting (m): 7308 occurrences

North: 0.002  
East: 0.001  
Height: 0.017

Quality Number Percentages:

Q 0: 100.0 %

Position Standard Deviation Percentages (%):

0.00 - 0.10 m: 100%  
0.10 - 0.30 m: 0  
0.30 - 1.00 m: 0  
1.00 - 5.00 m: 0  
5.00 m + over: 0

Percentages of epochs with DD\_DOP over 10.00: 0 %

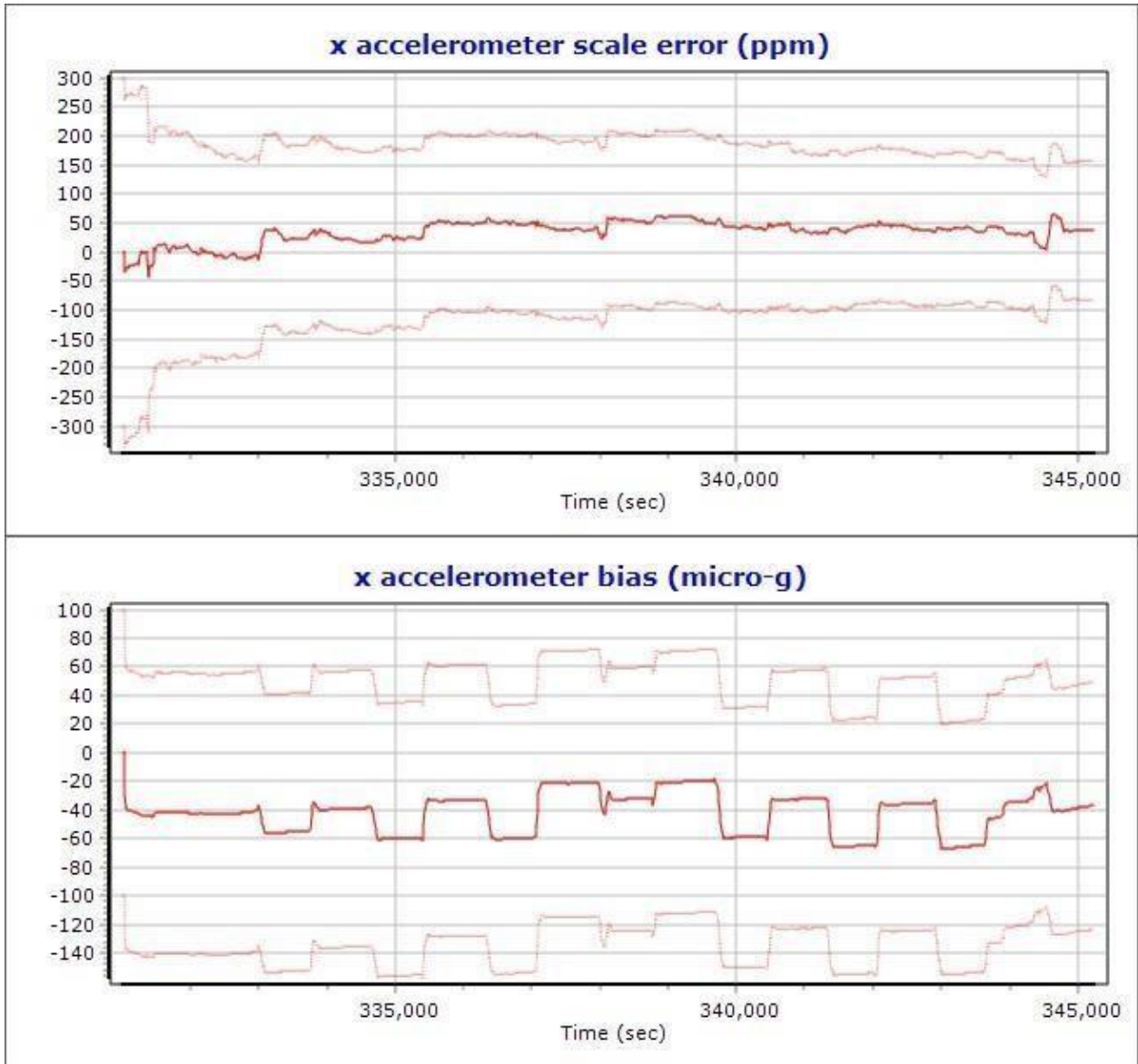
DOP over Tol: 1.47%

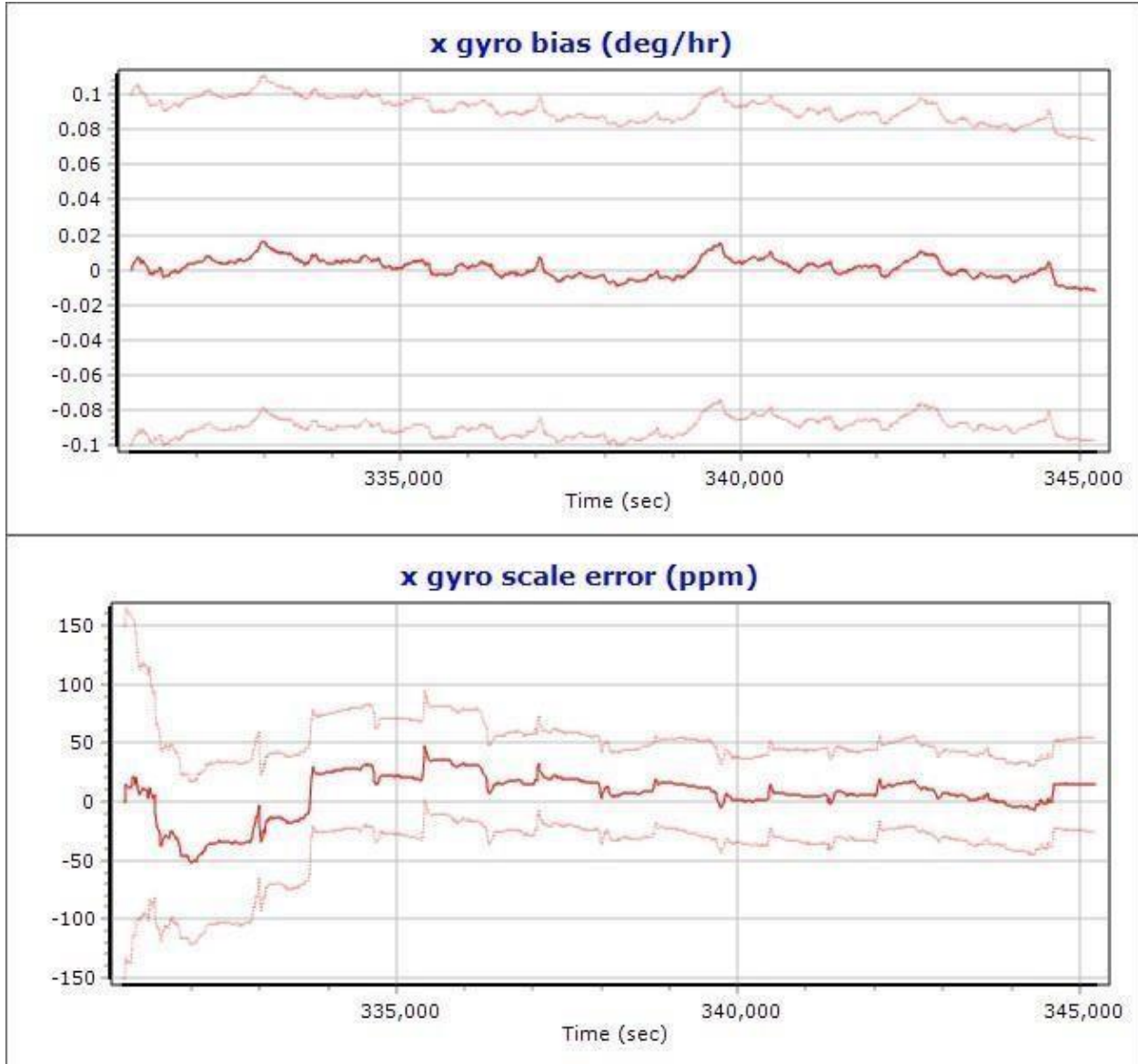
Baseline Distances (km):

Maximum: 30.68  
Minimum: 0.32  
Average: 16.82  
First Epoch: 22.35  
Last Epoch: 22.34

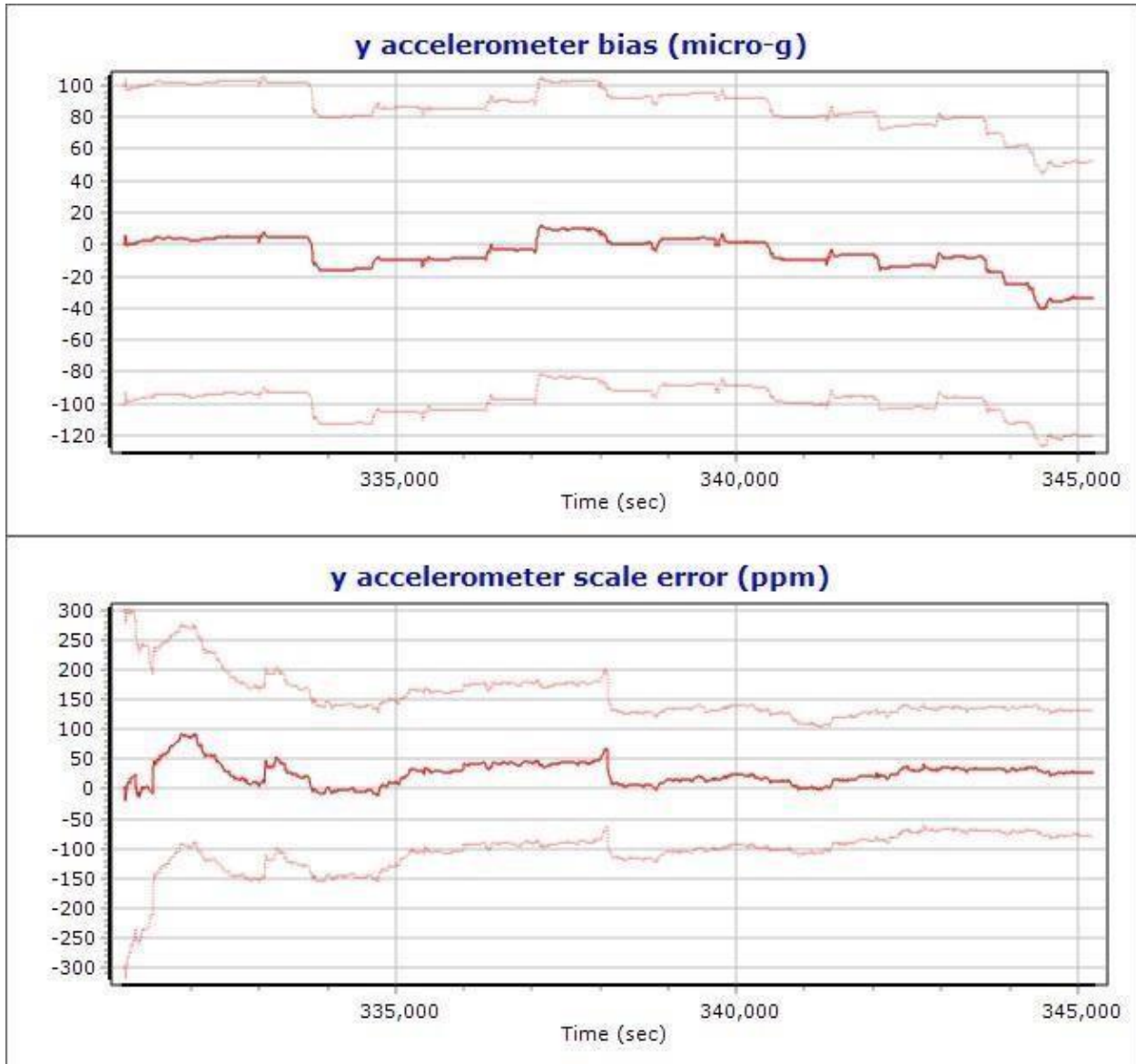
**CORS Base Stations**

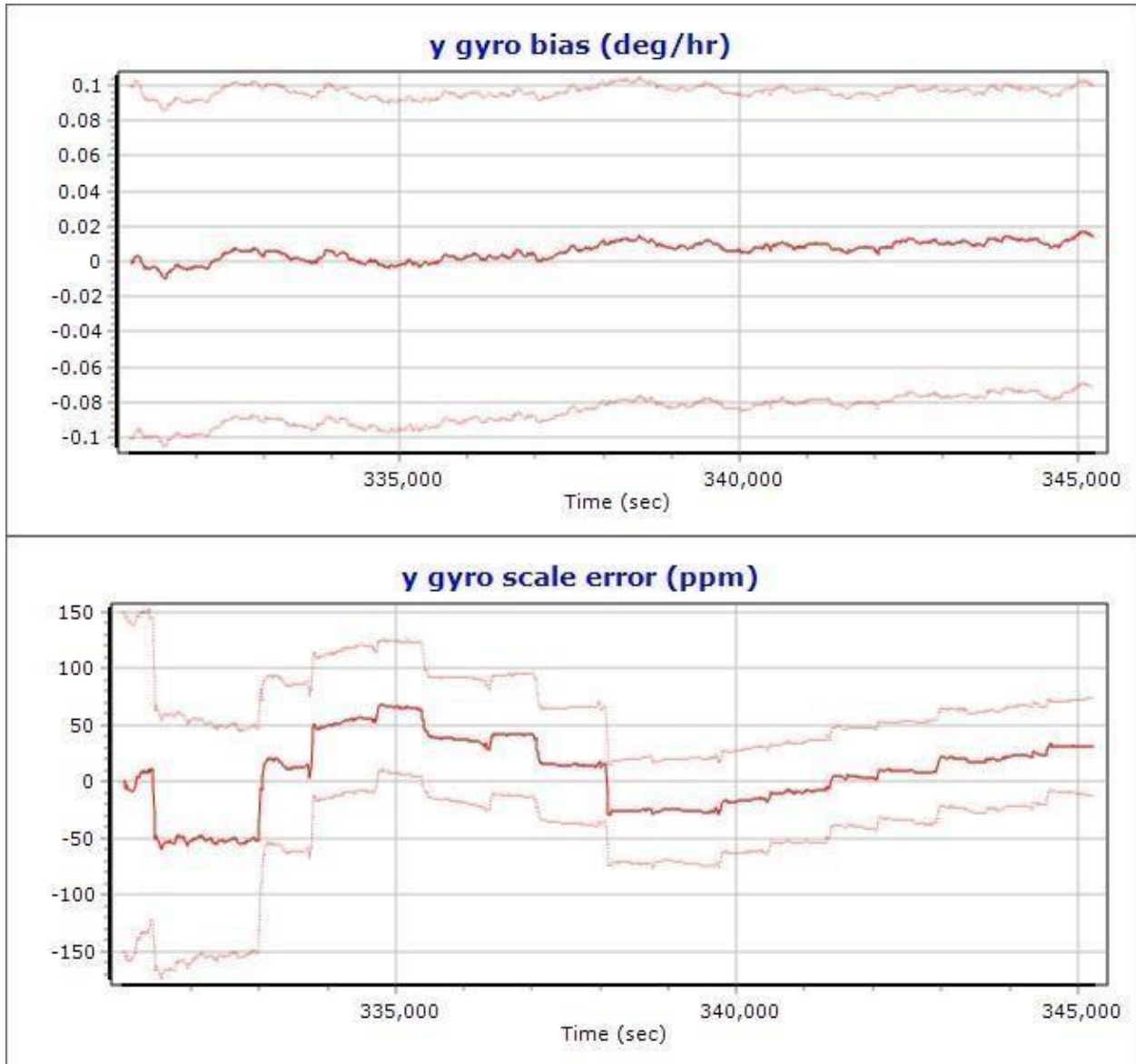
Station	Original			Adjusted		
TXOE	N31°52'24.51759"	W102°18'50.27494"	856.094			
TXSO	N32°08'28.21594"	W101°48'27.40138"	801.518	N32°08'28.21632"	W101°48'27.40201"	801.523
TXMH	N31°33'27.83676"	W102°53'38.43950"	773.391	N31°33'27.83695"	W102°53'38.43959"	773.384
TXAD	N32°18'28.83162"	W102°32'36.98731"	946.850	N32°18'28.83178"	W102°32'36.98751"	946.861
TXKM	N31°50'33.37111"	W103°06'31.30048"	847.990	N31°50'33.37149"	W103°06'31.30056"	847.994
TXCE	N31°25'22.08558"	W102°21'27.22543"	754.414	N31°25'22.08578"	W102°21'27.22576"	754.406

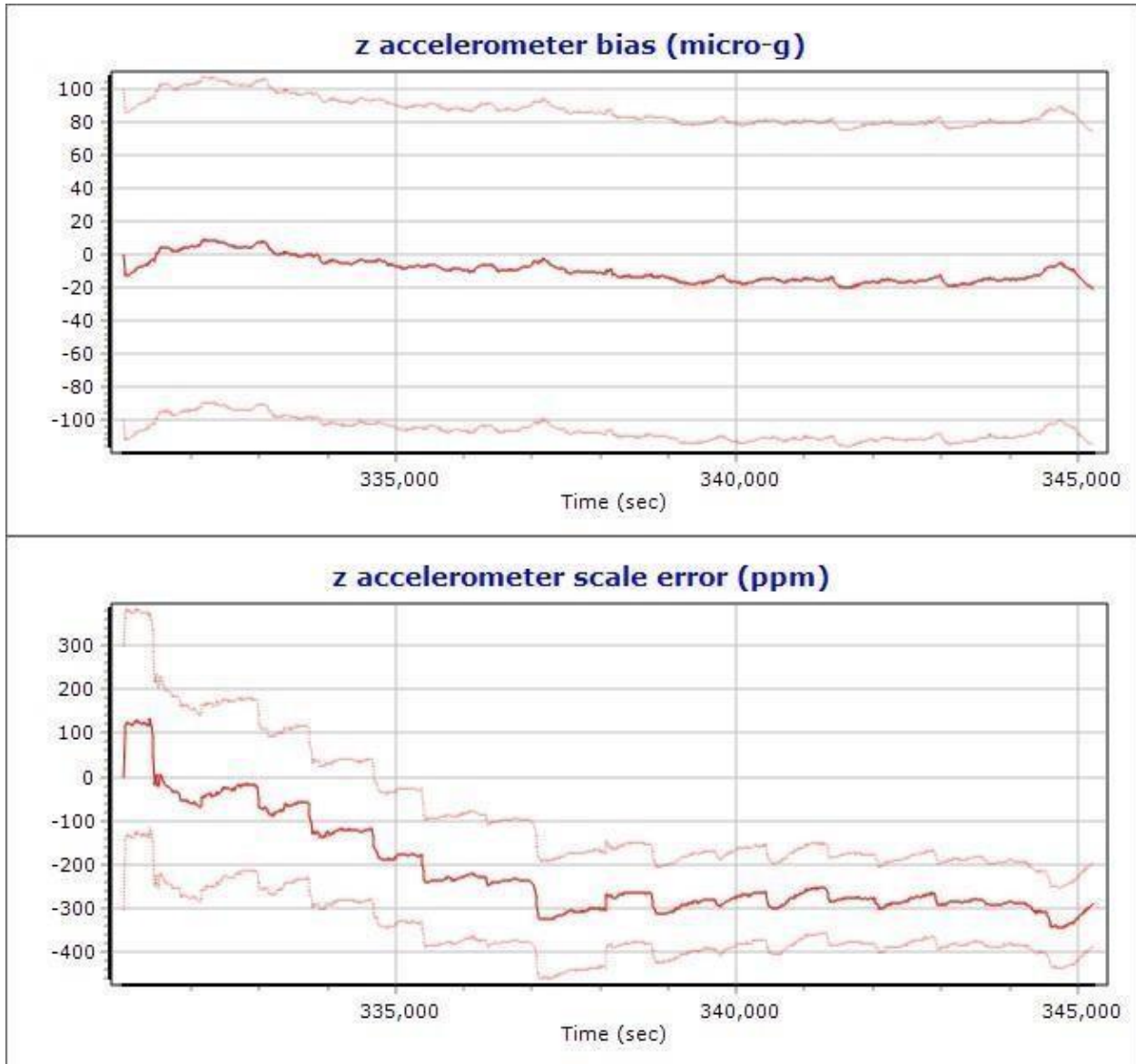


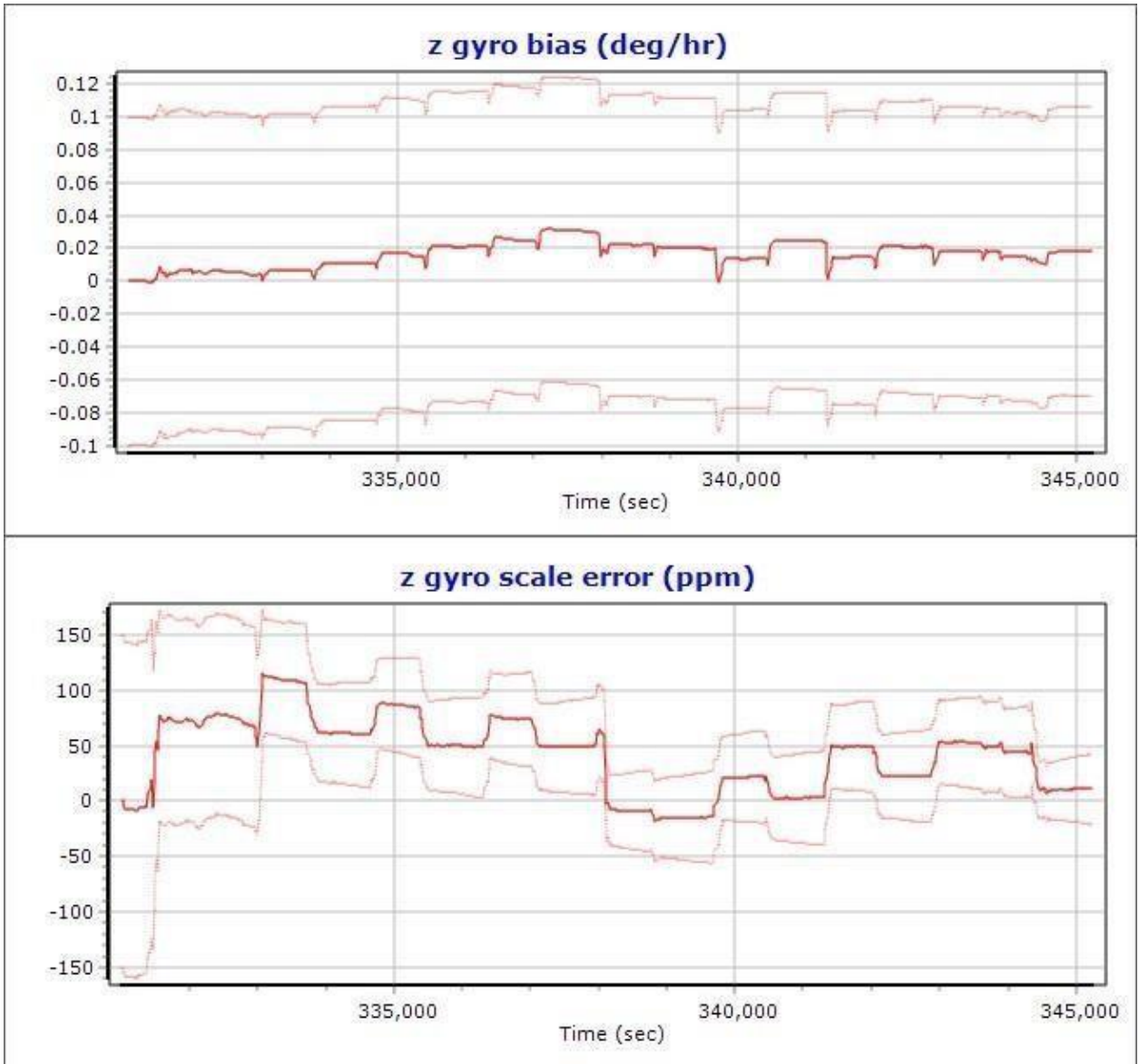




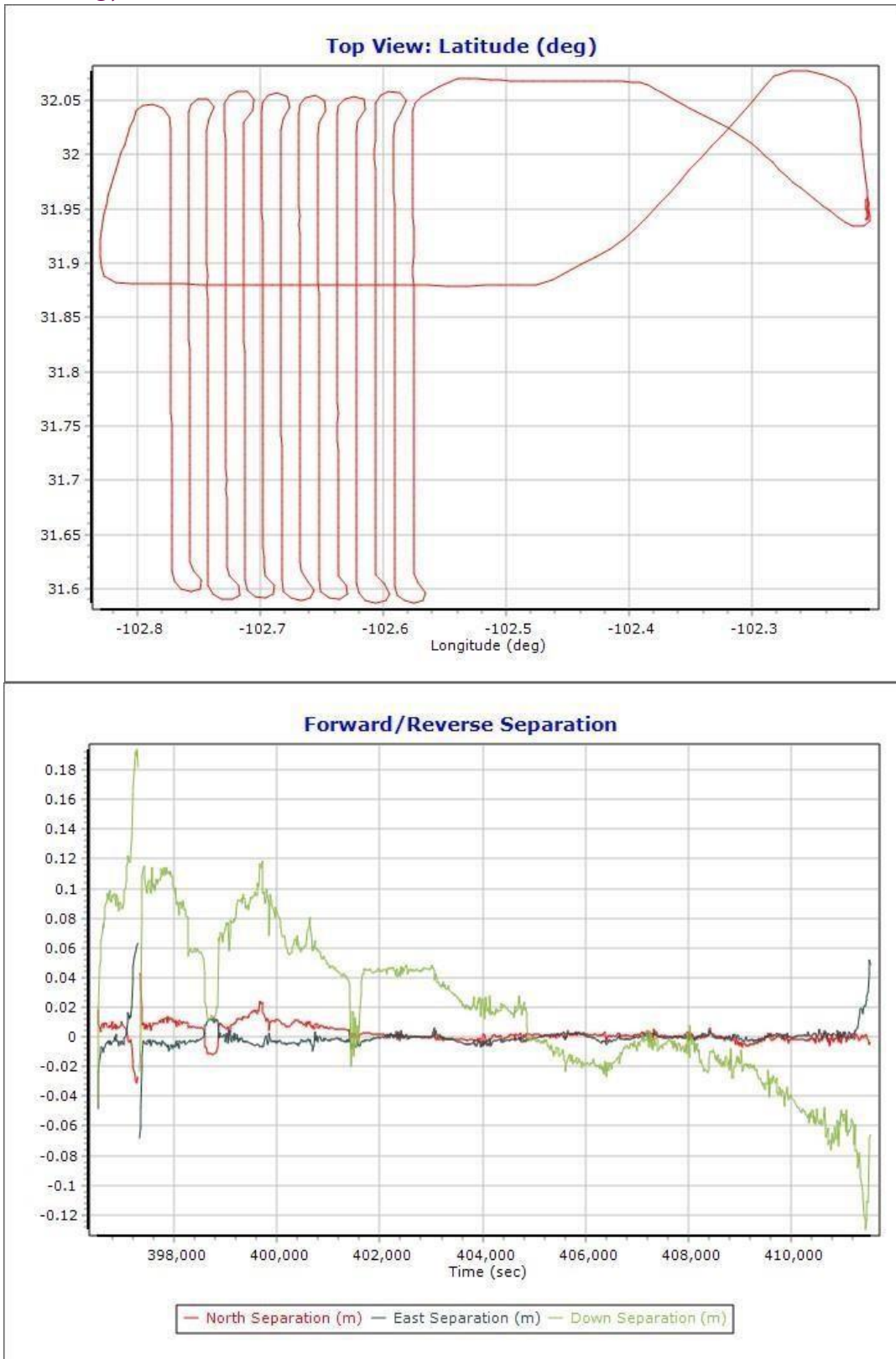


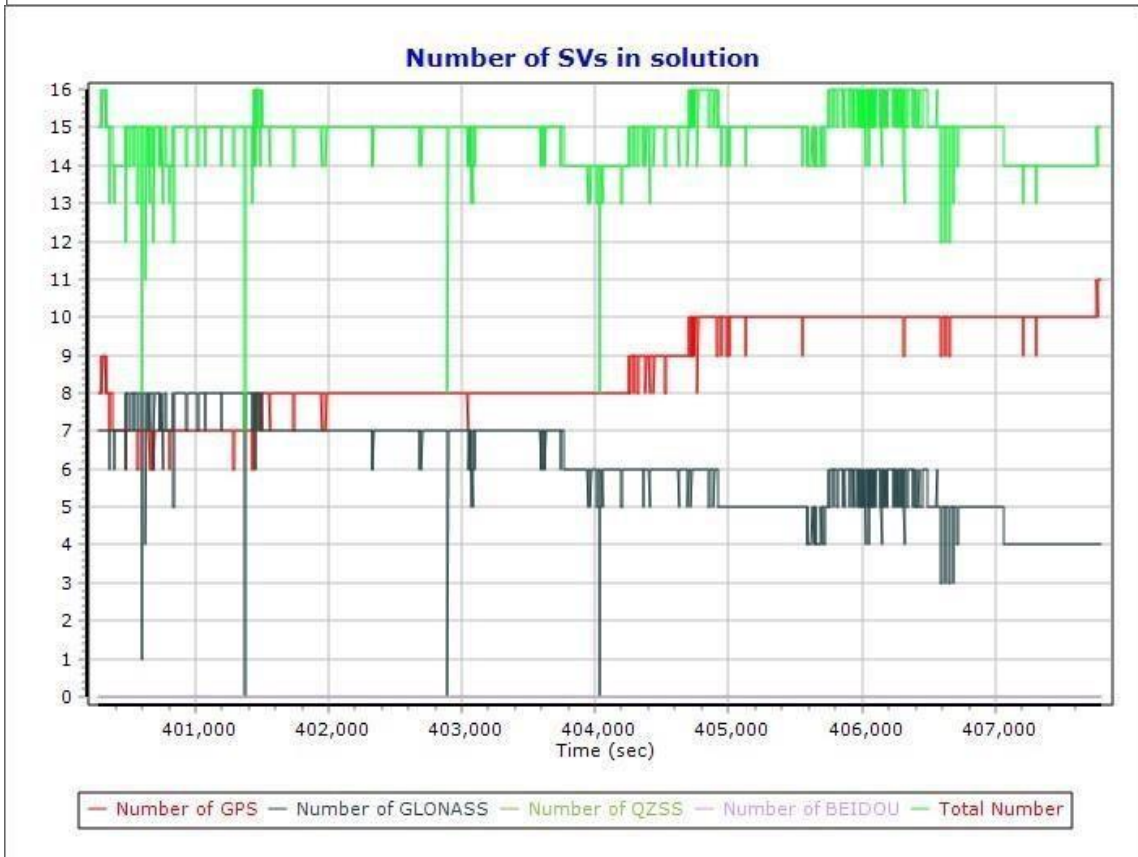
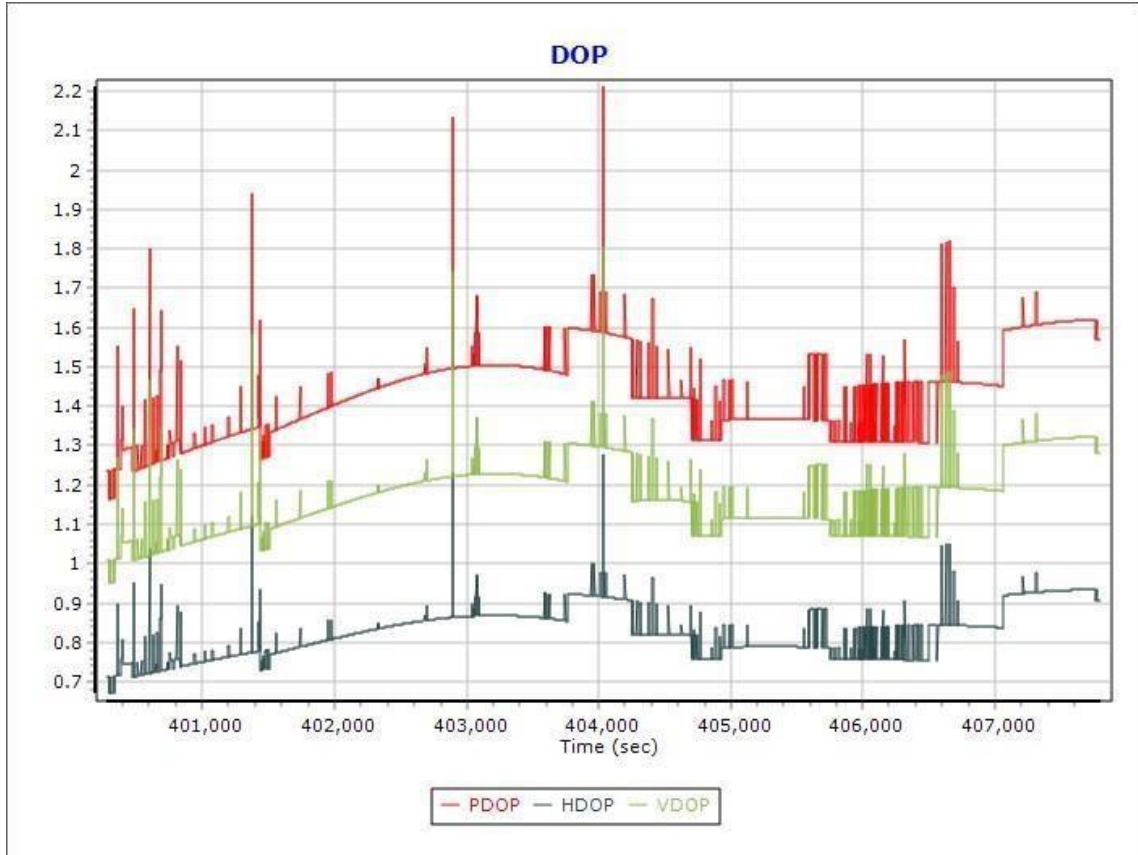






### FEBRUARY 15, 2018 MISSION 1





## Processing Summary Information

### Processing Summary Information

Program: POSPac MMS  
Version: 8.1.6388.30062  
Project: \\sa\data\riegl\18047\20180215\_TX\_A

Solution Type: IN-Fusion SmartBase

Fixed: 15016	(99.99%)
Float: 0	(0.00%)
No Solution: 1	(0.01%)

#### Number of Epochs:

Total in RAW file: 15050  
No processed position: 34

#### Fwd/Rev Separation RMS Values (m):

North: 0.007  
East: 0.008  
Height: 0.056

Fwd/Rev Sep. RMS for 25%-75% weighting (m): 7524 occurrences

North: 0.003  
East: 0.003  
Height: 0.032

#### Quality Number Percentages:

Q 0: 100.0 %

Position Standard Deviation Percentages (%):



0.00 - 0.10 m: 100

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0.10 - 0.30 m: 0

0.30 - 1.00 m: 0

1.00 - 5.00 m: 0

5.00 m + over: 0

Percentages of epochs with DD\_DOP over 10.00: 0 %

DOP over Tol: 1.43%

Baseline Distances (km):

Maximum: 42.47

Minimum: 0.07

Average: 20.21

First Epoch: 38.28

Last Epoch: 38.29

### CORS Base Stations

Station	Original			Adjusted		
TXSO	N32°08'28.21594"	W101°48'27.40138"	801.518	N32°08'28.21609"	W101°48'27.40180"	801.528
TXOE	N31°52'24.51763"	W102°18'50.27461"	856.094	N31°52'24.51739"	W102°18'50.27471"	856.098
TXMH	N31°33'27.83675"	W102°53'38.43950"	773.391			

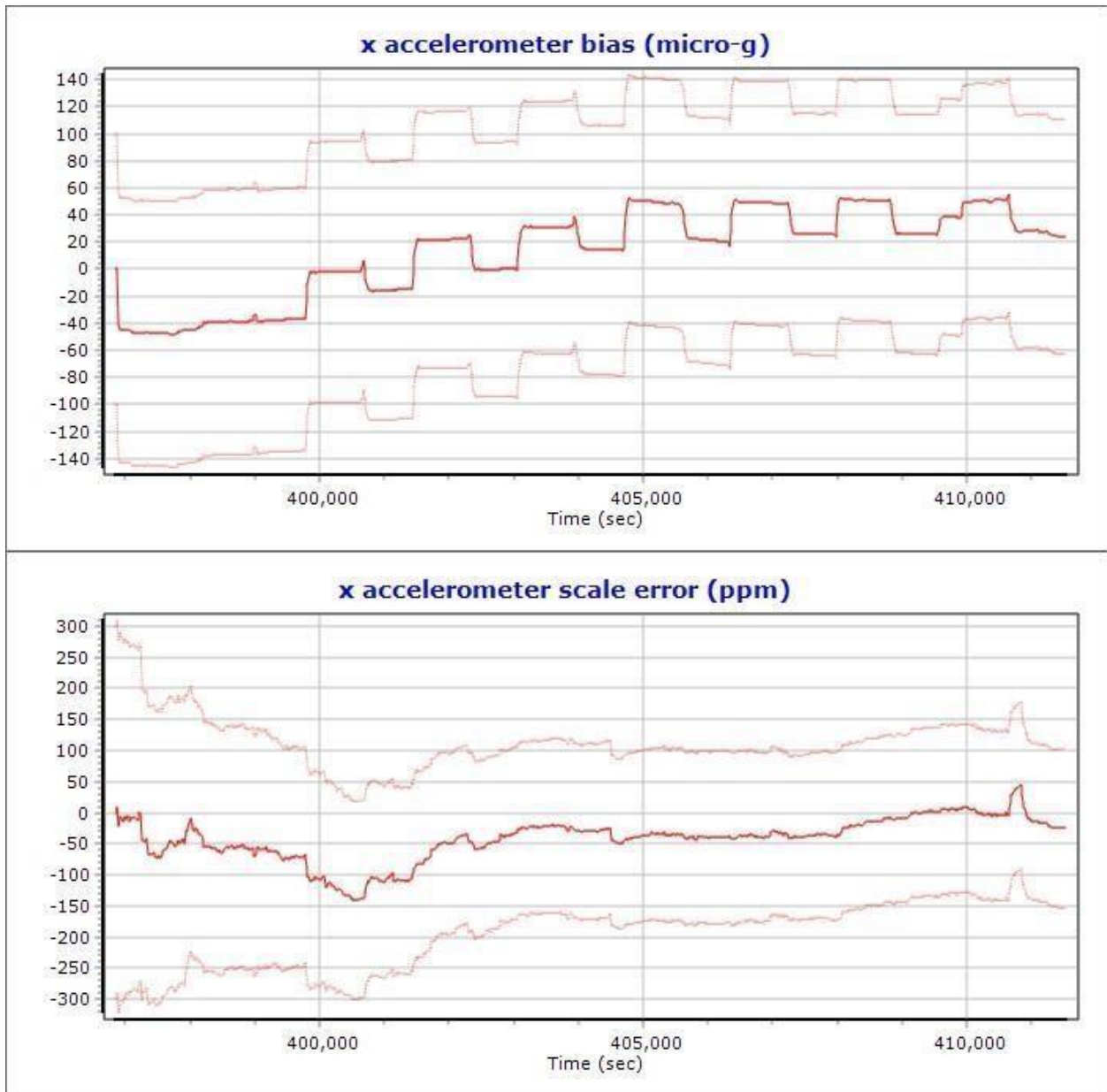
TXKM	N31°50'33.37111"	W103°06'31.30048"	847.990	N31°50'33.37129"	W103°06'31.30058"	847.996
TXCE	N31°25'22.08558"	W102°21'27.22543"	754.414	N31°25'22.08559"	W102°21'27.22569"	754.405

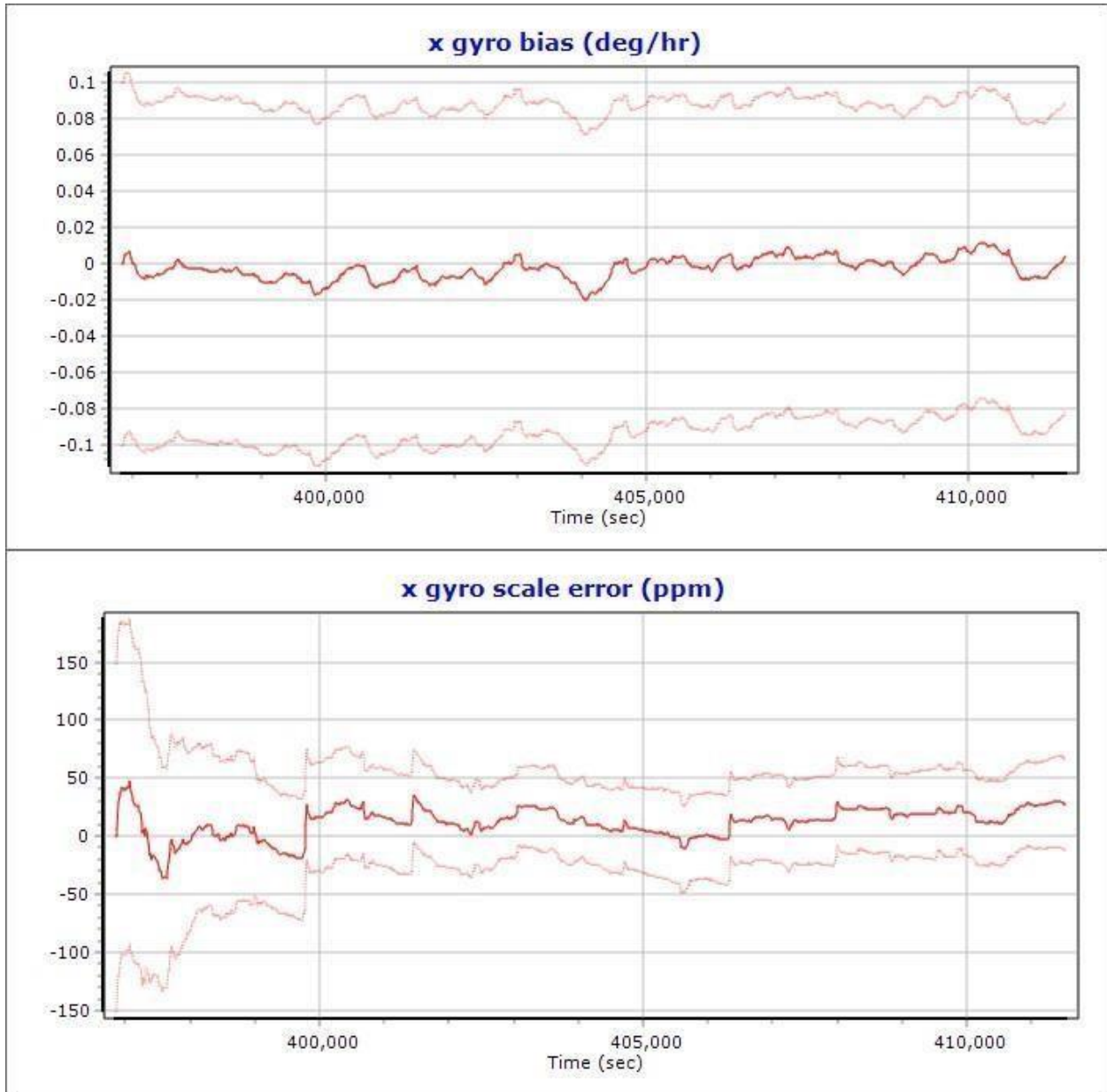
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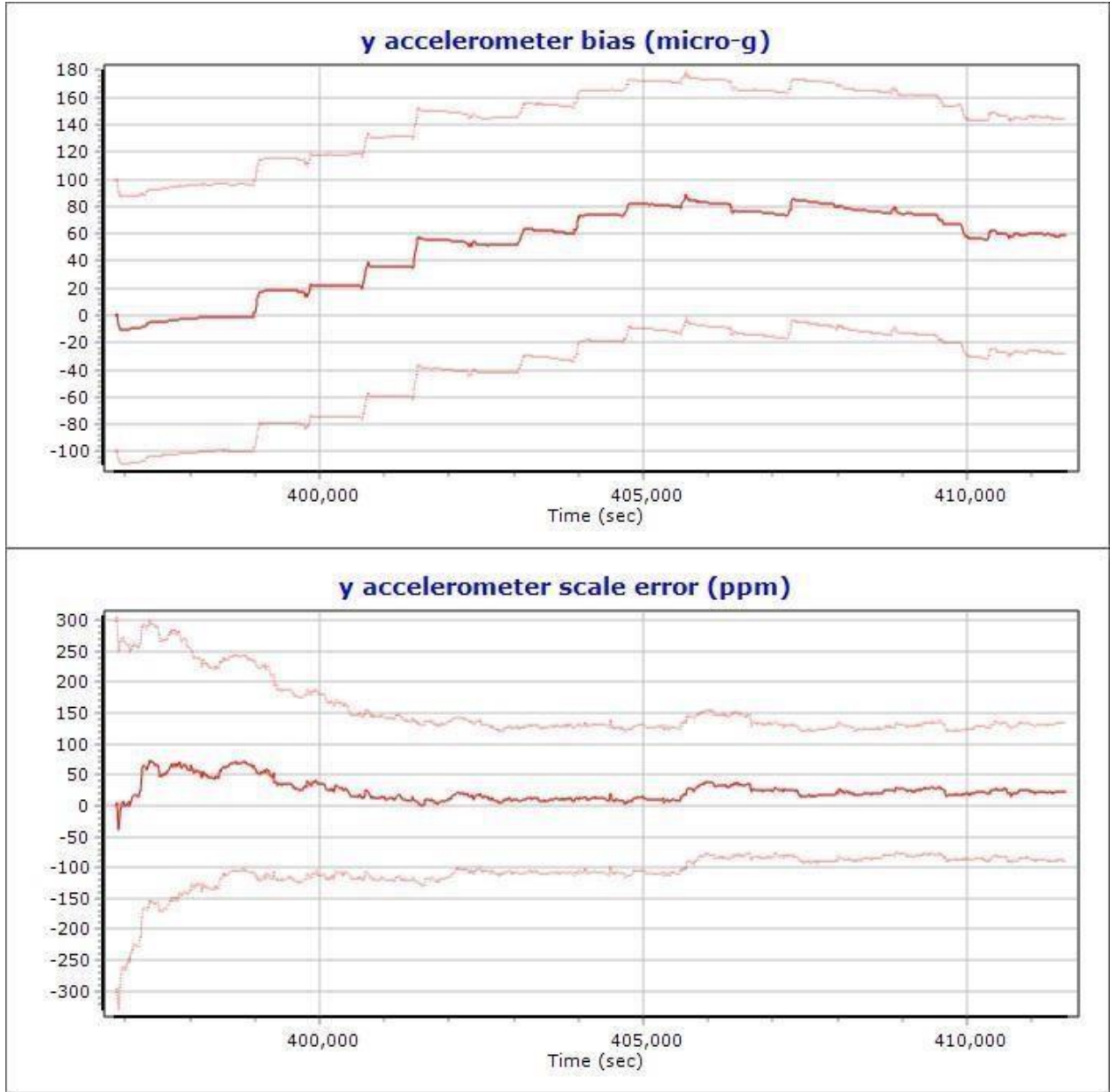
TXAD	N32°18'28.83162"	W102°32'36.98731"	946.850	N32°18'28.83156"	W102°32'36.98738"	946.863
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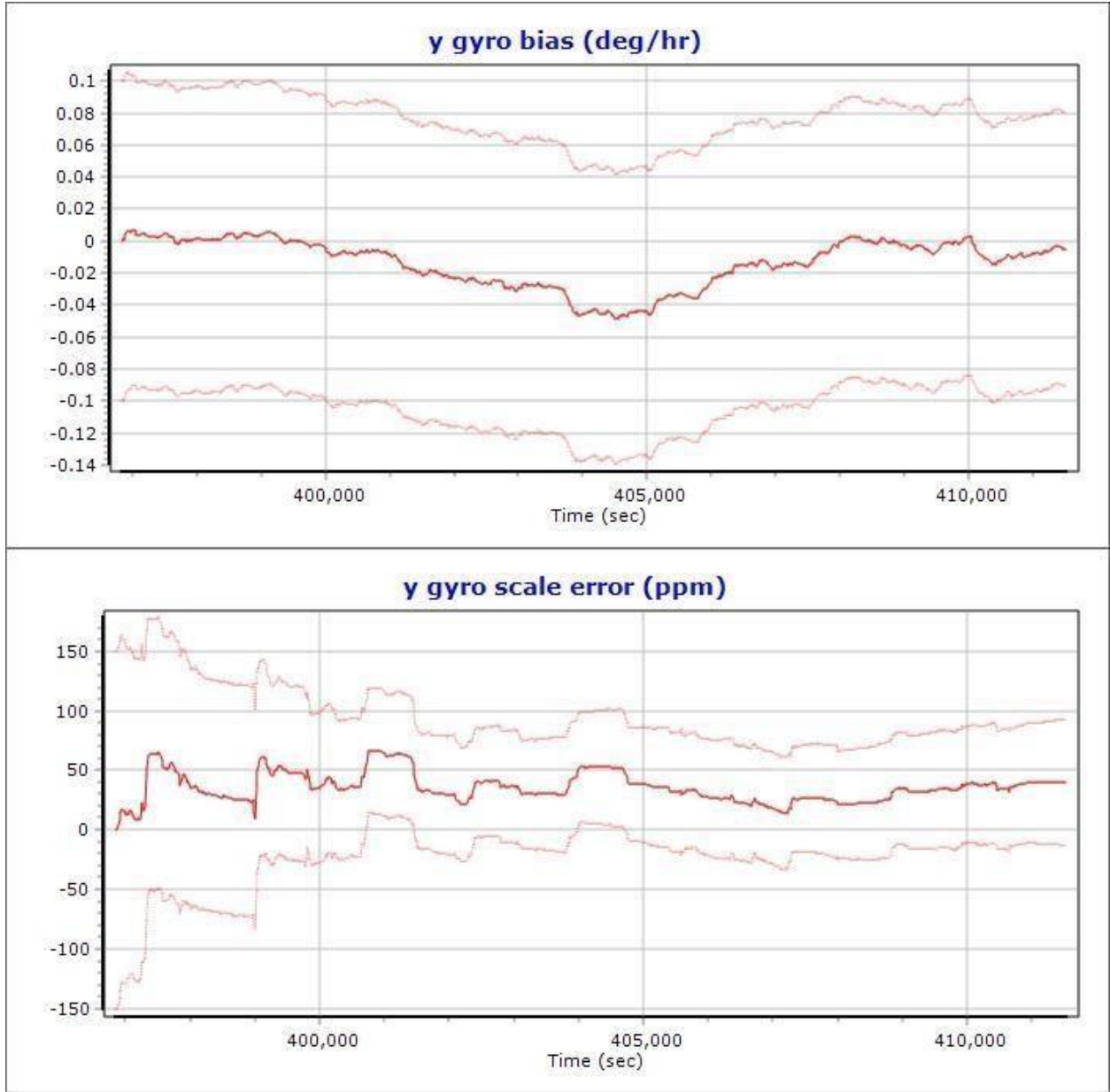
of

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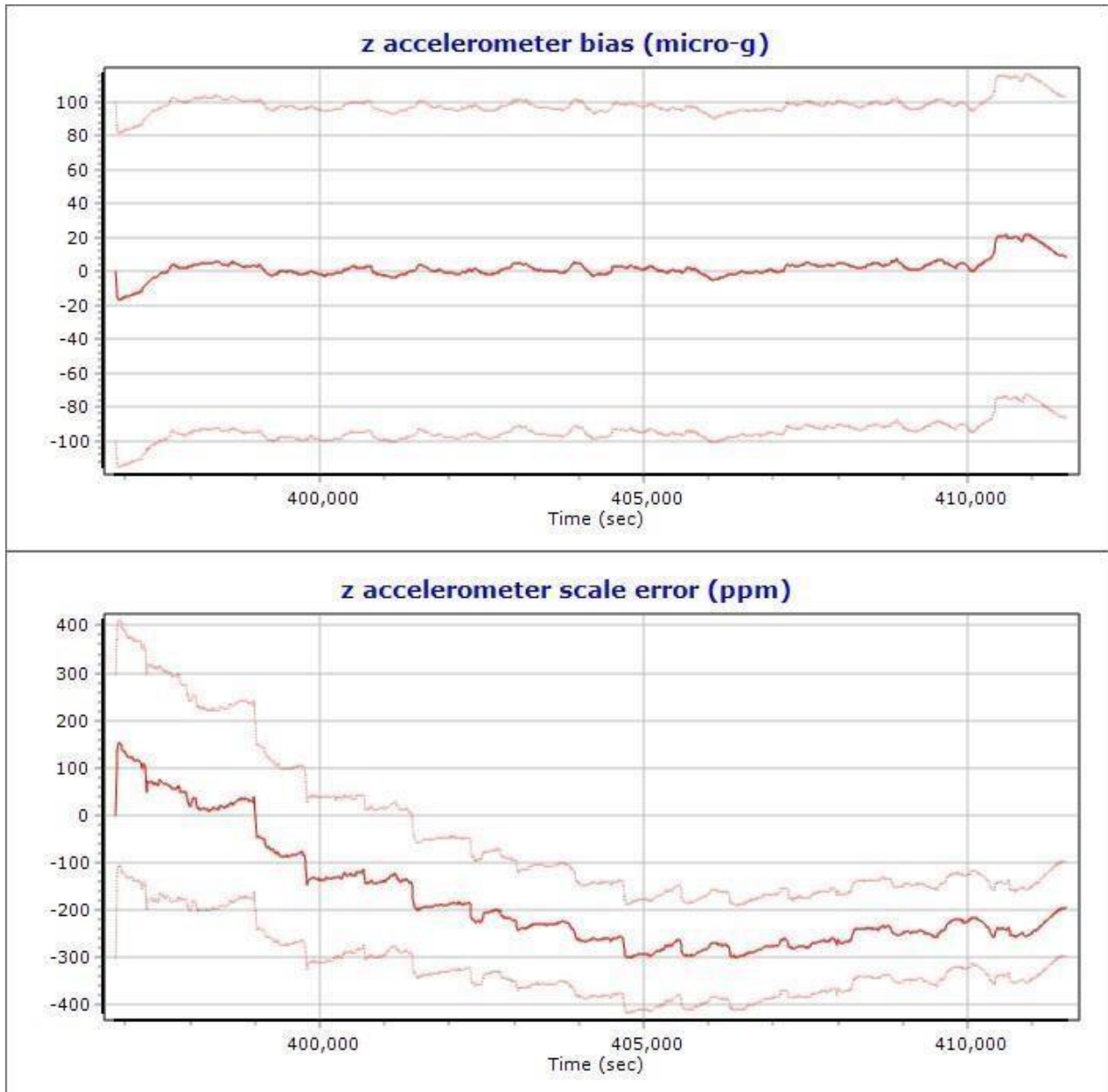




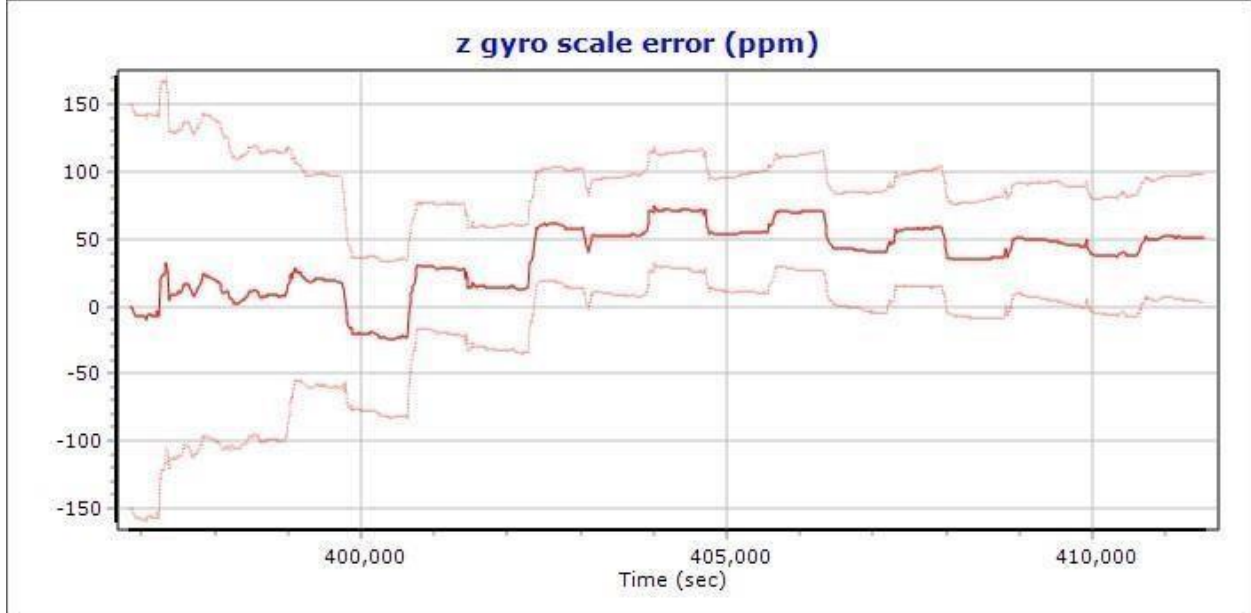
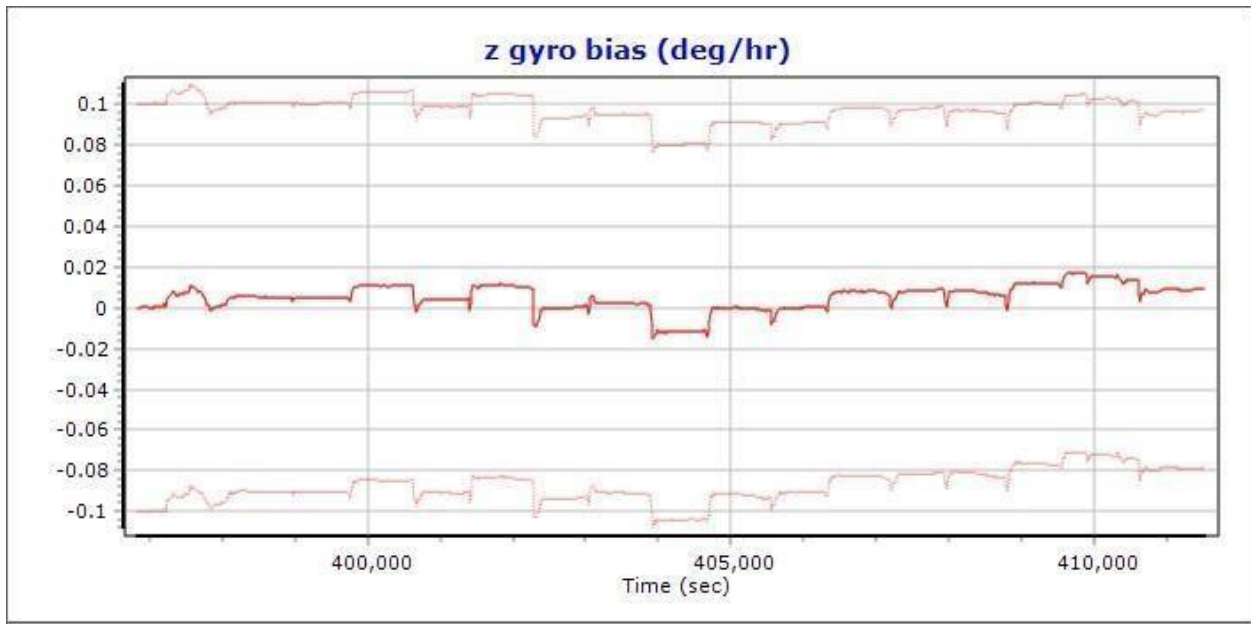


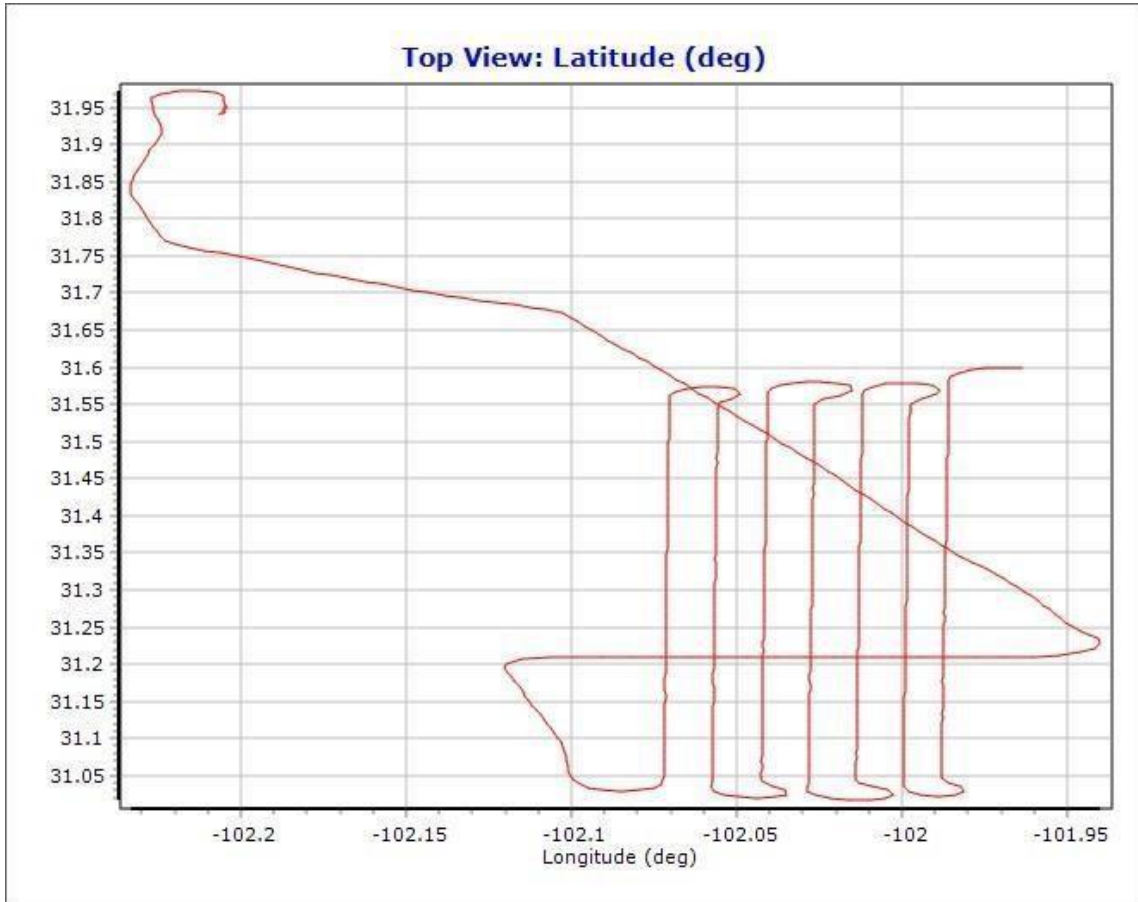


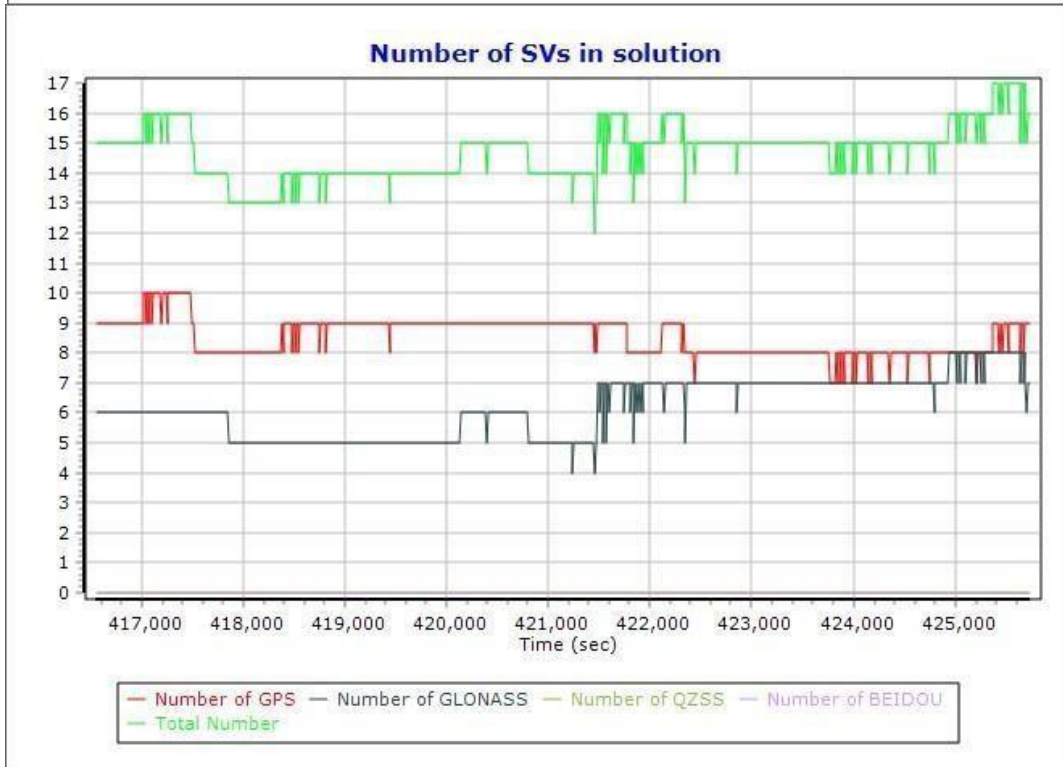
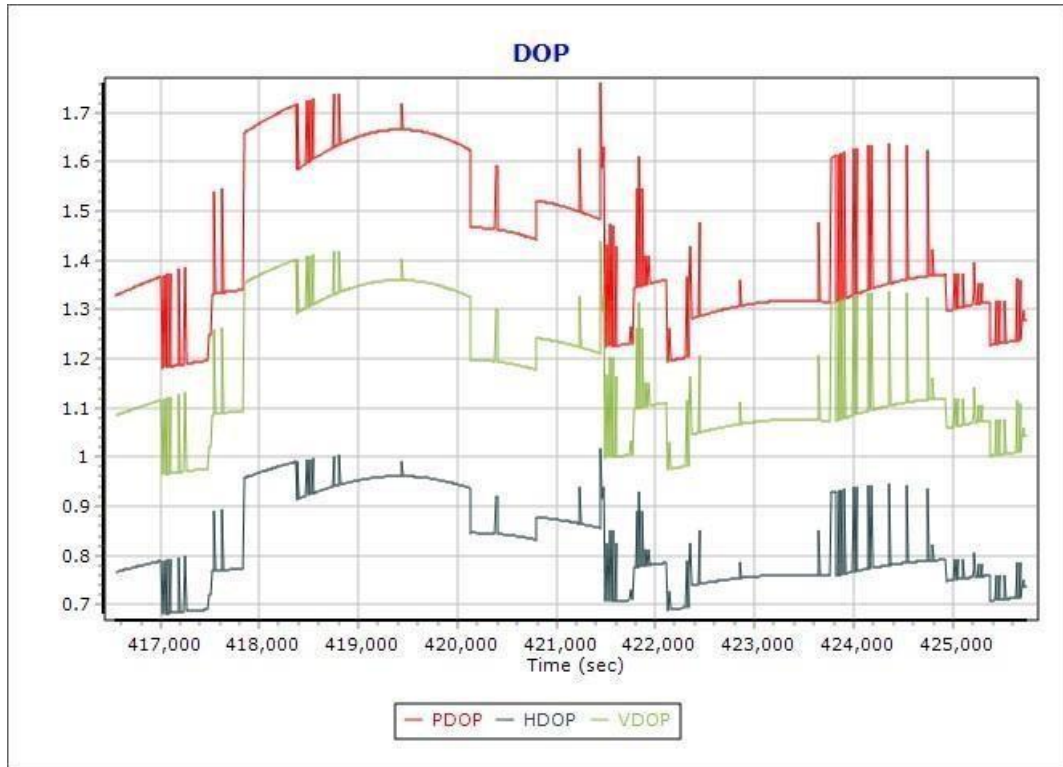
170











## Processing Summary Information

### Processing Summary Information

Program: POSpac MMS  
Version: 8.1.6388.30062  
Project: \\sa\data\riegl\18047\20180212\_TX\_B

Solution Type: IN-Fusion SmartBase

Fixed: 9215 (100%)  
Float: 0 (0.00%)  
No Solution: 0 (0.00%)

Number of Epochs:

Total in RAW file: 9222  
No processed position: 7

Fwd/Rev Separation RMS Values (m):

North: 0.014  
East: 0.003  
Height: 0.040

Fwd/Rev Sep. RMS for 25%-75% weighting (m): 3798 occurrences

North: 0.002  
East: 0.001  
Height: 0.013

Quality Number Percentages:

Q 0: 100.0 %

Position Standard Deviation Percentages (%):

0.00 - 0.10 m: 99.946  
 0.10 - 0.30 m: 0.054  
 0.30 - 1.00 m: 0  
 1.00 - 5.00 m: 0  
 5.00 m + over: 0

Percentages of epochs with DD\_DOP over 10.00: 0 %

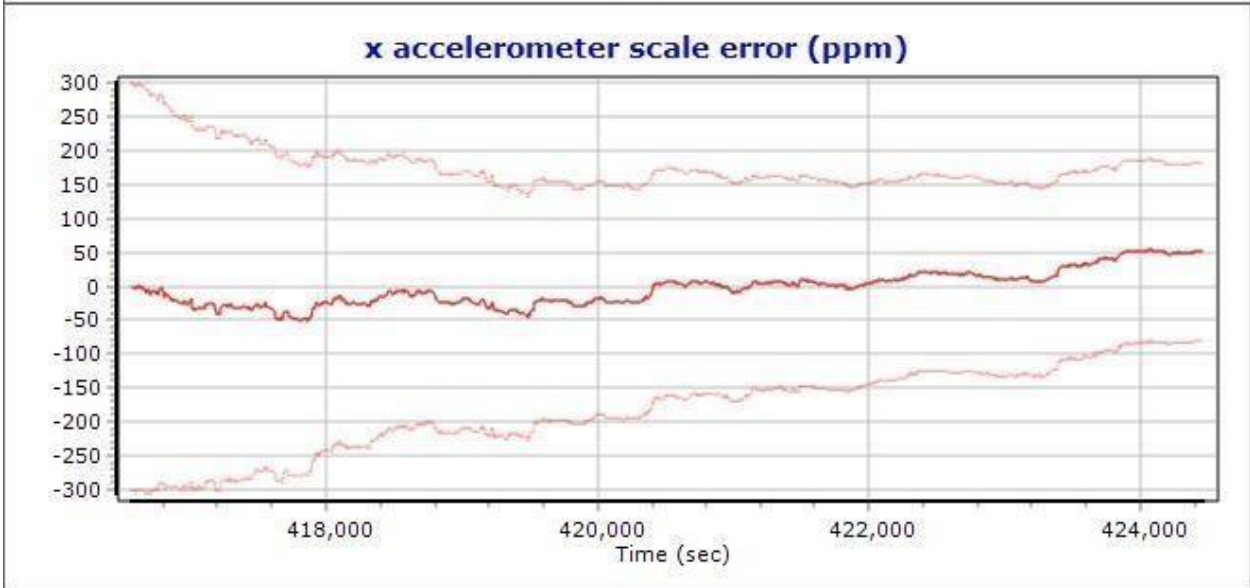
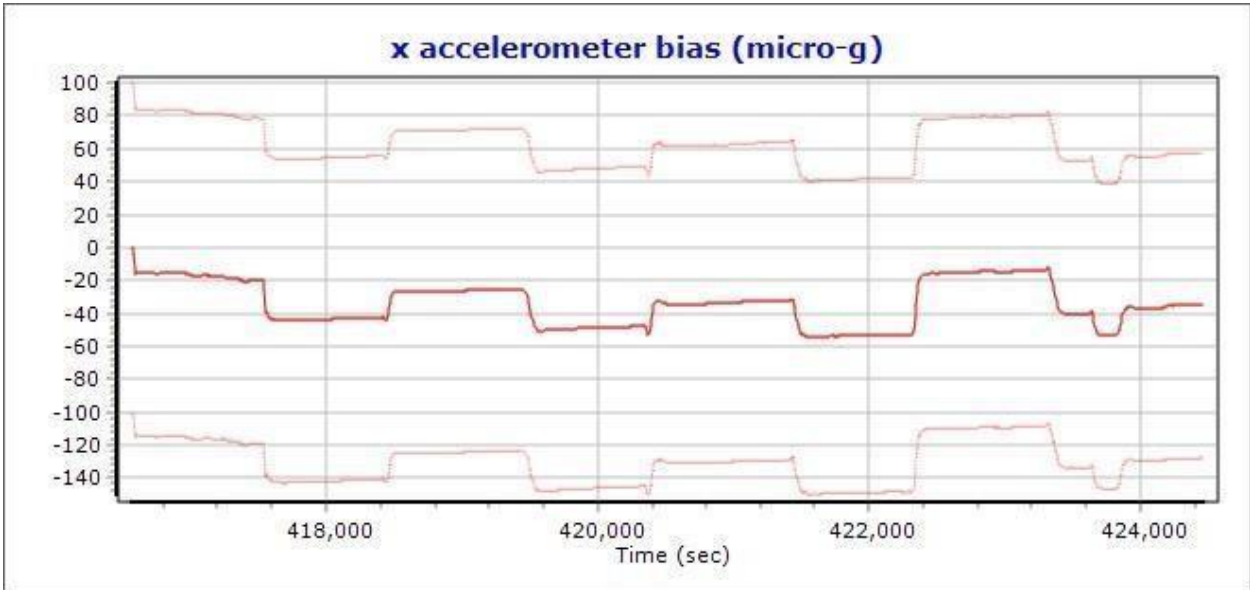
DOP over Tol: 1.42%

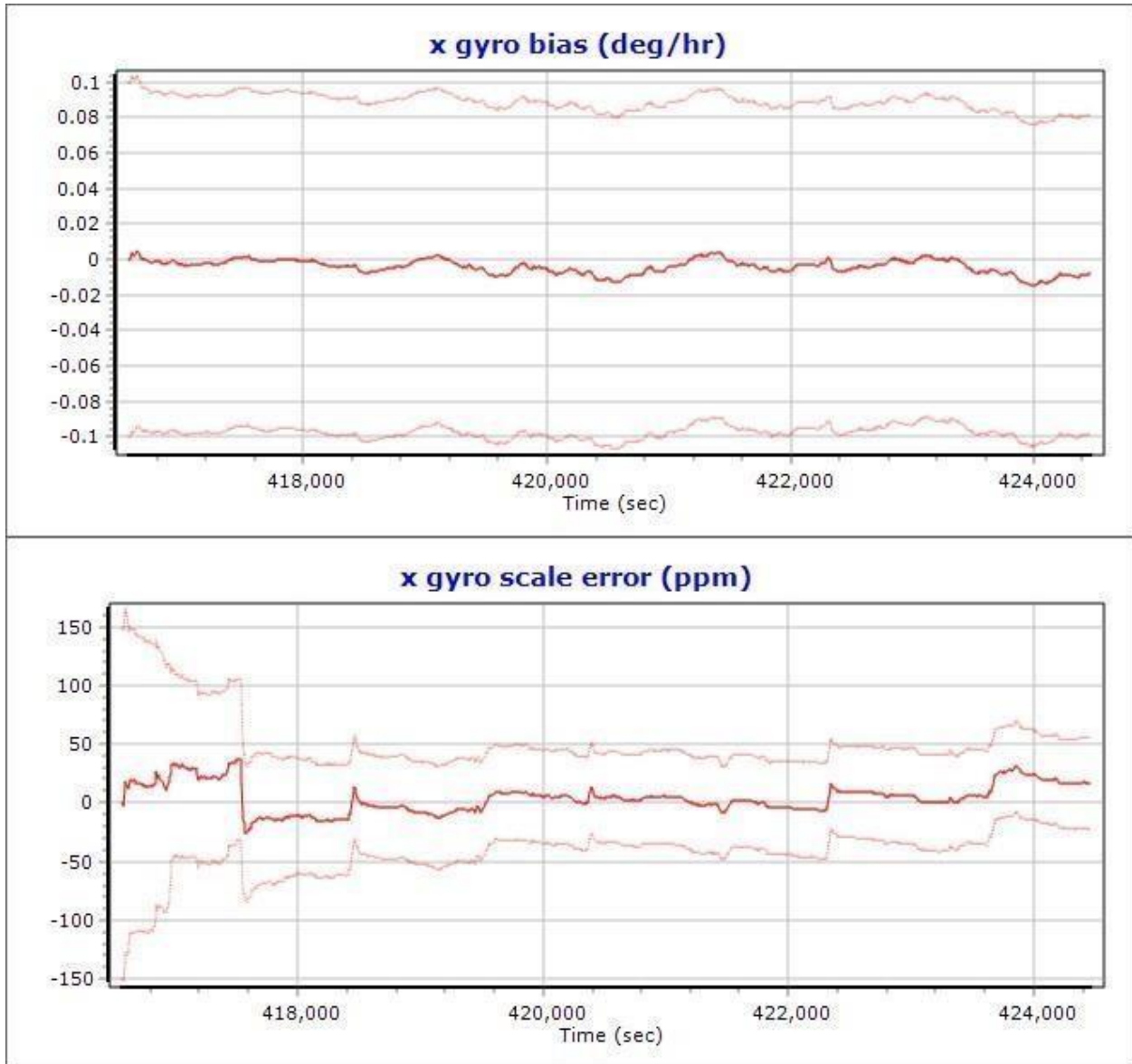
Baseline Distances (km):

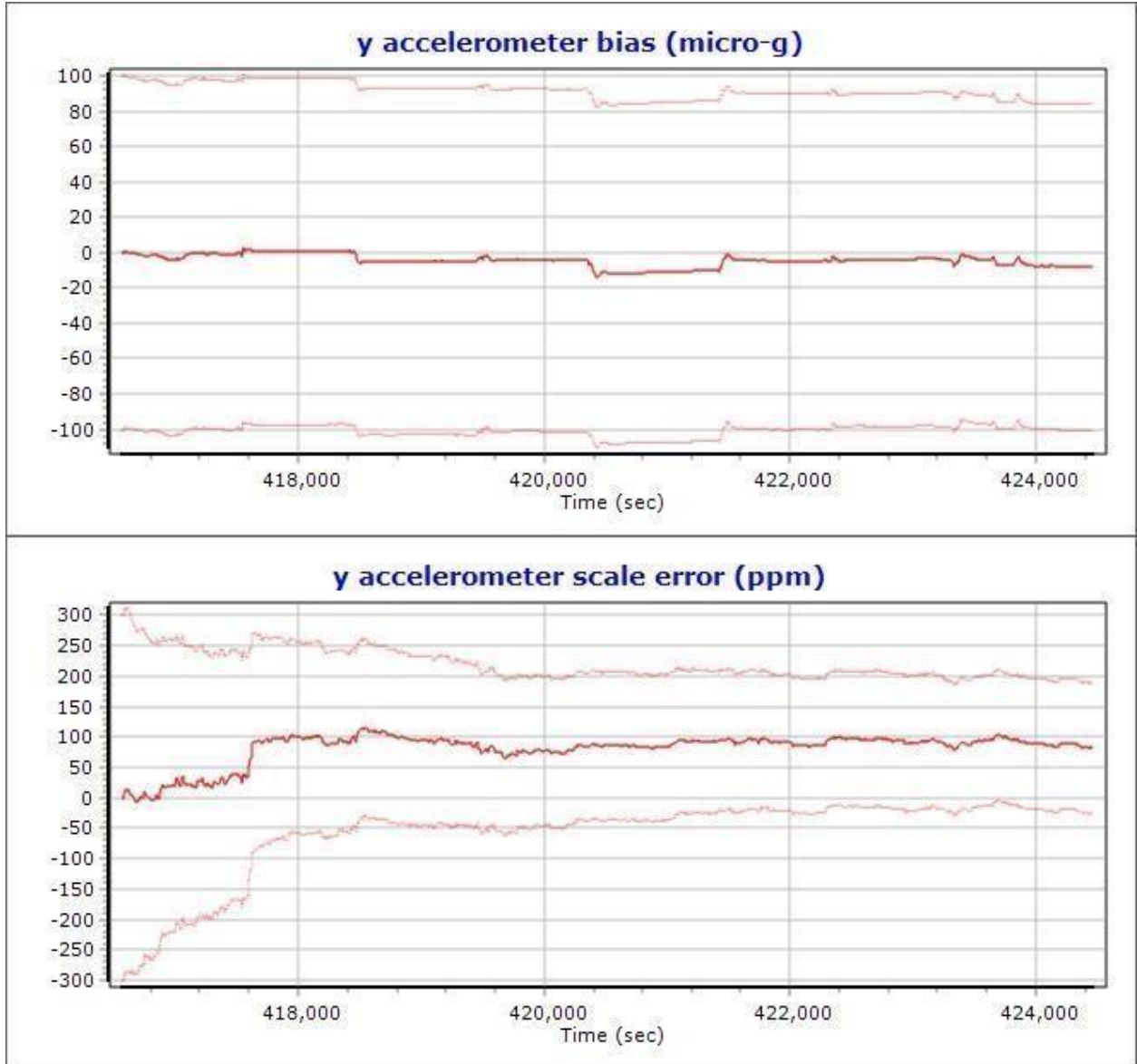
Maximum: 76.62  
 Minimum: 0.1  
 Average: 22.81  
 First Epoch: 33.63  
 Last Epoch: 72.93

**CORS Base Stations**

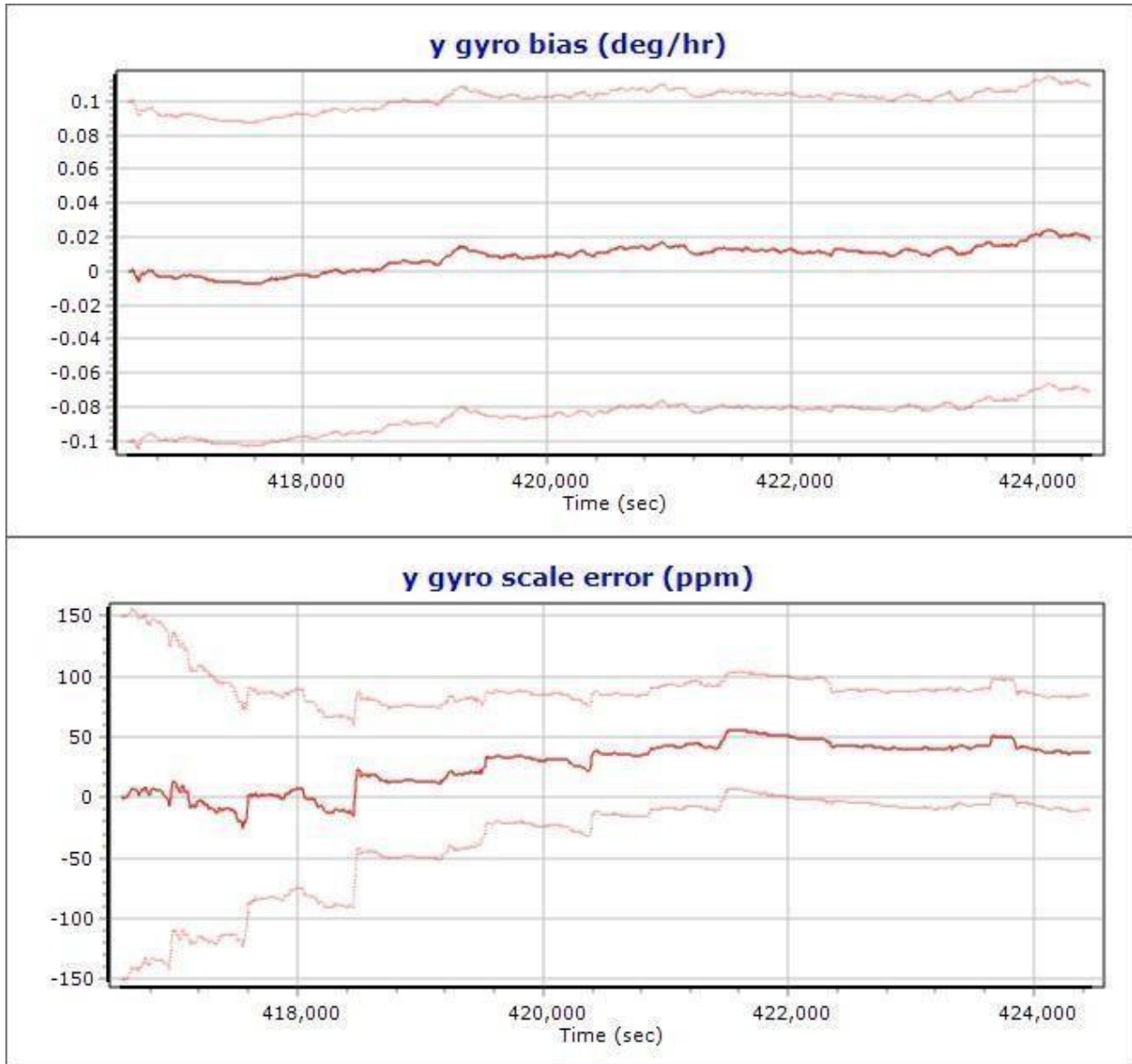
Station	Original			Adjusted		
TXMC	N31°07'55.57698"	W102°13'56.82386"	724.079			
TXSA	N31°24'51.56781"	W100°28'22.39691"	566.043	N31°24'51.56793"	W100°28'22.39680"	566.062
TXOZ	N30°43'34.28984"	W101°11'49.50644"	699.173	N30°43'34.28978"	W101°11'49.50629"	699.203
TXOE	N31°52'24.51763"	W102°18'50.27461"	856.094	N31°52'24.51748"	W102°18'50.27493"	856.103
TXCE	N31°25'22.08558"	W102°21'27.22543"	754.414	N31°25'22.08562"	W102°21'27.22588"	754.409

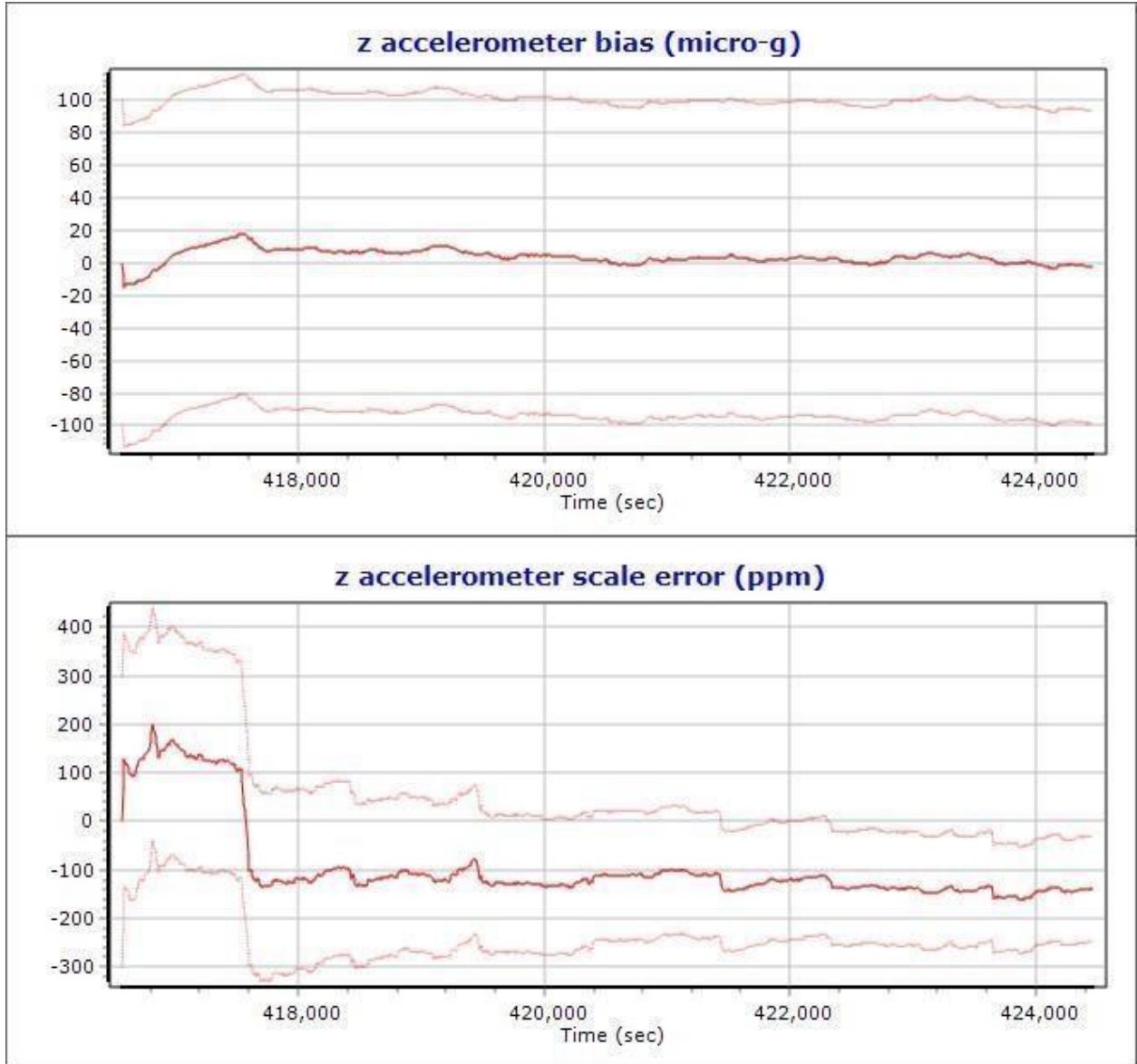


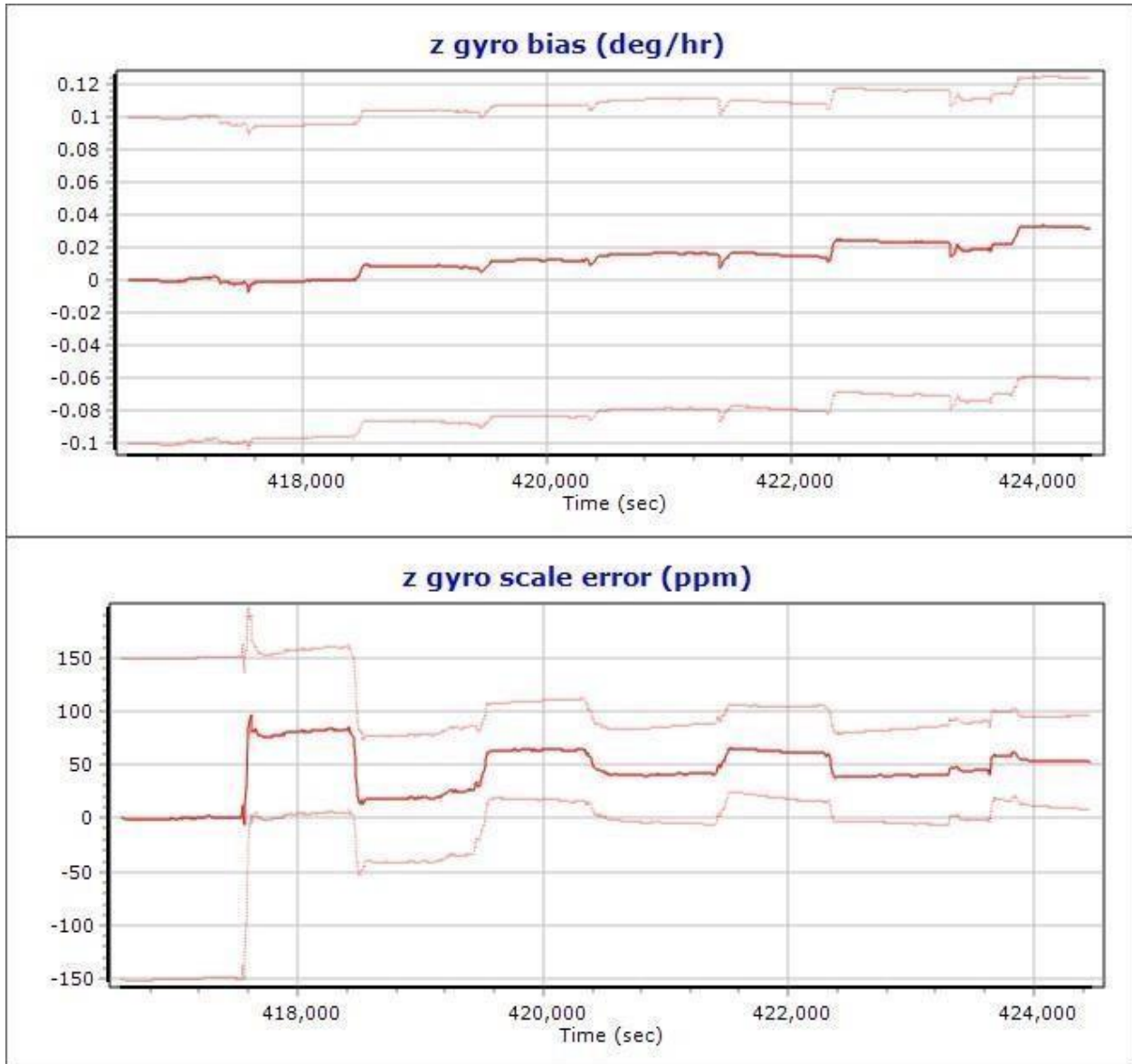




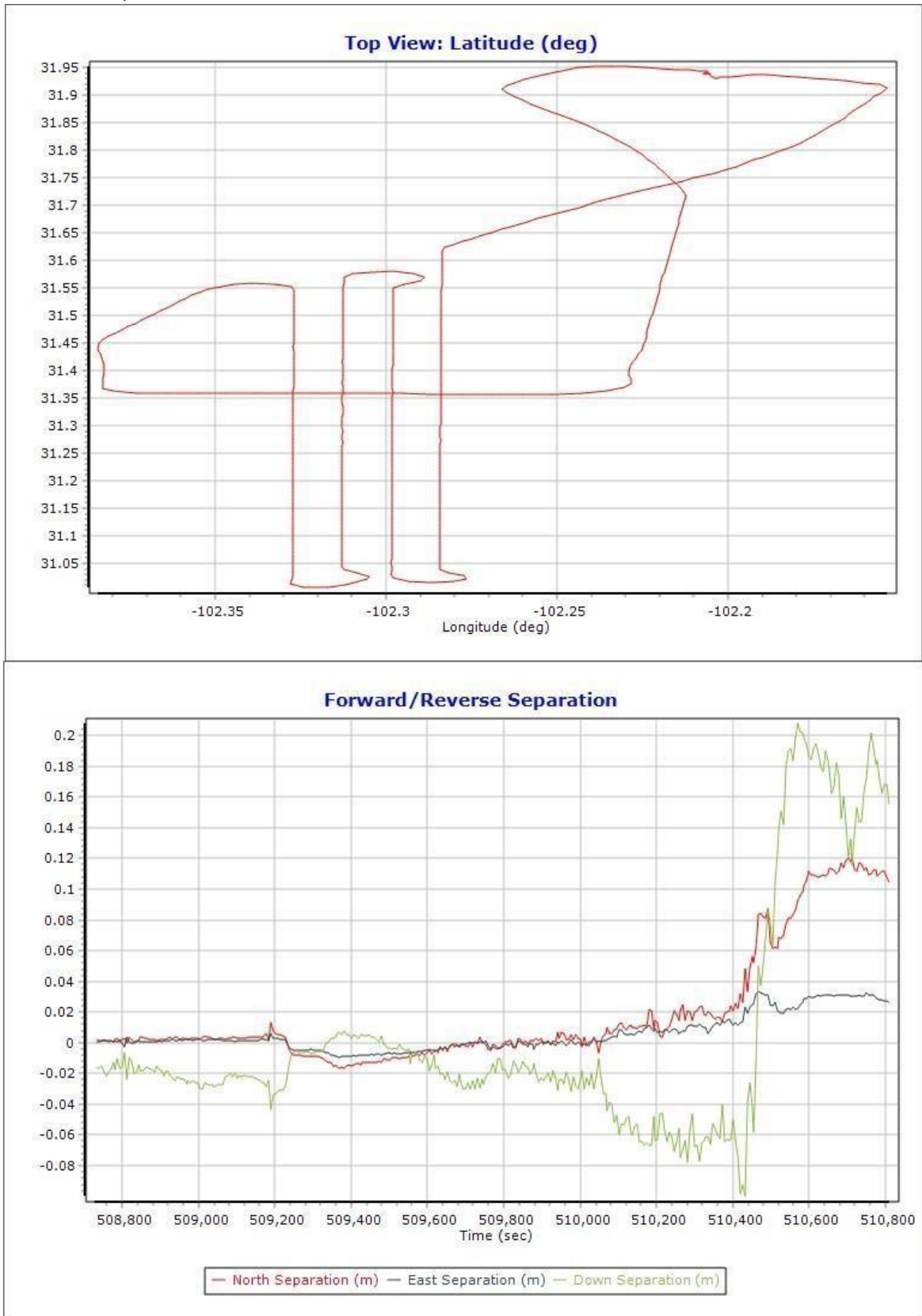


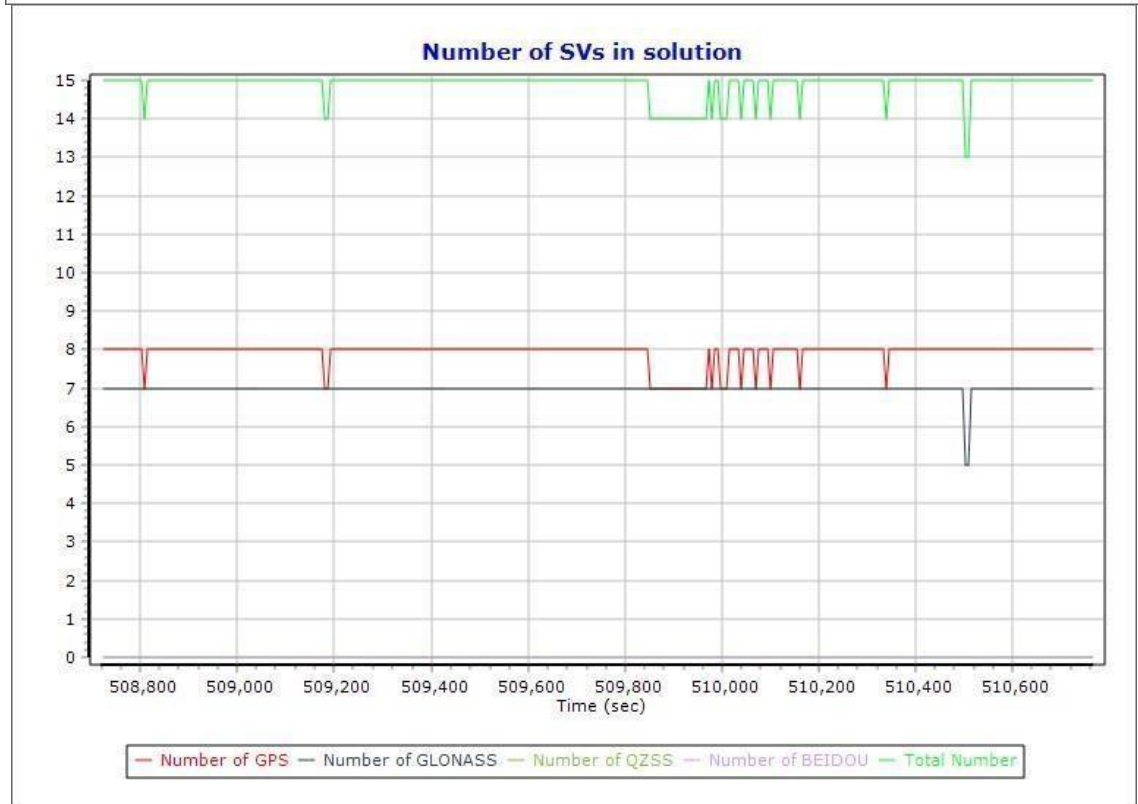
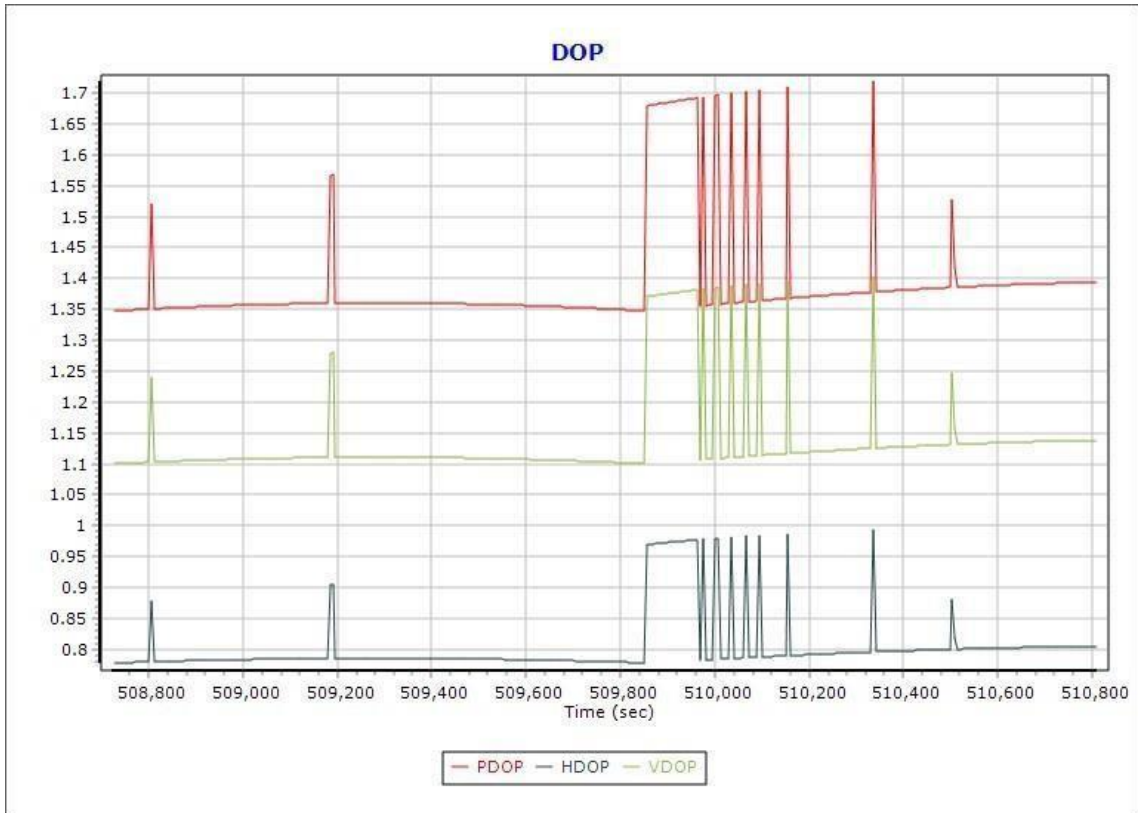






## FEBRUARY 16, 2018





## Processing Summary Information

### Processing Summary Information

Program: POSpac MMS  
Version: 8.1.6388.30062  
Project: \\sa\data\riegl\18047\20180212\_TX\_B

Solution Type: IN-Fusion SmartBase

Fixed: 23718	(86.09%)
Float: 0	(0.00%)
No Solution: 3831	(13.91%)

Number of Epochs:

Total in RAW file: 27595  
No processed position: 3877

Fwd/Rev Separation RMS Values (m):

North: 0.019  
East: 0.007  
Height: 0.055

Fwd/Rev Sep. RMS for 25%-75% weighting (m): 13775 occurrences

North: 0.016  
East: 0.006  
Height: 0.056

Quality Number Percentages:

Q 0: 100.0 %

Position Standard Deviation Percentages (%):

0.00 - 0.10 m: 99.310  
 0.10 - 0.30 m: 0.690  
 0.30 - 1.00 m: 0  
 1.00 - 5.00 m: 0  
 5.00 m + over: 0

Percentages of epochs with DD\_DOP over 10.00: 0 %

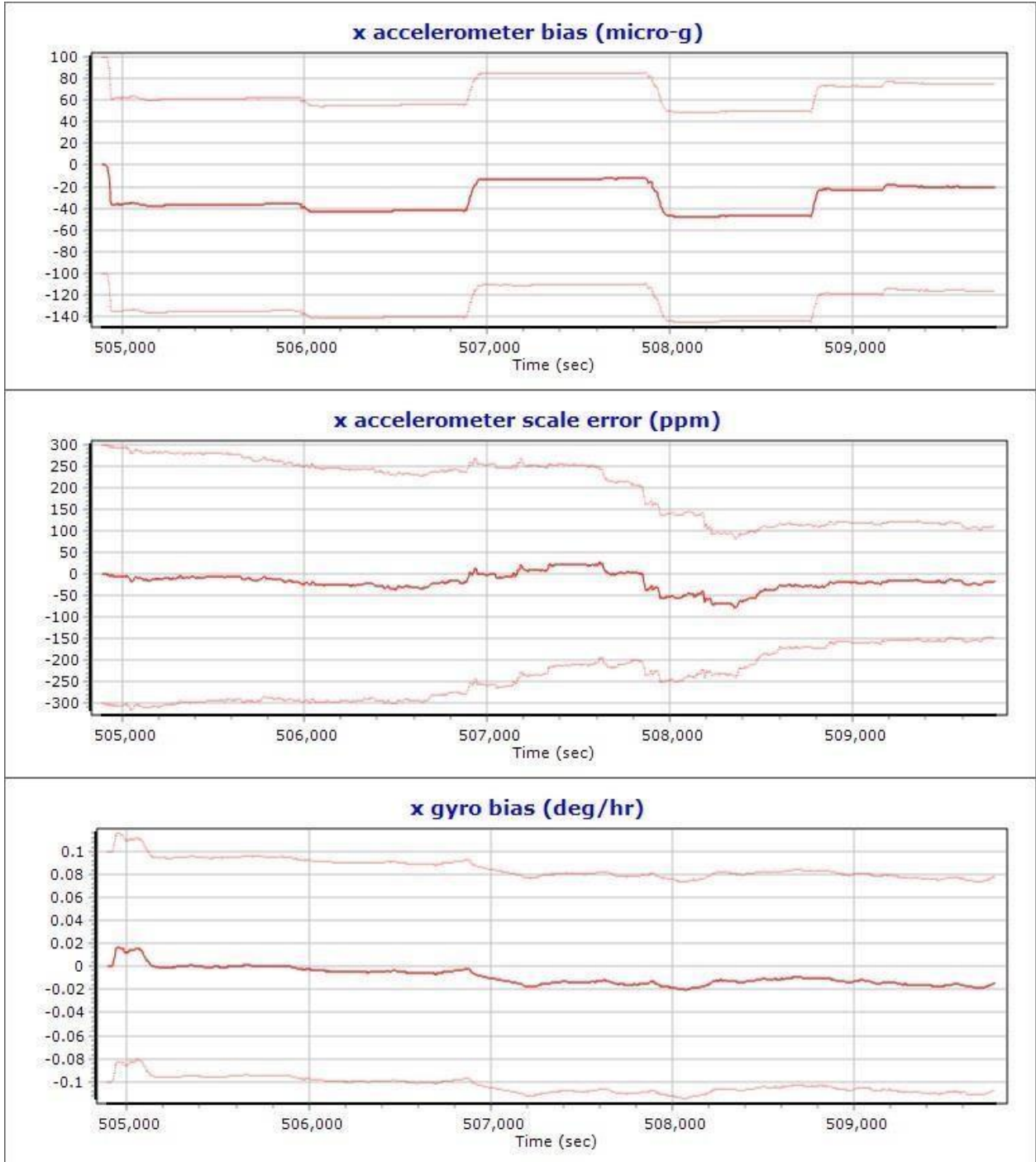
DOP over Tol: 1.58%

Baseline Distances (km):

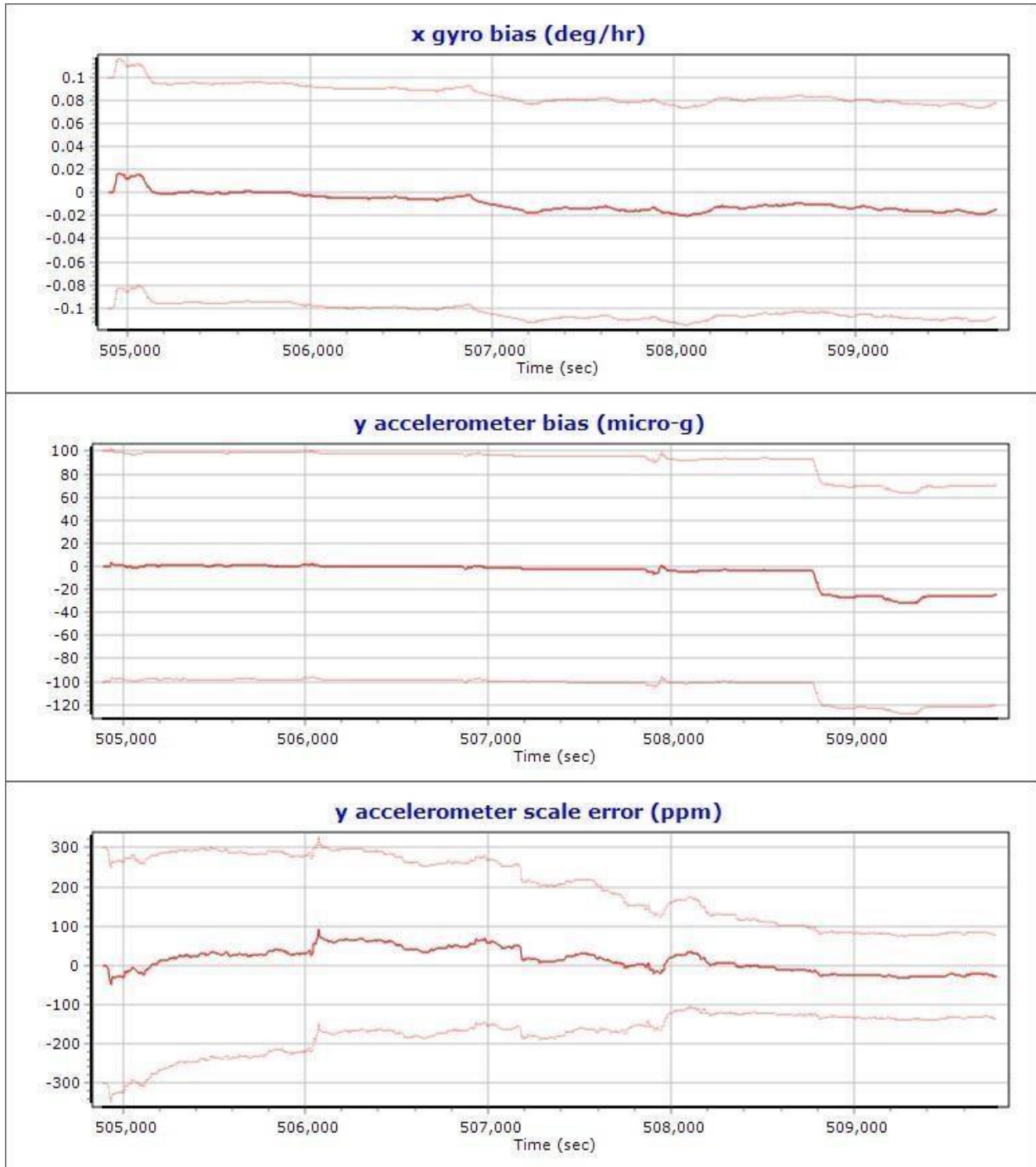
Maximum: 71.13  
 Minimum: 0.38  
 Average: 28.01  
 First Epoch: 67.67  
 Last Epoch: 67.62

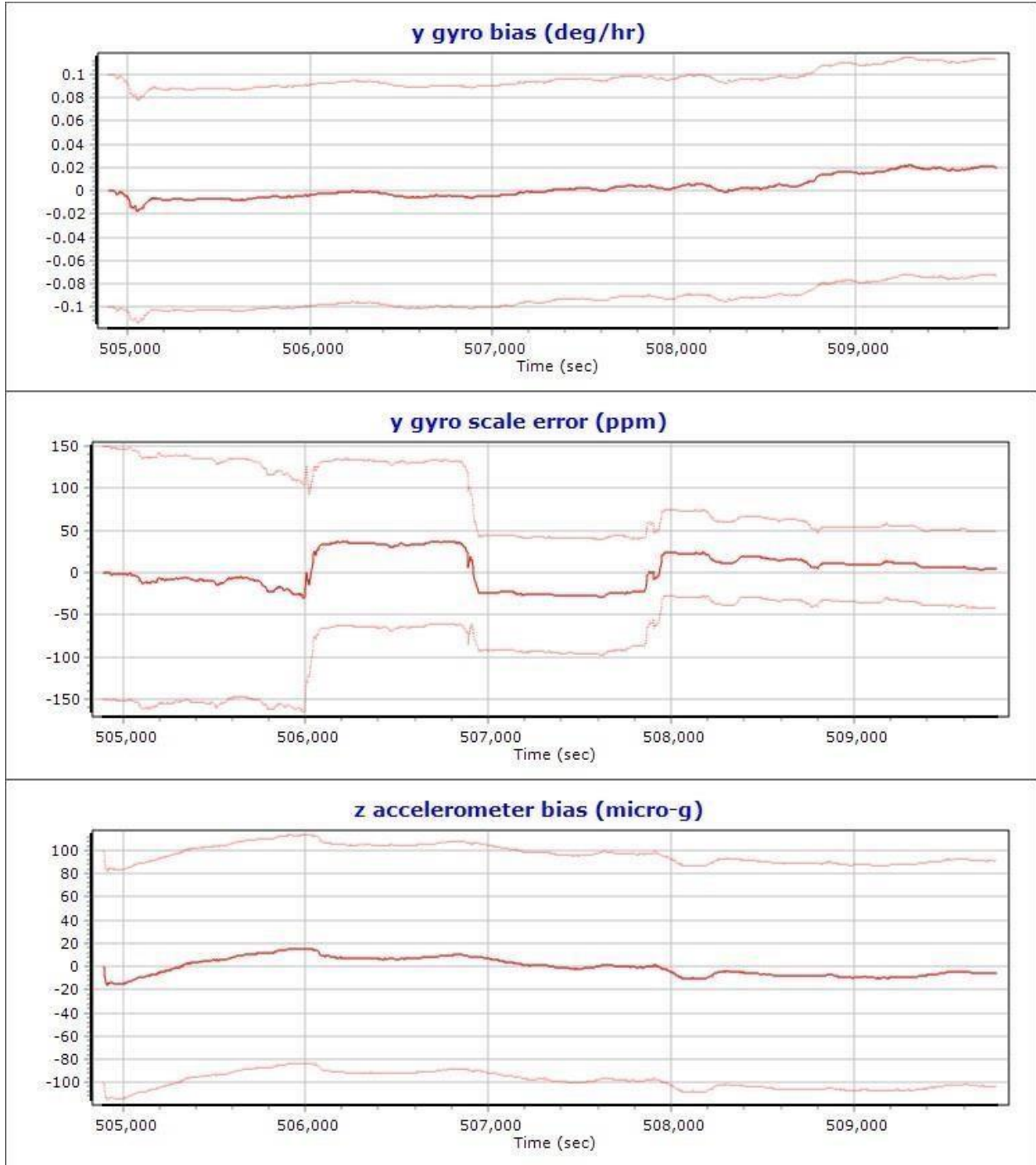
**CORS Base Stations**

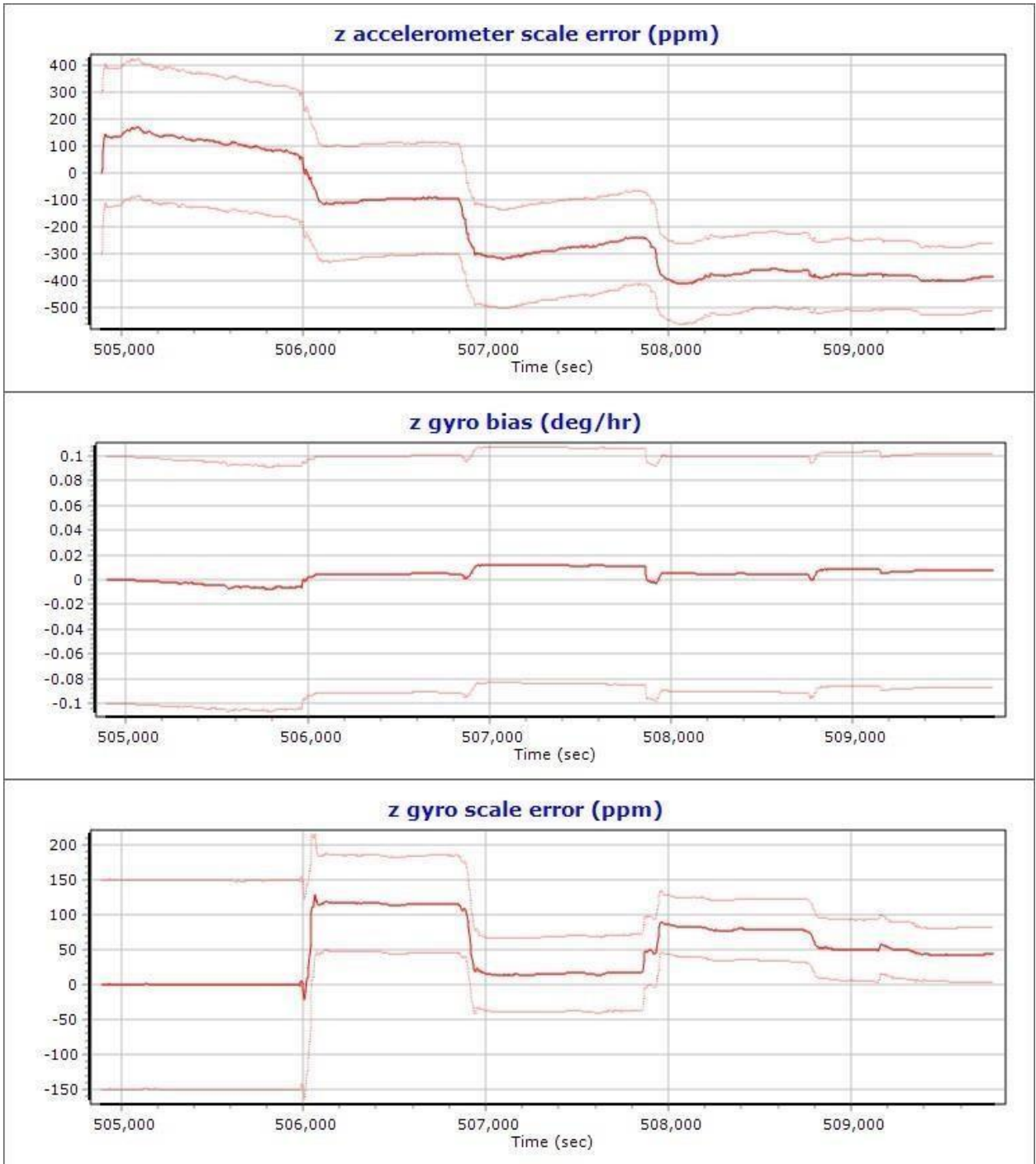
Station	Original			Adjusted		
TXMC	N31°07'55.57698"	W102°13'56.82387"	724.079			
TXOZ	N30°43'34.28984"	W101°11'49.50644"	699.173	N30°43'34.28971"	W101°11'49.50622"	699.194
TXOE	N31°52'24.51763"	W102°18'50.27461"	856.094	N31°52'24.51737"	W102°18'50.27503"	856.101
TXMH	N31°33'27.83675"	W102°53'38.43950"	773.391	N31°33'27.83678"	W102°53'38.43985"	773.392
TXFS	N30°53'38.06136"	W102°51'59.48948"	877.580	N30°53'38.06127"	W102°51'59.48968"	877.599
TXCE	N31°25'22.08558"	W102°21'27.22543"	754.414	N31°25'22.08554"	W102°21'27.22594"	754.412



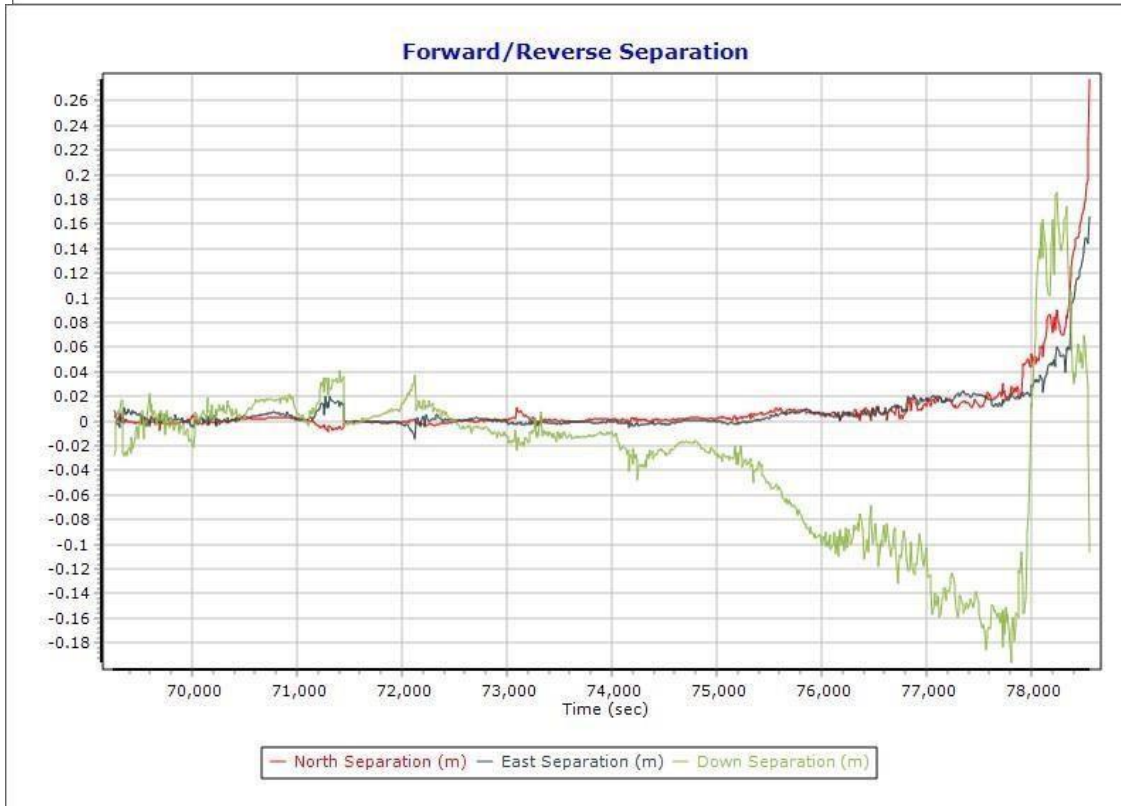
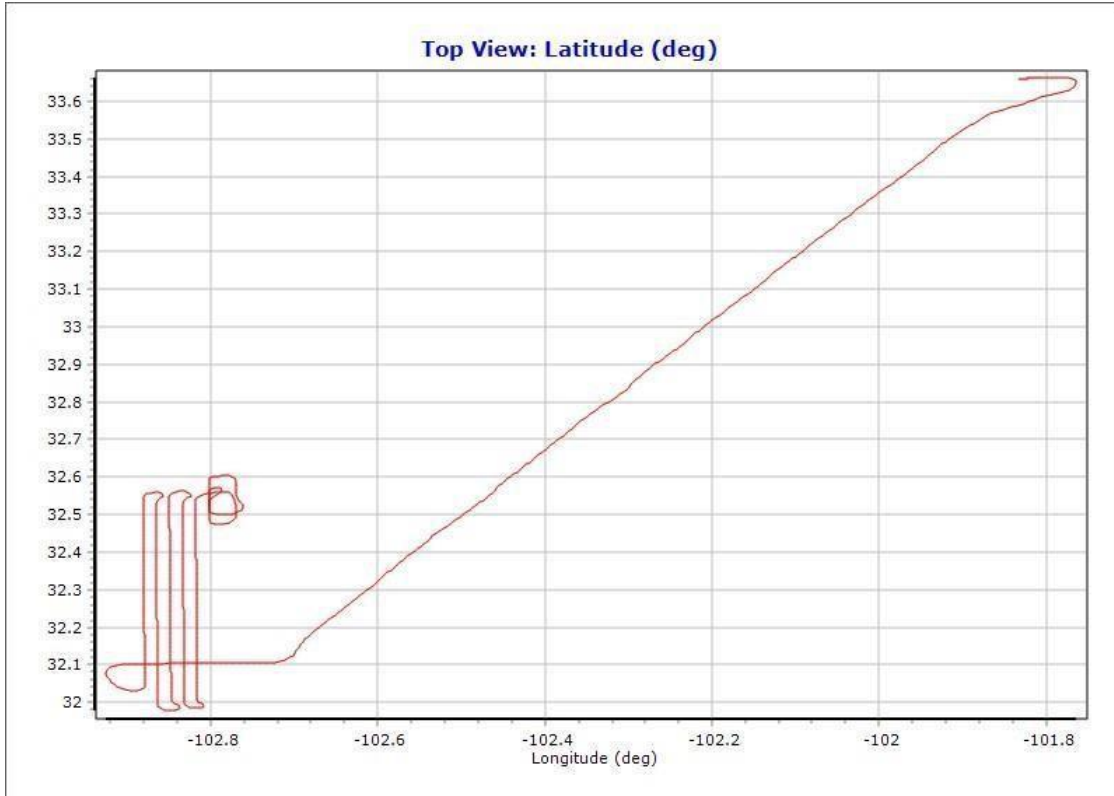


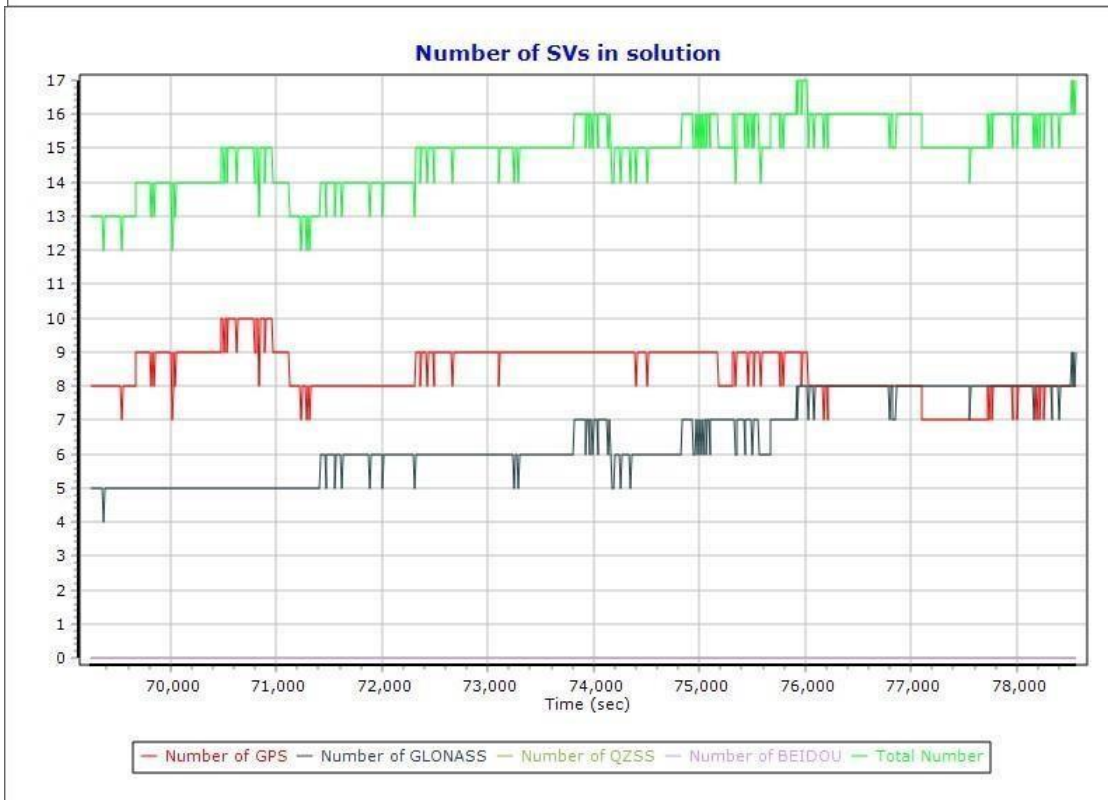
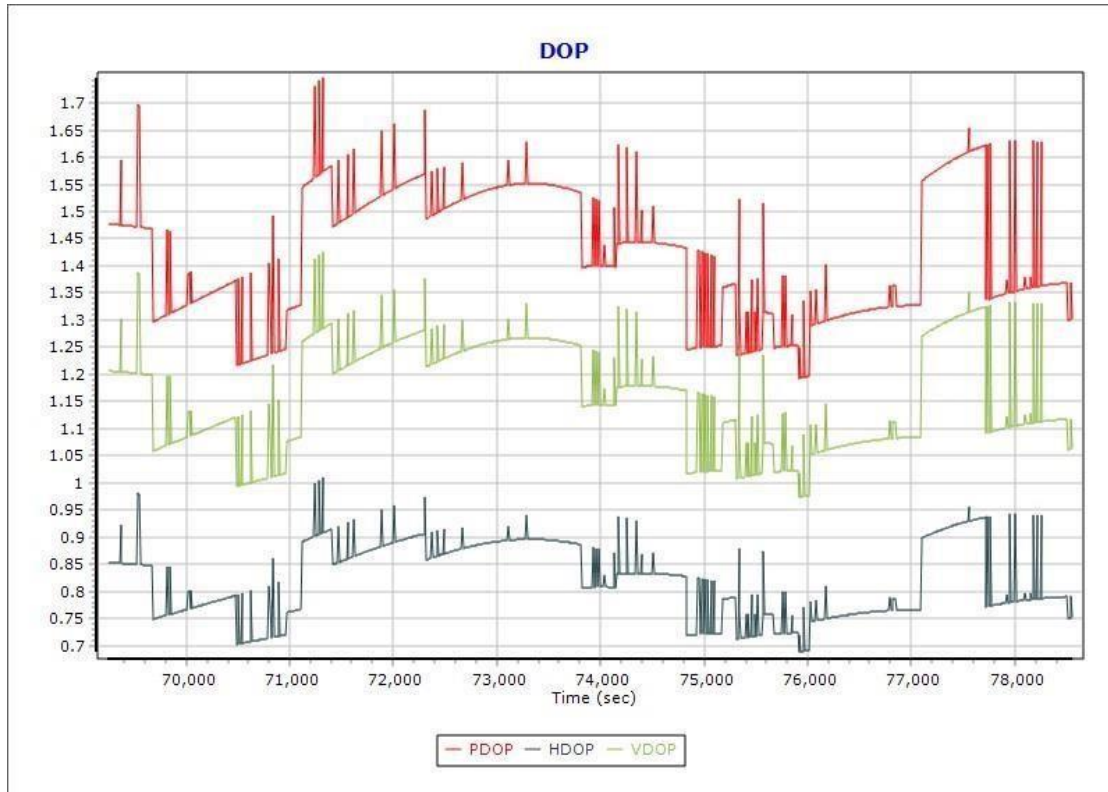






**FEBRUARY 18, 2018 PART 1**





## Processing Summary Information

### Processing Summary Information

Program: POSpac MMS  
Version: 8.1.6388.30062  
Project: \\sa\data\riegl\18047\20180218\_TX\_Lines\_1-6

Solution Type: IN-Fusion SmartBase

Fixed: 17064	(99.91%)
Float: 0	(0.00%)
No Solution: 15	(0.09%)

Number of Epochs:

Total in RAW file: 17080  
No processed position: 16

Fwd/Rev Separation RMS Values (m):

North: 0.033  
East: 0.022  
Height: 0.082

Fwd/Rev Sep. RMS for 25%-75% weighting (m): 8540 occurrences

North: 0.004  
East: 0.004  
Height: 0.027

Quality Number Percentages:

Q 0: 100.0 %

Position Standard Deviation Percentages (%):

0.00 - 0.10 m: 98.793  
 0.10 - 0.30 m: 1.207  
 0.30 - 1.00 m: 0  
 1.00 - 5.00 m: 0  
 5.00 m + over: 0

Percentages of epochs with DD\_DOP over 10.00: 0 %

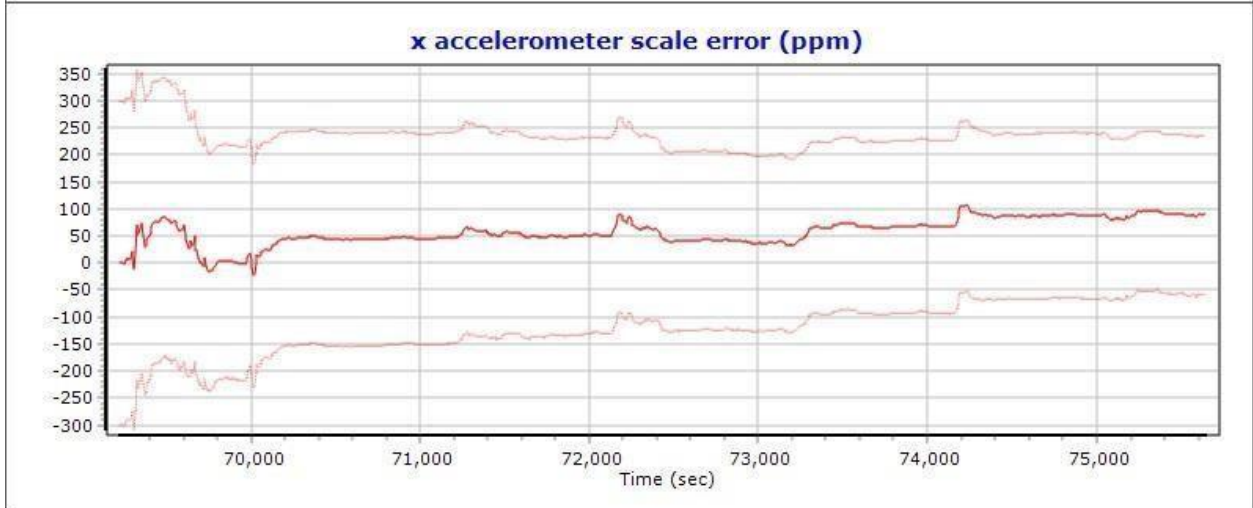
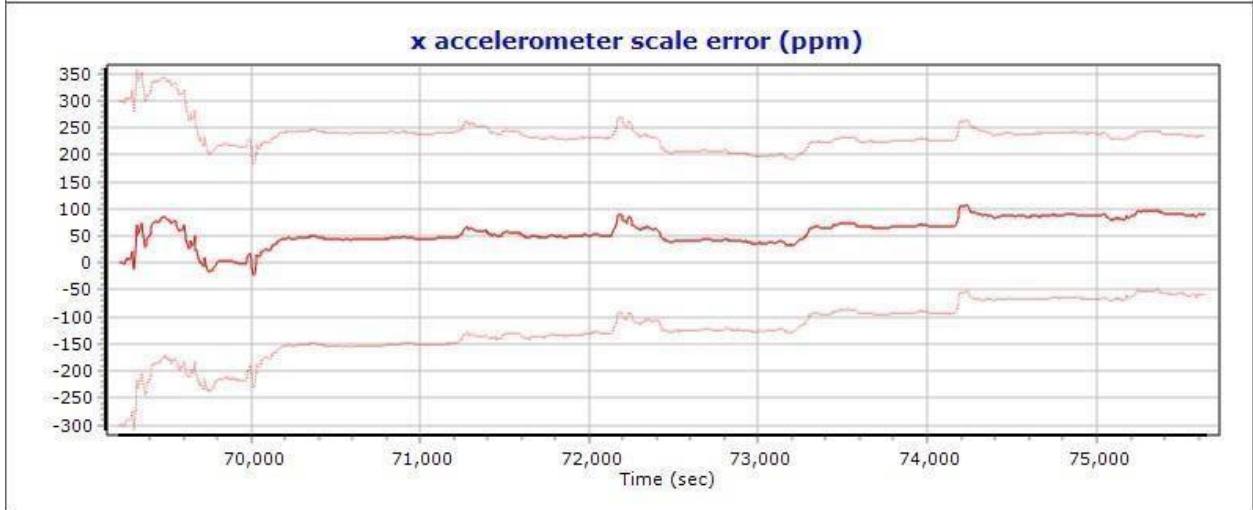
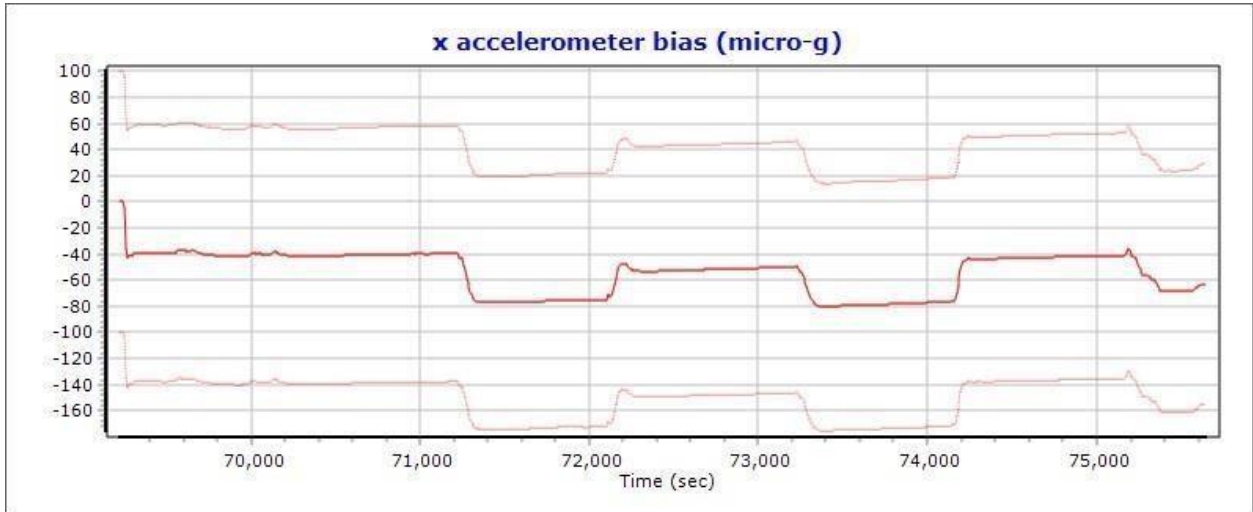
DOP over Tol: 1.58%

Baseline Distances (km):

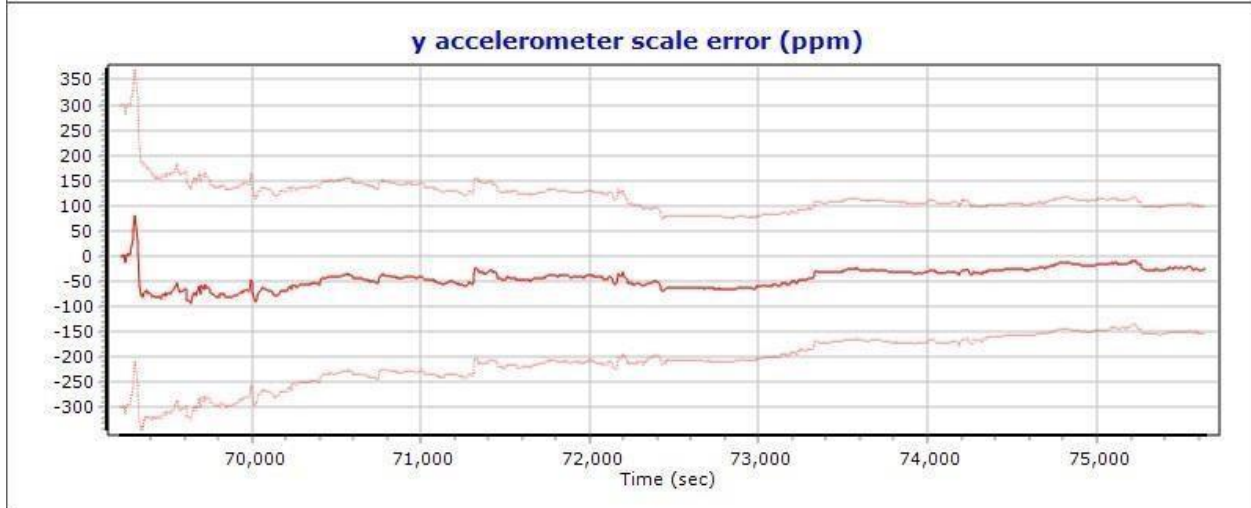
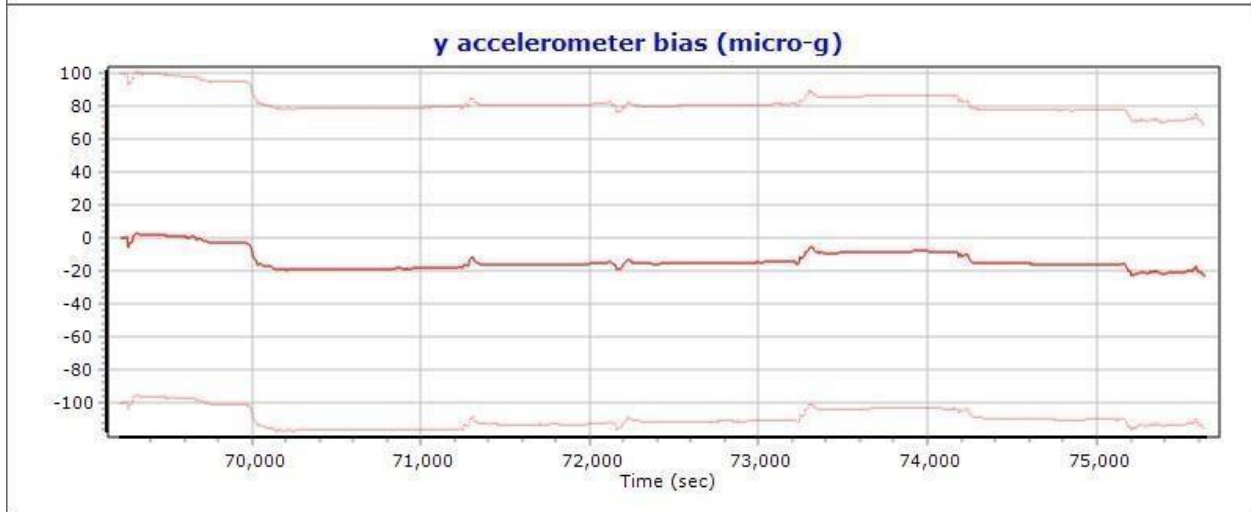
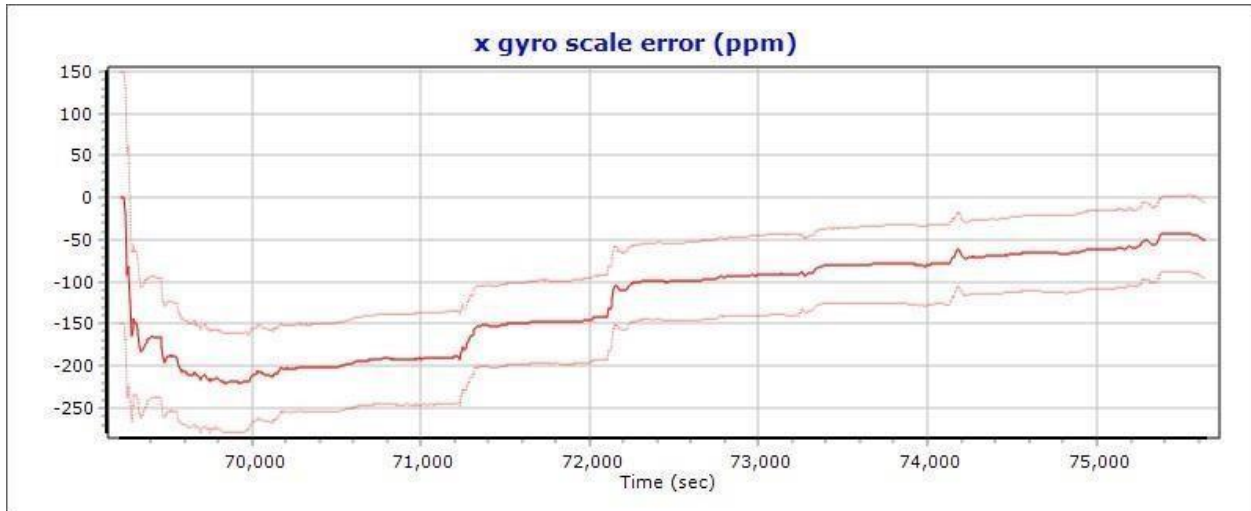
Maximum: 180.16  
 Minimum: 0.74  
 Average: 54.82  
 First Epoch: 176.9  
 Last Epoch: 176.87

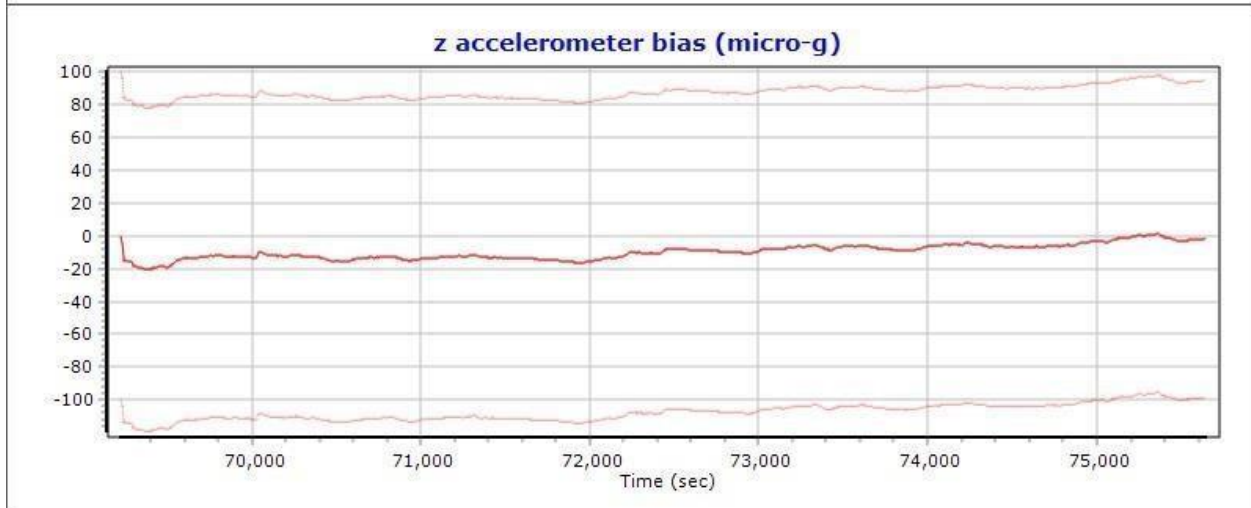
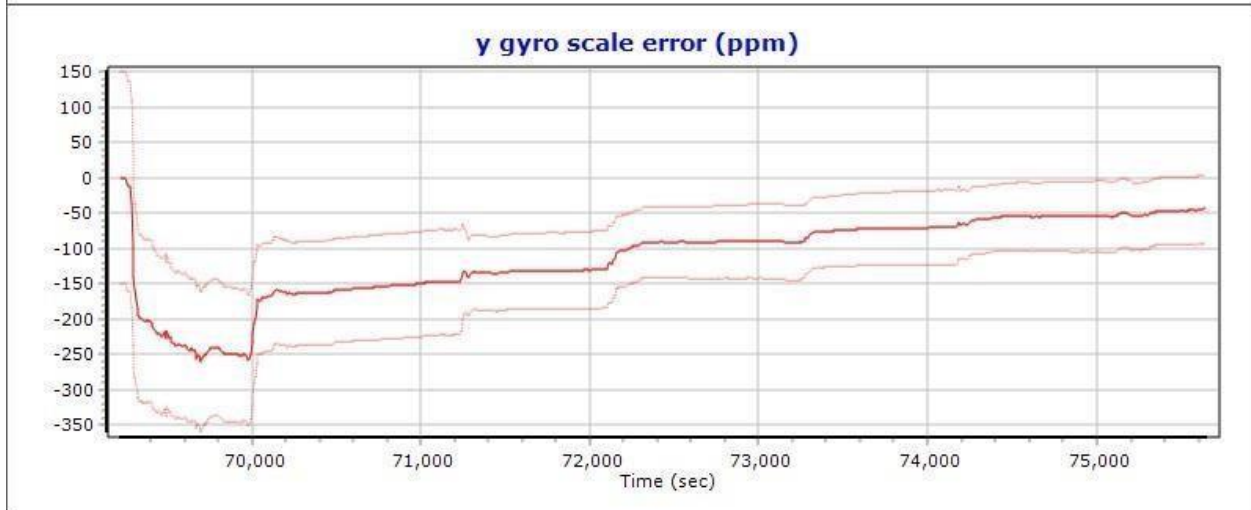
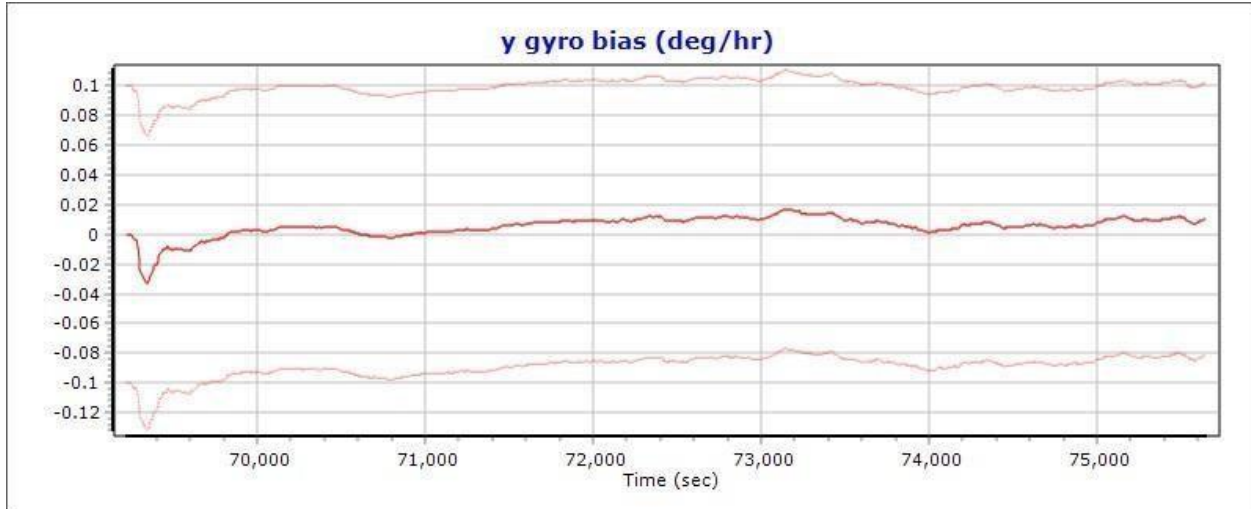
**CORS Base Stations**

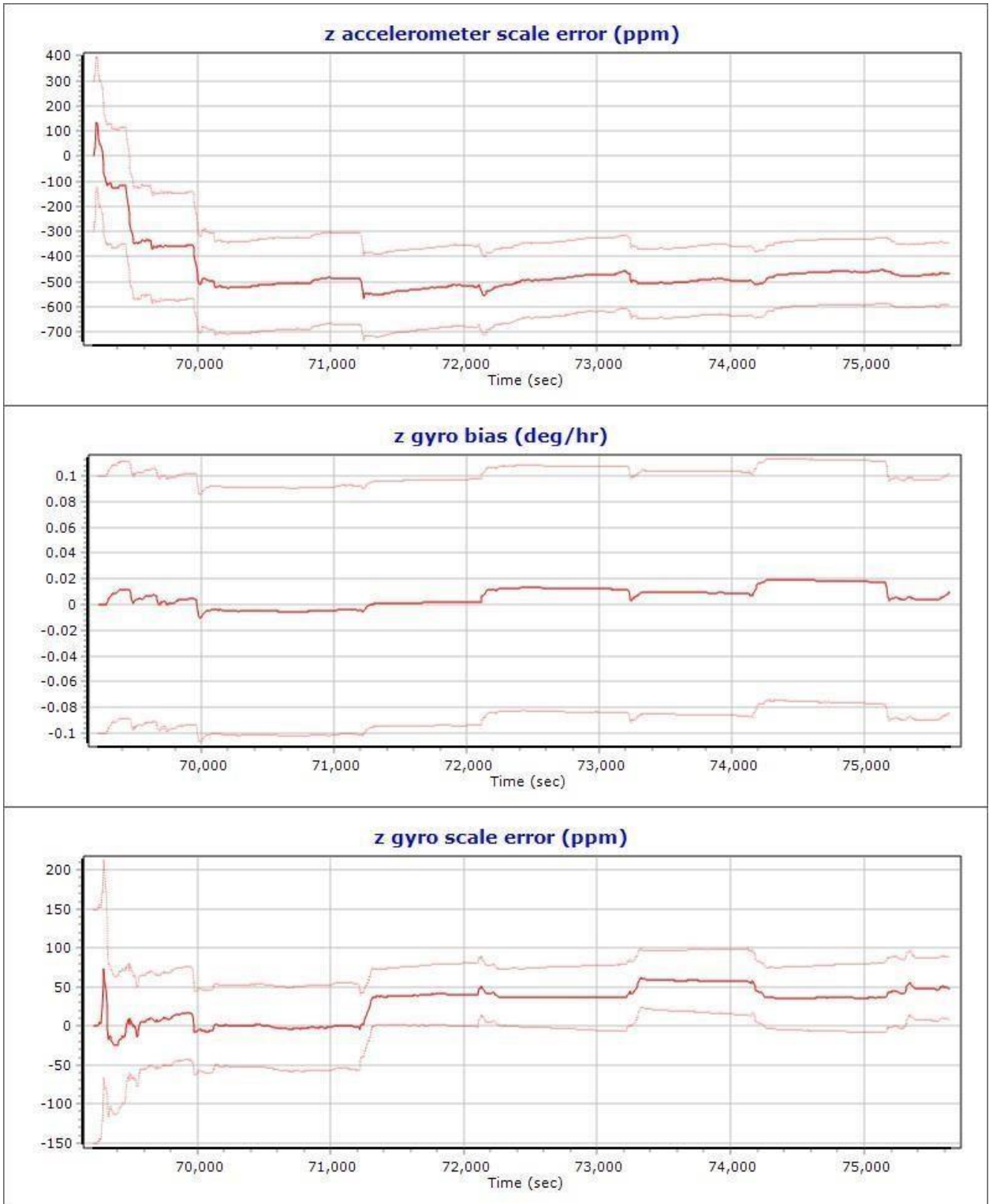
Station	Original			Adjusted		
TXAD	N32°18'28.83158"	W102°32'36.98766"	946.849			
TXS3	N32°42'42.42348"	W102°37'47.28471"	977.768	N32°42'42.42309"	W102°37'47.28480"	977.742
TXP2	N33°10'55.80258"	W102°49'05.38271"	1089.713	N33°10'55.80235"	W102°49'05.38304"	1089.728
TXOE	N31°52'24.51762"	W102°18'50.27461"	856.094	N31°52'24.51736"	W102°18'50.27476"	856.080
TXMH	N31°33'27.83675"	W102°53'38.43950"	773.391	N31°33'27.83675"	W102°53'38.43958"	773.379
TXKM	N31°50'33.37111"	W103°06'31.30048"	847.990	N31°50'33.37130"	W103°06'31.30064"	847.983



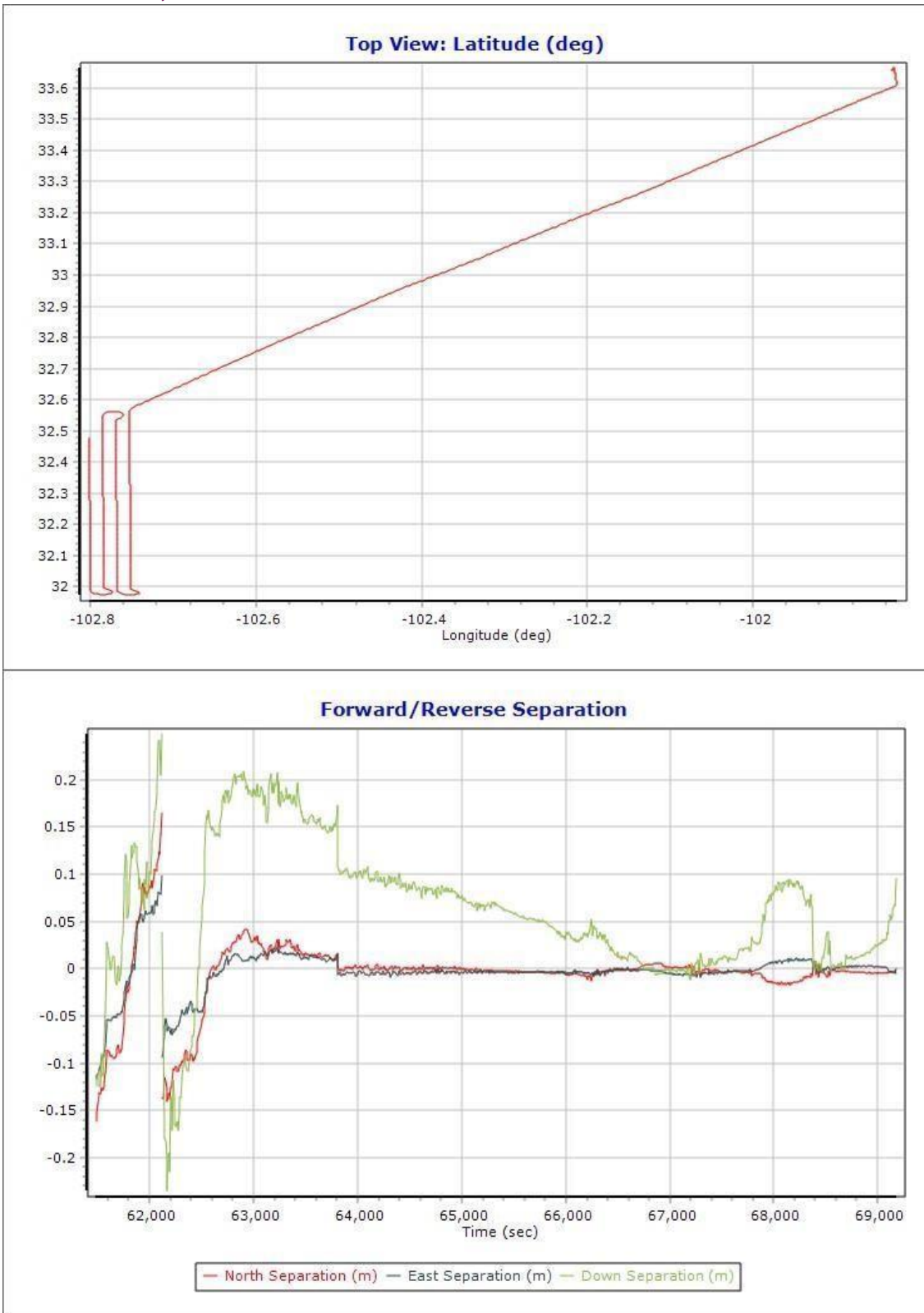


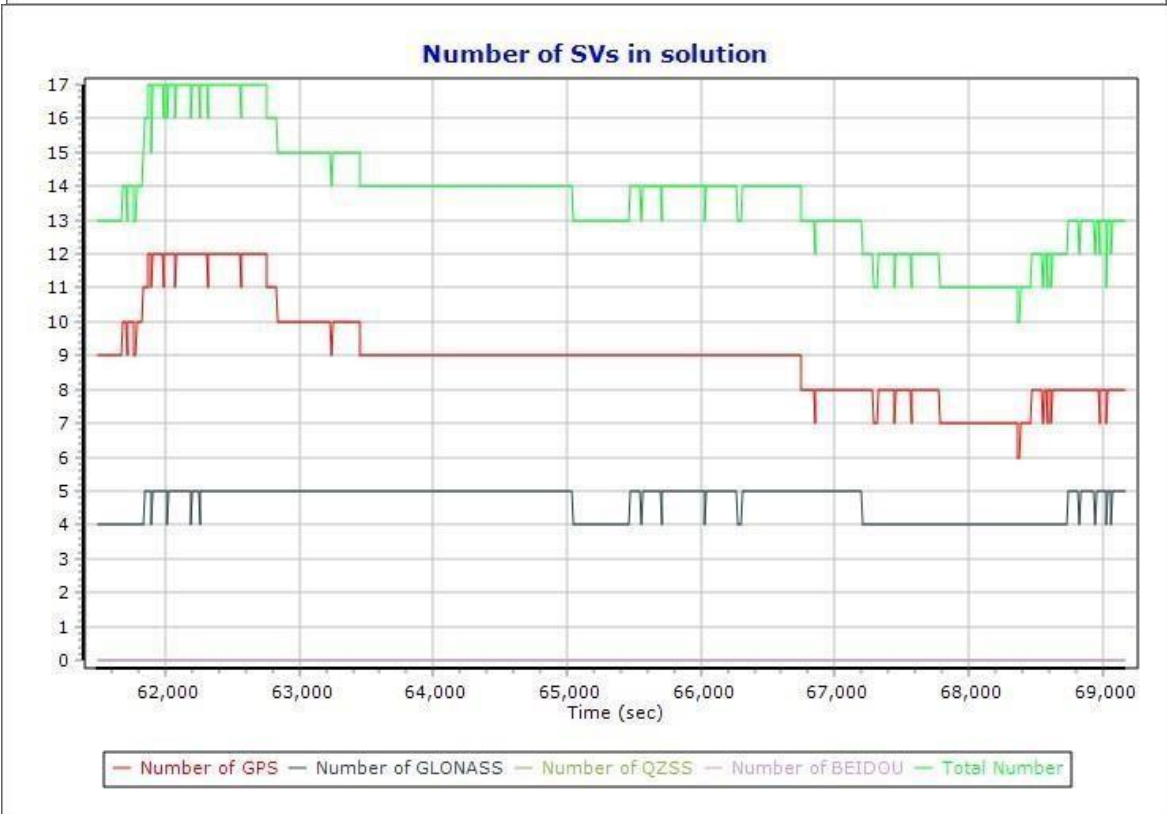
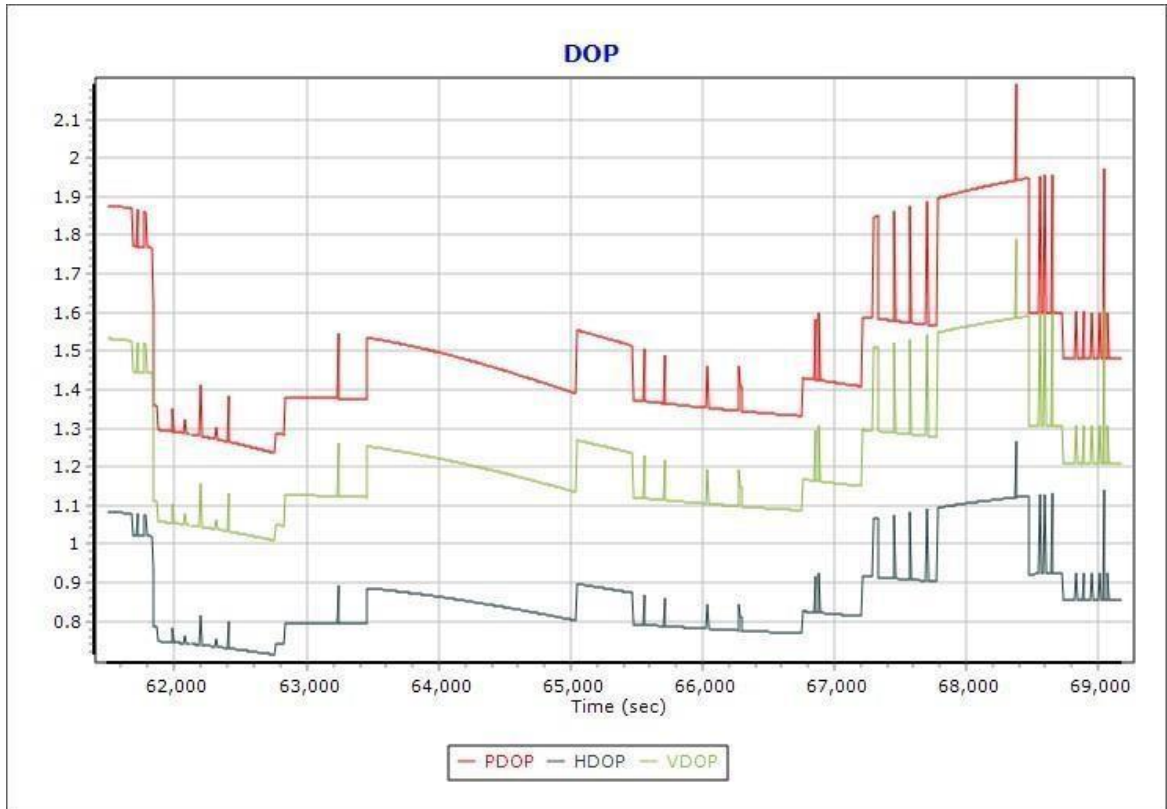






## FEBRUARY 18, 2018 PART 2





## Processing Summary Information

### Processing Summary Information

Program: POSpac MMS  
Version: 8.1.6388.30062  
Project: \\sa\data\riegl\18047\20180218\_TX\_Lines\_6-9

Solution Type: IN-Fusion SmartBase

Fixed: 17064	(99.91%)
Float: 0	(0.00%)
No Solution: 1	(0.09%)

Number of Epochs:

Total in RAW file: 17080  
No processed position: 16

Fwd/Rev Separation RMS Values (m):

North: 0.033  
East: 0.022  
Height: 0.082

Fwd/Rev Sep. RMS for 25%-75% weighting (m): 8540 occurrences

North: 0.004  
East: 0.004  
Height: 0.027

Quality Number Percentages:

Q 0: 100.0 %

Position Standard Deviation Percentages (%):

0.00 - 0.10 m: 98.793  
 0.10 - 0.30 m: 1.207  
 0.30 - 1.00 m: 0  
 1.00 - 5.00 m: 0  
 5.00 m + over: 0

Percentages of epochs with DD\_DOP over 10.00: 0 %

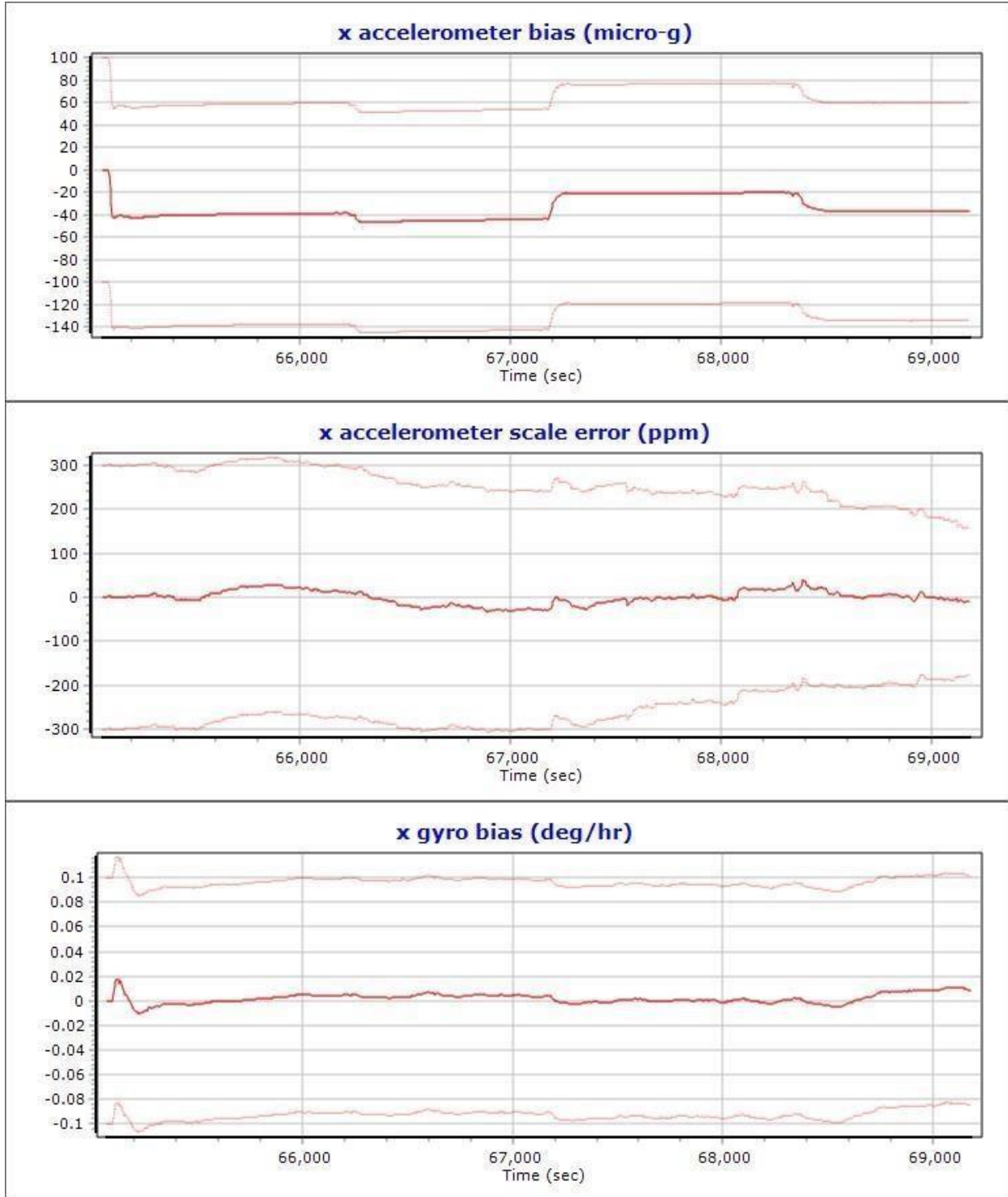
DOP over Tol: 1.58%

Baseline Distances (km):

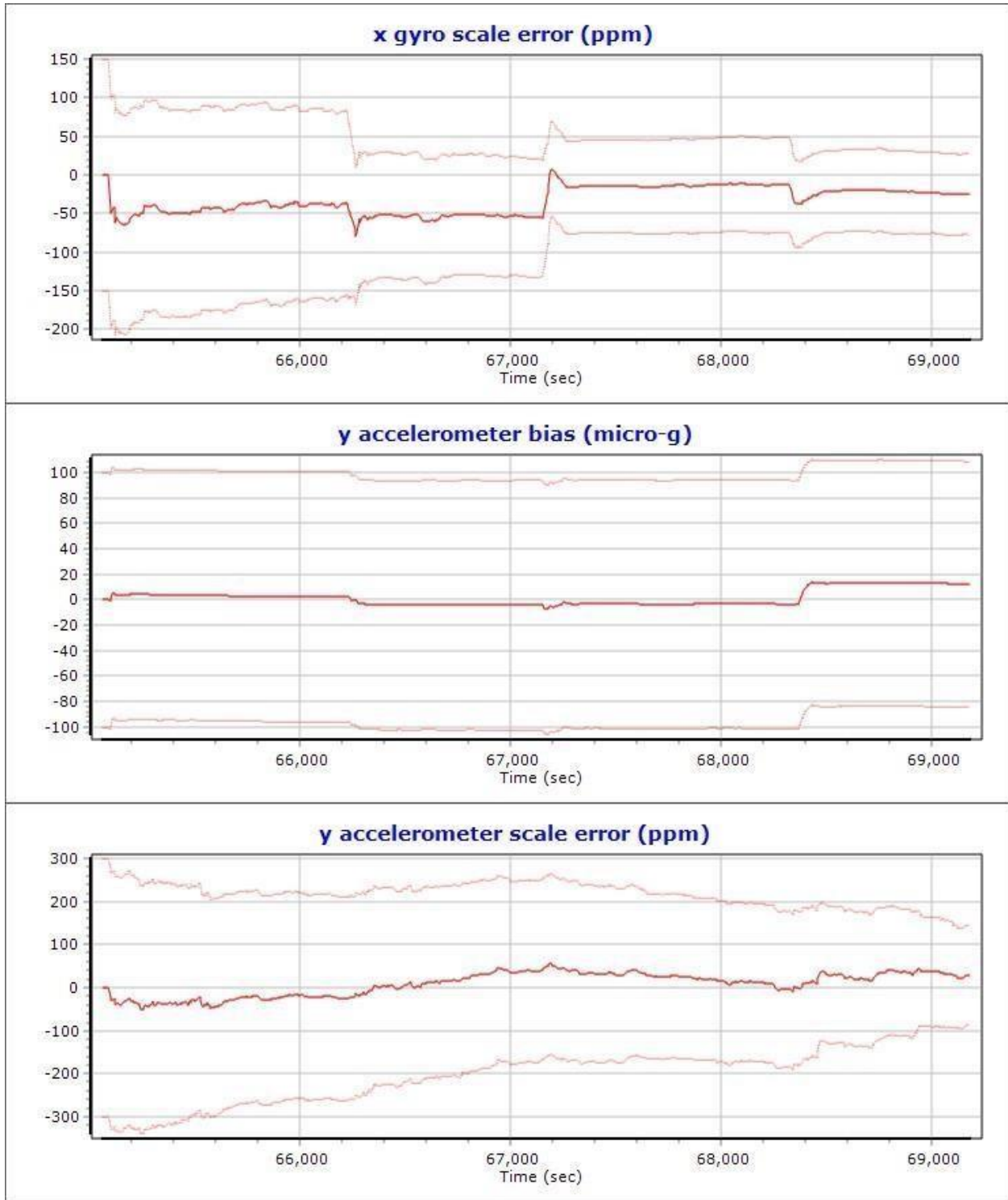
Maximum: 180.16  
 Minimum: 0.74  
 Average: 54.82  
 First Epoch: 176.9  
 Last Epoch: 176.87

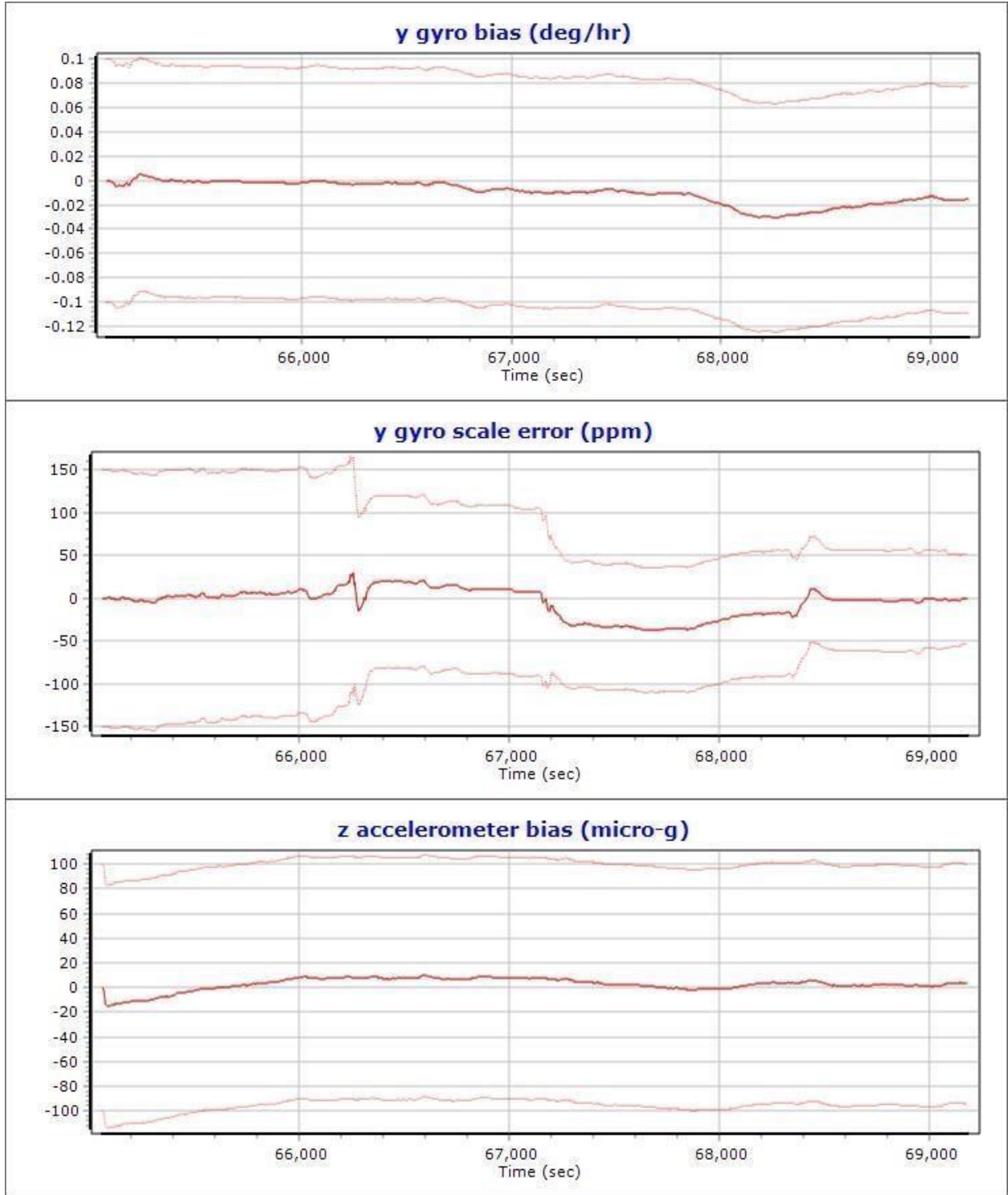
**CORS Base Stations**

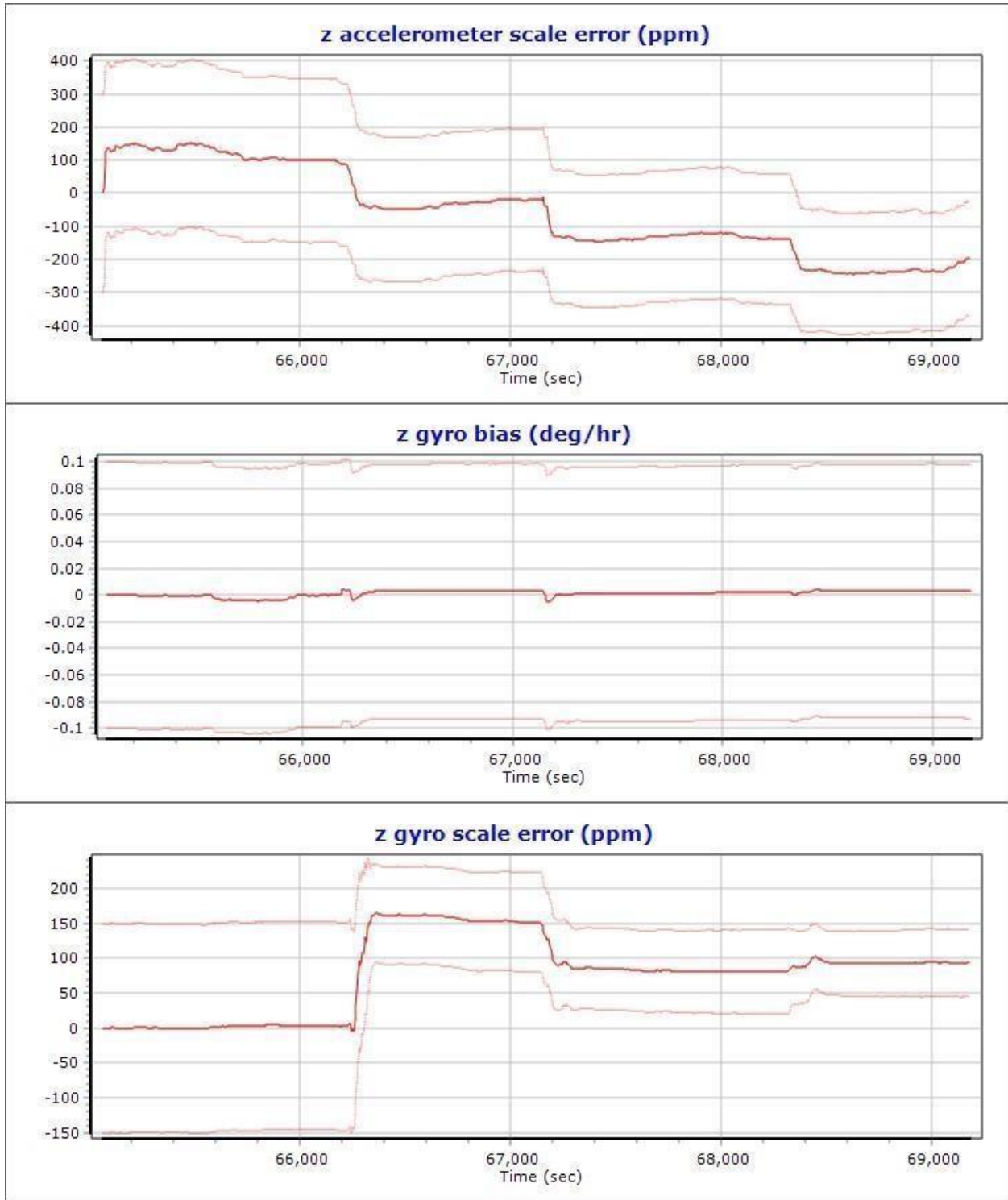
Station	Original			Adjusted		
	N	E	Dist	N	E	Dist
TXAD	N32°18'28.83158"	W102°32'36.98766"	946.849			
TXS3	N32°42'42.42348"	W102°37'47.28471"	977.768	N32°42'42.42309"	W102°37'47.28480"	977.742
TXP2	N33°10'55.80258"	W102°49'05.38271"	1089.713	N33°10'55.80235"	W102°49'05.38304"	1089.728
TXOE	N31°52'24.51762"	W102°18'50.27461"	856.094	N31°52'24.51736"	W102°18'50.27476"	856.080
TXMH	N31°33'27.83675"	W102°53'38.43950"	773.391	N31°33'27.83675"	W102°53'38.43958"	773.379
TXKM	N31°50'33.37111"	W103°06'31.30048"	847.990	N31°50'33.37130"	W103°06'31.30064"	847.983



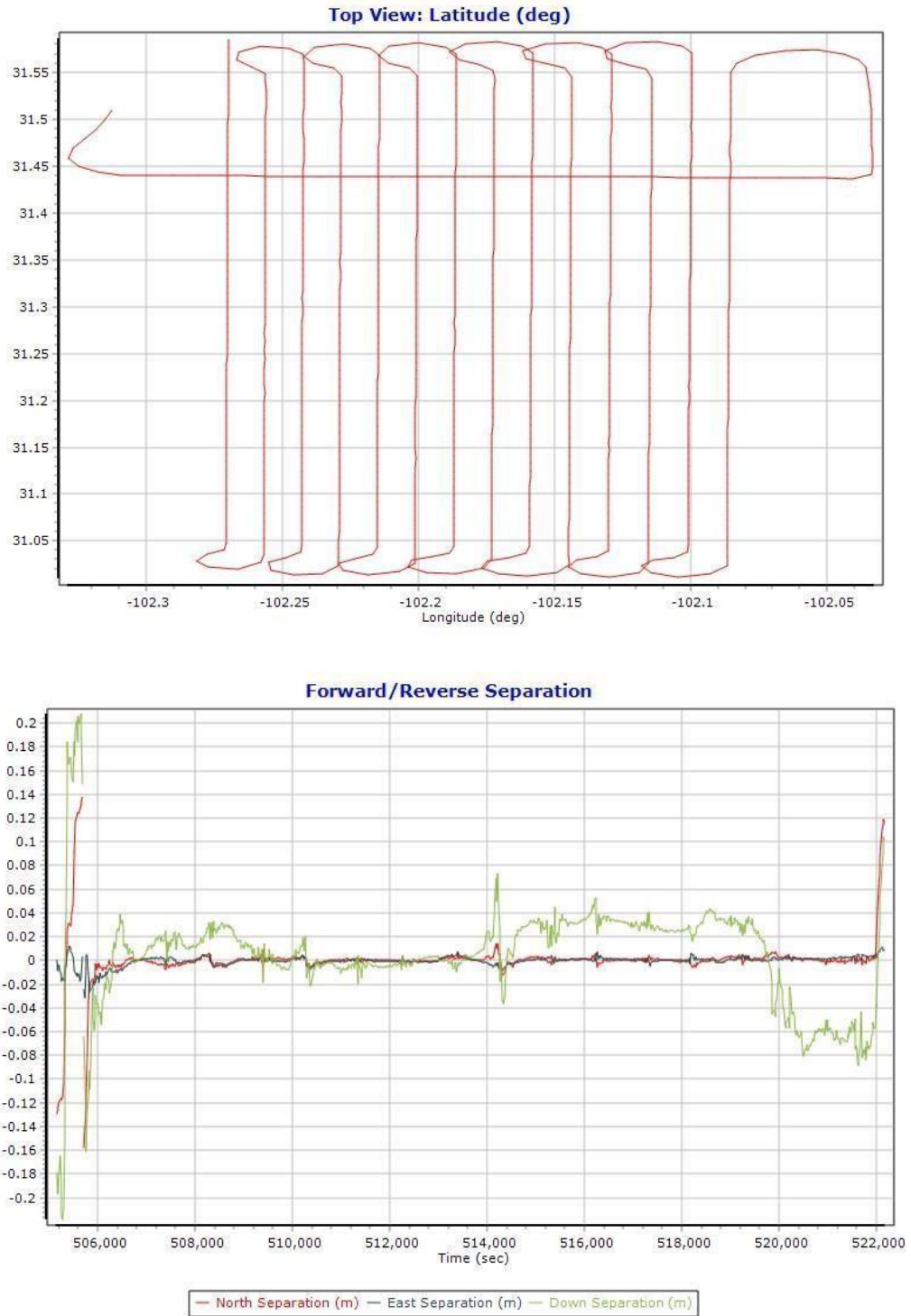


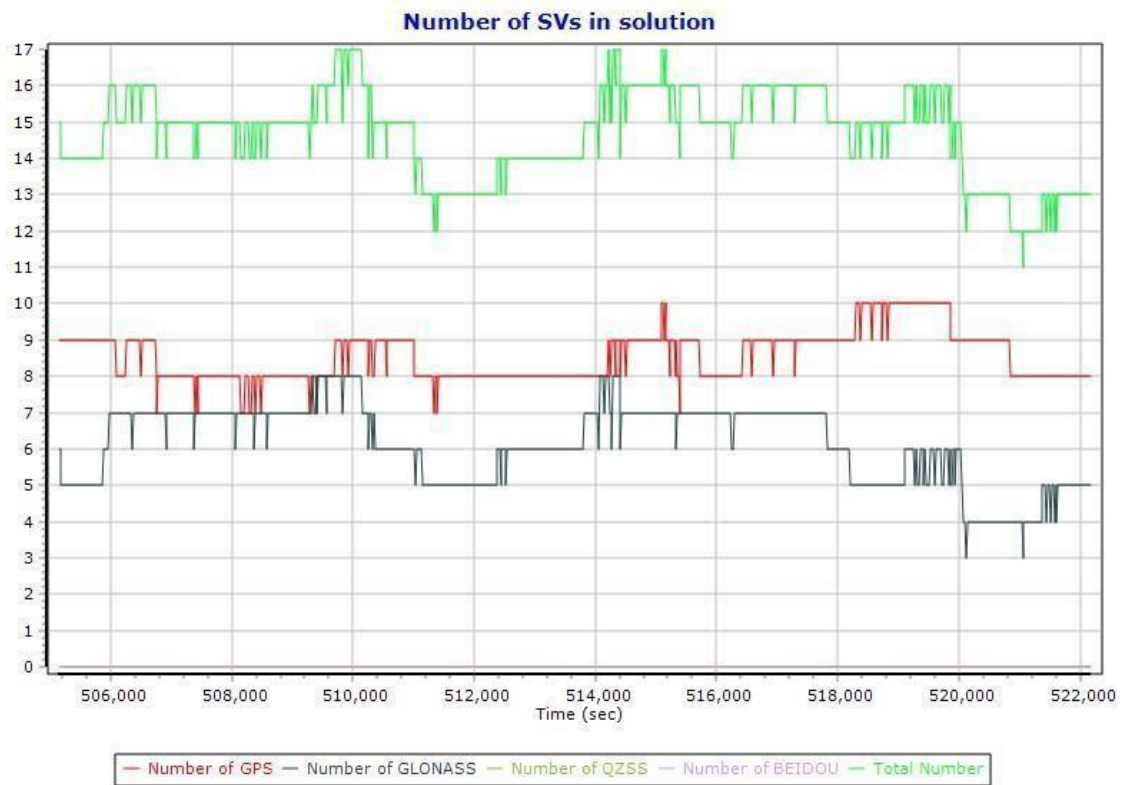
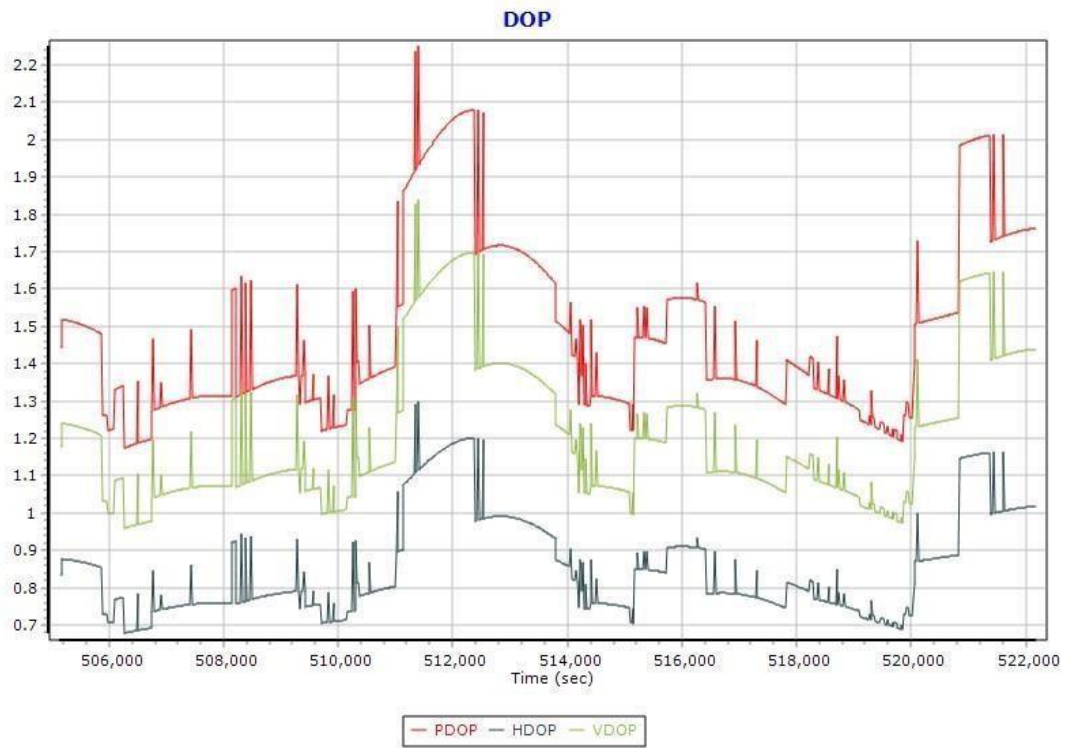






## FEBRUARY 23, 2018





## Processing Summary Information

### Processing Summary Information

Program: POSPac MMS  
Version: 8.1.6388.30062  
Project: \\sa\data\riegl\18047\20180223\_TX

Solution Type: IN-Fusion SmartBase

Fixed: 17064	(99.99%)
Float: 0	(0.00%)
No Solution: 1	(0.01%)

Number of Epochs:

Total in RAW file: 17076  
No processed position: 8

Fwd/Rev Separation RMS Values (m):

North: 0.023  
East: 0.004  
Height: 0.046

Fwd/Rev Sep. RMS for 25%-75% weighting (m): 8533 occurrences

North: 0.002  
East: 0.002  
Height: 0.021

Quality Number Percentages:

Q 0: 100.0 %

Position Standard Deviation Percentages (%):

0.00 - 0.10 m: 99.516  
 0.10 - 0.30 m: 0.484  
 0.30 - 1.00 m: 0  
 1.00 - 5.00 m: 0  
 5.00 m + over: 0

Percentages of epochs with DD\_DOP over 10.00: 0 %

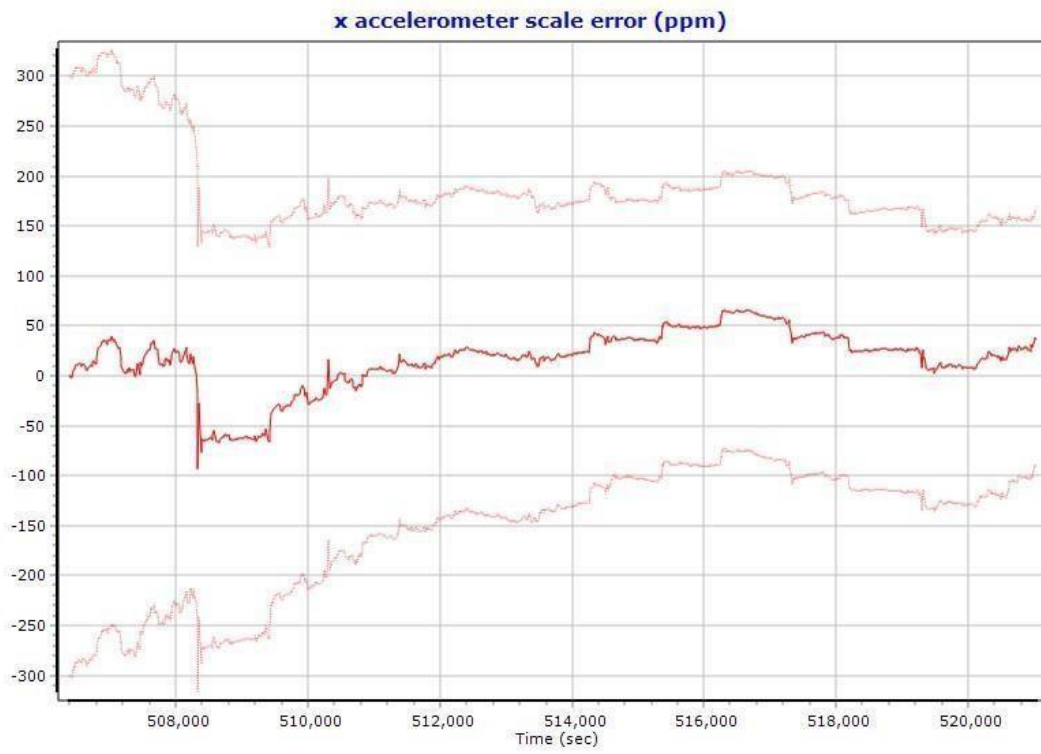
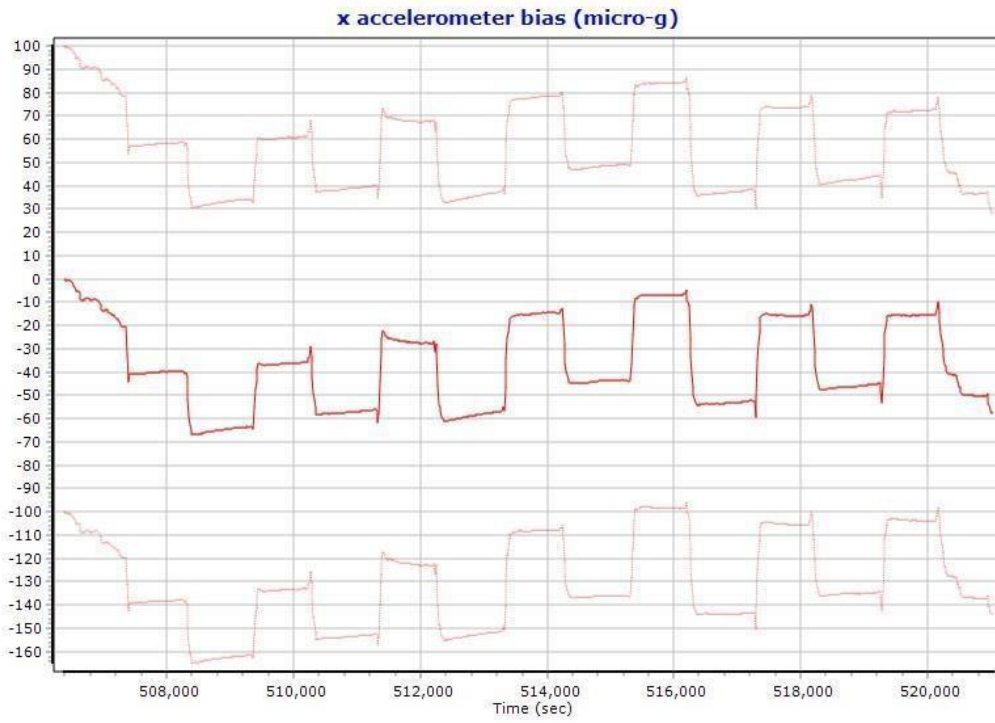
DOP over Tol: 1.48%

Baseline Distances (km):

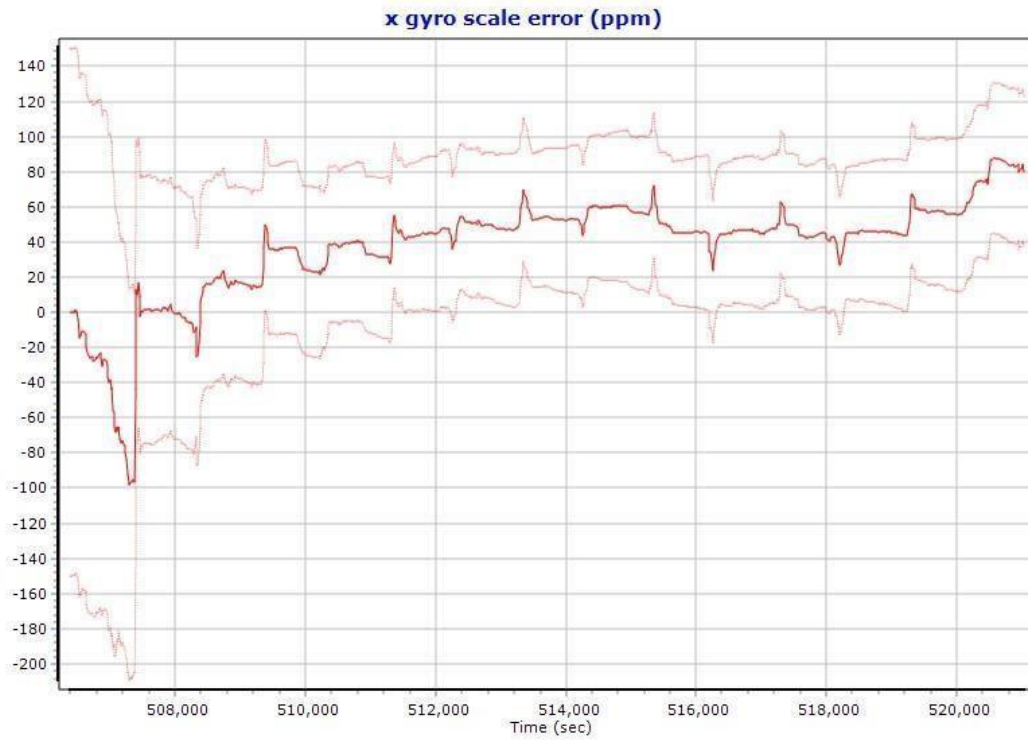
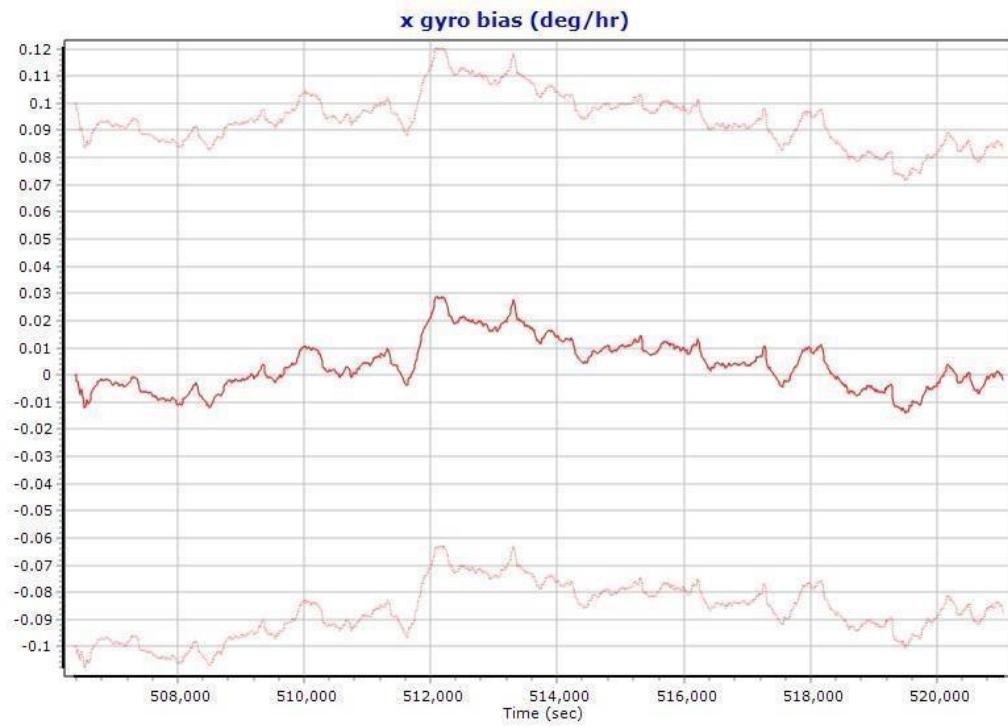
Maximum: 71.41  
 Minimum: 0.66  
 Average: 23.46  
 First Epoch: 69.94  
 Last Epoch: 69.94

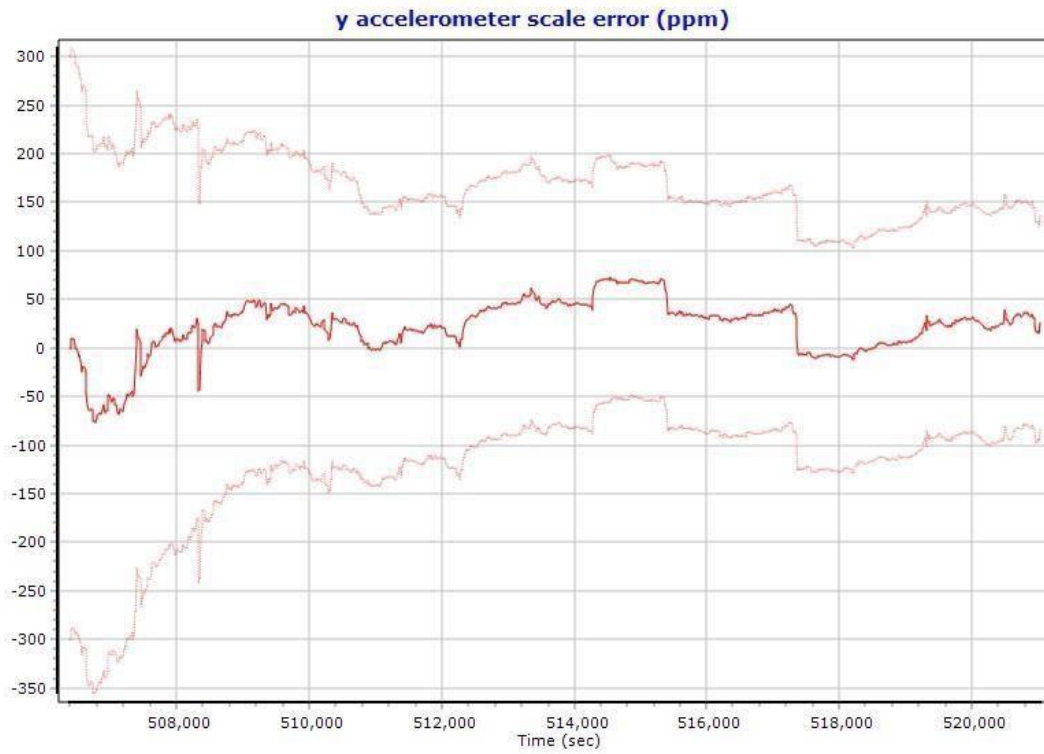
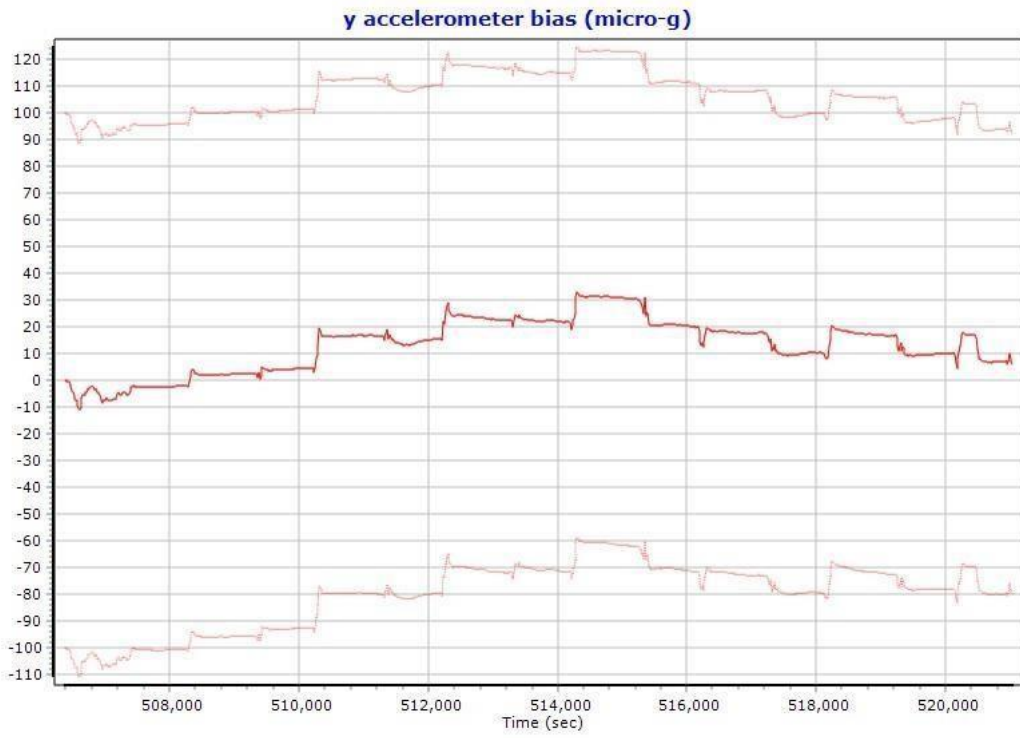
**CORS Base Stations**

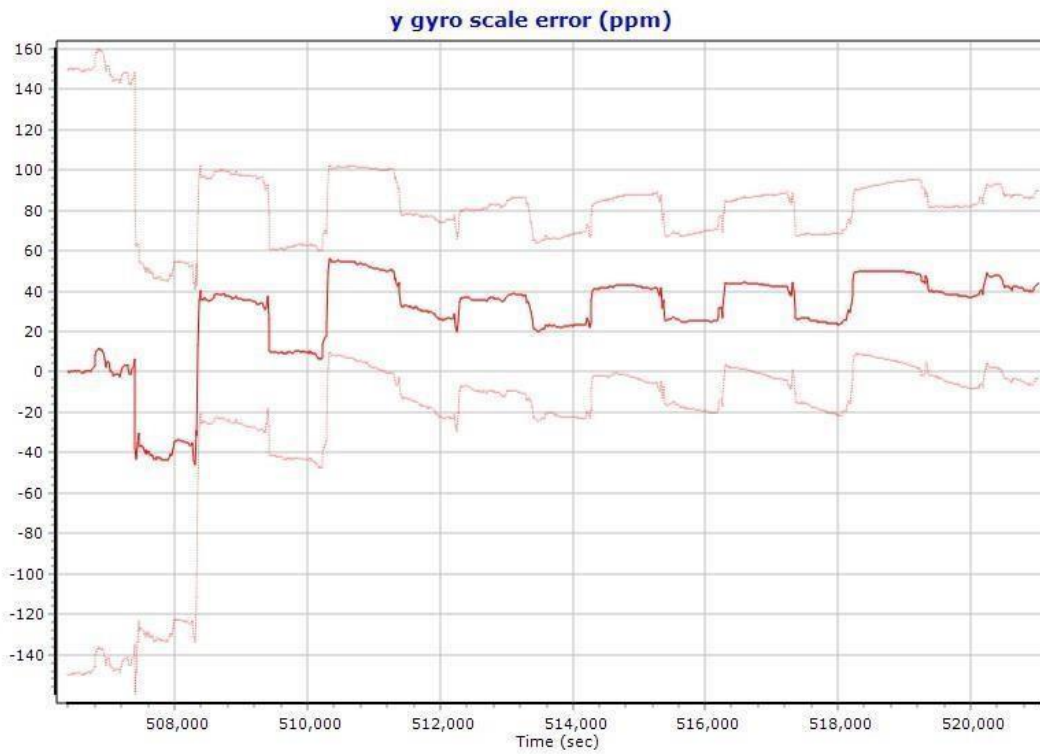
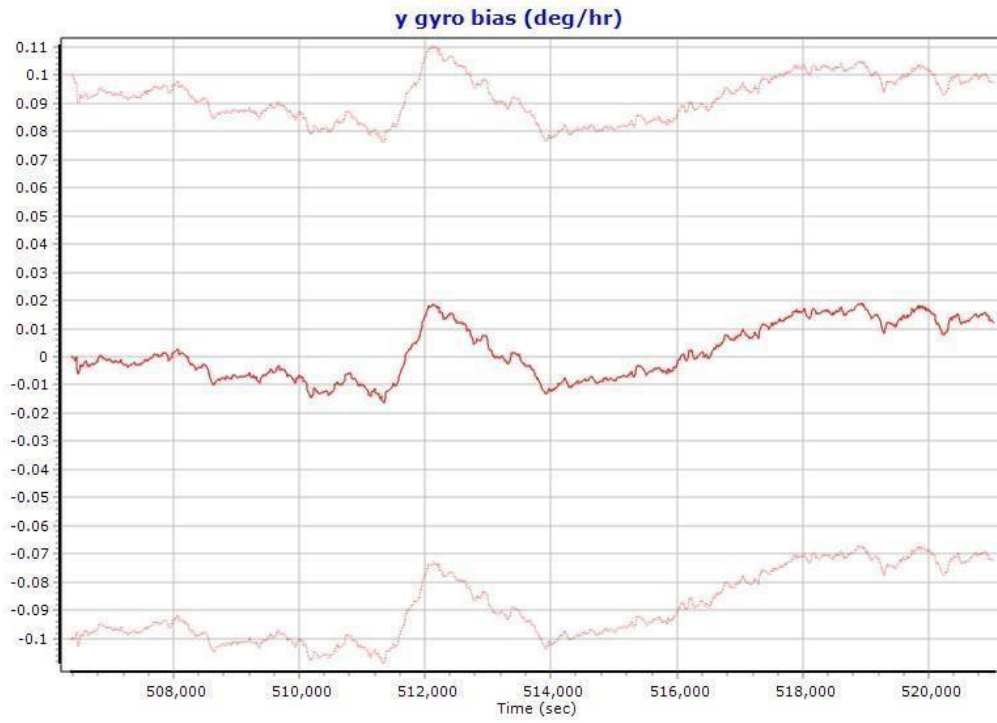
Station	Original			Adjusted		
TXMC	N31°07'55.57698"	W102°13'56.82387"	724.079			
TXSO	N32°08'28.21594"	W101°48'27.40139"	801.518	N32°08'28.21614"	W101°48'27.40215"	801.523
TXOZ	N30°43'34.28983"	W101°11'49.50645"	699.173	N30°43'34.28982"	W101°11'49.50624"	699.182
TXOE	N31°52'24.51762"	W102°18'50.27462"	856.094	N31°52'24.51736"	W102°18'50.27496"	856.090
TXMH	N31°33'27.83675"	W102°53'38.43951"	773.391	N31°33'27.83675"	W102°53'38.43966"	773.390
TXFS	N30°53'38.06136"	W102°51'59.48948"	877.580	N30°53'38.06127"	W102°51'59.48969"	877.595

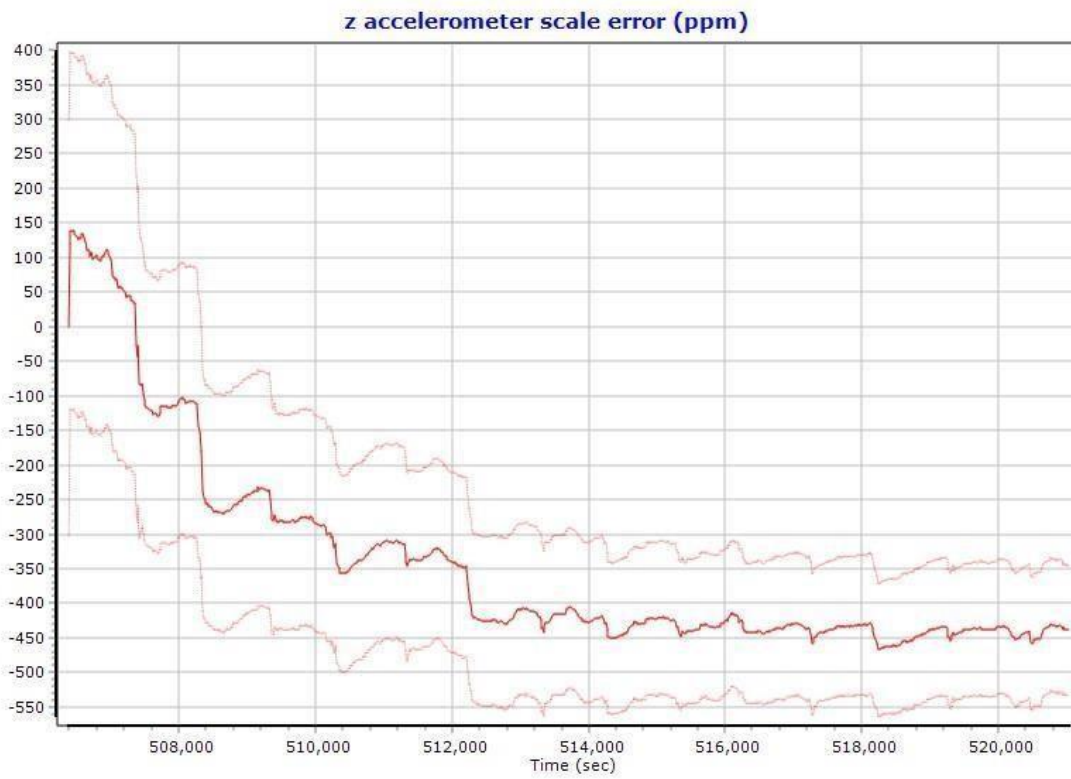
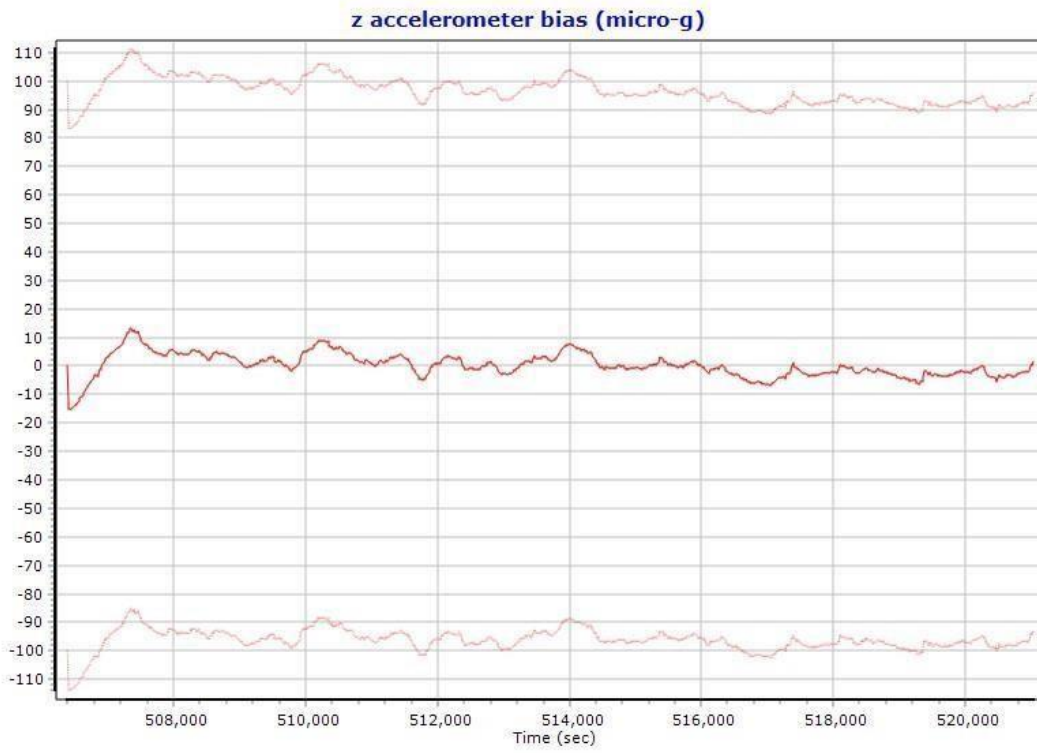


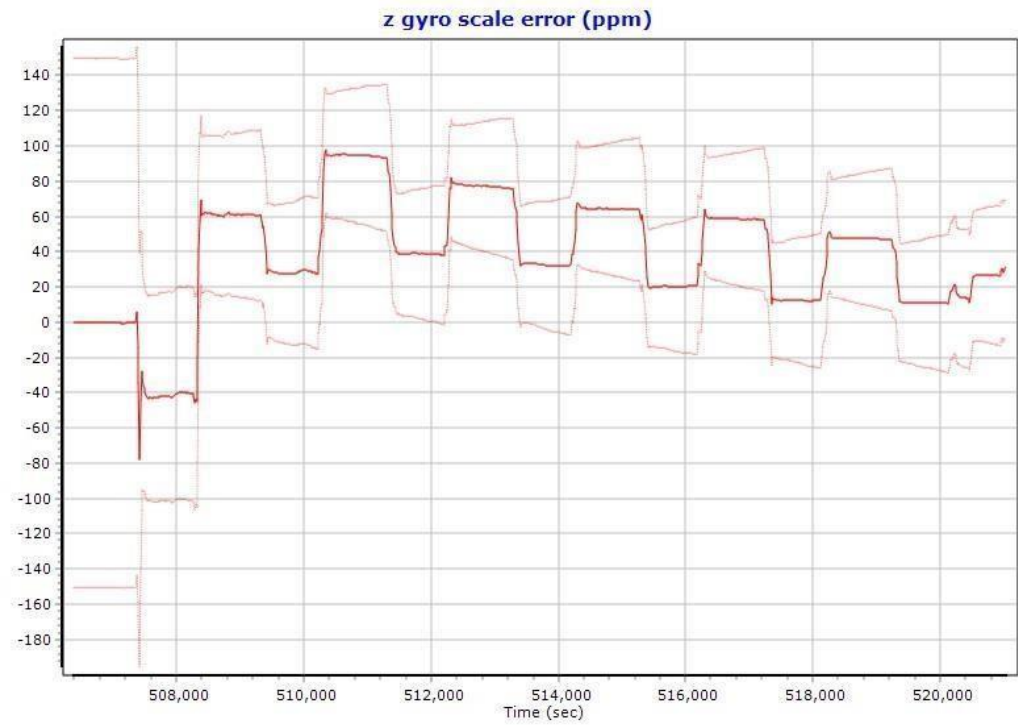
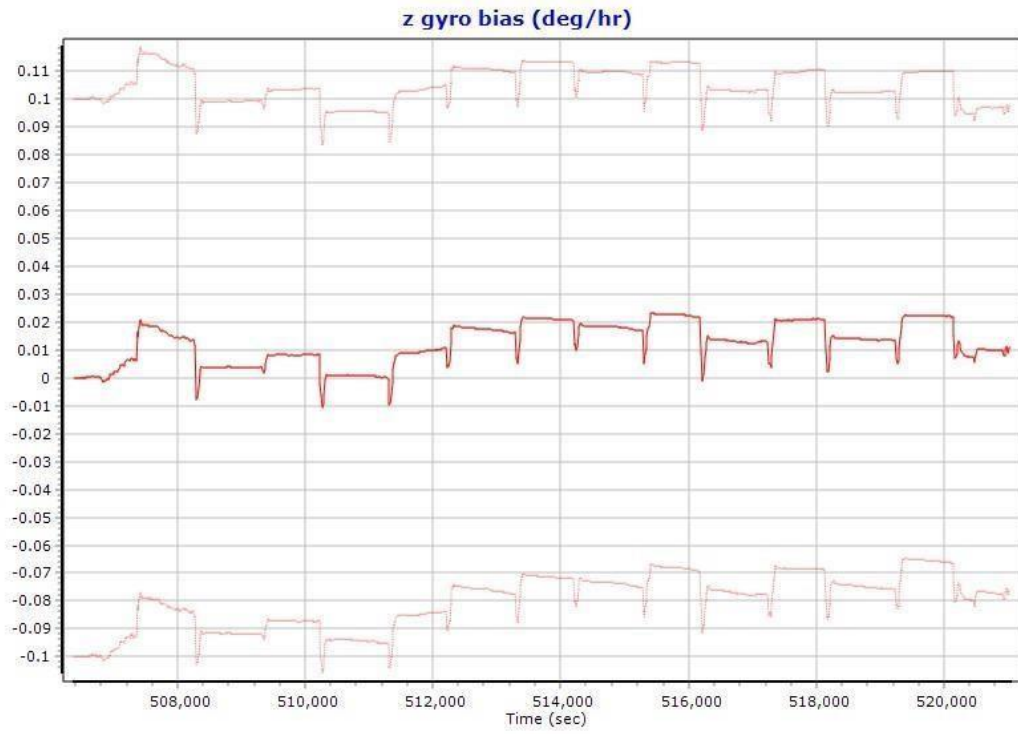




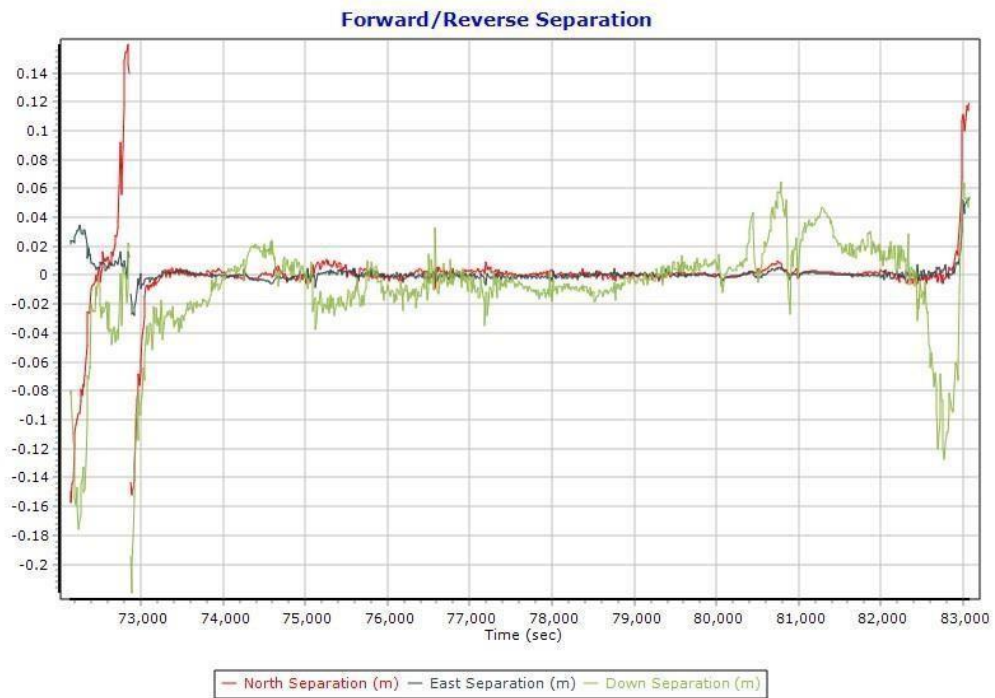
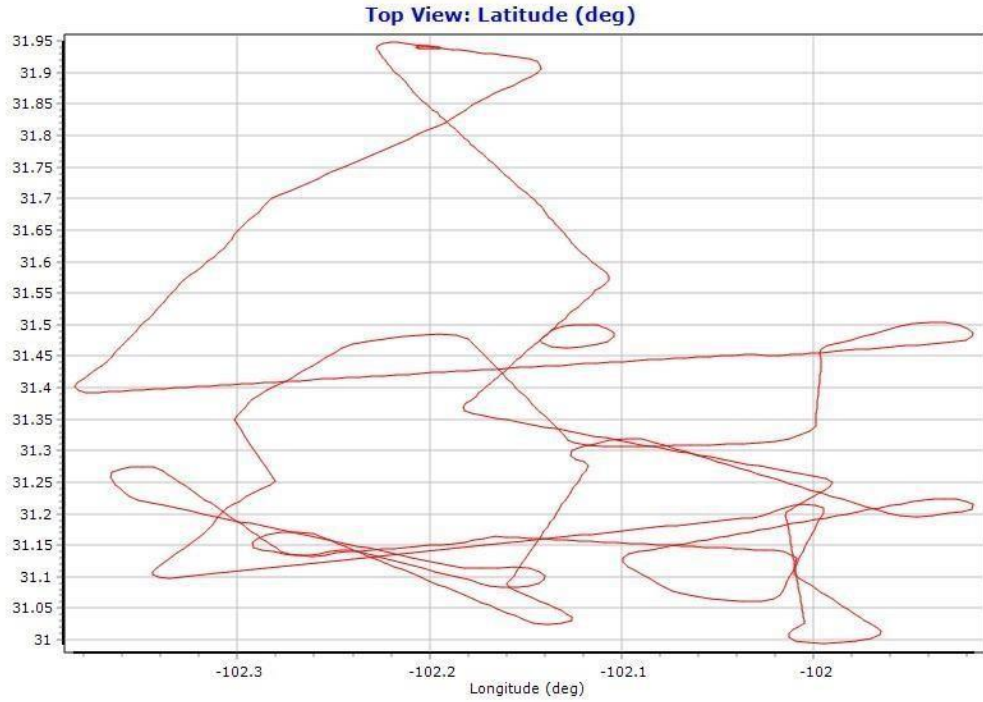


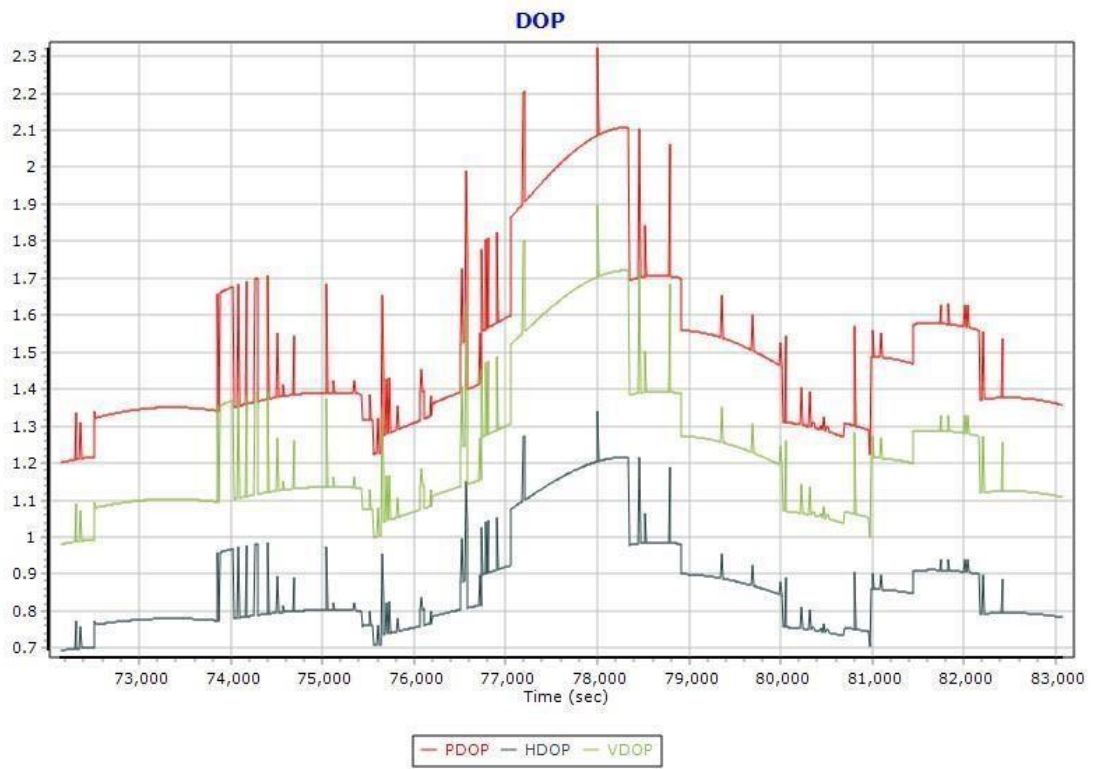






### MARCH 04, 2018





## Processing Summary Information

### Processing Summary Information

Program: POSPac MMS  
Version: 8.1.6388.30062  
Project: \\sa\data\riegl\18047\20180304\_TX

Solution Type: IN-Fusion SmartBase

Fixed: 10920	(99.99%)
Float: 0	(0.00%)
No Solution: 1	(0.01%)

Number of Epochs:

Total in RAW file: 10965  
No processed position: 45

Fwd/Rev Separation RMS Values (m):

North: 0.027  
East: 0.007  
Height: 0.036

Fwd/Rev Sep. RMS for 25%-75% weighting (m): 5482 occurrences

North: 0.003  
East: 0.002  
Height: 0.011

Quality Number Percentages:

Q 0: 100.0 %



Position Standard Deviation Percentages (%):

0.00 - 0.10 m: 99.611  
 0.10 - 0.30 m: 0.389  
 0.30 - 1.00 m: 0  
 1.00 - 5.00 m: 0  
 5.00 m + over: 0

Percentages of epochs with DD\_DOP over 10.00: 0 %

DOP over Tol: 1.50%

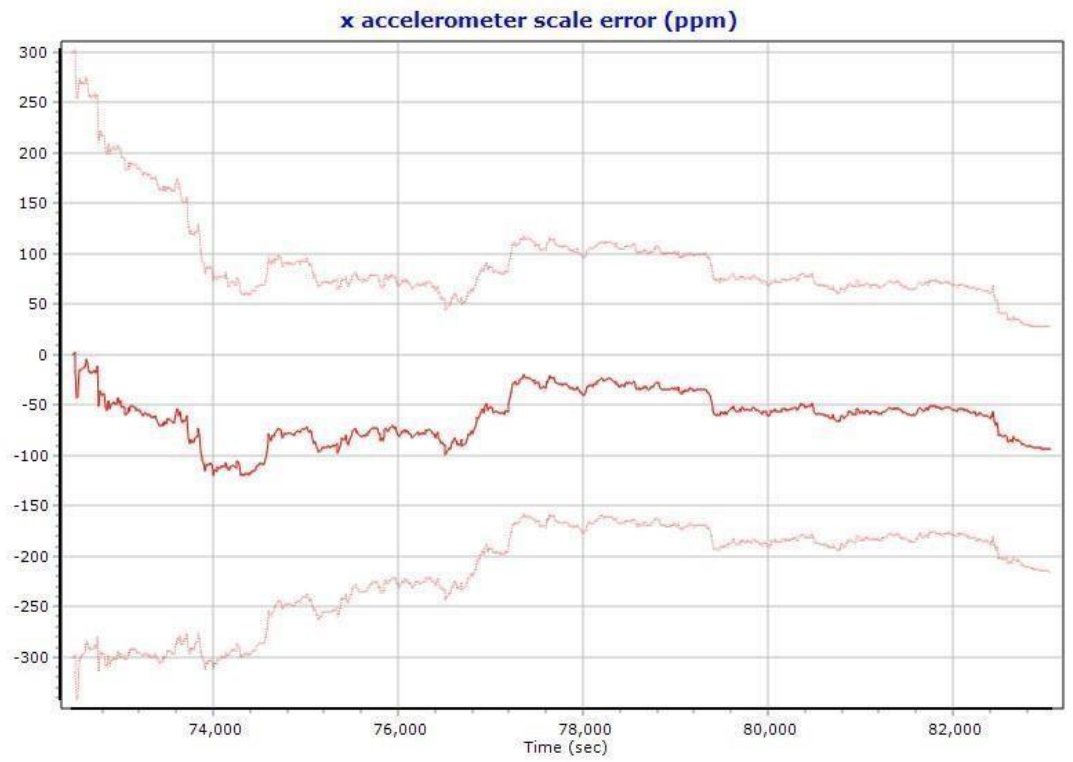
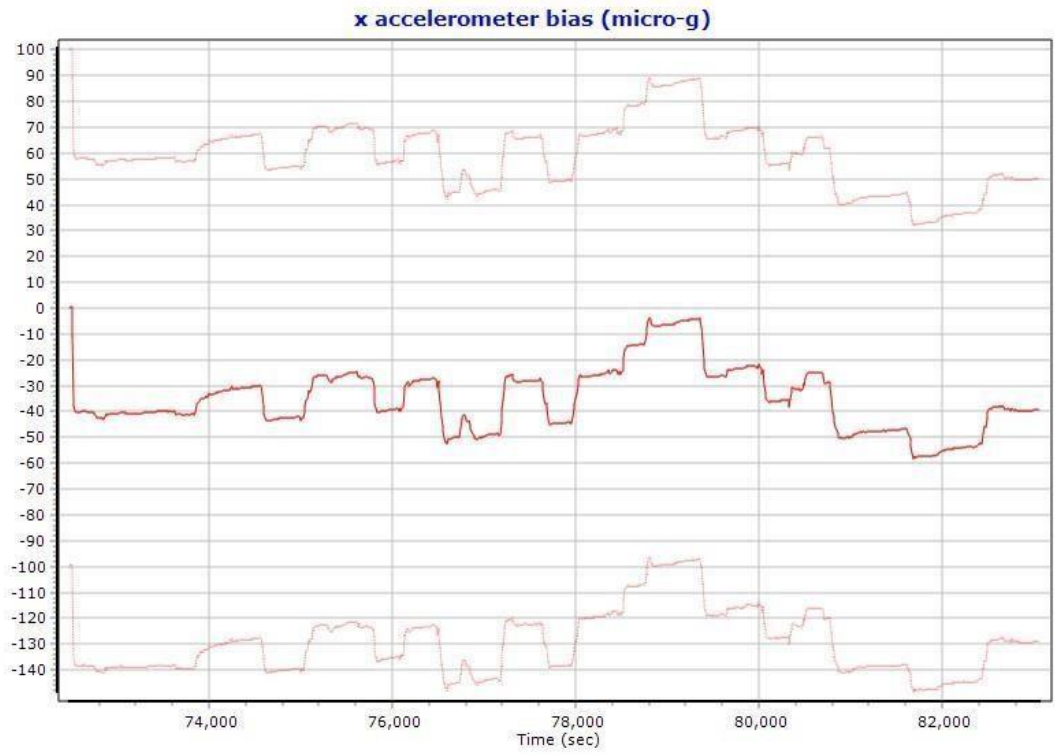
Baseline Distances (km):

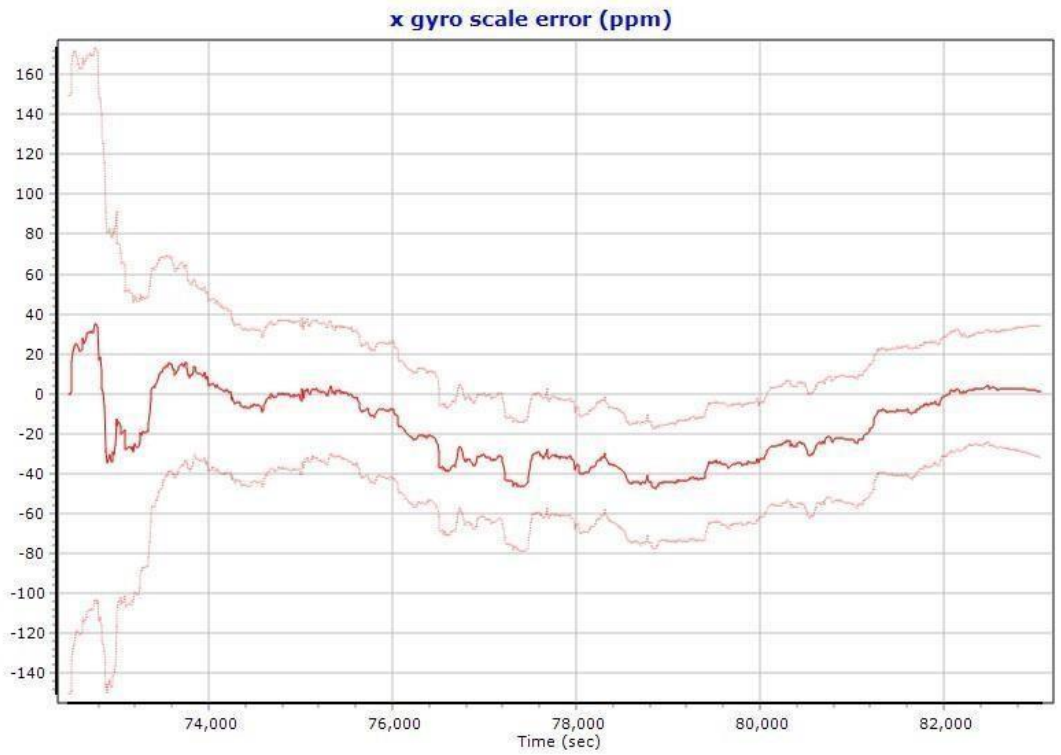
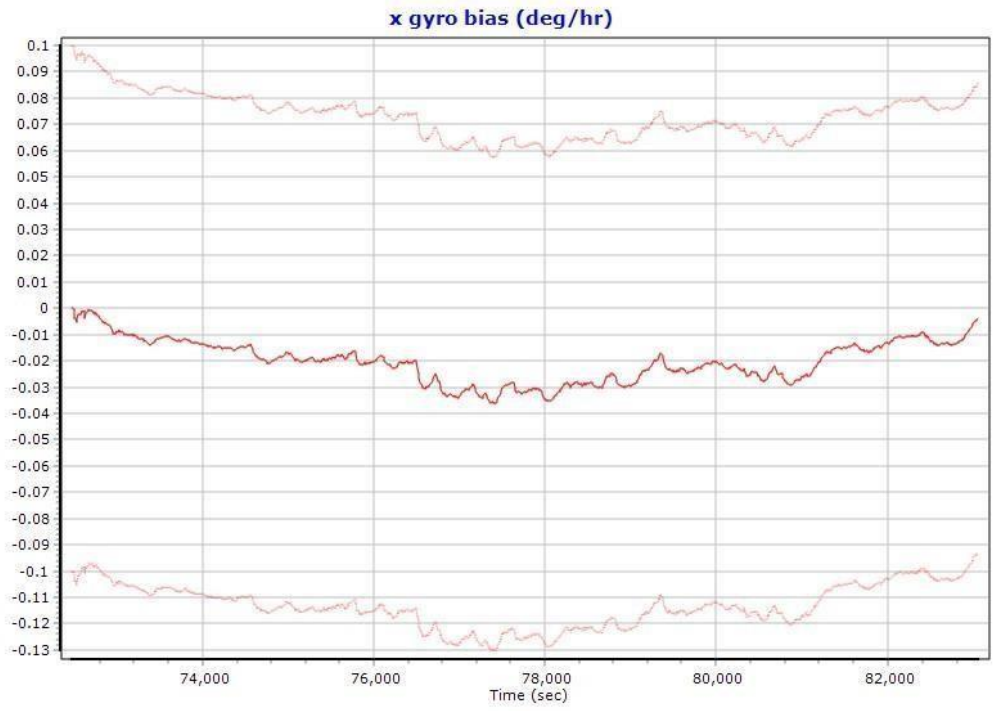
Maximum: 61.2  
 Minimum: 0.36  
 Average: 29.74  
 First Epoch: 60.13  
 Last Epoch: 60.17

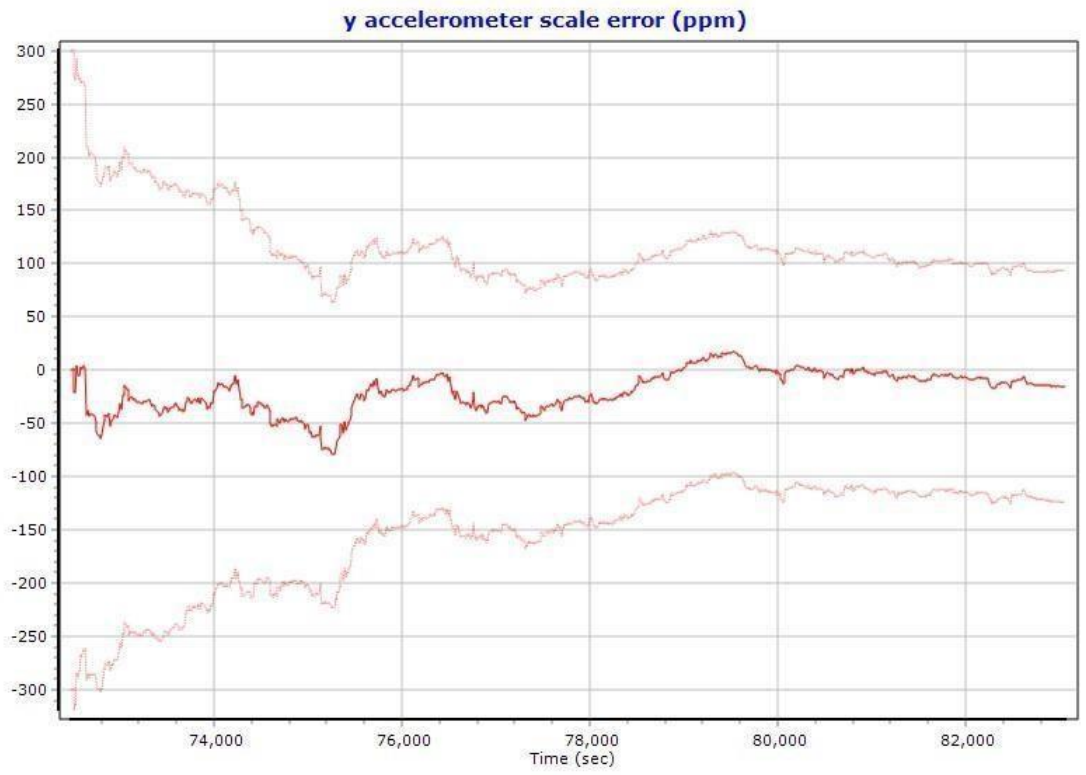
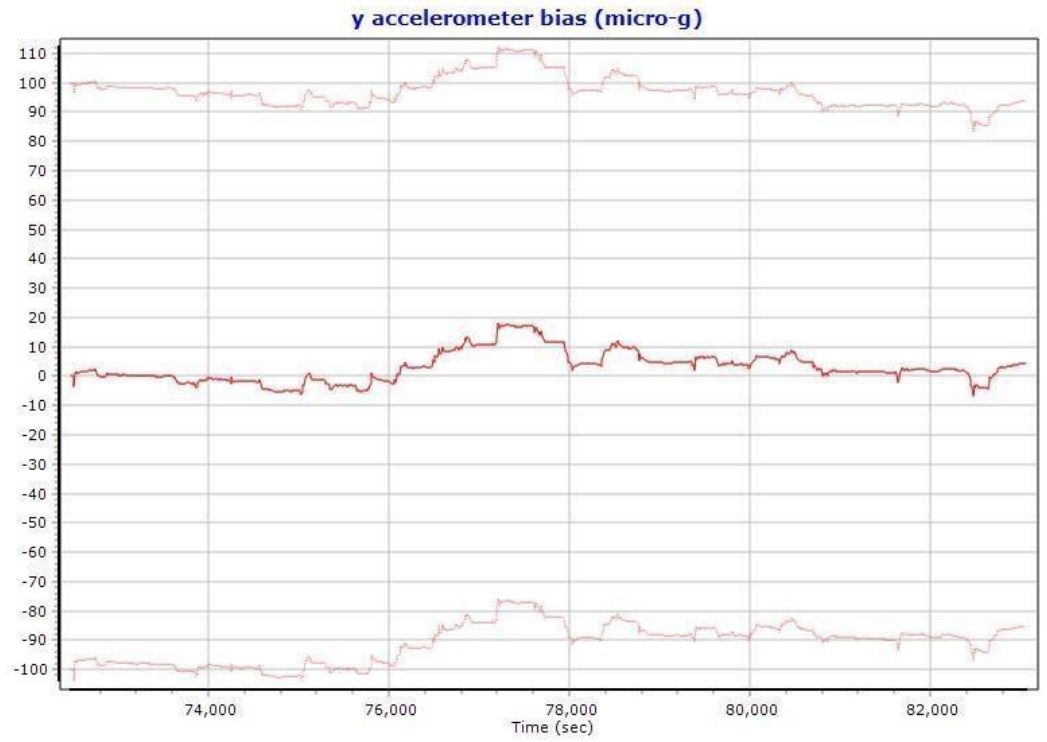
**CORS Base Stations**

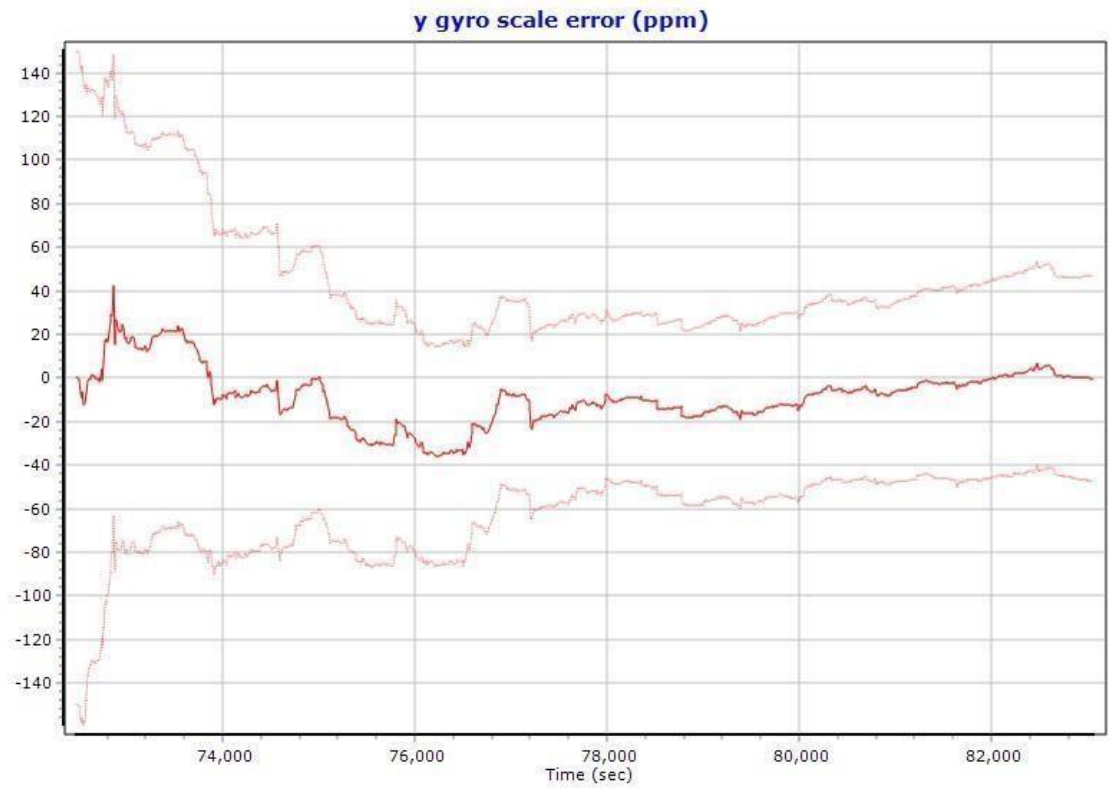
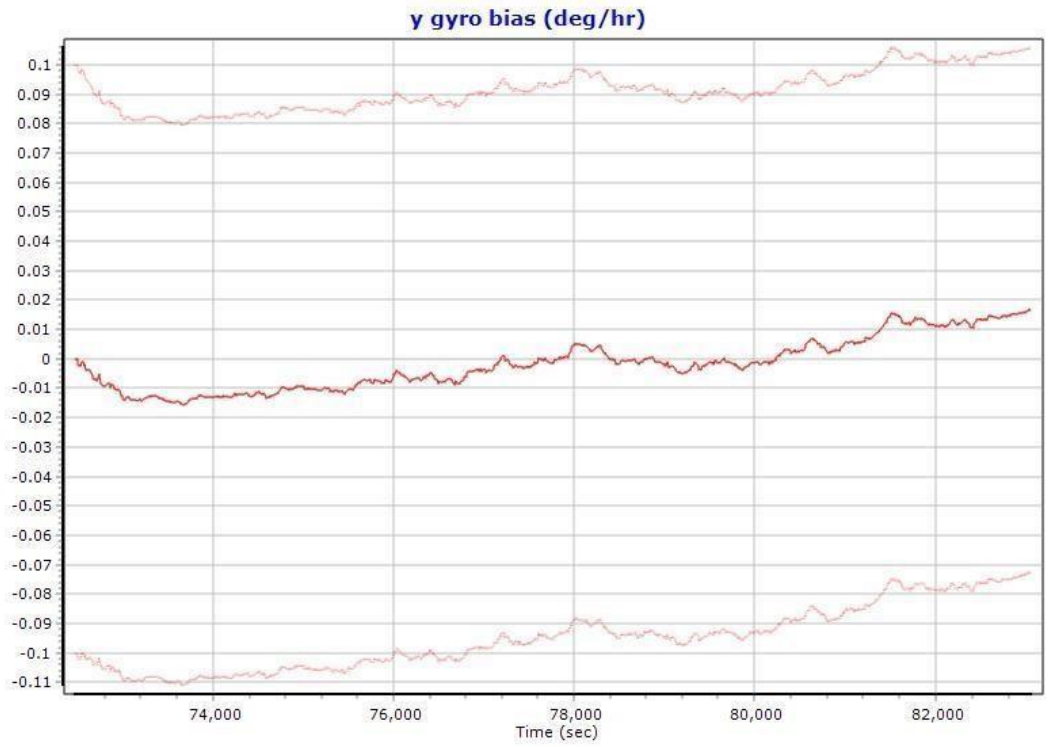
Station	Original			Adjusted		
TXSO	N32°08'28.21593"	W101°48'27.40140"	801.518	N32°08'28.21623"	W101°48'27.40168"	801.523
TXOZ	N30°43'34.28983"	W101°11'49.50646"	699.173	N30°43'34.28980"	W101°11'49.50549"	699.196
TXOE	N31°52'24.51762"	W102°18'50.27463"	856.094	N31°52'24.51747"	W102°18'50.27465"	856.092
TXMH	N31°33'27.83674"	W102°53'38.43952"	773.391	N31°33'27.83691"	W102°53'38.43947"	773.395
TXMC	N31°07'55.57701"	W102°13'56.82359"	724.080			
TXKM	N31°50'33.37110"	W103°06'31.30050"	847.990	N31°50'33.37144"	W103°06'31.30042"	848.004
TXFS	N30°53'38.06135"	W102°51'59.48950"	877.580	N30°53'38.06133"	W102°51'59.48947"	877.593

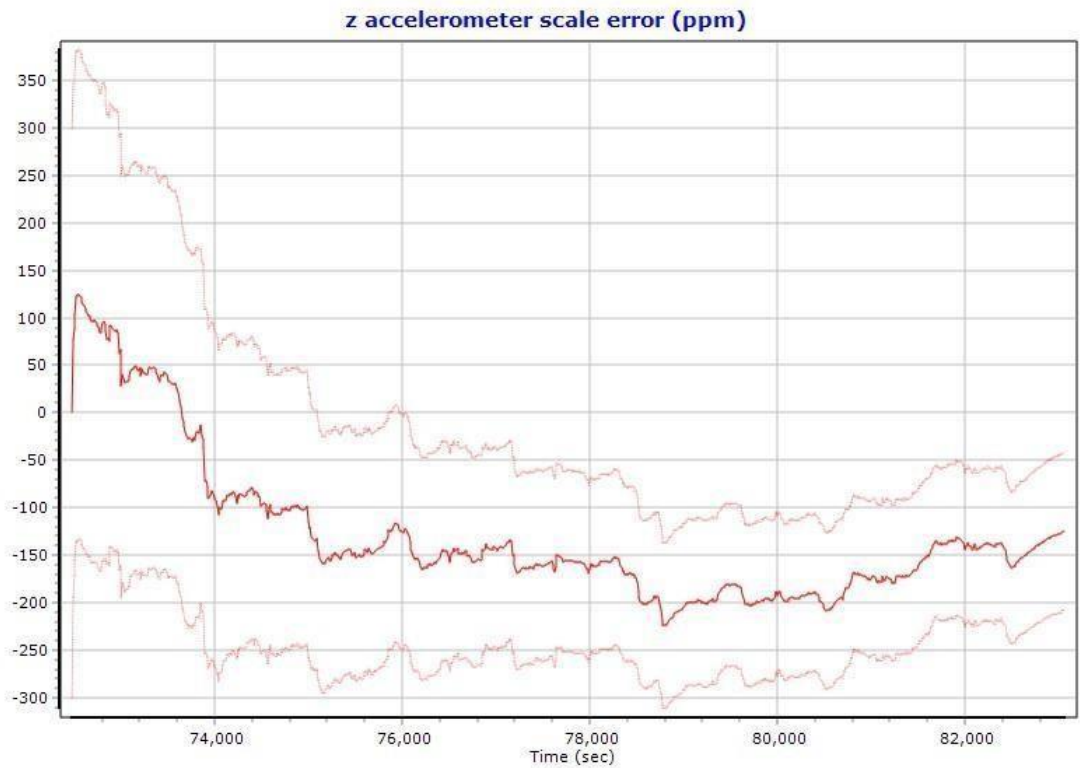
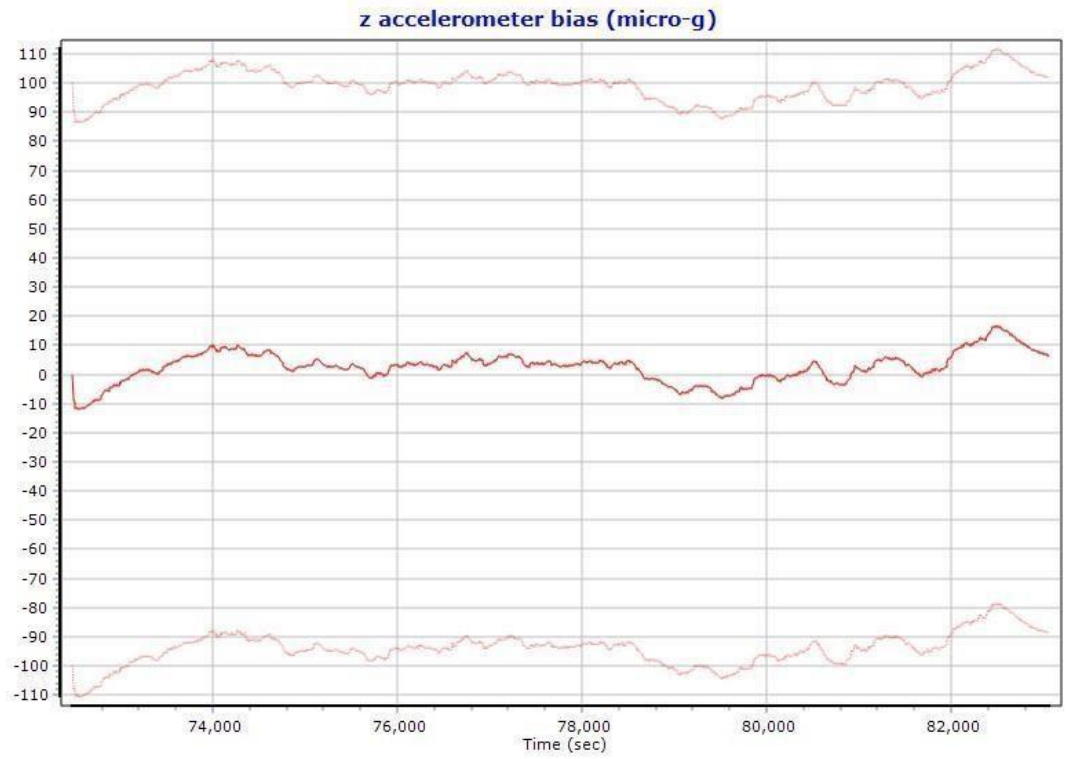
TXCE	N31°25'22.08557"	W102°21'27.22545"	754.414	N31°25'22.08568"	W102°21'27.22567"
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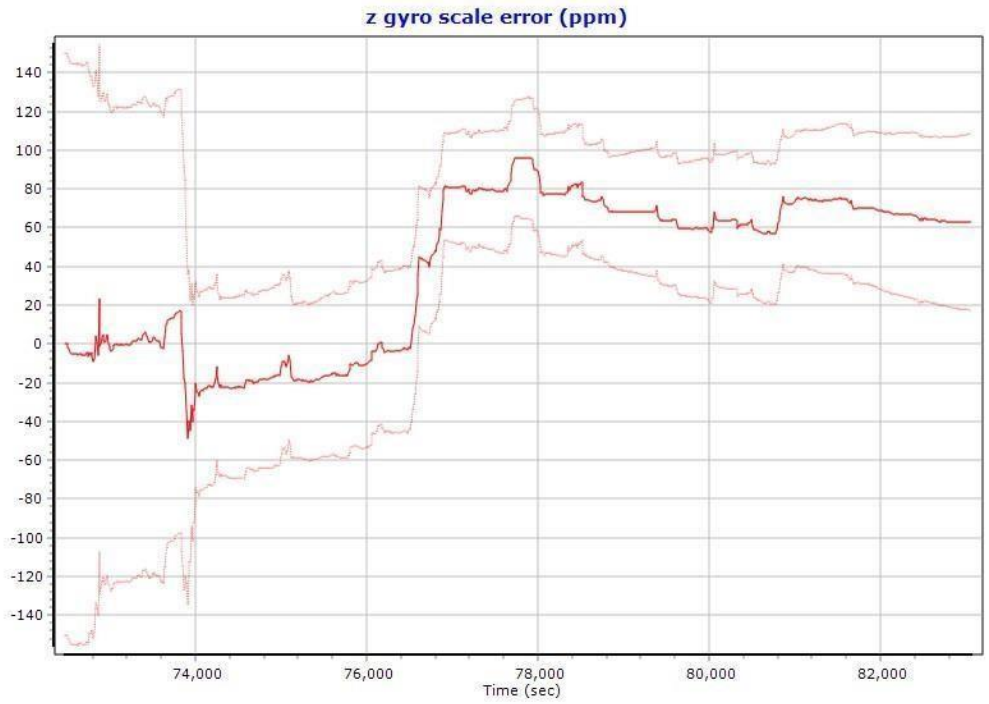
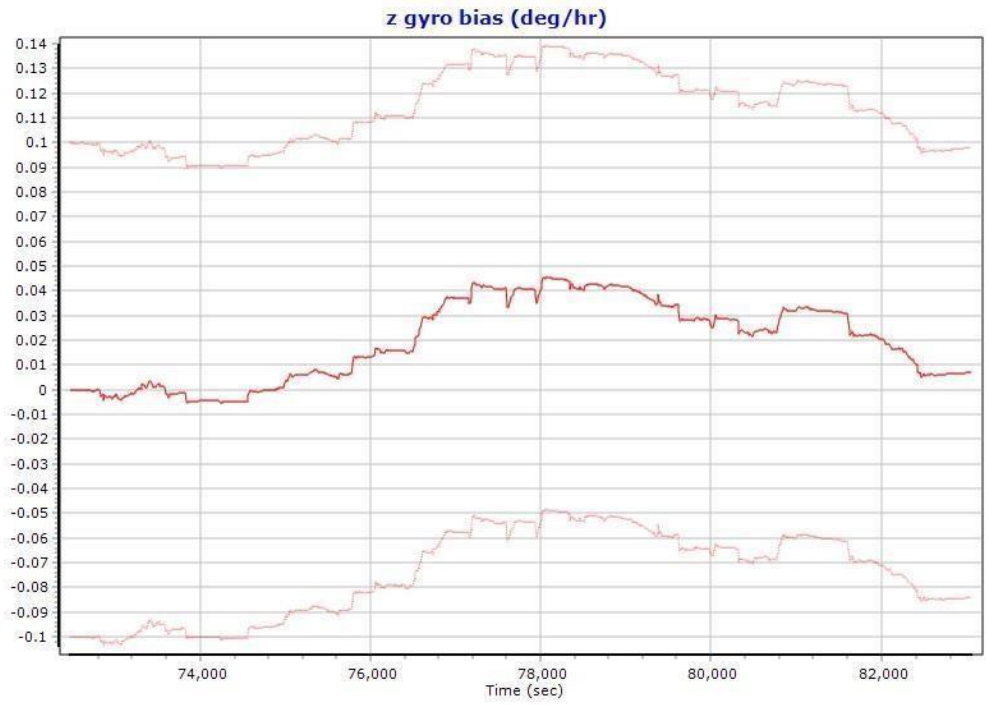






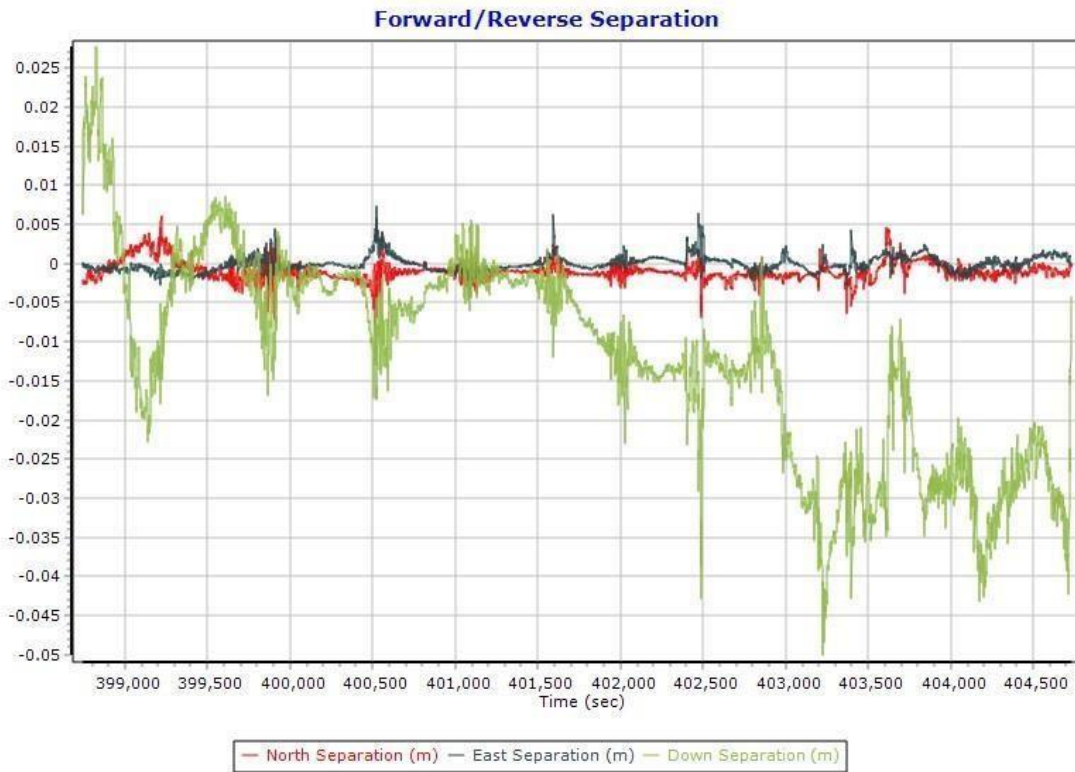
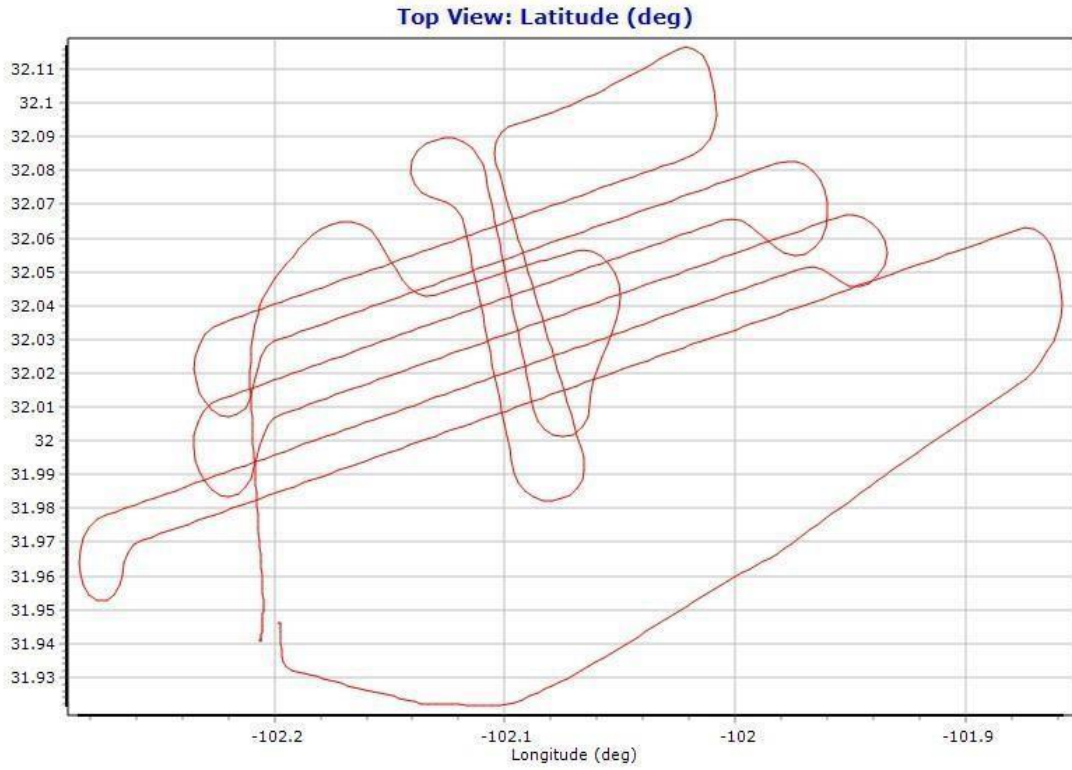


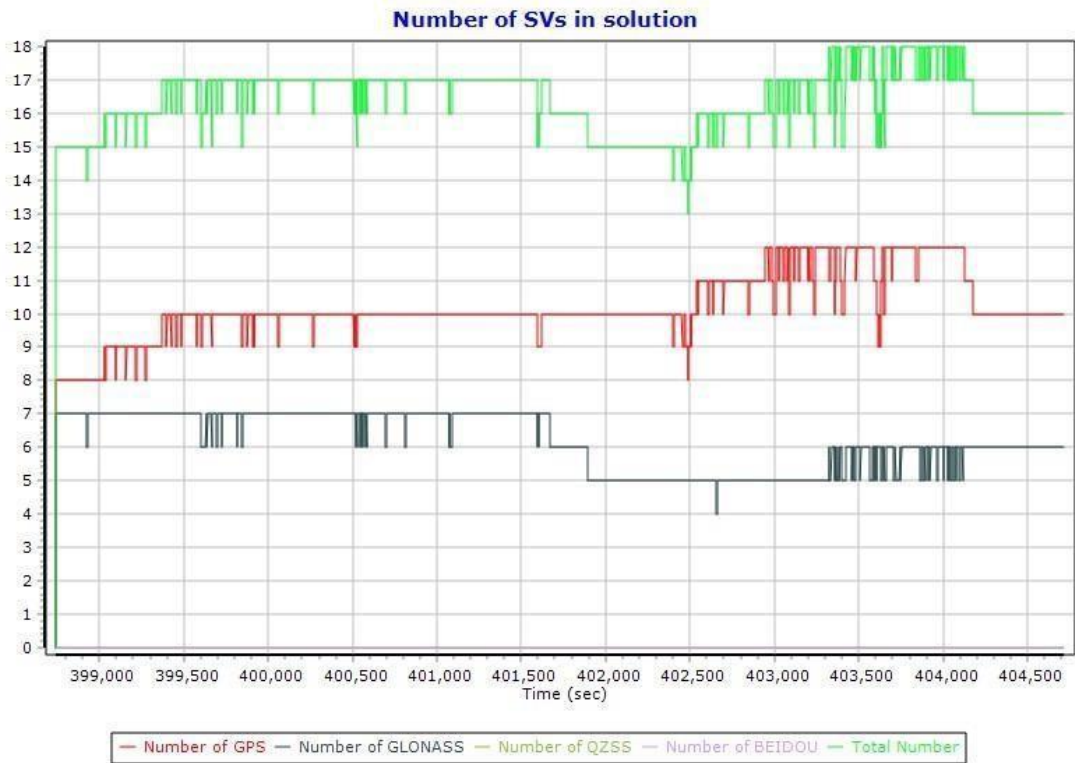
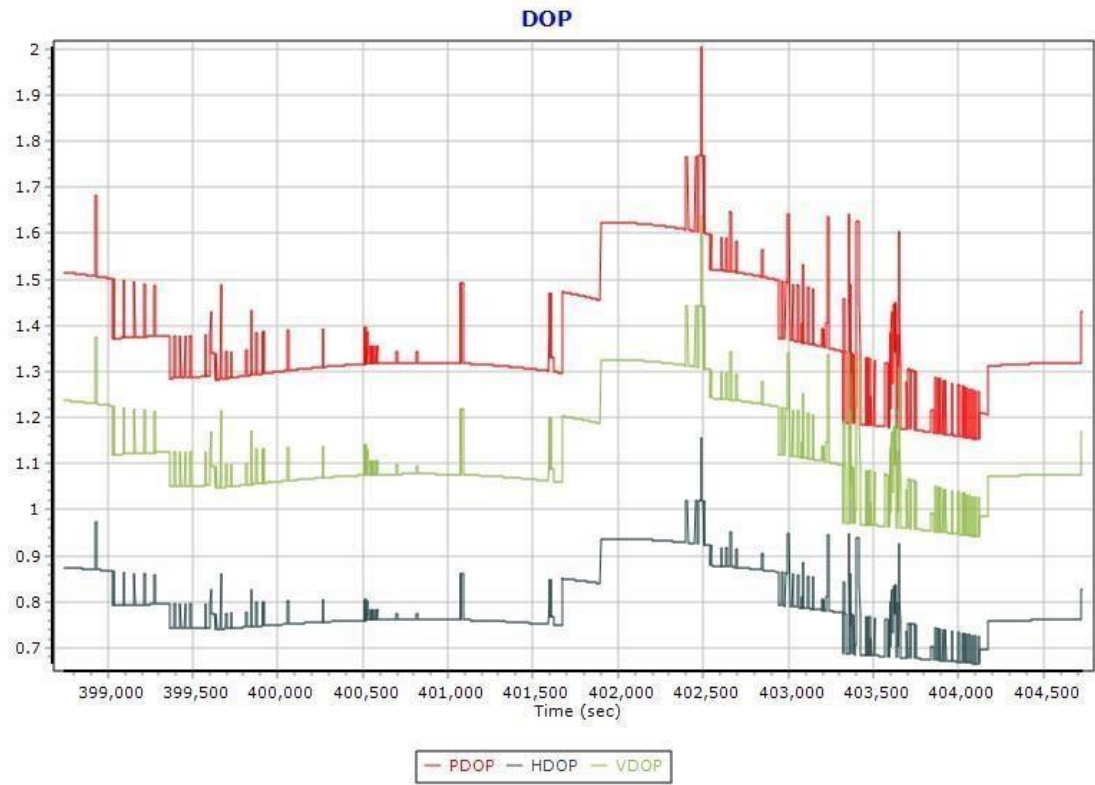






### MARCH 08, 2018





## Processing Summary Information

### Processing Summary Information

Program: POSPac MMS  
Version: 8.1.6388.30062  
Project: \\sa\data\riegl\18047\20180308\_TX

Solution Type: IN-Fusion SmartBase

Fixed: 5972	(100%)
Float: 0	(0.00%)
No Solution: 0	(0.00%)

Number of Epochs:

Total in RAW file: 5987  
No processed position: 15

Fwd/Rev Separation RMS Values (m):

North: 0.002  
East: 0.001  
Height: 0.018

Fwd/Rev Sep. RMS for 25%-75% weighting (m): 2993 occurrences

North: 0.002  
East: 0.001  
Height: 0.012

Quality Number Percentages:

Q 0: 100.0 %

Position Standard Deviation Percentages (%):

0.00 - 0.10 m: 100  
 0.10 - 0.30 m: 0  
 0.30 - 1.00 m: 0  
 1.00 - 5.00 m: 0  
 5.00 m + over: 0

Percentages of epochs with DD\_DOP over 10.00: 0 %

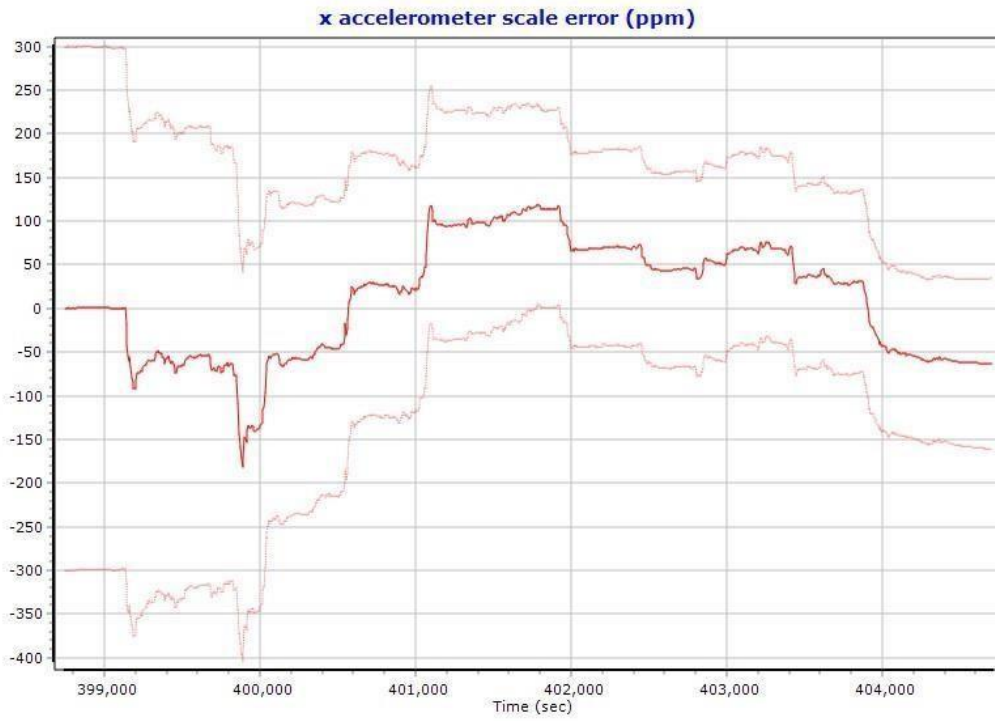
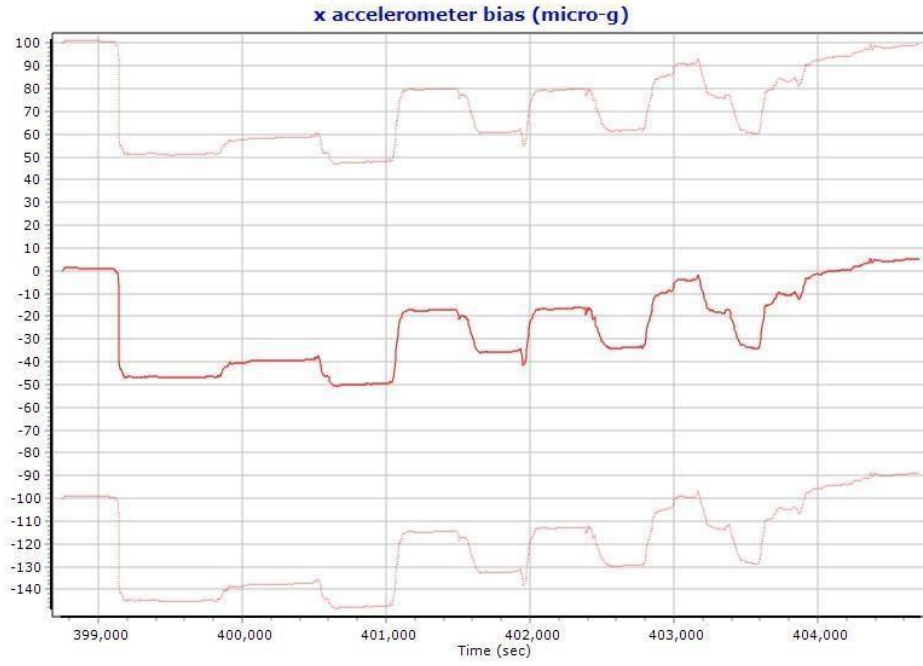
DOP over Tol: 1.37%

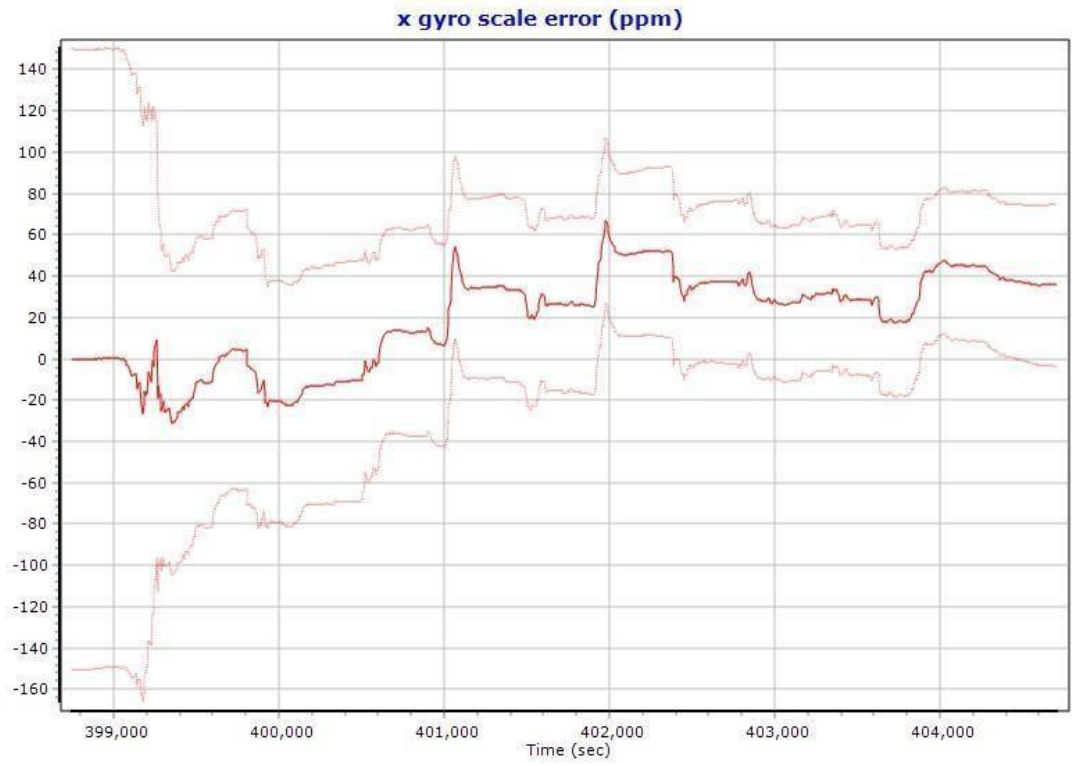
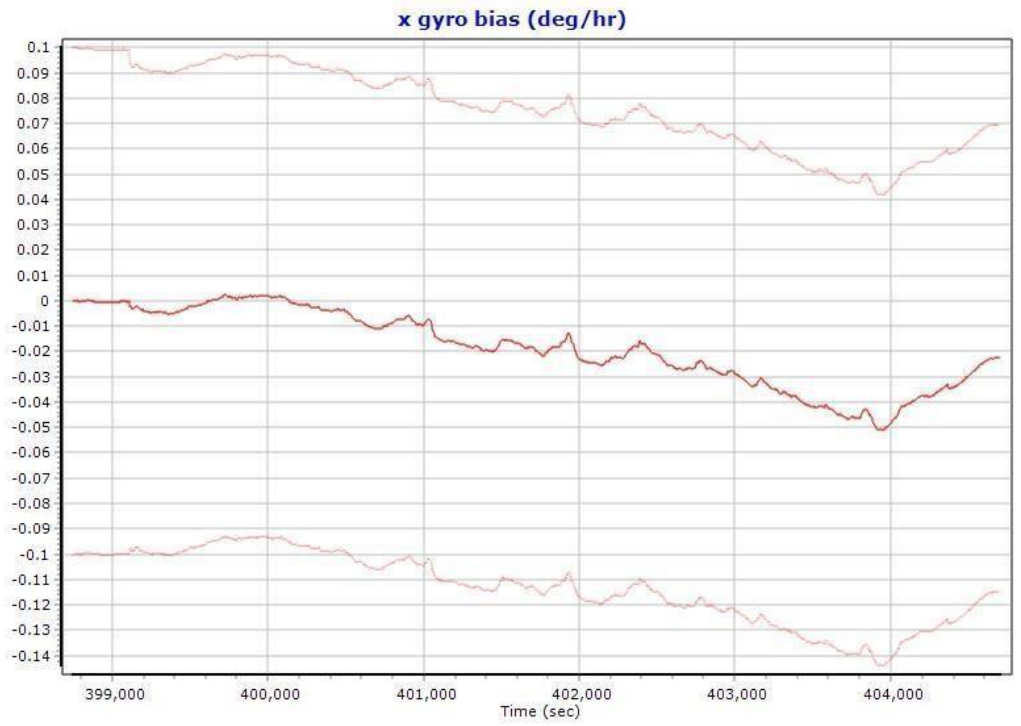
Baseline Distances (km):

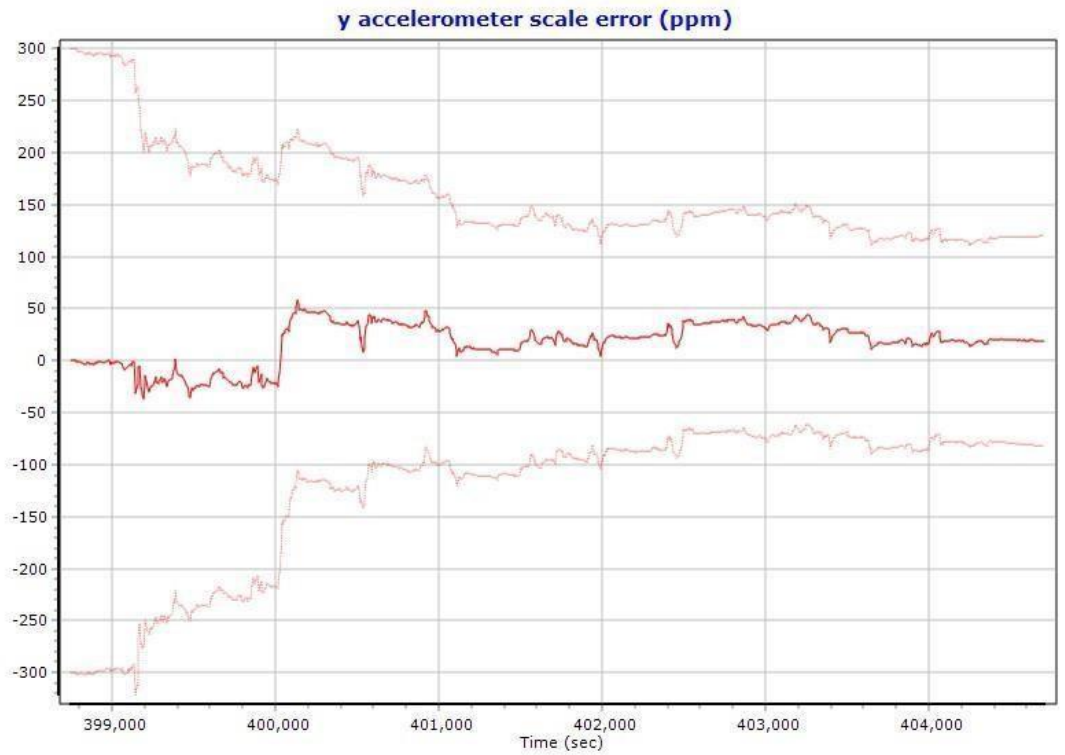
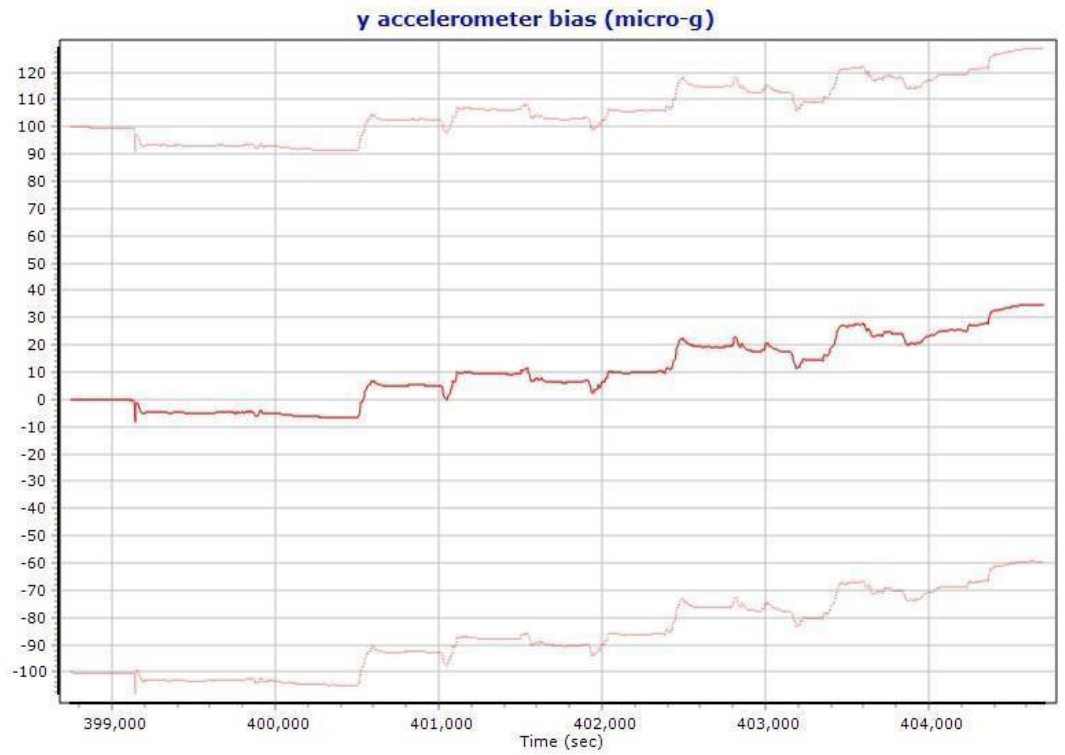
Maximum: 24.1  
 Minimum: 0.71  
 Average: 9.54  
 First Epoch: 11.14  
 Last Epoch: 12.08

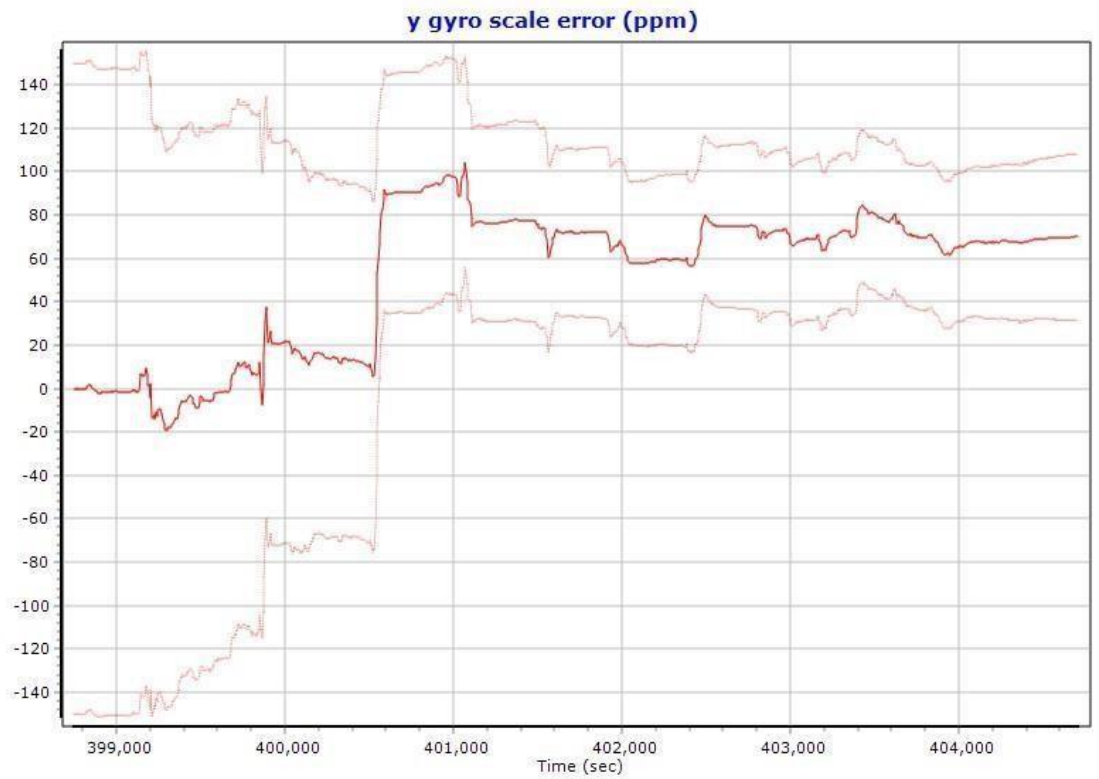
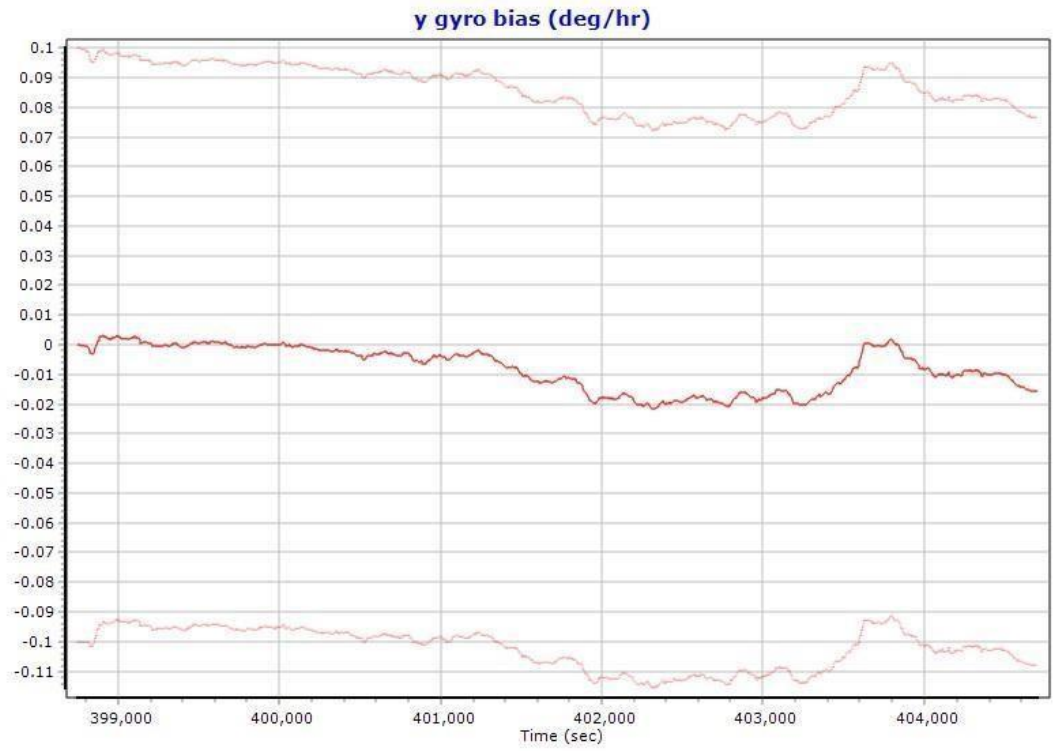
**CORS Base Stations**

Station	Original			Adjusted	
TXSO	N32°08'28.21593"	W101°48'27.40141"	801.518	N32°08'28.21632"	W101°48'27.40174"
TXOE	N31°52'24.51761"	W102°18'50.27463"	856.094		
TXMH	N31°33'27.83674"	W102°53'38.43953"	773.391	N31°33'27.83699"	W102°53'38.43938"
TXLA	N32°45'40.91673"	W101°56'38.21354"	891.645	N32°45'40.91684"	W101°56'38.21312"
TXCE	N31°25'22.08557"	W102°21'27.22545"	754.414	N31°25'22.08575"	W102°21'27.22551"
TXAD	N32°18'28.83160"	W102°32'36.98734"	946.850	N32°18'28.83174"	W102°32'36.98719"

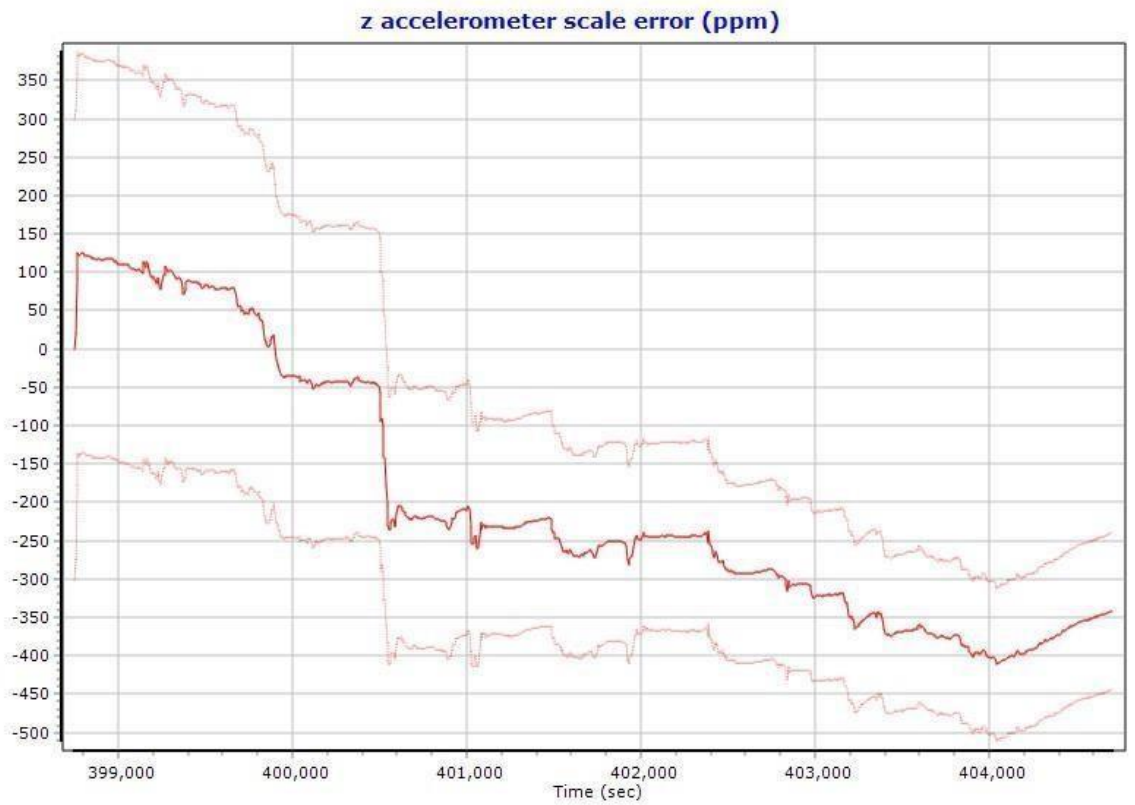
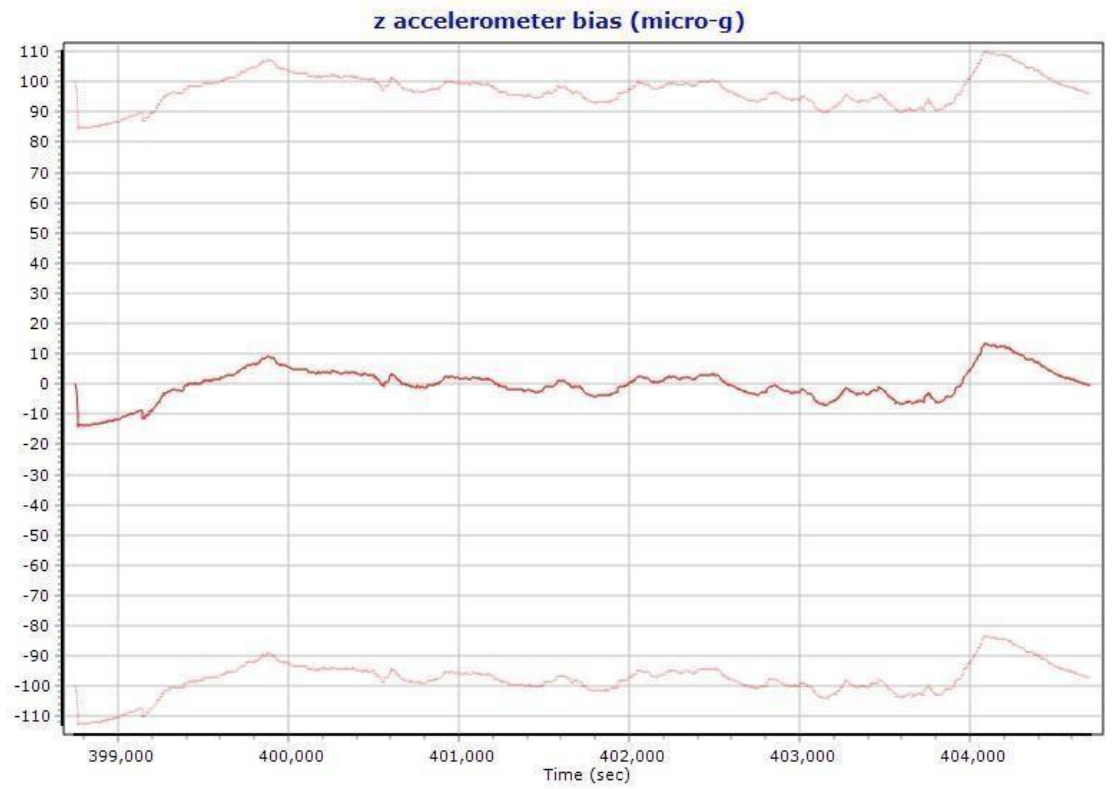


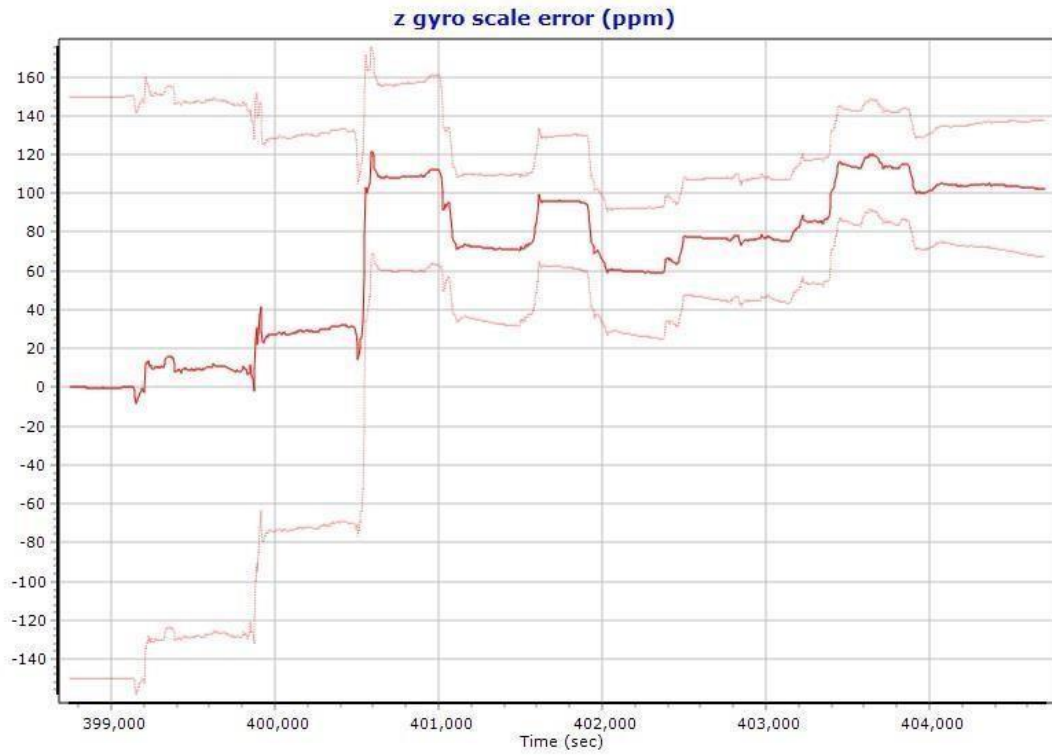
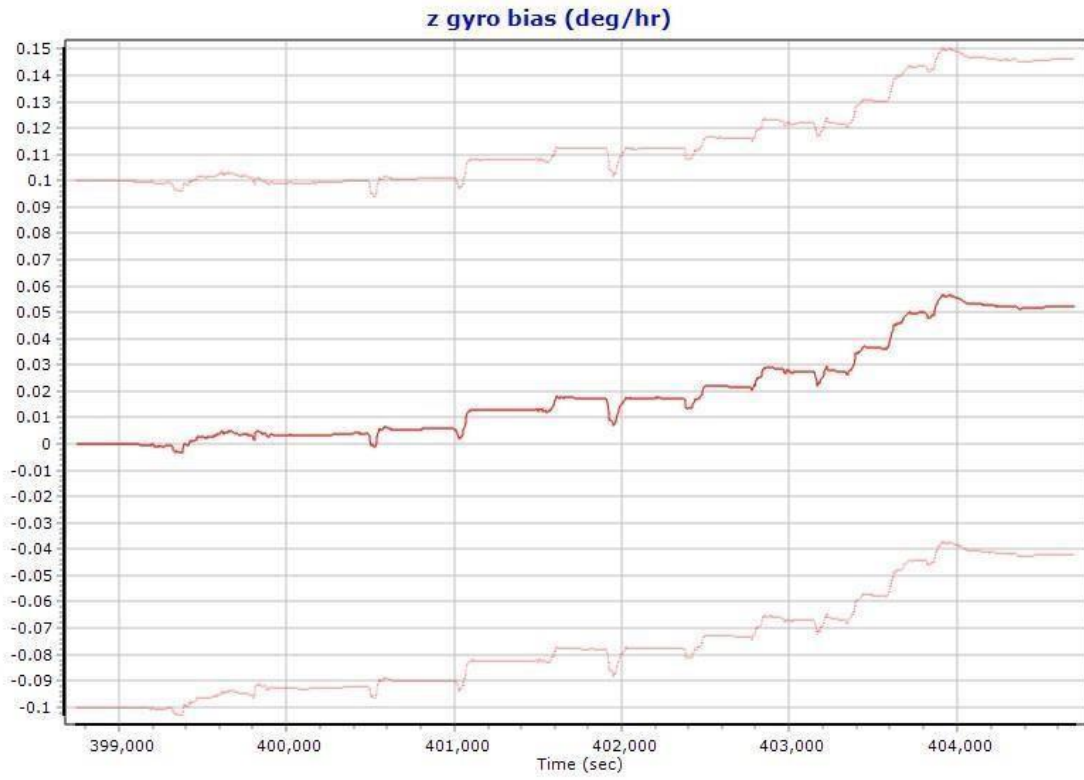








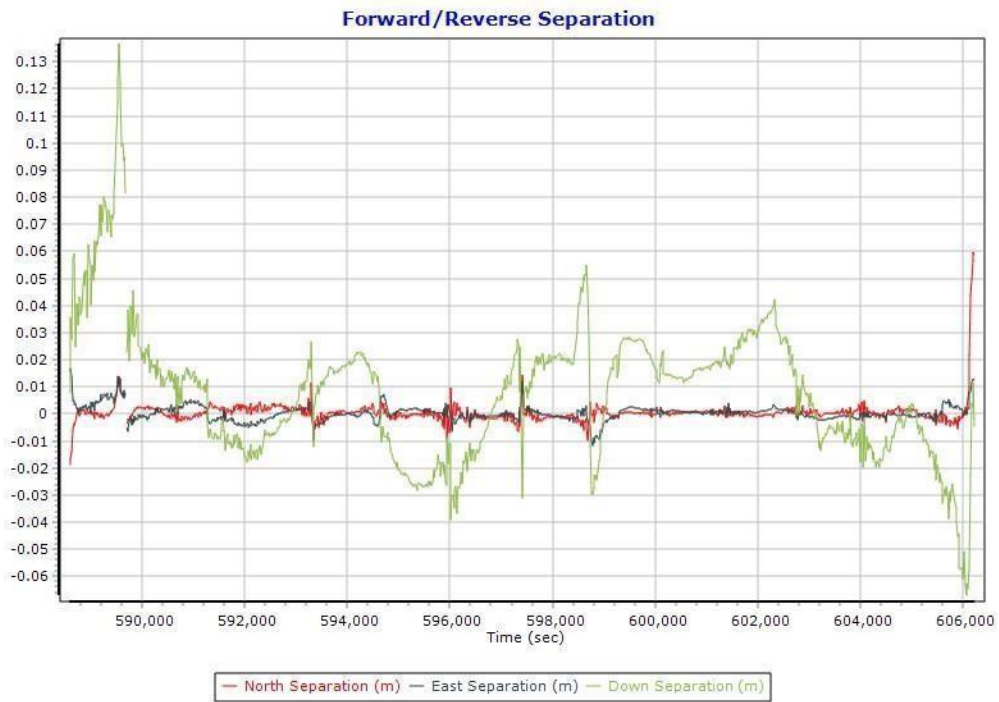
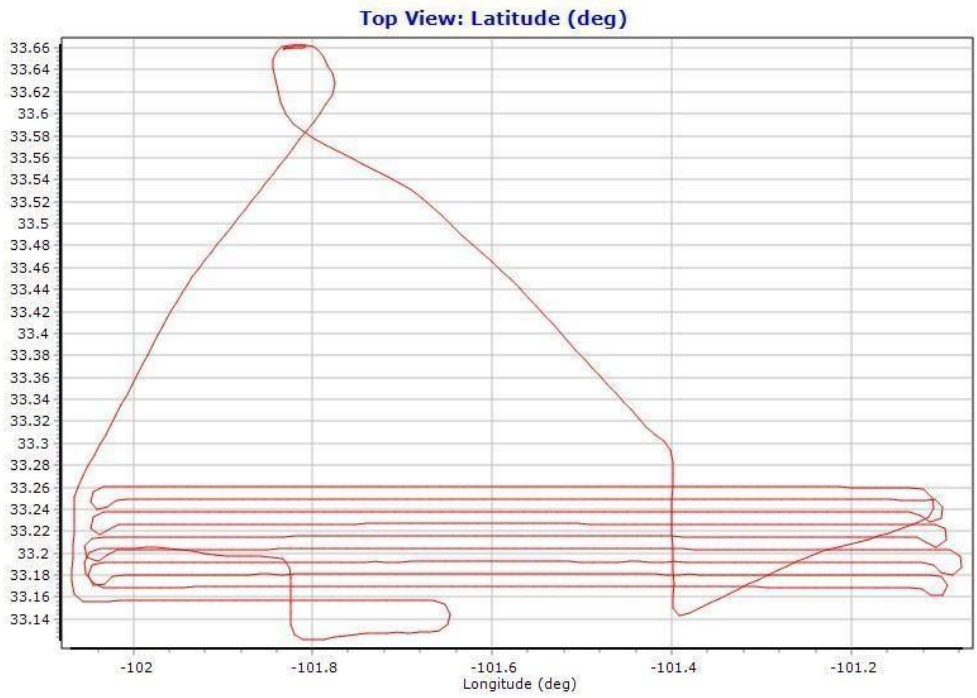


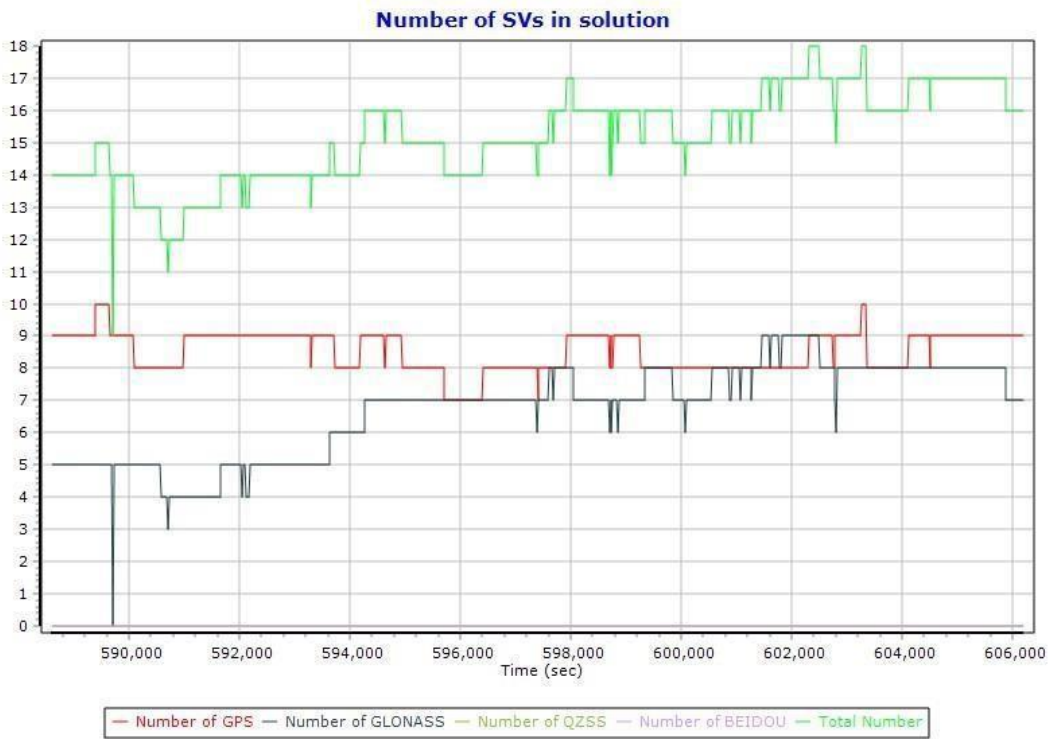
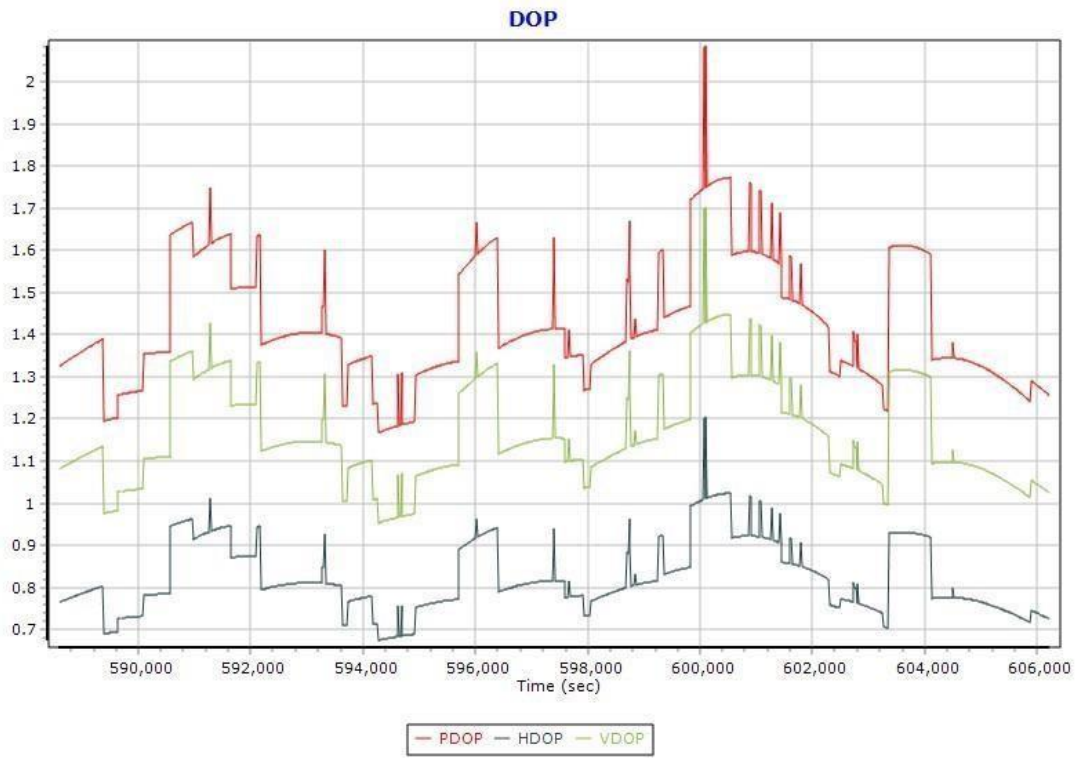


## **Appendix E: GPS Processing Block 05**

### **GPS and IMU Processing Reports for Each Mission**

**FEBRUARY 17, 2018**





of 112

of 101

## Processing Summary Information

Program: POSPac MMS  
Version: 8.1.6388.30062  
Project: \\sa\data\riegl\18047\20180217\_TX

Solution Type:           IN-Fusion SmartBase

Fixed: 17633	(99.99%)
Float: 0	(0.00%)
No Solution: 1	(0.01%)

Number of Epochs:

Total in RAW file: 17647  
No processed position: 13

Fwd/Rev Separation RMS Values (m):

North: 0.005  
East: 0.003  
Height: 0.026

Fwd/Rev Sep. RMS for 25%-75% weighting (m): 8823 occurrences

North: 0.002  
East: 0.002  
Height: 0.020

Quality Number Percentages:

Q 0: 100.0 %

Position Standard Deviation Percentages (%):

0.00 - 0.10 m: 100  
0.10 - 0.30 m: 0  
0.30 - 1.00 m: 0  
1.00 - 5.00 m: 0  
5.00 m + over: 0

Percentages of epochs with DD\_DOP over 10.00: 0 %

DOP over Tol: 1.42%

Baseline Distances (km):

Maximum: 52.65  
Minimum: 1.97  
Average: 28.22  
First Epoch: 46.23  
Last Epoch: 46.23

CORS Base Stations

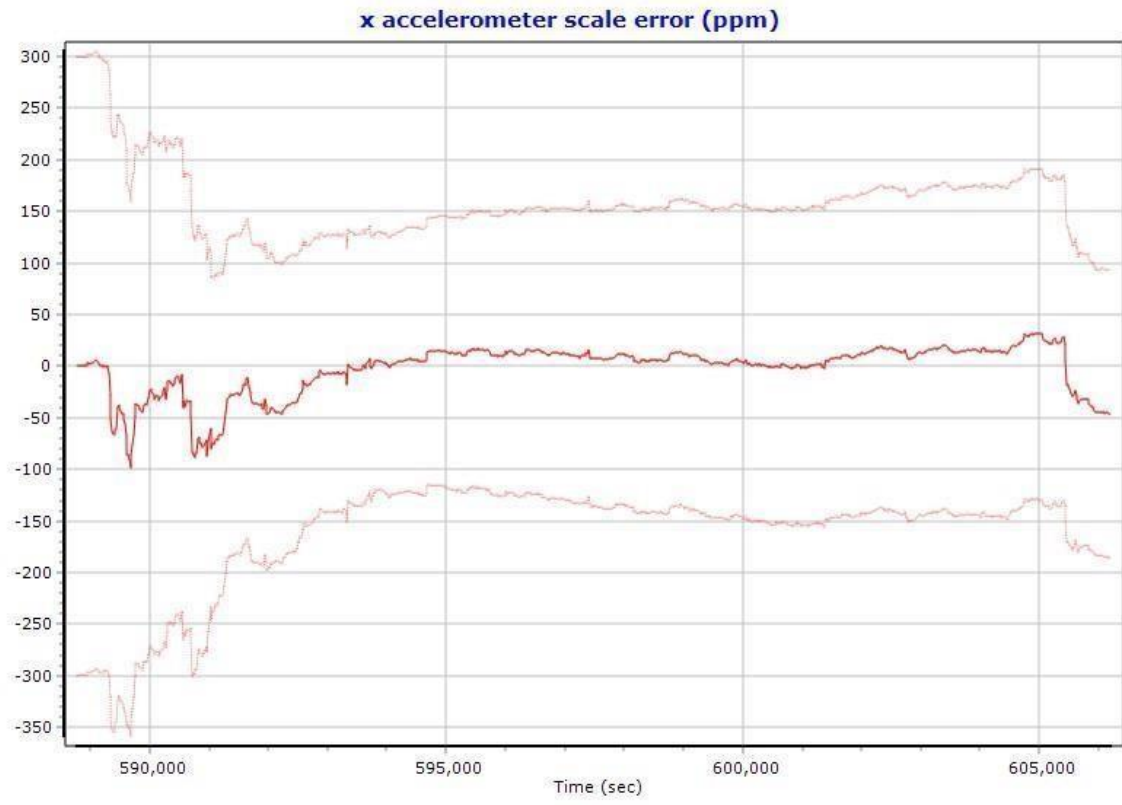
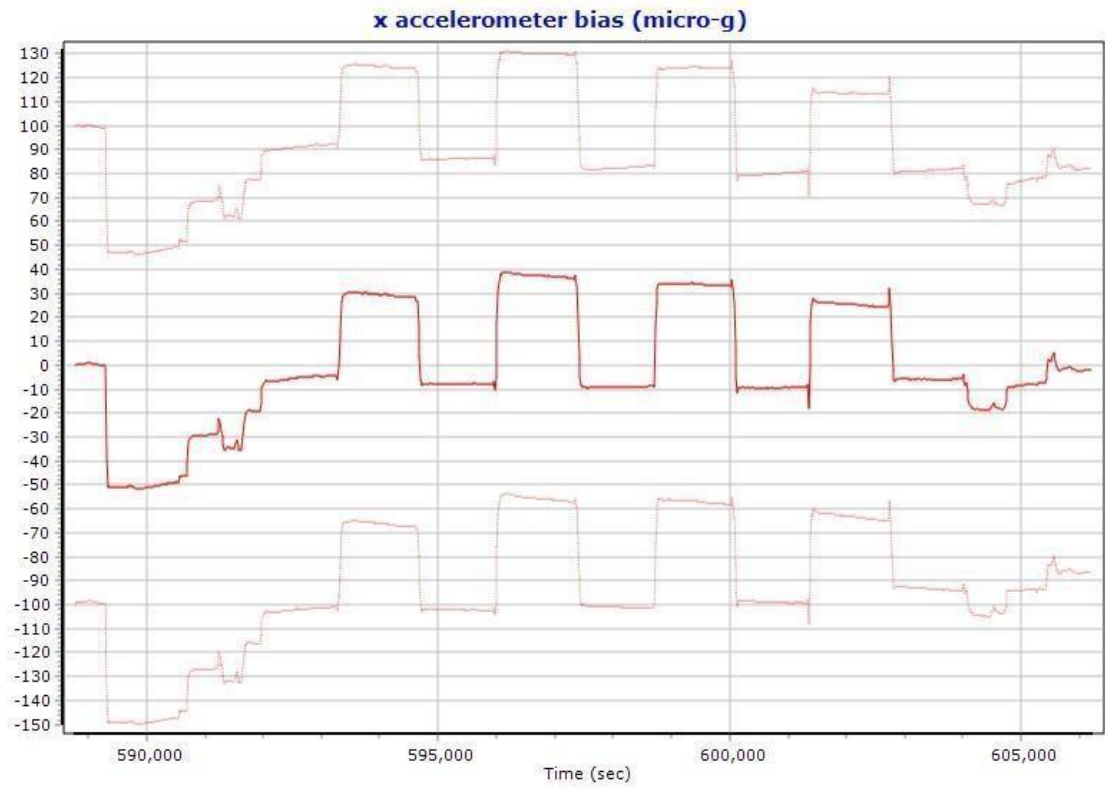
Station	Original			Adjusted		
TXSC	N31°50'29.77677"	W101°00'38.30281"	679.283	N31°50'29.77699"	W101°00'38.30295"	679.312
TXPD	N34°00'44.30418"	W100°17'22.65697"	533.170	N34°00'44.30469"	W100°17'22.65694"	533.175

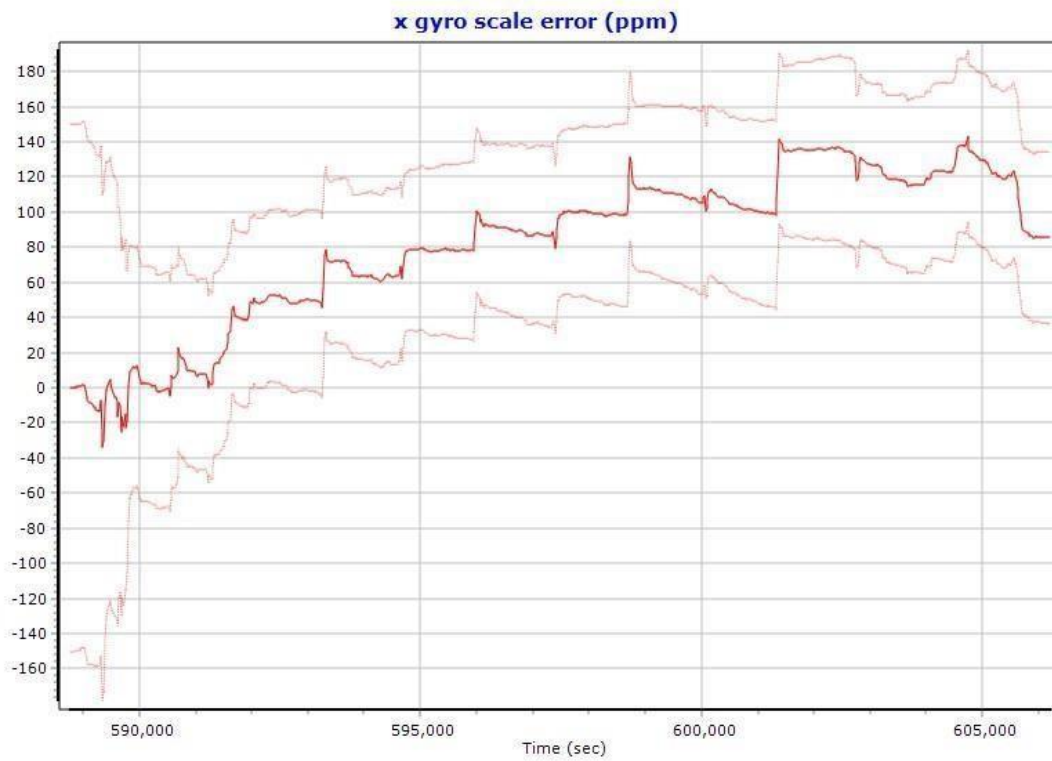
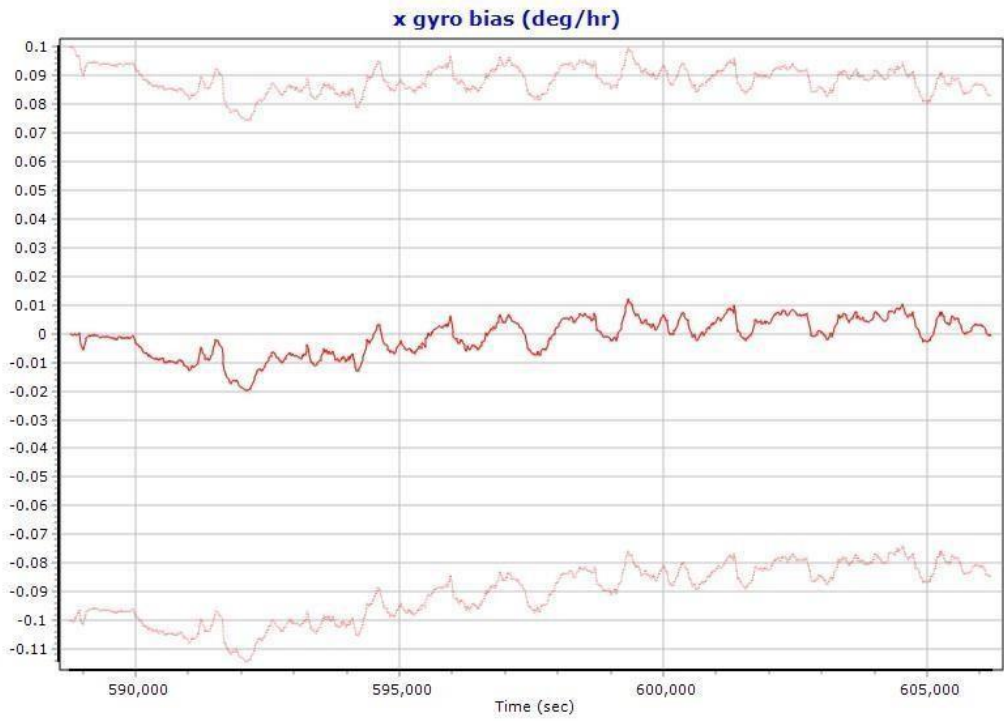
TXP2	N33°10'55.80258"	W102°49'05.38271"	1089.713	N33°10'55.80252"	W102°49'05.38287"	1089.754
TXP1	N33°10'57.08880"	W101°22'47.67644"	767.614	N33°10'57.08880"	W101°22'47.67644"	767.614
TXLU	N33°32'07.50651"	W101°50'34.20530"	956.019	N33°32'07.50677"	W101°50'34.20543"	956.030

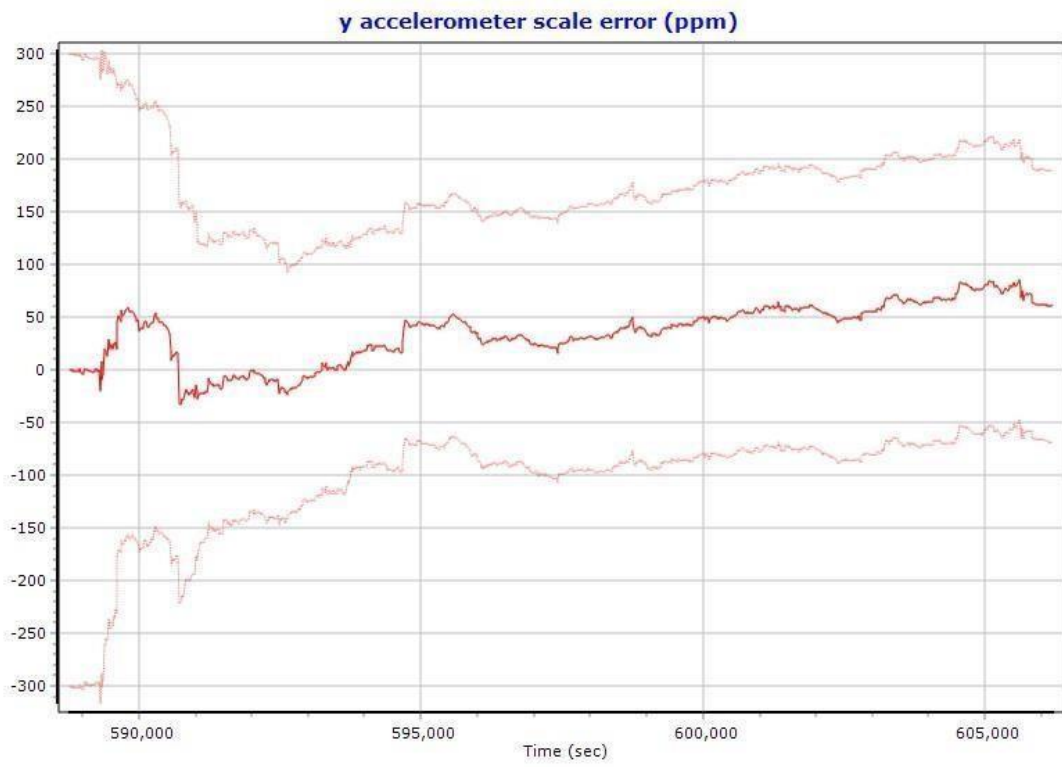
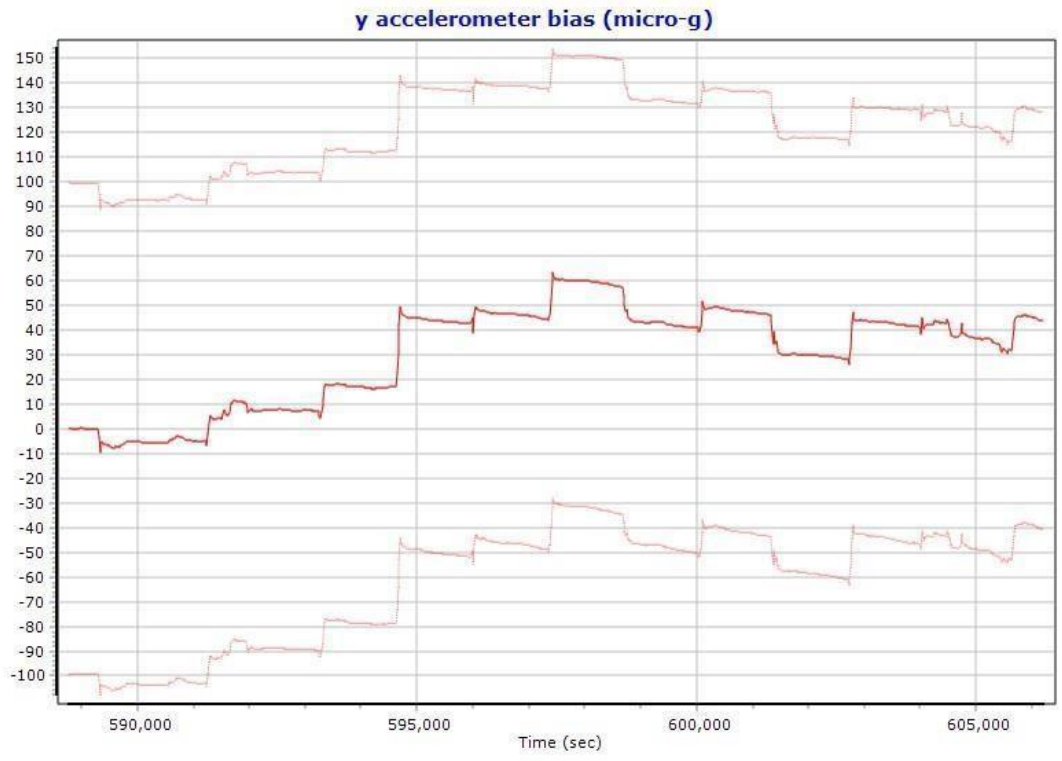


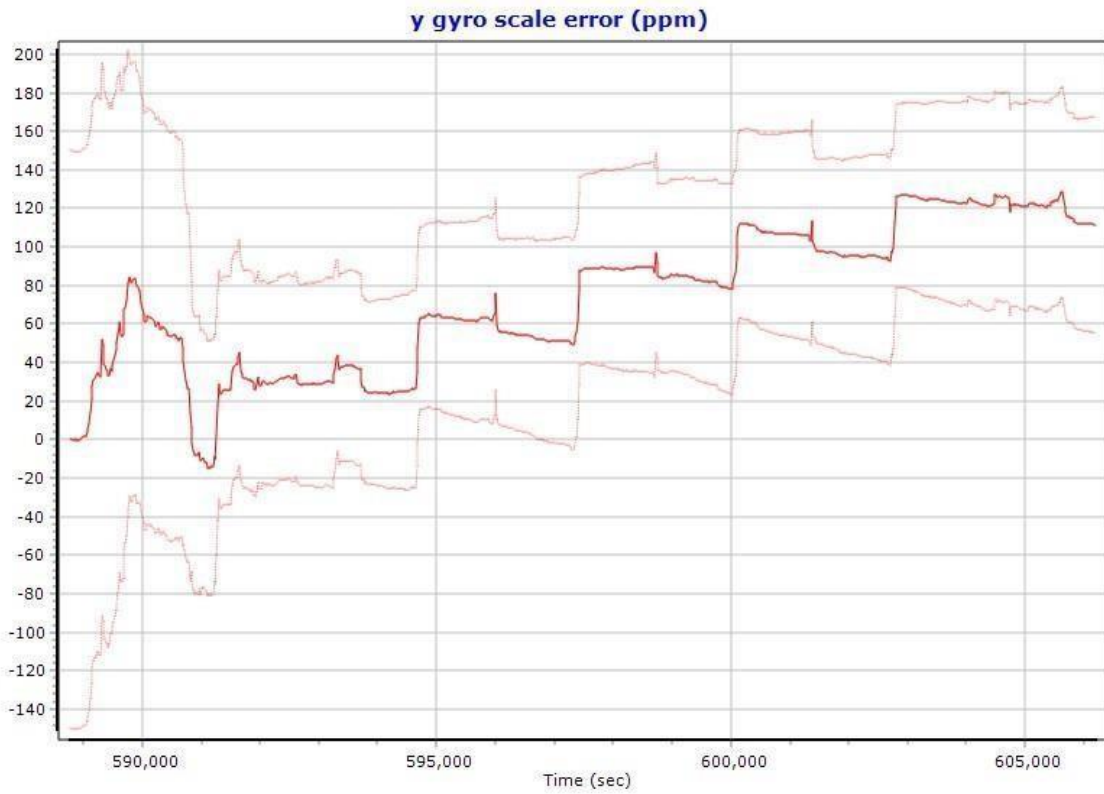
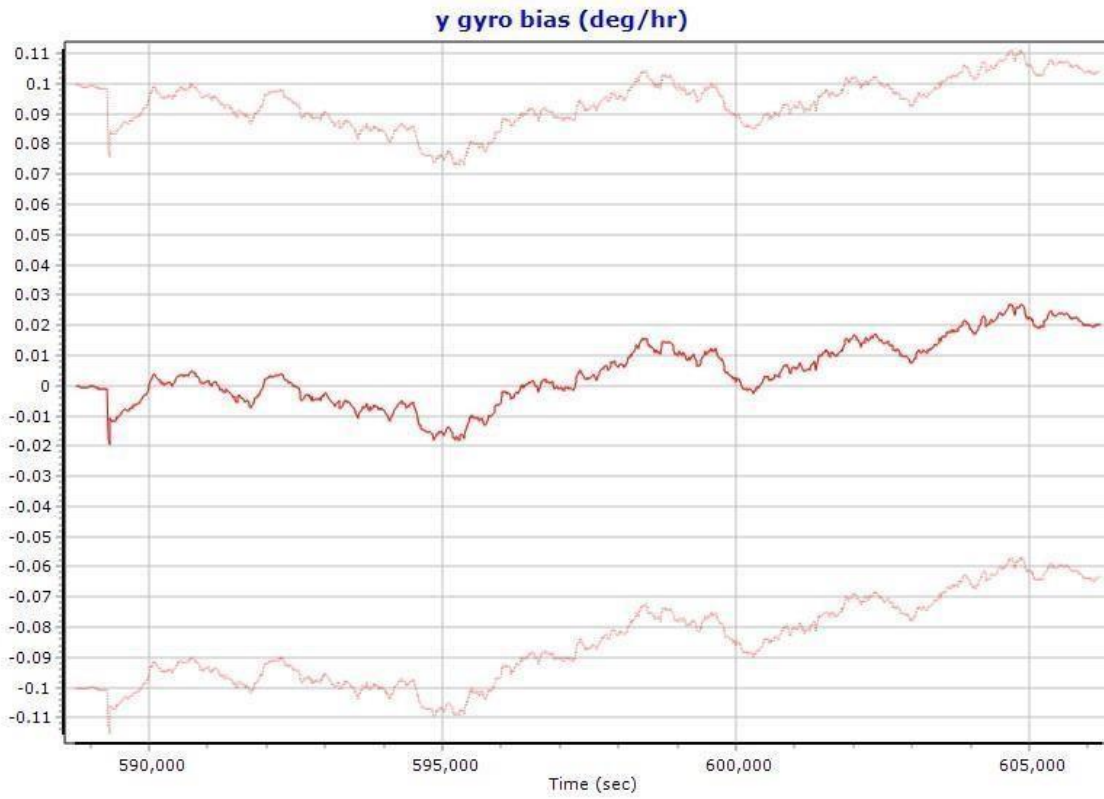
TXLA	N32°45'40.91674"	W101°56'38.21351"	891.645	N32°45'40.91676"	W101°56'38.21342"	891.650
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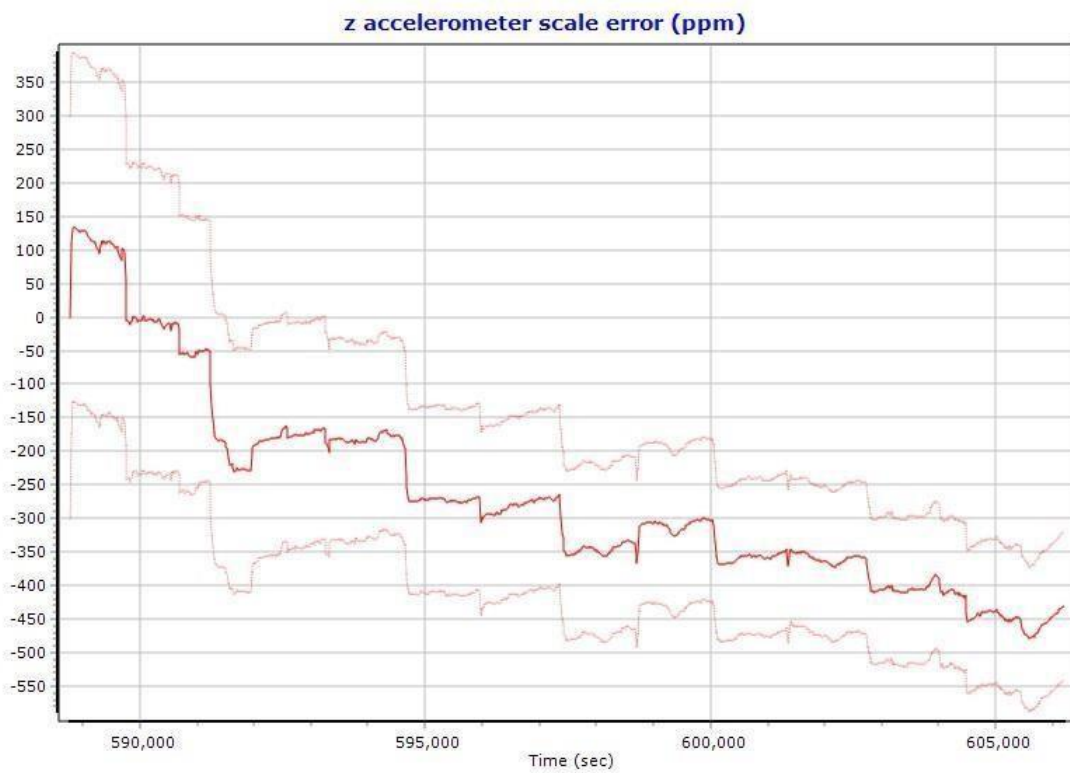
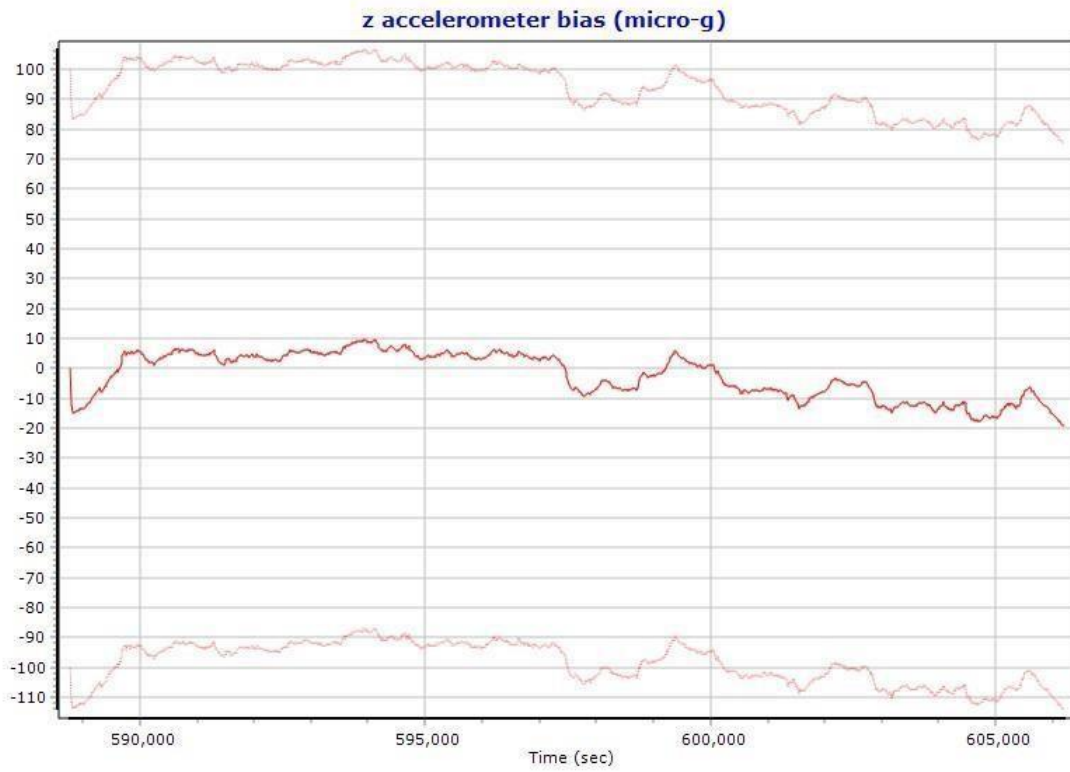




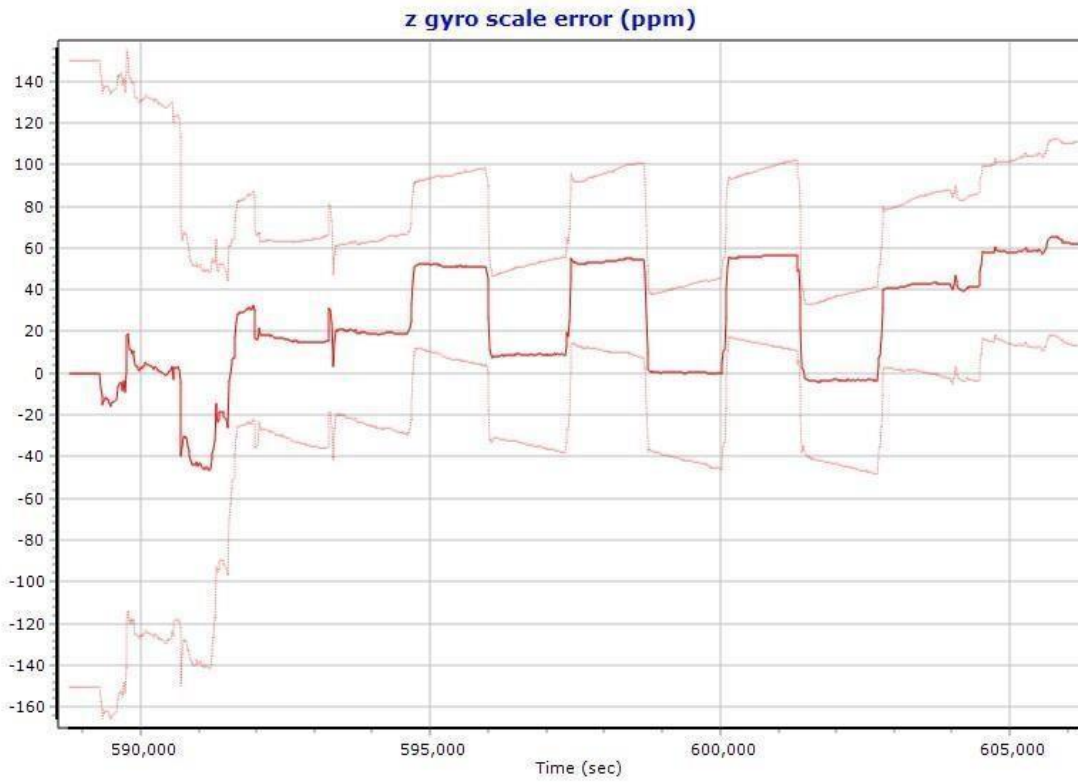
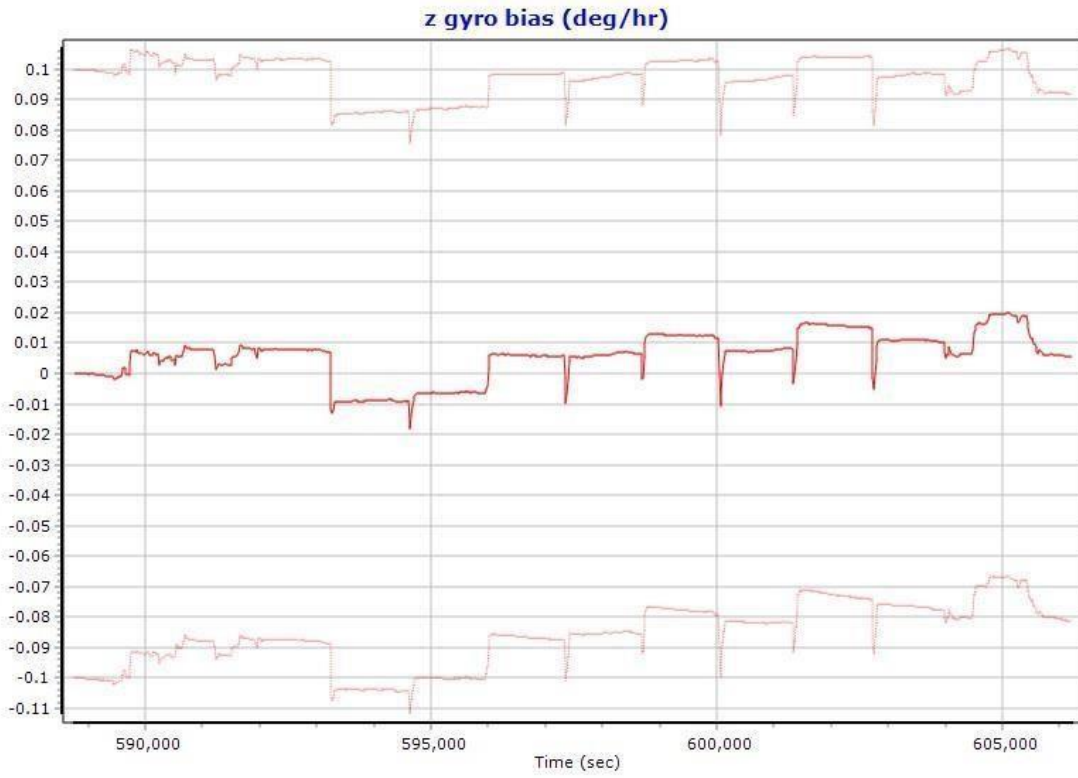


of

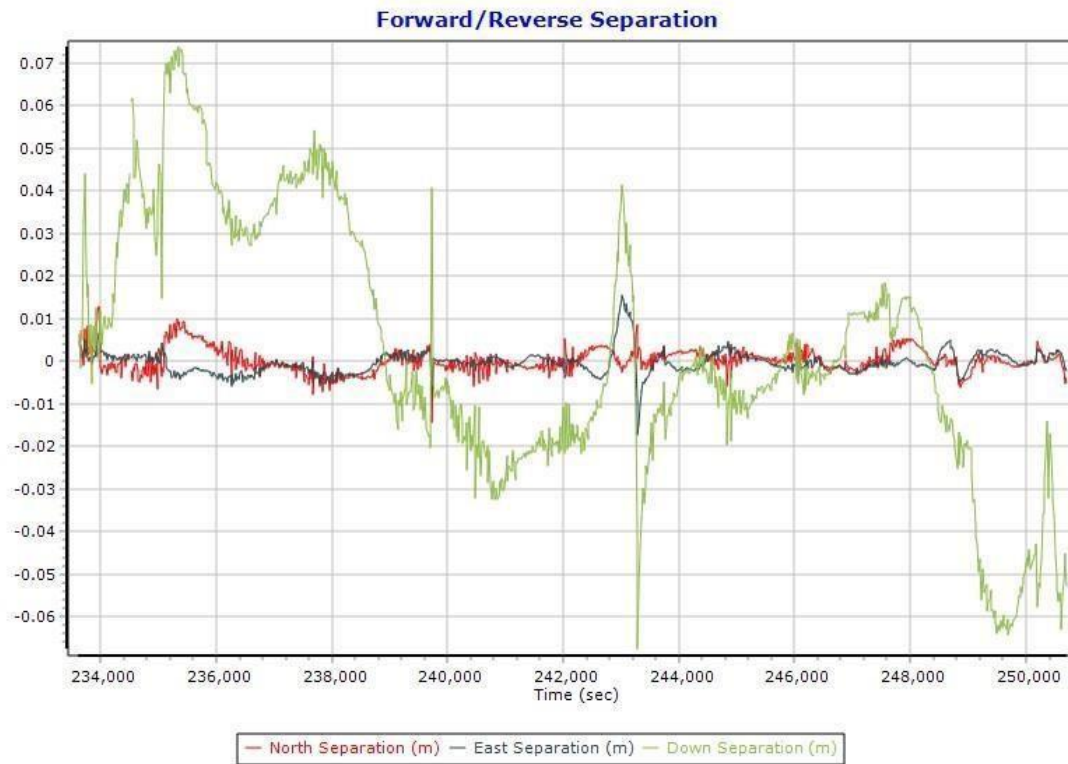
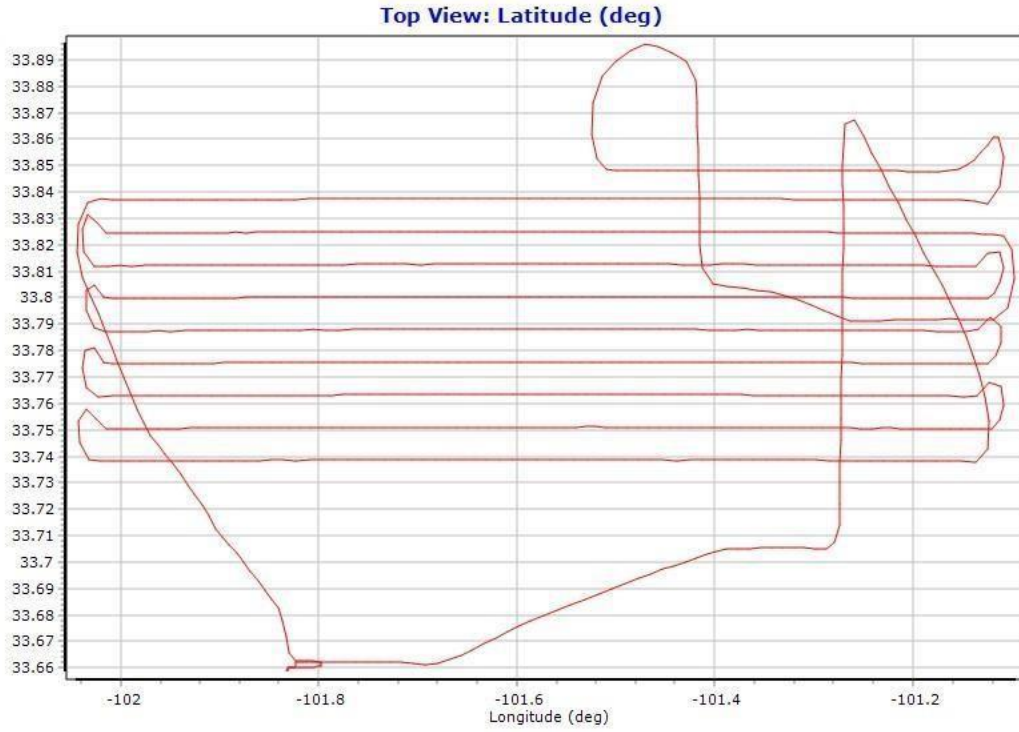
101

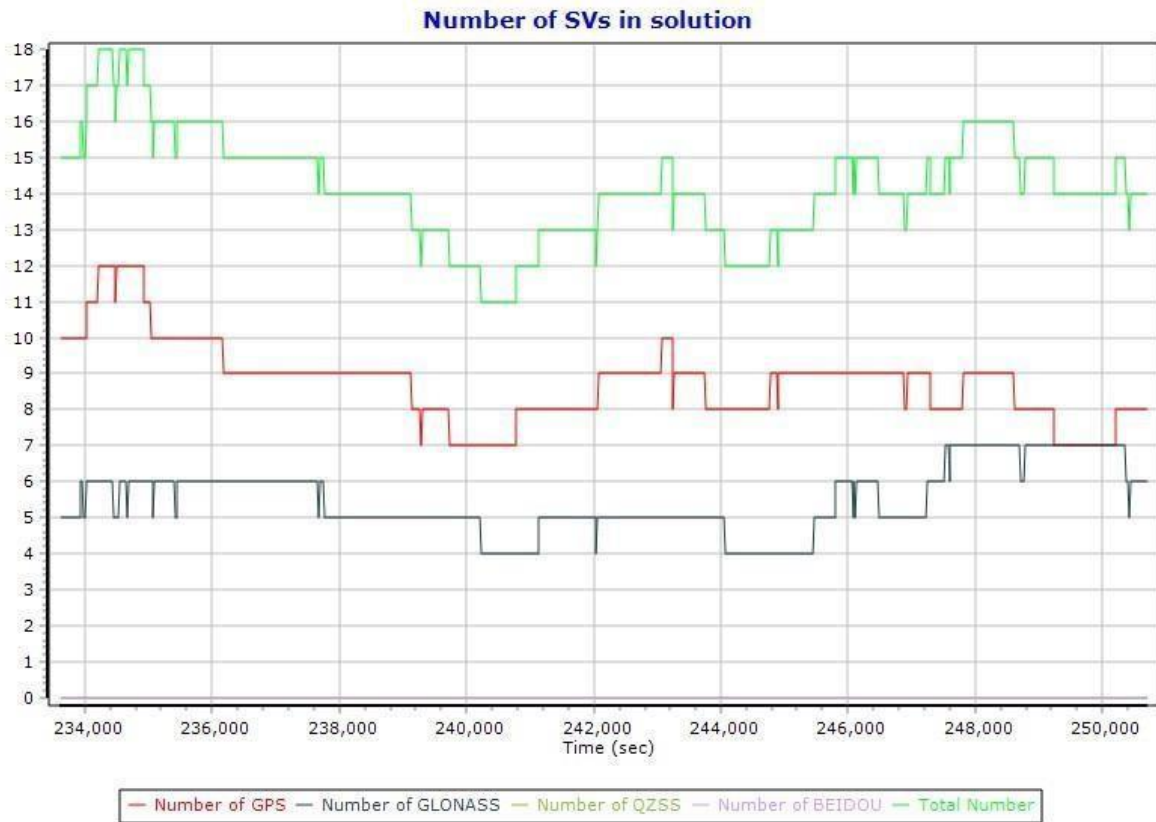
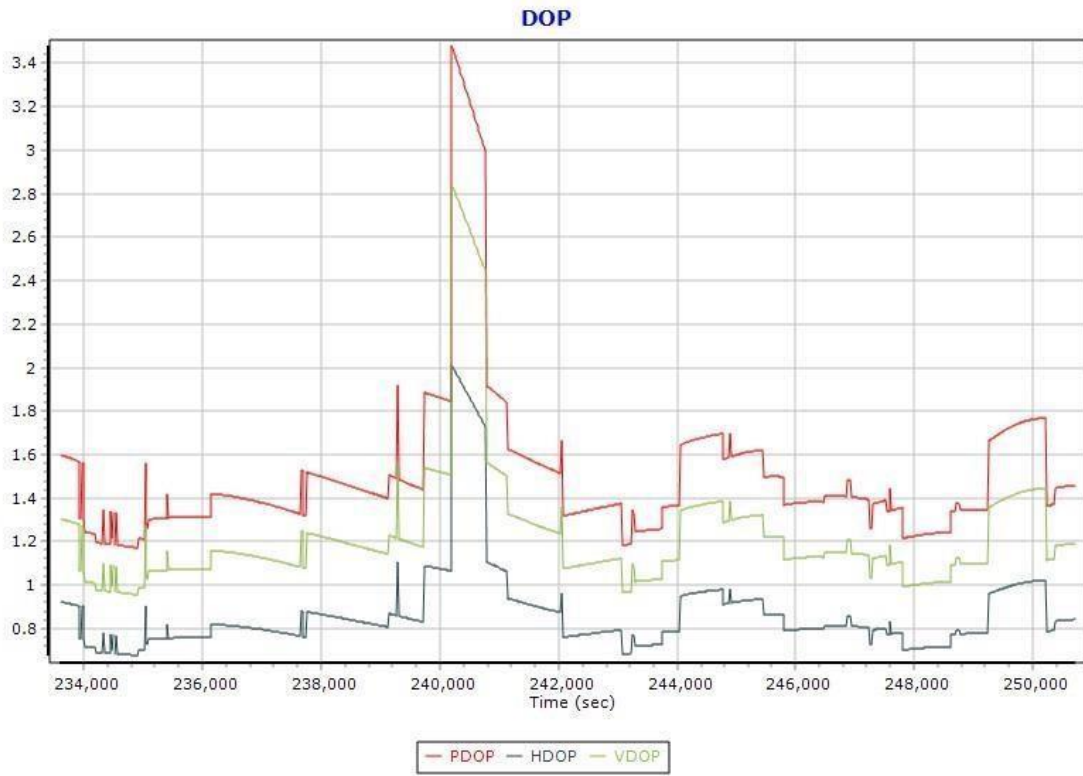






## FEBRUARY 20, 2018 MISSION 1





## Processing Summary Information

Program: POSPac MMS  
Version: 8.1.6388.30062  
Project: \\sa\data\riegl\18047\20180220\_TX\_A

Solution Type: IN-Fusion SmartBase

Fixed: 17121	(99.99%)
Float: 0	(0.00%)
No Solution: 1	(0.01%)

Number of Epochs:

Total in RAW file: 17128  
No processed position: 7

Fwd/Rev Separation RMS Values (m):

North: 0.003  
East: 0.003  
Height: 0.030

Fwd/Rev Sep. RMS for 25%-75% weighting (m): 8563 occurrences

North: 0.002  
East: 0.003  
Height: 0.019

Quality Number Percentages:

Q 0: 100.0 %

Position Standard Deviation Percentages (%):

0.00 - 0.10 m: 100  
0.10 - 0.30 m: 0  
0.30 - 1.00 m: 0  
1.00 - 5.00 m: 0  
5.00 m + over: 0

Percentages of epochs with DD\_DOP over 10.00: 0 %

DOP over Tol: 1.51%

Baseline Distances (km):

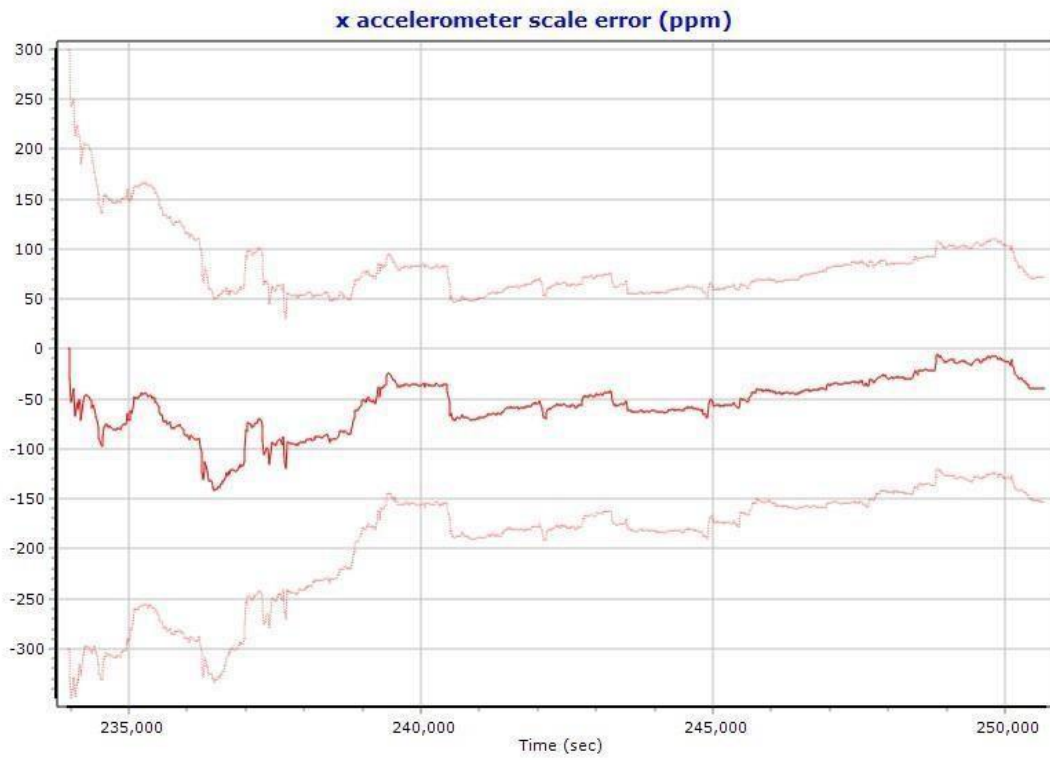
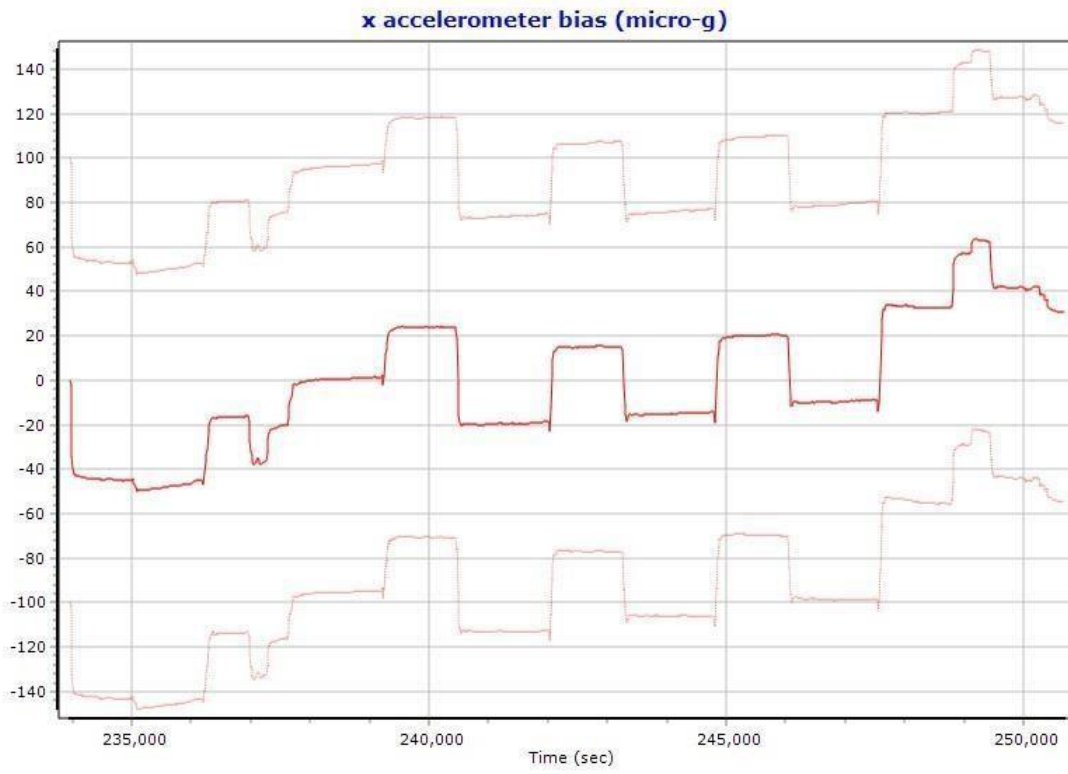
Maximum: 44.21  
Minimum: 0.2  
Average: 23.65  
First Epoch: 27.67  
Last Epoch: 27.66

**CORS Base Stations**

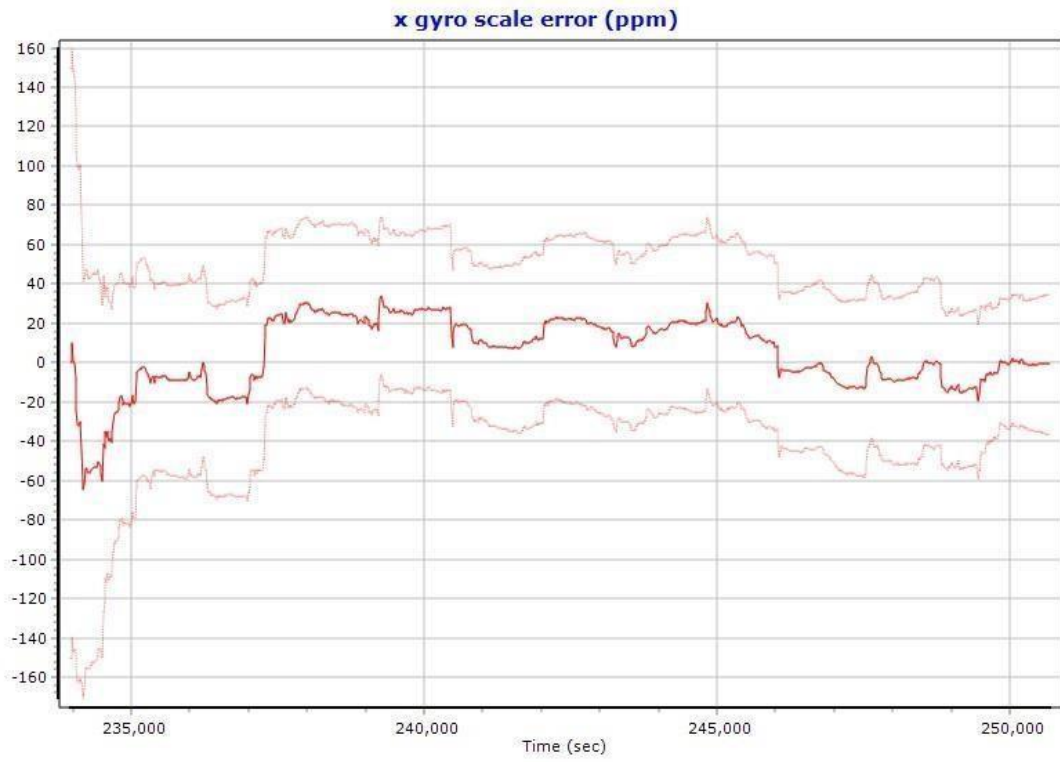
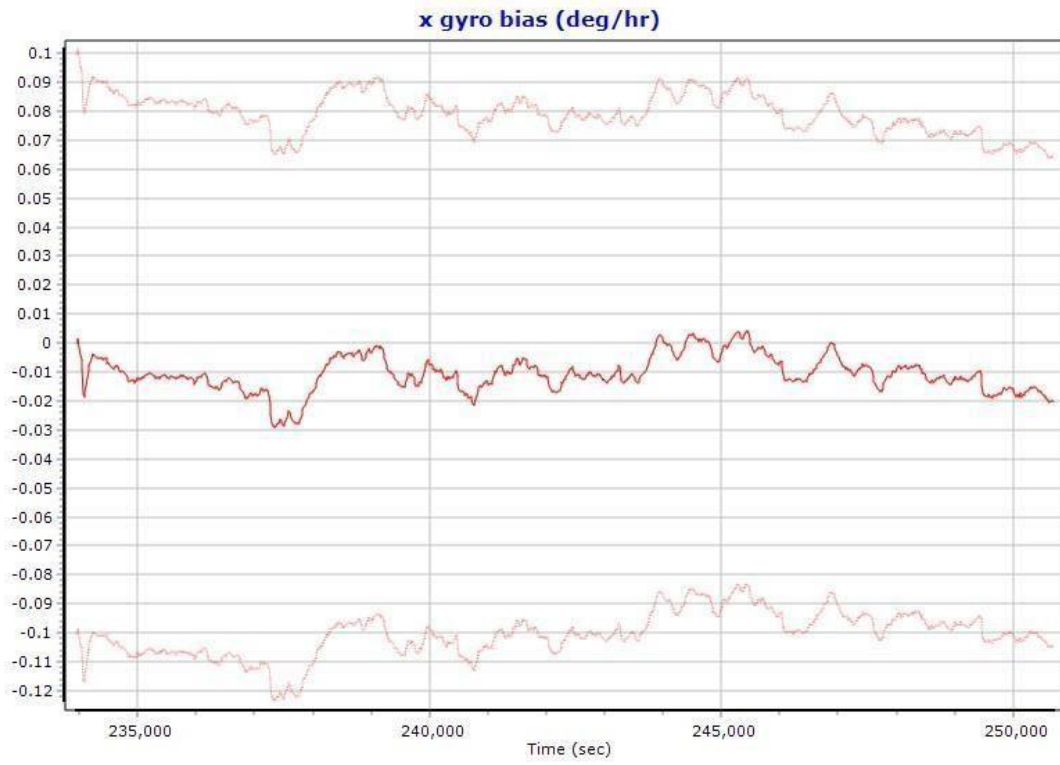
Station	Original			Adjusted		
	TXLU	N33°32'07.50651"	W101°50'34.20530"	956.019	N33°32'07.50651"	W101°50'34.20530"
TXTU	N34°32'01.43593"	W101°44'21.67571"	1034.841	N34°32'01.43615"	W101°44'21.67574"	1034.855
TXSL	N34°28'26.70827"	W101°18'50.73006"	975.716	N34°28'26.70803"	W101°18'50.72994"	975.732
TXP1	N33°10'57.08880"	W101°22'47.67645"	767.614	N33°10'57.08861"	W101°22'47.67696"	767.619
TXMT	N34°00'42.06253"	W100°49'57.89018"	707.923	N34°00'42.06226"	W100°49'57.89059"	707.928

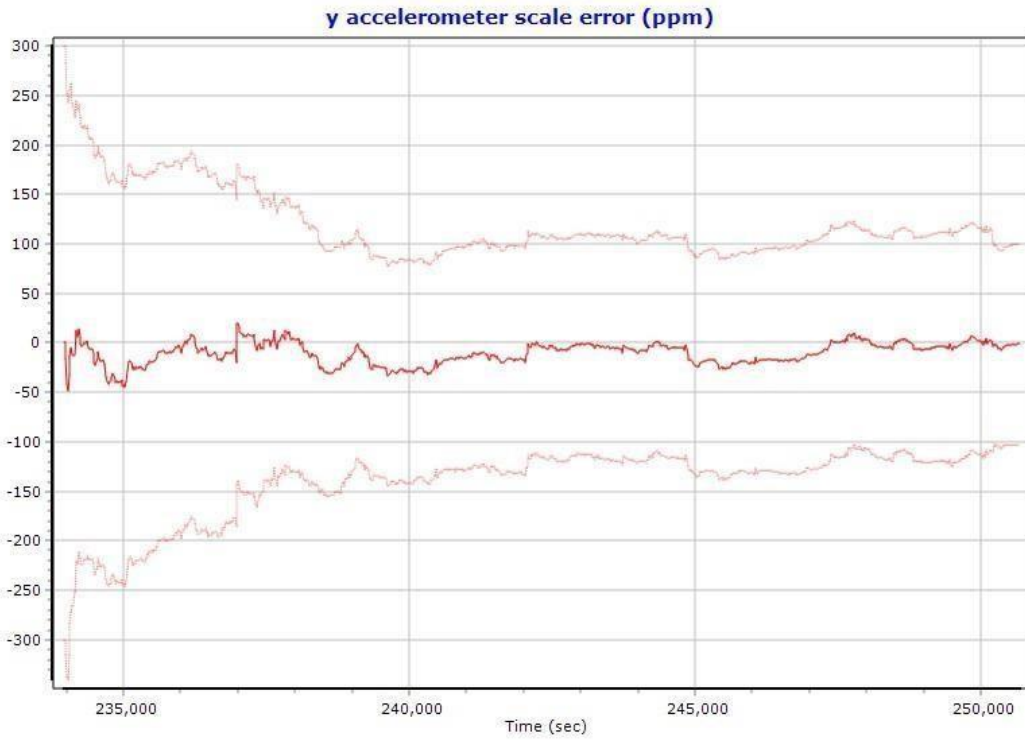
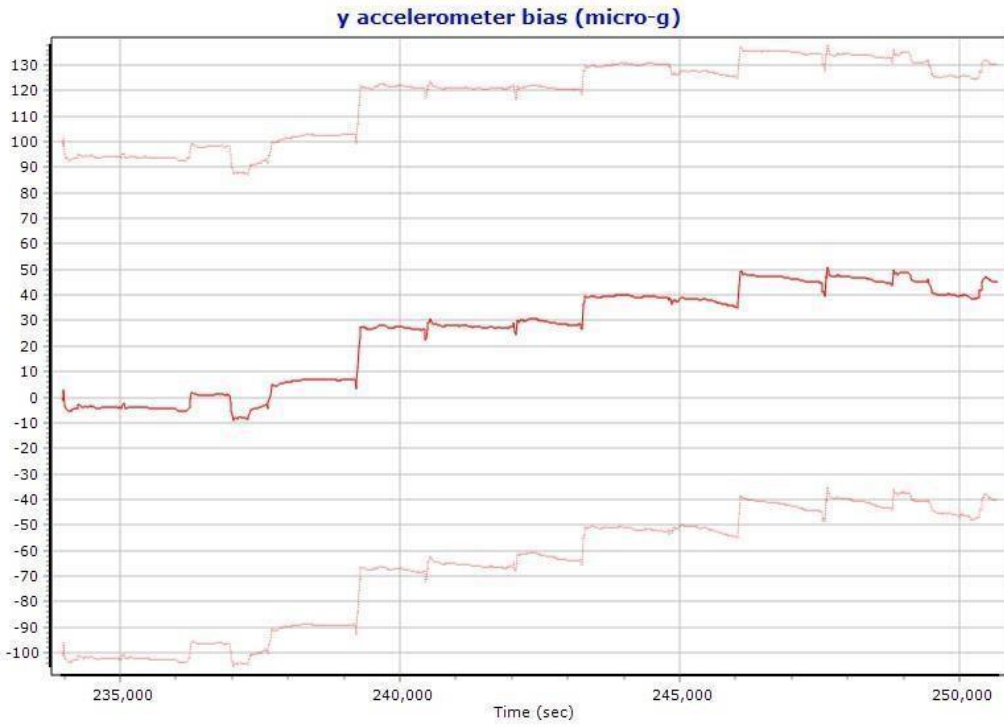
TXL1	N33°56'18.24260"	W102°20'58.31949"	1071.624	N33°56'18.24222"	W102°20'58.31955"	1071.641
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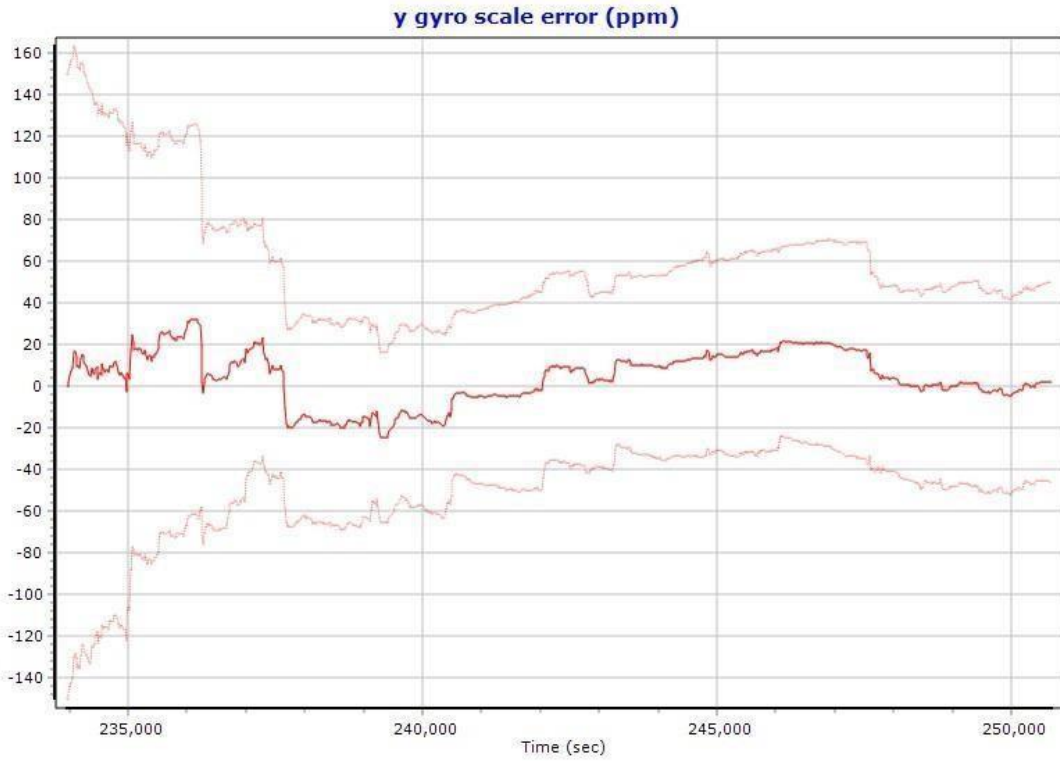
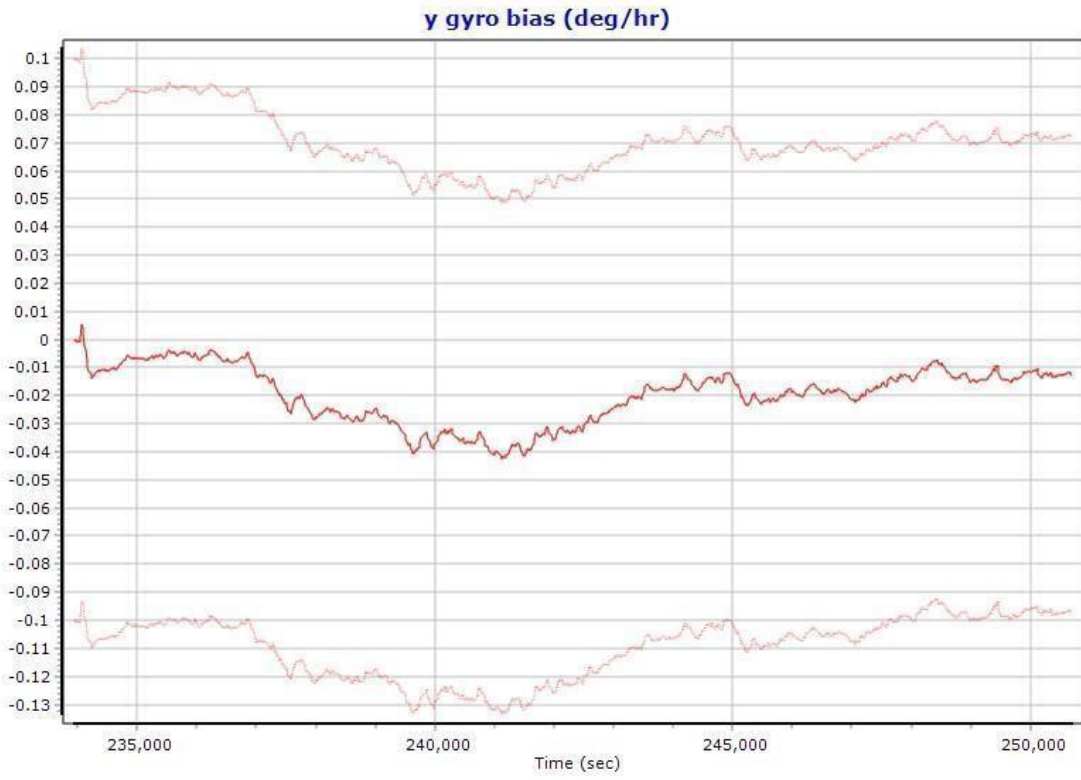


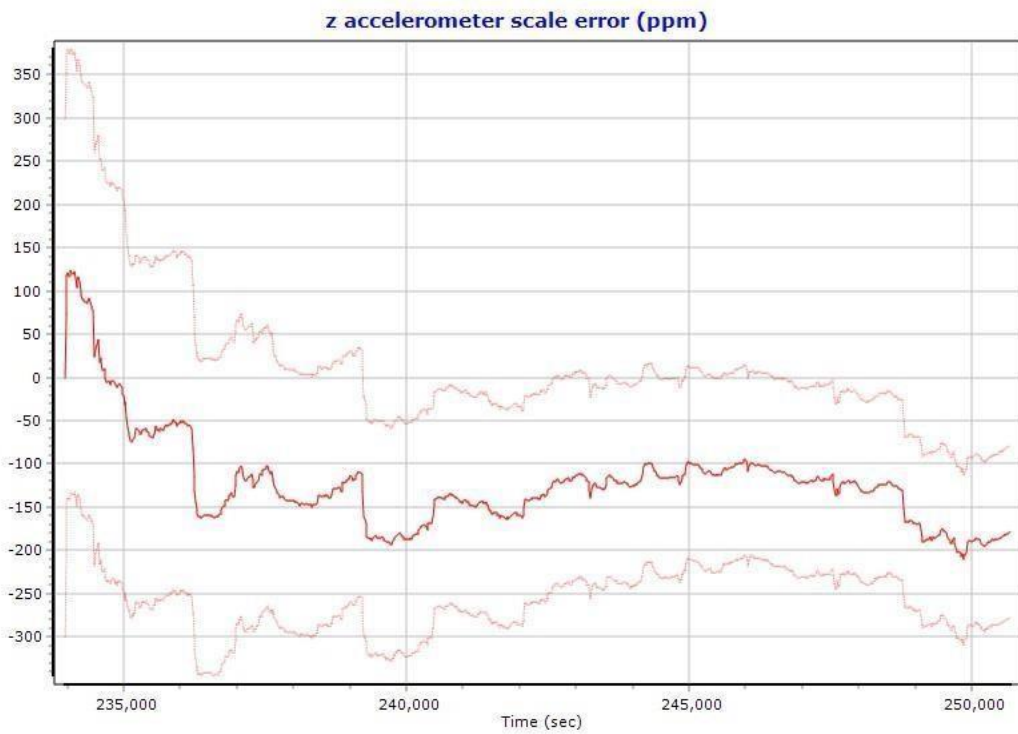
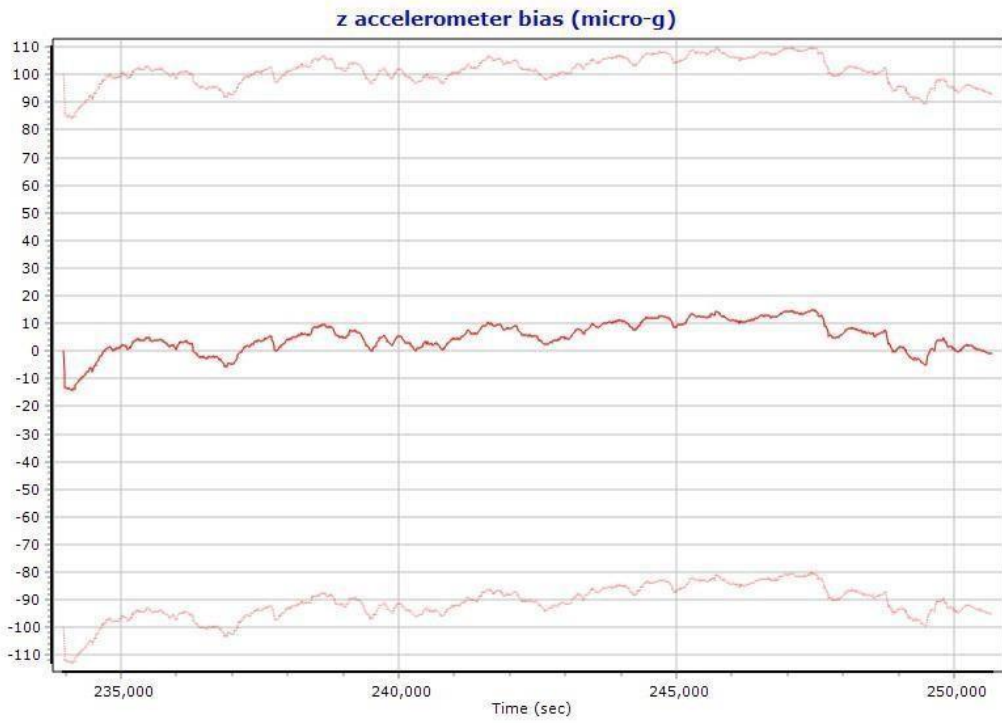


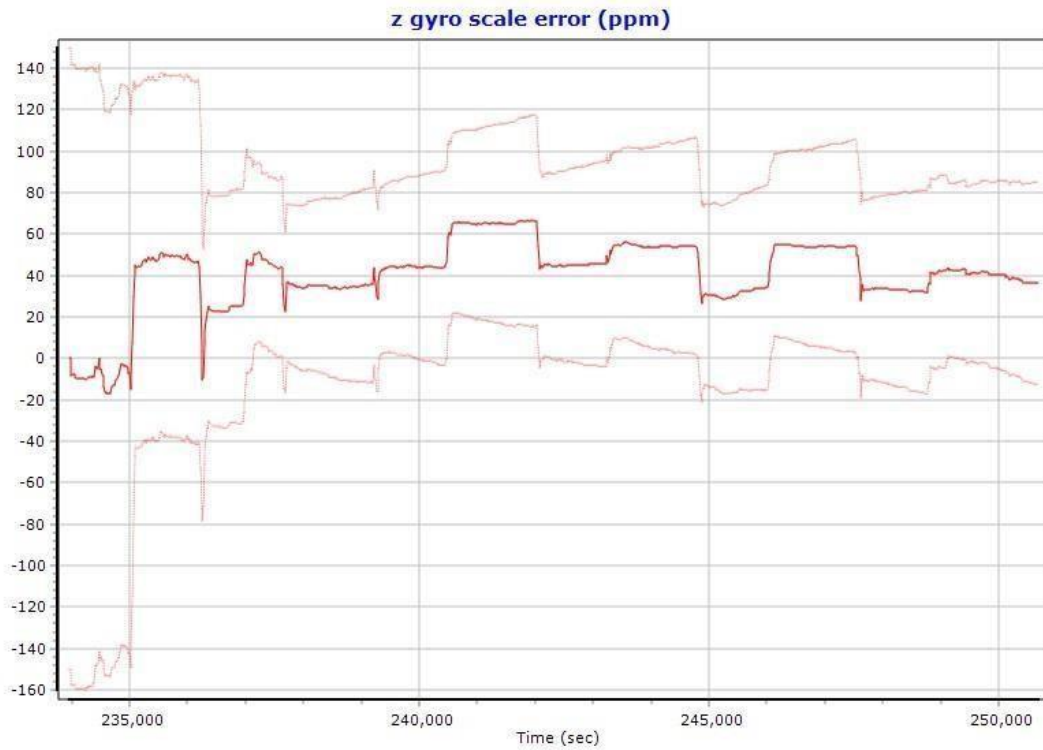
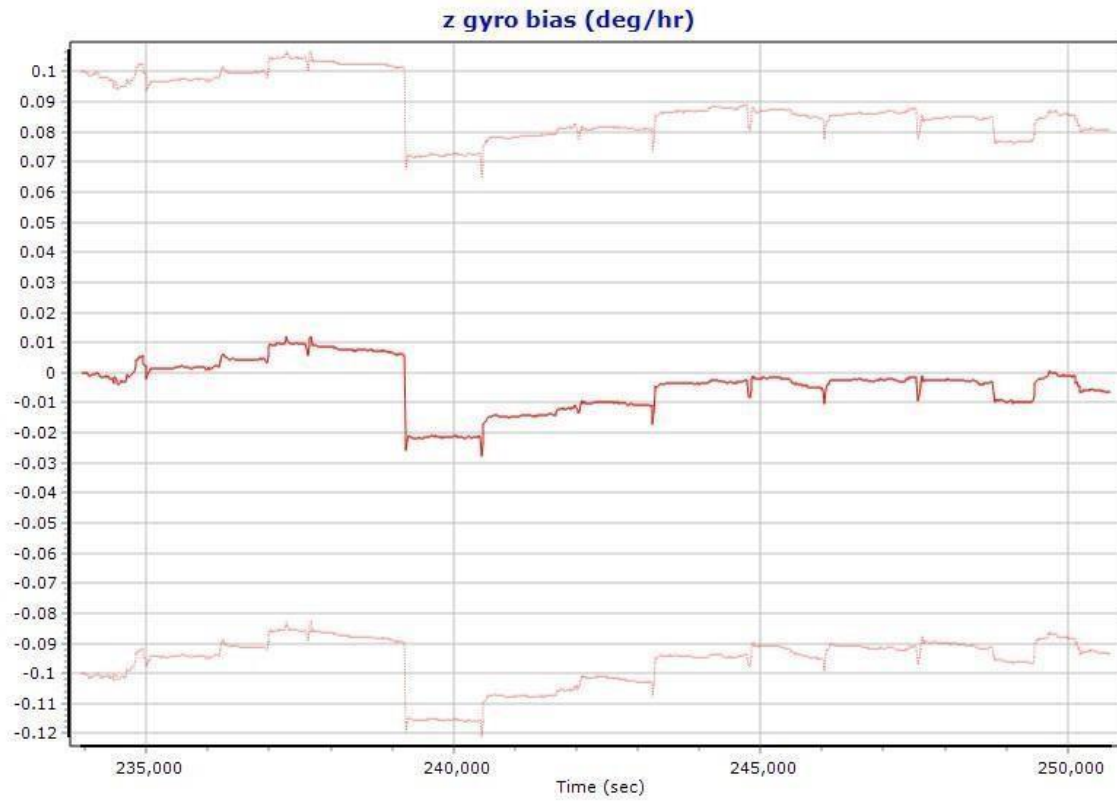






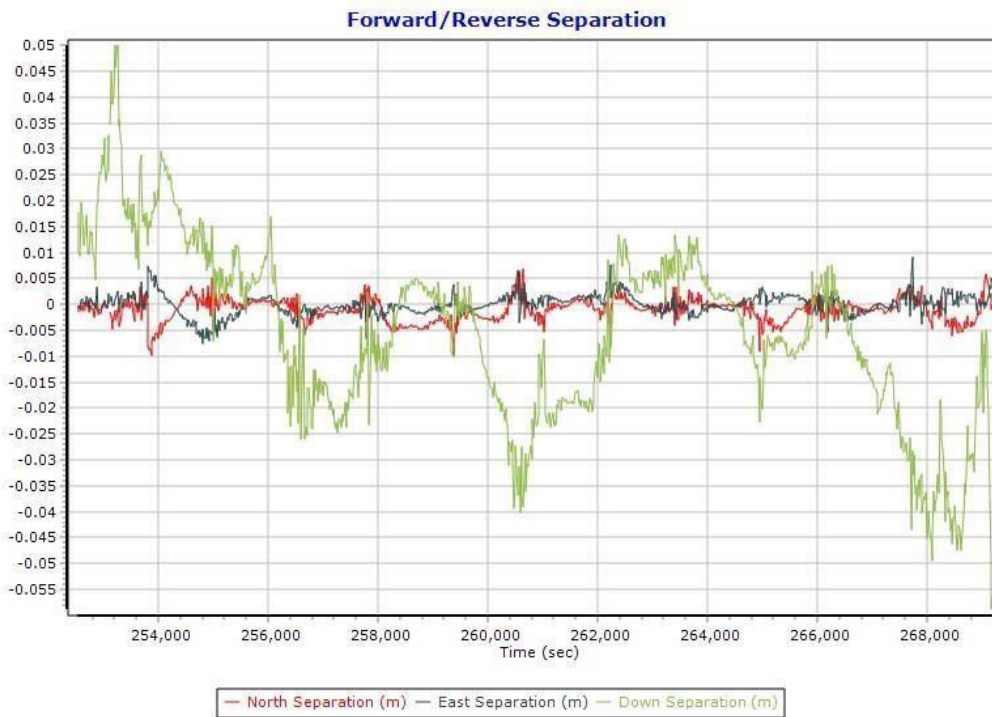
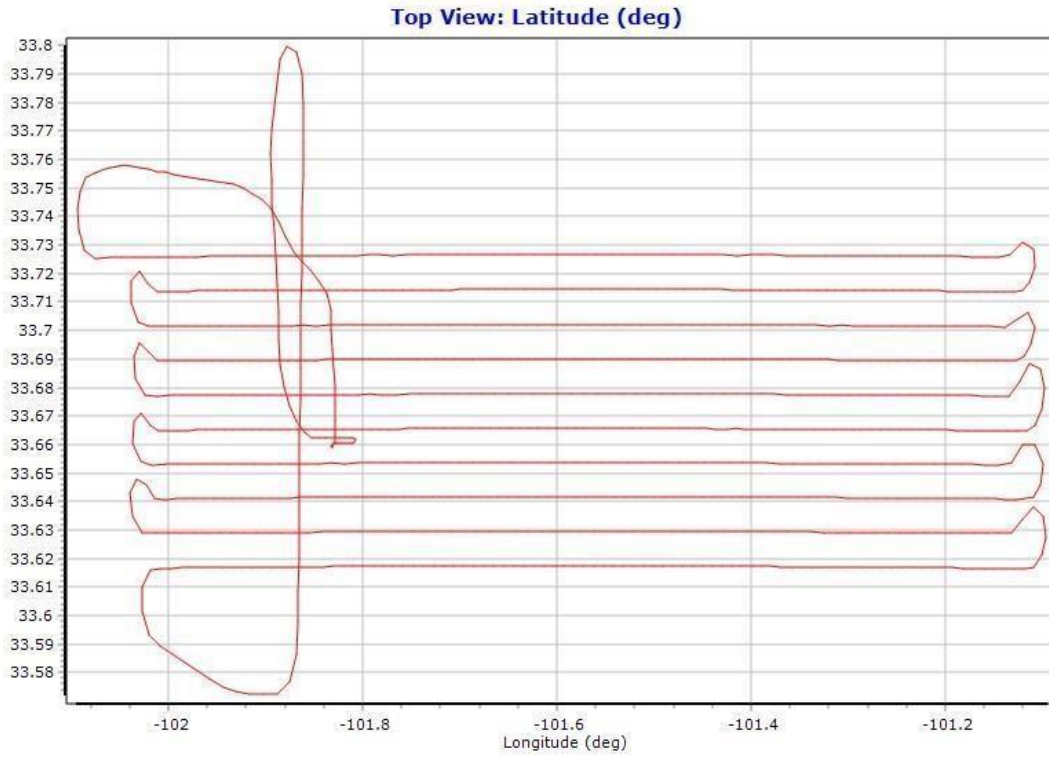


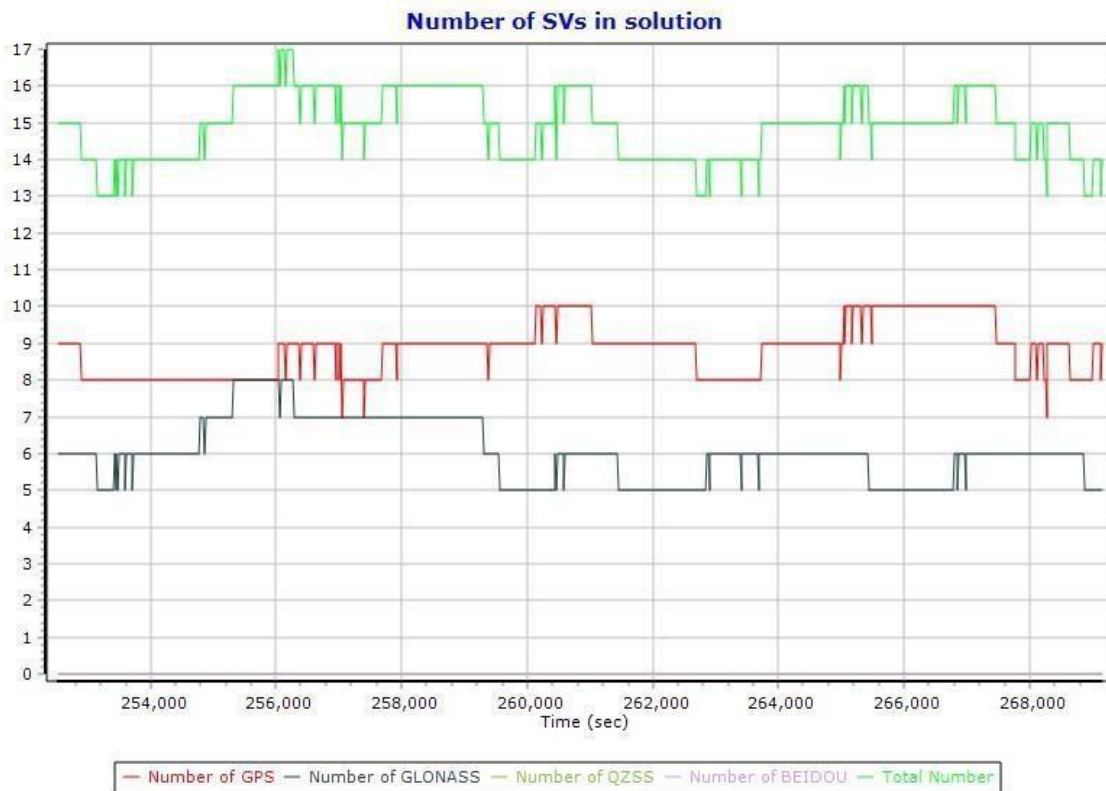
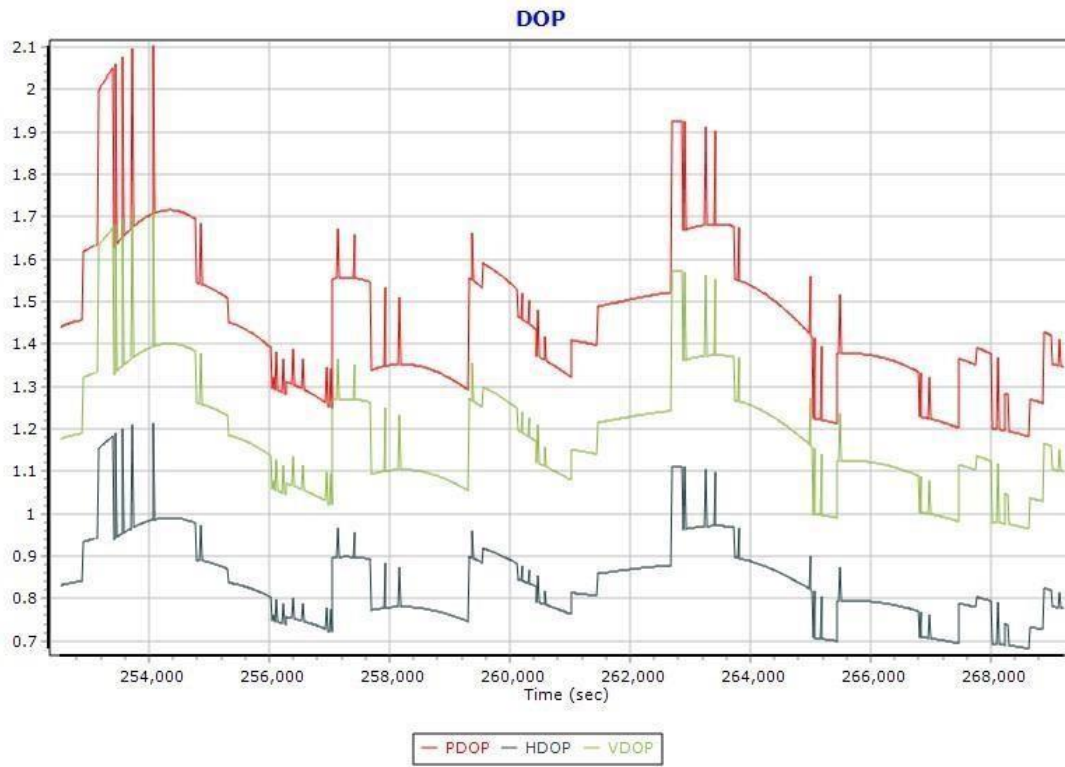




## **GPS Processing Block 05**

## FEBRUARY 20, 2018 MISSION 2







## Processing Summary Information

Program: POSPac MMS  
Version: 8.1.6388.30062  
Project: \\sa\data\riegl\18047\20180220\_TX\_B

Solution Type: IN-Fusion SmartBase

Fixed: 16666	(99.99%)
Float: 0	(0.00%)
No Solution: 1	(0.01%)

Number of Epochs:

Total in RAW file: 16712  
No processed position: 46

Fwd/Rev Separation RMS Values (m):

North: 0.002  
East: 0.002  
Height: 0.018

Fwd/Rev Sep. RMS for 25%-75% weighting (m): 8355 occurrences

North: 0.002  
East: 0.002  
Height: 0.014

Quality Number Percentages:

Q 0: 100.0 %

Position Standard Deviation Percentages (%):

0.00 - 0.10 m: 100  
0.10 - 0.30 m: 0  
0.30 - 1.00 m: 0  
1.00 - 5.00 m: 0  
5.00 m + over: 0

Percentages of epochs with DD\_DOP over 10.00: 0 %

DOP over Tol: 1.49%

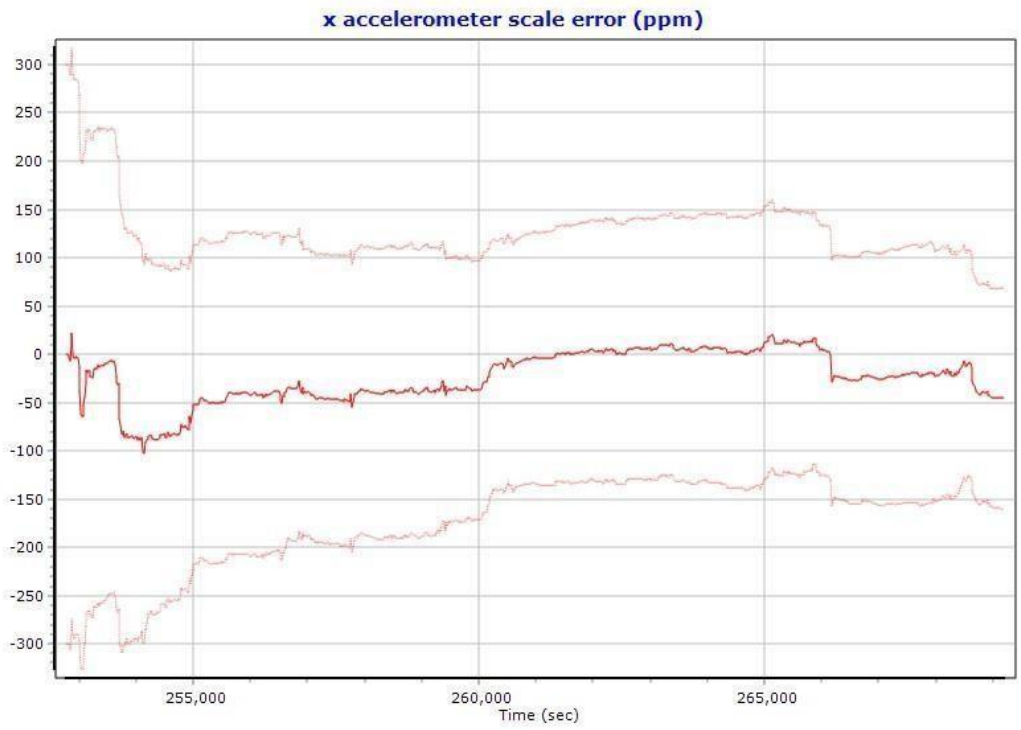
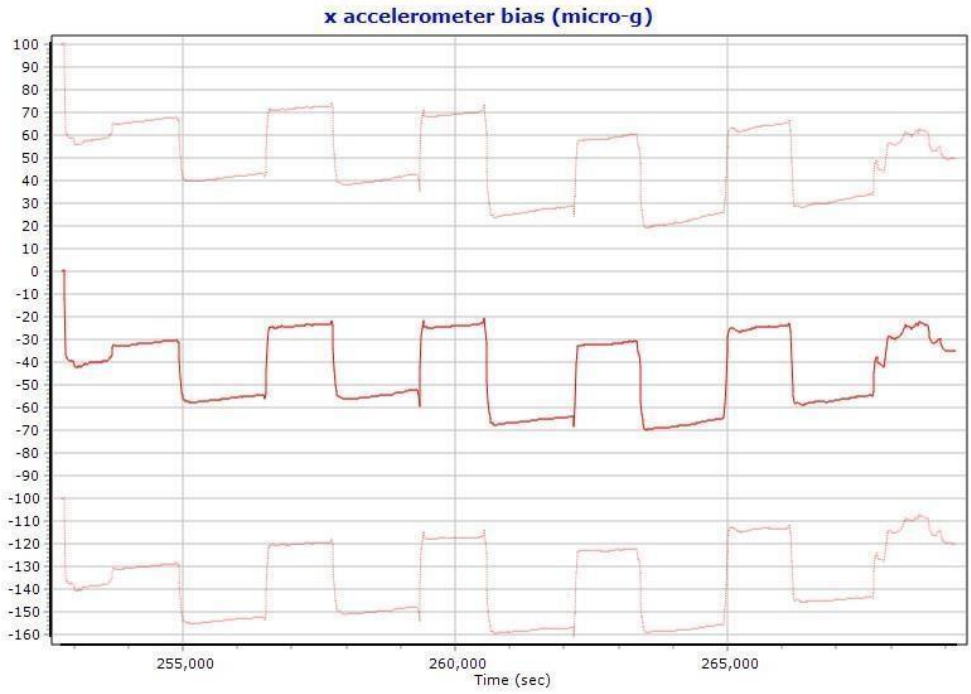
Baseline Distances (km):

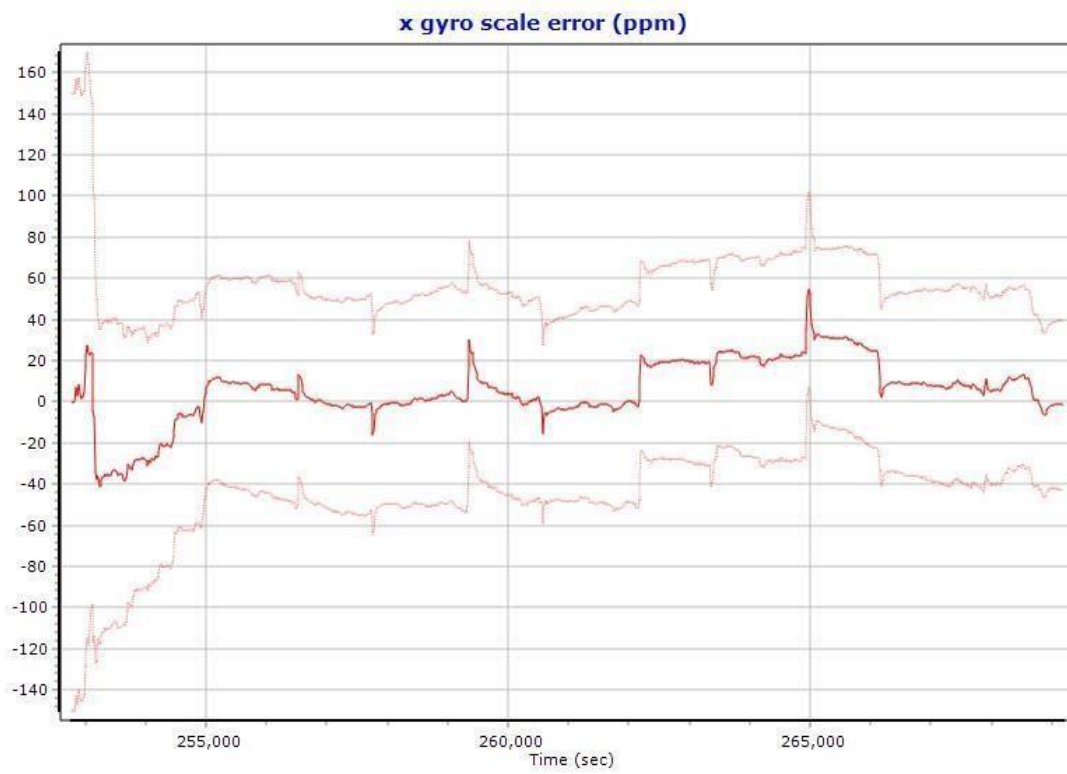
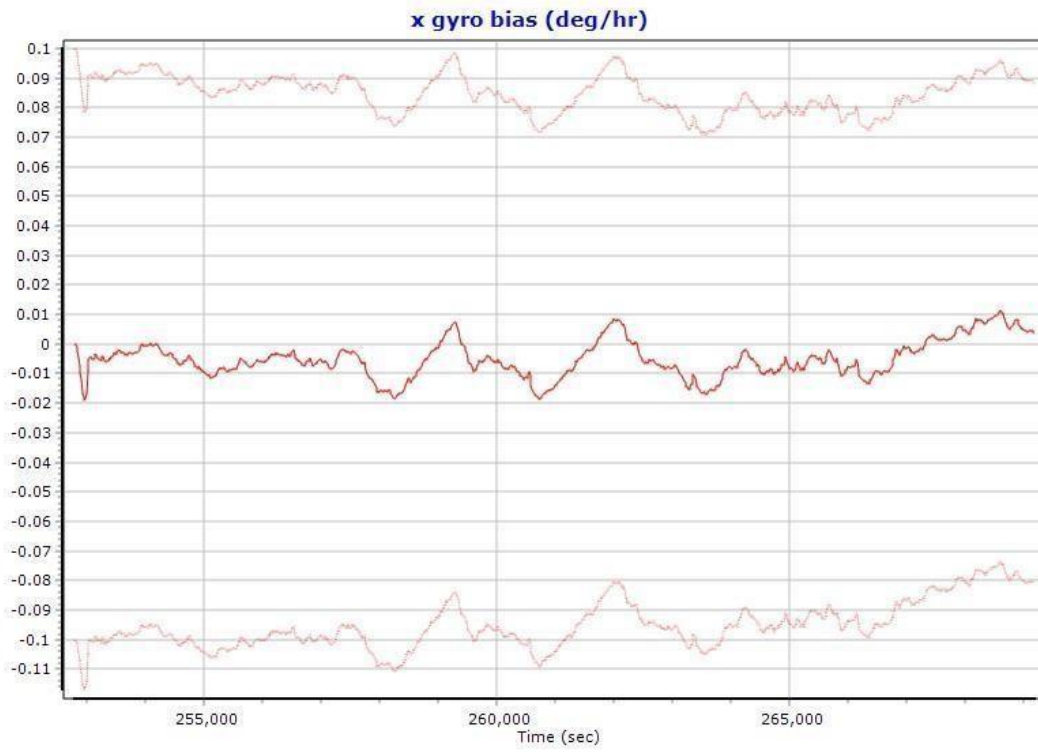
Maximum: 48.95  
Minimum: 0.48  
Average: 23.28  
First Epoch: 19.69  
Last Epoch: 19.7

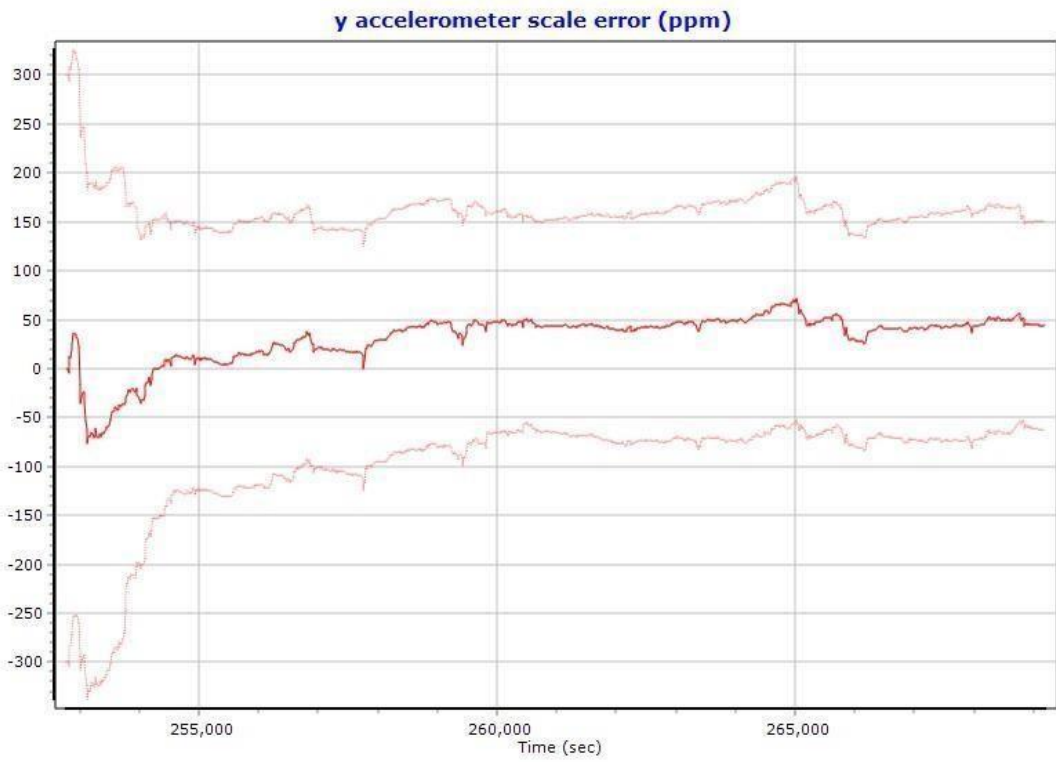
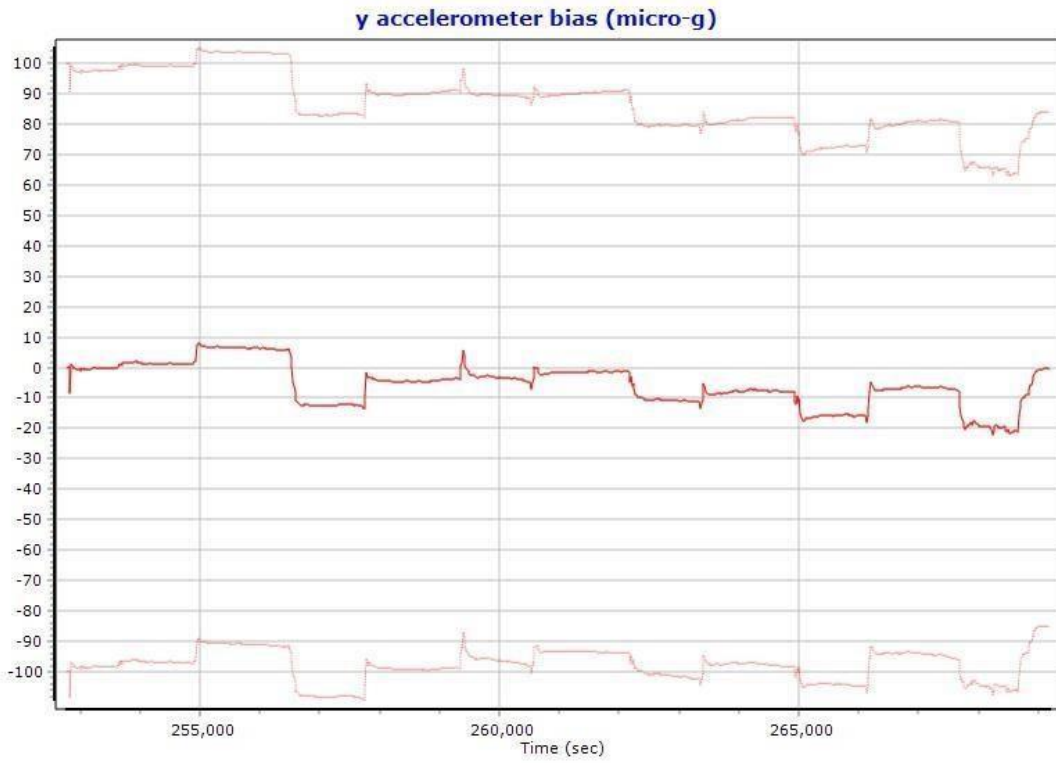
**CORS Base Stations**

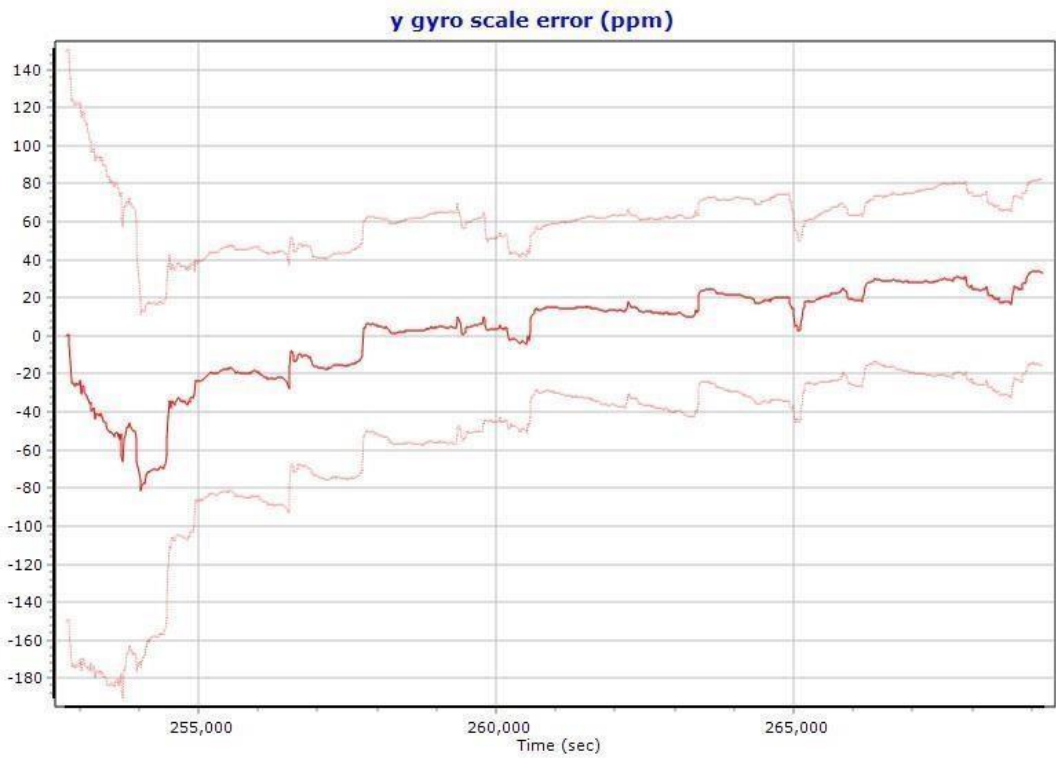
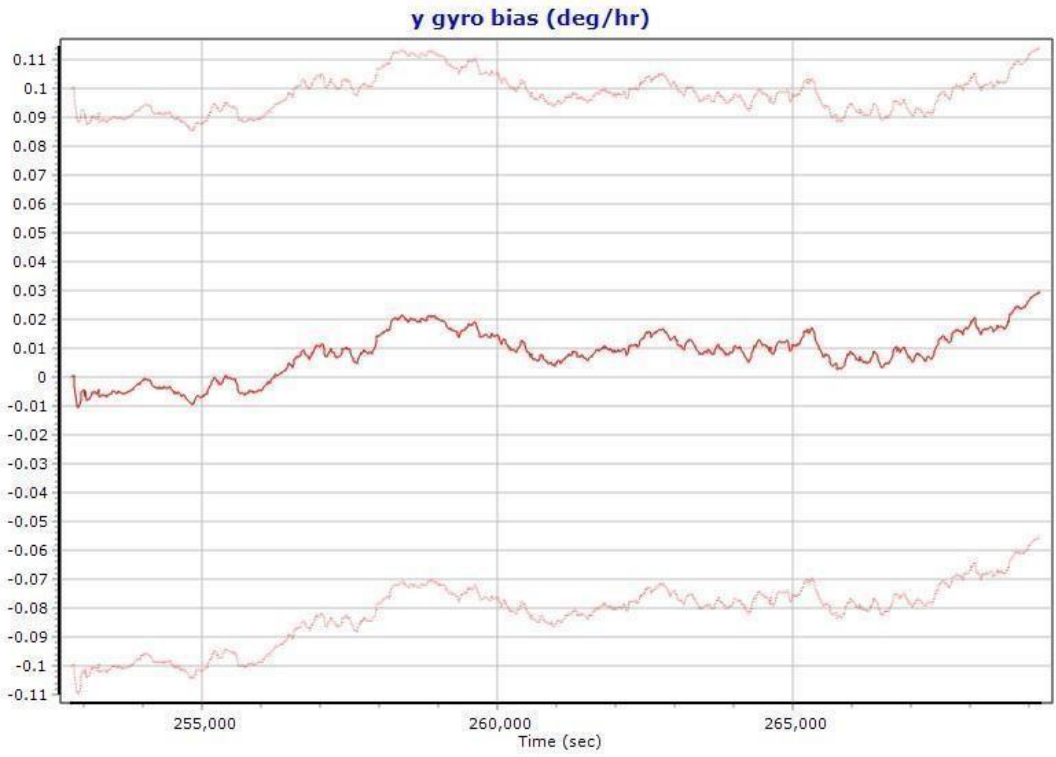
Station	Original			Adjusted		
TXTU	N34°32'01.43593"	W101°44'21.67571"	1034.841	N34°32'01.43619"	W101°44'21.67587"	1034.855
TXSL	N34°28'26.70827"	W101°18'50.73006"	975.716	N34°28'26.70806"	W101°18'50.73001"	975.731
TXP1	N33°10'57.08880"	W101°22'47.67645"	767.614	N33°10'57.08859"	W101°22'47.67679"	767.619
TXMT	N34°00'42.06253"	W100°49'57.89018"	707.923	N34°00'42.06228"	W100°49'57.89038"	707.933

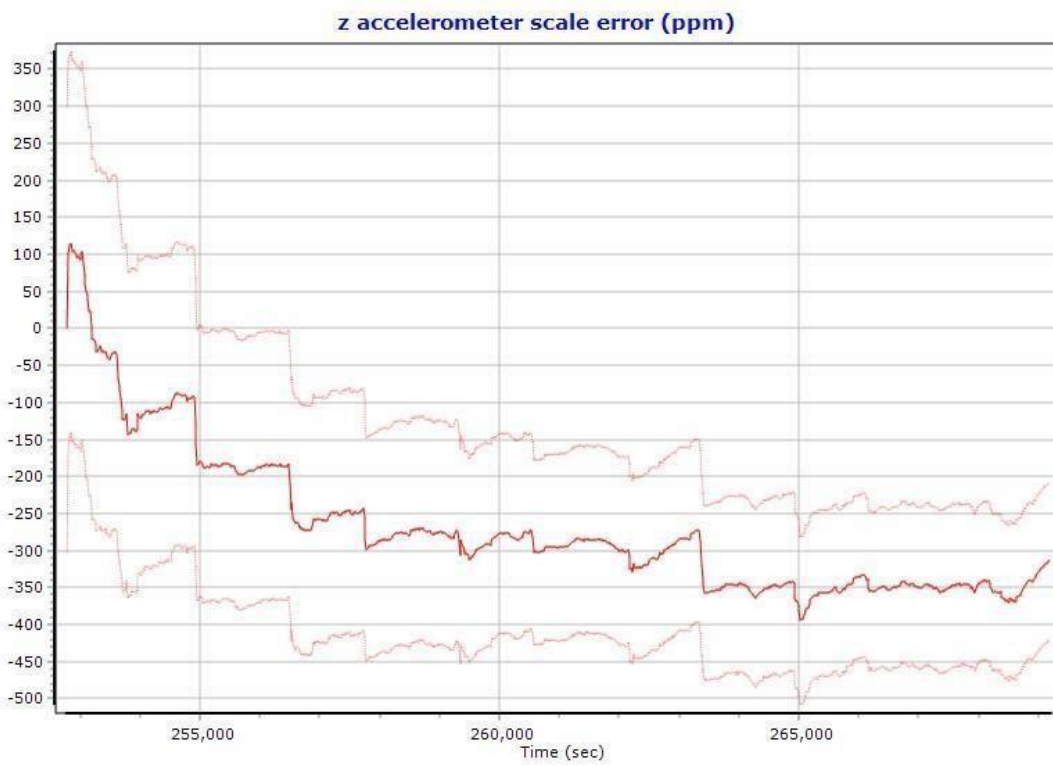
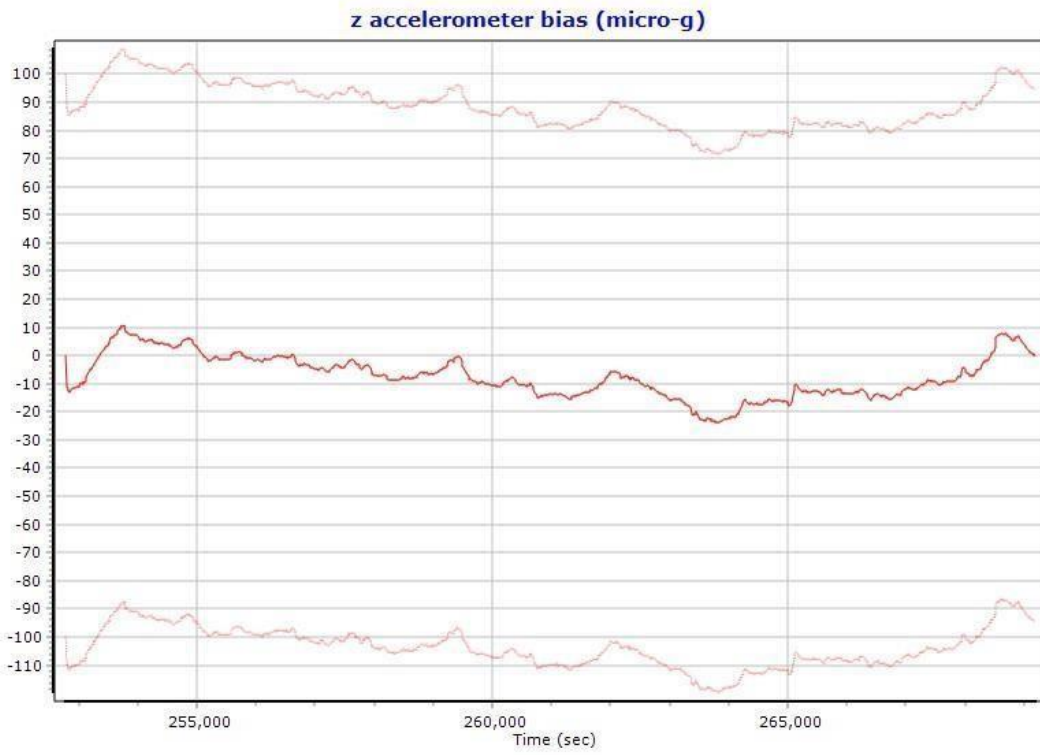
TXM1	N33°44'16.18559"	W102°45'34.86058"	1125.573	N33°44'16.18529"	W102°45'34.86089"	1125.576
TXLU	N33°32'07.50646"	W101°50'34.20553"	956.023	N33°32'07.50646"	W101°50'34.20553"	956.023
TXL1	N33°56'18.24260"	W102°20'58.31949"	1071.624	N33°56'18.24224"	W102°20'58.31981"	1071.640



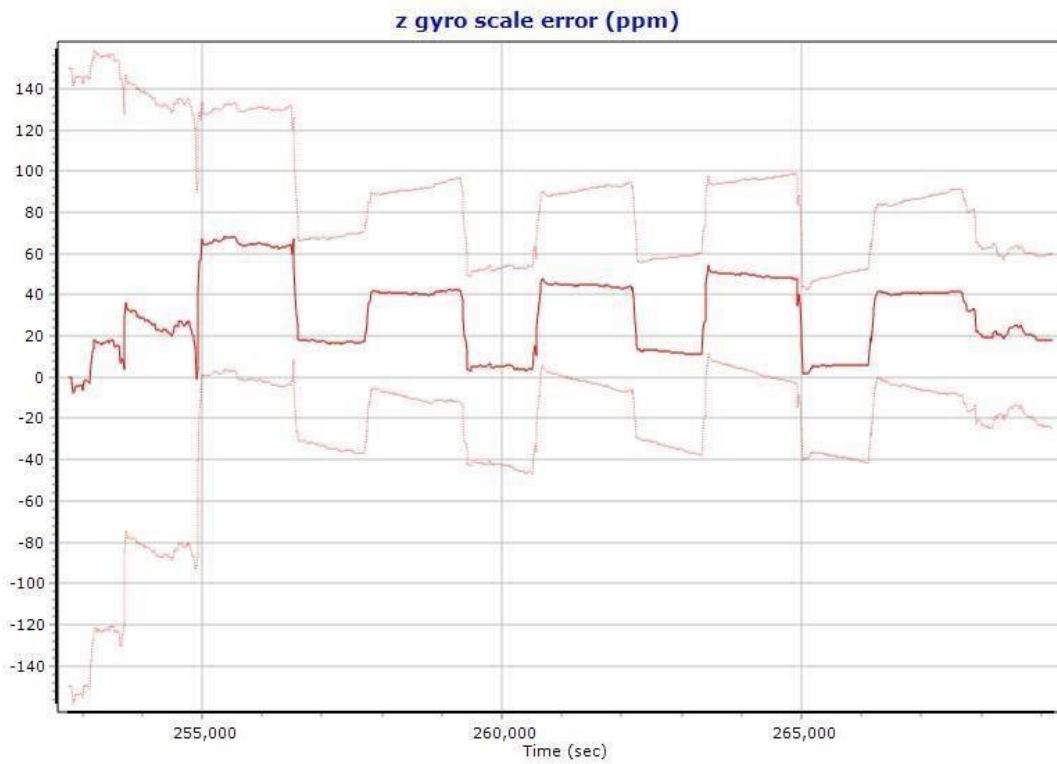
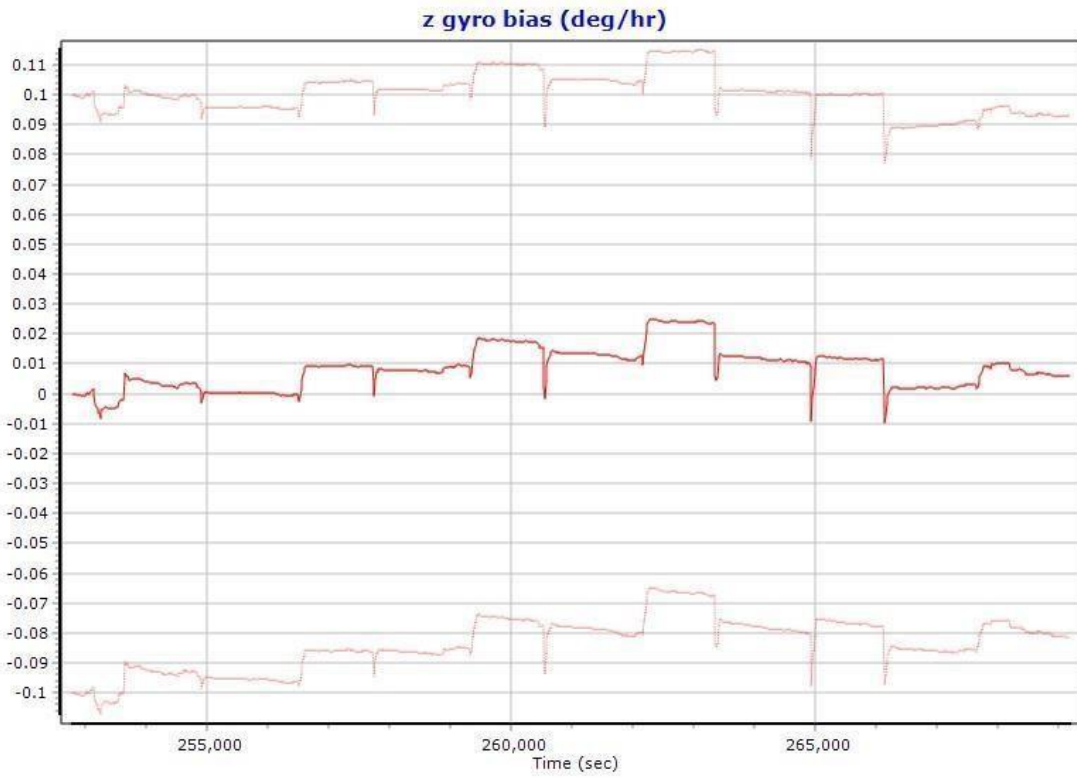




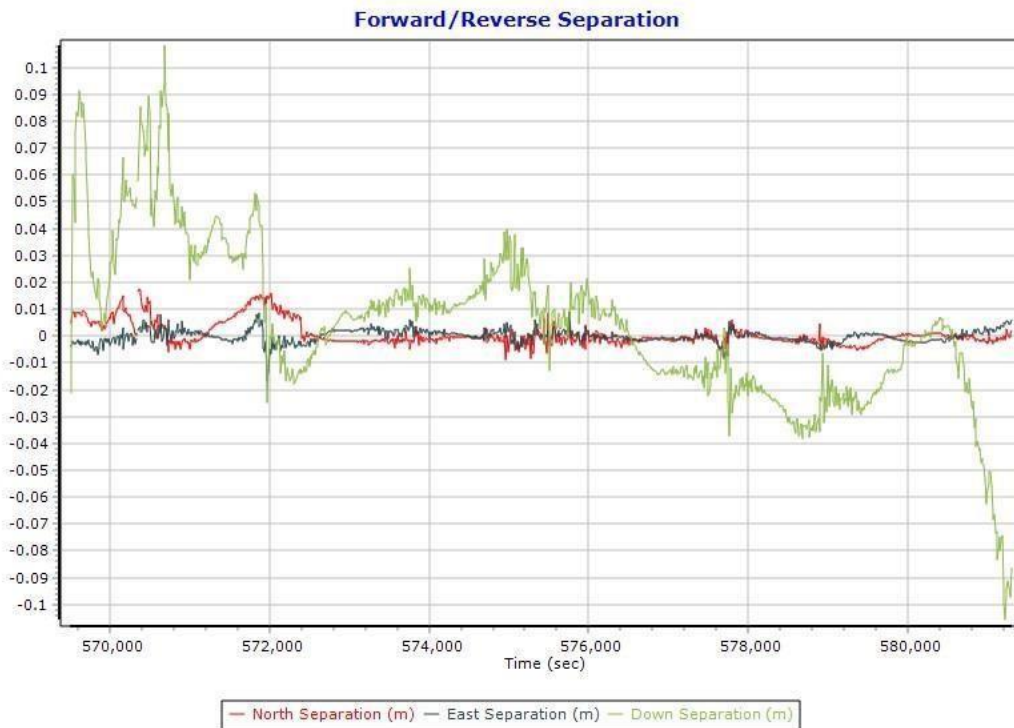
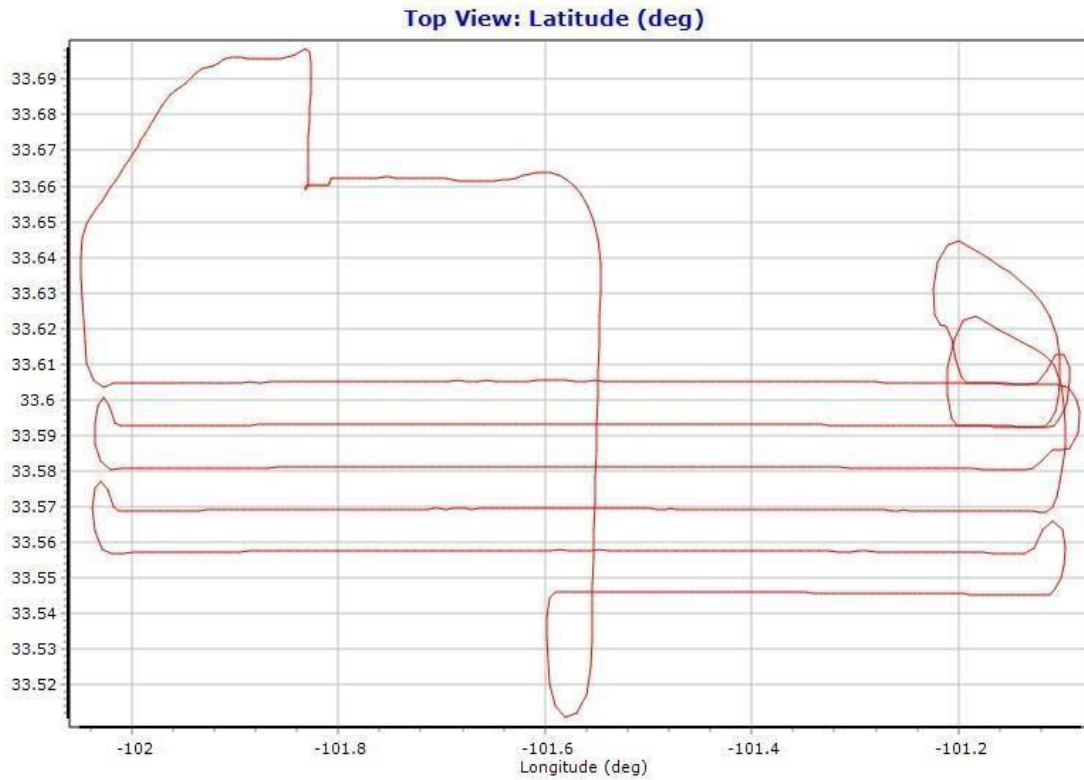


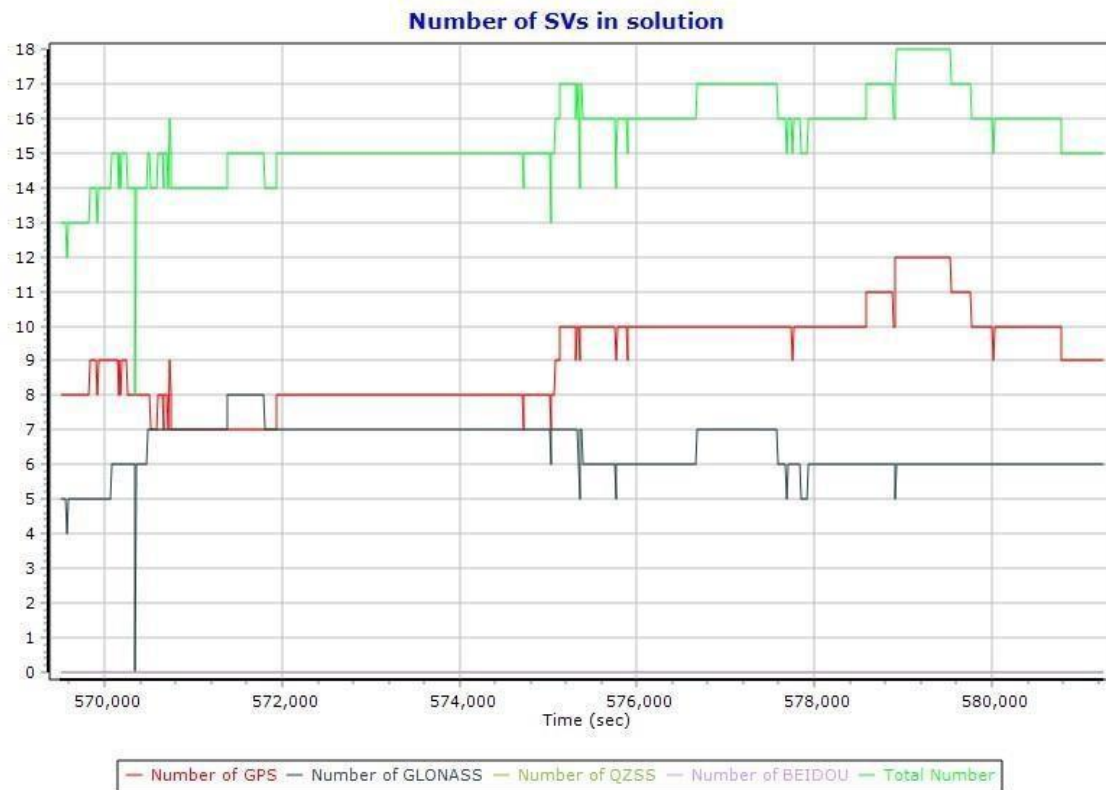
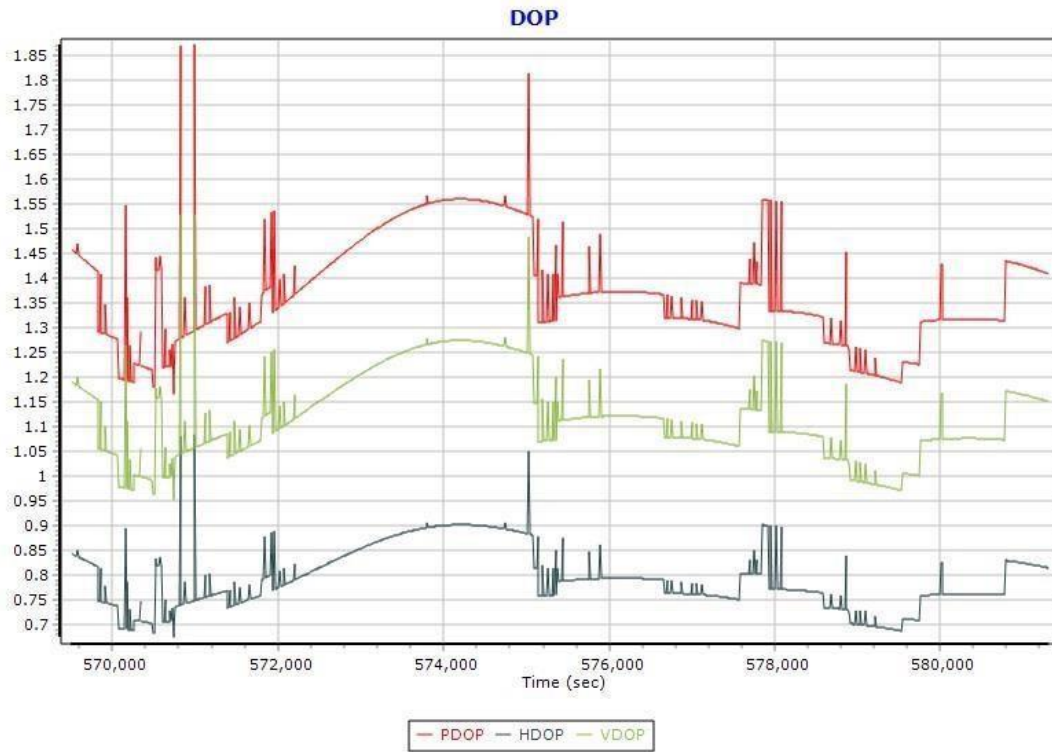






## FEBRUARY 24, 2018





## Processing Summary Information

Program: POSPac MMS  
Version: 8.1.6388.30062  
Project: \\sa\data\riegl\18047\20180224\_TX

Solution Type: IN-Fusion SmartBase

Fixed: 11774	(99.99%)
Float: 0	(0.00%)
No Solution: 1	(0.01%)

Number of Epochs:

Total in RAW file: 11830  
No processed position: 56

Fwd/Rev Separation RMS Values (m):

North: 0.004  
East: 0.002  
Height: 0.030

Fwd/Rev Sep. RMS for 25%-75% weighting (m): 5914 occurrences

North: 0.002  
East: 0.002  
Height: 0.015

Quality Number Percentages:

Q 0: 100.0 %

Position Standard Deviation Percentages (%):

0.00 - 0.10 m: 100  
0.10 - 0.30 m: 0  
0.30 - 1.00 m: 0  
1.00 - 5.00 m: 0  
5.00 m + over: 0

Percentages of epochs with DD\_DOP over 10.00: 0 %

DOP over Tol: 1.37%

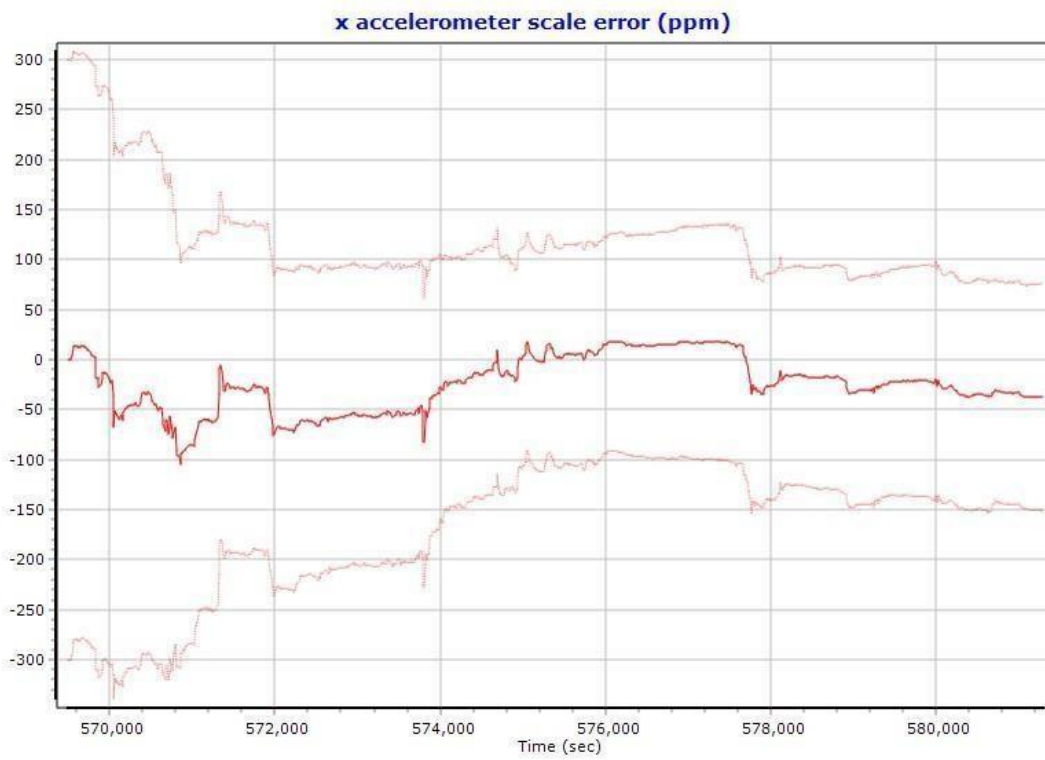
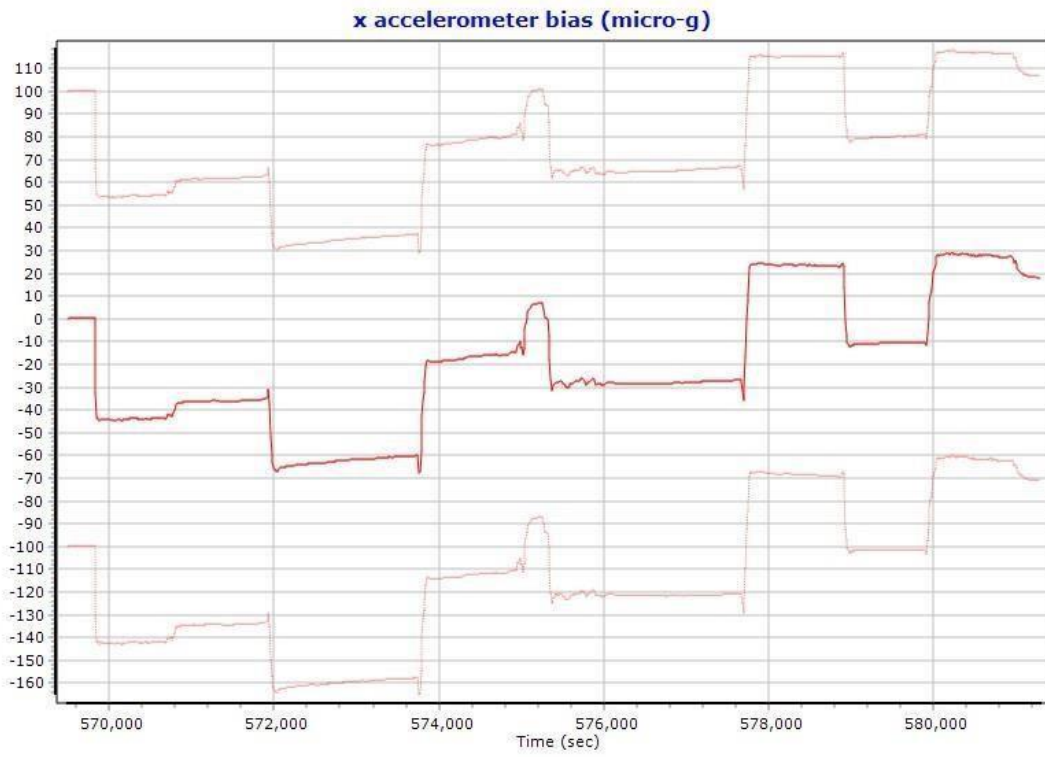
Baseline Distances (km):

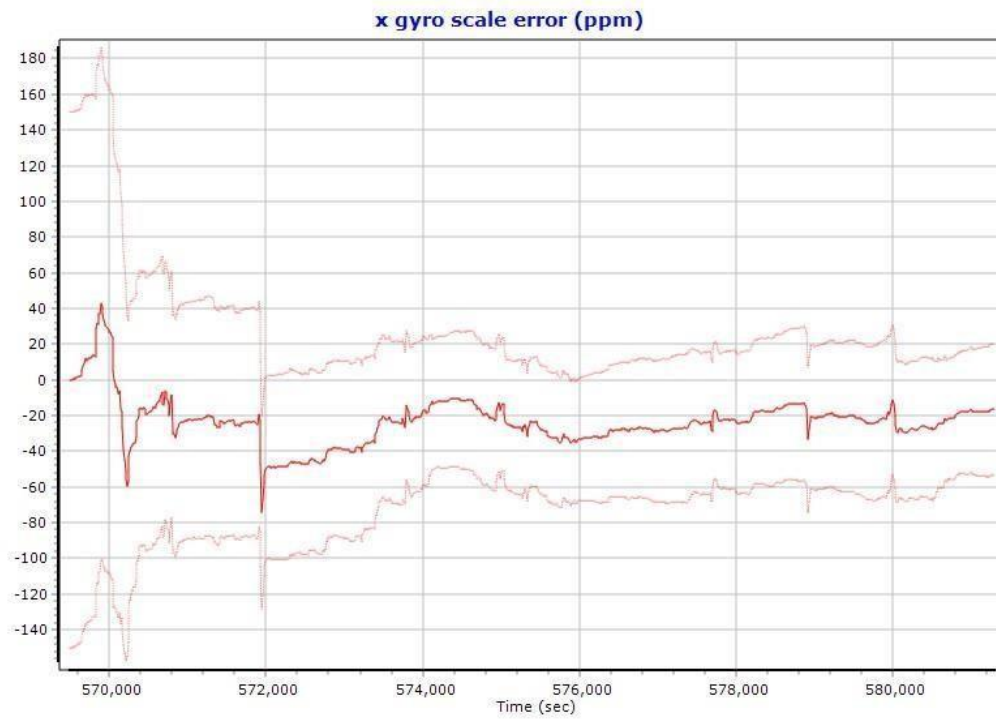
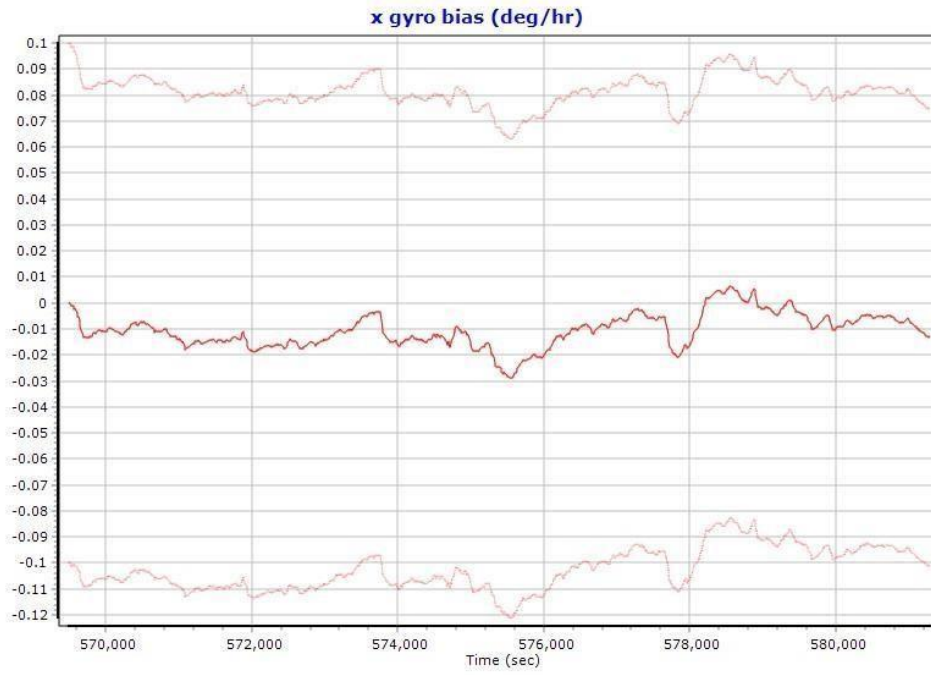
Maximum: 45.07  
Minimum: 0.48  
Average: 24.09  
First Epoch: 25.67  
Last Epoch: 25.67

**CORS Base Stations**

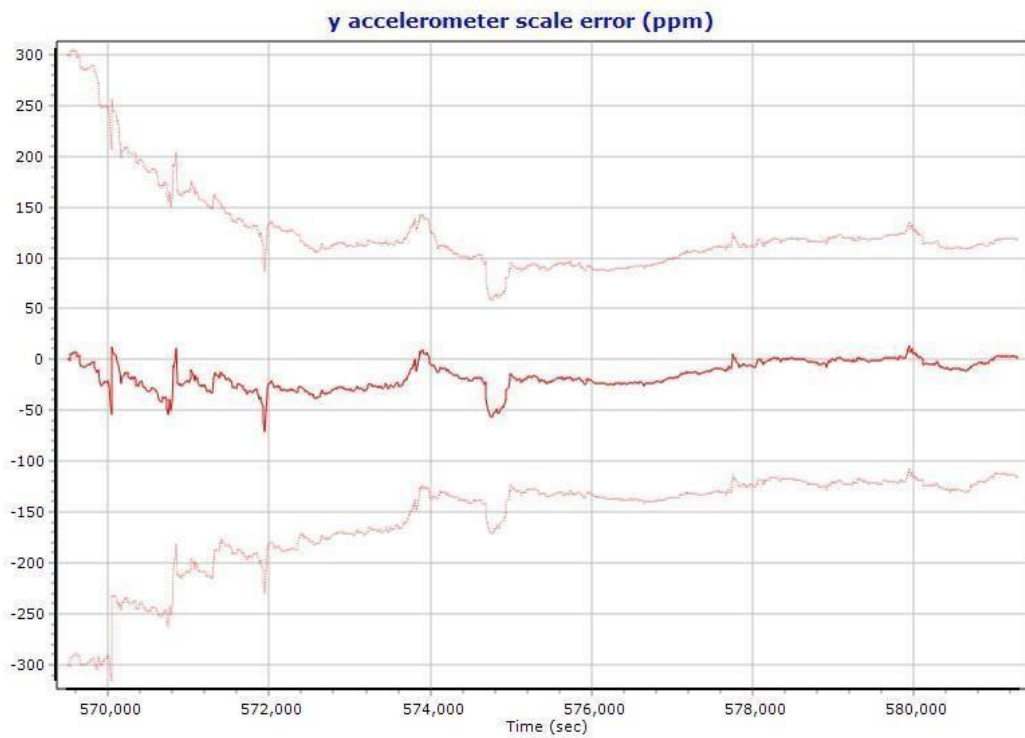
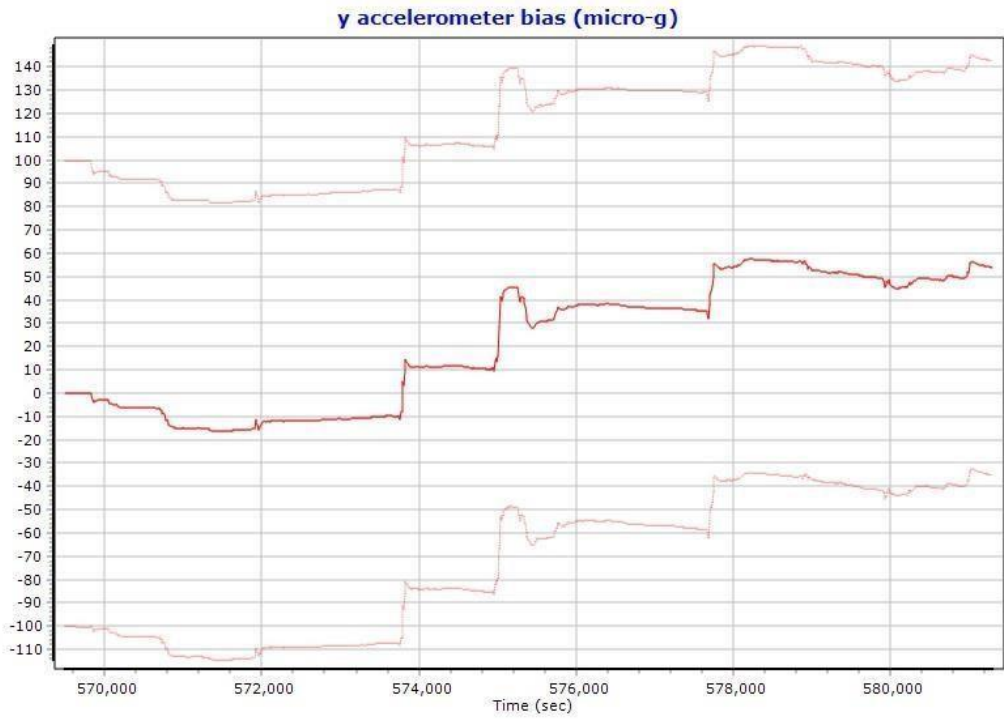
Station	Original			Adjusted		
TXLU	N33°32'07.50646"	W101°50'34.20554"	956.023	N33°32'07.50646"	W101°50'34.20554"	956.023
TXPD	N34°00'44.30418"	W100°17'22.65698"	533.170	N34°00'44.30433"	W100°17'22.65730"	533.181
TXP1	N33°10'57.08880"	W101°22'47.67645"	767.614	N33°10'57.08852"	W101°22'47.67667"	767.608
TXMT	N34°00'42.06253"	W100°49'57.89018"	707.923	N34°00'42.06220"	W100°49'57.89024"	707.935
TXLA	N32°45'40.91674"	W101°56'38.21352"	891.645	N32°45'40.91660"	W101°56'38.21349"	891.645

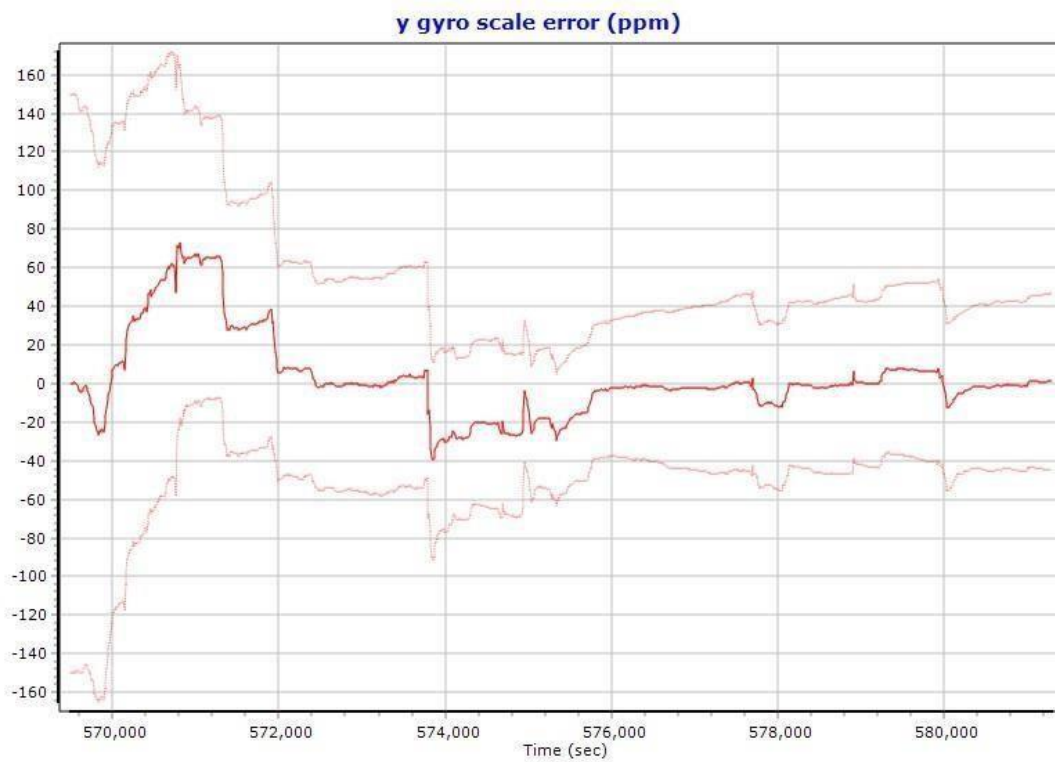
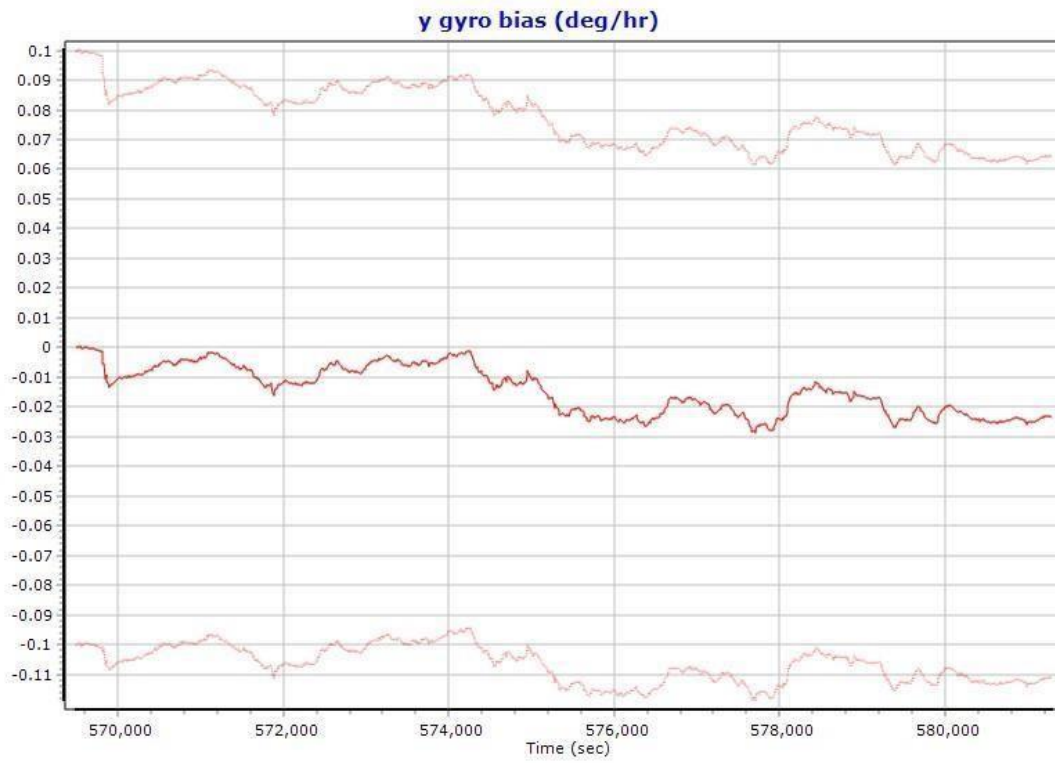
TXL1	N33°56'18.24260"	W102°20'58.31950"	1071.624	N33°56'18.24215"	W102°20'58.31977"	1071.636
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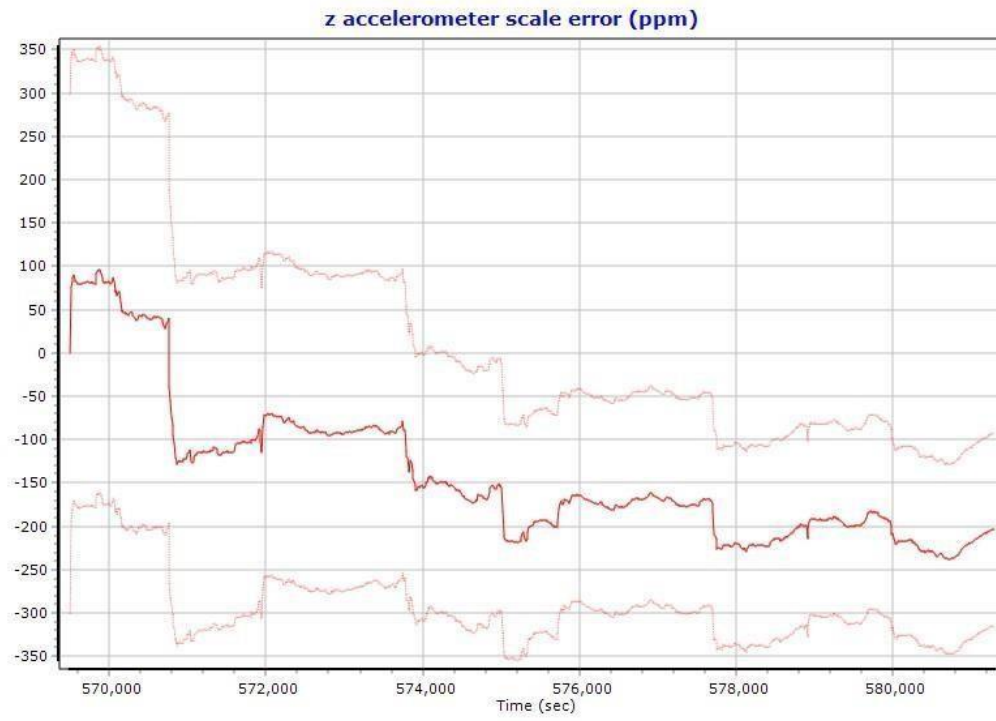
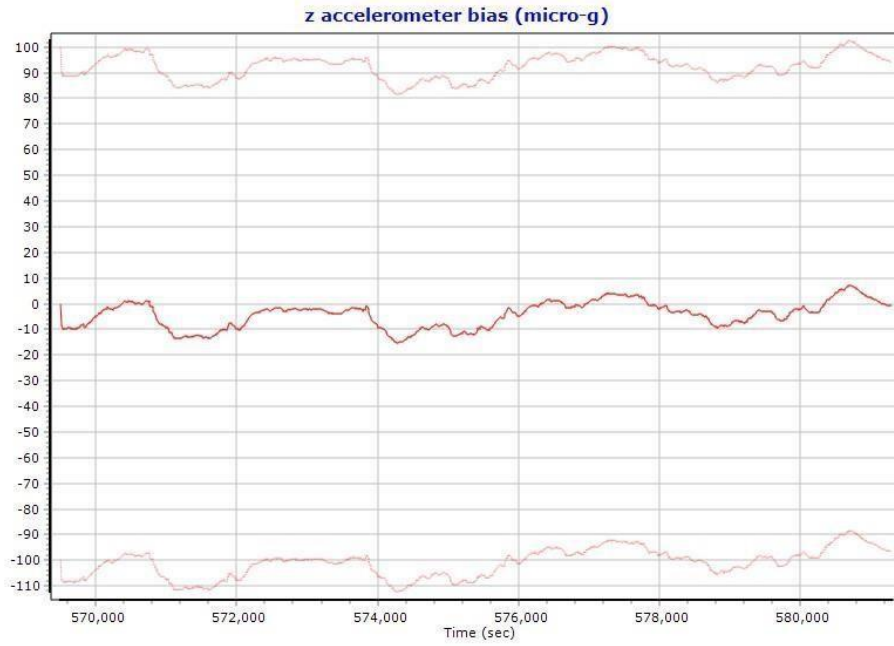


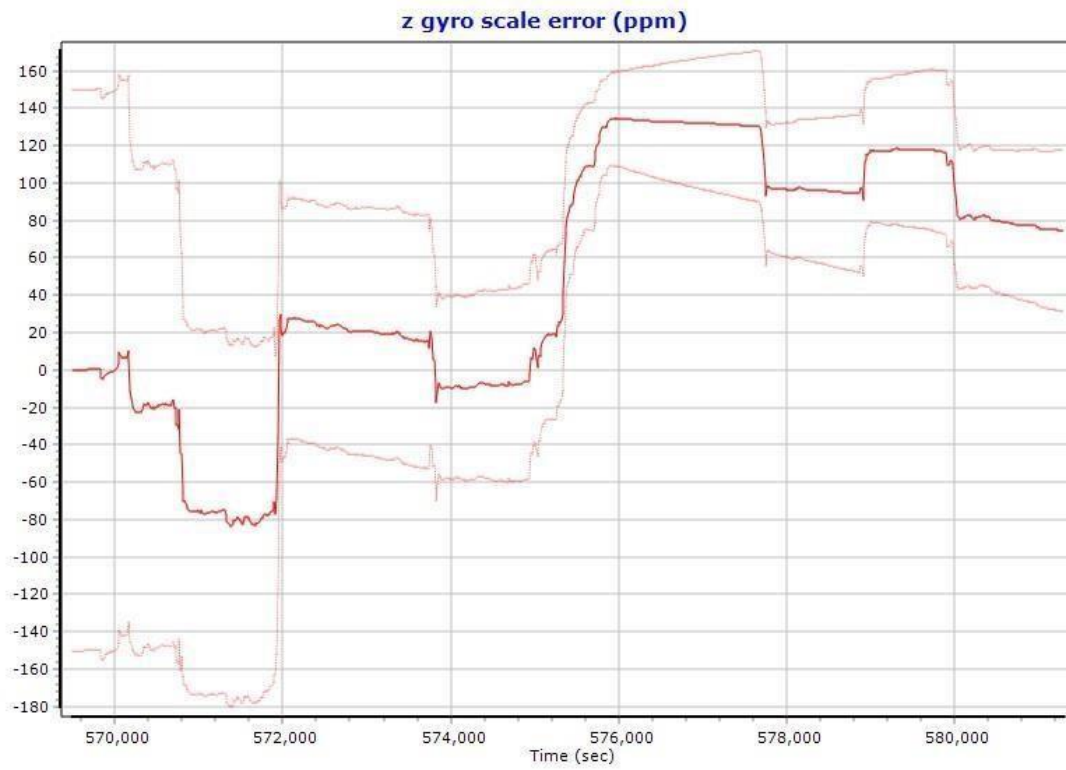
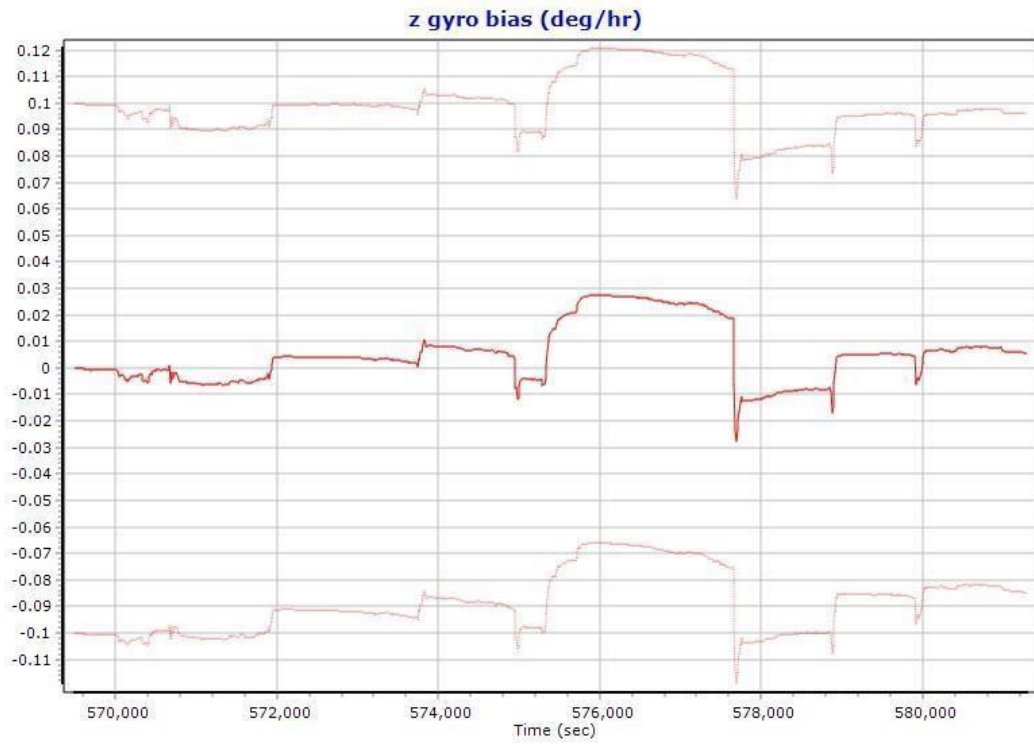




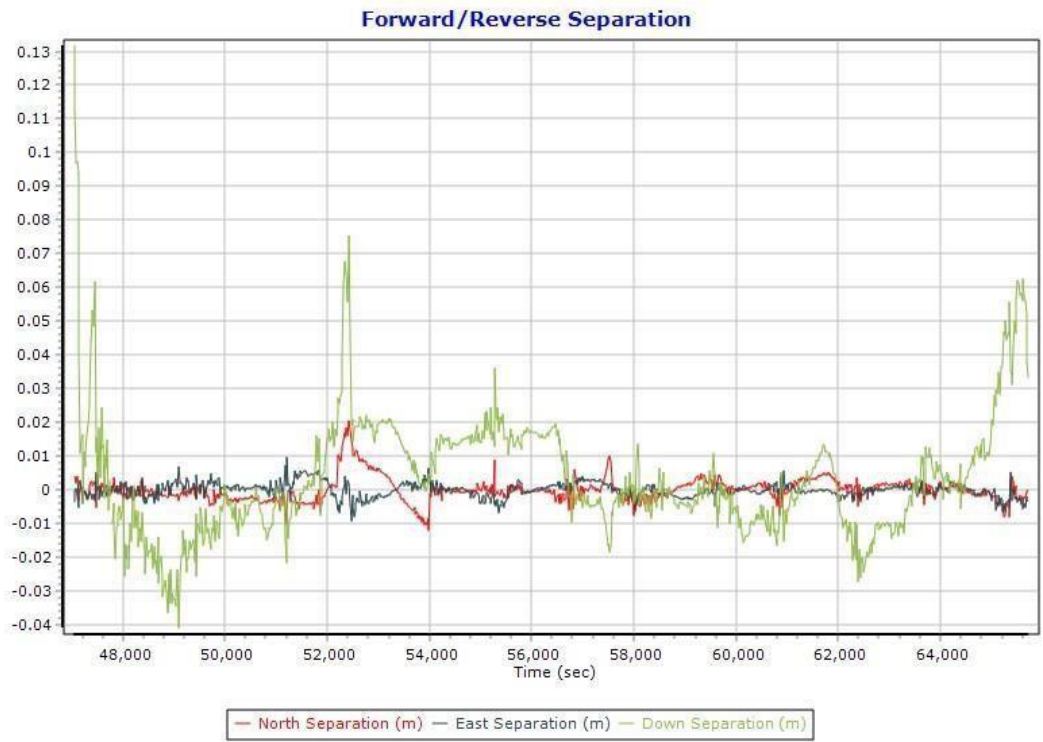
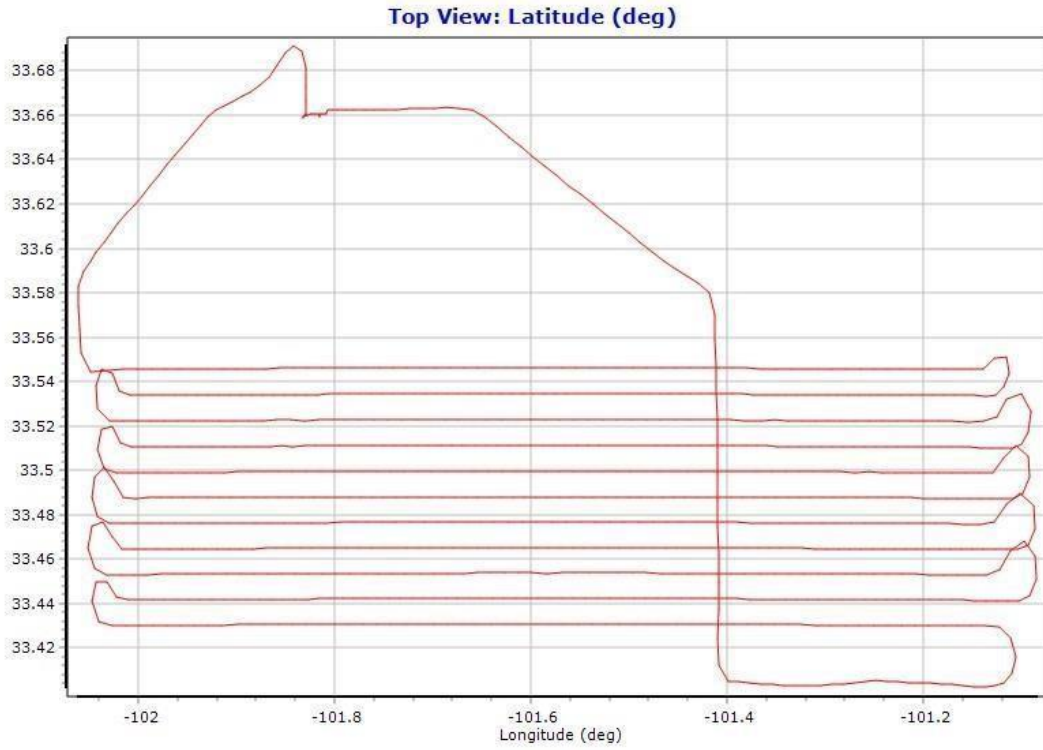




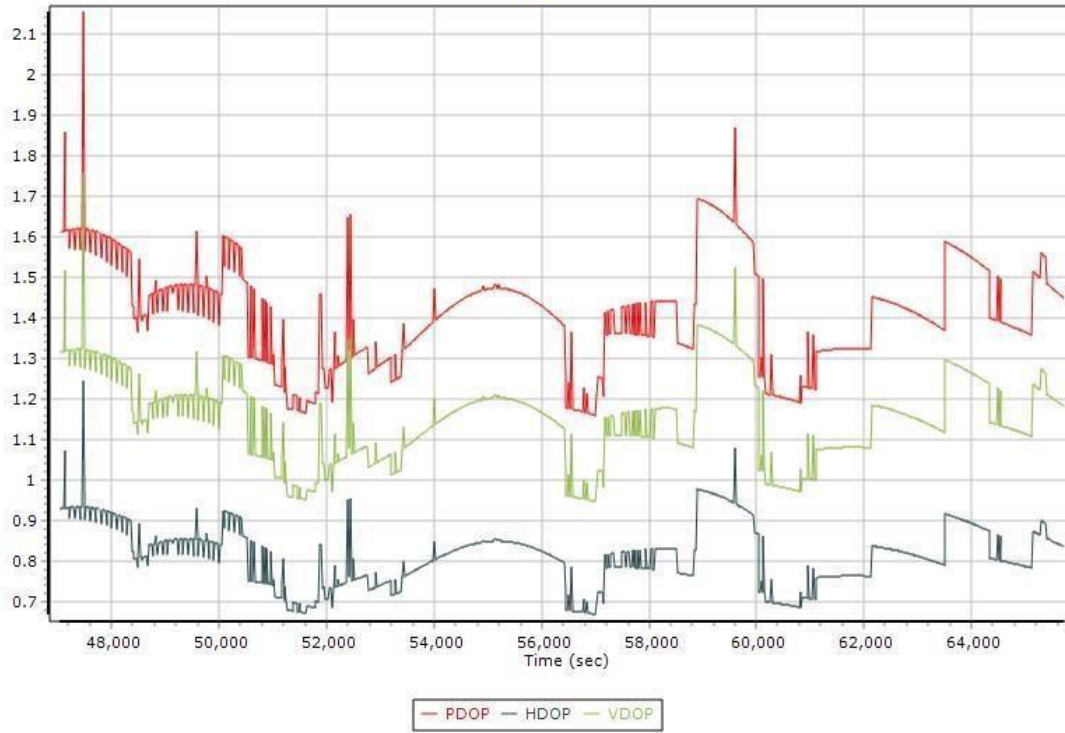




## FEBRUARY 25, 2018 MISSION 1



DOP



Number of SVs in solution



## Processing Summary Information

Program: POSPac MMS  
Version: 8.1.6388.30062  
Project: \\sa\data\riegl\18047\20180225\_TX\_A

Solution Type: IN-Fusion SmartBase

Fixed: 18675	(99.99%)
Float: 0	(0.00%)
No Solution: 1	(0.01%)

Number of Epochs:

Total in RAW file: 18709  
No processed position: 34

Fwd/Rev Separation RMS Values (m):

North: 0.004  
East: 0.003  
Height: 0.021

Fwd/Rev Sep. RMS for 25%-75% weighting (m): 9354 occurrences

North: 0.004  
East: 0.002  
Height: 0.015

Quality Number Percentages:

Q 0: 100.0 %

Position Standard Deviation Percentages (%):

0.00 - 0.10 m: 100  
0.10 - 0.30 m: 0  
0.30 - 1.00 m: 0  
1.00 - 5.00 m: 0  
5.00 m + over: 0

Percentages of epochs with DD\_DOP over 10.00: 0 %

DOP over Tol: 1.41%

Baseline Distances (km):

Maximum: 47.58  
Minimum: 0.26  
Average: 24.33  
First Epoch: 27.96  
Last Epoch: 27.94

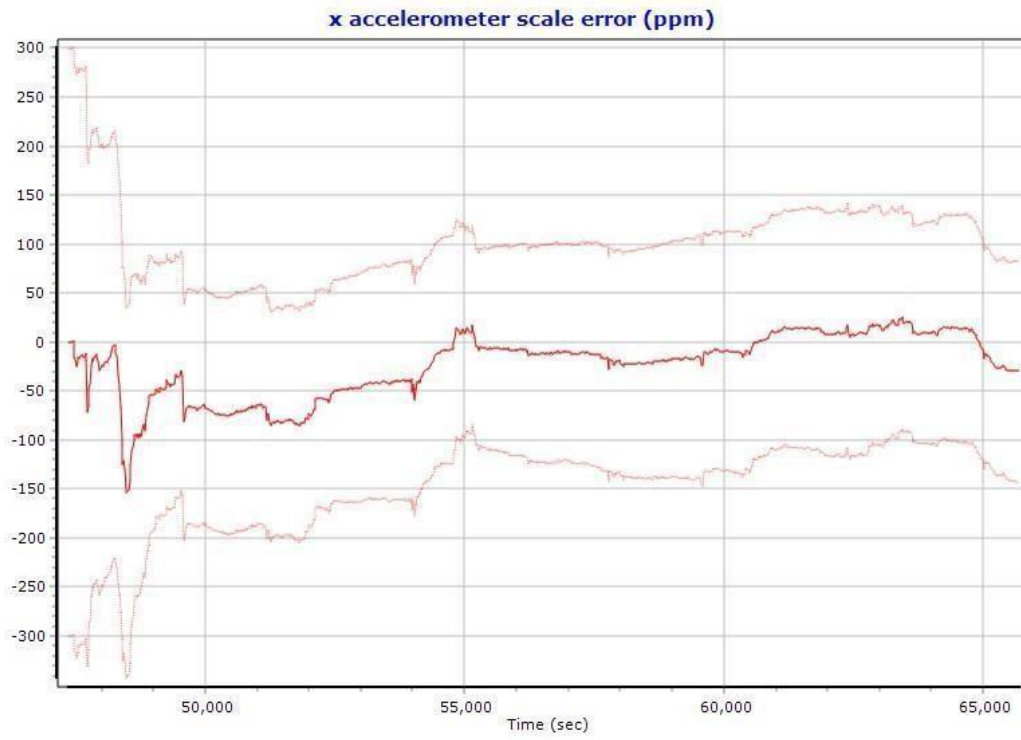
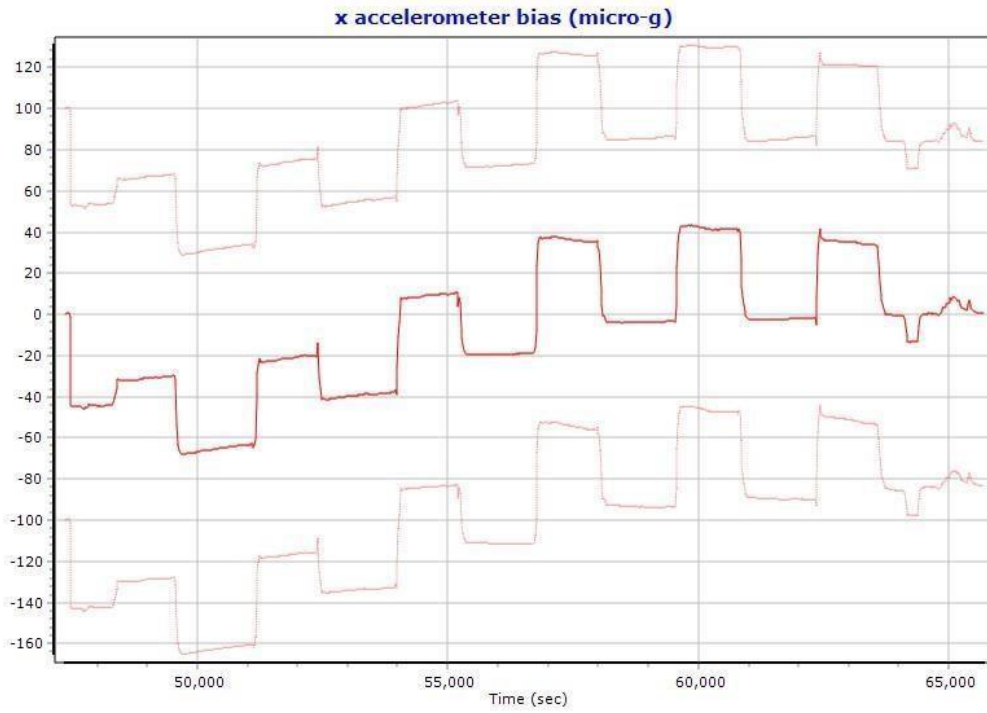
**CORS Base Stations**

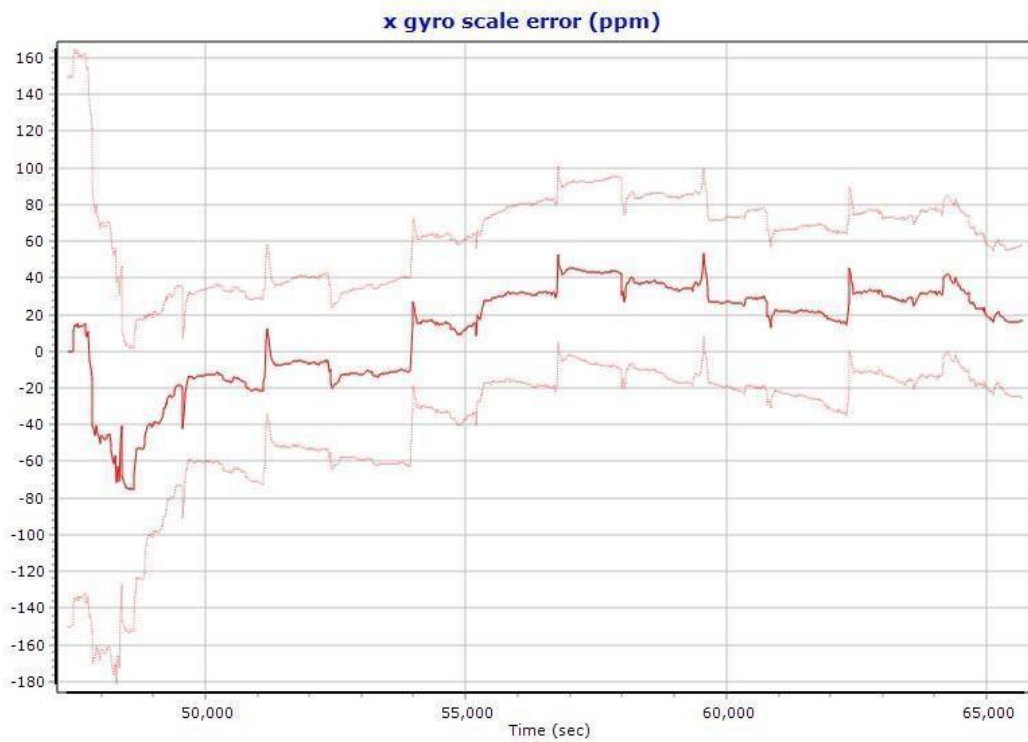
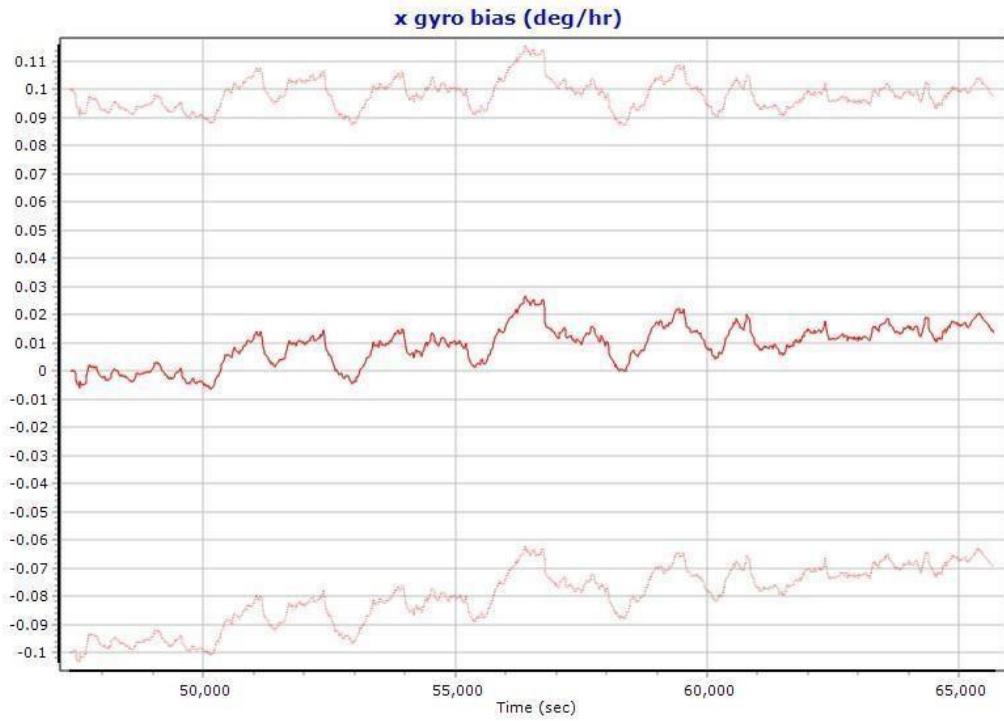
Station	Original			Adjusted		
txto	N33°10'49.96109"	W101°47'42.25871"	921.376	N33°10'49.97663"	W101°47'42.30191"	920.282
txra	N33°40'19.86637"	W101°23'14.39843"	925.300	N33°40'19.88231"	W101°23'14.44154"	924.206
txpw	N34°09'00.03857"	W101°43'23.64569"	1007.155	N34°09'00.05479"	W101°43'23.68925"	1006.097

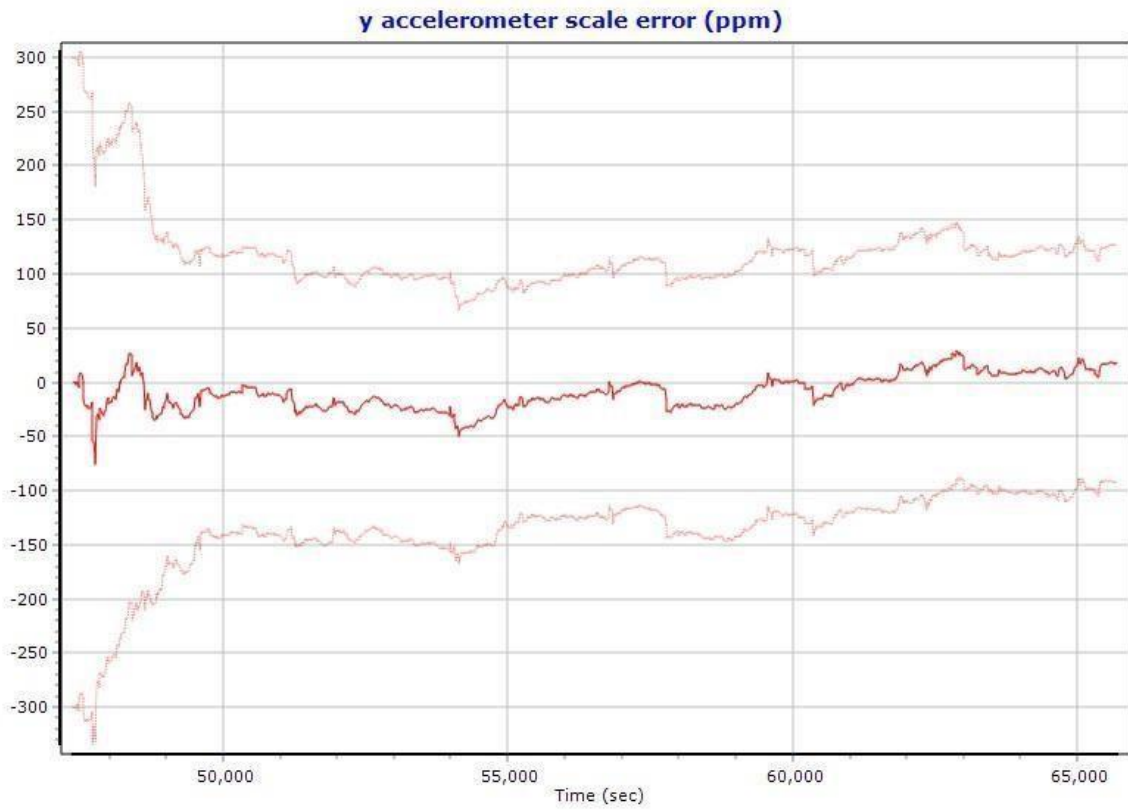
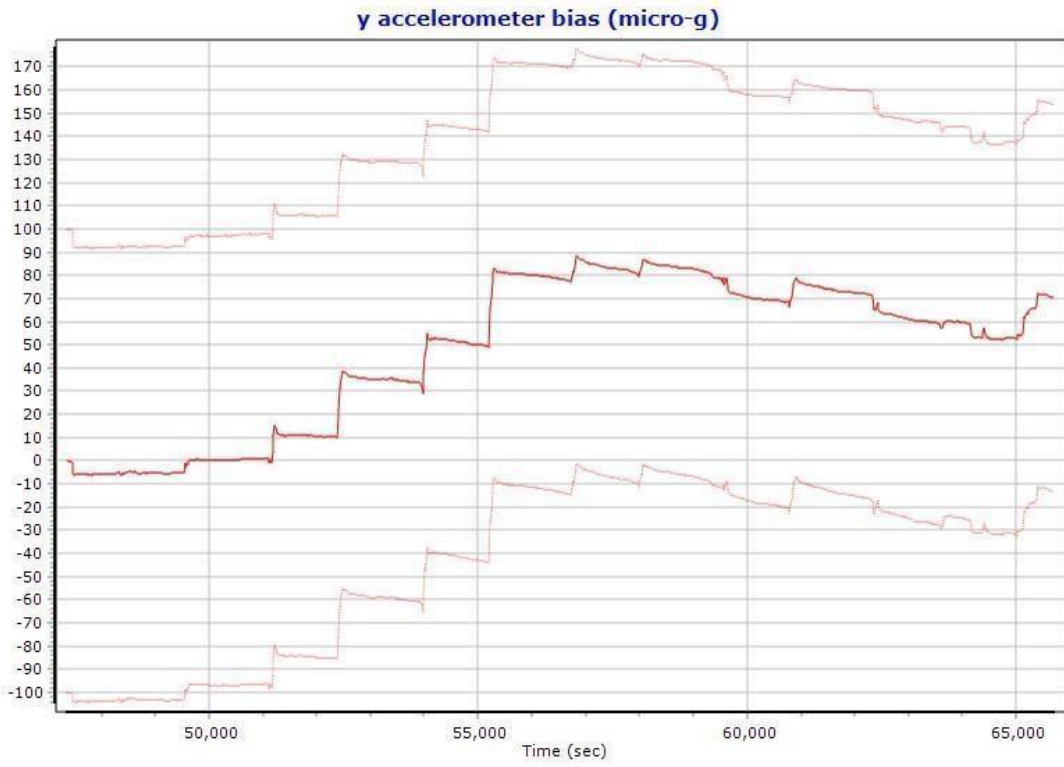


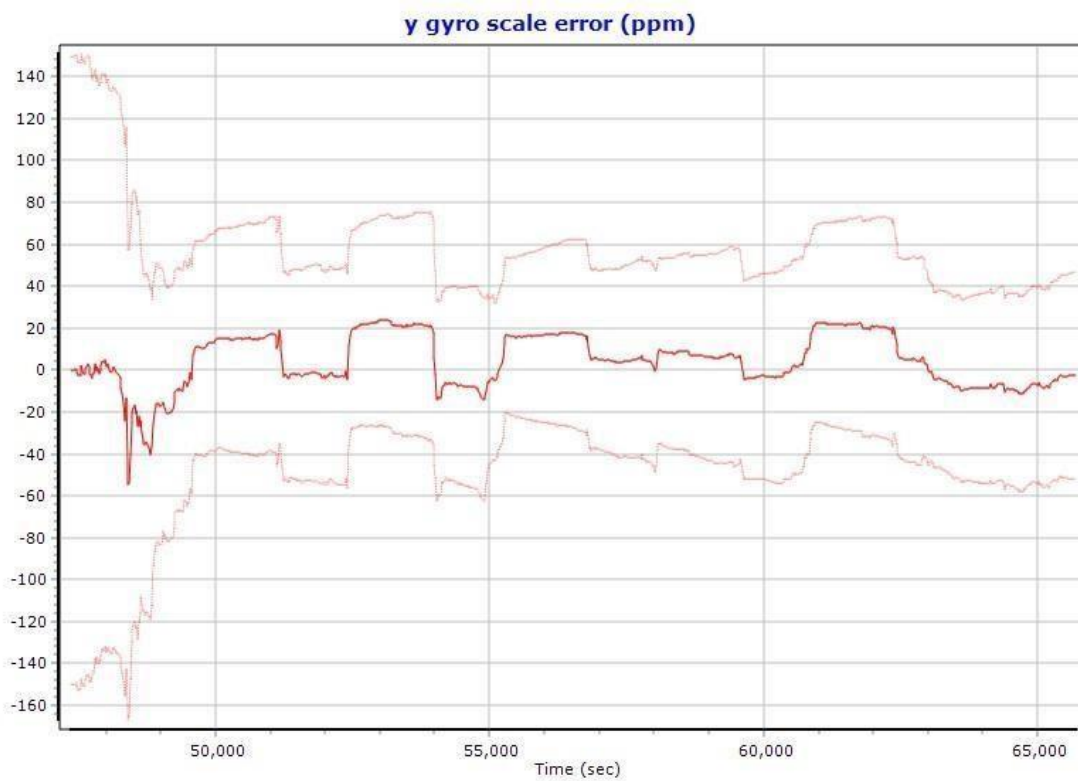
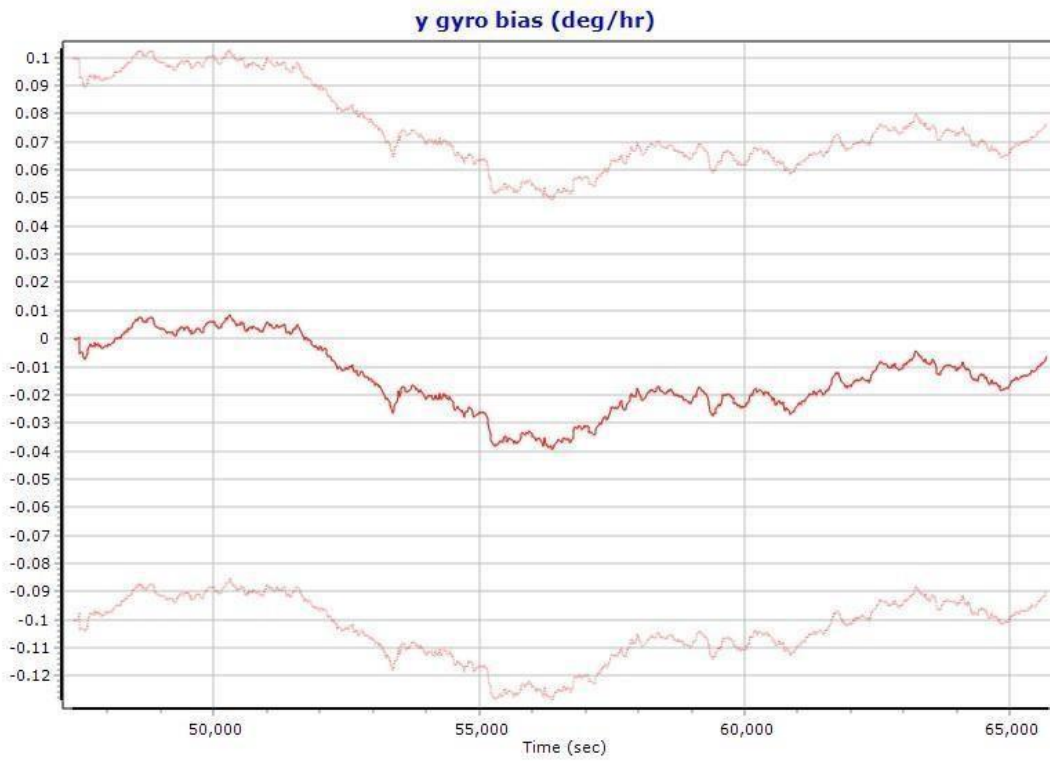
txld	N33°35'39.61067"	W102°20'44.92007"	1053.240	N33°35'39.62624"	W102°20'44.96365"	1052.166
txdk	N33°37'25.18336"	W100°49'48.73780"	763.897	N33°37'25.19953"	W100°49'48.78037"	762.791
txbf	N33°09'55.04178"	W102°16'58.18985"	991.461	N33°09'55.05707"	W102°16'58.23331"	990.369

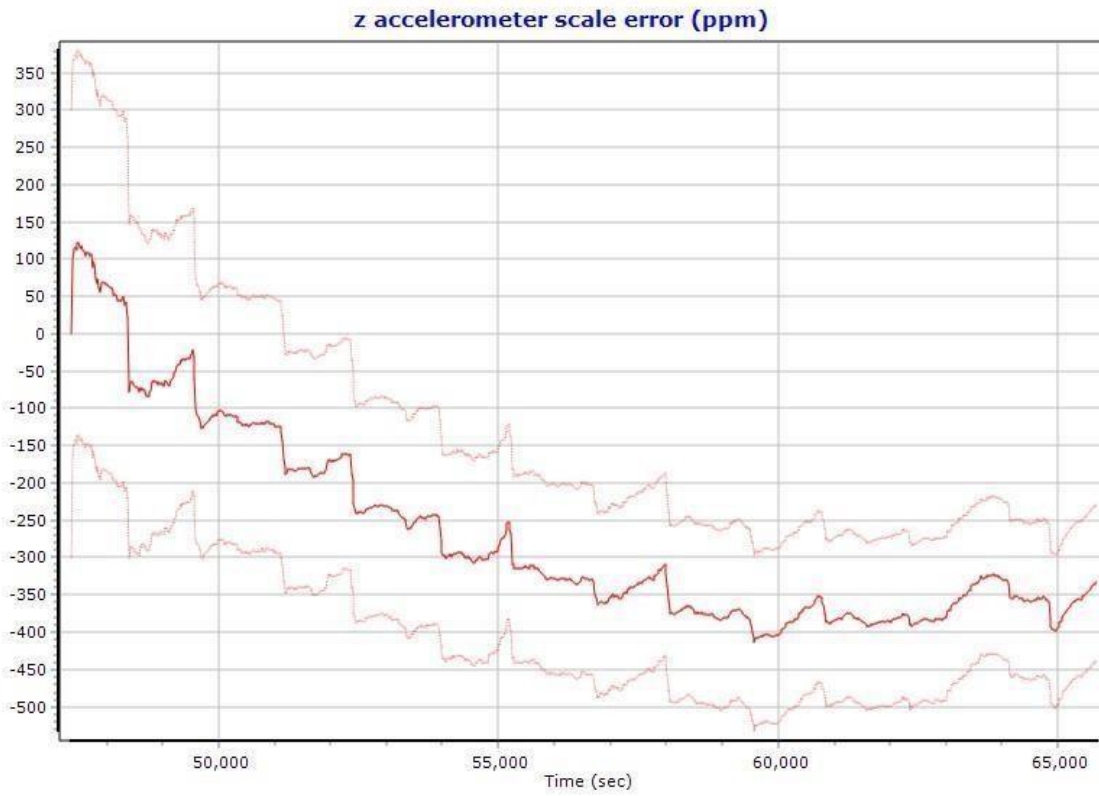
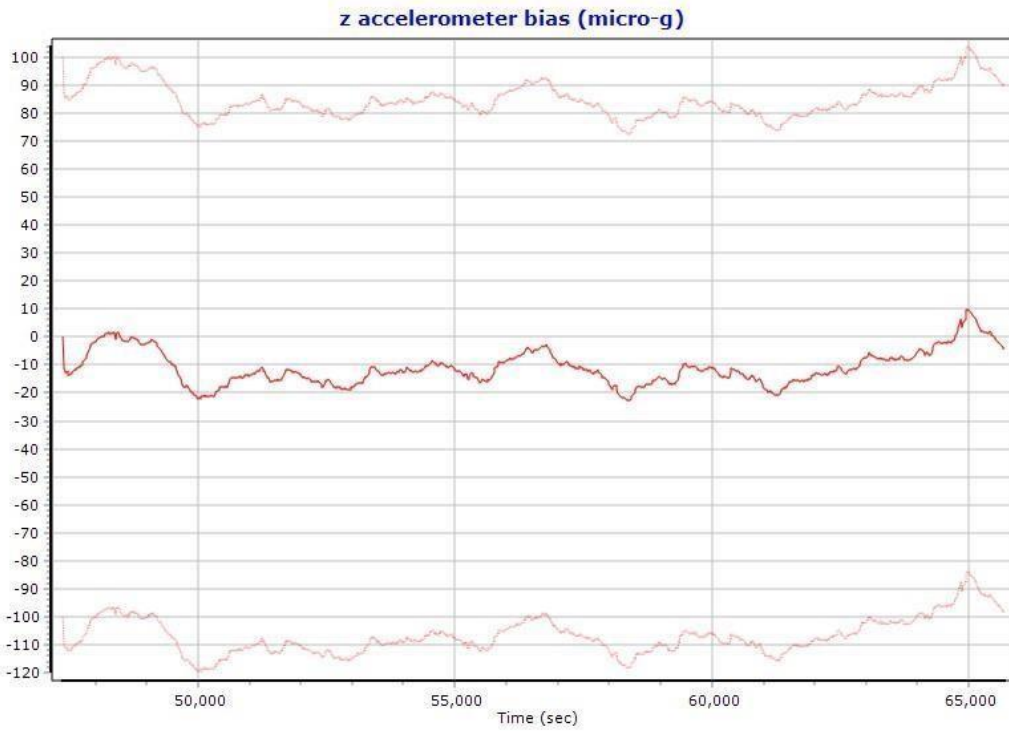
TXP1	N33°10'57.08880"	W101°22'47.67646"	767.614	N33°10'57.08848"	W101°22'47.67677"	767.607
TXMT	N34°00'42.06253"	W100°49'57.89019"	707.923	N34°00'42.06211"	W100°49'57.89033"	707.927
TXLU	N33°32'07.50646"	W101°50'34.20554"	956.023	N33°32'07.50646"	W101°50'34.20554"	956.023
TXLA	N32°45'40.91674"	W101°56'38.21352"	891.645	N32°45'40.91654"	W101°56'38.21372"	891.642
TXL1	N33°56'18.24259"	W102°20'58.31950"	1071.624	N33°56'18.24212"	W102°20'58.31992"	1071.632

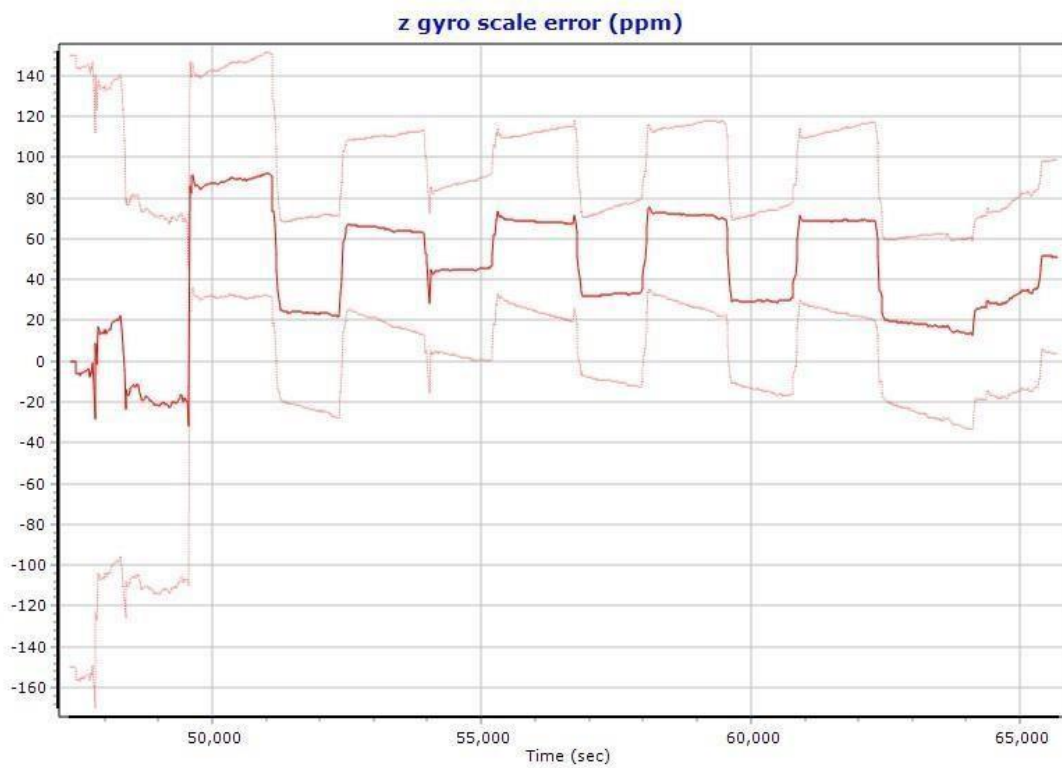
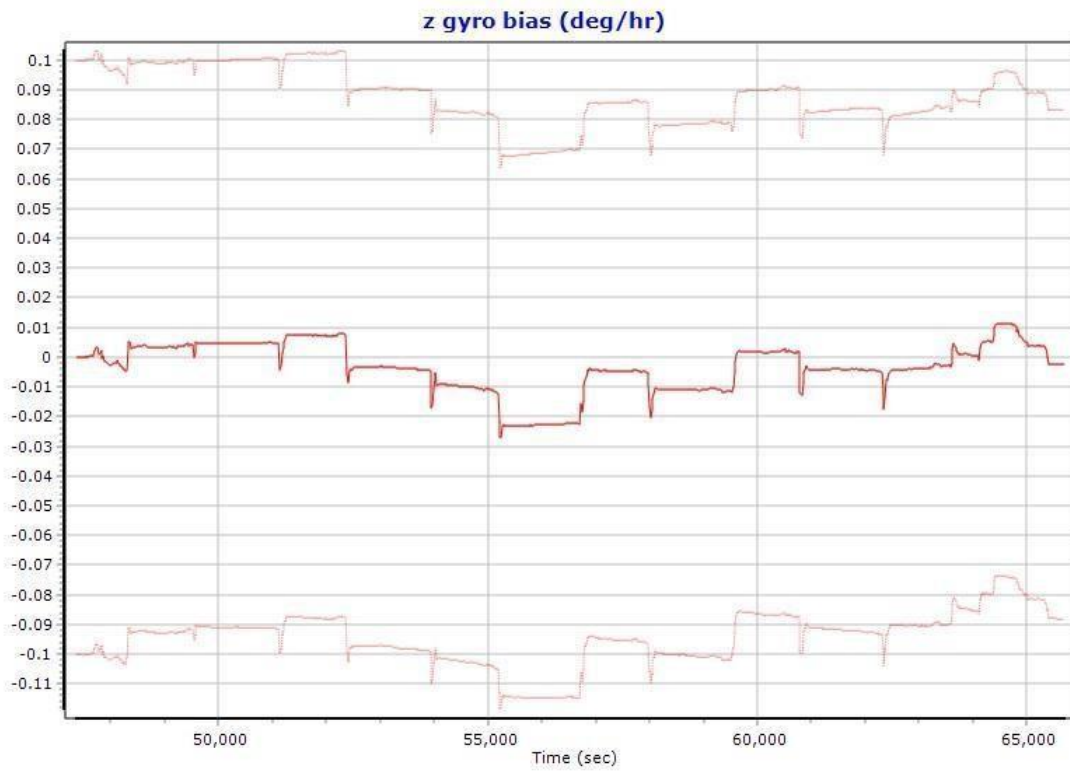










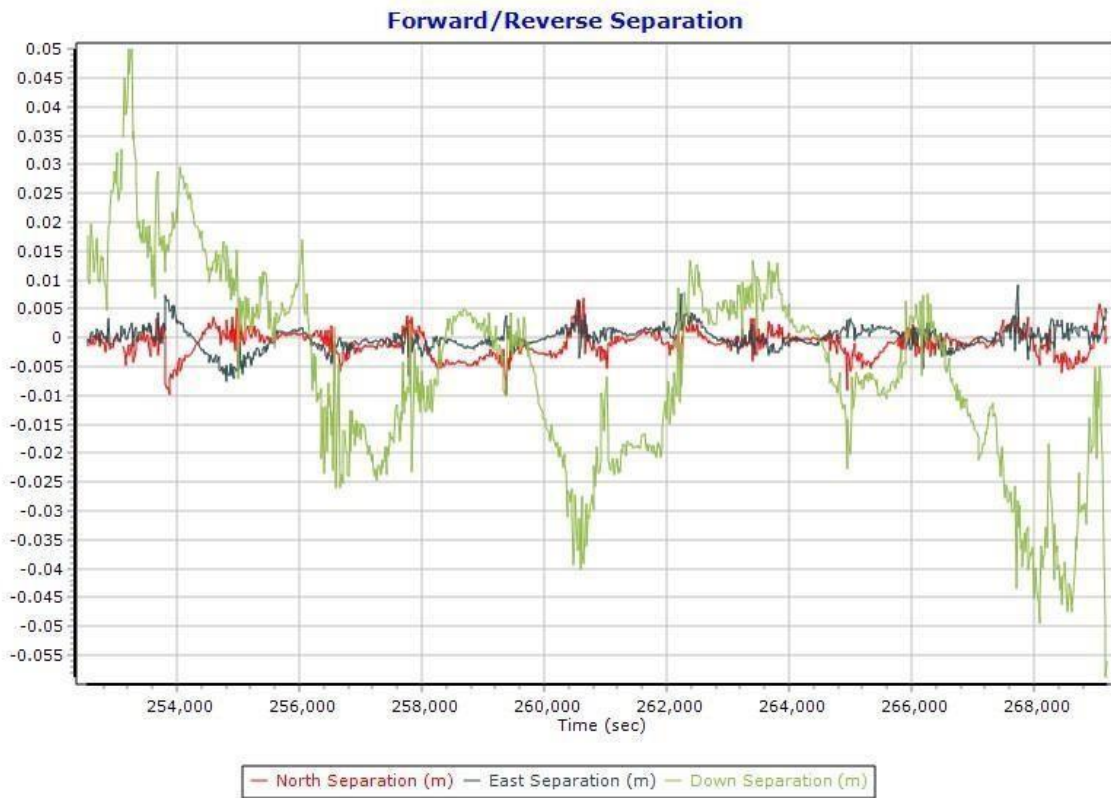
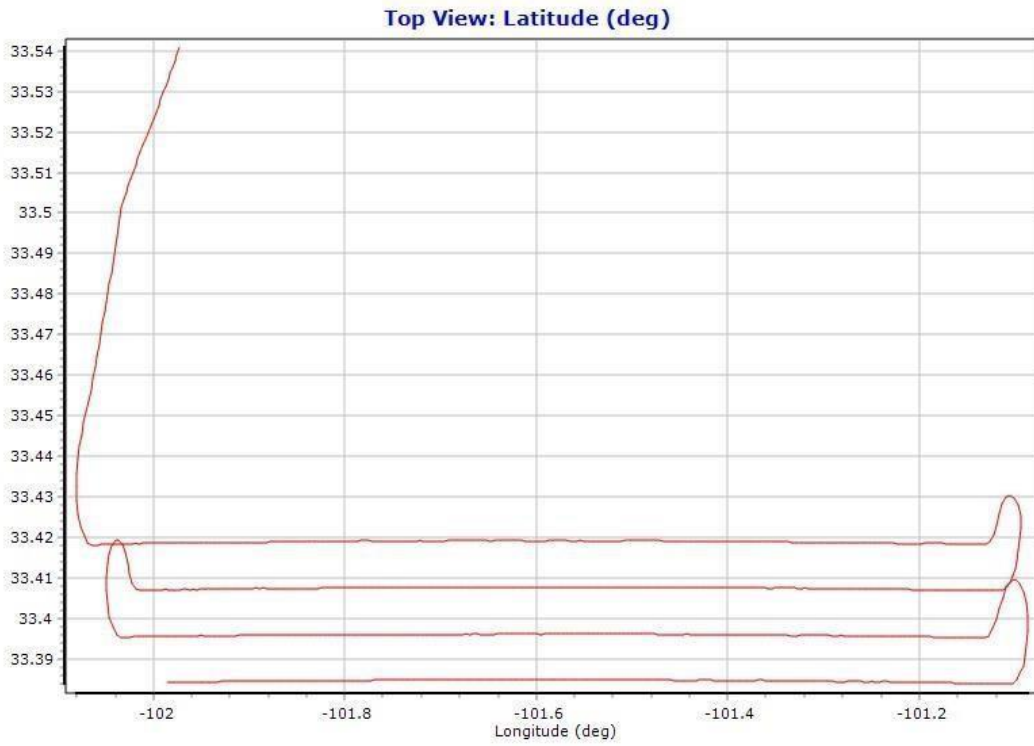


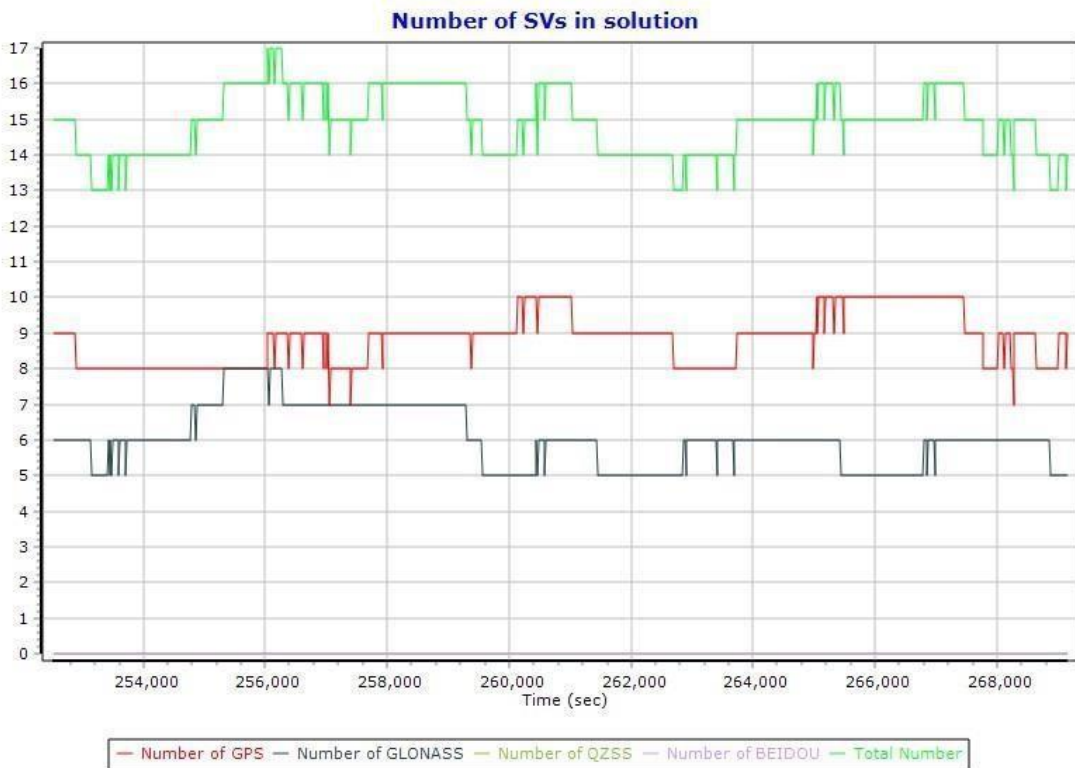
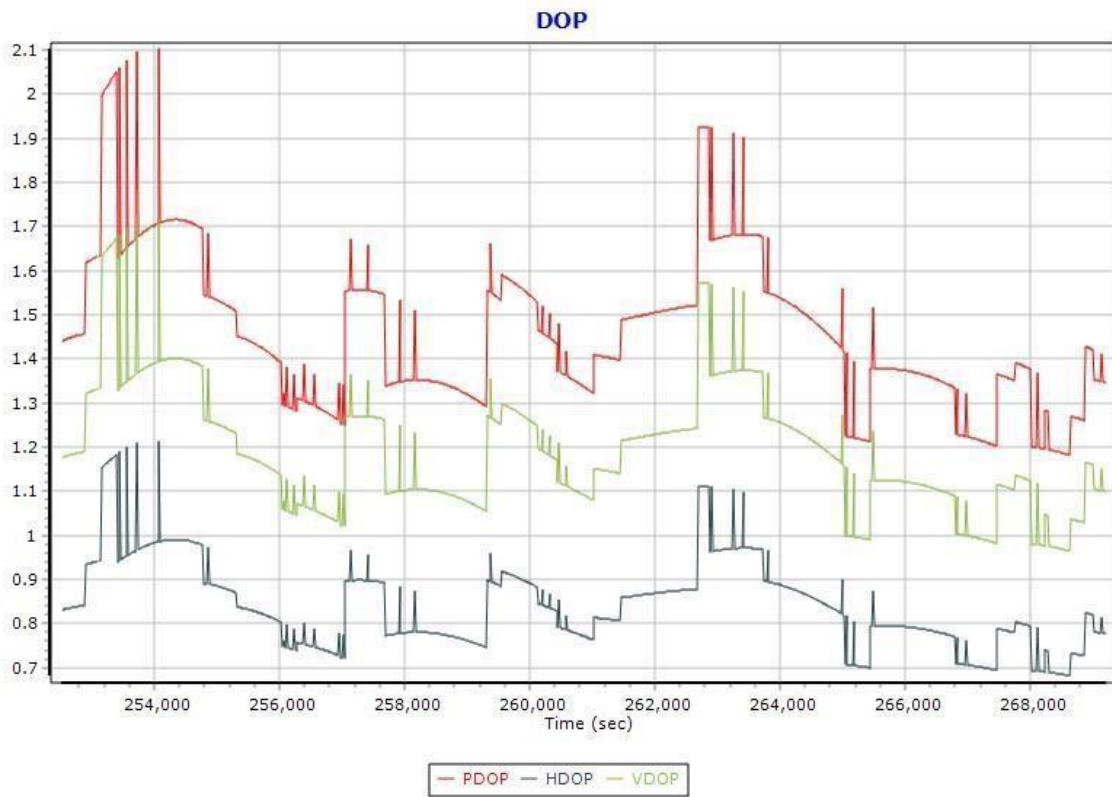
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## FEBRUARY 25, 2018 MISSION 1 PART 1





## Processing Summary Information

Program: POSPac MMS  
Version: 8.1.6388.30062  
Project: \\sa\data\riegl\18047\20180225\_TX\_B1

Solution Type: IN-Fusion SmartBase

Fixed: 17918	(99.88%)
Float: 0	(0.00%)
No Solution: 22	(0.12%)

Number of Epochs:

Total in RAW file: 17970  
No processed position: 52

Fwd/Rev Separation RMS Values (m):

North: 0.009  
East: 0.004  
Height: 0.032

Fwd/Rev Sep. RMS for 25%-75% weighting (m): 8974 occurrences

North: 0.003  
East: 0.005  
Height: 0.027

Quality Number Percentages:

Q 0: 100.0 %

Position Standard Deviation Percentages (%):

0.00 - 0.10 m: 100  
0.10 - 0.30 m: 0  
0.30 - 1.00 m: 0  
1.00 - 5.00 m: 0  
5.00 m + over: 0

Percentages of epochs with DD\_DOP over 10.00: 0 %

DOP over Tol: 1.42%

Baseline Distances (km):

Maximum: 47.29  
Minimum: 0.6  
Average: 26.67  
First Epoch: 41.46  
Last Epoch: 41.47

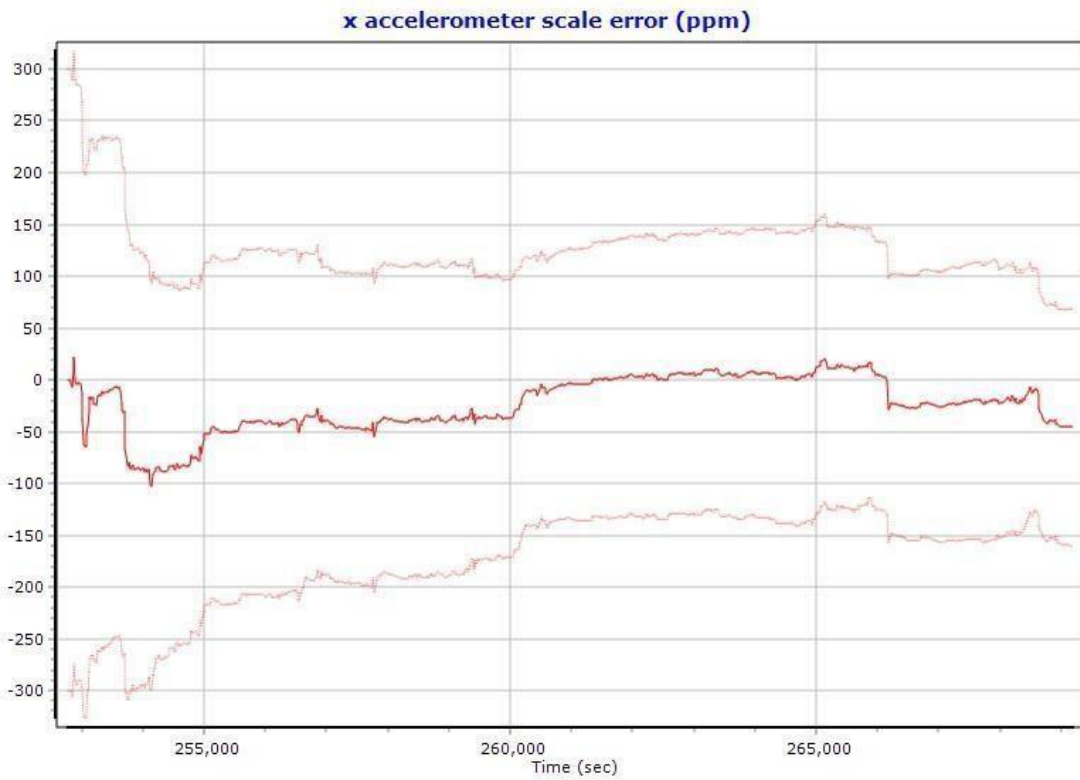
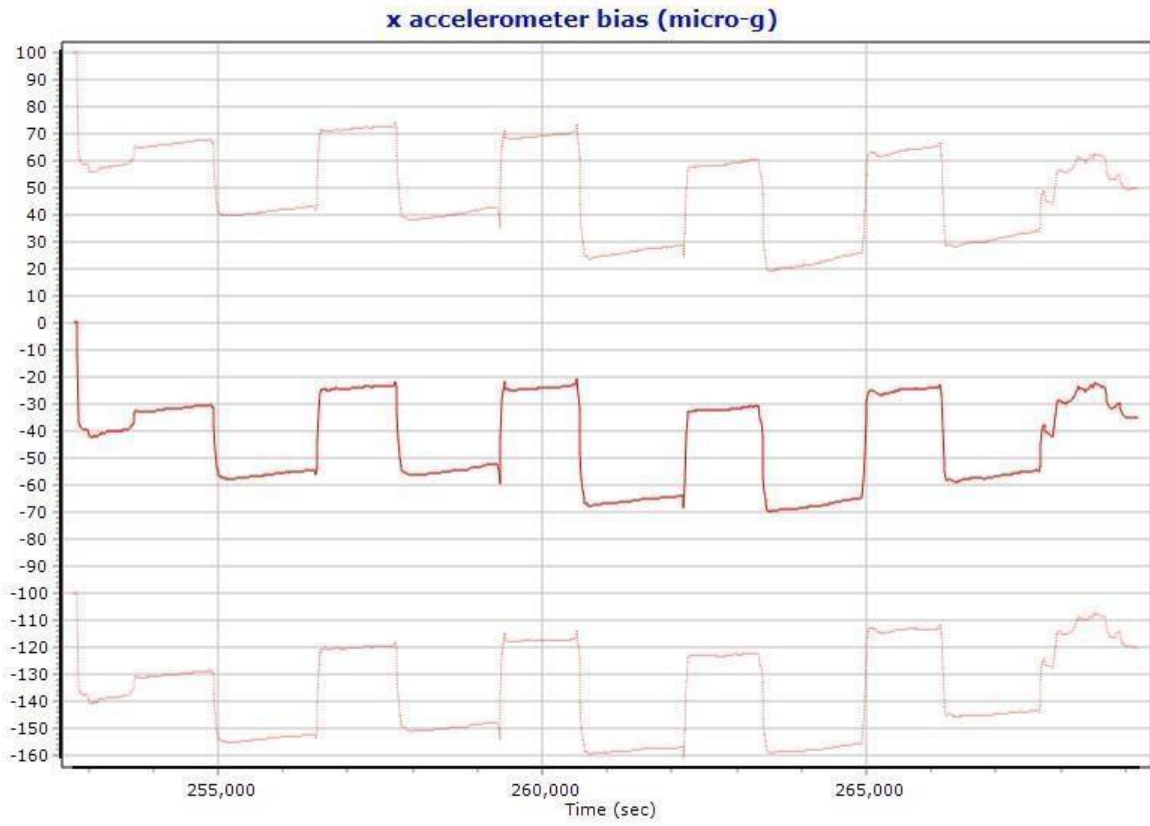
**CORS Base Stations**

Station	Original			Adjusted		
TXSO	N32°08'28.21593"	W101°48'27.40139"	801.518	N32°08'28.21599"	W101°48'27.40238"	801.531
TXPD	N34°00'44.30417"	W100°17'22.65698"	533.170	N34°00'44.30438"	W100°17'22.65719"	533.169
TXP1	N33°10'57.08880"	W101°22'47.67646"	767.614	N33°10'57.08847"	W101°22'47.67674"	767.607

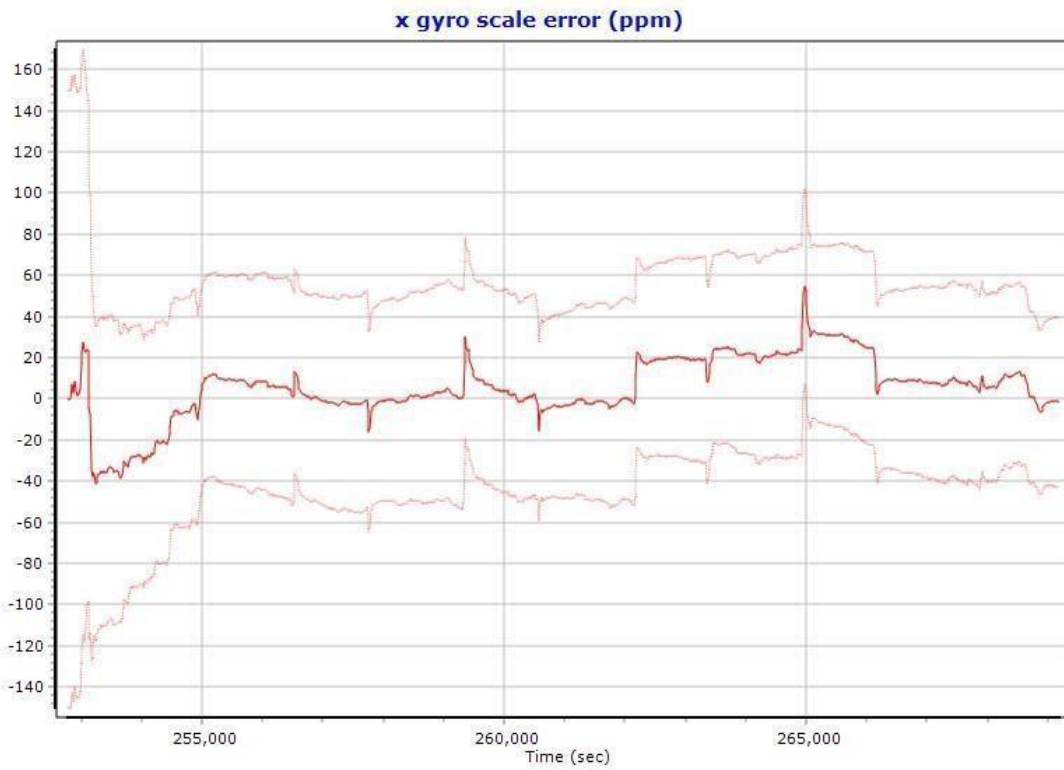
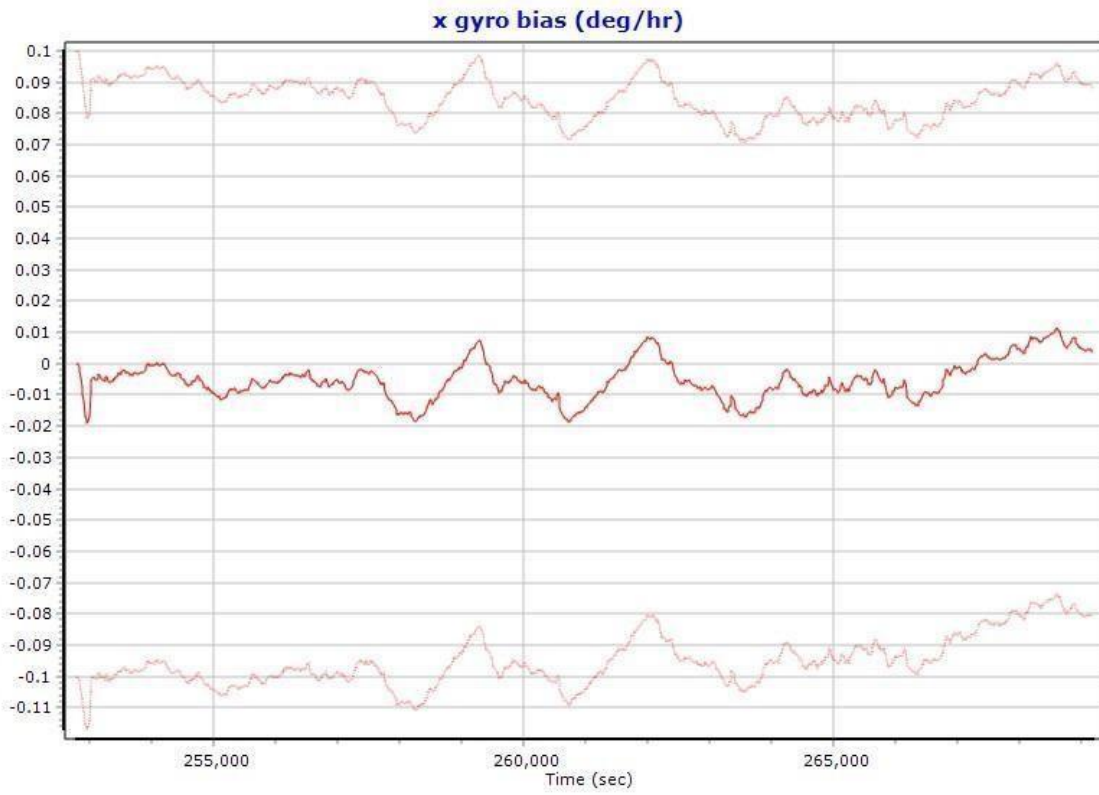
TXMT	N34°00'42.06253"	W100°49'57.89019"	707.923	N34°00'42.06214"	W100°49'57.89028"	707.928
TXLU	N33°32'07.50646"	W101°50'34.20554"	956.023	N33°32'07.50646"	W101°50'34.20554"	956.023

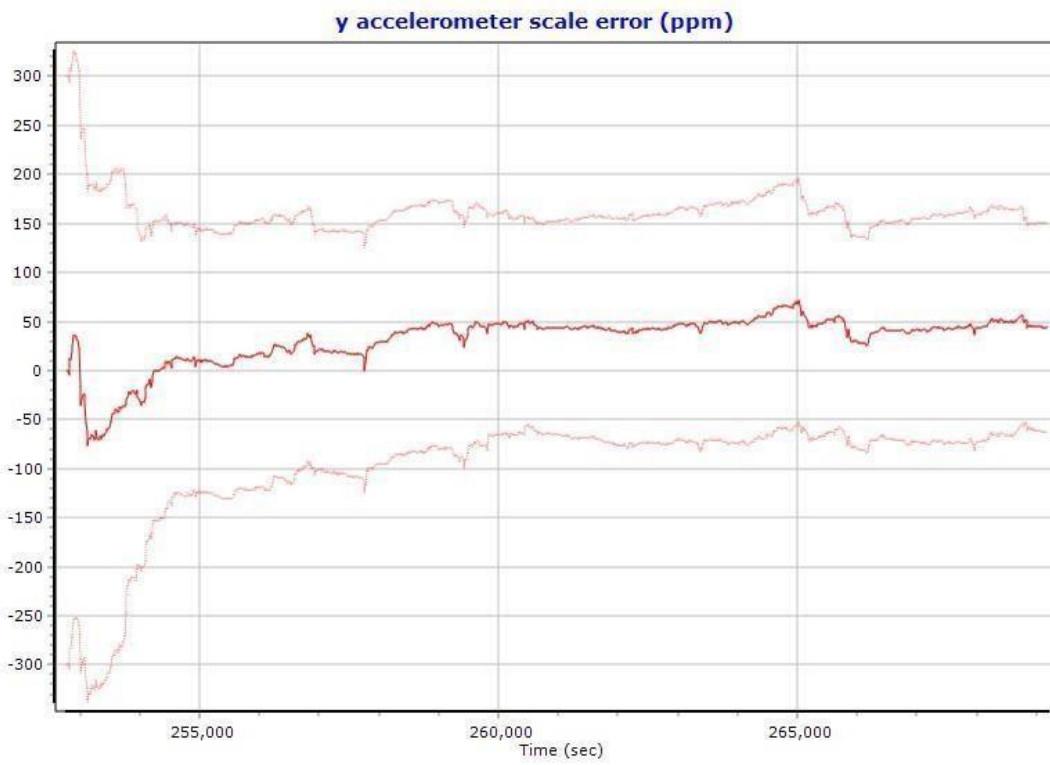
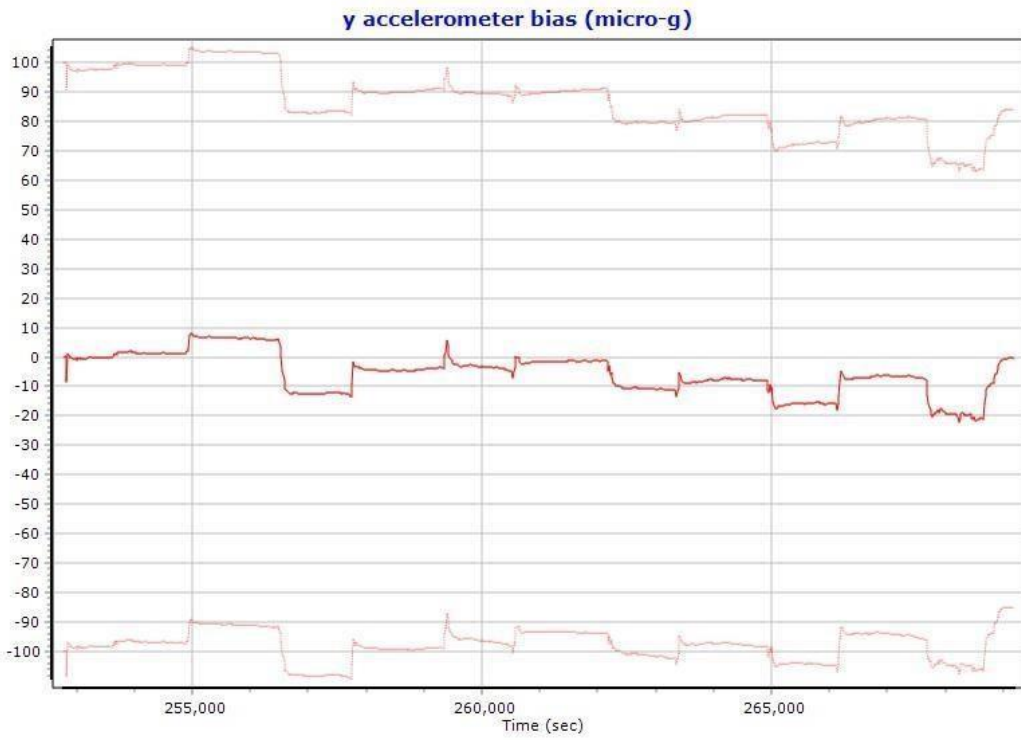
TXLA	N32°45'40.91674"	W101°56'38.21352"	891.645	N32°45'40.91650"	W101°56'38.21371"	891.642
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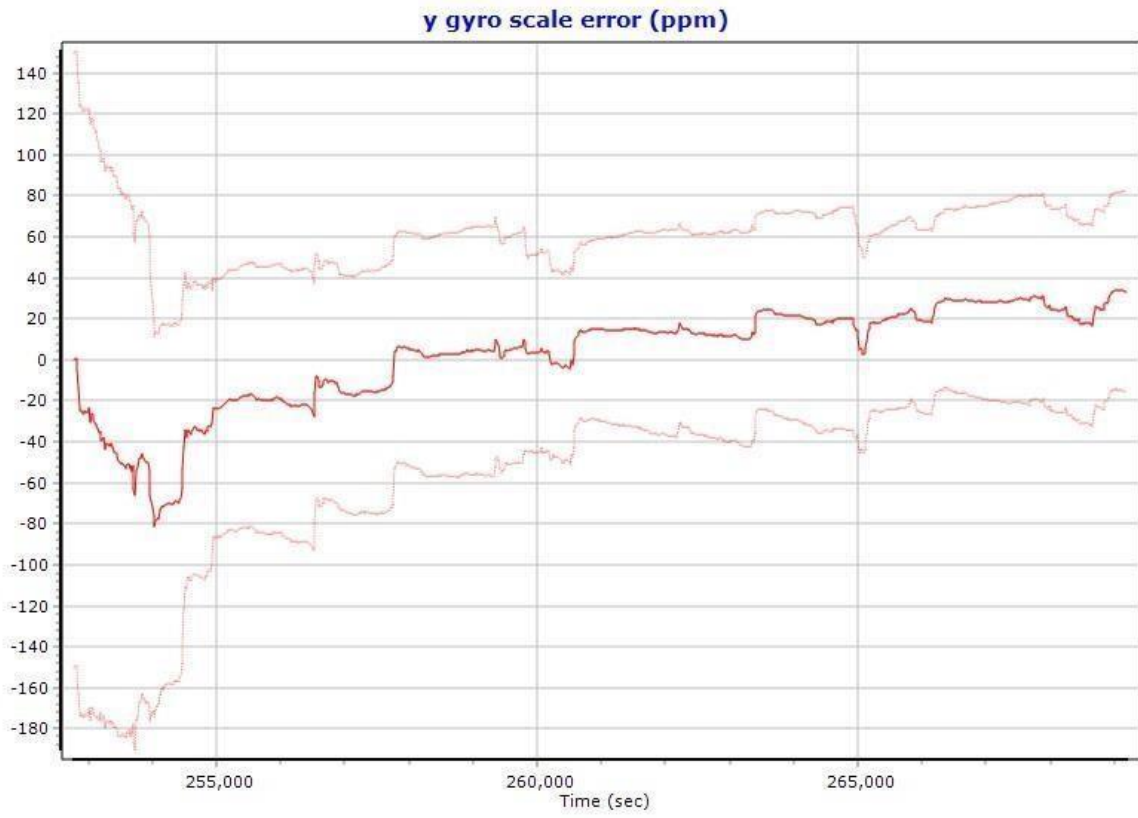
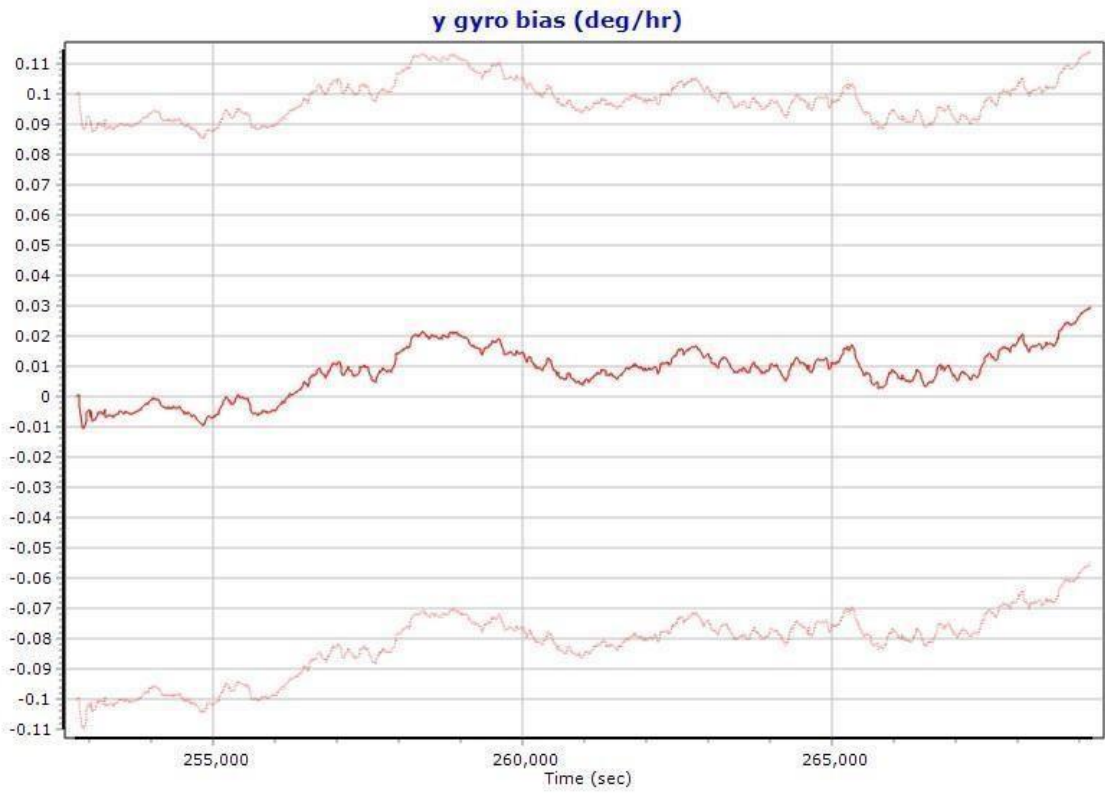


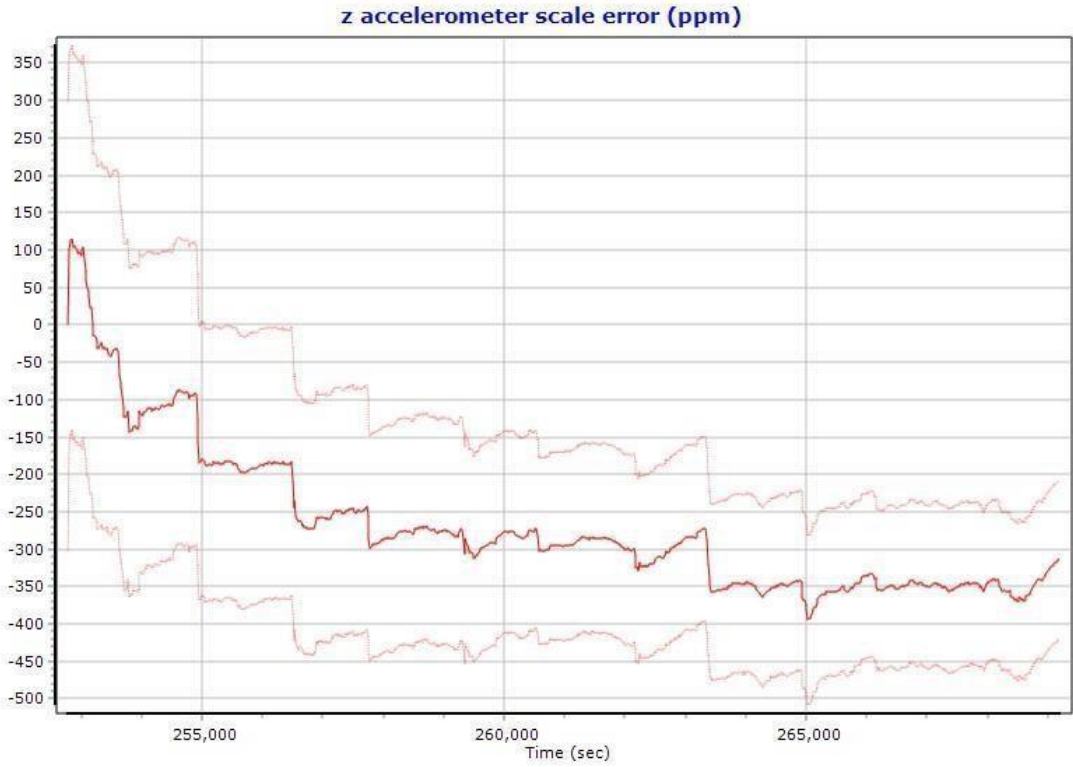
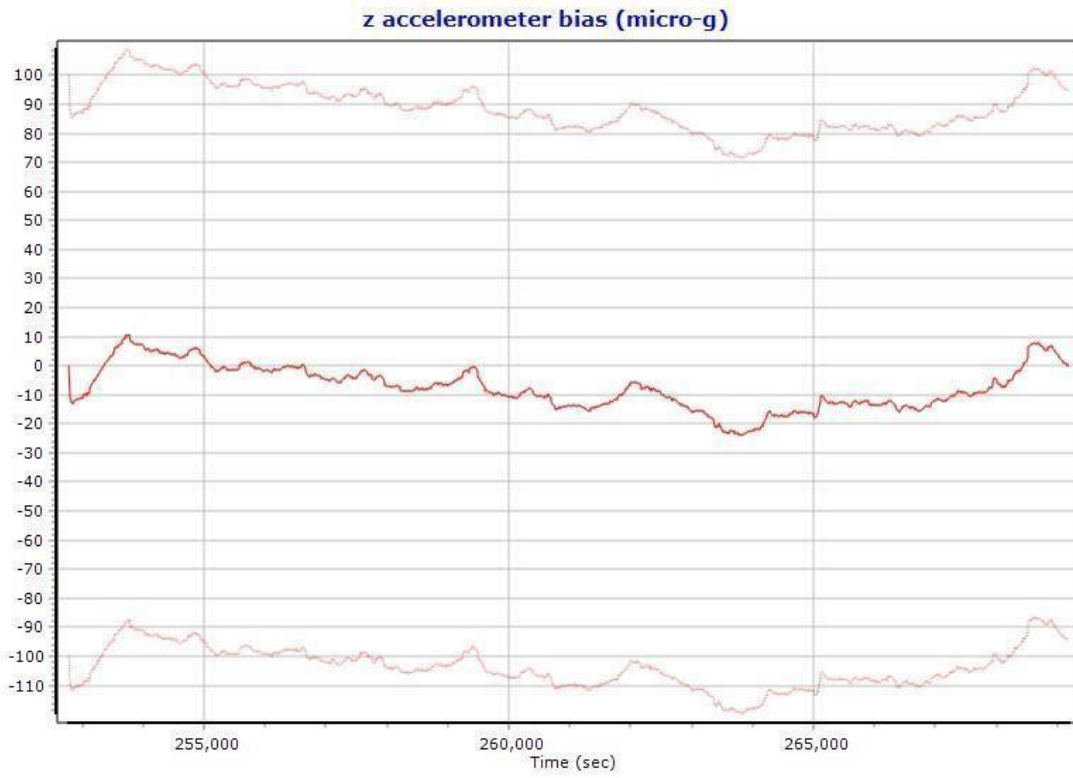


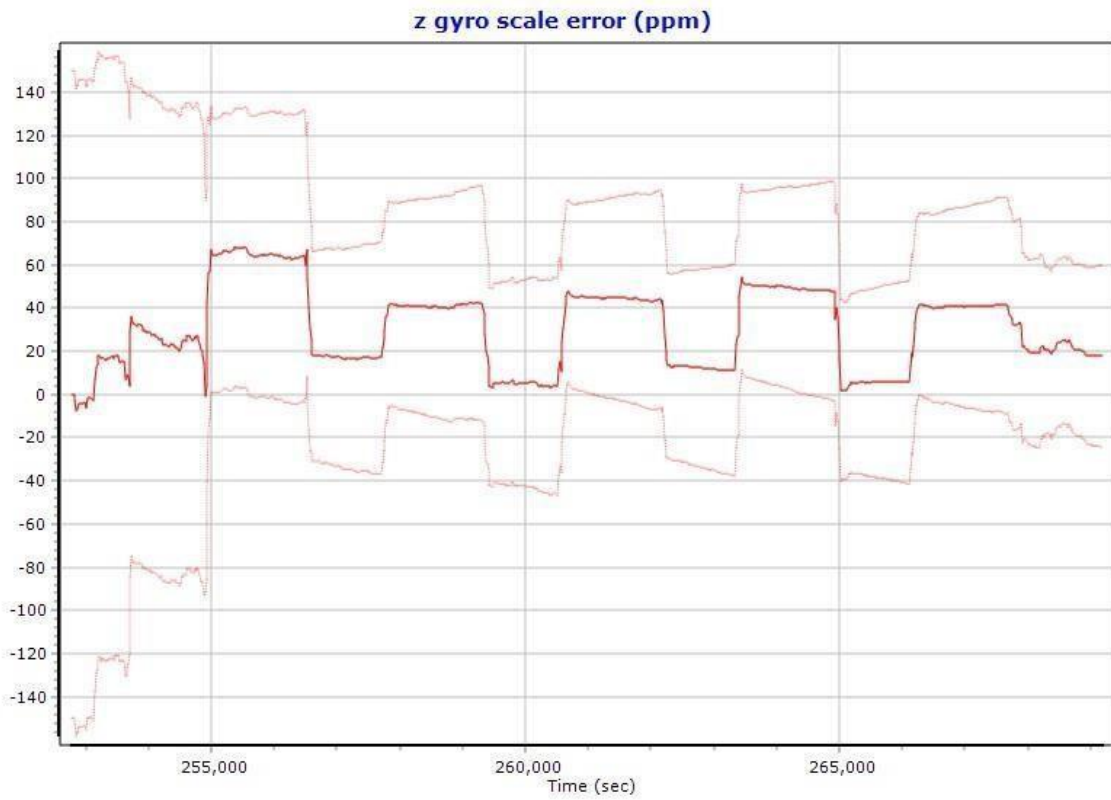
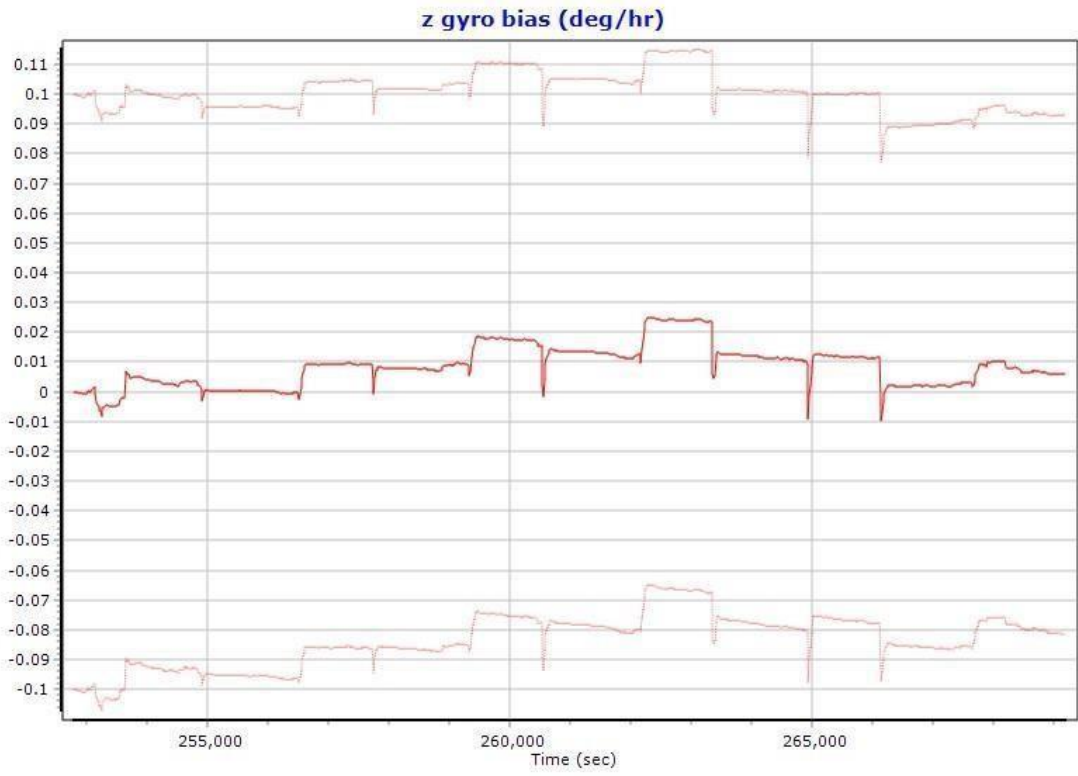




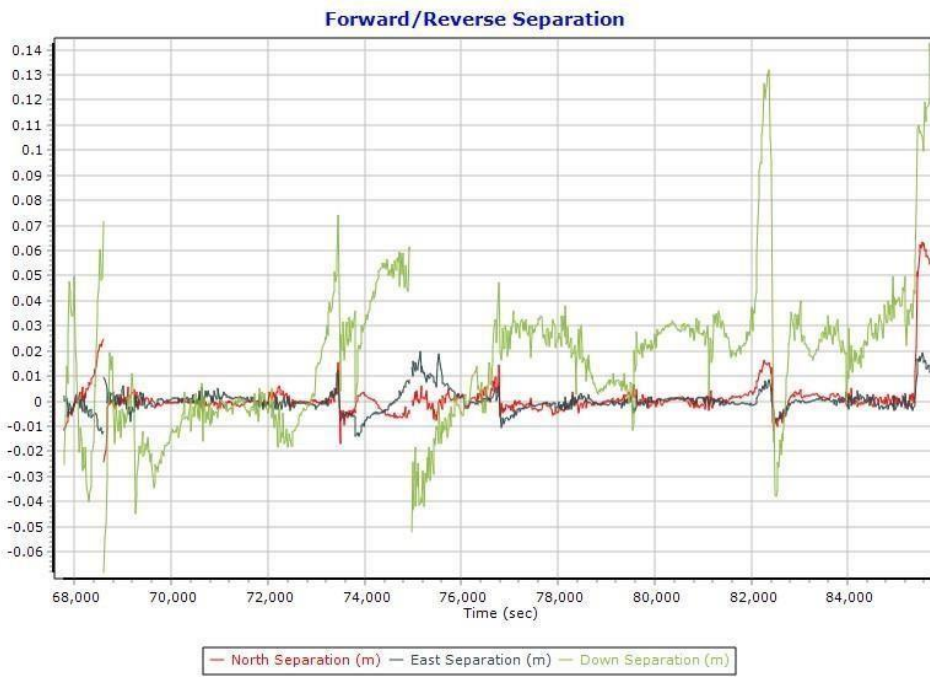
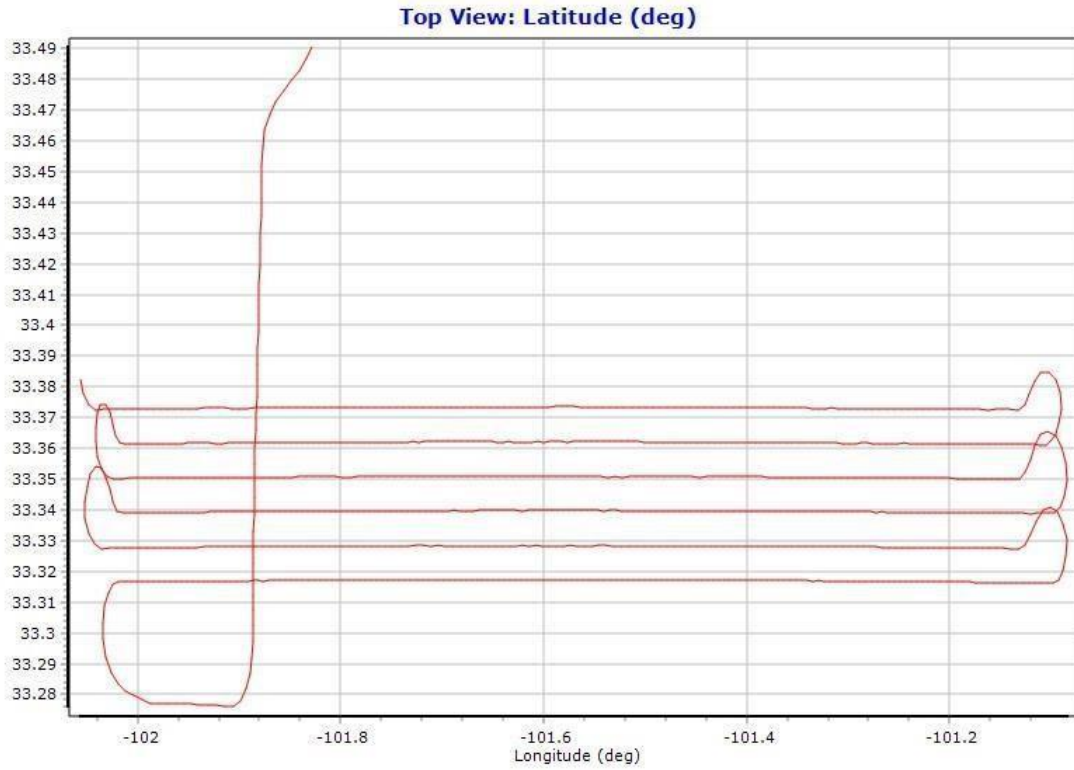


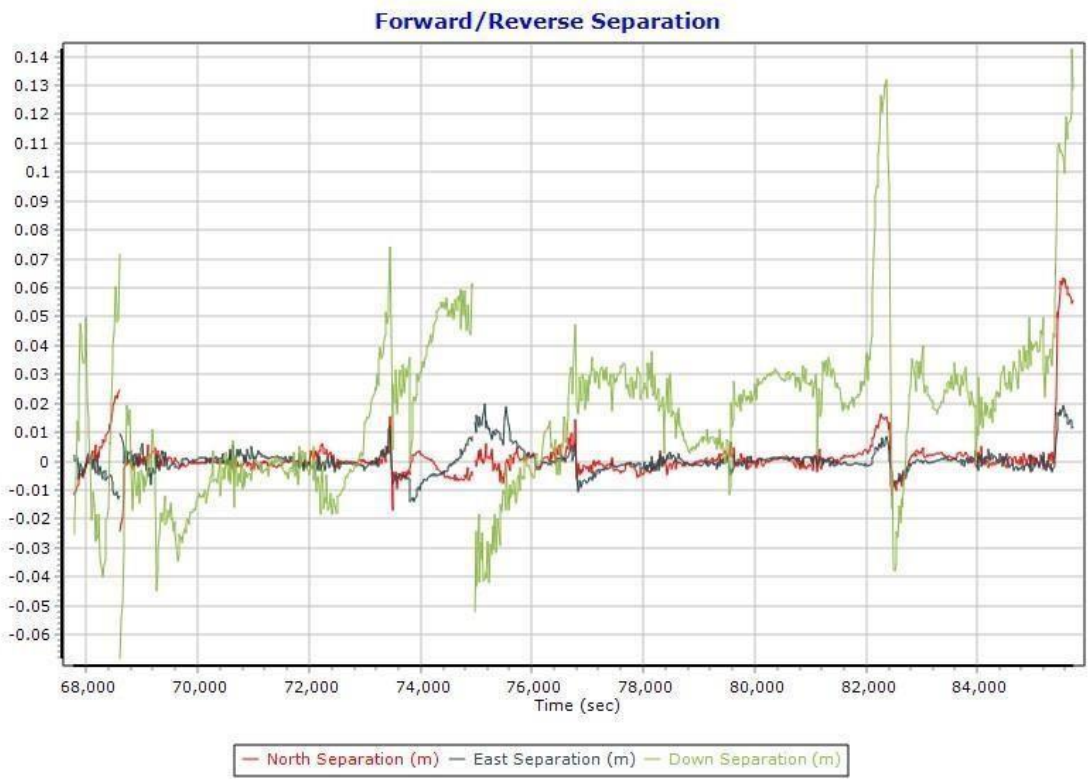
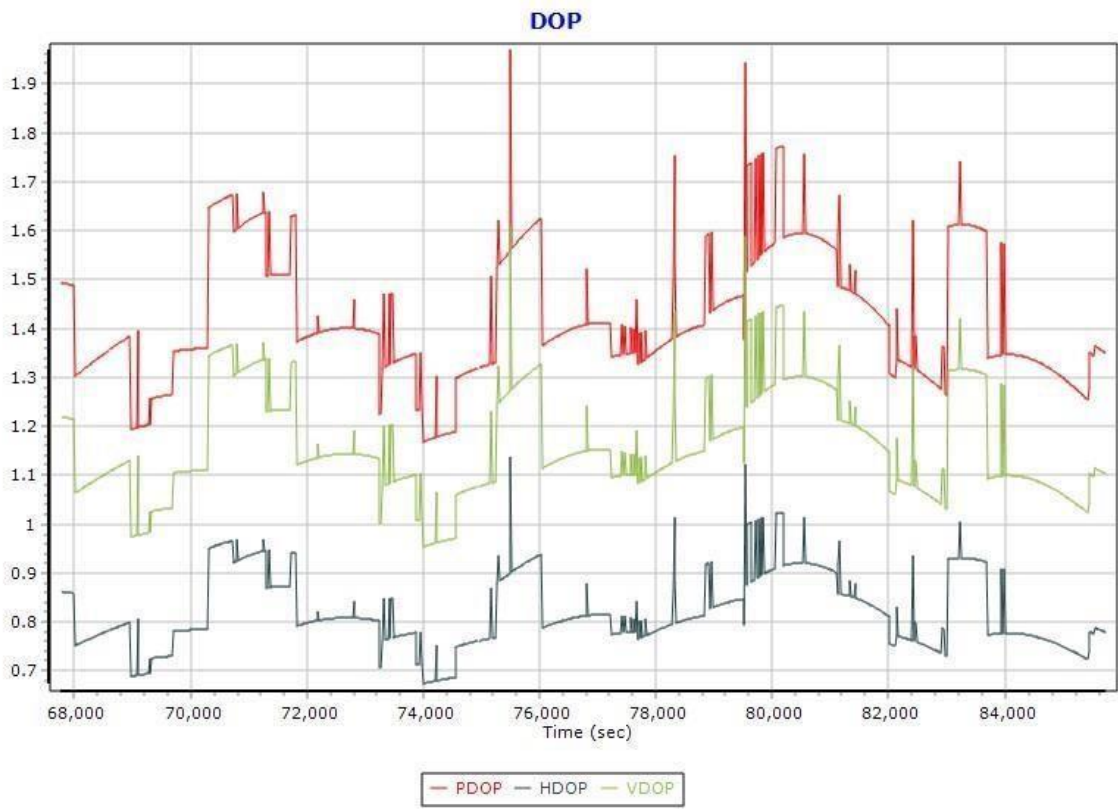






## FEBRUARY 25, 2018 MISSION 1 PART 2





## Processing Summary Information

Program: POSPac MMS  
Version: 8.1.6388.30062  
Project: \\sa\data\riegl\18047\20180225\_TX\_B2

Solution Type: IN-Fusion SmartBase

Fixed: 17918	(99.88%)
Float: 0	(0.00%)
No Solution: 22	(0.12%)

Number of Epochs:

Total in RAW file: 17970  
No processed position: 52

Fwd/Rev Separation RMS Values (m):

North: 0.009  
East: 0.004  
Height: 0.032

Fwd/Rev Sep. RMS for 25%-75% weighting (m): 8974 occurrences

North: 0.003  
East: 0.005  
Height: 0.027

Quality Number Percentages:

Q 0: 100.0 %



Position Standard Deviation Percentages (%):

0.00 - 0.10 m: 100  
0.10 - 0.30 m: 0  
0.30 - 1.00 m: 0  
1.00 - 5.00 m: 0  
5.00 m + over: 0

Percentages of epochs with DD\_DOP over 10.00: 0 %

DOP over Tol: 1.42%

Baseline Distances (km):

Maximum: 47.29  
Minimum: 0.6  
Average: 26.67  
First Epoch: 41.46  
Last Epoch: 41.47

**CORS Base Stations**

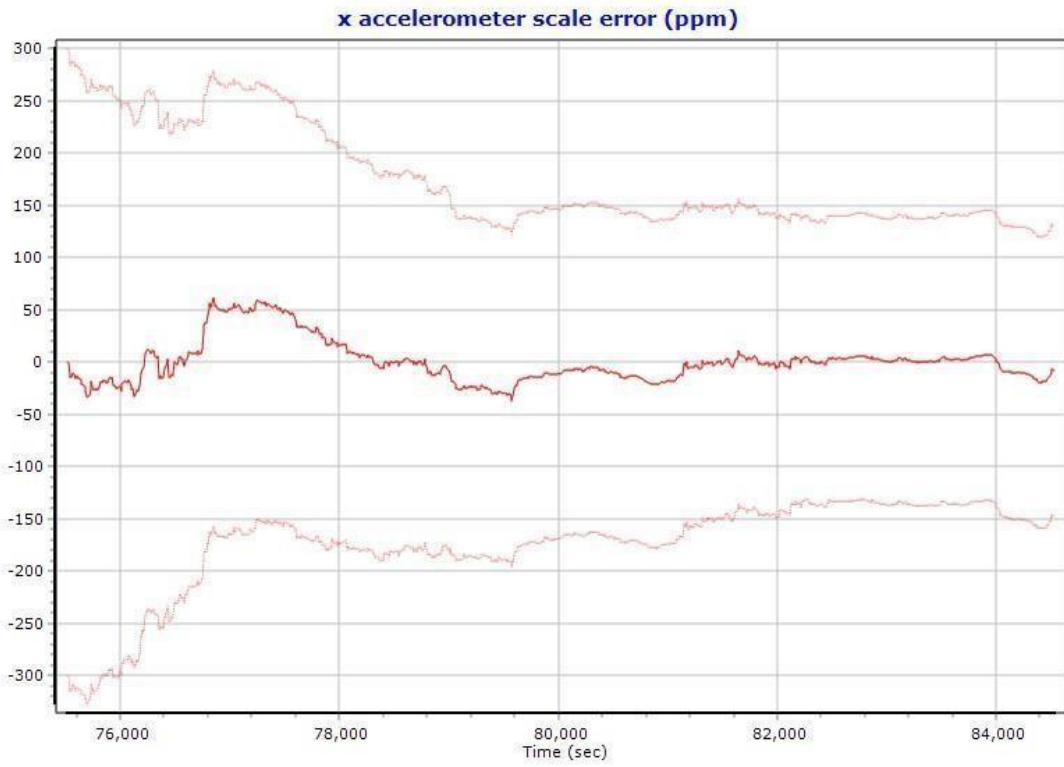
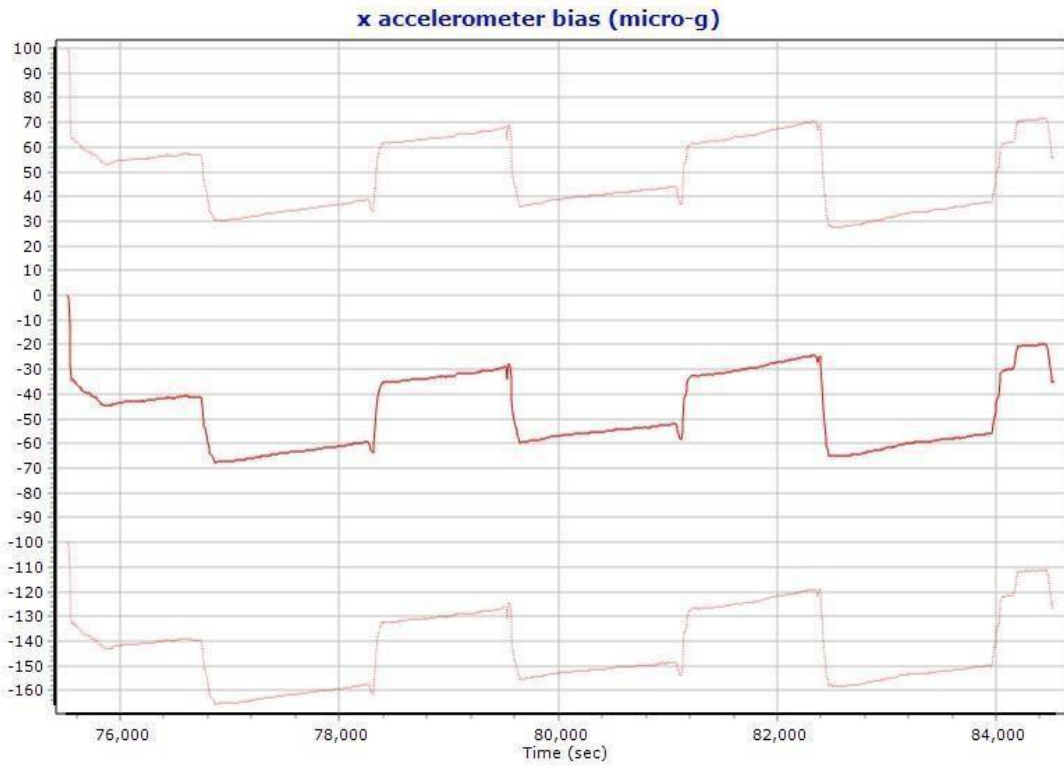
Station	Original			Adjusted		
TXSO	N32°08'28.21593"	W101°48'27.40139"	801.518	N32°08'28.21599"	W101°48'27.40238"	801.531
TXPD	N34°00'44.30417"	W100°17'22.65698"	533.170	N34°00'44.30438"	W100°17'22.65719"	533.169
TXP1	N33°10'57.08880"	W101°22'47.67646"	767.614	N33°10'57.08847"	W101°22'47.67674"	767.607
TXMT	N34°00'42.06253"	W100°49'57.89019"	707.923	N34°00'42.06214"	W100°49'57.89028"	707.928

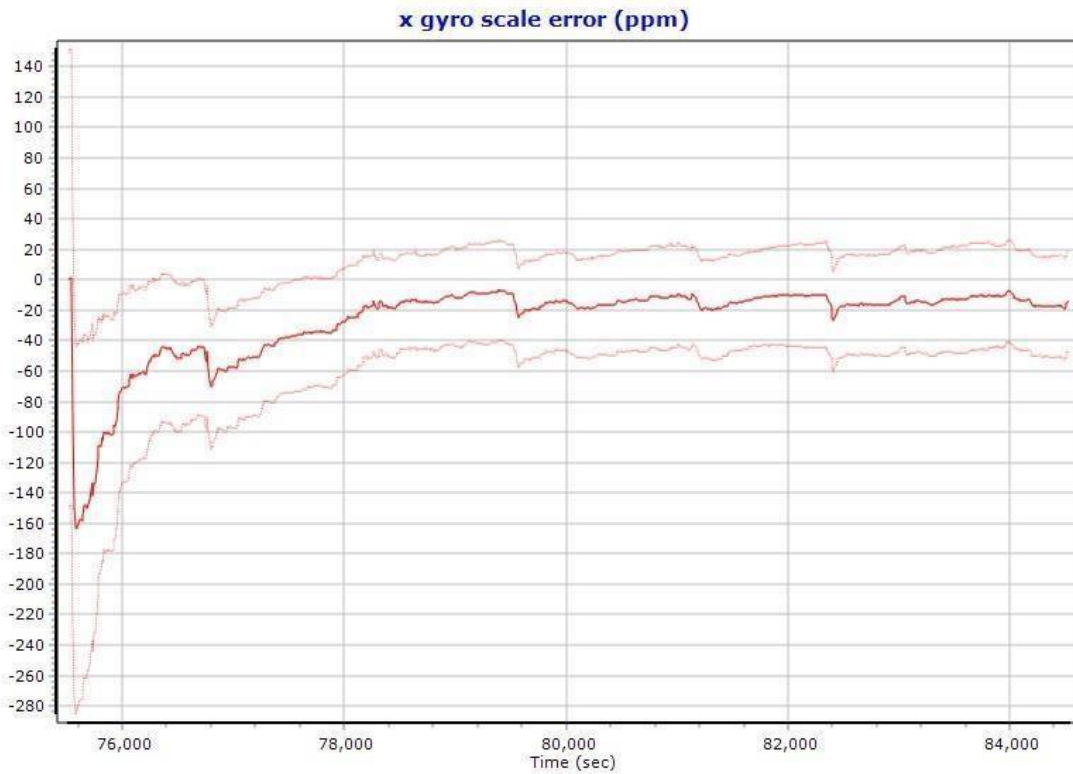
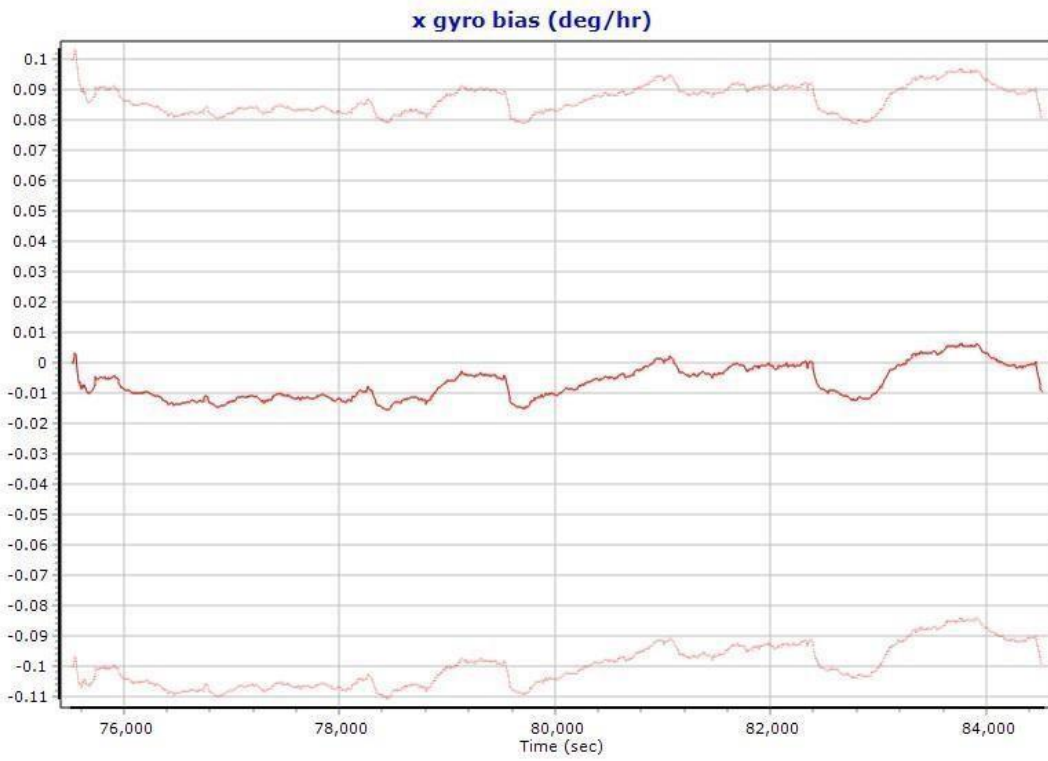
TXLU	N33°32'07.50646"	W101°50'34.20554"	956.023	N33°32'07.50646"	W101°50'34.20554"	956.023
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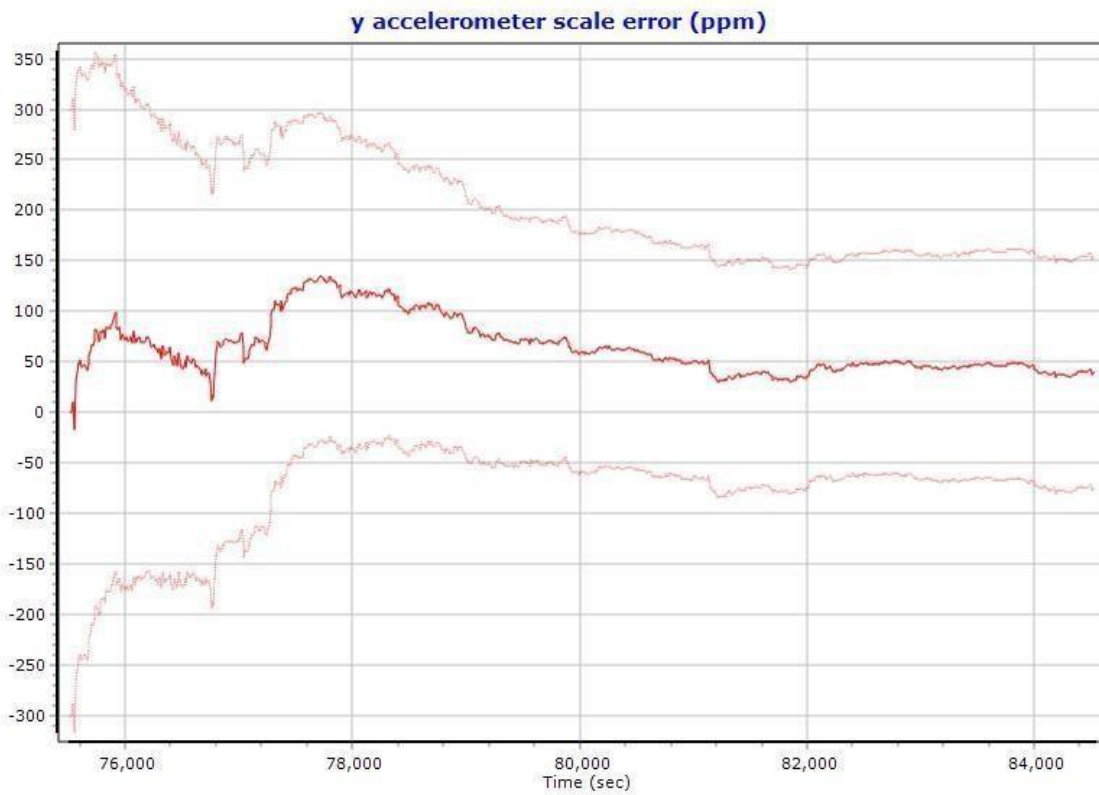
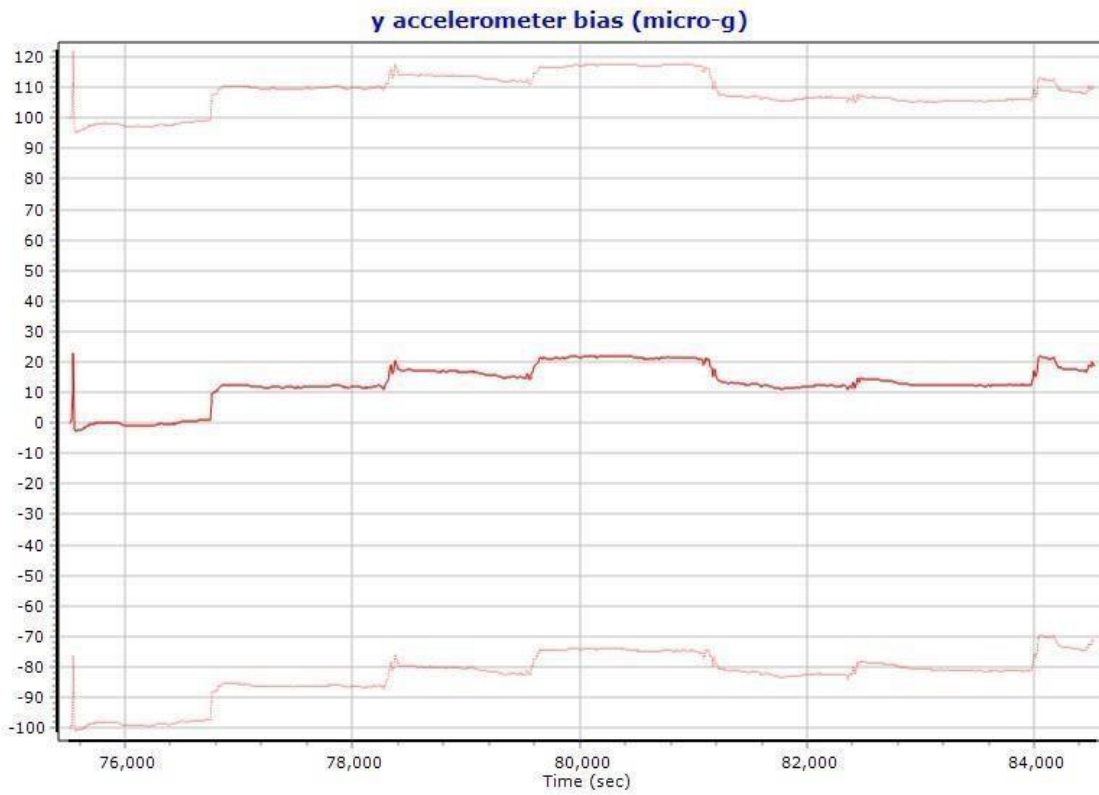
TXLA	N32°45'40.91674"	W101°56'38.21352"	891.645	N32°45'40.91650"	W101°56'38.21371"	891.642
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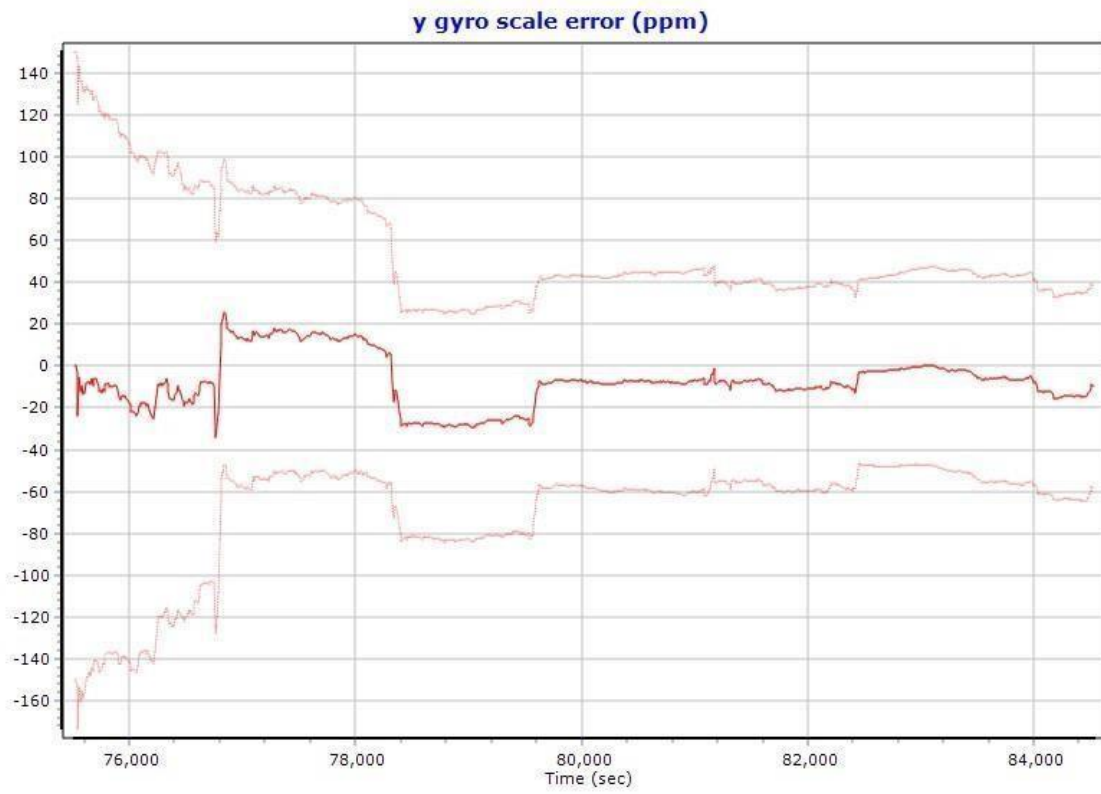
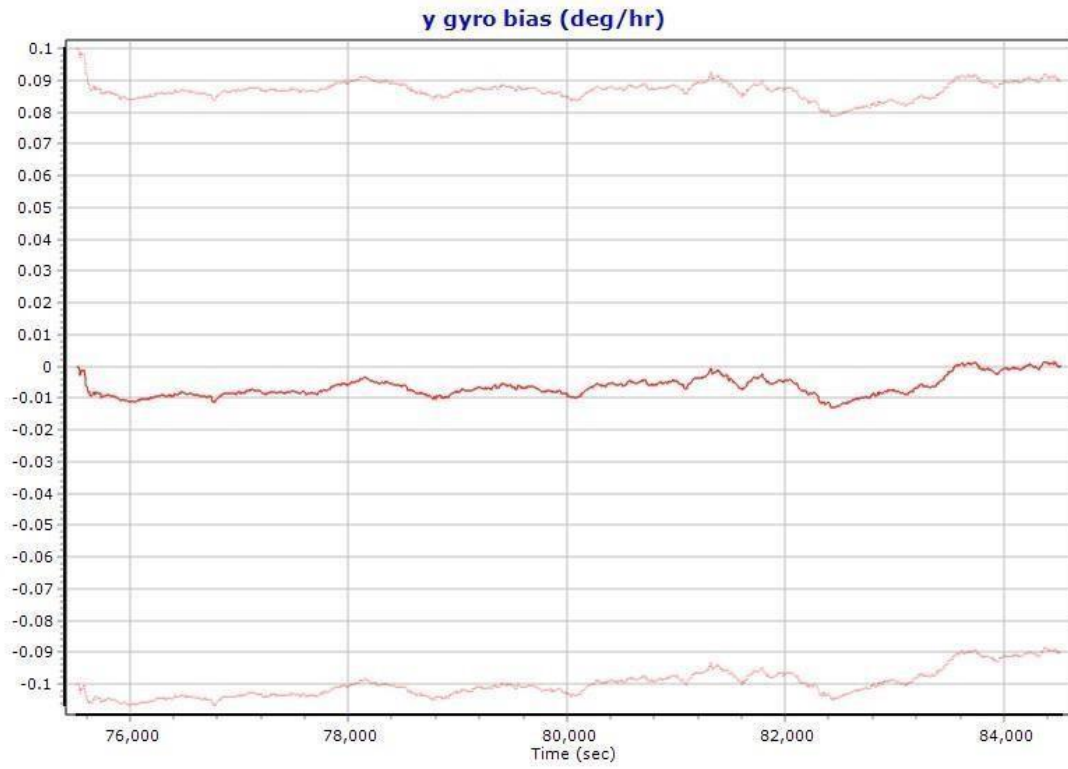


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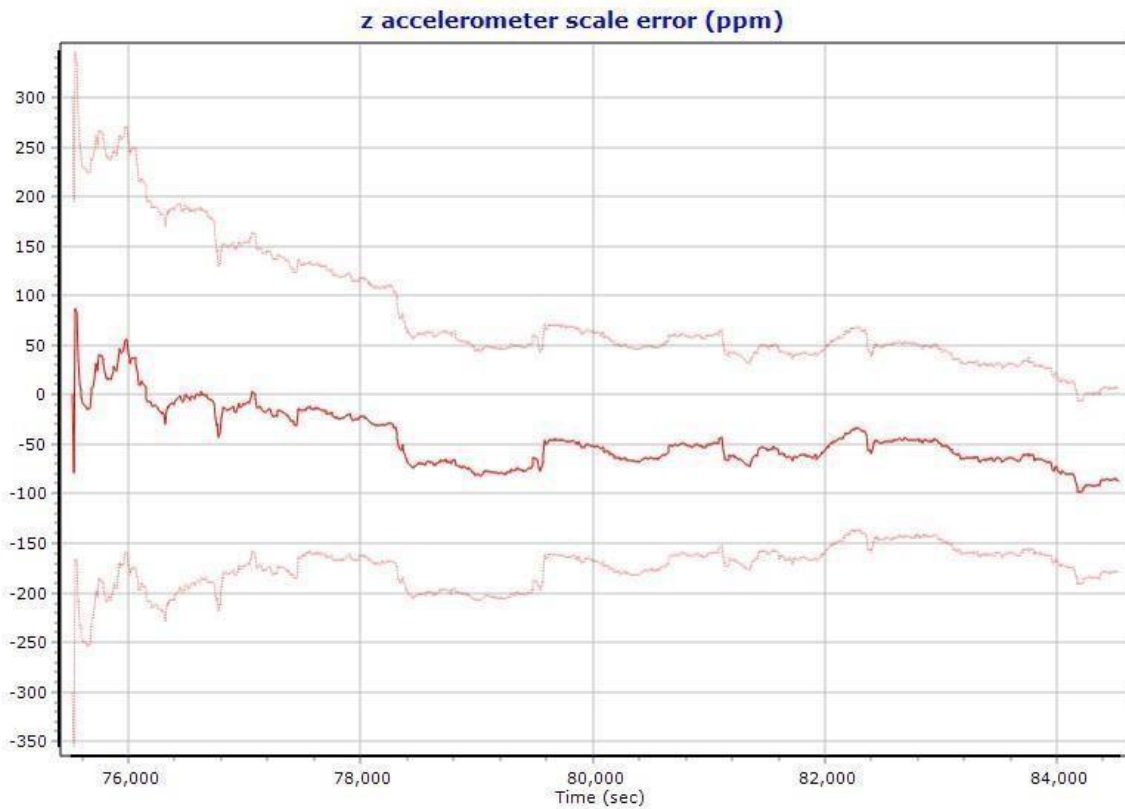
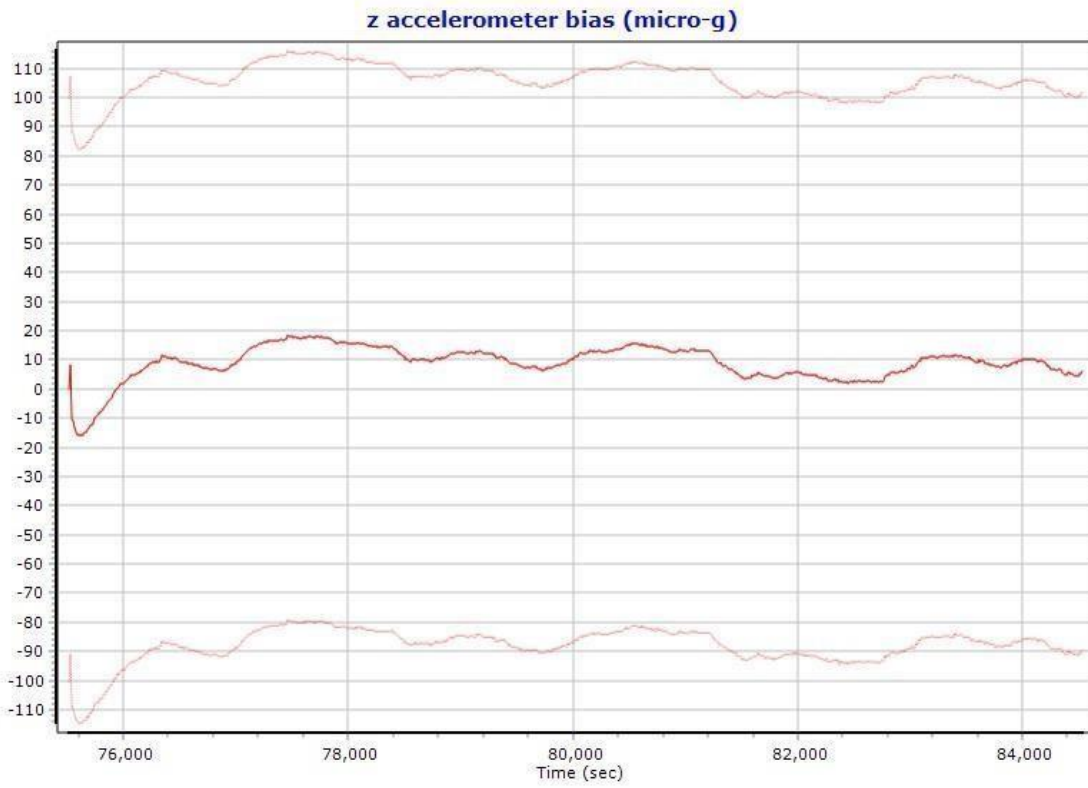


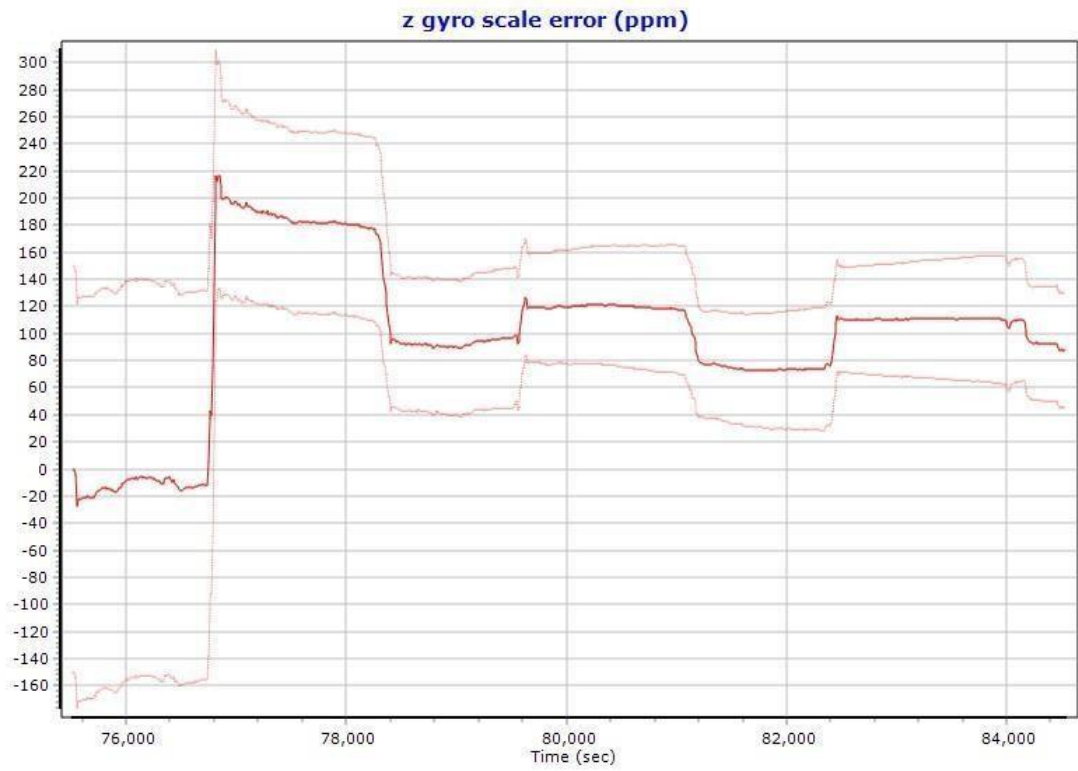
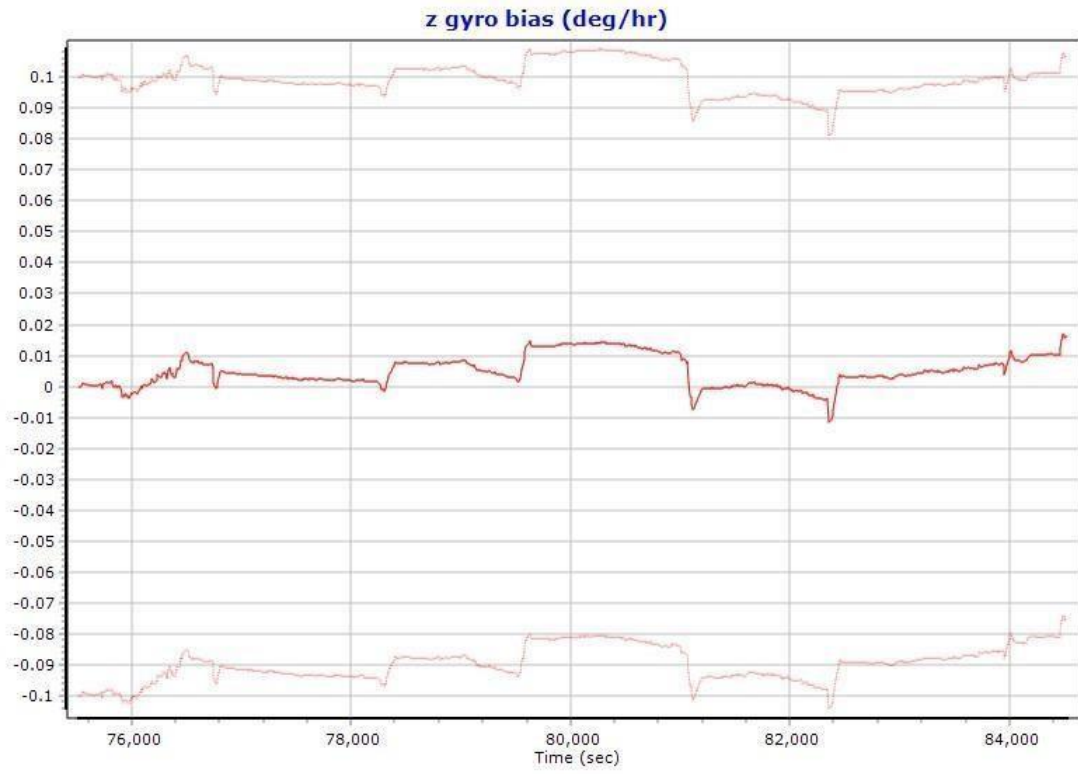




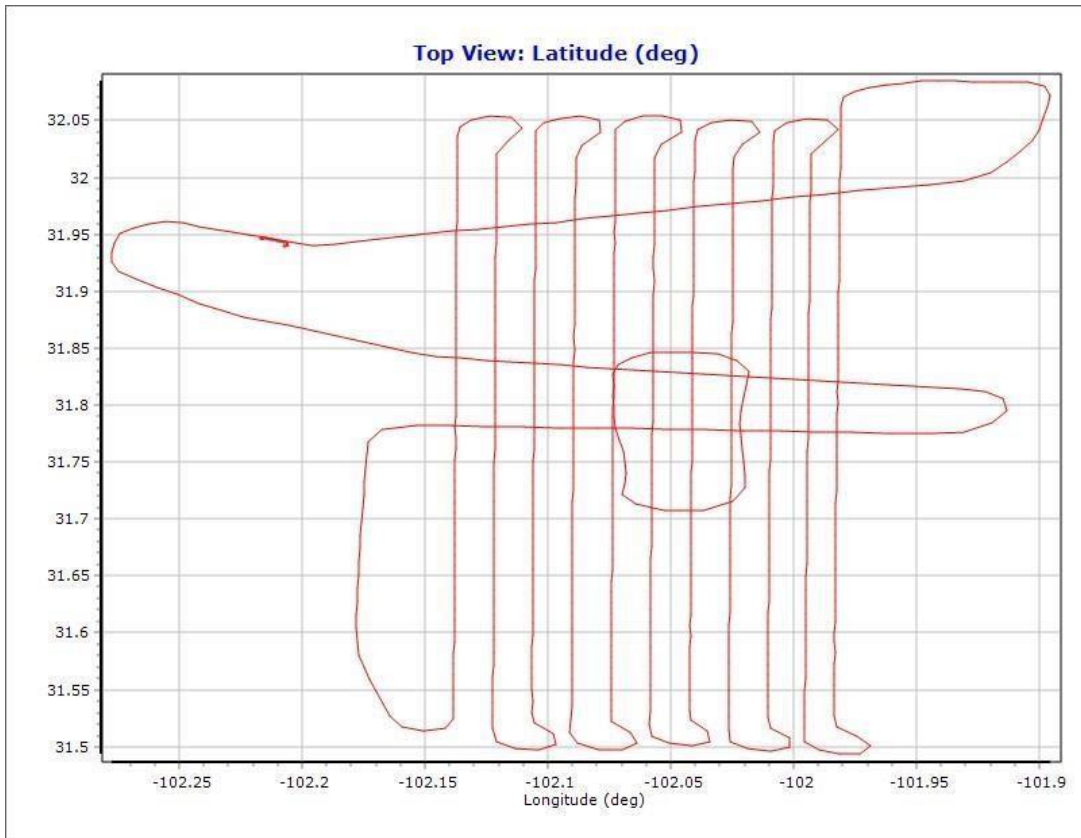




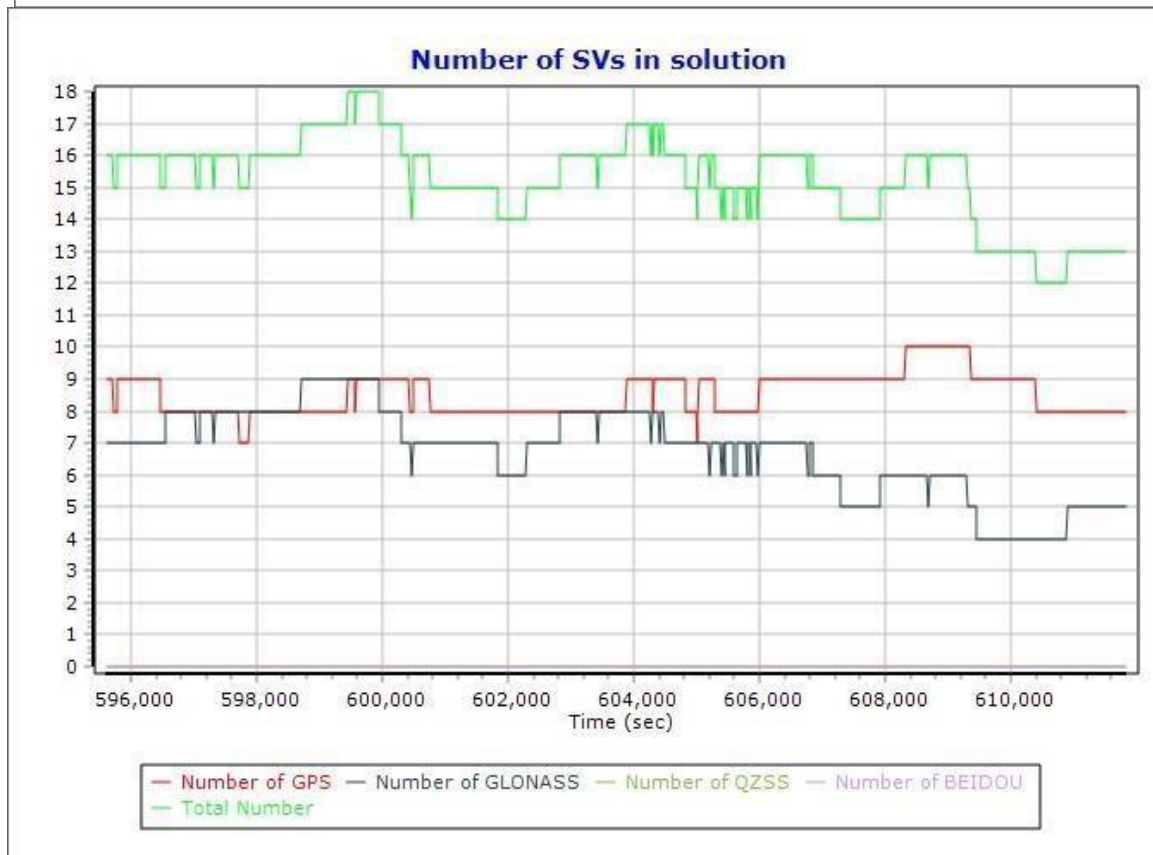
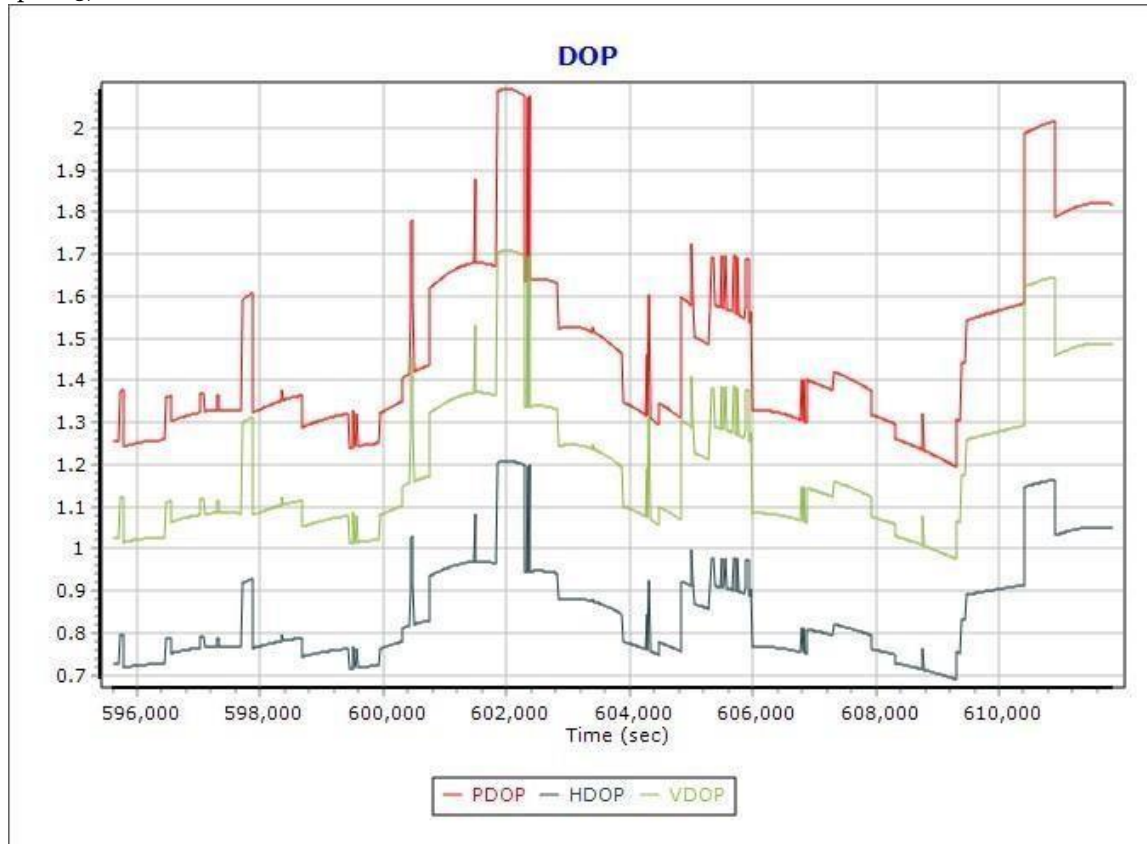




### FEBRUARY 25, 2018 MISSION 3







## Processing Summary Information

Program: POSPac MMS  
Version: 8.1.6388.30062  
Project: \\sa\data\riegl\18047\20180225\_TX\_C

Solution Type: IN-Fusion SmartBase

Fixed: 9327	(99.99%)
Float: 0	(0.00%)
No Solution: 1	(0.01%)

Number of Epochs:

Total in RAW file: 9342  
No processed position: 15

Fwd/Rev Separation RMS Values (m):

North: 0.008  
East: 0.015  
Height: 0.041

Fwd/Rev Sep. RMS for 25%-75% weighting (m): 4670 occurrences

North: 0.004  
East: 0.003  
Height: 0.024

Quality Number Percentages:

Q 0: 100.0 %

Position Standard Deviation Percentages (%):

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0.00 - 0.10 m: 100

0.10 - 0.30 m: 0

0.30 - 1.00 m: 0

1.00 - 5.00 m: 0

5.00 m + over: 0

Percentages of epochs with DD\_DOP over 10.00: 0 %

DOP over Tol: 1.46%

Baseline Distances (km):

Maximum: 55.89

Minimum: 7.43

Average: 27.96

First Epoch: 34.88

Last Epoch: 34.88

### CORS Base Stations

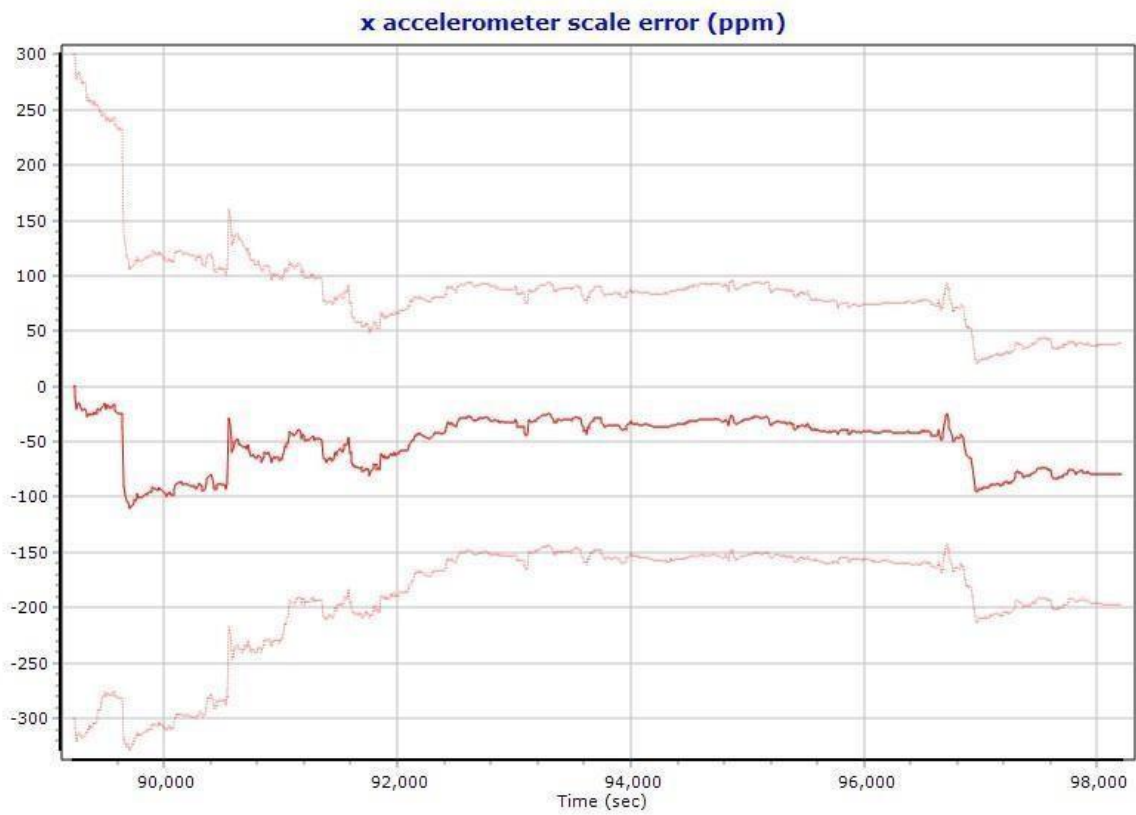
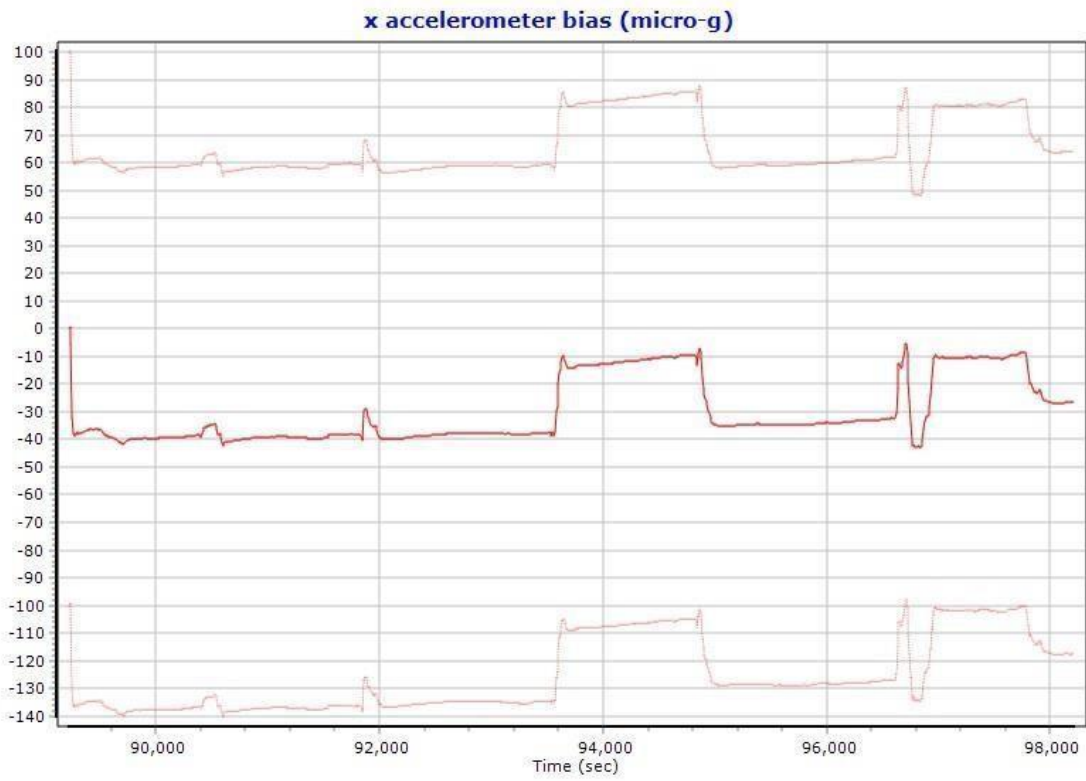
Station	Original			Adjusted		
TXMT	N34°00'42.06253"	W100°49'57.89019"	707.923	N34°00'42.06210"	W100°49'57.89038"	707.925
txto	N33°10'49.96109"	W101°47'42.25871"	921.376	N33°10'49.97664"	W101°47'42.30192"	920.280
txra	N33°40'19.86637"	W101°23'14.39843"	925.300	N33°40'19.88232"	W101°23'14.44155"	924.204
txpw	N34°09'00.03857"	W101°43'23.64569"	1007.155	N34°09'00.05479"	W101°43'23.68927"	1006.094
txld	N33°35'39.61067"	W102°20'44.92007"	1053.240	N33°35'39.62625"	W102°20'44.96366"	1052.165

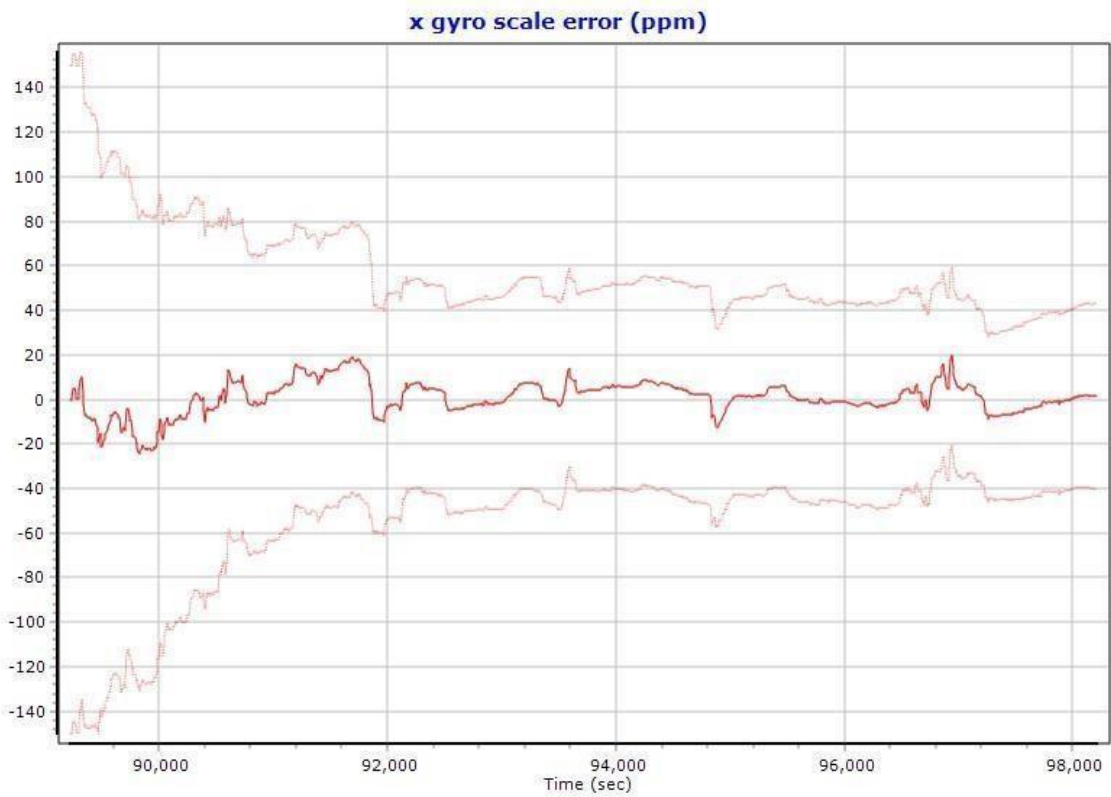
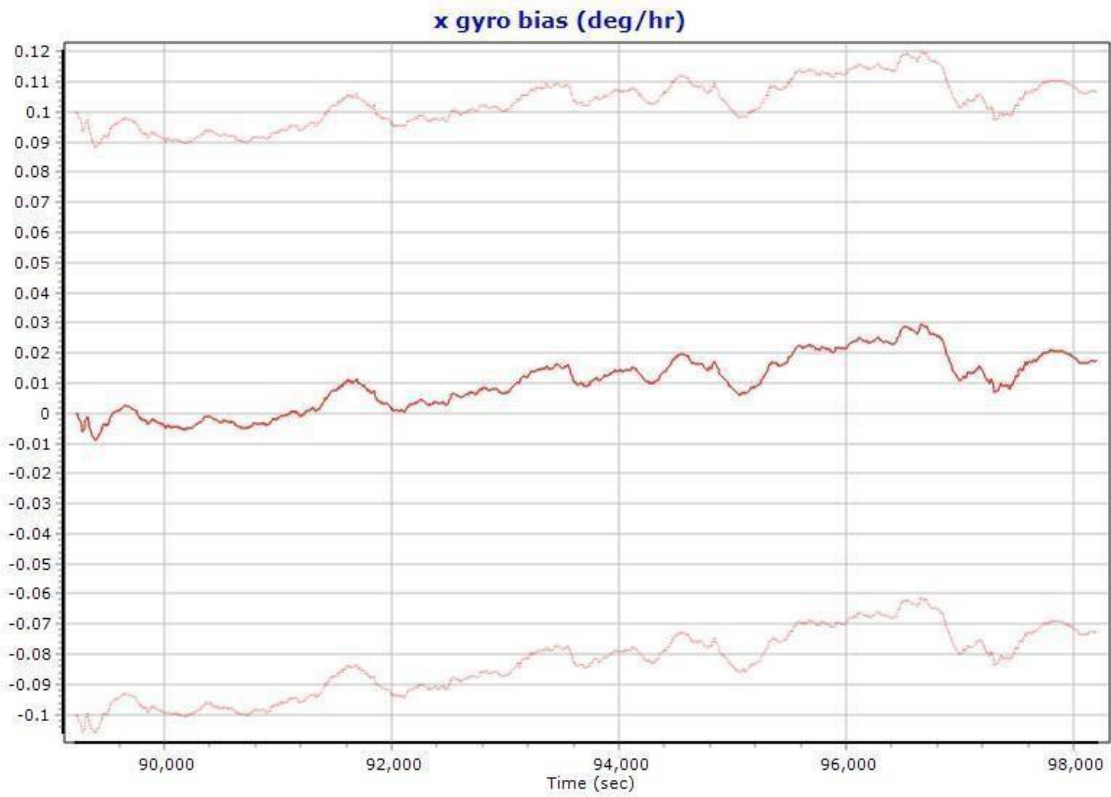
txdk	N33°37'25.18336"	W100°49'48.73780"	763.897	N33°37'25.19953"	W100°49'48.78039"	762.790
txbf	N33°09'55.04178"	W102°16'58.18985"	991.461	N33°09'55.05708"	W102°16'58.23332"	990.367
TXP1	N33°10'57.08880"	W101°22'47.67646"	767.614	N33°10'57.08850"	W101°22'47.67685"	767.604

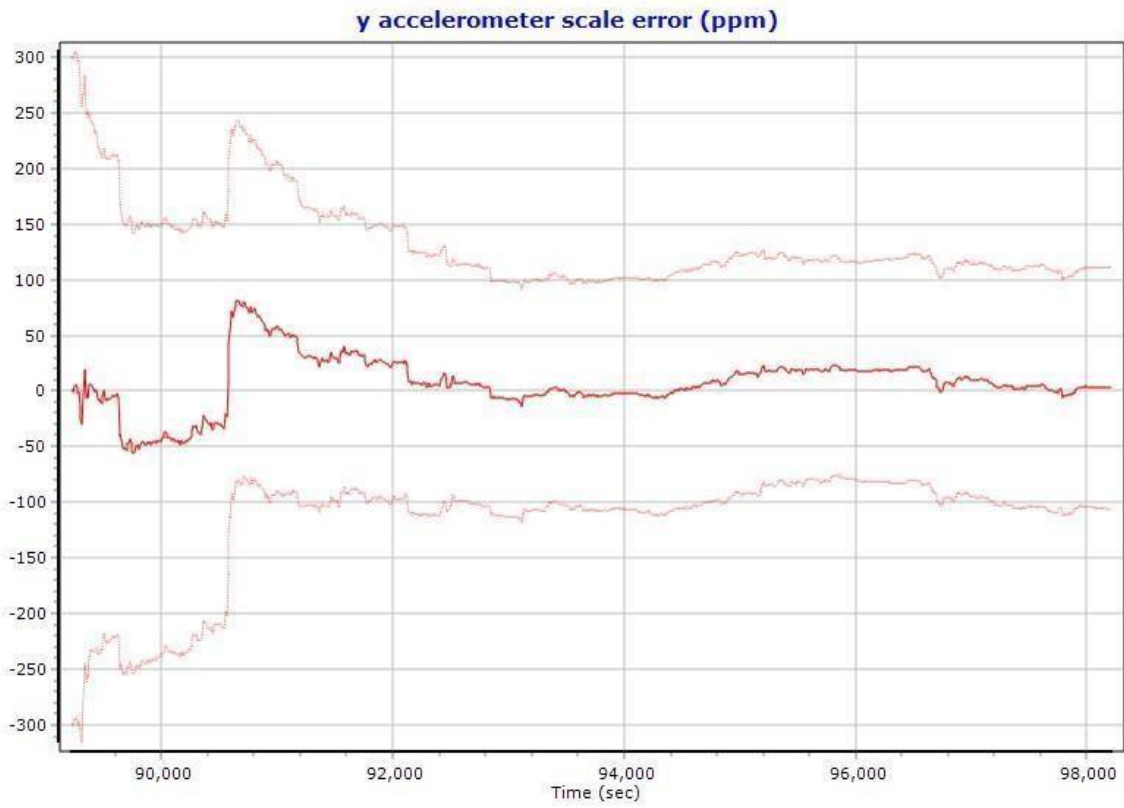
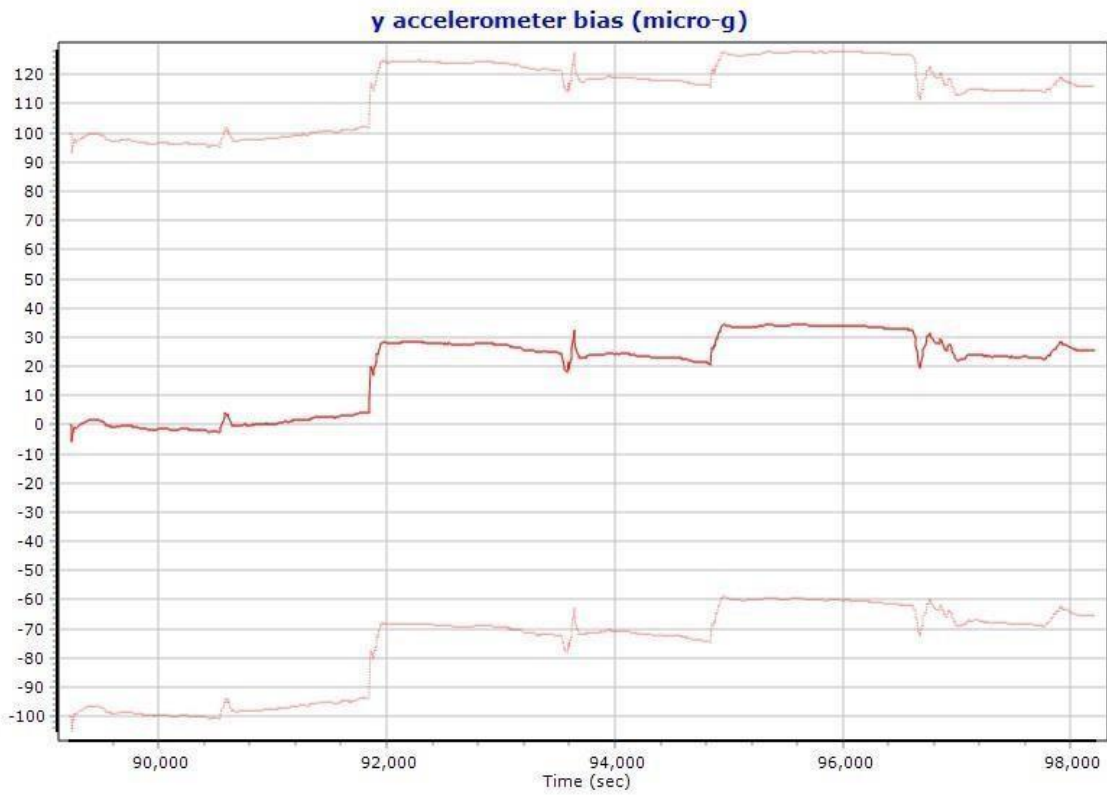
TXLU	N33°32'07.50646"	W101°50'34.20554"	956.023	N33°32'07.50646"	W101°50'34.20554"	956.023
TXLA	N32°45'40.91674"	W101°56'38.21352"	891.645	N32°45'40.91658"	W101°56'38.21378"	891.640

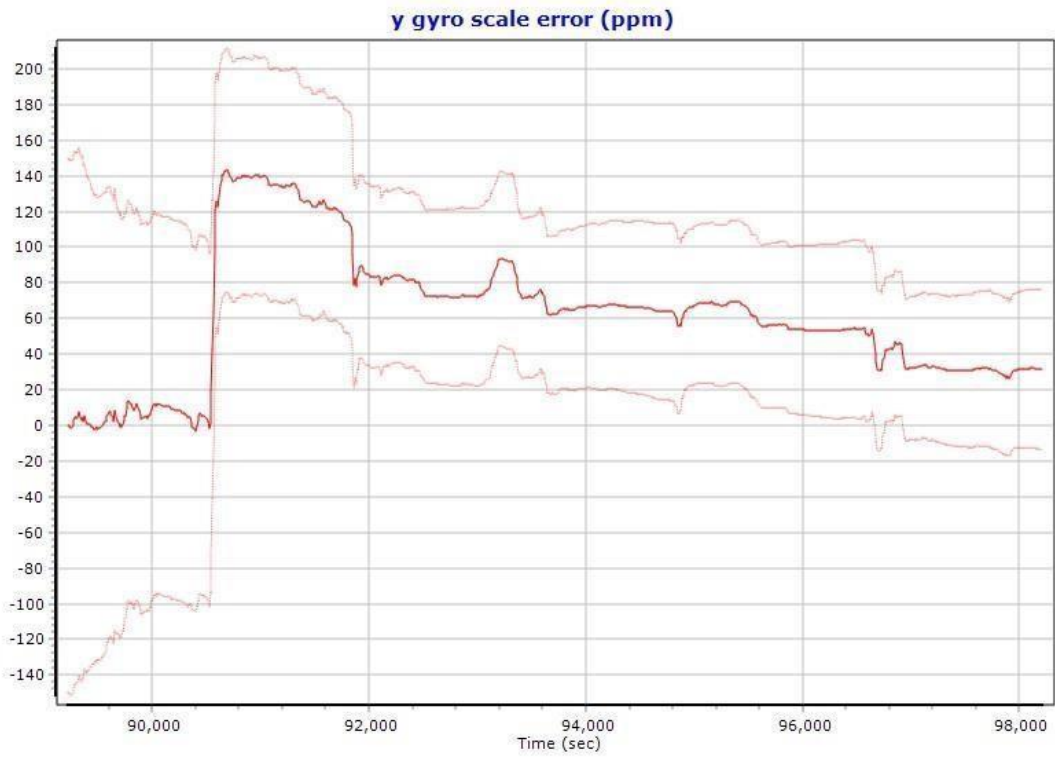
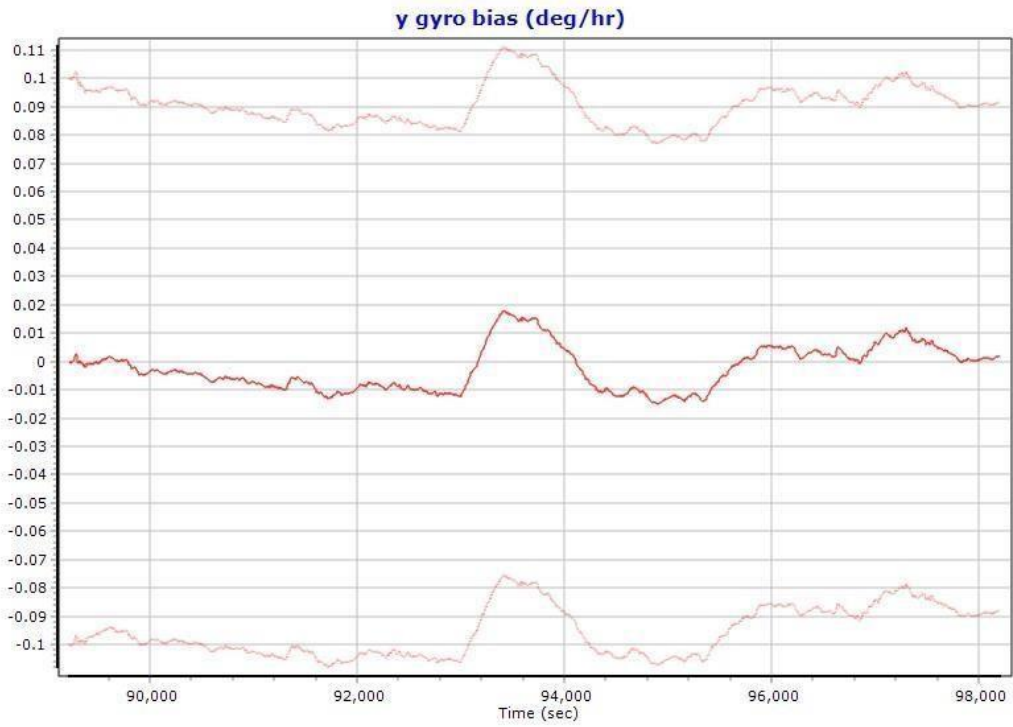


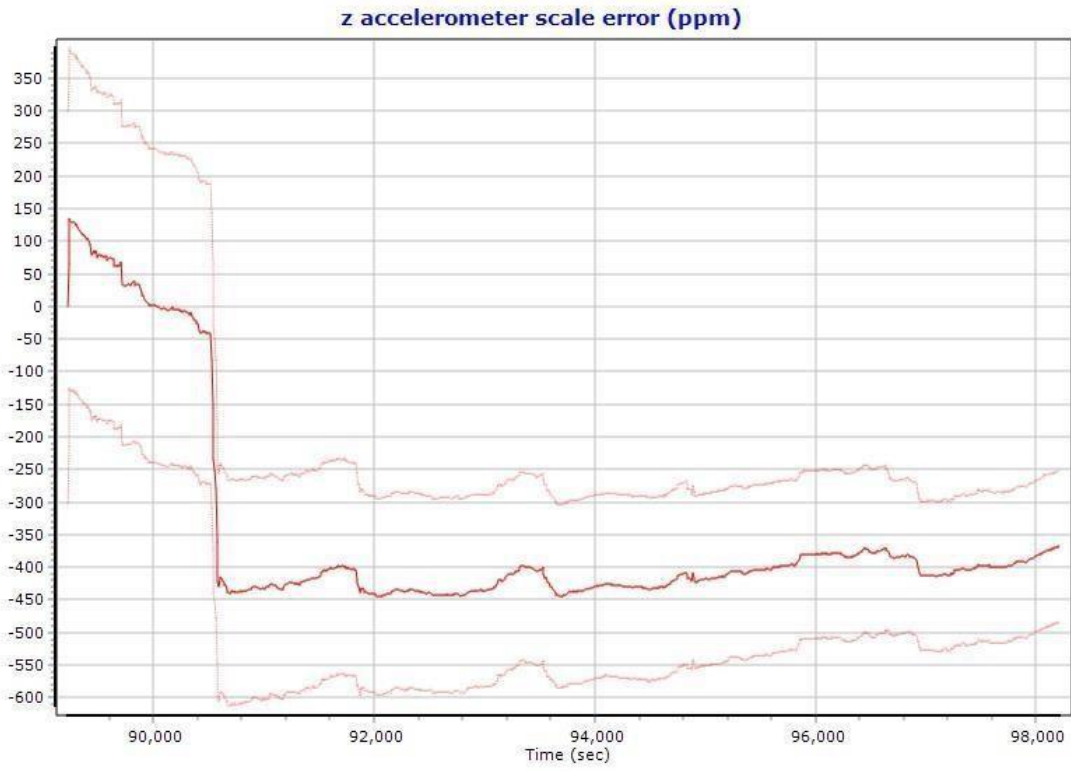
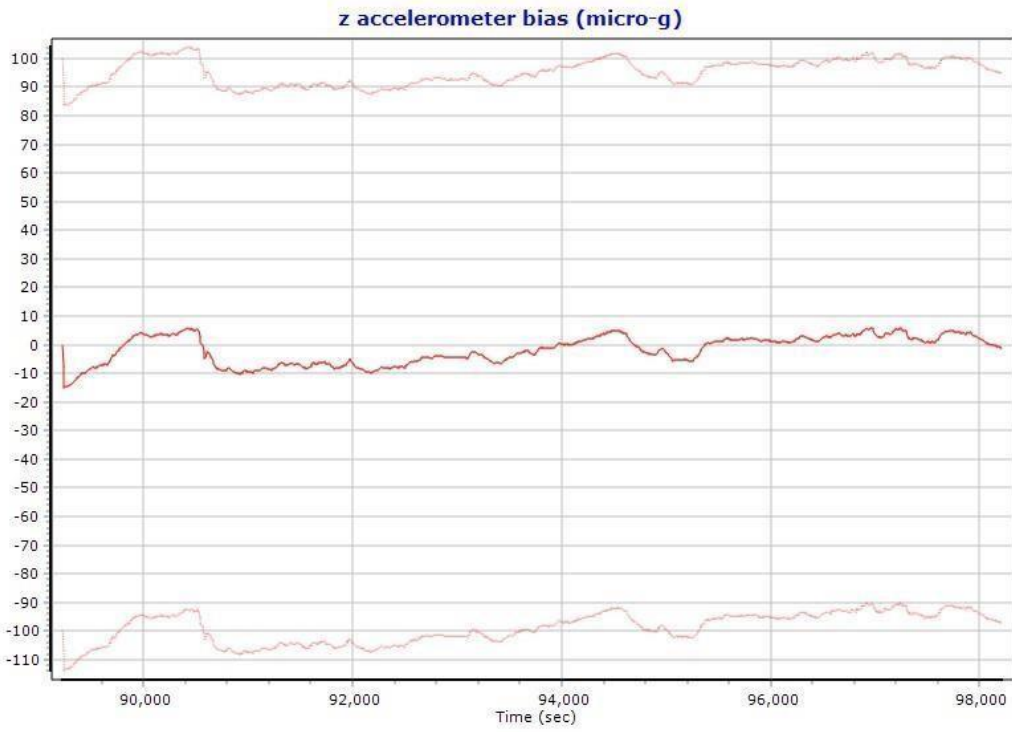
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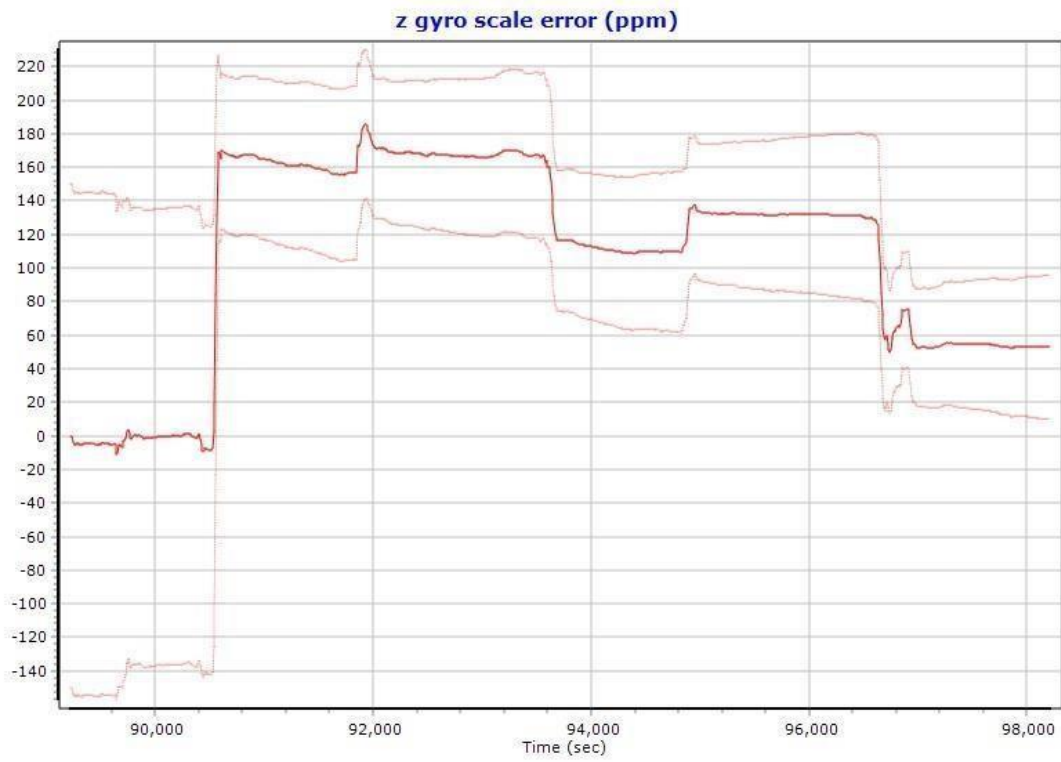
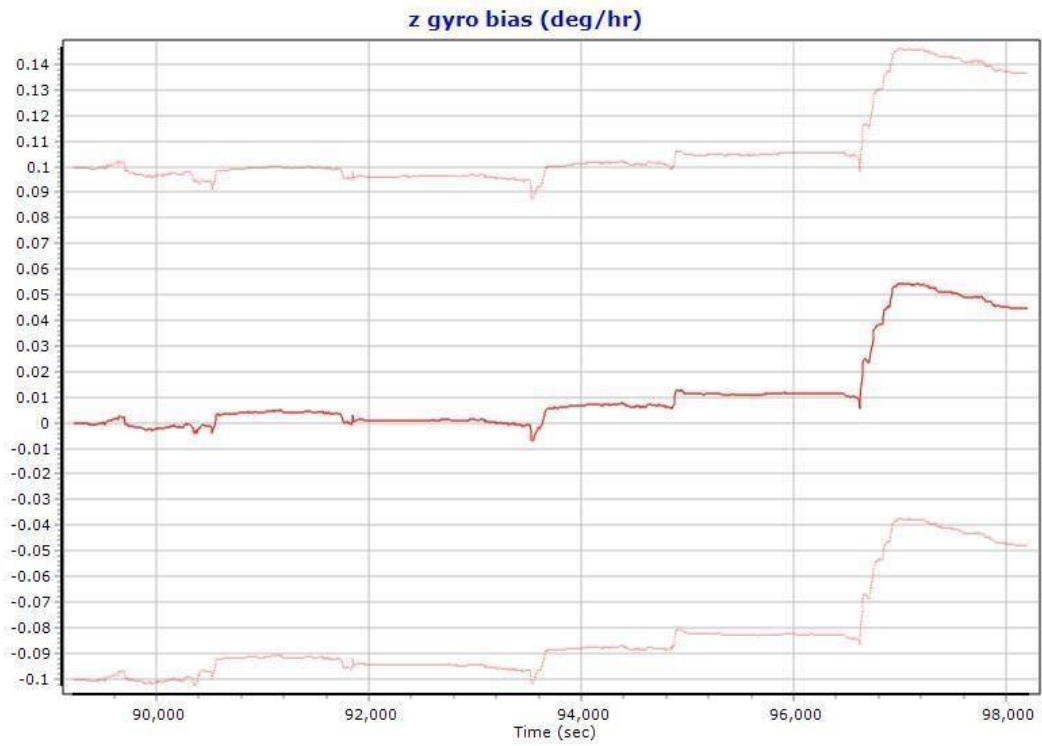




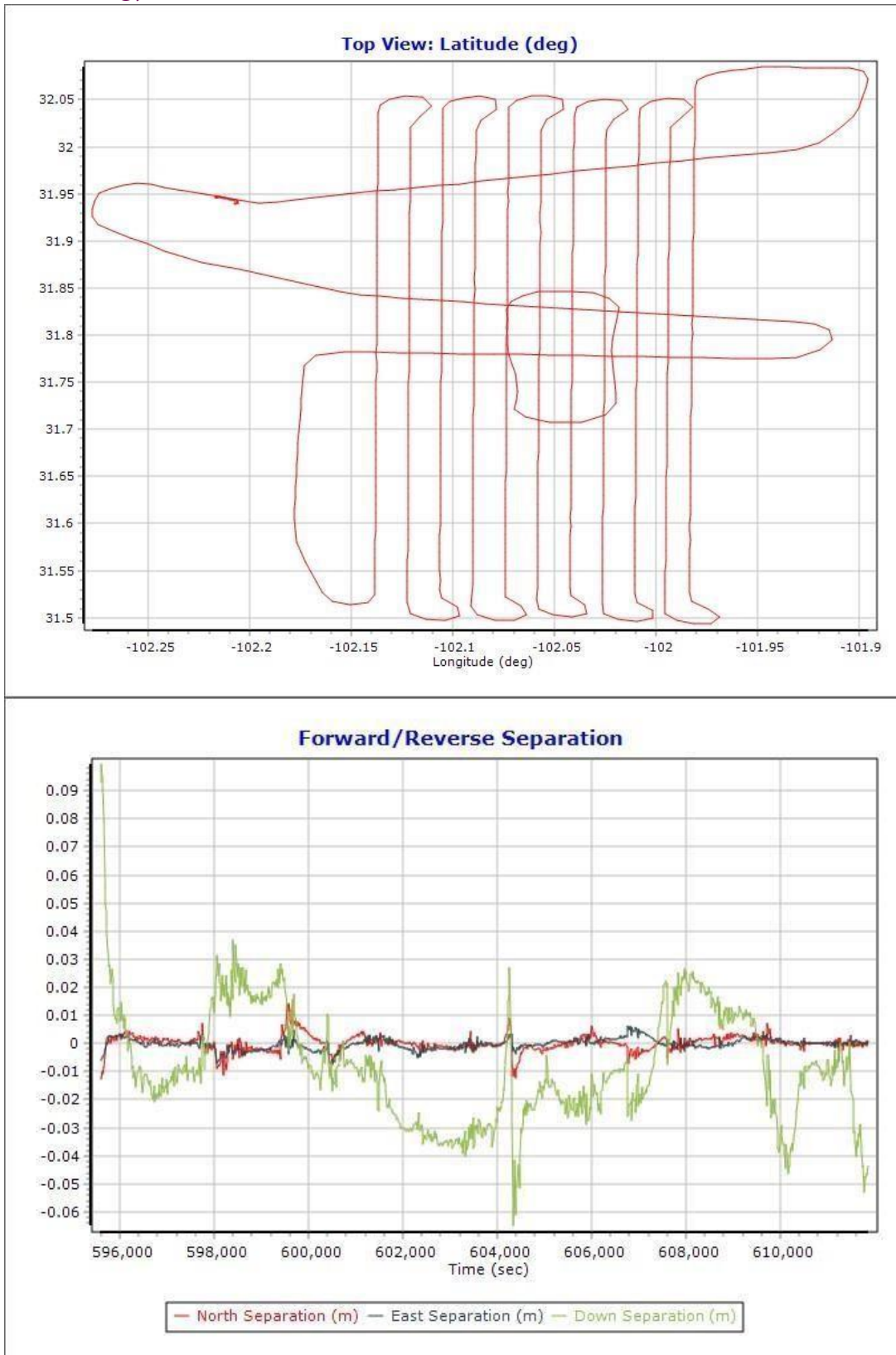


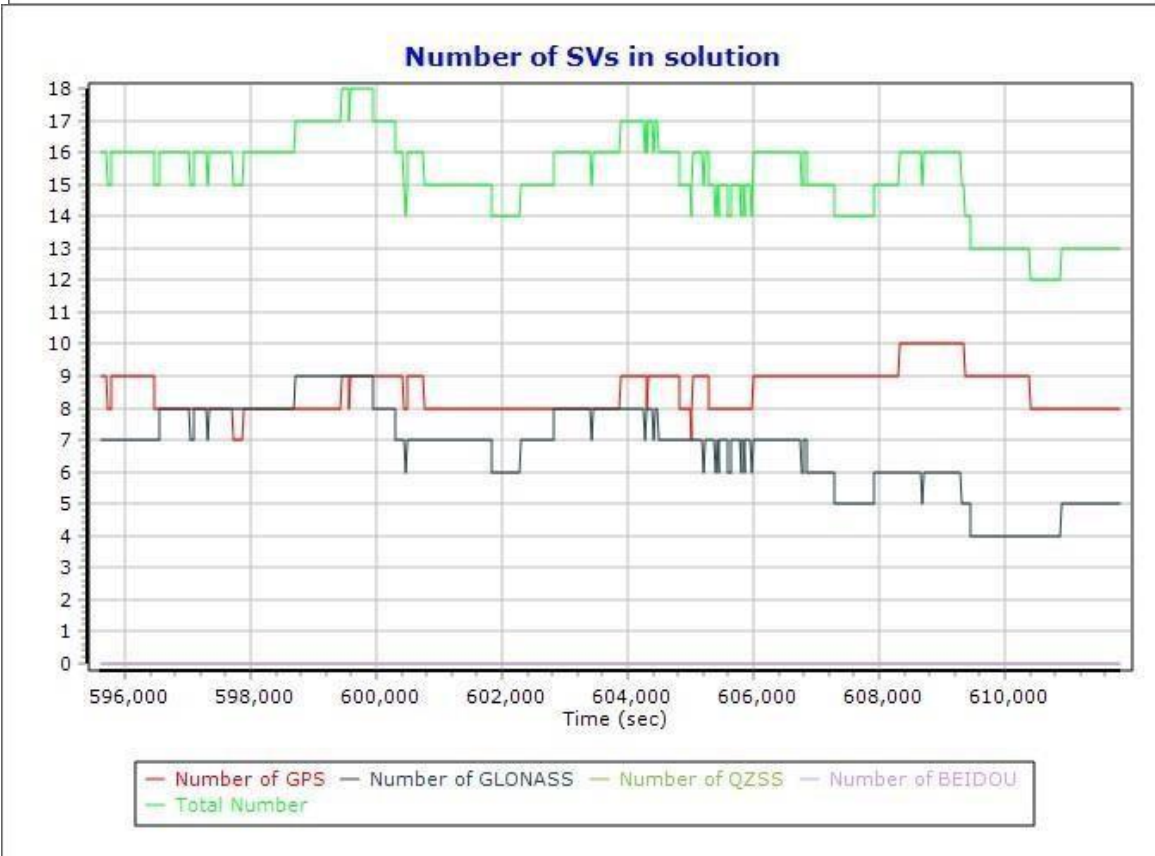
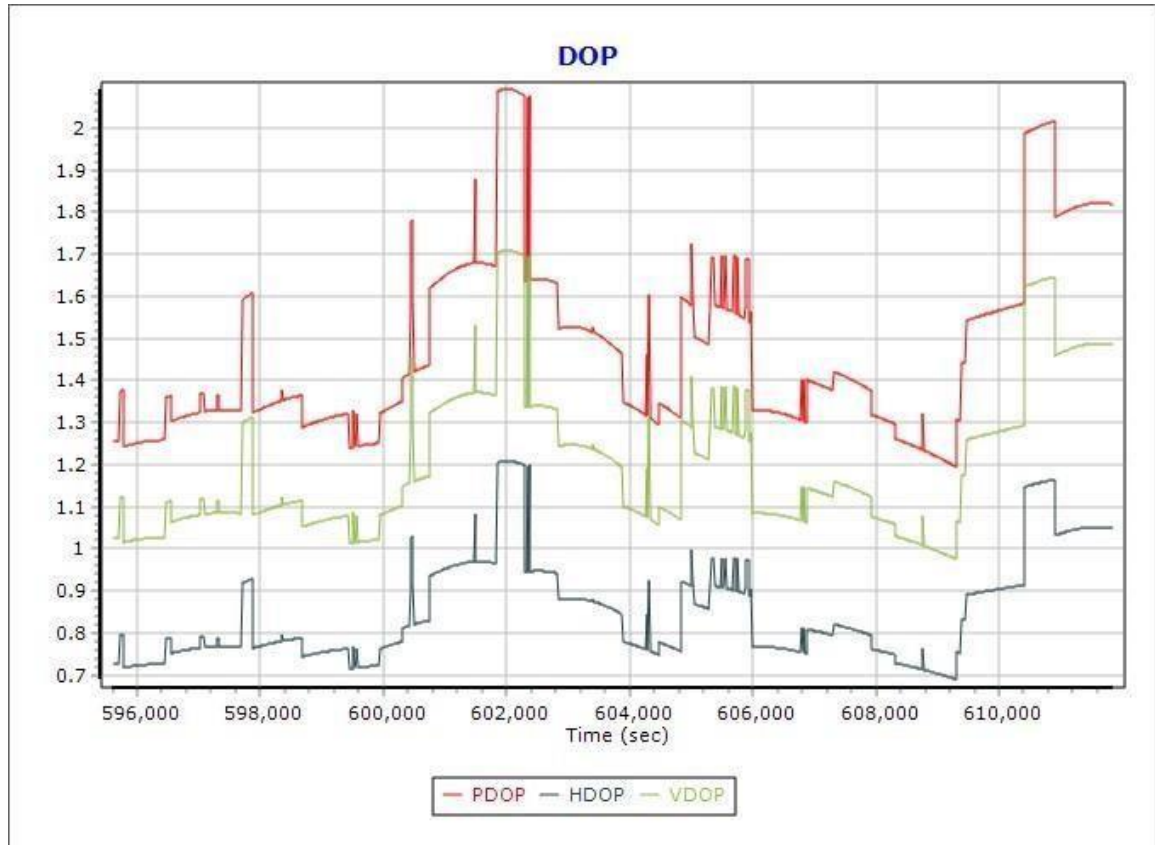






**MARCH 05, 2018**







## Processing Summary Information

Program: POSPac MMS  
Version: 8.1.6388.30062  
Project: \\sa\data\riegl\18047\20180303\_TX

Solution Type: IN-Fusion SmartBase

Fixed: 10124	(99.99%)
Float: 0	(0.00%)
No Solution: 1	(0.01%)

Number of Epochs:

Total in RAW file: 10180  
No processed position: 56

Fwd/Rev Separation RMS Values (m):

North: 0.030  
East: 0.006  
Height: 0.025

Fwd/Rev Sep. RMS for 25%-75% weighting (m): 5089 occurrences

North: 0.002  
East: 0.002  
Height: 0.015

Quality Number Percentages:

Q 0: 100.0 %

Position Standard Deviation Percentages (%):

0.00 - 0.10 m: 100  
0.10 - 0.30 m: 0  
0.30 - 1.00 m: 0  
1.00 - 5.00 m: 0  
5.00 m + over: 0

Percentages of epochs with DD\_DOP over 10.00: 0 %

DOP over Tol: 1.48%

Baseline Distances (km):

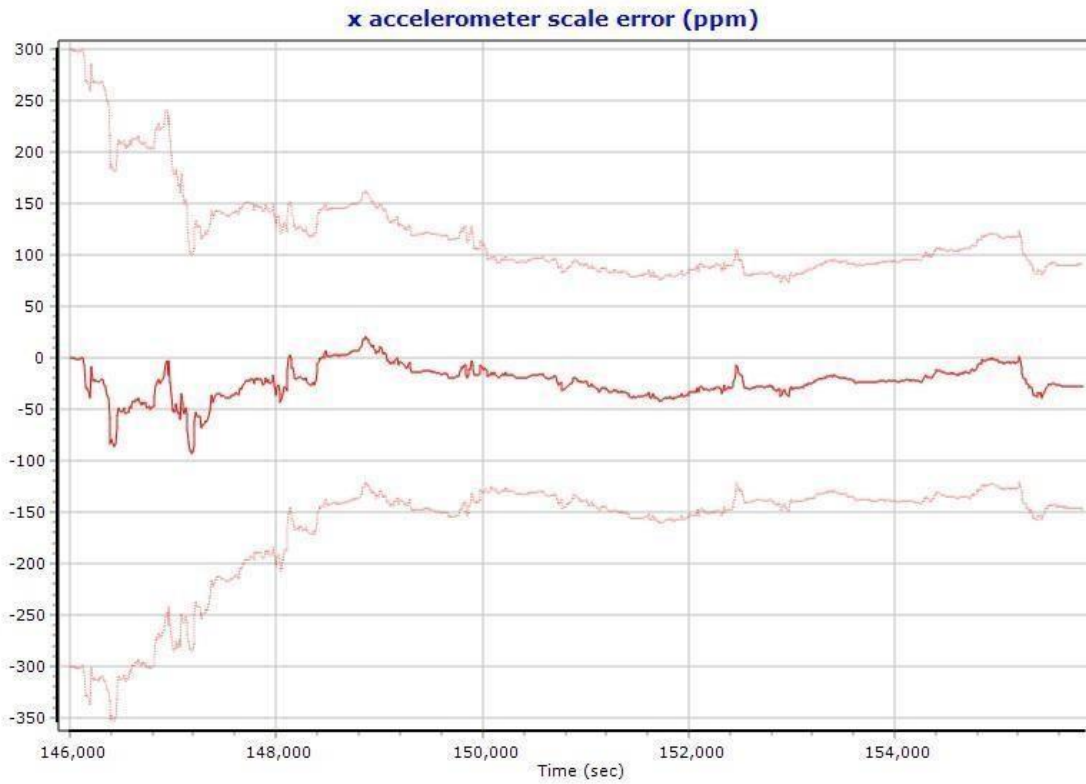
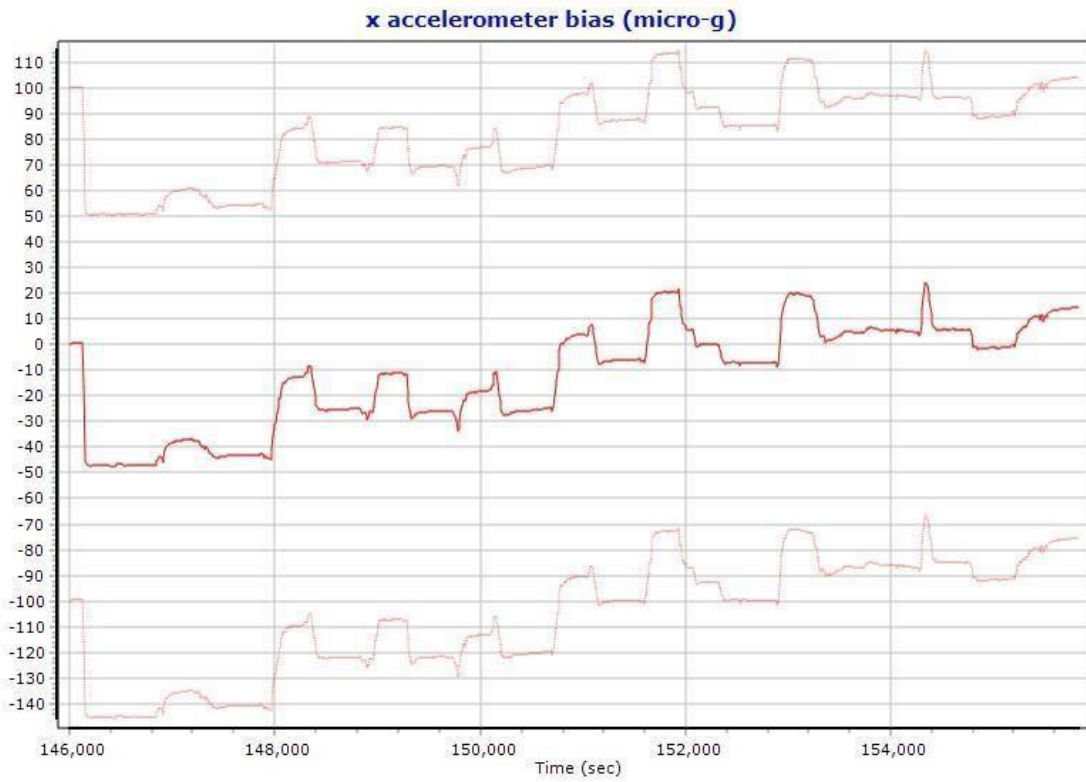
Maximum: 41.46  
Minimum: 0.42  
Average: 13.34  
First Epoch: 9.77  
Last Epoch: 9.73

**CORS Base Stations**

Station	Original			Adjusted		
TXTU	N34°32'01.43592"	W101°44'21.67572"	1034.841	N34°32'01.43633"	W101°44'21.67583"	1034.844
TXP2	N33°10'55.80257"	W102°49'05.38273"	1089.713	N33°10'55.80225"	W102°49'05.38317"	1089.747
TXP1	N33°10'57.08880"	W101°22'47.67647"	767.614	N33°10'57.08850"	W101°22'47.67657"	767.610
TXMT	N34°00'42.06253"	W100°49'57.89020"	707.923	N34°00'42.06229"	W100°49'57.89012"	707.927

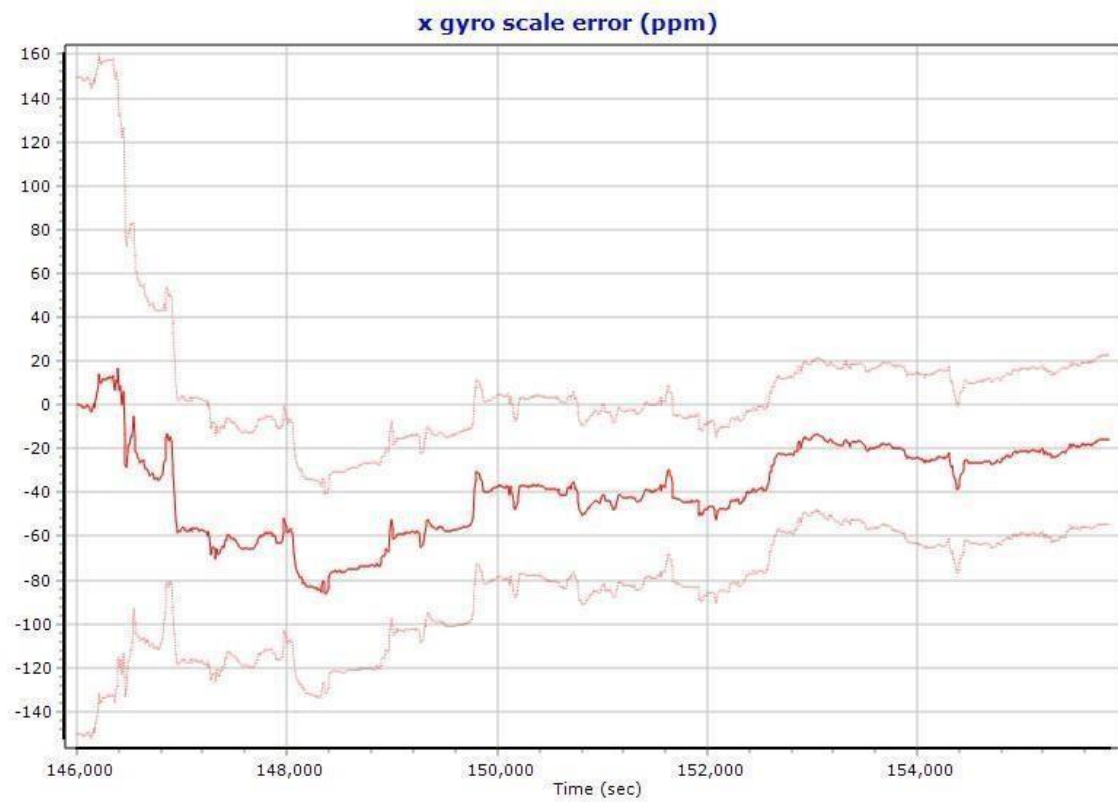
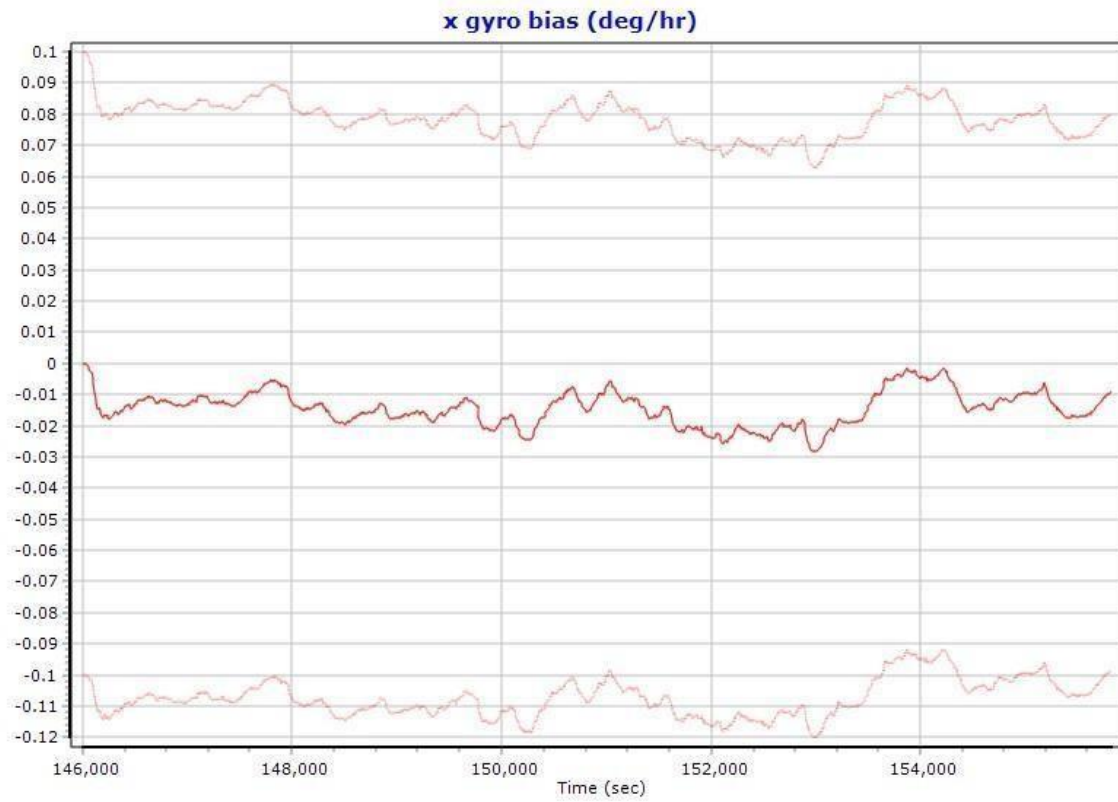
TXLU	N33°32'07.50646"	W101°50'34.20555"	956.023	N33°32'07.50646"	W101°50'34.20555"	956.023
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TXLA	N32°45'40.91674"	W101°56'38.21353"	891.645	N32°45'40.91650"	W101°56'38.21362"	891.644
TXL1	N33°56'18.24259"	W102°20'58.31951"	1071.624	N33°56'18.24232"	W102°20'58.31990"	1071.630





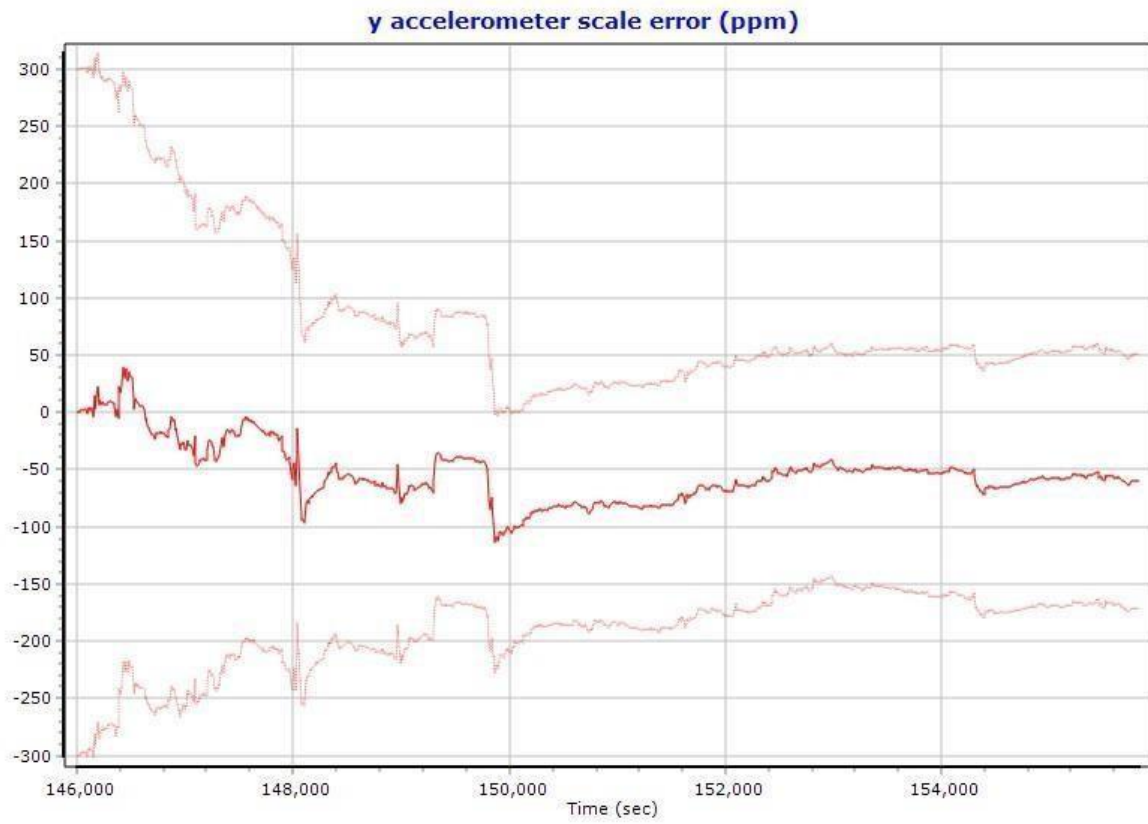
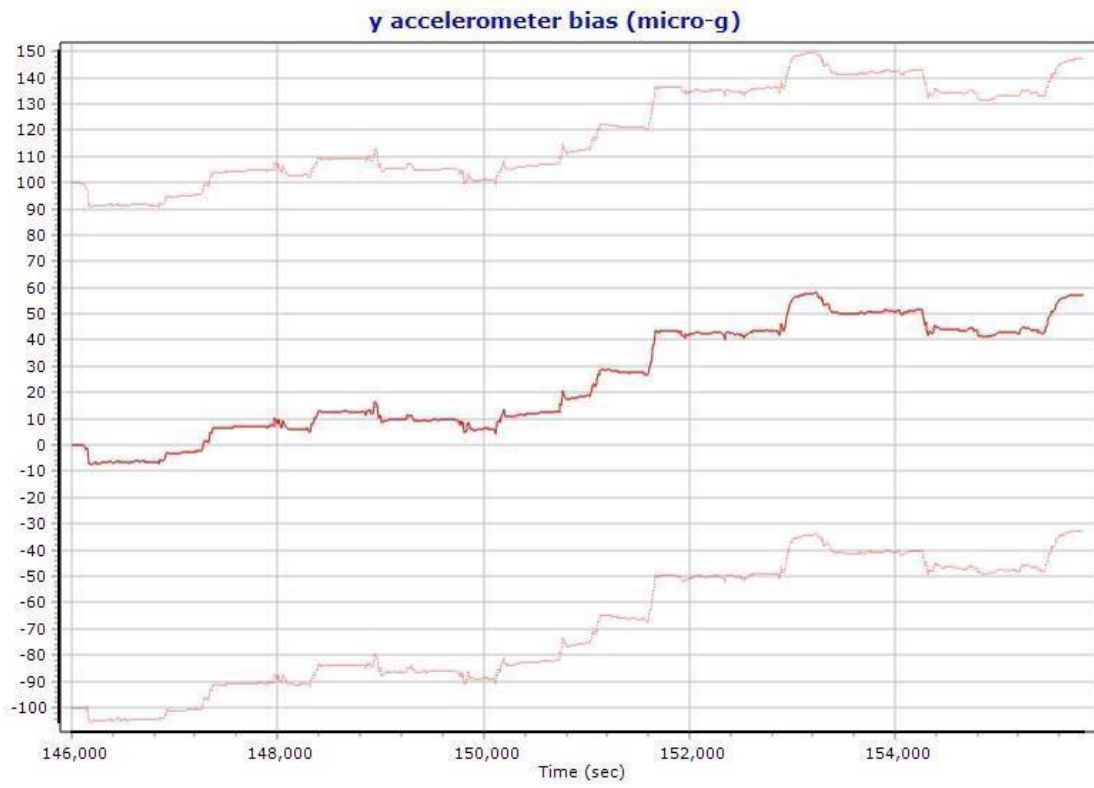
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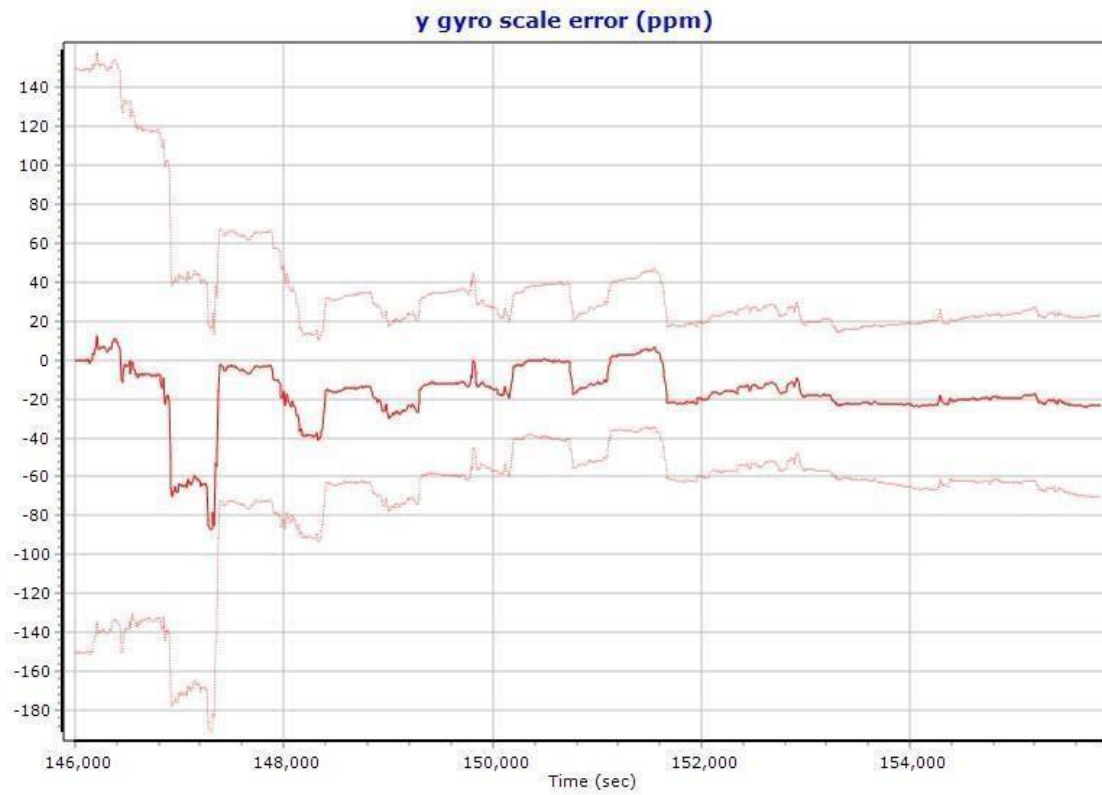
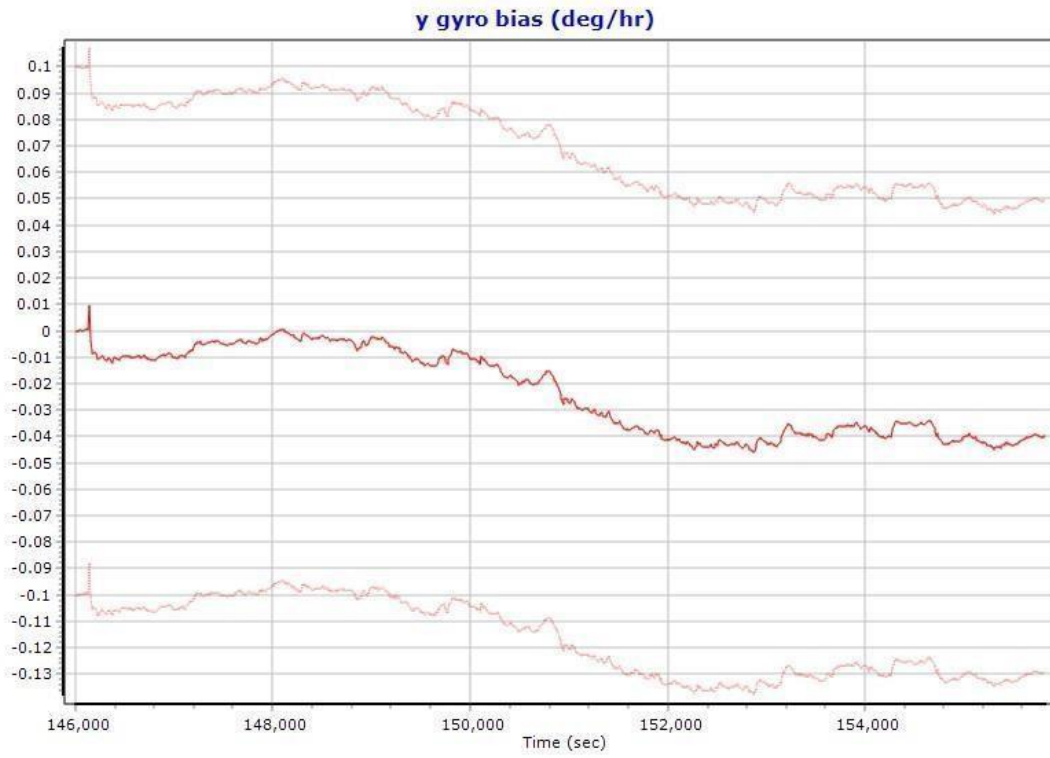
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