

Project information		Coordinate System	
Name:	\\conas\projects \312014478_PAG_2015\Acquisition \Ground_Survey\Adjustments\4478 PAG LiDAR Network.vce	Name:	US State Plane 1983
Size:	950 KB	Datum:	NAD 1983 (Conus)
Modified:	3/6/2015 3:36:43 PM (UTC:-7)	Zone:	Arizona Central 0202
Time zone:	Mountain Standard Time	Geoid:	GEOID12A (Conus)
Reference number:		Vertical datum:	NAVD88
Description:			

## Baseline Processing Report

### Processing Summary

Observation	From	To	Solution Type	H. Prec. (Meter)	V. Prec. (Meter)	Geodetic Az.	Ellipsoid Dist. (Meter)	ΔHeight (Meter)
KRYN_APT_2 --- TUS_4 (B1)	KRYN_APT_2	TUS_4	Fixed	0.003	0.006	128°48'57"	55511.541	791.884
TUS_4 --- KTUS_APT_1 (B2)	KTUS_APT_1	TUS_4	Fixed	0.002	0.005	146°45'51"	39837.691	742.016
TUS_5 --- AVRA_APT_3 (B5)	TUS_5	AVRA_APT_3	Fixed	0.004	0.009	267°23'18"	68751.549	-290.612
KTUS_APT_1 --- TUS_5 (B6)	KTUS_APT_1	TUS_5	Fixed	0.008	0.014	51°31'44"	55176.280	122.571
KTUS_APT_1 --- KRYN_APT_2 (B11)	KTUS_APT_1	KRYN_APT_2	Fixed	0.003	0.009	274°11'38"	21402.526	-49.845
KRYN_APT_2 --- AVRA_APT_3 (B14)	KRYN_APT_2	AVRA_APT_3	Fixed	0.003	0.008	351°52'46"	29621.649	-118.272
KTUS_APT_1 --- AH8499 (B16)	KTUS_APT_1	AH8499	Fixed	0.006	0.024	347°29'00"	11667.978	-62.758
TUS_4 --- CZ0209 (B21)	CZ0209	TUS_4	Fixed	0.005	0.020	142°10'47"	37867.782	738.165
KTUS_APT_1 --- CZ0209 (B22)	CZ0209	KTUS_APT_1	Fixed	0.003	0.016	22°04'30"	3674.374	-3.893
TUS_4 --- TUS_5 (B23)	TUS_4	TUS_5	Fixed	0.015	0.044	17°39'00"	70940.648	-619.511
AH8499 --- AVRA_APT_3 (B24)	AH8499	AVRA_APT_3	Fixed	0.005	0.027	310°21'53"	30112.354	-105.341

### Acceptance Summary

Processed	Passed	Flag	Fail
11	11	0	0

**KRYN\_APT\_2 - TUS\_4 (8:17:04 AM-9:33:44 AM) (S1)**

Baseline observation: KRYN\_APT\_2 --- TUS\_4 (B1)  
 Processed: 3/5/2015 3:40:14 PM  
 Solution type: Fixed  
 Frequency used: Dual Frequency (L1, L2)  
 Horizontal precision: 0.003 m  
 Vertical precision: 0.006 m  
 RMS: 0.003 m  
 Maximum PDOP: 4.871  
 Ephemeris used: Broadcast  
 Antenna model: NGS Absolute  
 Processing start time: 2/25/2015 8:17:04 AM (Local: UTC-7hr)  
 Processing stop time: 2/26/2015 9:33:44 AM (Local: UTC-7hr)  
 Processing duration: 1.01:16:40  
 Processing interval: 10 seconds

**Vector Components (Mark to Mark)**

From:		KRYN_APT_2			
Grid		Local		Global	
Easting	283680.071 m	Latitude	N32°08'19.22927"	Latitude	N32°08'19.22927"
Northing	126486.193 m	Longitude	W111°10'16.66431"	Longitude	W111°10'16.66431"
Elevation	752.237 m	Height	722.413 m	Height	722.412 m

To:		TUS_4			
Grid		Local		Global	
Easting	327171.546 m	Latitude	N31°49'26.59644"	Latitude	N31°49'26.59643"
Northing	91988.911 m	Longitude	W110°42'51.96051"	Longitude	W110°42'51.96051"
Elevation	1542.664 m	Height	1514.297 m	Height	1514.297 m

<b>Vector</b>					
ΔEasting	43491.475 m	NS Fwd Azimuth	128°48'57"	ΔX	33487.545 m
ΔNorthing	-34497.282 m	Ellipsoid Dist.	55511.541 m	ΔY	-33323.636 m
ΔElevation	790.427 m	ΔHeight	791.884 m	ΔZ	-29177.734 m

**Standard Errors**

<b>Vector errors:</b>					
σ ΔEasting	0.001 m	σ NS fwd Azimuth	0°00'00"	σ ΔX	0.002 m
σ ΔNorthing	0.001 m	σ Ellipsoid Dist.	0.001 m	σ ΔY	0.003 m
σ ΔElevation	0.003 m	σ ΔHeight	0.003 m	σ ΔZ	0.002 m

**Aposteriori Covariance Matrix (Meter<sup>2</sup>)**

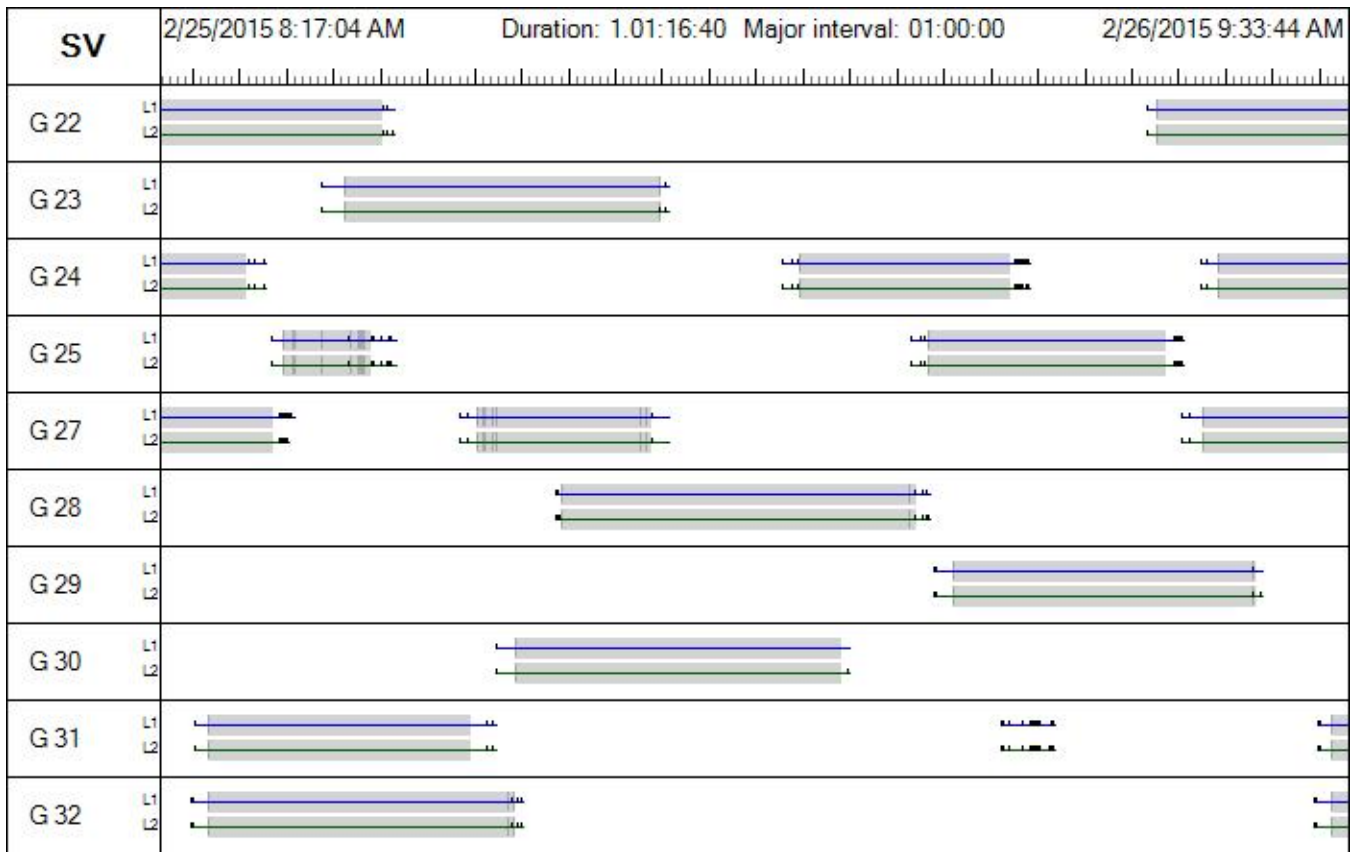
	X	Y	Z
X	0.0000023408		
Y	0.0000021660	0.0000066416	
Z	-0.0000017696	-0.0000038742	0.0000030495

**Occupations**

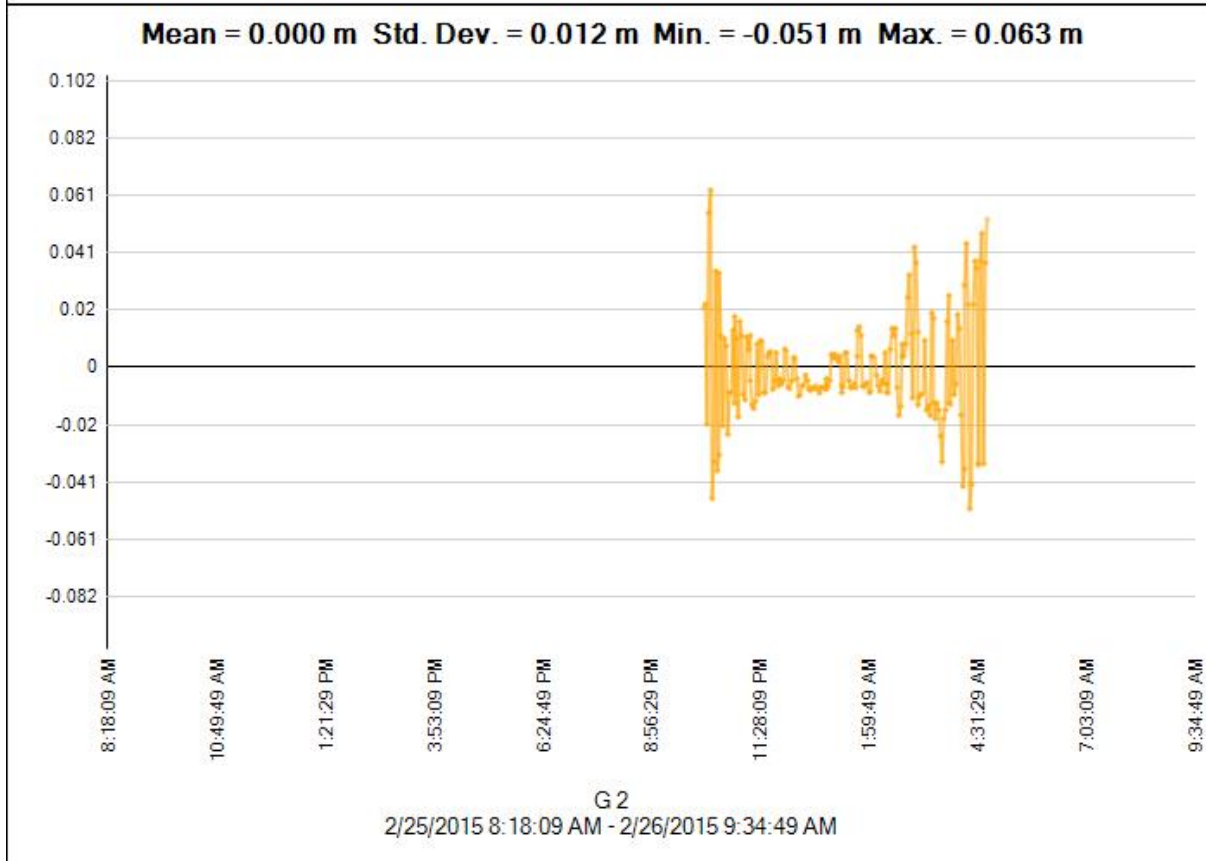
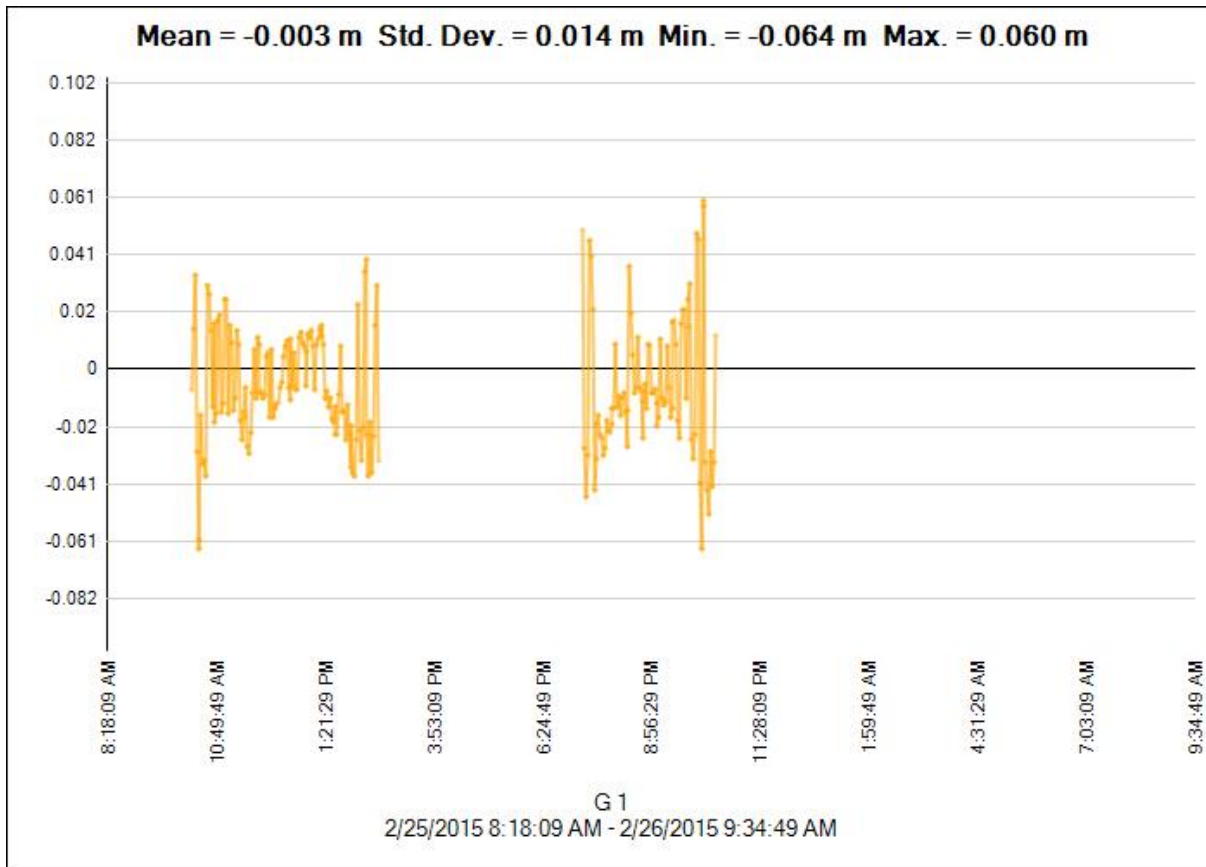
	From	To
<b>Point ID:</b>	KRYN_APT_2	TUS_4
<b>Data file:</b>	\\conas\projects \312014478_PAG_2015\Acquisition \Ground_Survey\Adjustments\4478 PAG LiDAR Network\00010560 resampled.15o	\\conas\projects \312014478_PAG_2015\Acquisition \Ground_Survey\Adjustments\4478 PAG LiDAR Network\00110560 resampled.15o
<b>Receiver type:</b>	Geo Explorer 3	Geo Explorer 3
<b>Receiver serial number:</b>		
<b>Antenna type:</b>	702 Rev 3.00	702 Rev 3.00
<b>Antenna serial number:</b>	-----	-----
<b>Antenna height (measured):</b>	2.065 m	2.065 m
<b>Antenna method:</b>	Antenna Phase Center	Antenna Phase Center

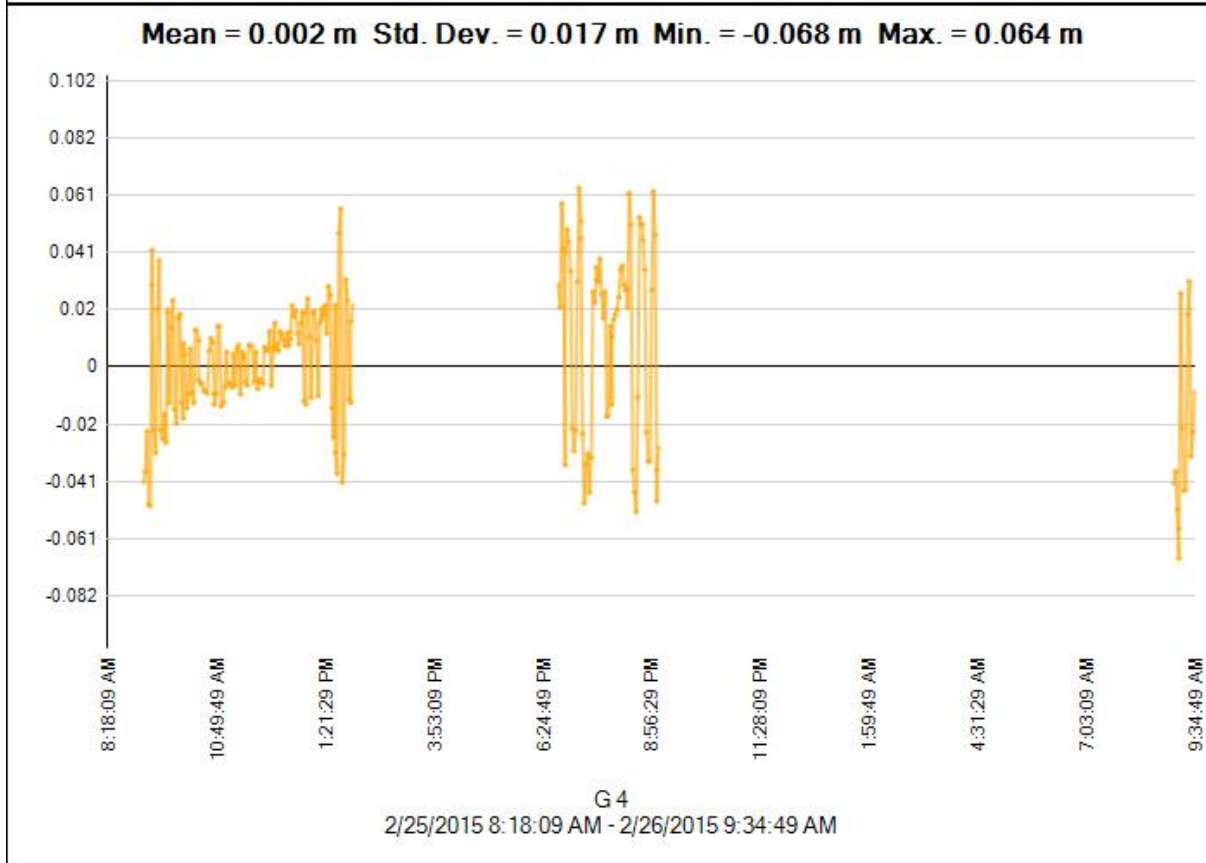
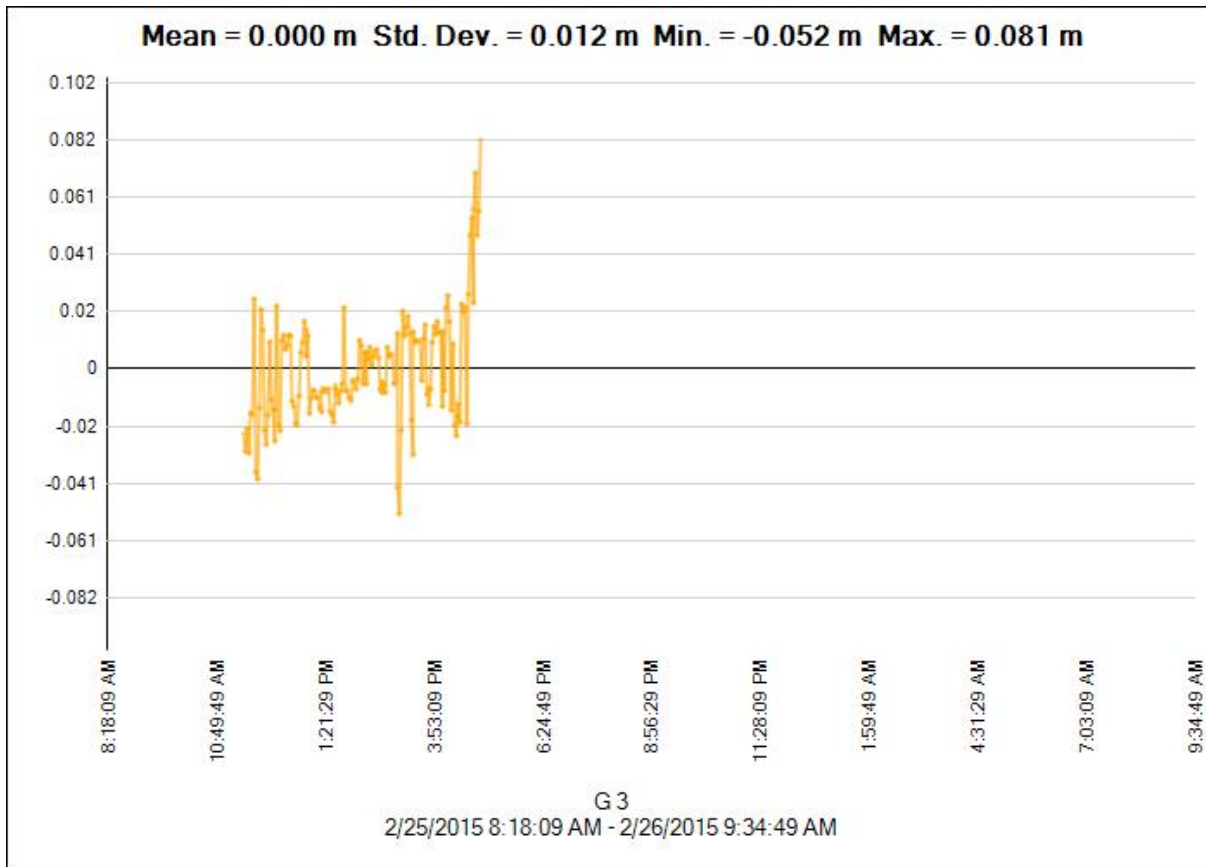
# Tracking Summary

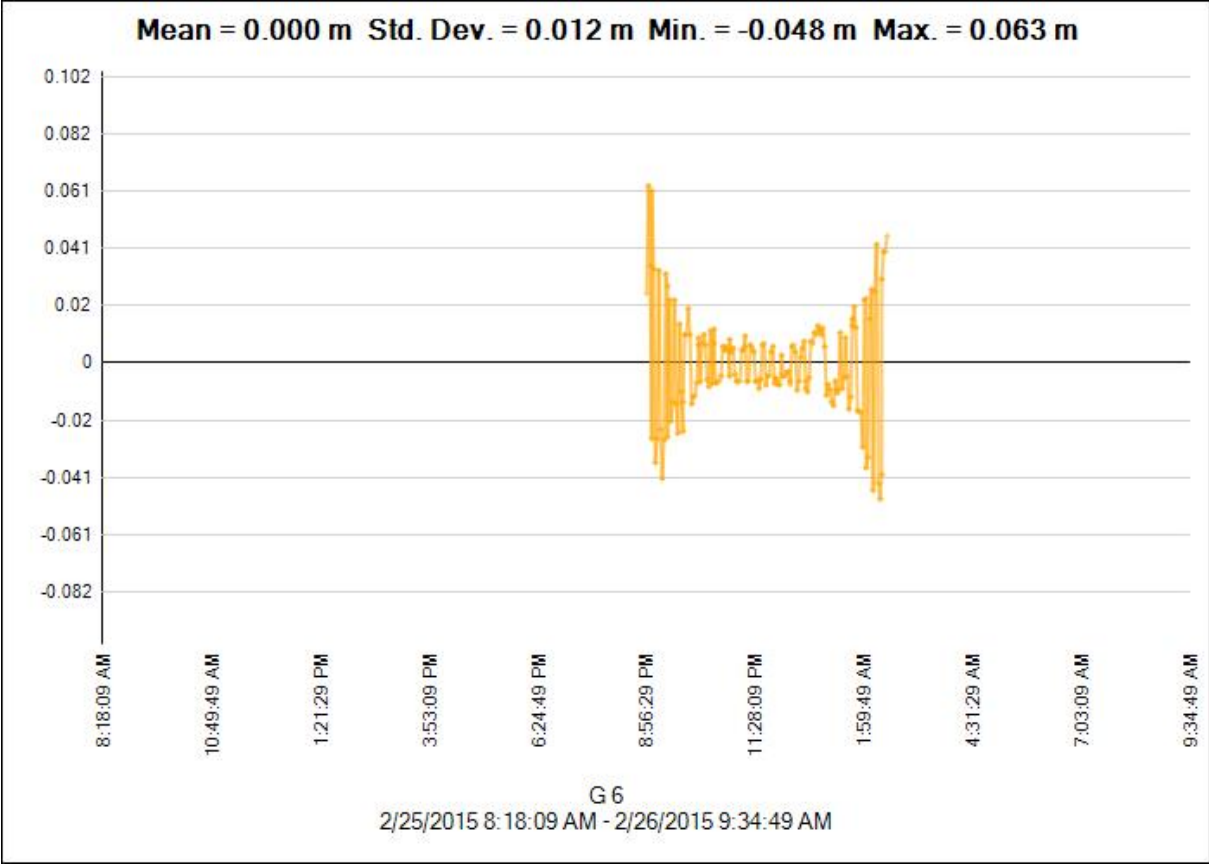
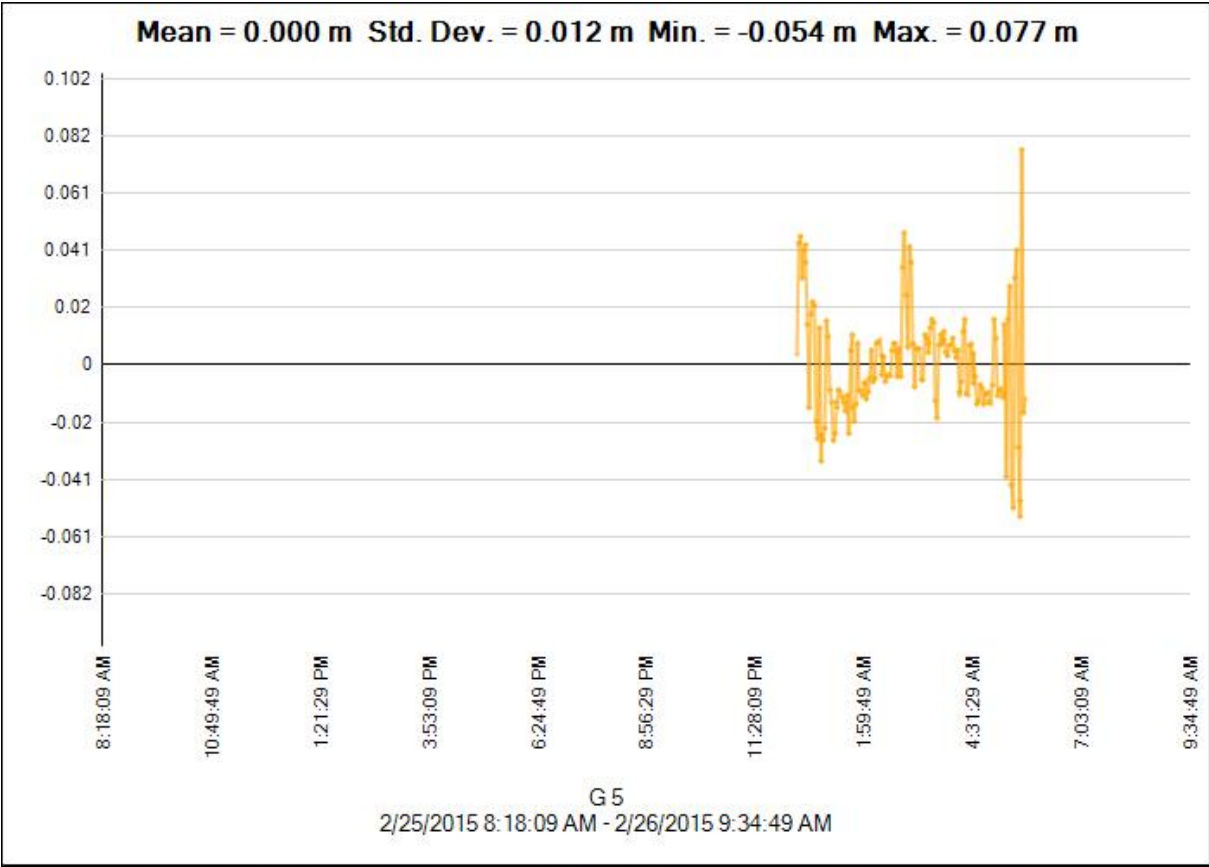
SV	2/25/2015 8:17:04 AM		Duration: 1.01:16:40 Major interval: 01:00:00		2/26/2015 9:33:44 AM	
G 1	L1					
	L2					
G 2	L1					
	L2					
G 3	L1					
	L2					
G 4	L1					
	L2					
G 5	L1					
	L2					
G 6	L1					
	L2					
G 7	L1					
	L2					
G 9	L1					
	L2					
G 10	L1					
	L2					
G 11	L1					
	L2					
G 12	L1					
	L2					
G 13	L1					
	L2					
G 14	L1					
	L2					
G 15	L1					
	L2					
G 16	L1					
	L2					
G 17	L1					
	L2					
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G 19	L1					
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G 20	L1					
	L2					
G 21	L1					
	L2					



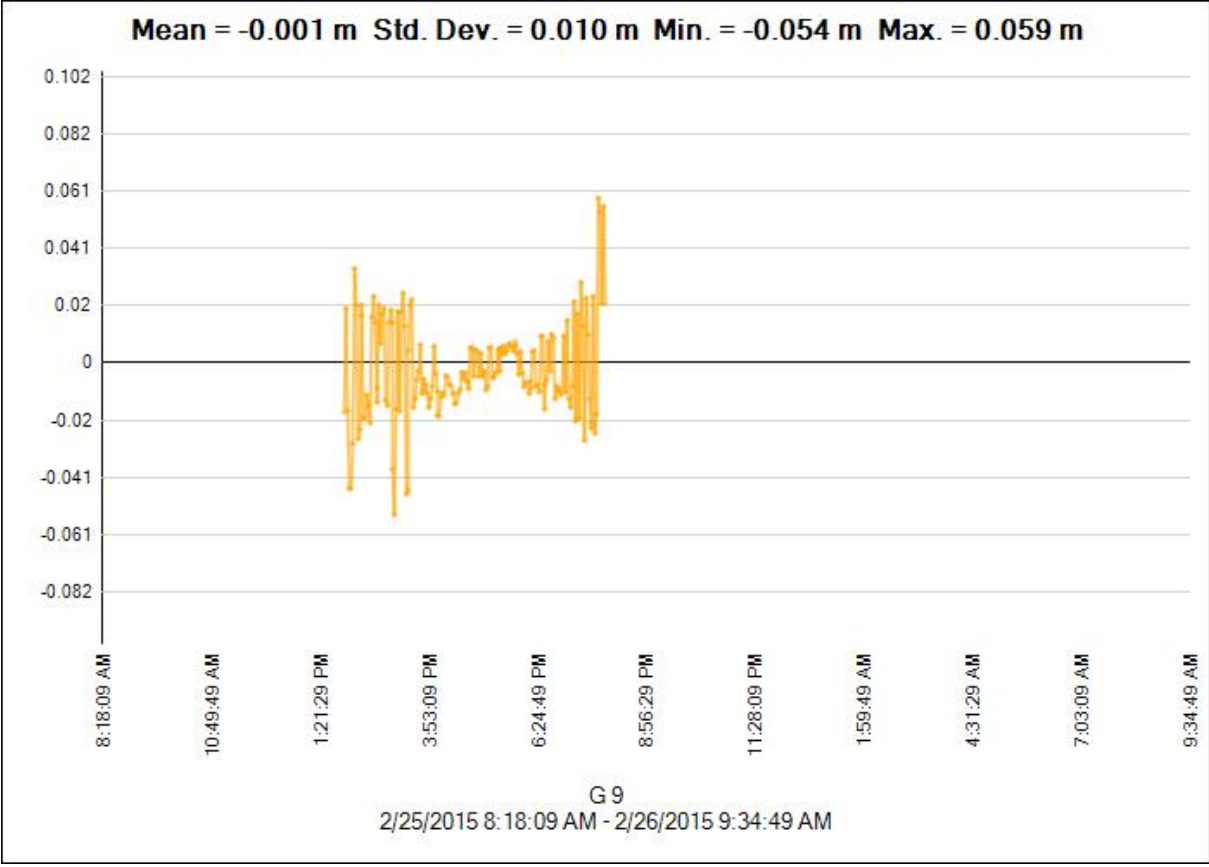
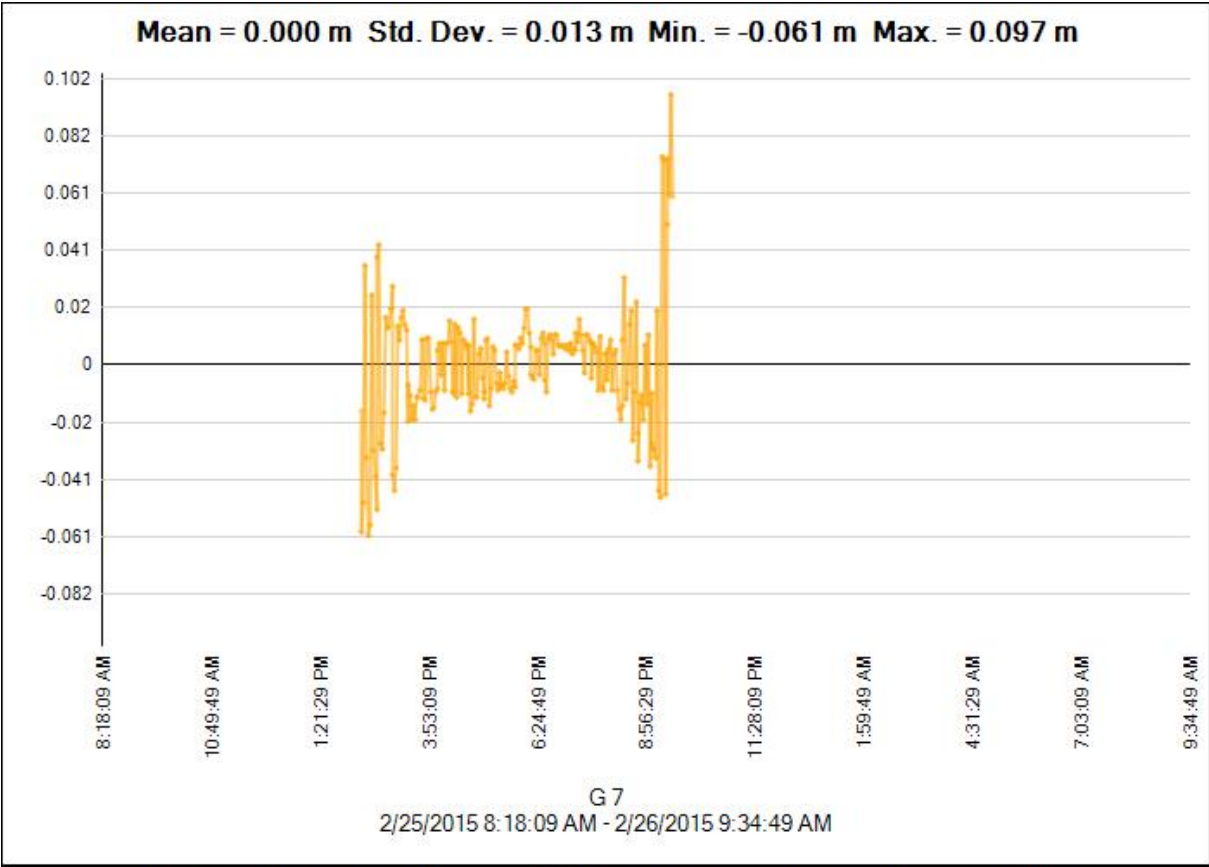
# Residuals

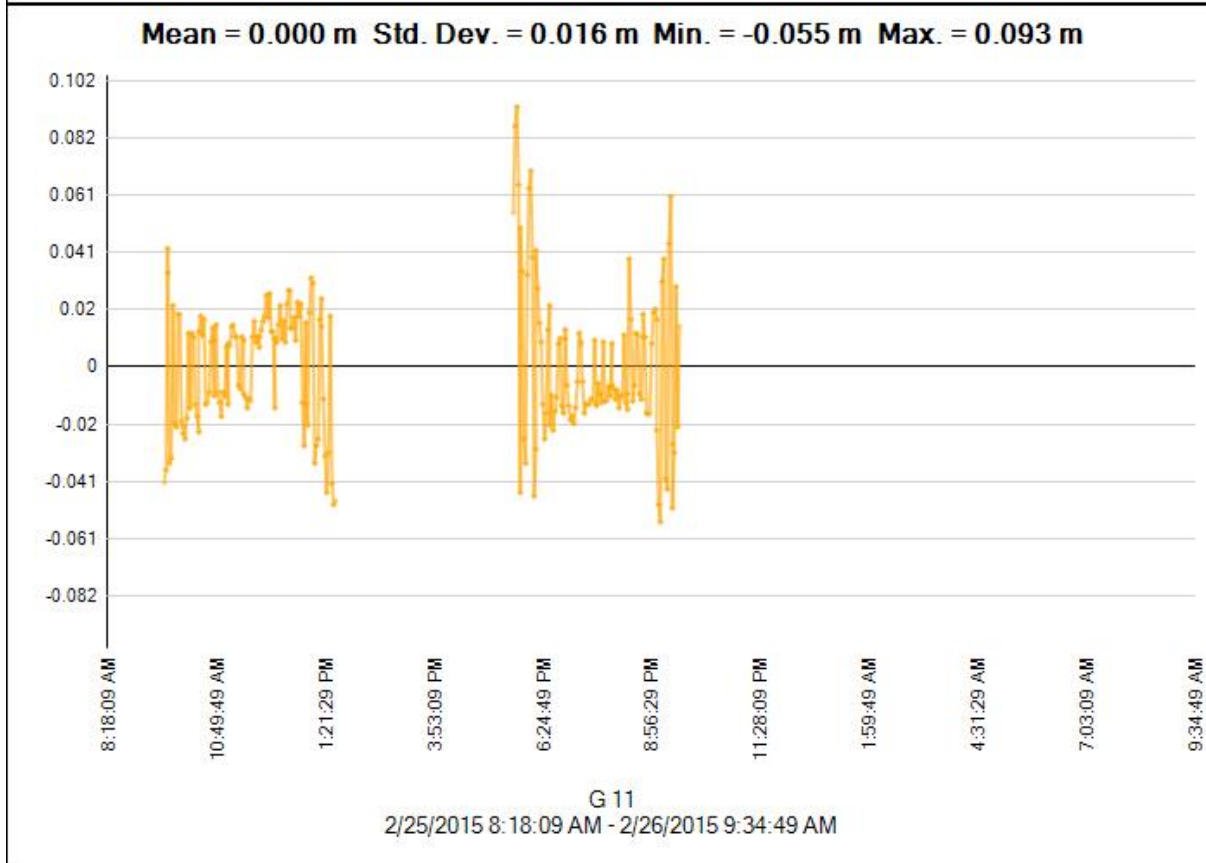
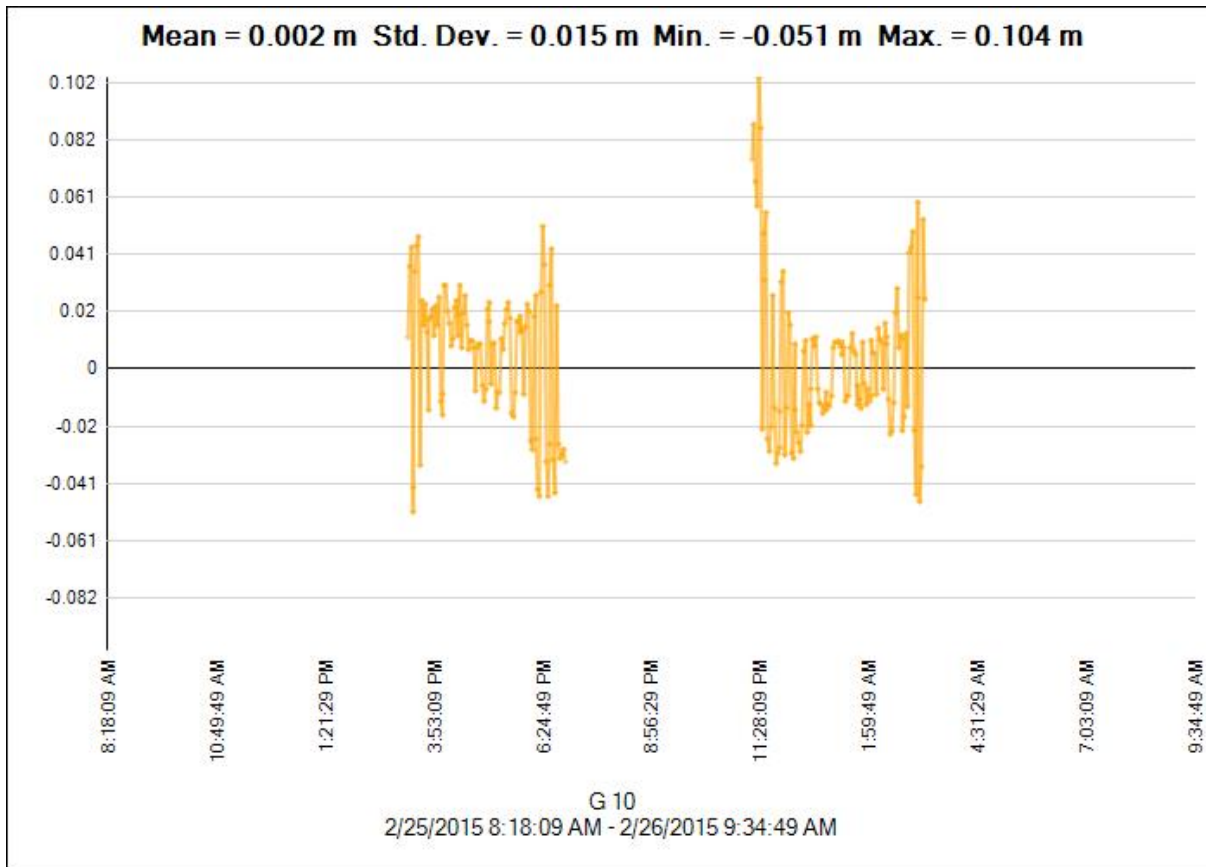


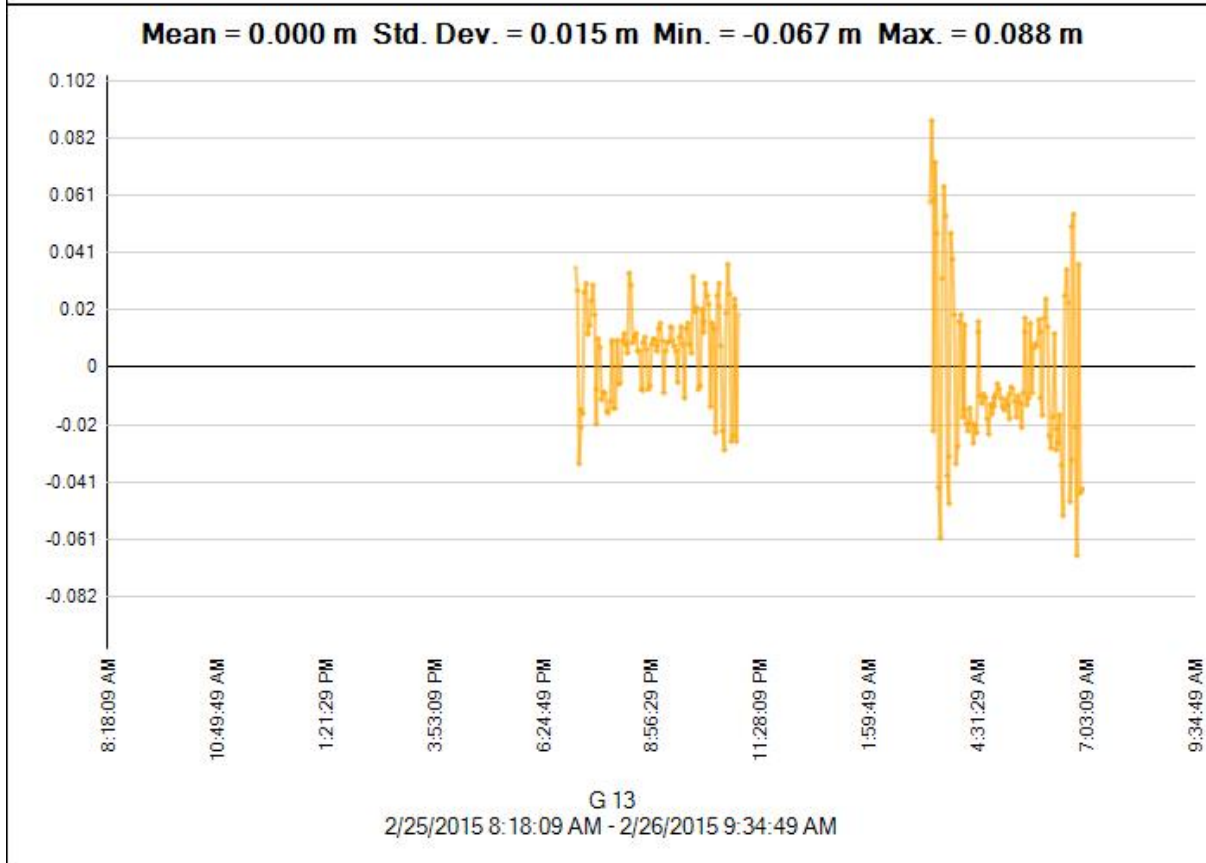
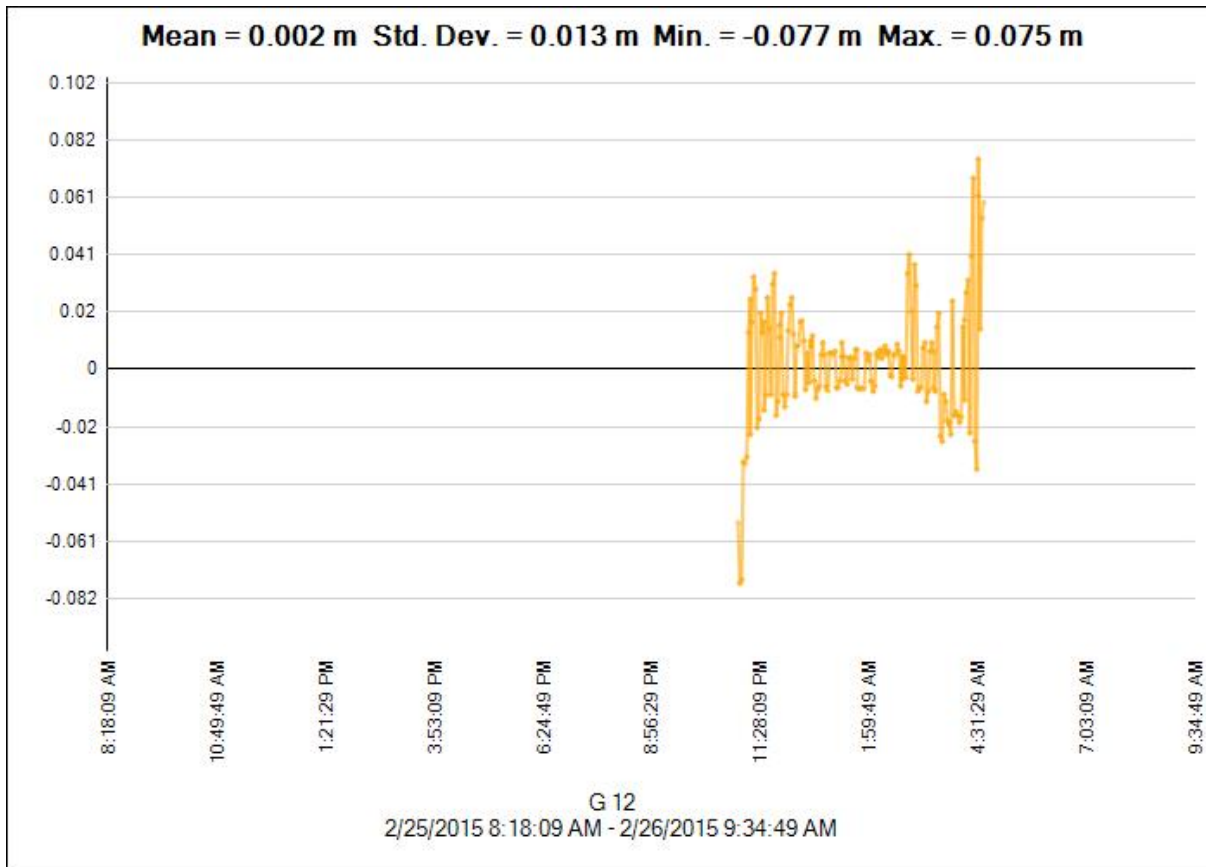


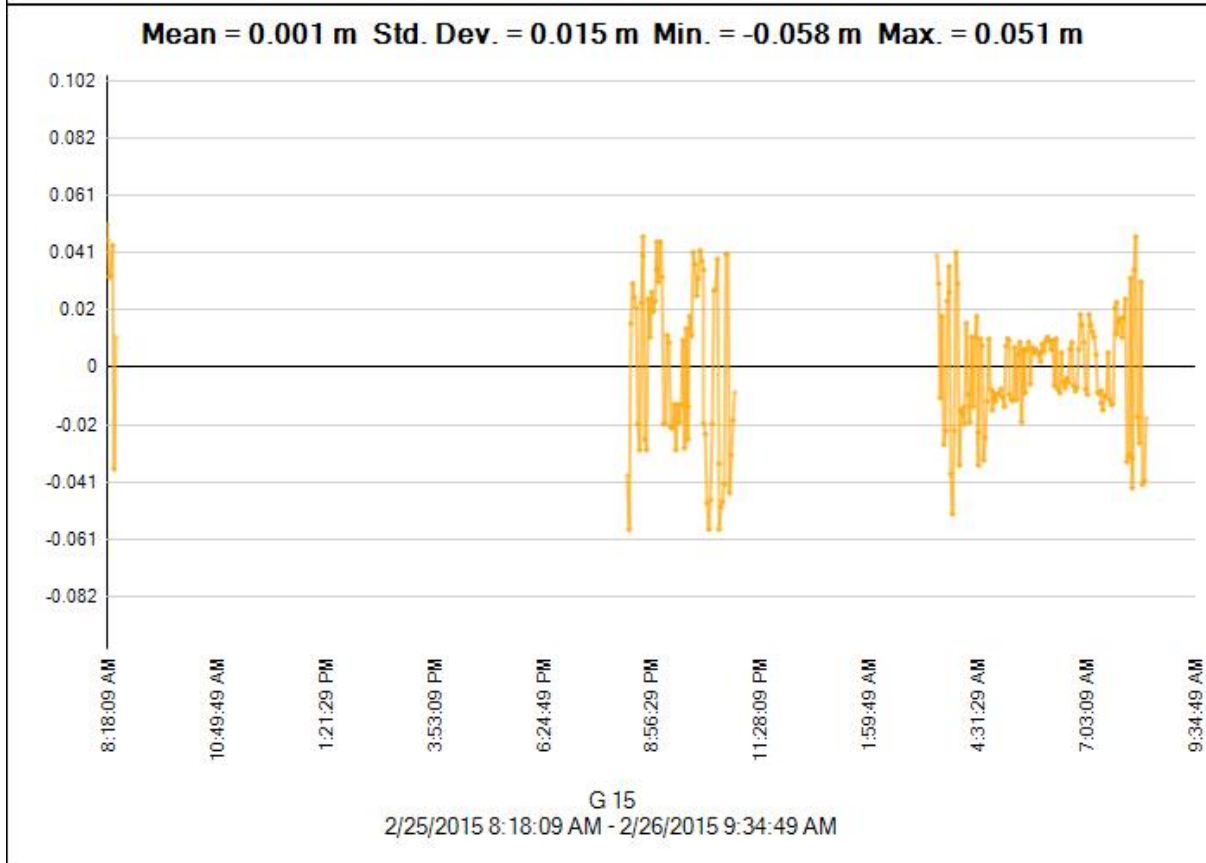
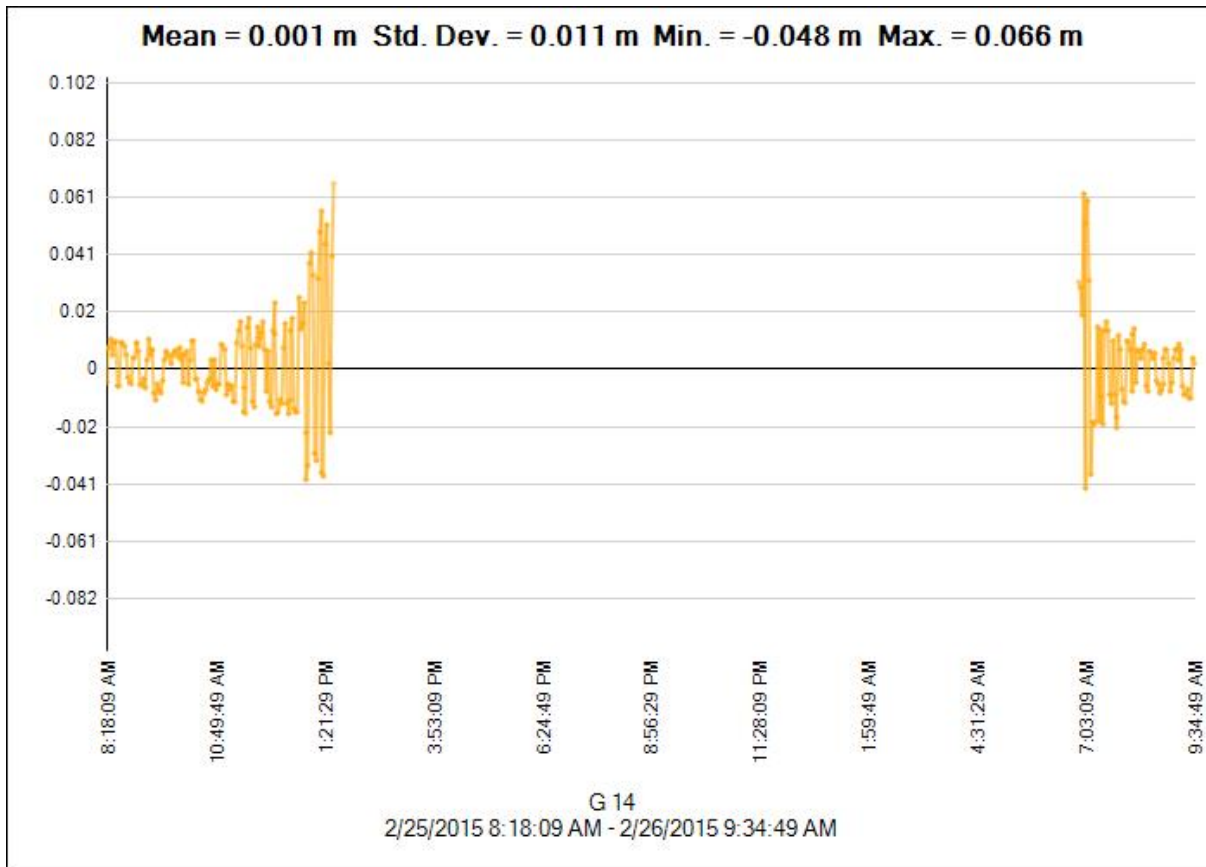


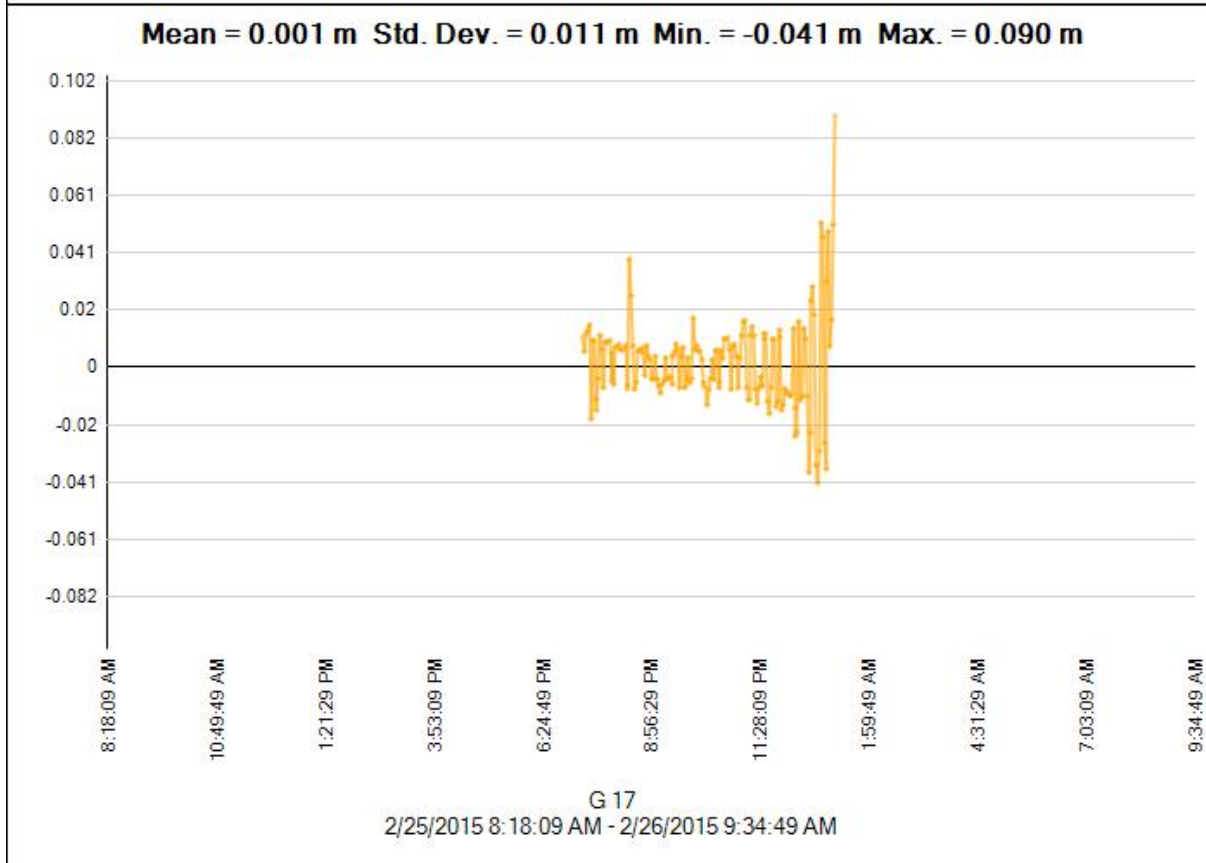
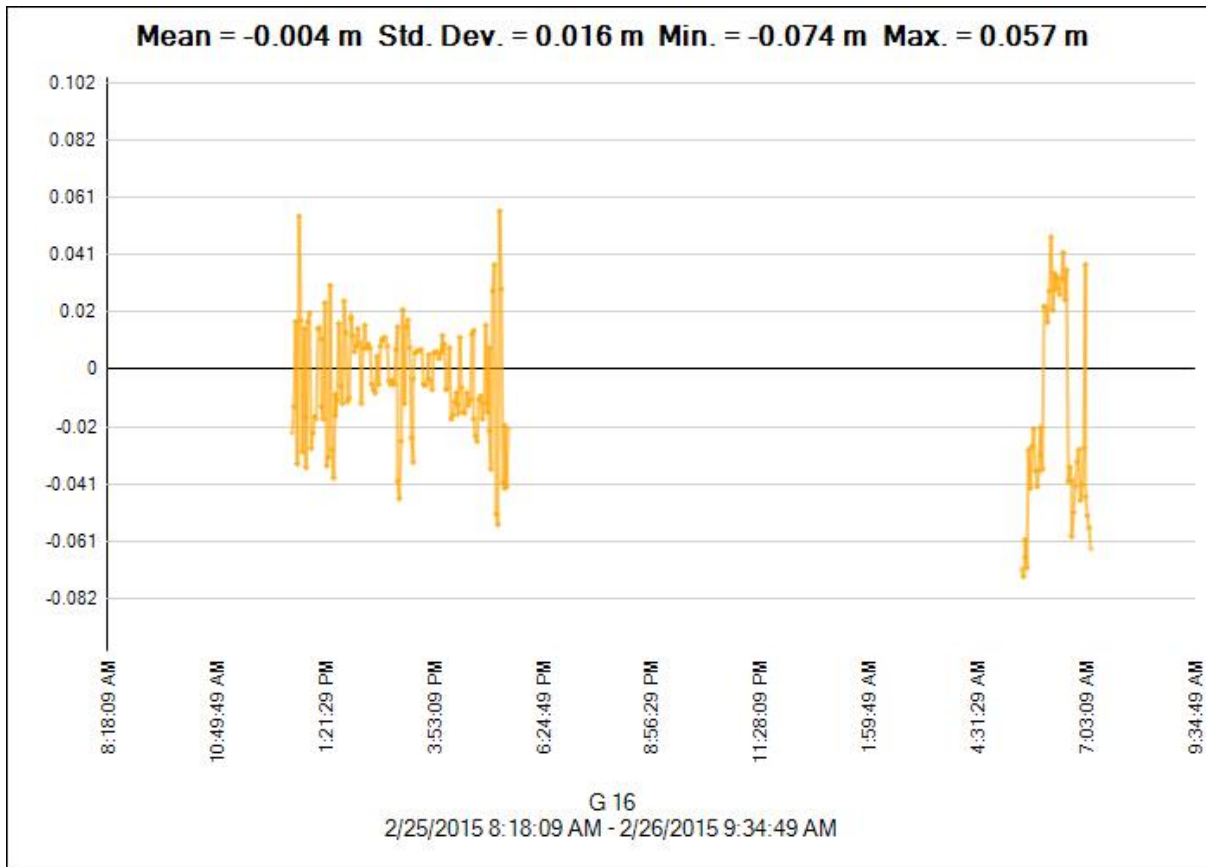


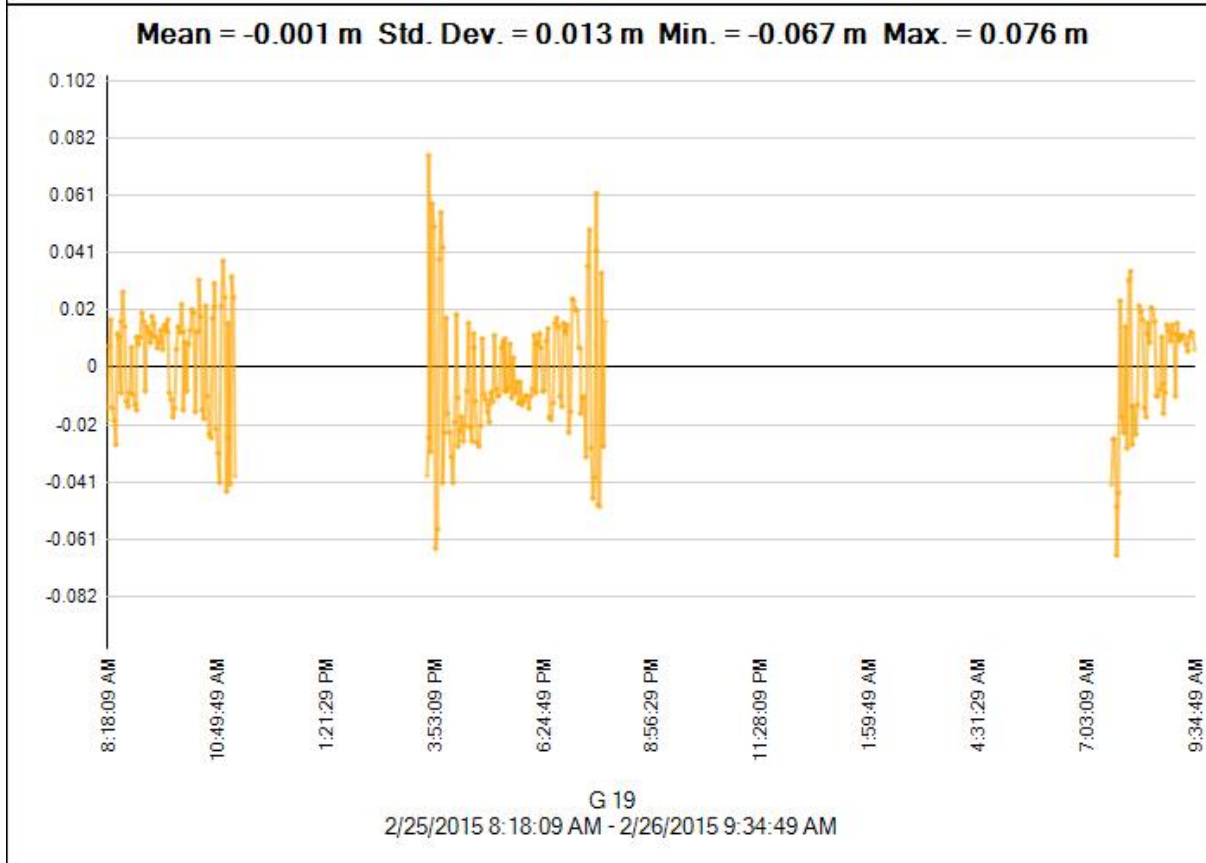
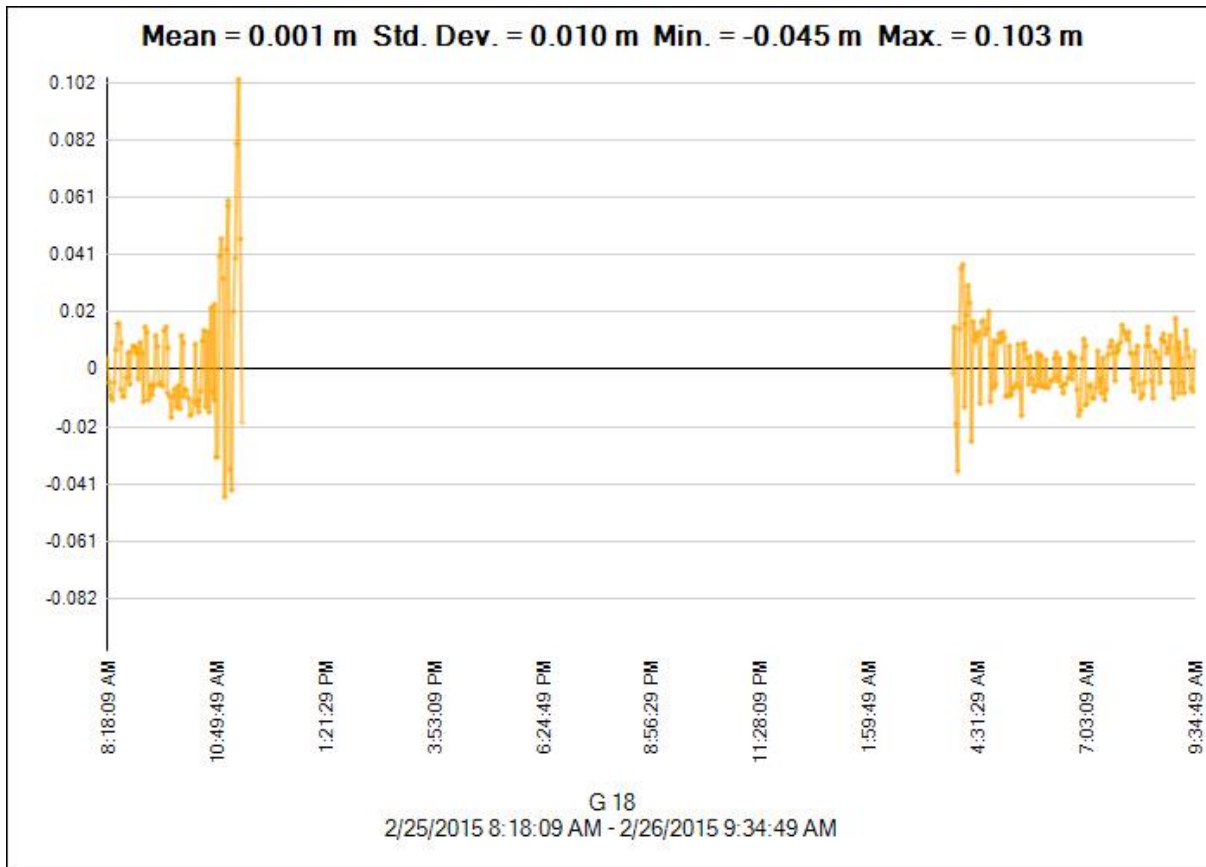


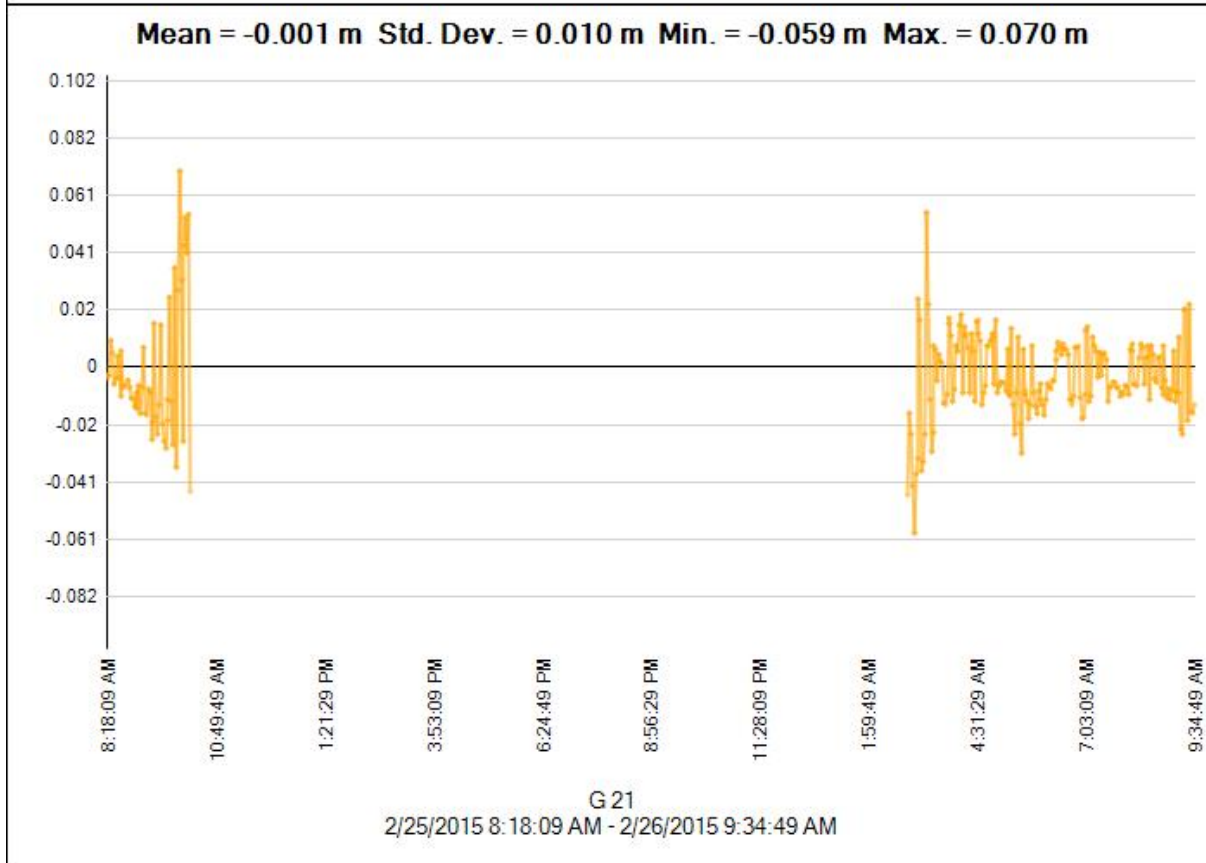
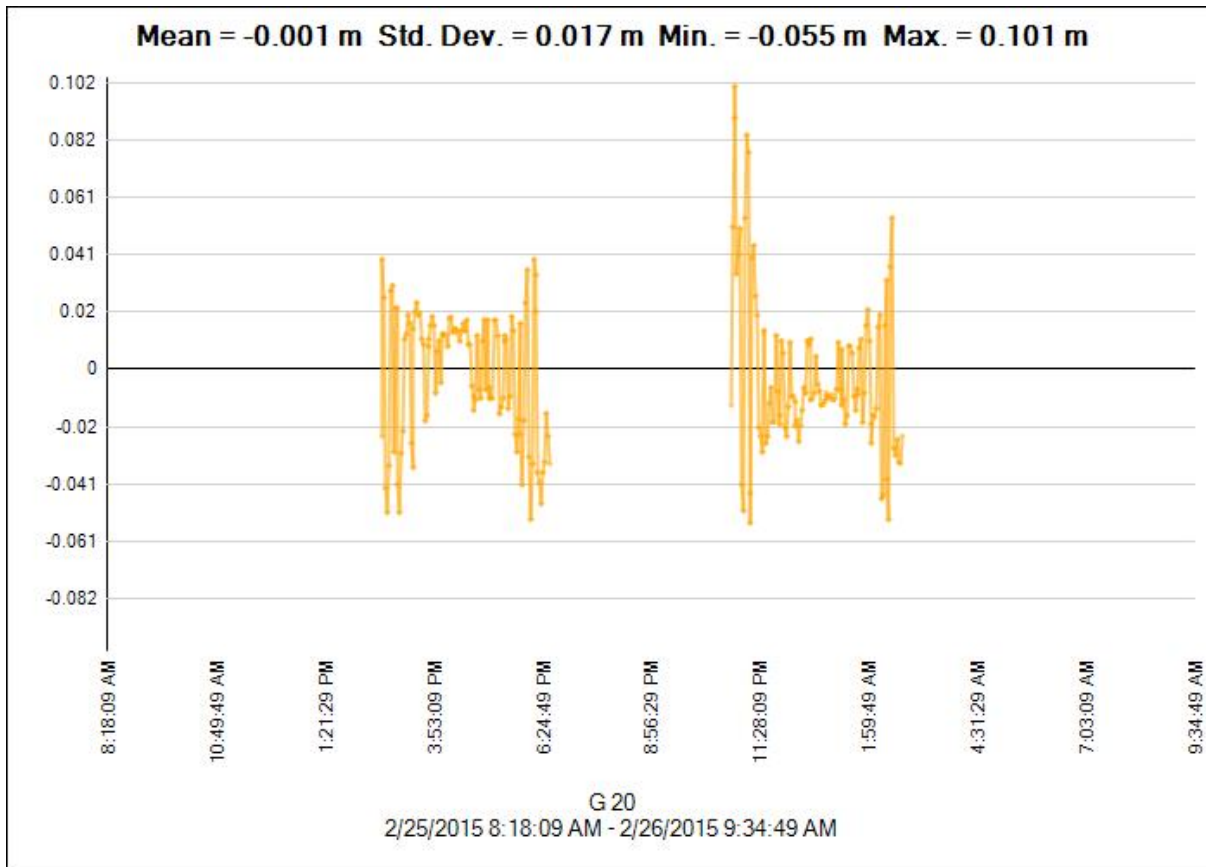


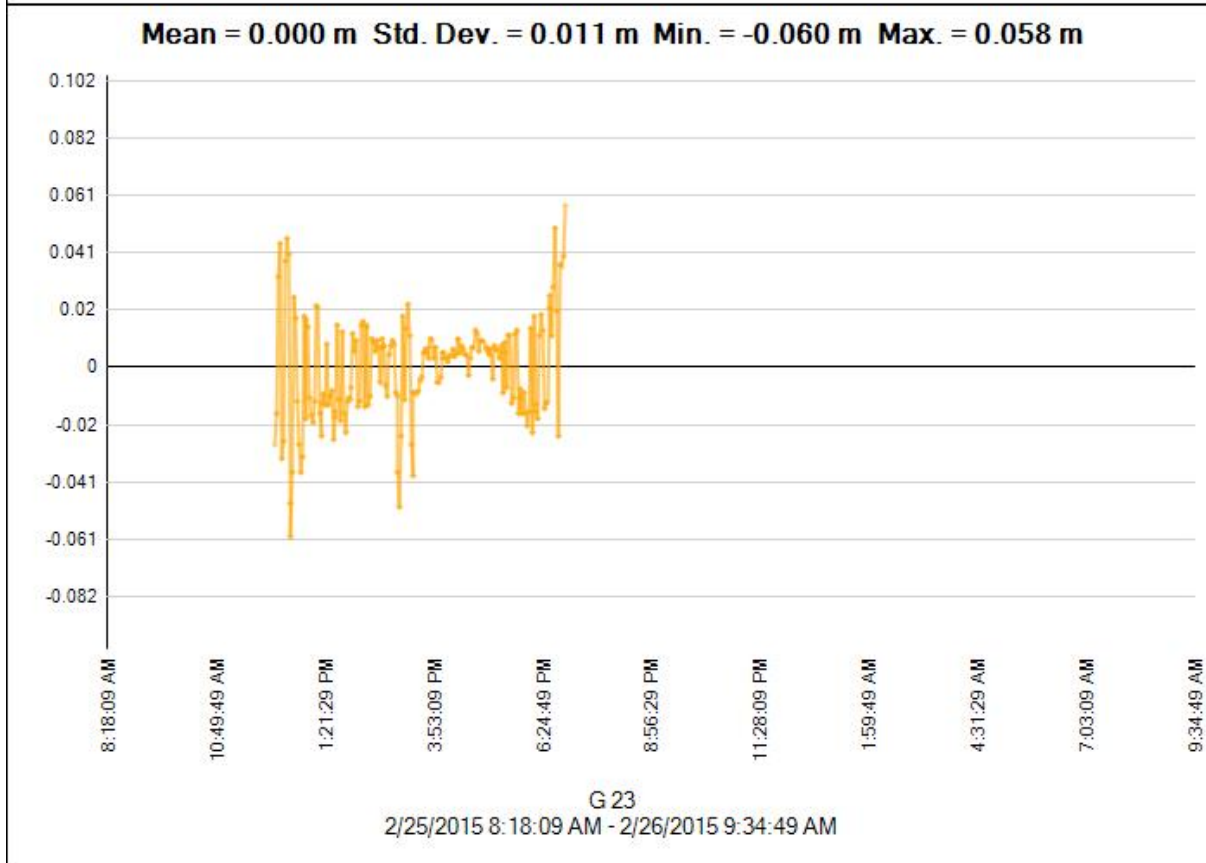
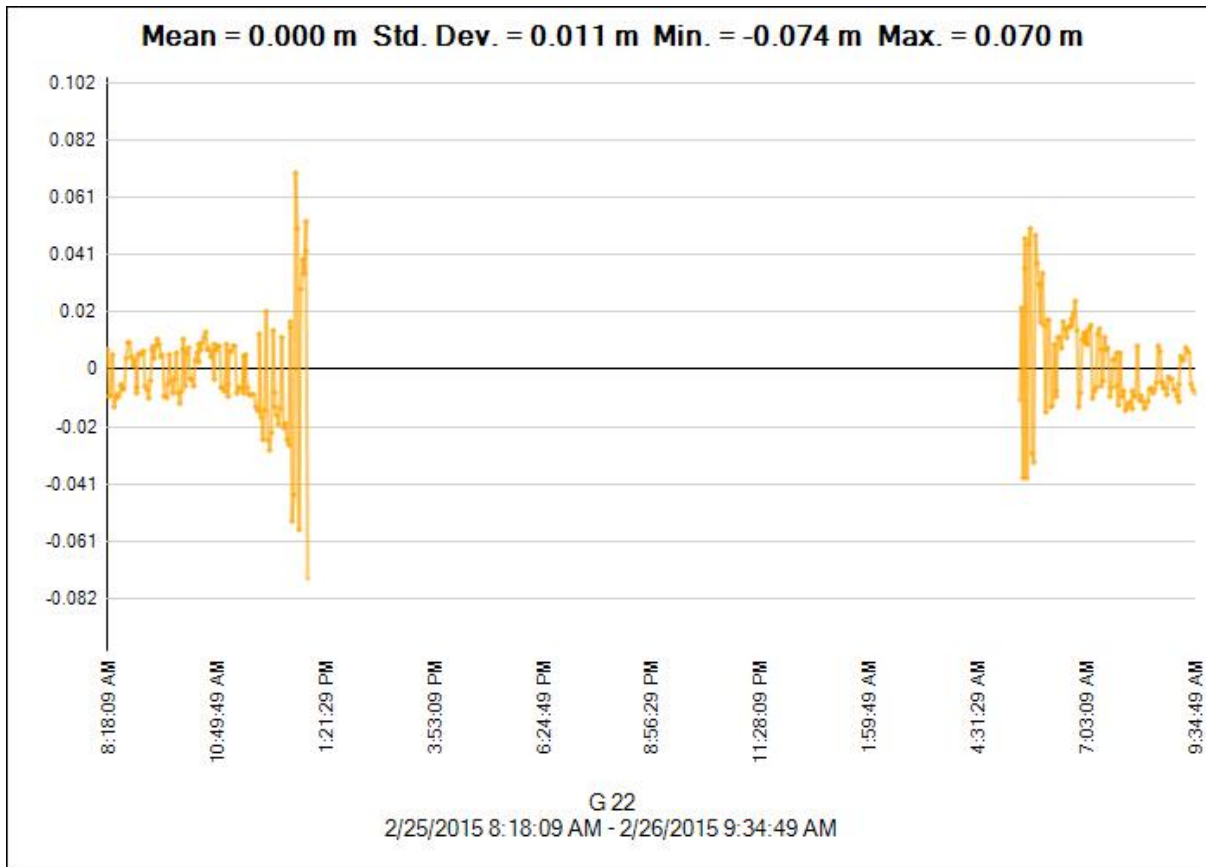




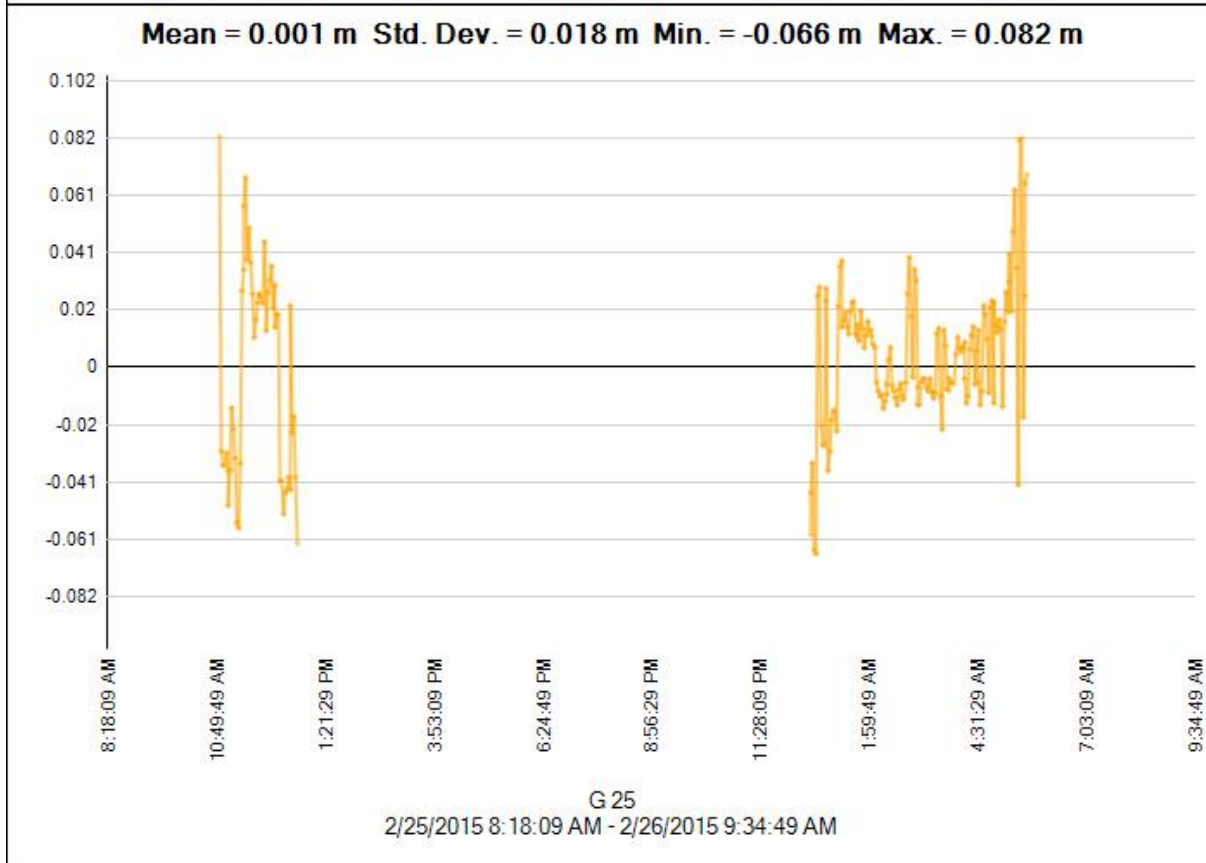
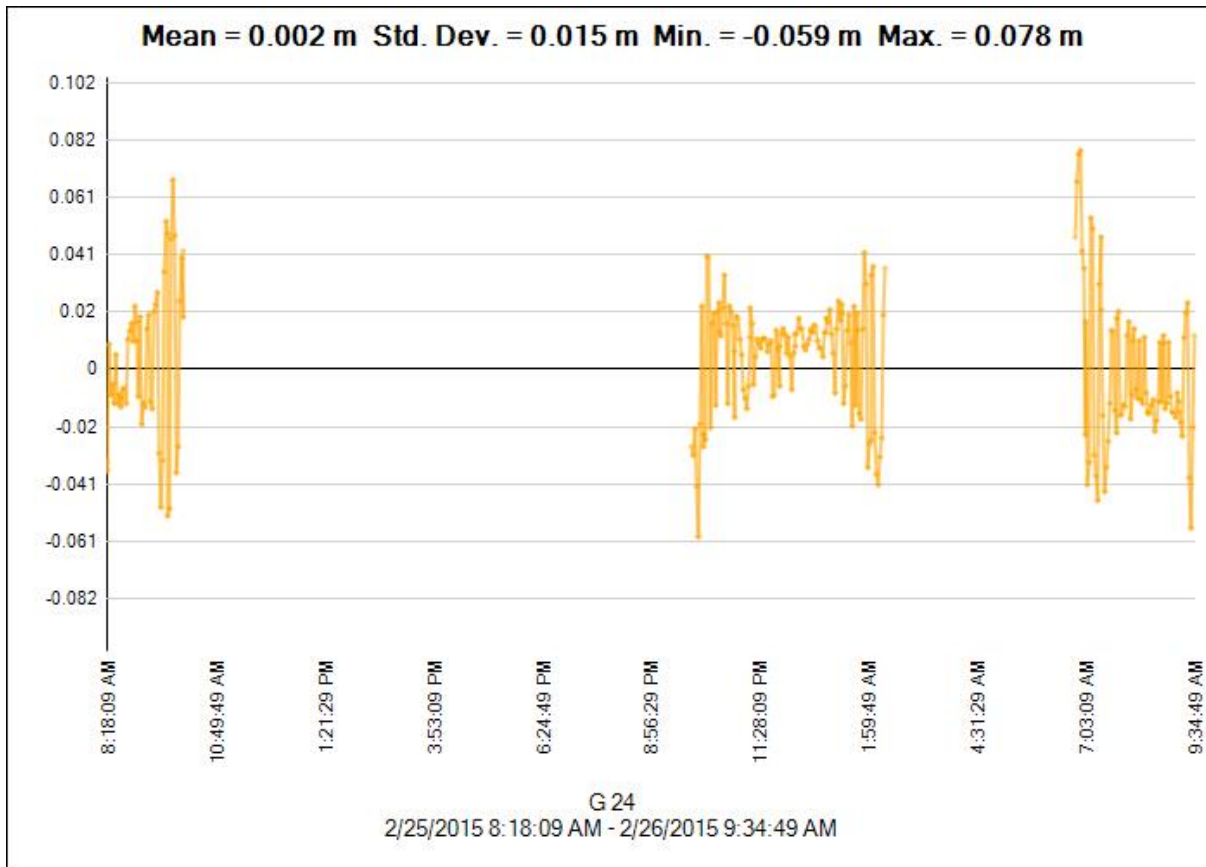


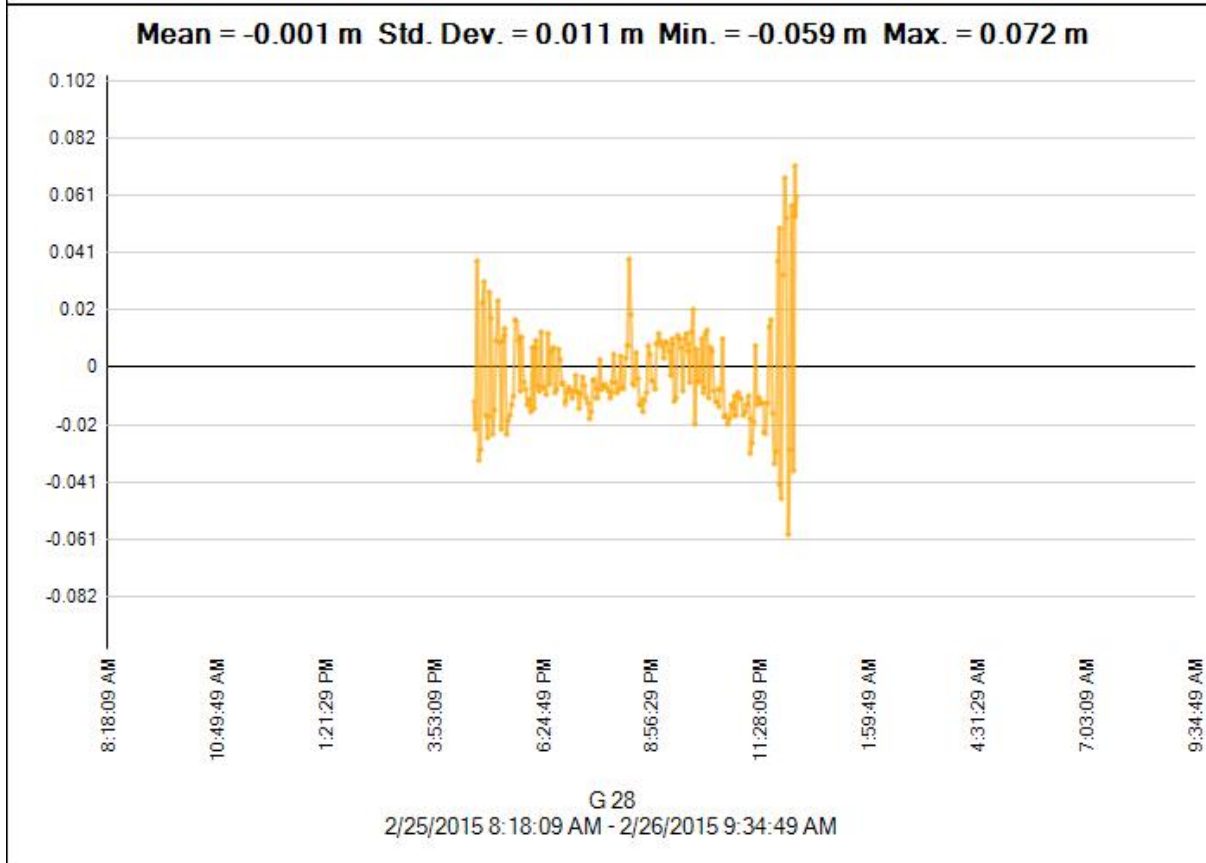
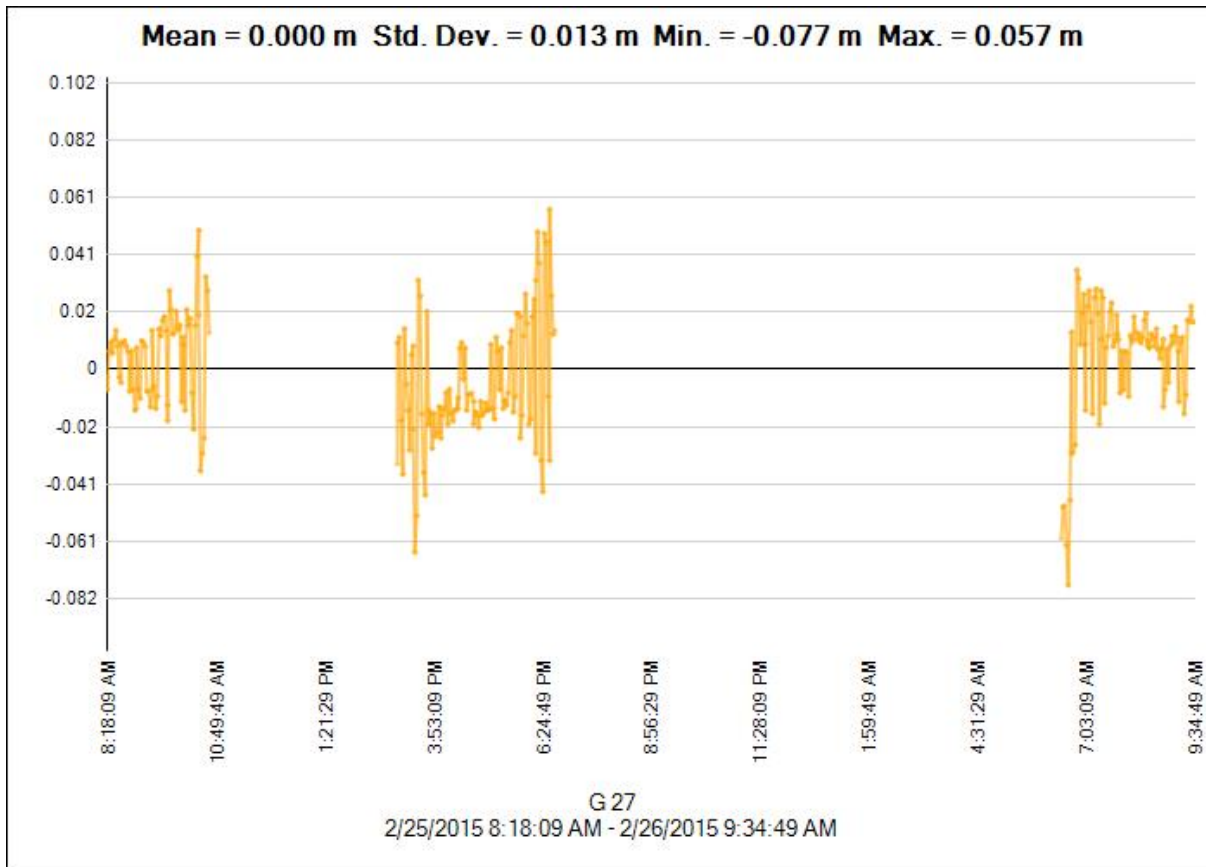


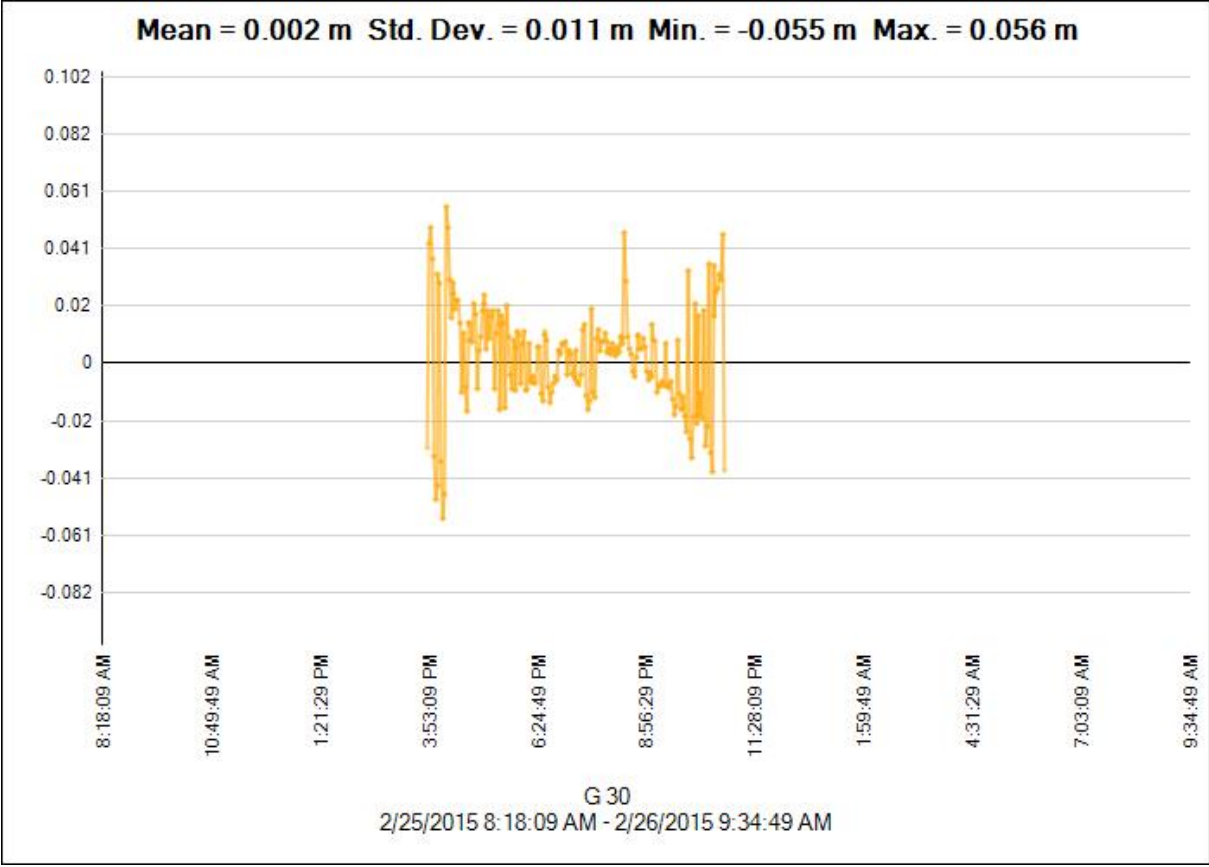
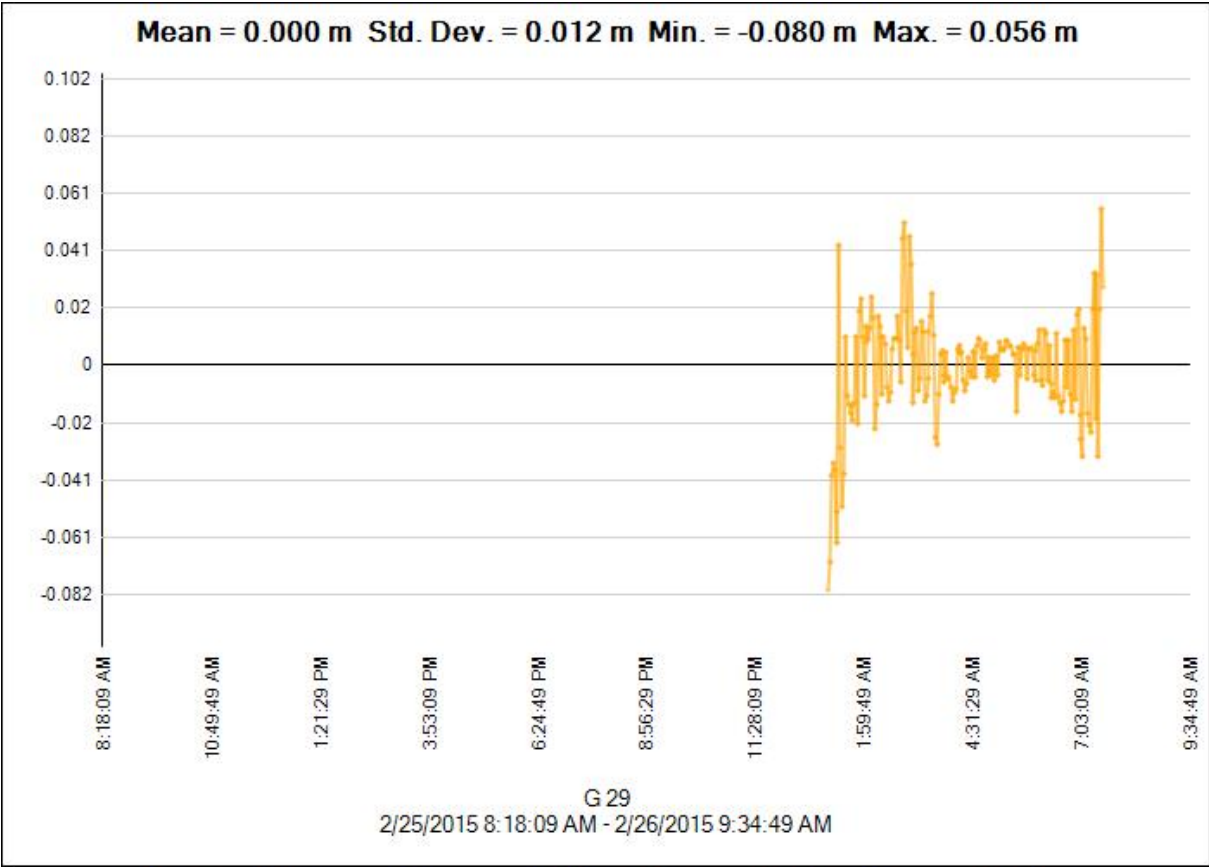


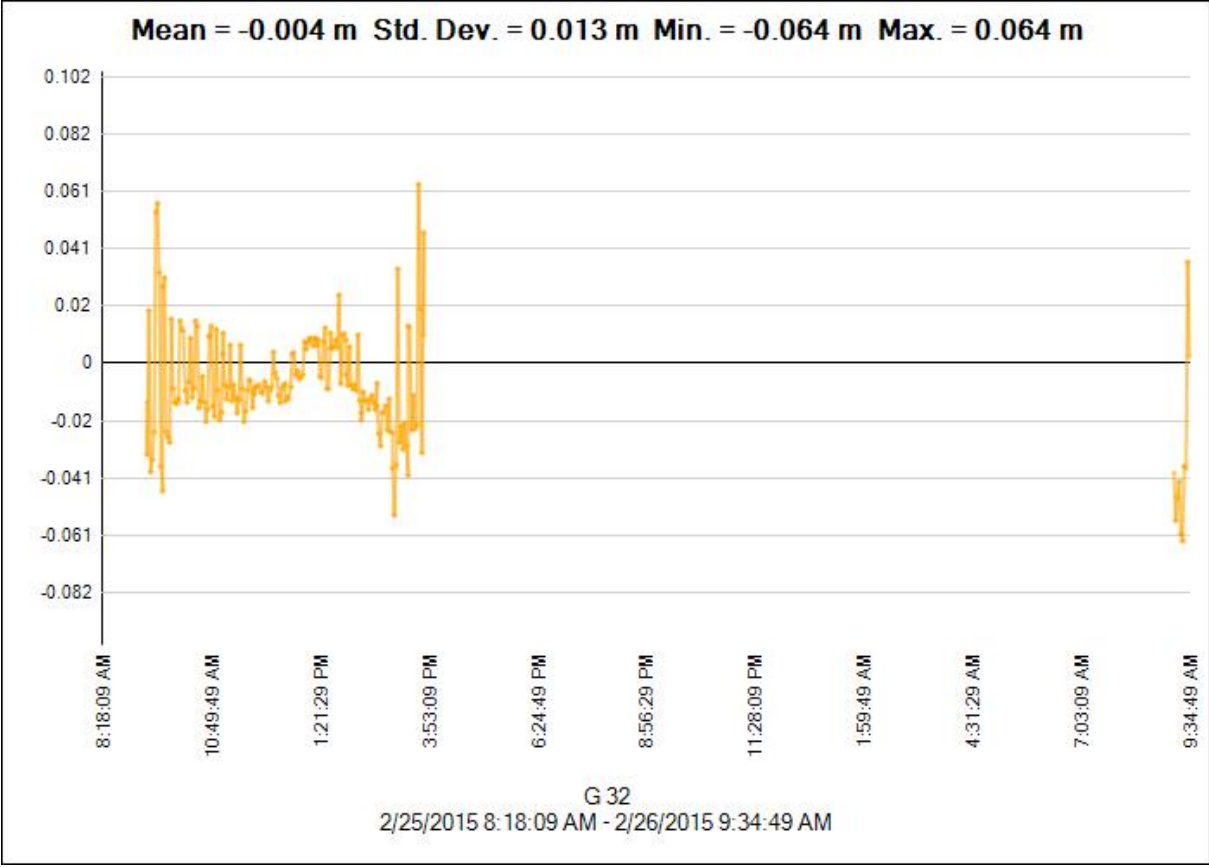
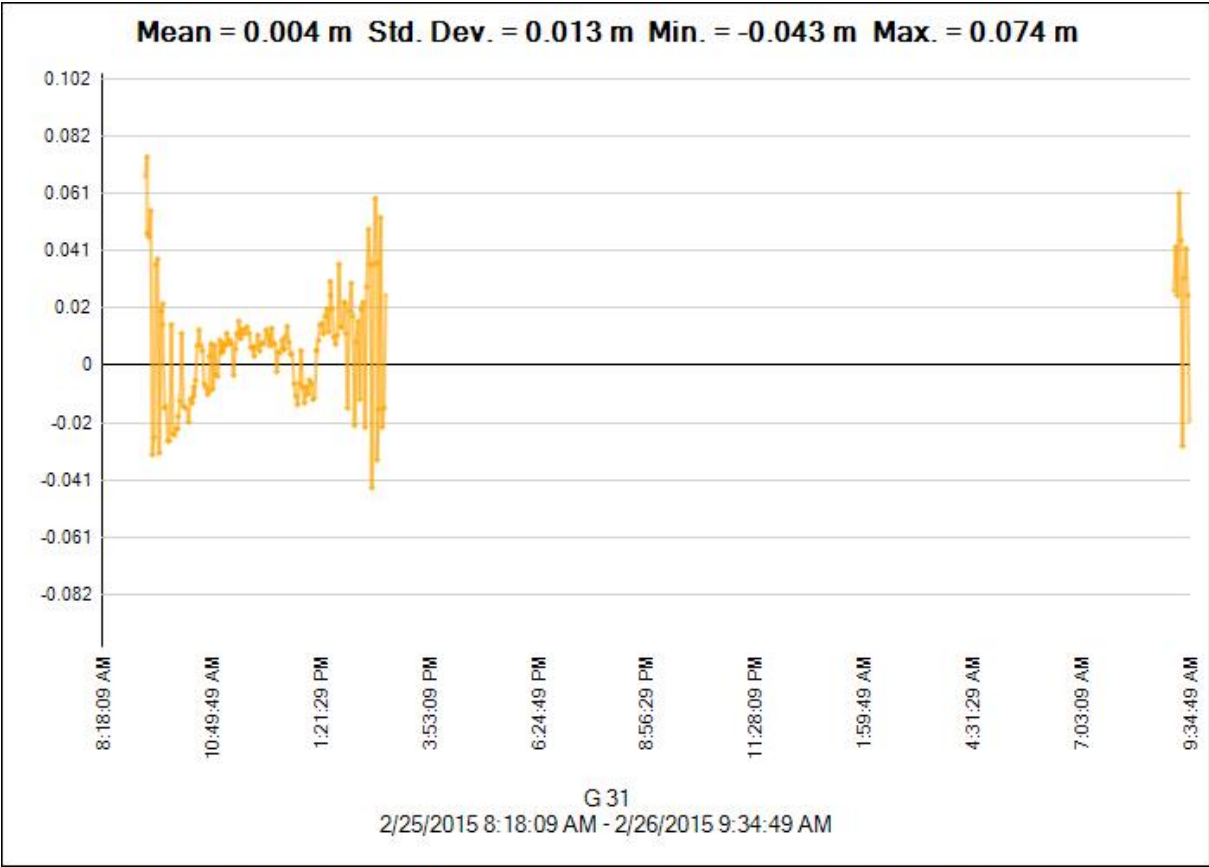














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**Processing style**

Elevation mask: 10.0 deg  
Auto start processing: Yes  
Start automatic ID numbering: AUTO0001  
Continuous vectors: No  
Generate residuals: Yes  
Antenna model: Automatic  
Ephemeris type: Automatic  
Frequency: Multiple Frequencies  
Processing Interval: Use all data  
Force float: No

**Acceptance Criteria**

Vector Component	Flag 	Fail 
Horizontal Precision >	0.050 m + 1.000 ppm	0.100 m + 1.000 ppm
Vertical Precision >	0.100 m + 1.000 ppm	0.200 m + 1.000 ppm

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**TUS\_4 - KTUS\_APT\_1 (9:32:34 AM-9:30:34 AM) (S2)**

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Baseline observation: TUS\_4 --- KTUS\_APT\_1 (B2)  
Processed: 3/5/2015 3:38:49 PM  
Solution type: Fixed  
Frequency used: Dual Frequency (L1, L2)  
Horizontal precision: 0.002 m  
Vertical precision: 0.005 m  
RMS: 0.003 m  
Maximum PDOP: 4.890  
Ephemeris used: Broadcast  
Antenna model: NGS Absolute  
Processing start time: 2/25/2015 9:32:34 AM (Local: UTC-7hr)  
Processing stop time: 2/26/2015 9:30:34 AM (Local: UTC-7hr)  
Processing duration: 23:58:00  
Processing interval: 10 seconds

### Vector Components (Mark to Mark)

From: KTUS_APT_1					
Grid		Local		Global	
Easting	305038.073 m	Latitude	N32°07'29.14239"	Latitude	N32°07'29.14238"
Northing	125113.588 m	Longitude	W110°56'42.22790"	Longitude	W110°56'42.22790"
Elevation	801.705 m	Height	772.276 m	Height	772.276 m

To: TUS_4					
Grid		Local		Global	
Easting	327171.561 m	Latitude	N31°49'26.59479"	Latitude	N31°49'26.59478"
Northing	91988.860 m	Longitude	W110°42'51.95997"	Longitude	W110°42'51.95997"
Elevation	1542.660 m	Height	1514.292 m	Height	1514.292 m

Vector					
$\Delta$ Easting	22133.488 m	NS Fwd Azimuth	146°45'51"	$\Delta$ X	13874.116 m
$\Delta$ Northing	-33124.728 m	Ellipsoid Dist.	39837.691 m	$\Delta$ Y	-24847.273 m
$\Delta$ Elevation	740.955 m	$\Delta$ Height	742.016 m	$\Delta$ Z	-27897.658 m

### Standard Errors

Vector errors:					
$\sigma$ $\Delta$ Easting	0.001 m	$\sigma$ NS fwd Azimuth	0°00'00"	$\sigma$ $\Delta$ X	0.001 m
$\sigma$ $\Delta$ Northing	0.000 m	$\sigma$ Ellipsoid Dist.	0.001 m	$\sigma$ $\Delta$ Y	0.002 m
$\sigma$ $\Delta$ Elevation	0.003 m	$\sigma$ $\Delta$ Height	0.003 m	$\sigma$ $\Delta$ Z	0.001 m

### Aposteriori Covariance Matrix (Meter<sup>2</sup>)

	X	Y	Z
X	0.0000014299		
Y	0.0000014722	0.0000042252	
Z	-0.0000010545	-0.0000025593	0.0000018805

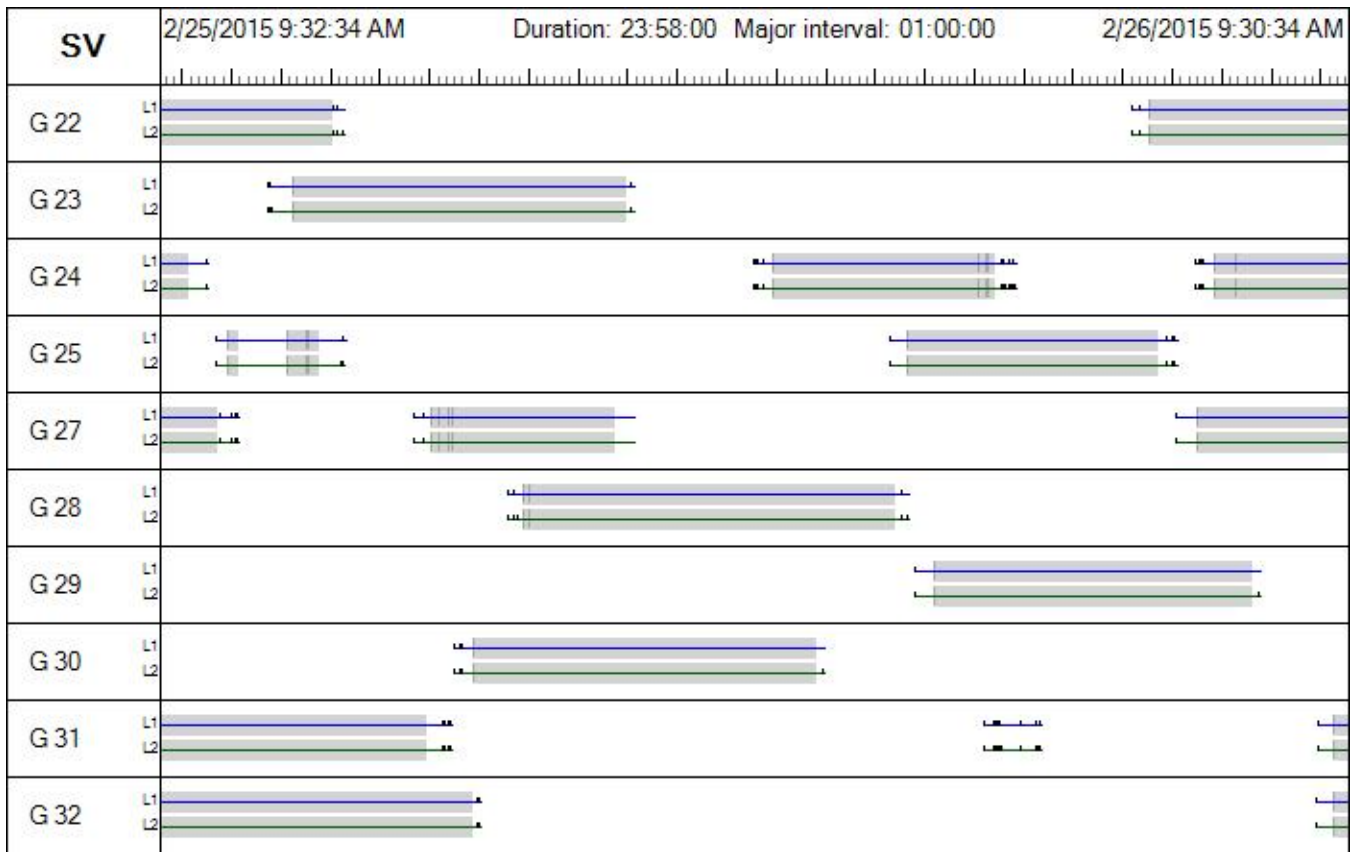
## Occupations

	From	To
Point ID:	KTUS_APT_1	TUS_4
Data file:	\\conas\projects \312014478_PAG_2015\Acquisition \Ground_Survey\Adjustments\4478 PAG LiDAR Network\00050560 resampled.15o	\\conas\projects \312014478_PAG_2015\Acquisition \Ground_Survey\Adjustments\4478 PAG LiDAR Network\00110560 resampled.15o
Receiver type:	Geo Explorer 3	Geo Explorer 3
Receiver serial number:		
Antenna type:	702 Rev 3.00	702 Rev 3.00
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

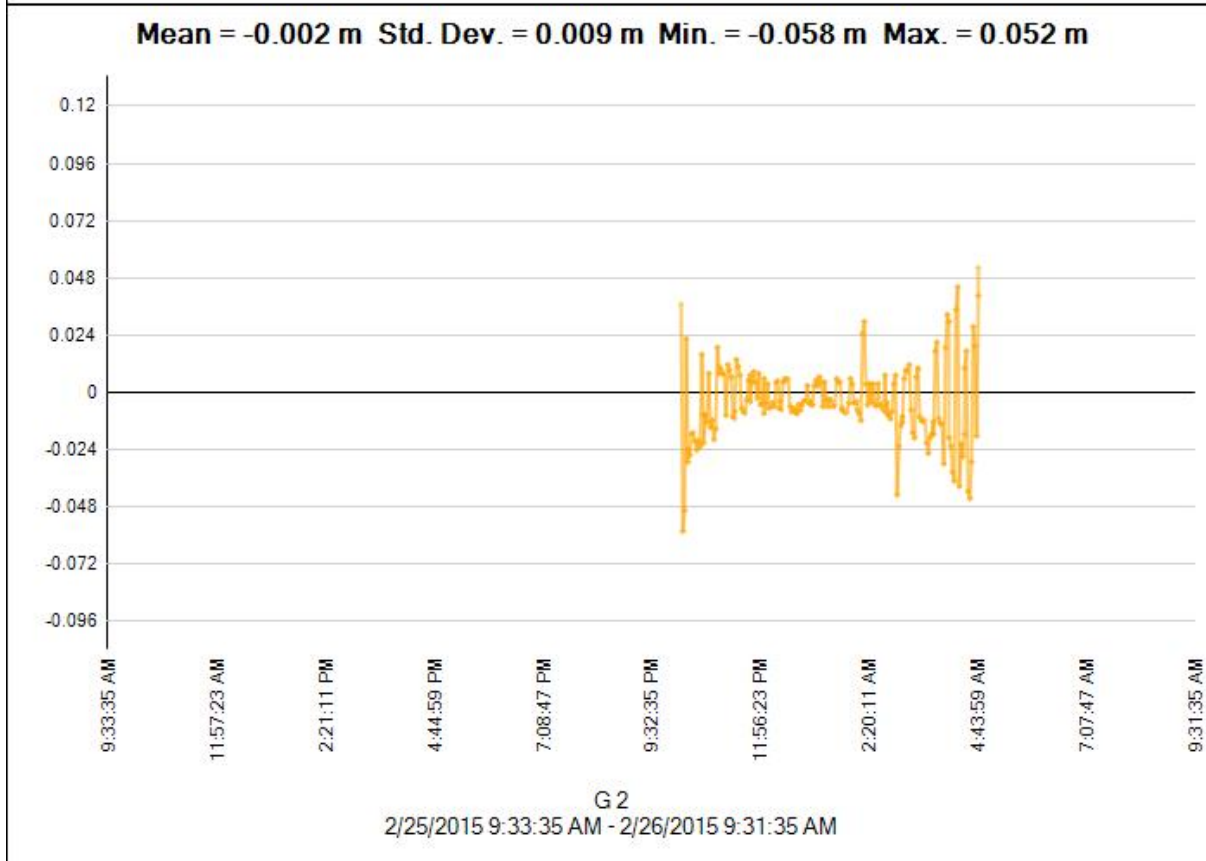
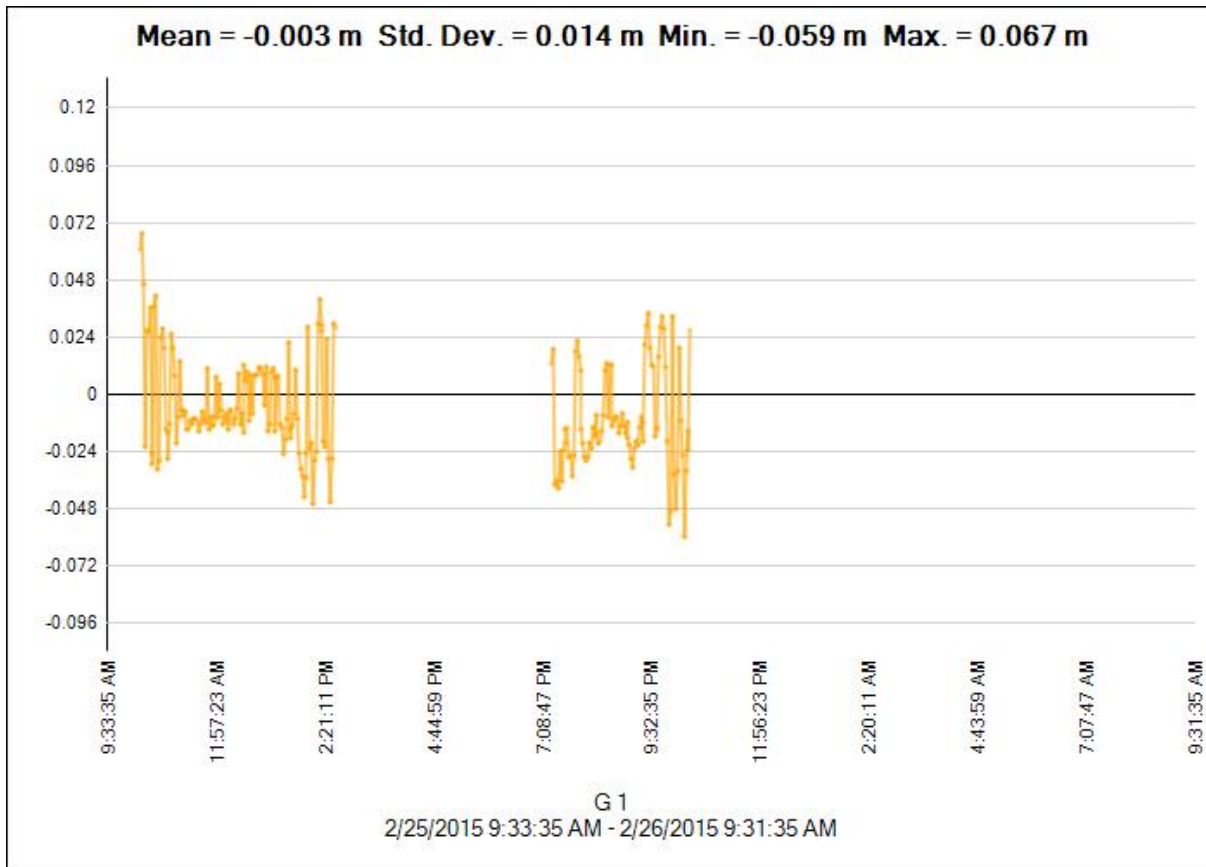
# Tracking Summary

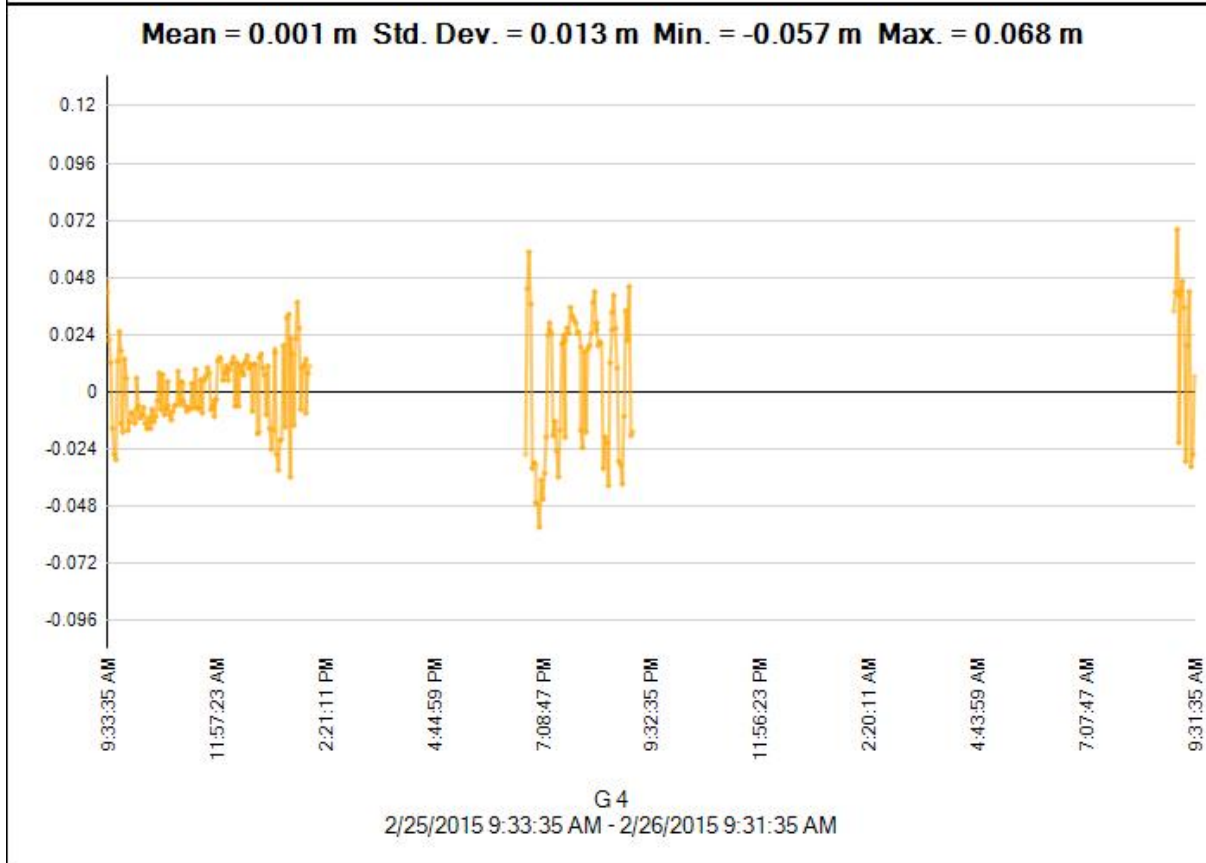
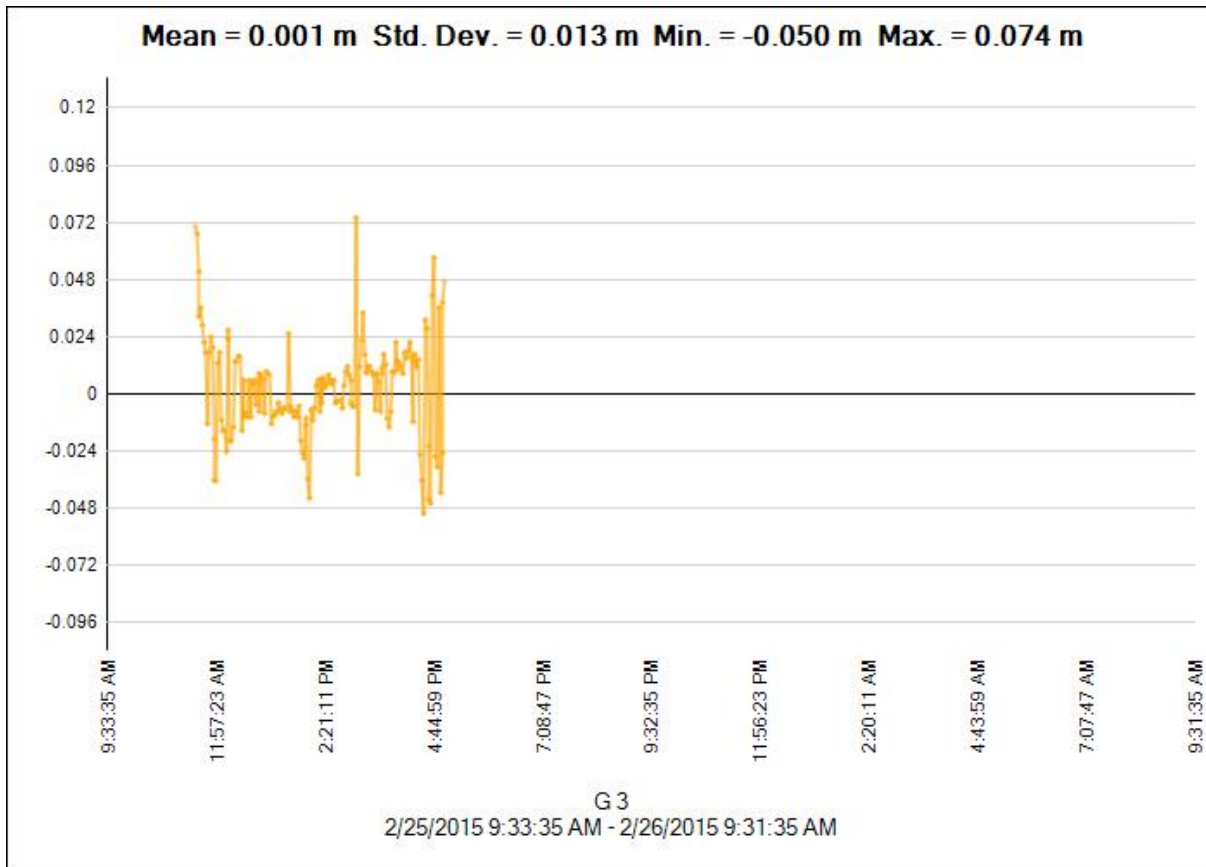
SV	2/25/2015 9:32:34 AM	Duration: 23:58:00	Major interval: 01:00:00	2/26/2015 9:30:34 AM
G 1	L1 L2			
G 2	L1 L2			
G 3	L1 L2			
G 4	L1 L2			
G 5	L1 L2			
G 6	L1 L2			
G 7	L1 L2			
G 9	L1 L2			
G 10	L1 L2			
G 11	L1 L2			
G 12	L1 L2			
G 13	L1 L2			
G 14	L1 L2			
G 15	L1 L2			
G 16	L1 L2			
G 17	L1 L2			
G 18	L1 L2			
G 19	L1 L2			
G 20	L1 L2			
G 21	L1 L2			

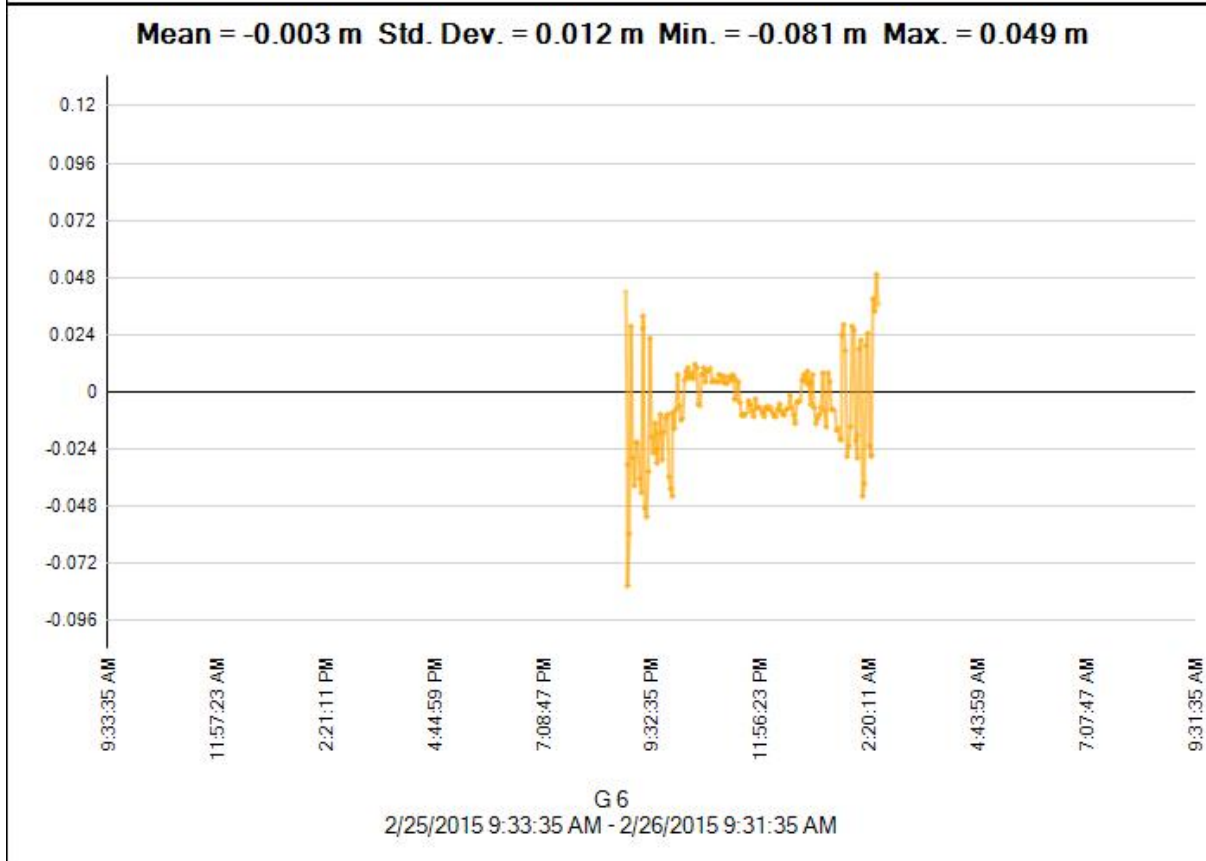
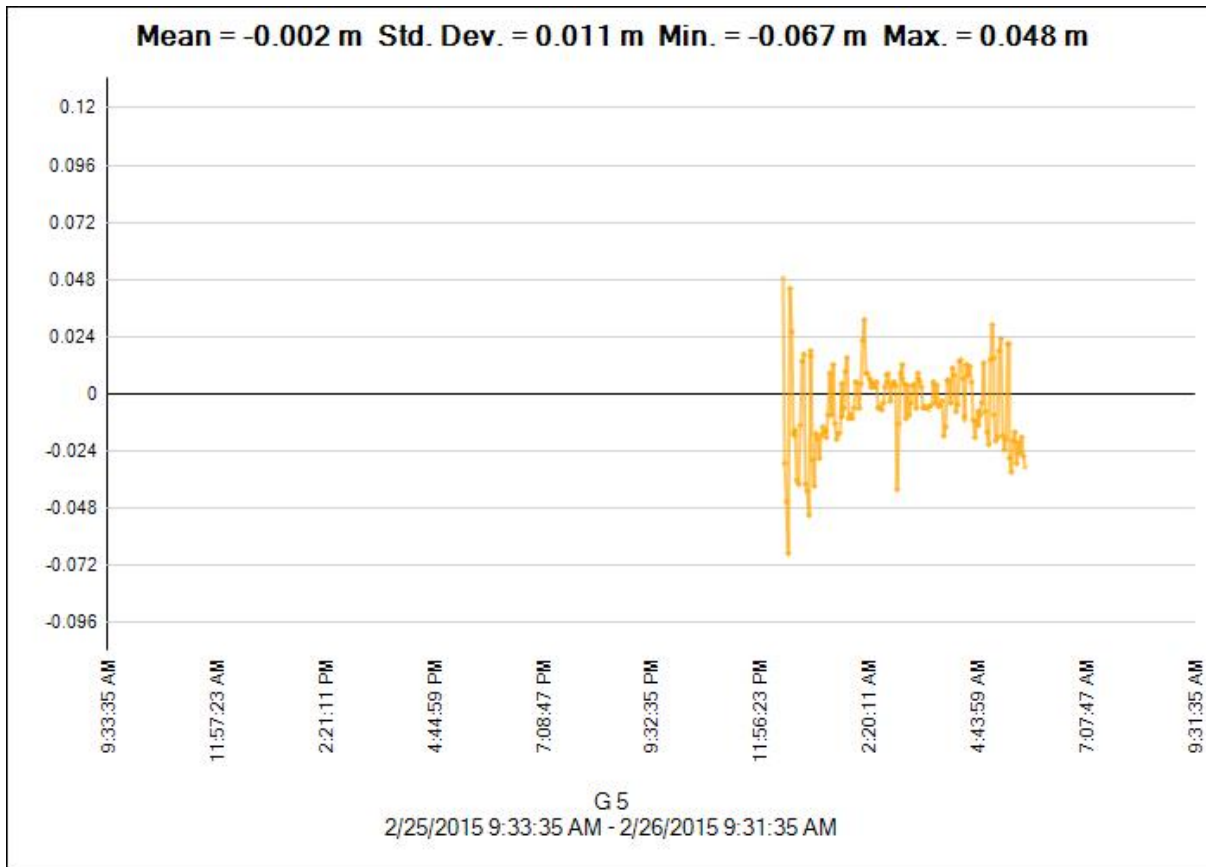


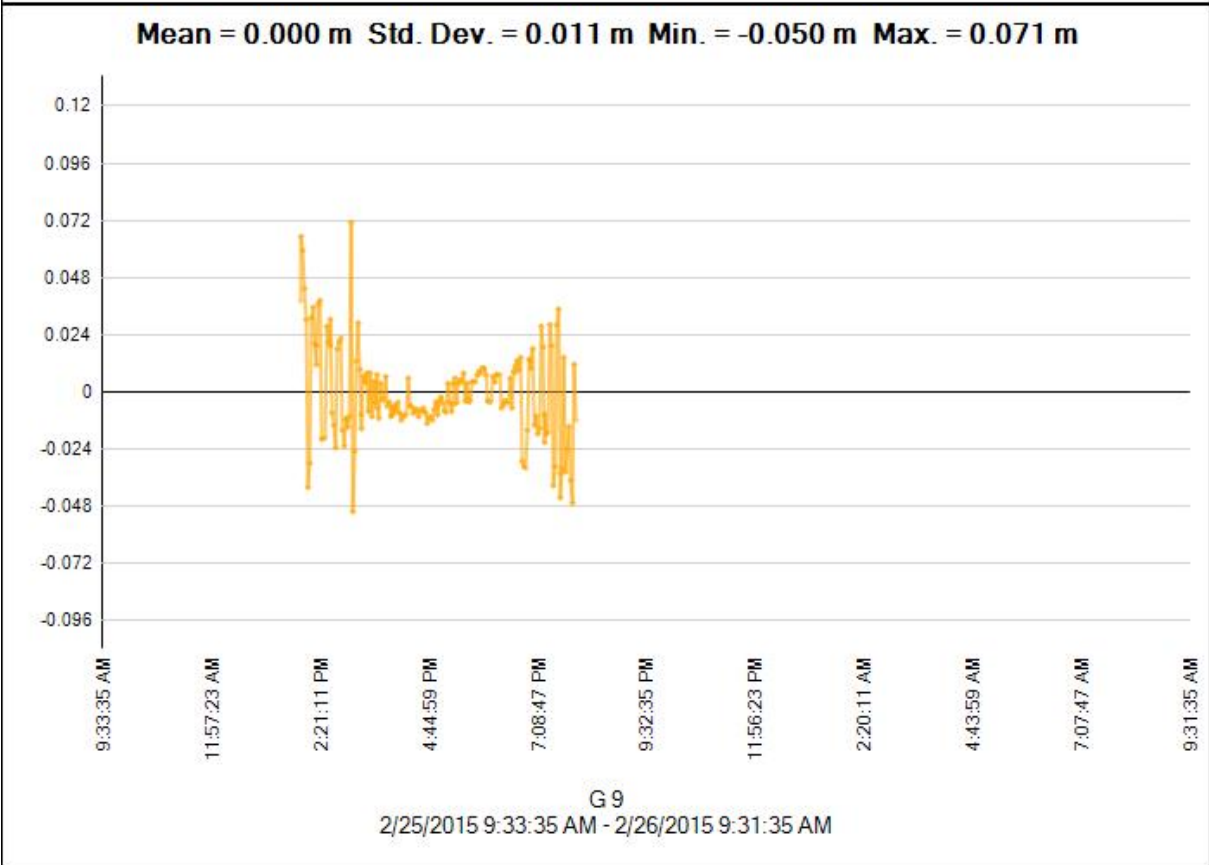
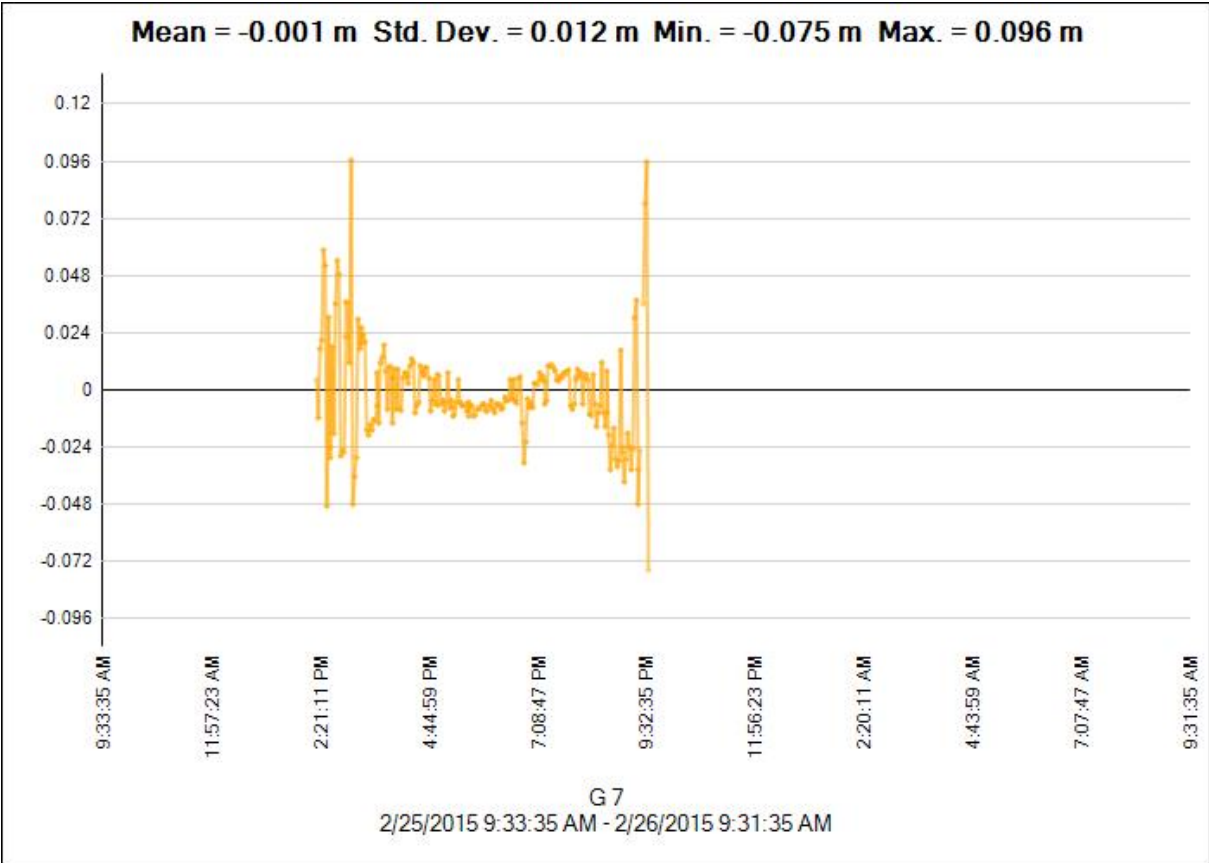


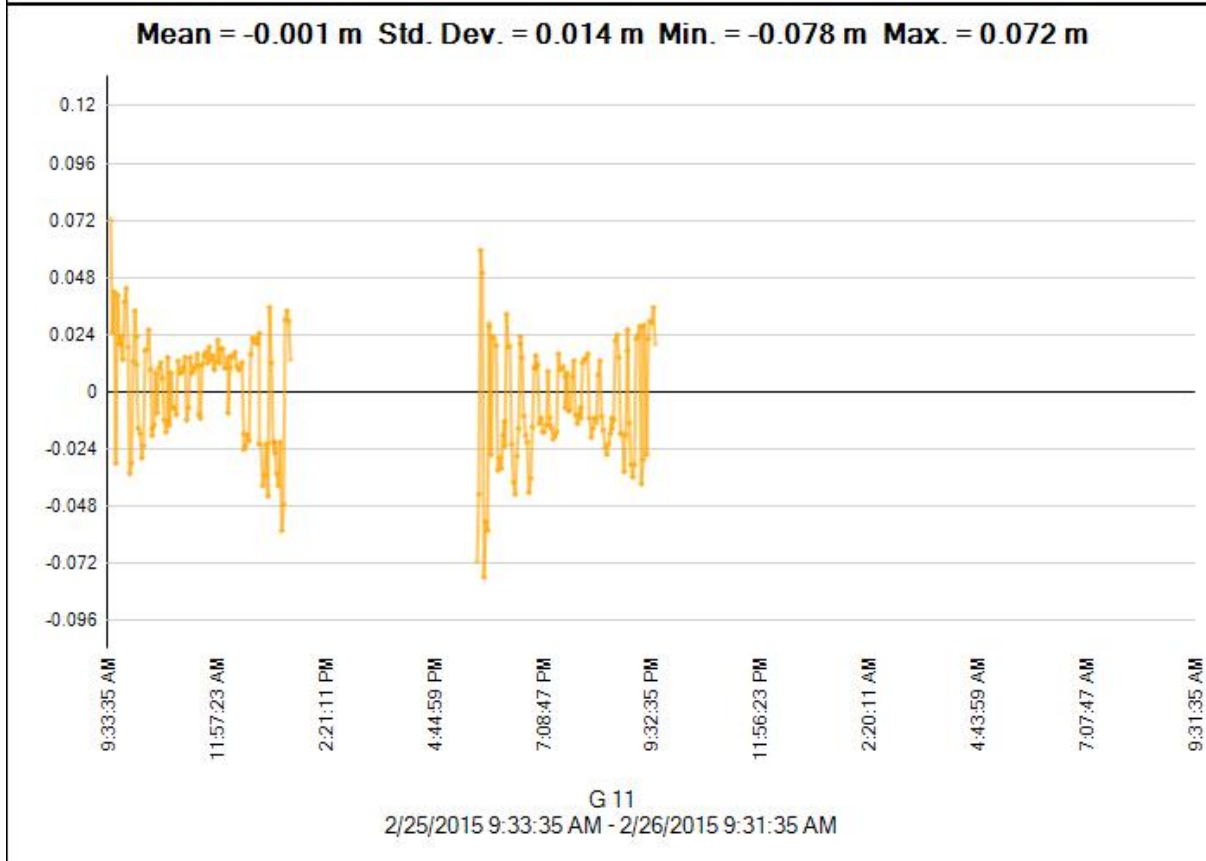
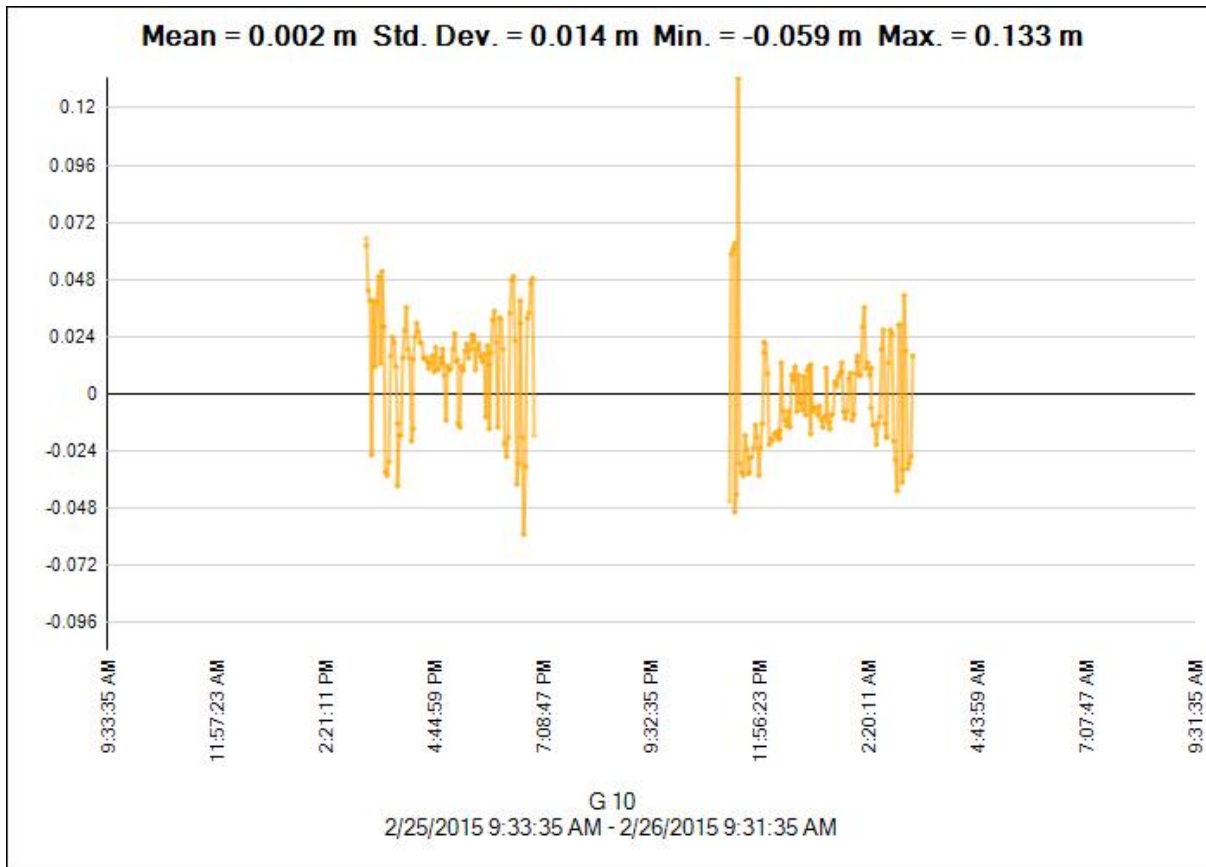
# Residuals

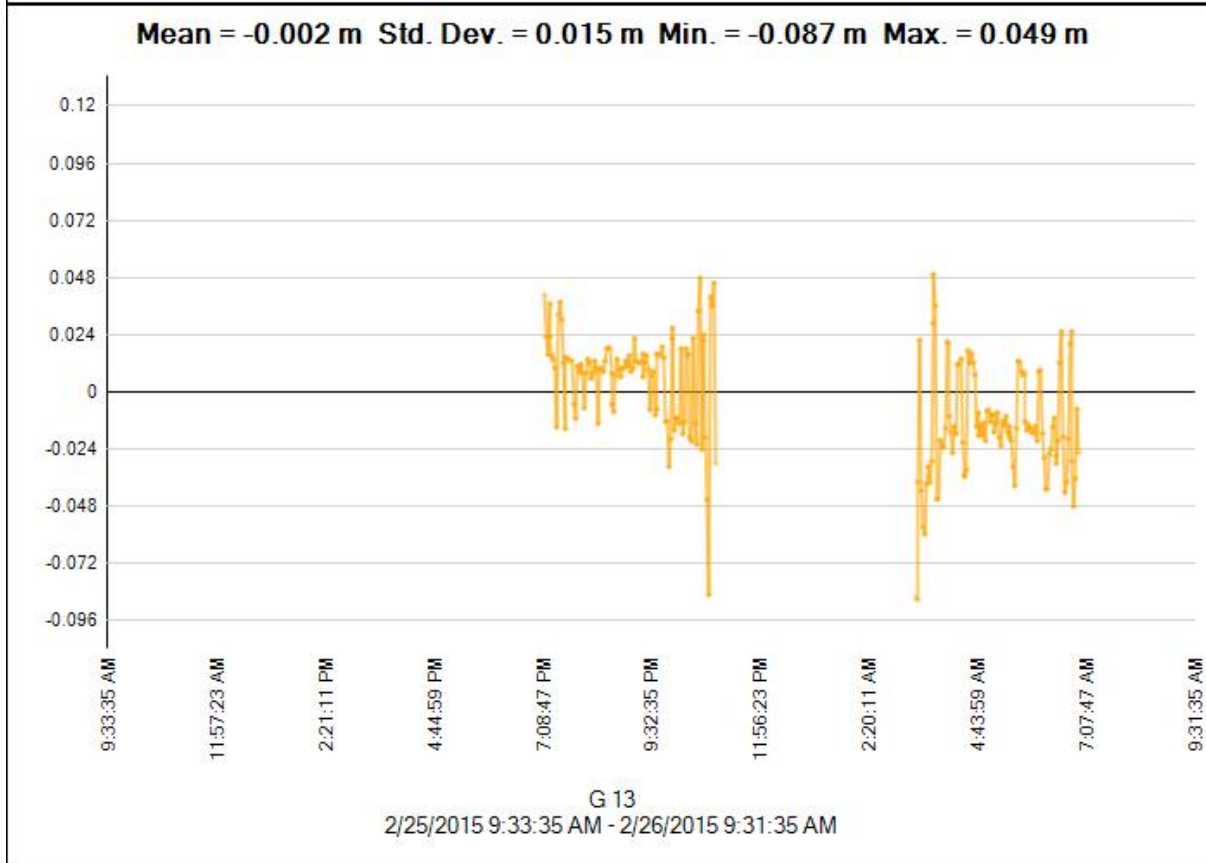
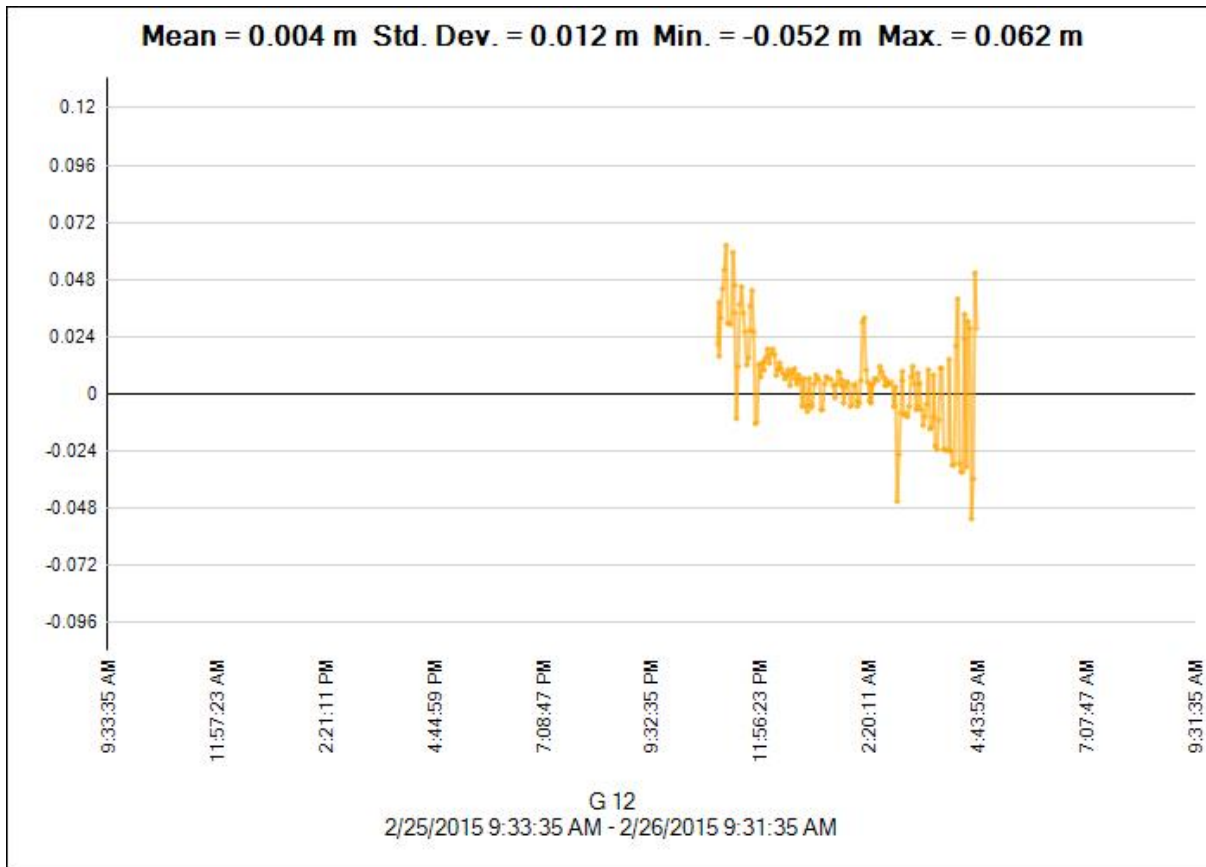


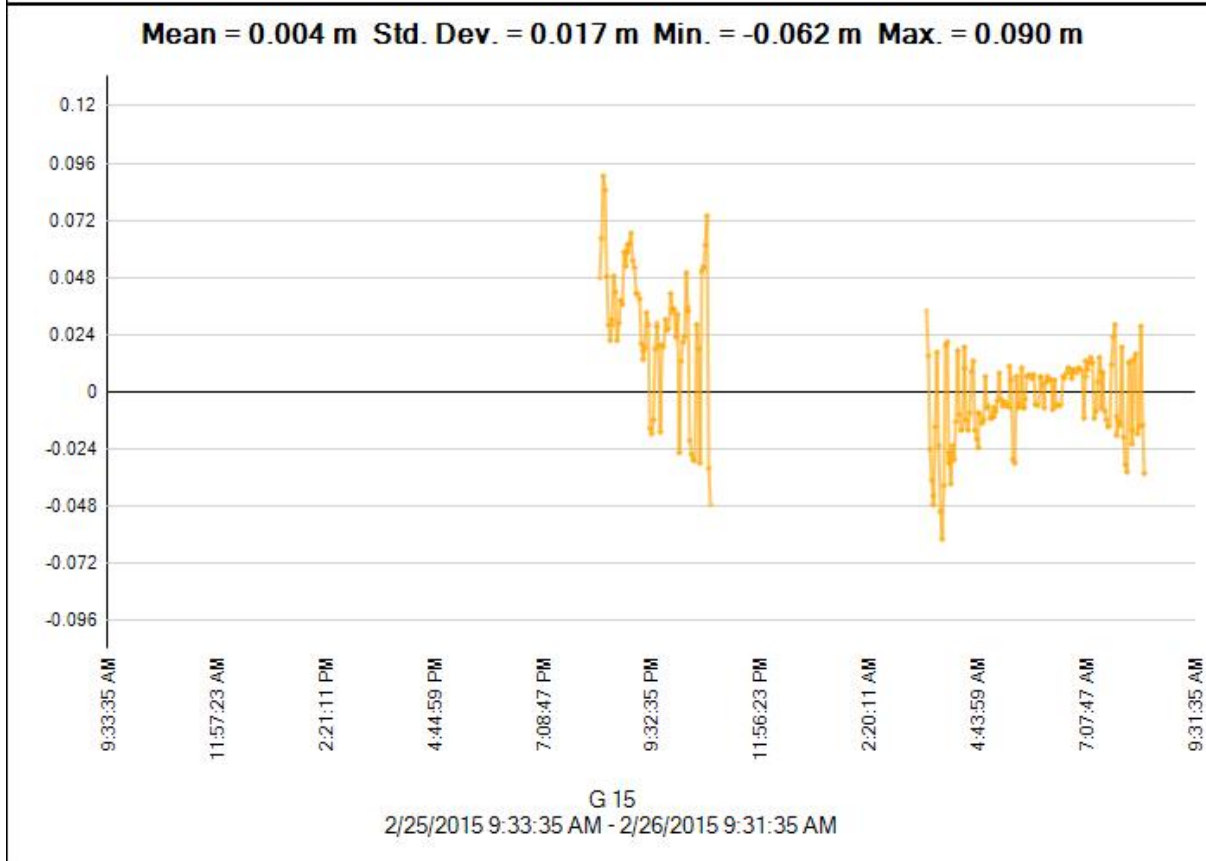
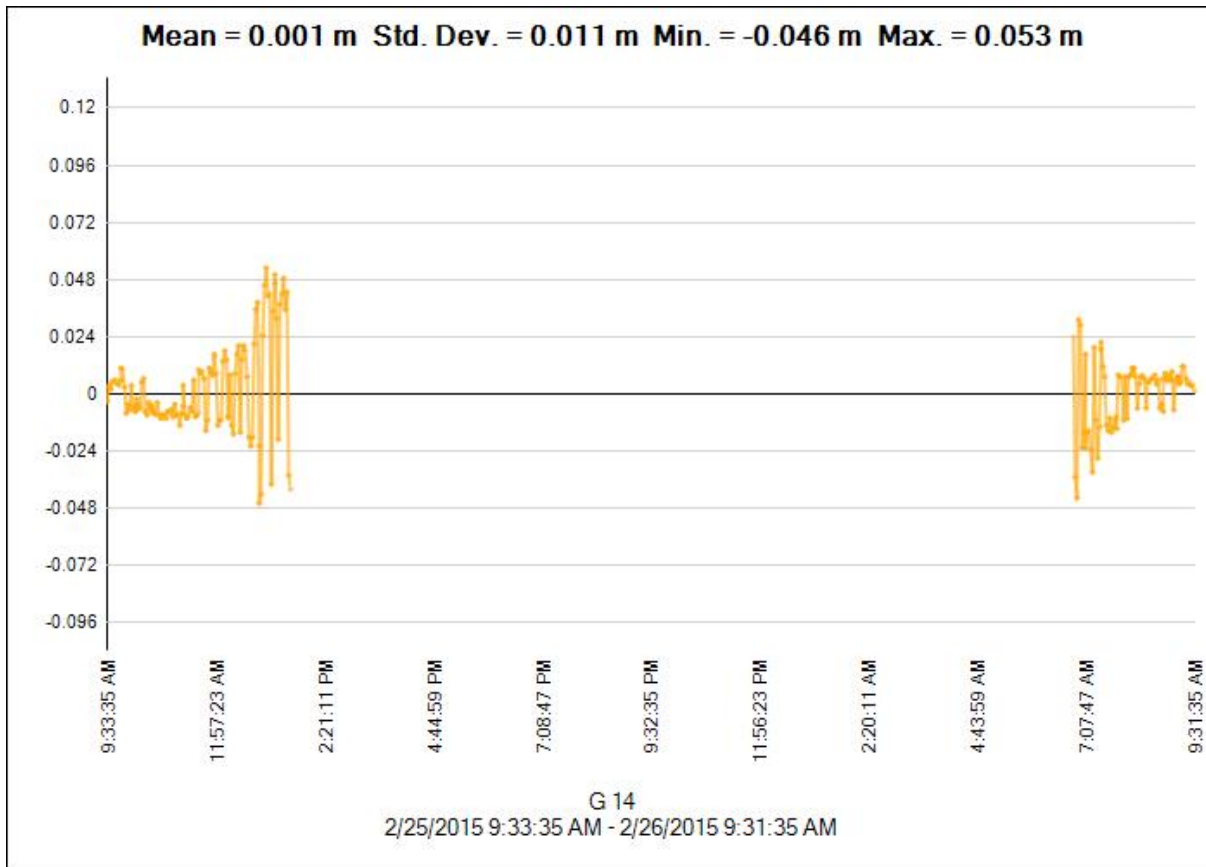




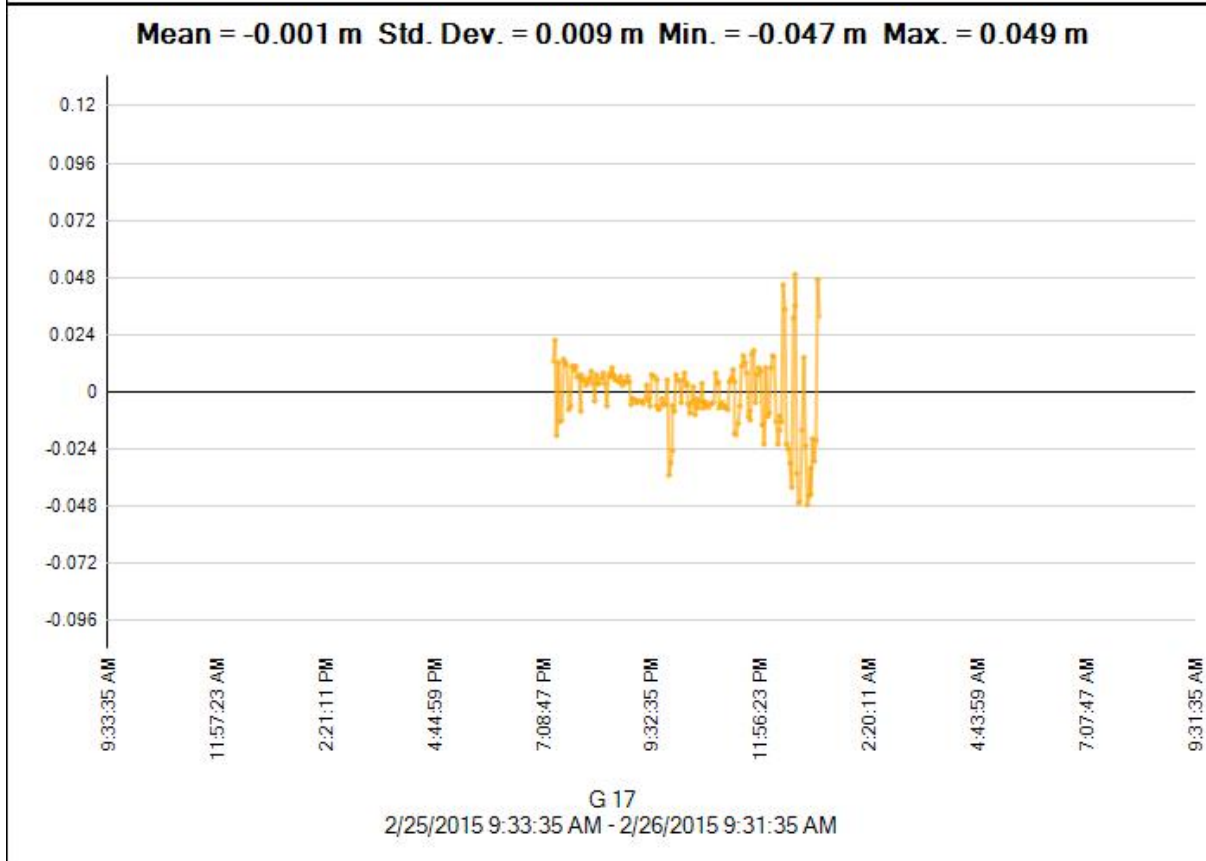
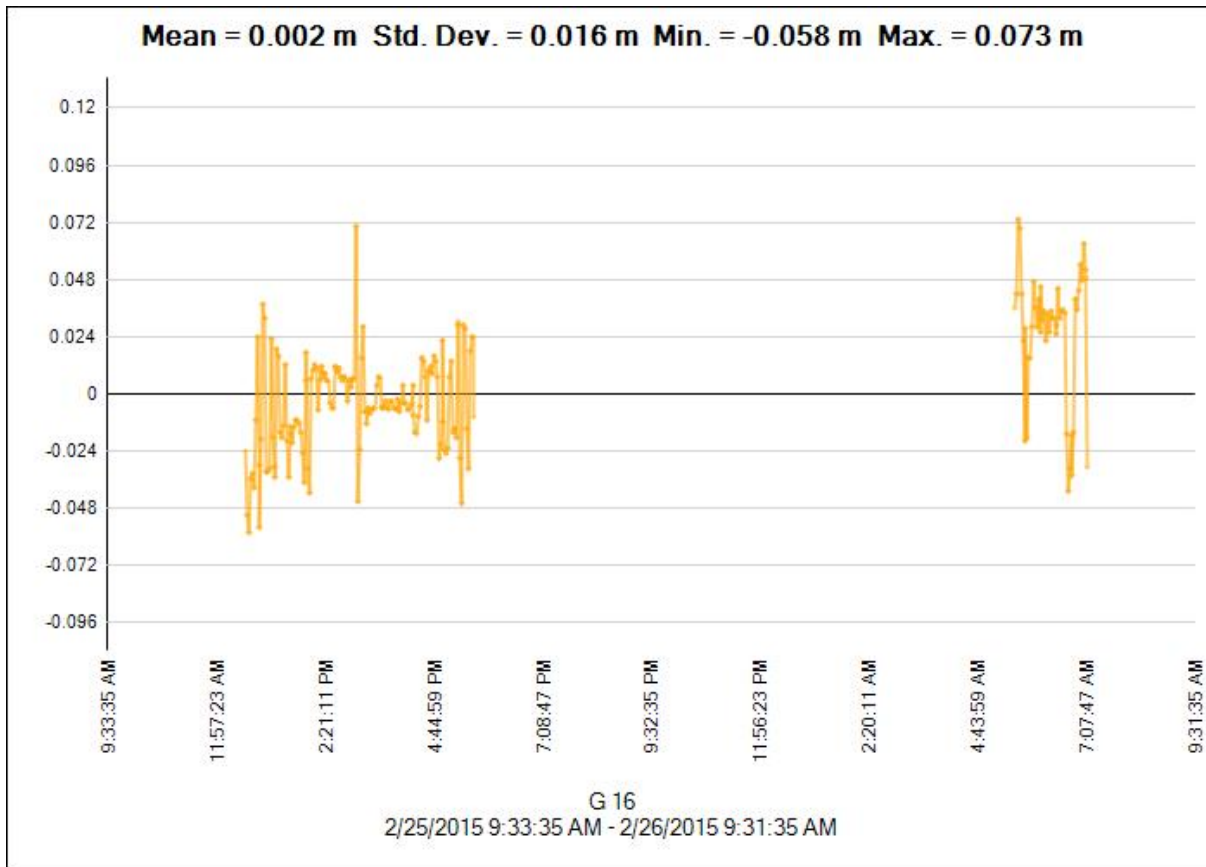


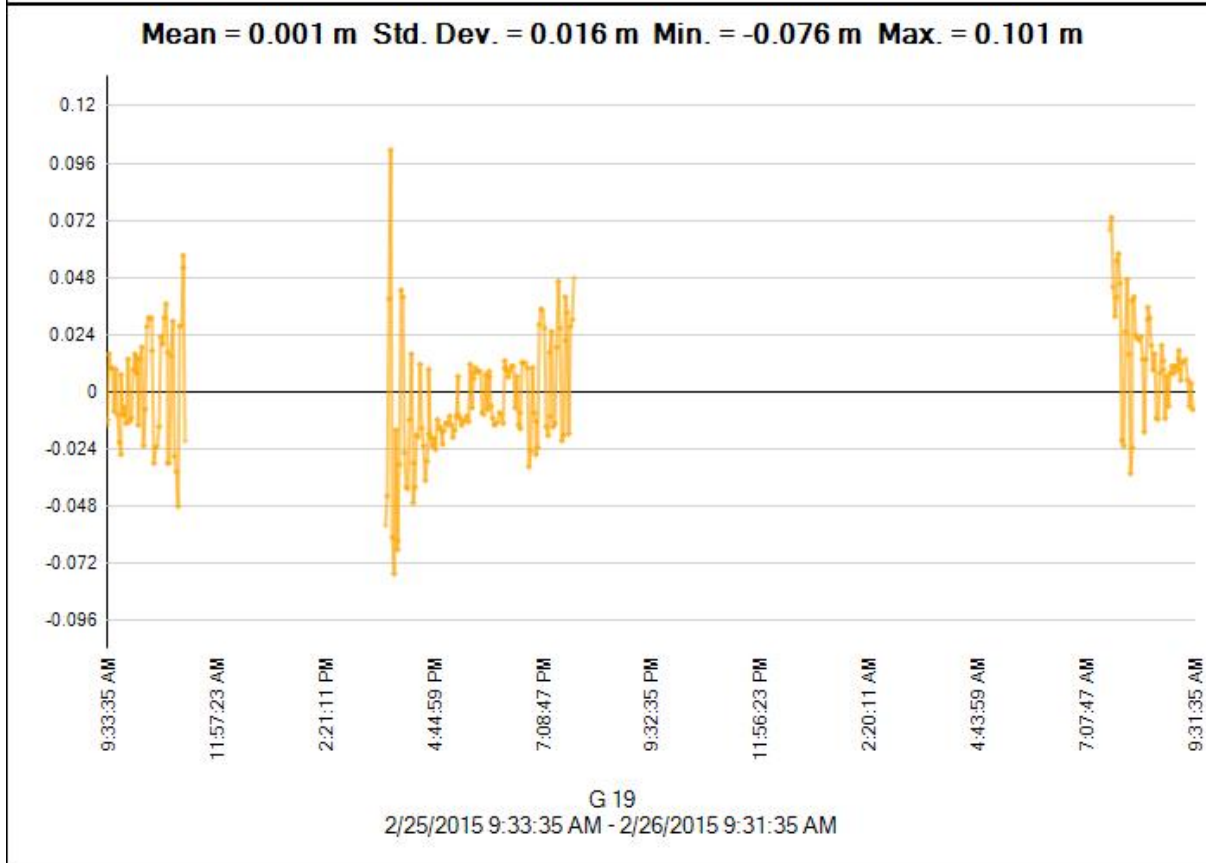
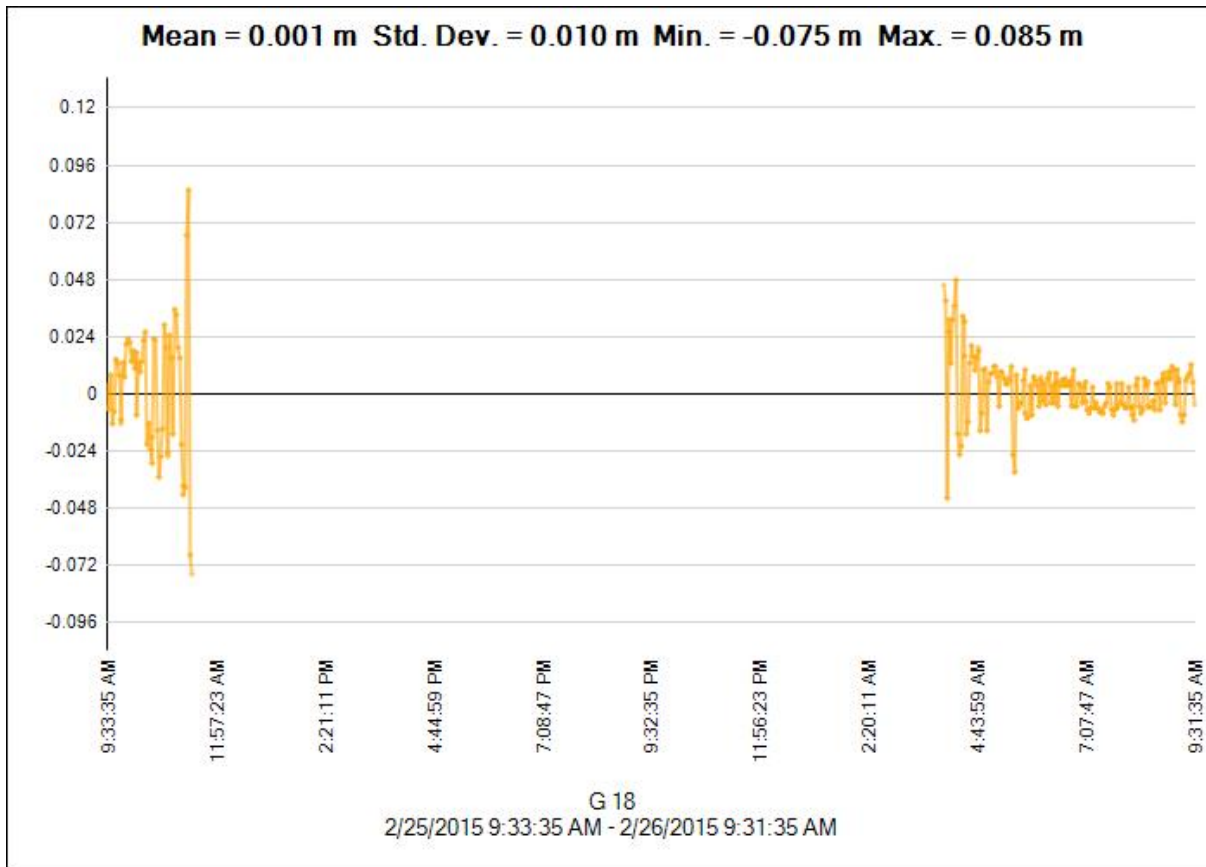


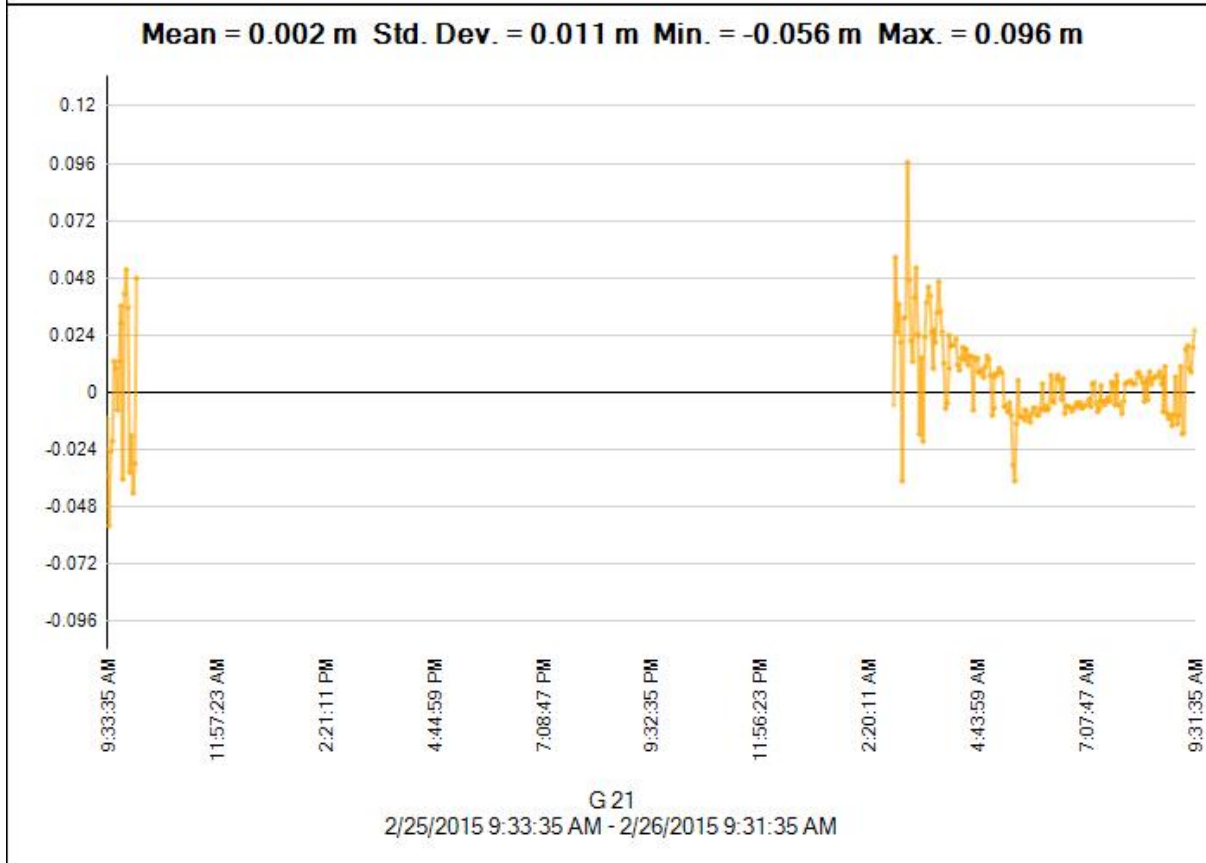
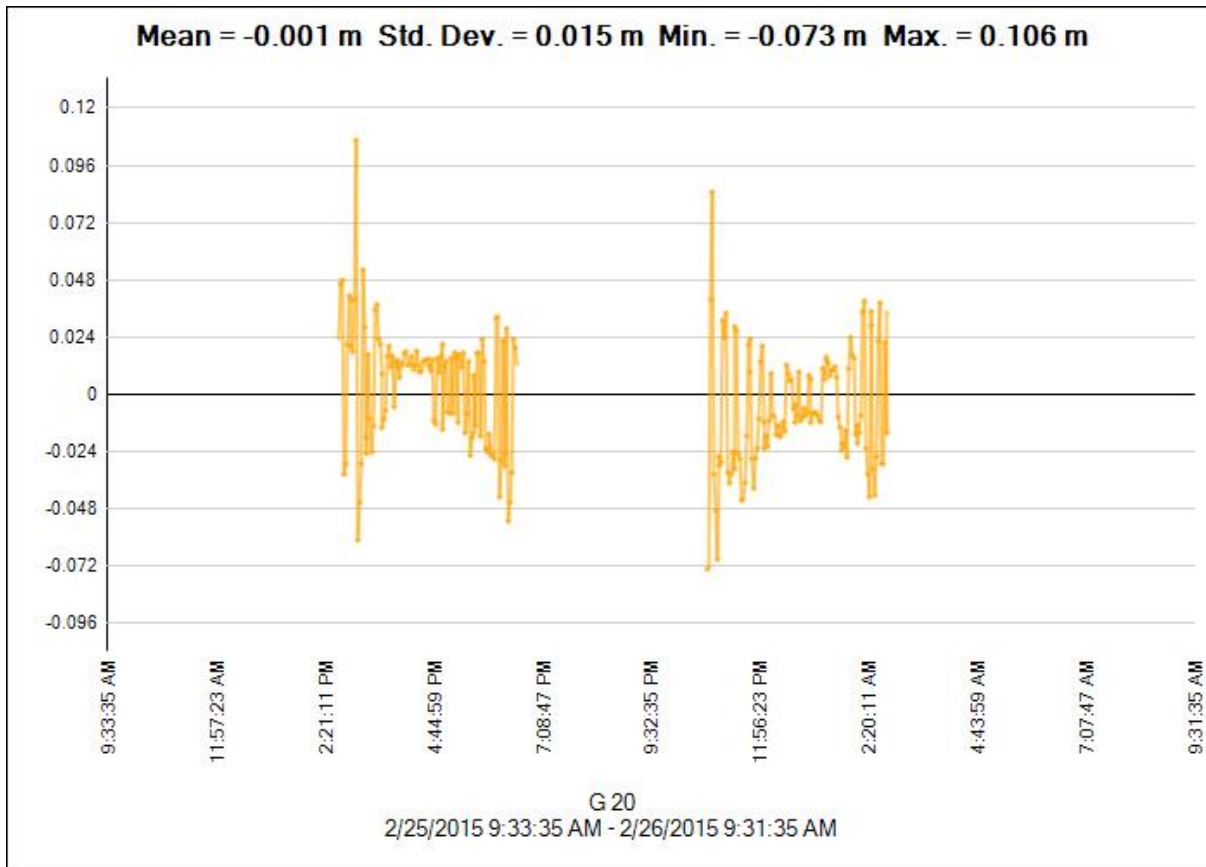


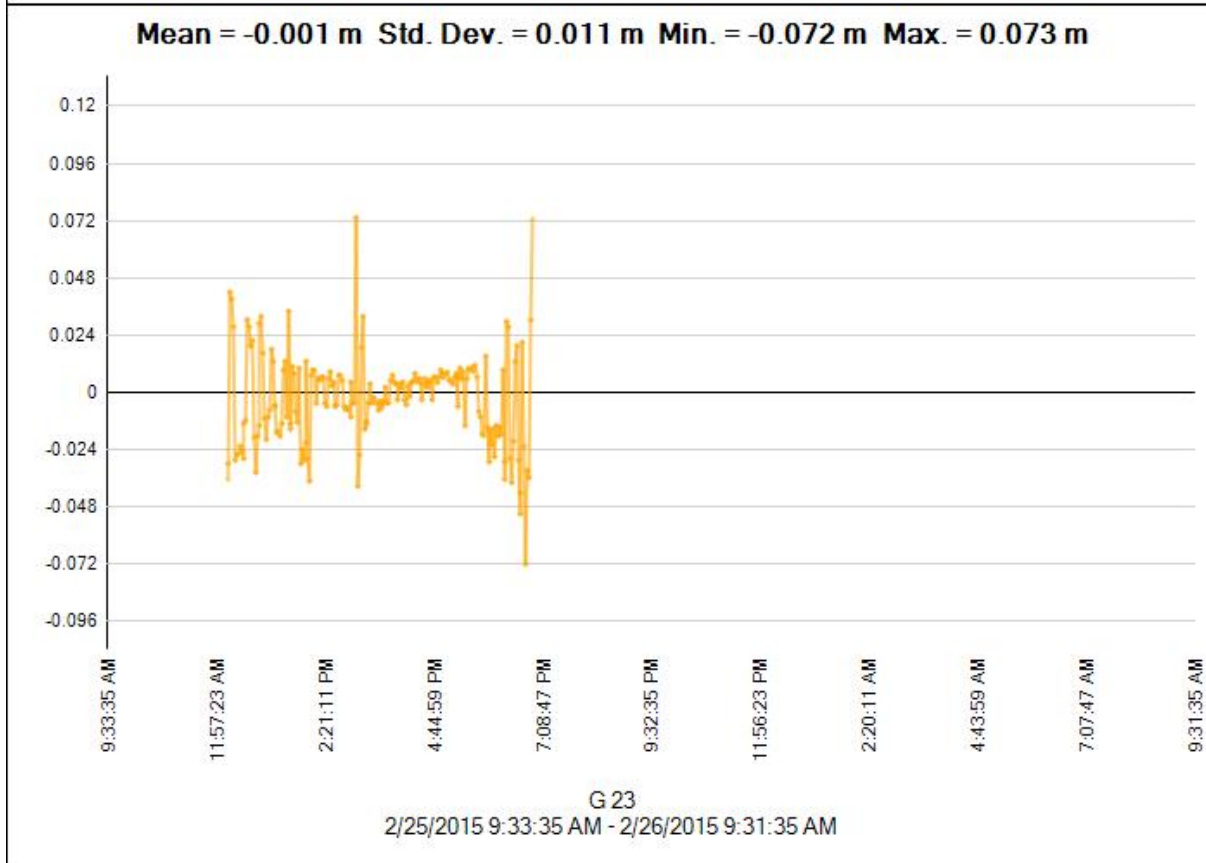
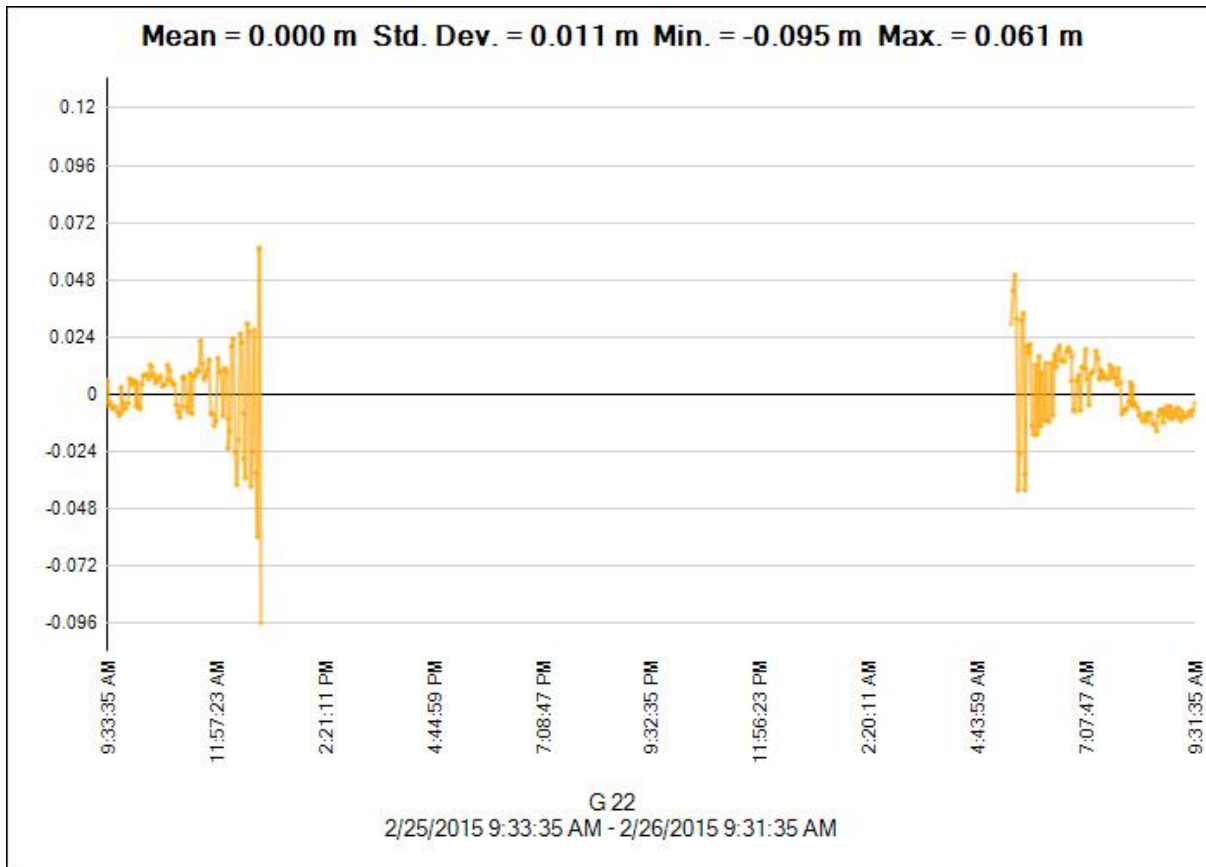


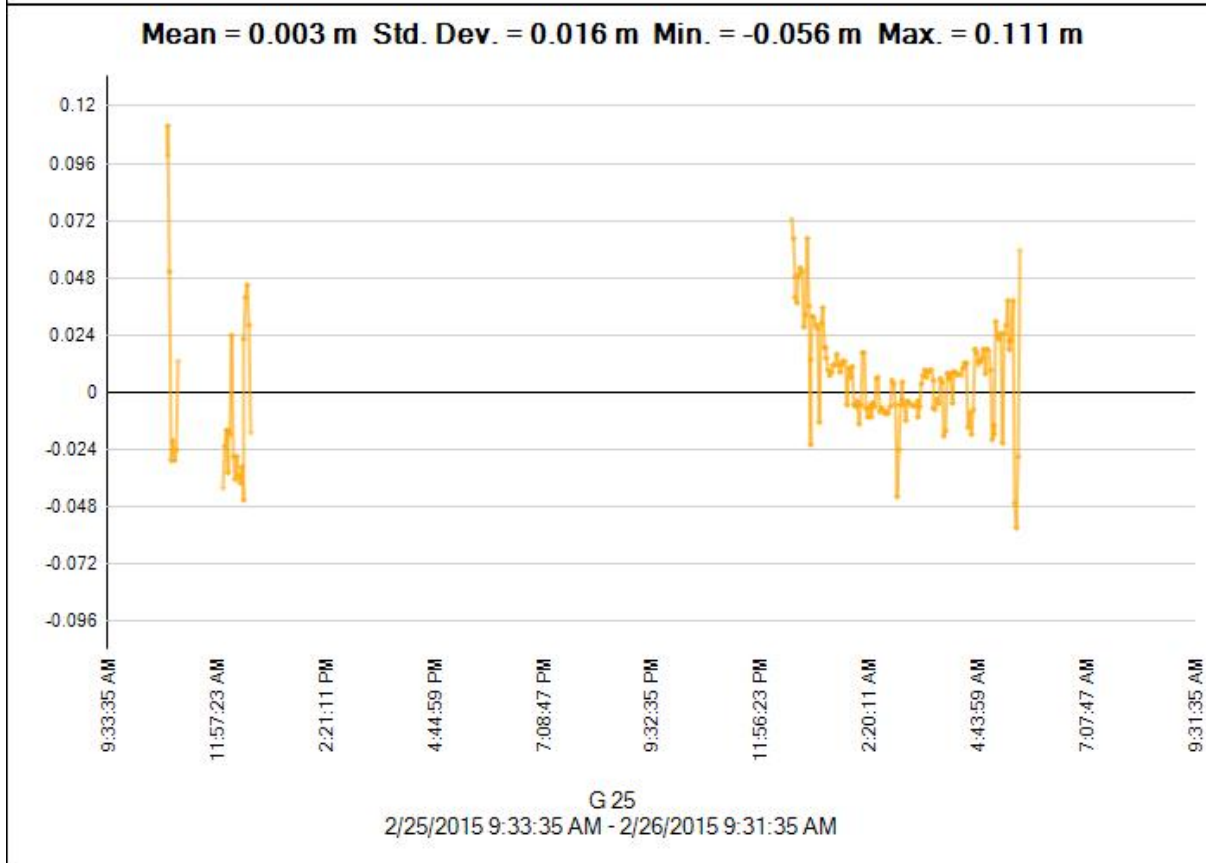
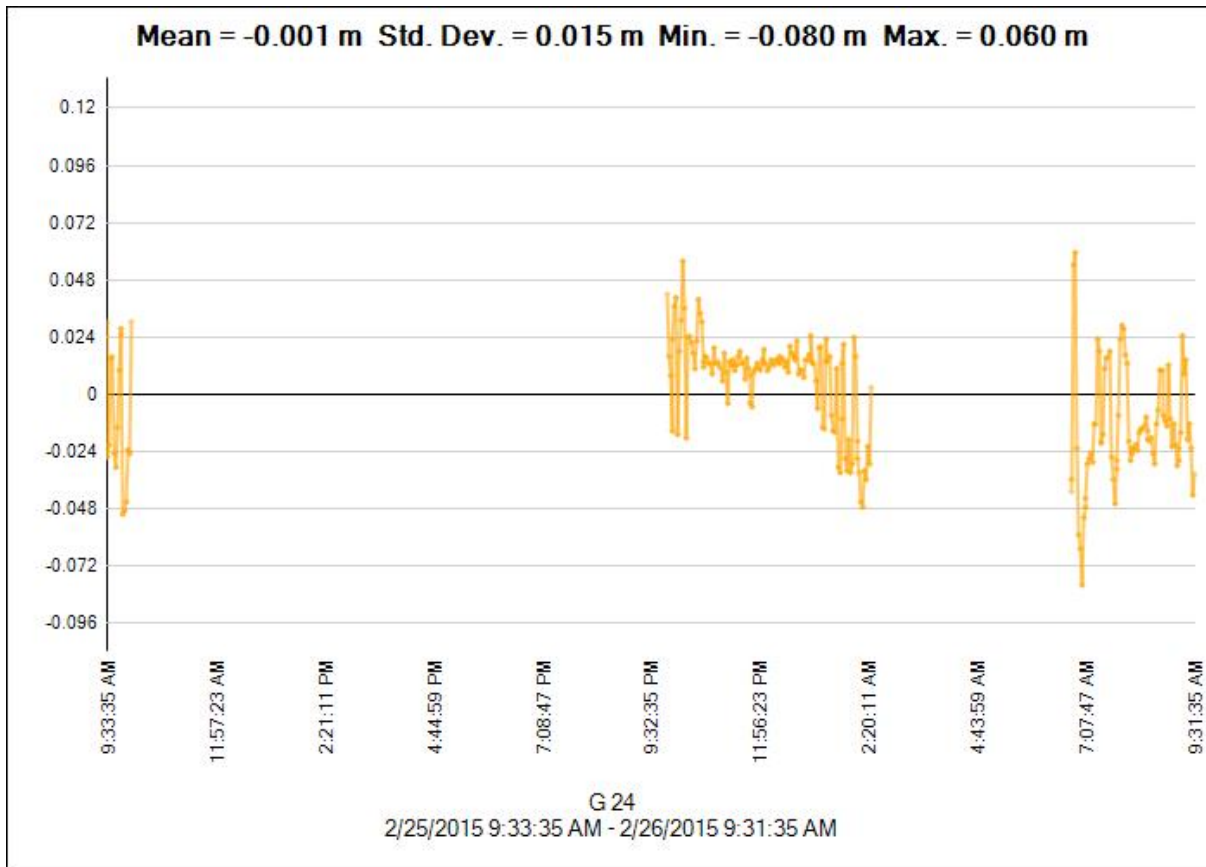


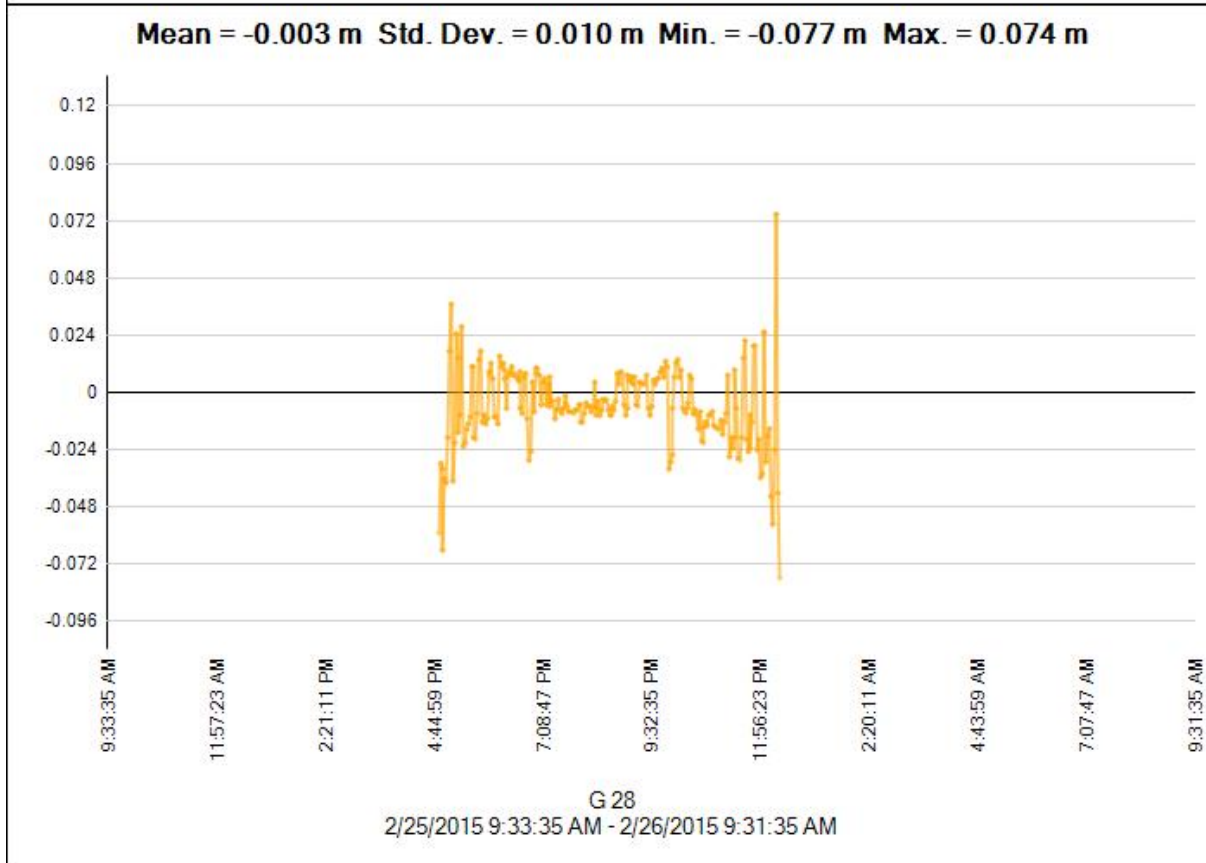
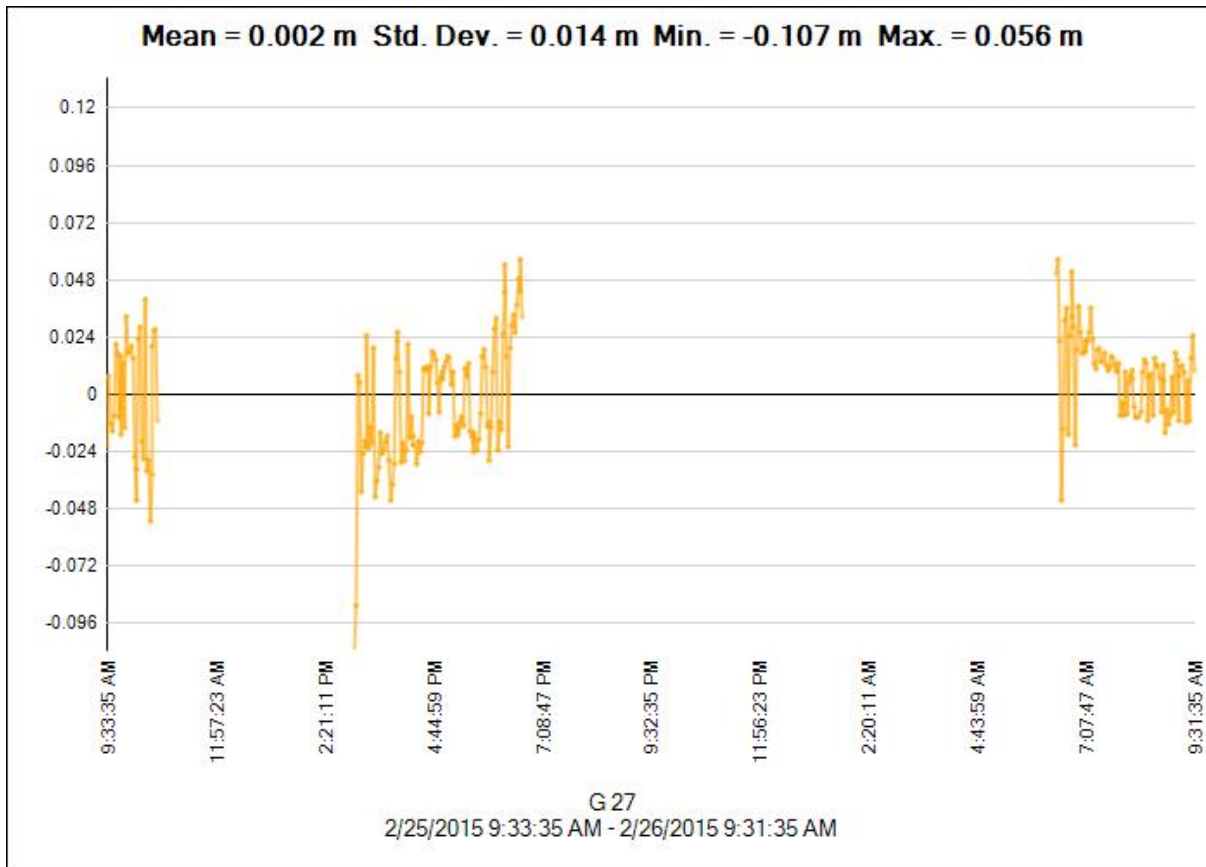


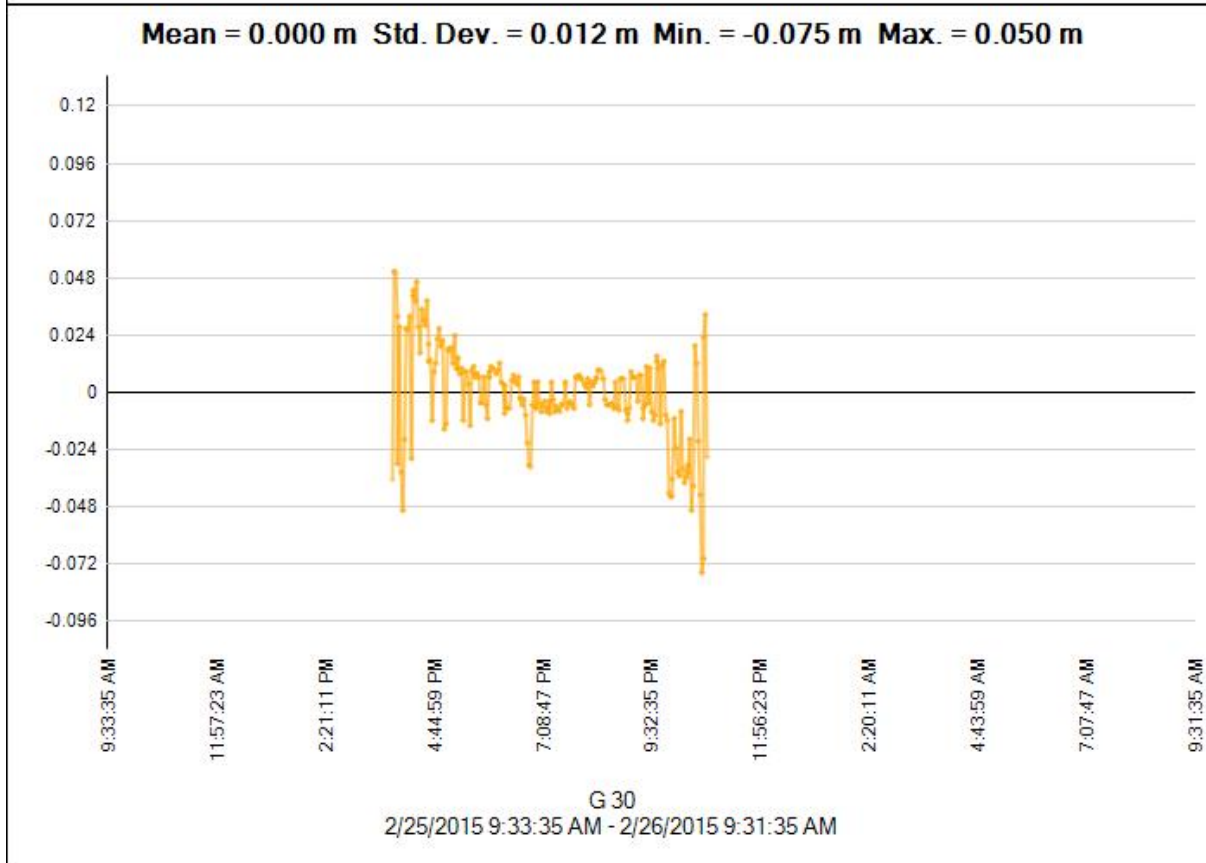
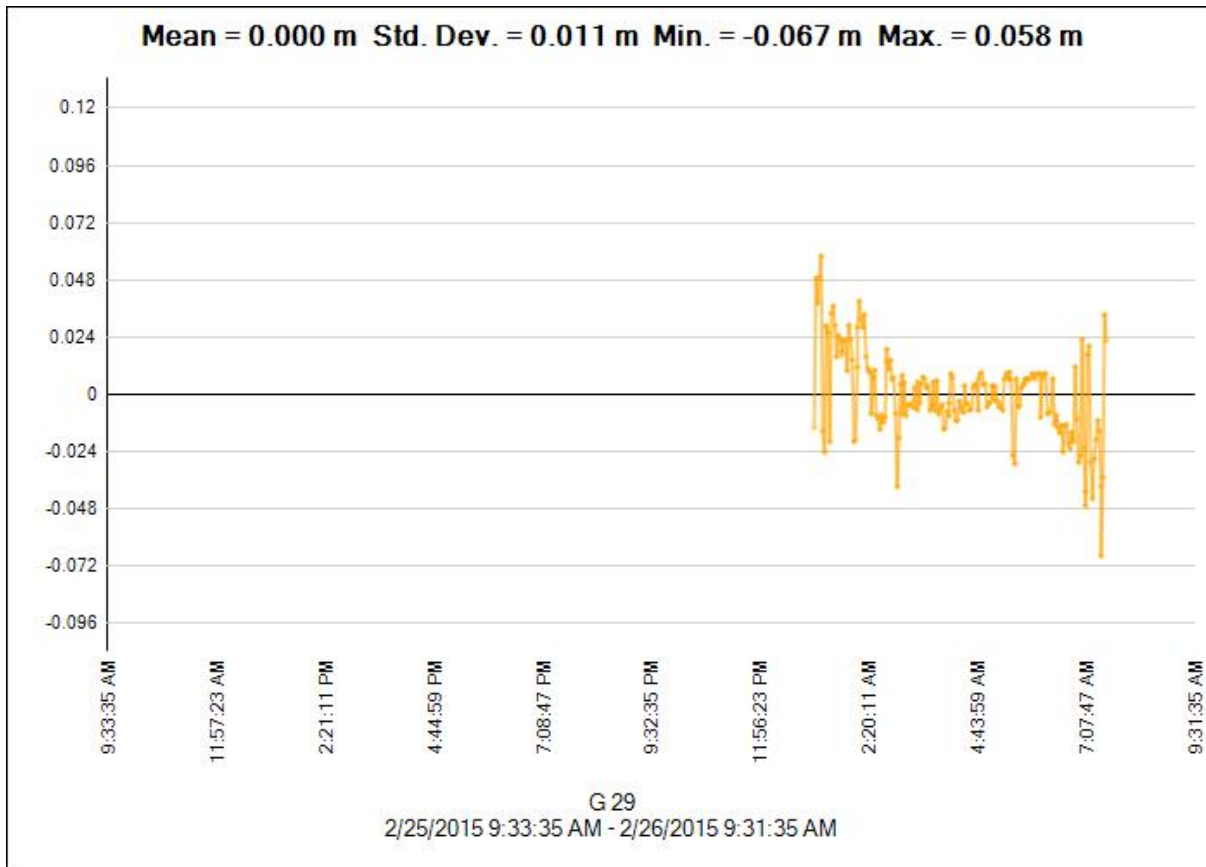


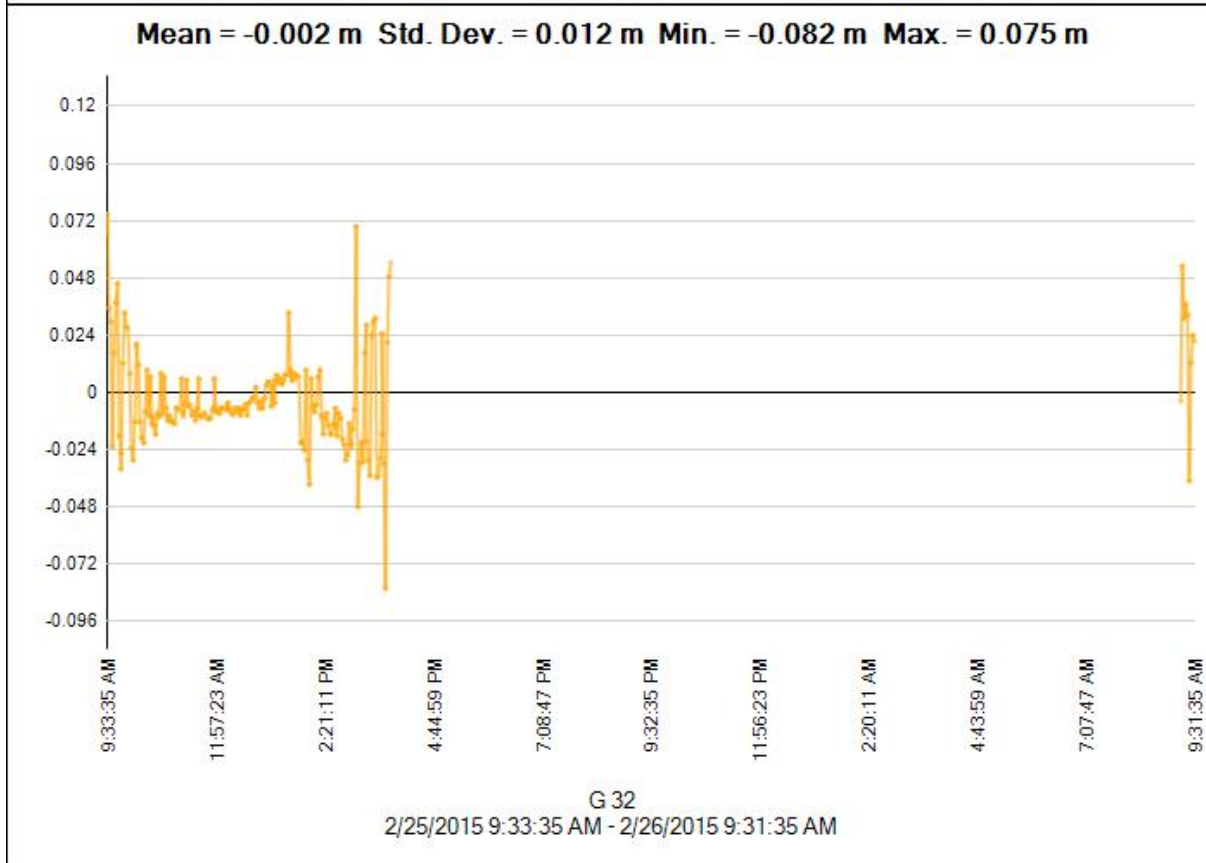
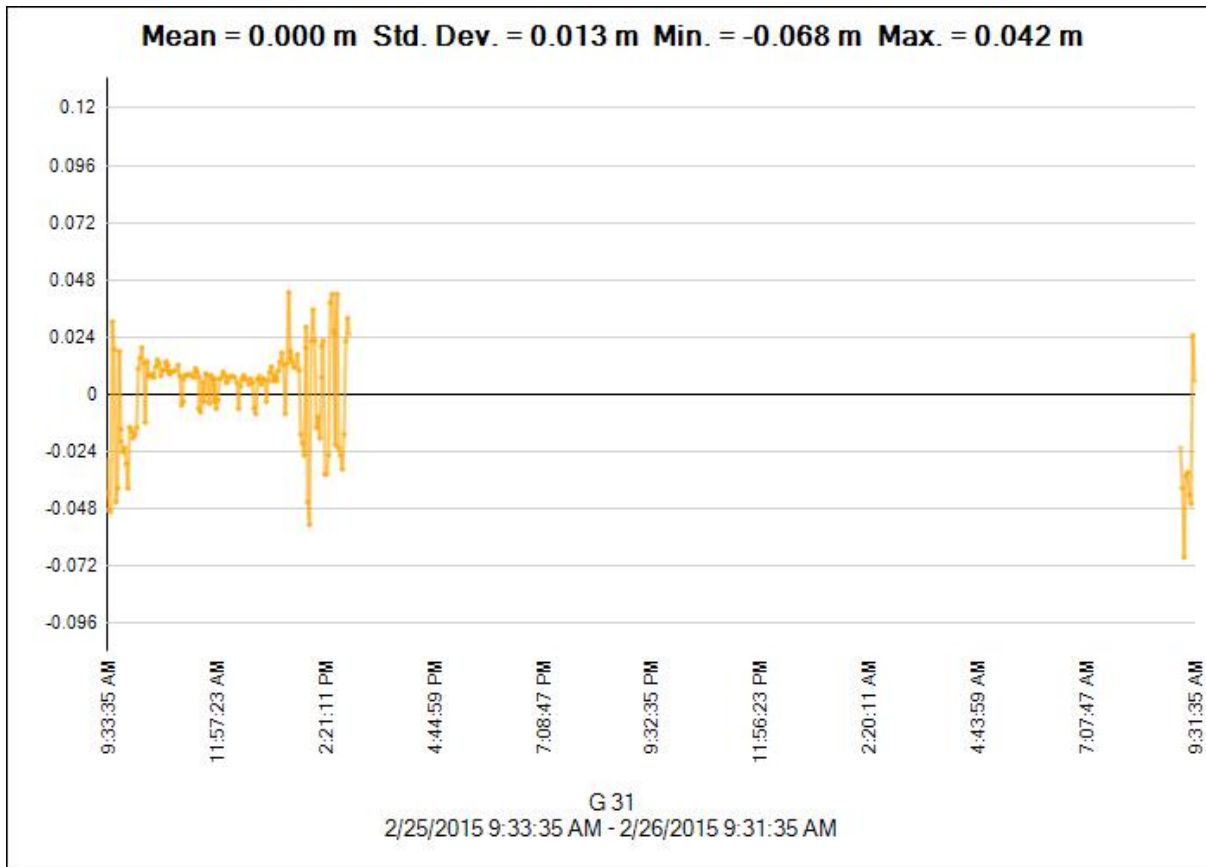
















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**Processing style**

Elevation mask: 10.0 deg  
Auto start processing: Yes  
Start automatic ID numbering: AUTO0001  
Continuous vectors: No  
Generate residuals: Yes  
Antenna model: Automatic  
Ephemeris type: Automatic  
Frequency: Multiple Frequencies  
Processing Interval: Use all data  
Force float: No

**Acceptance Criteria**

Vector Component	Flag 	Fail 
Horizontal Precision >	0.050 m + 1.000 ppm	0.100 m + 1.000 ppm
Vertical Precision >	0.100 m + 1.000 ppm	0.200 m + 1.000 ppm

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**TUS\_5 - AVRA\_APT\_3 (2:30:54 PM-9:16:44 AM) (S5)**

---

Baseline observation: TUS\_5 --- AVRA\_APT\_3 (B5)  
Processed: 3/5/2015 3:39:27 PM  
Solution type: Fixed  
Frequency used: Dual Frequency (L1, L2)  
Horizontal precision: 0.004 m  
Vertical precision: 0.009 m  
RMS: 0.004 m  
Maximum PDOP: 4.960  
Ephemeris used: Broadcast  
Antenna model: NGS Absolute  
Processing start time: 2/20/2015 2:30:54 PM (Local: UTC-7hr)  
Processing stop time: 2/21/2015 9:16:44 AM (Local: UTC-7hr)  
Processing duration: 18:45:50  
Processing interval: 10 seconds

### Vector Components (Mark to Mark)

From:		TUS_5			
Grid		Local		Global	
Easting	347926.477 m	Latitude	N32°26'00.51554"	Latitude	N32°26'00.51554"
Northing	159832.027 m	Longitude	W110°29'08.61837"	Longitude	W110°29'08.61837"
Elevation	922.850 m	Height	894.816 m	Height	894.816 m

To:		AVRA_APT_3			
Grid		Local		Global	
Easting	279292.478 m	Latitude	N32°24'11.19701"	Latitude	N32°24'11.19701"
Northing	155779.701 m	Longitude	W111°12'56.77810"	Longitude	W111°12'56.77810"
Elevation	633.847 m	Height	604.204 m	Height	604.204 m

Vector					
$\Delta$ Easting	-68633.999 m	NS Fwd Azimuth	267°23'18"	$\Delta$ X	-64734.479 m
$\Delta$ Northing	-4052.326 m	Ellipsoid Dist.	68751.549 m	$\Delta$ Y	22986.492 m
$\Delta$ Elevation	-289.003 m	$\Delta$ Height	-290.612 m	$\Delta$ Z	-2998.779 m

### Standard Errors

Vector errors:					
$\sigma$ $\Delta$ Easting	0.002 m	$\sigma$ NS fwd Azimuth	0°00'00"	$\sigma$ $\Delta$ X	0.002 m
$\sigma$ $\Delta$ Northing	0.001 m	$\sigma$ Ellipsoid Dist.	0.002 m	$\sigma$ $\Delta$ Y	0.004 m
$\sigma$ $\Delta$ Elevation	0.005 m	$\sigma$ $\Delta$ Height	0.005 m	$\sigma$ $\Delta$ Z	0.003 m

### Aposteriori Covariance Matrix (Meter<sup>2</sup>)

	X	Y	Z
X	0.0000053984		
Y	0.0000048221	0.0000143560	
Z	-0.0000034928	-0.0000089122	0.0000066599

## Occupations

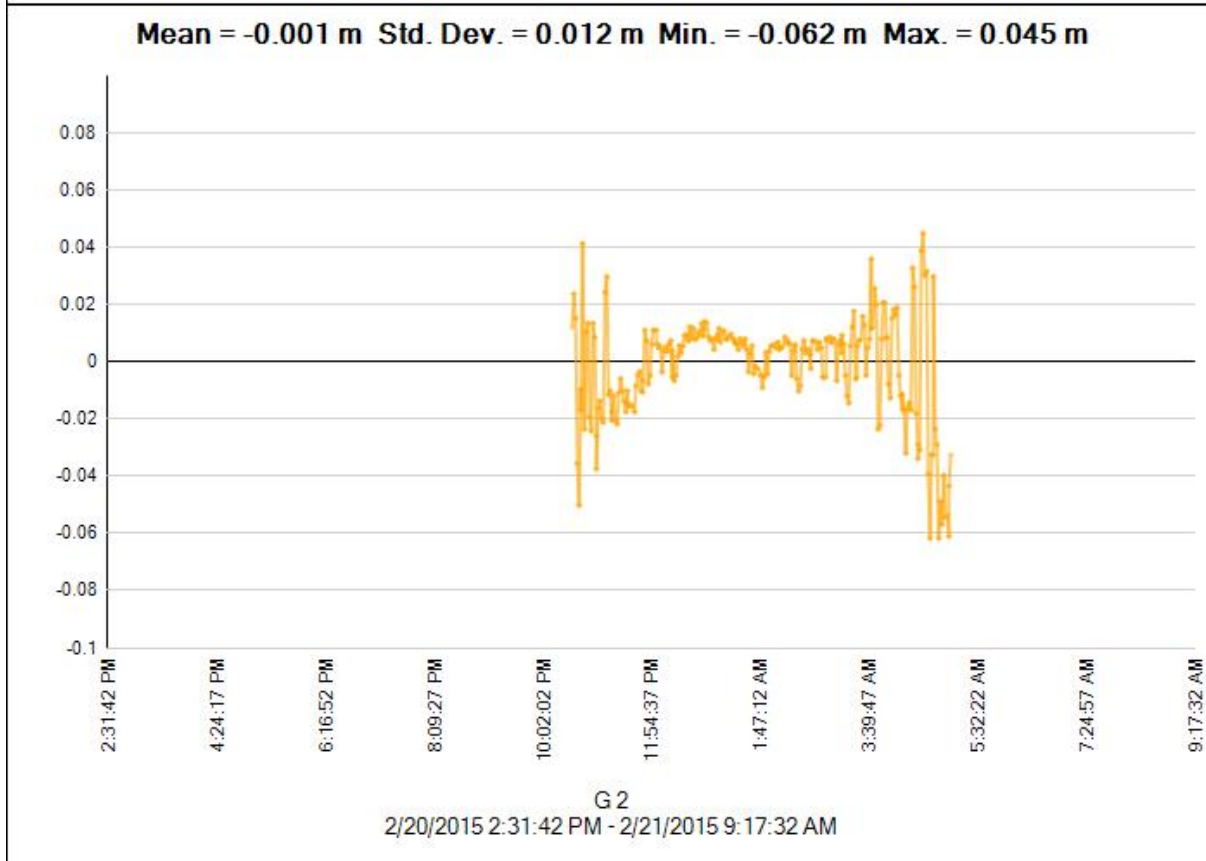
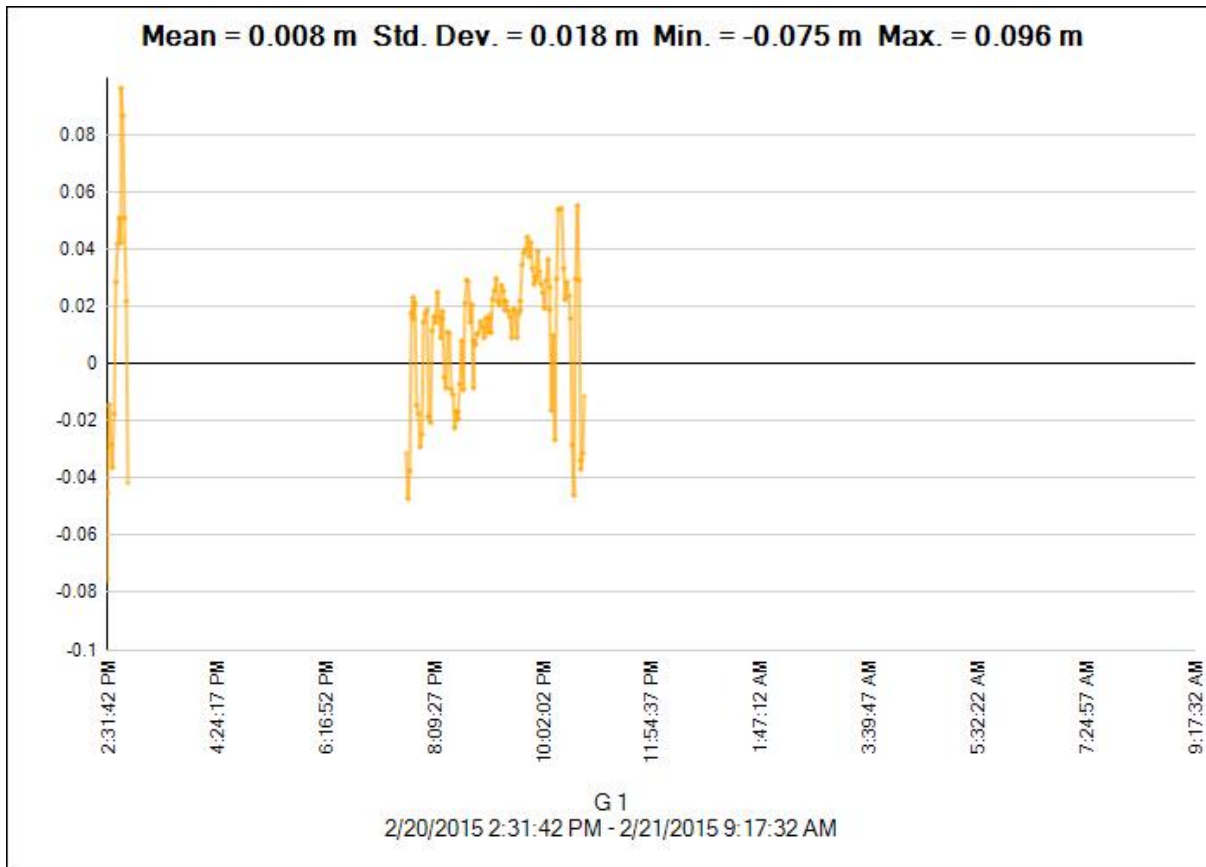
	From	To
Point ID:	TUS_5	AVRA_APT_3
Data file:	\\conas\projects \312014478_PAG_2015\Acquisition \Ground_Survey\Adjustments\4478 PAG LiDAR Network\00110510 resampled.15o	\\conas\projects \312014478_PAG_2015\Acquisition \Ground_Survey\Adjustments\4478 PAG LiDAR Network\00010510 resampled.15o
Receiver type:	Geo Explorer 3	Geo Explorer 3
Receiver serial number:		
Antenna type:	702 Rev 3.00	702 Rev 3.00
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

# Tracking Summary

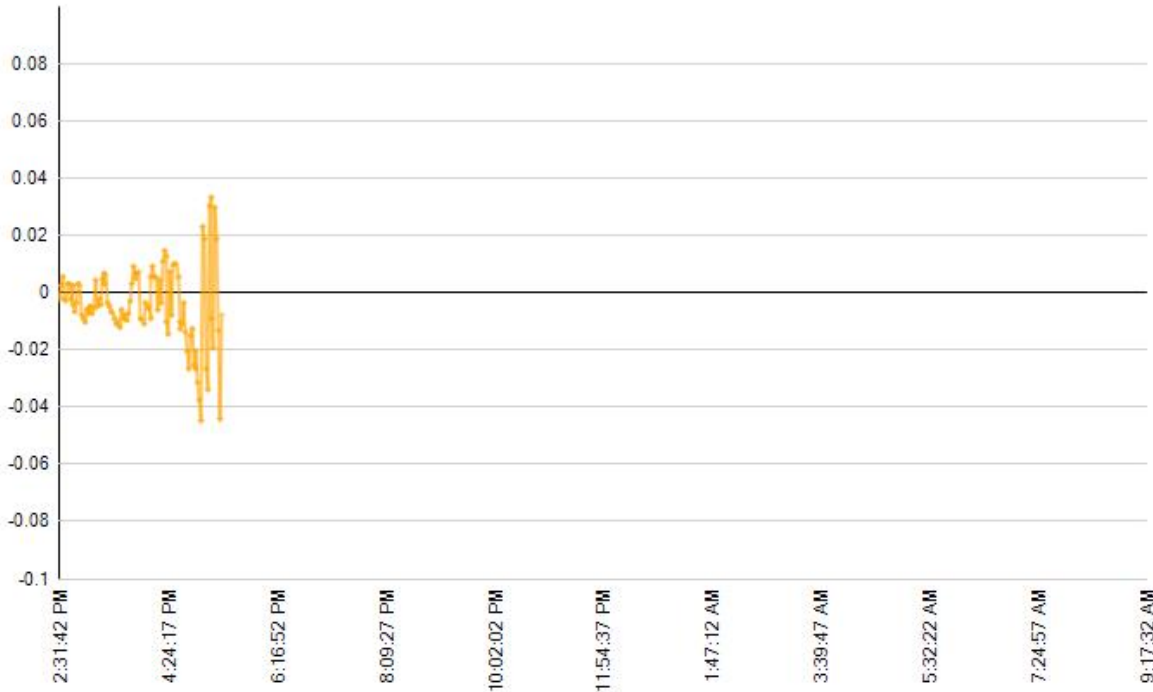
SV	2/20/2015 2:30:54 PM	Duration: 18:45:50	Major interval: 01:00:00	2/21/2015 9:16:44 AM
G 1	L1 L2			
G 2	L1 L2			
G 3	L1 L2			
G 4	L1 L2			
G 5	L1 L2			
G 6	L1 L2			
G 7	L1 L2			
G 9	L1 L2			
G 10	L1 L2			
G 11	L1 L2			
G 12	L1 L2			
G 13	L1 L2			
G 14	L1 L2			
G 15	L1 L2			
G 16	L1 L2			
G 17	L1 L2			
G 18	L1 L2			
G 19	L1 L2			
G 20	L1 L2			
G 21	L1 L2			

SV	2/20/2015 2:30:54 PM	Duration: 18:45:50 Major interval: 01:00:00	2/21/2015 9:16:44 AM
G 22	L1 L2		
G 23	L1 L2		
G 24	L1 L2		
G 25	L1 L2		
G 27	L1 L2		
G 28	L1 L2		
G 29	L1 L2		
G 30	L1 L2		
G 31	L1 L2		
G 32	L1 L2		

# Residuals



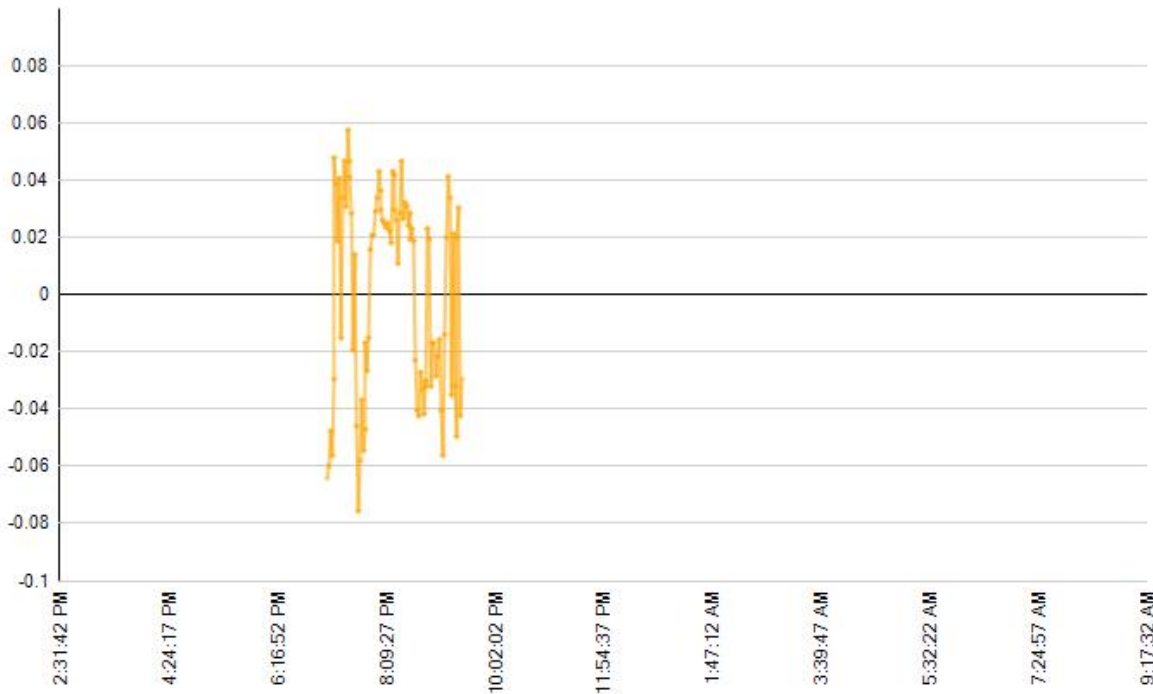
Mean = -0.003 m Std. Dev. = 0.009 m Min. = -0.045 m Max. = 0.034 m



G 3

2/20/2015 2:31:42 PM - 2/21/2015 9:17:32 AM

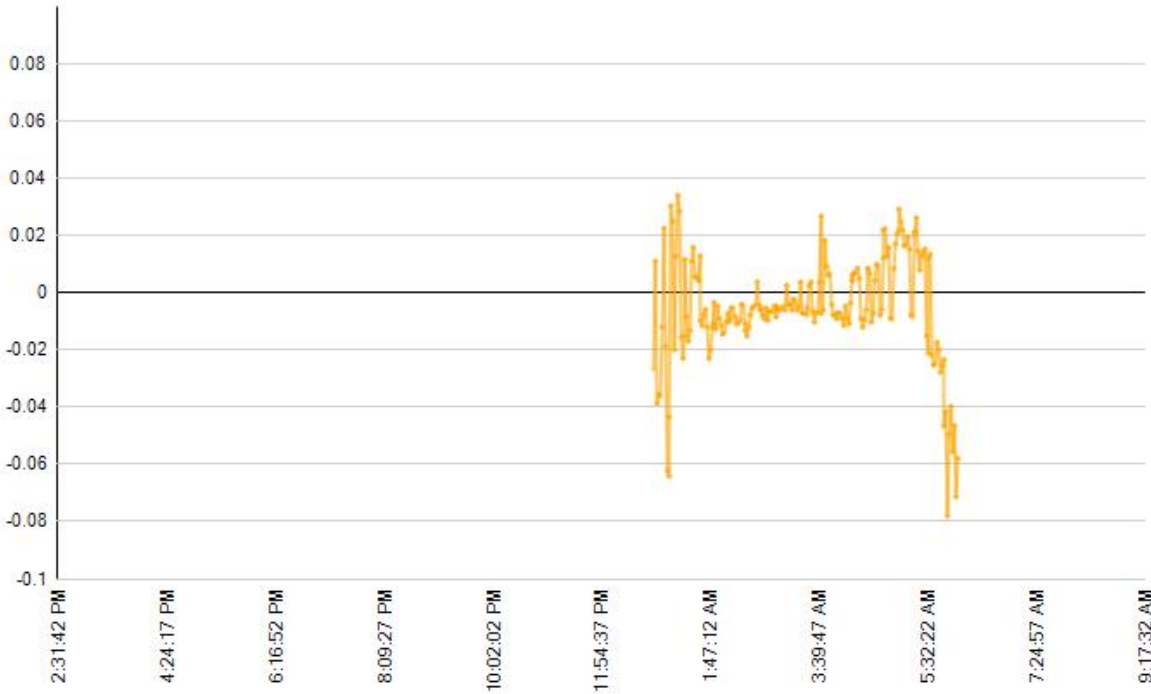
Mean = 0.000 m Std. Dev. = 0.024 m Min. = -0.076 m Max. = 0.057 m



G 4

2/20/2015 2:31:42 PM - 2/21/2015 9:17:32 AM

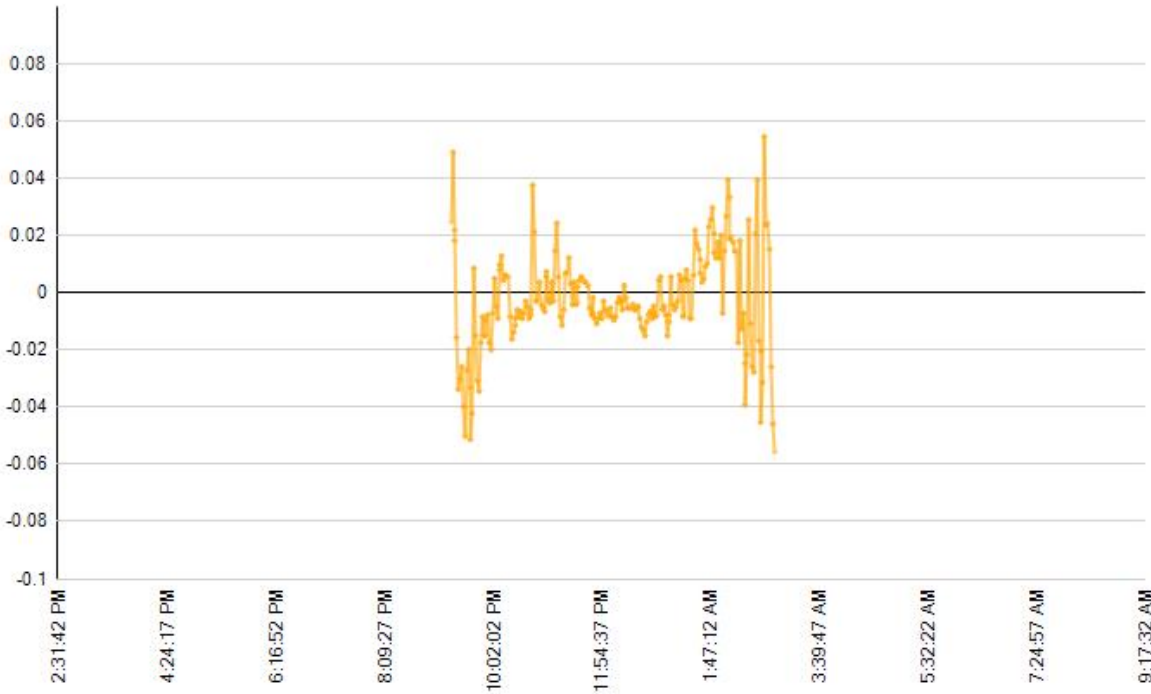
Mean = -0.003 m Std. Dev. = 0.013 m Min. = -0.078 m Max. = 0.034 m



G5

2/20/2015 2:31:42 PM - 2/21/2015 9:17:32 AM

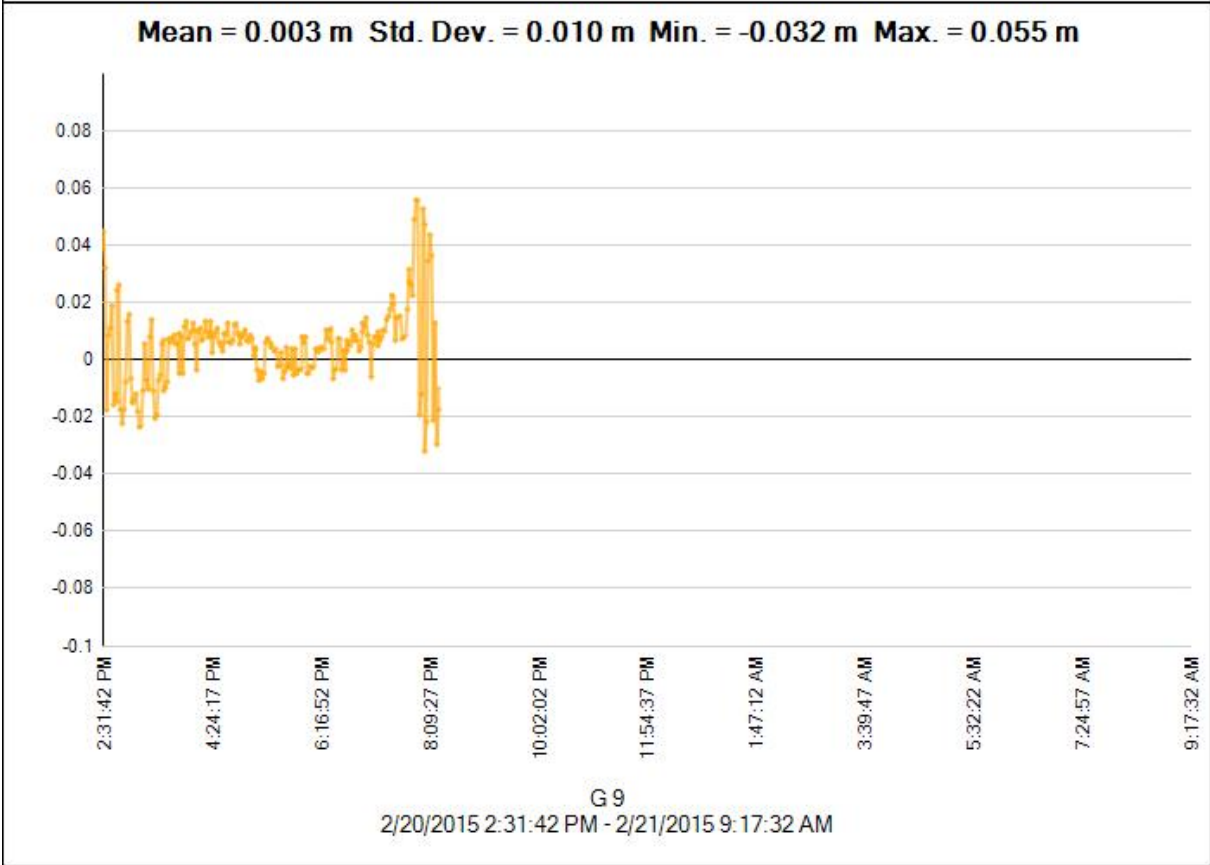
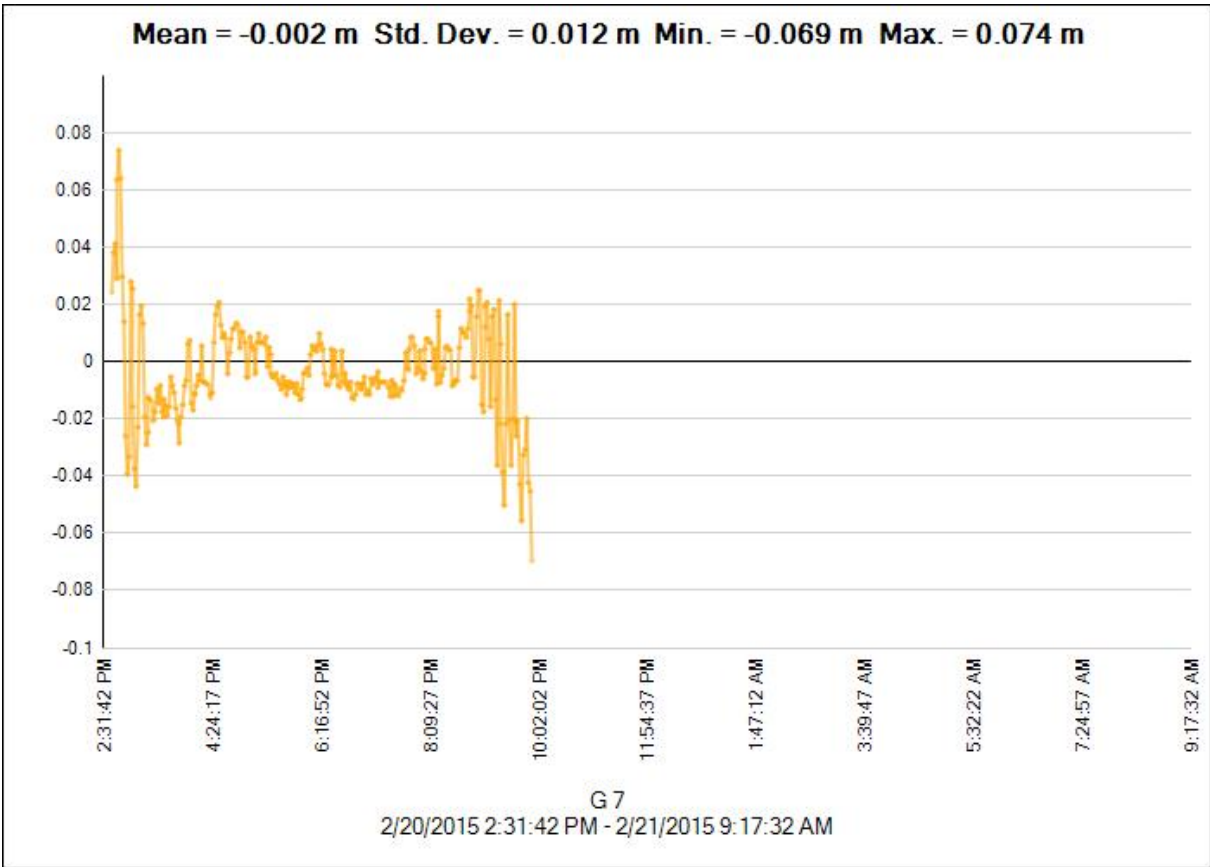
Mean = -0.002 m Std. Dev. = 0.011 m Min. = -0.056 m Max. = 0.055 m

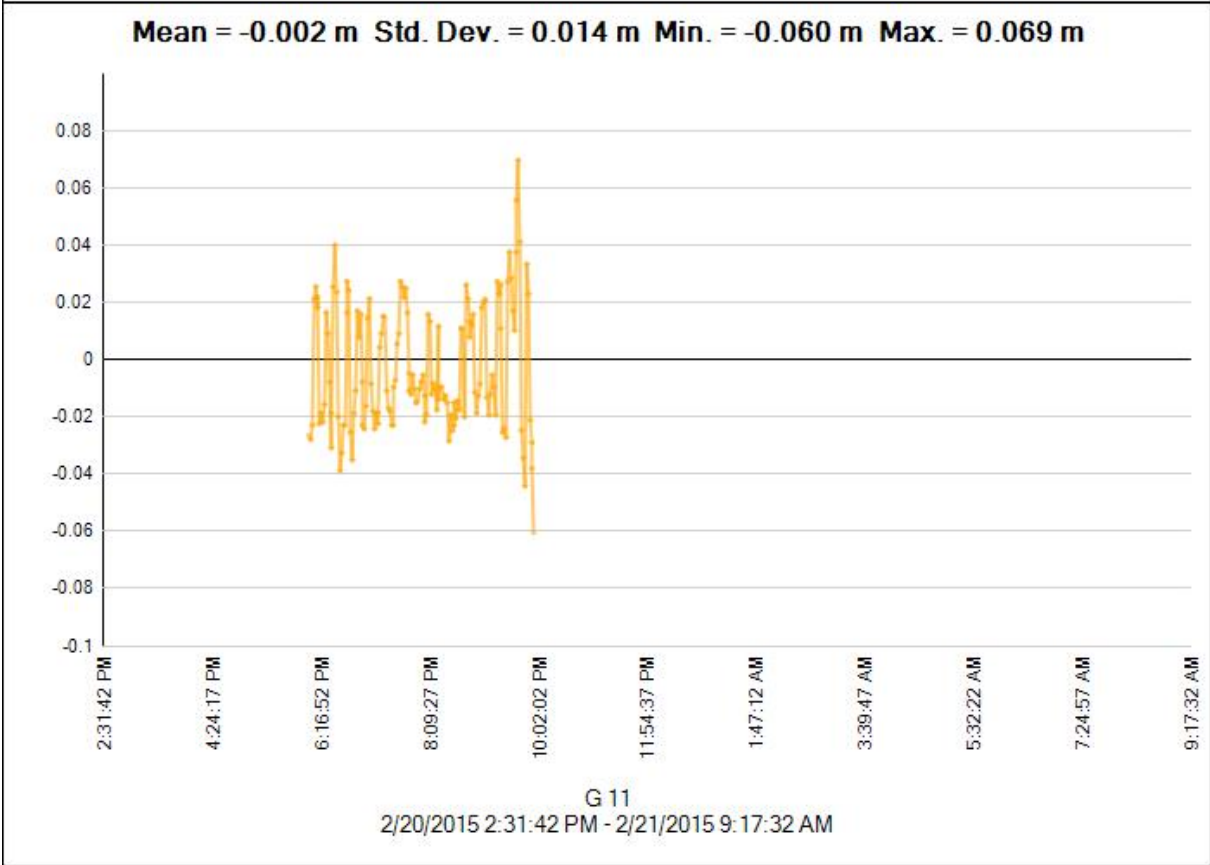
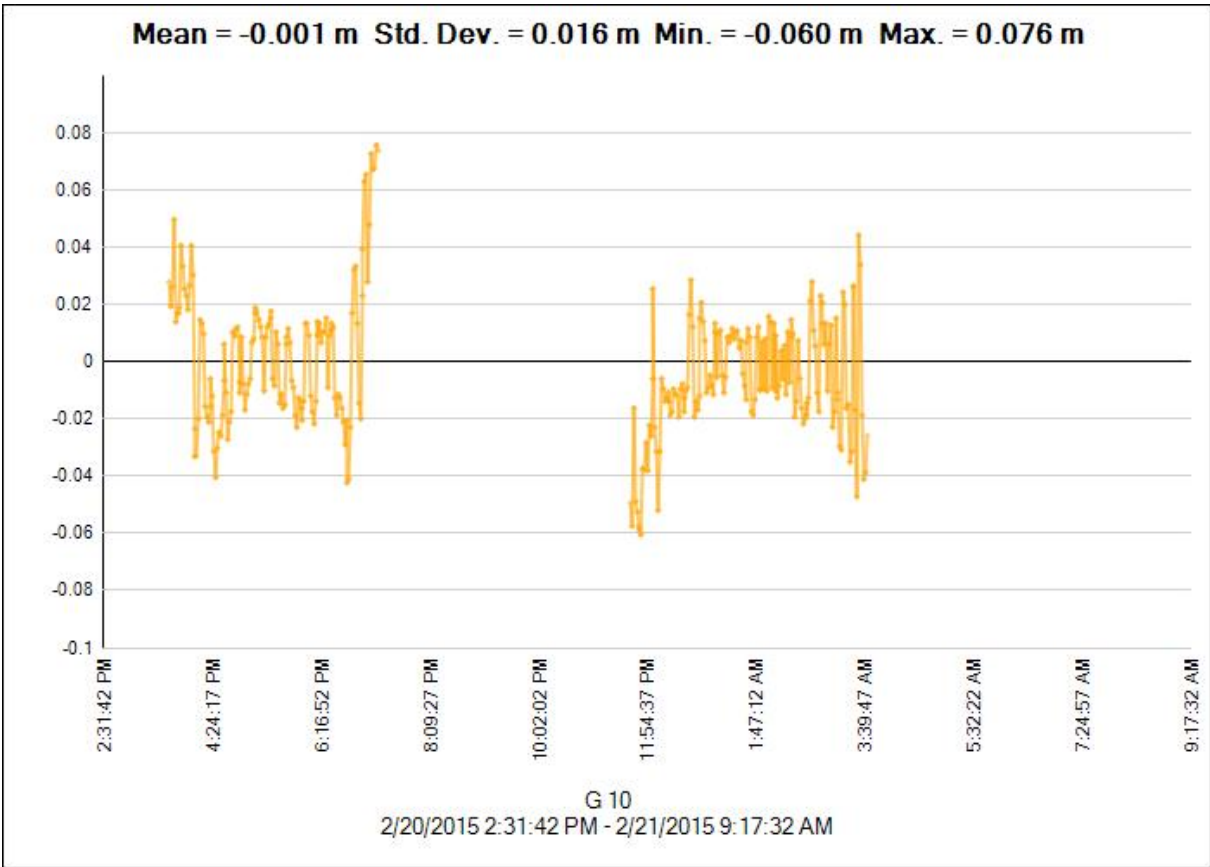


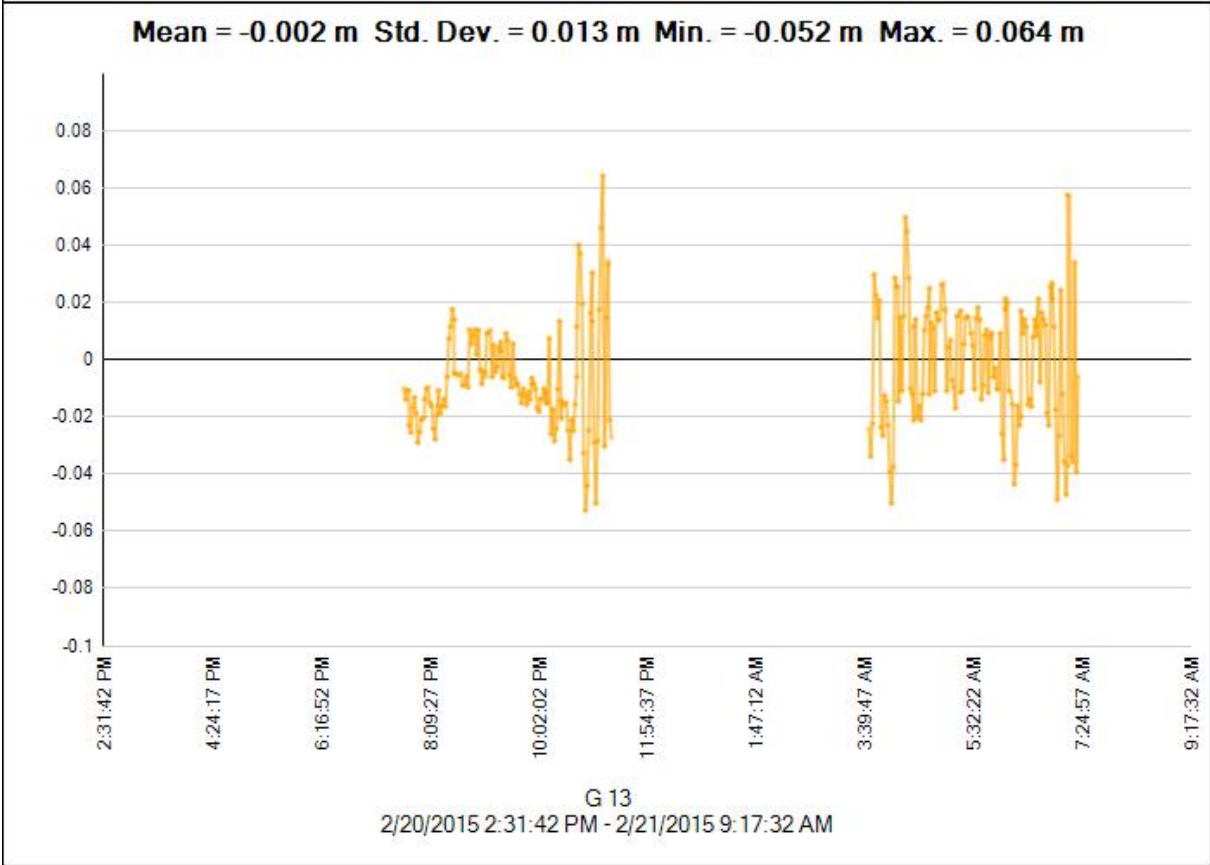
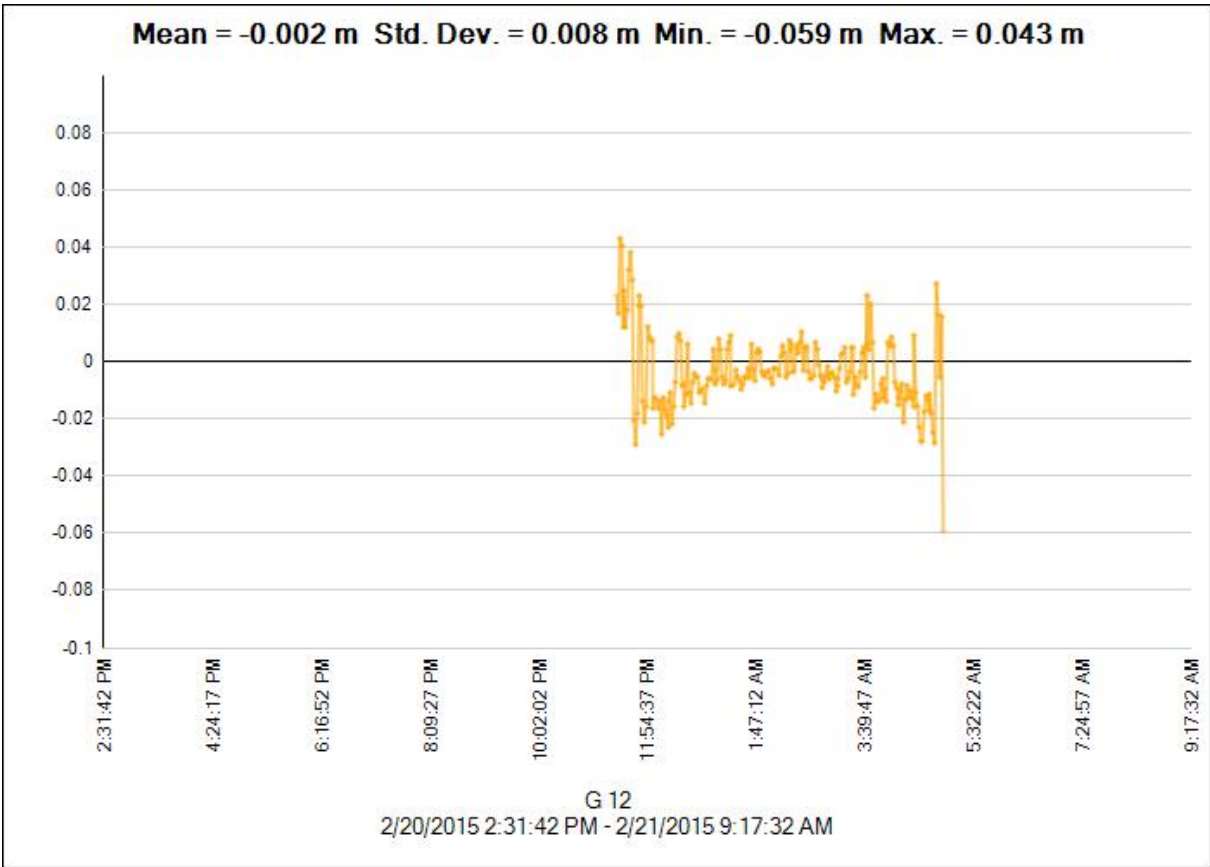
G6

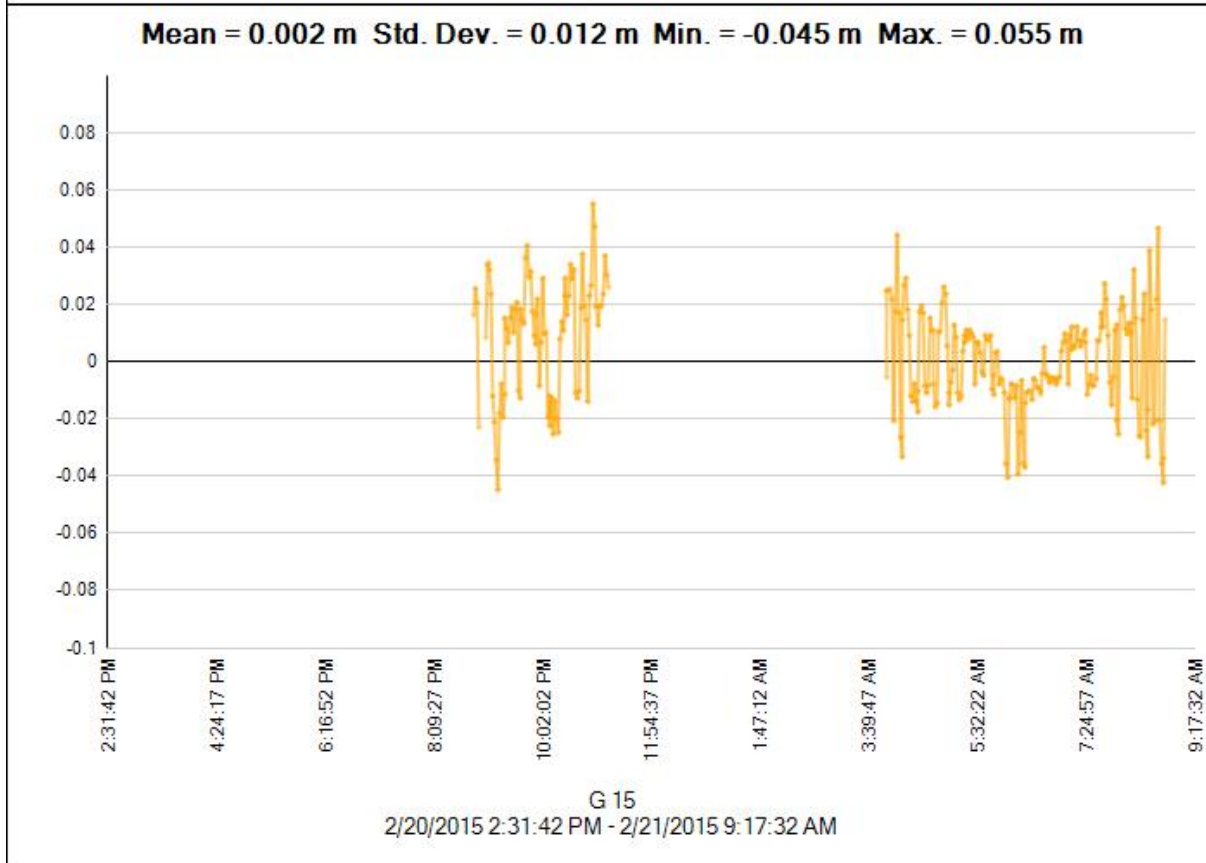
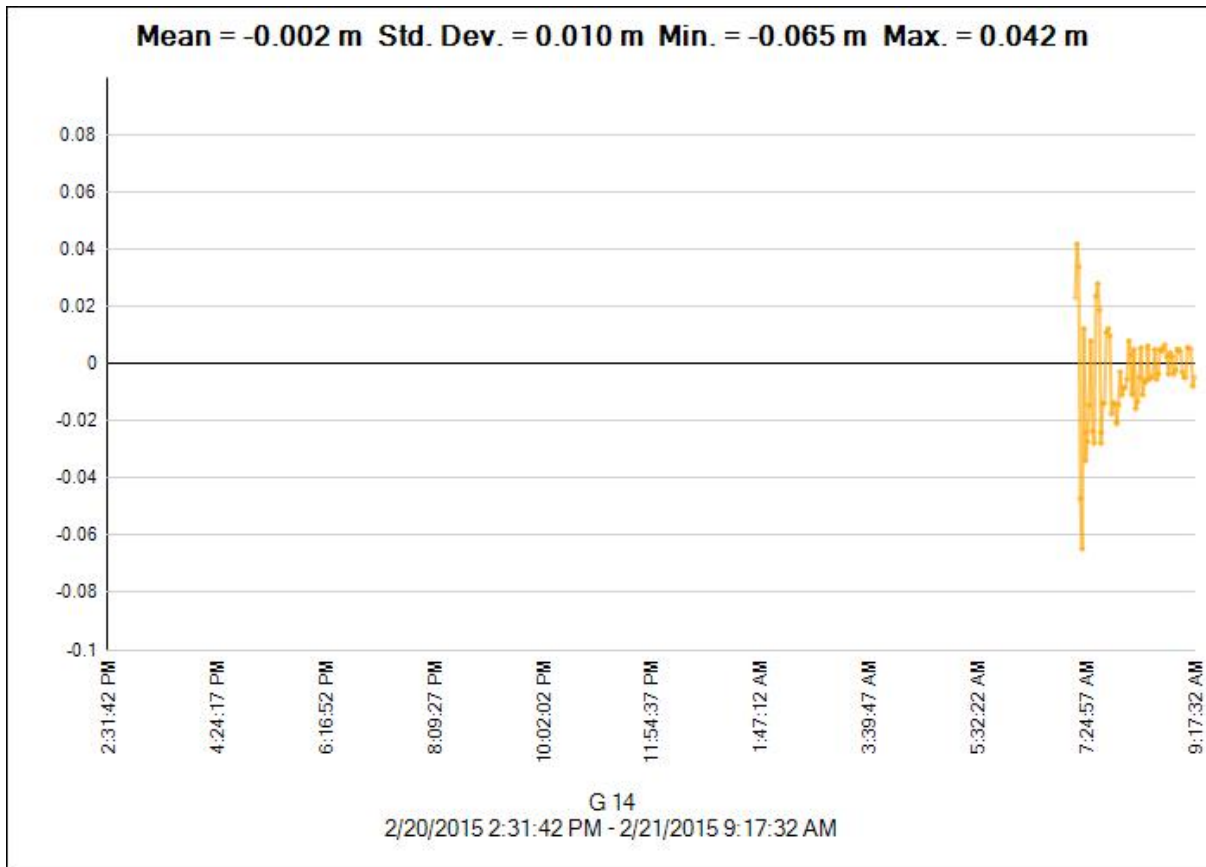
2/20/2015 2:31:42 PM - 2/21/2015 9:17:32 AM

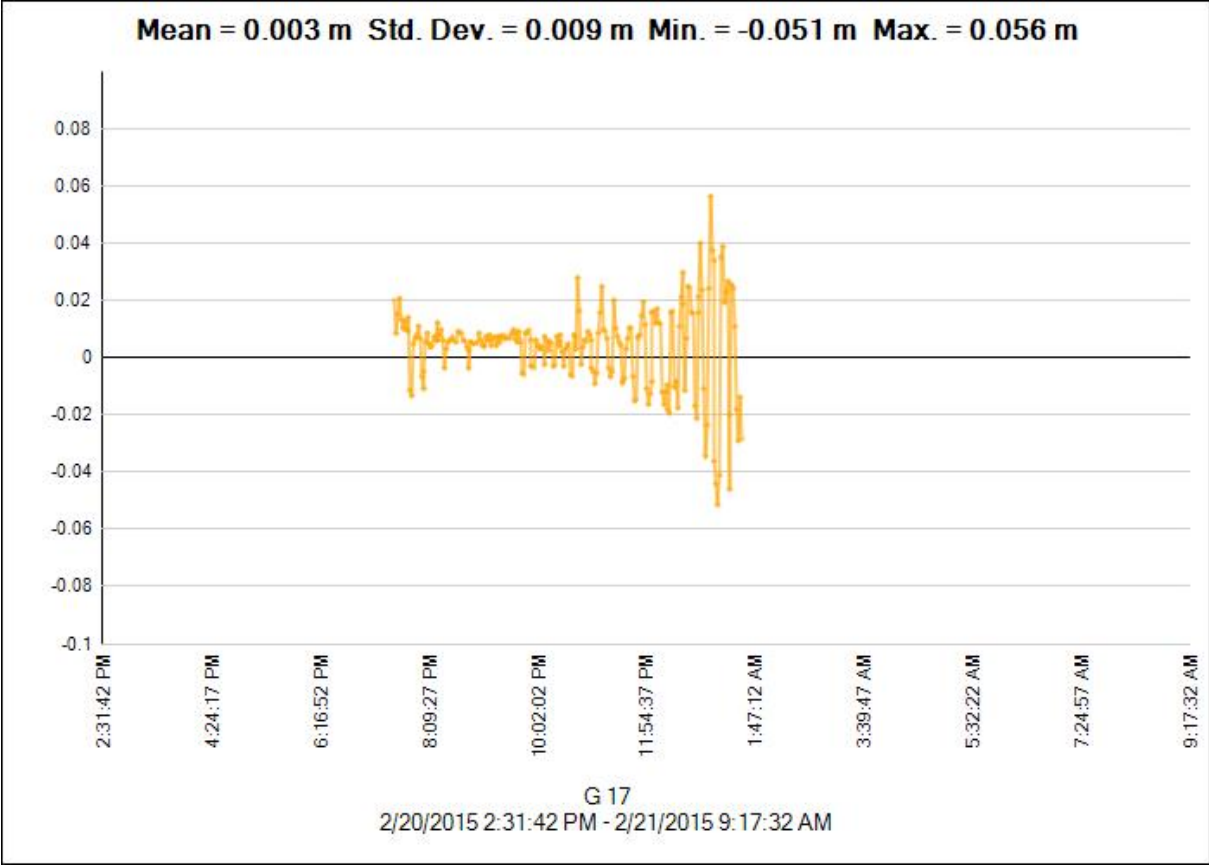
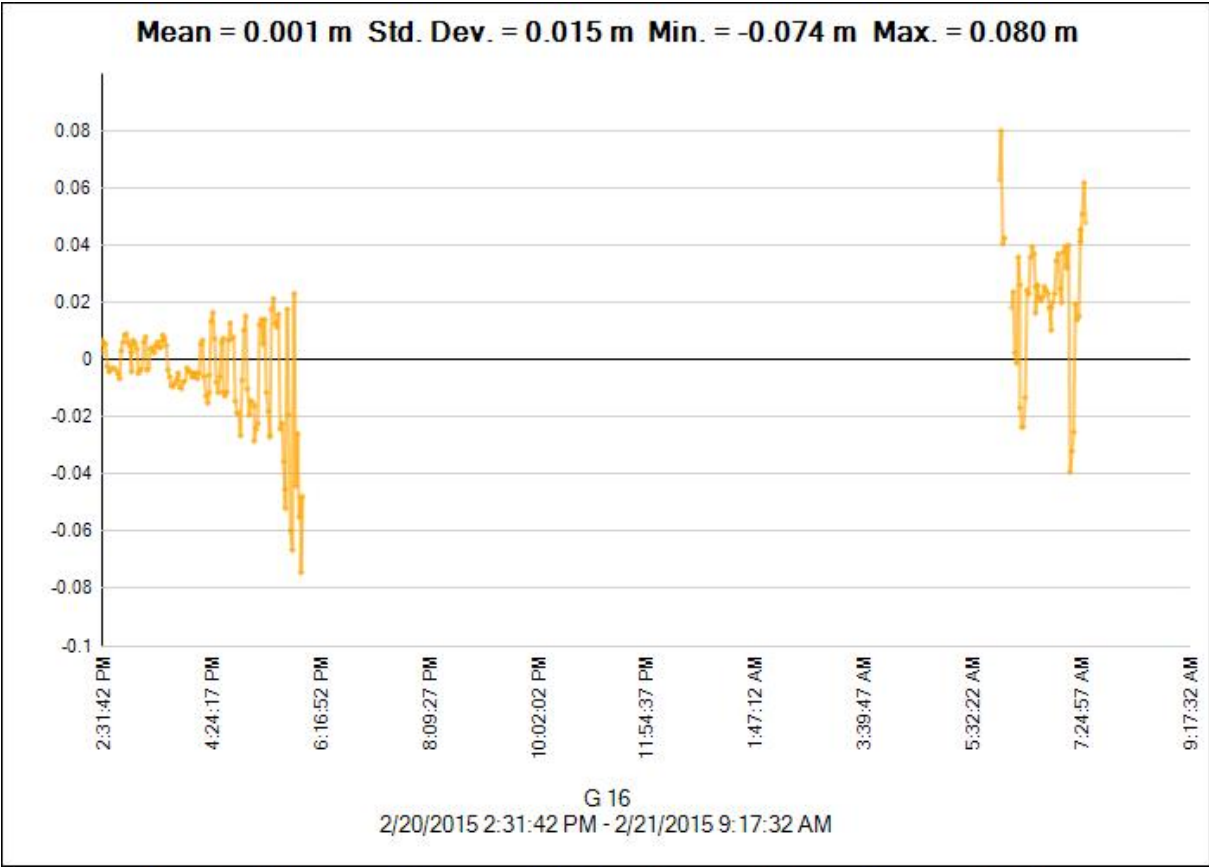


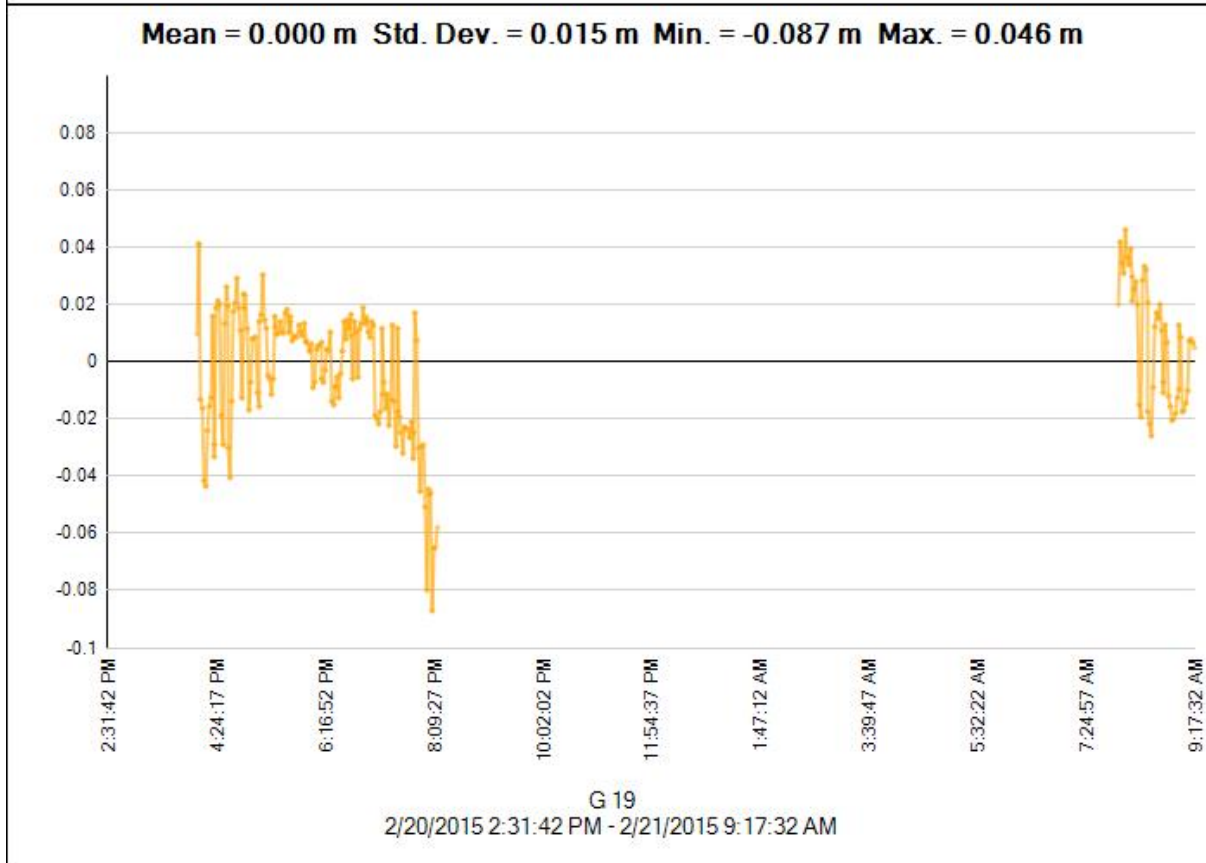
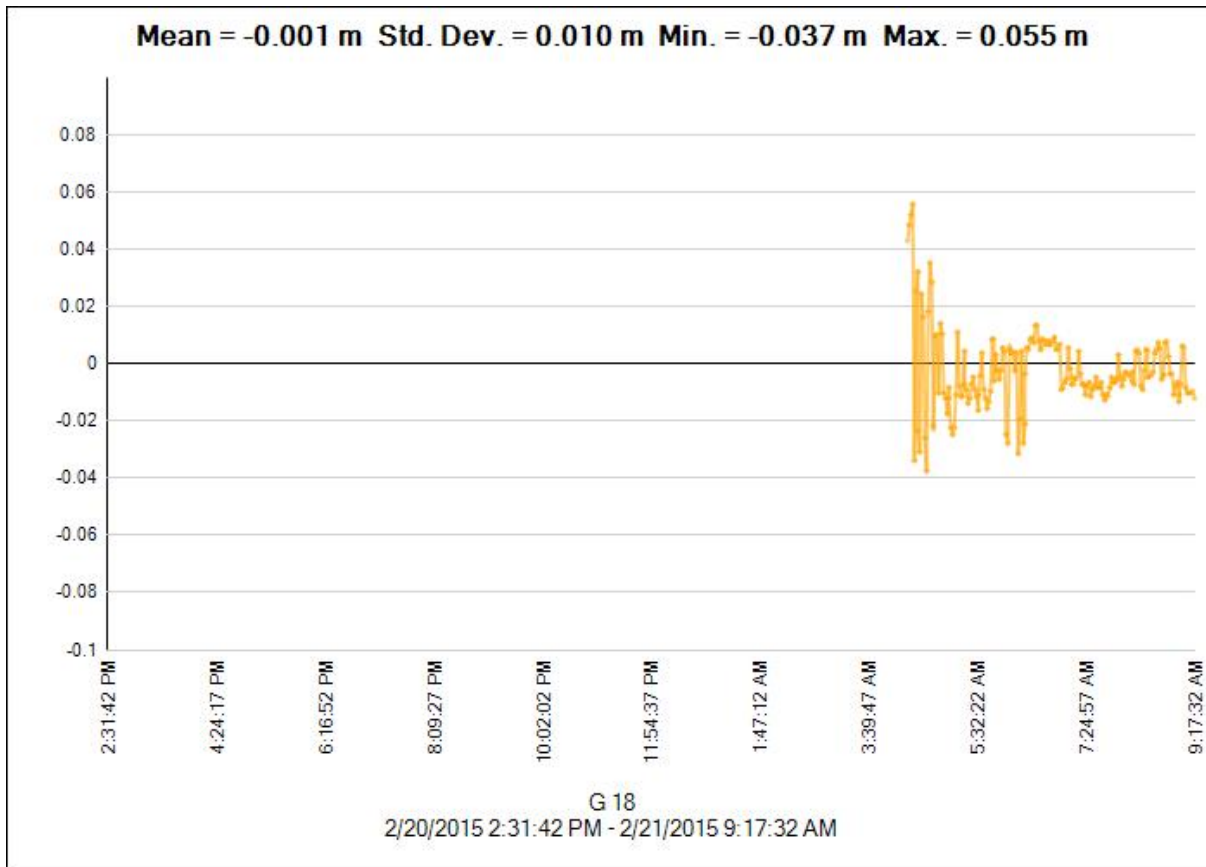


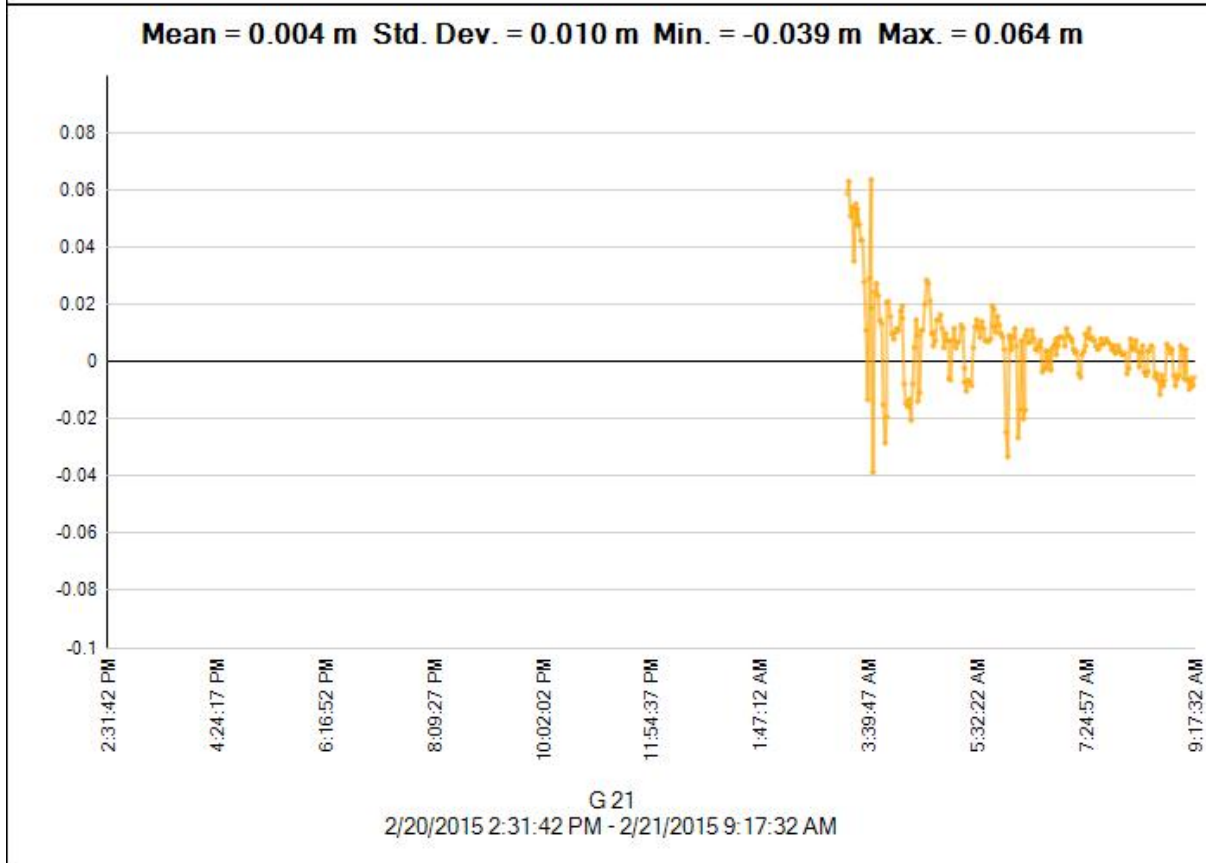
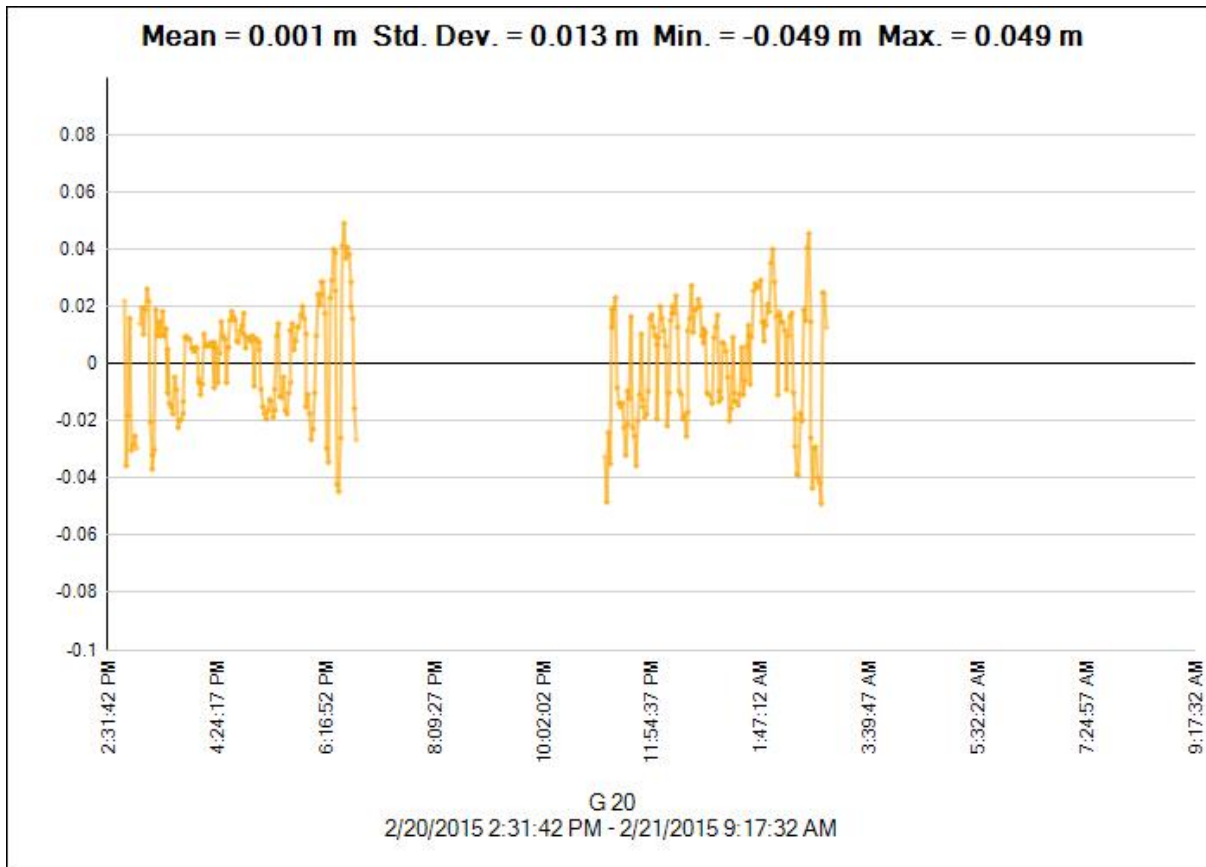


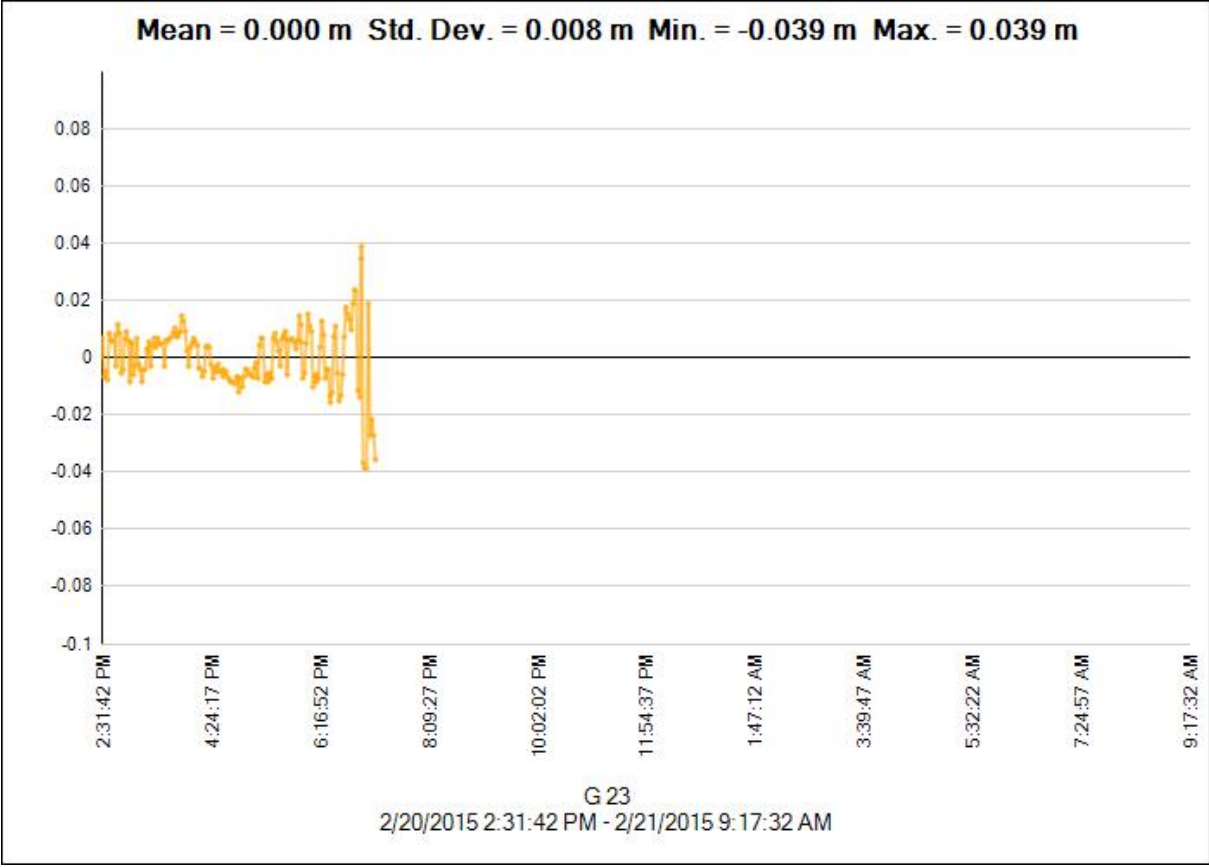
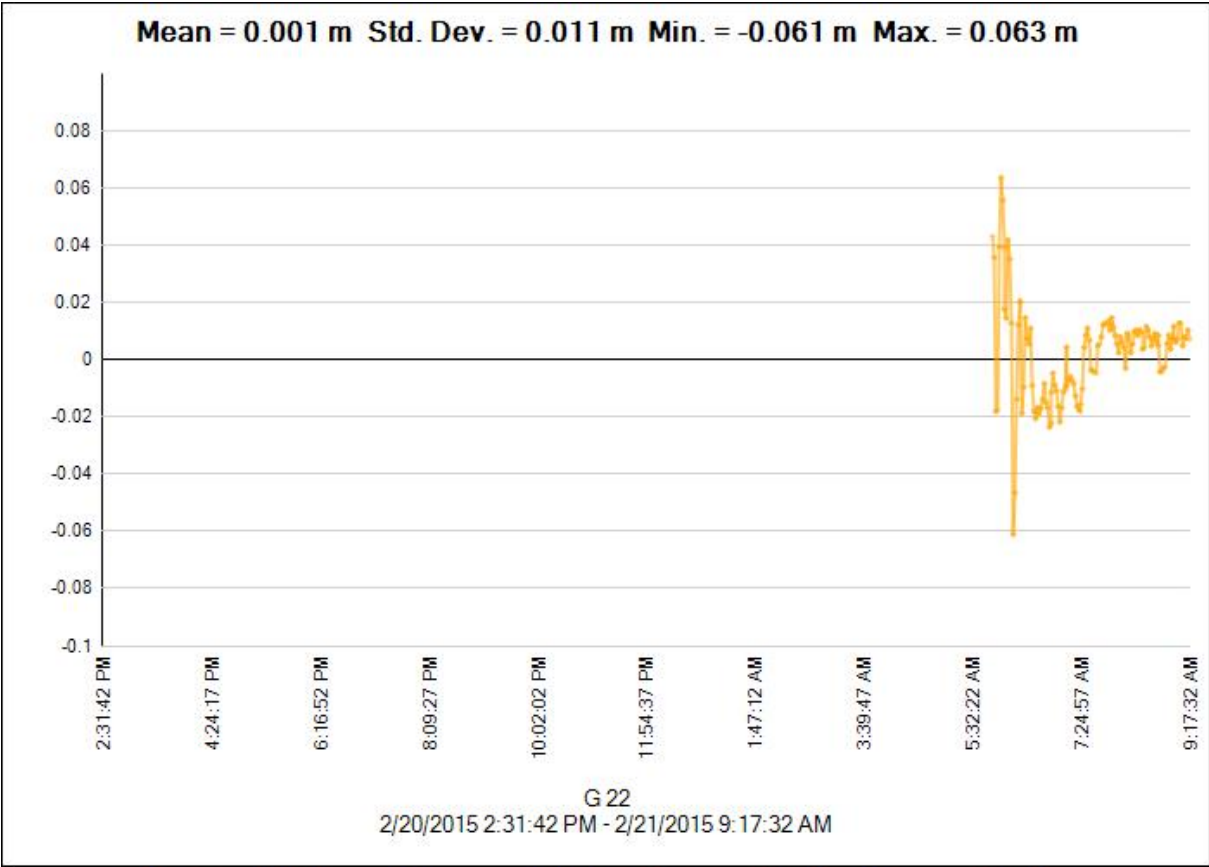






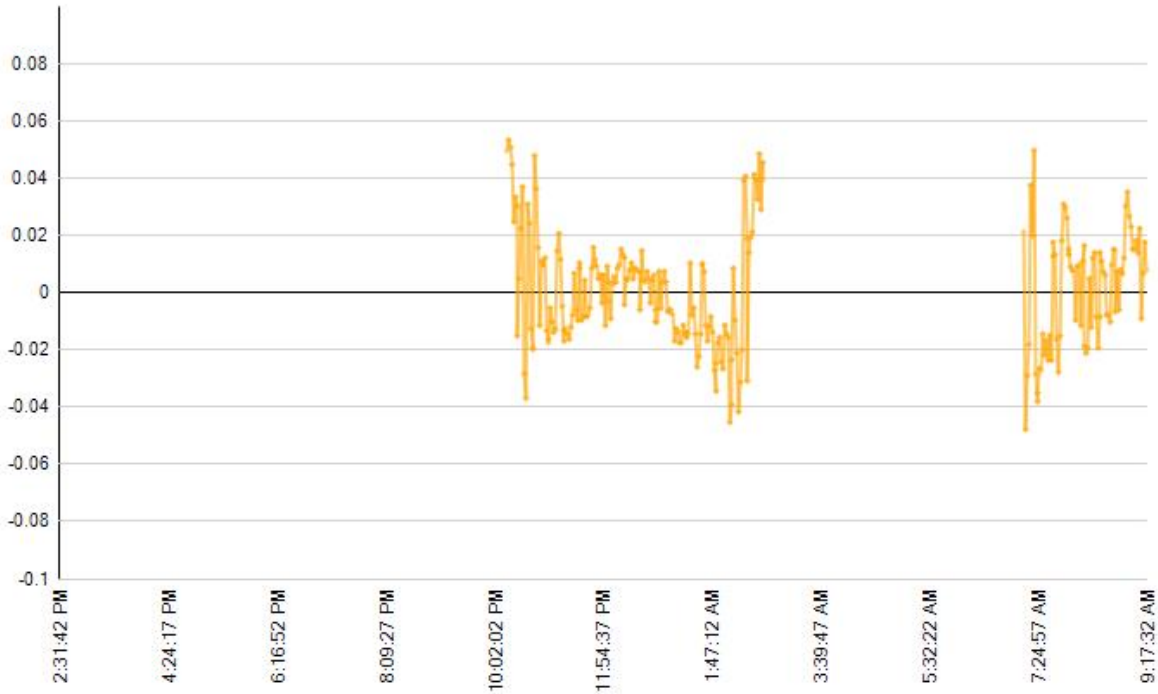






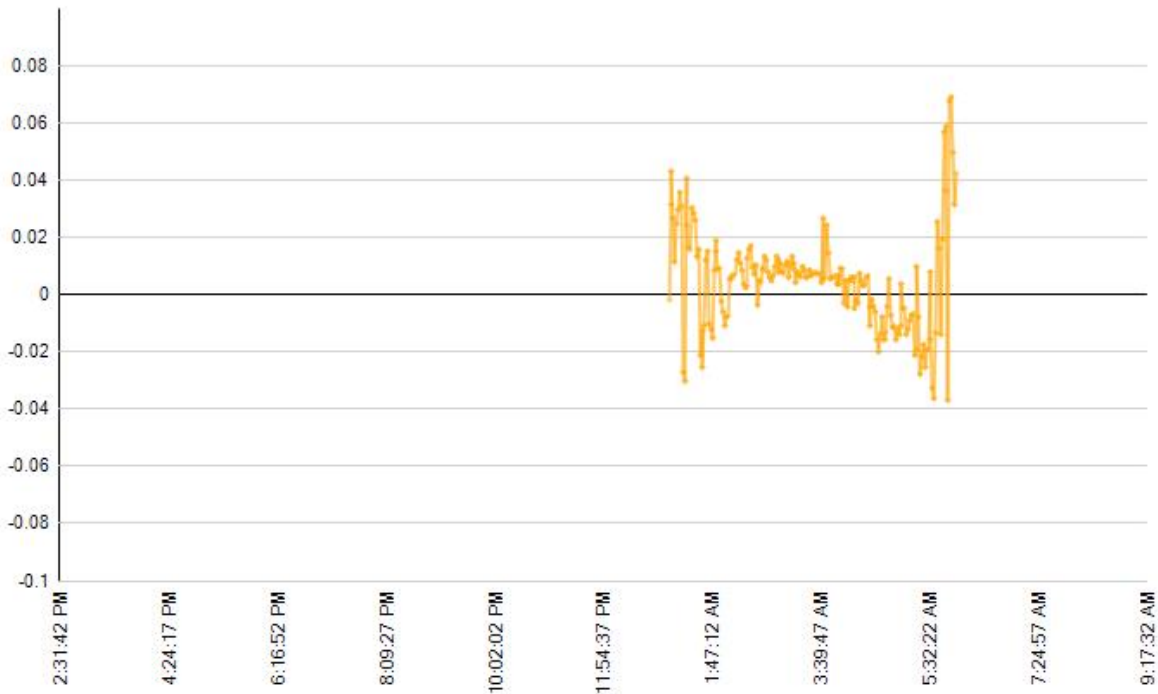


Mean = 0.000 m Std. Dev. = 0.013 m Min. = -0.048 m Max. = 0.053 m

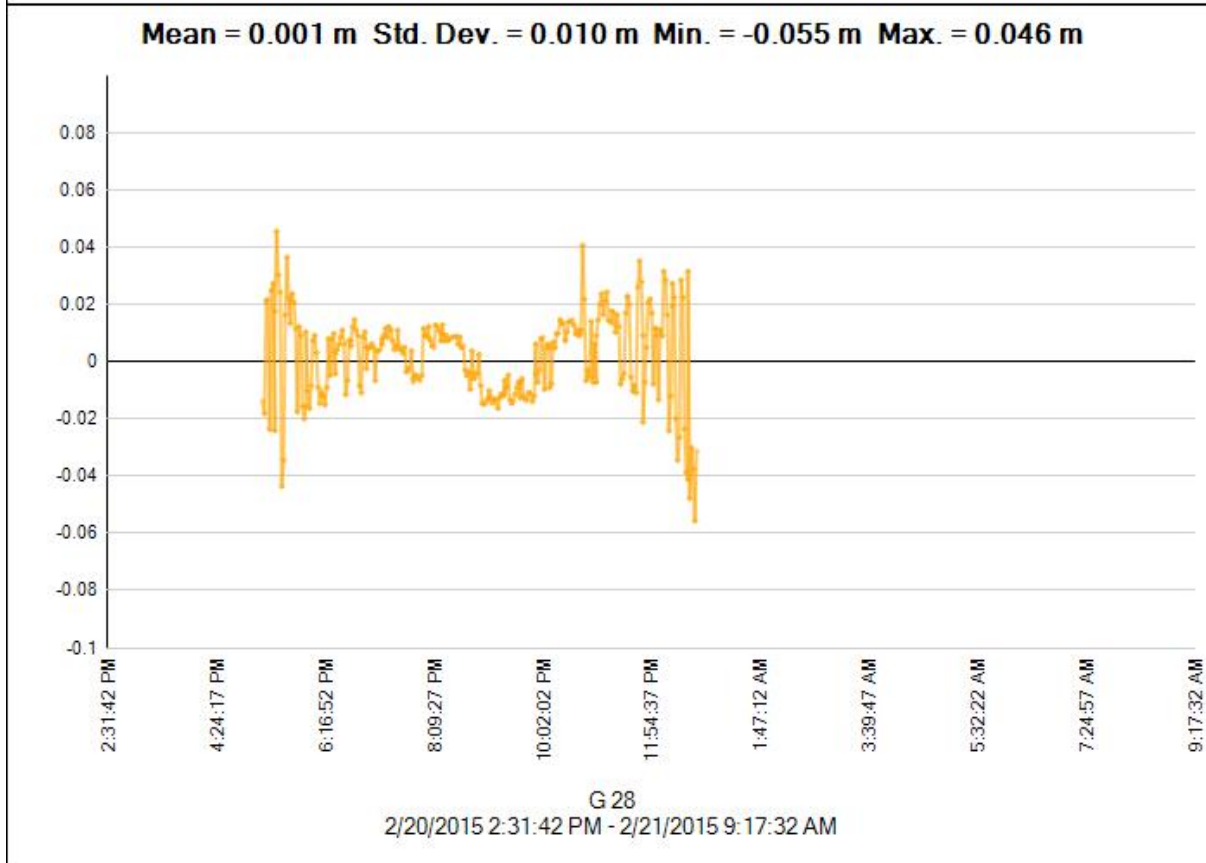
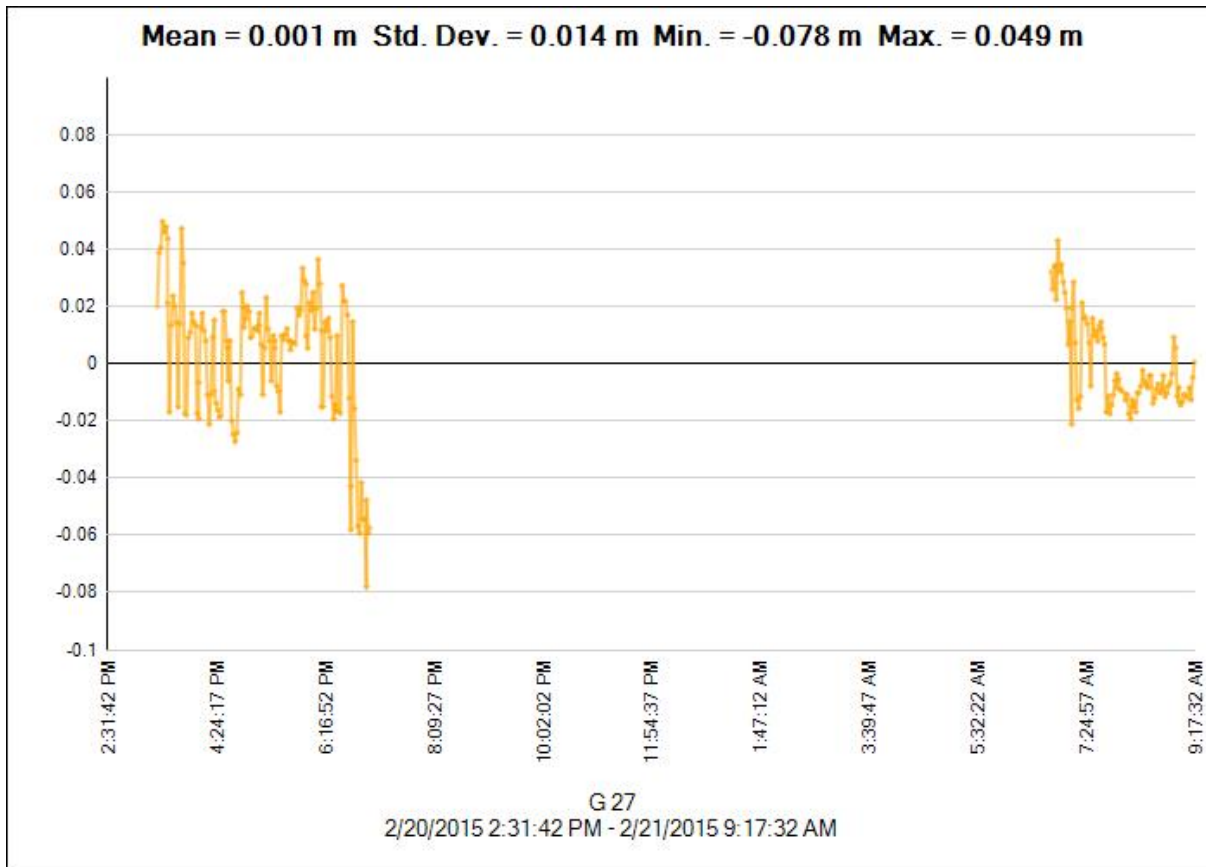


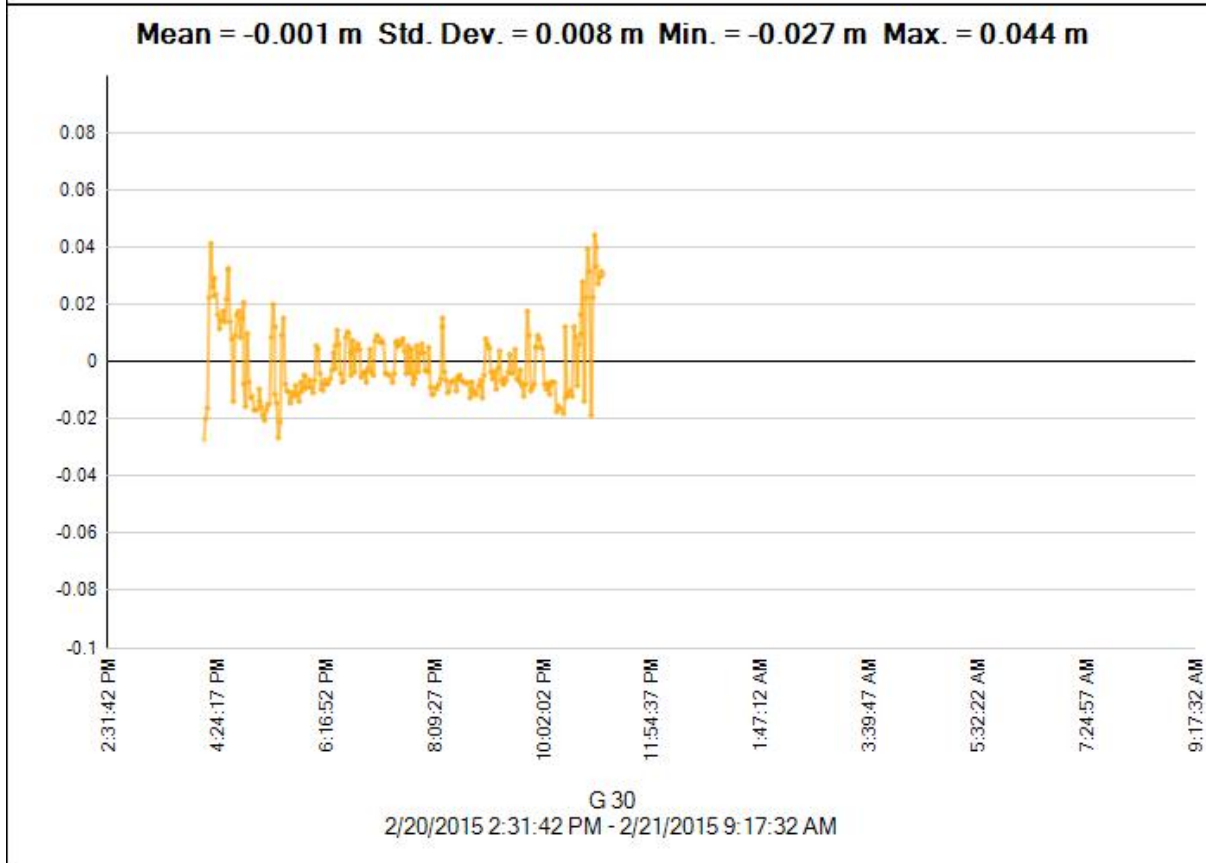
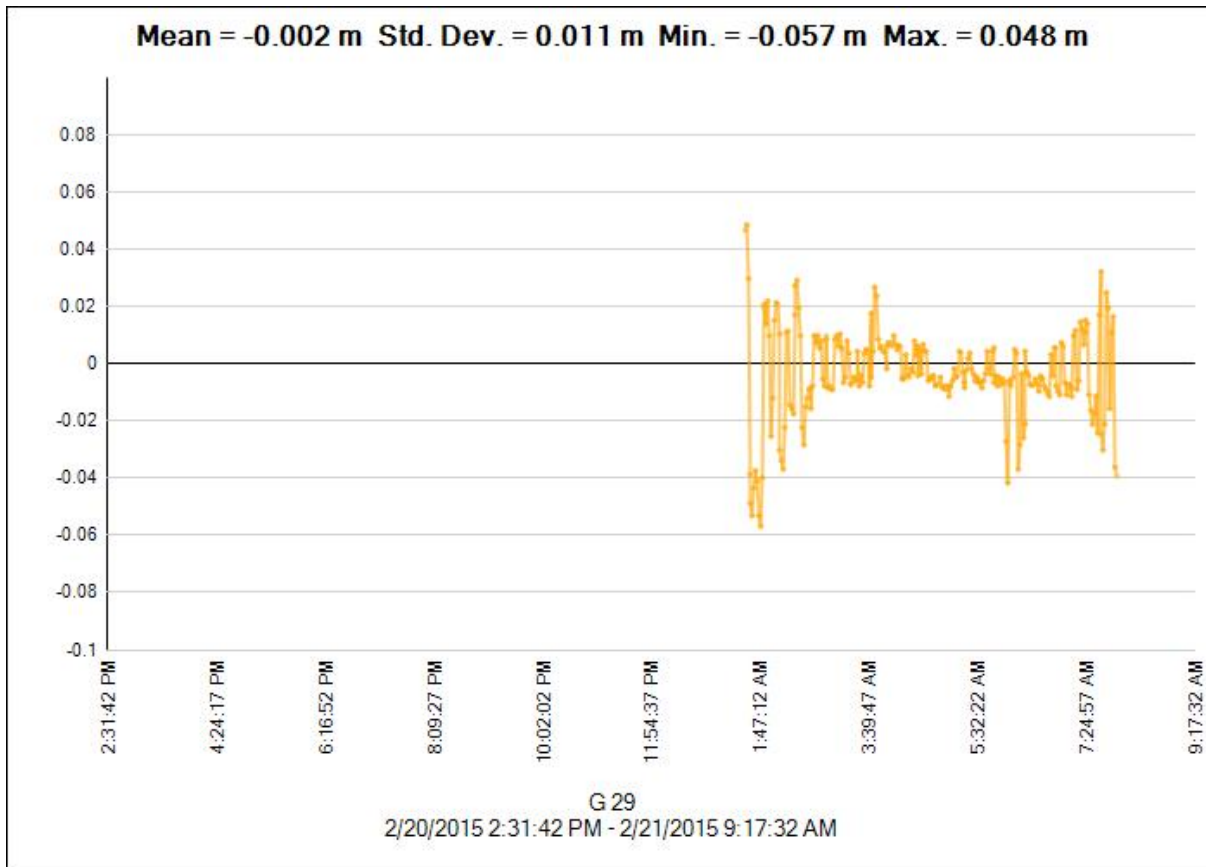
G 24  
2/20/2015 2:31:42 PM - 2/21/2015 9:17:32 AM

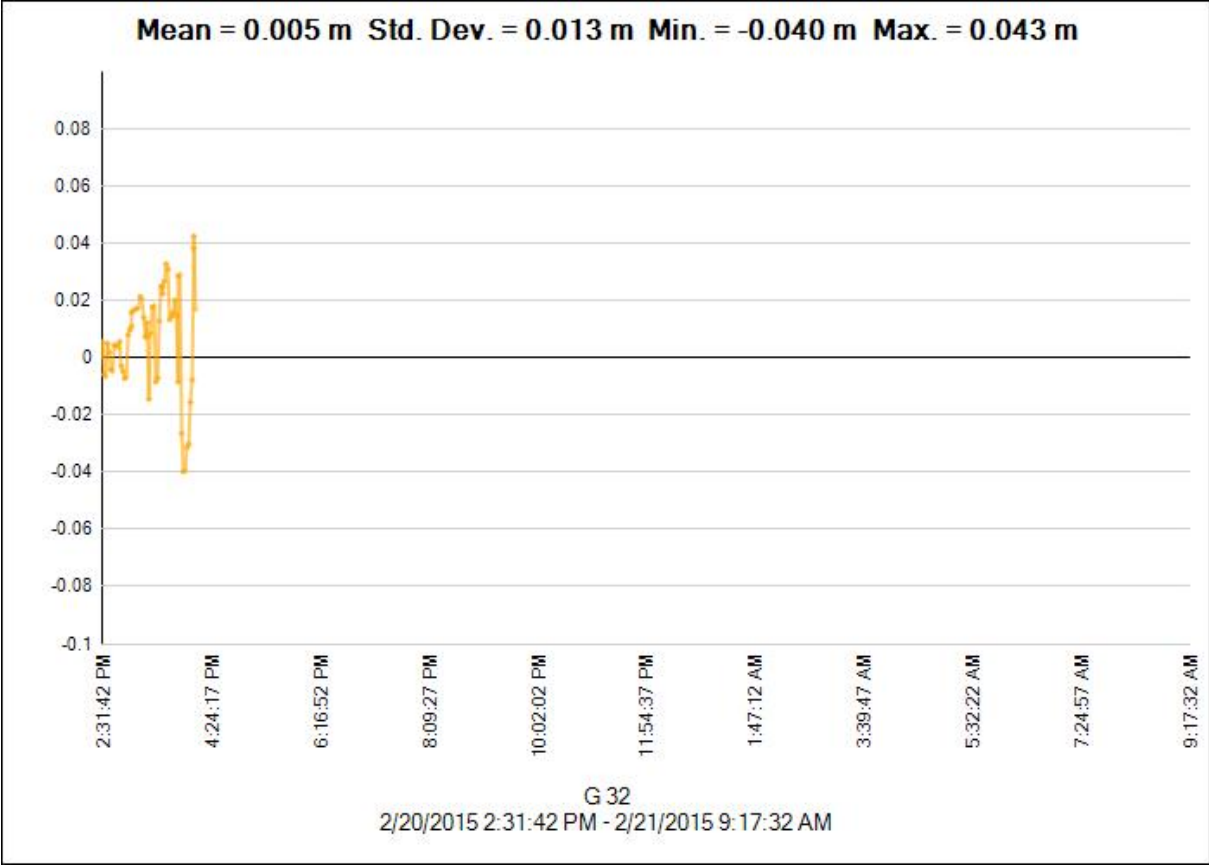
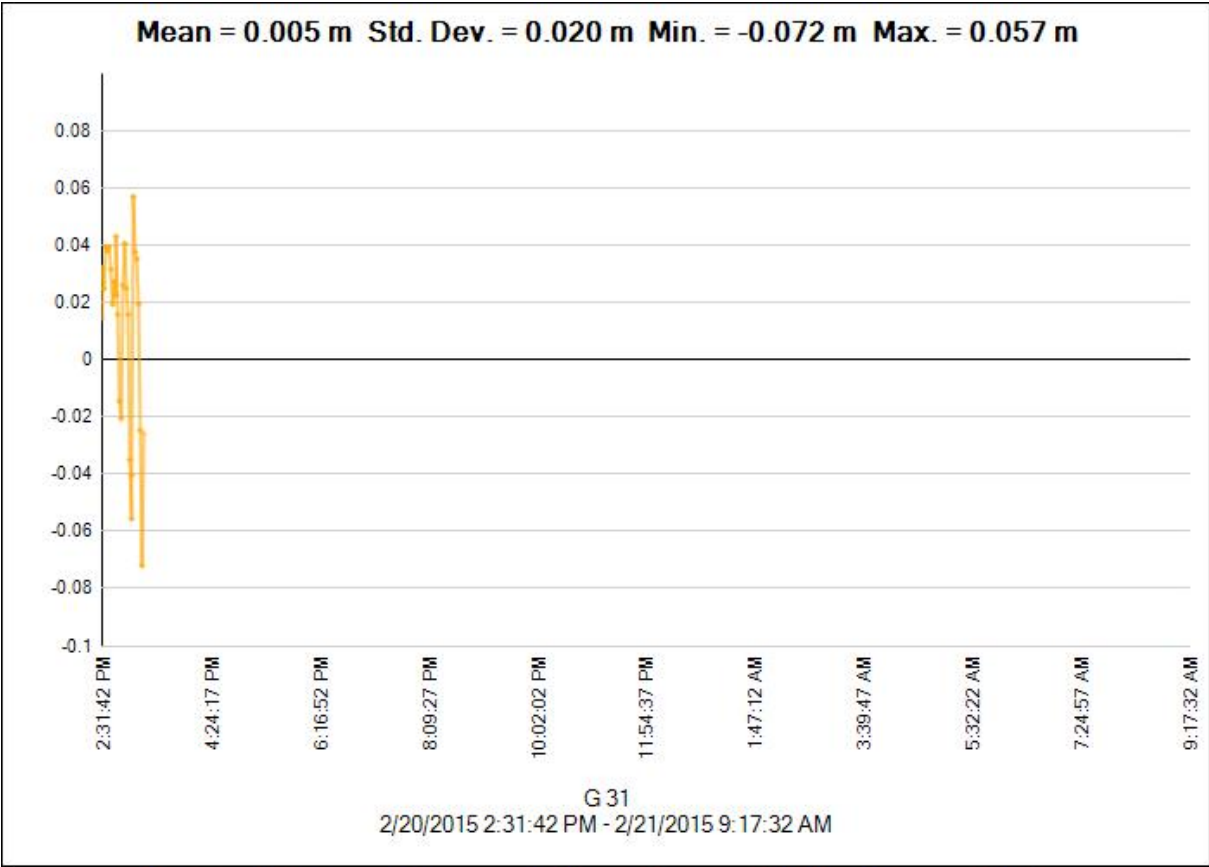
Mean = 0.003 m Std. Dev. = 0.011 m Min. = -0.037 m Max. = 0.069 m



G 25  
2/20/2015 2:31:42 PM - 2/21/2015 9:17:32 AM









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**Processing style**

Elevation mask: 10.0 deg  
Auto start processing: Yes  
Start automatic ID numbering: AUTO0001  
Continuous vectors: No  
Generate residuals: Yes  
Antenna model: Automatic  
Ephemeris type: Automatic  
Frequency: Multiple Frequencies  
Processing Interval: Use all data  
Force float: No

**Acceptance Criteria**

Vector Component	Flag 	Fail 
Horizontal Precision >	0.050 m + 1.000 ppm	0.100 m + 1.000 ppm
Vertical Precision >	0.100 m + 1.000 ppm	0.200 m + 1.000 ppm

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**KTUS\_APT\_1 - TUS\_5 (9:26:44 AM-11:03:24 AM) (S6)**

---

Baseline observation: KTUS\_APT\_1 --- TUS\_5 (B6)  
Processed: 3/5/2015 3:38:46 PM  
Solution type: Fixed  
Frequency used: Dual Frequency (L1, L2)  
Horizontal precision: 0.008 m  
Vertical precision: 0.014 m  
RMS: 0.004 m  
Maximum PDOP: 2.341  
Ephemeris used: Broadcast  
Antenna model: NGS Absolute  
Processing start time: 2/21/2015 9:26:44 AM (Local: UTC-7hr)  
Processing stop time: 2/21/2015 11:03:24 AM (Local: UTC-7hr)  
Processing duration: 01:36:40  
Processing interval: 10 seconds

### Vector Components (Mark to Mark)

From: KTUS_APT_1					
Grid		Local		Global	
Easting	305038.073 m	Latitude	N32°07'29.14239"	Latitude	N32°07'29.14238"
Northing	125113.588 m	Longitude	W110°56'42.22790"	Longitude	W110°56'42.22790"
Elevation	801.705 m	Height	772.276 m	Height	772.276 m

To: TUS_5					
Grid		Local		Global	
Easting	347926.475 m	Latitude	N32°26'00.51560"	Latitude	N32°26'00.51560"
Northing	159832.028 m	Longitude	W110°29'08.61844"	Longitude	W110°29'08.61844"
Elevation	922.881 m	Height	894.847 m	Height	894.847 m

Vector					
$\Delta$ Easting	42888.402 m	NS Fwd Azimuth	51°31'44"	$\Delta$ X	46910.645 m
$\Delta$ Northing	34718.440 m	Ellipsoid Dist.	55176.280 m	$\Delta$ Y	1697.230 m
$\Delta$ Elevation	121.176 m	$\Delta$ Height	122.571 m	$\Delta$ Z	29012.502 m

### Standard Errors

Vector errors:					
$\sigma$ $\Delta$ Easting	0.002 m	$\sigma$ NS fwd Azimuth	0°00'00"	$\sigma$ $\Delta$ X	0.004 m
$\sigma$ $\Delta$ Northing	0.003 m	$\sigma$ Ellipsoid Dist.	0.003 m	$\sigma$ $\Delta$ Y	0.006 m
$\sigma$ $\Delta$ Elevation	0.007 m	$\sigma$ $\Delta$ Height	0.007 m	$\sigma$ $\Delta$ Z	0.004 m

### Aposteriori Covariance Matrix (Meter<sup>2</sup>)

	X	Y	Z
X	0.0000131647		
Y	0.0000150718	0.0000344342	
Z	-0.0000053692	-0.0000177459	0.0000176001

## Occupations

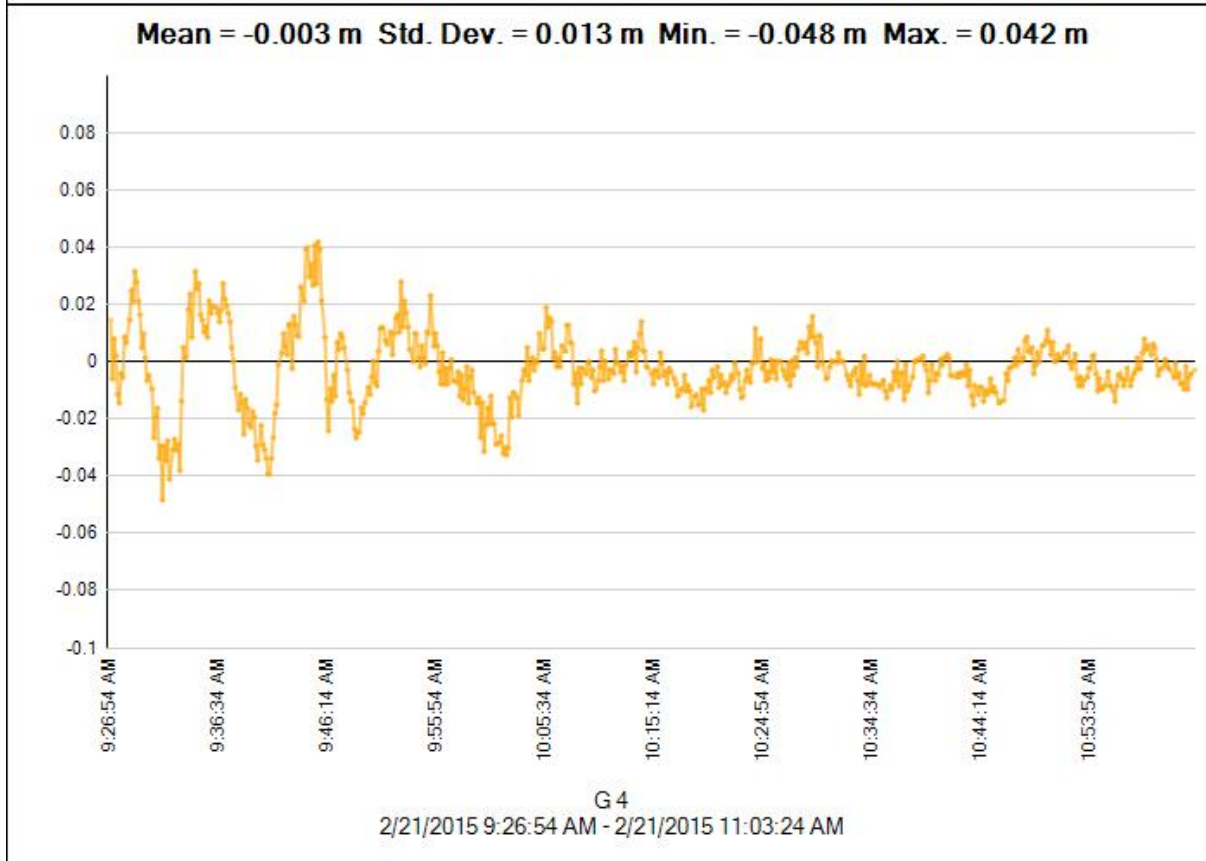
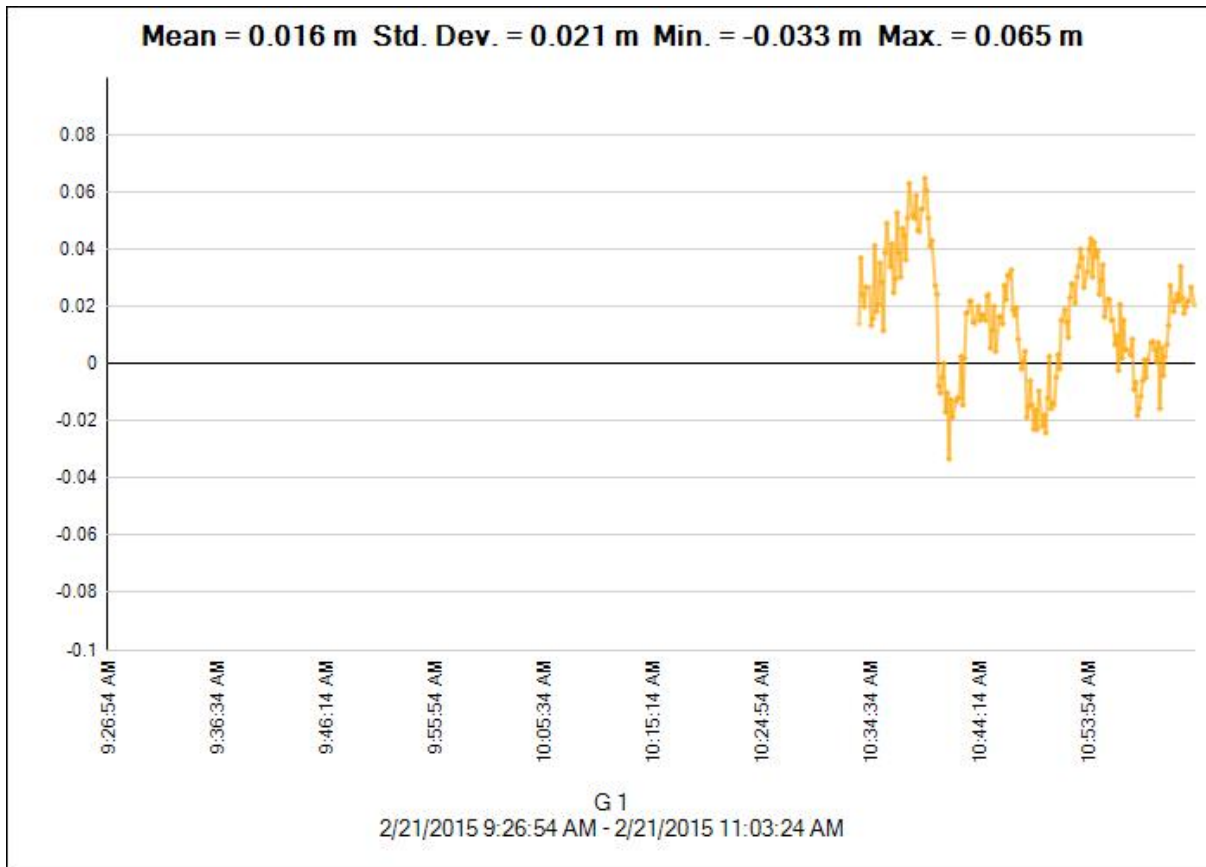
	From	To
Point ID:	KTUS_APT_1	TUS_5
Data file:	\\conas\projects \312014478_PAG_2015\Acquisition \Ground_Survey\Adjustments\4478 PAG LiDAR Network\00050520 resampled.15o	\\conas\projects \312014478_PAG_2015\Acquisition \Ground_Survey\Adjustments\4478 PAG LiDAR Network\00110510 resampled.15o
Receiver type:	Geo Explorer 3	Geo Explorer 3
Receiver serial number:		
Antenna type:	702 Rev 3.00	702 Rev 3.00
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

# Tracking Summary

SV	2/21/2015 9:26:44 AM	Duration: 01:36:40	Major interval: 00:10:00	2/21/2015 11:03:24 AM
G 1	L1 L2			
G 4	L1 L2			
G 11	L1 L2			
G 14	L1 L2			
G 18	L1 L2			
G 19	L1 L2			
G 21	L1 L2			
G 22	L1 L2			
G 24	L1 L2			
G 25	L1 L2			
G 27	L1 L2			
G 31	L1 L2			
G 32	L1 L2			



# Residuals

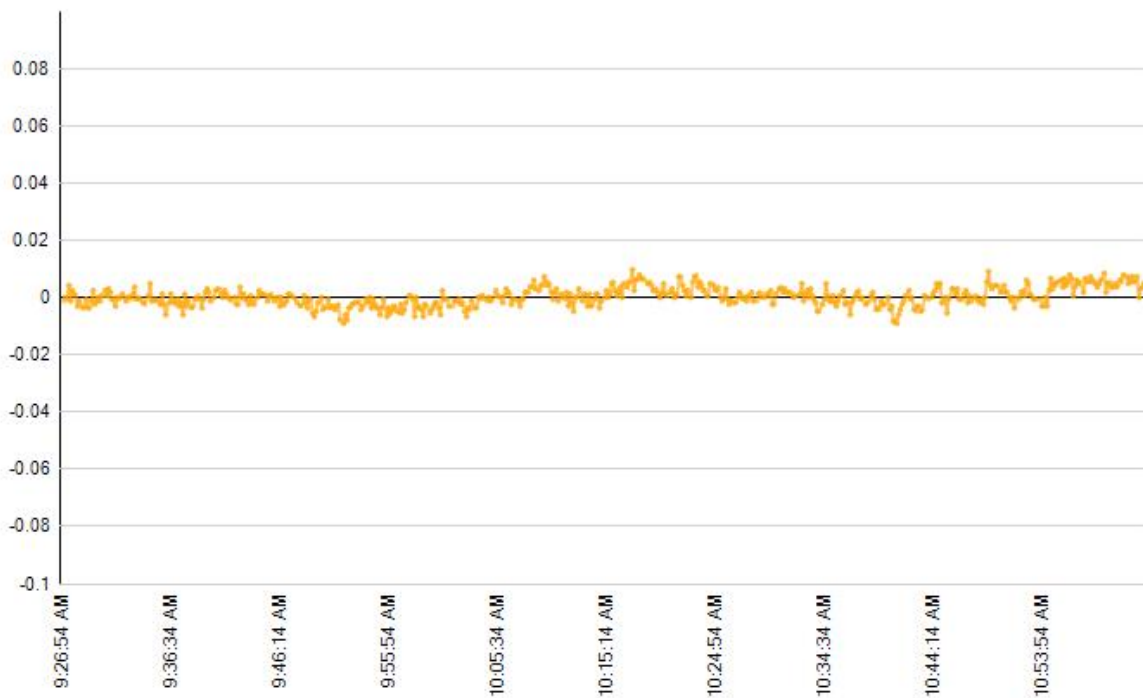


Mean = -0.002 m Std. Dev. = 0.017 m Min. = -0.045 m Max. = 0.054 m



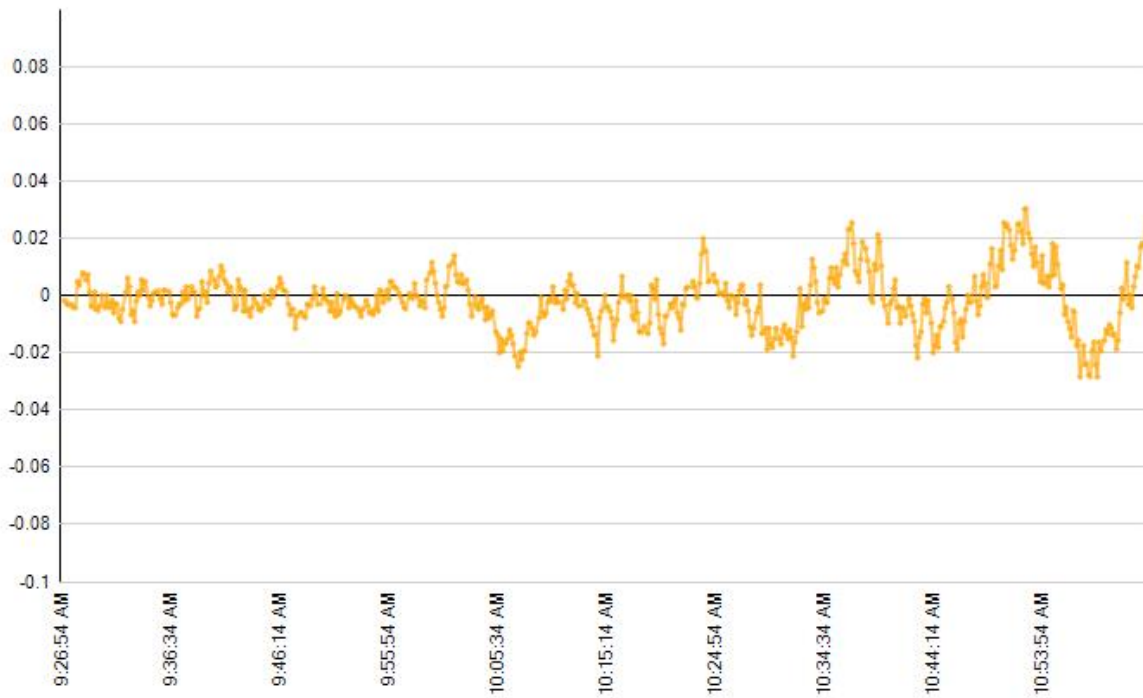
G 11  
2/21/2015 9:26:54 AM - 2/21/2015 11:03:24 AM

Mean = 0.000 m Std. Dev. = 0.003 m Min. = -0.009 m Max. = 0.010 m



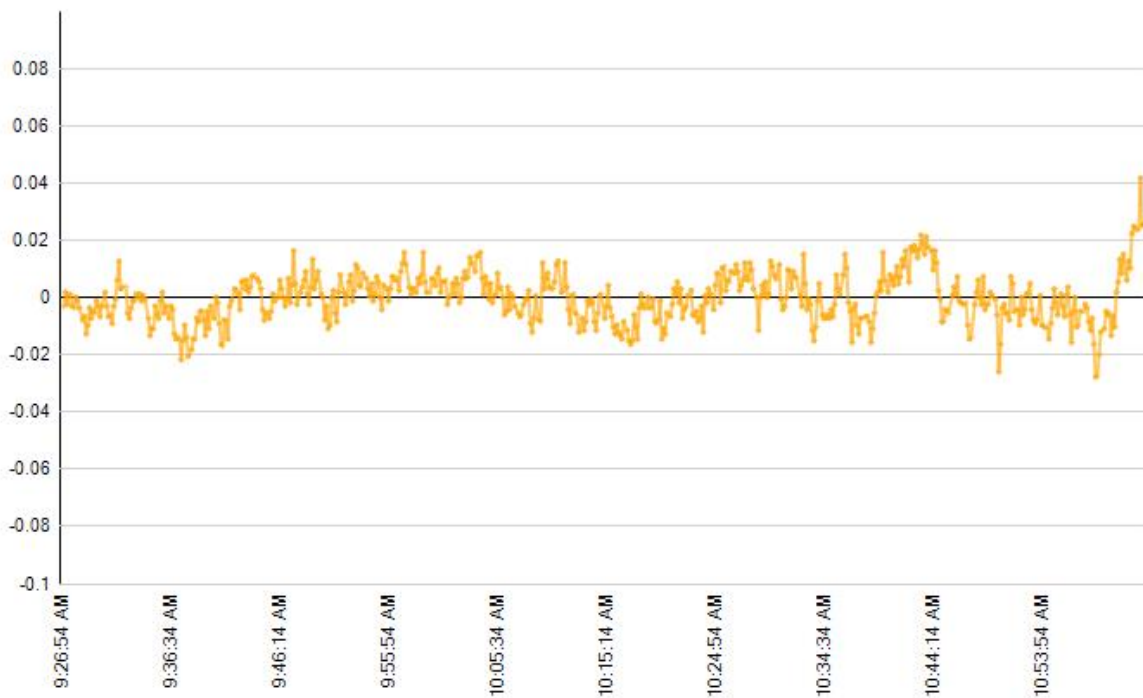
G 14  
2/21/2015 9:26:54 AM - 2/21/2015 11:03:24 AM

Mean = -0.002 m Std. Dev. = 0.010 m Min. = -0.029 m Max. = 0.030 m



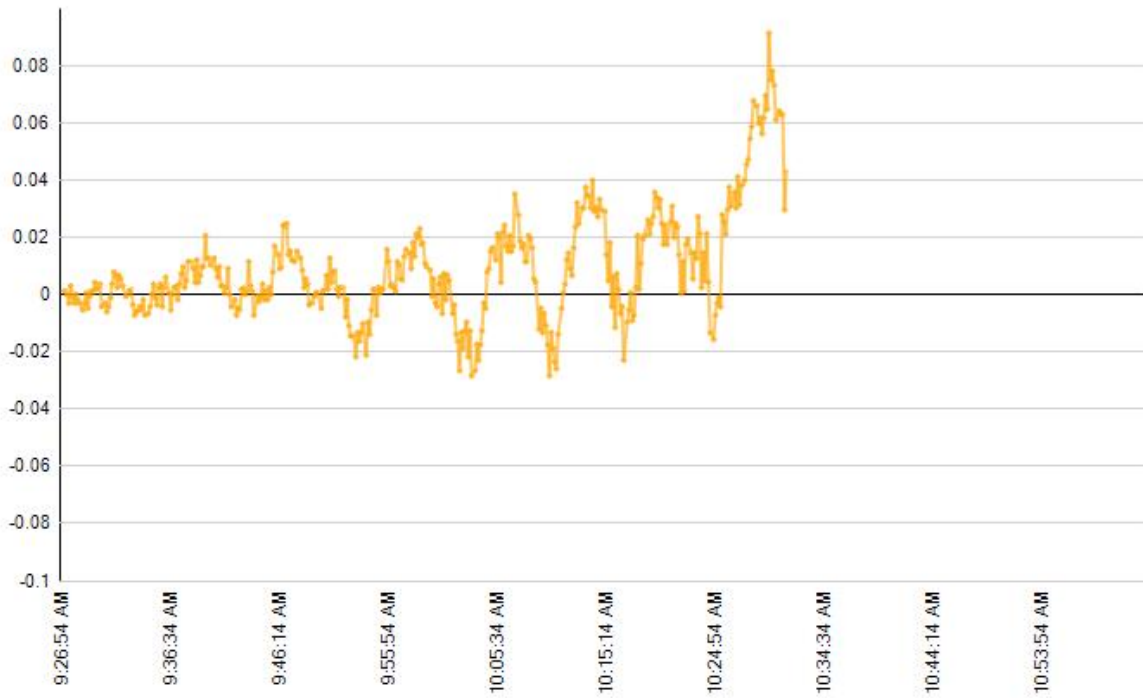
G 18  
2/21/2015 9:26:54 AM - 2/21/2015 11:03:24 AM

Mean = 0.000 m Std. Dev. = 0.009 m Min. = -0.028 m Max. = 0.042 m



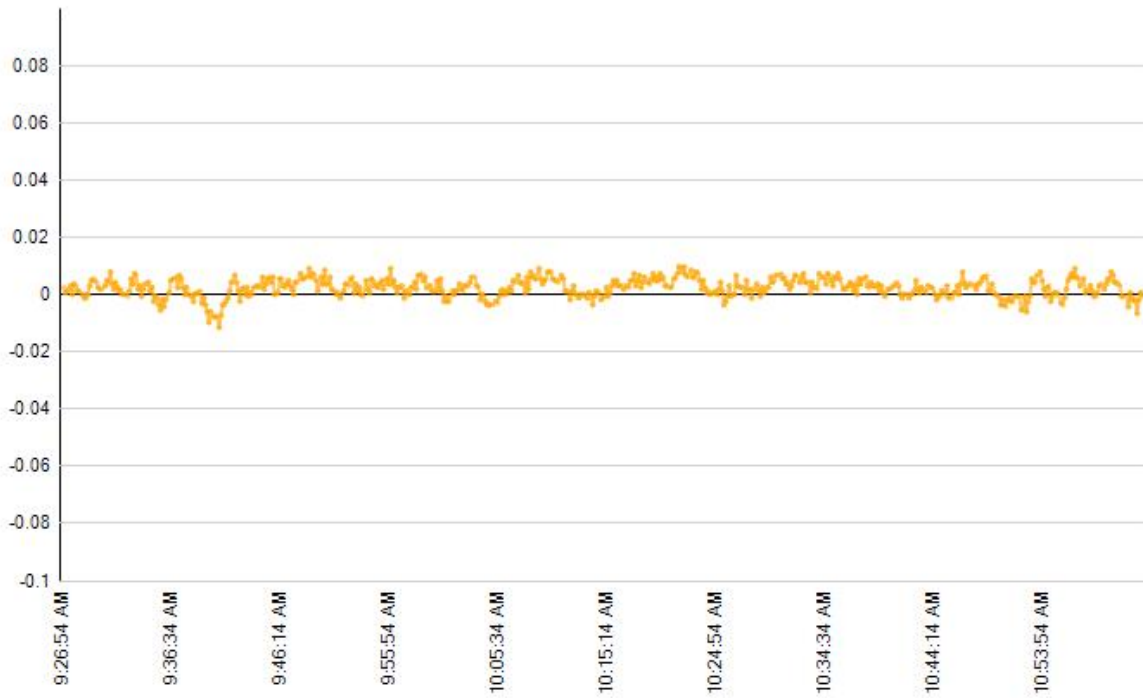
G 19  
2/21/2015 9:26:54 AM - 2/21/2015 11:03:24 AM

Mean = 0.009 m Std. Dev. = 0.019 m Min. = -0.029 m Max. = 0.091 m



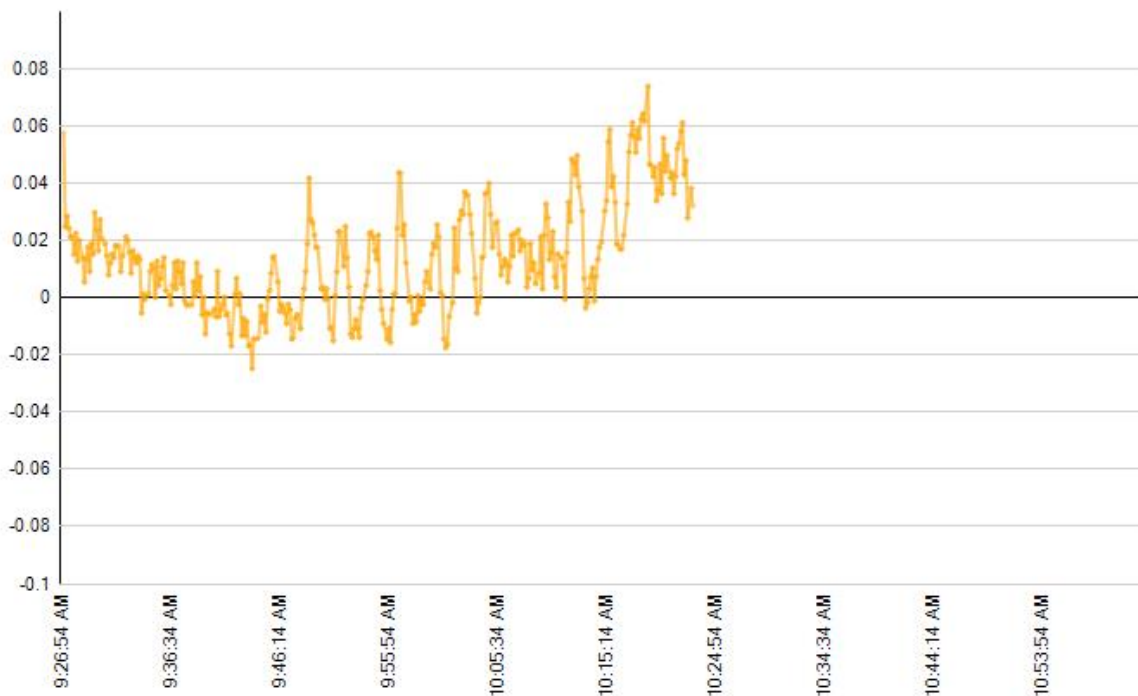
G 21  
2/21/2015 9:26:54 AM - 2/21/2015 11:03:24 AM

Mean = 0.002 m Std. Dev. = 0.003 m Min. = -0.011 m Max. = 0.010 m



G 22  
2/21/2015 9:26:54 AM - 2/21/2015 11:03:24 AM

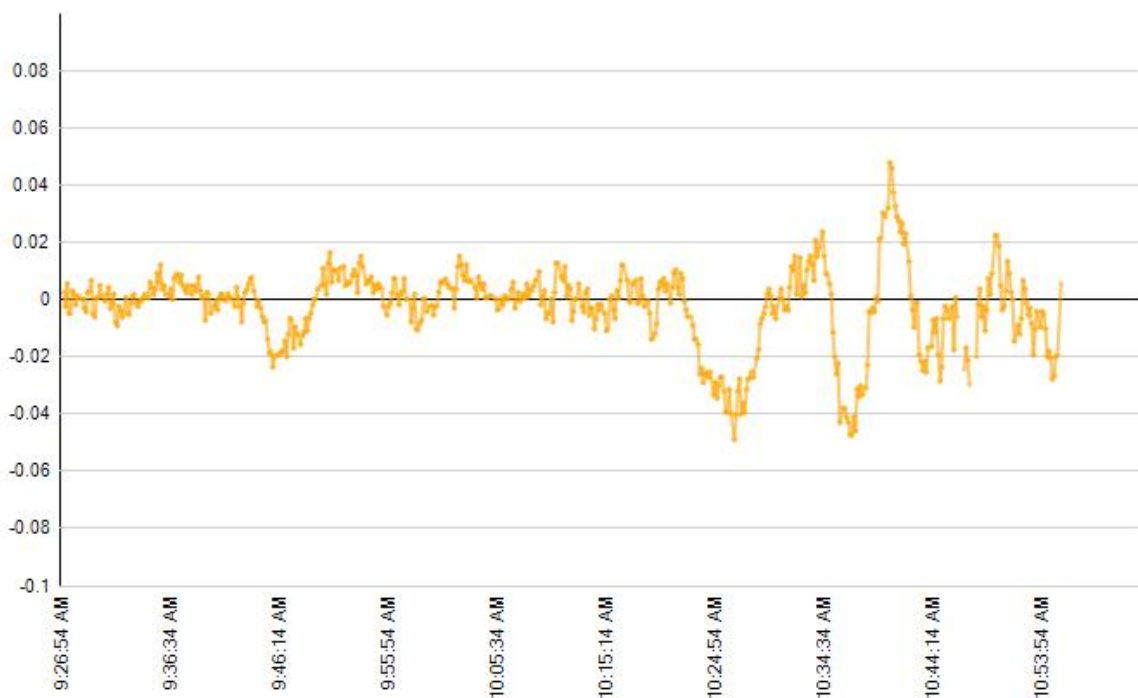
Mean = 0.014 m Std. Dev. = 0.019 m Min. = -0.025 m Max. = 0.074 m



G 24

2/21/2015 9:26:54 AM - 2/21/2015 11:03:24 AM

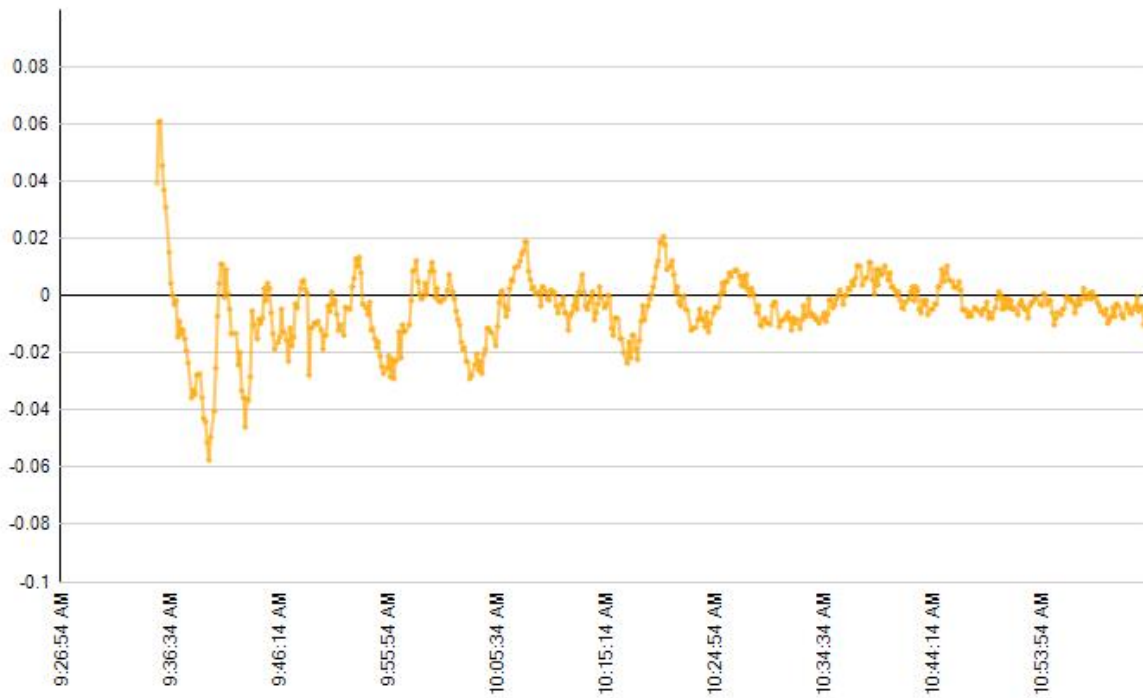
Mean = -0.003 m Std. Dev. = 0.014 m Min. = -0.049 m Max. = 0.048 m



G 27

2/21/2015 9:26:54 AM - 2/21/2015 11:03:24 AM

Mean = -0.005 m Std. Dev. = 0.012 m Min. = -0.057 m Max. = 0.061 m



G 31  
2/21/2015 9:26:54 AM - 2/21/2015 11:03:24 AM

Mean = 0.002 m Std. Dev. = 0.016 m Min. = -0.051 m Max. = 0.064 m





G 32  
2/21/2015 9:26:54 AM - 2/21/2015 11:03:24 AM

---

**Processing style**

Elevation mask: 10.0 deg  
Auto start processing: Yes  
Start automatic ID numbering: AUTO0001  
Continuous vectors: No  
Generate residuals: Yes  
Antenna model: Automatic  
Ephemeris type: Automatic  
Frequency: Multiple Frequencies  
Processing Interval: Use all data  
Force float: No

**Acceptance Criteria**

Vector Component	Flag 	Fail 
Horizontal Precision >	0.050 m + 1.000 ppm	0.100 m + 1.000 ppm
Vertical Precision >	0.100 m + 1.000 ppm	0.200 m + 1.000 ppm

---

**KTUS\_APT\_1 - KRYN\_APT\_2 (8:35:34 PM-9:01:14 AM) (S11)**

---

Baseline observation: KTUS\_APT\_1 --- KRYN\_APT\_2 (B11)  
Processed: 3/6/2015 2:43:43 PM  
Solution type: Fixed  
Frequency used: Dual Frequency (L1, L2)  
Horizontal precision: 0.003 m  
Vertical precision: 0.009 m  
RMS: 0.002 m  
Maximum PDOP: 5.387  
Ephemeris used: Broadcast  
Antenna model: NGS Absolute  
Processing start time: 2/21/2015 8:35:34 PM (Local: UTC-7hr)  
Processing stop time: 2/22/2015 9:01:14 AM (Local: UTC-7hr)  
Processing duration: 12:25:40  
Processing interval: 10 seconds

**Vector Components (Mark to Mark)**

<b>From:</b>		KTUS_APT_1			
<b>Grid</b>		<b>Local</b>		<b>Global</b>	
<b>Easting</b>	305040.626 m	<b>Latitude</b>	N32°07'29.08828"	<b>Latitude</b>	N32°07'29.08827"
<b>Northing</b>	125111.945 m	<b>Longitude</b>	W110°56'42.13109"	<b>Longitude</b>	W110°56'42.13109"
<b>Elevation</b>	784.889 m	<b>Height</b>	755.459 m	<b>Height</b>	755.459 m

<b>To:</b>		KRYN_APT_2			
<b>Grid</b>		<b>Local</b>		<b>Global</b>	
<b>Easting</b>	283682.561 m	<b>Latitude</b>	N32°08'19.17609"	<b>Latitude</b>	N32°08'19.17609"
<b>Northing</b>	126484.572 m	<b>Longitude</b>	W111°10'16.56974"	<b>Longitude</b>	W111°10'16.56974"
<b>Elevation</b>	735.439 m	<b>Height</b>	705.615 m	<b>Height</b>	705.615 m

<b>Vector</b>					
<b>ΔEasting</b>	-21358.065 m	<b>NS Fwd Azimuth</b>	274°11'38"	<b>ΔX</b>	-19613.445 m
<b>ΔNorthing</b>	1372.627 m	<b>Ellipsoid Dist.</b>	21402.526 m	<b>ΔY</b>	8476.380 m
<b>ΔElevation</b>	-49.450 m	<b>ΔHeight</b>	-49.845 m	<b>ΔZ</b>	1280.152 m

**Standard Errors**

<b>Vector errors:</b>					
<b>σ ΔEasting</b>	0.001 m	<b>σ NS fwd Azimuth</b>	0°00'00"	<b>σ ΔX</b>	0.002 m
<b>σ ΔNorthing</b>	0.001 m	<b>σ Ellipsoid Dist.</b>	0.001 m	<b>σ ΔY</b>	0.004 m
<b>σ ΔElevation</b>	0.005 m	<b>σ ΔHeight</b>	0.005 m	<b>σ ΔZ</b>	0.003 m

**Aposteriori Covariance Matrix (Meter<sup>2</sup>)**

	<b>X</b>	<b>Y</b>	<b>Z</b>
<b>X</b>	0.0000040124		
<b>Y</b>	0.0000051362	0.0000130613	
<b>Z</b>	-0.0000037845	-0.0000084281	0.0000063007



## Occupations

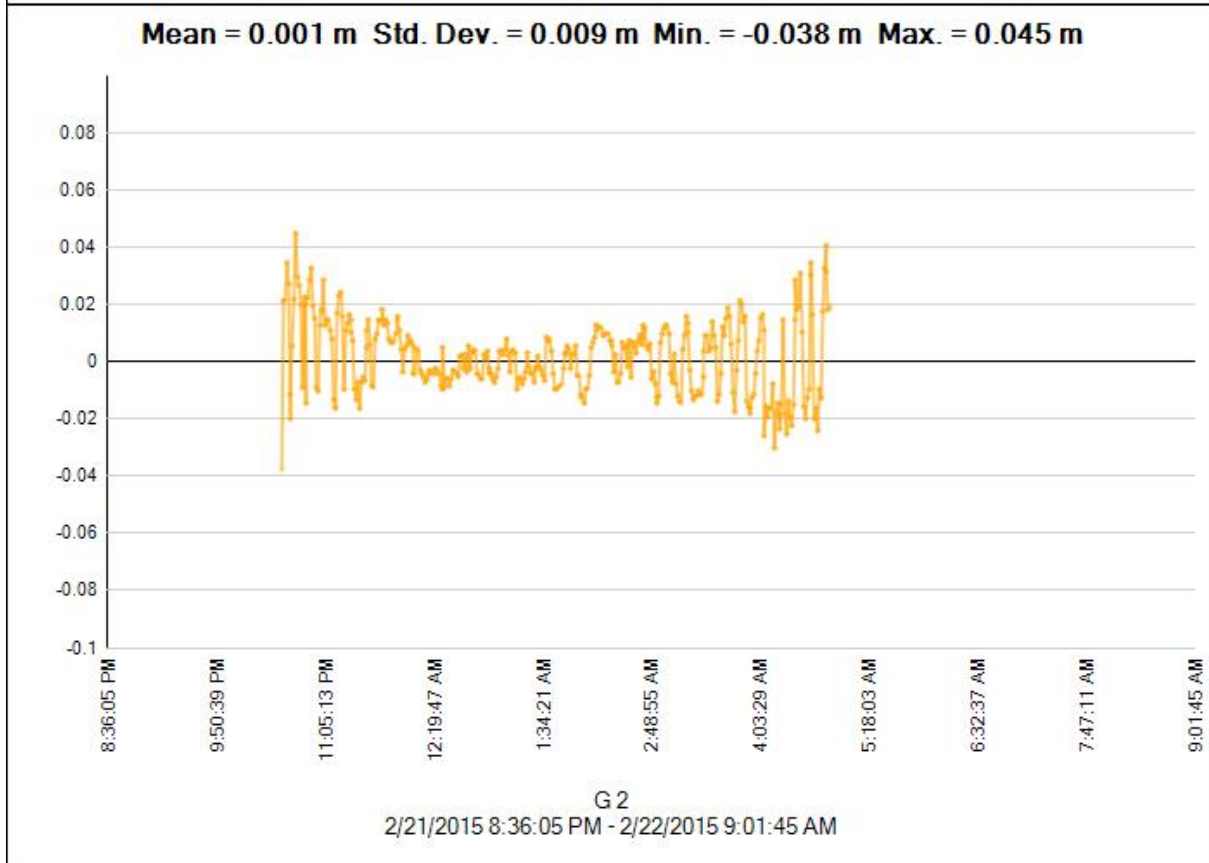
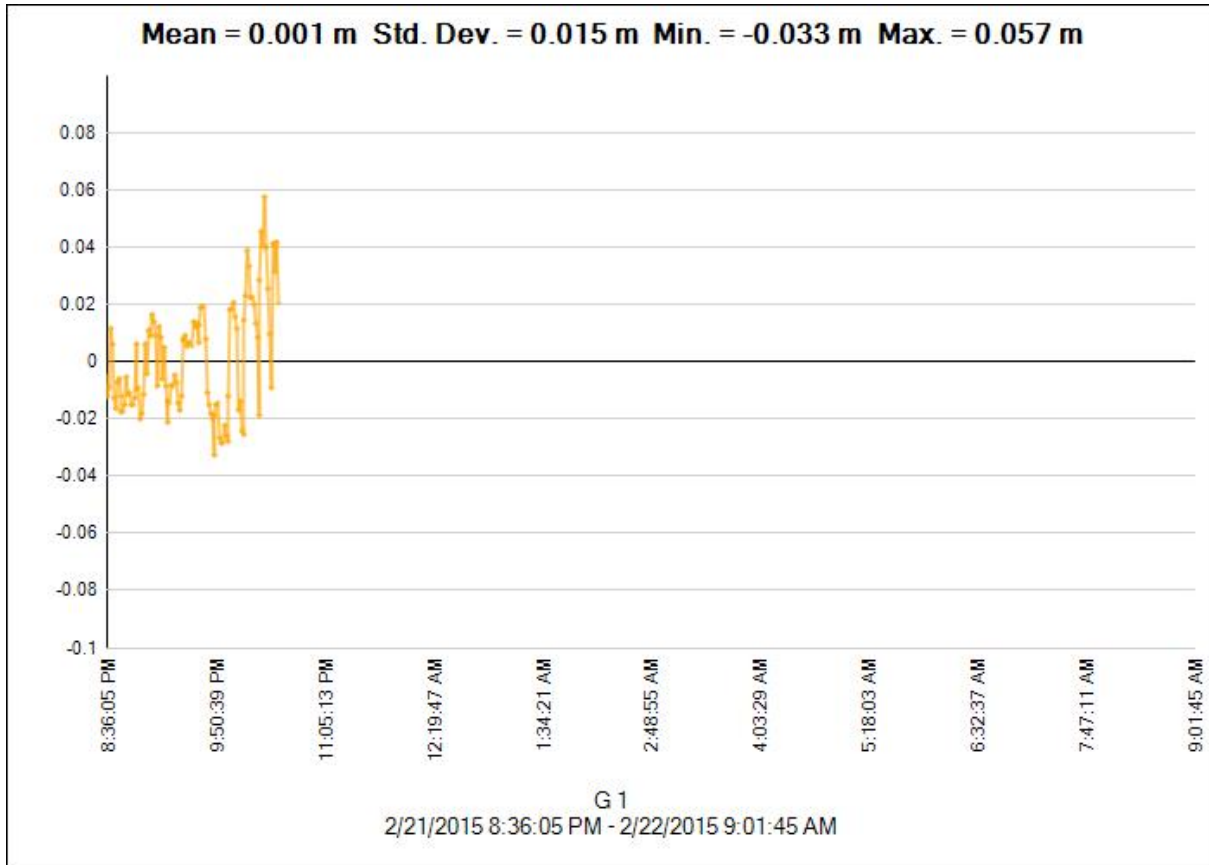
	From	To
<b>Point ID:</b>	KTUS_APT_1	KRYN_APT_2
<b>Data file:</b>	\\conas\projects \312014478_PAG_2015\Acquisition \Ground_Survey\Adjustments\4478 PAG LiDAR Network\00050520 resampled.15o	\\conas\projects \312014478_PAG_2015\Acquisition \Ground_Survey\Adjustments\4478 PAG LiDAR Network\00110530 resampled.15o
<b>Receiver type:</b>	Geo Explorer 3	Geo Explorer 3
<b>Receiver serial number:</b>		
<b>Antenna type:</b>	702 Rev 3.00	702 Rev 3.00
<b>Antenna serial number:</b>	-----	-----
<b>Antenna height (measured):</b>	1.565 m	2.065 m
<b>Antenna method:</b>	Antenna Phase Center	Antenna Phase Center

# Tracking Summary

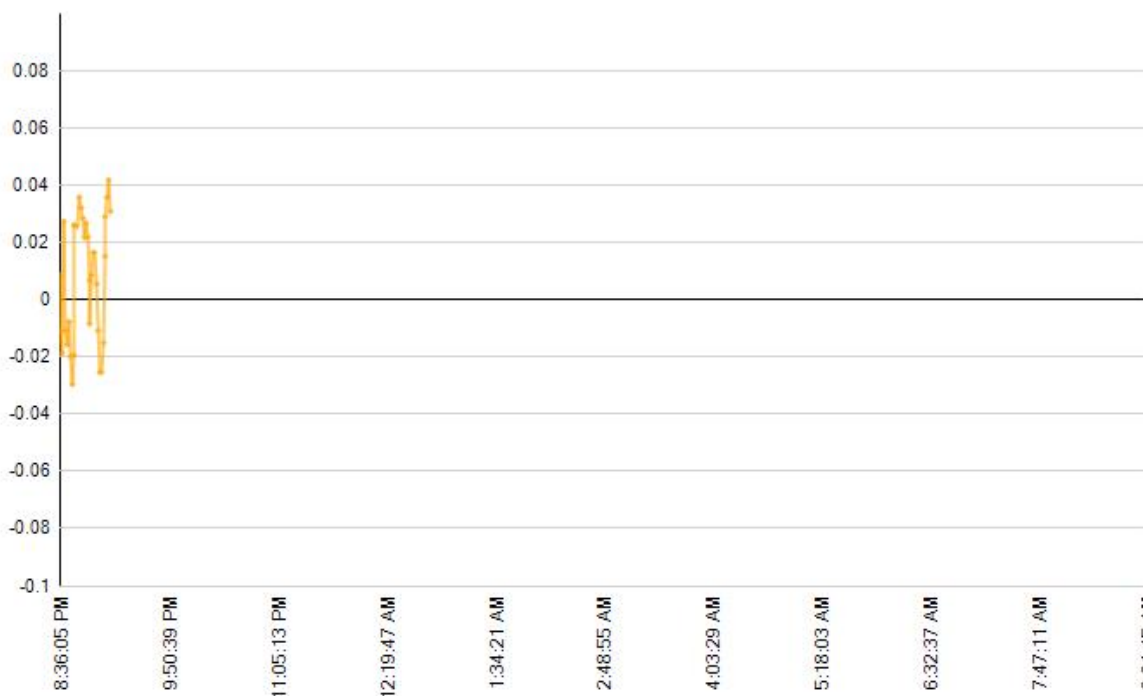
SV	2/21/2015 8:35:34 PM	Duration: 12:25:40	Major interval: 01:00:00	2/22/2015 9:01:14 AM
G 1	L1 L2			
G 2	L1 L2			
G 3	L1 L2			
G 4	L1 L2			
G 5	L1 L2			
G 6	L1 L2			
G 7	L1 L2			
G 9	L1 L2			
G 10	L1 L2			
G 11	L1 L2			
G 12	L1 L2			
G 13	L1 L2			
G 14	L1 L2			
G 15	L1 L2			
G 16	L1 L2			
G 17	L1 L2			
G 18	L1 L2			
G 19	L1 L2			
G 20	L1 L2			
G 21	L1 L2			

SV	2/21/2015 8:35:34 PM	Duration: 12:25:40 Major interval: 01:00:00	2/22/2015 9:01:14 AM
G 22	L1 L2		
G 24	L1 L2		
G 25	L1 L2		
G 27	L1 L2		
G 28	L1 L2		
G 29	L1 L2		
G 30	L1 L2		
G 31	L1 L2		
G 32	L1 L2		

# Residuals



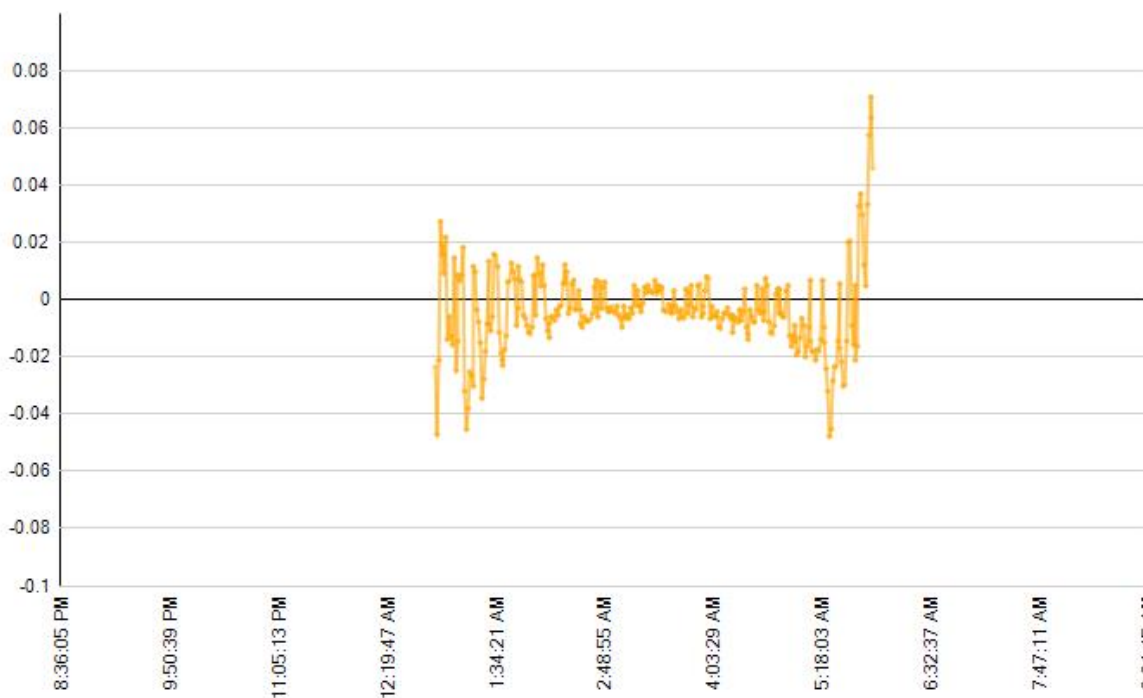
Mean = 0.008 m Std. Dev. = 0.015 m Min. = -0.030 m Max. = 0.042 m



G 4

2/21/2015 8:36:05 PM - 2/22/2015 9:01:45 AM

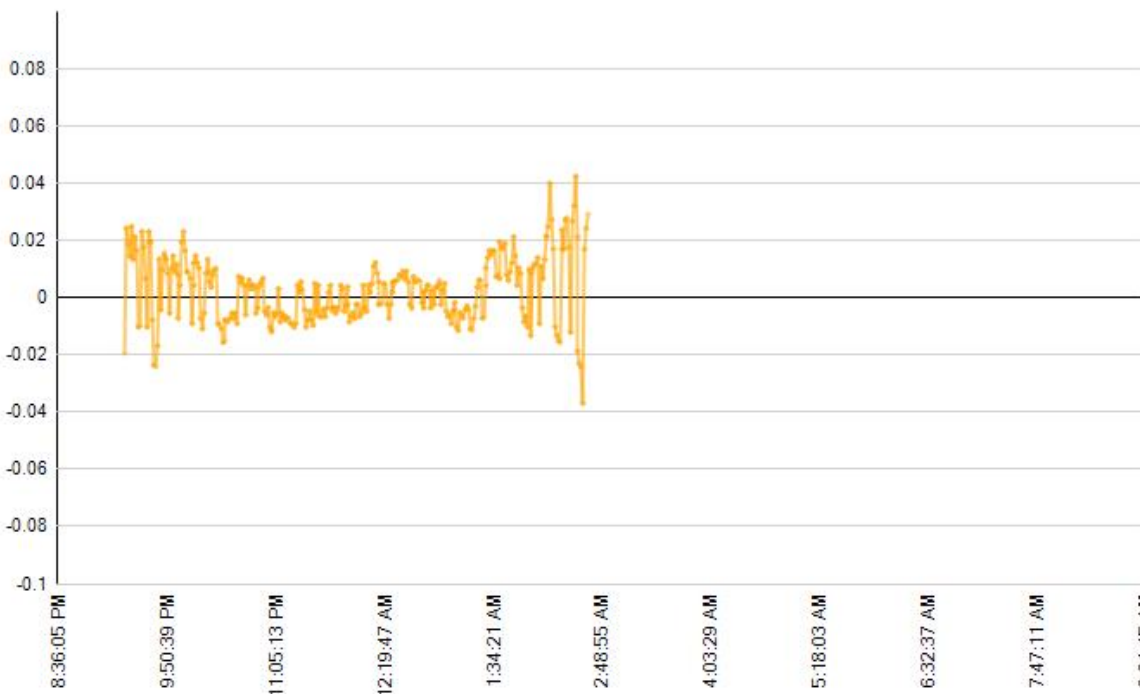
Mean = -0.002 m Std. Dev. = 0.011 m Min. = -0.048 m Max. = 0.071 m



G 5

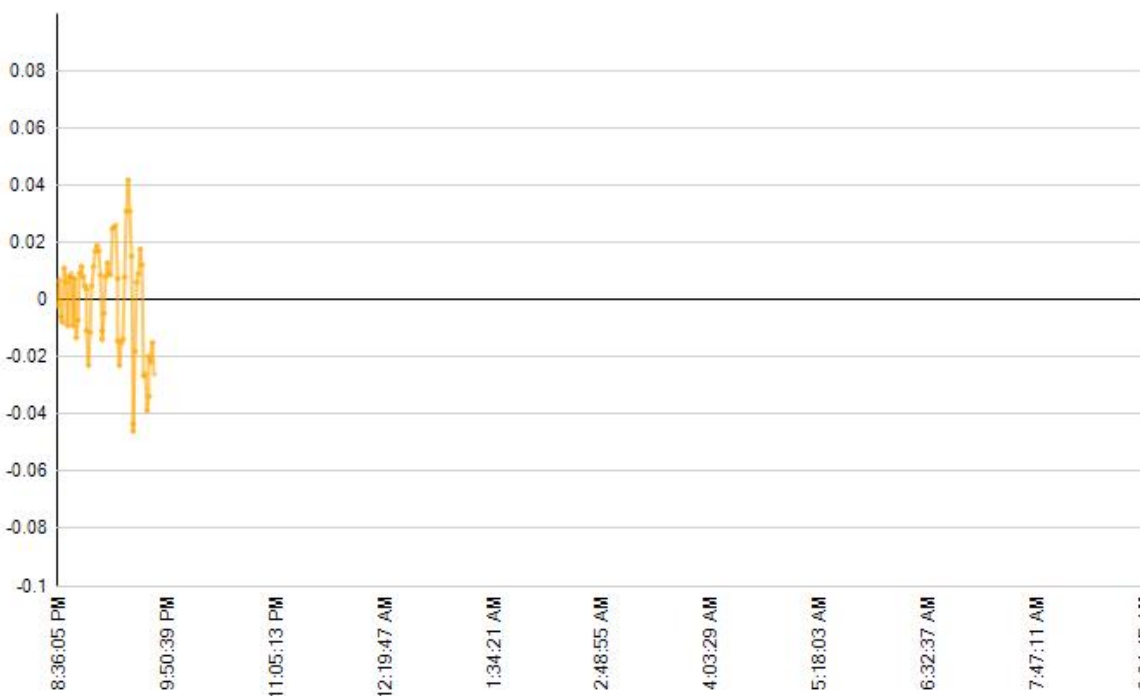
2/21/2015 8:36:05 PM - 2/22/2015 9:01:45 AM

Mean = 0.002 m Std. Dev. = 0.008 m Min. = -0.037 m Max. = 0.042 m



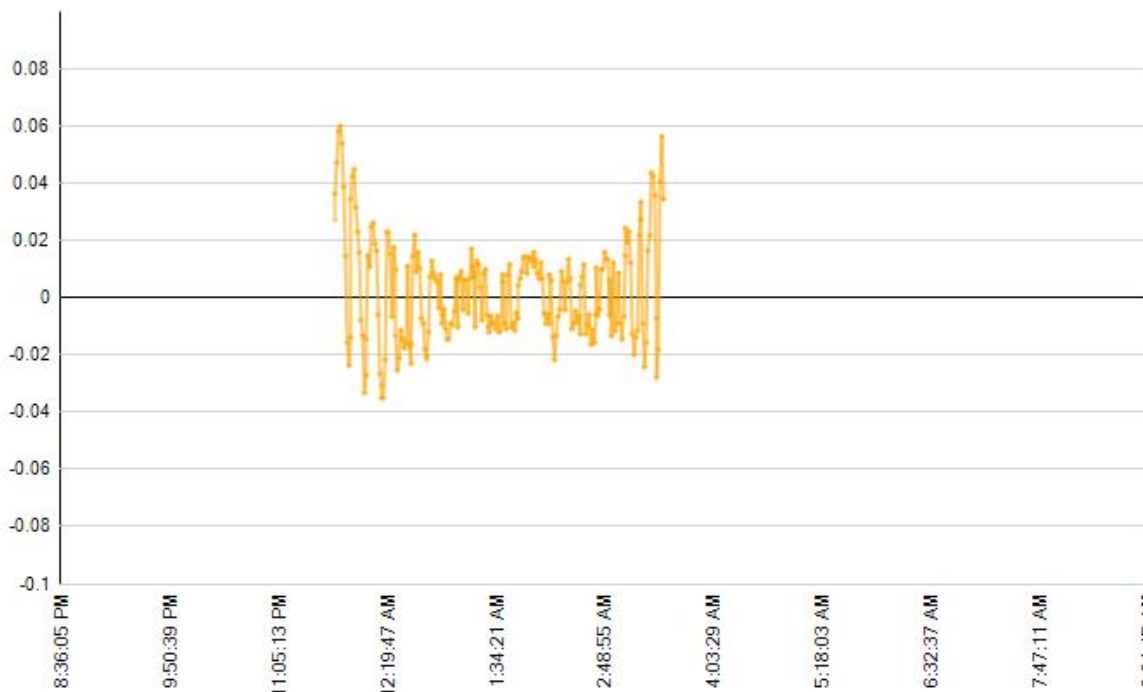
G 6  
2/21/2015 8:36:05 PM - 2/22/2015 9:01:45 AM

Mean = -0.001 m Std. Dev. = 0.013 m Min. = -0.046 m Max. = 0.042 m



G 7  
2/21/2015 8:36:05 PM - 2/22/2015 9:01:45 AM

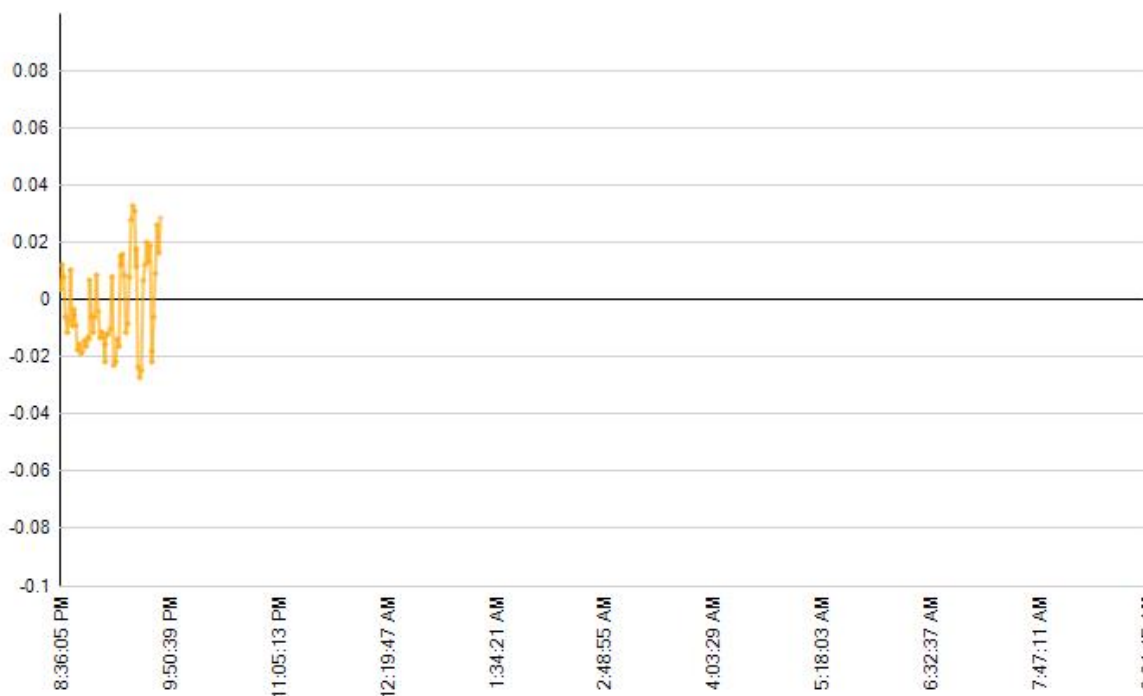
Mean = 0.002 m Std. Dev. = 0.014 m Min. = -0.035 m Max. = 0.060 m



G 10

2/21/2015 8:36:05 PM - 2/22/2015 9:01:45 AM

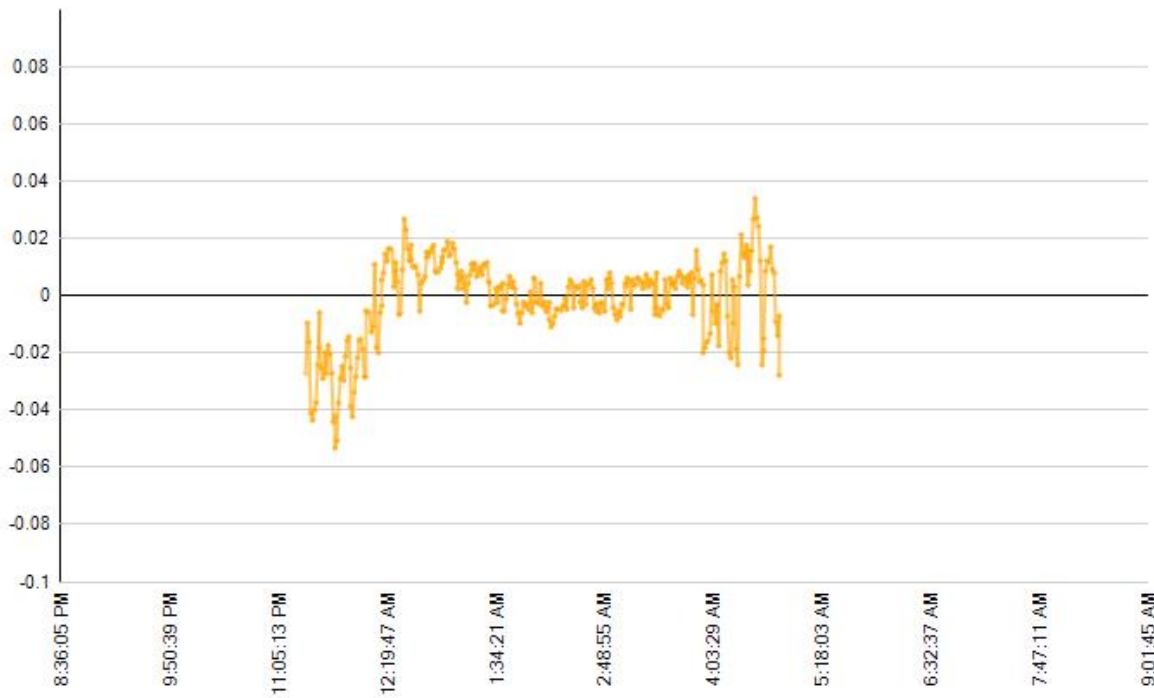
Mean = -0.001 m Std. Dev. = 0.011 m Min. = -0.027 m Max. = 0.033 m



G 11

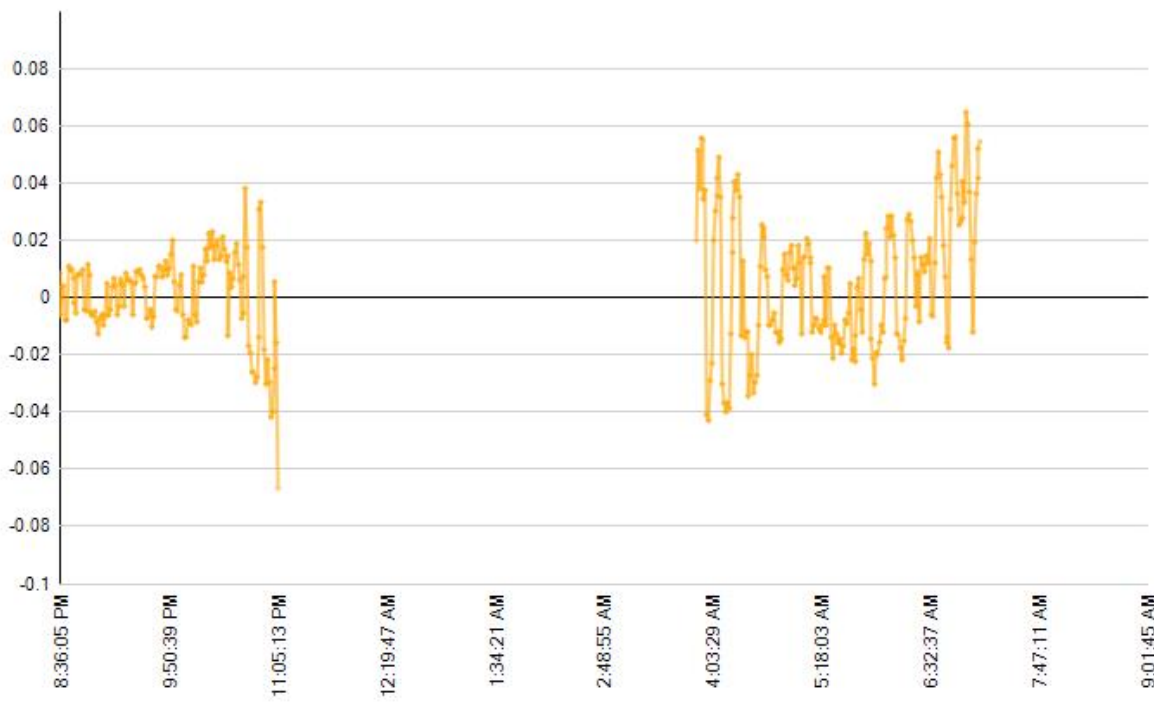
2/21/2015 8:36:05 PM - 2/22/2015 9:01:45 AM

Mean = -0.001 m Std. Dev. = 0.011 m Min. = -0.053 m Max. = 0.034 m



G 12  
2/21/2015 8:36:05 PM - 2/22/2015 9:01:45 AM

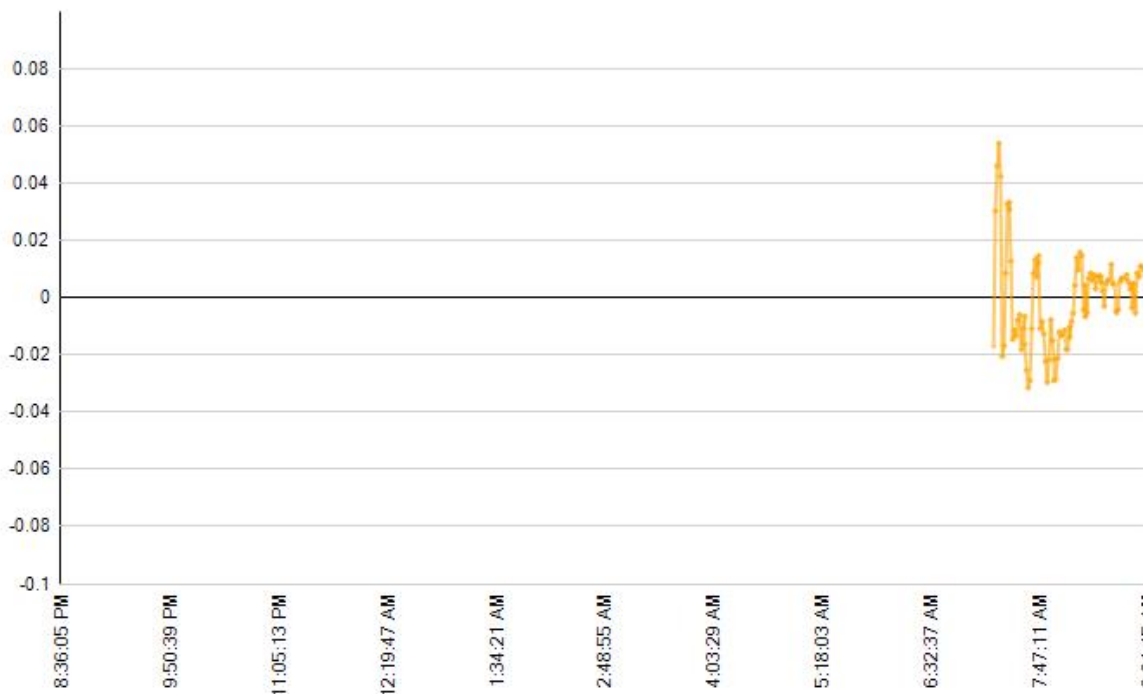
Mean = 0.003 m Std. Dev. = 0.015 m Min. = -0.067 m Max. = 0.065 m



G 13  
2/21/2015 8:36:05 PM - 2/22/2015 9:01:45 AM

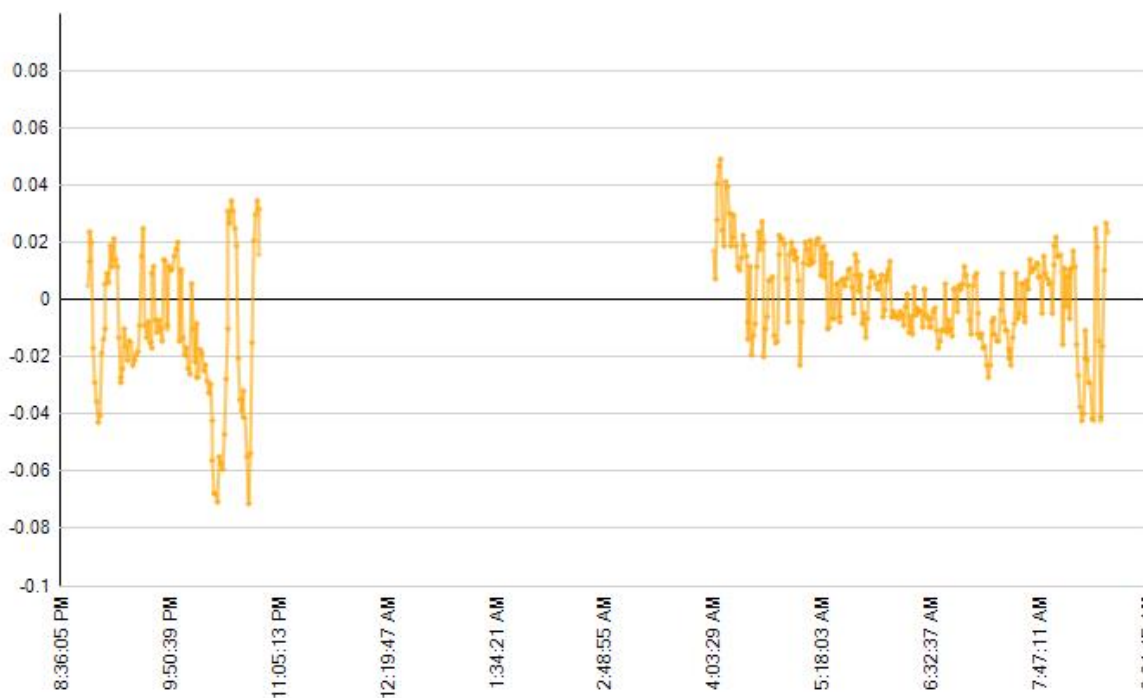


Mean = 0.000 m Std. Dev. = 0.013 m Min. = -0.032 m Max. = 0.054 m

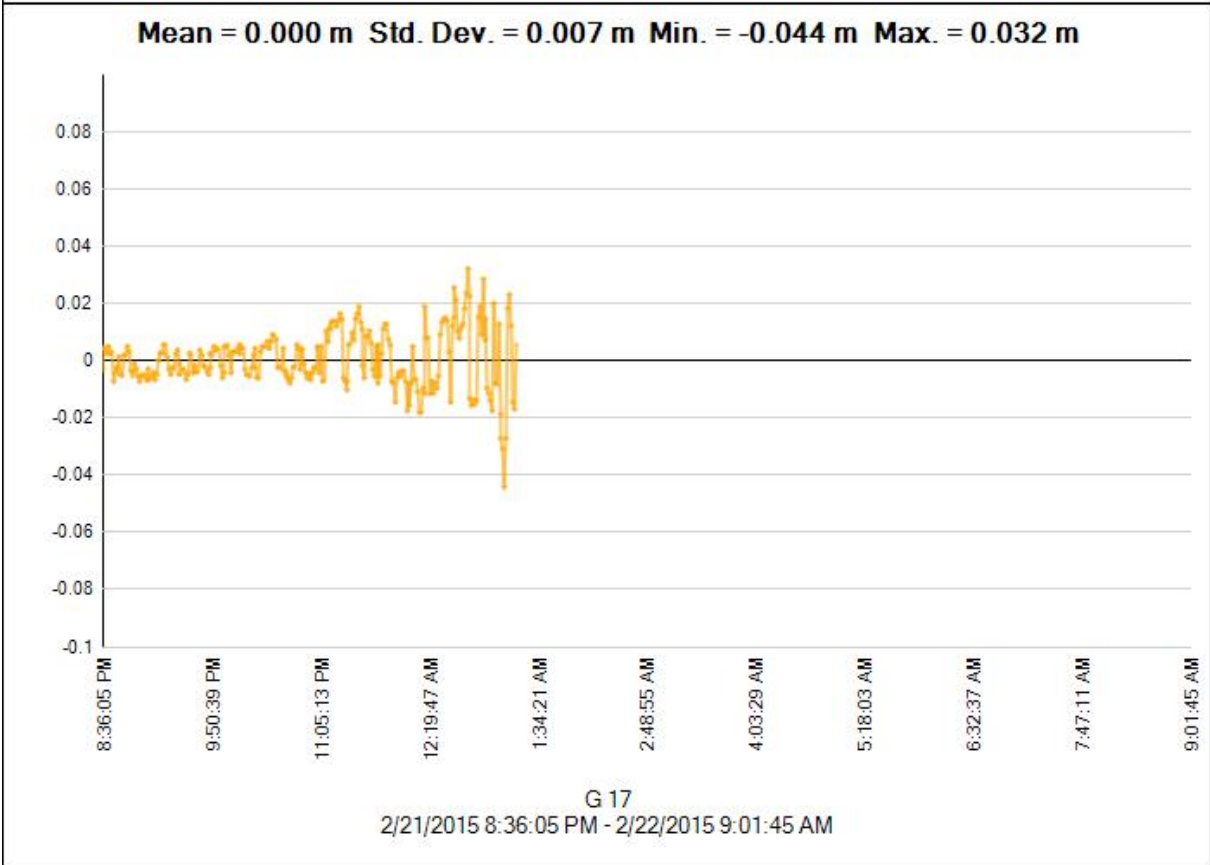
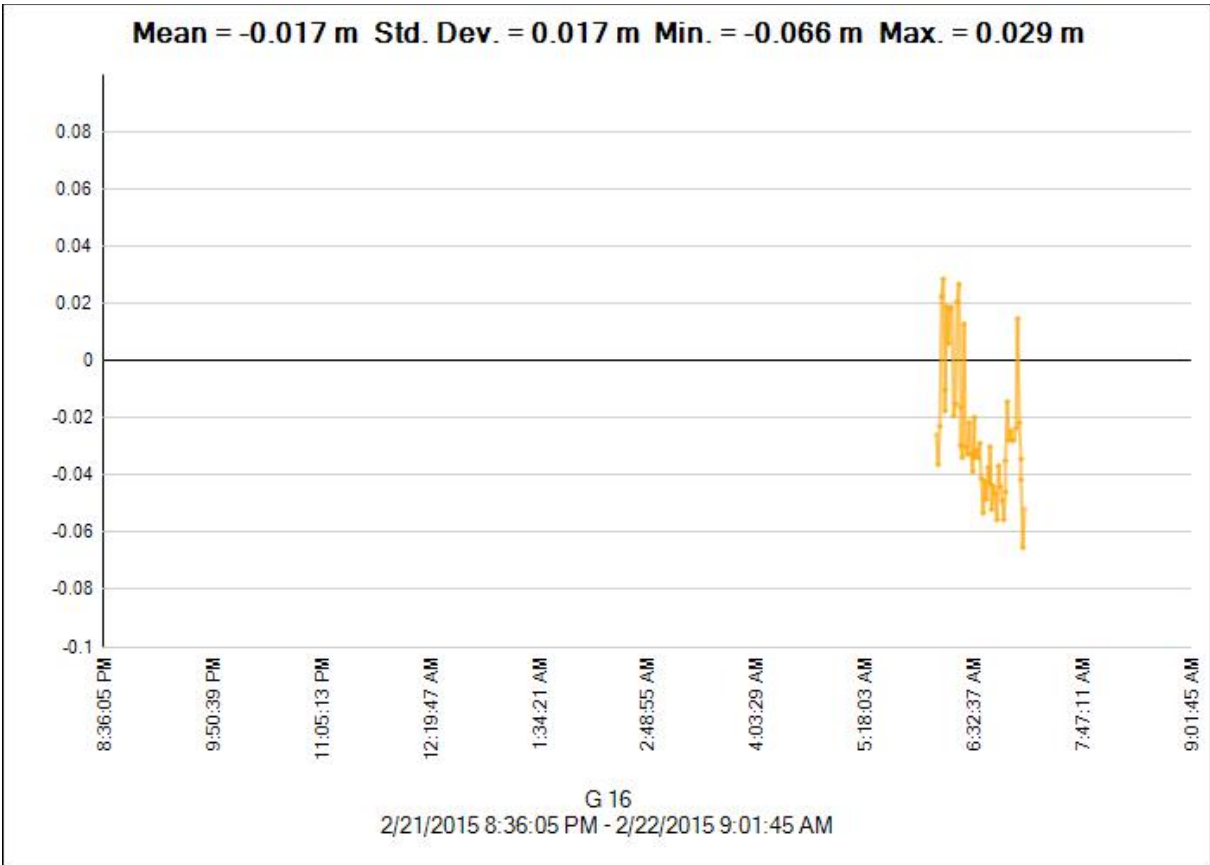


G 14  
2/21/2015 8:36:05 PM - 2/22/2015 9:01:45 AM

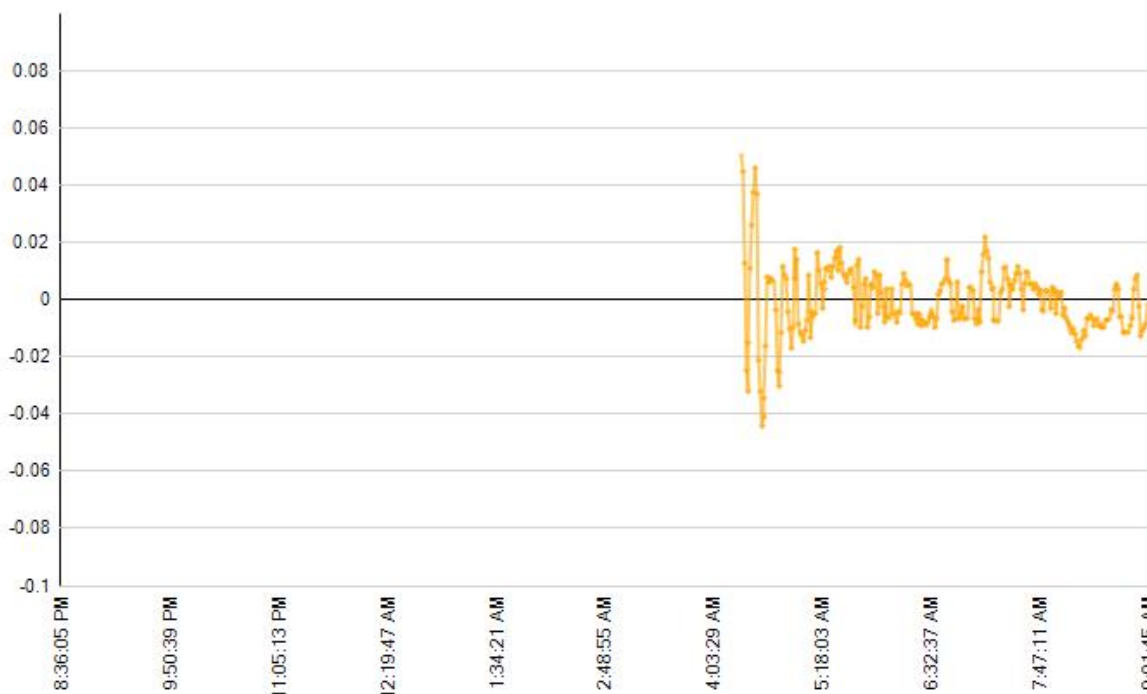
Mean = -0.002 m Std. Dev. = 0.015 m Min. = -0.071 m Max. = 0.049 m



G 15  
2/21/2015 8:36:05 PM - 2/22/2015 9:01:45 AM

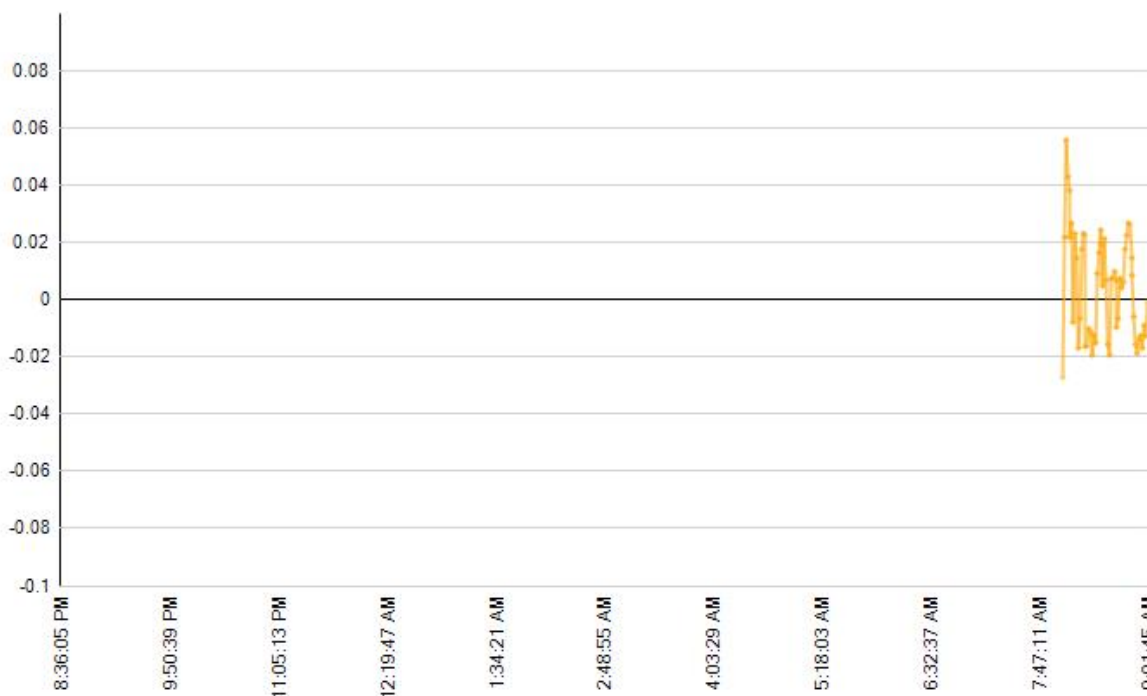


Mean = 0.000 m Std. Dev. = 0.009 m Min. = -0.044 m Max. = 0.050 m



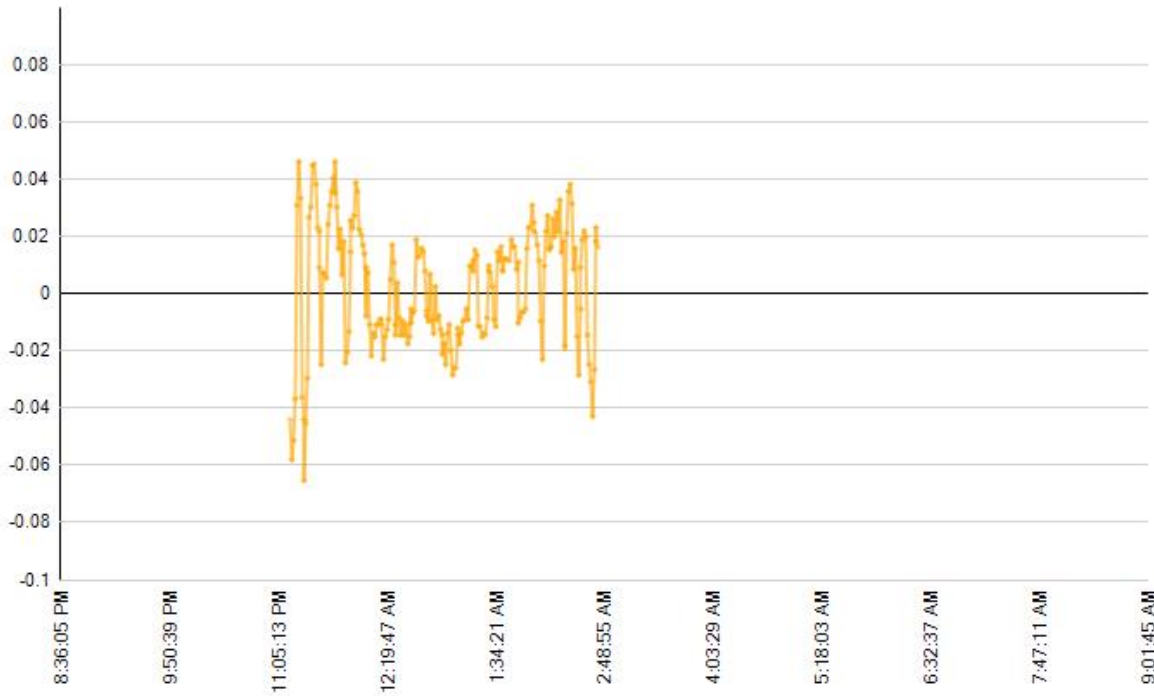
G 18  
2/21/2015 8:36:05 PM - 2/22/2015 9:01:45 AM

Mean = 0.004 m Std. Dev. = 0.013 m Min. = -0.027 m Max. = 0.055 m



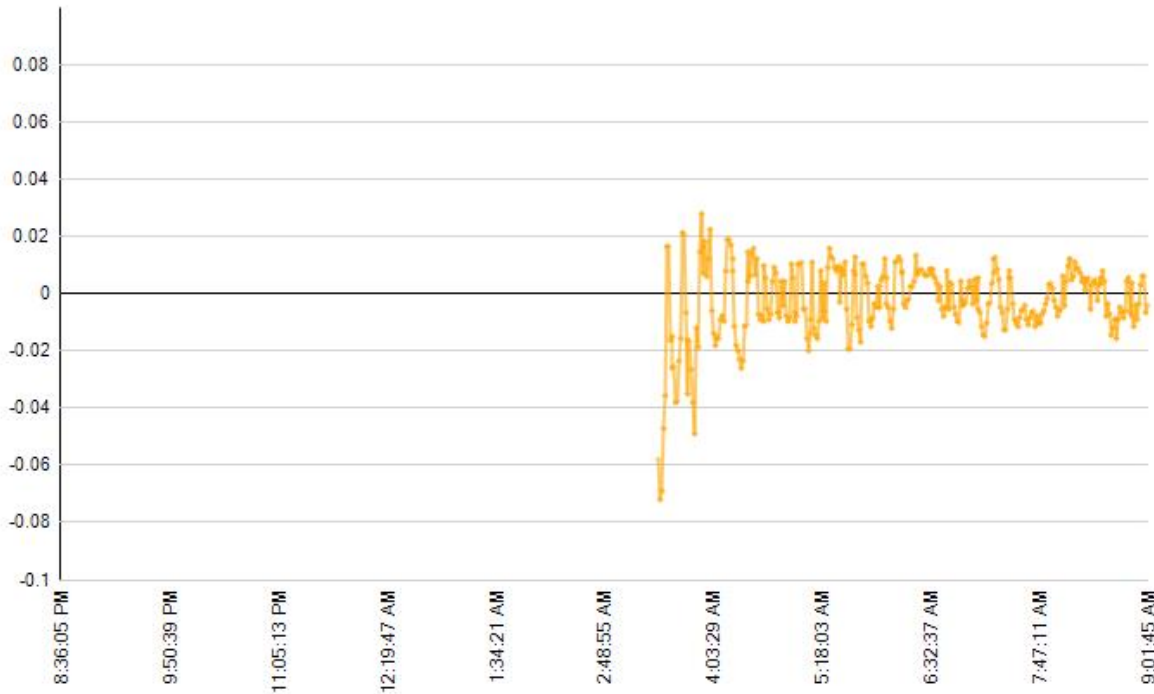
G 19  
2/21/2015 8:36:05 PM - 2/22/2015 9:01:45 AM

Mean = 0.002 m Std. Dev. = 0.015 m Min. = -0.065 m Max. = 0.046 m

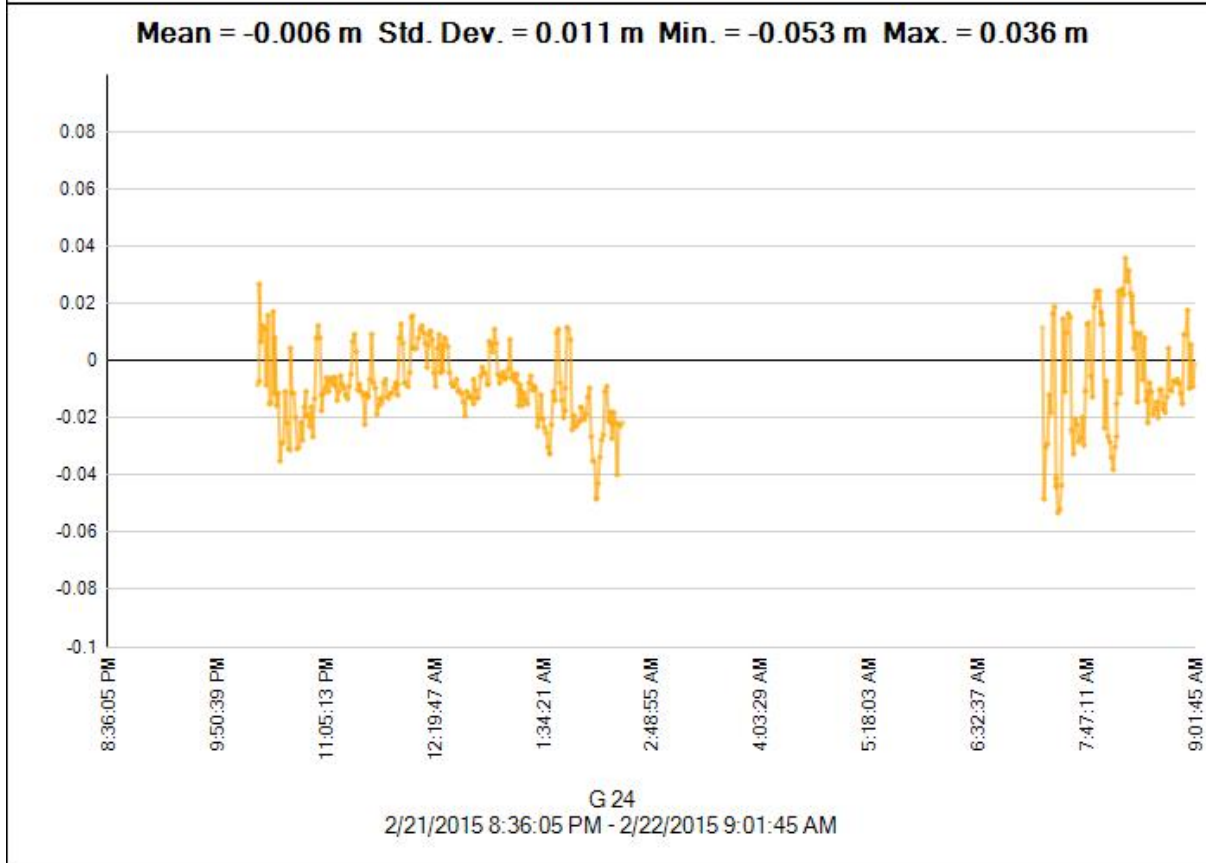
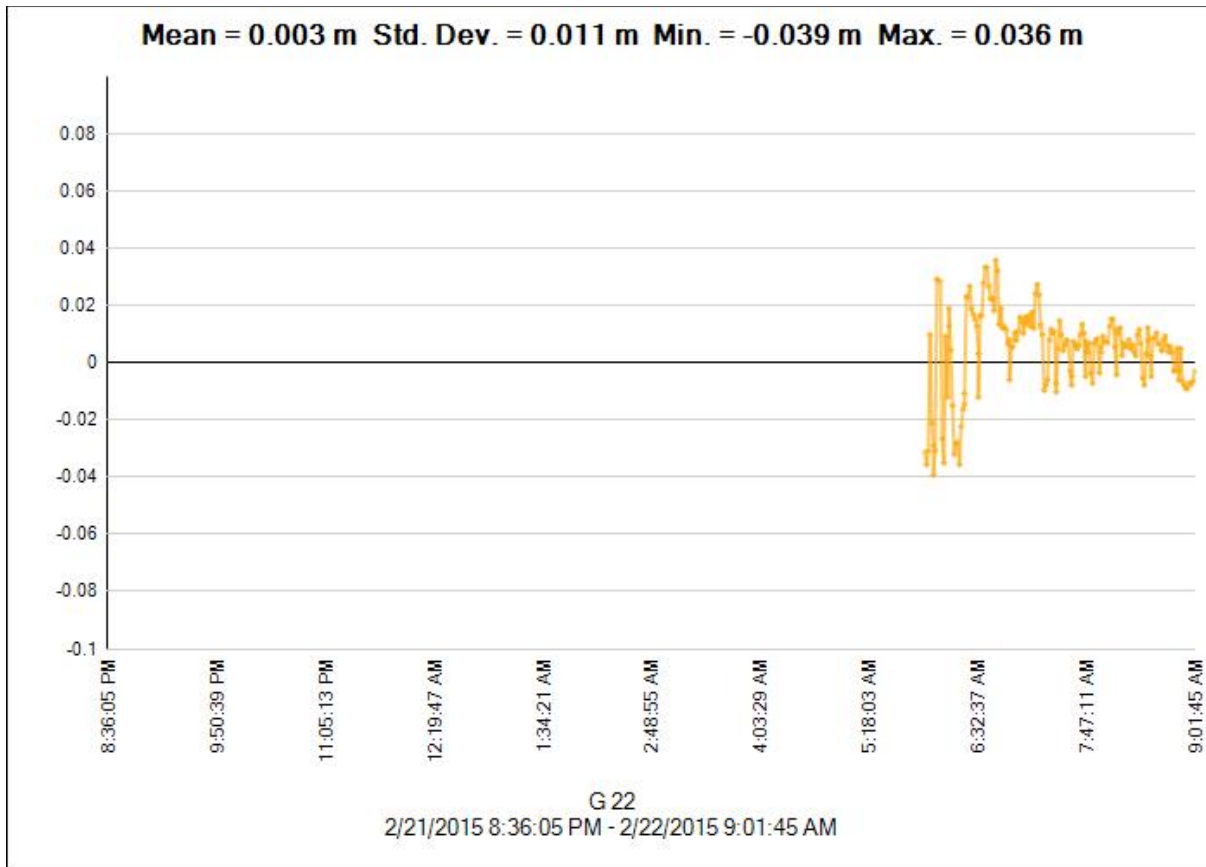


G 20  
2/21/2015 8:36:05 PM - 2/22/2015 9:01:45 AM

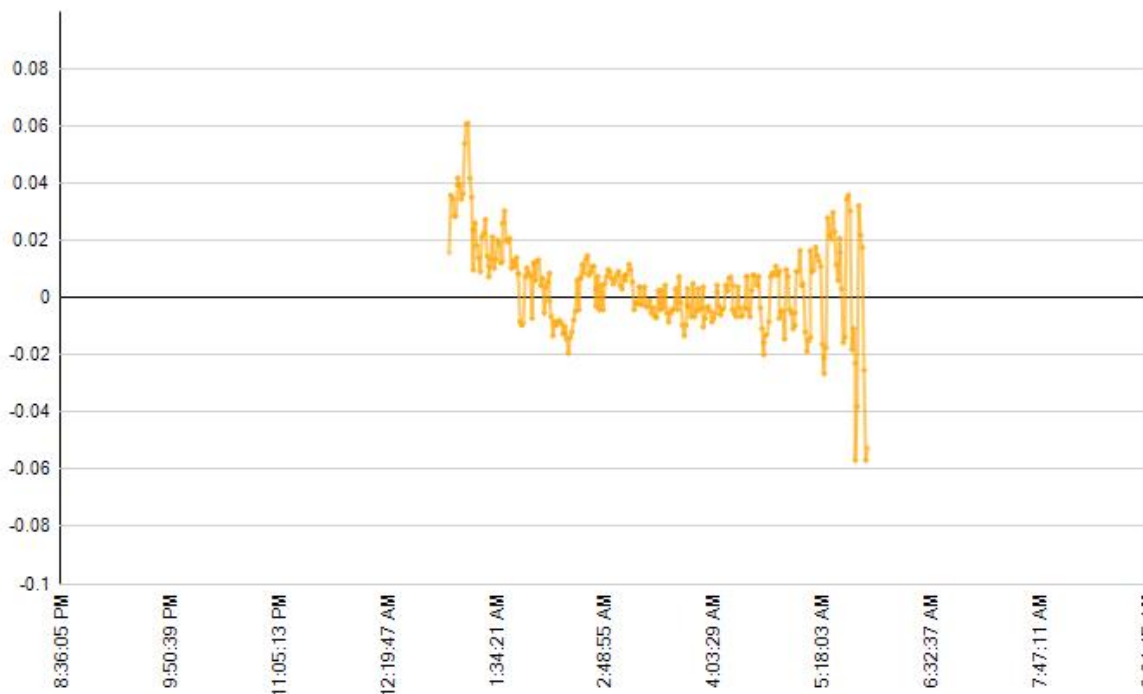
Mean = -0.002 m Std. Dev. = 0.009 m Min. = -0.072 m Max. = 0.028 m



G 21  
2/21/2015 8:36:05 PM - 2/22/2015 9:01:45 AM

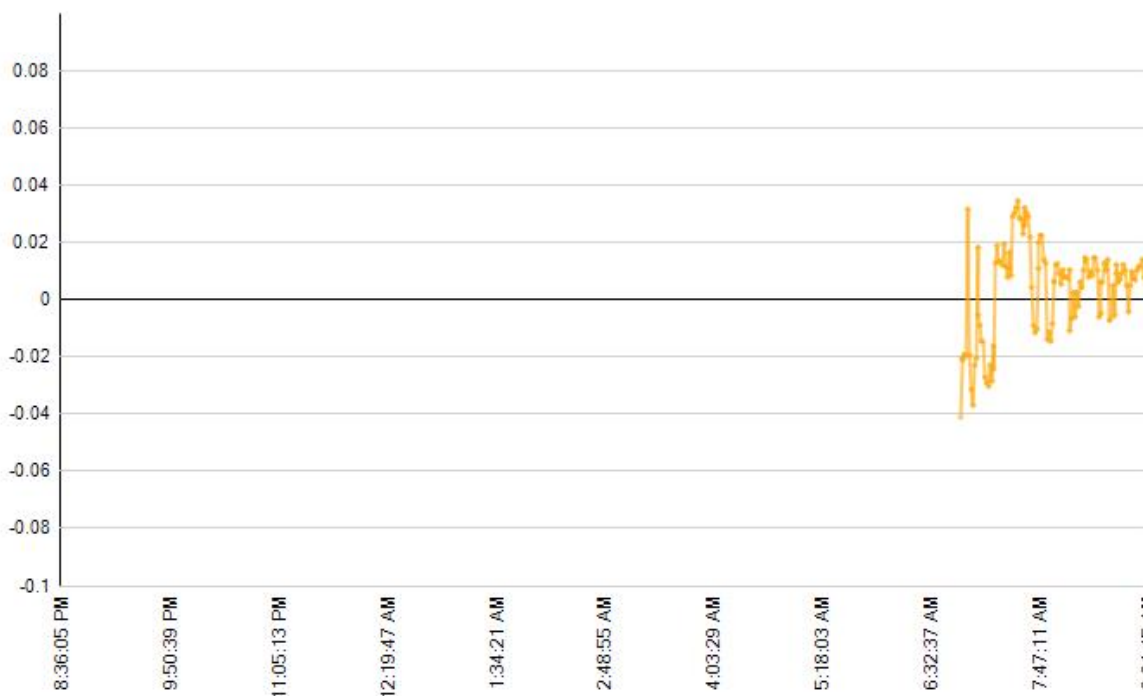


Mean = 0.003 m Std. Dev. = 0.012 m Min. = -0.057 m Max. = 0.061 m



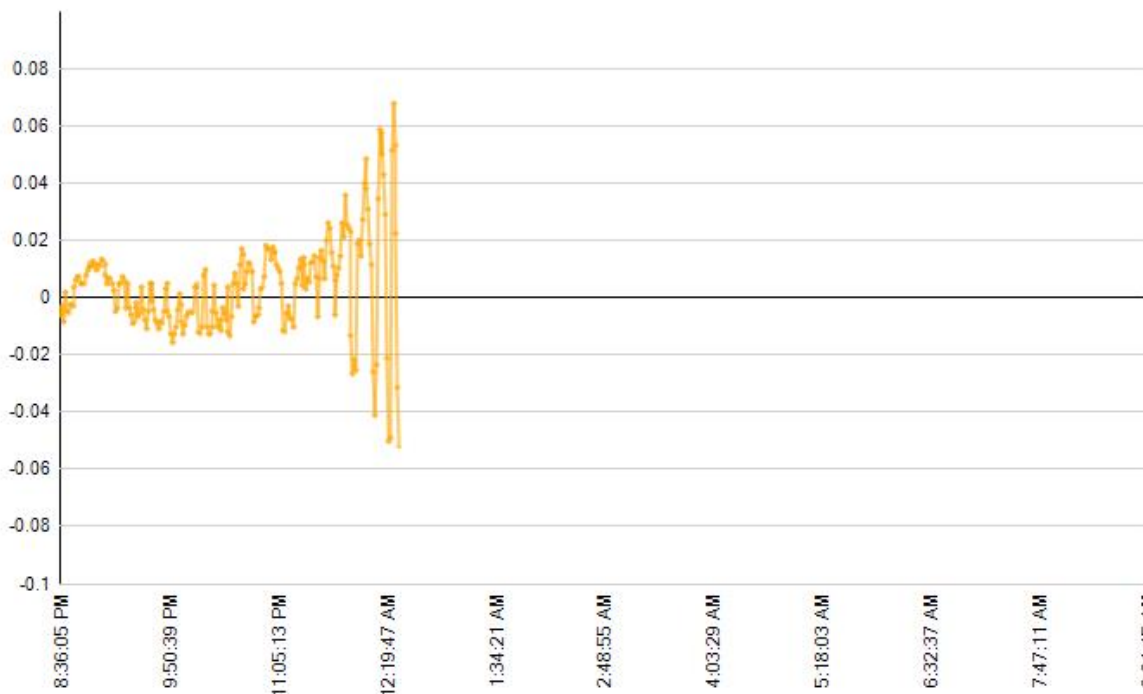
G 25  
2/21/2015 8:36:05 PM - 2/22/2015 9:01:45 AM

Mean = 0.003 m Std. Dev. = 0.012 m Min. = -0.041 m Max. = 0.035 m



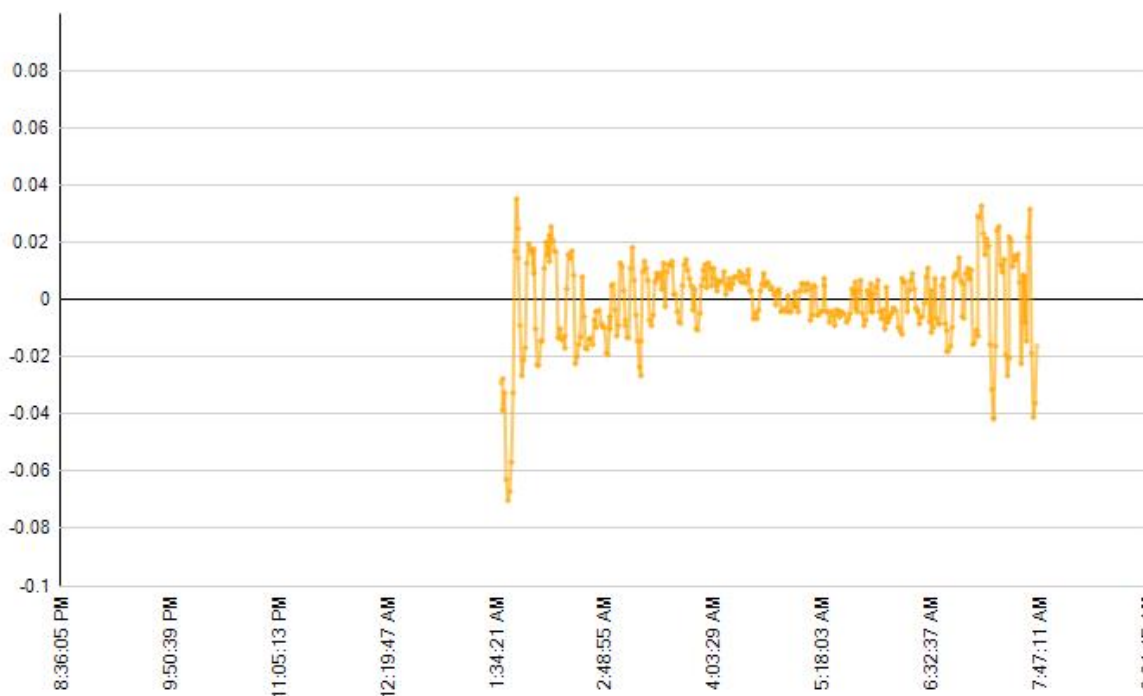
G 27  
2/21/2015 8:36:05 PM - 2/22/2015 9:01:45 AM

Mean = 0.003 m Std. Dev. = 0.012 m Min. = -0.052 m Max. = 0.068 m

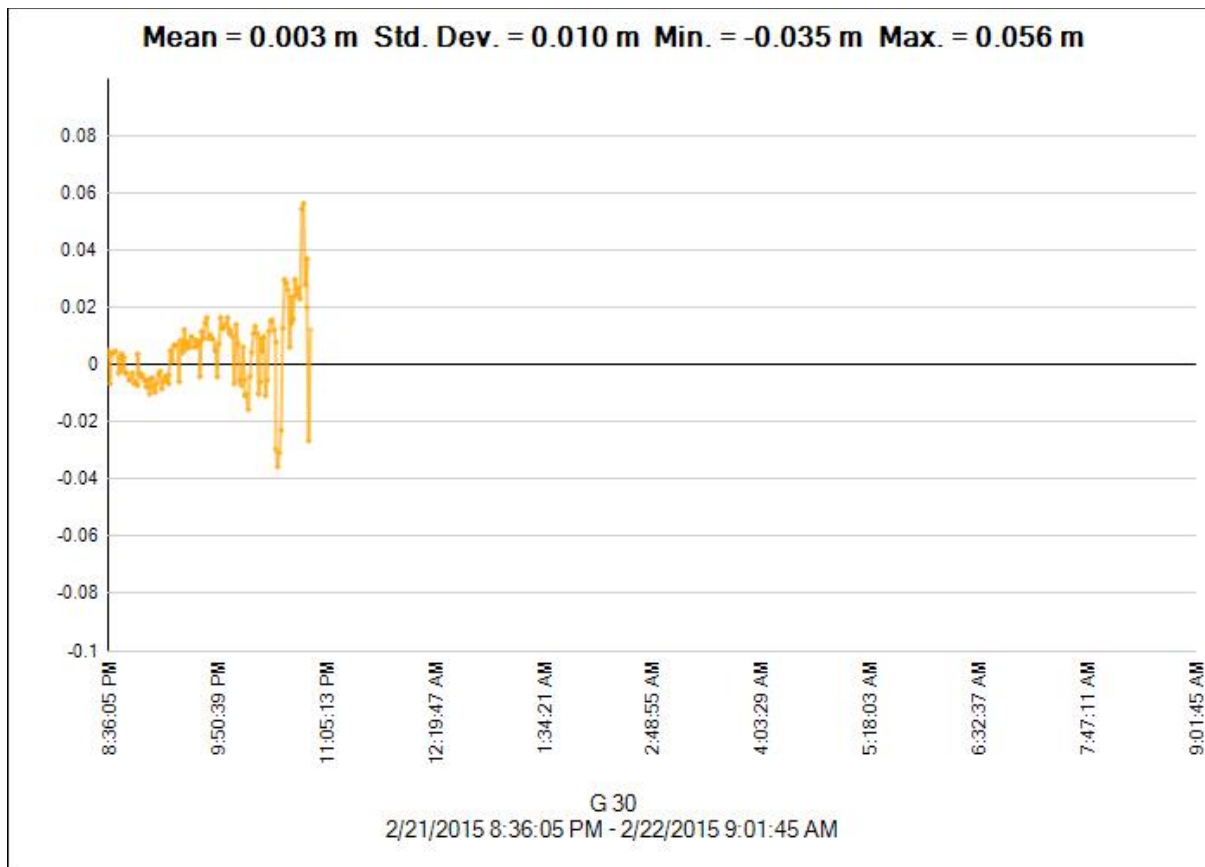


G 28  
2/21/2015 8:36:05 PM - 2/22/2015 9:01:45 AM

Mean = -0.001 m Std. Dev. = 0.011 m Min. = -0.070 m Max. = 0.035 m





G 29  
2/21/2015 8:36:05 PM - 2/22/2015 9:01:45 AM



### Processing style

Elevation mask: 13.0 deg  
 Auto start processing: Yes  
 Start automatic ID numbering: AUTO0001  
 Continuous vectors: No  
 Generate residuals: Yes  
 Antenna model: Automatic  
 Ephemeris type: Automatic  
 Frequency: Multiple Frequencies  
 Processing Interval: Use all data  
 Force float: No

### Acceptance Criteria

Vector Component	Flag 	Fail 
Horizontal Precision >	0.050 m + 1.000 ppm	0.100 m + 1.000 ppm
Vertical Precision >	0.100 m + 1.000 ppm	0.200 m + 1.000 ppm



**KRYN\_APT\_2 - AVRA\_APT\_3 (9:52:46 AM-5:49:13 PM) (S14)**

Baseline observation: KRYN\_APT\_2 --- AVRA\_APT\_3 (B14)  
 Processed: 3/5/2015 3:39:53 PM  
 Solution type: Fixed  
 Frequency used: Dual Frequency (L1, L2)  
 Horizontal precision: 0.003 m  
 Vertical precision: 0.008 m  
 RMS: 0.003 m  
 Maximum PDOP: 3.156  
 Ephemeris used: Broadcast  
 Antenna model: NGS Absolute  
 Processing start time: 2/25/2015 9:52:54 AM (Local: UTC-7hr)  
 Processing stop time: 2/25/2015 5:49:04 PM (Local: UTC-7hr)  
 Processing duration: 07:56:10  
 Processing interval: 10 seconds

**Vector Components (Mark to Mark)**

From: KRYN_APT_2					
Grid		Local		Global	
Easting	283680.071 m	Latitude	N32°08'19.22927"	Latitude	N32°08'19.22927"
Northing	126486.193 m	Longitude	W111°10'16.66431"	Longitude	W111°10'16.66431"
Elevation	752.237 m	Height	722.413 m	Height	722.412 m

To: AVRA_APT_3					
Grid		Local		Global	
Easting	279292.469 m	Latitude	N32°24'11.20055"	Latitude	N32°24'11.20054"
Northing	155779.810 m	Longitude	W111°12'56.77844"	Longitude	W111°12'56.77844"
Elevation	633.784 m	Height	604.140 m	Height	604.140 m

Vector					
ΔEasting	-4387.603 m	NS Fwd Azimuth	351°52'46"	ΔX	1789.643 m
ΔNorthing	29293.617 m	Ellipsoid Dist.	29621.649 m	ΔY	16207.463 m
ΔElevation	-118.454 m	ΔHeight	-118.272 m	ΔZ	24733.641 m

**Standard Errors**

Vector errors:					
$\sigma \Delta$ Easting	0.001 m	$\sigma$ NS fwd Azimuth	0°00'00"	$\sigma \Delta$ X	0.002 m
$\sigma \Delta$ Northing	0.001 m	$\sigma$ Ellipsoid Dist.	0.001 m	$\sigma \Delta$ Y	0.003 m
$\sigma \Delta$ Elevation	0.004 m	$\sigma \Delta$ Height	0.004 m	$\sigma \Delta$ Z	0.002 m

**Aposteriori Covariance Matrix (Meter<sup>2</sup>)**


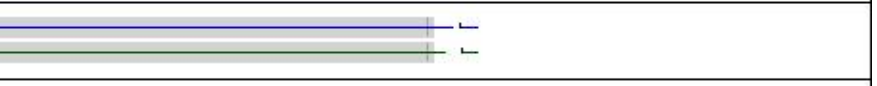

	X	Y	Z
X	0.0000029296		
Y	0.0000043217	0.0000105430	
Z	-0.0000029757	-0.0000071358	0.0000058447

**Occupations**

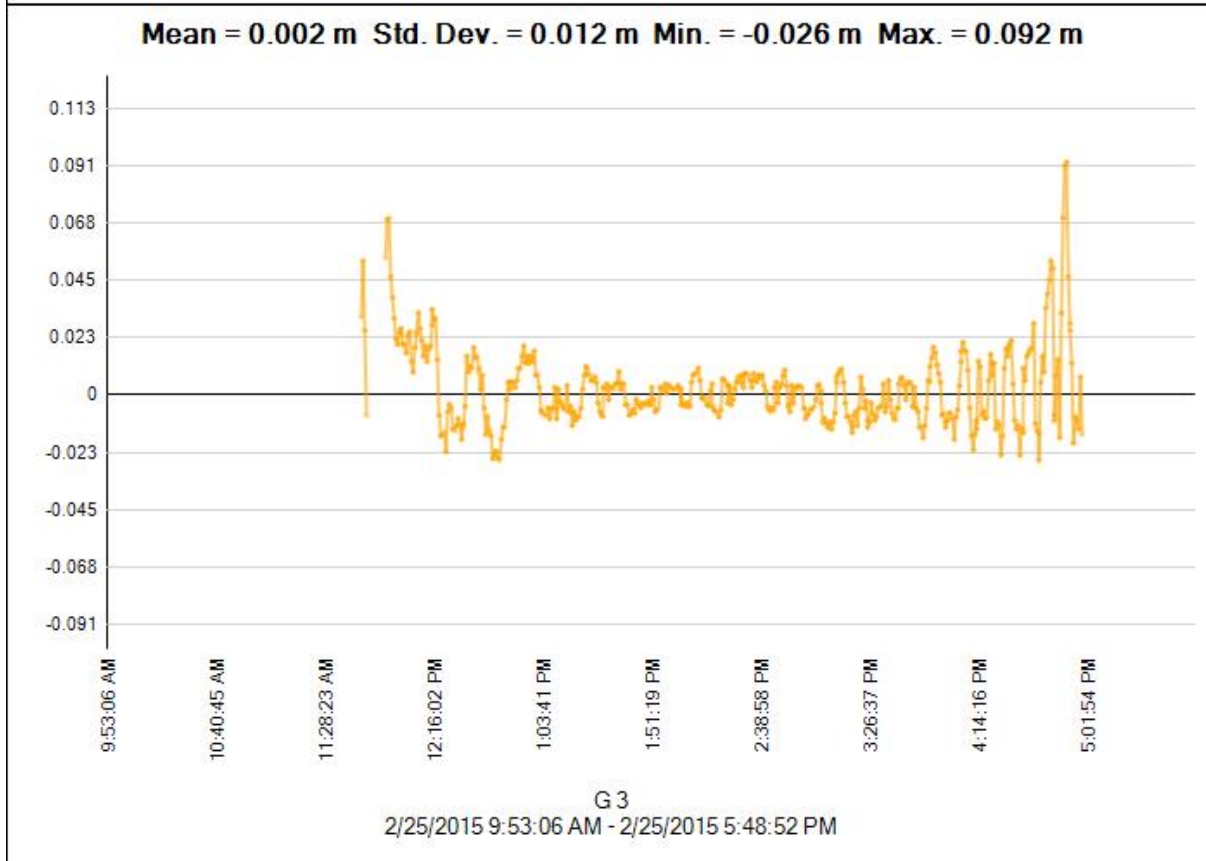
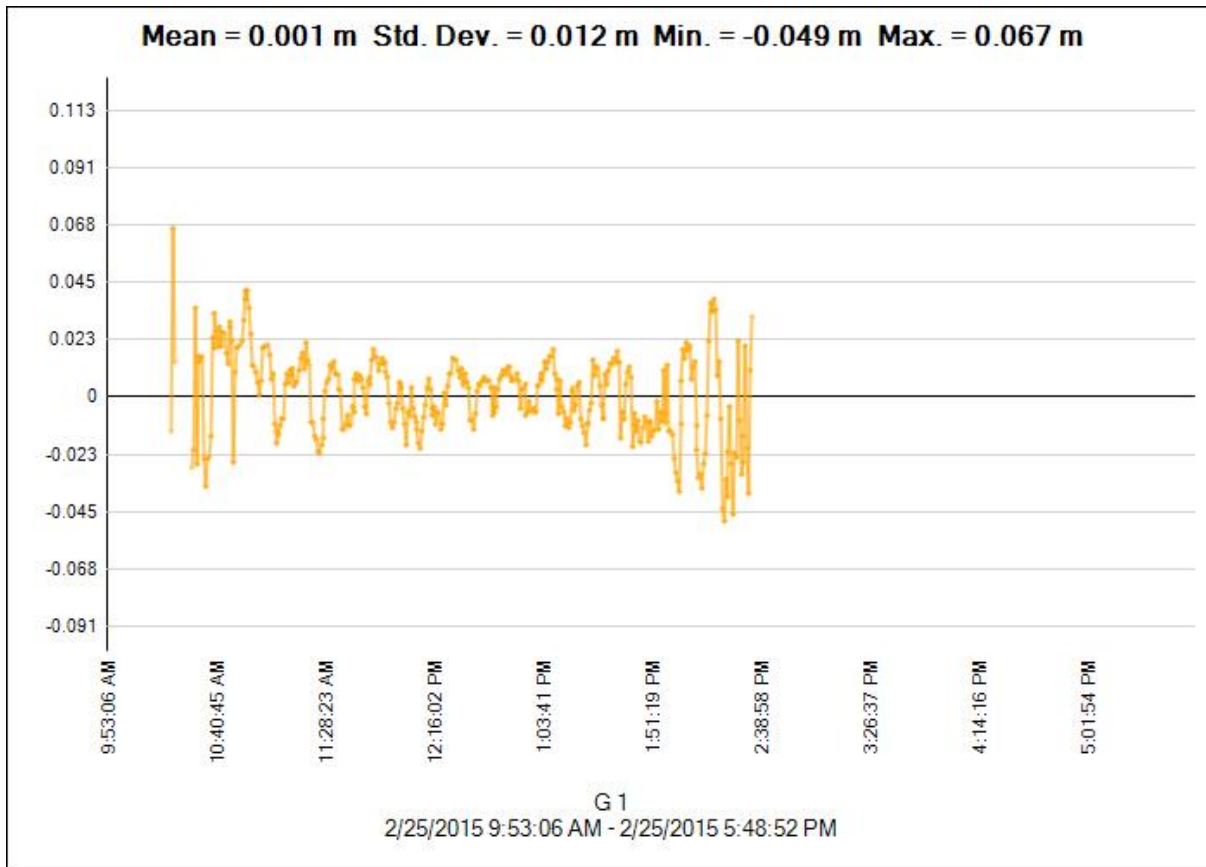
	From	To
Point ID:	KRYN_APT_2	AVRA_APT_3
Data file:	\\conas\projects \312014478_PAG_2015\Acquisition \Ground_Survey\Adjustments\4478 PAG LiDAR Network\00010560 resampled.15o	\\conas\projects \312014478_PAG_2015\Acquisition \Ground_Survey\Adjustments\4478 PAG LiDAR Network\11520560.t00
Receiver type:	Geo Explorer 3	5700
Receiver serial number:		0220271152
Antenna type:	702 Rev 3.00	Zephyr Geodetic
Antenna serial number:	-----	00000000
Antenna height (measured):	2.065 m	1.553 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

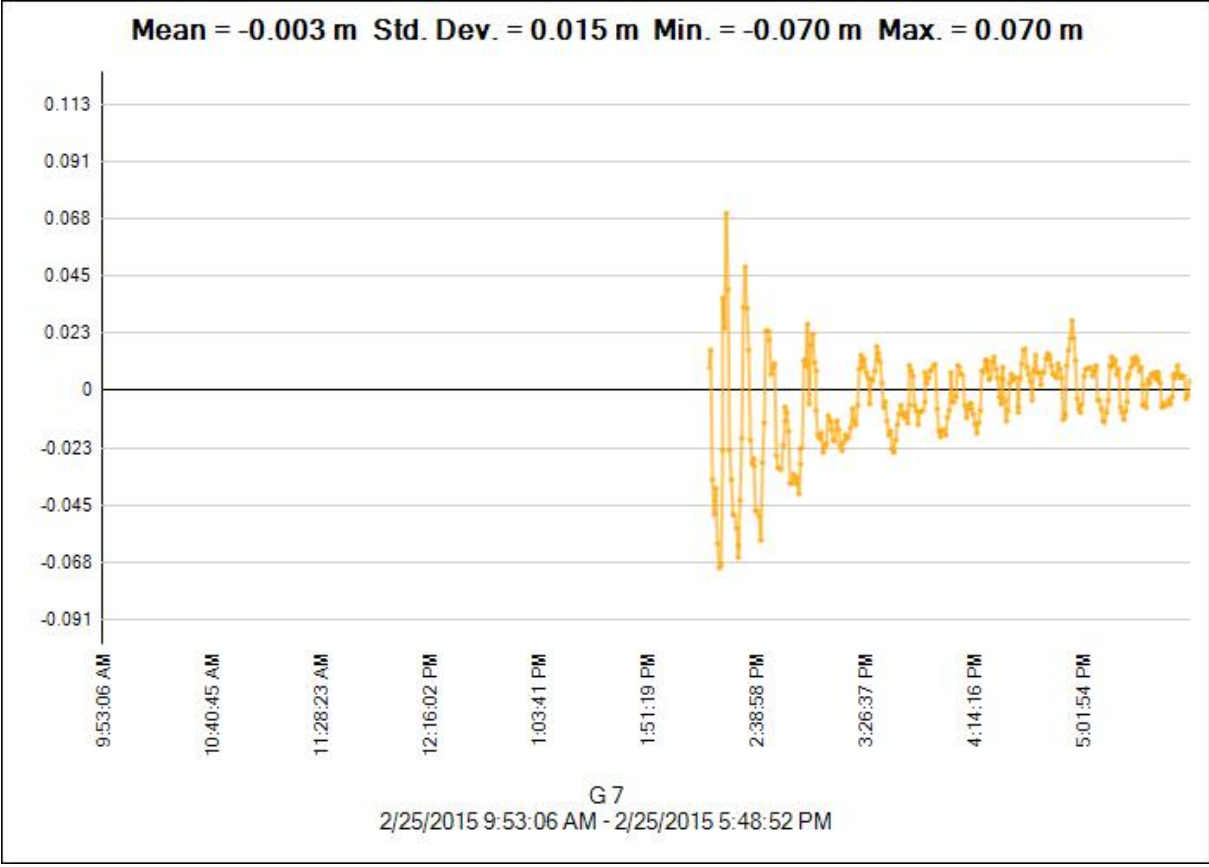
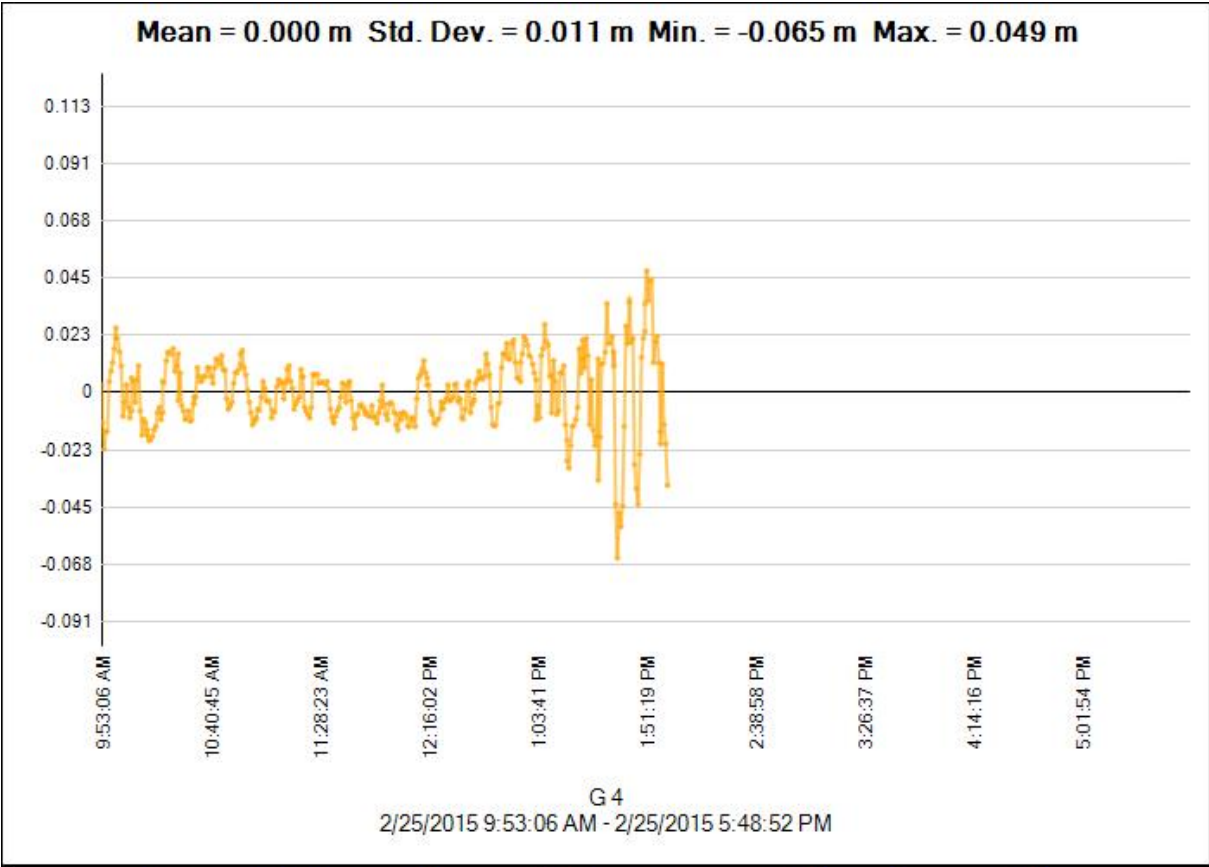
# Tracking Summary

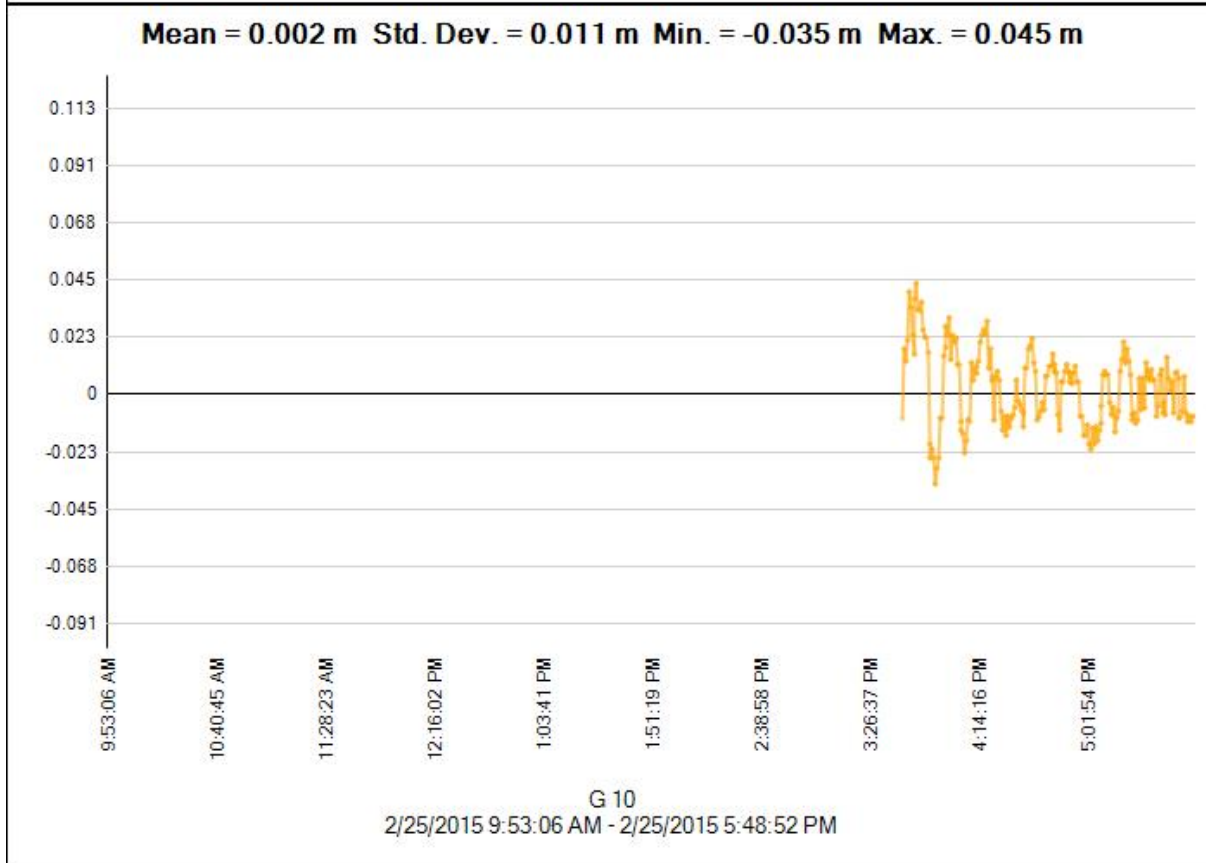
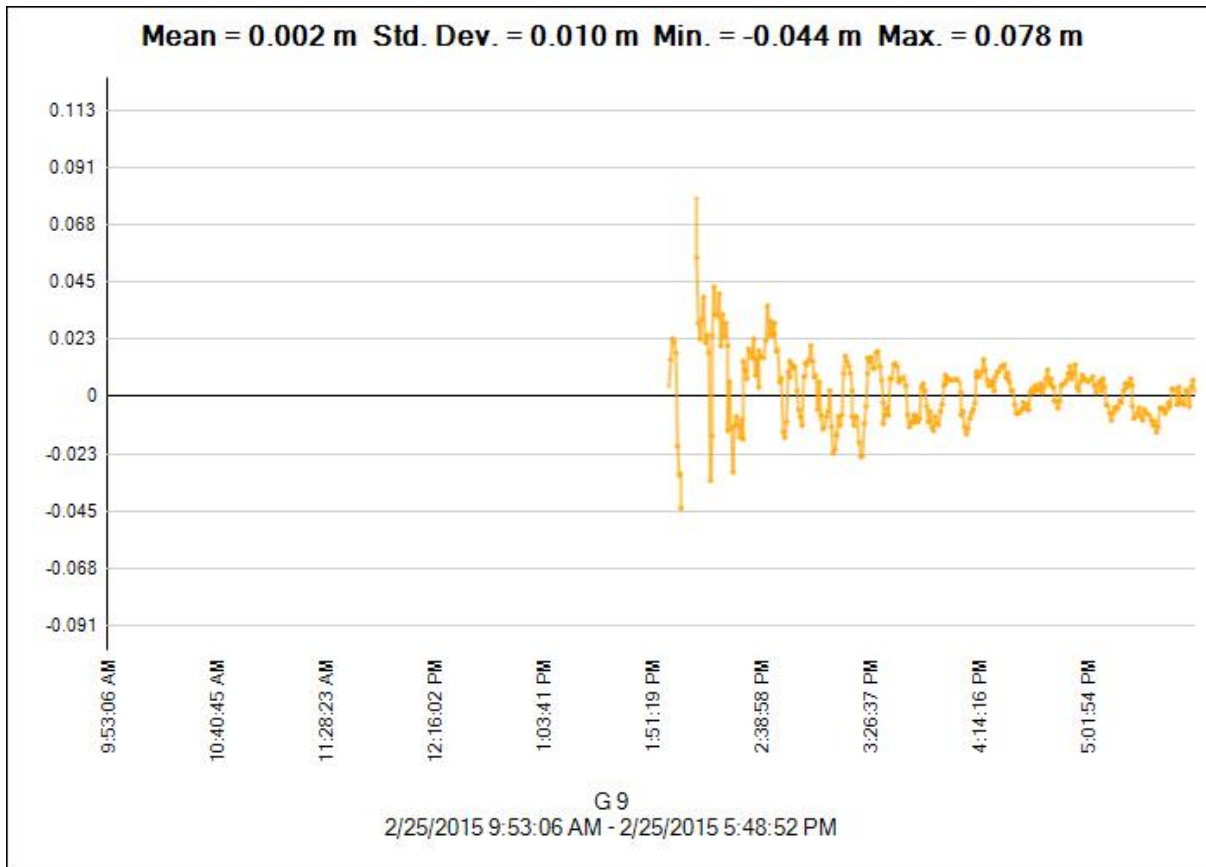
SV	2/25/2015 9:52:46 AM	Duration: 07:56:27	Major interval: 01:00:00	2/25/2015 5:49:13 PM
G 1	L1 L2			
G 3	L1 L2			
G 4	L1 L2			
G 5	L1 L2			
G 7	L1 L2			
G 9	L1 L2			
G 10	L1 L2			
G 11	L1 L2			
G 14	L1 L2			
G 16	L1 L2			
G 18	L1 L2			
G 19	L1 L2			
G 20	L1 L2			
G 21	L1 L2			
G 22	L1 L2			
G 23	L1 L2			
G 24	L1 L2			
G 25	L1 L2			
G 27	L1 L2			
G 28	L1 L2			

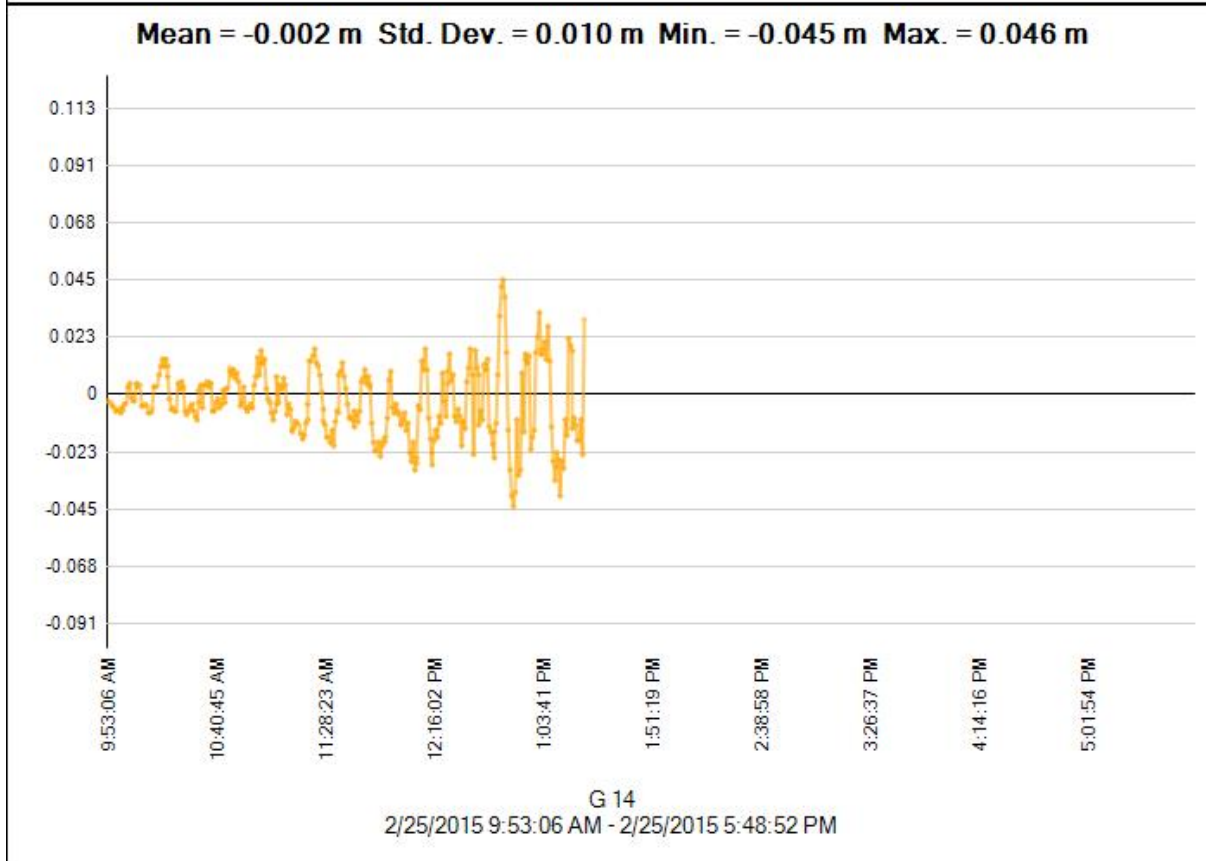
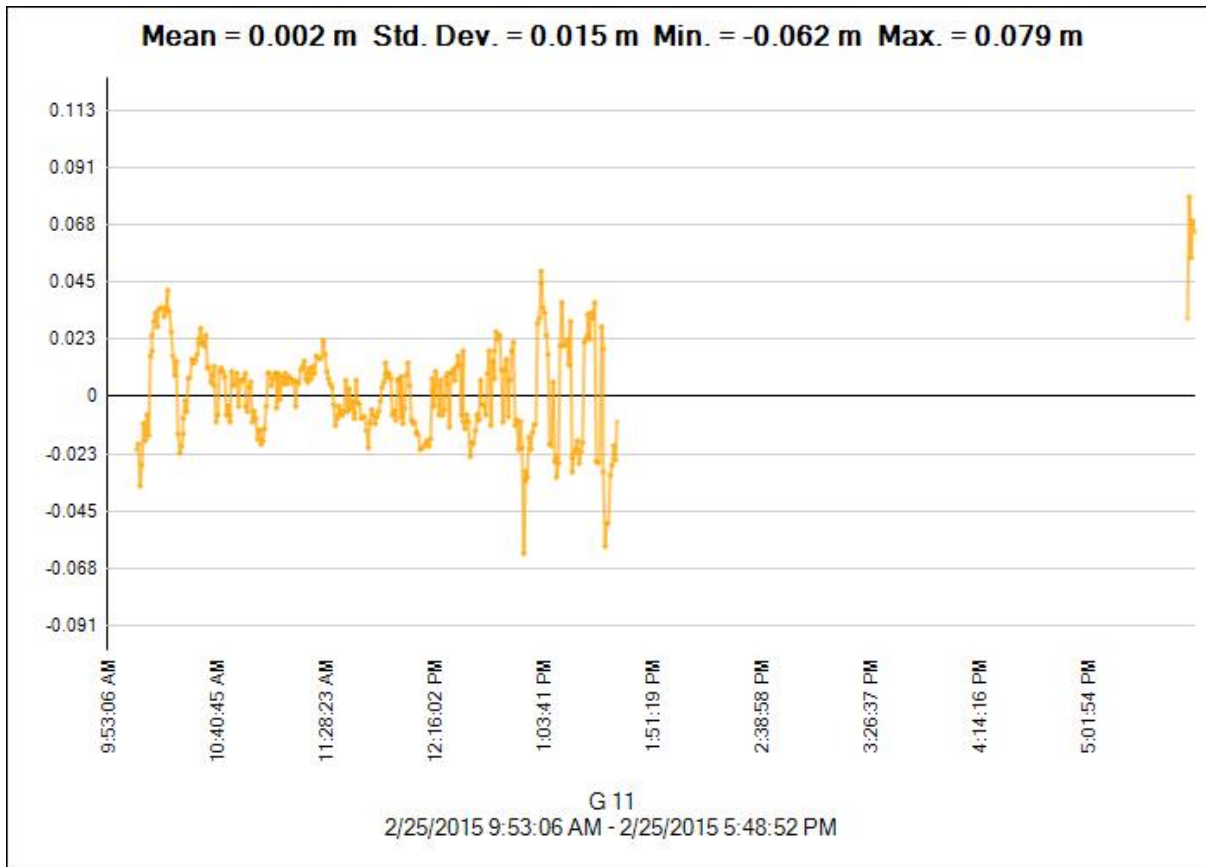
<b>SV</b>	2/25/2015 9:52:46 AM	Duration: 07:56:27 Major interval: 01:00:00	2/25/2015 5:49:13 PM
G 30	L1 L2		
G 31	L1 L2		
G 32	L1 L2		

# Residuals

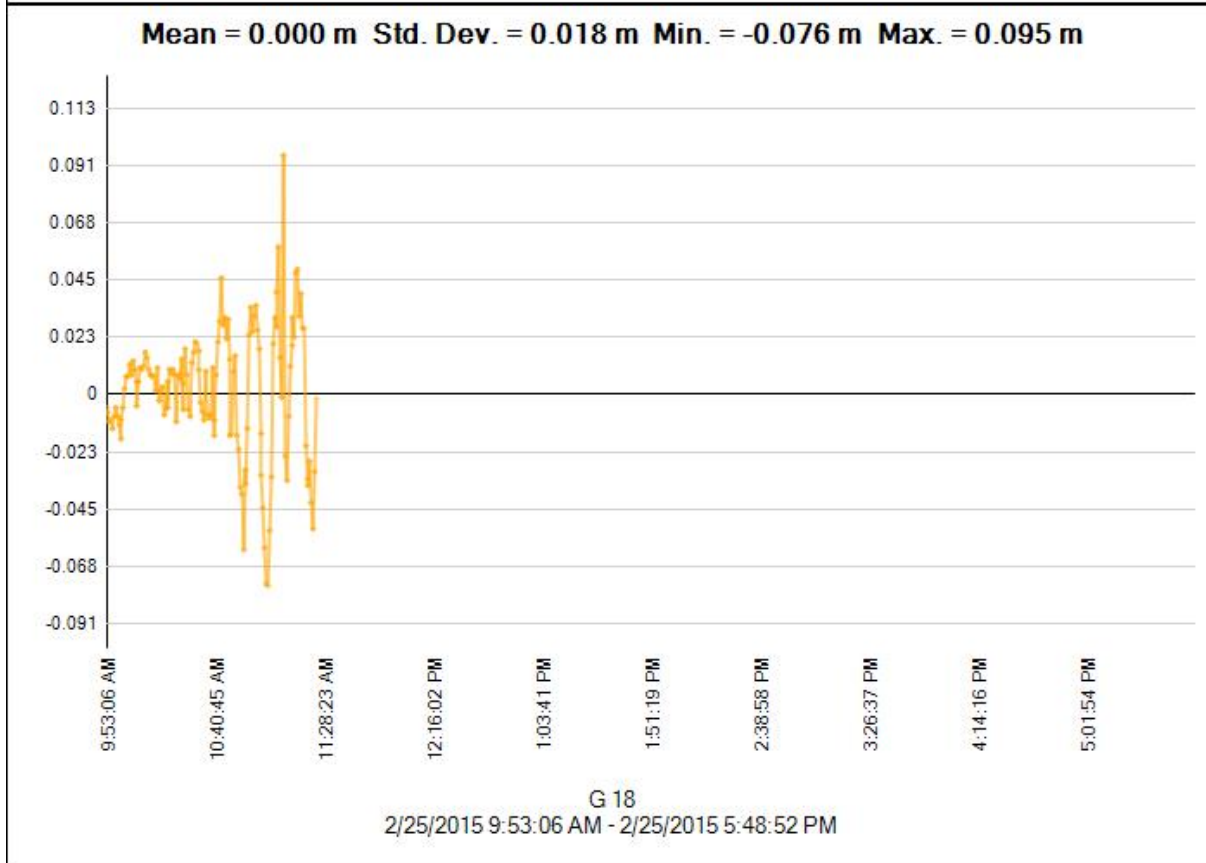
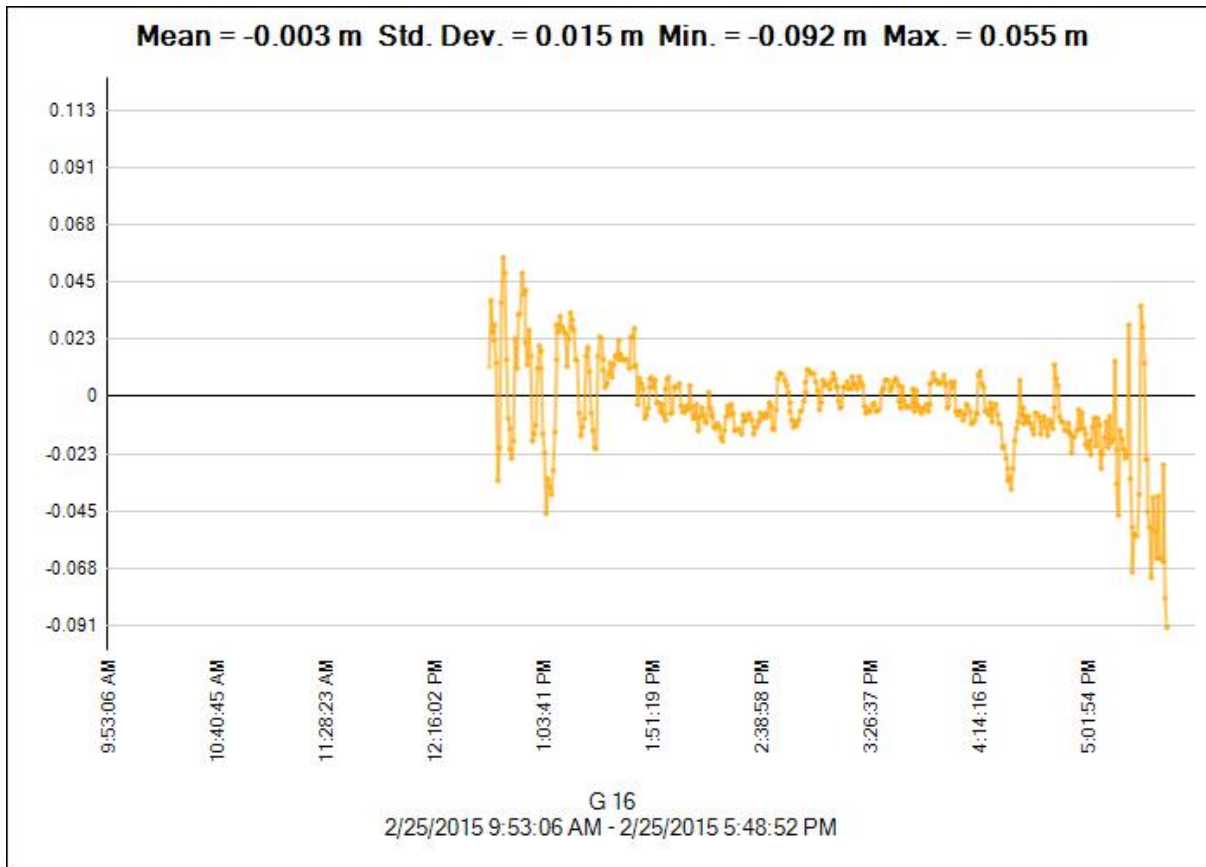


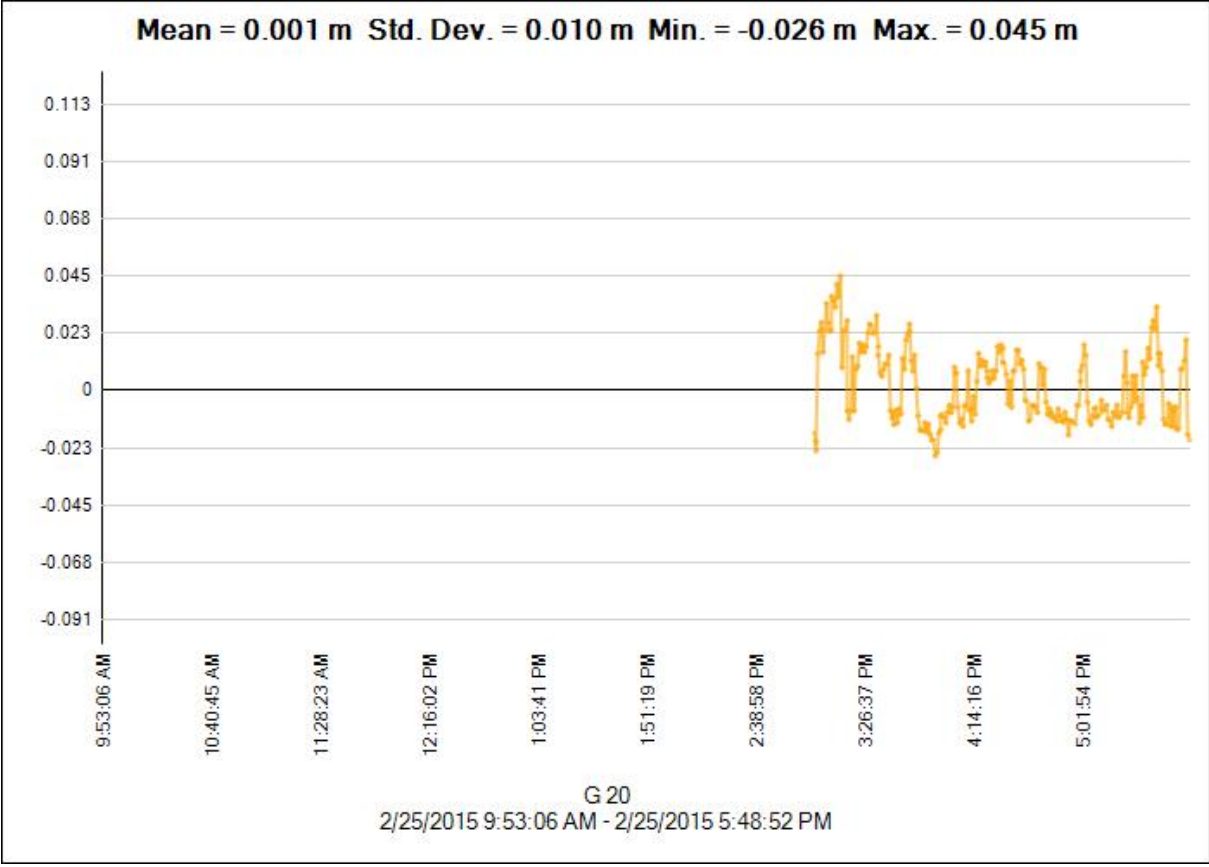
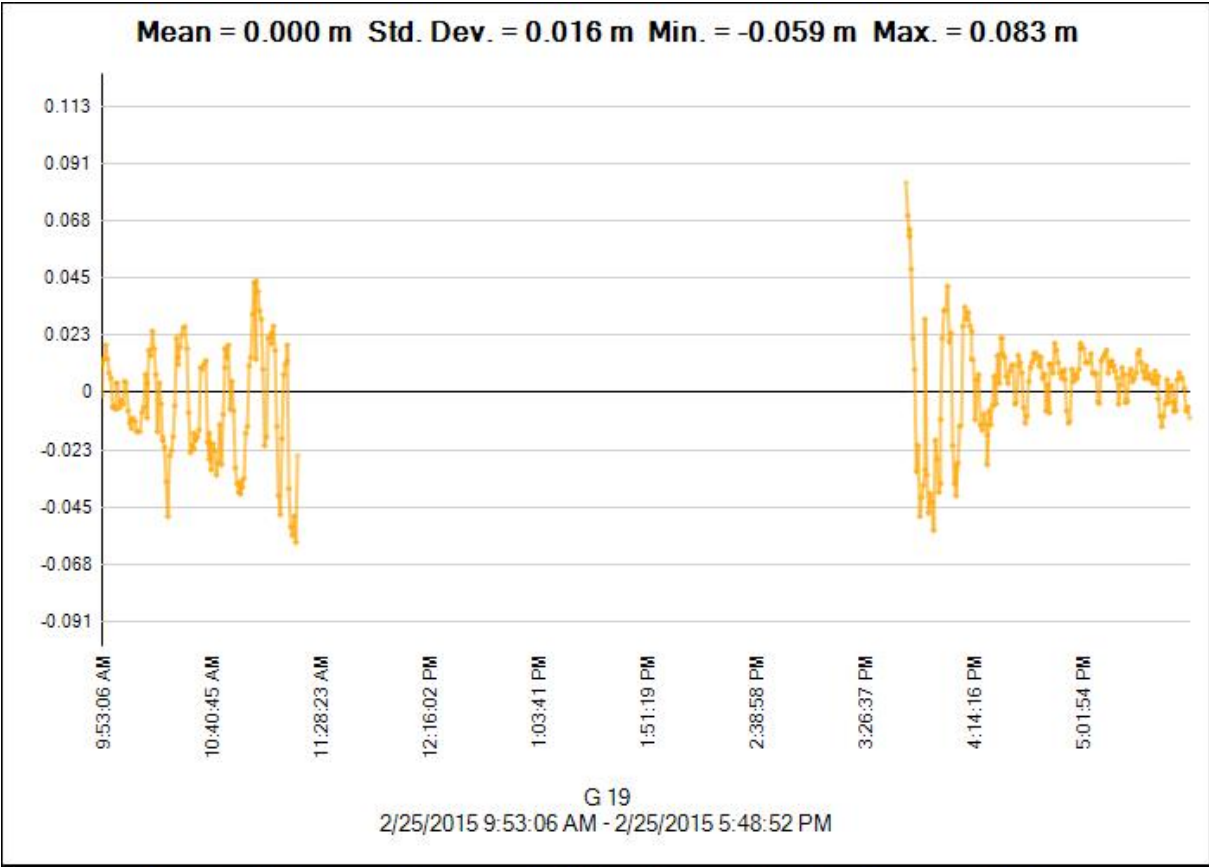


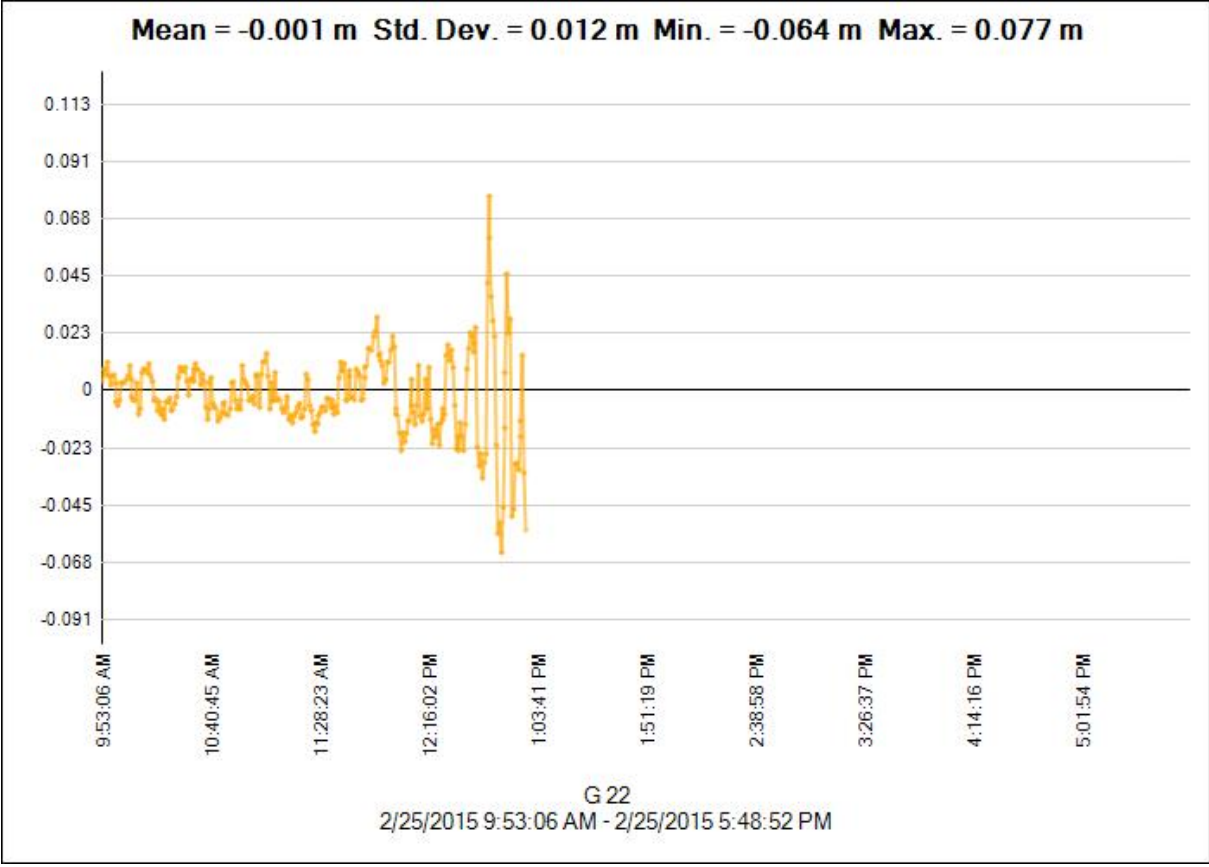
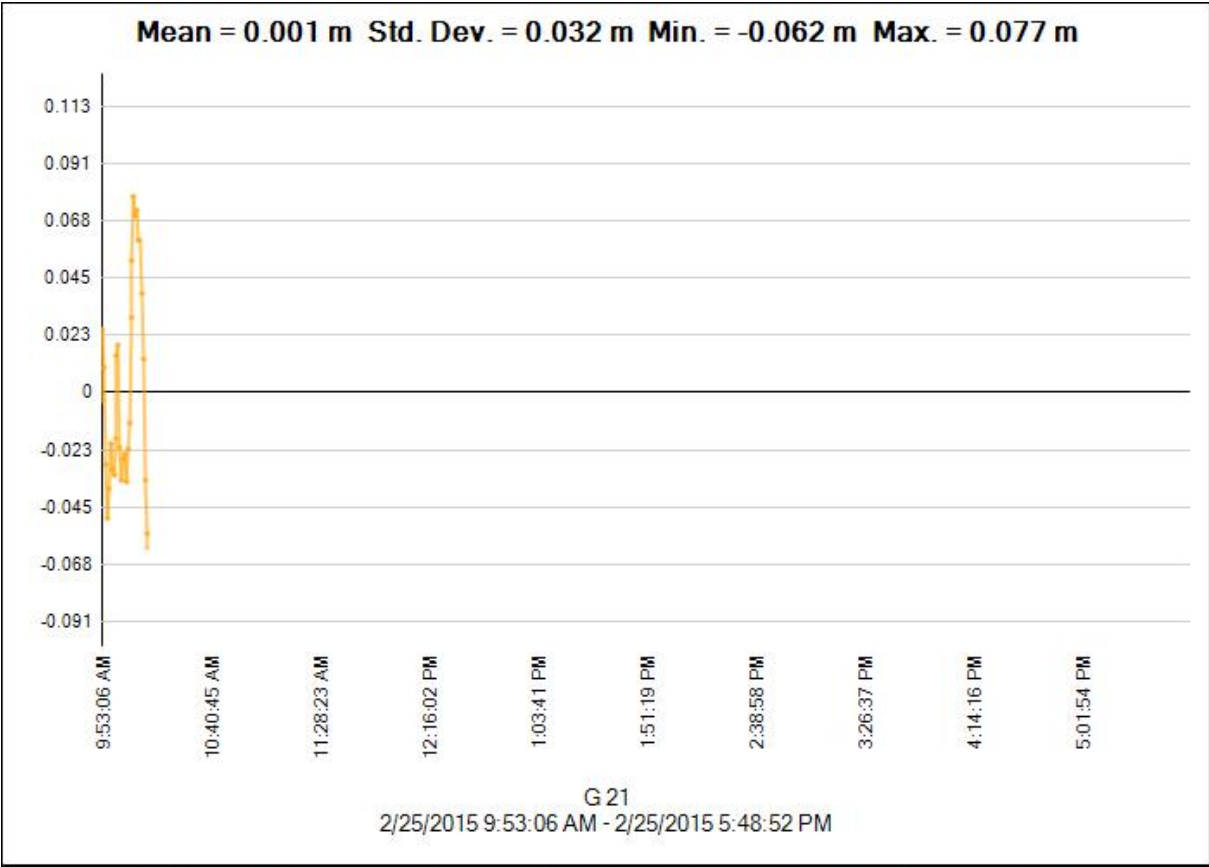


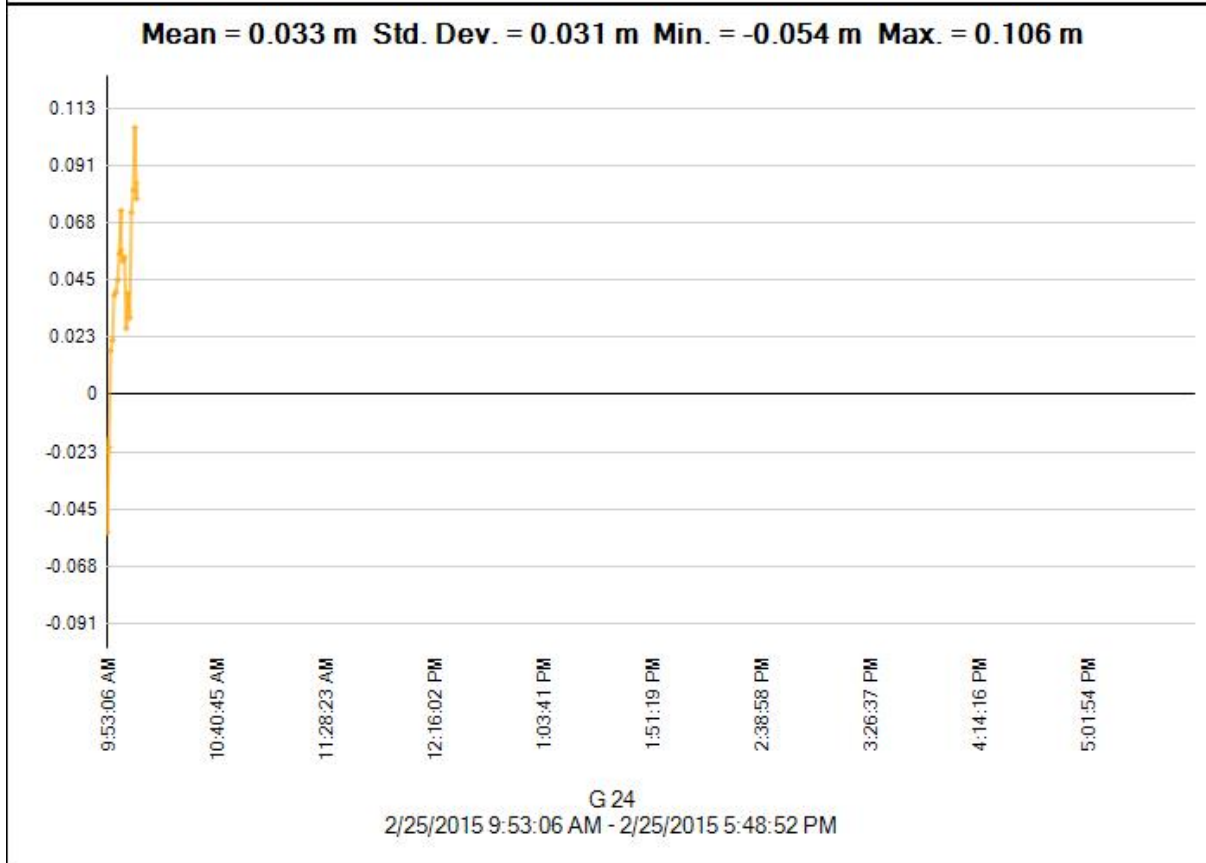
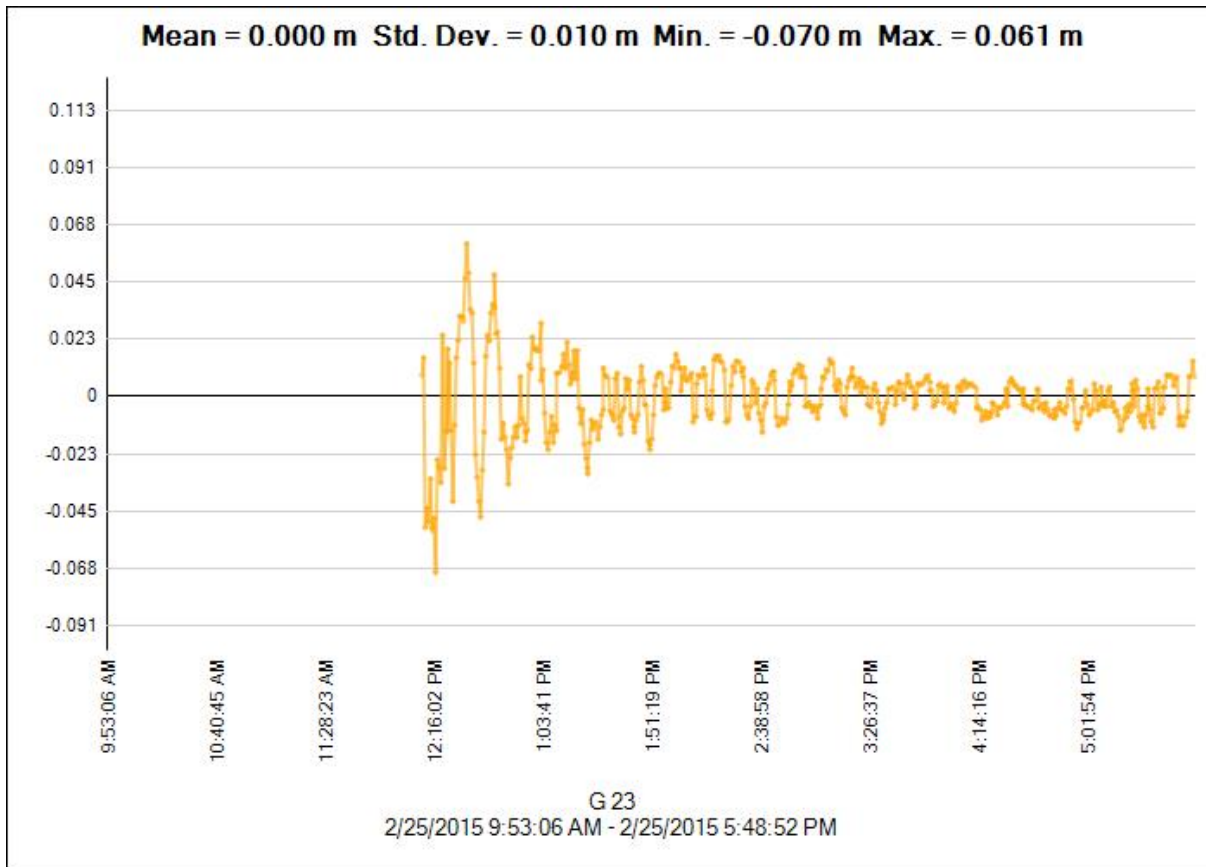


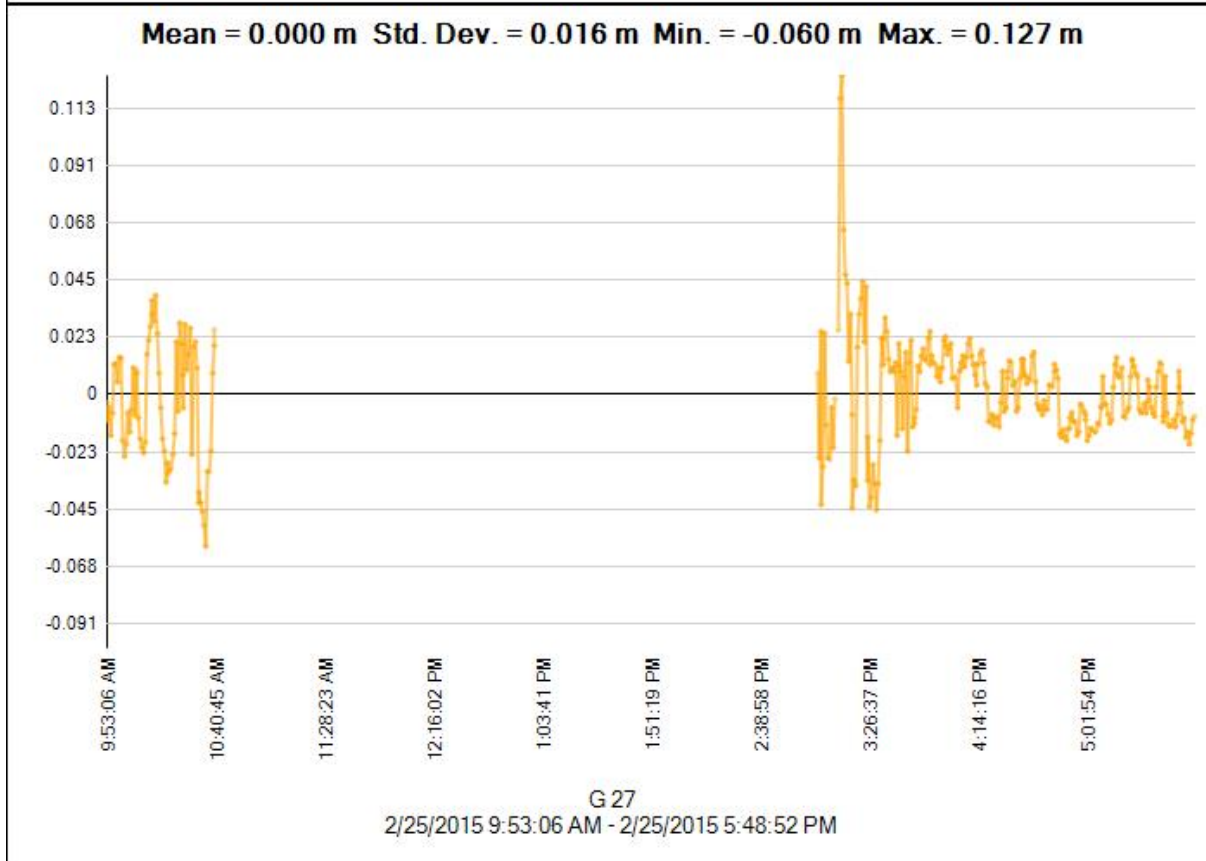
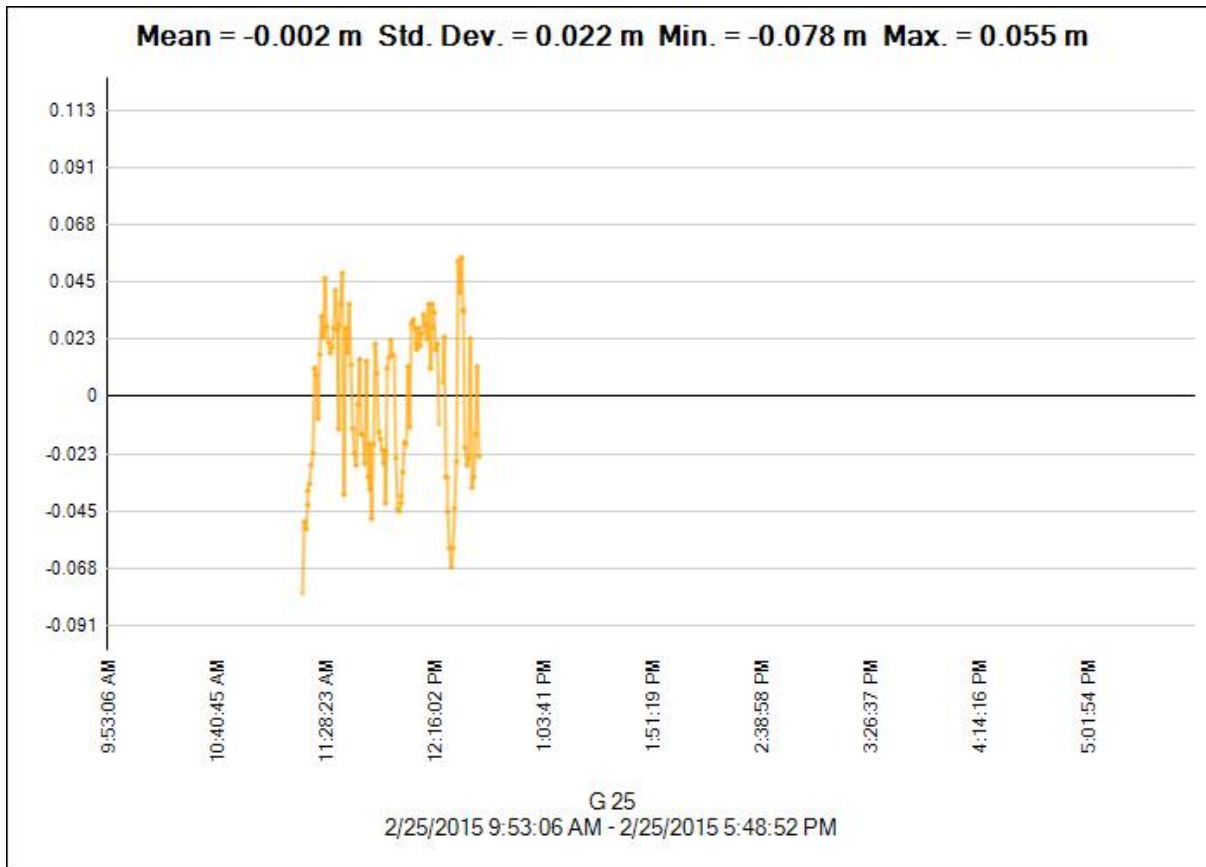


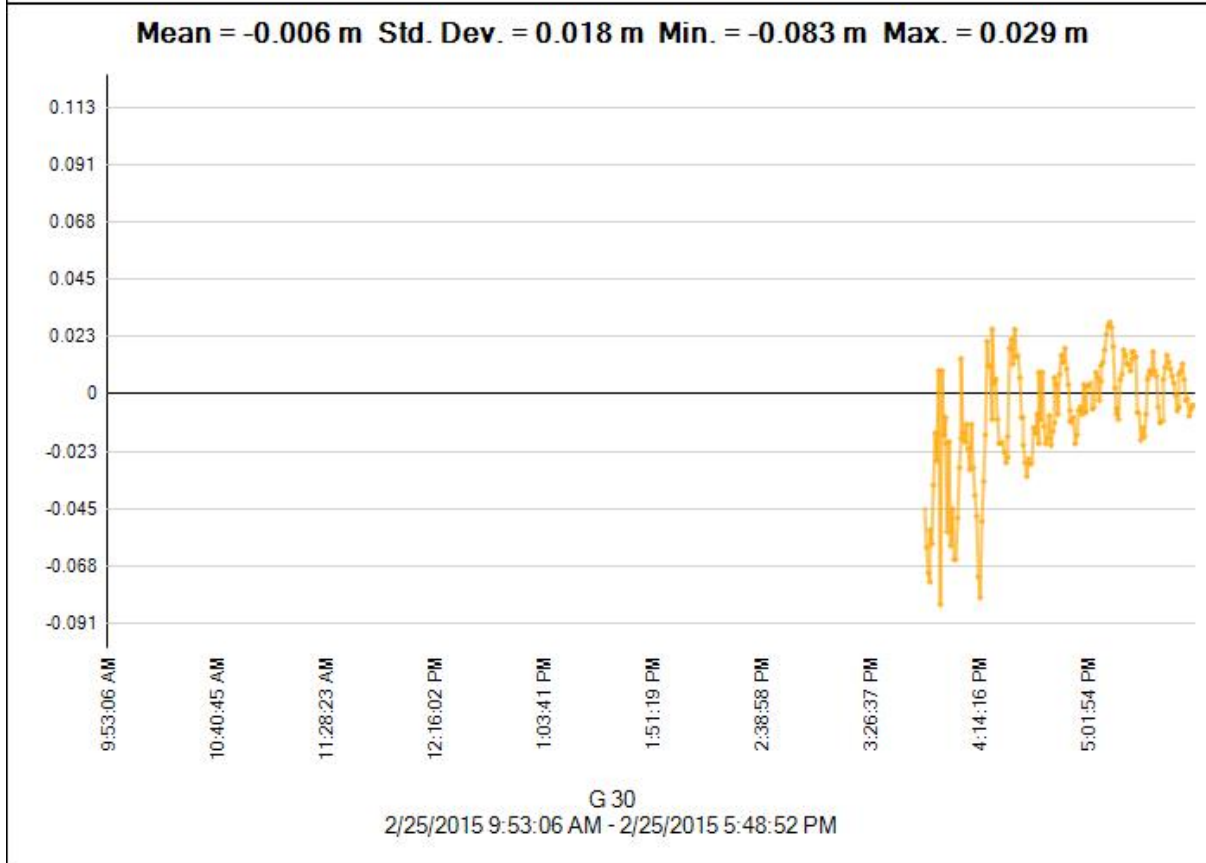
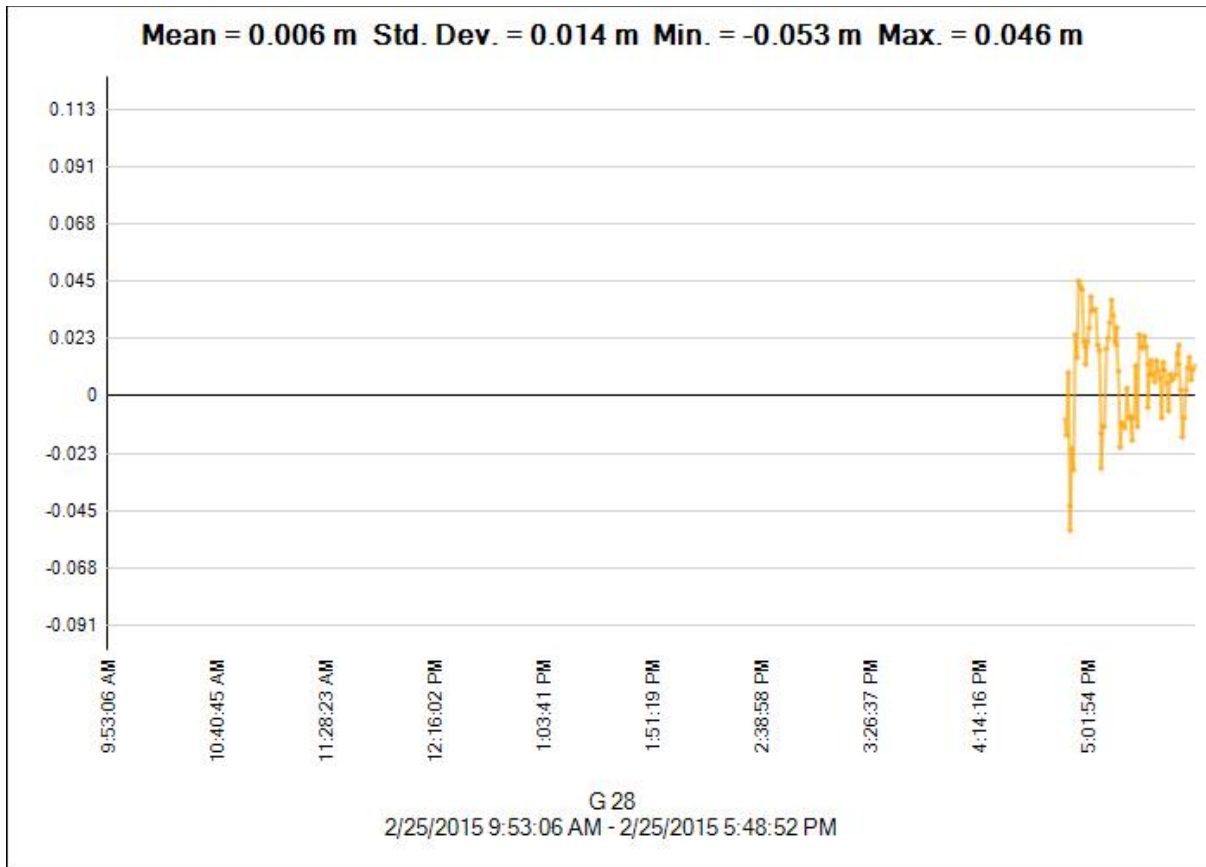


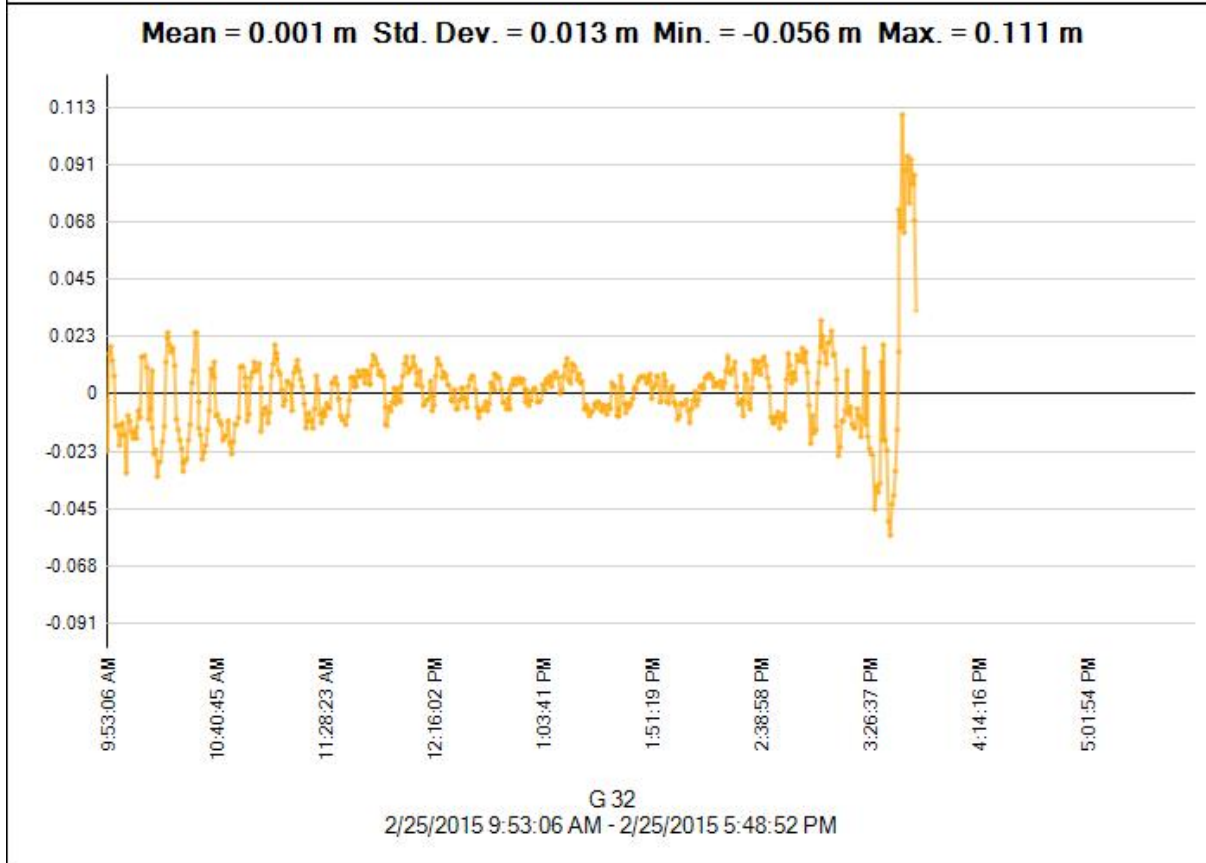
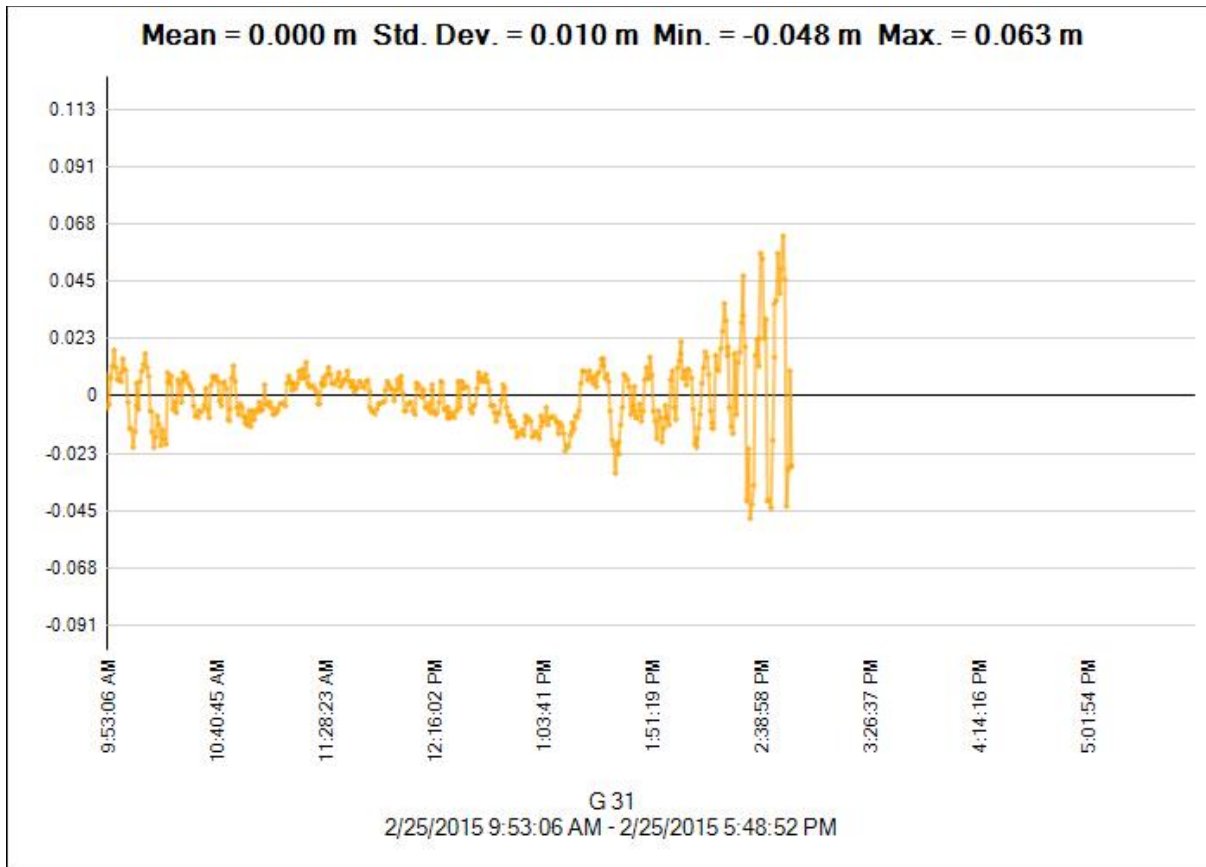














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**Processing style**

Elevation mask: 10.0 deg  
Auto start processing: Yes  
Start automatic ID numbering: AUTO0001  
Continuous vectors: No  
Generate residuals: Yes  
Antenna model: Automatic  
Ephemeris type: Automatic  
Frequency: Multiple Frequencies  
Processing Interval: Use all data  
Force float: No

**Acceptance Criteria**

Vector Component	Flag 	Fail 
Horizontal Precision >	0.050 m + 1.000 ppm	0.100 m + 1.000 ppm
Vertical Precision >	0.100 m + 1.000 ppm	0.200 m + 1.000 ppm

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**KTUS\_APT\_1 - AH8499 (4:39:34 PM-5:56:14 PM) (S16)**

---

Baseline observation: KTUS\_APT\_1 --- AH8499 (B16)  
Processed: 3/5/2015 3:38:00 PM  
Solution type: Fixed  
Frequency used: Dual Frequency (L1, L2)  
Horizontal precision: 0.006 m  
Vertical precision: 0.024 m  
RMS: 0.005 m  
Maximum PDOP: 2.258  
Ephemeris used: Broadcast  
Antenna model: NGS Absolute  
Processing start time: 2/27/2015 4:39:34 PM (Local: UTC-7hr)  
Processing stop time: 2/27/2015 5:56:14 PM (Local: UTC-7hr)  
Processing duration: 01:16:40  
Processing interval: 5 seconds



### Vector Components (Mark to Mark)

From:		KTUS_APT_1			
Grid		Local		Global	
Easting	305038.073 m	Latitude	N32°07'29.14239"	Latitude	N32°07'29.14238"
Northing	125113.588 m	Longitude	W110°56'42.22790"	Longitude	W110°56'42.22790"
Elevation	801.705 m	Height	772.276 m	Height	772.276 m

To:		AH8499			
Grid		Local		Global	
Easting	302406.574 m	Latitude	N32°13'38.92587"	Latitude	N32°13'38.92587"
Northing	136480.958 m	Longitude	W110°58'18.80681"	Longitude	W110°58'18.80681"
Elevation	738.788 m	Height	709.518 m	Height	709.518 m

Vector					
$\Delta$ Easting	-2631.499 m	NS Fwd Azimuth	347°29'00"	$\Delta$ X	-174.157 m
$\Delta$ Northing	11367.370 m	Ellipsoid Dist.	11667.978 m	$\Delta$ Y	6619.709 m
$\Delta$ Elevation	-62.917 m	$\Delta$ Height	-62.758 m	$\Delta$ Z	9608.666 m

### Standard Errors

Vector errors:					
$\sigma$ $\Delta$ Easting	0.002 m	$\sigma$ NS fwd Azimuth	0°00'00"	$\sigma$ $\Delta$ X	0.004 m
$\sigma$ $\Delta$ Northing	0.002 m	$\sigma$ Ellipsoid Dist.	0.002 m	$\sigma$ $\Delta$ Y	0.009 m
$\sigma$ $\Delta$ Elevation	0.012 m	$\sigma$ $\Delta$ Height	0.012 m	$\sigma$ $\Delta$ Z	0.007 m

### Aposteriori Covariance Matrix (Meter<sup>2</sup>)

	X	Y	Z
X	0.0000146149		
Y	0.0000322330	0.0000895359	
Z	-0.0000218155	-0.0000616965	0.0000496539

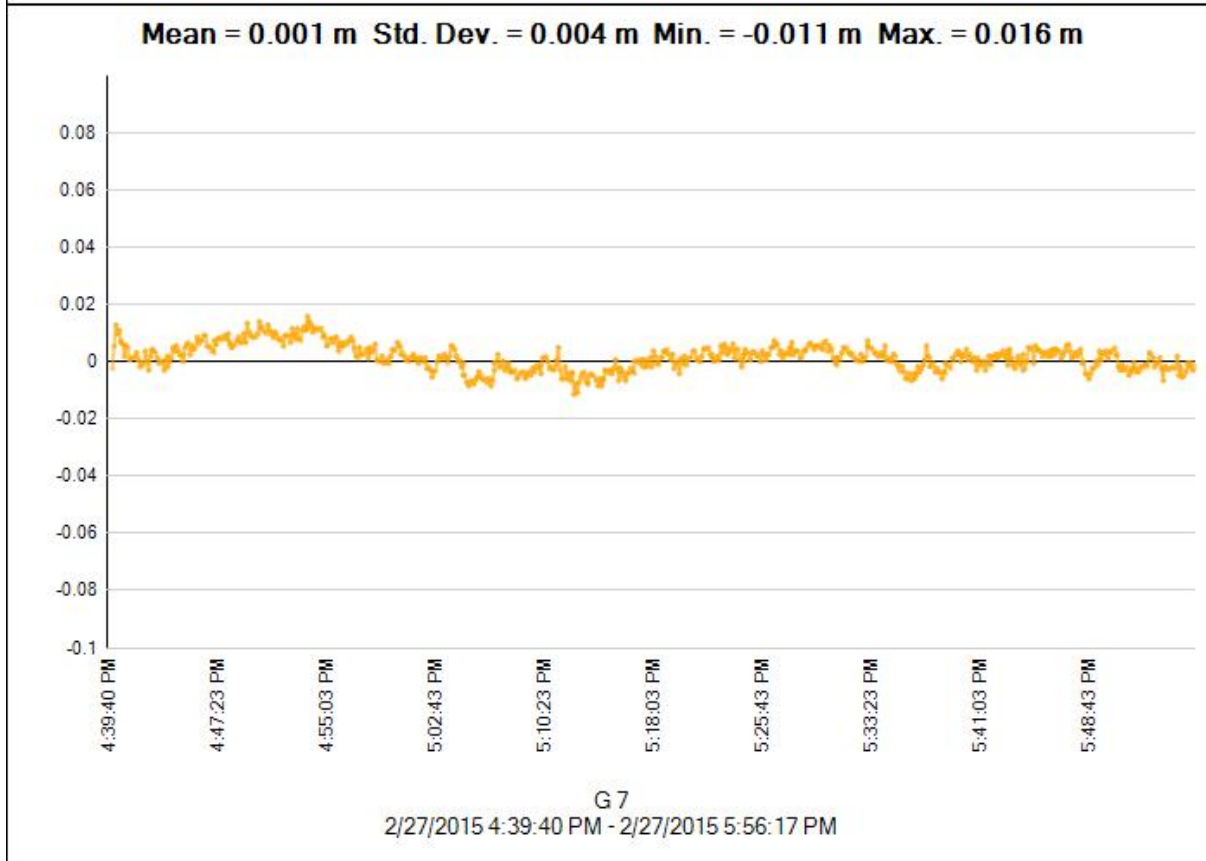
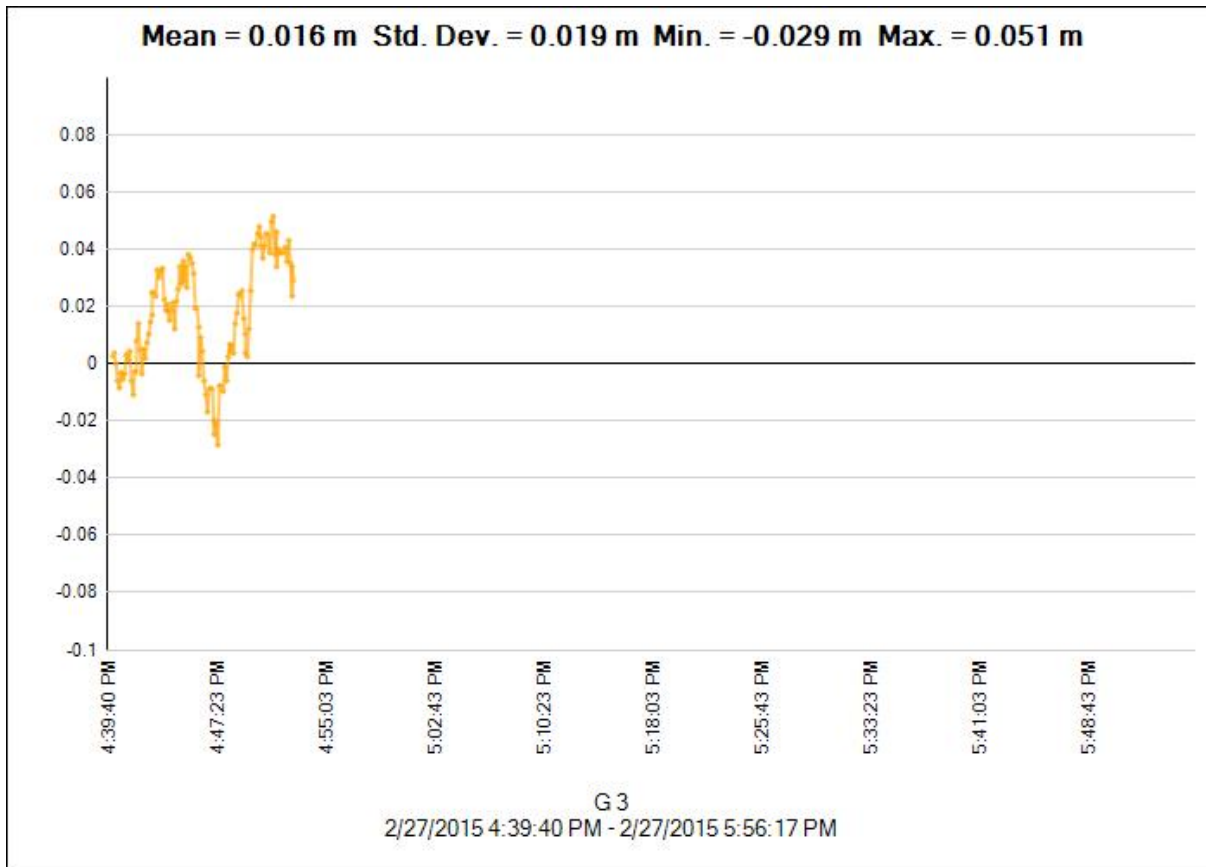
## Occupations

	From	To
Point ID:	KTUS_APT_1	AH8499
Data file:	\\conas\projects \312014478_PAG_2015\Acquisition \Ground_Survey\Adjustments\4478 PAG LiDAR Network\00050580 resampled.15o	\\conas\projects \312014478_PAG_2015\Acquisition \Ground_Survey\Adjustments\4478 PAG LiDAR Network\00110580 resampled.15o
Receiver type:	Geo Explorer 3	Geo Explorer 3
Receiver serial number:		
Antenna type:	702 Rev 3.00	702 Rev 3.00
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

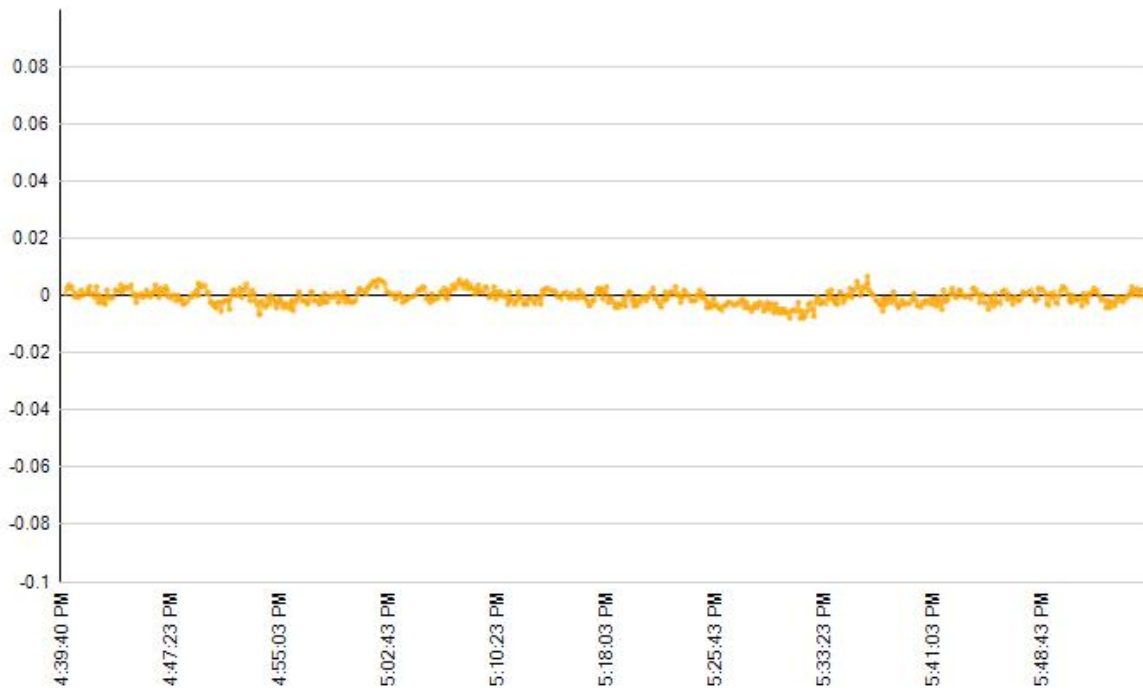
# Tracking Summary

SV	2/27/2015 4:39:34 PM	Duration: 01:16:40	Major interval: 00:10:00	2/27/2015 5:56:14 PM
G 3	L1 L2			
G 5	L1 L2			
G 7	L1 L2			
G 9	L1 L2			
G 10	L1 L2			
G 11	L1 L2			
G 16	L1 L2			
G 19	L1 L2			
G 20	L1 L2			
G 23	L1 L2			
G 27	L1 L2			
G 28	L1 L2			
G 30	L1 L2			

# Residuals

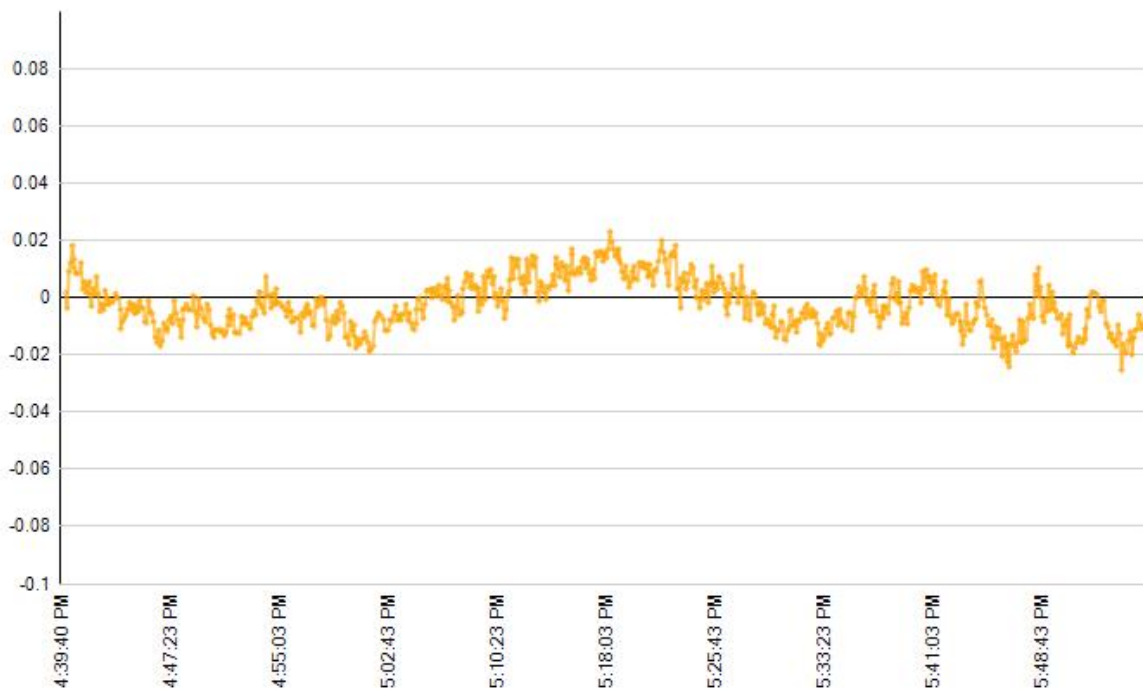


Mean = -0.001 m Std. Dev. = 0.002 m Min. = -0.008 m Max. = 0.007 m



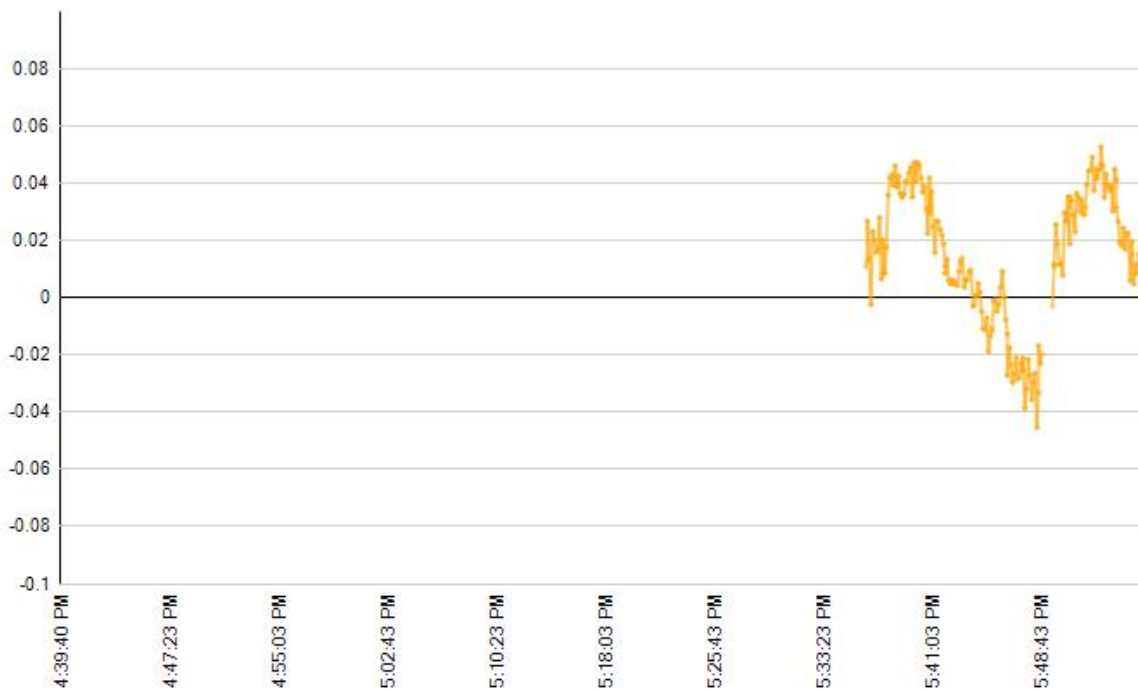
G 9  
2/27/2015 4:39:40 PM - 2/27/2015 5:56:17 PM

Mean = -0.002 m Std. Dev. = 0.008 m Min. = -0.025 m Max. = 0.023 m



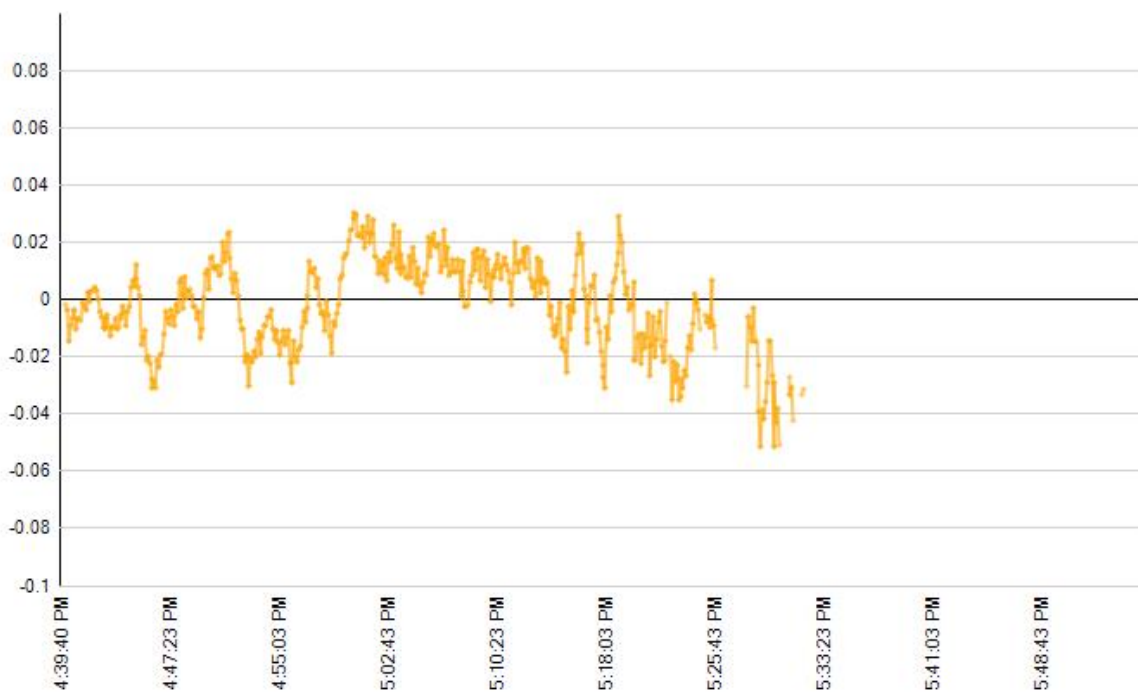
G 10  
2/27/2015 4:39:40 PM - 2/27/2015 5:56:17 PM

Mean = 0.015 m Std. Dev. = 0.022 m Min. = -0.045 m Max. = 0.053 m



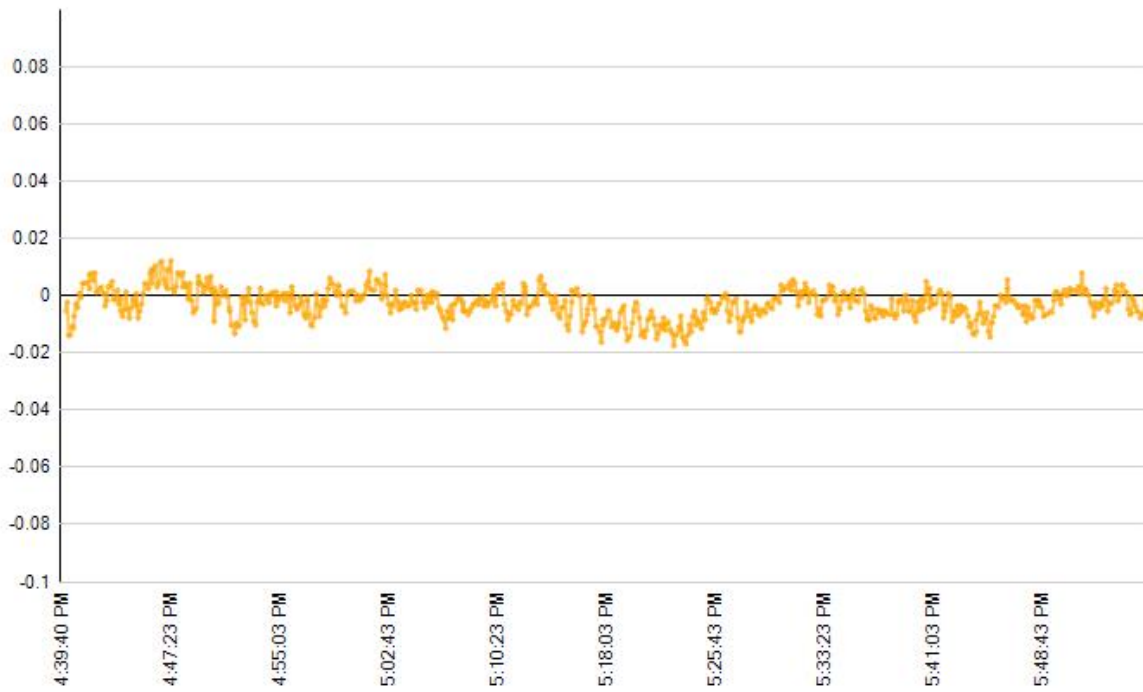
G 11  
2/27/2015 4:39:40 PM - 2/27/2015 5:56:17 PM

Mean = -0.002 m Std. Dev. = 0.015 m Min. = -0.051 m Max. = 0.030 m



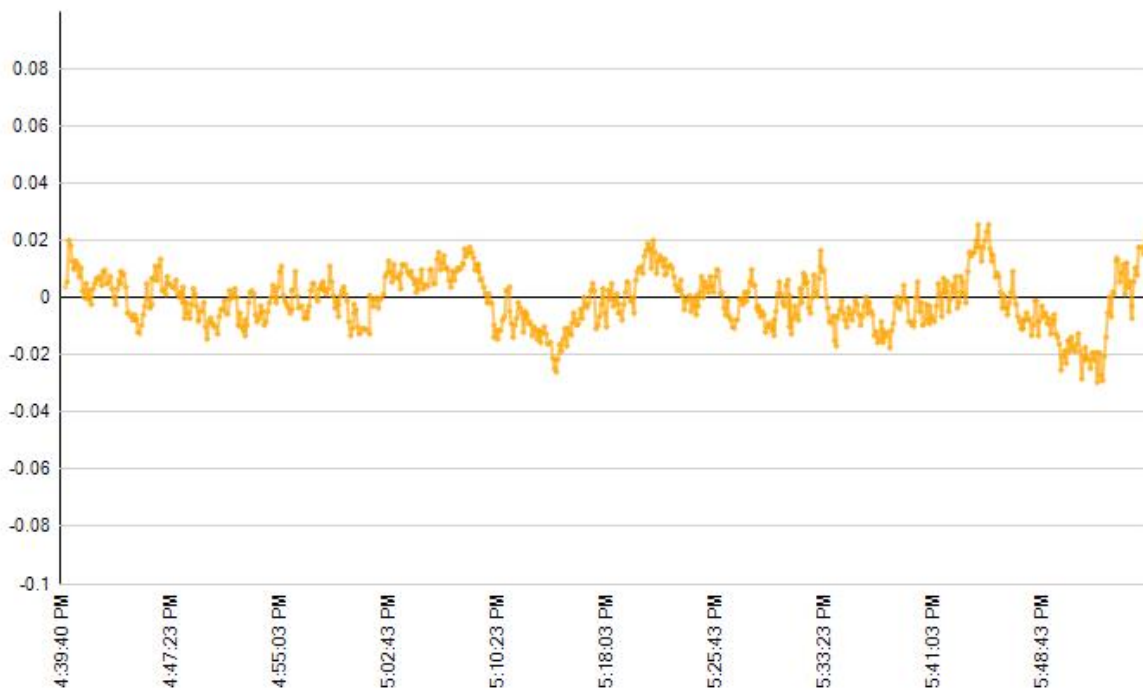
G 16  
2/27/2015 4:39:40 PM - 2/27/2015 5:56:17 PM

Mean = -0.003 m Std. Dev. = 0.005 m Min. = -0.018 m Max. = 0.012 m



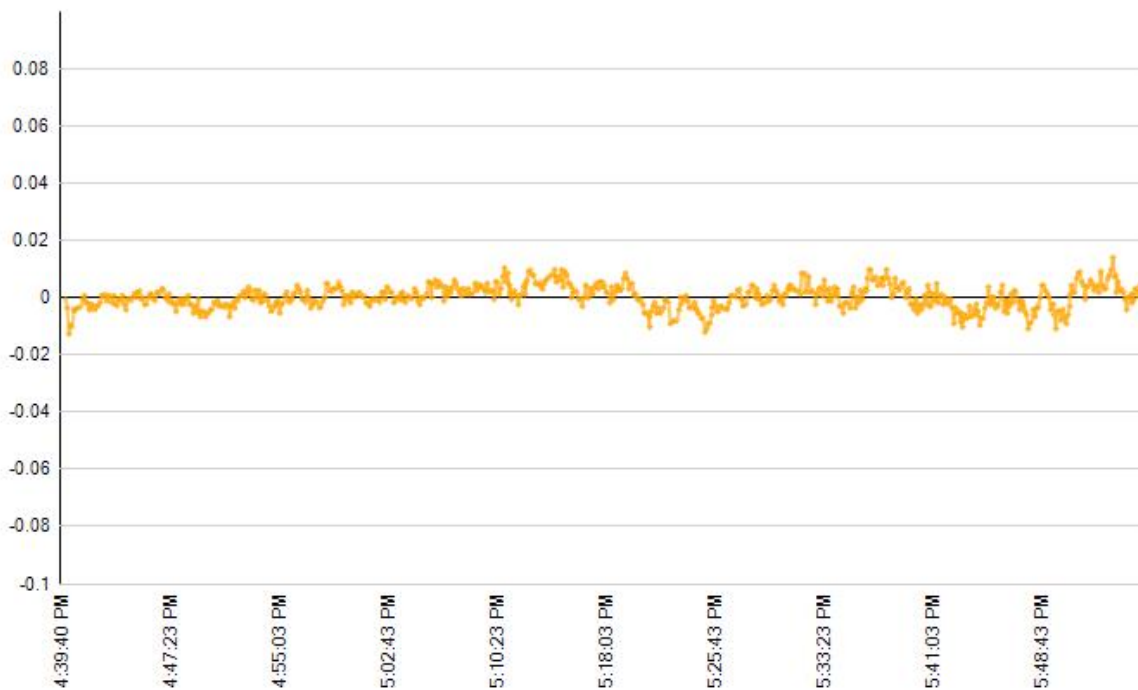
G 19  
2/27/2015 4:39:40 PM - 2/27/2015 5:56:17 PM

Mean = -0.001 m Std. Dev. = 0.009 m Min. = -0.030 m Max. = 0.025 m



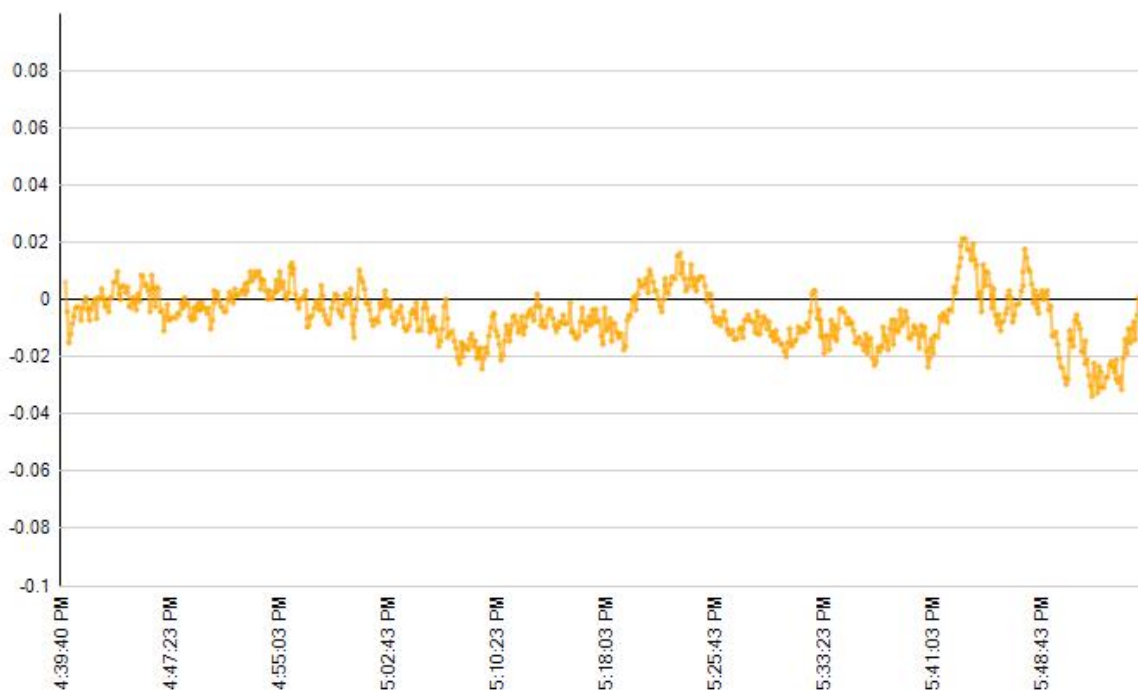
G 20  
2/27/2015 4:39:40 PM - 2/27/2015 5:56:17 PM

Mean = 0.000 m Std. Dev. = 0.004 m Min. = -0.013 m Max. = 0.014 m



G 23  
2/27/2015 4:39:40 PM - 2/27/2015 5:56:17 PM

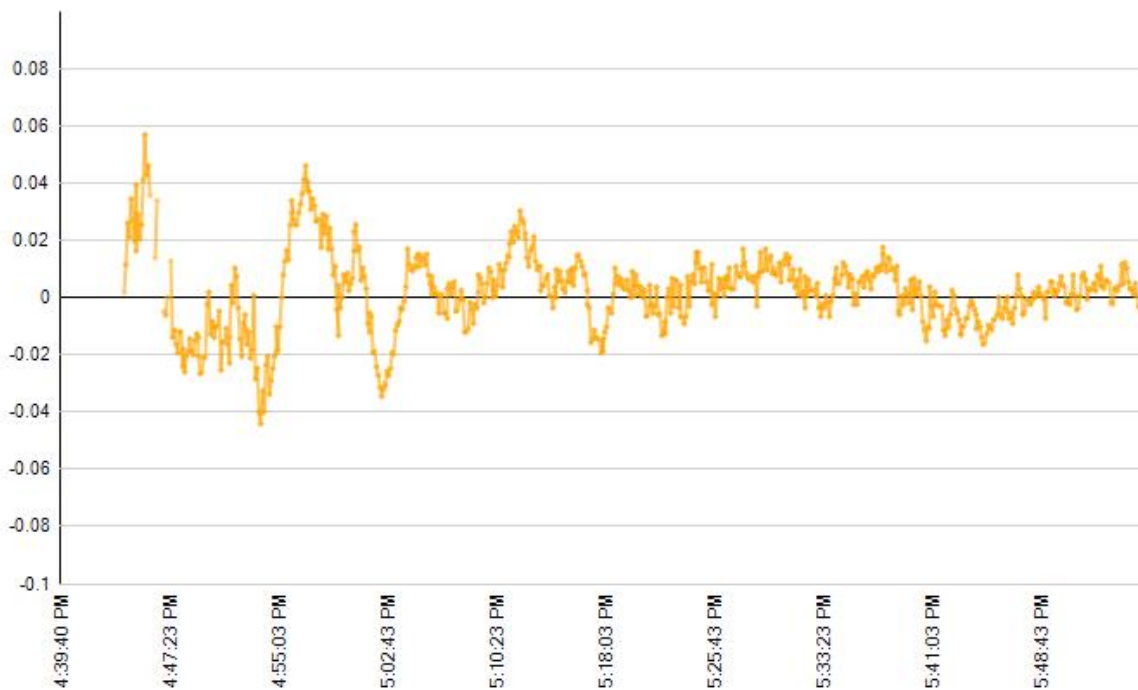
Mean = -0.005 m Std. Dev. = 0.009 m Min. = -0.034 m Max. = 0.021 m



G 27  
2/27/2015 4:39:40 PM - 2/27/2015 5:56:17 PM

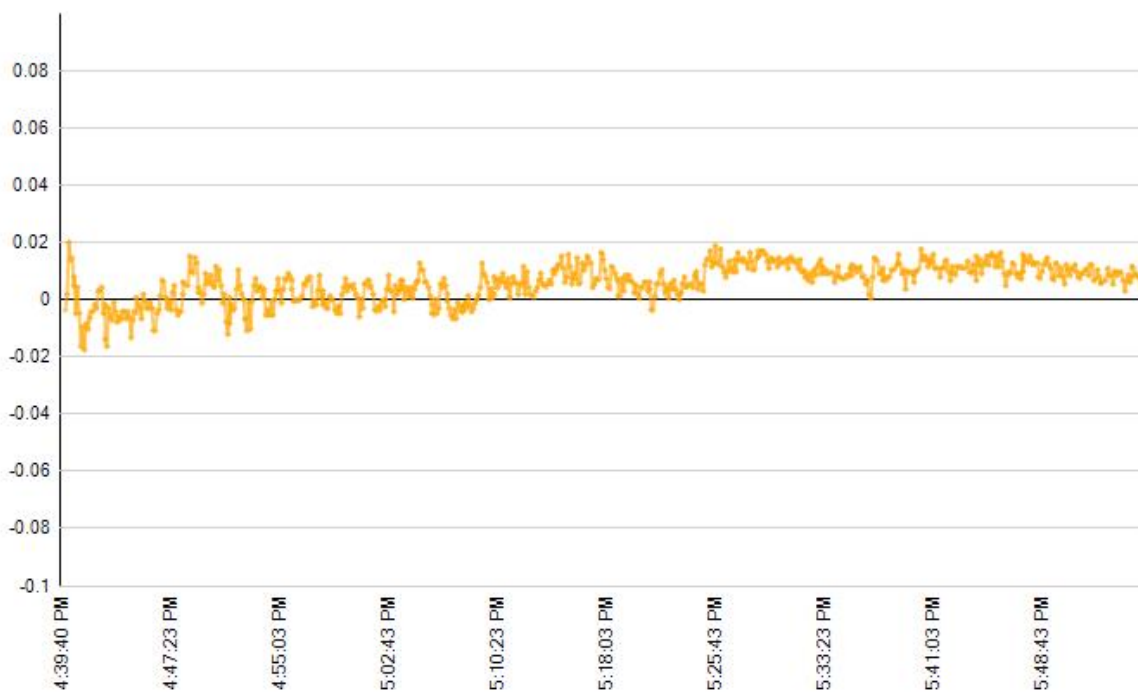


Mean = 0.002 m Std. Dev. = 0.013 m Min. = -0.044 m Max. = 0.057 m



G 28  
2/27/2015 4:39:40 PM - 2/27/2015 5:56:17 PM

Mean = 0.006 m Std. Dev. = 0.006 m Min. = -0.017 m Max. = 0.020 m





G 30  
2/27/2015 4:39:40 PM - 2/27/2015 5:56:17 PM

---

**Processing style**

Elevation mask: 10.0 deg  
Auto start processing: Yes  
Start automatic ID numbering: AUTO0001  
Continuous vectors: No  
Generate residuals: Yes  
Antenna model: Automatic  
Ephemeris type: Automatic  
Frequency: Multiple Frequencies  
Processing Interval: Use all data  
Force float: No

**Acceptance Criteria**

Vector Component	Flag 	Fail 
Horizontal Precision >	0.050 m + 1.000 ppm	0.100 m + 1.000 ppm
Vertical Precision >	0.100 m + 1.000 ppm	0.200 m + 1.000 ppm

---

**TUS\_4 - CZ0209 (8:48:24 AM-10:16:29 AM) (S21)**

---

Baseline observation: TUS\_4 --- CZ0209 (B21)  
Processed: 3/6/2015 2:31:32 PM  
Solution type: Fixed  
Frequency used: Dual Frequency (L1, L2)  
Horizontal precision: 0.005 m  
Vertical precision: 0.020 m  
RMS: 0.005 m  
Maximum PDOP: 2.609  
Ephemeris used: Broadcast  
Antenna model: NGS Absolute  
Processing start time: 2/28/2015 8:48:24 AM (Local: UTC-7hr)  
Processing stop time: 2/28/2015 10:16:29 AM (Local: UTC-7hr)  
Processing duration: 01:28:05  
Processing interval: 5 seconds

### Vector Components (Mark to Mark)

From:		CZ0209			
Grid		Local		Global	
Easting	303689.998 m	Latitude	N32°05'38.54768"	Latitude	N32°05'38.54768"
Northing	121694.799 m	Longitude	W110°57'34.81248"	Longitude	W110°57'34.81248"
Elevation	788.857 m	Height	759.352 m	Height	759.352 m

To:		TUS_4			
Grid		Local		Global	
Easting	327174.176 m	Latitude	N31°49'26.53771"	Latitude	N31°49'26.53771"
Northing	91987.131 m	Longitude	W110°42'51.86129"	Longitude	W110°42'51.86129"
Elevation	1525.884 m	Height	1497.517 m	Height	1497.517 m

Vector					
$\Delta$ Easting	23484.177 m	NS Fwd Azimuth	142°10'47"	$\Delta$ X	15812.524 m
$\Delta$ Northing	-29707.668 m	Ellipsoid Dist.	37867.782 m	$\Delta$ Y	-23647.783 m
$\Delta$ Elevation	737.027 m	$\Delta$ Height	738.165 m	$\Delta$ Z	-25015.285 m

### Standard Errors

Vector errors:					
$\sigma$ $\Delta$ Easting	0.002 m	$\sigma$ NS fwd Azimuth	0°00'00"	$\sigma$ $\Delta$ X	0.003 m
$\sigma$ $\Delta$ Northing	0.002 m	$\sigma$ Ellipsoid Dist.	0.002 m	$\sigma$ $\Delta$ Y	0.008 m
$\sigma$ $\Delta$ Elevation	0.010 m	$\sigma$ $\Delta$ Height	0.010 m	$\sigma$ $\Delta$ Z	0.006 m

### Aposteriori Covariance Matrix (Meter<sup>2</sup>)

	X	Y	Z
X	0.0000106515		
Y	0.0000225851	0.0000696771	
Z	-0.0000142957	-0.0000434004	0.0000335554

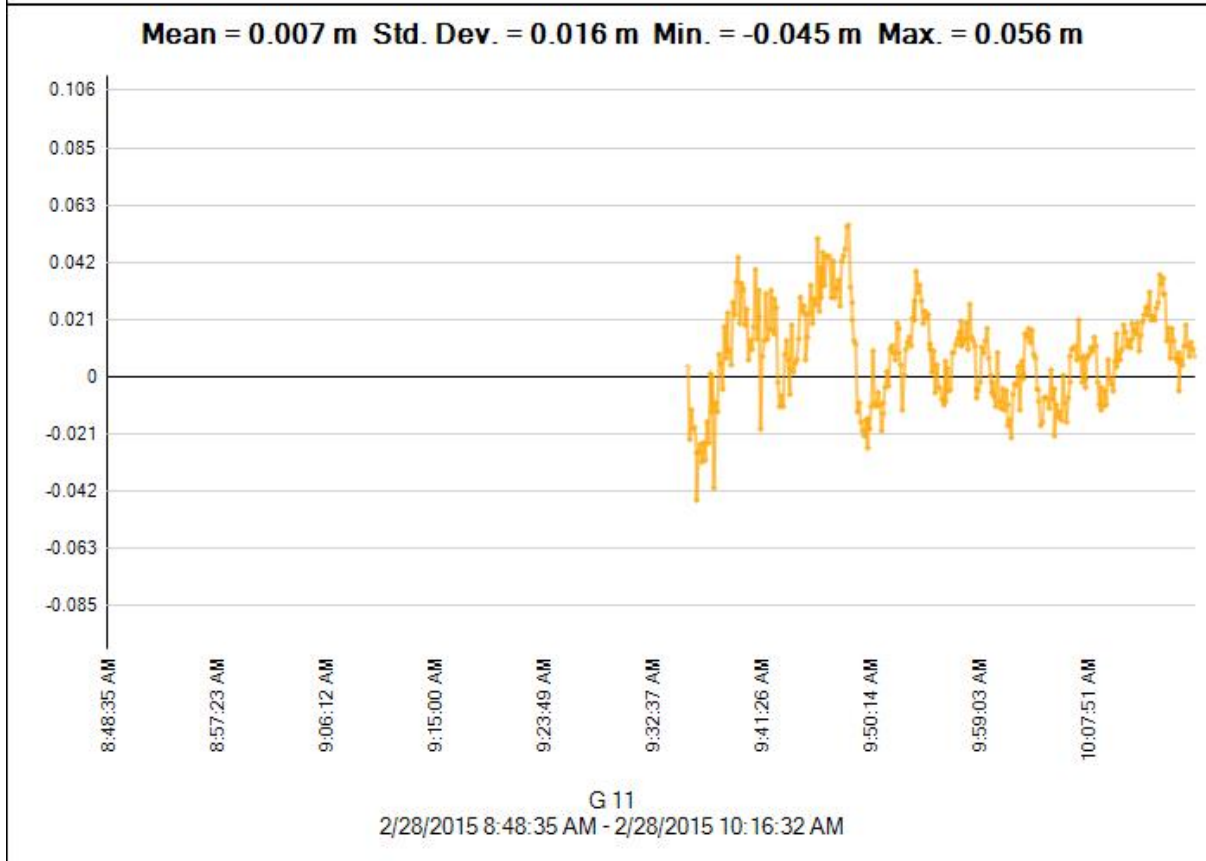
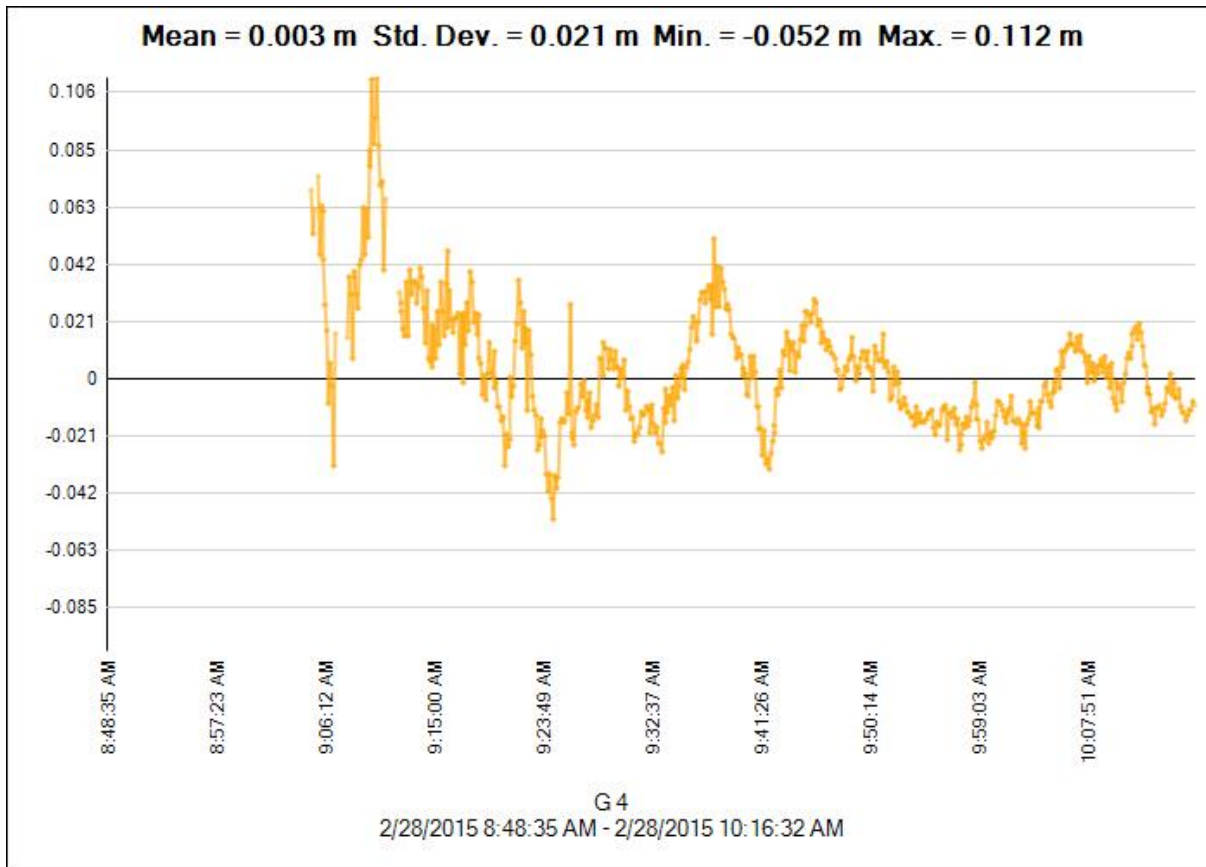
## Occupations

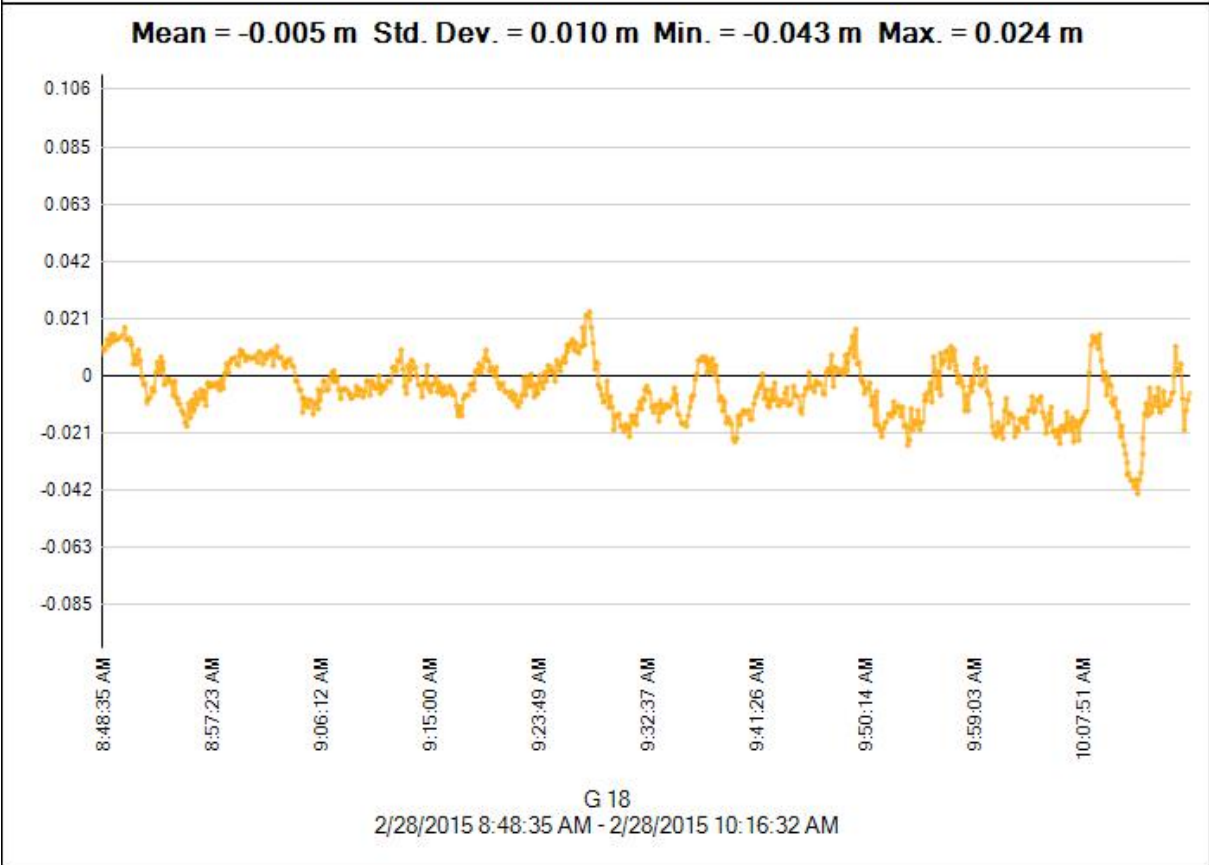
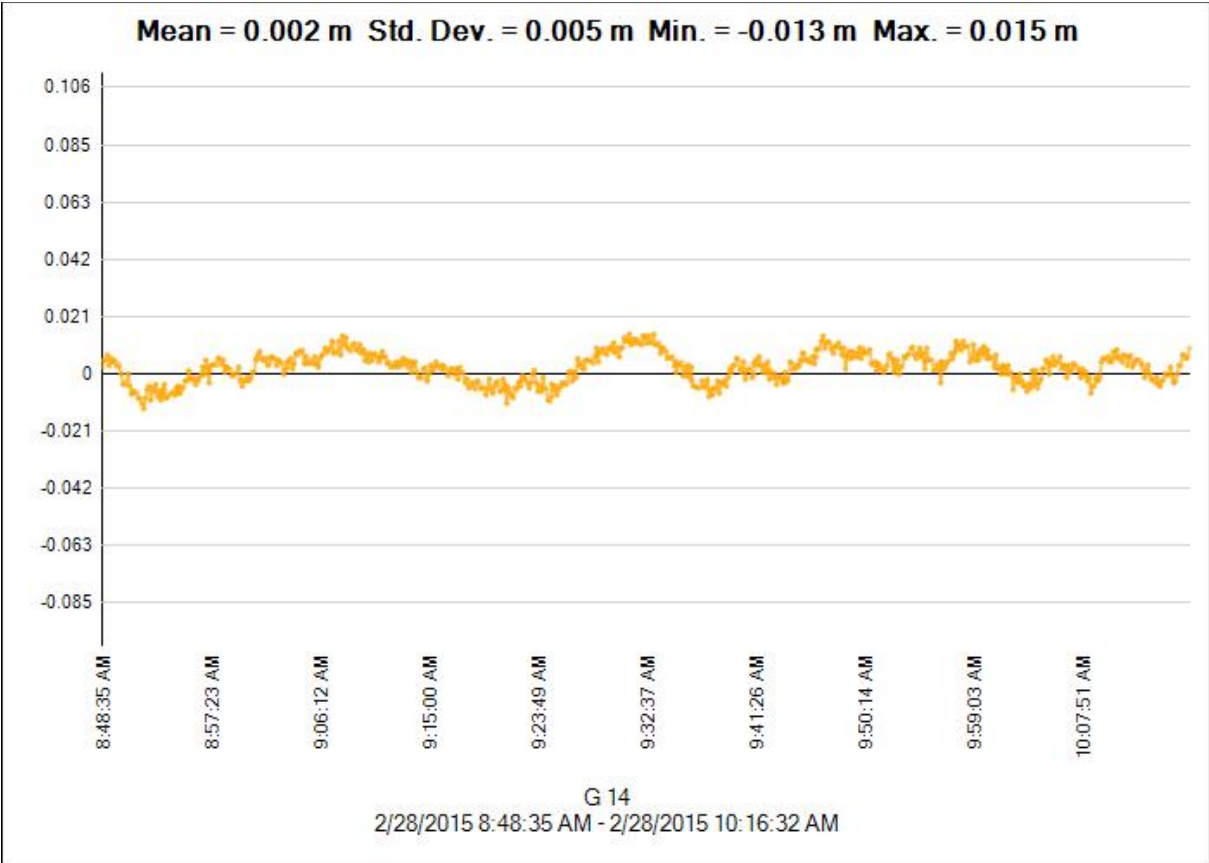
	From	To
<b>Point ID:</b>	CZ0209	TUS_4
<b>Data file:</b>	\\conas\projects \312014478_PAG_2015\Acquisition \Ground_Survey\Adjustments\4478 PAG LiDAR Network\00110591 resampled.15o	\\conas\projects \312014478_PAG_2015\Acquisition \Ground_Survey\Adjustments\4478 PAG LiDAR Network\00010592 resampled.15o
<b>Receiver type:</b>	Geo Explorer 3	Geo Explorer 3
<b>Receiver serial number:</b>		
<b>Antenna type:</b>	702 Rev 3.00	702 Rev 3.00
<b>Antenna serial number:</b>	-----	-----
<b>Antenna height (measured):</b>	2.065 m	2.065 m
<b>Antenna method:</b>	Antenna Phase Center	Antenna Phase Center

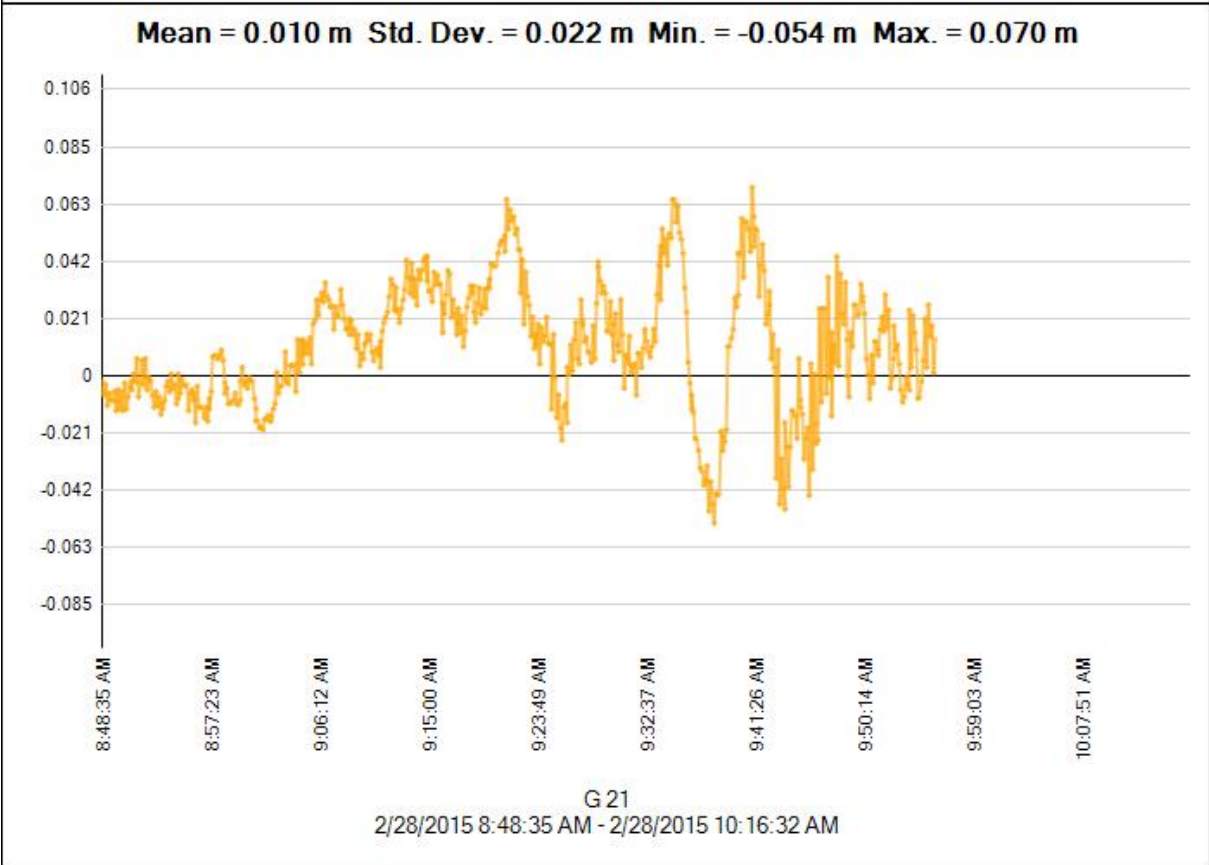
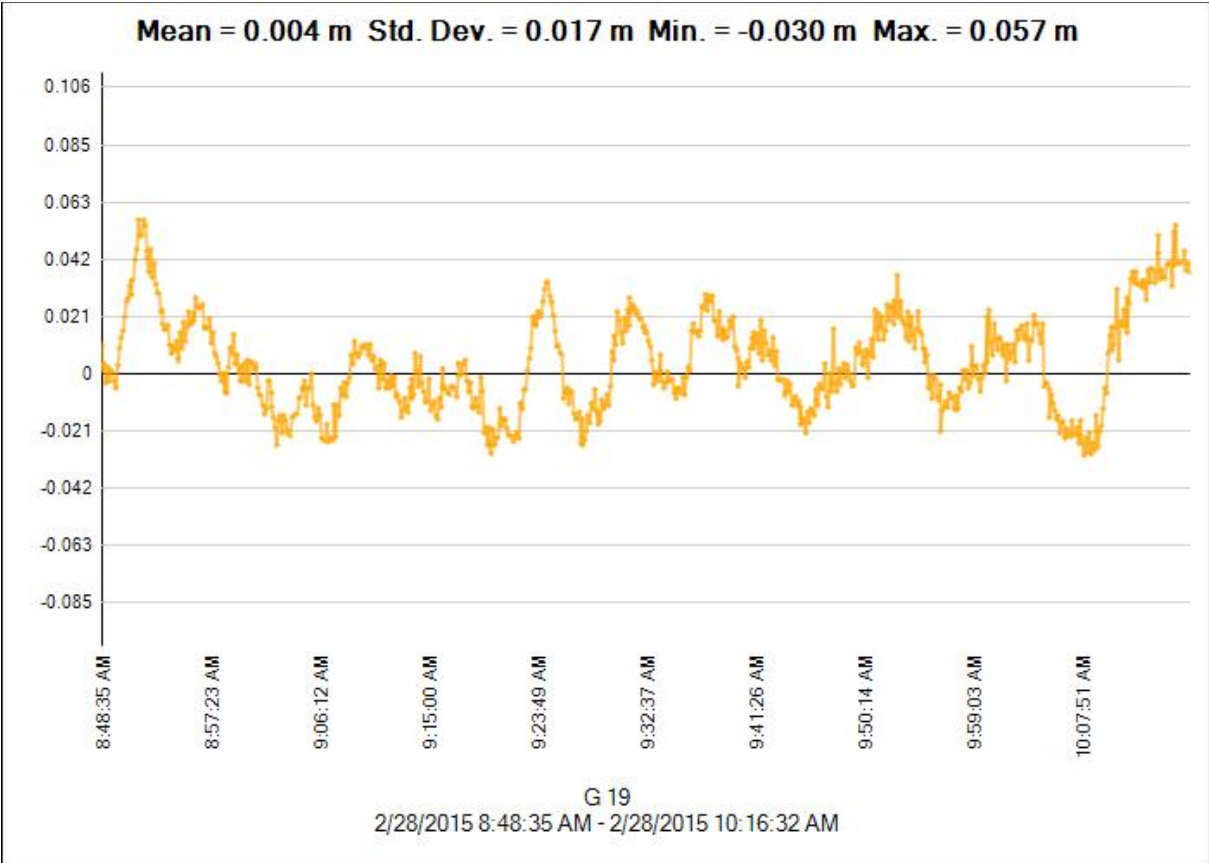
# Tracking Summary

SV	2/28/2015 8:48:24 AM	Duration: 01:28:05	Major interval: 00:10:00	2/28/2015 10:16:29 AM
G 4	L1 L2	[Timeline visualization for G 4]		
G 11	L1 L2	[Timeline visualization for G 11]		
G 14	L1 L2	[Timeline visualization for G 14]		
G 18	L1 L2	[Timeline visualization for G 18]		
G 19	L1 L2	[Timeline visualization for G 19]		
G 21	L1 L2	[Timeline visualization for G 21]		
G 22	L1 L2	[Timeline visualization for G 22]		
G 24	L1 L2	[Timeline visualization for G 24]		
G 25	L1 L2	[Timeline visualization for G 25]		
G 27	L1 L2	[Timeline visualization for G 27]		
G 31	L1 L2	[Timeline visualization for G 31]		
G 32	L1 L2	[Timeline visualization for G 32]		

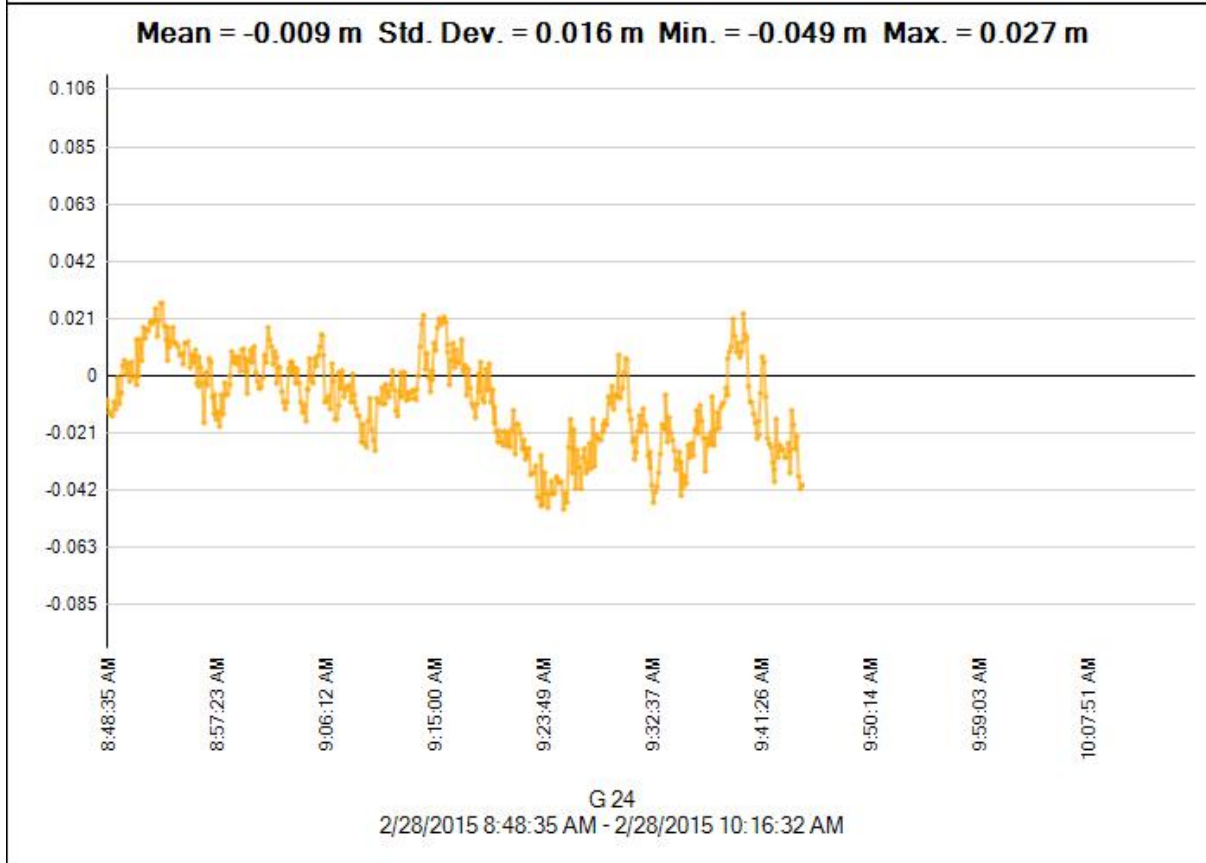
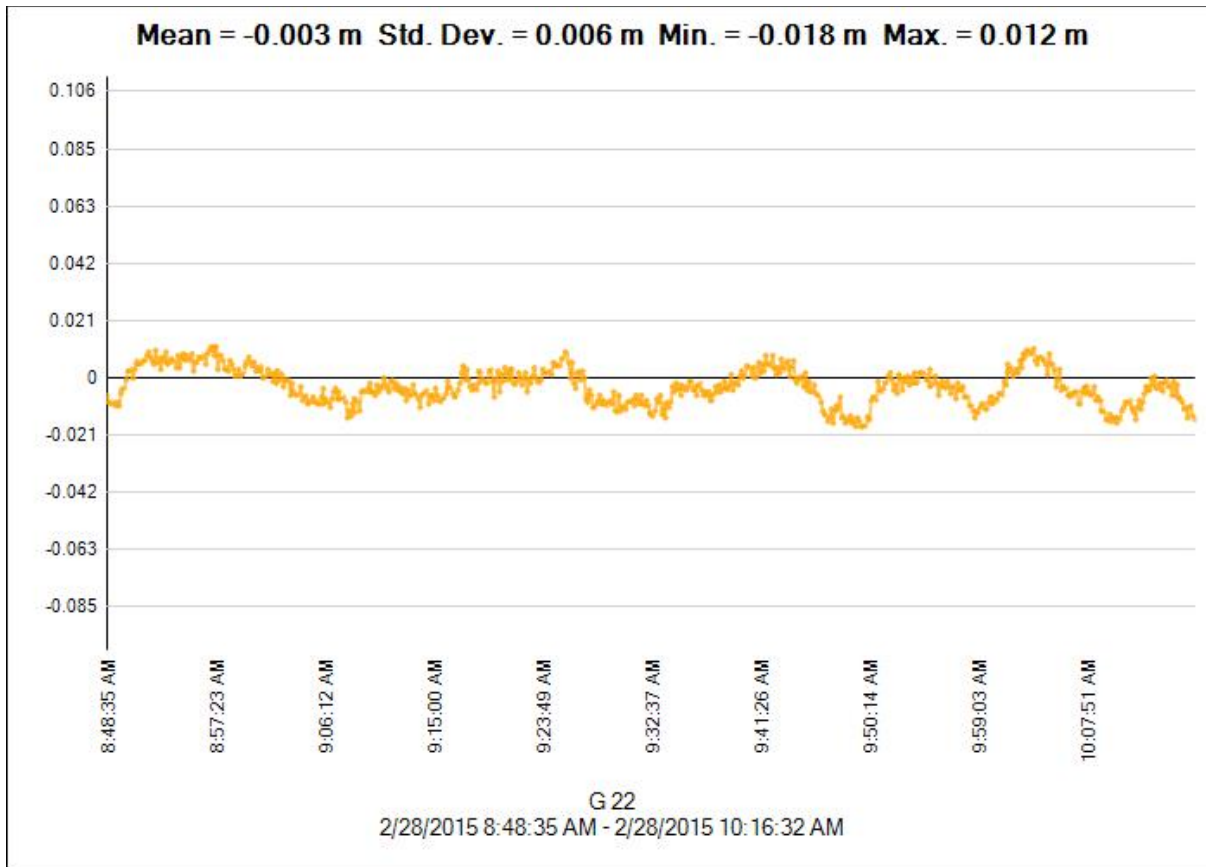
# Residuals

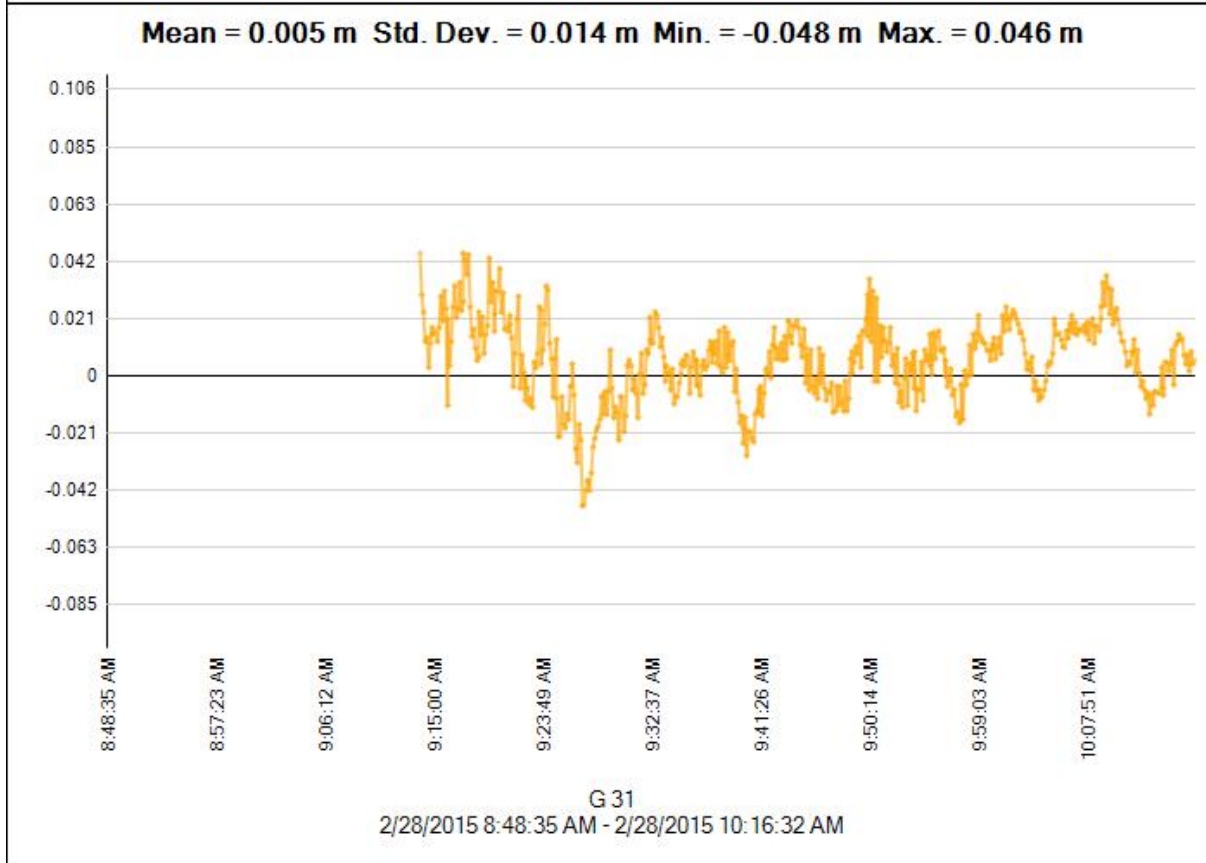
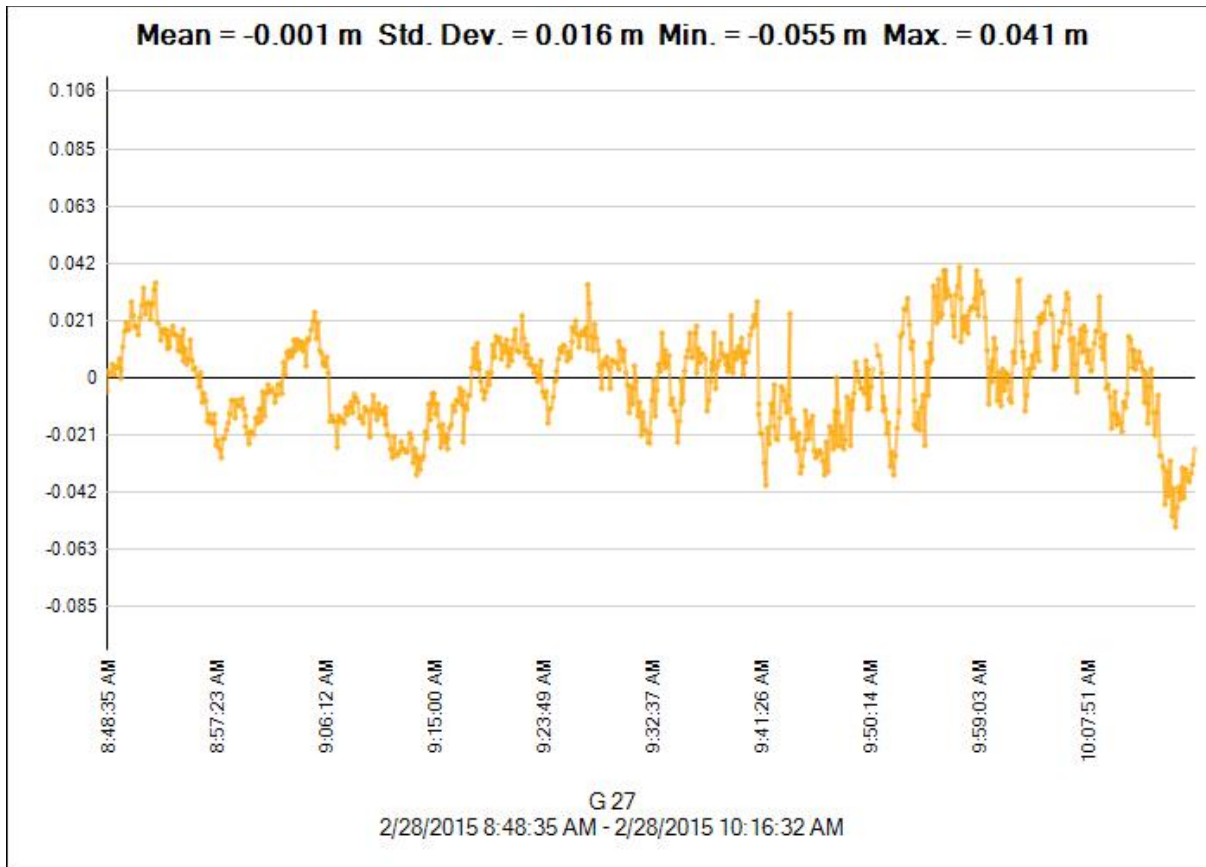


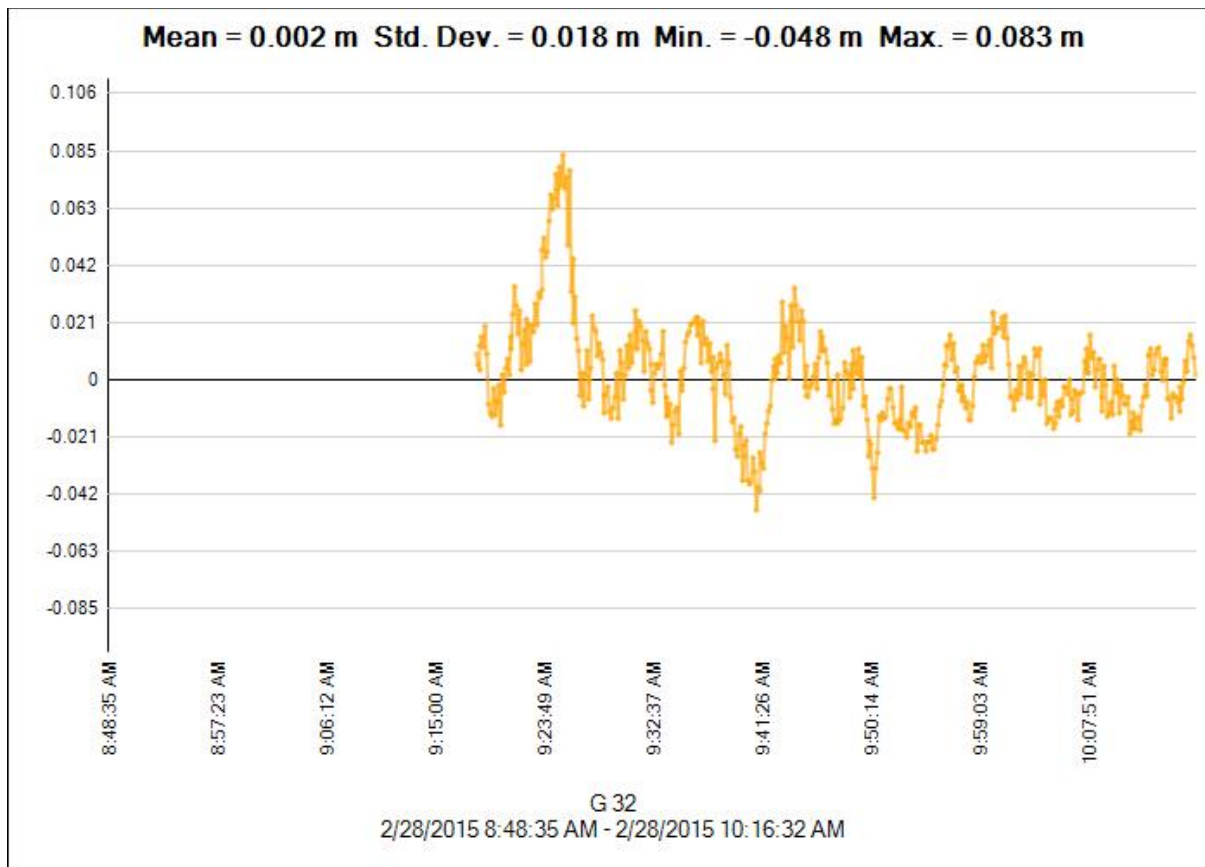














### Processing style

Elevation mask: 13.0 deg  
 Auto start processing: Yes  
 Start automatic ID numbering: AUTO0001  
 Continuous vectors: No  
 Generate residuals: Yes  
 Antenna model: Automatic  
 Ephemeris type: Automatic  
 Frequency: Multiple Frequencies  
 Processing Interval: Use all data  
 Force float: No

### Acceptance Criteria

Vector Component	Flag 	Fail 
Horizontal Precision >	0.050 m + 1.000 ppm	0.100 m + 1.000 ppm
Vertical Precision >	0.100 m + 1.000 ppm	0.200 m + 1.000 ppm

**KTUS\_APT\_1 - CZ0209 (7:32:04 AM-9:50:39 AM) (S22)**

Baseline observation: KTUS\_APT\_1 --- CZ0209 (B22)  
 Processed: 3/6/2015 2:31:34 PM  
 Solution type: Fixed  
 Frequency used: Dual Frequency (L1, L2)  
 Horizontal precision: 0.003 m  
 Vertical precision: 0.016 m  
 RMS: 0.002 m  
 Maximum PDOP: 2.814  
 Ephemeris used: Broadcast  
 Antenna model: NGS Absolute  
 Processing start time: 2/28/2015 7:32:04 AM (Local: UTC-7hr)  
 Processing stop time: 2/28/2015 9:50:39 AM (Local: UTC-7hr)  
 Processing duration: 02:18:35  
 Processing interval: 5 seconds

**Vector Components (Mark to Mark)**

From: CZ0209					
Grid		Local		Global	
Easting	303689.998 m	Latitude	N32°05'38.54768"	Latitude	N32°05'38.54768"
Northing	121694.799 m	Longitude	W110°57'34.81248"	Longitude	W110°57'34.81248"
Elevation	788.857 m	Height	759.352 m	Height	759.352 m

To: KTUS_APT_1					
Grid		Local		Global	
Easting	305040.626 m	Latitude	N32°07'29.08828"	Latitude	N32°07'29.08827"
Northing	125111.945 m	Longitude	W110°56'42.13109"	Longitude	W110°56'42.13109"
Elevation	784.889 m	Height	755.459 m	Height	755.459 m

Vector					
ΔEasting	1350.627 m	NS Fwd Azimuth	22°04'30"	ΔX	1938.411 m
ΔNorthing	3417.146 m	Ellipsoid Dist.	3674.374 m	ΔY	1199.509 m
ΔElevation	-3.968 m	ΔHeight	-3.893 m	ΔZ	2882.359 m

**Standard Errors**

Vector errors:					
$\sigma \Delta$ Easting	0.001 m	$\sigma$ NS fwd Azimuth	0°00'00"	$\sigma \Delta$ X	0.003 m
$\sigma \Delta$ Northing	0.001 m	$\sigma$ Ellipsoid Dist.	0.001 m	$\sigma \Delta$ Y	0.006 m
$\sigma \Delta$ Elevation	0.008 m	$\sigma \Delta$ Height	0.008 m	$\sigma \Delta$ Z	0.004 m

**Aposteriori Covariance Matrix (Meter<sup>2</sup>)**

	X	Y	Z
X	0.0000073061		
Y	0.0000160133	0.0000410917	
Z	-0.0000099609	-0.0000250720	0.0000174082

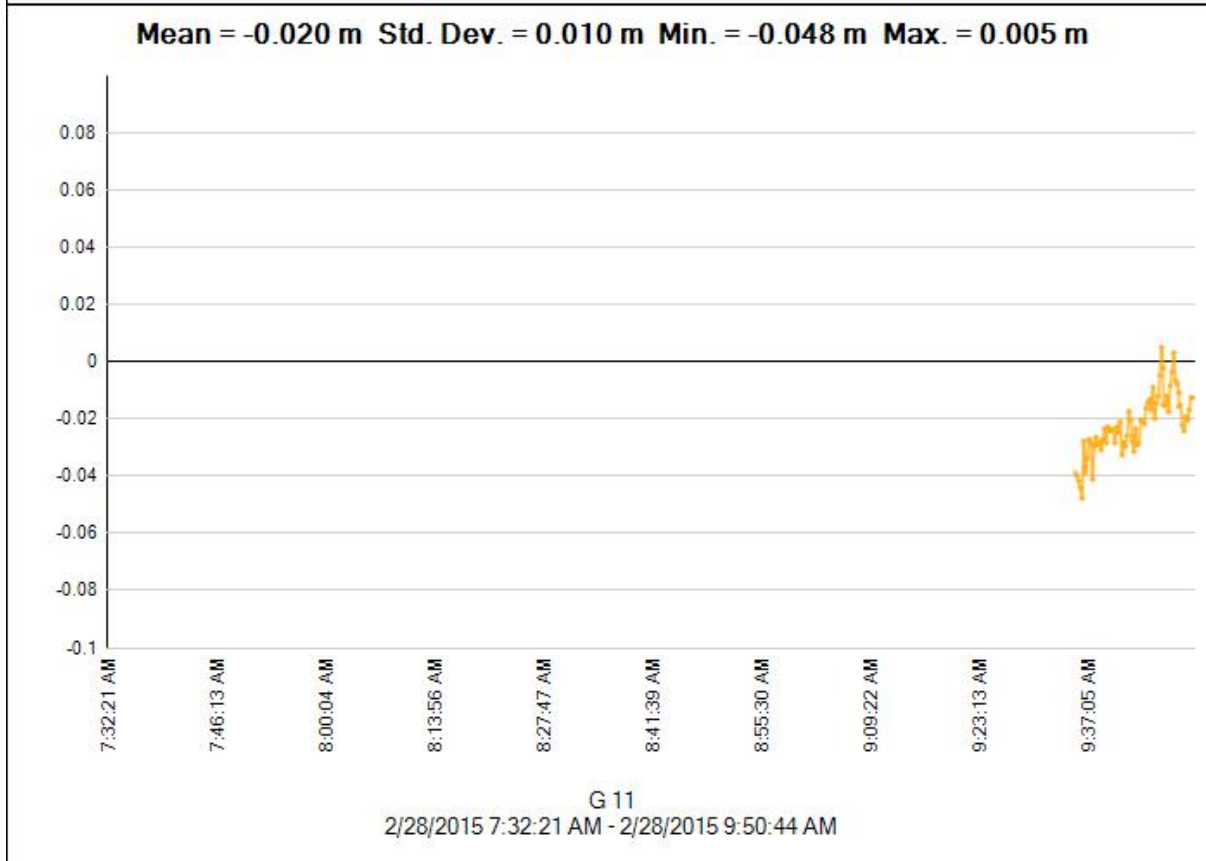
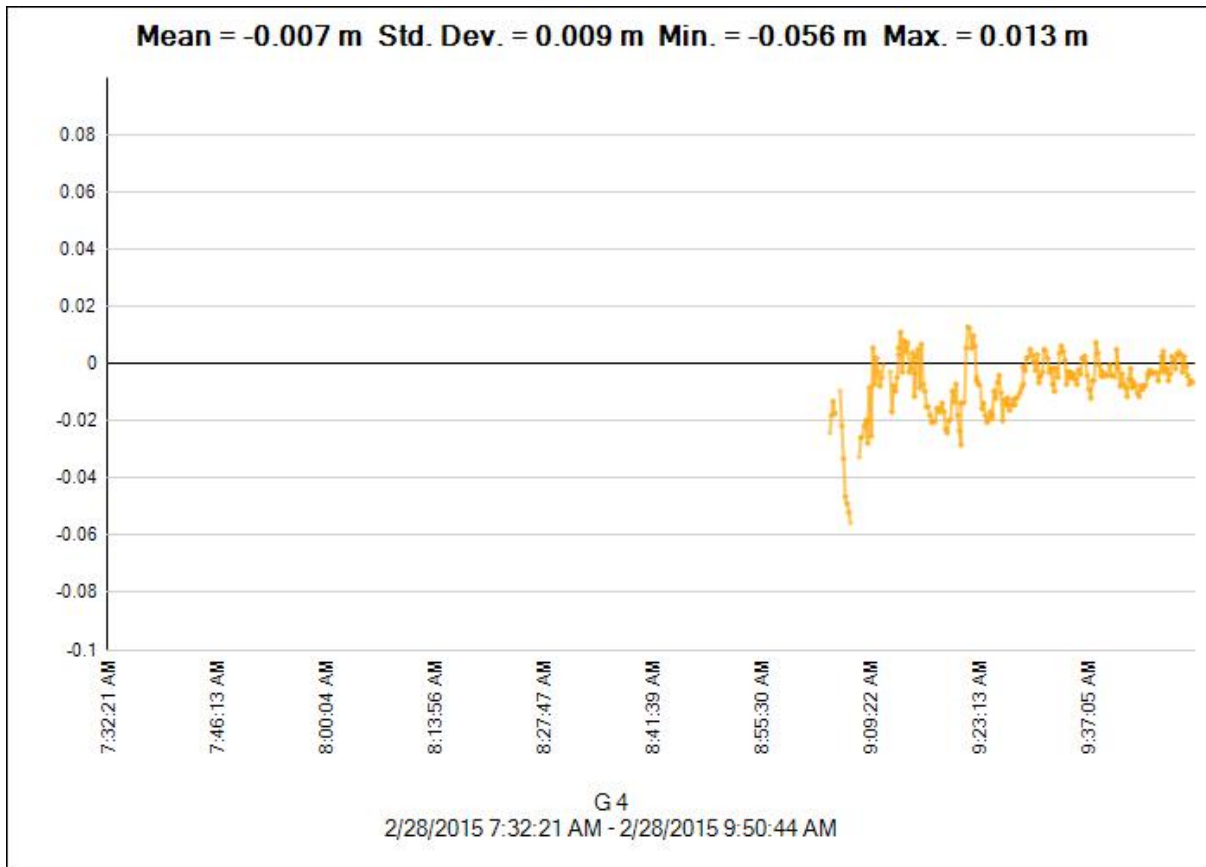
**Occupations**

	From	To
Point ID:	CZ0209	KTUS_APT_1
Data file:	\\conas\projects \312014478_PAG_2015\Acquisition \Ground_Survey\Adjustments\4478 PAG LiDAR Network\00110591 resampled.15o	\\conas\projects \312014478_PAG_2015\Acquisition \Ground_Survey\Adjustments\4478 PAG LiDAR Network\00050580 resampled.15o
Receiver type:	Geo Explorer 3	Geo Explorer 3
Receiver serial number:		
Antenna type:	702 Rev 3.00	702 Rev 3.00
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	1.565 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

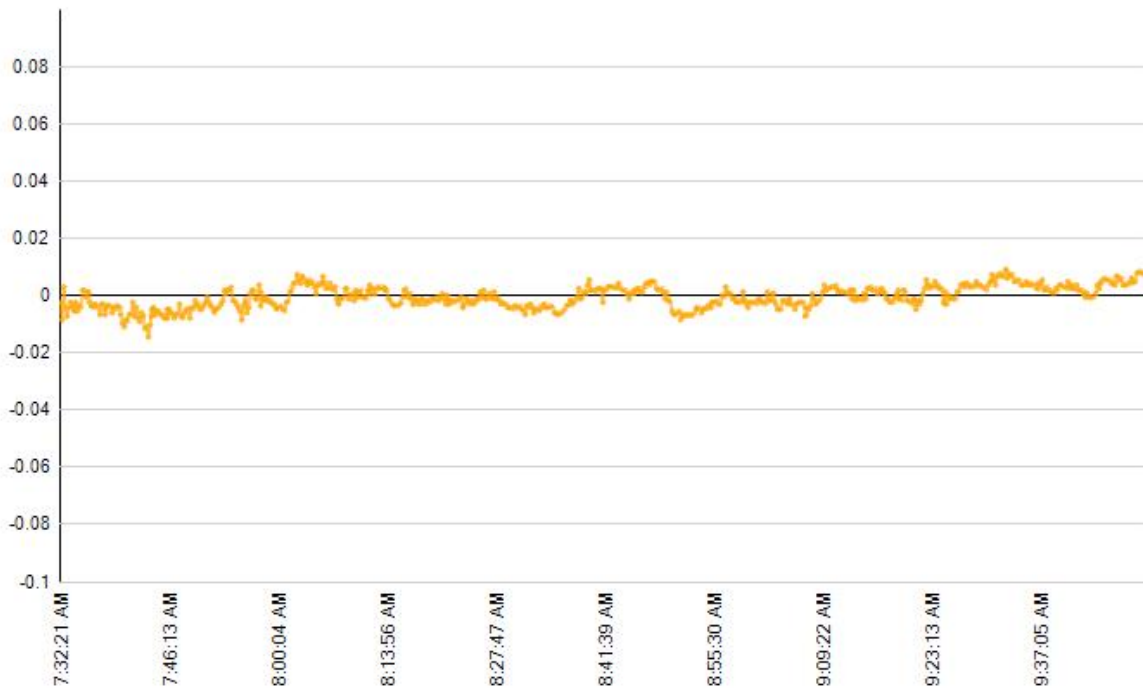
# Tracking Summary

SV	2/28/2015 7:32:04 AM	Duration: 02:18:35	Major interval: 00:10:00	2/28/2015 9:50:39 AM
G 4	L1 L2			
G 11	L1 L2			
G 14	L1 L2			
G 15	L1 L2			
G 16	L1 L2			
G 18	L1 L2			
G 19	L1 L2			
G 21	L1 L2			
G 22	L1 L2			
G 24	L1 L2			
G 27	L1 L2			
G 29	L1 L2			
G 31	L1 L2			
G 32	L1 L2			

# Residuals

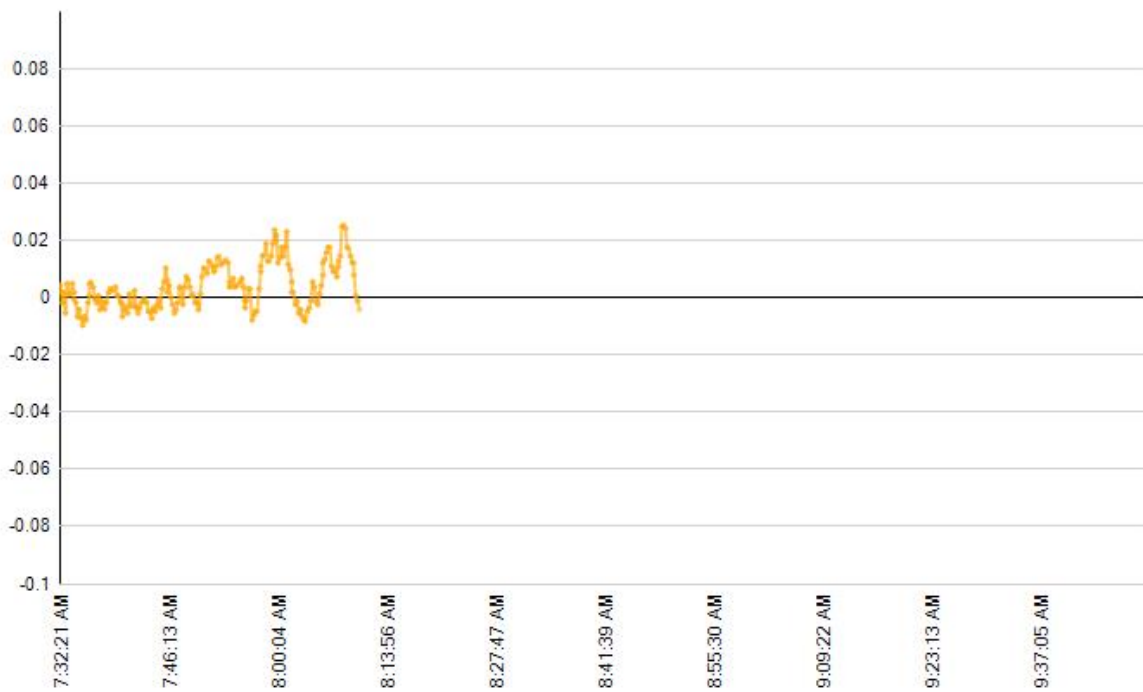


Mean = -0.001 m Std. Dev. = 0.003 m Min. = -0.015 m Max. = 0.009 m



G 14  
2/28/2015 7:32:21 AM - 2/28/2015 9:50:44 AM

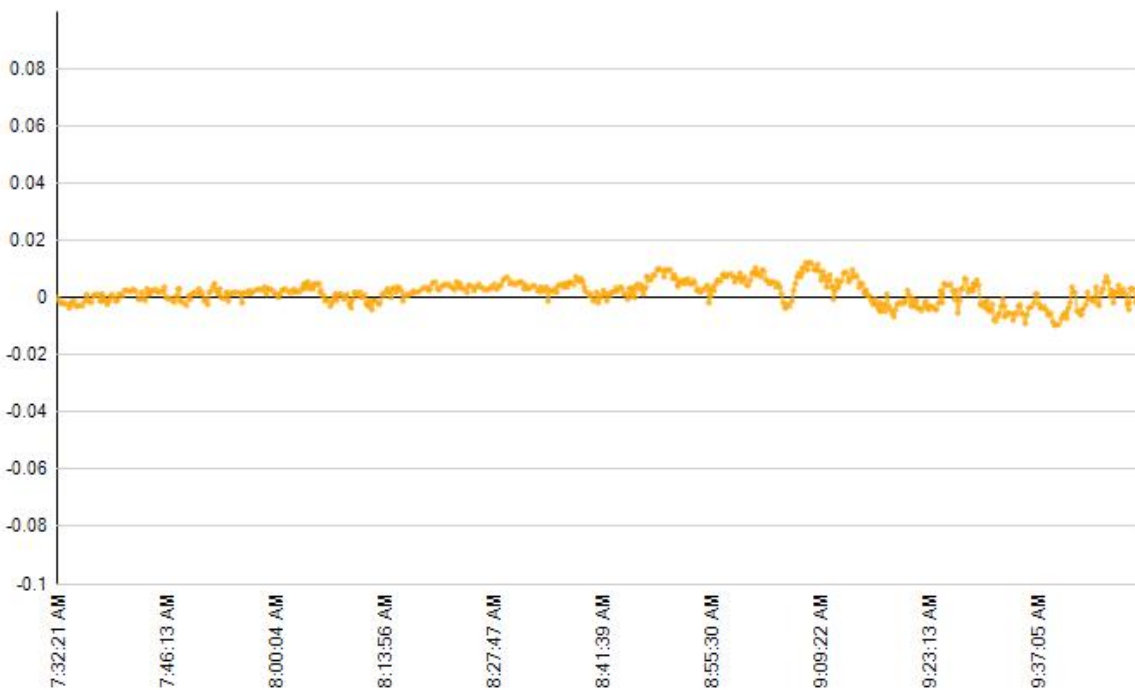
Mean = 0.003 m Std. Dev. = 0.007 m Min. = -0.010 m Max. = 0.025 m



G 15  
2/28/2015 7:32:21 AM - 2/28/2015 9:50:44 AM

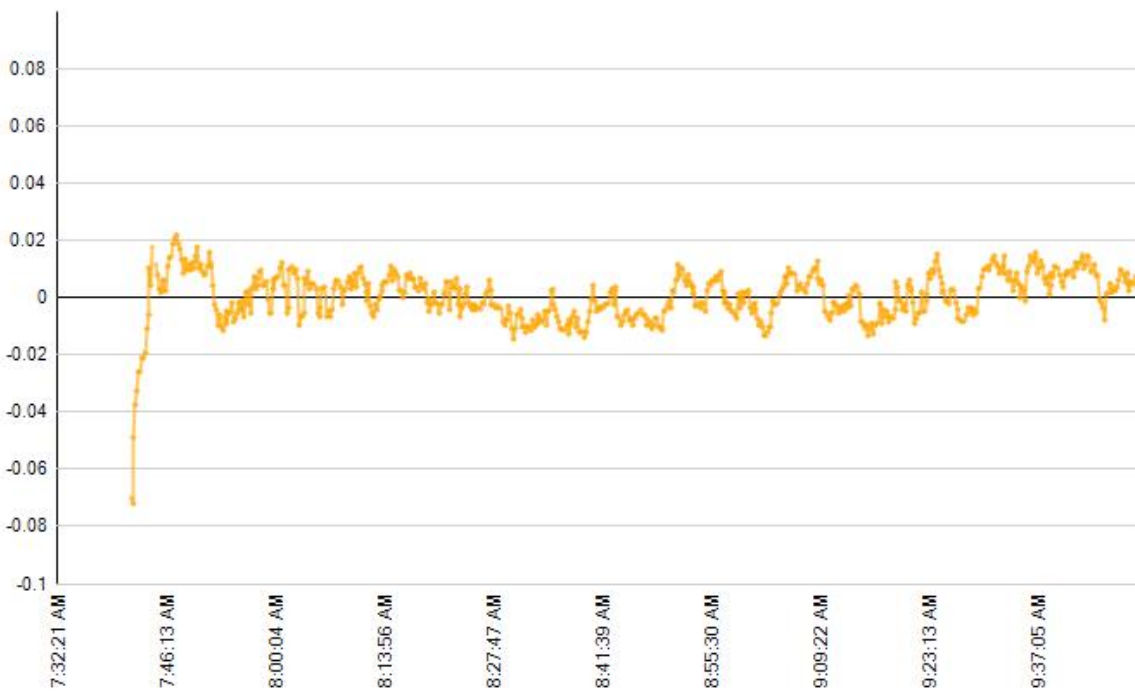


Mean = 0.002 m Std. Dev. = 0.003 m Min. = -0.010 m Max. = 0.012 m

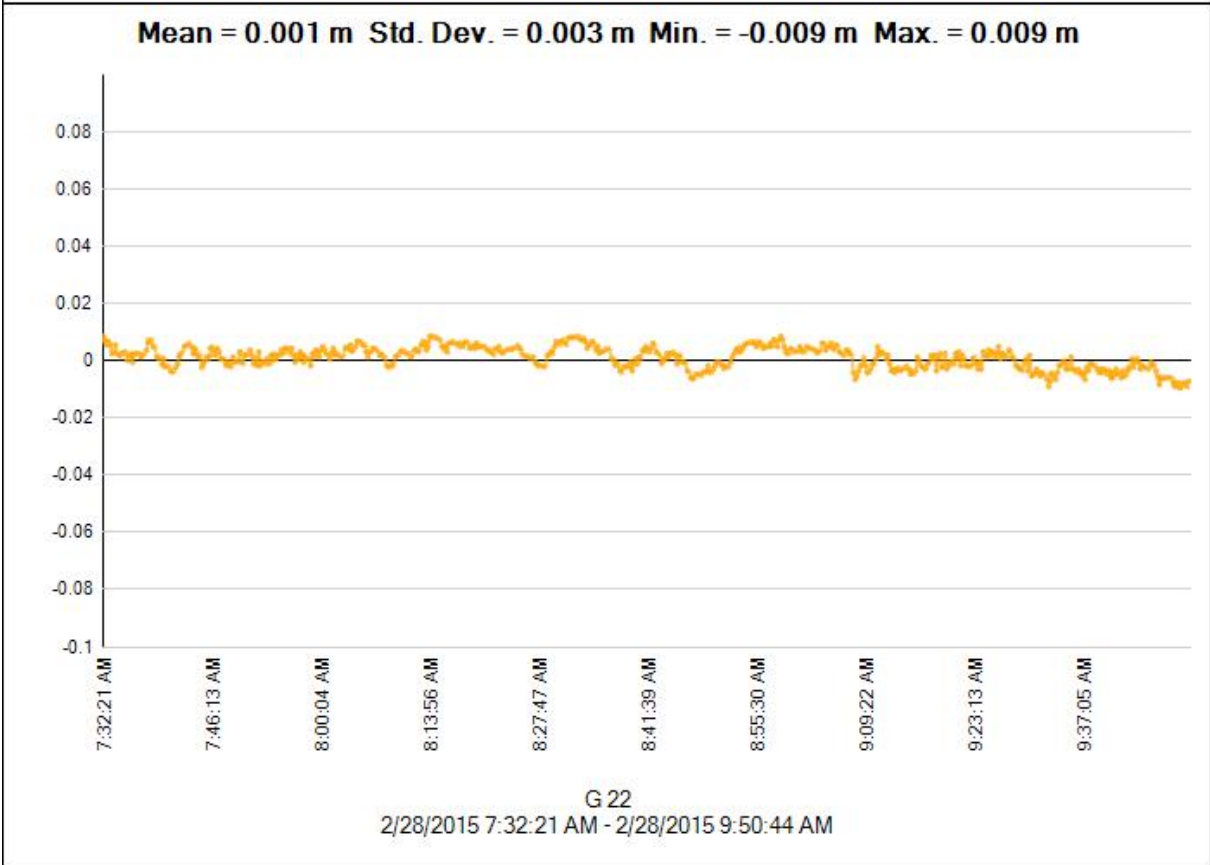
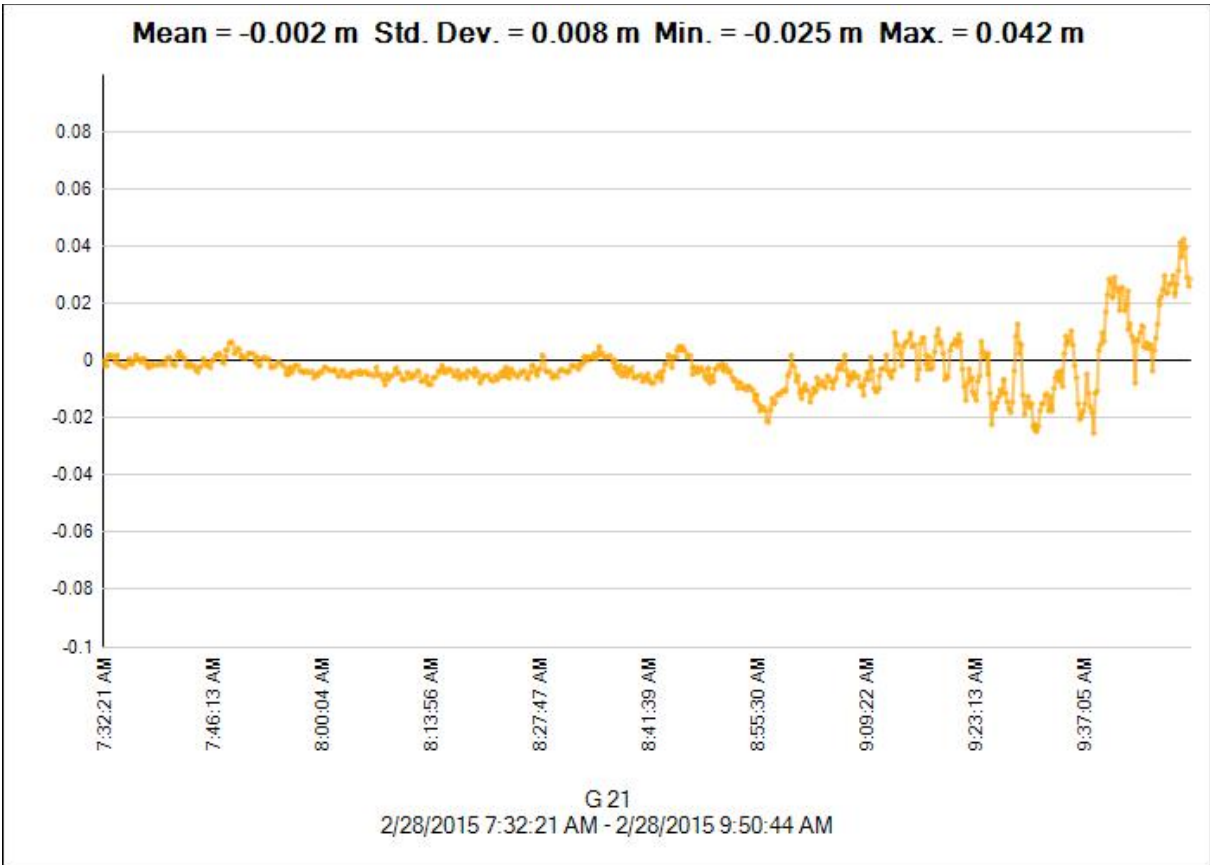


G 18  
2/28/2015 7:32:21 AM - 2/28/2015 9:50:44 AM

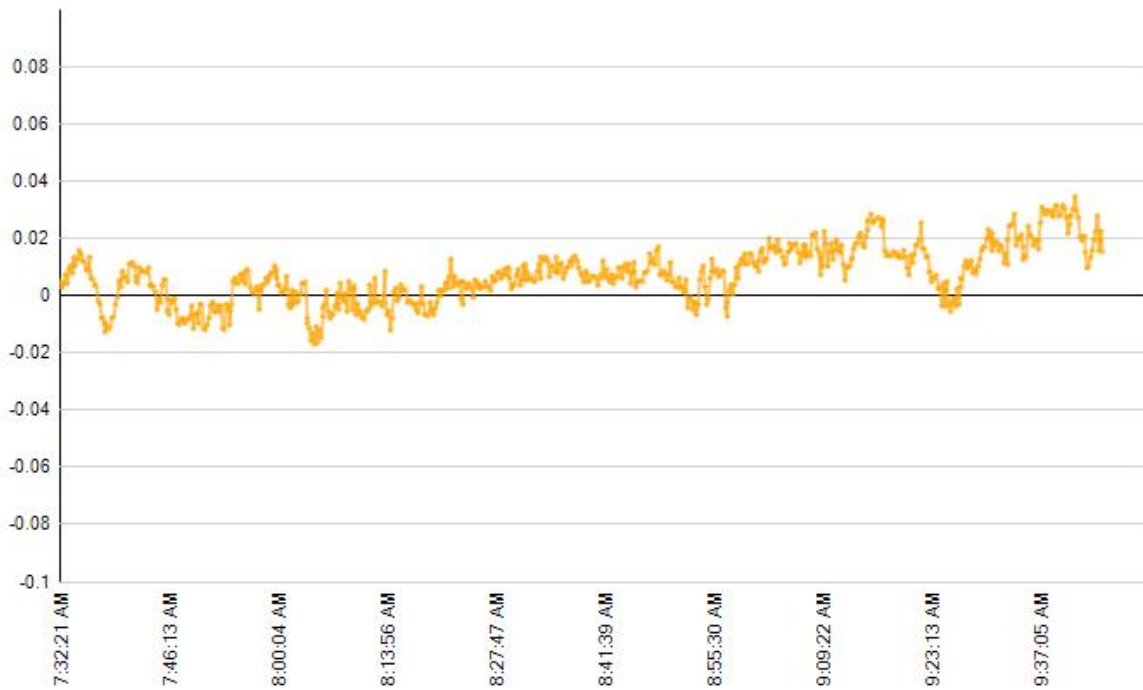
Mean = 0.000 m Std. Dev. = 0.007 m Min. = -0.072 m Max. = 0.022 m



G 19  
2/28/2015 7:32:21 AM - 2/28/2015 9:50:44 AM

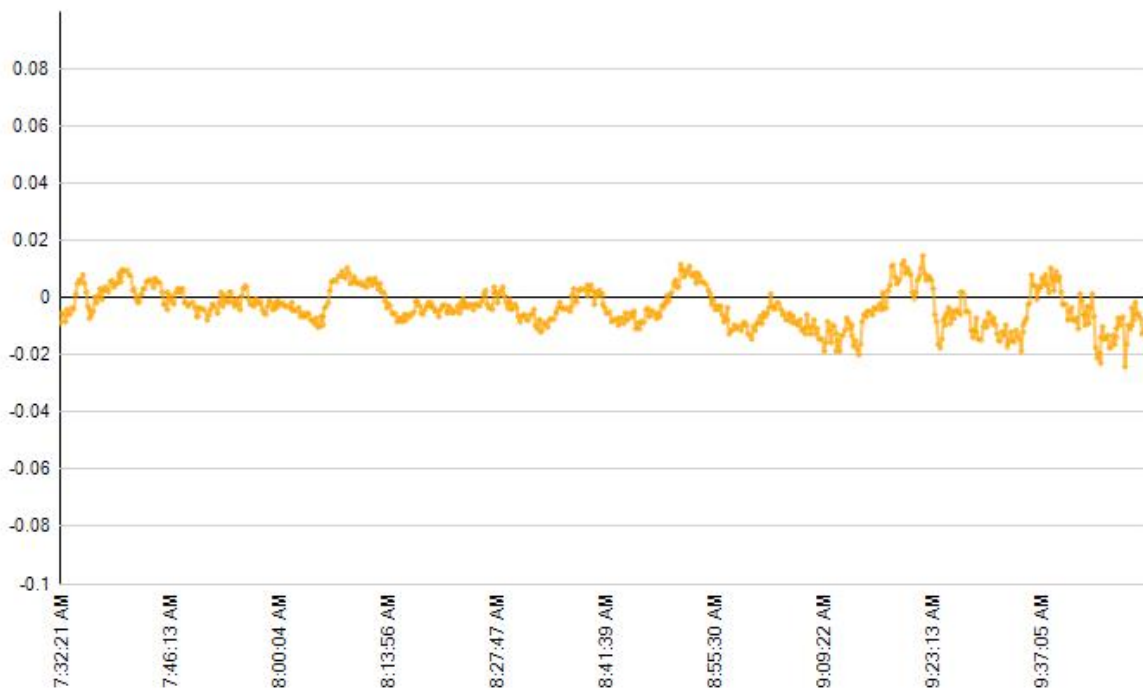


Mean = 0.006 m Std. Dev. = 0.009 m Min. = -0.017 m Max. = 0.035 m



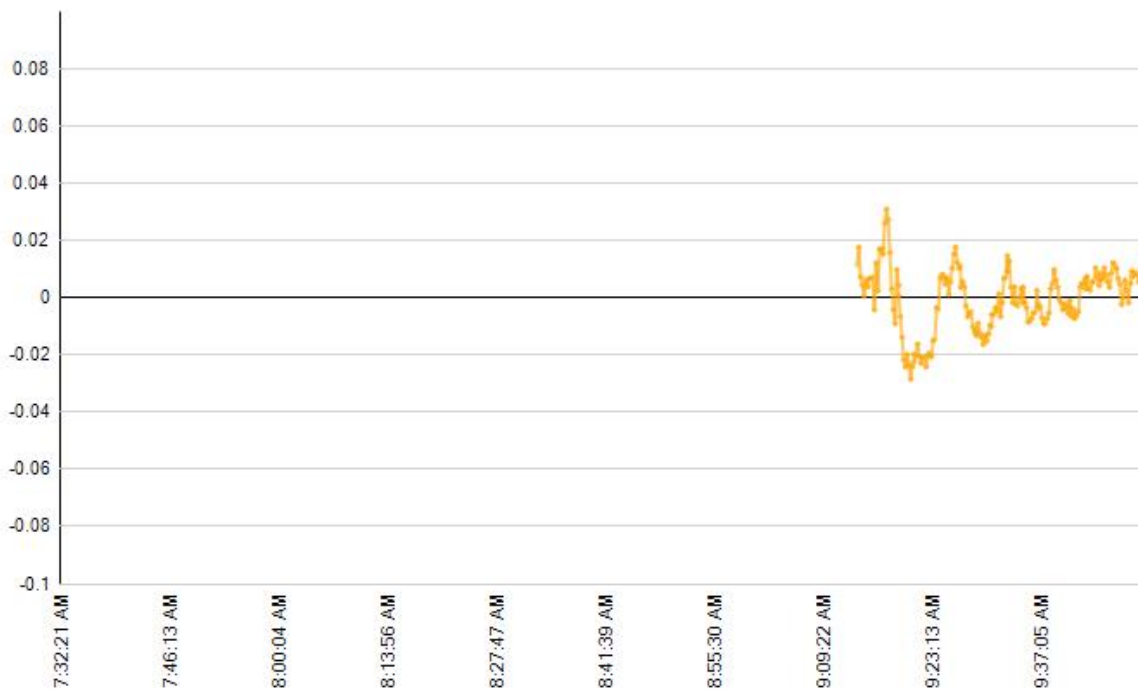
G 24  
2/28/2015 7:32:21 AM - 2/28/2015 9:50:44 AM

Mean = -0.003 m Std. Dev. = 0.006 m Min. = -0.024 m Max. = 0.014 m



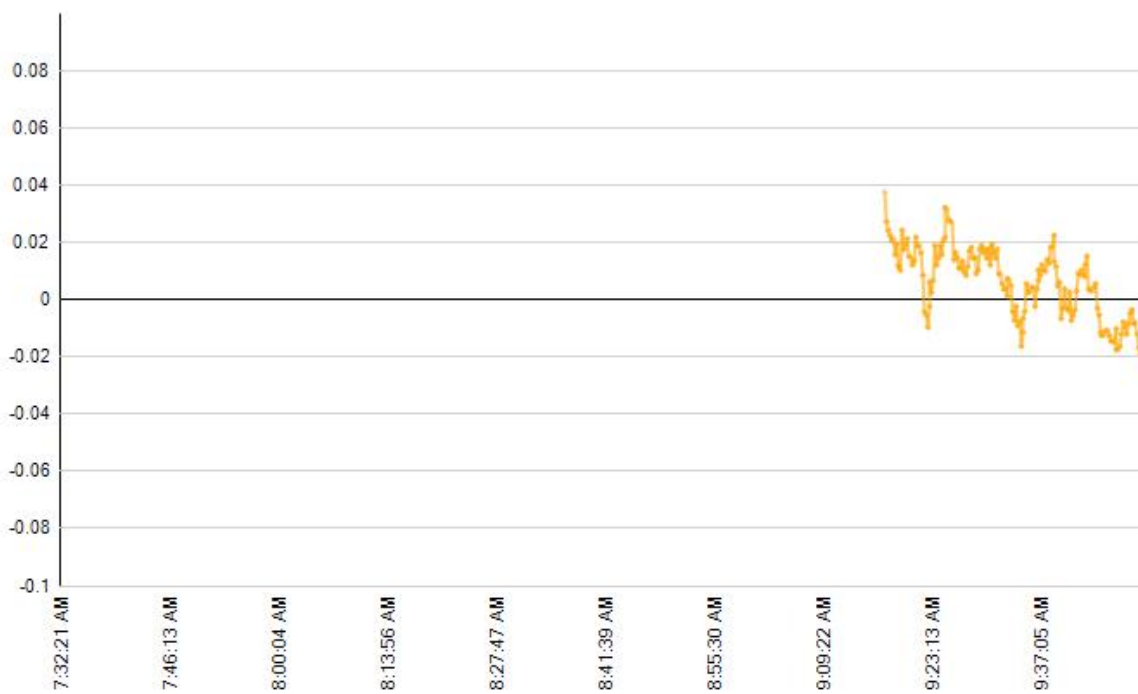
G 27  
2/28/2015 7:32:21 AM - 2/28/2015 9:50:44 AM

Mean = 0.000 m Std. Dev. = 0.010 m Min. = -0.028 m Max. = 0.031 m



G 31  
2/28/2015 7:32:21 AM - 2/28/2015 9:50:44 AM

Mean = 0.005 m Std. Dev. = 0.011 m Min. = -0.021 m Max. = 0.038 m





G 32  
2/28/2015 7:32:21 AM - 2/28/2015 9:50:44 AM

---

**Processing style**

Elevation mask: 13.0 deg  
Auto start processing: Yes  
Start automatic ID numbering: AUTO0001  
Continuous vectors: No  
Generate residuals: Yes  
Antenna model: Automatic  
Ephemeris type: Automatic  
Frequency: Multiple Frequencies  
Processing Interval: Use all data  
Force float: No

**Acceptance Criteria**

Vector Component	Flag 	Fail 
Horizontal Precision >	0.050 m + 1.000 ppm	0.100 m + 1.000 ppm
Vertical Precision >	0.100 m + 1.000 ppm	0.200 m + 1.000 ppm

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**TUS\_4 - TUS\_5 (12:42:14 PM-1:43:24 PM) (S23)**

---

Baseline observation: TUS\_4 --- TUS\_5 (B23)  
Processed: 3/6/2015 2:35:48 PM  
Solution type: Fixed  
Frequency used: Dual Frequency (L1, L2)  
Horizontal precision: 0.015 m  
Vertical precision: 0.044 m  
RMS: 0.010 m  
Maximum PDOP: 2.687  
Ephemeris used: Broadcast  
Antenna model: NGS Absolute  
Processing start time: 2/28/2015 12:57:34 PM (Local: UTC-7hr)  
Processing stop time: 2/28/2015 1:41:54 PM (Local: UTC-7hr)  
Processing duration: 00:44:20  
Processing interval: 5 seconds

### Vector Components (Mark to Mark)

From:		TUS_4			
Grid		Local		Global	
Easting	327174.172 m	Latitude	N31°49'26.53764"	Latitude	N31°49'26.53764"
Northing	91987.129 m	Longitude	W110°42'51.86144"	Longitude	W110°42'51.86144"
Elevation	1525.861 m	Height	1497.494 m	Height	1497.494 m

To:		TUS_5			
Grid		Local		Global	
Easting	347929.202 m	Latitude	N32°26'00.46318"	Latitude	N32°26'00.46317"
Northing	159830.450 m	Longitude	W110°29'08.51487"	Longitude	W110°29'08.51487"
Elevation	906.016 m	Height	877.982 m	Height	877.982 m

Vector					
$\Delta$ Easting	20755.030 m	NS Fwd Azimuth	17°39'00"	$\Delta$ X	33036.598 m
$\Delta$ Northing	67843.321 m	Ellipsoid Dist.	70940.648 m	$\Delta$ Y	26544.513 m
$\Delta$ Elevation	-619.845 m	$\Delta$ Height	-619.511 m	$\Delta$ Z	56910.105 m

### Standard Errors

Vector errors:					
$\sigma$ $\Delta$ Easting	0.005 m	$\sigma$ NS fwd Azimuth	0°00'00"	$\sigma$ $\Delta$ X	0.010 m
$\sigma$ $\Delta$ Northing	0.006 m	$\sigma$ Ellipsoid Dist.	0.006 m	$\sigma$ $\Delta$ Y	0.018 m
$\sigma$ $\Delta$ Elevation	0.023 m	$\sigma$ $\Delta$ Height	0.023 m	$\sigma$ $\Delta$ Z	0.012 m

### Aposteriori Covariance Matrix (Meter<sup>2</sup>)

	X	Y	Z
X	0.0000919509		
Y	0.0001460718	0.0003374493	
Z	-0.0000781914	-0.0001834197	0.0001397364

## Occupations

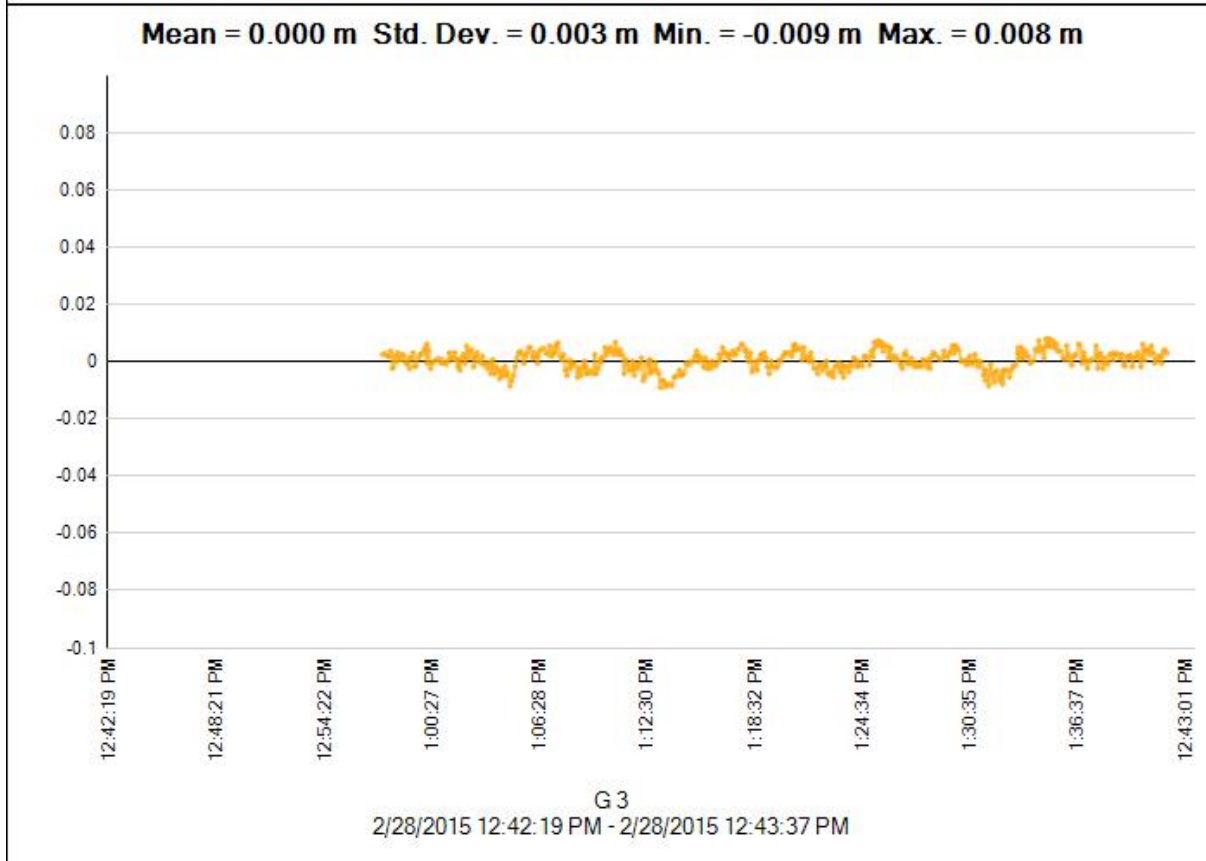
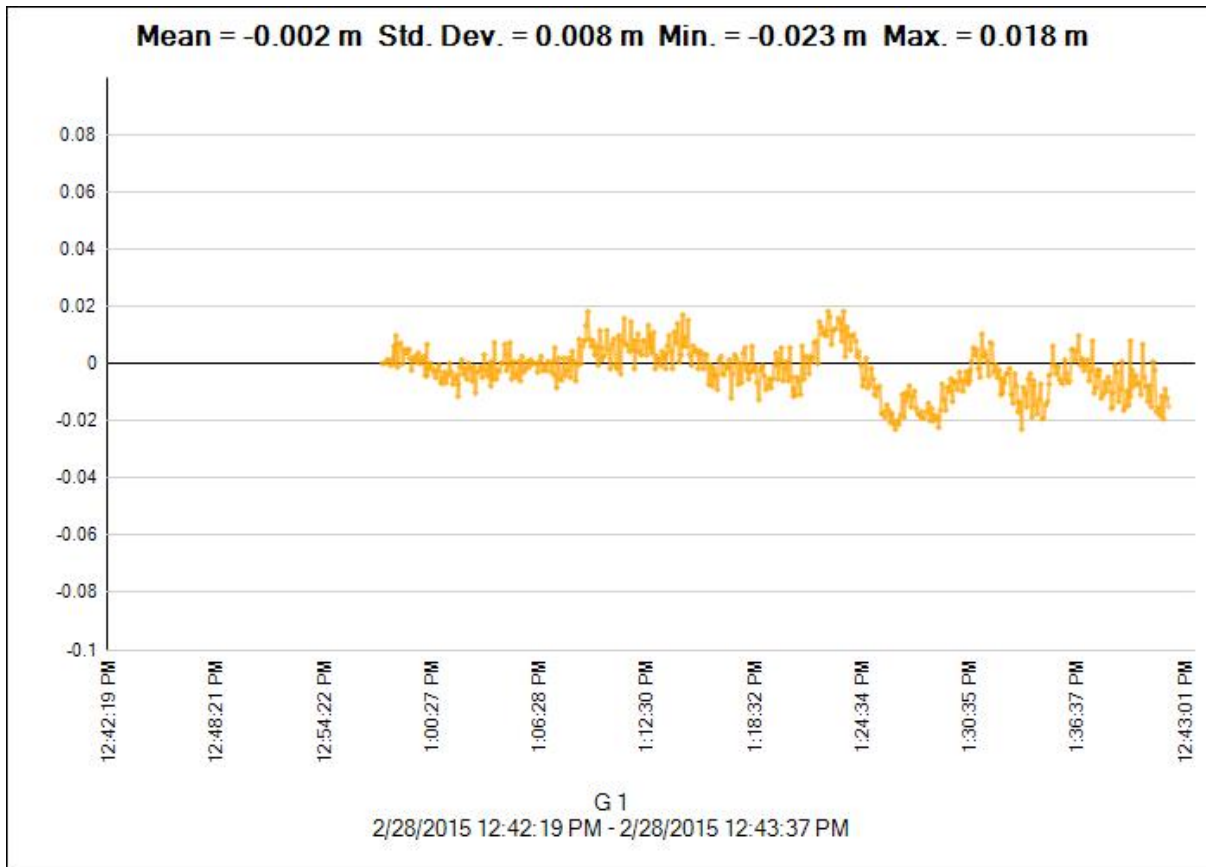
	From	To
Point ID:	TUS_4	TUS_5
Data file:	\\conas\projects \312014478_PAG_2015\Acquisition \Ground_Survey\Adjustments\4478 PAG LiDAR Network\00010592 resampled.15o	\\conas\projects \312014478_PAG_2015\Acquisition \Ground_Survey\Adjustments\4478 PAG LiDAR Network\00110592 resampled.15o
Receiver type:	Geo Explorer 3	Geo Explorer 3
Receiver serial number:		
Antenna type:	702 Rev 3.00	702 Rev 3.00
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

# Tracking Summary

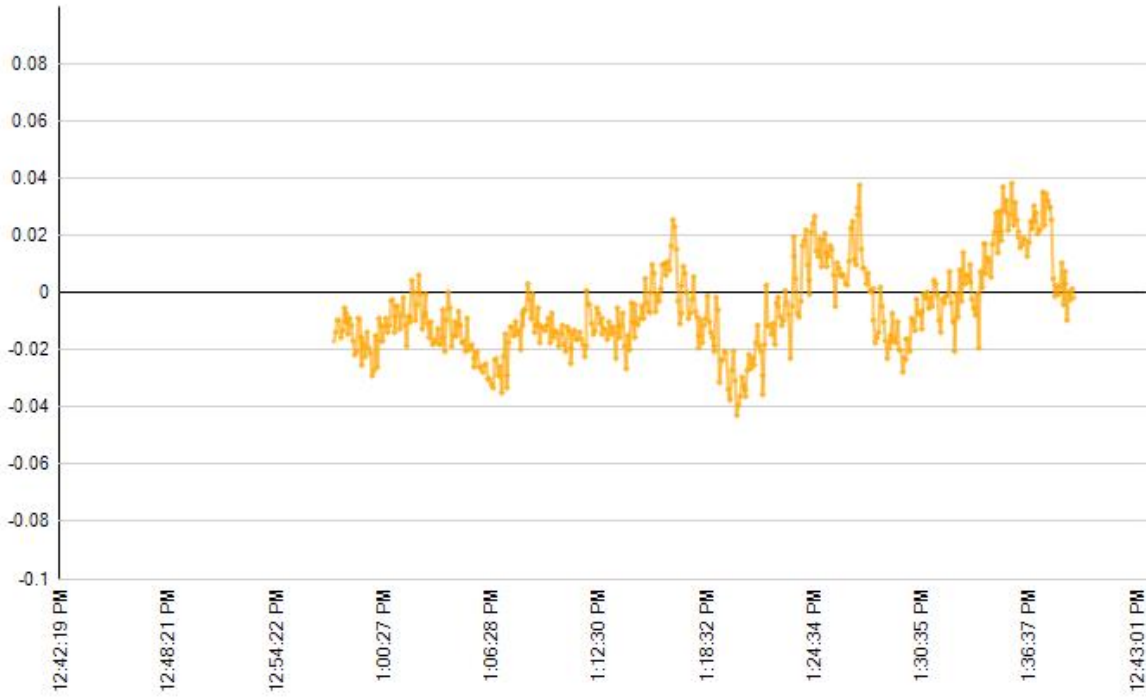
SV	2/28/2015 12:42:14 PM	Duration: 01:01:10	Major interval: 00:10:00	2/28/2015 1:43:24 PM
G 1	L1 L2			
G 3	L1 L2			
G 4	L1 L2			
G 9	L1 L2			
G 11	L1 L2			
G 14	L1 L2			
G 16	L1 L2			
G 22	L1 L2			
G 23	L1 L2			
G 25	L1 L2			
G 31	L1 L2			
G 32	L1 L2			



# Residuals



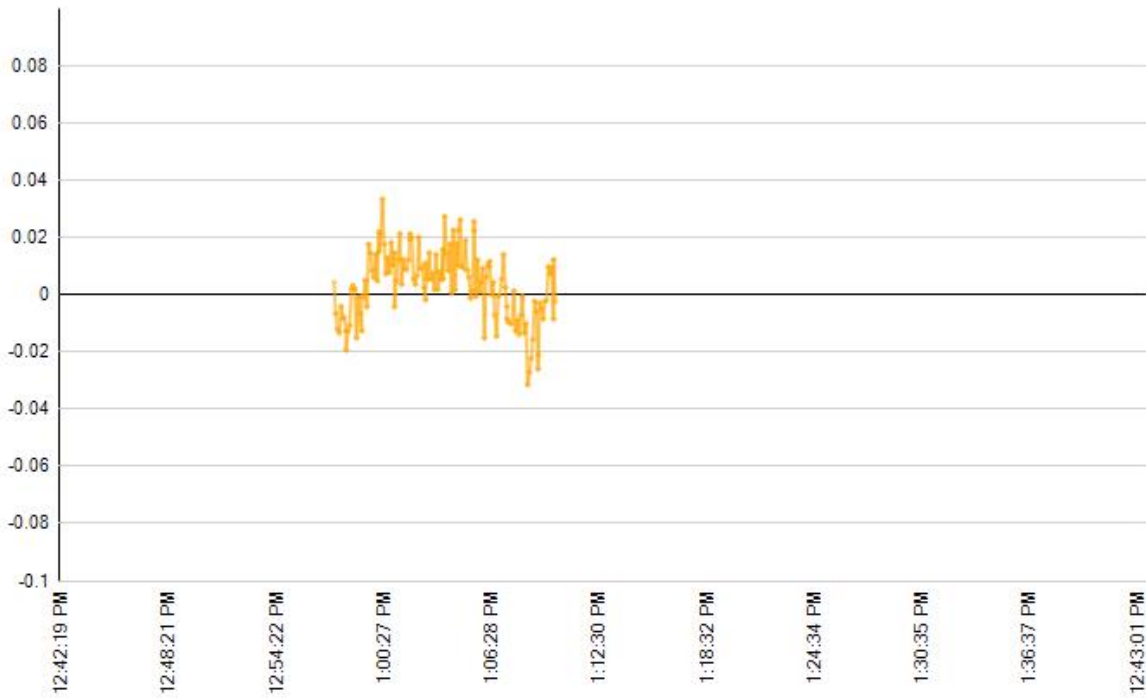
Mean = -0.006 m Std. Dev. = 0.015 m Min. = -0.043 m Max. = 0.038 m



G 4

2/28/2015 12:42:19 PM - 2/28/2015 12:43:37 PM

Mean = 0.003 m Std. Dev. = 0.012 m Min. = -0.031 m Max. = 0.033 m



G 11

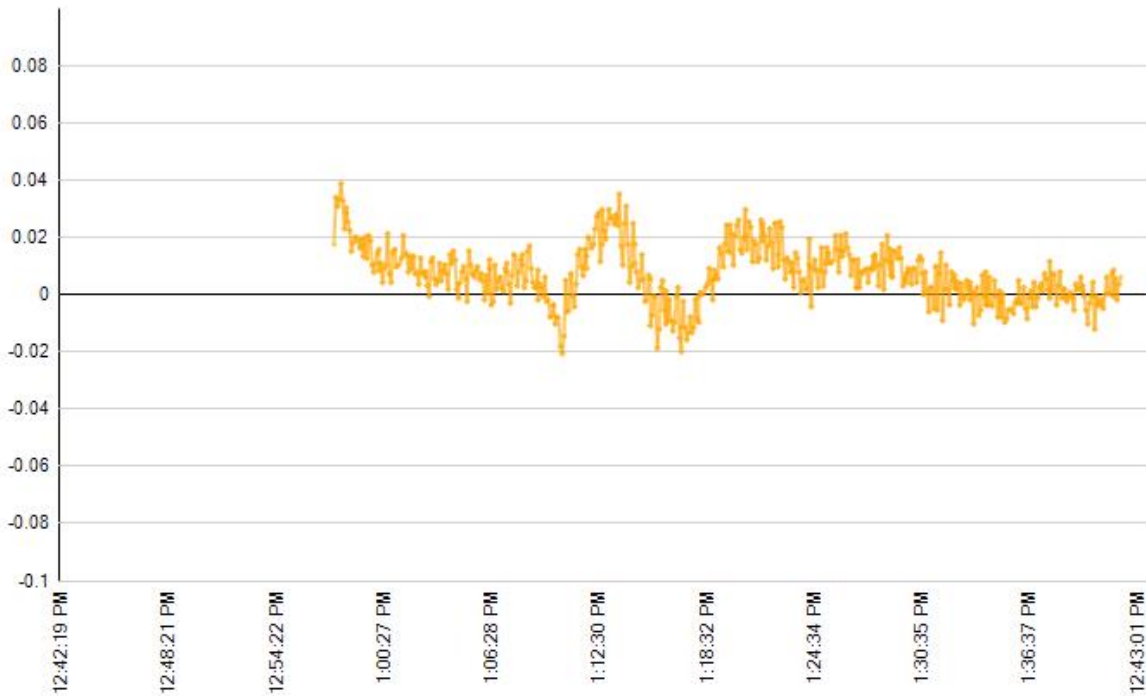
2/28/2015 12:42:19 PM - 2/28/2015 12:43:37 PM

Mean = -0.004 m Std. Dev. = 0.026 m Min. = -0.060 m Max. = 0.049 m



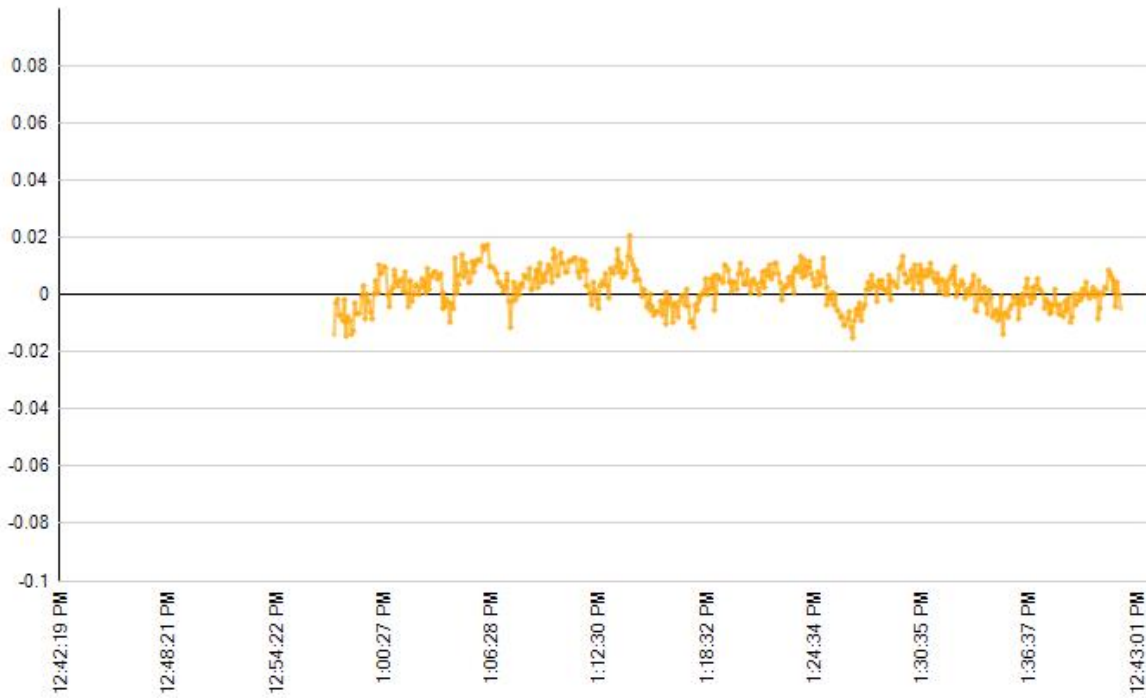
G 14  
2/28/2015 12:42:19 PM - 2/28/2015 12:43:37 PM

Mean = 0.007 m Std. Dev. = 0.010 m Min. = -0.021 m Max. = 0.039 m



G 16  
2/28/2015 12:42:19 PM - 2/28/2015 12:43:37 PM

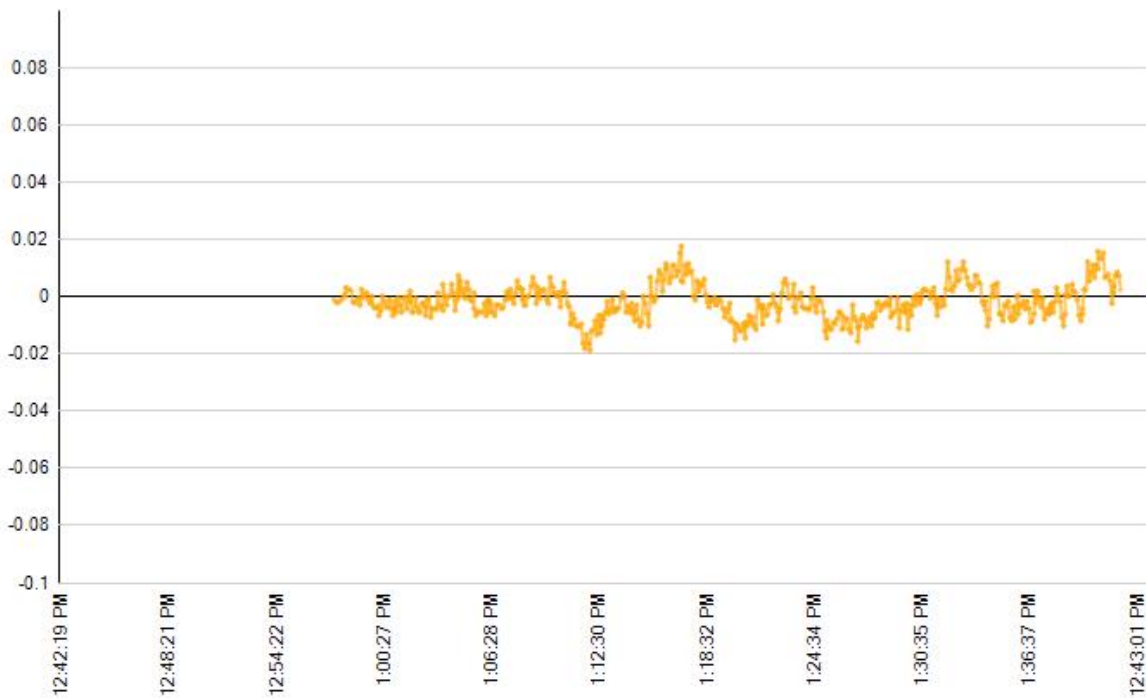
Mean = 0.002 m Std. Dev. = 0.006 m Min. = -0.015 m Max. = 0.020 m



G 23

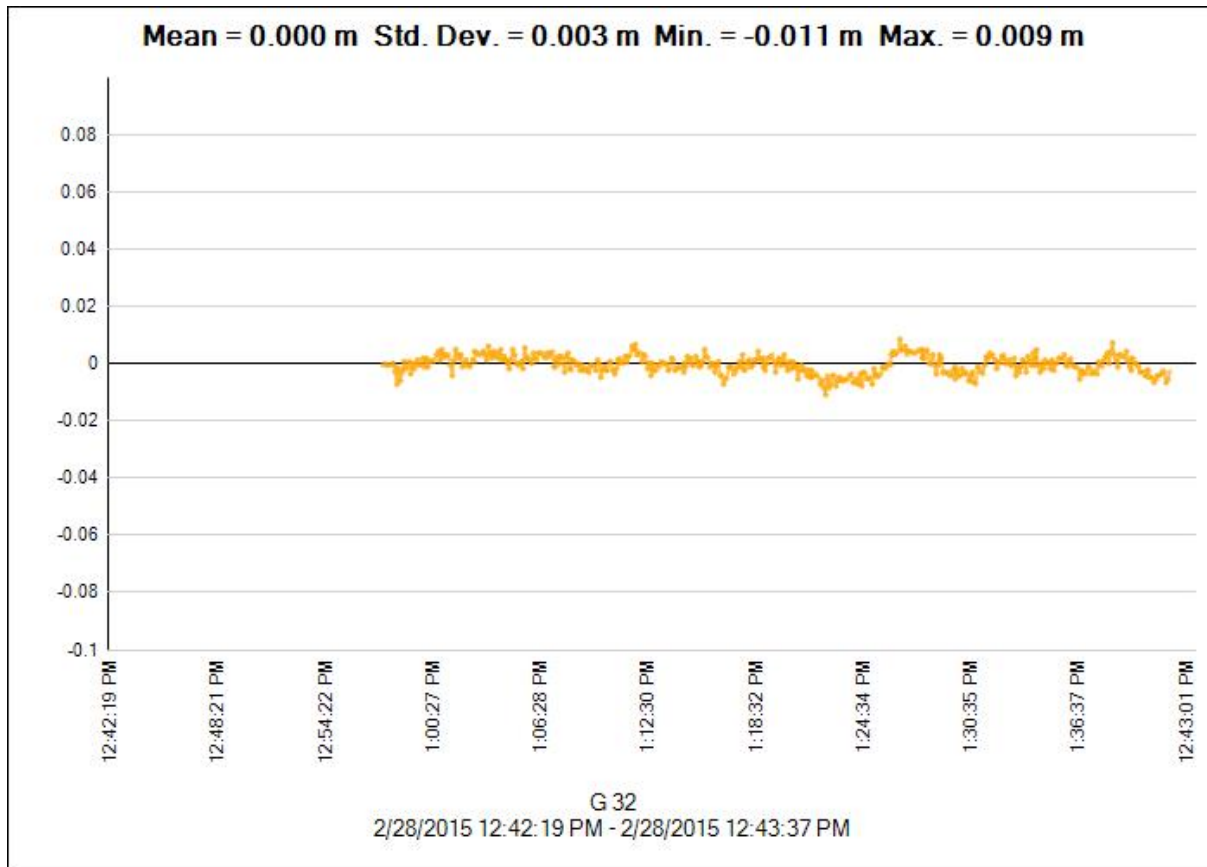
2/28/2015 12:42:19 PM - 2/28/2015 12:43:37 PM

Mean = -0.002 m Std. Dev. = 0.006 m Min. = -0.019 m Max. = 0.017 m



G 31



2/28/2015 12:42:19 PM - 2/28/2015 12:43:37 PM



### Processing style

Elevation mask: 13.0 deg  
 Auto start processing: Yes  
 Start automatic ID numbering: AUTO0001  
 Continuous vectors: No  
 Generate residuals: Yes  
 Antenna model: Automatic  
 Ephemeris type: Automatic  
 Frequency: Multiple Frequencies  
 Processing Interval: Use all data  
 Force float: No

### Acceptance Criteria

Vector Component	Flag 	Fail 
Horizontal Precision >	0.050 m + 1.000 ppm	0.100 m + 1.000 ppm
Vertical Precision >	0.100 m + 1.000 ppm	0.200 m + 1.000 ppm

### AH8499 - AVRA\_APT\_3 (5:34:09 PM-6:35:49 PM) (S24)

**Baseline observation:** AH8499 --- AVRA\_APT\_3 (B24)  
**Processed:** 3/5/2015 3:38:09 PM  
**Solution type:** Fixed  
**Frequency used:** Dual Frequency (L1, L2)  
**Horizontal precision:** 0.005 m  
**Vertical precision:** 0.027 m  
**RMS:** 0.003 m  
**Maximum PDOP:** 2.362  
**Ephemeris used:** Broadcast  
**Antenna model:** NGS Absolute  
**Processing start time:** 2/28/2015 5:34:09 PM (Local: UTC-7hr)  
**Processing stop time:** 2/28/2015 6:35:49 PM (Local: UTC-7hr)  
**Processing duration:** 01:01:40  
**Processing interval:** 5 seconds

#### Vector Components (Mark to Mark)

From: AH8499					
Grid		Local		Global	
<b>Easting</b>	302406.574 m	<b>Latitude</b>	N32°13'38.92587"	<b>Latitude</b>	N32°13'38.92587"
<b>Northing</b>	136480.958 m	<b>Longitude</b>	W110°58'18.80681"	<b>Longitude</b>	W110°58'18.80681"
<b>Elevation</b>	738.788 m	<b>Height</b>	709.518 m	<b>Height</b>	709.518 m

To: AVRA_APT_3					
Grid		Local		Global	
<b>Easting</b>	279292.416 m	<b>Latitude</b>	N32°24'11.19873"	<b>Latitude</b>	N32°24'11.19873"
<b>Northing</b>	155779.753 m	<b>Longitude</b>	W111°12'56.78045"	<b>Longitude</b>	W111°12'56.78045"
<b>Elevation</b>	633.819 m	<b>Height</b>	604.176 m	<b>Height</b>	604.176 m

Vector					
<b>ΔEasting</b>	-23114.157 m	<b>NS Fwd Azimuth</b>	310°21'53"	<b>ΔX</b>	-17649.705 m
<b>ΔNorthing</b>	19298.795 m	<b>Ellipsoid Dist.</b>	30112.354 m	<b>ΔY</b>	18064.106 m
<b>ΔElevation</b>	-104.968 m	<b>ΔHeight</b>	-105.341 m	<b>ΔZ</b>	16405.068 m

### Standard Errors

Vector errors:					
$\sigma \Delta$ Easting	0.002 m	$\sigma$ NS fwd Azimuth	0°00'00"	$\sigma \Delta$ X	0.005 m
$\sigma \Delta$ Northing	0.002 m	$\sigma$ Ellipsoid Dist.	0.002 m	$\sigma \Delta$ Y	0.011 m
$\sigma \Delta$ Elevation	0.014 m	$\sigma \Delta$ Height	0.014 m	$\sigma \Delta$ Z	0.008 m

### Aposteriori Covariance Matrix (Meter<sup>2</sup>)

	X	Y	Z
X	0.0000210960		
Y	0.0000470187	0.0001243943	
Z	-0.0000311393	-0.0000807627	0.0000574989

### Occupations

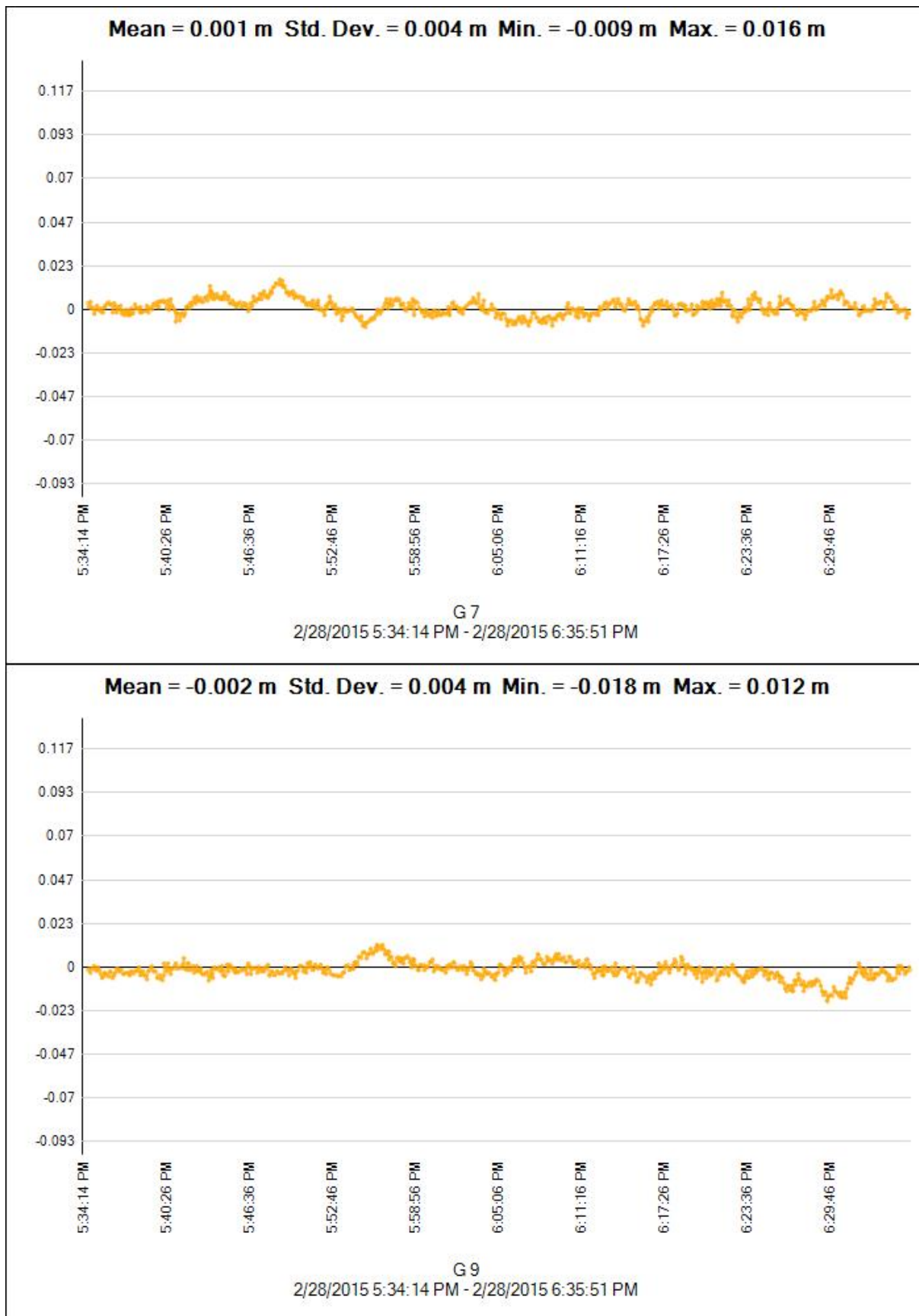
	From	To
Point ID:	AH8499	AVRA_APT_3
Data file:	\\conas\projects \312014478_PAG_2015\Acquisition \Ground_Survey\Adjustments\4478 PAG LiDAR Network\00010600 resampled.15o	\\conas\projects \312014478_PAG_2015\Acquisition \Ground_Survey\Adjustments\4478 PAG LiDAR Network\00110600 resampled.15o
Receiver type:	Geo Explorer 3	Geo Explorer 3
Receiver serial number:		
Antenna type:	702 Rev 3.00	702 Rev 3.00
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

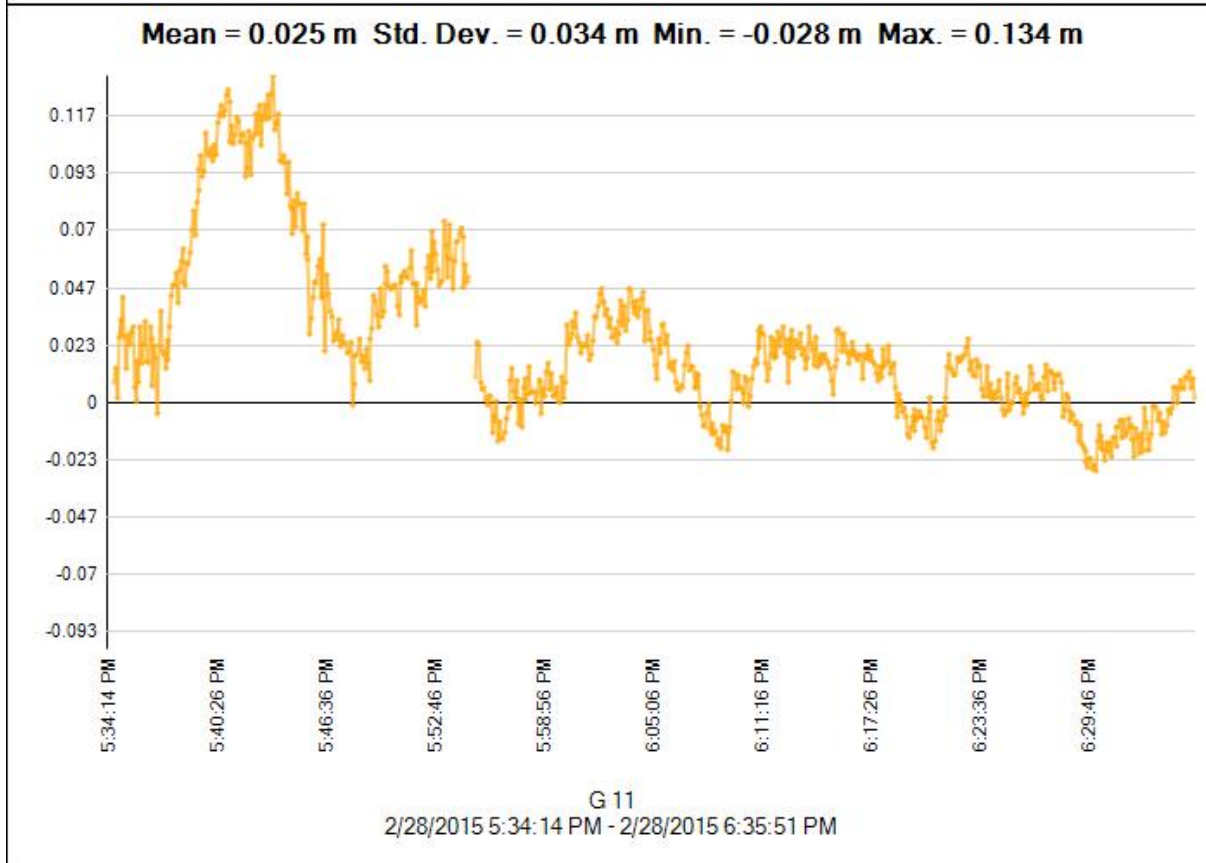
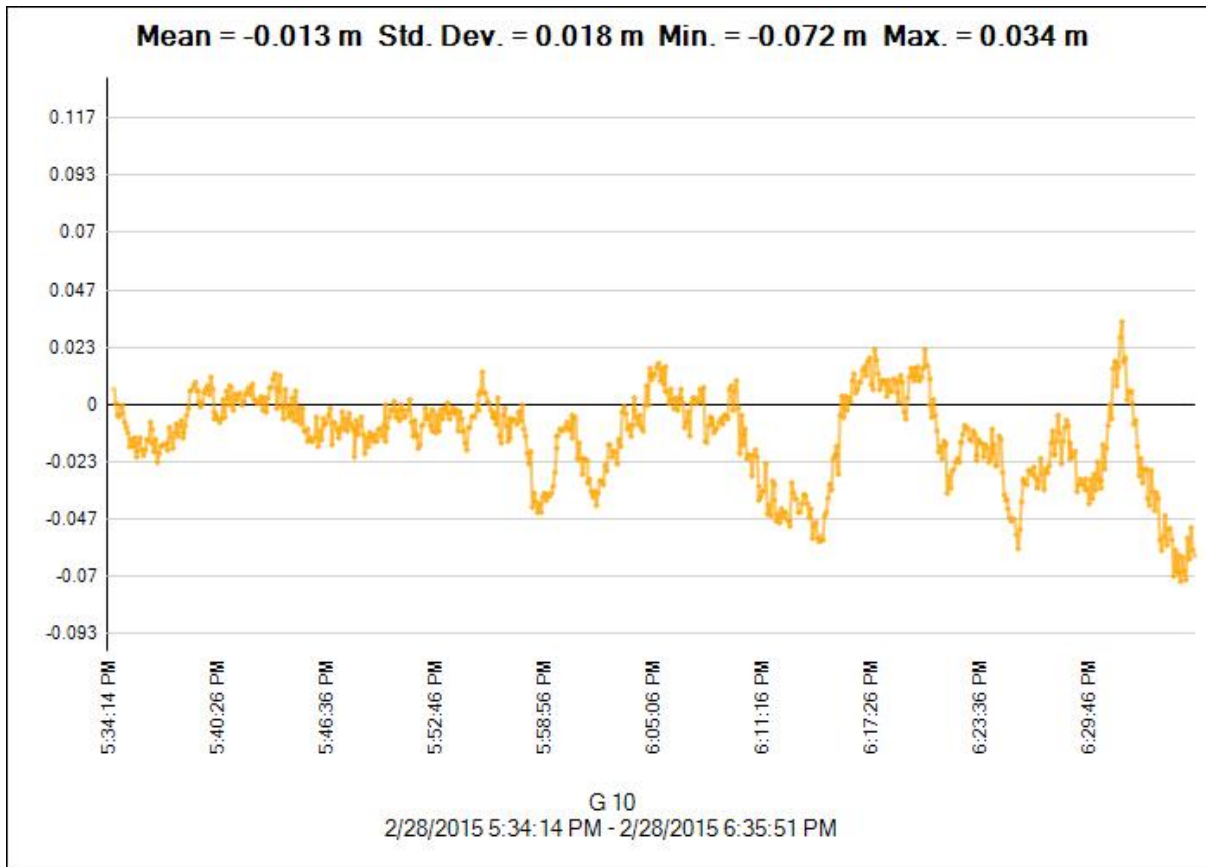
# Tracking Summary

SV	2/28/2015 5:34:09 PM	Duration: 01:01:40	Major interval: 00:10:00	2/28/2015 6:35:49 PM
G 4	L1 L2			
G 5	L1 L2			
G 7	L1 L2			
G 9	L1 L2			
G 10	L1 L2			
G 11	L1 L2			
G 16	L1 L2			
G 19	L1 L2			
G 20	L1 L2			
G 23	L1 L2			
G 27	L1 L2			
G 28	L1 L2			
G 30	L1 L2			

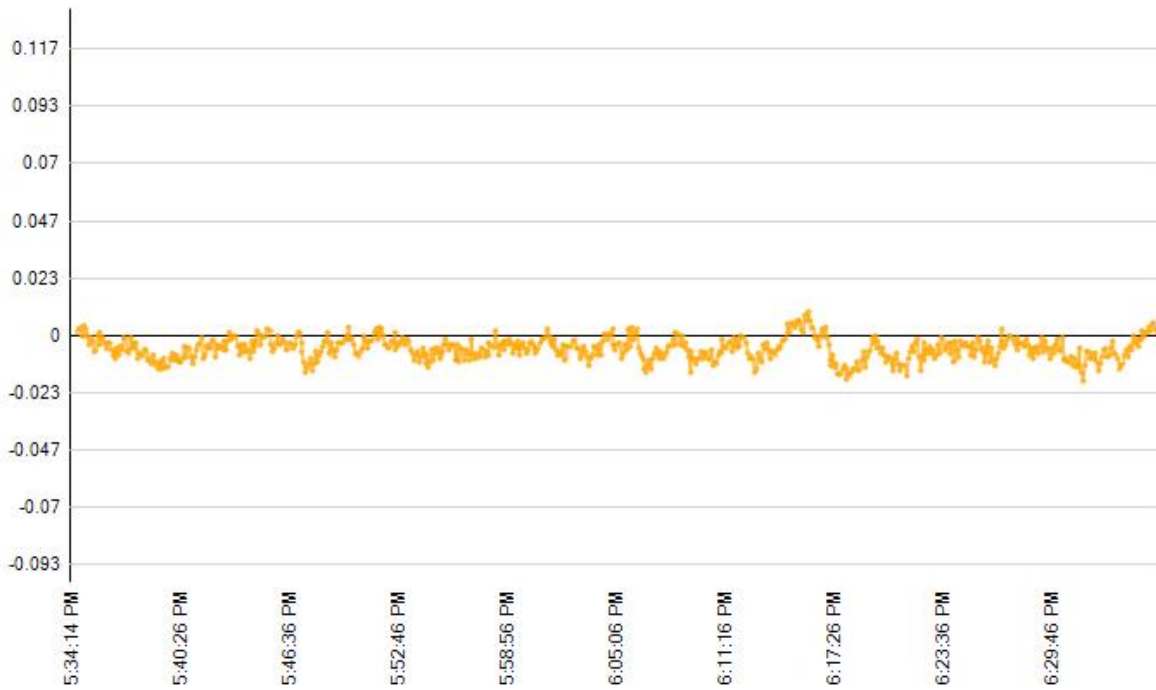


## Residuals





Mean = -0.005 m Std. Dev. = 0.004 m Min. = -0.018 m Max. = 0.010 m



G 19

2/28/2015 5:34:14 PM - 2/28/2015 6:35:51 PM

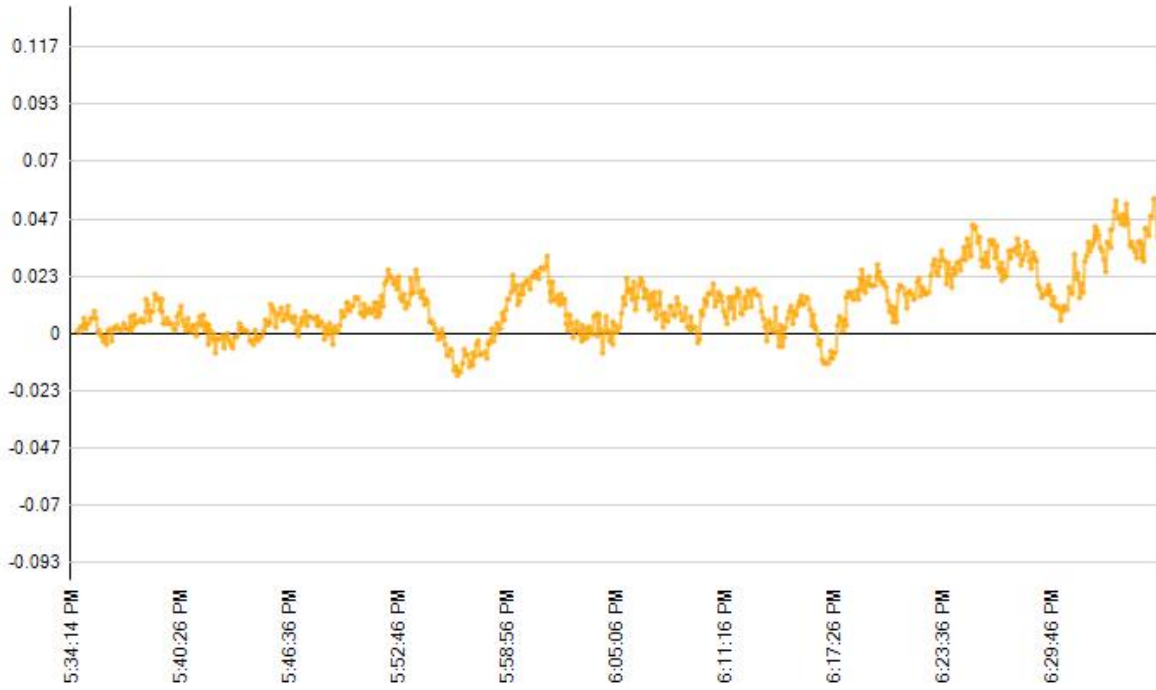
Mean = -0.009 m Std. Dev. = 0.021 m Min. = -0.058 m Max. = 0.058 m



G 20

2/28/2015 5:34:14 PM - 2/28/2015 6:35:51 PM

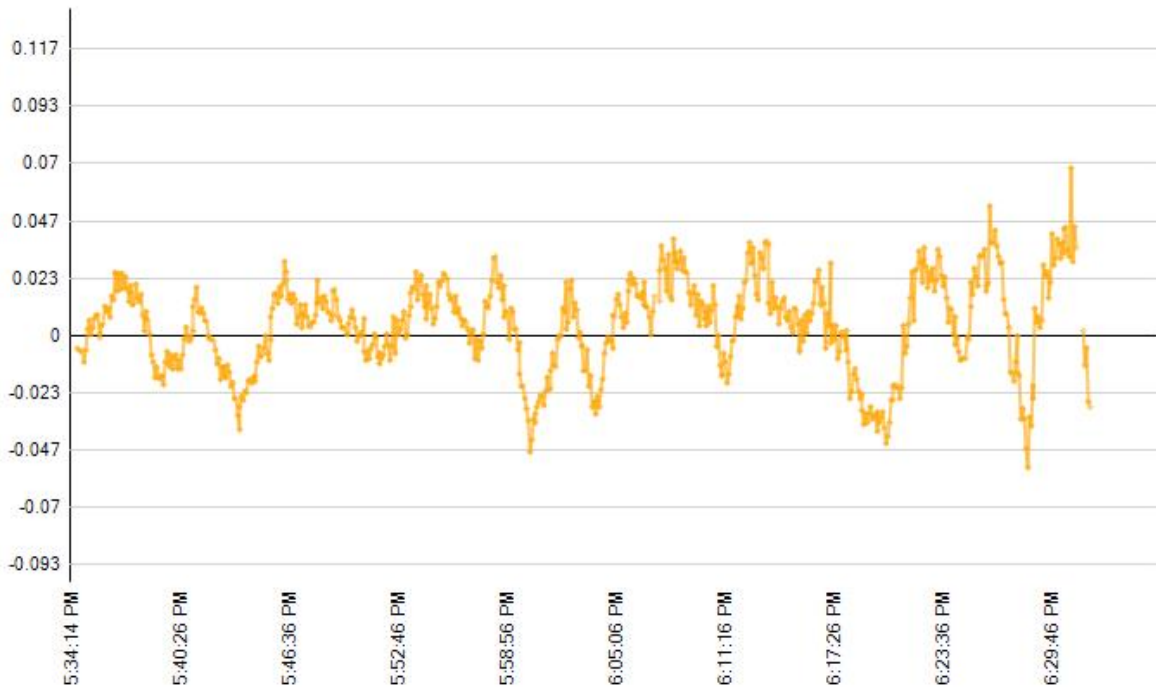
Mean = 0.012 m Std. Dev. = 0.013 m Min. = -0.017 m Max. = 0.055 m



G 23

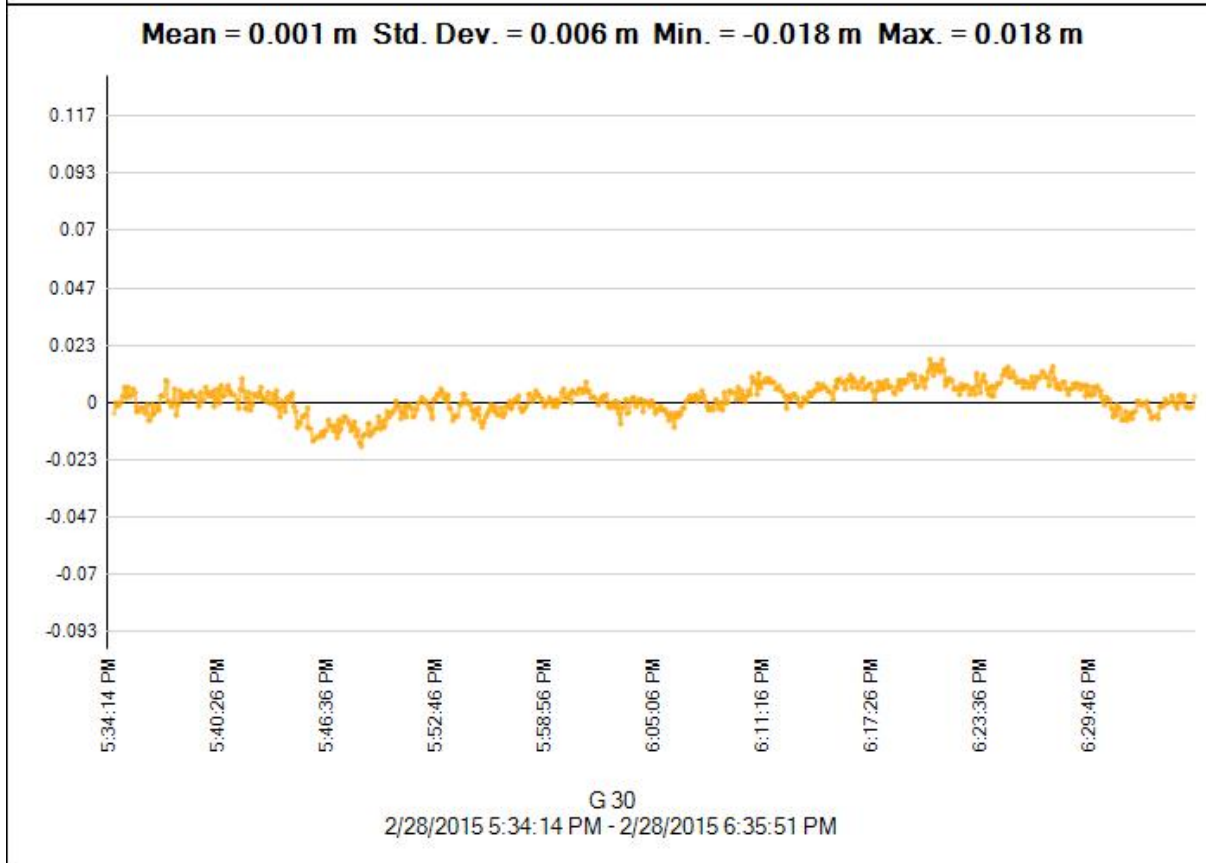
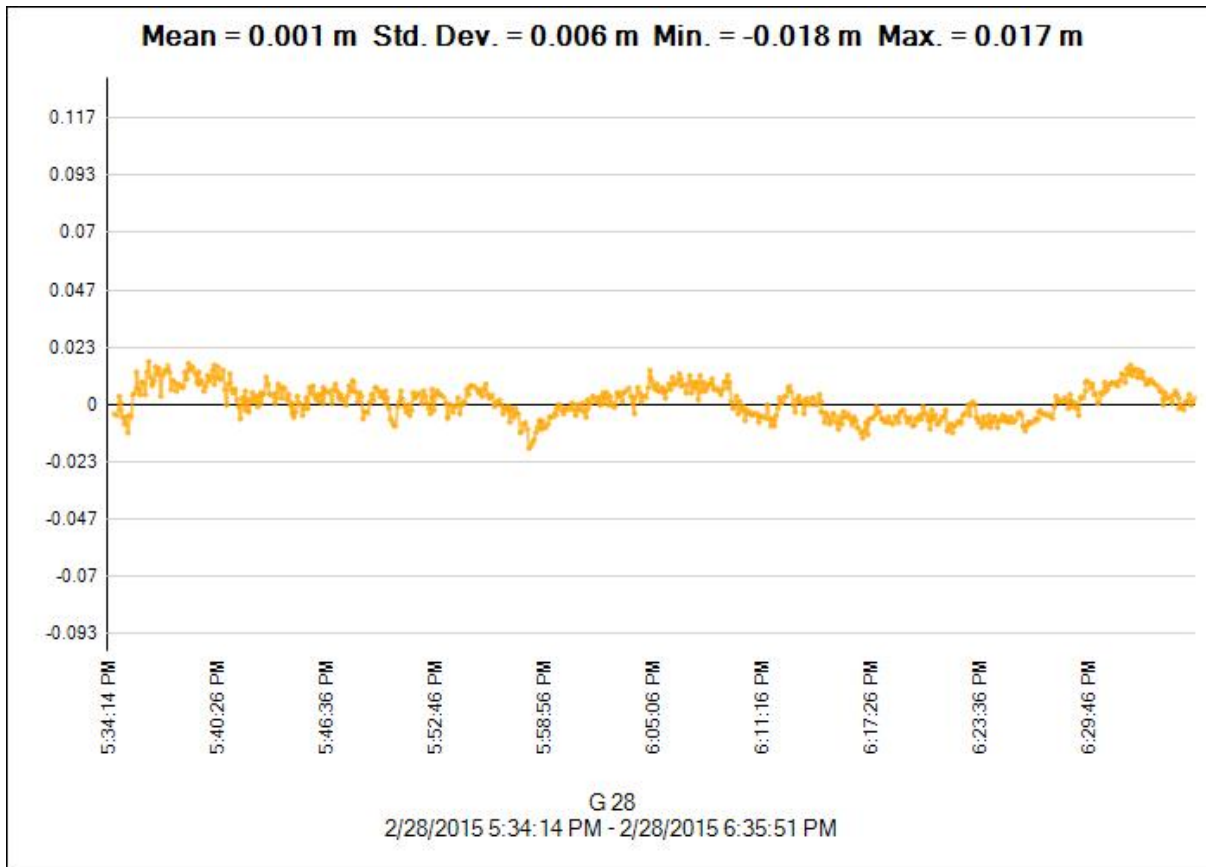
2/28/2015 5:34:14 PM - 2/28/2015 6:35:51 PM

Mean = 0.004 m Std. Dev. = 0.019 m Min. = -0.054 m Max. = 0.068 m



G 27

2/28/2015 5:34:14 PM - 2/28/2015 6:35:51 PM





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**Processing style**

Elevation mask: 10.0 deg  
Auto start processing: Yes  
Start automatic ID numbering: AUTO0001  
Continuous vectors: No  
Generate residuals: Yes  
Antenna model: Automatic  
Ephemeris type: Automatic  
Frequency: Multiple Frequencies  
Processing Interval: Use all data  
Force float: No

**Acceptance Criteria**

Vector Component	Flag 	Fail 
Horizontal Precision >	0.050 m + 1.000 ppm	0.100 m + 1.000 ppm
Vertical Precision >	0.100 m + 1.000 ppm	0.200 m + 1.000 ppm

10/29/2015 1:09:46 PM	\\conas\projects \312014478_PAG_2015\Acquisition \Ground_Survey\Adjustments\4478 PAG LiDAR Network.vce	Trimble Business Center
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