

Project information		Coordinate System	
Name:	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj.vce	Name:	UTM
Size:	14 MB	Datum:	NAD 1983 (Conus)
Modified:	4/11/2012 3:30:45 PM (UTC:-6)	Zone:	14 North (99W)
Time zone:	Mountain Standard Time	Geoid:	GEOID09 (Conus)
Reference number:		Vertical datum:	
Description:			

Baseline Processing Report

Processing Summary

Observation	From	To	Solution Type	H. Prec. (Meter)	V. Prec. (Meter)	Geodetic Az.	Ellipsoid Dist. (Meter)	<Y][\h fA YHYfL
19S-SPIKE --- FVA38-B2 (B1)	19S-SPIKE	FVA38-B2	Fixed	0.021	0.027	116°42'00"	49481.707	-134.596
19S-SPIKE --- SVA38-B2 (B2)	19S-SPIKE	SVA38-B2	Fixed	0.016	0.021	116°24'31"	50028.970	-146.694
19S-SPIKE --- FVA62-B2 (B3)	19S-SPIKE	FVA62-B2	Fixed	0.019	0.021	129°53'46"	83955.263	-199.936
19S-SPIKE --- SVA62-B2 (B4)	19S-SPIKE	SVA62-B2	Fixed	0.037	0.052	129°54'53"	83936.036	-199.600
19S-SPIKE --- FVA60-B2 (B5)	19S-SPIKE	FVA60-B2	Fixed	0.006	0.009	87°31'32"	2928.644	-4.085
19S-SPIKE --- SVA60-B2 (B6)	19S-SPIKE	SVA60-B2	Fixed	0.007	0.019	73°00'57"	3051.162	-4.051
19S-SPIKE --- FVA40-B2 (B7)	19S-SPIKE	FVA40-B2	Fixed	0.009	0.014	70°38'24"	28158.762	-46.218
19S-SPIKE --- SVA40-B2 (B8)	19S-SPIKE	SVA40-B2	Fixed	0.024	0.035	70°32'13"	28147.205	-46.402
19S-SPIKE --- FVA57-B2 (B9)	19S-SPIKE	FVA57-B2	Fixed	0.012	0.013	358°22'44"	10257.393	6.585
19S-SPIKE --- FVA57-B2 (B10)	19S-SPIKE	FVA57-B2	Fixed	0.010	0.013	358°24'12"	10209.021	6.243
19S-SPIKE --- FVA33-B2 (B11)	19S-SPIKE	FVA33-B2	Fixed	0.009	0.016	269°56'20"	15257.133	20.375

19S-SPIKE --- FVA33-B2 (B12)	19S-SPIKE	FVA33-B2	Fixed	0.011	0.016	269°54'34"	15316.634	19.863
19S-SPIKE --- FVA29-B2 (B13)	19S-SPIKE	FVA29-B2	Fixed	0.017	0.039	135°18'21"	68019.154	-173.374
19S-SPIKE --- SVA65-B2 (B14)	19S-SPIKE	SVA65-B2	Fixed	0.018	0.020	117°22'52"	73565.538	-227.411
19S-SPIKE --- FVA65-B2 (B16)	19S-SPIKE	FVA65-B2	Fixed	0.015	0.020	117°23'58"	73555.330	-229.028
19S-SPIKE --- FVA41-B2 (B17)	19S-SPIKE	FVA41-B2	Fixed	0.012	0.017	108°41'43"	26937.853	-41.029
19S-SPIKE --- SVA41-B2 (B18)	19S-SPIKE	SVA41-B2	Fixed	0.009	0.014	108°46'12"	26927.956	-41.514
19S-SPIKE --- FVA42-B2 (B19)	19S-SPIKE	FVA42-B2	Fixed	0.011	0.027	139°24'38"	32974.739	-46.044
19S-SPIKE --- SVA42-B2 (B20)	19S-SPIKE	SVA42-B2	Fixed	0.021	0.074	139°19'24"	32975.926	-46.272
19S-SPIKE --- FVA44-B2 (B21)	19S-SPIKE	FVA44-B2	Fixed	0.029	0.047	152°44'40"	48865.392	-65.498
19S-SPIKE --- SVA44-B2 (B22)	19S-SPIKE	SVA44-B2	Fixed	0.060	0.052	152°46'47"	48933.738	-66.506
19S-SPIKE --- FVA64-B2 (B23)	19S-SPIKE	FVA64-B2	Fixed	0.009	0.011	156°31'42"	56481.067	-146.742
19S-SPIKE --- SVA64-B2 (B24)	19S-SPIKE	SVA64-B2	Fixed	0.008	0.013	156°33'29"	56484.065	-146.893
19S-SPIKE --- FVA31-B2 (B25)	19S-SPIKE	FVA31-B2	Fixed	0.033	0.038	205°37'55"	41027.970	5.653
19S-SPIKE --- SVA31-B2 (B26)	19S-SPIKE	SVA31-B2	Fixed	0.045	0.029	205°32'57"	41111.212	4.577
19S-SPIKE --- FVA32-B2 (B27)	19S-SPIKE	FVA32-B2	Fixed	0.010	0.018	211°43'37"	27596.770	2.913
19S-SPIKE --- SVA32-B2 (B28)	19S-SPIKE	SVA32-B2	Fixed	0.010	0.014	211°40'45"	27547.153	1.570
19S-SPIKE --- FVA01-B2 (B31)	19S-SPIKE	FVA01-B2	Fixed	0.010	0.013	239°42'17"	20841.482	-22.792
19S-SPIKE --- SVA01-B2 (B32)	19S-SPIKE	SVA01-B2	Fixed	0.010	0.013	239°41'07"	20816.363	-21.815
19S-SPIKE --- FVA26-B2 (B33)	19S-SPIKE	FVA26-B2	Fixed	0.023	0.032	92°00'16"	54451.222	-113.559
19S-SPIKE --- SVA26-B2 (B34)	19S-SPIKE	SVA26-B2	Fixed	0.013	0.041	92°04'25"	54464.181	-114.301
19S-SPIKE --- FVA61-B2 (B35)	19S-SPIKE	FVA61-B2	Fixed	0.009	0.020	88°16'27"	59113.458	-117.415
19S-SPIKE --- SVA61-B2 (B36)	19S-SPIKE	SVA61-B2	Fixed	0.074	0.063	88°16'03"	59179.406	-117.632
19S-SPIKE --- FVA27-B2 (B37)	19S-SPIKE	FVA27-B2	Fixed	0.022	0.042	100°09'51"	63297.028	-98.791
19S-SPIKE --- SVA27-B2 (B38)	19S-SPIKE	SVA27-B2	Fixed	0.030	0.059	100°12'36"	63298.082	-99.538
19S-SPIKE --- FVA28-B2 (B39)	19S-SPIKE	FVA28-B2	Fixed	0.024	0.031	123°31'49"	75171.541	-189.145

MEJ-SPIKE --- FVA30-B2 (B249)	MEJ-SPIKE	FVA30-B2	Fixed	0.007	0.012	239°58'34"	57857.932	97.666
MEJ-SPIKE --- FVA63-B2 (B250)	MEJ-SPIKE	FVA63-B2	Fixed	0.031	0.055	240°53'17"	64071.216	110.772
MEJ-SPIKE --- SVA63-B2 (B251)	MEJ-SPIKE	SVA63-B2	Fixed	0.067	0.091	240°37'42"	62944.248	111.471

Acceptance Summary

Processed	Passed	Flag 	Fail 
39	39	0	0

19S-SPIKE - FVA38-B2 (11:34:19 AM-11:56:26 AM) (S1)

Baseline observation: 19S-SPIKE --- FVA38-B2 (B1)

Processed: 3/20/2012 3:49:05 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.021 m

Vertical precision: 0.027 m

RMS: 0.009 m

Maximum PDOP: 1.904

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/2/2012 11:34:19 AM (Local: UTC-7hr)

Processing stop time: 2/2/2012 11:56:26 AM (Local: UTC-7hr)

Processing duration: 00:22:07

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338086.572 m	Latitude	N37°29'23.75733"	Latitude	N37°29'23.75732"
Northing	4150799.740 m	Longitude	W100°49'53.32096"	Longitude	W100°49'53.32096"
Elevation	897.036 m	Height	870.868 m	Height	870.868 m

To:	FVA38-B2				
Grid		Local		Global	
Easting	381845.254 m	Latitude	N37°17'18.79602"	Latitude	N37°17'18.79602"
Northing	4127716.177 m	Longitude	W100°19'58.65707"	Longitude	W100°19'58.65707"
Elevation	762.969 m	Height	736.272 m	Height	736.272 m

Vector					
9Ughb[	43758.682 m	NS Fwd Azimuth	116°42'00"	L	40928.103 m
Bcfh\jb[	-23083.563 m	Ellipsoid Dist.	49481.707 m	M	-21345.453 m
9Yj U\jcb	-134.068 m	<Y]\h	-134.596 m	N	-17841.635 m

Standard Errors

Vector errors:					
Point ID	0.007 m	Point ID	0°00'00"	Point ID	0.007 m
Point ID	0.009 m	Point ID	0.007 m	Point ID	0.012 m
Point ID	0.014 m	Point ID	0.014 m	Point ID	0.011 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000517998		
Y	0.0000304591	0.0001467404	
Z	-0.0000099540	-0.0000557774	0.0001140101

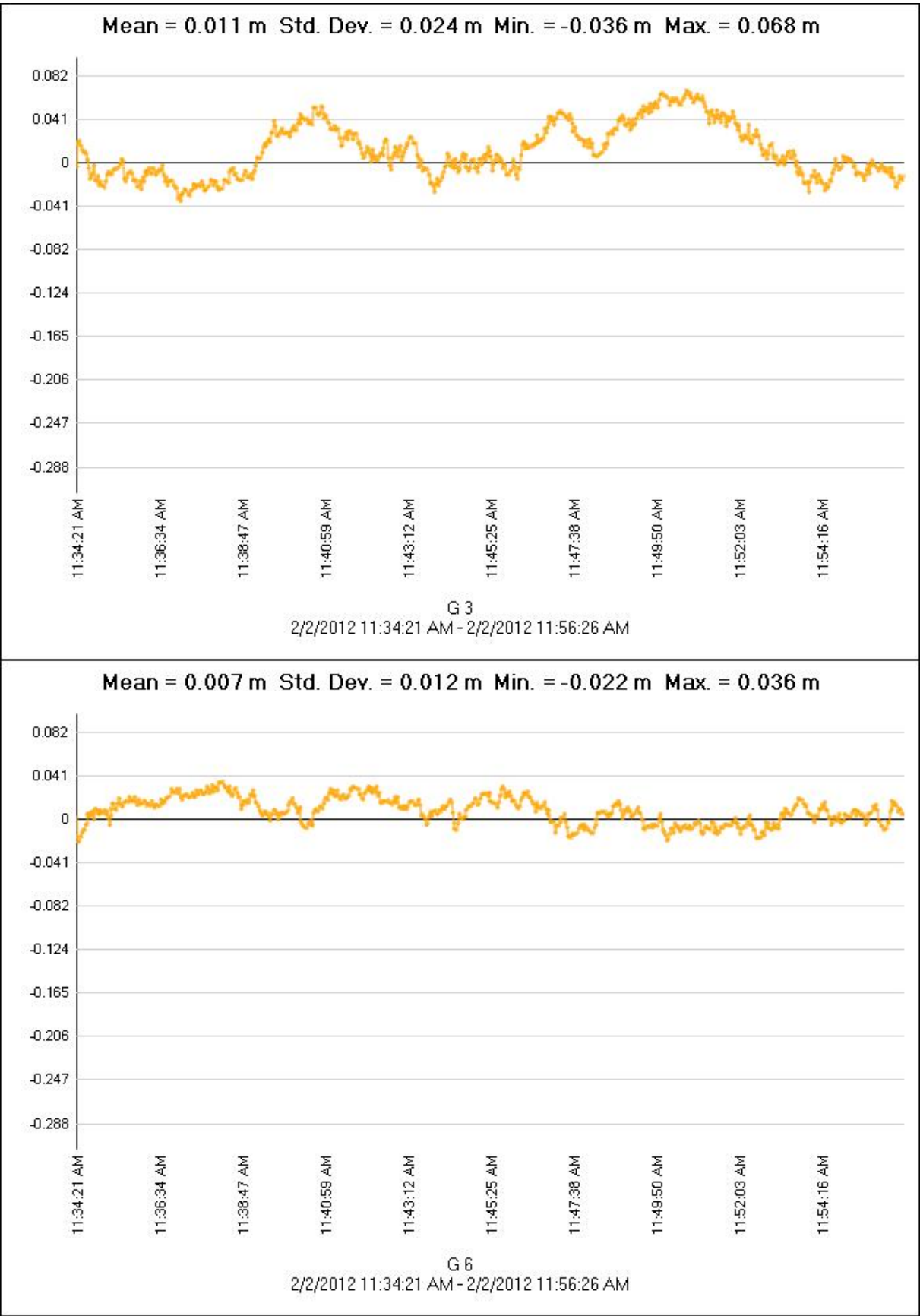
Occupations

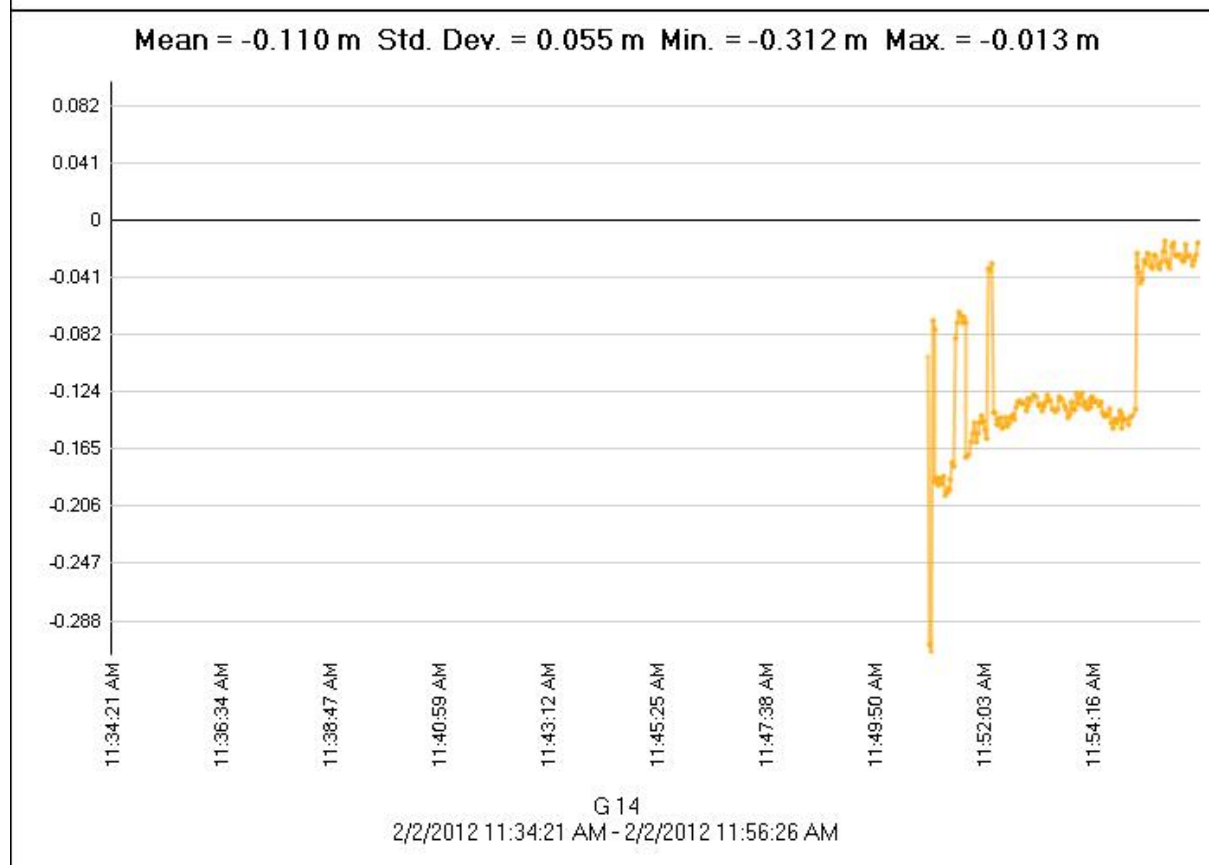
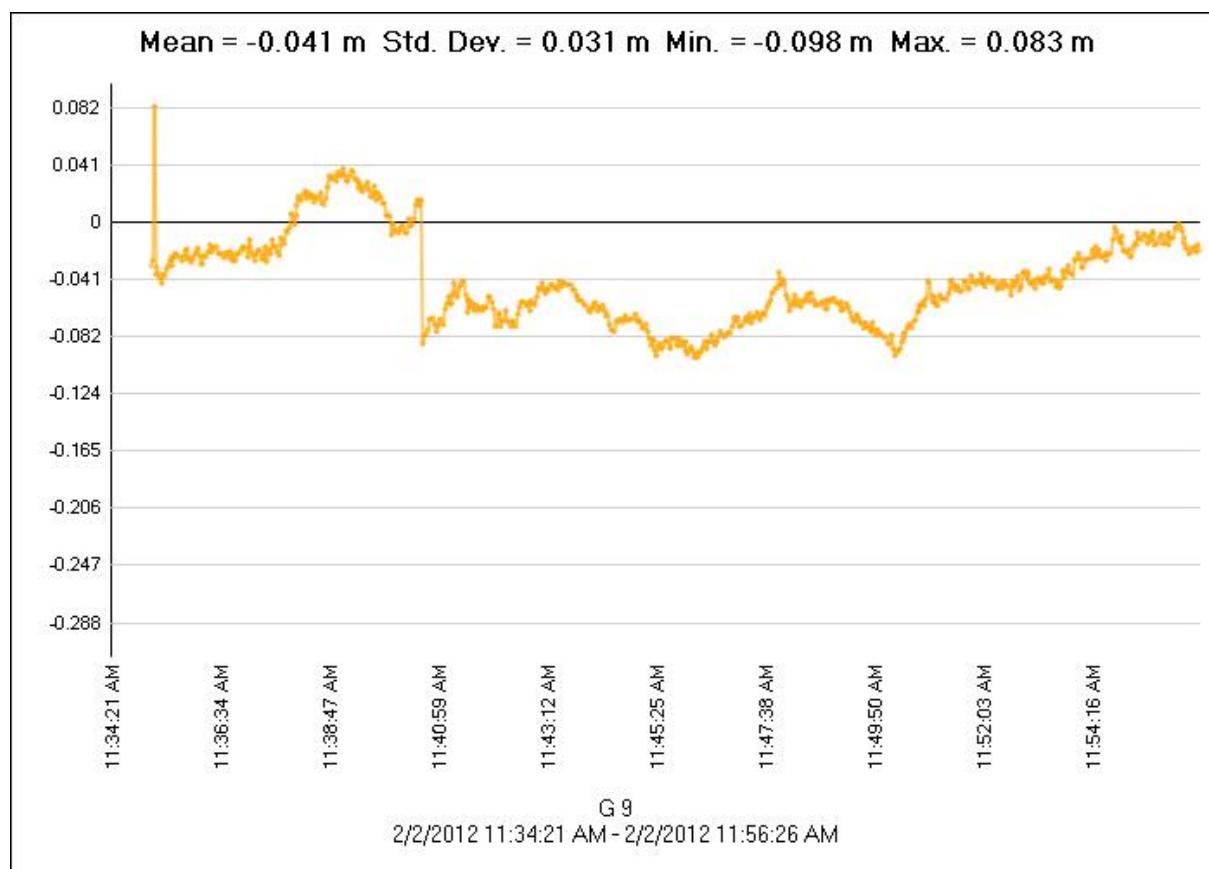
	From	To
Point ID:	19S-SPIKE	FVA38-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010330.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080330.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

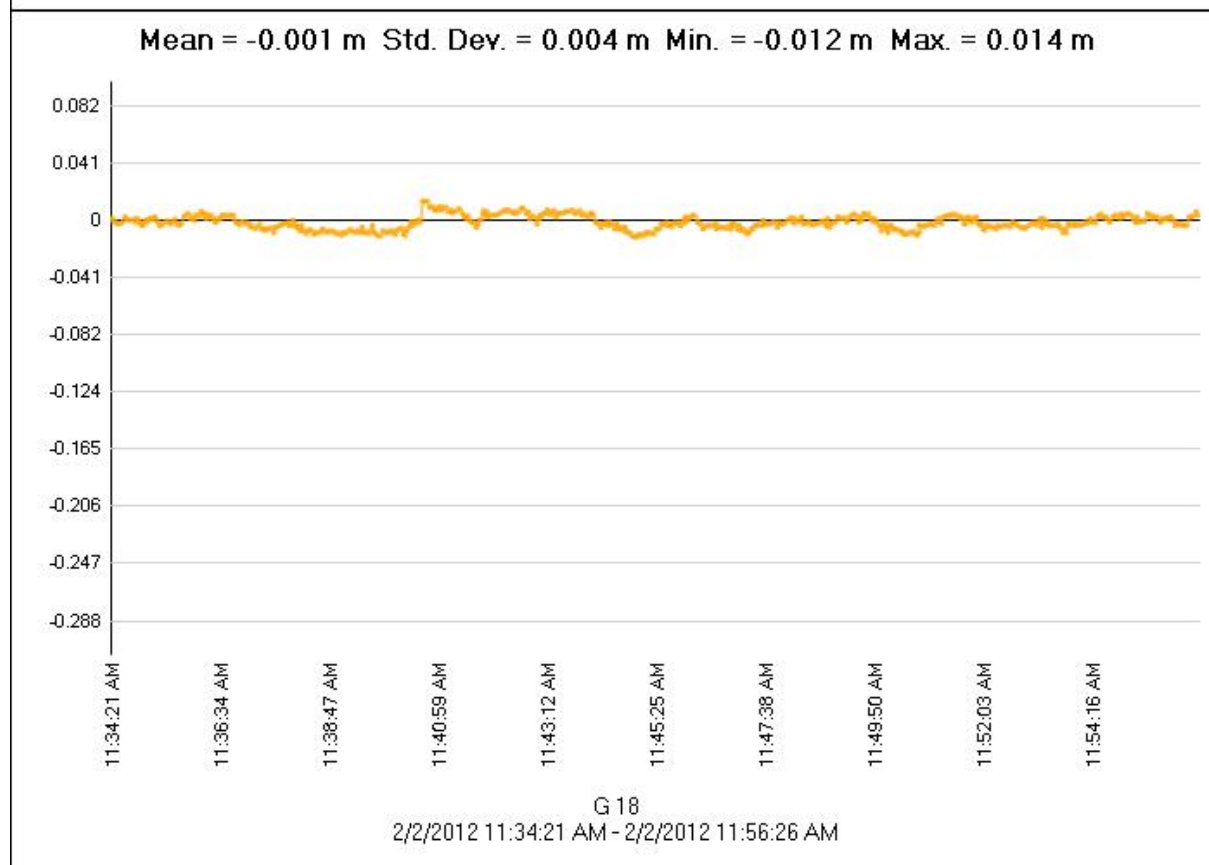
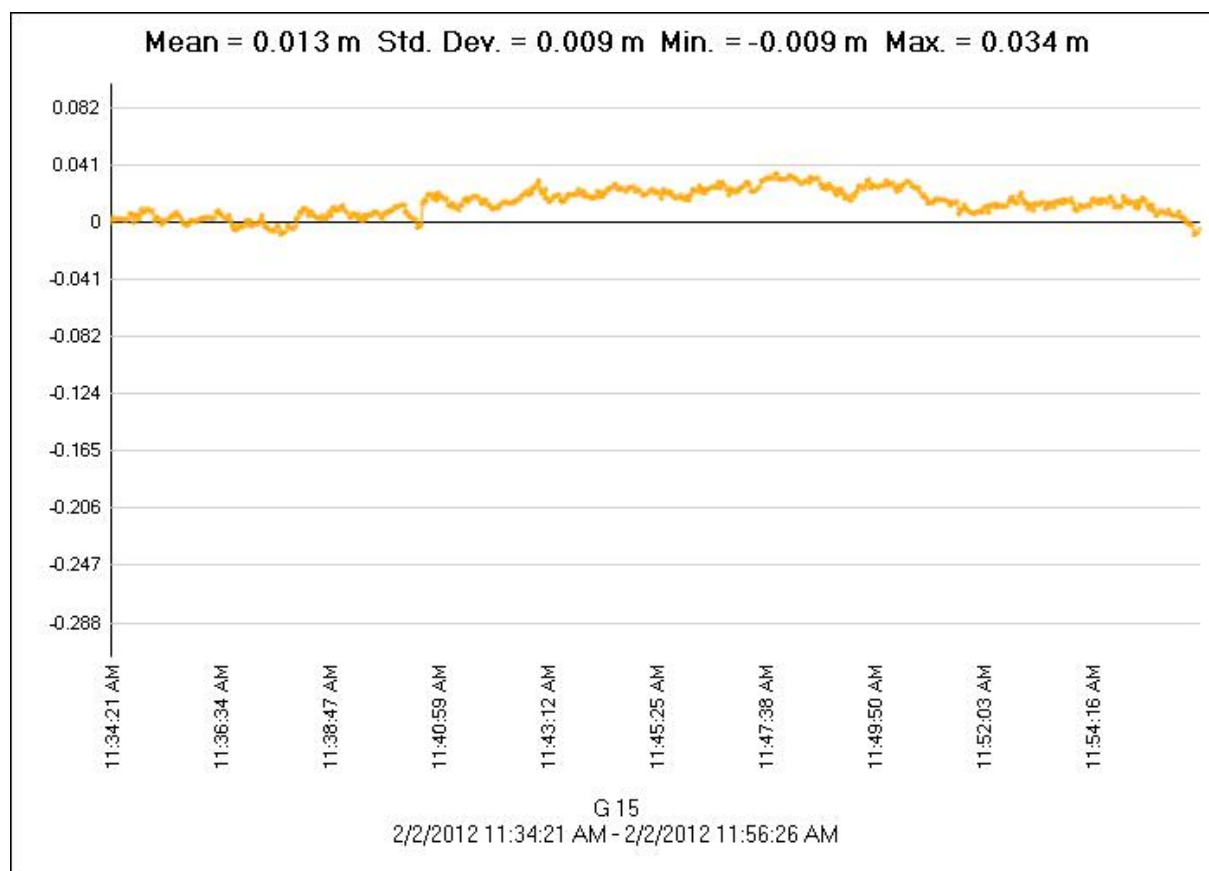
Tracking Summary

SV	2/2/2012 11:34:19 AM	Duration: 00:22:07 Major interval: 00:01:00	2/2/2012 11:56:26 AM
G 3			
G 6			
G 9			
G 14			
G 15			
G 18			
G 21			
G 22			
G 26			
G 27			
G 29			

Residuals







Mean = 0.006 m Std. Dev. = 0.005 m Min. = -0.006 m Max. = 0.019 m



G 21

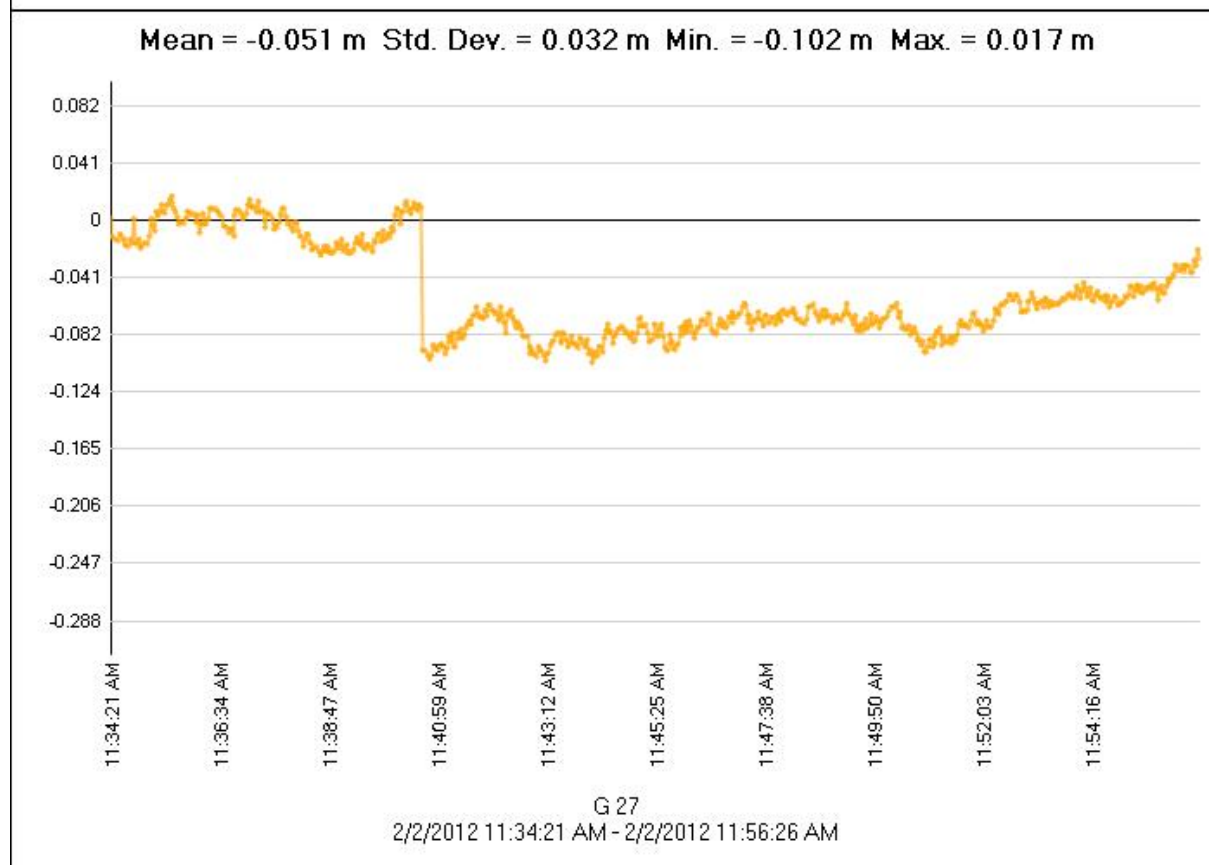
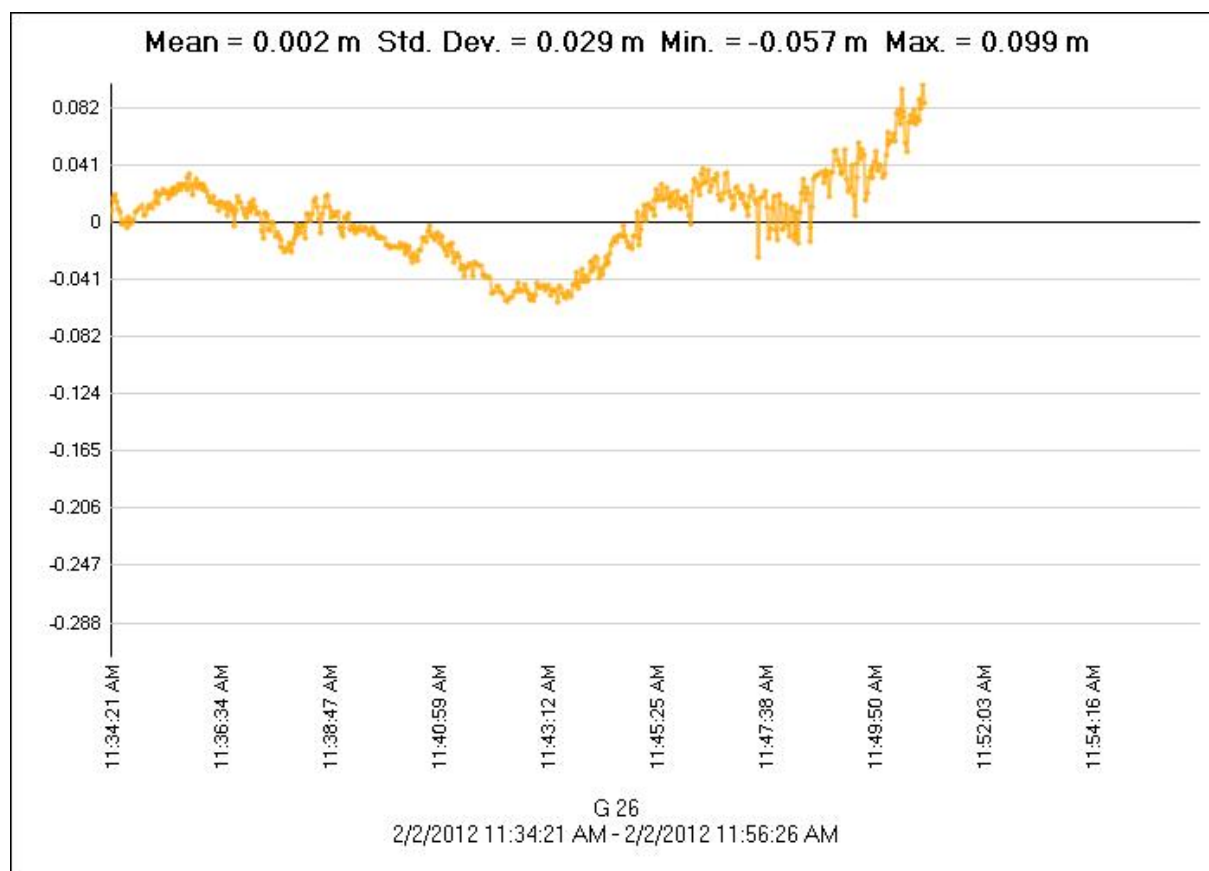
2/2/2012 11:34:21 AM - 2/2/2012 11:56:26 AM

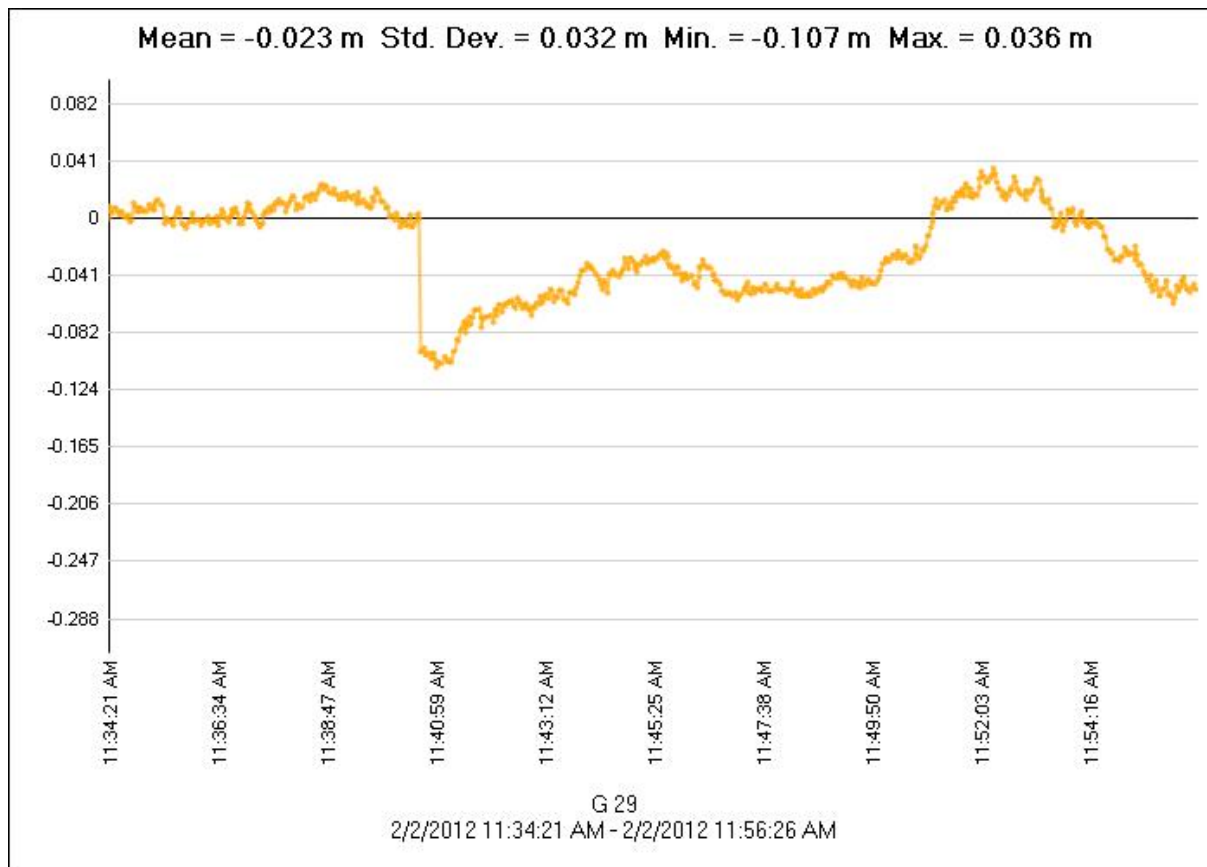
Mean = 0.010 m Std. Dev. = 0.012 m Min. = -0.026 m Max. = 0.036 m



G 22

2/2/2012 11:34:21 AM - 2/2/2012 11:56:26 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:	Dual Frequency (L1, L2)
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

19S-SPIKE - SVA38-B2 (12:10:47 PM-12:31:29 PM) (S2)

Baseline observation: 19S-SPIKE --- SVA38-B2 (B2)

Processed: 3/20/2012 3:49:00 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.016 m

Vertical precision: 0.021 m

RMS: 0.002 m

Maximum PDOP: 2.082

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/2/2012 12:10:47 PM (Local: UTC-7hr)

Processing stop time: 2/2/2012 12:31:29 PM (Local: UTC-7hr)

Processing duration: 00:20:42

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338086.572 m	Latitude	N37°29'23.75733"	Latitude	N37°29'23.75732"
Northing	4150799.740 m	Longitude	W100°49'53.32096"	Longitude	W100°49'53.32096"
Elevation	897.036 m	Height	870.868 m	Height	870.868 m

To:	SVA38-B2				
Grid		Local		Global	
Easting	382447.320 m	Latitude	N37°17'18.09953"	Latitude	N37°17'18.09952"
Northing	4127686.242 m	Longitude	W100°19'34.19413"	Longitude	W100°19'34.19413"
Elevation	750.876 m	Height	724.174 m	Height	724.174 m

Vector					
9Ughb[	44360.747 m	NS Fwd Azimuth	116°24'31"	L	41520.363 m
Bcfh\jb[	-23113.497 m	Ellipsoid Dist.	50028.970 m	M	-21456.840 m
9Yj Uhcb	-146.161 m	<Y][\h	-146.694 m	N	-17866.049 m

Standard Errors

Vector errors:					
Point ID	0.004 m	Point ID	0°00'00"	Point ID	0.005 m
Point ID	0.007 m	Point ID	0.004 m	Point ID	0.010 m
Point ID	0.011 m	Point ID	0.011 m	Point ID	0.007 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000204049		
Y	0.0000237397	0.0001087102	
Z	-0.0000069909	-0.0000300473	0.0000483537

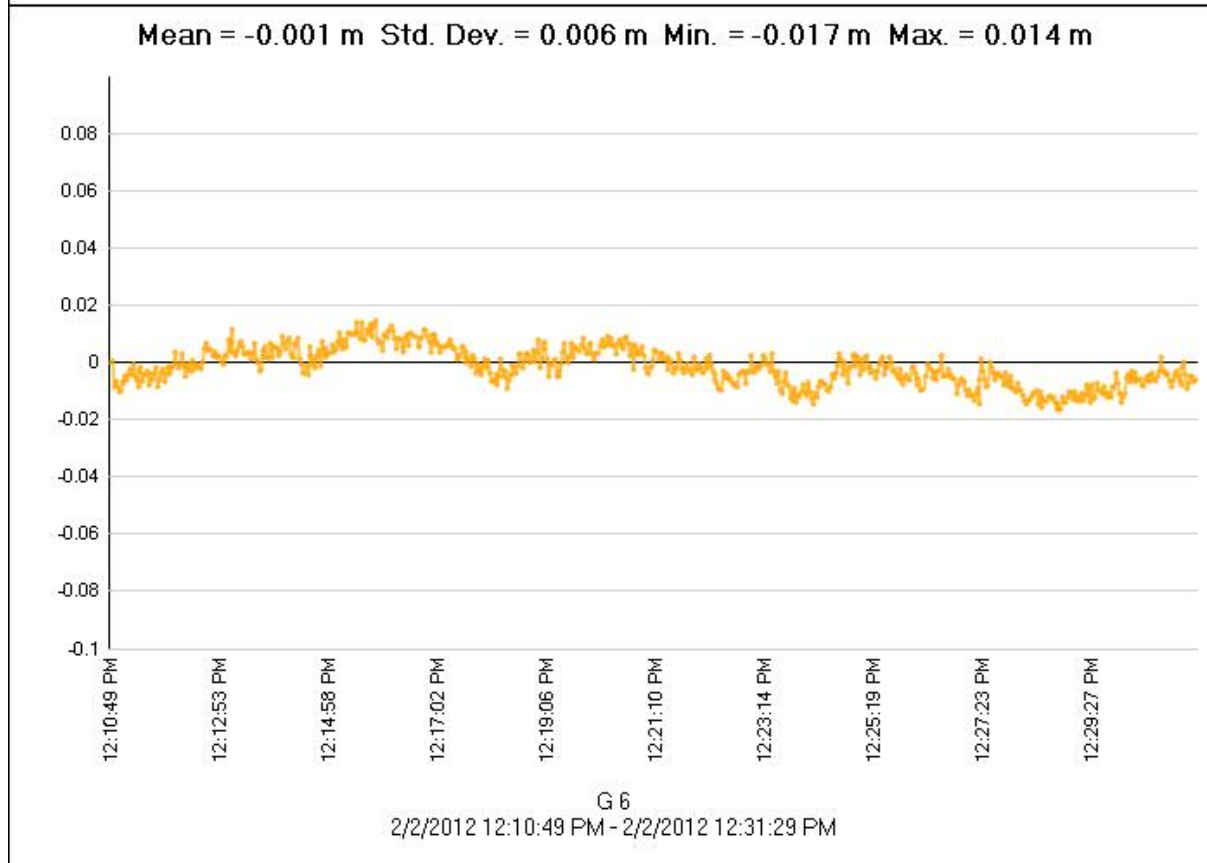
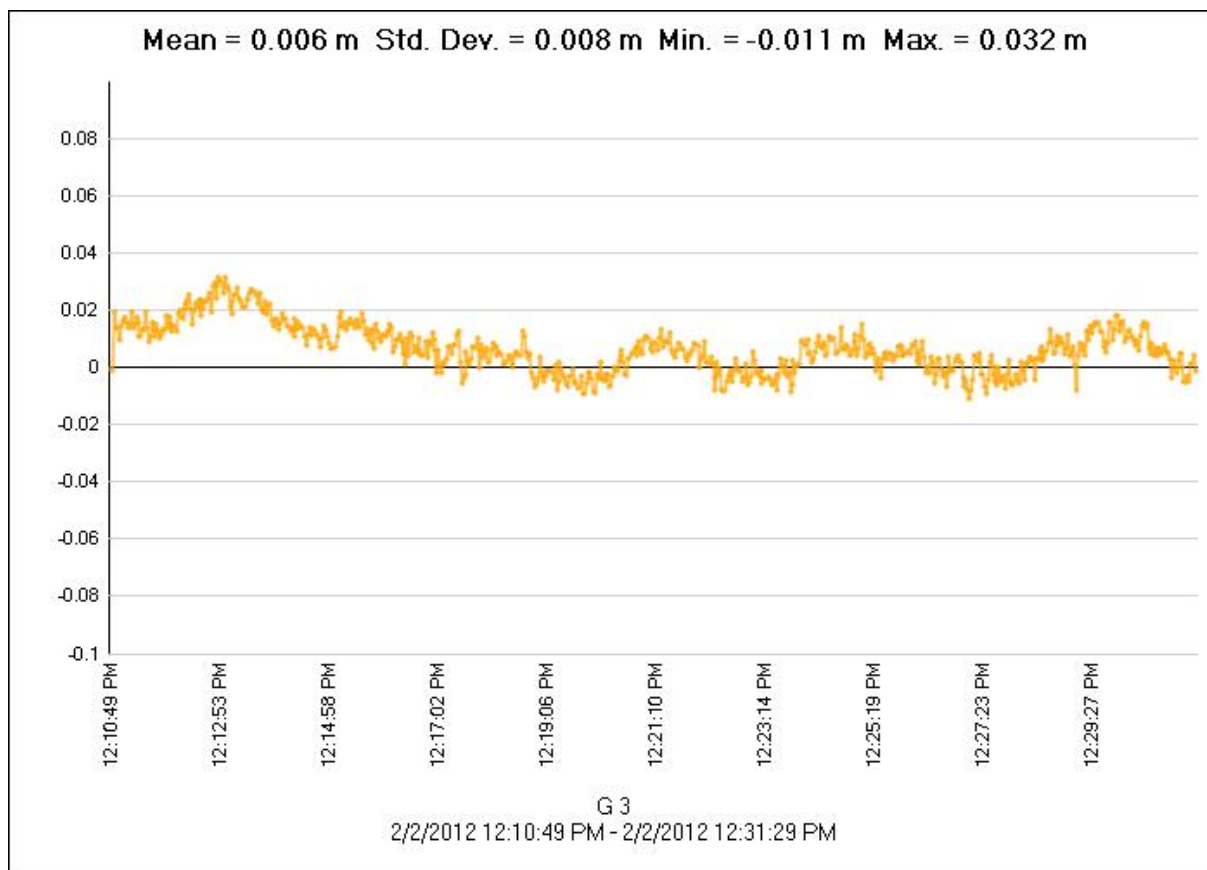
Occupations

	From	To
Point ID:	19S-SPIKE	SVA38-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00010330.12o	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00080331.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

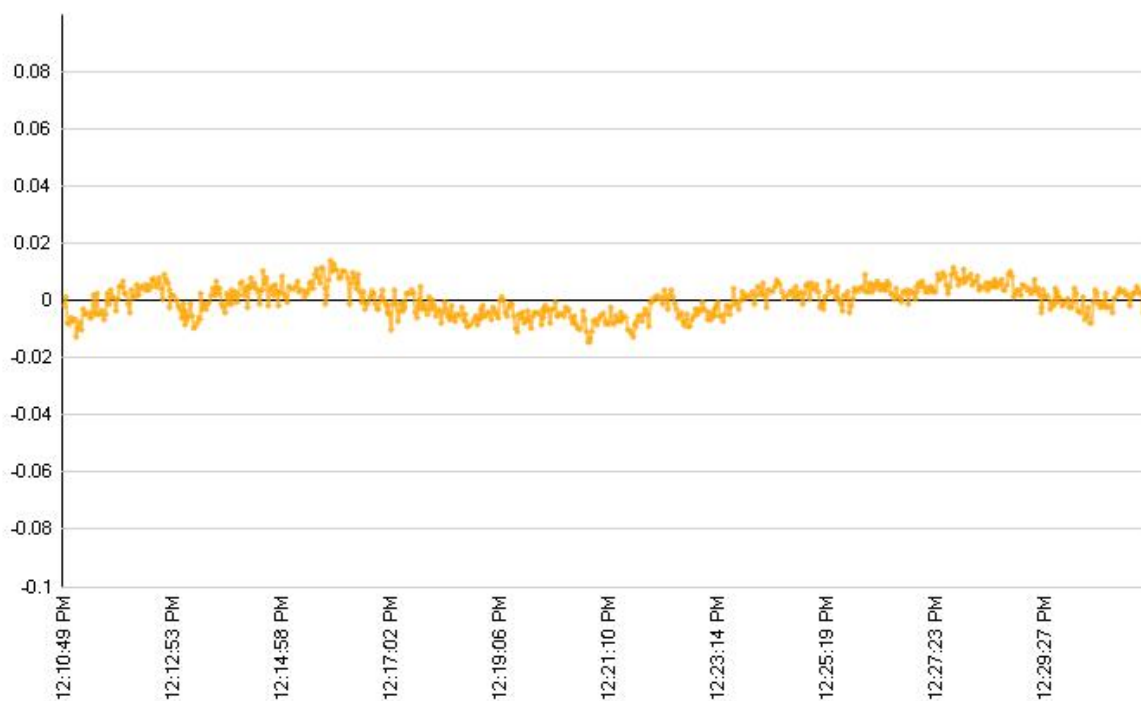
Tracking Summary

SV	2/2/2012 12:10:47 PM	Duration: 00:20:42	Major interval: 00:01:00	2/2/2012 12:31:29 PM
G 3	L1 L2			
G 6	L1 L2			
G 9	L1 L2			
G 14	L1 L2			
G 15	L1 L2			
G 18	L1 L2			
G 19	L1 L2			
G 21	L1 L2			
G 22	L1 L2			
G 26	L1 L2			
G 27	L1 L2			
G 29	L1 L2			

Residuals



Mean = 0.000 m Std. Dev. = 0.005 m Min. = -0.015 m Max. = 0.014 m



G 9

2/2/2012 12:10:49 PM - 2/2/2012 12:31:29 PM

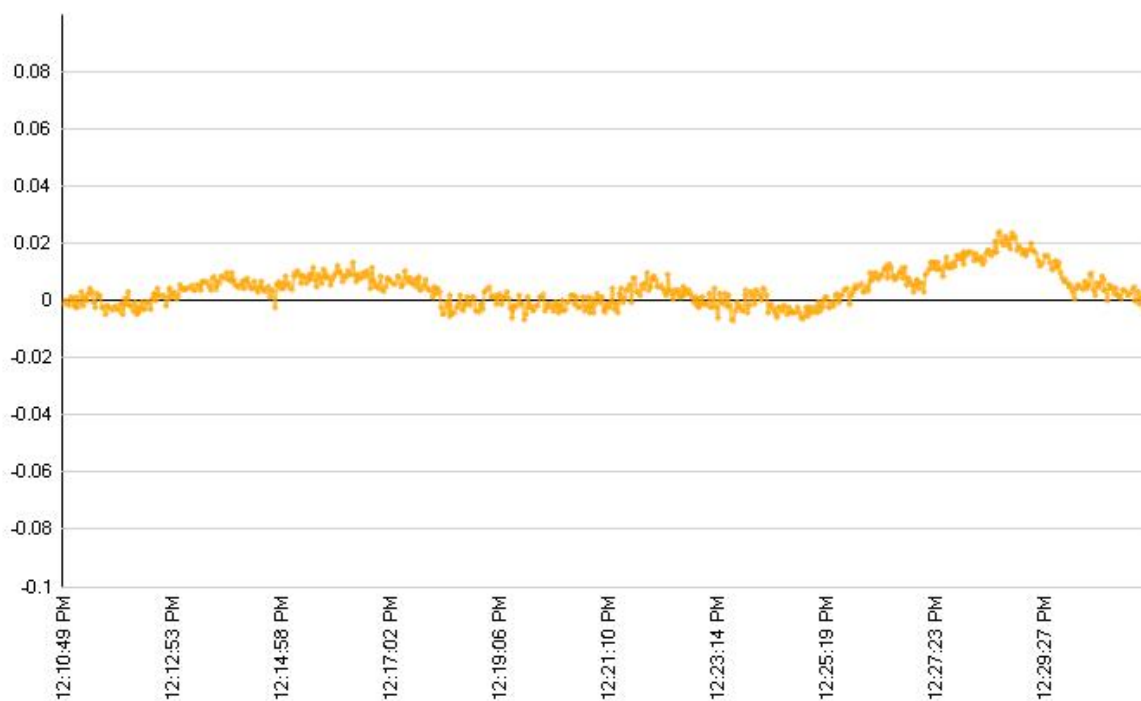
Mean = -0.004 m Std. Dev. = 0.015 m Min. = -0.037 m Max. = 0.032 m



G 14

2/2/2012 12:10:49 PM - 2/2/2012 12:31:29 PM

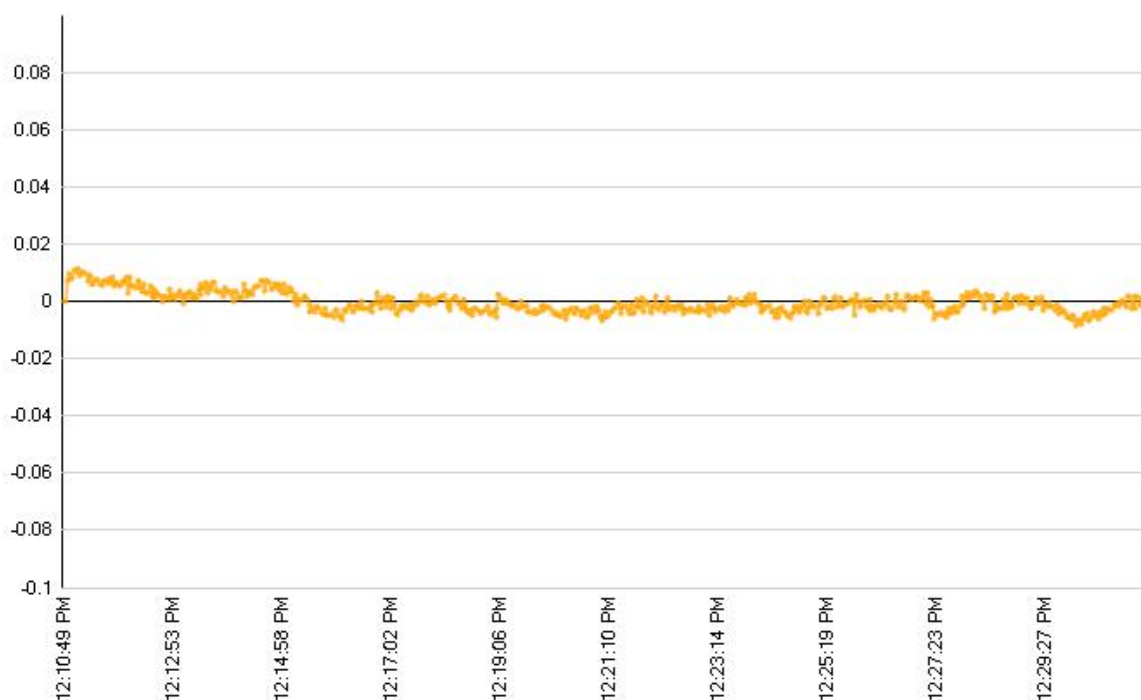
Mean = 0.004 m Std. Dev. = 0.006 m Min. = -0.007 m Max. = 0.024 m



G 15

2/2/2012 12:10:49 PM - 2/2/2012 12:31:29 PM

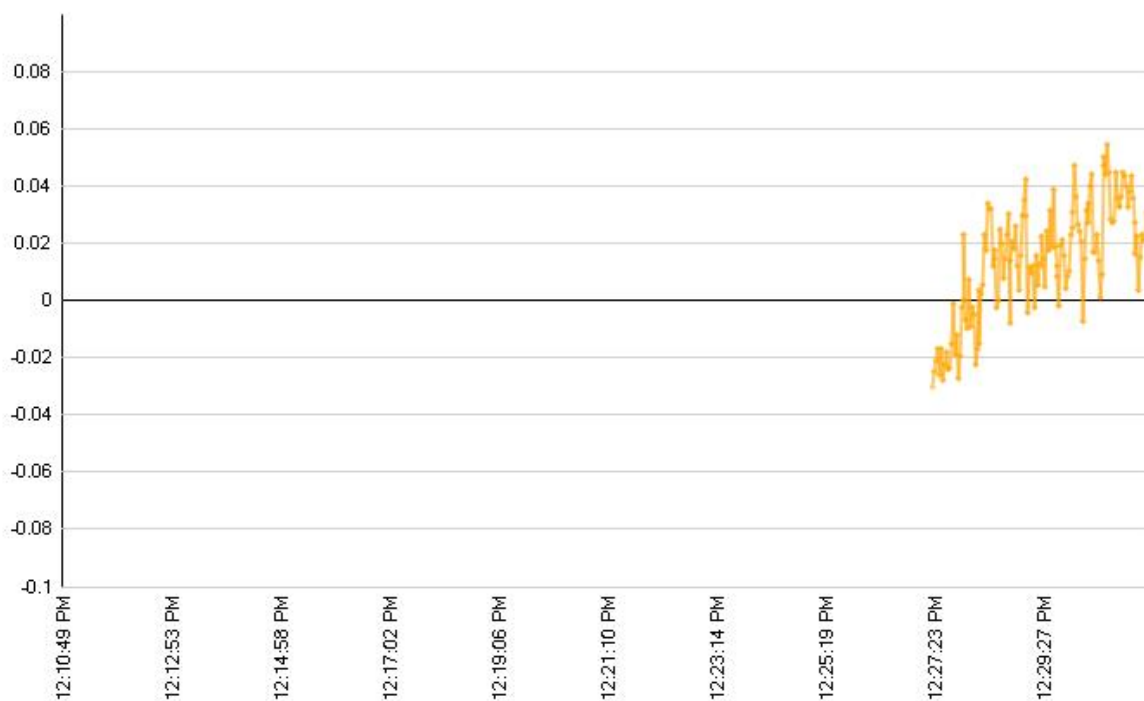
Mean = 0.000 m Std. Dev. = 0.003 m Min. = -0.008 m Max. = 0.012 m



G 18

2/2/2012 12:10:49 PM - 2/2/2012 12:31:29 PM

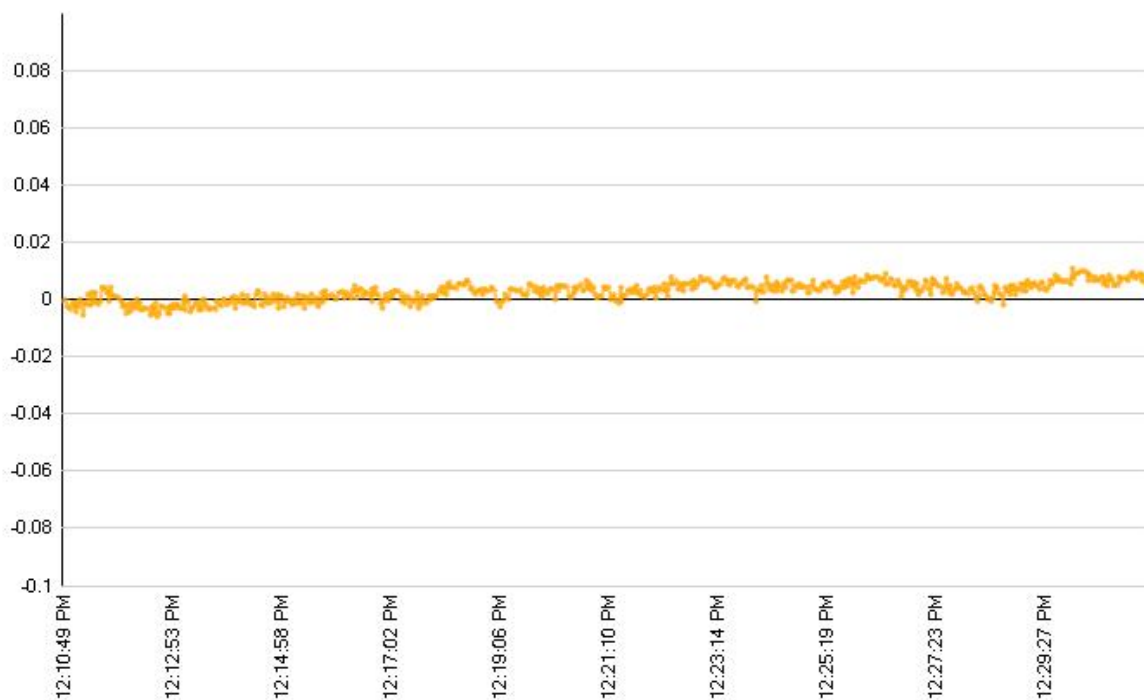
Mean = 0.013 m Std. Dev. = 0.018 m Min. = -0.030 m Max. = 0.054 m



G 19

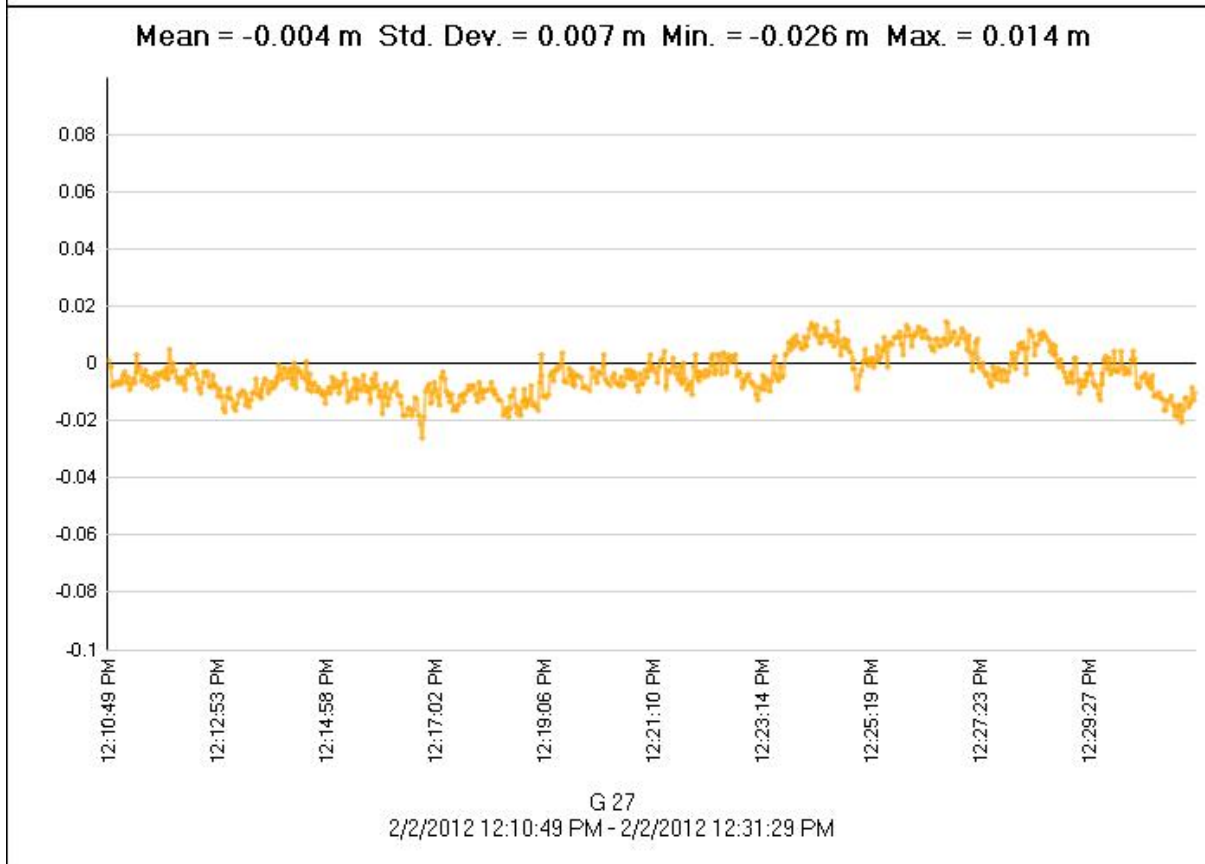
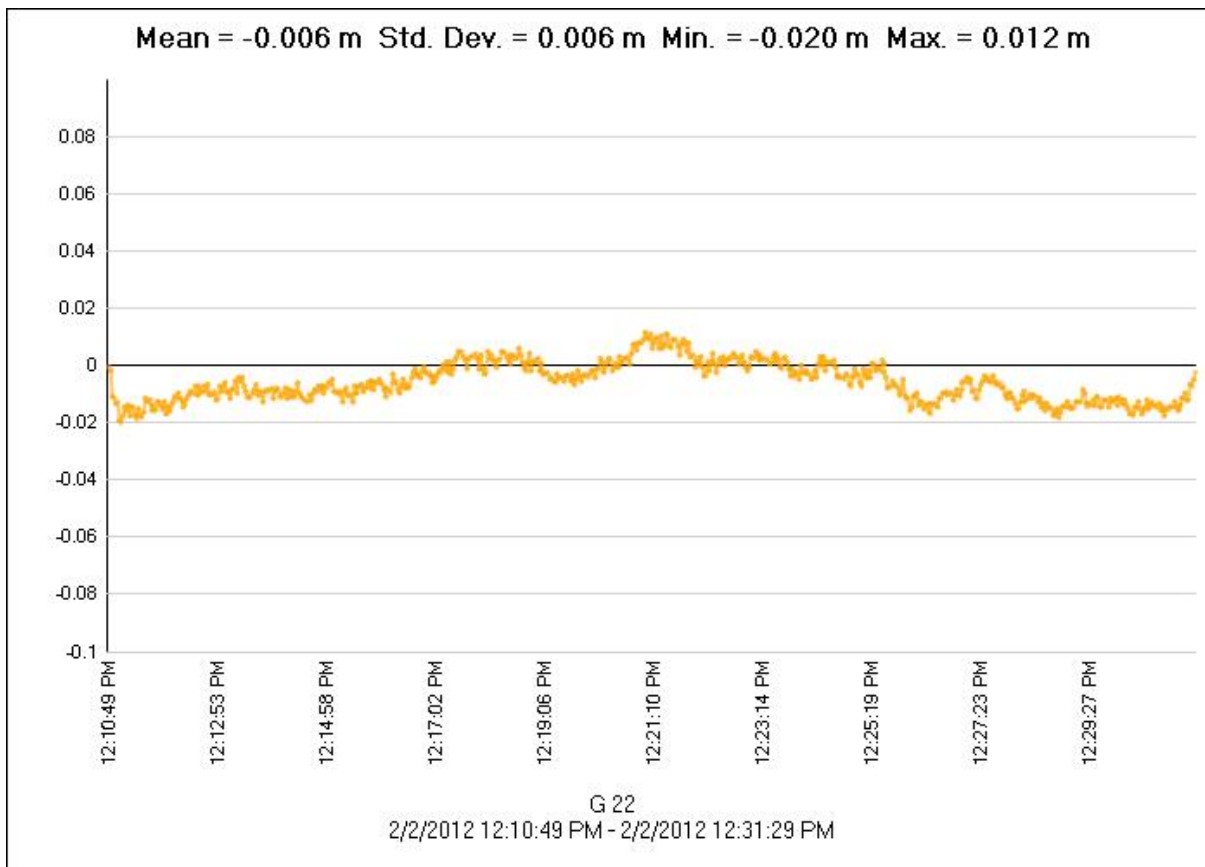
2/2/2012 12:10:49 PM - 2/2/2012 12:31:29 PM

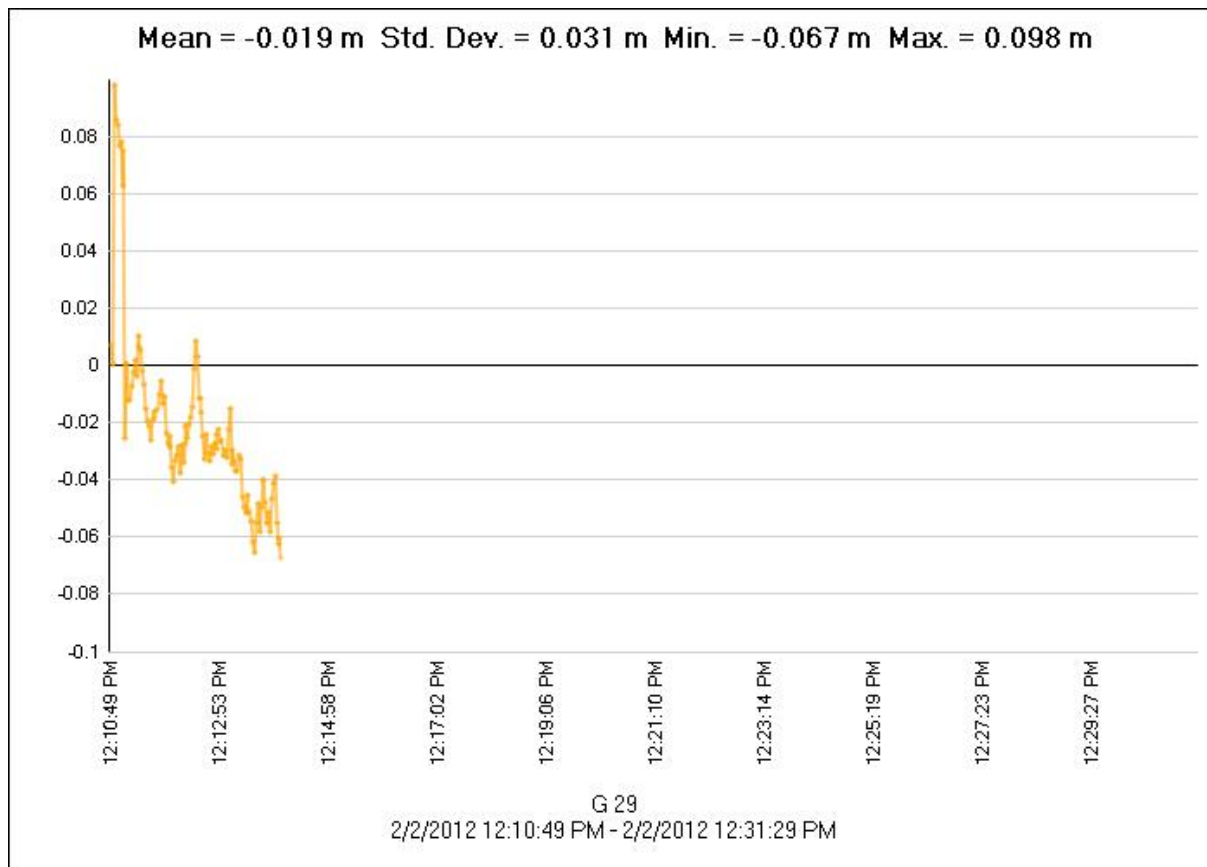
Mean = 0.002 m Std. Dev. = 0.003 m Min. = -0.006 m Max. = 0.011 m



G 21

2/2/2012 12:10:49 PM - 2/2/2012 12:31:29 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:	Dual Frequency (L1, L2)
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

19S-SPIKE - FVA62-B2 (1:34:59 PM-1:54:43 PM) (S3)

Baseline observation: 19S-SPIKE --- FVA62-B2 (B3)

Processed: 3/20/2012 3:49:07 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.019 m

Vertical precision: 0.021 m

RMS: 0.003 m

Maximum PDOP: 2.070

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/2/2012 1:34:59 PM (Local: UTC-7hr)

Processing stop time: 2/2/2012 1:54:43 PM (Local: UTC-7hr)

Processing duration: 00:19:44

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338086.572 m	Latitude	N37°29'23.75733"	Latitude	N37°29'23.75732"
Northing	4150799.740 m	Longitude	W100°49'53.32096"	Longitude	W100°49'53.32096"
Elevation	897.036 m	Height	870.868 m	Height	870.868 m

To:	FVA62-B2				
Grid		Local		Global	
Easting	401431.170 m	Latitude	N37°00'09.03090"	Latitude	N37°00'09.03090"
Northing	4095724.217 m	Longitude	W100°06'28.18813"	Longitude	W100°06'28.18813"
Elevation	698.273 m	Height	670.932 m	Height	670.932 m

Vector					
9Ughb[	63344.597 m	NS Fwd Azimuth	129°53'46"	L	57221.376 m
BcfA\jb[	-55075.523 m	Ellipsoid Dist.	83955.263 m	M	-43710.551 m
9Yj Uhcb	-198.763 m	<Y][\h	-199.936 m	N	-43188.320 m

Standard Errors

Vector errors:					
Ughb[	0.007 m	BG`Zk X'5n]a i h	0°00'00"	L	0.007 m
Bcfh\]b[	0.006 m	'9~]dgc]X'8]gh	0.008 m	M	0.008 m
'9`Yj Uhcb	0.011 m	' <Y][\h	0.011 m	N	0.009 m

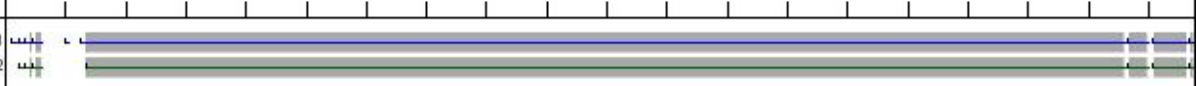
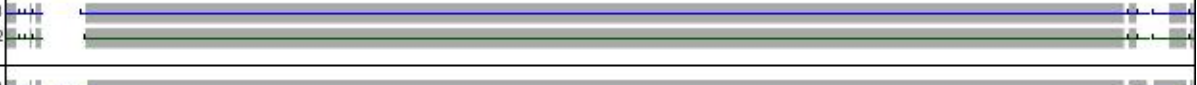
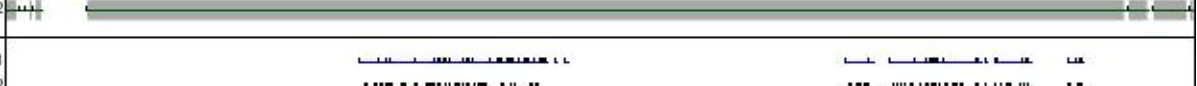

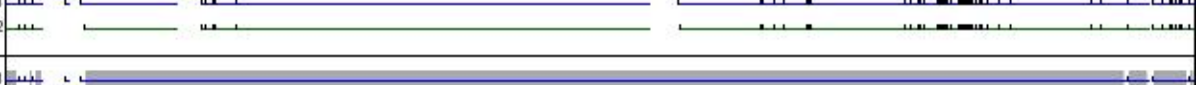



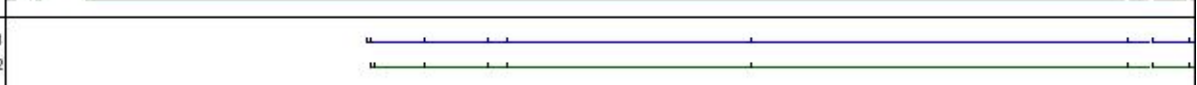



Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000557276		
Y	0.0000135982	0.0000677010	
Z	-0.0000297872	-0.0000384950	0.0000864435

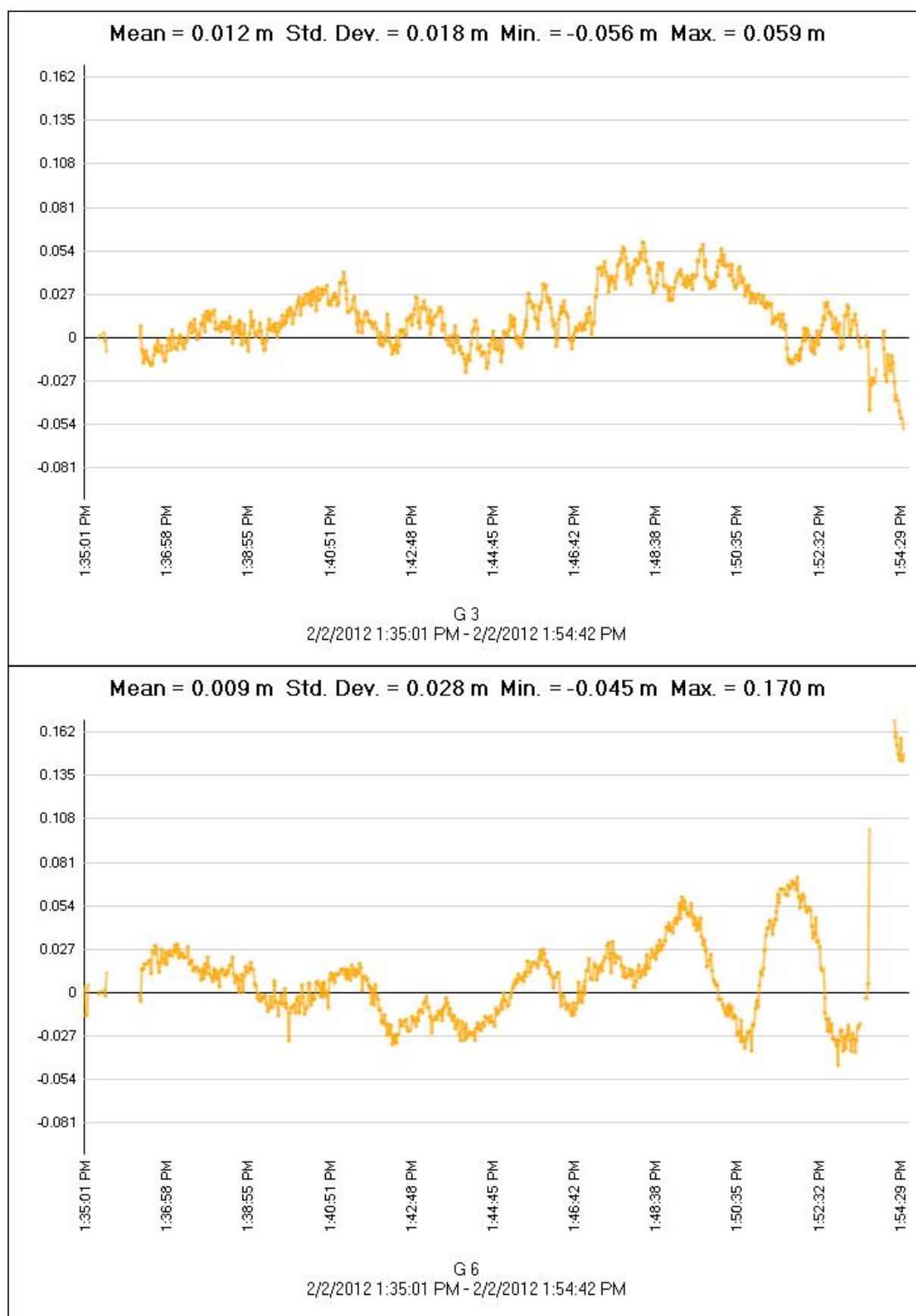
Occupations

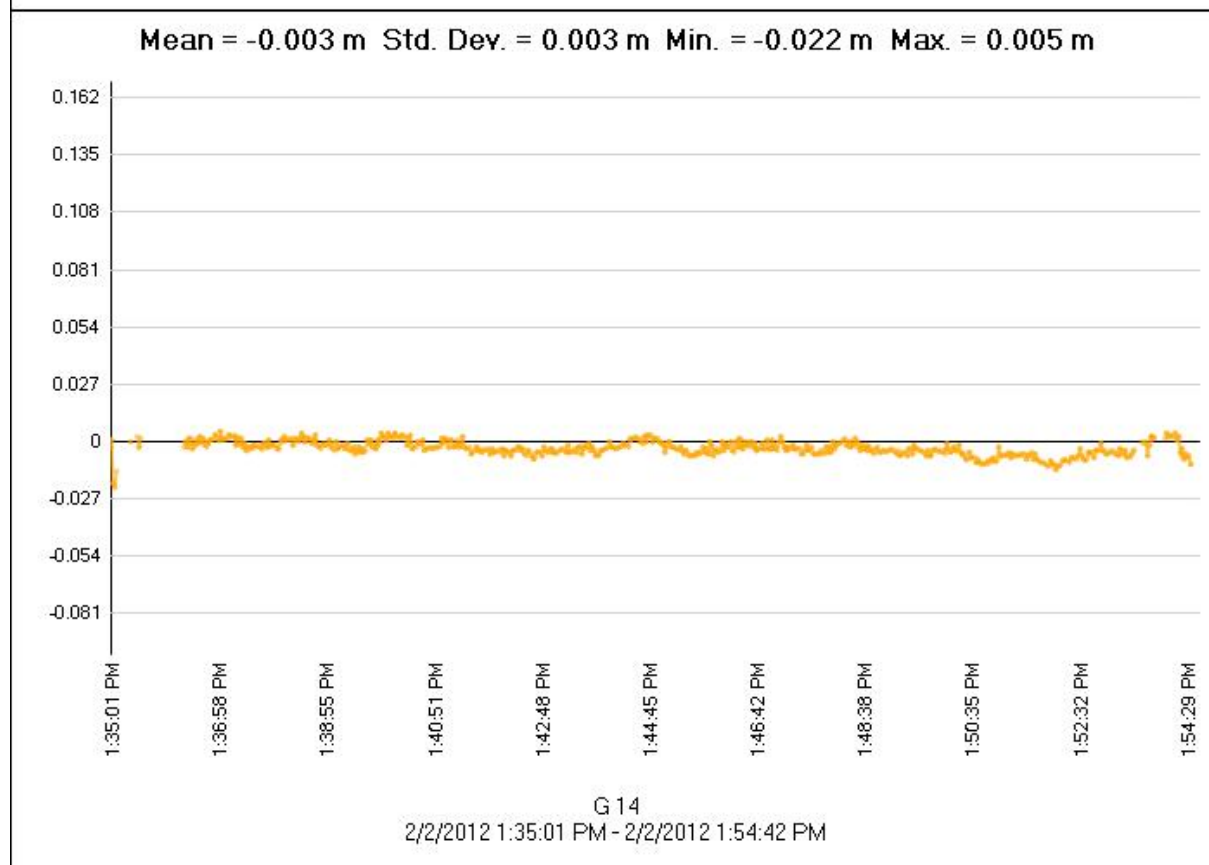
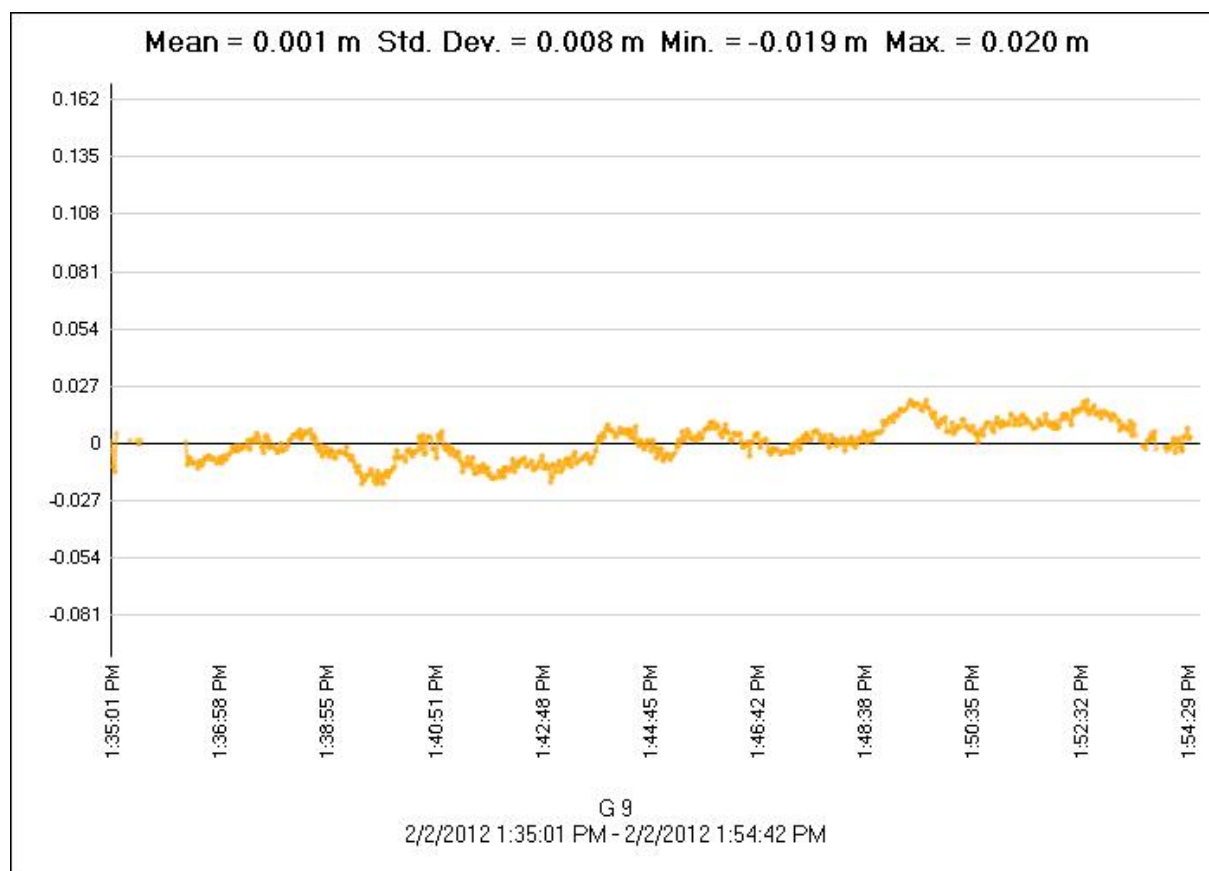
	From	To
Point ID:	19S-SPIKE	FVA62-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00010330.12o	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00080332.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

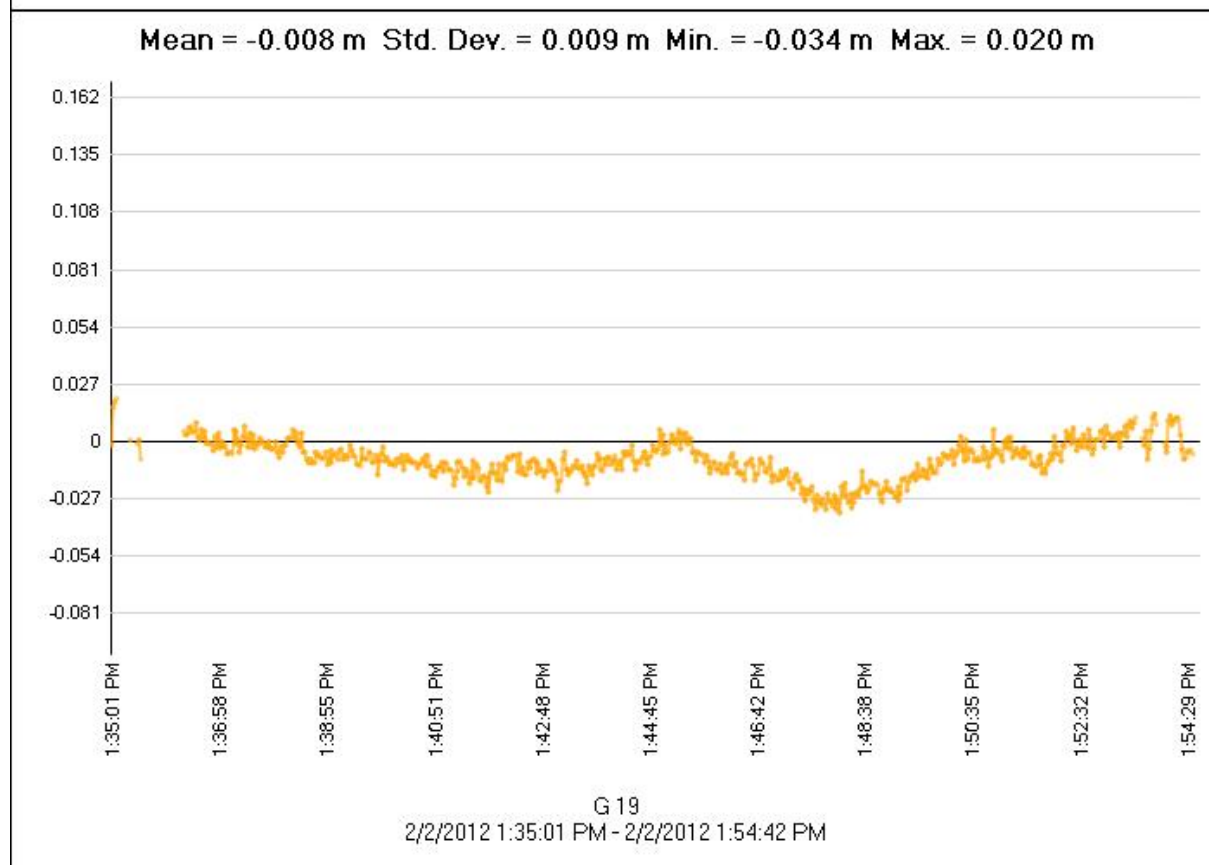
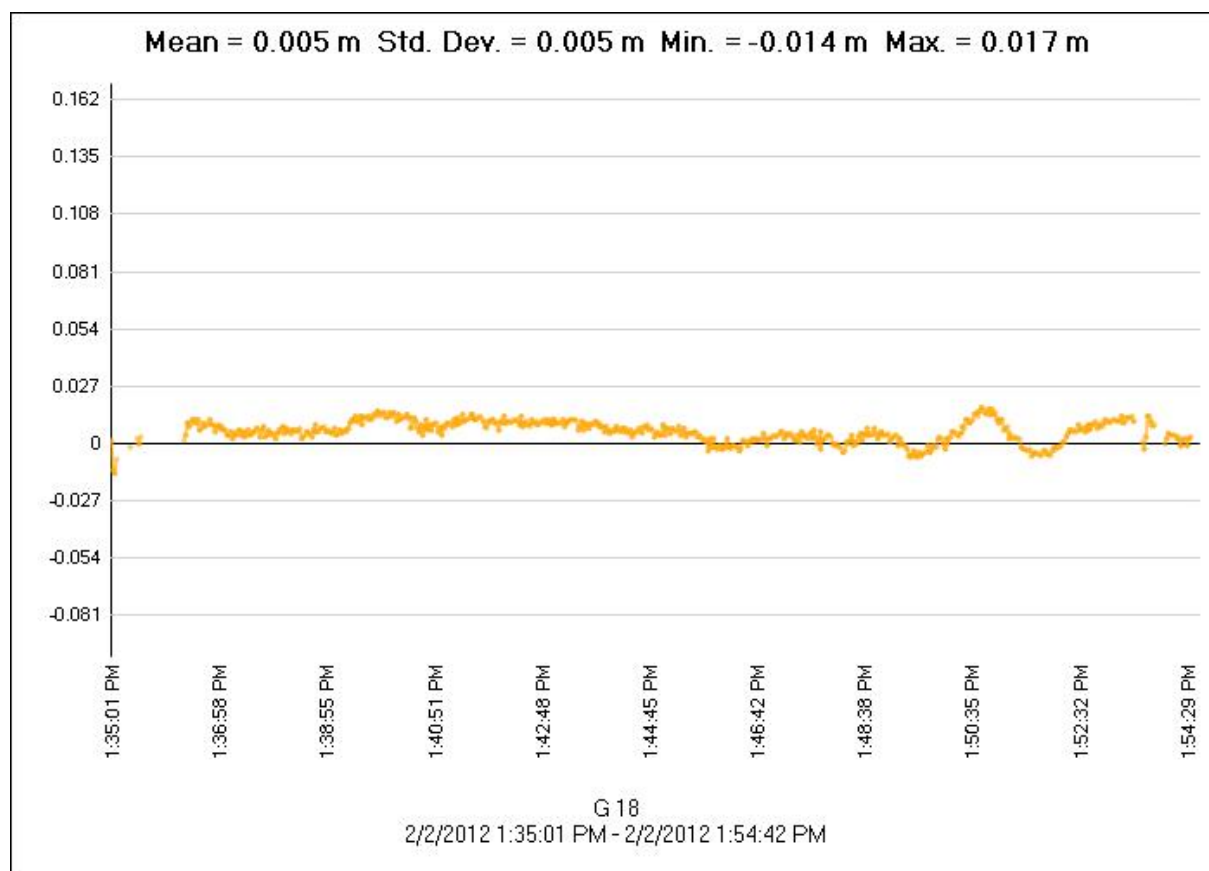
Tracking Summary

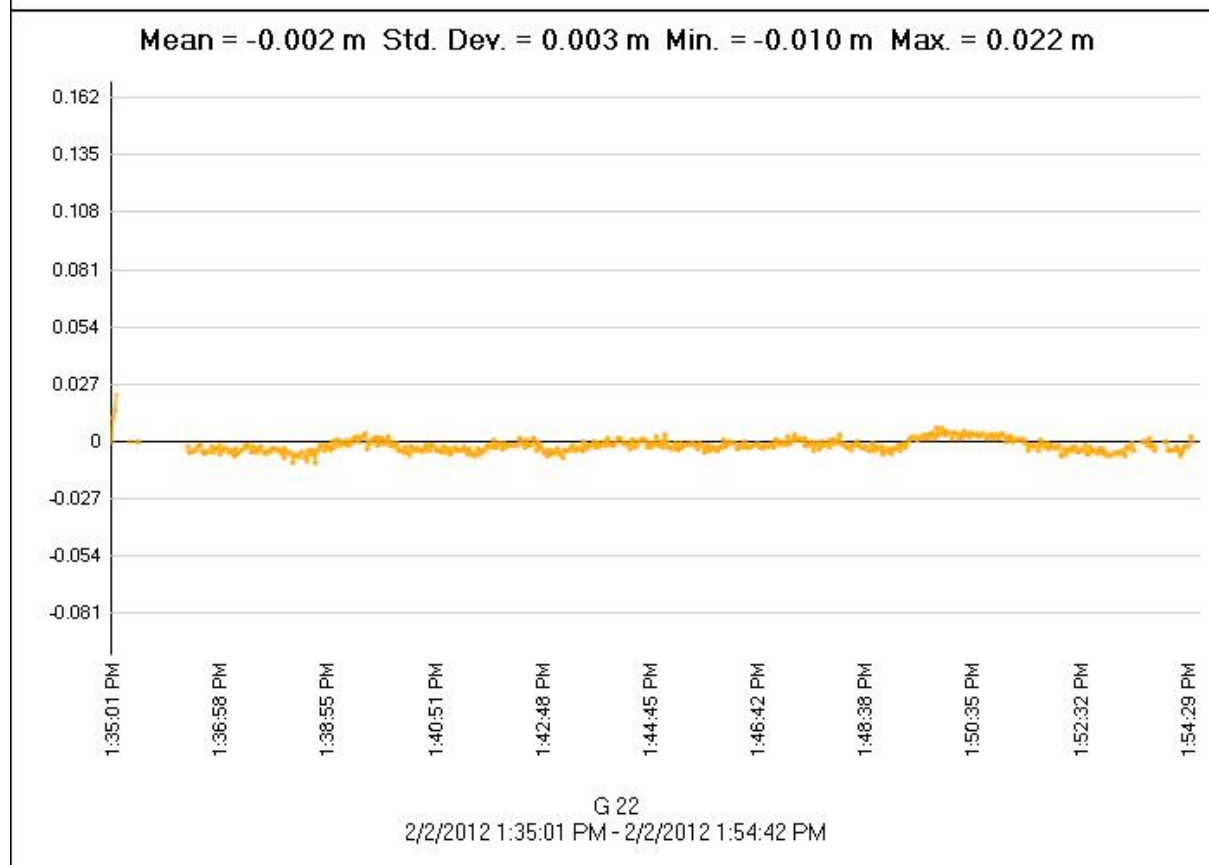
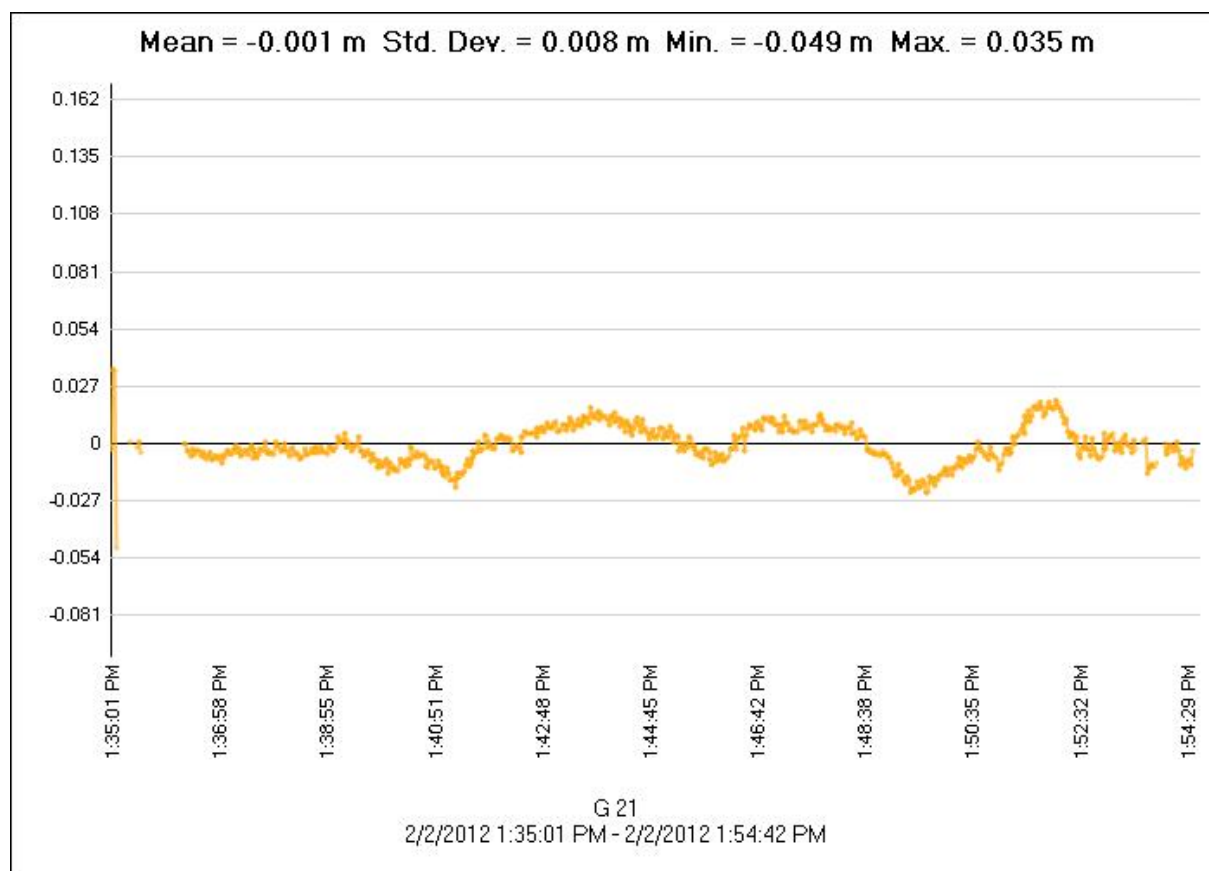
SV	2/2/2012 1:34:59 PM	Duration: 00:19:44.5000000	Major interval: 00:01:00	2/2/2012 1:54:43 PM
G 3	L1 L2			
G 6	L1 L2			
G 9	L1 L2			
G 11	L1 L2			
G 14	L1 L2			
G 15	L1 L2			
G 18	L1 L2			
G 19	L1 L2			
G 21	L1 L2			
G 22	L1 L2			
G 27	L1 L2			
G 31	L1 L2			

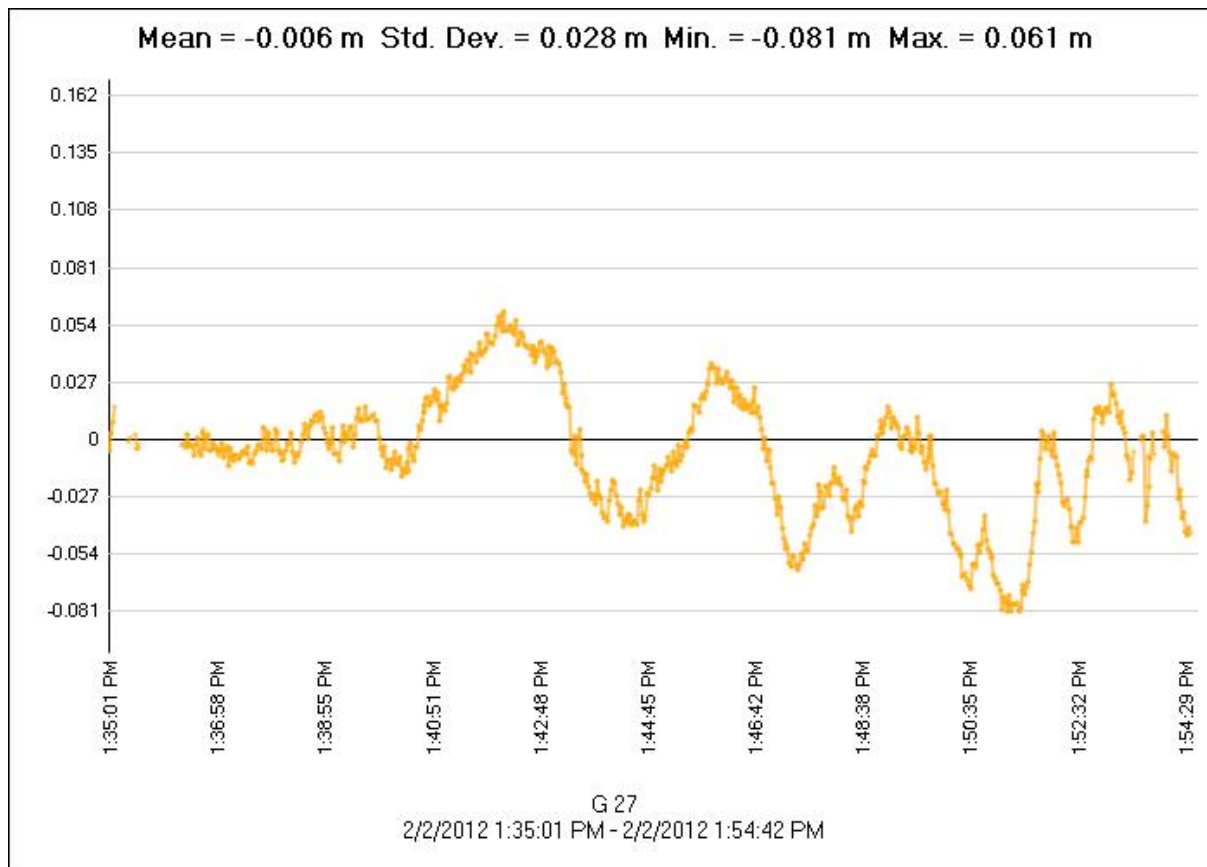
Residuals












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: Dual Frequency (L1, L2)
 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

19S-SPIKE - SVA62-B2 (1:58:43 PM-2:19:15 PM) (S4)

Baseline observation: 19S-SPIKE --- SVA62-B2 (B4)

Processed: 3/20/2012 3:49:07 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.037 m

Vertical precision: 0.052 m

RMS: 0.005 m

Maximum PDOP: 1.876

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/2/2012 1:58:43 PM (Local: UTC-7hr)

Processing stop time: 2/2/2012 2:19:15 PM (Local: UTC-7hr)

Processing duration: 00:20:32

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338086.572 m	Latitude	N37°29'23.75733"	Latitude	N37°29'23.75732"
Northing	4150799.740 m	Longitude	W100°49'53.32096"	Longitude	W100°49'53.32096"
Elevation	897.036 m	Height	870.868 m	Height	870.868 m

To:	SVA62-B2				
Grid		Local		Global	
Easting	401398.866 m	Latitude	N37°00'08.76387"	Latitude	N37°00'08.76387"
Northing	4095716.362 m	Longitude	W100°06'29.49124"	Longitude	W100°06'29.49124"
Elevation	698.609 m	Height	671.268 m	Height	671.268 m

Vector					
9Ughb[	63312.294 m	NS Fwd Azimuth	129°54'53"	L	57188.738 m
BcfA\jb[	-55083.377 m	Ellipsoid Dist.	83936.036 m	M	-43710.038 m
9Yj Uhcb	-198.427 m	<Y][\h	-199.600 m	N	-43194.692 m

Standard Errors

Vector errors:					
Point ID	0.012 m	Point ID	0°00'00"	Point ID	0.013 m
Point ID	0.012 m	Point ID	0.015 m	Point ID	0.025 m
Point ID	0.027 m	Point ID	0.027 m	Point ID	0.014 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0001567090		
Y	0.0000661573	0.0006385160	
Z	-0.0001244664	-0.0002206806	0.0002028808

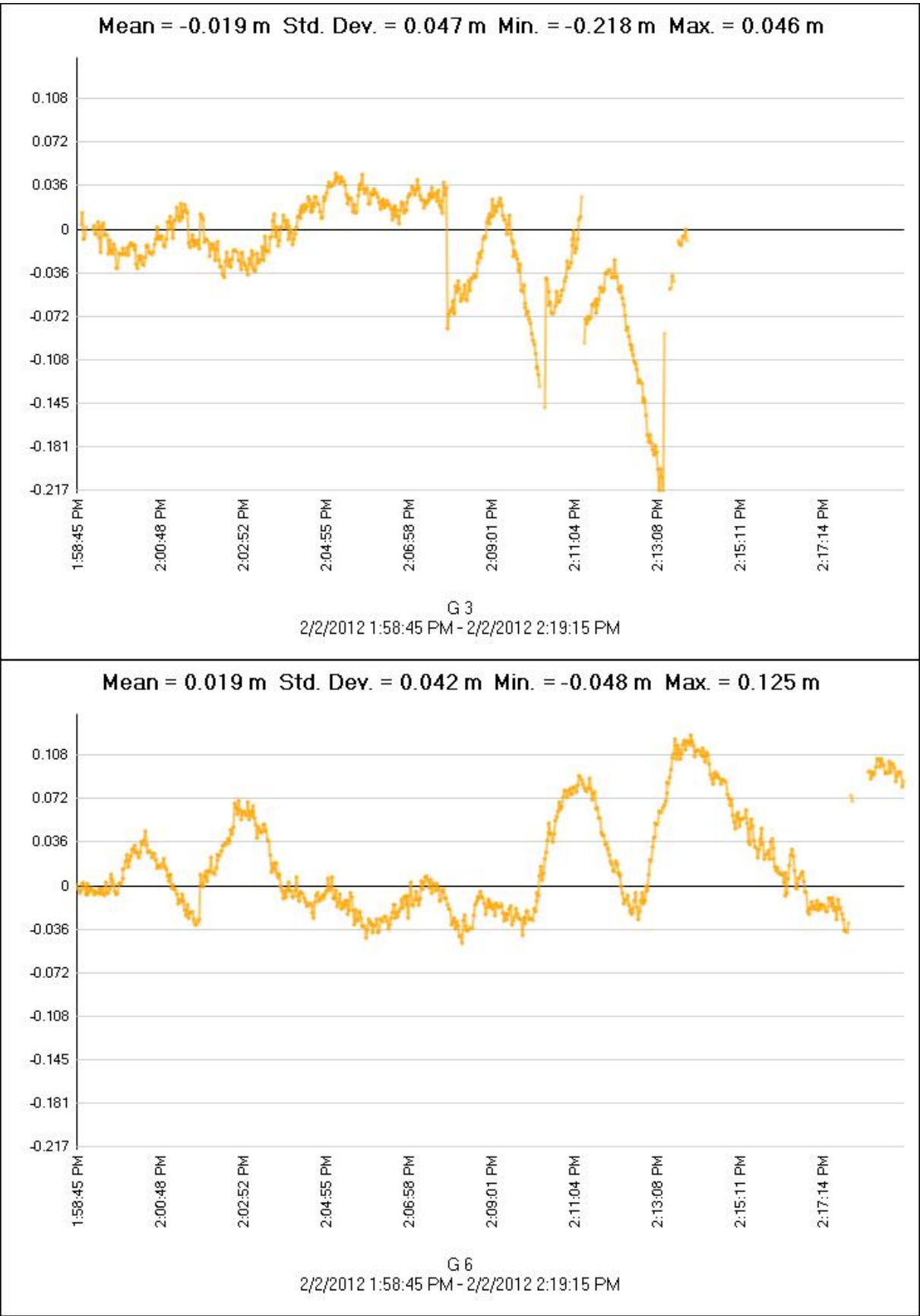
Occupations

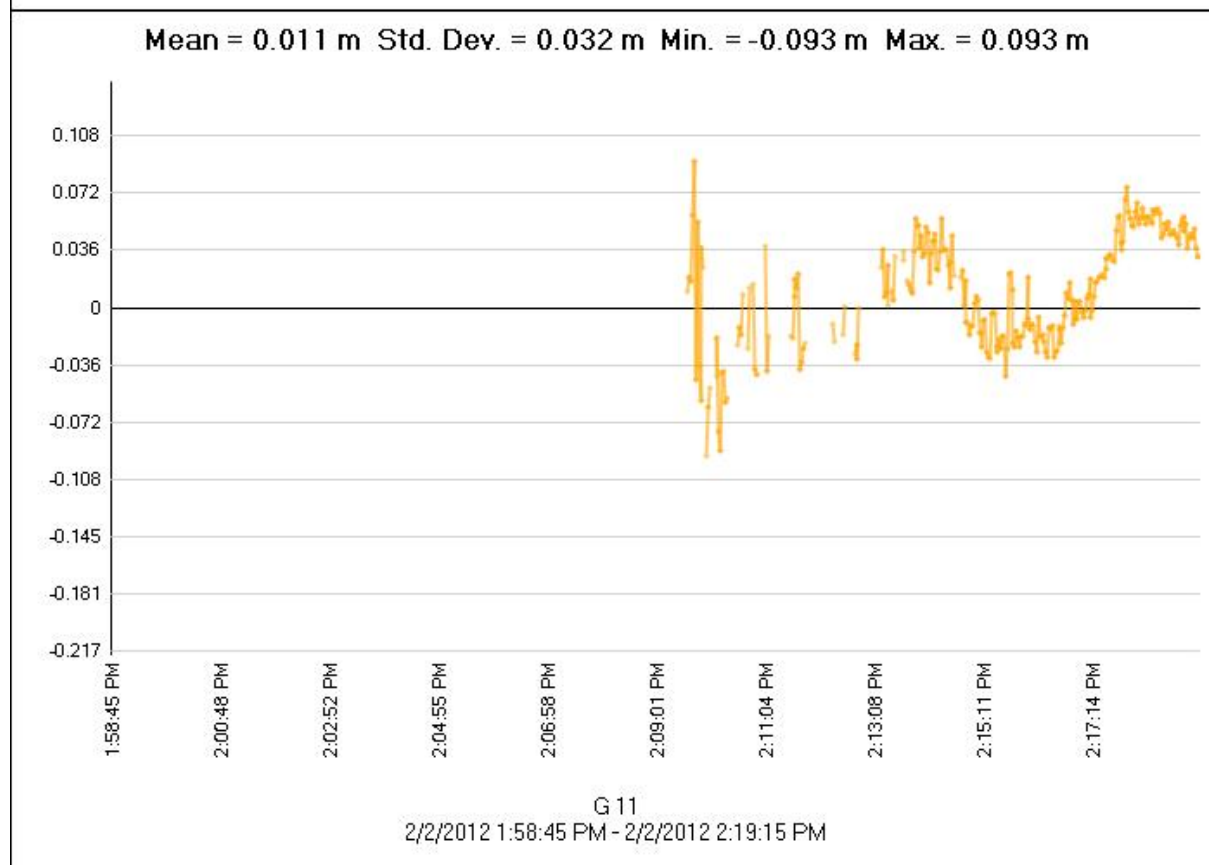
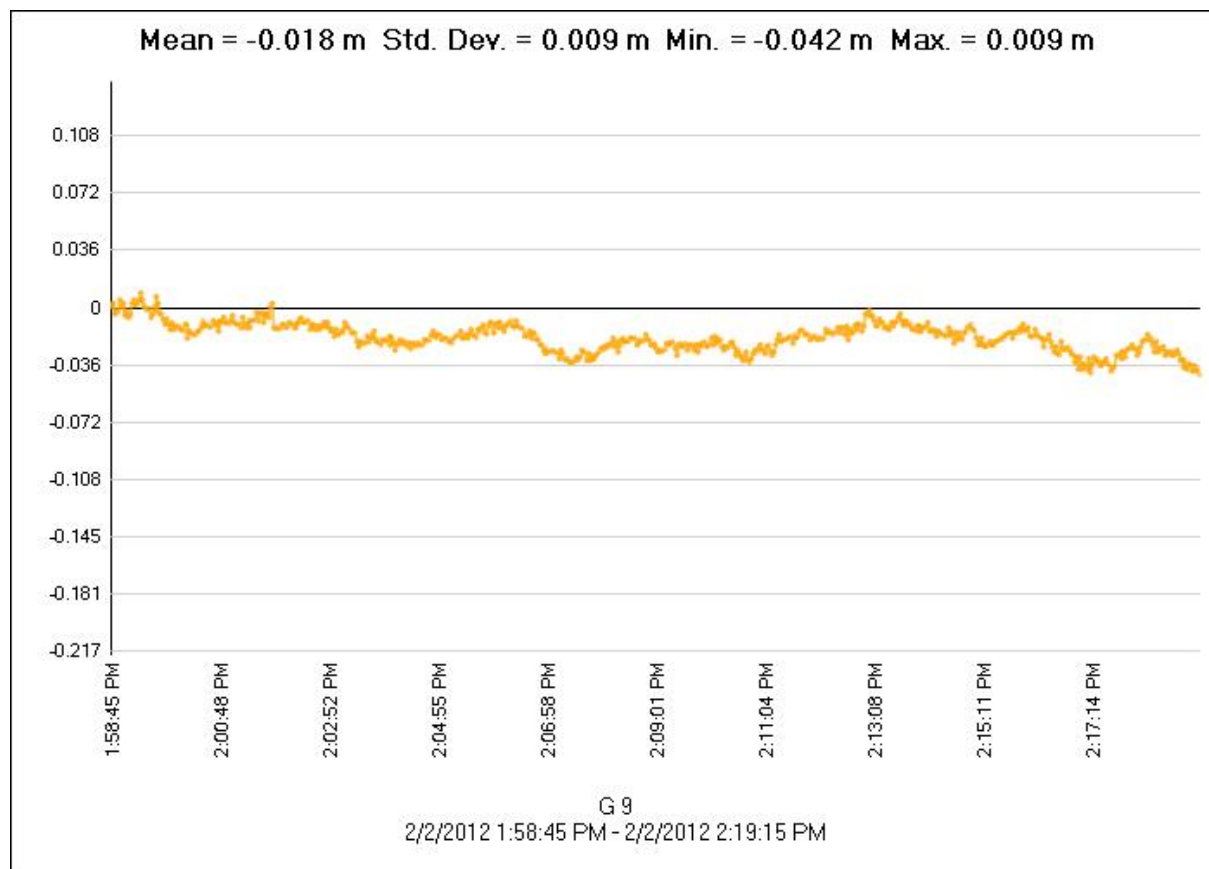
	From	To
Point ID:	19S-SPIKE	SVA62-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010330.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080333.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

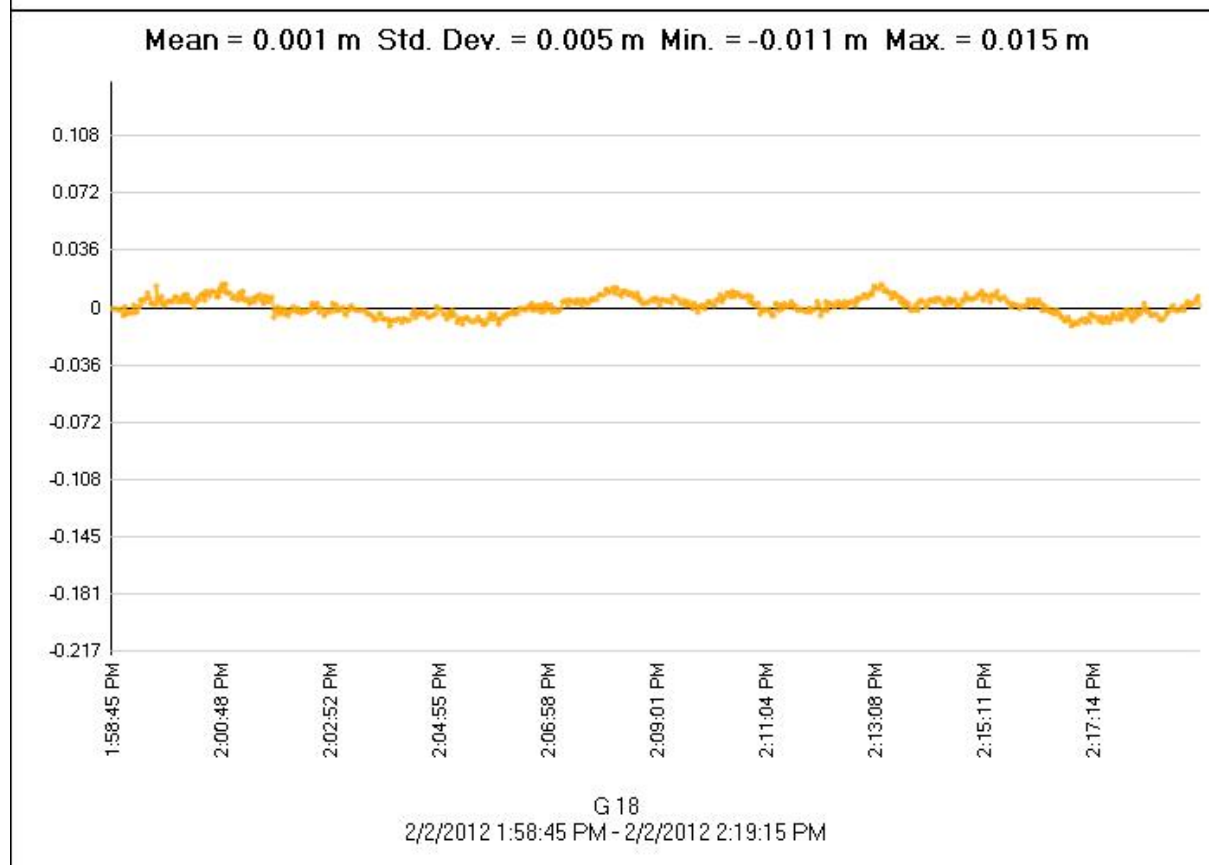
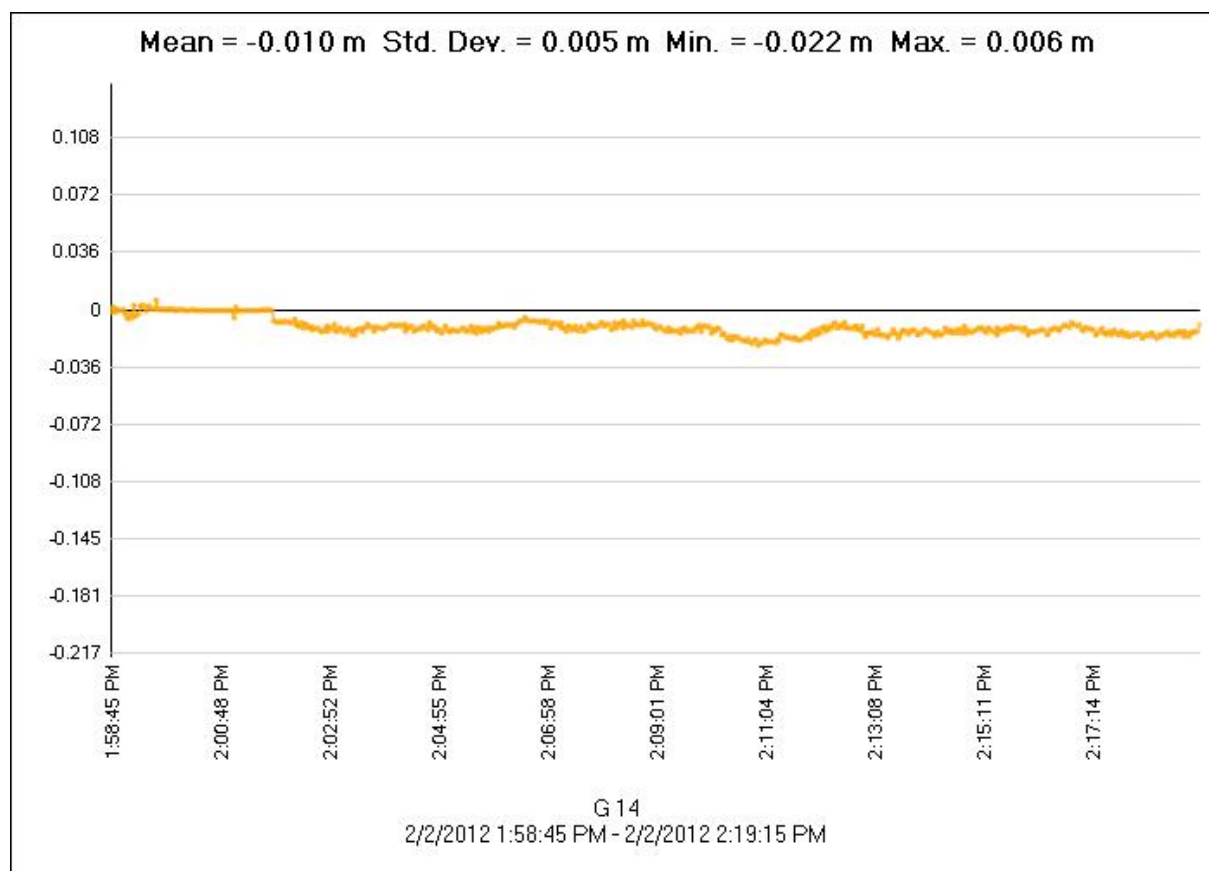
Tracking Summary

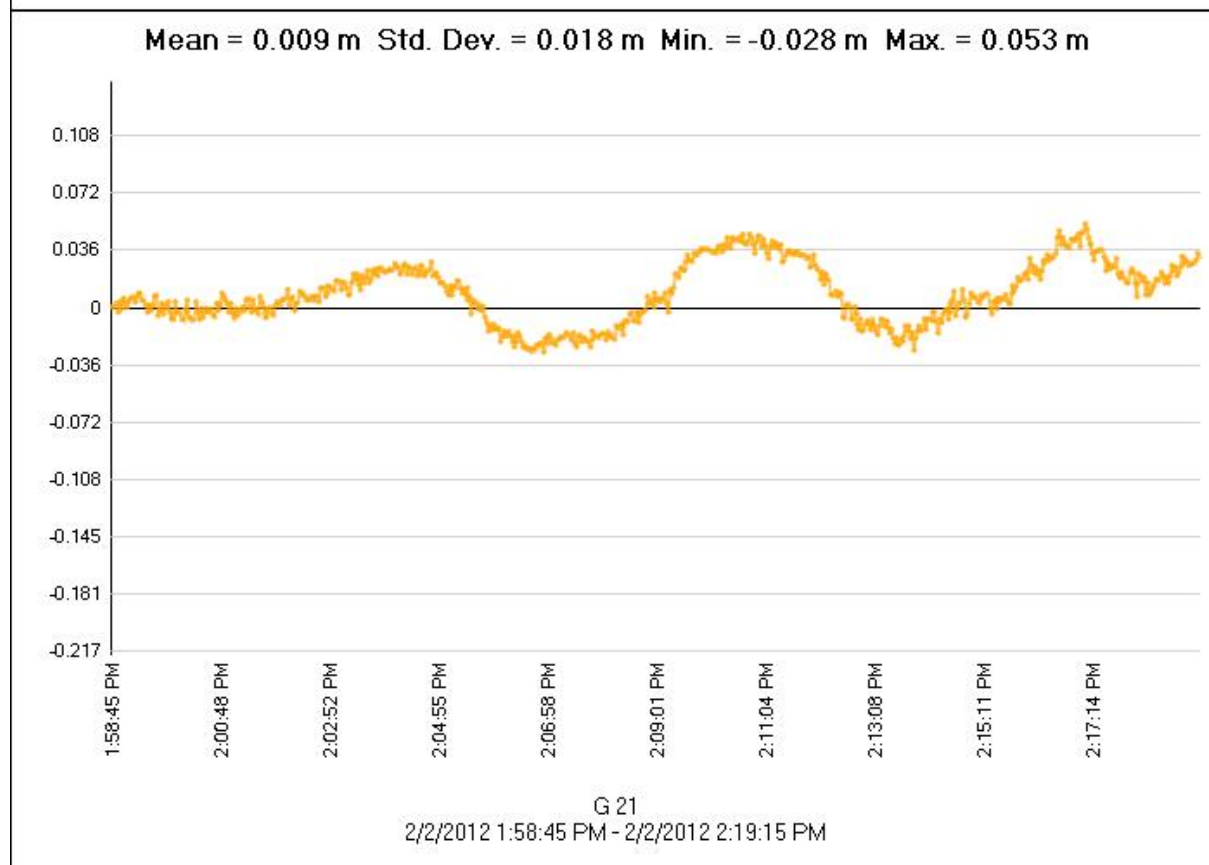
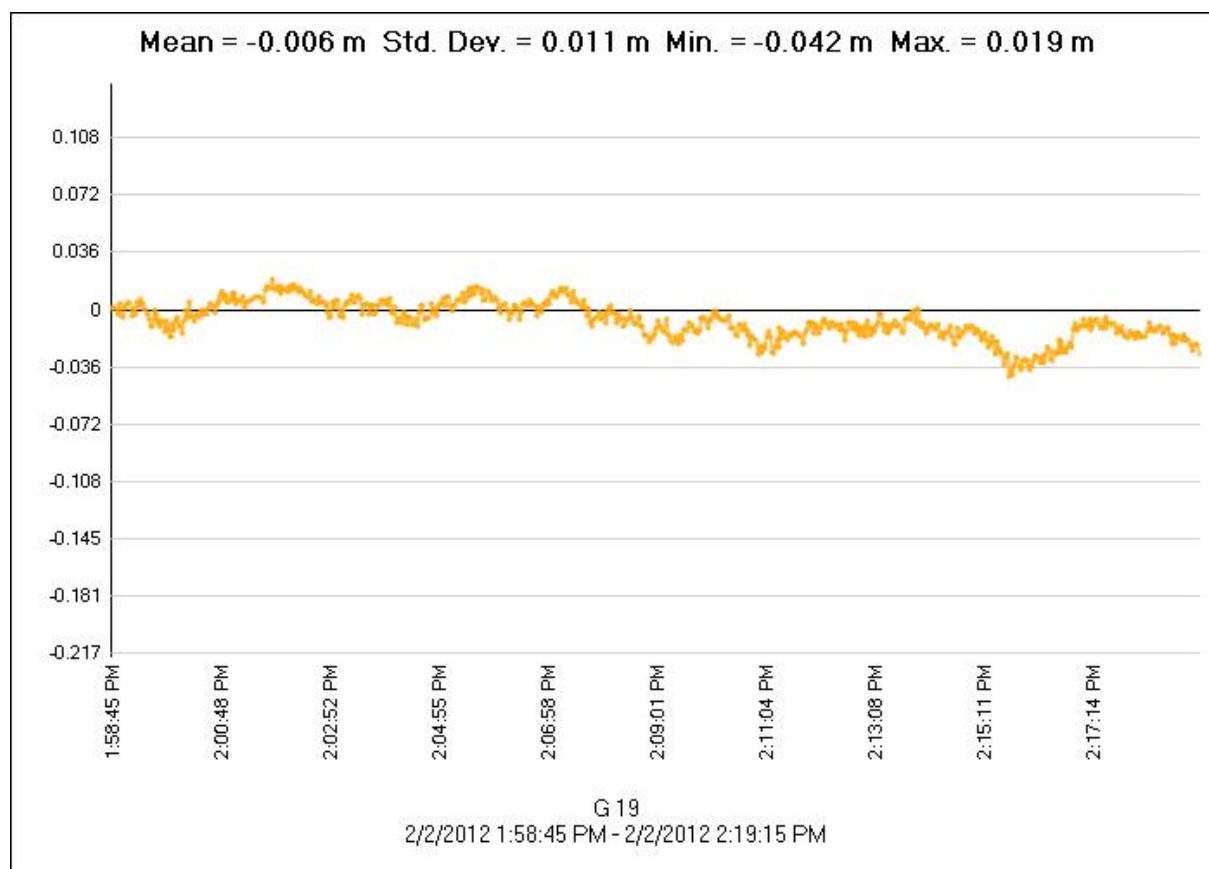


Residuals

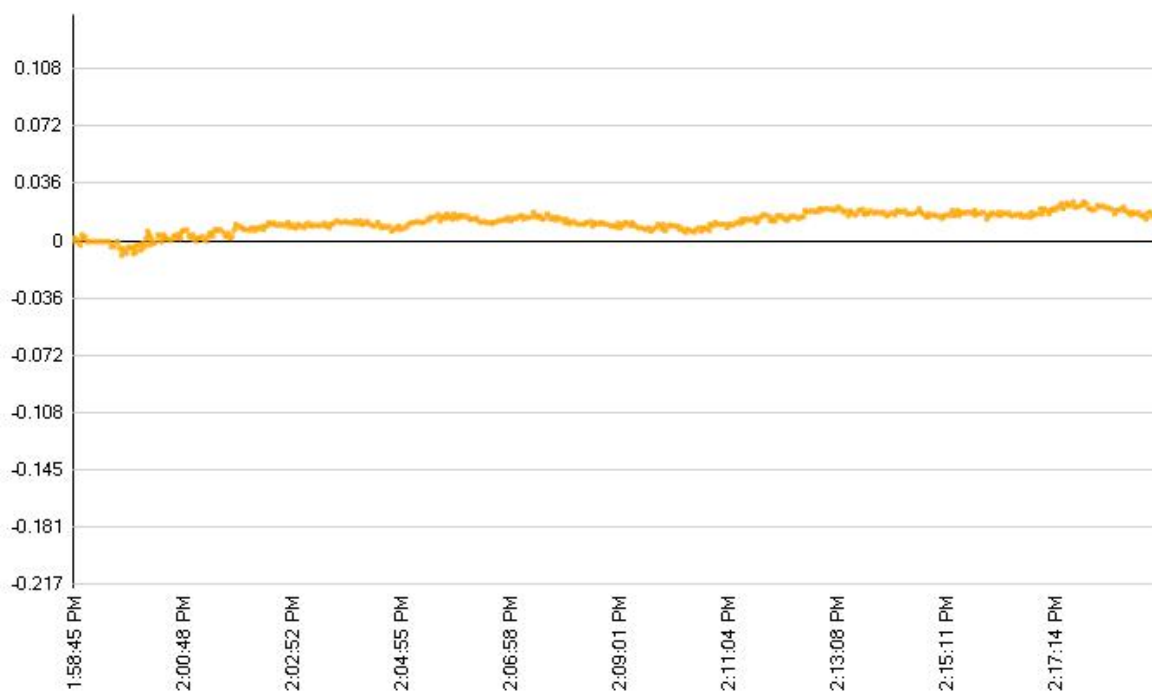






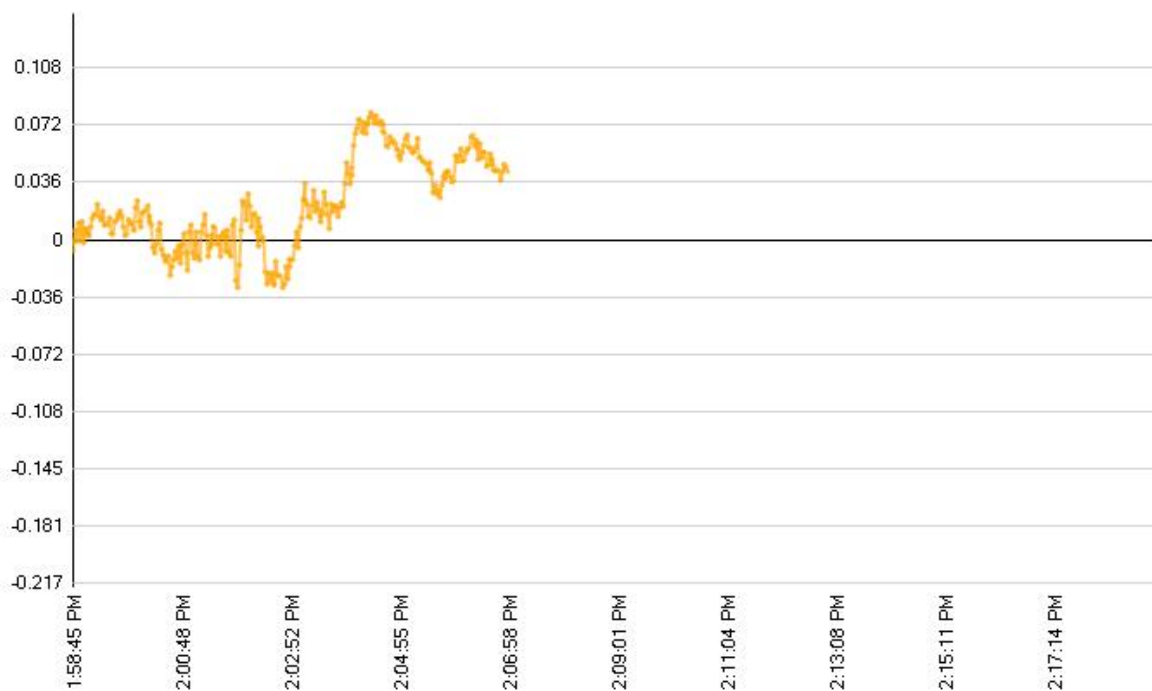


Mean = 0.012 m Std. Dev. = 0.006 m Min. = -0.009 m Max. = 0.024 m

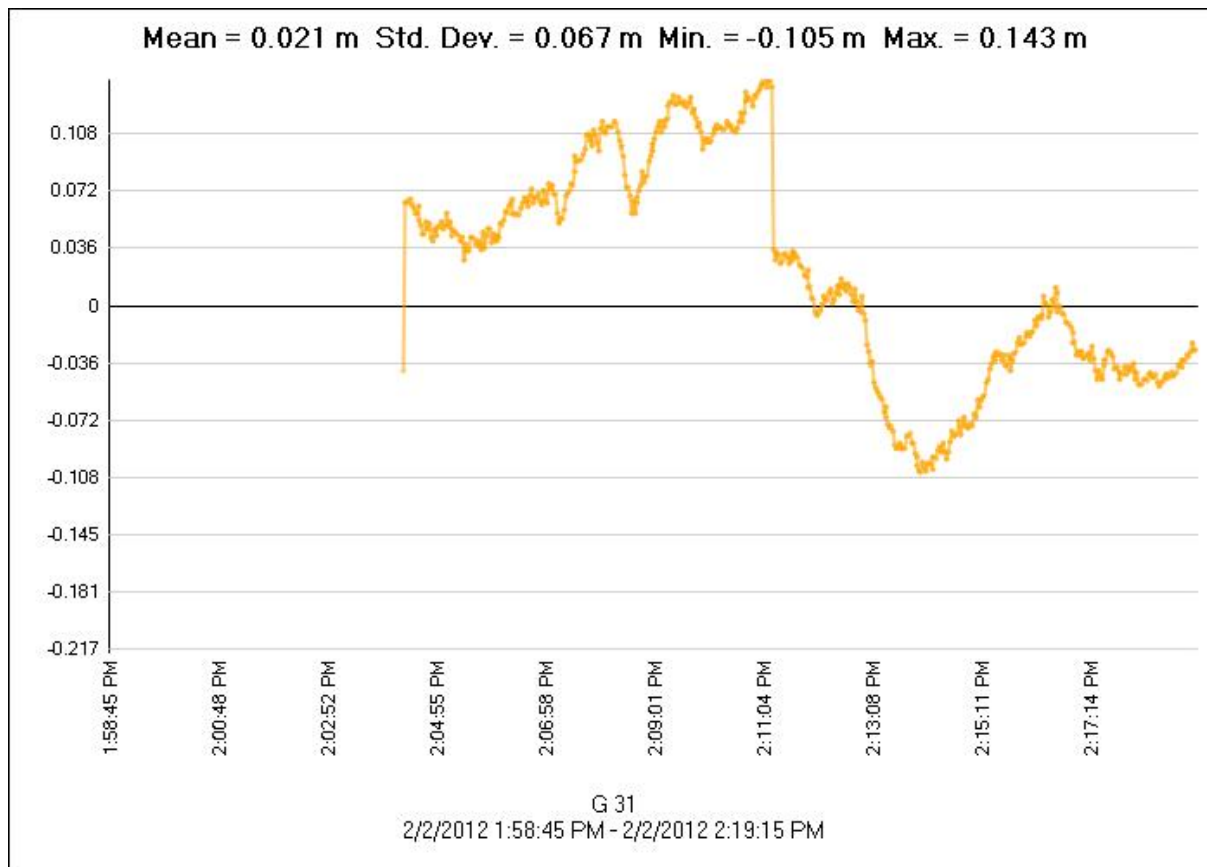


G 22
2/2/2012 1:58:45 PM - 2/2/2012 2:19:15 PM

Mean = 0.022 m Std. Dev. = 0.027 m Min. = -0.030 m Max. = 0.081 m



G 27
2/2/2012 1:58:45 PM - 2/2/2012 2:19:15 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:	Dual Frequency (L1, L2)
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

19S-SPIKE - FVA60-B2 (9:37:46 AM-9:57:22 AM) (S5)

Baseline observation: 19S-SPIKE --- FVA60-B2 (B5)

Processed: 3/20/2012 5:07:25 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.006 m

Vertical precision: 0.009 m

RMS: 0.001 m

Maximum PDOP: 3.264

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/3/2012 9:37:46 AM (Local: UTC-7hr)

Processing stop time: 2/3/2012 9:57:22 AM (Local: UTC-7hr)

Processing duration: 00:19:36

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338086.566 m	Latitude	N37°29'23.76152"	Latitude	N37°29'23.76151"
Northing	4150799.869 m	Longitude	W100°49'53.32131"	Longitude	W100°49'53.32131"
Elevation	896.723 m	Height	870.555 m	Height	870.555 m

To:	FVA60-B2				
Grid		Local		Global	
Easting	341014.144 m	Latitude	N37°29'27.84594"	Latitude	N37°29'27.84593"
Northing	4150869.343 m	Longitude	W100°47'54.21492"	Longitude	W100°47'54.21492"
Elevation	892.650 m	Height	866.471 m	Height	866.471 m

Vector					
9Ughb[	2927.577 m	NS Fwd Azimuth	87°31'32"	L	2889.348 m
Bcfh\jb[	69.474 m	Ellipsoid Dist.	2928.644 m	M	-470.618 m
9Yj Uhcb	-4.073 m	<Y][\h	-4.085 m	N	97.441 m

Standard Errors

Vector errors:					
Ughb[	0.002 m	BG`Zk X'5n]a i h	0°00'00"	L	0.002 m
Bcfh\]b[	0.002 m	'9~]dgc]X'8]gh	0.002 m	M	0.004 m
'9`Yj Uhcb	0.005 m	' <Y][\h	0.005 m	N	0.004 m




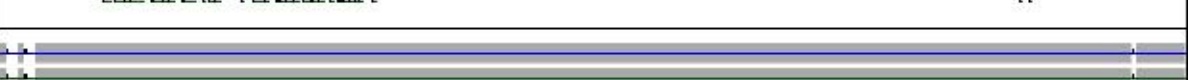

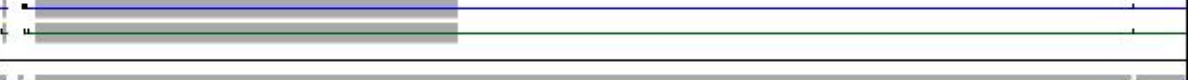
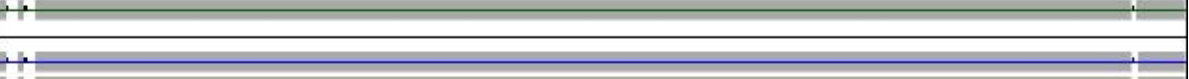



Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000027542		
Y	0.0000017723	0.0000128420	
Z	-0.0000017503	-0.0000093788	0.0000159255

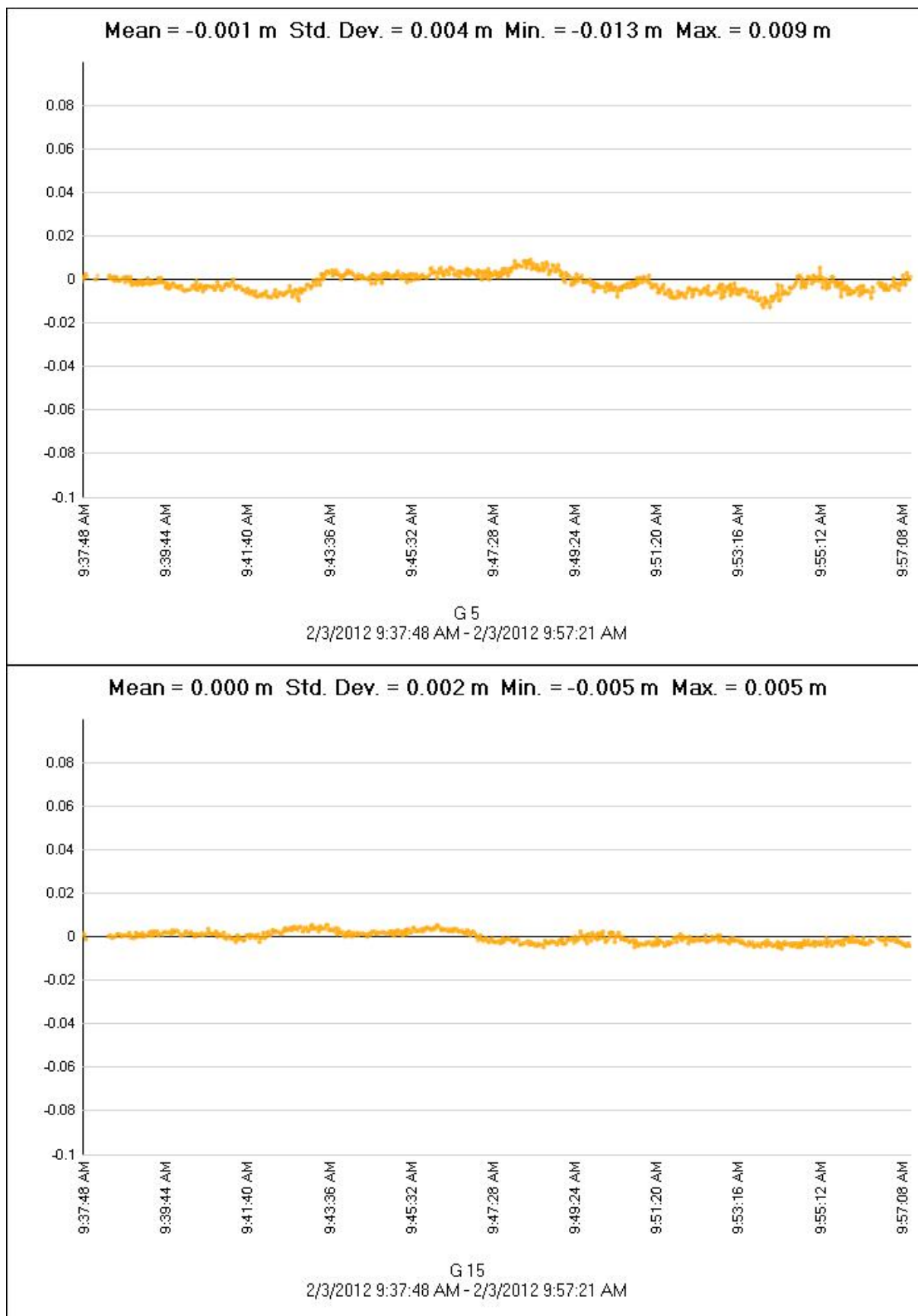
Occupations

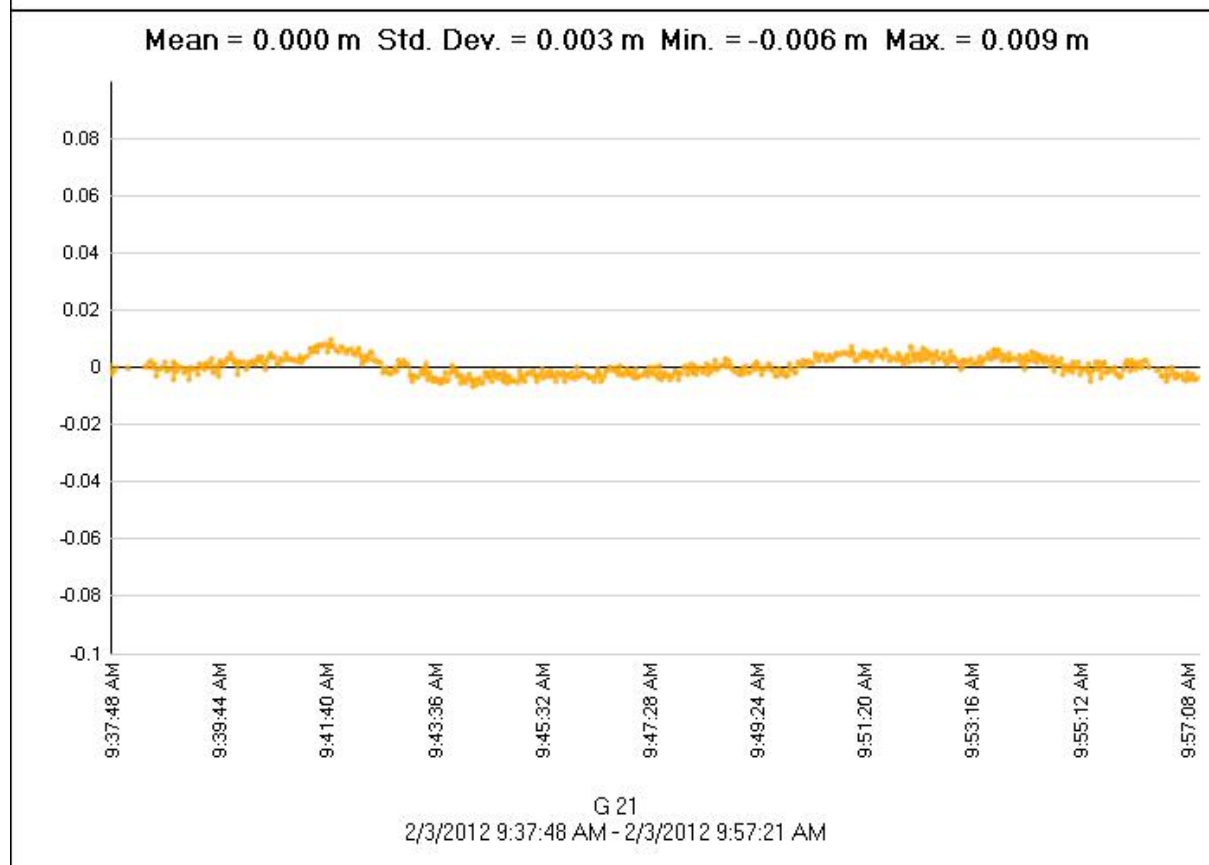
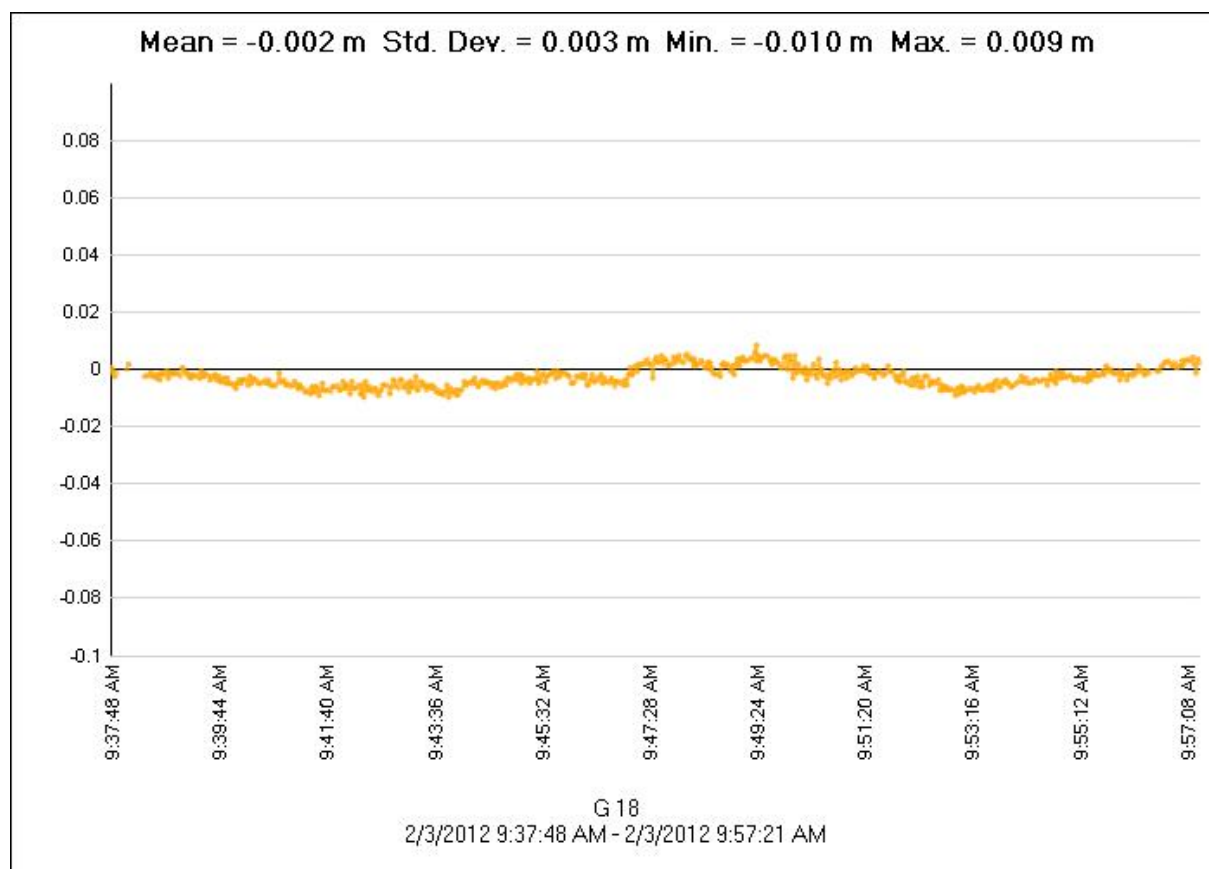
	From	To
Point ID:	19S-SPIKE	FVA60-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00010340.12o	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00080340.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

Tracking Summary

SV	2/3/2012 9:37:46 AM	Duration: 00:19:36.5000000	Major interval: 00:01:00	2/3/2012 9:57:22 AM
G 2	L1 L2			
G 5	L1 L2			
G 15	L1 L2			
G 16	L1 L2			
G 18	L1 L2			
G 21	L1 L2			
G 25	L1 L2			
G 26	L1 L2			
G 29	L1 L2			
G 30	L1 L2			

Residuals



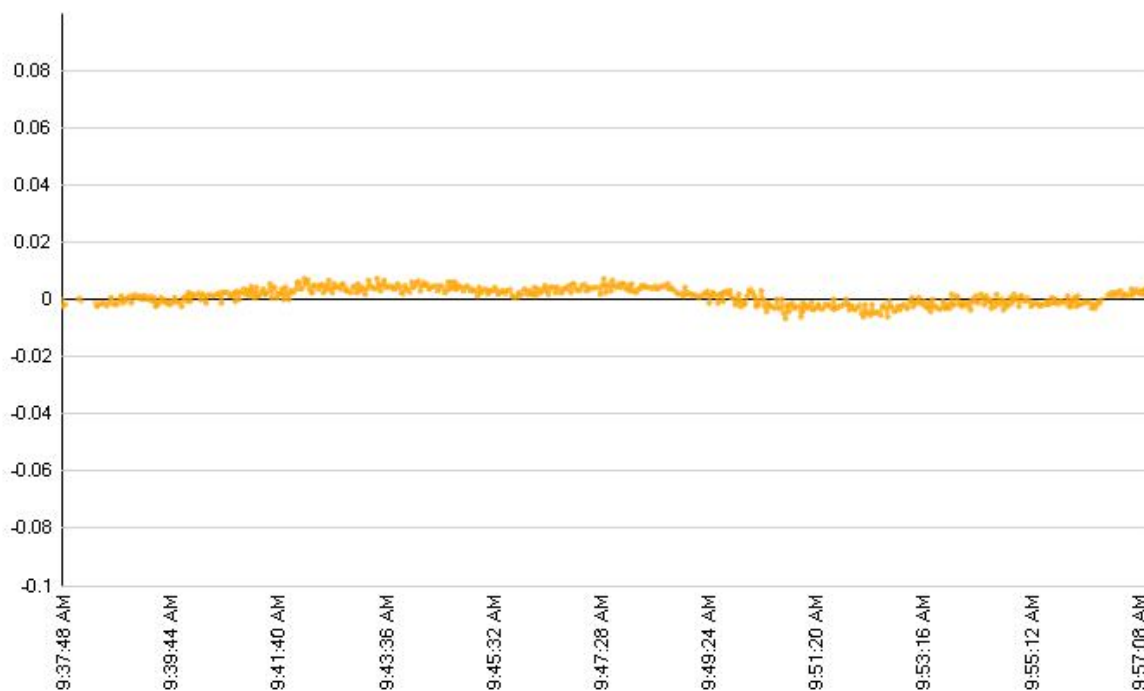


Mean = 0.001 m Std. Dev. = 0.007 m Min. = -0.014 m Max. = 0.020 m



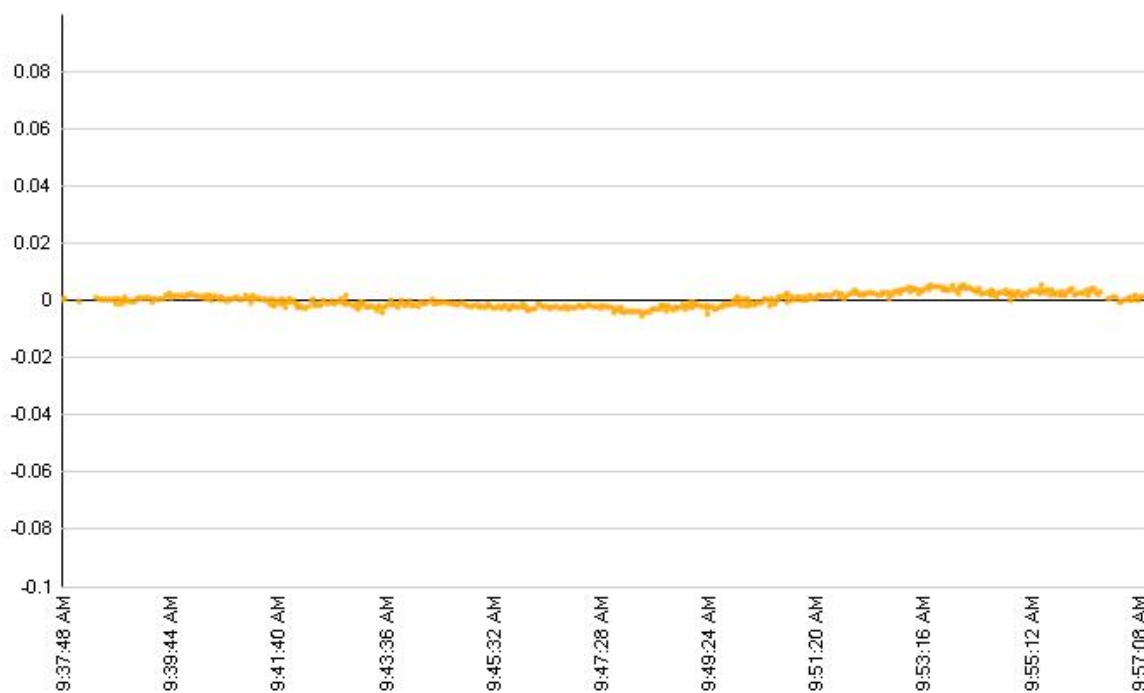
G 25
2/3/2012 9:37:48 AM - 2/3/2012 9:57:21 AM

Mean = 0.001 m Std. Dev. = 0.003 m Min. = -0.007 m Max. = 0.008 m



G 26
2/3/2012 9:37:48 AM - 2/3/2012 9:57:21 AM

Mean = 0.000 m Std. Dev. = 0.002 m Min. = -0.005 m Max. = 0.006 m



G 29
2/3/2012 9:37:48 AM - 2/3/2012 9:57:21 AM

Mean = 0.012 m Std. Dev. = 0.007 m Min. = -0.017 m Max. = 0.027 m





G 30
2/3/2012 9:37:48 AM - 2/3/2012 9:57:21 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:	Dual Frequency (L1, L2)
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

19S-SPIKE - SVA60-B2 (10:08:41 AM-10:28:25 AM) (S6)

Baseline observation: 19S-SPIKE --- SVA60-B2 (B6)

Processed: 3/20/2012 5:07:20 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.007 m

Vertical precision: 0.019 m

RMS: 0.000 m

Maximum PDOP: 4.272

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/3/2012 10:08:41 AM (Local: UTC-7hr)

Processing stop time: 2/3/2012 10:28:25 AM (Local: UTC-7hr)

Processing duration: 00:19:44

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338086.566 m	Latitude	N37°29'23.76152"	Latitude	N37°29'23.76151"
Northing	4150799.869 m	Longitude	W100°49'53.32131"	Longitude	W100°49'53.32131"
Elevation	896.723 m	Height	870.555 m	Height	870.555 m

To:	SVA60-B2				
Grid		Local		Global	
Easting	341021.199 m	Latitude	N37°29'52.65449"	Latitude	N37°29'52.65448"
Northing	4151634.120 m	Longitude	W100°47'54.52270"	Longitude	W100°47'54.52270"
Elevation	892.674 m	Height	866.504 m	Height	866.504 m

Vector					
9Ughb[	2934.633 m	NS Fwd Azimuth	73°00'57"	L	2969.150 m
Bcfh\jb[	834.251 m	Ellipsoid Dist.	3051.162 m	M	-11.861 m
9Yj Uhcb	-4.049 m	<Y][\h	-4.051 m	N	704.377 m

Standard Errors

Vector errors:					
σ _{Ughb}	0.002 m	σ _{BG'Zk X'5nJa i h}	0°00'00"	σ _L	0.002 m
σ _{Bcfh\]b}	0.003 m	σ _{'9~]dgc]X'8]gh}	0.002 m	σ _M	0.007 m
σ _{'9~j Uhcb}	0.010 m	σ _{' <Y][\h}	0.010 m	σ _N	0.007 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000034407		
Y	0.0000034995	0.0000470082	
Z	-0.0000036525	-0.0000463159	0.0000555091

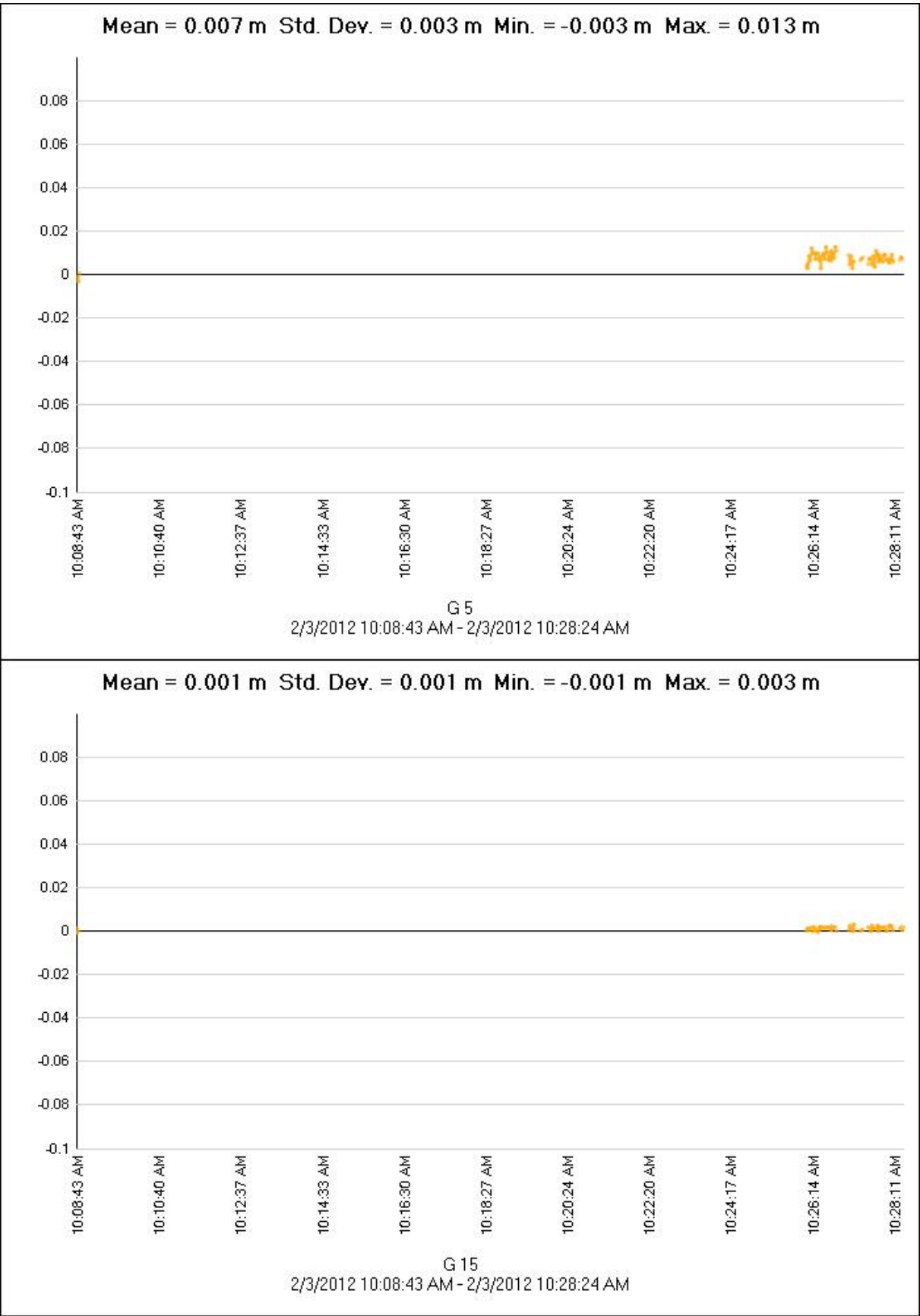
Occupations

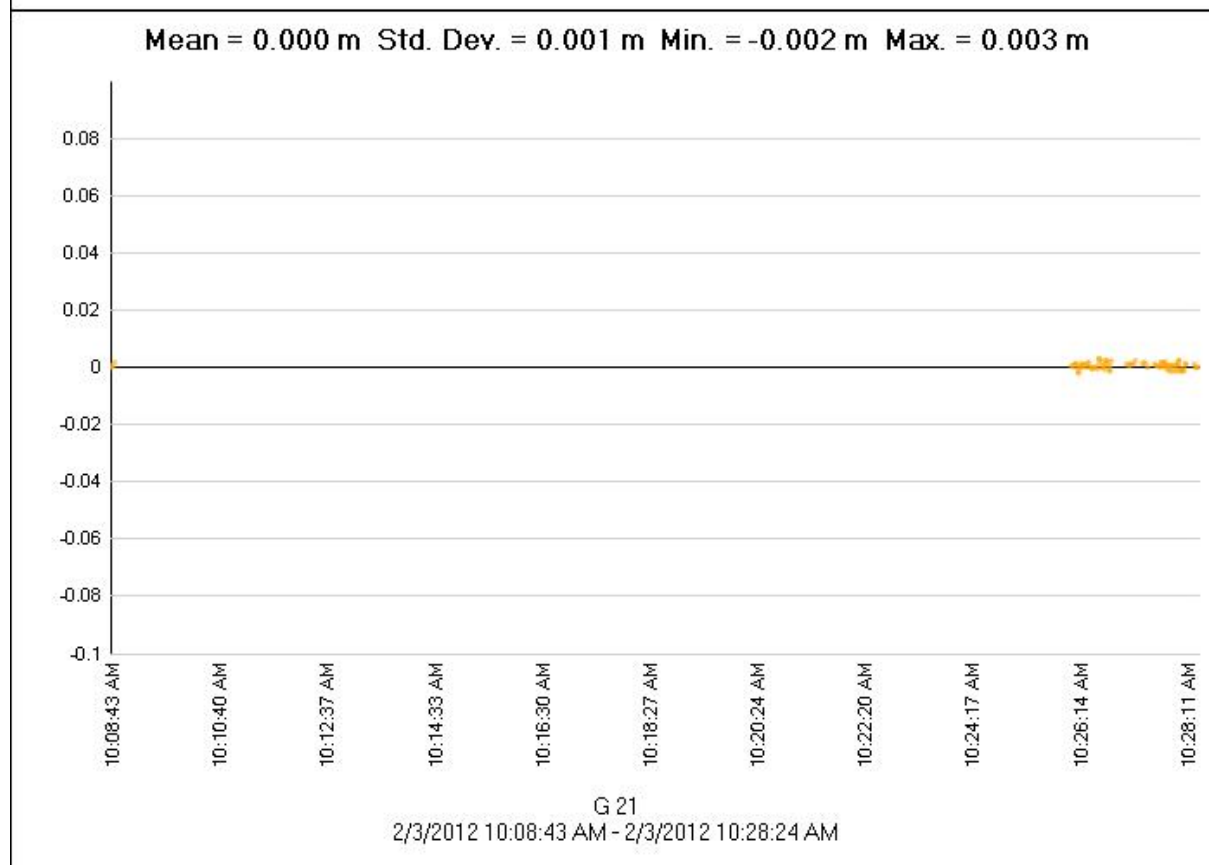
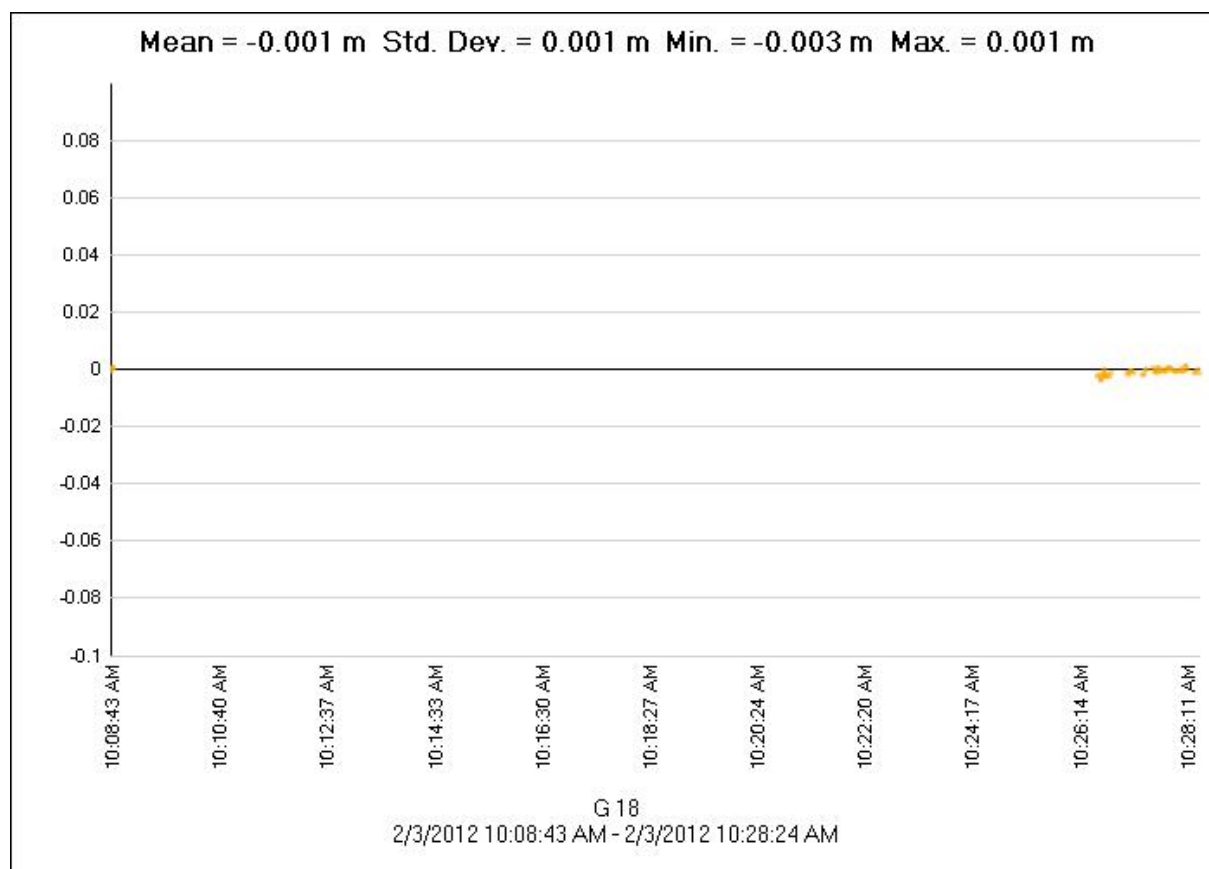
	From	To
Point ID:	19S-SPIKE	SVA60-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00010340.12o	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00080341.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

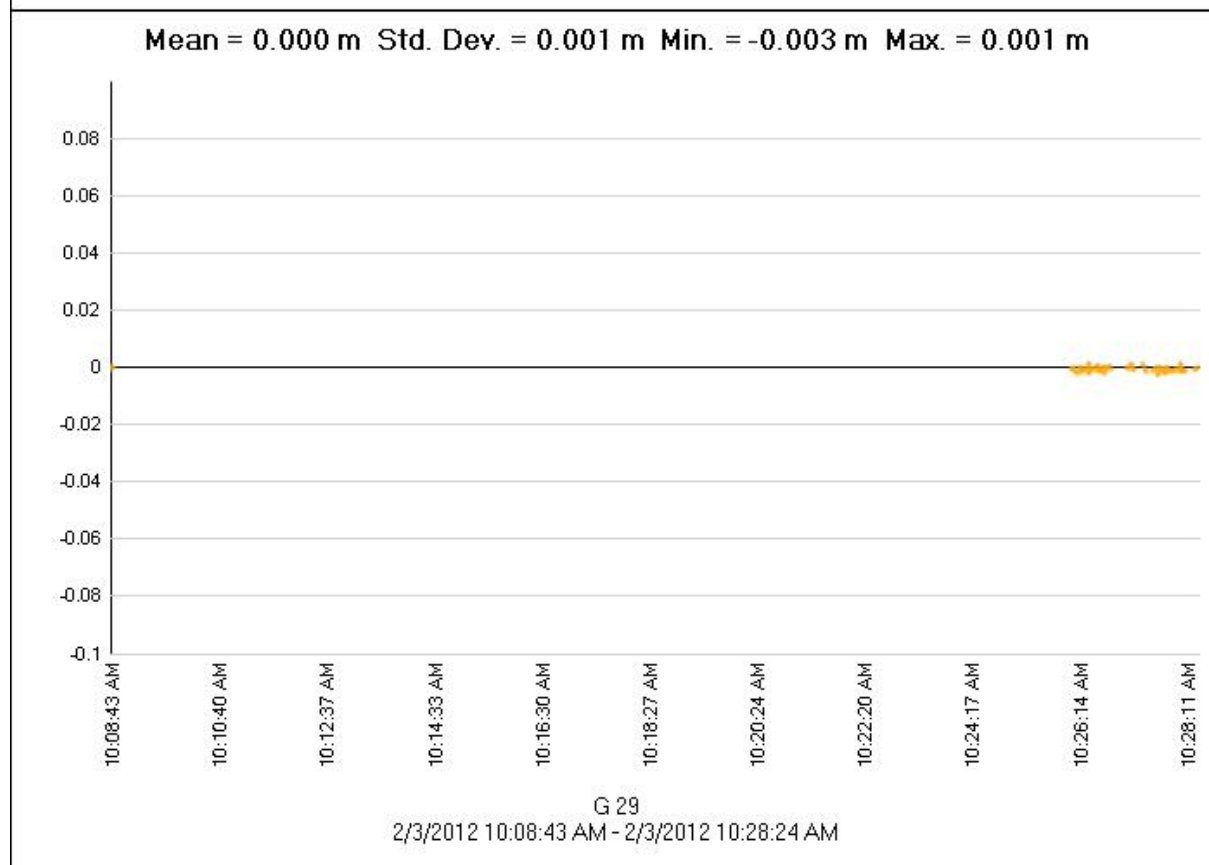
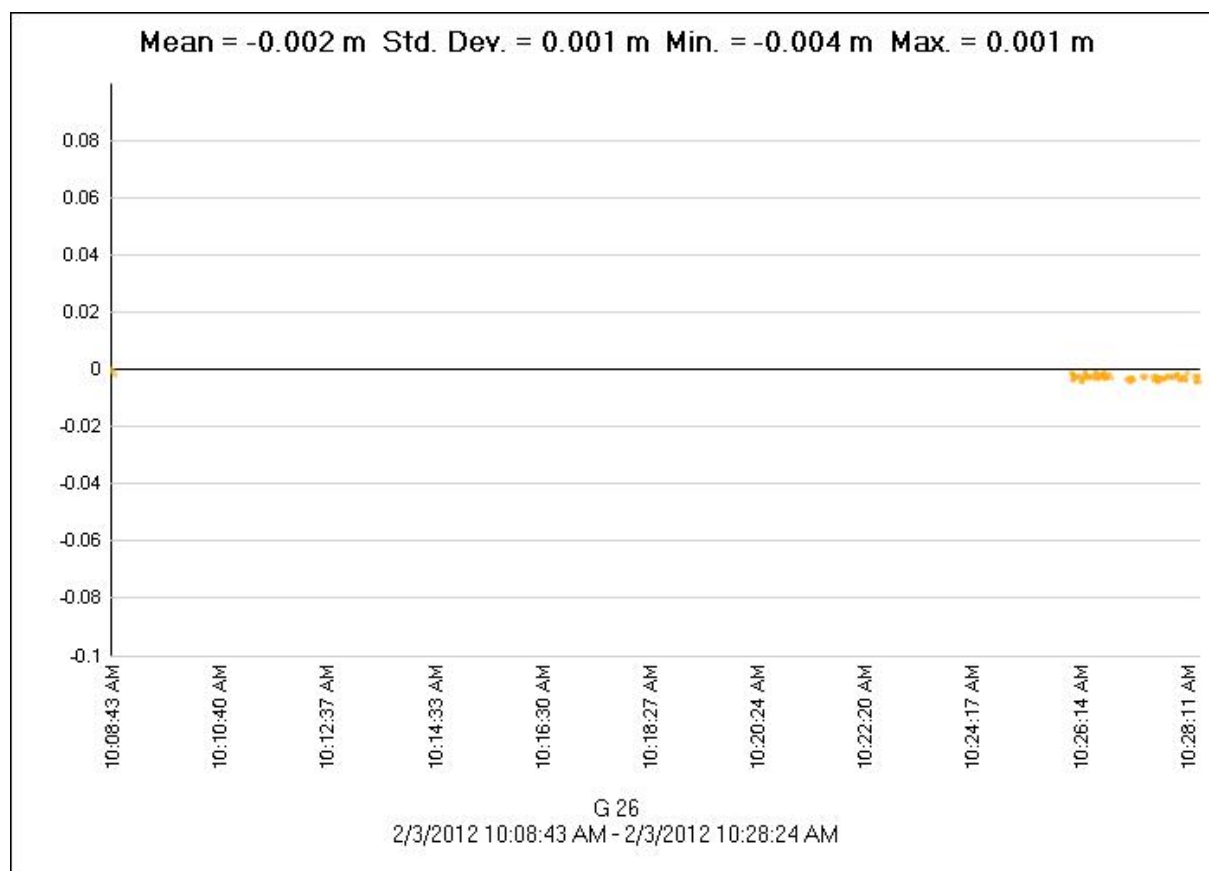
Tracking Summary

SV	2/3/2012 10:08:41 AM	Duration: 00:19:44.5000000	Major interval: 00:01:00	2/3/2012 10:28:25 AM
G 5	L1 L2			
G 6	L1 L2			
G 15	L1 L2			
G 16	L1 L2			
G 18	L1 L2			
G 21	L1 L2			
G 22	L1 L2			
G 25	L1			
G 26	L1 L2			
G 27	L1 L2			
G 29	L1 L2			
G 30	L1 L2			

Residuals









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:	Dual Frequency (L1, L2)
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

19S-SPIKE - FVA40-B2 (10:54:24 AM-11:14:23 AM) (S7)

Baseline observation: 19S-SPIKE --- FVA40-B2 (B7)

Processed: 3/20/2012 5:07:29 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.009 m

Vertical precision: 0.014 m

RMS: 0.002 m

Maximum PDOP: 2.343

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/3/2012 10:54:24 AM (Local: UTC-7hr)

Processing stop time: 2/3/2012 11:14:23 AM (Local: UTC-7hr)

Processing duration: 00:19:59

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338086.566 m	Latitude	N37°29'23.76152"	Latitude	N37°29'23.76151"
Northing	4150799.869 m	Longitude	W100°49'53.32131"	Longitude	W100°49'53.32131"
Elevation	896.723 m	Height	870.555 m	Height	870.555 m

To:	FVA40-B2				
Grid		Local		Global	
Easting	364826.418 m	Latitude	N37°34'25.16460"	Latitude	N37°34'25.16459"
Northing	4159614.296 m	Longitude	W100°31'50.67269"	Longitude	W100°31'50.67269"
Elevation	850.483 m	Height	824.337 m	Height	824.337 m

Vector					
9Ughb[	26739.851 m	NS Fwd Azimuth	70°38'24"	L	27180.413 m
Bcfh\jb[	8814.427 m	Ellipsoid Dist.	28158.762 m	M	672.181 m
9Yj Uhcb	-46.240 m	<Y][\h	-46.218 m	N	7341.704 m

Standard Errors

Vector errors:					
Point ID	0.003 m	Point Description	0°00'00"	Point Type	0.003 m
Point ID	0.004 m	Point Description	0.003 m	Point Type	0.006 m
Point ID	0.007 m	Point Description	0.007 m	Point Type	0.005 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000096197		
Y	0.0000050595	0.0000385089	
Z	-0.0000027892	-0.0000161650	0.0000218312

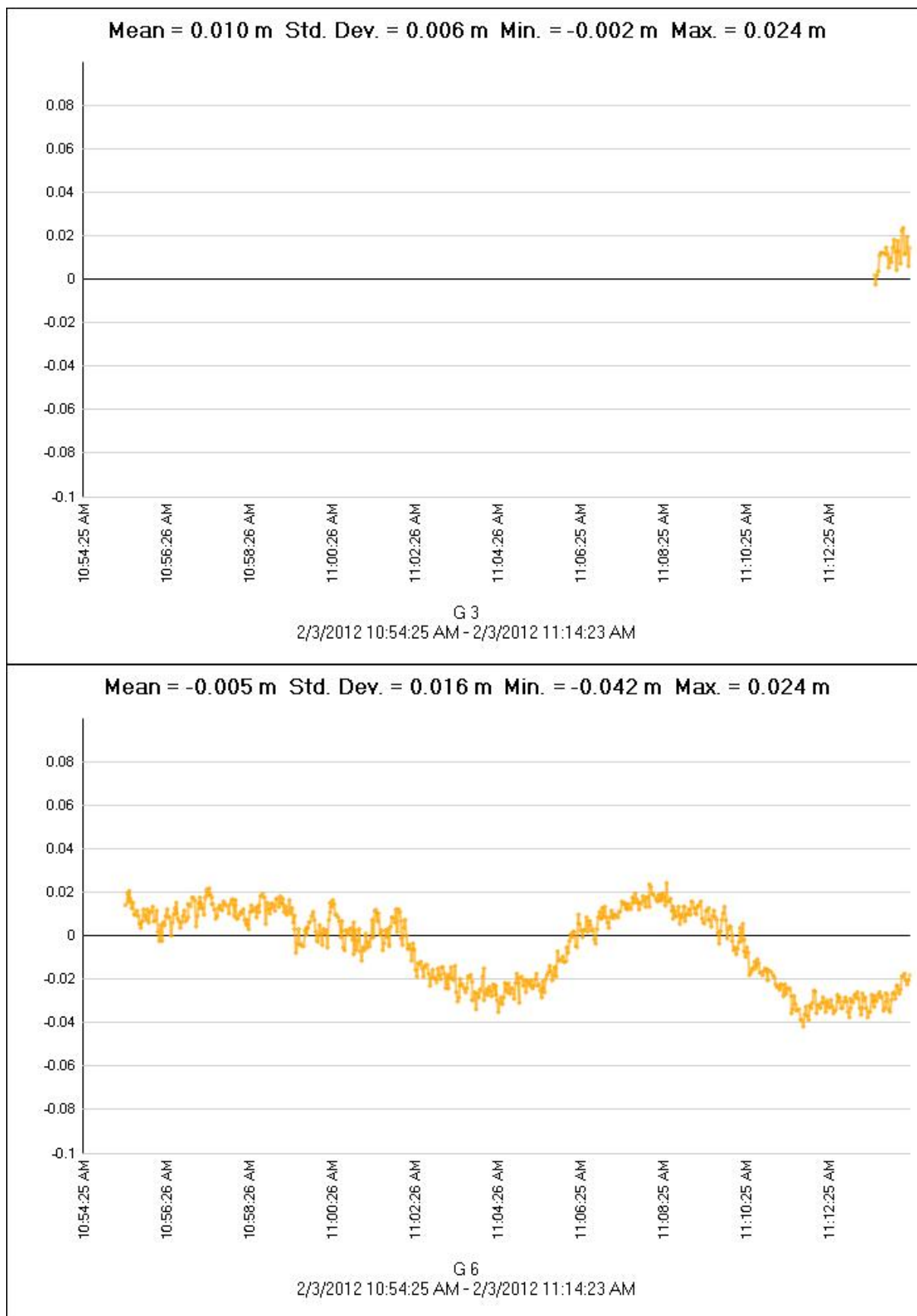
Occupations

	From	To
Point ID:	19S-SPIKE	FVA40-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010340.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080342.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

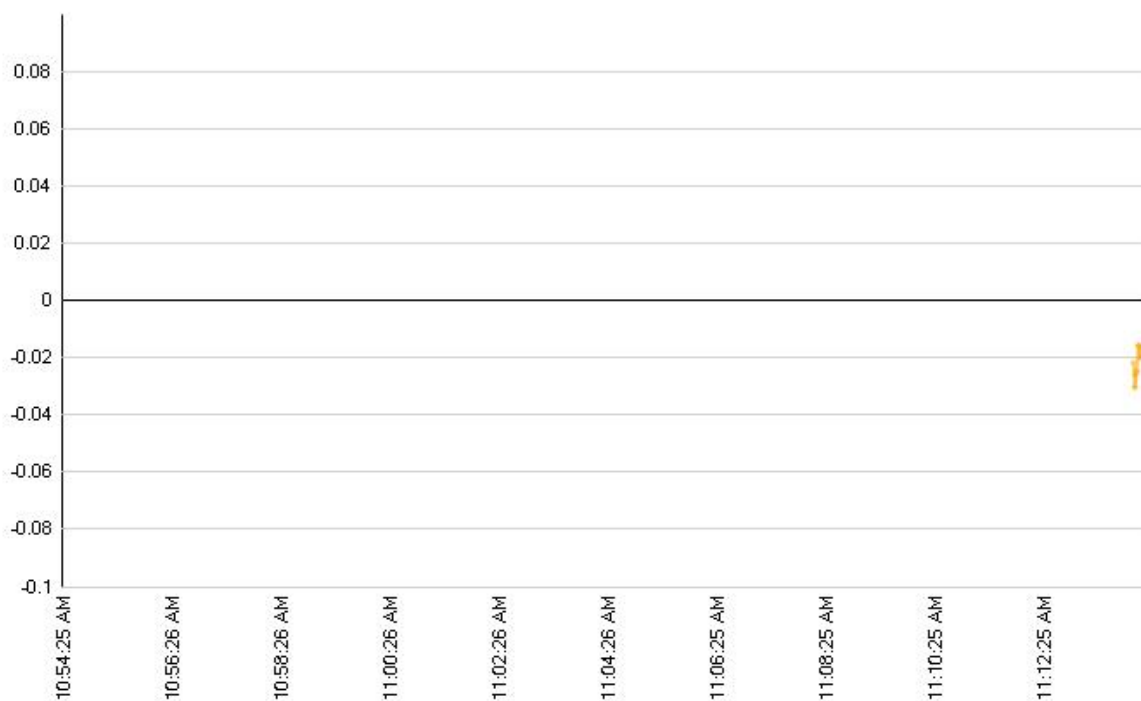
Tracking Summary



Residuals



Mean = -0.021 m Std. Dev. = 0.004 m Min. = -0.030 m Max. = -0.016 m



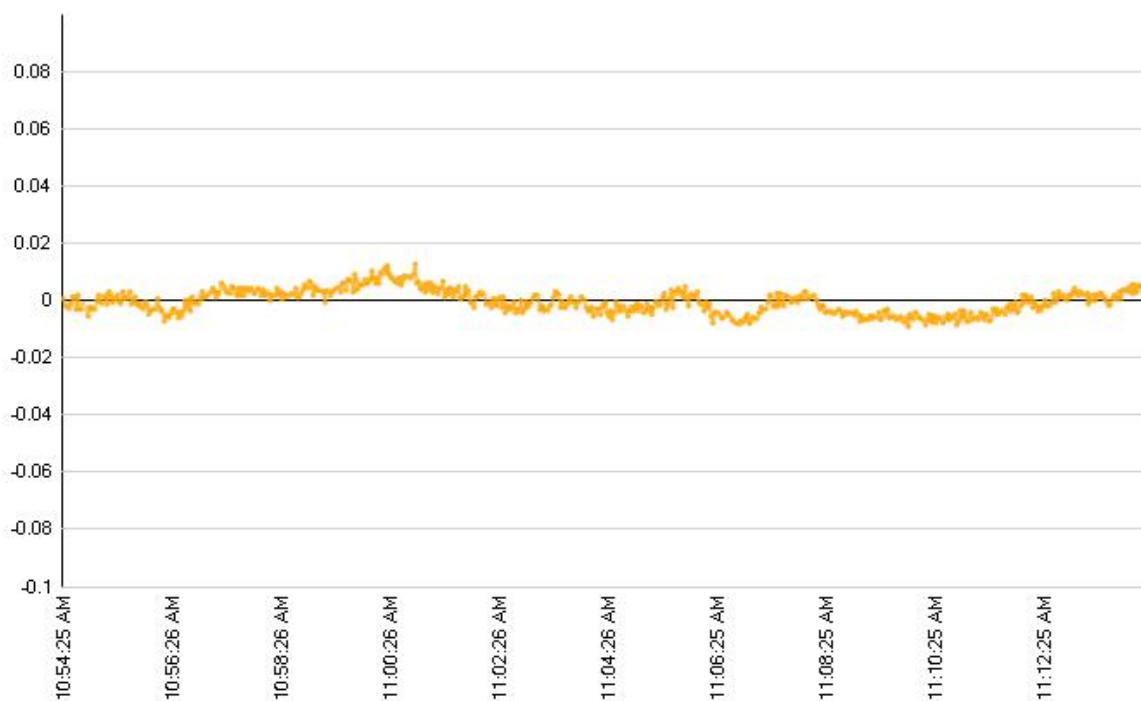
G 9
2/3/2012 10:54:25 AM - 2/3/2012 11:14:23 AM

Mean = 0.000 m Std. Dev. = 0.004 m Min. = -0.010 m Max. = 0.012 m



G 15
2/3/2012 10:54:25 AM - 2/3/2012 11:14:23 AM

Mean = 0.000 m Std. Dev. = 0.004 m Min. = -0.009 m Max. = 0.012 m



G 18
2/3/2012 10:54:25 AM - 2/3/2012 11:14:23 AM

Mean = 0.000 m Std. Dev. = 0.003 m Min. = -0.009 m Max. = 0.011 m



G 21
2/3/2012 10:54:25 AM - 2/3/2012 11:14:23 AM

Mean = 0.005 m Std. Dev. = 0.010 m Min. = -0.020 m Max. = 0.037 m



G 22

2/3/2012 10:54:25 AM - 2/3/2012 11:14:23 AM

Mean = -0.004 m Std. Dev. = 0.010 m Min. = -0.033 m Max. = 0.023 m



G 26

2/3/2012 10:54:25 AM - 2/3/2012 11:14:23 AM

Mean = 0.003 m Std. Dev. = 0.013 m Min. = -0.026 m Max. = 0.047 m



G 27

2/3/2012 10:54:25 AM - 2/3/2012 11:14:23 AM

Mean = 0.002 m Std. Dev. = 0.006 m Min. = -0.015 m Max. = 0.024 m





G 29

2/3/2012 10:54:25 AM - 2/3/2012 11:14:23 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:	Dual Frequency (L1, L2)
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

19S-SPIKE - SVA40-B2 (11:19:05 AM-11:37:58 AM) (S8)

Baseline observation: 19S-SPIKE --- SVA40-B2 (B8)

Processed: 3/20/2012 5:07:31 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.024 m

Vertical precision: 0.035 m

RMS: 0.003 m

Maximum PDOP: 1.538

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/3/2012 11:19:05 AM (Local: UTC-7hr)

Processing stop time: 2/3/2012 11:37:58 AM (Local: UTC-7hr)

Processing duration: 00:18:52

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338086.566 m	Latitude	N37°29'23.76152"	Latitude	N37°29'23.76151"
Northing	4150799.869 m	Longitude	W100°49'53.32131"	Longitude	W100°49'53.32131"
Elevation	896.723 m	Height	870.555 m	Height	870.555 m

To:	SVA40-B2				
Grid		Local		Global	
Easting	364799.569 m	Latitude	N37°34'26.59052"	Latitude	N37°34'26.59052"
Northing	4159658.693 m	Longitude	W100°31'51.79637"	Longitude	W100°31'51.79637"
Elevation	850.298 m	Height	824.153 m	Height	824.153 m

Vector					
9Ughb[	26713.003 m	NS Fwd Azimuth	70°32'13"	L	27158.228 m
BcfA\jb[	8858.824 m	Ellipsoid Dist.	28147.205 m	M	703.724 m
9Yj Uhcb	-46.425 m	<Y][\h	-46.402 m	N	7376.439 m

Standard Errors

Vector errors:					
Point ID	0.008 m	Point Description	0°00'00"	Point Type	0.011 m
Point ID	0.008 m	Point Description	0.009 m	Point Type	0.016 m
Point ID	0.018 m	Point Description	0.018 m	Point Type	0.009 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0001106077		
Y	0.0001458462	0.0002613360	
Z	-0.0000639133	-0.0000907823	0.0000813485

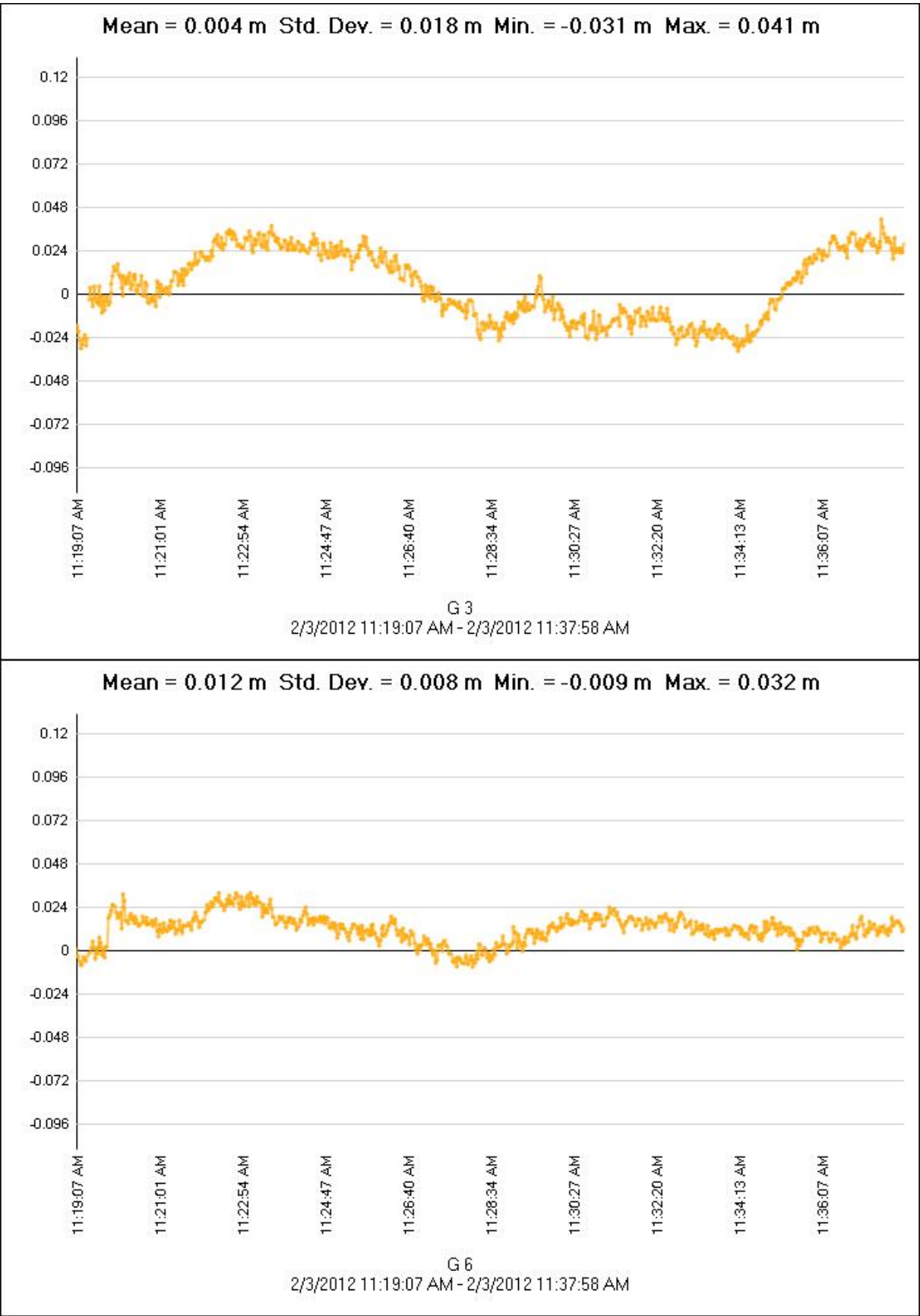
Occupations

	From	To
Point ID:	19S-SPIKE	SVA40-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010340.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080343.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

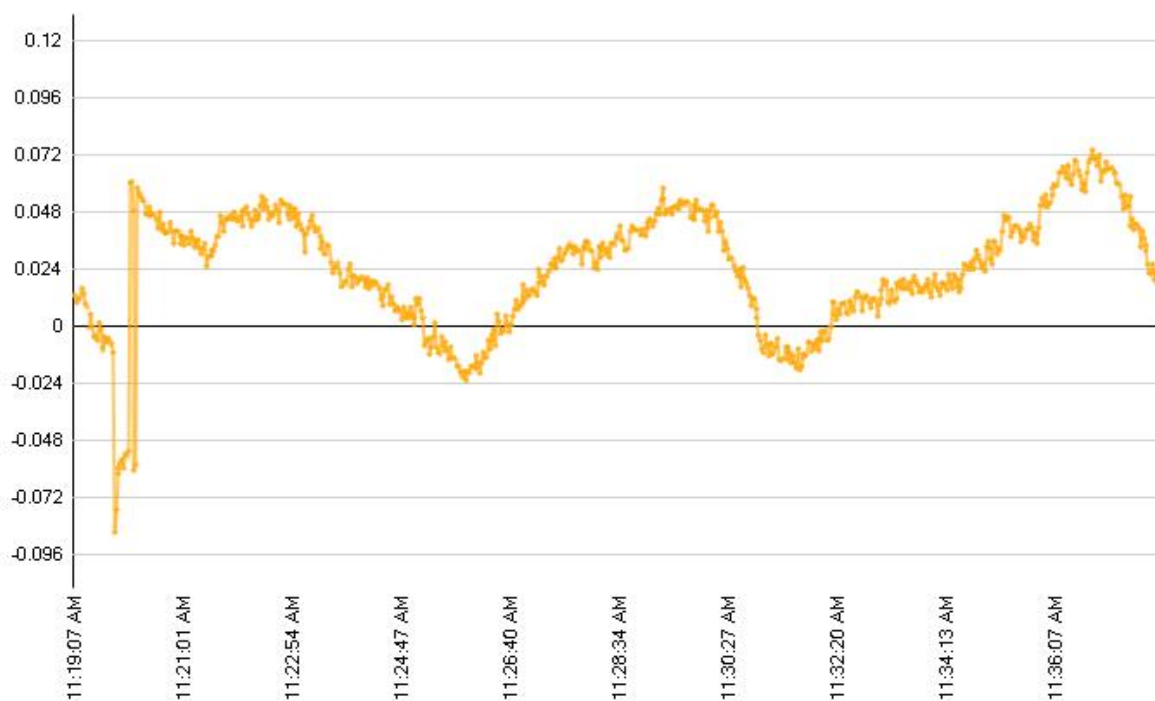
Tracking Summary

SV	2/3/2012 11:19:05 AM	Duration: 00:18:52.5000000	Major interval: 00:01:00	2/3/2012 11:37:58 AM
G 3	L1 L2			
G 6	L1 L2			
G 9	L1 L2			
G 14	L1 L2			
G 15	L1 L2			
G 16	L1 L2			
G 18	L1 L2			
G 21	L1 L2			
G 22	L1 L2			
G 26	L1 L2			
G 27	L1 L2			
G 29	L1 L2			

Residuals



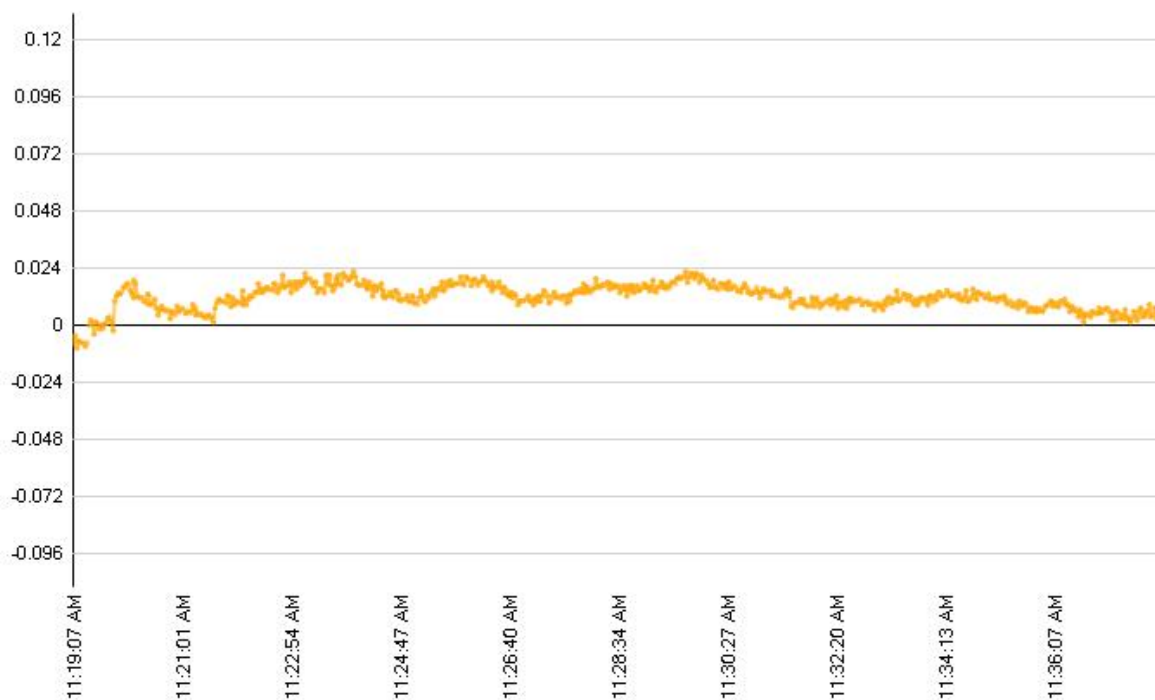
Mean = 0.024 m Std. Dev. = 0.024 m Min. = -0.086 m Max. = 0.074 m



G 9

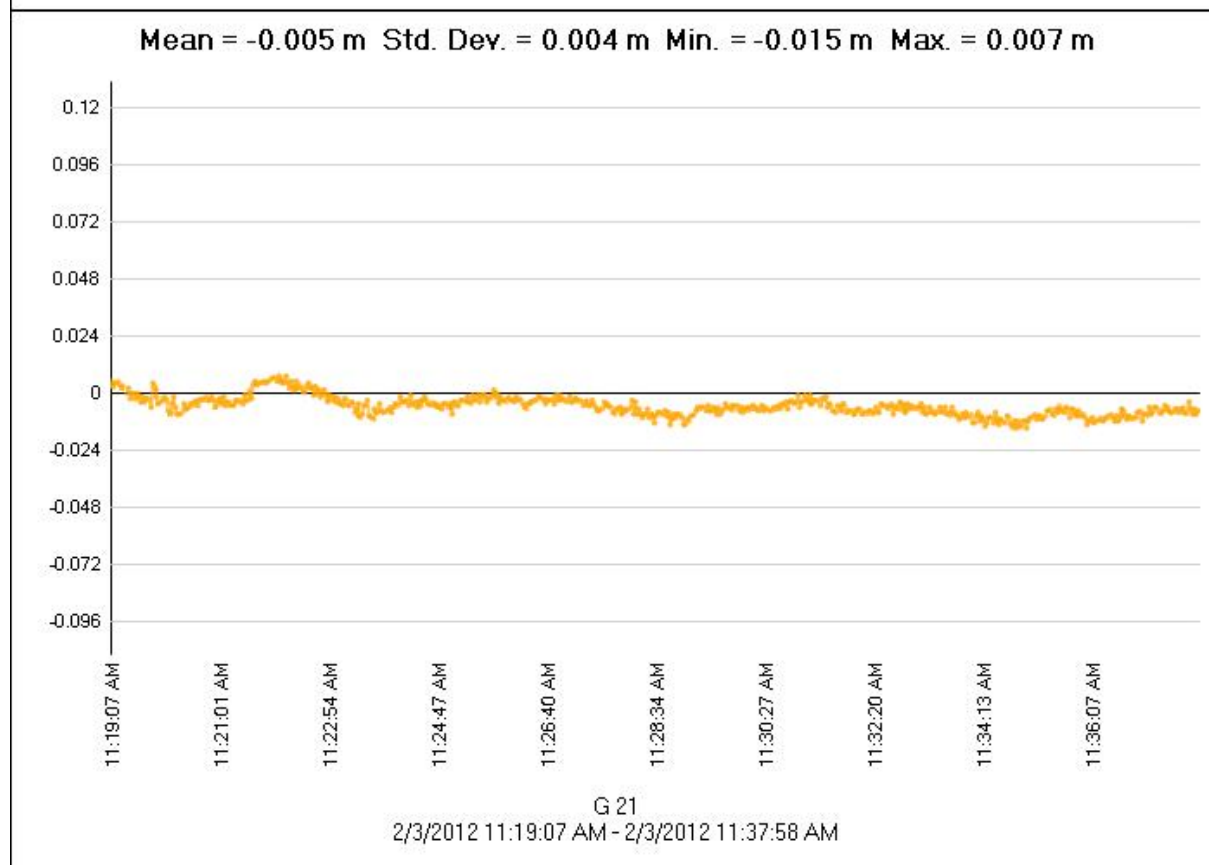
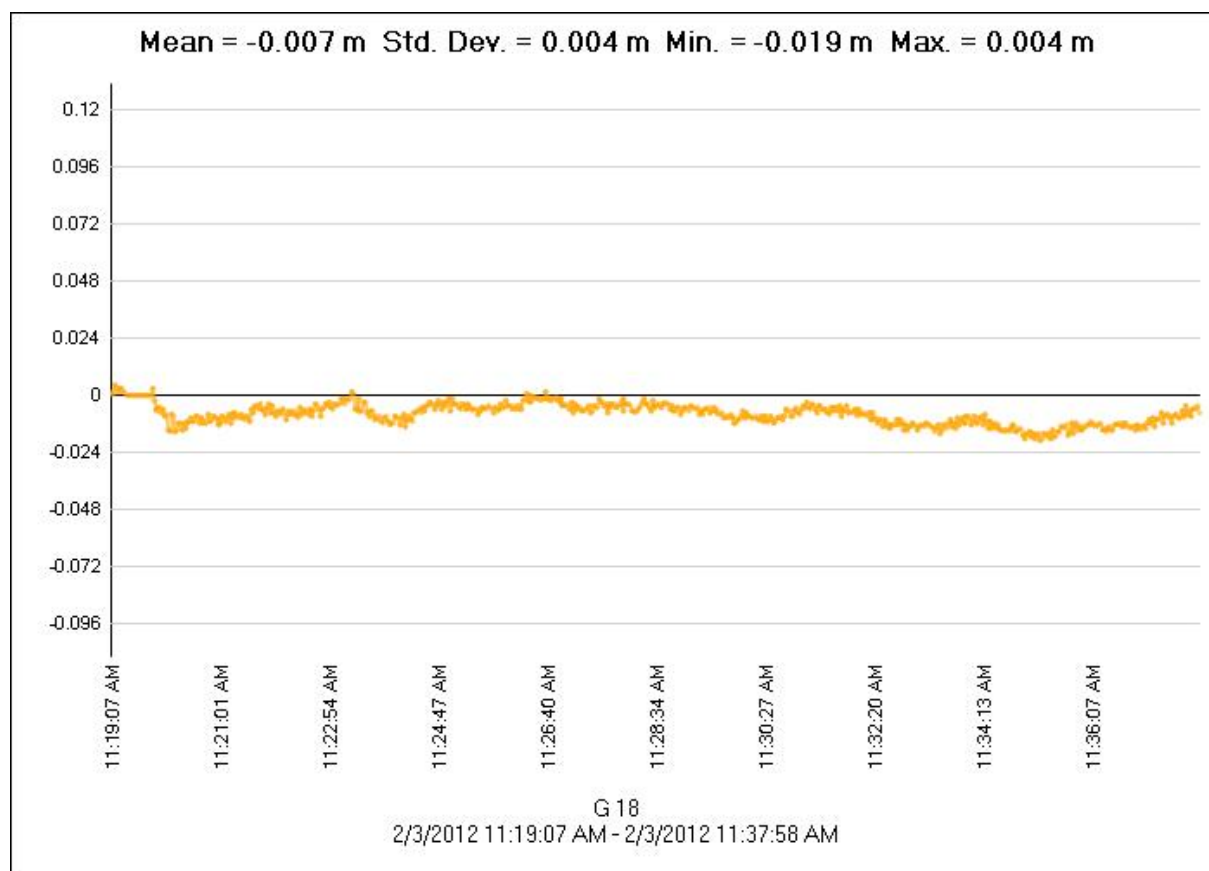
2/3/2012 11:19:07 AM - 2/3/2012 11:37:58 AM

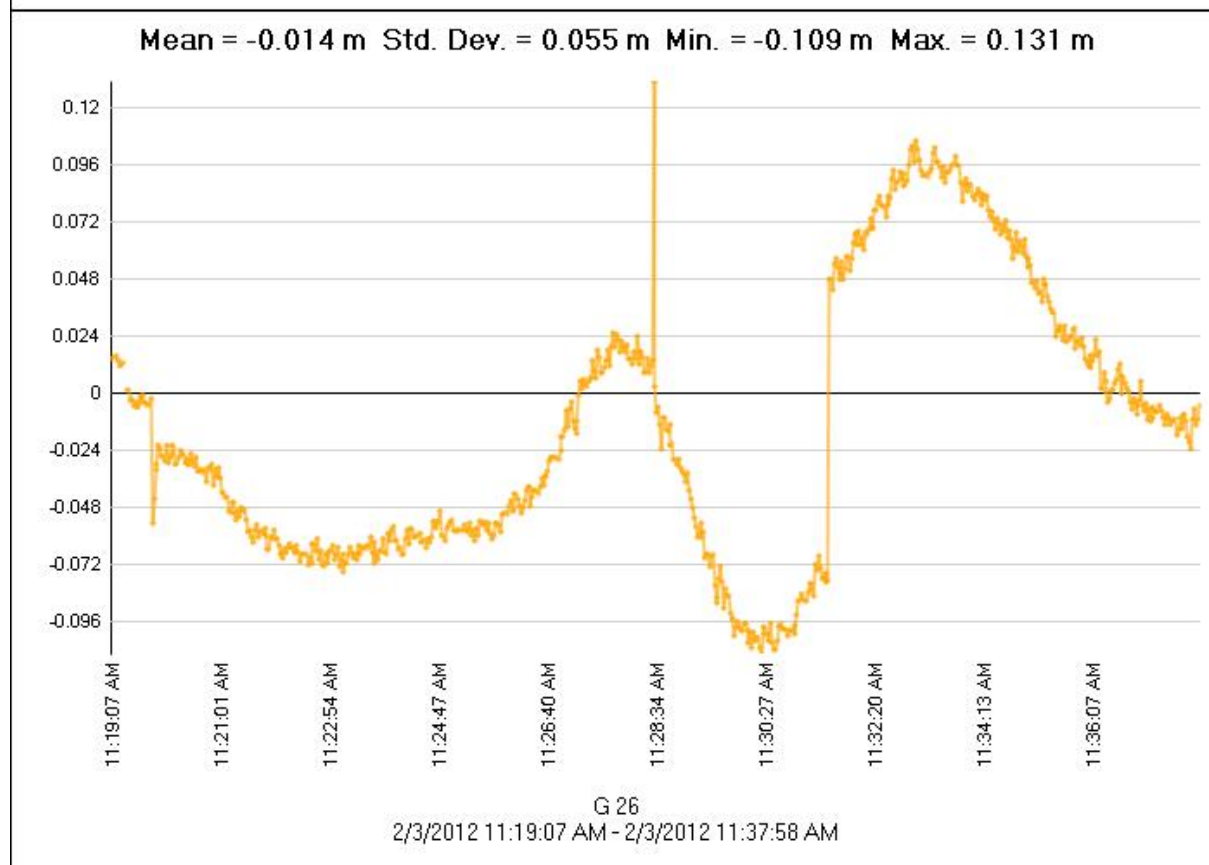
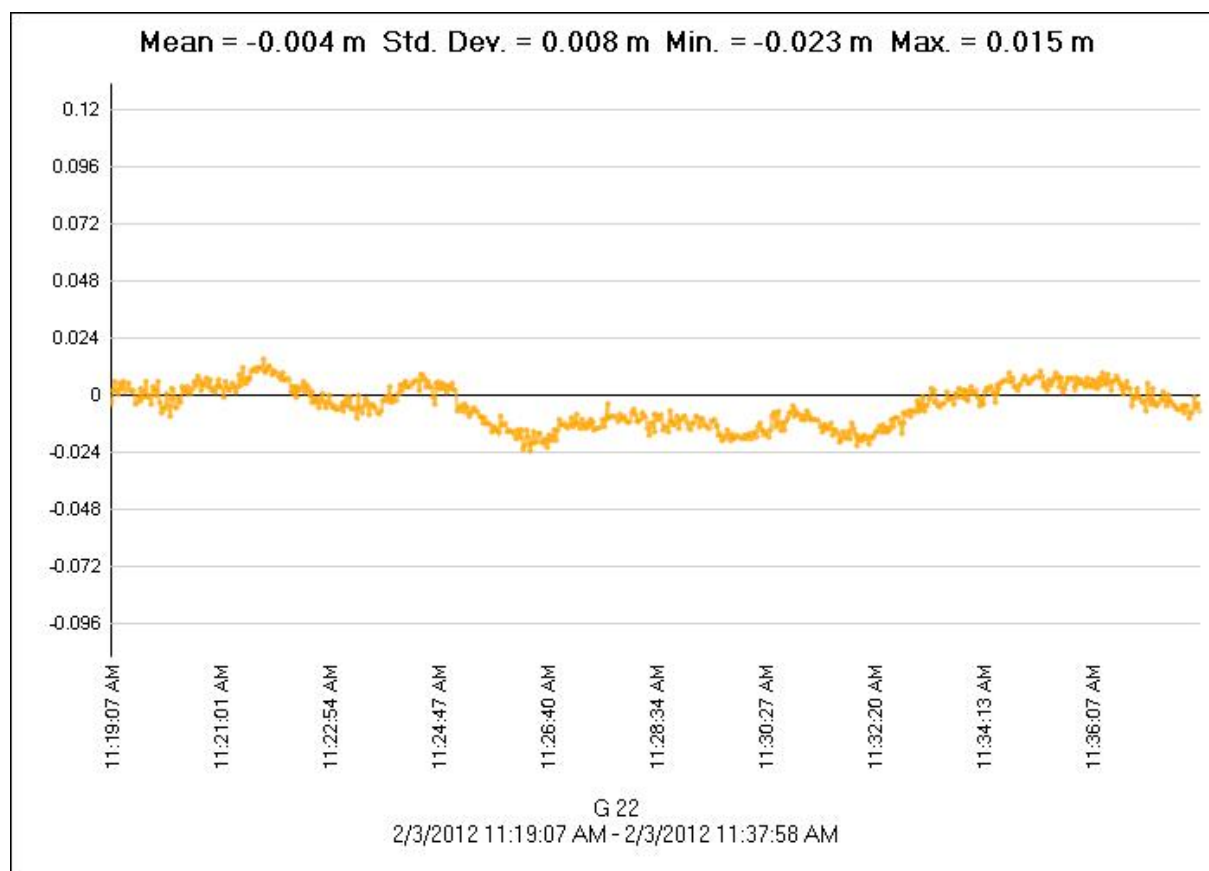
Mean = 0.011 m Std. Dev. = 0.005 m Min. = -0.010 m Max. = 0.022 m



G 15

2/3/2012 11:19:07 AM - 2/3/2012 11:37:58 AM





Mean = 0.017 m Std. Dev. = 0.035 m Min. = -0.095 m Max. = 0.065 m



G 27

2/3/2012 11:19:07 AM - 2/3/2012 11:37:58 AM

Mean = -0.006 m Std. Dev. = 0.010 m Min. = -0.033 m Max. = 0.026 m





G 29

2/3/2012 11:19:07 AM - 2/3/2012 11:37:58 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:	Dual Frequency (L1, L2)
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

19S-SPIKE - FVA57-B2 (12:02:47 PM-12:20:43 PM) (S9)

Baseline observation: 19S-SPIKE --- FVA57-B2 (B9)

Processed: 3/20/2012 5:07:36 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.012 m

Vertical precision: 0.013 m

RMS: 0.002 m

Maximum PDOP: 2.067

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/3/2012 12:02:47 PM (Local: UTC-7hr)

Processing stop time: 2/3/2012 12:20:43 PM (Local: UTC-7hr)

Processing duration: 00:17:56

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338086.566 m	Latitude	N37°29'23.76152"	Latitude	N37°29'23.76151"
Northing	4150799.869 m	Longitude	W100°49'53.32131"	Longitude	W100°49'53.32131"
Elevation	896.723 m	Height	870.555 m	Height	870.555 m

To:	FVA57-B2				
Grid		Local		Global	
Easting	337996.152 m	Latitude	N37°34'56.33718"	Latitude	N37°34'56.33718"
Northing	4161056.074 m	Longitude	W100°50'05.14870"	Longitude	W100°50'05.14870"
Elevation	903.173 m	Height	877.141 m	Height	877.141 m

Vector					
9Ughb[	-90.414 m	NS Fwd Azimuth	358°22'44"	L	888.049 m
BcfA\jb[	10256.205 m	Ellipsoid Dist.	10257.393 m	M	6185.898 m
9`Yj U\jcb	6.450 m	<Y][\h	6.585 m	N	8135.667 m

Standard Errors

Vector errors:					
Point ID	0.003 m	Point Description	0°00'00"	Point Type	0.003 m
Point ID	0.005 m	Point Description	0.005 m	Point Type	0.006 m
Point ID	0.007 m	Point Description	0.007 m	Point Type	0.005 m








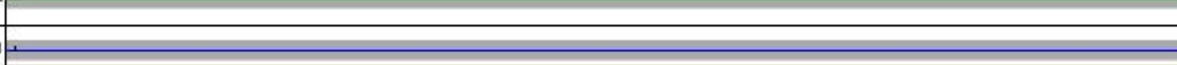
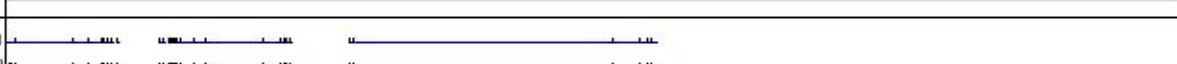



Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000095979		
Y	0.0000085857	0.0000391861	
Z	-0.0000019599	-0.0000085512	0.0000282298

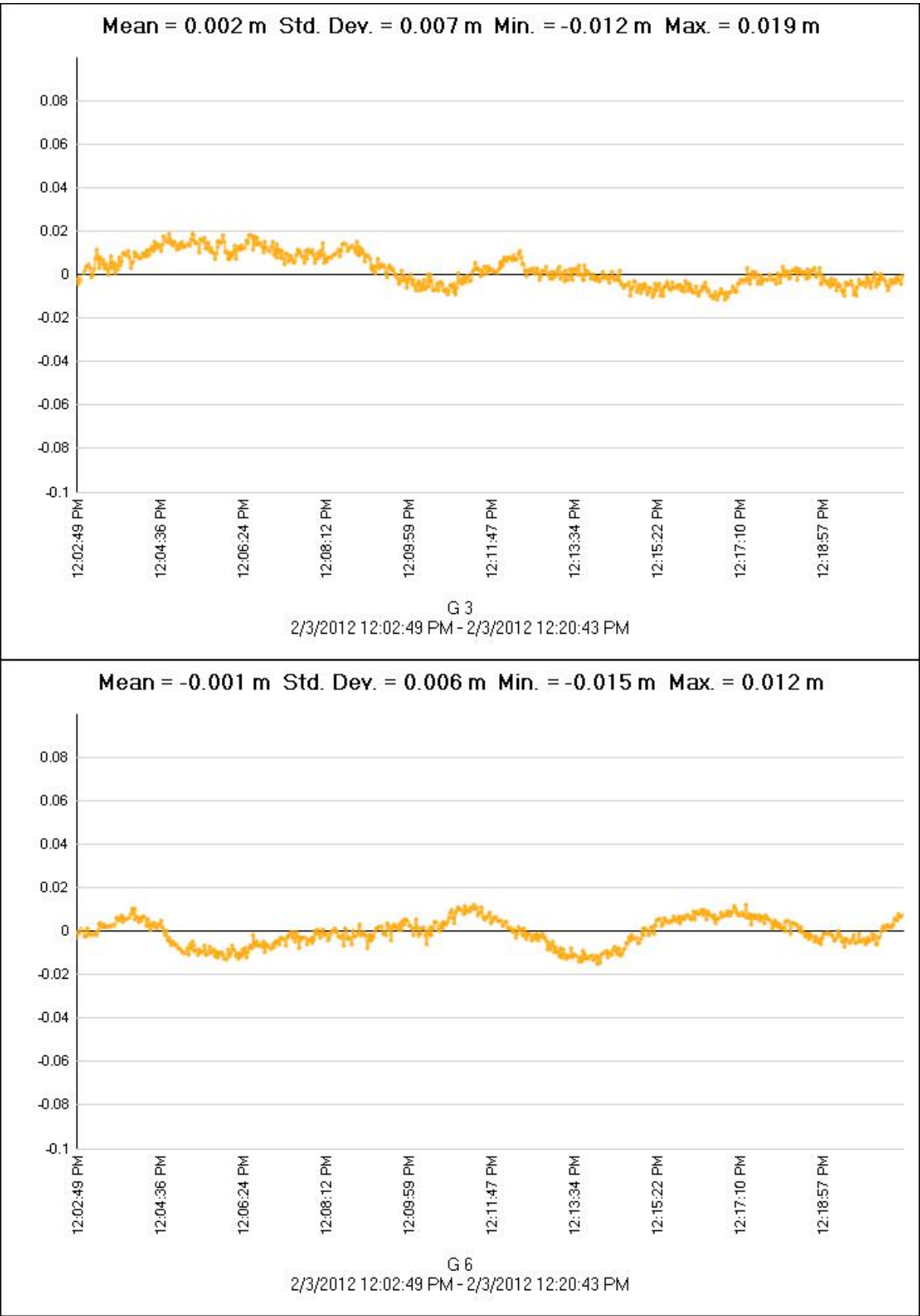
Occupations

	From	To
Point ID:	19S-SPIKE	FVA57-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010340.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080344.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

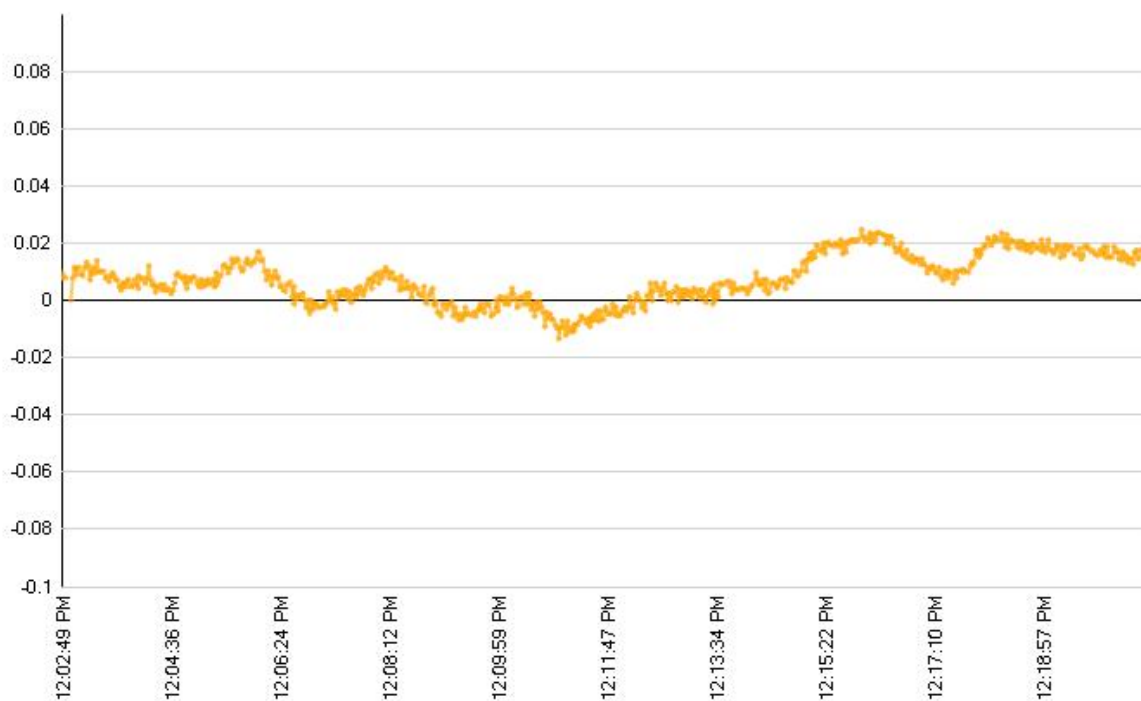
Tracking Summary

SV	2/3/2012 12:02:47 PM	Duration: 00:17:56	Major interval: 00:01:00	2/3/2012 12:20:43 PM
G 3	L1 L2			
G 6	L1 L2			
G 9	L1 L2			
G 14	L1 L2			
G 15	L1 L2			
G 18	L1 L2			
G 19	L1 L2			
G 21	L1 L2			
G 22	L1 L2			
G 26	L1 L2			
G 27	L1 L2			
G 29	L1 L2			

Residuals



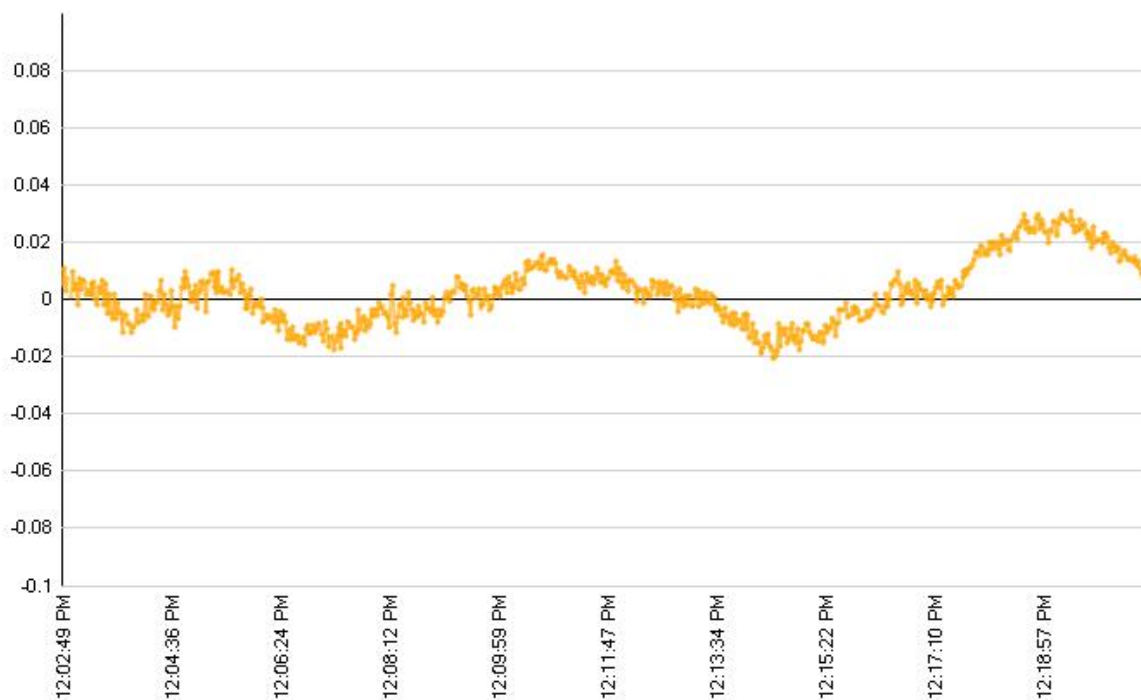
Mean = 0.007 m Std. Dev. = 0.008 m Min. = -0.013 m Max. = 0.025 m



G 9

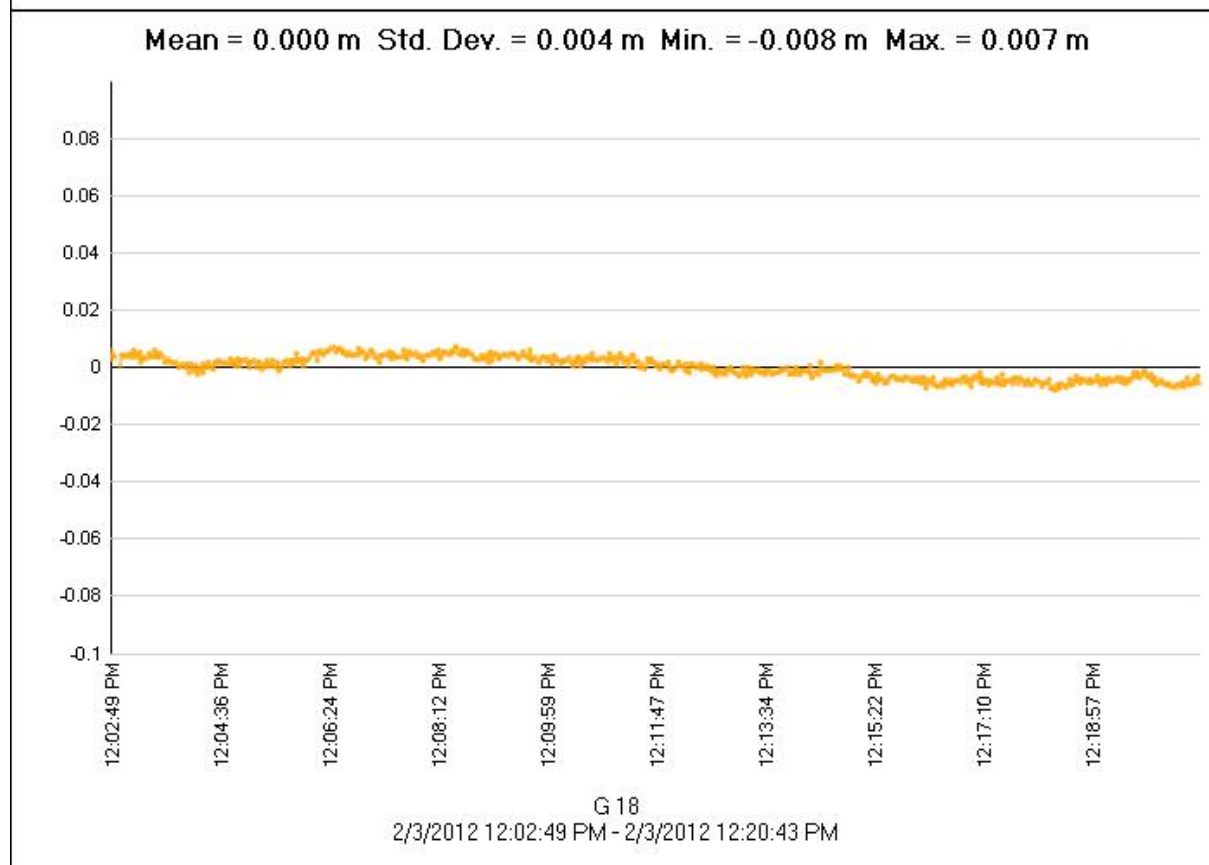
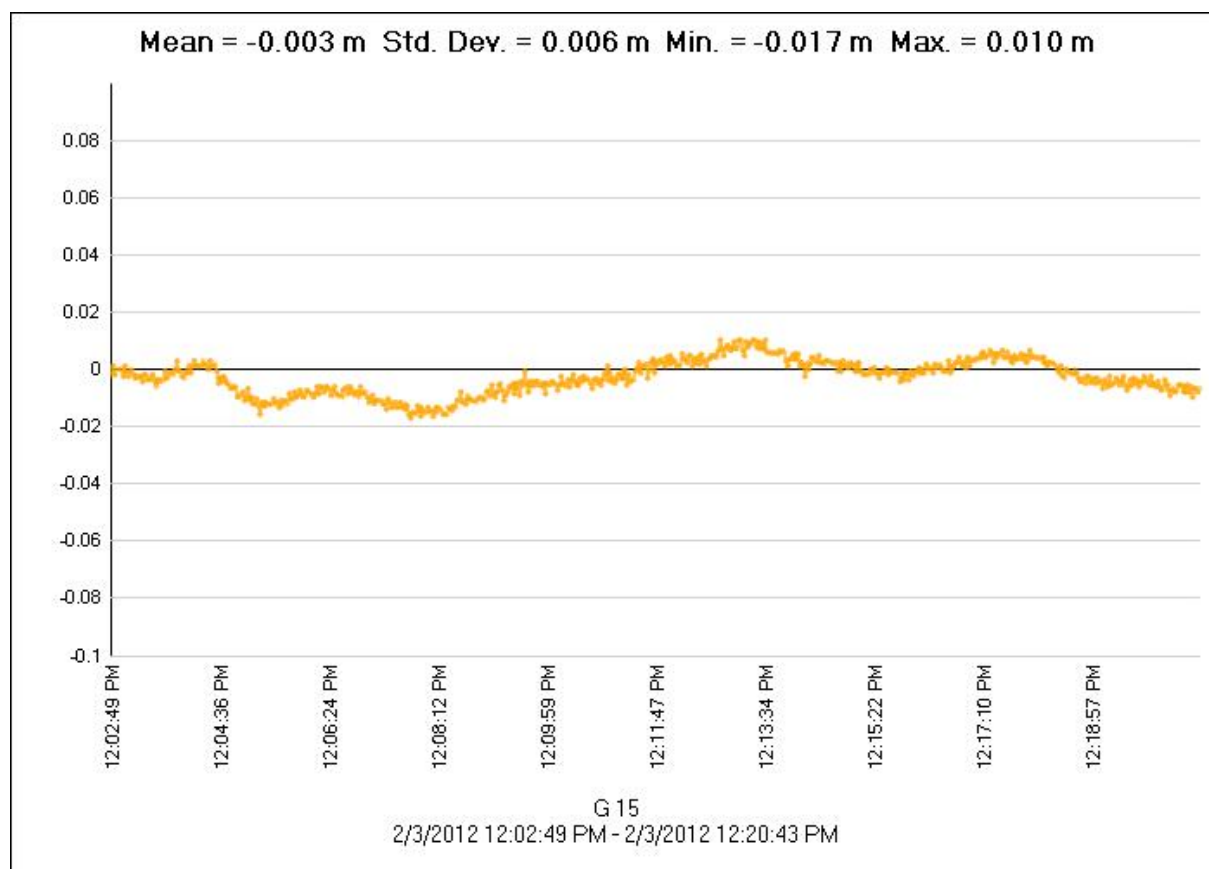
2/3/2012 12:02:49 PM - 2/3/2012 12:20:43 PM

Mean = 0.002 m Std. Dev. = 0.010 m Min. = -0.021 m Max. = 0.031 m

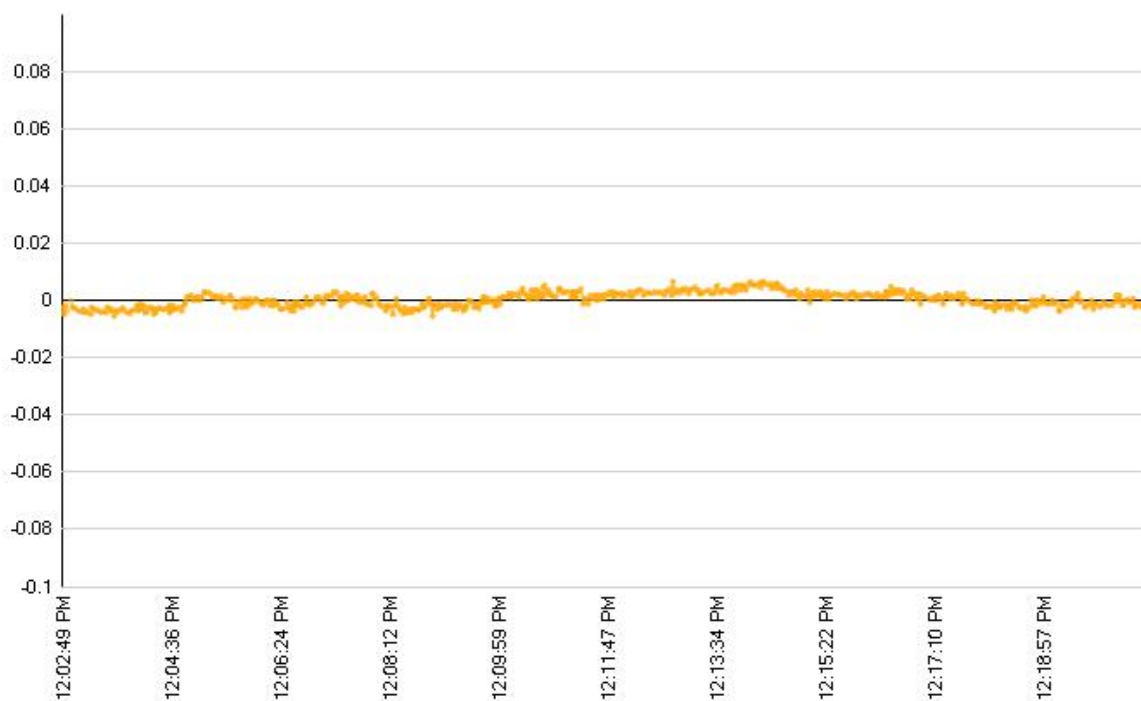


G 14

2/3/2012 12:02:49 PM - 2/3/2012 12:20:43 PM

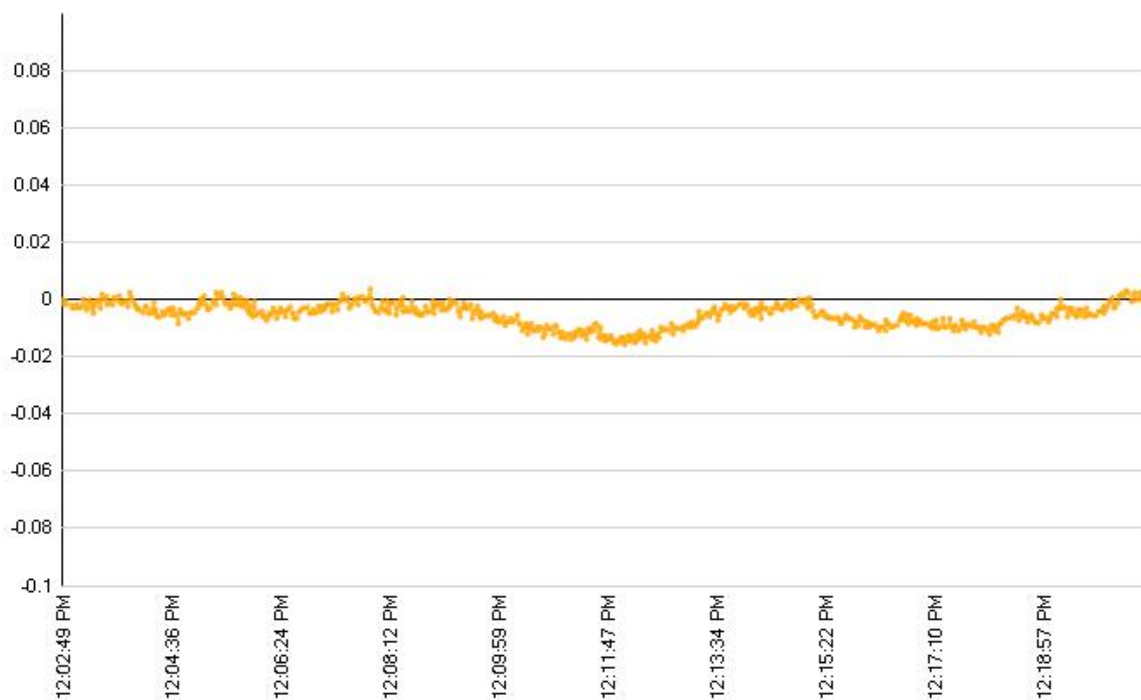


Mean = 0.000 m Std. Dev. = 0.002 m Min. = -0.005 m Max. = 0.007 m



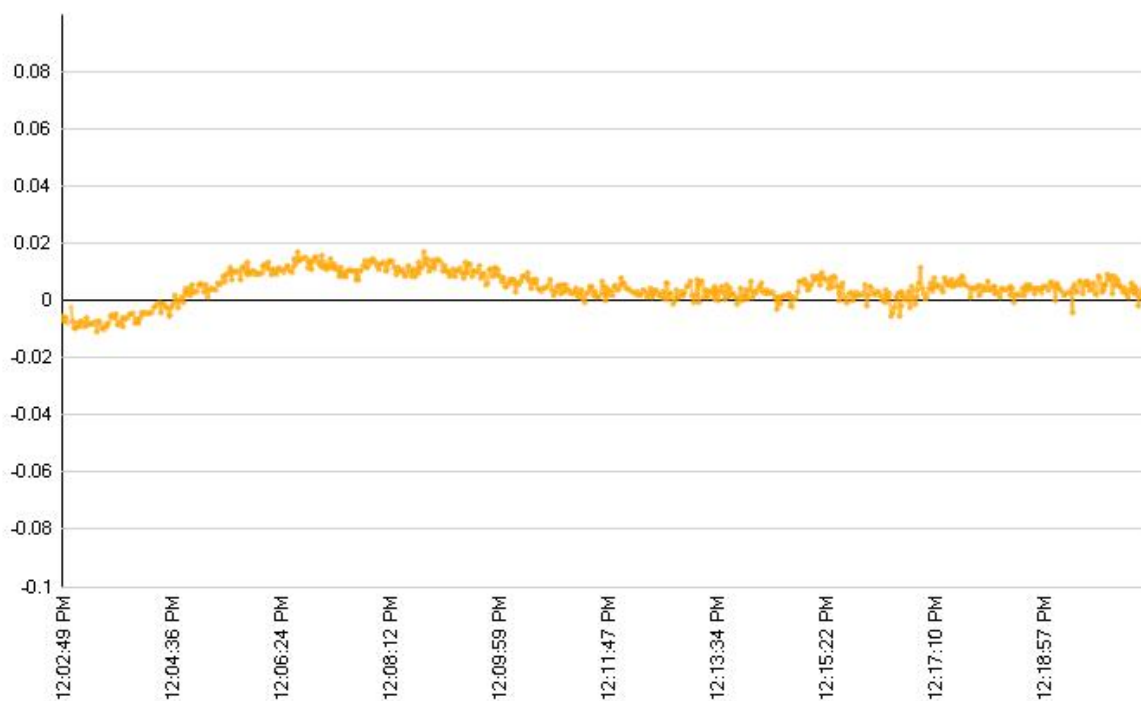
G 21
2/3/2012 12:02:49 PM - 2/3/2012 12:20:43 PM

Mean = -0.005 m Std. Dev. = 0.004 m Min. = -0.016 m Max. = 0.003 m



G 22
2/3/2012 12:02:49 PM - 2/3/2012 12:20:43 PM

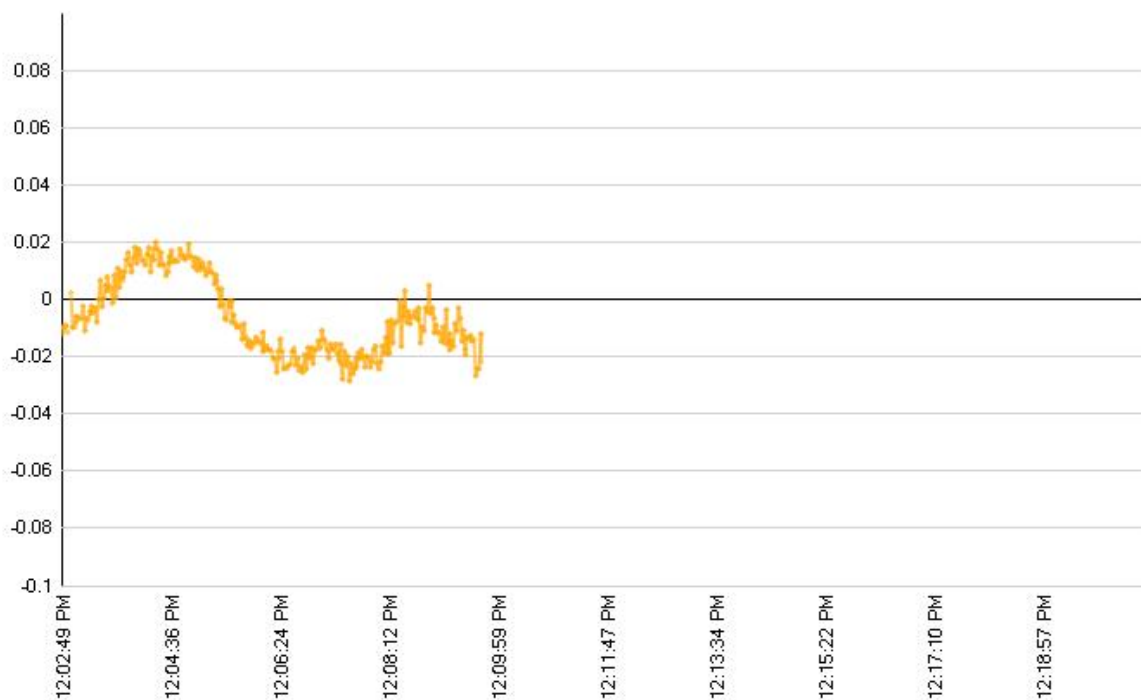
Mean = 0.004 m Std. Dev. = 0.005 m Min. = -0.011 m Max. = 0.017 m



G 27

2/3/2012 12:02:49 PM - 2/3/2012 12:20:43 PM

Mean = -0.006 m Std. Dev. = 0.013 m Min. = -0.029 m Max. = 0.020 m





G 29

2/3/2012 12:02:49 PM - 2/3/2012 12:20:43 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:	Dual Frequency (L1, L2)
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

19S-SPIKE - FVA57-B2 (12:24:54 PM-12:46:43 PM) (S10)

Baseline observation: 19S-SPIKE --- FVA57-B2 (B10)

Processed: 3/20/2012 5:07:37 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.010 m

Vertical precision: 0.013 m

RMS: 0.003 m

Maximum PDOP: 2.102

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/3/2012 12:24:54 PM (Local: UTC-7hr)

Processing stop time: 2/3/2012 12:46:43 PM (Local: UTC-7hr)

Processing duration: 00:21:48

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338086.566 m	Latitude	N37°29'23.76152"	Latitude	N37°29'23.76151"
Northing	4150799.869 m	Longitude	W100°49'53.32131"	Longitude	W100°49'53.32131"
Elevation	896.723 m	Height	870.555 m	Height	870.555 m

To:	FVA57-B2				
Grid		Local		Global	
Easting	338000.926 m	Latitude	N37°34'54.77283"	Latitude	N37°34'54.77282"
Northing	4161007.746 m	Longitude	W100°50'04.91567"	Longitude	W100°50'04.91567"
Elevation	902.831 m	Height	876.798 m	Height	876.798 m

Vector					
9Ughb[	-85.640 m	NS Fwd Azimuth	358°24'12"	L	888.186 m
BcfA\jb[	10207.877 m	Ellipsoid Dist.	10209.021 m	M	6156.195 m
9`Yj U\jcb	6.108 m	<Y][\h	6.243 m	N	8097.232 m

Standard Errors

Vector errors:					
Ughb[	0.002 m	BG`Zk X'5n]a i h	0°00'00"	L	0.003 m
Bcfh\]b[	0.004 m	'9~]dgc]X'8]gh	0.004 m	M	0.006 m
'9`Yj Uhcb	0.007 m	' <Y][\h	0.007 m	N	0.005 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000076014		
Y	0.0000067400	0.0000309807	
Z	-0.0000053548	-0.0000153573	0.0000300640

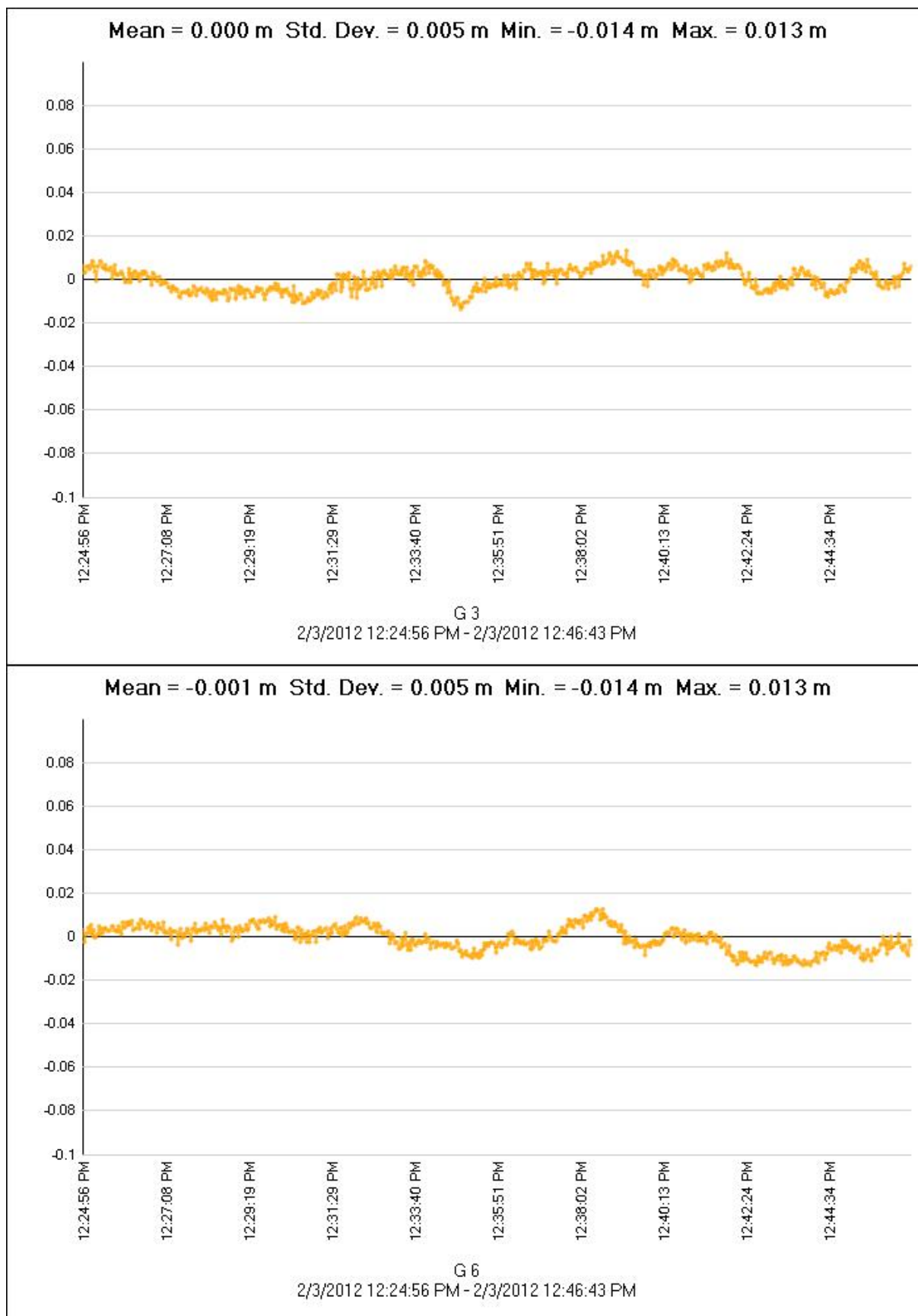
Occupations

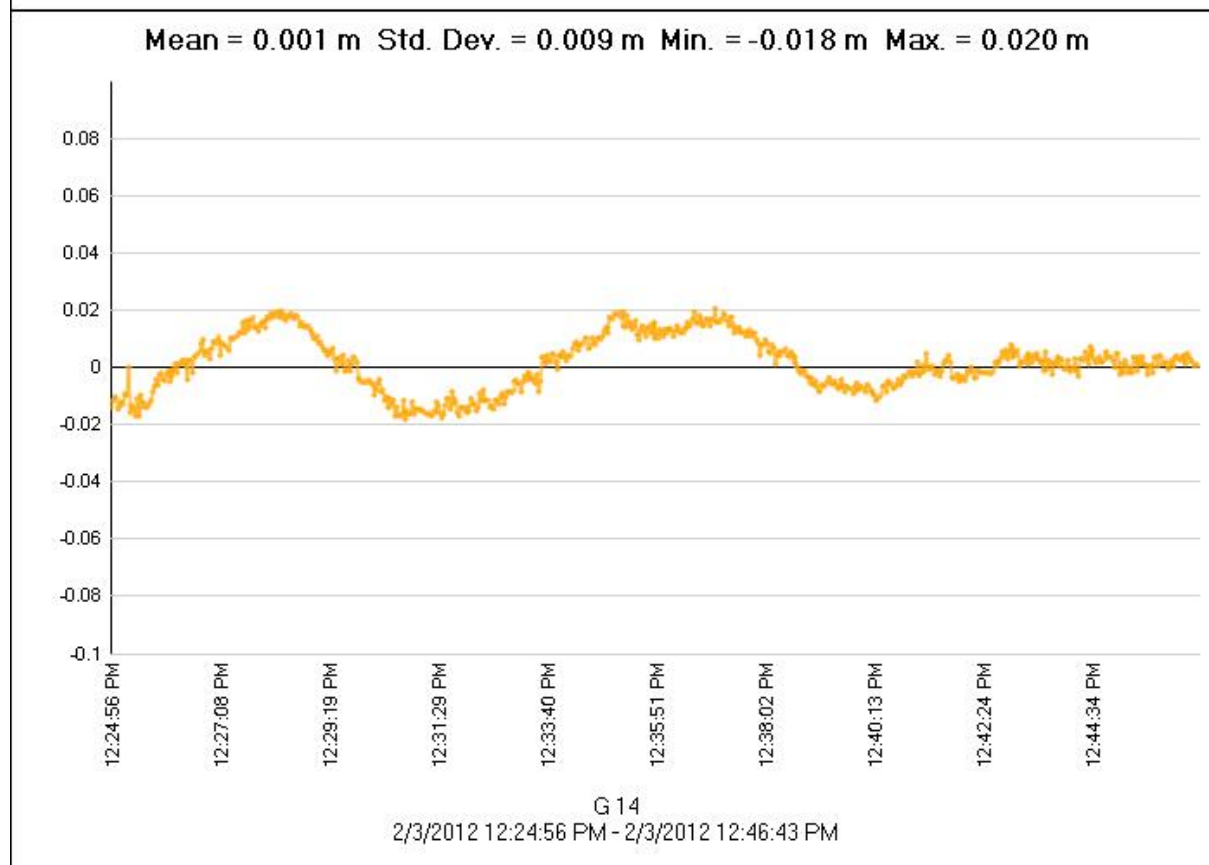
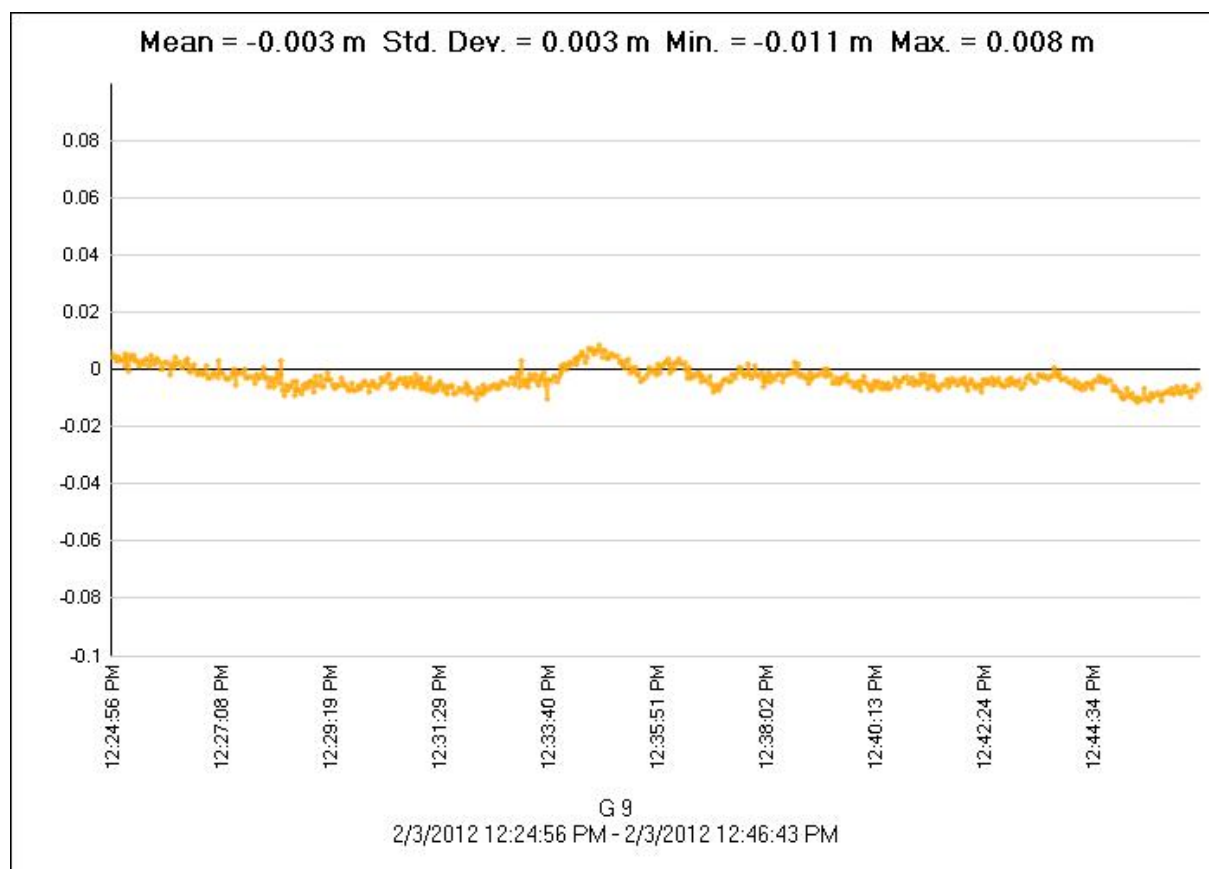
	From	To
Point ID:	19S-SPIKE	FVA57-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00010340.12o	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00080345.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

Tracking Summary

SV	2/3/2012 12:24:54 PM	Duration: 00:21:48.5000000	Major interval: 00:01:00	2/3/2012 12:46:43 PM
G 3				
G 6				
G 9				
G 14				
G 15				
G 18				
G 19				
G 21				
G 22				
G 27				
G 29				

Residuals



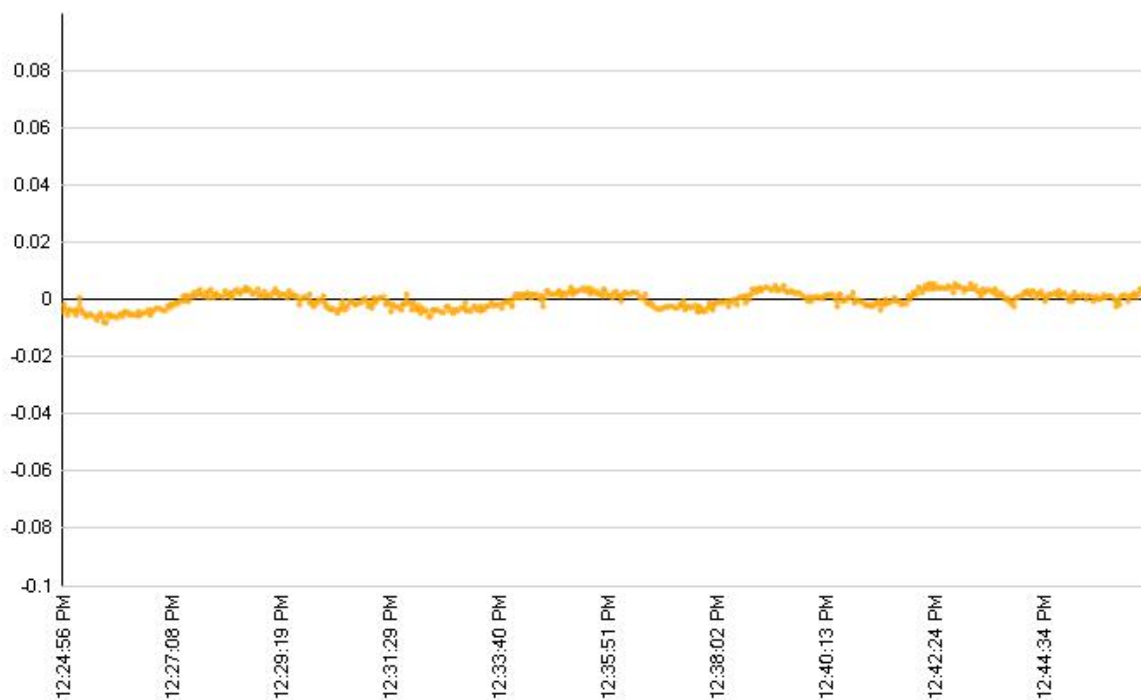


Mean = 0.003 m Std. Dev. = 0.006 m Min. = -0.014 m Max. = 0.017 m

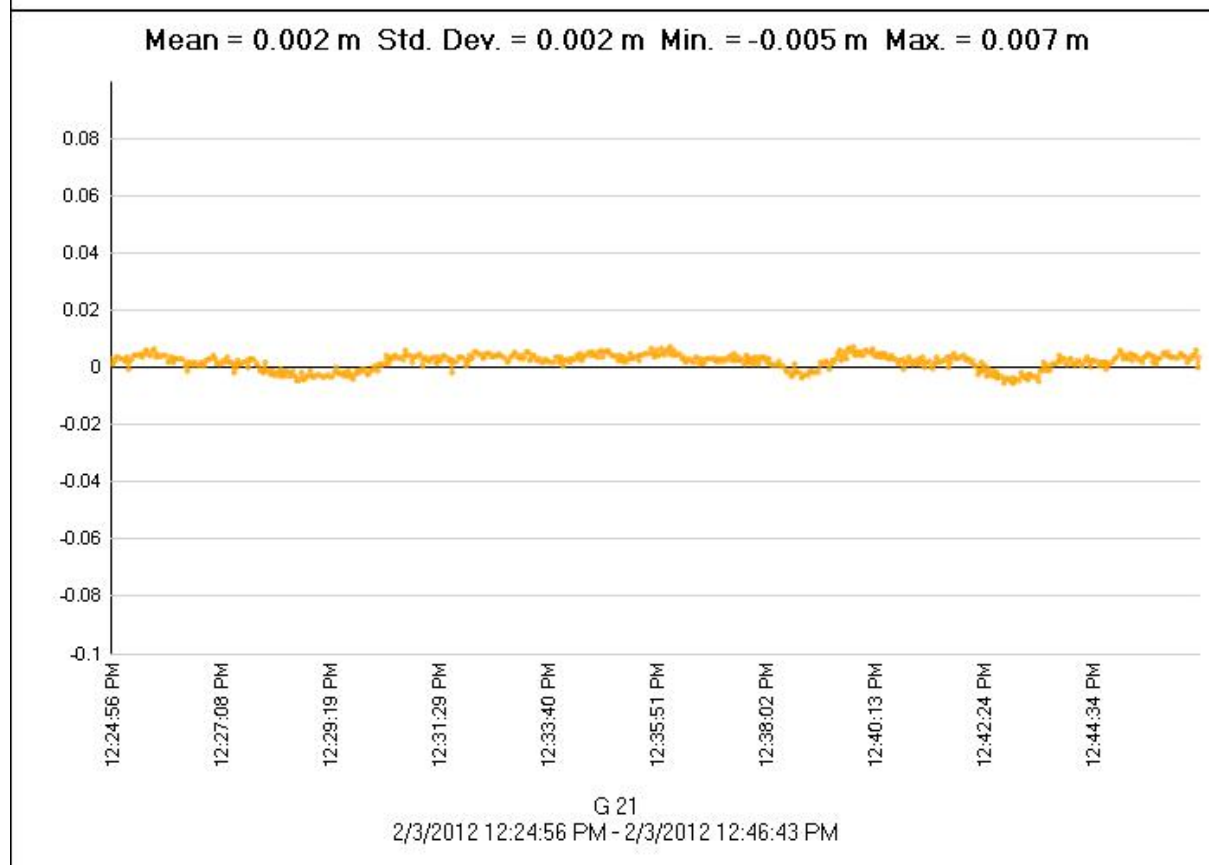
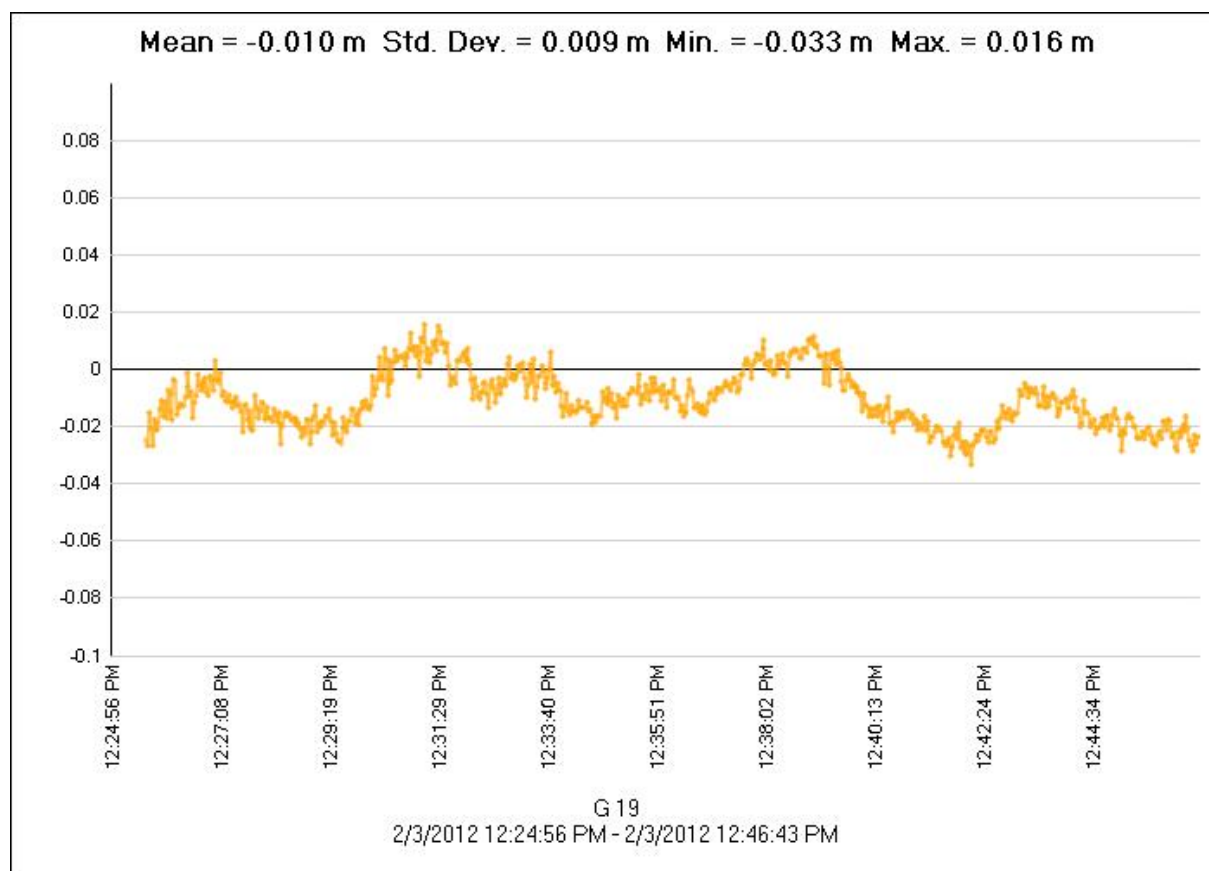


G 15
2/3/2012 12:24:56 PM - 2/3/2012 12:46:43 PM

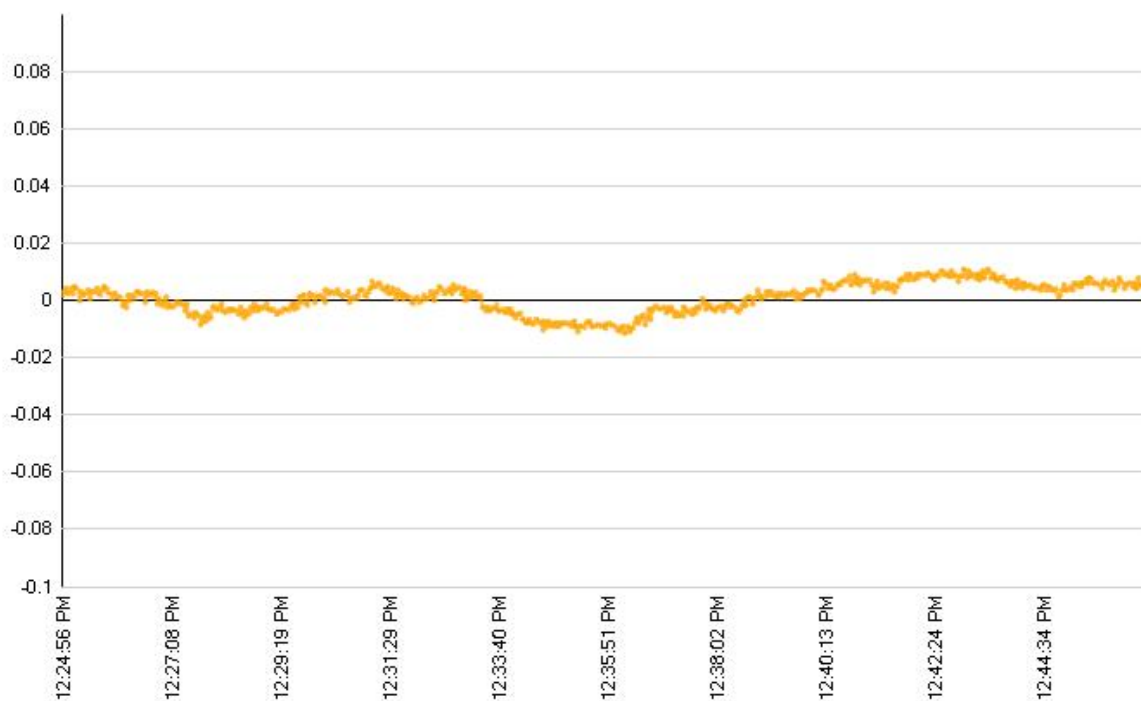
Mean = 0.000 m Std. Dev. = 0.003 m Min. = -0.008 m Max. = 0.006 m



G 18
2/3/2012 12:24:56 PM - 2/3/2012 12:46:43 PM

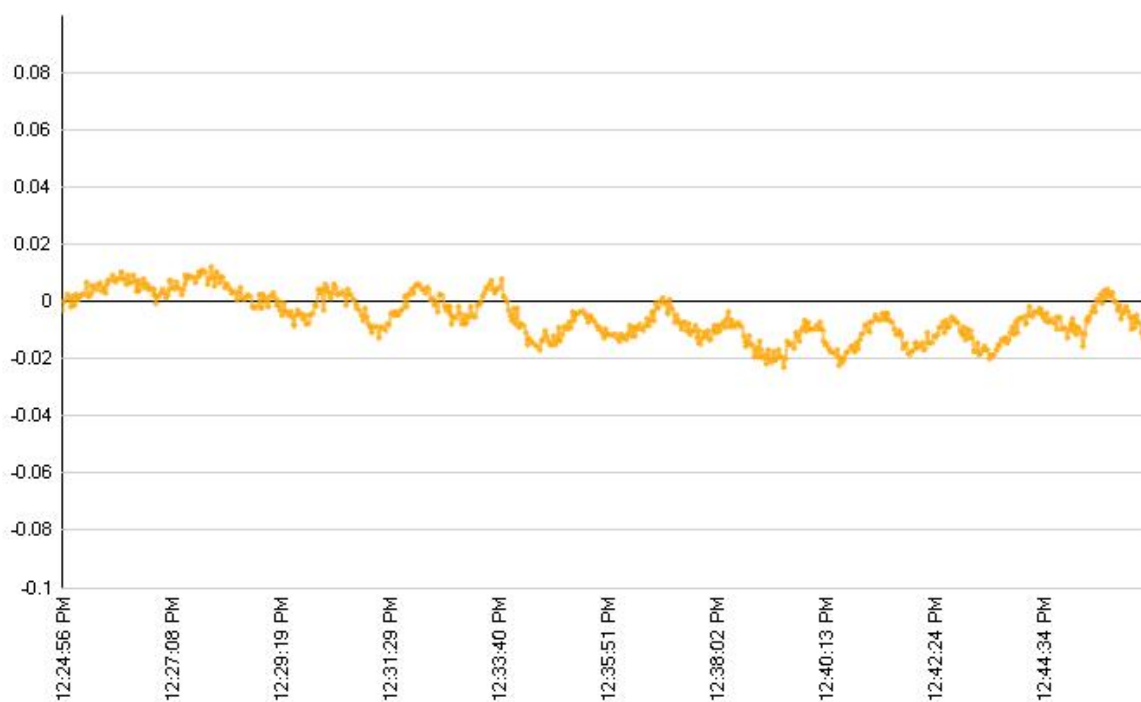


Mean = 0.001 m Std. Dev. = 0.005 m Min. = -0.012 m Max. = 0.011 m



G 22
2/3/2012 12:24:56 PM - 2/3/2012 12:46:43 PM

Mean = -0.005 m Std. Dev. = 0.007 m Min. = -0.023 m Max. = 0.012 m





G 27
2/3/2012 12:24:56 PM - 2/3/2012 12:46:43 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:	Dual Frequency (L1, L2)
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

19S-SPIKE - FVA33-B2 (1:12:54 PM-1:30:26 PM) (S11)

Baseline observation: 19S-SPIKE --- FVA33-B2 (B11)

Processed: 3/20/2012 5:07:43 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.009 m

Vertical precision: 0.016 m

RMS: 0.004 m

Maximum PDOP: 2.059

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/3/2012 1:12:54 PM (Local: UTC-7hr)

Processing stop time: 2/3/2012 1:30:26 PM (Local: UTC-7hr)

Processing duration: 00:17:32

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338086.566 m	Latitude	N37°29'23.76152"	Latitude	N37°29'23.76151"
Northing	4150799.869 m	Longitude	W100°49'53.32131"	Longitude	W100°49'53.32131"
Elevation	896.723 m	Height	870.555 m	Height	870.555 m

To:	FVA33-B2				
Grid		Local		Global	
Easting	322832.710 m	Latitude	N37°29'22.77989"	Latitude	N37°29'22.77988"
Northing	4151080.455 m	Longitude	W101°00'14.38812"	Longitude	W101°00'14.38812"
Elevation	916.981 m	Height	890.930 m	Height	890.930 m

Vector					
9Ughb[	-15253.856 m	NS Fwd Azimuth	269°56'20"	L	-14989.565 m
Bcfh\jb[	280.586 m	Ellipsoid Dist.	15257.133 m	M	2856.122 m
9Yj Uhcb	20.258 m	<Y][\h	20.375 m	N	-11.615 m

Standard Errors

Vector errors:					
Point ID	0.003 m	Point Description	0°00'00"	Point Type	0.003 m
Point ID	0.004 m	Point Description	0.003 m	Point Type	0.007 m
Point ID	0.008 m	Point Description	0.008 m	Point Type	0.006 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000094760		
Y	0.0000085248	0.0000472534	
Z	-0.0000084457	-0.0000257050	0.0000346320

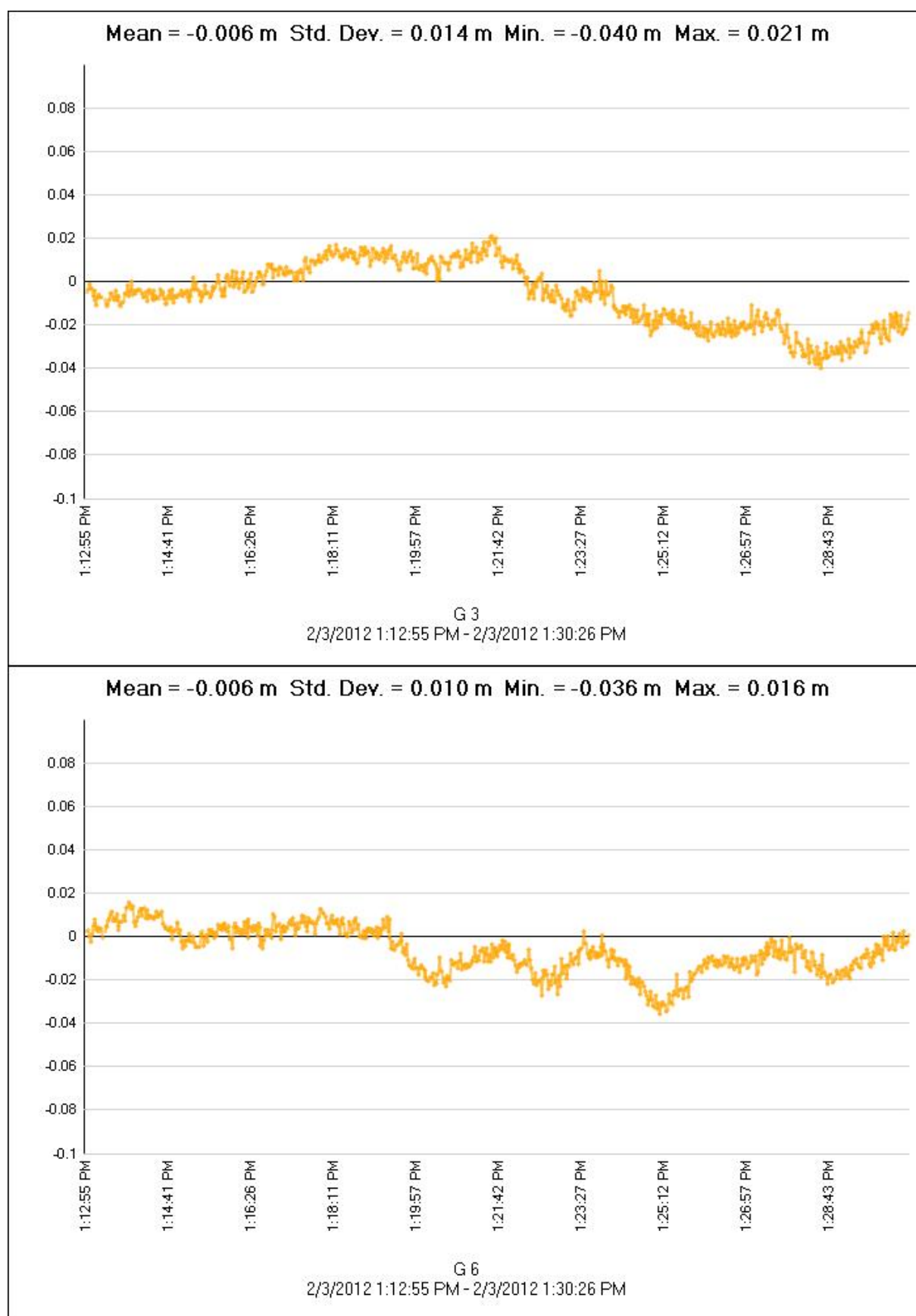
Occupations

	From	To
Point ID:	19S-SPIKE	FVA33-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00010340.12o	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00080346.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

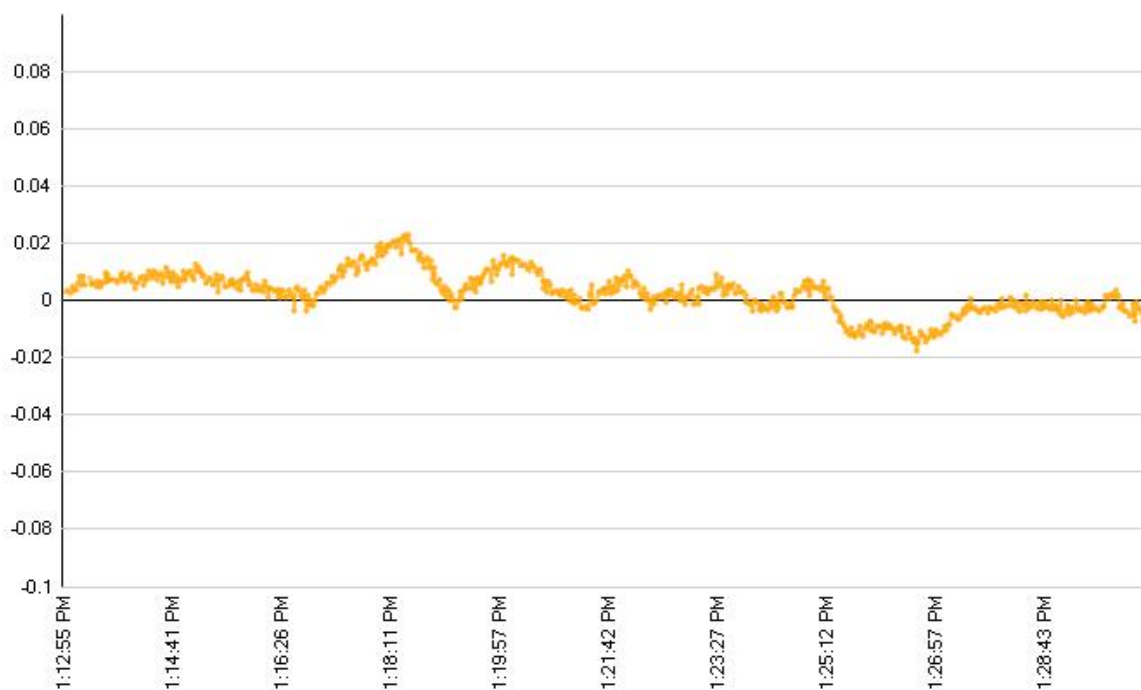
Tracking Summary

SV	2/3/2012 1:12:54 PM	Duration: 00:17:32 Major interval: 00:01:00	2/3/2012 1:30:26 PM
G 3	L1 L2		
G 6	L1 L2		
G 9	L1 L2		
G 14	L1 L2		
G 15	L1 L2		
G 18	L1 L2		
G 19	L1 L2		
G 21	L1 L2		
G 22	L1 L2		
G 27	L1 L2		

Residuals



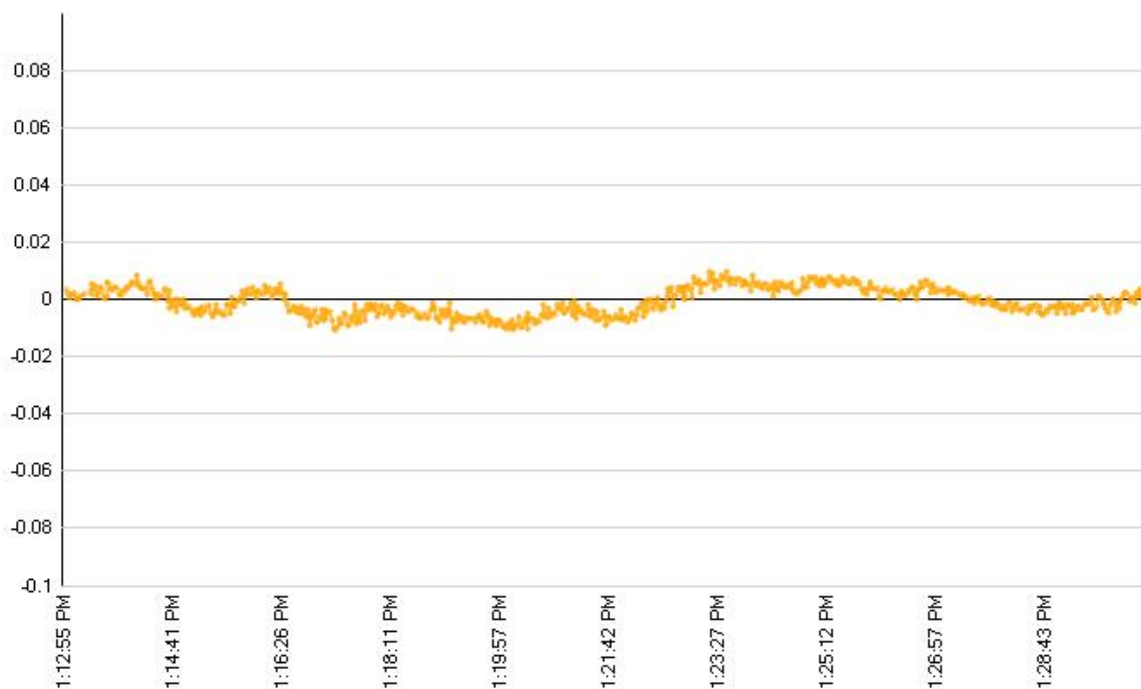
Mean = 0.003 m Std. Dev. = 0.007 m Min. = -0.018 m Max. = 0.023 m



G 9

2/3/2012 1:12:55 PM - 2/3/2012 1:30:26 PM

Mean = -0.001 m Std. Dev. = 0.004 m Min. = -0.011 m Max. = 0.010 m



G 14

2/3/2012 1:12:55 PM - 2/3/2012 1:30:26 PM

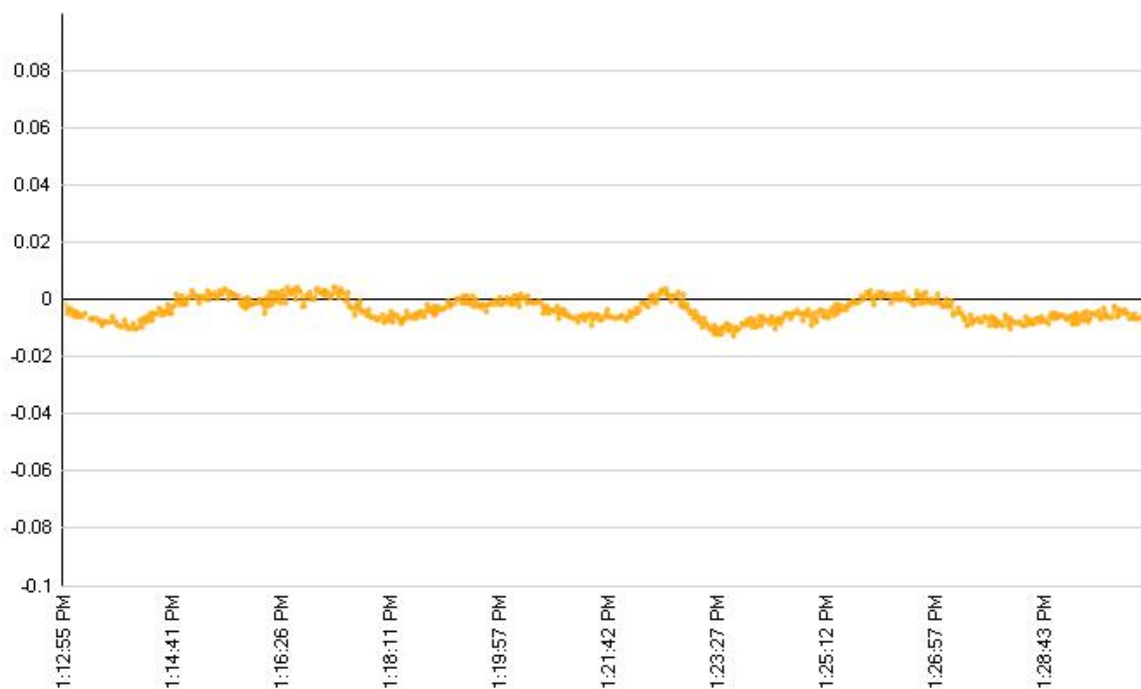
Mean = 0.015 m Std. Dev. = 0.011 m Min. = -0.012 m Max. = 0.055 m



G 15

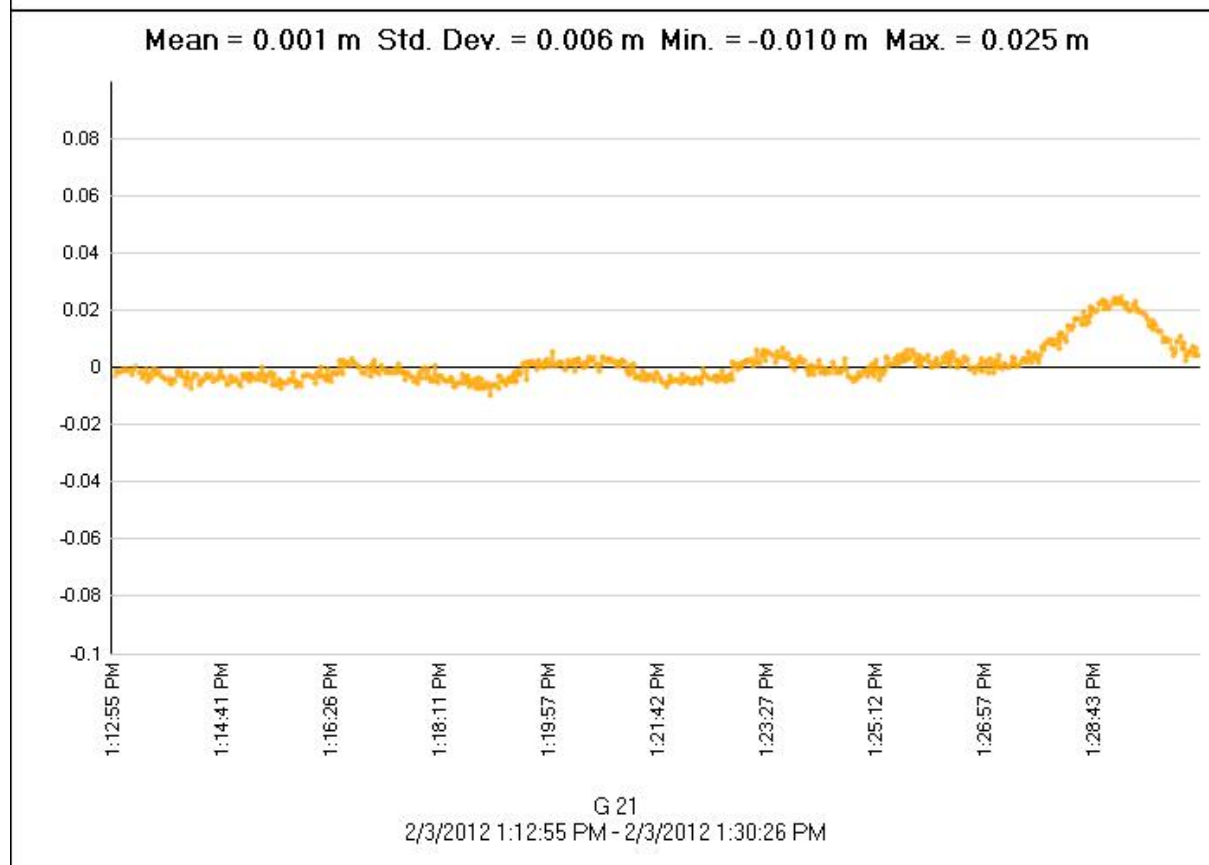
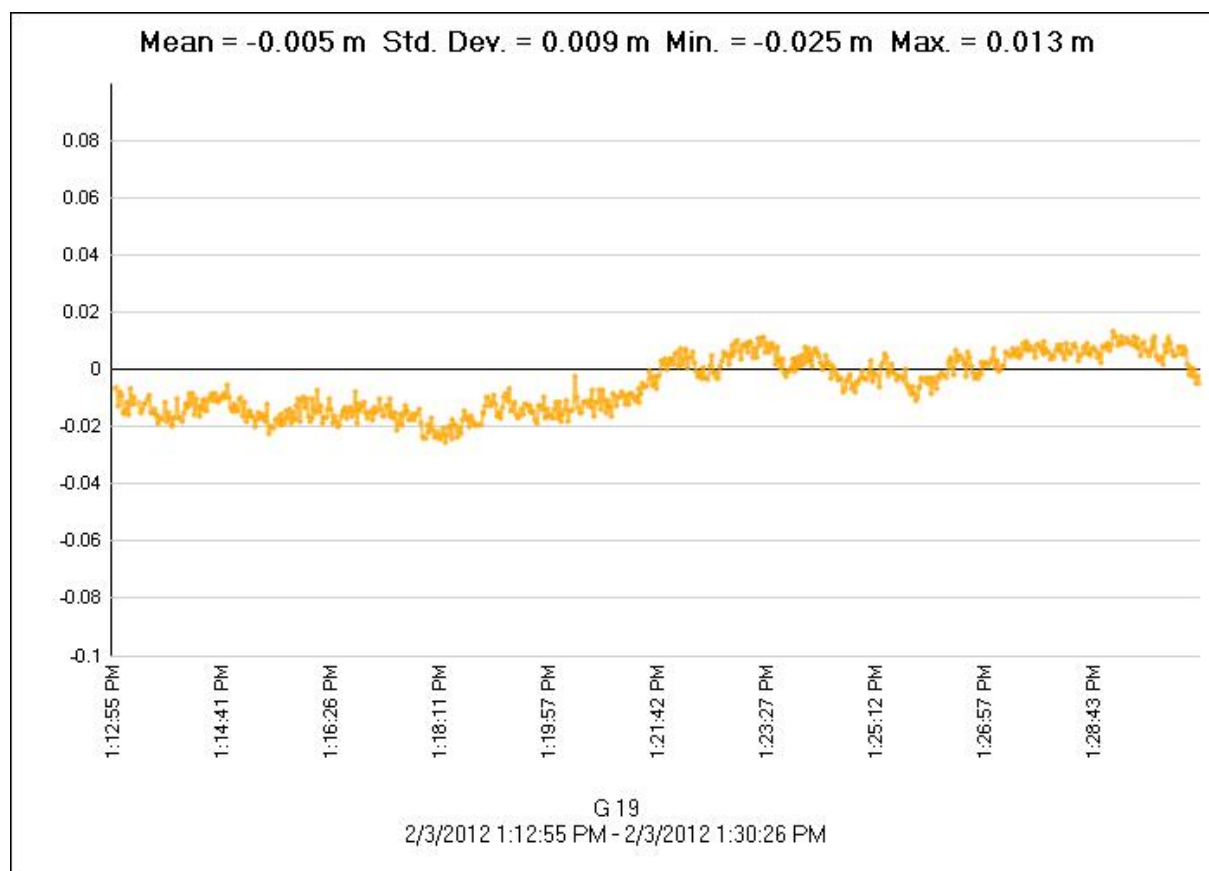
2/3/2012 1:12:55 PM - 2/3/2012 1:30:26 PM

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

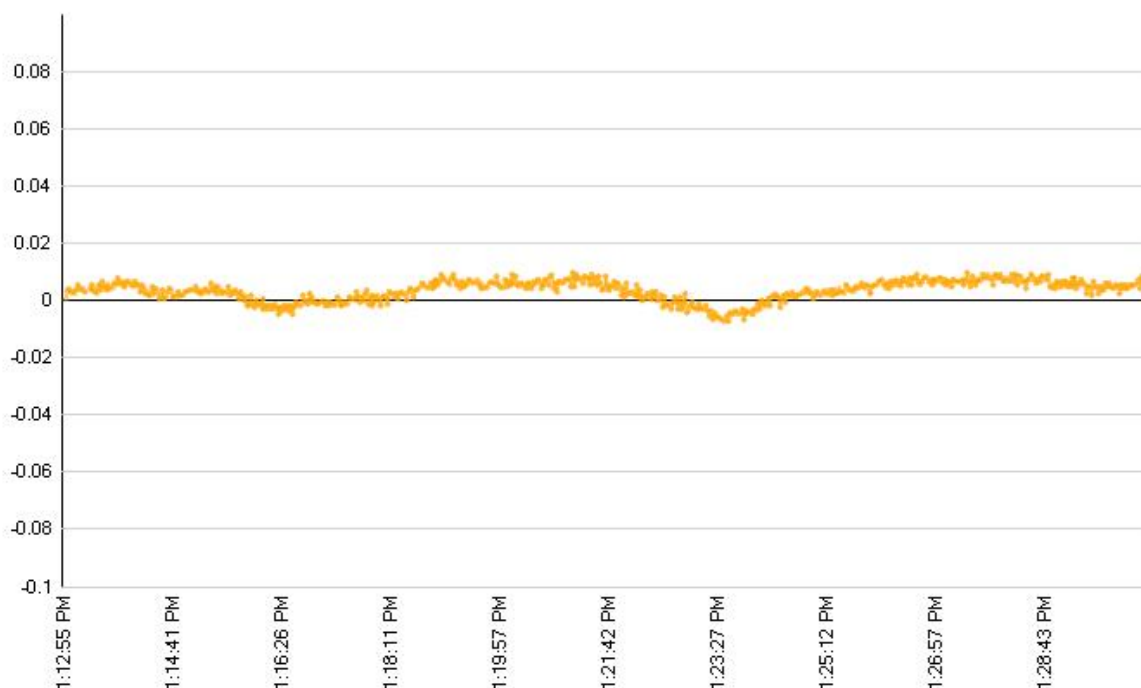


G 18

2/3/2012 1:12:55 PM - 2/3/2012 1:30:26 PM



Mean = 0.003 m Std. Dev. = 0.003 m Min. = -0.008 m Max. = 0.010 m



G 22
2/3/2012 1:12:55 PM - 2/3/2012 1:30:26 PM

Mean = 0.008 m Std. Dev. = 0.016 m Min. = -0.034 m Max. = 0.048 m





G 27
2/3/2012 1:12:55 PM - 2/3/2012 1:30:26 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:	Dual Frequency (L1, L2)
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

19S-SPIKE - FVA33-B2 (1:34:32 PM-1:53:16 PM) (S12)

Baseline observation: 19S-SPIKE --- FVA33-B2 (B12)

Processed: 3/20/2012 5:07:42 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.011 m

Vertical precision: 0.016 m

RMS: 0.013 m

Maximum PDOP: 2.594

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/3/2012 1:34:32 PM (Local: UTC-7hr)

Processing stop time: 2/3/2012 1:53:16 PM (Local: UTC-7hr)

Processing duration: 00:18:44

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338086.566 m	Latitude	N37°29'23.76152"	Latitude	N37°29'23.76151"
Northing	4150799.869 m	Longitude	W100°49'53.32131"	Longitude	W100°49'53.32131"
Elevation	896.723 m	Height	870.555 m	Height	870.555 m

To:	FVA33-B2				
Grid		Local		Global	
Easting	322773.078 m	Latitude	N37°29'22.51832"	Latitude	N37°29'22.51832"
Northing	4151073.659 m	Longitude	W101°00'16.80915"	Longitude	W101°00'16.80915"
Elevation	916.468 m	Height	890.418 m	Height	890.418 m

Vector					
9Ughb[	-15313.488 m	NS Fwd Azimuth	269°54'34"	L	-15048.814 m
Bcfh\jb[	273.790 m	Ellipsoid Dist.	15316.634 m	M	2863.057 m
9Yj Uhcb	19.745 m	<Y][\h	19.863 m	N	-18.327 m

Standard Errors

Vector errors:					
Point ID	0.003 m	Point Description	0°00'00"	Point Type	0.003 m
Point ID	0.004 m	Point Description	0.003 m	Point Type	0.008 m
Point ID	0.008 m	Point Description	0.008 m	Point Type	0.005 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000098966		
Y	0.0000069243	0.0000605968	
Z	-0.0000055746	-0.0000210641	0.0000271775

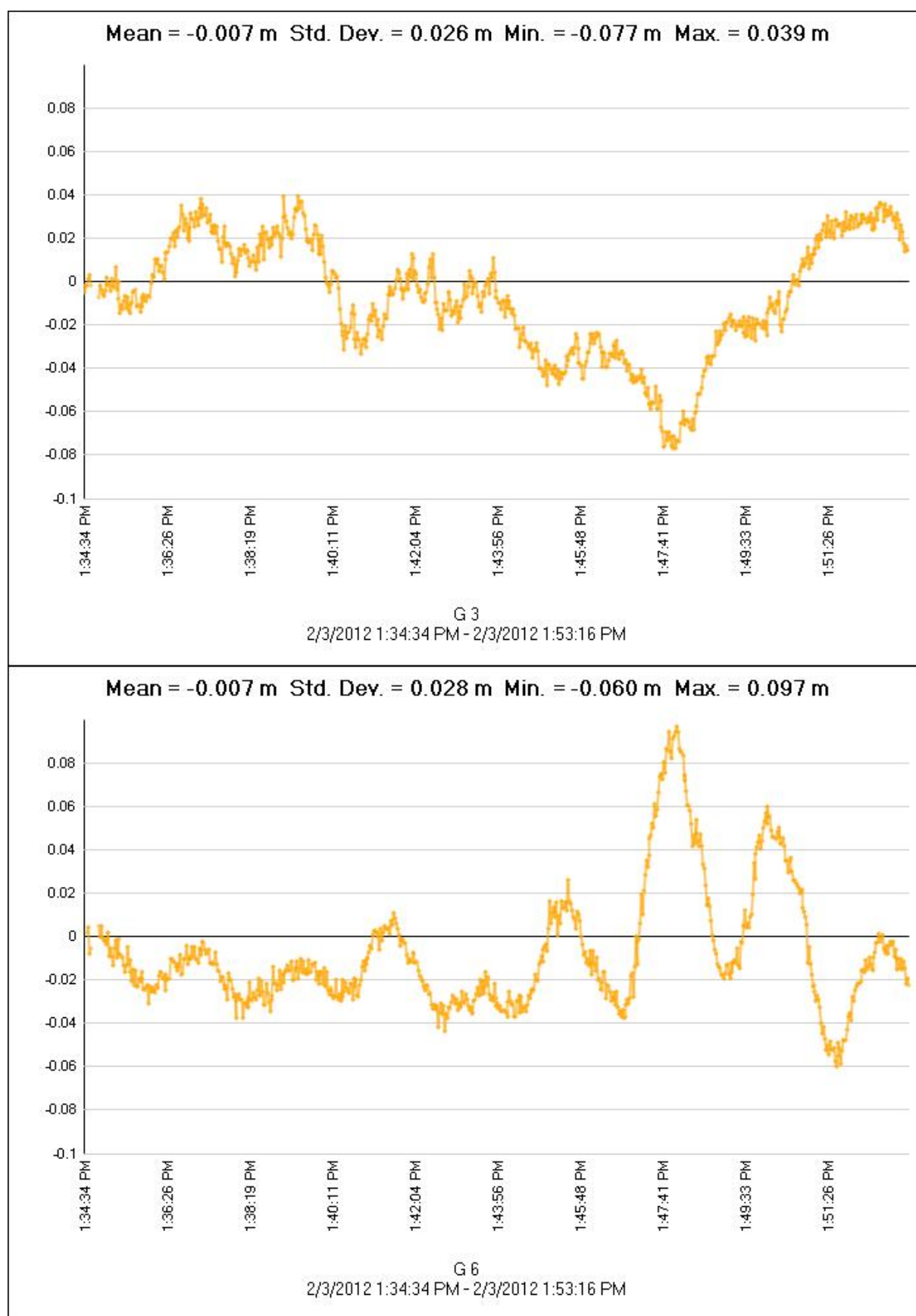
Occupations

	From	To
Point ID:	19S-SPIKE	FVA33-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00010340.12o	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00080347.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

Tracking Summary

SV	2/3/2012 1:34:32 PM	Duration: 00:18:44	Major interval: 00:01:00	2/3/2012 1:53:16 PM
G 3	L1 L2			
G 6	L1 L2			
G 9	L1 L2			
G 11	L1 L2			
G 14	L1 L2			
G 15	L1 L2			
G 18	L1 L2			
G 19	L1 L2			
G 21	L1 L2			
G 22	L1 L2			
G 27	L1 L2			
G 31	L1 L2			

Residuals



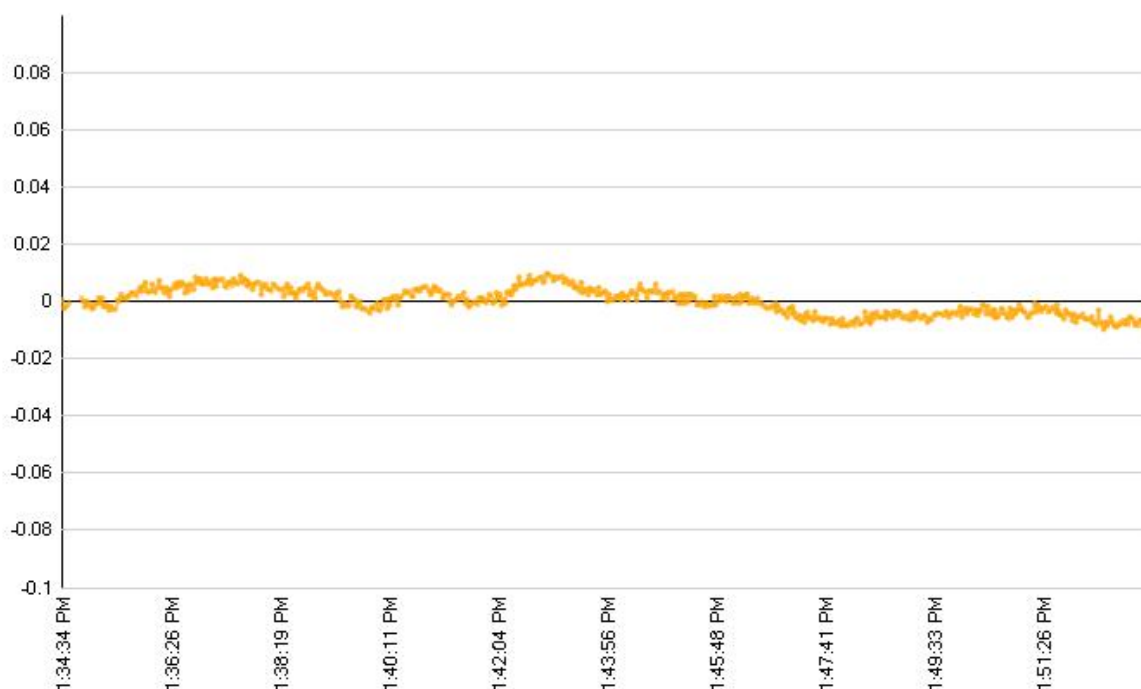
Mean = 0.000 m Std. Dev. = 0.009 m Min. = -0.025 m Max. = 0.022 m



G 9

2/3/2012 1:34:34 PM - 2/3/2012 1:53:16 PM

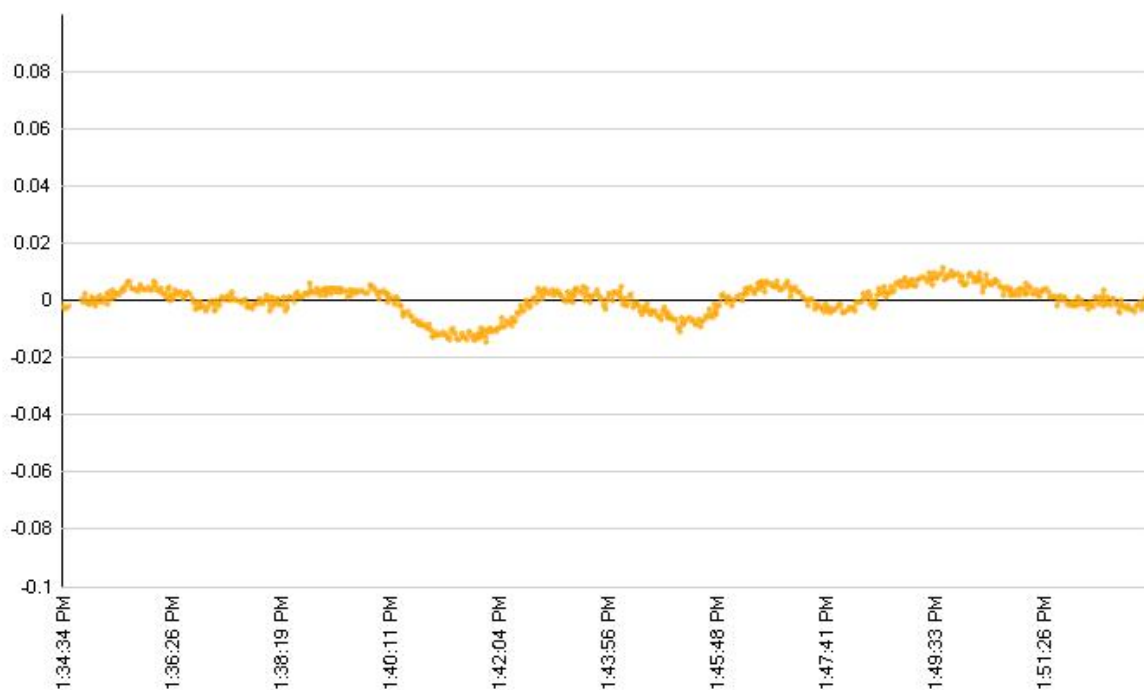
Mean = 0.000 m Std. Dev. = 0.004 m Min. = -0.010 m Max. = 0.009 m



G 14

2/3/2012 1:34:34 PM - 2/3/2012 1:53:16 PM

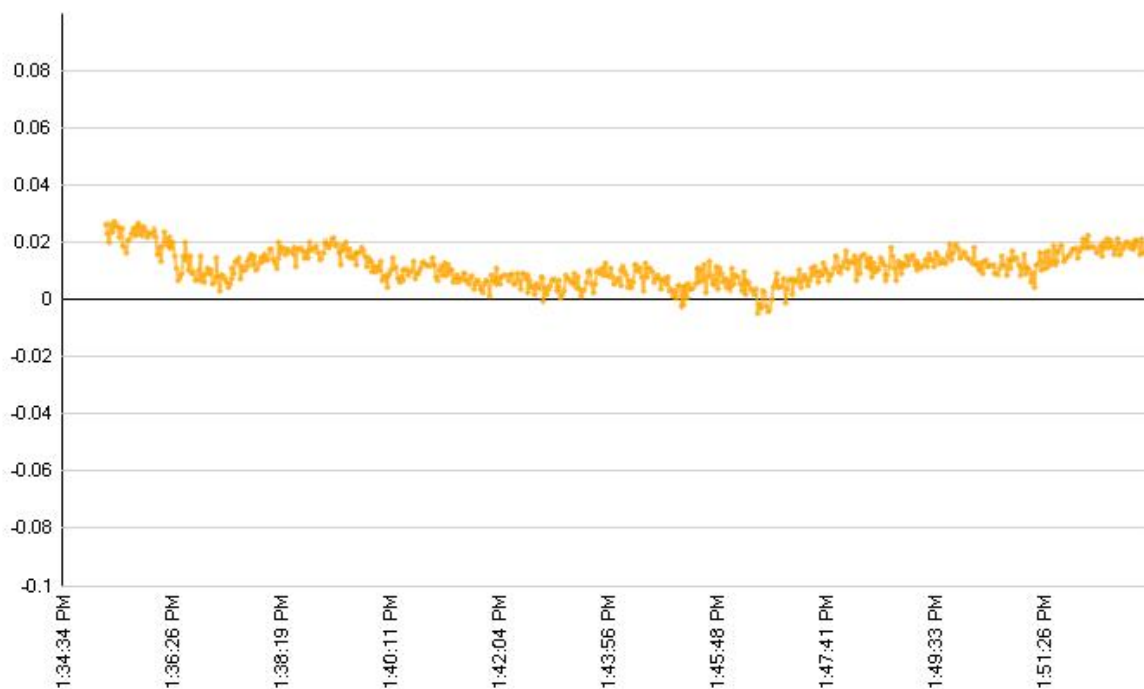
Mean = 0.000 m Std. Dev. = 0.005 m Min. = -0.014 m Max. = 0.011 m



G 18

2/3/2012 1:34:34 PM - 2/3/2012 1:53:16 PM

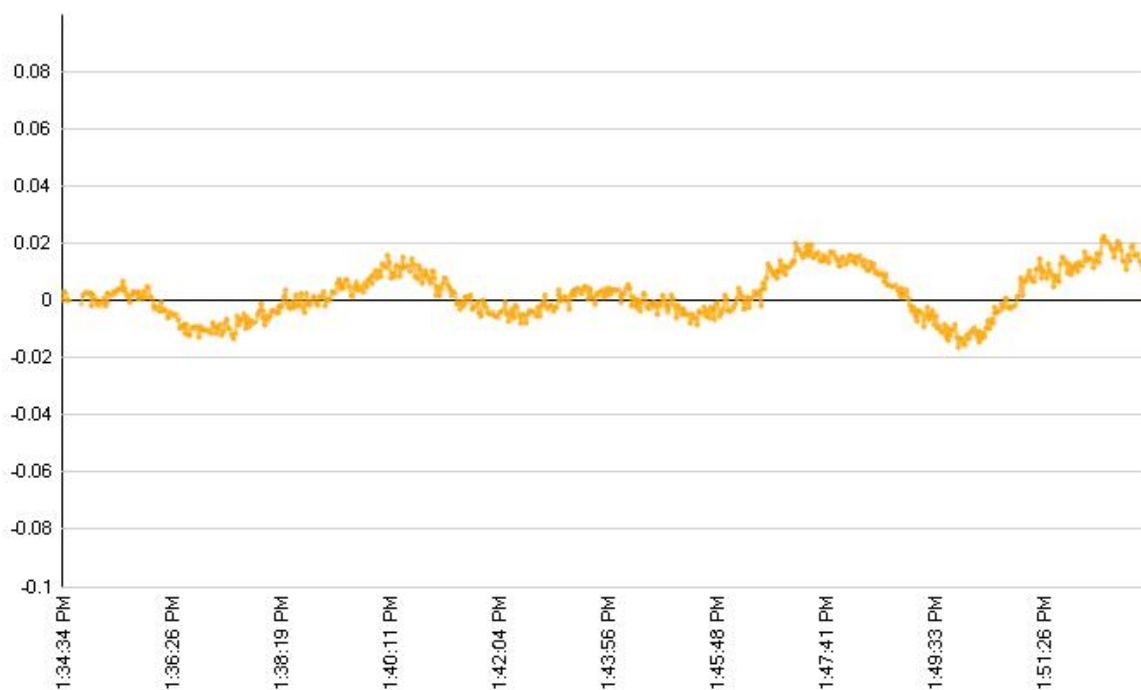
Mean = 0.011 m Std. Dev. = 0.006 m Min. = -0.005 m Max. = 0.027 m



G 19

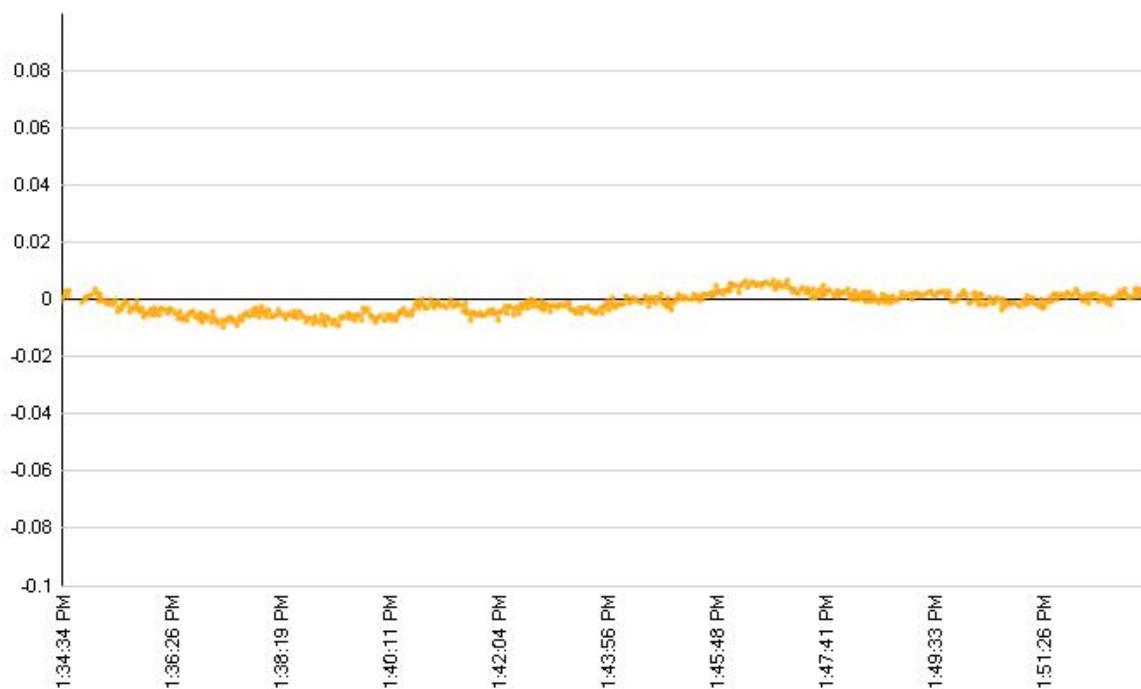
2/3/2012 1:34:34 PM - 2/3/2012 1:53:16 PM

Mean = 0.002 m Std. Dev. = 0.008 m Min. = -0.016 m Max. = 0.023 m

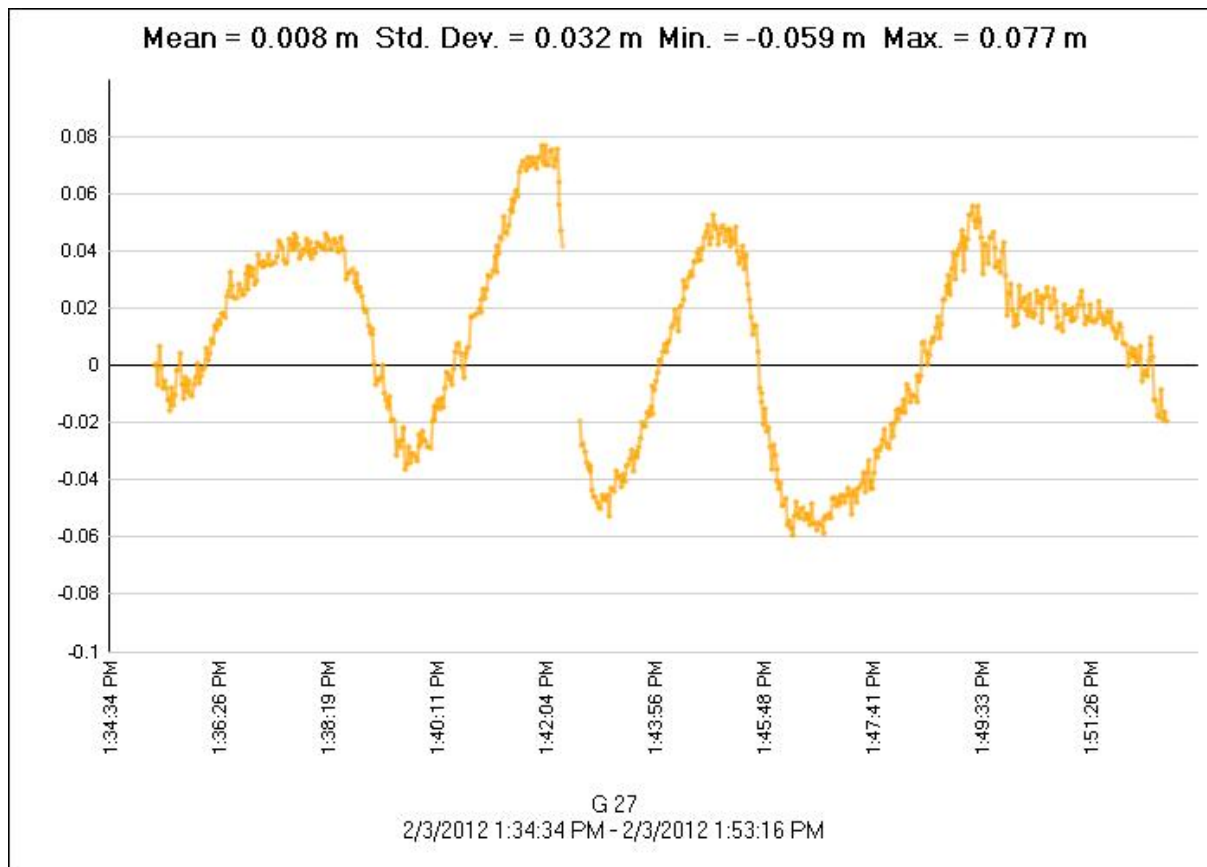


G 21
2/3/2012 1:34:34 PM - 2/3/2012 1:53:16 PM

Mean = -0.001 m Std. Dev. = 0.003 m Min. = -0.010 m Max. = 0.007 m




G 22
2/3/2012 1:34:34 PM - 2/3/2012 1:53:16 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:	Dual Frequency (L1, L2)
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

19S-SPIKE - FVA29-B2 (10:30:32 AM-10:48:30 AM) (S13)

Baseline observation: 19S-SPIKE --- FVA29-B2 (B13)

Processed: 3/20/2012 4:05:44 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.017 m

Vertical precision: 0.039 m

RMS: 0.004 m

Maximum PDOP: 3.016

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/4/2012 10:30:32 AM (Local: UTC-7hr)

Processing stop time: 2/4/2012 10:48:30 AM (Local: UTC-7hr)

Processing duration: 00:17:58

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338086.744 m	Latitude	N37°29'23.76857"	Latitude	N37°29'23.76856"
Northing	4150800.083 m	Longitude	W100°49'53.31423"	Longitude	W100°49'53.31423"
Elevation	896.738 m	Height	870.570 m	Height	870.570 m

To:	FVA29-B2				
Grid		Local		Global	
Easting	384972.924 m	Latitude	N37°03'10.90253"	Latitude	N37°03'10.90252"
Northing	4101537.554 m	Longitude	W100°17'37.15892"	Longitude	W100°17'37.15892"
Elevation	724.323 m	Height	697.197 m	Height	697.197 m

Vector					
9Ughb[	46886.179 m	NS Fwd Azimuth	135°18'21"	L	41540.442 m
Bcfh\jb[	-49262.529 m	Ellipsoid Dist.	68019.154 m	M	-37479.754 m
9Yj Uhcb	-172.416 m	<Y][\h	-173.374 m	N	-38696.117 m

Standard Errors

Vector errors:					
Point ID	0.006 m	Point Description	0°00'00"	Point Type	0.005 m
Point ID	0.007 m	Point Description	0.006 m	Point Type	0.015 m
Point ID	0.020 m	Point Description	0.020 m	Point Type	0.015 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000291398		
Y	0.0000075276	0.0002273442	
Z	-0.0000098998	-0.0001852104	0.0002315034

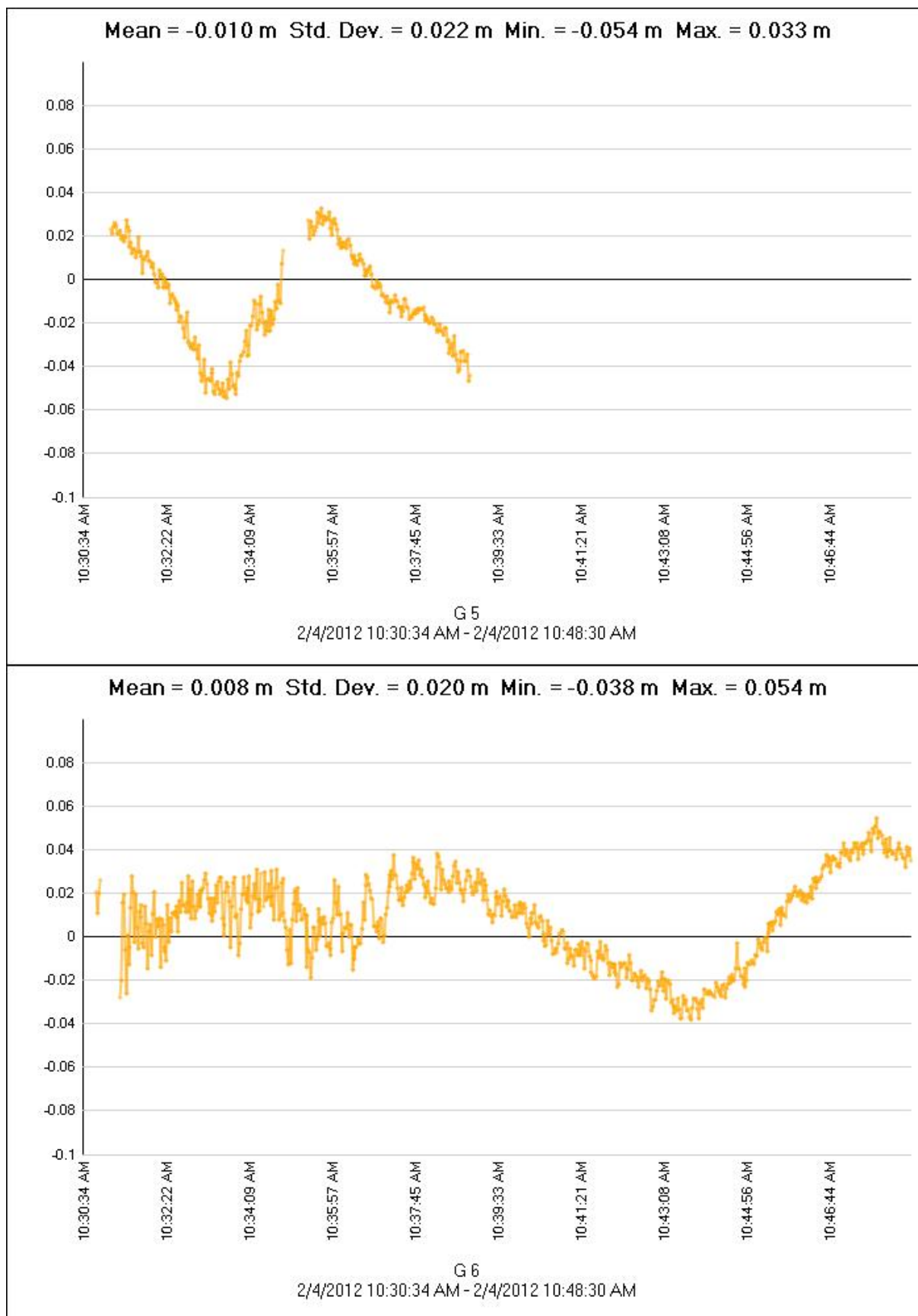
Occupations

	From	To
Point ID:	19S-SPIKE	FVA29-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010350.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080351.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

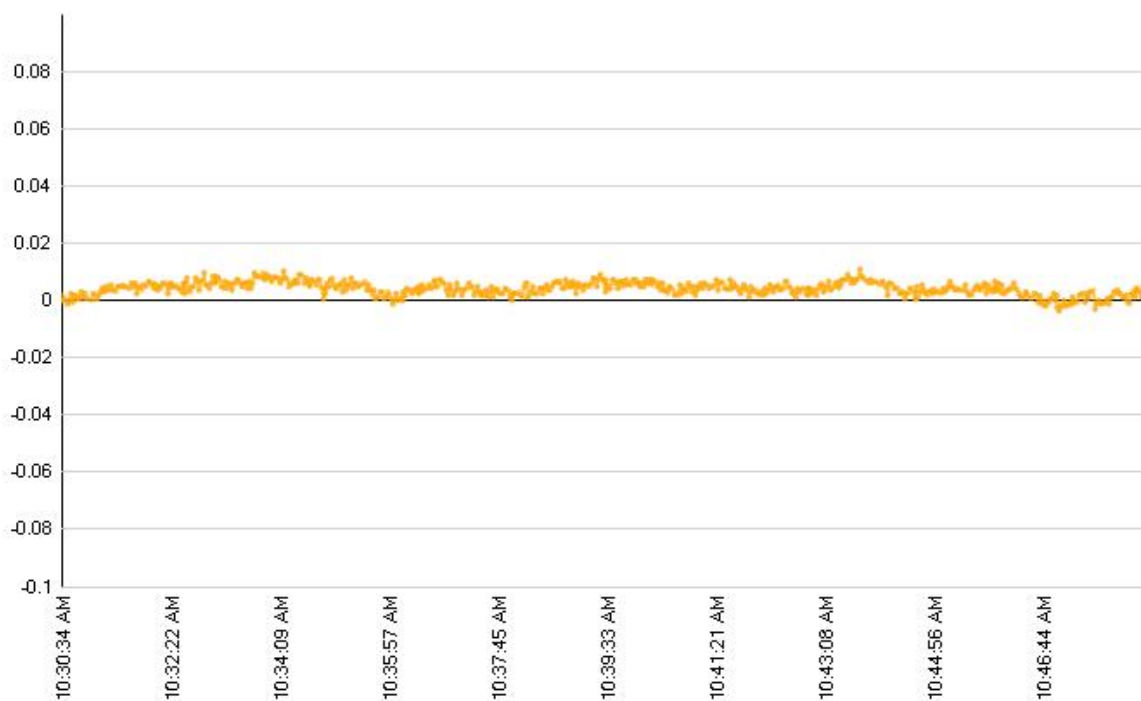
Tracking Summary

SV	2/4/2012 10:30:32 AM	Duration: 00:17:58	Major interval: 00:01:00	2/4/2012 10:48:30 AM
G 5	L1 L2			
G 6	L1 L2			
G 9	L1 L2			
G 15	L1 L2			
G 16	L1 L2			
G 18	L1 L2			
G 21	L1 L2			
G 22	L1 L2			
G 26	L1 L2			
G 27	L1 L2			
G 29	L1 L2			
G 30	L1 L2			

Residuals



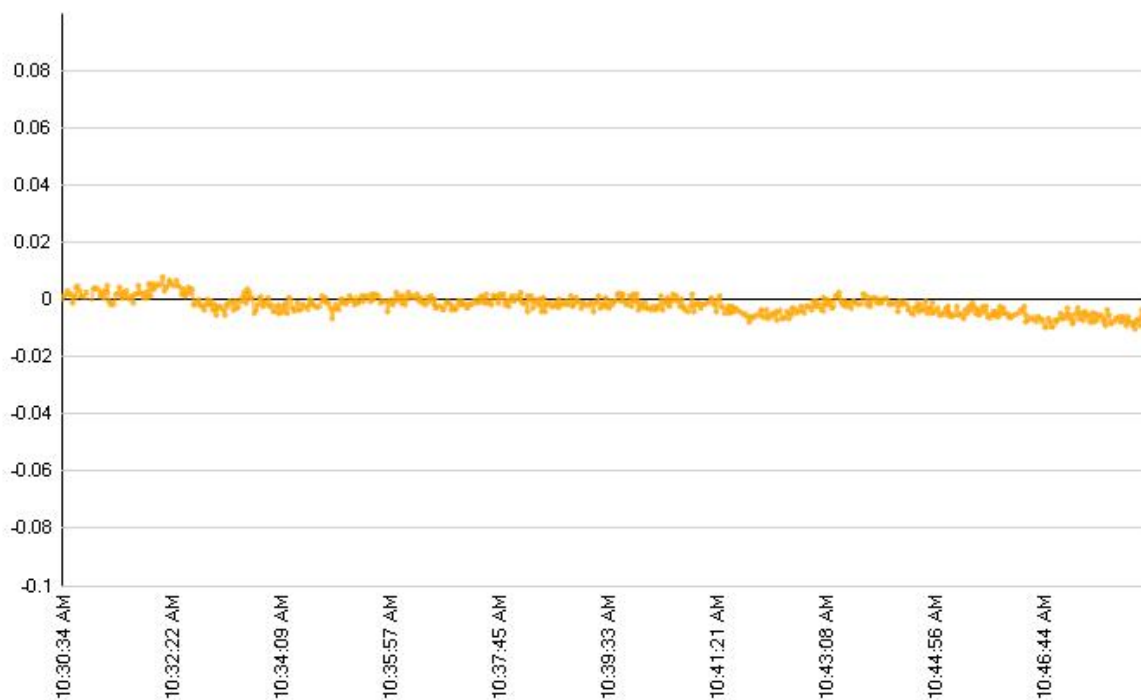
Mean = 0.004 m Std. Dev. = 0.002 m Min. = -0.004 m Max. = 0.011 m



G 15

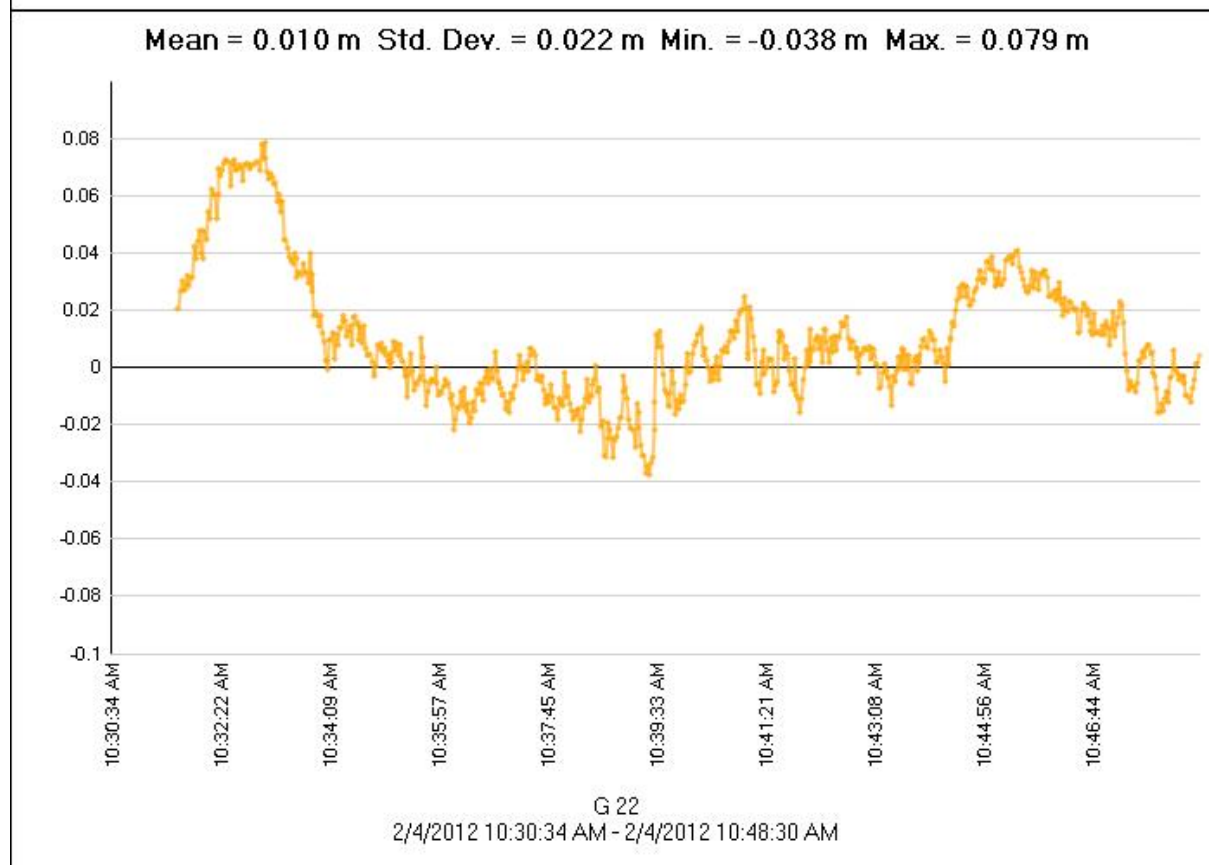
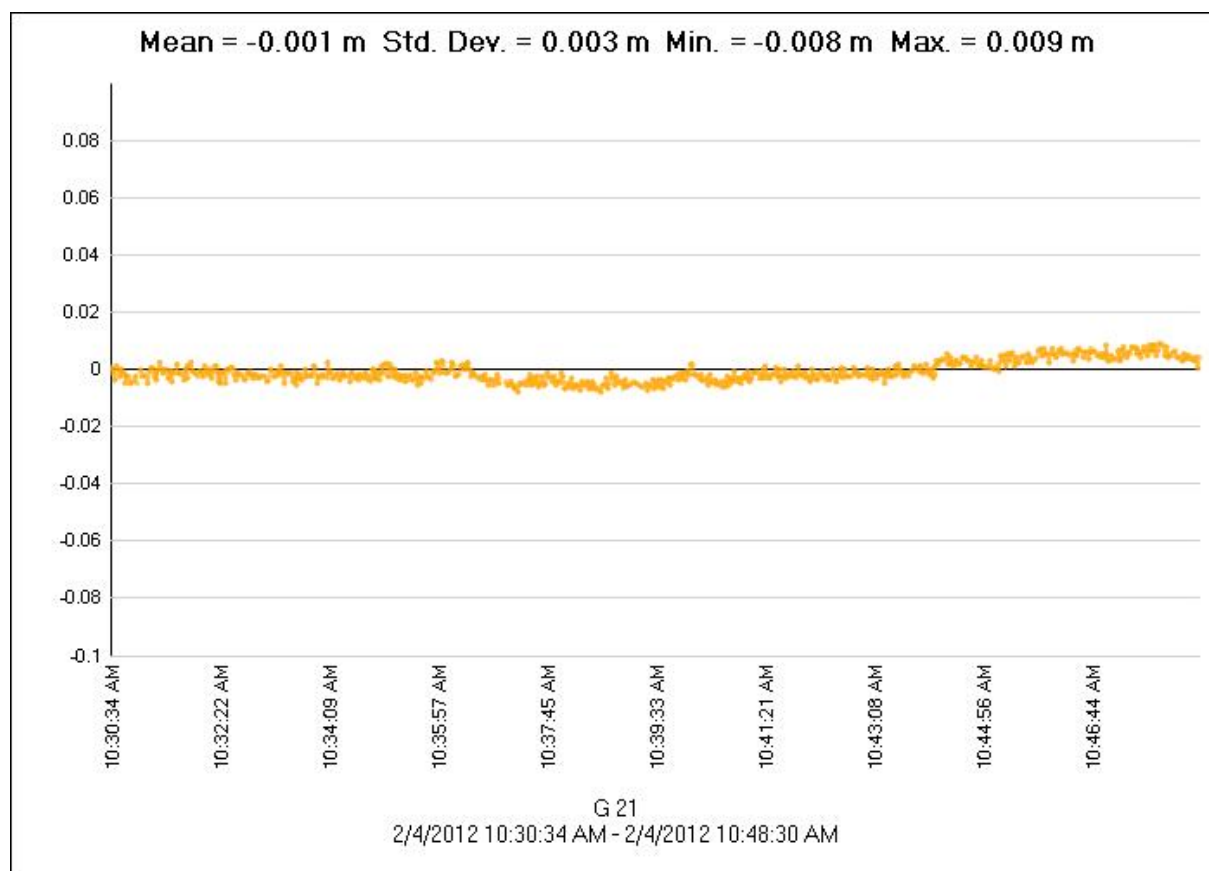
2/4/2012 10:30:34 AM - 2/4/2012 10:48:30 AM

Mean = -0.002 m Std. Dev. = 0.003 m Min. = -0.010 m Max. = 0.008 m



G 18

2/4/2012 10:30:34 AM - 2/4/2012 10:48:30 AM



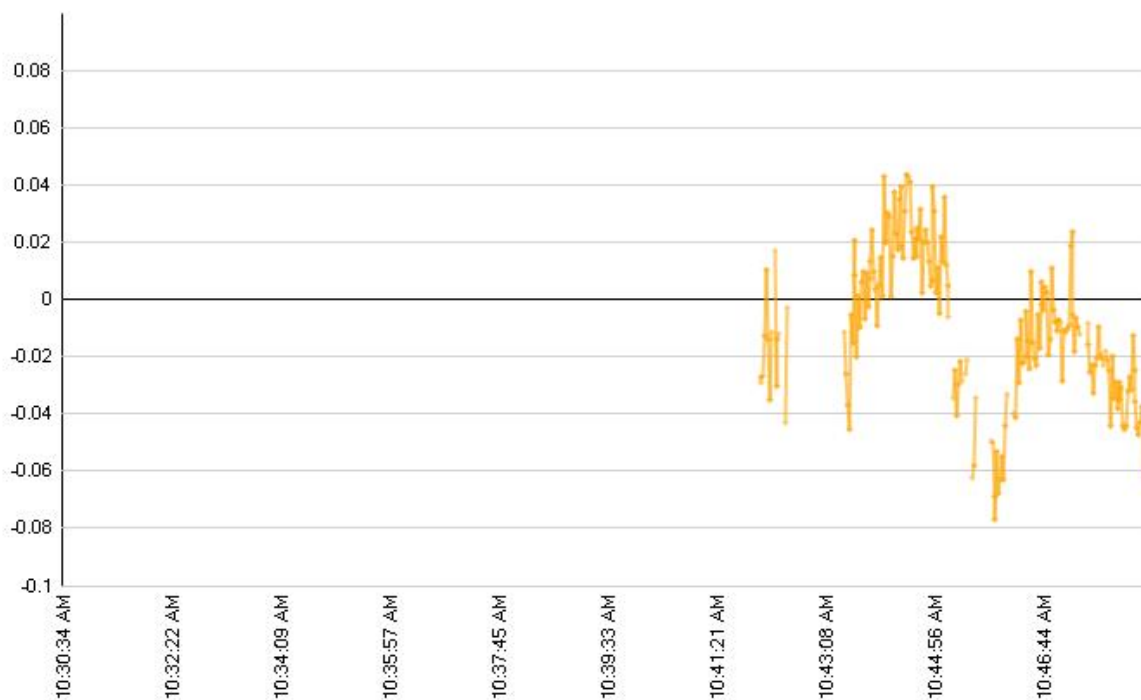
Mean = 0.002 m Std. Dev. = 0.007 m Min. = -0.015 m Max. = 0.018 m



G 26

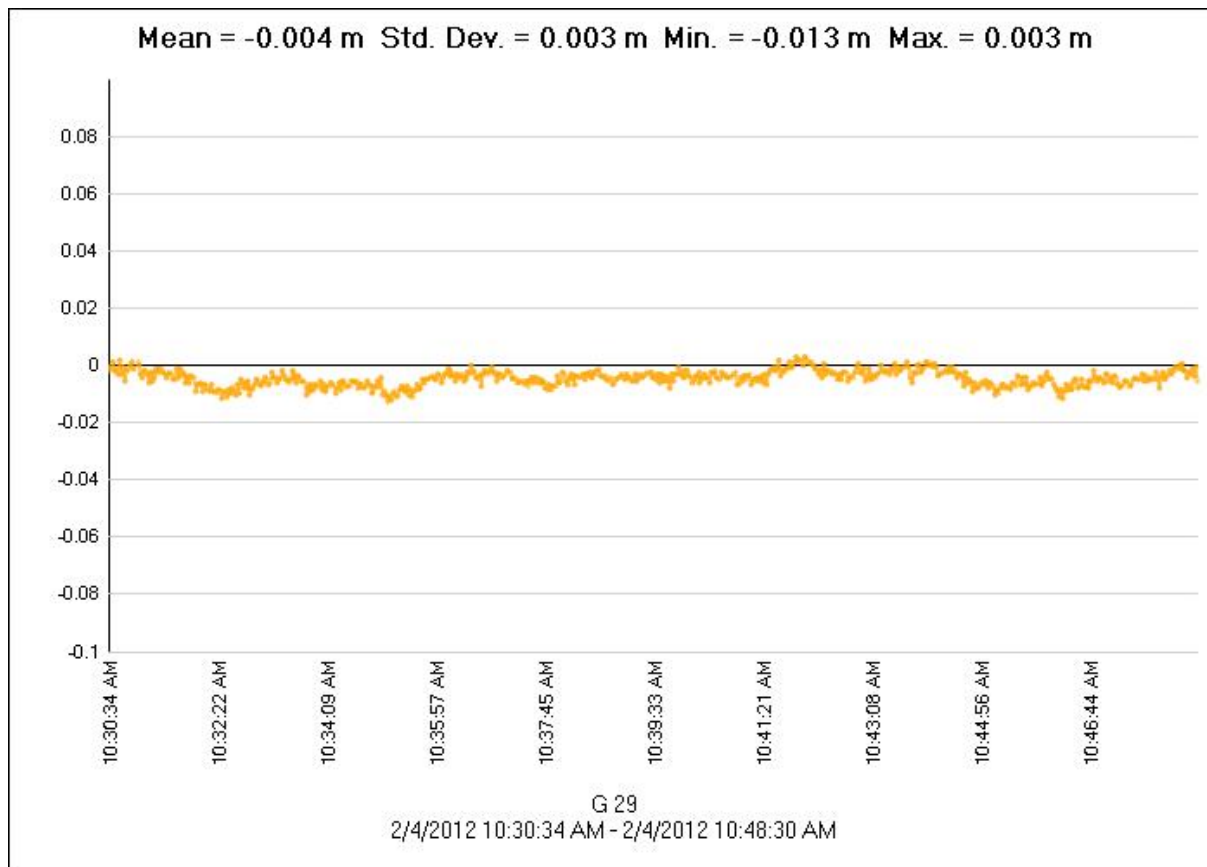
2/4/2012 10:30:34 AM - 2/4/2012 10:48:30 AM

Mean = -0.011 m Std. Dev. = 0.025 m Min. = -0.077 m Max. = 0.044 m



G 27

2/4/2012 10:30:34 AM - 2/4/2012 10:48:30 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:	Dual Frequency (L1, L2)
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

19S-SPIKE - SVA65-B2 (11:54:24 AM-12:15:12 PM) (S14)

Baseline observation: 19S-SPIKE --- SVA65-B2 (B14)

Processed: 3/20/2012 4:05:48 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.018 m

Vertical precision: 0.020 m

RMS: 0.001 m

Maximum PDOP: 2.059

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/4/2012 11:54:24 AM (Local: UTC-7hr)

Processing stop time: 2/4/2012 12:15:12 PM (Local: UTC-7hr)

Processing duration: 00:20:48

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338086.744 m	Latitude	N37°29'23.76857"	Latitude	N37°29'23.76856"
Northing	4150800.083 m	Longitude	W100°49'53.31423"	Longitude	W100°49'53.31423"
Elevation	896.738 m	Height	870.570 m	Height	870.570 m

To:	SVA65-B2				
Grid		Local		Global	
Easting	402729.787 m	Latitude	N37°10'58.05569"	Latitude	N37°10'58.05569"
Northing	4115712.739 m	Longitude	W100°05'44.98214"	Longitude	W100°05'44.98214"
Elevation	670.254 m	Height	643.159 m	Height	643.159 m

Vector					
9Ughb[	64643.042 m	NS Fwd Azimuth	117°22'52"	L	60392.296 m
BcfA\jb[	-35087.344 m	Ellipsoid Dist.	73565.538 m	M	-31995.293 m
9Yj Uhcb	-226.484 m	<Y][\h	-227.411 m	N	-27244.010 m

Standard Errors

Vector errors:					
Point ID	0.004 m	Point ID	0°00'00"	Point ID	0.005 m
Point ID	0.007 m	Point ID	0.004 m	Point ID	0.010 m
Point ID	0.010 m	Point ID	0.010 m	Point ID	0.008 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000209729		
Y	0.0000237223	0.0000927464	
Z	-0.0000027952	-0.0000202206	0.0000615258

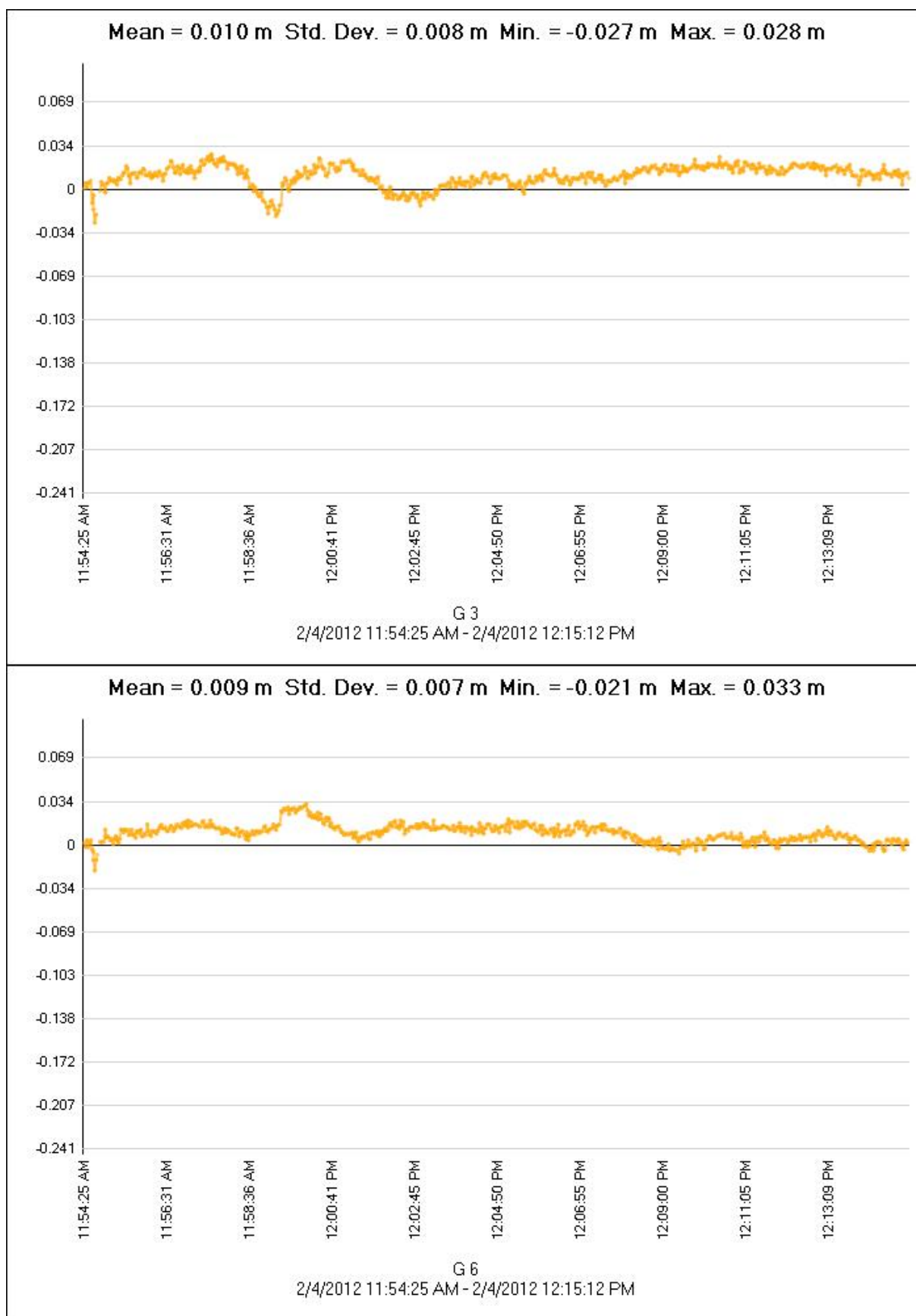
Occupations

	From	To
Point ID:	19S-SPIKE	SVA65-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010350.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080352.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

Tracking Summary

SV	2/4/2012 11:54:24 AM	Duration: 00:20:48	Major interval: 00:01:00	2/4/2012 12:15:12 PM
G 3	L1 L2			
G 6	L1 L2			
G 9	L1 L2			
G 14	L1 L2			
G 15	L1 L2			
G 18	L1 L2			
G 19	L1 L2			
G 21	L1 L2			
G 22	L1 L2			
G 26	L1 L2			
G 27	L1 L2			
G 29	L1 L2			

Residuals



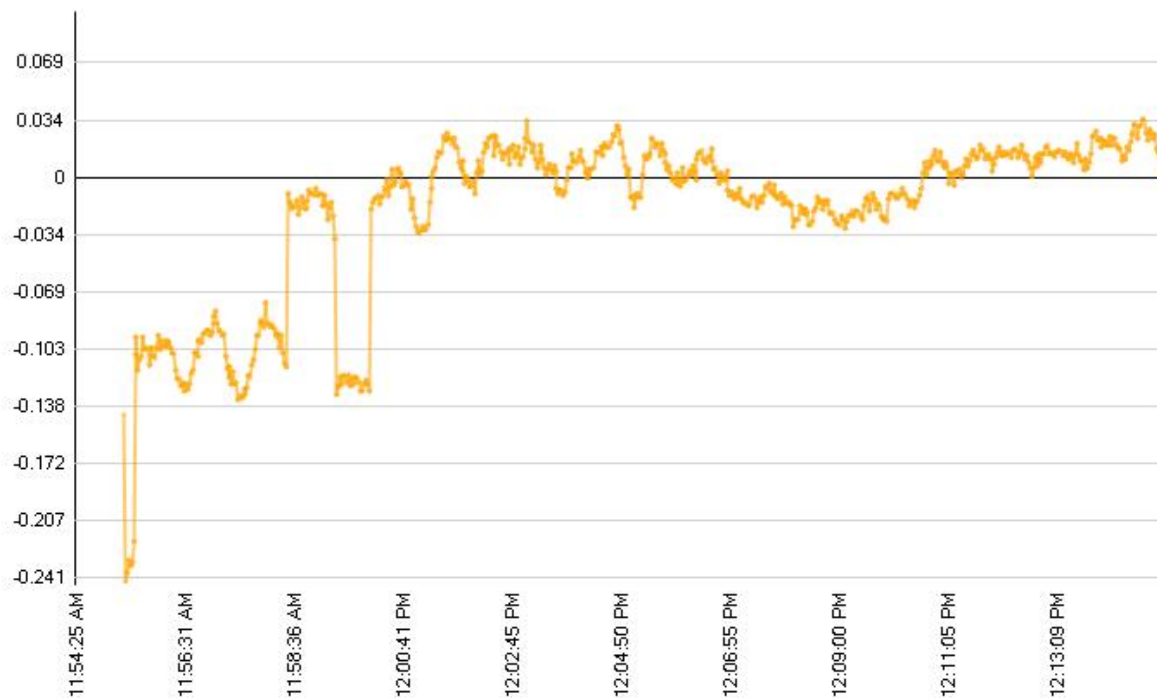
Mean = 0.008 m Std. Dev. = 0.033 m Min. = -0.025 m Max. = 0.086 m



G 9

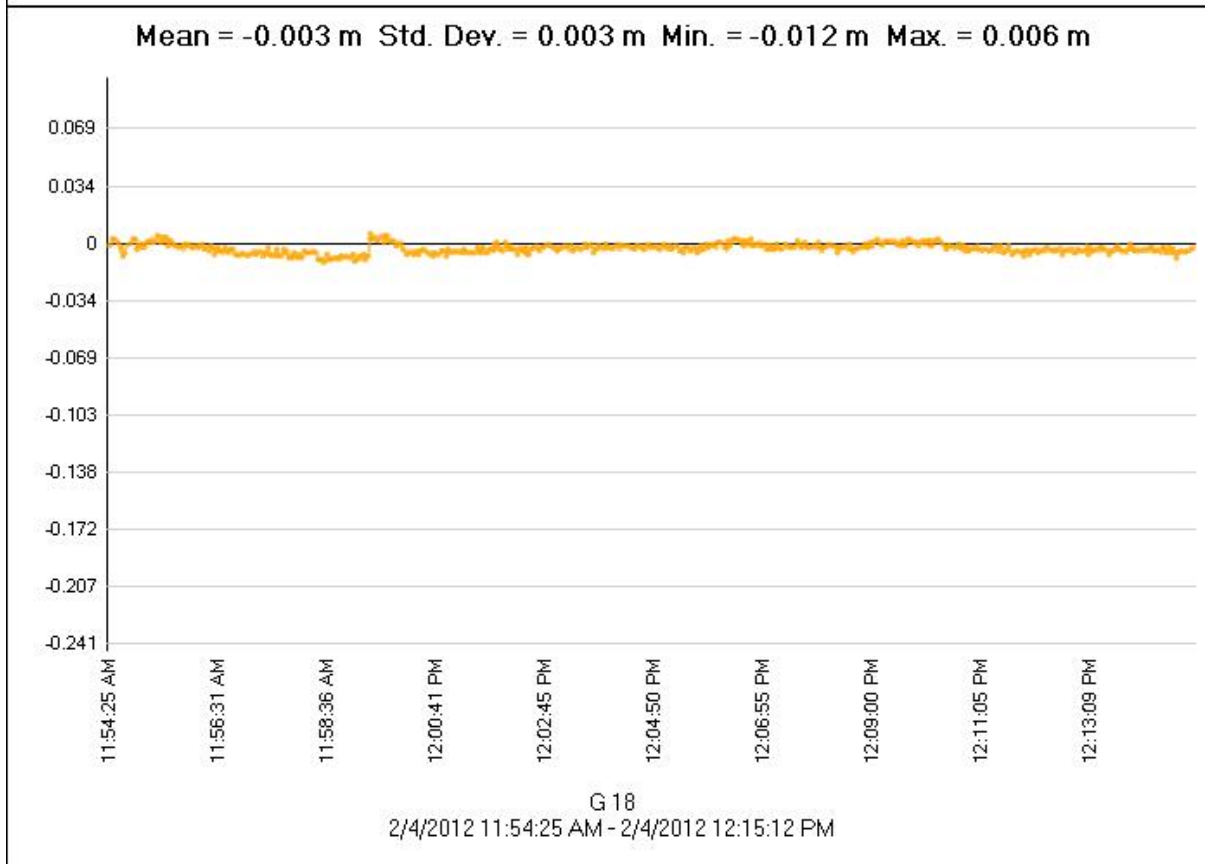
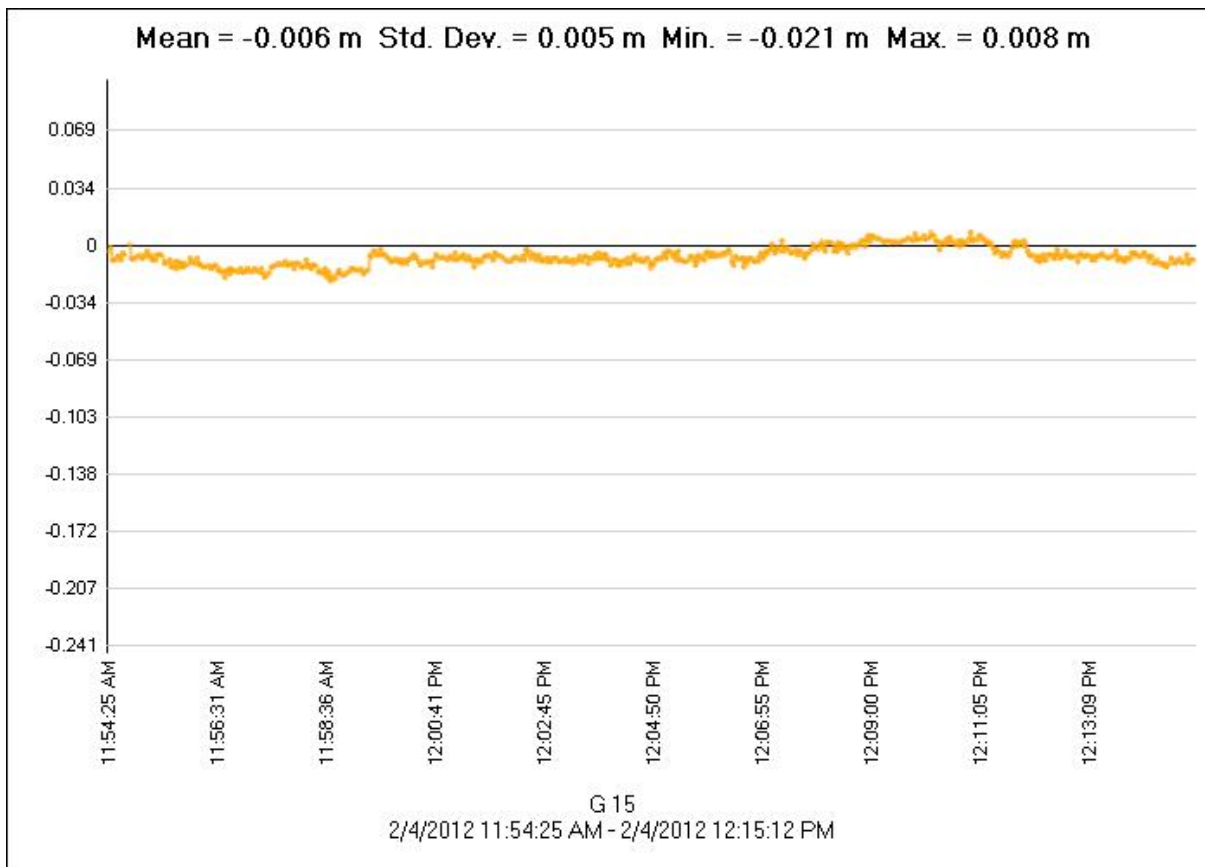
2/4/2012 11:54:25 AM - 2/4/2012 12:15:12 PM

Mean = -0.020 m Std. Dev. = 0.049 m Min. = -0.244 m Max. = 0.035 m

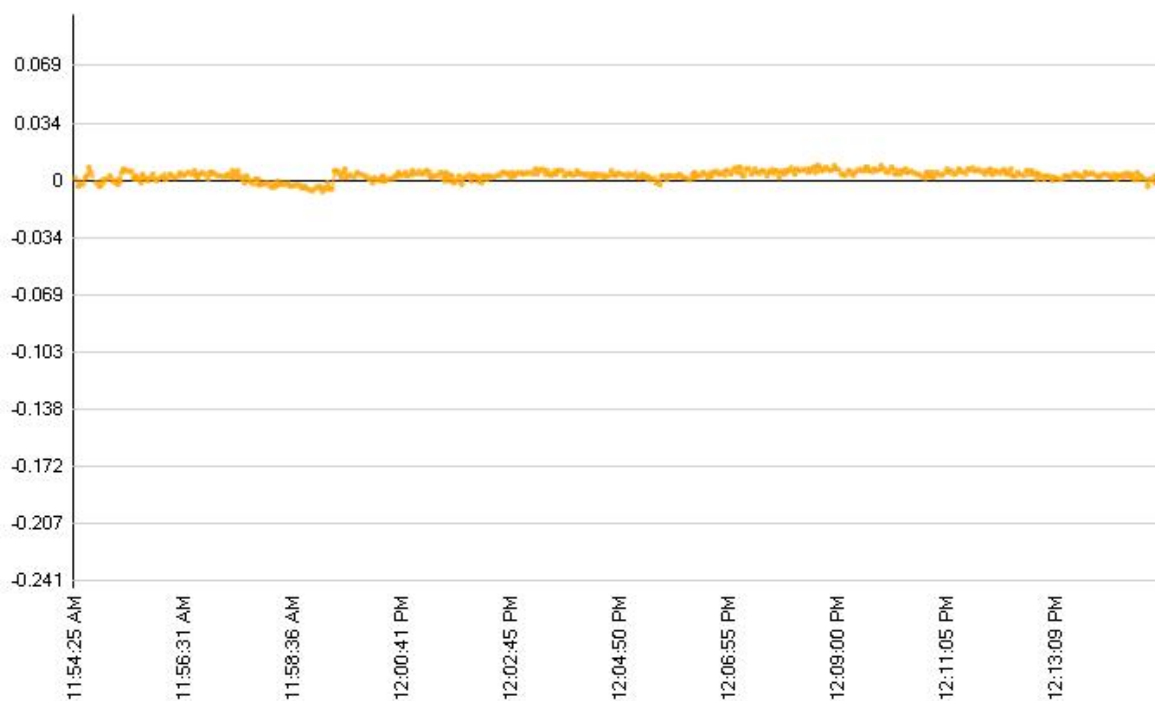


G 14

2/4/2012 11:54:25 AM - 2/4/2012 12:15:12 PM

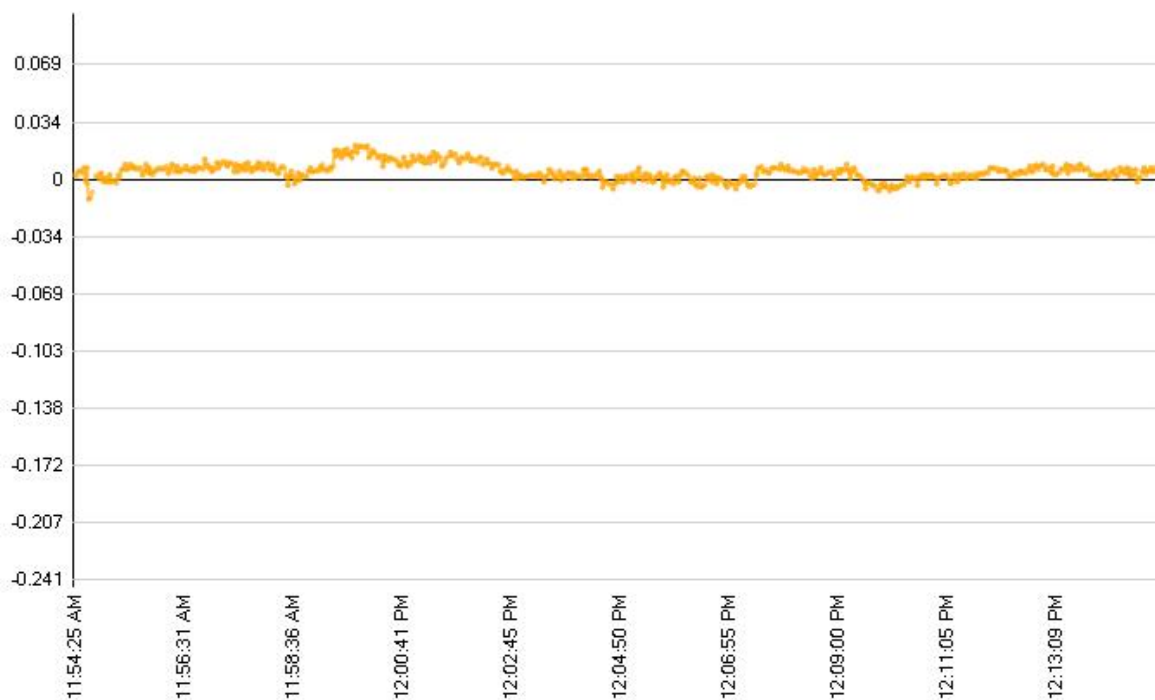


Mean = 0.003 m Std. Dev. = 0.003 m Min. = -0.007 m Max. = 0.009 m

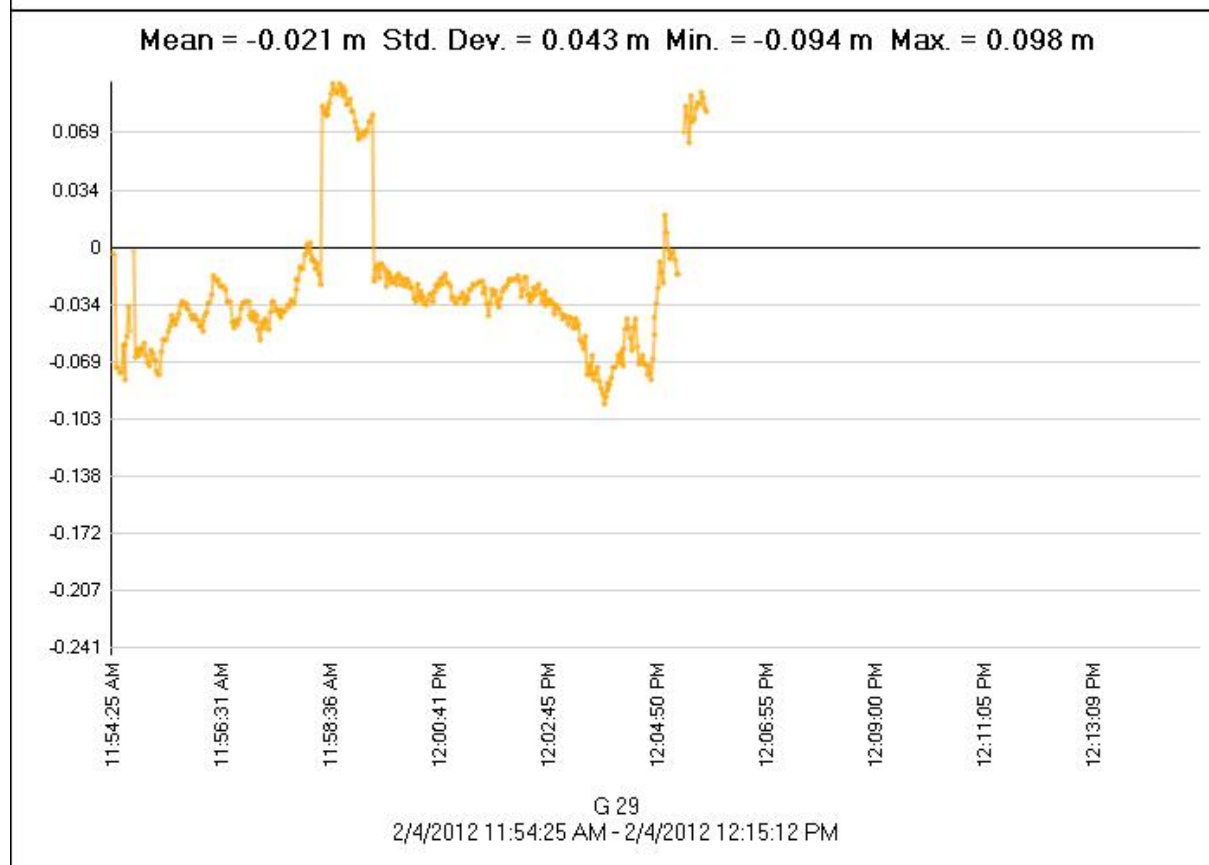
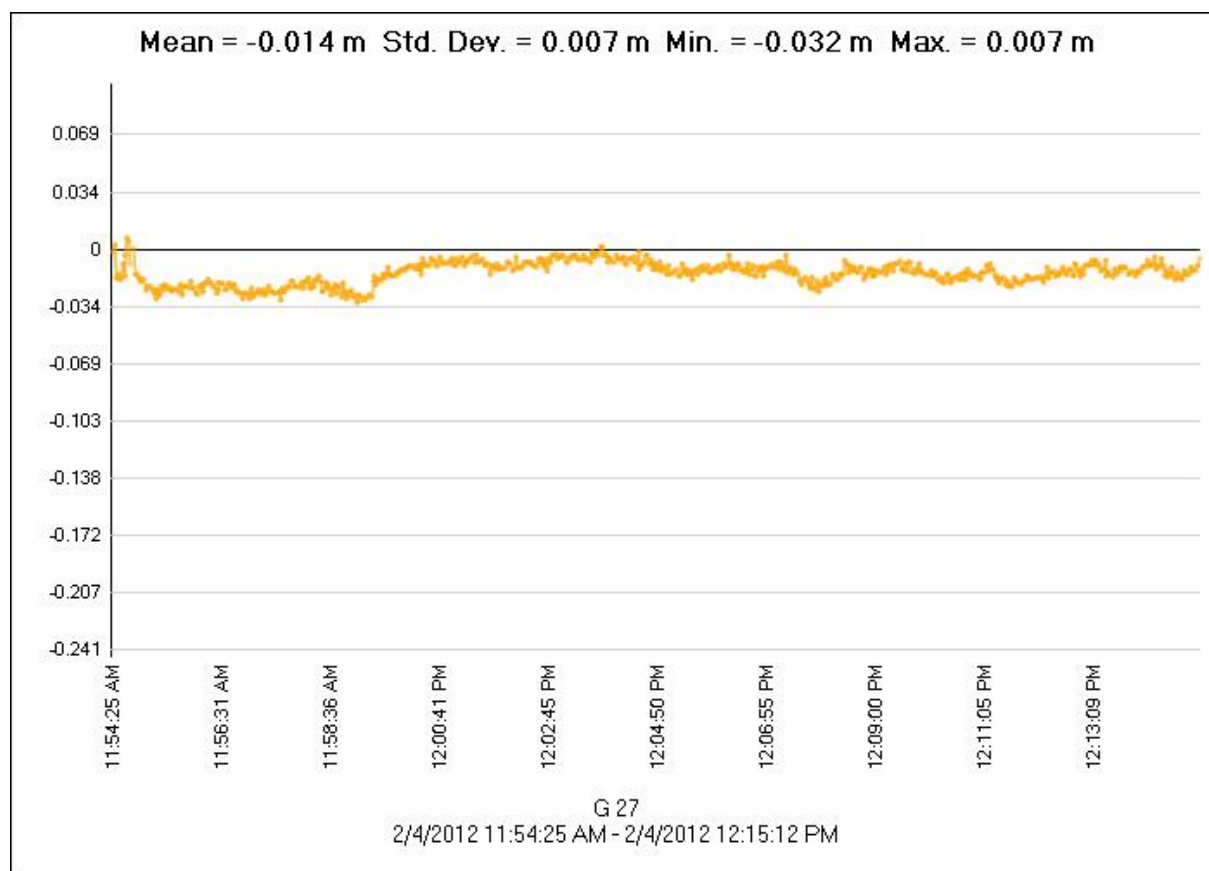


G 21
2/4/2012 11:54:25 AM - 2/4/2012 12:15:12 PM

Mean = 0.004 m Std. Dev. = 0.005 m Min. = -0.012 m Max. = 0.021 m





G 22
2/4/2012 11:54:25 AM - 2/4/2012 12:15:12 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:	Dual Frequency (L1, L2)
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

19S-SPIKE - FVA65-B2 (12:21:03 PM-12:40:09 PM) (S16)

Baseline observation: 19S-SPIKE --- FVA65-B2 (B16)

Processed: 3/20/2012 4:05:47 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.015 m

Vertical precision: 0.020 m

RMS: 0.002 m

Maximum PDOP: 2.186

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/4/2012 12:21:03 PM (Local: UTC-7hr)

Processing stop time: 2/4/2012 12:40:09 PM (Local: UTC-7hr)

Processing duration: 00:19:06

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338086.744 m	Latitude	N37°29'23.76857"	Latitude	N37°29'23.76856"
Northing	4150800.083 m	Longitude	W100°49'53.31423"	Longitude	W100°49'53.31423"
Elevation	896.738 m	Height	870.570 m	Height	870.570 m

To:	FVA65-B2				
Grid		Local		Global	
Easting	402709.499 m	Latitude	N37°10'57.52966"	Latitude	N37°10'57.52966"
Northing	4115696.761 m	Longitude	W100°05'45.79732"	Longitude	W100°05'45.79732"
Elevation	668.638 m	Height	641.543 m	Height	641.543 m

Vector					
9Ughb[	64622.754 m	NS Fwd Azimuth	117°23'58"	L	60371.005 m
Bcfh\jb[	-35103.322 m	Ellipsoid Dist.	73555.330 m	M	-32000.150 m
9Yj Uhcb	-228.101 m	<Y][\h	-229.028 m	N	-27257.908 m

Standard Errors

Vector errors:					
Ughb[	0.004 m	BG`Zk X'5n]a i h	0°00'00"	L	0.004 m
Bcfh\]b[	0.006 m	'9~]dgc]X'8]gh	0.004 m	M	0.008 m
'9`Yj Uhcb	0.010 m	' <Y][\h	0.010 m	N	0.008 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000167416		
Y	0.0000153076	0.0000690430	
Z	-0.0000123152	-0.0000357548	0.0000720305

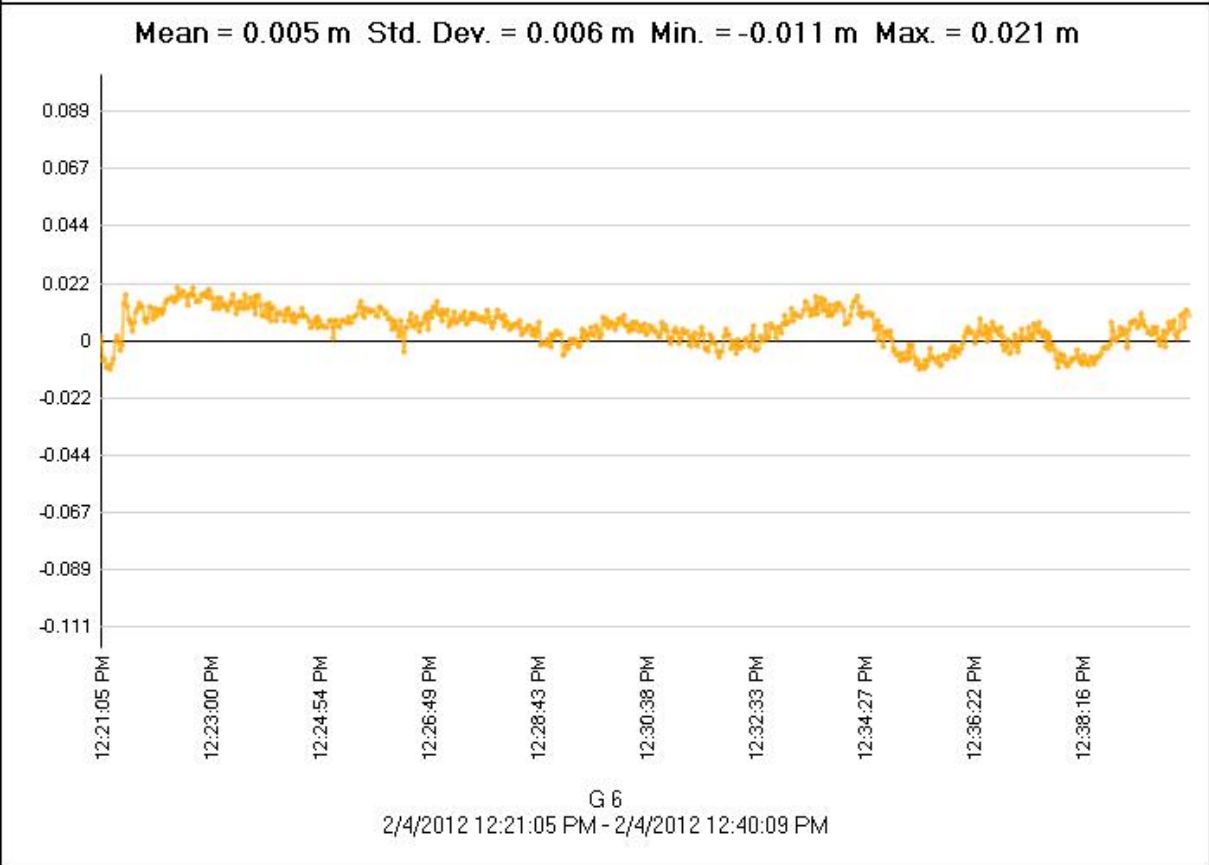
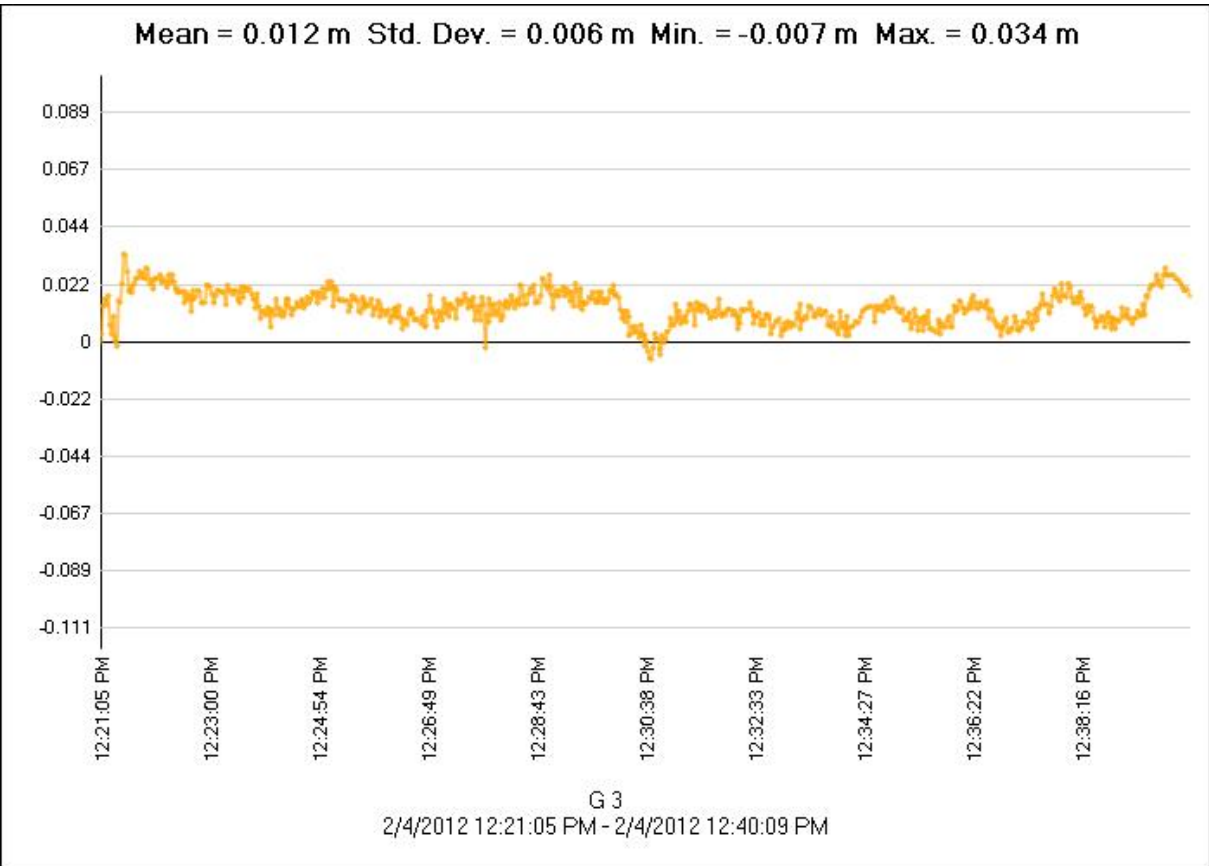
Occupations

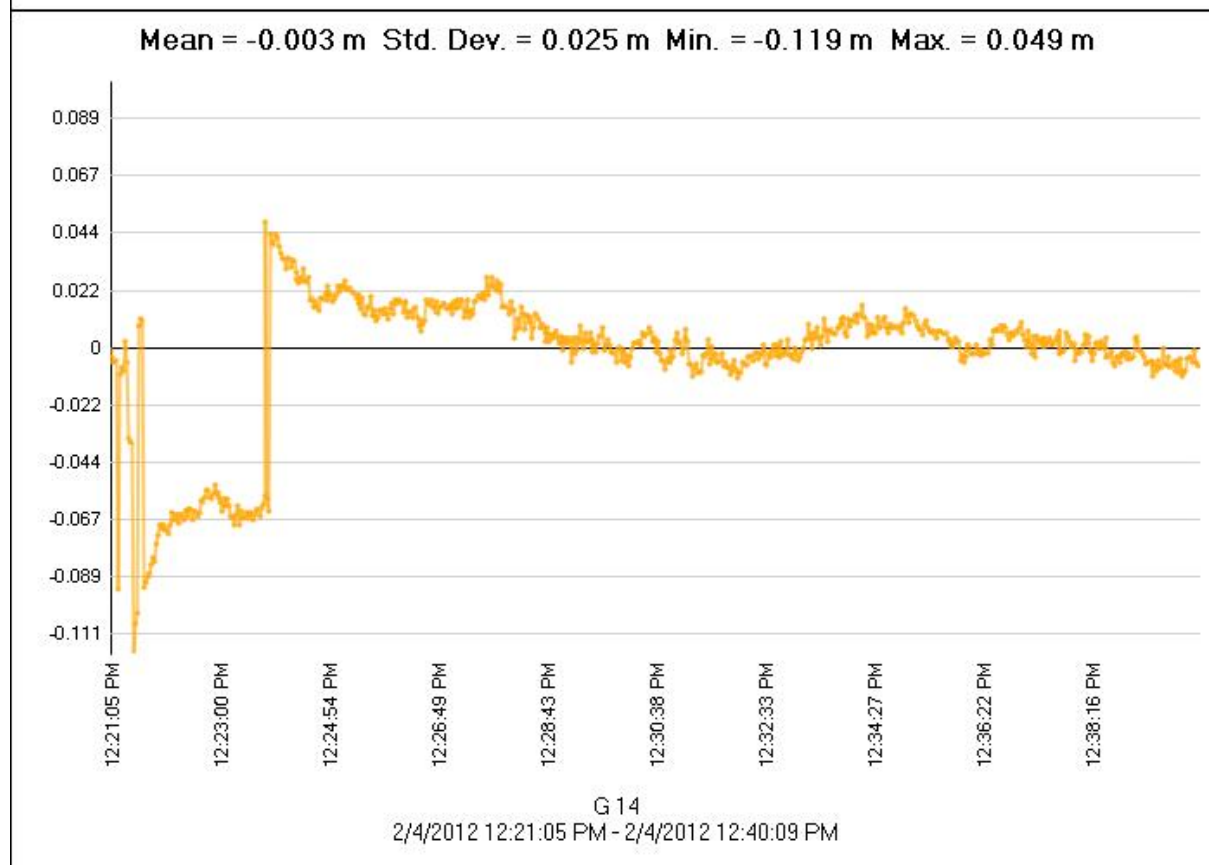
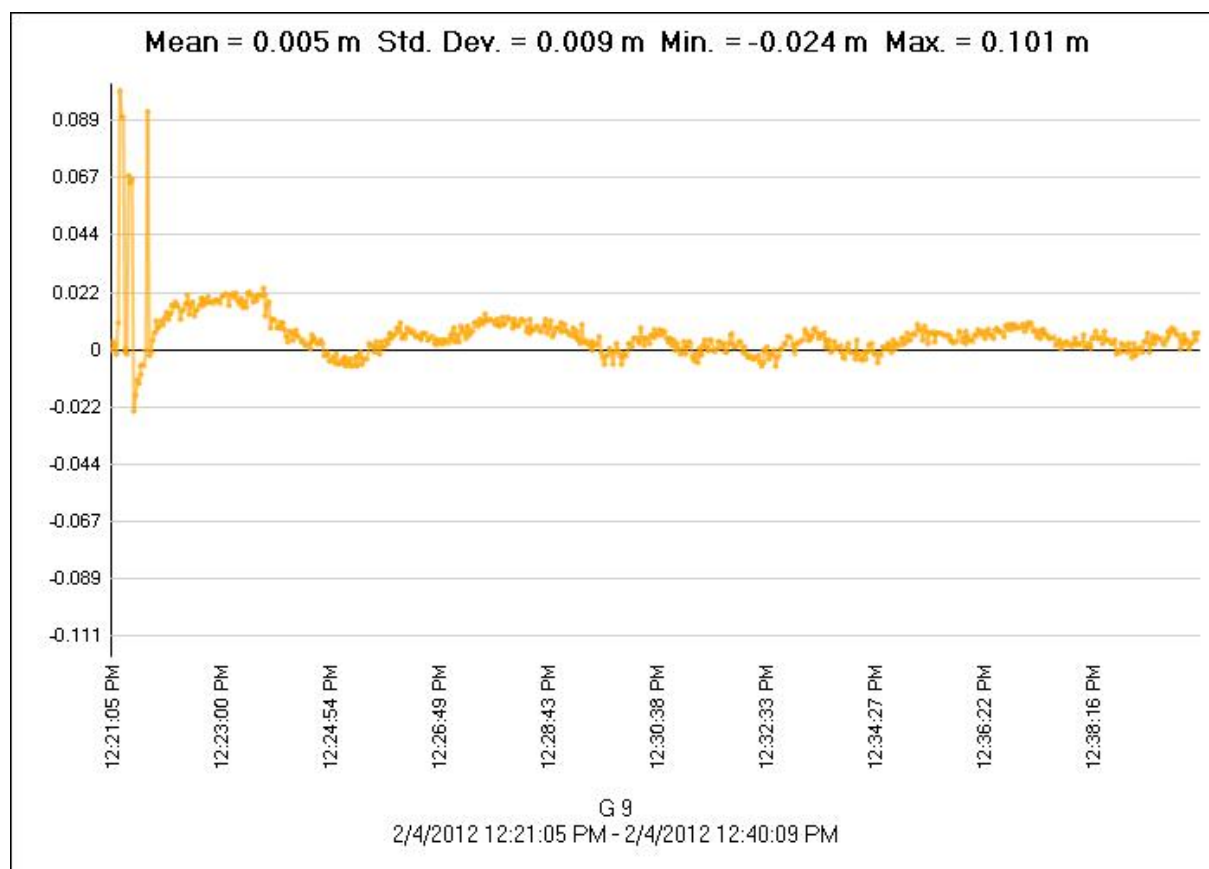
	From	To
Point ID:	19S-SPIKE	FVA65-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010350.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080353.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

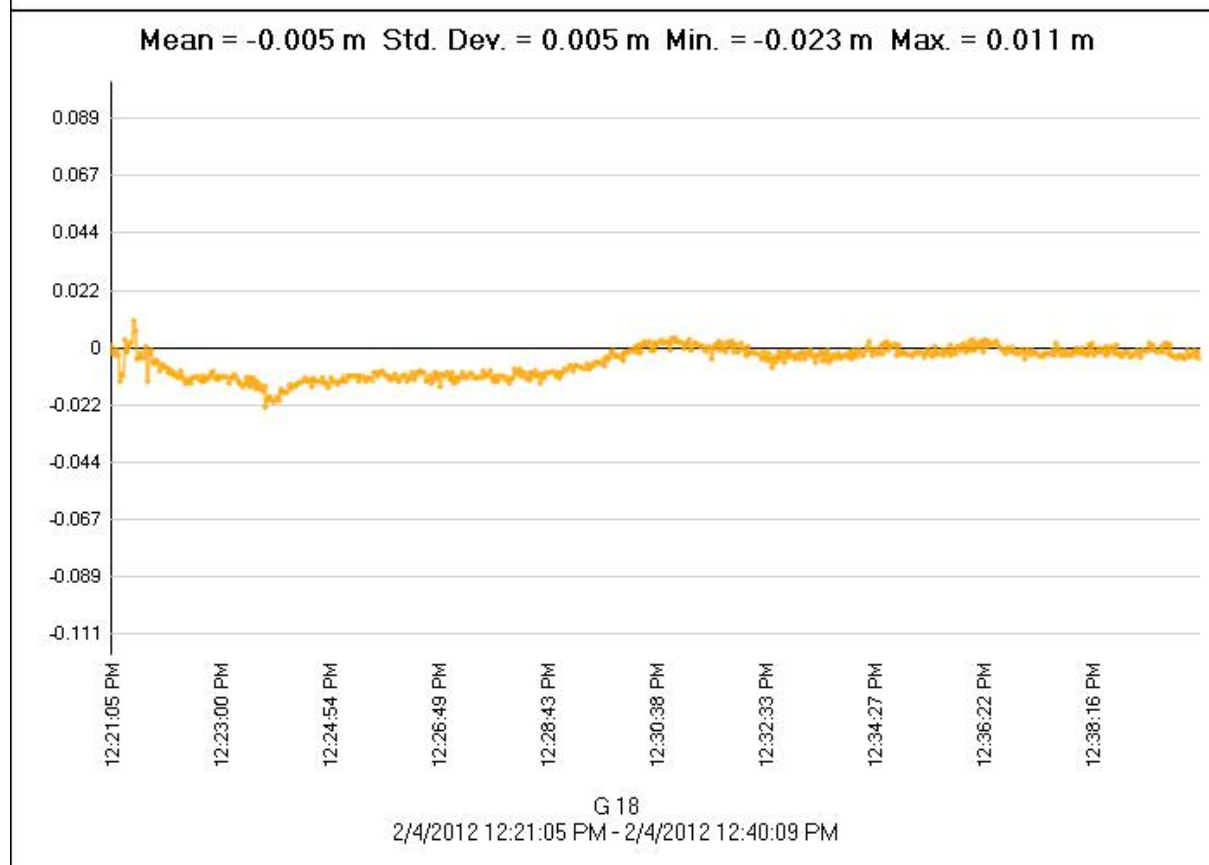
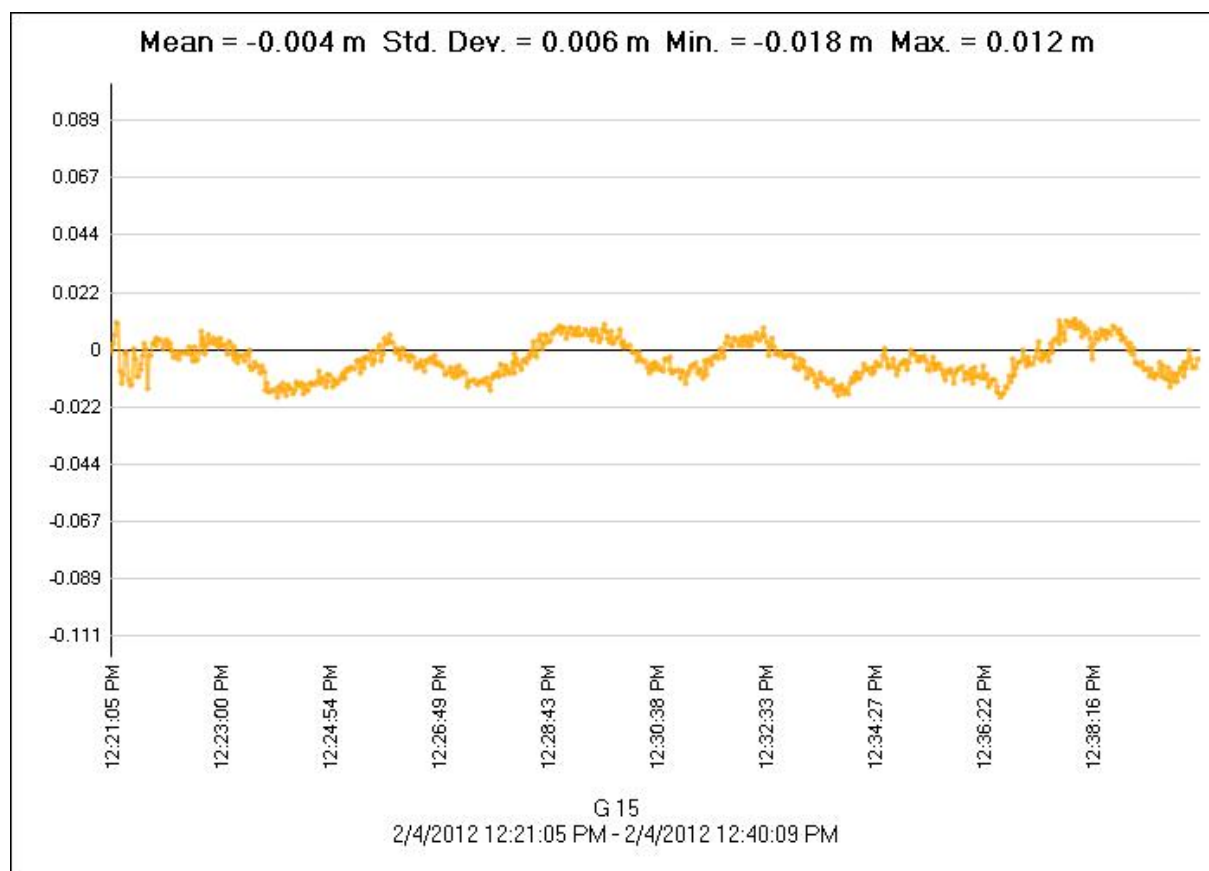
Tracking Summary

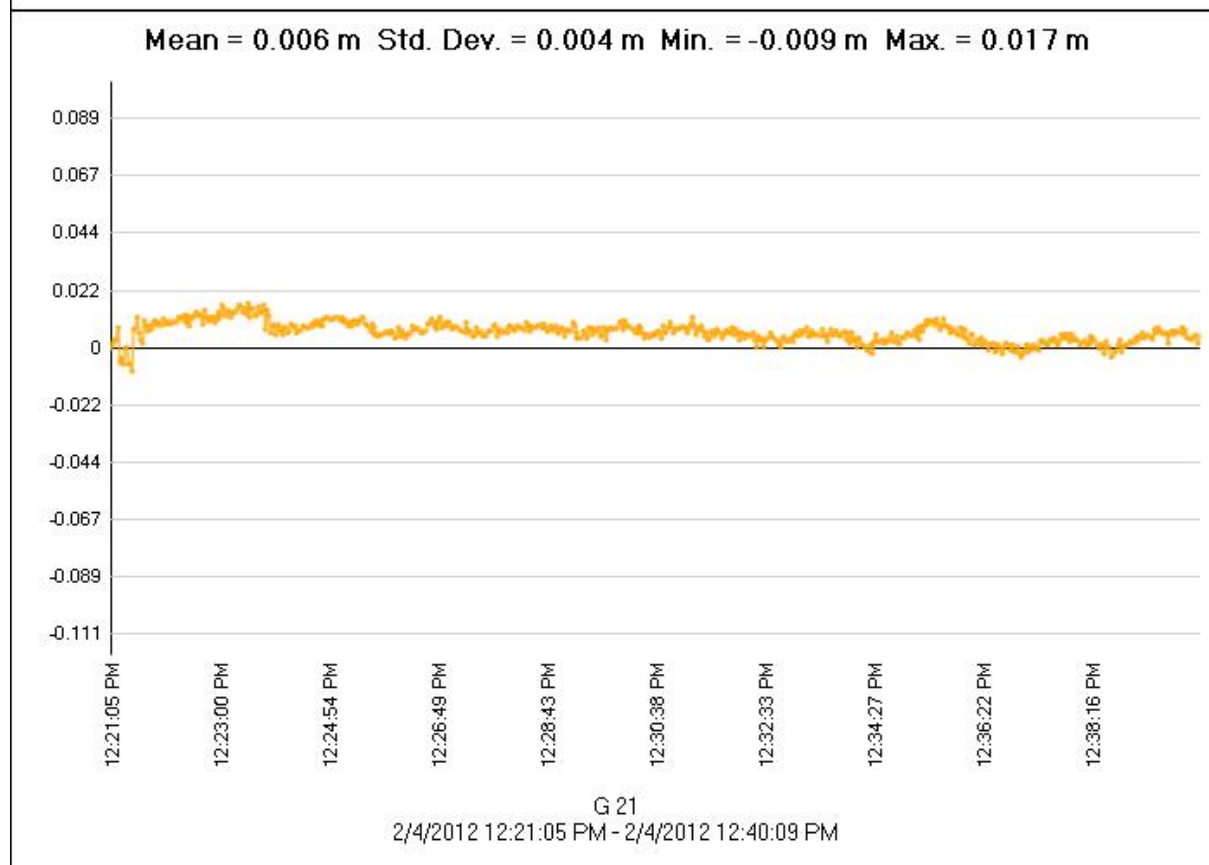
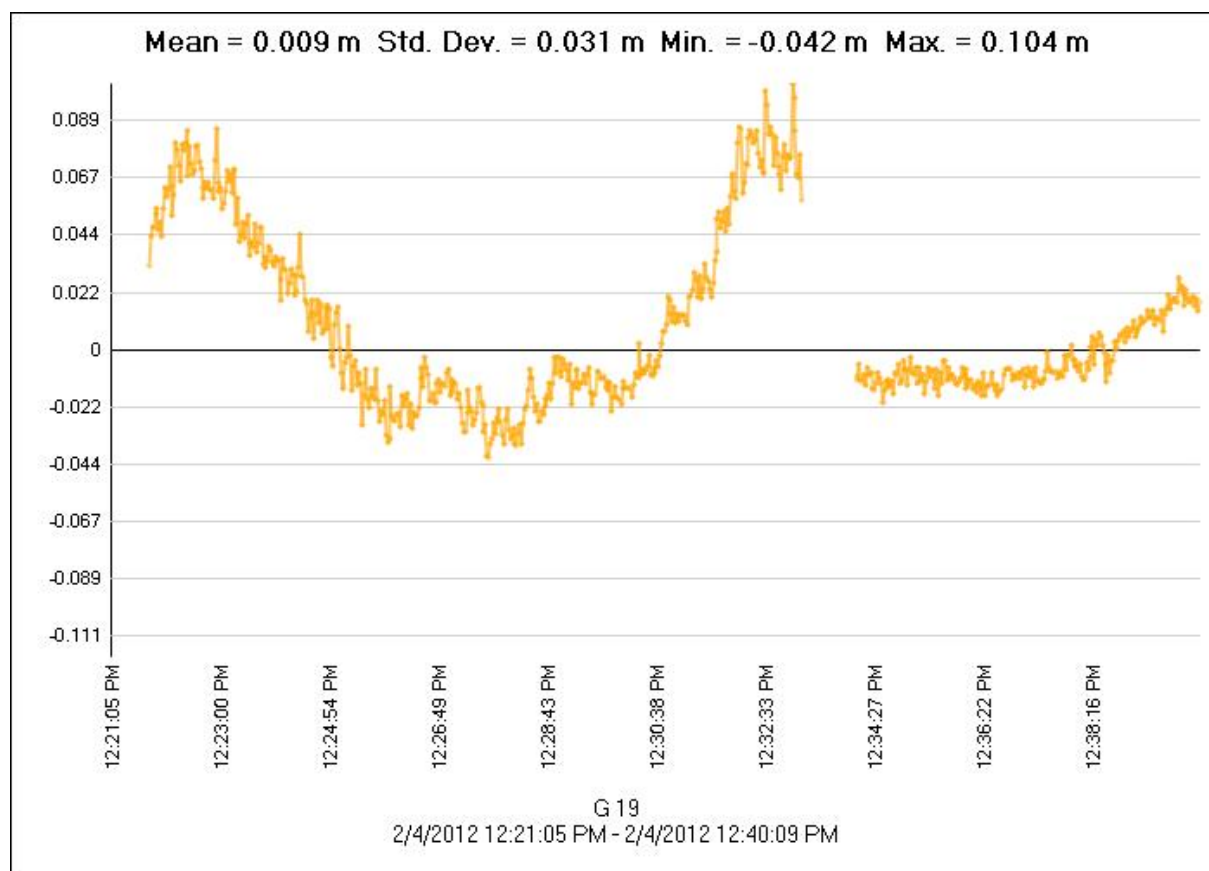
SV	2/4/2012 12:21:03 PM	Duration: 00:19:06	Major interval: 00:01:00	2/4/2012 12:40:09 PM
G 3	L1 L2			
G 6	L1 L2			
G 9	L1 L2			
G 14	L1 L2			
G 15	L1 L2			
G 18	L1 L2			
G 19	L1 L2			
G 21	L1 L2			
G 22	L1 L2			
G 27	L1 L2			
G 29	L1 L2			

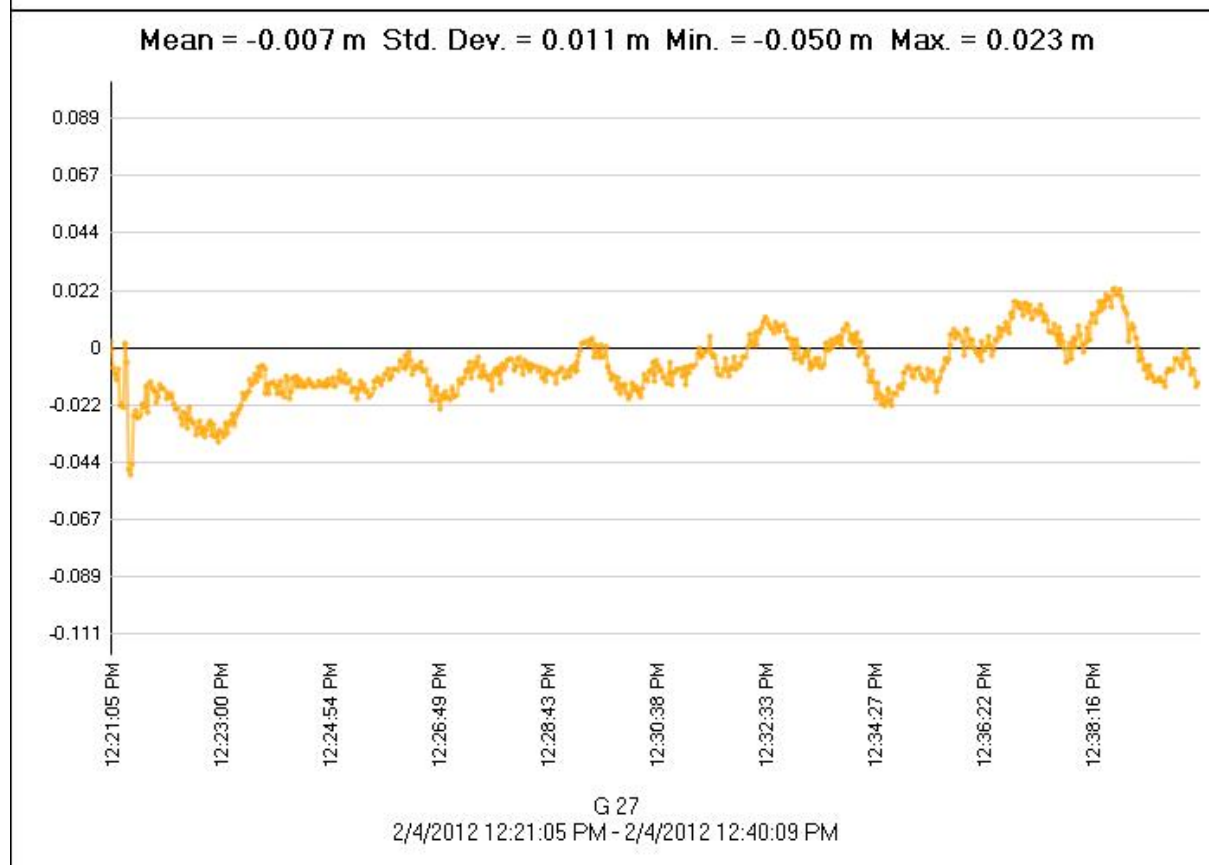
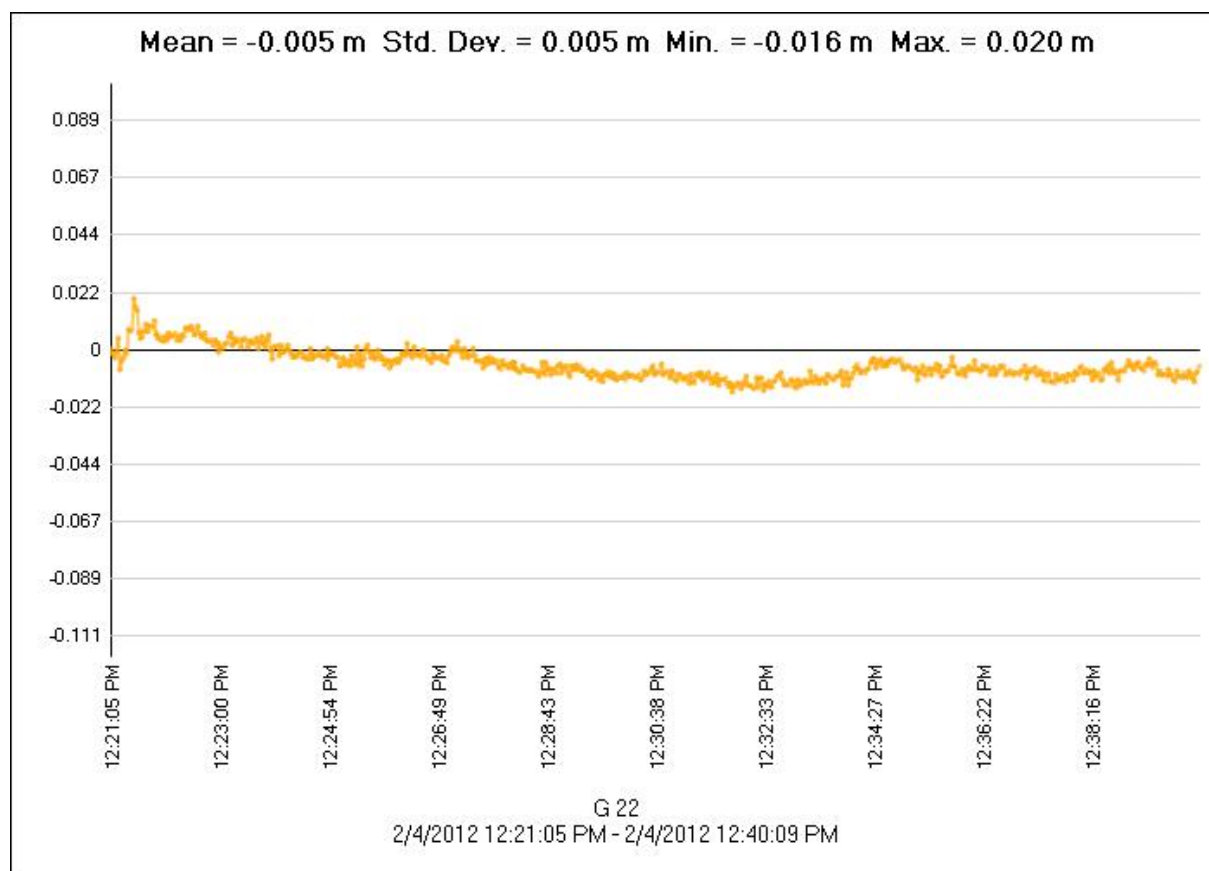
Residuals













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:	Dual Frequency (L1, L2)
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

19S-SPIKE - FVA41-B2 (8:44:25 AM-9:02:57 AM) (S17)

Baseline observation: 19S-SPIKE --- FVA41-B2 (B17)

Processed: 4/11/2012 3:28:44 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.012 m

Vertical precision: 0.017 m

RMS: 0.002 m

Maximum PDOP: 2.400

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/5/2012 8:44:25 AM (Local: UTC-7hr)

Processing stop time: 2/5/2012 9:02:57 AM (Local: UTC-7hr)

Processing duration: 00:18:32

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338087.643 m	Latitude	N37°29'23.71988"	Latitude	N37°29'23.71988"
Northing	4150798.564 m	Longitude	W100°49'53.27643"	Longitude	W100°49'53.27643"
Elevation	886.743 m	Height	860.575 m	Height	860.575 m

To:	FVA41-B2				
Grid		Local		Global	
Easting	363428.313 m	Latitude	N37°24'42.37954"	Latitude	N37°24'42.37953"
Northing	4141670.749 m	Longitude	W100°32'35.65953"	Longitude	W100°32'35.65953"
Elevation	845.912 m	Height	819.546 m	Height	819.546 m

Vector					
9Ughb[	25340.670 m	NS Fwd Azimuth	108°41'43"	L	24091.978 m
Bcfh\jb[	-9127.815 m	Ellipsoid Dist.	26937.853 m	M	-9881.599 m
9Yj Uhcb	-40.831 m	<Y][\h	-41.029 m	N	-6911.595 m

Standard Errors

Vector errors:					
Point ID	0.003 m	Point Description	0°00'00"	Point Type	0.003 m
Point ID	0.005 m	Point Description	0.003 m	Point Type	0.009 m
Point ID	0.009 m	Point Description	0.009 m	Point Type	0.004 m

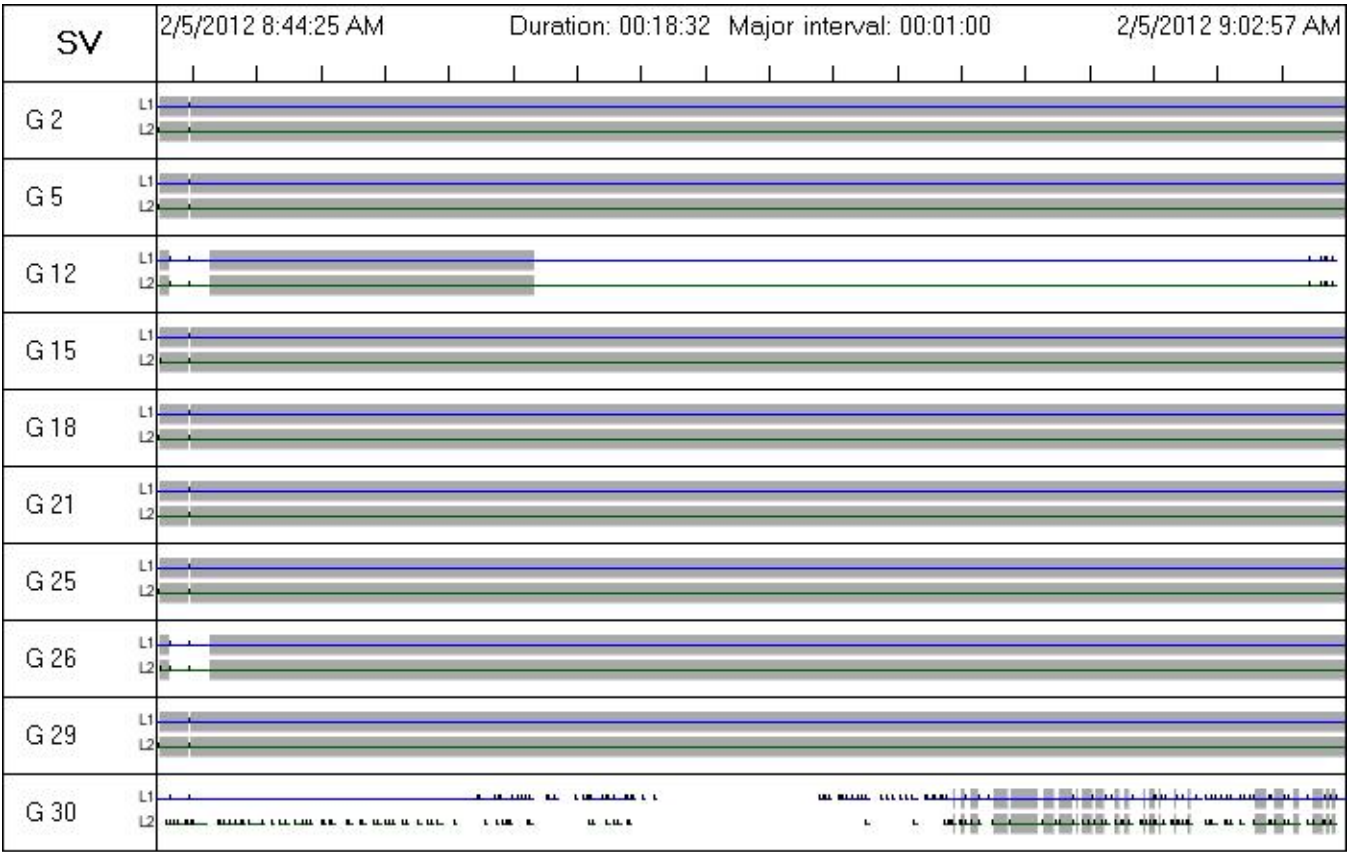
Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000092360		
Y	0.0000087604	0.0000802869	
Z	-0.0000028801	-0.0000190452	0.0000167430

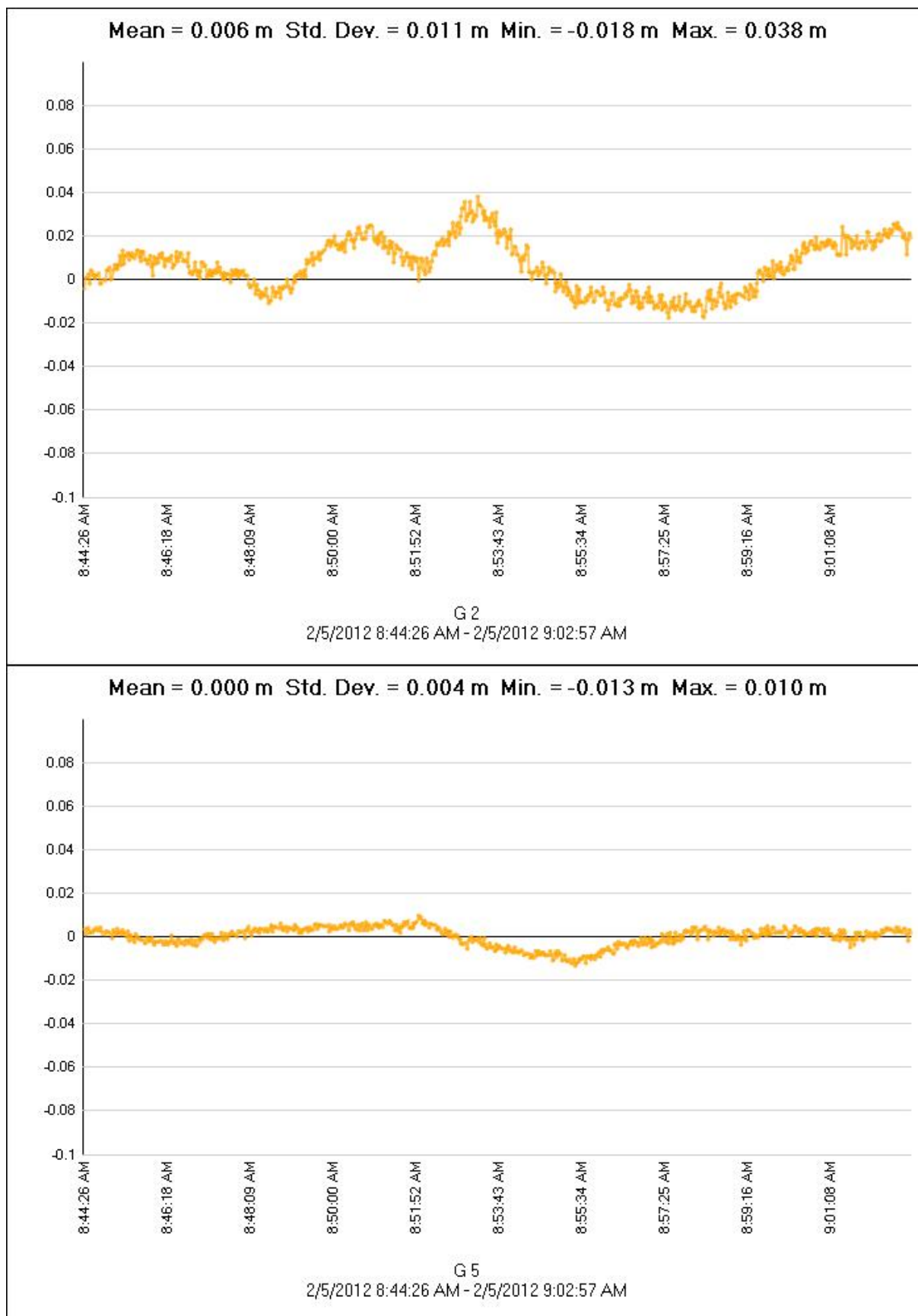
Occupations

	From	To
Point ID:	19S-SPIKE	FVA41-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010360.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080360.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

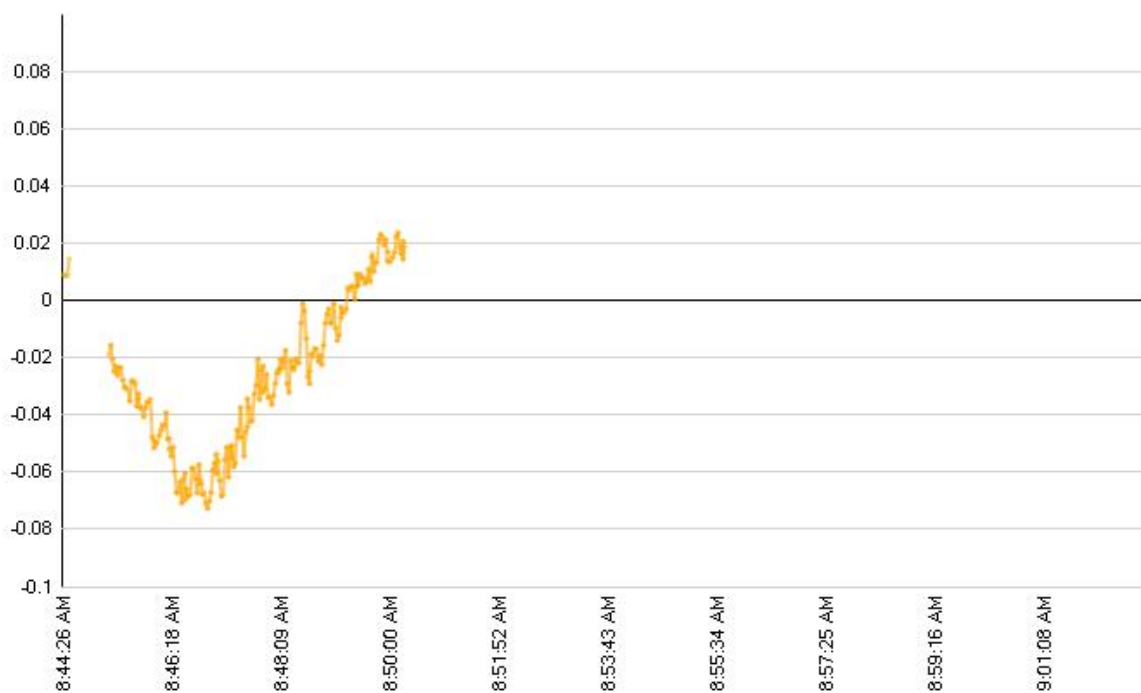
Tracking Summary



Residuals



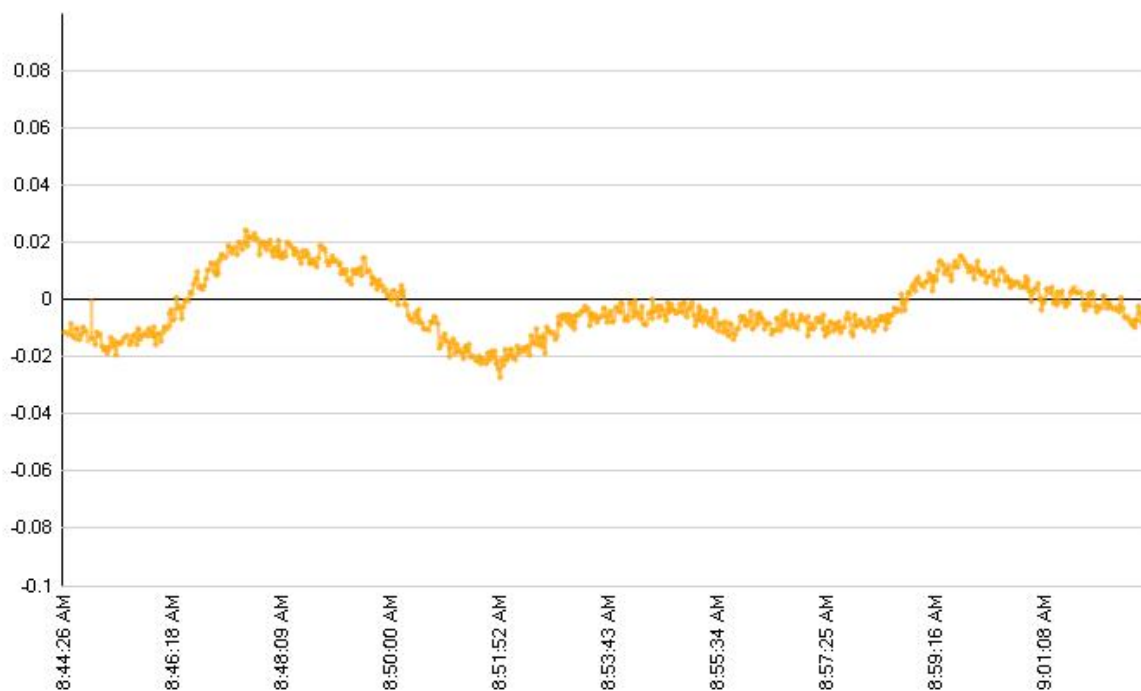
Mean = -0.026 m Std. Dev. = 0.026 m Min. = -0.072 m Max. = 0.024 m



G 12

2/5/2012 8:44:26 AM - 2/5/2012 9:02:57 AM

Mean = -0.002 m Std. Dev. = 0.010 m Min. = -0.027 m Max. = 0.024 m



G 15

2/5/2012 8:44:26 AM - 2/5/2012 9:02:57 AM

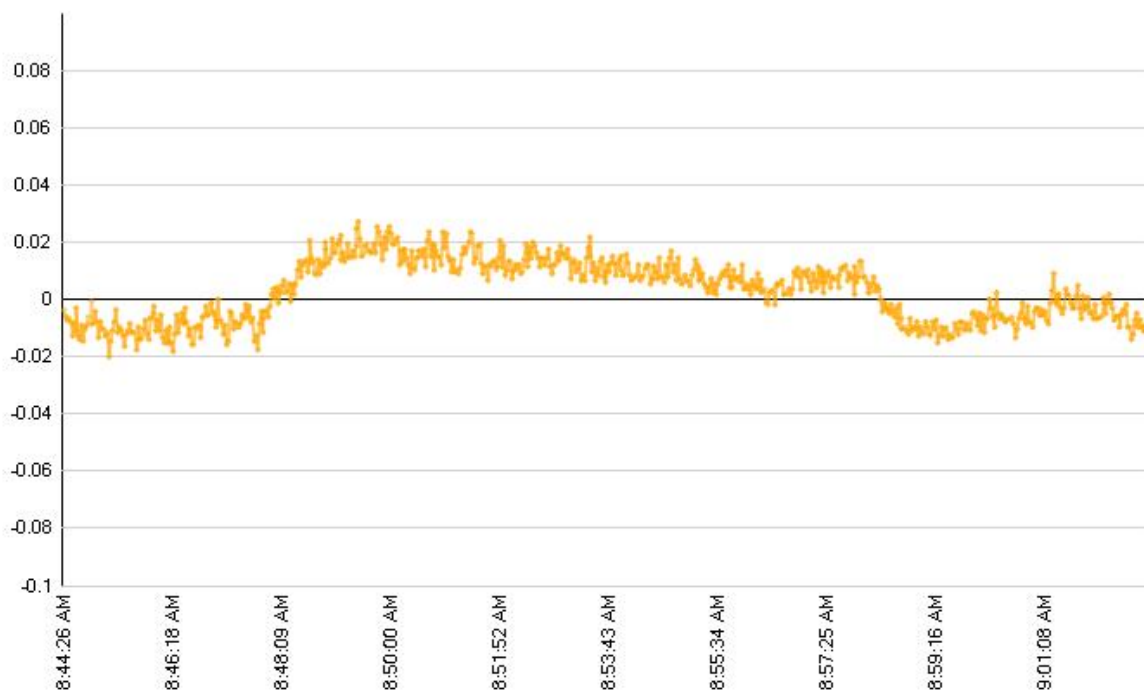
Mean = -0.004 m Std. Dev. = 0.022 m Min. = -0.039 m Max. = 0.048 m



G 18

2/5/2012 8:44:26 AM - 2/5/2012 9:02:57 AM

Mean = 0.003 m Std. Dev. = 0.010 m Min. = -0.020 m Max. = 0.027 m



G 21

2/5/2012 8:44:26 AM - 2/5/2012 9:02:57 AM

Mean = 0.004 m Std. Dev. = 0.009 m Min. = -0.019 m Max. = 0.023 m



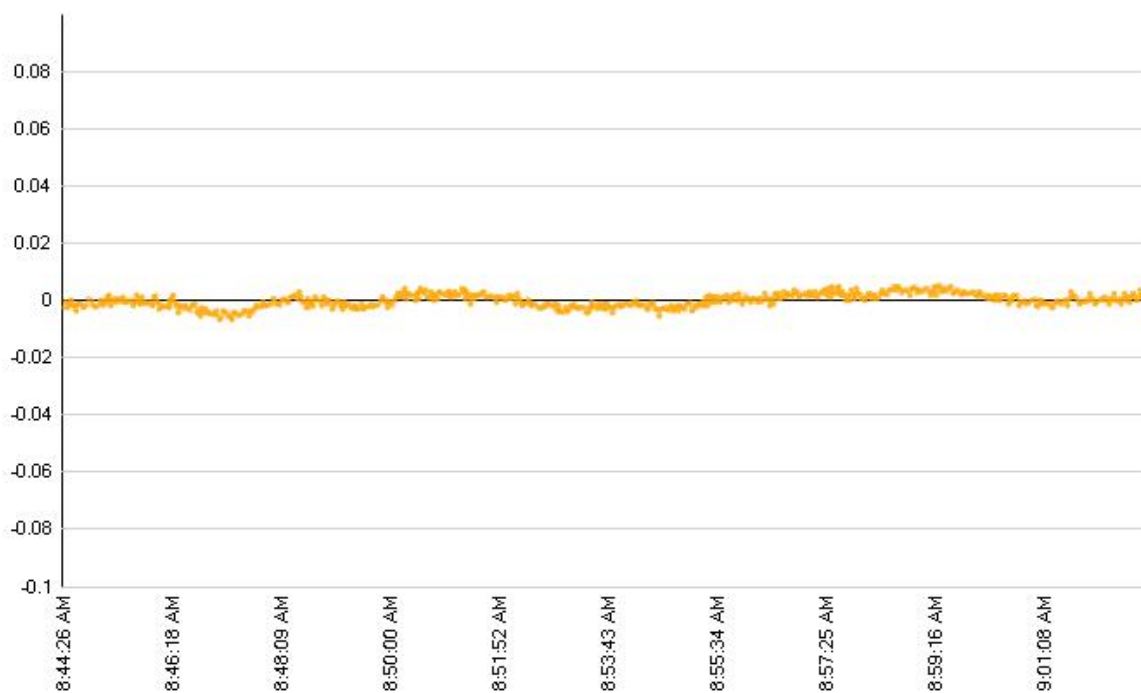
G 25
2/5/2012 8:44:26 AM - 2/5/2012 9:02:57 AM

Mean = -0.001 m Std. Dev. = 0.007 m Min. = -0.018 m Max. = 0.013 m



G 26
2/5/2012 8:44:26 AM - 2/5/2012 9:02:57 AM

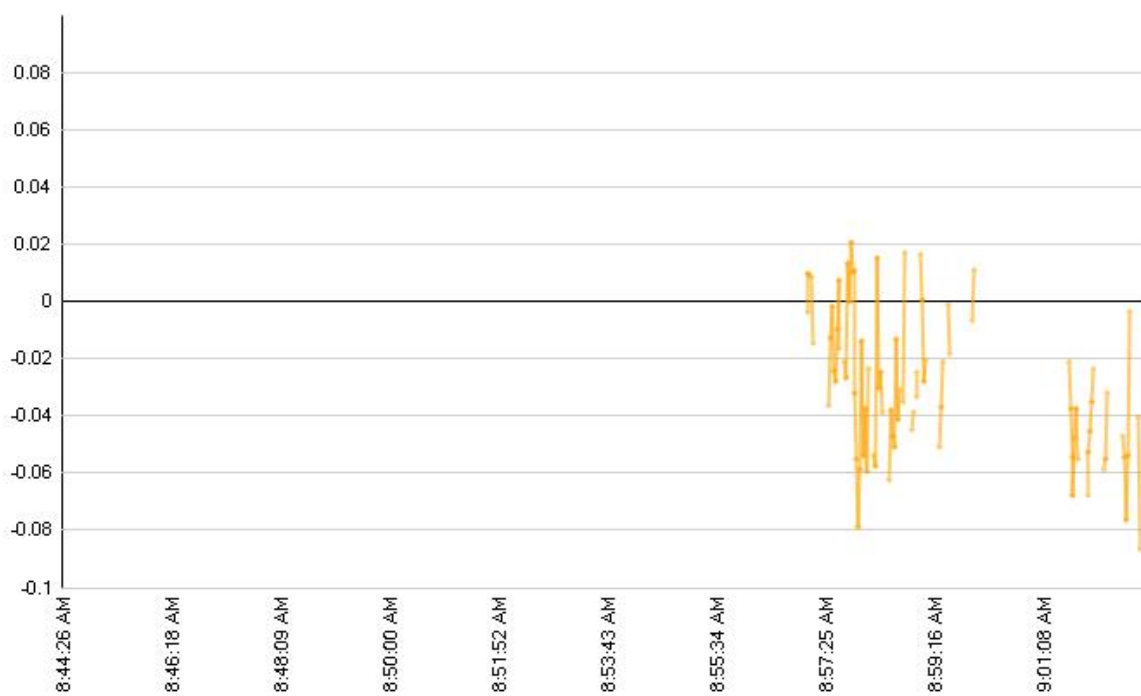
Mean = 0.000 m Std. Dev. = 0.002 m Min. = -0.007 m Max. = 0.006 m



G 29

2/5/2012 8:44:26 AM - 2/5/2012 9:02:57 AM

Mean = -0.026 m Std. Dev. = 0.025 m Min. = -0.086 m Max. = 0.034 m





G 30

2/5/2012 8:44:26 AM - 2/5/2012 9:02:57 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:	Dual Frequency (L1, L2)
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

19S-SPIKE - SVA41-B2 (9:07:13 AM-9:26:53 AM) (S18)

Baseline observation: 19S-SPIKE --- SVA41-B2 (B18)

Processed: 4/11/2012 3:28:45 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.009 m

Vertical precision: 0.014 m

RMS: 0.002 m

Maximum PDOP: 2.119

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/5/2012 9:07:13 AM (Local: UTC-7hr)

Processing stop time: 2/5/2012 9:26:53 AM (Local: UTC-7hr)

Processing duration: 00:19:40

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338087.643 m	Latitude	N37°29'23.71988"	Latitude	N37°29'23.71988"
Northing	4150798.564 m	Longitude	W100°49'53.27643"	Longitude	W100°49'53.27643"
Elevation	886.743 m	Height	860.575 m	Height	860.575 m

To:	SVA41-B2				
Grid		Local		Global	
Easting	363407.071 m	Latitude	N37°24'41.40463"	Latitude	N37°24'41.40462"
Northing	4141641.042 m	Longitude	W100°32'36.50357"	Longitude	W100°32'36.50357"
Elevation	845.427 m	Height	819.061 m	Height	819.061 m

Vector					
9Ughb[	25319.428 m	NS Fwd Azimuth	108°46'12"	L	24068.298 m
Bcfh\jb[	-9157.522 m	Ellipsoid Dist.	26927.956 m	M	-9895.376 m
9Yj Uhcb	-41.316 m	<Y][\h	-41.514 m	N	-6935.766 m

Standard Errors

Vector errors:					
Point ID	0.003 m	Point Description	0°00'00"	Point Type	0.003 m
Point ID	0.004 m	Point Description	0.003 m	Point Type	0.006 m
Point ID	0.007 m	Point Description	0.007 m	Point Type	0.005 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000079184		
Y	0.0000045277	0.0000407071	
Z	-0.0000023629	-0.0000144262	0.0000203452

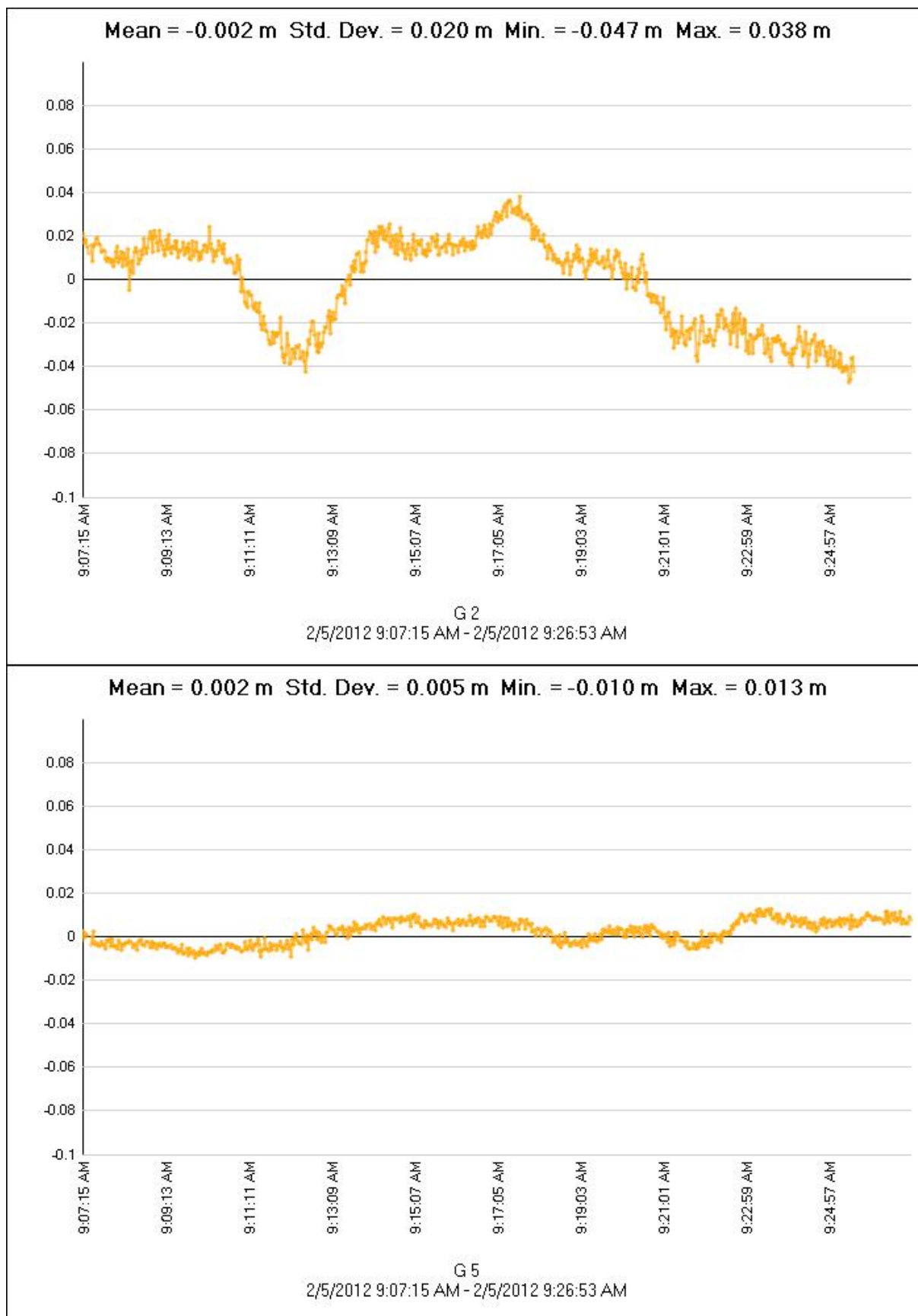
Occupations

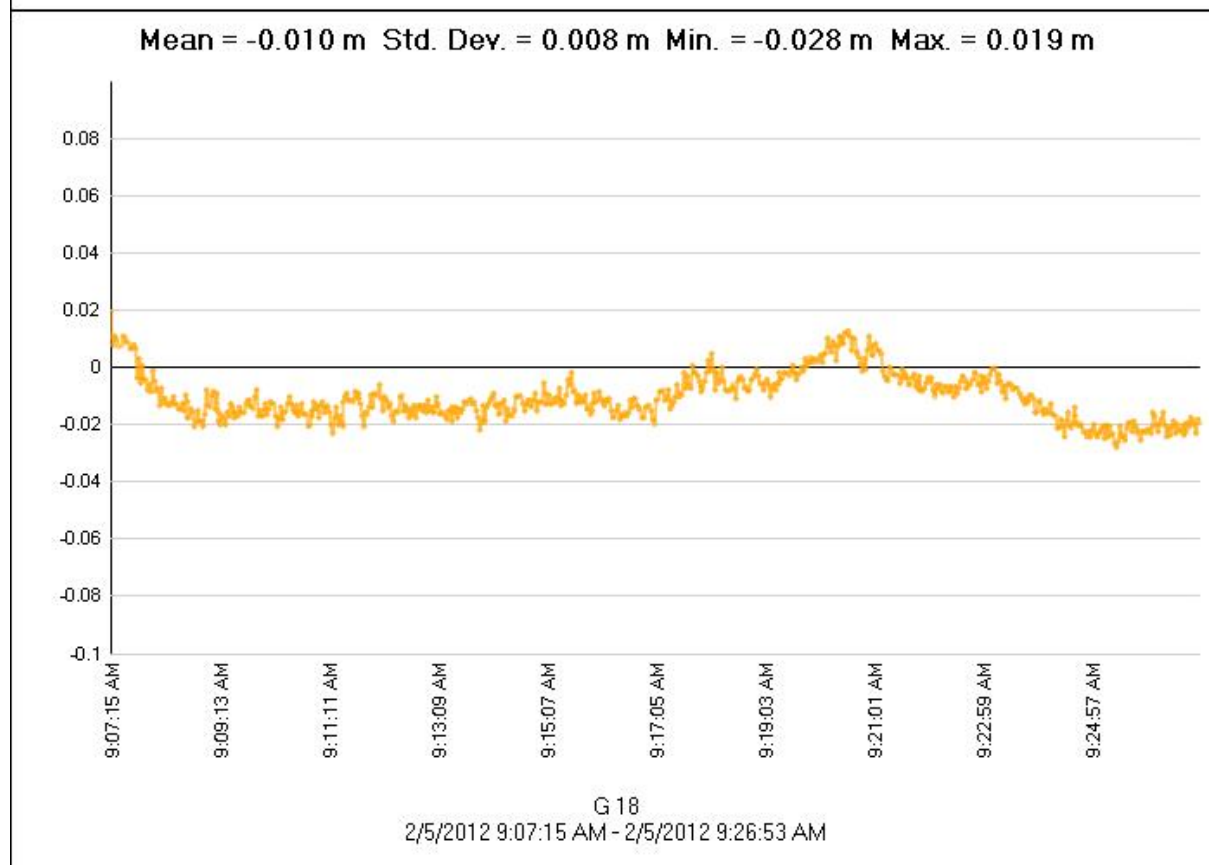
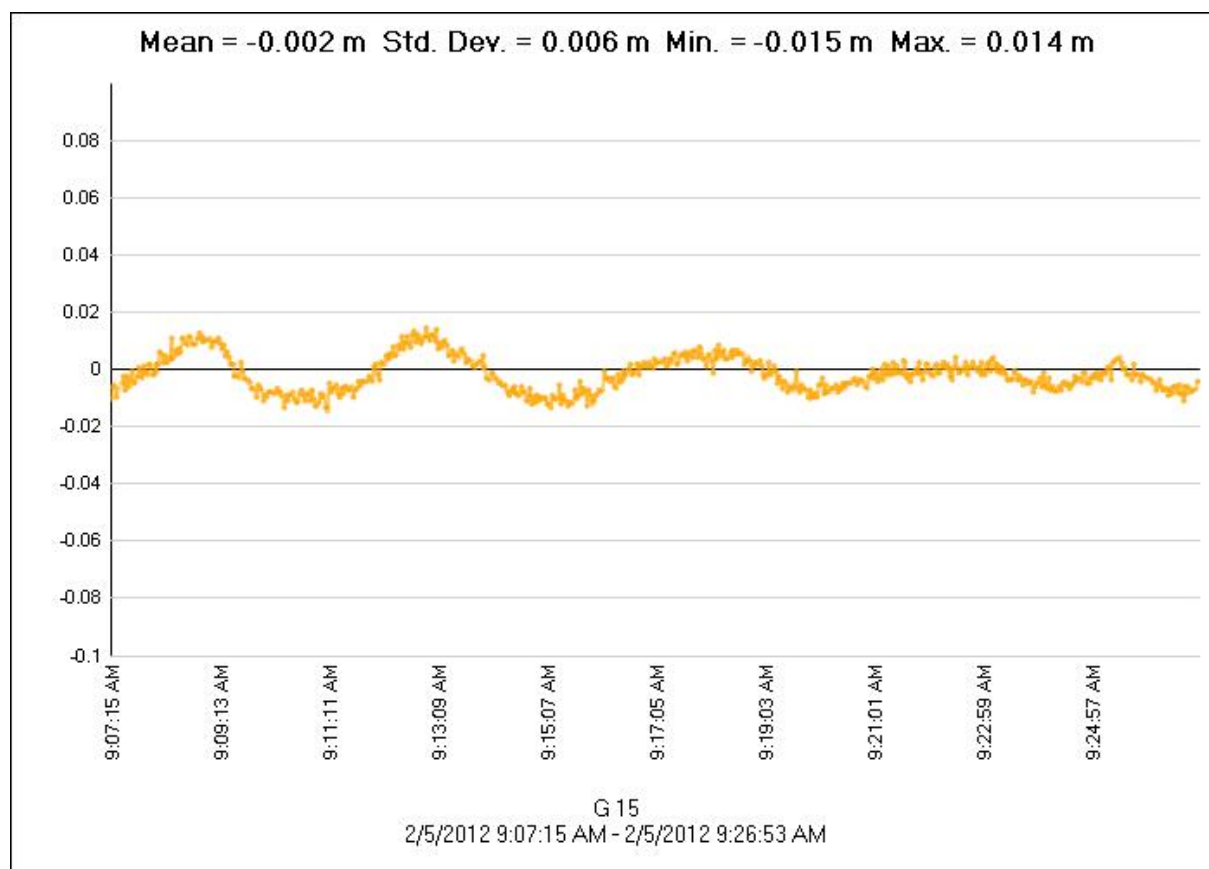
	From	To
Point ID:	19S-SPIKE	SVA41-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010360.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080361.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

Tracking Summary

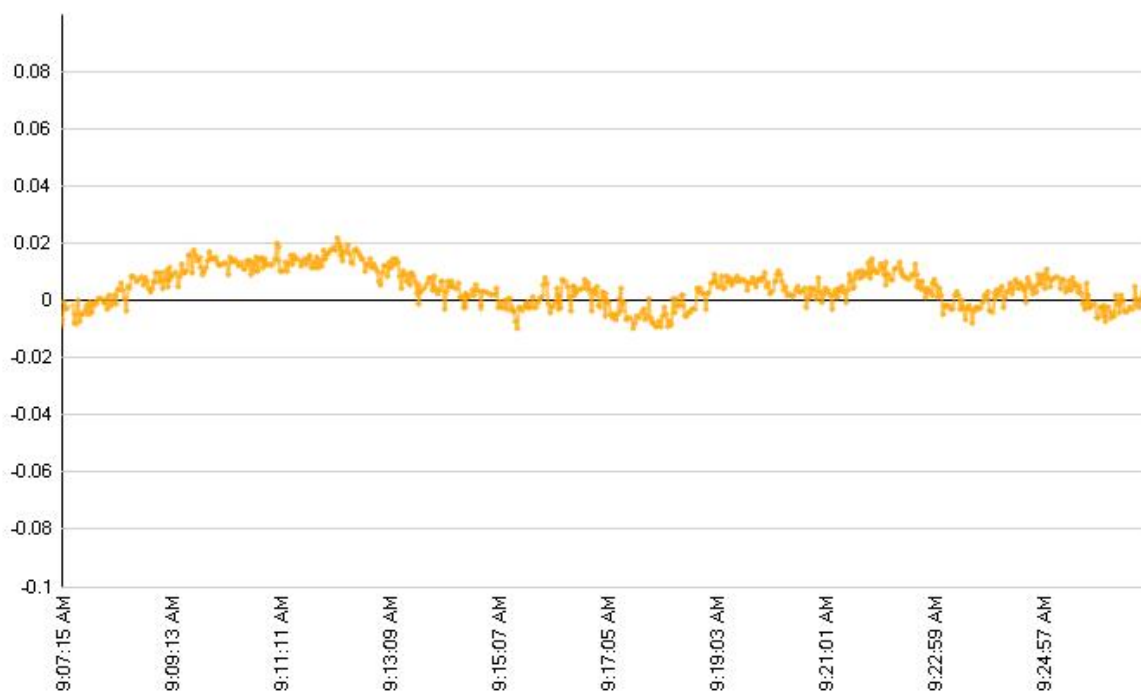
SV	2/5/2012 9:07:13 AM	Duration: 00:19:40	Major interval: 00:01:00	2/5/2012 9:26:53 AM
G 2	L1 L2			
G 5	L1 L2			
G 12	L1 L2			
G 15	L1 L2			
G 16	L1 L2			
G 18	L1 L2			
G 21	L1 L2			
G 25	L1 L2			
G 26	L1 L2			
G 29	L1 L2			
G 30	L1 L2			

Residuals





Mean = 0.004 m Std. Dev. = 0.006 m Min. = -0.010 m Max. = 0.022 m



G 21

2/5/2012 9:07:15 AM - 2/5/2012 9:26:53 AM

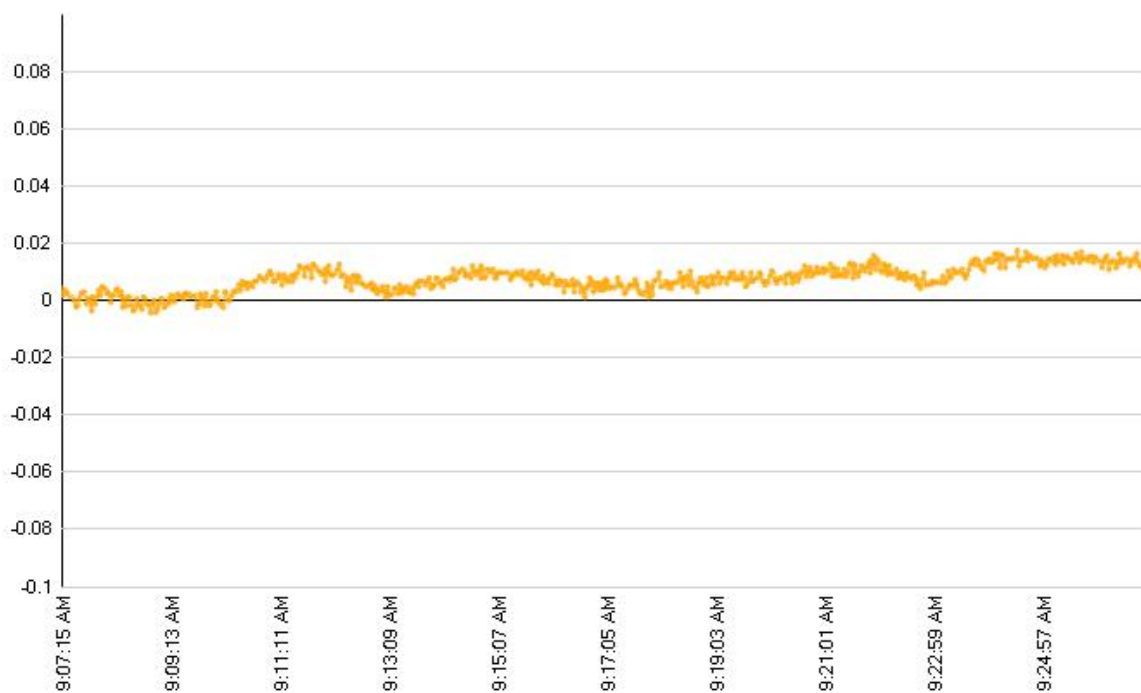
Mean = -0.010 m Std. Dev. = 0.011 m Min. = -0.039 m Max. = 0.016 m



G 25

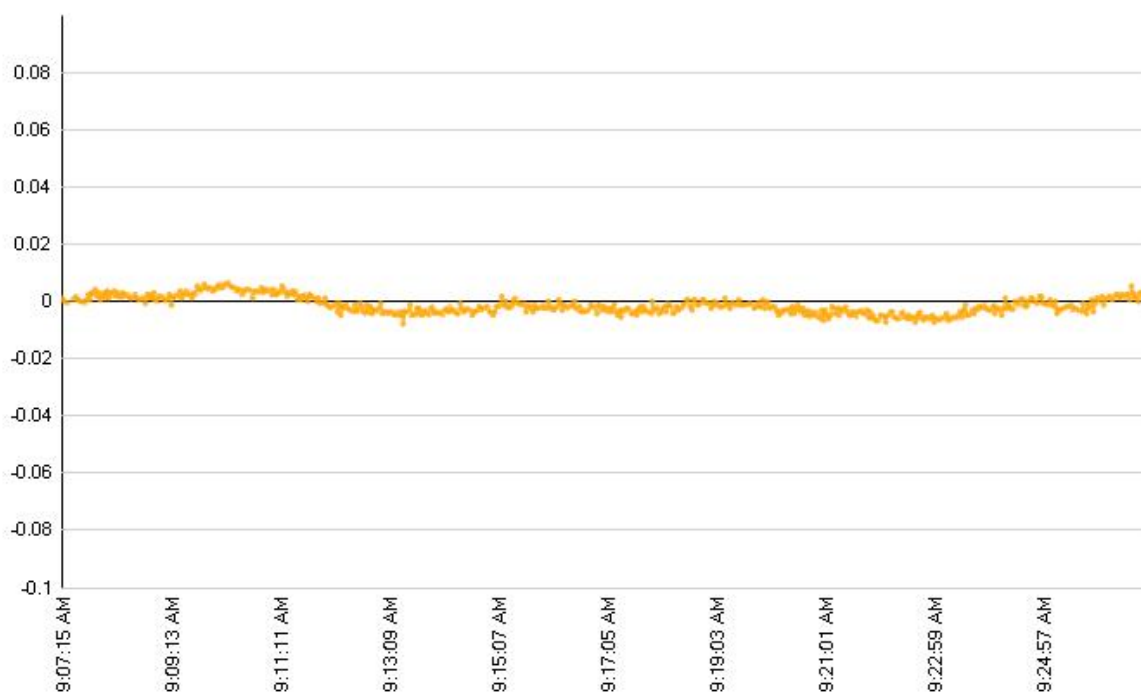
2/5/2012 9:07:15 AM - 2/5/2012 9:26:53 AM

Mean = 0.007 m Std. Dev. = 0.004 m Min. = -0.004 m Max. = 0.018 m

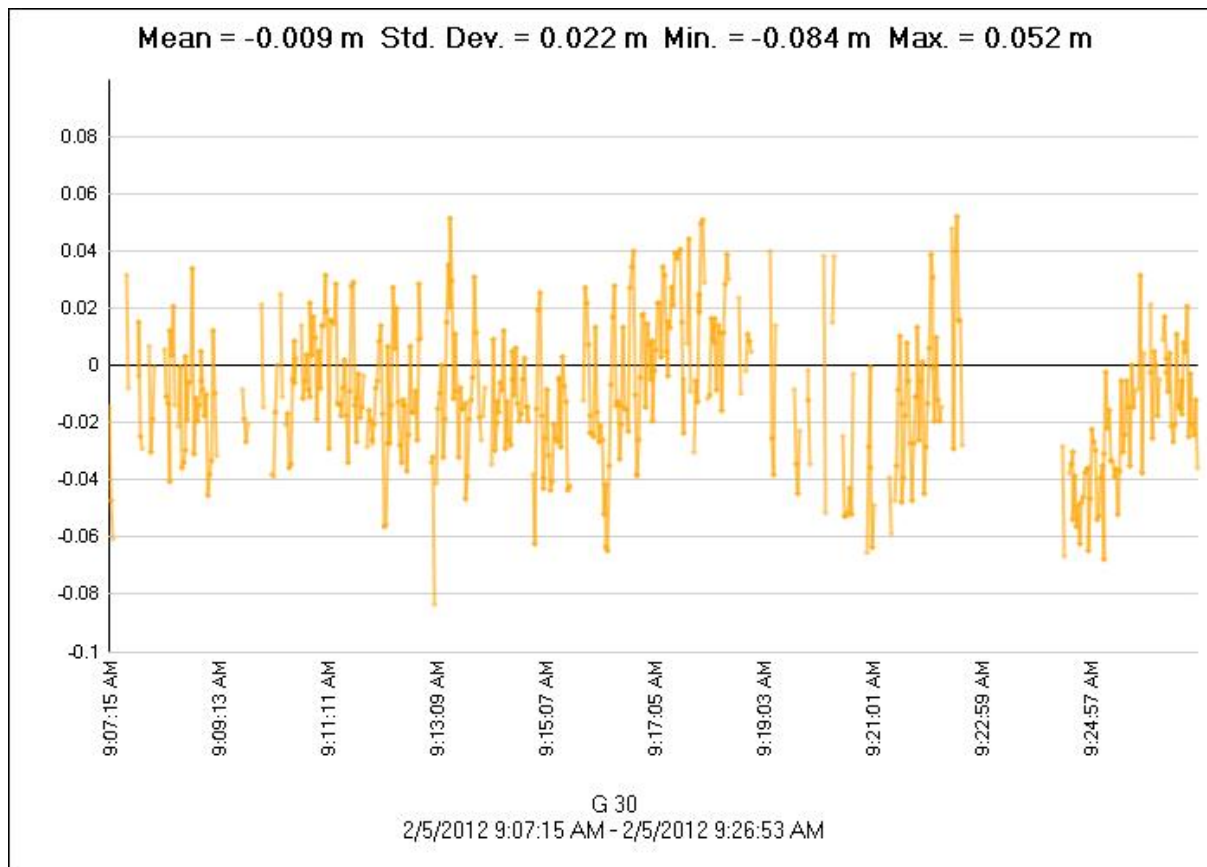


G 26
2/5/2012 9:07:15 AM - 2/5/2012 9:26:53 AM

Mean = -0.001 m Std. Dev. = 0.003 m Min. = -0.008 m Max. = 0.007 m





G 29
2/5/2012 9:07:15 AM - 2/5/2012 9:26:53 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:	Dual Frequency (L1, L2)
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

19S-SPIKE - FVA42-B2 (10:00:24 AM-10:20:06 AM) (S19)

Baseline observation: 19S-SPIKE --- FVA42-B2 (B19)

Processed: 4/11/2012 3:28:43 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.011 m

Vertical precision: 0.027 m

RMS: 0.002 m

Maximum PDOP: 4.269

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/5/2012 10:00:24 AM (Local: UTC-7hr)

Processing stop time: 2/5/2012 10:20:06 AM (Local: UTC-7hr)

Processing duration: 00:19:42

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338087.643 m	Latitude	N37°29'23.71988"	Latitude	N37°29'23.71988"
Northing	4150798.564 m	Longitude	W100°49'53.27643"	Longitude	W100°49'53.27643"
Elevation	886.743 m	Height	860.575 m	Height	860.575 m

To:	FVA42-B2				
Grid		Local		Global	
Easting	359049.568 m	Latitude	N37°15'50.58236"	Latitude	N37°15'50.58235"
Northing	4125349.074 m	Longitude	W100°35'22.55136"	Longitude	W100°35'22.55136"
Elevation	841.070 m	Height	814.531 m	Height	814.531 m

Vector					
9Ughb[	20961.924 m	NS Fwd Azimuth	139°24'38"	L	18230.062 m
Bcfh\jb[	-25449.490 m	Ellipsoid Dist.	32974.739 m	M	-18900.524 m
9Yj Uhcb	-45.672 m	<Y][\h	-46.044 m	N	-19951.292 m

Standard Errors

Vector errors:

Point ID	0.003 m	Point Description	0°00'00"	Point Type	0.003 m
Point ID	0.005 m	Point Description	0.004 m	Point Type	0.009 m
Point ID	0.014 m	Point Description	0.014 m	Point Type	0.011 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000083063		
Y	0.0000097210	0.0000864274	
Z	-0.0000111359	-0.0000907244	0.0001227111

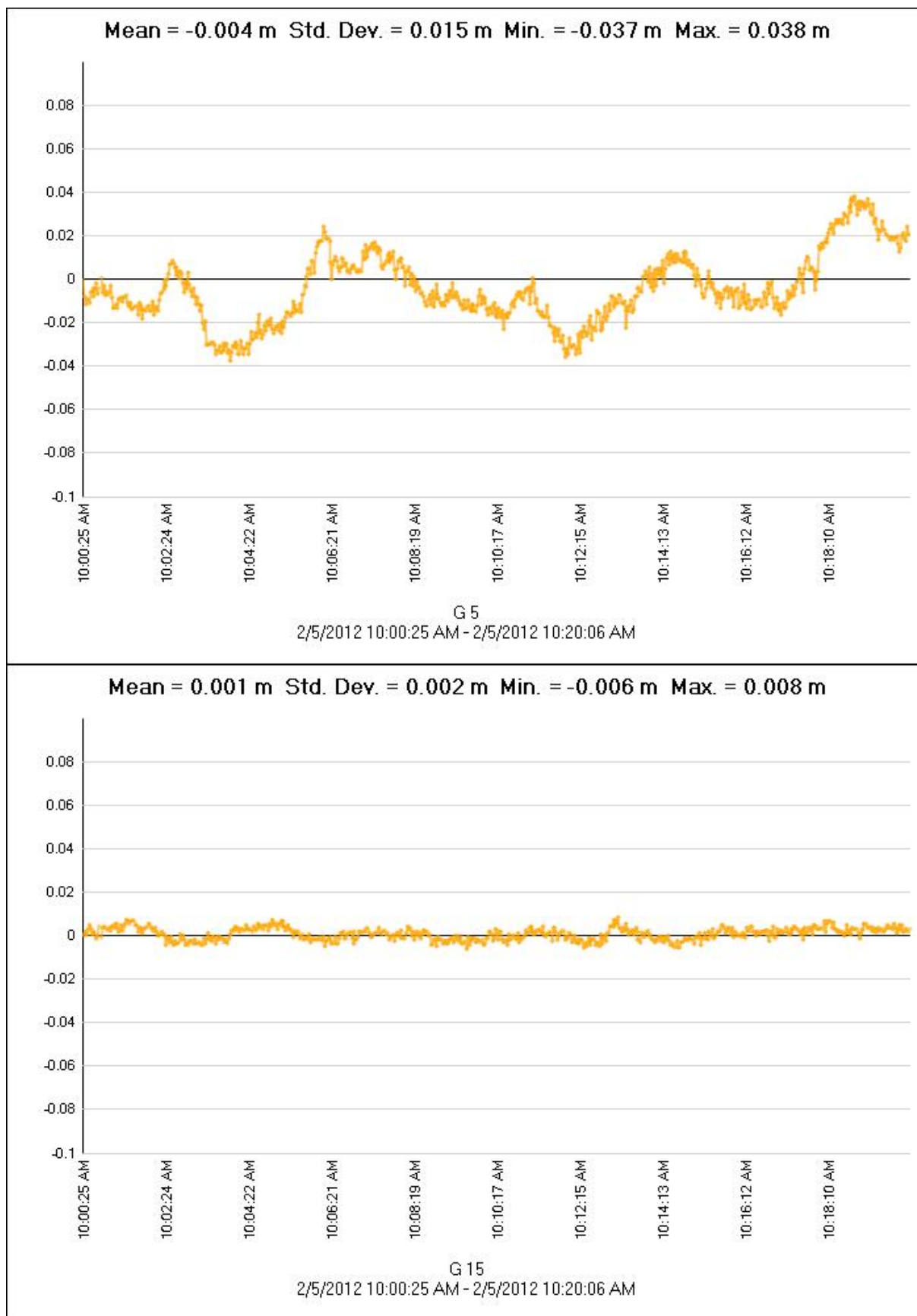
Occupations

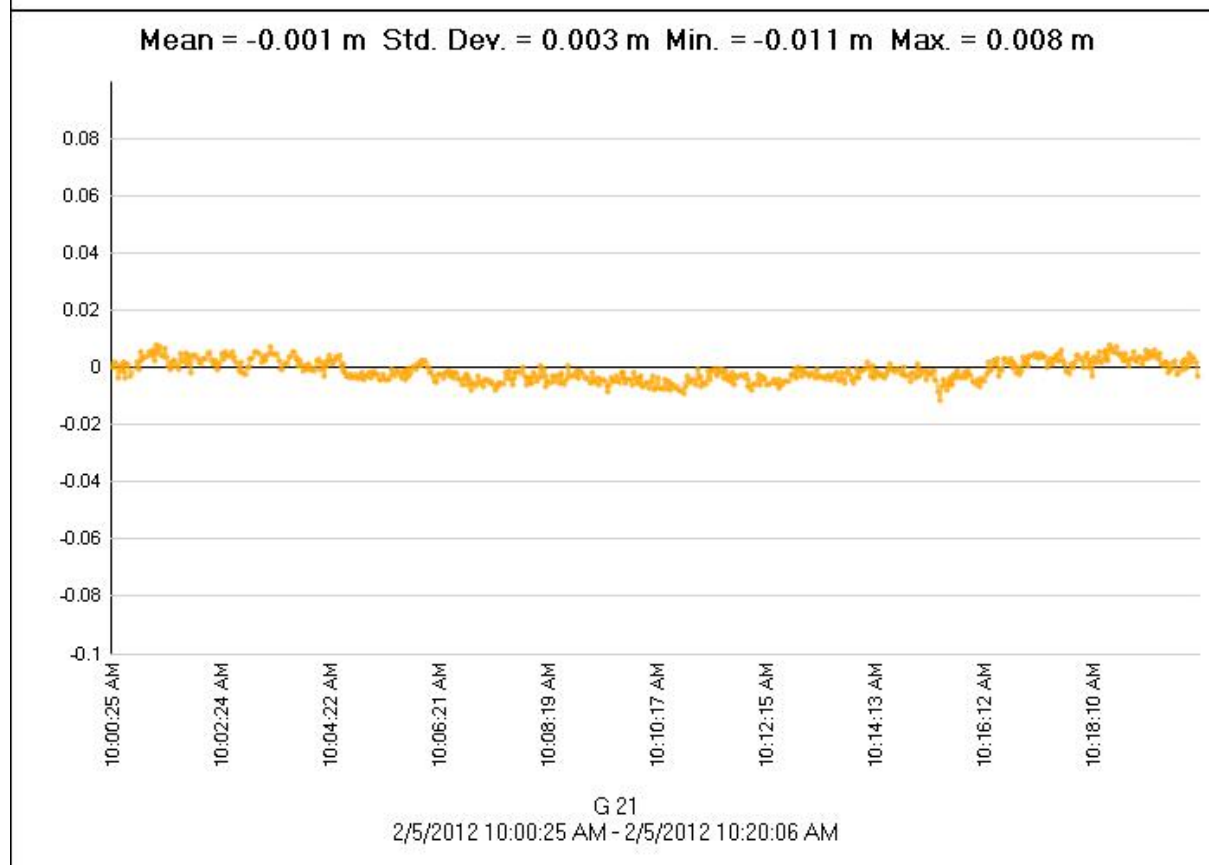
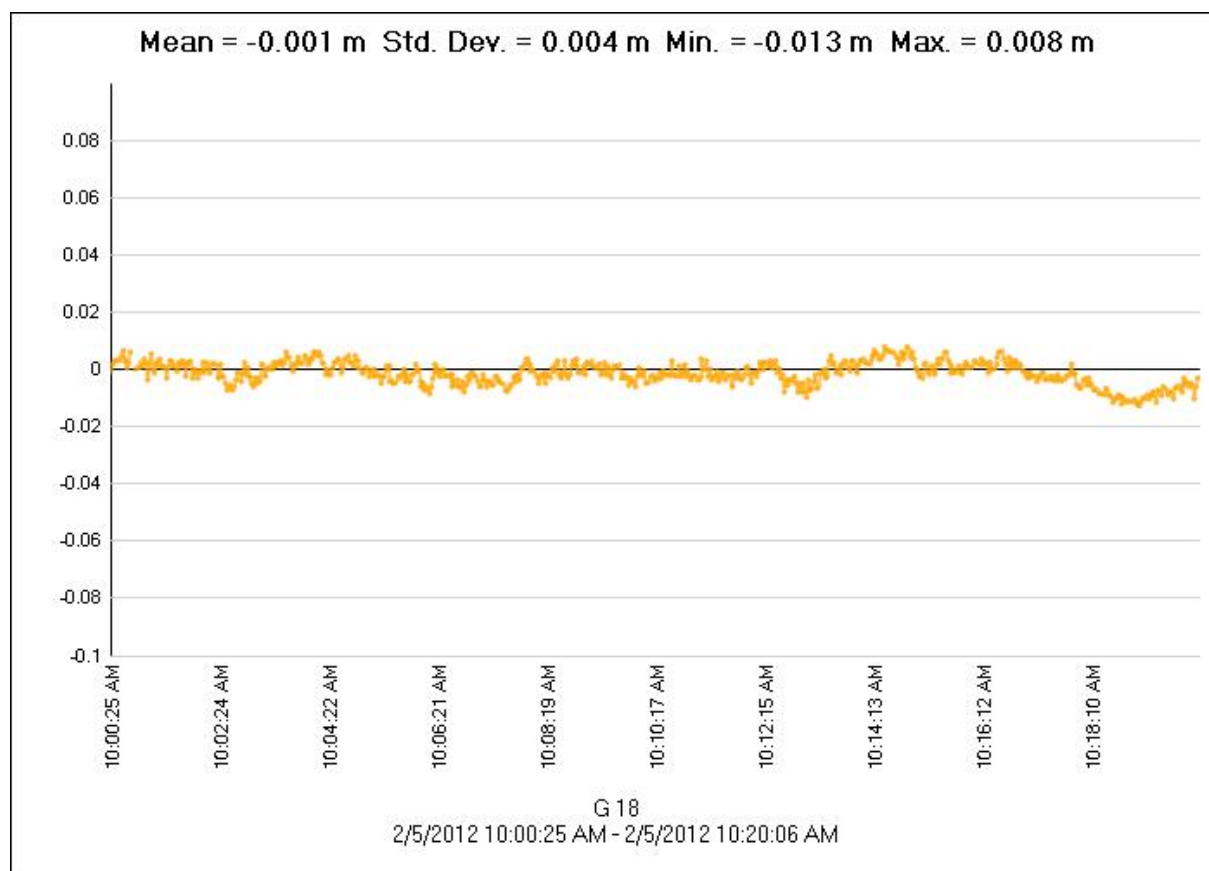
	From	To
Point ID:	19S-SPIKE	FVA42-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010360.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080362.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

Tracking Summary

SV	2/5/2012 10:00:24 AM	Duration: 00:19:42	Major interval: 00:01:00	2/5/2012 10:20:06 AM
G 5	L1 L2			
G 6	L1 L2			
G 15	L1 L2			
G 16	L1 L2			
G 18	L1 L2			
G 21	L1 L2			
G 22	L1 L2			
G 25	L1 L2			
G 26	L1 L2			
G 27	L1 L2			
G 29	L1 L2			
G 30	L1 L2			

Residuals





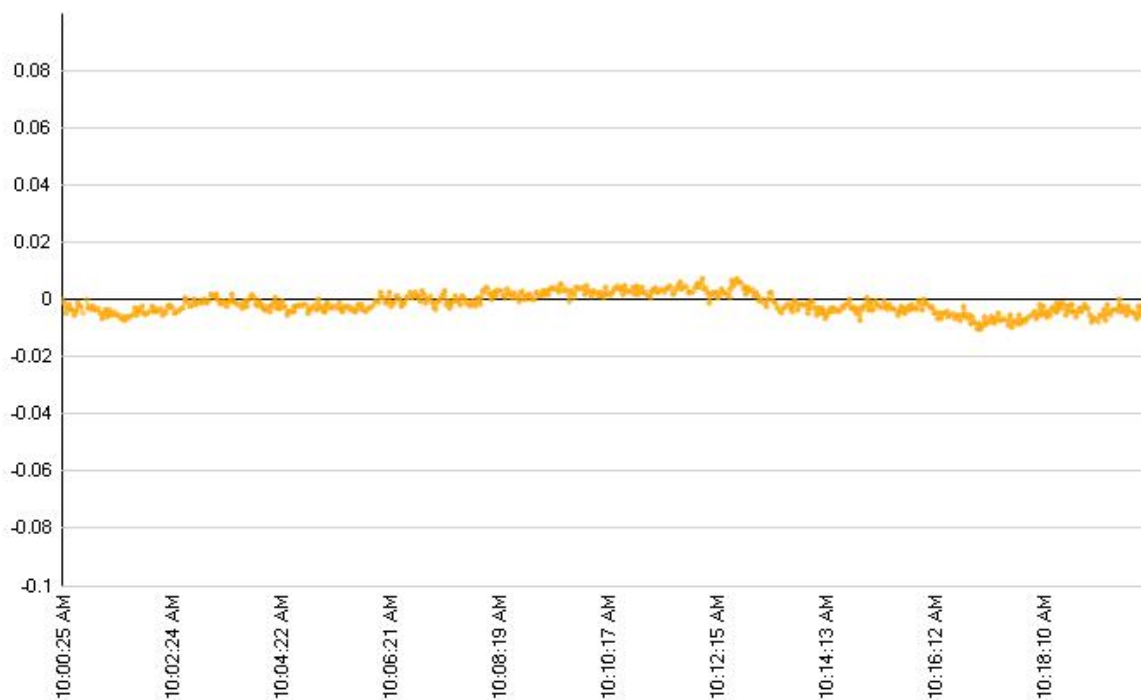
Mean = 0.006 m Std. Dev. = 0.004 m Min. = -0.004 m Max. = 0.018 m



G 26

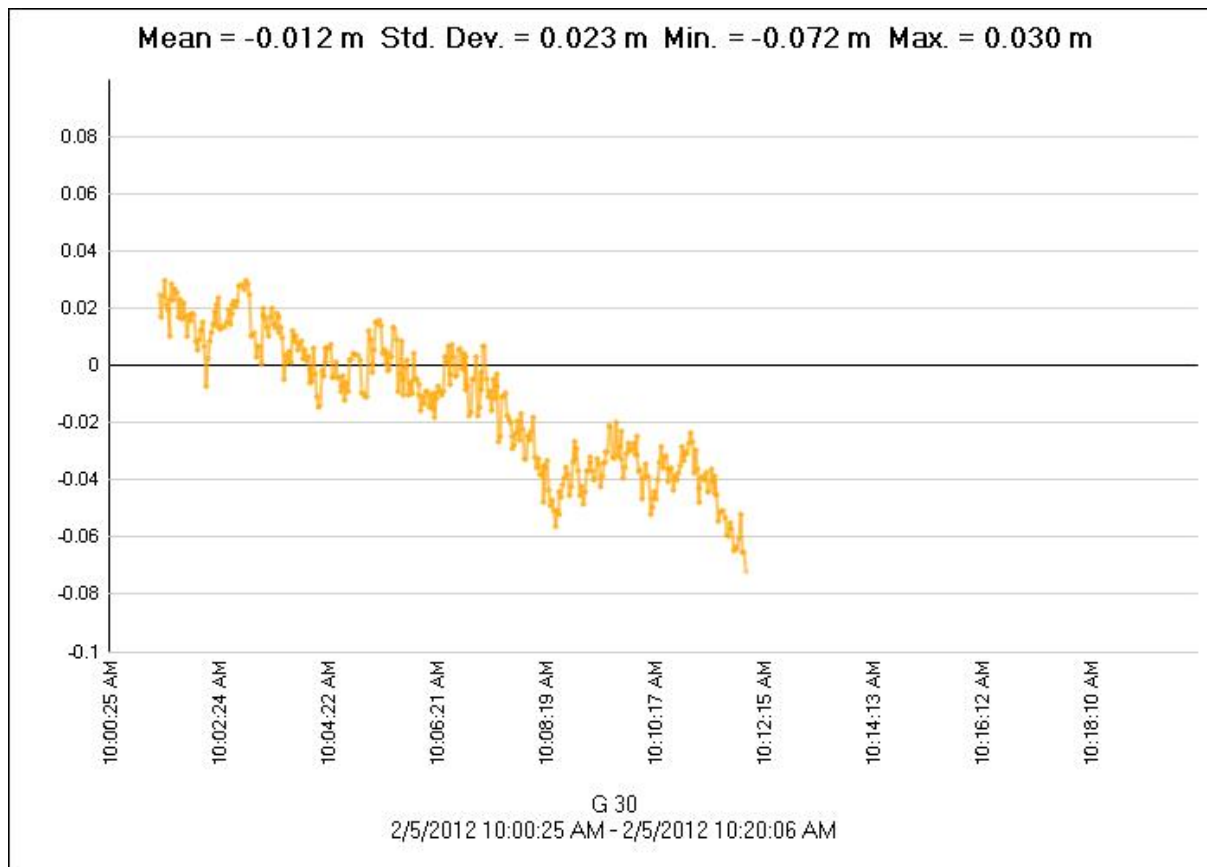
2/5/2012 10:00:25 AM - 2/5/2012 10:20:06 AM

Mean = -0.001 m Std. Dev. = 0.003 m Min. = -0.011 m Max. = 0.007 m



G 29

2/5/2012 10:00:25 AM - 2/5/2012 10:20:06 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:	Dual Frequency (L1, L2)
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

19S-SPIKE - SVA42-B2 (10:24:24 AM-10:43:14 AM) (S20)

Baseline observation: 19S-SPIKE --- SVA42-B2 (B20)

Processed: 4/11/2012 3:28:52 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.021 m

Vertical precision: 0.074 m

RMS: 0.009 m

Maximum PDOP: 6.508

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/5/2012 10:24:24 AM (Local: UTC-7hr)

Processing stop time: 2/5/2012 10:43:14 AM (Local: UTC-7hr)

Processing duration: 00:18:50

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338087.643 m	Latitude	N37°29'23.71988"	Latitude	N37°29'23.71988"
Northing	4150798.564 m	Longitude	W100°49'53.27643"	Longitude	W100°49'53.27643"
Elevation	886.743 m	Height	860.575 m	Height	860.575 m

To:	SVA42-B2				
Grid		Local		Global	
Easting	359089.151 m	Latitude	N37°15'51.61334"	Latitude	N37°15'51.61334"
Northing	4125380.192 m	Longitude	W100°35'20.96607"	Longitude	W100°35'20.96607"
Elevation	840.842 m	Height	814.303 m	Height	814.303 m

Vector					
9Ughb[	21001.507 m	NS Fwd Azimuth	139°19'24"	L	18272.033 m
BcfA\jb[	-25418.372 m	Ellipsoid Dist.	32975.926 m	M	-18888.605 m
9Yj Uhcb	-45.901 m	<Y][\h	-46.272 m	N	-19926.131 m

Standard Errors

Vector errors:					
Point ID	0.007 m	Point ID	0°00'00"	Point ID	0.007 m
Point ID	0.008 m	Point ID	0.007 m	Point ID	0.028 m
Point ID	0.038 m	Point ID	0.038 m	Point ID	0.027 m

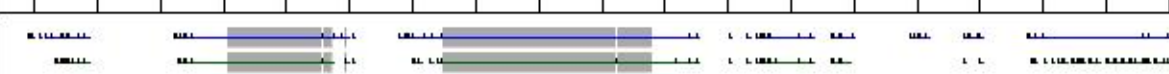








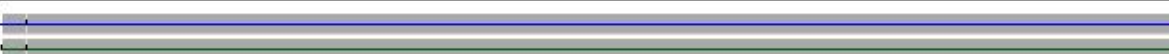

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000442438		
Y	0.0000675278	0.0007872928	
Z	-0.0000655167	-0.0006882718	0.0007079036

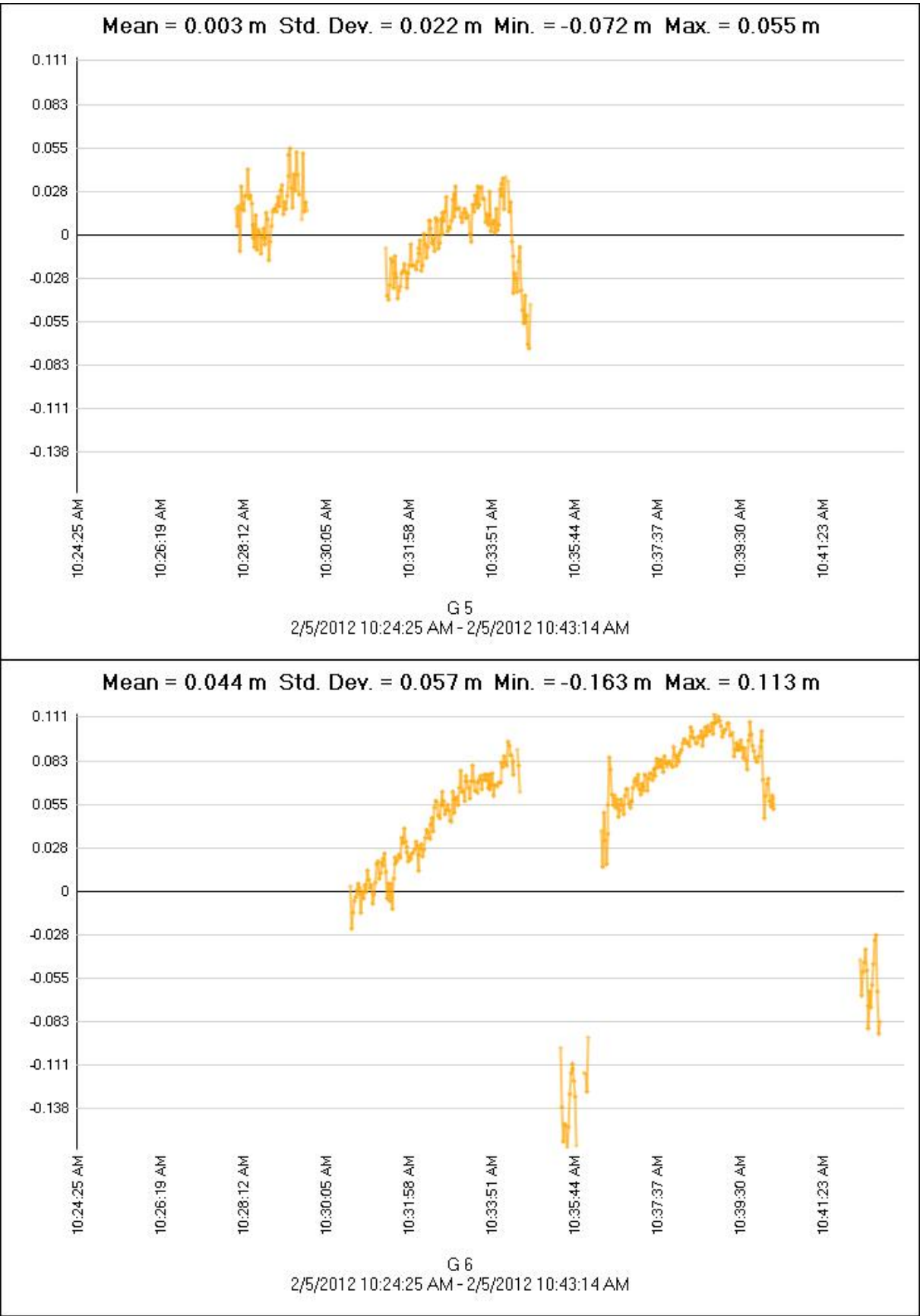
Occupations

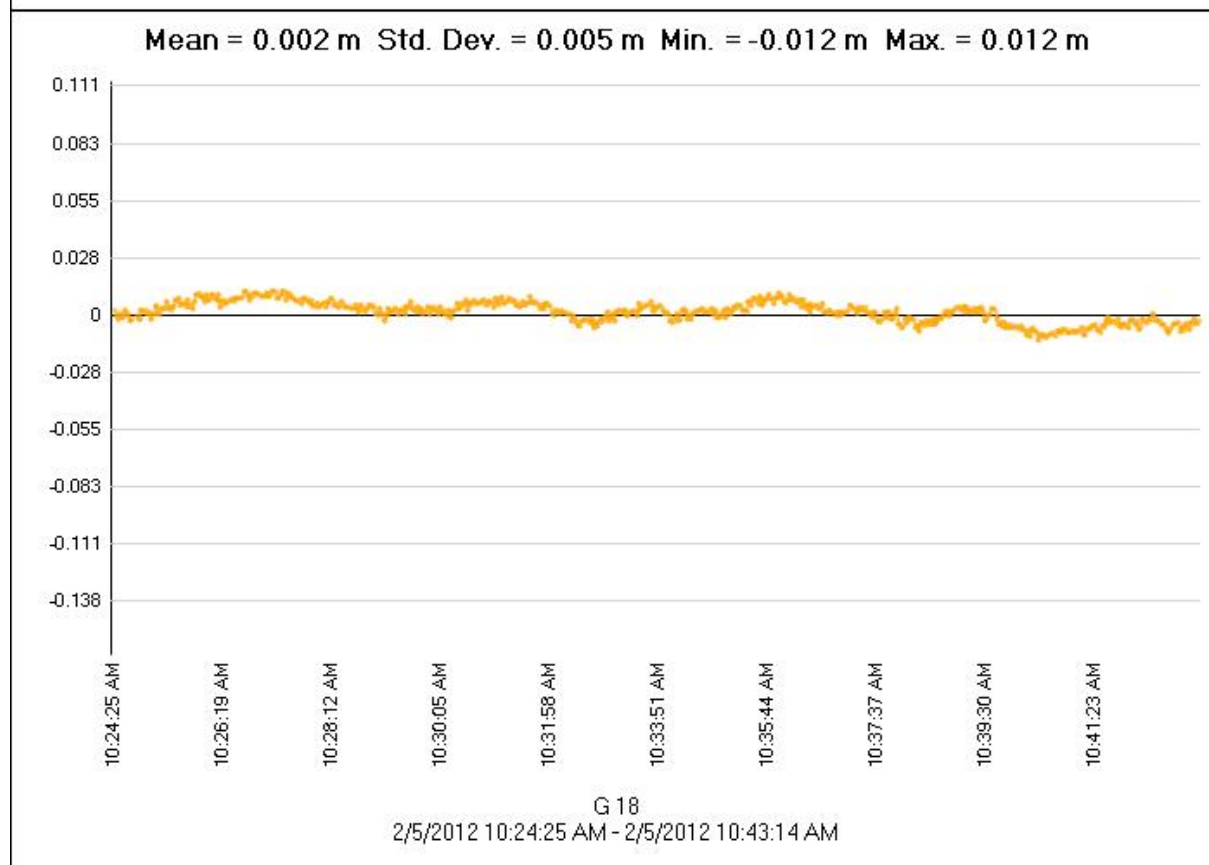
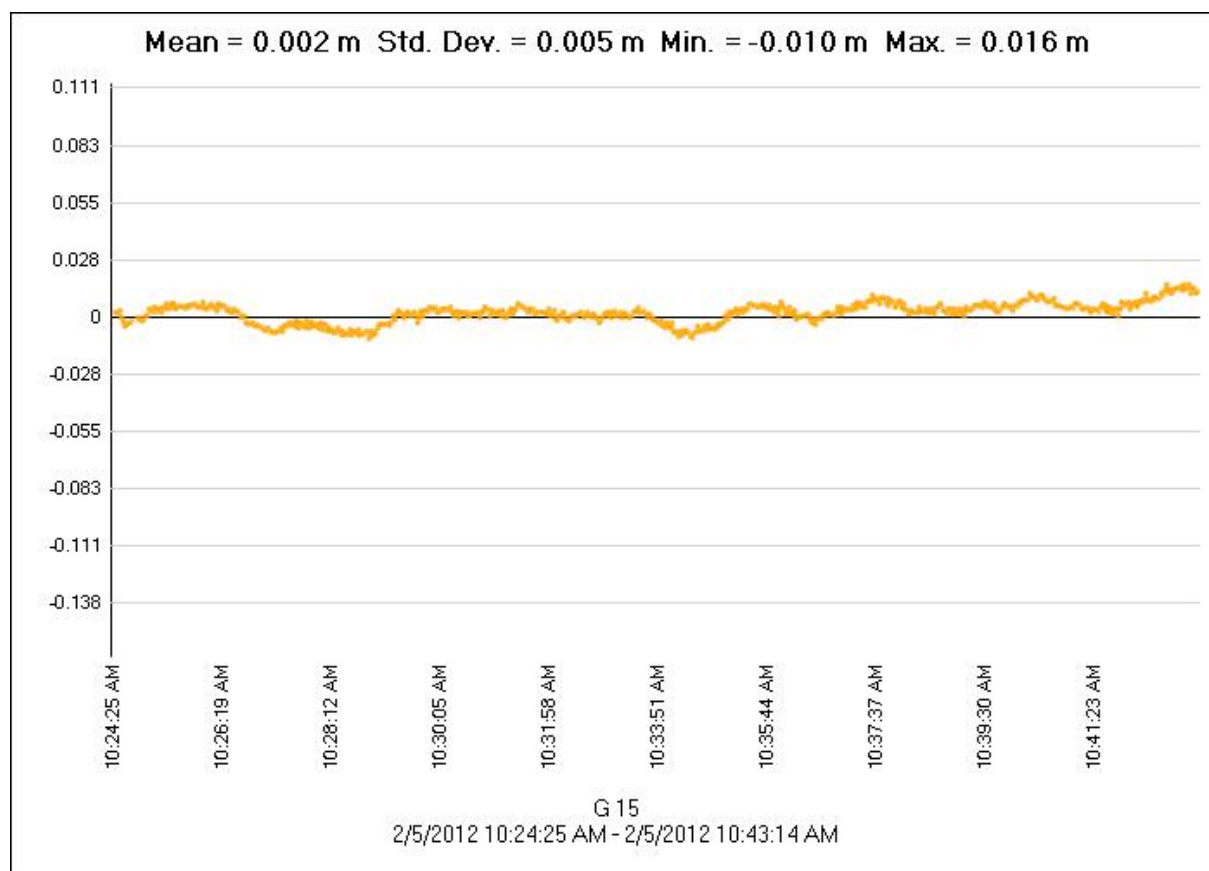
	From	To
Point ID:	19S-SPIKE	SVA42-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010360.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080363.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

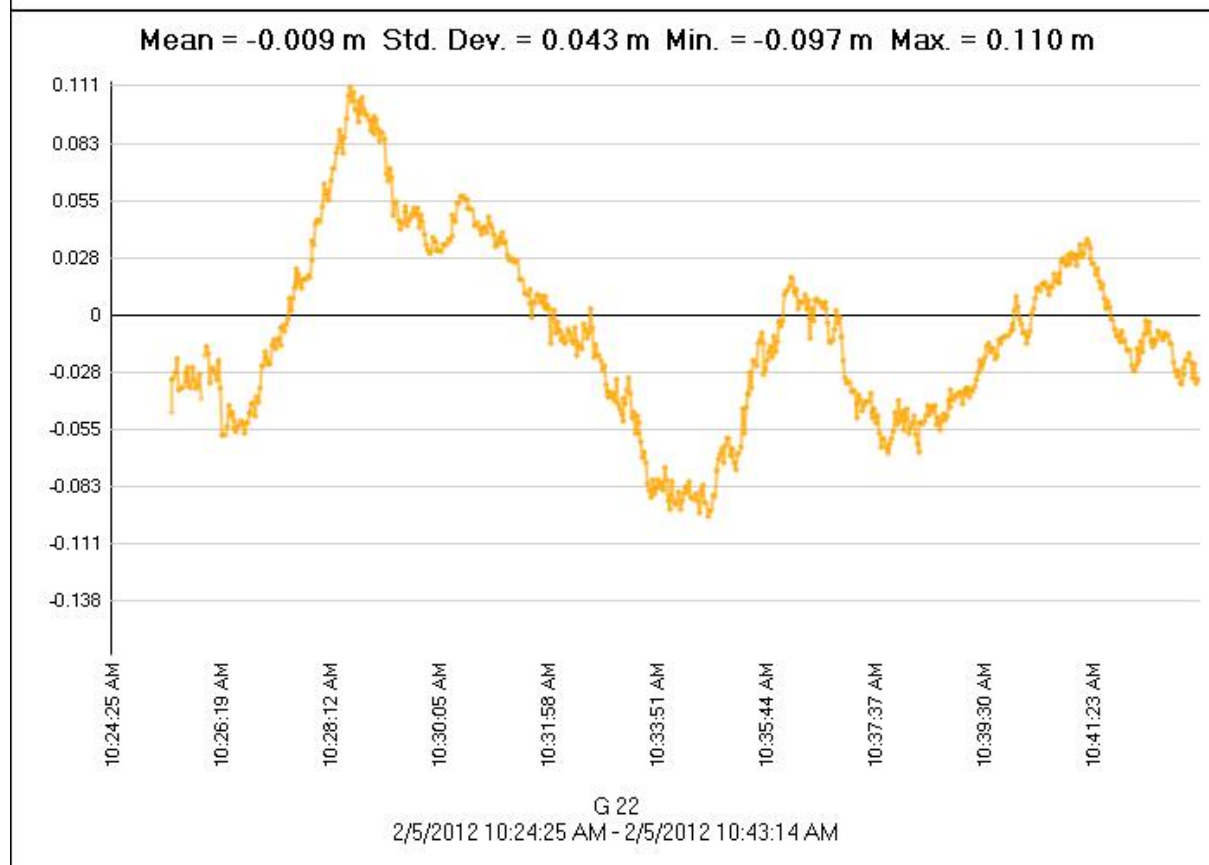
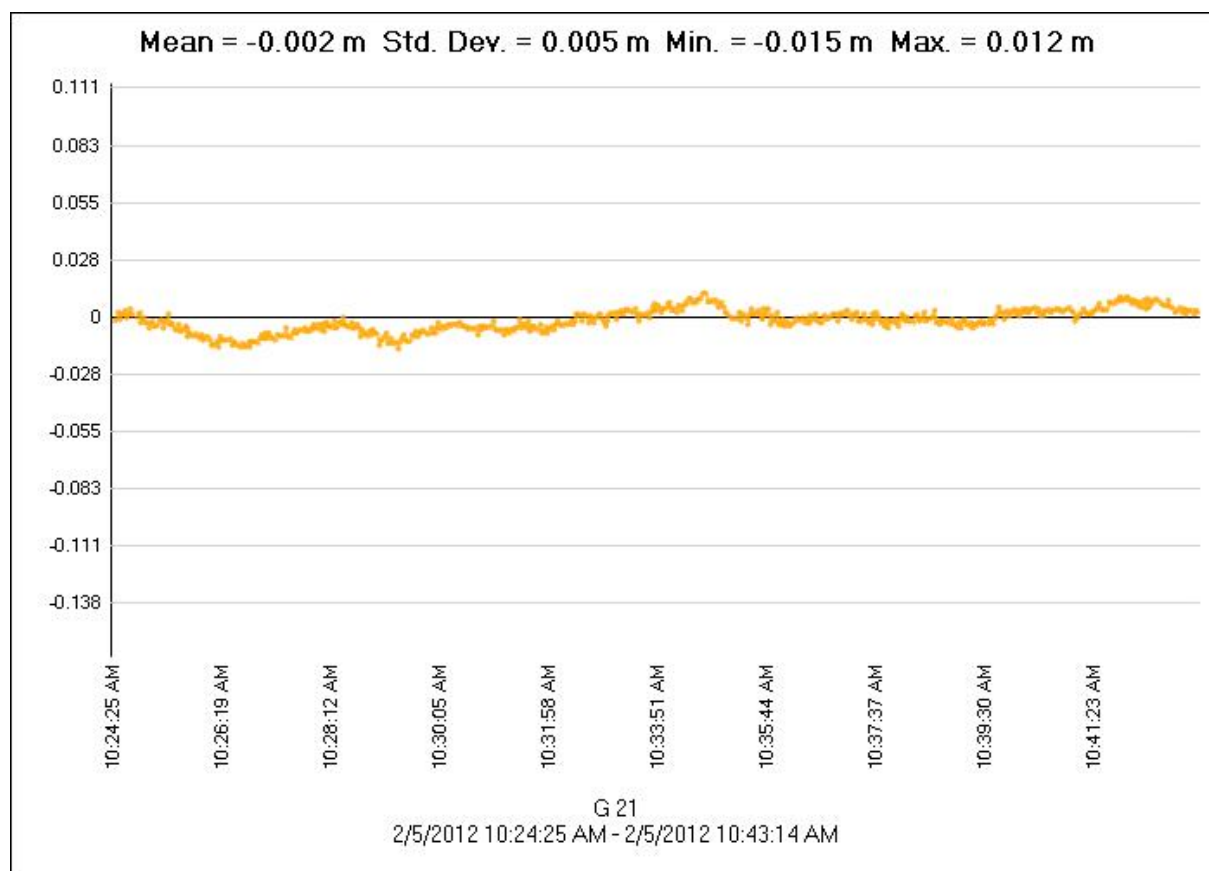
Tracking Summary

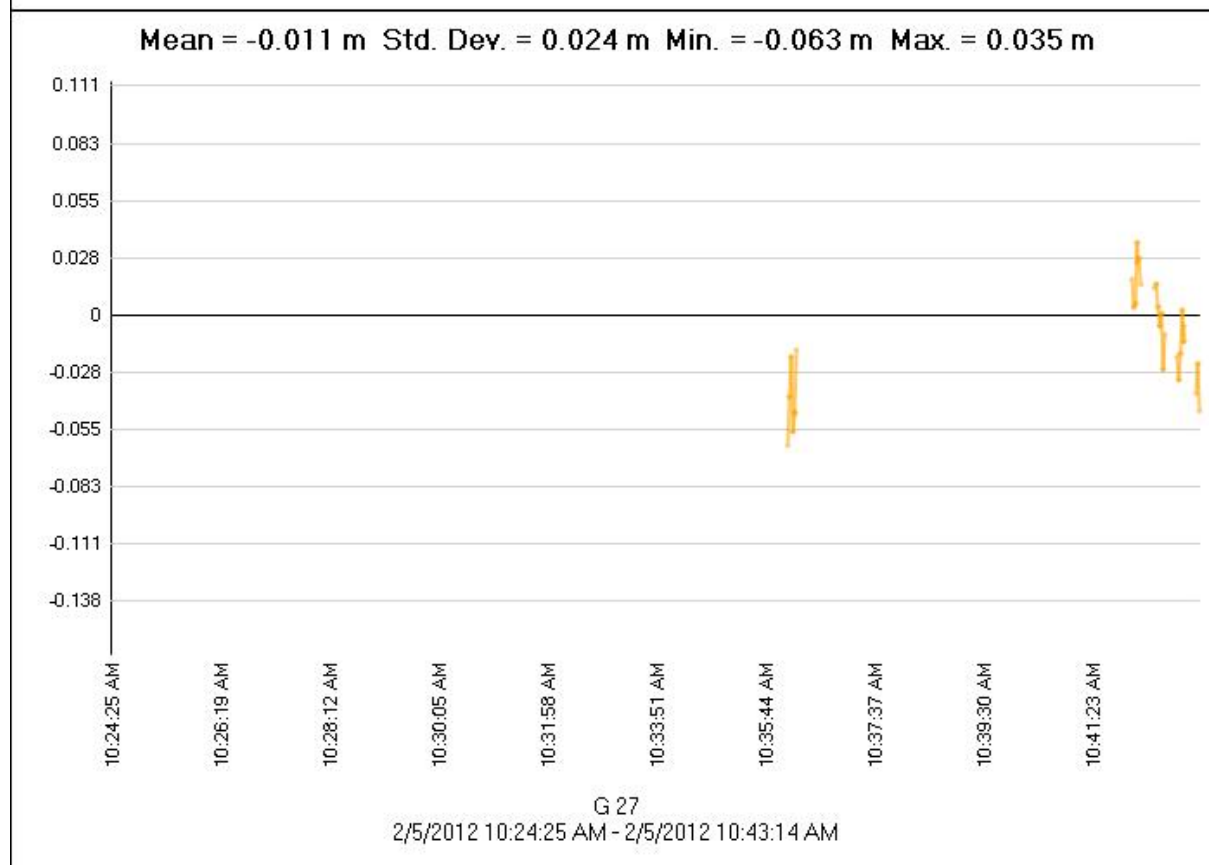
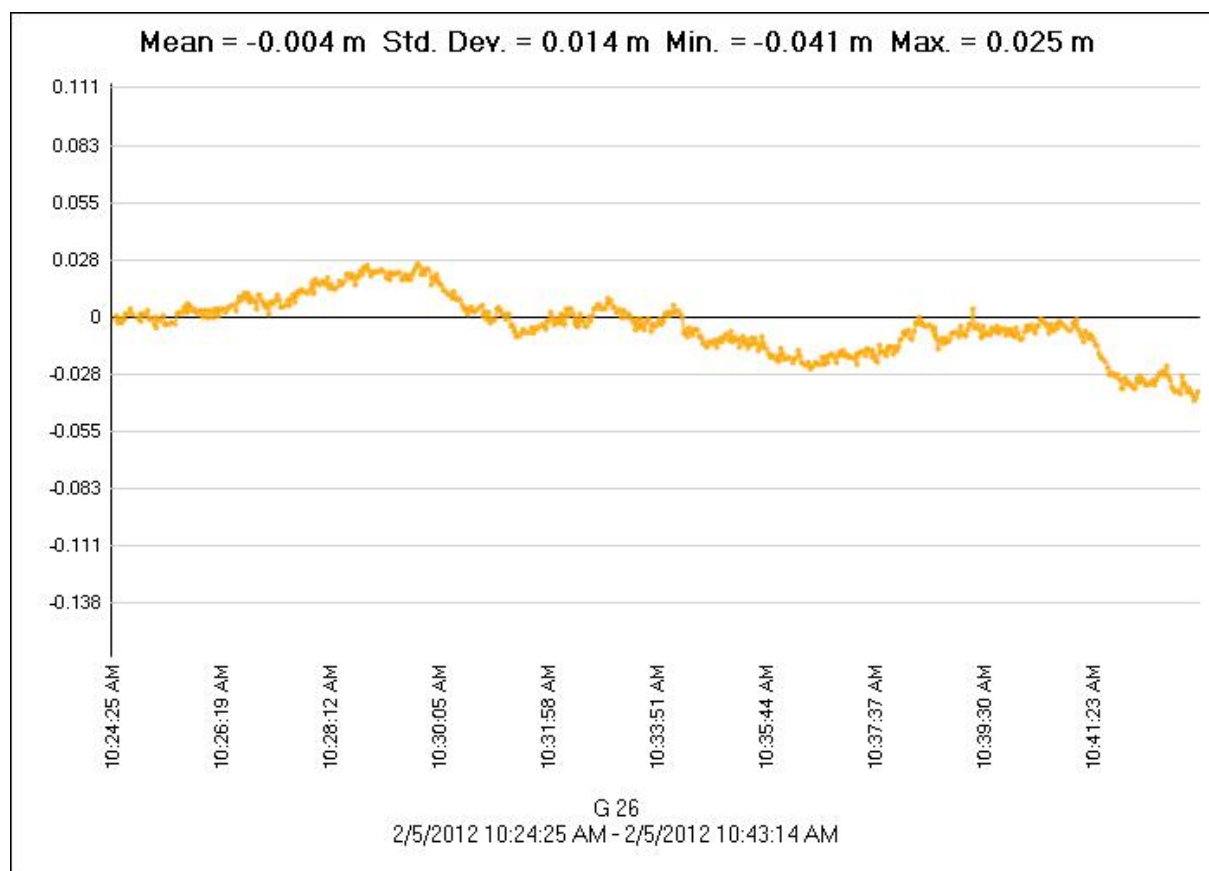
SV	2/5/2012 10:24:24 AM	Duration: 00:18:50	Major interval: 00:01:00	2/5/2012 10:43:14 AM
G 5	L1 L2			
G 6	L1 L2			
G 9	L1 L2			
G 15	L1 L2			
G 16	L1 L2			
G 18	L1 L2			
G 21	L1 L2			
G 22	L1 L2			
G 26	L1 L2			
G 27	L1 L2			
G 29	L1 L2			
G 30	L1 L2			

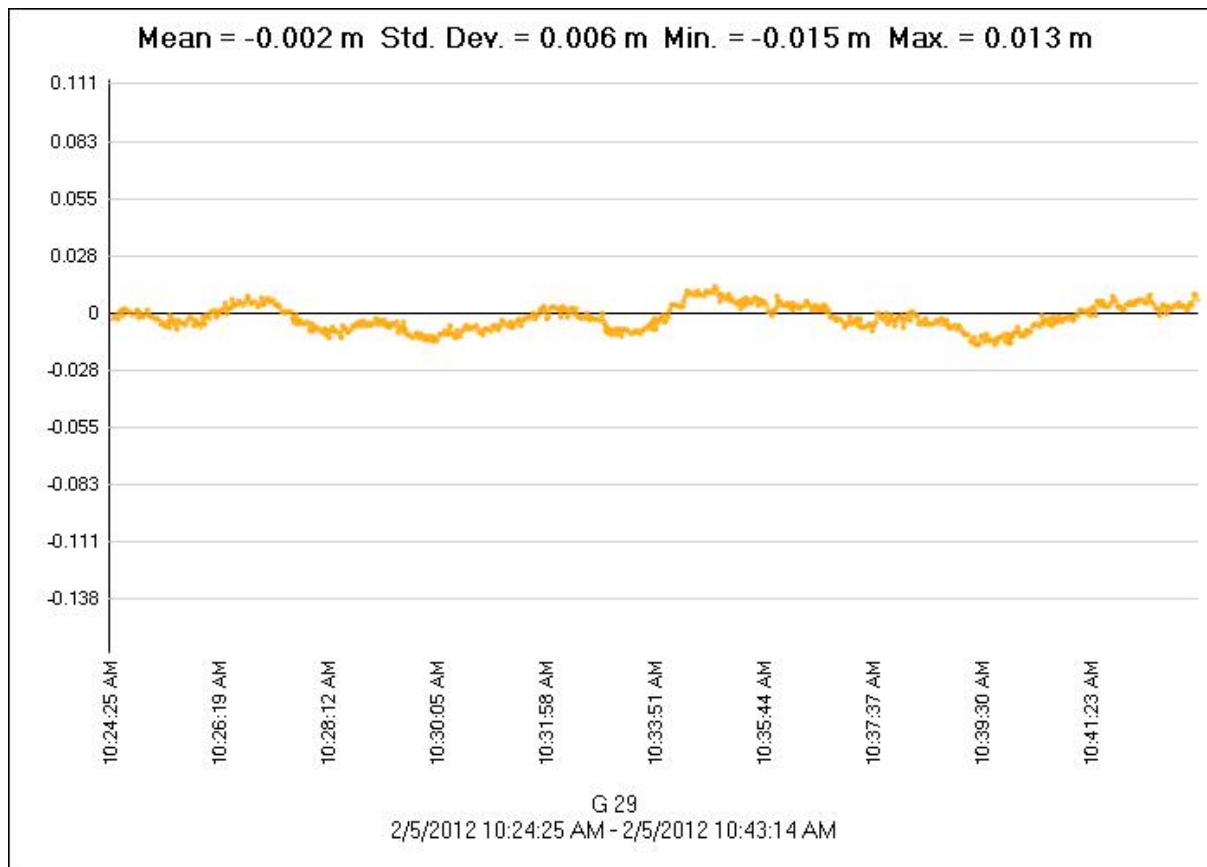
Residuals












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:	Dual Frequency (L1, L2)
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

19S-SPIKE - FVA44-B2 (11:08:35 AM-11:27:49 AM) (S21)

Baseline observation: 19S-SPIKE --- FVA44-B2 (B21)

Processed: 4/11/2012 3:29:00 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.029 m

Vertical precision: 0.047 m

RMS: 0.002 m

Maximum PDOP: 1.751

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/5/2012 11:08:35 AM (Local: UTC-7hr)

Processing stop time: 2/5/2012 11:27:49 AM (Local: UTC-7hr)

Processing duration: 00:19:14

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338087.643 m	Latitude	N37°29'23.71988"	Latitude	N37°29'23.71988"
Northing	4150798.564 m	Longitude	W100°49'53.27643"	Longitude	W100°49'53.27643"
Elevation	886.743 m	Height	860.575 m	Height	860.575 m

To:	FVA44-B2				
Grid		Local		Global	
Easting	359617.699 m	Latitude	N37°05'53.67371"	Latitude	N37°05'53.67371"
Northing	4106938.340 m	Longitude	W100°34'47.03980"	Longitude	W100°34'47.03980"
Elevation	821.923 m	Height	795.077 m	Height	795.077 m

Vector					
9Ughb[	21530.055 m	NS Fwd Azimuth	152°44'40"	L	17051.059 m
Bcfh\jb[	-43860.224 m	Ellipsoid Dist.	48865.392 m	M	-29979.097 m
9Yj Uhcb	-64.820 m	<Y][\h	-65.498 m	N	-34625.936 m

Standard Errors

Vector errors:					
Point ID	0.008 m	Point ID	0°00'00"	Point ID	0.006 m
Point ID	0.012 m	Point ID	0.011 m	Point ID	0.022 m
Point ID	0.024 m	Point ID	0.024 m	Point ID	0.016 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000398759		
Y	-0.0000133785	0.0005010604	
Z	0.0000355639	-0.0002046795	0.0002454654

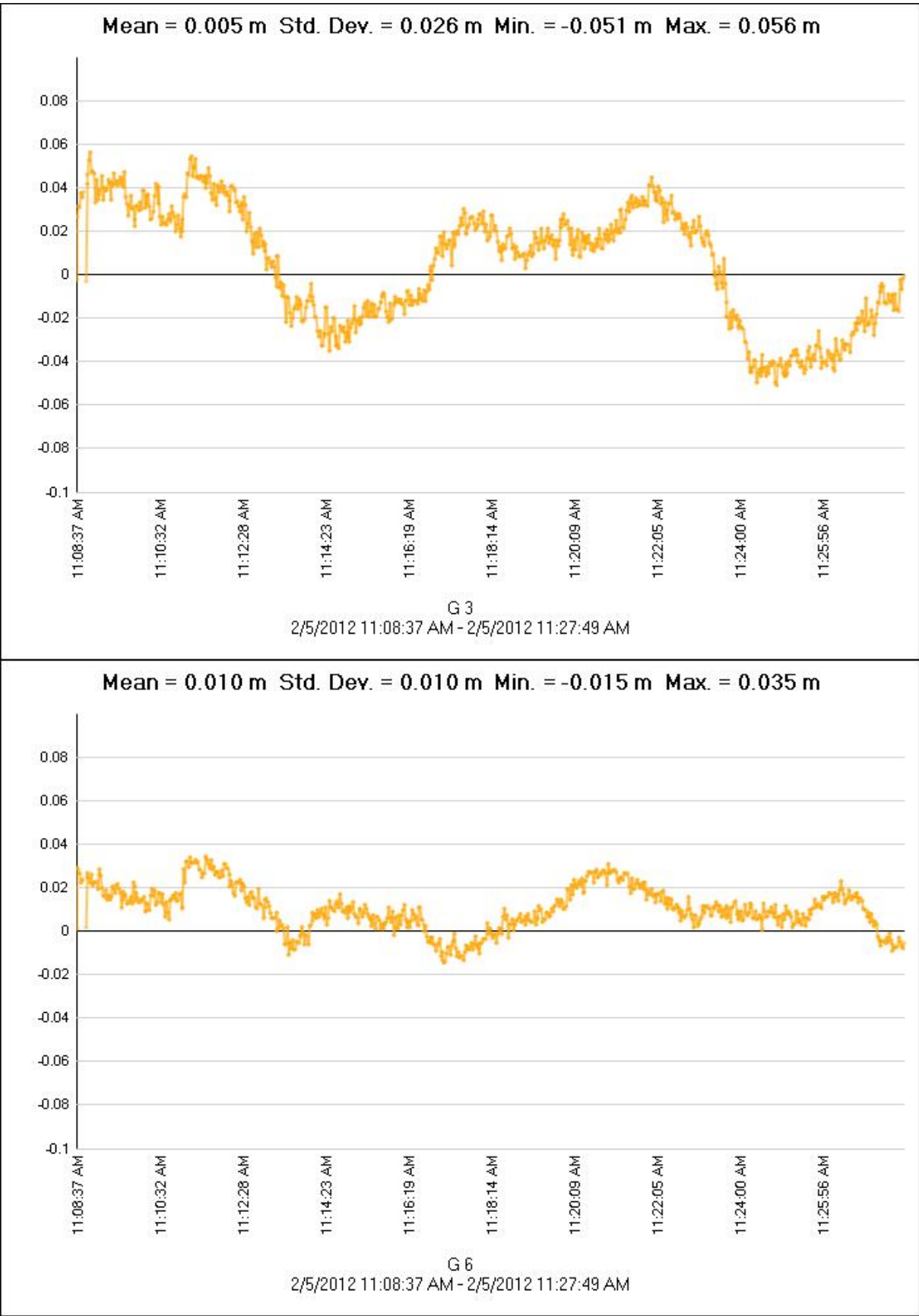
Occupations

	From	To
Point ID:	19S-SPIKE	FVA44-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010360.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080364.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

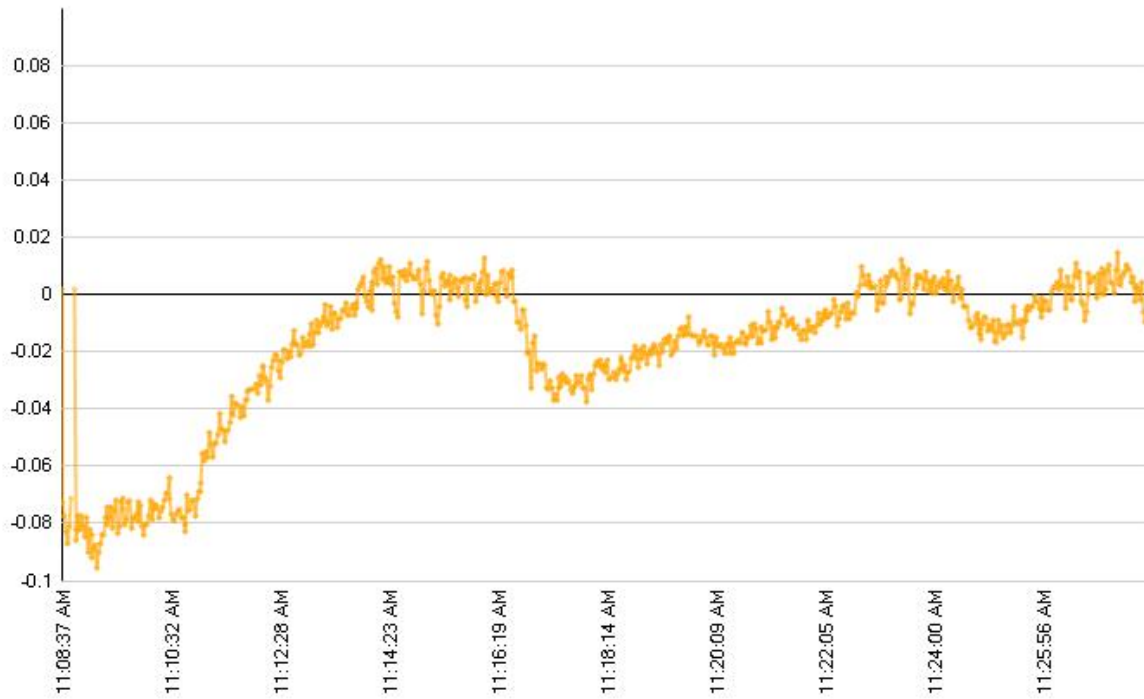
Tracking Summary

SV	2/5/2012 11:08:35 AM	Duration: 00:19:14	Major interval: 00:01:00	2/5/2012 11:27:49 AM
G 3	L1 L2			
G 6	L1 L2			
G 9	L1 L2			
G 14	L1 L2			
G 15	L1 L2			
G 16	L1 L2			
G 18	L1 L2			
G 21	L1 L2			
G 22	L1 L2			
G 26	L1 L2			
G 27	L1 L2			
G 29	L1 L2			

Residuals



Mean = -0.018 m Std. Dev. = 0.026 m Min. = -0.095 m Max. = 0.015 m



G 9

2/5/2012 11:08:37 AM - 2/5/2012 11:27:49 AM

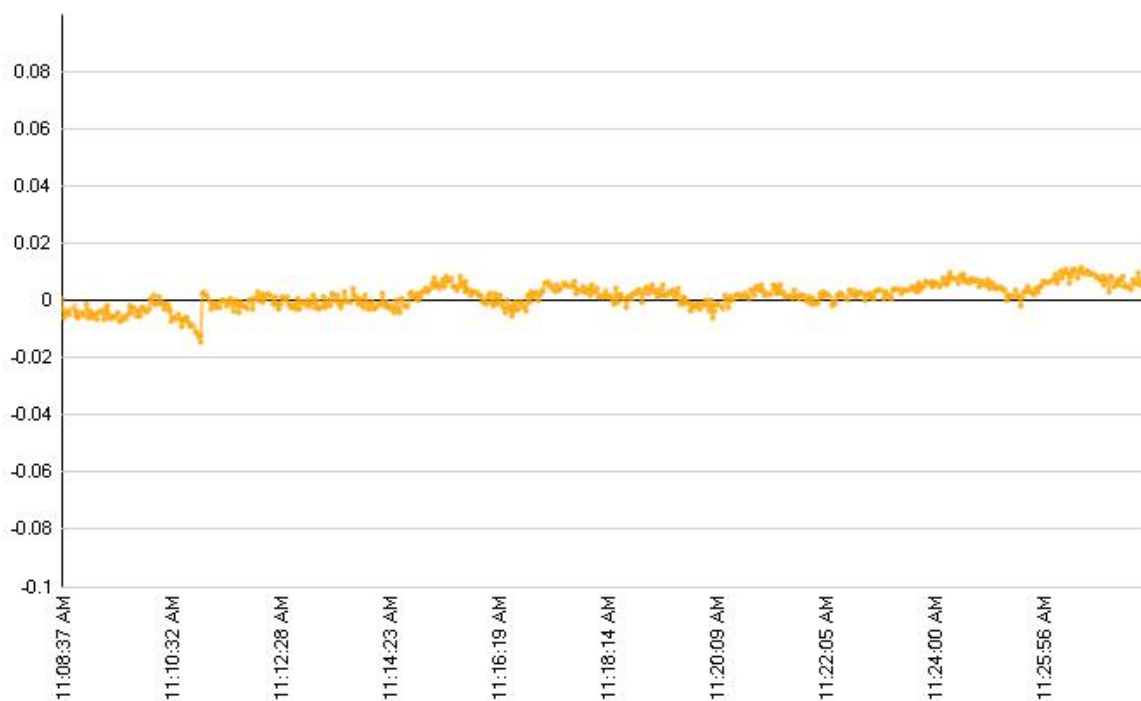
Mean = 0.004 m Std. Dev. = 0.005 m Min. = -0.006 m Max. = 0.018 m



G 15

2/5/2012 11:08:37 AM - 2/5/2012 11:27:49 AM

Mean = 0.001 m Std. Dev. = 0.004 m Min. = -0.014 m Max. = 0.012 m



G 18

2/5/2012 11:08:37 AM - 2/5/2012 11:27:49 AM

Mean = 0.002 m Std. Dev. = 0.003 m Min. = -0.009 m Max. = 0.013 m



G 21

2/5/2012 11:08:37 AM - 2/5/2012 11:27:49 AM

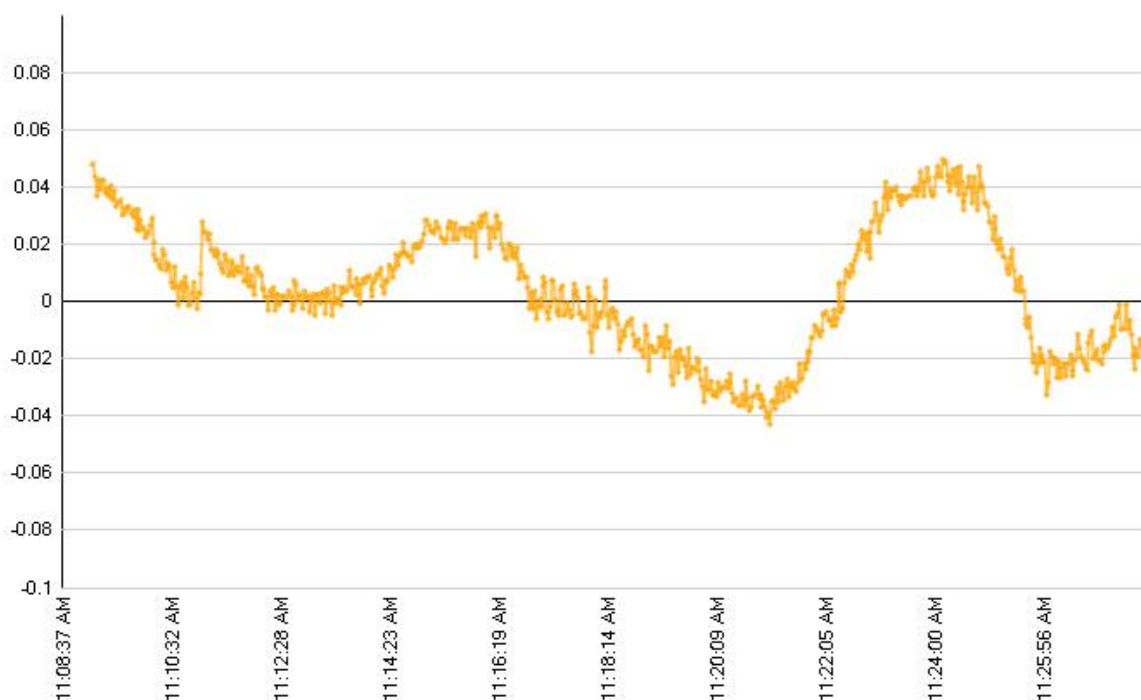
Mean = -0.012 m Std. Dev. = 0.021 m Min. = -0.049 m Max. = 0.069 m



G 22

2/5/2012 11:08:37 AM - 2/5/2012 11:27:49 AM

Mean = 0.004 m Std. Dev. = 0.021 m Min. = -0.043 m Max. = 0.049 m



G 26

2/5/2012 11:08:37 AM - 2/5/2012 11:27:49 AM

Mean = -0.014 m Std. Dev. = 0.017 m Min. = -0.069 m Max. = 0.023 m



G 27

2/5/2012 11:08:37 AM - 2/5/2012 11:27:49 AM

Mean = -0.015 m Std. Dev. = 0.023 m Min. = -0.069 m Max. = 0.040 m





G 29

2/5/2012 11:08:37 AM - 2/5/2012 11:27:49 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:	Dual Frequency (L1, L2)
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

19S-SPIKE - SVA44-B2 (11:34:28 AM-11:54:16 AM) (S22)

Baseline observation: 19S-SPIKE --- SVA44-B2 (B22)

Processed: 4/11/2012 3:28:57 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.060 m

Vertical precision: 0.052 m

RMS: 0.011 m

Maximum PDOP: 1.969

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/5/2012 11:34:28 AM (Local: UTC-7hr)

Processing stop time: 2/5/2012 11:54:16 AM (Local: UTC-7hr)

Processing duration: 00:19:47

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338087.643 m	Latitude	N37°29'23.71988"	Latitude	N37°29'23.71988"
Northing	4150798.564 m	Longitude	W100°49'53.27643"	Longitude	W100°49'53.27643"
Elevation	886.743 m	Height	860.575 m	Height	860.575 m

To:	SVA44-B2				
Grid		Local		Global	
Easting	359620.768 m	Latitude	N37°05'51.25509"	Latitude	N37°05'51.25509"
Northing	4106863.730 m	Longitude	W100°34'46.86526"	Longitude	W100°34'46.86526"
Elevation	820.916 m	Height	794.069 m	Height	794.069 m

Vector					
9Ughb[	21533.124 m	NS Fwd Azimuth	152°46'47"	L	17047.186 m
Bcfh\jb[	-43934.834 m	Ellipsoid Dist.	48933.738 m	M	-30023.312 m
9Yj Uhcb	-65.827 m	<Y][\h	-66.506 m	N	-34686.021 m

Standard Errors

Vector errors:					
Point ID	0.011 m	Point ID	0°00'00"	Point ID	0.012 m
Point ID	0.025 m	Point ID	0.022 m	Point ID	0.029 m
Point ID	0.026 m	Point ID	0.026 m	Point ID	0.021 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0001460870		
Y	0.0001348505	0.0008162825	
Z	0.0000182838	0.0000009239	0.0004525247

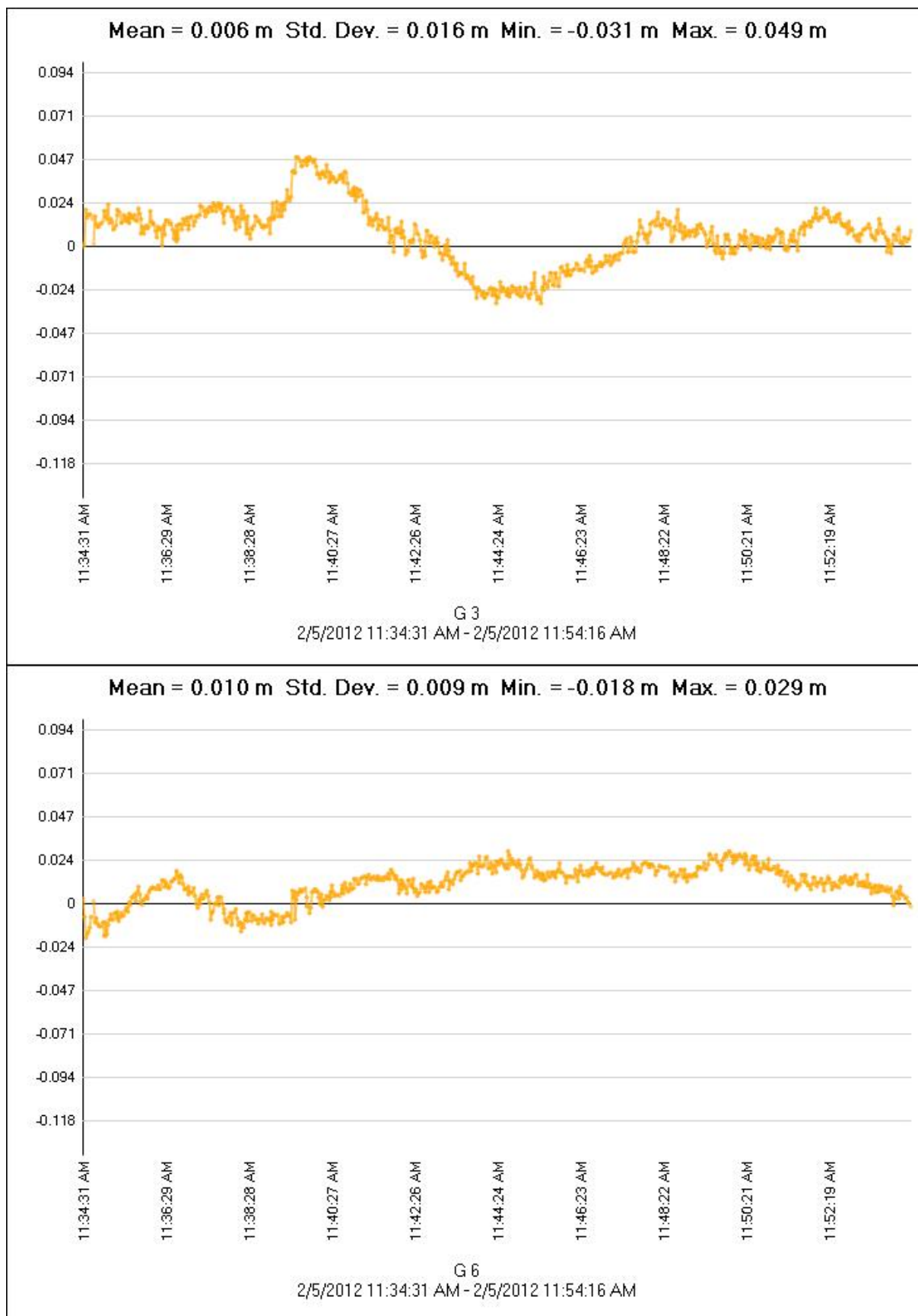
Occupations

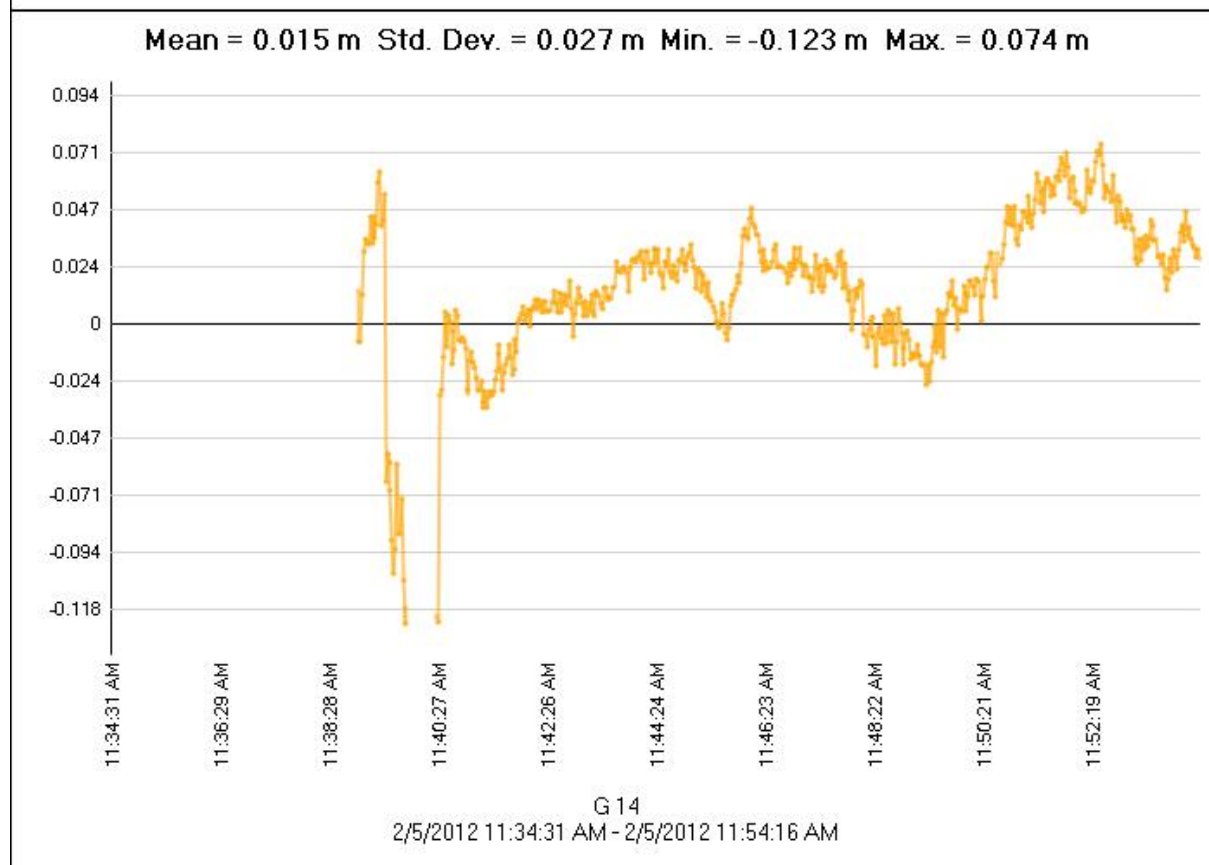
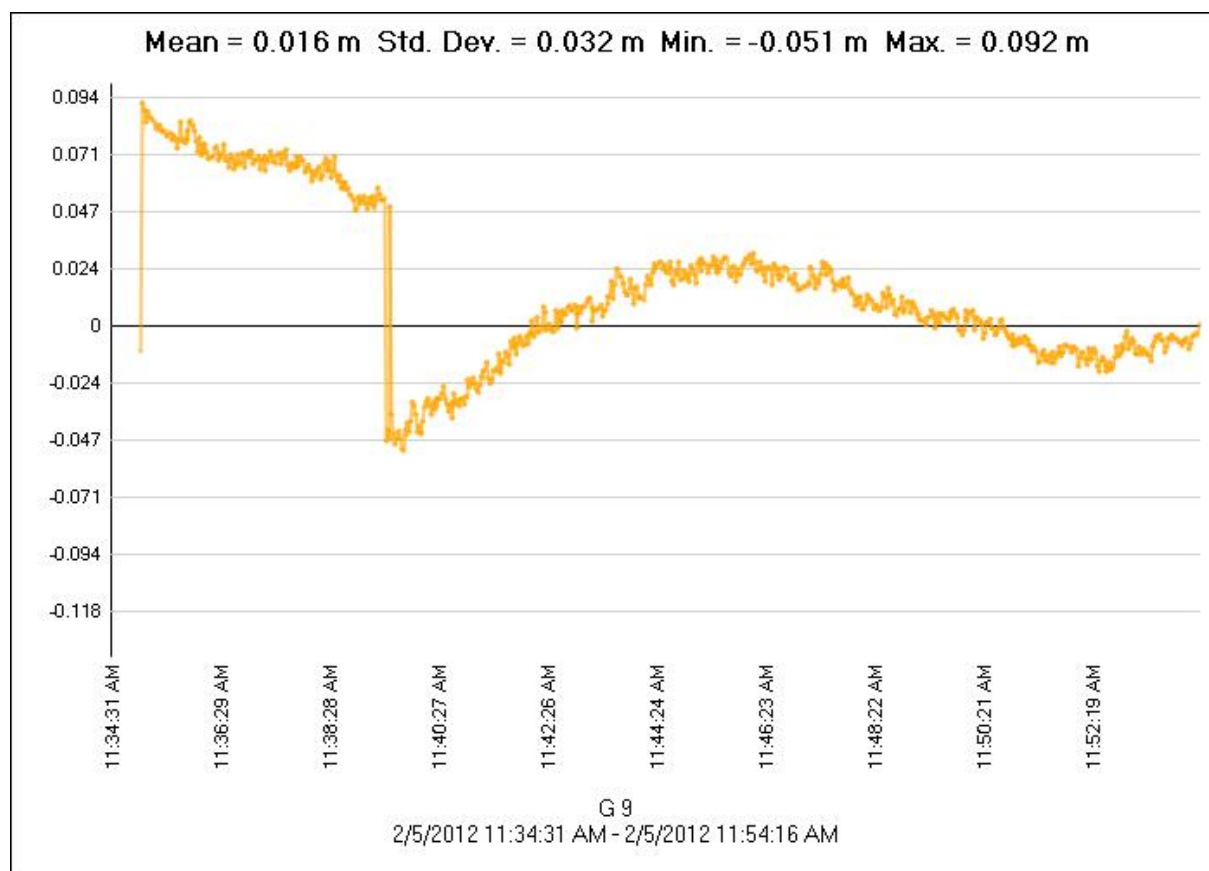
	From	To
Point ID:	19S-SPIKE	SVA44-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010360.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080365.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

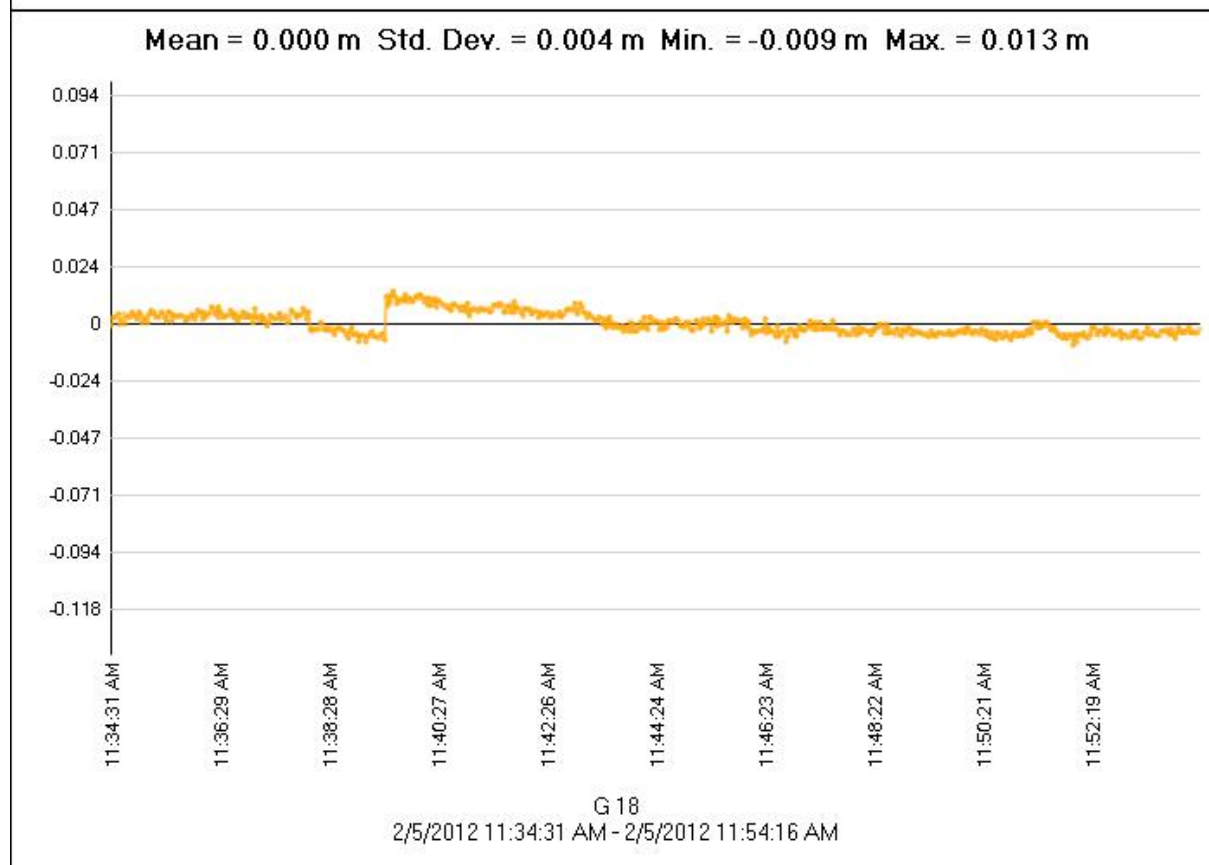
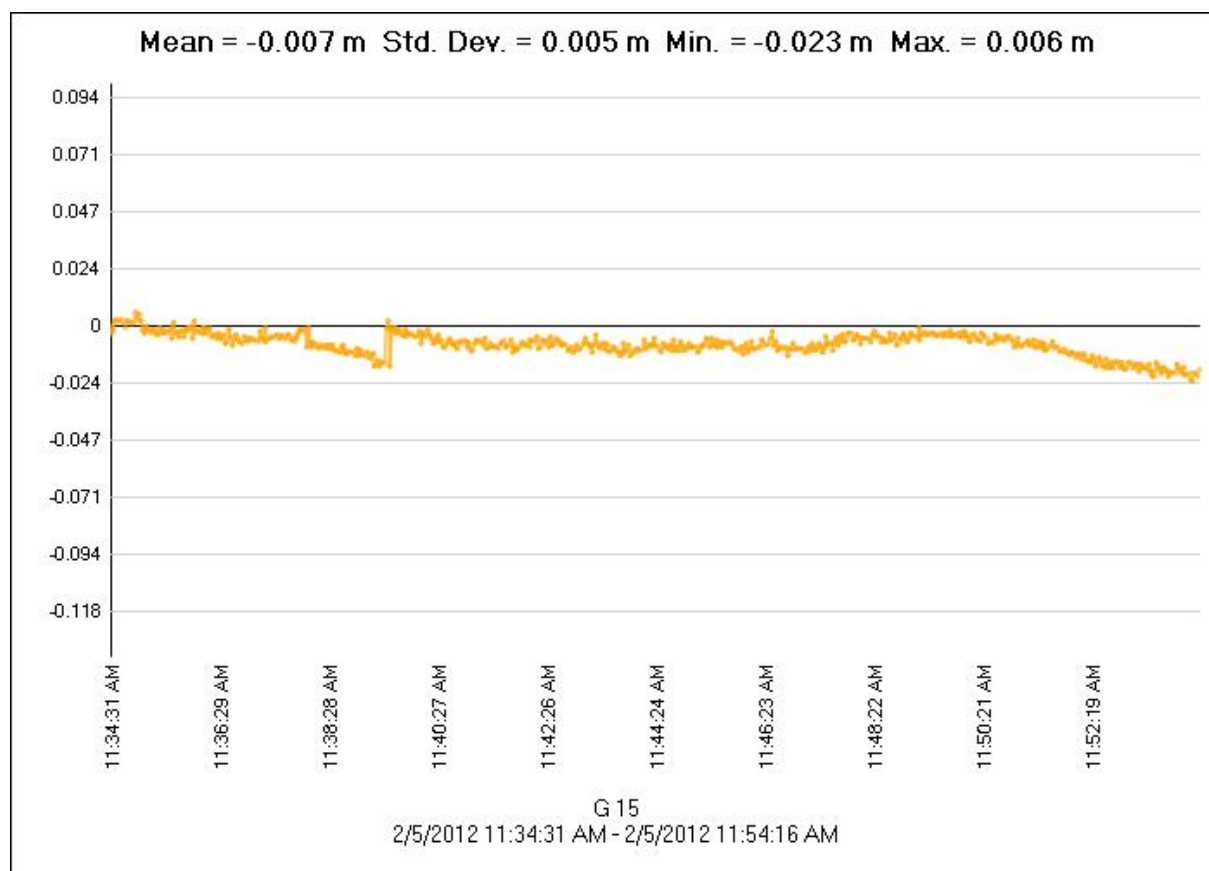
Tracking Summary

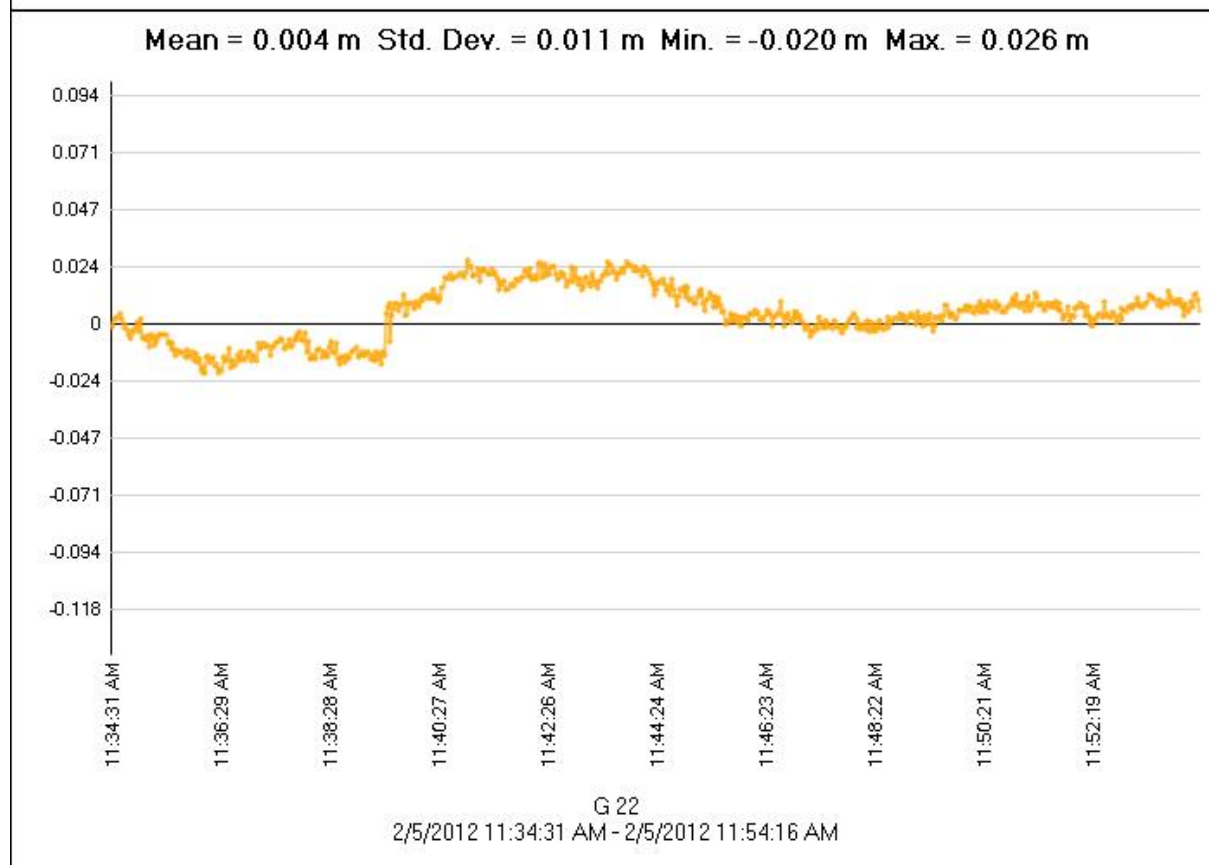
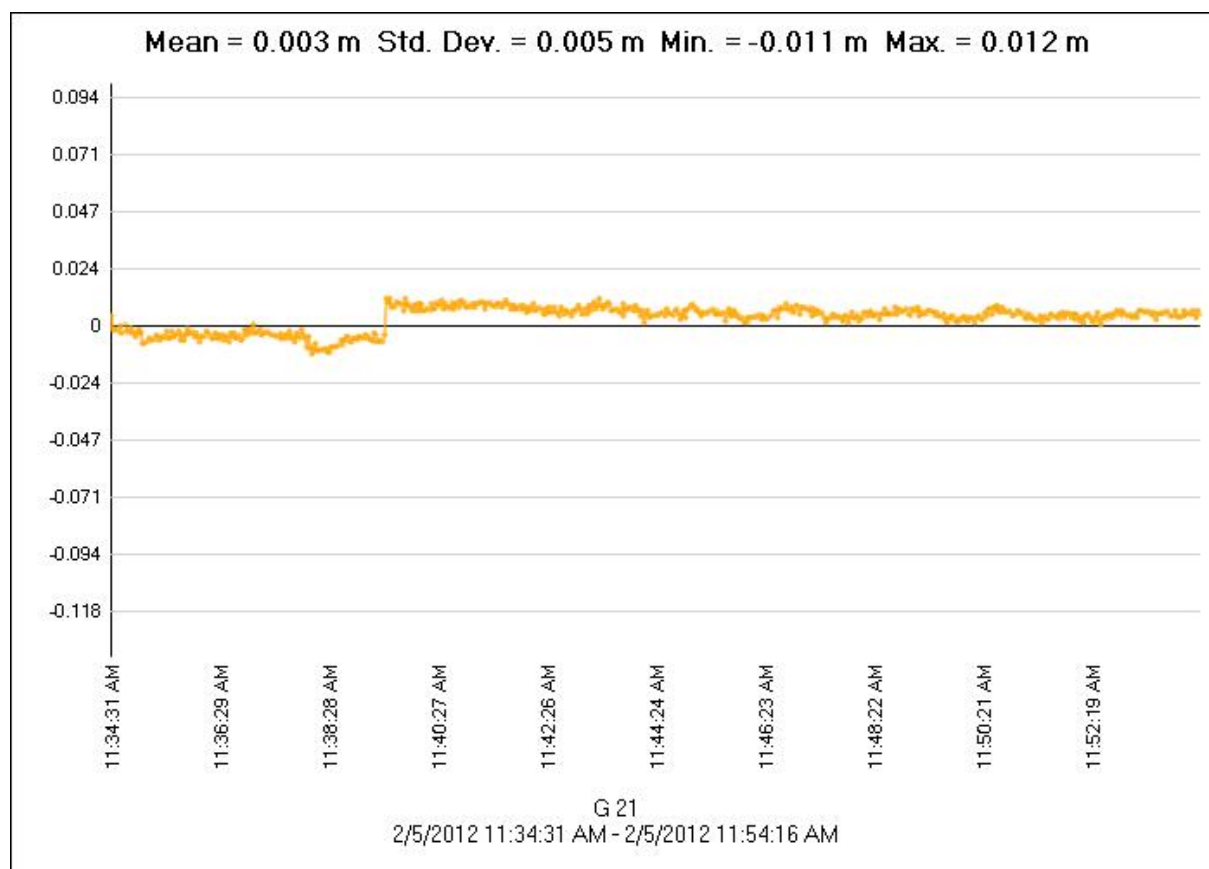
SV	2/5/2012 11:34:28 AM	Duration: 00:19:47.5000000	Major interval: 00:01:00	2/5/2012 11:54:16 AM
G 3	L1 L2			
G 6	L1 L2			
G 9	L1 L2			
G 14	L1 L2			
G 15	L1 L2			
G 16	L1 L2			
G 18	L1 L2			
G 19	L1 L2			
G 21	L1 L2			
G 22	L1 L2			
G 26	L1 L2			
G 27	L1 L2			
G 29	L1 L2			

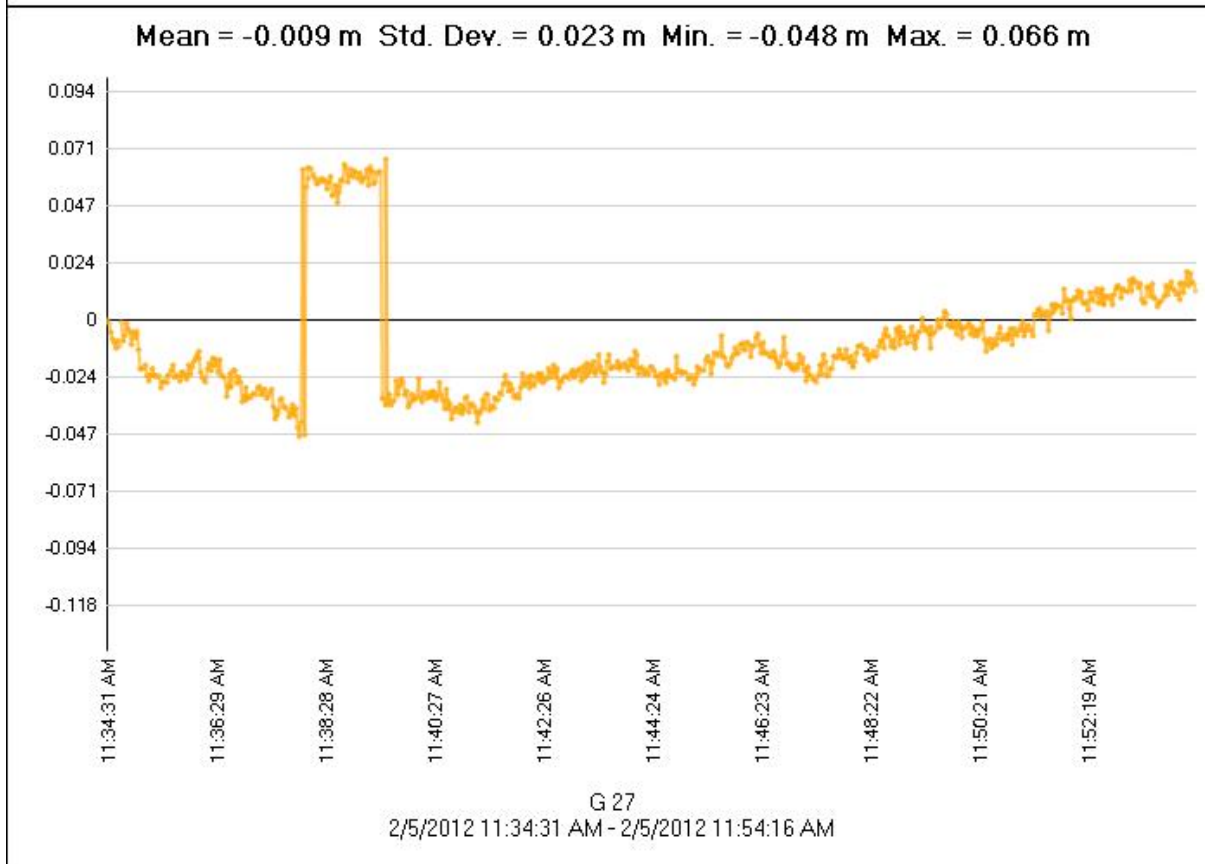
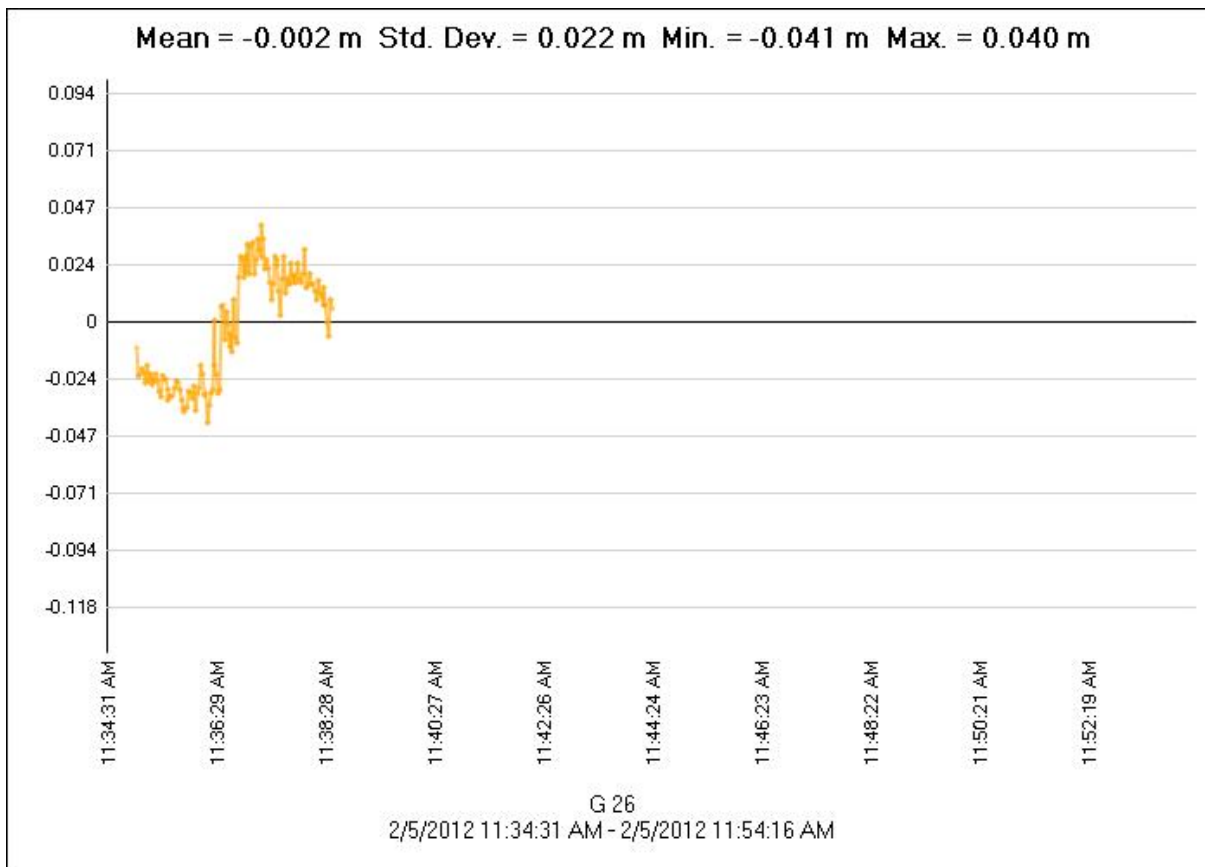
Residuals

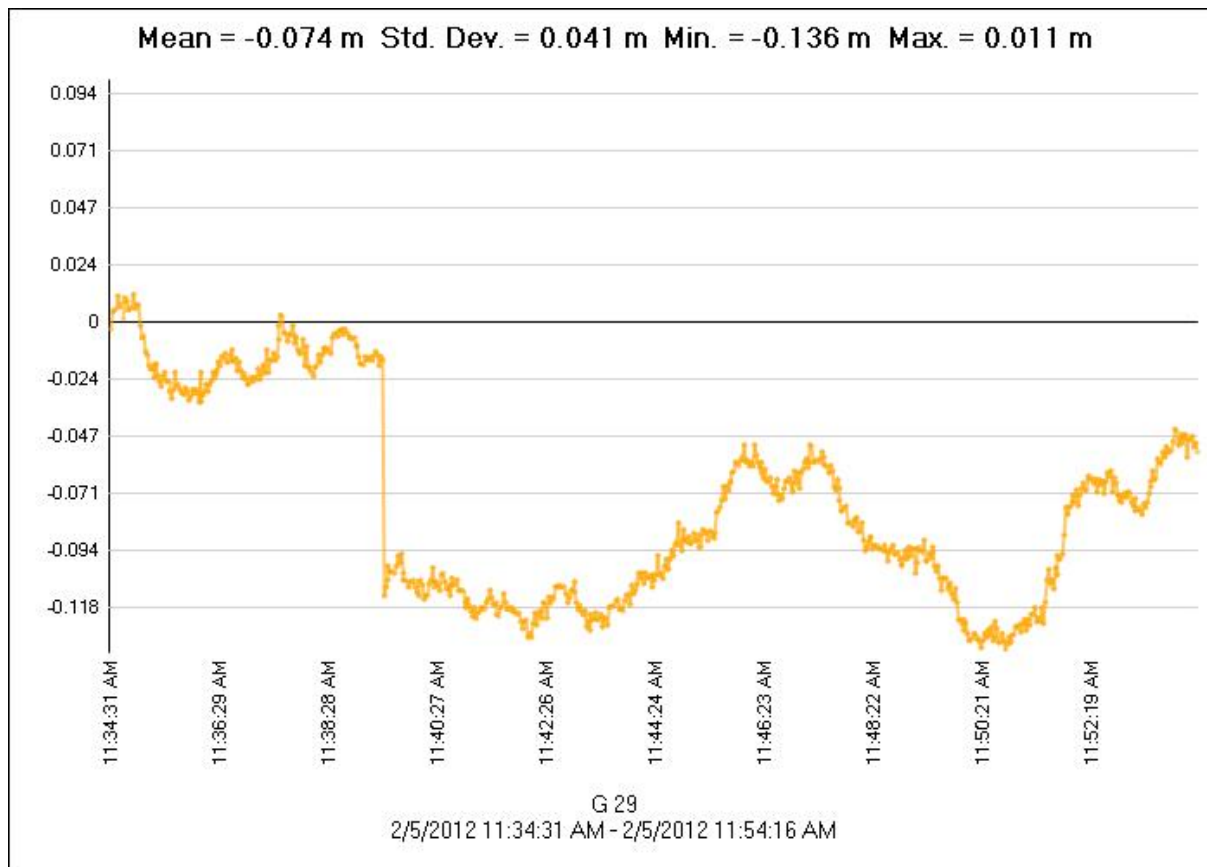













Processing style

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:	Dual Frequency (L1, L2)
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

19S-SPIKE - FVA64-B2 (12:09:54 PM-12:29:49 PM) (S23)

Baseline observation: 19S-SPIKE --- FVA64-B2 (B23)

Processed: 4/11/2012 3:29:21 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.009 m

Vertical precision: 0.011 m

RMS: 0.002 m

Maximum PDOP: 2.085

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/5/2012 12:09:54 PM (Local: UTC-7hr)

Processing stop time: 2/5/2012 12:29:49 PM (Local: UTC-7hr)

Processing duration: 00:19:54

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338087.643 m	Latitude	N37°29'23.71988"	Latitude	N37°29'23.71988"
Northing	4150798.564 m	Longitude	W100°49'53.27643"	Longitude	W100°49'53.27643"
Elevation	886.743 m	Height	860.575 m	Height	860.575 m

To:	FVA64-B2				
Grid		Local		Global	
Easting	359574.211 m	Latitude	N37°01'22.23026"	Latitude	N37°01'22.23025"
Northing	4098571.317 m	Longitude	W100°34'43.17309"	Longitude	W100°34'43.17309"
Elevation	740.827 m	Height	713.833 m	Height	713.833 m

Vector					
9Ughb[	21486.567 m	NS Fwd Azimuth	156°31'42"	L	16230.904 m
Bcfh\jb[	-52227.248 m	Ellipsoid Dist.	56481.067 m	M	-34890.766 m
9Yj Uhcb	-145.916 m	<Y][\h	-146.742 m	N	-41353.272 m

Standard Errors

Vector errors:					
Point ID	0.002 m	Point Description	0°00'00"	Point Type	0.002 m
Point ID	0.004 m	Point Description	0.003 m	Point Type	0.005 m
Point ID	0.006 m	Point Description	0.006 m	Point Type	0.005 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000059214		
Y	0.0000050051	0.0000235784	
Z	-0.0000033813	-0.0000103784	0.0000222251

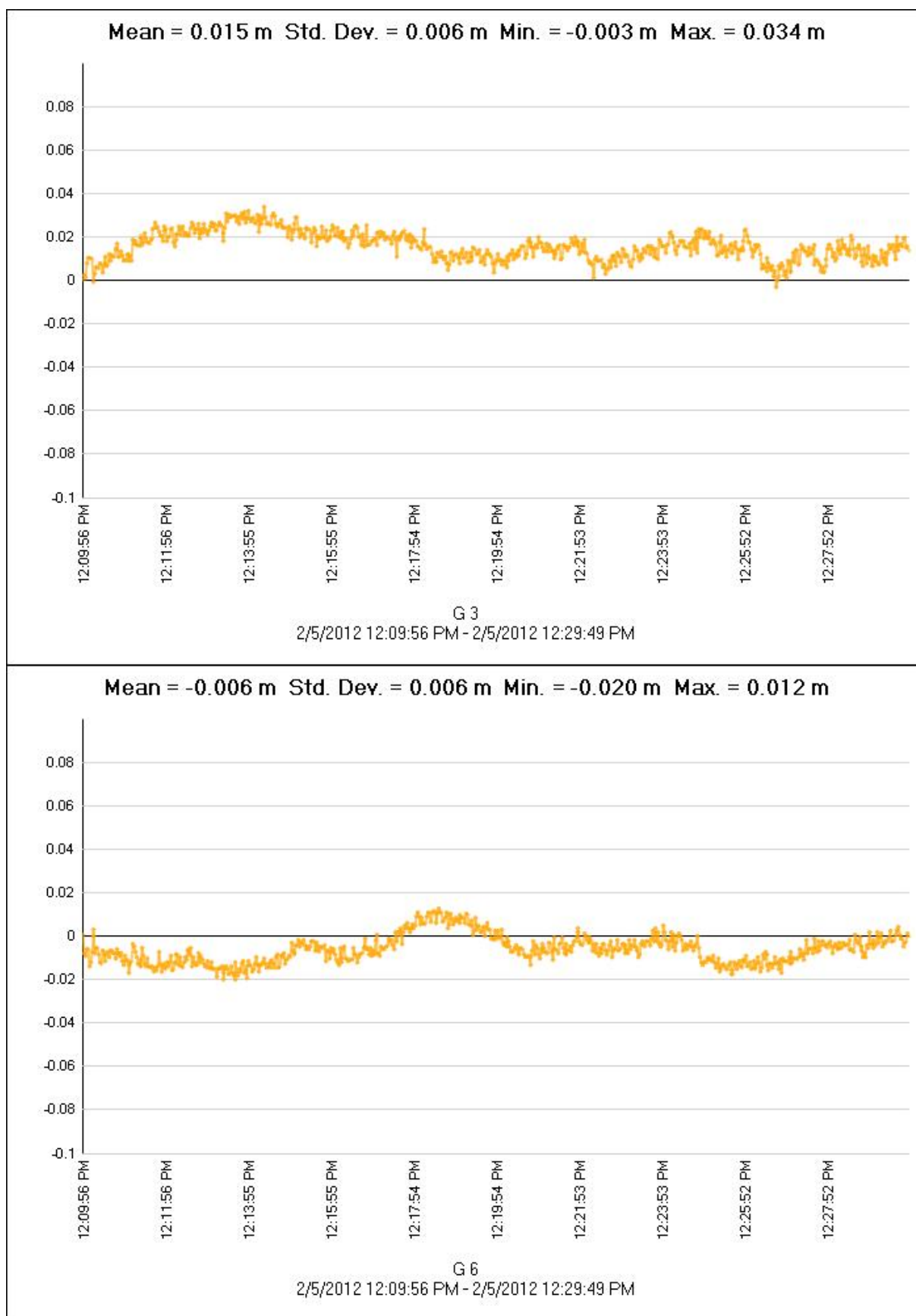
Occupations

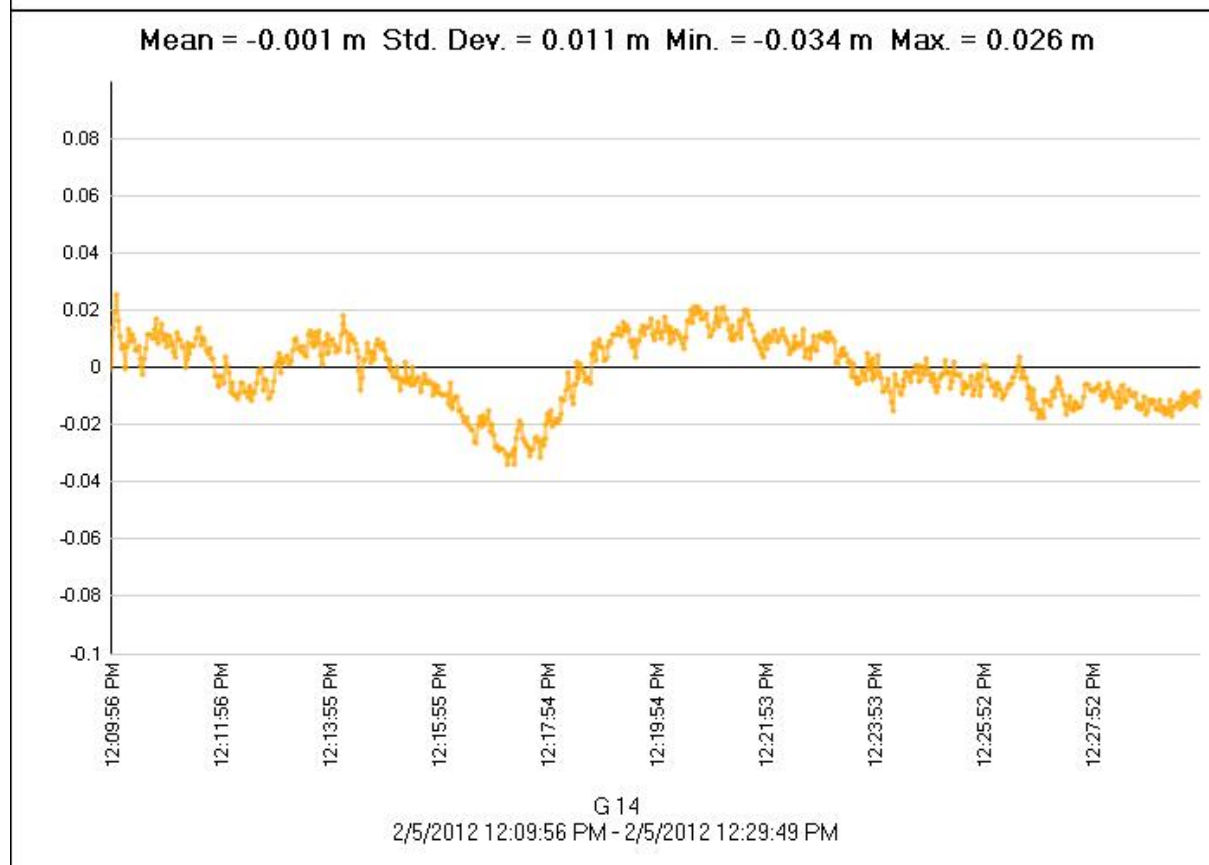
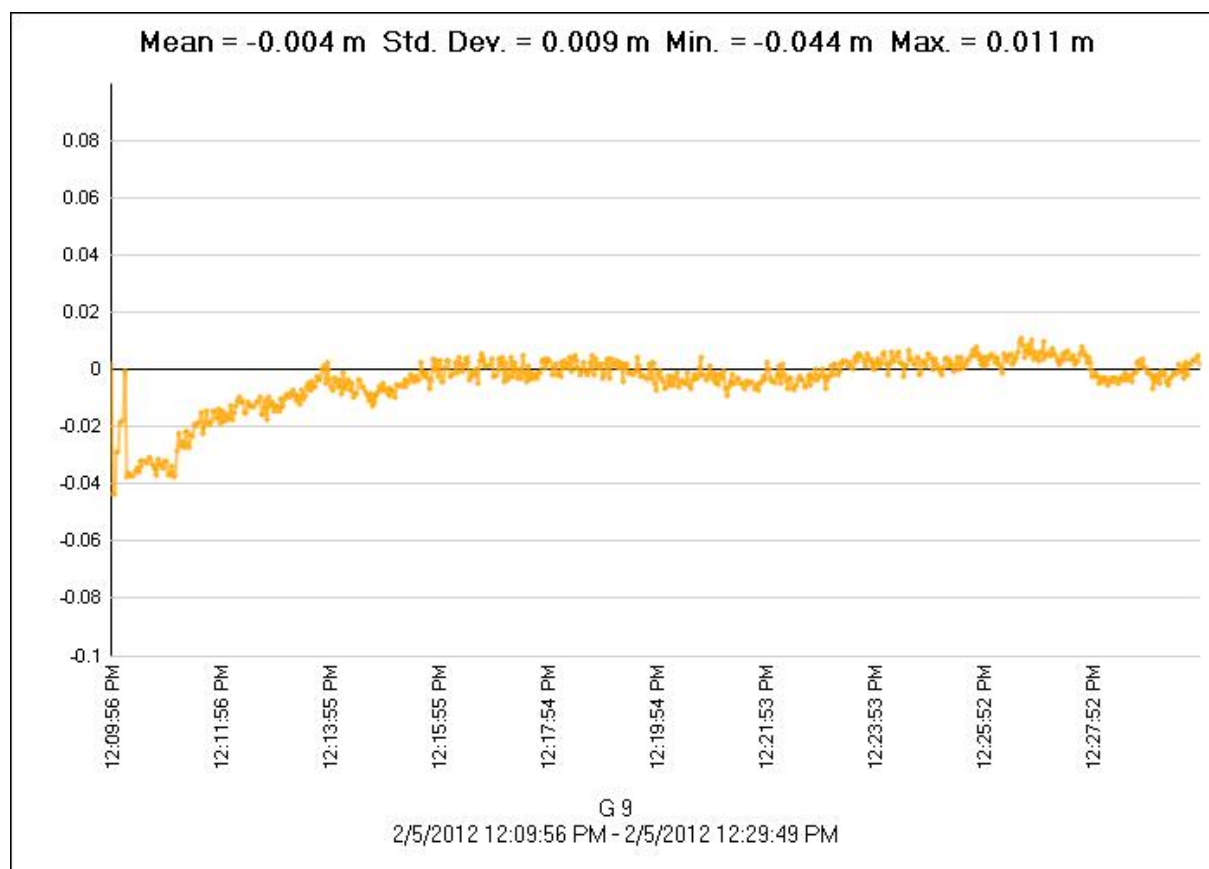
	From	To
Point ID:	19S-SPIKE	FVA64-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010360.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080366.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

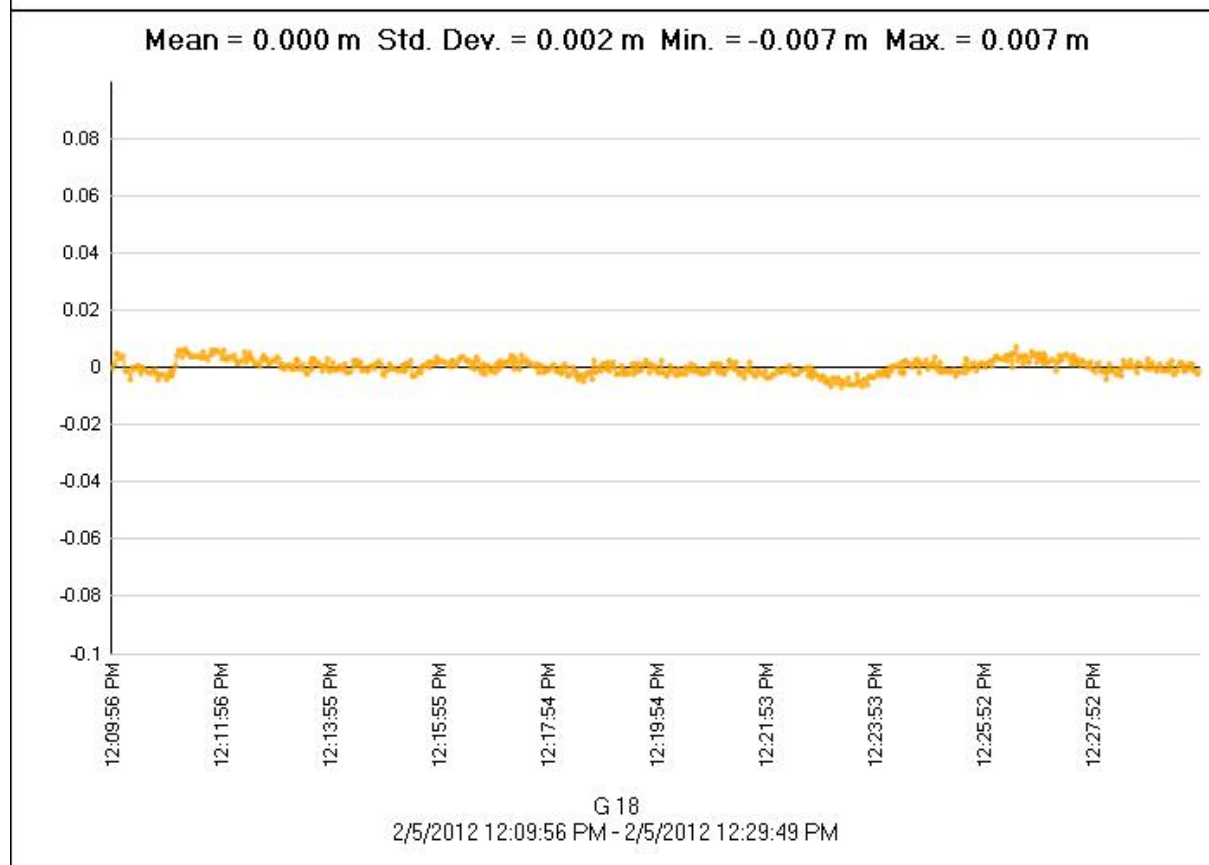
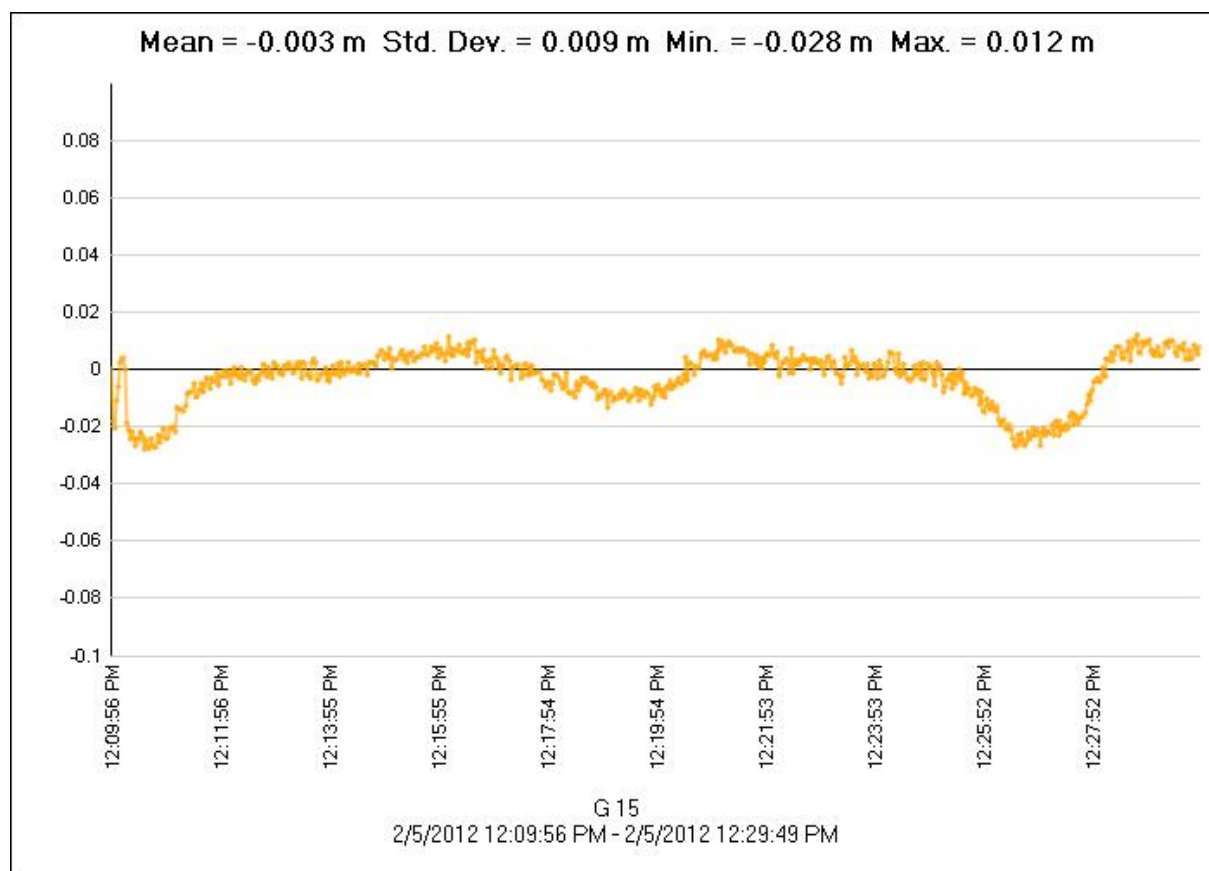
Tracking Summary

SV	2/5/2012 12:09:54 PM	Duration: 00:19:54.5000000	Major interval: 00:01:00	2/5/2012 12:29:49 PM
G 3				
G 6				
G 9				
G 14				
G 15				
G 18				
G 19				
G 21				
G 22				
G 27				
G 29				

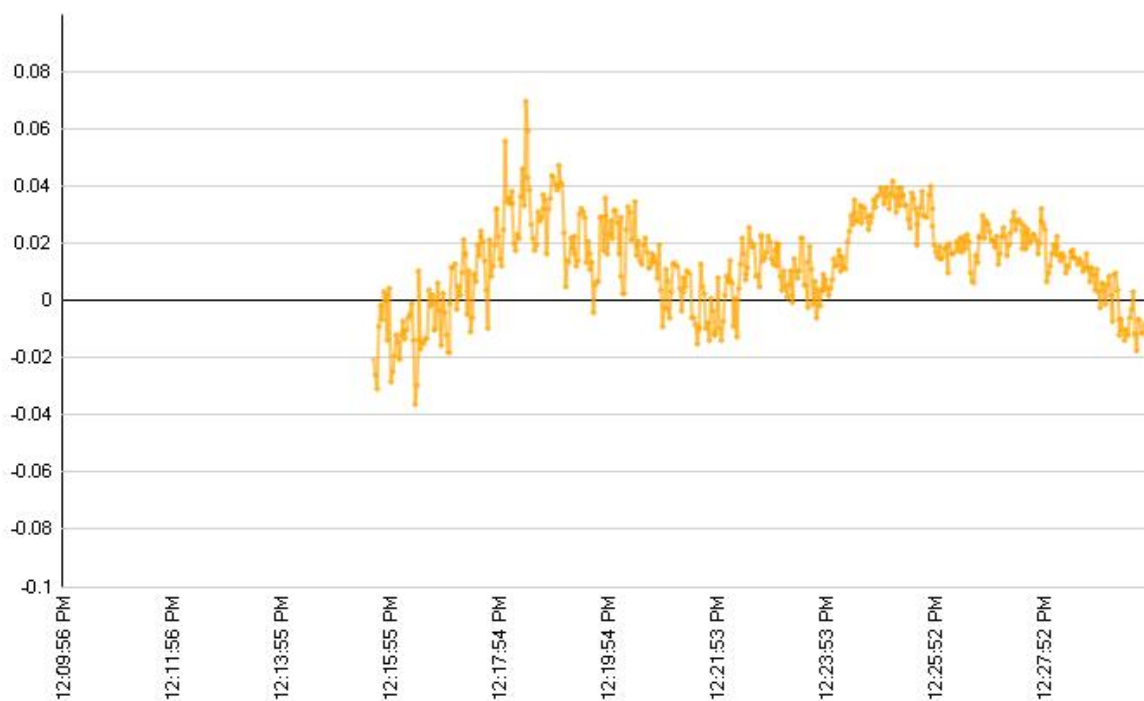
Residuals







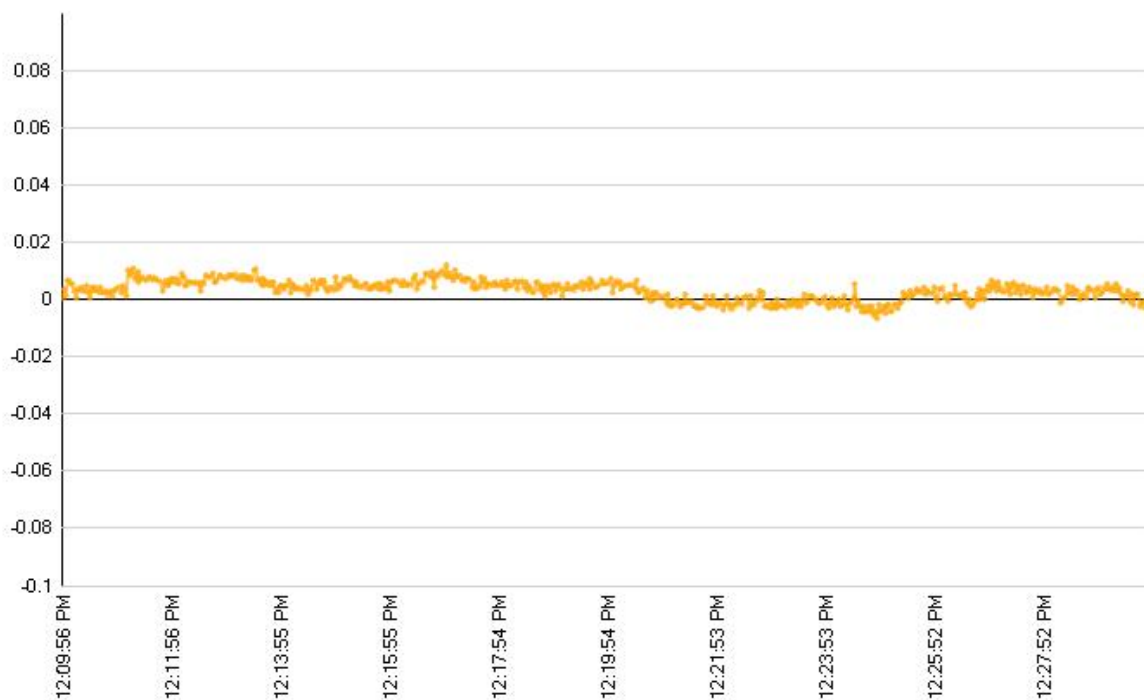
Mean = 0.012 m Std. Dev. = 0.015 m Min. = -0.036 m Max. = 0.069 m



G 19

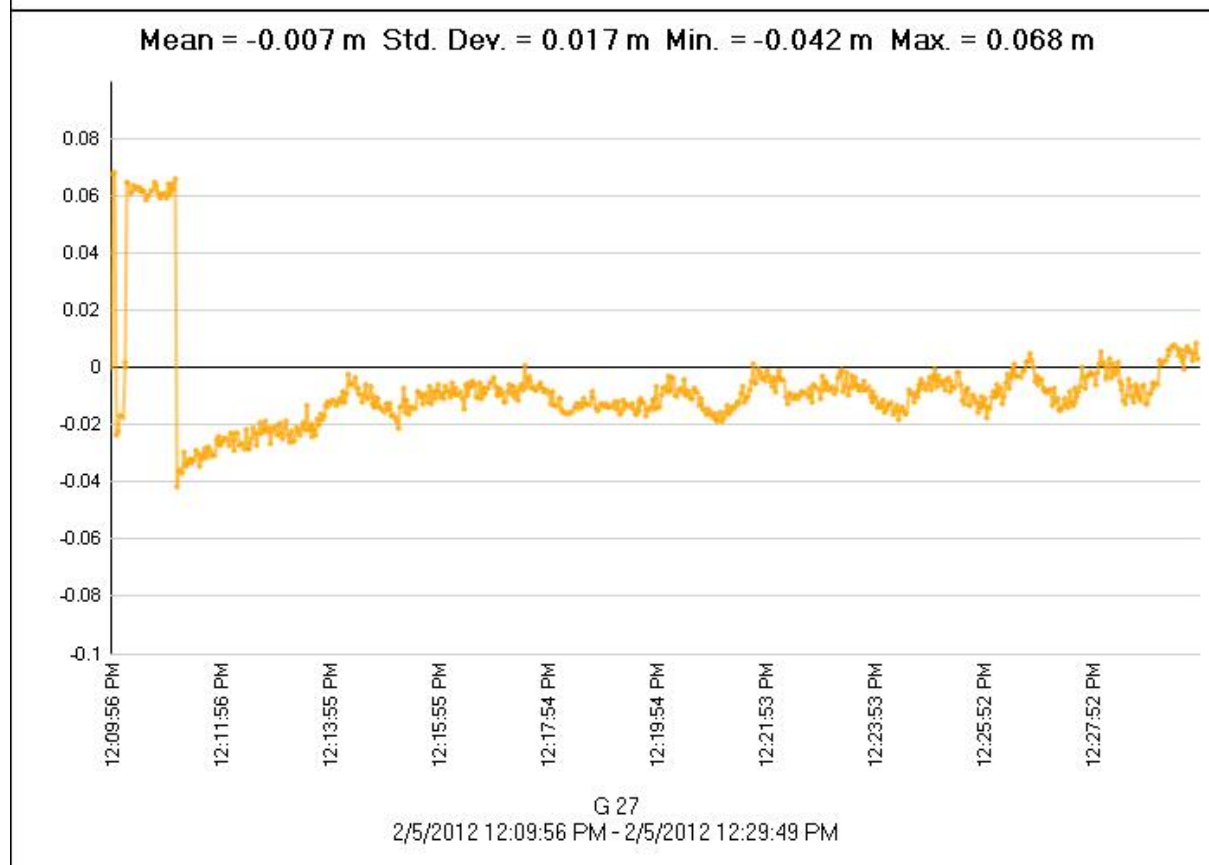
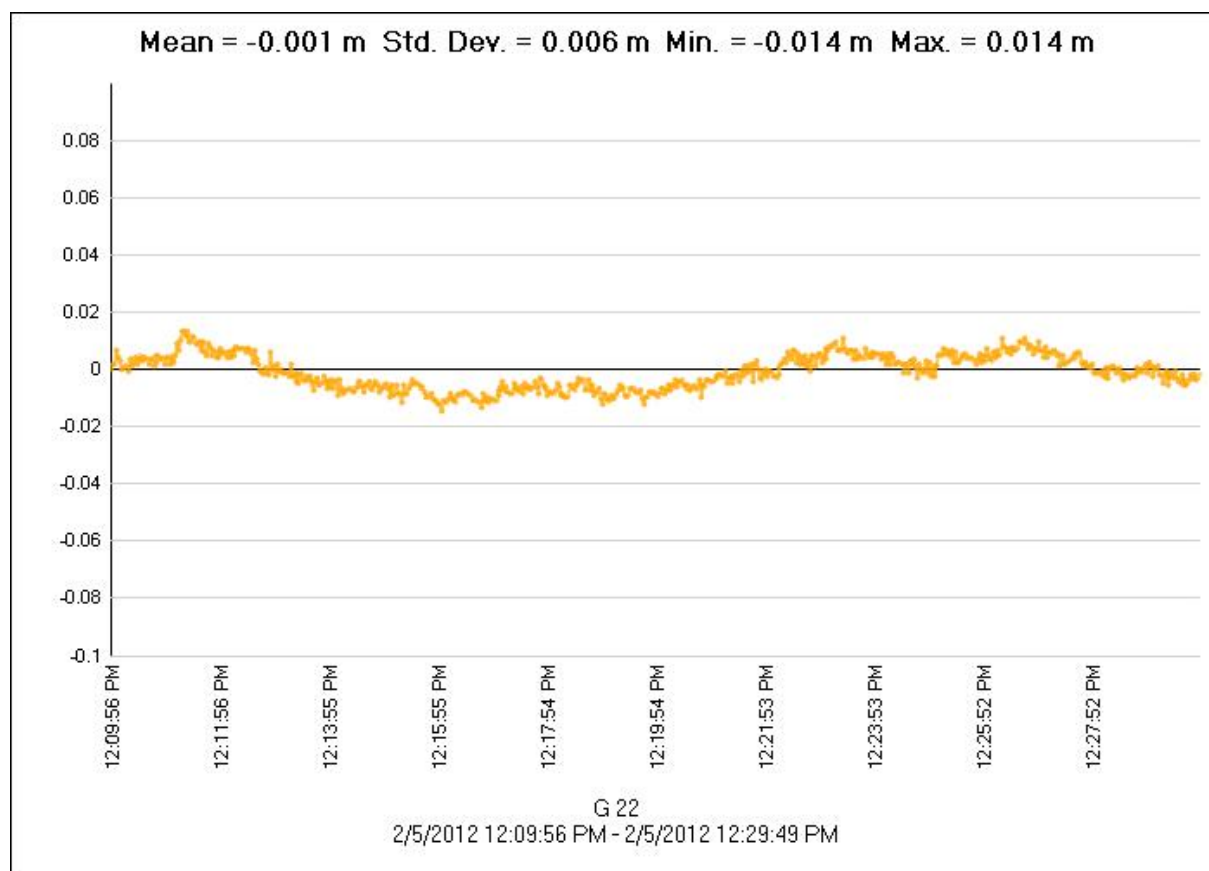
2/5/2012 12:09:56 PM - 2/5/2012 12:29:49 PM

Mean = 0.003 m Std. Dev. = 0.003 m Min. = -0.007 m Max. = 0.012 m



G 21



2/5/2012 12:09:56 PM - 2/5/2012 12:29:49 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:	Dual Frequency (L1, L2)
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

19S-SPIKE - SVA64-B2 (12:34:15 PM-12:53:48 PM) (S24)

Baseline observation: 19S-SPIKE --- SVA64-B2 (B24)

Processed: 4/11/2012 3:29:03 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.008 m

Vertical precision: 0.013 m

RMS: 0.001 m

Maximum PDOP: 2.157

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/5/2012 12:34:15 PM (Local: UTC-7hr)

Processing stop time: 2/5/2012 12:53:48 PM (Local: UTC-7hr)

Processing duration: 00:19:32

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338087.643 m	Latitude	N37°29'23.71988"	Latitude	N37°29'23.71988"
Northing	4150798.564 m	Longitude	W100°49'53.27643"	Longitude	W100°49'53.27643"
Elevation	886.743 m	Height	860.575 m	Height	860.575 m

To:	SVA64-B2				
Grid		Local		Global	
Easting	359548.144 m	Latitude	N37°01'21.76338"	Latitude	N37°01'21.76338"
Northing	4098557.357 m	Longitude	W100°34'44.21829"	Longitude	W100°34'44.21829"
Elevation	740.675 m	Height	713.682 m	Height	713.682 m

Vector					
9Ughb[	21460.501 m	NS Fwd Azimuth	156°33'29"	L	16203.937 m
Bcfh\jb[	-52241.207 m	Ellipsoid Dist.	56484.065 m	M	-34894.423 m
9Yj Uhcb	-146.068 m	<Y][\h	-146.893 m	N	-41364.855 m

Standard Errors

Vector errors:					
Ughb[	0.002 m	BG`Zk X'5n]a i h	0°00'00"	L	0.002 m
Bcfh\]b[	0.003 m	'9~]dgc]X'8]gh	0.003 m	M	0.005 m
'9`Yj Uhcb	0.007 m	' <Y][\h	0.007 m	N	0.005 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000062342		
Y	0.0000060296	0.0000270619	
Z	-0.0000060706	-0.0000166601	0.0000264178

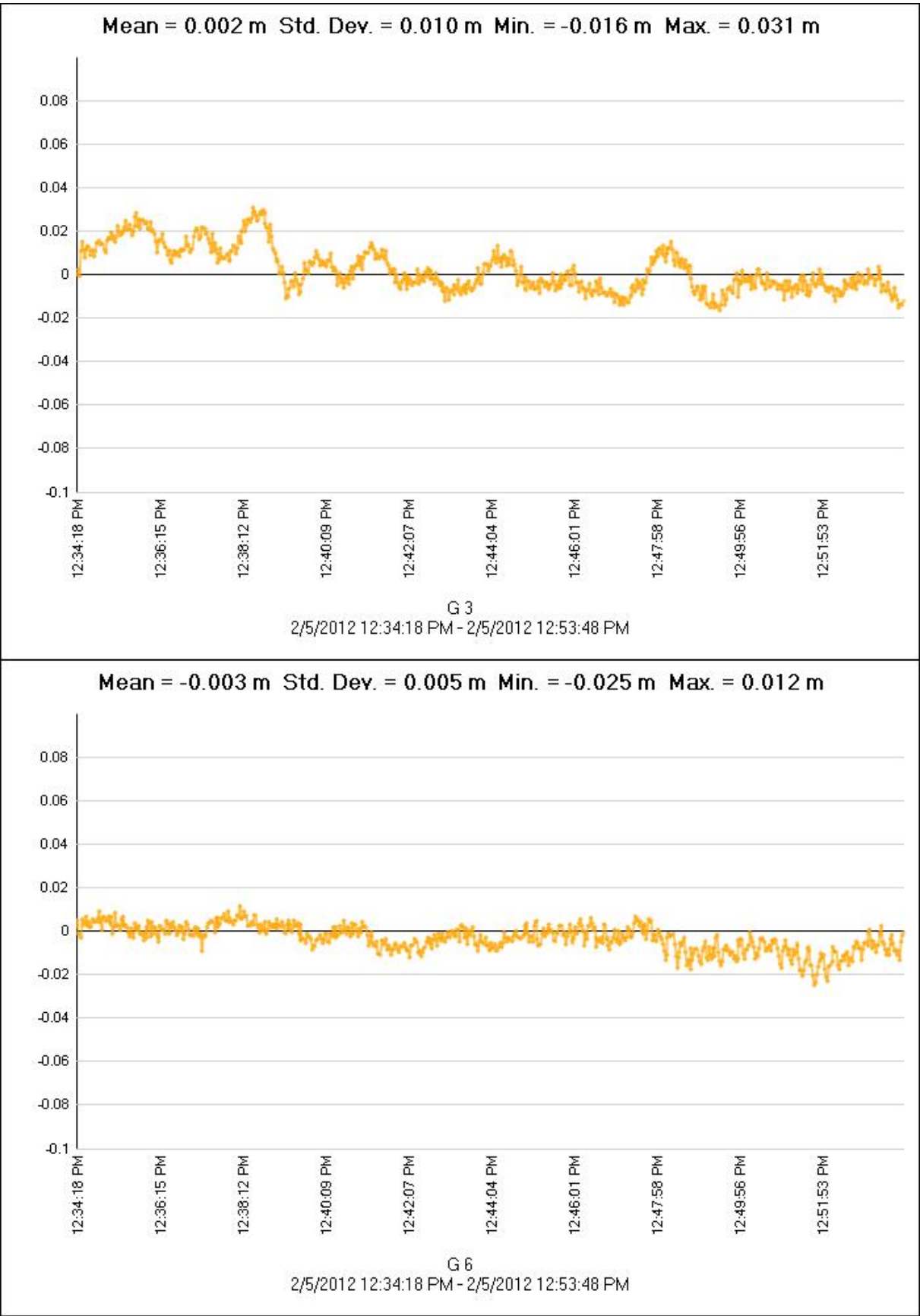
Occupations

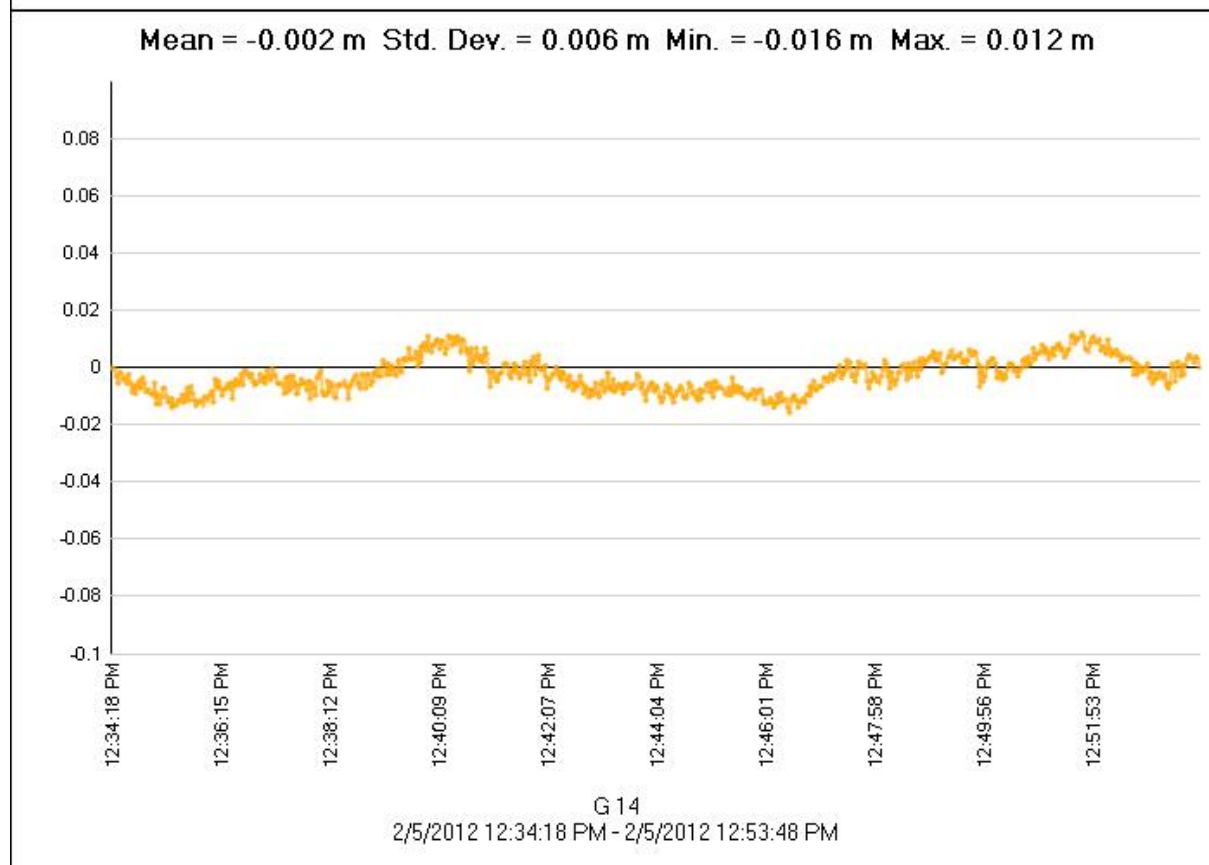
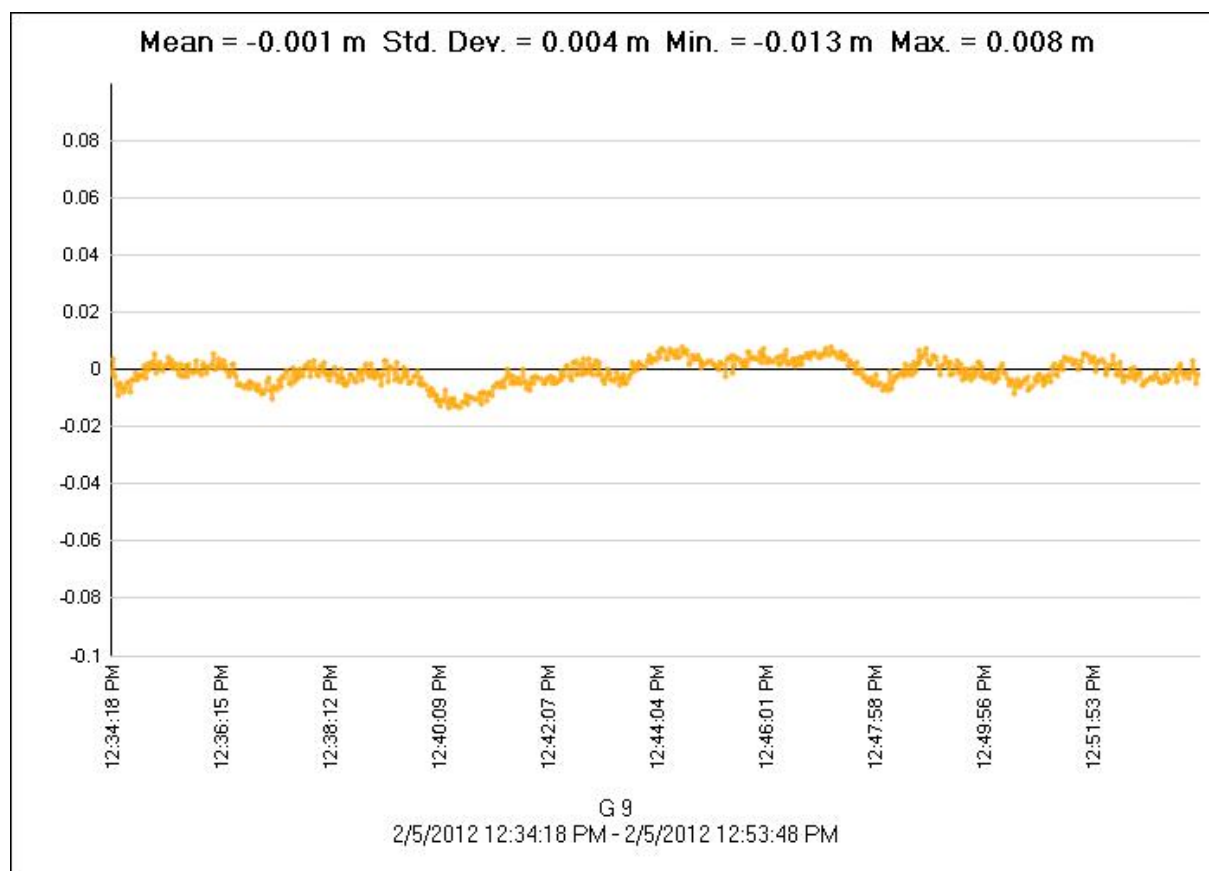
	From	To
Point ID:	19S-SPIKE	SVA64-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00010360.12o	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00080367.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

Tracking Summary

SV	2/5/2012 12:34:15 PM	Duration: 00:19:32.5000000	Major interval: 00:01:00	2/5/2012 12:53:48 PM
G 3	L1			
	L2			
G 6	L1			
	L2			
G 9	L1			
	L2			
G 14	L1			
	L2			
G 15	L1			
	L2			
G 18	L1			
	L2			
G 19	L1			
	L2			
G 21	L1			
	L2			
G 22	L1			
	L2			
G 27	L1			
	L2			

Residuals





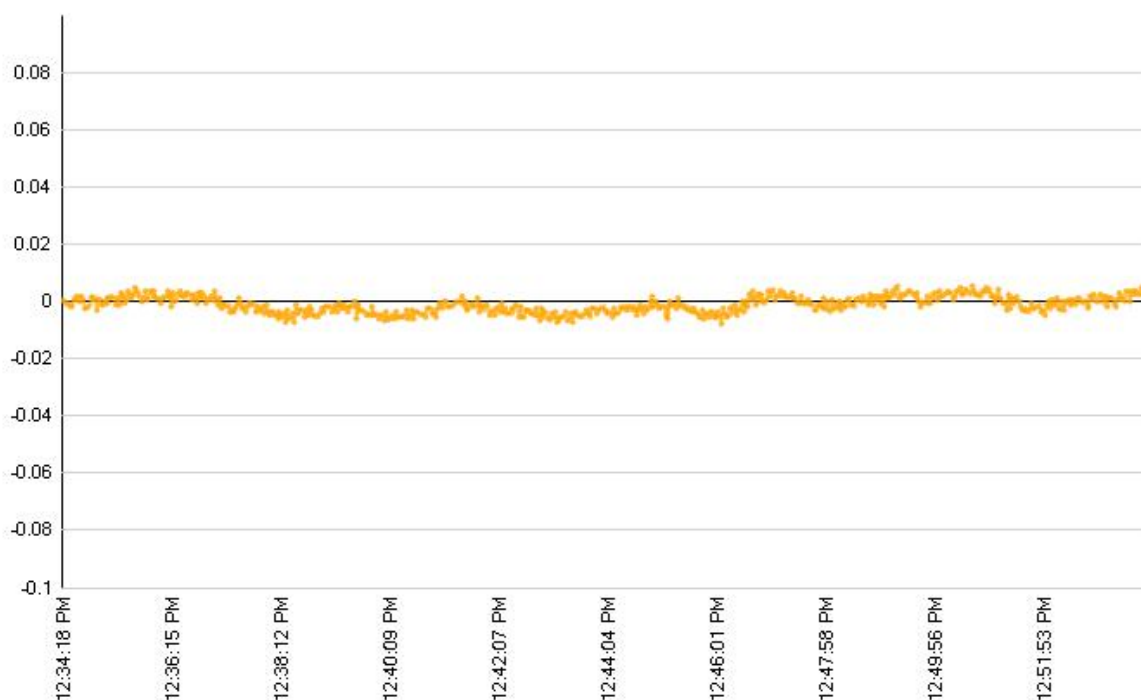
Mean = 0.001 m Std. Dev. = 0.016 m Min. = -0.044 m Max. = 0.034 m



G 15

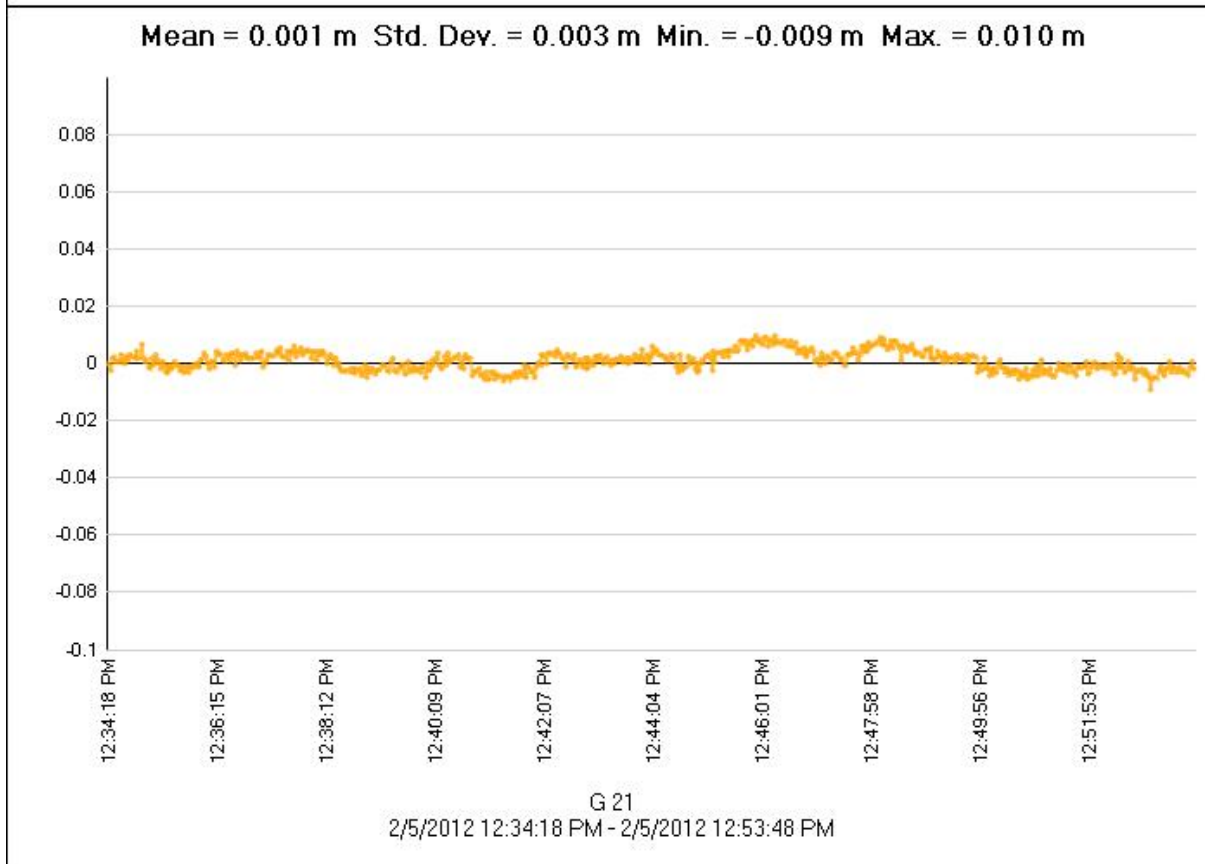
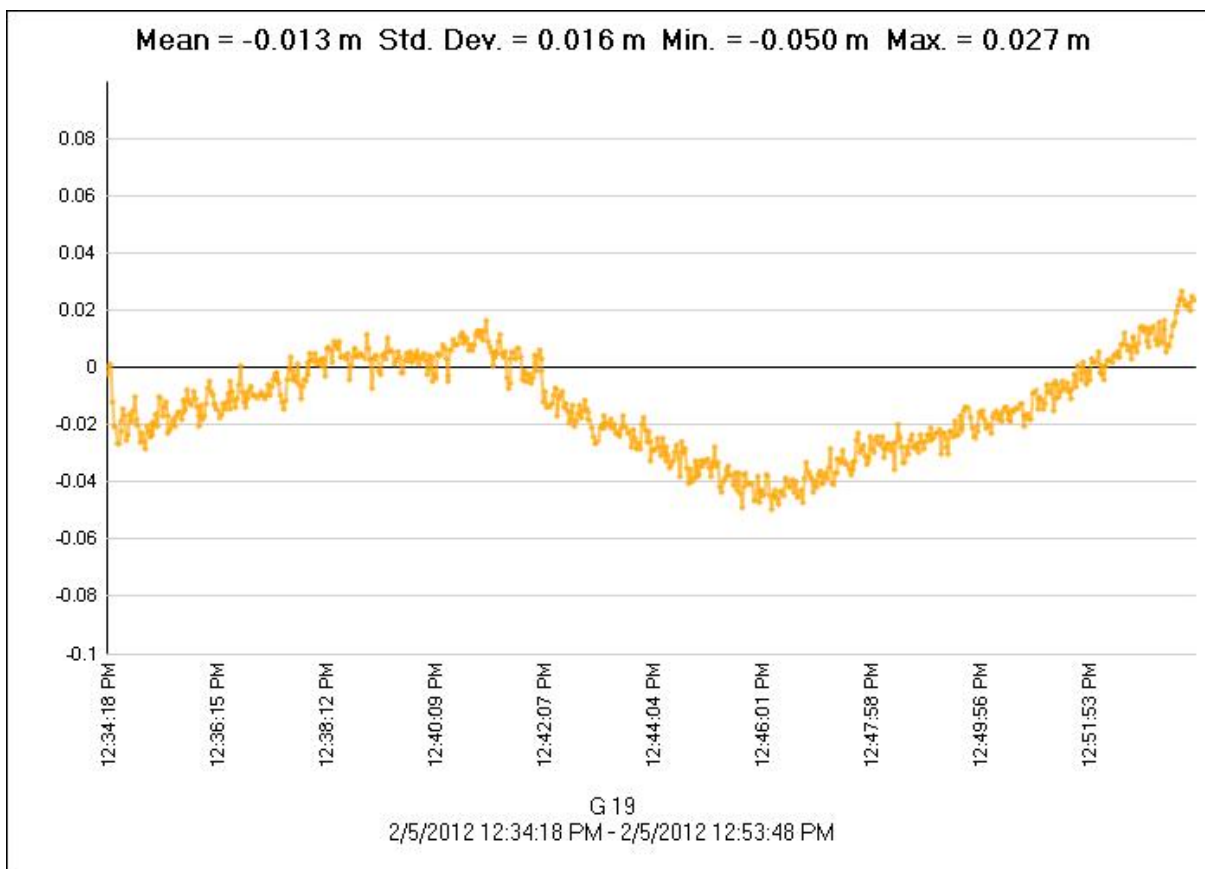
2/5/2012 12:34:18 PM - 2/5/2012 12:53:48 PM

Mean = -0.001 m Std. Dev. = 0.003 m Min. = -0.008 m Max. = 0.006 m

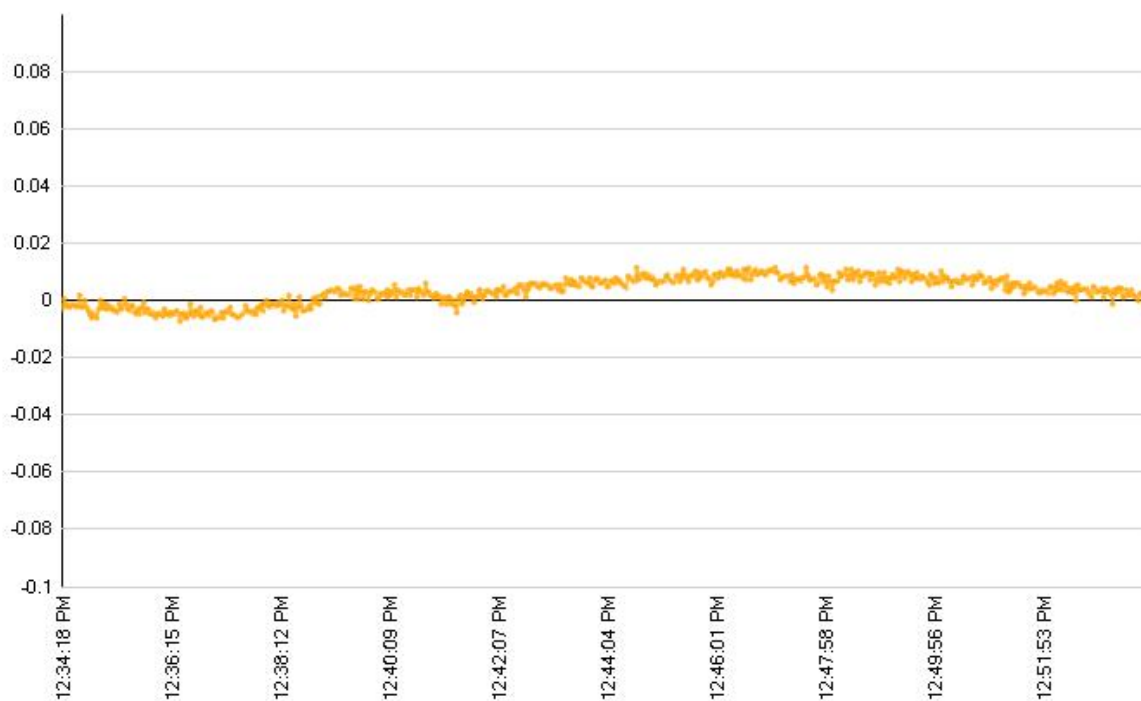


G 18

2/5/2012 12:34:18 PM - 2/5/2012 12:53:48 PM



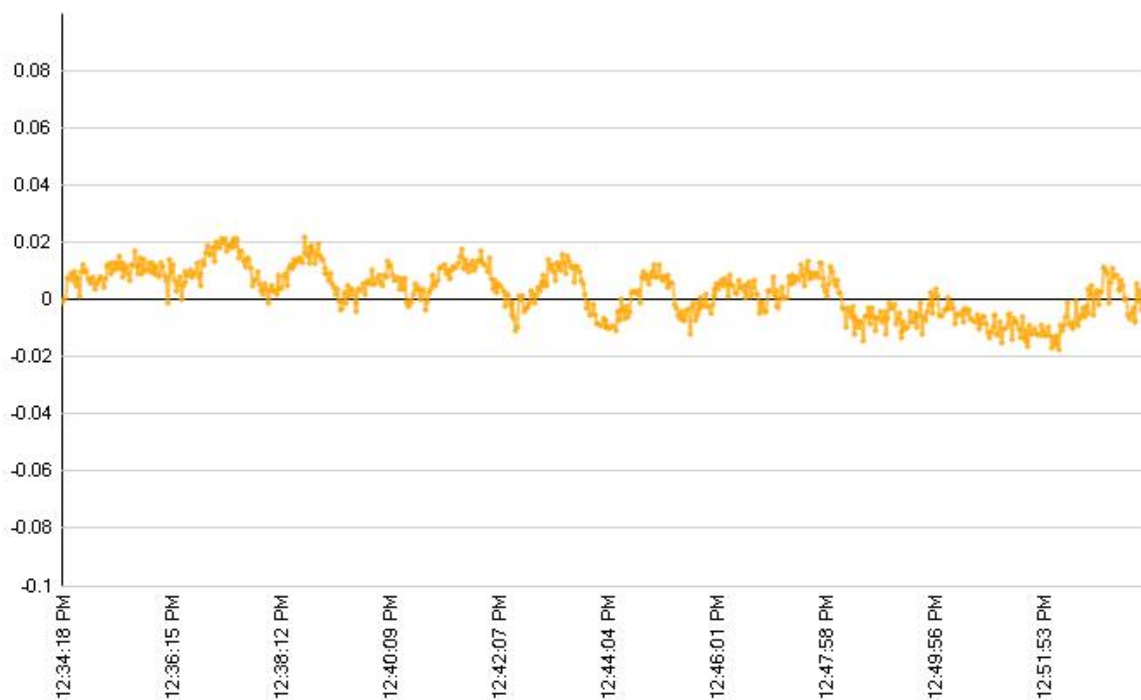
Mean = 0.003 m Std. Dev. = 0.004 m Min. = -0.008 m Max. = 0.011 m



G 22

2/5/2012 12:34:18 PM - 2/5/2012 12:53:48 PM

Mean = 0.003 m Std. Dev. = 0.008 m Min. = -0.018 m Max. = 0.022 m



G 27

2/5/2012 12:34:18 PM - 2/5/2012 12:53:48 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: Dual Frequency (L1, L2)

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

19S-SPIKE - FVA31-B2 (2:05:24 PM-2:25:33 PM) (S25)

Baseline observation: 19S-SPIKE --- FVA31-B2 (B25)

Processed: 4/11/2012 3:29:16 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.033 m

Vertical precision: 0.038 m

RMS: 0.005 m

Maximum PDOP: 2.046

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/5/2012 2:05:24 PM (Local: UTC-7hr)

Processing stop time: 2/5/2012 2:25:33 PM (Local: UTC-7hr)

Processing duration: 00:20:08

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338087.643 m	Latitude	N37°29'23.71988"	Latitude	N37°29'23.71988"
Northing	4150798.564 m	Longitude	W100°49'53.27643"	Longitude	W100°49'53.27643"
Elevation	886.743 m	Height	860.575 m	Height	860.575 m

To:	FVA31-B2				
Grid		Local		Global	
Easting	319626.438 m	Latitude	N37°09'23.24491"	Latitude	N37°09'23.24490"
Northing	4114160.504 m	Longitude	W101°01'52.56461"	Longitude	W101°01'52.56461"
Elevation	892.744 m	Height	866.228 m	Height	866.228 m

Vector					
9Ughb[	-18461.206 m	NS Fwd Azimuth	205°37'55"	L	-21646.720 m
Bcfh\jb[	-36638.060 m	Ellipsoid Dist.	41027.970 m	M	-18680.570 m
9Yj Uhcb	6.001 m	<Y][\h	5.653 m	N	-29431.295 m

Standard Errors

Vector errors:					
Point ID	0.006 m	Point ID	0°00'00"	Point ID	0.005 m
Point ID	0.013 m	Point ID	0.012 m	Point ID	0.020 m
Point ID	0.019 m	Point ID	0.019 m	Point ID	0.013 m

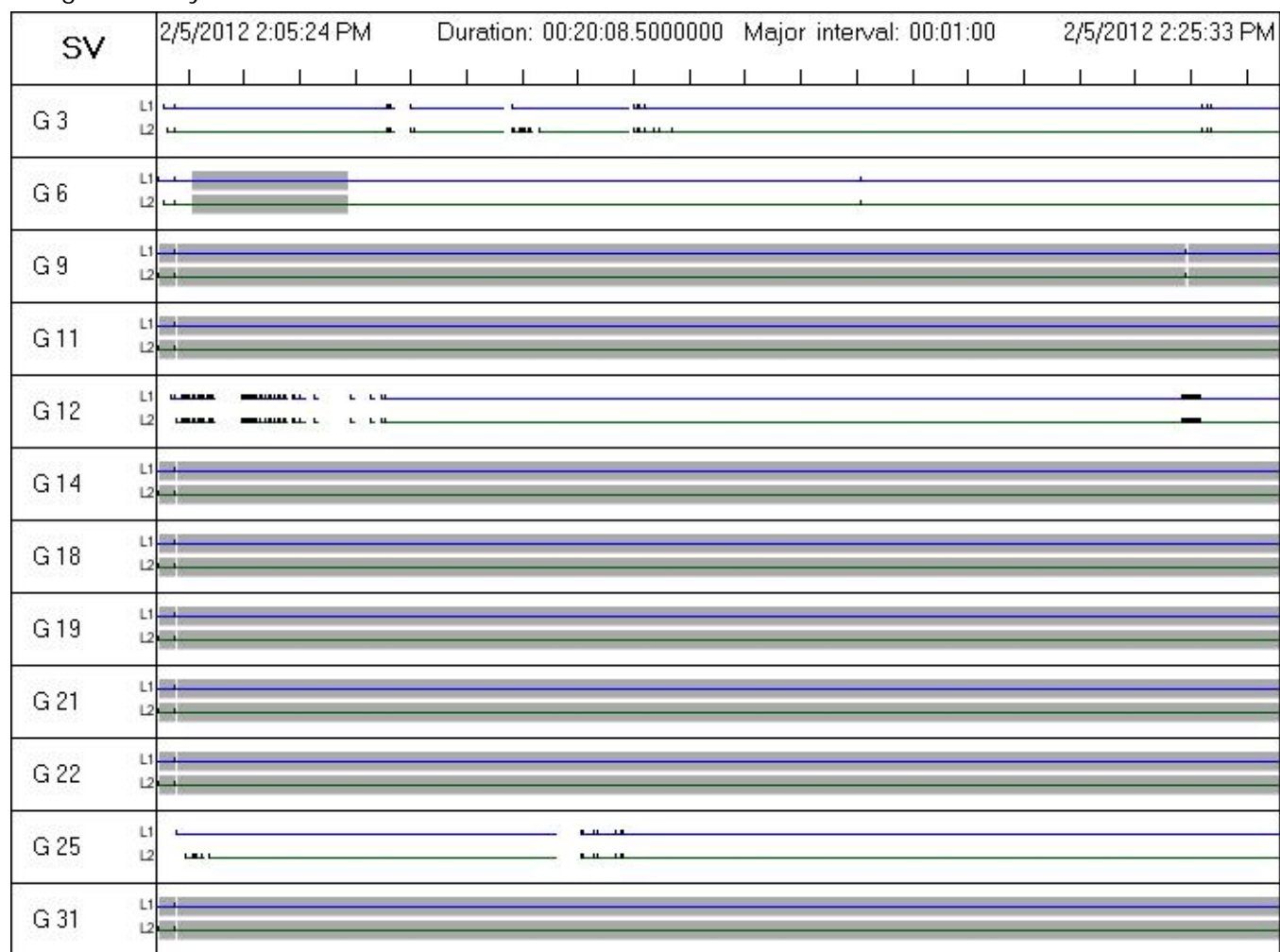
Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000225408		
Y	-0.0000047478	0.0003997599	
Z	0.0000267841	-0.0000772655	0.0001669846

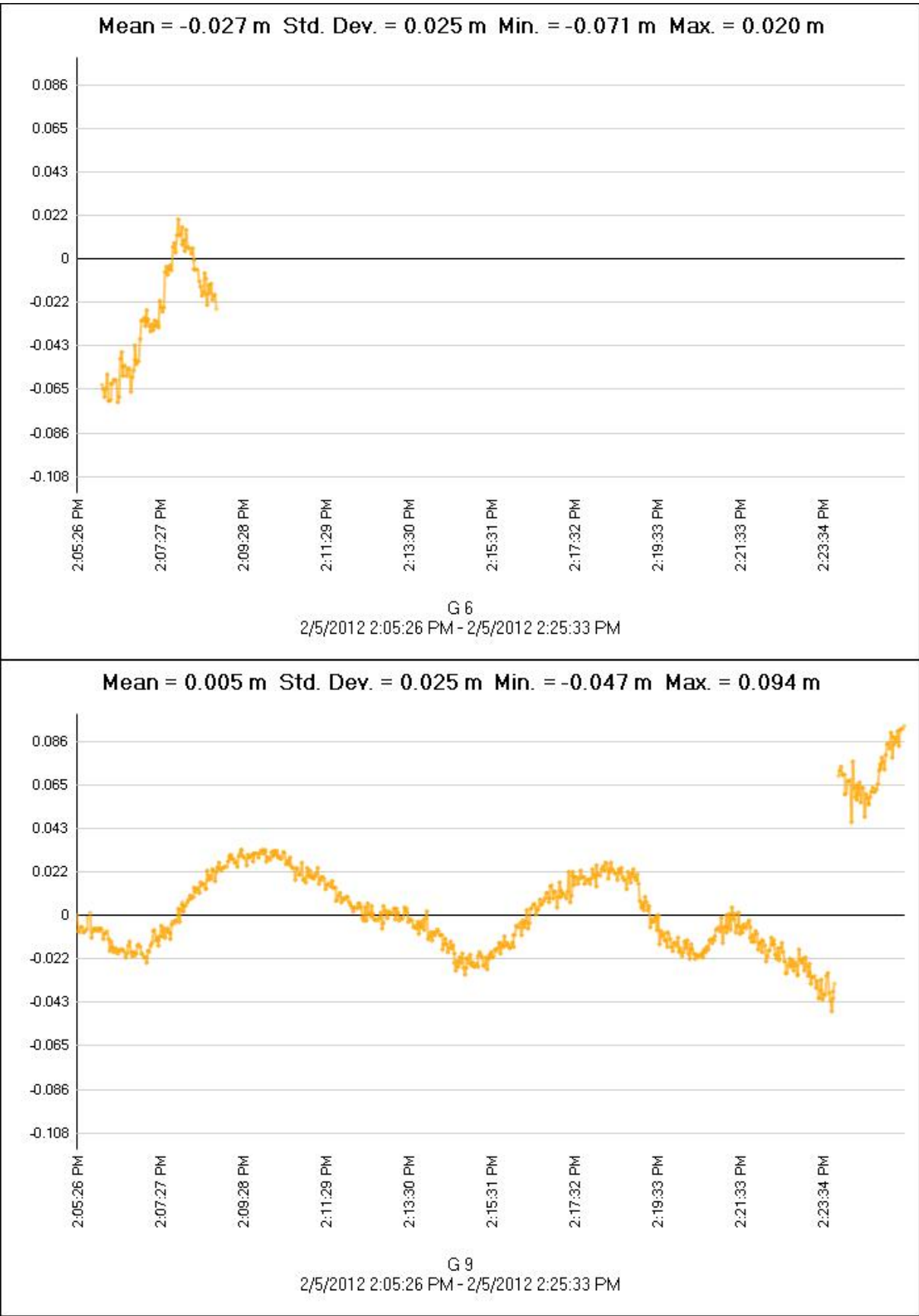
Occupations

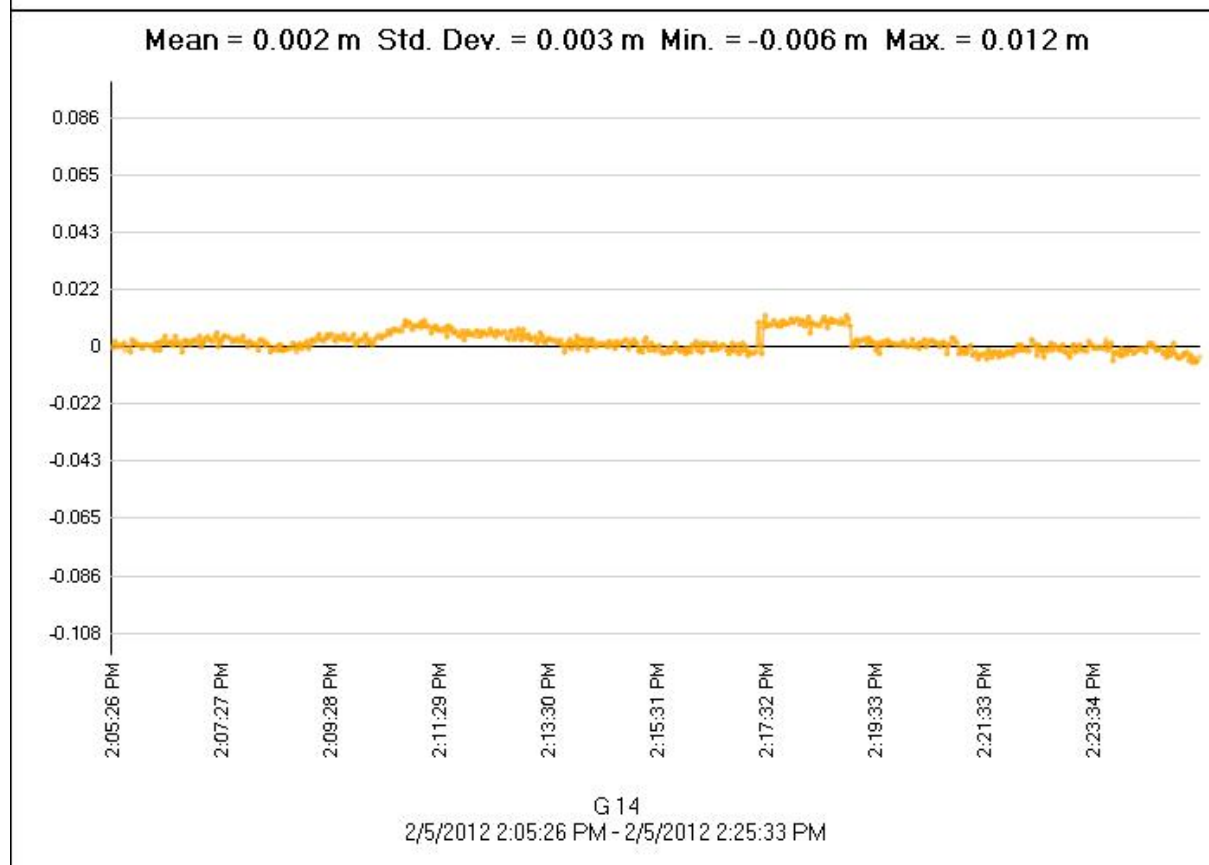
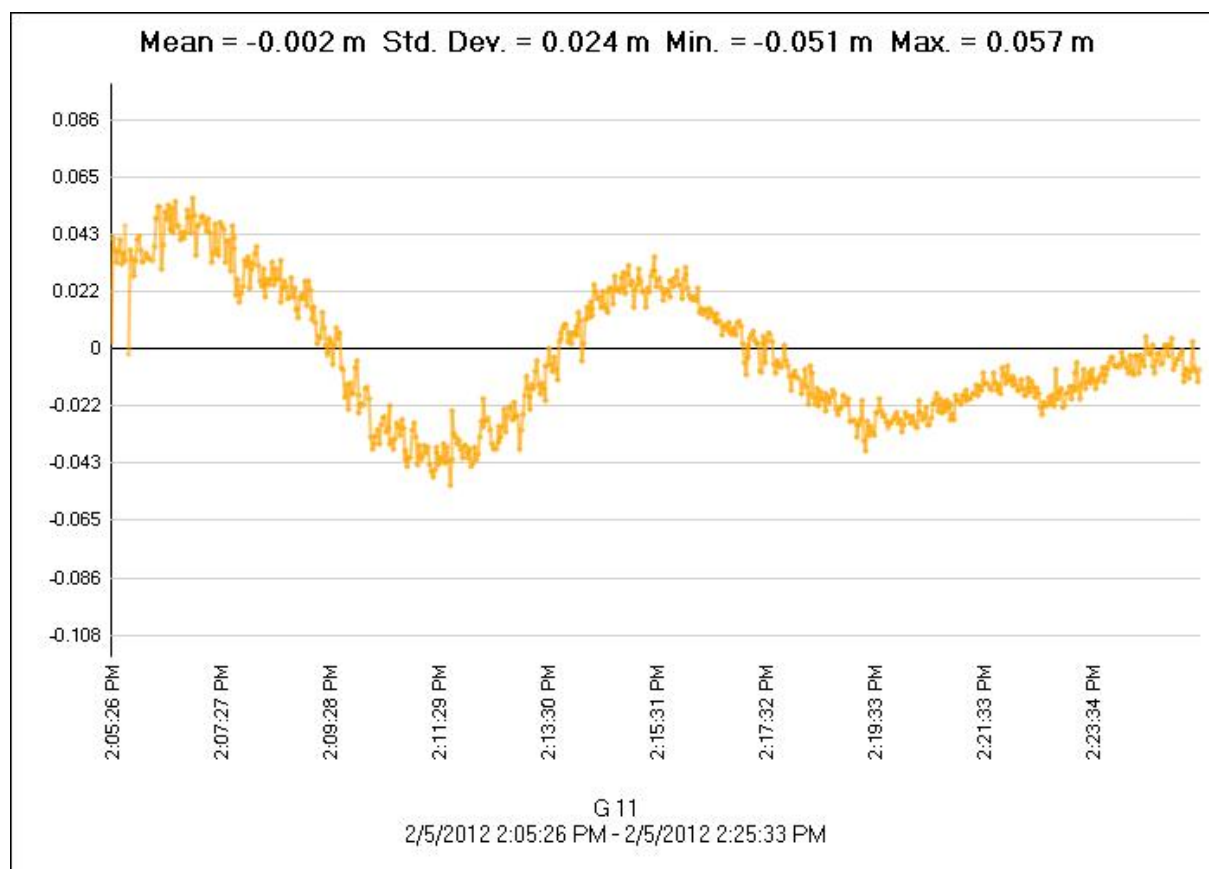
	From	To
Point ID:	19S-SPIKE	FVA31-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010360.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080368.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

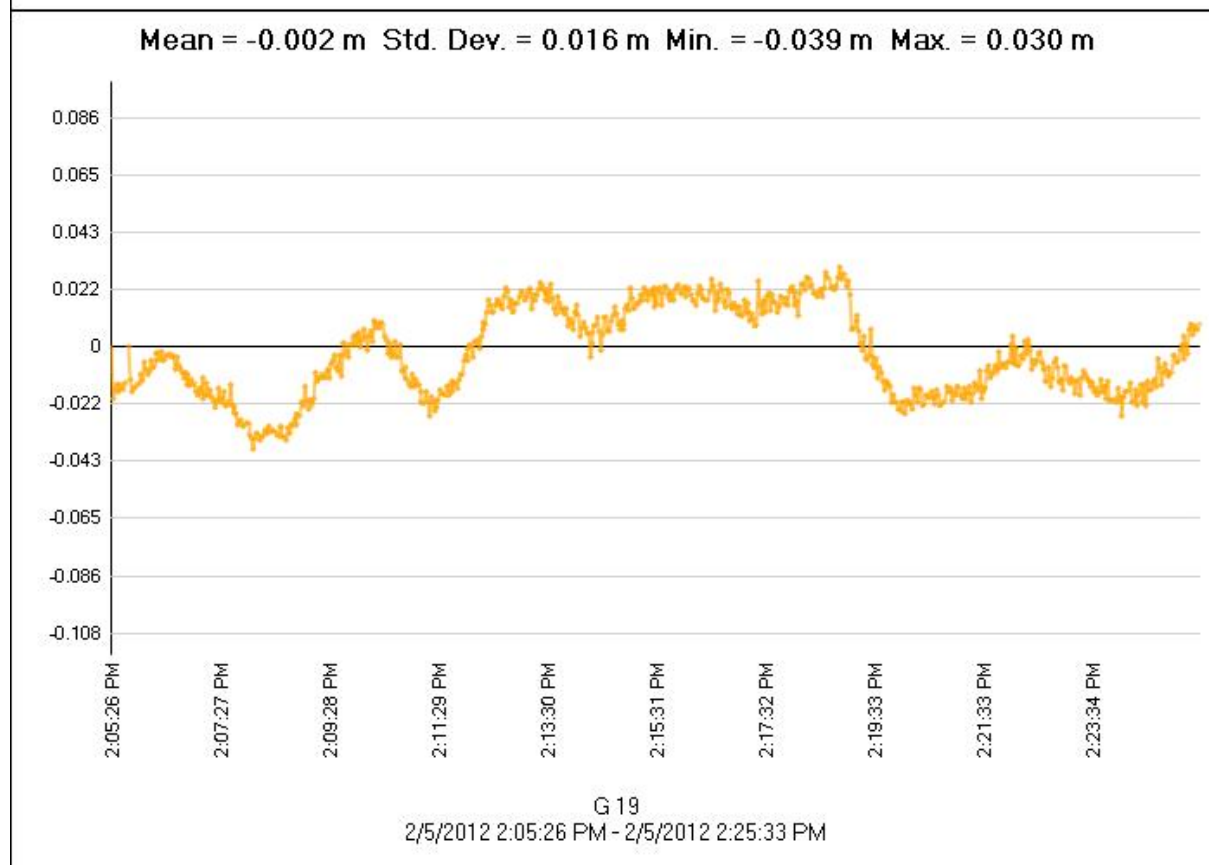
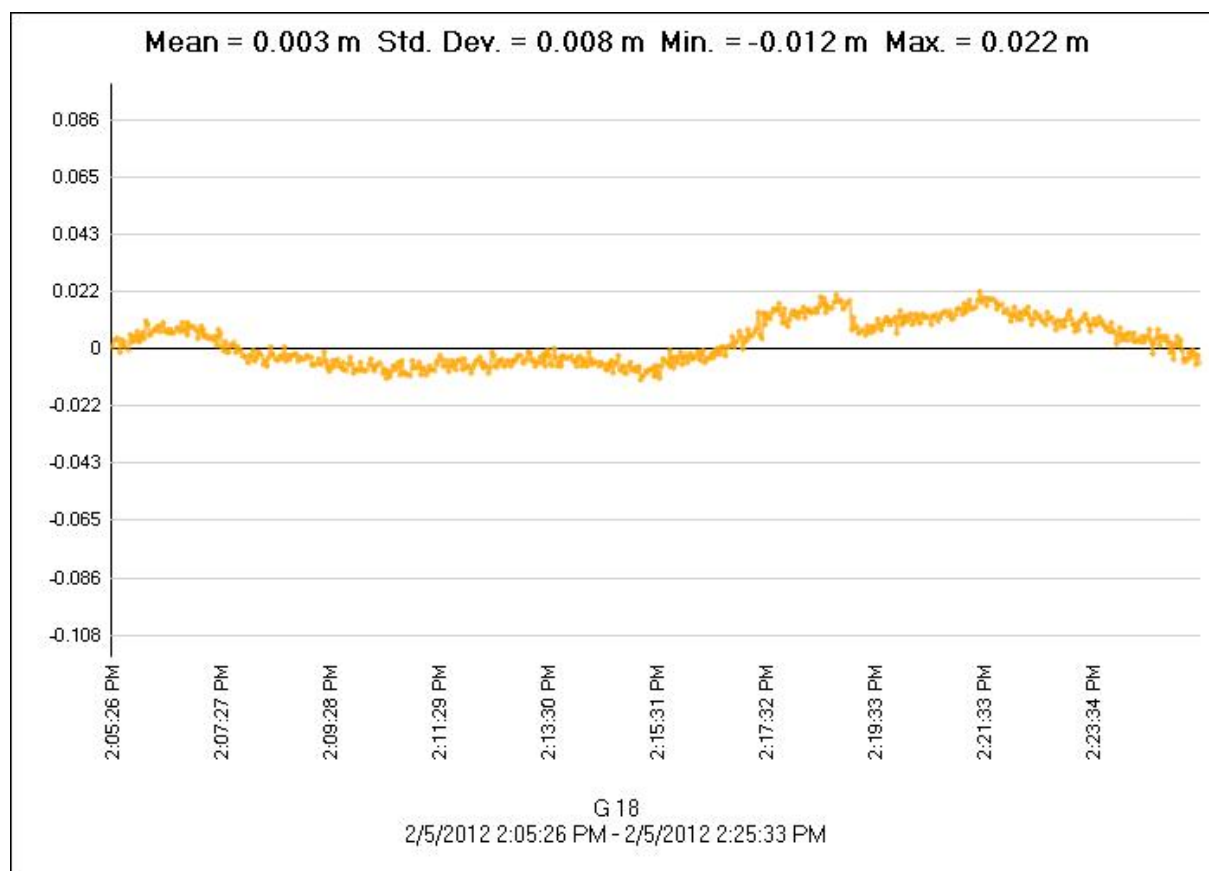
Tracking Summary

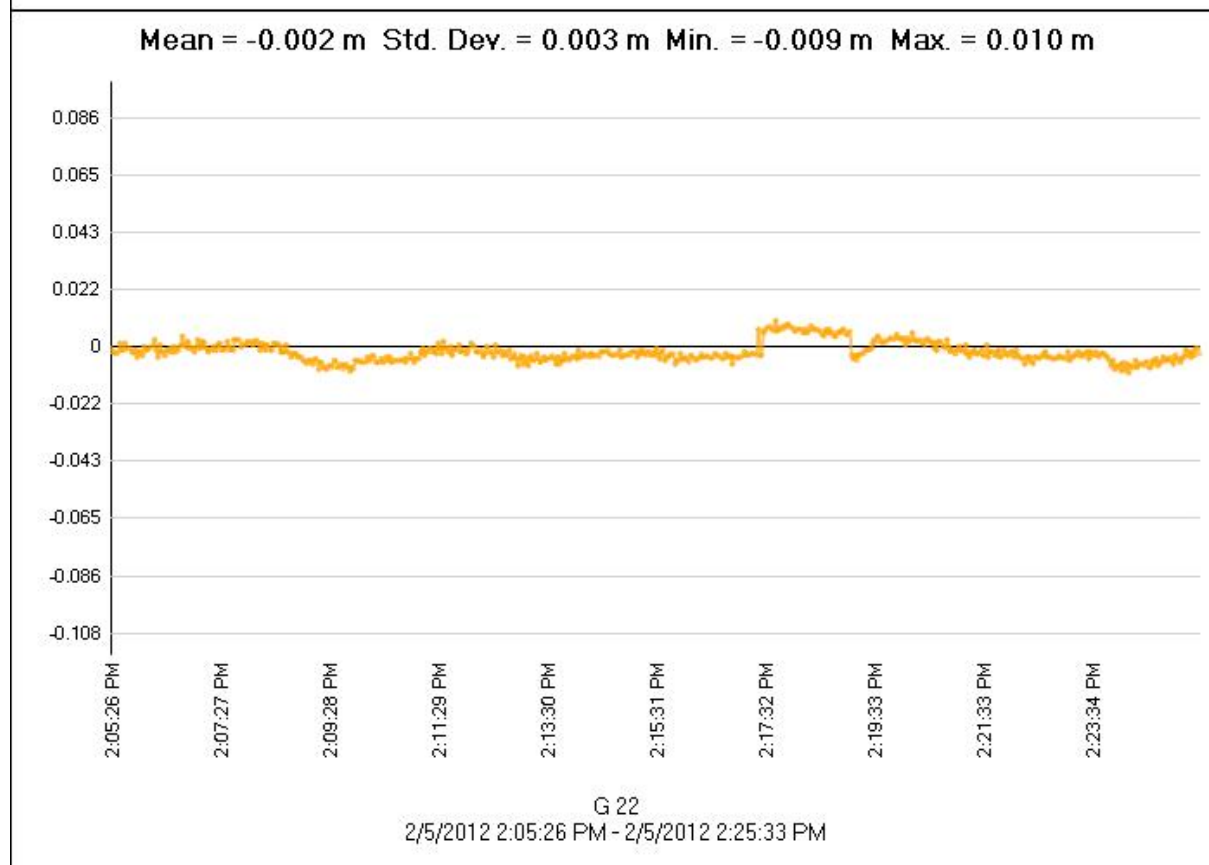
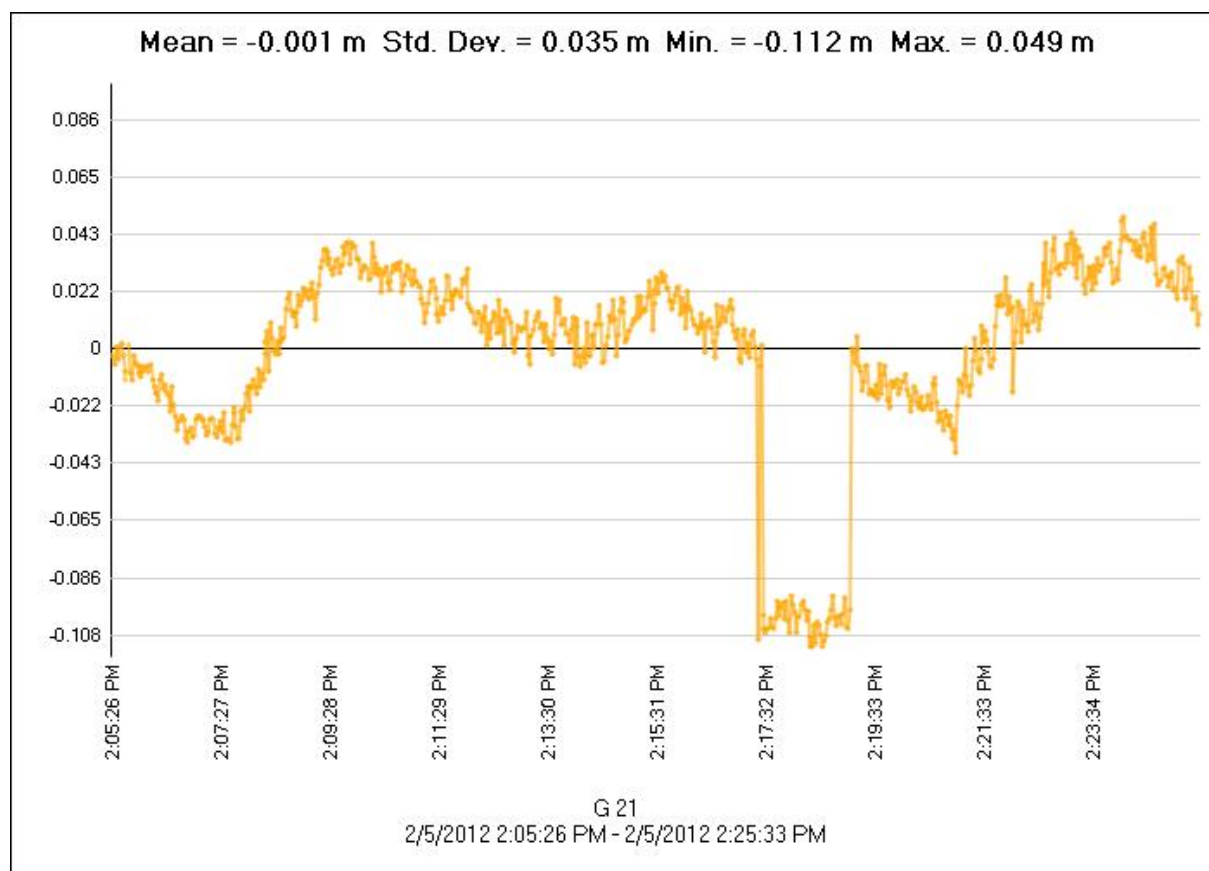


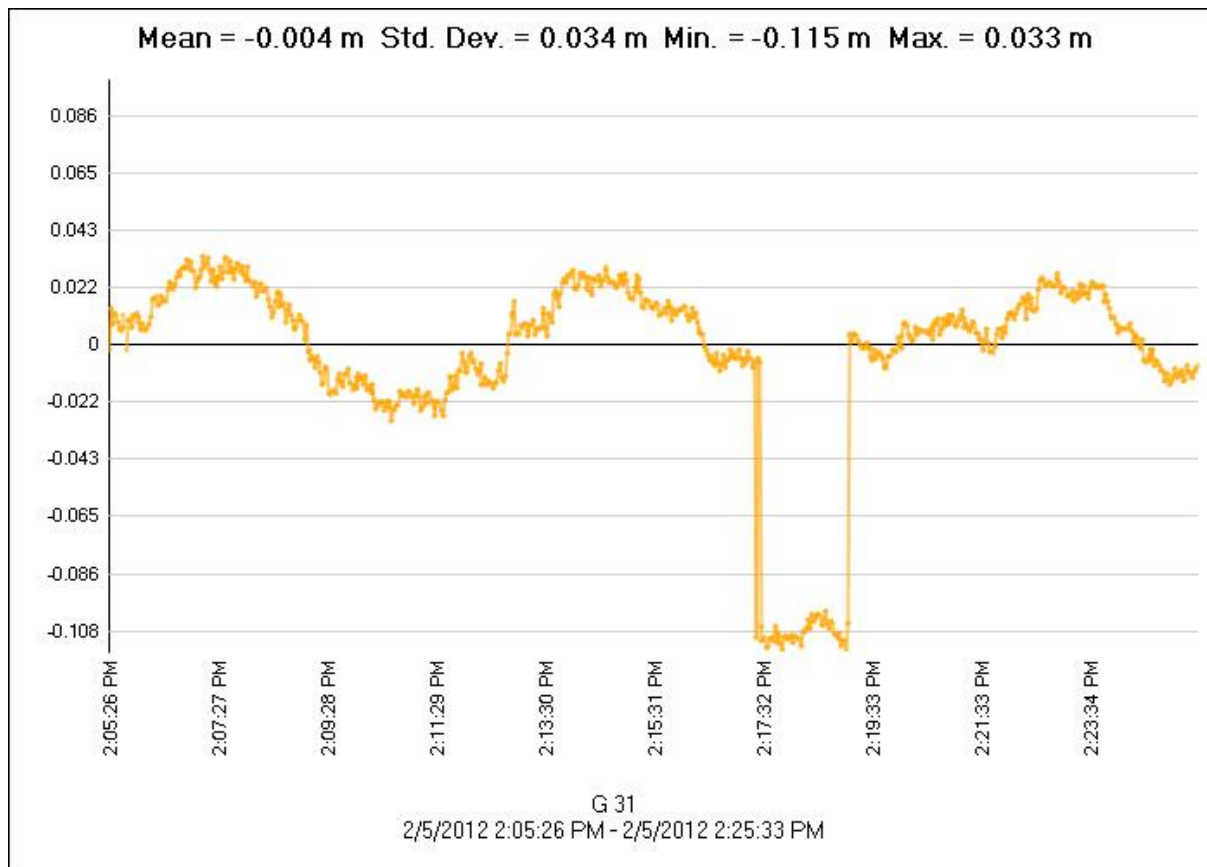
Residuals











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:	Dual Frequency (L1, L2)
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

19S-SPIKE - SVA31-B2 (2:30:12 PM-2:49:49 PM) (S26)

Baseline observation: 19S-SPIKE --- SVA31-B2 (B26)

Processed: 4/11/2012 3:29:17 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.045 m

Vertical precision: 0.029 m

RMS: 0.004 m

Maximum PDOP: 1.735

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/5/2012 2:30:12 PM (Local: UTC-7hr)

Processing stop time: 2/5/2012 2:49:49 PM (Local: UTC-7hr)

Processing duration: 00:19:36

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338087.643 m	Latitude	N37°29'23.71988"	Latitude	N37°29'23.71988"
Northing	4150798.564 m	Longitude	W100°49'53.27643"	Longitude	W100°49'53.27643"
Elevation	886.743 m	Height	860.575 m	Height	860.575 m

To:	SVA31-B2				
Grid		Local		Global	
Easting	319642.163 m	Latitude	N37°09'19.97767"	Latitude	N37°09'19.97766"
Northing	4114059.422 m	Longitude	W101°01'51.83972"	Longitude	W101°01'51.83972"
Elevation	891.669 m	Height	865.152 m	Height	865.152 m

Vector					
9Ughb[	-18445.480 m	NS Fwd Azimuth	205°32'57"	L	-21640.640 m
BcfA\jb[	-36739.142 m	Ellipsoid Dist.	41111.212 m	M	-18742.870 m
9Yj Uhcb	4.926 m	<Y][\h	4.577 m	N	-29512.230 m

Standard Errors

Vector errors:					
Point ID	0.009 m	Point Description	0°00'00"	Point Type	0.011 m
Point ID	0.017 m	Point Description	0.018 m	Point Type	0.015 m
Point ID	0.015 m	Point Description	0.015 m	Point Type	0.015 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0001206720		
Y	0.0001159852	0.0002375395	
Z	0.0000832030	0.0000295847	0.0002284209

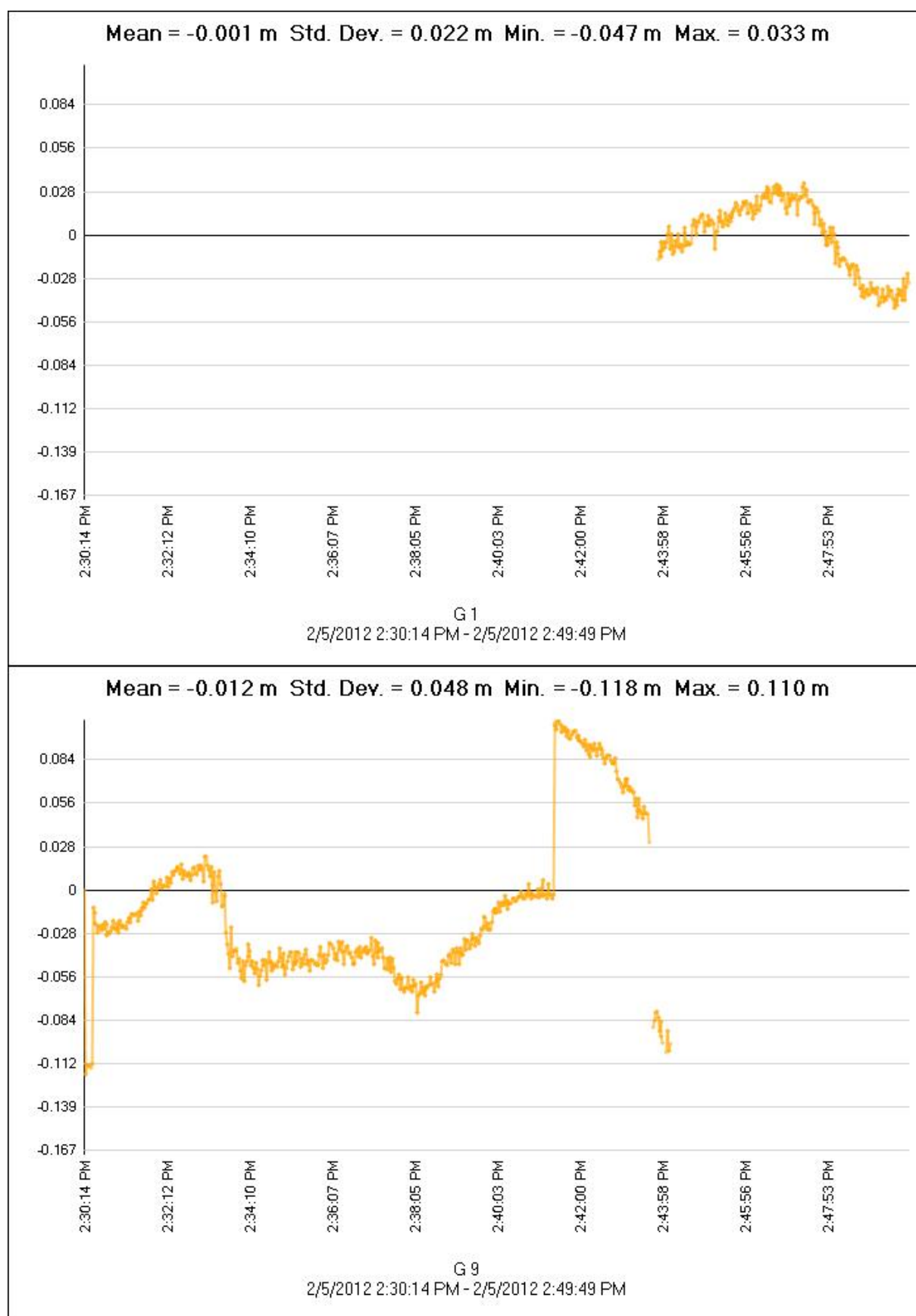
Occupations

	From	To
Point ID:	19S-SPIKE	SVA31-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010360.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080369.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

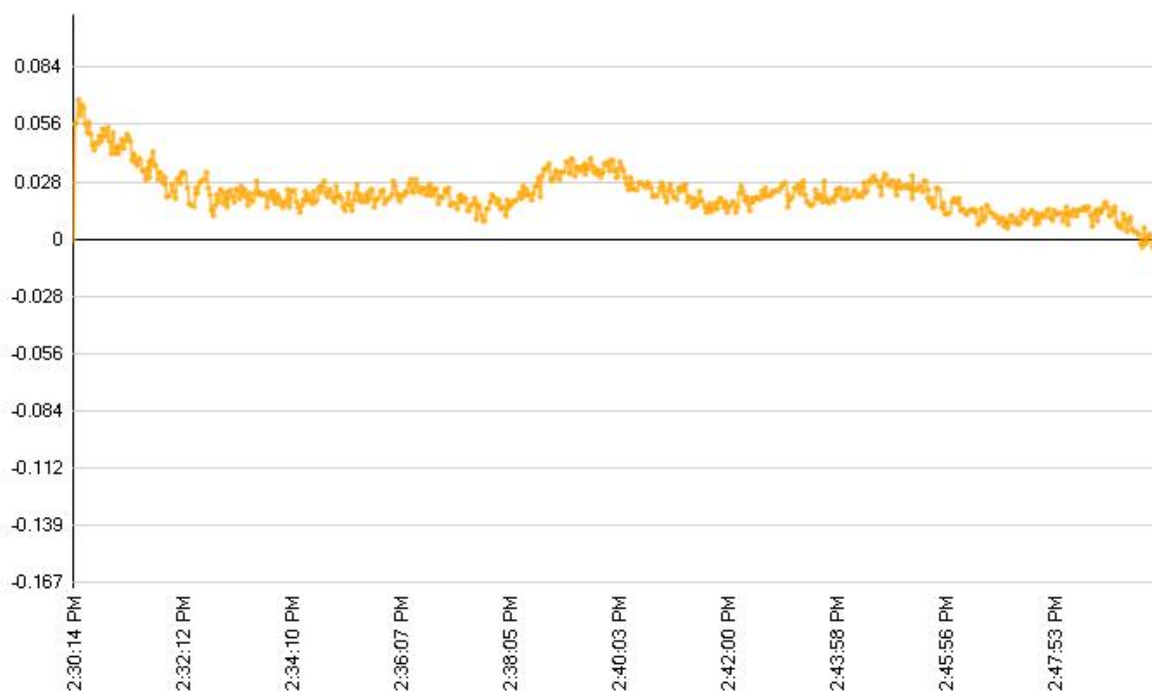
Tracking Summary

SV		2/5/2012 2:30:12 PM	Duration: 00:19:36.5000000	Major interval: 00:01:00	2/5/2012 2:49:49 PM
G 1	L1				
	L2				
G 9	L1				
	L2				
G 11	L1				
	L2				
G 12	L1				
	L2				
G 14	L1				
	L2				
G 18	L1				
	L2				
G 19	L1				
	L2				
G 21	L1				
	L2				
G 22	L1				
	L2				
G 25	L1				
	L2				
G 31	L1				
	L2				
G 32	L1				
	L2				

Residuals



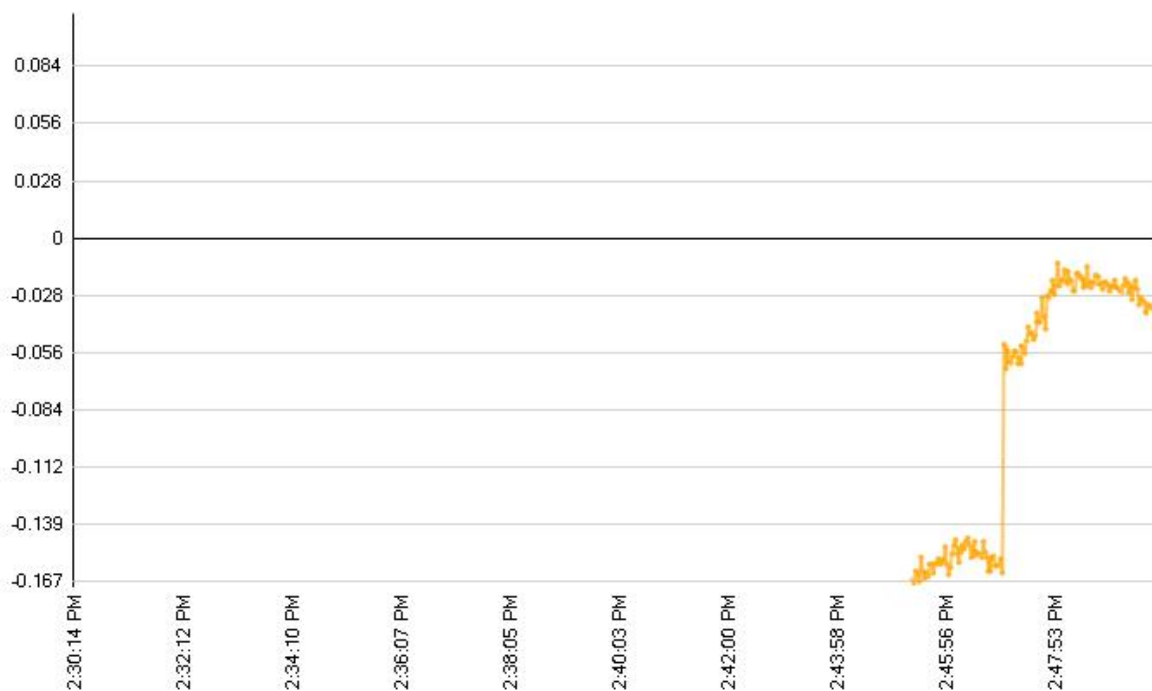
Mean = 0.021 m Std. Dev. = 0.010 m Min. = -0.008 m Max. = 0.068 m



G 11

2/5/2012 2:30:14 PM - 2/5/2012 2:49:49 PM

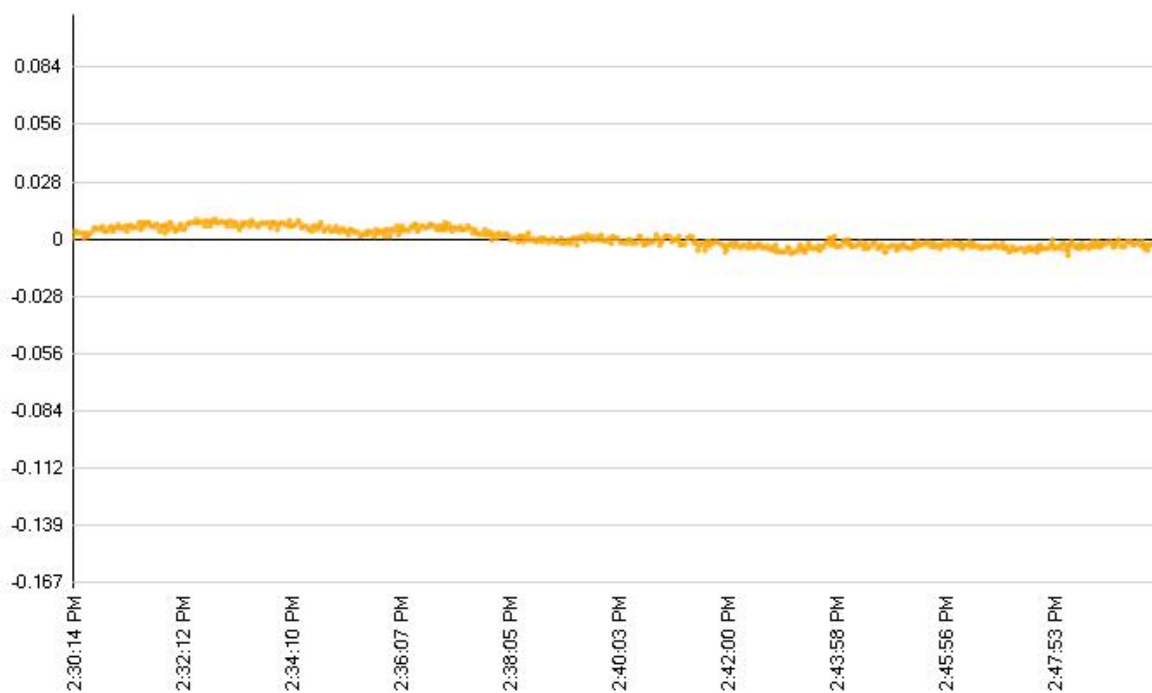
Mean = -0.076 m Std. Dev. = 0.061 m Min. = -0.169 m Max. = -0.008 m



G 12

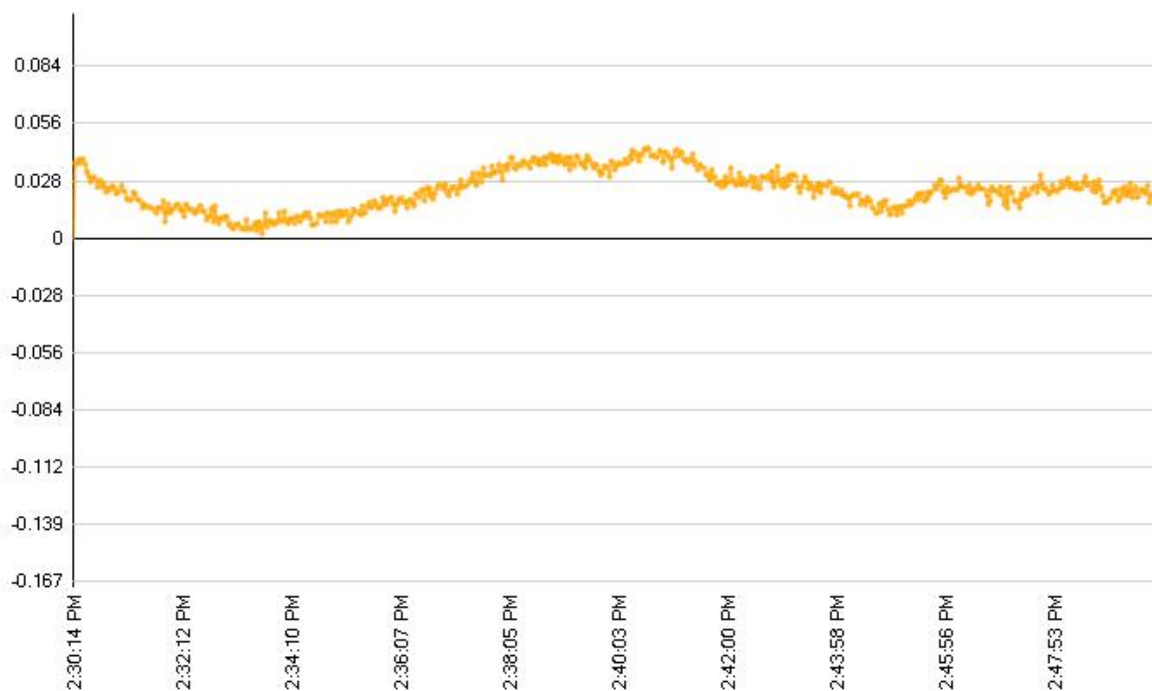
2/5/2012 2:30:14 PM - 2/5/2012 2:49:49 PM

Mean = 0.001 m Std. Dev. = 0.004 m Min. = -0.008 m Max. = 0.010 m

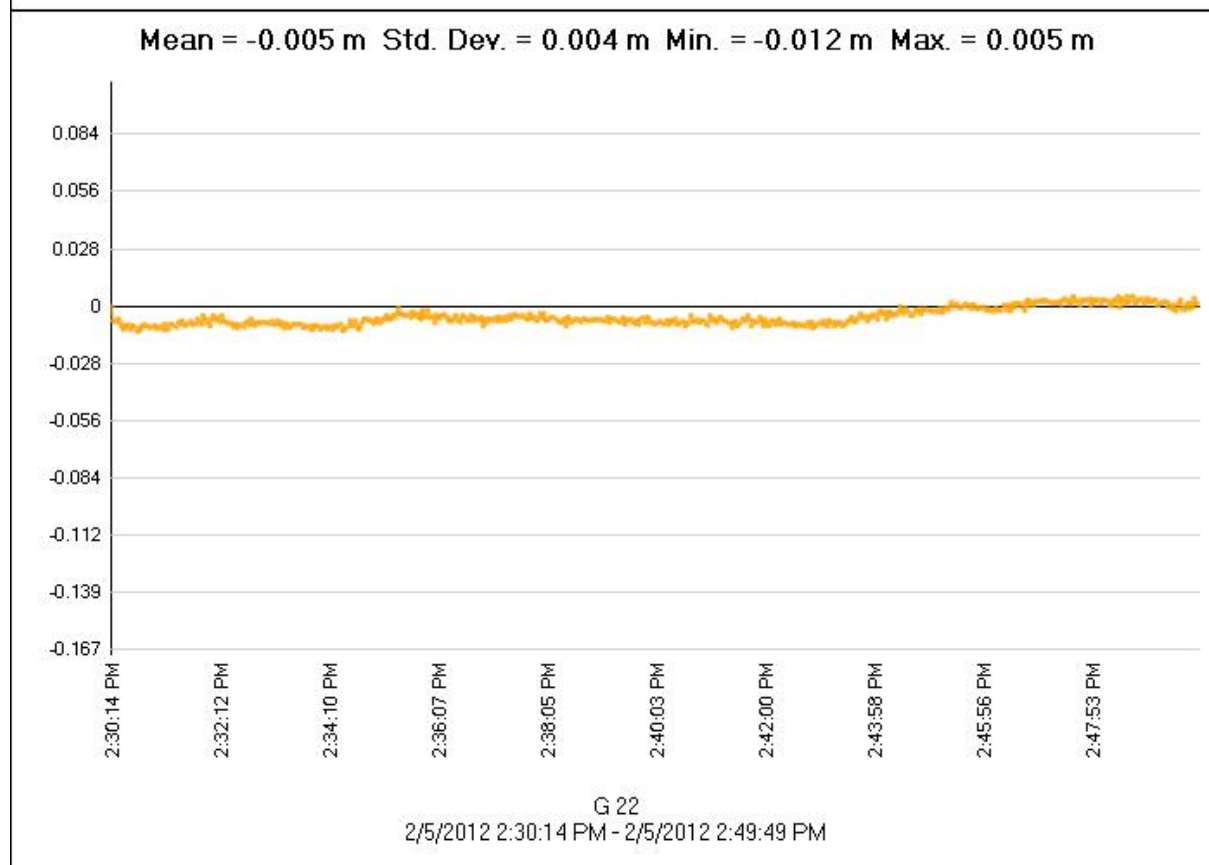
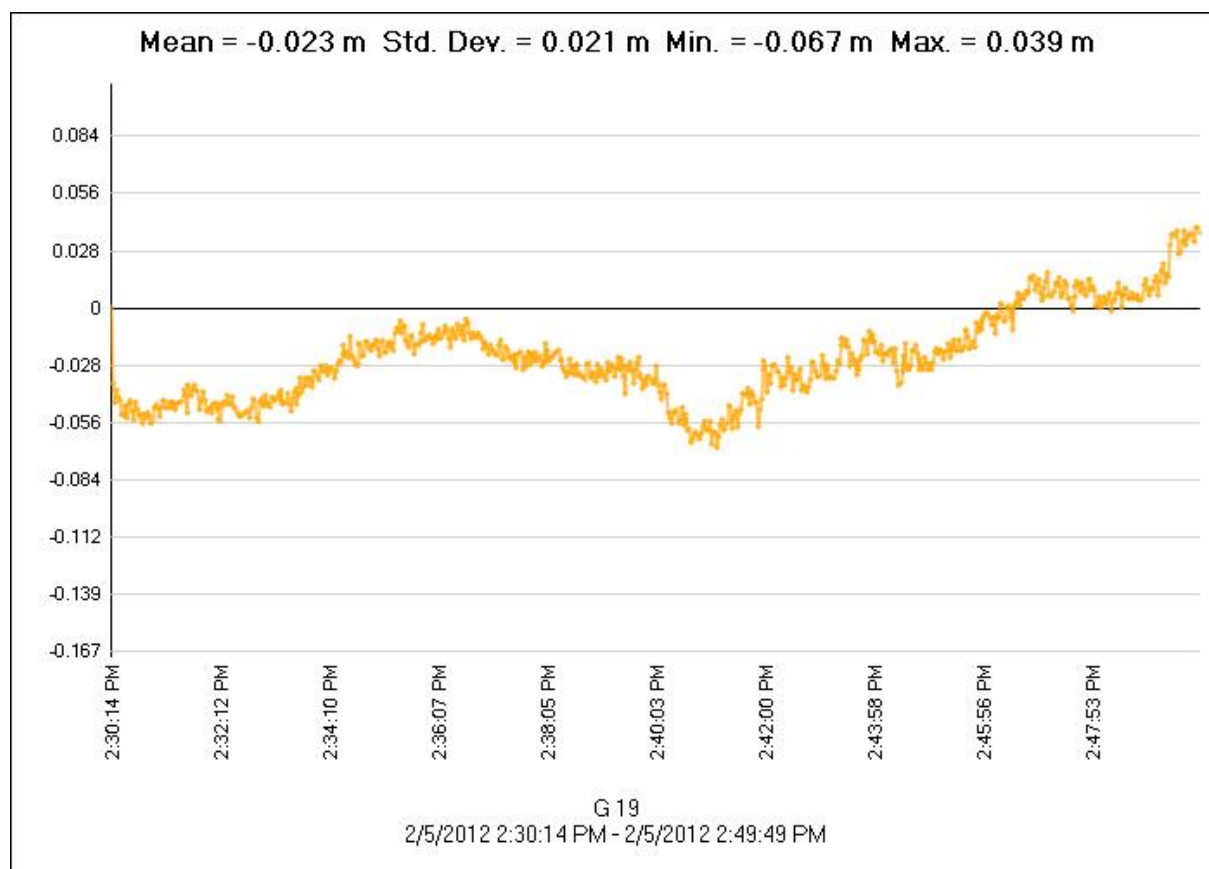


G 14
2/5/2012 2:30:14 PM - 2/5/2012 2:49:49 PM

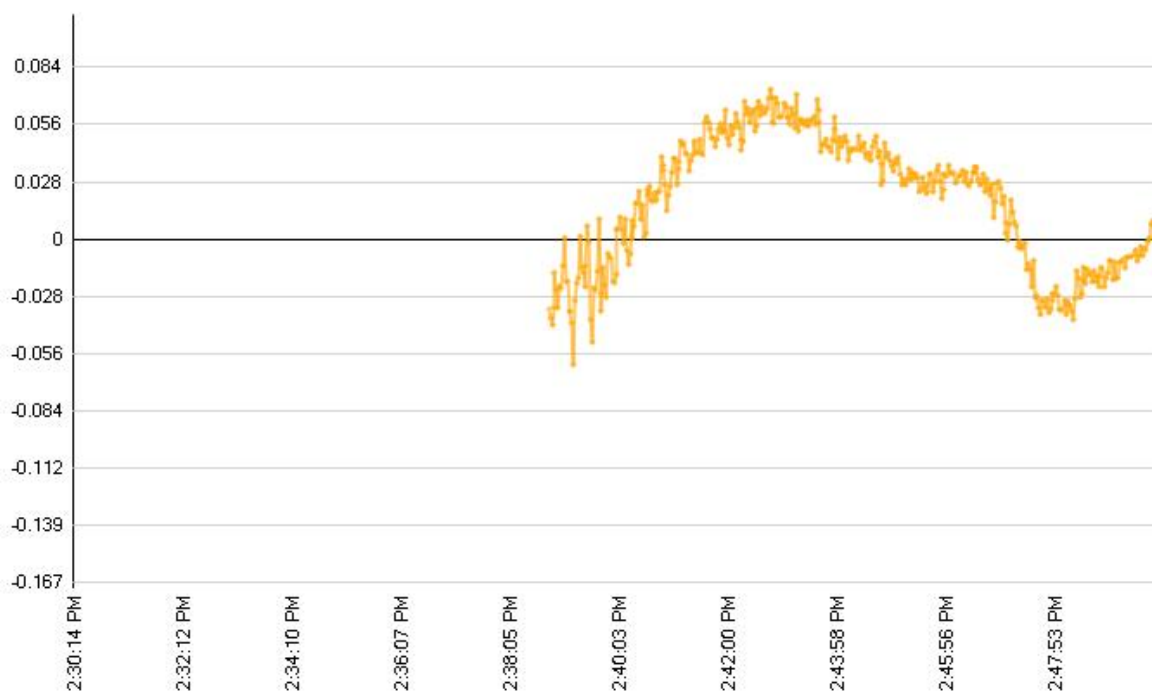
Mean = 0.023 m Std. Dev. = 0.010 m Min. = 0.000 m Max. = 0.044 m



G 18
2/5/2012 2:30:14 PM - 2/5/2012 2:49:49 PM



Mean = 0.018 m Std. Dev. = 0.030 m Min. = -0.061 m Max. = 0.073 m

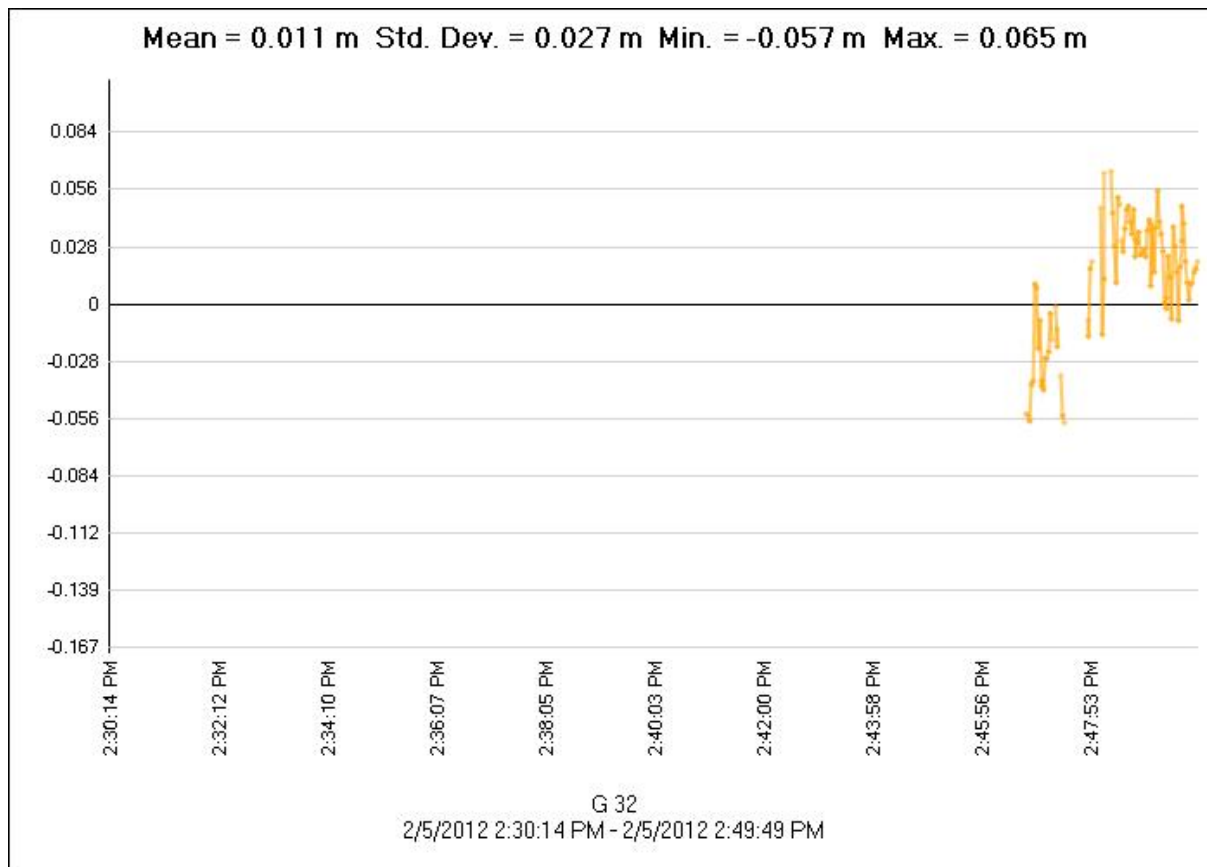


G 25
2/5/2012 2:30:14 PM - 2/5/2012 2:49:49 PM

Mean = -0.009 m Std. Dev. = 0.007 m Min. = -0.027 m Max. = 0.016 m



G 31
2/5/2012 2:30:14 PM - 2/5/2012 2:49:49 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:	Dual Frequency (L1, L2)
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

19S-SPIKE - FVA32-B2 (3:30:45 PM-3:49:50 PM) (S27)

Baseline observation: 19S-SPIKE --- FVA32-B2 (B27)

Processed: 4/11/2012 3:29:12 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.010 m

Vertical precision: 0.018 m

RMS: 0.004 m

Maximum PDOP: 2.550

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/5/2012 3:30:45 PM (Local: UTC-7hr)

Processing stop time: 2/5/2012 3:49:50 PM (Local: UTC-7hr)

Processing duration: 00:19:04

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338087.643 m	Latitude	N37°29'23.71988"	Latitude	N37°29'23.71988"
Northing	4150798.564 m	Longitude	W100°49'53.27643"	Longitude	W100°49'53.27643"
Elevation	886.743 m	Height	860.575 m	Height	860.575 m

To:	FVA32-B2				
Grid		Local		Global	
Easting	323123.048 m	Latitude	N37°16'41.92813"	Latitude	N37°16'41.92813"
Northing	4127612.965 m	Longitude	W100°59'42.37154"	Longitude	W100°59'42.37154"
Elevation	889.841 m	Height	863.488 m	Height	863.488 m

Vector					
9Ughb[	-14964.596 m	NS Fwd Azimuth	211°43'37"	L	-16932.264 m
BcfA\jb[	-23185.600 m	Ellipsoid Dist.	27596.770 m	M	-11261.499 m
9Yj Uhcb	3.098 m	<Y][\h	2.913 m	N	-18661.829 m

Standard Errors

Vector errors:					
Ughb[	0.003 m	BG`Zk X'5n]a i h	0°00'00"	L	0.004 m
Bcfh\]b[	0.004 m	'9~]dgc]X'8]gh	0.004 m	M	0.006 m
'9`Yj Uhcb	0.009 m	' <Y][\h	0.009 m	N	0.008 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000127758		
Y	0.0000126311	0.0000413765	
Z	-0.0000099994	-0.0000358195	0.0000569622

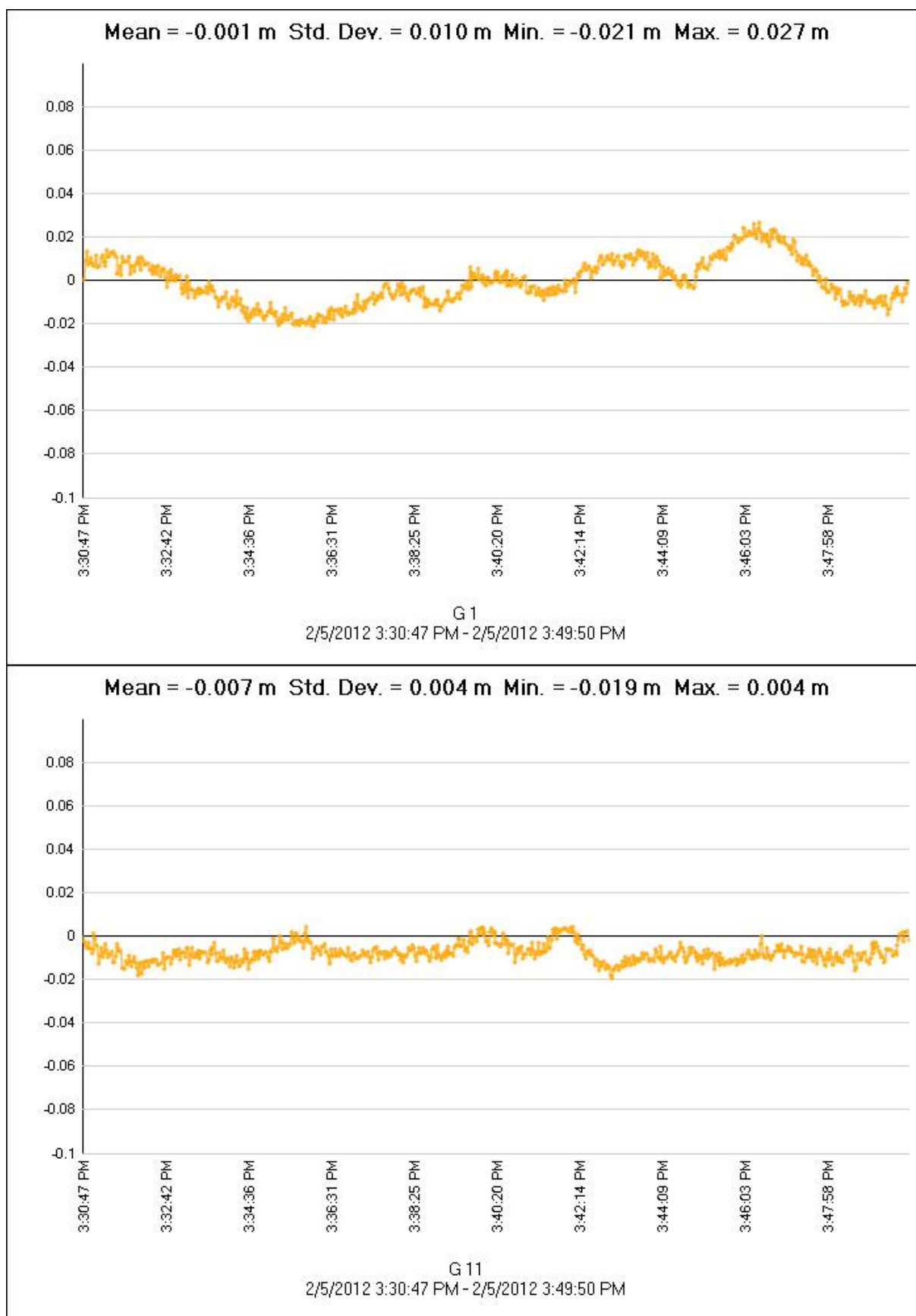
Occupations

	From	To
Point ID:	19S-SPIKE	FVA32-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00010360.12o	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\0008036A.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

Tracking Summary

SV	2/5/2012 3:30:45 PM	Duration: 00:19:04.5000000	Major interval: 00:01:00	2/5/2012 3:49:50 PM
G 1	L1 L2			
G 11	L1 L2			
G 12	L1 L2			
G 14	L1 L2			
G 18	L1 L2			
G 19	L1 L2			
G 20	L1 L2			
G 22	L1 L2			
G 25	L1 L2			
G 30	L1 L2			
G 31	L1 L2			
G 32	L1 L2			

Residuals

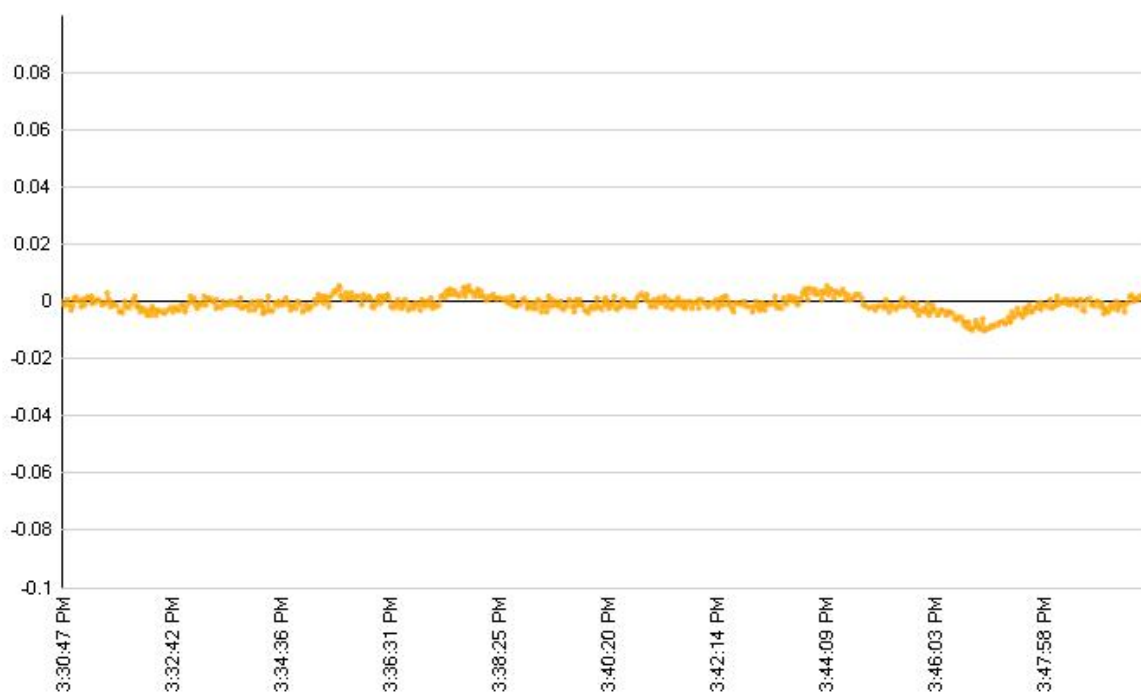


Mean = 0.011 m Std. Dev. = 0.015 m Min. = -0.033 m Max. = 0.052 m



G 12
2/5/2012 3:30:47 PM - 2/5/2012 3:49:50 PM

Mean = -0.001 m Std. Dev. = 0.002 m Min. = -0.010 m Max. = 0.005 m



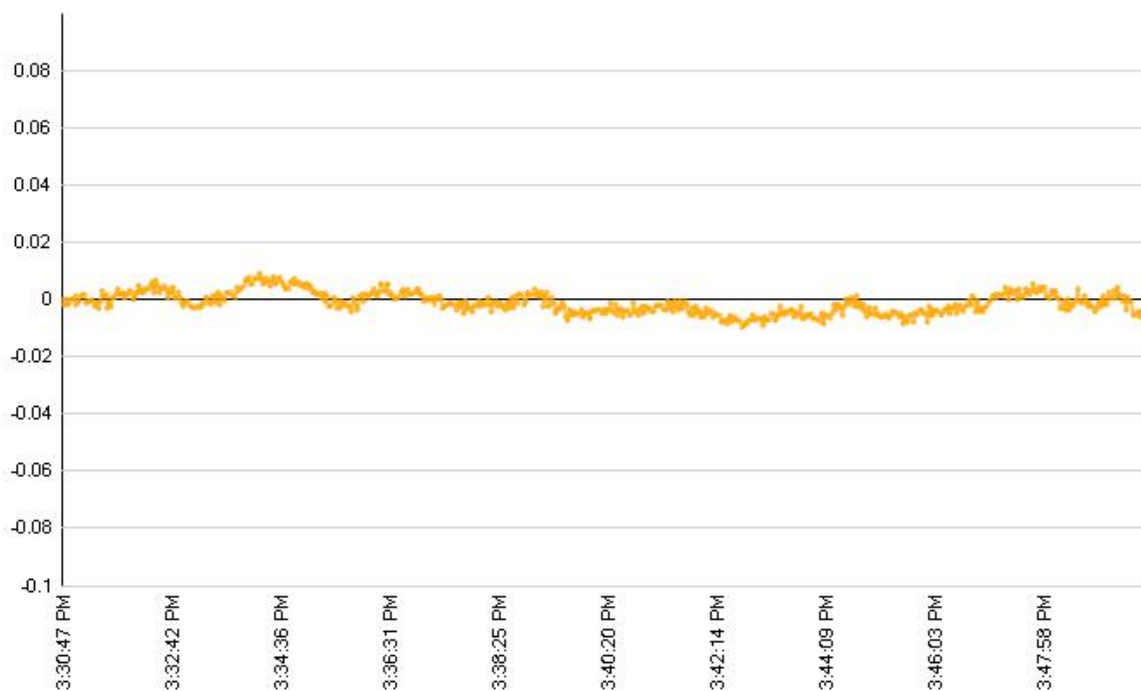
G 14
2/5/2012 3:30:47 PM - 2/5/2012 3:49:50 PM

Mean = 0.019 m Std. Dev. = 0.027 m Min. = -0.052 m Max. = 0.089 m



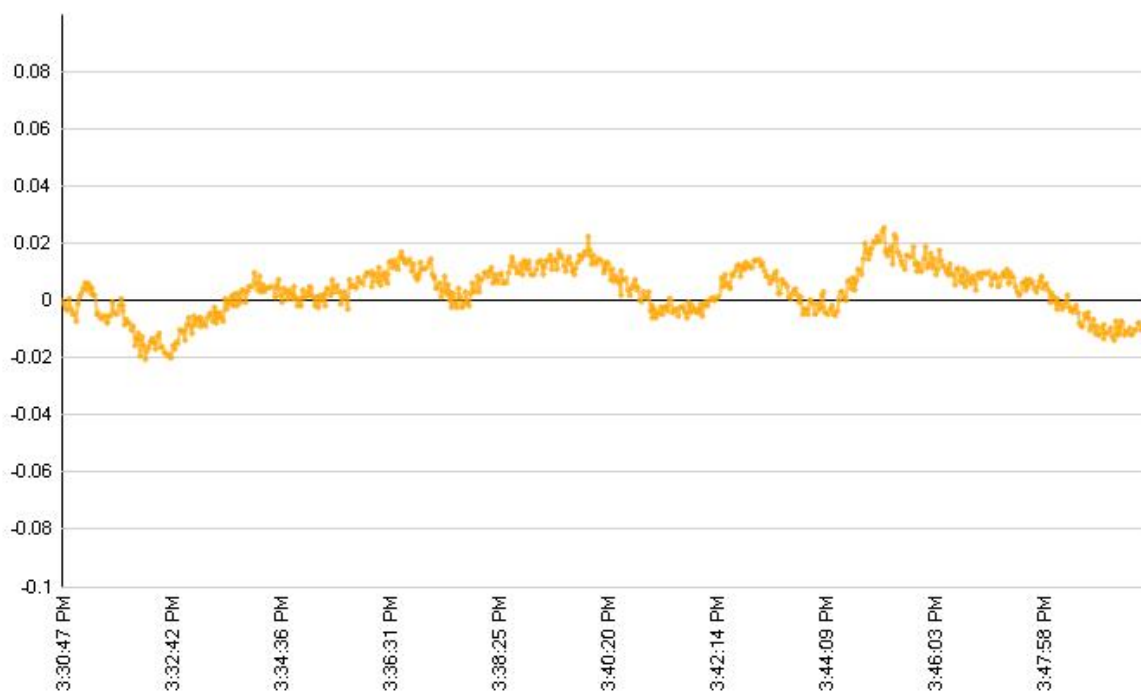
G 18
2/5/2012 3:30:47 PM - 2/5/2012 3:49:50 PM

Mean = -0.001 m Std. Dev. = 0.003 m Min. = -0.010 m Max. = 0.009 m



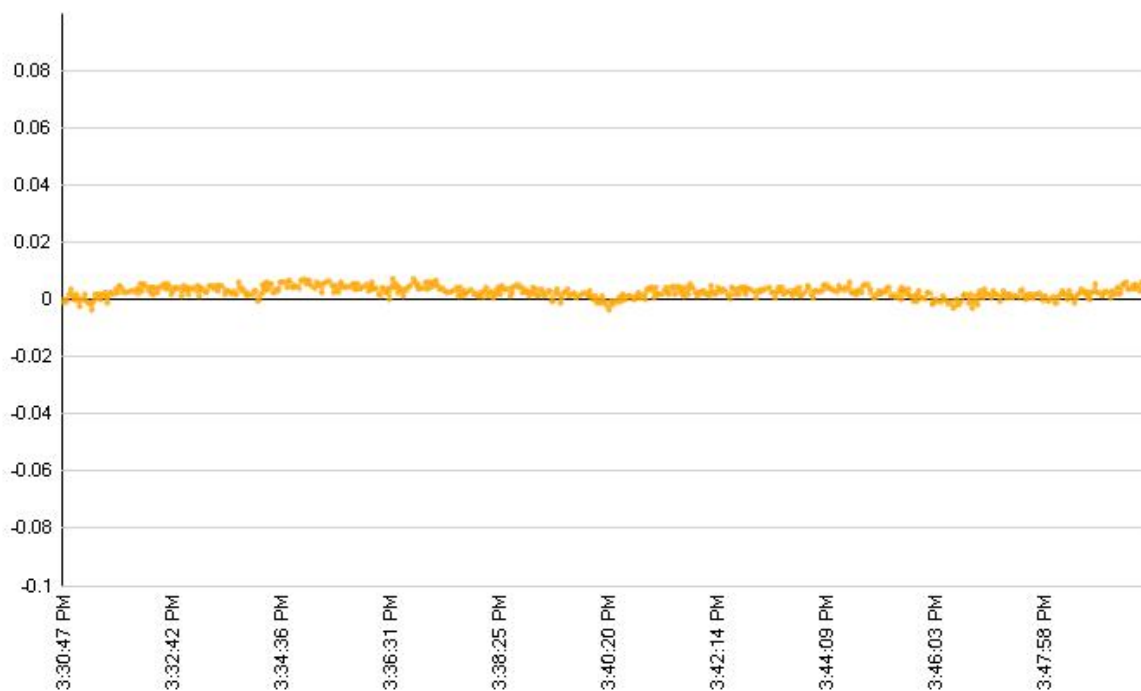
G 22
2/5/2012 3:30:47 PM - 2/5/2012 3:49:50 PM

Mean = 0.003 m Std. Dev. = 0.008 m Min. = -0.020 m Max. = 0.025 m

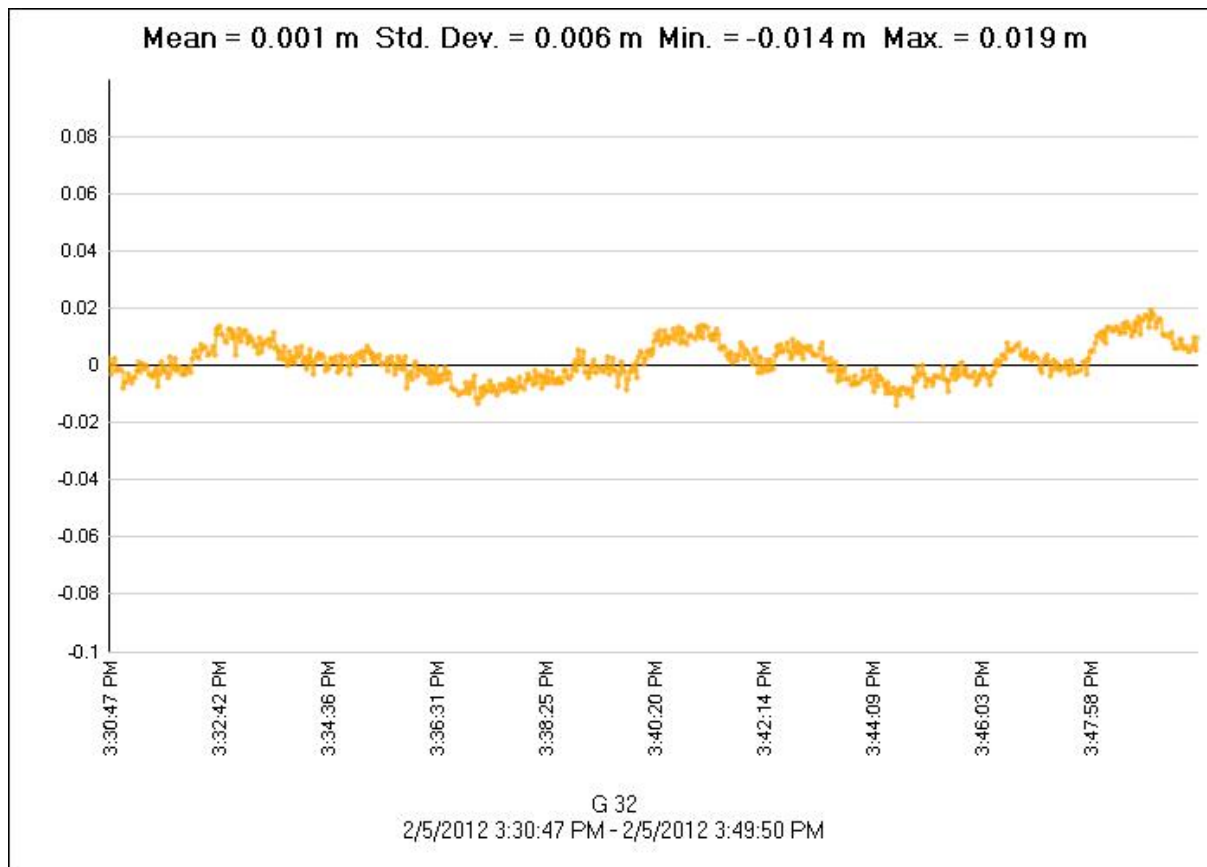


G 25
2/5/2012 3:30:47 PM - 2/5/2012 3:49:50 PM

Mean = 0.002 m Std. Dev. = 0.002 m Min. = -0.004 m Max. = 0.008 m



G 31
2/5/2012 3:30:47 PM - 2/5/2012 3:49:50 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:	Dual Frequency (L1, L2)
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

19S-SPIKE - SVA32-B2 (3:55:41 PM-4:15:48 PM) (S28)

Baseline observation: 19S-SPIKE --- SVA32-B2 (B28)

Processed: 4/11/2012 3:29:19 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.010 m

Vertical precision: 0.014 m

RMS: 0.006 m

Maximum PDOP: 2.735

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/5/2012 3:55:41 PM (Local: UTC-7hr)

Processing stop time: 2/5/2012 4:15:48 PM (Local: UTC-7hr)

Processing duration: 00:20:06

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338087.643 m	Latitude	N37°29'23.71988"	Latitude	N37°29'23.71988"
Northing	4150798.564 m	Longitude	W100°49'53.27643"	Longitude	W100°49'53.27643"
Elevation	886.743 m	Height	860.575 m	Height	860.575 m

To:	SVA32-B2				
Grid		Local		Global	
Easting	323169.339 m	Latitude	N37°16'42.90638"	Latitude	N37°16'42.90638"
Northing	4127642.152 m	Longitude	W100°59'40.51784"	Longitude	W100°59'40.51784"
Elevation	888.497 m	Height	862.145 m	Height	862.145 m

Vector					
9Ughb[	-14918.305 m	NS Fwd Azimuth	211°40'45"	L	-16883.742 m
BcfA\jb[	-23156.412 m	Ellipsoid Dist.	27547.153 m	M	-11251.227 m
9Yj Uhcb	1.755 m	<Y][\h	1.570 m	N	-18638.642 m

Standard Errors

Vector errors:					
Point ID	0.003 m	Point ID	0°00'00"	Point ID	0.003 m
Point ID	0.004 m	Point ID	0.004 m	Point ID	0.006 m
Point ID	0.007 m	Point ID	0.007 m	Point ID	0.006 m

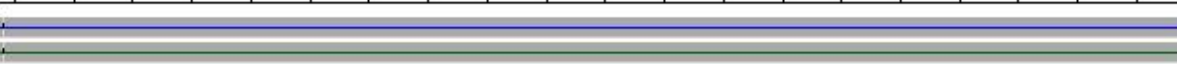


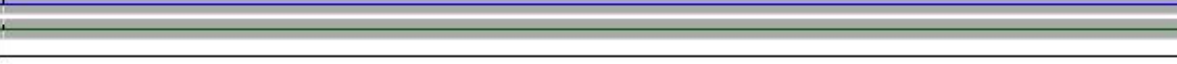



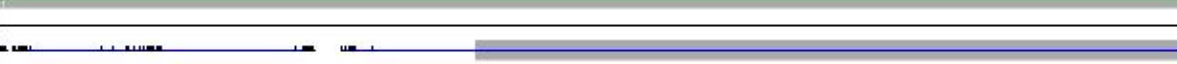



Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000092472		
Y	0.0000070020	0.0000309881	
Z	-0.0000048363	-0.0000186286	0.0000372155

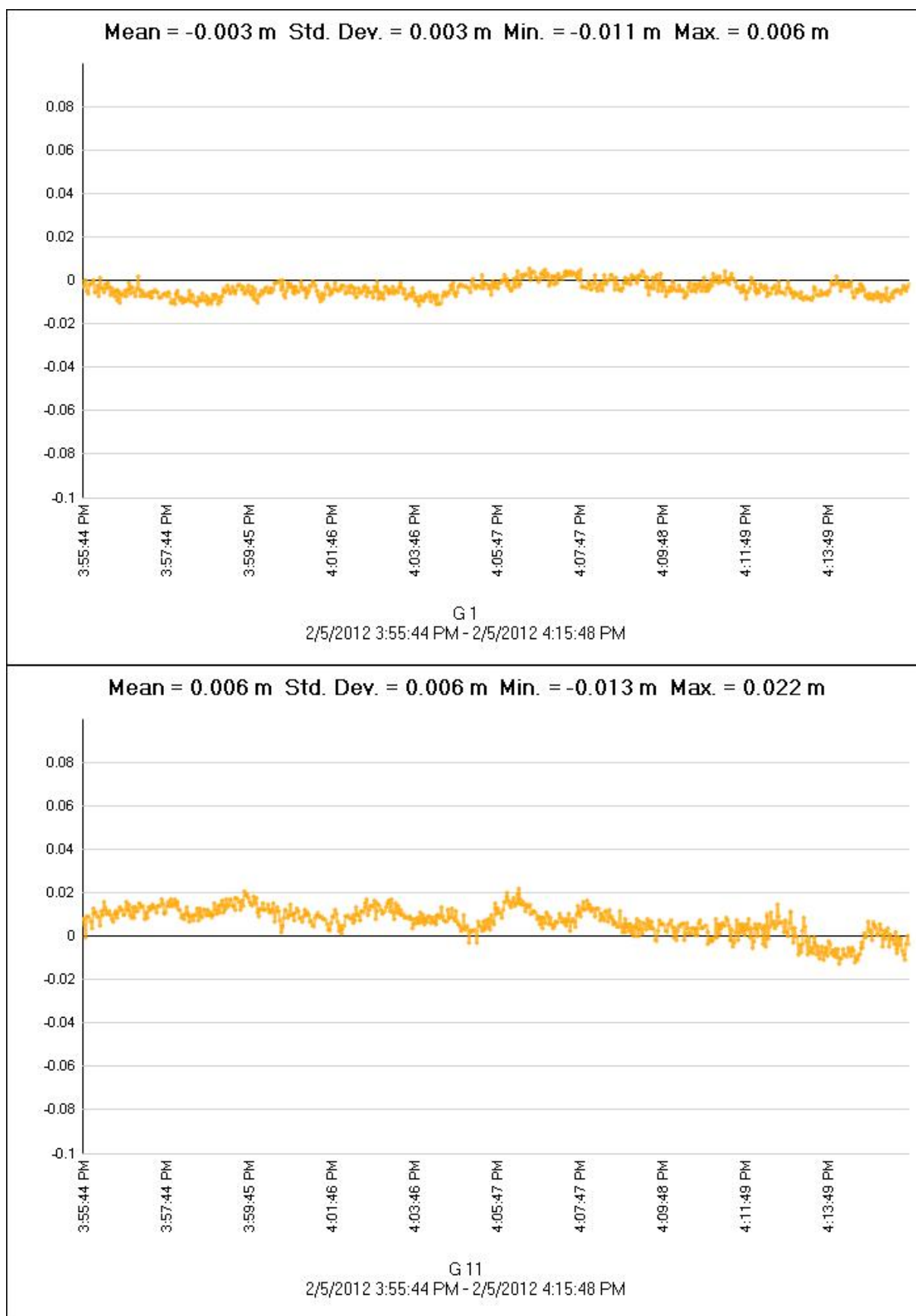
Occupations

	From	To
Point ID:	19S-SPIKE	SVA32-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010360.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\0008036B.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

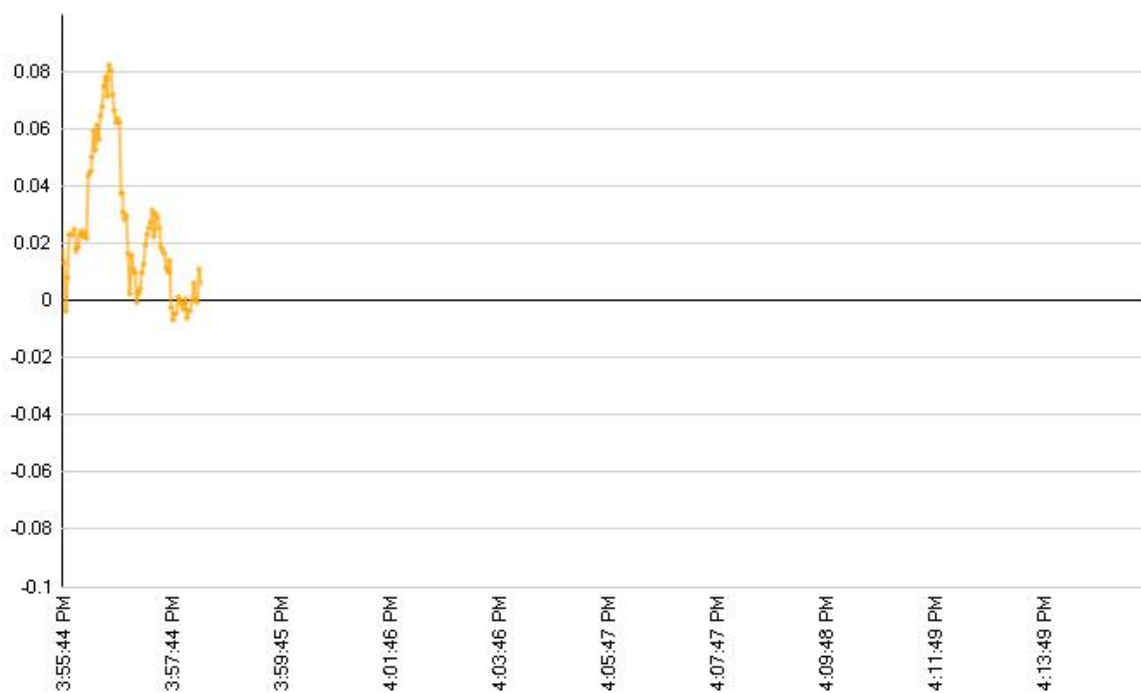
Tracking Summary

SV	2/5/2012 3:55:41 PM	Duration: 00:20:06.5000000	Major interval: 00:01:00	2/5/2012 4:15:48 PM
G 1	L1 L2			
G 11	L1 L2			
G 12	L1 L2			
G 14	L1 L2			
G 18	L1 L2			
G 20	L1 L2			
G 22	L1 L2			
G 25	L1 L2			
G 30	L1 L2			
G 31	L1 L2			
G 32	L1 L2			

Residuals



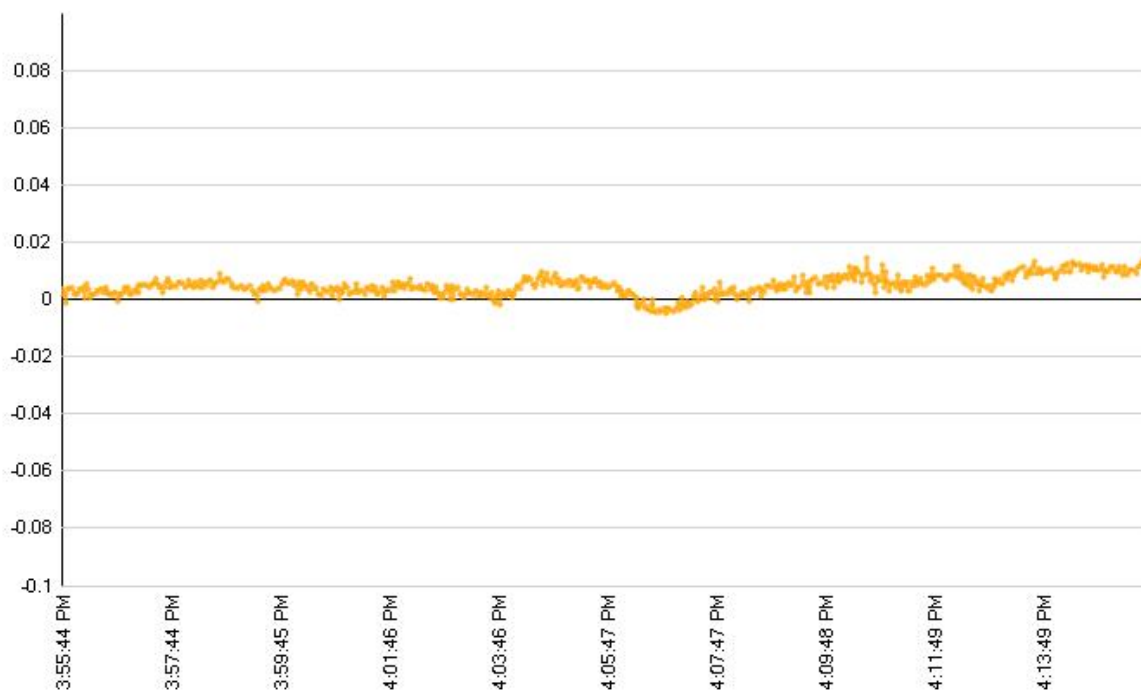
Mean = 0.024 m Std. Dev. = 0.024 m Min. = -0.007 m Max. = 0.082 m



G 12

2/5/2012 3:55:44 PM - 2/5/2012 4:15:48 PM

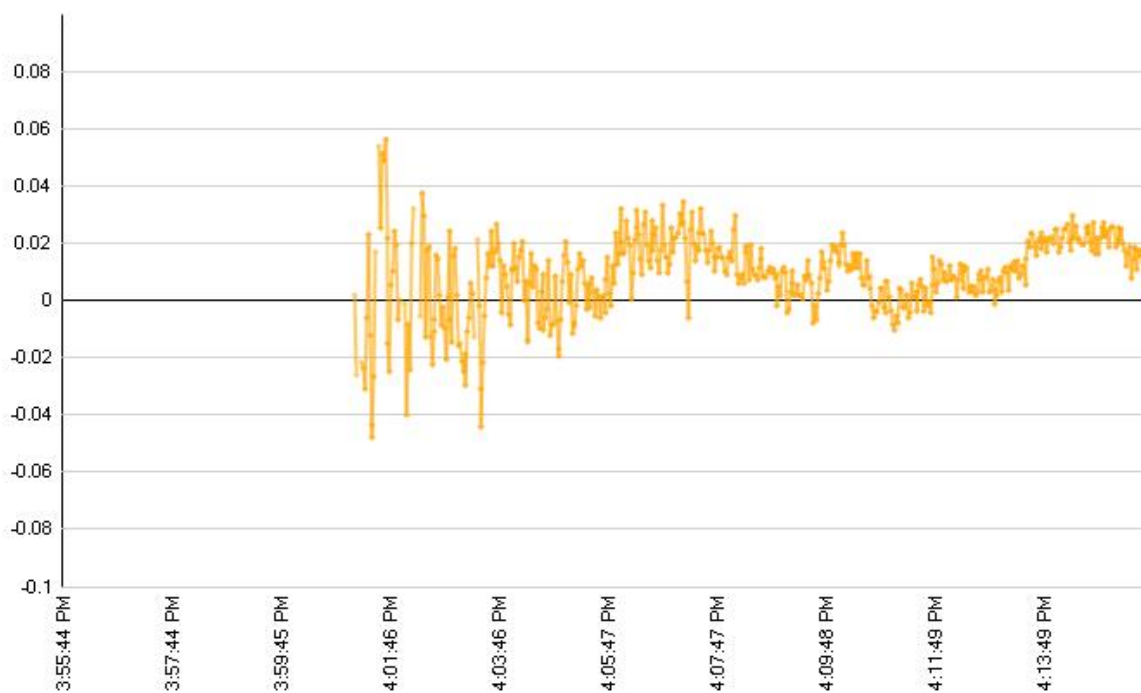
Mean = 0.004 m Std. Dev. = 0.003 m Min. = -0.005 m Max. = 0.015 m



G 14

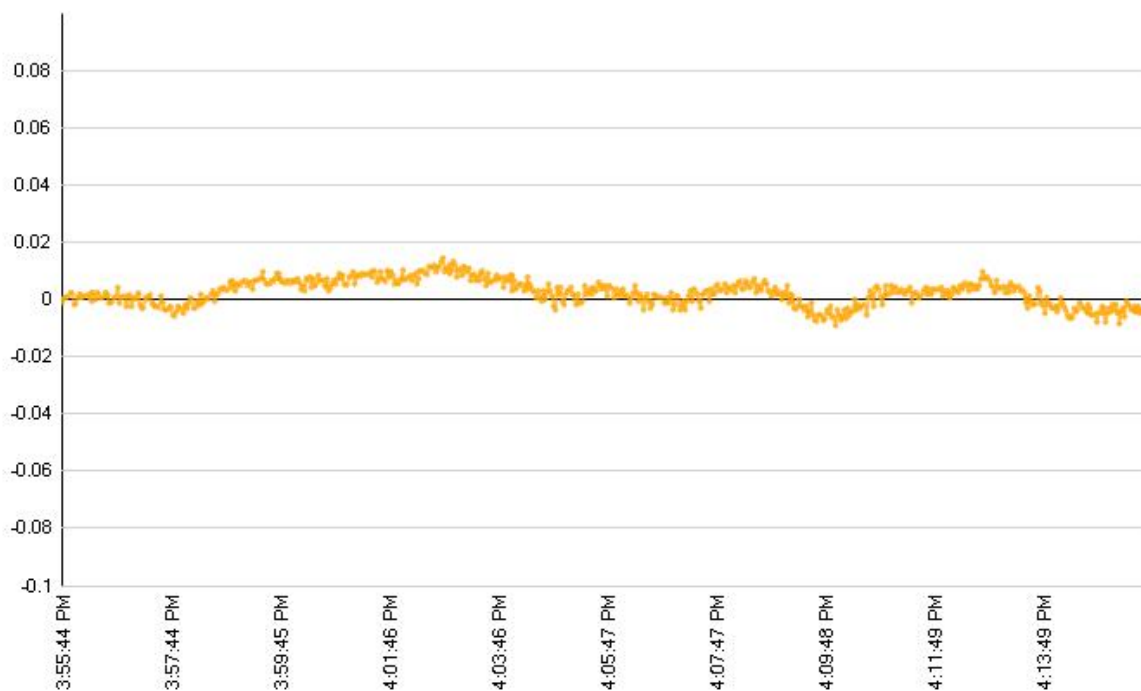
2/5/2012 3:55:44 PM - 2/5/2012 4:15:48 PM

Mean = 0.008 m Std. Dev. = 0.012 m Min. = -0.048 m Max. = 0.056 m

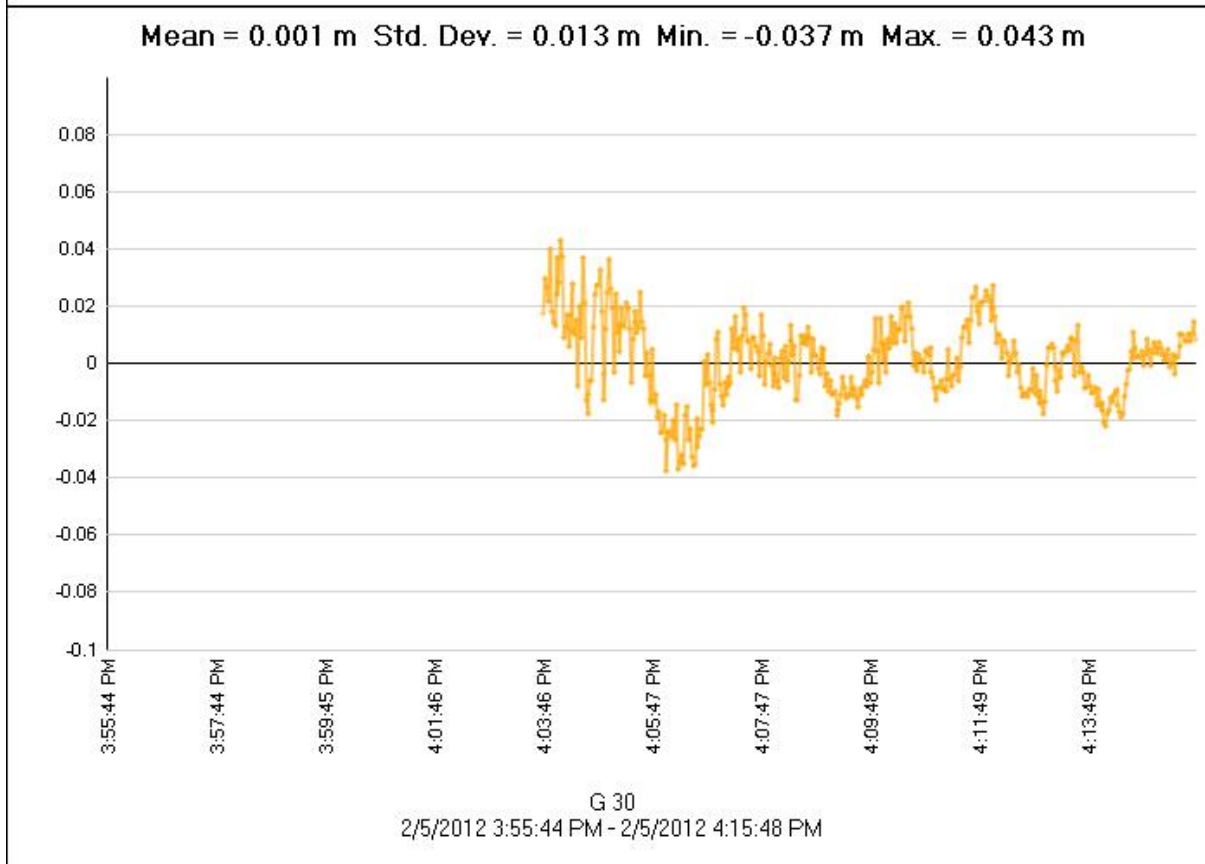
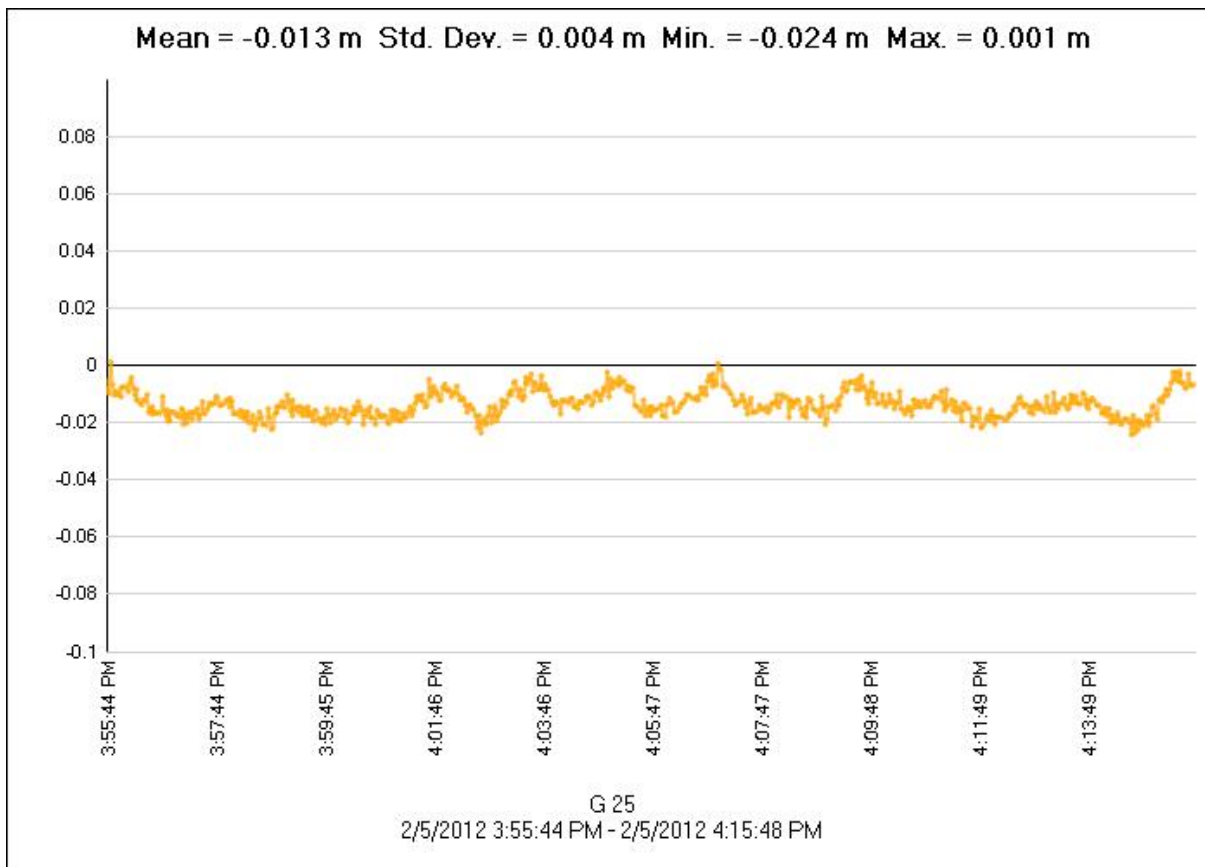


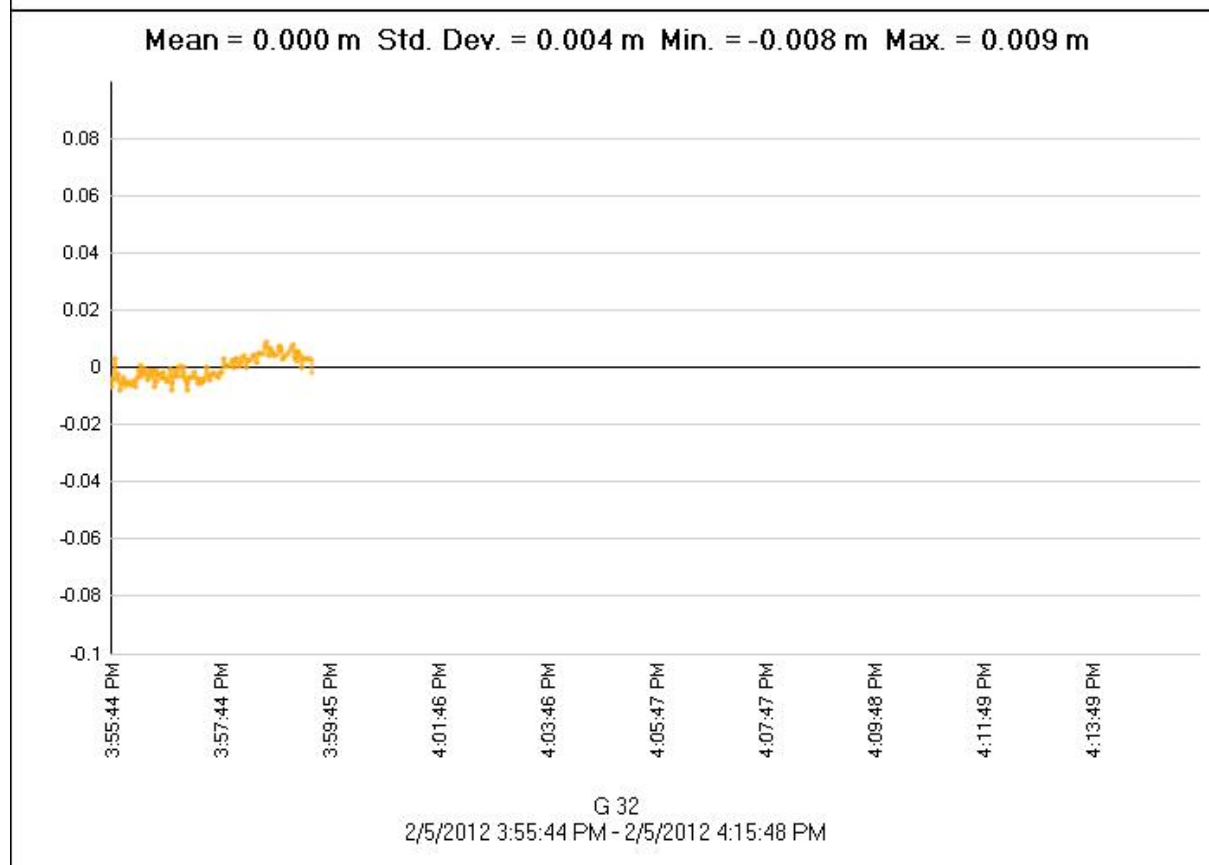
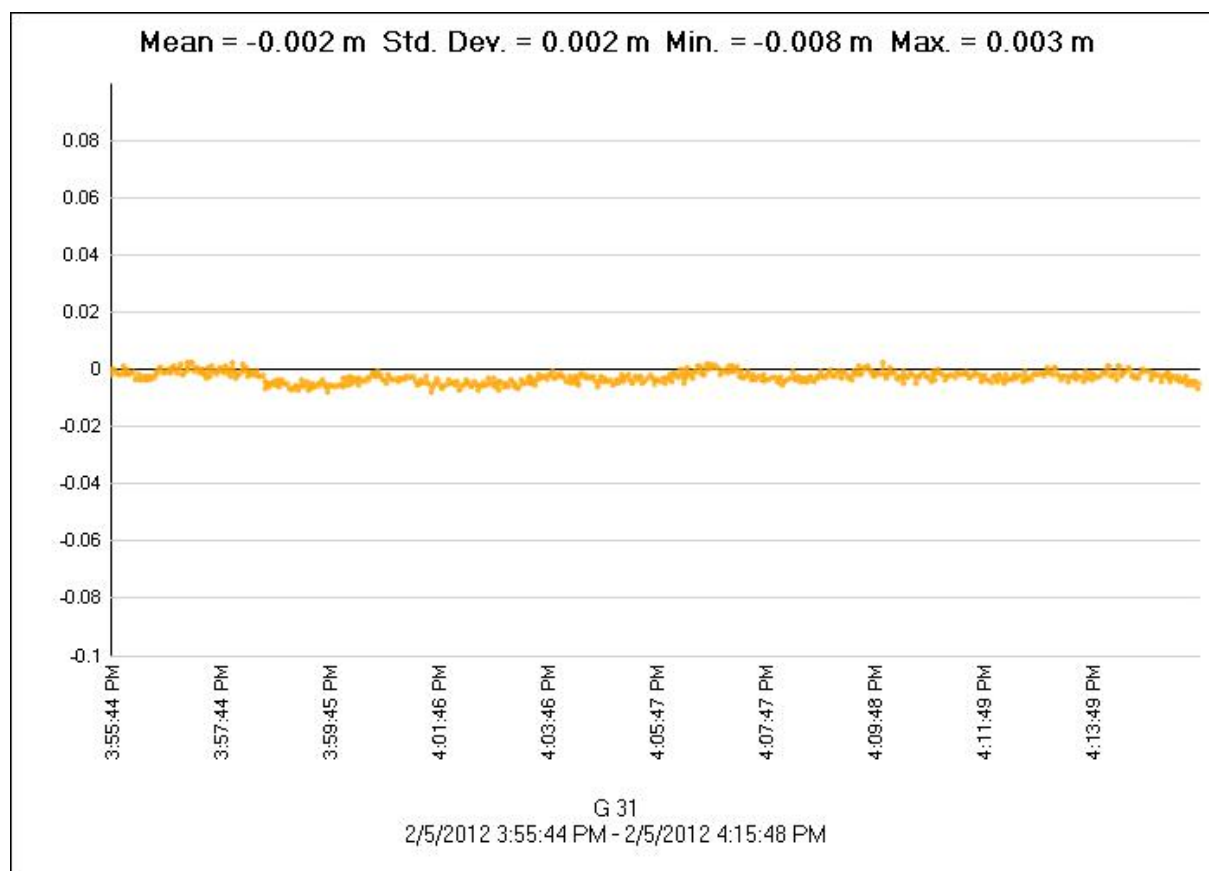
G 20
2/5/2012 3:55:44 PM - 2/5/2012 4:15:48 PM

Mean = 0.002 m Std. Dev. = 0.004 m Min. = -0.009 m Max. = 0.014 m



G 22
2/5/2012 3:55:44 PM - 2/5/2012 4:15:48 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: Dual Frequency (L1, L2)

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

19S-SPIKE - FVA01-B2 (4:42:25 PM-5:01:09 PM) (S31)

Baseline observation: 19S-SPIKE --- FVA01-B2 (B31)

Processed: 4/11/2012 3:29:16 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.010 m

Vertical precision: 0.013 m

RMS: 0.004 m

Maximum PDOP: 2.186

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/5/2012 4:42:25 PM (Local: UTC-7hr)

Processing stop time: 2/5/2012 5:01:09 PM (Local: UTC-7hr)

Processing duration: 00:18:44

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338087.643 m	Latitude	N37°29'23.71988"	Latitude	N37°29'23.71988"
Northing	4150798.564 m	Longitude	W100°49'53.27643"	Longitude	W100°49'53.27643"
Elevation	886.743 m	Height	860.575 m	Height	860.575 m

To:	FVA01-B2				
Grid		Local		Global	
Easting	319892.078 m	Latitude	N37°23'42.06621"	Latitude	N37°23'42.06621"
Northing	4140637.141 m	Longitude	W101°02'04.88441"	Longitude	W101°02'04.88441"
Elevation	863.946 m	Height	837.783 m	Height	837.783 m

Vector					
9Ughb[	-18195.566 m	NS Fwd Azimuth	239°42'17"	L	-18871.167 m
Bcfh\jb[	-10161.423 m	Ellipsoid Dist.	20841.482 m	M	-2859.178 m
9Yj Uhcb	-22.797 m	<Y][\h	-22.792 m	N	-8377.788 m

Standard Errors

Vector errors:					
Ughb[	0.003 m	BG`Zk X'5n]a i h	0°00'00"	L	0.003 m
Bcfh\]b[	0.004 m	'9~]dgc]X'8]gh	0.003 m	M	0.006 m
'9`Yj Uhcb	0.007 m	' <Y][\h	0.007 m	N	0.005 m

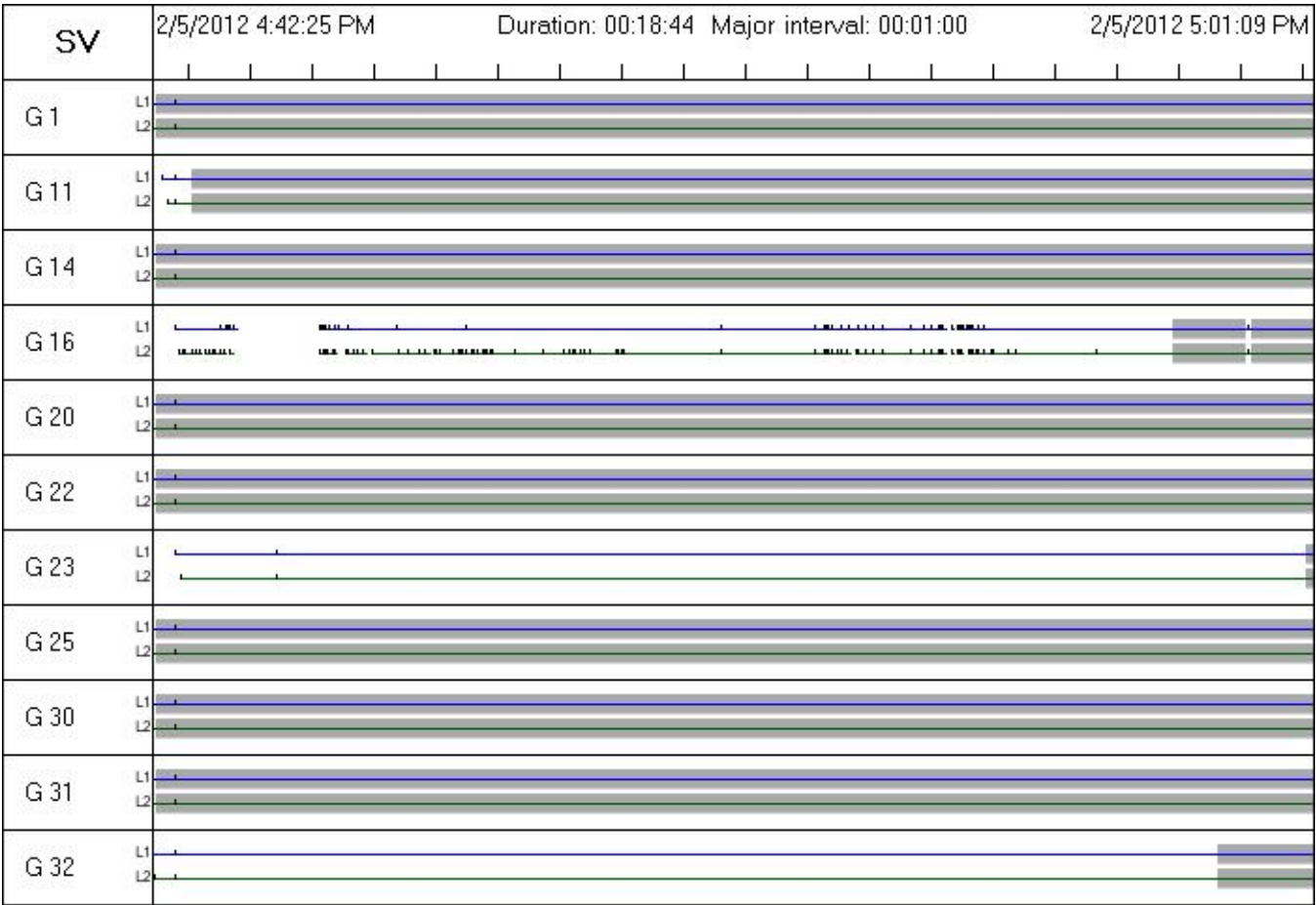
Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000108744		
Y	0.0000082085	0.0000408190	
Z	-0.0000028353	-0.0000120502	0.0000206370

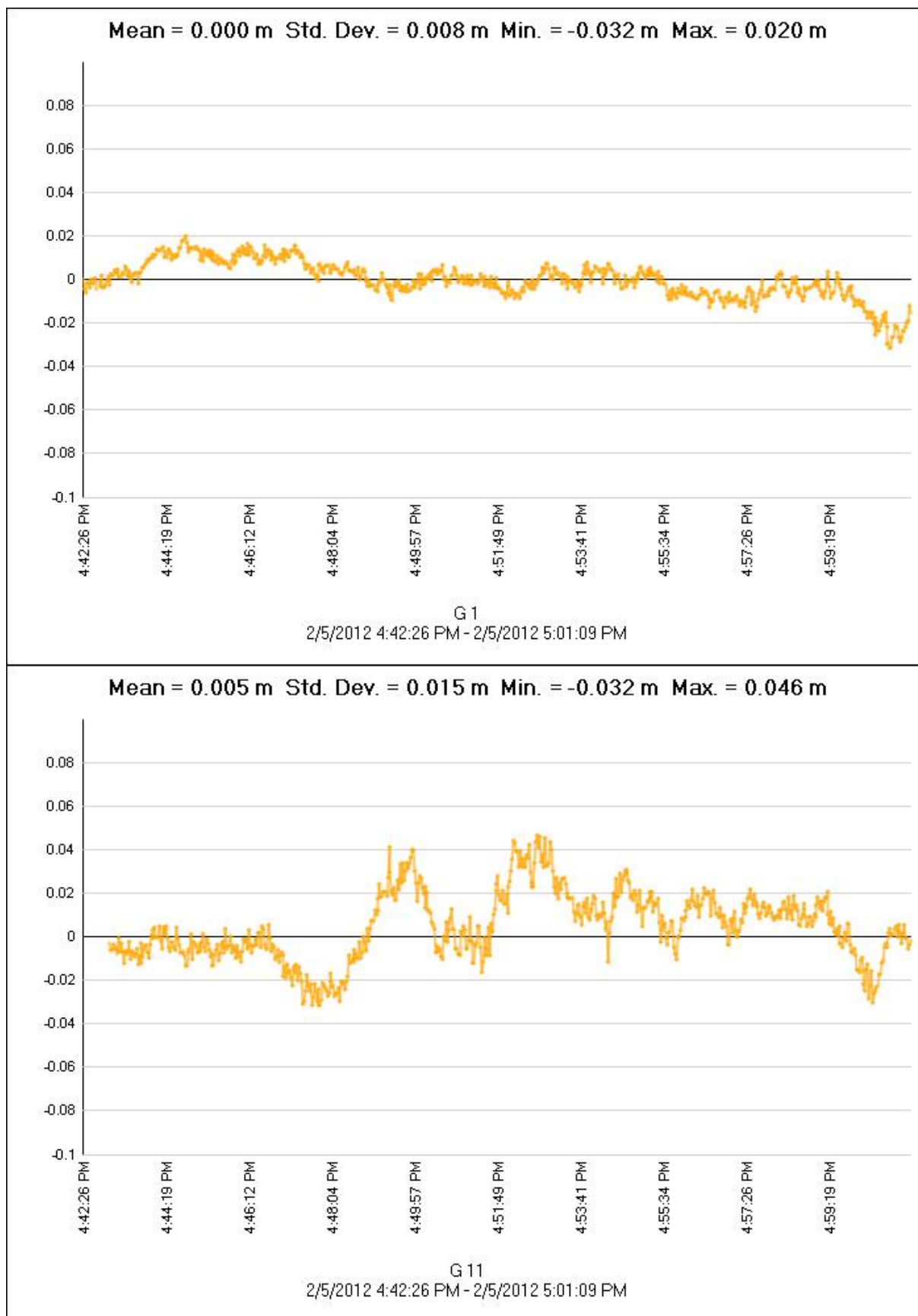
Occupations

	From	To
Point ID:	19S-SPIKE	FVA01-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00010360.12o	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\0008036C.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

Tracking Summary



Residuals

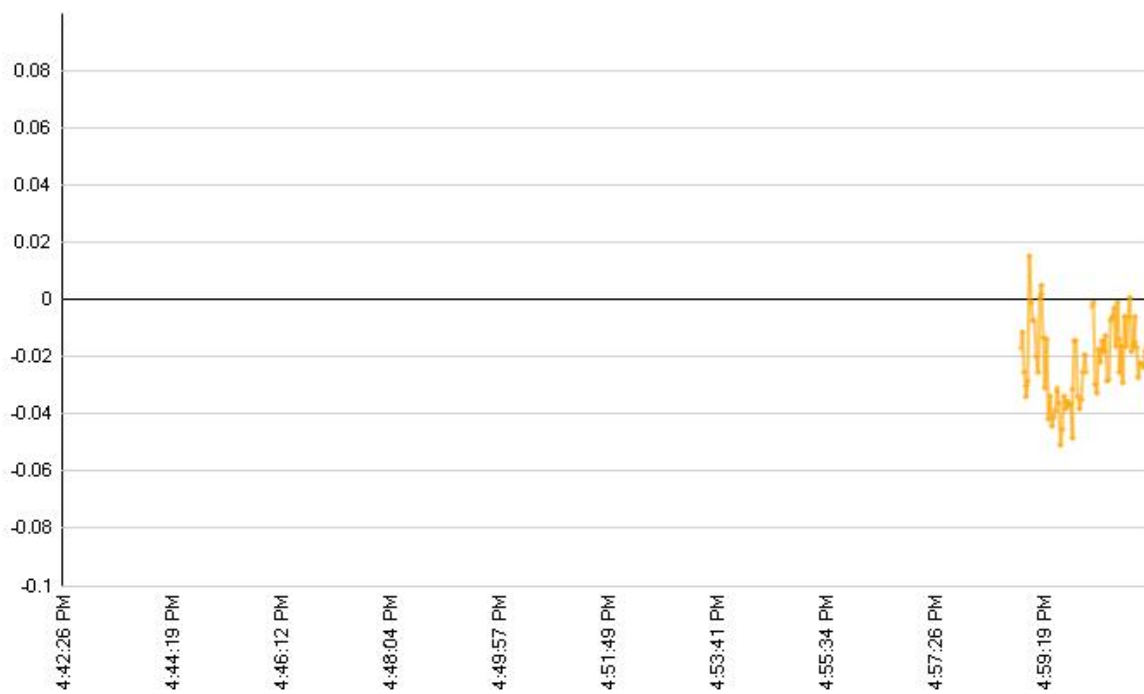


Mean = 0.000 m Std. Dev. = 0.006 m Min. = -0.019 m Max. = 0.013 m



G 14
2/5/2012 4:42:26 PM - 2/5/2012 5:01:09 PM

Mean = -0.019 m Std. Dev. = 0.013 m Min. = -0.051 m Max. = 0.015 m



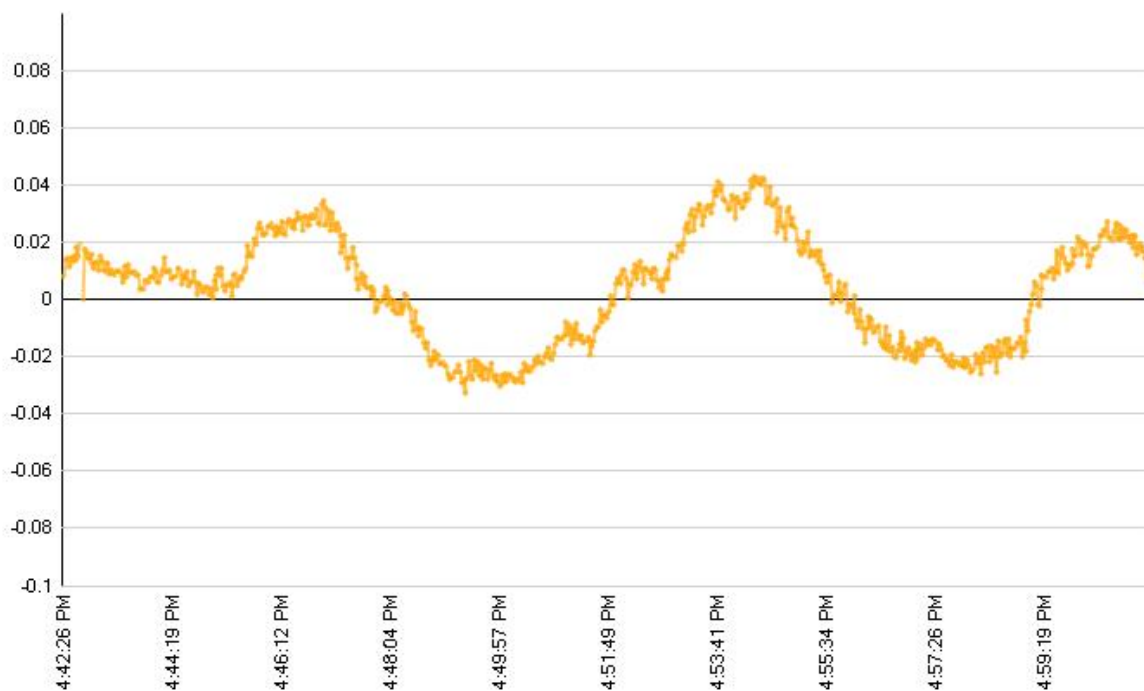
G 16
2/5/2012 4:42:26 PM - 2/5/2012 5:01:09 PM

Mean = 0.003 m Std. Dev. = 0.007 m Min. = -0.016 m Max. = 0.017 m

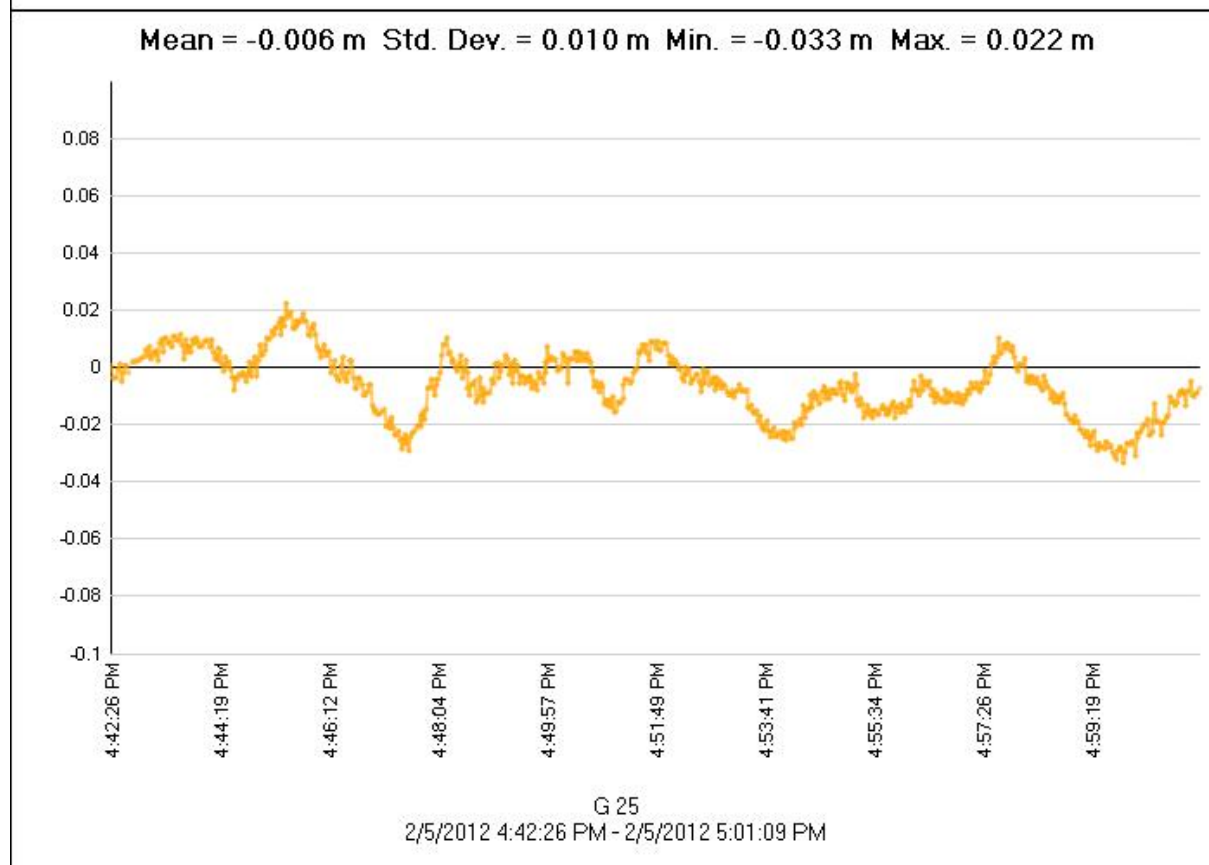
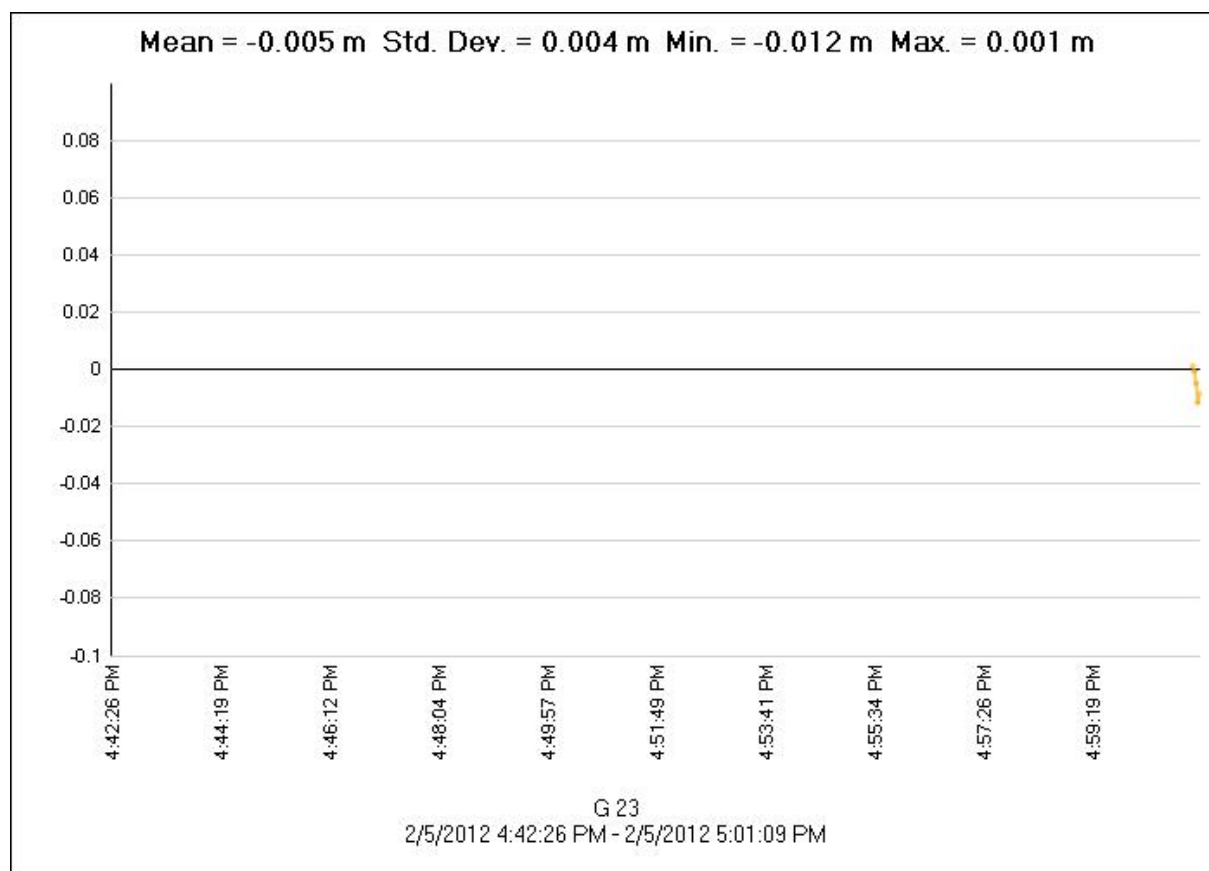


G 20
2/5/2012 4:42:26 PM - 2/5/2012 5:01:09 PM

Mean = 0.004 m Std. Dev. = 0.018 m Min. = -0.033 m Max. = 0.043 m



G 22
2/5/2012 4:42:26 PM - 2/5/2012 5:01:09 PM



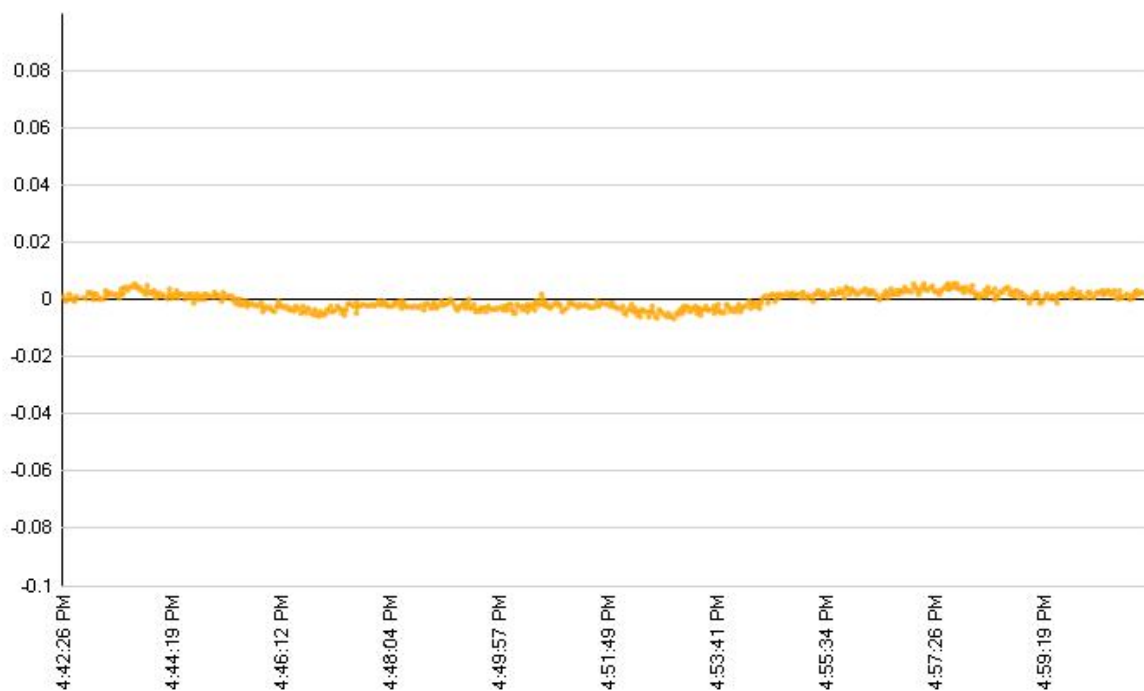
Mean = -0.003 m Std. Dev. = 0.010 m Min. = -0.024 m Max. = 0.017 m



G 30

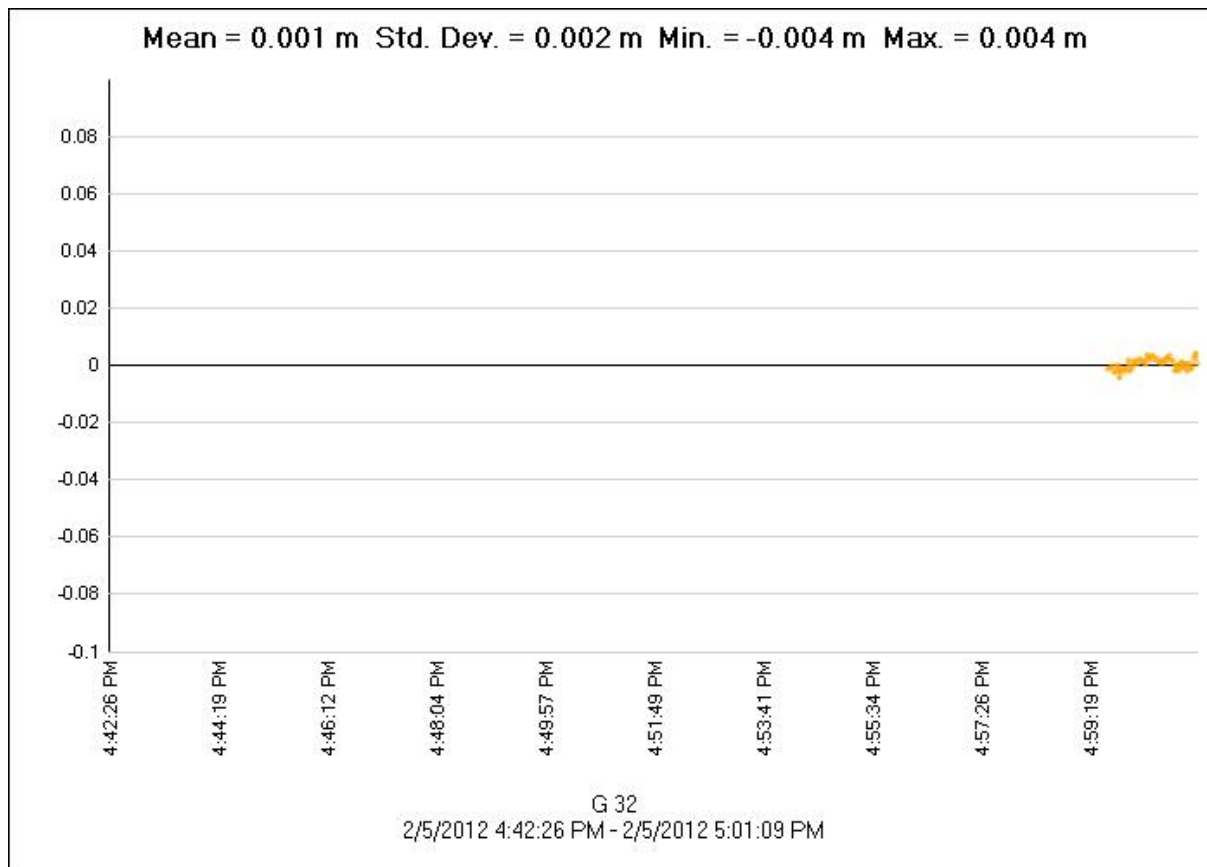
2/5/2012 4:42:26 PM - 2/5/2012 5:01:09 PM

Mean = 0.000 m Std. Dev. = 0.003 m Min. = -0.007 m Max. = 0.006 m



G 31

2/5/2012 4:42:26 PM - 2/5/2012 5:01:09 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:	Dual Frequency (L1, L2)
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

19S-SPIKE - SVA01-B2 (5:05:24 PM-5:24:34 PM) (S32)

Baseline observation: 19S-SPIKE --- SVA01-B2 (B32)

Processed: 4/11/2012 3:29:24 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.010 m

Vertical precision: 0.013 m

RMS: 0.005 m

Maximum PDOP: 1.593

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/5/2012 5:05:24 PM (Local: UTC-7hr)

Processing stop time: 2/5/2012 5:24:34 PM (Local: UTC-7hr)

Processing duration: 00:19:09

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338087.643 m	Latitude	N37°29'23.71988"	Latitude	N37°29'23.71988"
Northing	4150798.564 m	Longitude	W100°49'53.27643"	Longitude	W100°49'53.27643"
Elevation	886.743 m	Height	860.575 m	Height	860.575 m

To:	SVA01-B2				
Grid		Local		Global	
Easting	319917.456 m	Latitude	N37°23'42.28108"	Latitude	N37°23'42.28108"
Northing	4140643.220 m	Longitude	W101°02'03.85823"	Longitude	W101°02'03.85823"
Elevation	864.923 m	Height	838.760 m	Height	838.760 m

Vector					
9Ughb[	-18170.188 m	NS Fwd Azimuth	239°41'07"	L	-18845.768 m
BcfA\jb[	-10155.345 m	Ellipsoid Dist.	20816.363 m	M	-2860.823 m
9Yj Uhcb	-21.820 m	<Y][\h	-21.815 m	N	-8371.931 m

Standard Errors

Vector errors:					
Point ID	0.003 m	Point Description	0°00'00"	Point Type	0.003 m
Point ID	0.004 m	Point Description	0.003 m	Point Type	0.007 m
Point ID	0.007 m	Point Description	0.007 m	Point Type	0.004 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000106382		
Y	0.0000079668	0.0000425866	
Z	-0.0000016299	-0.0000131772	0.0000177666

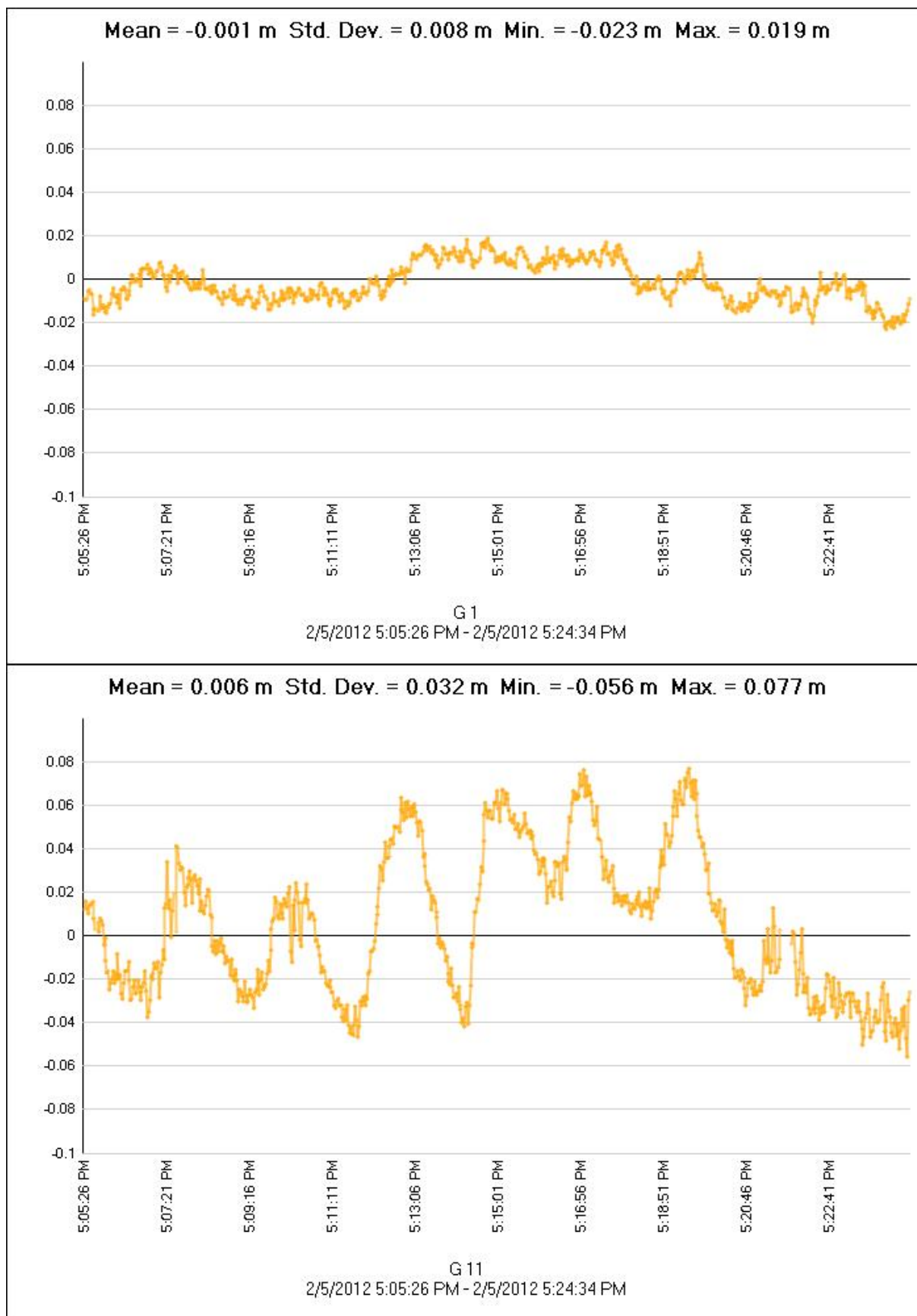
Occupations

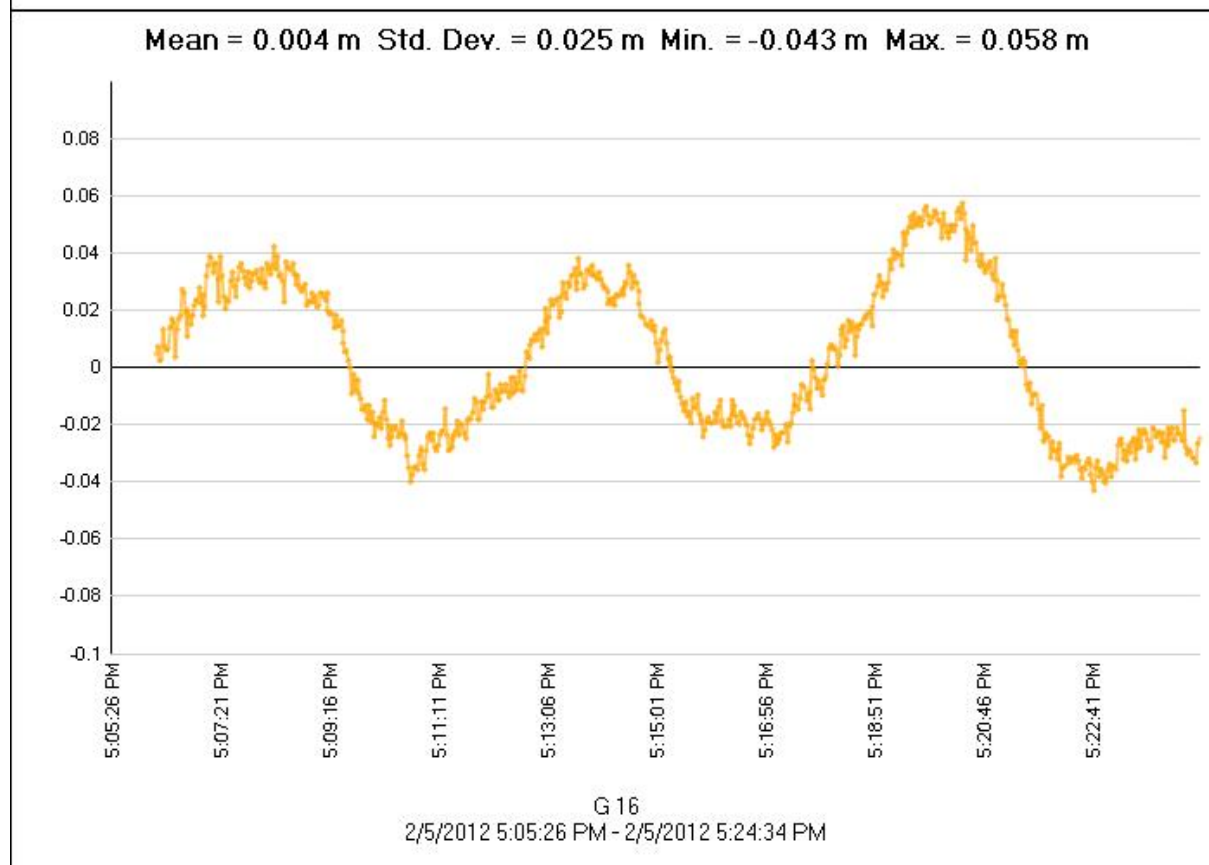
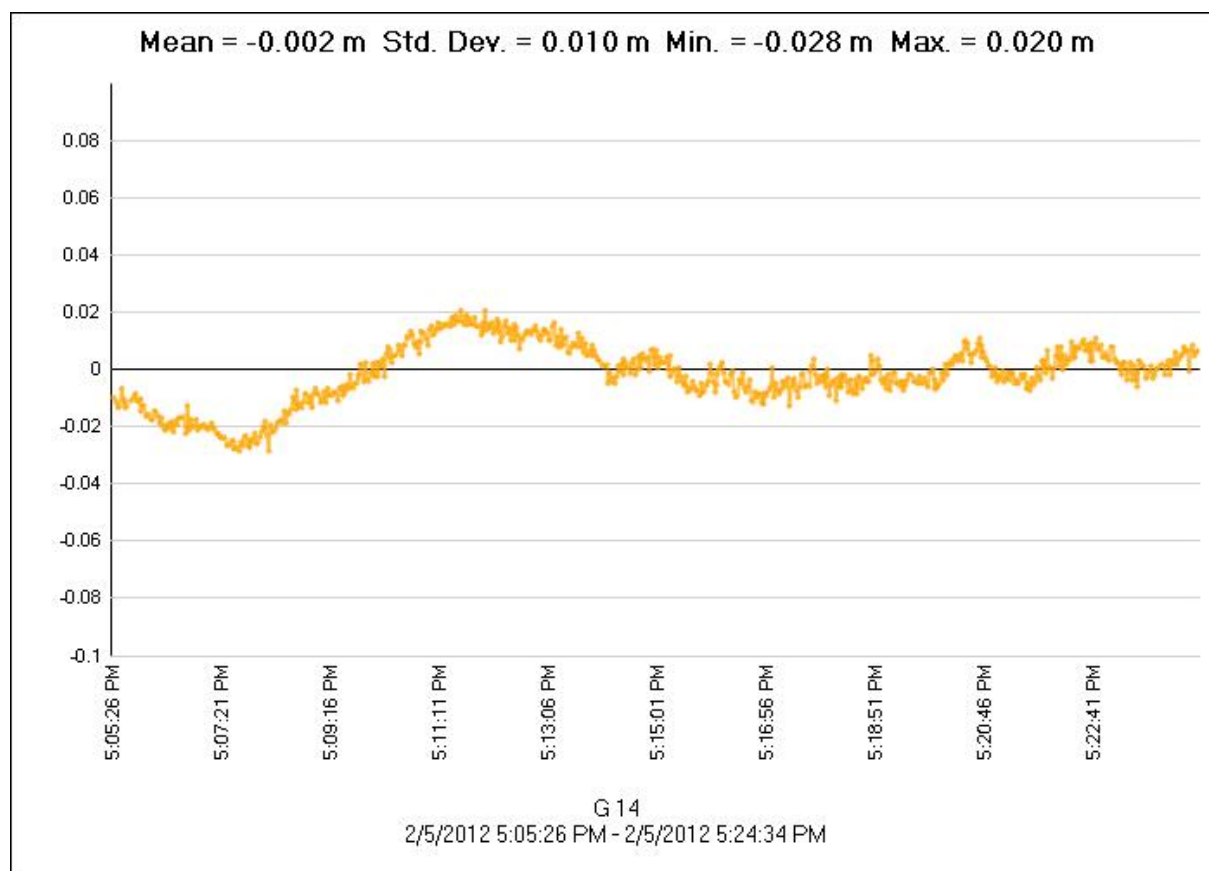
	From	To
Point ID:	19S-SPIKE	SVA01-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010360.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080370.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

Tracking Summary

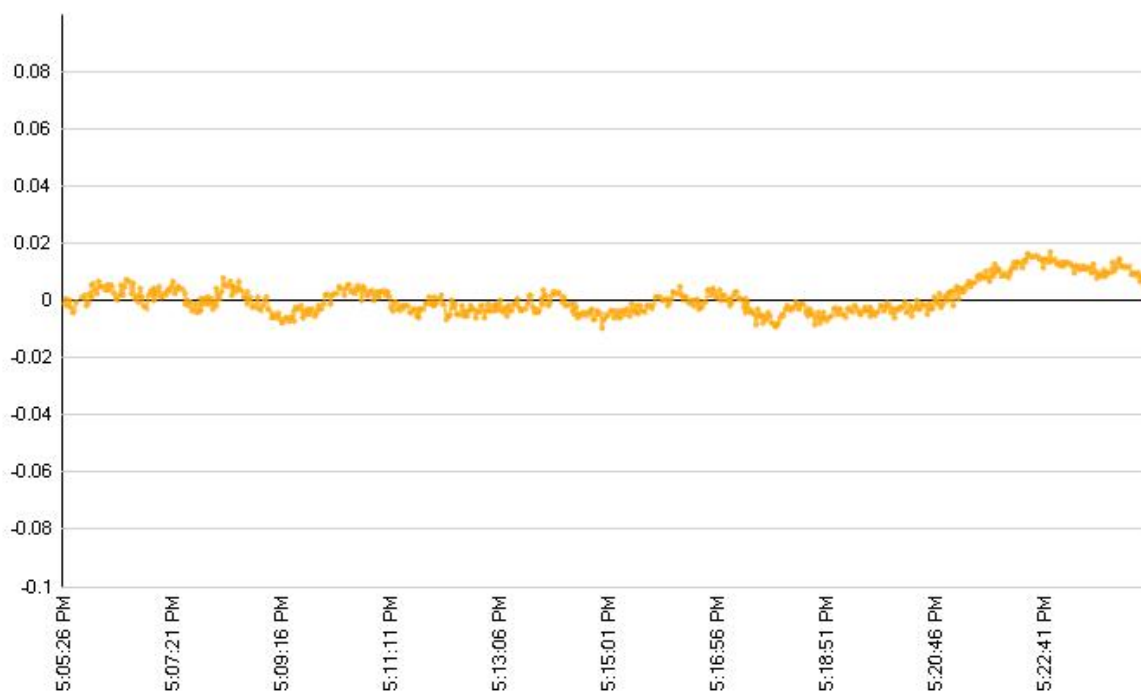
SV	2/5/2012 5:05:24 PM	Duration: 00:19:09.5000000	Major interval: 00:01:00	2/5/2012 5:24:34 PM
G 1				
G 11				
G 14				
G 16				
G 20				
G 22				
G 23				
G 25				
G 30				
G 31				
G 32				

Residuals





Mean = 0.001 m Std. Dev. = 0.005 m Min. = -0.010 m Max. = 0.017 m

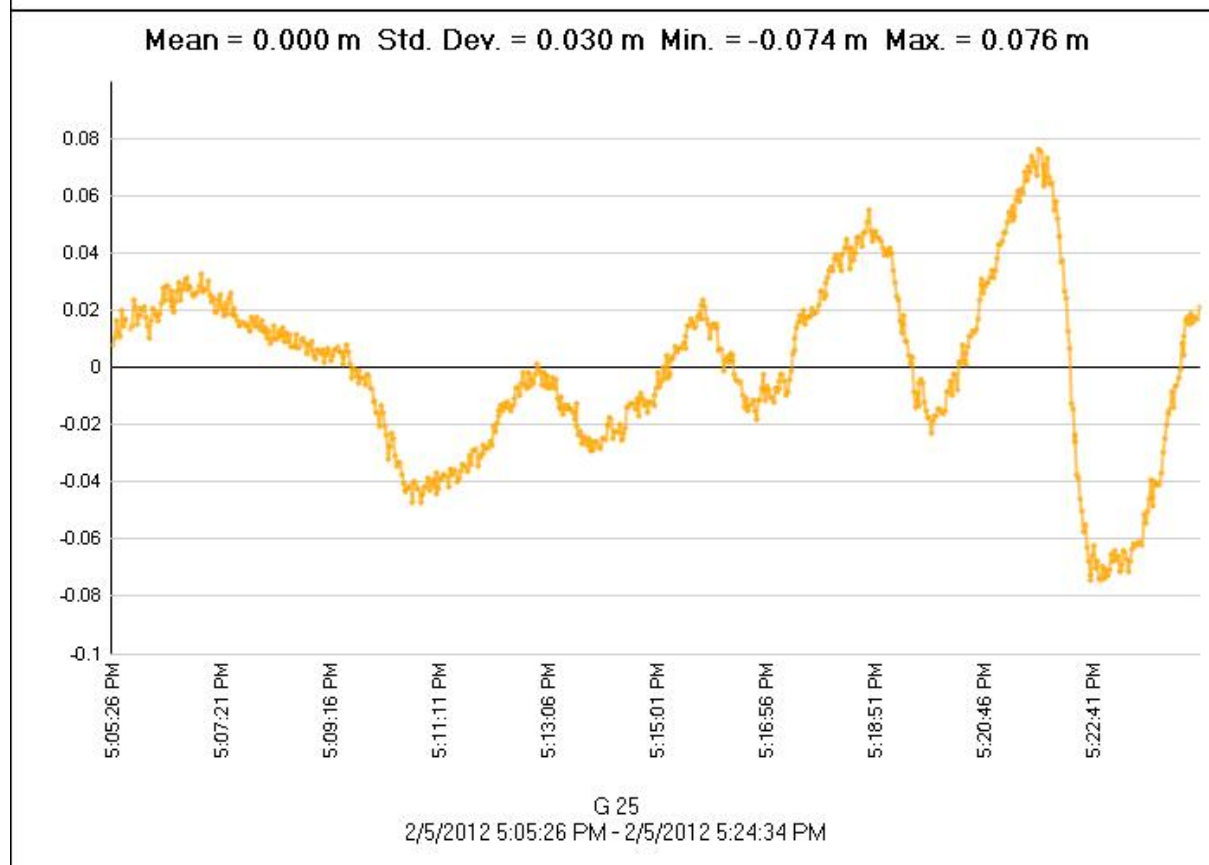
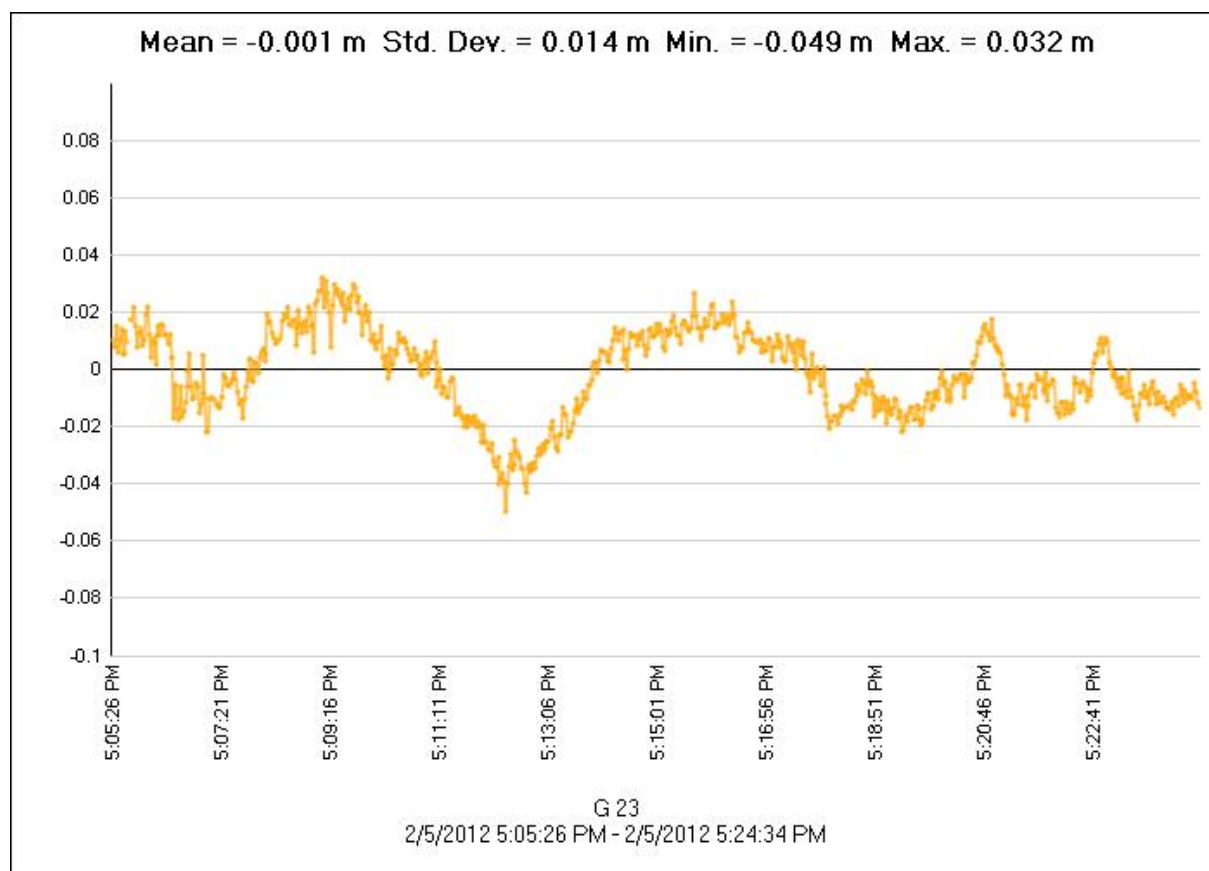


G 20
2/5/2012 5:05:26 PM - 2/5/2012 5:24:34 PM

Mean = 0.006 m Std. Dev. = 0.018 m Min. = -0.094 m Max. = 0.049 m



G 22
2/5/2012 5:05:26 PM - 2/5/2012 5:24:34 PM

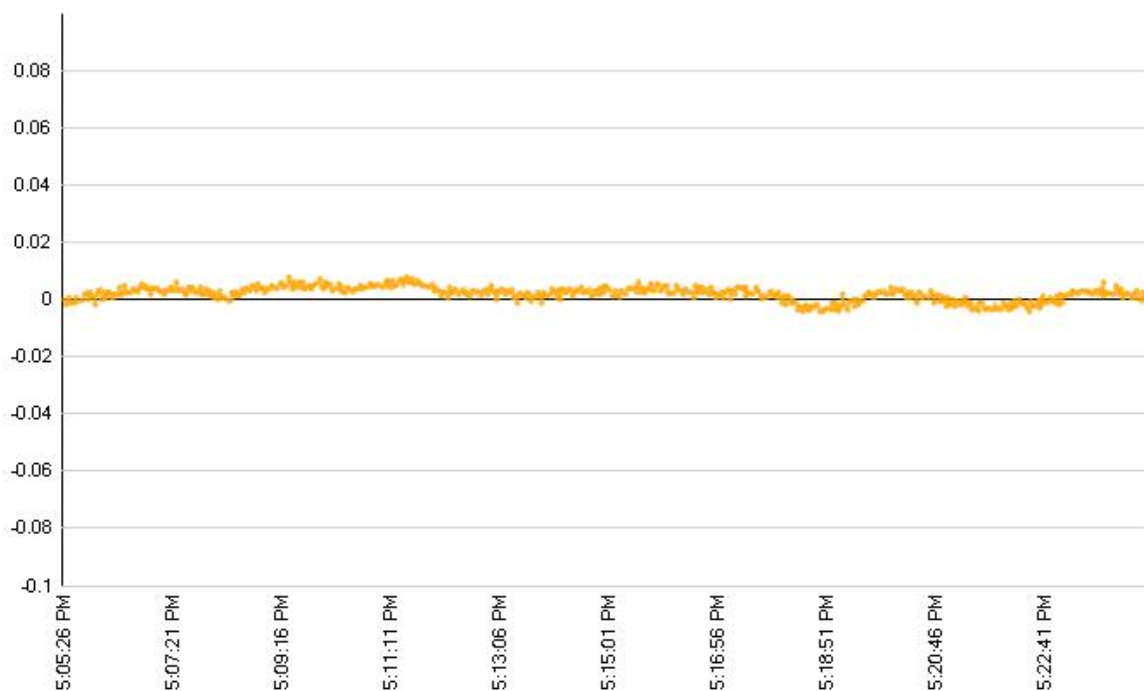


Mean = 0.000 m Std. Dev. = 0.005 m Min. = -0.012 m Max. = 0.013 m

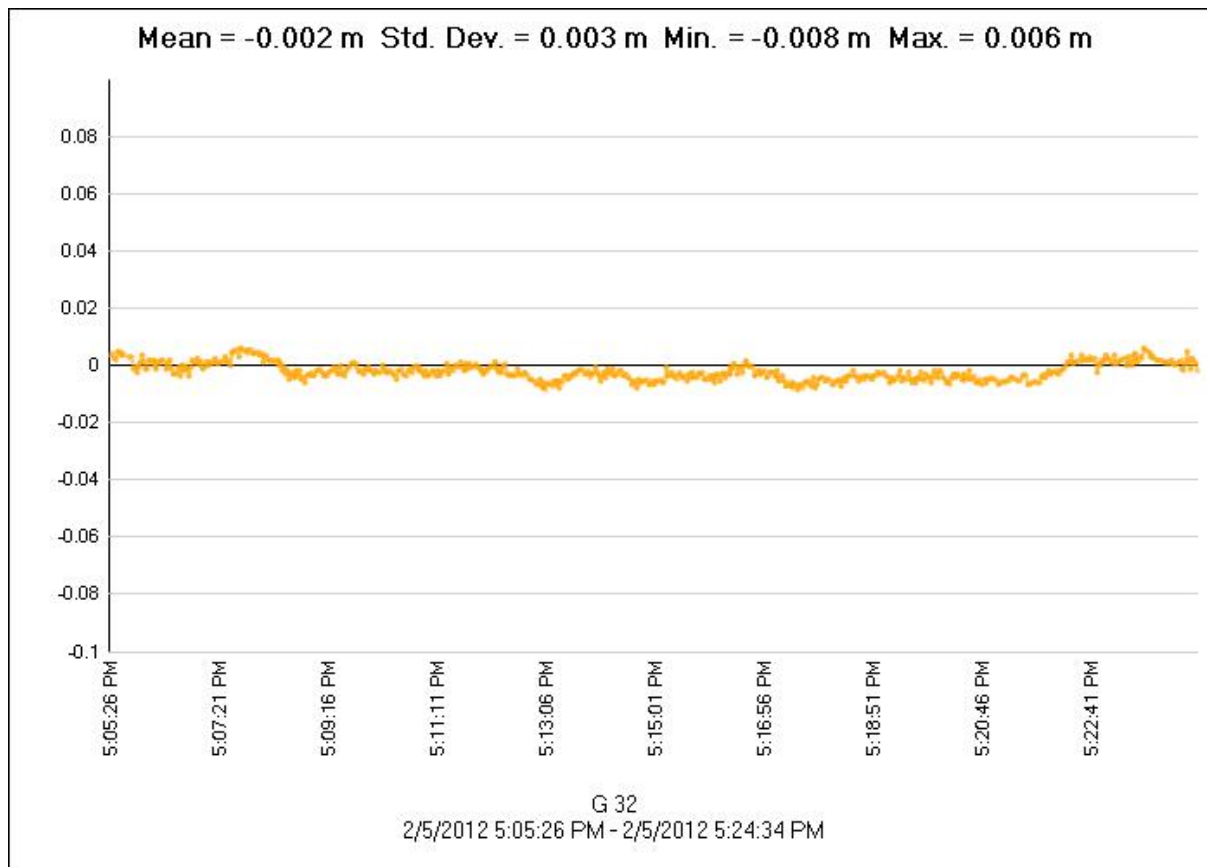


G 30
2/5/2012 5:05:26 PM - 2/5/2012 5:24:34 PM

Mean = 0.002 m Std. Dev. = 0.002 m Min. = -0.005 m Max. = 0.008 m



G 31
2/5/2012 5:05:26 PM - 2/5/2012 5:24:34 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:	Dual Frequency (L1, L2)
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

19S-SPIKE - FVA26-B2 (9:15:36 AM-9:36:09 AM) (S33)

Baseline observation: 19S-SPIKE --- FVA26-B2 (B33)

Processed: 3/20/2012 5:07:46 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.023 m

Vertical precision: 0.032 m

RMS: 0.002 m

Maximum PDOP: 2.662

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/6/2012 9:15:36 AM (Local: UTC-7hr)

Processing stop time: 2/6/2012 9:36:09 AM (Local: UTC-7hr)

Processing duration: 00:20:33

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338086.566 m	Latitude	N37°29'23.76152"	Latitude	N37°29'23.76151"
Northing	4150799.869 m	Longitude	W100°49'53.32131"	Longitude	W100°49'53.32131"
Elevation	896.723 m	Height	870.555 m	Height	870.555 m

To:	FVA26-B2				
Grid		Local		Global	
Easting	392447.698 m	Latitude	N37°28'16.21792"	Latitude	N37°28'16.21791"
Northing	4147837.611 m	Longitude	W100°12'58.68070"	Longitude	W100°12'58.68070"
Elevation	783.486 m	Height	756.996 m	Height	756.996 m

Vector					
9Ughb[	54361.132 m	NS Fwd Azimuth	92°00'16"	L	53287.787 m
Bcfh\jb[	-2962.258 m	Ellipsoid Dist.	54451.222 m	M	-11096.549 m
9Yj Uhcb	-113.237 m	<Y][\h	-113.559 m	N	-1721.776 m

Standard Errors

Vector errors:					
Point ID	0.009 m	Point Description	0°00'00"	Point Type	0.010 m
Point ID	0.006 m	Point Description	0.009 m	Point Type	0.013 m
Point ID	0.017 m	Point Description	0.017 m	Point Type	0.012 m

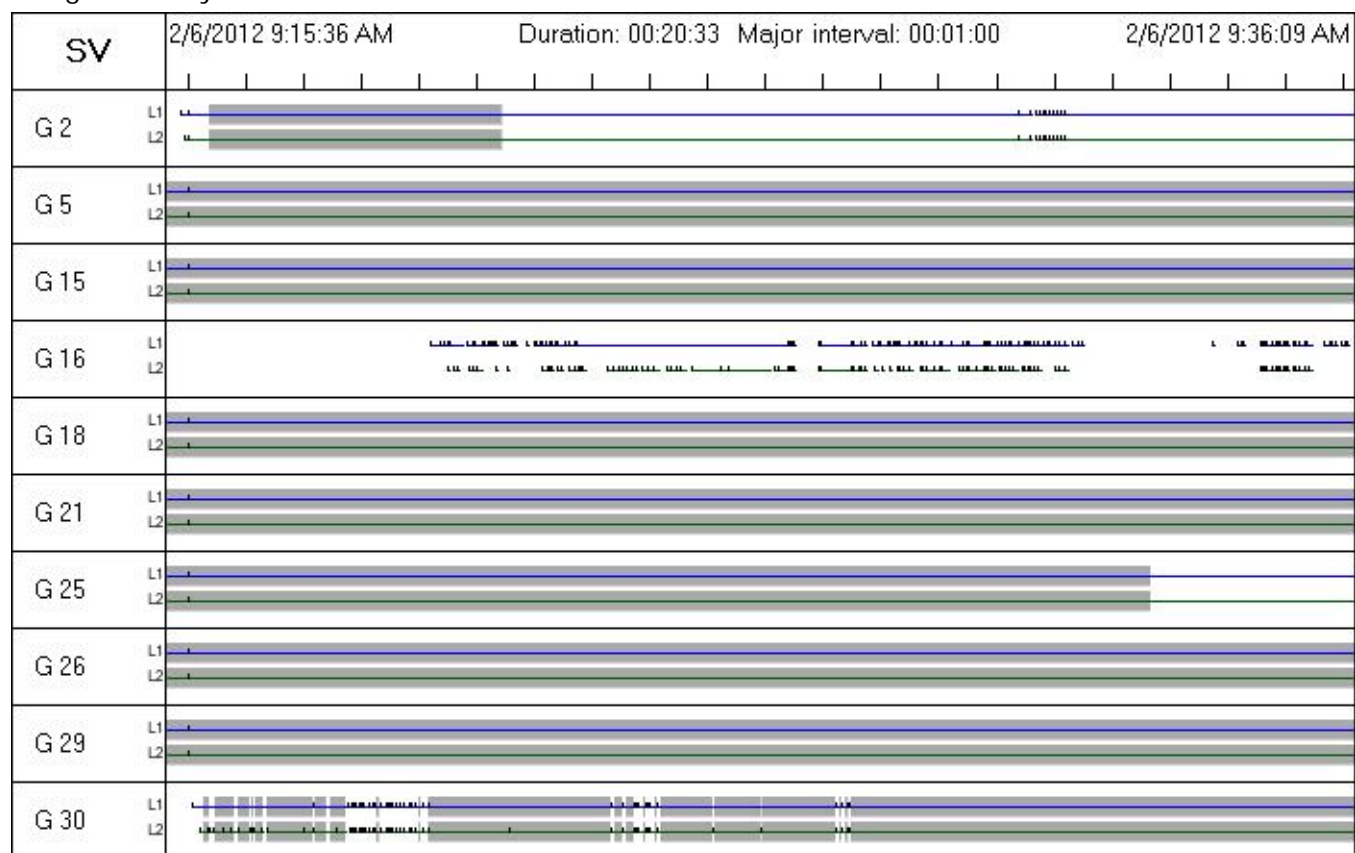
Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000912098		
Y	0.0000225454	0.0001572584	
Z	-0.0000263092	-0.0001181162	0.0001467343

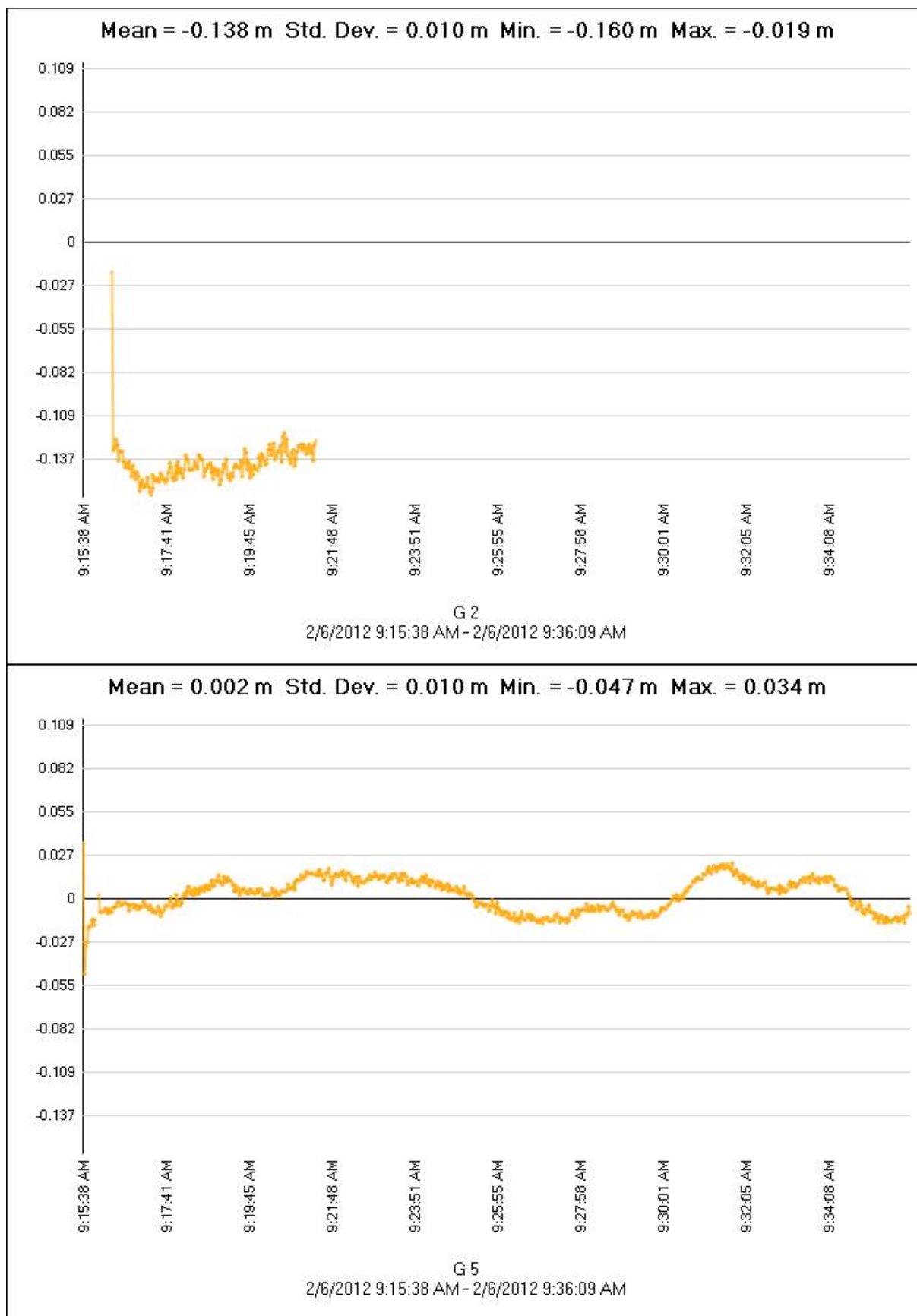
Occupations

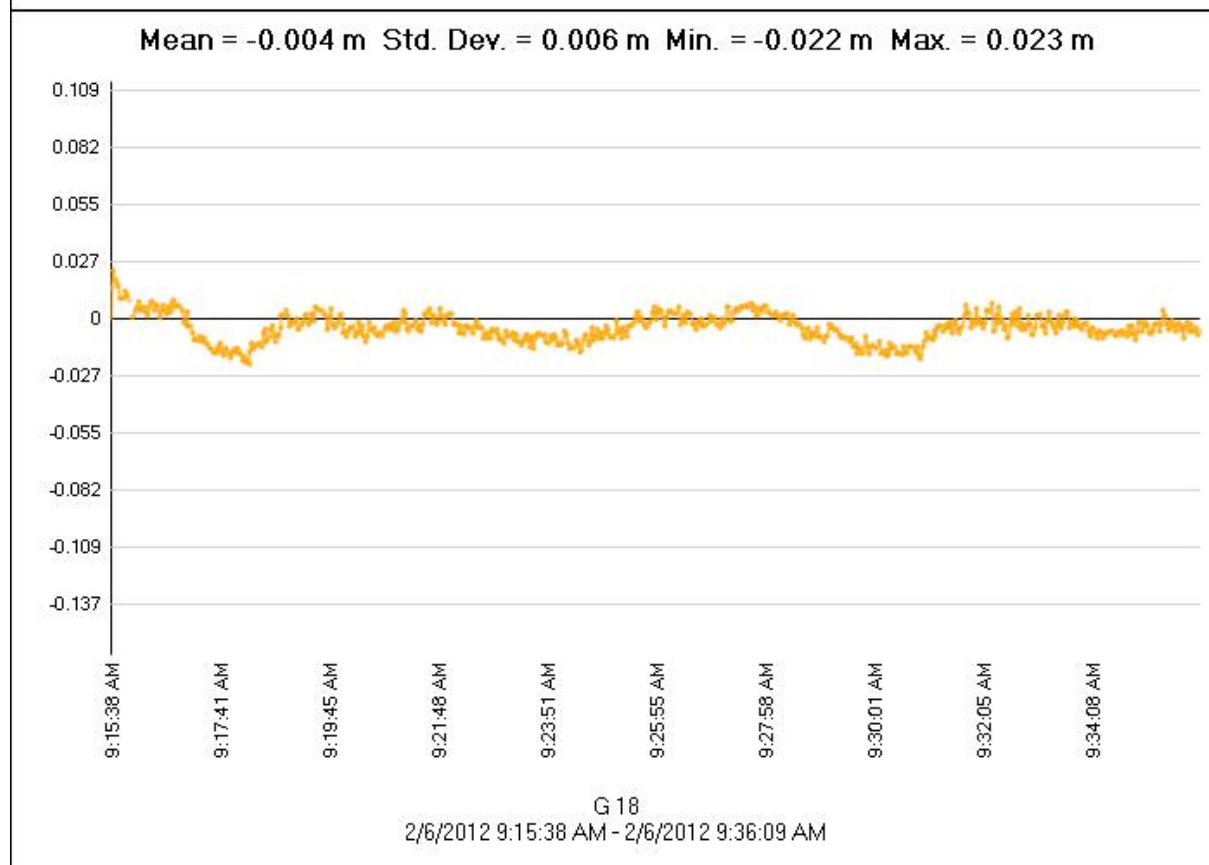
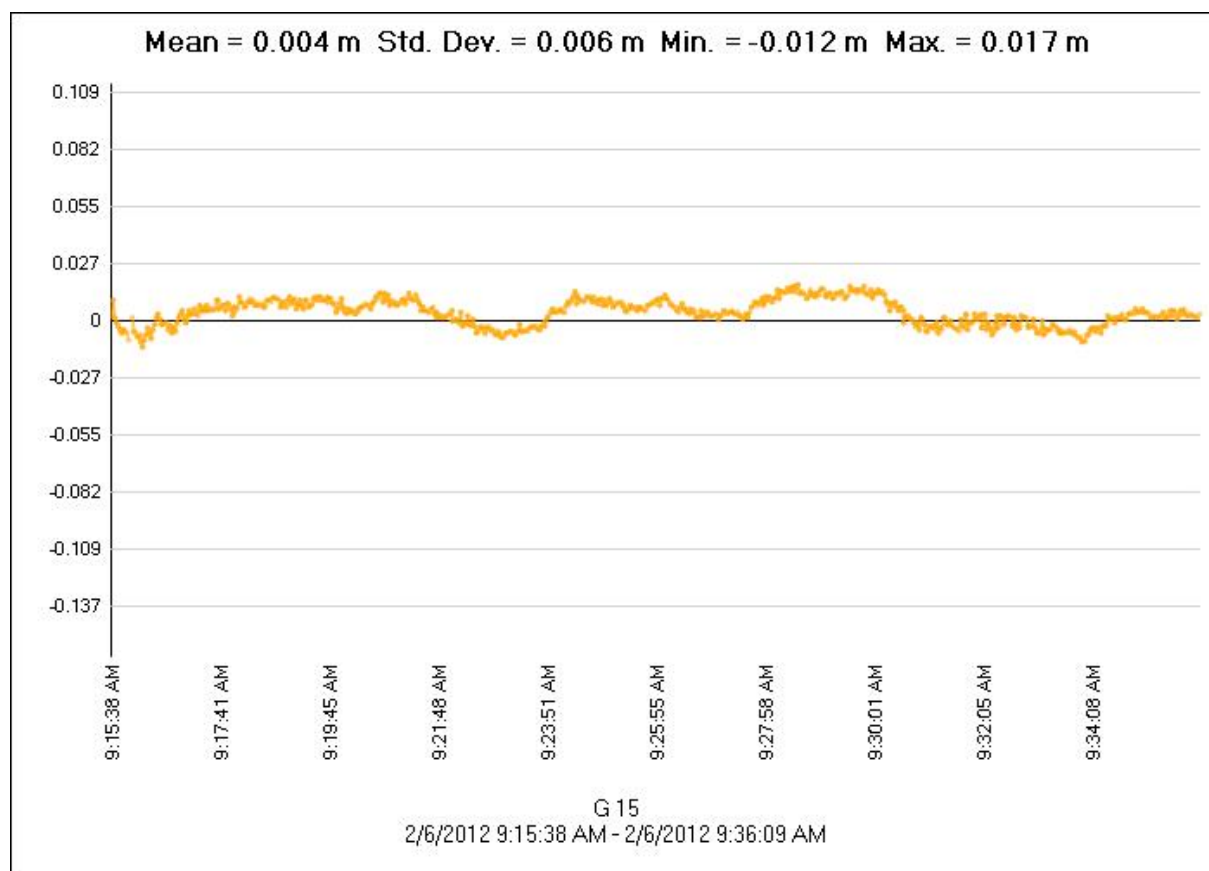
	From	To
Point ID:	19S-SPIKE	FVA26-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010370.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080370-1.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

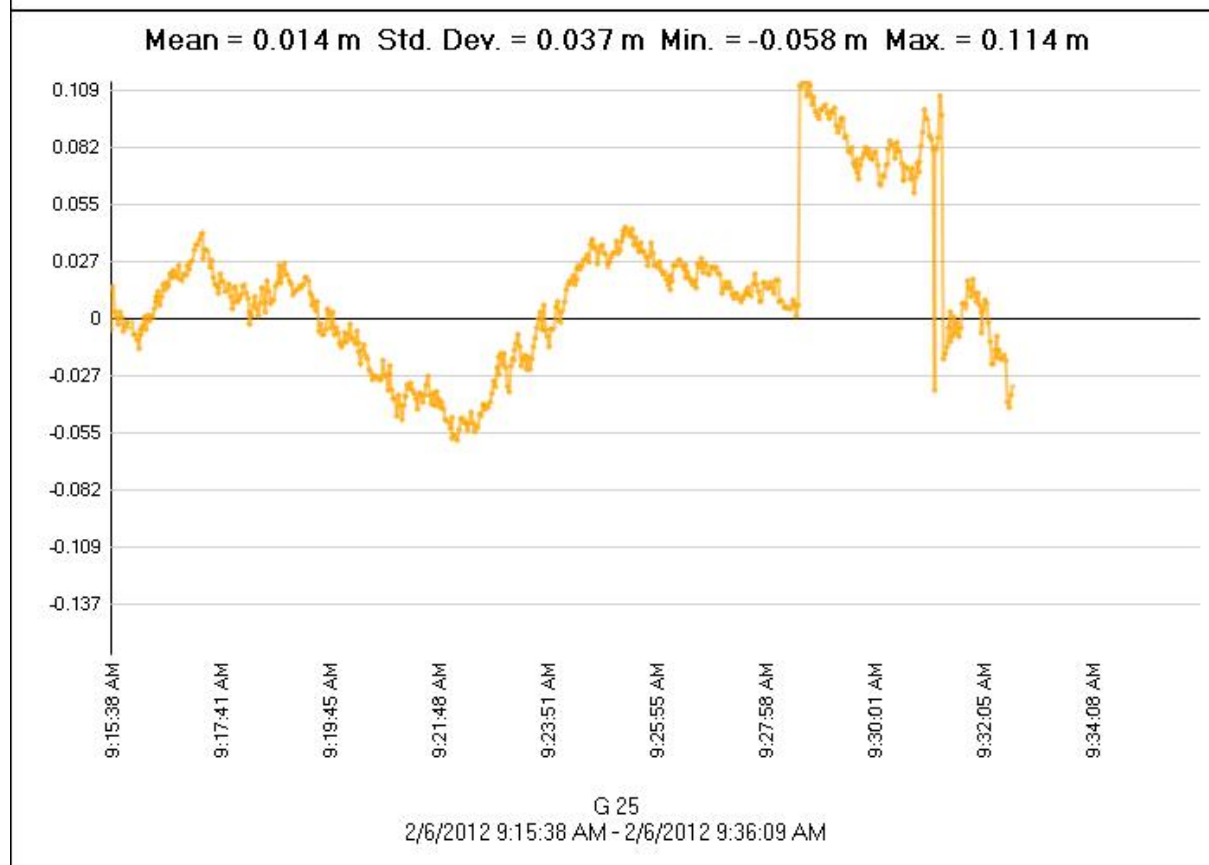
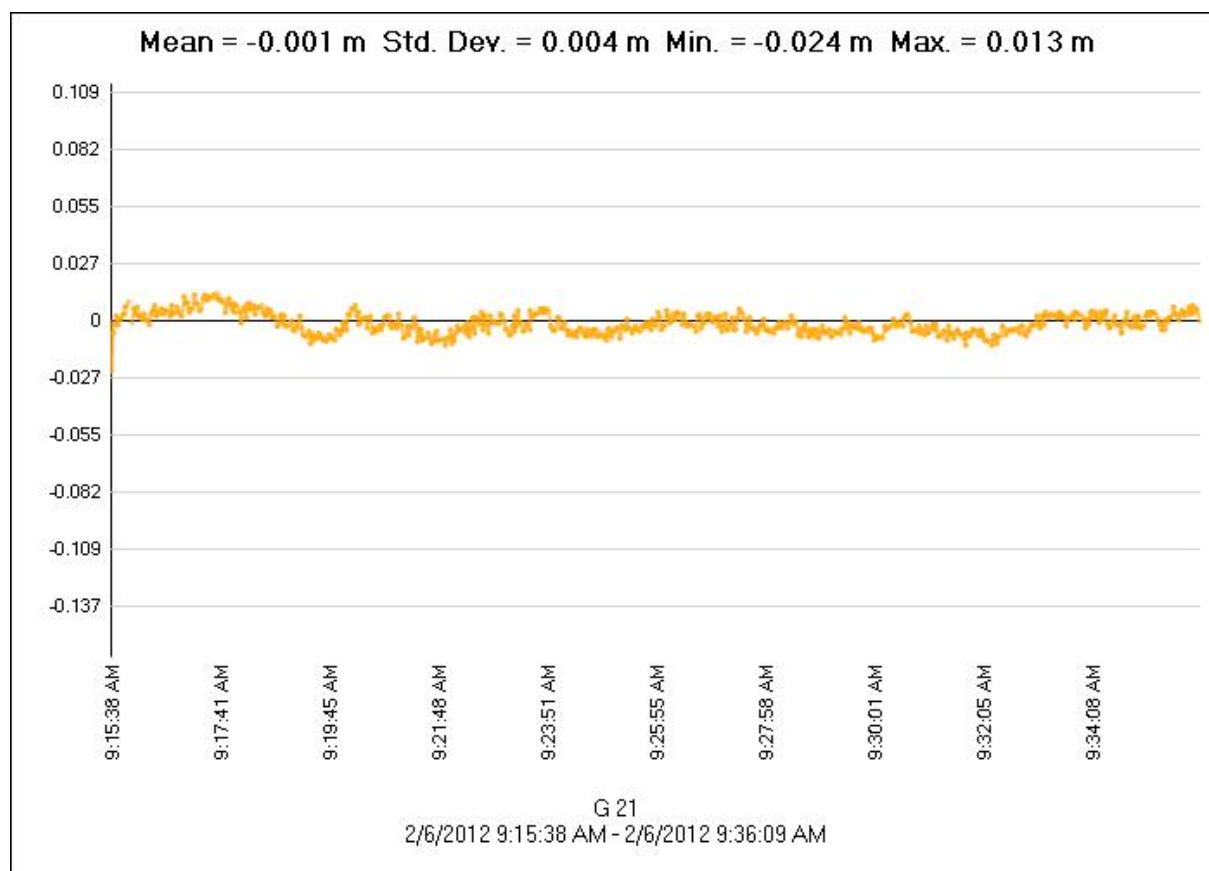
Tracking Summary



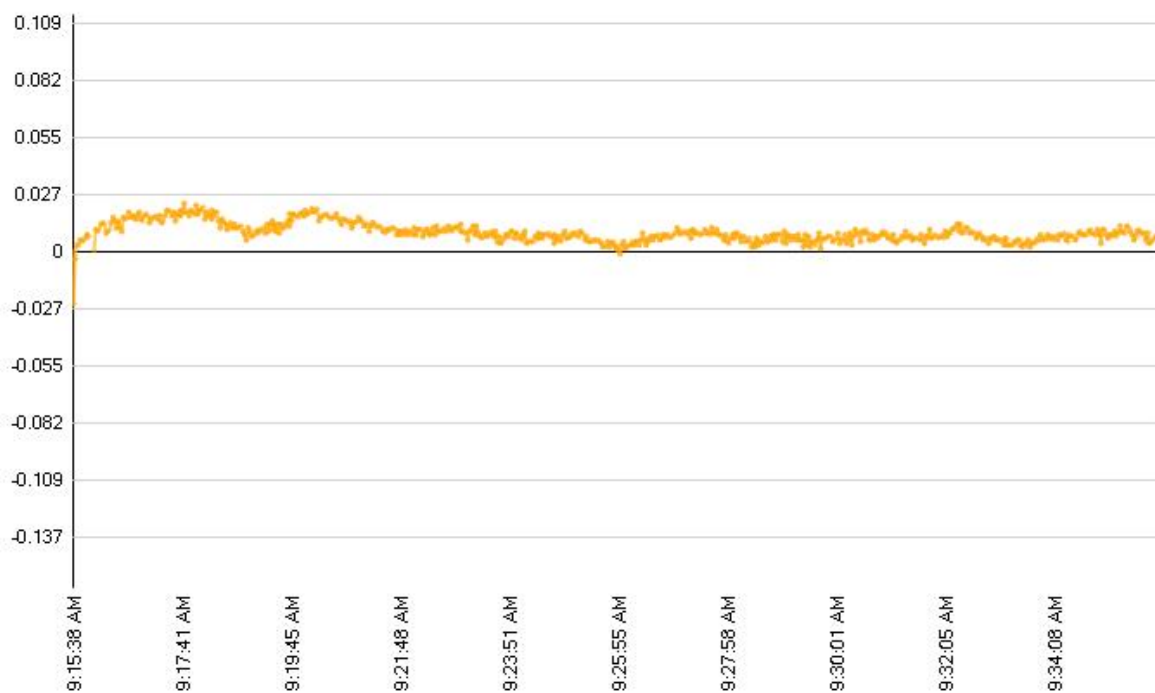
Residuals







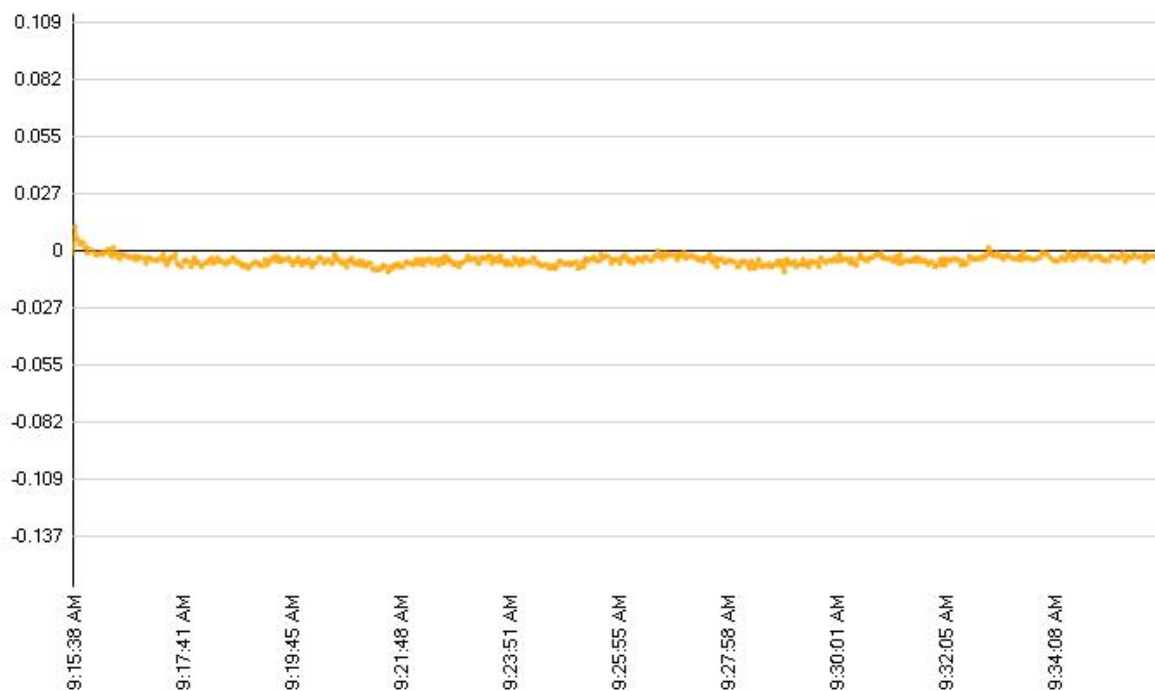
Mean = 0.009 m Std. Dev. = 0.005 m Min. = -0.025 m Max. = 0.023 m



G 26

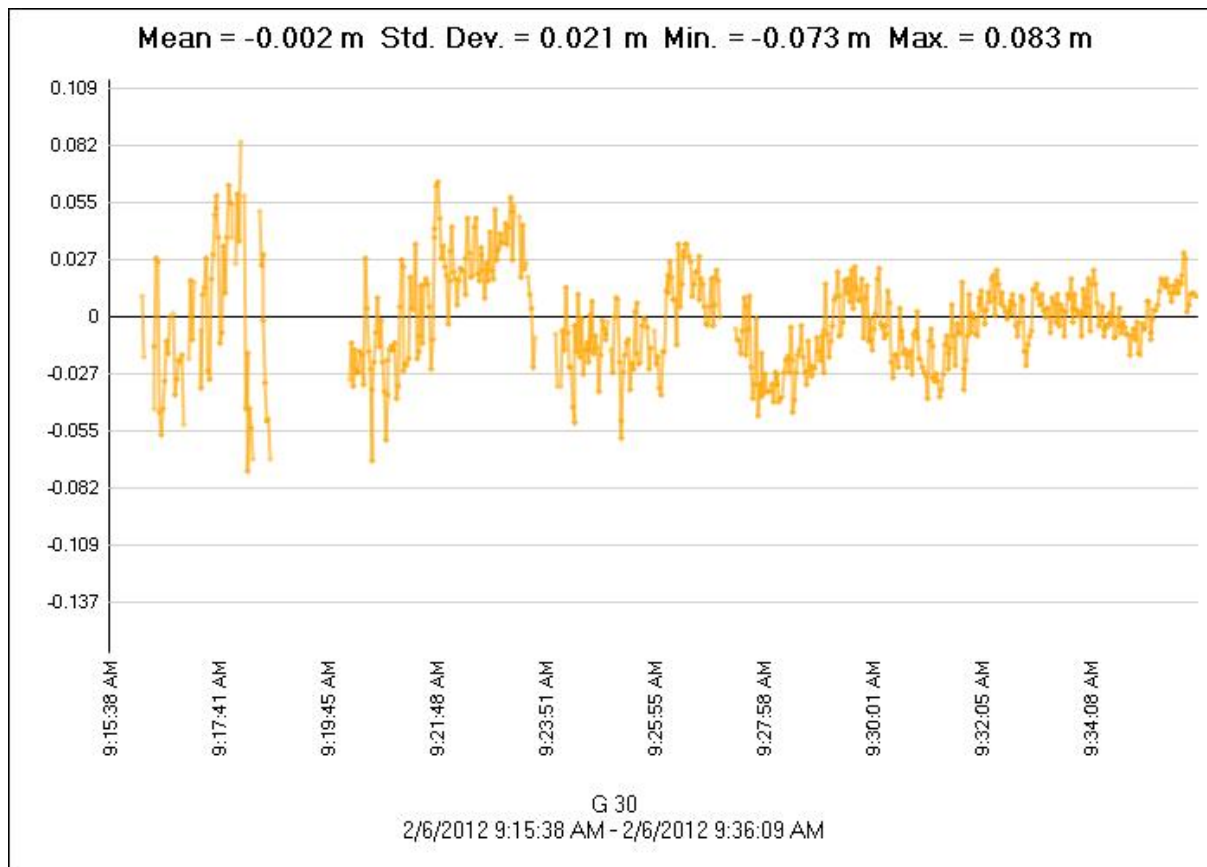
2/6/2012 9:15:38 AM - 2/6/2012 9:36:09 AM

Mean = -0.004 m Std. Dev. = 0.002 m Min. = -0.010 m Max. = 0.011 m



G 29



2/6/2012 9:15:38 AM - 2/6/2012 9:36:09 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:	Dual Frequency (L1, L2)
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

19S-SPIKE - SVA26-B2 (9:42:14 AM-10:01:48 AM) (S34)

Baseline observation: 19S-SPIKE --- SVA26-B2 (B34)

Processed: 3/20/2012 5:07:54 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.013 m

Vertical precision: 0.041 m

RMS: 0.001 m

Maximum PDOP: 2.822

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/6/2012 9:42:14 AM (Local: UTC-7hr)

Processing stop time: 2/6/2012 10:01:48 AM (Local: UTC-7hr)

Processing duration: 00:19:34

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338086.566 m	Latitude	N37°29'23.76152"	Latitude	N37°29'23.76151"
Northing	4150799.869 m	Longitude	W100°49'53.32131"	Longitude	W100°49'53.32131"
Elevation	896.723 m	Height	870.555 m	Height	870.555 m

To:	SVA26-B2				
Grid		Local		Global	
Easting	392457.024 m	Latitude	N37°28'14.07266"	Latitude	N37°28'14.07265"
Northing	4147771.365 m	Longitude	W100°12'58.26626"	Longitude	W100°12'58.26626"
Elevation	782.744 m	Height	756.254 m	Height	756.254 m

Vector					
9Ughb[	54370.458 m	NS Fwd Azimuth	92°04'25"	L	53290.778 m
Bcfh\jb[	-3028.504 m	Ellipsoid Dist.	54464.181 m	M	-11137.378 m
9Yj Uhcb	-113.979 m	<Y][\h	-114.301 m	N	-1774.725 m

Standard Errors

Vector errors:					
Point ID	0.003 m	Point Description	0°00'00"	Point Type	0.003 m
Point ID	0.005 m	Point Description	0.003 m	Point Type	0.014 m
Point ID	0.021 m	Point Description	0.021 m	Point Type	0.016 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000073372		
Y	0.0000093808	0.0002084152	
Z	-0.0000110074	-0.0002153586	0.0002500566

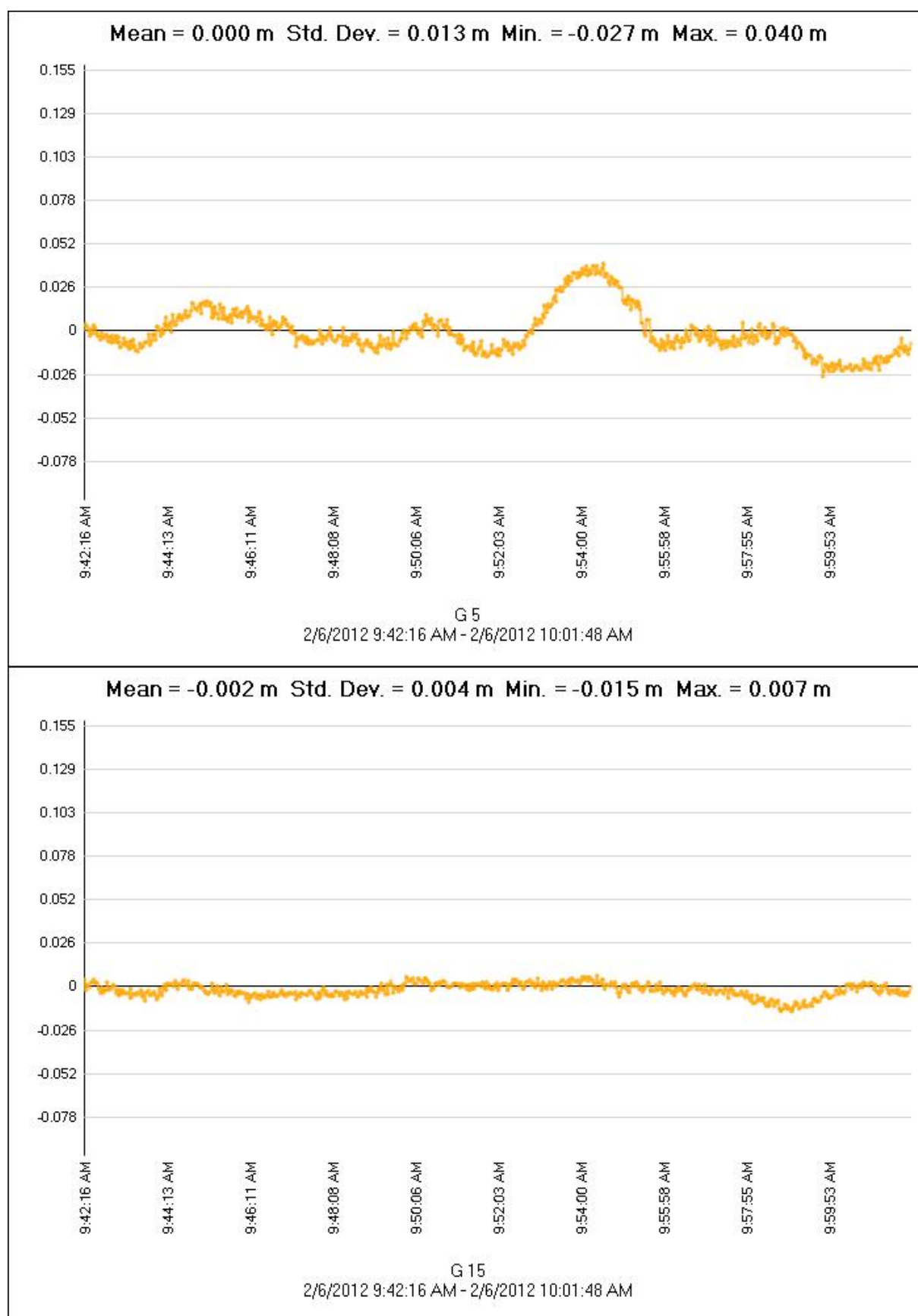
Occupations

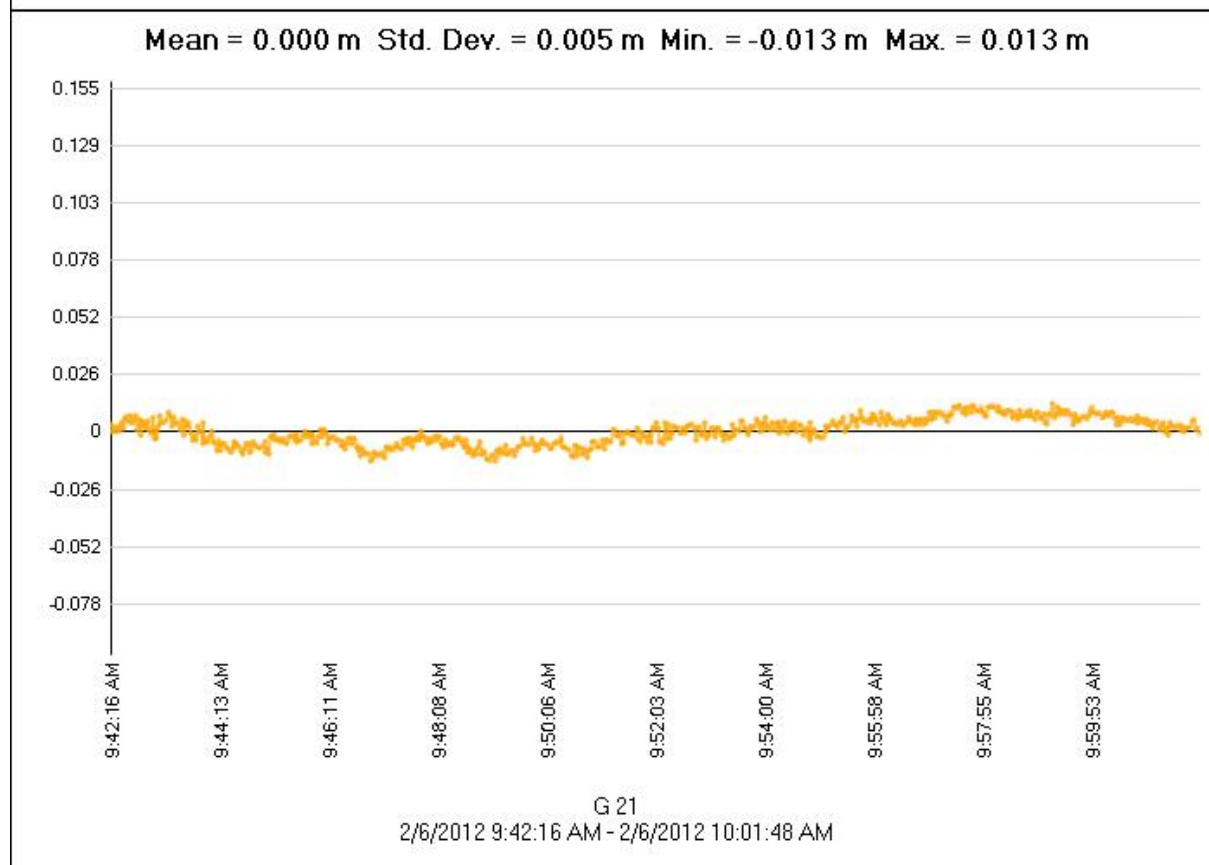
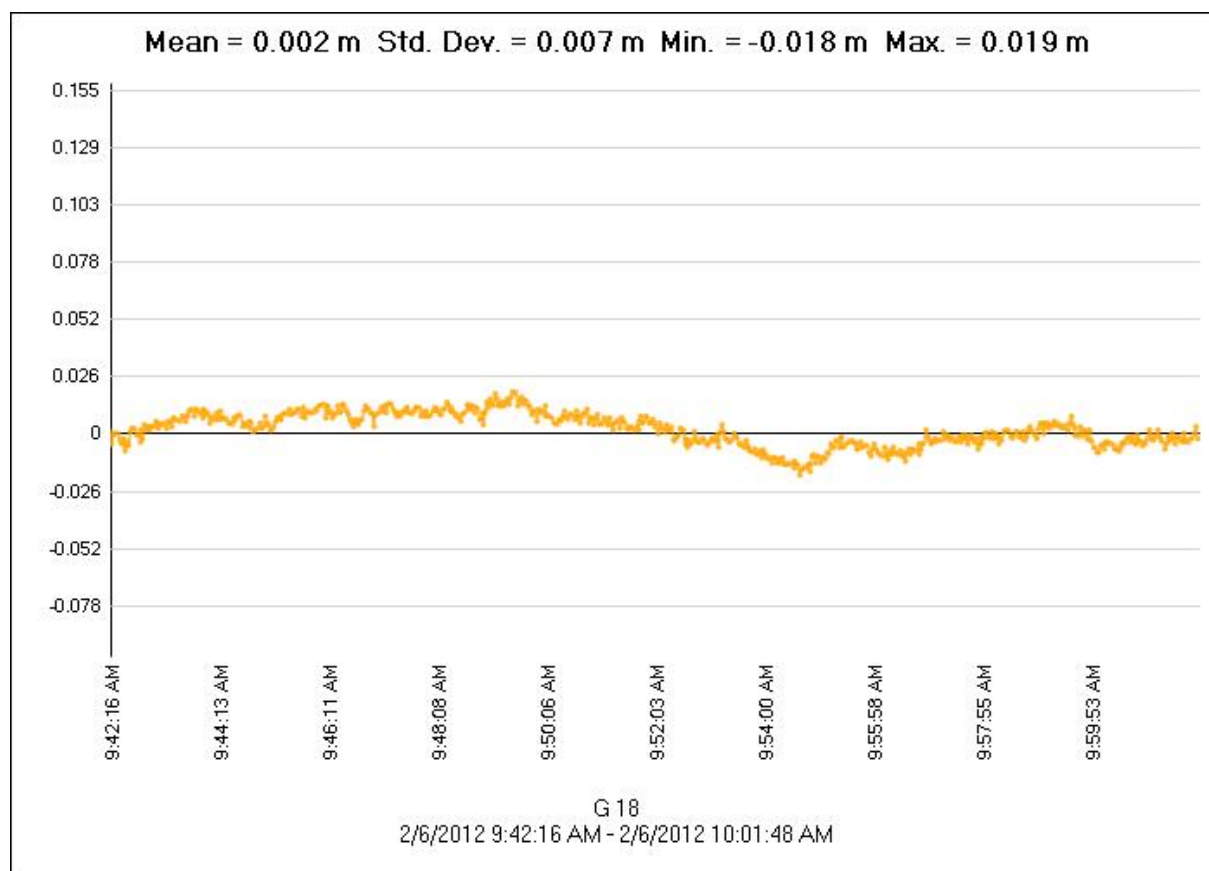
	From	To
Point ID:	19S-SPIKE	SVA26-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010370.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080371.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

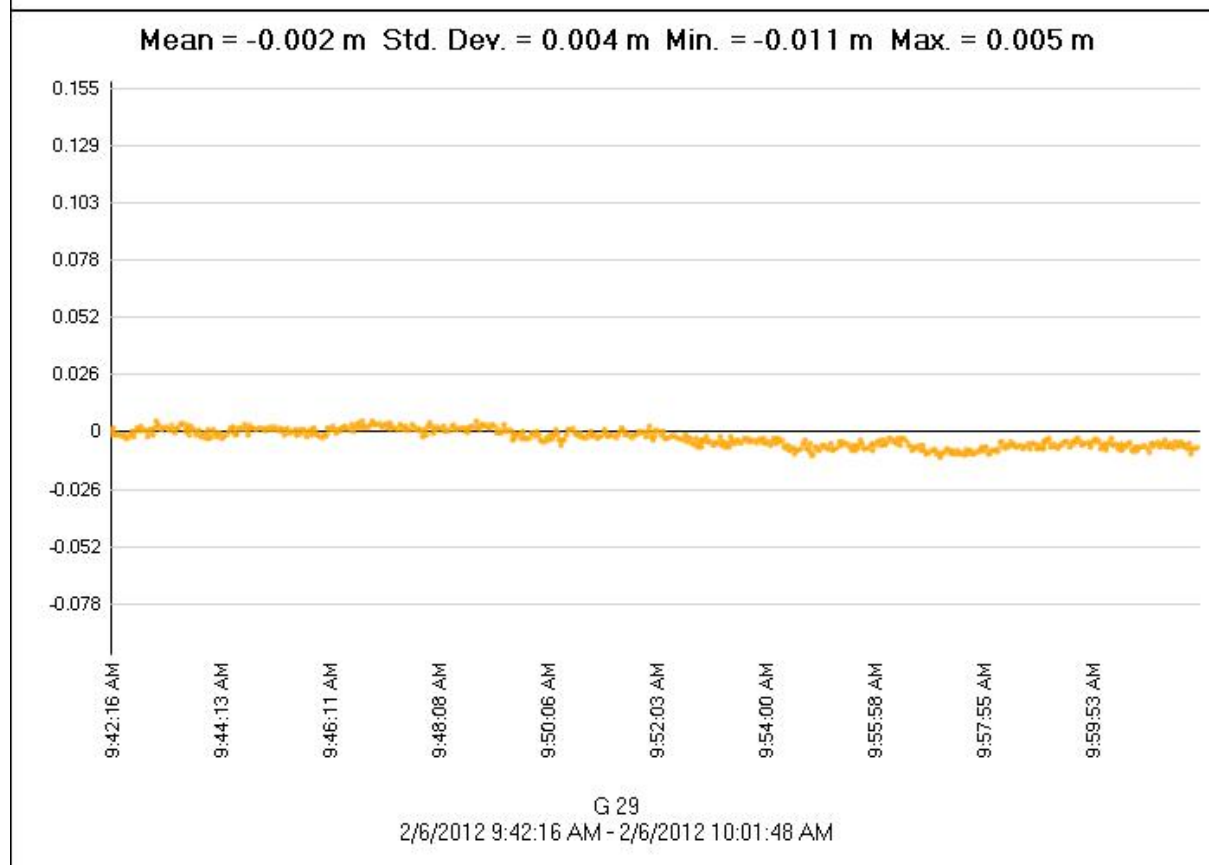
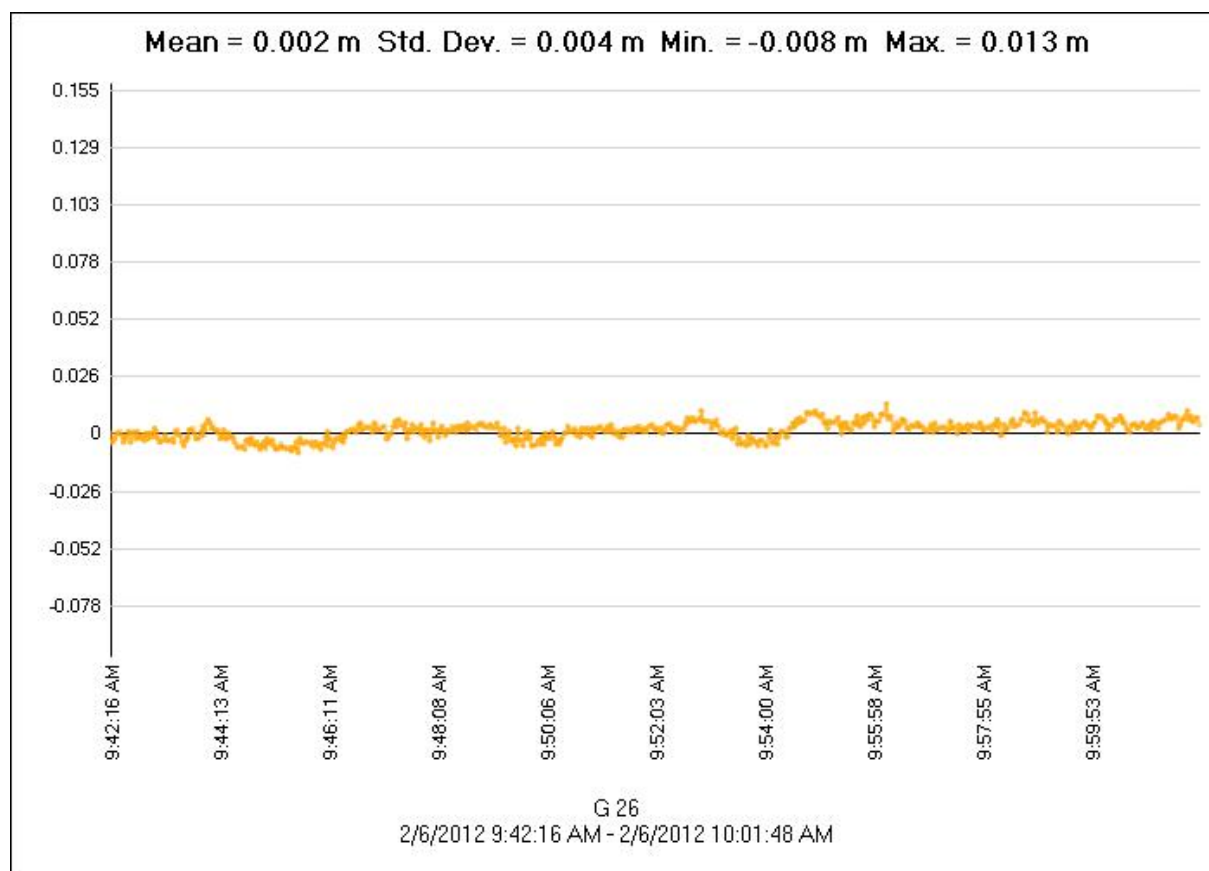
Tracking Summary

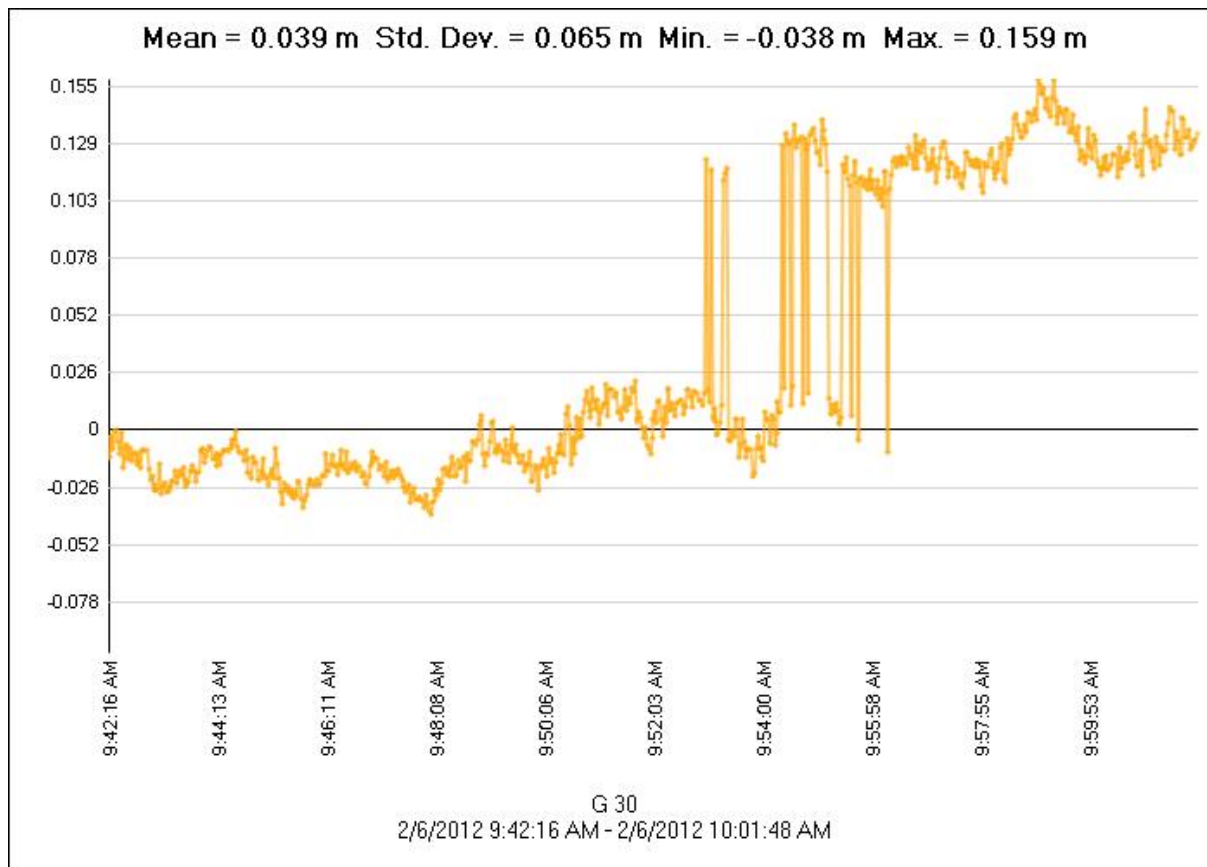
SV	2/6/2012 9:42:14 AM	Duration: 00:19:34	Major interval: 00:01:00	2/6/2012 10:01:48 AM
G 2	L1 L2			
G 5	L1 L2			
G 6	L1 L2			
G 15	L1 L2			
G 16	L1 L2			
G 18	L1 L2			
G 21	L1 L2			
G 22	L1 L2			
G 25	L1 L2			
G 26	L1 L2			
G 27	L1 L2			
G 29	L1 L2			
G 30	L1 L2			

Residuals









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:	Dual Frequency (L1, L2)
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

19S-SPIKE - FVA61-B2 (10:26:41 AM-10:44:59 AM) (S35)

Baseline observation: 19S-SPIKE --- FVA61-B2 (B35)

Processed: 3/20/2012 5:07:52 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.009 m

Vertical precision: 0.020 m

RMS: 0.003 m

Maximum PDOP: 2.662

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/6/2012 10:26:41 AM (Local: UTC-7hr)

Processing stop time: 2/6/2012 10:44:59 AM (Local: UTC-7hr)

Processing duration: 00:18:18

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338086.566 m	Latitude	N37°29'23.76152"	Latitude	N37°29'23.76151"
Northing	4150799.869 m	Longitude	W100°49'53.32131"	Longitude	W100°49'53.32131"
Elevation	896.723 m	Height	870.555 m	Height	870.555 m

To:	FVA61-B2				
Grid		Local		Global	
Easting	397185.990 m	Latitude	N37°30'14.70086"	Latitude	N37°30'14.70085"
Northing	4151429.840 m	Longitude	W100°09'47.61895"	Longitude	W100°09'47.61895"
Elevation	779.587 m	Height	753.140 m	Height	753.140 m

Vector					
9Ughb[	59099.424 m	NS Fwd Azimuth	88°16'27"	L	58301.917 m
Bcfh\jb[	629.971 m	Ellipsoid Dist.	59113.458 m	M	-9735.755 m
9Yj Uhcb	-117.135 m	<Y][\h	-117.415 m	N	1174.654 m

Standard Errors

Vector errors:					
σ _{Ughb}	0.003 m	σ _{BG'ZkX'5nJa i h}	0°00'00"	σ _L	0.004 m
σ _{Bcfh\]b}	0.004 m	σ _{'9~]dgc]X'8]gh}	0.003 m	σ _M	0.008 m
σ _{'9~j Uhcb}	0.010 m	σ _{' <Y][\h}	0.010 m	σ _N	0.007 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000133733		
Y	0.0000138563	0.0000585558	
Z	-0.0000134106	-0.0000417924	0.0000521090

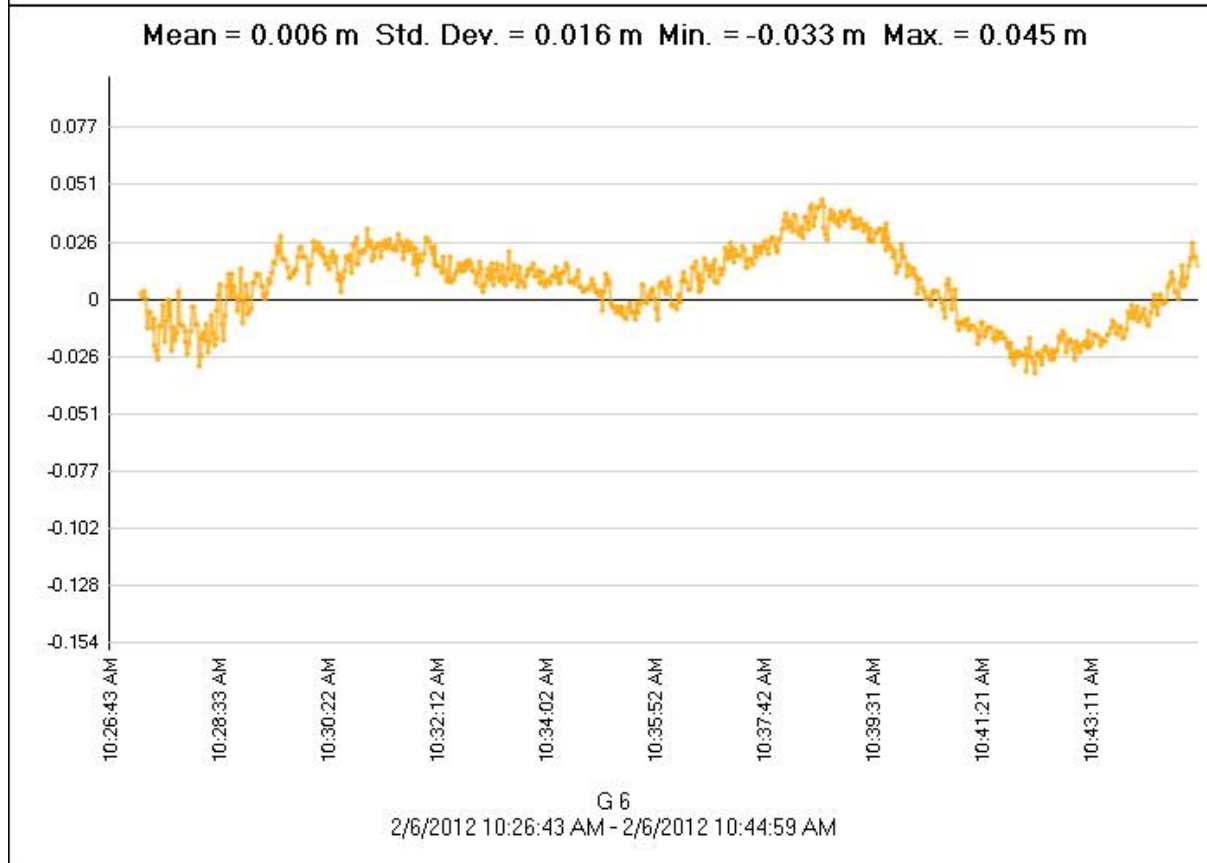
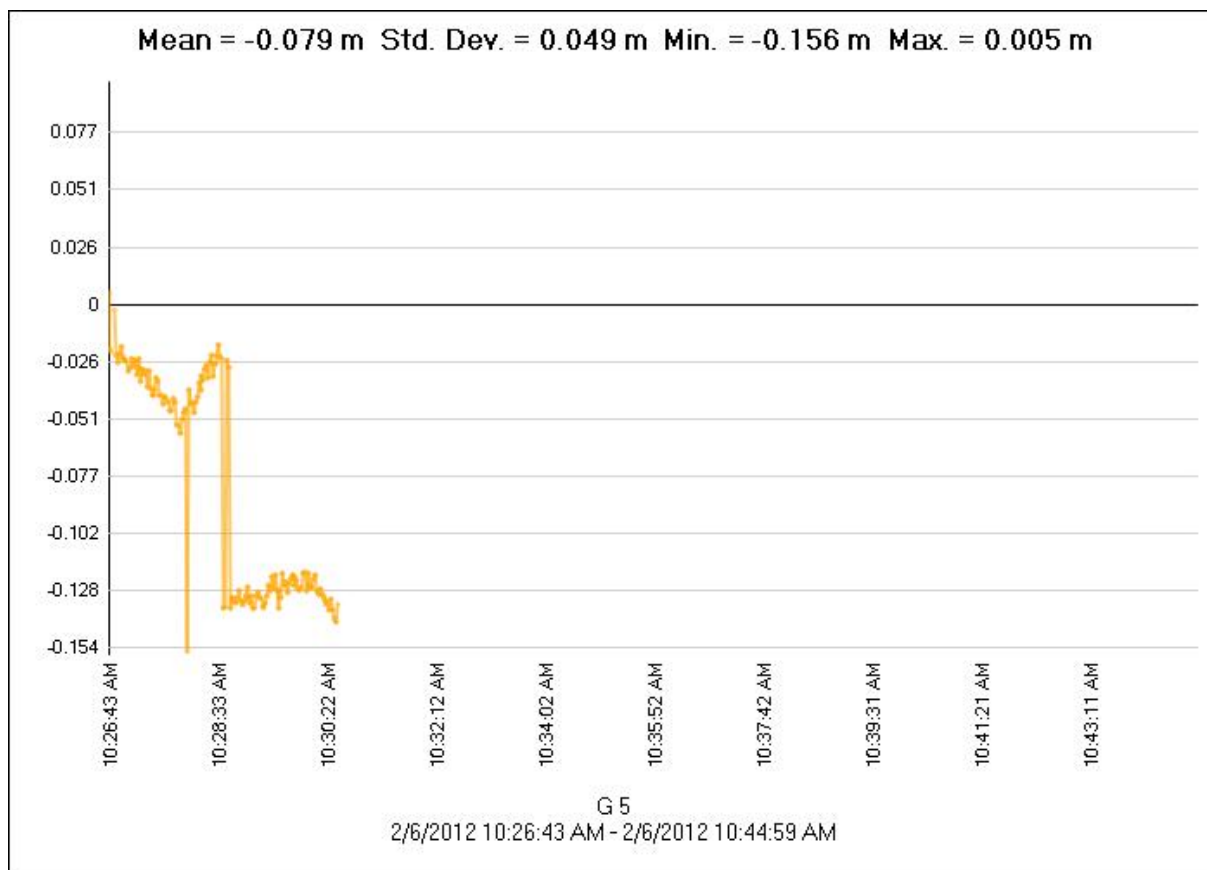
Occupations

	From	To
Point ID:	19S-SPIKE	FVA61-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00010370.12o	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00080372.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

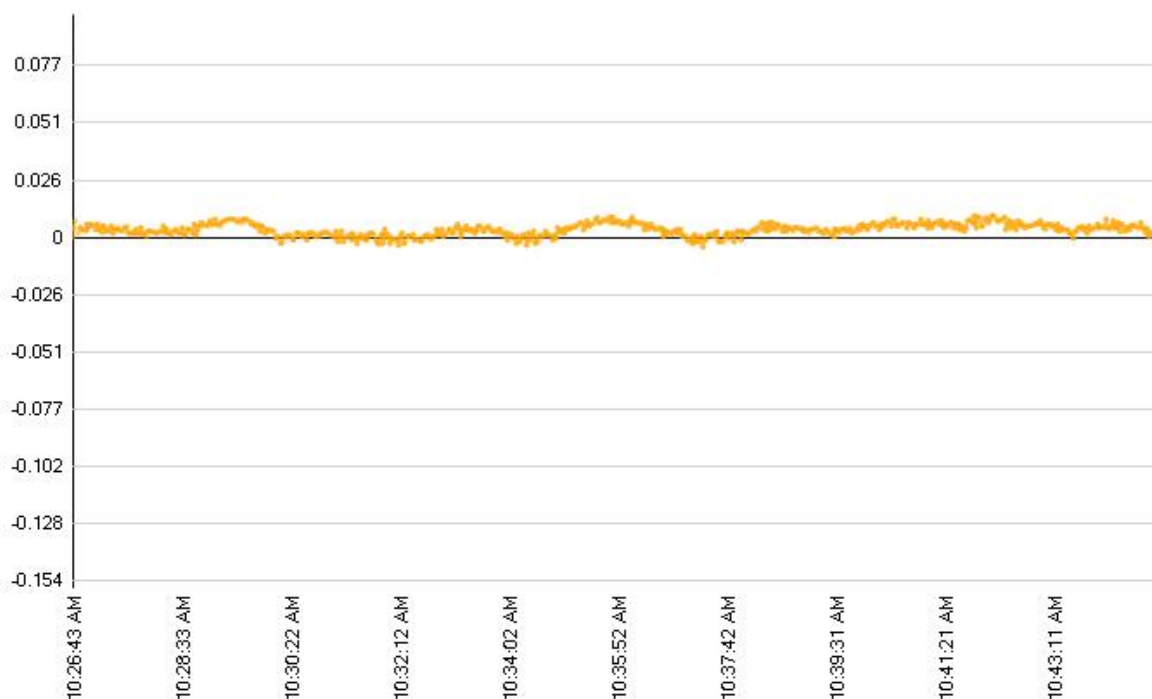
Tracking Summary

SV	2/6/2012 10:26:41 AM	Duration: 00:18:18	Major interval: 00:01:00	2/6/2012 10:44:59 AM
G 5	L1 L2			
G 6	L1 L2			
G 9	L1 L2			
G 15	L1 L2			
G 16	L1 L2			
G 18	L1 L2			
G 21	L1 L2			
G 22	L1 L2			
G 26	L1 L2			
G 27	L1 L2			
G 29	L1 L2			
G 30	L1 L2			

Residuals



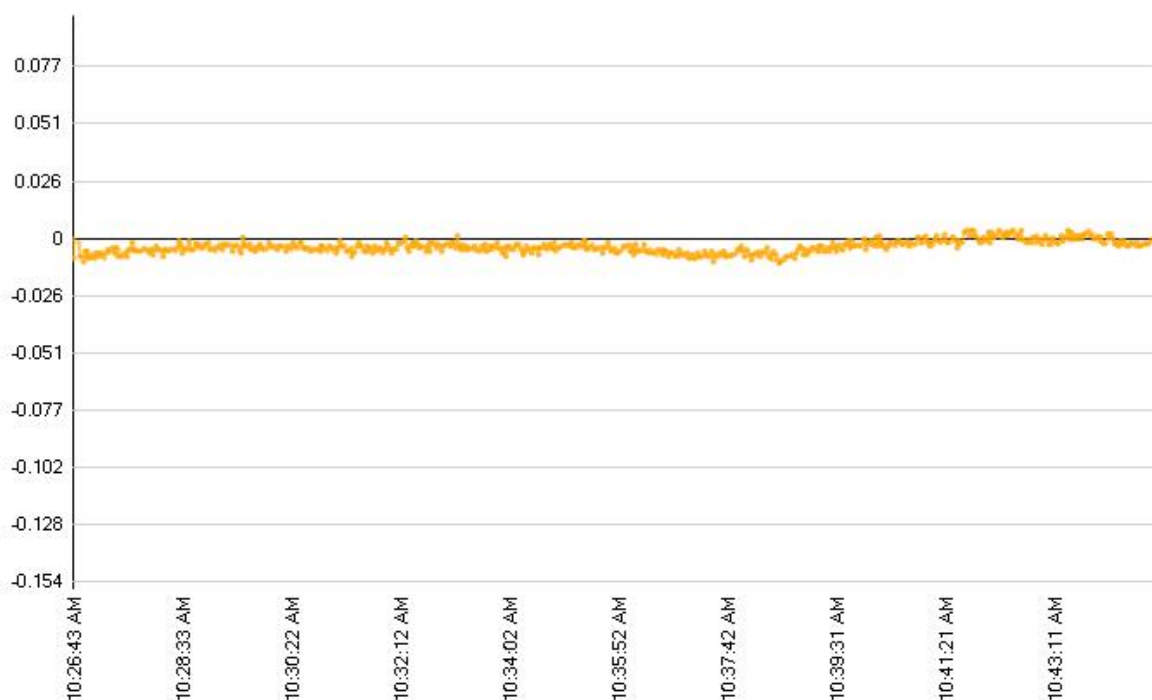
Mean = 0.003 m Std. Dev. = 0.003 m Min. = -0.004 m Max. = 0.010 m



G 15

2/6/2012 10:26:43 AM - 2/6/2012 10:44:59 AM

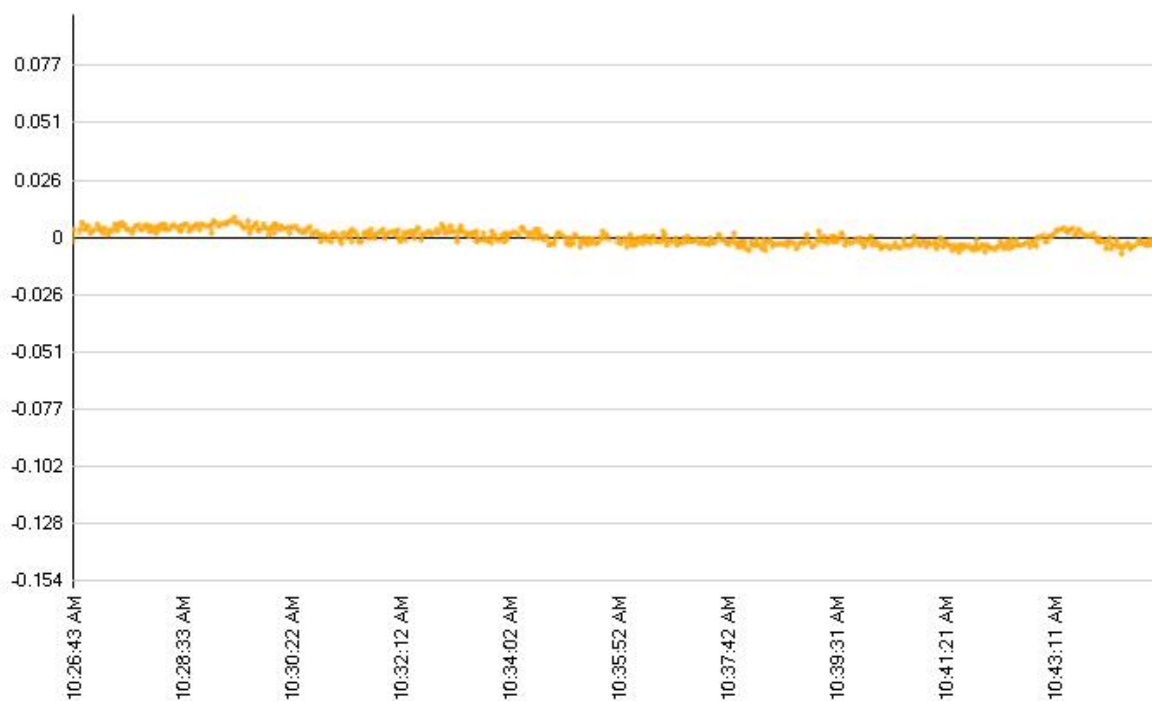
Mean = -0.003 m Std. Dev. = 0.003 m Min. = -0.011 m Max. = 0.004 m



G 18

2/6/2012 10:26:43 AM - 2/6/2012 10:44:59 AM

Mean = 0.000 m Std. Dev. = 0.003 m Min. = -0.007 m Max. = 0.009 m

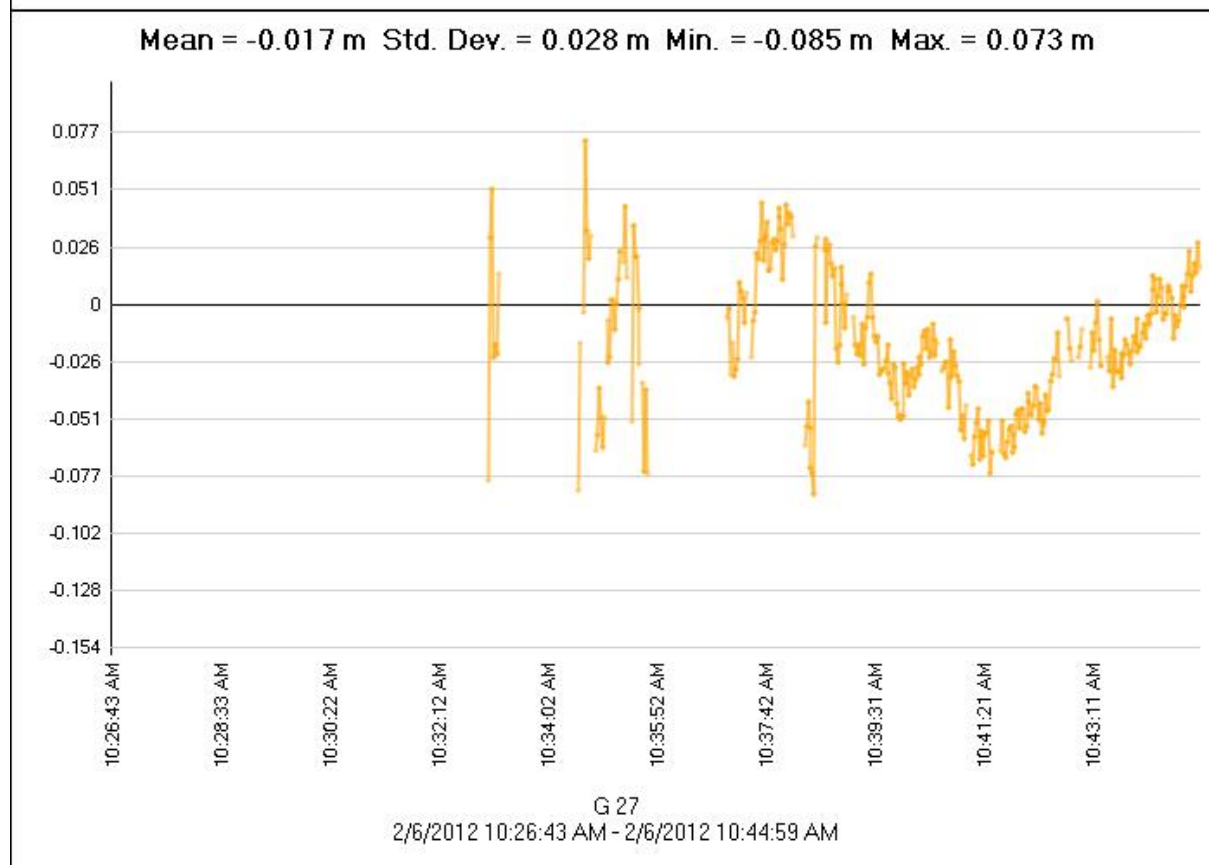
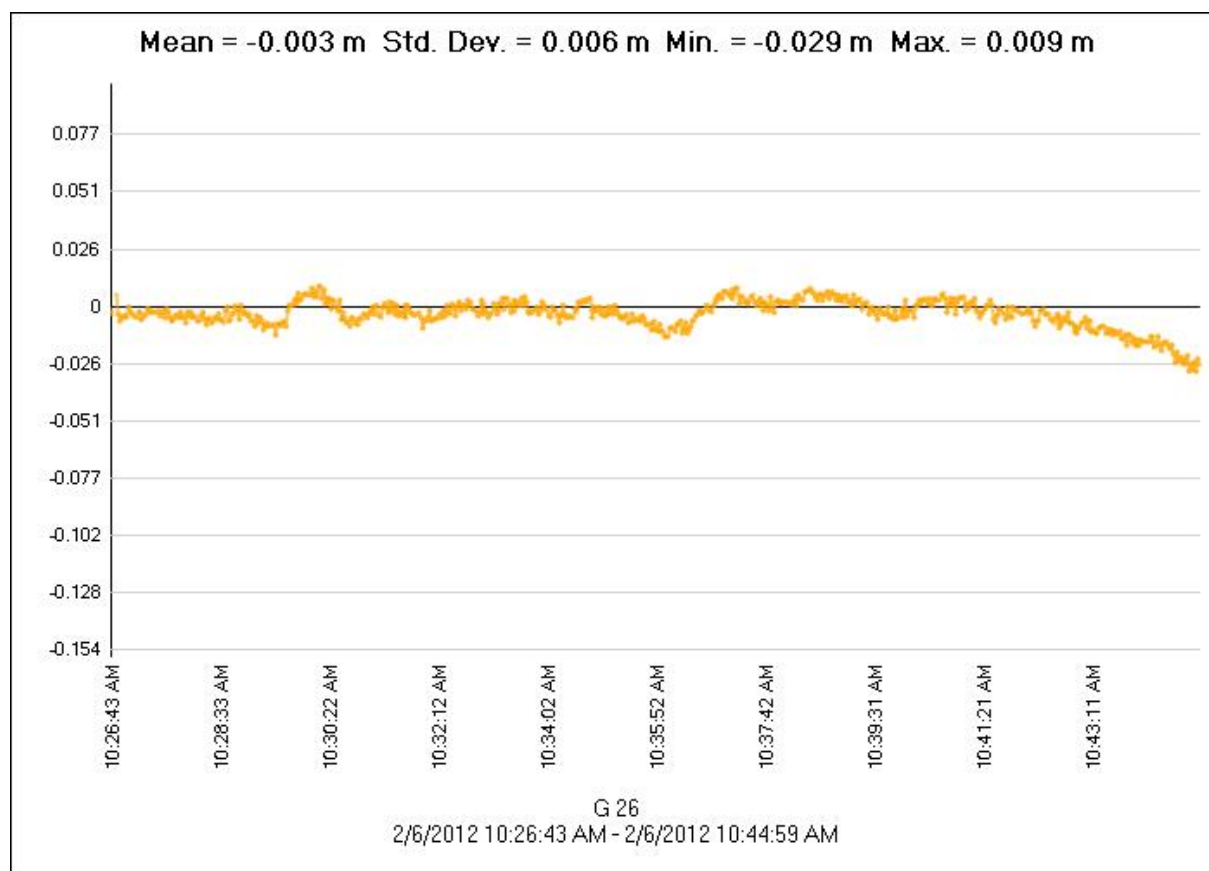


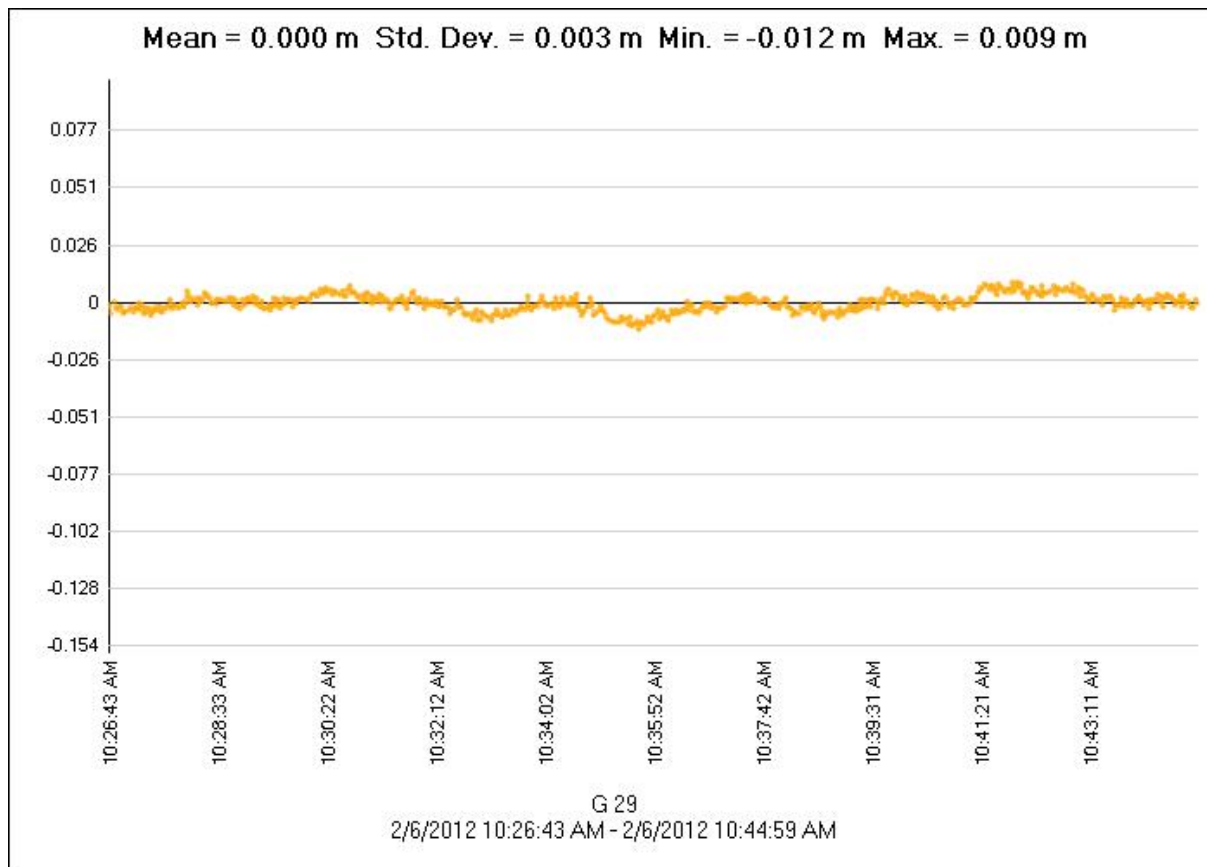
G 21
2/6/2012 10:26:43 AM - 2/6/2012 10:44:59 AM

Mean = 0.016 m Std. Dev. = 0.027 m Min. = -0.049 m Max. = 0.068 m



G 22
2/6/2012 10:26:43 AM - 2/6/2012 10:44:59 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:	Dual Frequency (L1, L2)
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

19S-SPIKE - SVA61-B2 (10:49:08 AM-11:09:02 AM) (S36)

Baseline observation: 19S-SPIKE --- SVA61-B2 (B36)

Processed: 3/20/2012 5:07:50 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.074 m

Vertical precision: 0.063 m

RMS: 0.003 m

Maximum PDOP: 3.280

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/6/2012 10:49:08 AM (Local: UTC-7hr)

Processing stop time: 2/6/2012 11:09:02 AM (Local: UTC-7hr)

Processing duration: 00:19:54

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338086.566 m	Latitude	N37°29'23.76152"	Latitude	N37°29'23.76151"
Northing	4150799.869 m	Longitude	W100°49'53.32131"	Longitude	W100°49'53.32131"
Elevation	896.723 m	Height	870.555 m	Height	870.555 m

To:	SVA61-B2				
Grid		Local		Global	
Easting	397251.842 m	Latitude	N37°30'14.97601"	Latitude	N37°30'14.97601"
Northing	4151437.508 m	Longitude	W100°09'44.94116"	Longitude	W100°09'44.94116"
Elevation	779.370 m	Height	752.923 m	Height	752.923 m

Vector					
9Ughb[	59165.276 m	NS Fwd Azimuth	88°16'03"	L	58367.605 m
BcfA\jb[	637.639 m	Ellipsoid Dist.	59179.406 m	M	-9742.107 m
9Yj Uhcb	-117.353 m	<Y][\h	-117.632 m	N	1181.252 m

Standard Errors

Vector errors:					
Point ID	0.028 m	Point ID	0°00'00"	Point ID	0.029 m
Point ID	0.018 m	Point ID	0.028 m	Point ID	0.020 m
Point ID	0.032 m	Point ID	0.032 m	Point ID	0.030 m

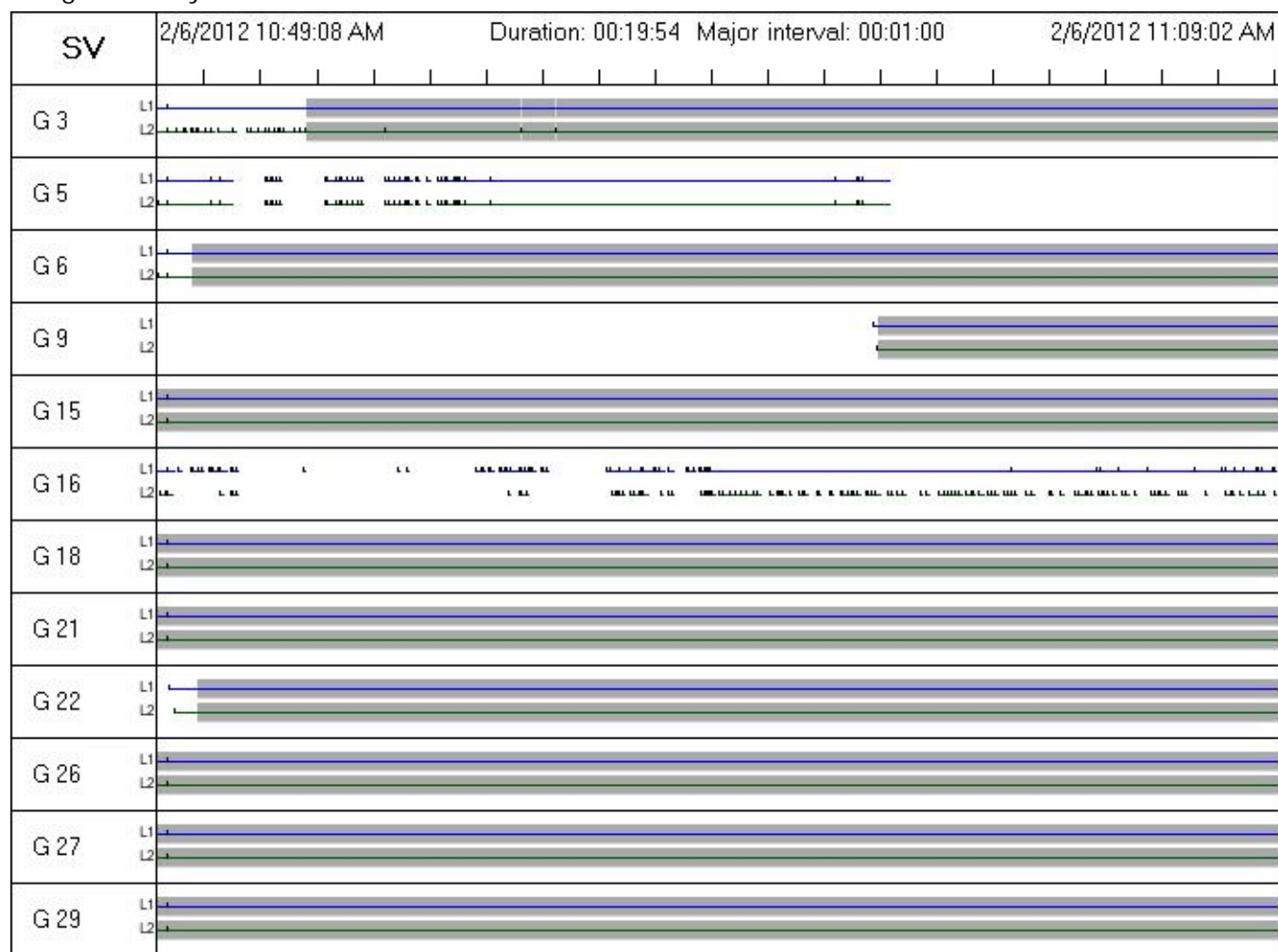
Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0008134426		
Y	0.0000846377	0.0004179119	
Z	-0.0005583302	-0.0003243677	0.0009075090

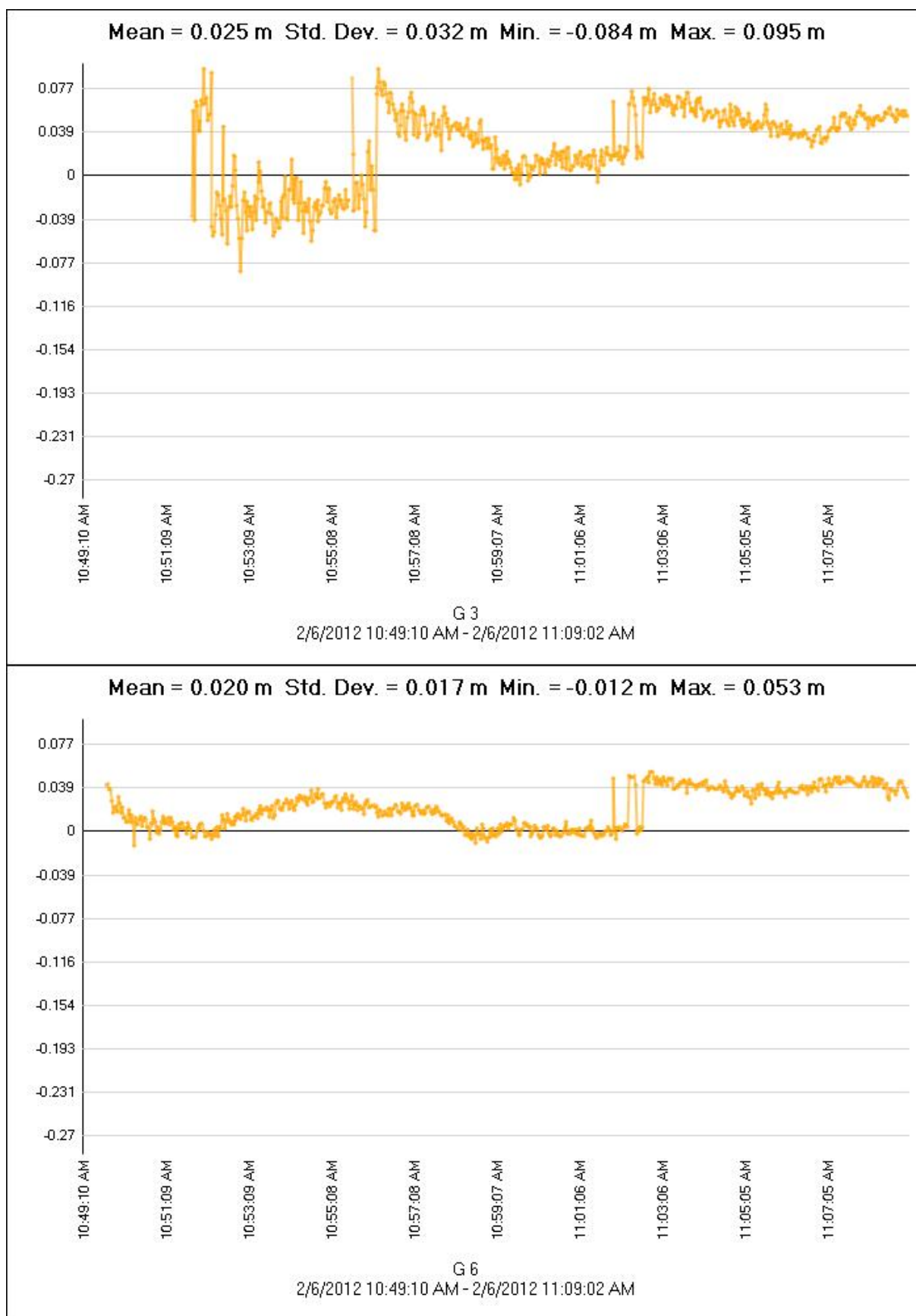
Occupations

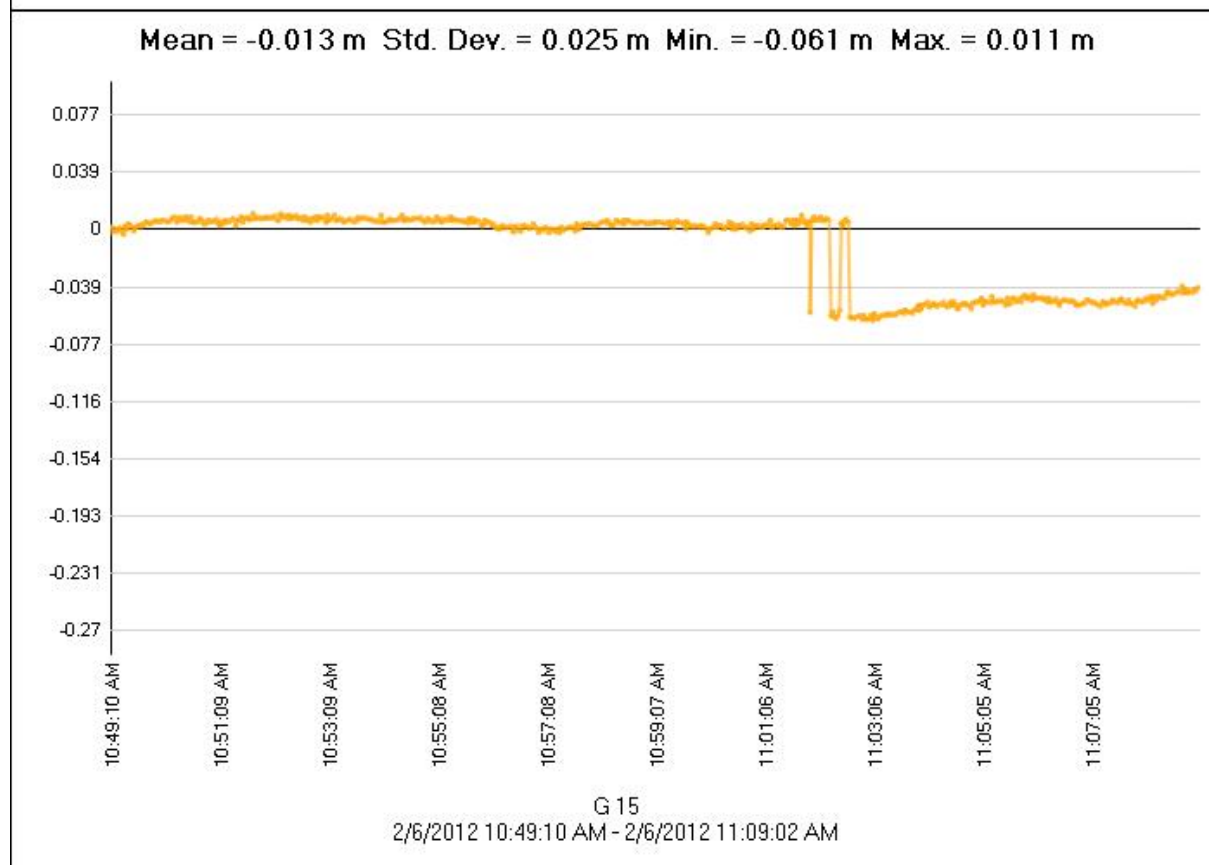
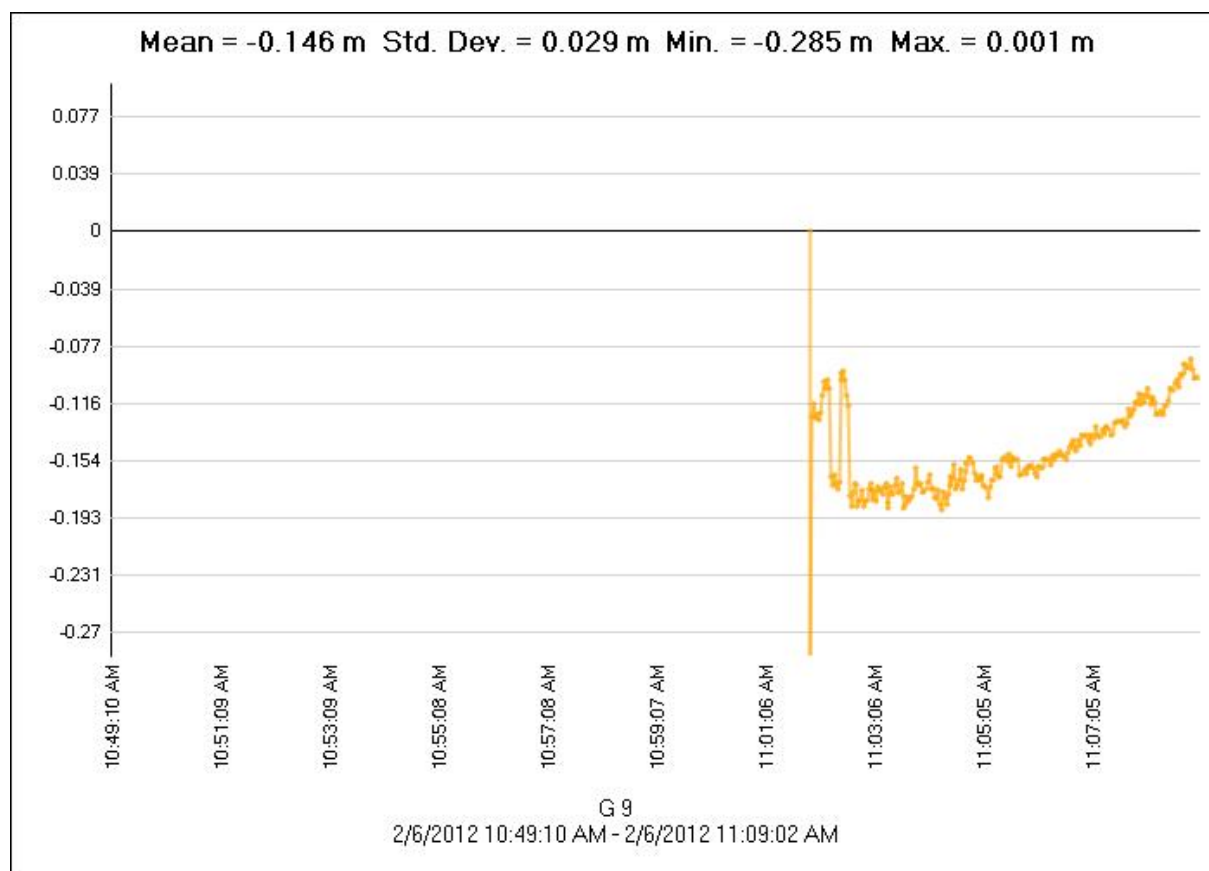
	From	To
Point ID:	19S-SPIKE	SVA61-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010370.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080373.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

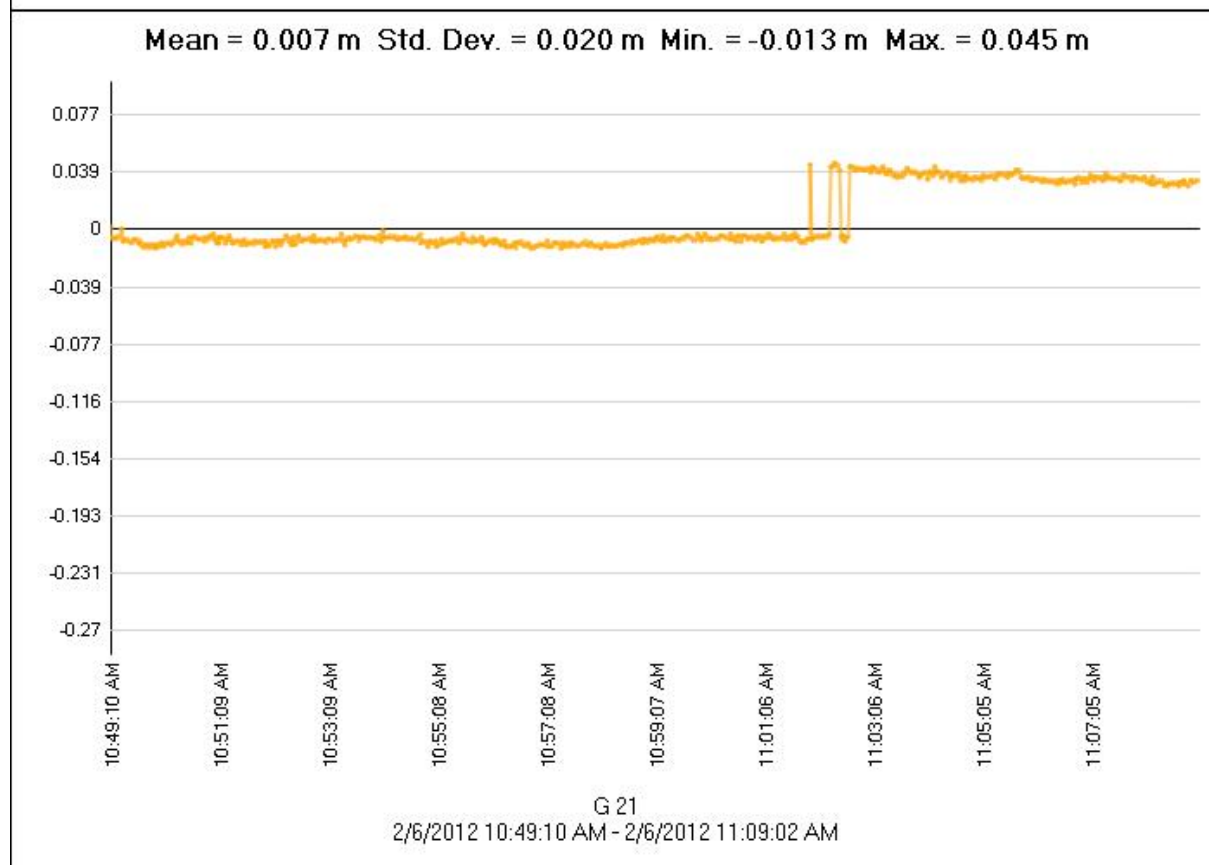
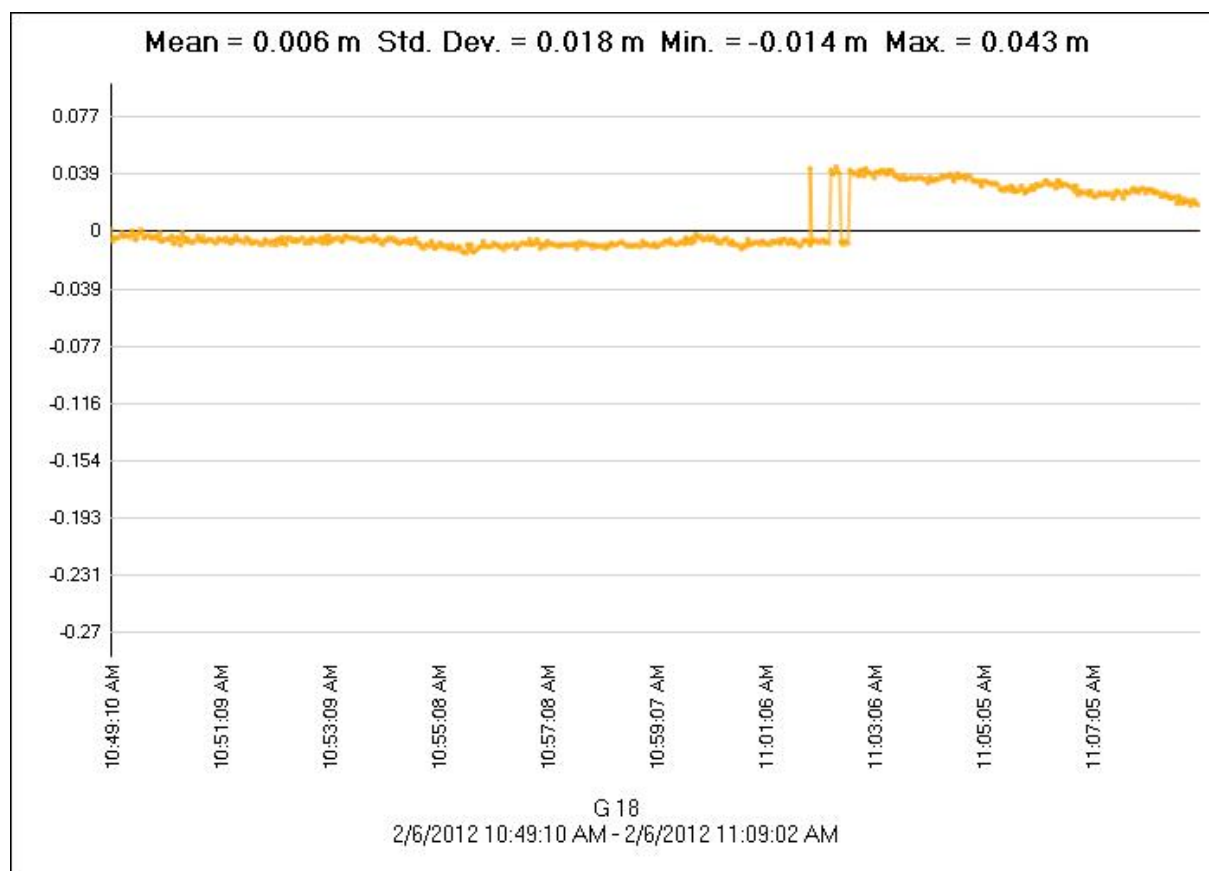
Tracking Summary



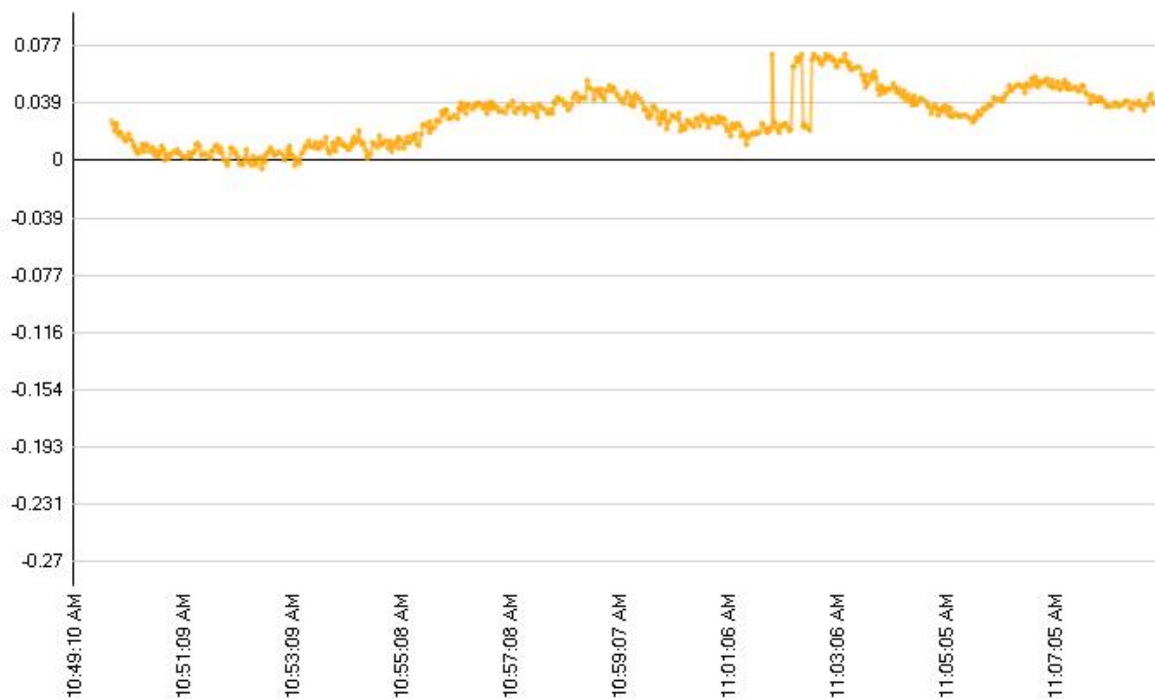
Residuals







Mean = 0.029 m Std. Dev. = 0.018 m Min. = -0.005 m Max. = 0.072 m



G 22

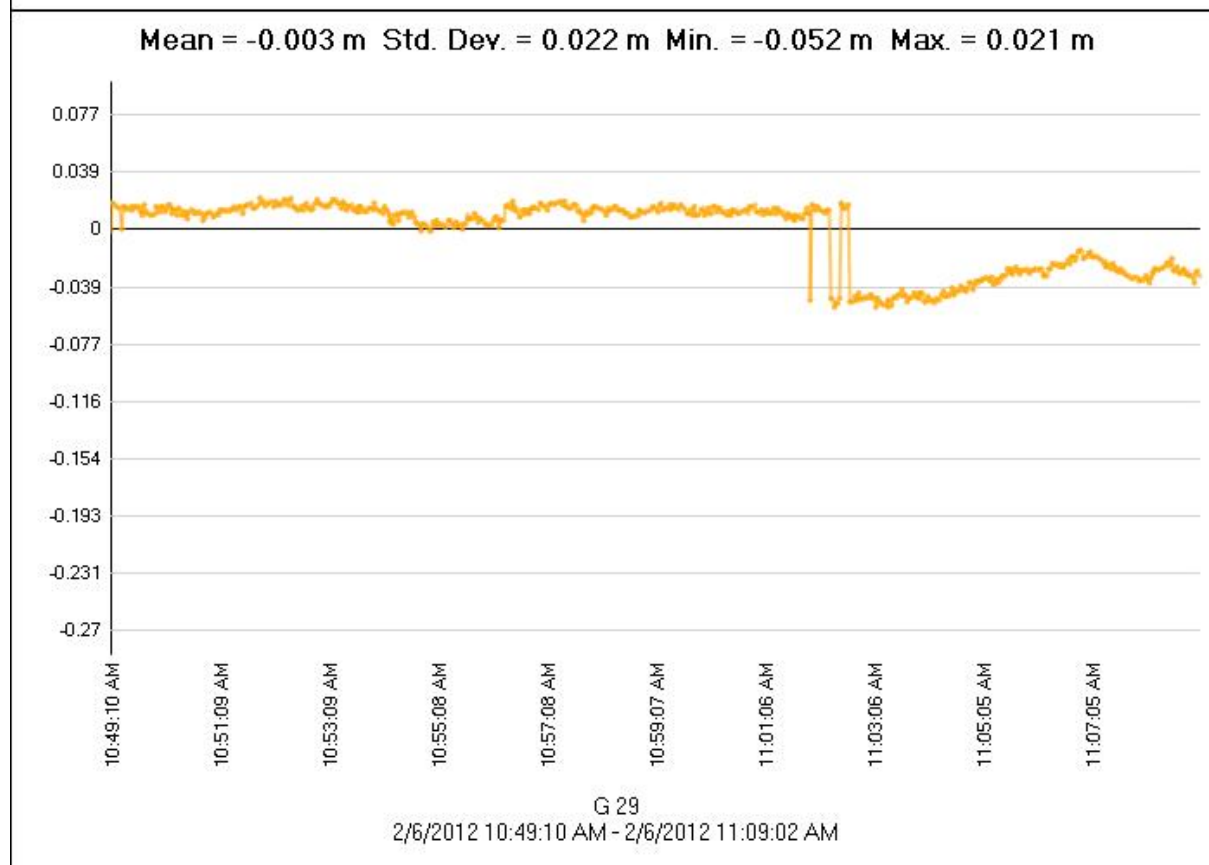
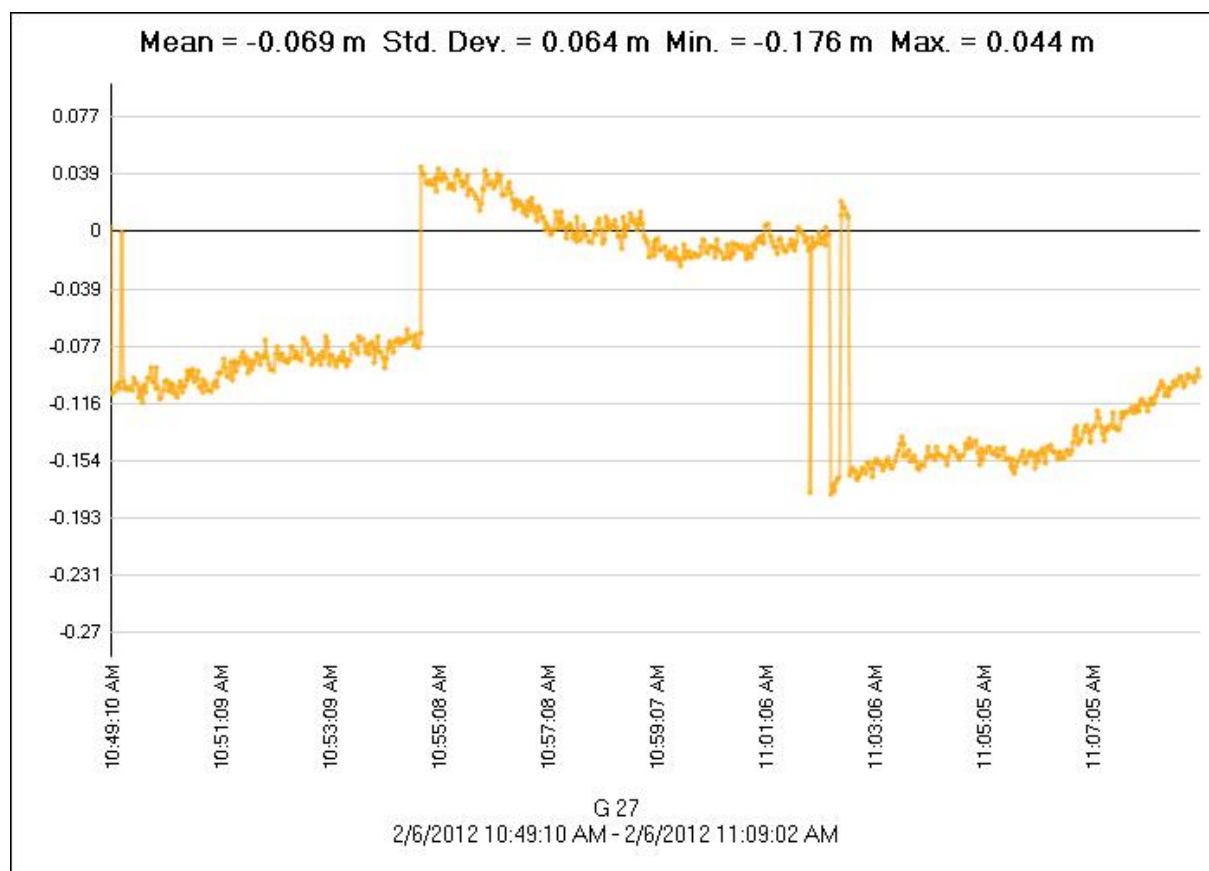
2/6/2012 10:49:10 AM - 2/6/2012 11:09:02 AM

Mean = -0.010 m Std. Dev. = 0.029 m Min. = -0.077 m Max. = 0.037 m



G 26



2/6/2012 10:49:10 AM - 2/6/2012 11:09:02 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:	Dual Frequency (L1, L2)
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

19S-SPIKE - FVA27-B2 (12:14:31 PM-12:32:30 PM) (S37)

Baseline observation: 19S-SPIKE --- FVA27-B2 (B37)

Processed: 3/20/2012 5:07:56 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.022 m

Vertical precision: 0.042 m

RMS: 0.002 m

Maximum PDOP: 2.256

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/6/2012 12:14:31 PM (Local: UTC-7hr)

Processing stop time: 2/6/2012 12:32:30 PM (Local: UTC-7hr)

Processing duration: 00:17:59

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338086.566 m	Latitude	N37°29'23.76152"	Latitude	N37°29'23.76151"
Northing	4150799.869 m	Longitude	W100°49'53.32131"	Longitude	W100°49'53.32131"
Elevation	896.723 m	Height	870.555 m	Height	870.555 m

To:	FVA27-B2				
Grid		Local		Global	
Easting	400149.881 m	Latitude	N37°23'13.90327"	Latitude	N37°23'13.90327"
Northing	4138423.437 m	Longitude	W100°07'40.58078"	Longitude	W100°07'40.58078"
Elevation	798.429 m	Height	771.764 m	Height	771.764 m

Vector					
9Ughb[	62063.315 m	NS Fwd Azimuth	100°09'51"	L	59983.923 m
Bcfh\jb[	-12376.432 m	Ellipsoid Dist.	63297.028 m	M	-18065.690 m
9Yj Uhcb	-98.294 m	<Y][\h	-98.791 m	N	-9114.882 m

Standard Errors

Vector errors:					
Point ID	0.008 m	Point Name	0°00'00"	Point Type	0.011 m
Point ID	0.007 m	Point Name	0.008 m	Point Type	0.018 m
Point ID	0.021 m	Point Name	0.021 m	Point Type	0.013 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0001106905		
Y	0.0001264813	0.0003142285	
Z	-0.0000756901	-0.0001730031	0.0001584009

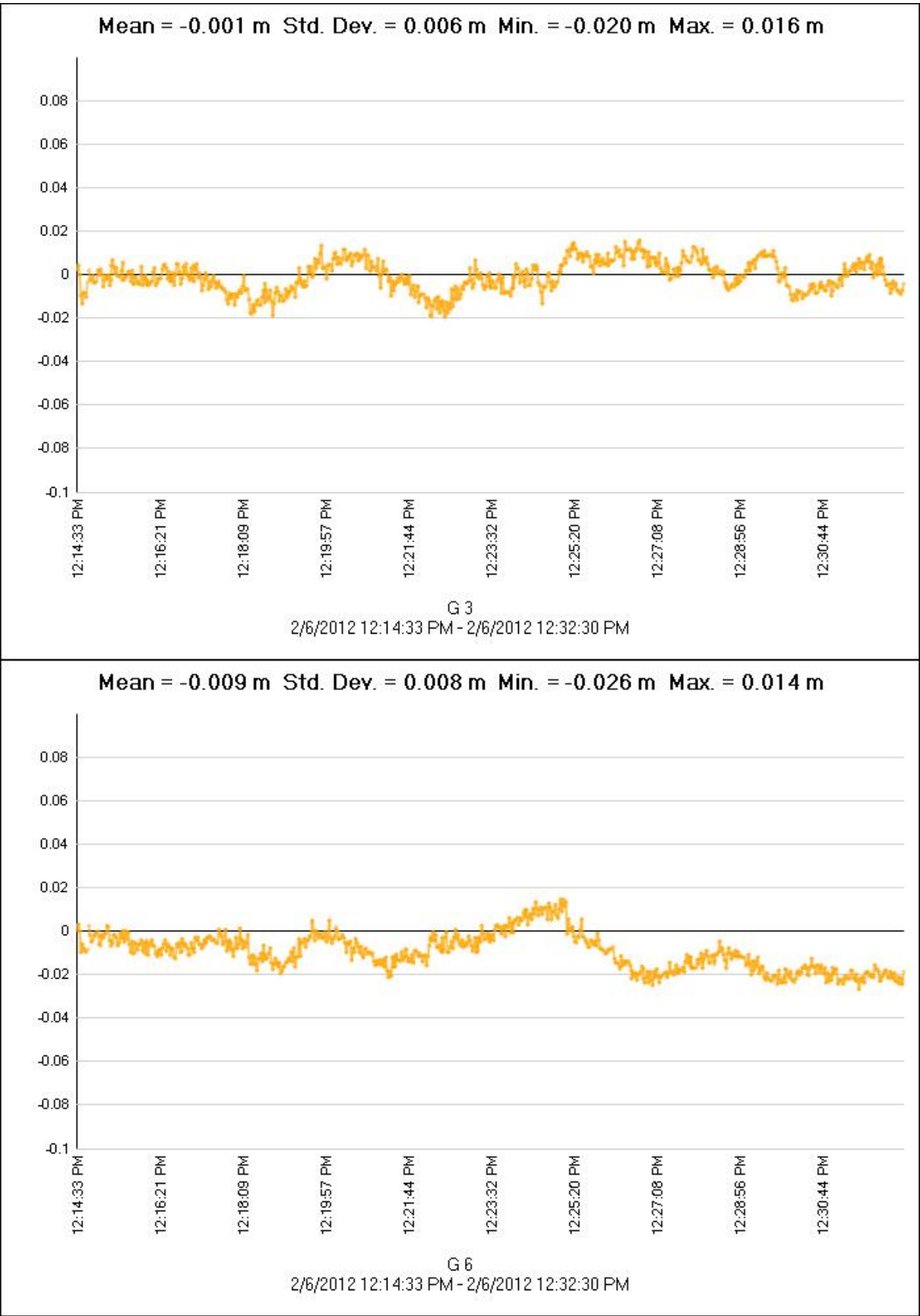
Occupations

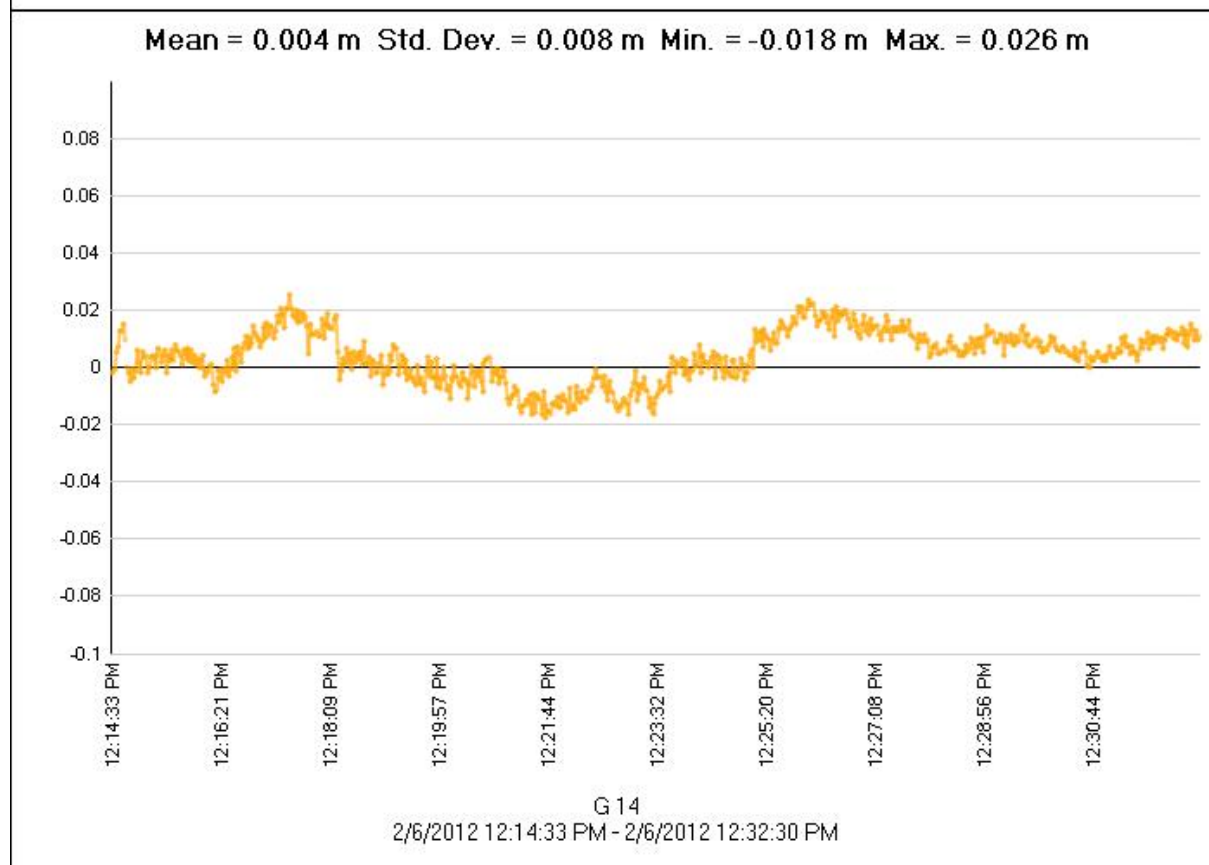
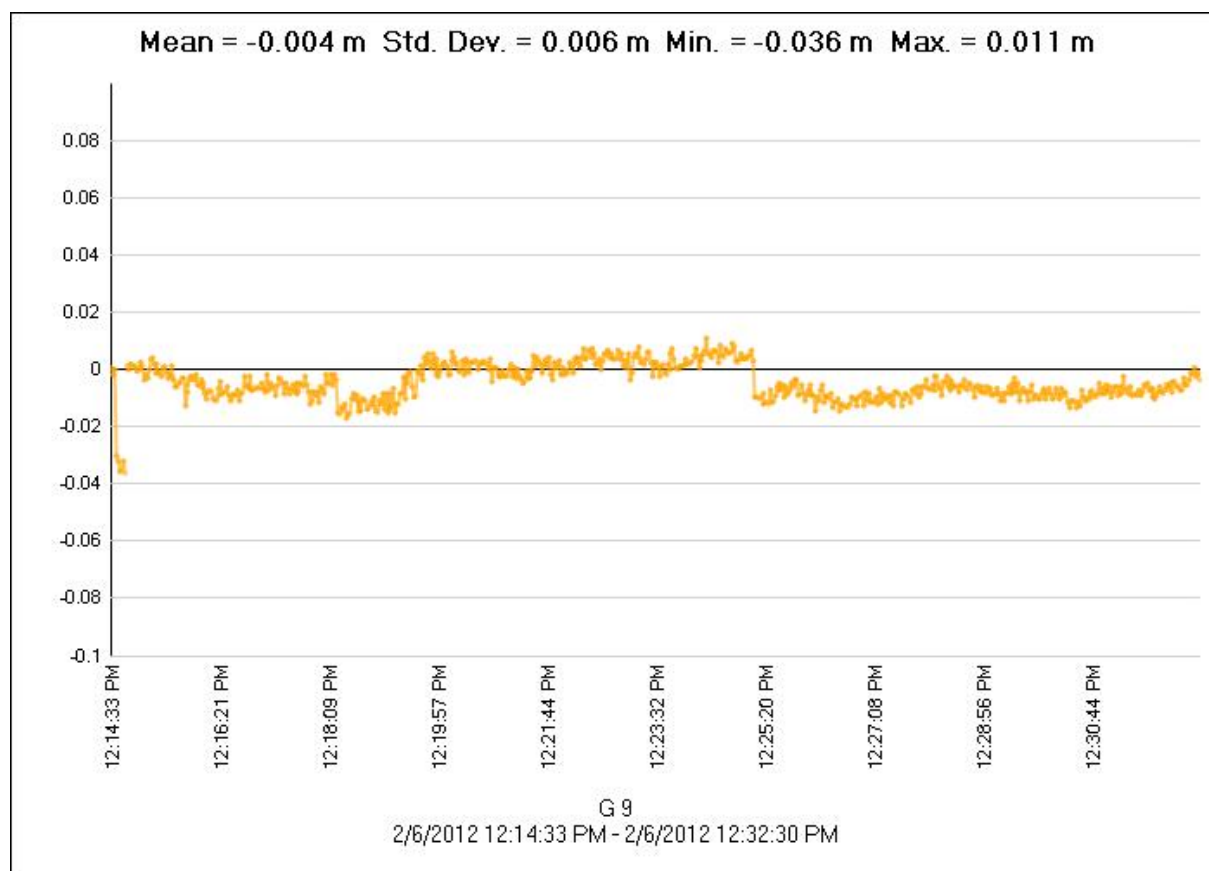
	From	To
Point ID:	19S-SPIKE	FVA27-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010370.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080374.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

Tracking Summary

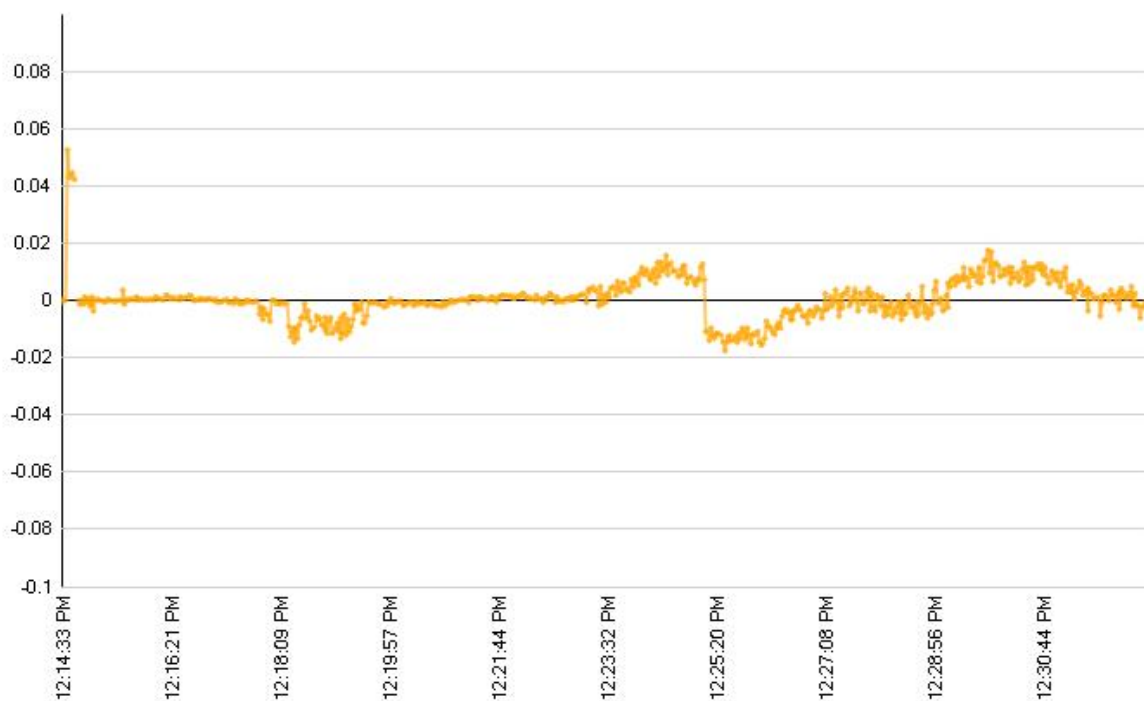
SV	2/6/2012 12:14:31 PM	Duration: 00:17:59	Major interval: 00:01:00	2/6/2012 12:32:30 PM
G 3				
G 6				
G 9				
G 14				
G 15				
G 18				
G 19				
G 21				
G 22				
G 27				
G 29				

Residuals





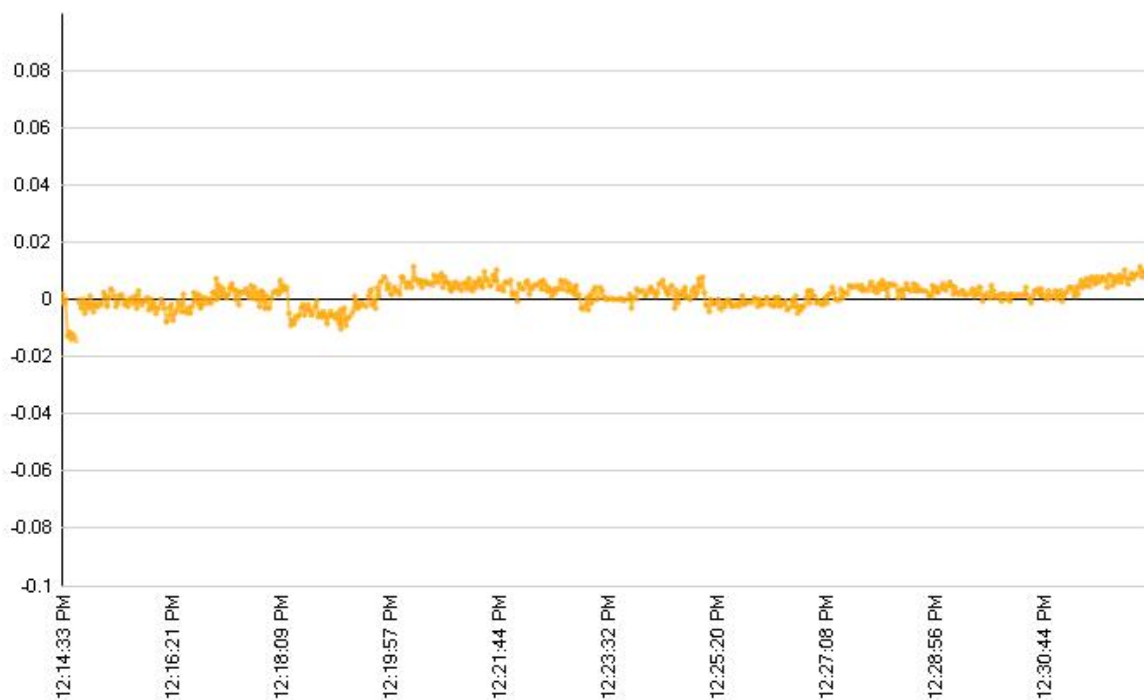
Mean = 0.000 m Std. Dev. = 0.007 m Min. = -0.018 m Max. = 0.052 m



G 15

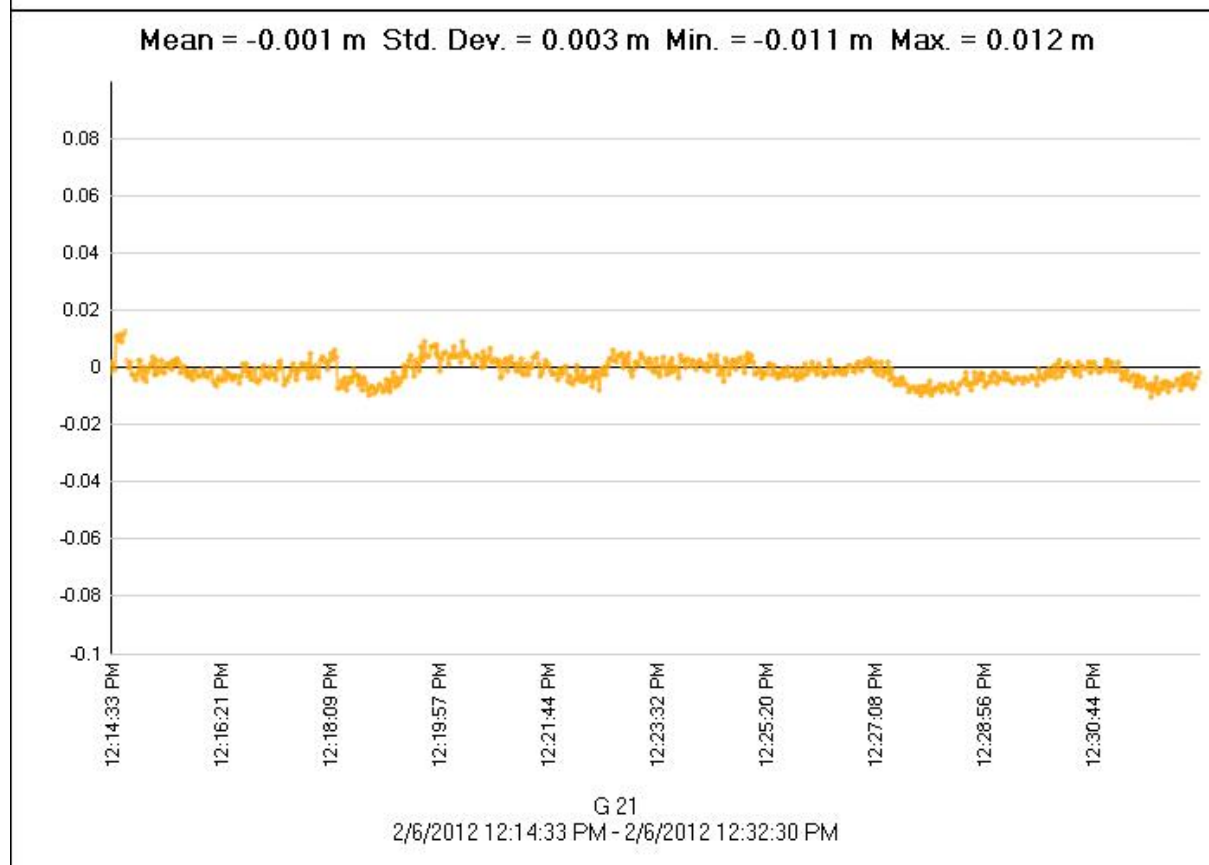
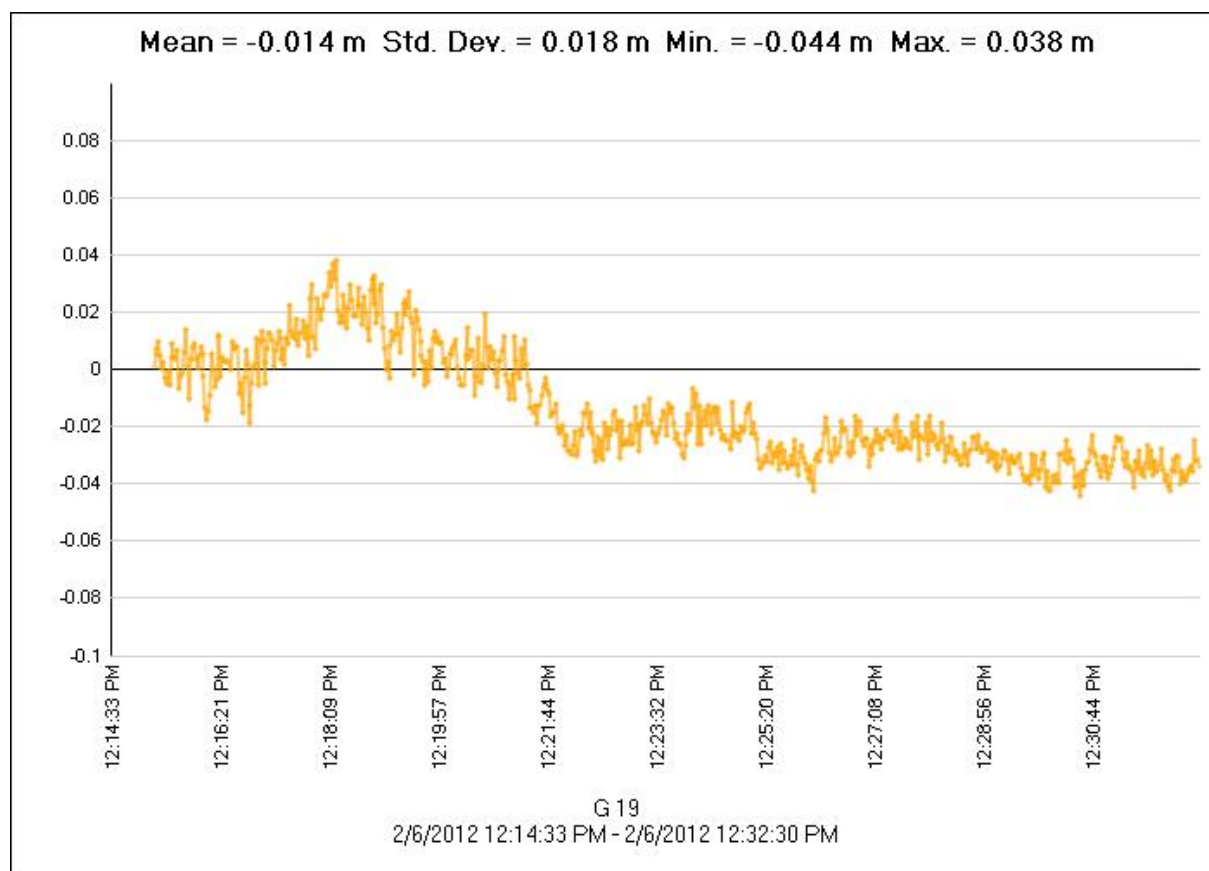
2/6/2012 12:14:33 PM - 2/6/2012 12:32:30 PM

Mean = 0.001 m Std. Dev. = 0.004 m Min. = -0.014 m Max. = 0.012 m



G 18

2/6/2012 12:14:33 PM - 2/6/2012 12:32:30 PM



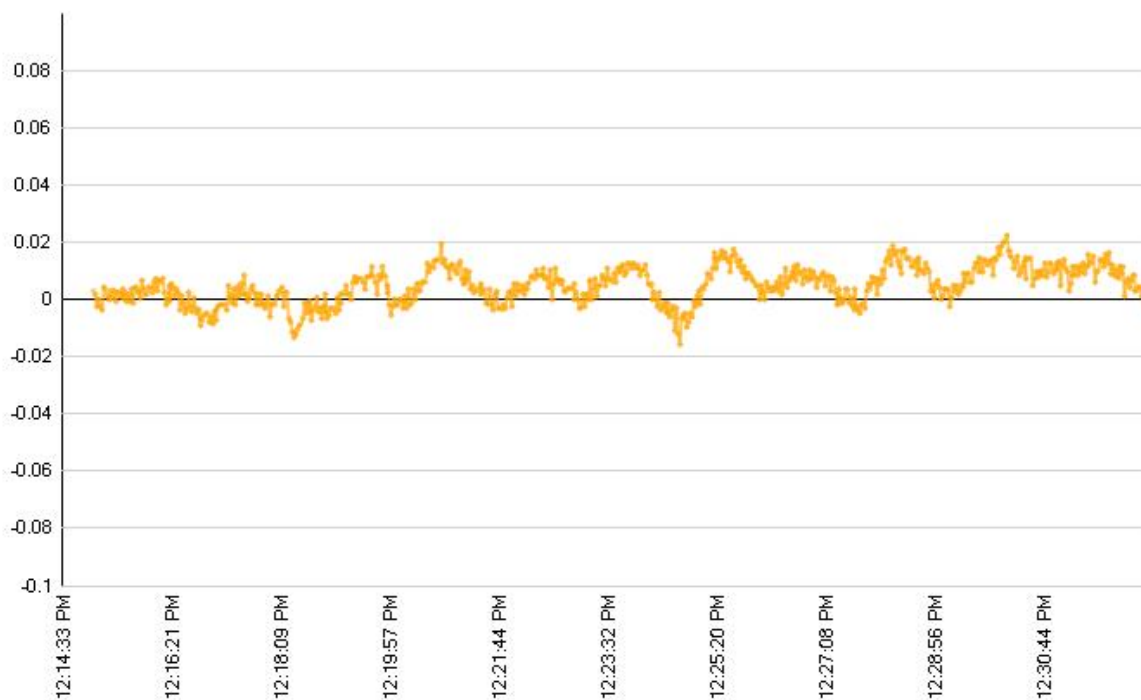
Mean = 0.004 m Std. Dev. = 0.004 m Min. = -0.006 m Max. = 0.014 m



G 22

2/6/2012 12:14:33 PM - 2/6/2012 12:32:30 PM

Mean = 0.005 m Std. Dev. = 0.006 m Min. = -0.016 m Max. = 0.023 m





G 27

2/6/2012 12:14:33 PM - 2/6/2012 12:32:30 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:	Dual Frequency (L1, L2)
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

19S-SPIKE - SVA27-B2 (12:36:24 PM-12:55:37 PM) (S38)

Baseline observation: 19S-SPIKE --- SVA27-B2 (B38)

Processed: 3/20/2012 5:07:57 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.030 m

Vertical precision: 0.059 m

RMS: 0.001 m

Maximum PDOP: 2.251

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/6/2012 12:36:24 PM (Local: UTC-7hr)

Processing stop time: 2/6/2012 12:55:37 PM (Local: UTC-7hr)

Processing duration: 00:19:12

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338086.566 m	Latitude	N37°29'23.76152"	Latitude	N37°29'23.76151"
Northing	4150799.869 m	Longitude	W100°49'53.32131"	Longitude	W100°49'53.32131"
Elevation	896.723 m	Height	870.555 m	Height	870.555 m

To:	SVA27-B2				
Grid		Local		Global	
Easting	400140.967 m	Latitude	N37°23'12.27808"	Latitude	N37°23'12.27808"
Northing	4138373.451 m	Longitude	W100°07'40.91892"	Longitude	W100°07'40.91892"
Elevation	797.683 m	Height	771.017 m	Height	771.017 m

Vector					
9Ughb[	62054.401 m	NS Fwd Azimuth	100°12'36"	L	59970.488 m
Bcfh\jb[	-12426.418 m	Ellipsoid Dist.	63298.082 m	M	-18093.595 m
9Yj Uhcb	-99.040 m	<Y][\h	-99.538 m	N	-9155.151 m

Standard Errors

Vector errors:					
Point ID	0.007 m	Point Description	0°00'00"	Point Type	0.010 m
Point ID	0.012 m	Point Description	0.008 m	Point Type	0.021 m
Point ID	0.030 m	Point Description	0.030 m	Point Type	0.023 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000965256		
Y	0.0001654764	0.0004564850	
Z	-0.0001739021	-0.0003739190	0.0005363480

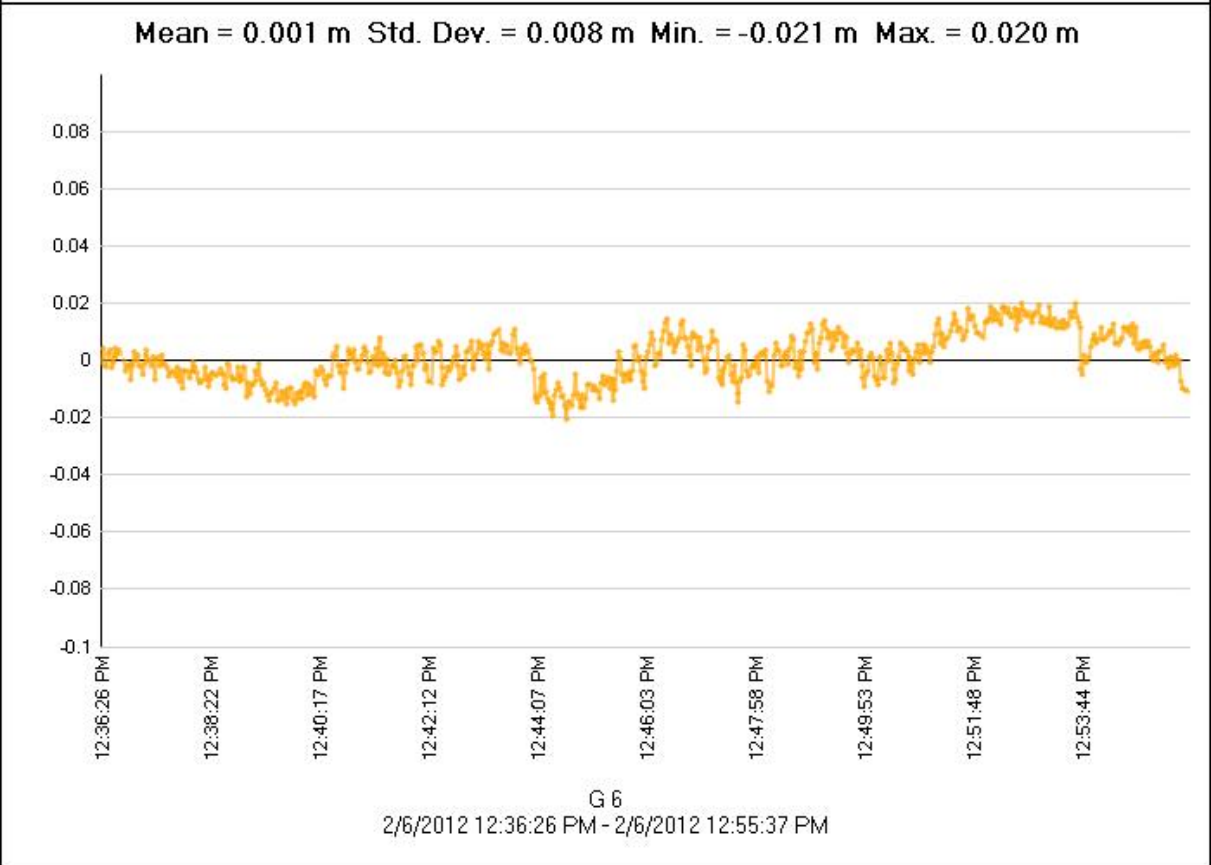
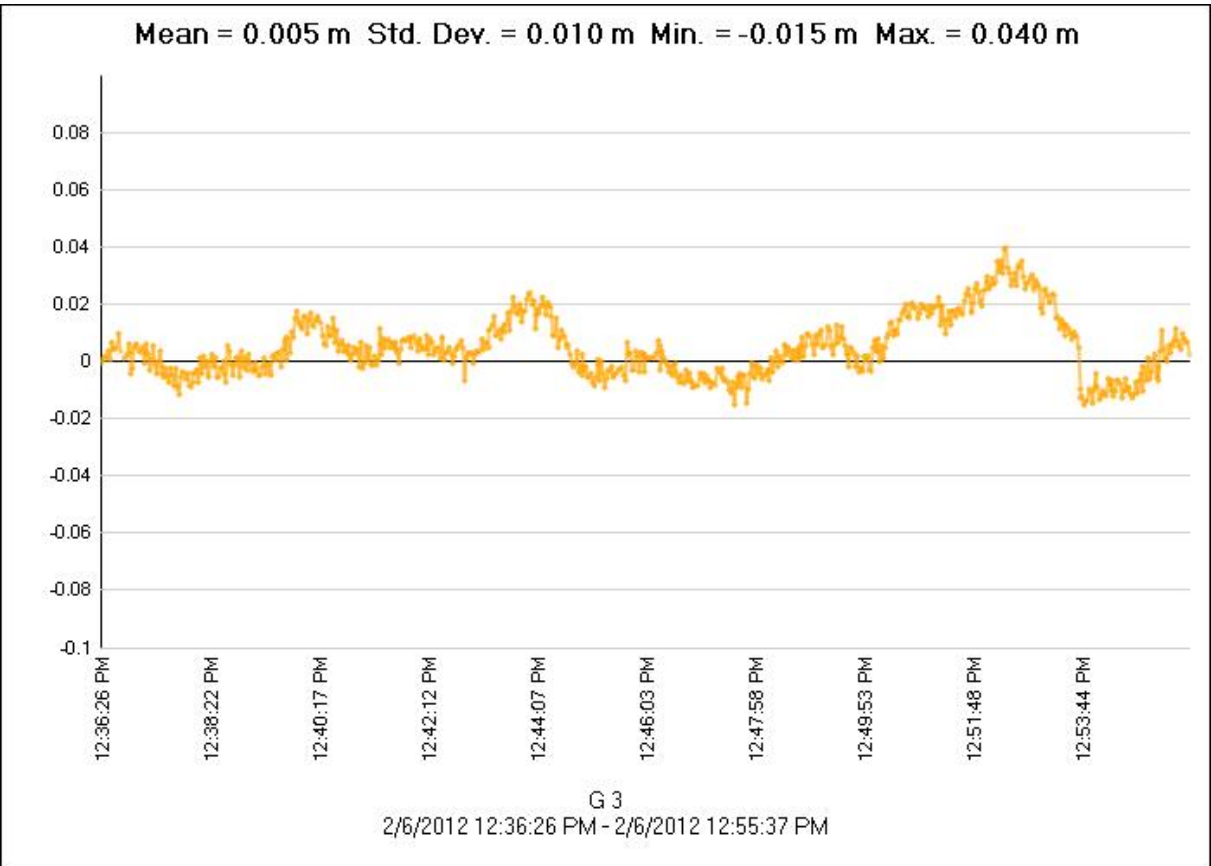
Occupations

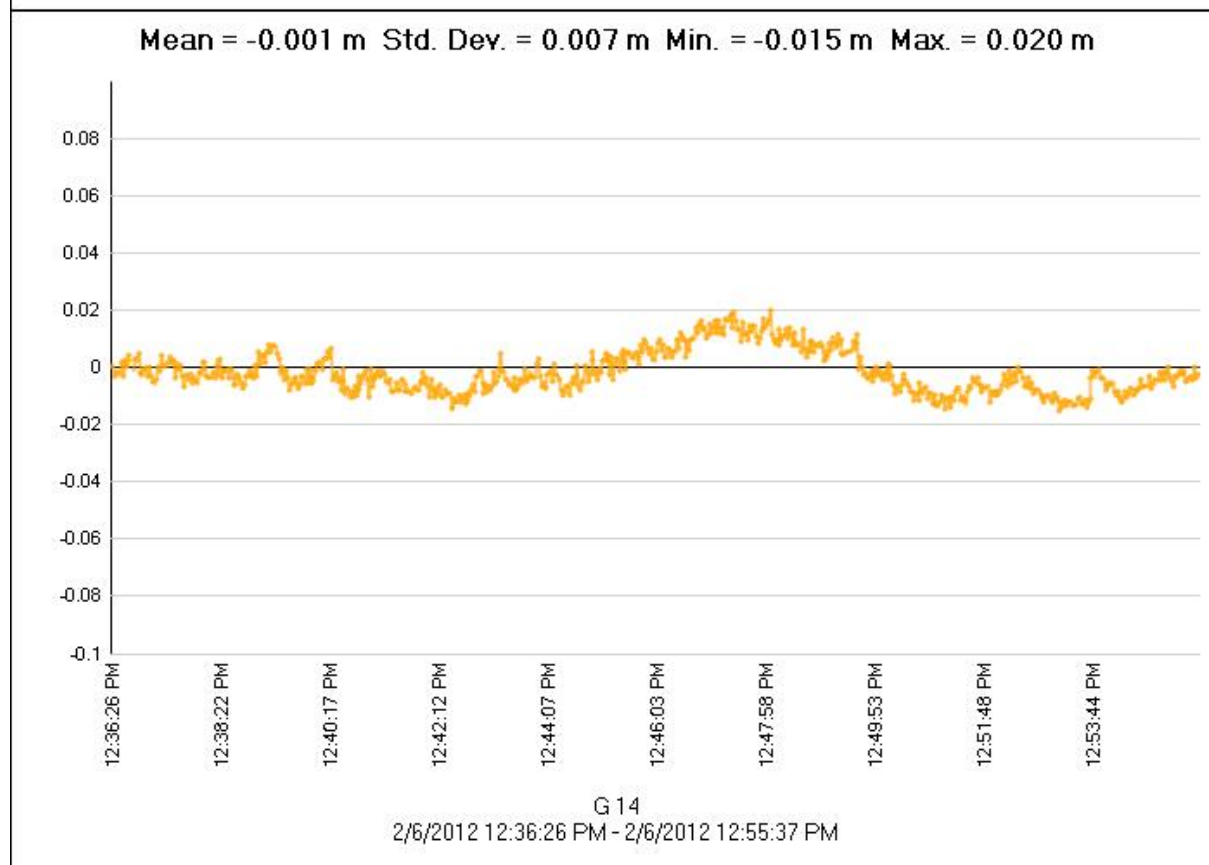
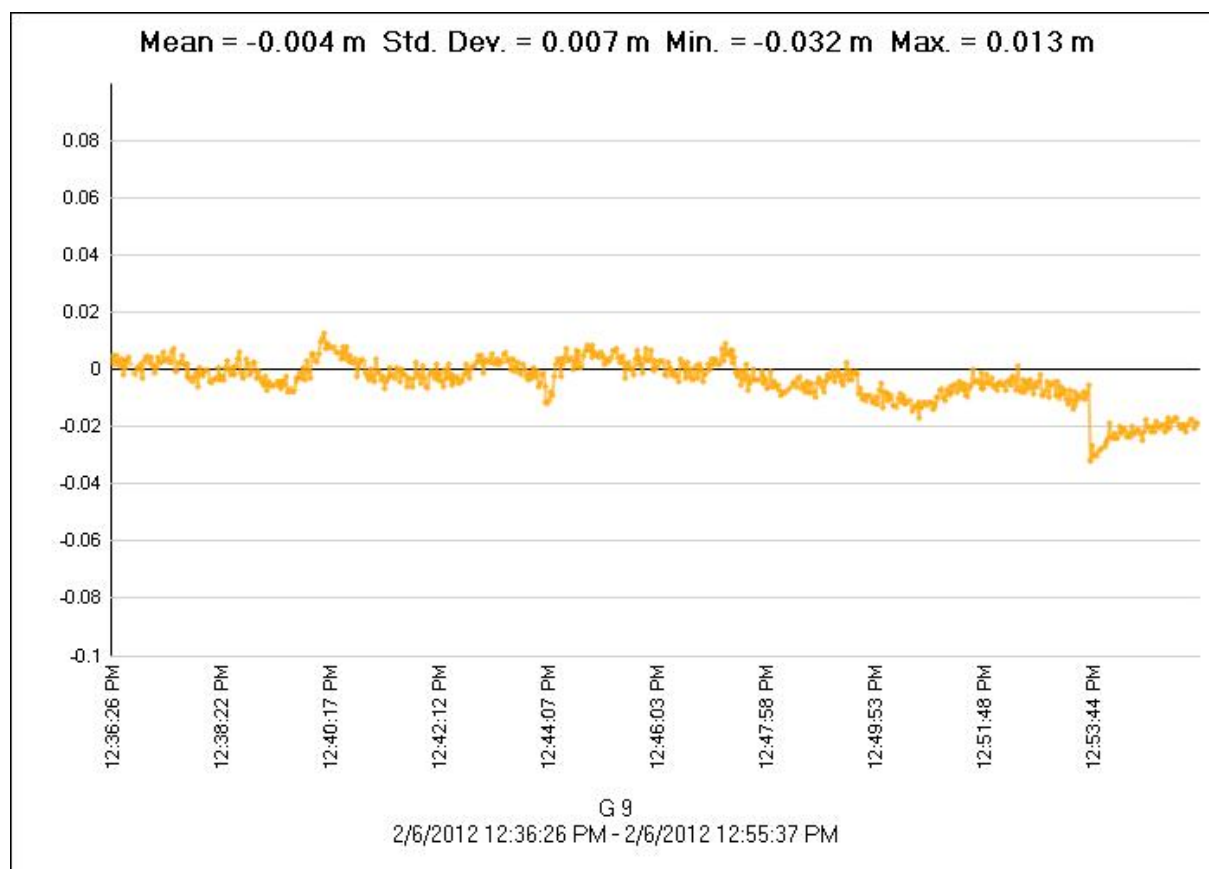
	From	To
Point ID:	19S-SPIKE	SVA27-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010370.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080375.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

Tracking Summary

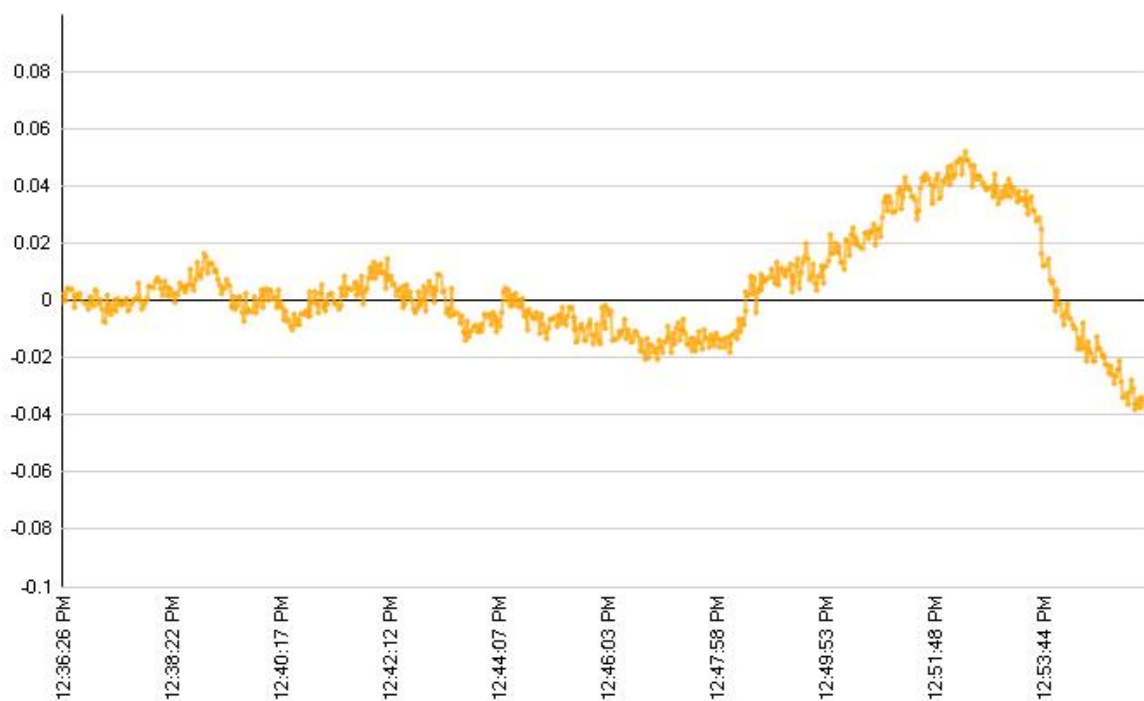
SV	2/6/2012 12:36:24 PM	Duration: 00:19:12.5000000	Major interval: 00:01:00	2/6/2012 12:55:37 PM
G 3				
G 6				
G 9				
G 14				
G 15				
G 18				
G 19				
G 21				
G 22				
G 27				

Residuals





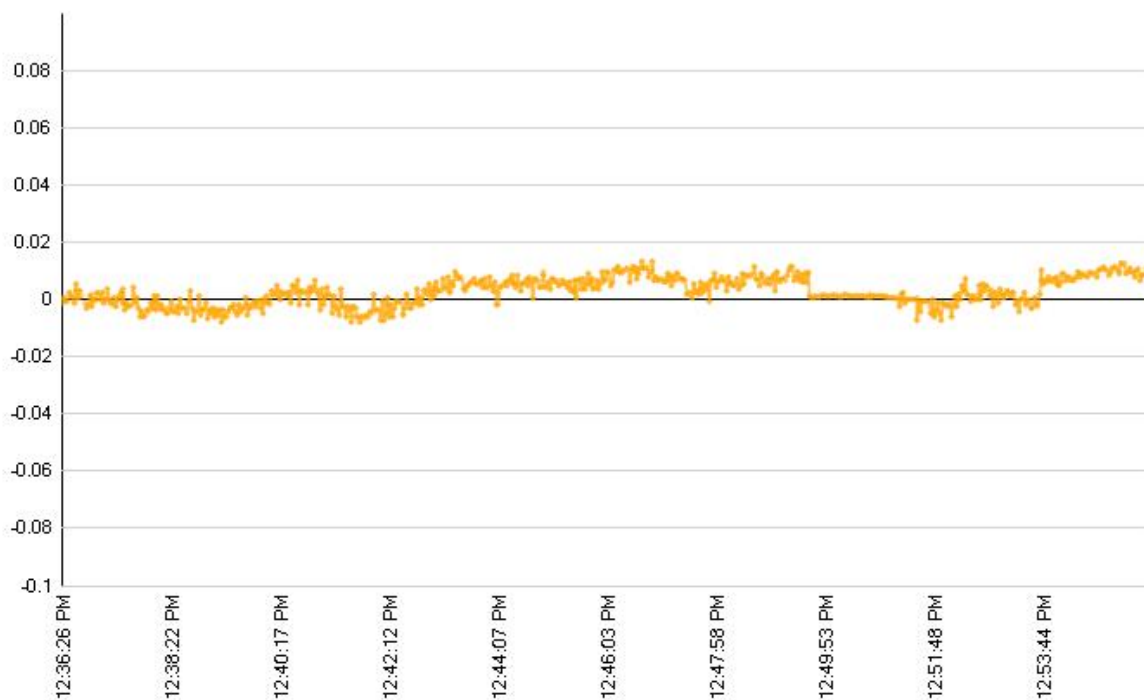
Mean = 0.004 m Std. Dev. = 0.018 m Min. = -0.039 m Max. = 0.052 m



G 15

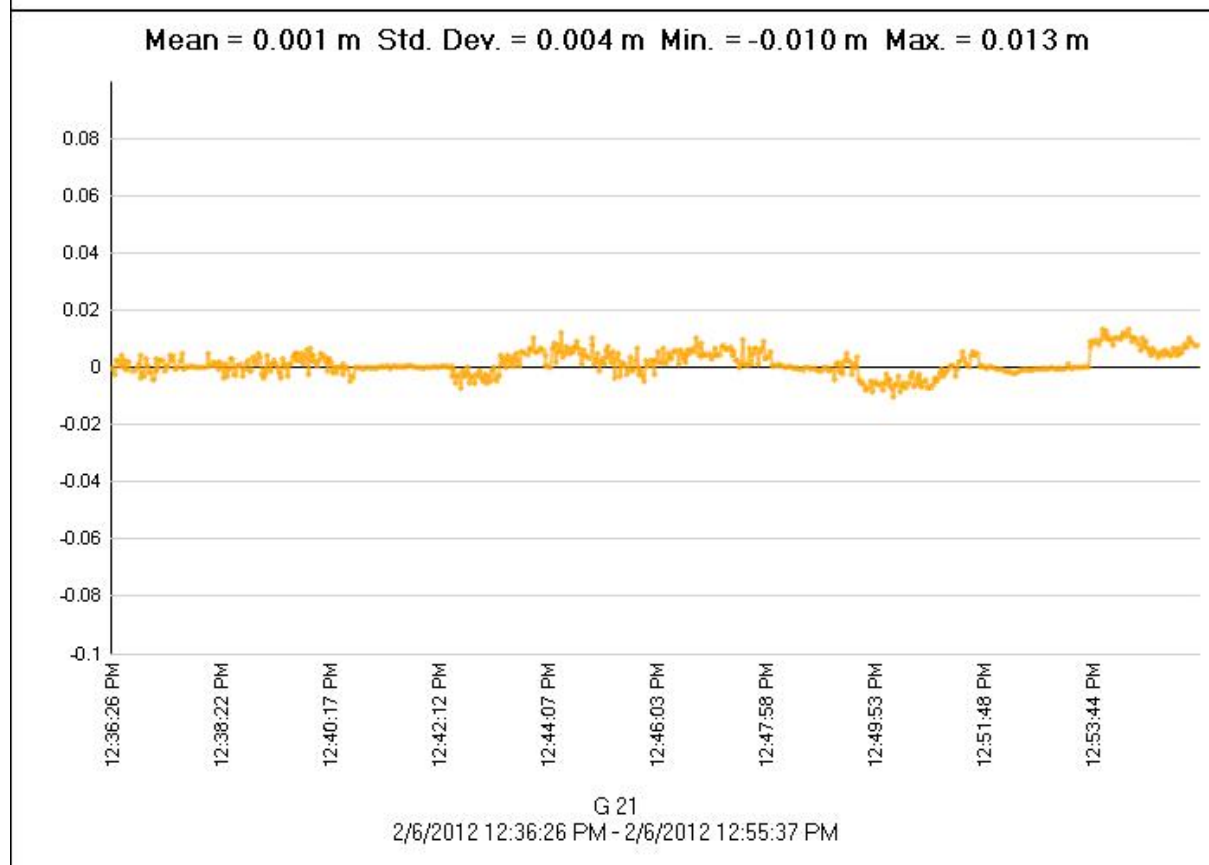
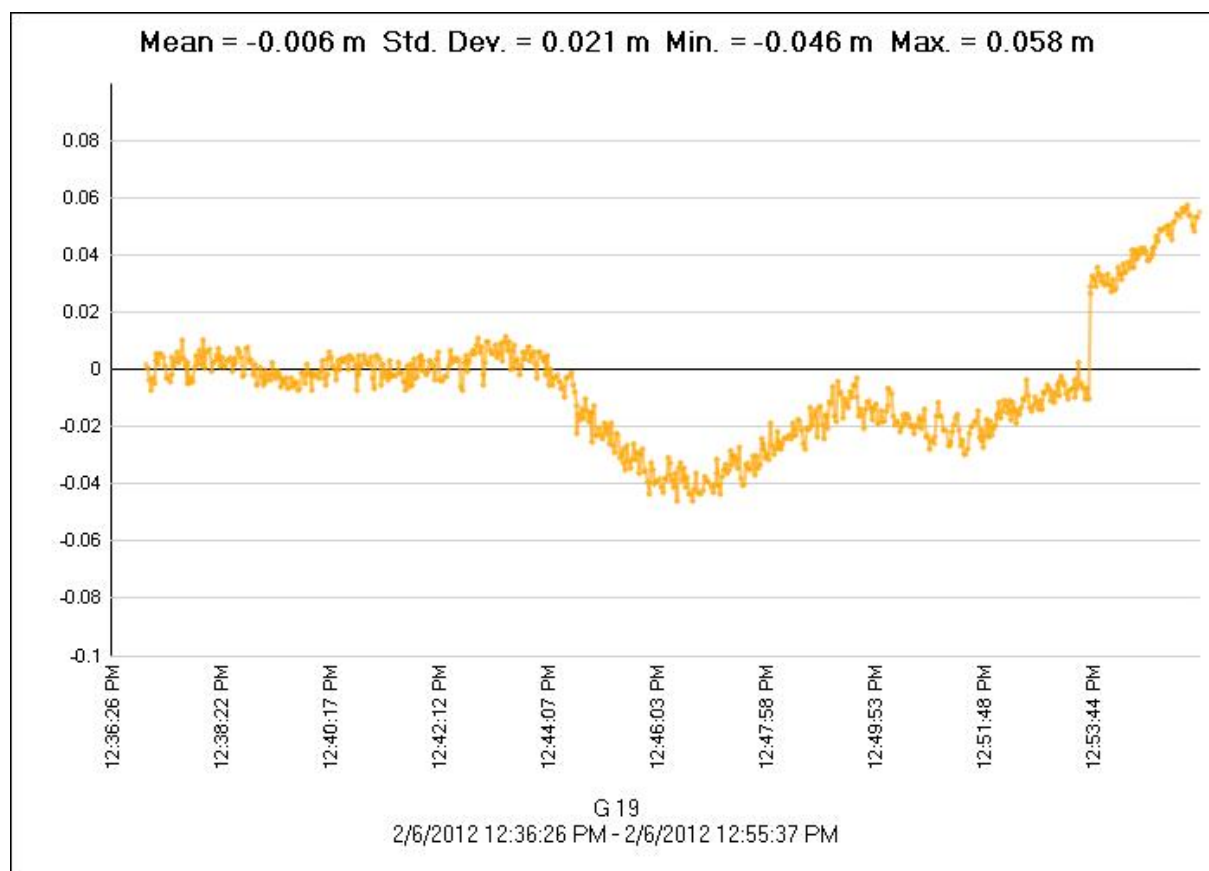
2/6/2012 12:36:26 PM - 2/6/2012 12:55:37 PM

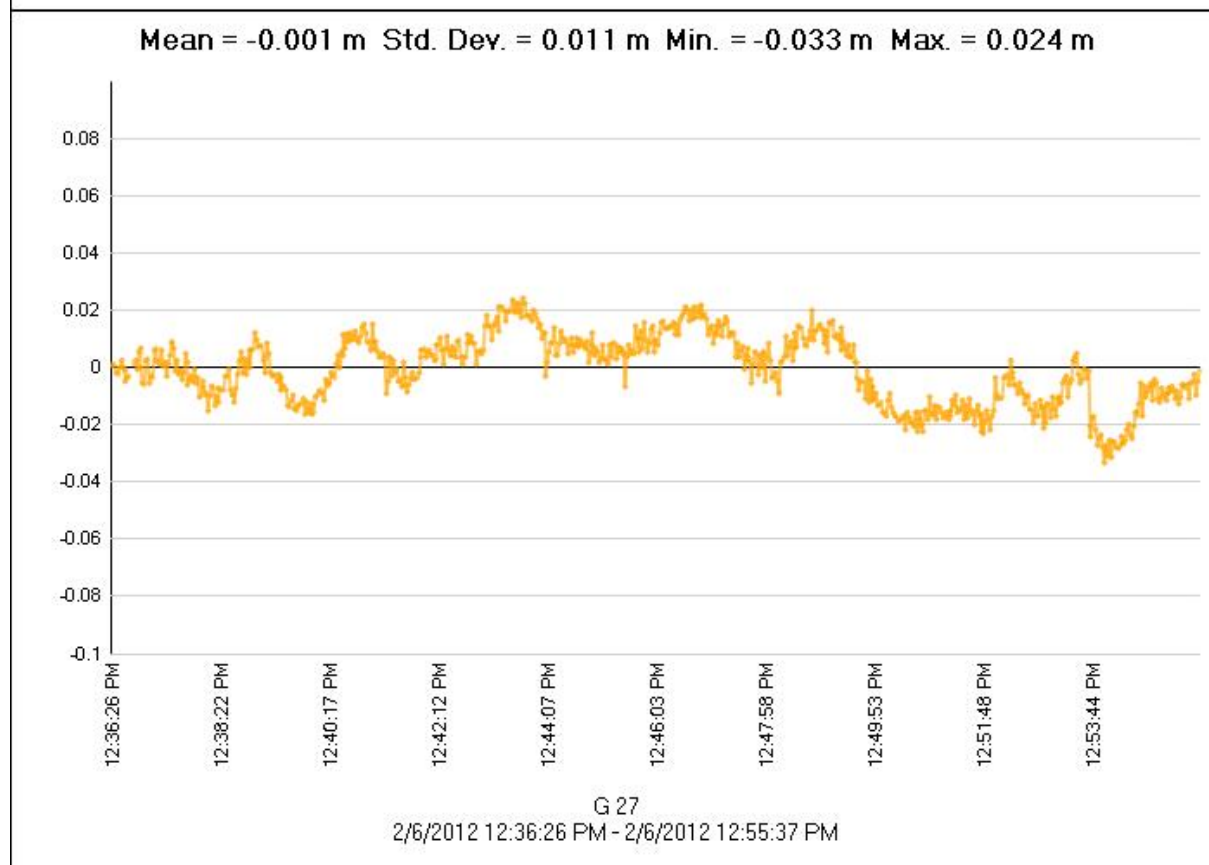
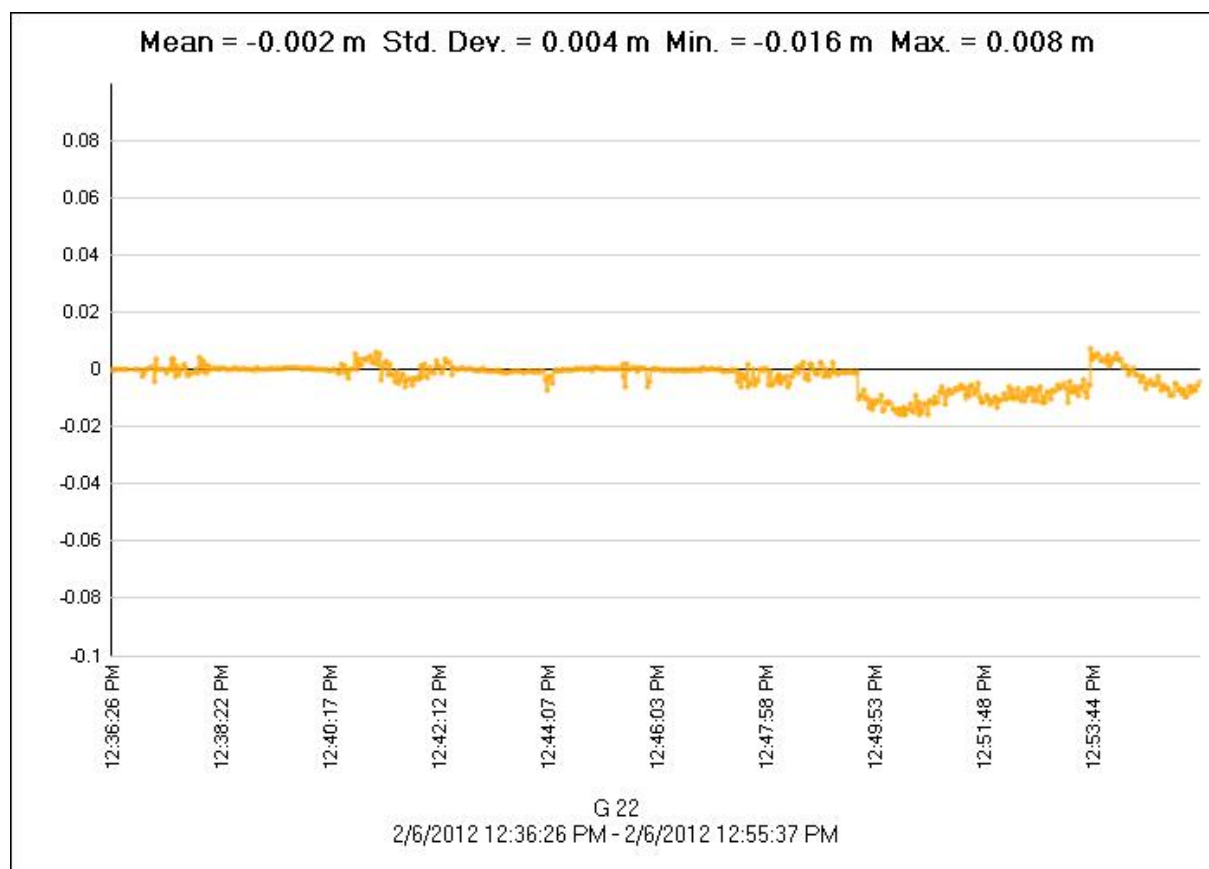
Mean = 0.003 m Std. Dev. = 0.004 m Min. = -0.008 m Max. = 0.013 m



G 18

2/6/2012 12:36:26 PM - 2/6/2012 12:55:37 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:	Dual Frequency (L1, L2)
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

19S-SPIKE - FVA28-B2 (1:41:01 PM-2:00:45 PM) (S39)

Baseline observation: 19S-SPIKE --- FVA28-B2 (B39)

Processed: 3/20/2012 5:08:02 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.024 m

Vertical precision: 0.031 m

RMS: 0.009 m

Maximum PDOP: 1.865

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/6/2012 1:41:01 PM (Local: UTC-7hr)

Processing stop time: 2/6/2012 2:00:45 PM (Local: UTC-7hr)

Processing duration: 00:19:43

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	19S-SPIKE				
Grid		Local		Global	
Easting	338086.566 m	Latitude	N37°29'23.76152"	Latitude	N37°29'23.76151"
Northing	4150799.869 m	Longitude	W100°49'53.32131"	Longitude	W100°49'53.32131"
Elevation	896.723 m	Height	870.555 m	Height	870.555 m

To:	FVA28-B2				
Grid		Local		Global	
Easting	399921.054 m	Latitude	N37°06'49.27476"	Latitude	N37°06'49.27475"
Northing	4108077.866 m	Longitude	W100°07'35.19988"	Longitude	W100°07'35.19988"
Elevation	708.581 m	Height	681.411 m	Height	681.411 m

Vector					
9Ughb[	61834.488 m	NS Fwd Azimuth	123°31'49"	L	56896.055 m
Bcfh\jb[	-42722.003 m	Ellipsoid Dist.	75171.541 m	M	-36107.608 m
9Yj Uhcb	-188.141 m	<Y][\h	-189.145 m	N	-33334.452 m

Standard Errors

Vector errors:					
Ughb[	0.004 m	BG`Zk X'5n]a i h	0°00'00"	L	0.004 m
Bcfh\]b[	0.010 m	'9~]dgc]X'8]gh	0.008 m	M	0.015 m
'9`Yj Uhcb	0.016 m	' <Y][\h	0.016 m	N	0.011 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000136464		
Y	0.0000051039	0.0002305486	
Z	-0.0000150397	-0.0000694221	0.0001214879

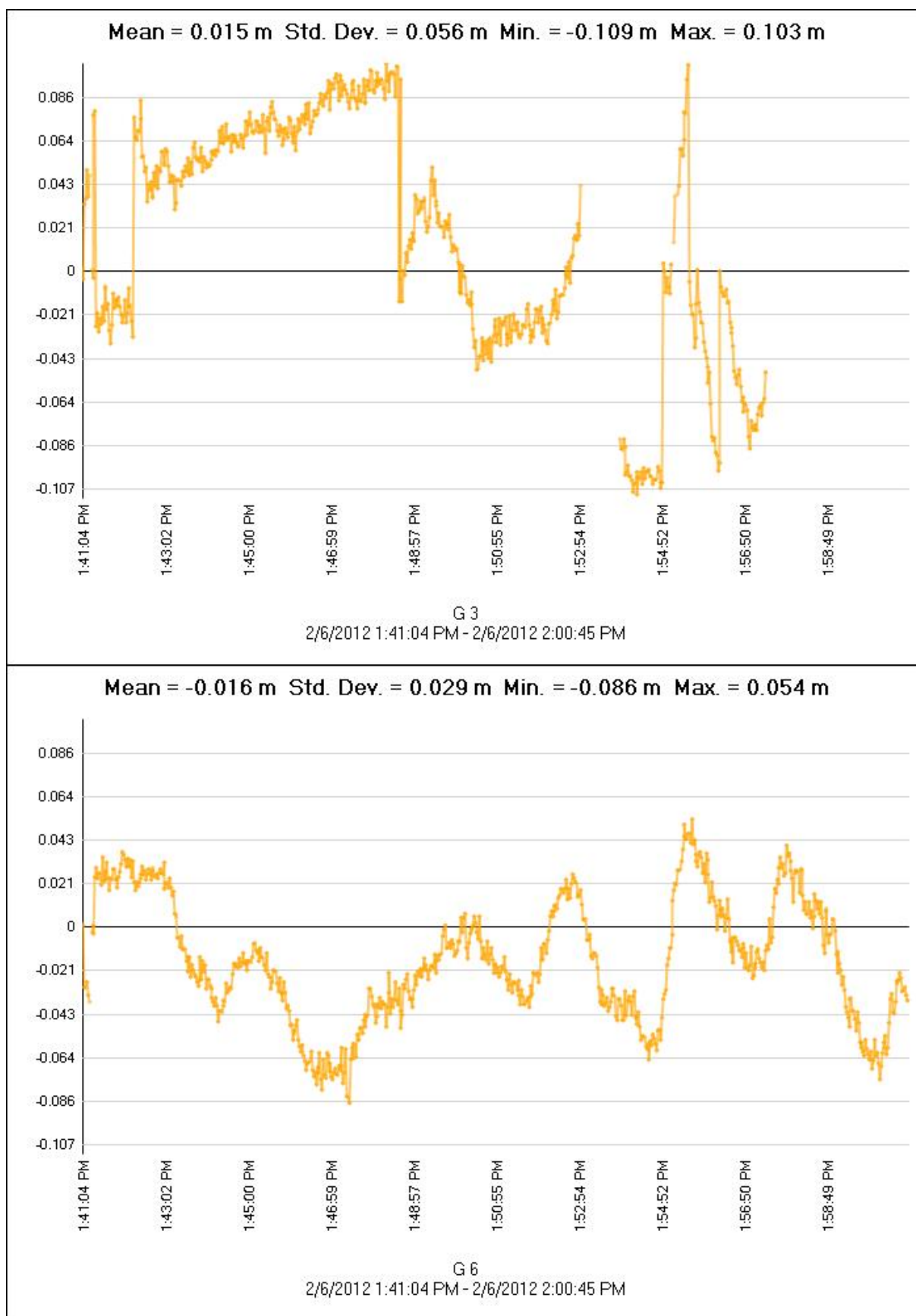
Occupations

	From	To
Point ID:	19S-SPIKE	FVA28-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00010370.12o	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00080376.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	1.565 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

Tracking Summary



Residuals



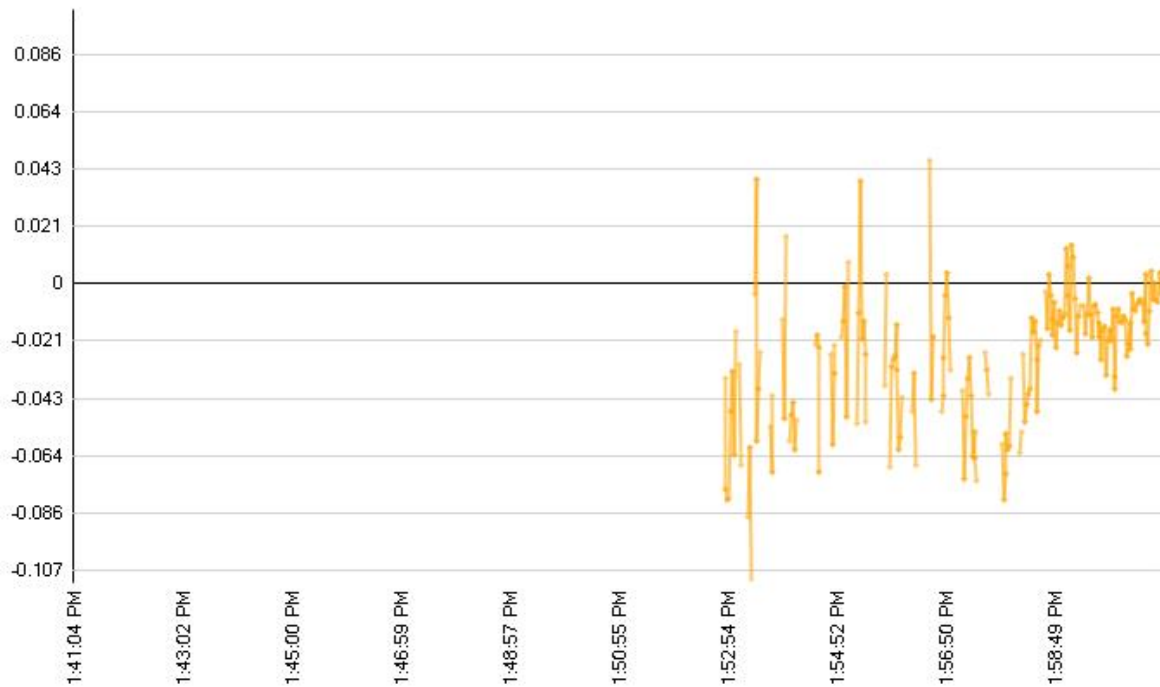
Mean = 0.010 m Std. Dev. = 0.015 m Min. = -0.032 m Max. = 0.040 m



G 9

2/6/2012 1:41:04 PM - 2/6/2012 2:00:45 PM

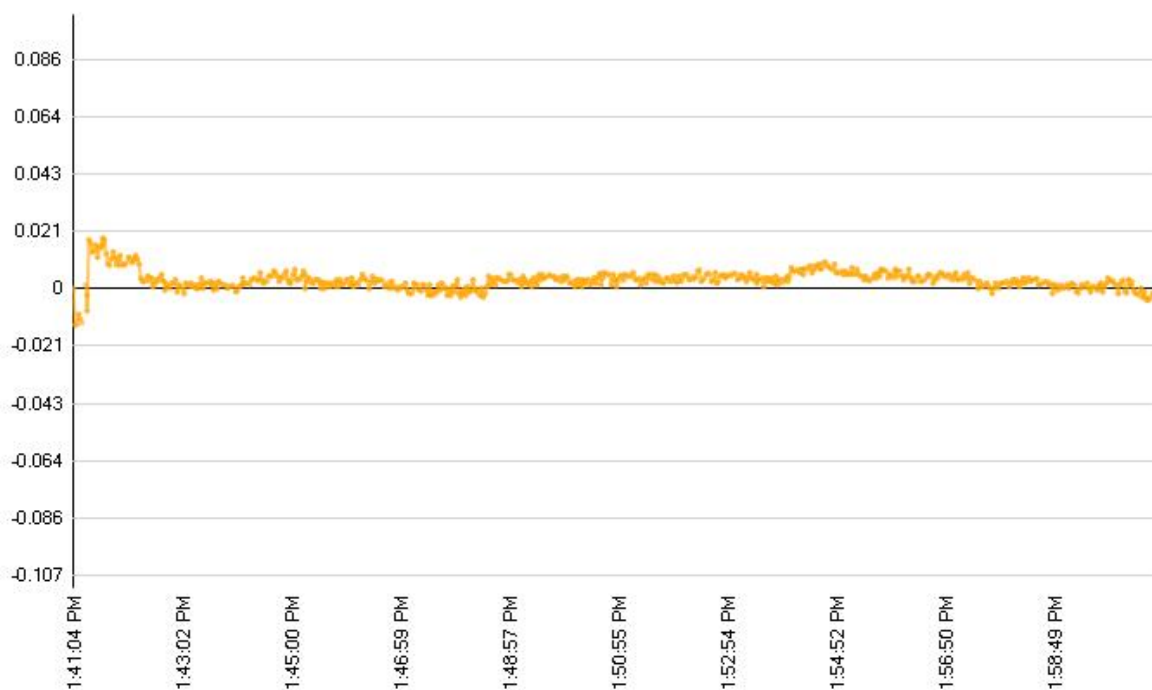
Mean = -0.024 m Std. Dev. = 0.024 m Min. = -0.111 m Max. = 0.046 m



G 11

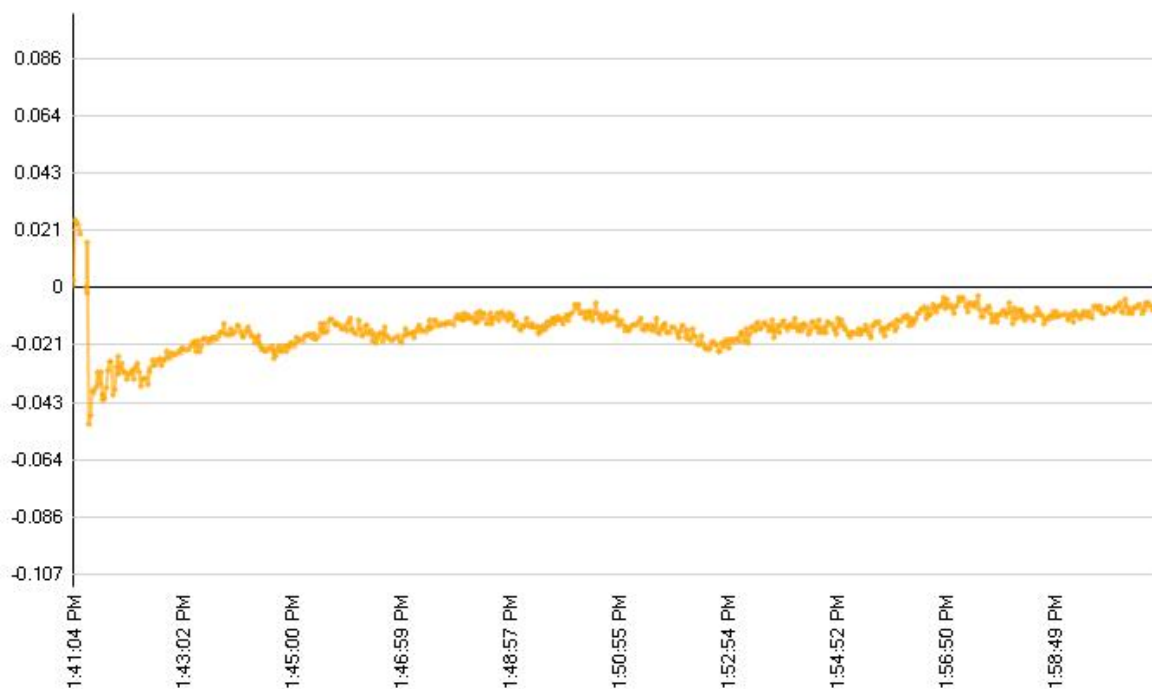
2/6/2012 1:41:04 PM - 2/6/2012 2:00:45 PM

Mean = 0.003 m Std. Dev. = 0.003 m Min. = -0.014 m Max. = 0.019 m

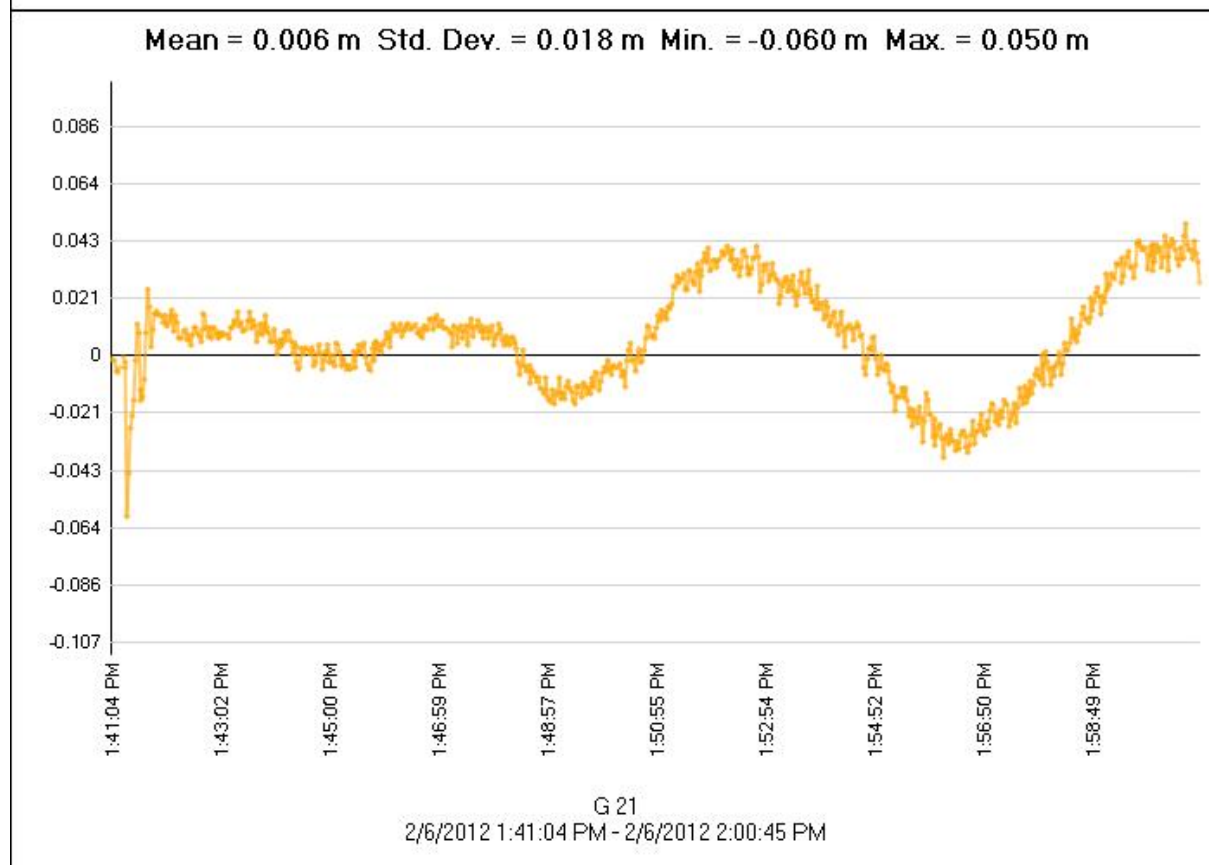
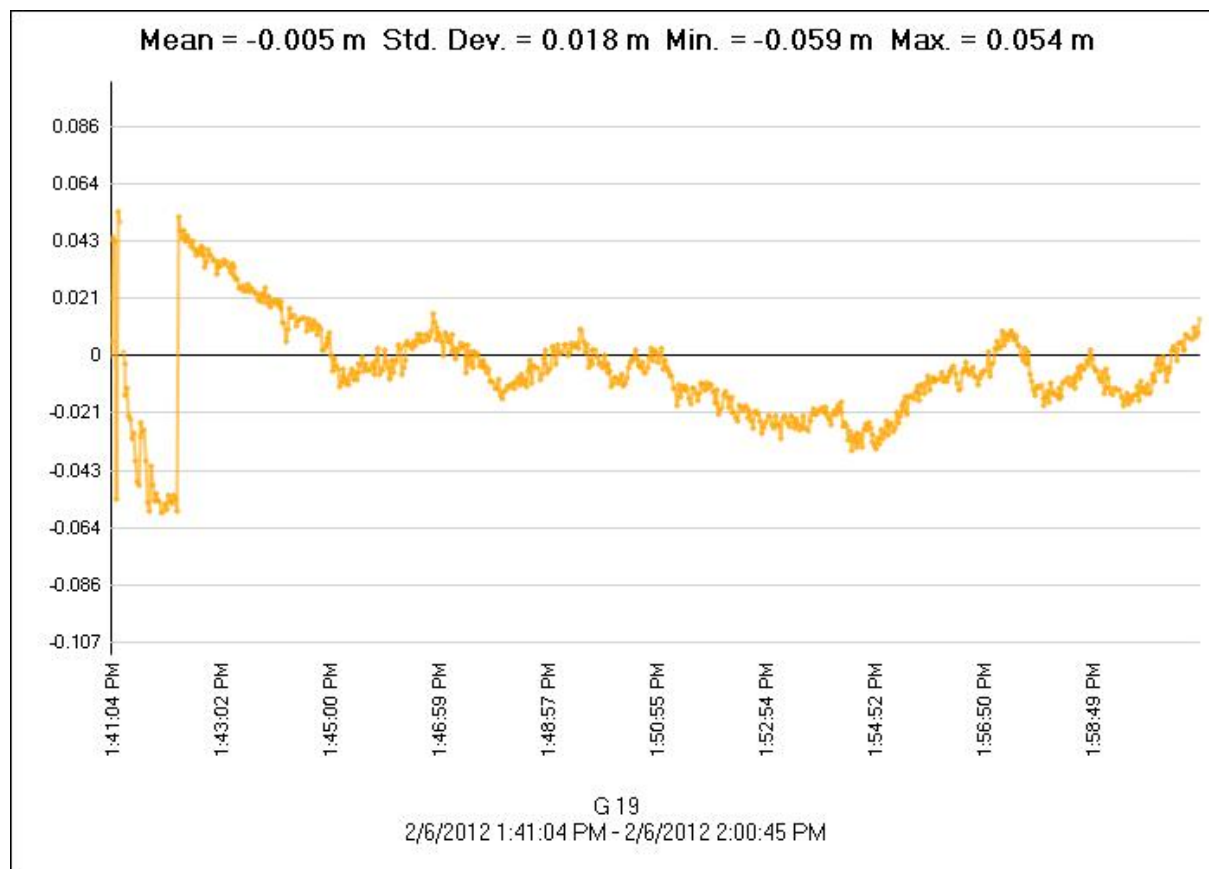


G 14
2/6/2012 1:41:04 PM - 2/6/2012 2:00:45 PM

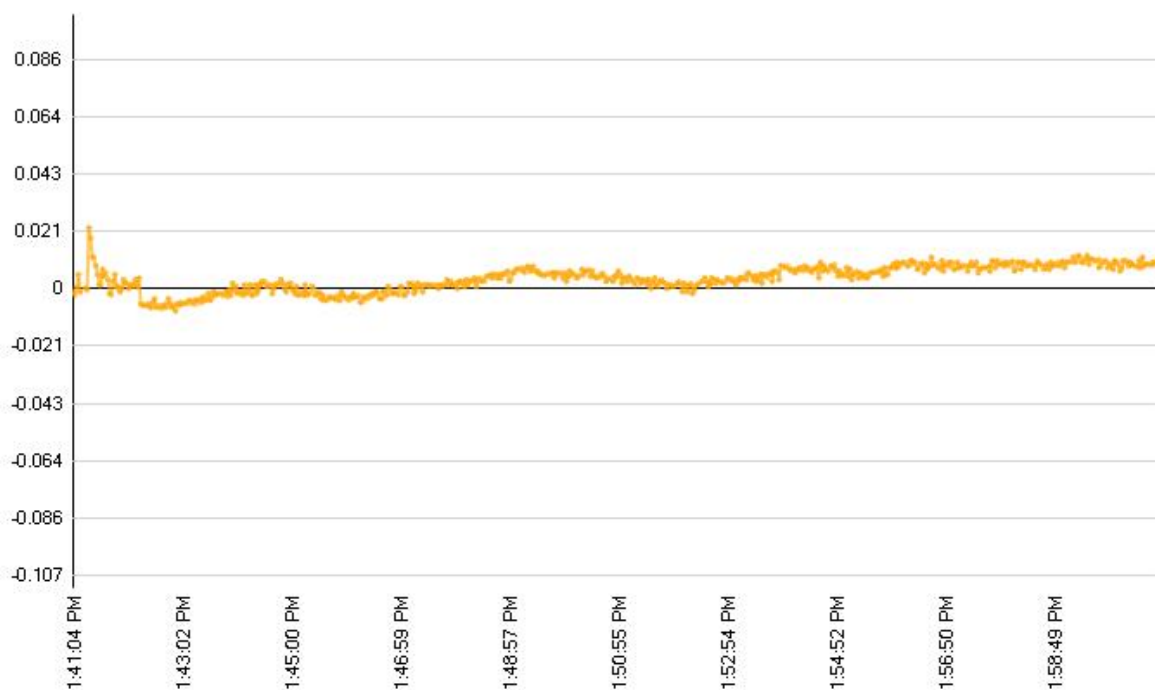
Mean = -0.014 m Std. Dev. = 0.008 m Min. = -0.051 m Max. = 0.025 m



G 18
2/6/2012 1:41:04 PM - 2/6/2012 2:00:45 PM



Mean = 0.004 m Std. Dev. = 0.005 m Min. = -0.008 m Max. = 0.023 m

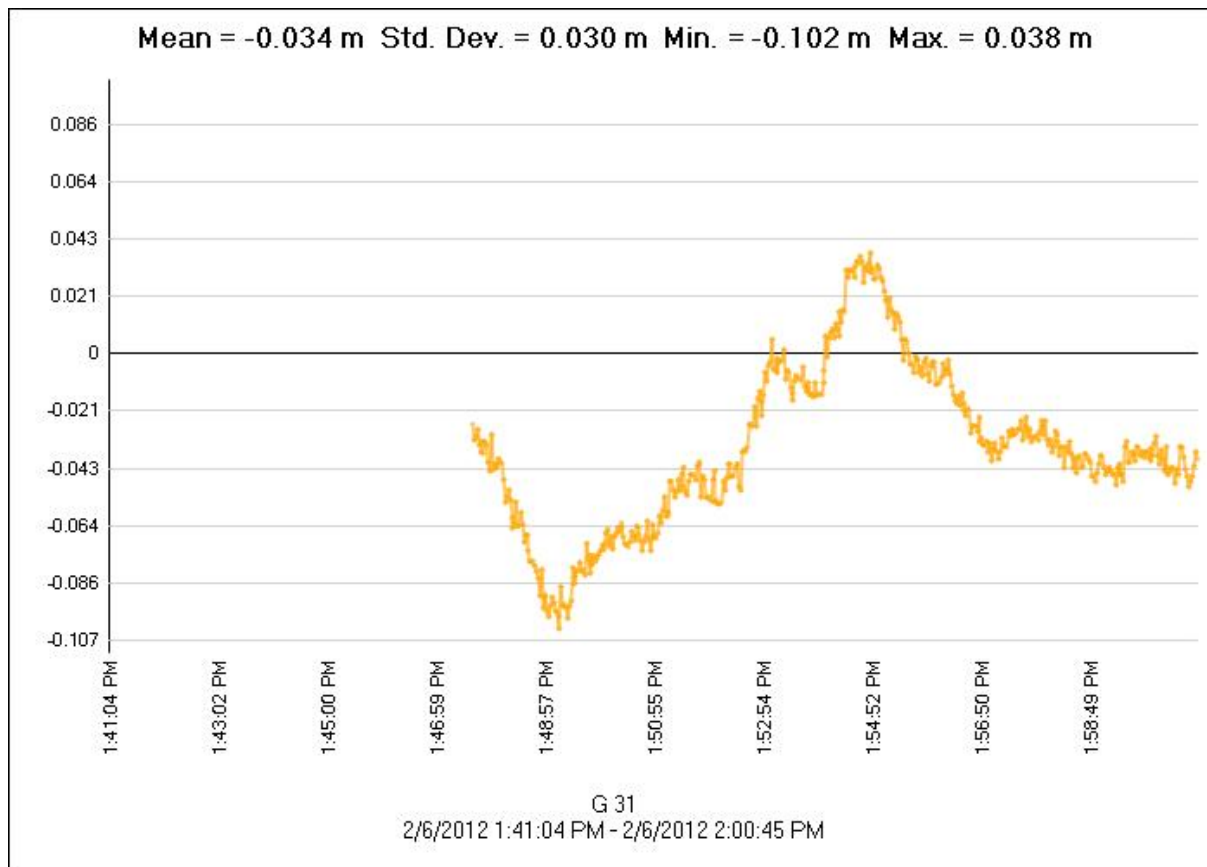


G 22
2/6/2012 1:41:04 PM - 2/6/2012 2:00:45 PM

Mean = 0.007 m Std. Dev. = 0.031 m Min. = -0.082 m Max. = 0.075 m



G 27
2/6/2012 1:41:04 PM - 2/6/2012 2:00:45 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:	Dual Frequency (L1, L2)
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

MEJ-SPIKE - FVA30-B2 (4:30:05 PM-5:01:04 PM) (S249)

Baseline observation: MEJ-SPIKE --- FVA30-B2 (B249)

Processed: 4/3/2012 5:22:31 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.007 m

Vertical precision: 0.012 m

RMS: 0.004 m

Maximum PDOP: 2.476

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 1/25/2012 4:30:05 PM (Local: UTC-7hr)

Processing stop time: 1/25/2012 5:01:04 PM (Local: UTC-7hr)

Processing duration: 00:30:59

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	MEJ-SPIKE				
Grid		Local		Global	
Easting	379445.827 m	Latitude	N37°17'05.09408"	Latitude	N37°17'05.09407"
Northing	4127327.983 m	Longitude	W100°21'35.85429"	Longitude	W100°21'35.85429"
Elevation	776.909 m	Height	750.229 m	Height	750.229 m

To:	FVA30-B2				
Grid		Local		Global	
Easting	328948.467 m	Latitude	N37°01'21.19255"	Latitude	N37°01'21.19255"
Northing	4099102.997 m	Longitude	W100°55'22.48407"	Longitude	W100°55'22.48407"
Elevation	874.711 m	Height	847.895 m	Height	847.895 m

Vector					
9Ughb[	-50497.359 m	NS Fwd Azimuth	239°58'34"	L	-52414.164 m
Bcfh\jb[	-28224.986 m	Ellipsoid Dist.	57857.932 m	M	-8114.651 m
9Yj Uhcb	97.802 m	<Y][\h	97.666 m	N	-23135.977 m

Standard Errors

Vector errors:					
Ughb[	0.002 m	BG`Zk X'5n]a i h	0°00'00"	L	0.002 m
Bcfh\]b[	0.003 m	'9~]dgc]X'8]gh	0.003 m	M	0.004 m
'9`Yj Uhcb	0.006 m	' <Y][\h	0.006 m	N	0.005 m

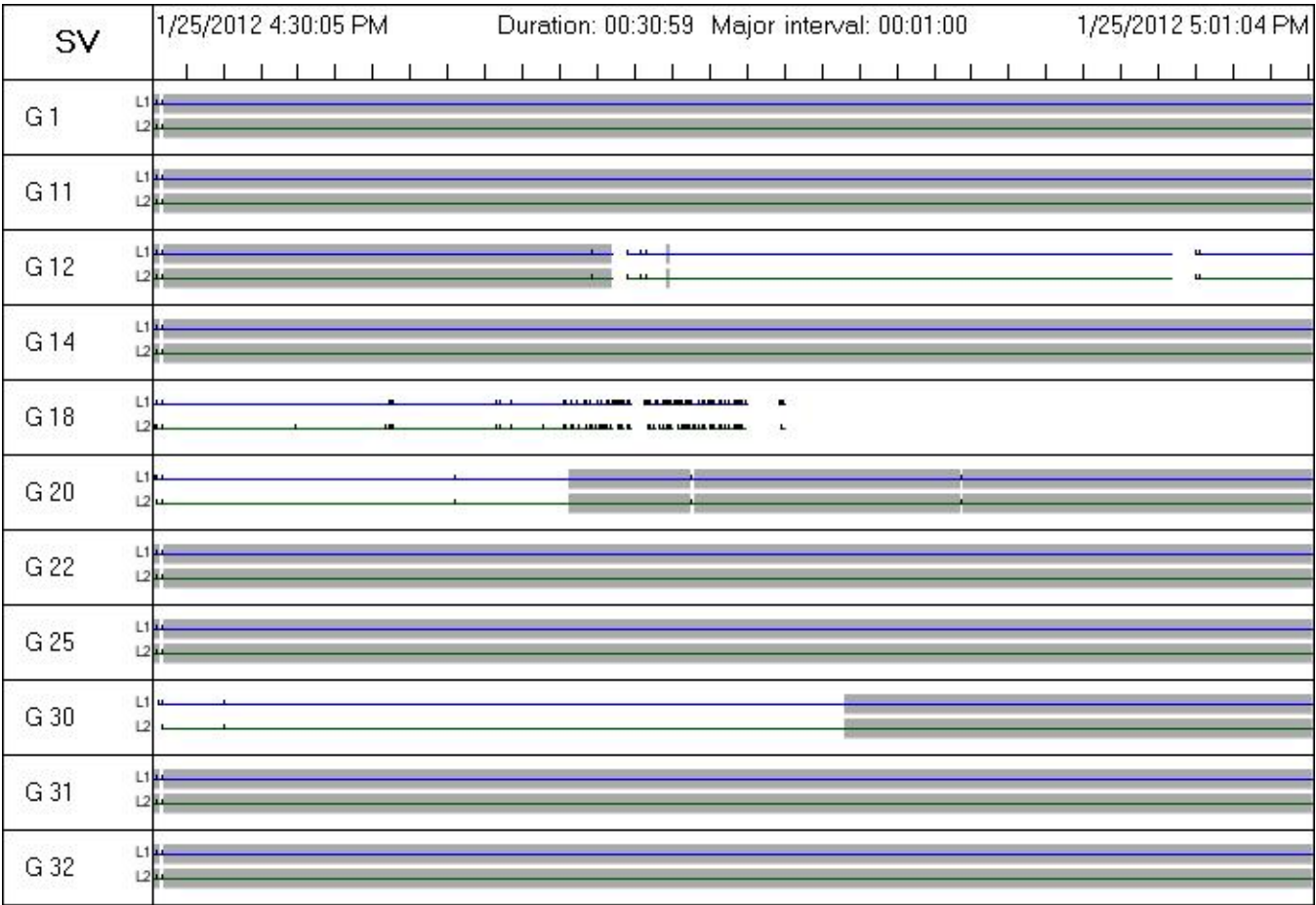
Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000056040		
Y	0.0000051661	0.0000198797	
Z	-0.0000031246	-0.0000149189	0.0000253644

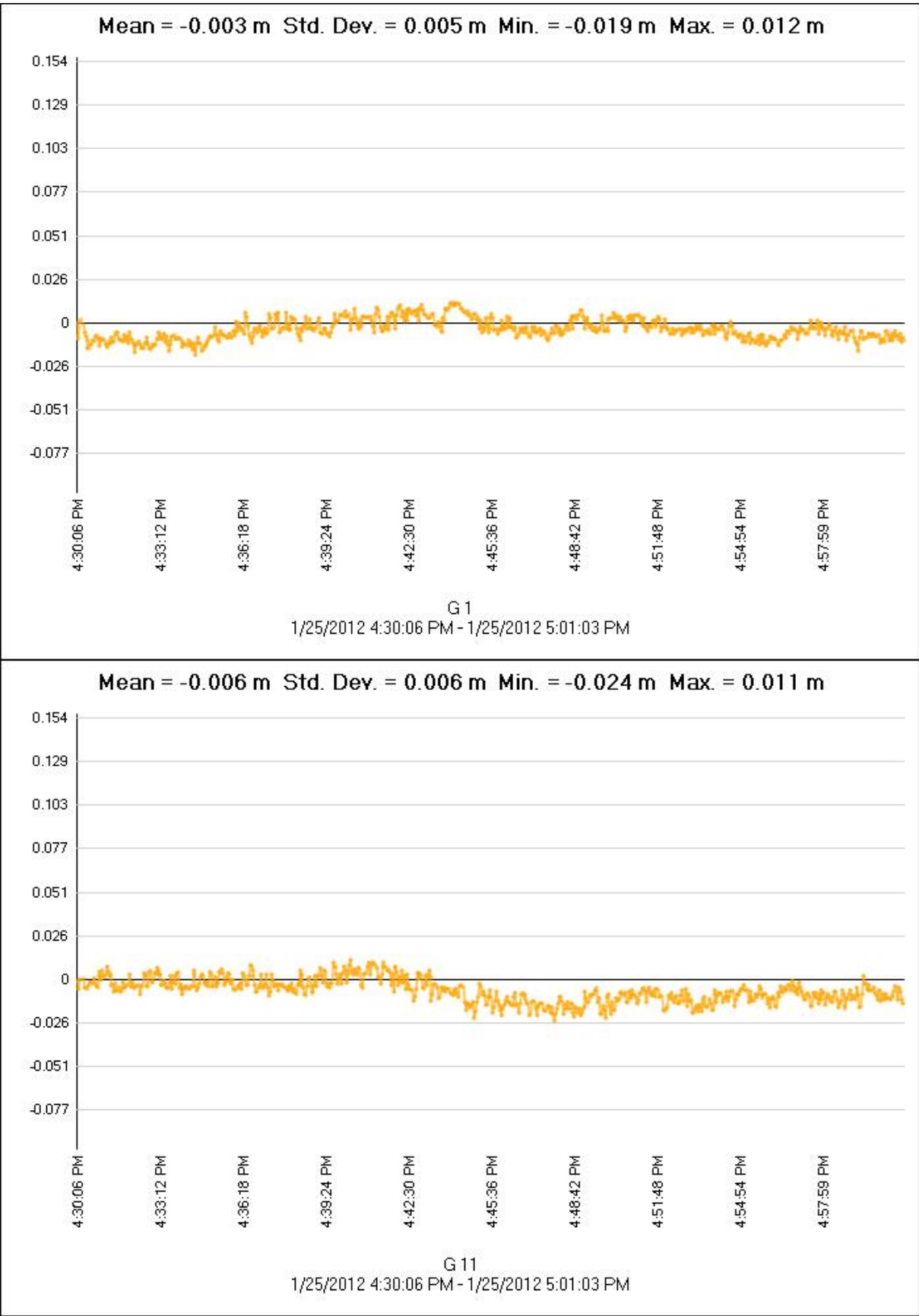
Occupations

	From	To
Point ID:	MEJ-SPIKE	FVA30-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050250.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00040252.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

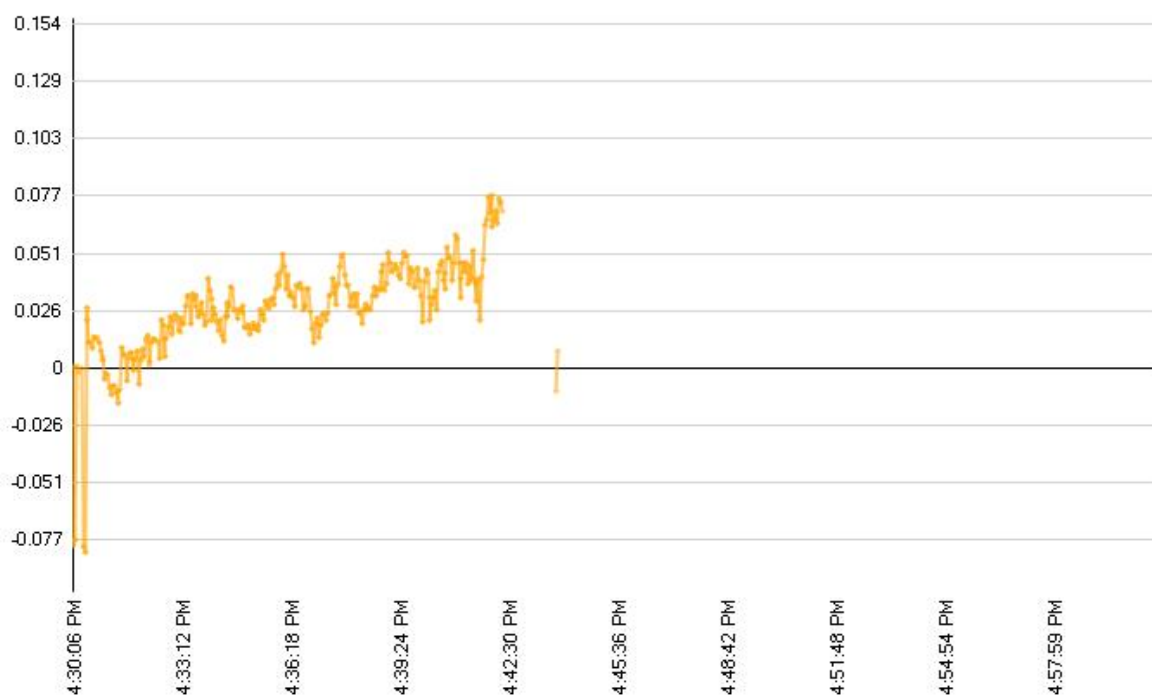
Tracking Summary



Residuals



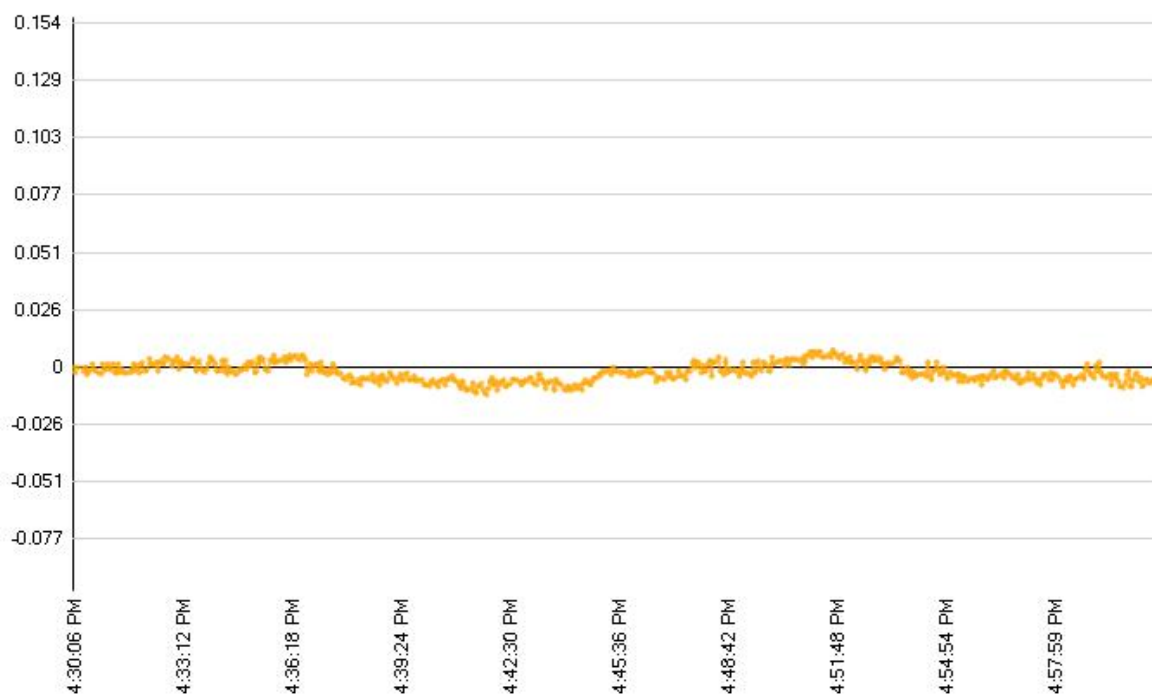
Mean = 0.024 m Std. Dev. = 0.019 m Min. = -0.083 m Max. = 0.077 m



G 12

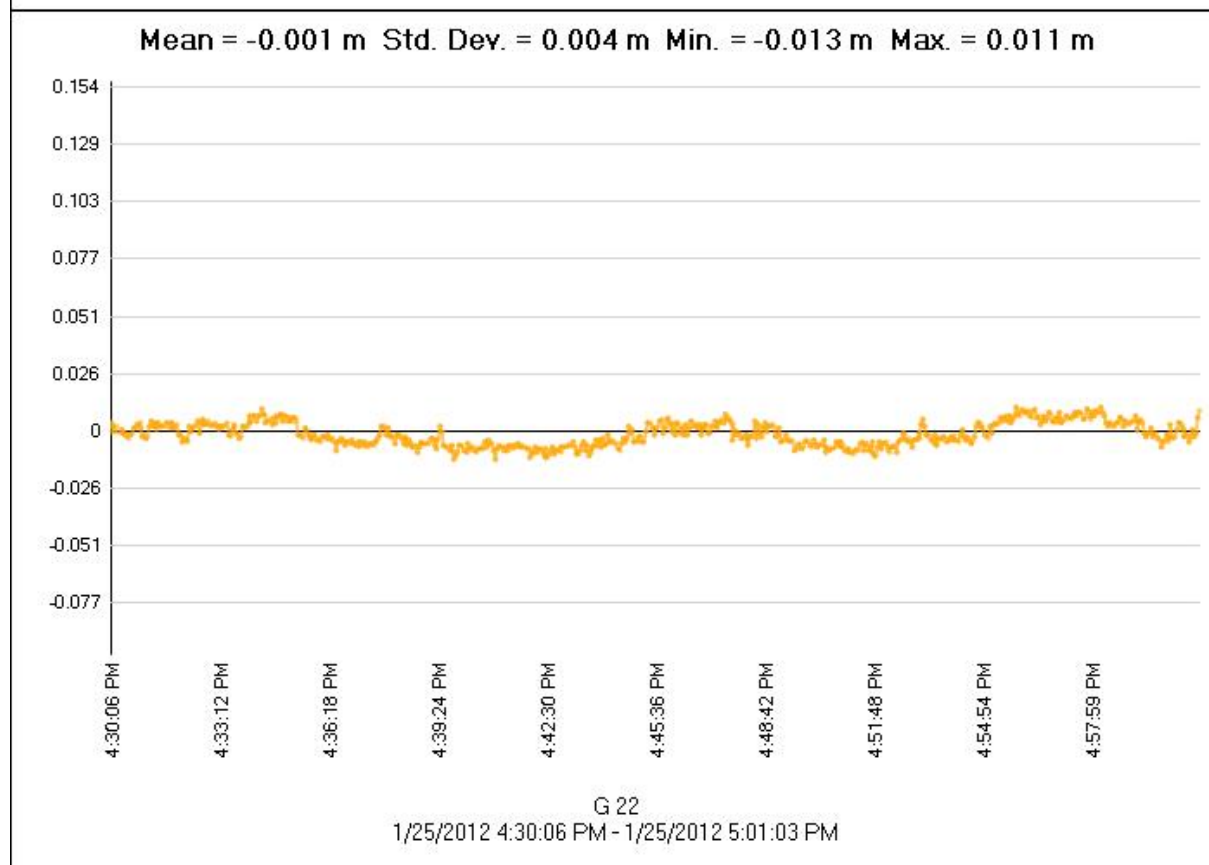
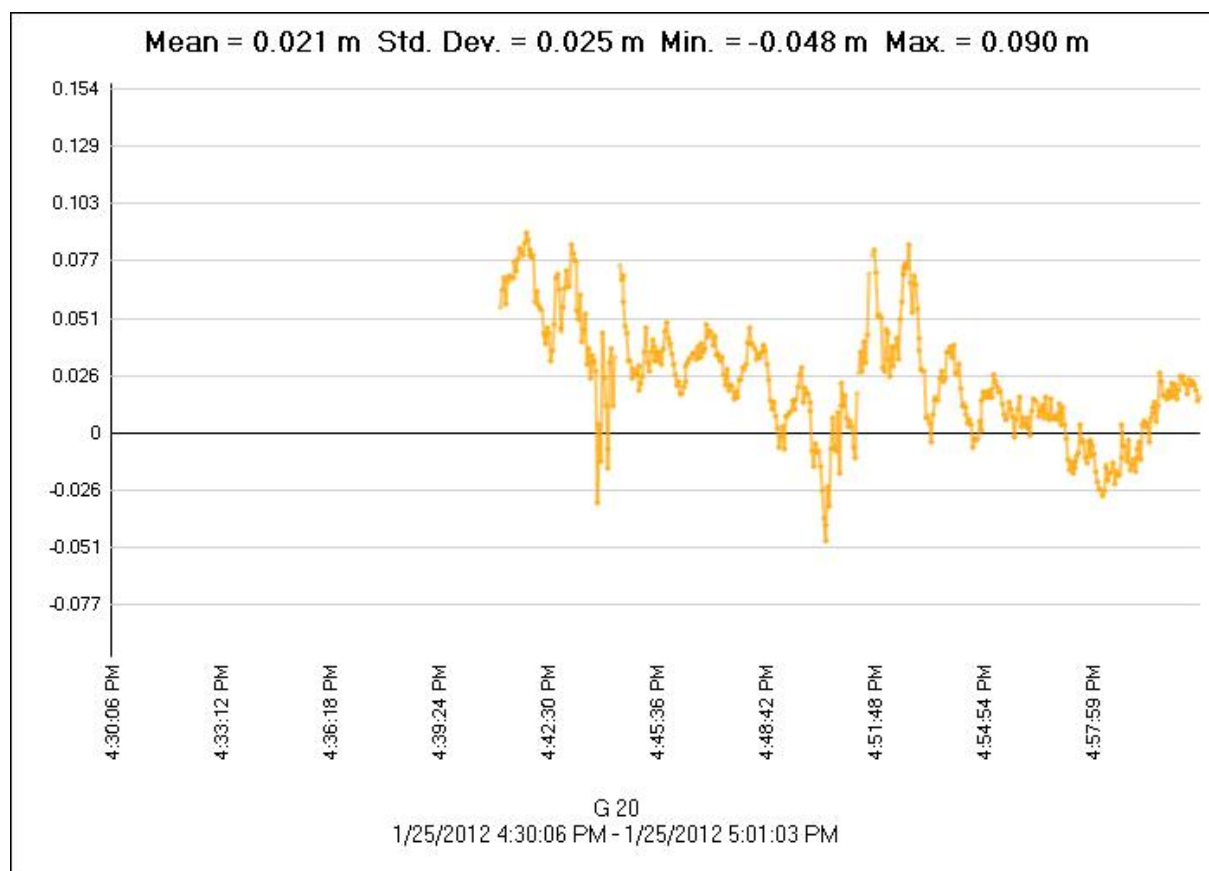
1/25/2012 4:30:06 PM - 1/25/2012 5:01:03 PM

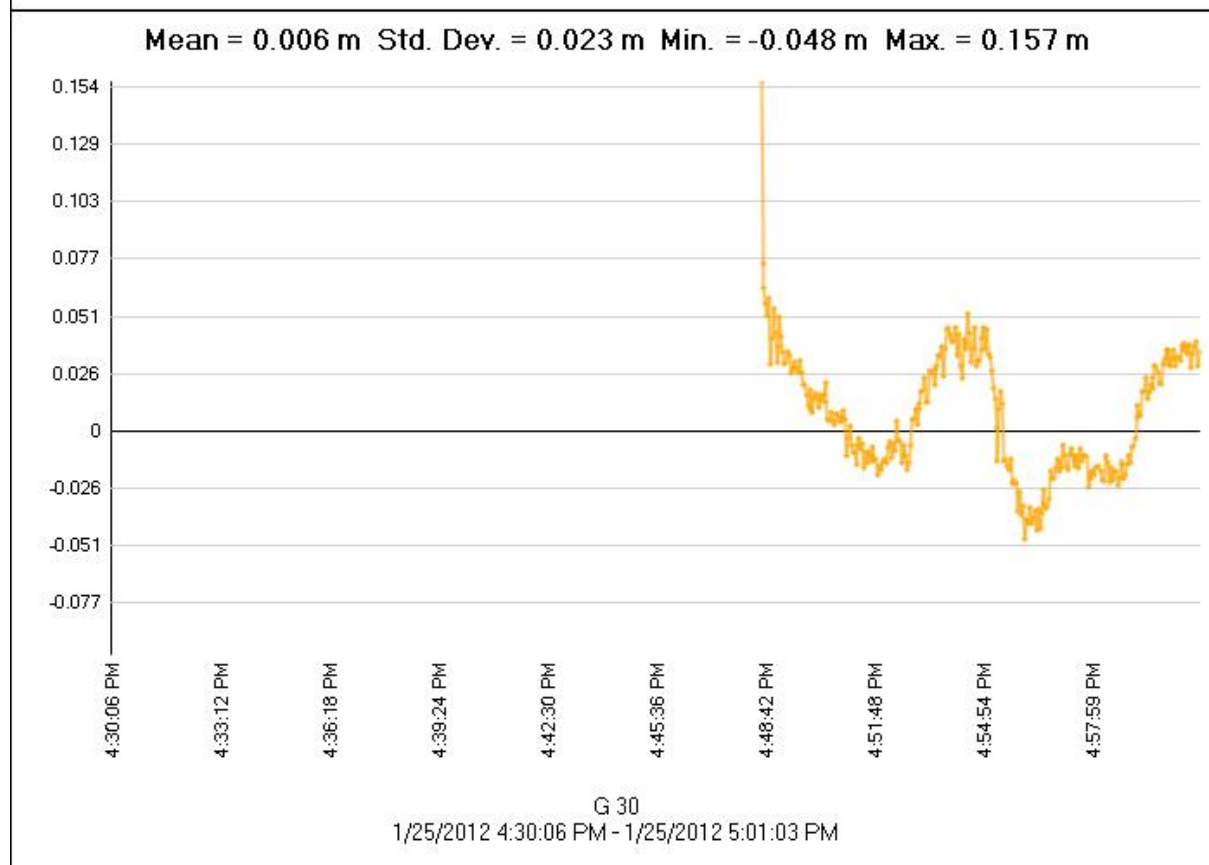
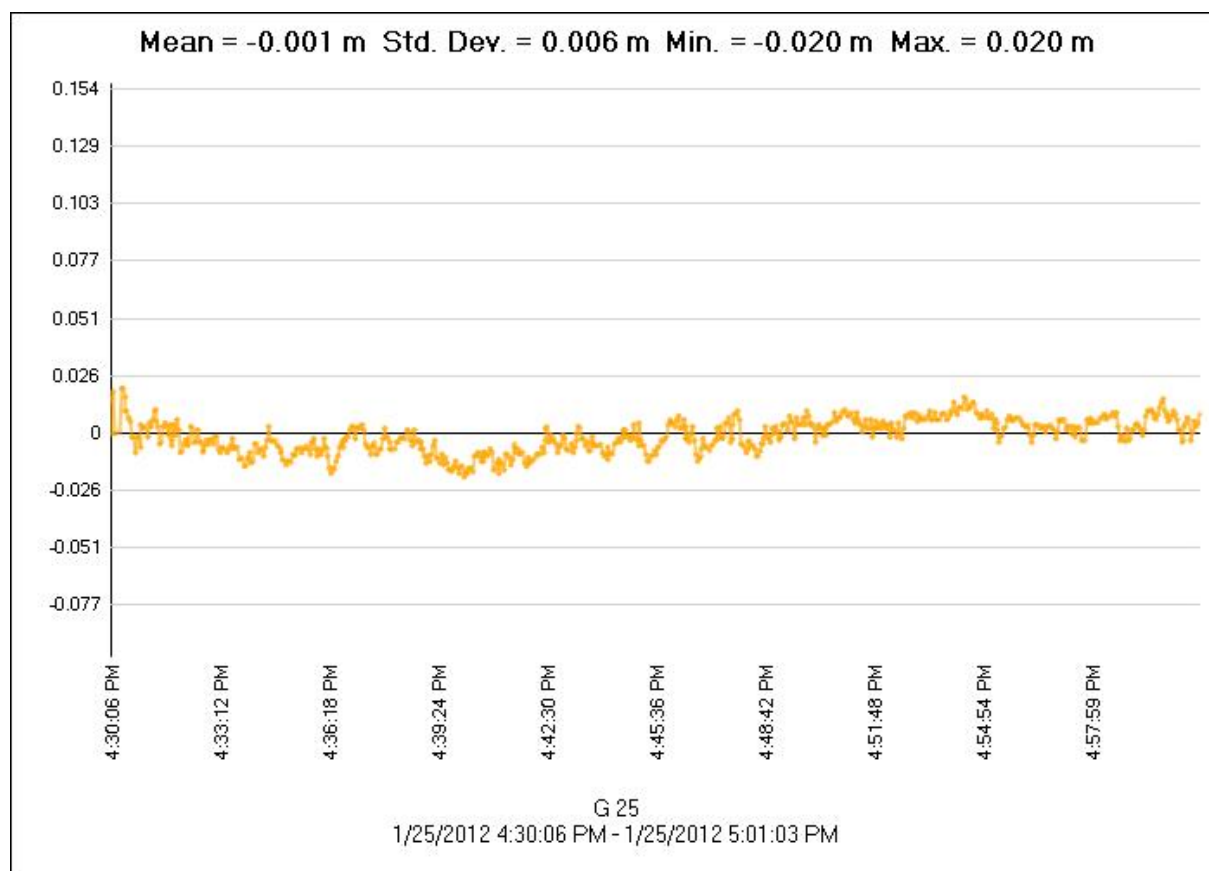
Mean = -0.002 m Std. Dev. = 0.003 m Min. = -0.013 m Max. = 0.008 m

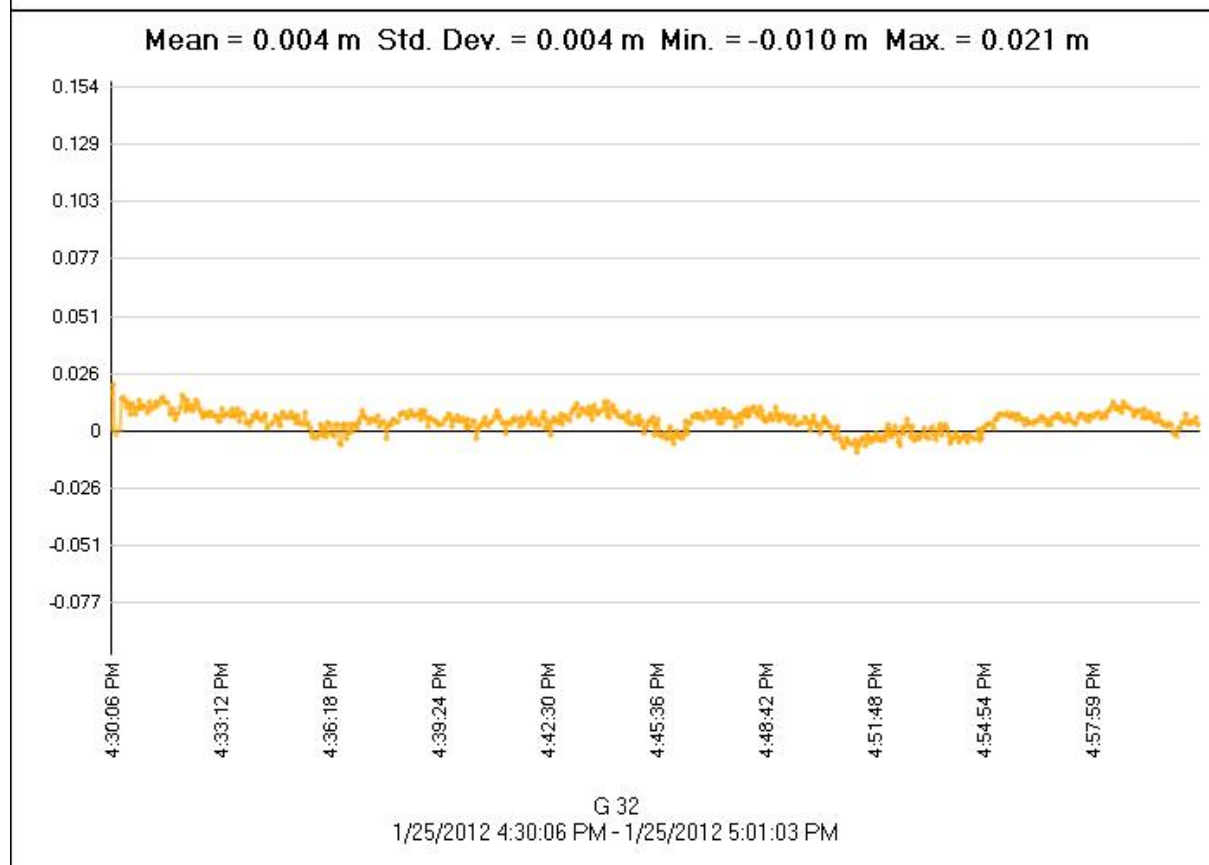
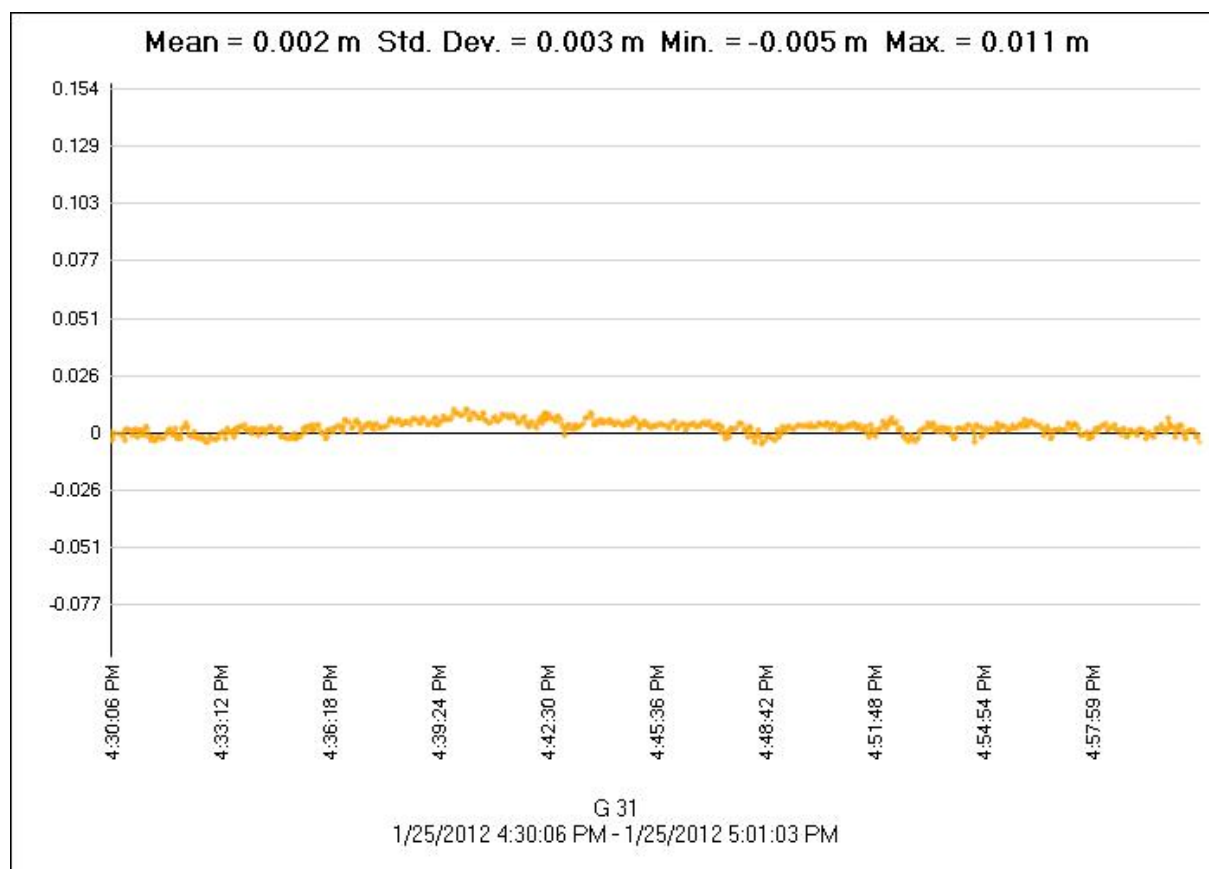


G 14

1/25/2012 4:30:06 PM - 1/25/2012 5:01:03 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:	Dual Frequency (L1, L2)
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

MEJ-SPIKE - FVA63-B2 (3:46:17 PM-4:17:47 PM) (S250)

Baseline observation: MEJ-SPIKE --- FVA63-B2 (B250)

Processed: 4/3/2012 5:22:28 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.031 m

Vertical precision: 0.055 m

RMS: 0.005 m

Maximum PDOP: 2.374

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 1/25/2012 3:46:17 PM (Local: UTC-7hr)

Processing stop time: 1/25/2012 4:17:47 PM (Local: UTC-7hr)

Processing duration: 00:31:29

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	MEJ-SPIKE				
Grid		Local		Global	
Easting	379445.827 m	Latitude	N37°17'05.09408"	Latitude	N37°17'05.09407"
Northing	4127327.983 m	Longitude	W100°21'35.85429"	Longitude	W100°21'35.85429"
Elevation	776.909 m	Height	750.229 m	Height	750.229 m

To:	FVA63-B2				
Grid		Local		Global	
Easting	323034.793 m	Latitude	N37°00'07.91551"	Latitude	N37°00'07.91551"
Northing	4096965.228 m	Longitude	W100°59'19.87481"	Longitude	W100°59'19.87481"
Elevation	887.791 m	Height	861.001 m	Height	861.001 m

Vector					
9Ughb[	-56411.034 m	NS Fwd Azimuth	240°53'17"	L	-58437.083 m
BcfA\jb[	-30362.755 m	Ellipsoid Dist.	64071.216 m	M	-8344.662 m
9Yj Uhcb	110.882 m	<Y][\h	110.772 m	N	-24932.094 m

Standard Errors

Vector errors:					
Point ID	0.012 m	Point Name	0°00'00"	Point L	0.016 m
Point B	0.007 m	Point dgc	0.012 m	Point M	0.020 m
Point Y	0.028 m	Point <Y	0.028 m	Point N	0.018 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0002437904		
Y	0.0002716471	0.0004191630	
Z	-0.0002029843	-0.0003236675	0.0003210790

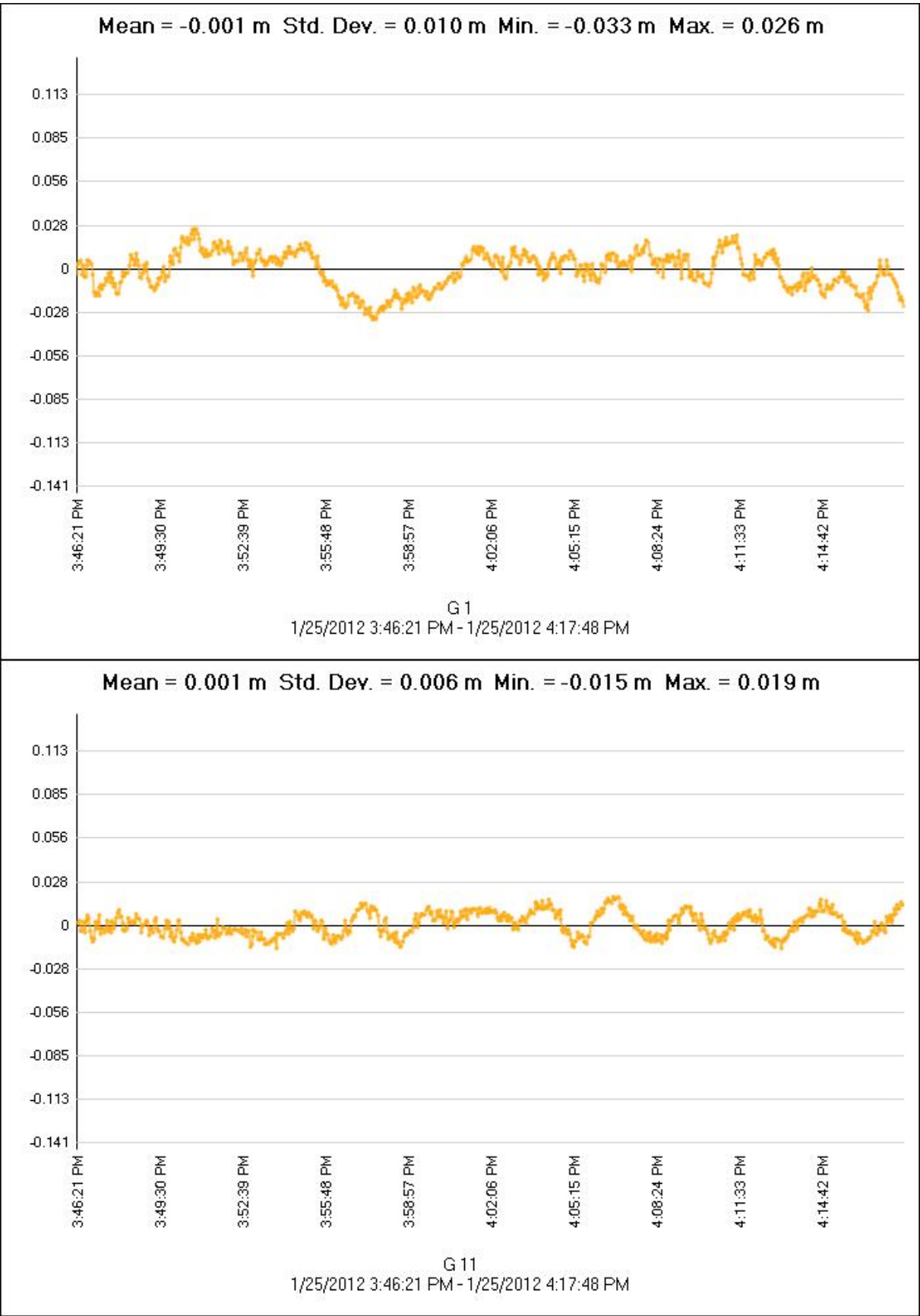
Occupations

	From	To
Point ID:	MEJ-SPIKE	FVA63-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050250.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00040251.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

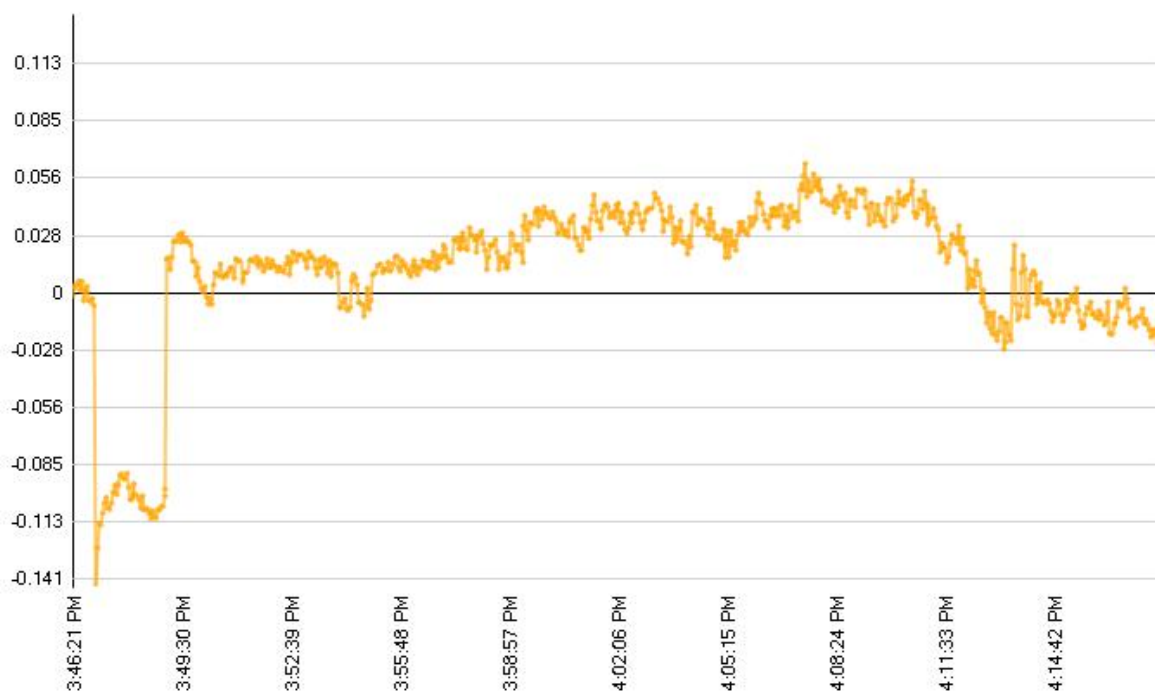
Tracking Summary

SV	1/25/2012 3:46:17 PM	Duration: 00:31:29.5000000	Major interval: 00:01:00	1/25/2012 4:17:47 PM
G1	L1 L2			
G9	L1 L2			
G11	L1 L2			
G12	L1 L2			
G14	L1 L2			
G18	L1 L2			
G19	L1 L2			
G20	L1 L2			
G22	L1 L2			
G25	L1 L2			
G31	L1 L2			
G32	L1 L2			

Residuals



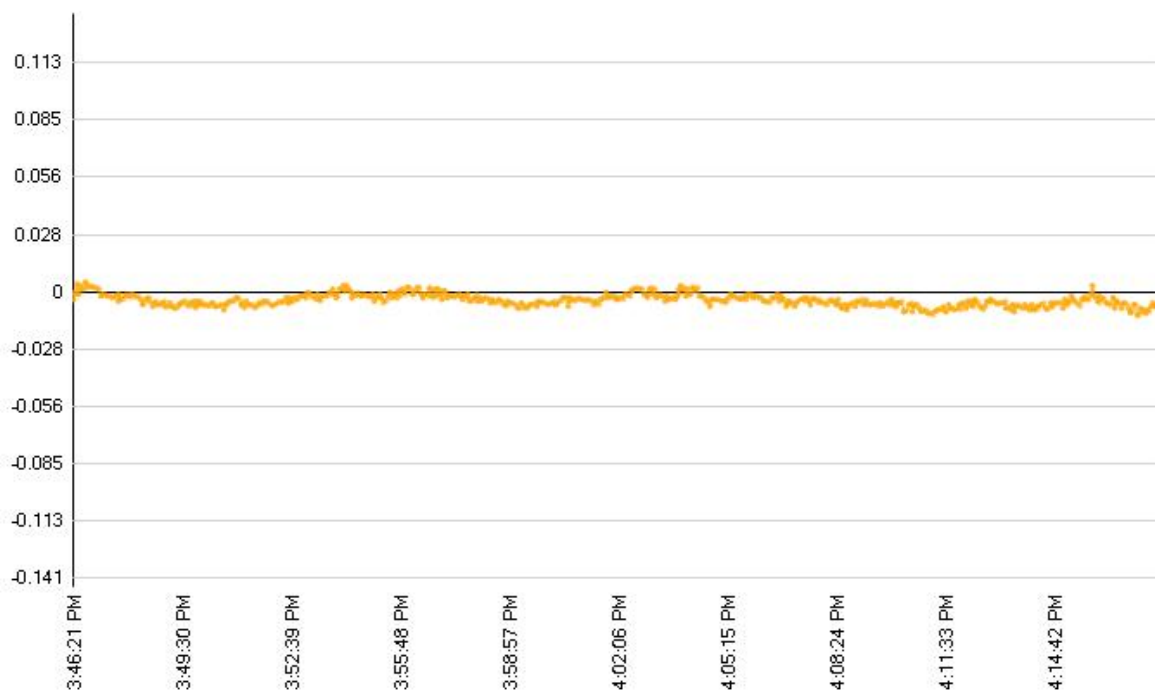
Mean = 0.010 m Std. Dev. = 0.034 m Min. = -0.145 m Max. = 0.064 m



G 12

1/25/2012 3:46:21 PM - 1/25/2012 4:17:48 PM

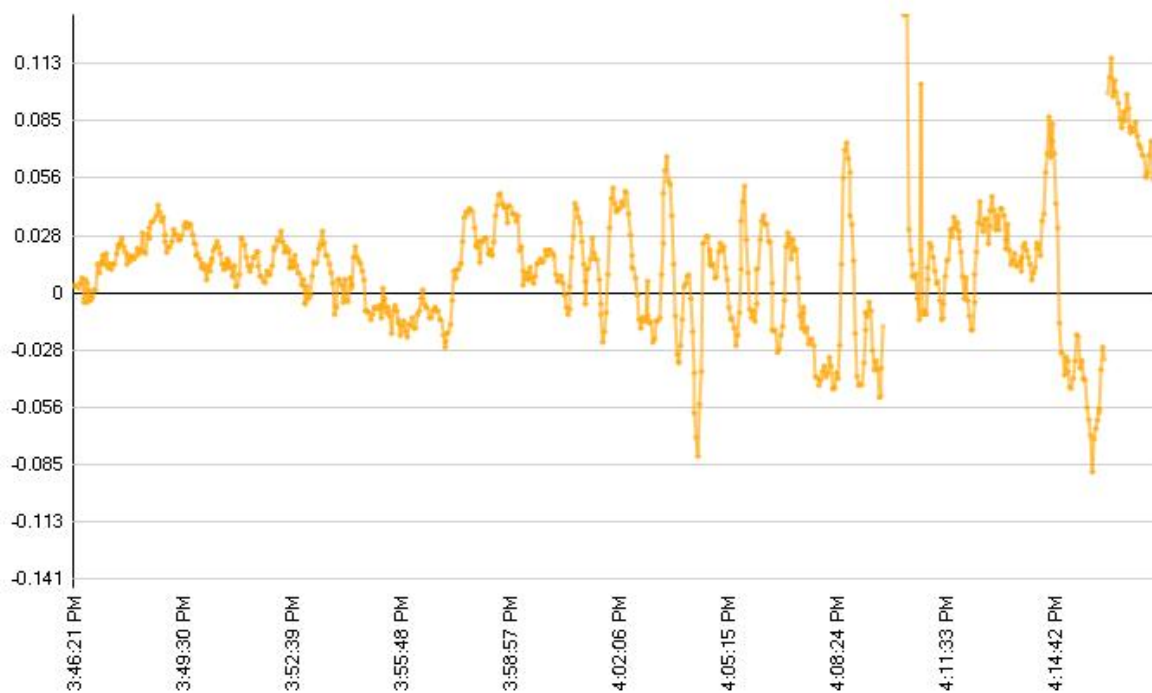
Mean = -0.003 m Std. Dev. = 0.003 m Min. = -0.011 m Max. = 0.005 m



G 14

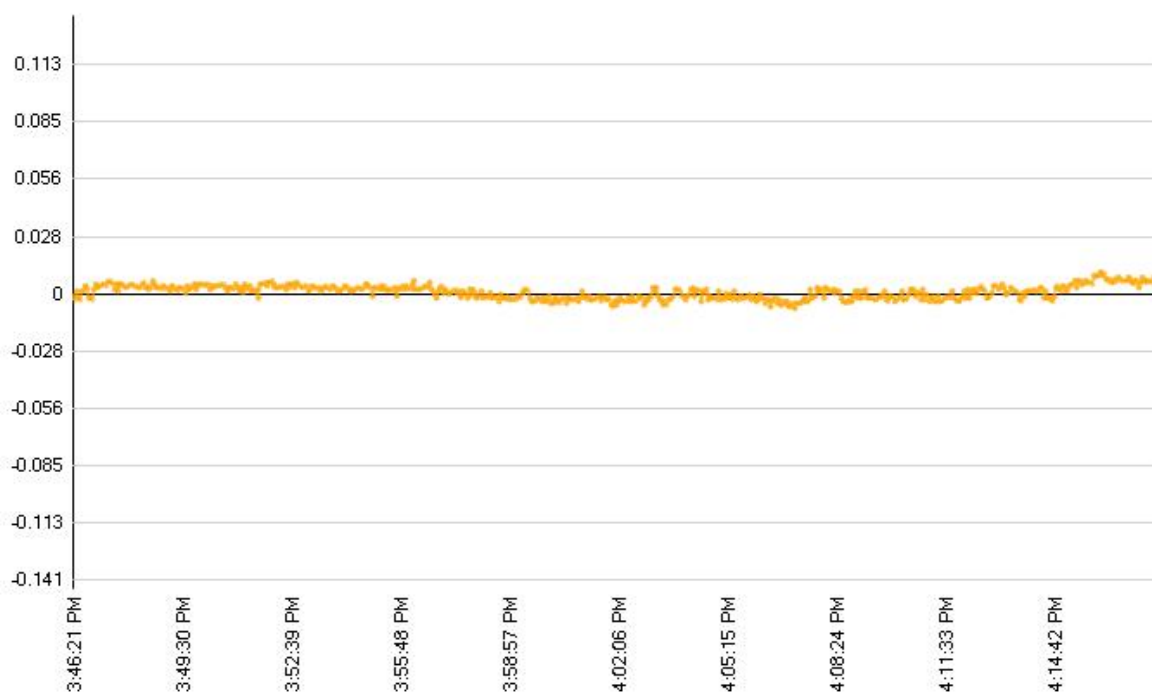
1/25/2012 3:46:21 PM - 1/25/2012 4:17:48 PM

Mean = 0.011 m Std. Dev. = 0.029 m Min. = -0.088 m Max. = 0.137 m

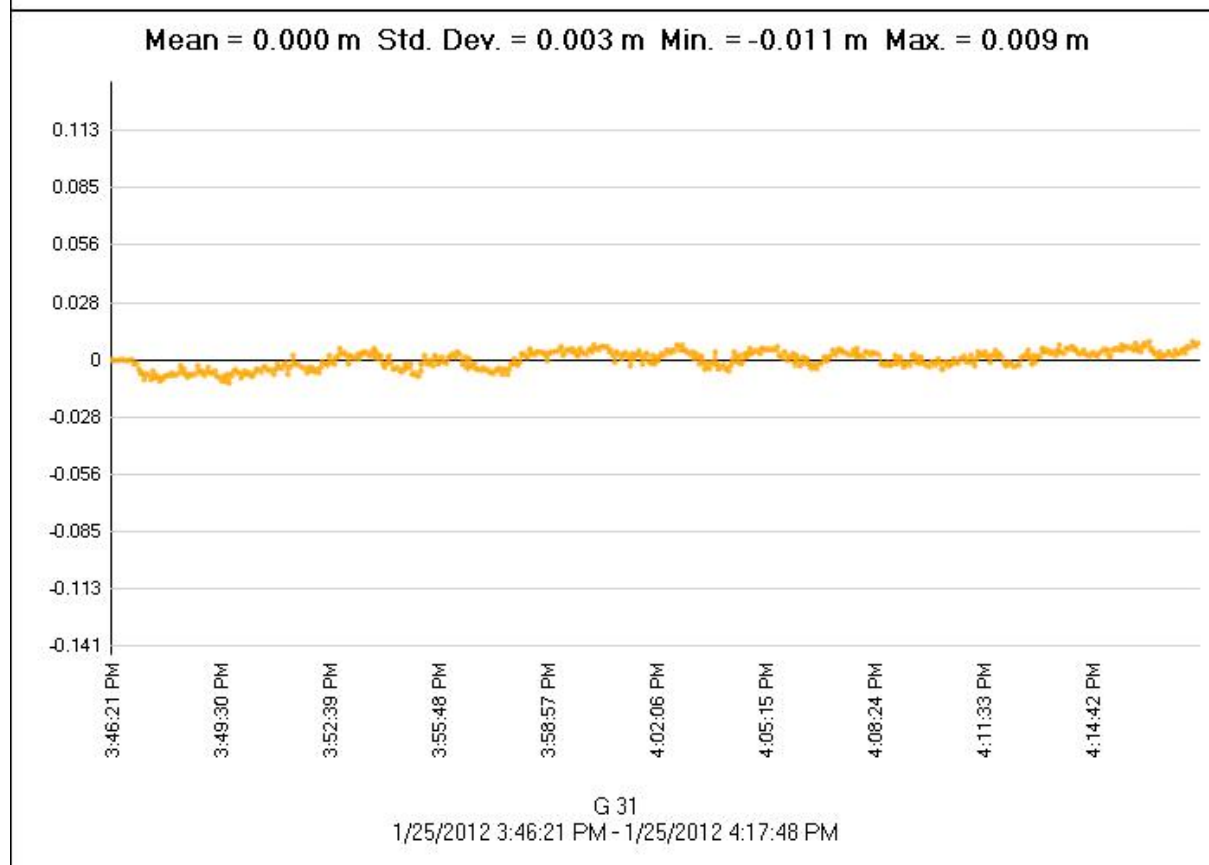
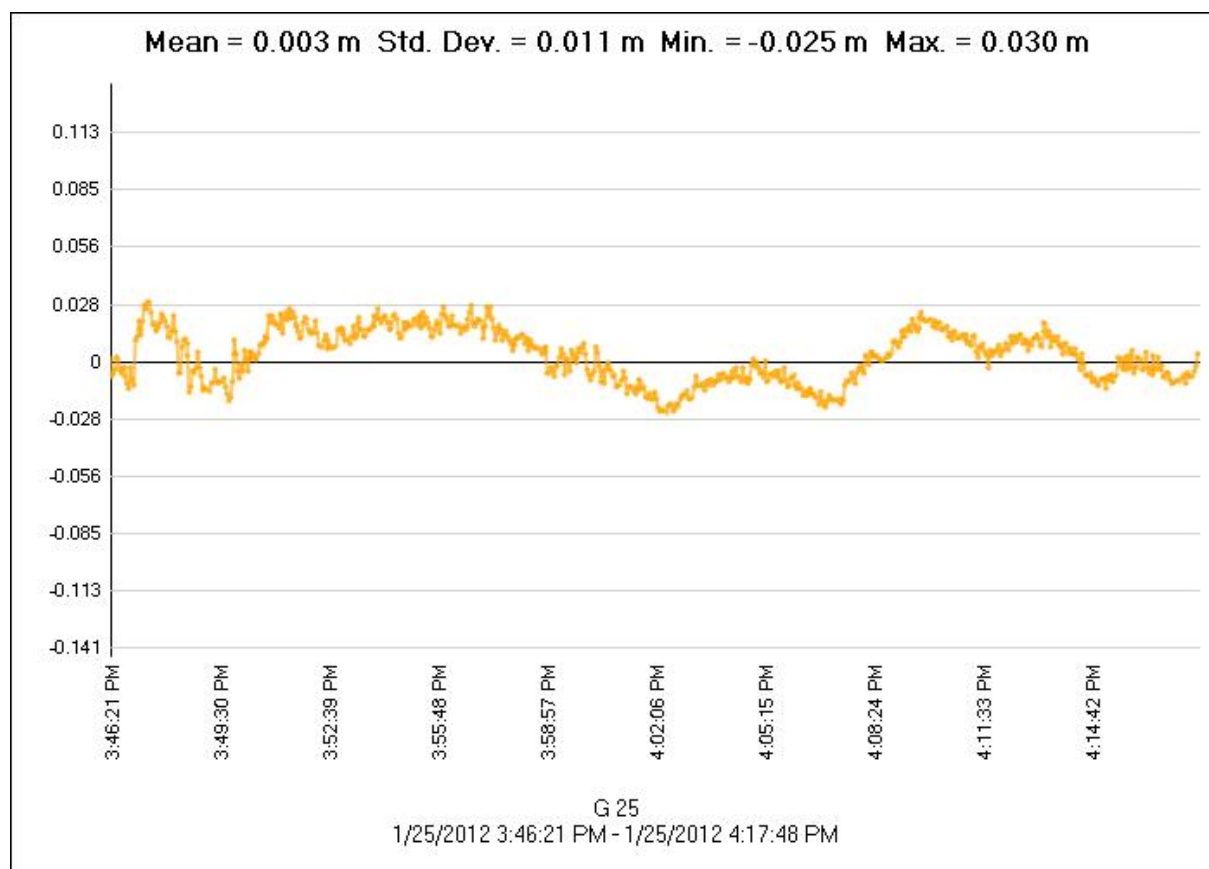


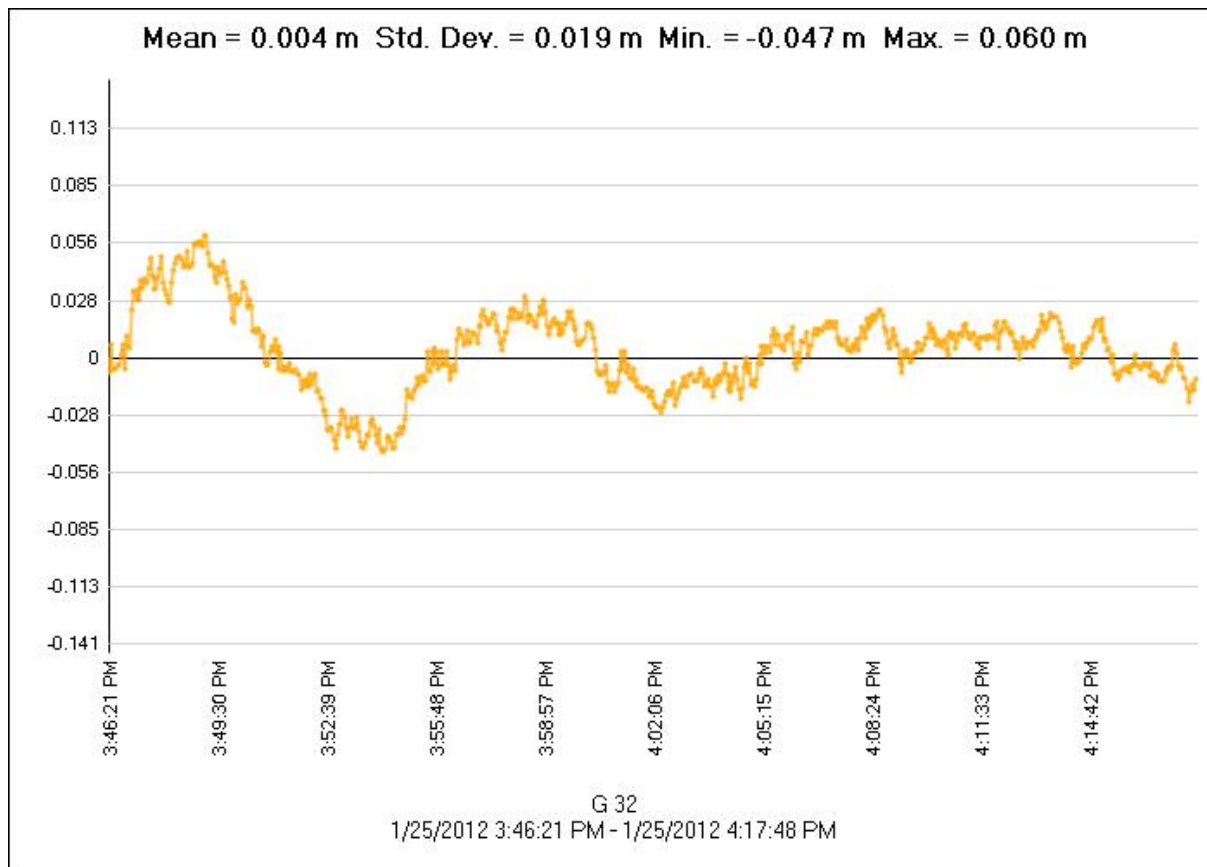
G 18
1/25/2012 3:46:21 PM - 1/25/2012 4:17:48 PM

Mean = 0.001 m Std. Dev. = 0.003 m Min. = -0.007 m Max. = 0.011 m



G 22
1/25/2012 3:46:21 PM - 1/25/2012 4:17:48 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:	Dual Frequency (L1, L2)
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

MEJ-SPIKE - SVA63-B2 (3:05:46 PM-3:37:18 PM) (S251)

Baseline observation: MEJ-SPIKE --- SVA63-B2 (B251)

Processed: 4/3/2012 5:22:28 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.067 m

Vertical precision: 0.091 m

RMS: 0.002 m

Maximum PDOP: 1.895

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 1/25/2012 3:05:46 PM (Local: UTC-7hr)

Processing stop time: 1/25/2012 3:37:18 PM (Local: UTC-7hr)

Processing duration: 00:31:32

Processing interval: .5 second

Vector Components (Mark to Mark)

From:	MEJ-SPIKE				
Grid		Local		Global	
Easting	379445.827 m	Latitude	N37°17'05.09408"	Latitude	N37°17'05.09407"
Northing	4127327.983 m	Longitude	W100°21'35.85429"	Longitude	W100°21'35.85429"
Elevation	776.909 m	Height	750.229 m	Height	750.229 m

To:	SVA63-B2				
Grid		Local		Global	
Easting	324162.965 m	Latitude	N37°00'17.86102"	Latitude	N37°00'17.86101"
Northing	4097248.376 m	Longitude	W100°58'34.49240"	Longitude	W100°58'34.49240"
Elevation	888.497 m	Height	861.700 m	Height	861.700 m

Vector					
9Ughb[	-55282.861 m	NS Fwd Azimuth	240°37'42"	L	-57300.383 m
BcfA\jb[	-30079.607 m	Ellipsoid Dist.	62944.248 m	M	-8377.828 m
9Yj Uhcb	111.588 m	<Y][\h	111.471 m	N	-24686.797 m

Standard Errors

Vector errors:					
Point ID	0.018 m	Point ID	0°00'00"	Point ID	0.016 m
Point ID	0.026 m	Point ID	0.016 m	Point ID	0.050 m
Point ID	0.046 m	Point ID	0.046 m	Point ID	0.019 m

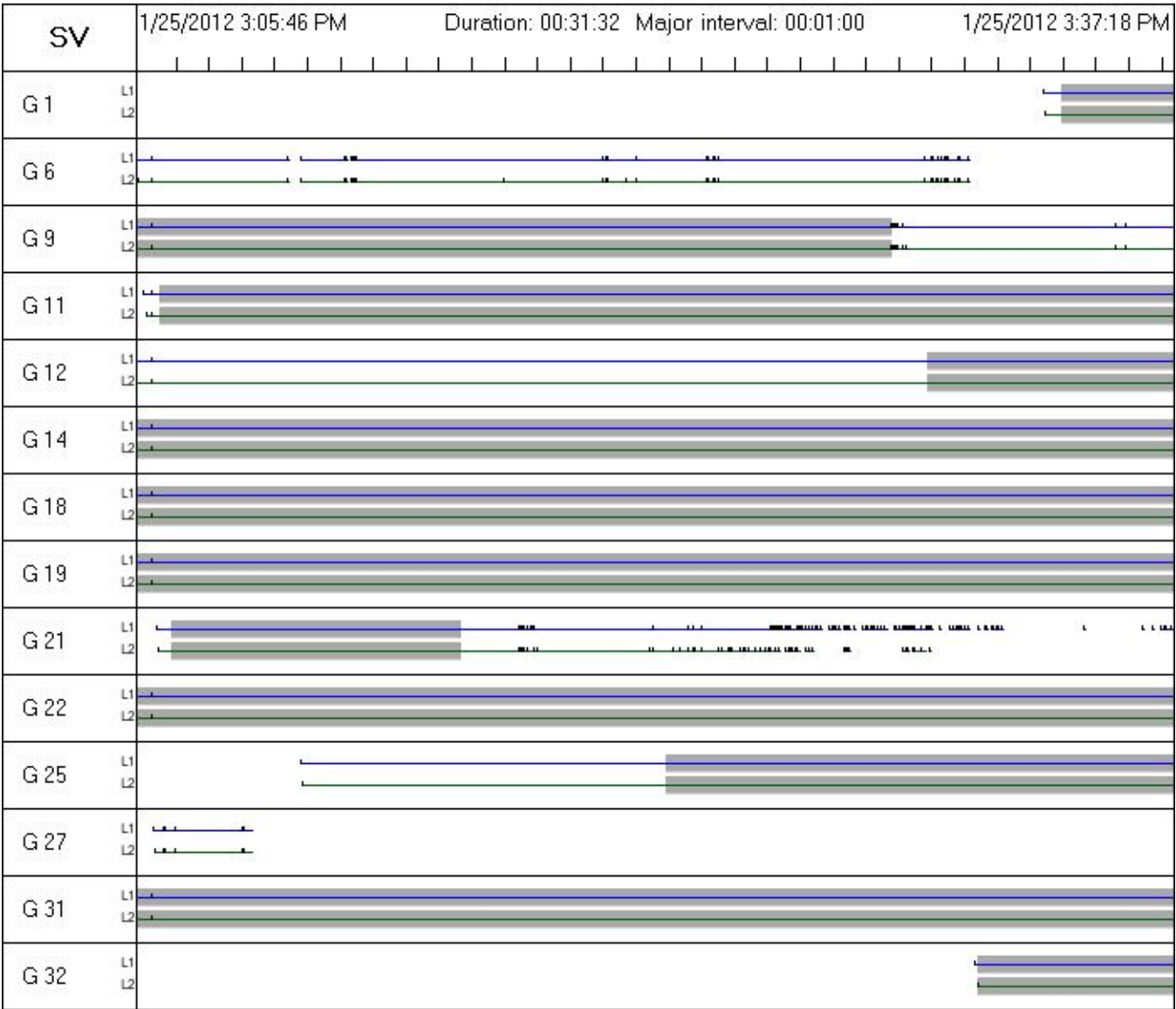
Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0002554856		
Y	-0.0000204927	0.0024998749	
Z	-0.0000080288	-0.0004928200	0.0003681158

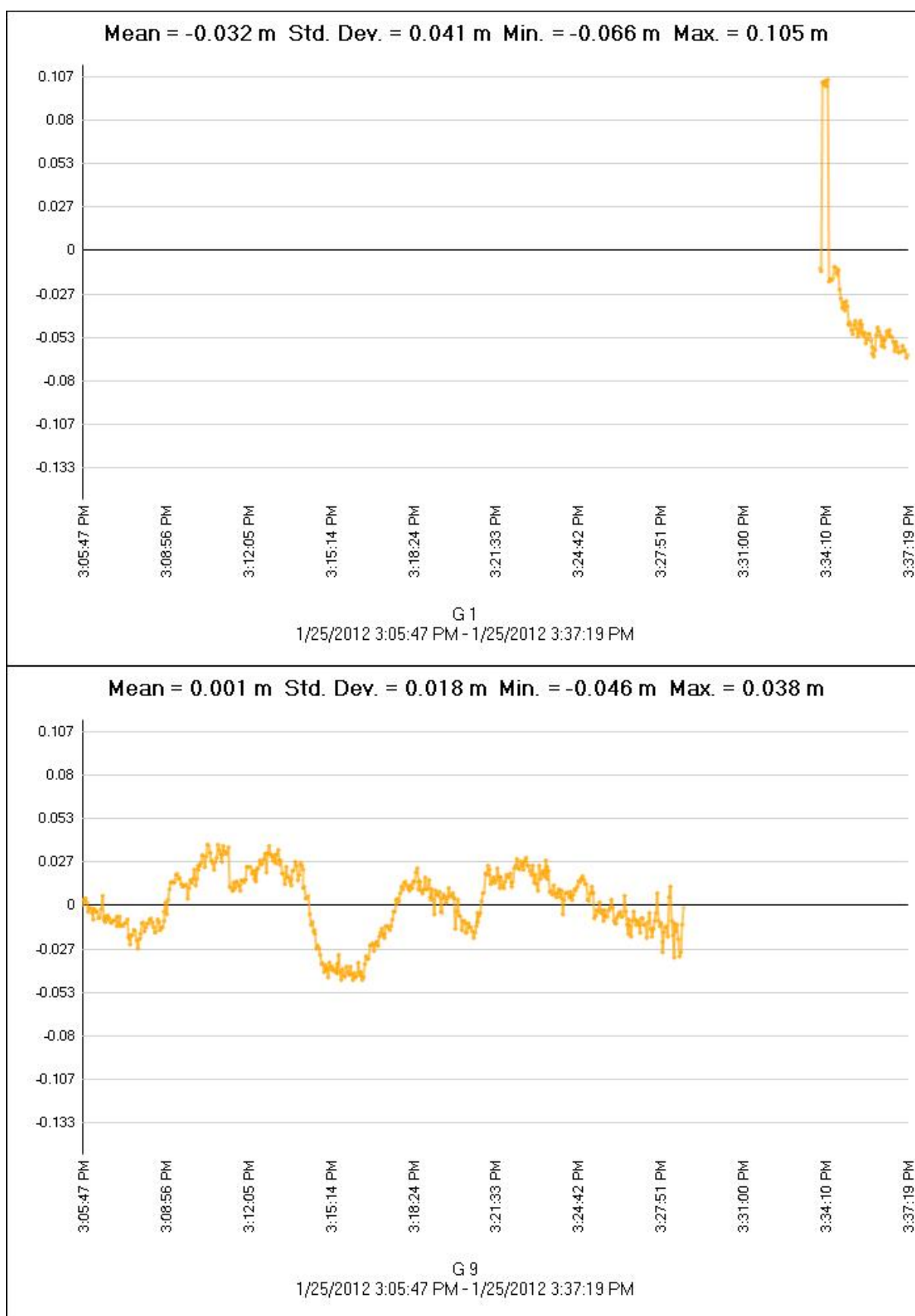
Occupations

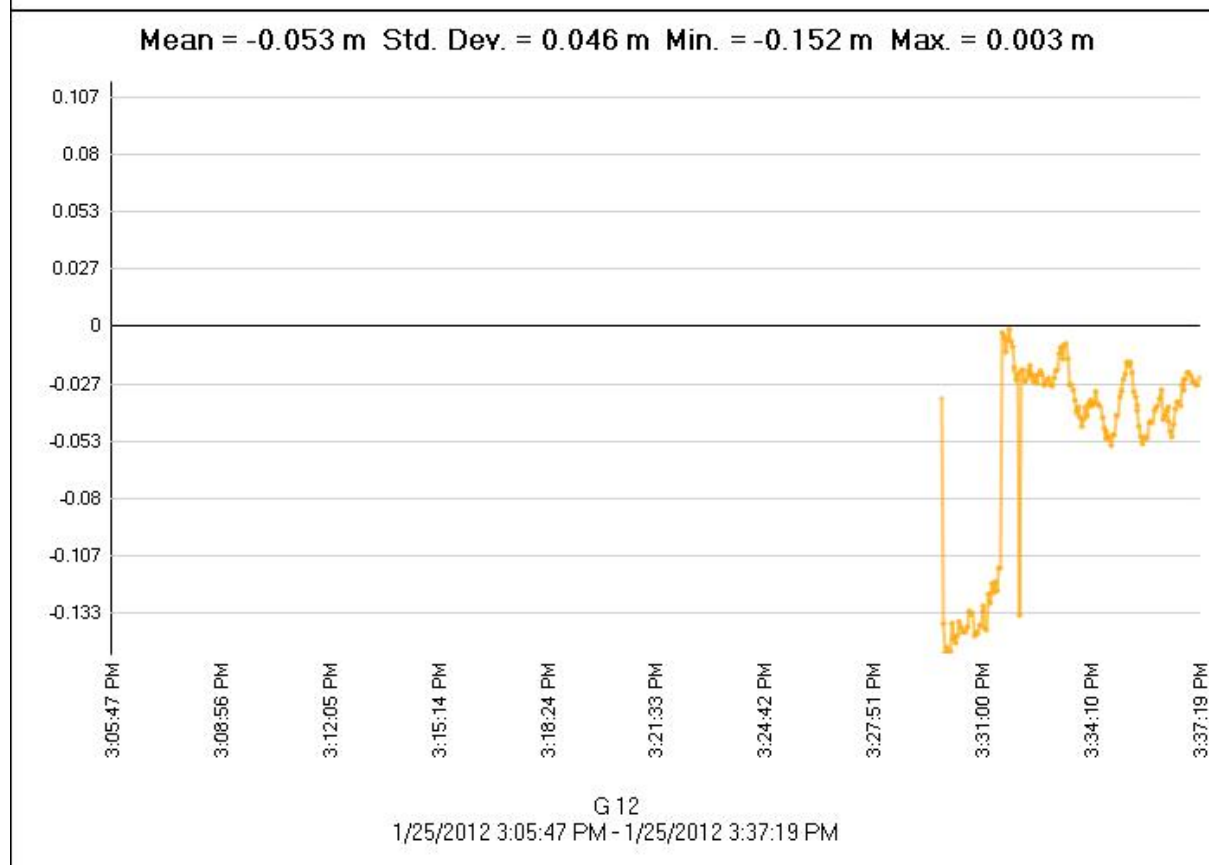
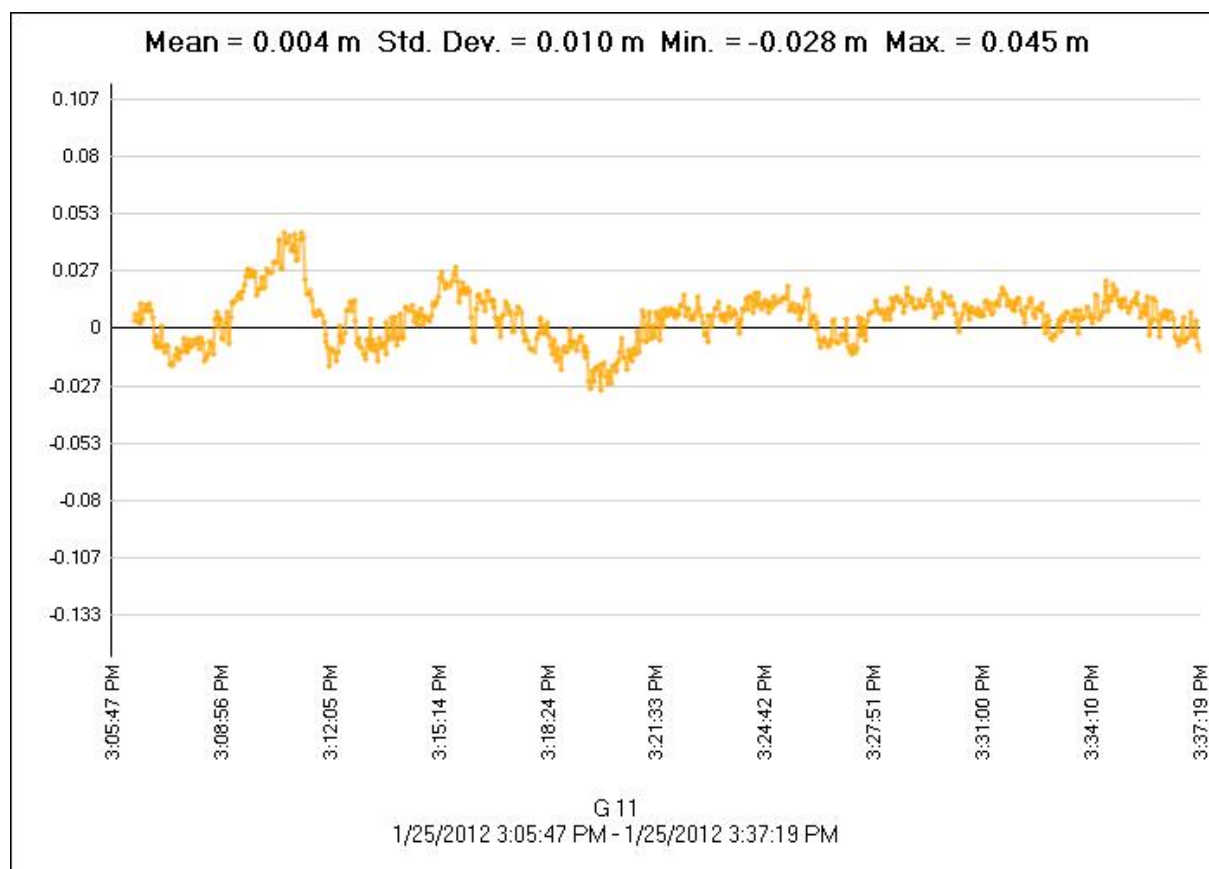
	From	To
Point ID:	MEJ-SPIKE	SVA63-B2
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050250.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00040250.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

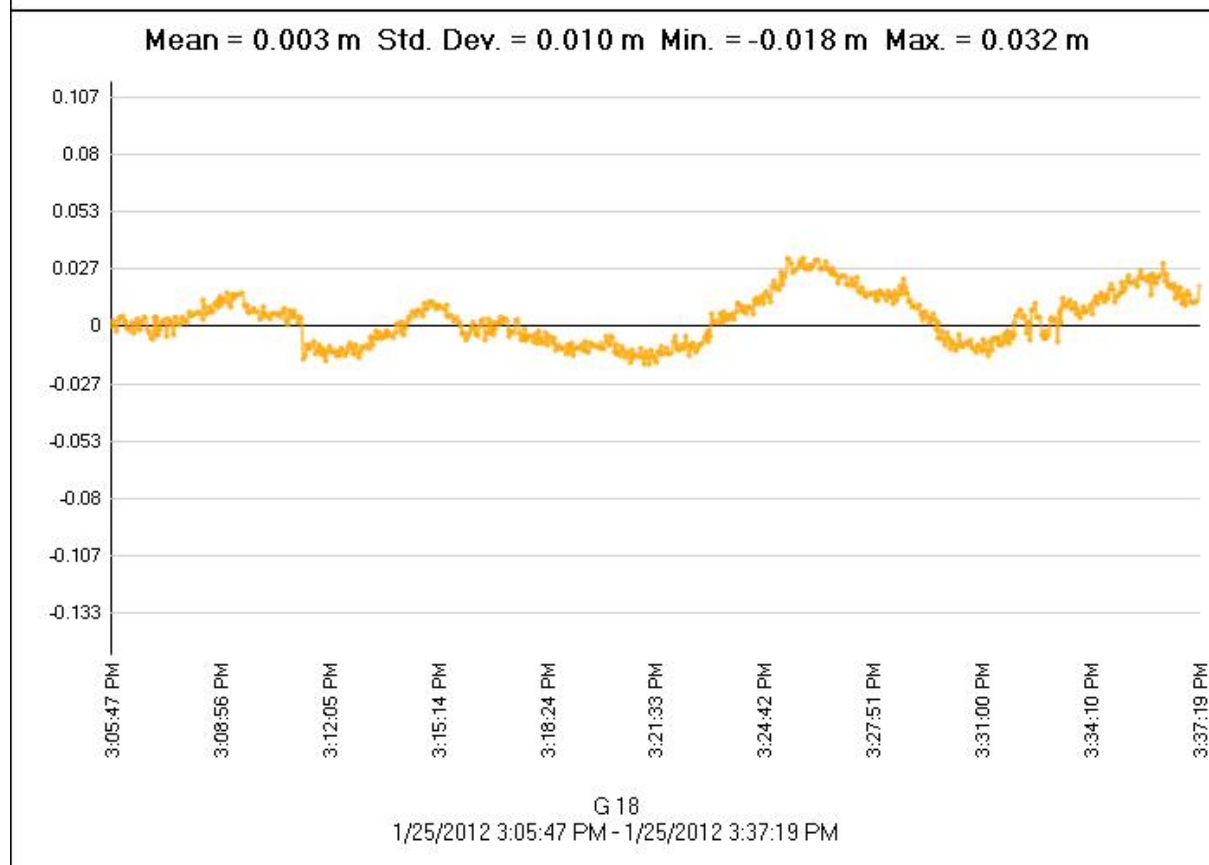
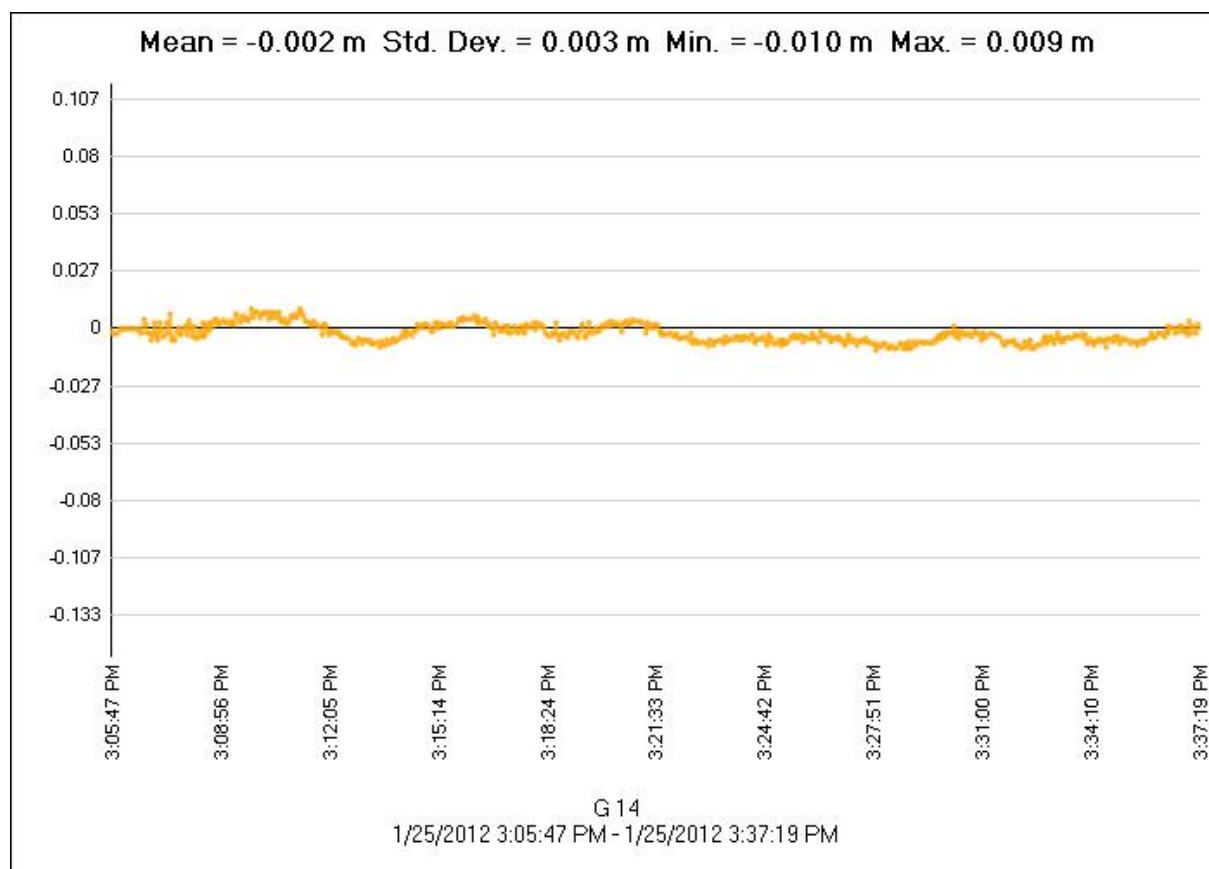
Tracking Summary

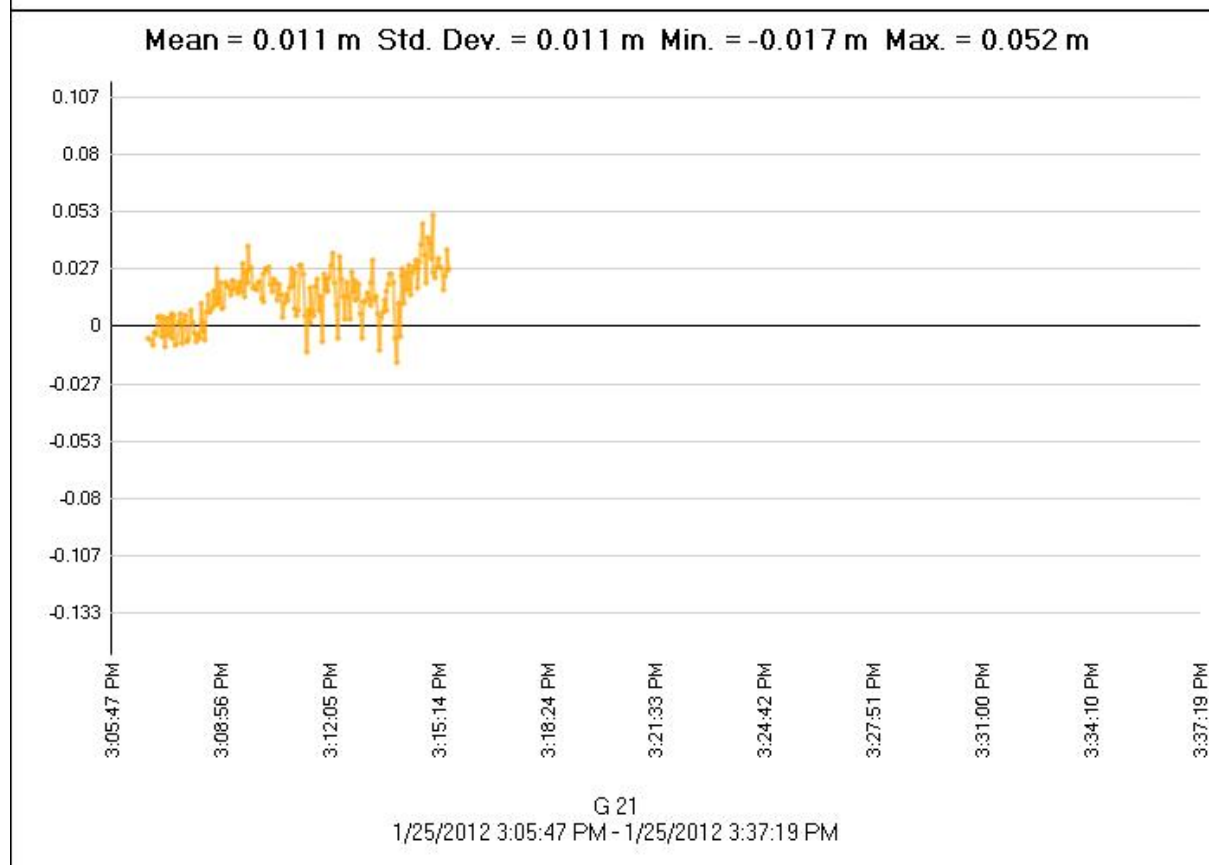
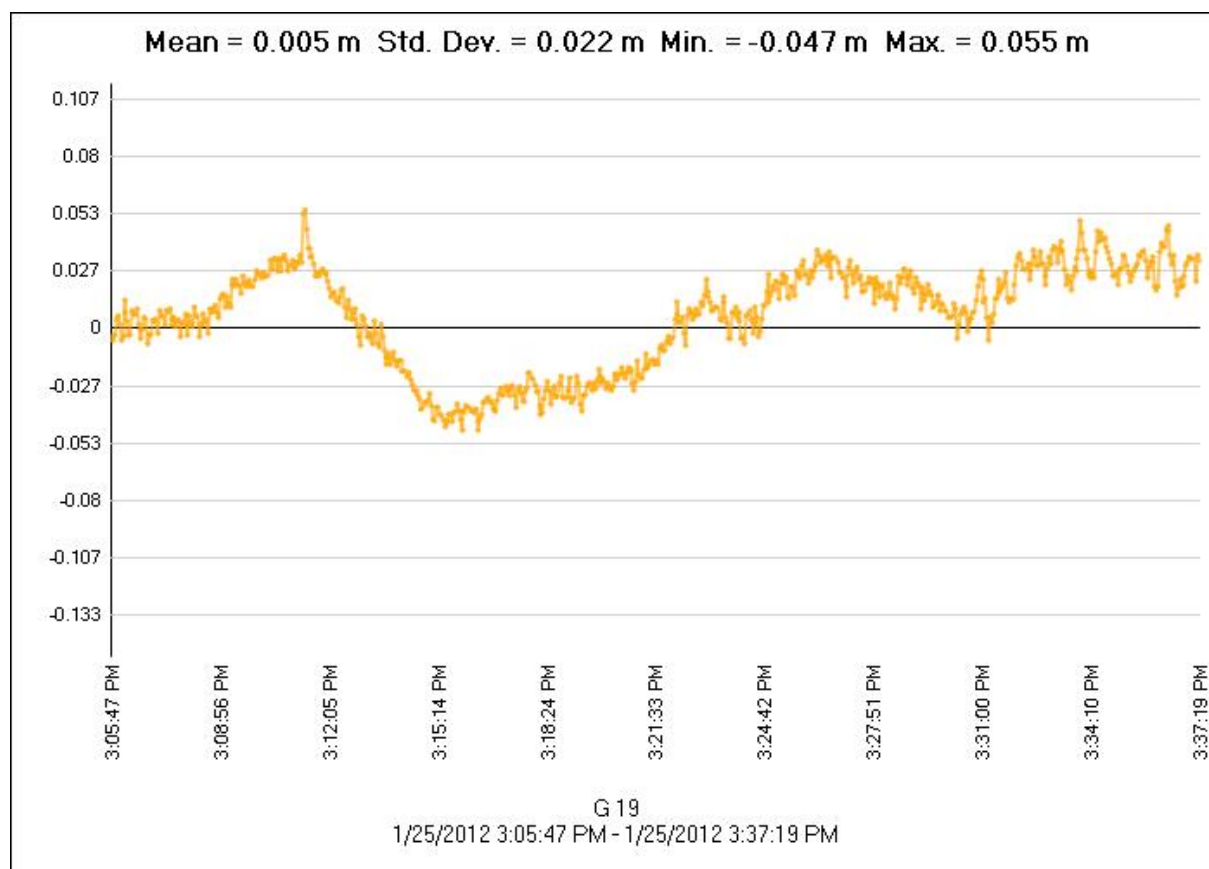


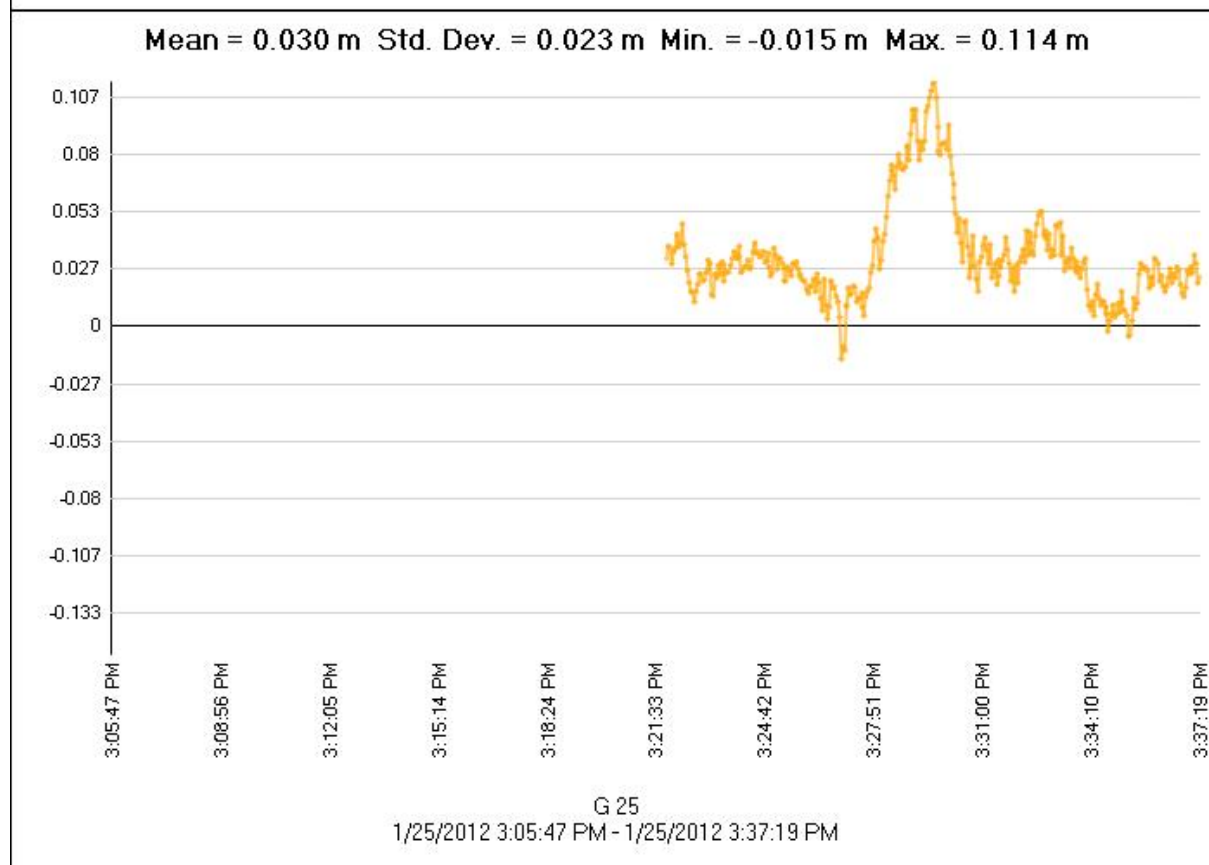
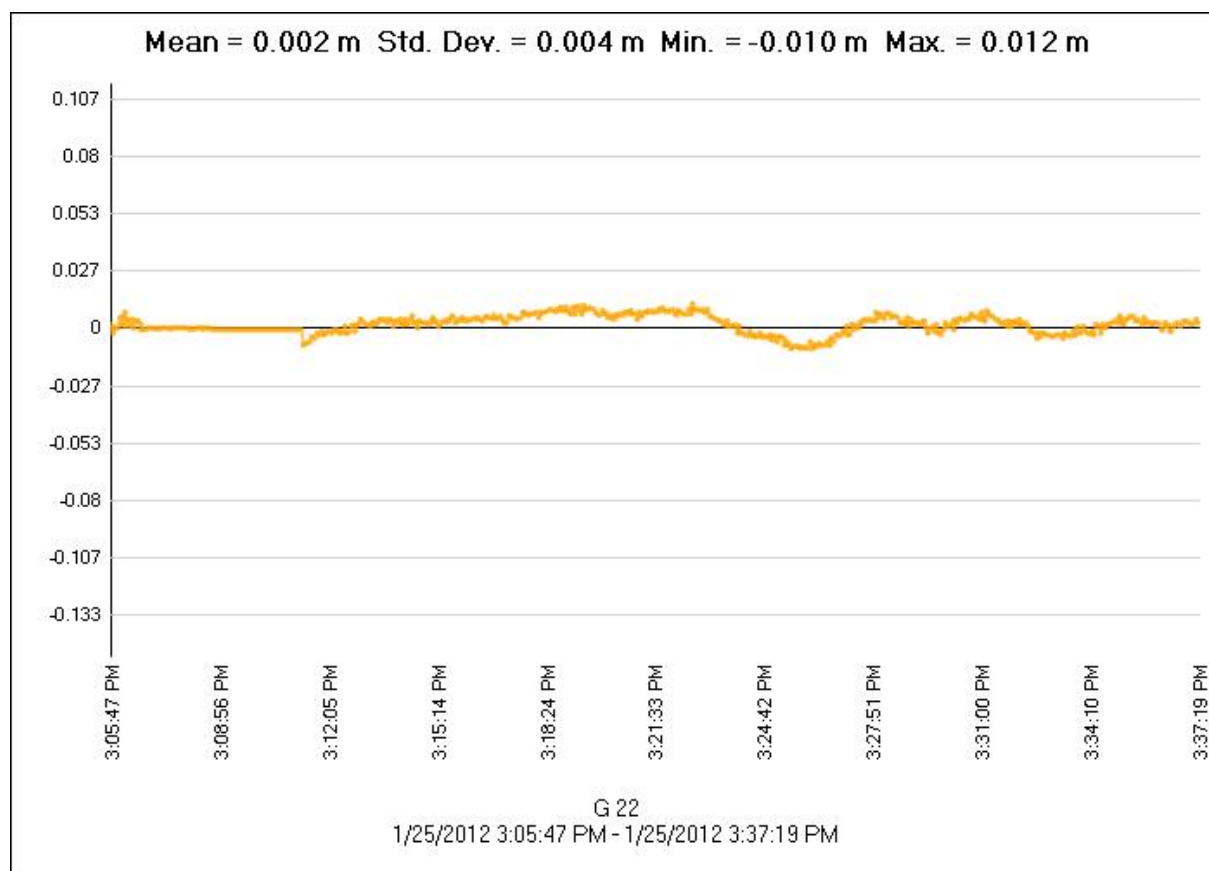
Residuals

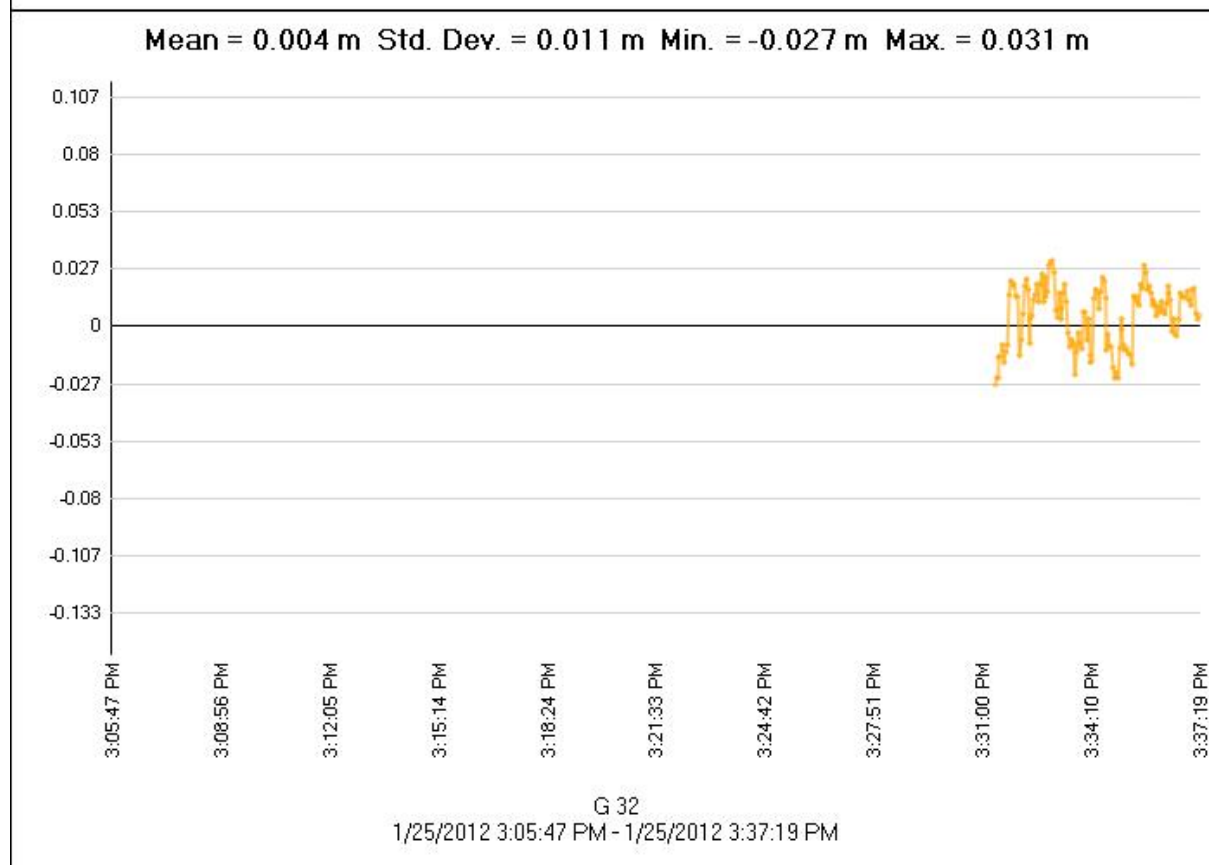
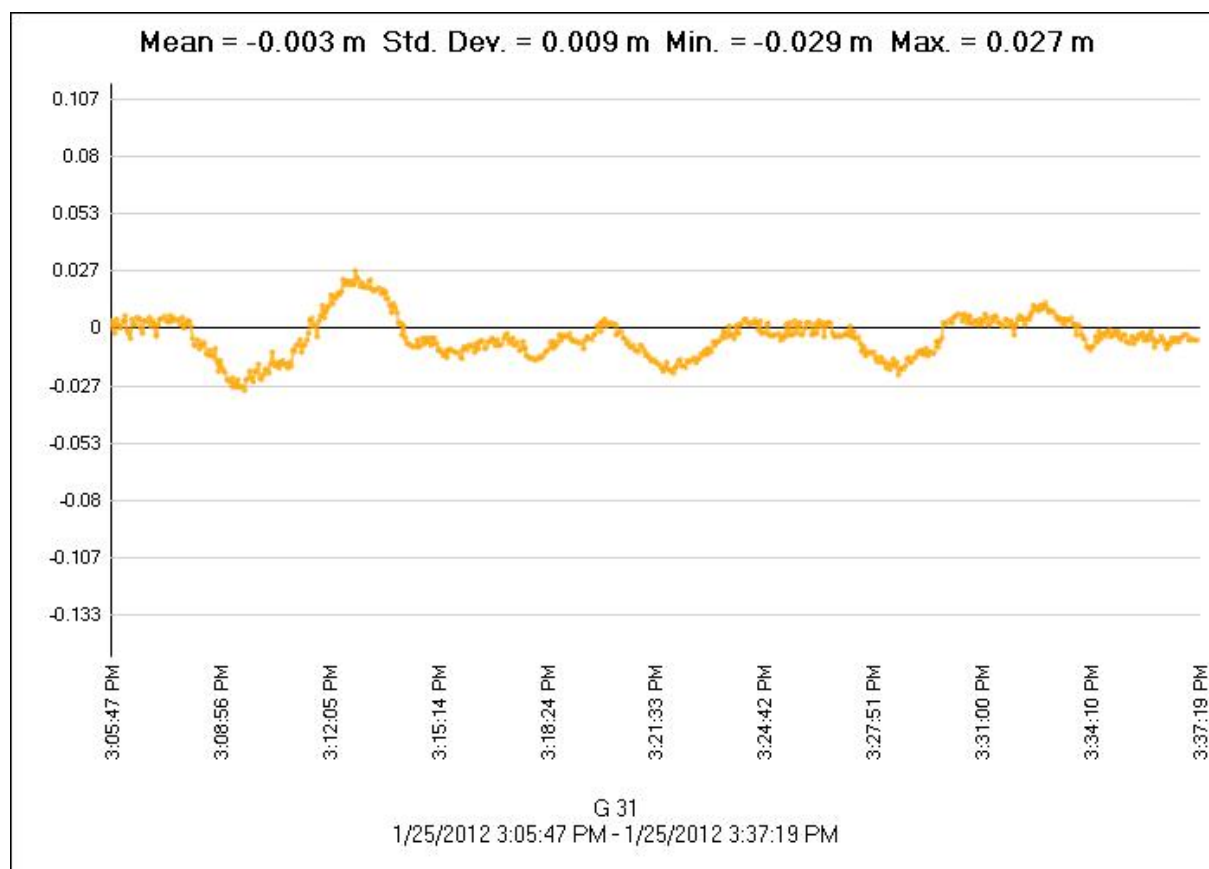













Processing style

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: Dual Frequency (L1, L2)
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

4/26/2012 4:56:45 AM	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj.vce	Trimble Business Center
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