

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
HH0645 --- FVA10-B1 (B202)	HH0645	FVA10-B1	Fixed	0.009	0.019	221°12'47"	12271.208	66.478
HH0645 --- FVA24-B1 (B203)	HH0645	FVA24-B1	Fixed	0.011	0.015	356°35'37"	29580.542	117.447
HH0645 --- FVA05-B1 (B204)	HH0645	FVA05-B1	Fixed	0.009	0.015	27°59'36"	17053.028	86.575
HH0645 --- SVA25-B1 (B205)	HH0645	SVA25-B1	Fixed	0.011	0.011	76°01'02"	29439.803	29.571
HH0645 --- FVA25-B1 (B206)	HH0645	FVA25-B1	Fixed	0.011	0.013	77°58'05"	26235.751	32.998
HH0645 --- SVA10-B1 (B207)	HH0645	SVA10-B1	Fixed	0.010	0.019	221°14'50"	12350.333	67.971
HH0645 --- SVA24-B1 (B208)	HH0645	SVA24-B1	Fixed	0.031	0.038	353°48'23"	29710.803	121.388
HH0645 --- SVA05-B1 (B209)	HH0645	SVA05-B1	Fixed	0.009	0.015	27°48'09"	16937.871	87.838
HH0698 --- FVA26-B1 (B225)	HH0698	FVA26-B1	Fixed	0.009	0.010	209°43'10"	4491.749	-13.423
HH0698 --- SVA26-B1 (B226)	HH0698	SVA26-B1	Fixed	0.005	0.007	287°52'42"	2377.477	5.559
HH0698 --- SVA27-B1 (B227)	HH0698	SVA27-B1	Fixed	0.008	0.013	97°19'11"	23688.962	-7.601

HH0698 --- FVA27-B1 (B228)	HH0698	FVA27-B1	Fixed	0.011	0.013	100°21'20"	22590.299	-8.880
HH0698 --- FVA17-B1 (B229)	HH0698	FVA17-B1	Fixed	0.008	0.012	162°08'10"	24569.688	-2.024
HH0698 --- SVA17-B1 (B230)	HH0698	SVA17-B1	Fixed	0.017	0.025	160°55'34"	23071.799	0.594
HH0698 --- SVA18-B1 (B231)	HH0698	SVA18-B1	Fixed	0.013	0.020	208°25'35"	24745.003	27.772
HH0698 --- FVA18-B1 (B232)	HH0698	FVA18-B1	Fixed	0.008	0.012	211°18'10"	23580.627	28.903
JJ0729 --- FVA09-B1 (B252)	JJ0729	FVA09-B1	Fixed	0.027	0.029	106°16'43"	35812.752	-60.927
JJ0729 --- SVA31-B1 (B253)	JJ0729	SVA31-B1	Float	0.128	0.106	107°18'36"	43078.057	-74.033
JJ0729 --- SVA31-B1 (B254)	JJ0729	SVA31-B1	Fixed	0.065	0.046	104°53'34"	43320.982	-40.765
JJ0729 --- FVA08-B1 (B255)	JJ0729	FVA08-B1	Float	0.061	0.084	99°36'07"	65420.639	-88.948
JJ0729 --- SVA32-B1 (B256)	JJ0729	SVA32-B1	Float	0.031	0.078	107°21'51"	58442.952	-88.549
JJ0729 --- FVA32-B1 (B257)	JJ0729	FVA32-B1	Fixed	0.016	0.029	107°38'29"	57585.073	-89.319
JJ0729 --- SVA08-B1 (B258)	JJ0729	SVA08-B1	Fixed	0.132	0.105	100°27'32"	67136.105	-109.911
JJ0729 --- FVA07-B1 (B259)	JJ0729	FVA07-B1	Float	0.070	0.083	94°48'43"	77897.173	-126.710
JJ0729 --- SVA07-B1 (B260)	JJ0729	SVA07-B1	Fixed	0.048	0.146	94°34'17"	77799.266	-119.097
JJ0729 --- SVA22-B1 (B274)	JJ0729	SVA22-B1	Fixed	0.007	0.013	280°19'01"	2386.198	0.248
JJ0729 --- FVA22-B1 (B279)	JJ0729	FVA22-B1	Fixed	0.006	0.008	290°50'54"	2497.381	2.801
JJ0729 --- SVA04-B1 (B284)	JJ0729	SVA04-B1	Fixed	0.013	0.013	8°31'30"	10549.826	70.576
JJ0729 --- FVA04-B1 (B288)	JJ0729	FVA04-B1	Fixed	0.011	0.013	9°08'40"	10418.986	75.074
JJ0729 --- FVA01-B1 (B294)	JJ0729	FVA01-B1	Fixed	0.009	0.016	10°59'23"	16756.554	125.272
JJ0729 --- SVA01-B1 (B297)	JJ0729	SVA01-B1	Fixed	0.009	0.015	15°03'43"	15216.836	123.223
HH0698 --- SVA09-B1 (B301)	HH0698	SVA09-B1	Fixed	0.009	0.016	331°37'09"	44385.247	36.232
HH0698 --- FVA20-B1 (B302)	HH0698	FVA20-B1	Fixed	0.009	0.012	341°36'38"	26568.481	52.296
HH0698 --- SVA20-B1 (B303)	HH0698	SVA20-B1	Fixed	0.009	0.012	339°38'02"	24859.751	46.082
HH0698 --- SVA14-B1 (B304)	HH0698	SVA14-B1	Fixed	0.010	0.017	319°36'36"	15805.453	30.888
HH0698 --- FVA14-B1 (B305)	HH0698	FVA14-B1	Fixed	0.010	0.022	320°26'01"	15622.630	33.702

HH0698 --- SVA23-B1 (B306)	HH0698	SVA23-B1	Fixed	0.009	0.020	19°06'46"	12712.444	4.096
HH0698 --- FVA23-B1 (B307)	HH0698	FVA23-B1	Fixed	0.008	0.015	19°10'36"	12726.172	3.847
HH0645 --- SVA12-B1 (B308)	HH0645	SVA12-B1	Fixed	0.008	0.012	234°44'03"	24185.550	76.297
HH0645 --- FVA12-B1 (B310)	HH0645	FVA12-B1	Fixed	0.028	0.031	211°41'52"	33634.459	94.209
HH0645 --- SVA13-B1 (B311)	HH0645	SVA13-B1	Fixed	0.007	0.011	173°58'38"	30577.505	10.276
HH0645 --- FVA13-B1 (B312)	HH0645	FVA13-B1	Fixed	0.009	0.010	172°28'52"	30658.678	6.595
HH0645 --- SVA30-B1 (B313)	HH0645	SVA30-B1	Fixed	0.010	0.015	151°37'48"	19582.899	63.032
HH0645 --- FVA30-B1 (B314)	HH0645	FVA30-B1	Fixed	0.011	0.023	163°28'40"	19628.741	68.485
HH0645 --- SVA15-B1 (B315)	HH0645	SVA15-B1	Fixed	0.016	0.029	116°44'59"	73526.651	-78.561
HH0645 --- FVA15-B1 (B316)	HH0645	FVA15-B1	Fixed	0.047	0.162	116°27'56"	71544.097	-85.227
HH0645 --- SVA16-B1 (B317)	HH0645	SVA16-B1	Float	0.189	0.178	134°11'47"	95358.368	-138.973
HH0645 --- FVA16-B1 (B319)	HH0645	FVA16-B1	Float	0.165	0.147	133°28'43"	95600.963	-117.391

#### Acceptance Summary

Processed	Passed	Flag 	Fail 
48	44	4	0

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HH0645 - FVA10-B1 (2:26:31 PM-2:53:00 PM) (S202)

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Baseline observation: HH0645 --- FVA10-B1 (B202)

Processed: 4/3/2012 2:51:16 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.009 m

Vertical precision: 0.019 m

RMS: 0.005 m

Maximum PDOP: 2.679

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/17/2012 2:26:31 PM (Local: UTC-7hr)

Processing stop time: 2/17/2012 2:53:00 PM (Local: UTC-7hr)

Processing duration: 00:26:29

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0645				
Grid		Local		Global	
Easting	252723.345 m	Latitude	N37°59'48.17255"	Latitude	N37°59'48.17255"
Northing	4209193.137 m	Longitude	W101°48'57.76498"	Longitude	W101°48'57.76498"
Elevation	995.279 m	Height	970.864 m	Height	970.864 m

To:	FVA10-B1				
Grid		Local		Global	
Easting	244359.722 m	Latitude	N37°54'48.64057"	Latitude	N37°54'48.64056"
Northing	4200207.232 m	Longitude	W101°54'28.75742"	Longitude	W101°54'28.75742"
Elevation	1061.684 m	Height	1037.342 m	Height	1037.342 m

Vector					
9Ughb[	-8363.623 m	NS Fwd Azimuth	221°12'47"	L	-9087.654 m
Bcfh\bo[	-8985.905 m	Ellipsoid Dist.	12271.208 m	M	-3949.696 m
9Yj U]cb	66.405 m	<Y][\h	66.478 m	N	-7242.156 m



## Standard Errors

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

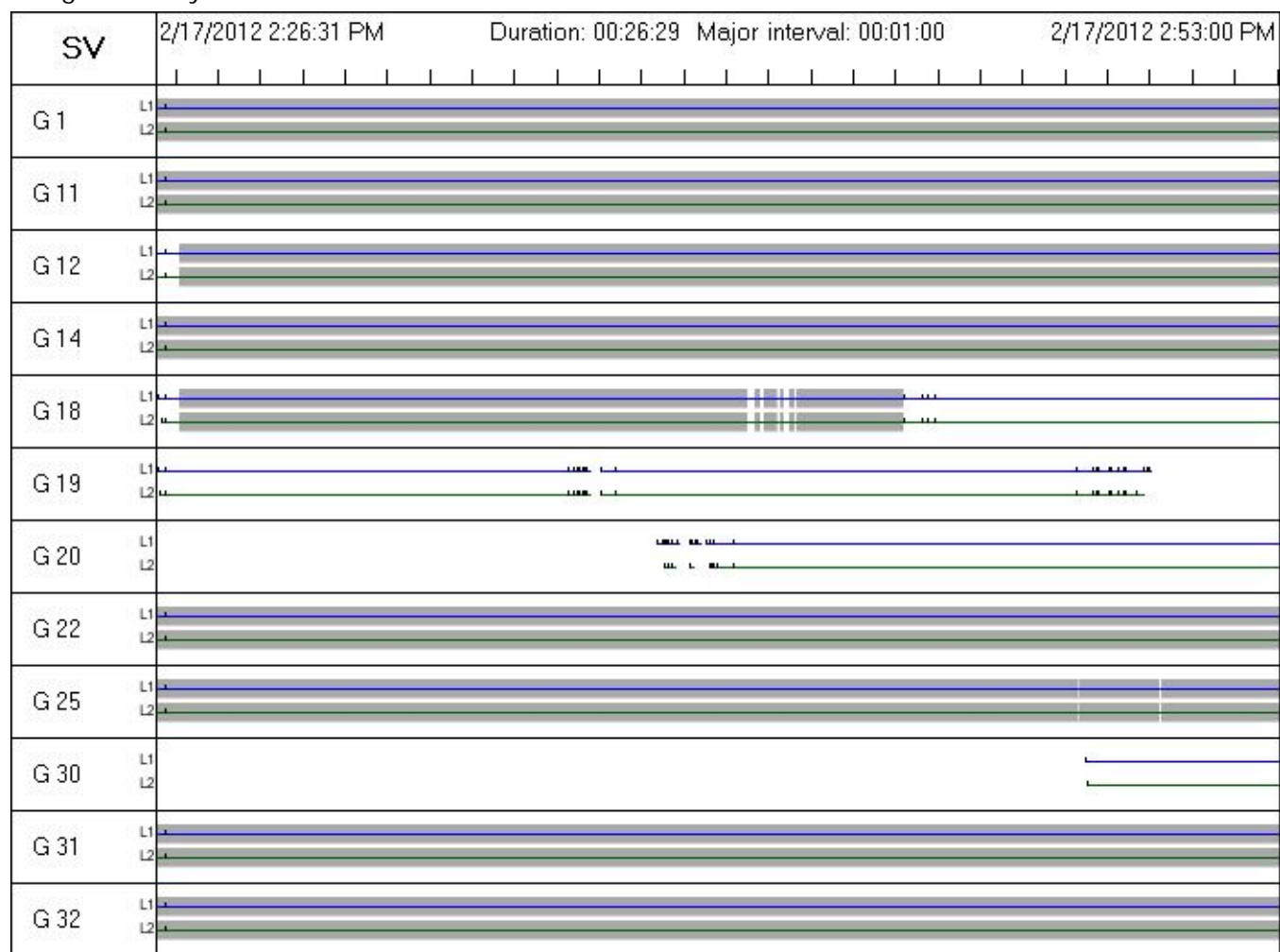
## Aposteriori Covariance Matrix (Meter<sup>2</sup>)

	X	Y	Z
X	0.0000206531		
Y	0.0000222984	0.0000480225	
Z	-0.0000174301	-0.0000378737	0.0000509441

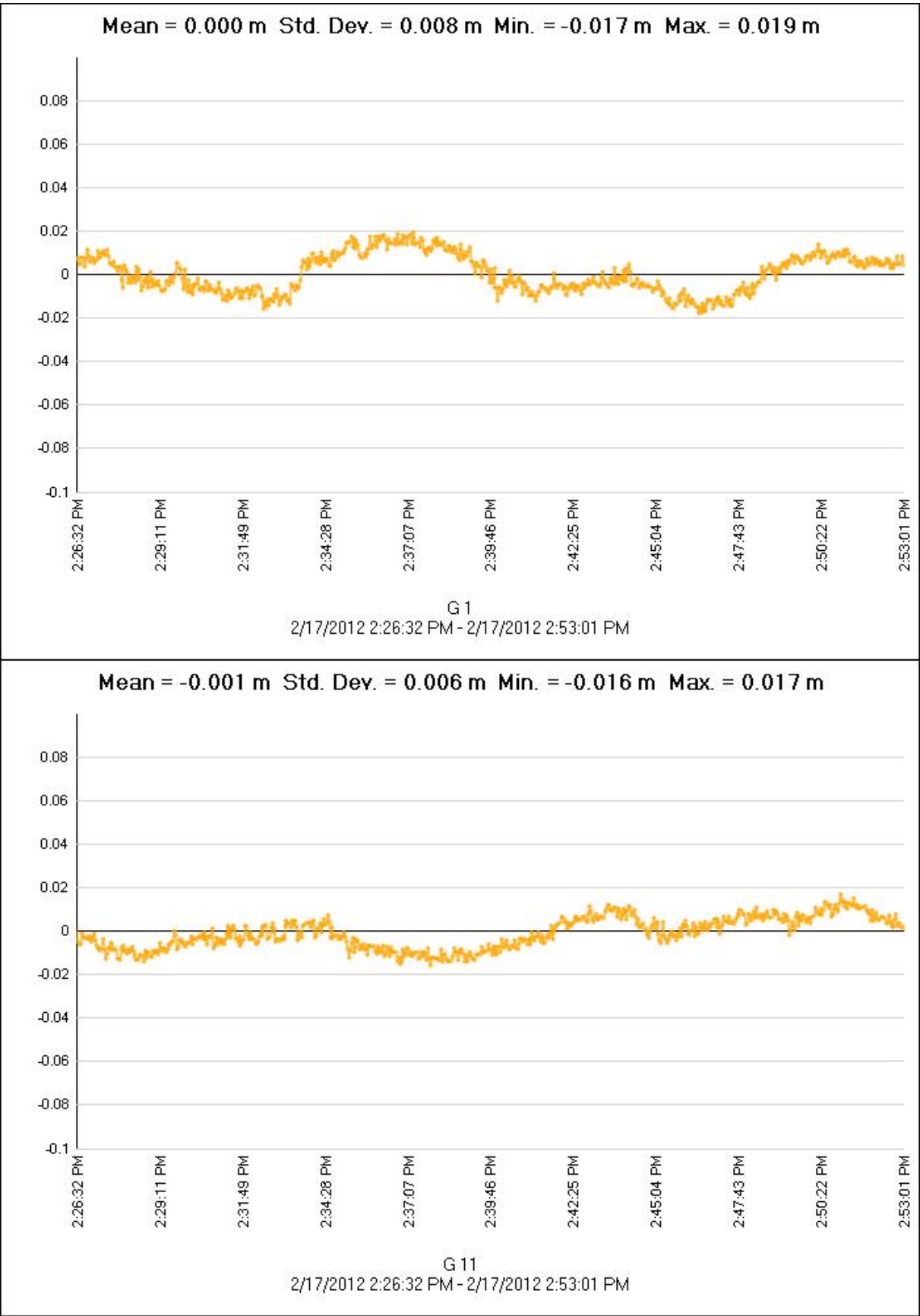
## Occupations

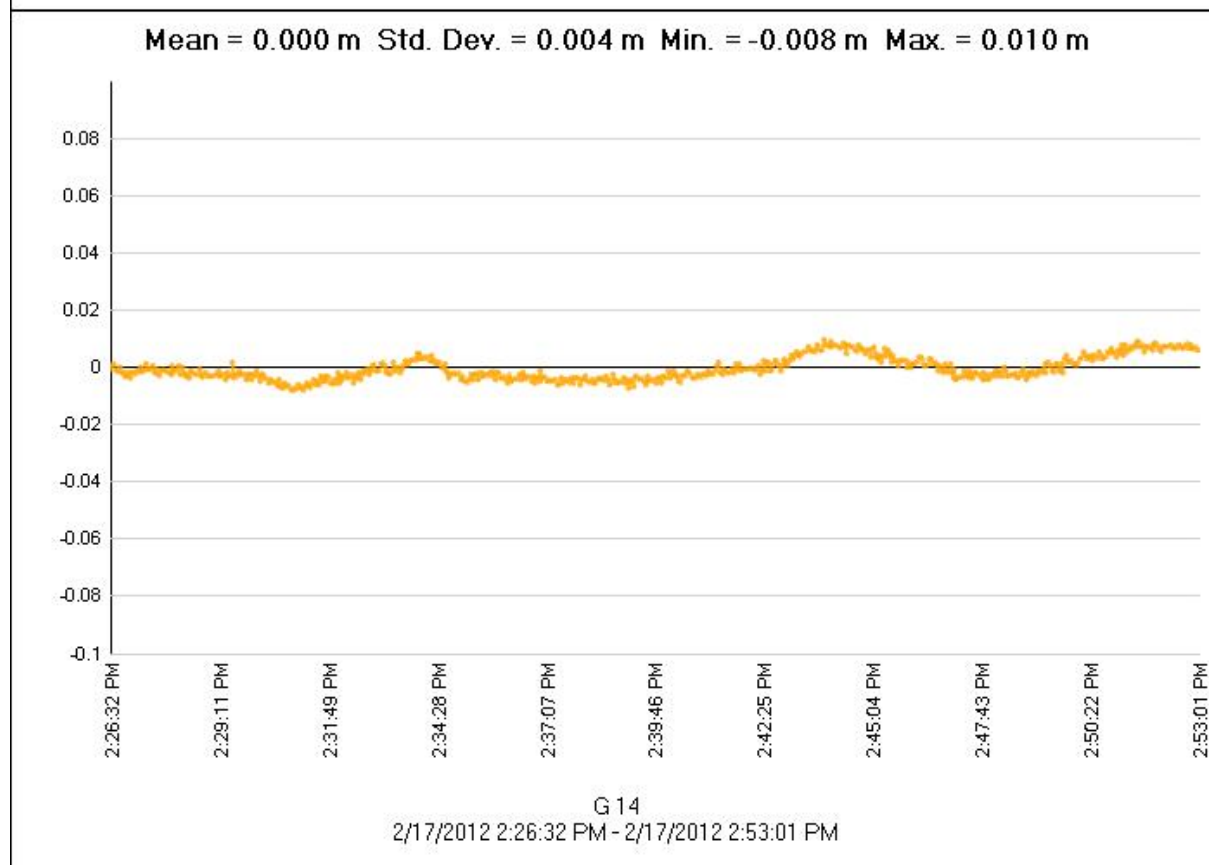
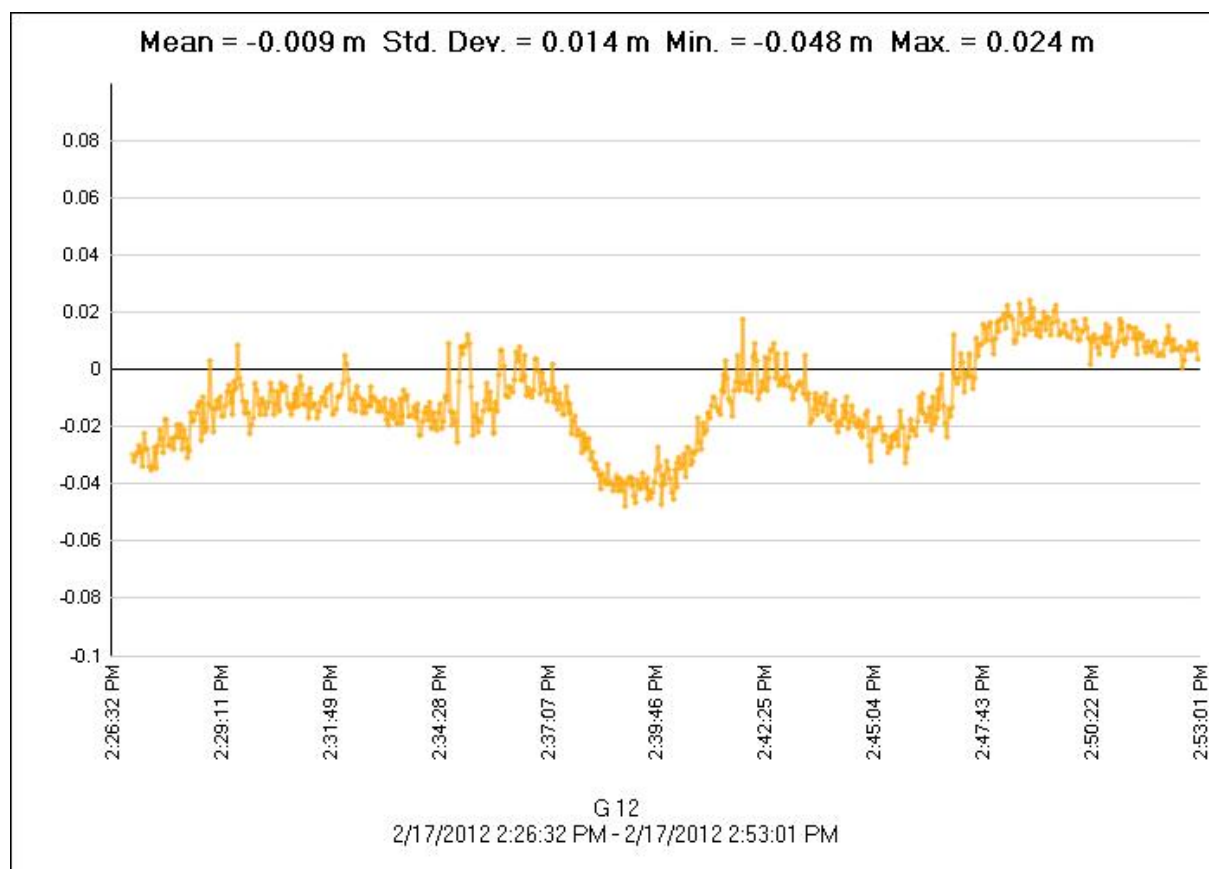
	From	To
Point ID:	HH0645	FVA10-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050480.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080484.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

# Tracking Summary



Residuals





Mean = 0.008 m Std. Dev. = 0.020 m Min. = -0.027 m Max. = 0.069 m



G 18

2/17/2012 2:26:32 PM - 2/17/2012 2:53:01 PM

Mean = 0.004 m Std. Dev. = 0.009 m Min. = -0.016 m Max. = 0.025 m



G 22

2/17/2012 2:26:32 PM - 2/17/2012 2:53:01 PM

Mean = 0.003 m Std. Dev. = 0.014 m Min. = -0.034 m Max. = 0.045 m

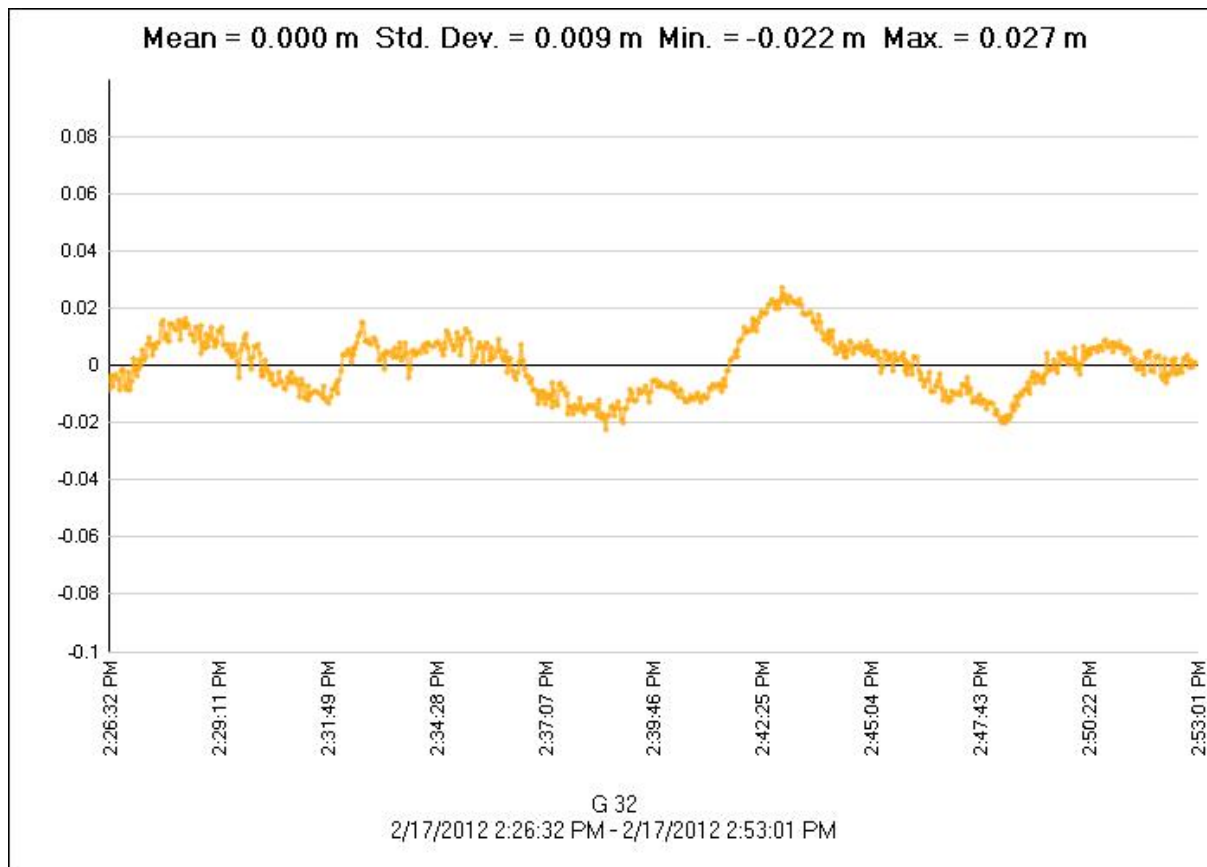


G 25  
2/17/2012 2:26:32 PM - 2/17/2012 2:53:01 PM

Mean = -0.003 m Std. Dev. = 0.004 m Min. = -0.013 m Max. = 0.007 m



G 31  
2/17/2012 2:26:32 PM - 2/17/2012 2:53:01 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

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HH0645 - FVA24-B1 (12:57:37 PM-1:19:43 PM) (S203)

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Baseline observation: HH0645 --- FVA24-B1 (B203)

Processed: 4/3/2012 2:50:48 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.011 m

Vertical precision: 0.015 m

RMS: 0.004 m

Maximum PDOP: 1.878

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/17/2012 12:57:37 PM (Local: UTC-7hr)

Processing stop time: 2/17/2012 1:19:43 PM (Local: UTC-7hr)

Processing duration: 00:22:05

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0645				
Grid		Local		Global	
Easting	252723.345 m	Latitude	N37°59'48.17255"	Latitude	N37°59'48.17255"
Northing	4209193.137 m	Longitude	W101°48'57.76498"	Longitude	W101°48'57.76498"
Elevation	995.279 m	Height	970.864 m	Height	970.864 m

To:	FVA24-B1				
Grid		Local		Global	
Easting	251862.629 m	Latitude	N38°15'45.84947"	Latitude	N38°15'45.84946"
Northing	4238771.682 m	Longitude	W101°50'10.06395"	Longitude	W101°50'10.06395"
Elevation	1112.314 m	Height	1088.311 m	Height	1088.311 m

Vector					
9Ughb[	-860.717 m	NS Fwd Azimuth	356°35'37"	L	1994.424 m
Bcfh\jb[	29578.545 m	Ellipsoid Dist.	29580.542 m	M	18118.328 m
9Yj Uhcb	117.035 m	<Y][\h	117.447 m	N	23303.486 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	0.007 m
Point ID	0.008 m	Point Description	0.008 m	Point Type	0.005 m

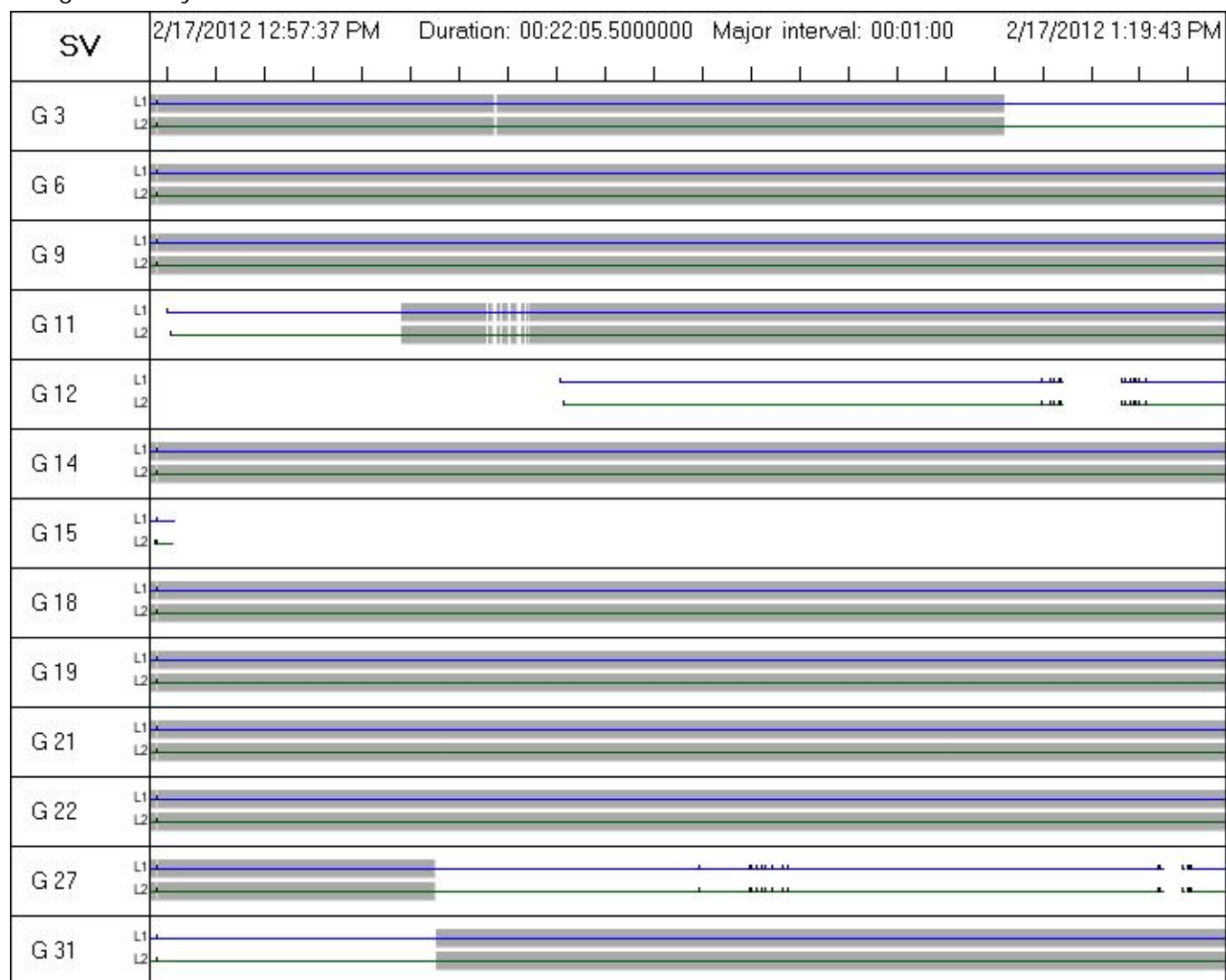
## Aposteriori Covariance Matrix (Meter<sup>2</sup>)

	X	Y	Z
X	0.0000096961		
Y	-0.0000015344	0.0000512669	
Z	0.0000016804	-0.0000171020	0.0000290434

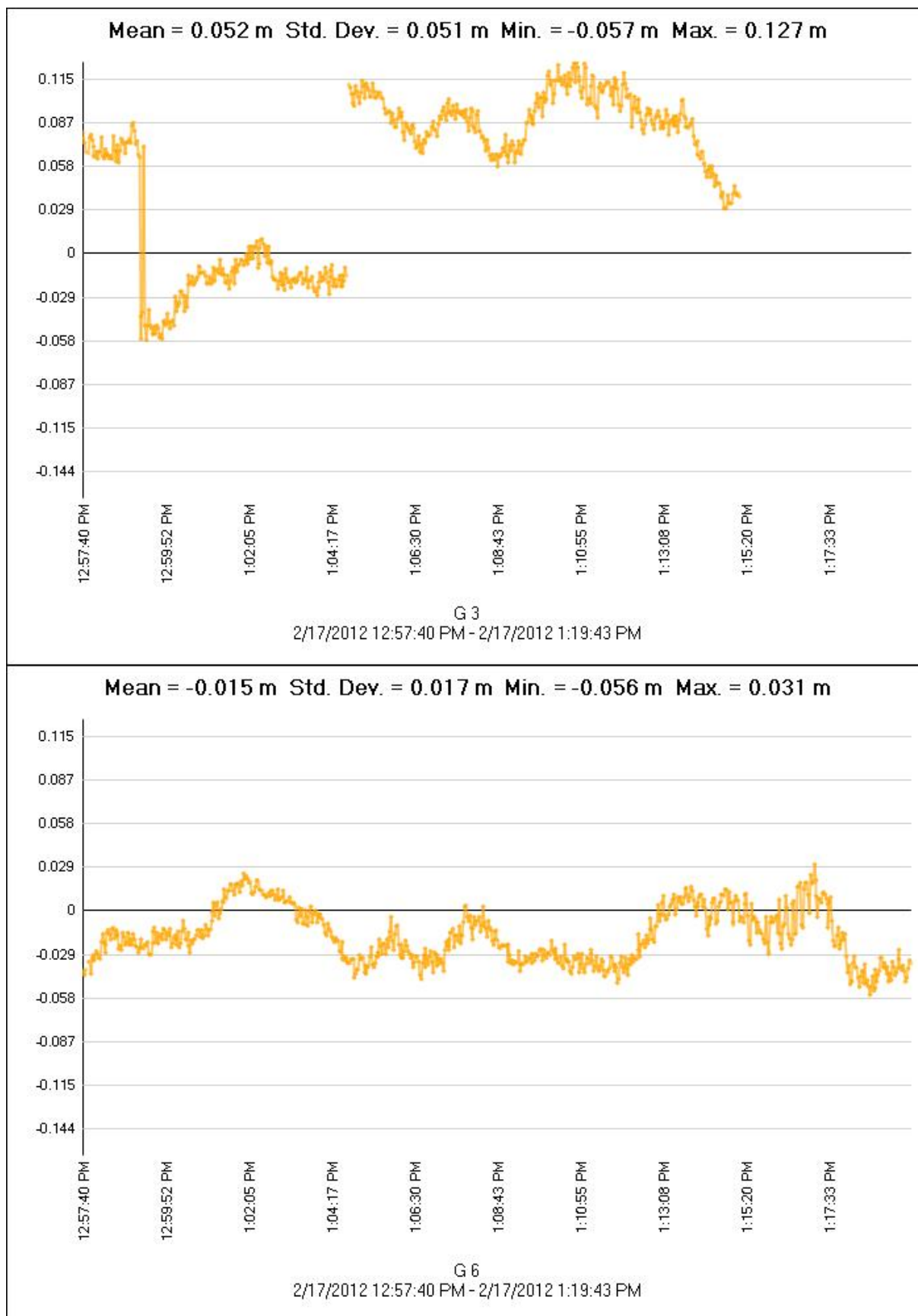
## Occupations

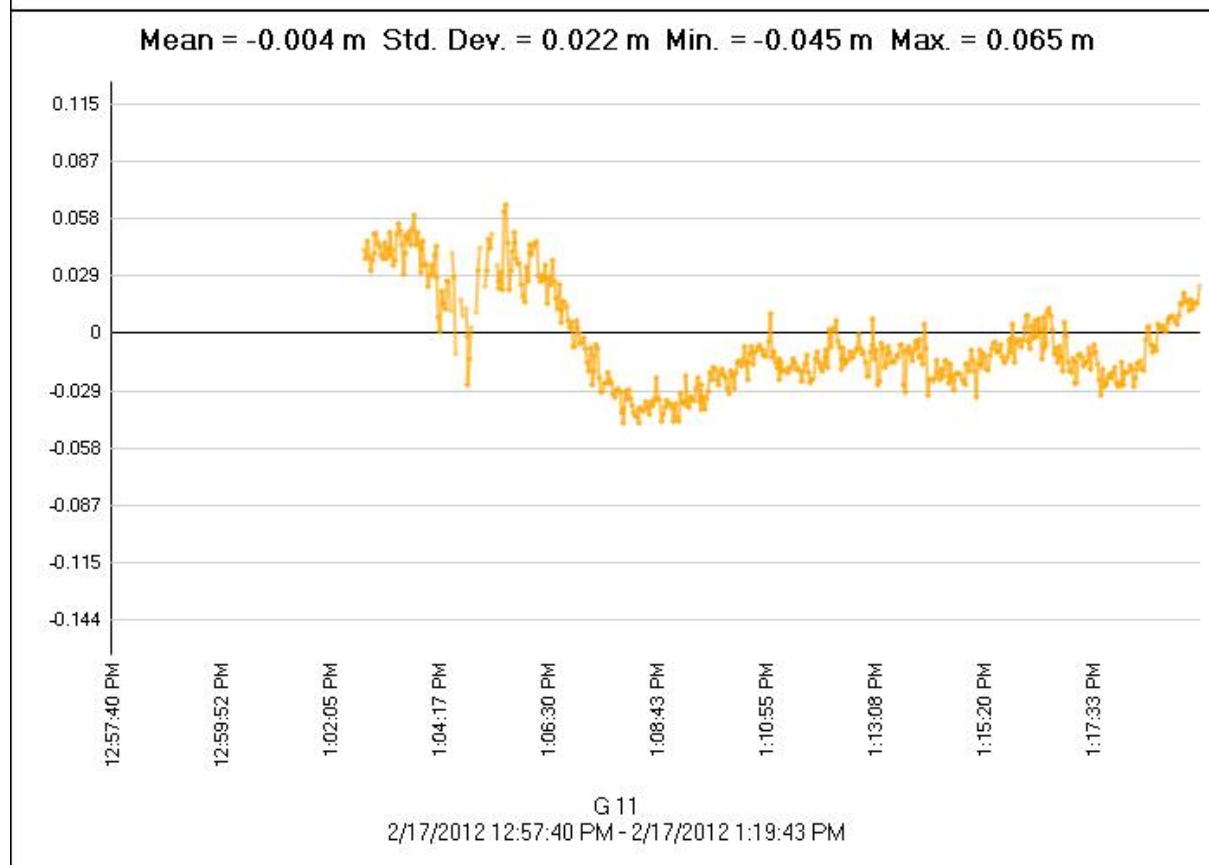
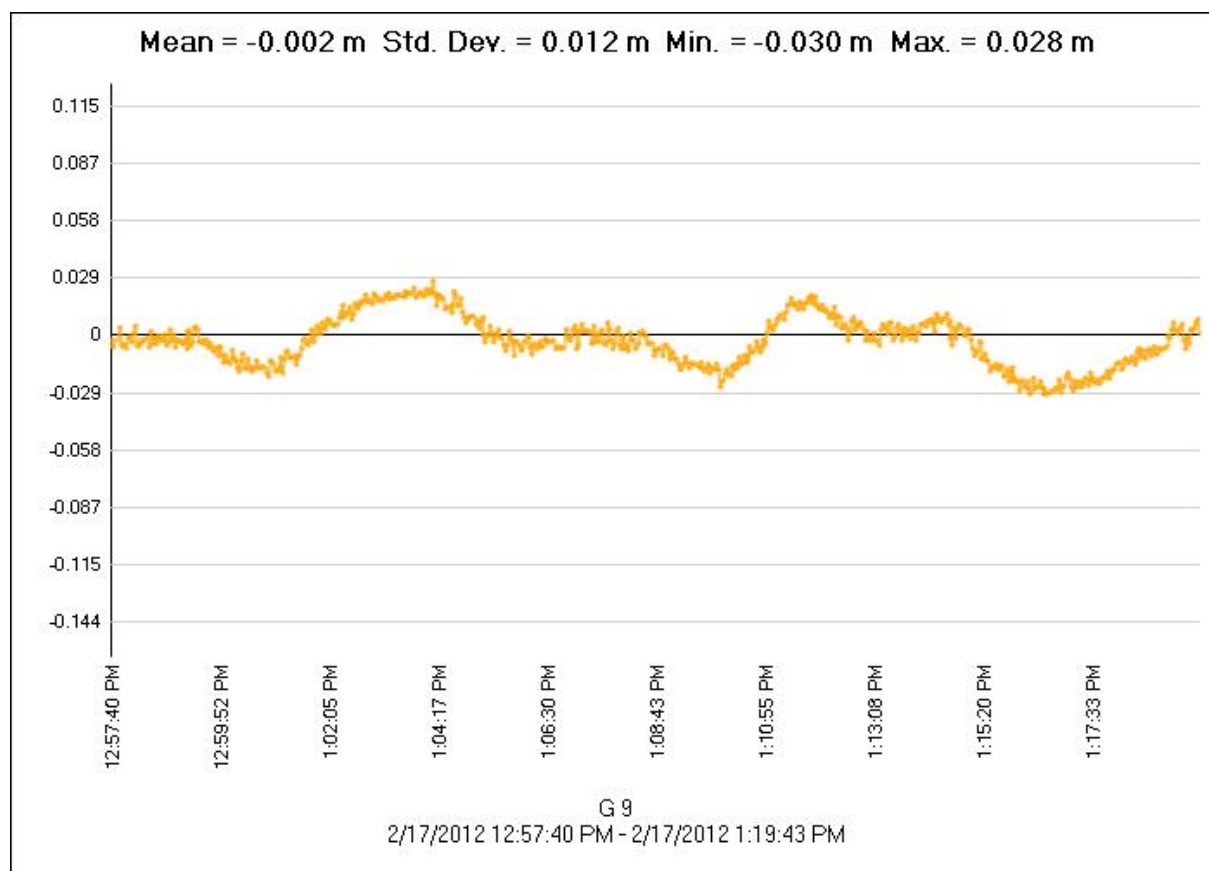
	From	To
Point ID:	HH0645	FVA24-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050480.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080483.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

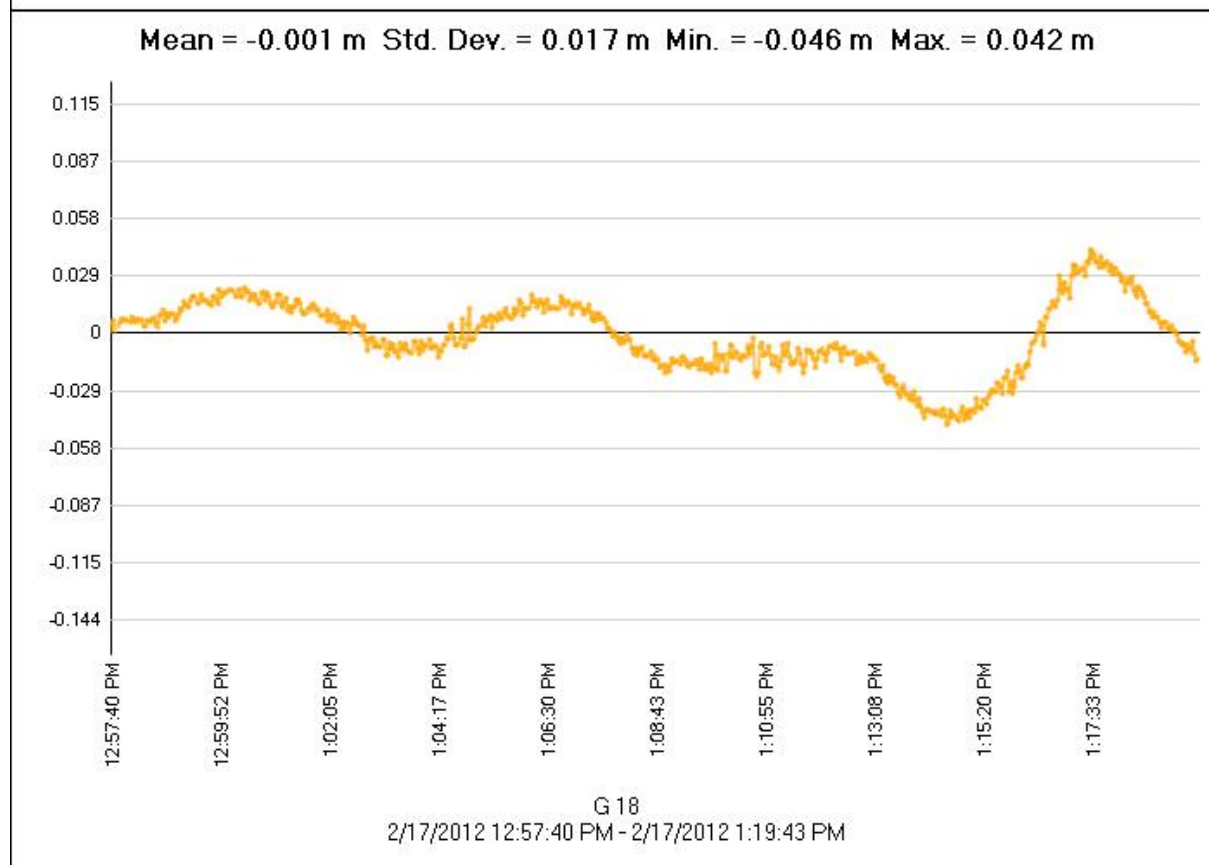
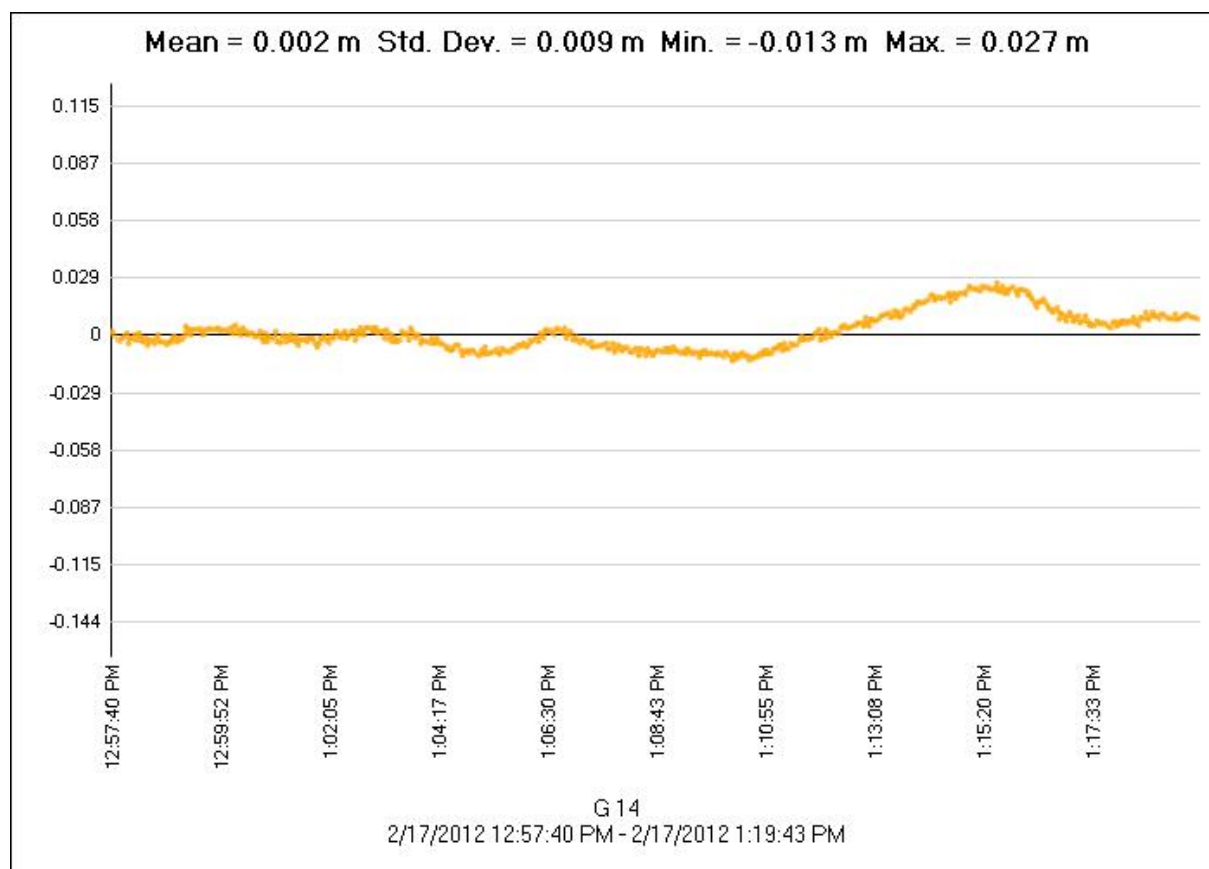
# Tracking Summary

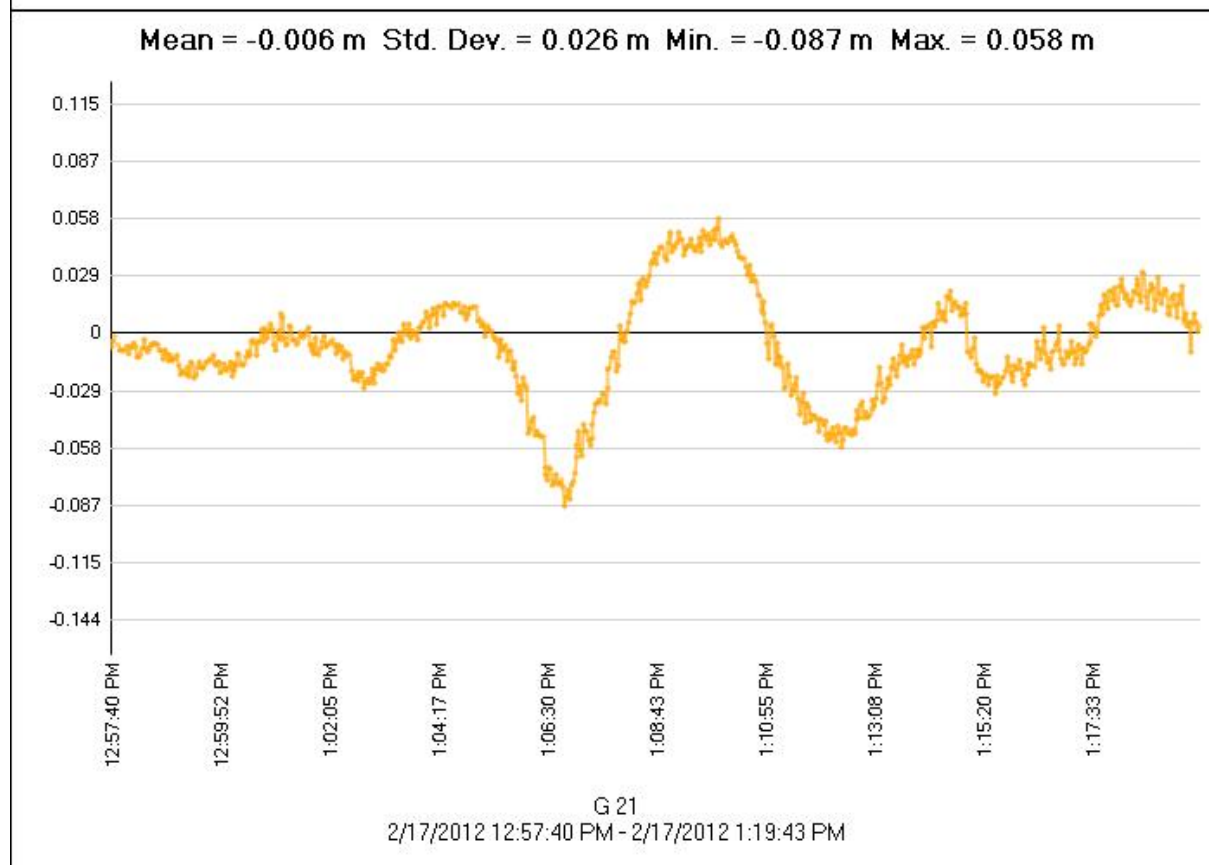
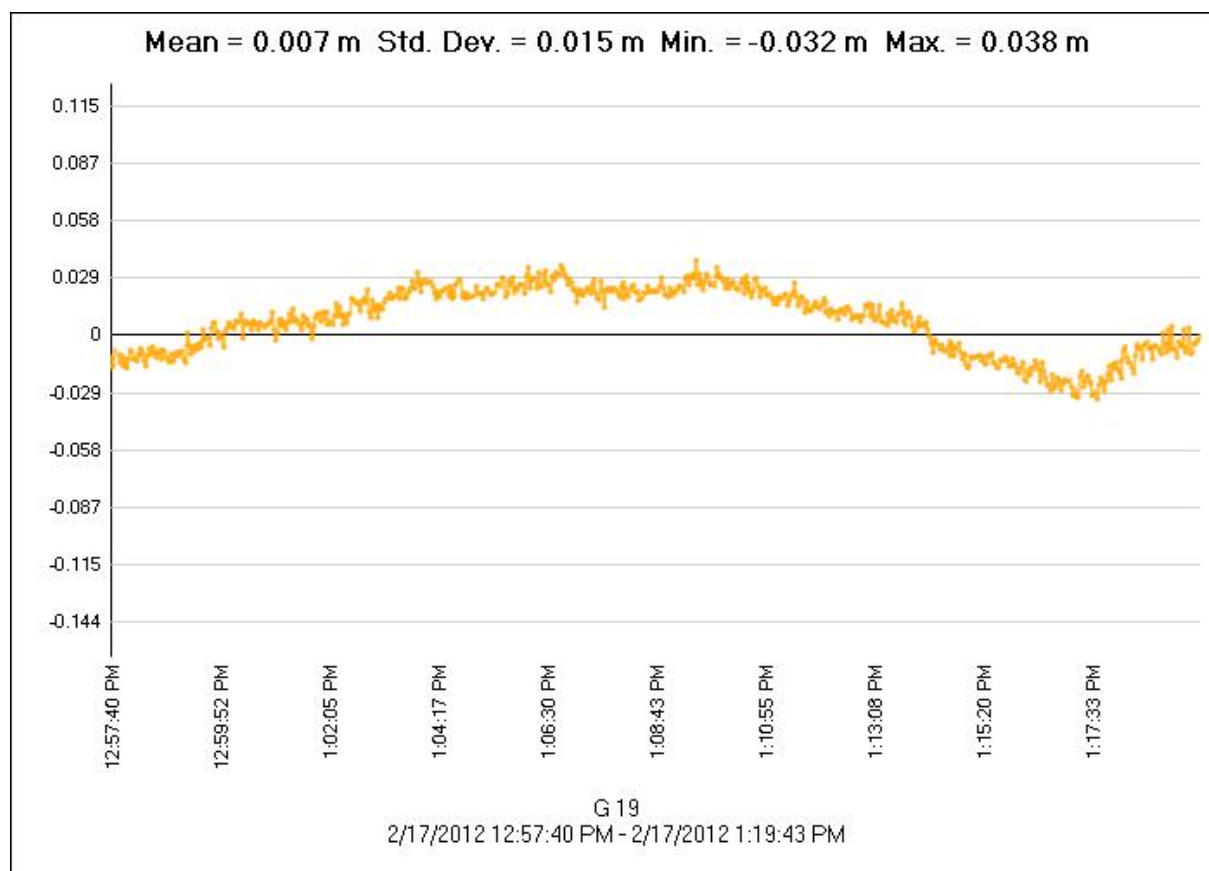


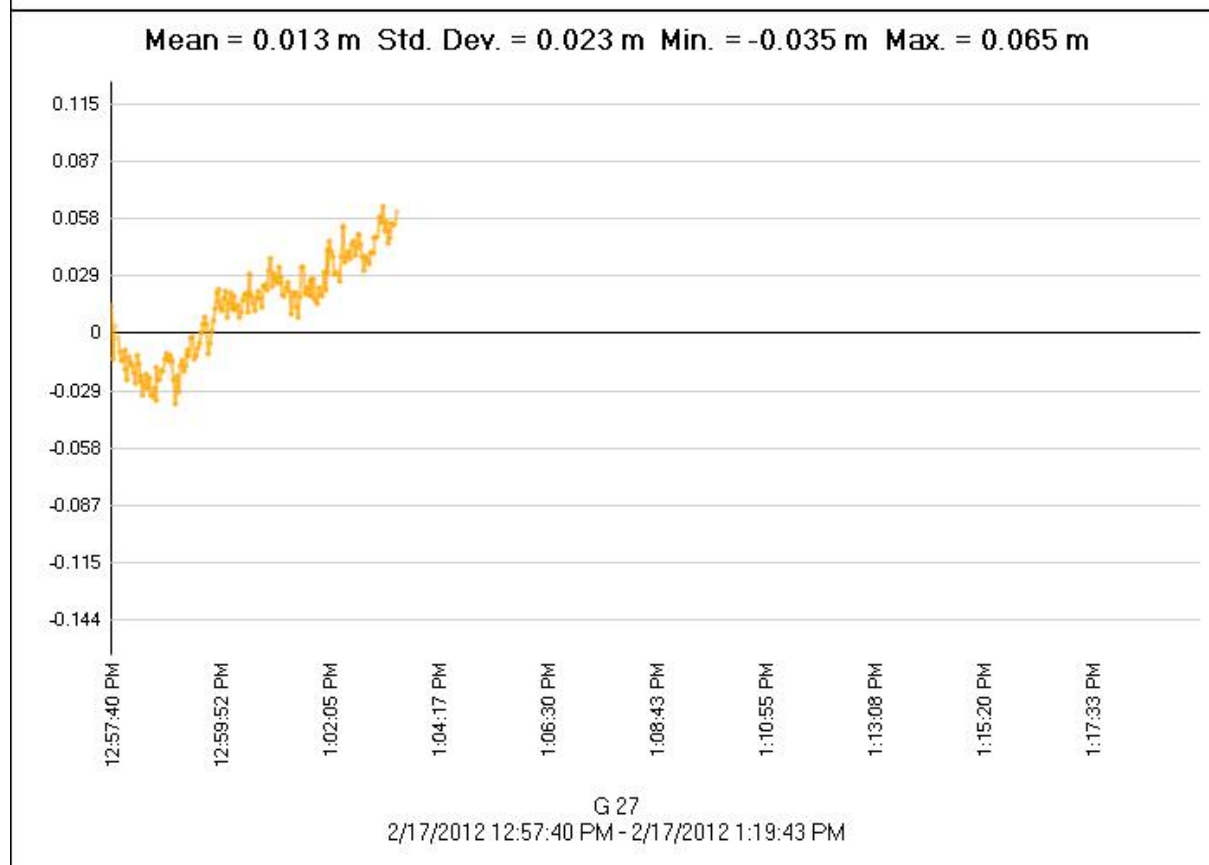
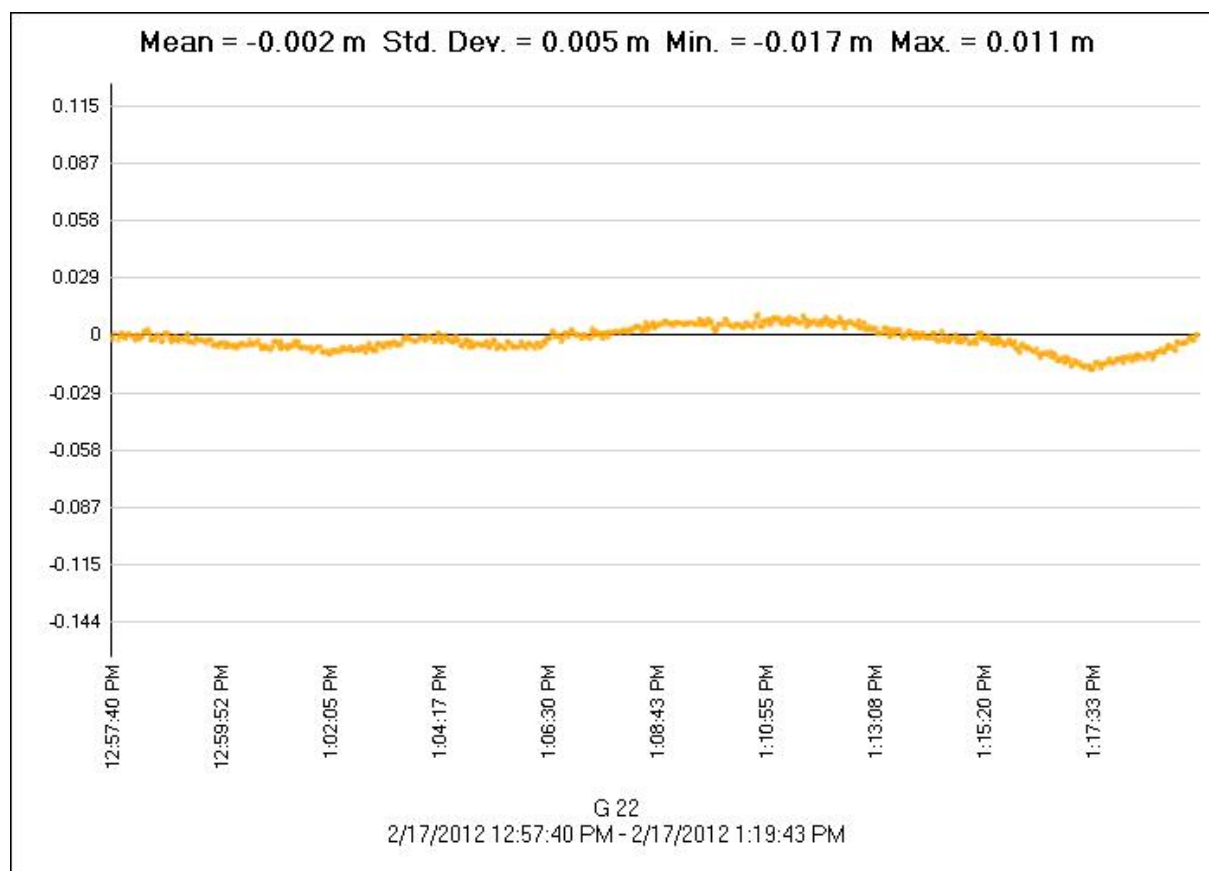
## Residuals

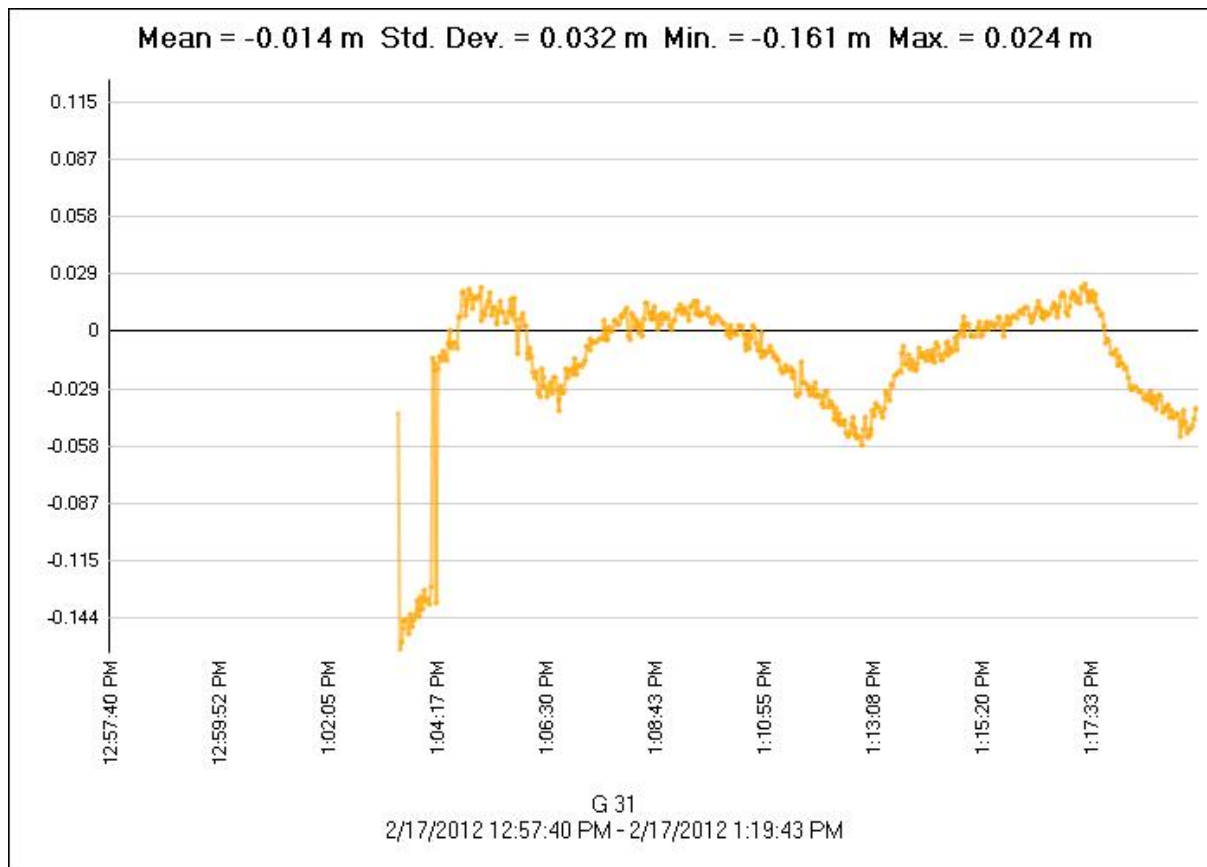














## Processing style

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



Baseline observation: HH0645 --- FVA05-B1 (B204)

Processed: 4/3/2012 2:50:44 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.009 m

Vertical precision: 0.015 m

RMS: 0.002 m

Maximum PDOP: 2.376

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/17/2012 11:53:24 AM (Local: UTC-7hr)

Processing stop time: 2/17/2012 12:16:36 PM (Local: UTC-7hr)

Processing duration: 00:23:12

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0645				
Grid		Local		Global	
Easting	252723.345 m	Latitude	N37°59'48.17255"	Latitude	N37°59'48.17255"
Northing	4209193.137 m	Longitude	W101°48'57.76498"	Longitude	W101°48'57.76498"
Elevation	995.279 m	Height	970.864 m	Height	970.864 m

To:	FVA05-B1				
Grid		Local		Global	
Easting	261183.071 m	Latitude	N38°07'56.41771"	Latitude	N38°07'56.41770"
Northing	4224006.287 m	Longitude	W101°43'29.10486"	Longitude	W101°43'29.10486"
Elevation	1081.770 m	Height	1057.439 m	Height	1057.439 m

Vector					
9Ughb[	8459.725 m	NS Fwd Azimuth	27°59'36"	L	9724.092 m
Bcfh\jb[	14813.150 m	Ellipsoid Dist.	17053.028 m	M	7386.477 m
9`Yj Ufcb	86.491 m	<Y][\h	86.575 m	N	11907.465 m

## Standard Errors

Vector errors:					
Point ID	0.002 m	Point Description	0°00'00"	Point Type	0.003 m
Point ID	0.003 m	Point Description	0.003 m	Point Type	0.006 m
Point ID	0.007 m	Point Description	0.007 m	Point Type	0.006 m

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

	X	Y	Z
X	0.0000077091		
Y	0.0000073982	0.0000347686	
Z	-0.0000076591	-0.0000210200	0.0000315515

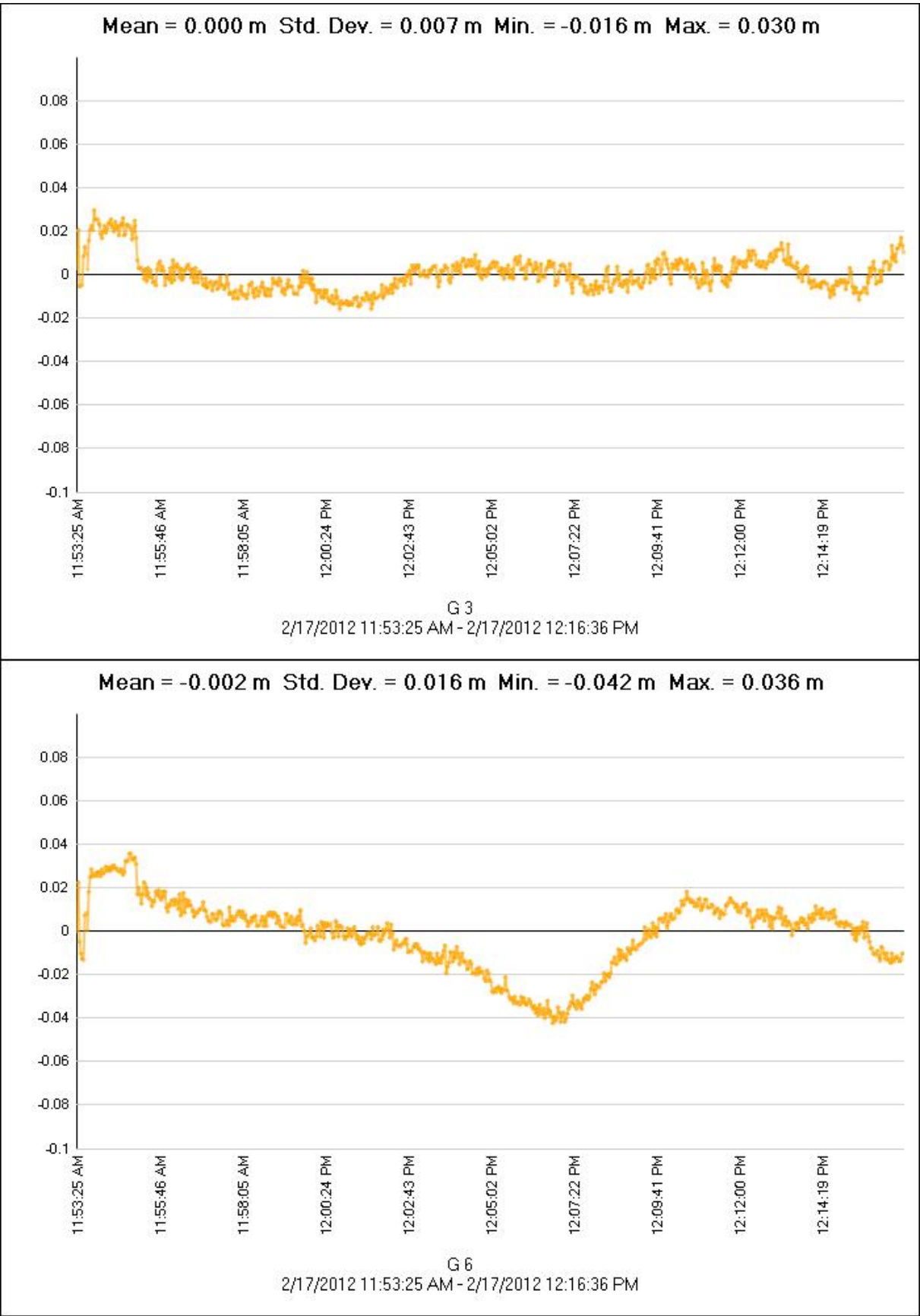
## Occupations

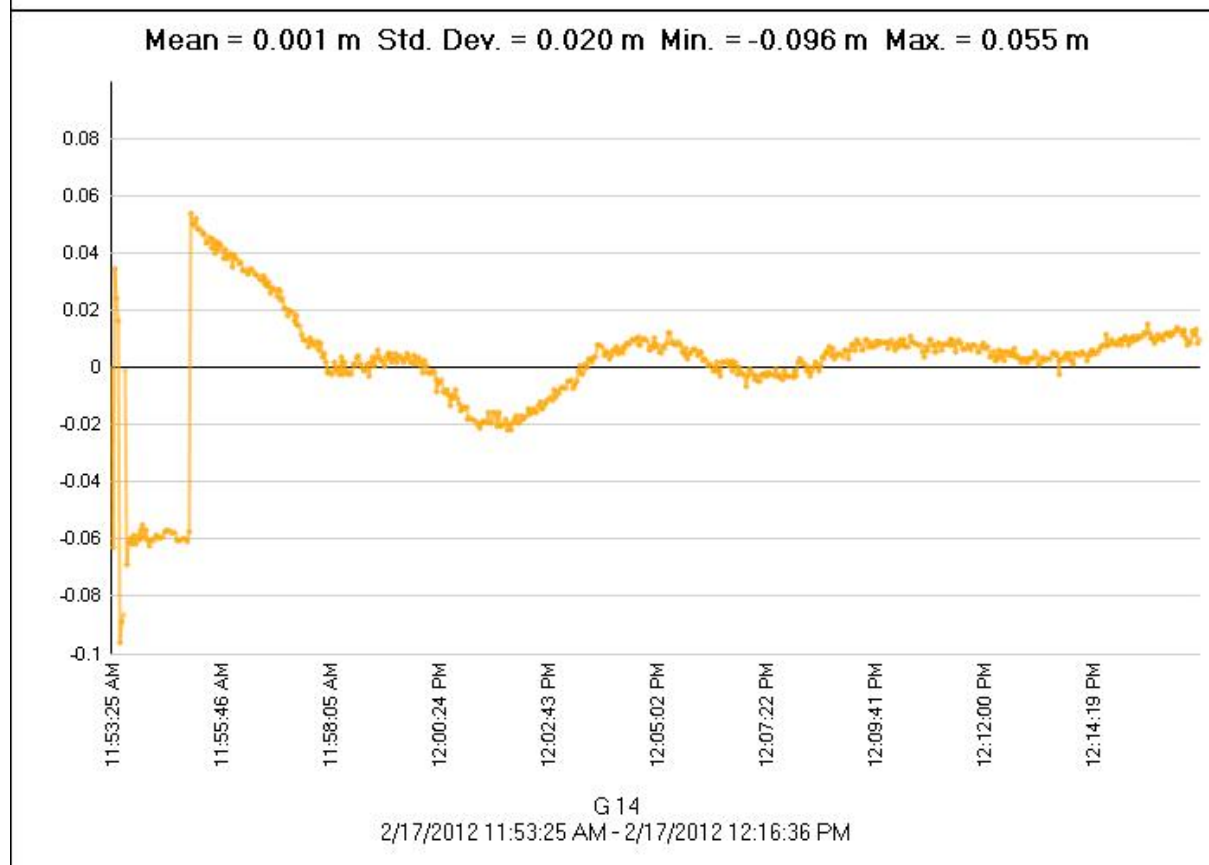
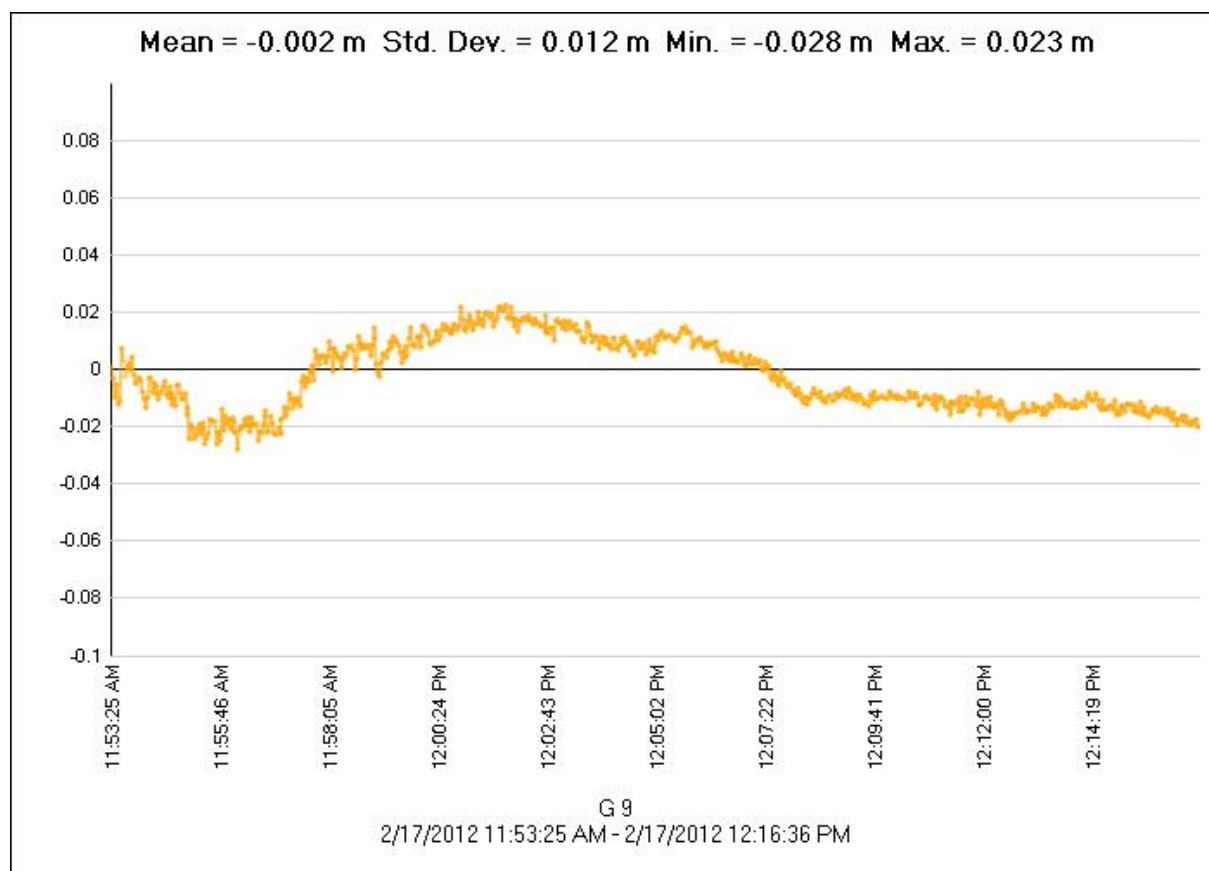
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Point ID:	HH0645	FVA05-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050480.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080482.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna 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	2/17/2012 11:53:24 AM	Duration: 00:23:12 Major interval: 00:01:00	2/17/2012 12:16:36 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 = 0.012 m Std. Dev. = 0.028 m Min. = -0.066 m Max. = 0.090 m



G 15

2/17/2012 11:53:25 AM - 2/17/2012 12:16:36 PM

Mean = 0.000 m Std. Dev. = 0.014 m Min. = -0.038 m Max. = 0.019 m



G 18

2/17/2012 11:53:25 AM - 2/17/2012 12:16:36 PM

Mean = 0.002 m Std. Dev. = 0.017 m Min. = -0.043 m Max. = 0.044 m



G 19

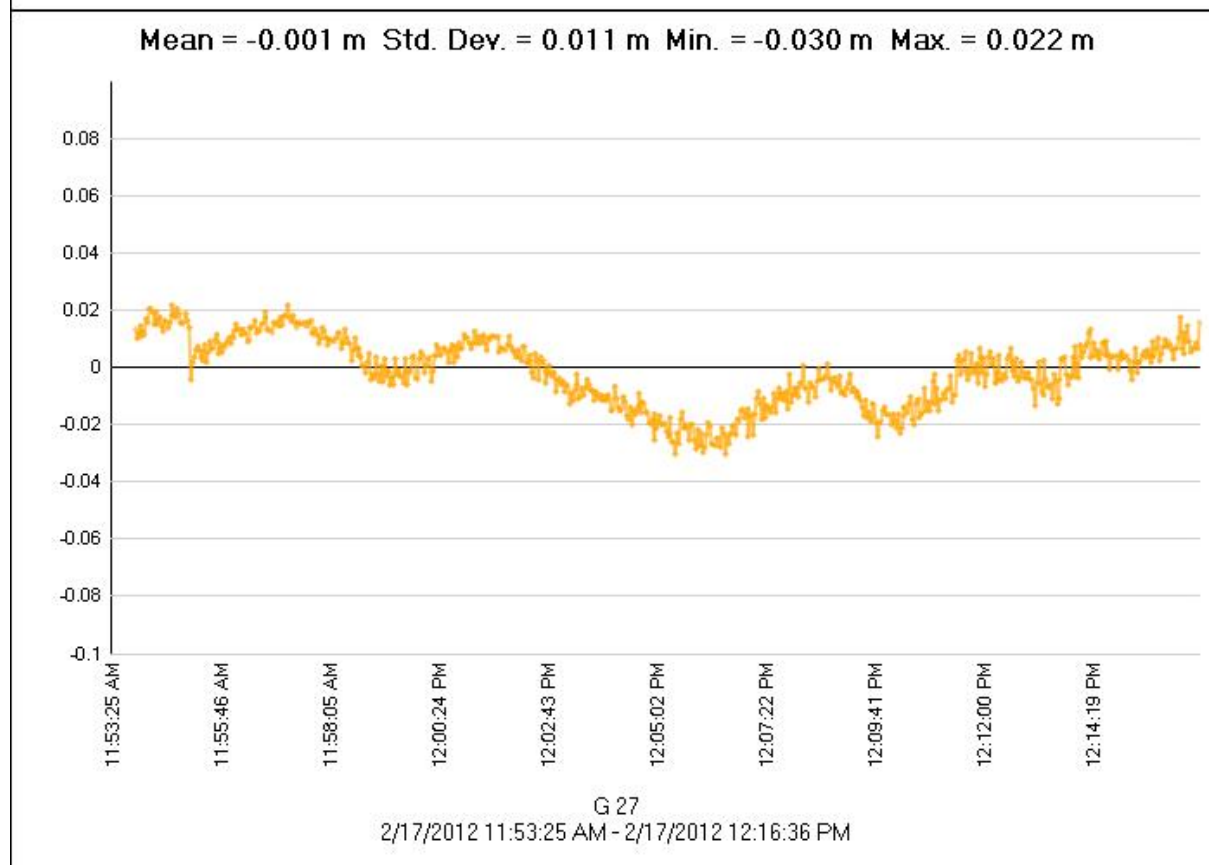
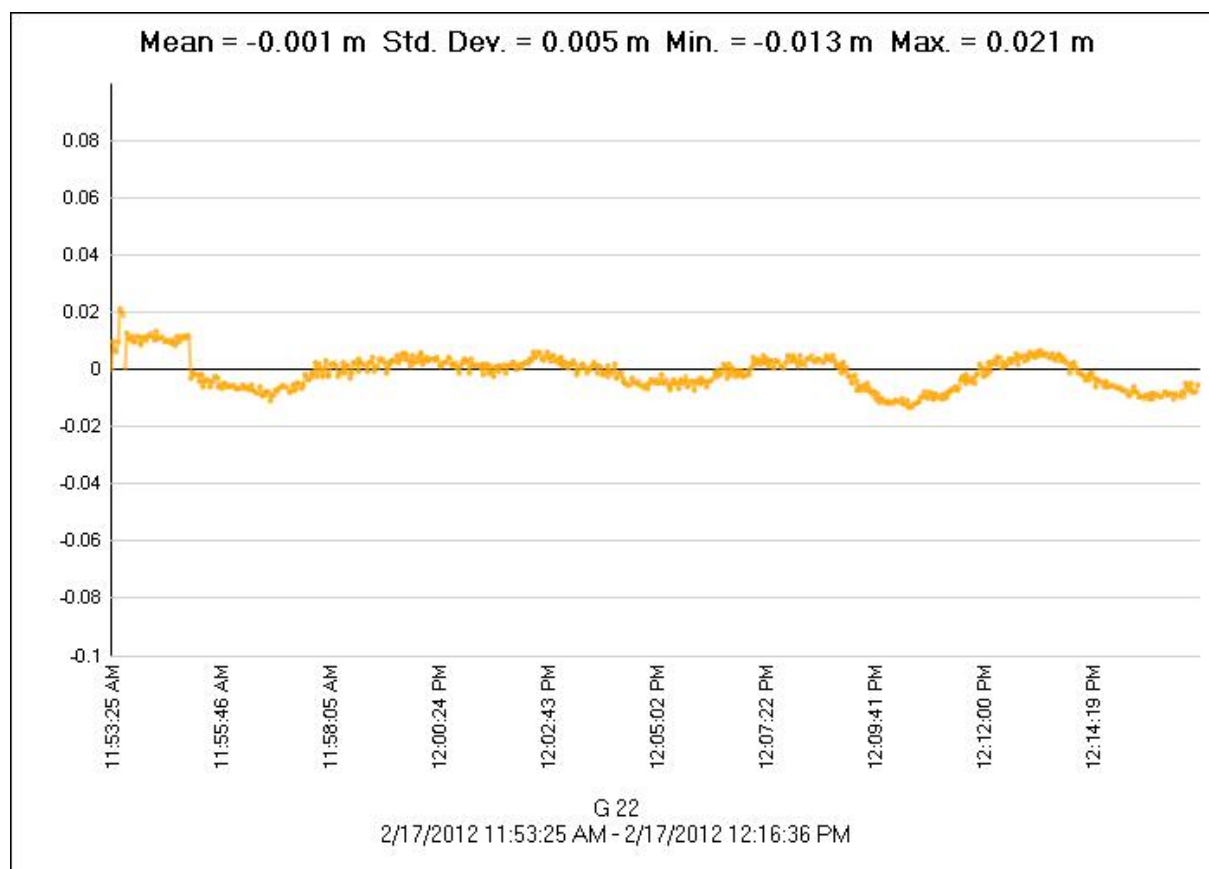
2/17/2012 11:53:25 AM - 2/17/2012 12:16:36 PM

Mean = 0.000 m Std. Dev. = 0.011 m Min. = -0.016 m Max. = 0.037 m



G 21

2/17/2012 11:53:25 AM - 2/17/2012 12:16:36 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

---

HH0645 - SVA25-B1 (10:59:38 AM-11:19:44 AM) (S205)

---

Baseline observation: HH0645 --- SVA25-B1 (B205)

Processed: 4/3/2012 2:50:55 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.011 m

Vertical precision: 0.011 m

RMS: 0.004 m

Maximum PDOP: 2.049

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/17/2012 10:59:38 AM (Local: UTC-7hr)

Processing stop time: 2/17/2012 11:19:44 AM (Local: UTC-7hr)

Processing duration: 00:20:06

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0645				
Grid		Local		Global	
Easting	252723.345 m	Latitude	N37°59'48.17255"	Latitude	N37°59'48.17255"
Northing	4209193.137 m	Longitude	W101°48'57.76498"	Longitude	W101°48'57.76498"
Elevation	995.279 m	Height	970.864 m	Height	970.864 m

To:	SVA25-B1				
Grid		Local		Global	
Easting	281500.859 m	Latitude	N38°03'37.26927"	Latitude	N38°03'37.26927"
Northing	4215439.965 m	Longitude	W101°29'25.90459"	Longitude	W101°29'25.90459"
Elevation	1025.182 m	Height	1000.435 m	Height	1000.435 m

Vector					
9Ughb[	28777.514 m	NS Fwd Azimuth	76°01'02"	L	28869.440 m
BcfA\jb[	6246.828 m	Ellipsoid Dist.	29439.803 m	M	-1533.987 m
9`Yj U\jcb	29.903 m	<Y][\h	29.571 m	N	5583.126 m

## Standard Errors

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

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

	X	Y	Z
X	0.0000075168		
Y	0.0000069514	0.0000295922	
Z	-0.0000014457	-0.0000059800	0.0000209415

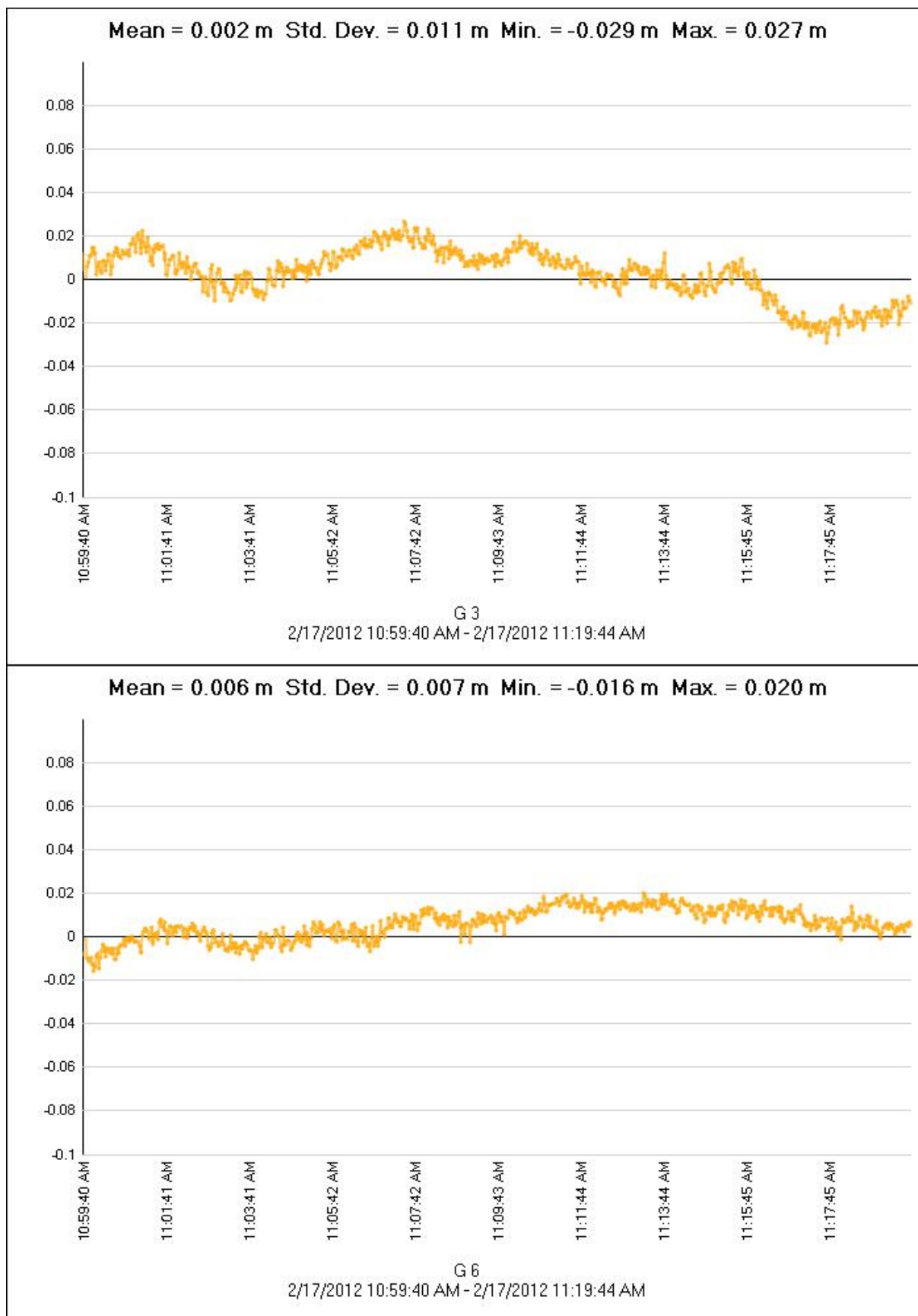
## Occupations

	From	To
Point ID:	HH0645	SVA25-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050480.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080481.12o
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	2/17/2012 10:59:38 AM	Duration: 00:20:06 Major interval: 00:01:00	2/17/2012 11:19:44 AM
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



Mean = 0.006 m Std. Dev. = 0.019 m Min. = -0.031 m Max. = 0.056 m



G 9

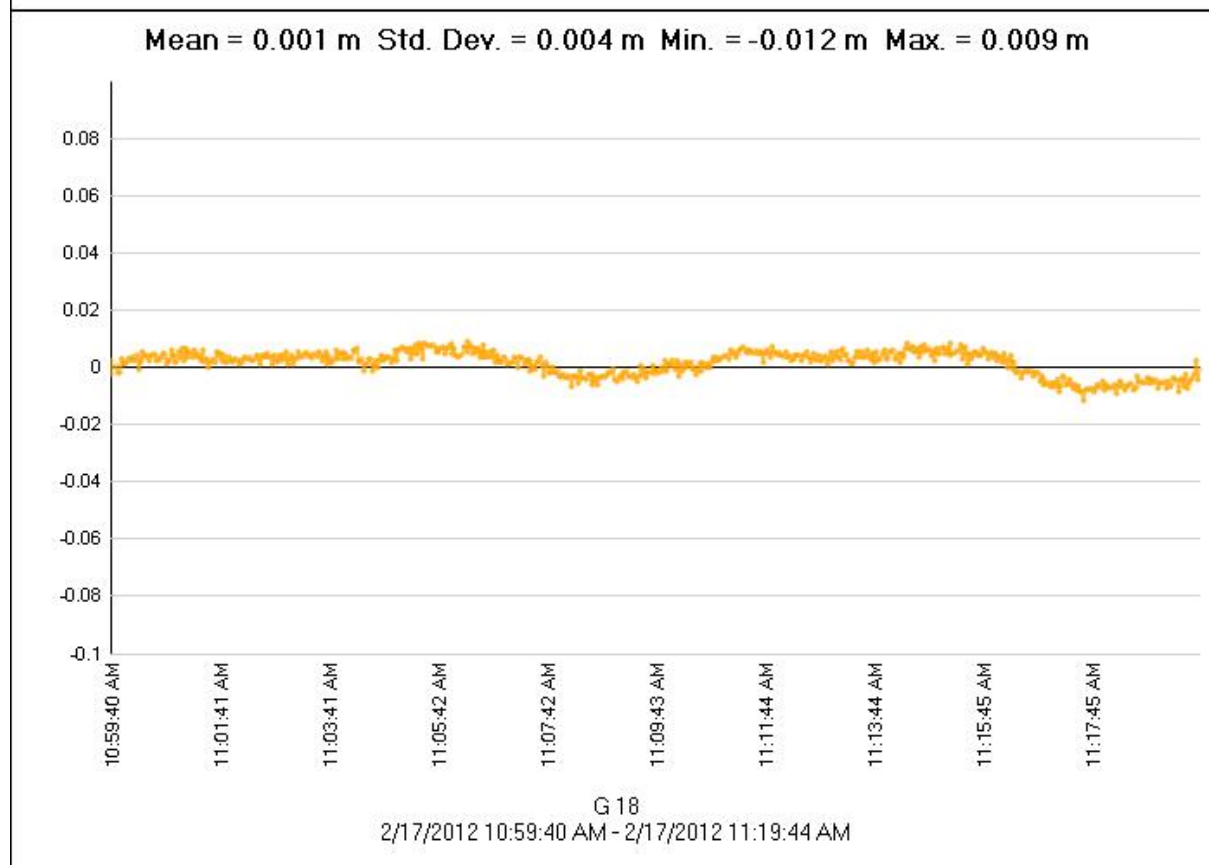
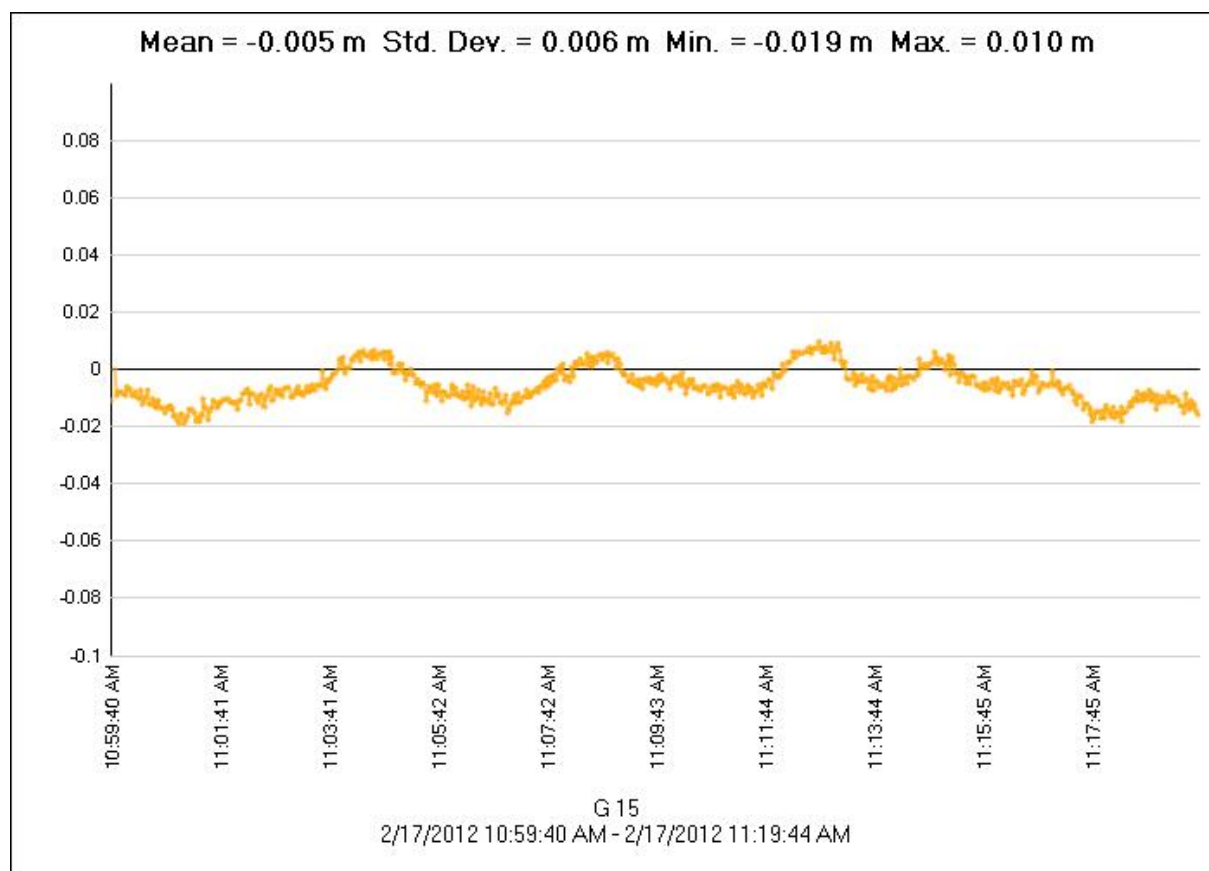
2/17/2012 10:59:40 AM - 2/17/2012 11:19:44 AM

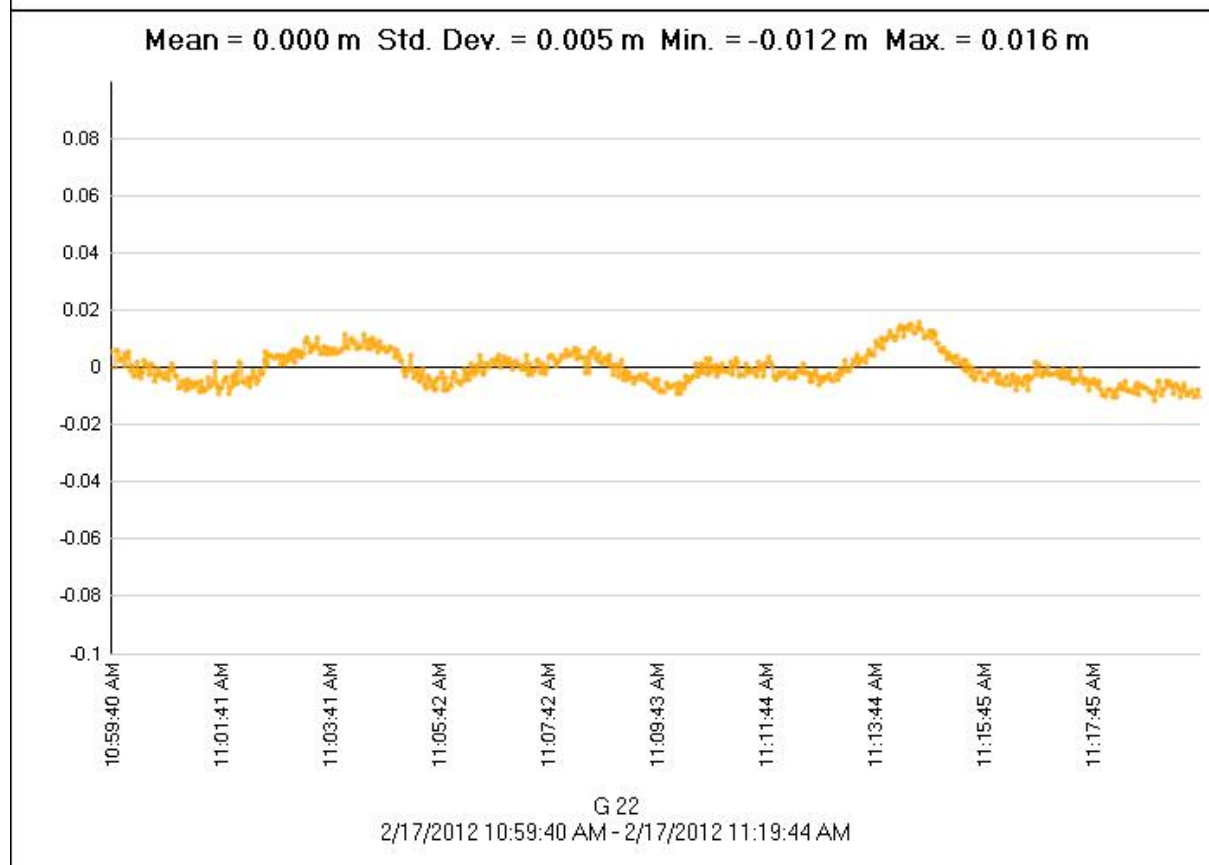
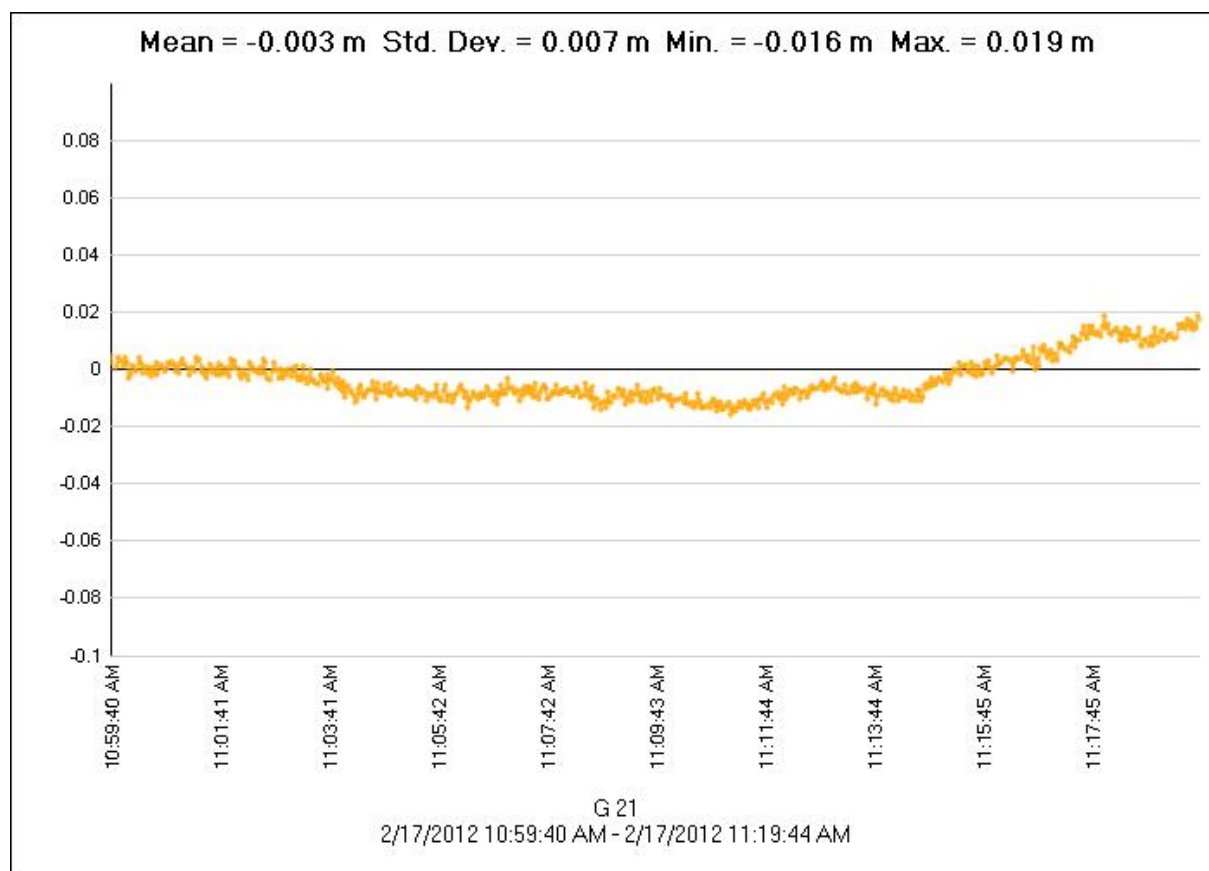
Mean = 0.001 m Std. Dev. = 0.015 m Min. = -0.032 m Max. = 0.050 m



G 14

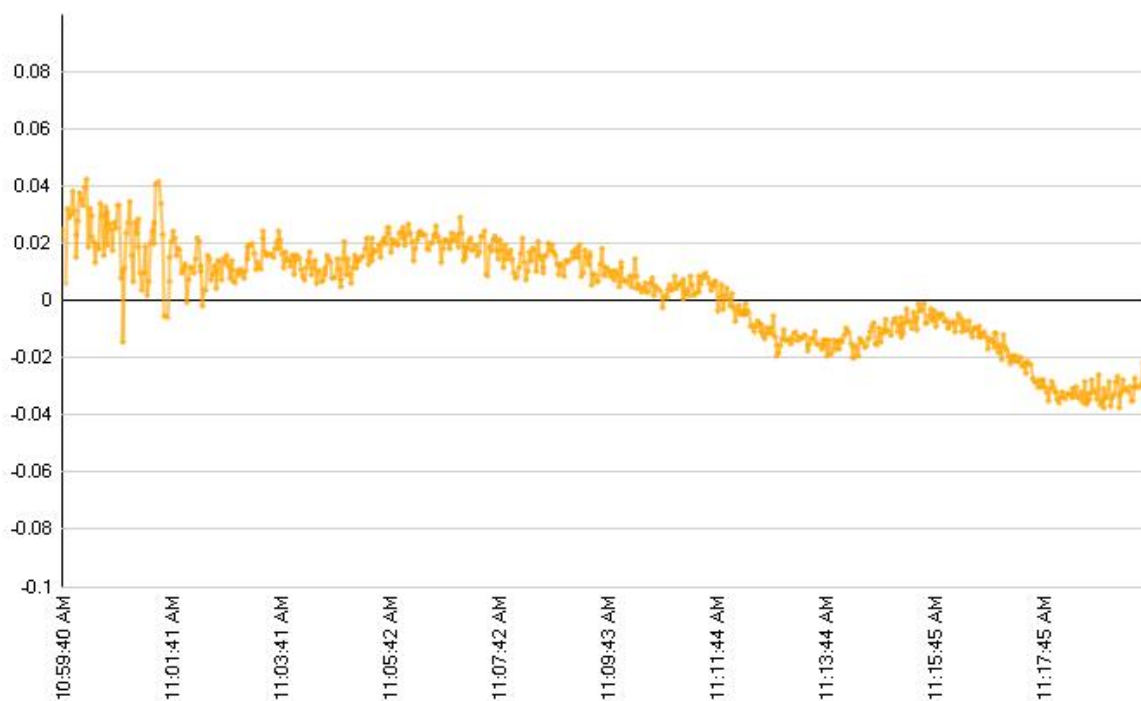
2/17/2012 10:59:40 AM - 2/17/2012 11:19:44 AM







Mean = 0.002 m Std. Dev. = 0.017 m Min. = -0.038 m Max. = 0.042 m



G 27

2/17/2012 10:59:40 AM - 2/17/2012 11:19:44 AM

Mean = -0.002 m Std. Dev. = 0.027 m Min. = -0.075 m Max. = 0.048 m





G 29

2/17/2012 10:59:40 AM - 2/17/2012 11:19:44 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

---

HH0645 - FVA25-B1 (10:16:29 AM-10:39:12 AM) (S206)

---

Baseline observation: HH0645 --- FVA25-B1 (B206)

Processed: 4/3/2012 2:50:41 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.011 m

Vertical precision: 0.013 m

RMS: 0.005 m

Maximum PDOP: 3.001

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/17/2012 10:16:29 AM (Local: UTC-7hr)

Processing stop time: 2/17/2012 10:39:12 AM (Local: UTC-7hr)

Processing duration: 00:22:43

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0645				
Grid		Local		Global	
Easting	252723.345 m	Latitude	N37°59'48.17255"	Latitude	N37°59'48.17255"
Northing	4209193.137 m	Longitude	W101°48'57.76498"	Longitude	W101°48'57.76498"
Elevation	995.279 m	Height	970.864 m	Height	970.864 m

To:	FVA25-B1				
Grid		Local		Global	
Easting	278543.737 m	Latitude	N38°02'44.24395"	Latitude	N38°02'44.24395"
Northing	4213883.949 m	Longitude	W101°31'25.40640"	Longitude	W101°31'25.40640"
Elevation	1028.590 m	Height	1003.862 m	Height	1003.862 m

Vector					
9Ughb[	25820.392 m	NS Fwd Azimuth	77°58'05"	L	25812.454 m
Bcfh\jb[	4690.812 m	Ellipsoid Dist.	26235.751 m	M	-1942.970 m
9Yj Uhcb	33.311 m	<Y][\h	32.998 m	N	4297.640 m

## Standard Errors

Vector errors:

Point ID	0.003 m	Point Description	0°00'00"	Point Type	0.004 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	0.004 m









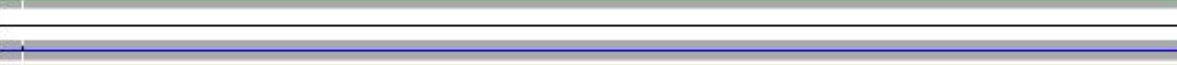




## Aposteriori Covariance Matrix (Meter<sup>2</sup>)

	X	Y	Z
X	0.0000134187		
Y	0.0000134363	0.0000405309	
Z	-0.0000026543	-0.0000085006	0.0000159260

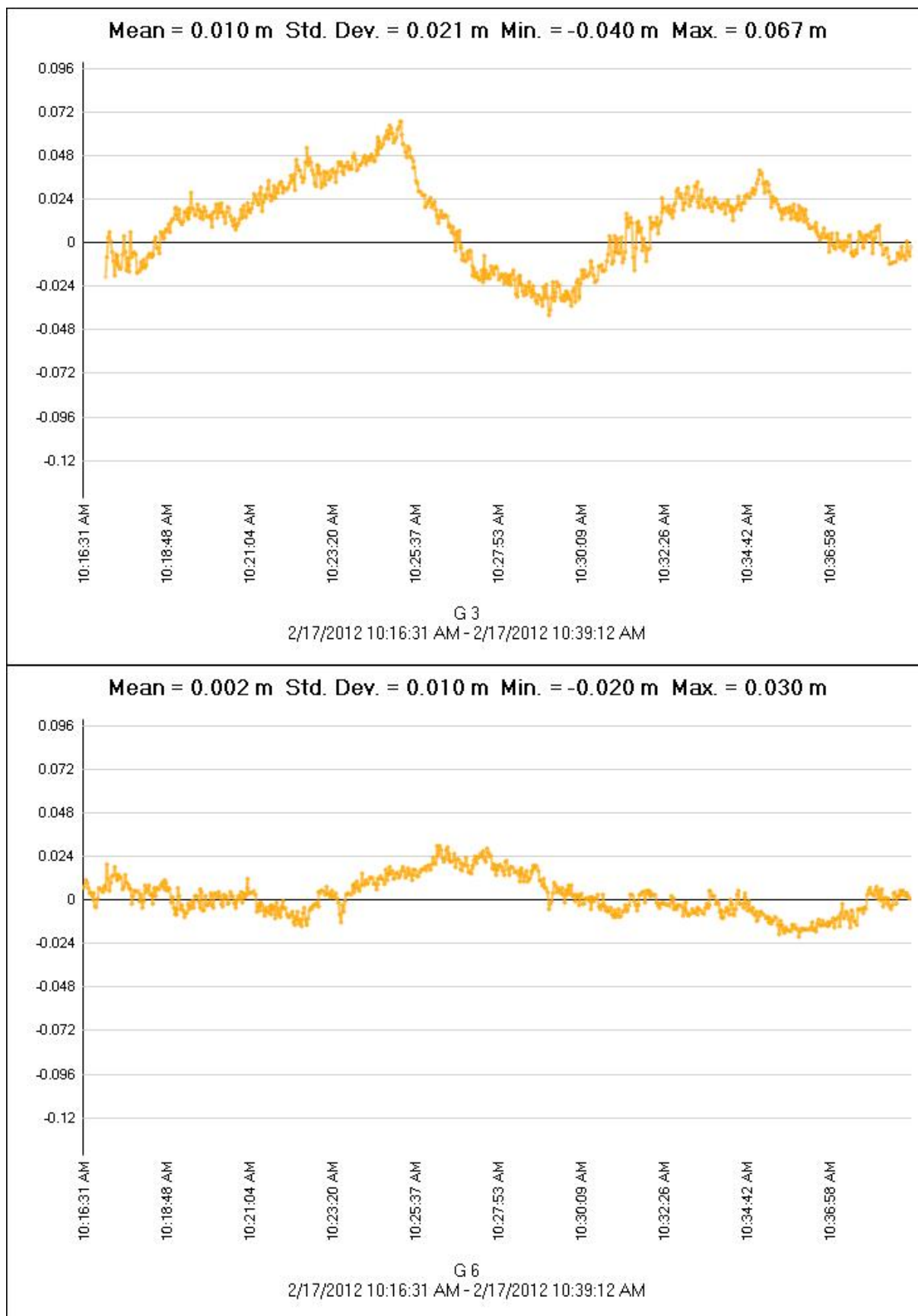
## Occupations

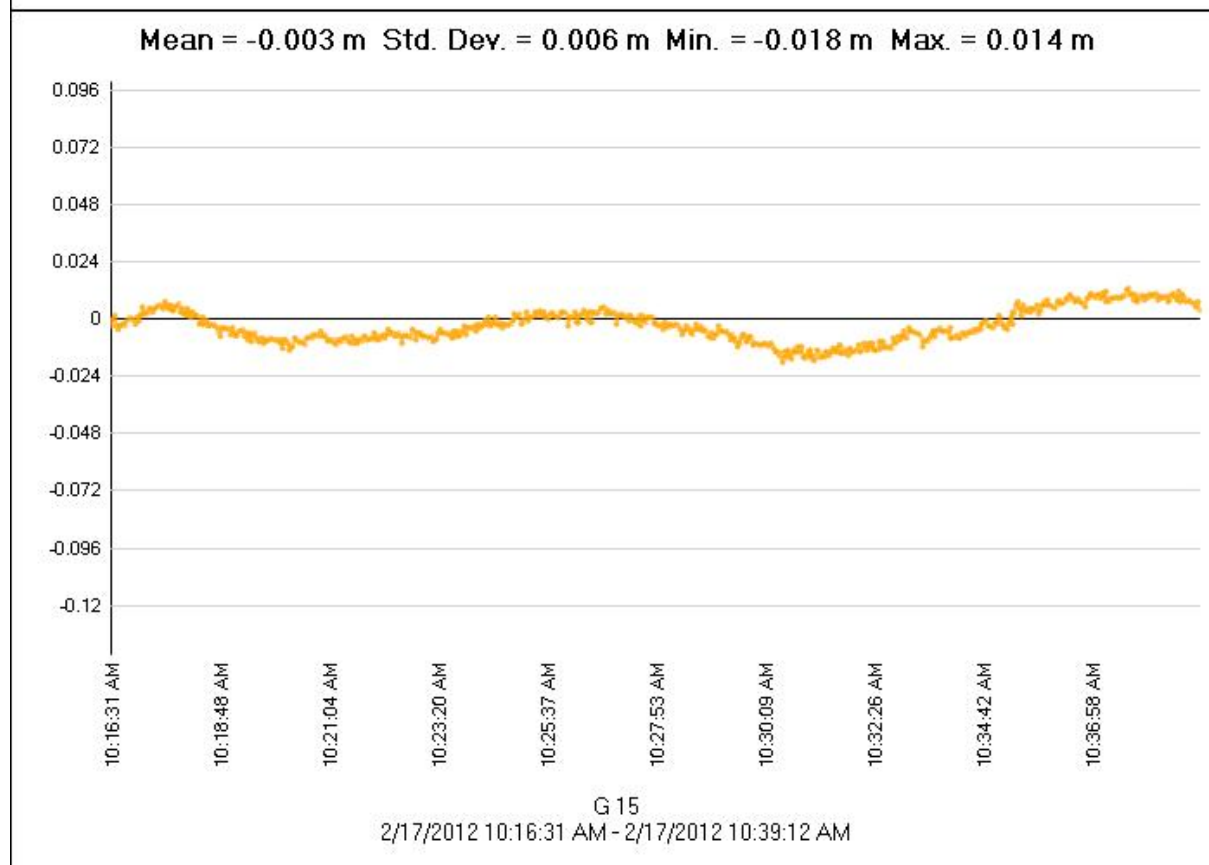
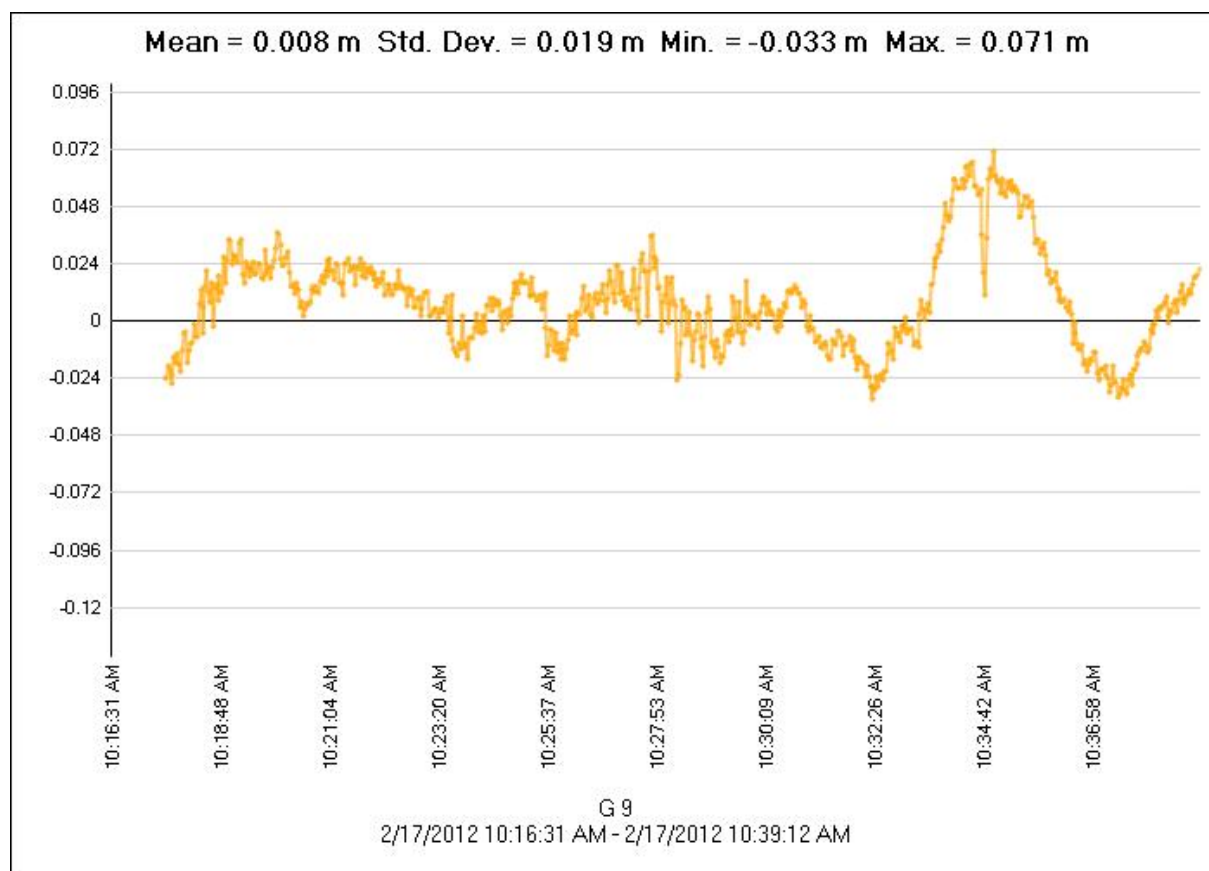
	From	To
Point ID:	HH0645	FVA25-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050480.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00080480.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

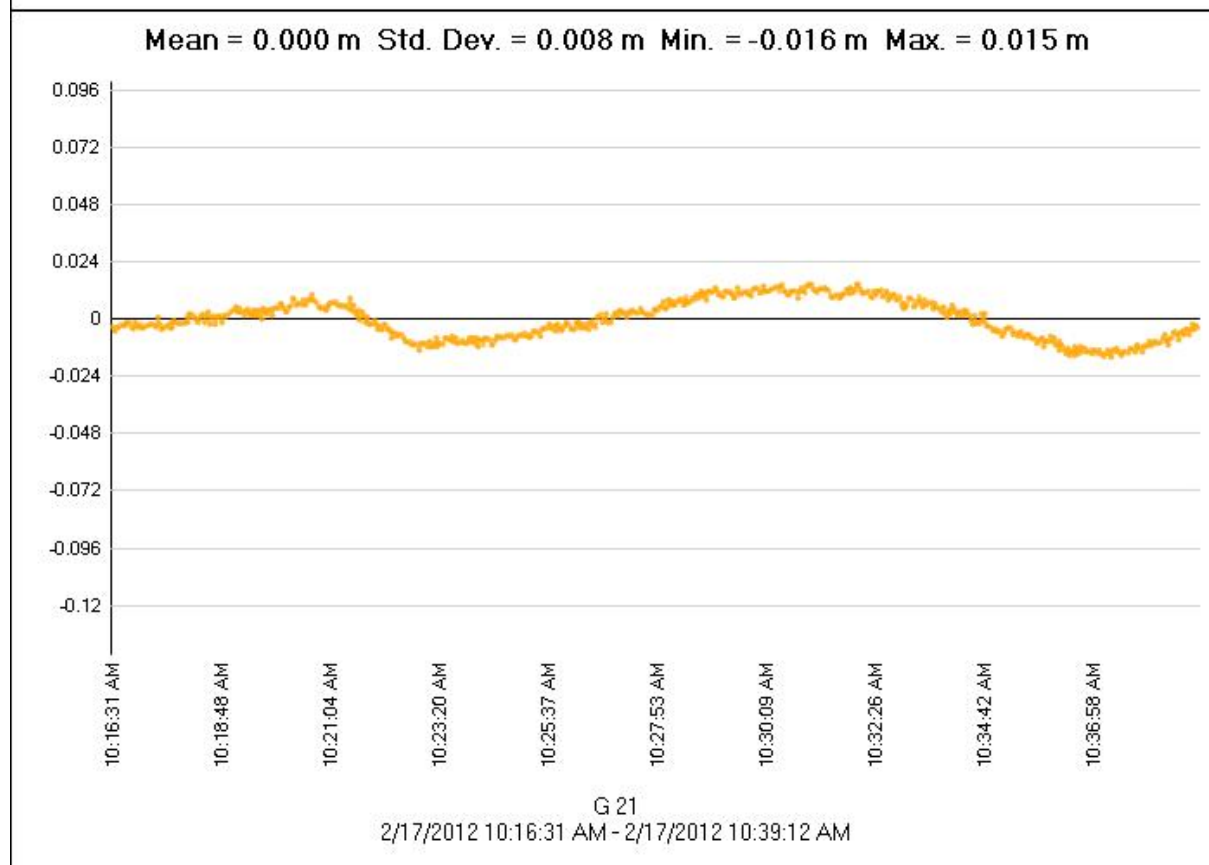
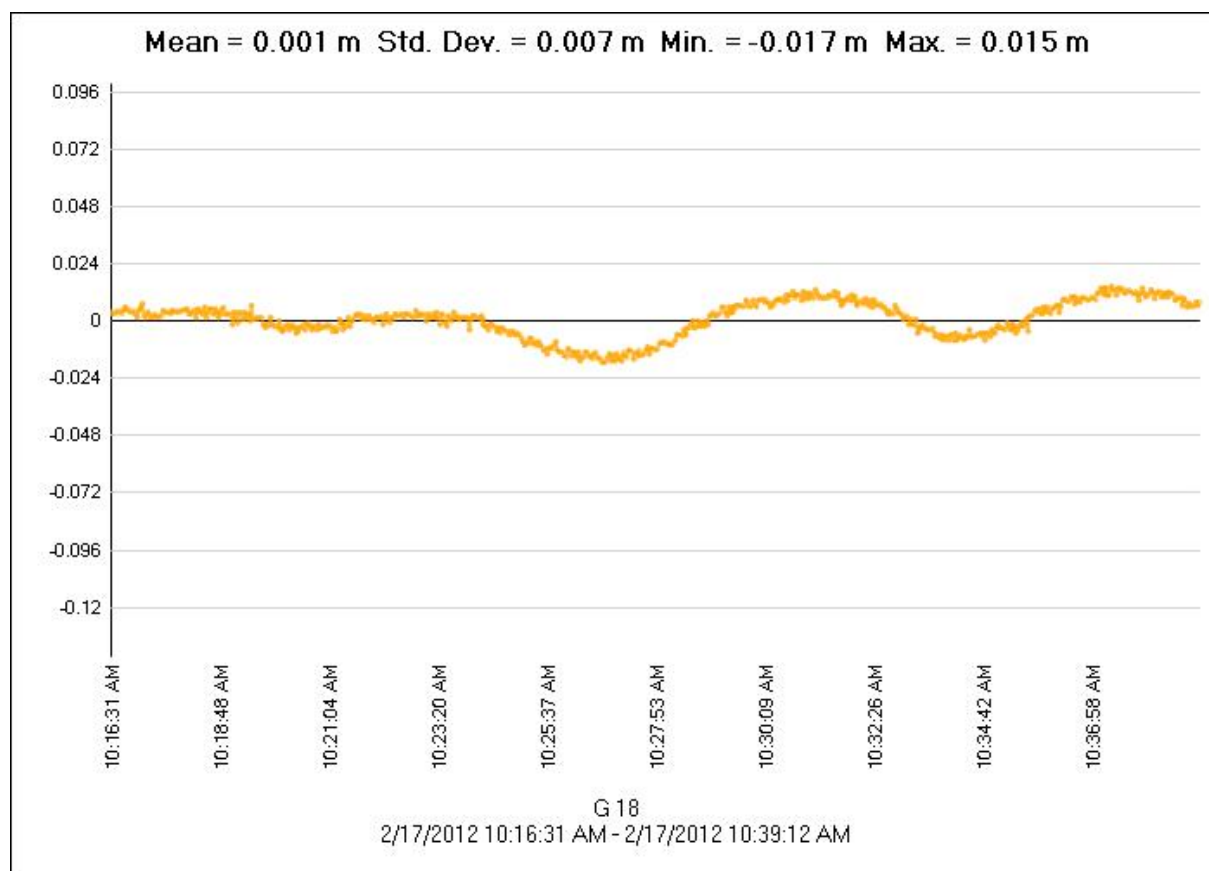
# Tracking Summary

SV	2/17/2012 10:16:29 AM	Duration: 00:22:43	Major interval: 00:01:00	2/17/2012 10:39:12 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 27	L1 L2			
G 29	L1 L2			
G 30	L1 L2			

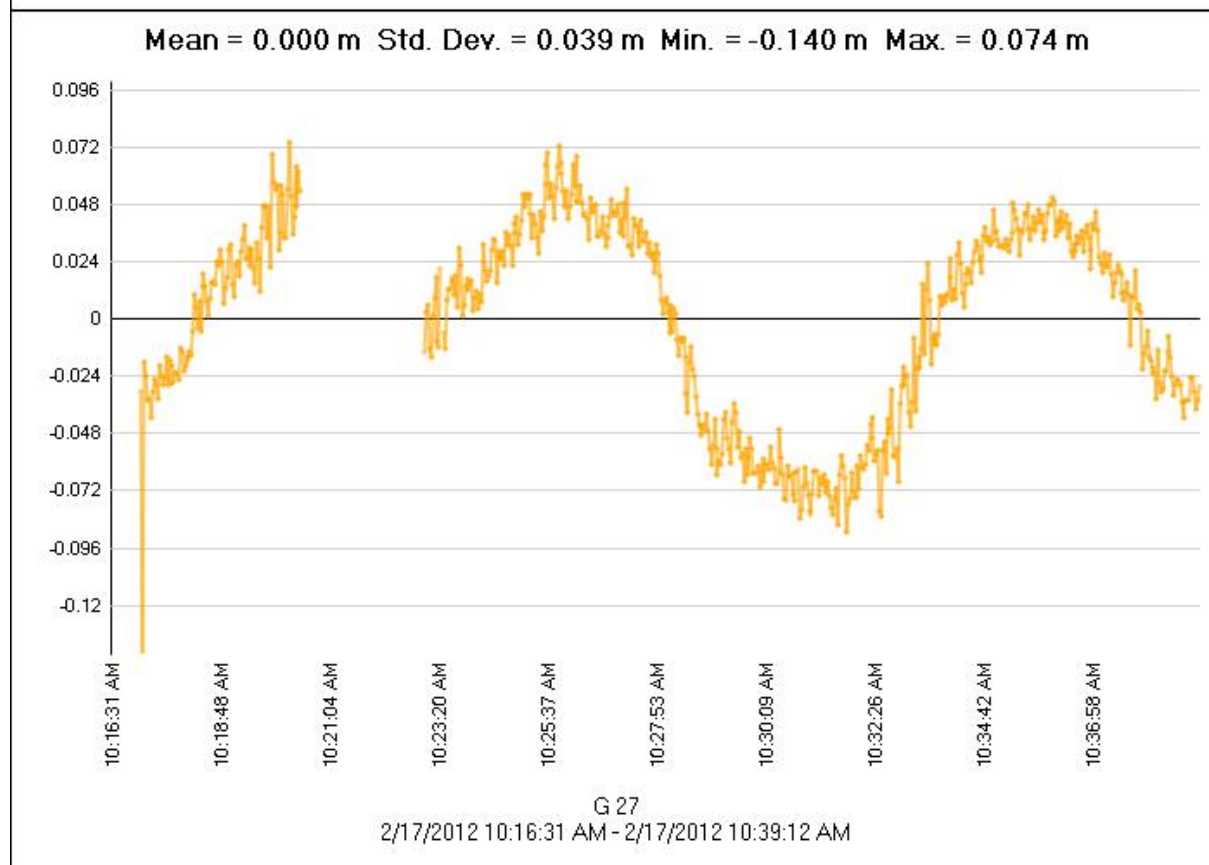
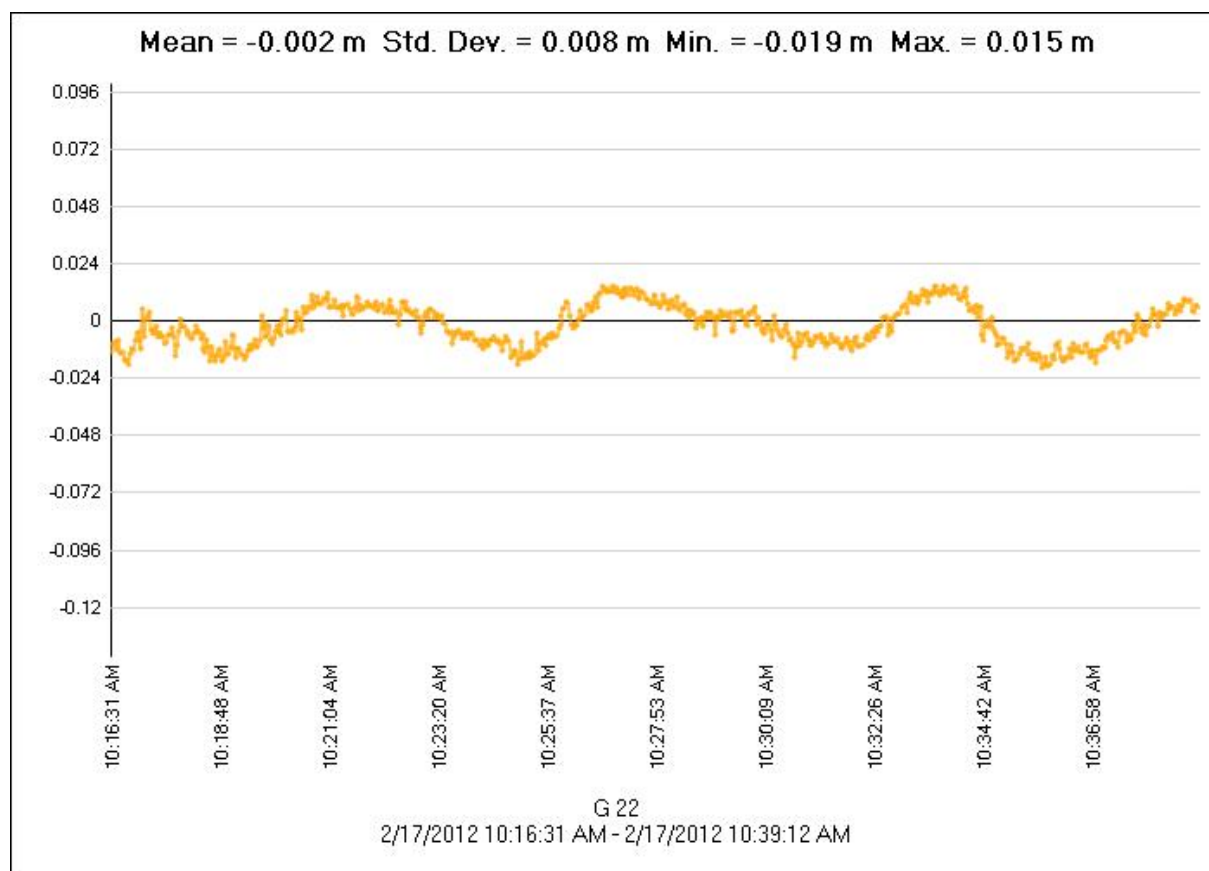
## Residuals

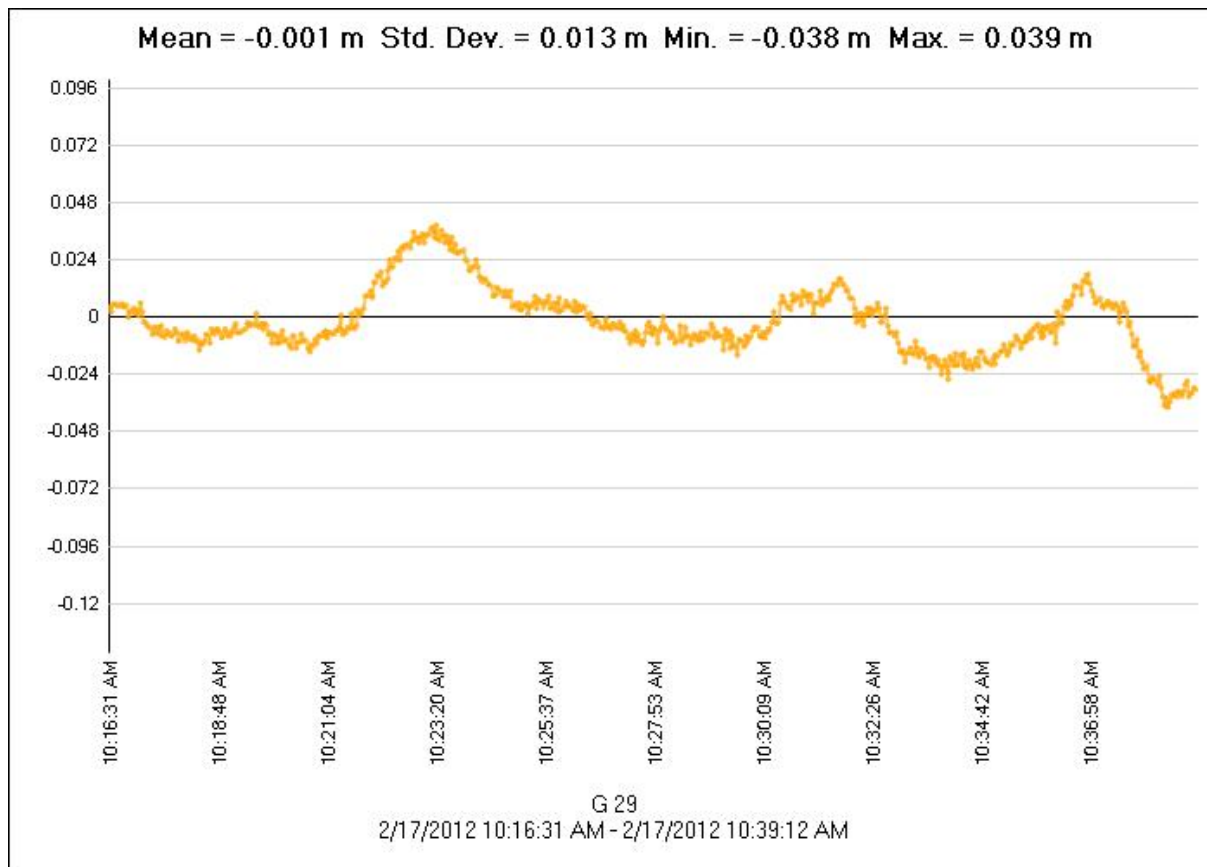












## Processing style

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

---

HH0645 - SVA10-B1 (2:34:06 PM-2:58:26 PM) (S207)

---

Baseline observation: HH0645 --- SVA10-B1 (B207)

Processed: 4/3/2012 2:51:06 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.010 m

Vertical precision: 0.019 m

RMS: 0.004 m

Maximum PDOP: 2.679

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/17/2012 2:34:06 PM (Local: UTC-7hr)

Processing stop time: 2/17/2012 2:58:26 PM (Local: UTC-7hr)

Processing duration: 00:24:20

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0645				
Grid		Local		Global	
Easting	252723.345 m	Latitude	N37°59'48.17255"	Latitude	N37°59'48.17255"
Northing	4209193.137 m	Longitude	W101°48'57.76498"	Longitude	W101°48'57.76498"
Elevation	995.279 m	Height	970.864 m	Height	970.864 m

To:	SVA10-B1				
Grid		Local		Global	
Easting	244300.367 m	Latitude	N37°54'46.86657"	Latitude	N37°54'46.86656"
Northing	4200154.340 m	Longitude	W101°54'31.11767"	Longitude	W101°54'31.11767"
Elevation	1063.176 m	Height	1038.835 m	Height	1038.835 m

Vector					
9Ughb[	-8422.978 m	NS Fwd Azimuth	221°14'50"	L	-9151.255 m
BcfA\jb[	-9038.797 m	Ellipsoid Dist.	12350.333 m	M	-3971.841 m
9`Yj Uhcb	67.897 m	<Y][\h	67.971 m	N	-7284.397 m

## Standard Errors

Vector errors:

Point ID	0.003 m	Point Description	0°00'00"	Point Type	0.004 m
Point ID	0.004 m	Point Description	0.004 m	Point Type	0.007 m
Point ID	0.010 m	Point Description	0.010 m	Point Type	0.007 m

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

	X	Y	Z
X	0.0000174784		
Y	0.0000189853	0.0000469619	
Z	-0.0000151480	-0.0000388695	0.0000557297

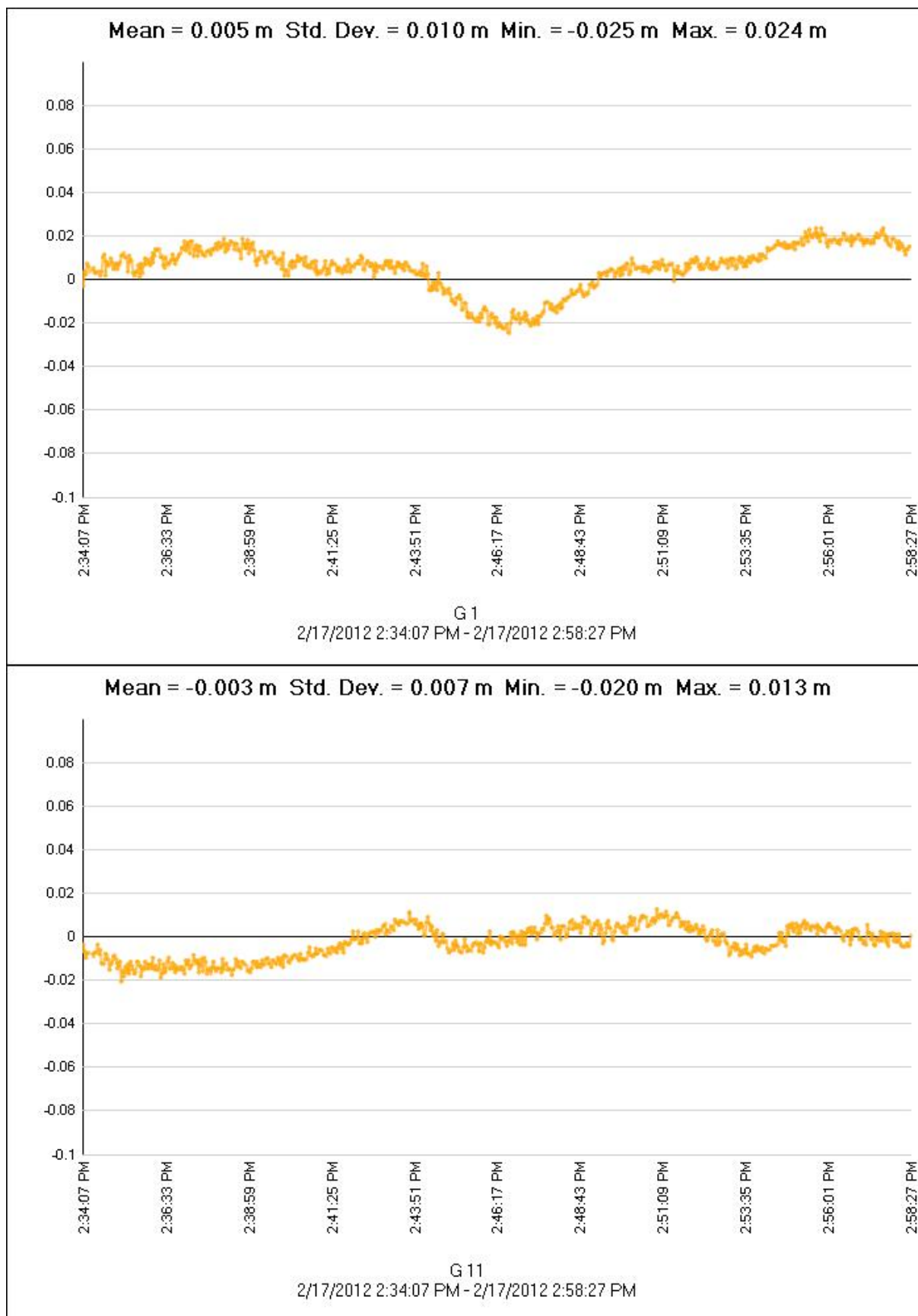
## Occupations

	From	To
Point ID:	HH0645	SVA10-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050480.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010482.12o
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	2/17/2012 2:34:06 PM	Duration: 00:24:20	Major interval: 00:01:00	2/17/2012 2:58:26 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

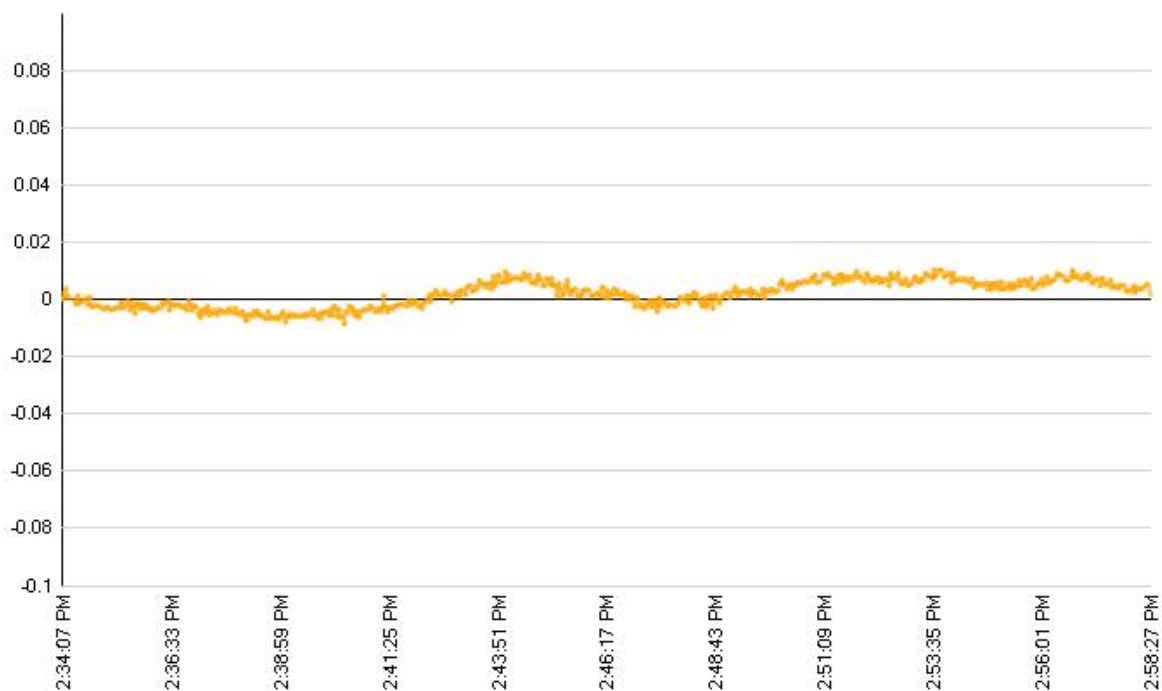


Mean = 0.003 m Std. Dev. = 0.012 m Min. = -0.024 m Max. = 0.041 m



G 12  
2/17/2012 2:34:07 PM - 2/17/2012 2:58:27 PM

Mean = 0.002 m Std. Dev. = 0.004 m Min. = -0.009 m Max. = 0.010 m



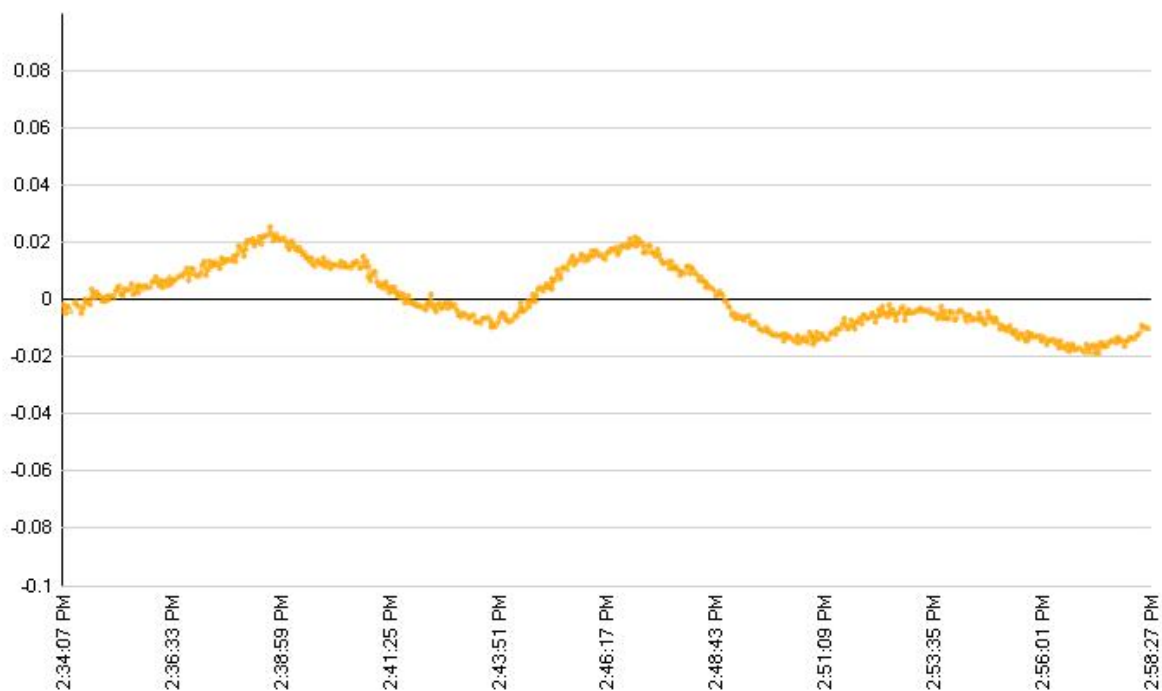
G 14  
2/17/2012 2:34:07 PM - 2/17/2012 2:58:27 PM

Mean = 0.000 m Std. Dev. = 0.017 m Min. = -0.040 m Max. = 0.048 m



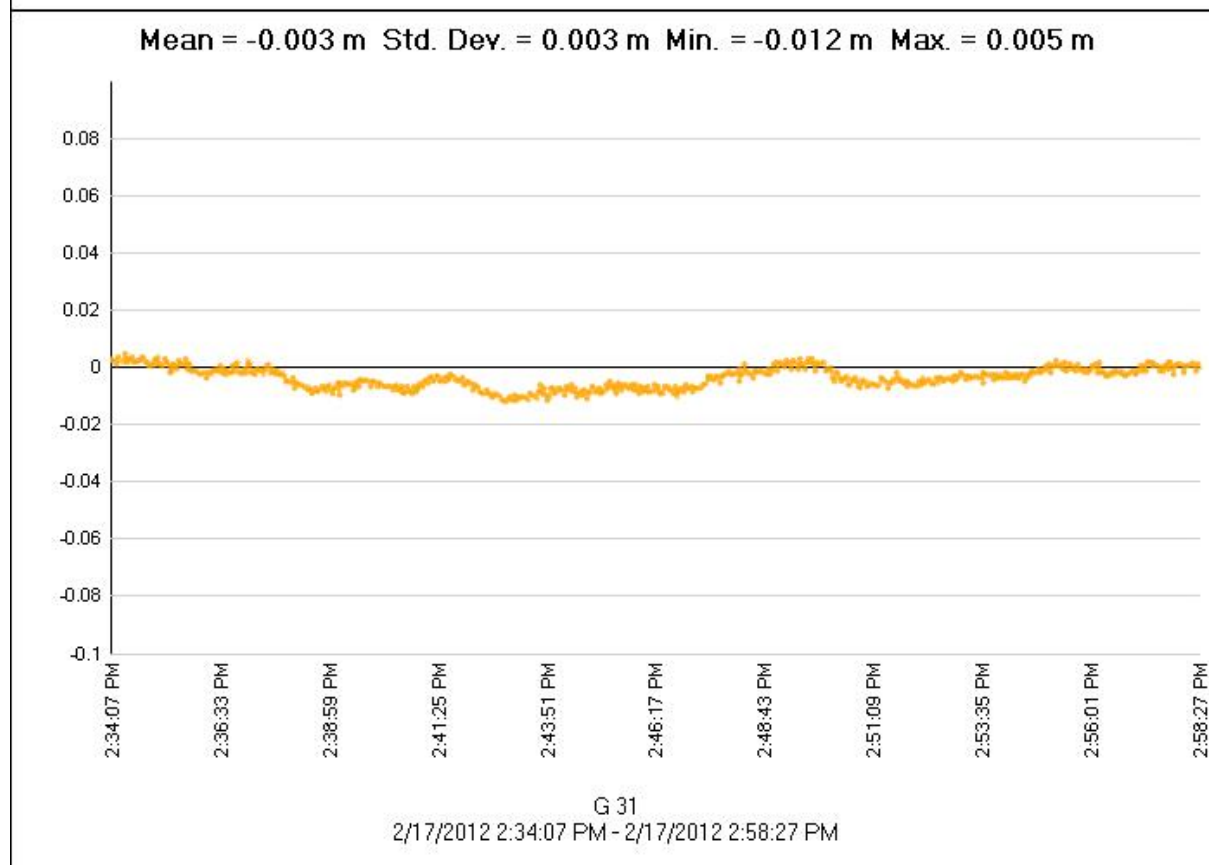
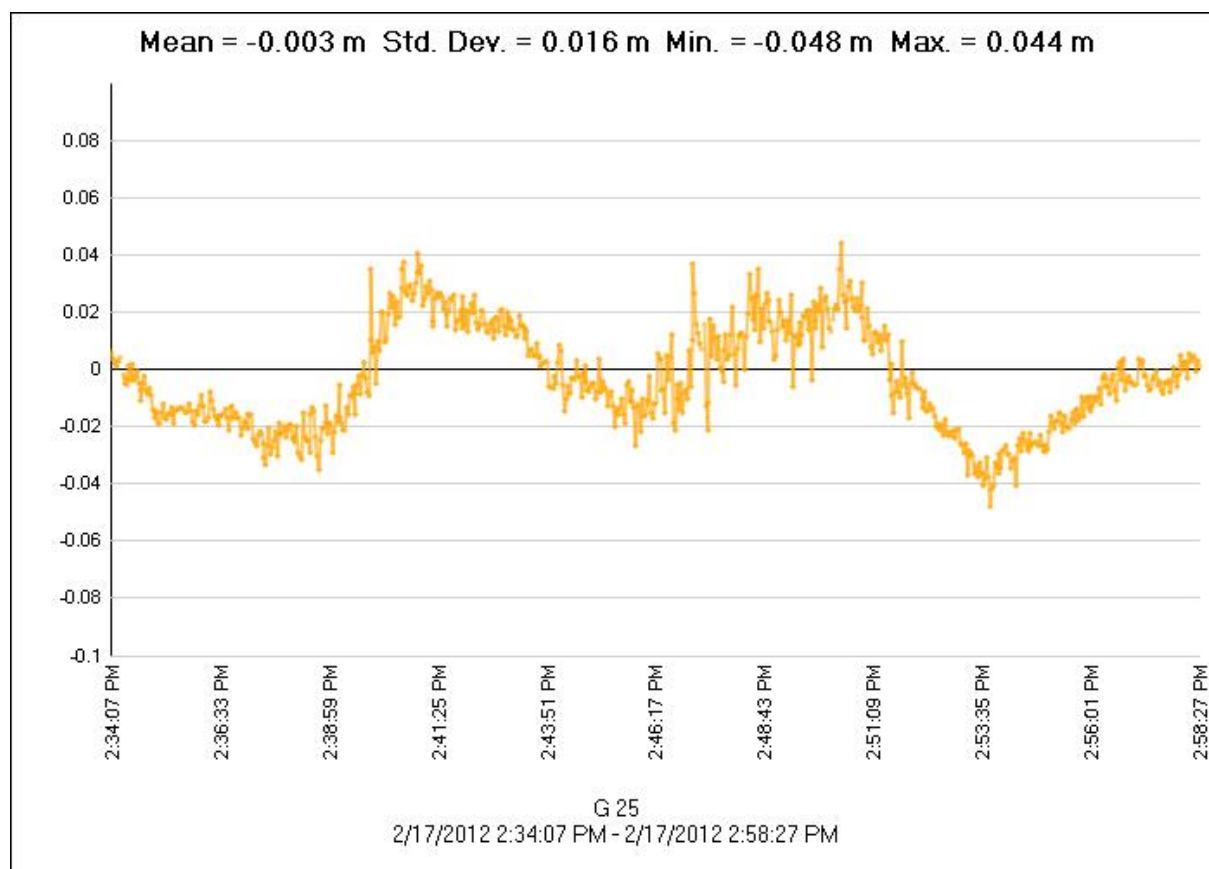
G 18  
2/17/2012 2:34:07 PM - 2/17/2012 2:58:27 PM

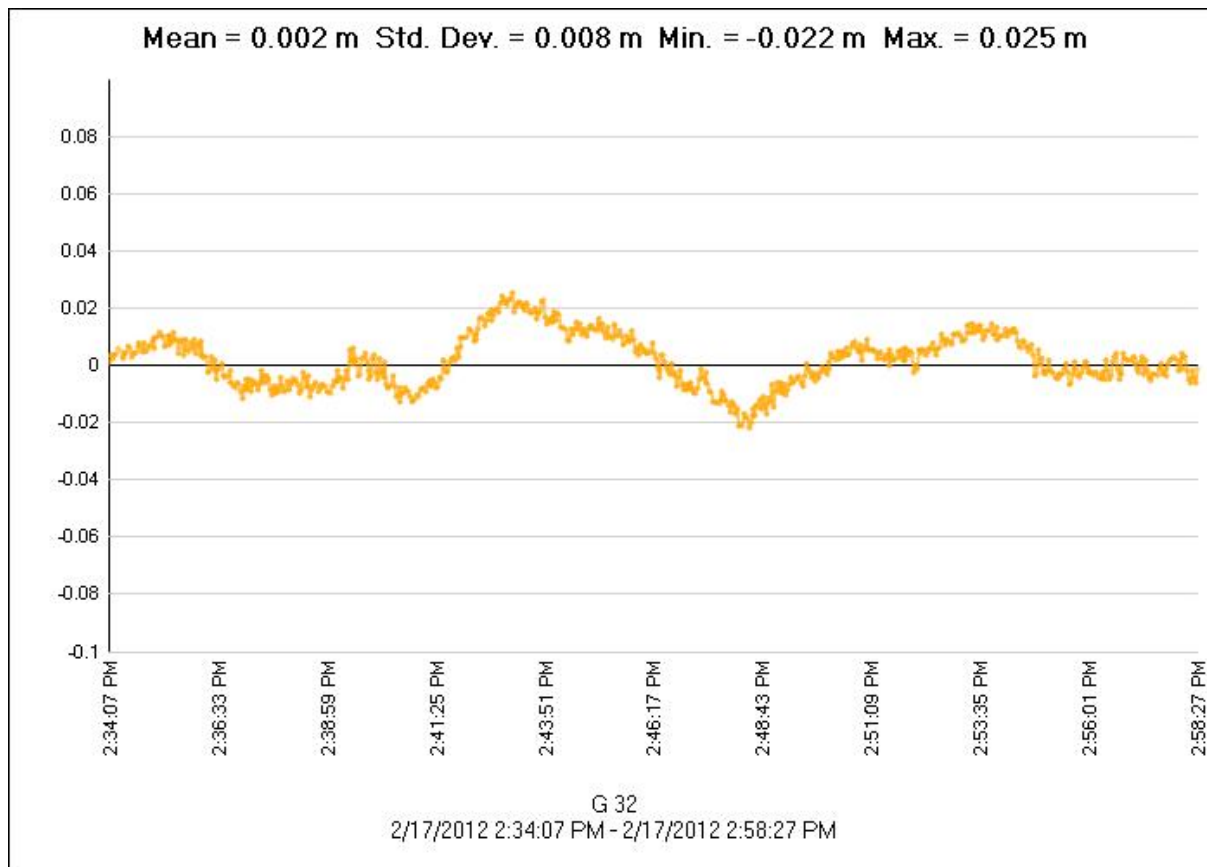
Mean = 0.001 m Std. Dev. = 0.011 m Min. = -0.019 m Max. = 0.025 m



G 22  
2/17/2012 2:34:07 PM - 2/17/2012 2:58:27 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

---

HH0645 - SVA24-B1 (1:10:54 PM-1:33:02 PM) (S208)

---

Baseline observation: HH0645 --- SVA24-B1 (B208)

Processed: 4/3/2012 2:51:09 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.031 m

Vertical precision: 0.038 m

RMS: 0.003 m

Maximum PDOP: 2.003

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/17/2012 1:10:54 PM (Local: UTC-7hr)

Processing stop time: 2/17/2012 1:33:02 PM (Local: UTC-7hr)

Processing duration: 00:22:08

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0645				
Grid		Local		Global	
Easting	252723.345 m	Latitude	N37°59'48.17255"	Latitude	N37°59'48.17255"
Northing	4209193.137 m	Longitude	W101°48'57.76498"	Longitude	W101°48'57.76498"
Elevation	995.279 m	Height	970.864 m	Height	970.864 m

To:	SVA24-B1				
Grid		Local		Global	
Easting	250415.182 m	Latitude	N38°15'46.13016"	Latitude	N38°15'46.13015"
Northing	4238824.880 m	Longitude	W101°51'09.62123"	Longitude	W101°51'09.62123"
Elevation	1116.229 m	Height	1092.252 m	Height	1092.252 m

Vector					
9Ughb[	-2308.163 m	NS Fwd Azimuth	353°48'23"	L	577.602 m
Bcfh\jb[	29631.743 m	Ellipsoid Dist.	29710.803 m	M	18417.779 m
9Yj Uhcb	120.950 m	<Y][\h	121.388 m	N	23312.724 m

## Standard Errors

Vector errors:					
Point ID	0.008 m	Point Description	0°00'00"	Point Type	0.006 m
Point ID	0.012 m	Point Description	0.012 m	Point Type	0.022 m
Point ID	0.020 m	Point Description	0.020 m	Point Type	0.009 m

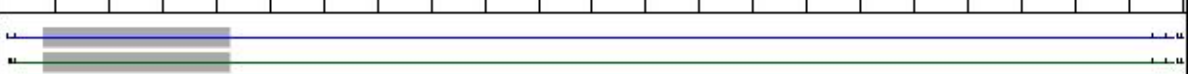











## Aposteriori Covariance Matrix (Meter<sup>2</sup>)

	X	Y	Z
X	0.0000366266		
Y	-0.0000123707	0.0004638514	
Z	0.0000003583	-0.0000832756	0.0000734632

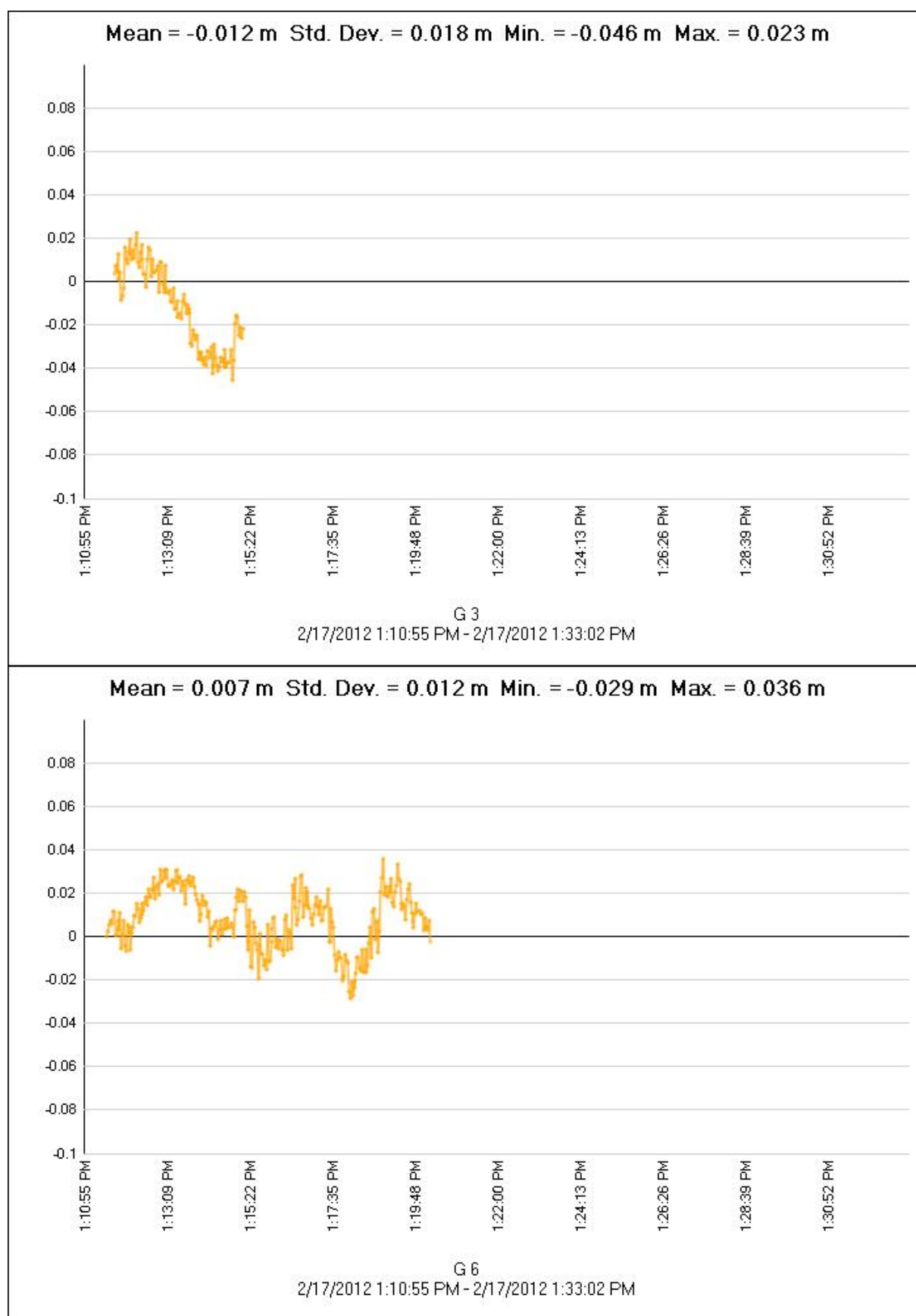
## Occupations

	From	To
Point ID:	HH0645	SVA24-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050480.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010481.12o
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	2/17/2012 1:10:54 PM	Duration: 00:22:08	Major interval: 00:01:00	2/17/2012 1:33:02 PM
G 3	L1 L2			
G 6	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 27	L1 L2			
G 31	L1 L2			

## Residuals



Mean = 0.042 m Std. Dev. = 0.026 m Min. = -0.006 m Max. = 0.096 m



G 9

2/17/2012 1:10:55 PM - 2/17/2012 1:33:02 PM

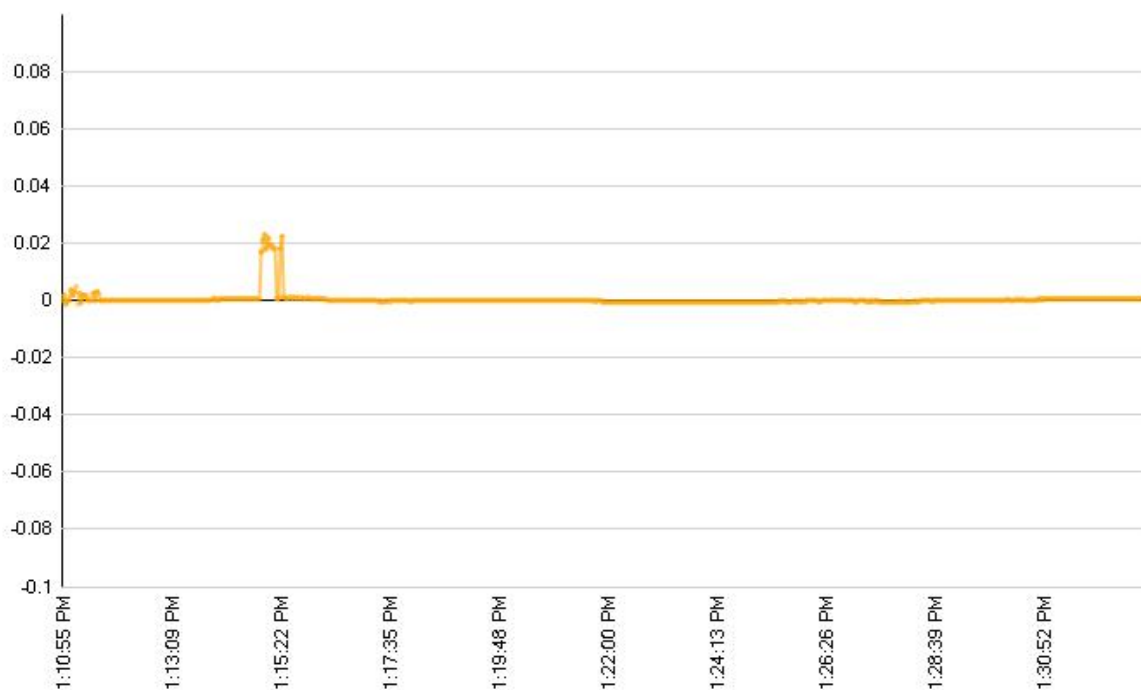
Mean = 0.012 m Std. Dev. = 0.017 m Min. = -0.035 m Max. = 0.054 m



G 11

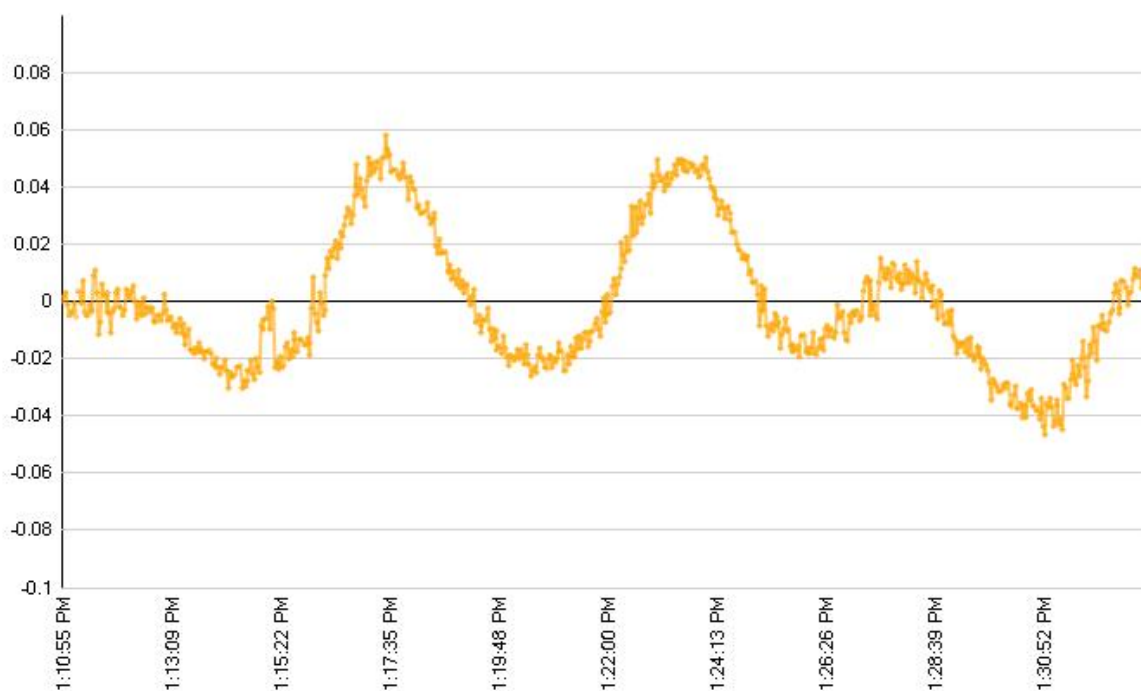
2/17/2012 1:10:55 PM - 2/17/2012 1:33:02 PM

Mean = 0.000 m Std. Dev. = 0.002 m Min. = -0.002 m Max. = 0.023 m



G 14  
2/17/2012 1:10:55 PM - 2/17/2012 1:33:02 PM

Mean = 0.000 m Std. Dev. = 0.022 m Min. = -0.046 m Max. = 0.058 m



G 18  
2/17/2012 1:10:55 PM - 2/17/2012 1:33:02 PM

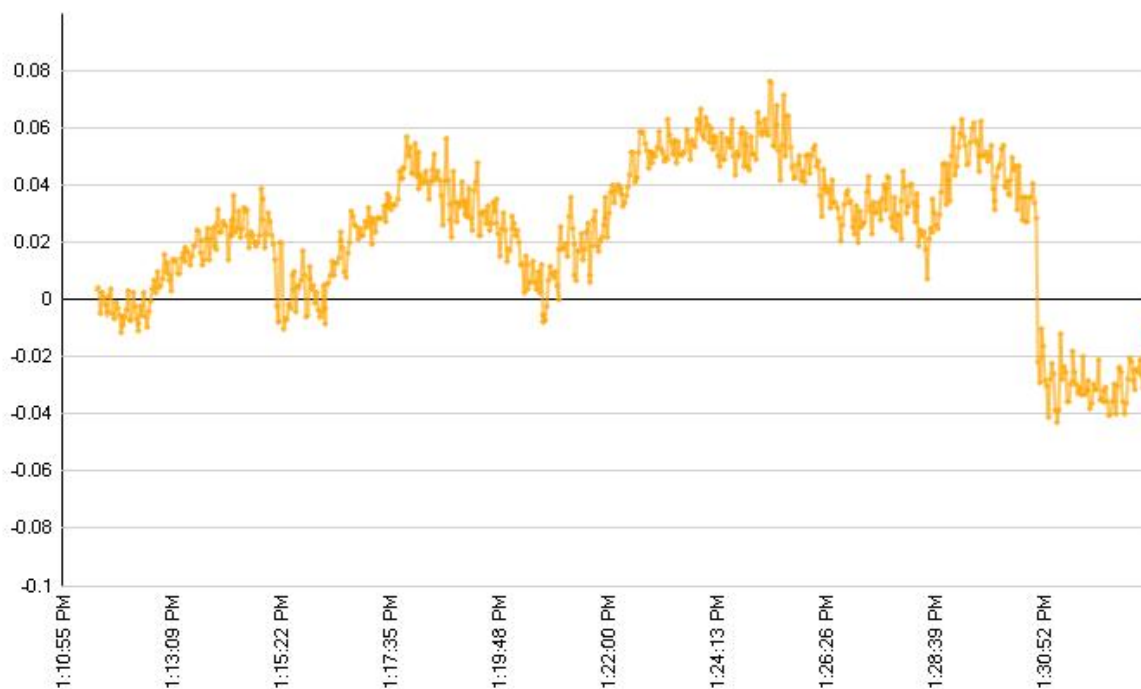


Mean = 0.012 m Std. Dev. = 0.020 m Min. = -0.029 m Max. = 0.053 m

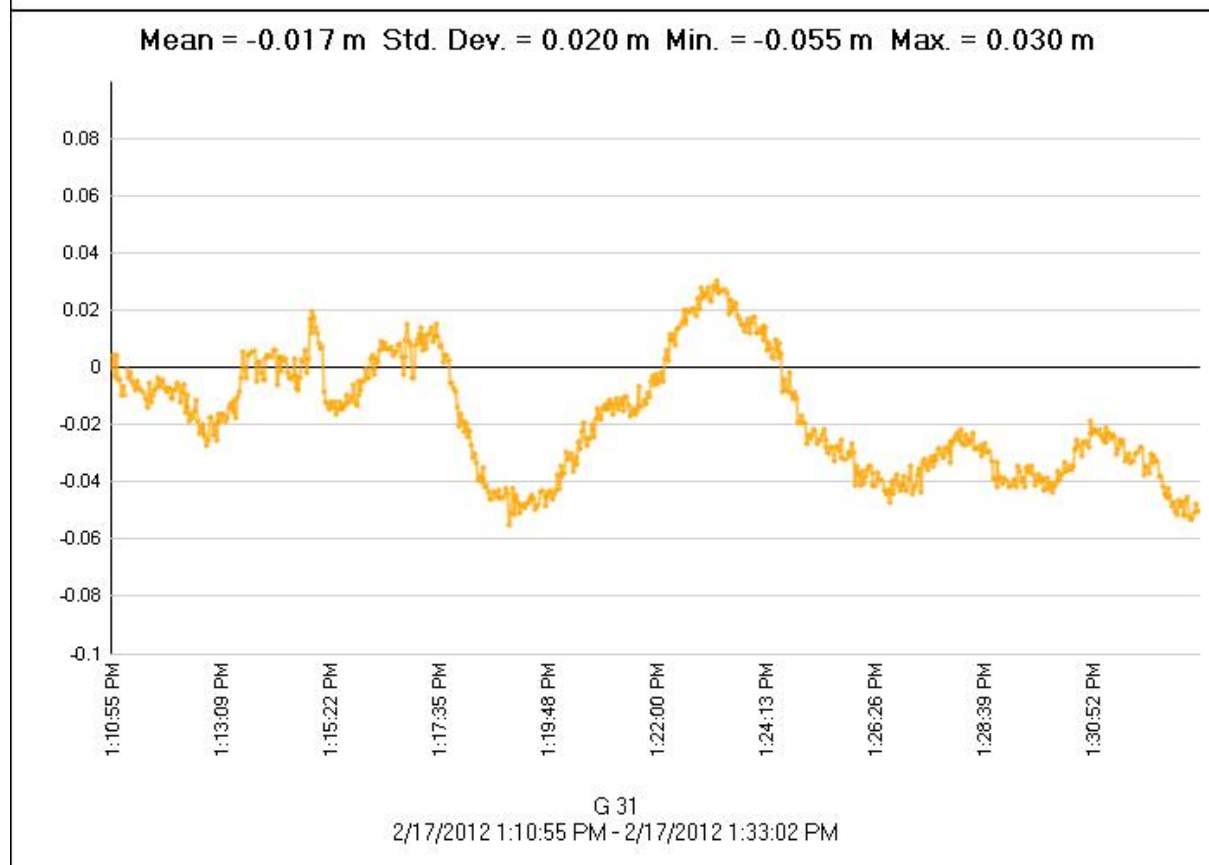
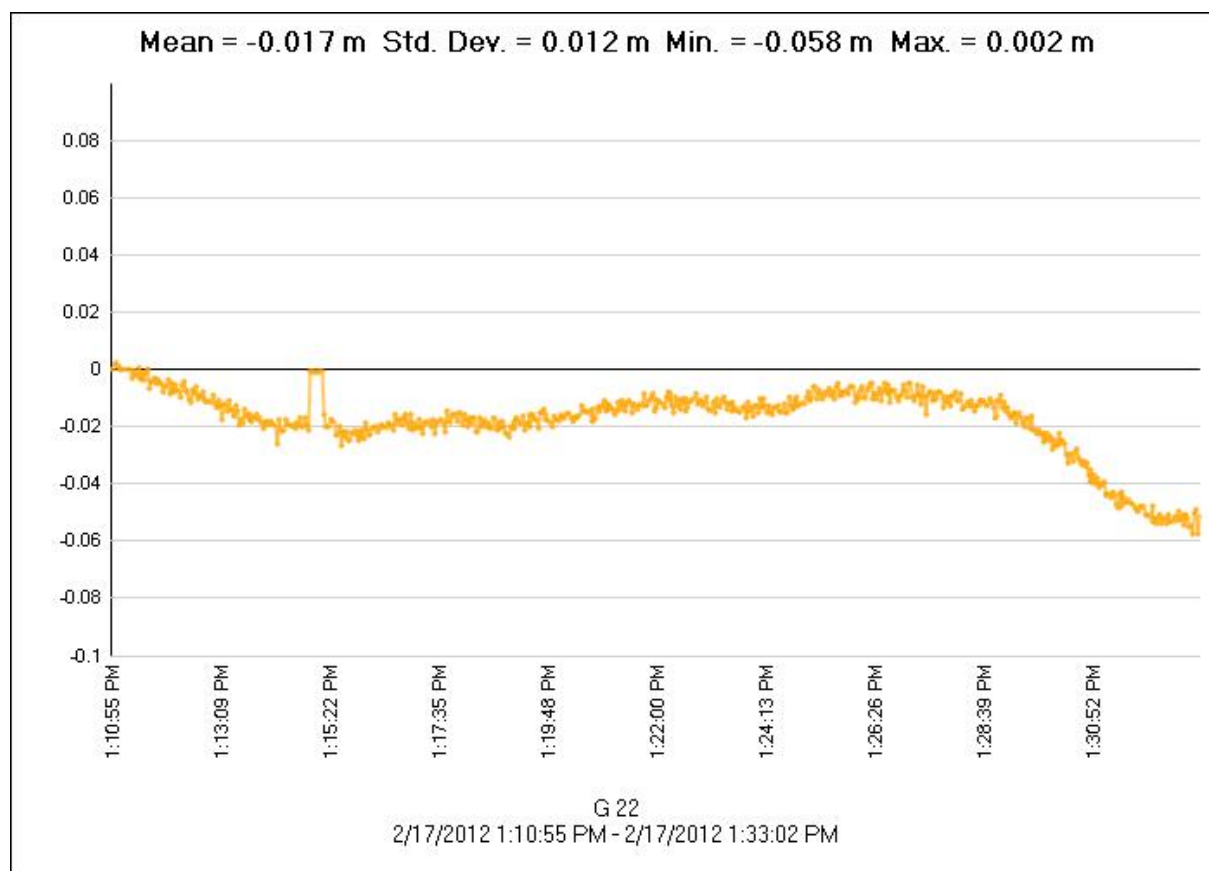


G 19  
2/17/2012 1:10:55 PM - 2/17/2012 1:33:02 PM

Mean = 0.023 m Std. Dev. = 0.024 m Min. = -0.043 m Max. = 0.076 m





G 21  
2/17/2012 1:10:55 PM - 2/17/2012 1:33:02 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

Baseline observation: HH0645 --- SVA05-B1 (B209)

Processed: 4/3/2012 2:50:51 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.009 m

Vertical precision: 0.015 m

RMS: 0.002 m

Maximum PDOP: 2.664

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/17/2012 12:08:01 PM (Local: UTC-7hr)

Processing stop time: 2/17/2012 12:28:35 PM (Local: UTC-7hr)

Processing duration: 00:20:33

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0645				
Grid		Local		Global	
Easting	252723.345 m	Latitude	N37°59'48.17255"	Latitude	N37°59'48.17255"
Northing	4209193.137 m	Longitude	W101°48'57.76498"	Longitude	W101°48'57.76498"
Elevation	995.279 m	Height	970.864 m	Height	970.864 m

To:	SVA05-B1				
Grid		Local		Global	
Easting	261076.862 m	Latitude	N38°07'53.97972"	Latitude	N38°07'53.97972"
Northing	4223934.183 m	Longitude	W101°43'33.37569"	Longitude	W101°43'33.37569"
Elevation	1083.032 m	Height	1058.702 m	Height	1058.702 m

Vector					
9Ughb[	8353.517 m	NS Fwd Azimuth	27°48'09"	L	9612.597 m
BcfA\jb[	14741.046 m	Ellipsoid Dist.	16937.871 m	M	7361.191 m
9Yj Uhcb	87.753 m	<Y][\h	87.838 m	N	11849.107 m

## Standard Errors

Vector errors:					
Point ID	0.002 m	Point Description	0°00'00"	Point Type	0.003 m
Point ID	0.003 m	Point Description	0.003 m	Point Type	0.006 m
Point ID	0.008 m	Point Description	0.008 m	Point Type	0.006 m

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

	X	Y	Z
X	0.0000077609		
Y	0.0000069456	0.0000368562	
Z	-0.0000072615	-0.0000212560	0.0000303142

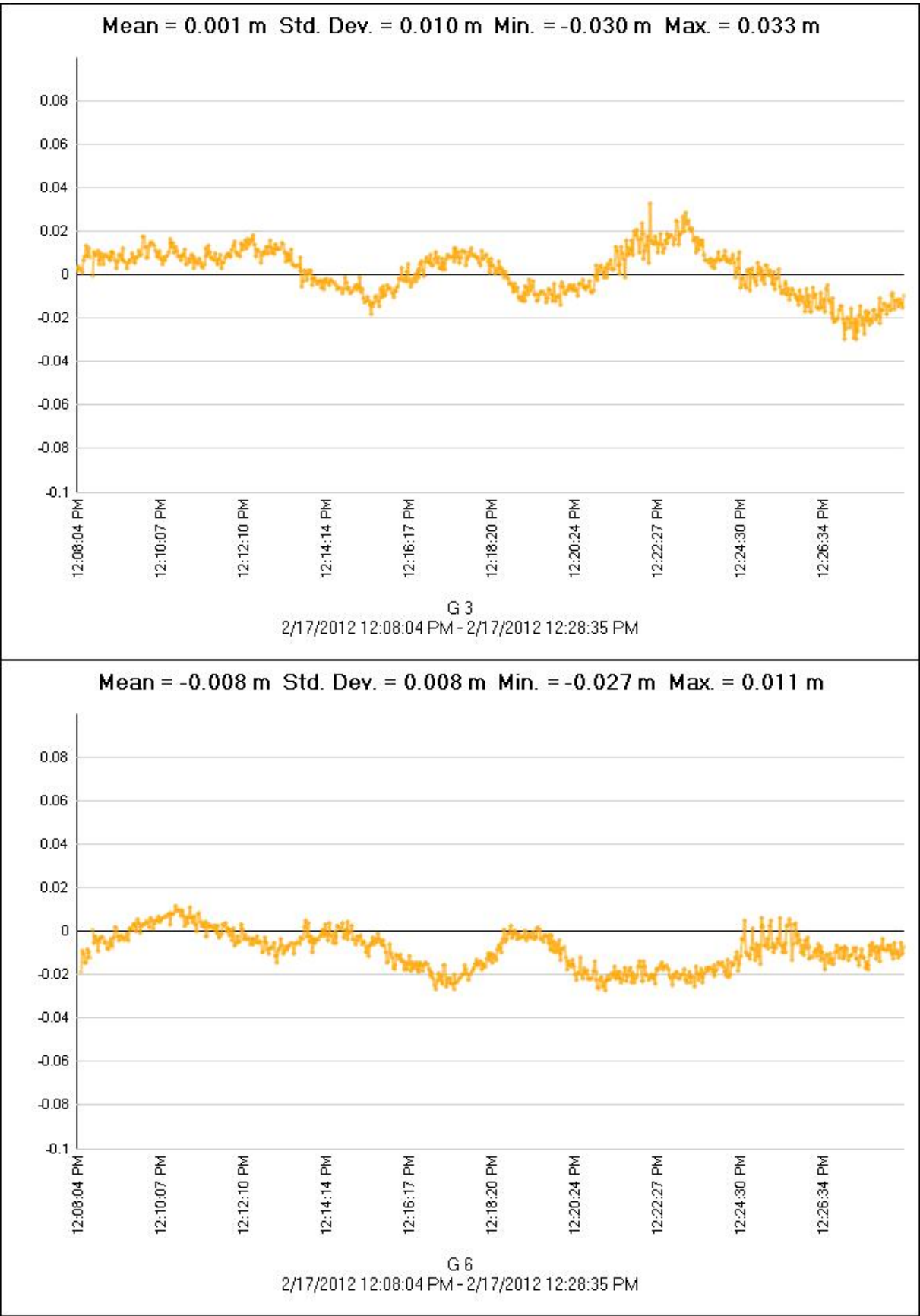
## Occupations

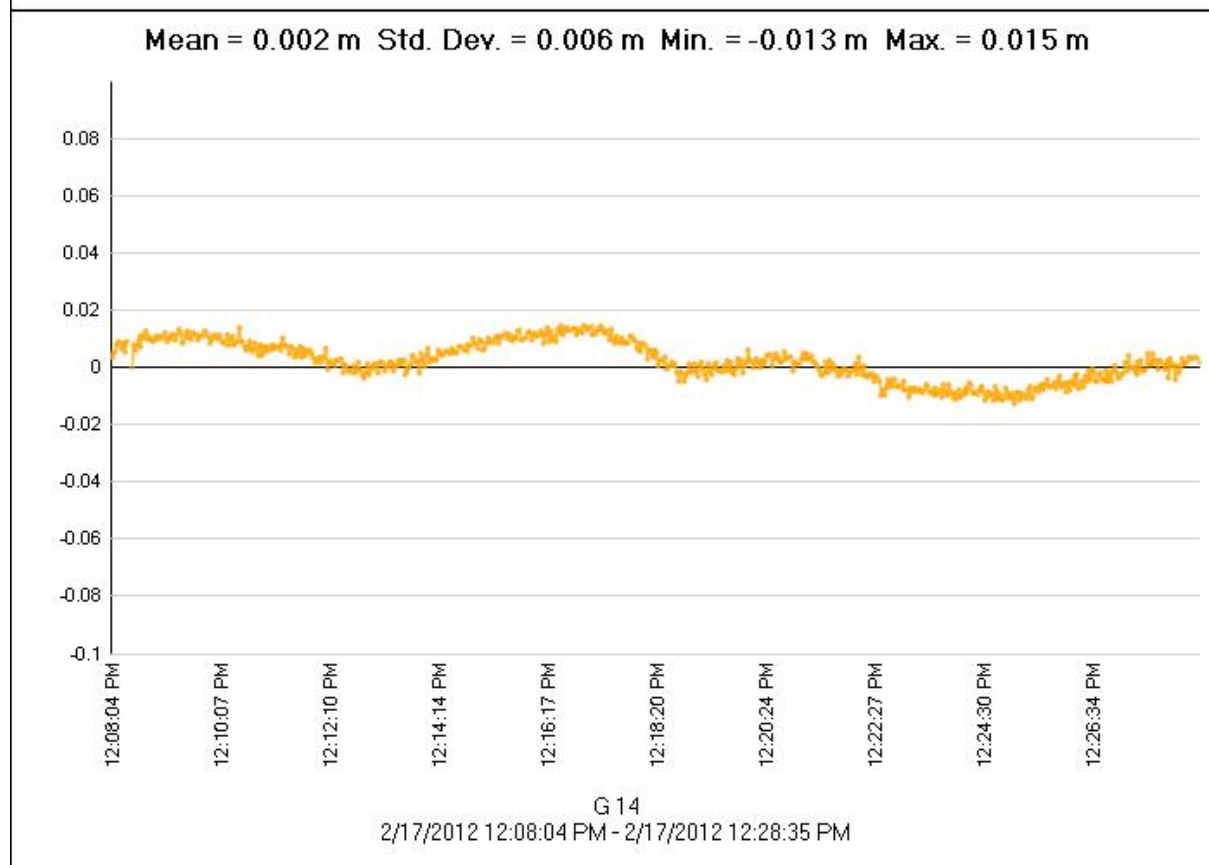
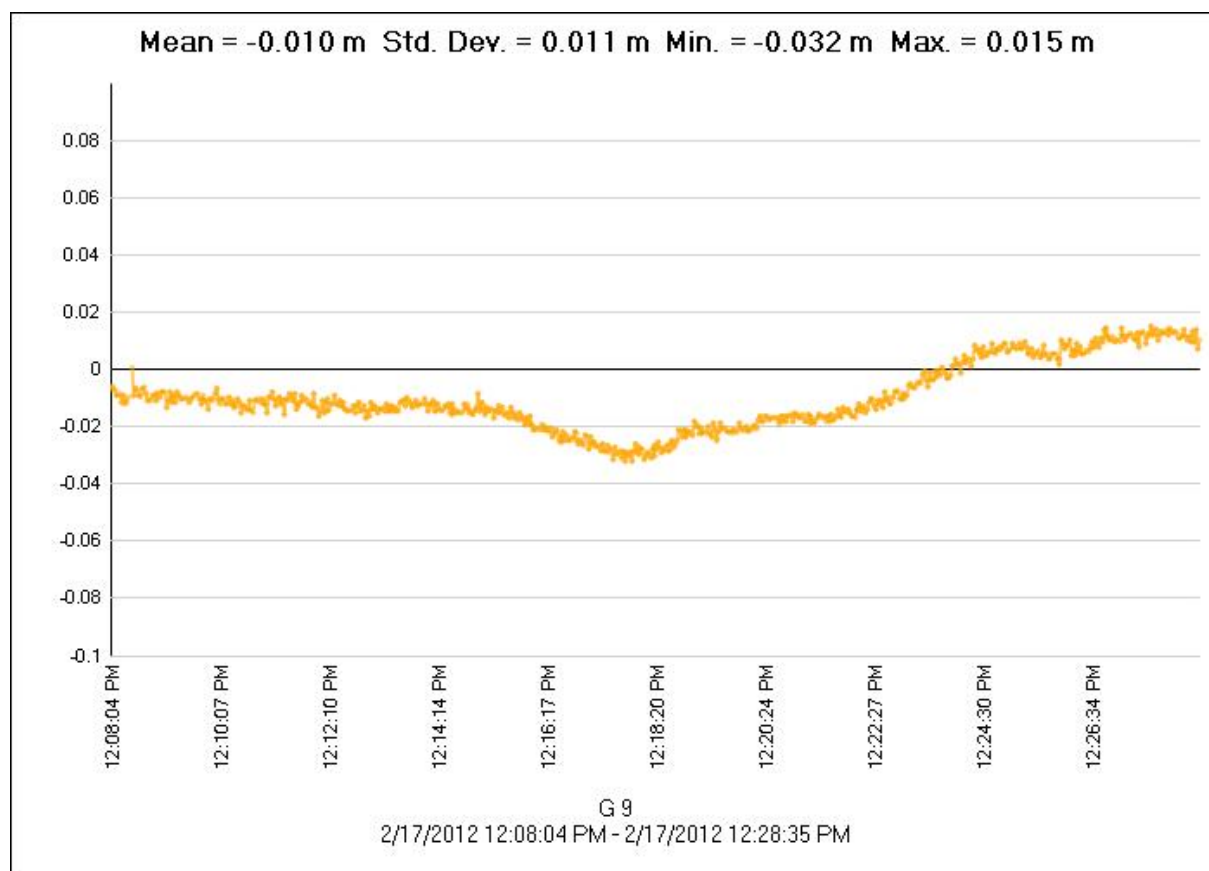
	From	To
Point ID:	HH0645	SVA05-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050480.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00010480.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

## Tracking Summary

SV	2/17/2012 12:08:01 PM	Duration: 00:20:33.5000000	Major interval: 00:01:00	2/17/2012 12:28:35 PM
G 3	L1			
G 3	L2			
G 6	L1			
G 6	L2			
G 9	L1			
G 9	L2			
G 14	L1			
G 14	L2			
G 15	L1			
G 15	L2			
G 18	L1			
G 18	L2			
G 19	L1			
G 19	L2			
G 21	L1			
G 21	L2			
G 22	L1			
G 22	L2			
G 27	L1			
G 27	L2			

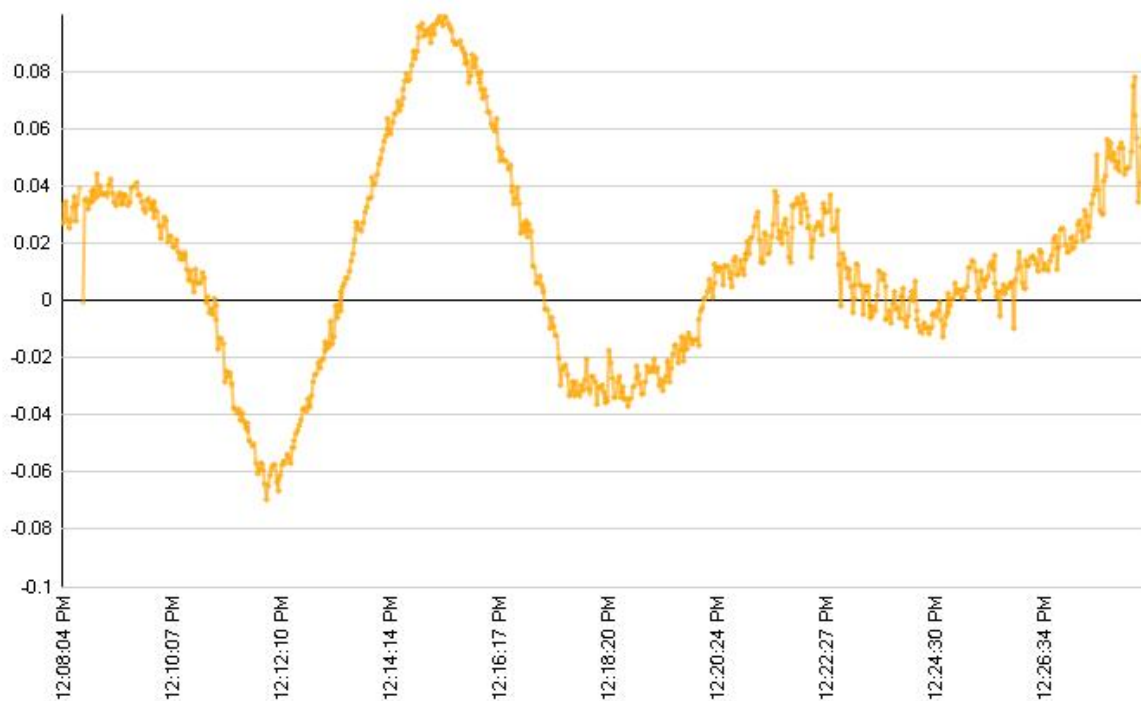
Residuals







Mean = 0.013 m Std. Dev. = 0.035 m Min. = -0.069 m Max. = 0.099 m



G 15

2/17/2012 12:08:04 PM - 2/17/2012 12:28:35 PM

Mean = 0.001 m Std. Dev. = 0.007 m Min. = -0.016 m Max. = 0.018 m



G 18

2/17/2012 12:08:04 PM - 2/17/2012 12:28:35 PM

Mean = 0.002 m Std. Dev. = 0.012 m Min. = -0.025 m Max. = 0.030 m



G 19

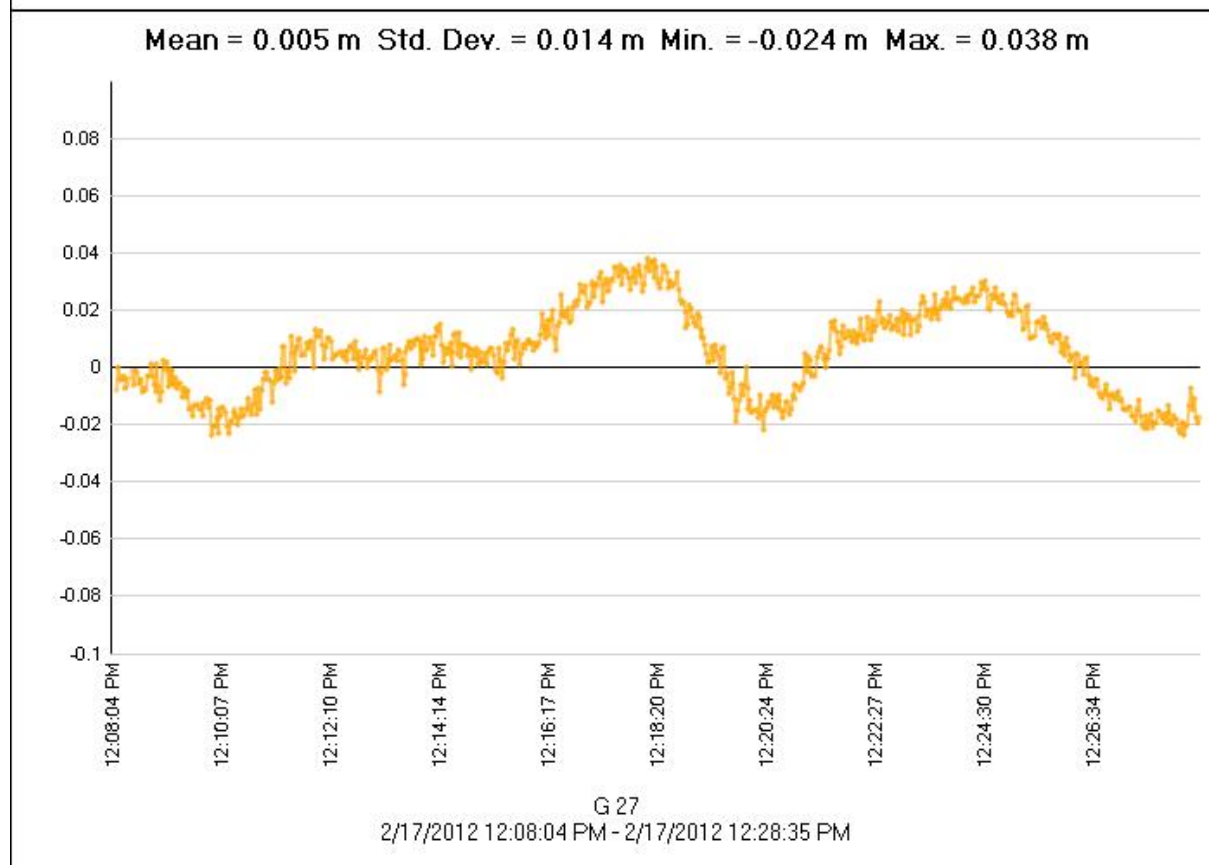
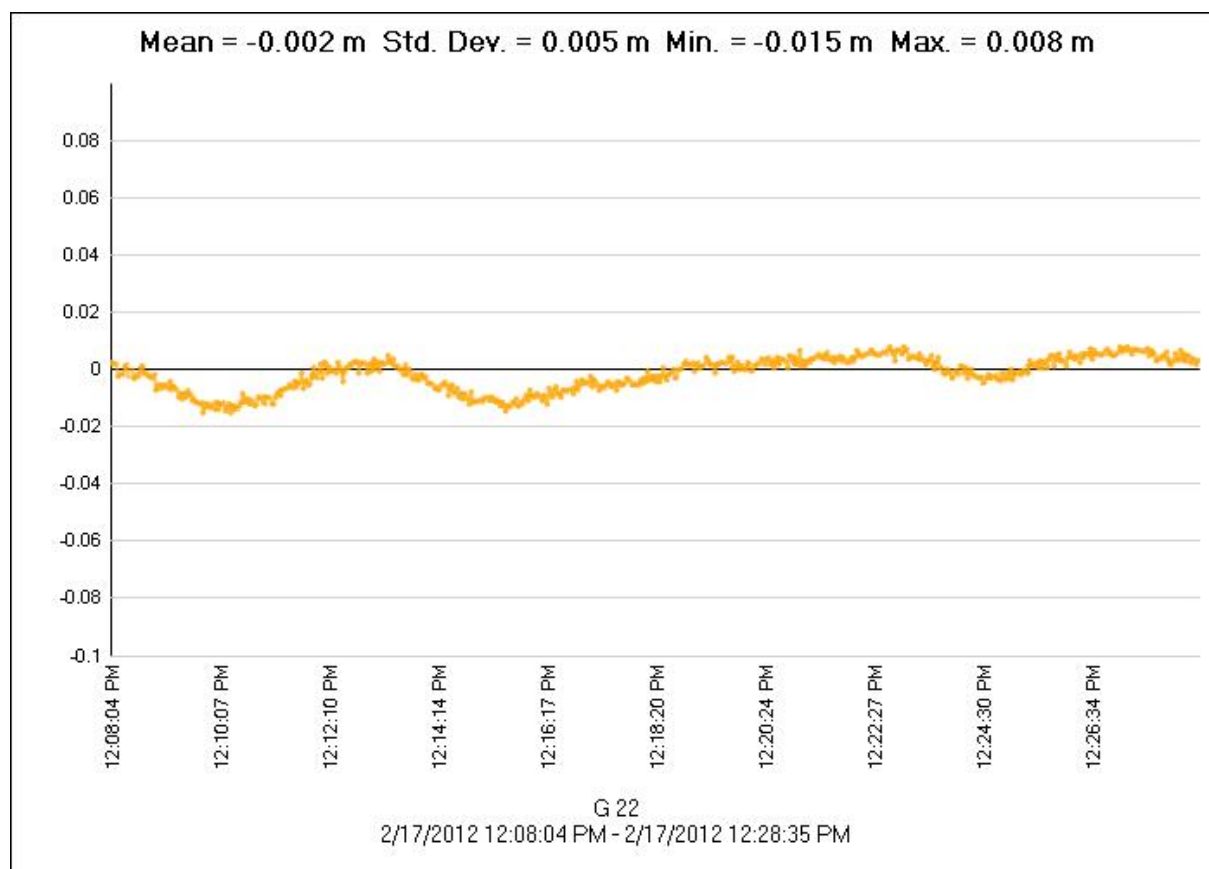
2/17/2012 12:08:04 PM - 2/17/2012 12:28:35 PM

Mean = 0.006 m Std. Dev. = 0.009 m Min. = -0.012 m Max. = 0.022 m



G 21

2/17/2012 12:08:04 PM - 2/17/2012 12:28:35 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

Baseline observation: HH0698 --- FVA26-B1 (B225)

Processed: 4/3/2012 2:40:44 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.009 m

Vertical precision: 0.010 m

RMS: 0.002 m

Maximum PDOP: 1.932

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 3/10/2012 11:51:54 AM (Local: UTC-7hr)

Processing stop time: 3/10/2012 12:21:46 PM (Local: UTC-7hr)

Processing duration: 00:29:51

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0698				
Grid		Local		Global	
Easting	290370.958 m	Latitude	N37°35'56.45803"	Latitude	N37°35'56.45802"
Northing	4163977.815 m	Longitude	W101°22'28.55840"	Longitude	W101°22'28.55840"
Elevation	944.147 m	Height	918.629 m	Height	918.629 m

To:	FVA26-B1				
Grid		Local		Global	
Easting	288045.900 m	Latitude	N37°33'49.91897"	Latitude	N37°33'49.91897"
Northing	4160133.876 m	Longitude	W101°23'59.29376"	Longitude	W101°23'59.29376"
Elevation	930.706 m	Height	905.206 m	Height	905.206 m

Vector					
9Ughb[	-2325.057 m	NS Fwd Azimuth	209°43'10"	L	-2650.497 m
Bcfh\jb[	-3843.939 m	Ellipsoid Dist.	4491.749 m	M	-1882.764 m
9Yj Uhcb	-13.441 m	<Y][\h	-13.423 m	N	-3100.296 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	0.005 m
Point ID	0.005 m	Point Description	0.005 m	Point Type	0.004 m

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

	X	Y	Z
X	0.0000074602		
Y	0.0000031293	0.0000268176	
Z	-0.0000002793	-0.0000042596	0.0000127419

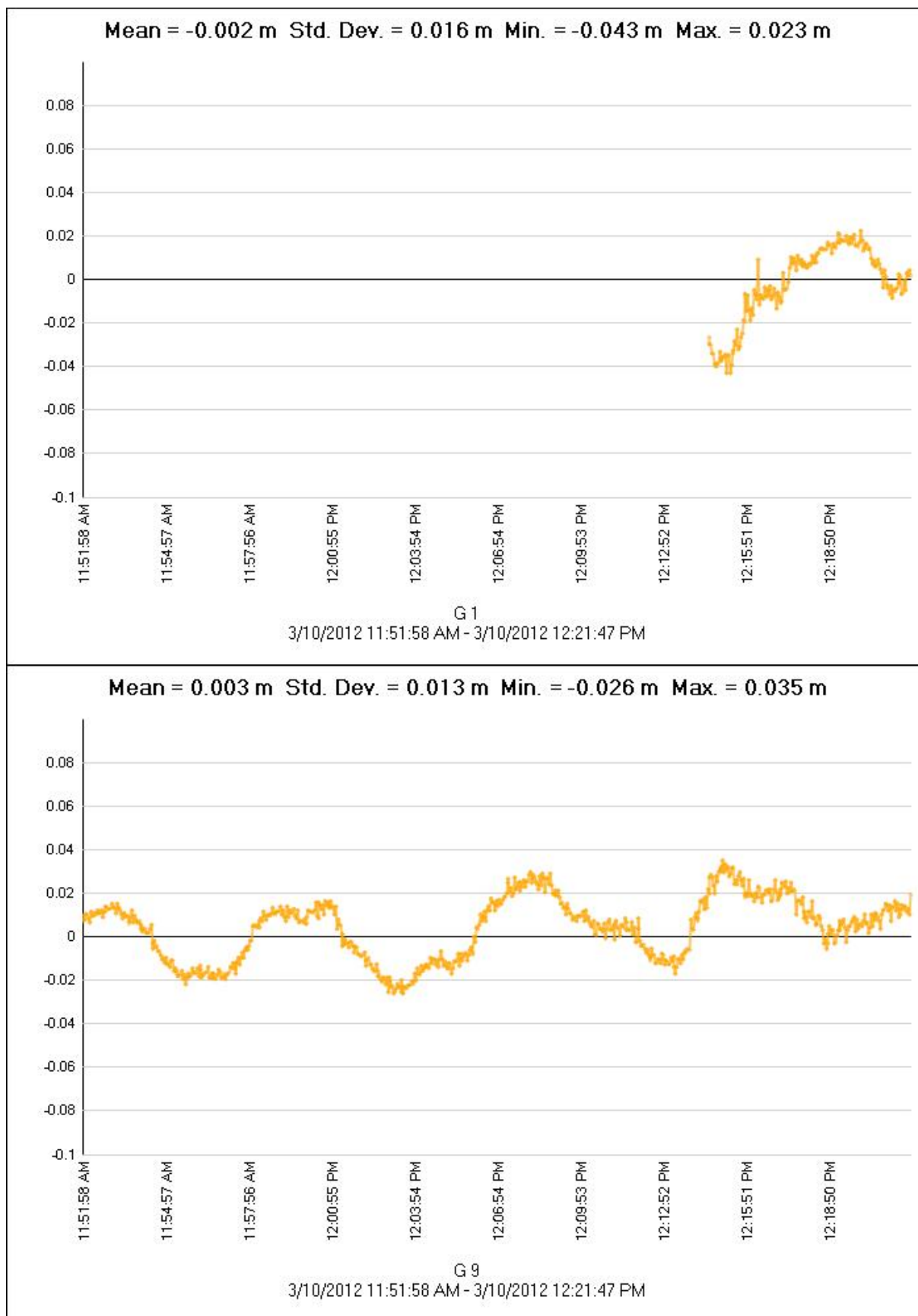
## Occupations

	From	To
Point ID:	HH0698	FVA26-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00100700.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050701.12o
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	3/10/2012 11:51:54 AM	Duration: 00:29:51.5000000	Major interval: 00:01:00	3/10/2012 12:21:46 PM
G1	L1			
G1	L2			
G6	L1			
G6	L2			
G9	L1			
G9	L2			
G11	L1			
G11	L2			
G12	L1			
G12	L2			
G14	L1			
G14	L2			
G18	L1			
G18	L2			
G19	L1			
G19	L2			
G21	L1			
G21	L2			
G22	L1			
G22	L2			
G25	L1			
G25	L2			
G27	L1			
G27	L2			
G31	L1			
G31	L2			

## Residuals





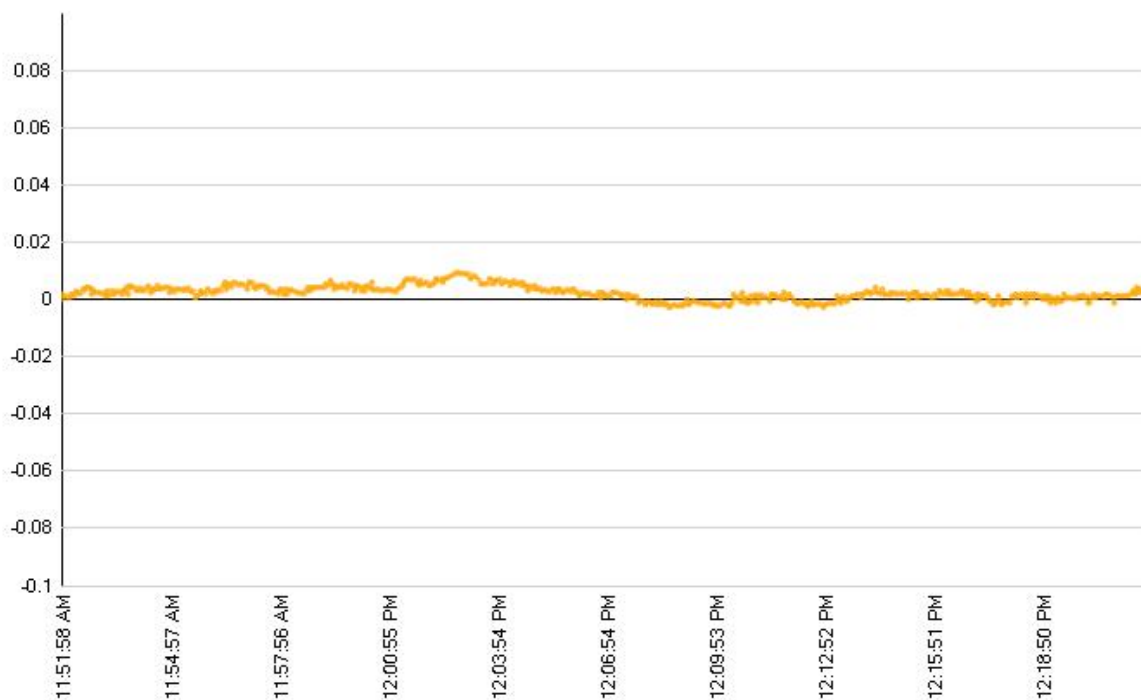
Mean = 0.004 m Std. Dev. = 0.008 m Min. = -0.020 m Max. = 0.021 m



G 11

3/10/2012 11:51:58 AM - 3/10/2012 12:21:47 PM

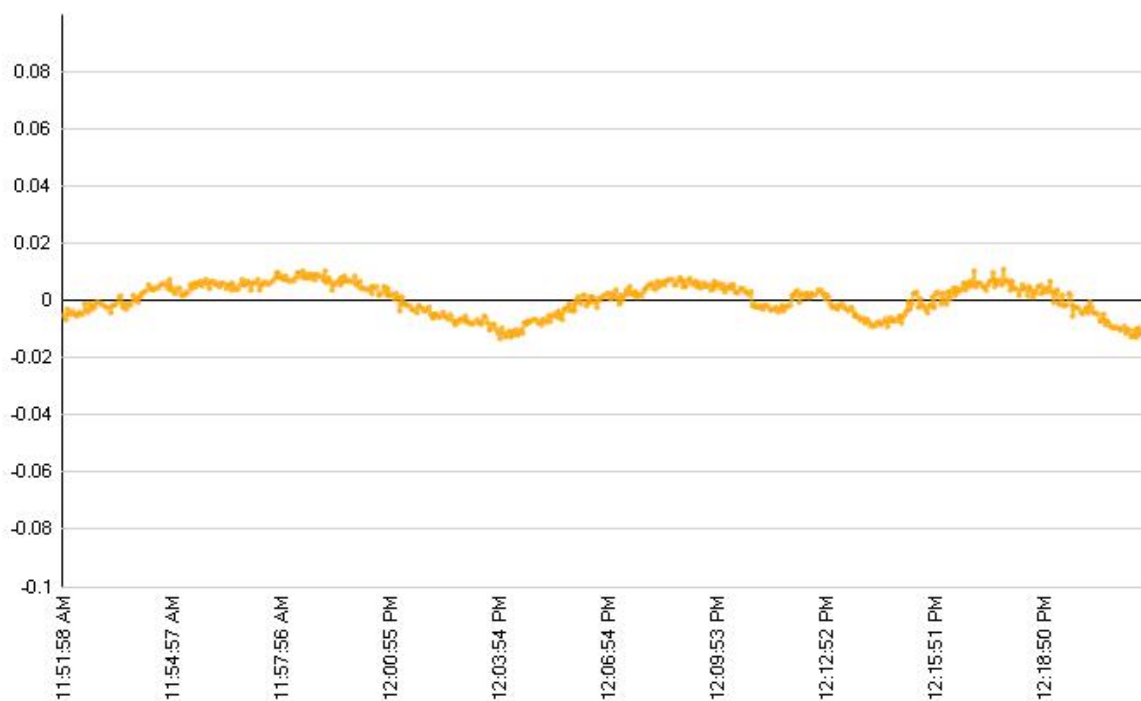
Mean = 0.002 m Std. Dev. = 0.002 m Min. = -0.003 m Max. = 0.010 m



G 14

3/10/2012 11:51:58 AM - 3/10/2012 12:21:47 PM

Mean = 0.000 m Std. Dev. = 0.005 m Min. = -0.013 m Max. = 0.011 m



G 18

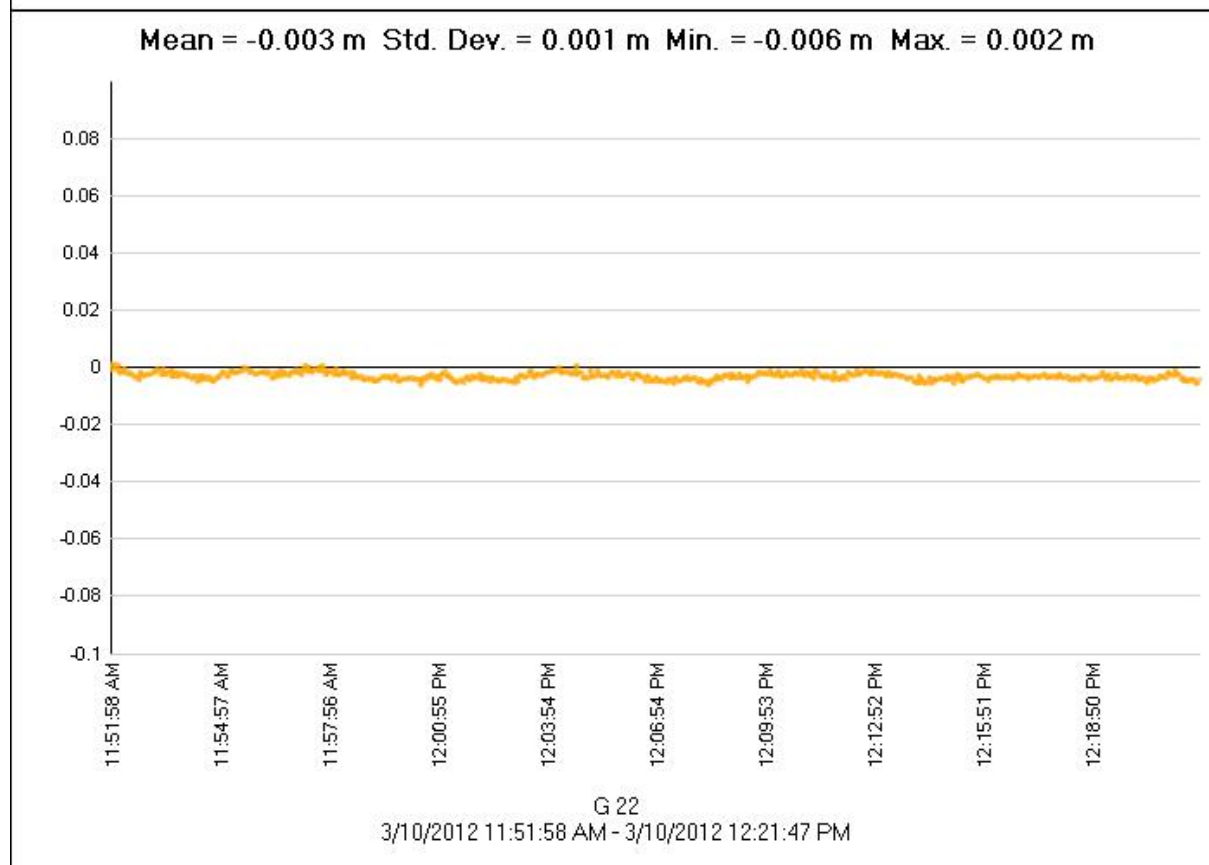
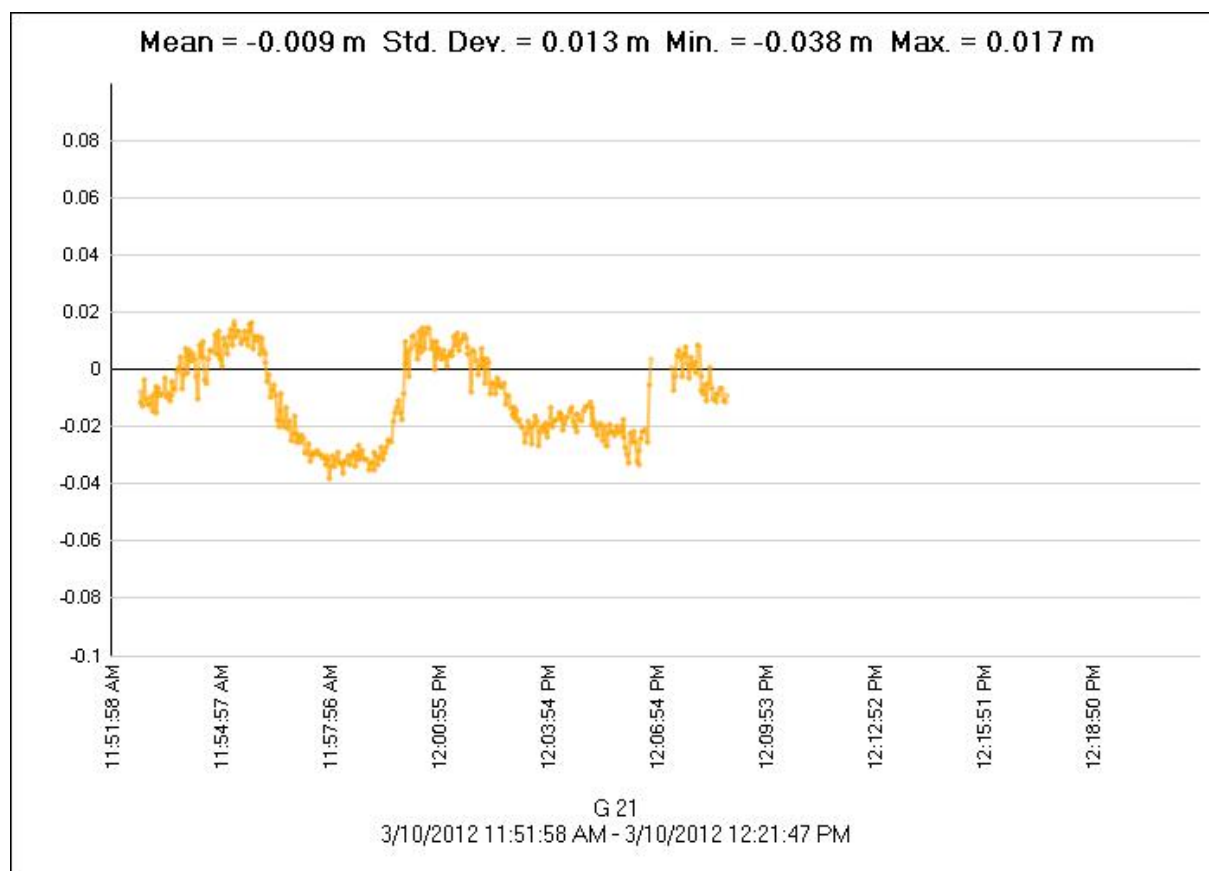
3/10/2012 11:51:58 AM - 3/10/2012 12:21:47 PM

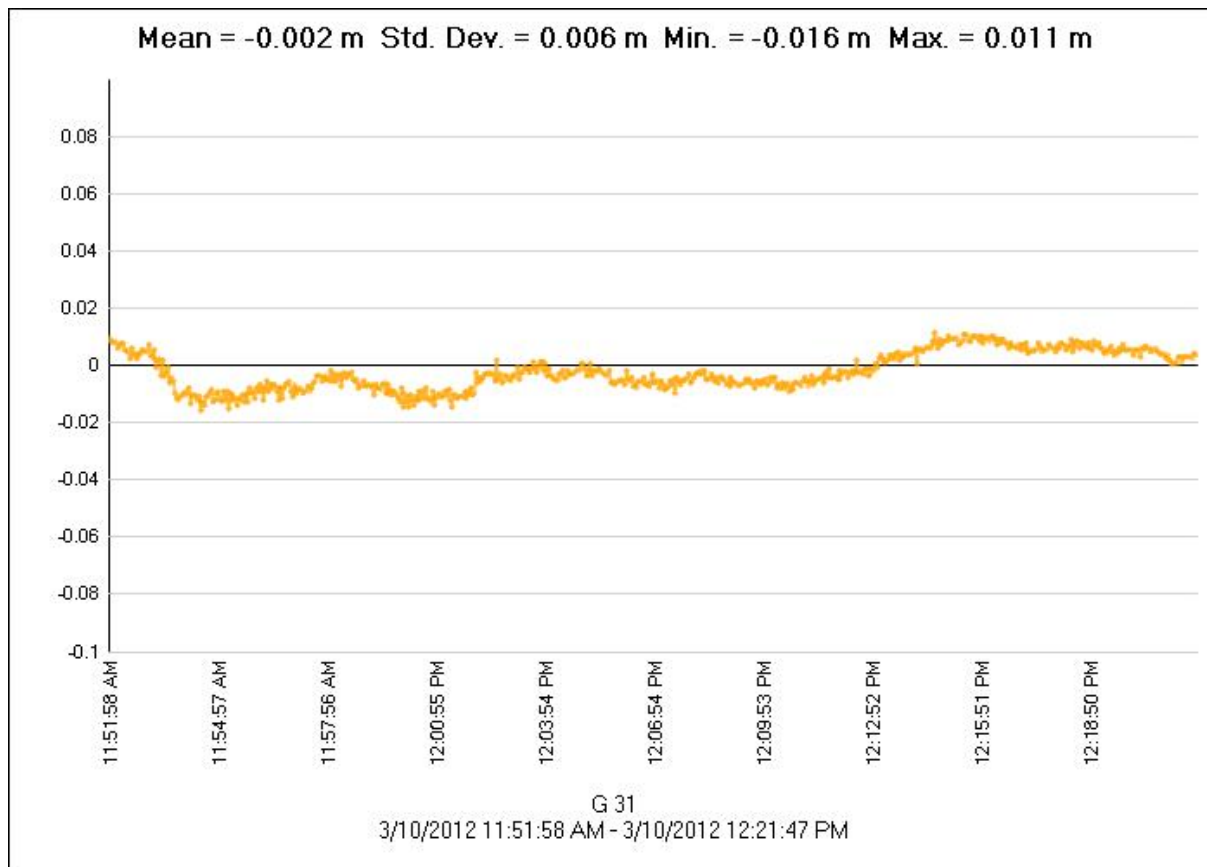
Mean = 0.005 m Std. Dev. = 0.012 m Min. = -0.018 m Max. = 0.027 m



G 19

3/10/2012 11:51:58 AM - 3/10/2012 12:21:47 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

Baseline observation: HH0698 --- SVA26-B1 (B226)

Processed: 4/3/2012 2:40:49 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.005 m

Vertical precision: 0.007 m

RMS: 0.002 m

Maximum PDOP: 6.818

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 3/10/2012 12:30:09 PM (Local: UTC-7hr)

Processing stop time: 3/10/2012 12:59:50 PM (Local: UTC-7hr)

Processing duration: 00:29:41

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0698				
Grid		Local		Global	
Easting	290370.958 m	Latitude	N37°35'56.45803"	Latitude	N37°35'56.45802"
Northing	4163977.815 m	Longitude	W101°22'28.55840"	Longitude	W101°22'28.55840"
Elevation	944.147 m	Height	918.629 m	Height	918.629 m

To:	SVA26-B1				
Grid		Local		Global	
Easting	288127.143 m	Latitude	N37°36'20.12200"	Latitude	N37°36'20.12200"
Northing	4164764.807 m	Longitude	W101°24'00.80690"	Longitude	W101°24'00.80690"
Elevation	949.675 m	Height	924.188 m	Height	924.188 m

Vector					
9Ughb[	-2243.814 m	NS Fwd Azimuth	287°52'42"	L	-2131.509 m
Bcfh\jb[	786.992 m	Ellipsoid Dist.	2377.477 m	M	878.978 m
9Yj Uhcb	5.528 m	<Y][\h	5.559 m	N	581.486 m

## Standard Errors

Vector errors:					
Point ID	0.002 m	Point ID	0°00'00"	Point ID	0.002 m
Point ID	0.002 m	Point ID	0.002 m	Point ID	0.003 m
Point ID	0.004 m	Point ID	0.004 m	Point ID	0.002 m

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

	X	Y	Z
X	0.0000043856		
Y	0.0000032573	0.0000091788	
Z	-0.0000006530	-0.0000037062	0.0000061053

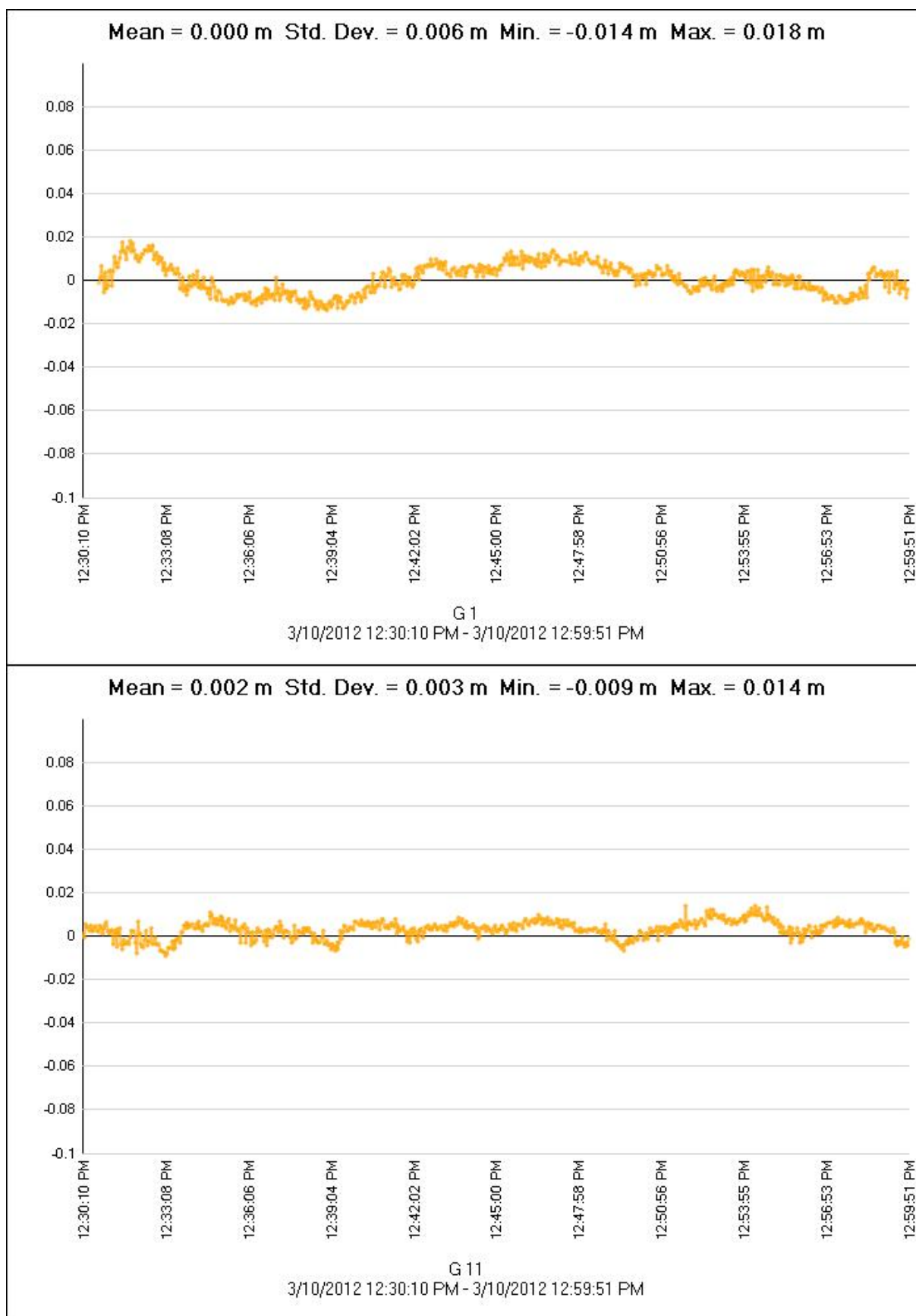
## Occupations

	From	To
Point ID:	HH0698	SVA26-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00100700.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050702.12o
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

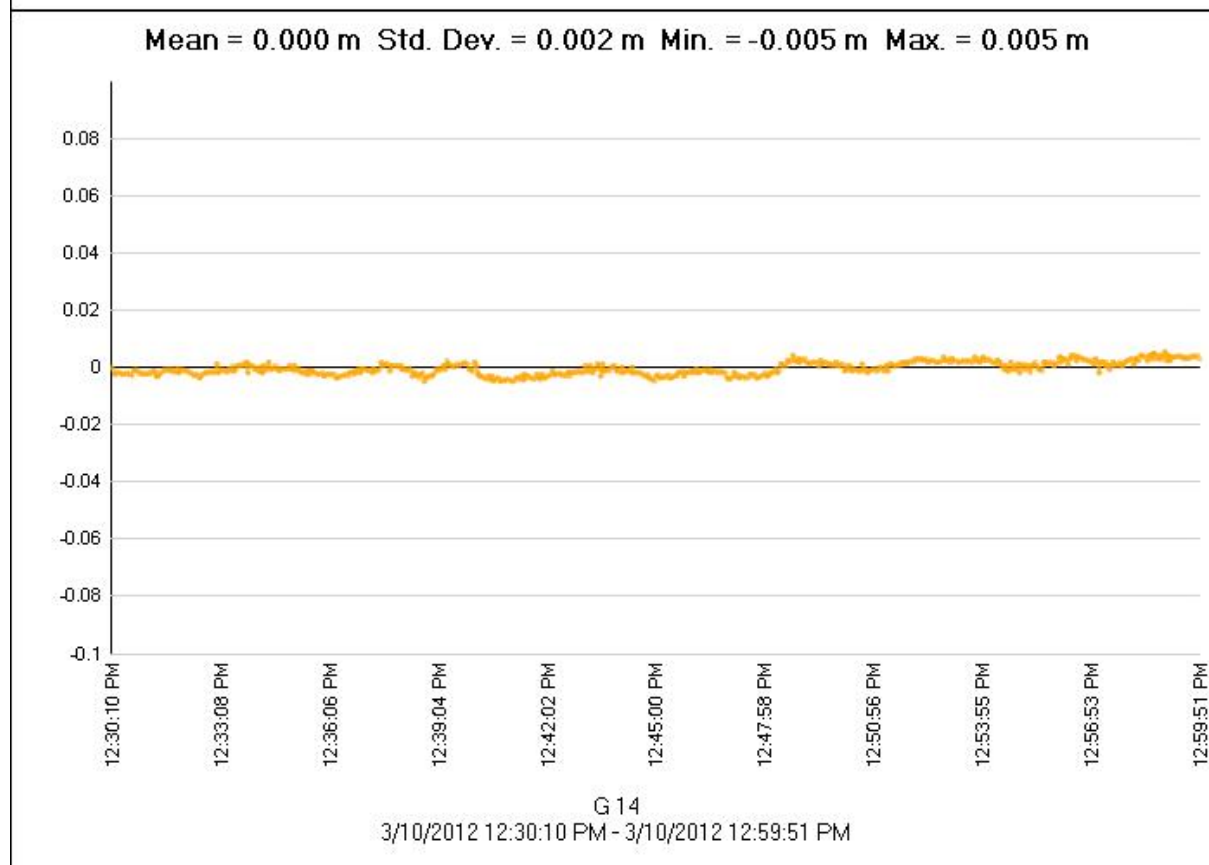
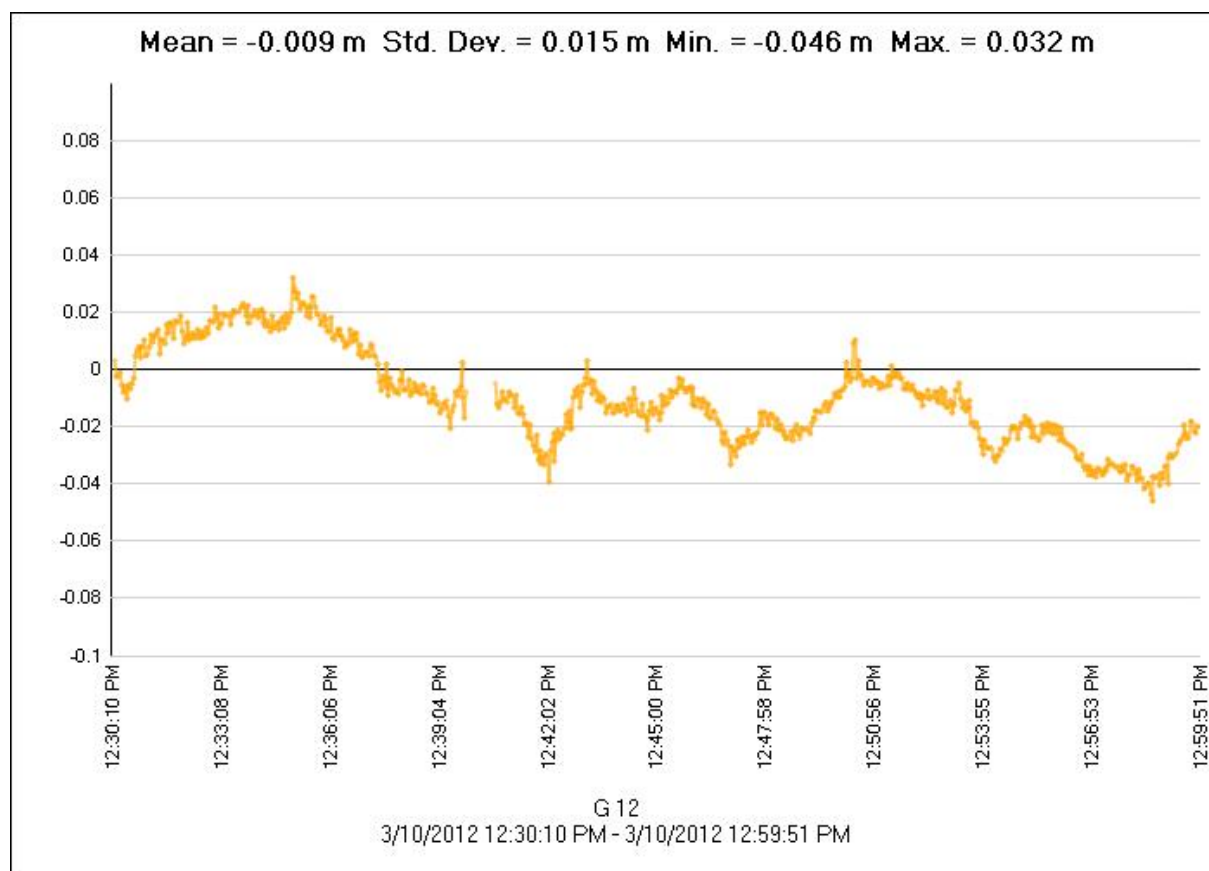
## Tracking Summary

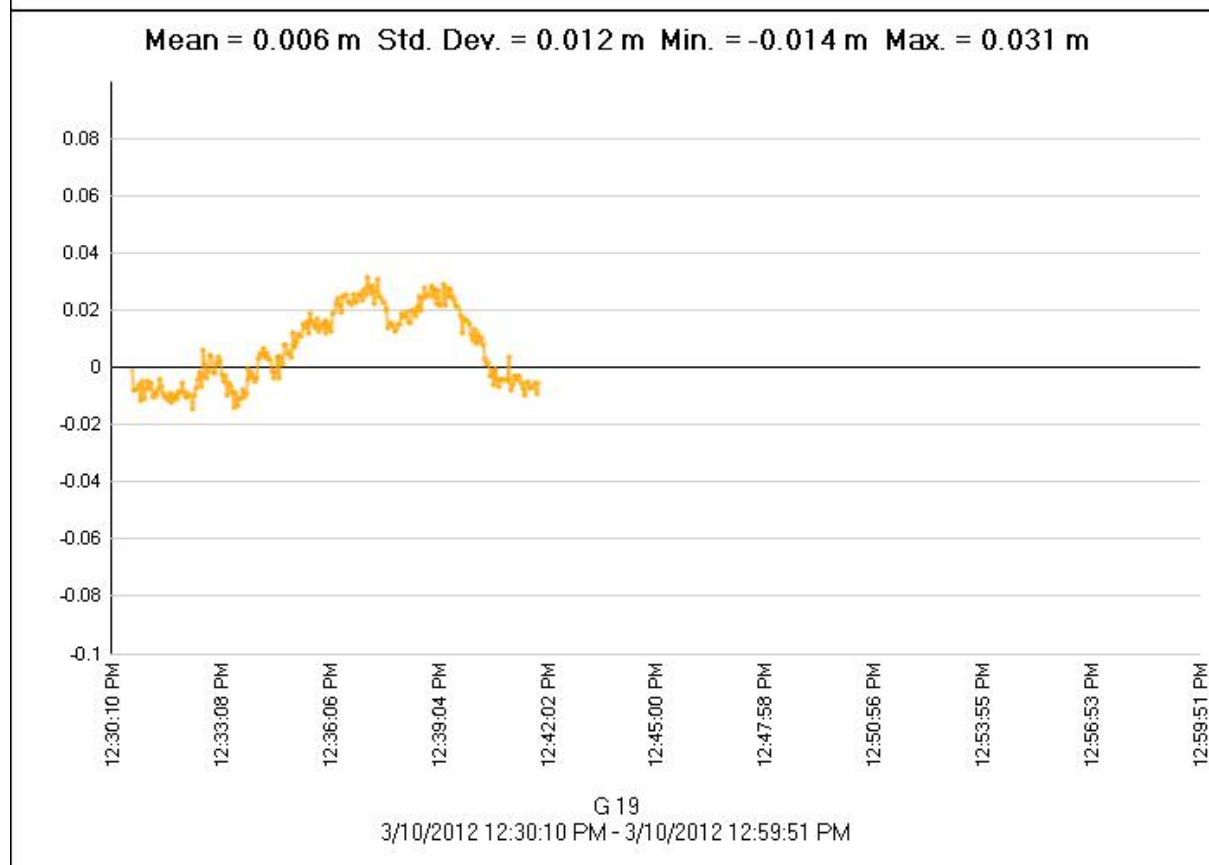
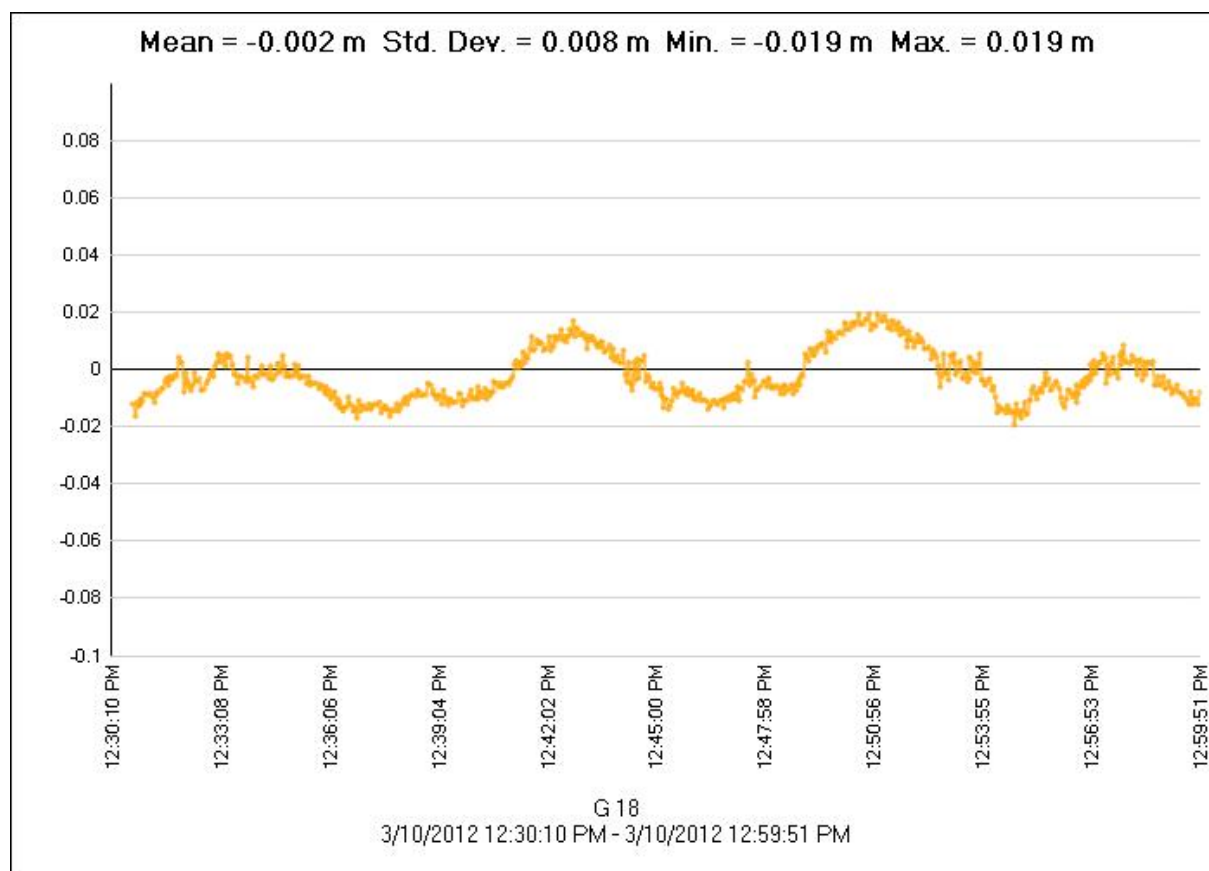
SV	3/10/2012 12:30:09 PM										Duration: 00:29:41 Major interval: 00:01:00										3/10/2012 12:59:50 PM																				
G 1	L1																																								
	L2																																								
G 9	L1																																								
	L2																																								
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

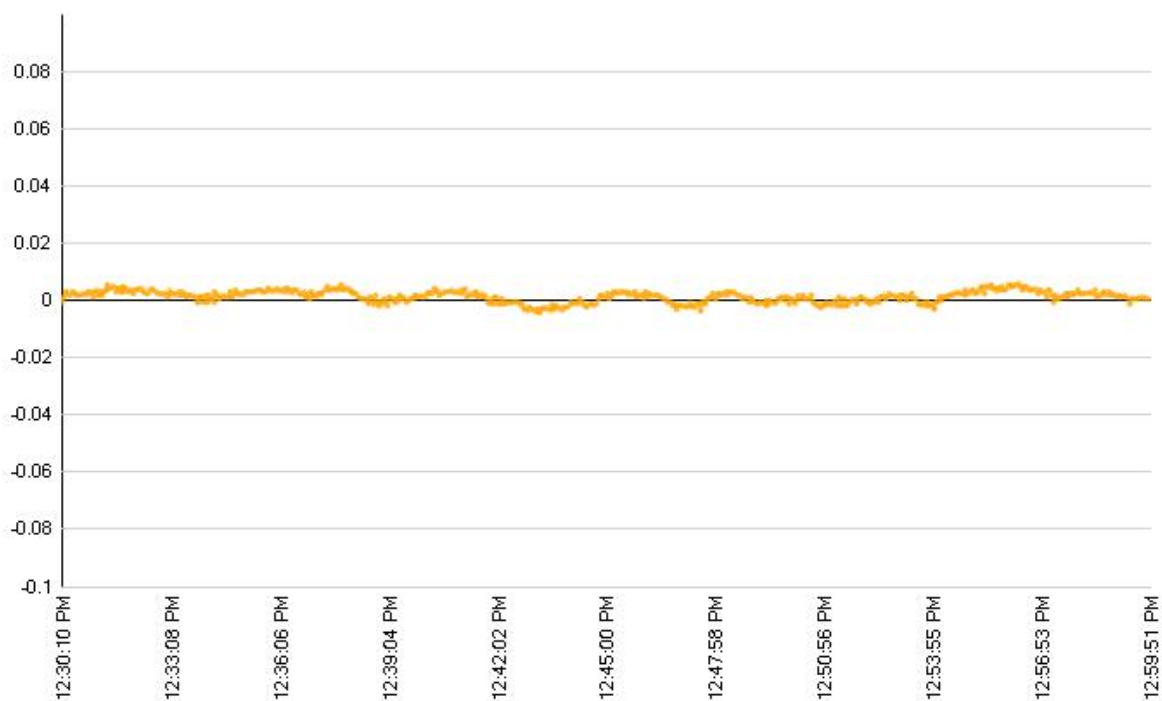






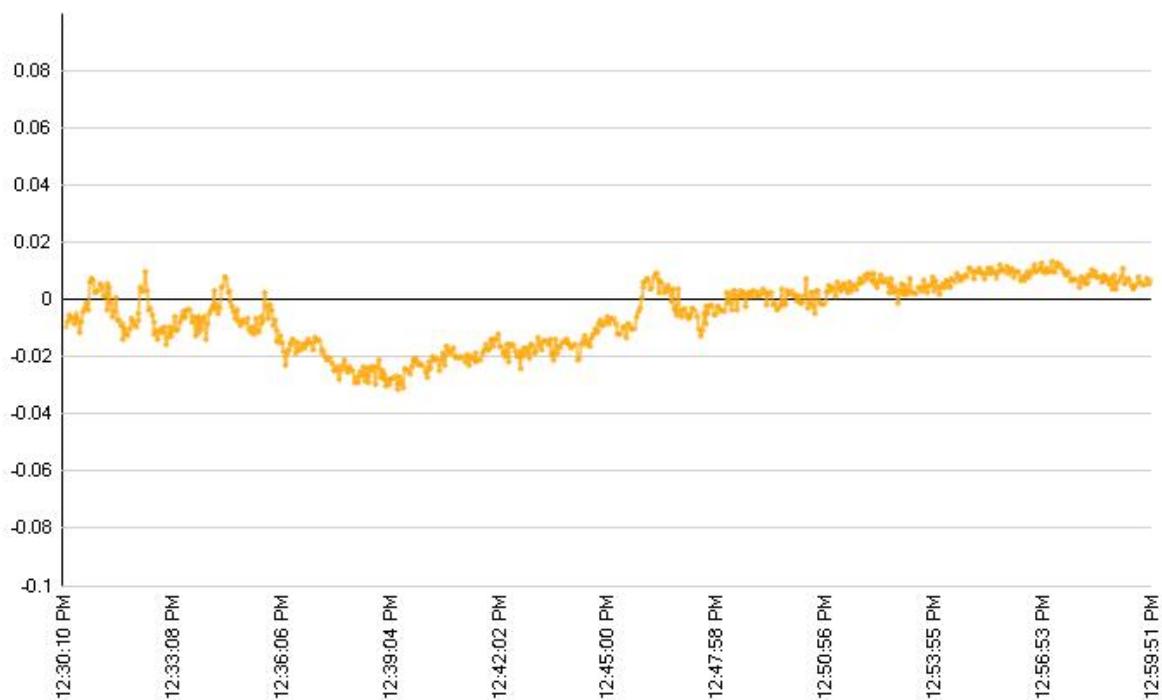


Mean = 0.001 m Std. Dev. = 0.002 m Min. = -0.004 m Max. = 0.006 m



G 22  
3/10/2012 12:30:10 PM - 3/10/2012 12:59:51 PM

Mean = -0.005 m Std. Dev. = 0.010 m Min. = -0.032 m Max. = 0.014 m



G 25  
3/10/2012 12:30:10 PM - 3/10/2012 12:59:51 PM

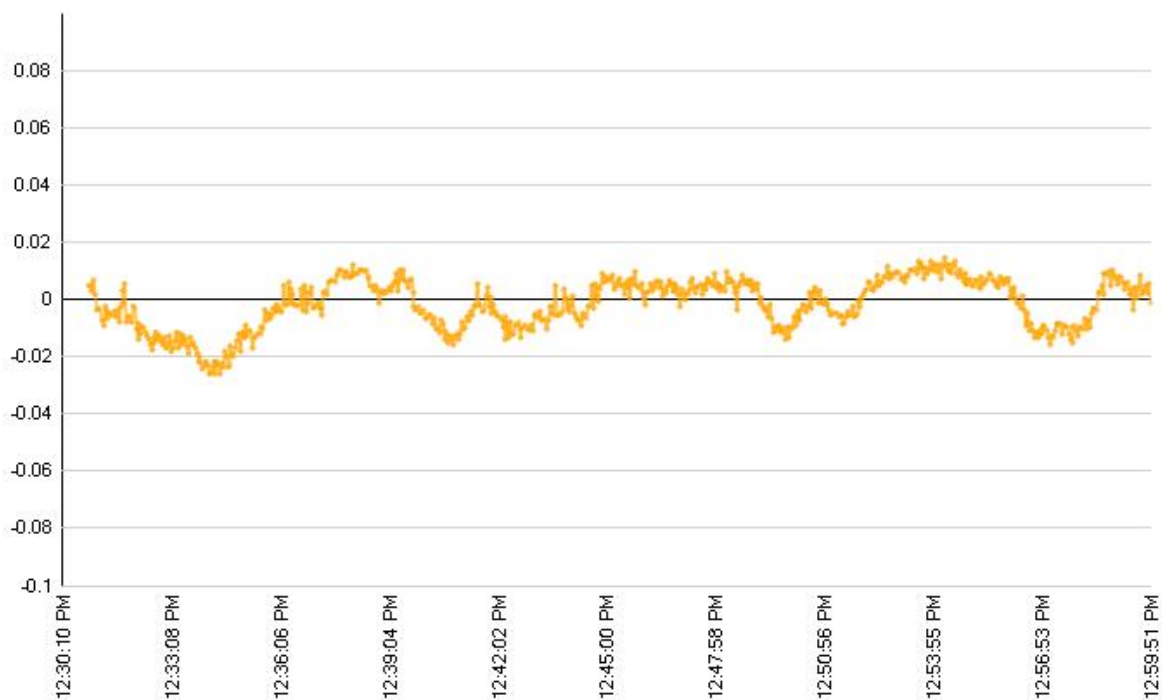
Mean = 0.000 m Std. Dev. = 0.005 m Min. = -0.011 m Max. = 0.016 m



G 31

3/10/2012 12:30:10 PM - 3/10/2012 12:59:51 PM

Mean = -0.002 m Std. Dev. = 0.007 m Min. = -0.026 m Max. = 0.014 m





G 32

3/10/2012 12:30:10 PM - 3/10/2012 12:59:51 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

Baseline observation: HH0698 --- SVA27-B1 (B227)

Processed: 4/3/2012 2:40:19 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.008 m

Vertical precision: 0.013 m

RMS: 0.002 m

Maximum PDOP: 2.456

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 3/9/2012 11:04:46 AM (Local: UTC-7hr)

Processing stop time: 3/9/2012 11:31:47 AM (Local: UTC-7hr)

Processing duration: 00:27:01

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0698				
Grid		Local		Global	
Easting	290370.958 m	Latitude	N37°35'56.45803"	Latitude	N37°35'56.45802"
Northing	4163977.815 m	Longitude	W101°22'28.55840"	Longitude	W101°22'28.55840"
Elevation	944.147 m	Height	918.629 m	Height	918.629 m

To:	SVA27-B1				
Grid		Local		Global	
Easting	313784.998 m	Latitude	N37°34'17.48496"	Latitude	N37°34'17.48496"
Northing	4160366.314 m	Longitude	W101°06'31.07122"	Longitude	W101°06'31.07122"
Elevation	936.857 m	Height	911.028 m	Height	911.028 m

Vector					
9Ughb[	23414.040 m	NS Fwd Azimuth	97°19'11"	L	22682.490 m
Bcfh\jb[	-3611.501 m	Ellipsoid Dist.	23688.962 m	M	-6400.060 m
9Yj Uhcb	-7.289 m	<Y][\h	-7.601 m	N	-2423.021 m

## Standard Errors

Vector errors:					
Point ID	0.003 m	Point ID	0°00'00"	Point ID	0.002 m
Point ID	0.003 m	Point ID	0.003 m	Point ID	0.006 m
Point ID	0.007 m	Point ID	0.007 m	Point ID	0.004 m

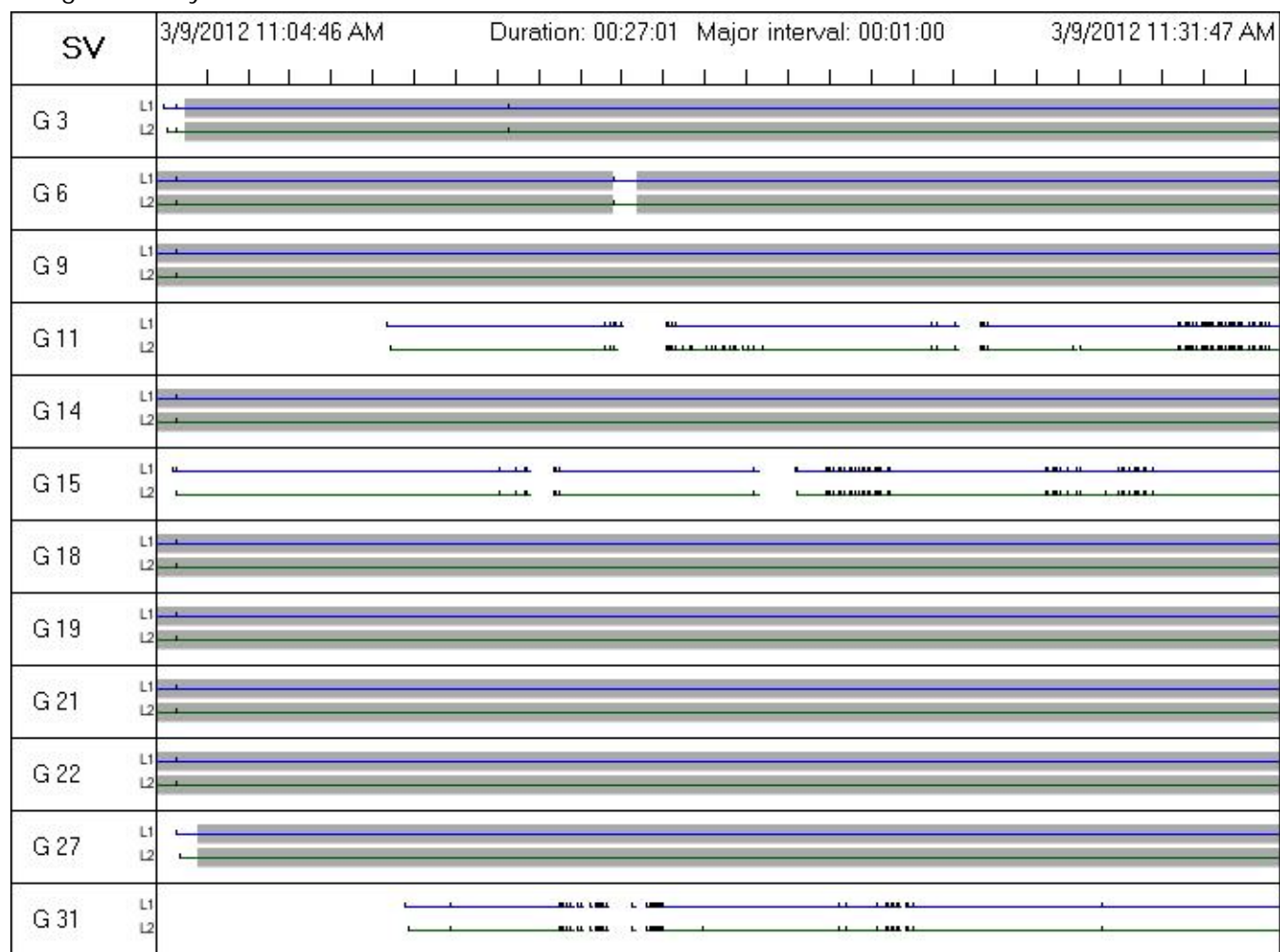
## Aposteriori Covariance Matrix (Meter<sup>2</sup>)

	X	Y	Z
X	0.0000060456		
Y	0.0000018896	0.0000341244	
Z	-0.0000023978	-0.0000144464	0.0000194025

## Occupations

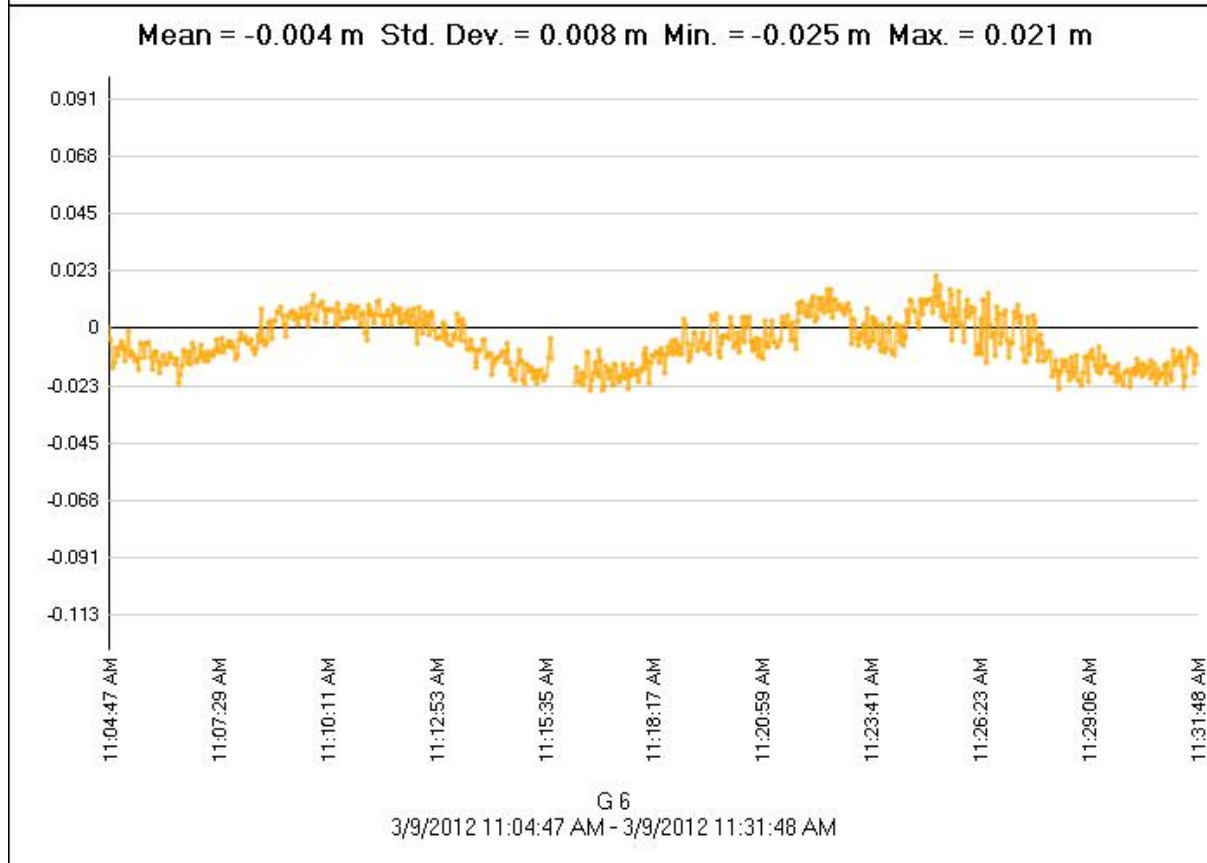
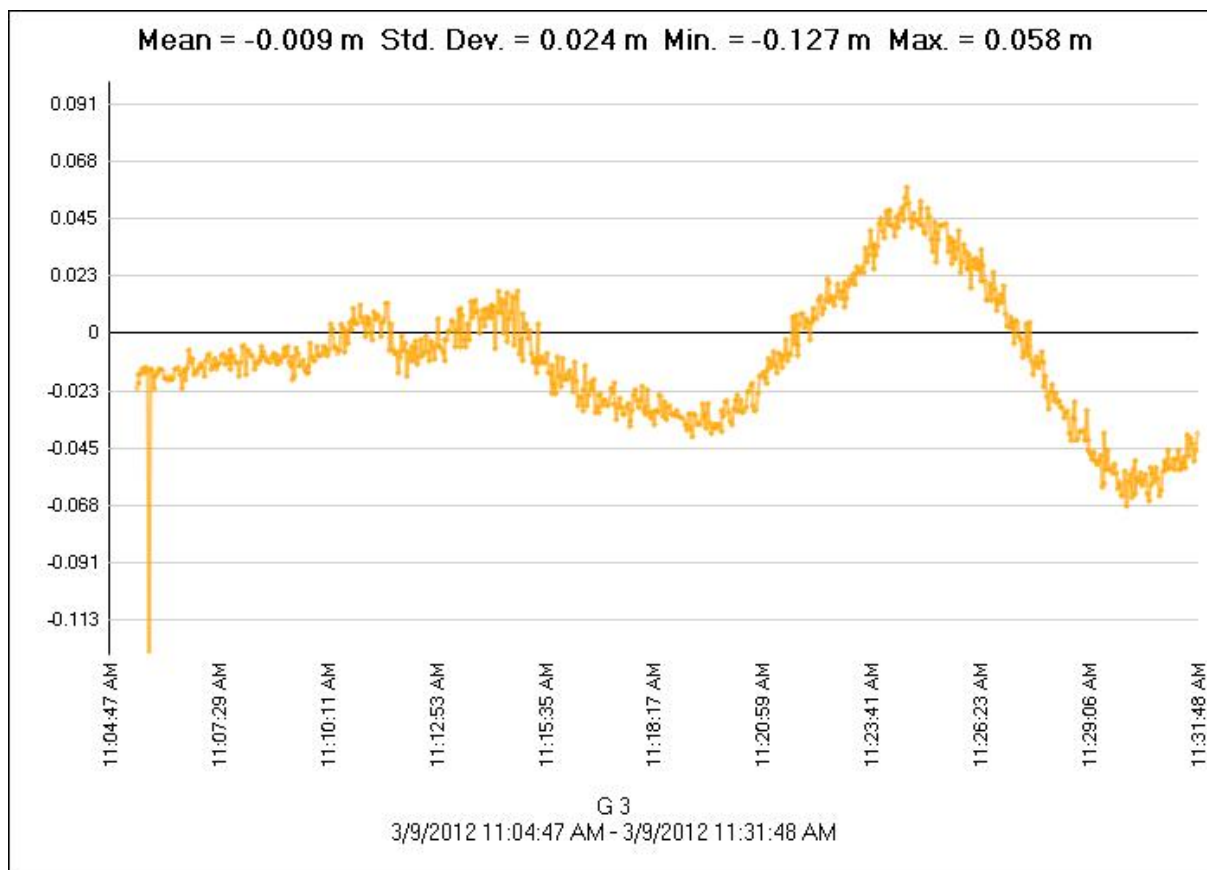
	From	To
Point ID:	HH0698	SVA27-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00100690.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050690.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

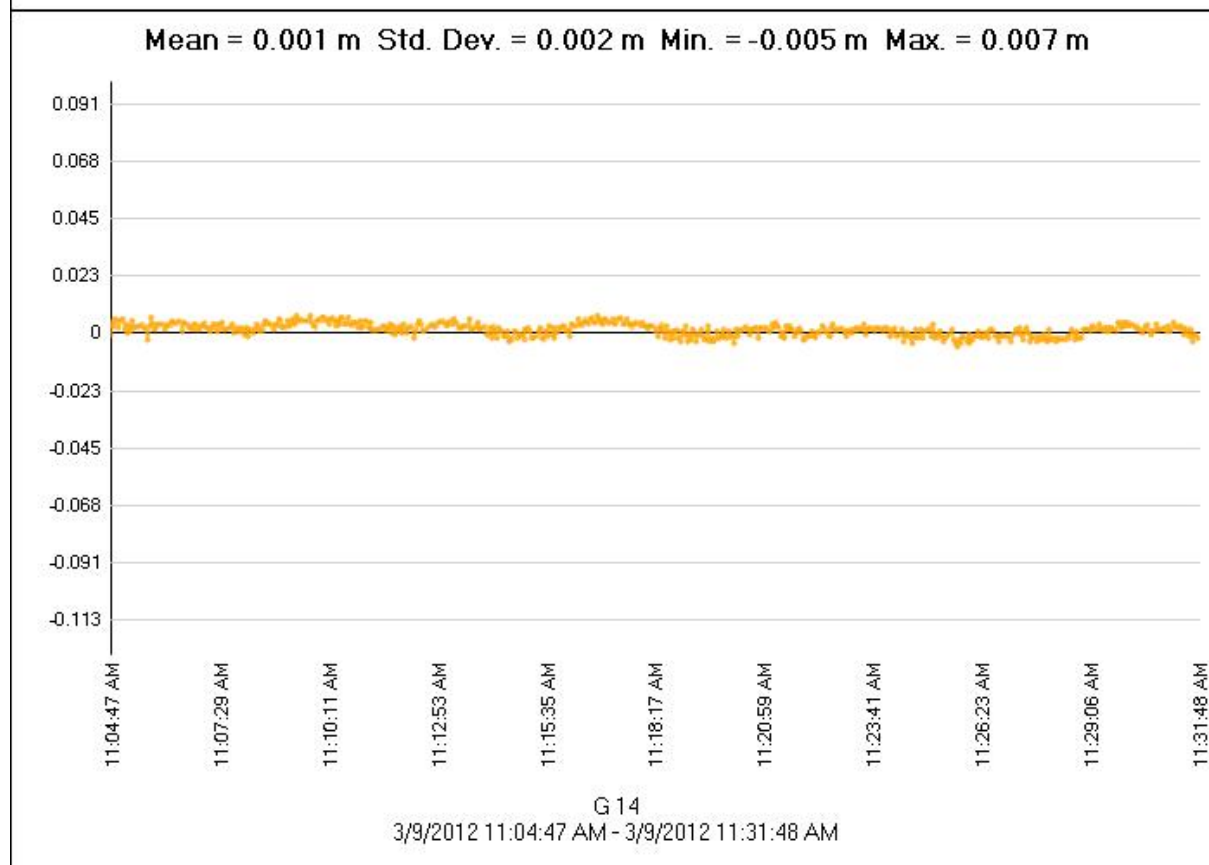
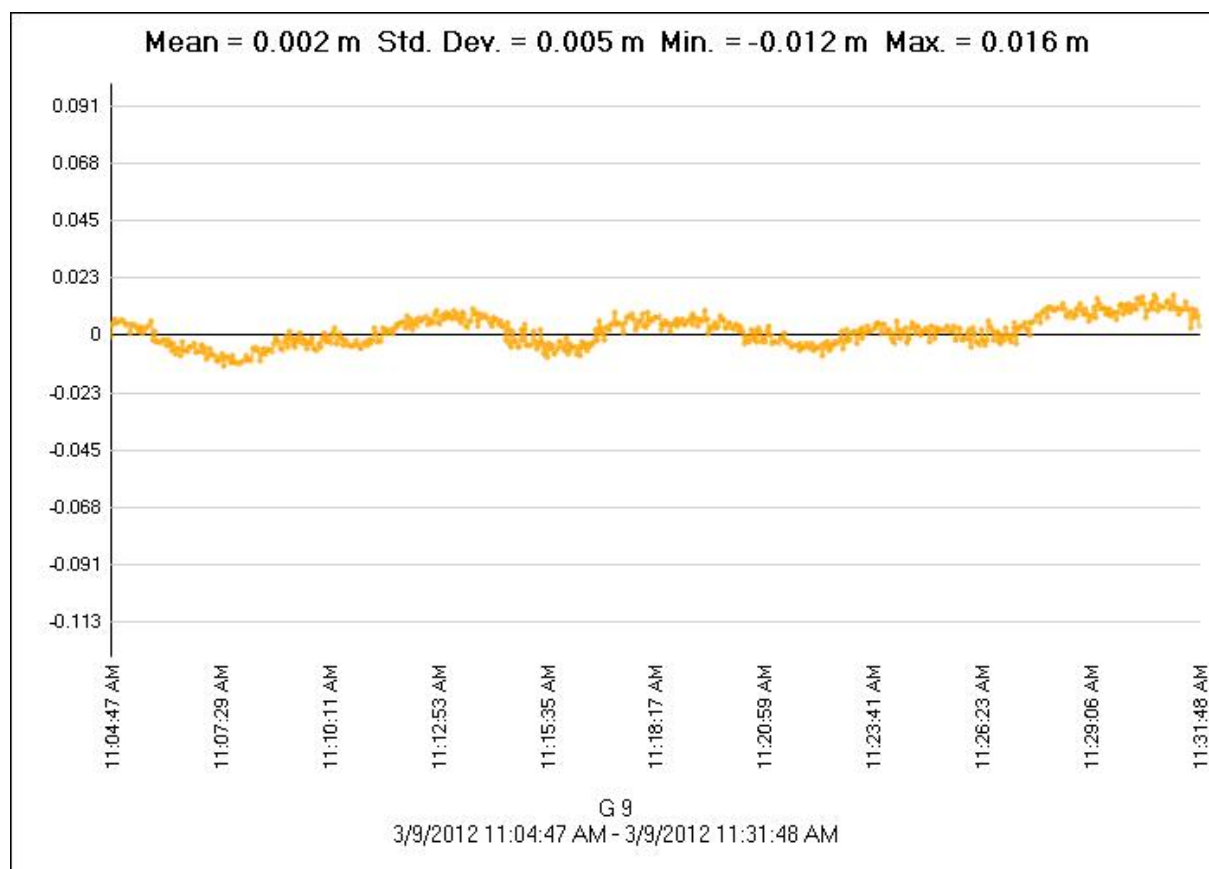
# Tracking Summary

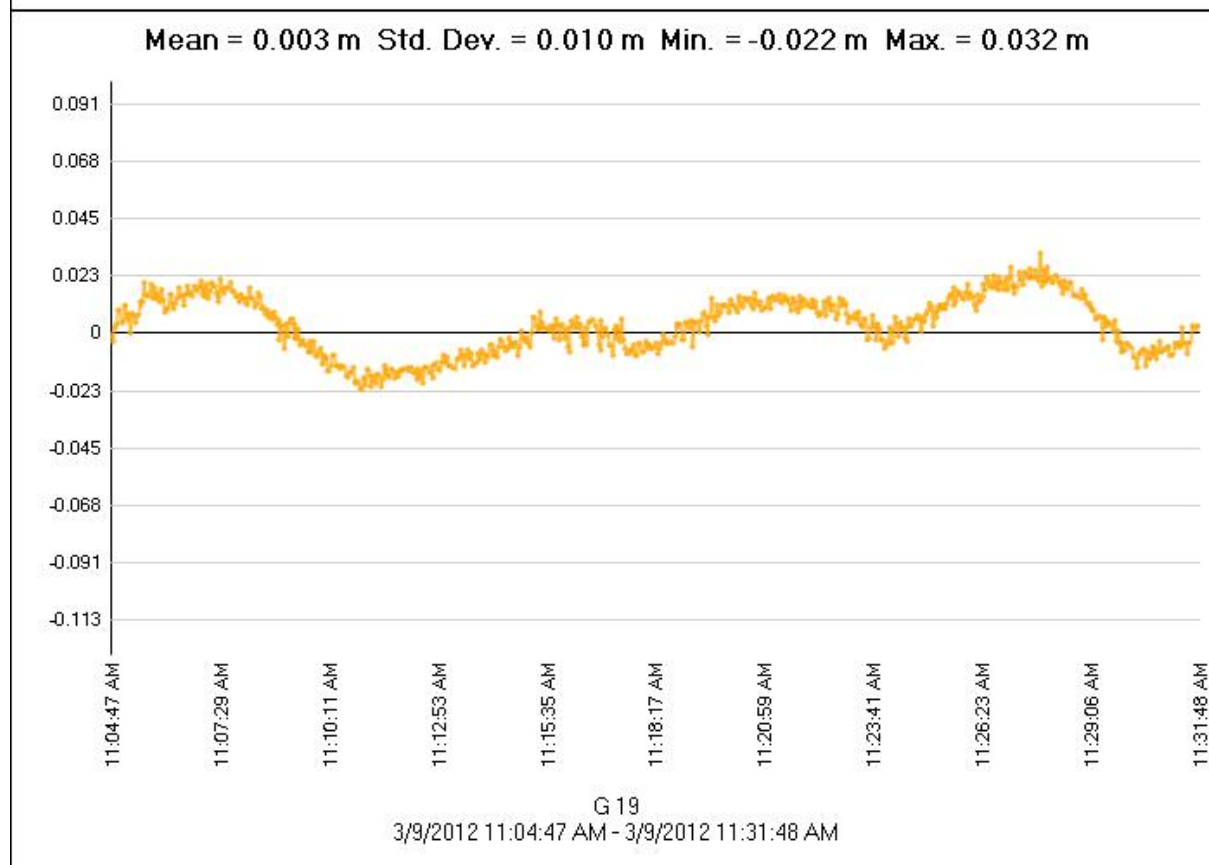
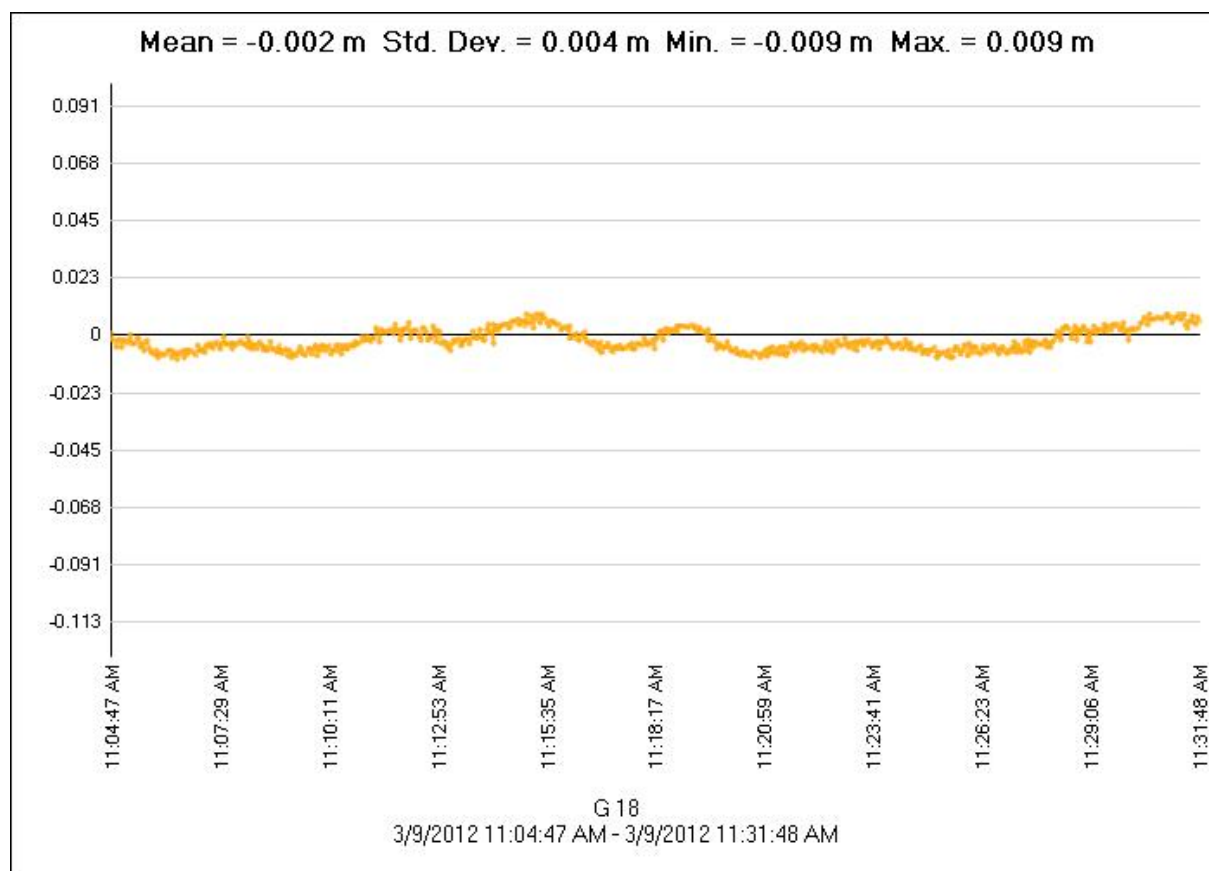


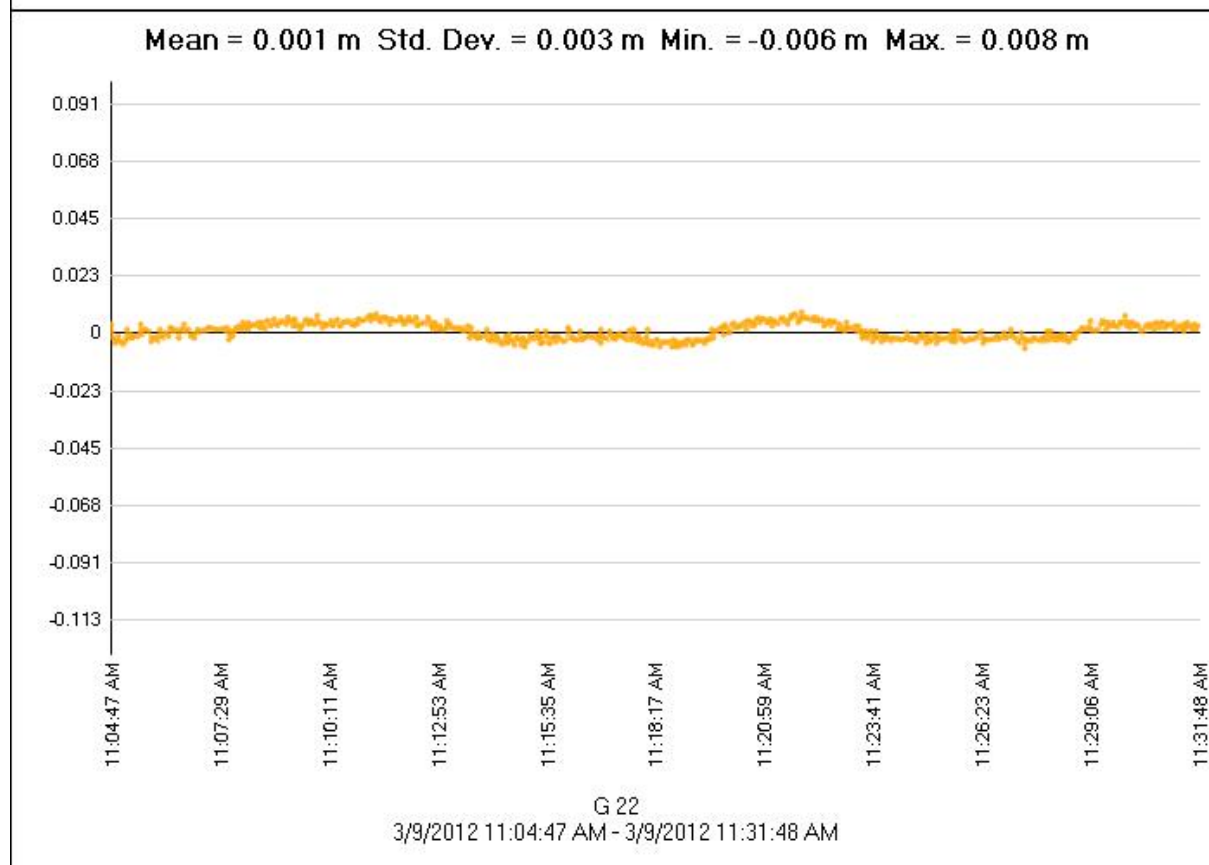
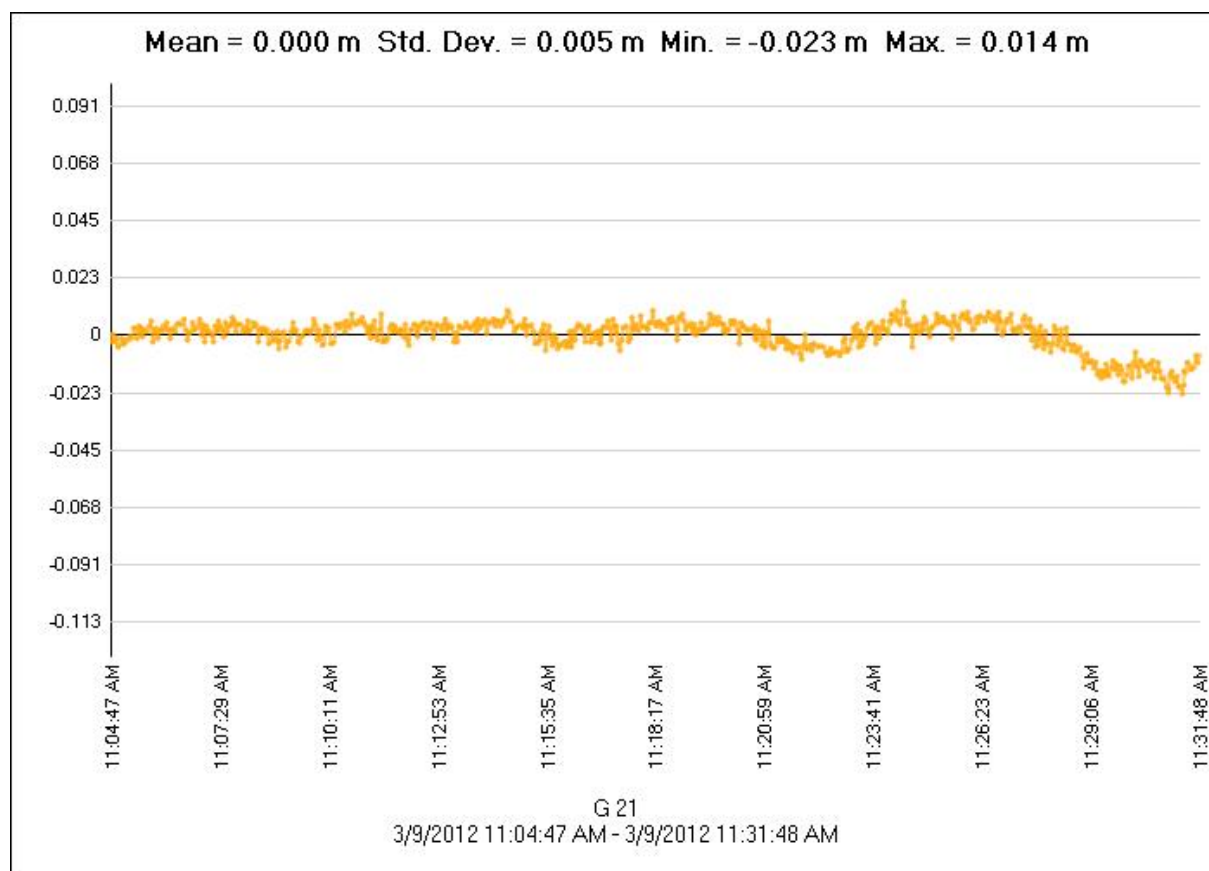


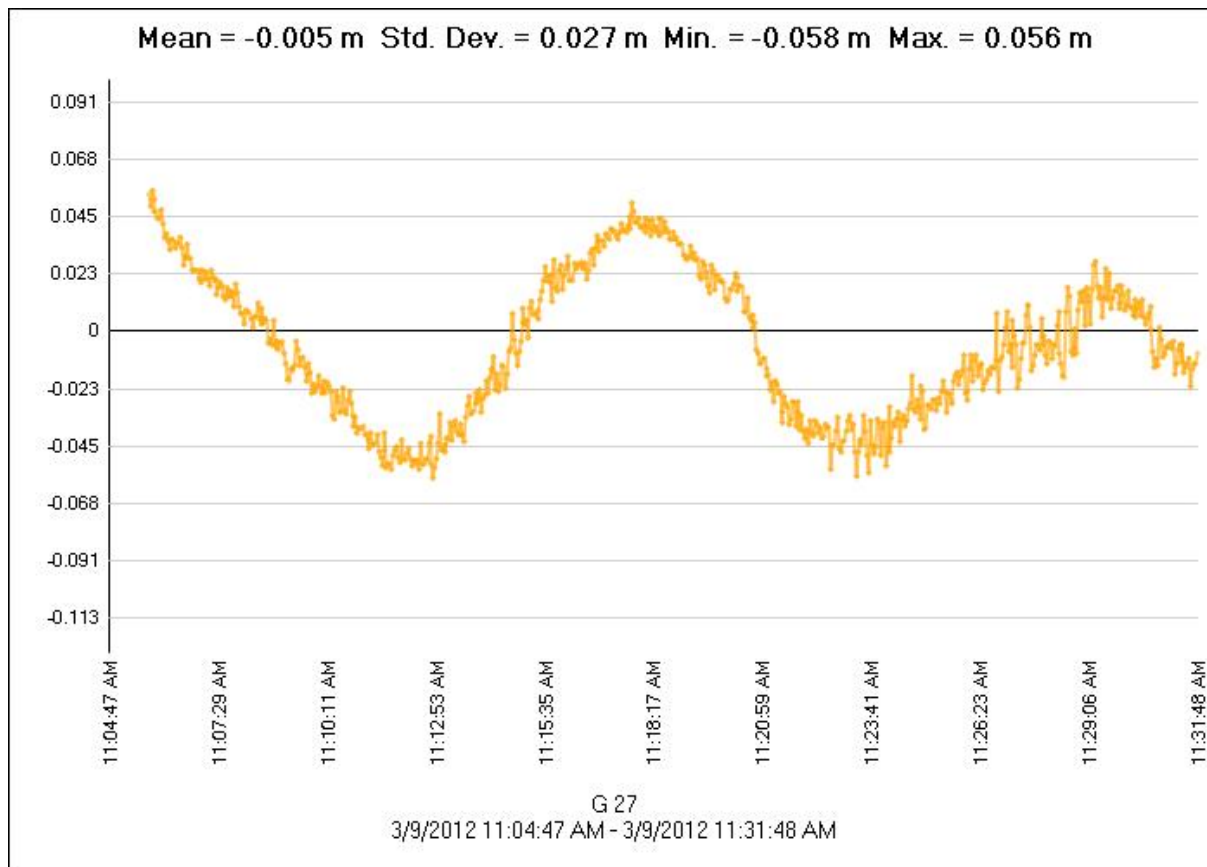
## Residuals











## 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

Baseline observation: HH0698 --- FVA27-B1 (B228)

Processed: 4/3/2012 2:40:30 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.011 m

Vertical precision: 0.013 m

RMS: 0.006 m

Maximum PDOP: 3.468

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 3/9/2012 11:38:24 AM (Local: UTC-7hr)

Processing stop time: 3/9/2012 12:09:33 PM (Local: UTC-7hr)

Processing duration: 00:31:09

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0698				
Grid		Local		Global	
Easting	290370.958 m	Latitude	N37°35'56.45803"	Latitude	N37°35'56.45802"
Northing	4163977.815 m	Longitude	W101°22'28.55840"	Longitude	W101°22'28.55840"
Elevation	944.147 m	Height	918.629 m	Height	918.629 m

To:	FVA27-B1				
Grid		Local		Global	
Easting	312485.428 m	Latitude	N37°33'43.77938"	Latitude	N37°33'43.77938"
Northing	4159356.146 m	Longitude	W101°07'23.08491"	Longitude	W101°07'23.08491"
Elevation	935.572 m	Height	909.749 m	Height	909.749 m

Vector					
9Ughb[	22114.470 m	NS Fwd Azimuth	100°21'20"	L	21307.838 m
Bcfh\jb[	-4621.668 m	Ellipsoid Dist.	22590.299 m	M	-6774.695 m
9Yj Uhcb	-8.574 m	<Y][\h	-8.880 m	N	-3247.590 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	0.007 m
Point ID	0.006 m	Point Description	0.006 m	Point Type	0.004 m

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

	X	Y	Z
X	0.0000104485		
Y	0.0000075630	0.0000458326	
Z	-0.0000000679	-0.0000060412	0.0000150552

## Occupations

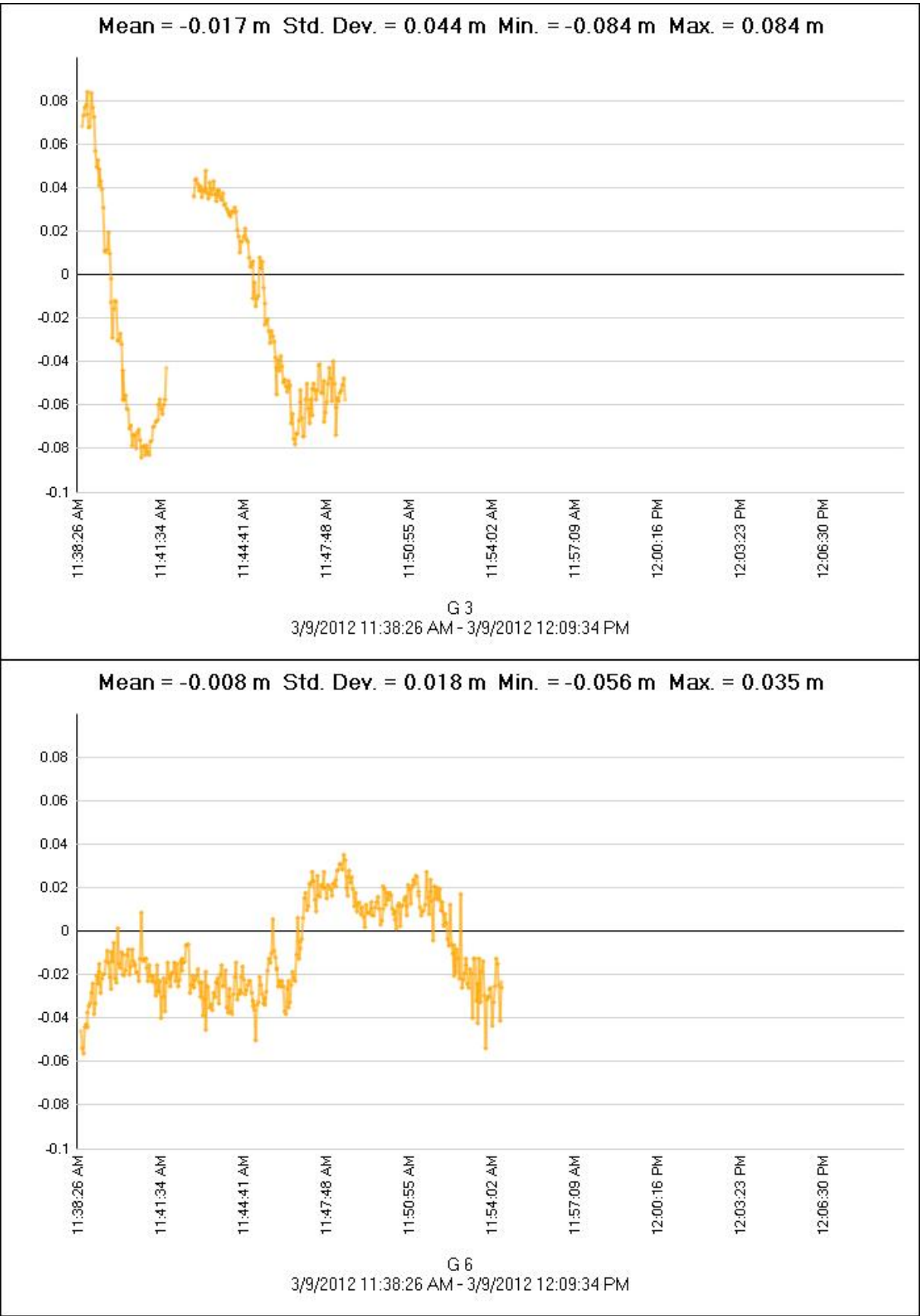
	From	To
Point ID:	HH0698	FVA27-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00100690.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050691.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

## Tracking Summary

SV	3/9/2012 11:38:24 AM	Duration: 00:31:09	Major interval: 00:01:00	3/9/2012 12:09:33 PM
G1				
G3				
G6				
G9				
G11				
G12				
G14				
G18				
G19				
G21				
G22				
G27				
G31				



Residuals



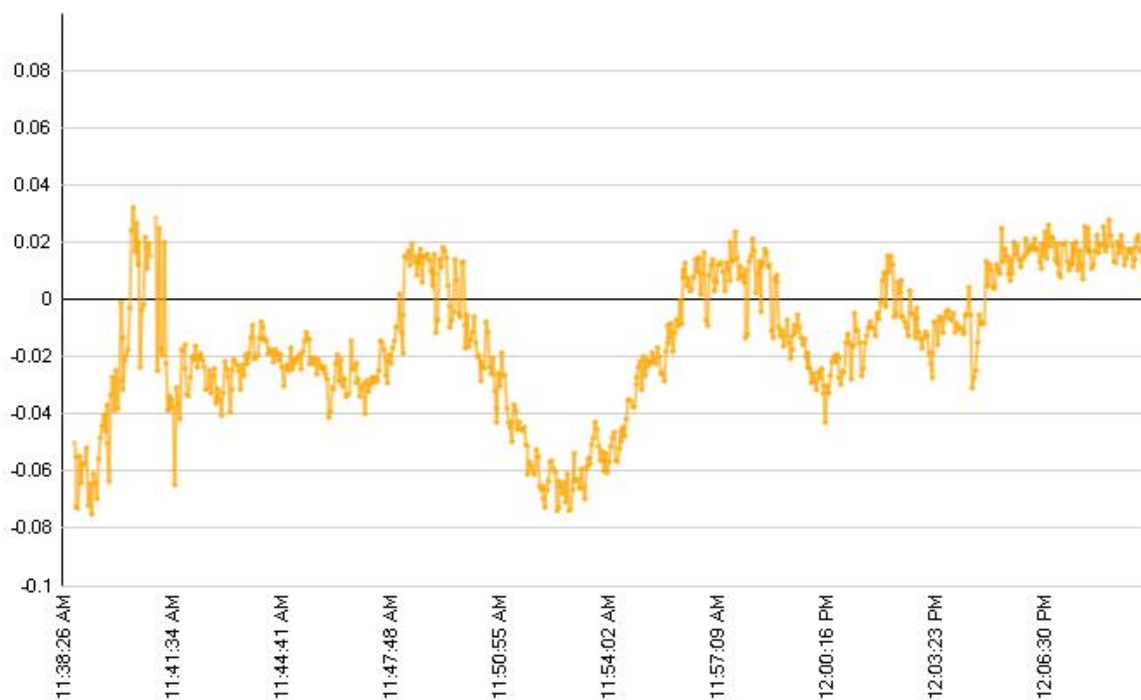
Mean = 0.001 m Std. Dev. = 0.014 m Min. = -0.043 m Max. = 0.033 m



G 9

3/9/2012 11:38:26 AM - 3/9/2012 12:09:34 PM

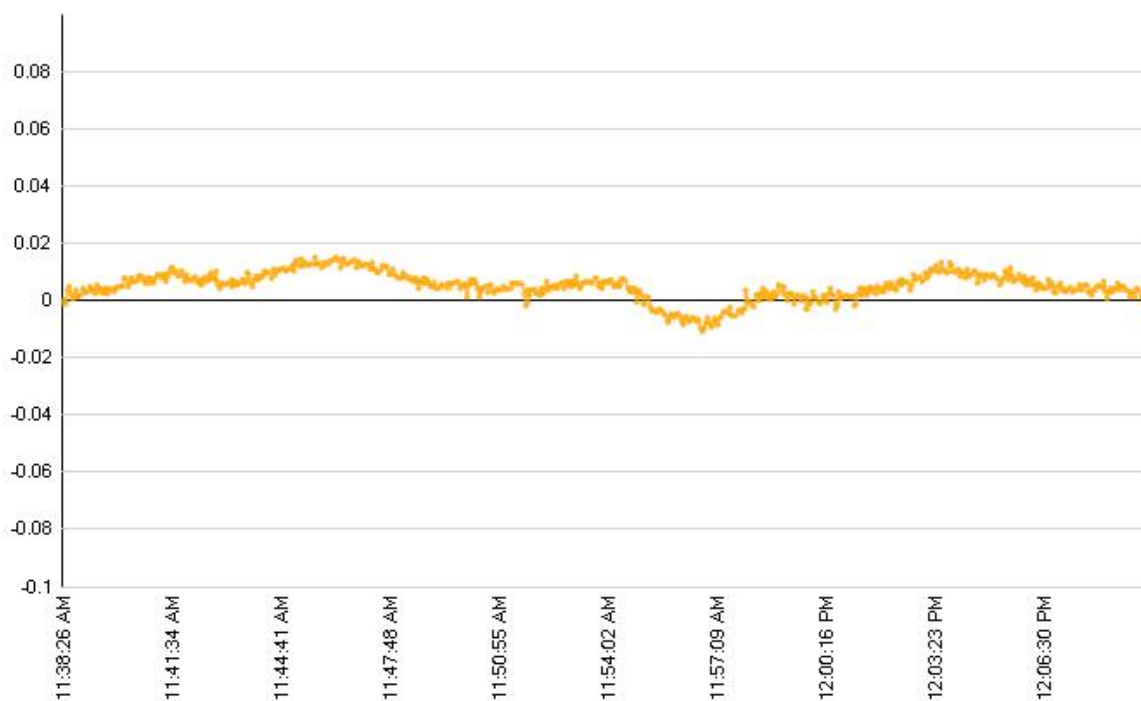
Mean = -0.014 m Std. Dev. = 0.023 m Min. = -0.075 m Max. = 0.032 m



G 11

3/9/2012 11:38:26 AM - 3/9/2012 12:09:34 PM

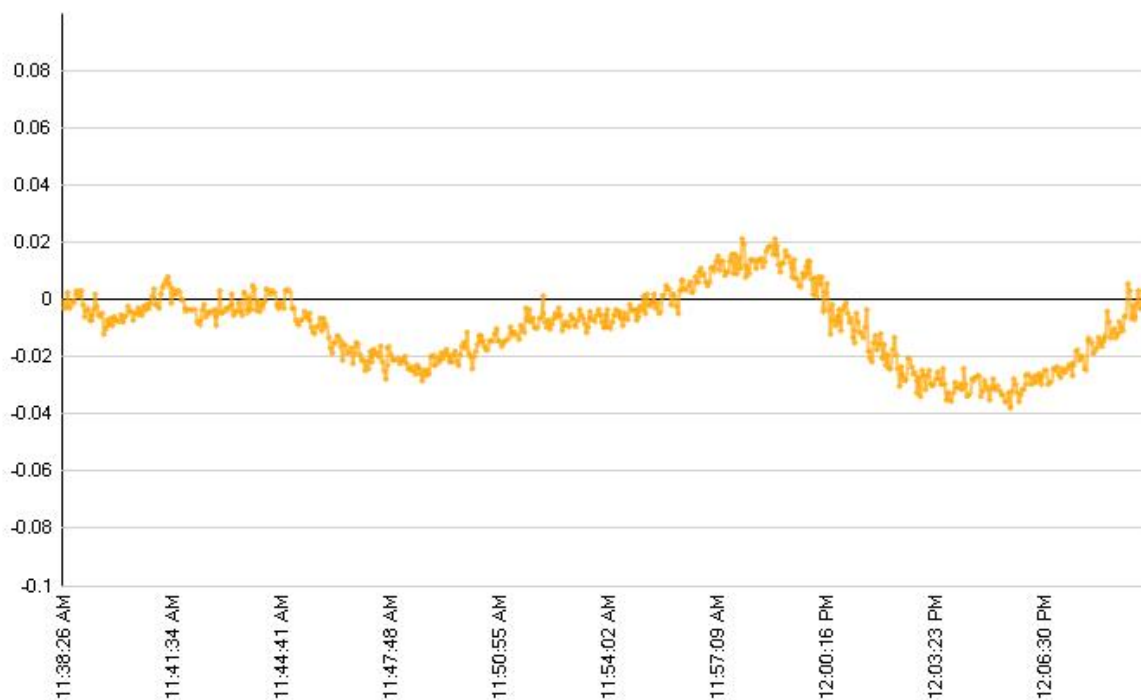
Mean = 0.004 m Std. Dev. = 0.005 m Min. = -0.011 m Max. = 0.015 m



G 14

3/9/2012 11:38:26 AM - 3/9/2012 12:09:34 PM

Mean = -0.009 m Std. Dev. = 0.012 m Min. = -0.038 m Max. = 0.021 m



G 18

3/9/2012 11:38:26 AM - 3/9/2012 12:09:34 PM

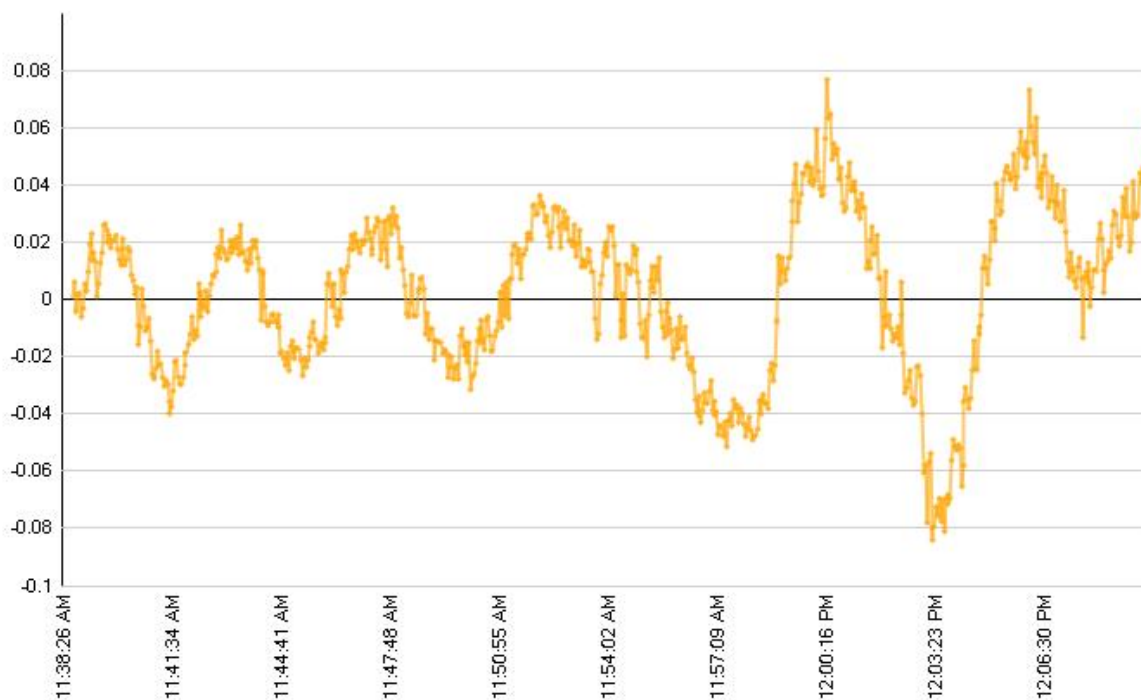
Mean = 0.000 m Std. Dev. = 0.011 m Min. = -0.039 m Max. = 0.029 m



G 19

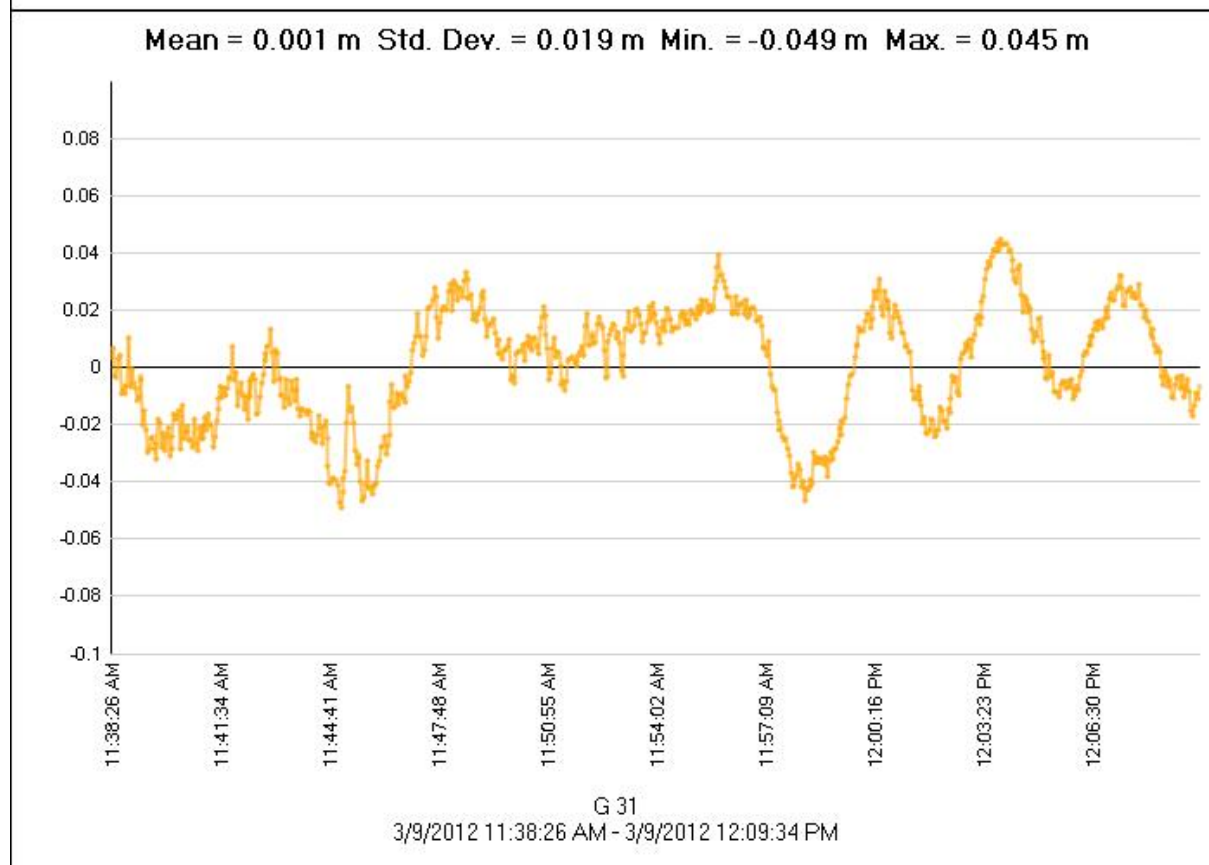
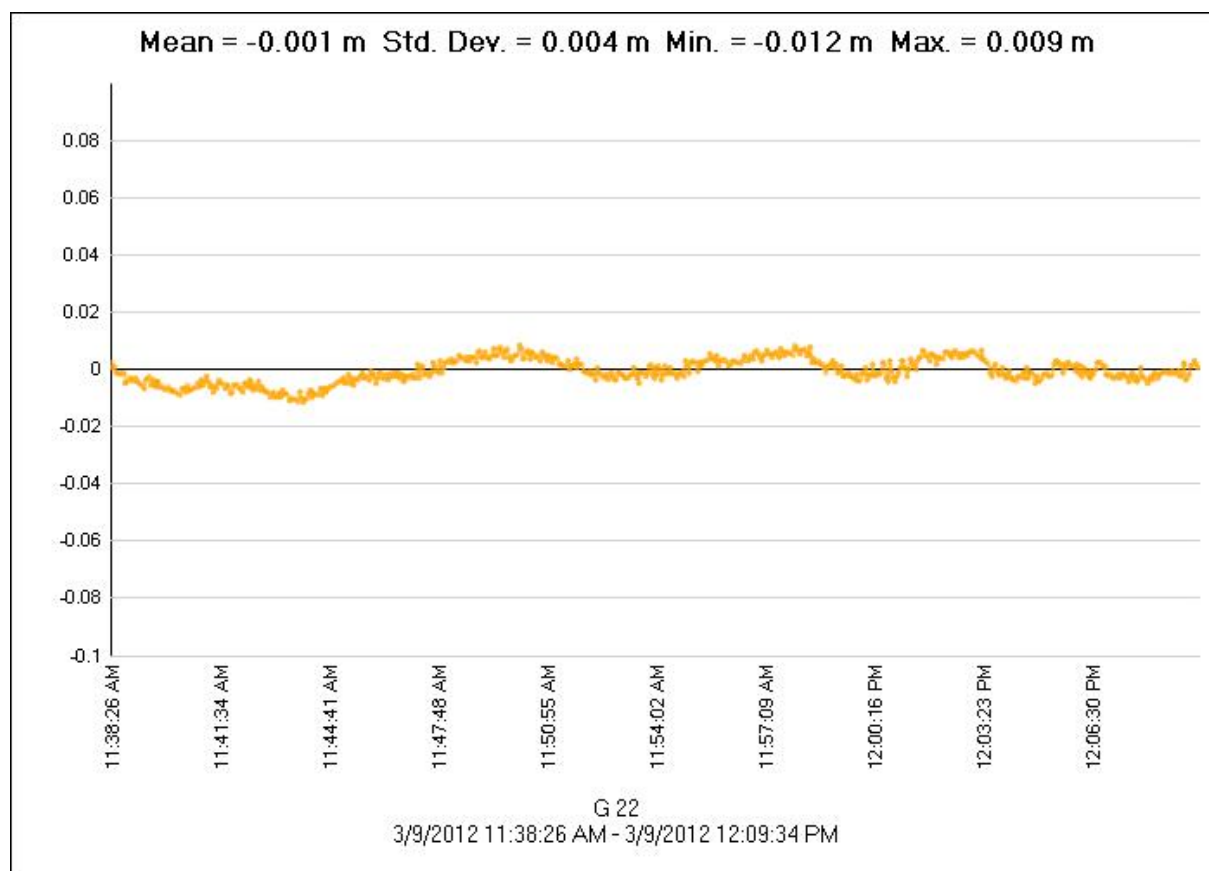
3/9/2012 11:38:26 AM - 3/9/2012 12:09:34 PM

Mean = 0.002 m Std. Dev. = 0.026 m Min. = -0.084 m Max. = 0.077 m



G 21



3/9/2012 11:38:26 AM - 3/9/2012 12:09:34 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

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HH0698 - FVA17-B1 (12:48:37 PM-1:18:59 PM) (S229)

---

Baseline observation: HH0698 --- FVA17-B1 (B229)

Processed: 4/3/2012 2:40:23 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.008 m

Vertical precision: 0.012 m

RMS: 0.003 m

Maximum PDOP: 1.833

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 3/9/2012 12:48:37 PM (Local: UTC-7hr)

Processing stop time: 3/9/2012 1:18:59 PM (Local: UTC-7hr)

Processing duration: 00:30:22

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0698				
Grid		Local		Global	
Easting	290370.958 m	Latitude	N37°35'56.45803"	Latitude	N37°35'56.45802"
Northing	4163977.815 m	Longitude	W101°22'28.55840"	Longitude	W101°22'28.55840"
Elevation	944.147 m	Height	918.629 m	Height	918.629 m

To:	FVA17-B1				
Grid		Local		Global	
Easting	297316.283 m	Latitude	N37°23'17.82154"	Latitude	N37°23'17.82153"
Northing	4140407.043 m	Longitude	W101°17'22.16893"	Longitude	W101°17'22.16893"
Elevation	942.456 m	Height	916.604 m	Height	916.604 m

Vector					
9Ughb[	6945.325 m	NS Fwd Azimuth	162°08'10"	L	4583.308 m
Bcfh\jb[	-23570.771 m	Ellipsoid Dist.	24569.688 m	M	-15437.977 m
9Yj Uhcb	-1.690 m	<Y][\h	-2.024 m	N	-18560.849 m

## Standard Errors

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

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

	X	Y	Z
X	0.0000100165		
Y	0.0000077802	0.0000229463	
Z	-0.0000033303	-0.0000132616	0.0000213737

## Occupations

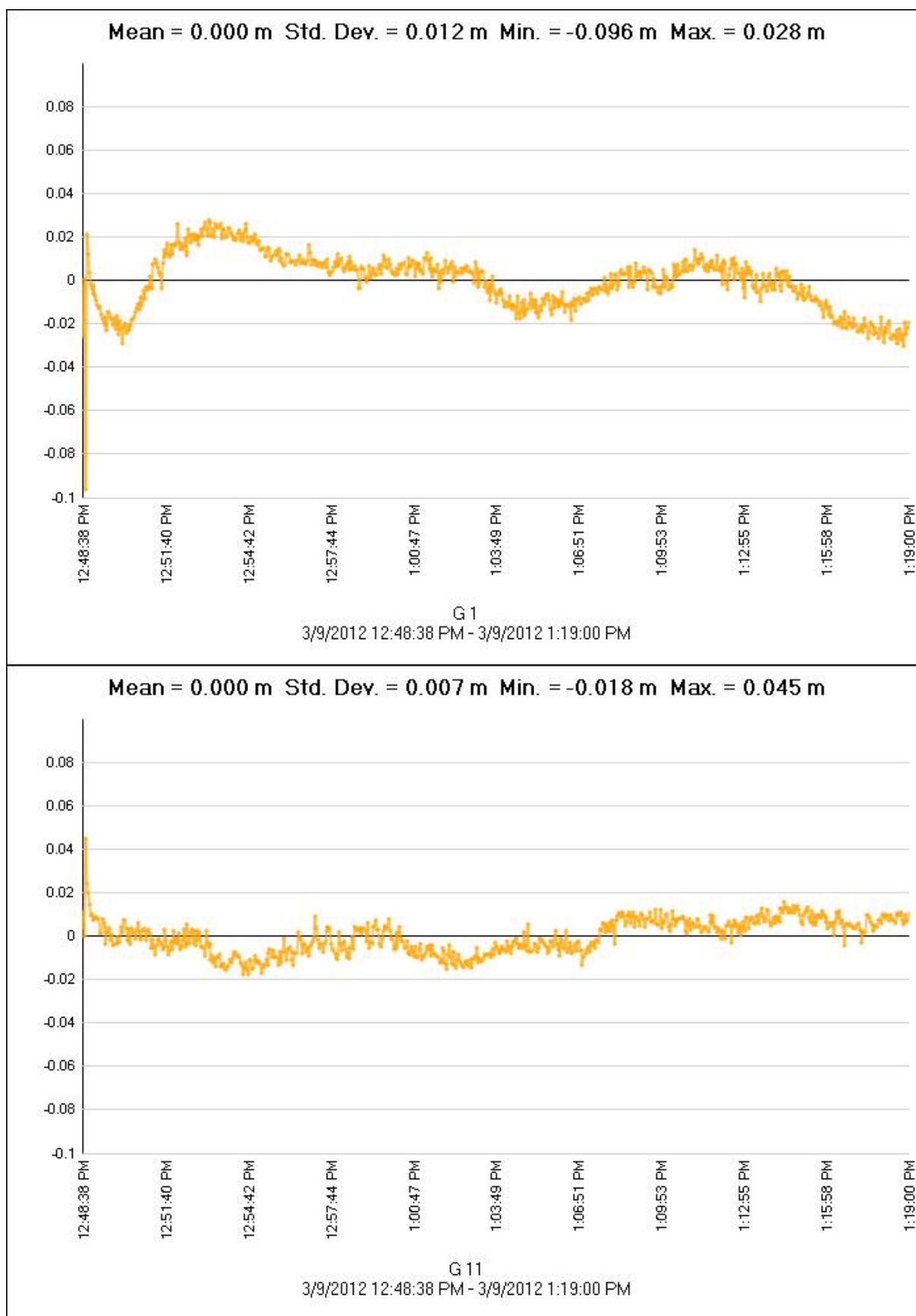
	From	To
Point ID:	HH0698	FVA17-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00100690.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050692.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center



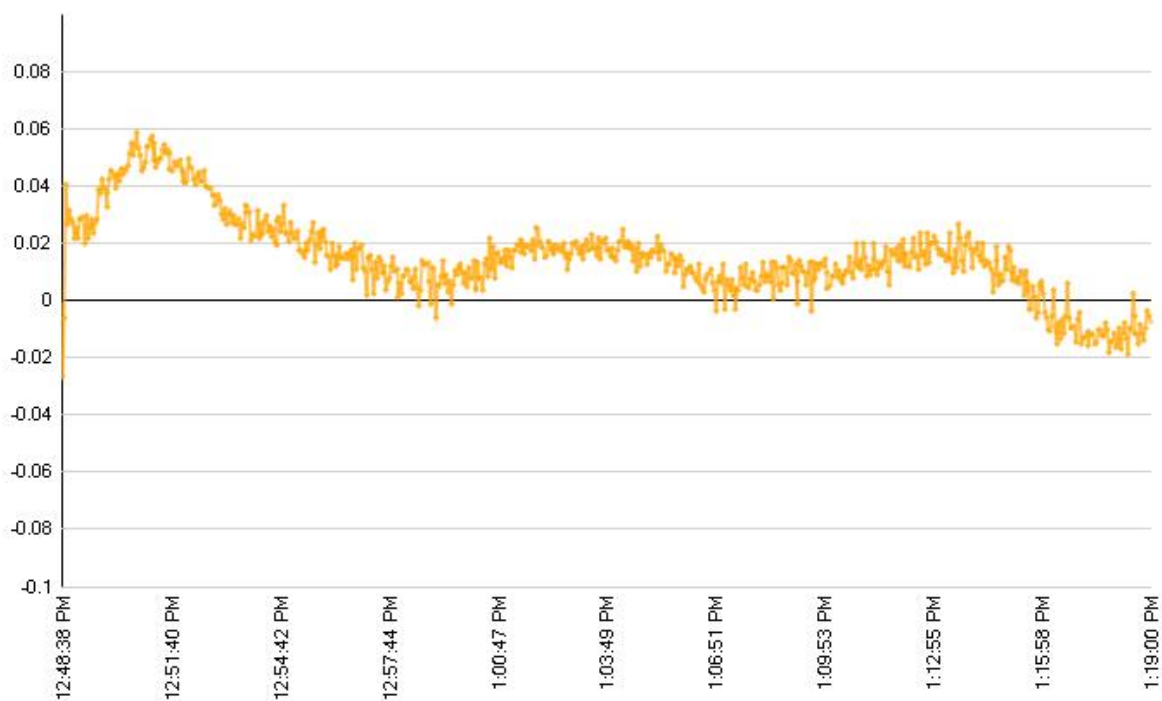
# Tracking Summary

SV	3/9/2012 12:48:37 PM	Duration: 00:30:22	Major interval: 00:01:00	3/9/2012 1:18:59 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 20	L1 L2			
G 22	L1 L2			
G 25	L1 L2			
G 30	L1 L2			
G 31	L1 L2			
G 32	L1 L2			

## Residuals



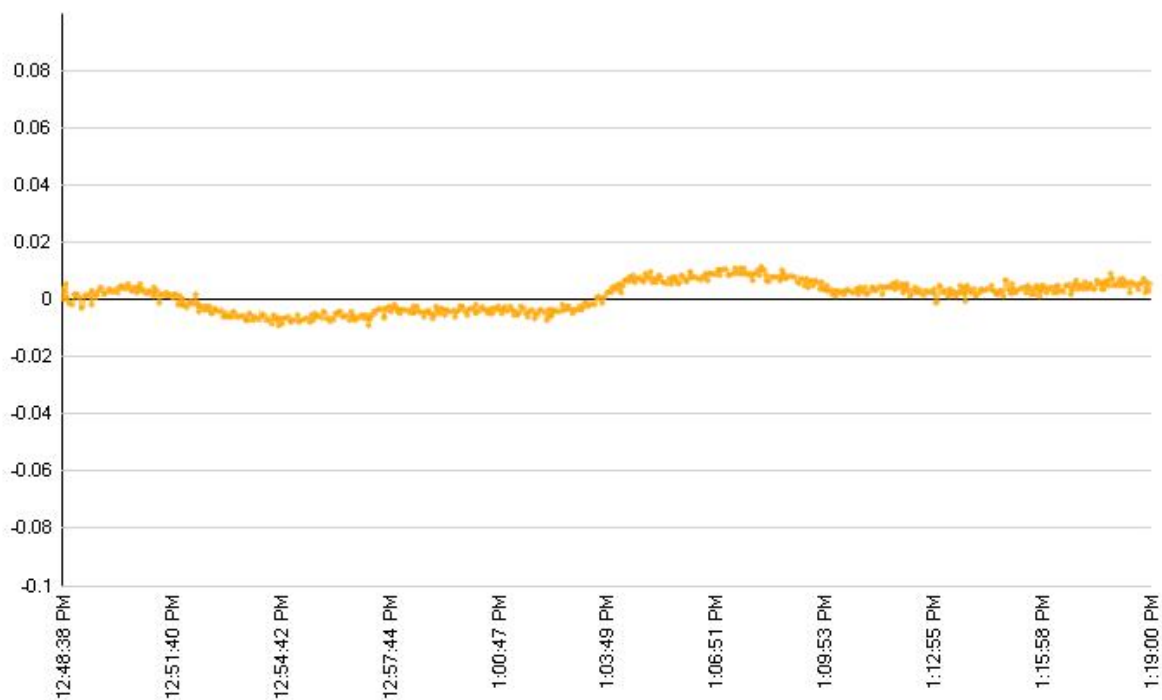
Mean = 0.014 m Std. Dev. = 0.014 m Min. = -0.026 m Max. = 0.058 m



G 12

3/9/2012 12:48:38 PM - 3/9/2012 1:19:00 PM

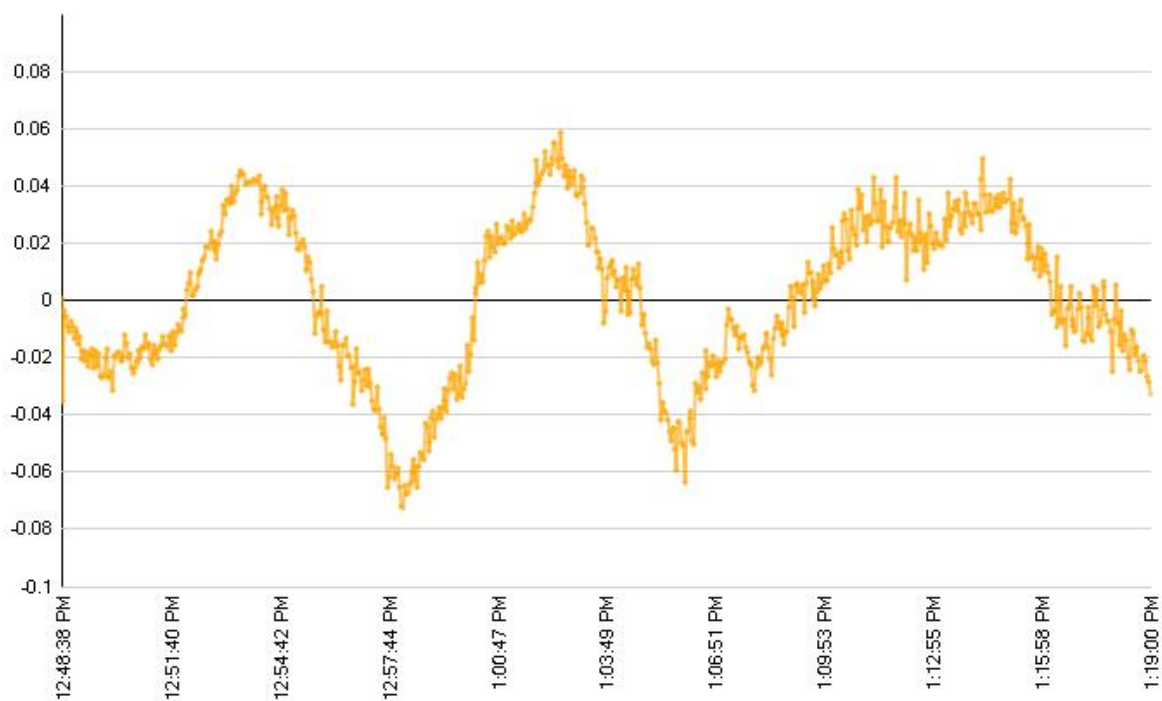
Mean = 0.001 m Std. Dev. = 0.004 m Min. = -0.009 m Max. = 0.011 m



G 14

3/9/2012 12:48:38 PM - 3/9/2012 1:19:00 PM

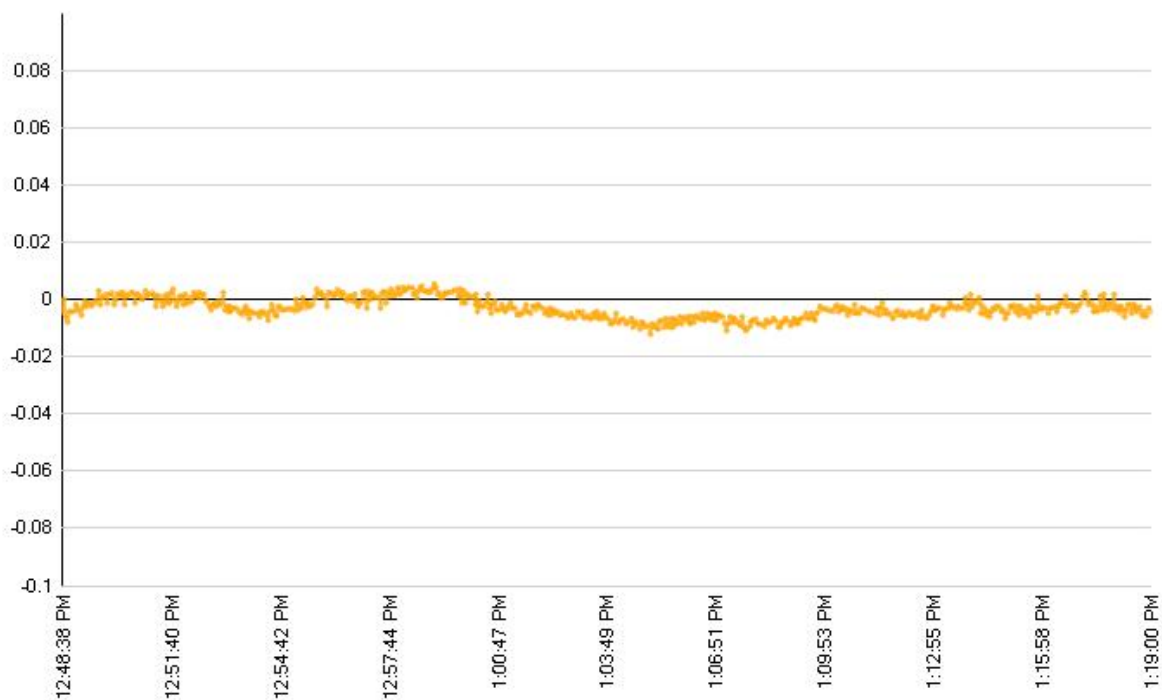
Mean = 0.001 m Std. Dev. = 0.026 m Min. = -0.073 m Max. = 0.059 m



G 18

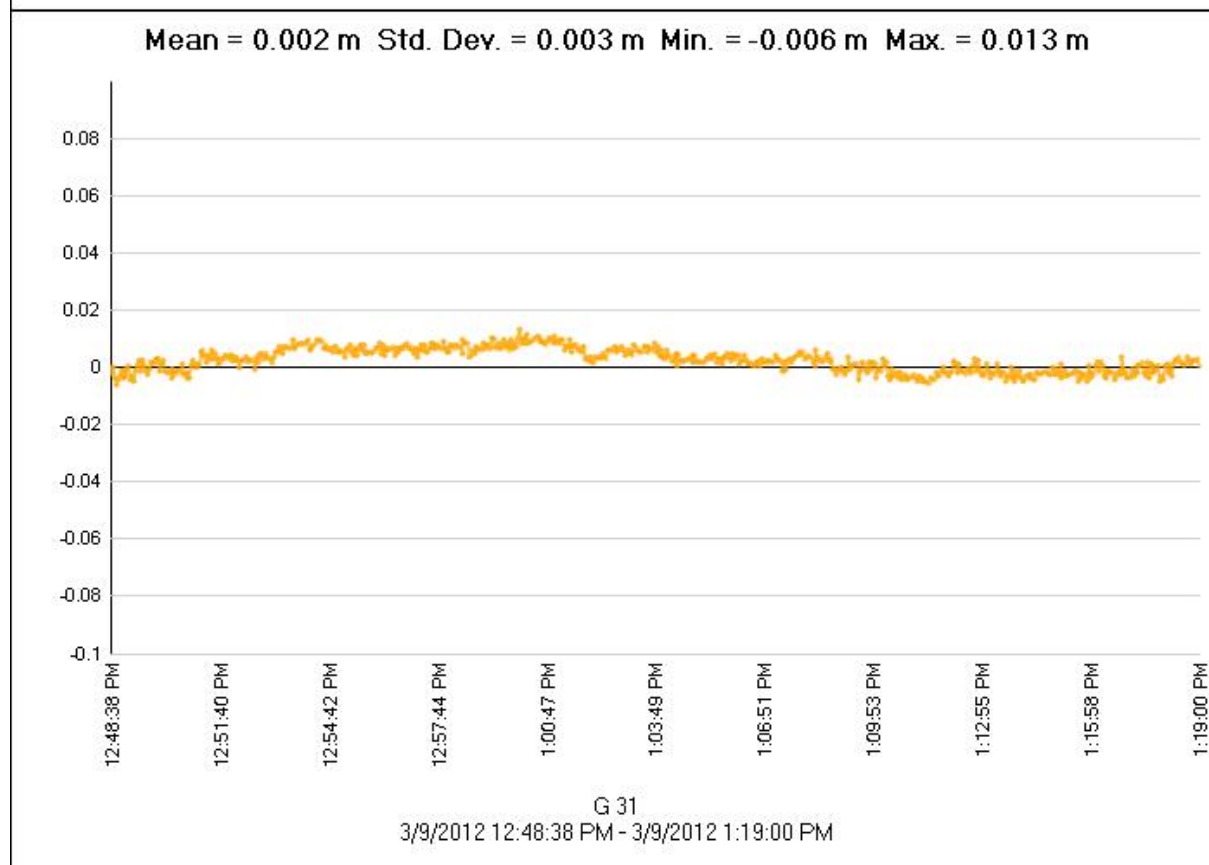
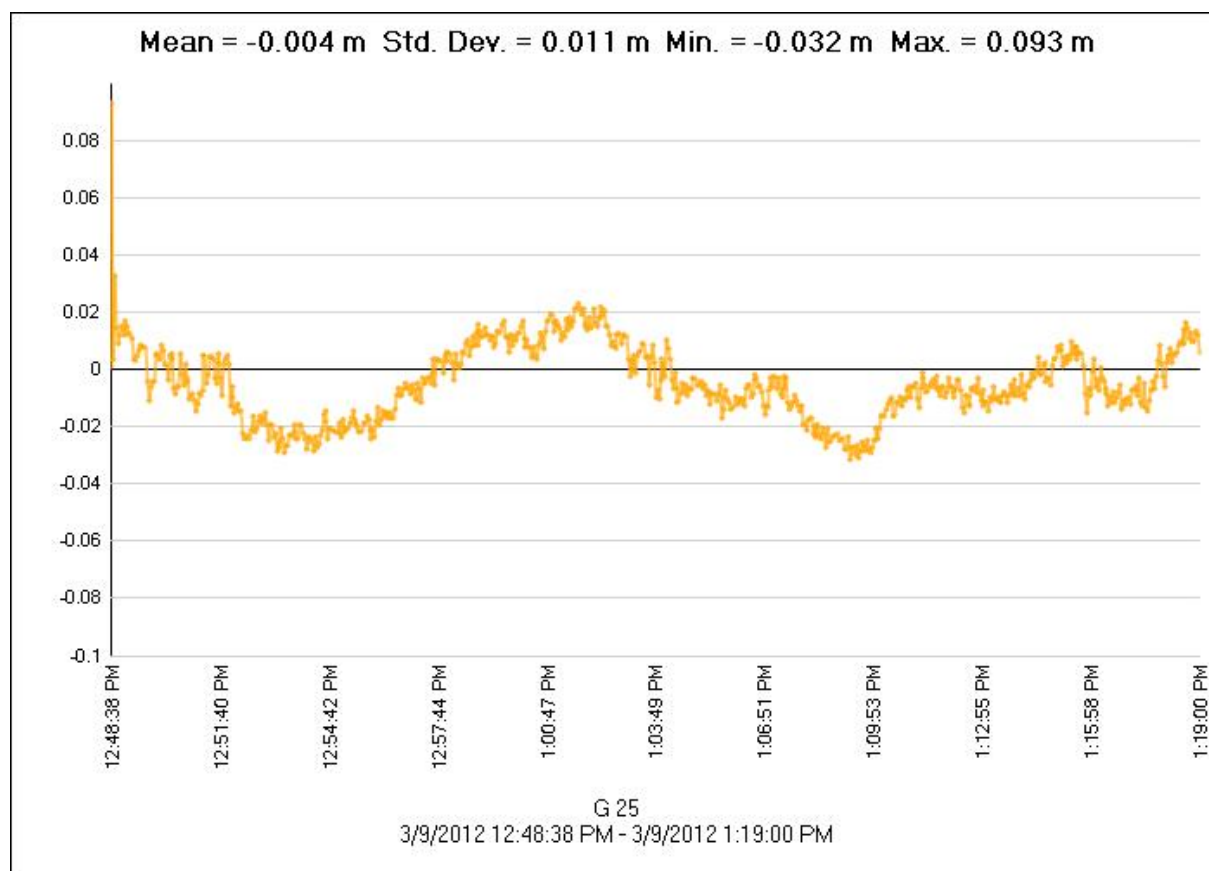
3/9/2012 12:48:38 PM - 3/9/2012 1:19:00 PM

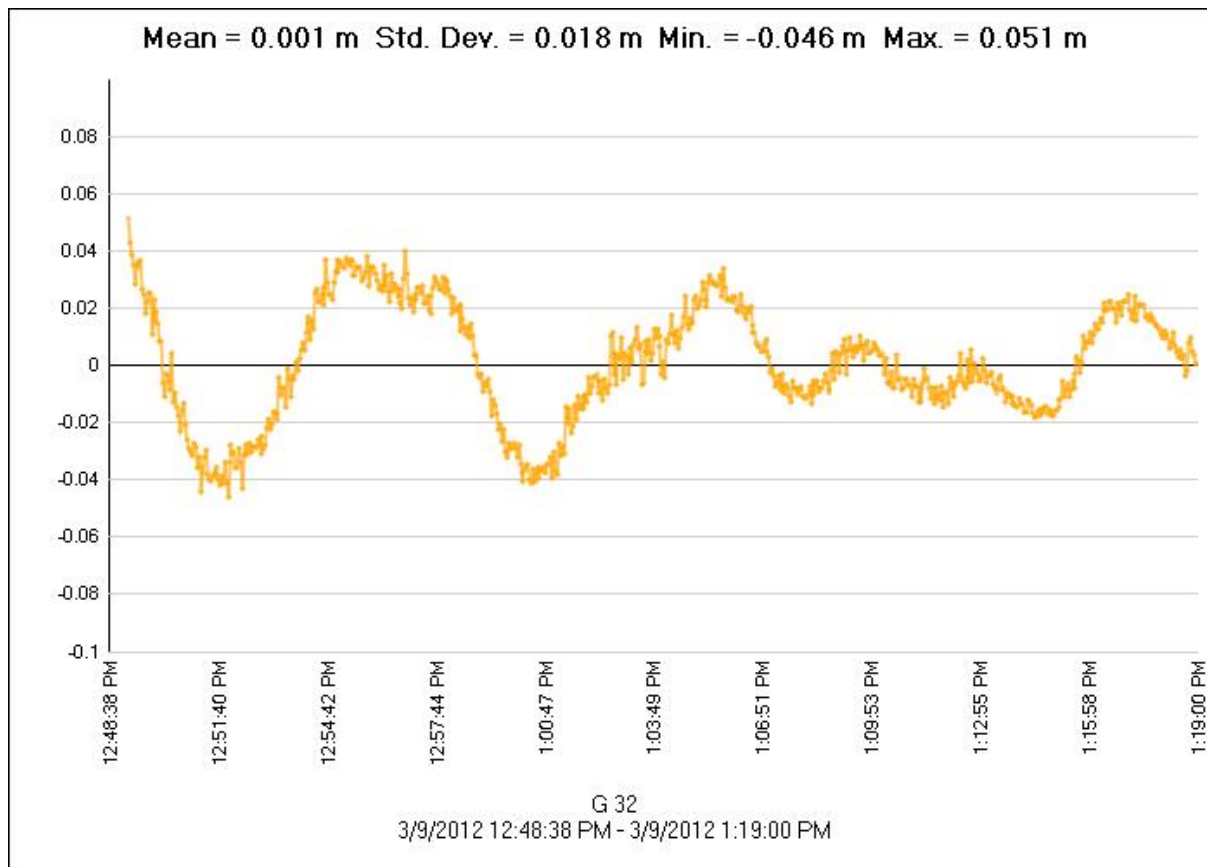
Mean = -0.003 m Std. Dev. = 0.003 m Min. = -0.012 m Max. = 0.005 m



G 22

3/9/2012 12:48:38 PM - 3/9/2012 1:19:00 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

---

HH0698 - SVA17-B1 (1:24:05 PM-1:53:48 PM) (S230)

---

Baseline observation: HH0698 --- SVA17-B1 (B230)

Processed: 4/3/2012 2:40:28 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.017 m

Vertical precision: 0.025 m

RMS: 0.003 m

Maximum PDOP: 2.752

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 3/9/2012 1:24:05 PM (Local: UTC-7hr)

Processing stop time: 3/9/2012 1:53:48 PM (Local: UTC-7hr)

Processing duration: 00:29:42

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0698				
Grid		Local		Global	
Easting	290370.958 m	Latitude	N37°35'56.45803"	Latitude	N37°35'56.45802"
Northing	4163977.815 m	Longitude	W101°22'28.55840"	Longitude	W101°22'28.55840"
Elevation	944.147 m	Height	918.629 m	Height	918.629 m

To:	SVA17-B1				
Grid		Local		Global	
Easting	297358.687 m	Latitude	N37°24'09.07200"	Latitude	N37°24'09.07200"
Northing	4141986.657 m	Longitude	W101°17'22.00431"	Longitude	W101°17'22.00431"
Elevation	945.053 m	Height	919.223 m	Height	919.222 m

Vector					
9Ughb[	6987.729 m	NS Fwd Azimuth	160°55'34"	L	4774.748 m
BcfA\jb[	-21991.158 m	Ellipsoid Dist.	23071.799 m	M	-14499.682 m
9Yj Uhcb	0.907 m	<Y][\h	0.594 m	N	-17303.818 m

## Standard Errors

Vector errors:					
Point ID	0.004 m	Point ID	0°00'00"	Point ID	0.004 m
Point ID	0.007 m	Point ID	0.006 m	Point ID	0.009 m
Point ID	0.013 m	Point ID	0.013 m	Point ID	0.012 m

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

	X	Y	Z
X	0.0000198626		
Y	0.0000172806	0.0000748208	
Z	-0.0000114300	-0.0000695900	0.0001347580

## Occupations

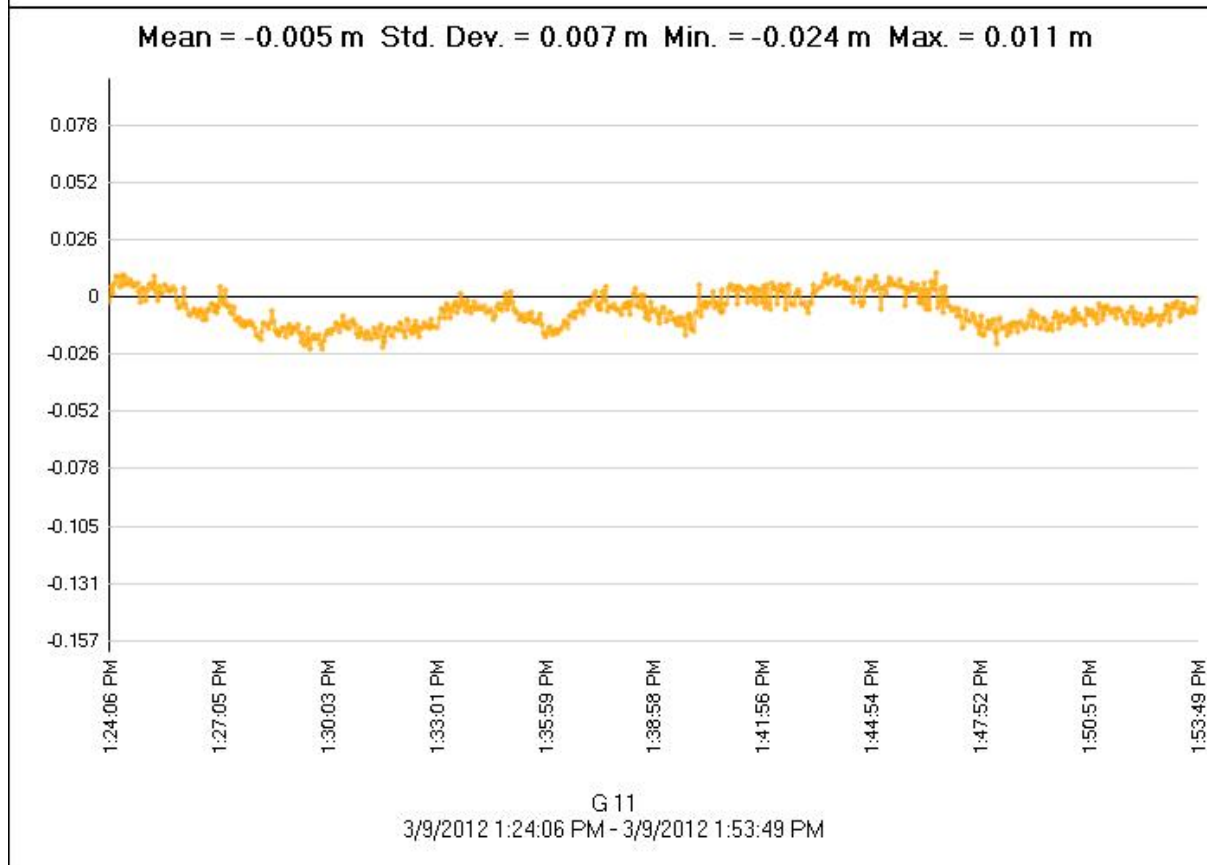
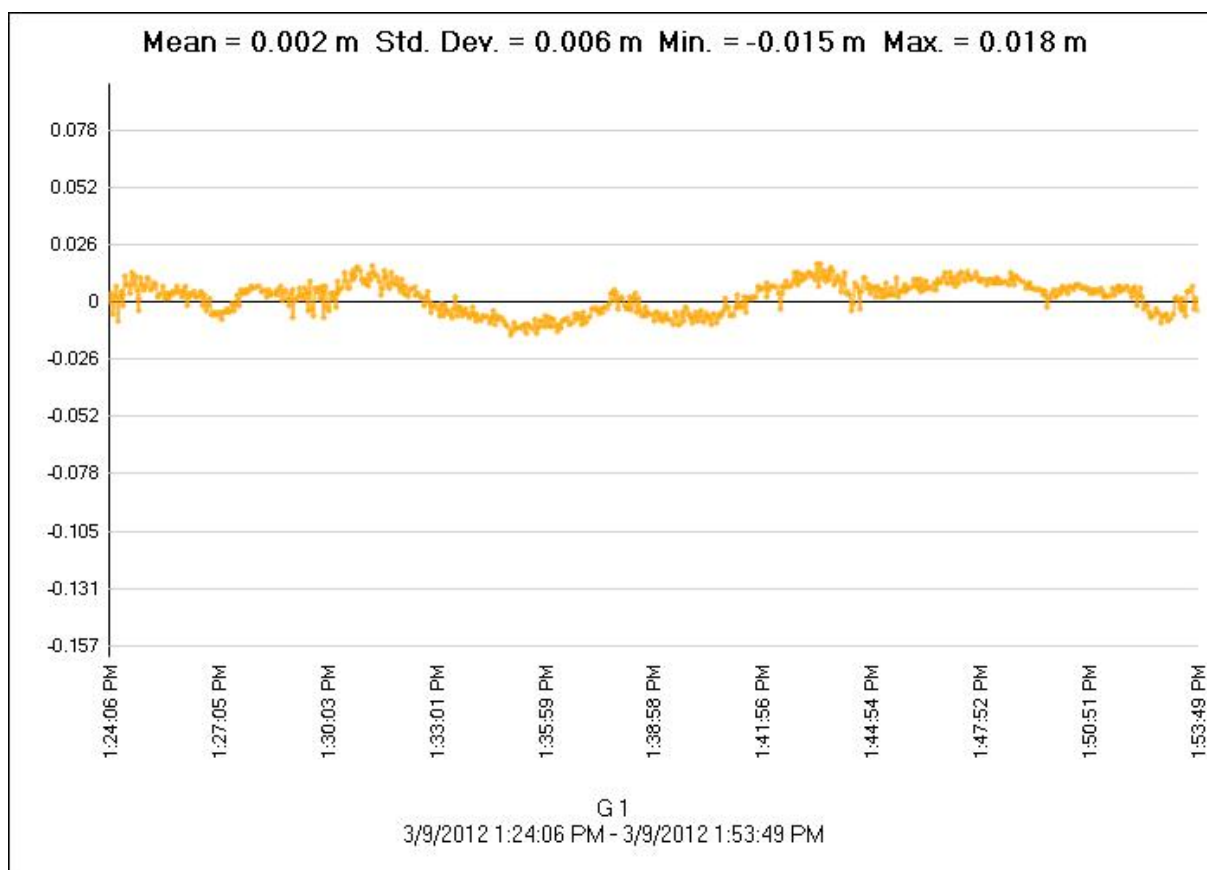
	From	To
Point ID:	HH0698	SVA17-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00100690.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050693.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center



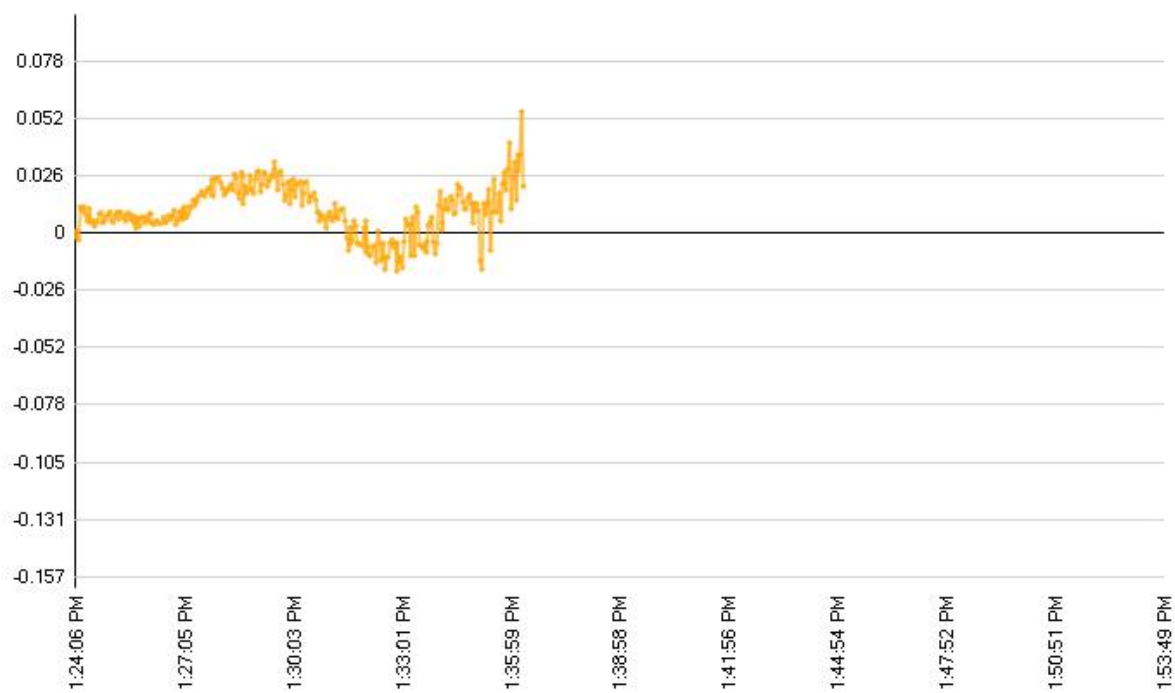
## Tracking Summary

SV	3/9/2012 1:24:05 PM	Duration: 00:29:42.5000000	Major interval: 00:01:00	3/9/2012 1:53:48 PM
G1				
G11				
G12				
G14				
G18				
G19				
G20				
G22				
G25				
G30				
G31				
G32				

## Residuals

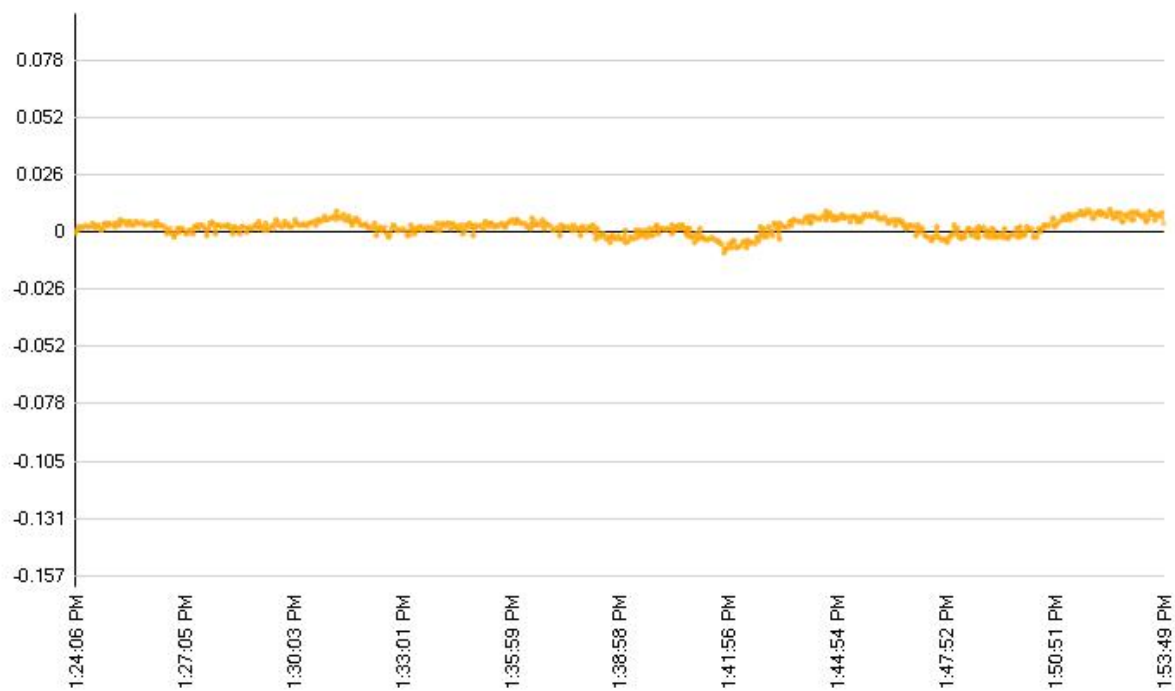


Mean = 0.009 m Std. Dev. = 0.010 m Min. = -0.017 m Max. = 0.055 m

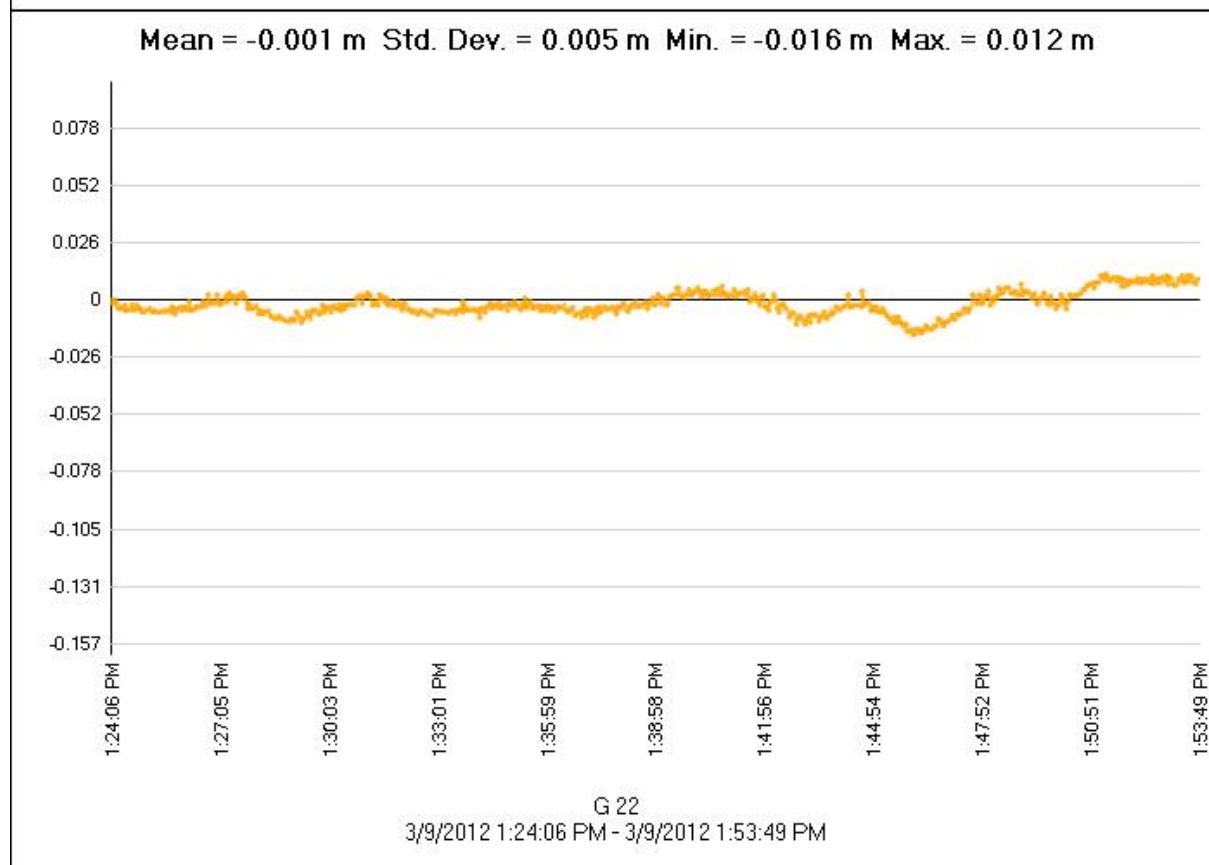
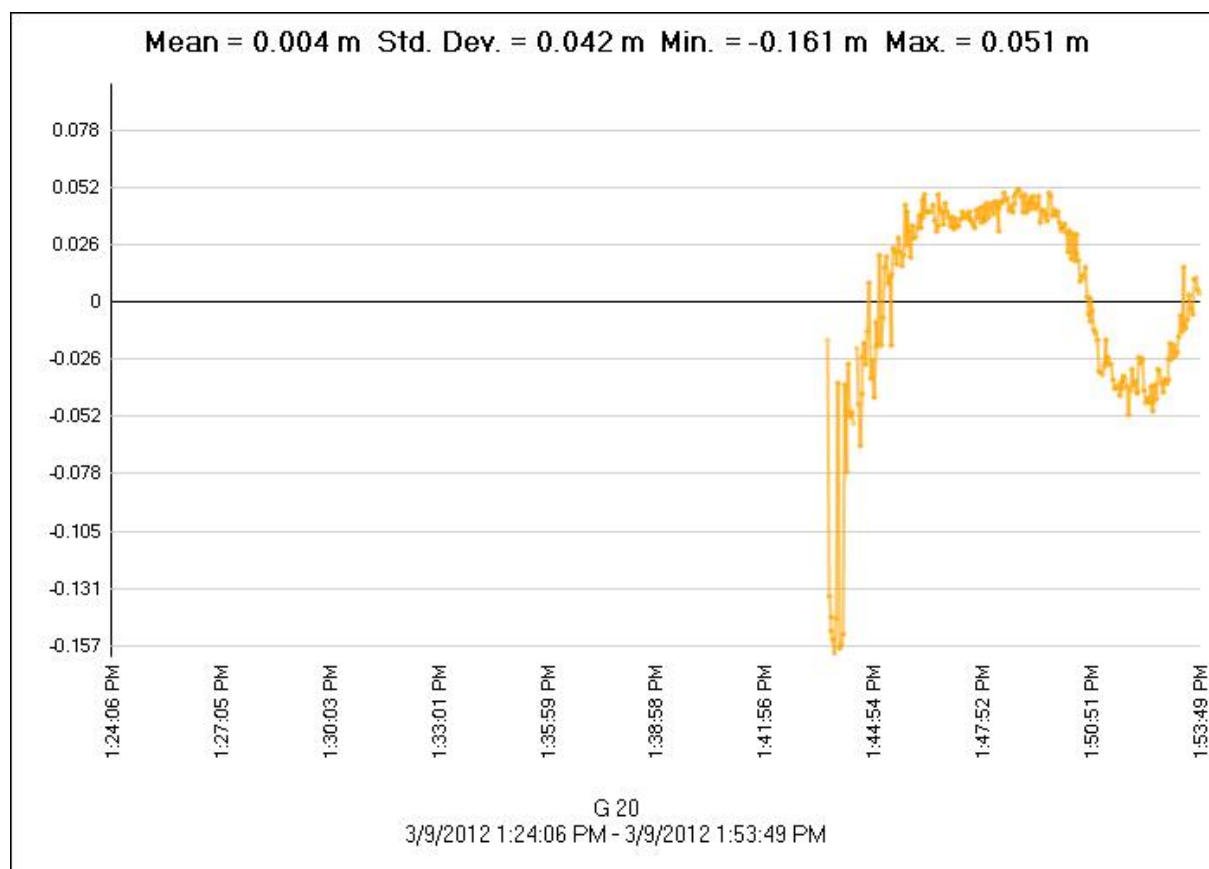


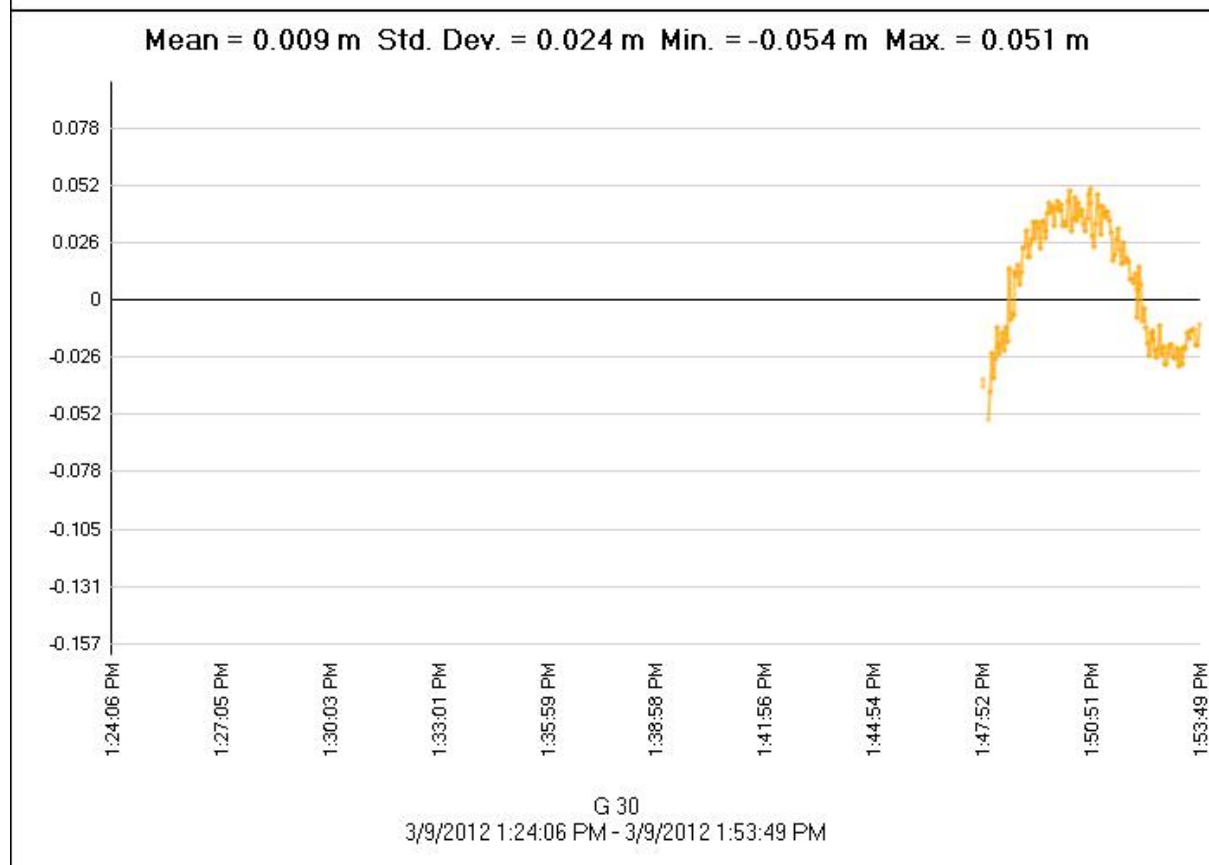
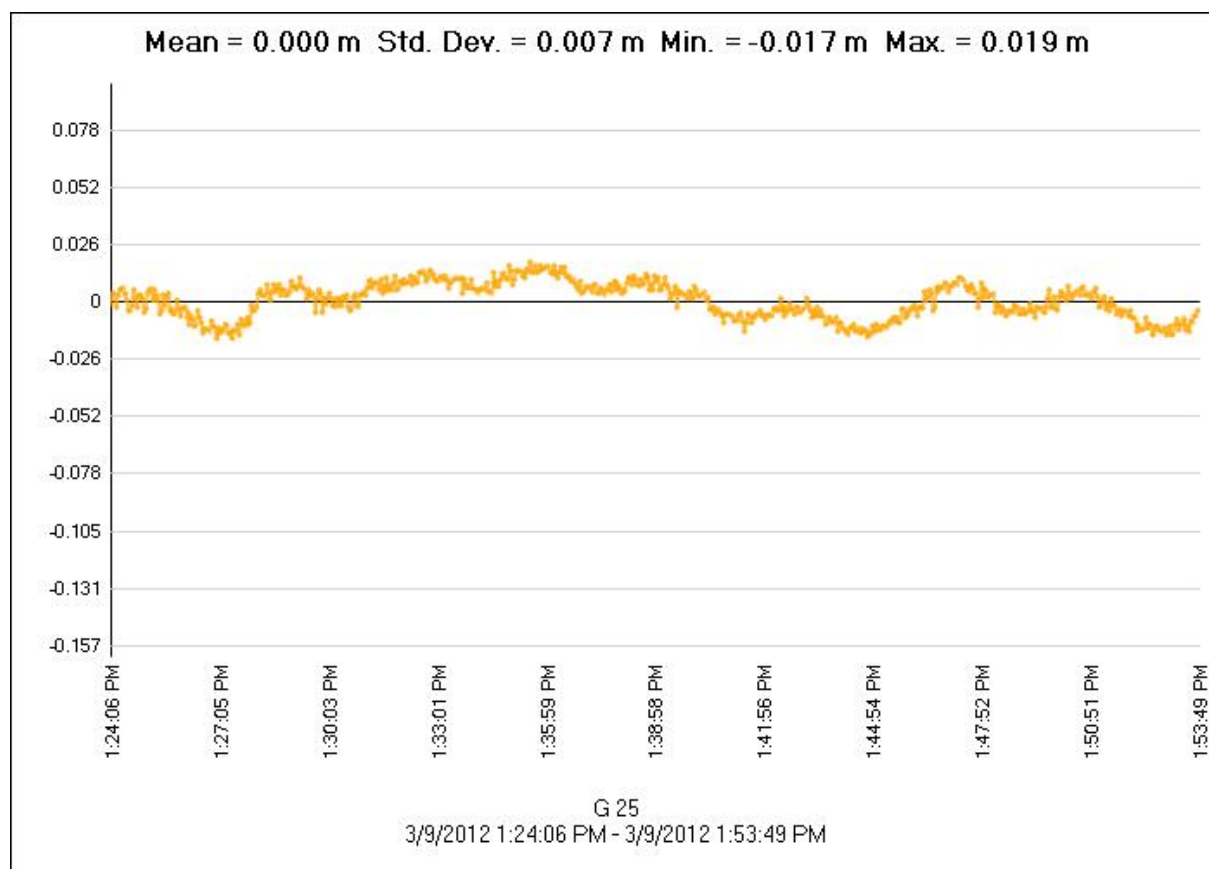
G 12  
3/9/2012 1:24:06 PM - 3/9/2012 1:53:49 PM

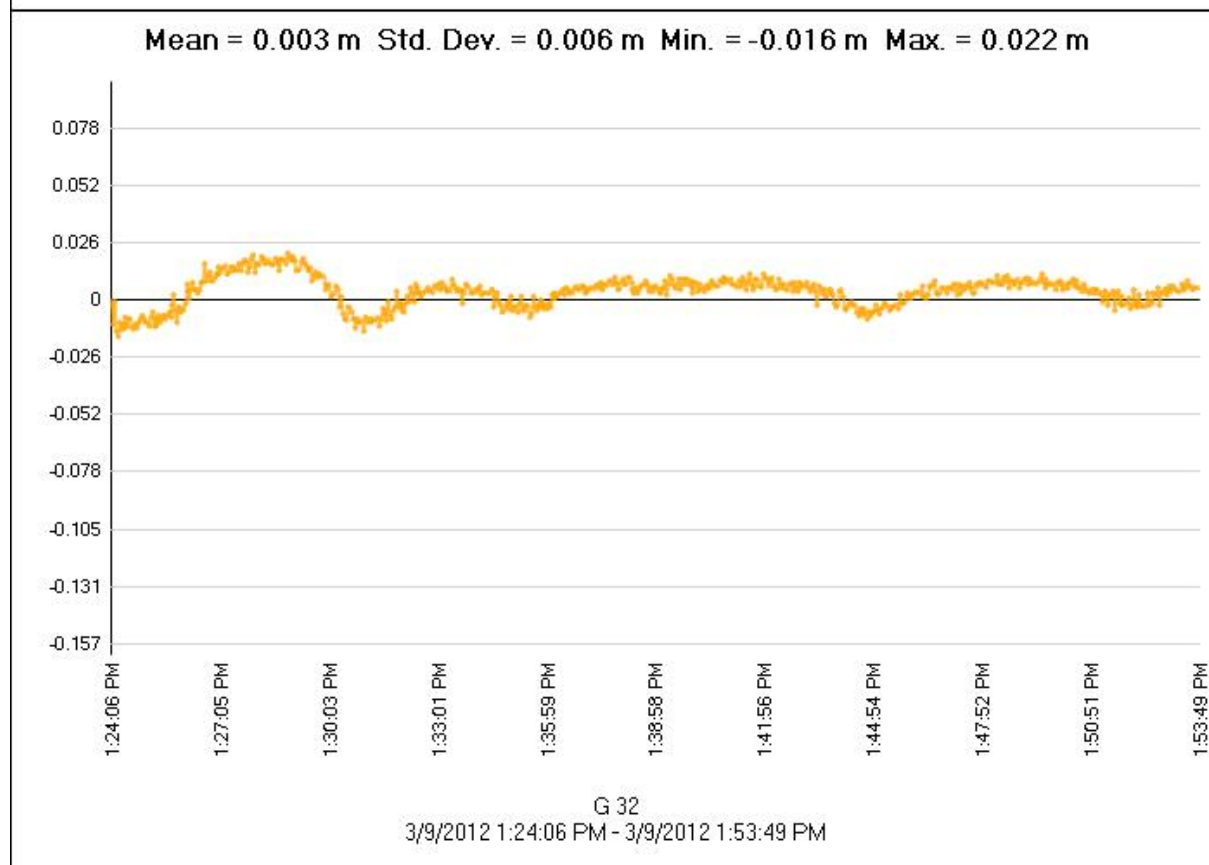
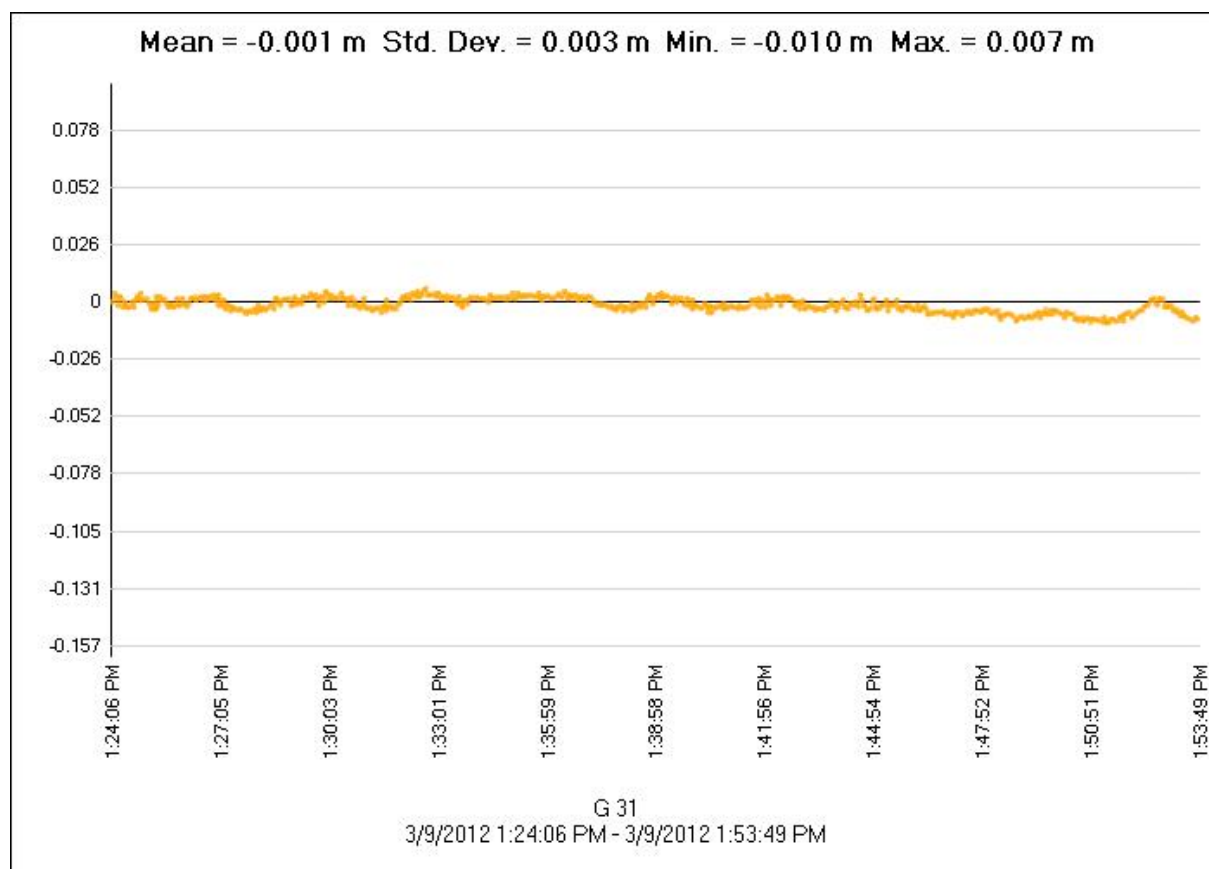
Mean = 0.002 m Std. Dev. = 0.003 m Min. = -0.009 m Max. = 0.011 m



G 14  
3/9/2012 1:24:06 PM - 3/9/2012 1:53:49 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

---

HH0698 - SVA18-B1 (2:21:54 PM-2:55:18 PM) (S231)

---

Baseline observation: HH0698 --- SVA18-B1 (B231)

Processed: 4/3/2012 2:40:39 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.013 m

Vertical precision: 0.020 m

RMS: 0.001 m

Maximum PDOP: 2.572

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 3/9/2012 2:21:54 PM (Local: UTC-7hr)

Processing stop time: 3/9/2012 2:55:18 PM (Local: UTC-7hr)

Processing duration: 00:33:23

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0698				
Grid		Local		Global	
Easting	290370.958 m	Latitude	N37°35'56.45803"	Latitude	N37°35'56.45802"
Northing	4163977.815 m	Longitude	W101°22'28.55840"	Longitude	W101°22'28.55840"
Elevation	944.147 m	Height	918.629 m	Height	918.629 m

To:	SVA18-B1				
Grid		Local		Global	
Easting	278044.068 m	Latitude	N37°24'10.32699"	Latitude	N37°24'10.32699"
Northing	4142516.785 m	Longitude	W101°30'27.50039"	Longitude	W101°30'27.50039"
Elevation	971.981 m	Height	946.401 m	Height	946.401 m

Vector					
9Ughb[	-12326.890 m	NS Fwd Azimuth	208°25'35"	L	-14165.440 m
BcfA\jb[	-21461.030 m	Ellipsoid Dist.	24745.003 m	M	-10679.219 m
9Yj Uhcb	27.835 m	<Y][\h	27.772 m	N	-17256.570 m



## Standard Errors

Vector errors:					
Point ID	0.004 m	Point Description	0°00'00"	Point Type	0.004 m
Point ID	0.005 m	Point Description	0.005 m	Point Type	0.009 m
Point ID	0.010 m	Point Description	0.010 m	Point Type	0.007 m

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

	X	Y	Z
X	0.0000188147		
Y	0.0000140887	0.0000814482	
Z	-0.0000016339	-0.0000340862	0.0000466668

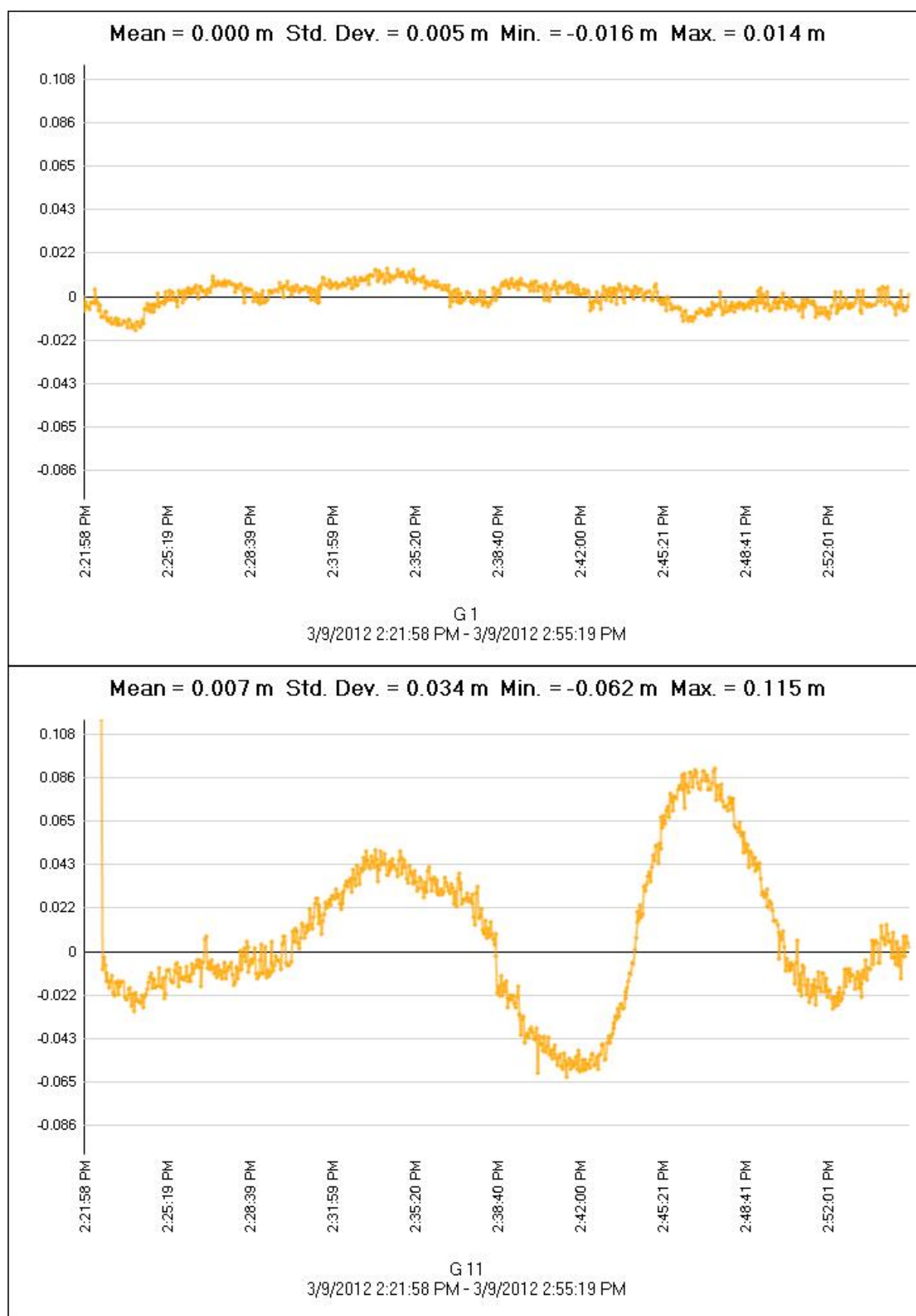
## Occupations

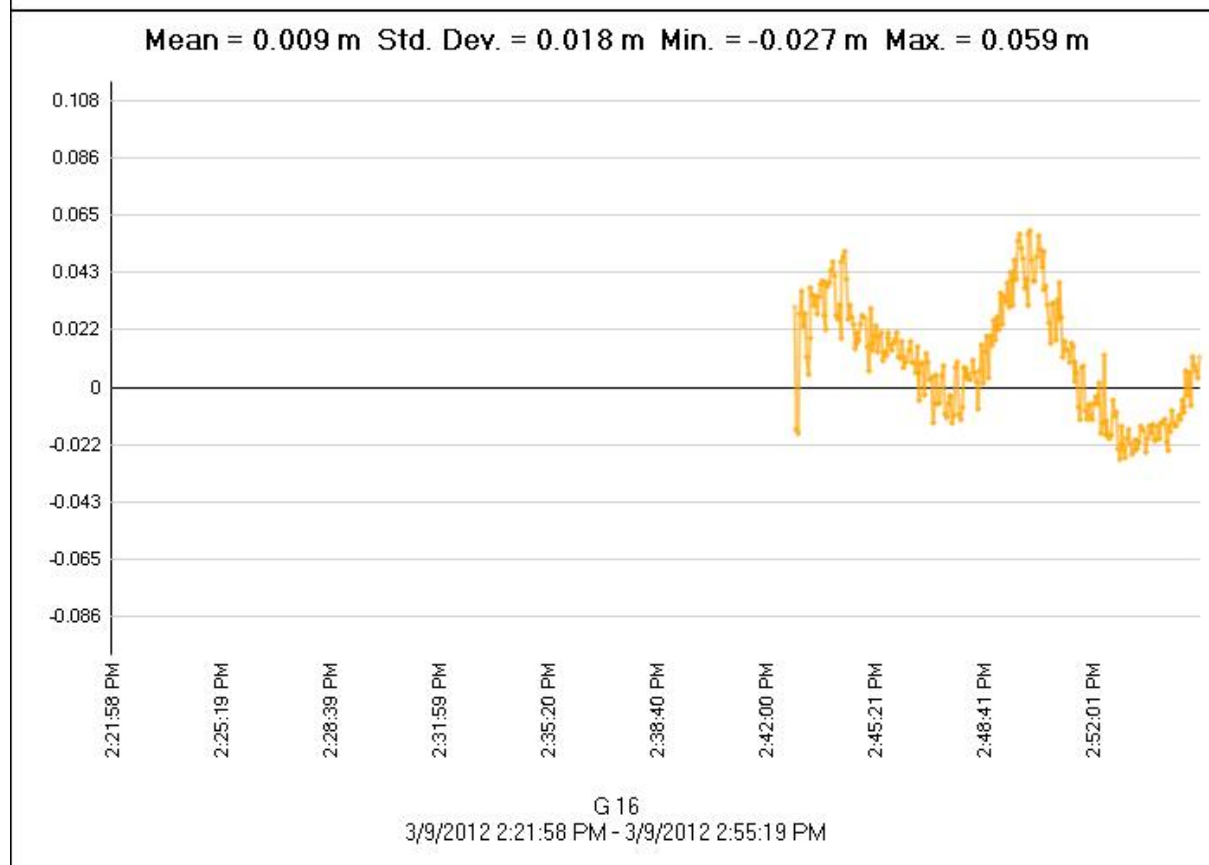
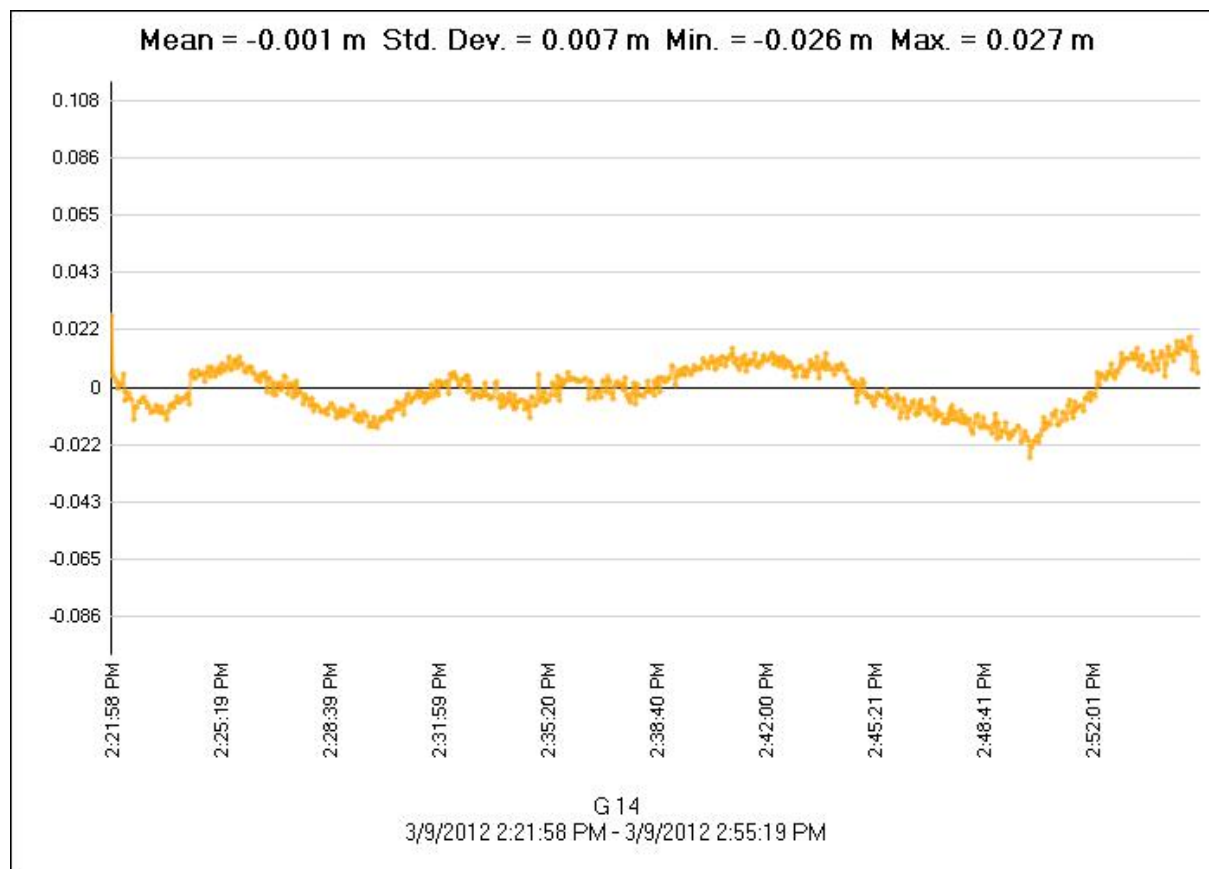
	From	To
Point ID:	HH0698	SVA18-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00100690.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050694.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

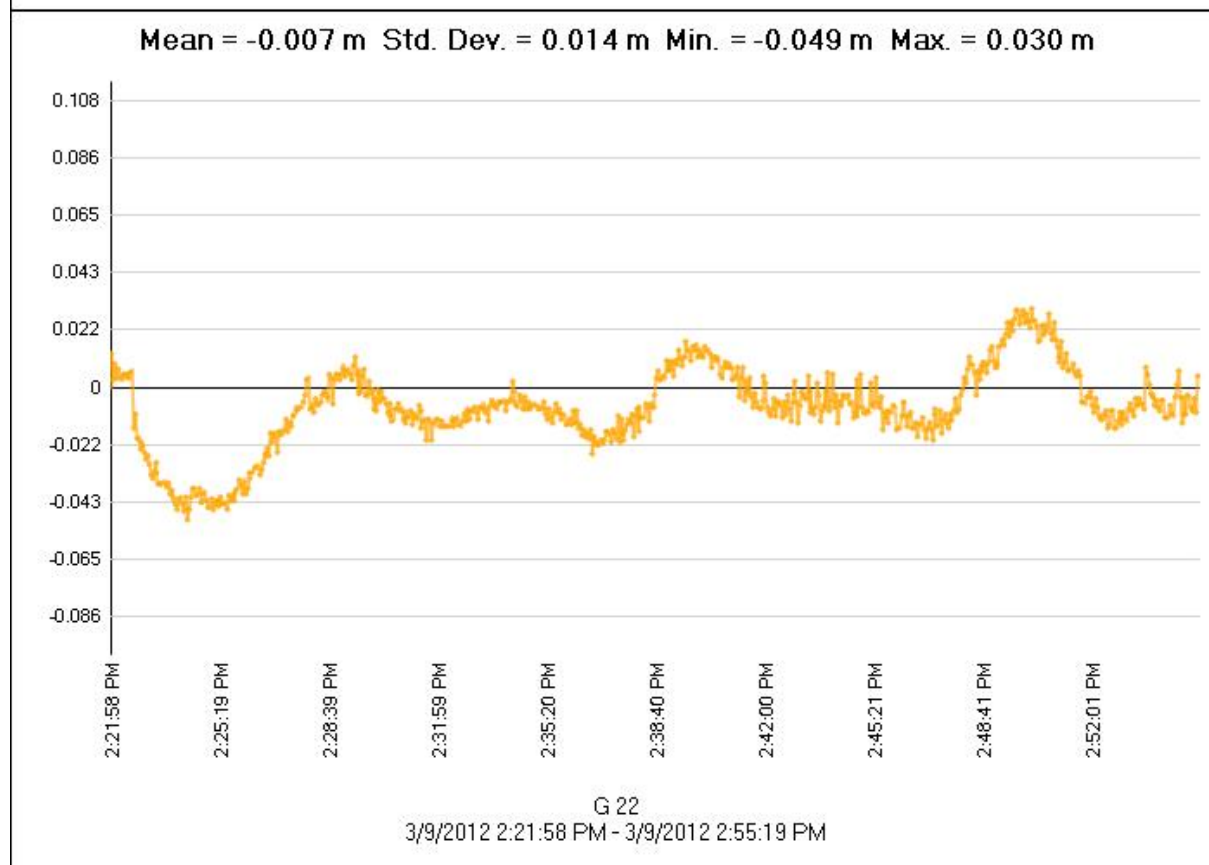
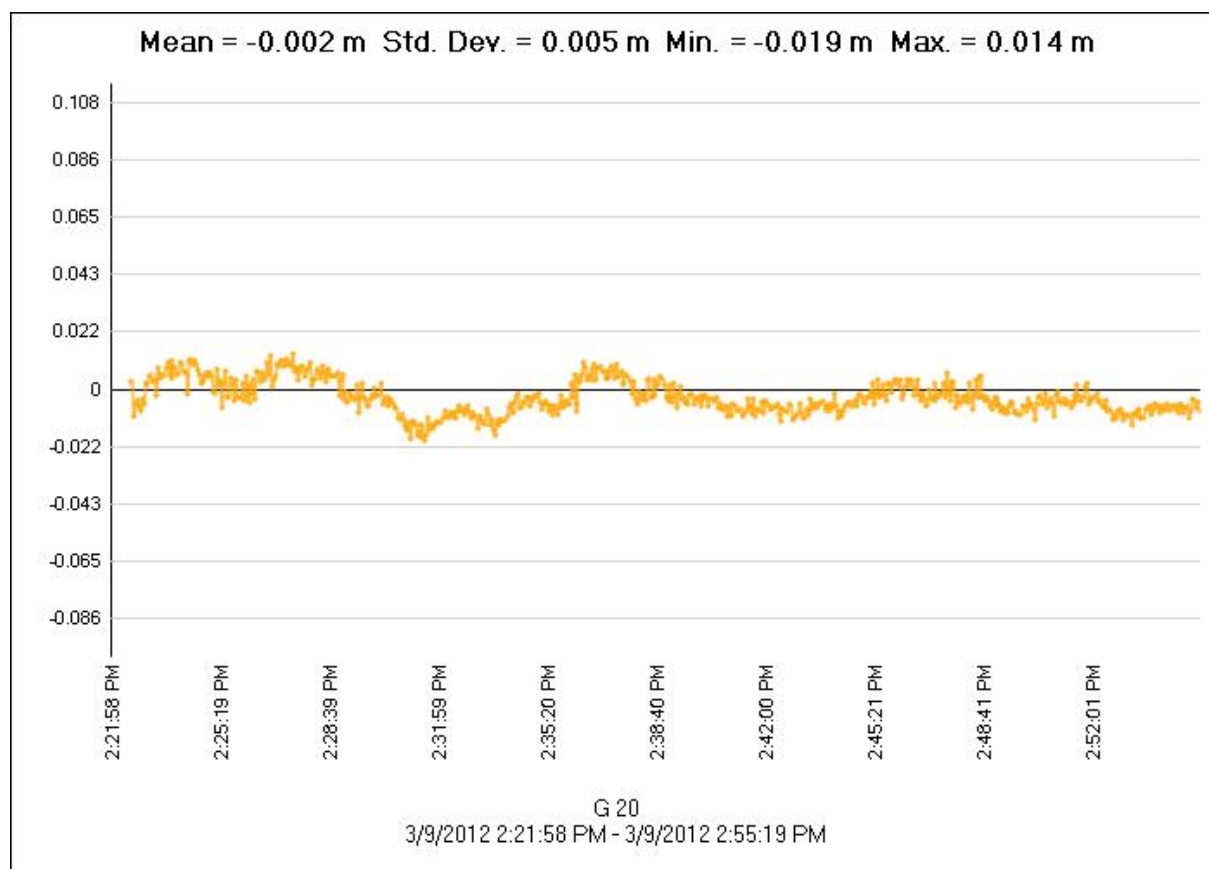
Tracking Summary

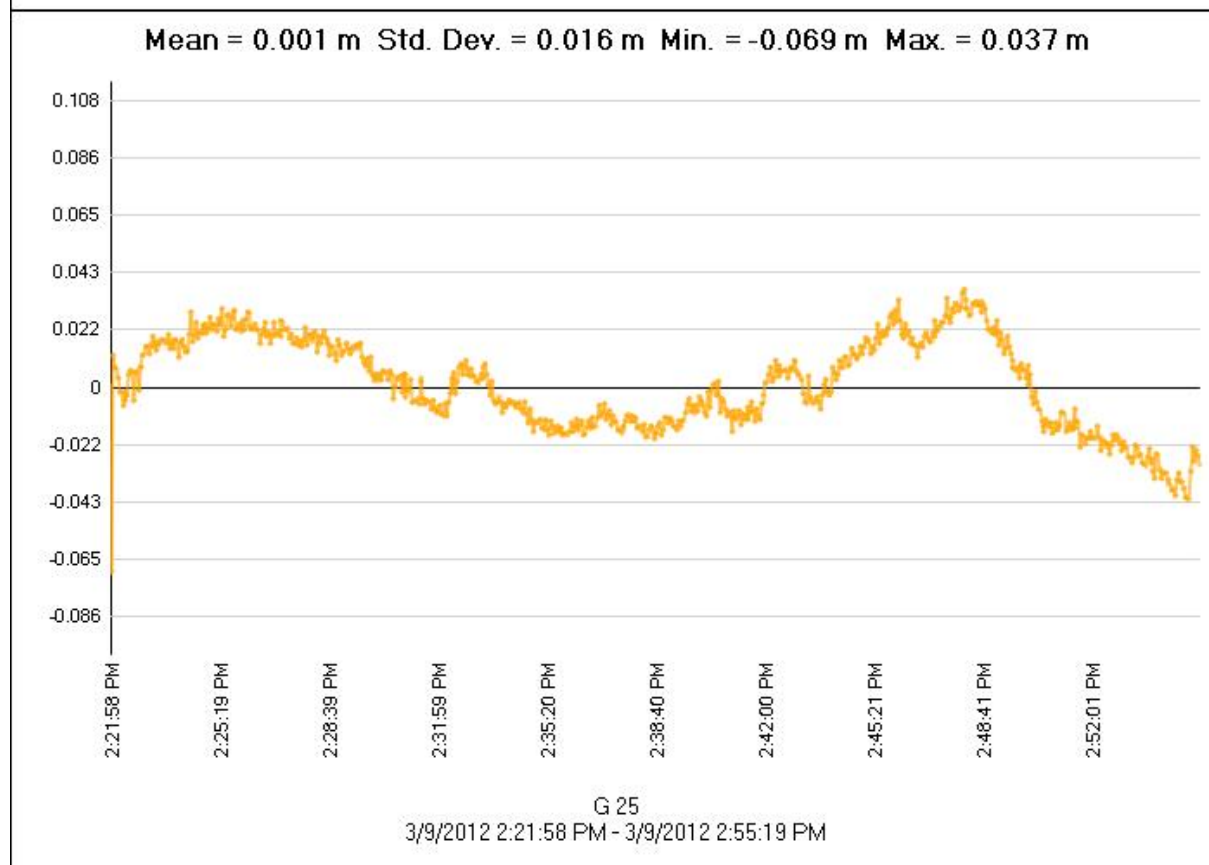
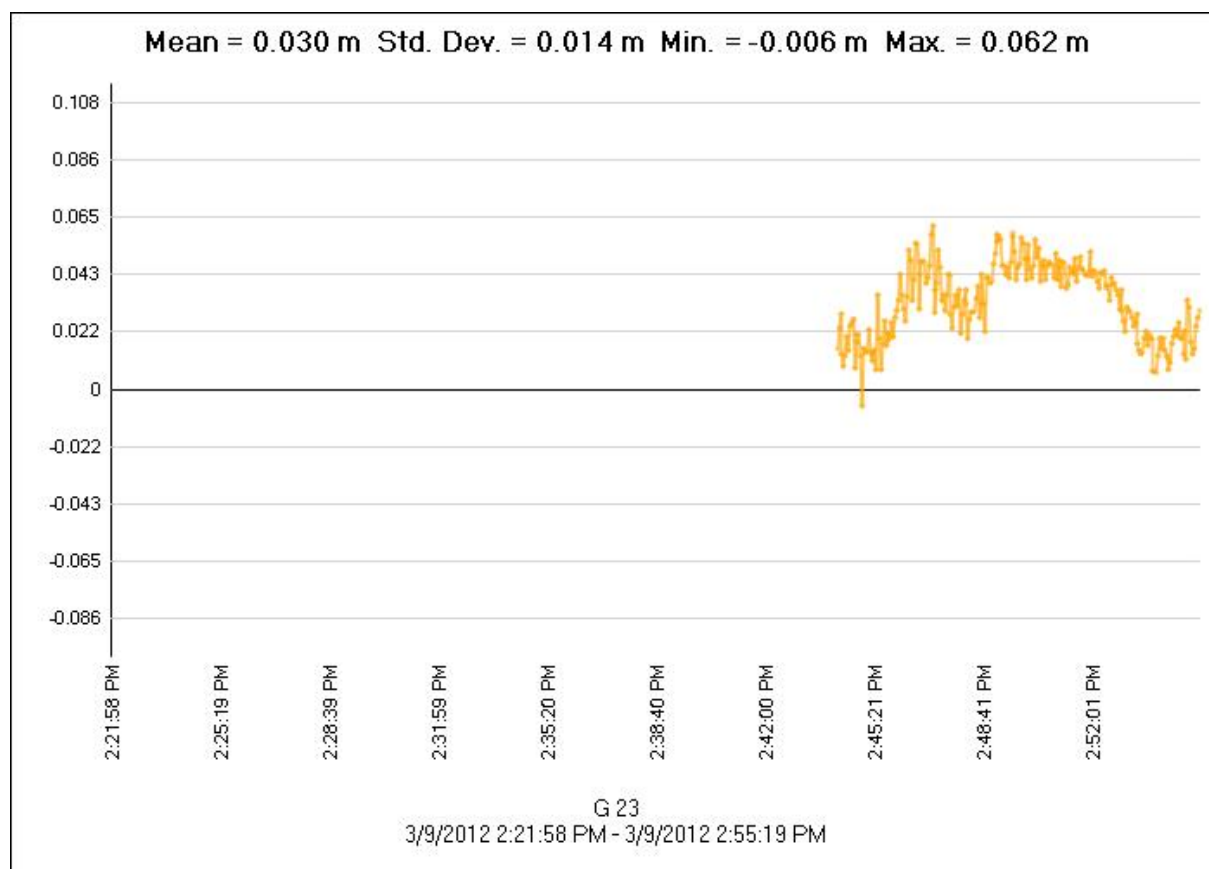
SV	3/9/2012 2:21:54 PM	Duration: 00:33:23.5000000	Major interval: 00:01:00	3/9/2012 2:55:18 PM
G 1	L1			
	L2			
G 11	L1			
	L2			
G 12	L1			
	L2			
G 14	L1			
	L2			
G 16	L1			
	L2			
G 20	L1			
	L2			
G 22	L1			
	L2			
G 23	L1			
	L2			
G 25	L1			
	L2			
G 30	L1			
	L2			
G 31	L1			
	L2			
G 32	L1			
	L2			

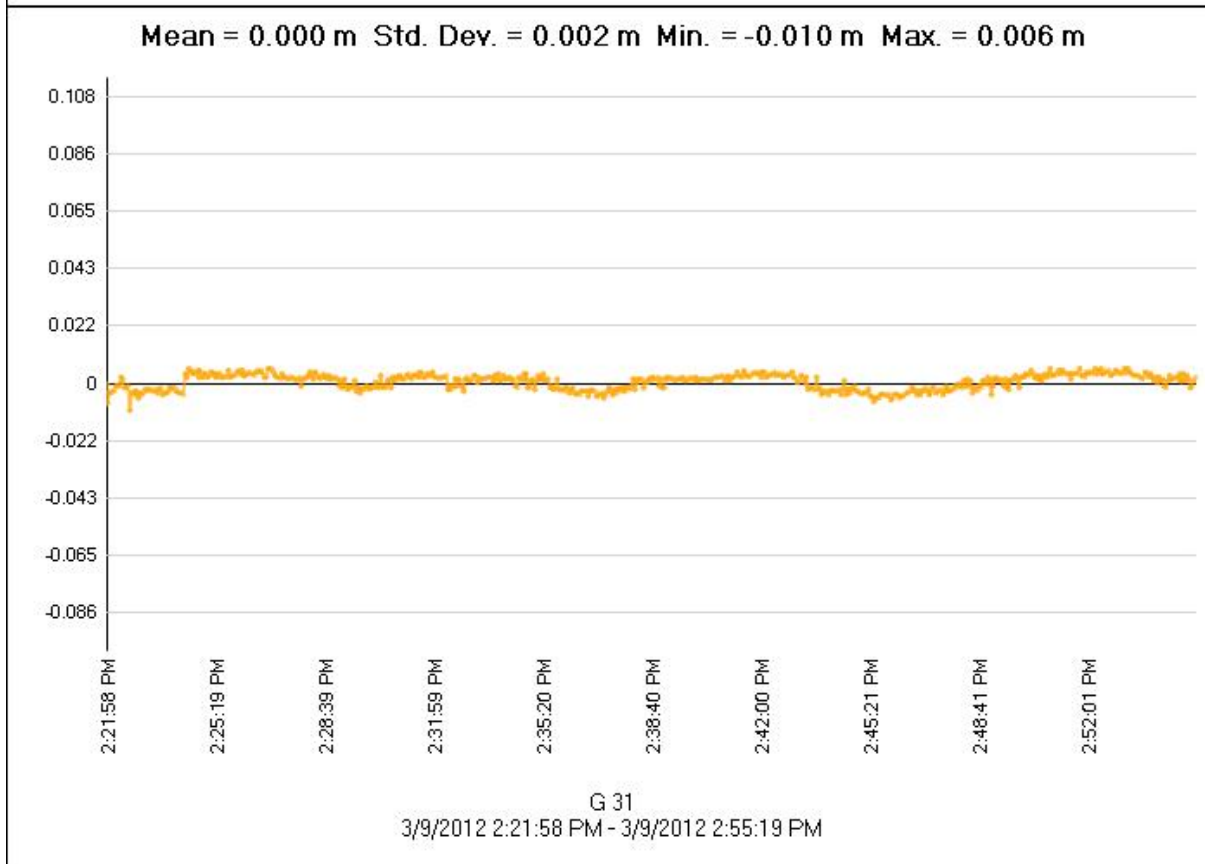
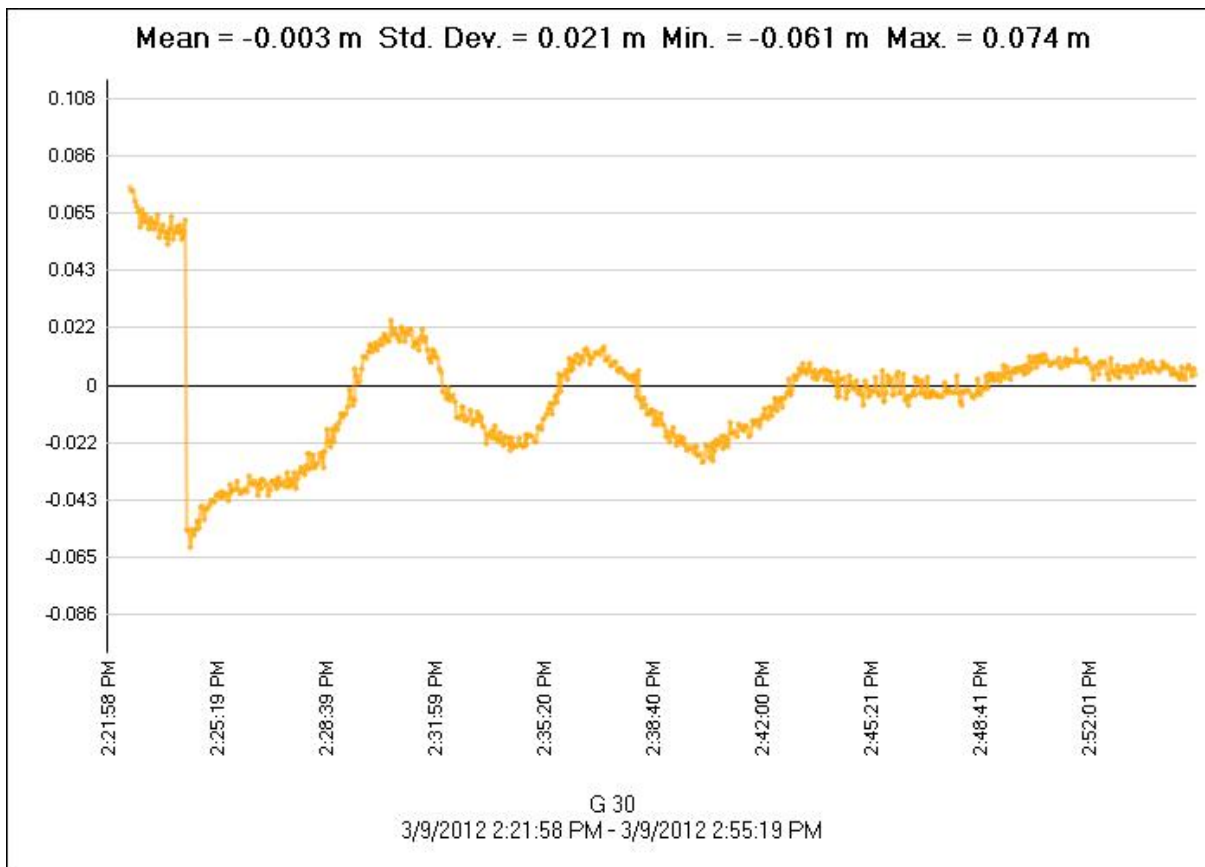
## Residuals

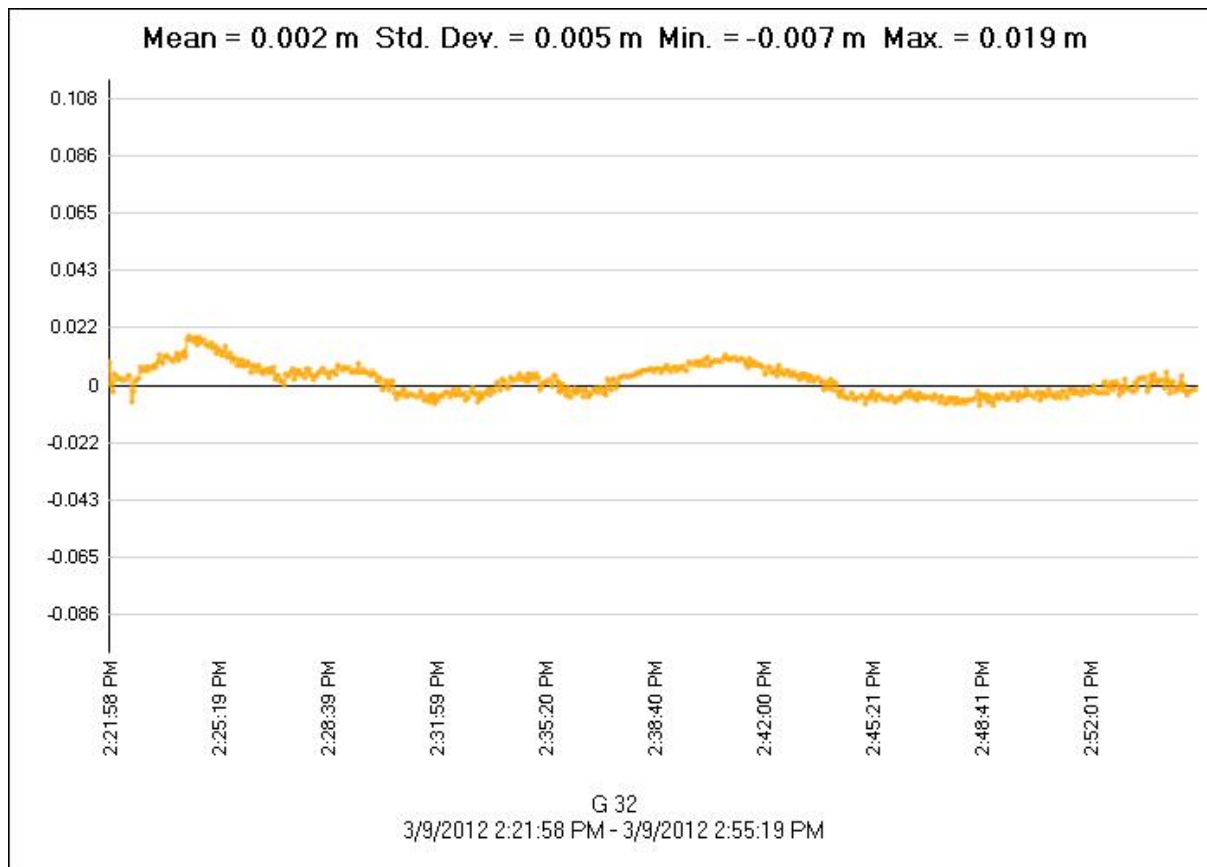












## Processing style

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



---

HH0698 - FVA18-B1 (3:01:55 PM-3:32:04 PM) (S232)

---

Baseline observation: HH0698 --- FVA18-B1 (B232)

Processed: 4/3/2012 2:41:07 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.008 m

Vertical precision: 0.012 m

RMS: 0.007 m

Maximum PDOP: 2.688

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 3/9/2012 3:01:55 PM (Local: UTC-7hr)

Processing stop time: 3/9/2012 3:32:04 PM (Local: UTC-7hr)

Processing duration: 00:30:08

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0698				
Grid		Local		Global	
Easting	290370.958 m	Latitude	N37°35'56.45803"	Latitude	N37°35'56.45802"
Northing	4163977.815 m	Longitude	W101°22'28.55840"	Longitude	W101°22'28.55840"
Elevation	944.147 m	Height	918.629 m	Height	918.629 m

To:	FVA18-B1				
Grid		Local		Global	
Easting	277612.465 m	Latitude	N37°25'02.63981"	Latitude	N37°25'02.63980"
Northing	4144141.953 m	Longitude	W101°30'46.80020"	Longitude	W101°30'46.80020"
Elevation	973.086 m	Height	947.532 m	Height	947.532 m

Vector					
9Ughb[	-12758.493 m	NS Fwd Azimuth	211°18'10"	L	-14435.226 m
BcfA\jb[	-19835.861 m	Ellipsoid Dist.	23580.627 m	M	-9625.157 m
9Yj Uhcb	28.939 m	<Y][\h	28.903 m	N	-15974.661 m

## Standard Errors

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


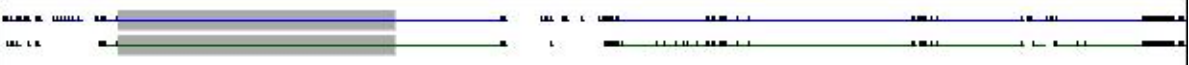

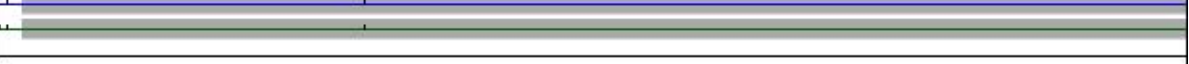



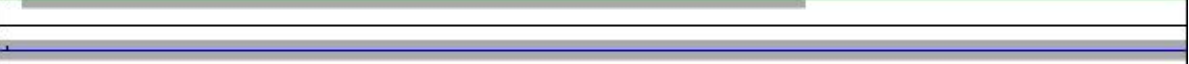



## Aposteriori Covariance Matrix (Meter<sup>2</sup>)

	X	Y	Z
X	0.0000078879		
Y	0.0000057410	0.0000292499	
Z	-0.0000015520	-0.0000118741	0.0000152782

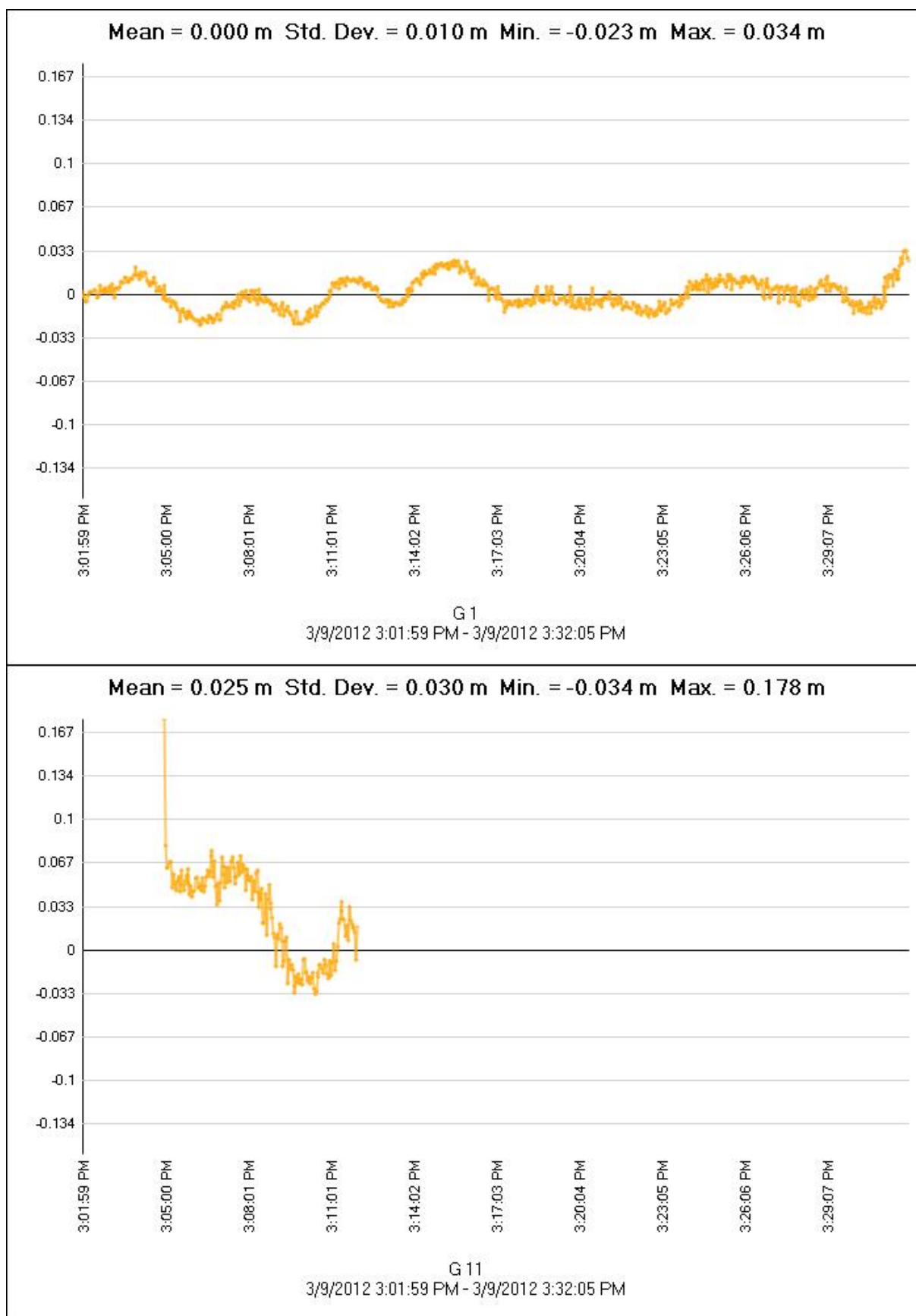
## Occupations

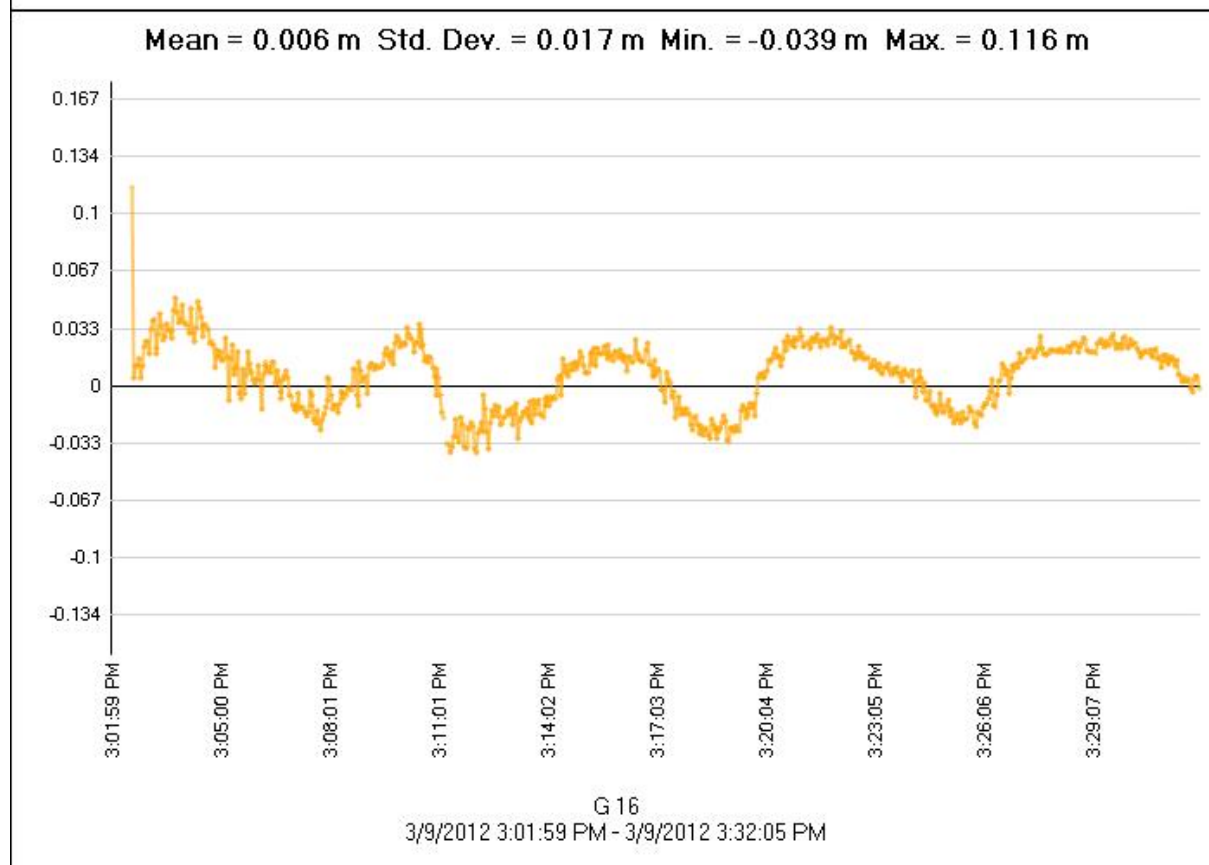
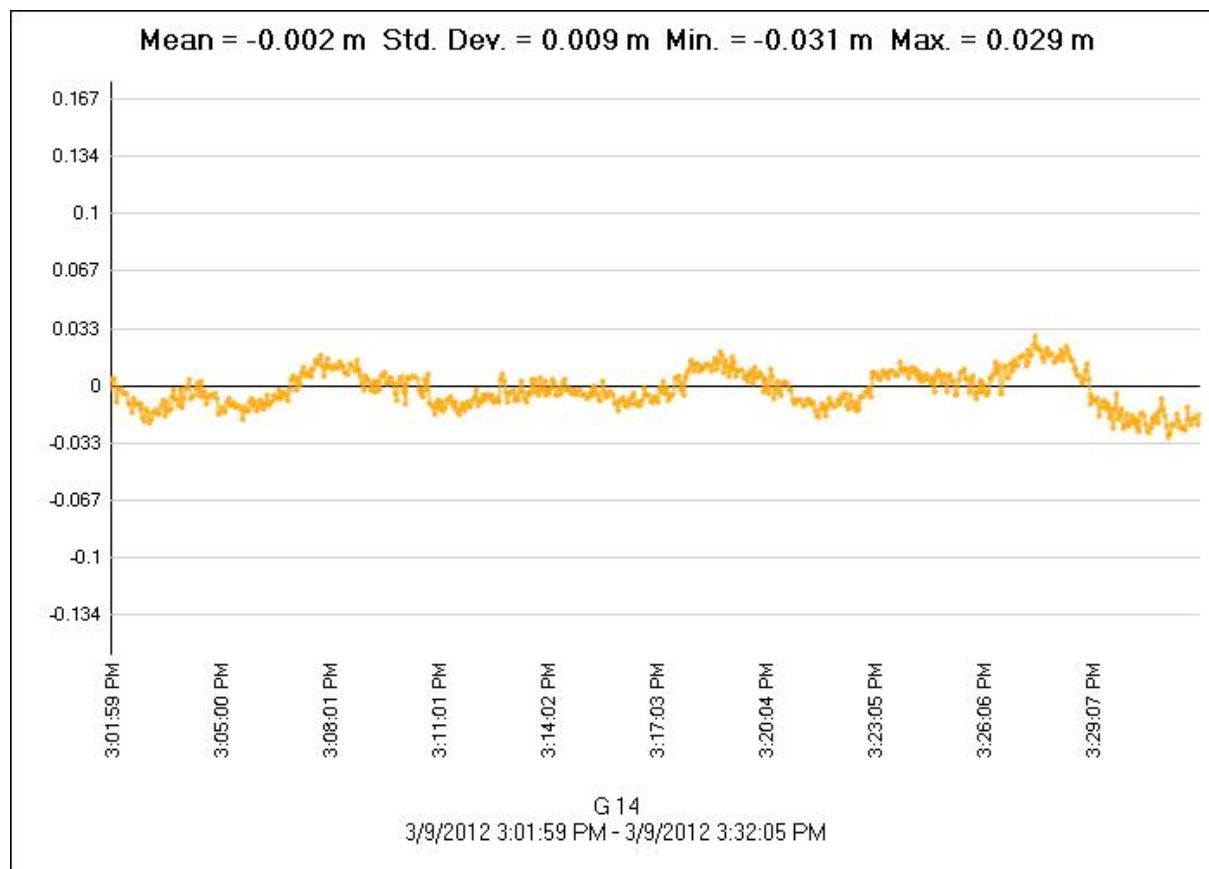
	From	To
Point ID:	HH0698	FVA18-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00100690.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050695.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

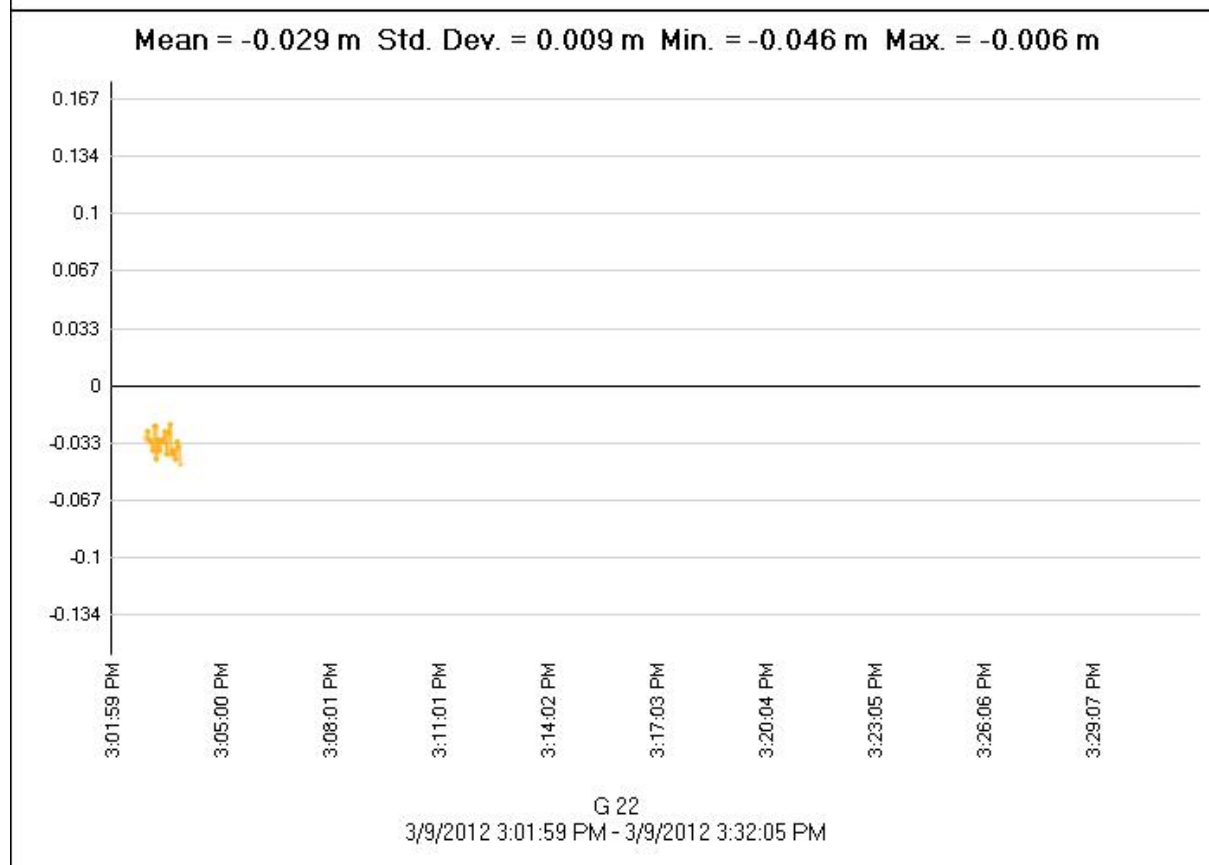
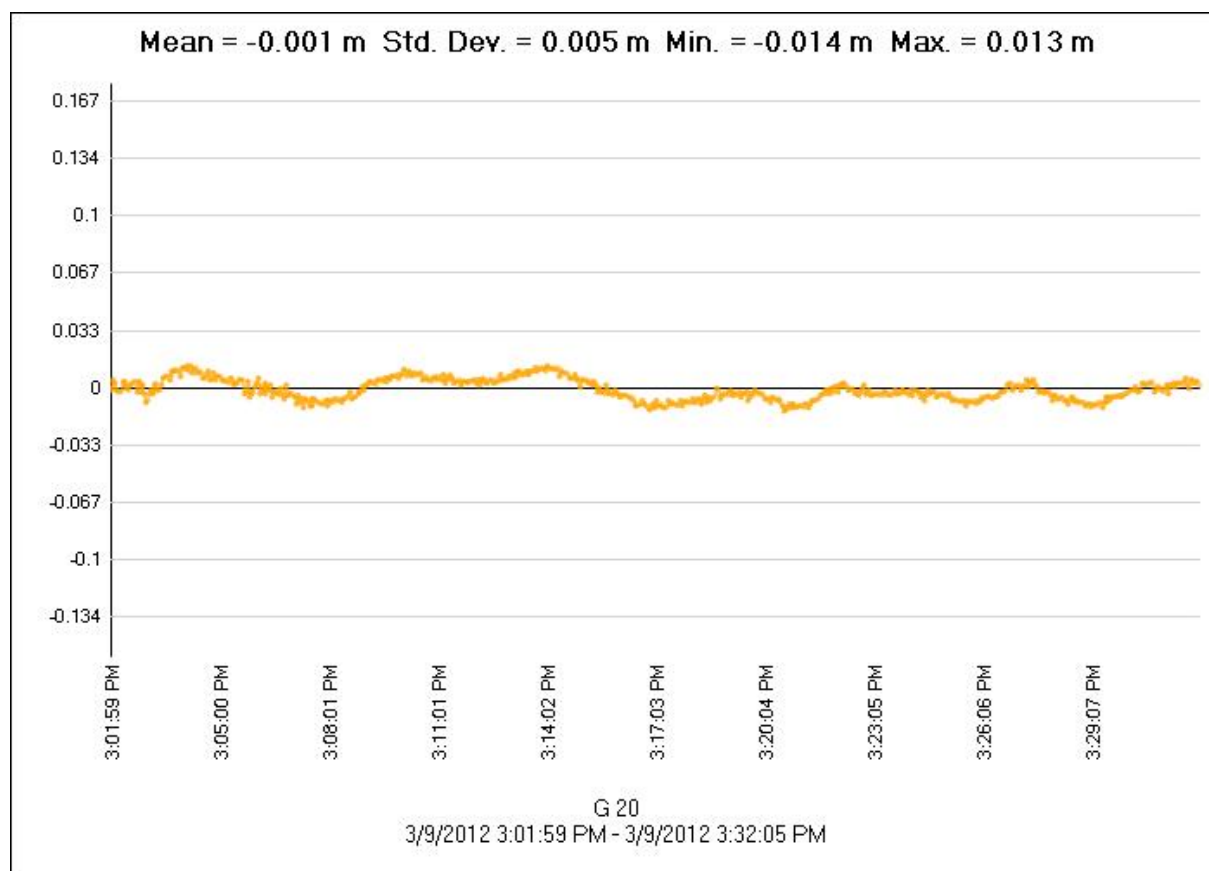
Tracking Summary

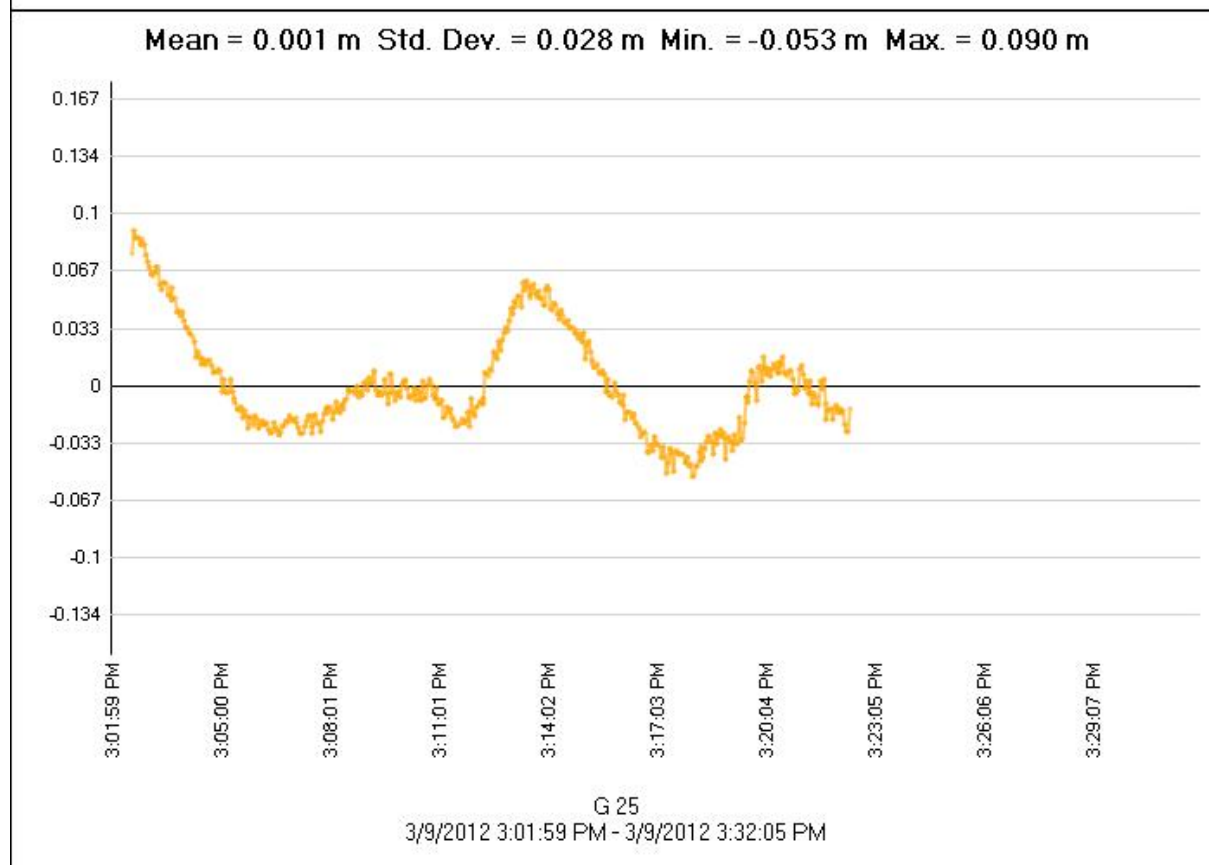
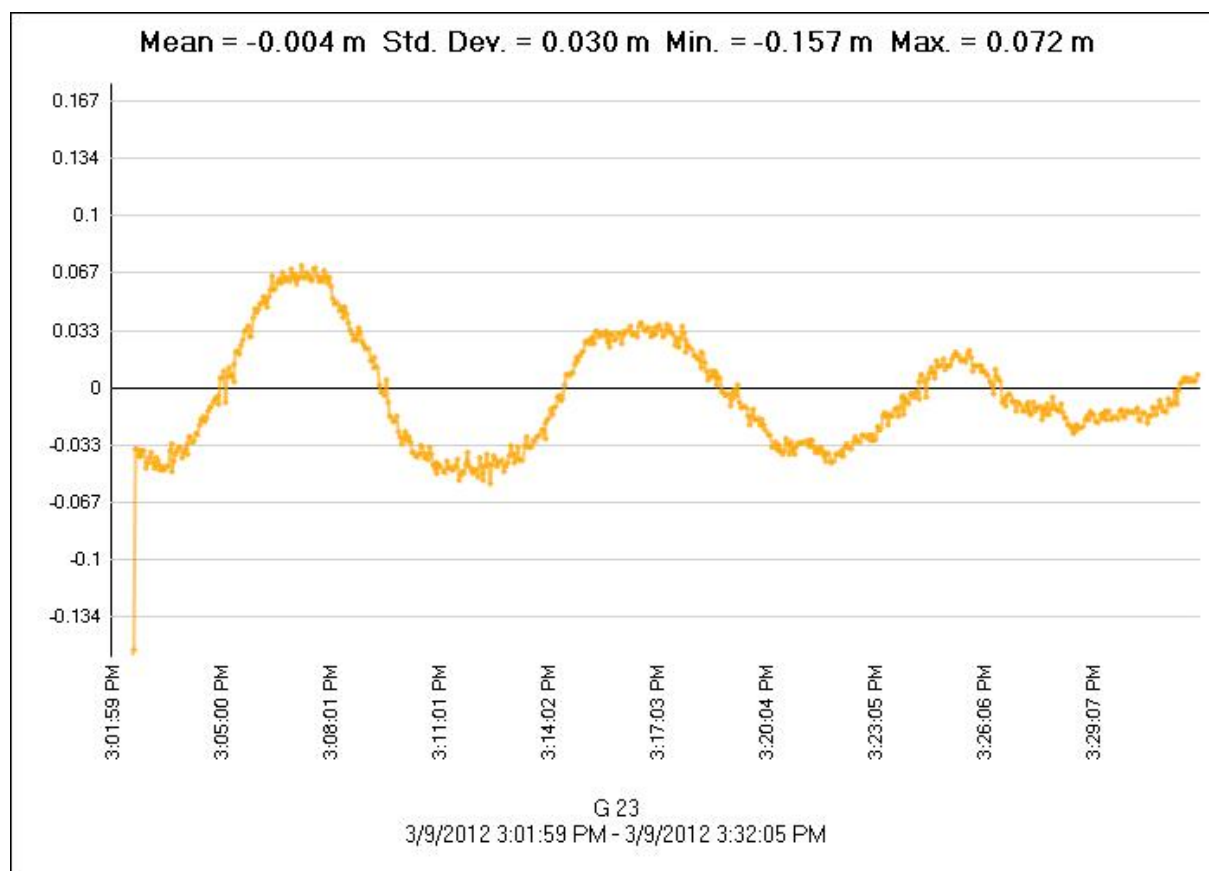
SV	3/9/2012 3:01:55 PM	Duration: 00:30:08.5000000	Major interval: 00:01:00	3/9/2012 3:32:04 PM
G 1	L1 L2			
G 11	L1 L2			
G 14	L1 L2			
G 16	L1 L2			
G 20	L1 L2			
G 22	L1 L2			
G 23	L1 L2			
G 25	L1 L2			
G 30	L1 L2			
G 31	L1 L2			
G 32	L1 L2			

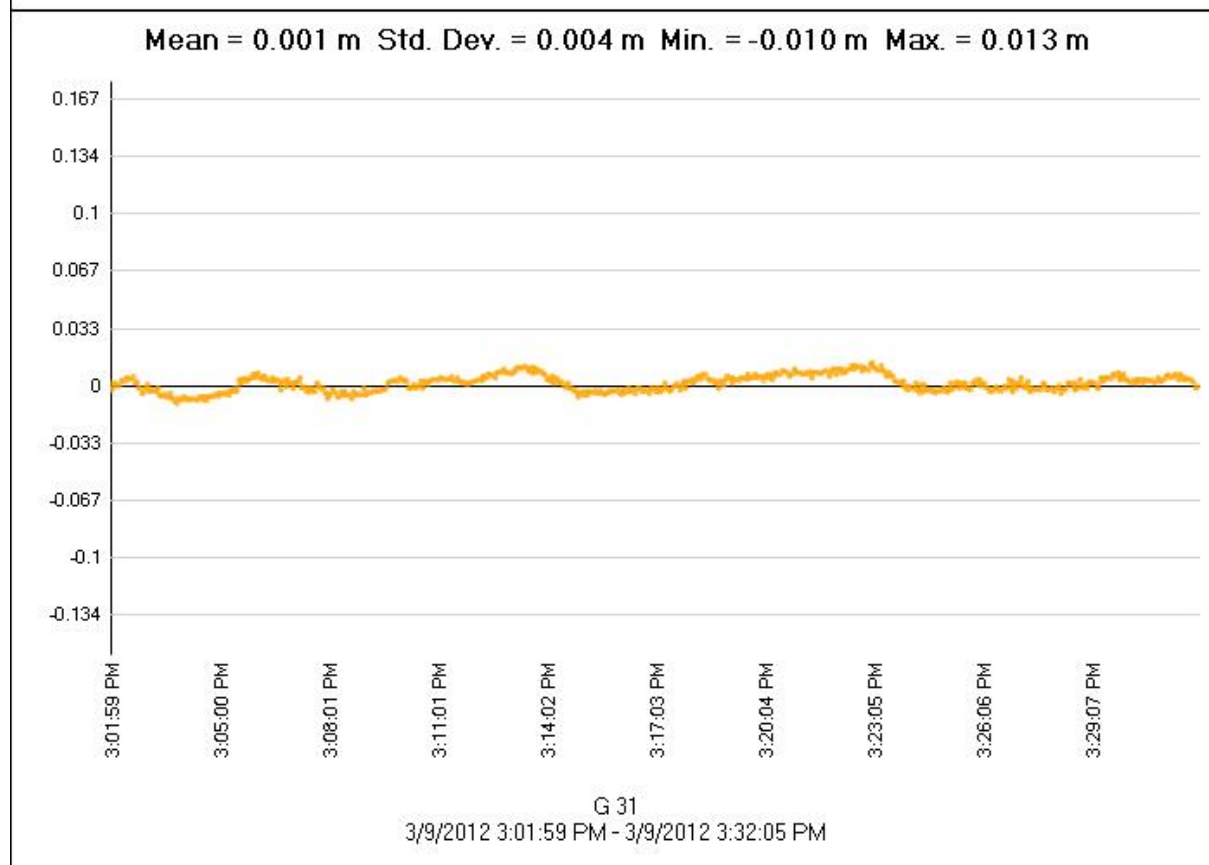
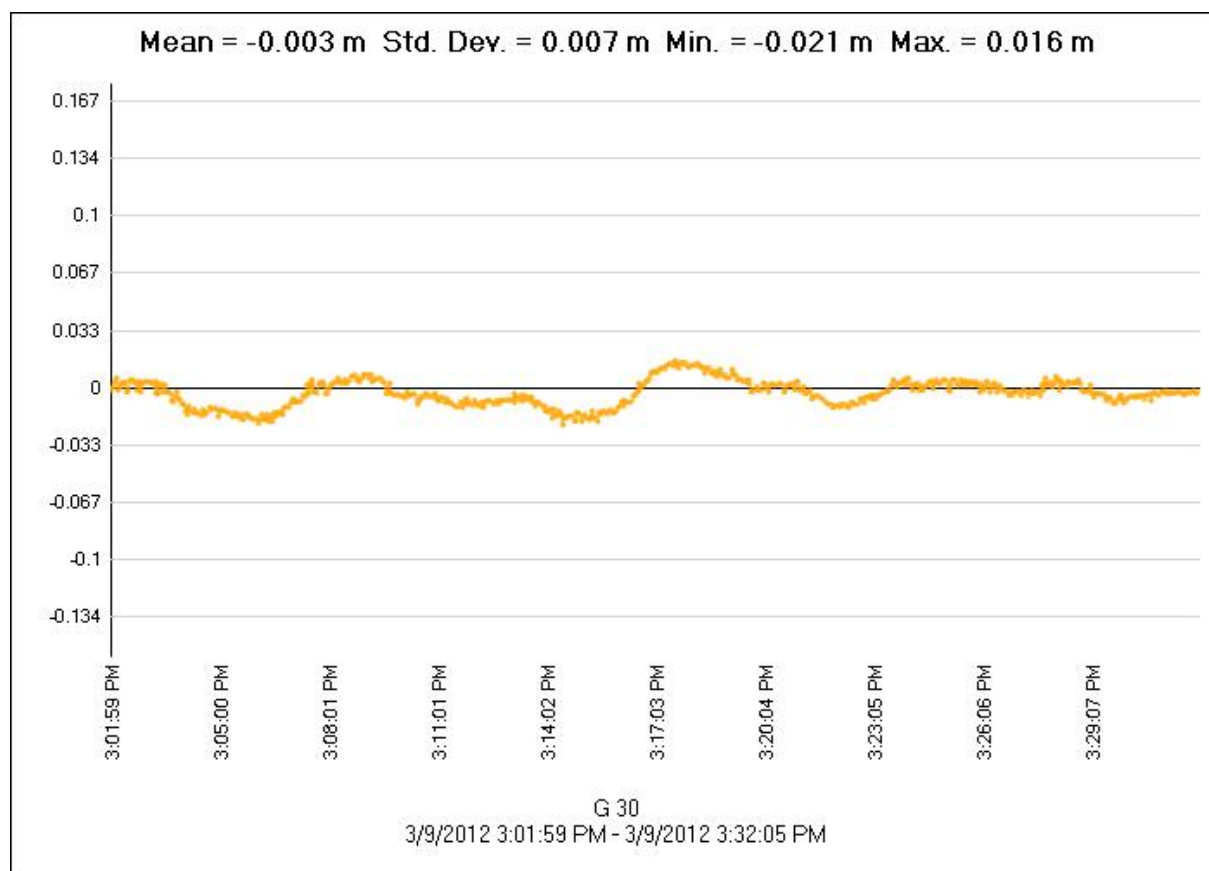
## Residuals



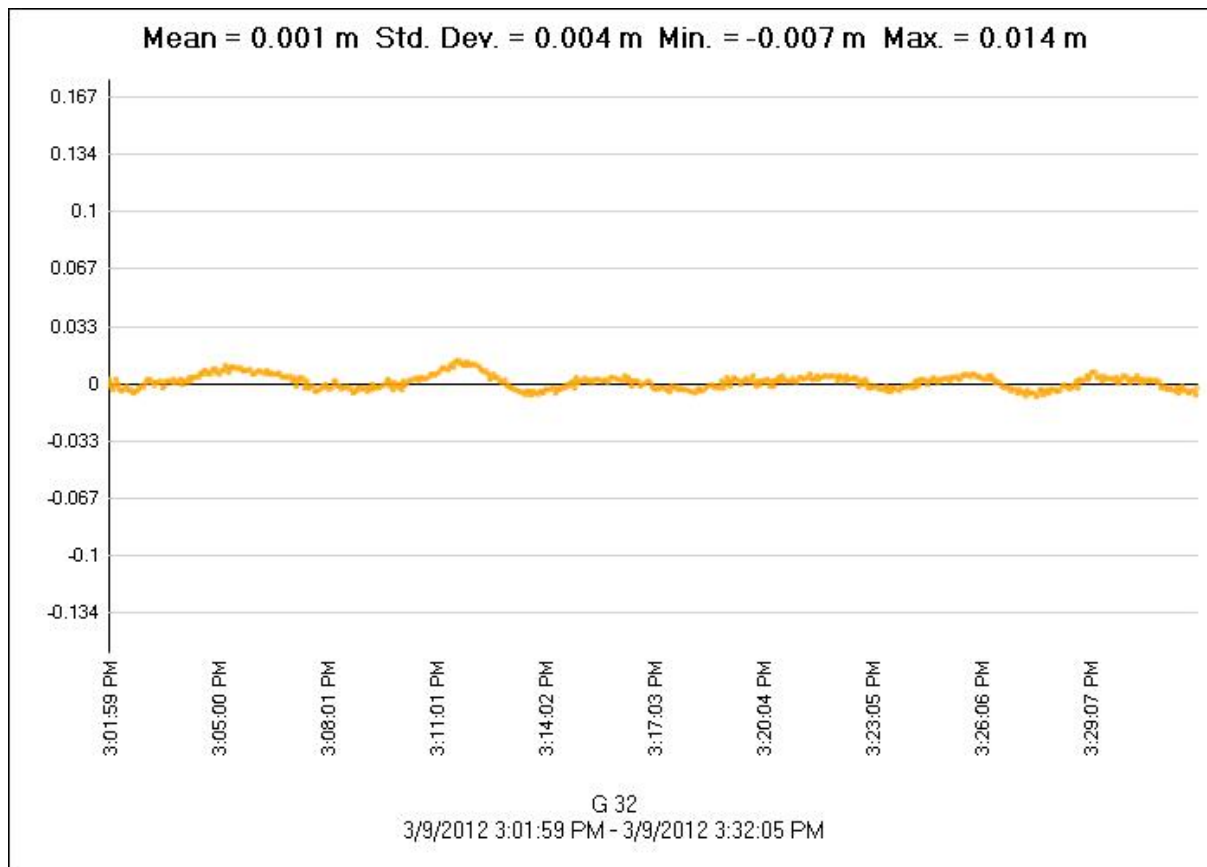












## Processing style

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

---

JJ0729 - FVA09-B1 (2:30:38 PM-2:52:58 PM) (S252)

---

Baseline observation: JJ0729 --- FVA09-B1 (B252)

Processed: 4/9/2012 10:38:58 AM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.027 m

Vertical precision: 0.029 m

RMS: 0.009 m

Maximum PDOP: 2.383

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/15/2012 2:30:38 PM (Local: UTC-7hr)

Processing stop time: 2/15/2012 2:52:58 PM (Local: UTC-7hr)

Processing duration: 00:22:20

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	JJ0729				
Grid		Local		Global	
Easting	235140.798 m	Latitude	N38°02'39.99776"	Latitude	N38°02'39.99775"
Northing	4215047.569 m	Longitude	W102°01'05.50297"	Longitude	W102°01'05.50297"
Elevation	1035.400 m	Height	1011.331 m	Height	1011.331 m

To:	FVA09-B1				
Grid		Local		Global	
Easting	269186.234 m	Latitude	N37°57'12.06785"	Latitude	N37°57'12.06784"
Northing	4203895.023 m	Longitude	W101°37'37.37539"	Longitude	W101°37'37.37539"
Elevation	975.121 m	Height	950.405 m	Height	950.405 m

Vector					
9Ughb[	34045.437 m	NS Fwd Azimuth	106°16'43"	L	32366.475 m
BcfA\jb[	-11152.547 m	Ellipsoid Dist.	35812.752 m	M	-13086.555 m
9Yj Uhcb	-60.279 m	<Y][\h	-60.927 m	N	-8006.315 m

## Standard Errors

Vector errors:					
Point ID	0.010 m	Point ID	0°00'00"	Point ID	0.010 m
Point ID	0.008 m	Point ID	0.008 m	Point ID	0.010 m
Point ID	0.015 m	Point ID	0.015 m	Point ID	0.013 m

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

	X	Y	Z
X	0.0001081560		
Y	0.0000328602	0.0000923828	
Z	0.0000016891	-0.0000862598	0.0001814136

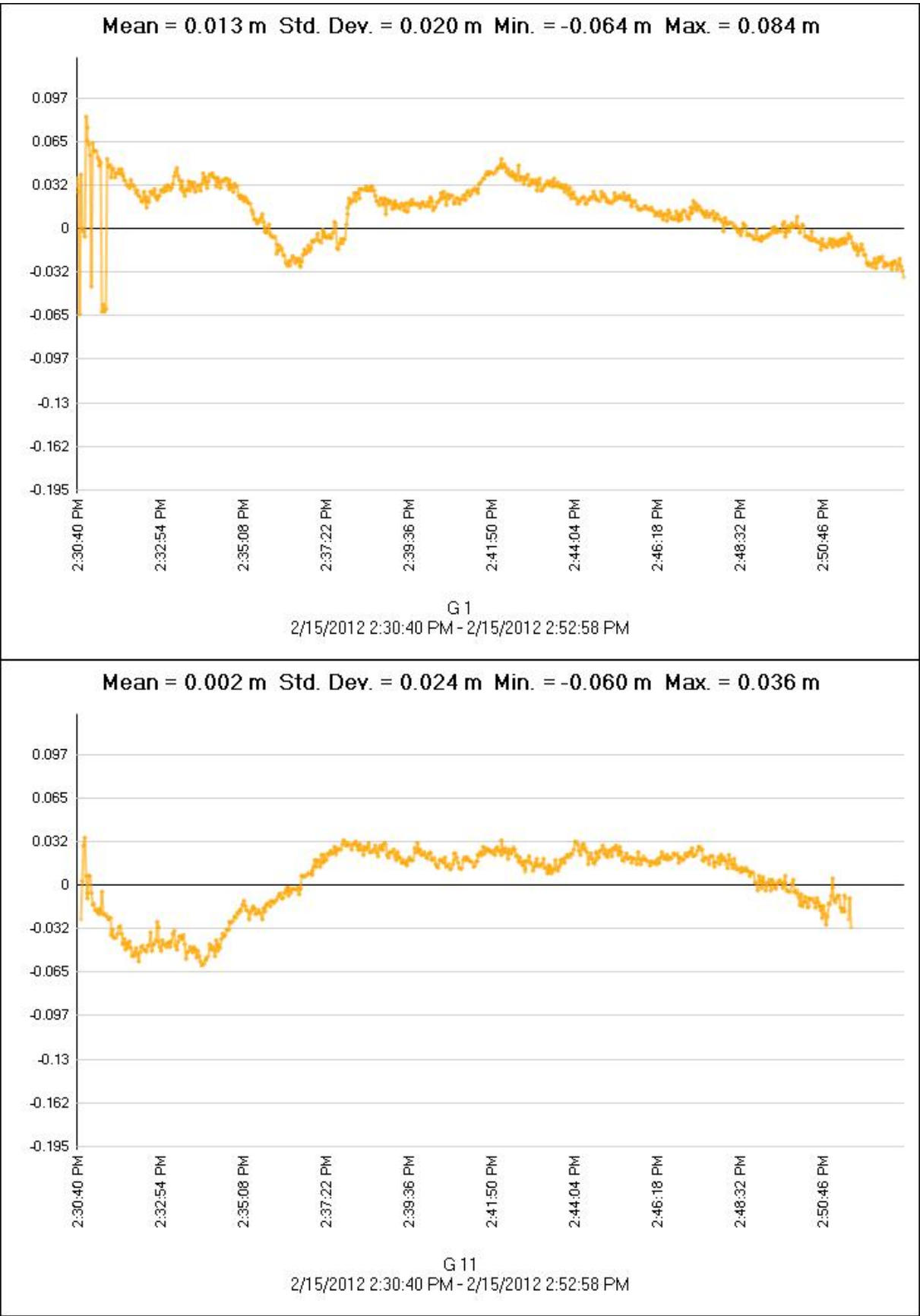
## Occupations

	From	To
Point ID:	JJ0729	FVA09-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\900040460.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050468.12o
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

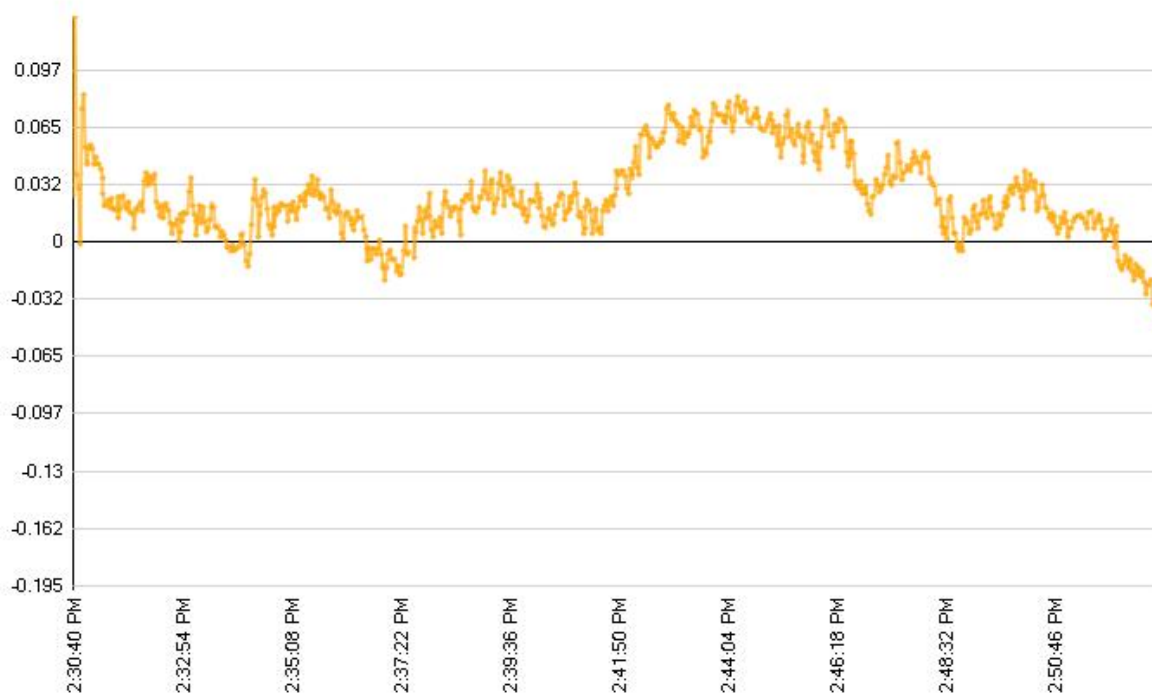
Tracking Summary



Residuals



Mean = 0.025 m Std. Dev. = 0.024 m Min. = -0.045 m Max. = 0.128 m

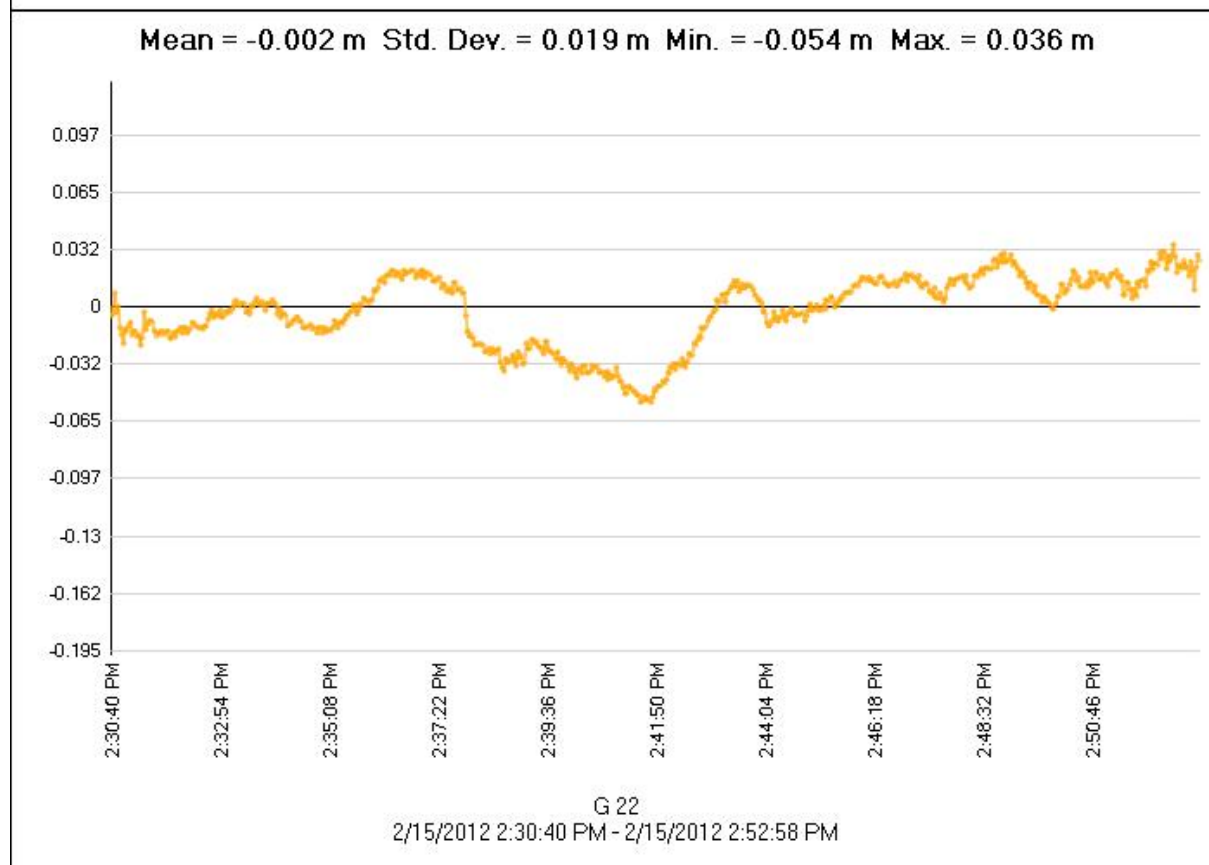
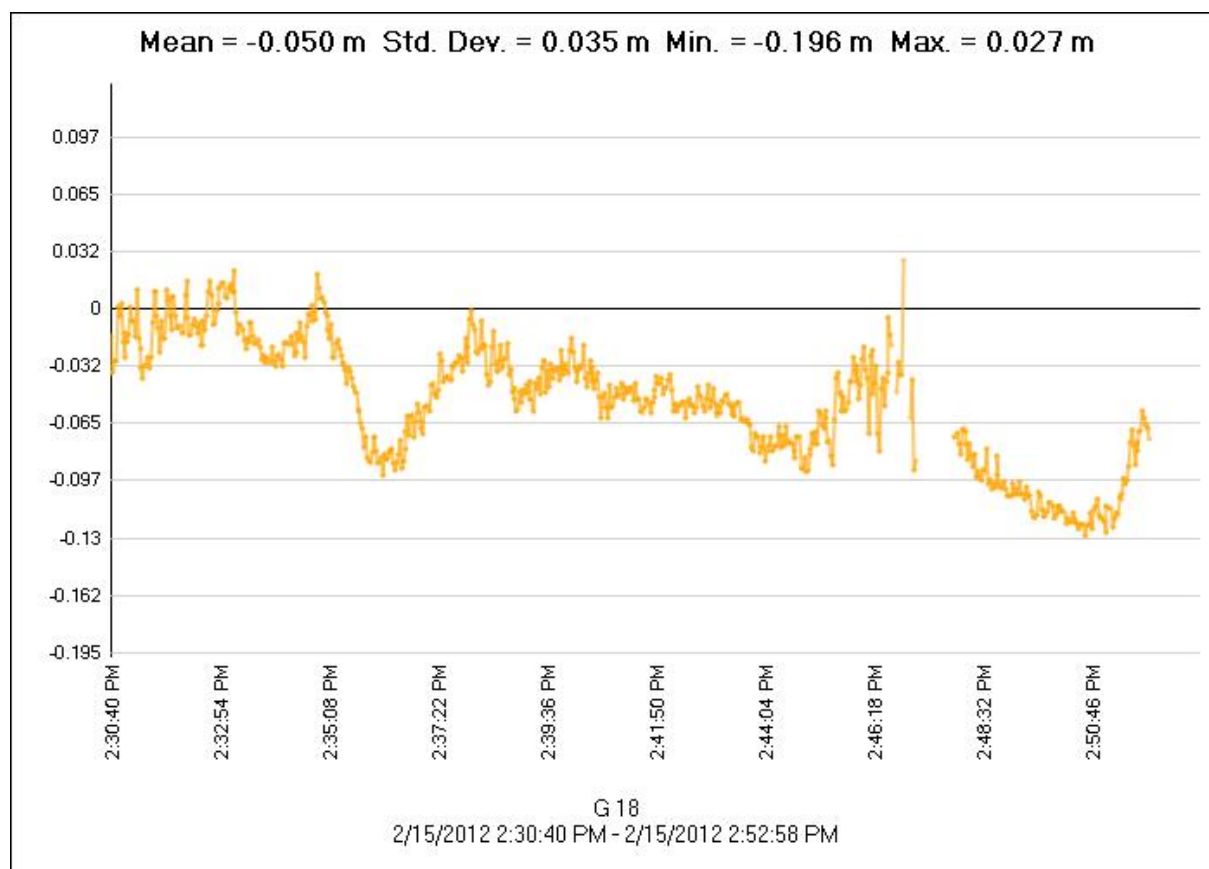


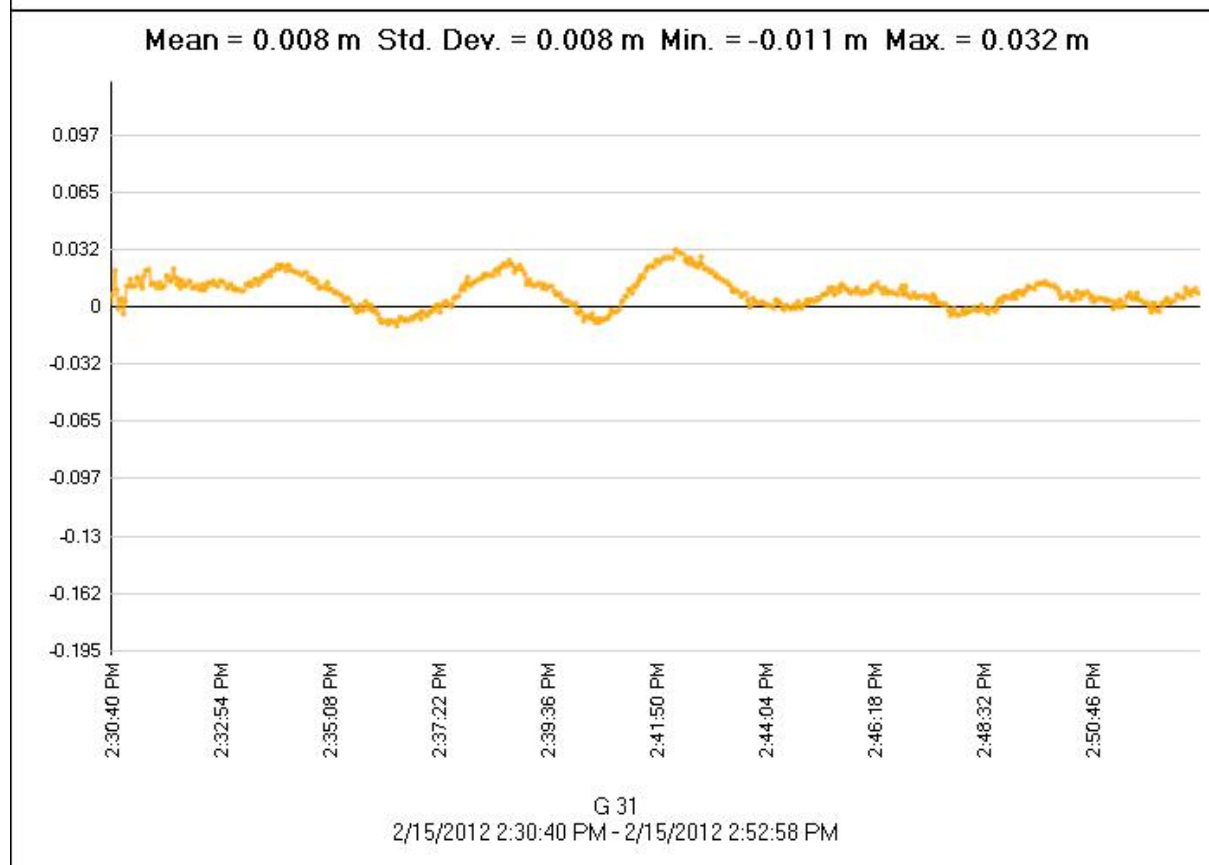
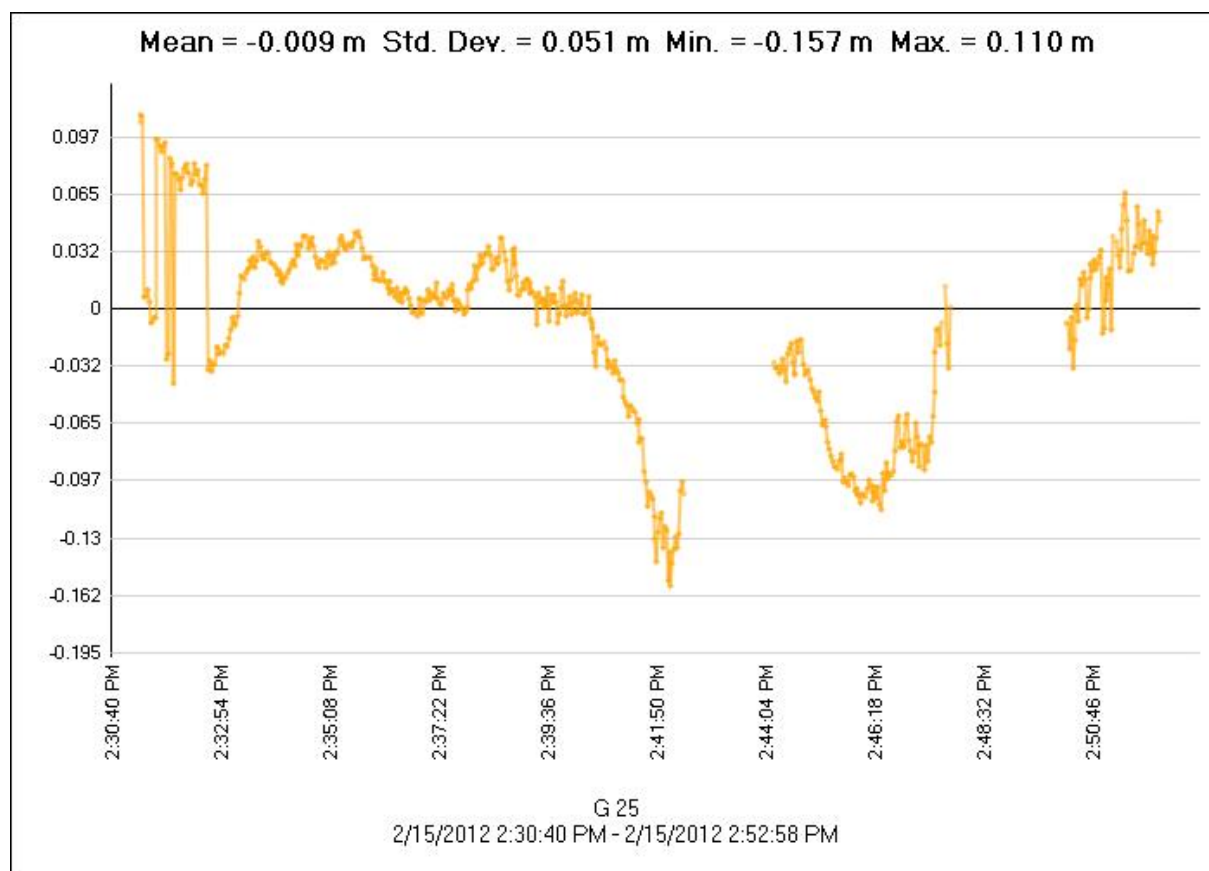
G 12  
2/15/2012 2:30:40 PM - 2/15/2012 2:52:58 PM

Mean = -0.005 m Std. Dev. = 0.013 m Min. = -0.026 m Max. = 0.032 m

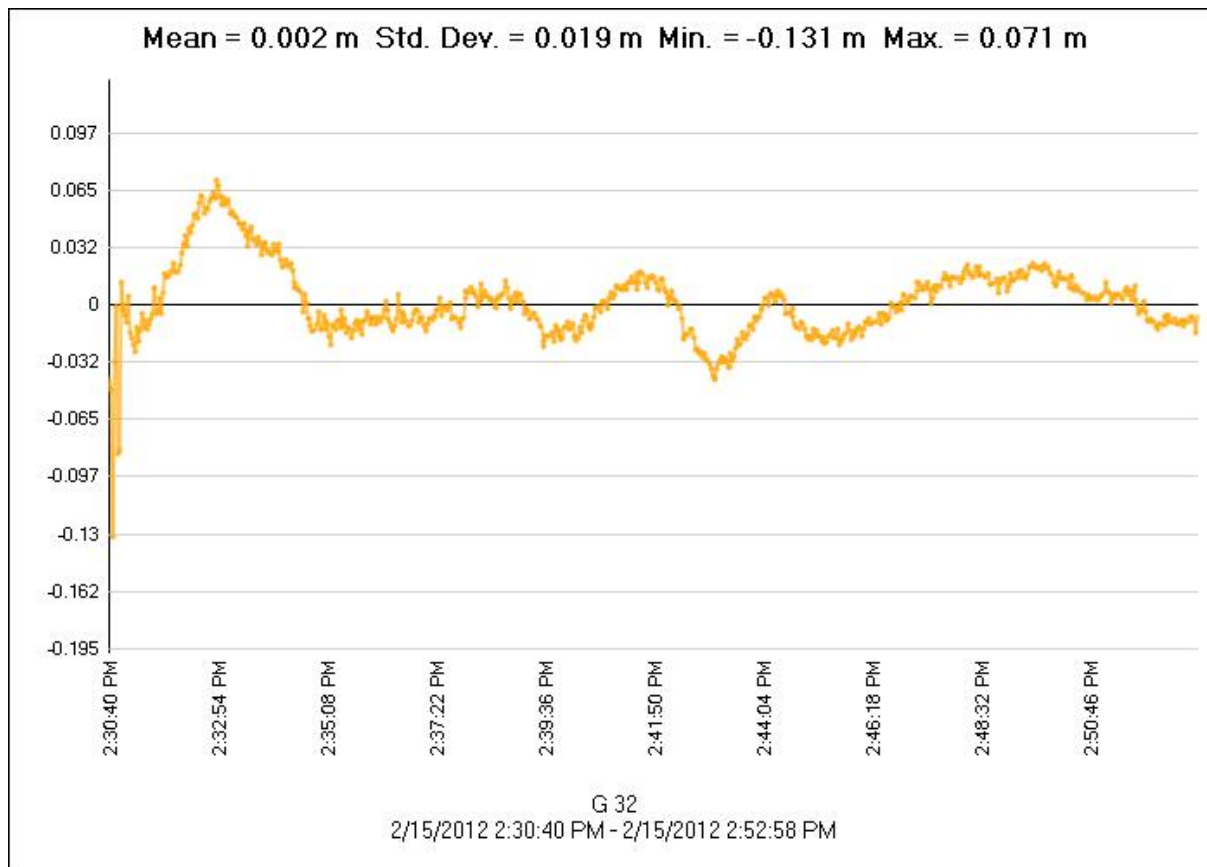


G 14  
2/15/2012 2:30:40 PM - 2/15/2012 2:52:58 PM











## 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

## Baseline observation:



JJ0729 --- SVA31-B1 (B253)

Processed:

4/9/2012 1:13:07 PM

Solution type:

Float

Frequency used:

Dual Frequency (L1, L2)

Horizontal precision:

0.128 m

Vertical precision:

0.106 m

RMS:

0.002 m

Maximum PDOP:

1.986

Ephemeris used:

Broadcast

Antenna model:

US National Geodetic Survey Calibration

Processing start time:

2/15/2012 1:56:12 PM (Local: UTC-7hr)

Processing stop time:

2/15/2012 2:18:48 PM (Local: UTC-7hr)

Processing duration:

00:22:35

Processing interval:

.5 second

## Vector Components (Mark to Mark)

From:	JJ0729				
Grid		Local		Global	
Easting	235140.798 m	Latitude	N38°02'39.99776"	Latitude	N38°02'39.99775"
Northing	4215047.569 m	Longitude	W102°01'05.50297"	Longitude	W102°01'05.50297"
Elevation	1035.400 m	Height	1011.331 m	Height	1011.331 m

To:	SVA31-B1				
Grid		Local		Global	
Easting	275844.201 m	Latitude	N37°55'40.92668"	Latitude	N37°55'40.92668"
Northing	4200898.117 m	Longitude	W101°33'01.46414"	Longitude	W101°33'01.46414"
Elevation	962.163 m	Height	937.298 m	Height	937.298 m

Vector					
9Ughb[	40703.403 m	NS Fwd Azimuth	107°18'36"	L	38622.131 m
Bcfh\jb[	-14149.452 m	Ellipsoid Dist.	43078.057 m	M	-16122.795 m
9Yj Uhcb	-73.237 m	<Y][\h	-74.033 m	N	-10230.856 m

## Standard Errors

Vector errors:

Point ID	0.049 m	Point Description	0°00'00"	Point Type	0.055 m
Point ID	0.052 m	Point Description	0.049 m	Point Type	0.043 m
Point ID	0.054 m	Point Description	0.054 m	Point Type	0.056 m

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

	X	Y	Z
X	0.0030302675		
Y	0.0013297849	0.0018290395	
Z	-0.0010096473	-0.0000037759	0.0031481171

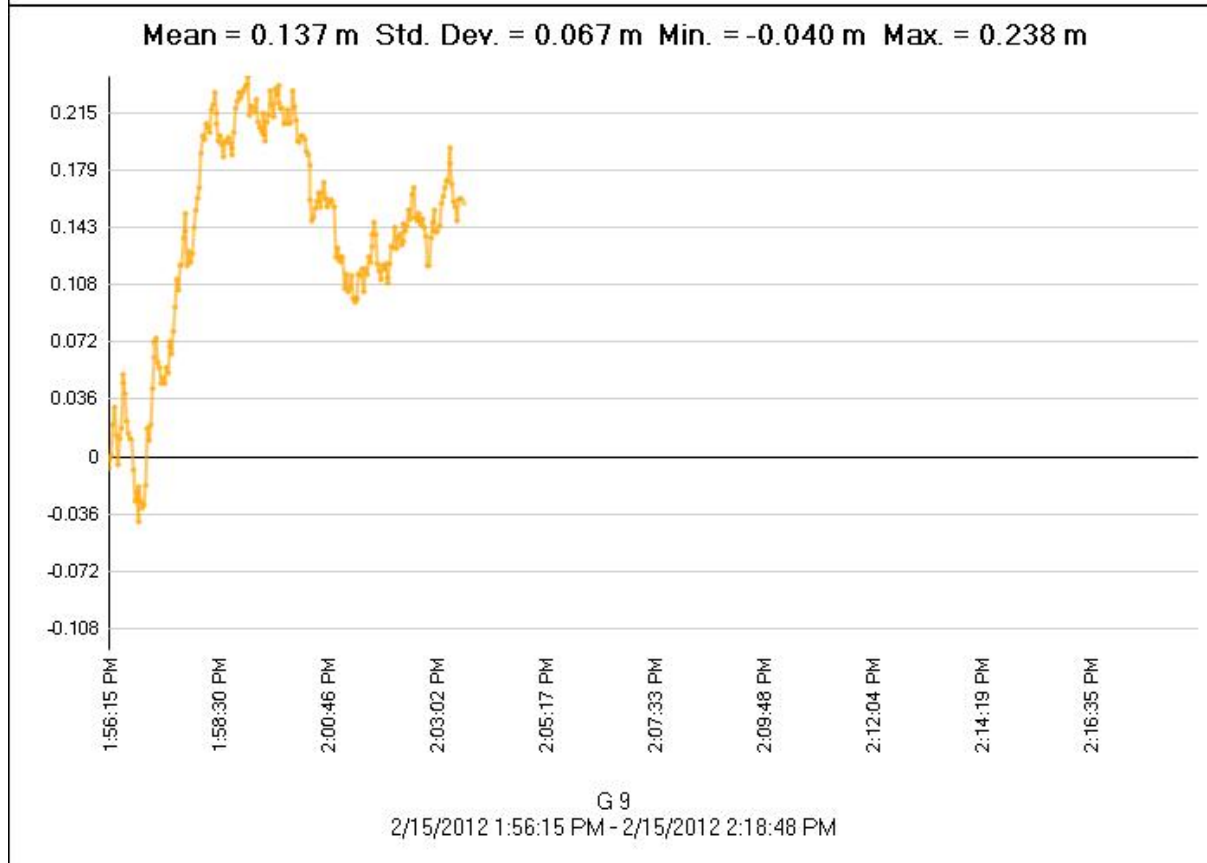
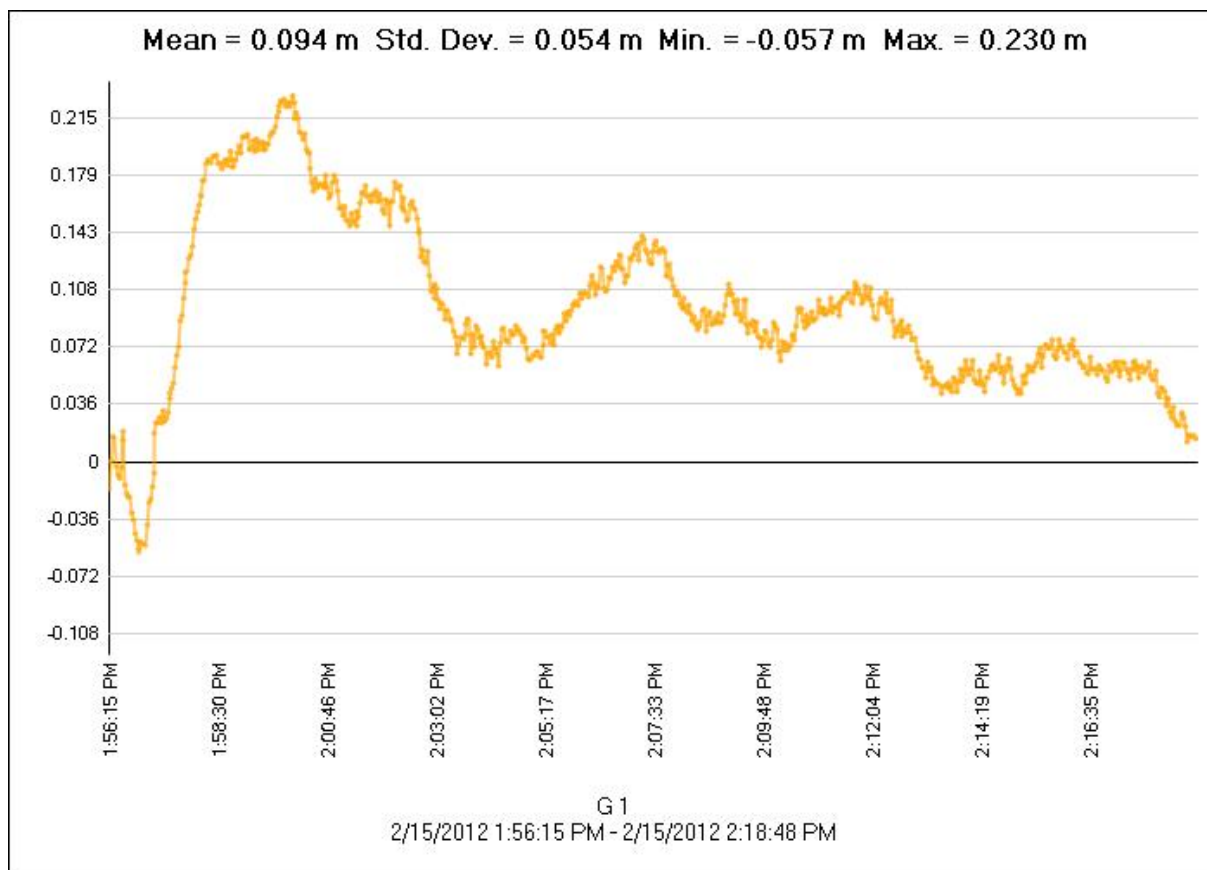
## Occupations

	From	To
Point ID:	JJ0729	SVA31-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\900040460.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050467.12o
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

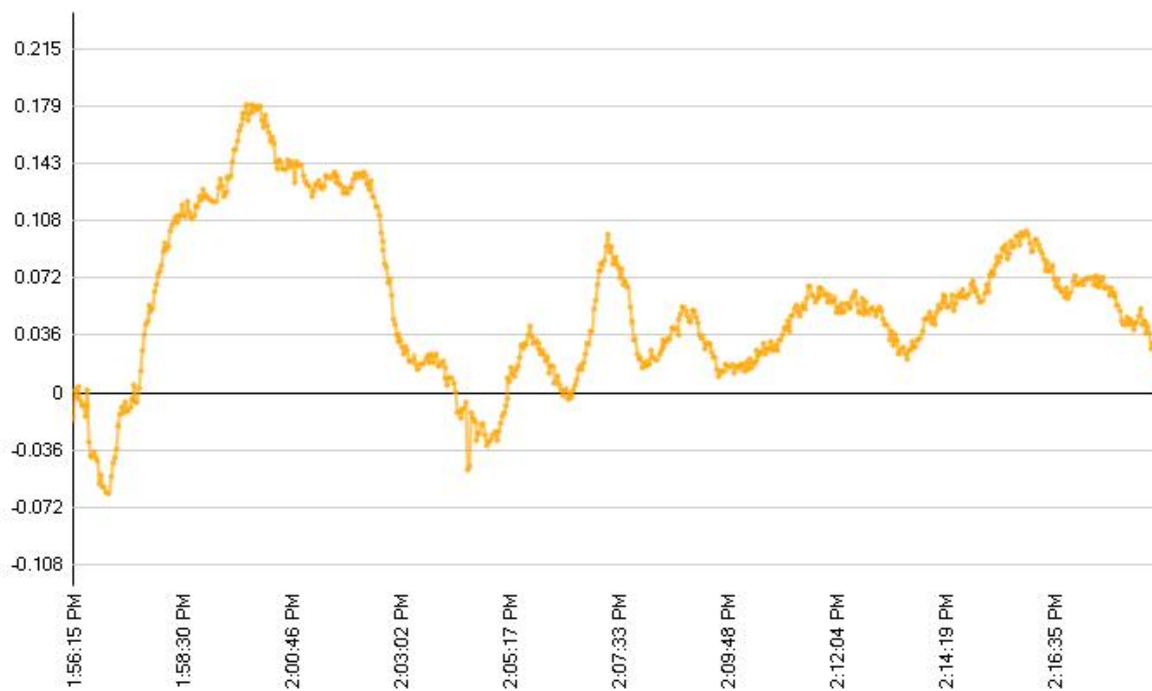
Tracking Summary



## Residuals



Mean = 0.055 m Std. Dev. = 0.050 m Min. = -0.063 m Max. = 0.181 m



G 11

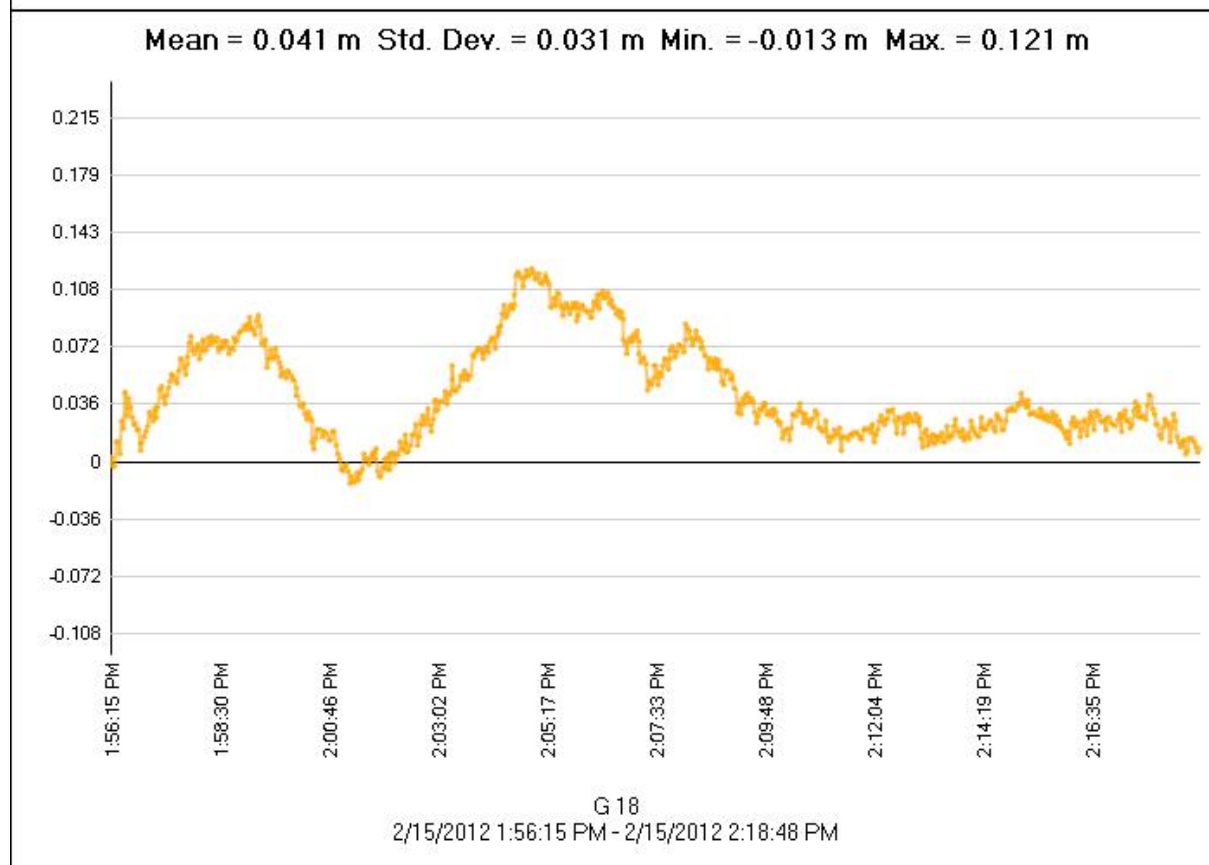
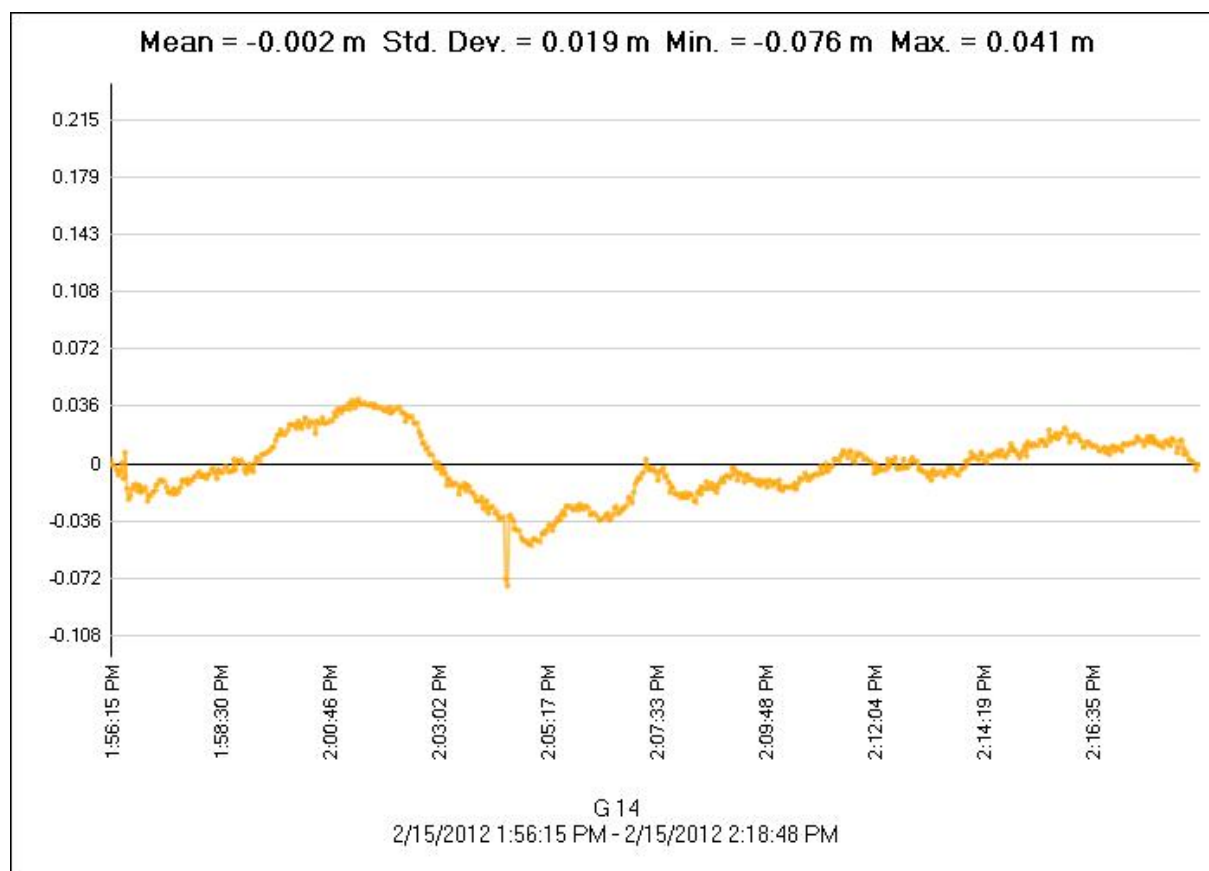
2/15/2012 1:56:15 PM - 2/15/2012 2:16:48 PM

Mean = 0.067 m Std. Dev. = 0.046 m Min. = -0.018 m Max. = 0.167 m



G 12

2/15/2012 1:56:15 PM - 2/15/2012 2:16:48 PM



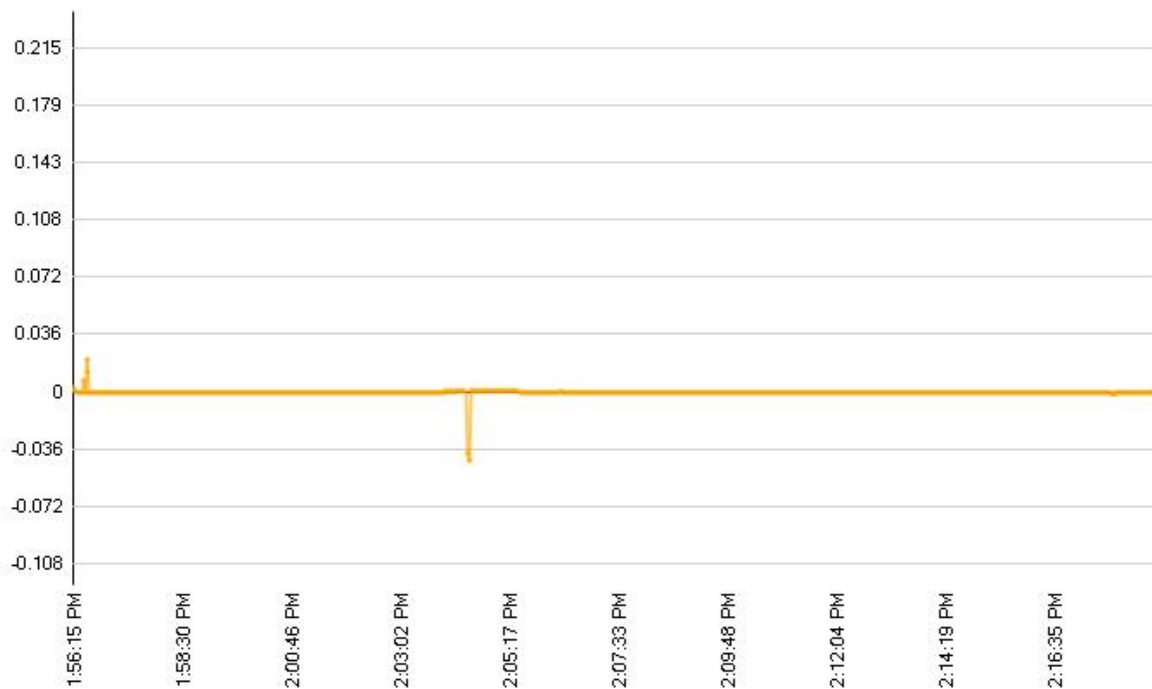
Mean = 0.033 m Std. Dev. = 0.039 m Min. = -0.067 m Max. = 0.103 m



G 19

2/15/2012 1:56:15 PM - 2/15/2012 2:16:48 PM

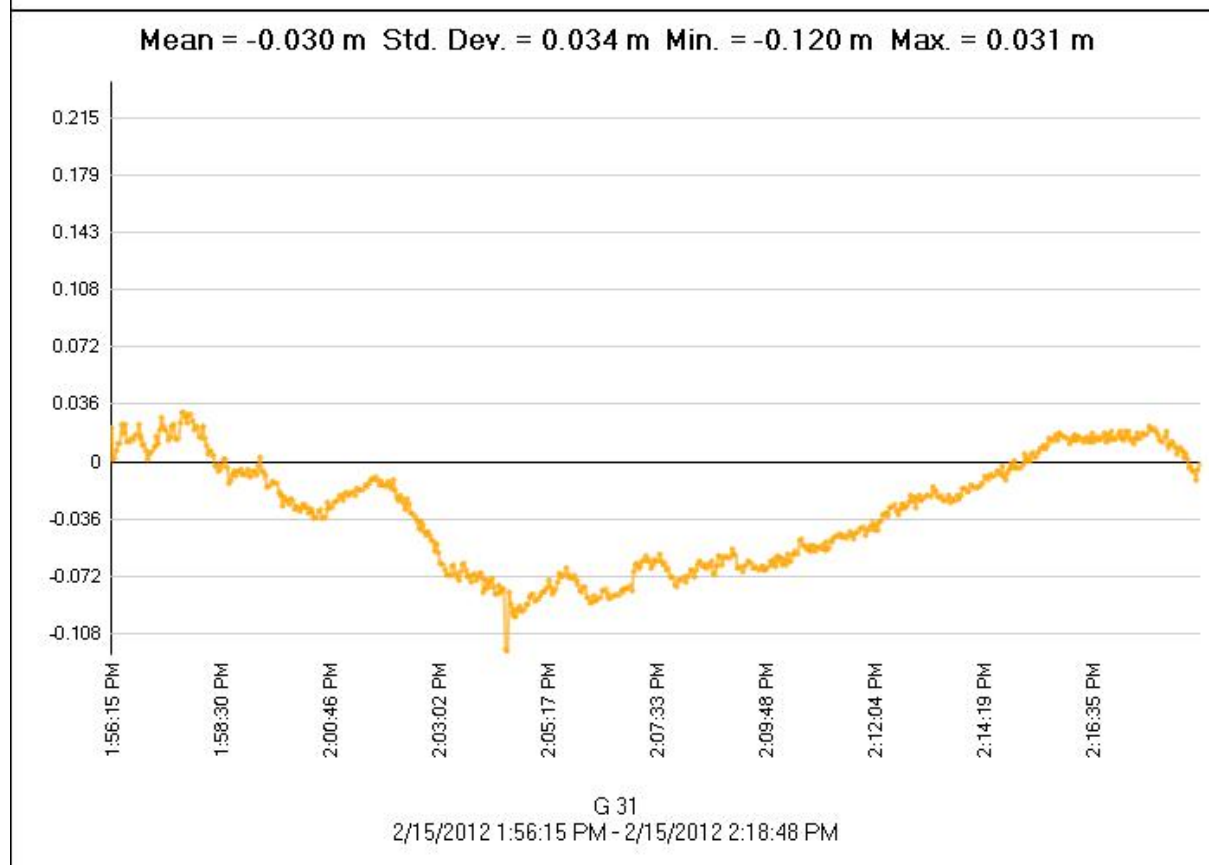
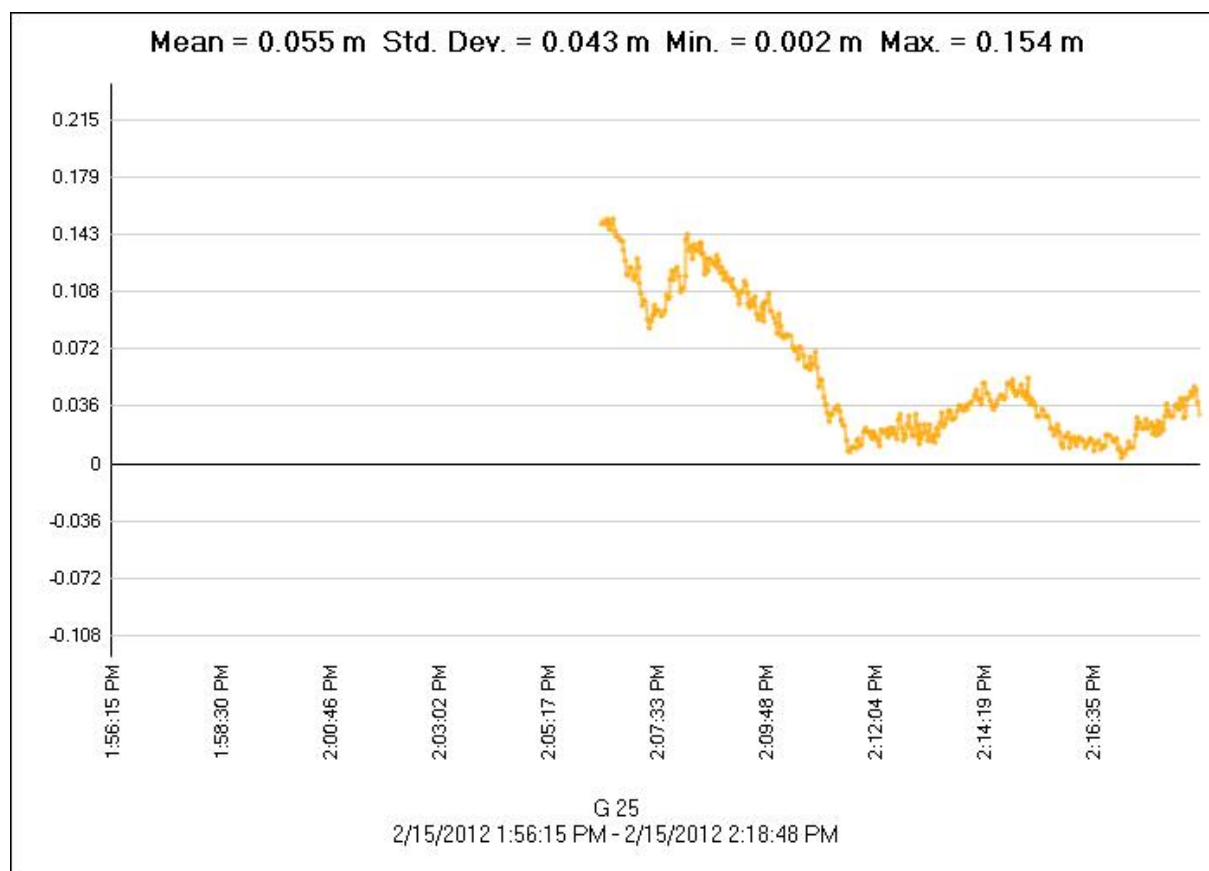
Mean = 0.000 m Std. Dev. = 0.002 m Min. = -0.043 m Max. = 0.020 m

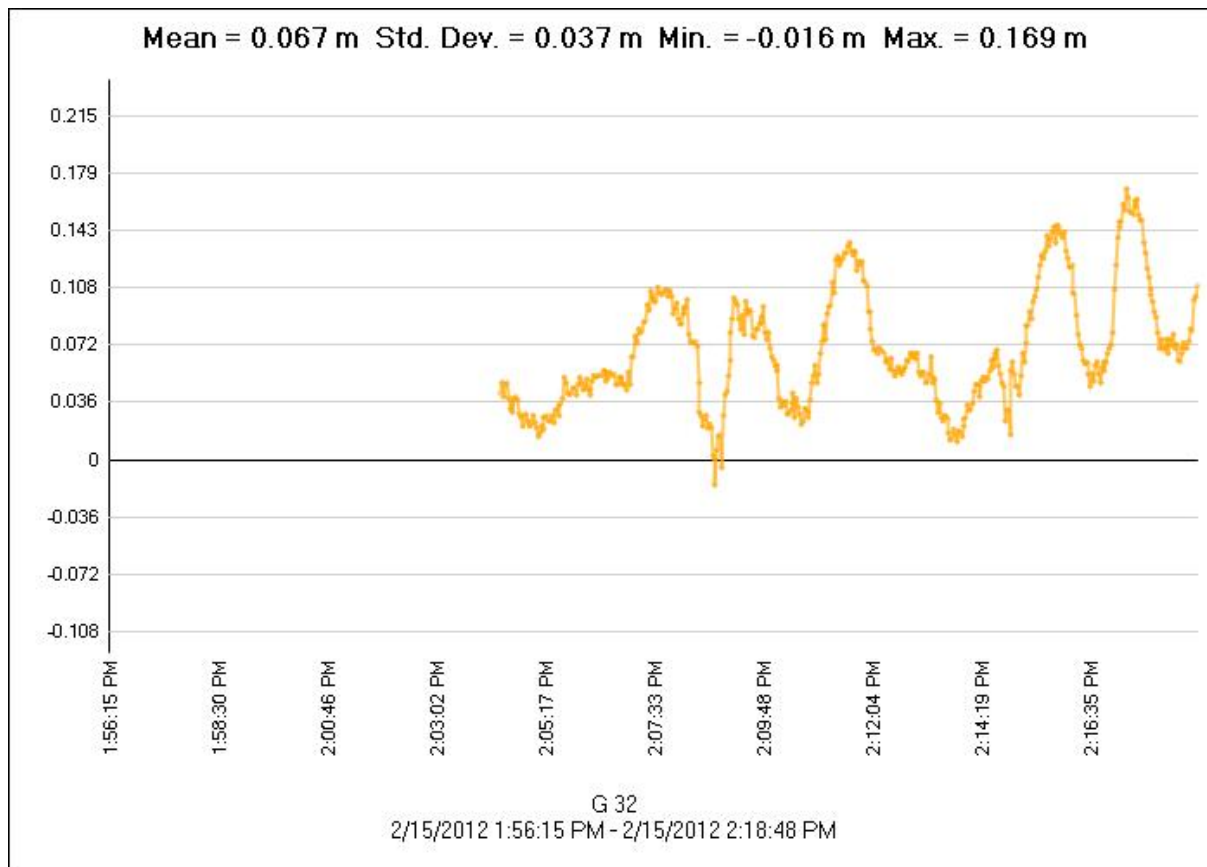


G 22

2/15/2012 1:56:15 PM - 2/15/2012 2:16:48 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

---

JJ0729 - SVA31-B1 (1:25:40 PM-1:48:17 PM) (S254)

---

Baseline observation: JJ0729 --- SVA31-B1 (B254)

Processed: 4/10/2012 9:11:27 AM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.065 m

Vertical precision: 0.046 m

RMS: 0.003 m

Maximum PDOP: 2.987

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/15/2012 1:25:40 PM (Local: UTC-7hr)

Processing stop time: 2/15/2012 1:33:15 PM (Local: UTC-7hr)

Processing duration: 00:07:35

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	JJ0729				
Grid		Local		Global	
Easting	235140.798 m	Latitude	N38°02'39.99776"	Latitude	N38°02'39.99775"
Northing	4215047.569 m	Longitude	W102°01'05.50297"	Longitude	W102°01'05.50297"
Elevation	1035.400 m	Height	1011.331 m	Height	1011.331 m

To:	SVA31-B1				
Grid		Local		Global	
Easting	276637.306 m	Latitude	N37°56'35.41016"	Latitude	N37°56'35.41015"
Northing	4202557.262 m	Longitude	W101°32'30.86094"	Longitude	W101°32'30.86094"
Elevation	995.421 m	Height	970.566 m	Height	970.566 m

Vector					
9Ughb[	41496.508 m	NS Fwd Azimuth	104°53'34"	L	39555.910 m
Bcfh\jb[	-12490.307 m	Ellipsoid Dist.	43320.982 m	M	-15286.129 m
9Yj Uhcb	-39.979 m	<Y][\h	-40.765 m	N	-8885.315 m

## Standard Errors

Vector errors:					
Point ID	0.011 m	Point Description	0°00'00"	Point Type	0.012 m
Point ID	0.026 m	Point Description	0.012 m	Point Type	0.023 m
Point ID	0.023 m	Point Description	0.023 m	Point Type	0.026 m

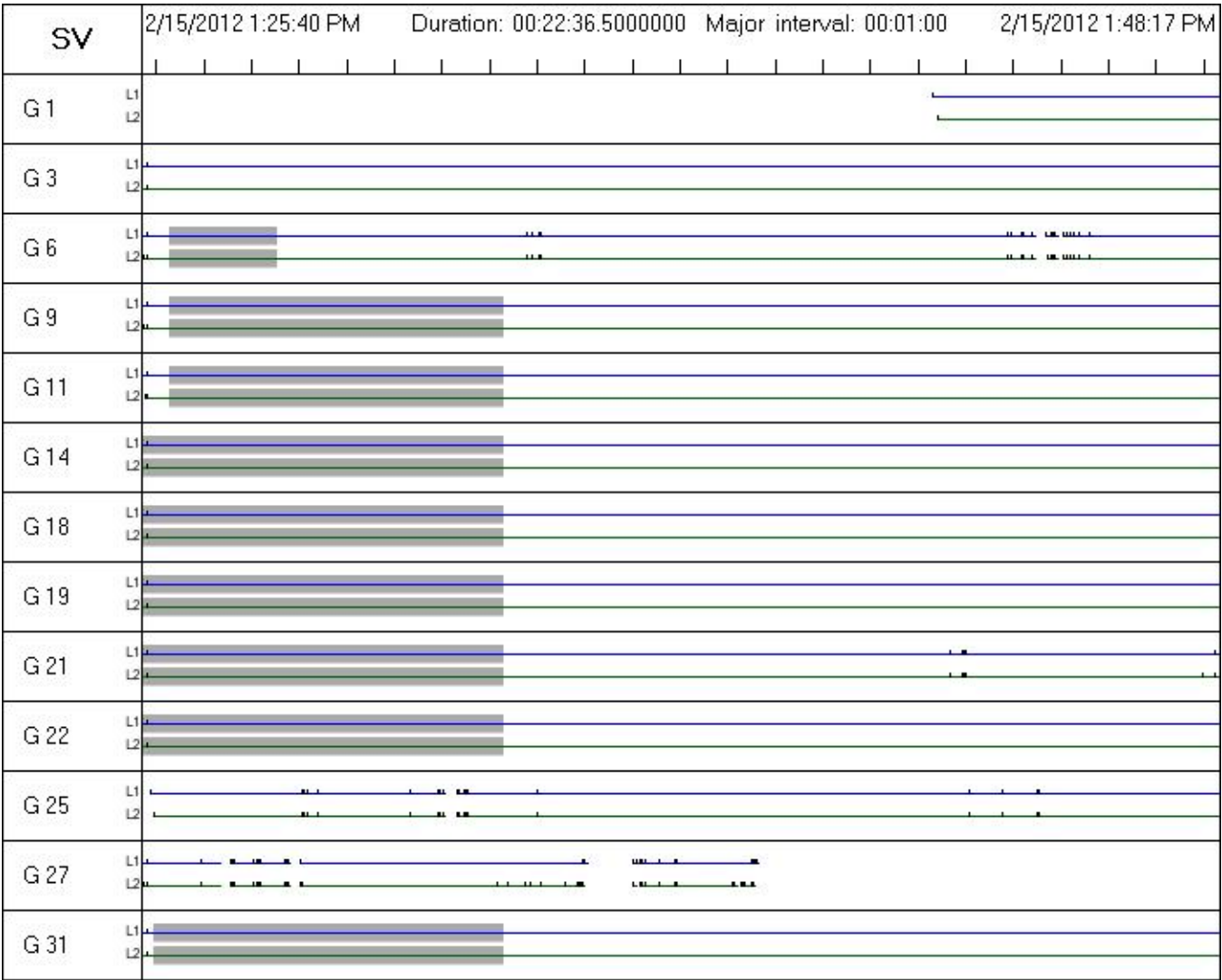
## Aposteriori Covariance Matrix (Meter<sup>2</sup>)

	X	Y	Z
X	0.0001358820		
Y	0.0000969254	0.0005489704	
Z	0.0000305967	0.0000638697	0.0006716867

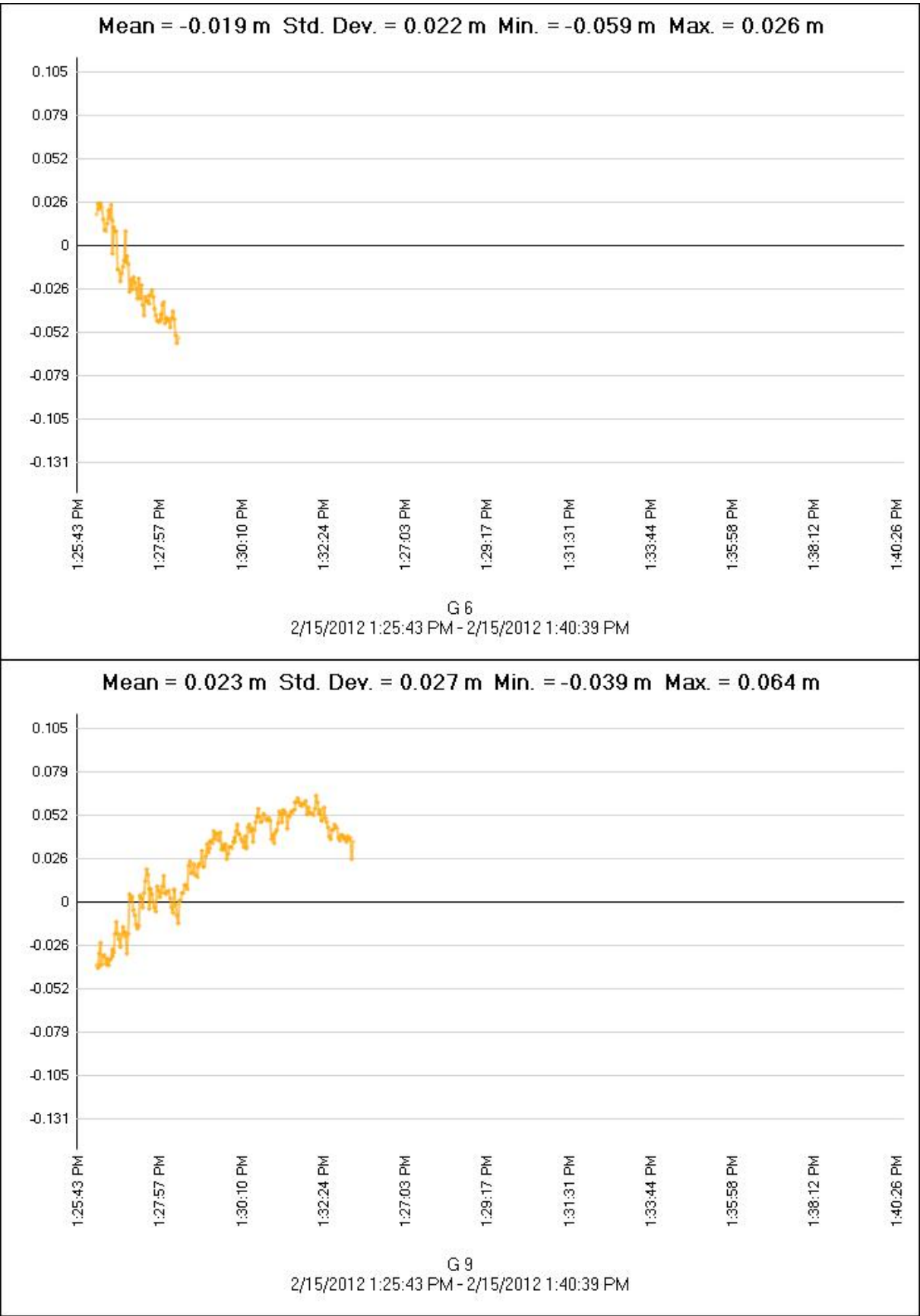
## Occupations

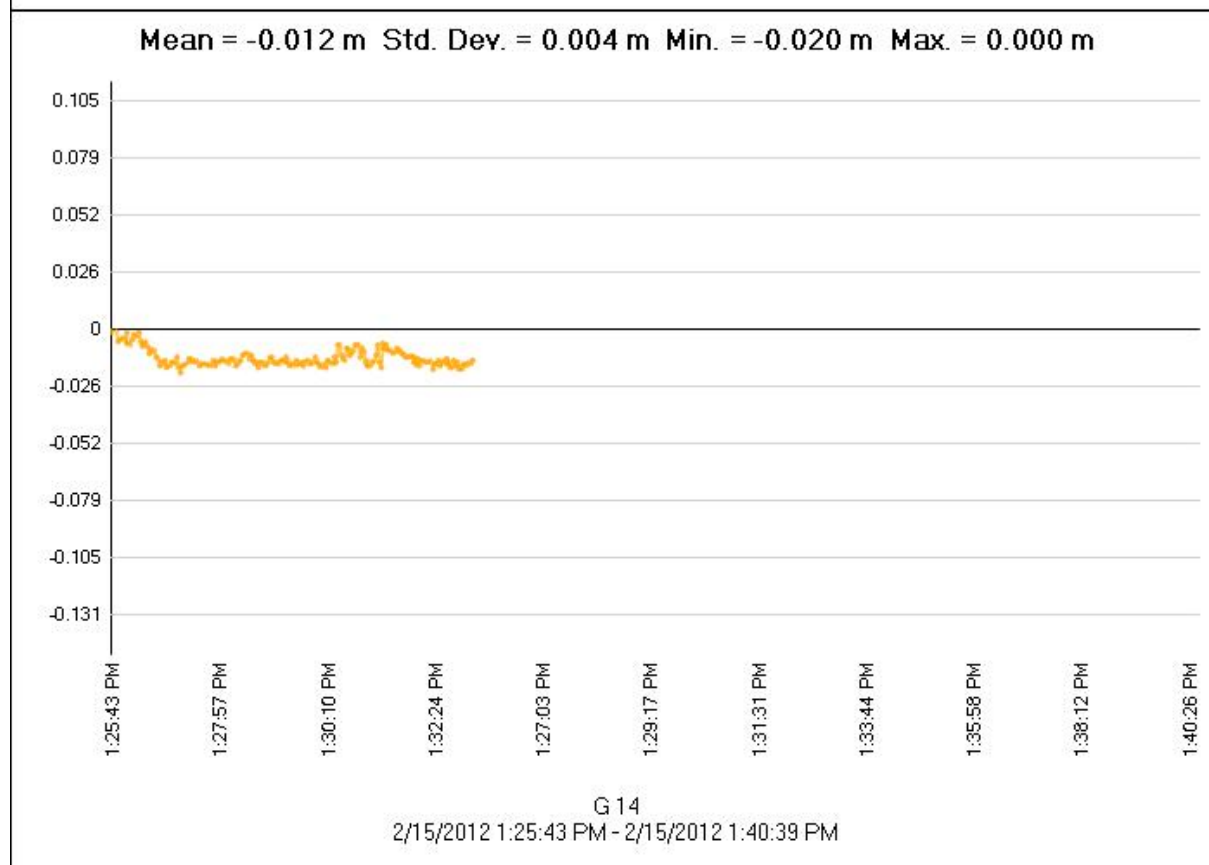
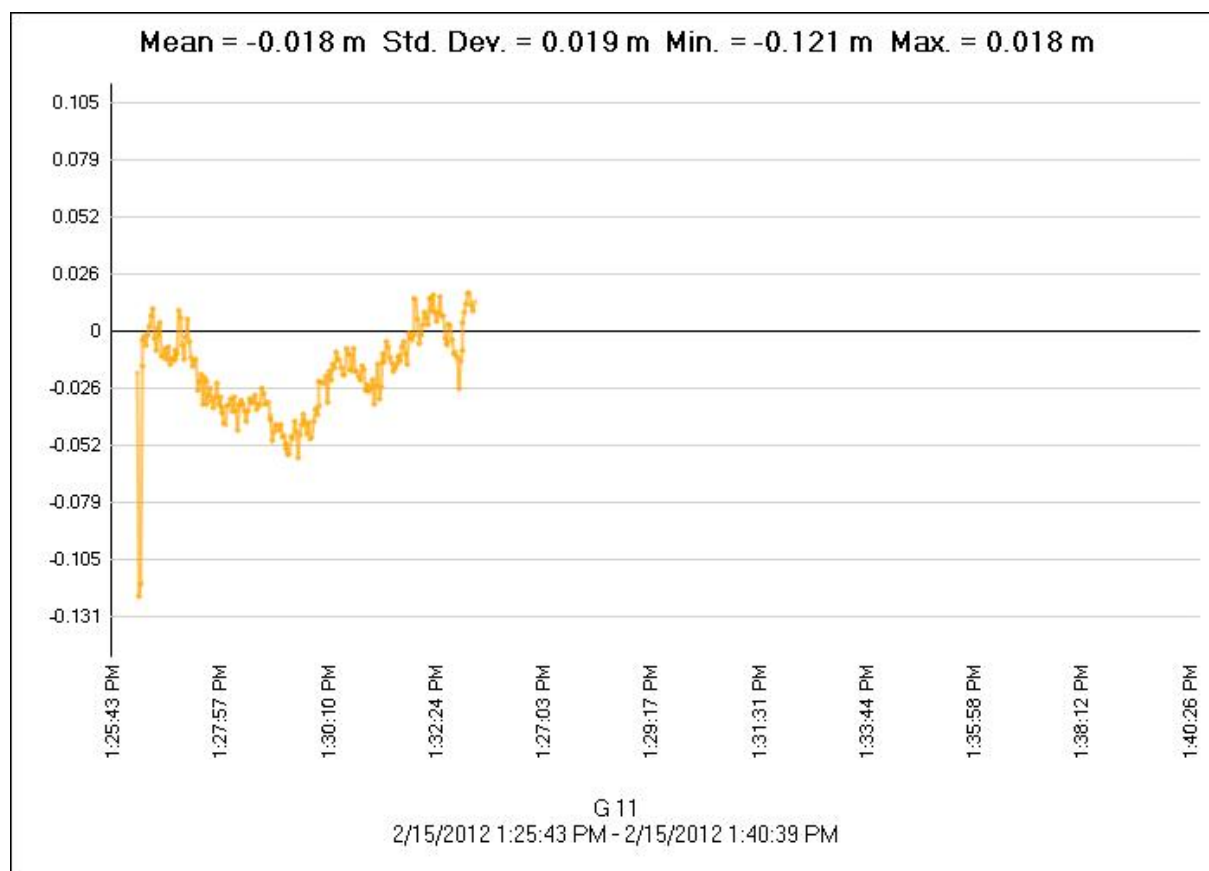
	From	To
Point ID:	JJ0729	SVA31-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\900040460.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050466.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

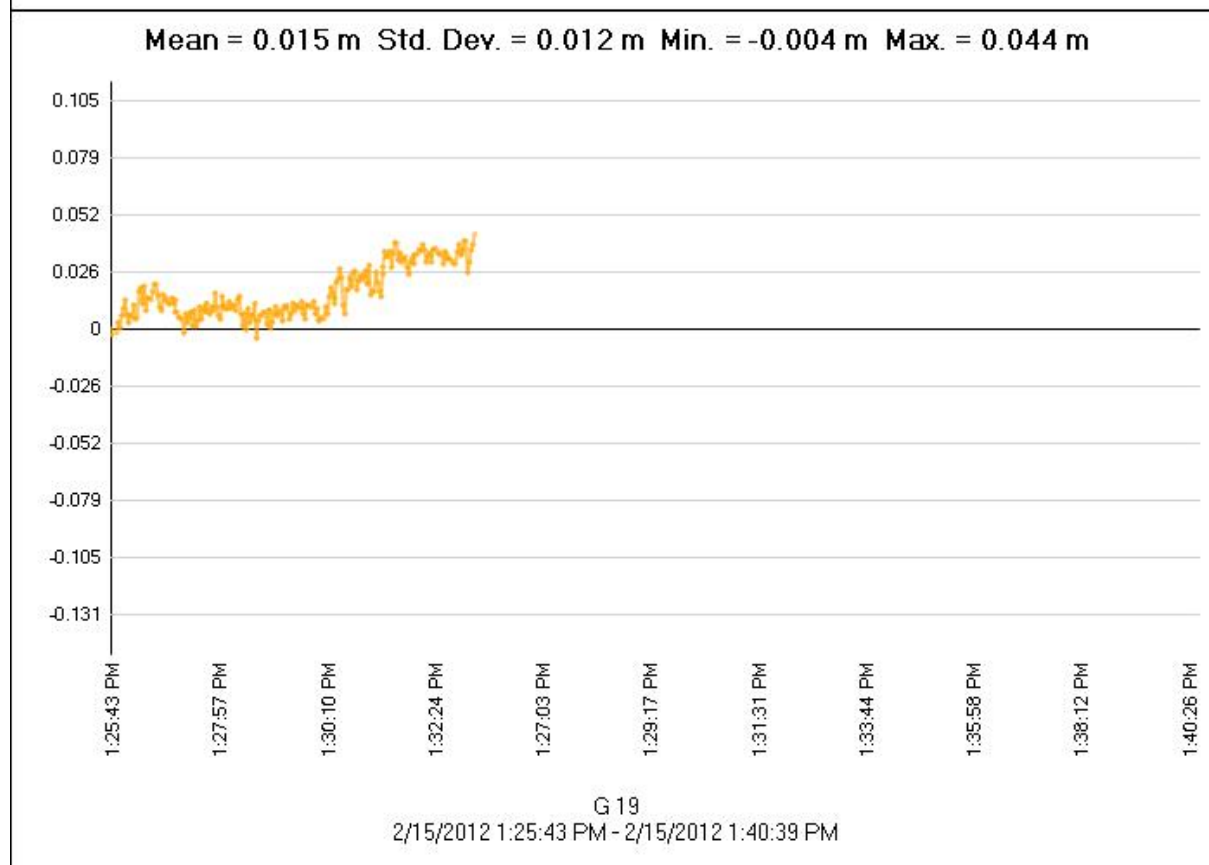
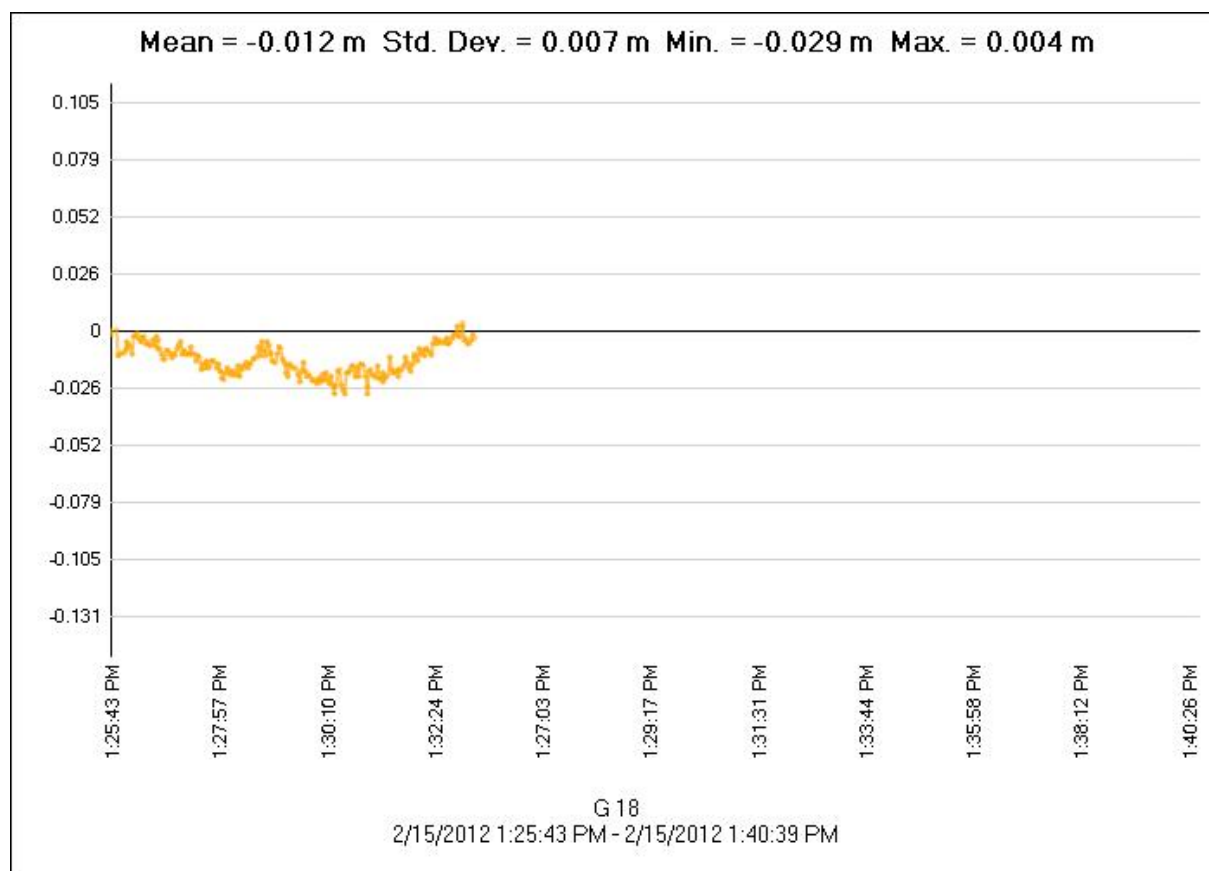
Tracking Summary



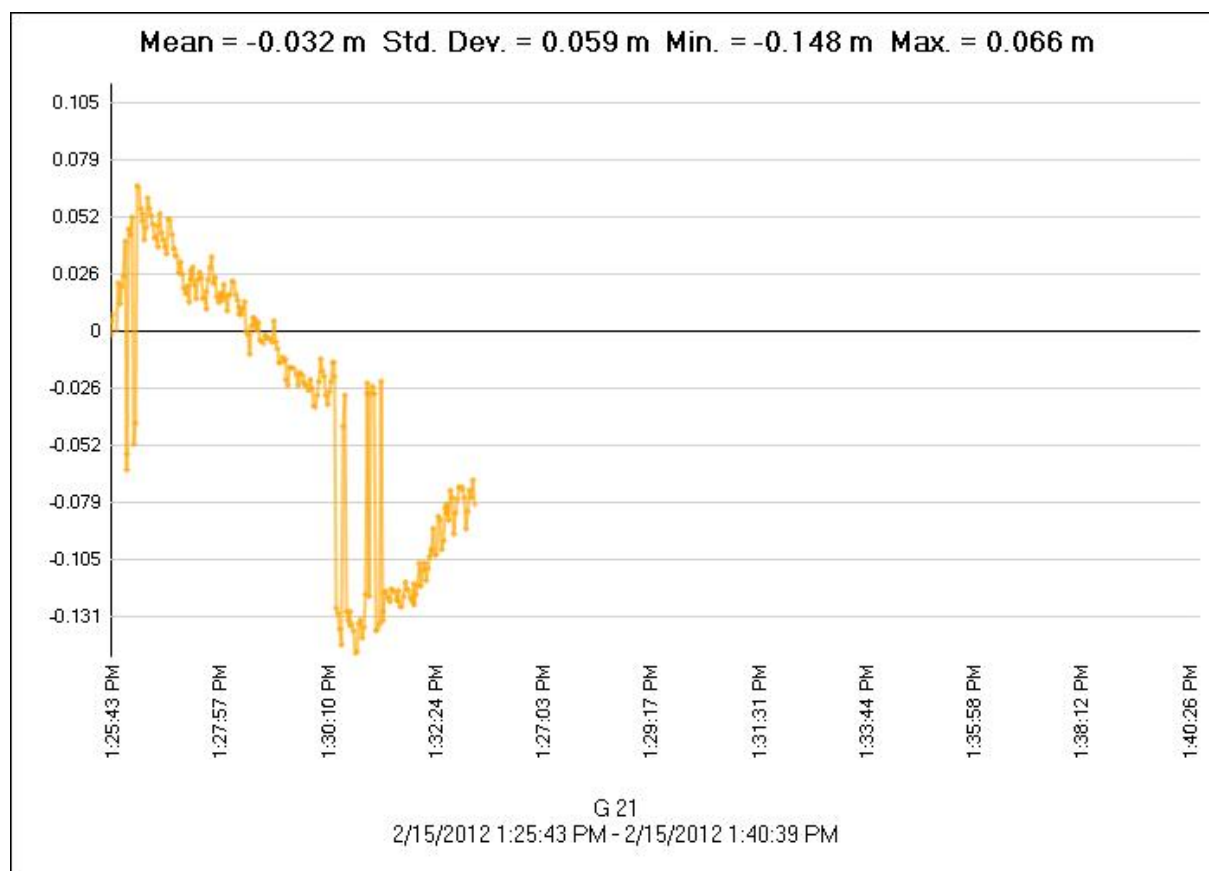
Residuals

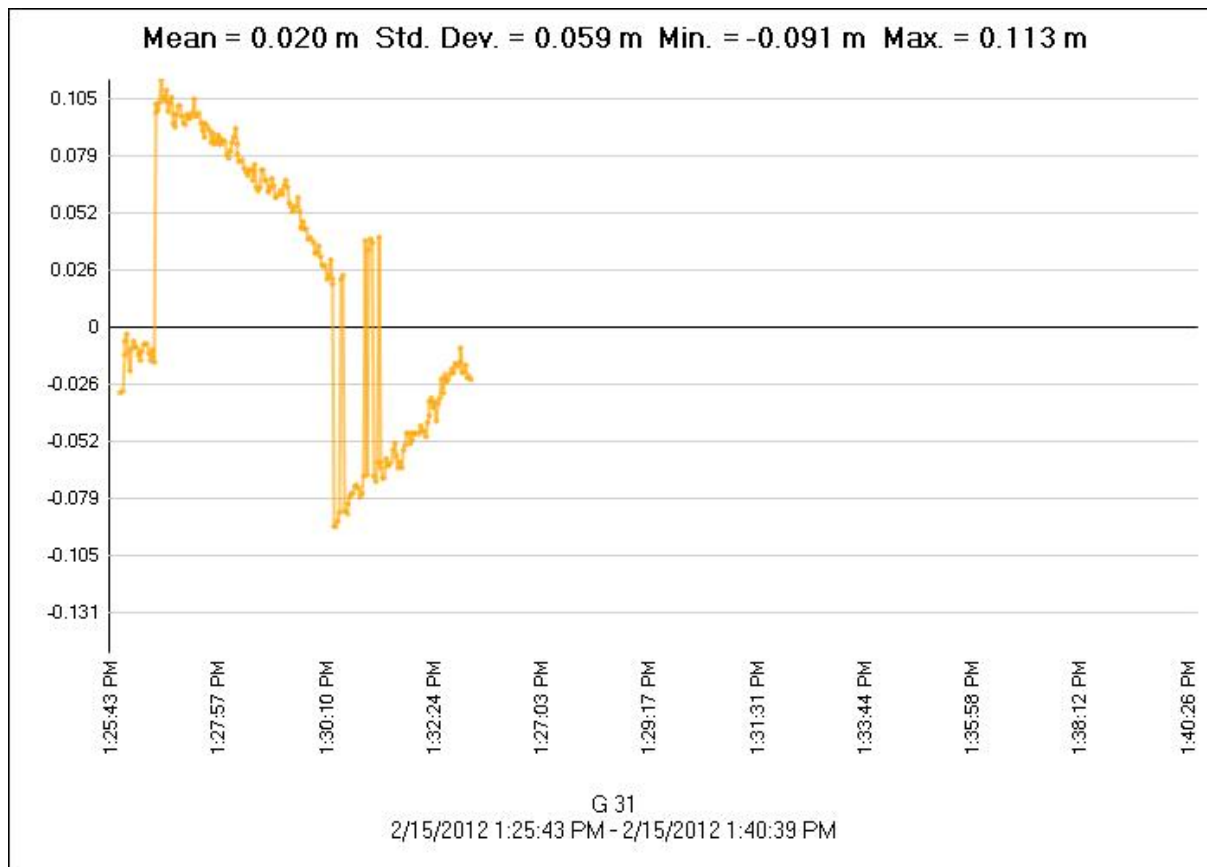













## Processing style

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

Baseline observation: JJ0729 --- FVA08-B1 (B255)

Processed: 4/9/2012 10:44:13 AM

Solution type: Float

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.061 m

Vertical precision: 0.084 m

RMS: 0.005 m

Maximum PDOP: 2.128

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/15/2012 12:46:15 PM (Local: UTC-7hr)

Processing stop time: 2/15/2012 1:04:39 PM (Local: UTC-7hr)

Processing duration: 00:18:24

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	JJ0729				
Grid		Local		Global	
Easting	235140.798 m	Latitude	N38°02'39.99776"	Latitude	N38°02'39.99775"
Northing	4215047.569 m	Longitude	W102°01'05.50297"	Longitude	W102°01'05.50297"
Elevation	1035.400 m	Height	1011.331 m	Height	1011.331 m

To:	FVA08-B1				
Grid		Local		Global	
Easting	299274.431 m	Latitude	N37°56'37.82407"	Latitude	N37°56'37.82407"
Northing	4202045.138 m	Longitude	W101°17'03.65168"	Longitude	W101°17'03.65168"
Elevation	947.612 m	Height	922.384 m	Height	922.384 m

Vector					
9Ughb[	64133.633 m	NS Fwd Azimuth	99°36'07"	L	61767.392 m
BcfA\jb[	-13002.431 m	Ellipsoid Dist.	65420.639 m	M	-19684.588 m
9Yj Uhcb	-87.788 m	<Y][\h	-88.948 m	N	-8856.239 m

## Standard Errors

Vector errors:					
Point ID	0.021 m	Point Description	0°00'00"	Point Type	0.023 m
Point ID	0.017 m	Point Description	0.023 m	Point Type	0.036 m
Point ID	0.043 m	Point Description	0.043 m	Point Type	0.028 m

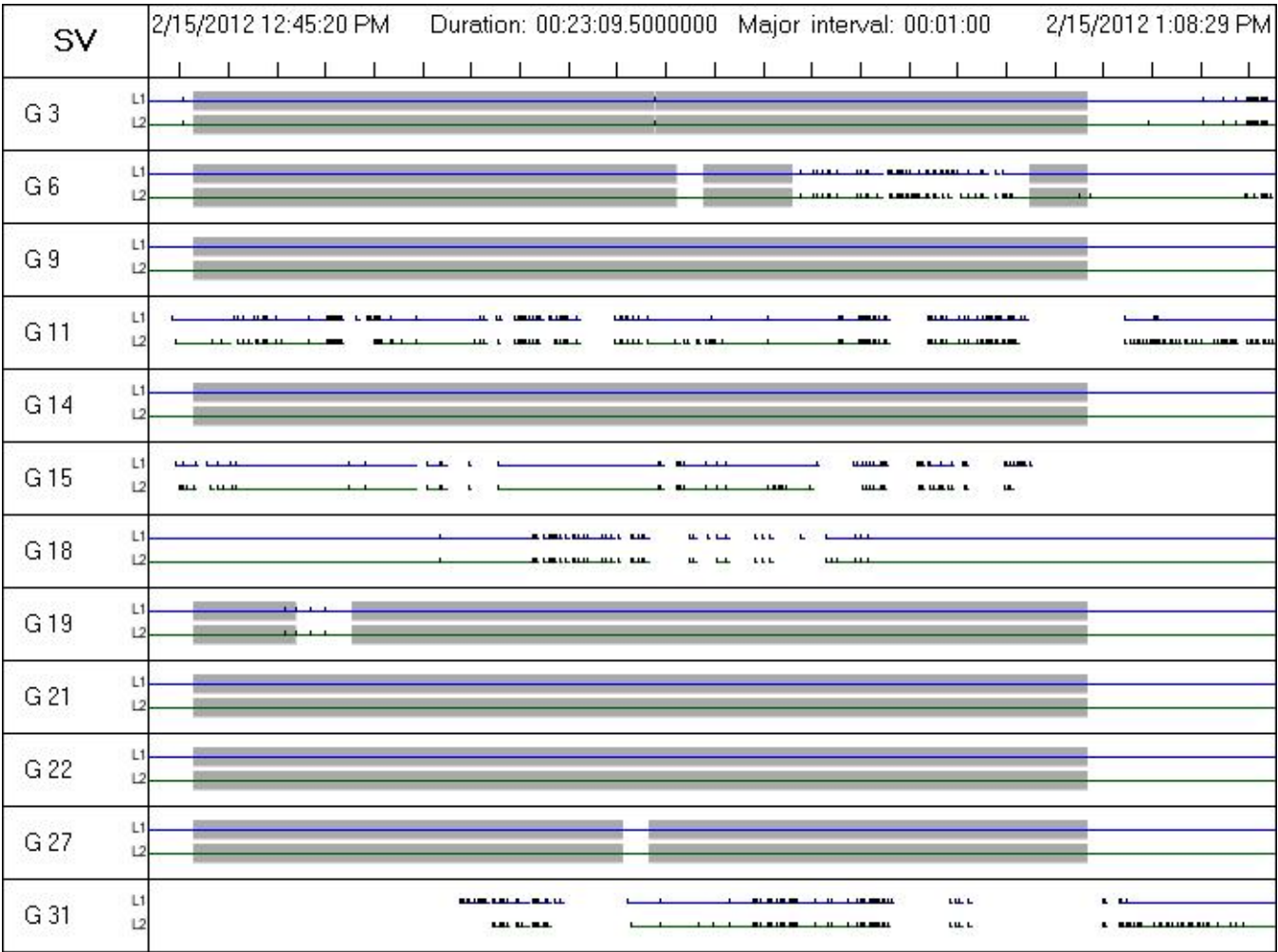
## Aposteriori Covariance Matrix (Meter<sup>2</sup>)

	X	Y	Z
X	0.0005178117		
Y	0.0002161788	0.0012639059	
Z	-0.0004609996	-0.0006393024	0.0007865883

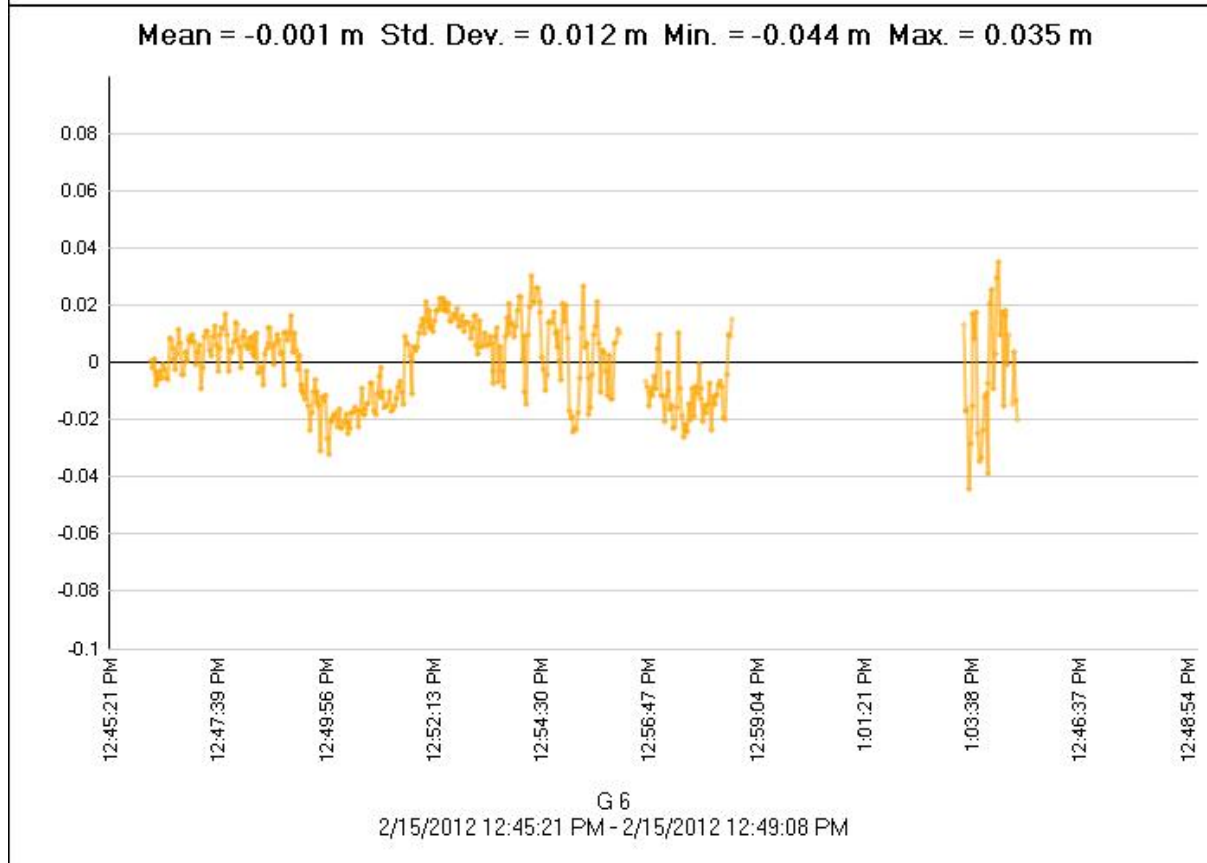
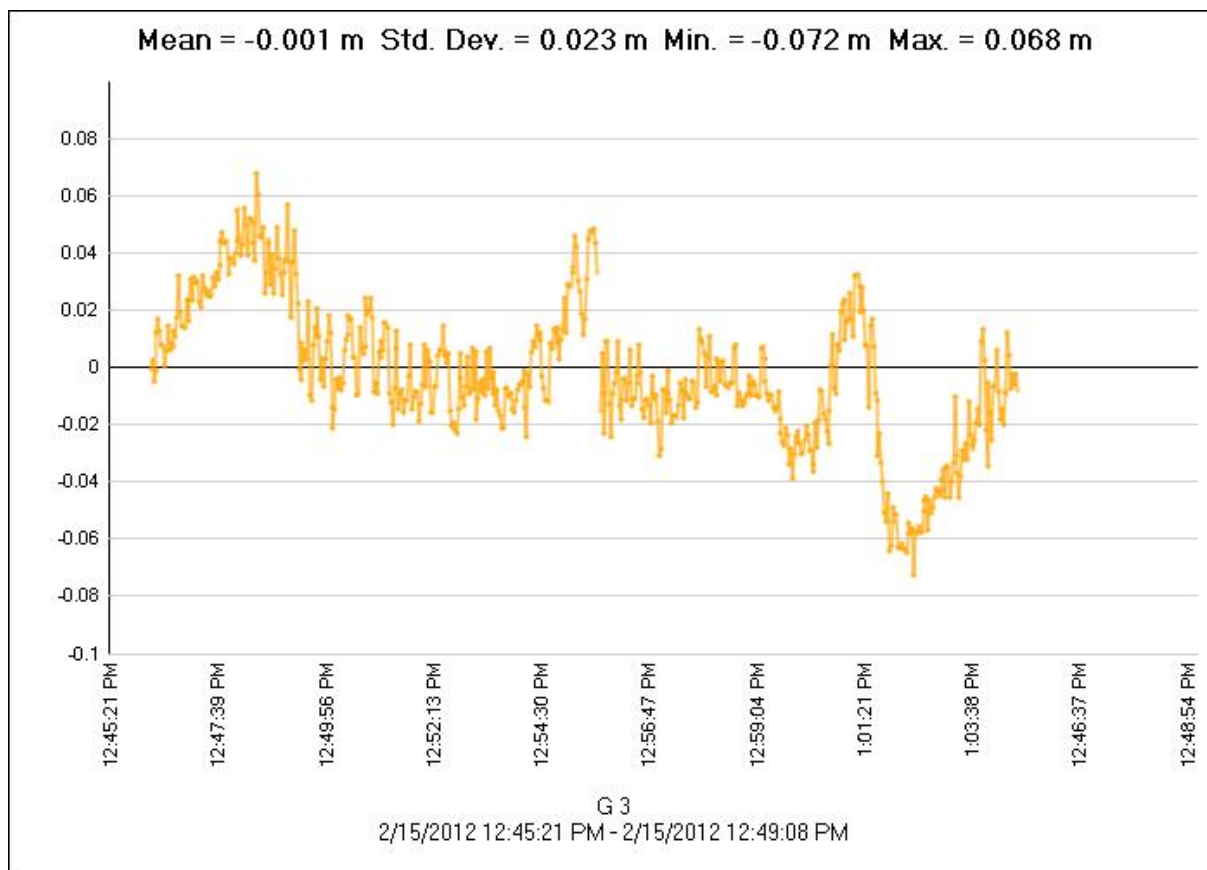
## Occupations

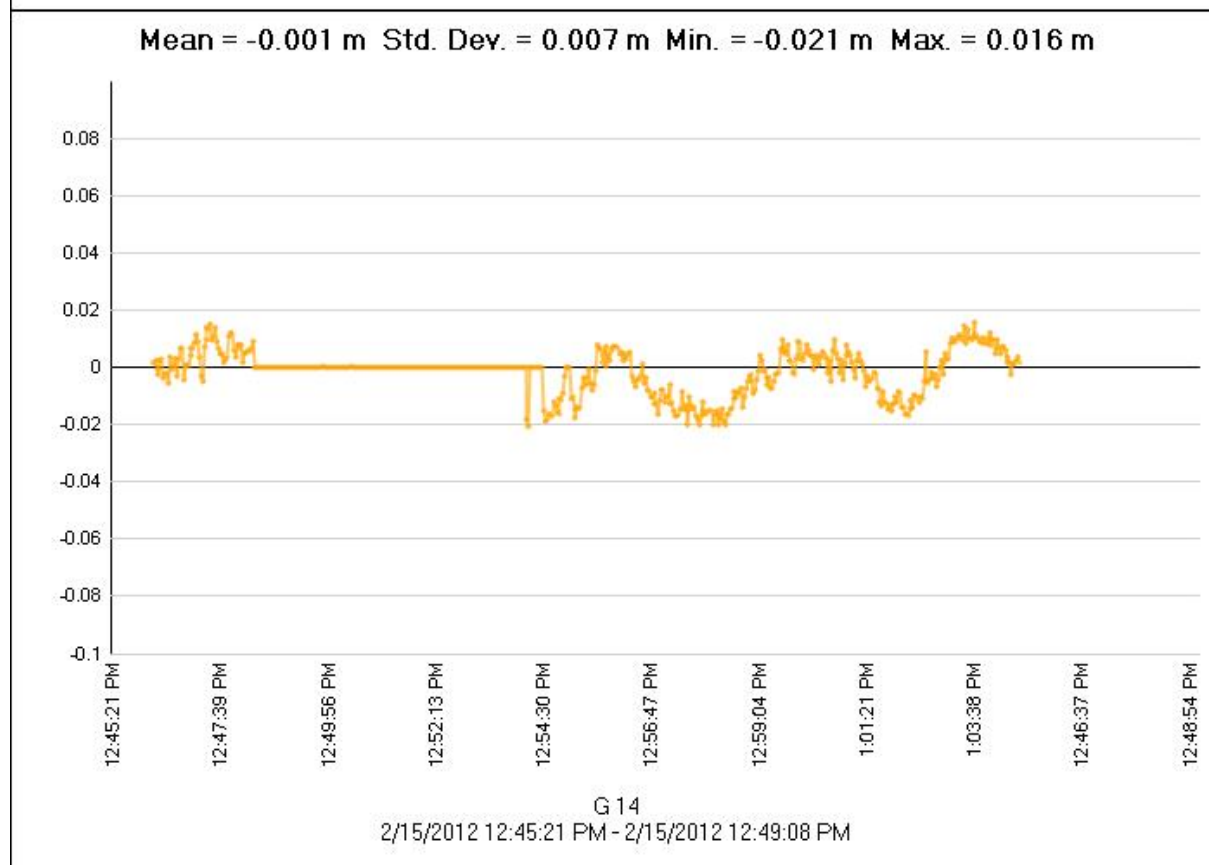
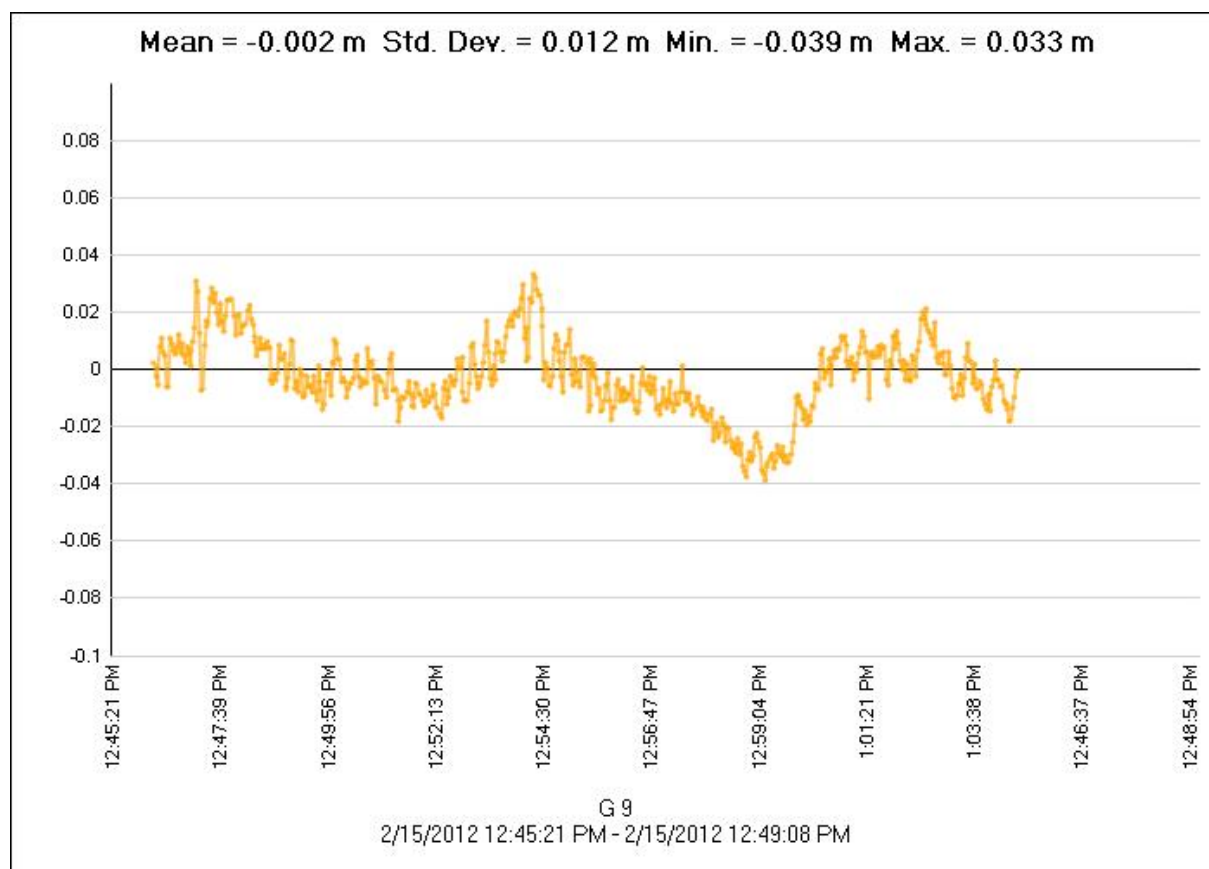
	From	To
Point ID:	JJ0729	FVA08-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\900040460.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050465.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

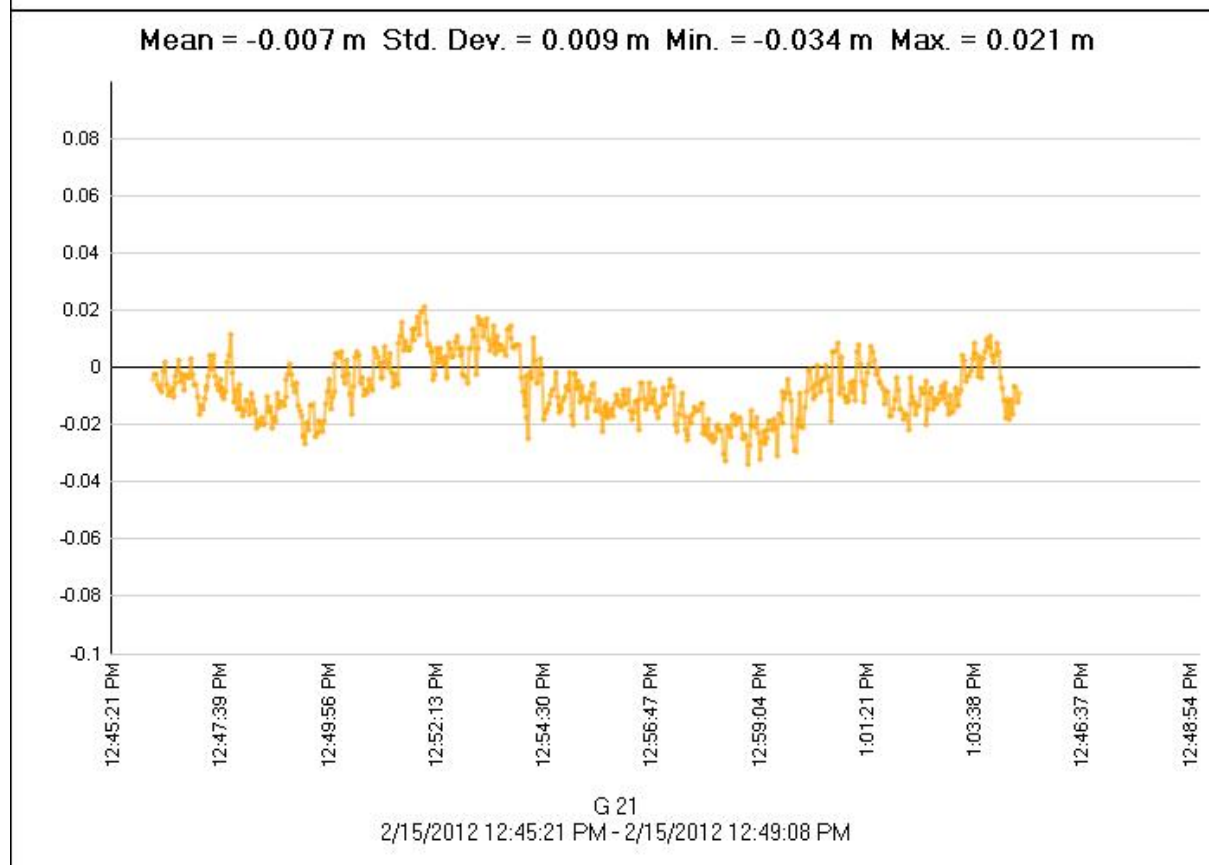
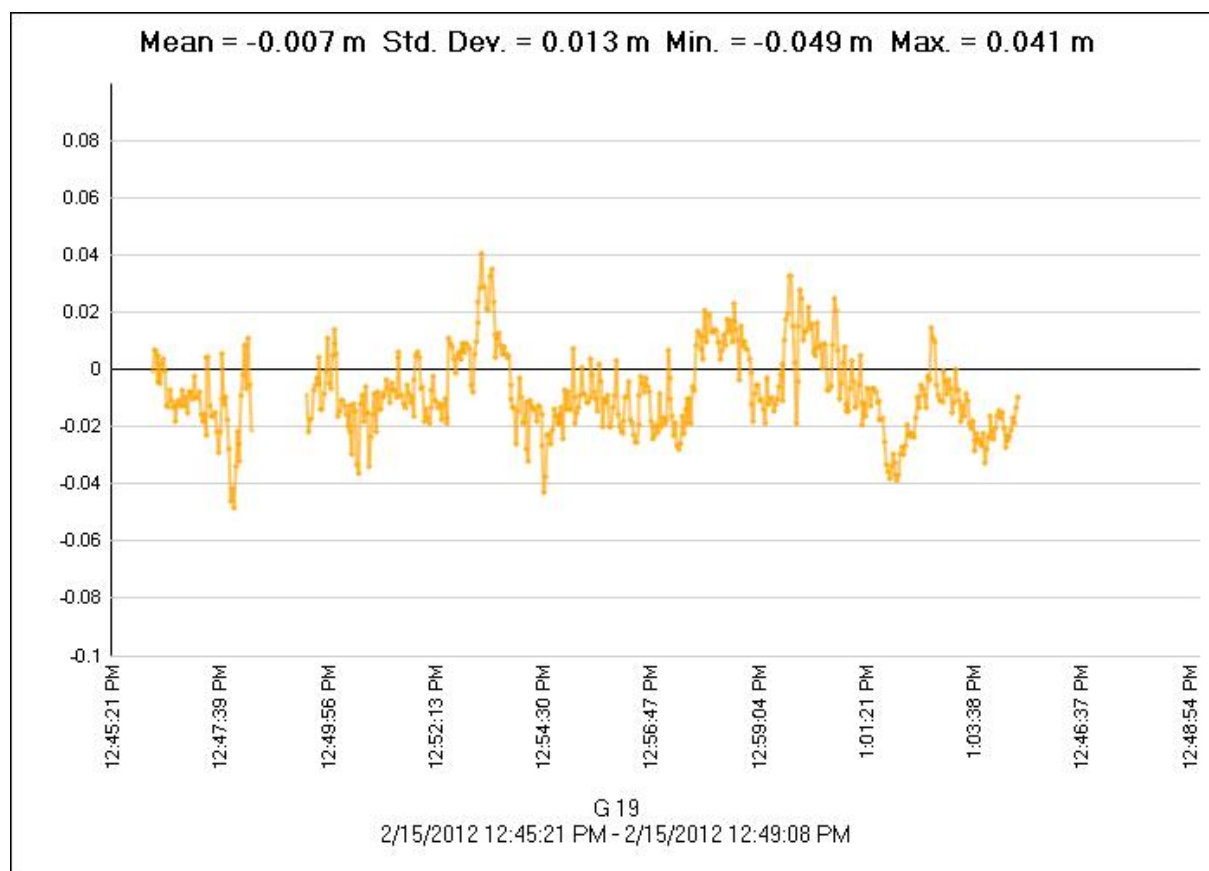
Tracking Summary



## Residuals

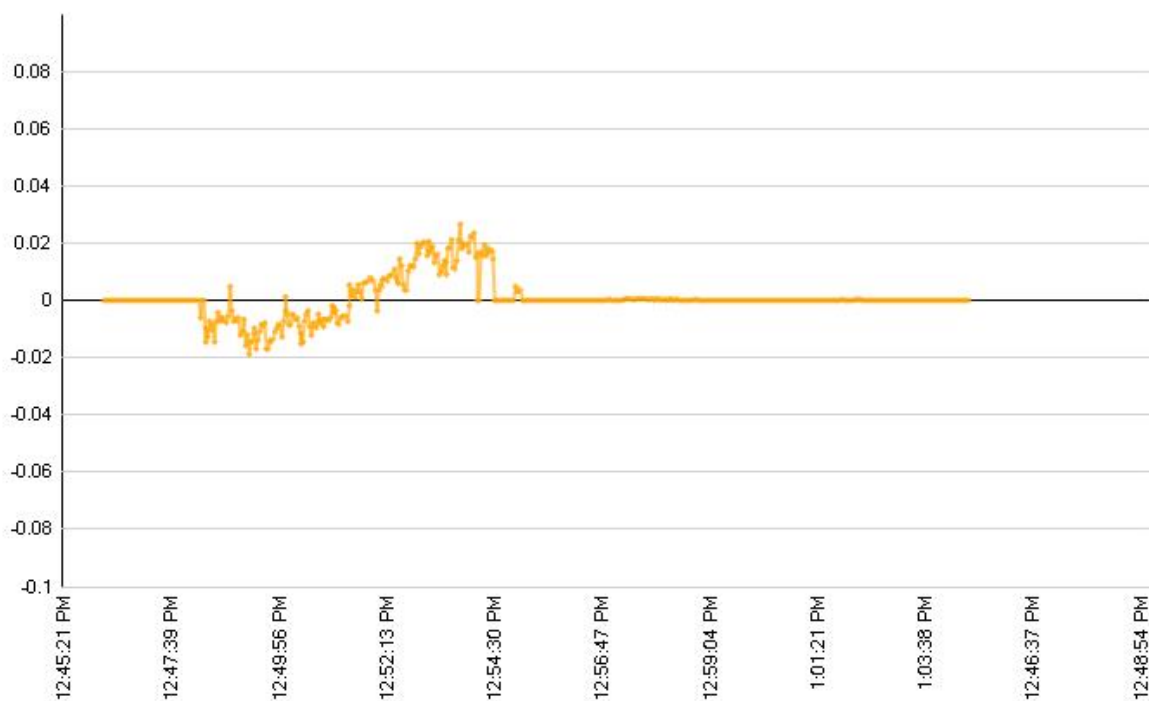








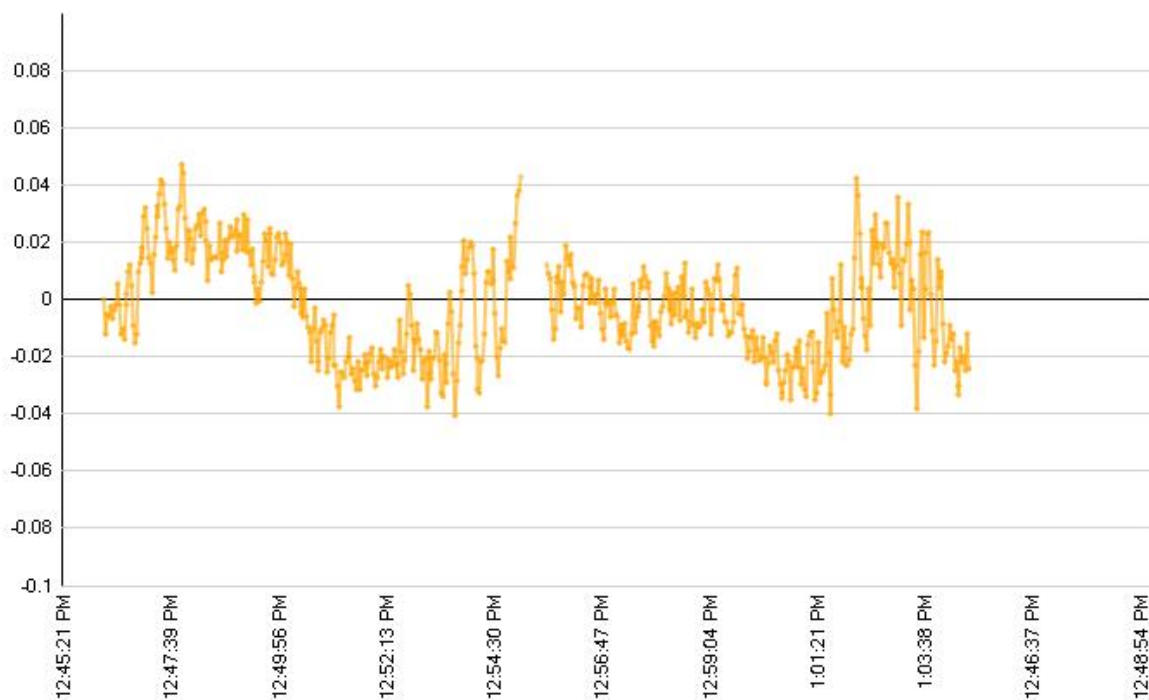
Mean = 0.001 m Std. Dev. = 0.006 m Min. = -0.019 m Max. = 0.026 m



G 22

2/15/2012 12:45:21 PM - 2/15/2012 12:49:08 PM

Mean = -0.002 m Std. Dev. = 0.016 m Min. = -0.040 m Max. = 0.047 m



G 27

2/15/2012 12:45:21 PM - 2/15/2012 12:49:08 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

Baseline observation: JJ0729 --- SVA32-B1 (B256)

Processed: 4/9/2012 10:53:49 AM

Solution type: Float

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.031 m

Vertical precision: 0.078 m

RMS: 0.002 m

Maximum PDOP: 2.161

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/15/2012 12:04:58 PM (Local: UTC-7hr)

Processing stop time: 2/15/2012 12:27:47 PM (Local: UTC-7hr)

Processing duration: 00:22:49

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	JJ0729				
Grid		Local		Global	
Easting	235140.798 m	Latitude	N38°02'39.99776"	Latitude	N38°02'39.99775"
Northing	4215047.569 m	Longitude	W102°01'05.50297"	Longitude	W102°01'05.50297"
Elevation	1035.400 m	Height	1011.331 m	Height	1011.331 m

To:	SVA32-B1				
Grid		Local		Global	
Easting	290341.988 m	Latitude	N37°53'08.13387"	Latitude	N37°53'08.13387"
Northing	4195800.936 m	Longitude	W101°23'02.78528"	Longitude	W101°23'02.78528"
Elevation	947.974 m	Height	922.782 m	Height	922.782 m

Vector					
9Ughb[	55201.190 m	NS Fwd Azimuth	107°21'51"	L	52384.039 m
Bcfh\jb[	-19246.634 m	Ellipsoid Dist.	58442.952 m	M	-21856.461 m
9Yj Uhcb	-87.426 m	<Y][ \h	-88.549 m	N	-13957.260 m

## Standard Errors

Vector errors:					
Point ID	0.010 m	Point Description	0°00'00"	Point Type	0.016 m
Point ID	0.011 m	Point Description	0.008 m	Point Type	0.034 m
Point ID	0.040 m	Point Description	0.040 m	Point Type	0.018 m

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

	X	Y	Z
X	0.0002548364		
Y	0.0004709348	0.0011855940	
Z	-0.0002444693	-0.0005867156	0.0003413805

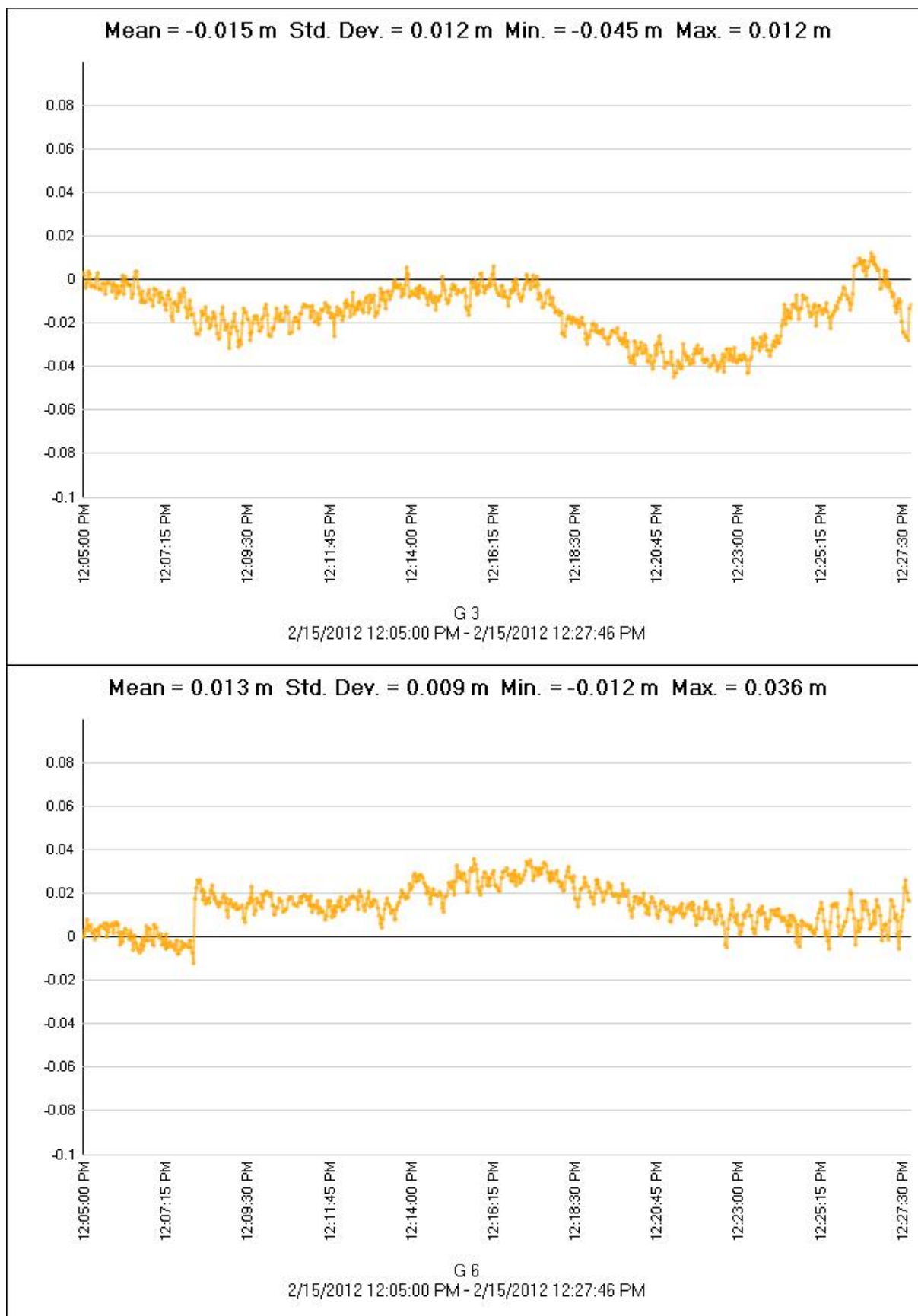
## Occupations

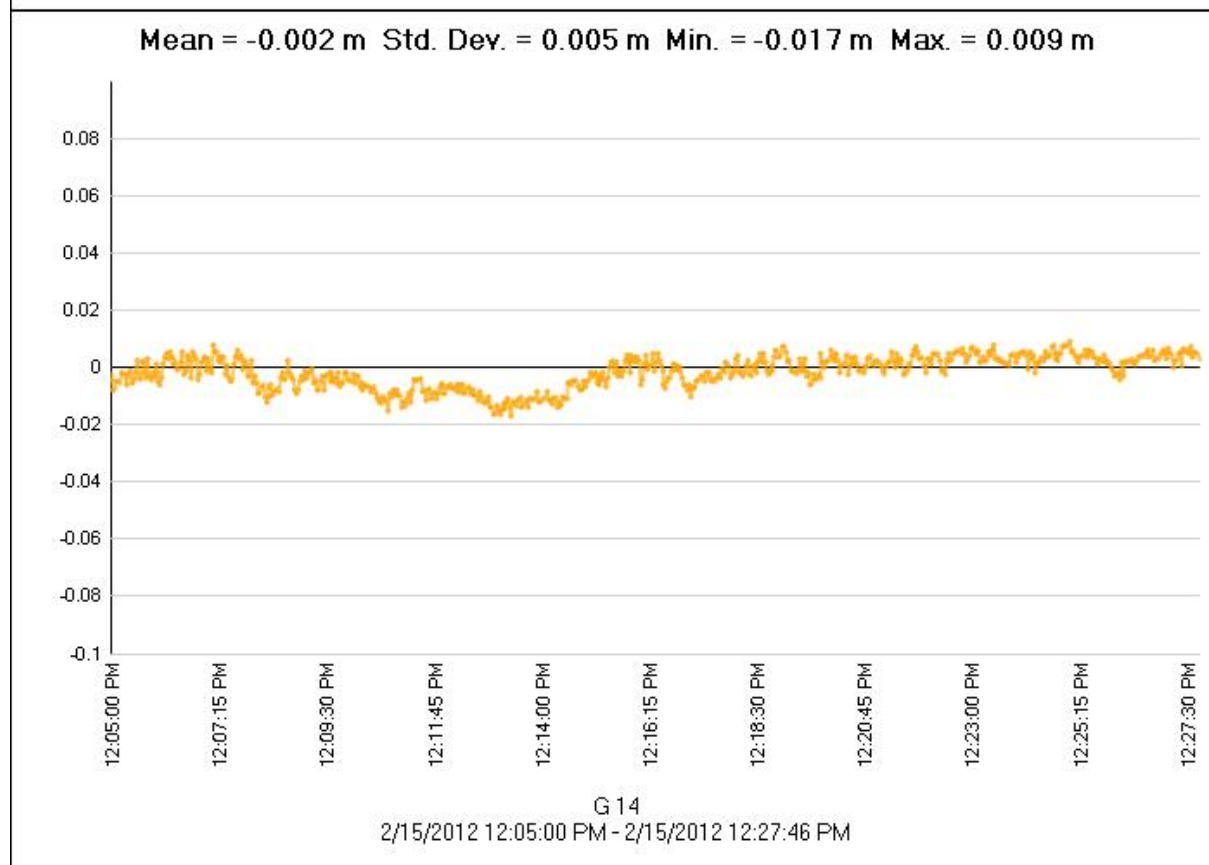
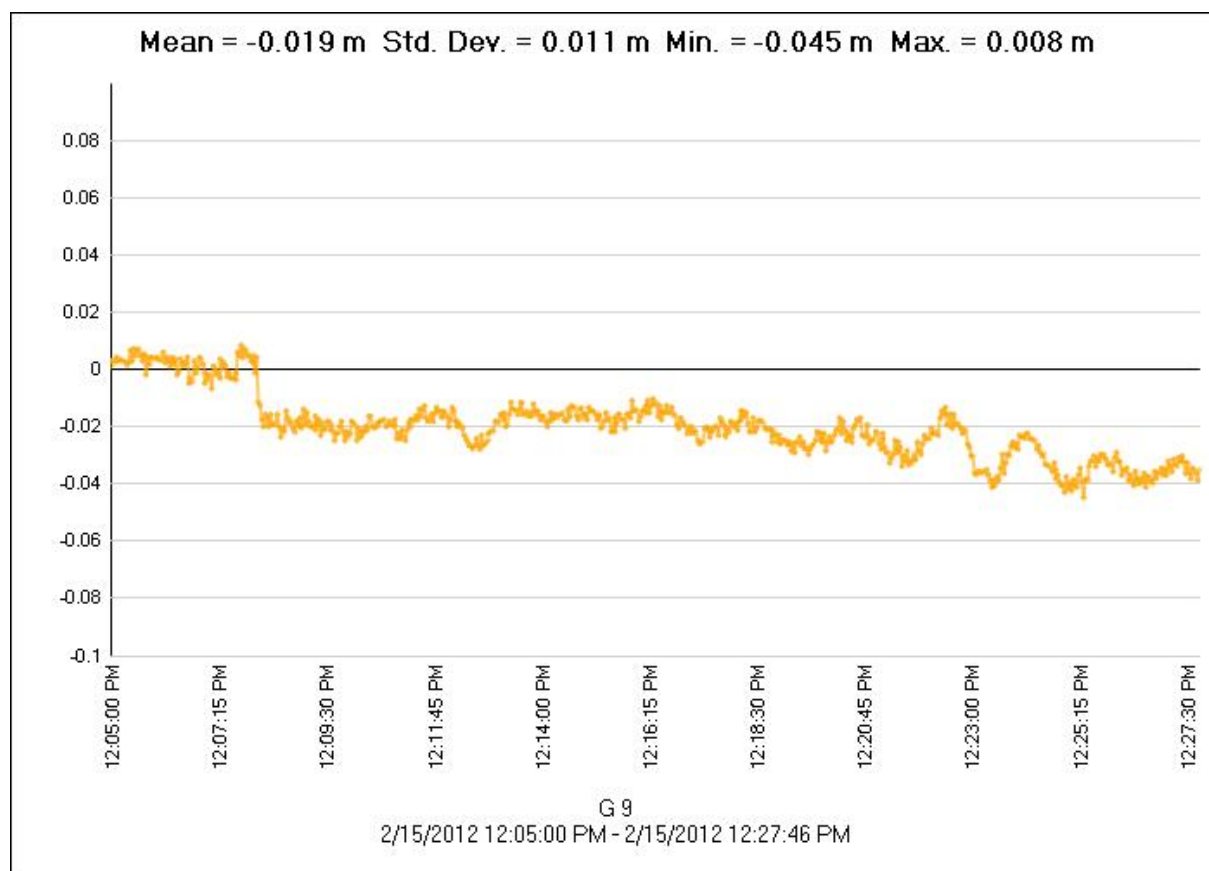
	From	To
Point ID:	JJ0729	SVA32-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\900040460.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050464.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

Tracking Summary

SV	2/15/2012 12:04:58 PM		Duration: 00:22:49.5000000		Major interval: 00:01:00		2/15/2012 12:27:47 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





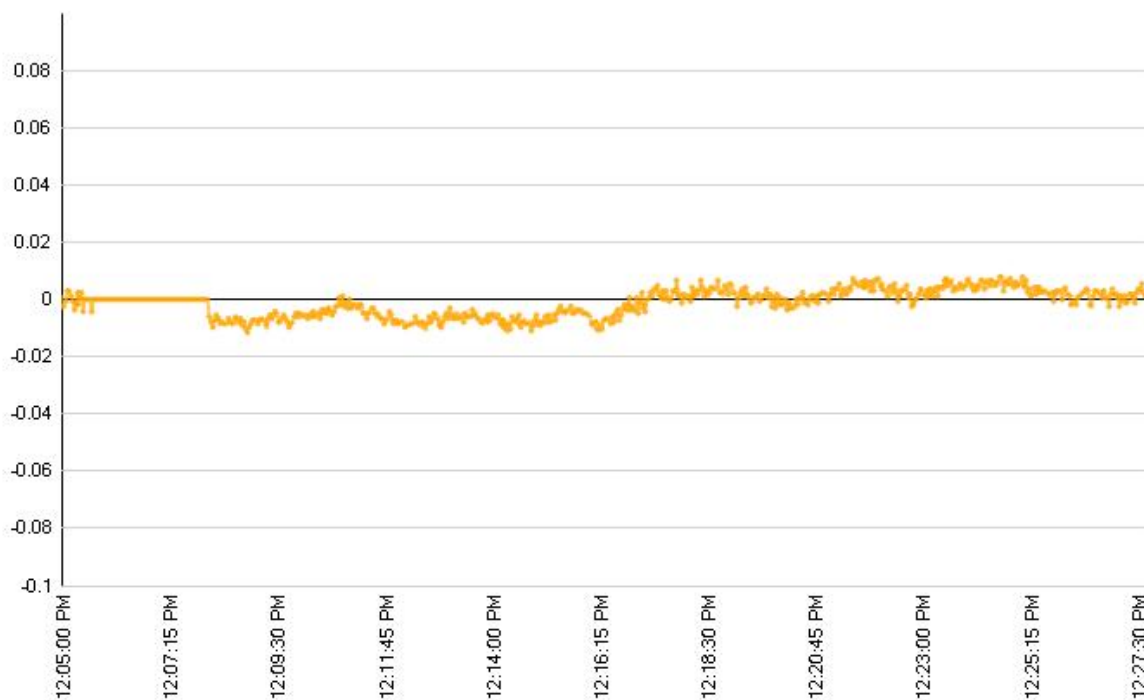
Mean = 0.008 m Std. Dev. = 0.019 m Min. = -0.029 m Max. = 0.056 m



G 15

2/15/2012 12:05:00 PM - 2/15/2012 12:27:46 PM

Mean = -0.001 m Std. Dev. = 0.004 m Min. = -0.011 m Max. = 0.008 m



G 18

2/15/2012 12:05:00 PM - 2/15/2012 12:27:46 PM



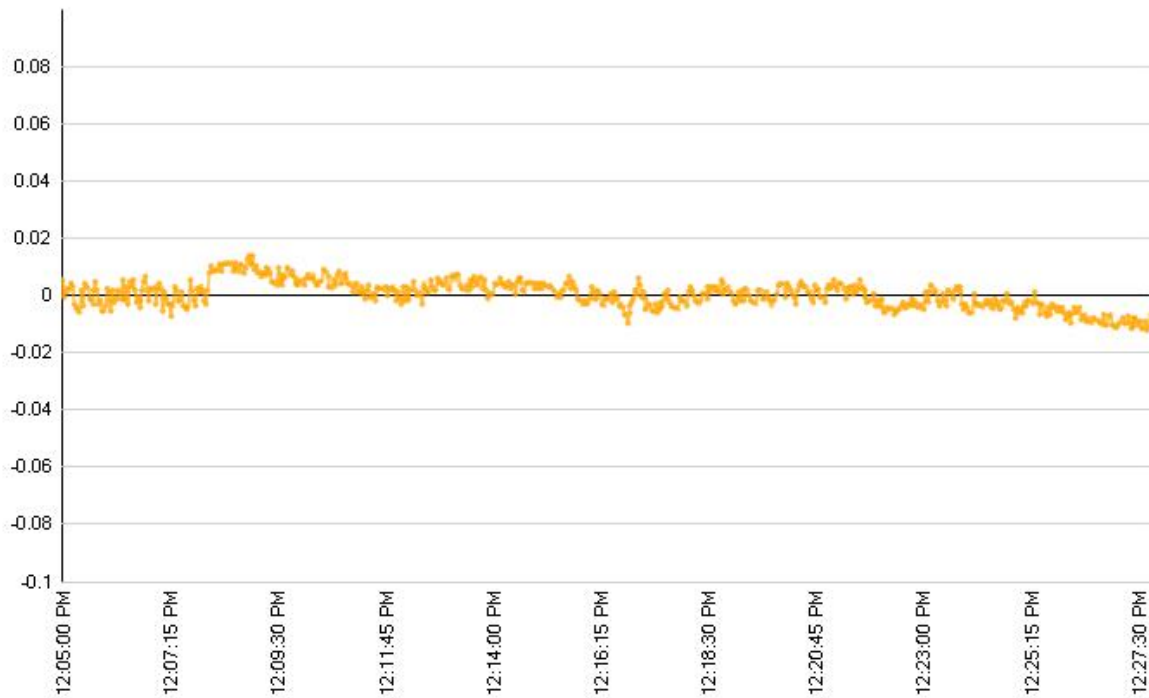
Mean = -0.025 m Std. Dev. = 0.020 m Min. = -0.064 m Max. = 0.028 m



G 19

2/15/2012 12:05:00 PM - 2/15/2012 12:27:46 PM

Mean = 0.000 m Std. Dev. = 0.004 m Min. = -0.012 m Max. = 0.014 m



G 21

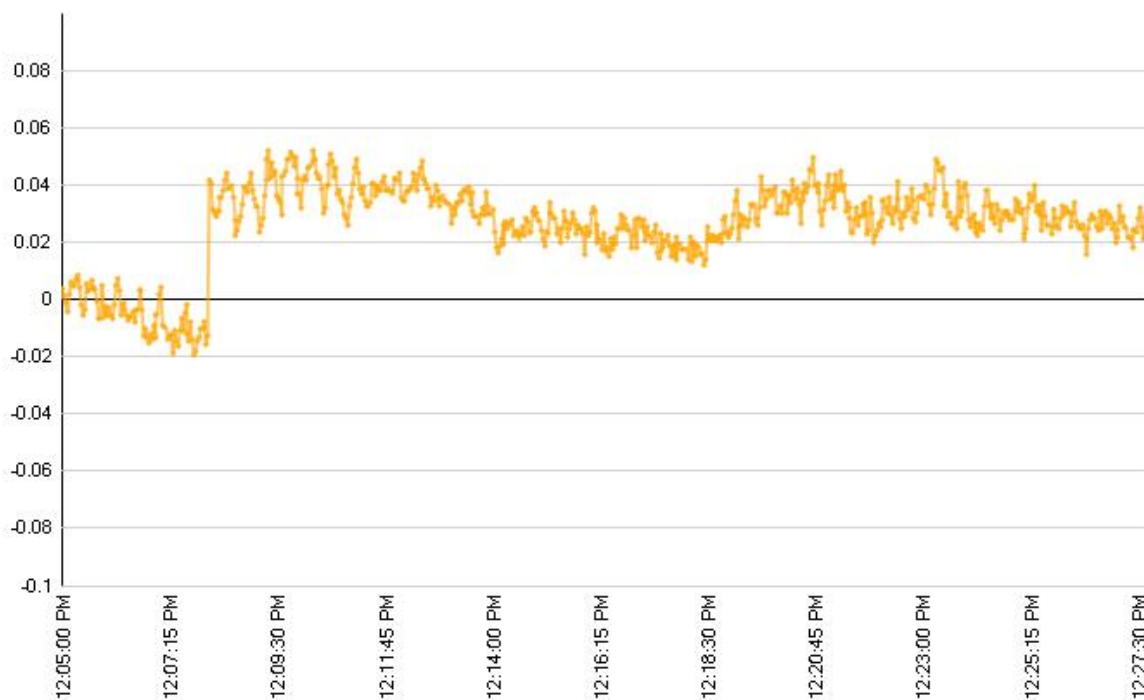
2/15/2012 12:05:00 PM - 2/15/2012 12:27:46 PM

Mean = 0.008 m Std. Dev. = 0.005 m Min. = -0.007 m Max. = 0.021 m



G 22  
2/15/2012 12:05:00 PM - 2/15/2012 12:27:46 PM

Mean = 0.025 m Std. Dev. = 0.014 m Min. = -0.019 m Max. = 0.052 m





G 27  
2/15/2012 12:05:00 PM - 2/15/2012 12:27:46 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

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JJ0729 - FVA32-B1 (11:36:12 AM-11:58:51 AM) (S257)

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Baseline observation: JJ0729 --- FVA32-B1 (B257)

Processed: 4/9/2012 10:38:44 AM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.016 m

Vertical precision: 0.029 m

RMS: 0.008 m

Maximum PDOP: 2.455

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/15/2012 11:36:12 AM (Local: UTC-7hr)

Processing stop time: 2/15/2012 11:58:51 AM (Local: UTC-7hr)

Processing duration: 00:22:38

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	JJ0729				
Grid		Local		Global	
Easting	235140.798 m	Latitude	N38°02'39.99776"	Latitude	N38°02'39.99775"
Northing	4215047.569 m	Longitude	W102°01'05.50297"	Longitude	W102°01'05.50297"
Elevation	1035.400 m	Height	1011.331 m	Height	1011.331 m

To:	FVA32-B1				
Grid		Local		Global	
Easting	289439.420 m	Latitude	N37°53'08.01545"	Latitude	N37°53'08.01545"
Northing	4195820.409 m	Longitude	W101°23'39.72462"	Longitude	W101°23'39.72462"
Elevation	947.188 m	Height	922.012 m	Height	922.012 m

Vector					
9Ughb[	54298.622 m	NS Fwd Azimuth	107°38'29"	L	51498.722 m
Bcfh\jb[	-19227.161 m	Ellipsoid Dist.	57585.073 m	M	-21679.790 m
9Yj Uhcb	-88.212 m	<Y][\h	-89.319 m	N	-13960.615 m

## Standard Errors

Vector errors:					
Point ID	0.006 m	Point Description	0°00'00"	Point Type	0.006 m
Point ID	0.007 m	Point Description	0.006 m	Point Type	0.012 m
Point ID	0.015 m	Point Description	0.015 m	Point Type	0.011 m

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

	X	Y	Z
X	0.0000326424		
Y	0.0000113303	0.0001432851	
Z	-0.0000109736	-0.0000861215	0.0001188808

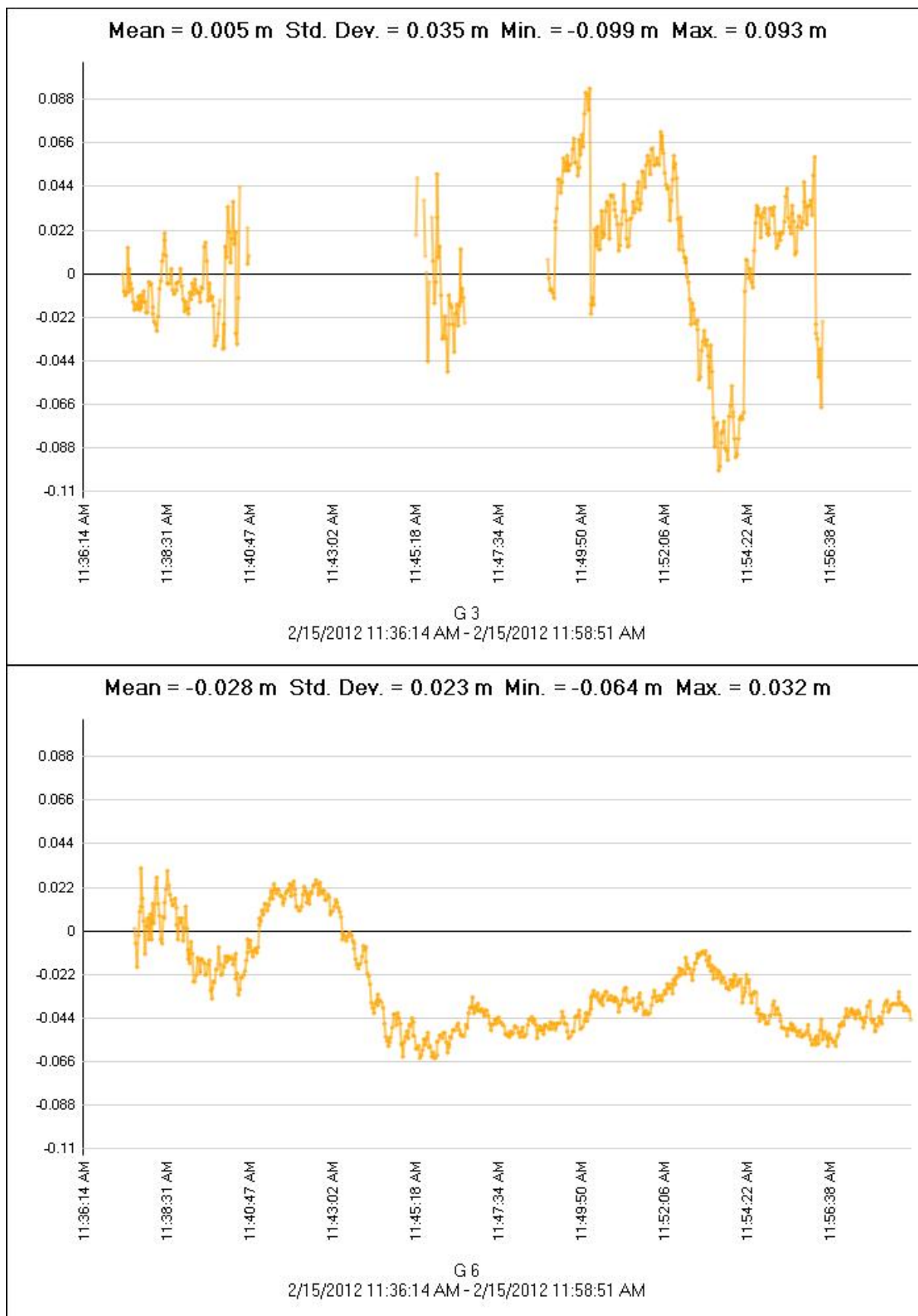
## Occupations

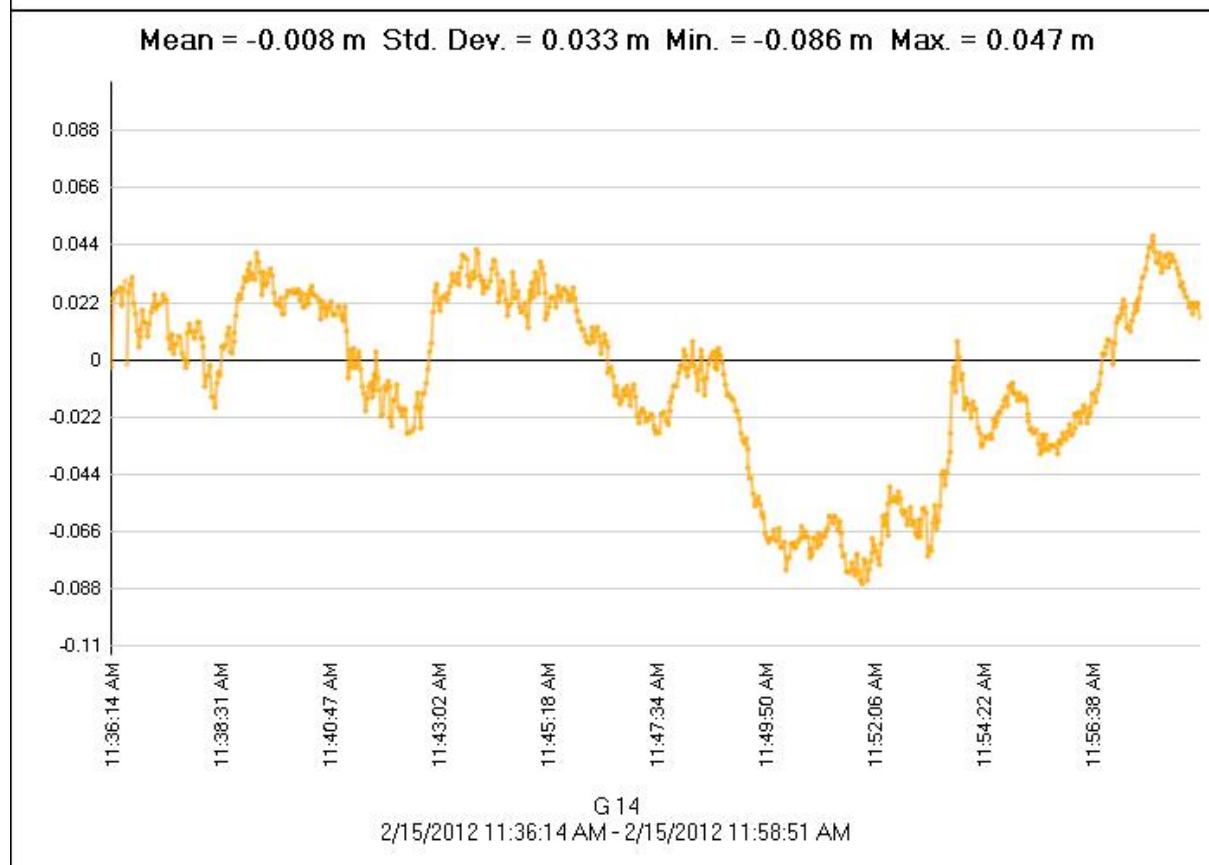
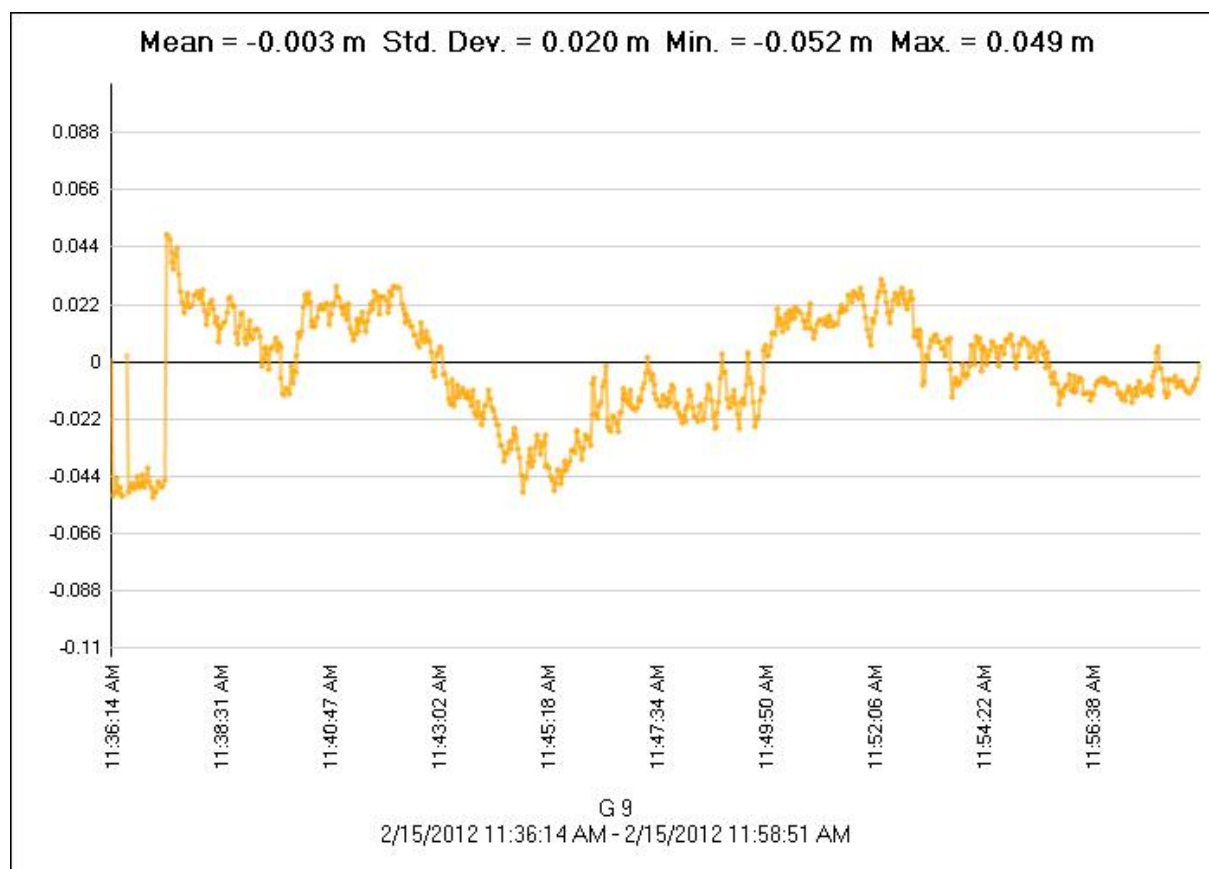
	From	To
Point ID:	JJ0729	FVA32-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\900040460.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050463.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

Tracking Summary

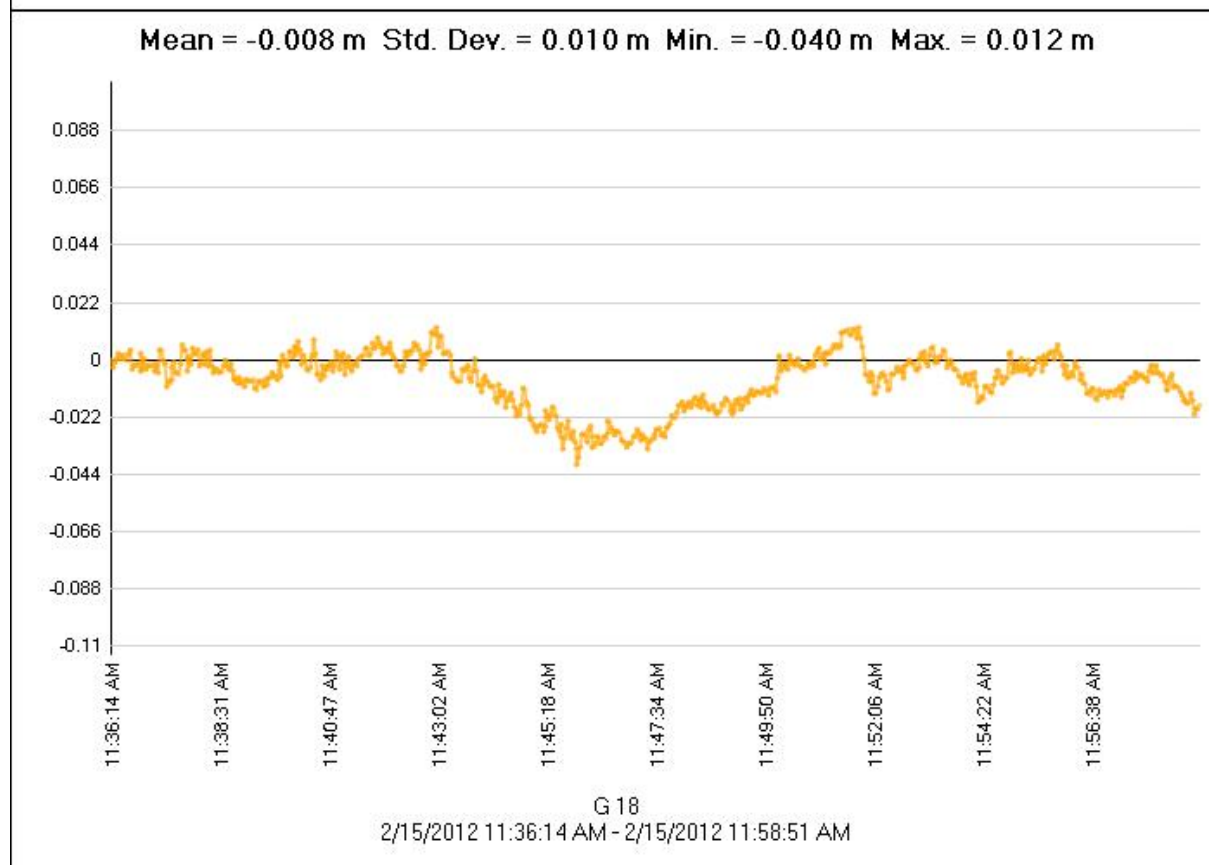
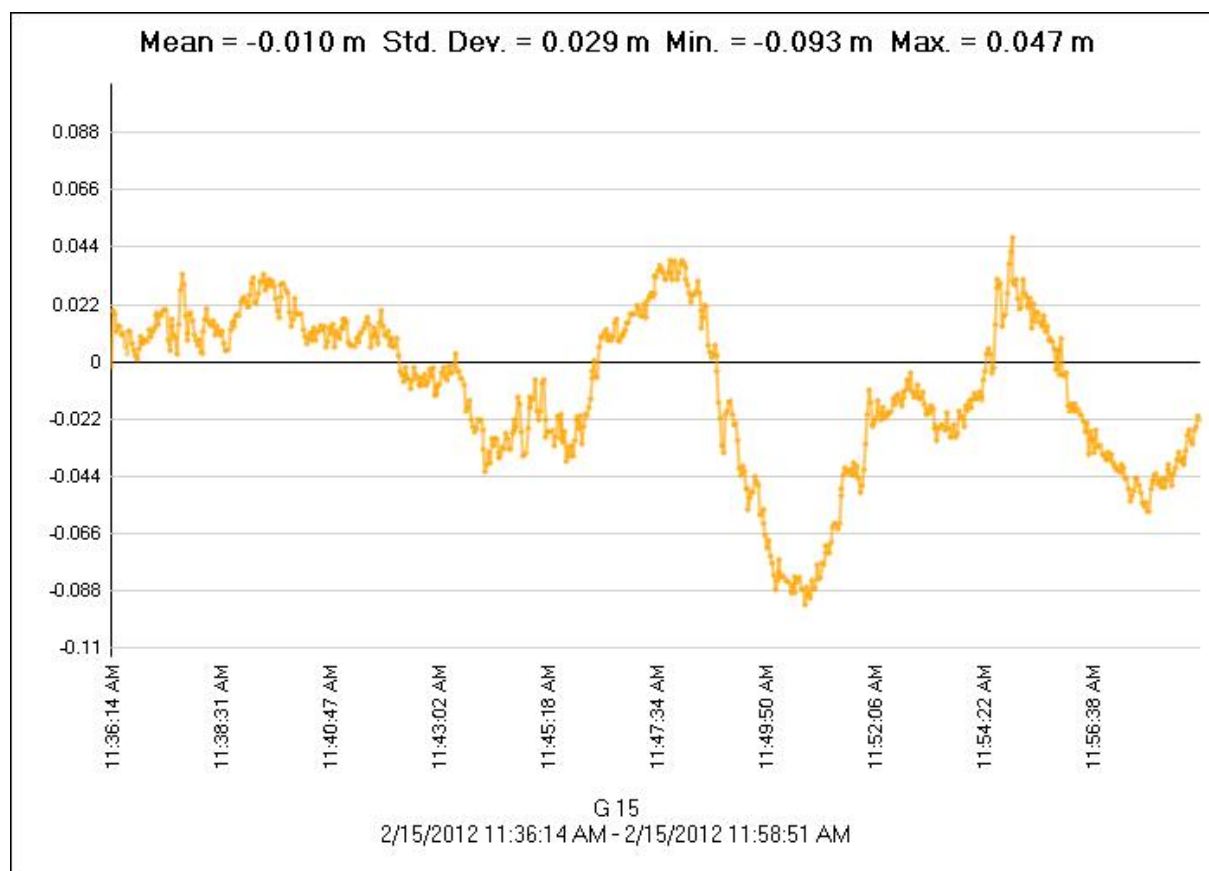


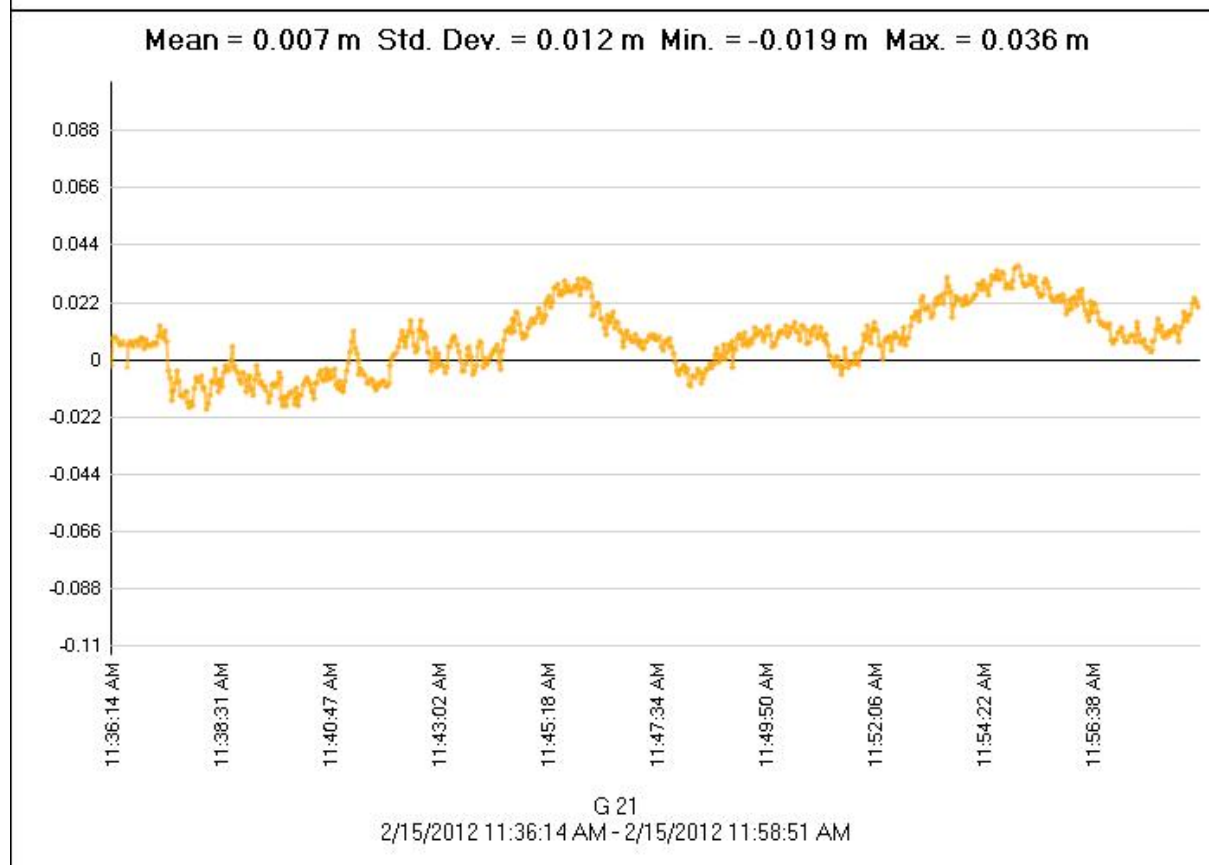
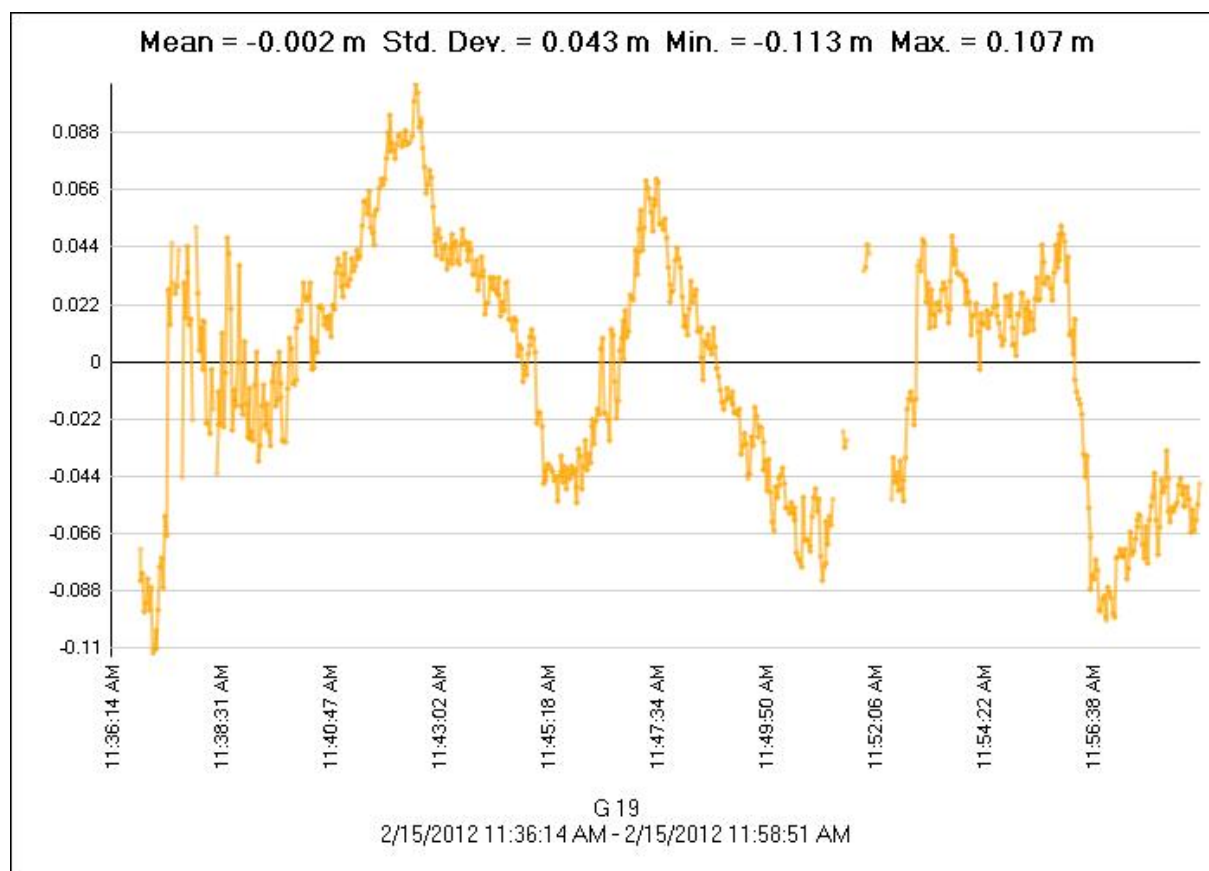
## Residuals











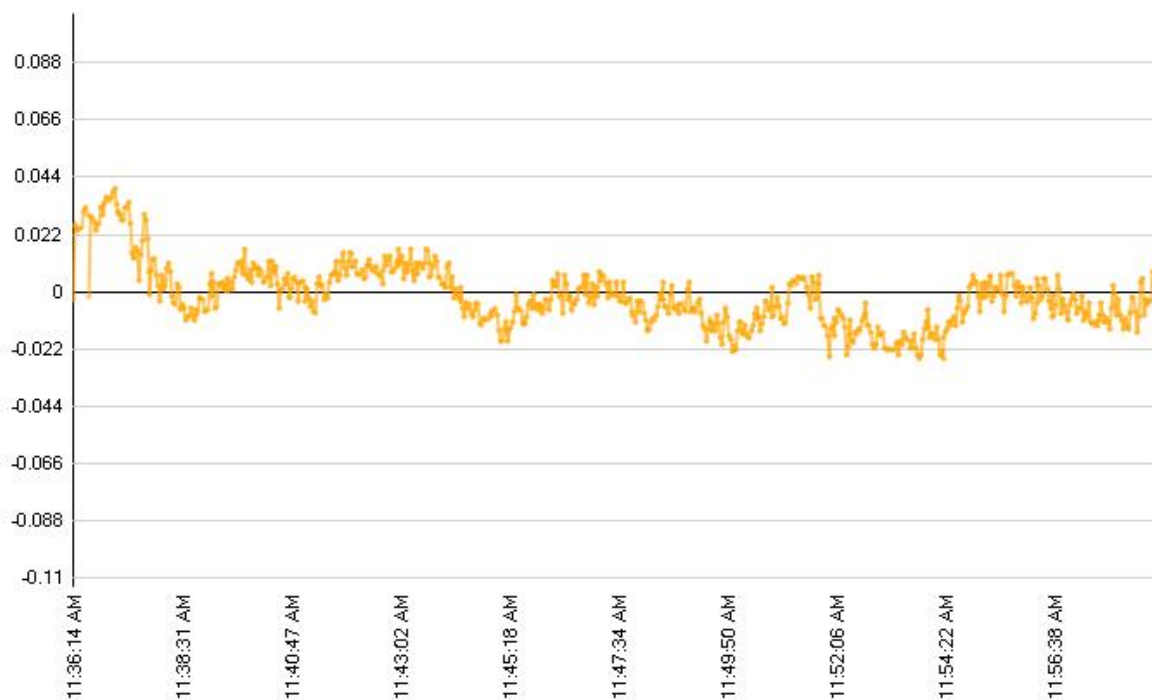
Mean = 0.024 m Std. Dev. = 0.032 m Min. = -0.039 m Max. = 0.077 m



G 22

2/15/2012 11:36:14 AM - 2/15/2012 11:58:51 AM

Mean = -0.001 m Std. Dev. = 0.011 m Min. = -0.026 m Max. = 0.040 m





G 27

2/15/2012 11:36:14 AM - 2/15/2012 11:58:51 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

## Baseline observation:



JJ0729 --- SVA08-B1 (B258)

Processed: 4/10/2012 9:17:24 AM  
 Solution type: Fixed  
 Frequency used: Dual Frequency (L1, L2)  
 Horizontal precision: 0.132 m  
 Vertical precision: 0.105 m  
 RMS: 0.002 m  
 Maximum PDOP: 1.943  
 Ephemeris used: Broadcast  
 Antenna model: US National Geodetic Survey Calibration  
 Processing start time: 2/15/2012 10:58:54 AM (Local: UTC-7hr)  
 Processing stop time: 2/15/2012 11:05:08 AM (Local: UTC-7hr)  
 Processing duration: 00:06:14  
 Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	JJ0729				
Grid		Local		Global	
Easting	235140.798 m	Latitude	N38°02'39.99776"	Latitude	N38°02'39.99775"
Northing	4215047.569 m	Longitude	W102°01'05.50297"	Longitude	W102°01'05.50297"
Elevation	1035.400 m	Height	1011.331 m	Height	1011.331 m

To:	SVA08-B1				
Grid		Local		Global	
Easting	300748.980 m	Latitude	N37°55'56.07815"	Latitude	N37°55'56.07814"
Northing	4200721.496 m	Longitude	W101°16'01.96459"	Longitude	W101°16'01.96459"
Elevation	926.694 m	Height	901.420 m	Height	901.420 m

Vector					
9Ughb[	65608.183 m	NS Fwd Azimuth	100°27'32"	L	63093.309 m
Bcfh\jb[	-14326.074 m	Ellipsoid Dist.	67136.105 m	M	-20739.109 m
9Yj Uhcb	-108.706 m	<Y][\h	-109.911 m	N	-9884.388 m

## Standard Errors

Vector errors:					
Point ID	0.038 m	Point Description	0°00'00"	Point Type	0.050 m
Point ID	0.042 m	Point Description	0.030 m	Point Type	0.054 m
Point ID	0.053 m	Point Description	0.053 m	Point Type	0.026 m

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

	X	Y	Z
X	0.0024745655		
Y	0.0026184958	0.0029294149	
Z	-0.0001897017	-0.0000946455	0.0006610859

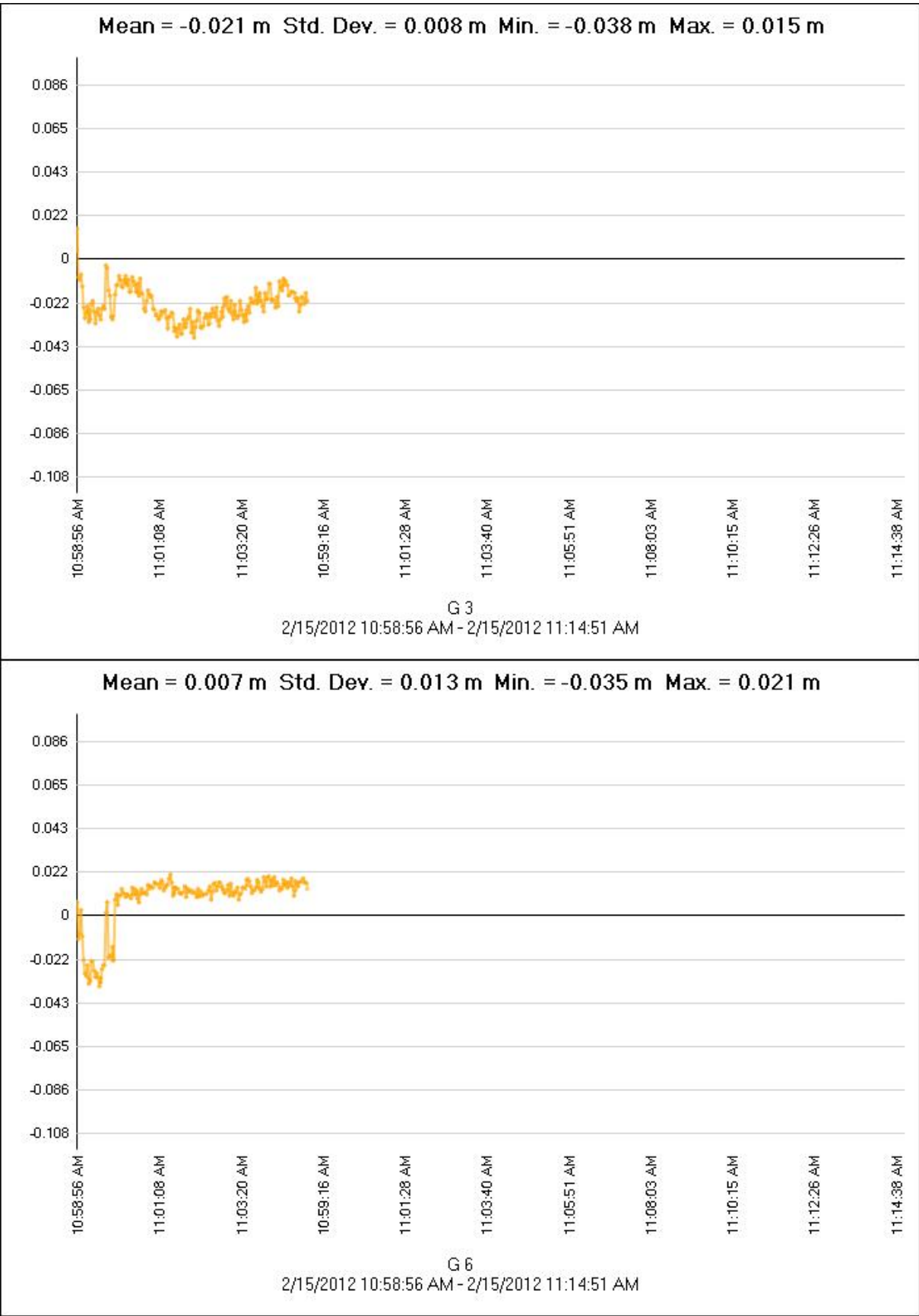
## Occupations

	From	To
Point ID:	JJ0729	SVA08-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\900040460.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050462.12o
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

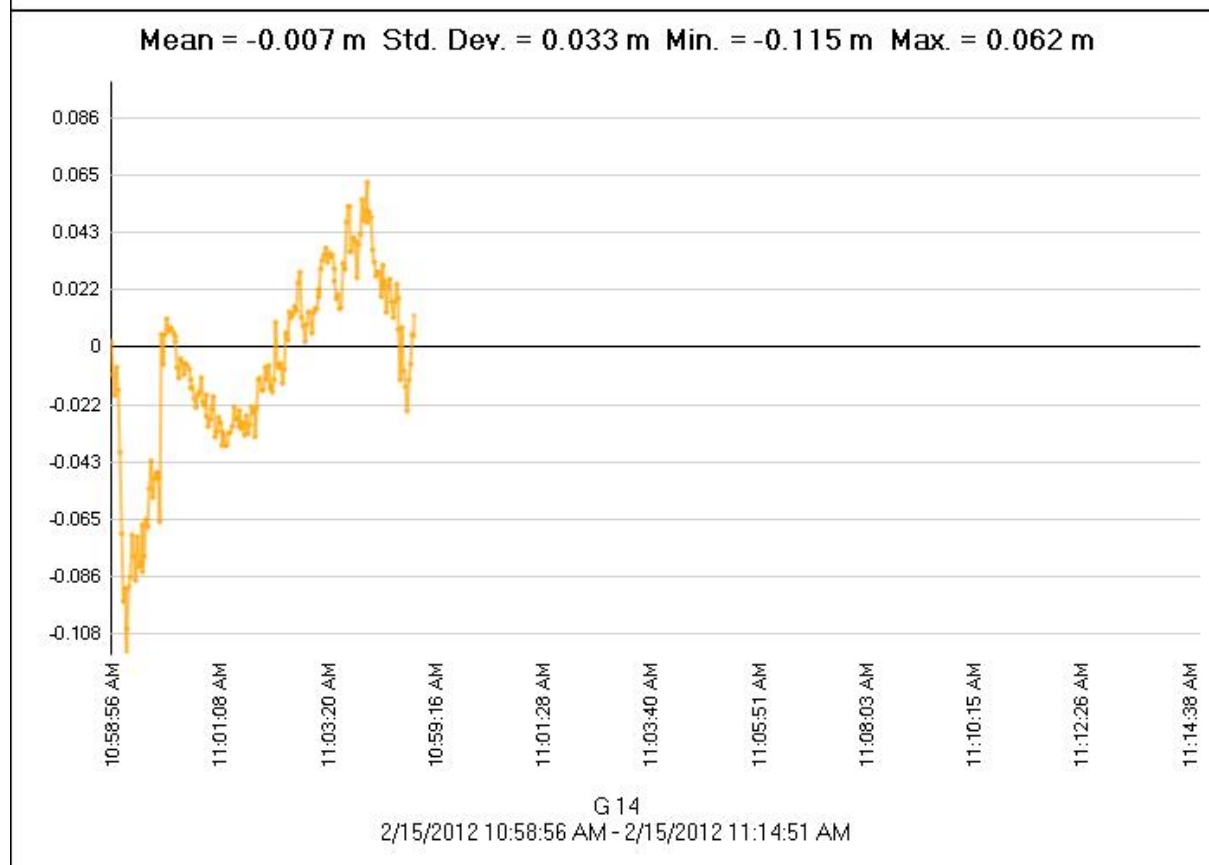
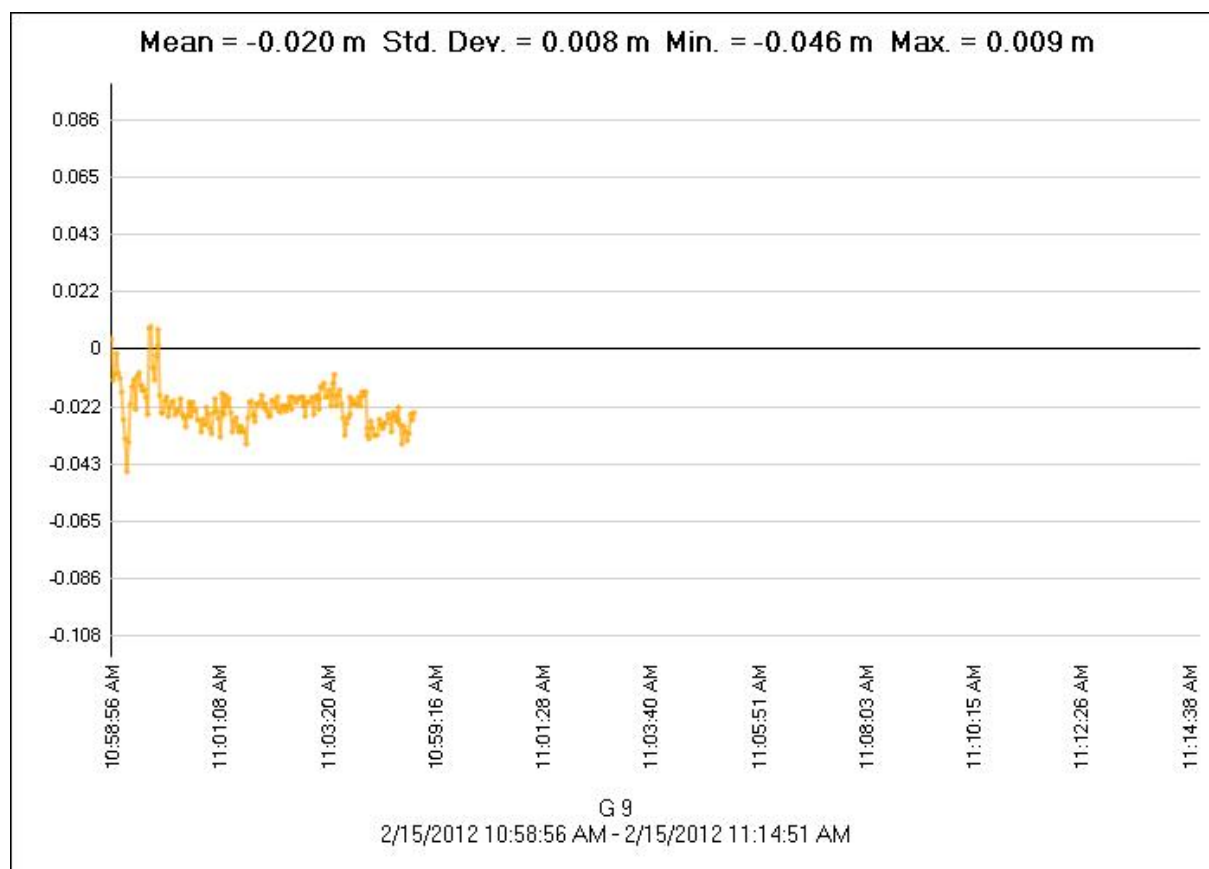
## Tracking Summary

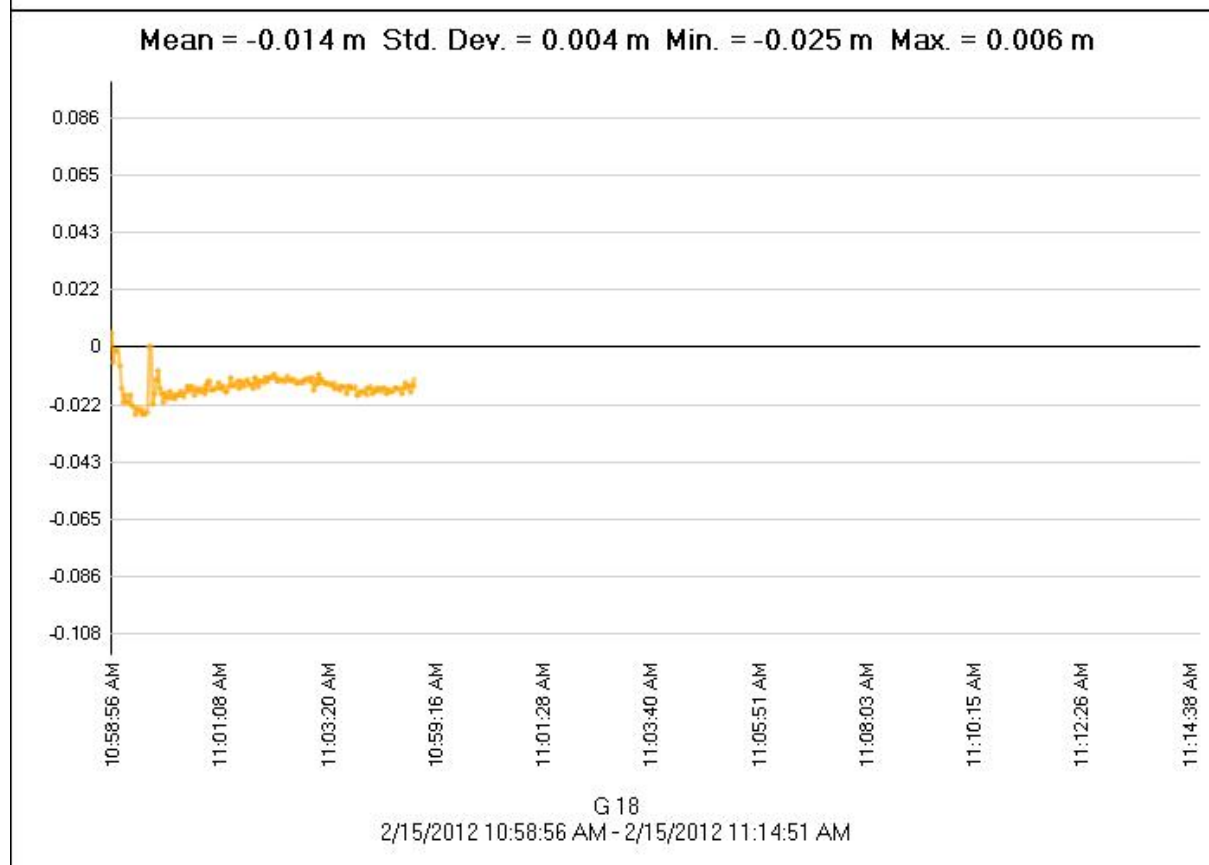
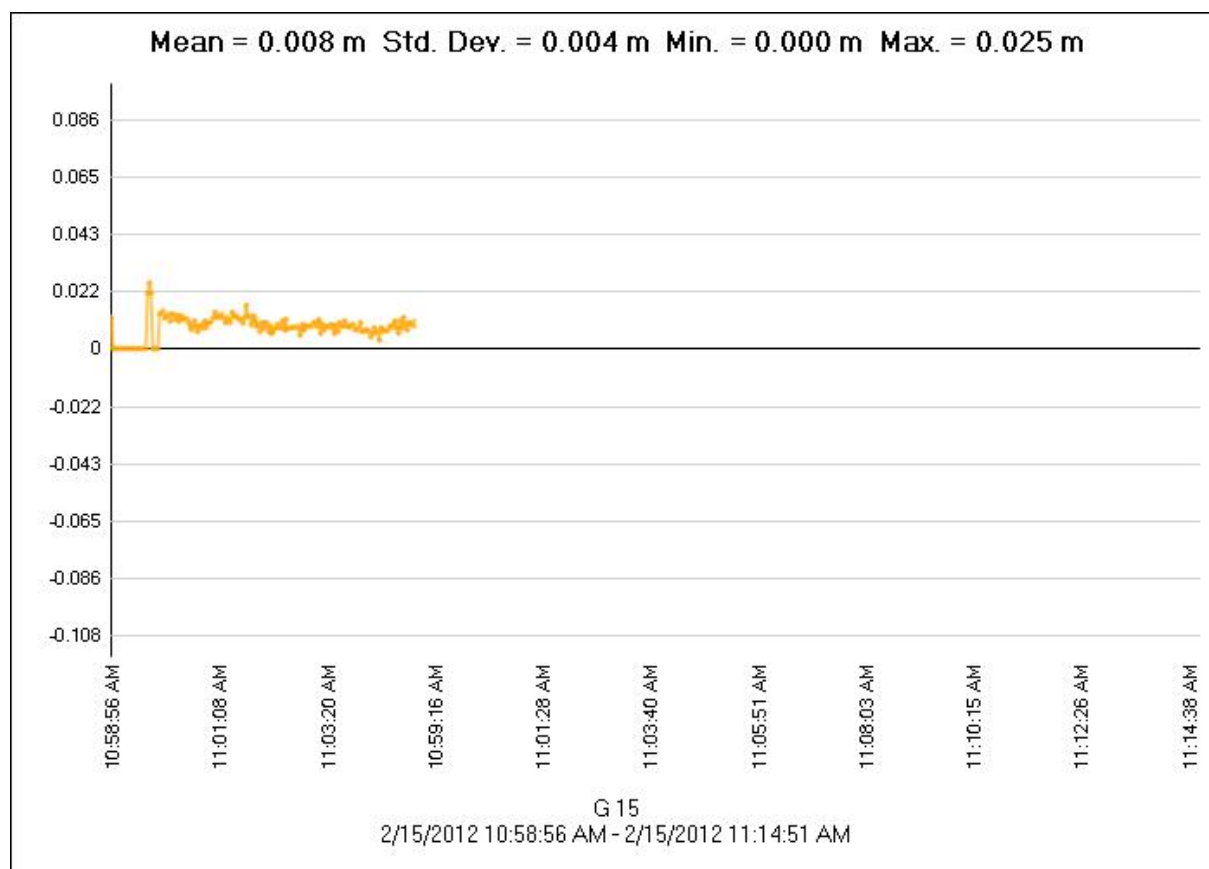
SV	2/15/2012 10:58:54 AM	Duration: 00:22:15.5000000	Major interval: 00:01:00	2/15/2012 11:21:09 AM
G 3	L1 L2			
G 6	L1 L2			
G 9	L1 L2			
G 14	L1 L2			
G 15	L1 L2			
G 16	L1 L2			
G 18	L1 L2			
G 19	L1 L2			
G 21	L1 L2			
G 22	L1 L2			
G 27	L1 L2			
G 29	L1 L2			

Residuals

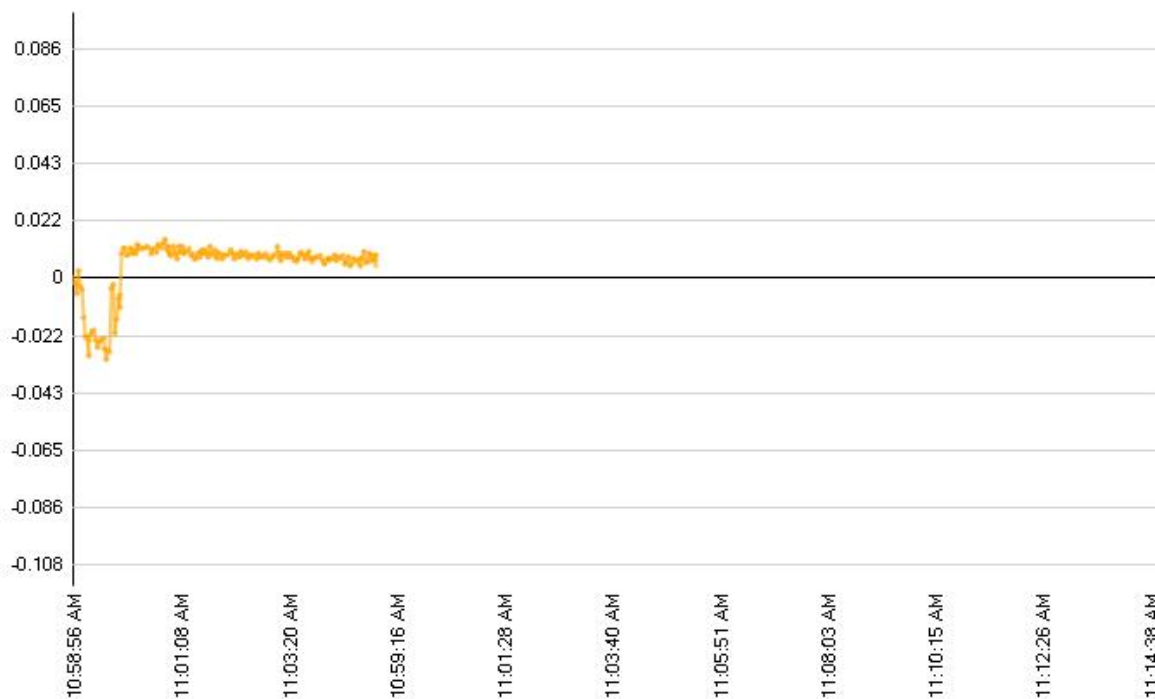








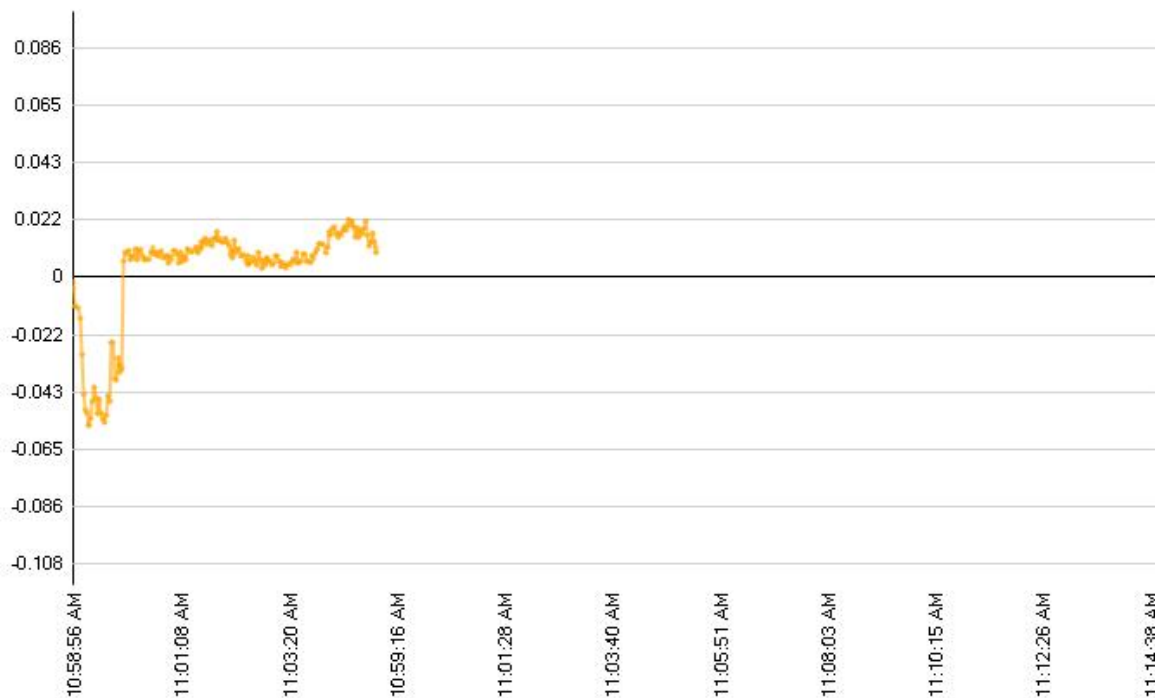
Mean = 0.005 m Std. Dev. = 0.009 m Min. = -0.030 m Max. = 0.014 m



G 21

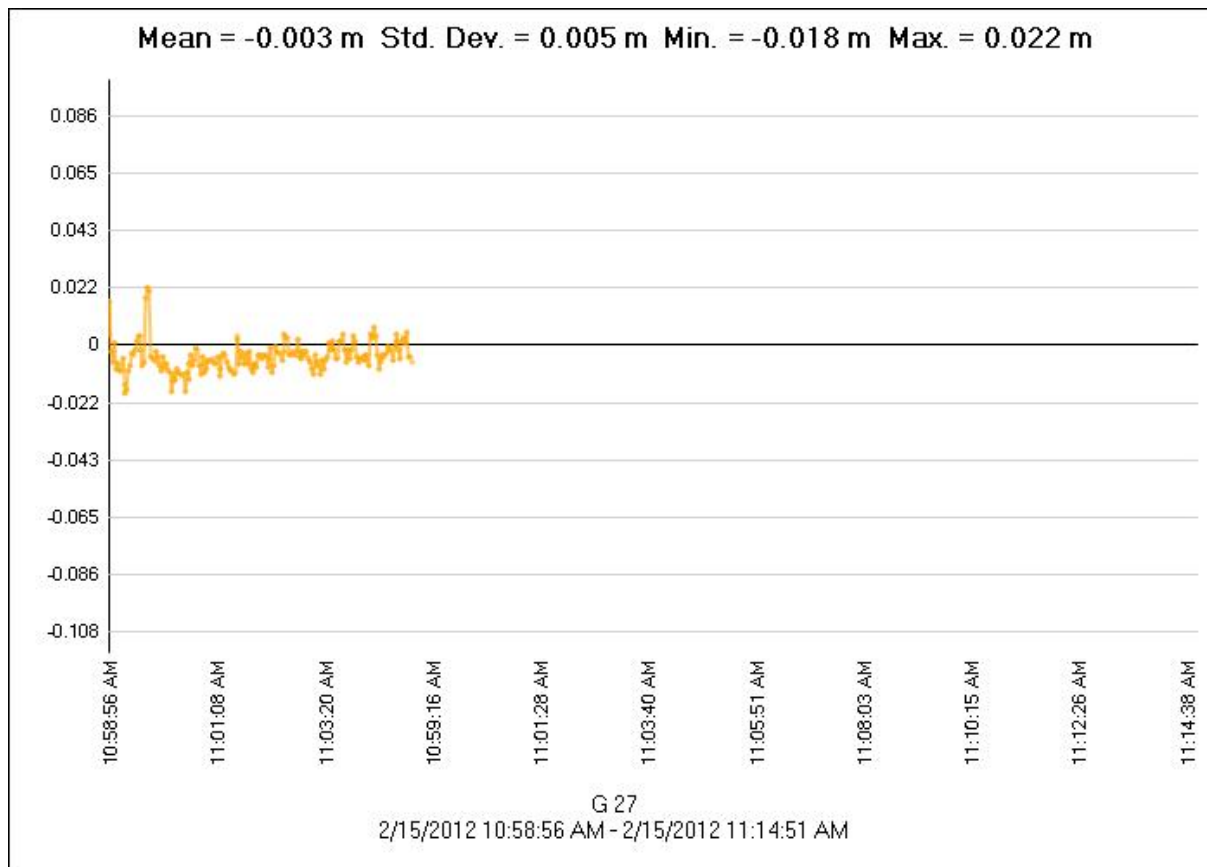
2/15/2012 10:58:56 AM - 2/15/2012 11:14:51 AM

Mean = 0.002 m Std. Dev. = 0.018 m Min. = -0.056 m Max. = 0.022 m



G 22

2/15/2012 10:58:56 AM - 2/15/2012 11:14:51 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

Baseline observation: JJ0729 --- FVA07-B1 (B259)

Processed: 4/9/2012 10:40:55 AM

Solution type: Float

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.070 m

Vertical precision: 0.083 m

RMS: 0.006 m

Maximum PDOP: 3.909

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/15/2012 10:25:12 AM (Local: UTC-7hr)

Processing stop time: 2/15/2012 10:42:47 AM (Local: UTC-7hr)

Processing duration: 00:17:35

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	JJ0729				
Grid		Local		Global	
Easting	235140.798 m	Latitude	N38°02'39.99776"	Latitude	N38°02'39.99775"
Northing	4215047.569 m	Longitude	W102°01'05.50297"	Longitude	W102°01'05.50297"
Elevation	1035.400 m	Height	1011.331 m	Height	1011.331 m

To:	FVA07-B1				
Grid		Local		Global	
Easting	312528.783 m	Latitude	N37°58'56.11167"	Latitude	N37°58'56.11167"
Northing	4205995.740 m	Longitude	W101°08'04.69371"	Longitude	W101°08'04.69371"
Elevation	909.894 m	Height	884.621 m	Height	884.621 m

Vector					
9Ughb[	77387.986 m	NS Fwd Azimuth	94°48'43"	L	75190.006 m
Bcfh\jb[	-9051.829 m	Ellipsoid Dist.	77897.173 m	M	-19640.079 m
9Yj Uhcb	-125.506 m	<Y][\h	-126.710 m	N	-5517.453 m

## Standard Errors

Vector errors:					
Point ID	0.011 m	Point ID	0°00'00"	Point ID	0.009 m
Point ID	0.028 m	Point ID	0.011 m	Point ID	0.037 m
Point ID	0.042 m	Point ID	0.042 m	Point ID	0.035 m





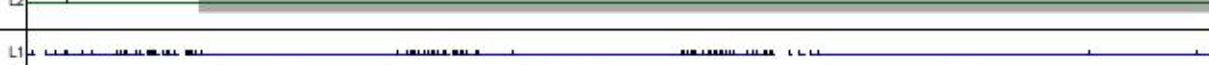
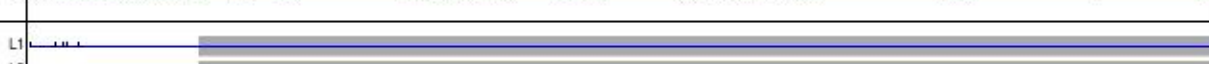


## Aposteriori Covariance Matrix (Meter<sup>2</sup>)

	X	Y	Z
X	0.0000868559		
Y	0.0000659619	0.0013991608	
Z	0.0000965384	-0.0005182609	0.0012305373

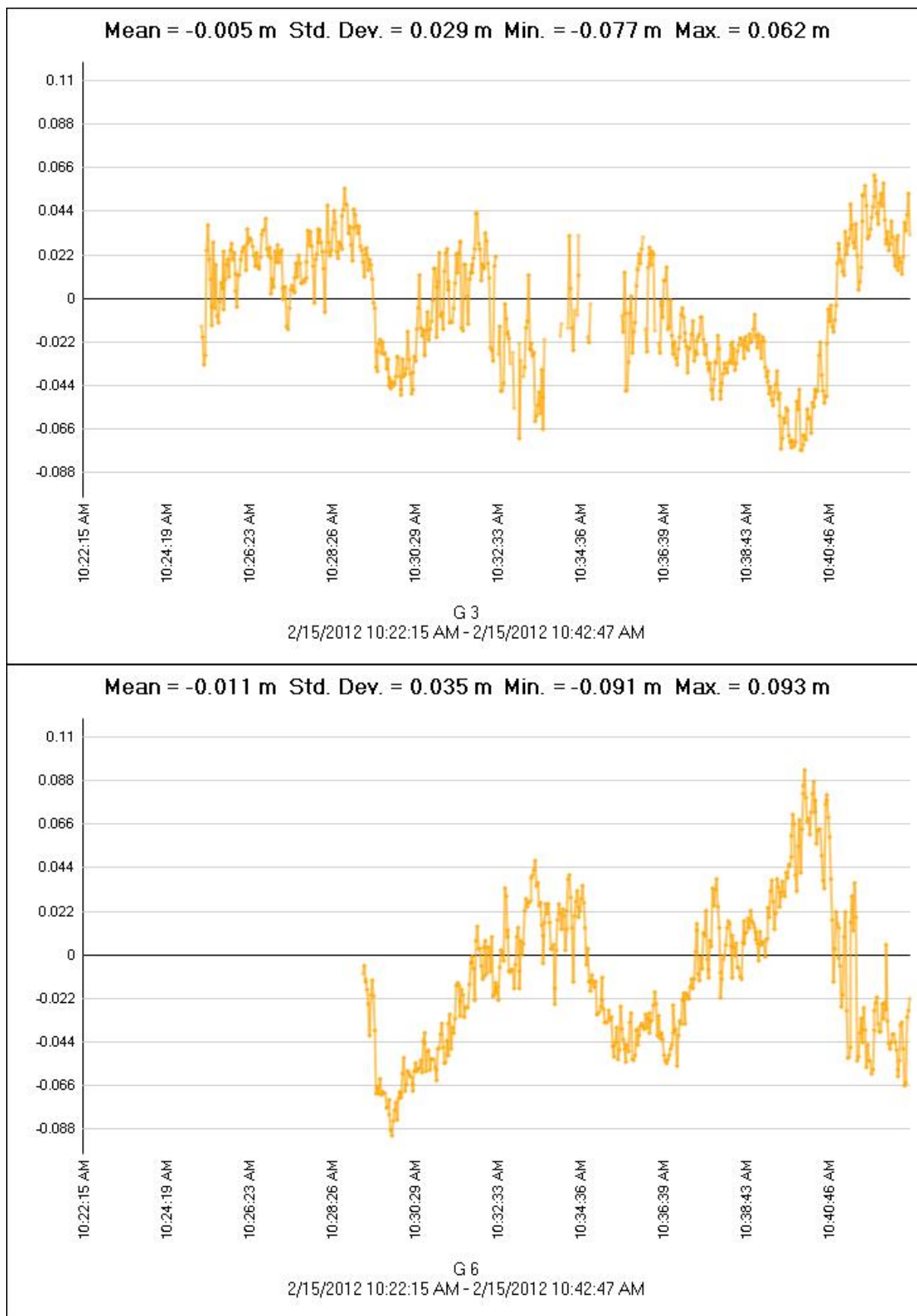
## Occupations

	From	To
Point ID:	JJ0729	FVA07-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\900040460.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050461.12o
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

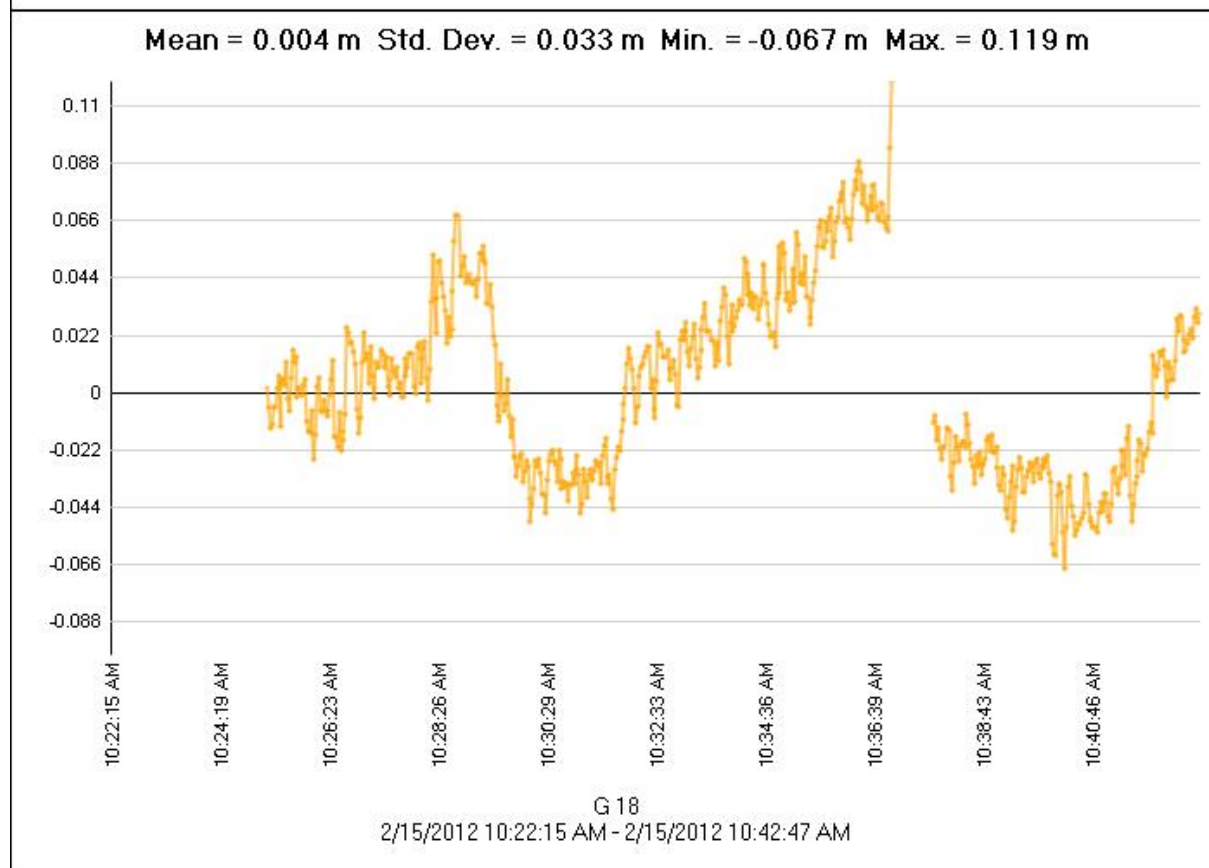
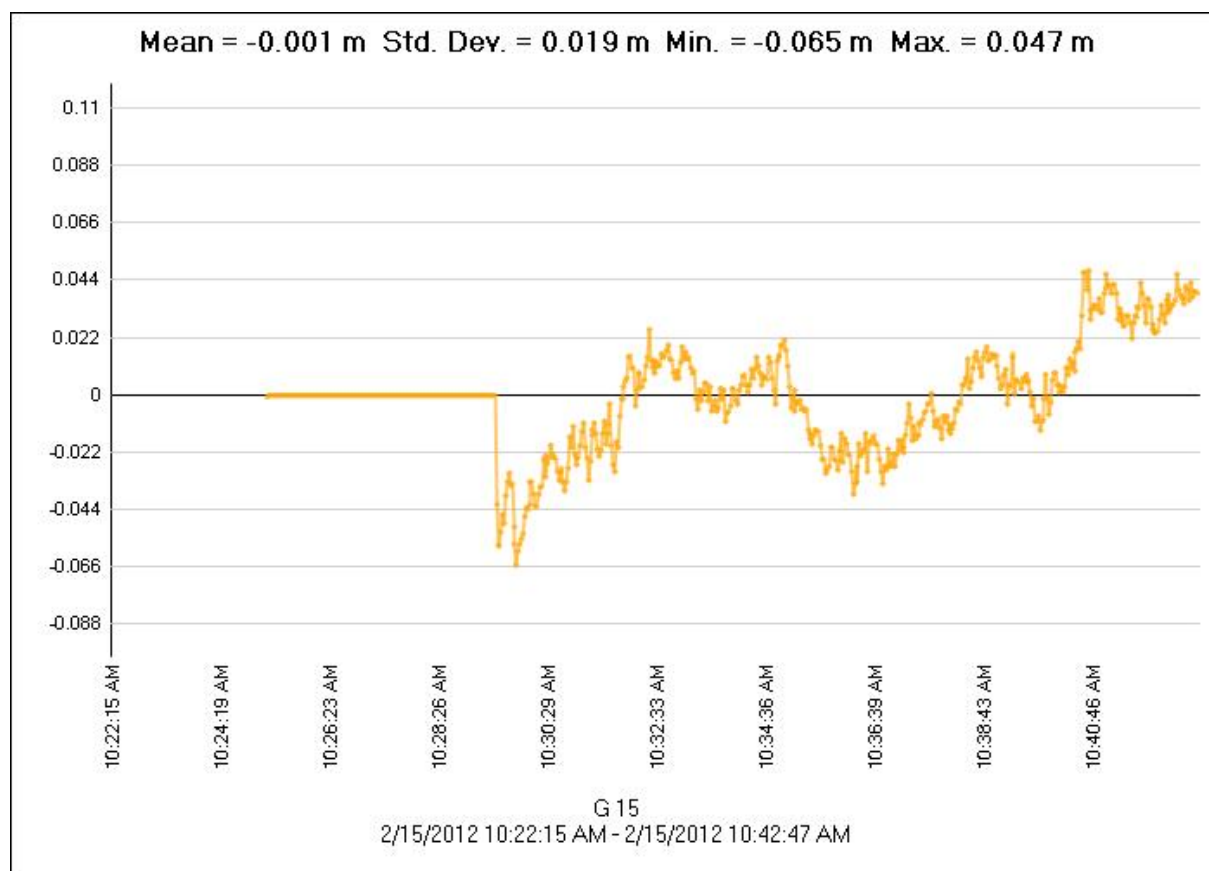
Tracking Summary

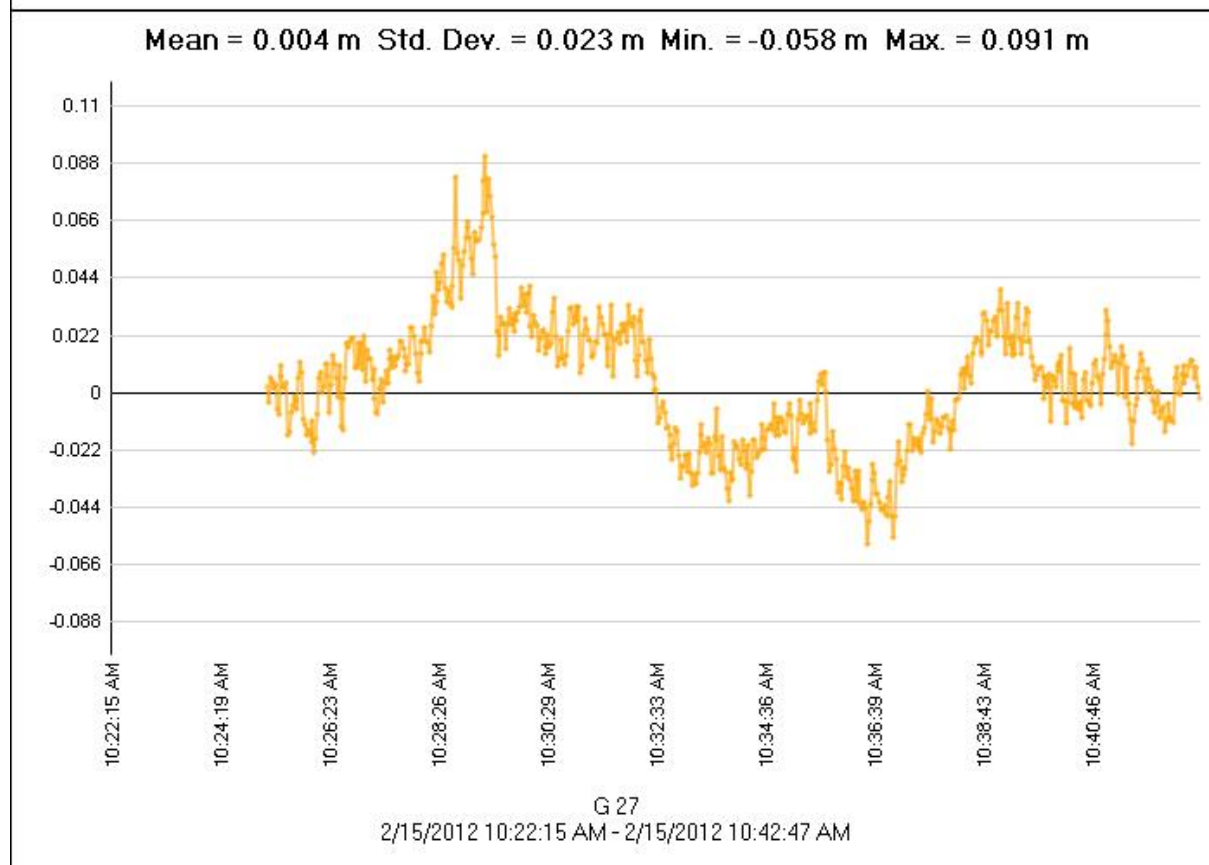
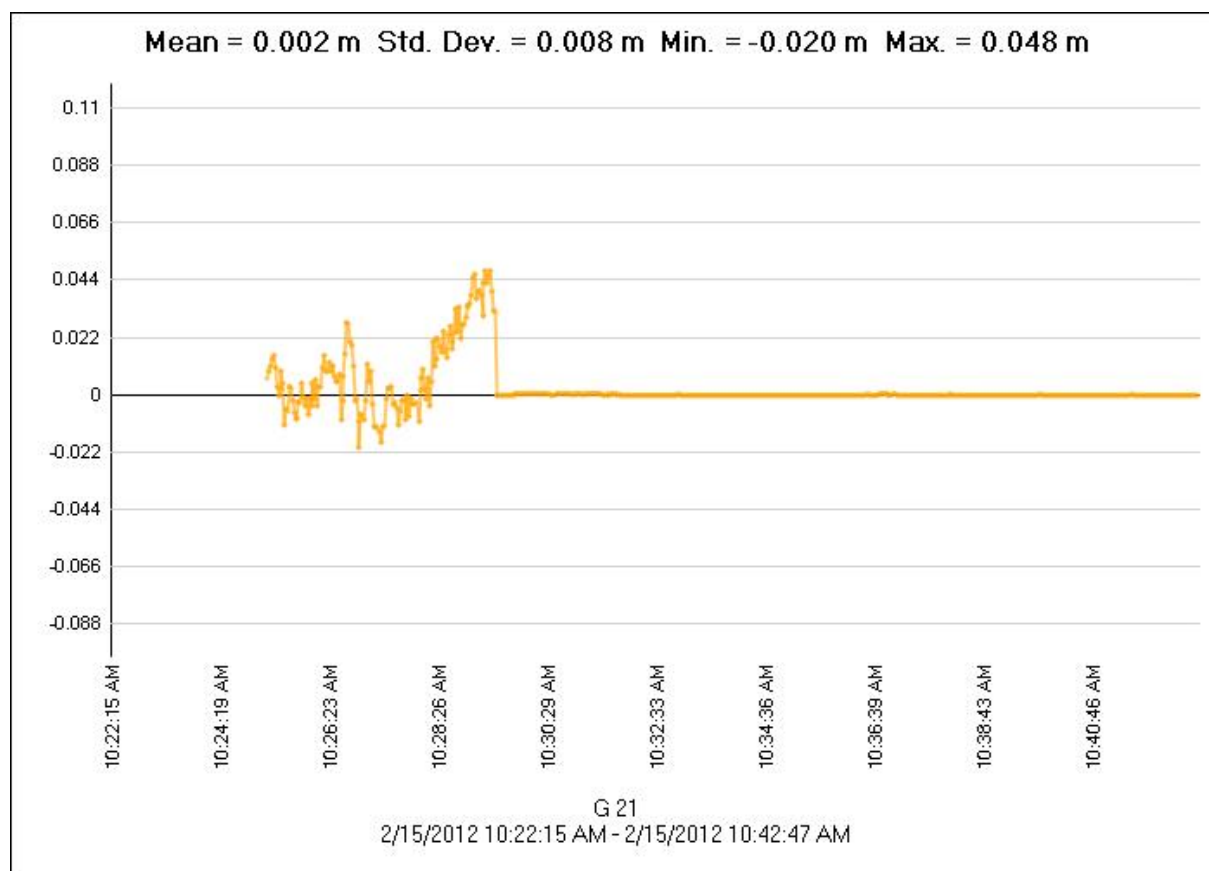
SV	2/15/2012 10:22:14 AM	Duration: 00:20:33	Major interval: 00:01:00	2/15/2012 10:42:47 AM
G 3				
G 6				
G 9				
G 15				
G 16				
G 18				
G 21				
G 22				
G 27				
G 29				
G 30				

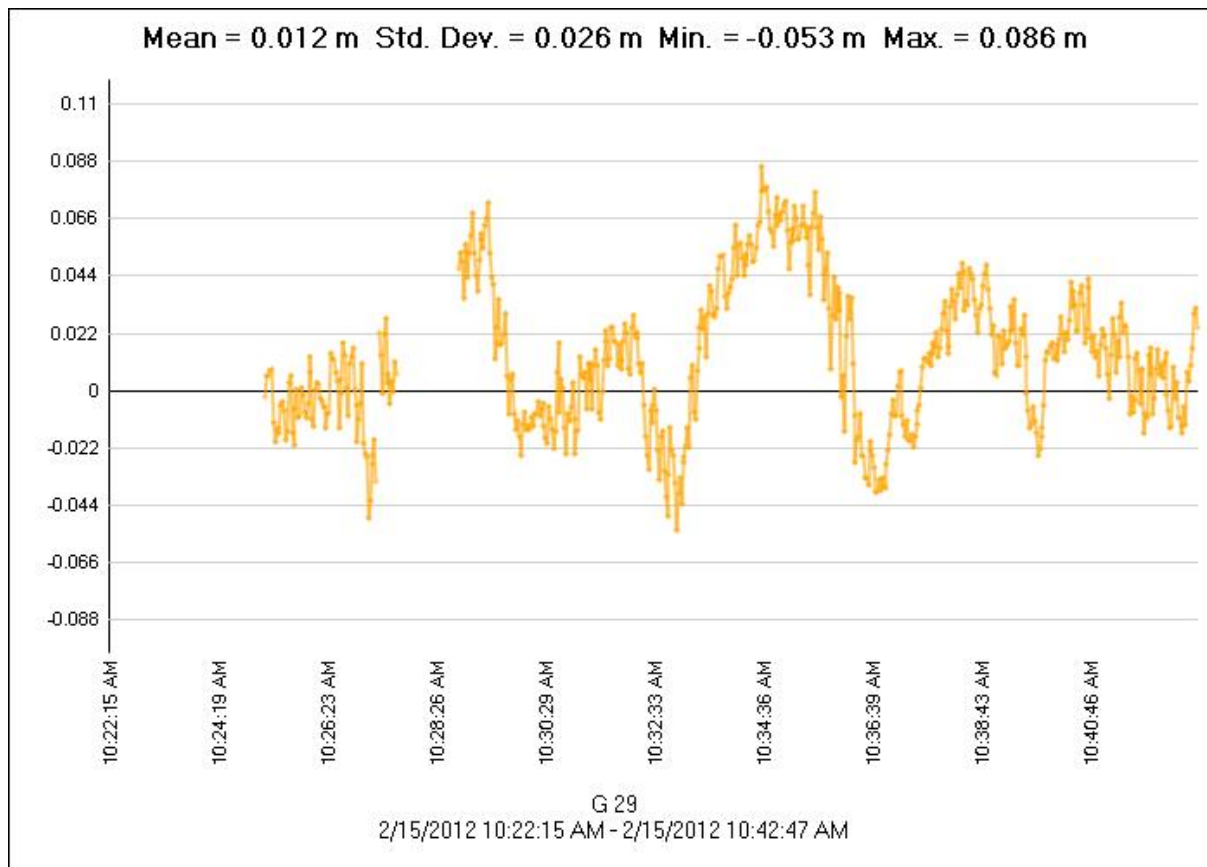
## Residuals













## 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

---

JJ0729 - SVA07-B1 (9:52:07 AM-10:15:03 AM) (S260)

---

Baseline observation: JJ0729 --- SVA07-B1 (B260)

Processed: 4/9/2012 10:42:10 AM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.048 m

Vertical precision: 0.146 m

RMS: 0.003 m

Maximum PDOP: 2.841

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/15/2012 9:53:08 AM (Local: UTC-7hr)

Processing stop time: 2/15/2012 10:15:03 AM (Local: UTC-7hr)

Processing duration: 00:21:55

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	JJ0729				
Grid		Local		Global	
Easting	235140.798 m	Latitude	N38°02'39.99776"	Latitude	N38°02'39.99775"
Northing	4215047.569 m	Longitude	W102°01'05.50297"	Longitude	W102°01'05.50297"
Elevation	1035.400 m	Height	1011.331 m	Height	1011.331 m

To:	SVA07-B1				
Grid		Local		Global	
Easting	312468.771 m	Latitude	N37°59'06.95081"	Latitude	N37°59'06.95081"
Northing	4206331.411 m	Longitude	W101°08'07.46768"	Longitude	W101°08'07.46768"
Elevation	917.497 m	Height	892.235 m	Height	892.235 m

Vector					
9Ughb[	77327.973 m	NS Fwd Azimuth	94°34'17"	L	75162.144 m
BcfA\jb[	-8716.158 m	Ellipsoid Dist.	77799.266 m	M	-19431.059 m
9Yj Uhcb	-117.903 m	<Y][\h	-119.097 m	N	-5249.323 m

## Standard Errors

Vector errors:					
Point ID	0.007 m	Point Description	0°00'00"	Point Type	0.019 m
Point ID	0.019 m	Point Description	0.006 m	Point Type	0.067 m
Point ID	0.074 m	Point Description	0.074 m	Point Type	0.032 m

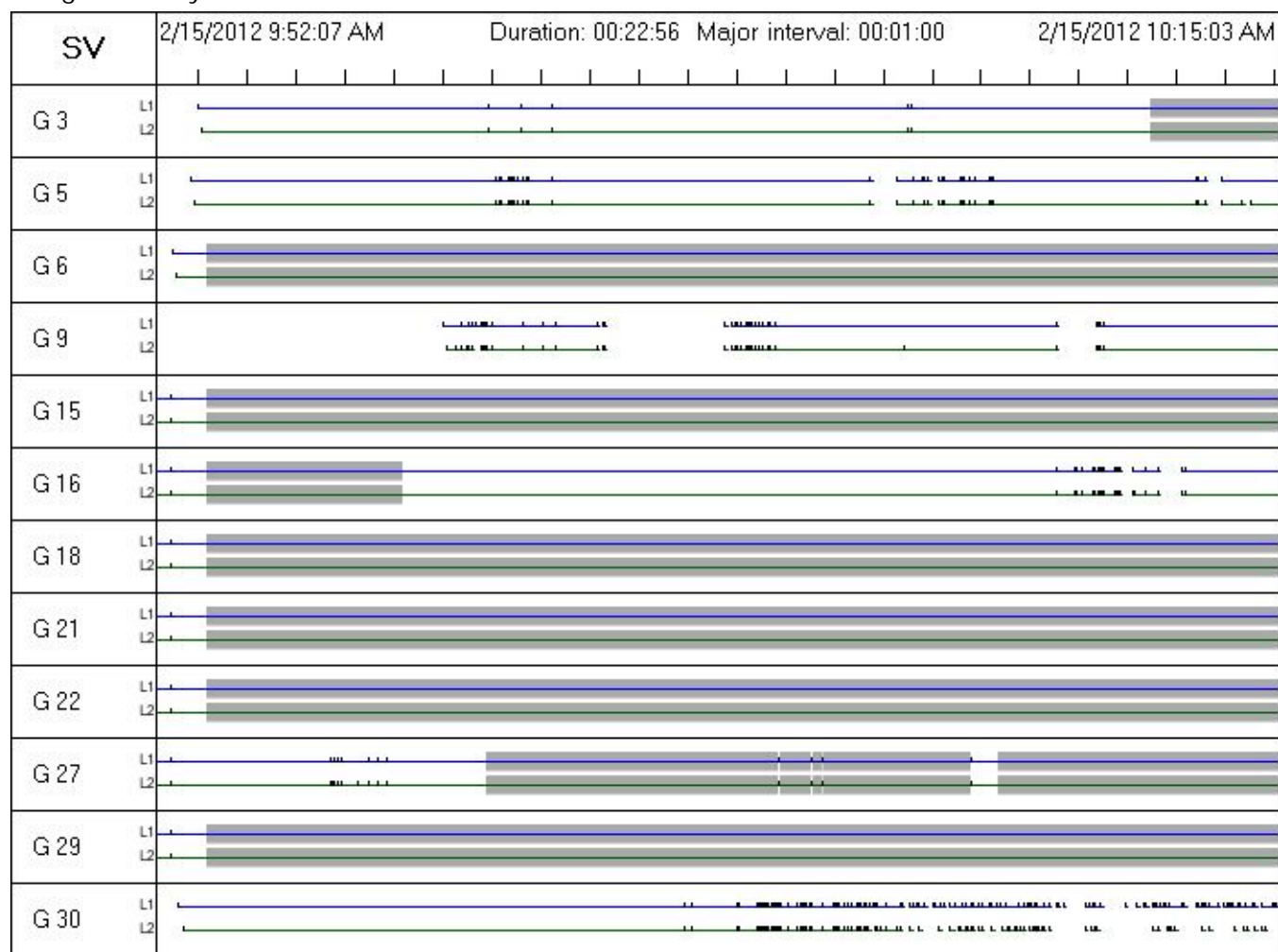
## Aposteriori Covariance Matrix (Meter<sup>2</sup>)

	X	Y	Z
X	0.0003720222		
Y	0.0012343868	0.0045073722	
Z	-0.0005637280	-0.0021192627	0.0010435131

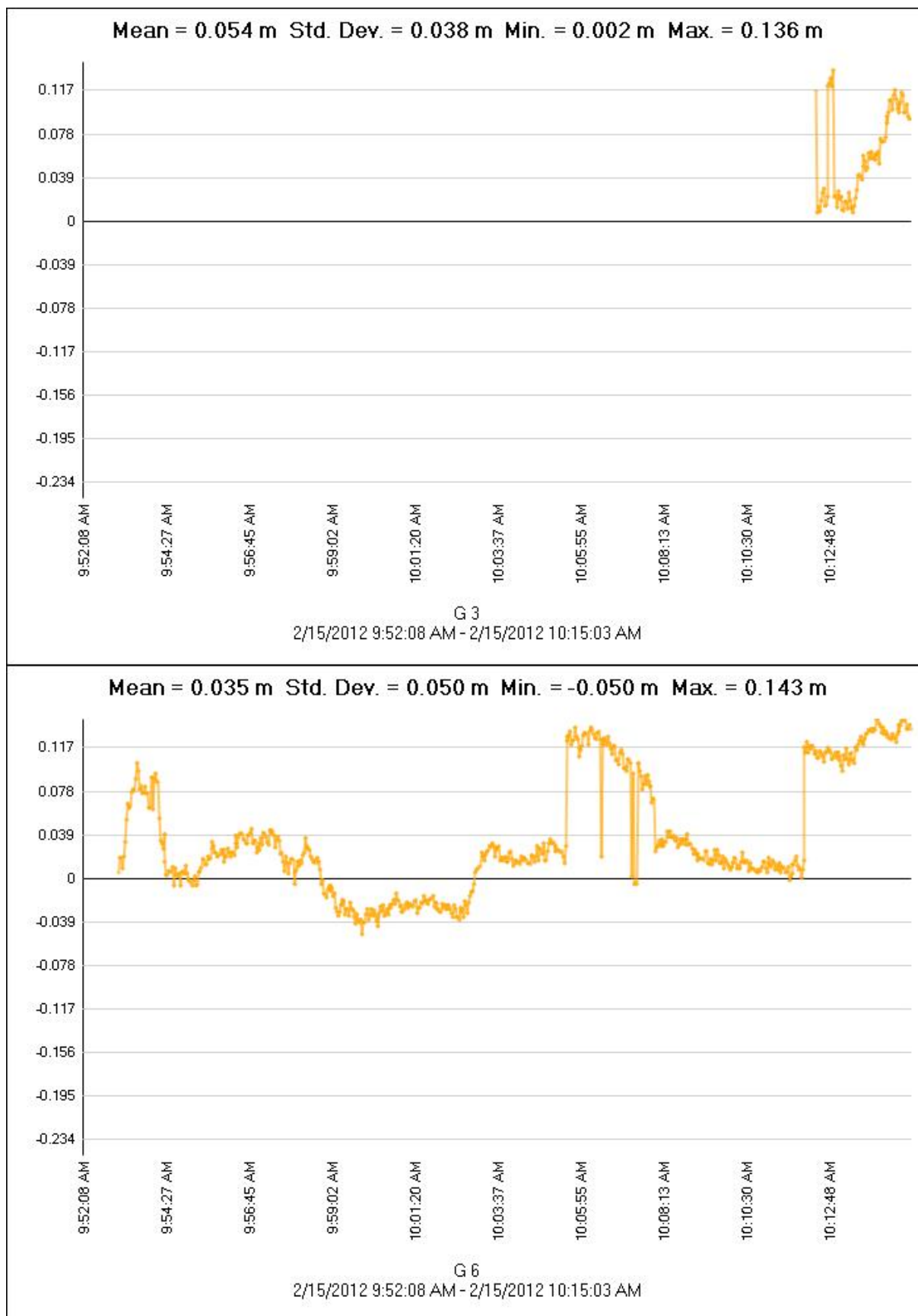
## Occupations

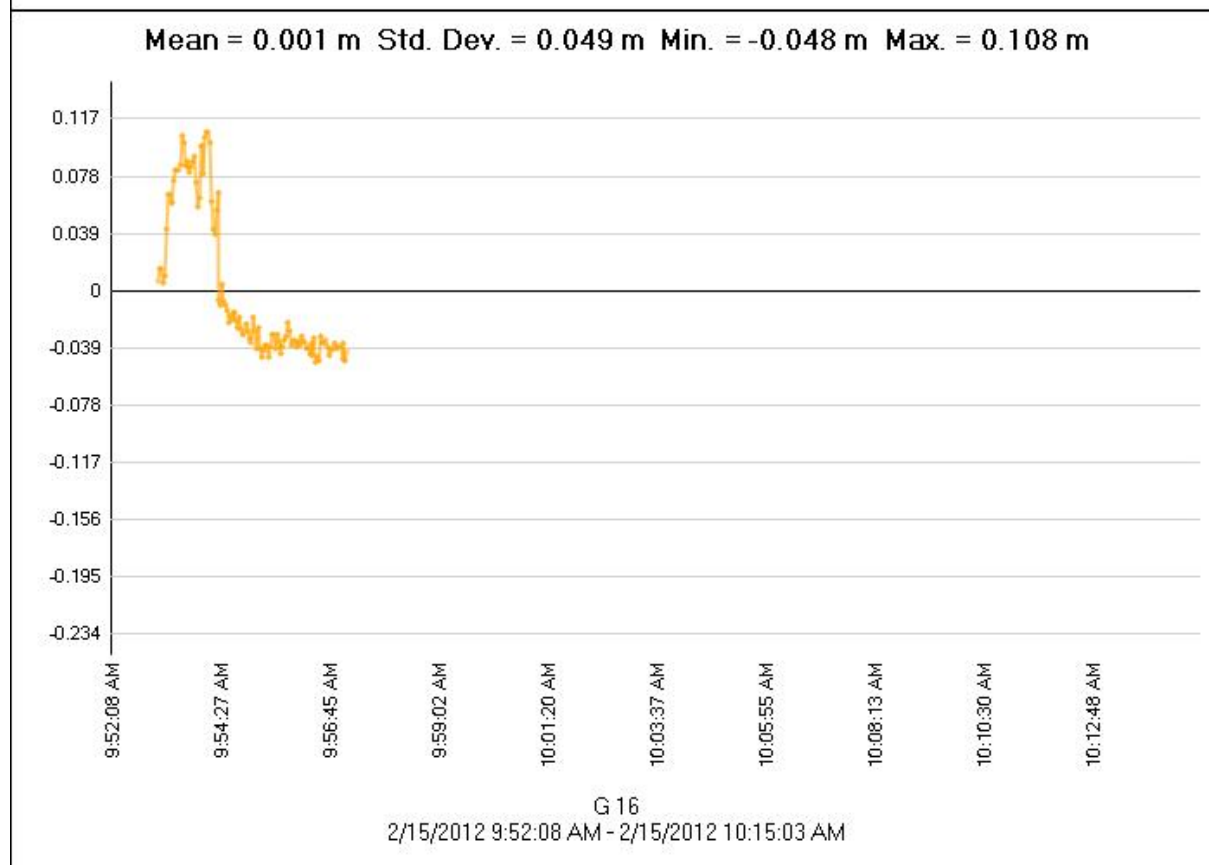
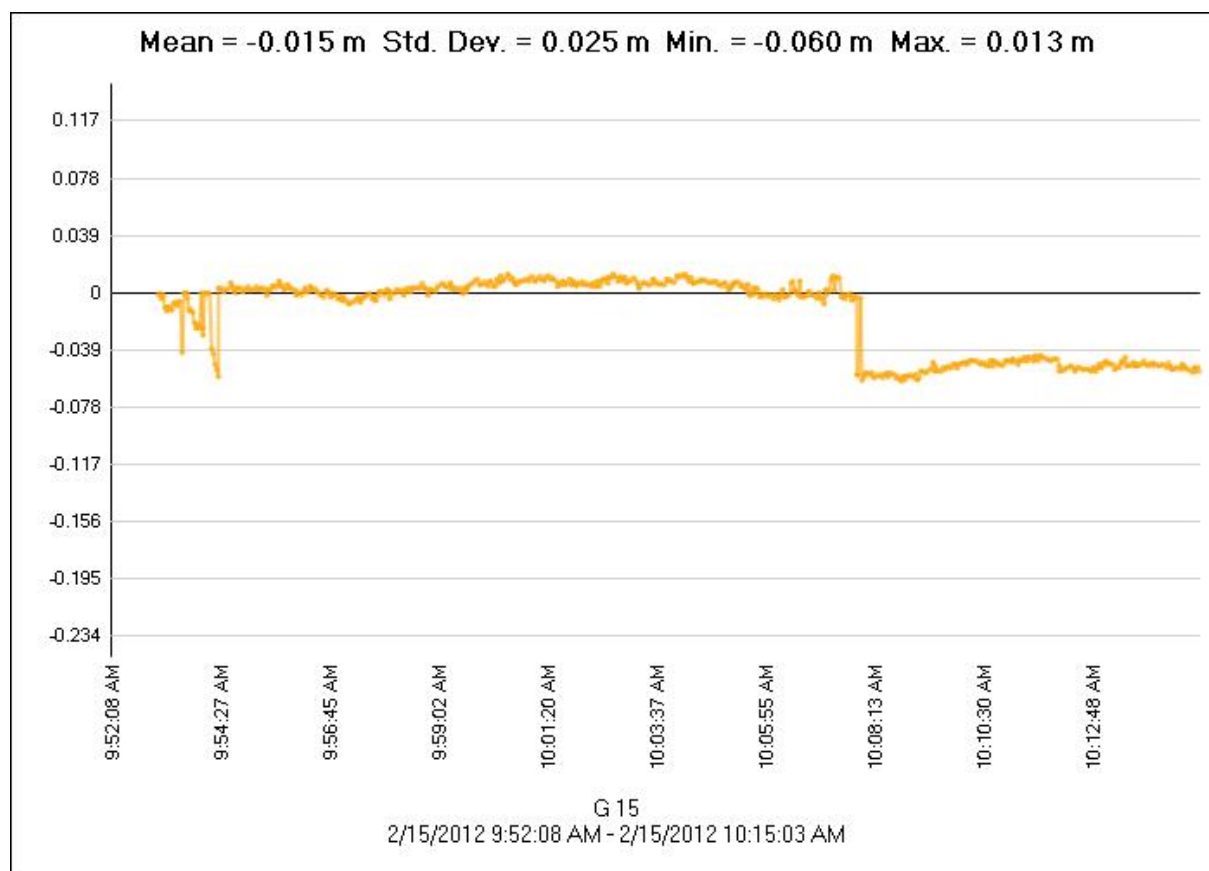
	From	To
Point ID:	JJ0729	SVA07-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\900040460.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050460.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

# Tracking Summary



## Residuals







Mean = 0.010 m Std. Dev. = 0.017 m Min. = -0.016 m Max. = 0.057 m



G 18

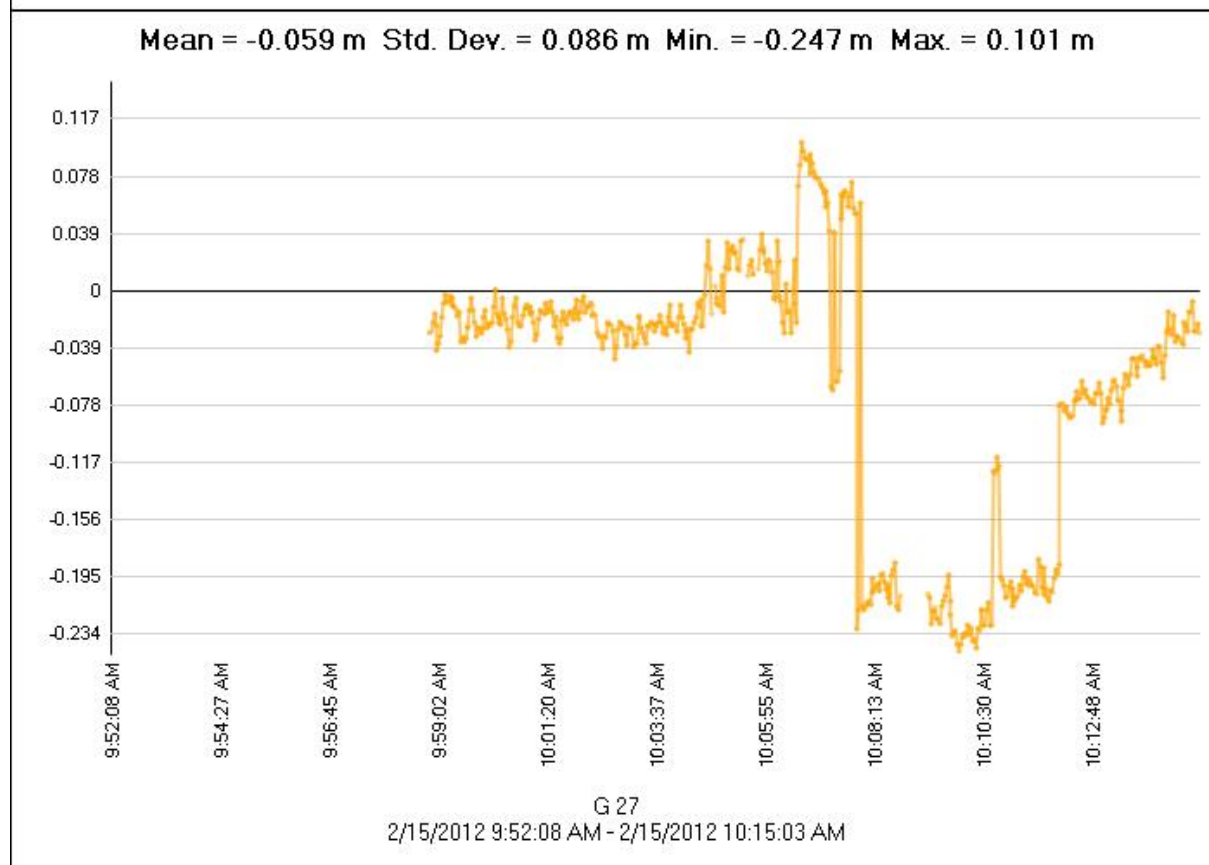
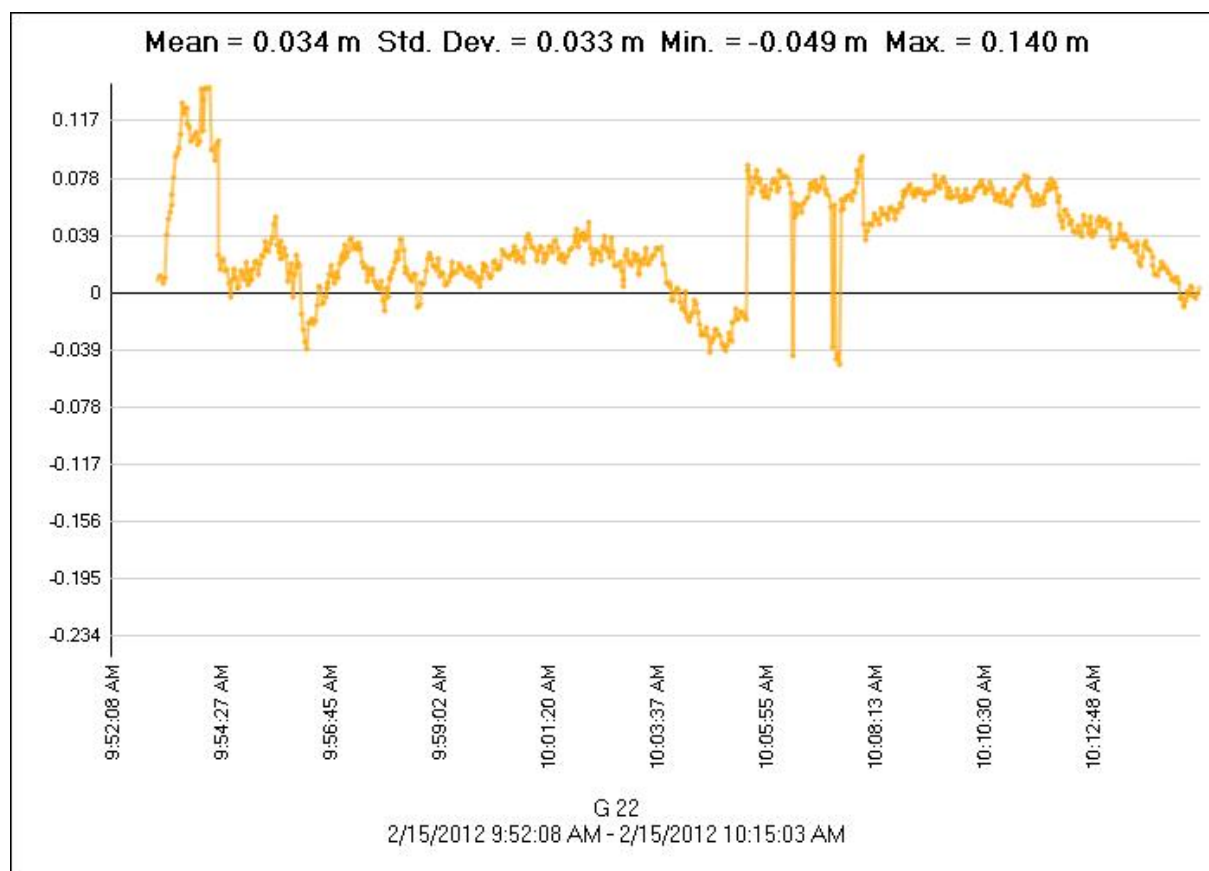
2/15/2012 9:52:08 AM - 2/15/2012 10:15:03 AM

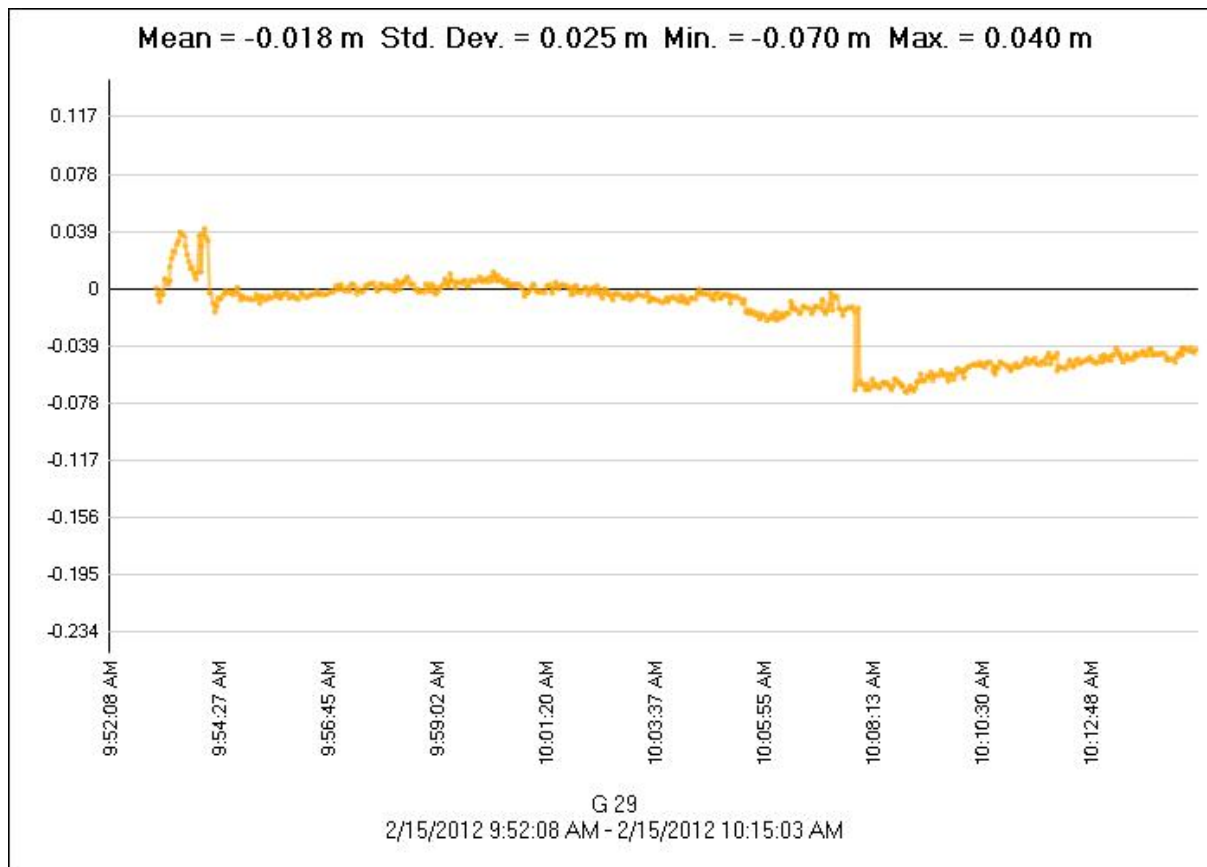
Mean = 0.009 m Std. Dev. = 0.019 m Min. = -0.040 m Max. = 0.049 m



G 21

2/15/2012 9:52:08 AM - 2/15/2012 10:15:03 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

---

JJ0729 - SVA22-B1 (9:43:37 AM-10:10:22 AM) (S274)

---

Baseline observation: JJ0729 --- SVA22-B1 (B274)

Processed: 4/9/2012 10:38:26 AM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.007 m

Vertical precision: 0.013 m

RMS: 0.002 m

Maximum PDOP: 2.811

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/15/2012 9:43:59 AM (Local: UTC-7hr)

Processing stop time: 2/15/2012 10:10:22 AM (Local: UTC-7hr)

Processing duration: 00:26:23

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	JJ0729				
Grid		Local		Global	
Easting	235140.798 m	Latitude	N38°02'39.99776"	Latitude	N38°02'39.99775"
Northing	4215047.569 m	Longitude	W102°01'05.50297"	Longitude	W102°01'05.50297"
Elevation	1035.400 m	Height	1011.331 m	Height	1011.331 m

To:	SVA22-B1				
Grid		Local		Global	
Easting	232807.197 m	Latitude	N38°02'53.84712"	Latitude	N38°02'53.84712"
Northing	4215551.178 m	Longitude	W102°02'41.78829"	Longitude	W102°02'41.78829"
Elevation	1035.608 m	Height	1011.579 m	Height	1011.579 m

Vector					
9Ughb[	-2333.601 m	NS Fwd Azimuth	280°19'01"	L	-2241.647 m
Bcfh\jb[	503.609 m	Ellipsoid Dist.	2386.198 m	M	746.689 m
9Yj Uhcb	0.208 m	<Y][\h	0.248 m	N	336.483 m

## Standard Errors

Vector errors:					
Point ID	0.002 m	Point Description	0°00'00"	Point Type	0.003 m
Point ID	0.002 m	Point Description	0.002 m	Point Type	0.006 m
Point ID	0.007 m	Point Description	0.007 m	Point Type	0.004 m

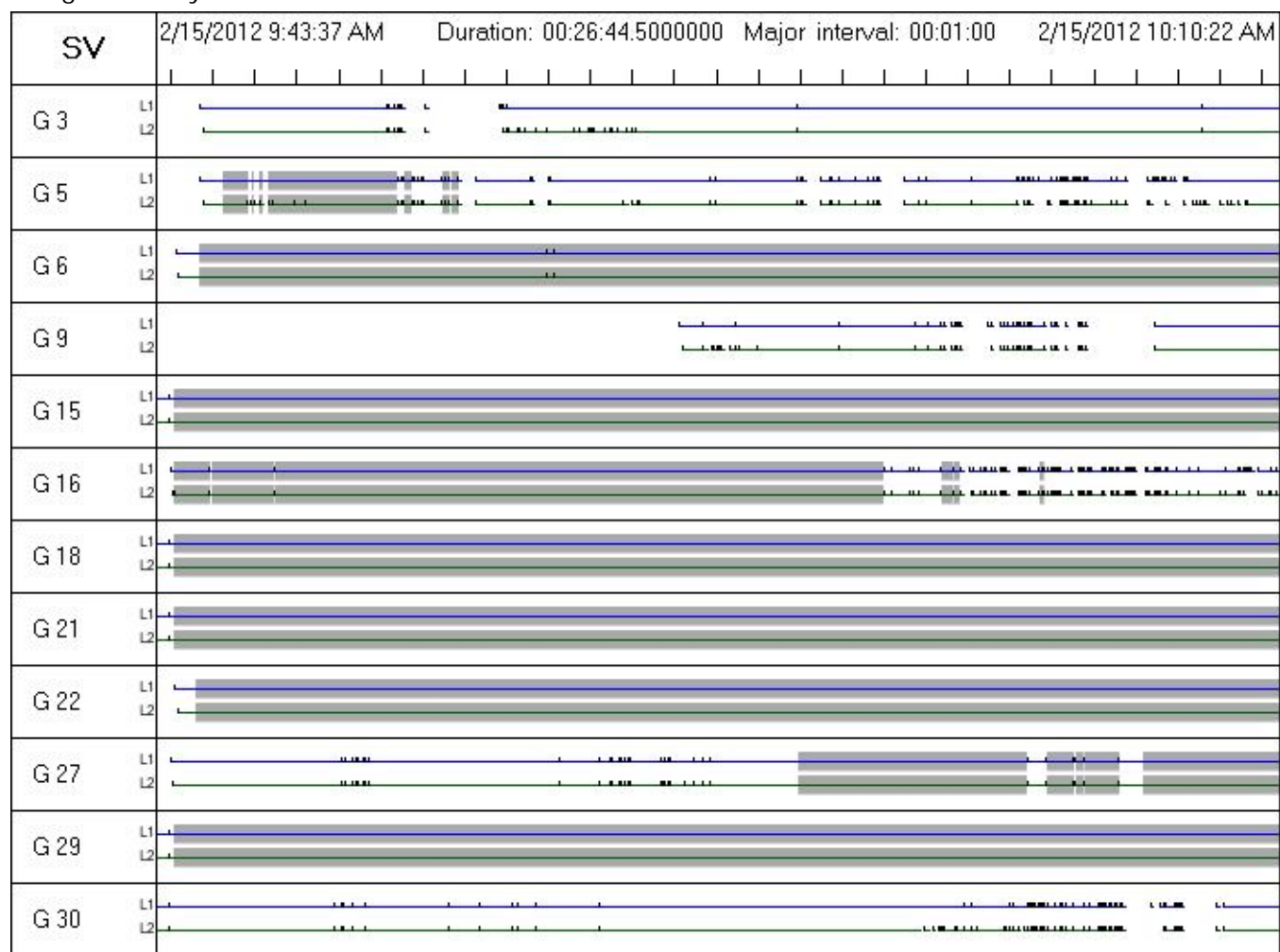
## Aposteriori Covariance Matrix (Meter<sup>2</sup>)

	X	Y	Z
X	0.0000084683		
Y	0.0000113225	0.0000308445	
Z	-0.0000050876	-0.0000154113	0.0000138297

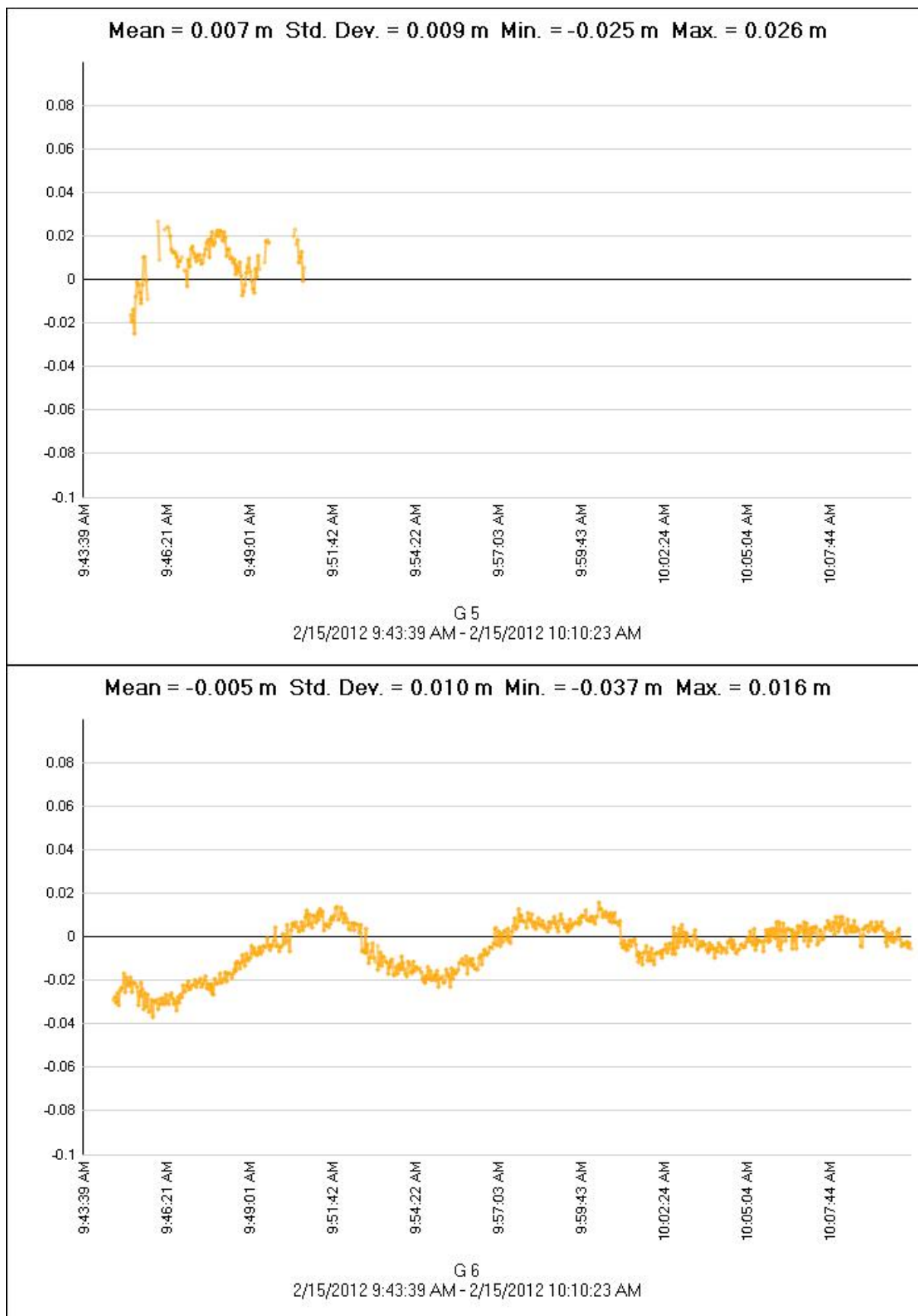
## Occupations

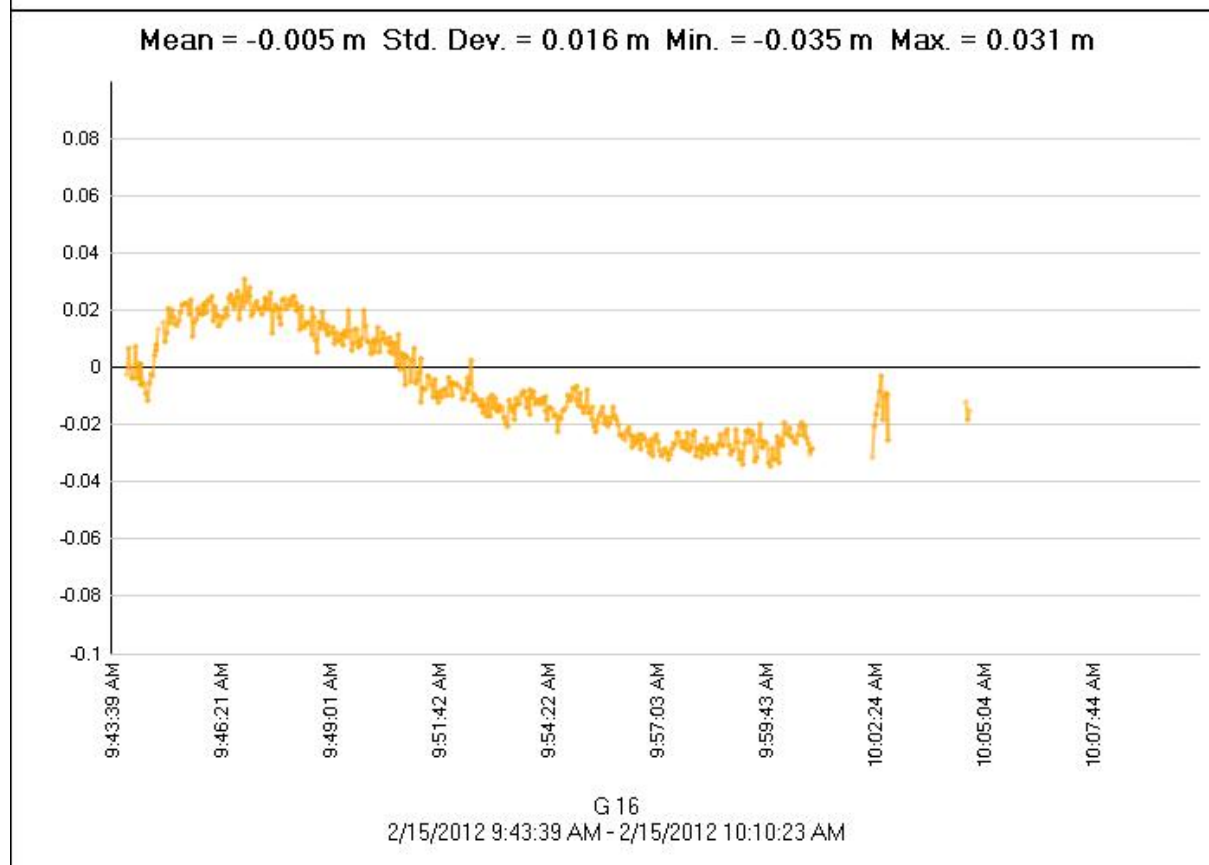
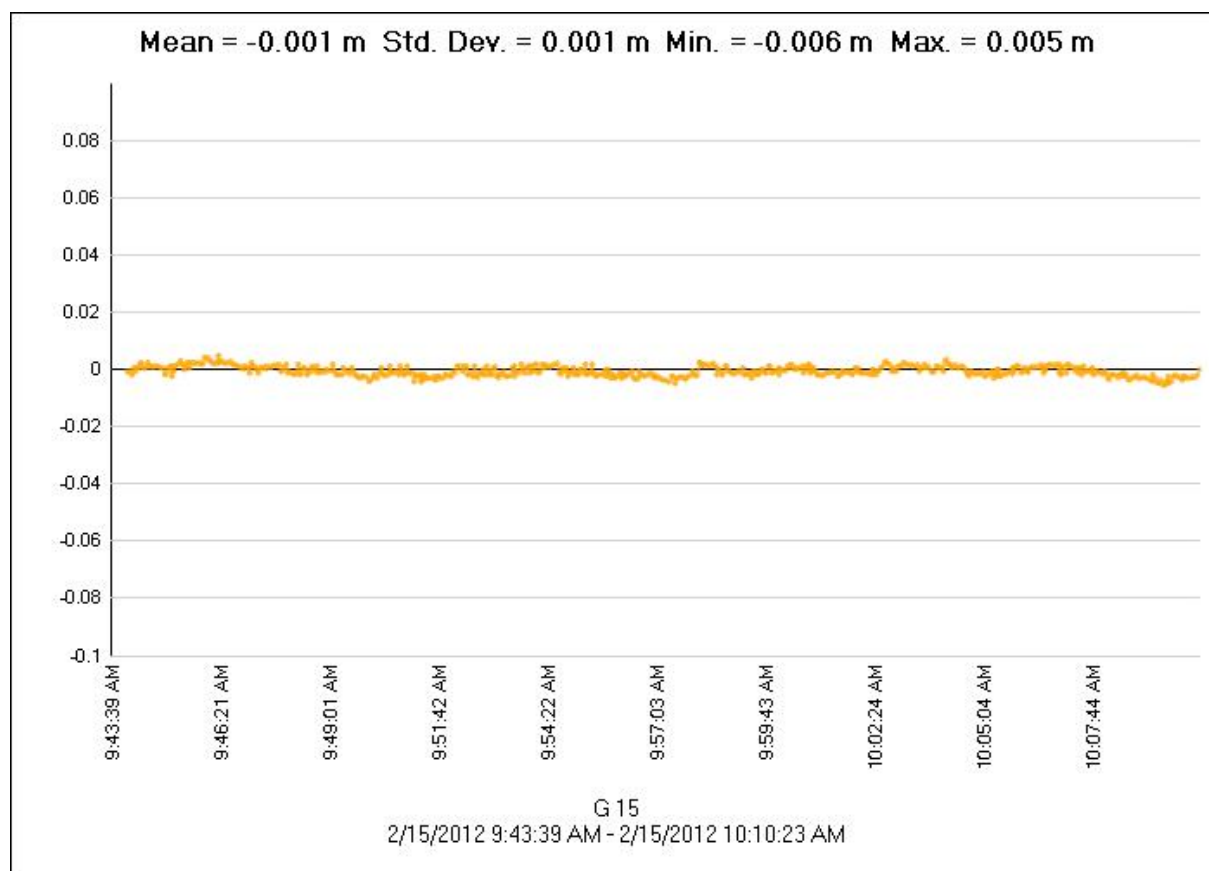
	From	To
Point ID:	JJ0729	SVA22-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\900040460.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00030460.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

# Tracking Summary



## Residuals







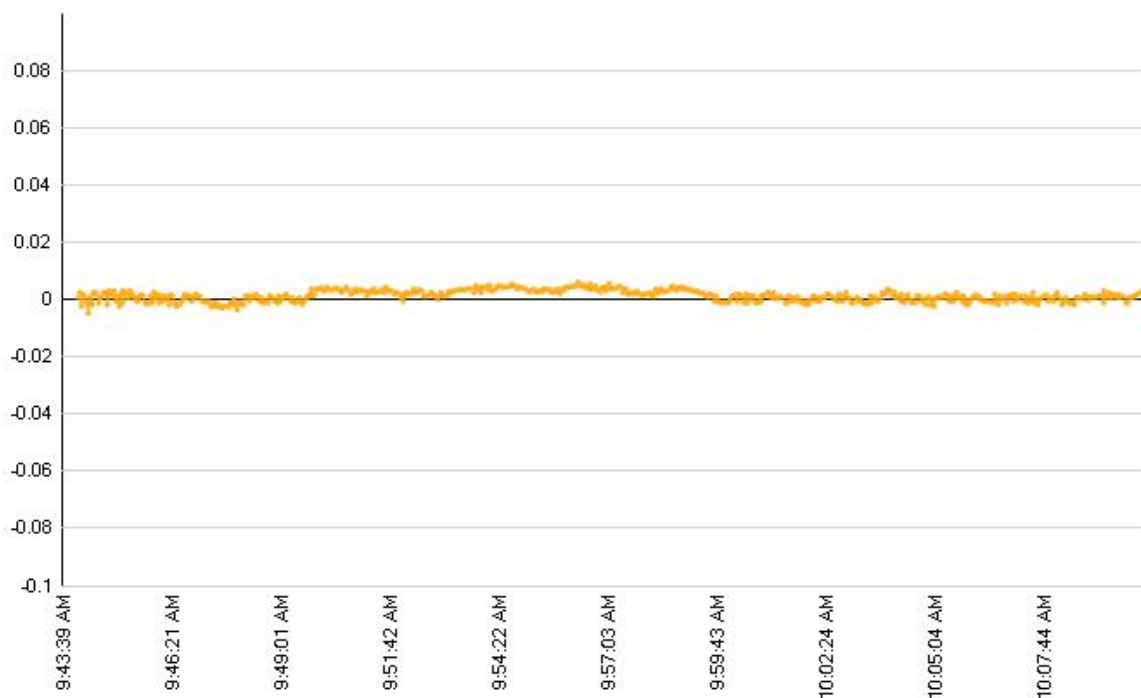
Mean = 0.000 m Std. Dev. = 0.001 m Min. = -0.004 m Max. = 0.005 m



G 18

2/15/2012 9:43:39 AM - 2/15/2012 10:10:23 AM

Mean = 0.001 m Std. Dev. = 0.002 m Min. = -0.005 m Max. = 0.006 m



G 21

2/15/2012 9:43:39 AM - 2/15/2012 10:10:23 AM

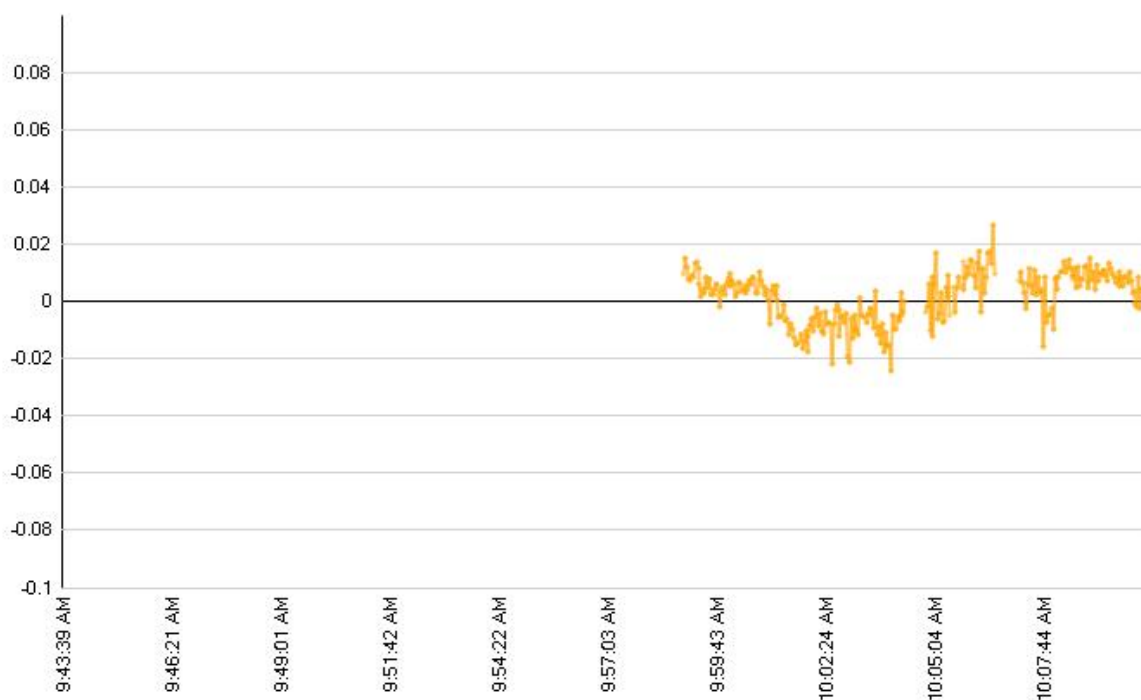
Mean = 0.004 m Std. Dev. = 0.006 m Min. = -0.013 m Max. = 0.024 m



G 22

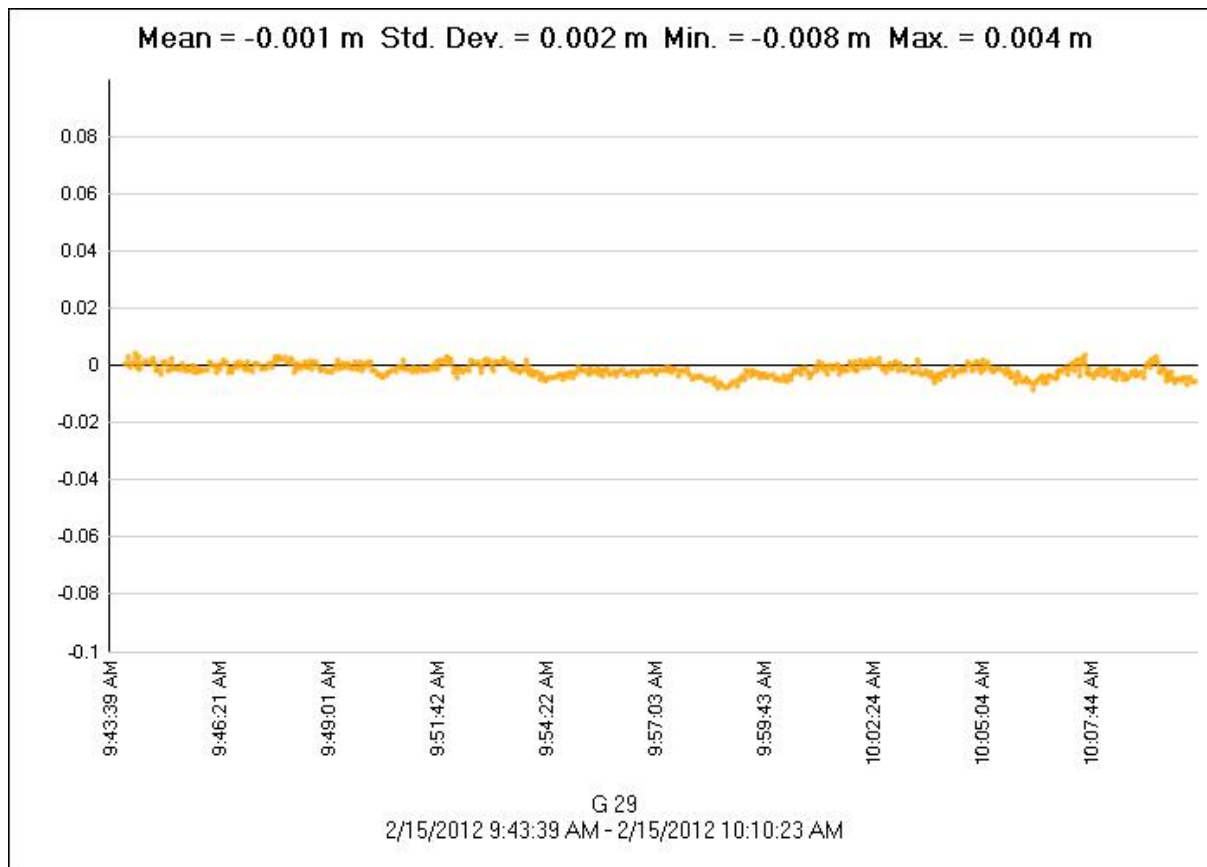
2/15/2012 9:43:39 AM - 2/15/2012 10:10:23 AM

Mean = 0.001 m Std. Dev. = 0.007 m Min. = -0.024 m Max. = 0.026 m



G 27

2/15/2012 9:43:39 AM - 2/15/2012 10:10:23 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

---

JJ0729 - FVA22-B1 (10:15:48 AM-10:38:24 AM) (S279)

---

Baseline observation: JJ0729 --- FVA22-B1 (B279)

Processed: 4/9/2012 10:38:25 AM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.006 m

Vertical precision: 0.008 m

RMS: 0.000 m

Maximum PDOP: 2.908

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/15/2012 10:15:48 AM (Local: UTC-7hr)

Processing stop time: 2/15/2012 10:38:24 AM (Local: UTC-7hr)

Processing duration: 00:22:35

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	JJ0729				
Grid		Local		Global	
Easting	235140.798 m	Latitude	N38°02'39.99776"	Latitude	N38°02'39.99775"
Northing	4215047.569 m	Longitude	W102°01'05.50297"	Longitude	W102°01'05.50297"
Elevation	1035.400 m	Height	1011.331 m	Height	1011.331 m

To:	FVA22-B1				
Grid		Local		Global	
Easting	232835.943 m	Latitude	N38°03'08.81373"	Latitude	N38°03'08.81373"
Northing	4216012.165 m	Longitude	W102°02'41.22971"	Longitude	W102°02'41.22971"
Elevation	1038.156 m	Height	1014.133 m	Height	1014.133 m

Vector					
9Ughb[	-2304.854 m	NS Fwd Azimuth	290°50'54"	L	-2169.383 m
Bcfh\jb[	964.595 m	Ellipsoid Dist.	2497.381 m	M	1020.085 m
9Yj Uhcb	2.756 m	<Y][\h	2.801 m	N	701.501 m

## Standard Errors

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

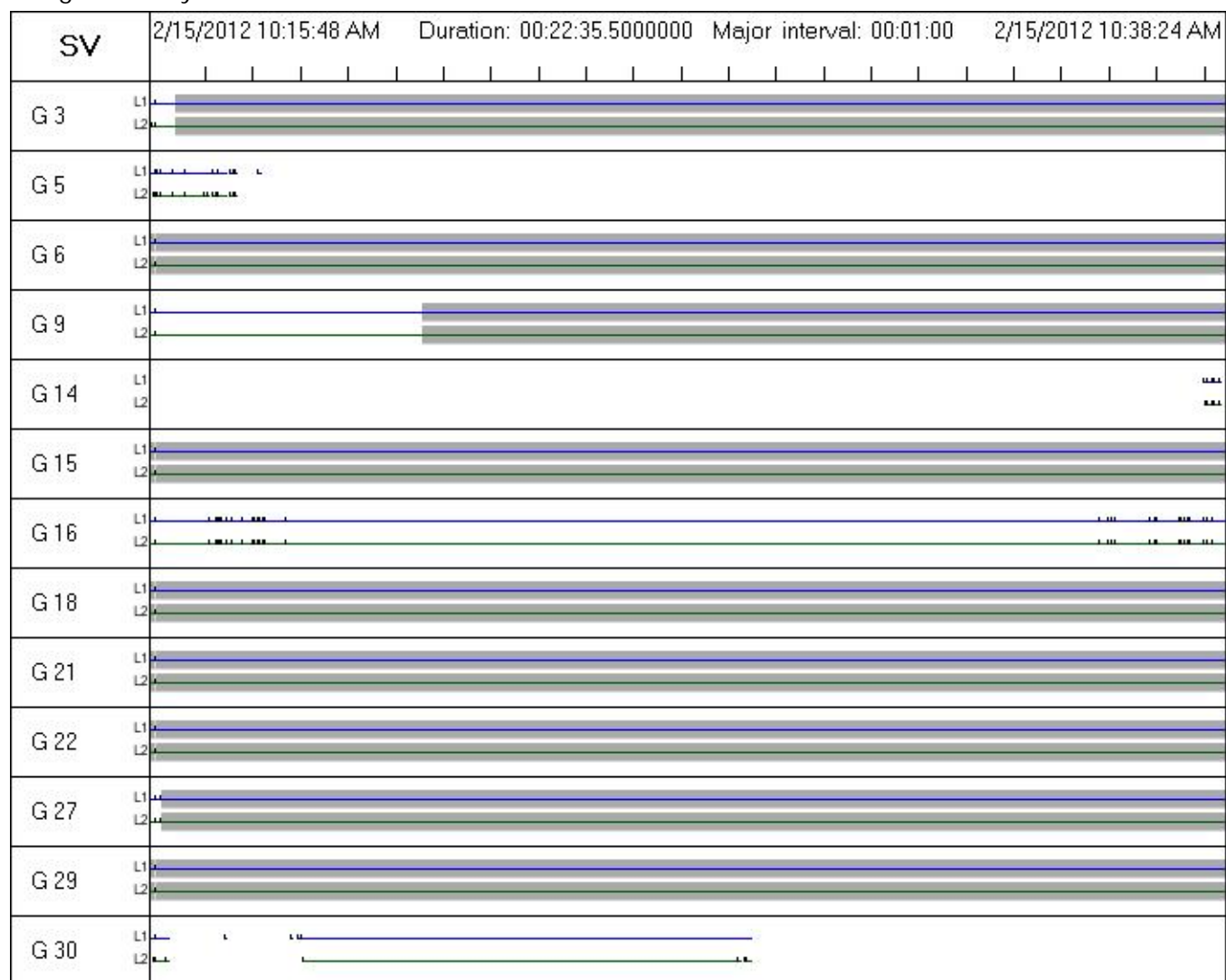
## Aposteriori Covariance Matrix (Meter<sup>2</sup>)

	X	Y	Z
X	0.0000047381		
Y	0.0000045729	0.0000147329	
Z	-0.0000009381	-0.0000037590	0.0000058270

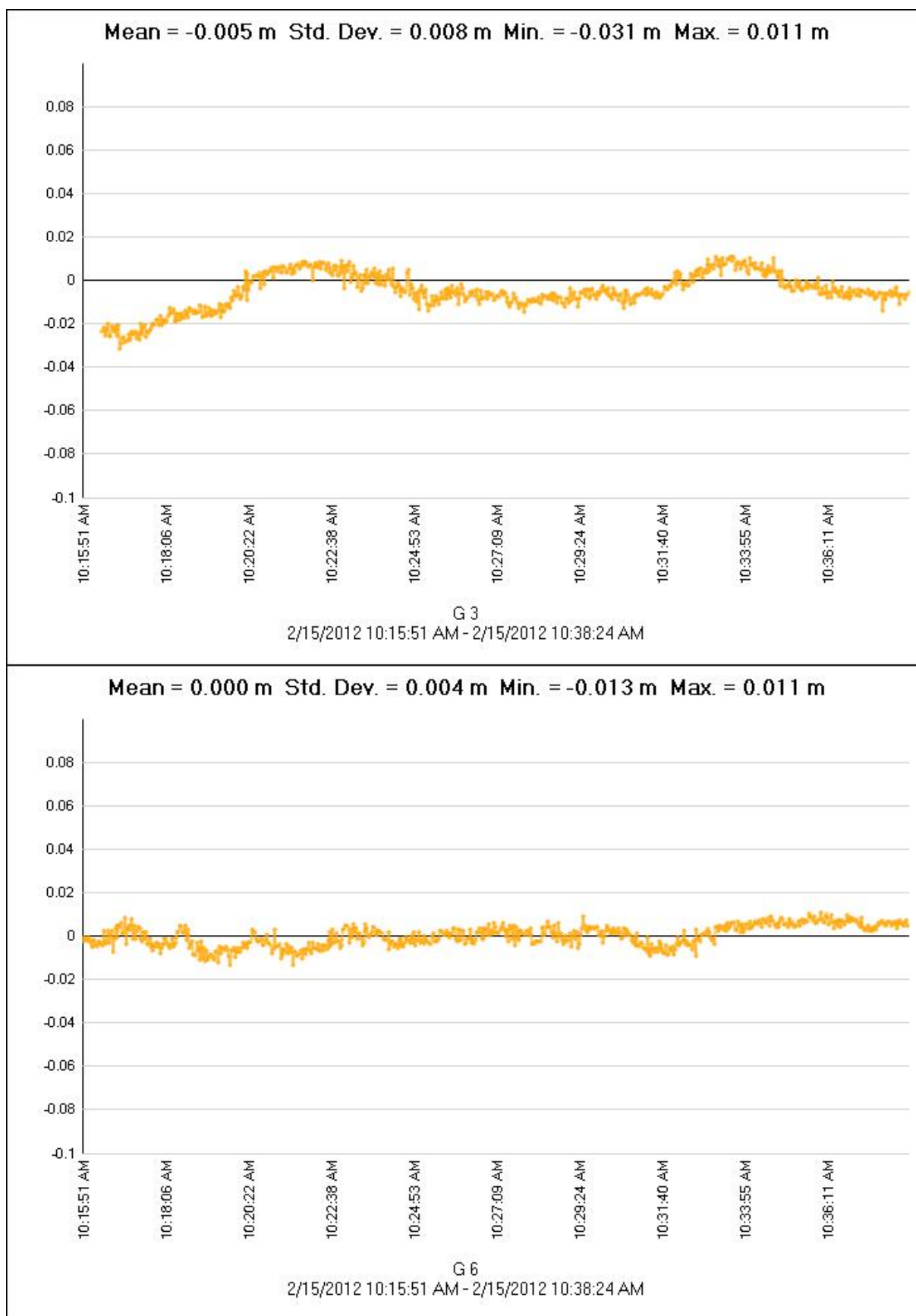
## Occupations

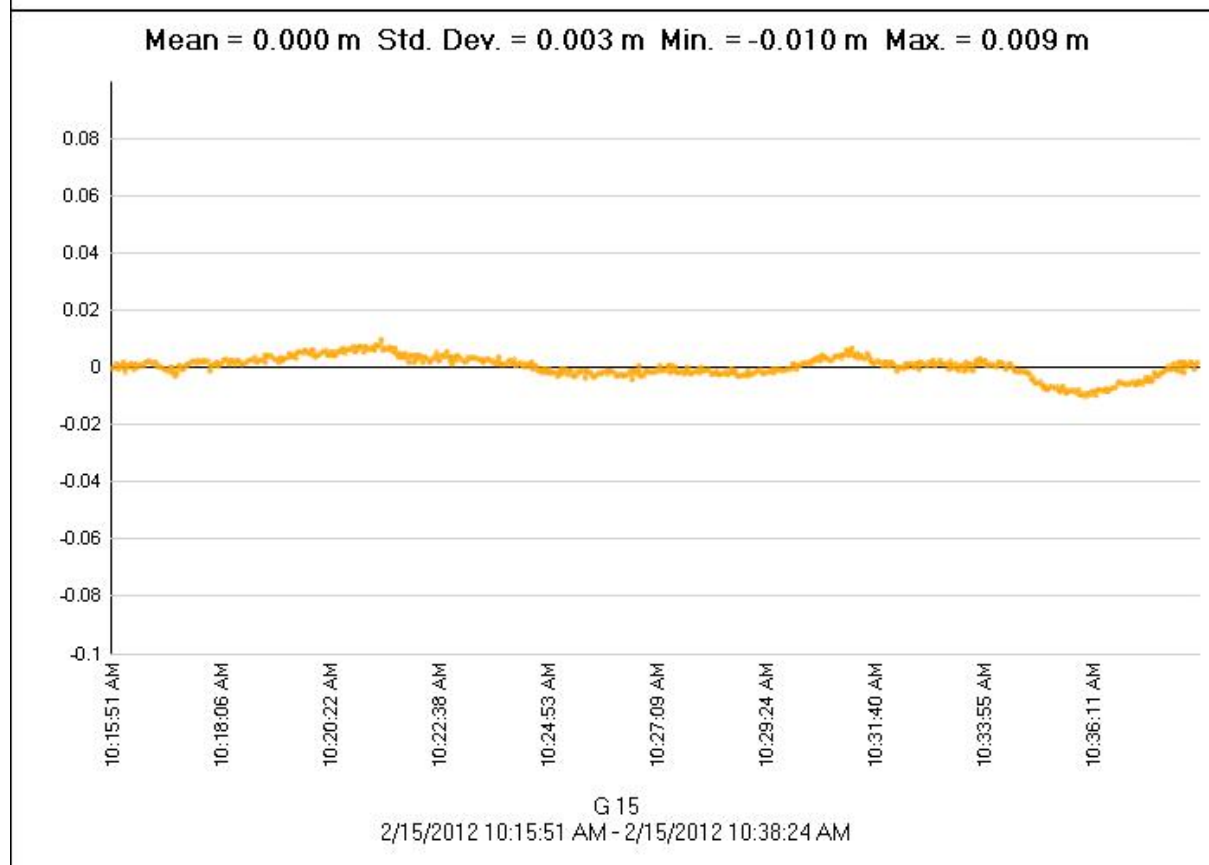
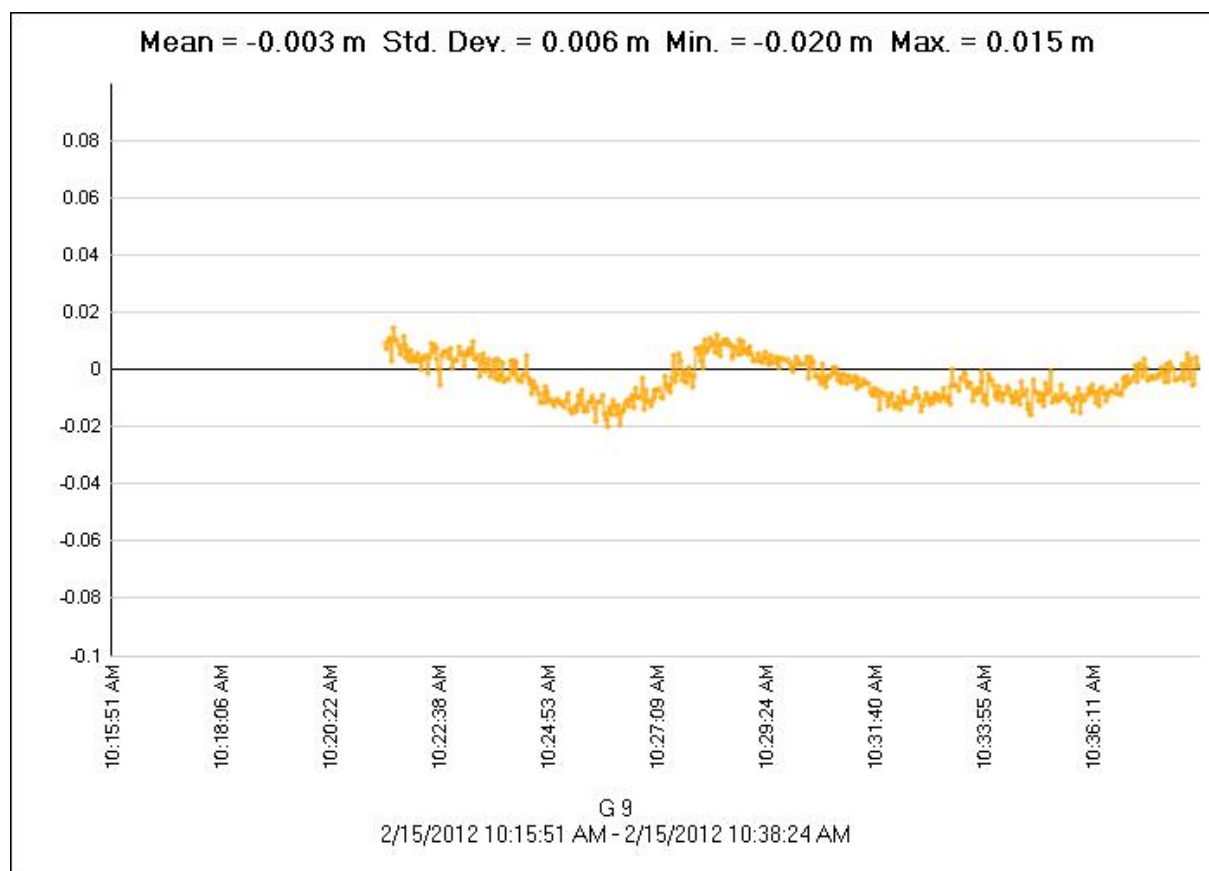
	From	To
Point ID:	JJ0729	FVA22-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\900040460.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00030461.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

# Tracking Summary



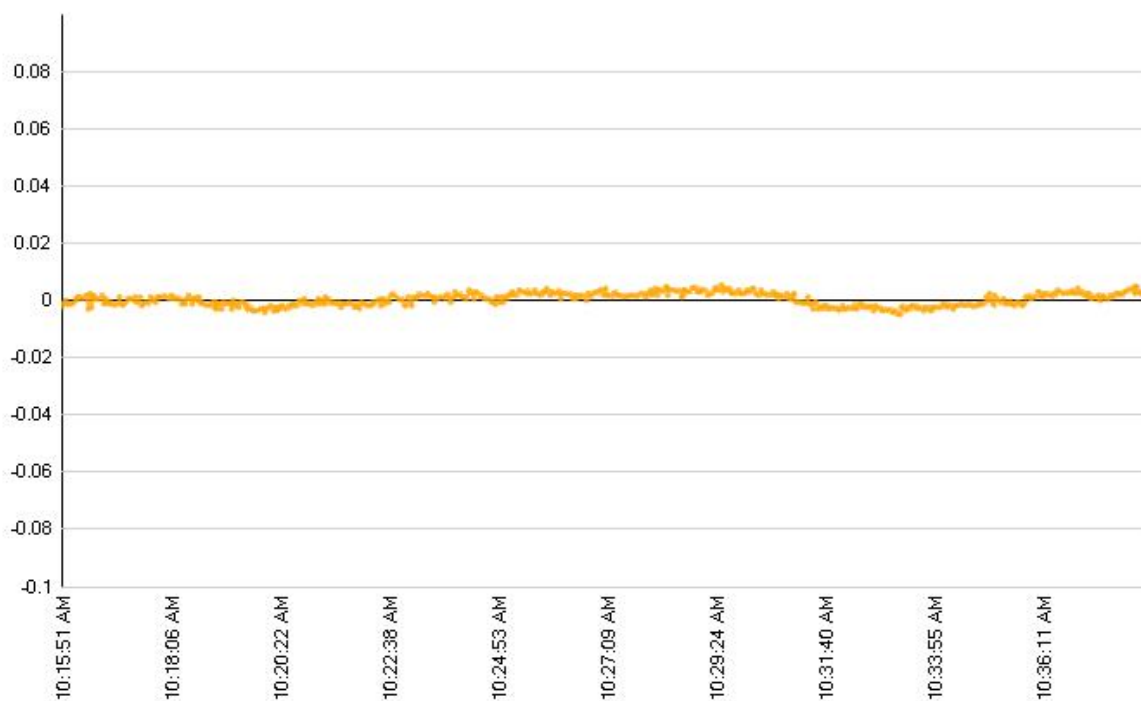
## Residuals







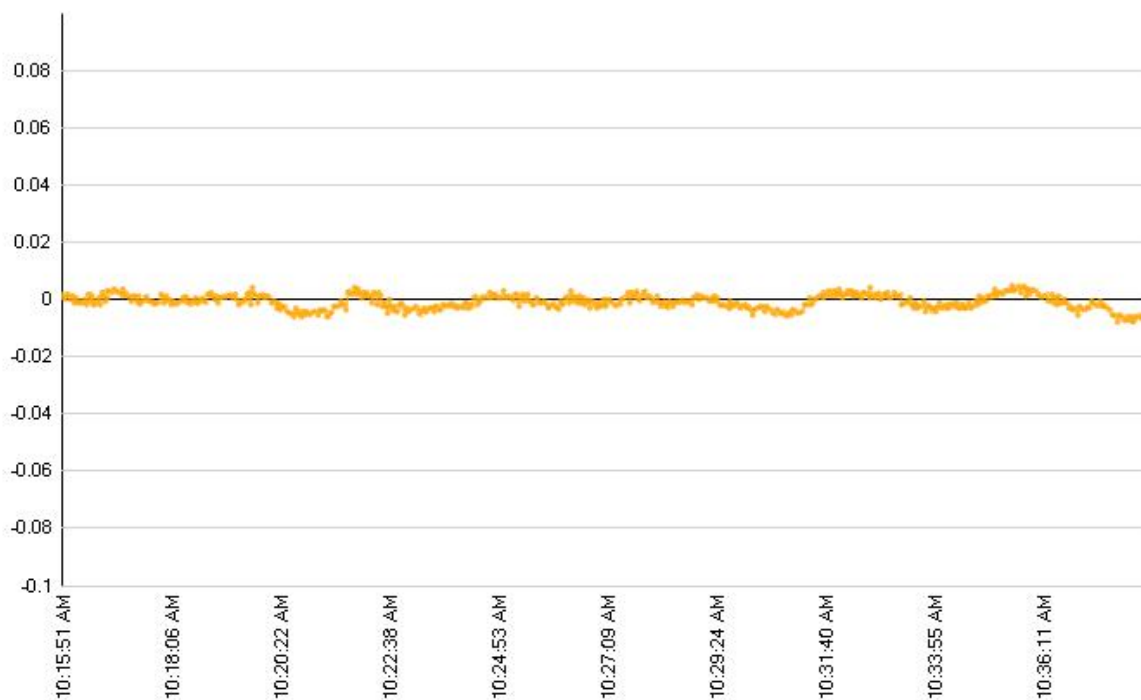
Mean = 0.000 m Std. Dev. = 0.002 m Min. = -0.005 m Max. = 0.005 m



G 18

2/15/2012 10:15:51 AM - 2/15/2012 10:38:24 AM

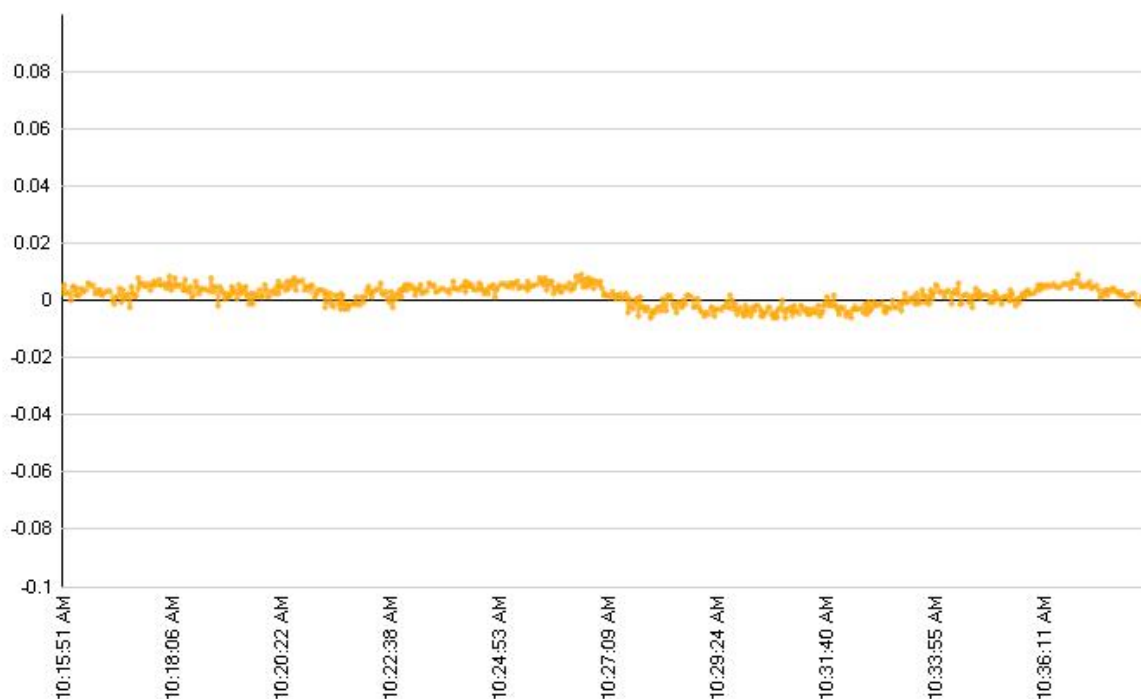
Mean = -0.001 m Std. Dev. = 0.002 m Min. = -0.008 m Max. = 0.005 m



G 21

2/15/2012 10:15:51 AM - 2/15/2012 10:38:24 AM

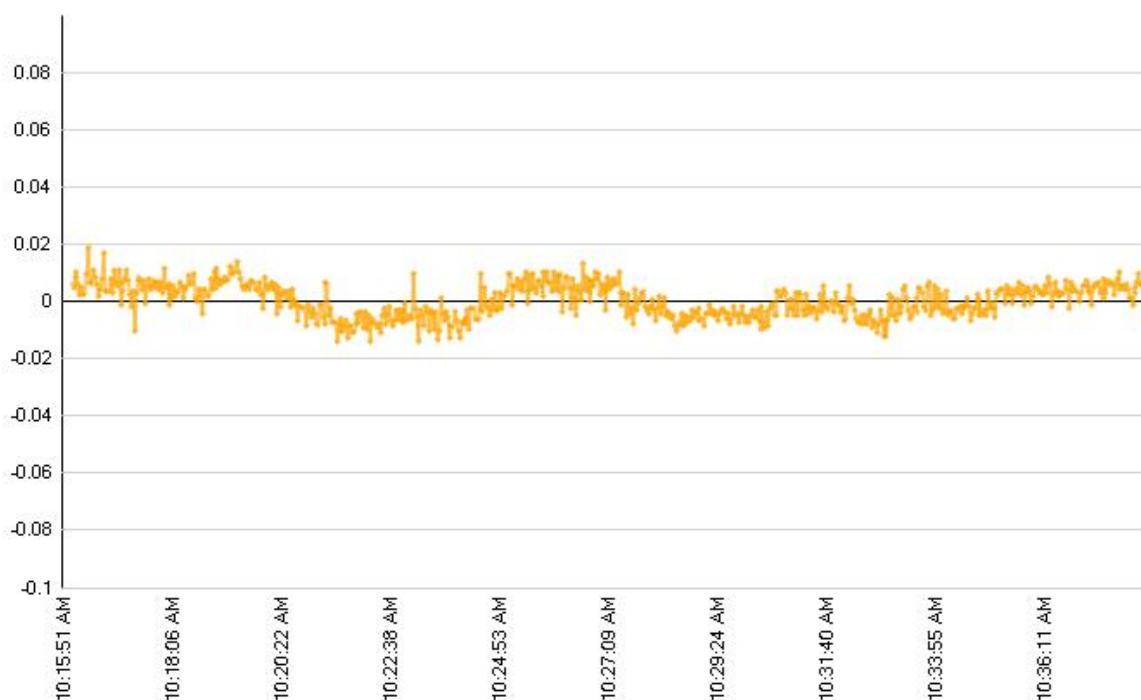
Mean = 0.001 m Std. Dev. = 0.003 m Min. = -0.006 m Max. = 0.009 m



G 22

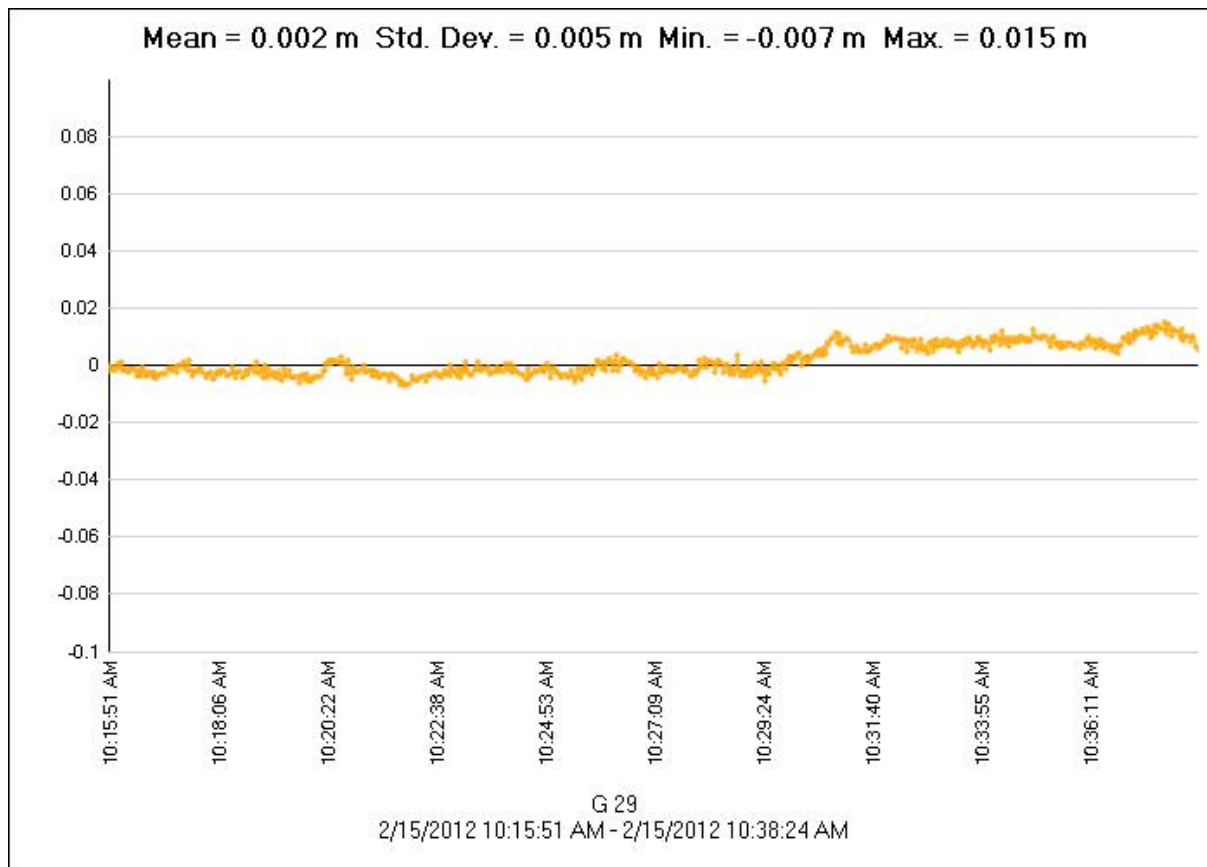
2/15/2012 10:15:51 AM - 2/15/2012 10:38:24 AM

Mean = 0.000 m Std. Dev. = 0.005 m Min. = -0.014 m Max. = 0.019 m



G 27

2/15/2012 10:15:51 AM - 2/15/2012 10:38:24 AM



## Processing style

Elevation mask:	10.0 deg
Auto start processing:	Yes
Start automatic ID numbering:	AUTO0001
Continuous vectors:	No
Generate residuals:	Yes
Antenna model:	Automatic
Ephemeris type:	Automatic
Frequency:	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

---

JJ0729 - SVA04-B1 (10:55:37 AM-11:15:56 AM) (S284)

---

Baseline observation: JJ0729 --- SVA04-B1 (B284)

Processed: 4/9/2012 10:38:26 AM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.013 m

Vertical precision: 0.013 m

RMS: 0.003 m

Maximum PDOP: 1.910

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/15/2012 10:55:37 AM (Local: UTC-7hr)

Processing stop time: 2/15/2012 11:15:56 AM (Local: UTC-7hr)

Processing duration: 00:20:18

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	JJ0729				
Grid		Local		Global	
Easting	235140.798 m	Latitude	N38°02'39.99776"	Latitude	N38°02'39.99775"
Northing	4215047.569 m	Longitude	W102°01'05.50297"	Longitude	W102°01'05.50297"
Elevation	1035.400 m	Height	1011.331 m	Height	1011.331 m

To:	SVA04-B1				
Grid		Local		Global	
Easting	237043.961 m	Latitude	N38°08'18.37440"	Latitude	N38°08'18.37440"
Northing	4225429.223 m	Longitude	W102°00'01.28118"	Longitude	W102°00'01.28118"
Elevation	1105.854 m	Height	1081.908 m	Height	1081.908 m

Vector					
9Ughb[	1903.163 m	NS Fwd Azimuth	8°31'30"	L	2858.810 m
Bcfh\jb[	10381.654 m	Ellipsoid Dist.	10549.826 m	M	5916.548 m
9`Yj Uhcb	70.454 m	<Y][\h	70.576 m	N	8256.033 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	0.006 m	Point Description	0.006 m	Point Type	0.005 m

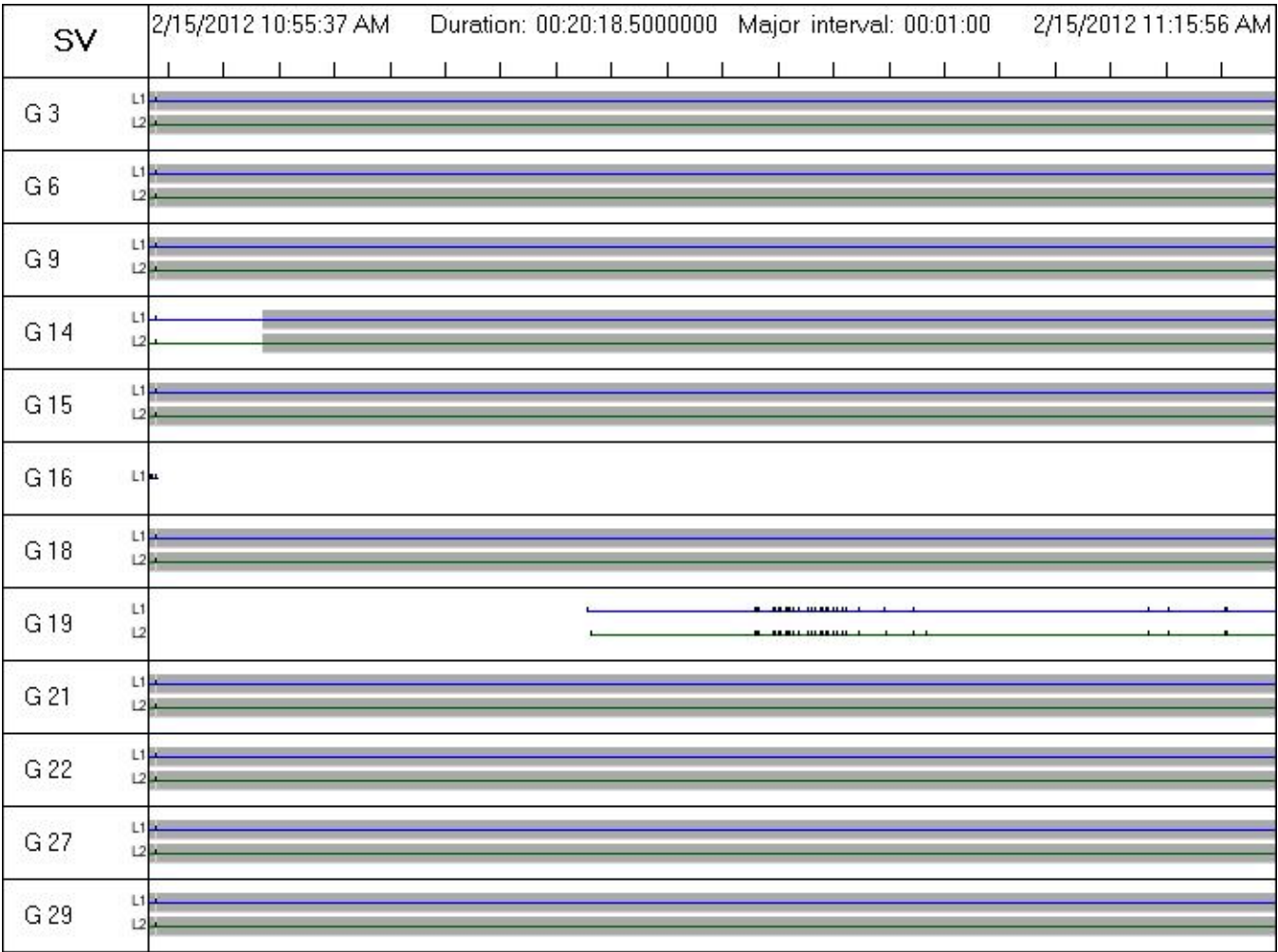
## Aposteriori Covariance Matrix (Meter<sup>2</sup>)

	X	Y	Z
X	0.0000109601		
Y	0.0000107914	0.0000415353	
Z	-0.0000003081	-0.0000044173	0.0000231174

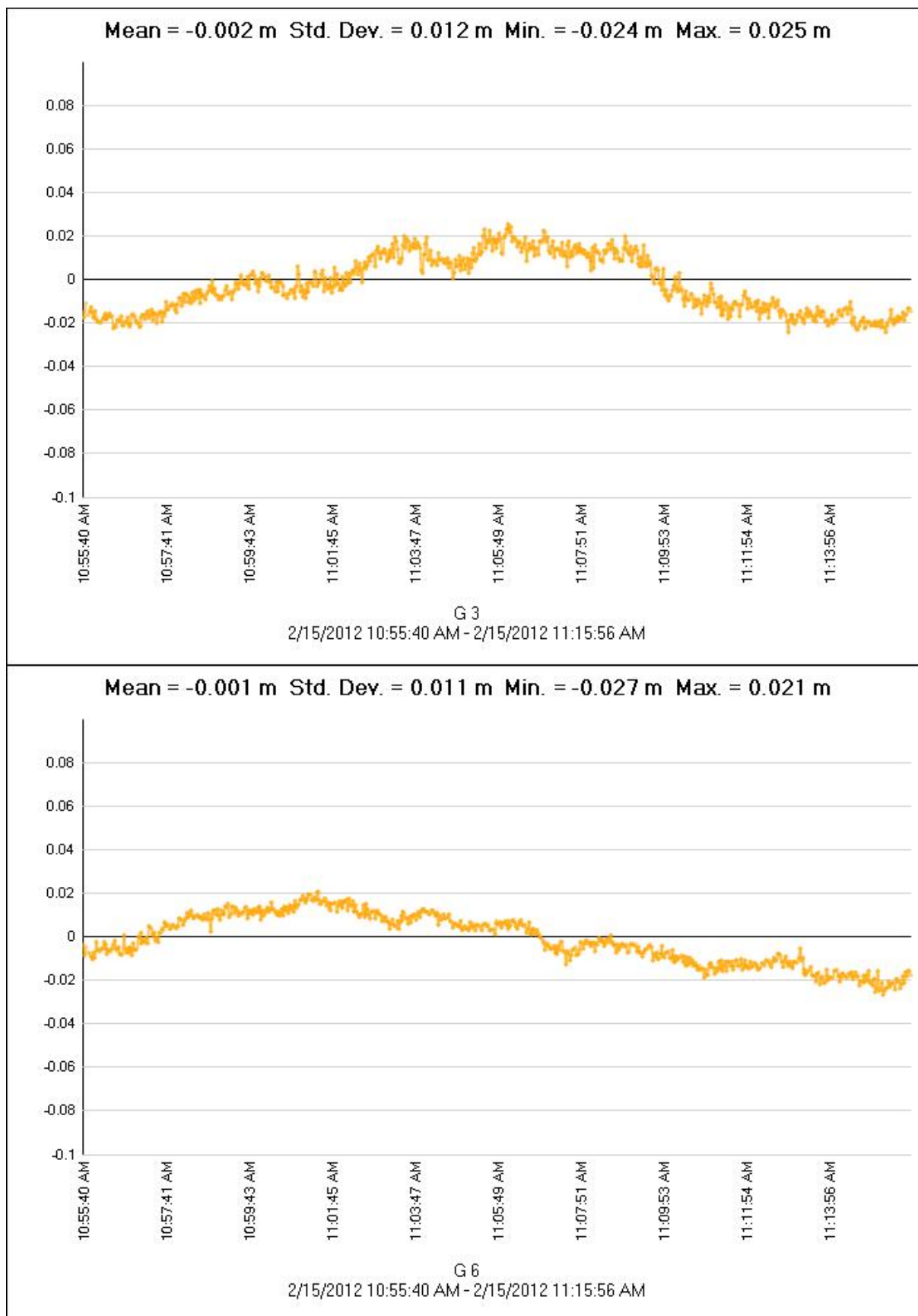
## Occupations

	From	To
Point ID:	JJ0729	SVA04-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\900040460.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00030462.12o
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 = 0.005 m Std. Dev. = 0.008 m Min. = -0.017 m Max. = 0.025 m



G 9

2/15/2012 10:55:40 AM - 2/15/2012 11:15:56 AM

Mean = -0.007 m Std. Dev. = 0.017 m Min. = -0.050 m Max. = 0.049 m

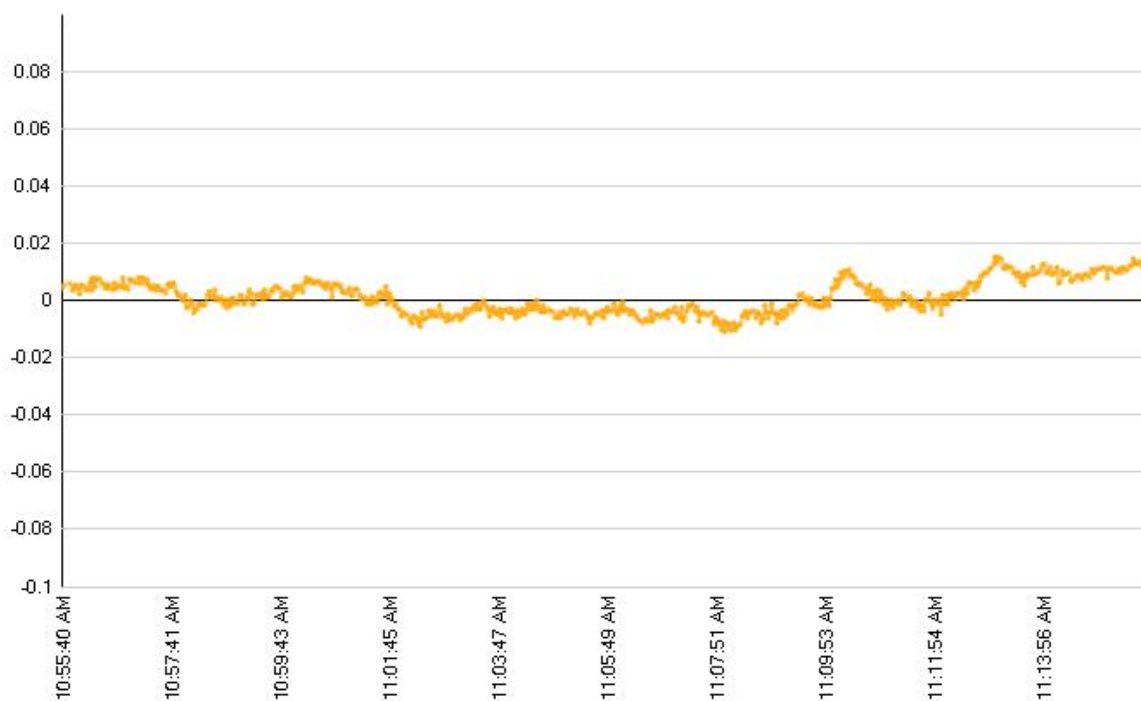


G 14

2/15/2012 10:55:40 AM - 2/15/2012 11:15:56 AM



Mean = 0.001 m Std. Dev. = 0.005 m Min. = -0.011 m Max. = 0.015 m



G 15

2/15/2012 10:55:40 AM - 2/15/2012 11:15:56 AM

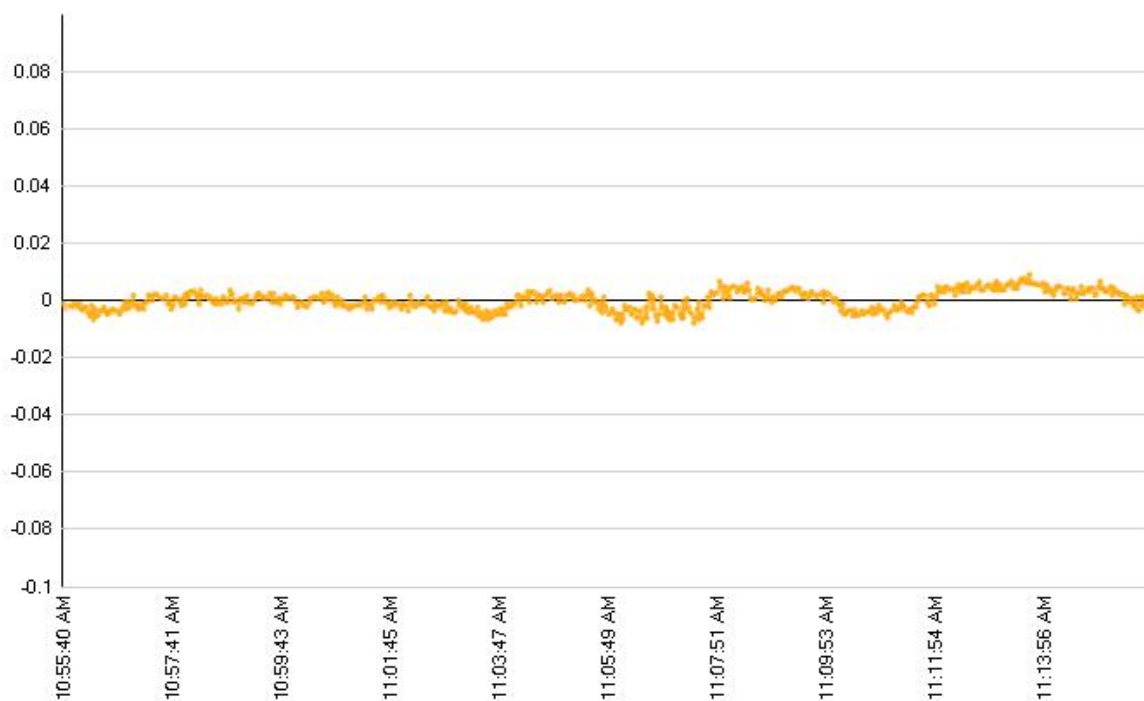
Mean = -0.002 m Std. Dev. = 0.003 m Min. = -0.011 m Max. = 0.005 m



G 18

2/15/2012 10:55:40 AM - 2/15/2012 11:15:56 AM

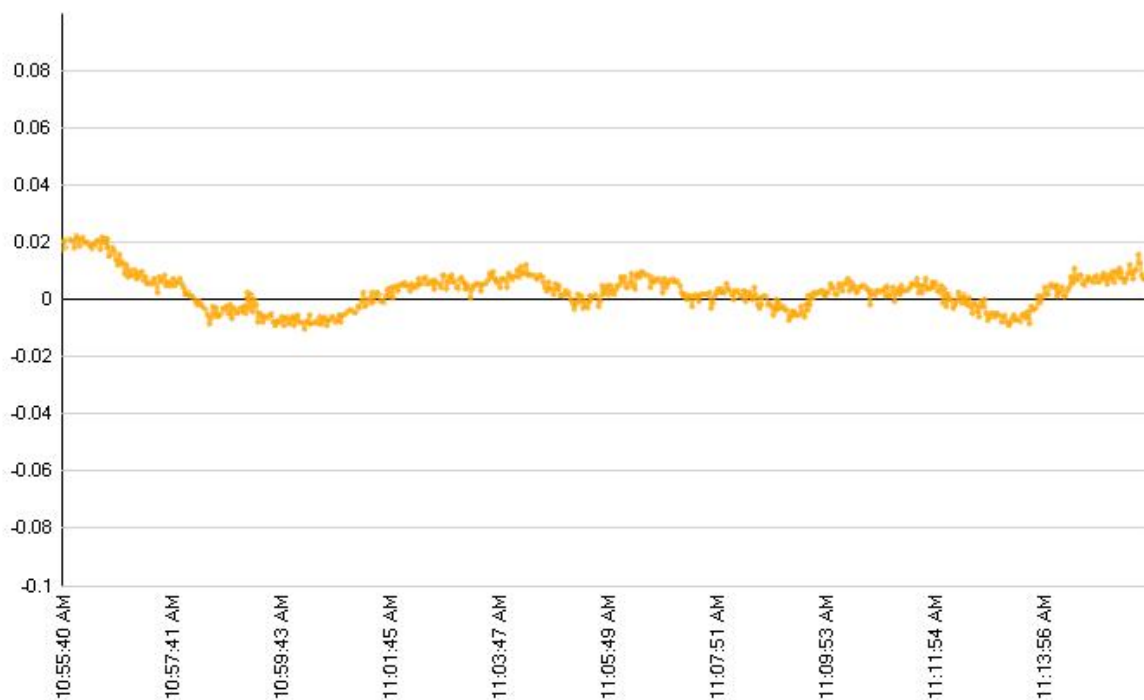
Mean = 0.000 m Std. Dev. = 0.003 m Min. = -0.008 m Max. = 0.009 m



G 21

2/15/2012 10:55:40 AM - 2/15/2012 11:15:56 AM

Mean = 0.003 m Std. Dev. = 0.006 m Min. = -0.010 m Max. = 0.022 m



G 22

2/15/2012 10:55:40 AM - 2/15/2012 11:15:56 AM

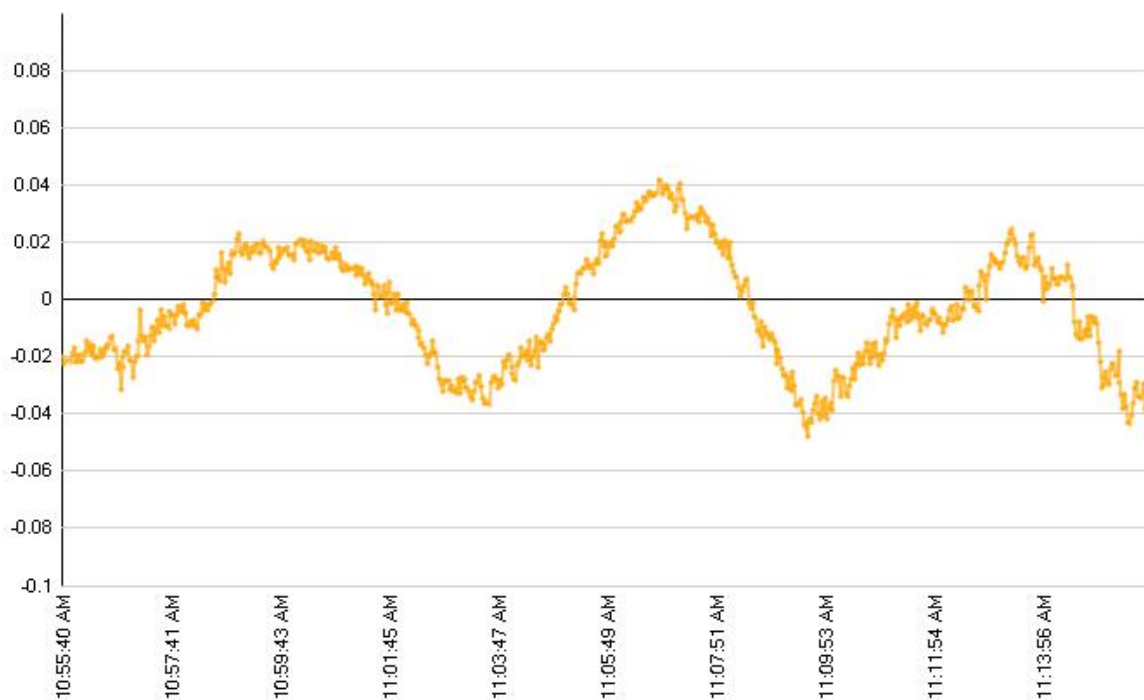
Mean = 0.004 m Std. Dev. = 0.012 m Min. = -0.023 m Max. = 0.033 m



G 27

2/15/2012 10:55:40 AM - 2/15/2012 11:15:56 AM

Mean = -0.003 m Std. Dev. = 0.019 m Min. = -0.048 m Max. = 0.041 m





G 29

2/15/2012 10:55:40 AM - 2/15/2012 11:15:56 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

---

JJ0729 - FVA04-B1 (11:20:37 AM-11:40:57 AM) (S288)

---

Baseline observation: JJ0729 --- FVA04-B1 (B288)

Processed: 4/9/2012 10:38:47 AM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.011 m

Vertical precision: 0.013 m

RMS: 0.001 m

Maximum PDOP: 2.611

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/15/2012 11:20:37 AM (Local: UTC-7hr)

Processing stop time: 2/15/2012 11:40:57 AM (Local: UTC-7hr)

Processing duration: 00:20:19

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	JJ0729				
Grid		Local		Global	
Easting	235140.798 m	Latitude	N38°02'39.99776"	Latitude	N38°02'39.99775"
Northing	4215047.569 m	Longitude	W102°01'05.50297"	Longitude	W102°01'05.50297"
Elevation	1035.400 m	Height	1011.331 m	Height	1011.331 m

To:	FVA04-B1				
Grid		Local		Global	
Easting	237131.099 m	Latitude	N38°08'13.61606"	Latitude	N38°08'13.61606"
Northing	4225279.546 m	Longitude	W101°59'57.50772"	Longitude	W101°59'57.50772"
Elevation	1110.355 m	Height	1086.405 m	Height	1086.405 m

Vector					
9Ughb[	1990.301 m	NS Fwd Azimuth	9°08'40"	L	2929.133 m
BcfA\jb[	10231.976 m	Ellipsoid Dist.	10418.986 m	M	5805.340 m
9Yj Uhcb	74.955 m	<Y][\h	75.074 m	N	8143.395 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	0.006 m

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

	X	Y	Z
X	0.0000088597		
Y	0.0000080844	0.0000337025	
Z	-0.0000038628	-0.0000116684	0.0000322794

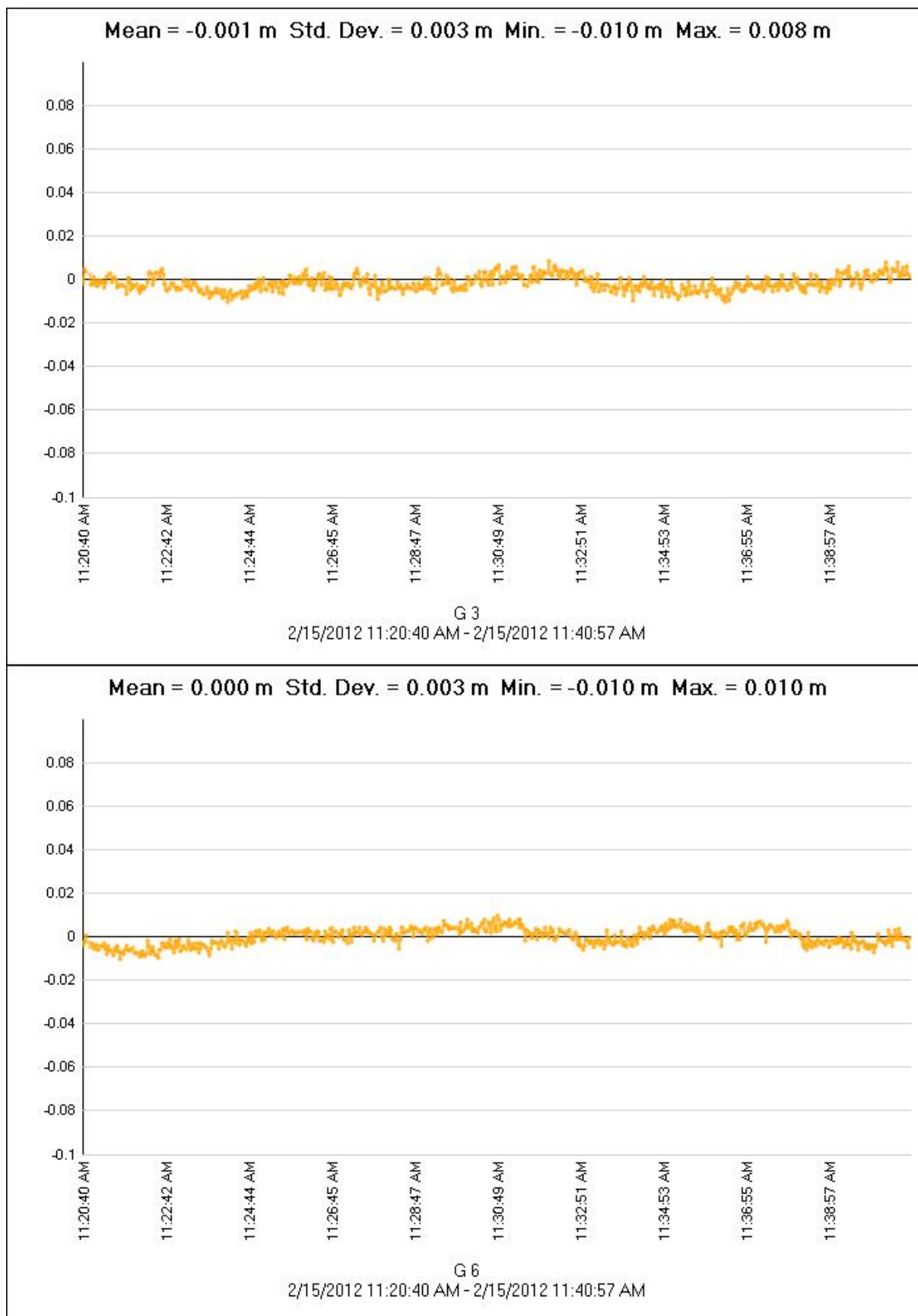
## Occupations

	From	To
Point ID:	JJ0729	FVA04-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\900040460.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00030463.12o
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

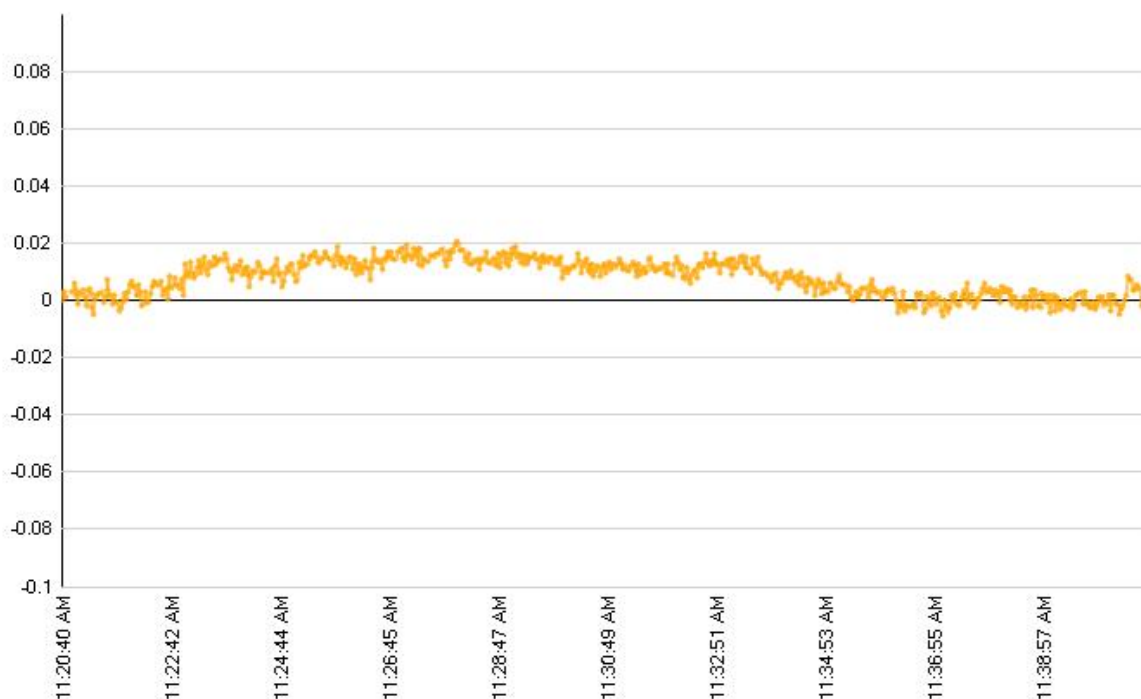


## Residuals





Mean = 0.007 m Std. Dev. = 0.006 m Min. = -0.005 m Max. = 0.021 m



G 9

2/15/2012 11:20:40 AM - 2/15/2012 11:40:57 AM

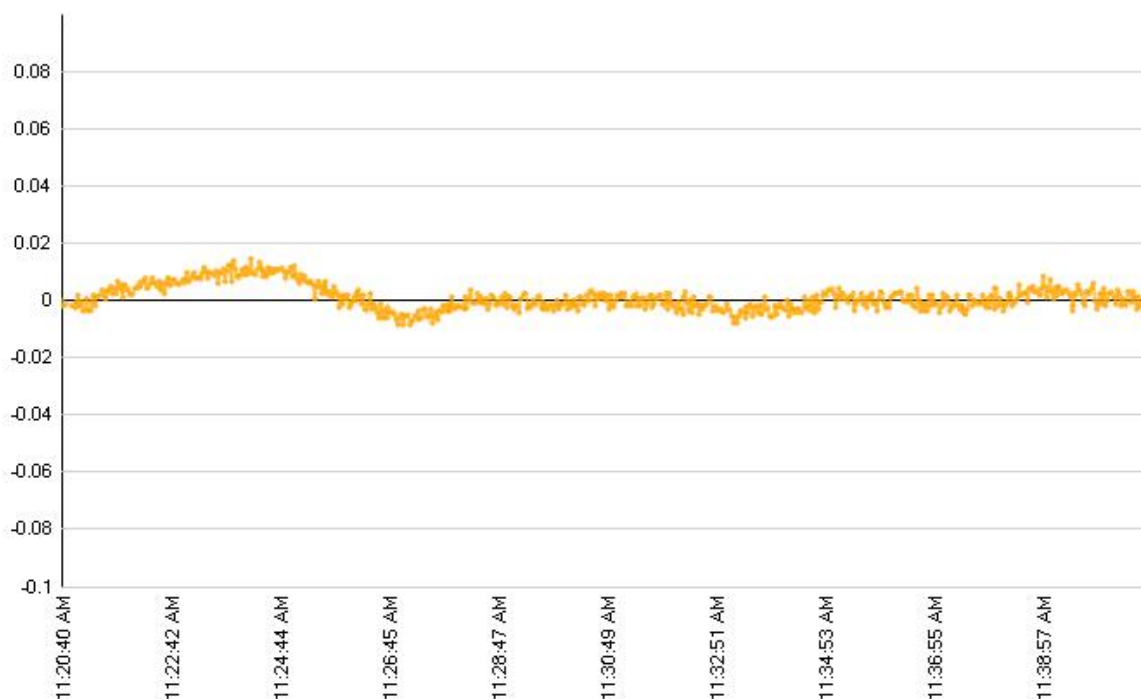
Mean = -0.001 m Std. Dev. = 0.009 m Min. = -0.022 m Max. = 0.025 m



G 14

2/15/2012 11:20:40 AM - 2/15/2012 11:40:57 AM

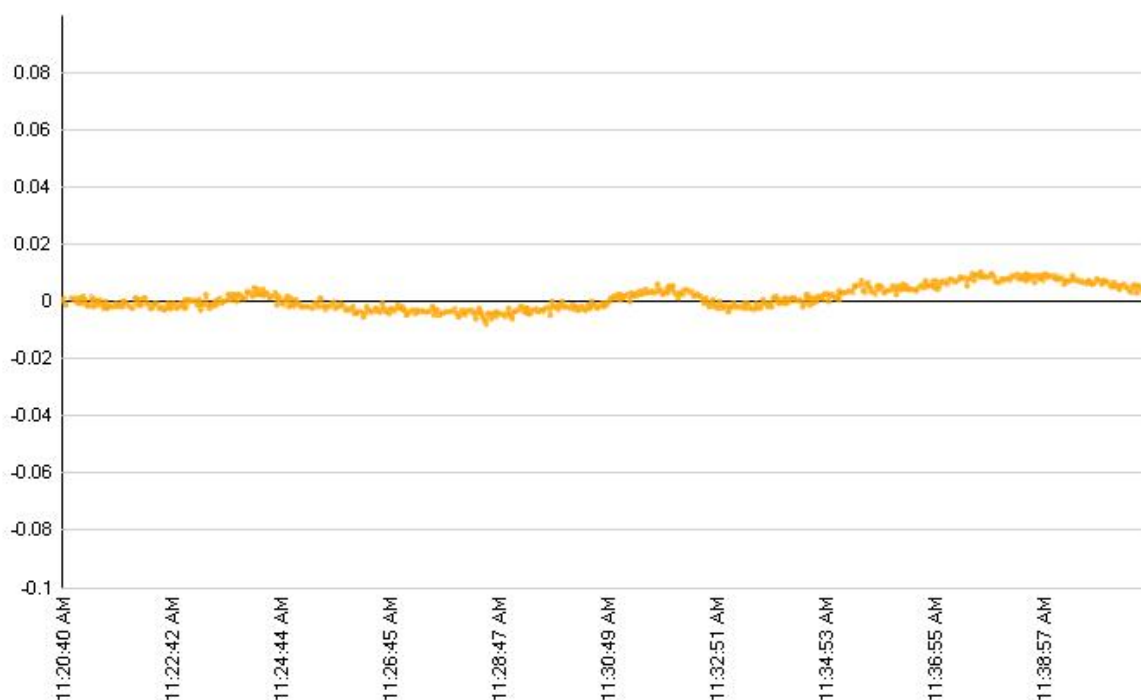
Mean = 0.001 m Std. Dev. = 0.004 m Min. = -0.009 m Max. = 0.014 m



G 15

2/15/2012 11:20:40 AM - 2/15/2012 11:40:57 AM

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



G 18

2/15/2012 11:20:40 AM - 2/15/2012 11:40:57 AM

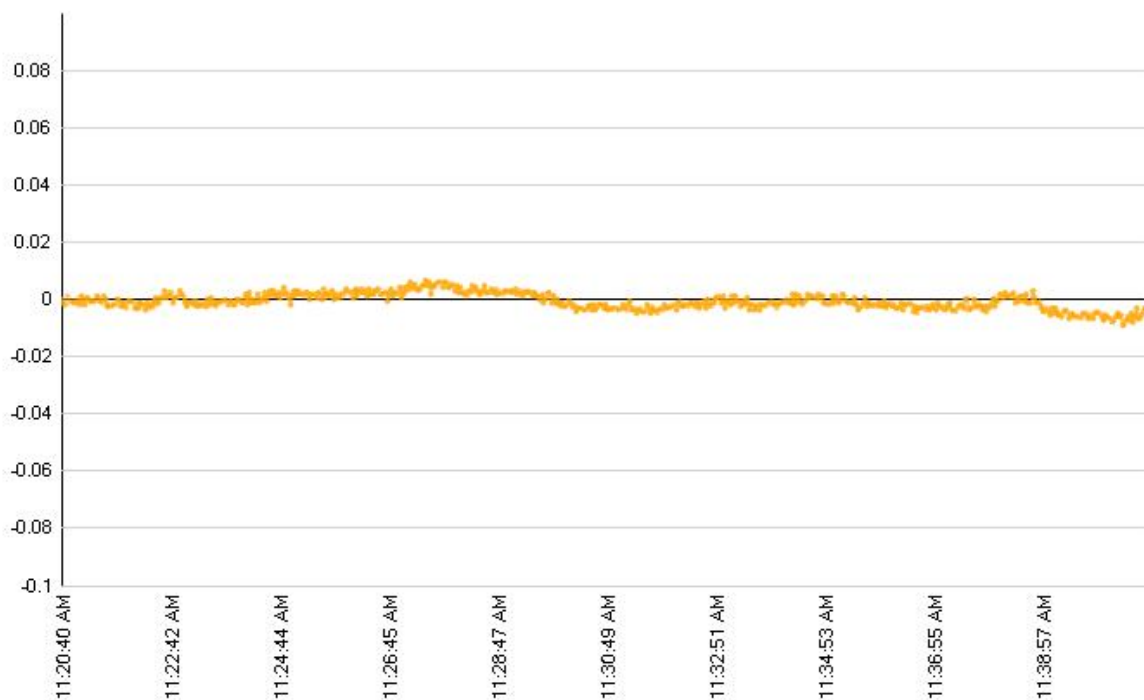
Mean = 0.012 m Std. Dev. = 0.012 m Min. = -0.019 m Max. = 0.047 m



G 19

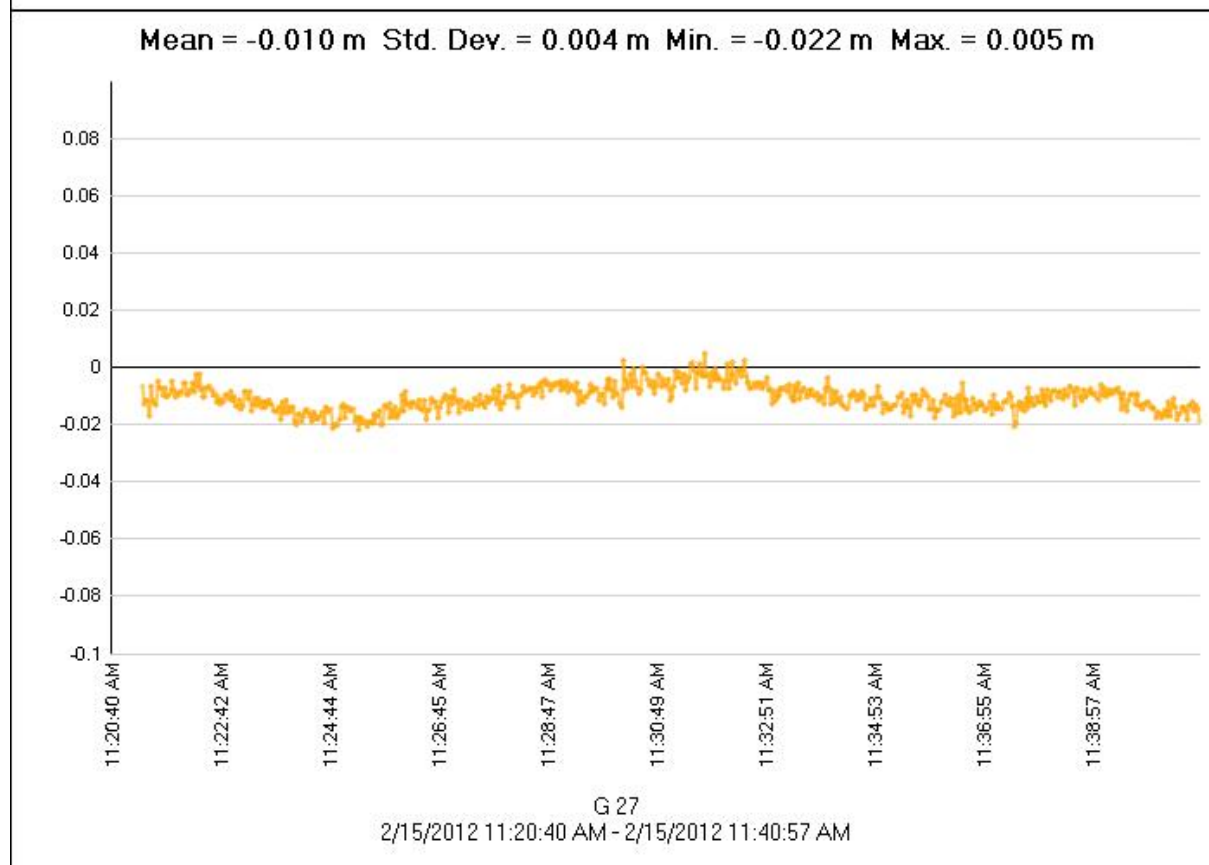
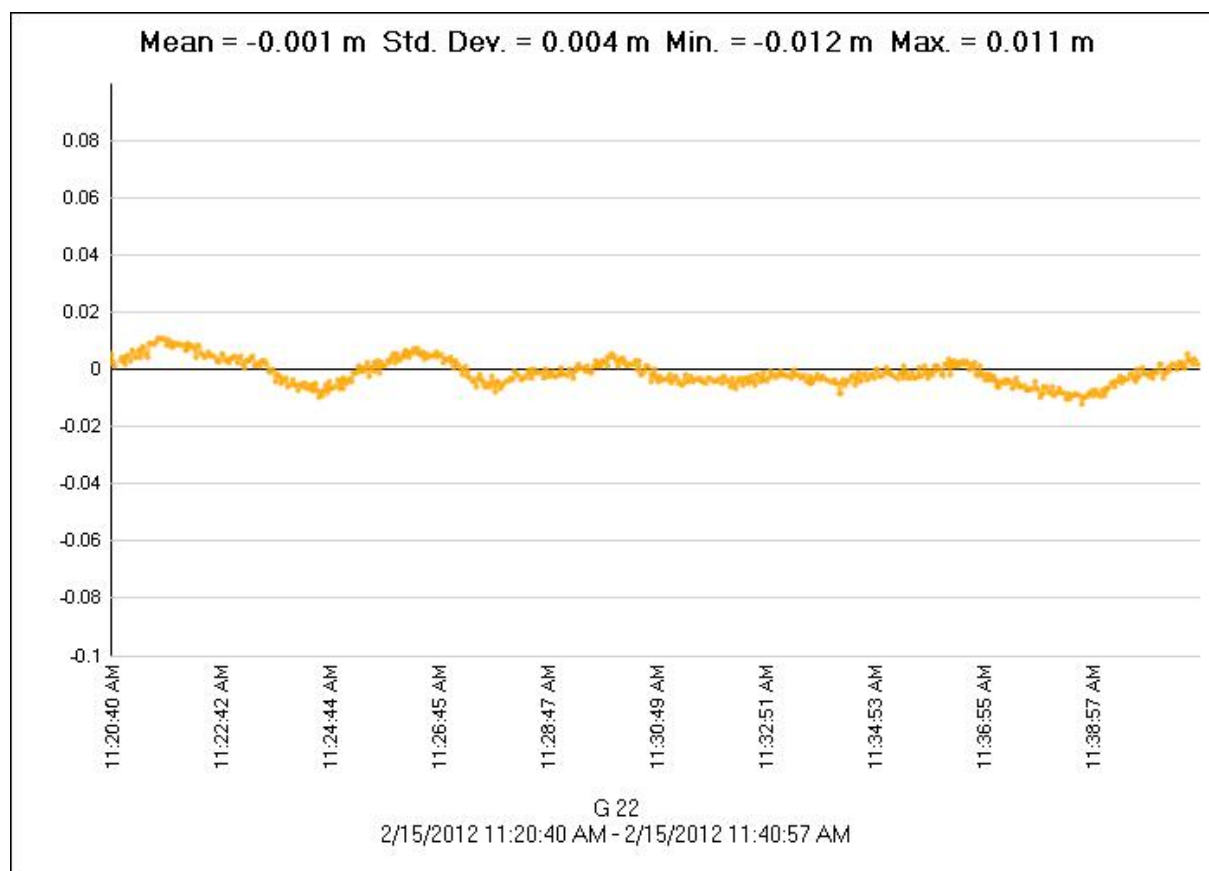
2/15/2012 11:20:40 AM - 2/15/2012 11:40:57 AM

Mean = -0.001 m Std. Dev. = 0.003 m Min. = -0.009 m Max. = 0.006 m



G 21



2/15/2012 11:20:40 AM - 2/15/2012 11:40:57 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

Baseline observation: JJ0729 --- FVA01-B1 (B294)

Processed: 4/9/2012 10:38:38 AM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.009 m

Vertical precision: 0.016 m

RMS: 0.003 m

Maximum PDOP: 2.530

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/15/2012 12:00:07 PM (Local: UTC-7hr)

Processing stop time: 2/15/2012 12:19:49 PM (Local: UTC-7hr)

Processing duration: 00:19:42

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	JJ0729				
Grid		Local		Global	
Easting	235140.798 m	Latitude	N38°02'39.99776"	Latitude	N38°02'39.99775"
Northing	4215047.569 m	Longitude	W102°01'05.50297"	Longitude	W102°01'05.50297"
Elevation	1035.400 m	Height	1011.331 m	Height	1011.331 m

To:	FVA01-B1				
Grid		Local		Global	
Easting	238870.217 m	Latitude	N38°11'33.47325"	Latitude	N38°11'33.47325"
Northing	4231391.601 m	Longitude	W101°58'54.23245"	Longitude	W101°58'54.23245"
Elevation	1160.478 m	Height	1136.603 m	Height	1136.603 m

Vector					
9Ughb[	3729.420 m	NS Fwd Azimuth	10°59'23"	L	5219.121 m
Bcfh\jb[	16344.032 m	Ellipsoid Dist.	16756.554 m	M	9172.060 m
9Yj Uhcb	125.078 m	<Y][\h	125.272 m	N	13020.236 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	0.004 m	Point Type	0.006 m
Point ID	0.008 m	Point Description	0.008 m	Point Type	0.006 m

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

	X	Y	Z
X	0.0000086137		
Y	0.0000088451	0.0000396451	
Z	-0.0000085530	-0.0000232384	0.0000343207

## Occupations

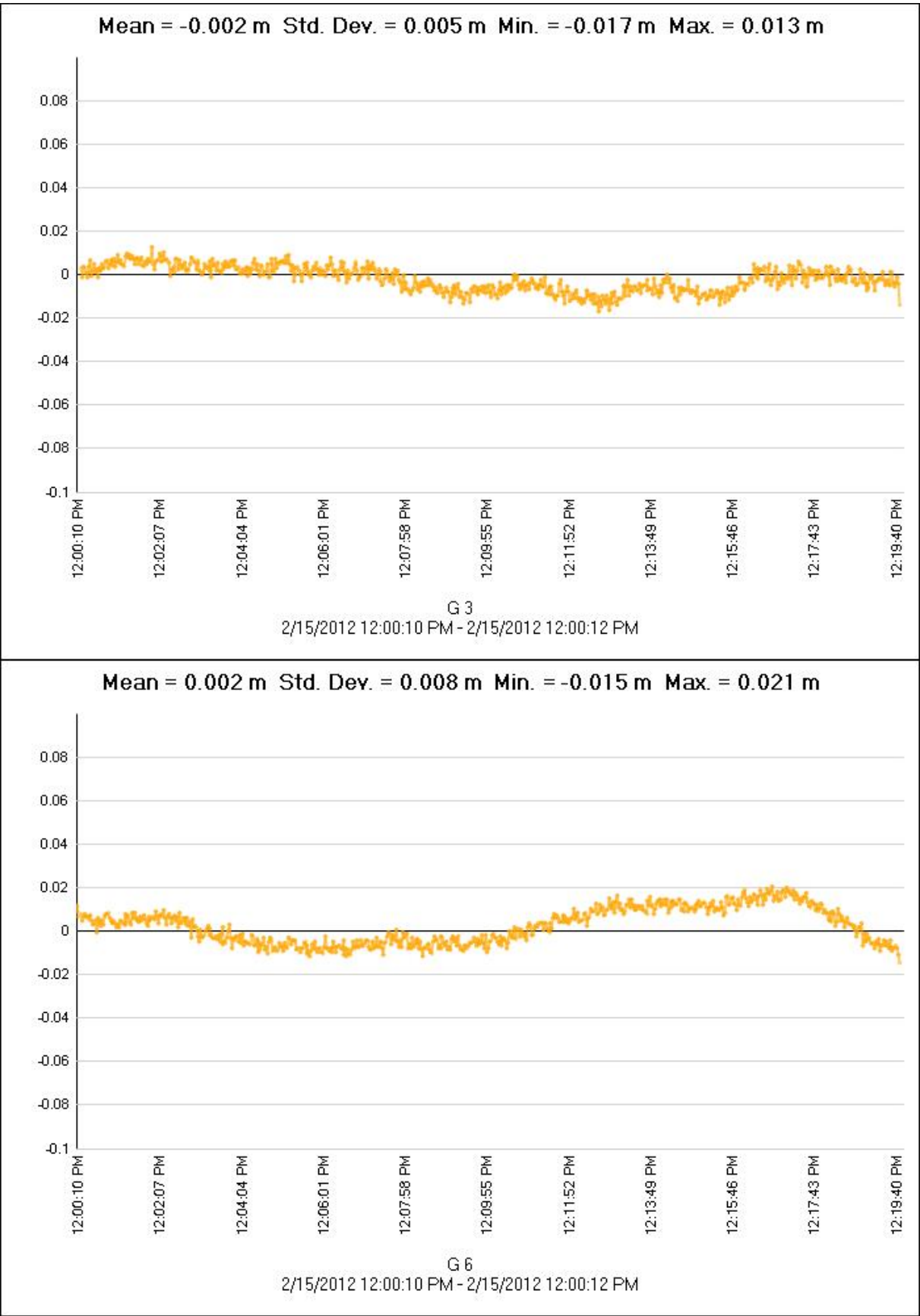
	From	To
Point ID:	JJ0729	FVA01-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\900040460.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00030464.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

Tracking Summary

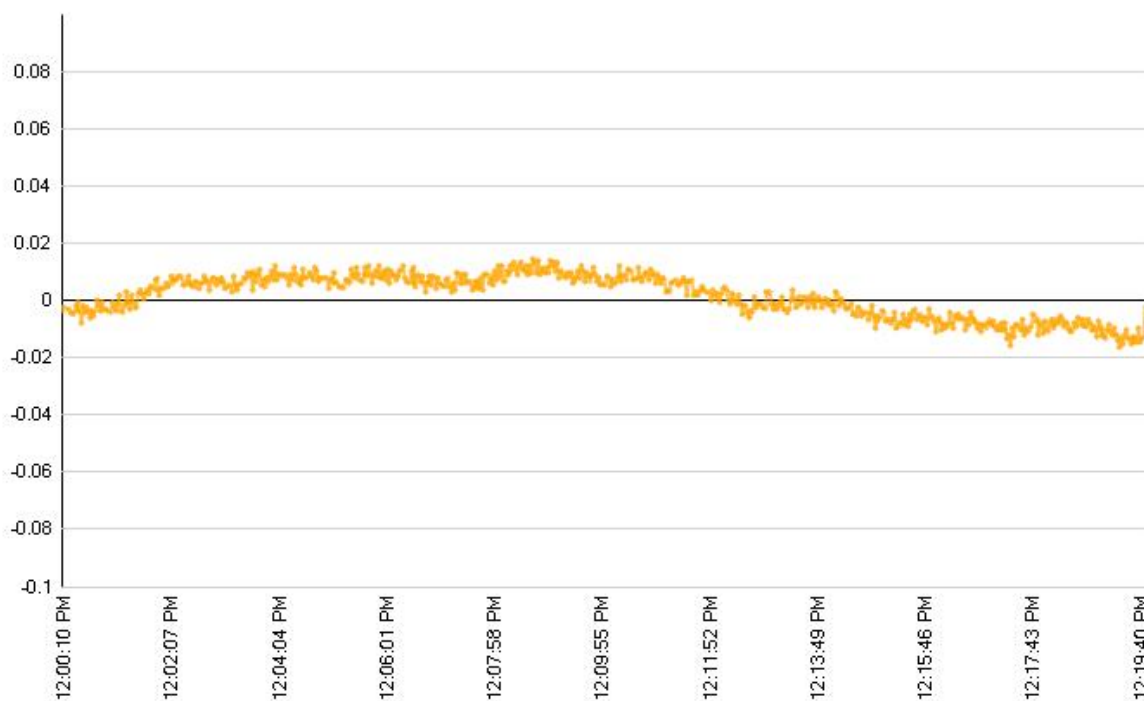
SV	2/15/2012 12:00:07 PM		Duration: 00:19:47 Major interval: 00:01:00		2/15/2012 12:19:54 PM	
G 3	L1					
	L2					
G 6	L1					
	L2					
G 9	L1					
	L2					
G 14	L1					
	L2					
G 15	L1					
	L2					
G 18	L1					
	L2					
G 19	L1					
	L2					
G 21	L1					
	L2					
G 22	L1					
	L2					
G 27	L1					
	L2					



Residuals



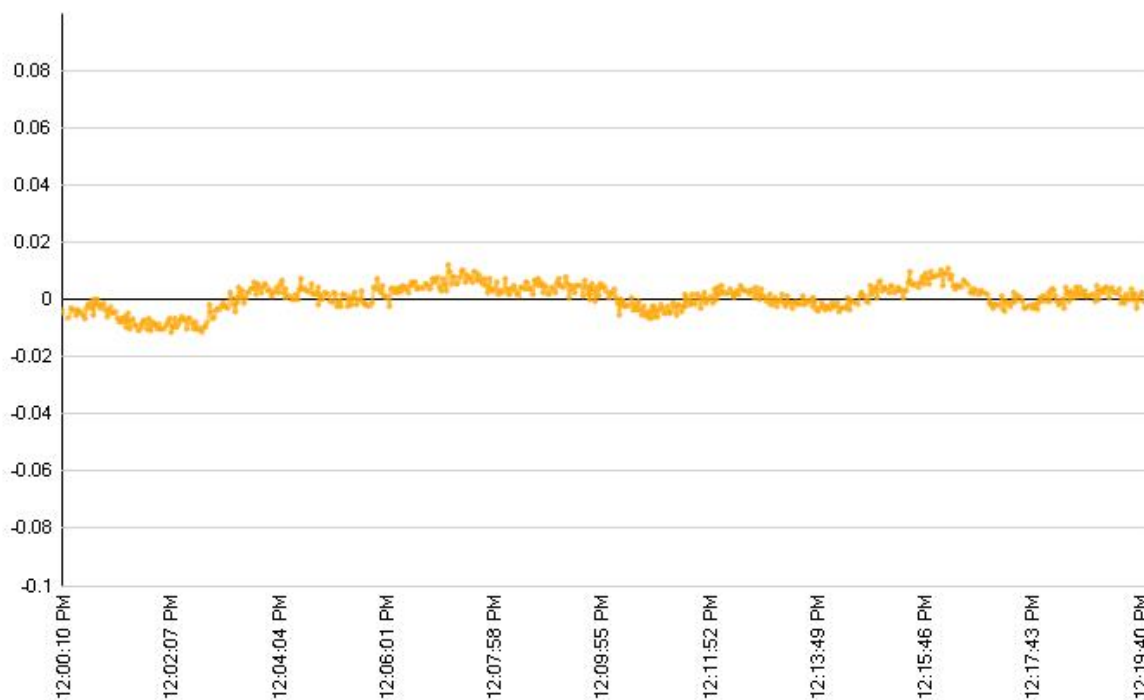
Mean = 0.001 m Std. Dev. = 0.007 m Min. = -0.016 m Max. = 0.014 m



G 9

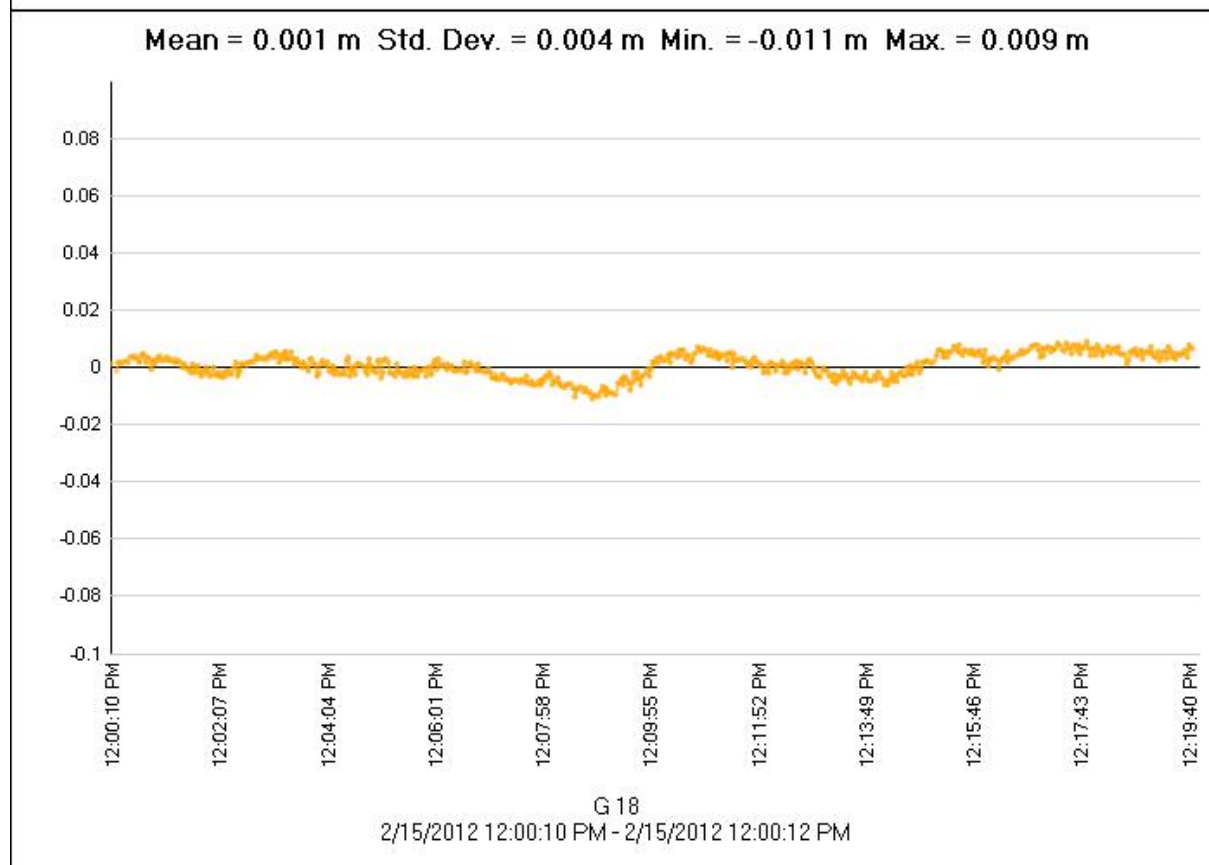
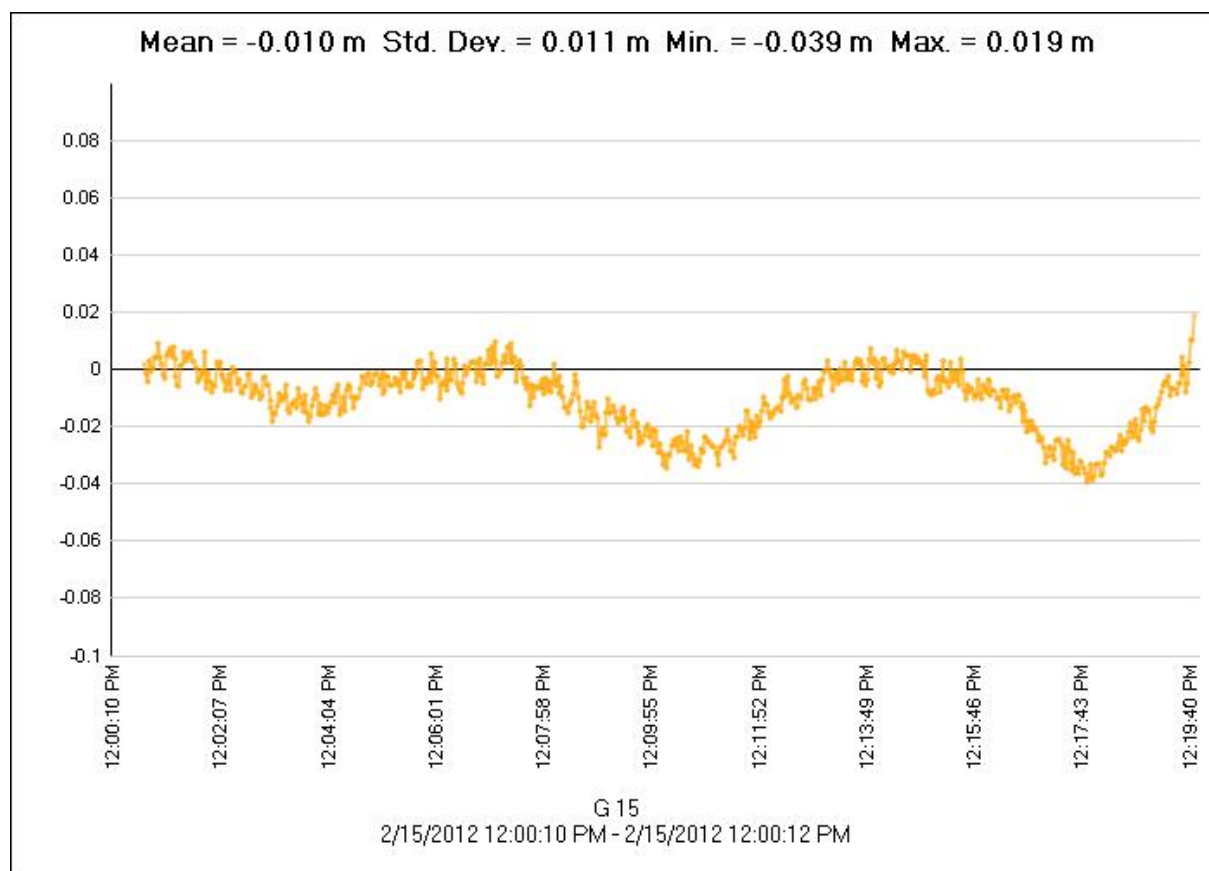
2/15/2012 12:00:10 PM - 2/15/2012 12:00:12 PM

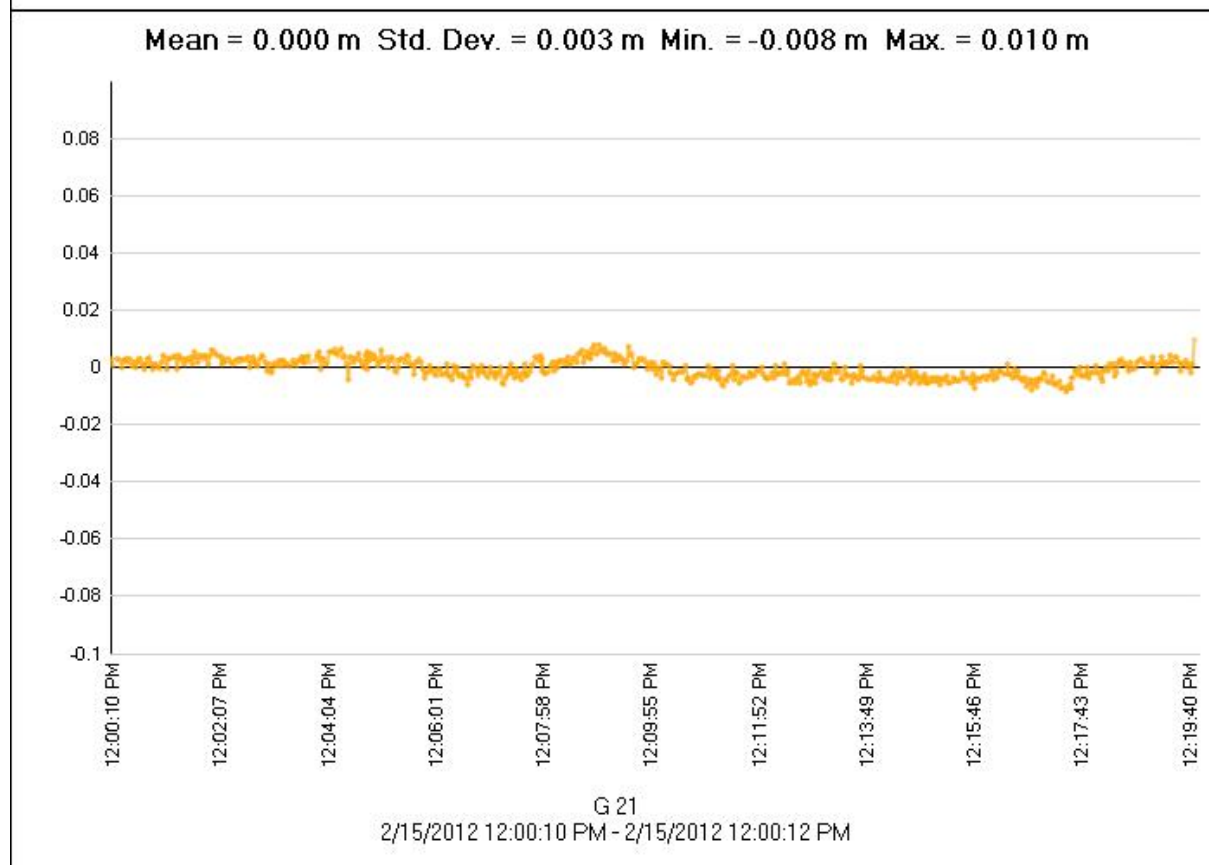
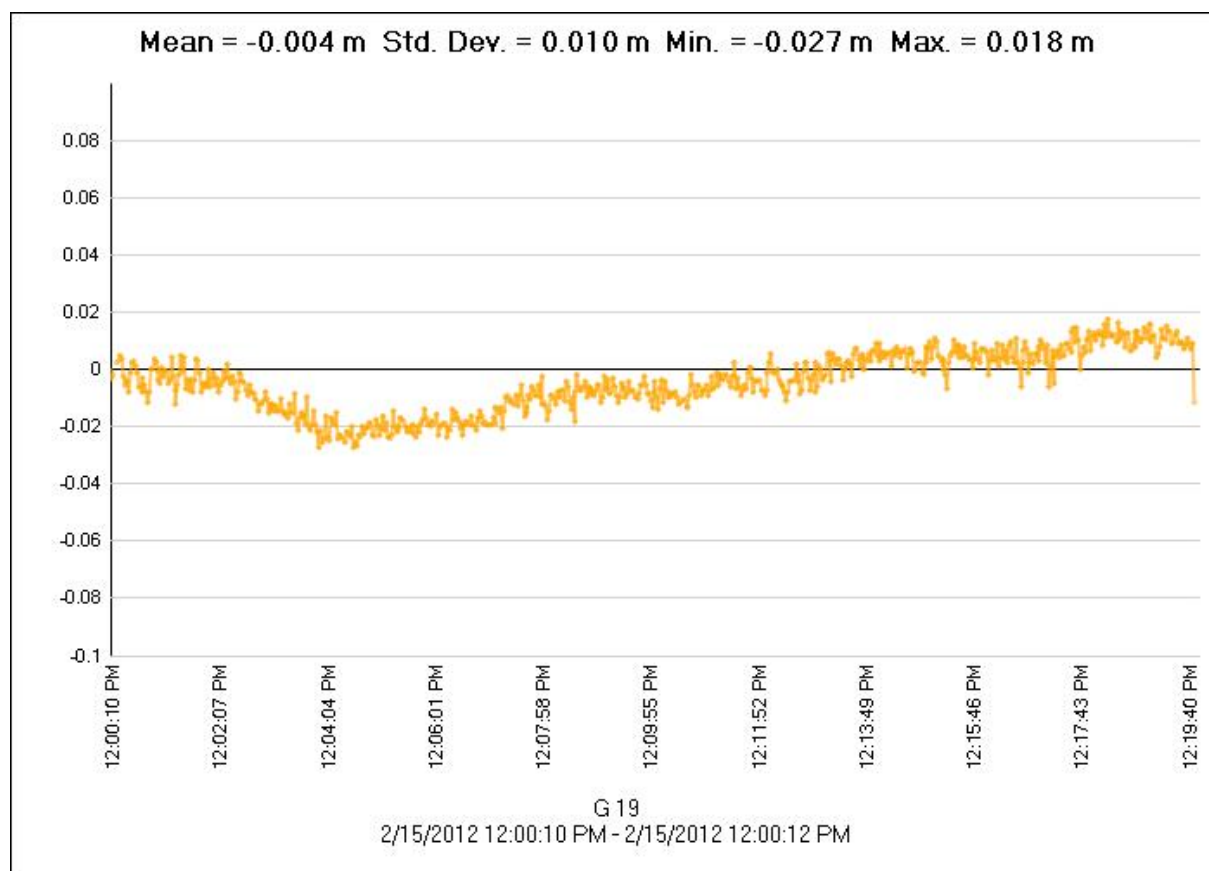
Mean = 0.001 m Std. Dev. = 0.004 m Min. = -0.012 m Max. = 0.012 m



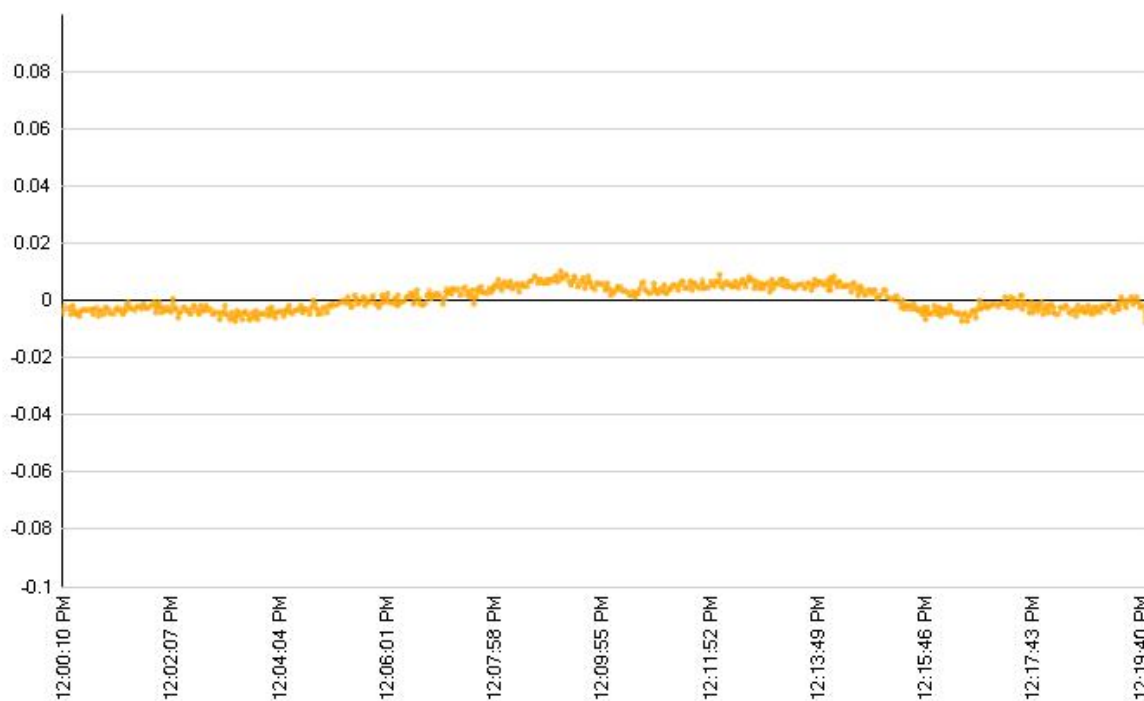
G 14

2/15/2012 12:00:10 PM - 2/15/2012 12:00:12 PM





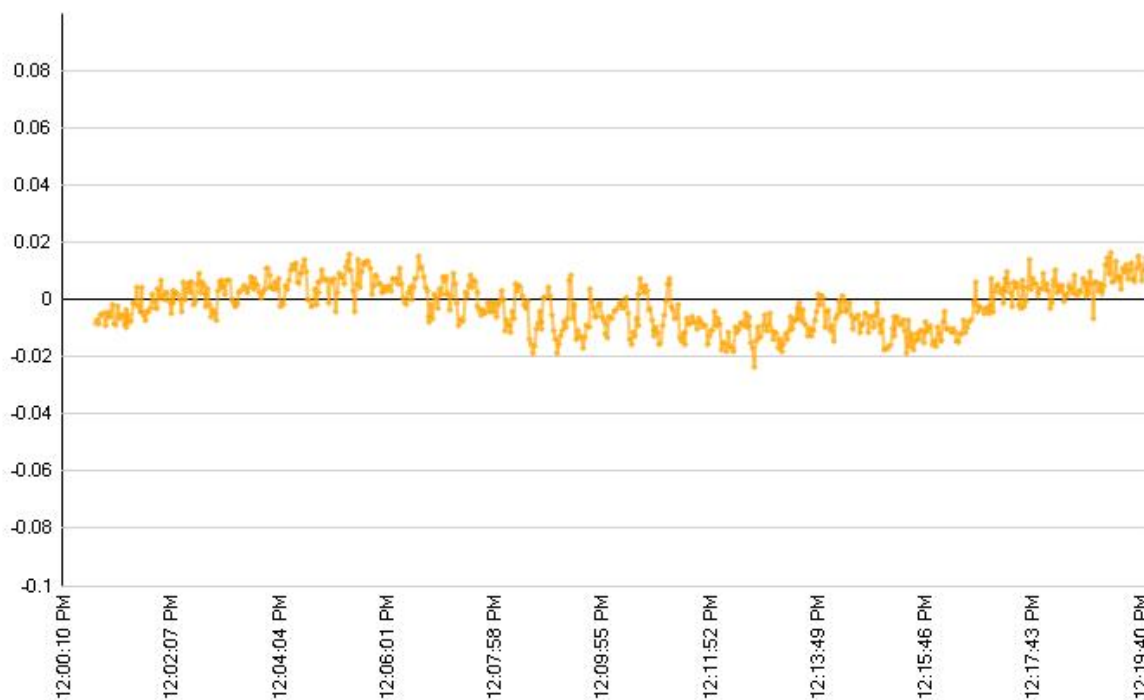
Mean = 0.001 m Std. Dev. = 0.004 m Min. = -0.008 m Max. = 0.011 m



G 22

2/15/2012 12:00:10 PM - 2/15/2012 12:00:12 PM

Mean = -0.002 m Std. Dev. = 0.007 m Min. = -0.024 m Max. = 0.016 m





G 27

2/15/2012 12:00:10 PM - 2/15/2012 12:00:12 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

Baseline observation: JJ0729 --- SVA01-B1 (B297)

Processed: 4/9/2012 10:38:38 AM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.009 m

Vertical precision: 0.015 m

RMS: 0.003 m

Maximum PDOP: 2.043

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/15/2012 12:27:07 PM (Local: UTC-7hr)

Processing stop time: 2/15/2012 12:47:35 PM (Local: UTC-7hr)

Processing duration: 00:20:27

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	JJ0729				
Grid		Local		Global	
Easting	235140.798 m	Latitude	N38°02'39.99776"	Latitude	N38°02'39.99775"
Northing	4215047.569 m	Longitude	W102°01'05.50297"	Longitude	W102°01'05.50297"
Elevation	1035.400 m	Height	1011.331 m	Height	1011.331 m

To:	SVA01-B1				
Grid		Local		Global	
Easting	239572.937 m	Latitude	N38°10'36.53681"	Latitude	N38°10'36.53681"
Northing	4229611.790 m	Longitude	W101°58'23.03566"	Longitude	W101°58'23.03566"
Elevation	1158.467 m	Height	1134.555 m	Height	1134.554 m

Vector					
9Ughb[	4432.139 m	NS Fwd Azimuth	15°03'43"	L	5737.019 m
Bcfh\jb[	14564.221 m	Ellipsoid Dist.	15216.836 m	M	7954.214 m
9Yj Uhcb	123.067 m	<Y][\h	123.223 m	N	11638.830 m

## Standard Errors

Vector errors:					
Point ID	0.003 m	Point Name	0°00'00"	Point Type	0.003 m
Point ID	0.004 m	Point Name	0.003 m	Point Type	0.006 m
Point ID	0.008 m	Point Name	0.008 m	Point Type	0.005 m

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

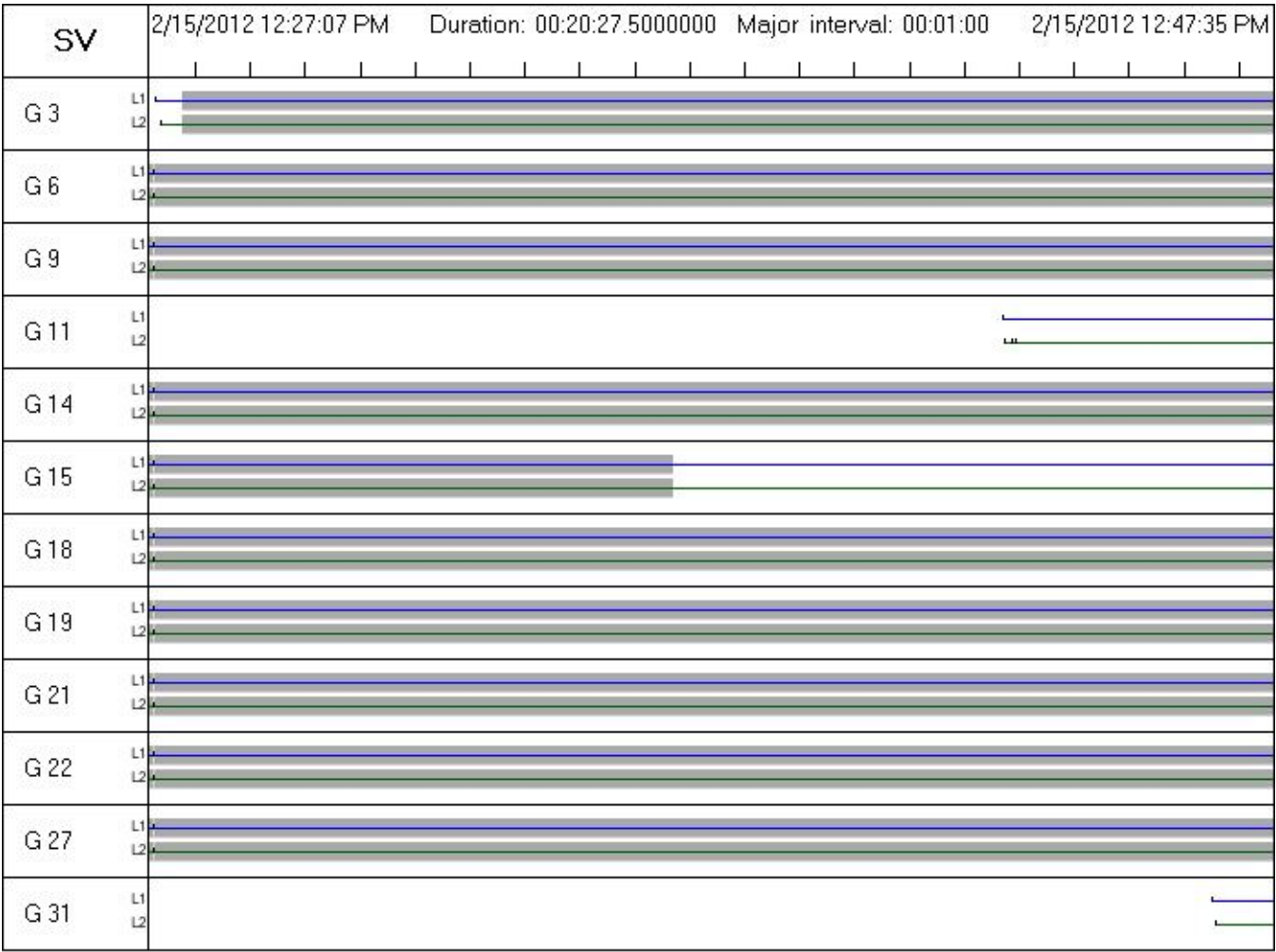
	X	Y	Z
X	0.0000083970		
Y	0.0000068413	0.0000422075	
Z	-0.0000068450	-0.0000215019	0.0000292988

## Occupations

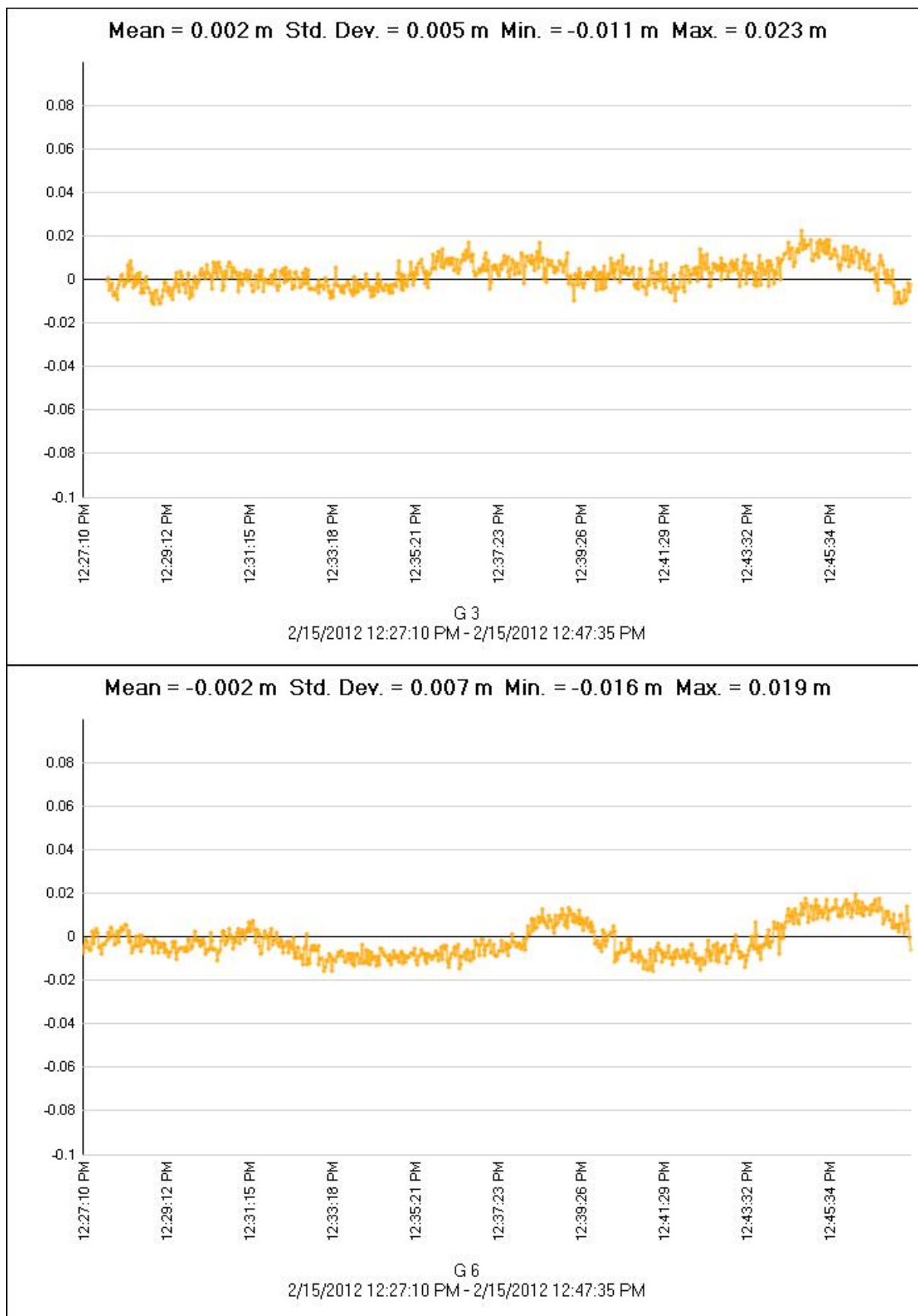
	From	To
Point ID:	JJ0729	SVA01-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\900040460.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00030465.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

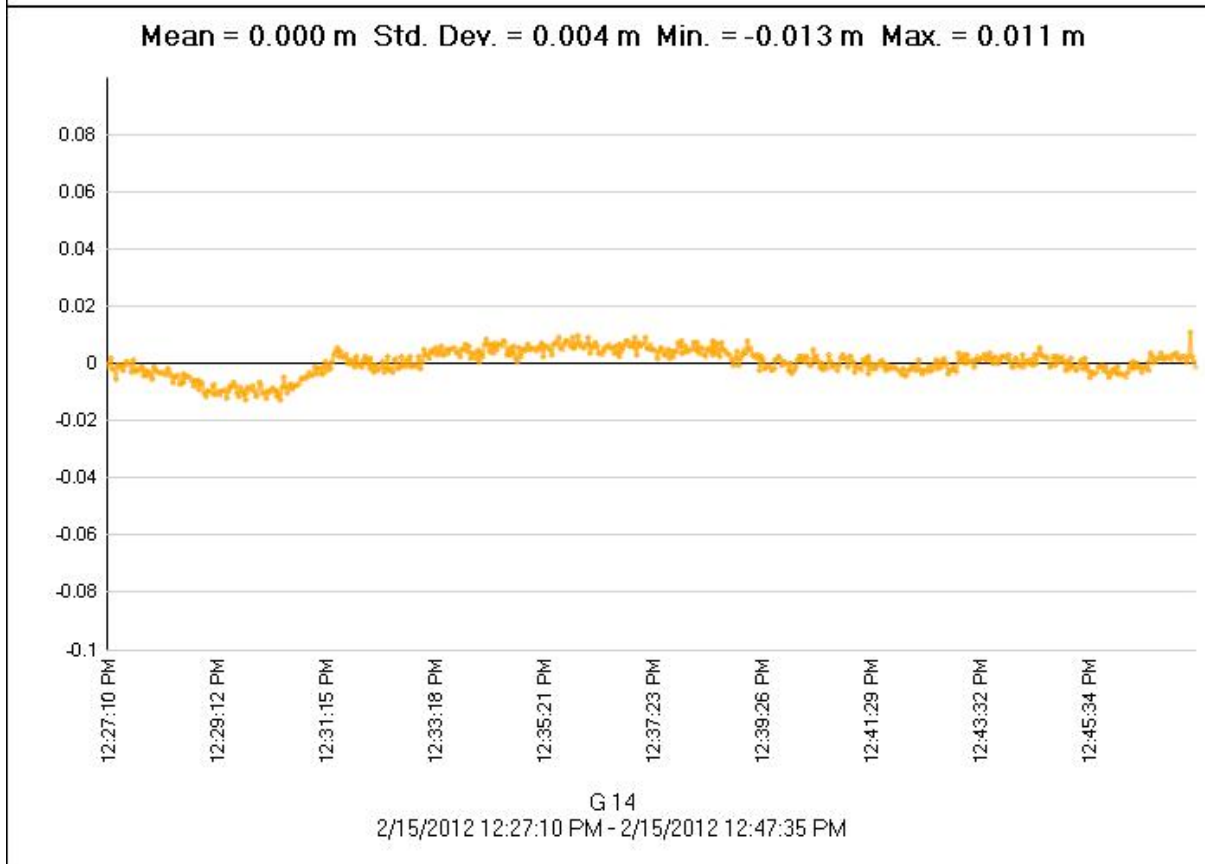
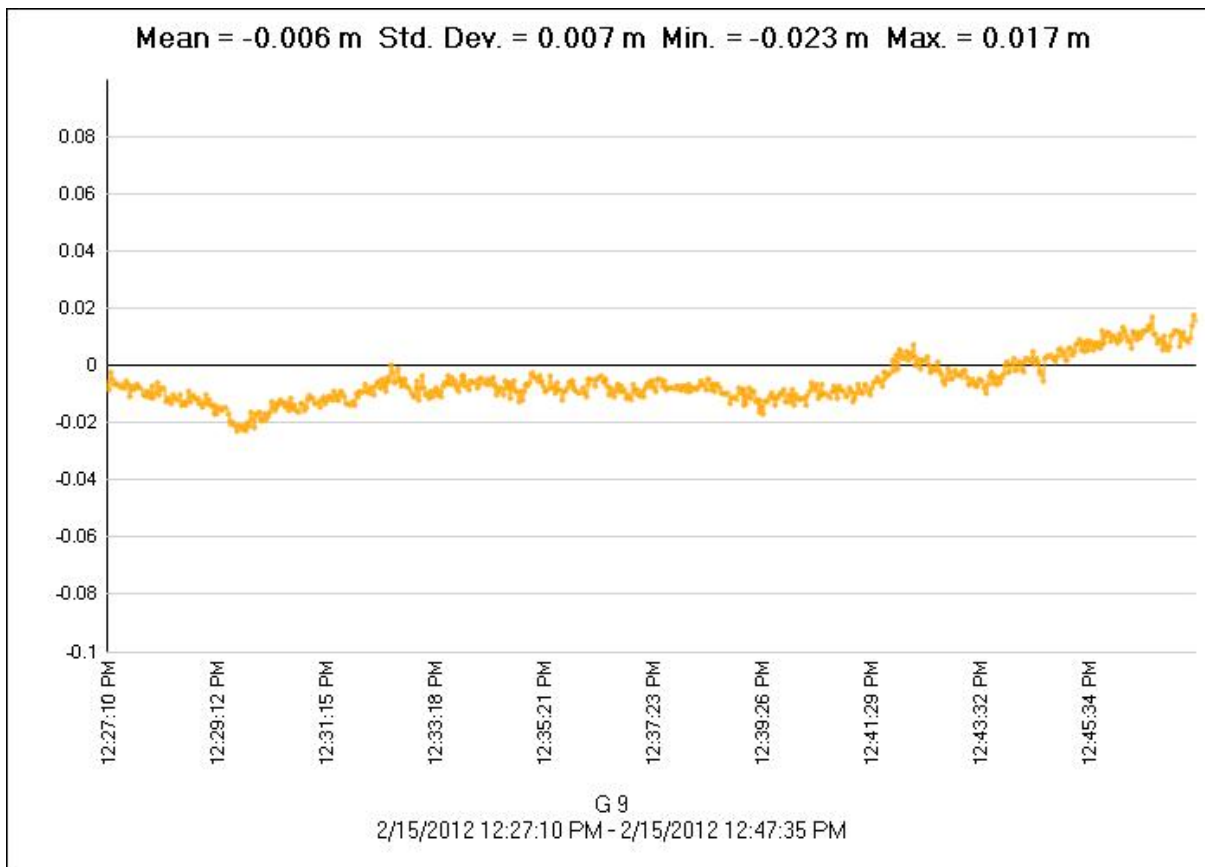


Tracking Summary



## Residuals





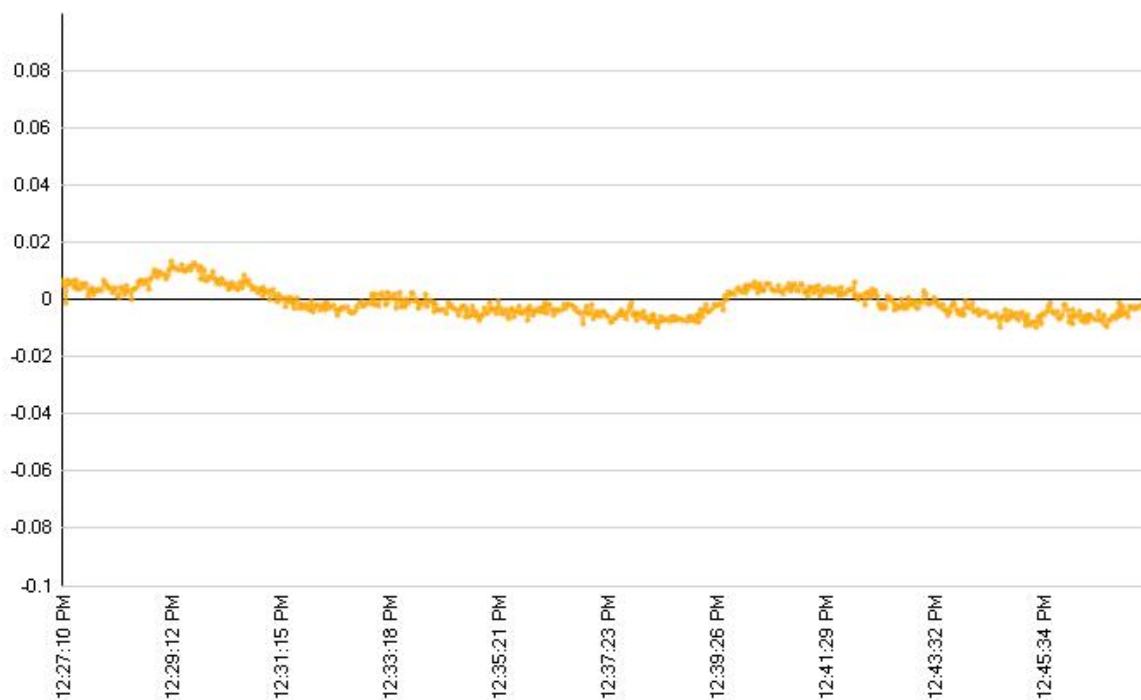
Mean = 0.026 m Std. Dev. = 0.016 m Min. = -0.007 m Max. = 0.078 m



G 15

2/15/2012 12:27:10 PM - 2/15/2012 12:47:35 PM

Mean = -0.001 m Std. Dev. = 0.004 m Min. = -0.010 m Max. = 0.013 m



G 18

2/15/2012 12:27:10 PM - 2/15/2012 12:47:35 PM

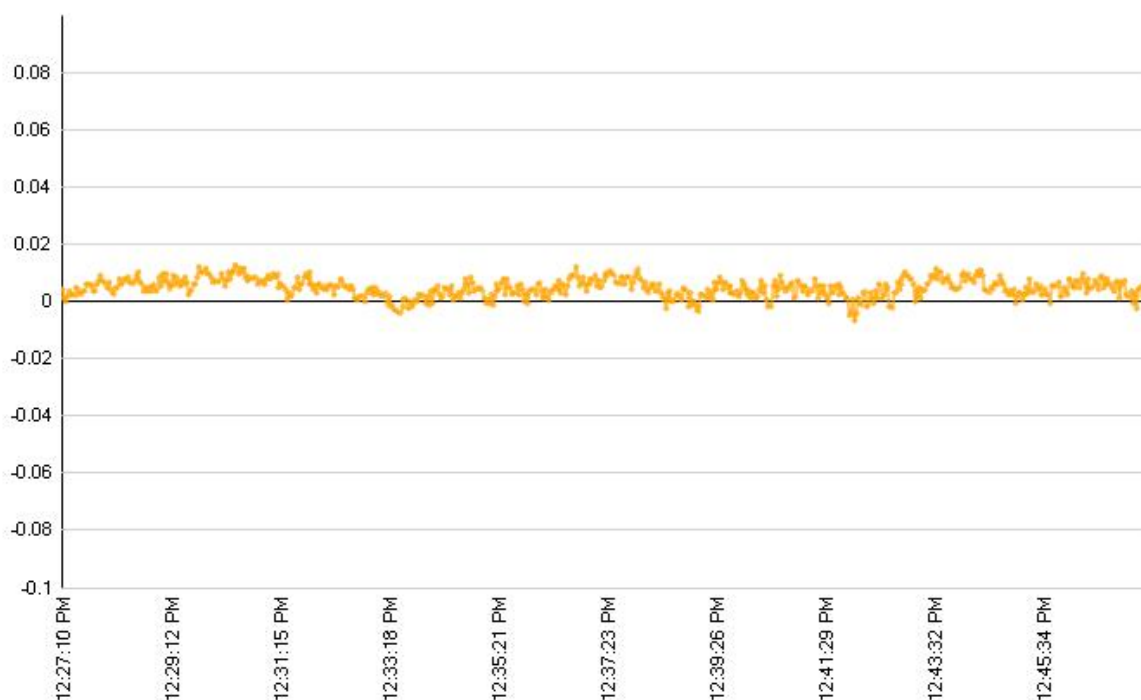
Mean = 0.007 m Std. Dev. = 0.007 m Min. = -0.011 m Max. = 0.024 m



G 19

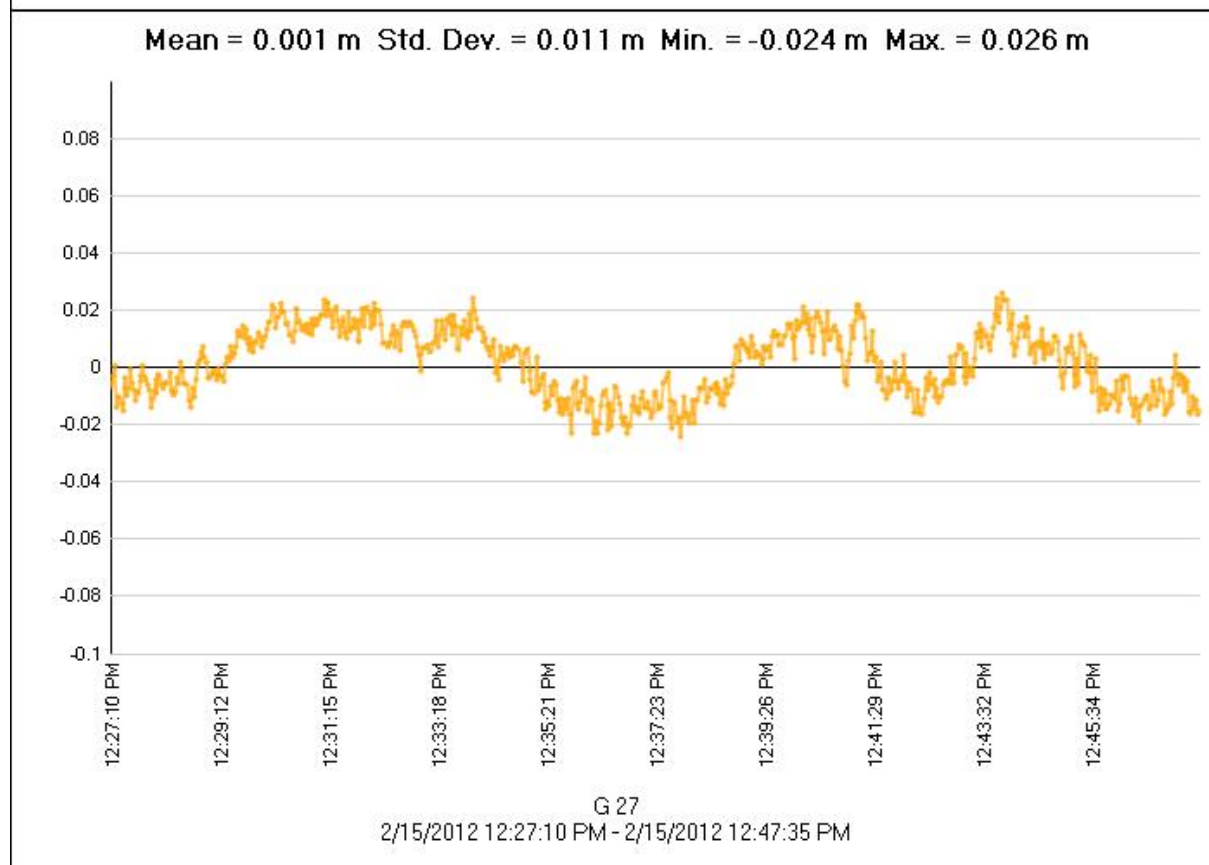
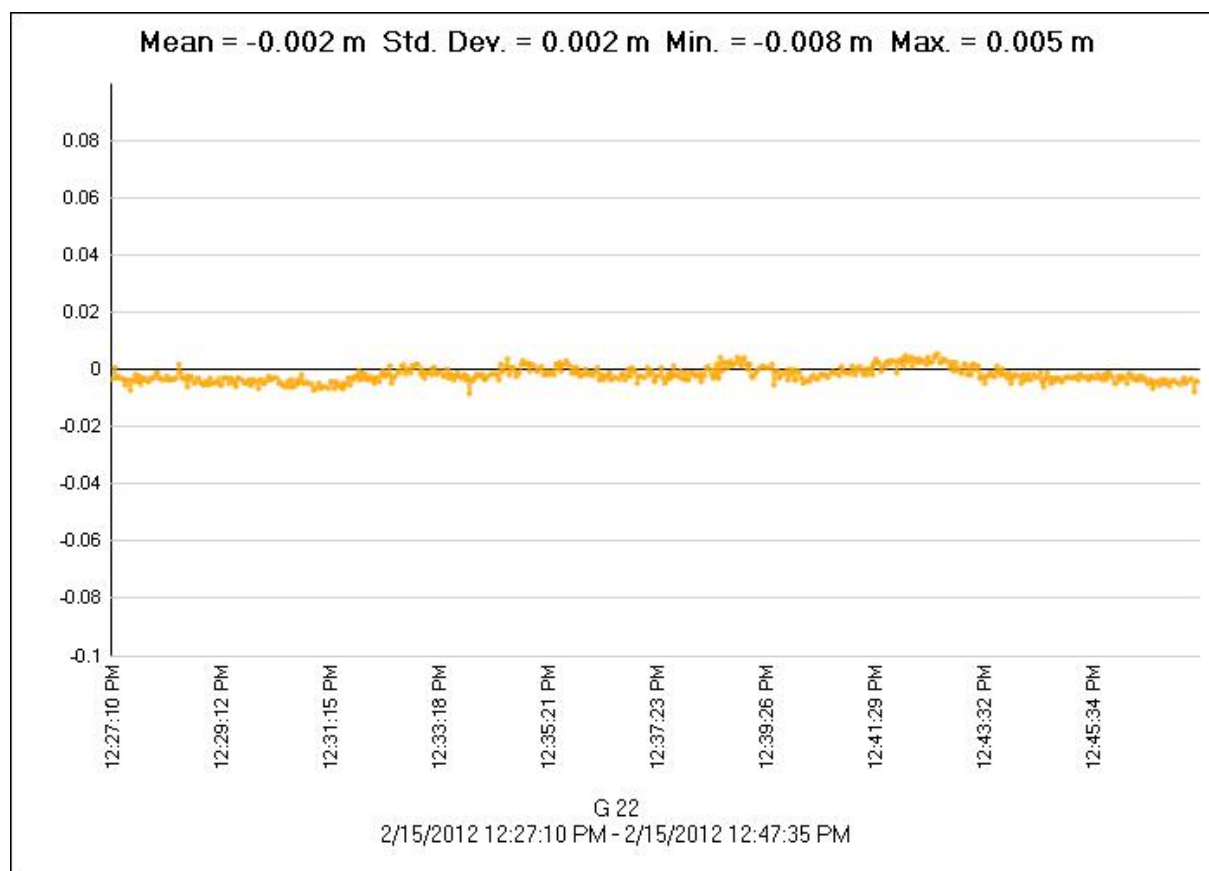
2/15/2012 12:27:10 PM - 2/15/2012 12:47:35 PM

Mean = 0.004 m Std. Dev. = 0.003 m Min. = -0.007 m Max. = 0.012 m



G 21



2/15/2012 12:27:10 PM - 2/15/2012 12:47:35 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

---

HH0698 - SVA09-B1 (1:07:16 PM-1:29:11 PM) (S301)

---

Baseline observation: HH0698 --- SVA09-B1 (B301)

Processed: 4/9/2012 1:12:44 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.009 m

Vertical precision: 0.016 m

RMS: 0.002 m

Maximum PDOP: 2.417

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 3/7/2012 1:07:16 PM (Local: UTC-7hr)

Processing stop time: 3/7/2012 1:29:11 PM (Local: UTC-7hr)

Processing duration: 00:21:54

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0698				
Grid		Local		Global	
Easting	290370.958 m	Latitude	N37°35'56.45803"	Latitude	N37°35'56.45802"
Northing	4163977.815 m	Longitude	W101°22'28.55840"	Longitude	W101°22'28.55840"
Elevation	944.147 m	Height	918.629 m	Height	918.629 m

To:	SVA09-B1				
Grid		Local		Global	
Easting	270267.968 m	Latitude	N37°57'02.17069"	Latitude	N37°57'02.17068"
Northing	4203559.222 m	Longitude	W101°36'52.70891"	Longitude	W101°36'52.70891"
Elevation	979.599 m	Height	954.861 m	Height	954.860 m

Vector					
9Ughb[	-20102.990 m	NS Fwd Azimuth	331°37'09"	L	-15968.044 m
Bcfh\jb[	39581.407 m	Ellipsoid Dist.	44385.247 m	M	27614.862 m
9Yj Uhcb	35.452 m	<Y][\h	36.232 m	N	30871.740 m



## Standard Errors

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

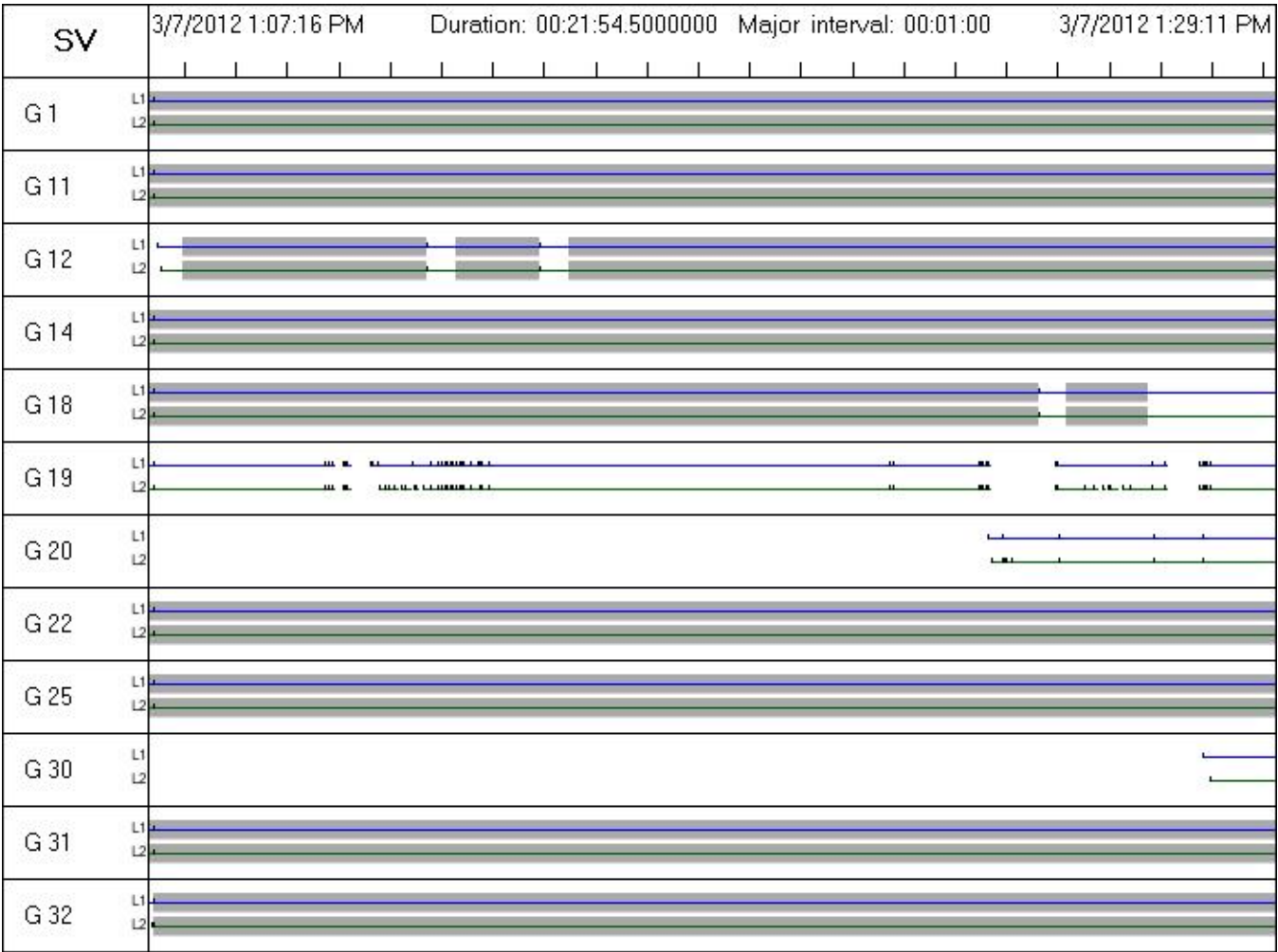
## Aposteriori Covariance Matrix (Meter<sup>2</sup>)

	X	Y	Z
X	0.0000138492		
Y	0.0000138066	0.0000339648	
Z	-0.0000098216	-0.0000254413	0.0000370100

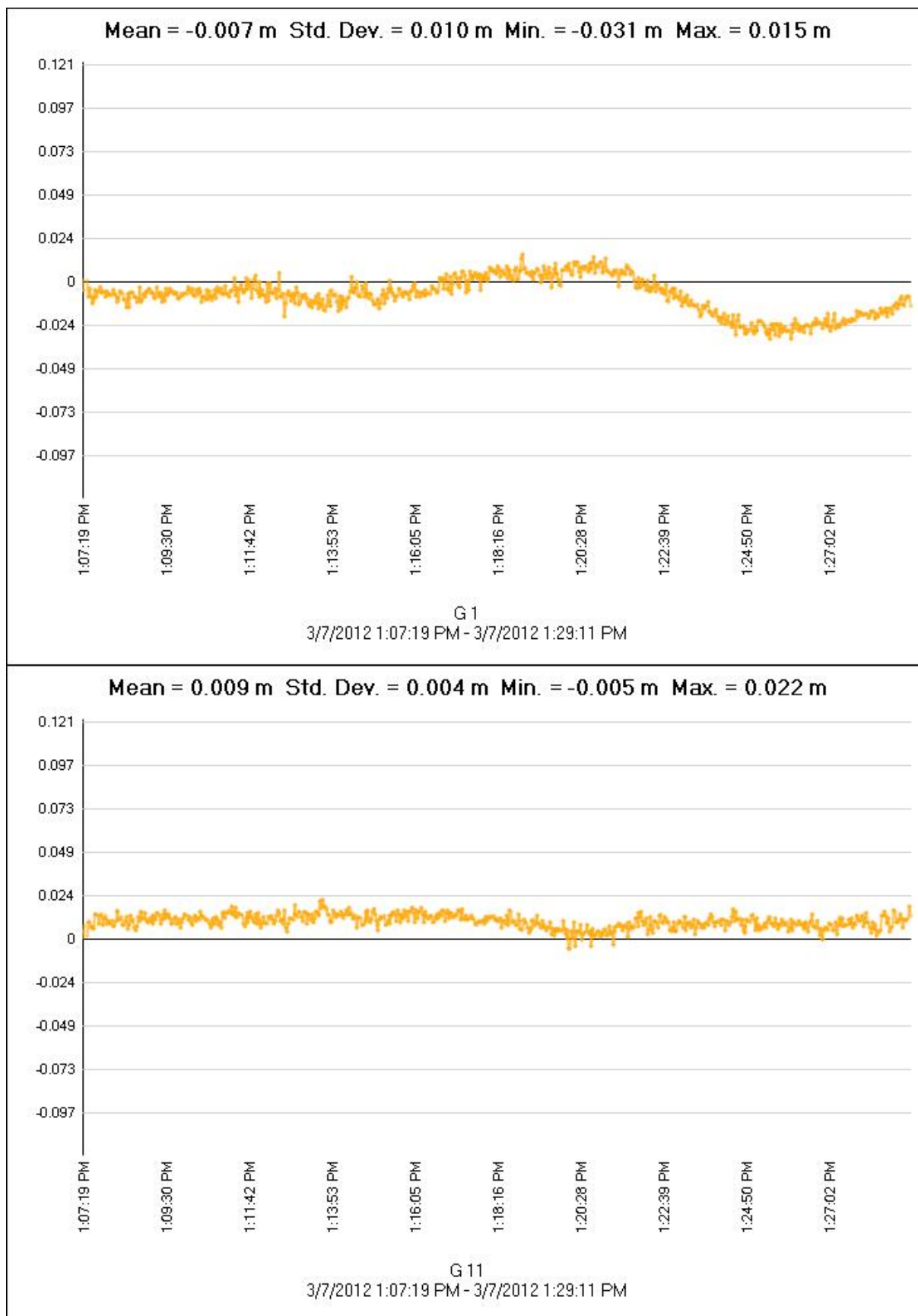
## Occupations

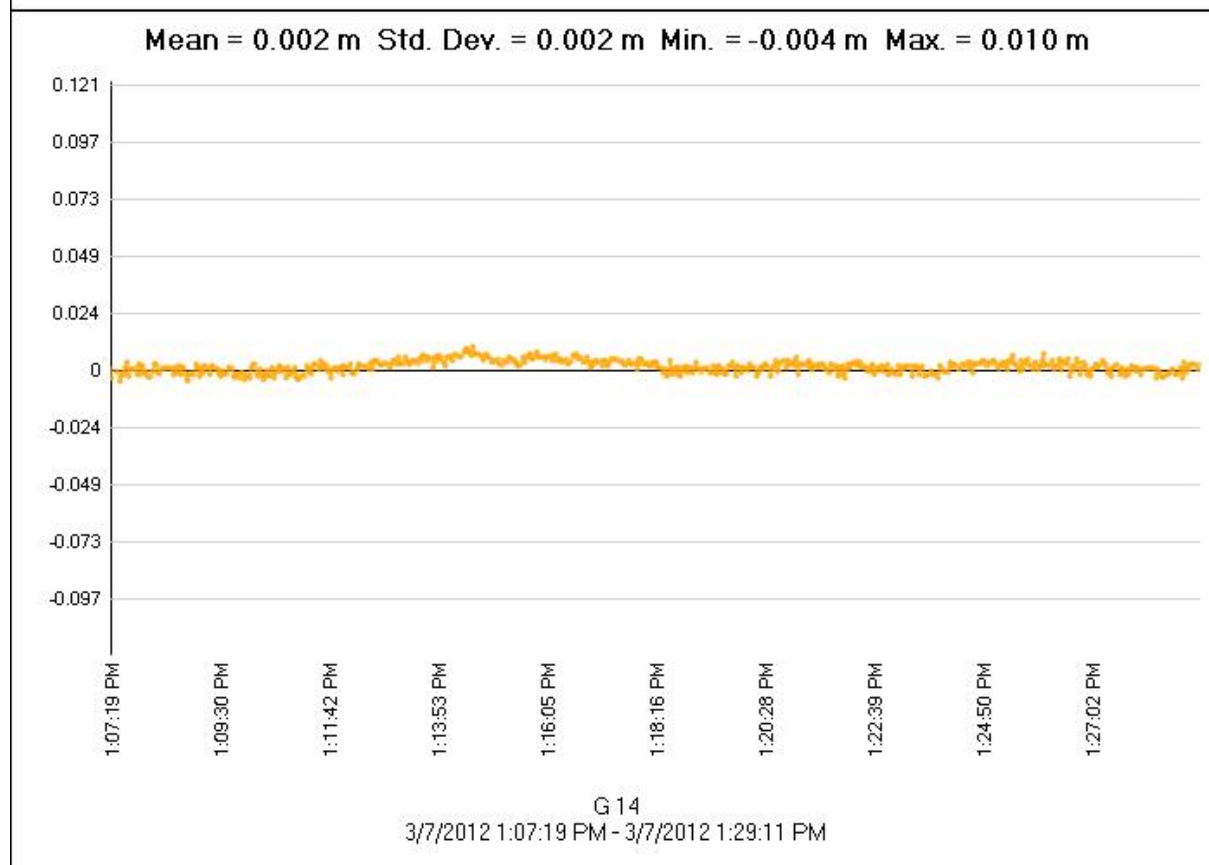
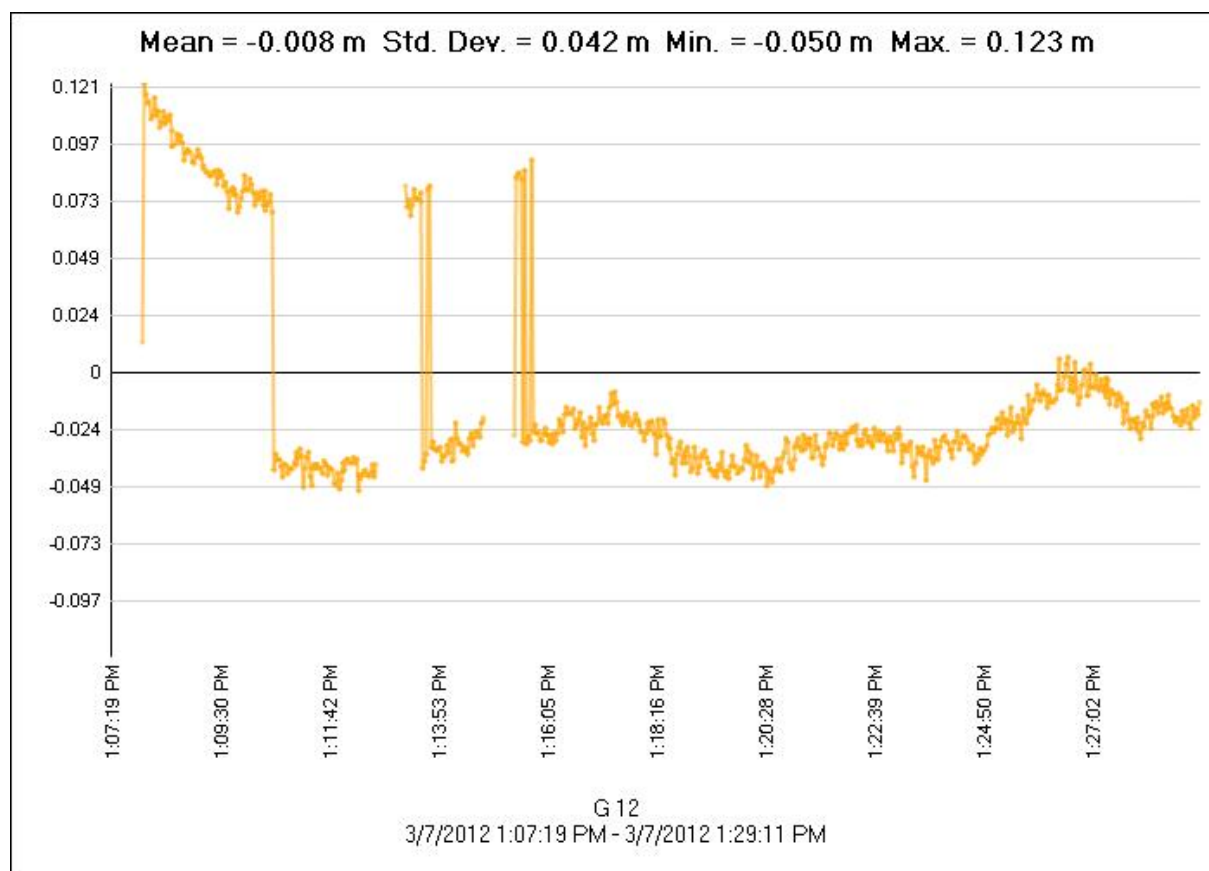
	From	To
Point ID:	HH0698	SVA09-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00100670.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050670.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

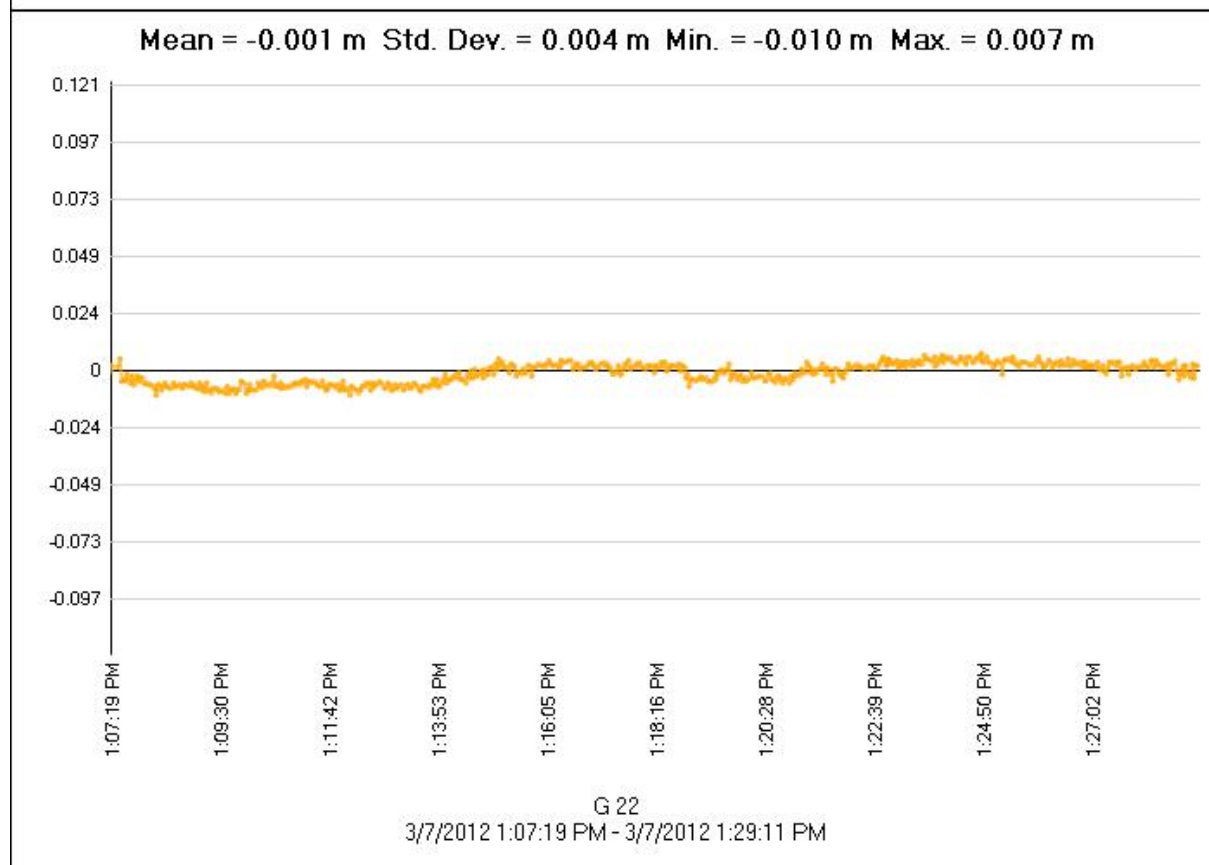
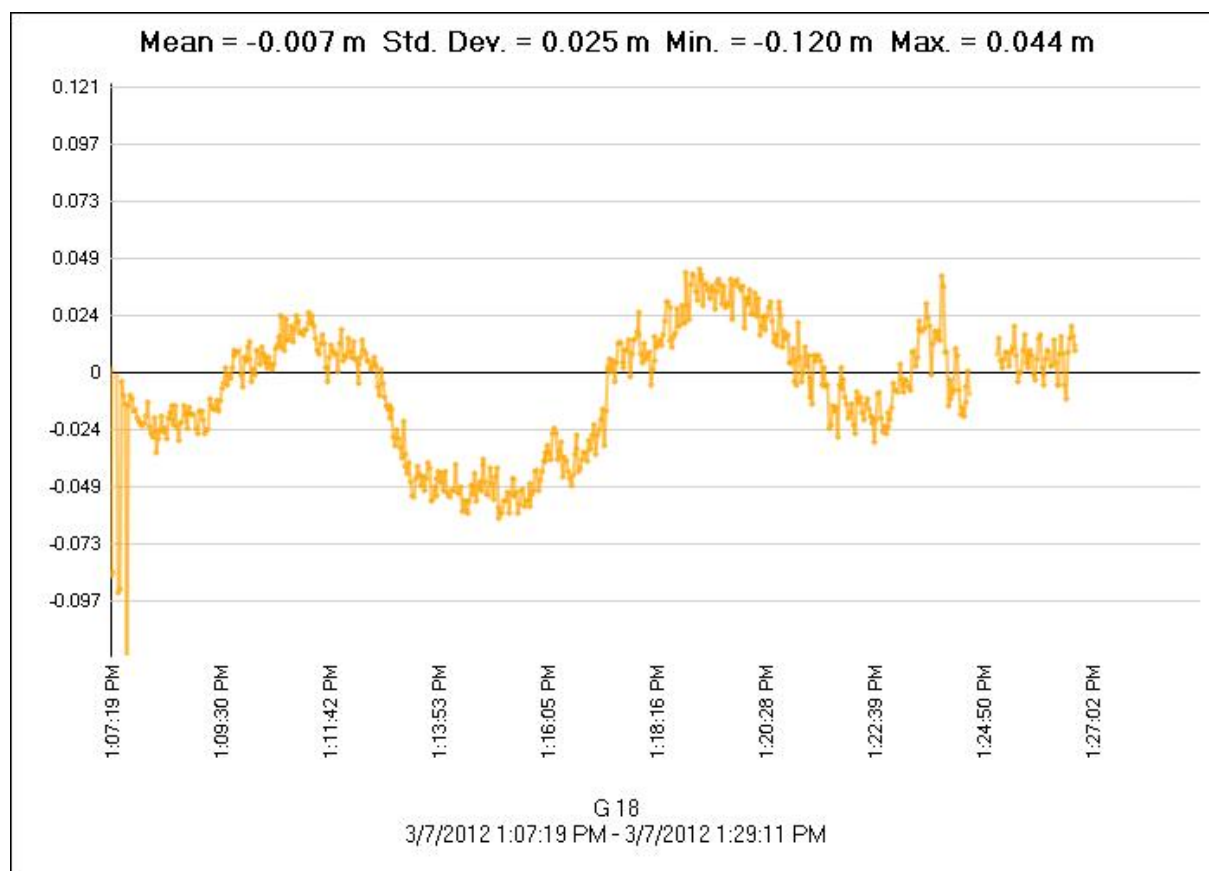
Tracking Summary

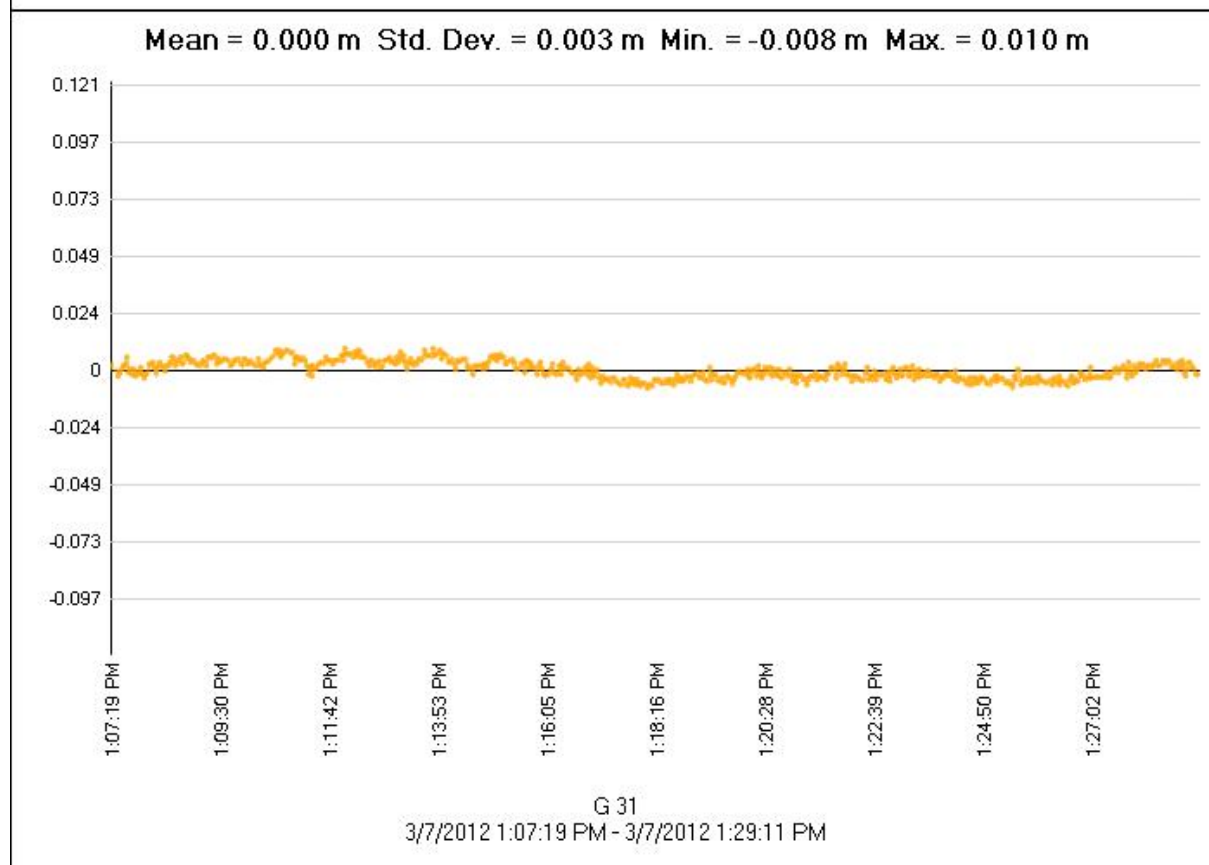
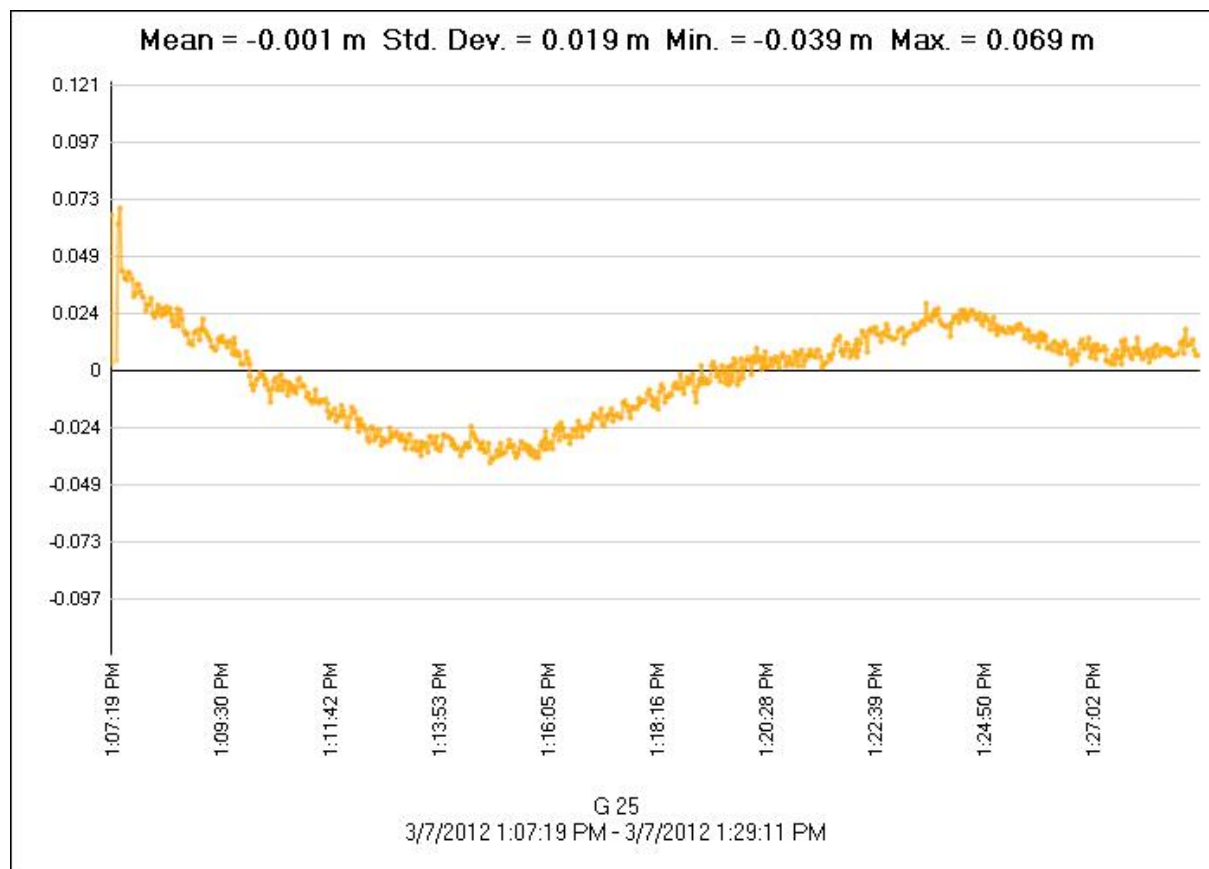


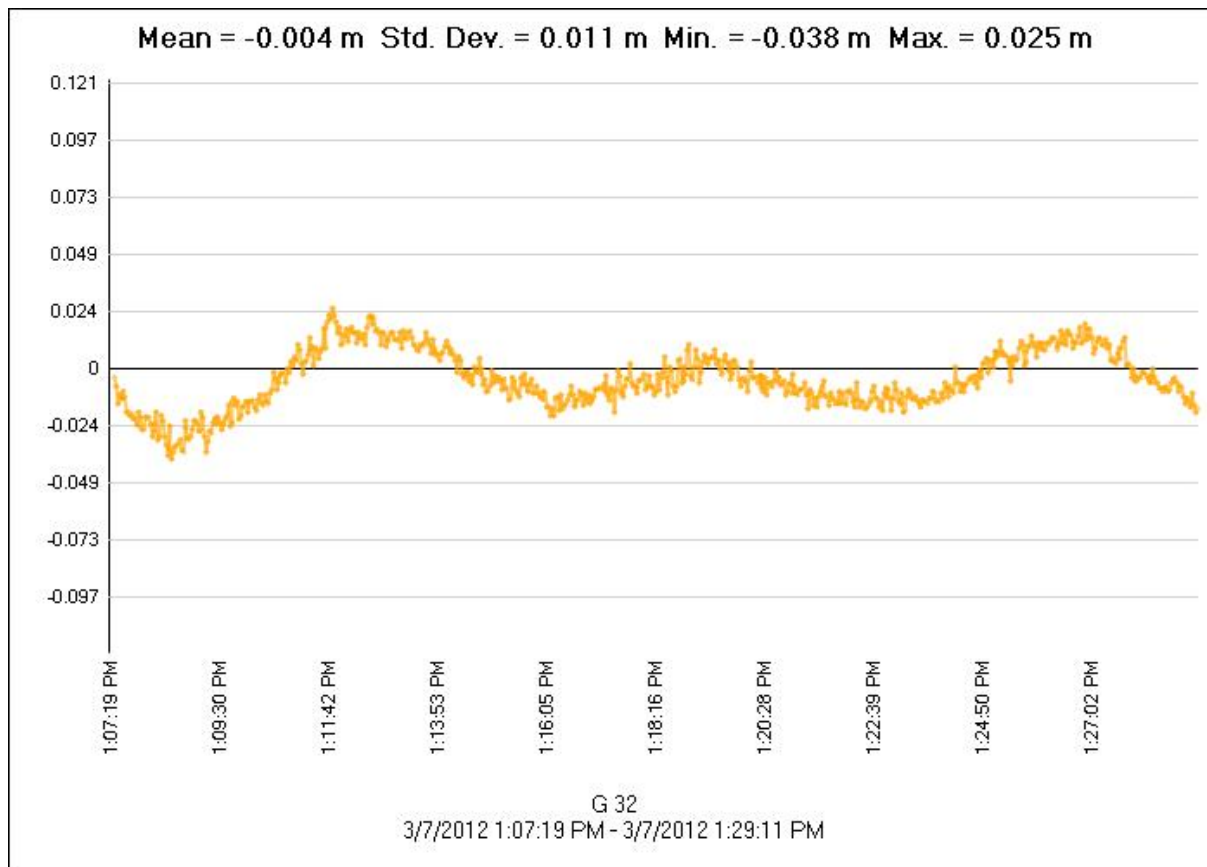
## Residuals











## 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

---

HH0698 - FVA20-B1 (2:26:52 PM-2:49:35 PM) (S302)

---

Baseline observation: HH0698 --- FVA20-B1 (B302)

Processed: 4/9/2012 1:12:44 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.009 m

Vertical precision: 0.012 m

RMS: 0.001 m

Maximum PDOP: 1.943

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 3/7/2012 2:26:52 PM (Local: UTC-7hr)

Processing stop time: 3/7/2012 2:49:35 PM (Local: UTC-7hr)

Processing duration: 00:22:42

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0698				
Grid		Local		Global	
Easting	290370.958 m	Latitude	N37°35'56.45803"	Latitude	N37°35'56.45802"
Northing	4163977.815 m	Longitude	W101°22'28.55840"	Longitude	W101°22'28.55840"
Elevation	944.147 m	Height	918.629 m	Height	918.629 m

To:	FVA20-B1				
Grid		Local		Global	
Easting	282630.096 m	Latitude	N37°49'34.06401"	Latitude	N37°49'34.06401"
Northing	4189398.107 m	Longitude	W101°28'11.29036"	Longitude	W101°28'11.29036"
Elevation	996.053 m	Height	970.925 m	Height	970.925 m

Vector					
9Ughb[	-7740.862 m	NS Fwd Azimuth	341°36'38"	L	-5183.538 m
Bcfh\jb[	25420.293 m	Ellipsoid Dist.	26568.481 m	M	16738.384 m
9Yj Uhcb	51.906 m	<Y][\h	52.296 m	N	19976.311 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	0.004 m	Point Type	0.006 m
Point ID	0.006 m	Point Description	0.006 m	Point Type	0.004 m

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

	X	Y	Z
X	0.0000080769		
Y	0.0000066814	0.0000326902	
Z	-0.0000012524	-0.0000093123	0.0000158903

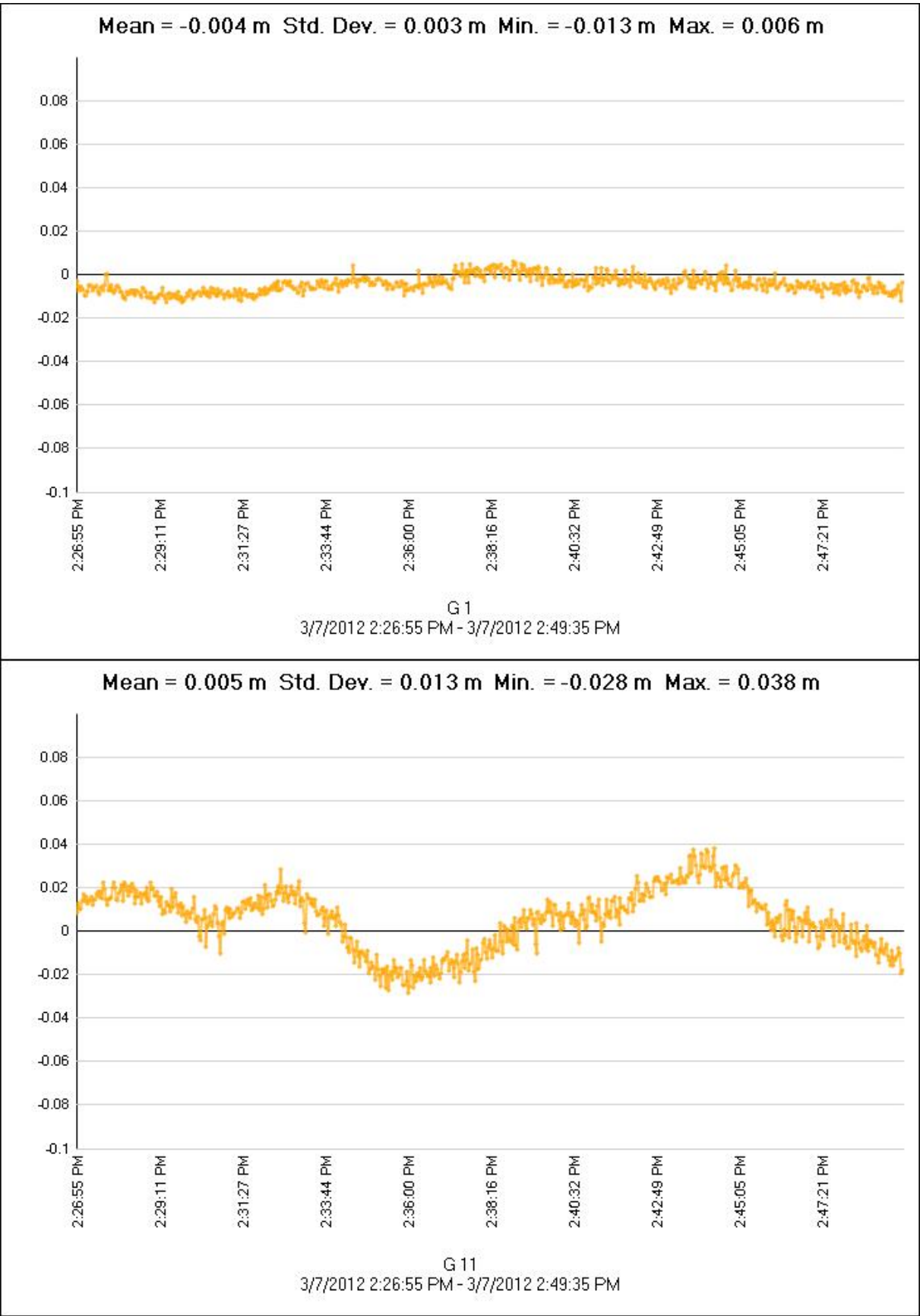
## Occupations

	From	To
Point ID:	HH0698	FVA20-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00100670.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050671.12o
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

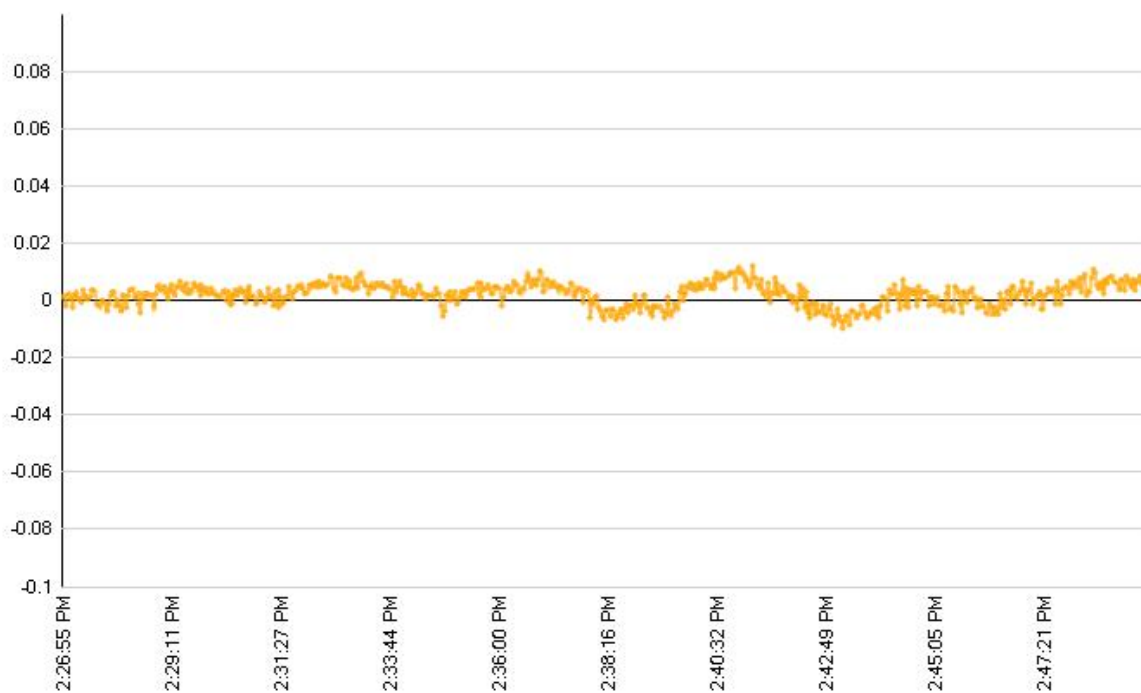
Tracking Summary

SV	3/7/2012 2:26:52 PM	Duration: 00:22:42.5000000	Major interval: 00:01:00	3/7/2012 2:49:35 PM
G 1	L1			
	L2			
G 11	L1			
	L2			
G 12	L1			
	L2			
G 14	L1			
	L2			
G 16	L1			
	L2			
G 20	L1			
	L2			
G 22	L1			
	L2			
G 23	L1			
	L2			
G 25	L1			
	L2			
G 30	L1			
	L2			
G 31	L1			
	L2			
G 32	L1			
	L2			

Residuals



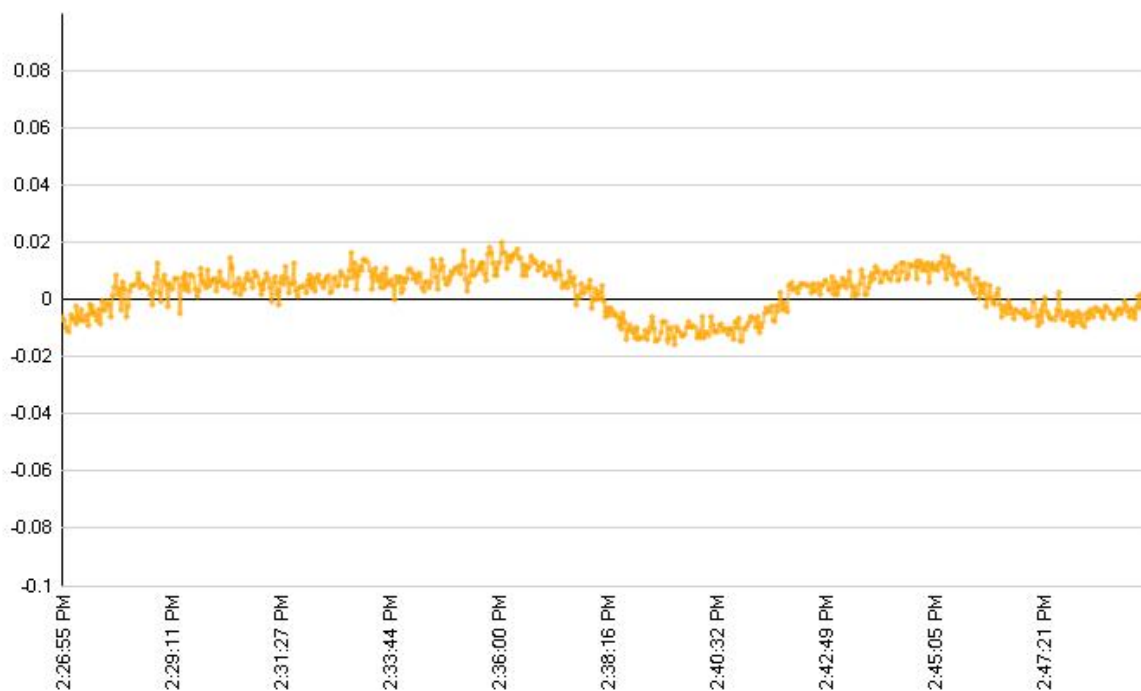
Mean = 0.002 m Std. Dev. = 0.003 m Min. = -0.010 m Max. = 0.012 m



G 14

3/7/2012 2:26:55 PM - 3/7/2012 2:49:35 PM

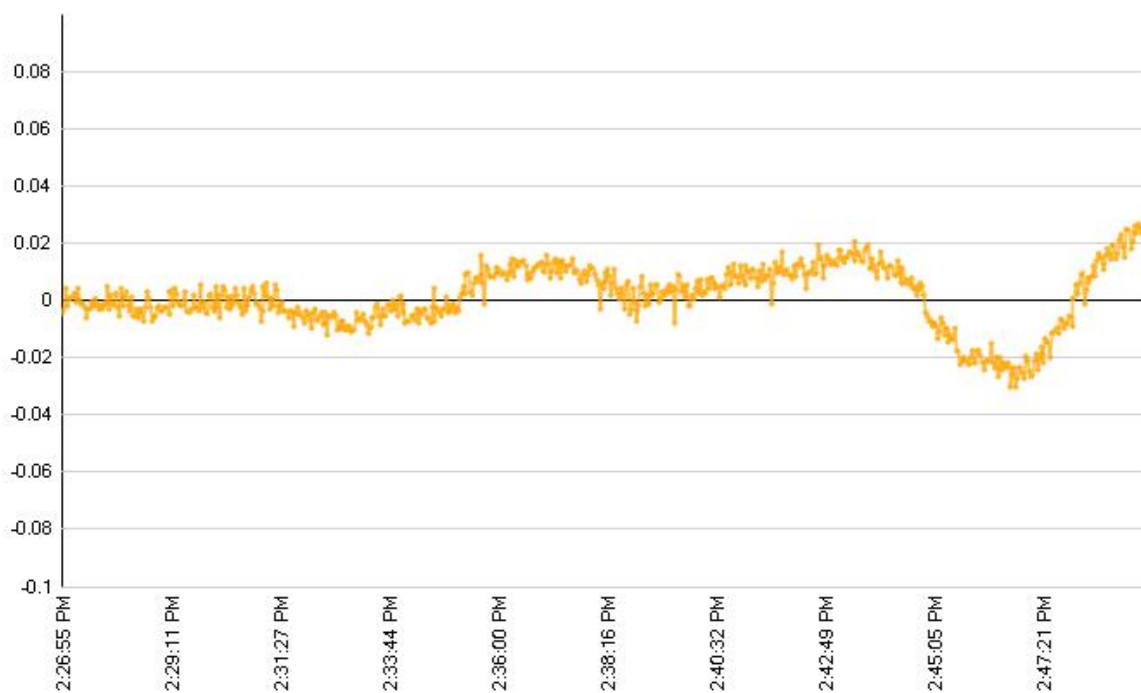
Mean = 0.002 m Std. Dev. = 0.007 m Min. = -0.016 m Max. = 0.020 m



G 20

3/7/2012 2:26:55 PM - 3/7/2012 2:49:35 PM

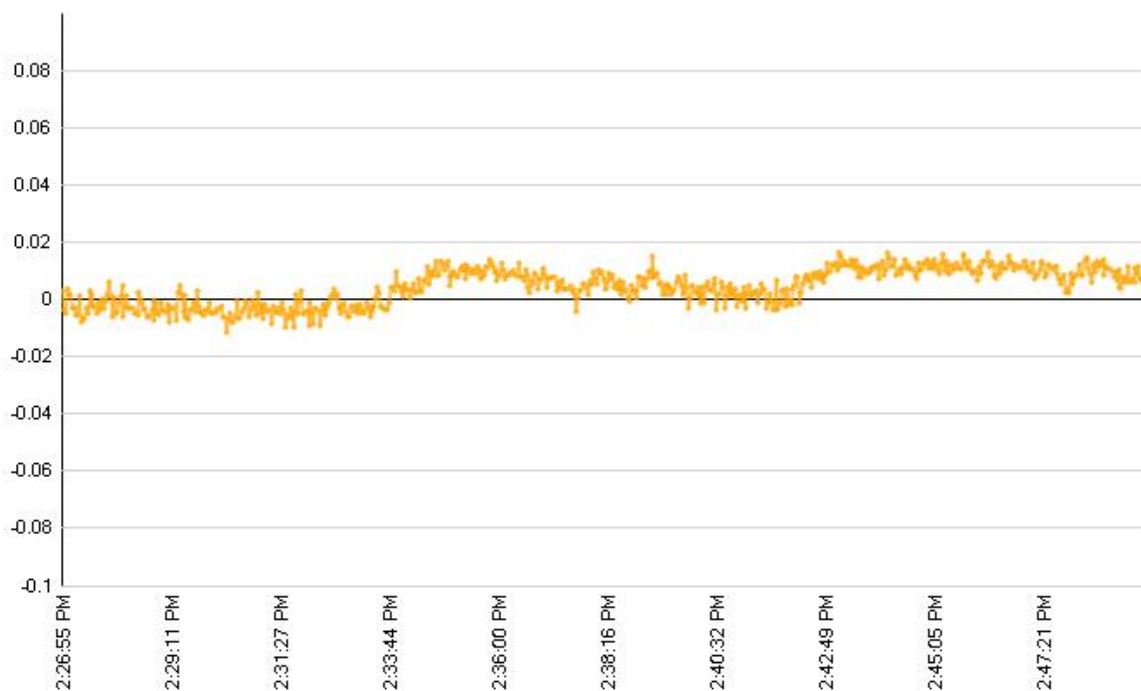
Mean = 0.001 m Std. Dev. = 0.010 m Min. = -0.031 m Max. = 0.028 m



G 22

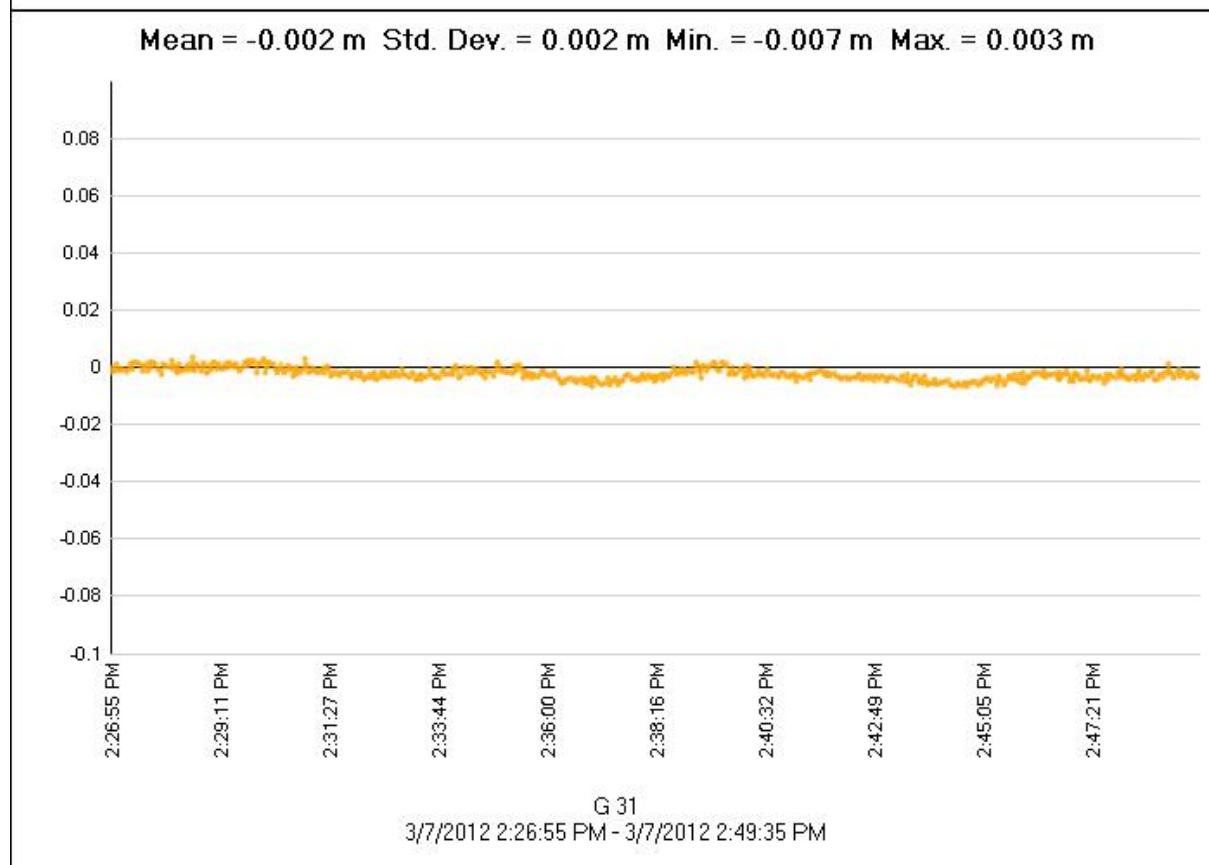
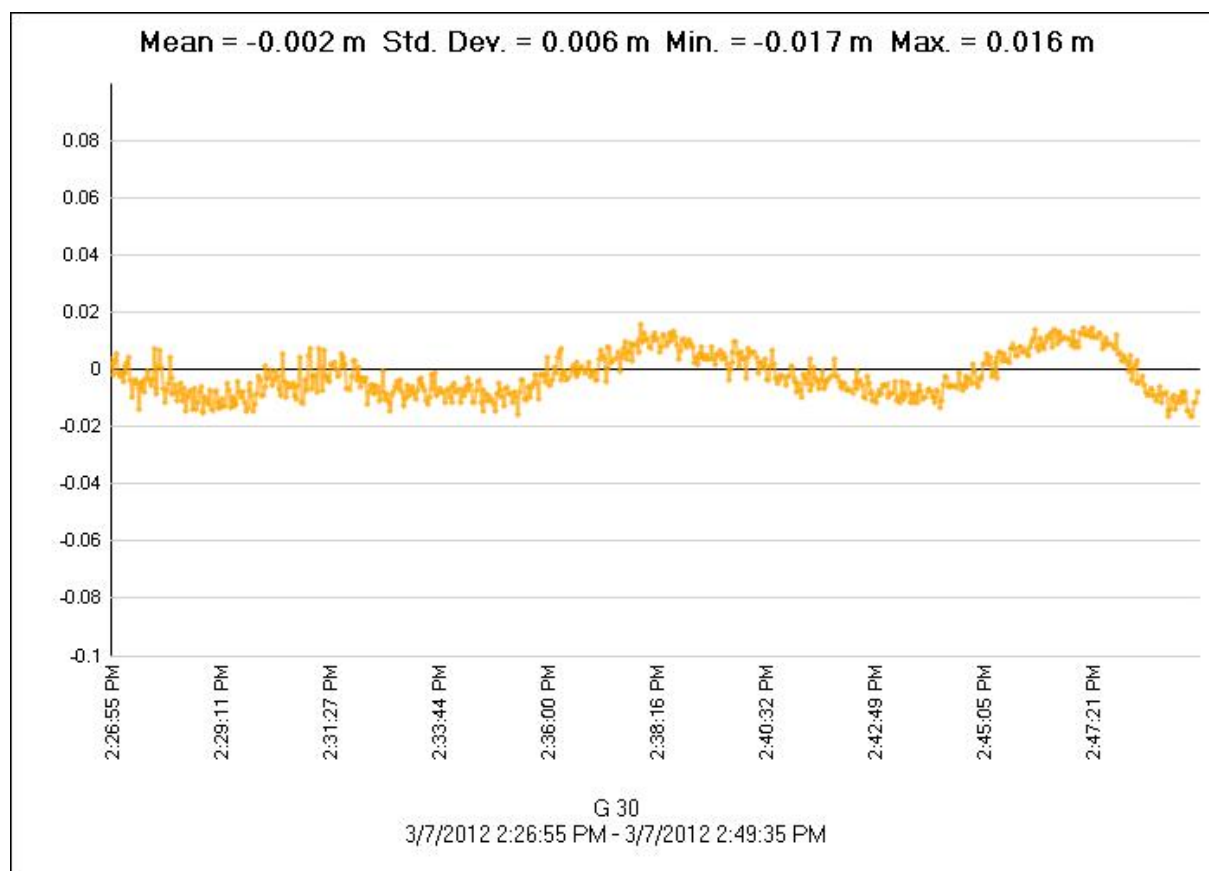
3/7/2012 2:26:55 PM - 3/7/2012 2:49:35 PM

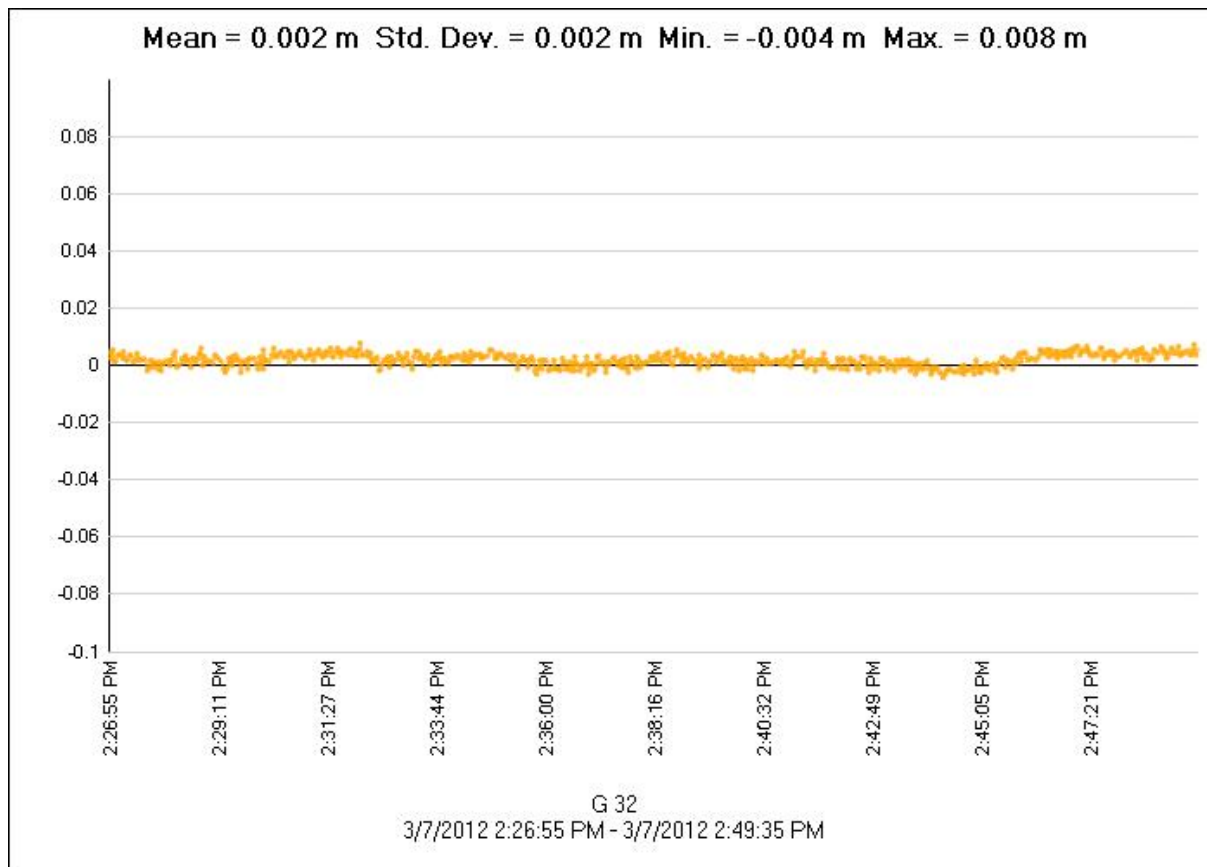
Mean = 0.004 m Std. Dev. = 0.006 m Min. = -0.011 m Max. = 0.017 m



G 25

3/7/2012 2:26:55 PM - 3/7/2012 2:49:35 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

---

HH0698 - SVA20-B1 (2:57:12 PM-3:19:13 PM) (S303)

---

Baseline observation: HH0698 --- SVA20-B1 (B303)

Processed: 4/9/2012 1:12:50 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.009 m

Vertical precision: 0.012 m

RMS: 0.003 m

Maximum PDOP: 1.720

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 3/7/2012 2:57:12 PM (Local: UTC-7hr)

Processing stop time: 3/7/2012 3:19:13 PM (Local: UTC-7hr)

Processing duration: 00:22:01

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0698				
Grid		Local		Global	
Easting	290370.958 m	Latitude	N37°35'56.45803"	Latitude	N37°35'56.45802"
Northing	4163977.815 m	Longitude	W101°22'28.55840"	Longitude	W101°22'28.55840"
Elevation	944.147 m	Height	918.629 m	Height	918.629 m

To:	SVA20-B1				
Grid		Local		Global	
Easting	282311.679 m	Latitude	N37°48'32.23389"	Latitude	N37°48'32.23388"
Northing	4187499.209 m	Longitude	W101°28'22.24876"	Longitude	W101°28'22.24876"
Elevation	989.863 m	Height	964.711 m	Height	964.711 m

Vector					
9Ughb[	-8059.279 m	NS Fwd Azimuth	339°38'02"	L	-5677.764 m
Bcfh\jb[	23521.394 m	Ellipsoid Dist.	24859.751 m	M	15650.829 m
9Yj Uhcb	45.716 m	<Y][\h	46.082 m	N	18466.349 m



Standard Errors

Vector errors:					
Point 1	0.003 m	Point 2	0°00'00"	Point 3	0.003 m
Point 4	0.003 m	Point 5	0.003 m	Point 6	0.006 m
Point 7	0.006 m	Point 8	0.006 m	Point 9	0.004 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000087736		
Y	0.0000069983	0.0000352053	
Z	-0.0000018604	-0.0000107813	0.0000141907

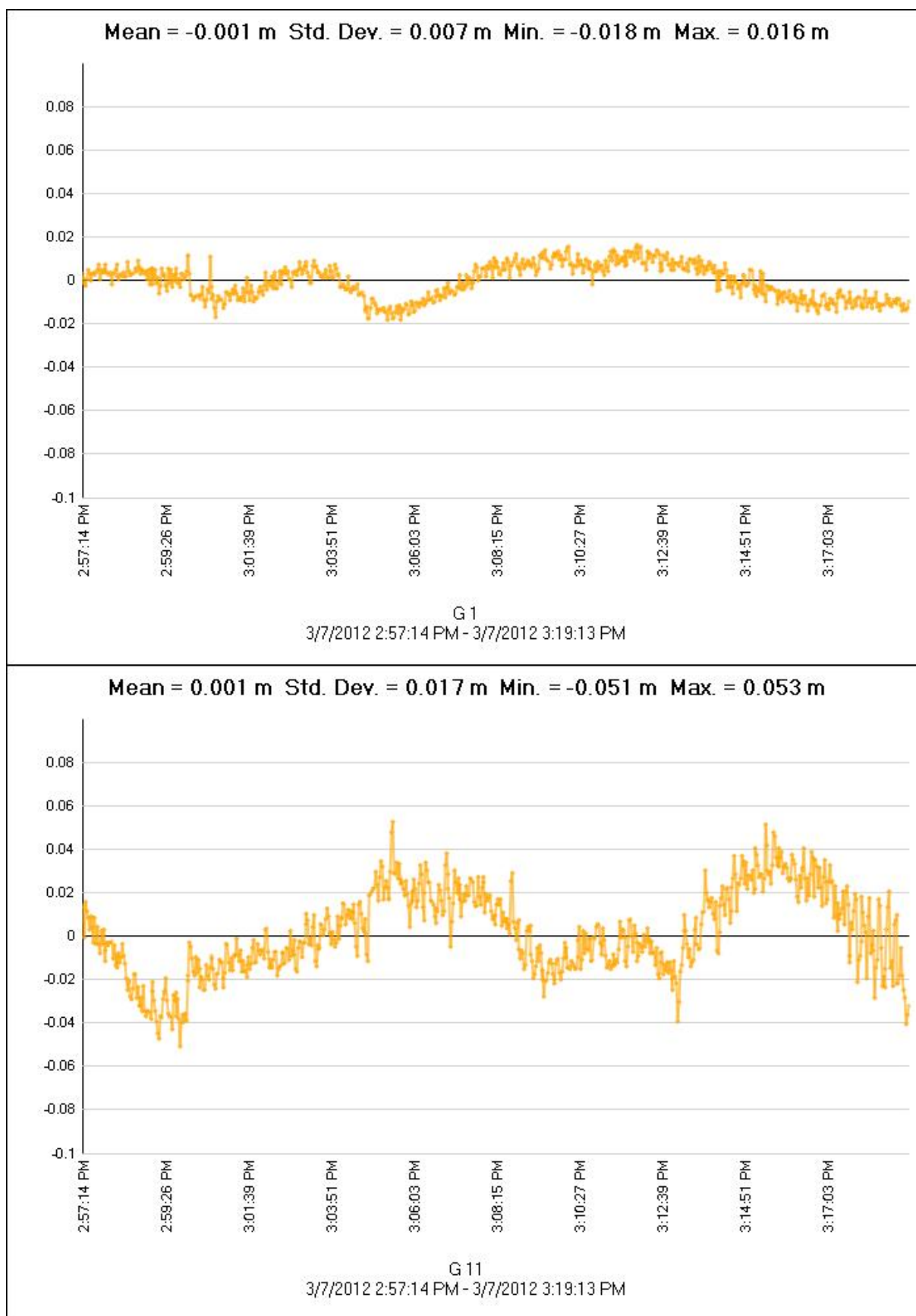
Occupations

	From	To
Point ID:	HH0698	SVA20-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00100670.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050672.12o
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

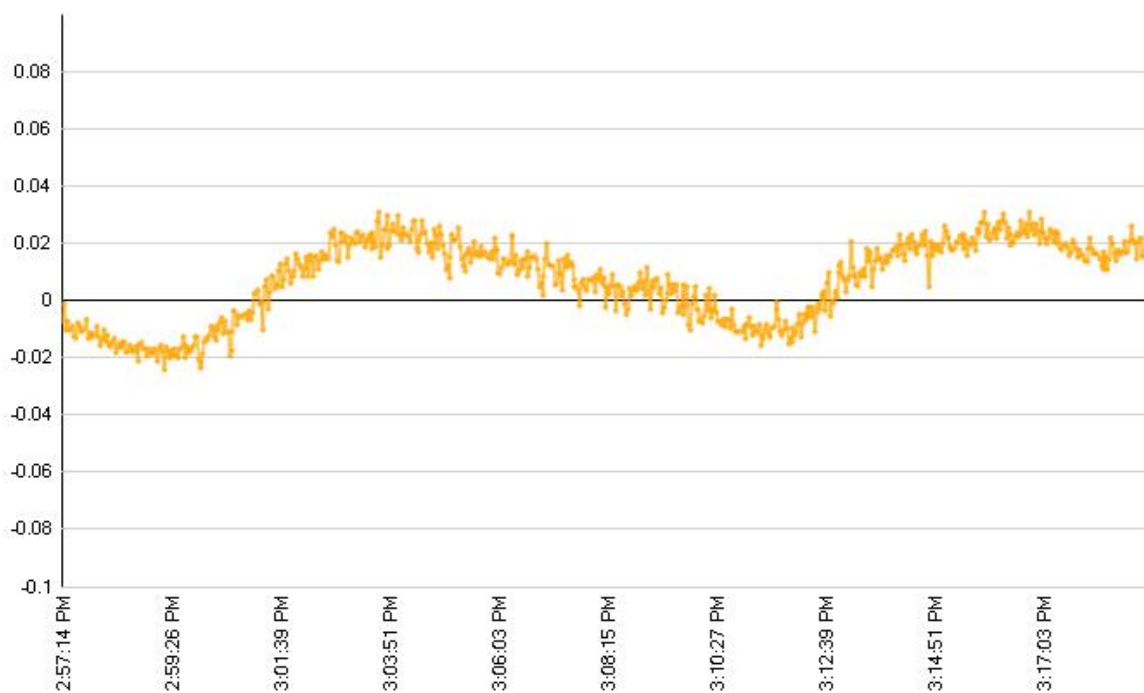
## Tracking Summary

SV	3/7/2012 2:57:12 PM	Duration: 00:22:01	Major interval: 00:01:00	3/7/2012 3:19:13 PM
G 1				
G 11				
G 14				
G 16				
G 20				
G 22				
G 23				
G 25				
G 30				
G 31				
G 32				

## Residuals



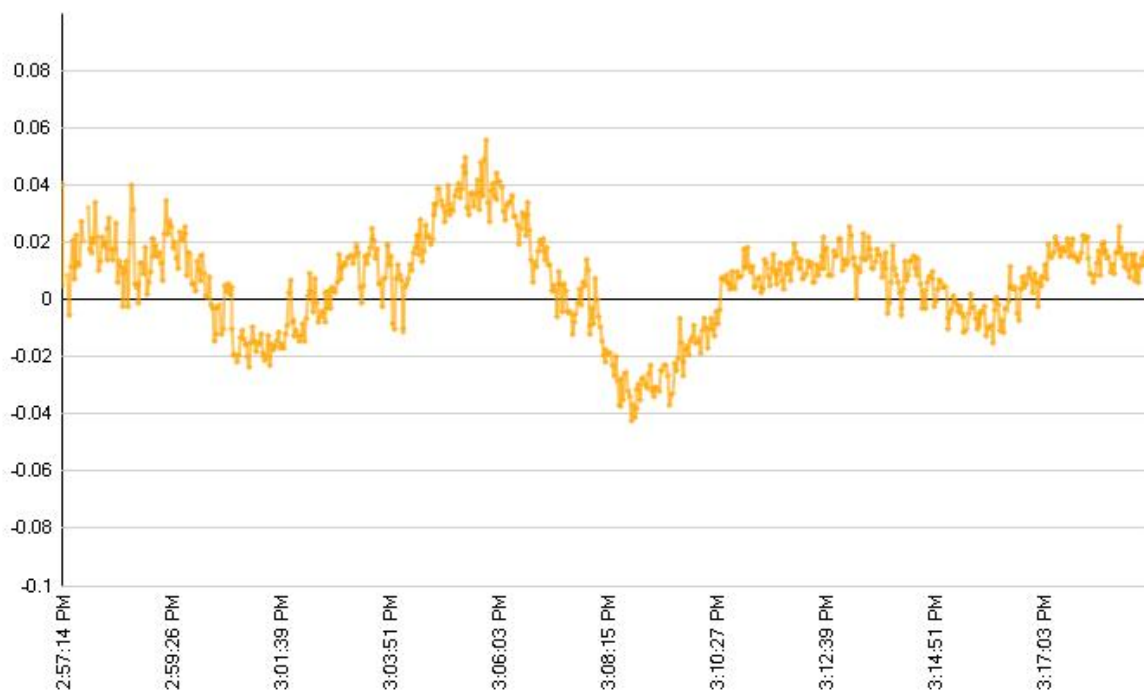
Mean = 0.006 m Std. Dev. = 0.013 m Min. = -0.024 m Max. = 0.031 m



G 14

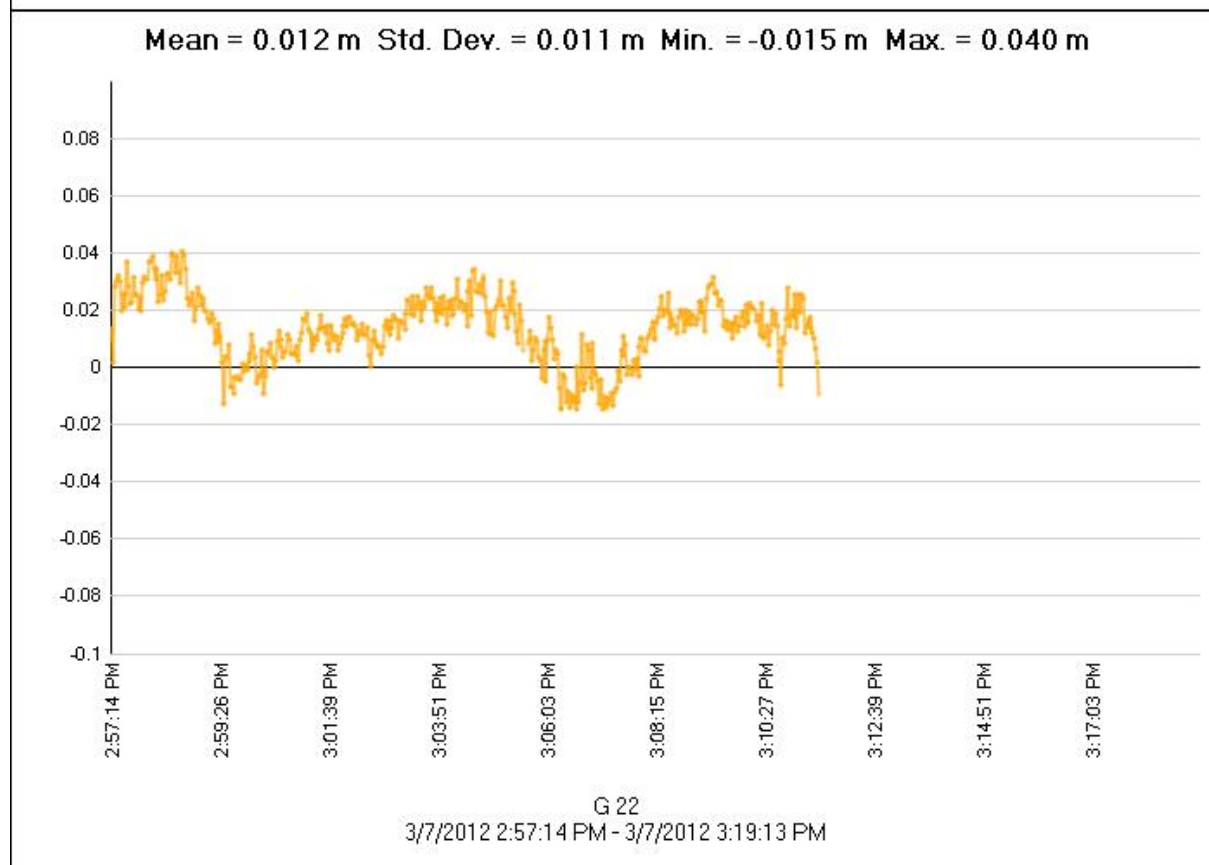
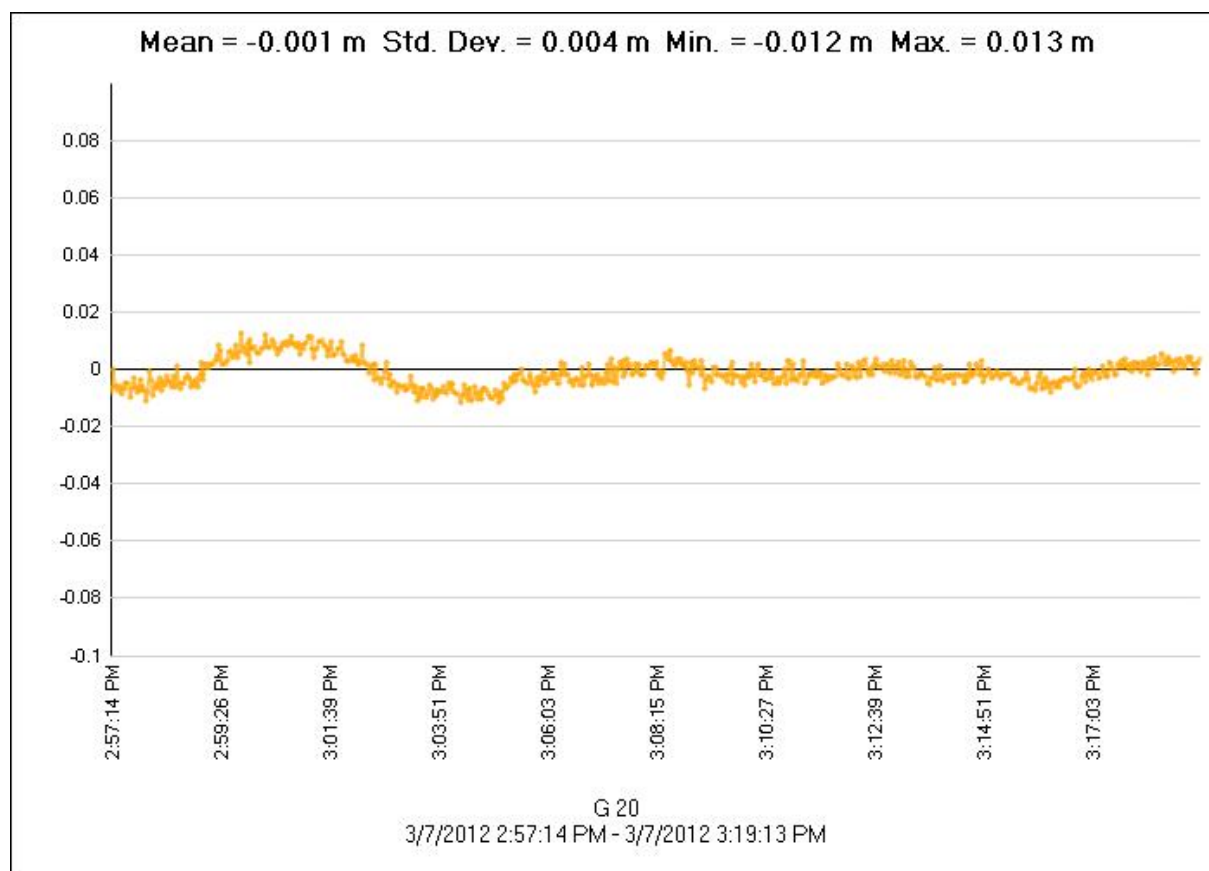
3/7/2012 2:57:14 PM - 3/7/2012 3:19:13 PM

Mean = 0.005 m Std. Dev. = 0.016 m Min. = -0.043 m Max. = 0.055 m



G 16

3/7/2012 2:57:14 PM - 3/7/2012 3:19:13 PM



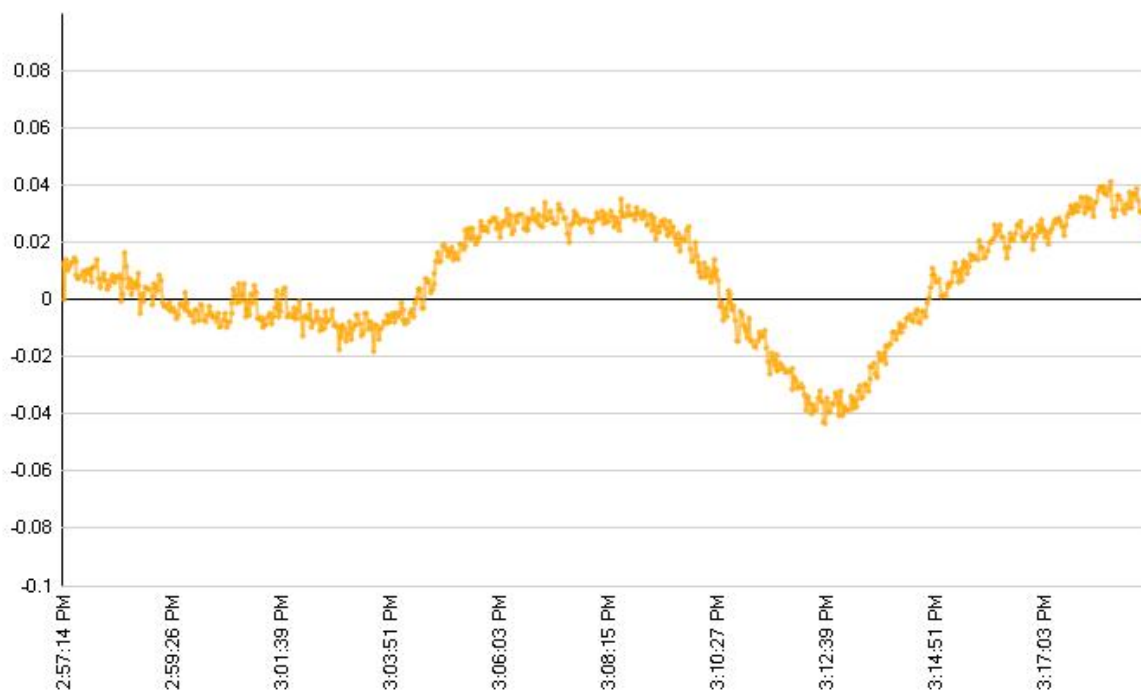
Mean = 0.005 m Std. Dev. = 0.021 m Min. = -0.048 m Max. = 0.048 m



G 23

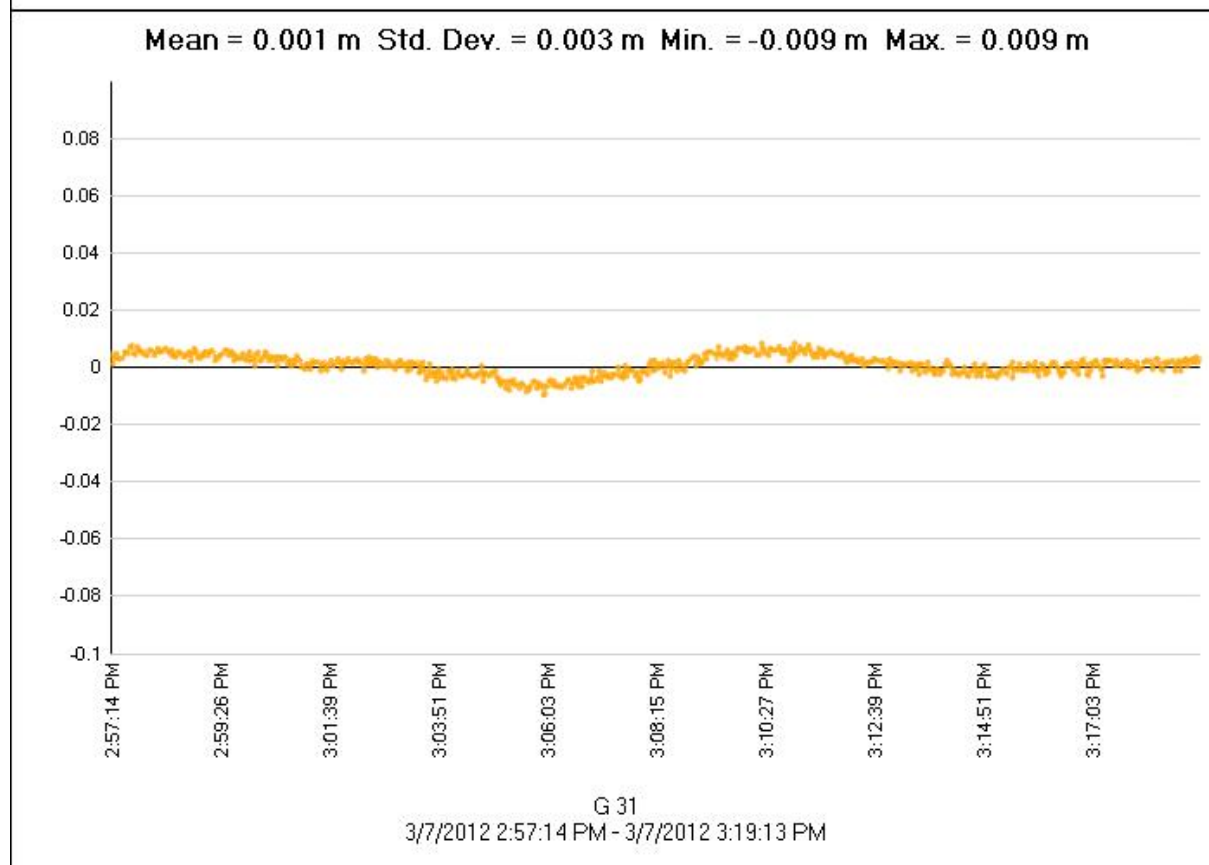
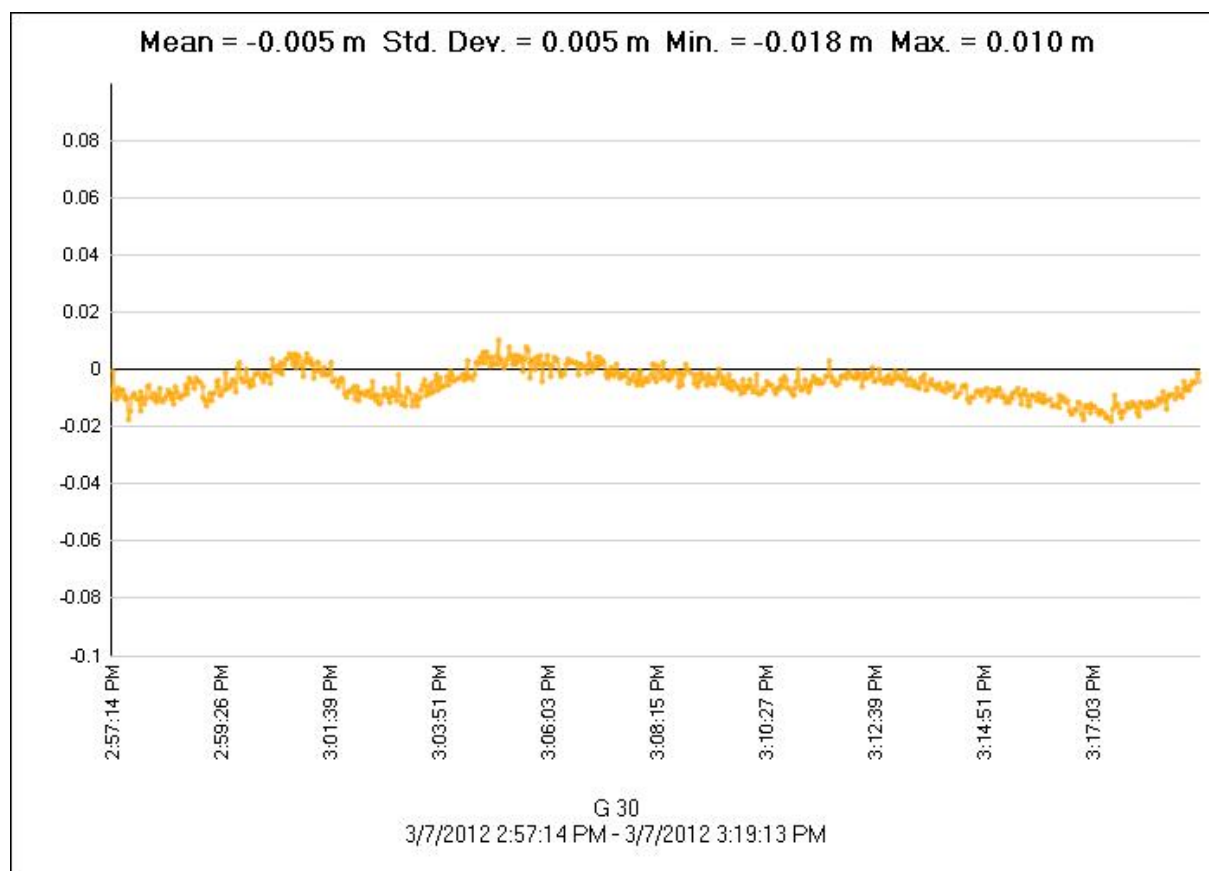
3/7/2012 2:57:14 PM - 3/7/2012 3:19:13 PM

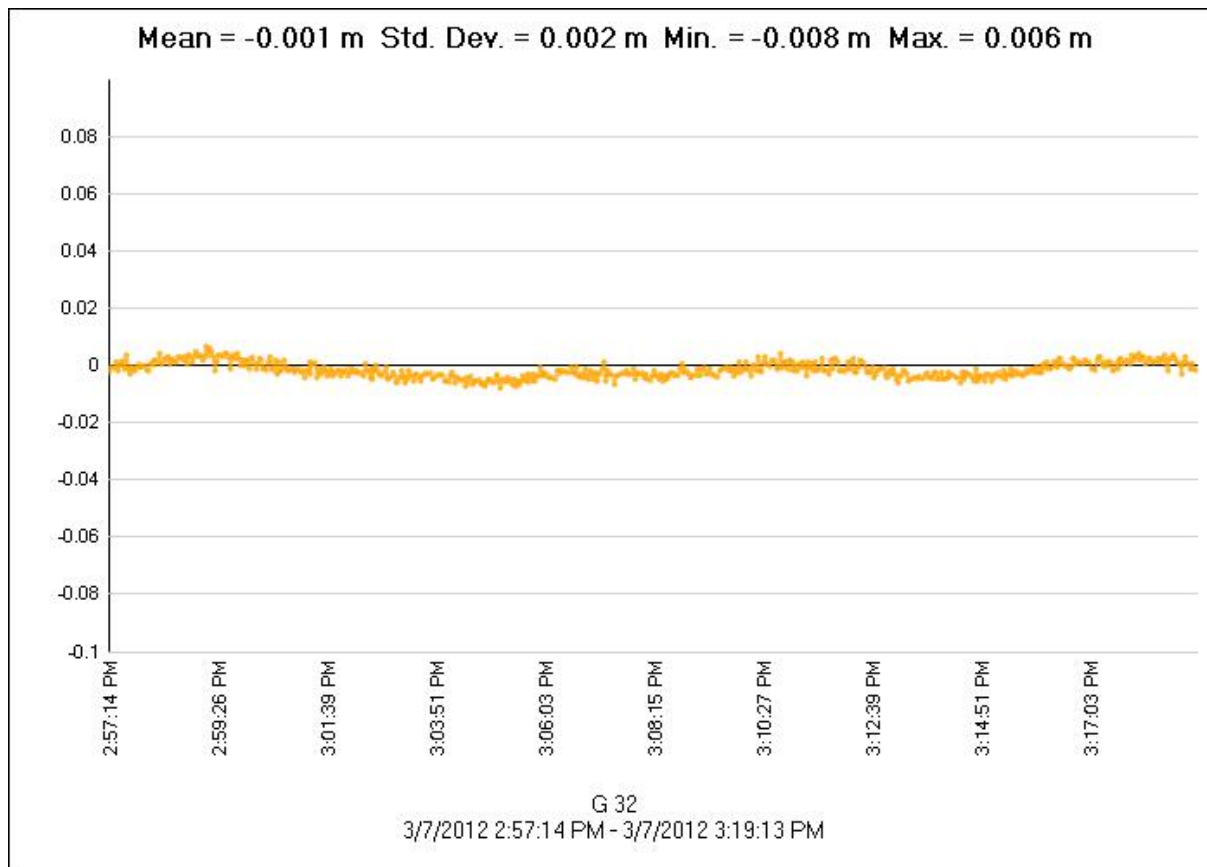
Mean = 0.006 m Std. Dev. = 0.019 m Min. = -0.043 m Max. = 0.041 m



G 25

3/7/2012 2:57:14 PM - 3/7/2012 3:19:13 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



---

HH0698 - SVA14-B1 (3:32:58 PM-3:55:22 PM) (S304)

---

Baseline observation: HH0698 --- SVA14-B1 (B304)

Processed: 4/9/2012 1:12:58 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.010 m

Vertical precision: 0.017 m

RMS: 0.001 m

Maximum PDOP: 2.472

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 3/7/2012 3:32:58 PM (Local: UTC-7hr)

Processing stop time: 3/7/2012 3:55:22 PM (Local: UTC-7hr)

Processing duration: 00:22:24

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0698				
Grid		Local		Global	
Easting	290370.958 m	Latitude	N37°35'56.45803"	Latitude	N37°35'56.45802"
Northing	4163977.815 m	Longitude	W101°22'28.55840"	Longitude	W101°22'28.55840"
Elevation	944.147 m	Height	918.629 m	Height	918.629 m

To:	SVA14-B1				
Grid		Local		Global	
Easting	280435.718 m	Latitude	N37°42'26.71726"	Latitude	N37°42'26.71725"
Northing	4176273.627 m	Longitude	W101°29'26.68183"	Longitude	W101°29'26.68183"
Elevation	974.817 m	Height	949.517 m	Height	949.517 m

Vector					
9Ughb[	-9935.240 m	NS Fwd Azimuth	319°36'36"	L	-8595.021 m
Bcfh\jb[	12295.812 m	Ellipsoid Dist.	15805.453 m	M	9213.155 m
9`Yj Uhcb	30.671 m	<Y][\h	30.888 m	N	9546.194 m

## Standard Errors

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

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

	X	Y	Z
X	0.0000158593		
Y	0.0000131183	0.0000502659	
Z	-0.0000055732	-0.0000260366	0.0000307412

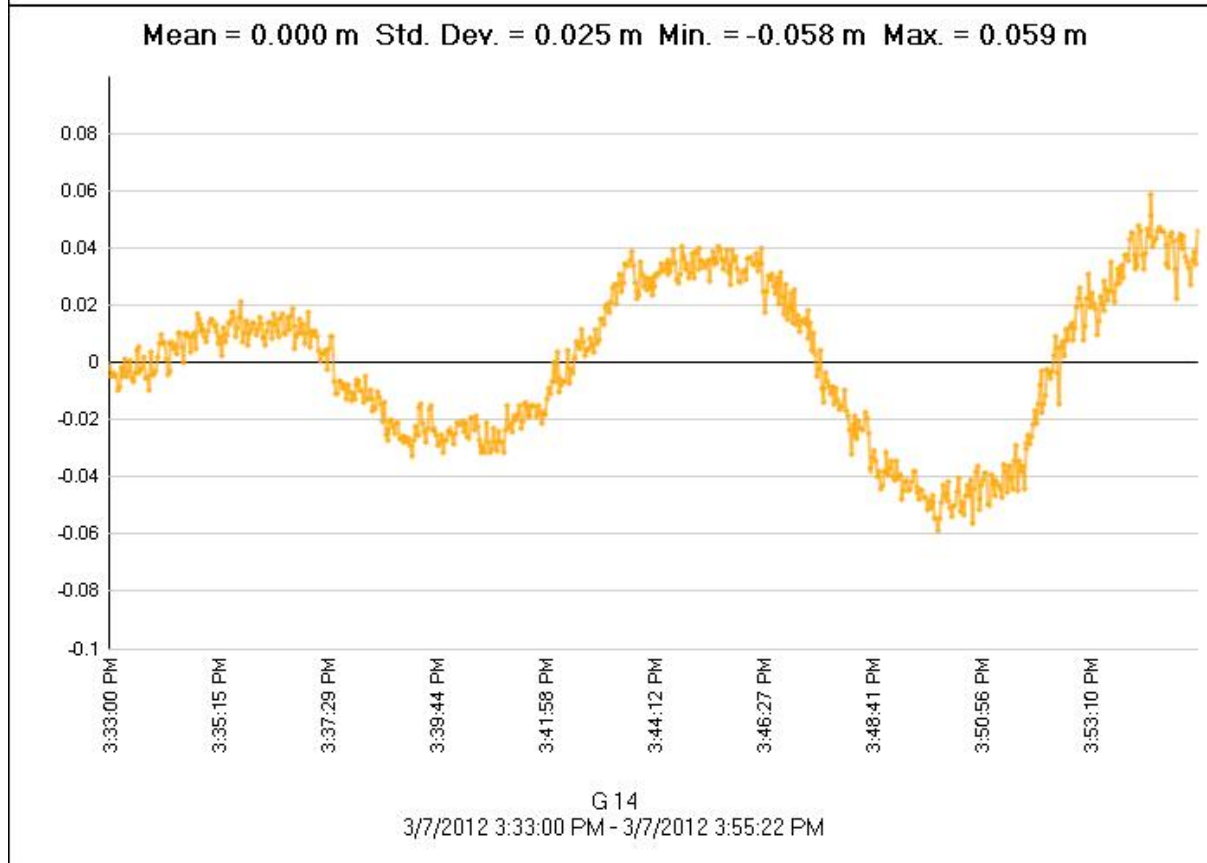
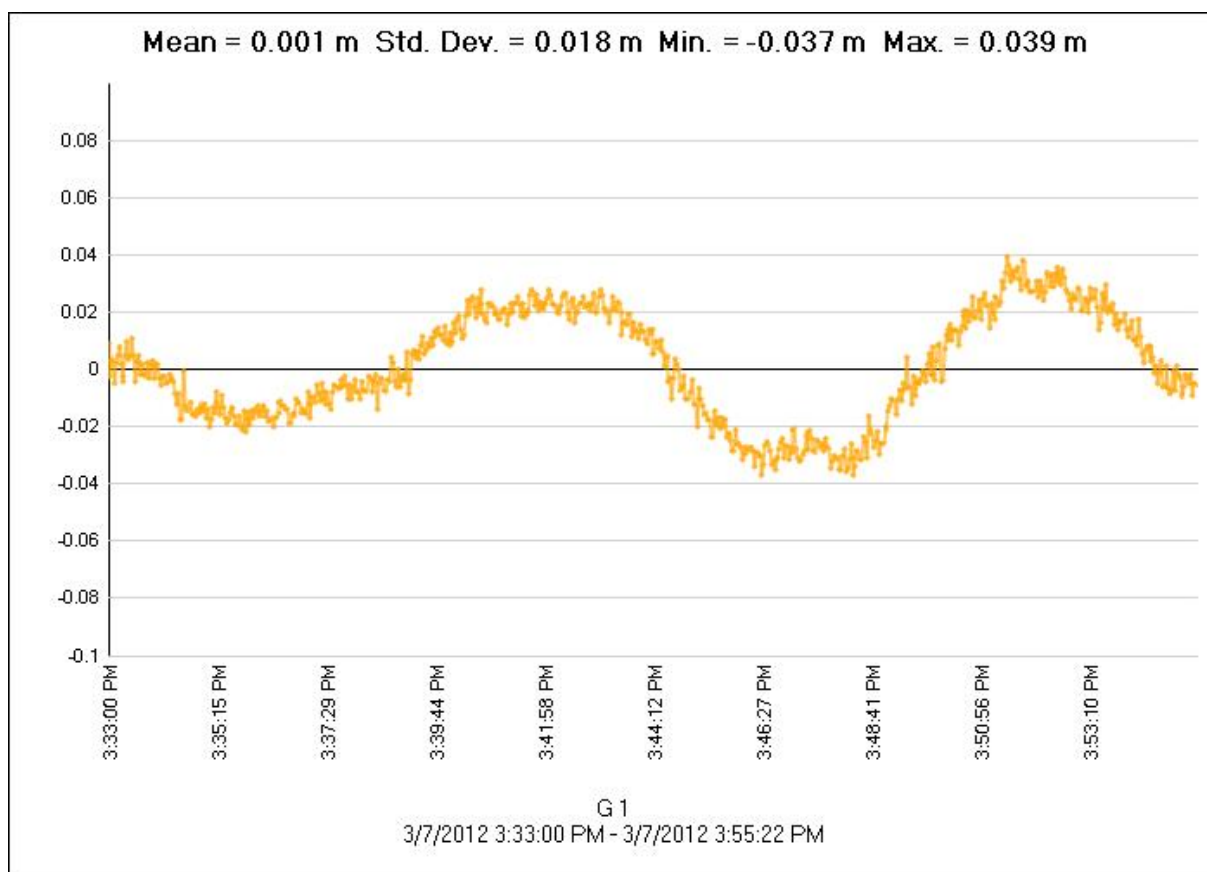
## Occupations

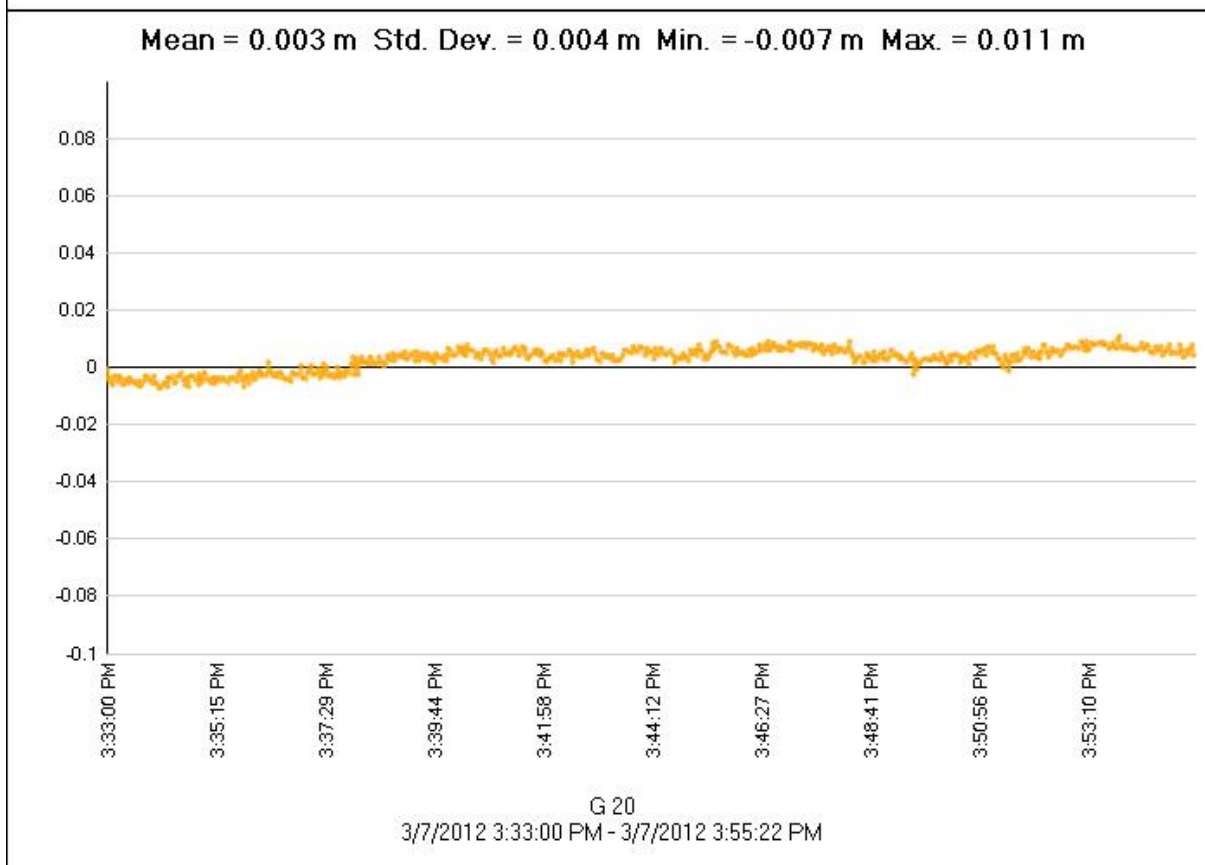
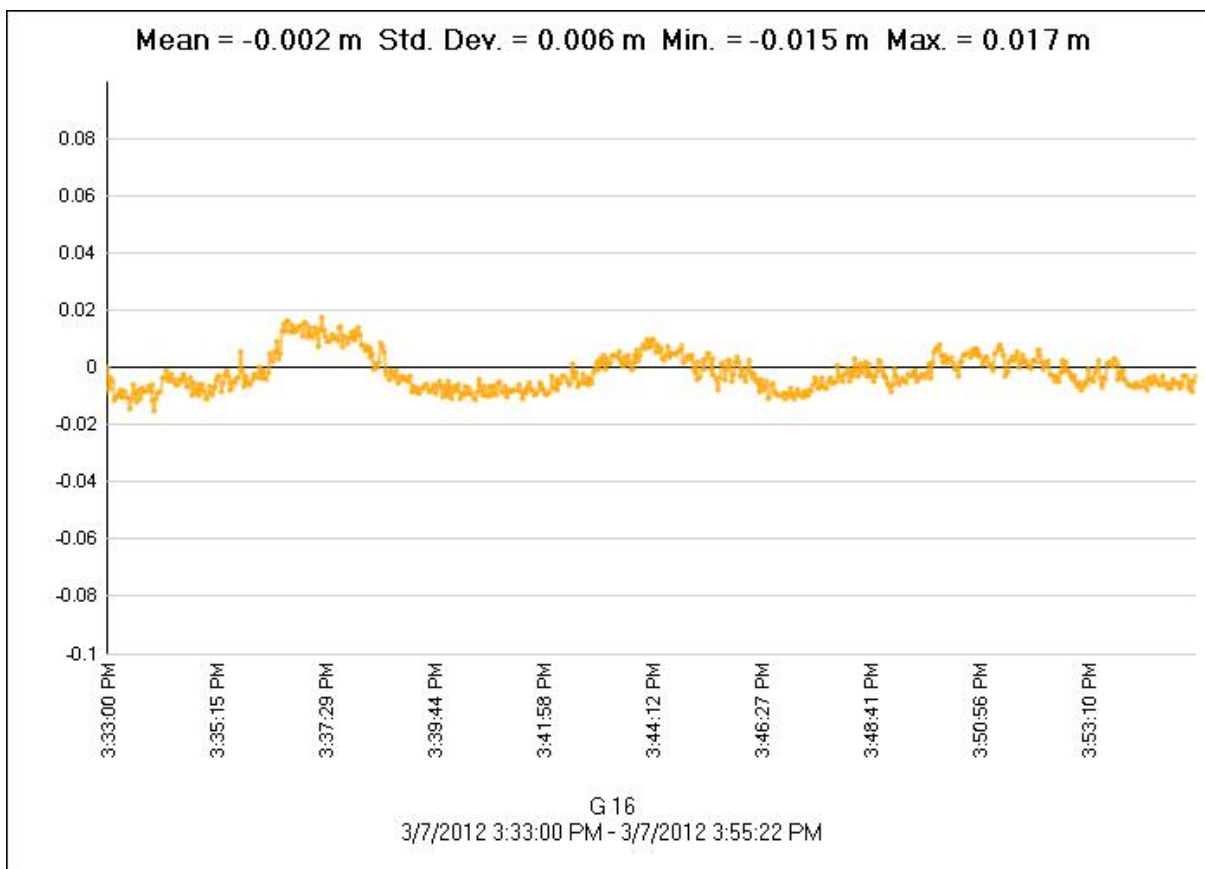
	From	To
Point ID:	HH0698	SVA14-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00100670.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050673.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

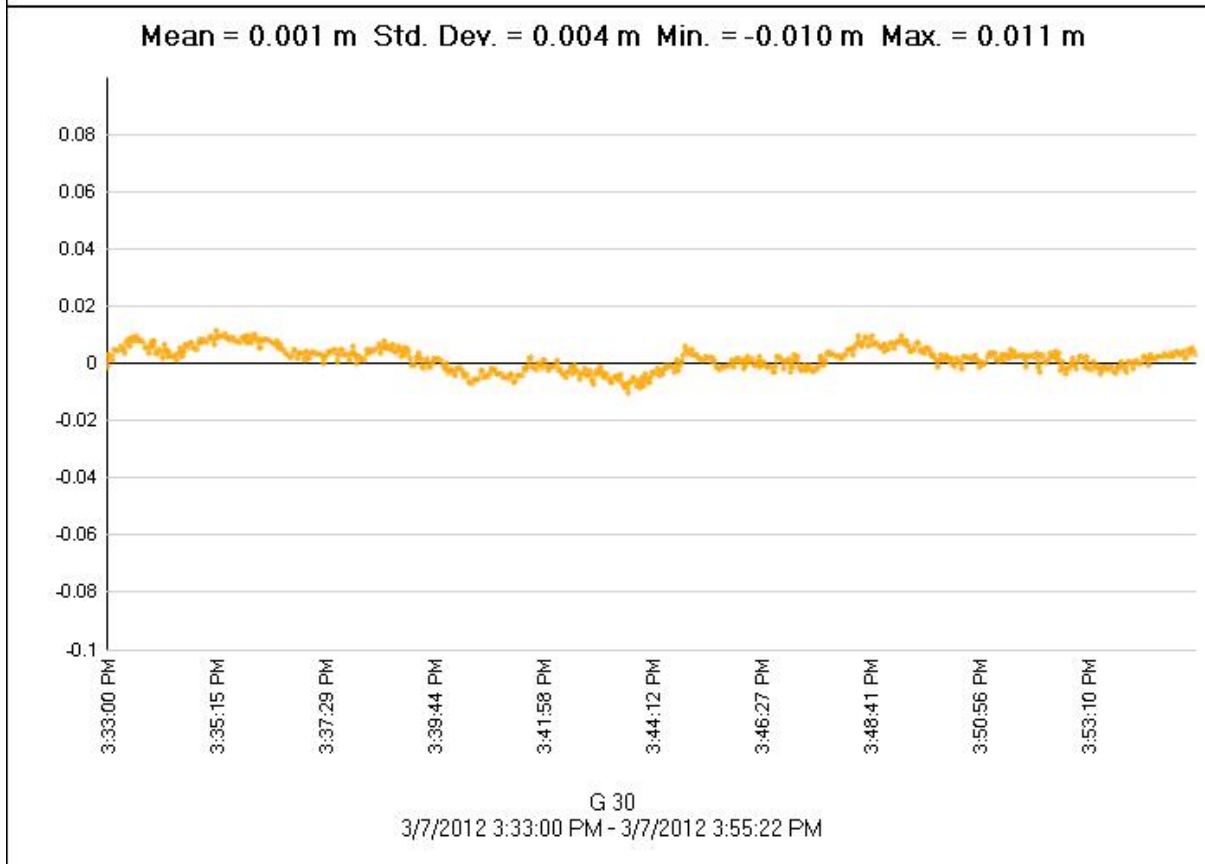
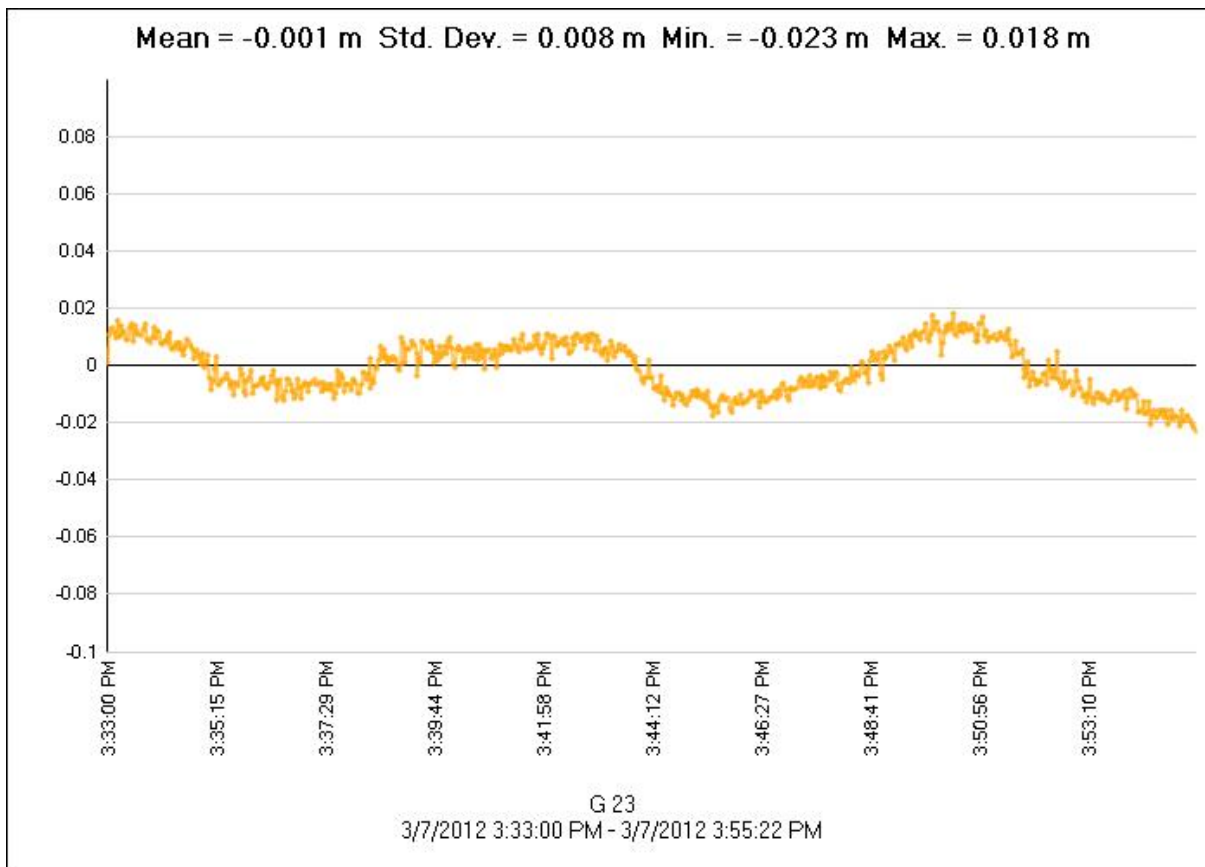
Tracking Summary

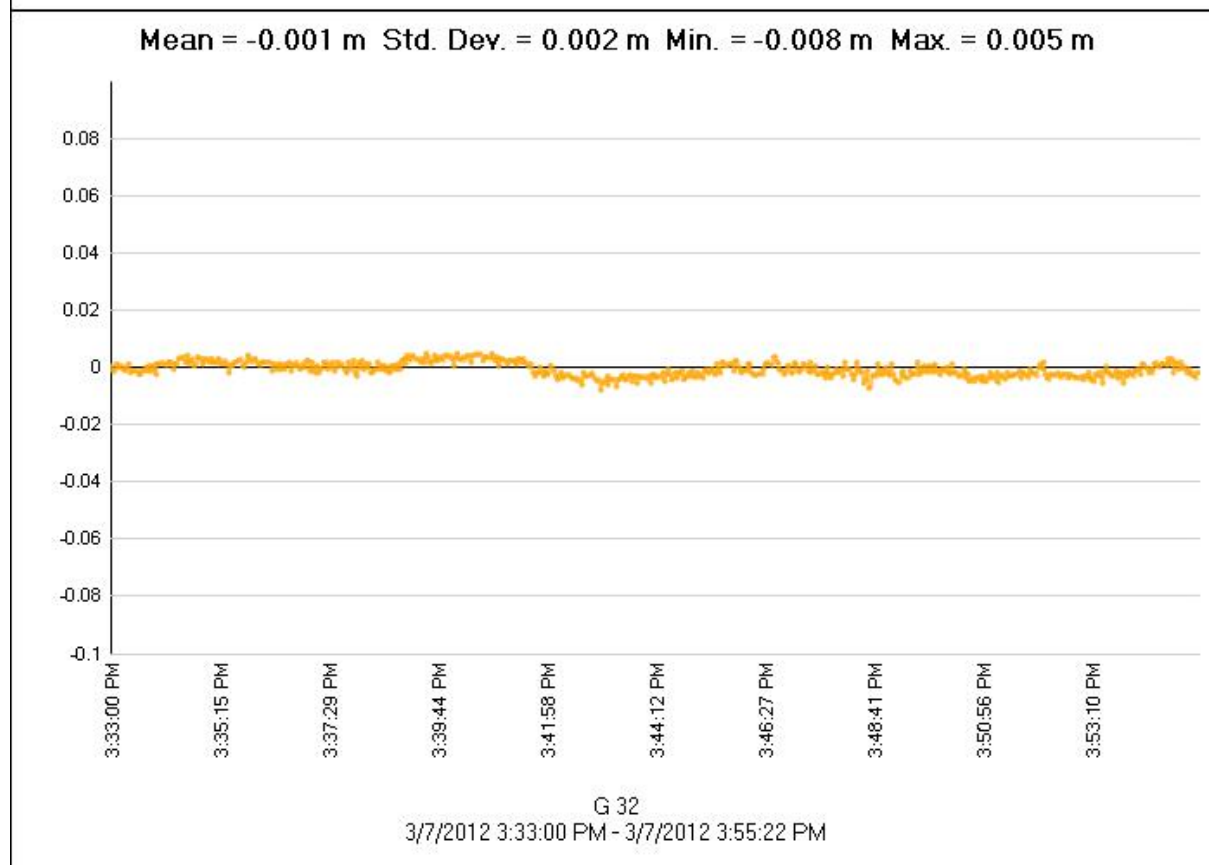
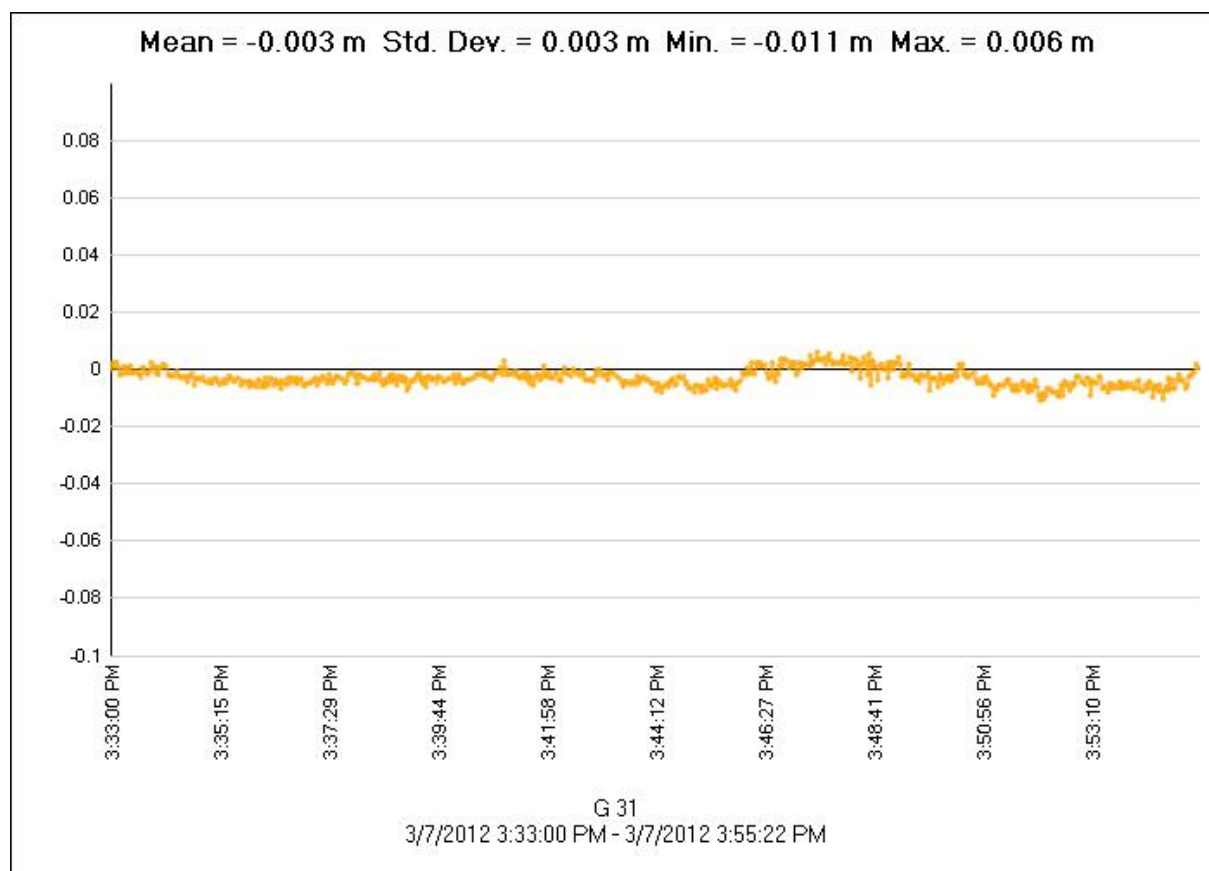
SV	3/7/2012 3:32:58 PM	Duration: 00:22:24	Major interval: 00:01:00	3/7/2012 3:55:22 PM
G 1	L1			
	L2			
G 11	L1			
	L2			
G 13	L1			
	L2			
G 14	L1			
	L2			
G 16	L1			
	L2			
G 20	L1			
	L2			
G 22	L1			
	L2			
G 23	L1			
	L2			
G 25	L1			
	L2			
G 30	L1			
	L2			
G 31	L1			
	L2			
G 32	L1			
	L2			

## 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



---

HH0698 - FVA14-B1 (3:59:51 PM-4:22:35 PM) (S305)

---

Baseline observation: HH0698 --- FVA14-B1 (B305)

Processed: 4/9/2012 1:12:57 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.010 m

Vertical precision: 0.022 m

RMS: 0.003 m

Maximum PDOP: 5.342

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 3/7/2012 3:59:51 PM (Local: UTC-7hr)

Processing stop time: 3/7/2012 4:22:35 PM (Local: UTC-7hr)

Processing duration: 00:22:44

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0698				
Grid		Local		Global	
Easting	290370.958 m	Latitude	N37°35'56.45803"	Latitude	N37°35'56.45802"
Northing	4163977.815 m	Longitude	W101°22'28.55840"	Longitude	W101°22'28.55840"
Elevation	944.147 m	Height	918.629 m	Height	918.629 m

To:	FVA14-B1				
Grid		Local		Global	
Easting	280726.359 m	Latitude	N37°42'26.89211"	Latitude	N37°42'26.89211"
Northing	4176271.293 m	Longitude	W101°29'14.82020"	Longitude	W101°29'14.82020"
Elevation	977.636 m	Height	952.331 m	Height	952.331 m

Vector					
9Ughb[	-9644.598 m	NS Fwd Azimuth	320°26'01"	L	-8310.042 m
Bcfh\jb[	12293.478 m	Ellipsoid Dist.	15622.630 m	M	9156.326 m
9`Yj Ufcb	33.489 m	<Y][\h	33.702 m	N	9552.181 m

## Standard Errors

Vector errors:					
Point ID	0.003 m	Point ID	0°00'00"	Point ID	0.004 m
Point ID	0.004 m	Point ID	0.004 m	Point ID	0.008 m
Point ID	0.011 m	Point ID	0.011 m	Point ID	0.009 m

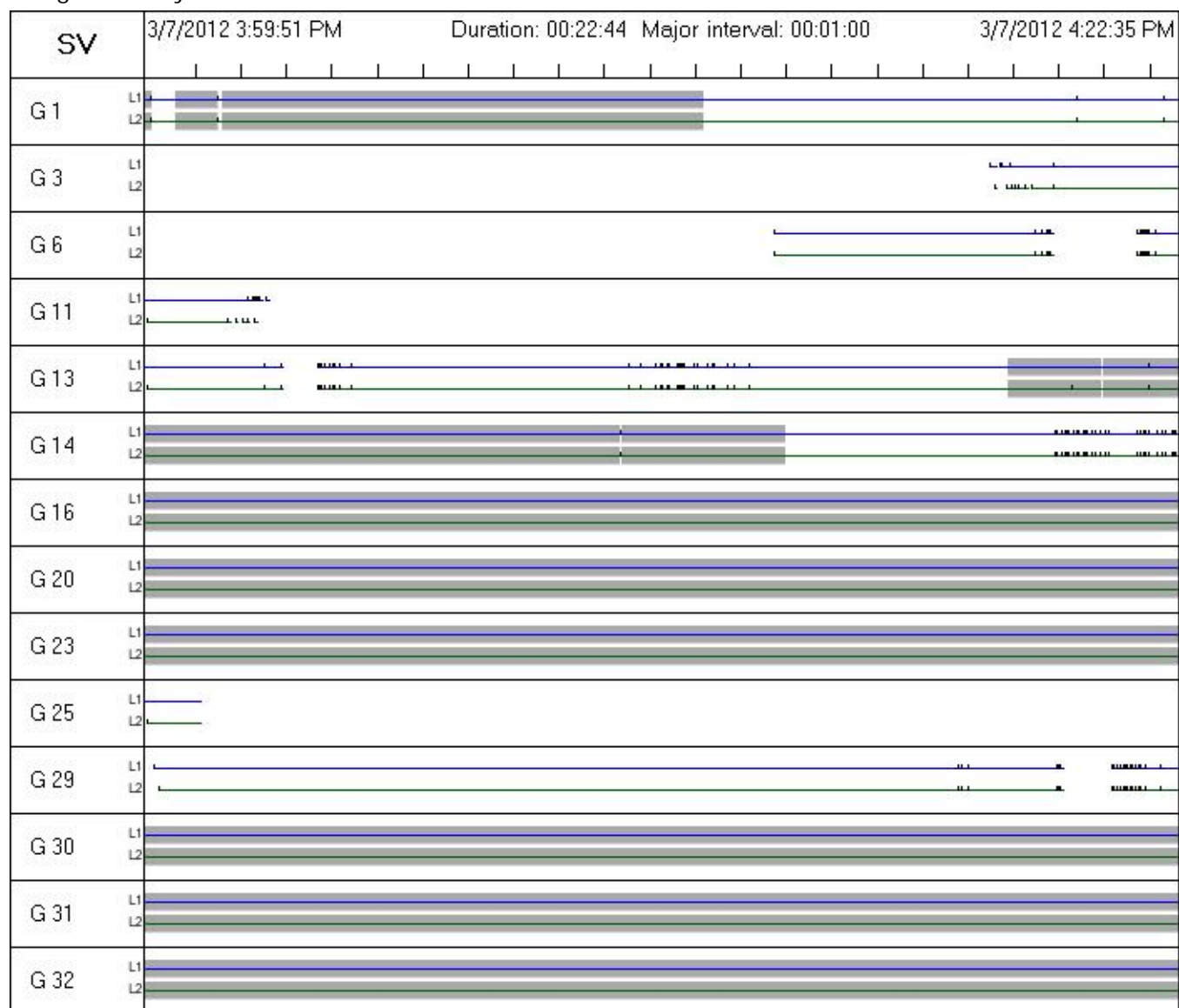
## Aposteriori Covariance Matrix (Meter<sup>2</sup>)

	X	Y	Z
X	0.0000127528		
Y	0.0000095691	0.0000615825	
Z	-0.0000074518	-0.0000549226	0.0000755027

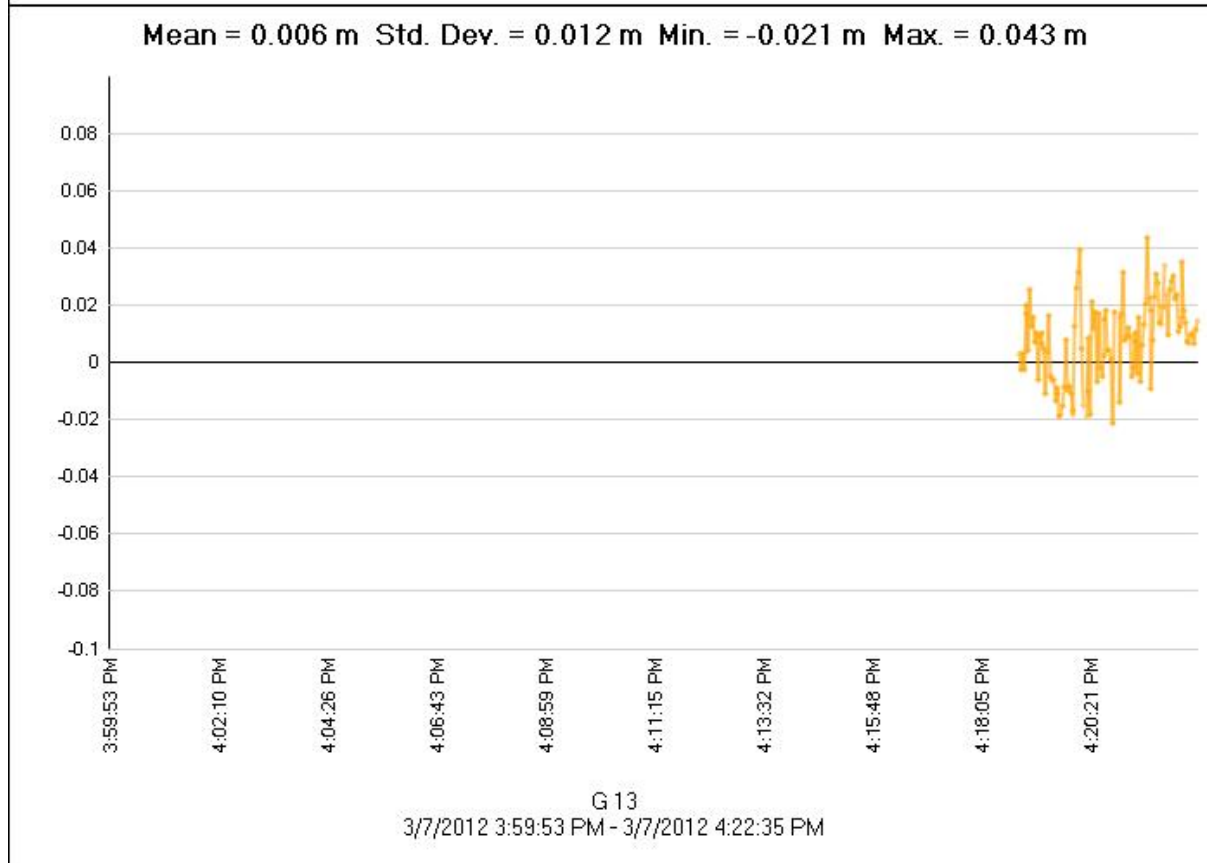
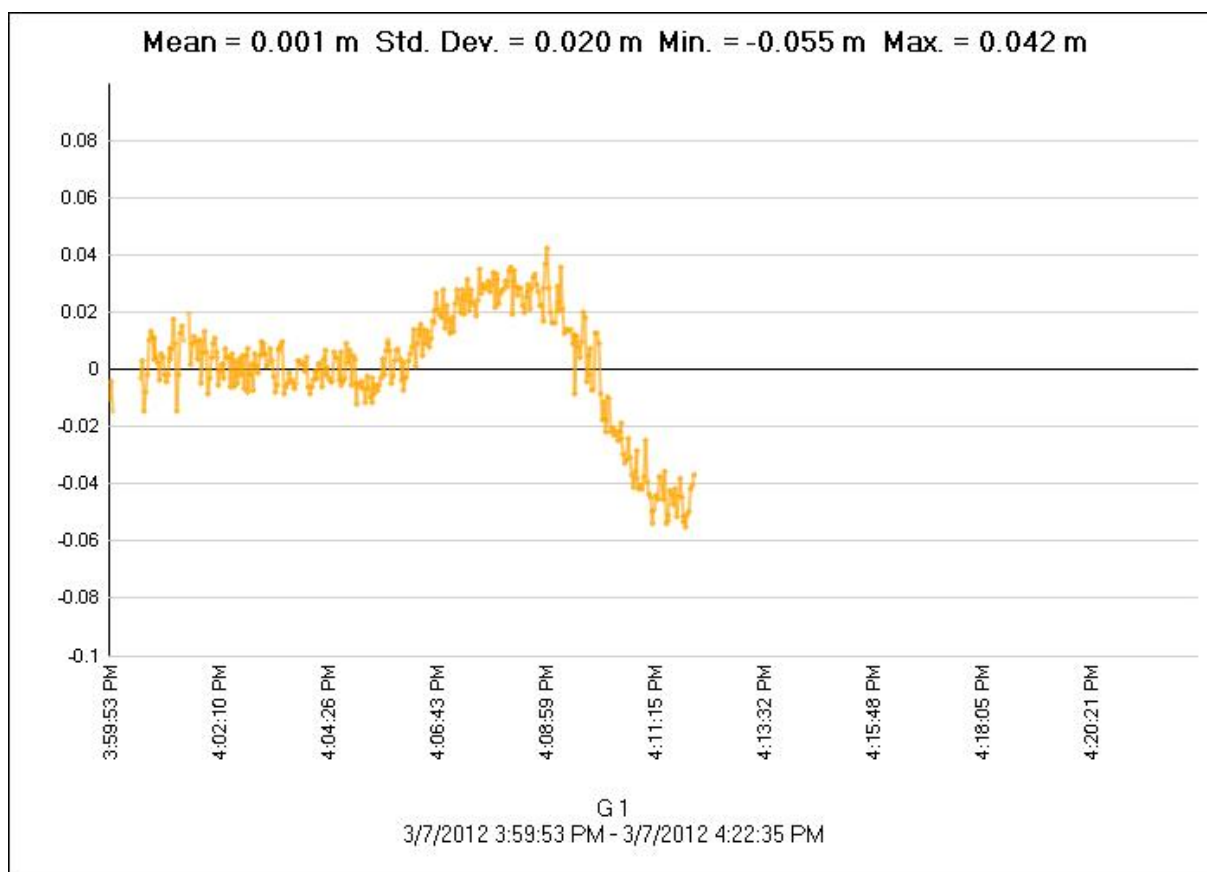
## Occupations

	From	To
Point ID:	HH0698	FVA14-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00100670.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050674.12o
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

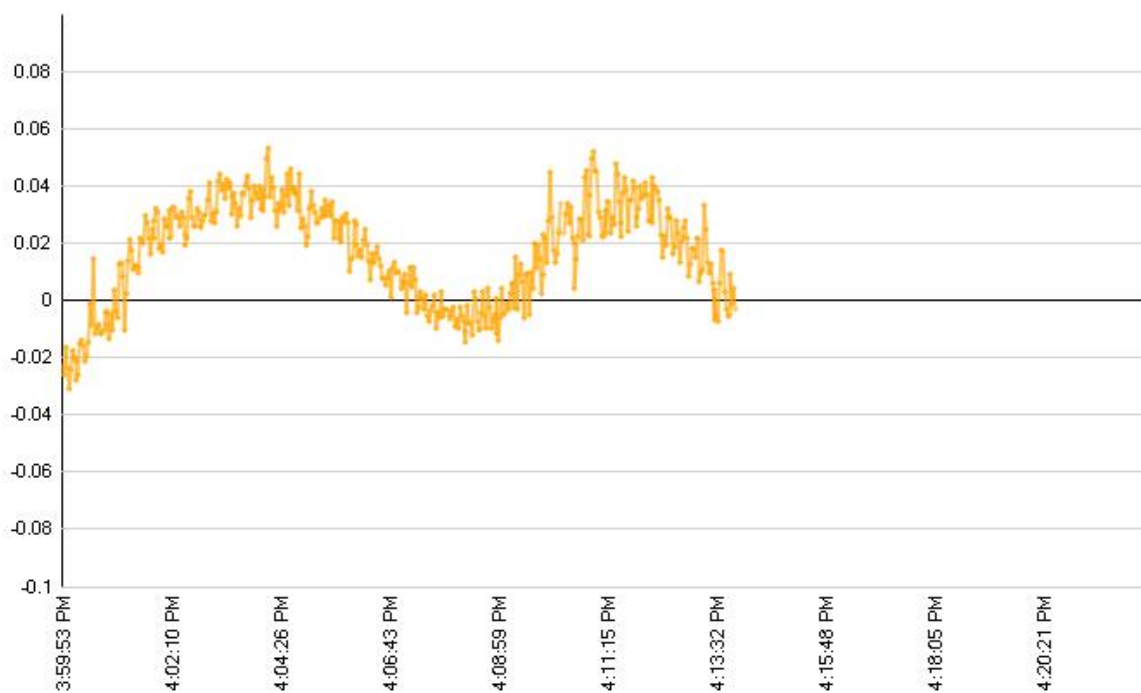
## Tracking Summary



## Residuals



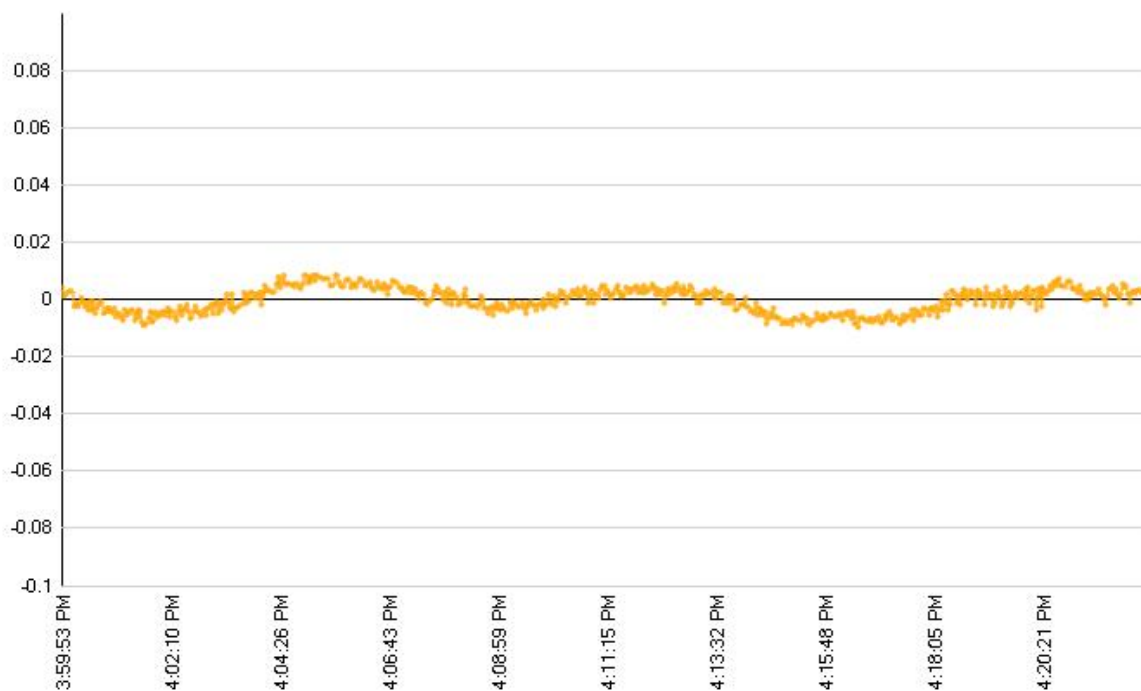
Mean = 0.015 m Std. Dev. = 0.016 m Min. = -0.031 m Max. = 0.053 m



G 14

3/7/2012 3:59:53 PM - 3/7/2012 4:22:35 PM

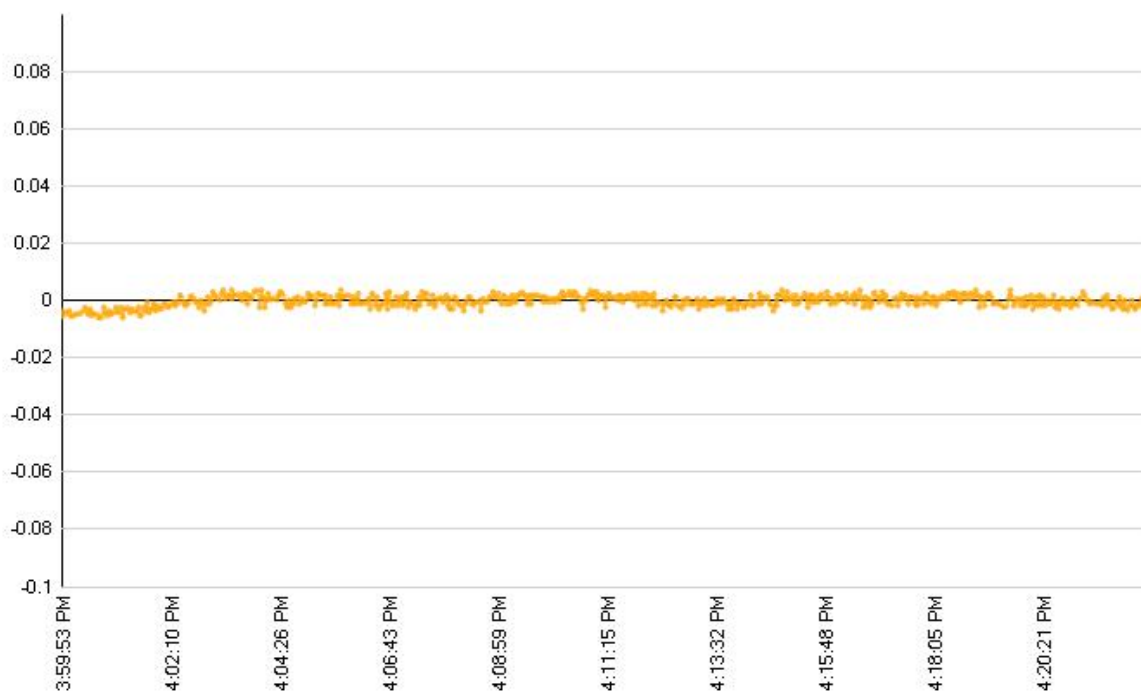
Mean = 0.000 m Std. Dev. = 0.004 m Min. = -0.009 m Max. = 0.009 m



G 16

3/7/2012 3:59:53 PM - 3/7/2012 4:22:35 PM

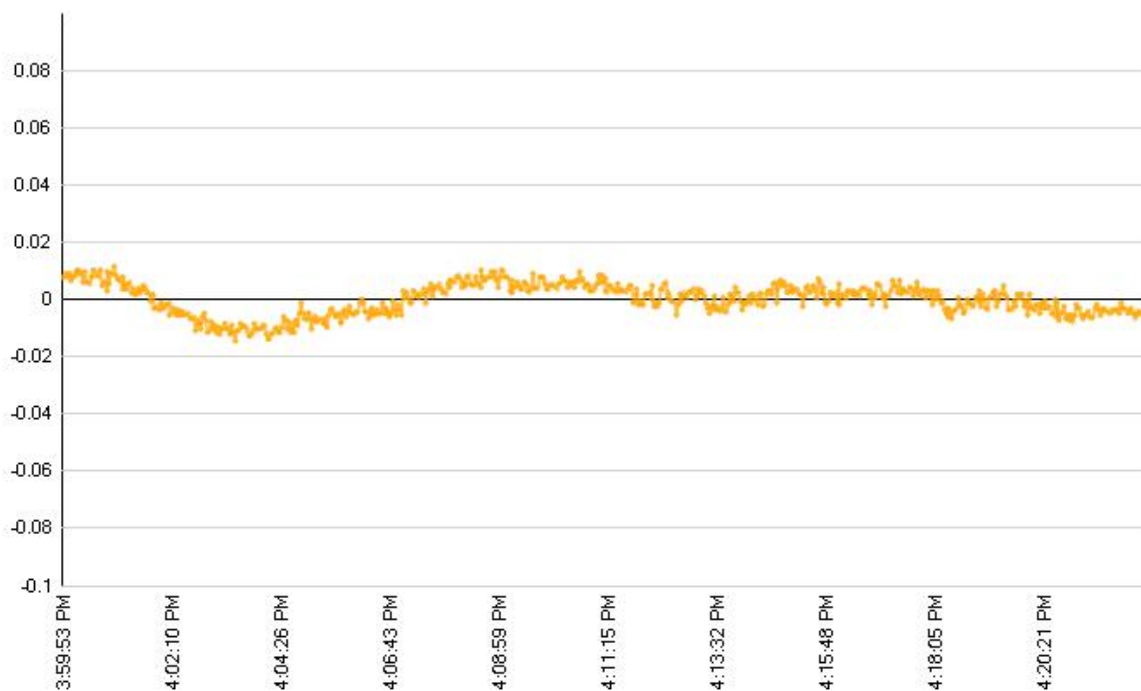
Mean = 0.000 m Std. Dev. = 0.002 m Min. = -0.006 m Max. = 0.004 m



G 20

3/7/2012 3:59:53 PM - 3/7/2012 4:22:35 PM

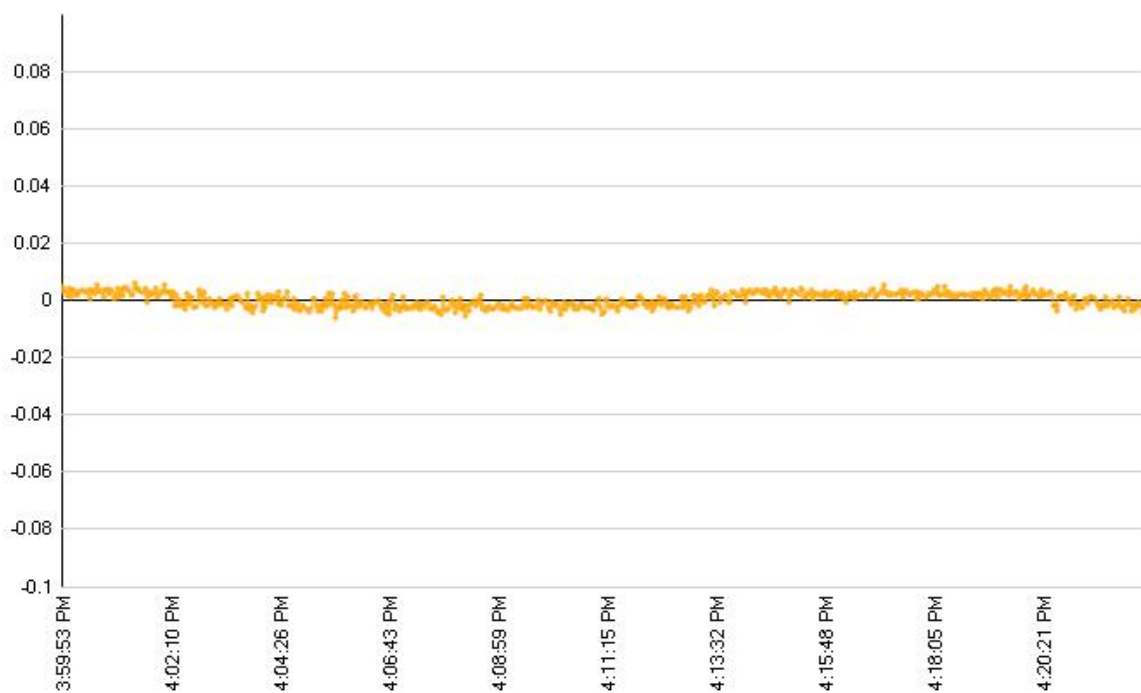
Mean = 0.000 m Std. Dev. = 0.005 m Min. = -0.014 m Max. = 0.011 m



G 23

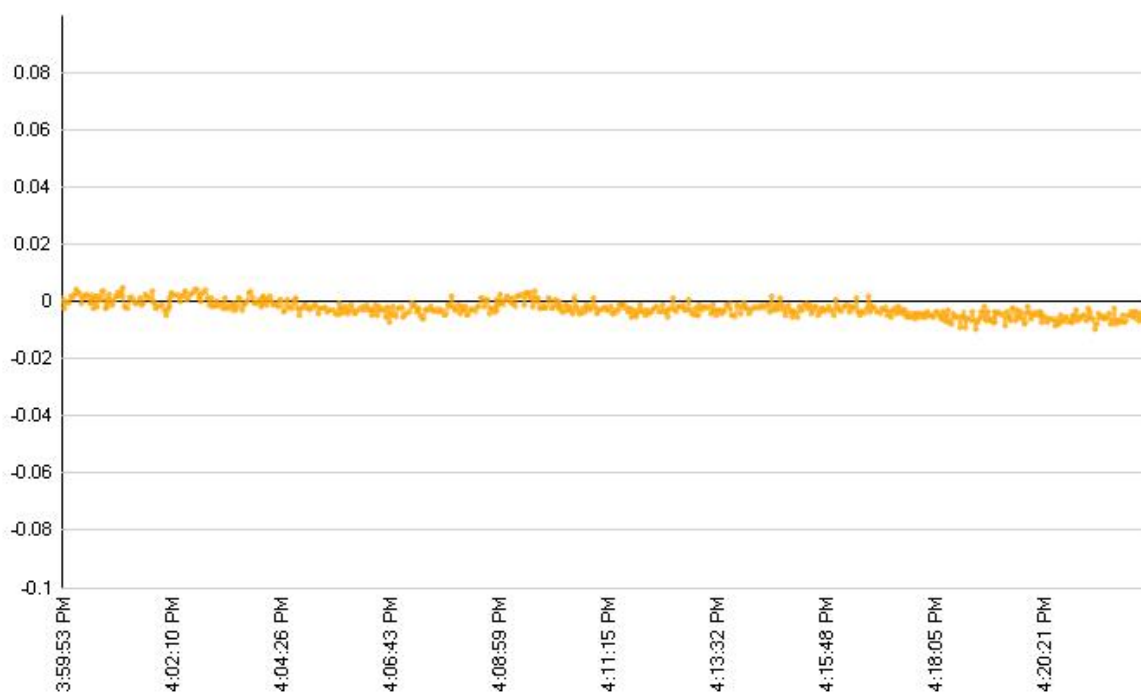
3/7/2012 3:59:53 PM - 3/7/2012 4:22:35 PM

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

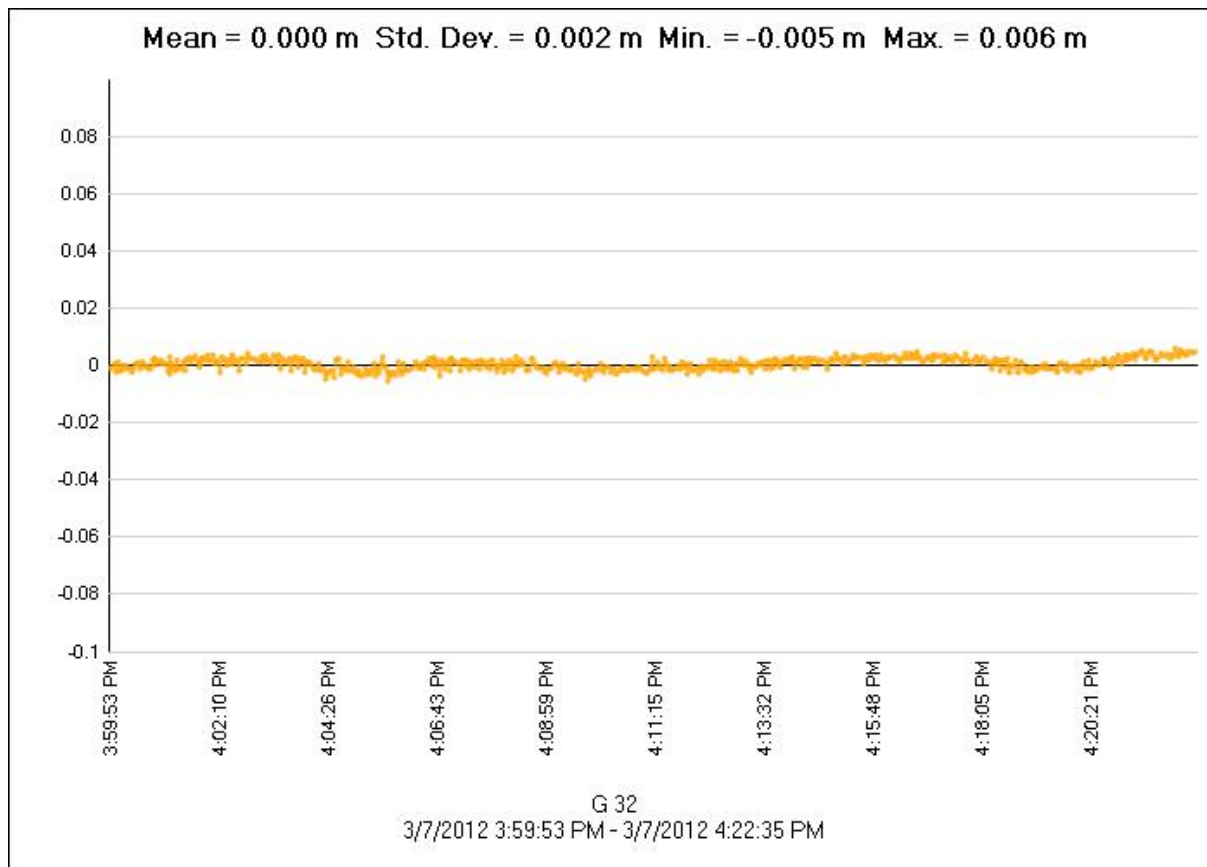


G 30  
3/7/2012 3:59:53 PM - 3/7/2012 4:22:35 PM

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



G 31  
3/7/2012 3:59:53 PM - 3/7/2012 4:22:35 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



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HH0698 - SVA23-B1 (4:38:09 PM-5:00:17 PM) (S306)

---

Baseline observation: HH0698 --- SVA23-B1 (B306)

Processed: 4/9/2012 1:13:02 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: 5.114

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 3/7/2012 4:38:09 PM (Local: UTC-7hr)

Processing stop time: 3/7/2012 5:00:17 PM (Local: UTC-7hr)

Processing duration: 00:22:08

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0698				
Grid		Local		Global	
Easting	290370.958 m	Latitude	N37°35'56.45803"	Latitude	N37°35'56.45802"
Northing	4163977.815 m	Longitude	W101°22'28.55840"	Longitude	W101°22'28.55840"
Elevation	944.147 m	Height	918.629 m	Height	918.629 m

To:	SVA23-B1				
Grid		Local		Global	
Easting	294836.774 m	Latitude	N37°42'26.02782"	Latitude	N37°42'26.02782"
Northing	4175881.793 m	Longitude	W101°19'38.62739"	Longitude	W101°19'38.62739"
Elevation	948.226 m	Height	922.725 m	Height	922.725 m

Vector					
9Ughb[	4465.816 m	NS Fwd Azimuth	19°06'46"	L	5528.166 m
Bcfh\jb[	11903.978 m	Ellipsoid Dist.	12712.444 m	M	6371.453 m
9`Yj Ufcb	4.080 m	<Y][\h	4.096 m	N	9512.988 m

## Standard Errors

Vector errors:

Point ID	0.003 m	Point Description	0°00'00"	Point Type	0.004 m
Point ID	0.004 m	Point Description	0.004 m	Point Type	0.007 m
Point ID	0.010 m	Point Description	0.010 m	Point Type	0.008 m

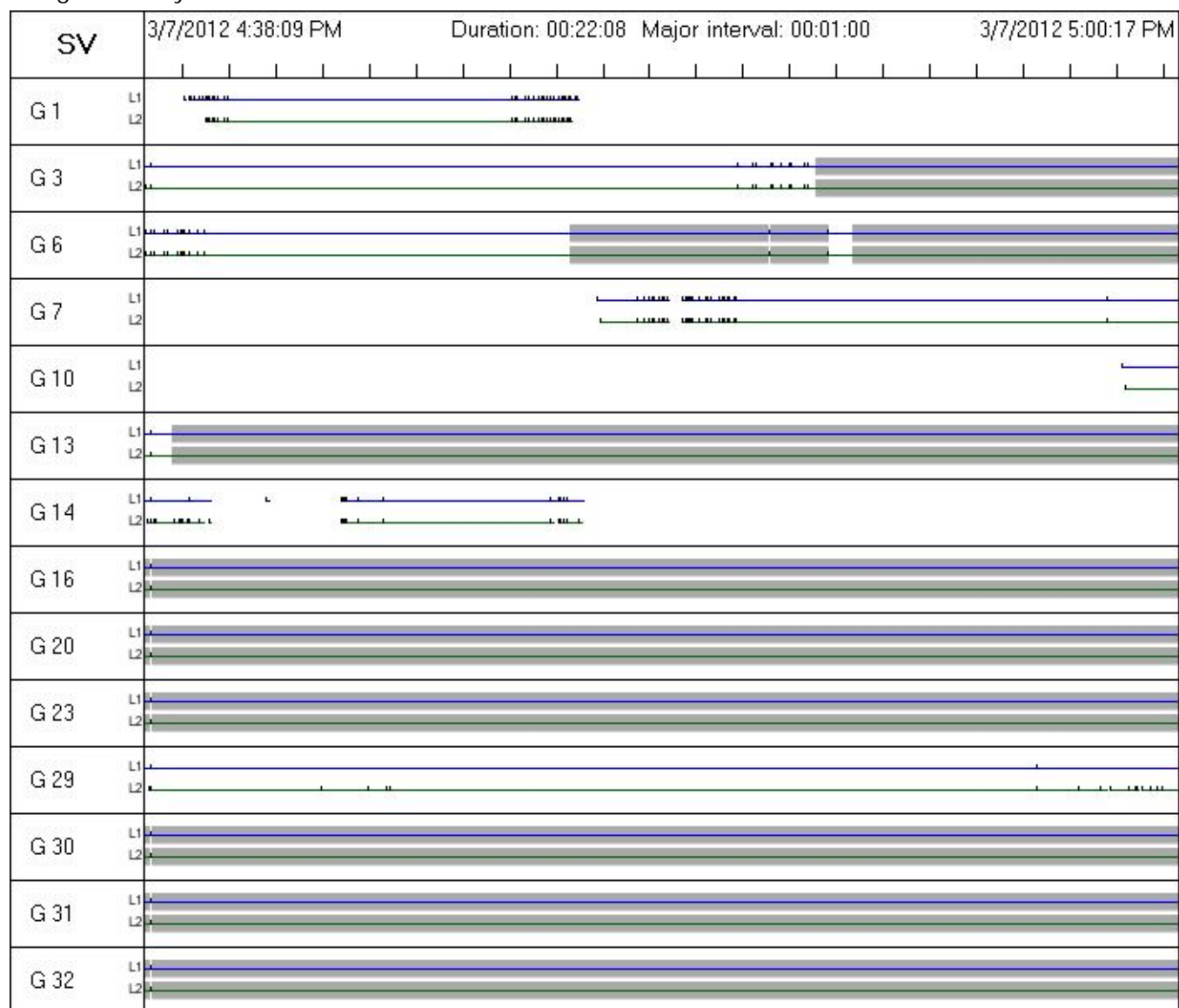
## Aposteriori Covariance Matrix (Meter<sup>2</sup>)

	X	Y	Z
X	0.0000129460		
Y	0.0000118445	0.0000559880	
Z	-0.0000123170	-0.0000480931	0.0000628427

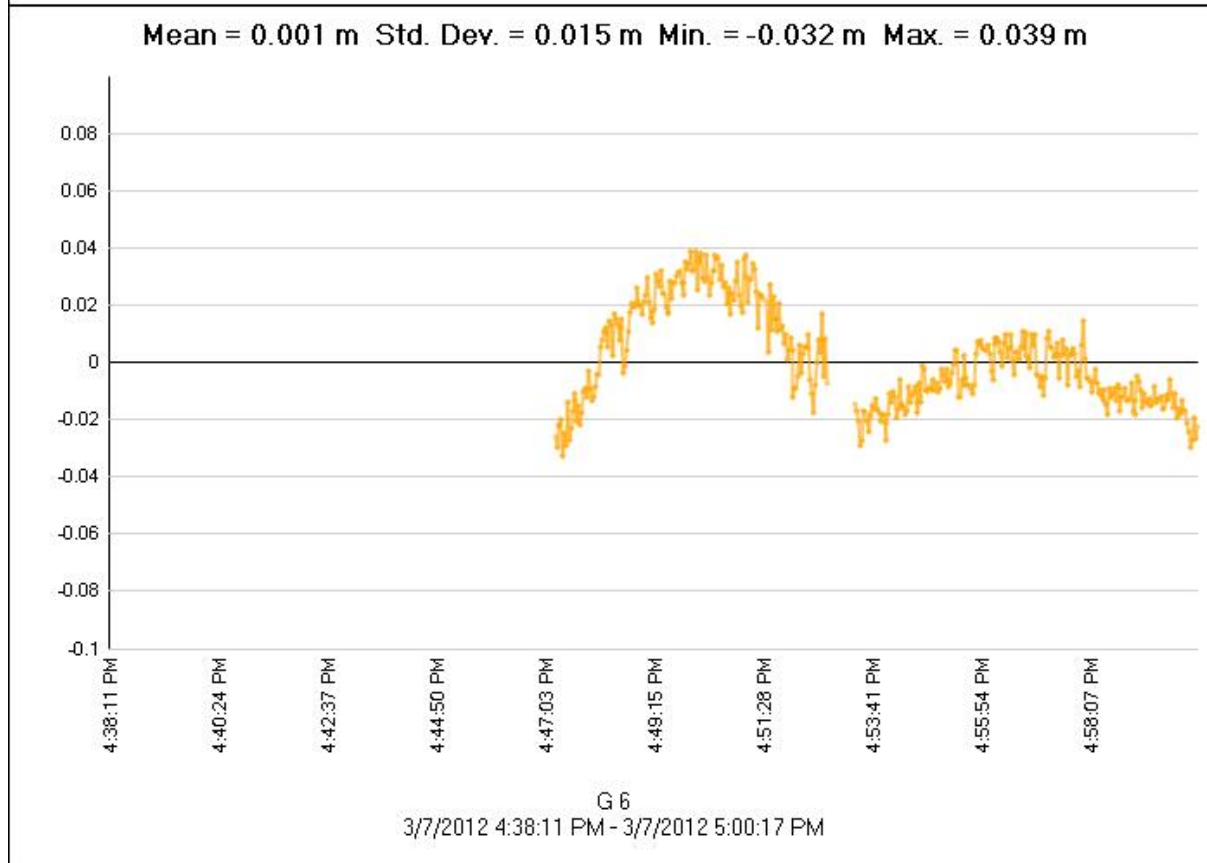
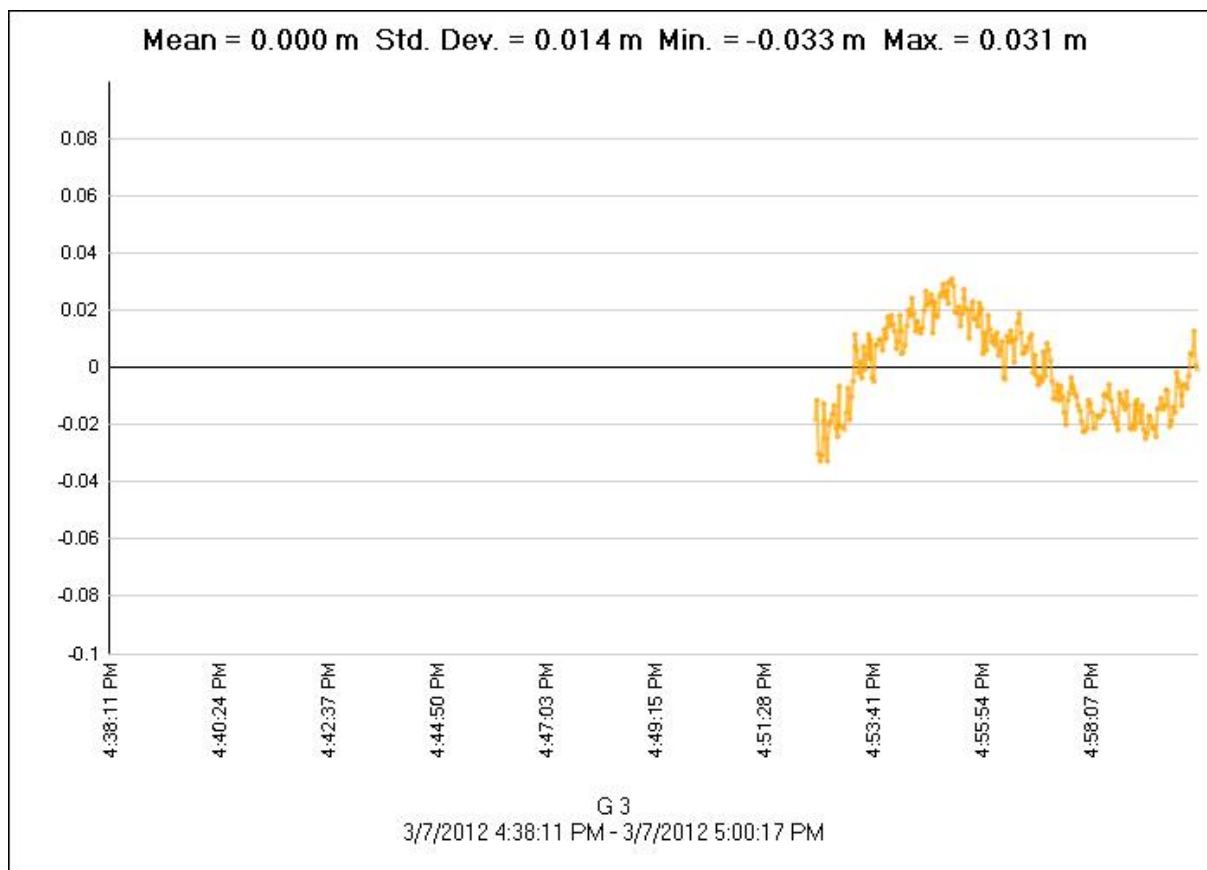
## Occupations

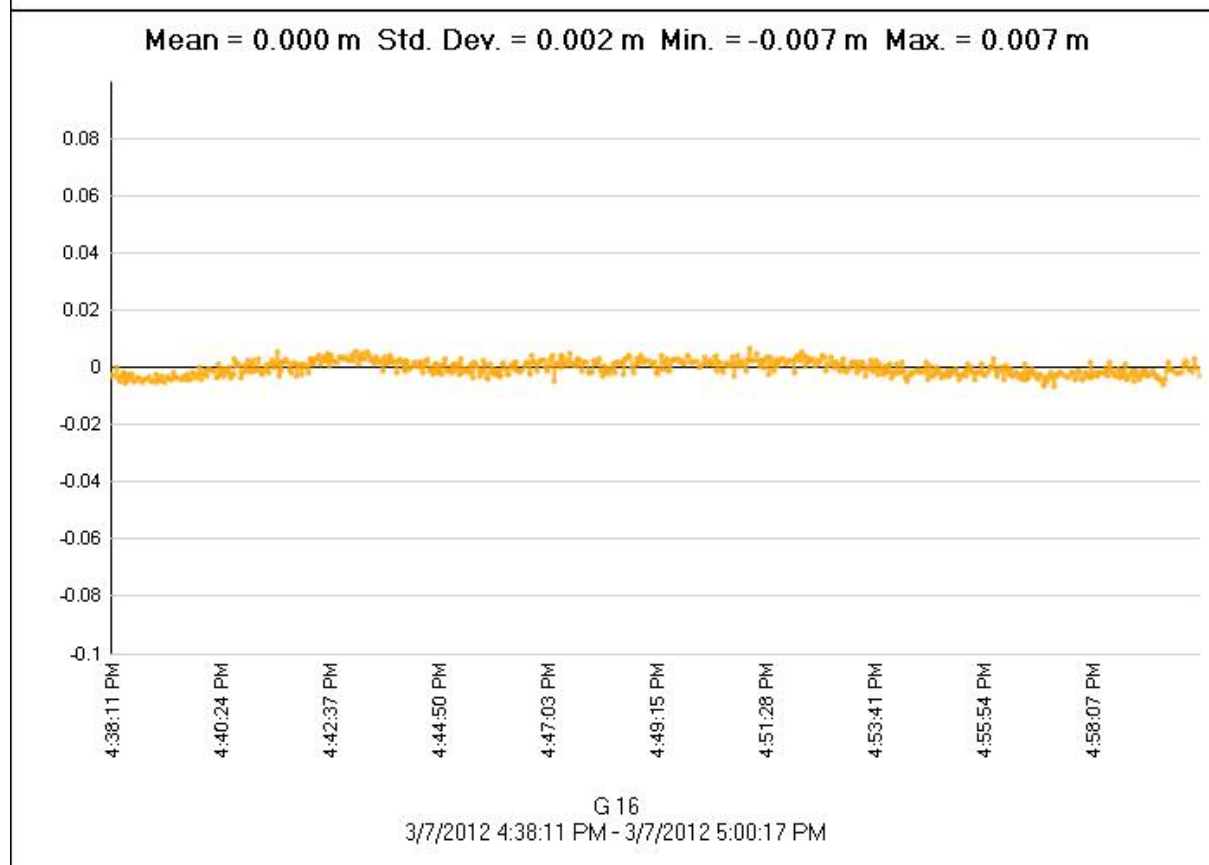
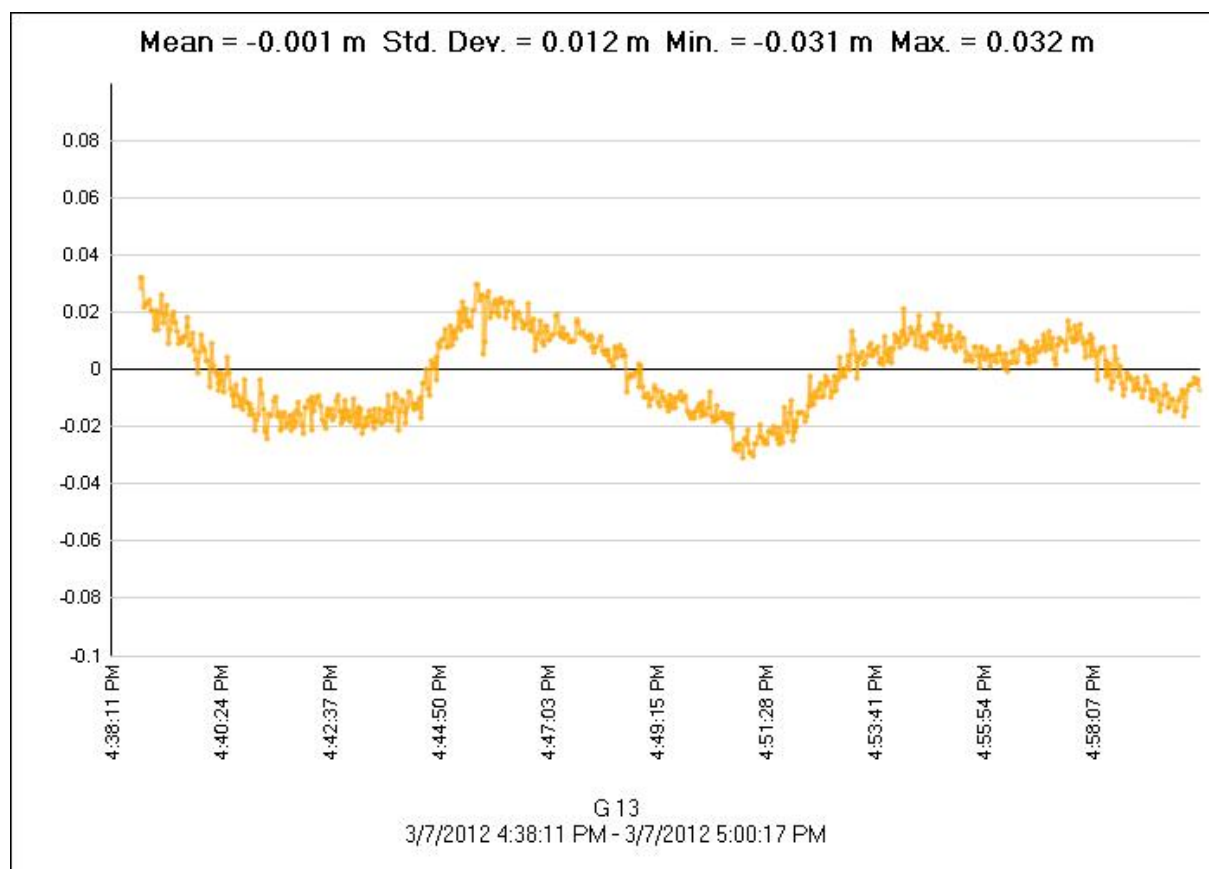
	From	To
Point ID:	HH0698	SVA23-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00100670.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050675.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

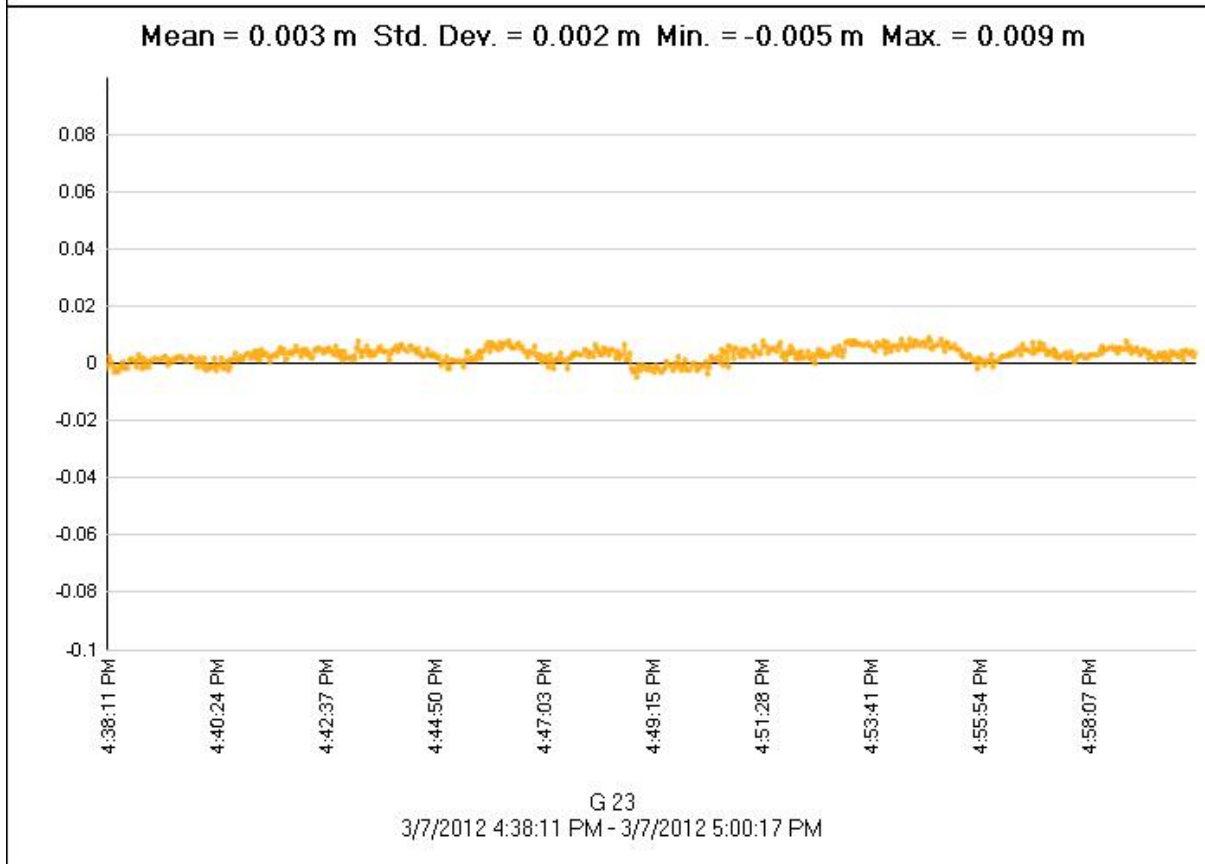
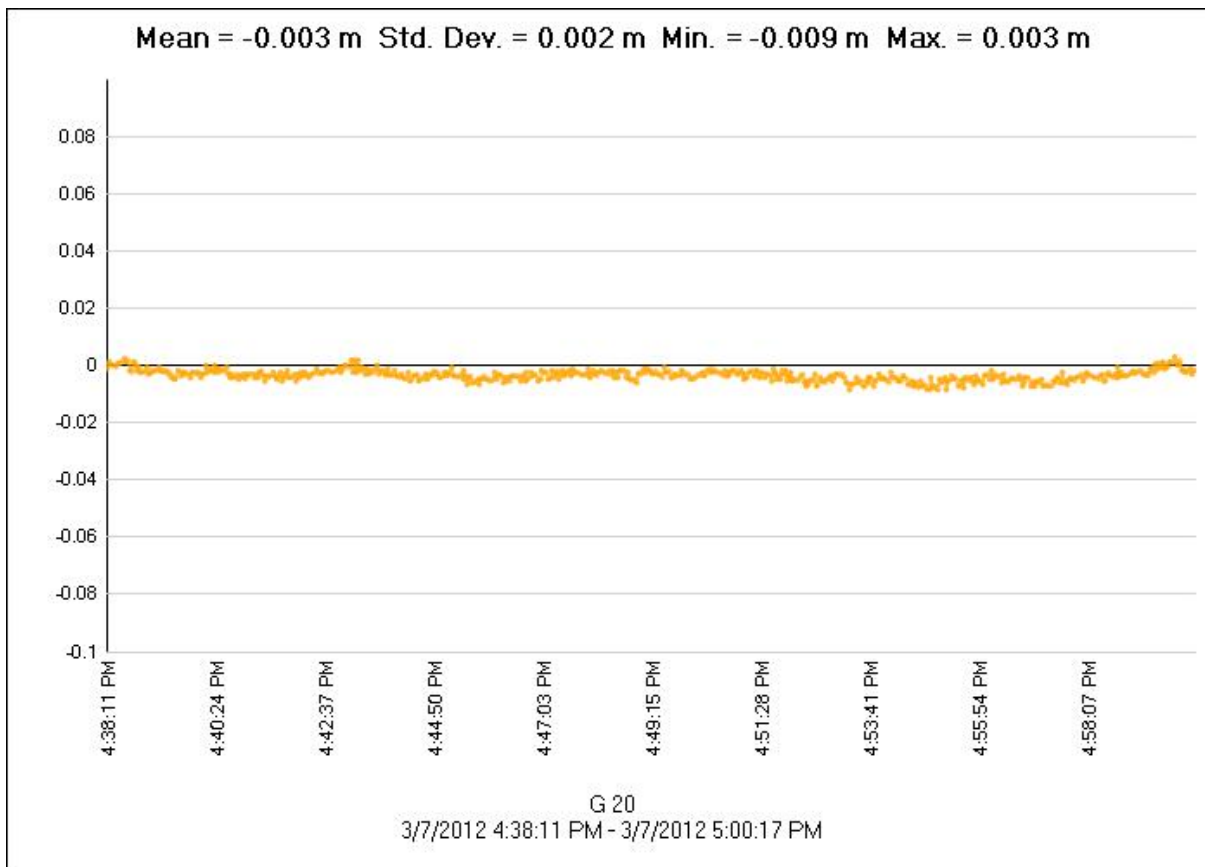
## Tracking Summary



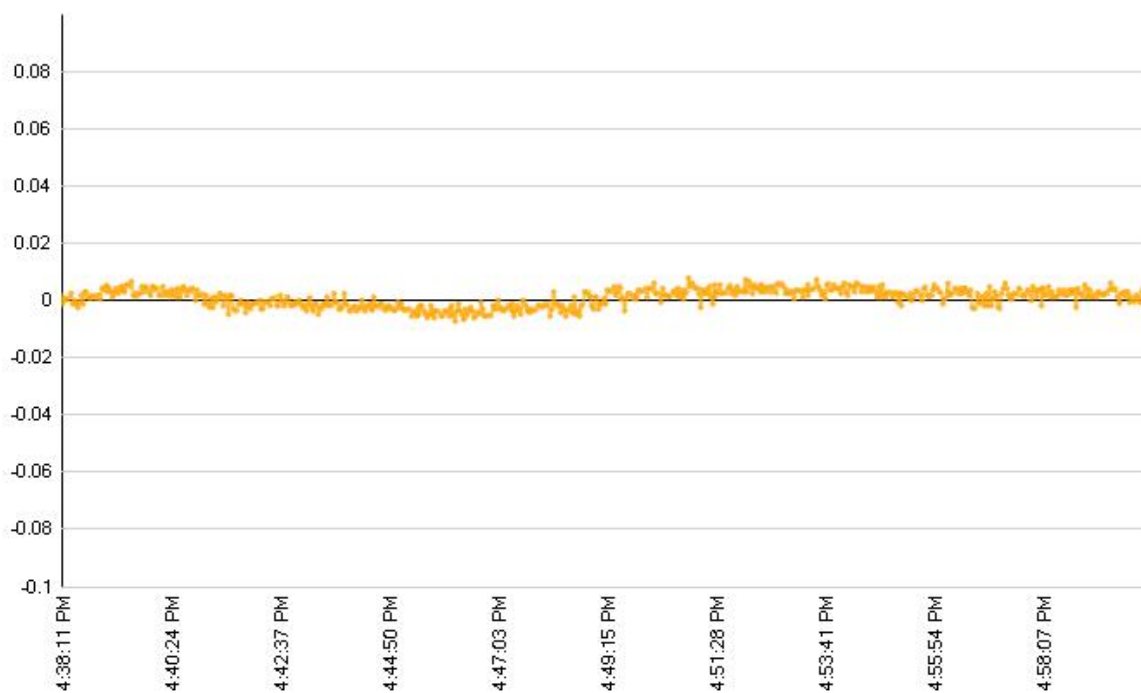
## Residuals







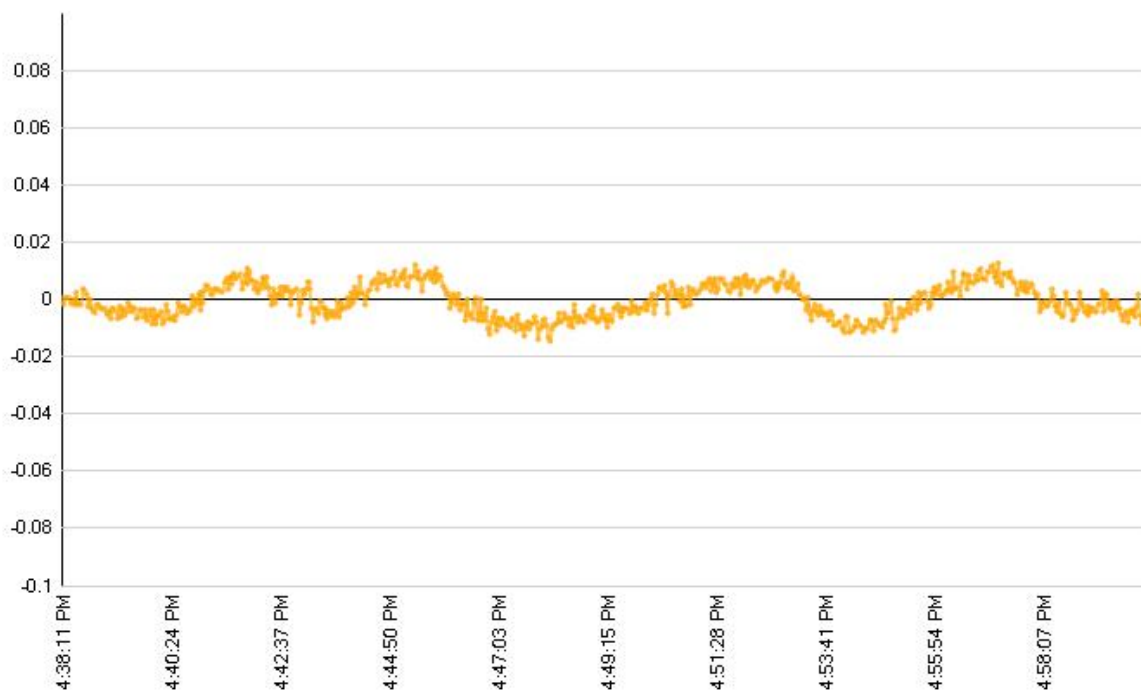
Mean = 0.001 m Std. Dev. = 0.003 m Min. = -0.007 m Max. = 0.008 m



G 30

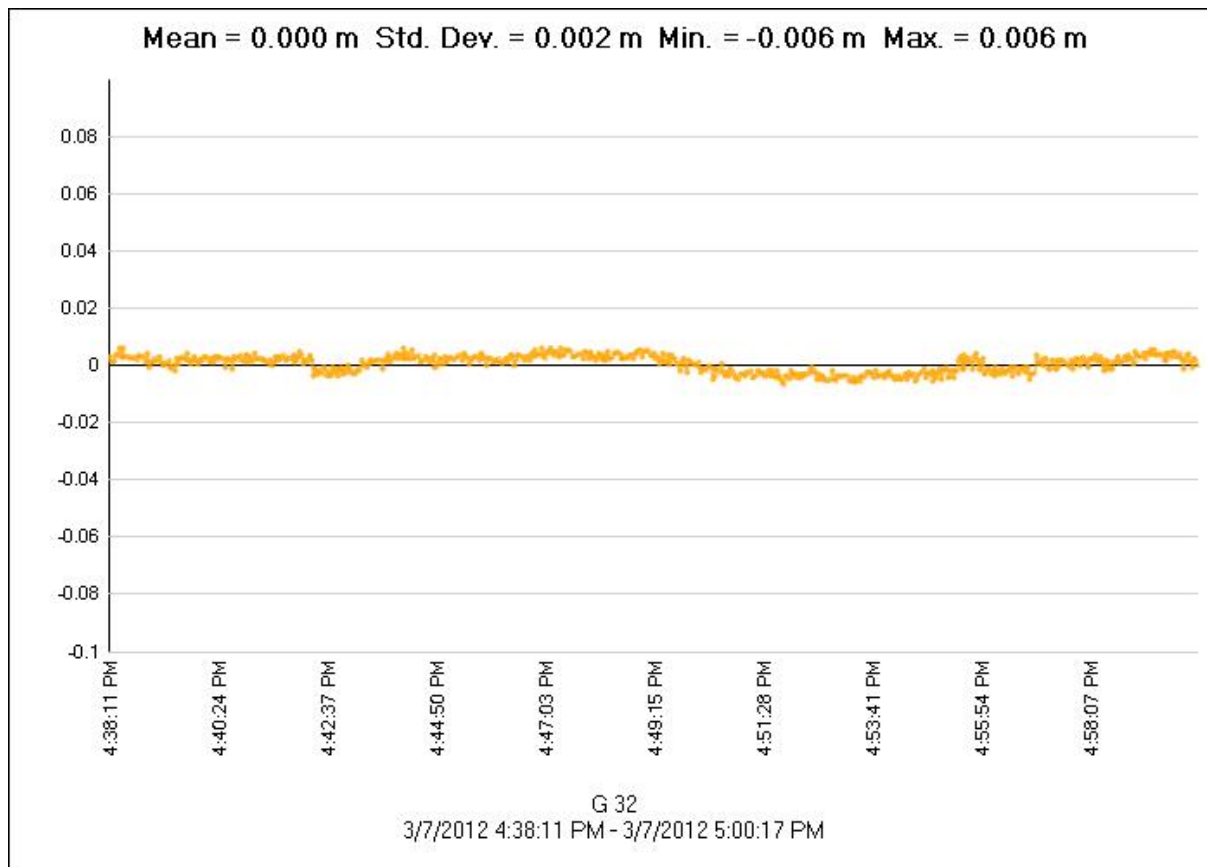
3/7/2012 4:38:11 PM - 3/7/2012 5:00:17 PM

Mean = 0.000 m Std. Dev. = 0.005 m Min. = -0.014 m Max. = 0.012 m



G 31

3/7/2012 4:38:11 PM - 3/7/2012 5:00:17 PM



## Processing style

Elevation mask:	10.0 deg
Auto start processing:	Yes
Start automatic ID numbering:	AUTO0001
Continuous vectors:	No
Generate residuals:	Yes
Antenna model:	Automatic
Ephemeris type:	Automatic
Frequency:	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



Baseline observation: HH0698 --- FVA23-B1 (B307)

Processed: 4/9/2012 1:13:02 PM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.008 m

Vertical precision: 0.015 m

RMS: 0.002 m

Maximum PDOP: 1.856

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 3/7/2012 5:02:42 PM (Local: UTC-7hr)

Processing stop time: 3/7/2012 5:24:51 PM (Local: UTC-7hr)

Processing duration: 00:22:09

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0698				
Grid		Local		Global	
Easting	290370.958 m	Latitude	N37°35'56.45803"	Latitude	N37°35'56.45802"
Northing	4163977.815 m	Longitude	W101°22'28.55840"	Longitude	W101°22'28.55840"
Elevation	944.147 m	Height	918.629 m	Height	918.629 m

To:	FVA23-B1				
Grid		Local		Global	
Easting	294854.923 m	Latitude	N37°42'26.29682"	Latitude	N37°42'26.29681"
Northing	4175889.639 m	Longitude	W101°19'37.89474"	Longitude	W101°19'37.89474"
Elevation	947.977 m	Height	922.476 m	Height	922.476 m

Vector					
9Ughb[	4483.965 m	NS Fwd Azimuth	19°10'36"	L	5546.800 m
Bcfh\jb[	11911.824 m	Ellipsoid Dist.	12726.172 m	M	6373.096 m
9Yj Uhcb	3.831 m	<Y][\h	3.847 m	N	9519.398 m

## Standard Errors

Vector errors:

Point ID	0.003 m	Point Description	0°00'00"	Point Type	0.003 m
Point B	0.003 m	Point C	0.003 m	Point M	0.006 m
Point D	0.007 m	Point E	0.007 m	Point N	0.005 m

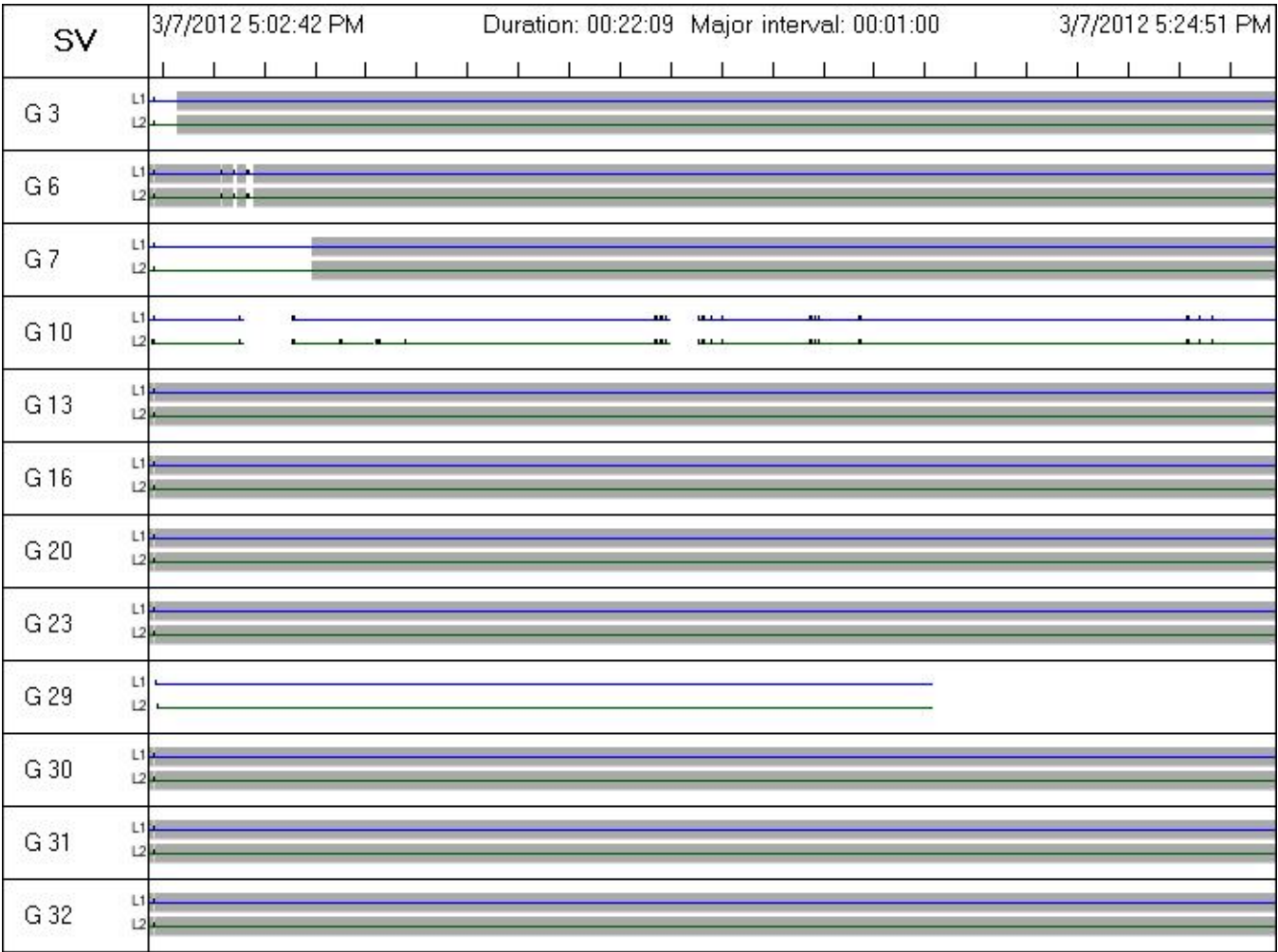
## Aposteriori Covariance Matrix (Meter<sup>2</sup>)

	X	Y	Z
X	0.0000113920		
Y	0.0000076677	0.0000398954	
Z	-0.0000054431	-0.0000206700	0.0000230355

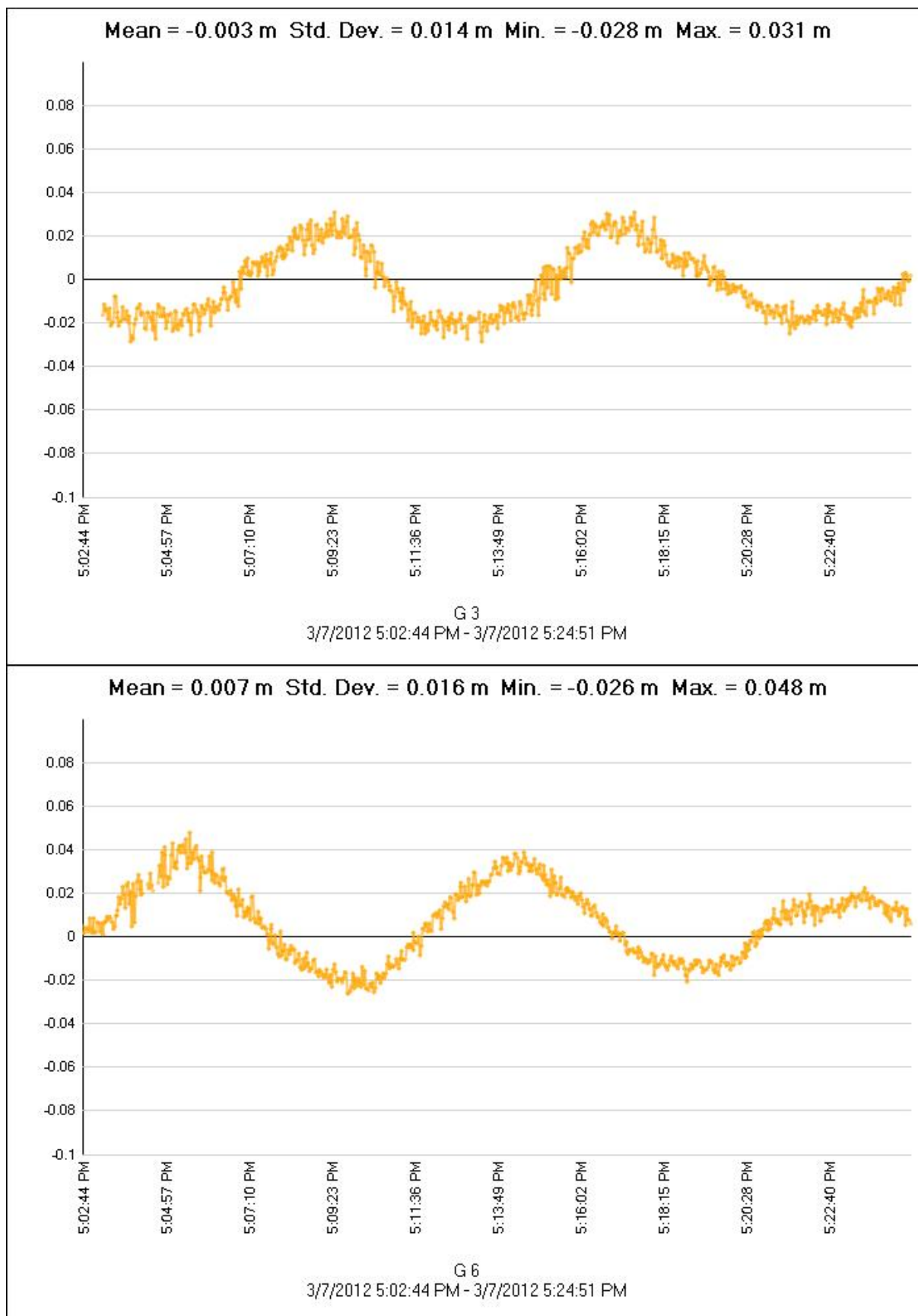
## Occupations

	From	To
Point ID:	HH0698	FVA23-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00100670.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050680.12o
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



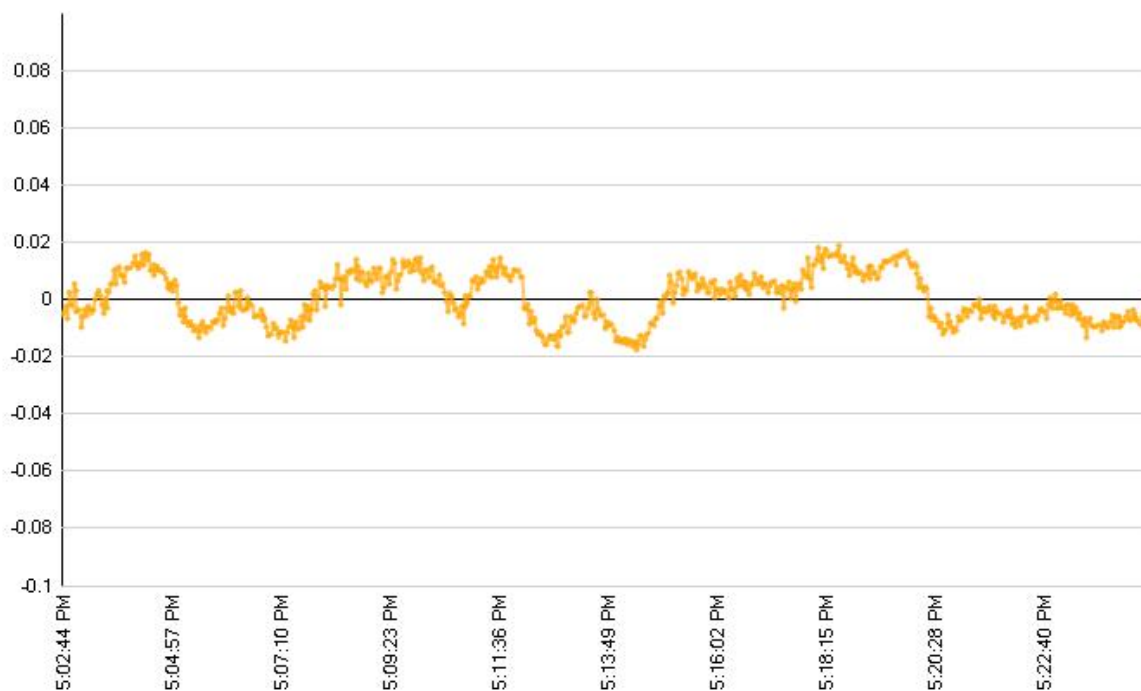
Mean = 0.002 m Std. Dev. = 0.014 m Min. = -0.033 m Max. = 0.036 m



G 7

3/7/2012 5:02:44 PM - 3/7/2012 5:24:51 PM

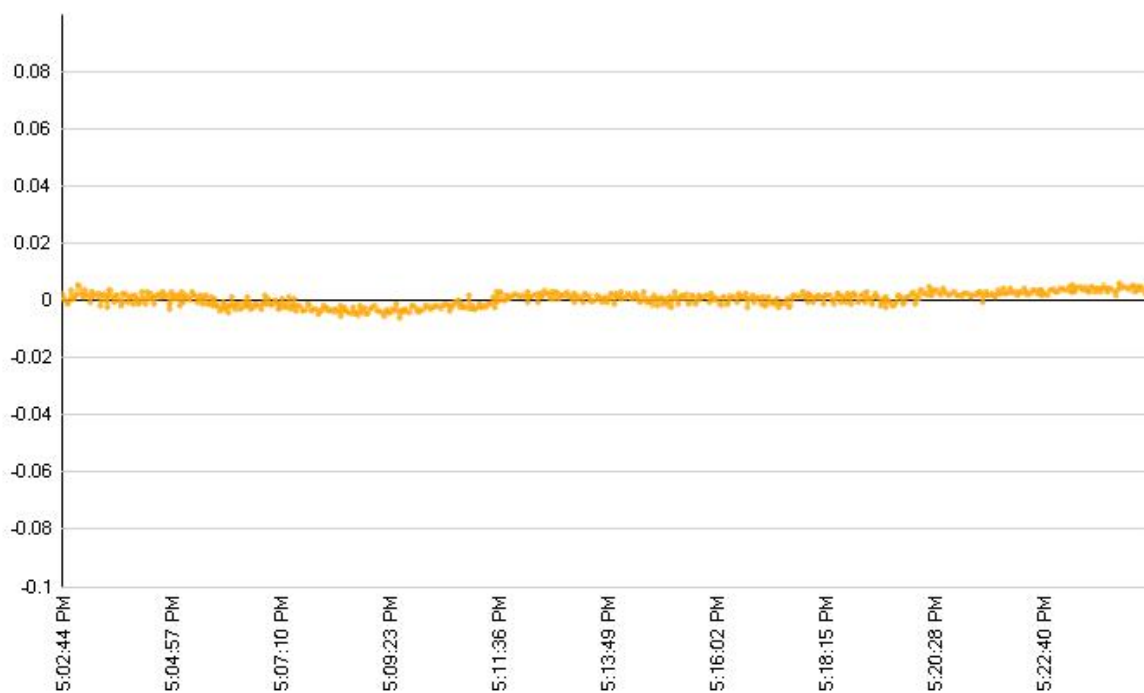
Mean = 0.000 m Std. Dev. = 0.008 m Min. = -0.018 m Max. = 0.019 m



G 13

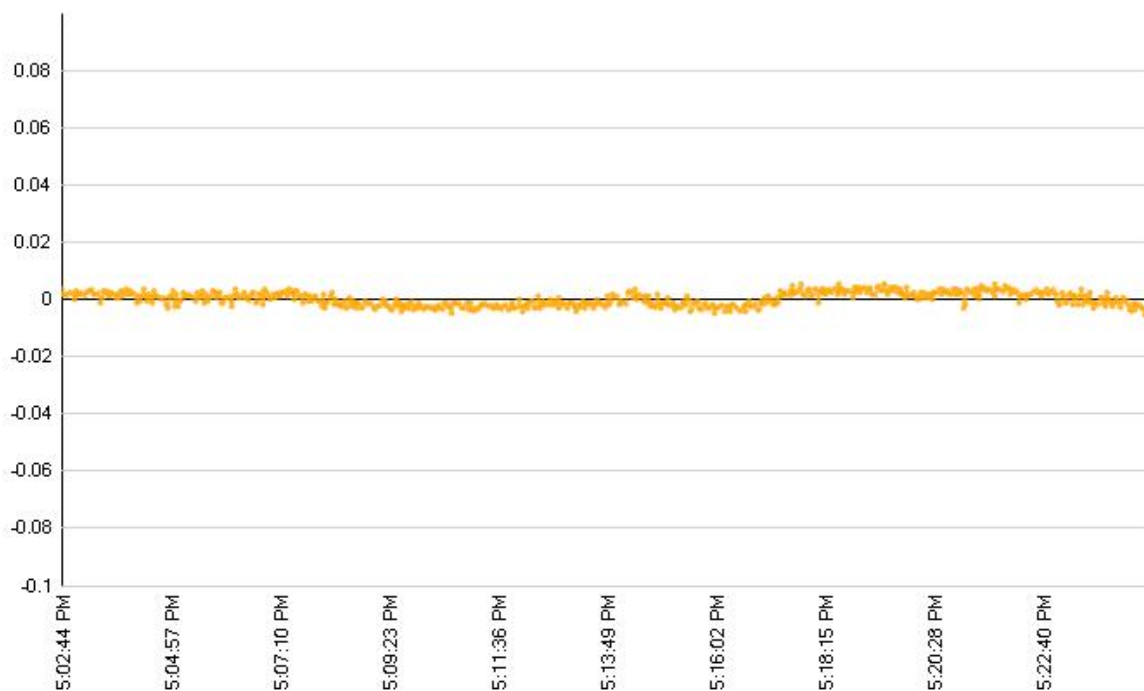
3/7/2012 5:02:44 PM - 3/7/2012 5:24:51 PM

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

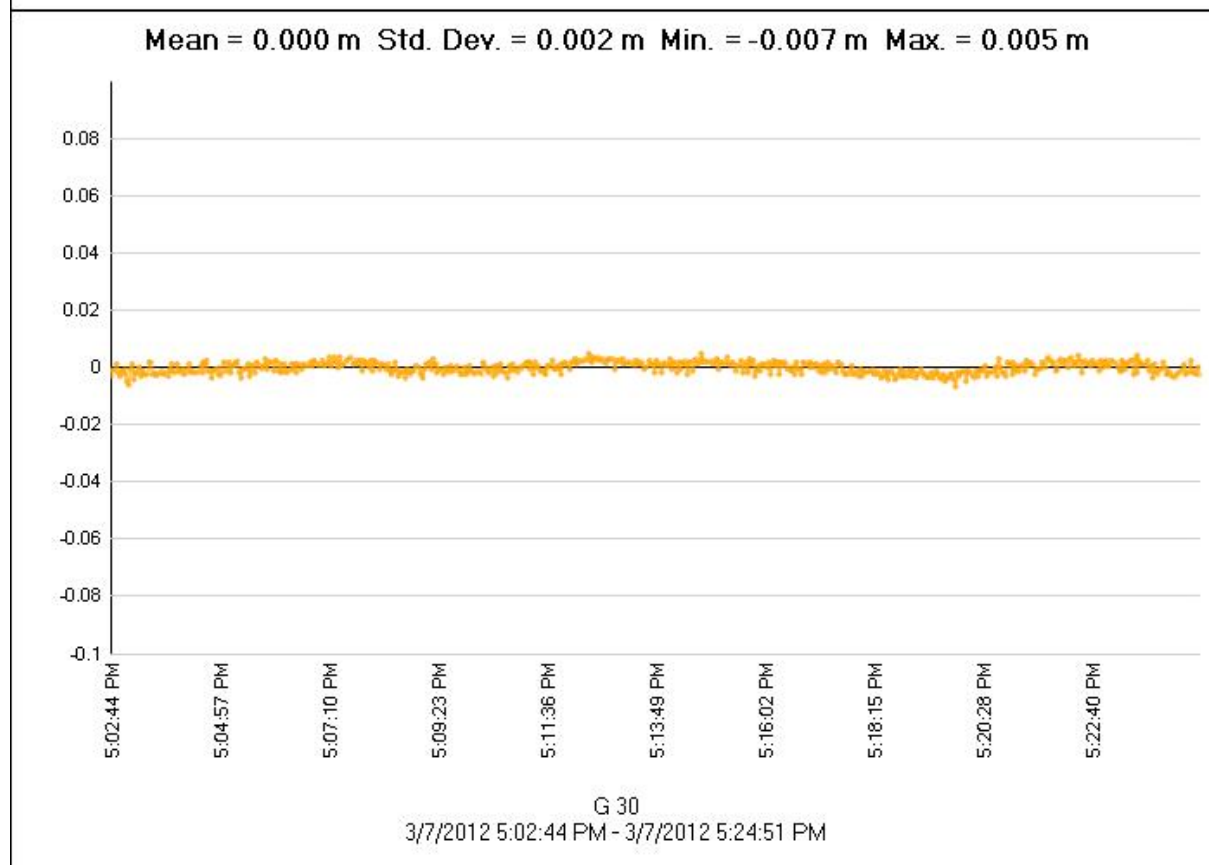
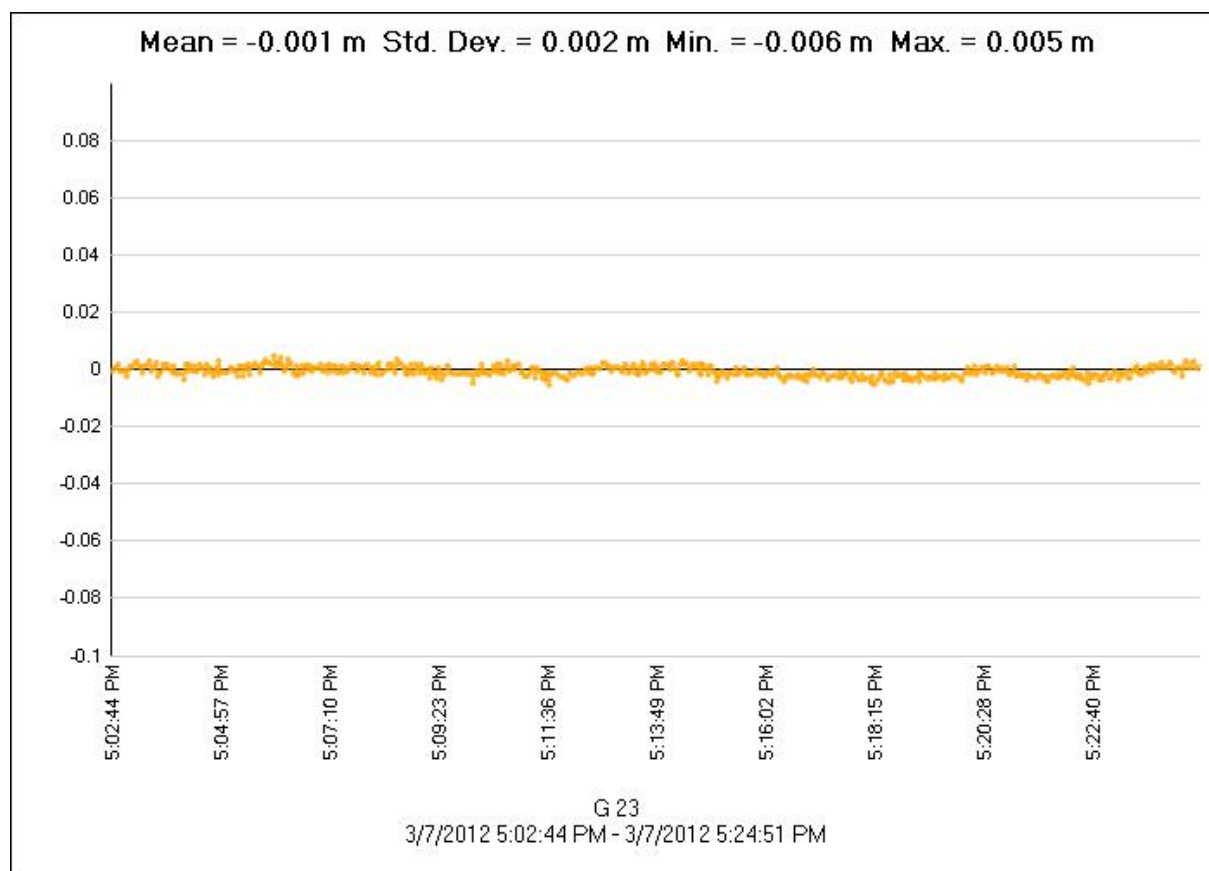


G 16  
3/7/2012 5:02:44 PM - 3/7/2012 5:24:51 PM

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



G 20  
3/7/2012 5:02:44 PM - 3/7/2012 5:24:51 PM



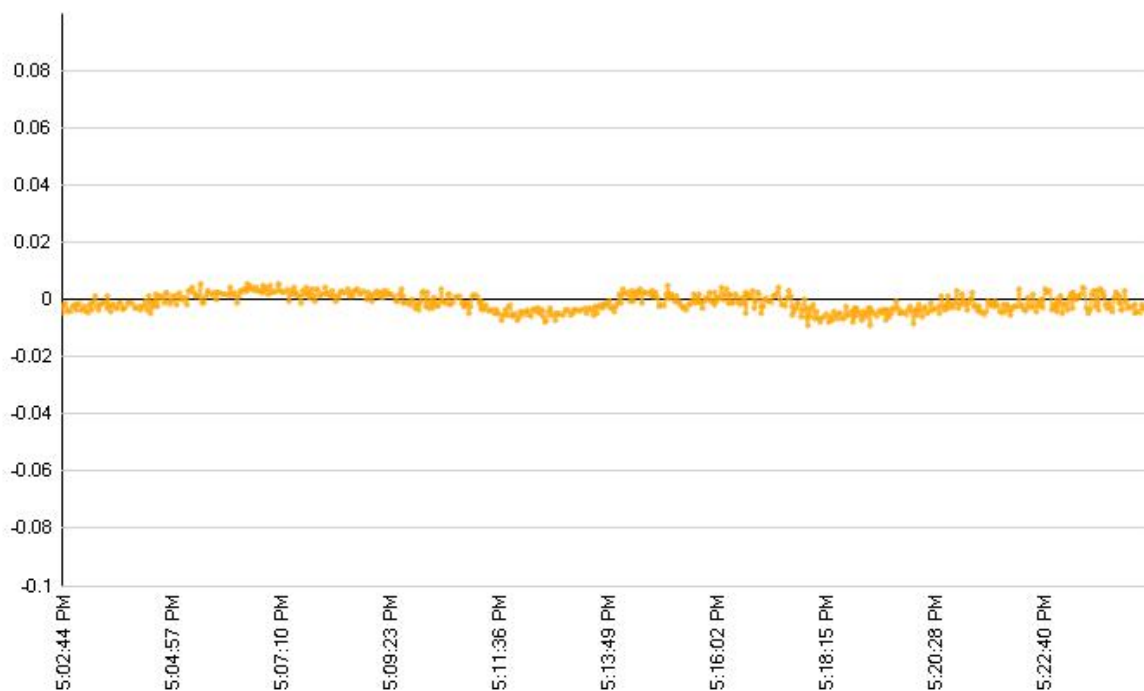
Mean = 0.000 m Std. Dev. = 0.015 m Min. = -0.033 m Max. = 0.036 m



G 31

3/7/2012 5:02:44 PM - 3/7/2012 5:24:51 PM

Mean = -0.001 m Std. Dev. = 0.003 m Min. = -0.009 m Max. = 0.005 m



G 32

3/7/2012 5:02:44 PM - 3/7/2012 5:24:51 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

---

HH0645 - SVA12-B1 (2:48:40 PM-3:18:56 PM) (S308)

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Baseline observation: HH0645 --- SVA12-B1 (B308)

Processed: 4/10/2012 8:47:27 AM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.008 m

Vertical precision: 0.012 m

RMS: 0.002 m

Maximum PDOP: 2.719

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/21/2012 2:48:40 PM (Local: UTC-7hr)

Processing stop time: 2/21/2012 3:18:56 PM (Local: UTC-7hr)

Processing duration: 00:30:16

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0645				
Grid		Local		Global	
Easting	252723.345 m	Latitude	N37°59'48.17255"	Latitude	N37°59'48.17255"
Northing	4209193.137 m	Longitude	W101°48'57.76498"	Longitude	W101°48'57.76498"
Elevation	995.279 m	Height	970.864 m	Height	970.864 m

To:	SVA12-B1				
Grid		Local		Global	
Easting	232554.857 m	Latitude	N37°52'14.49282"	Latitude	N37°52'14.49281"
Northing	4195826.761 m	Longitude	W102°02'25.72288"	Longitude	W102°02'25.72288"
Elevation	1071.320 m	Height	1047.161 m	Height	1047.161 m

Vector					
9Ughb[	-20168.488 m	NS Fwd Azimuth	234°44'03"	L	-21097.229 m
Bcfh\jb[	-13366.376 m	Ellipsoid Dist.	24185.550 m	M	-4394.927 m
9Yj Uhcb	76.041 m	<Y][\h	76.297 m	N	-10987.383 m

## Standard Errors

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

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

	X	Y	Z
X	0.0000067986		
Y	0.0000059118	0.0000220663	
Z	-0.0000026953	-0.0000133990	0.0000252049

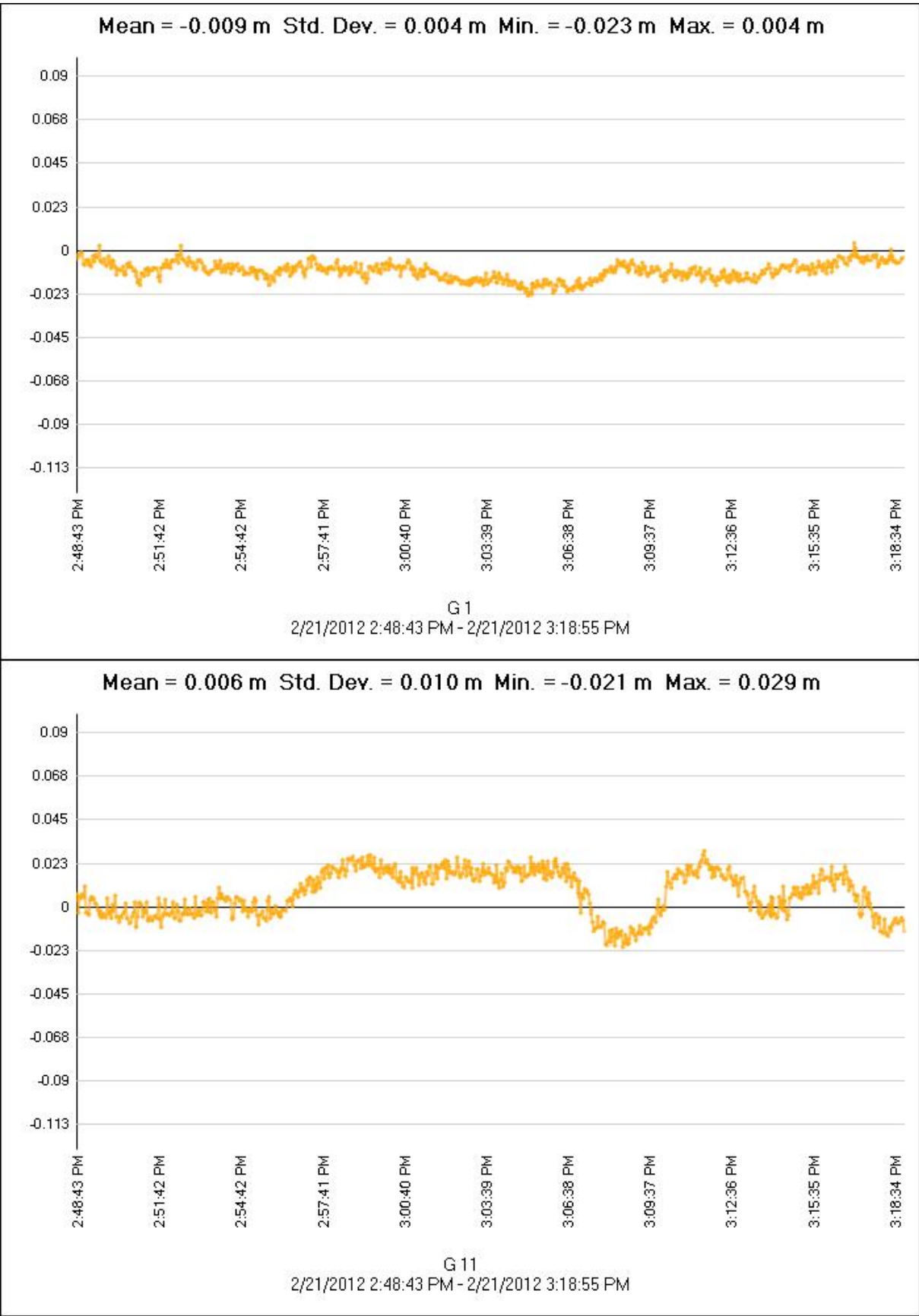
## Occupations

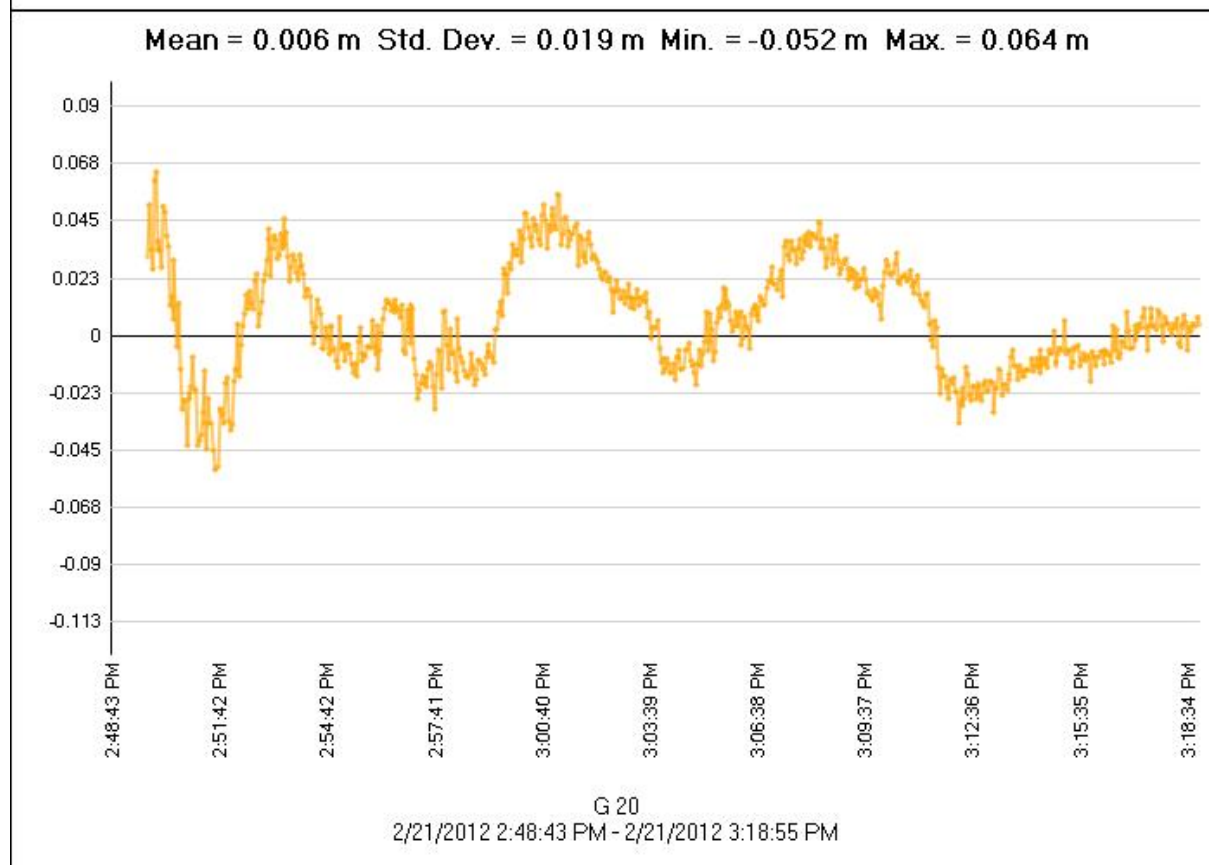
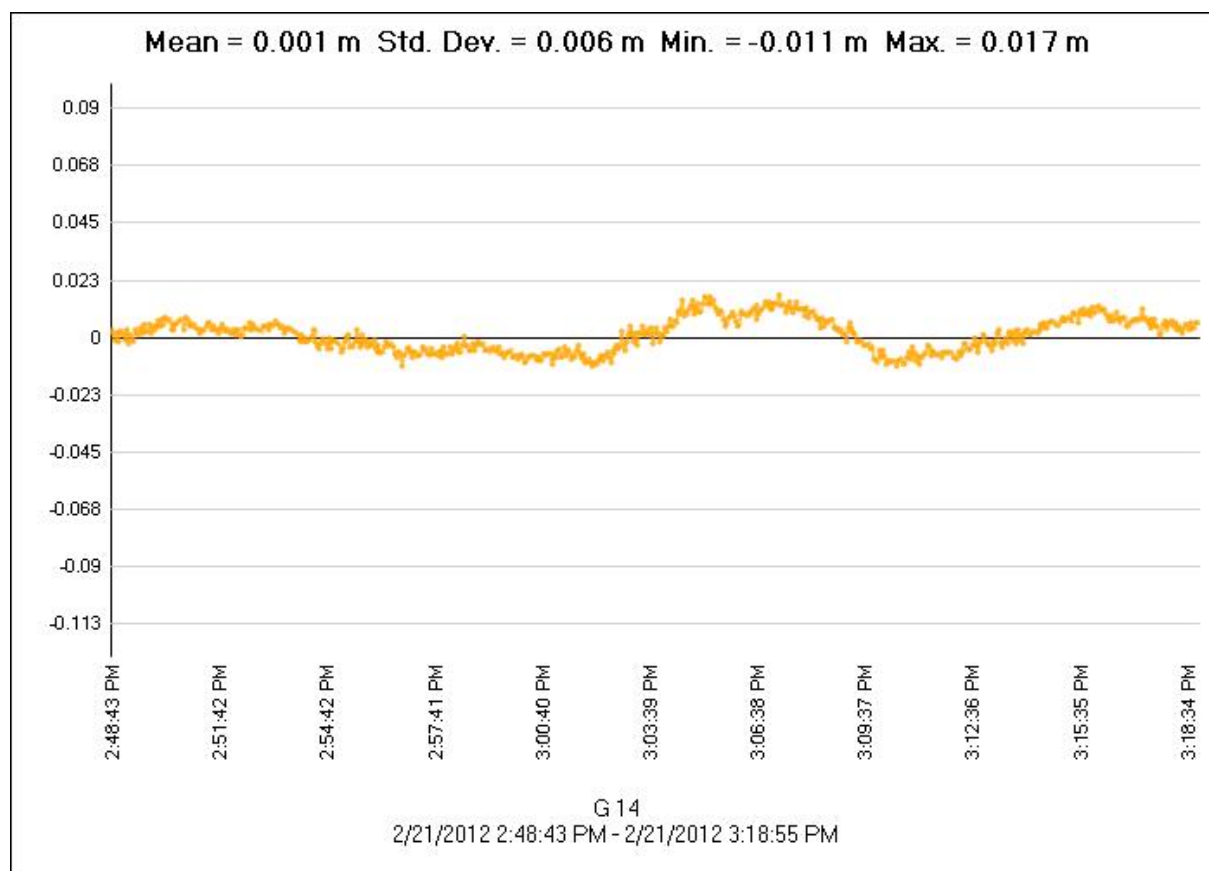
	From	To
Point ID:	HH0645	SVA12-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050520.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00110527.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

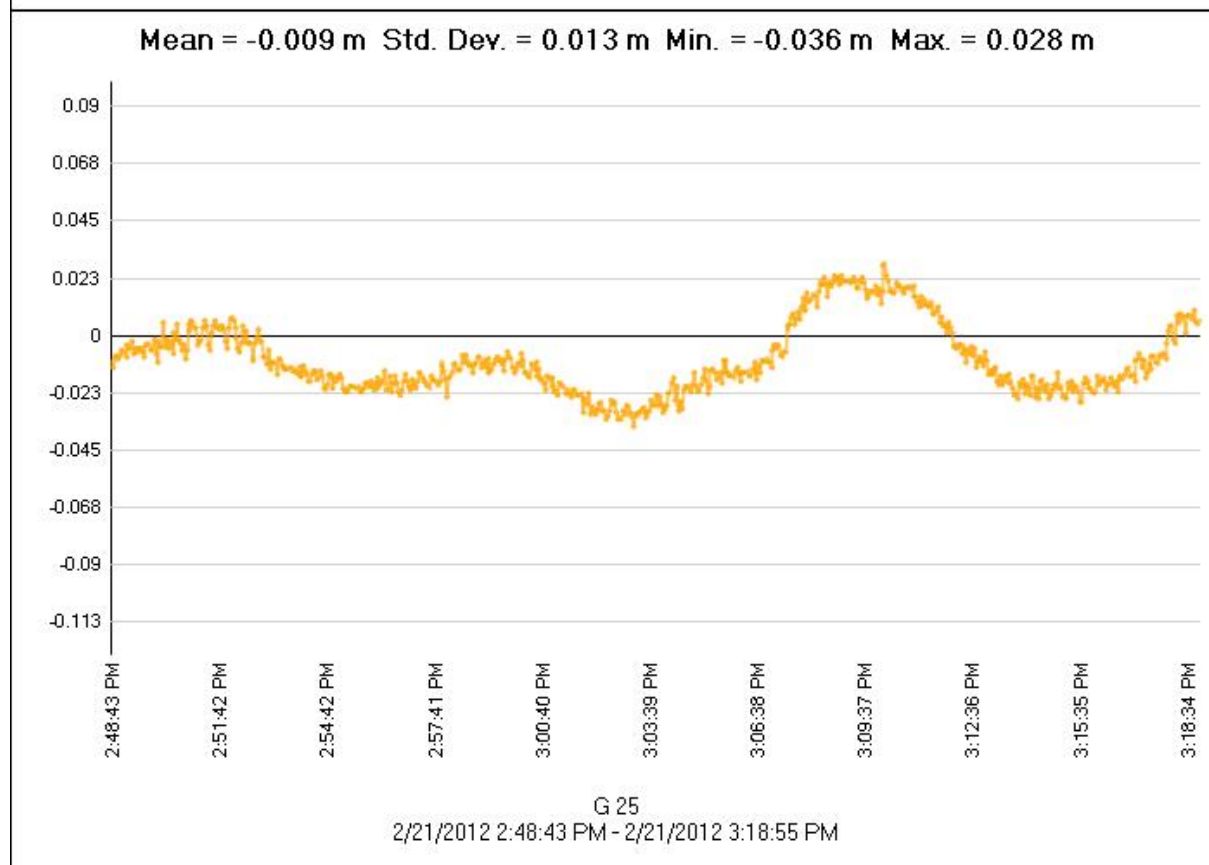
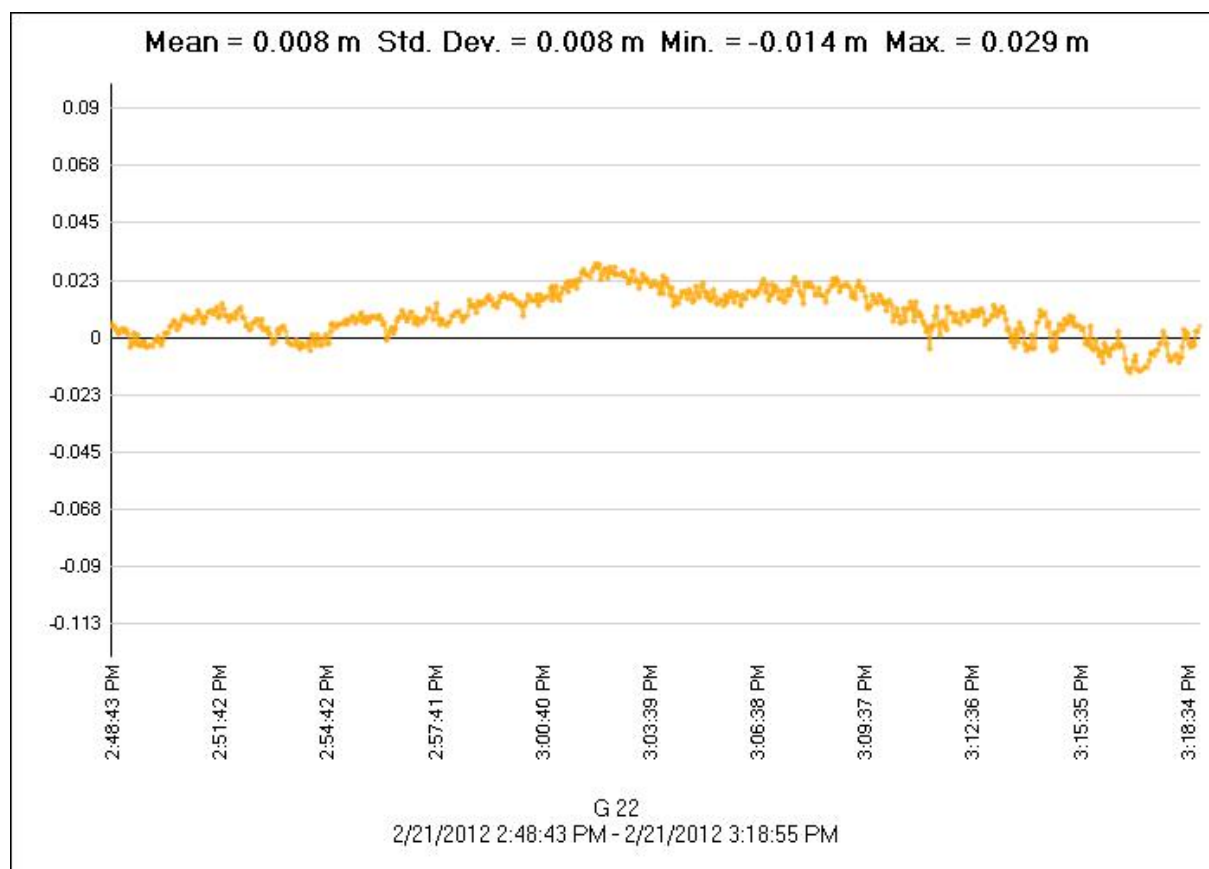
## Tracking Summary

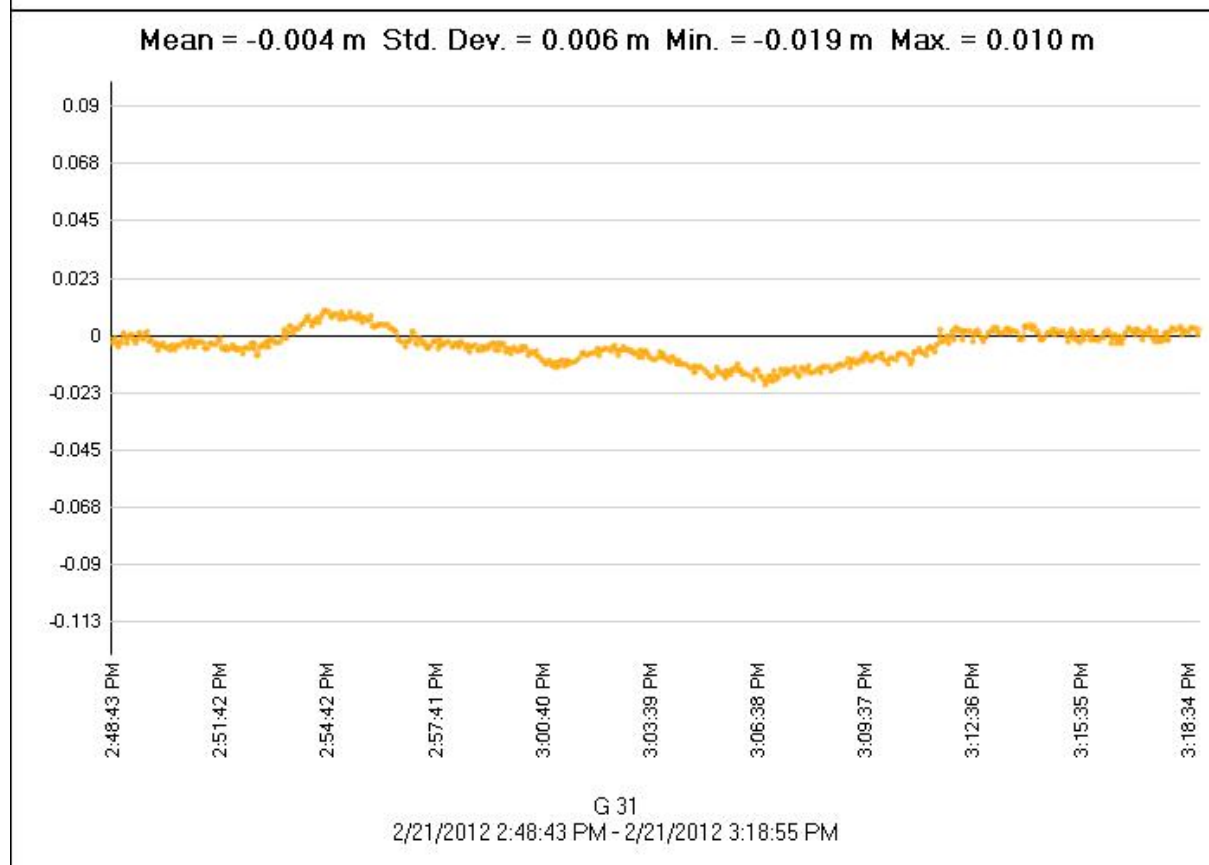
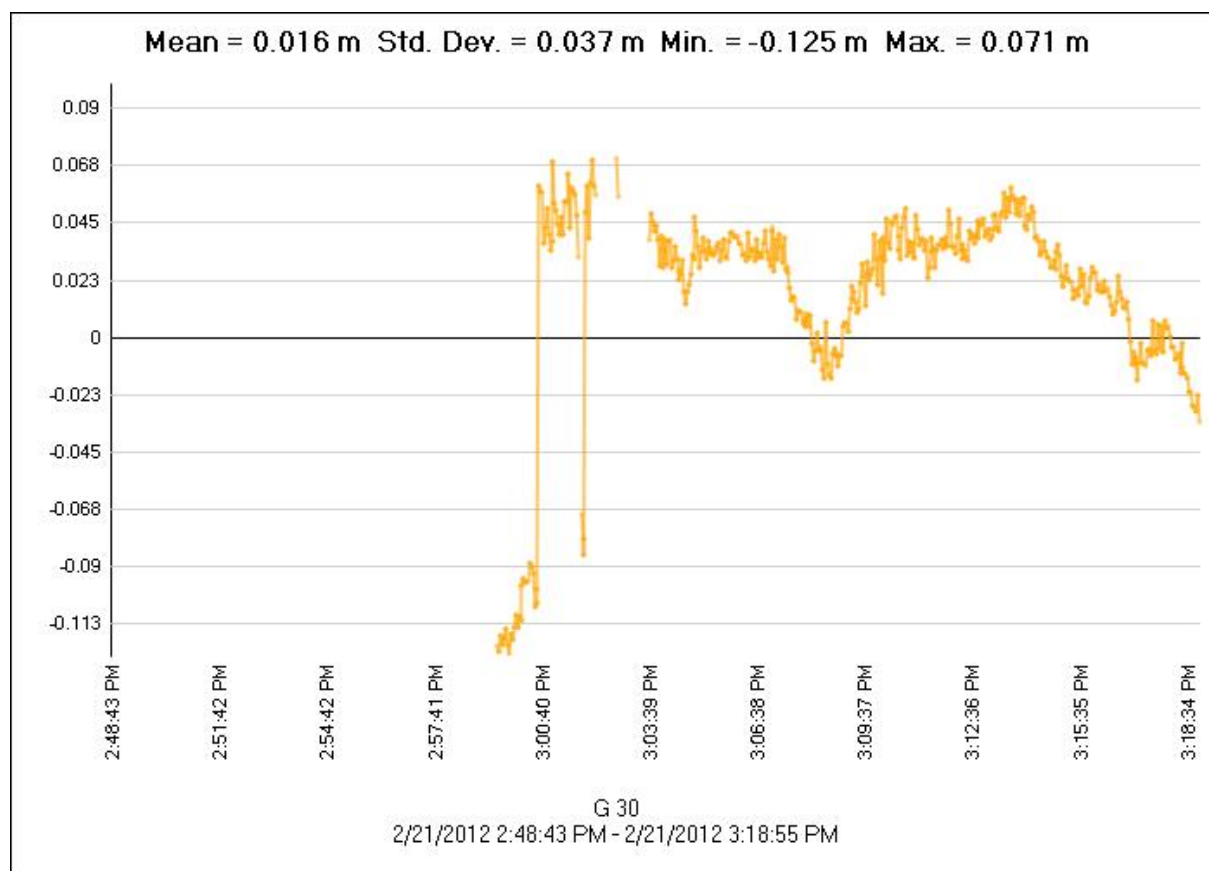
SV	2/21/2012 2:48:40 PM	Duration: 00:30:16.5000000	Major interval: 00:01:00	2/21/2012 3:18:56 PM
G1	L1 L2			
G11	L1 L2			
G12	L1 L2			
G14	L1 L2			
G18	L1 L2			
G20	L1 L2			
G22	L1 L2			
G23	L1 L2			
G25	L1 L2			
G30	L1 L2			
G31	L1 L2			
G32	L1 L2			

Residuals

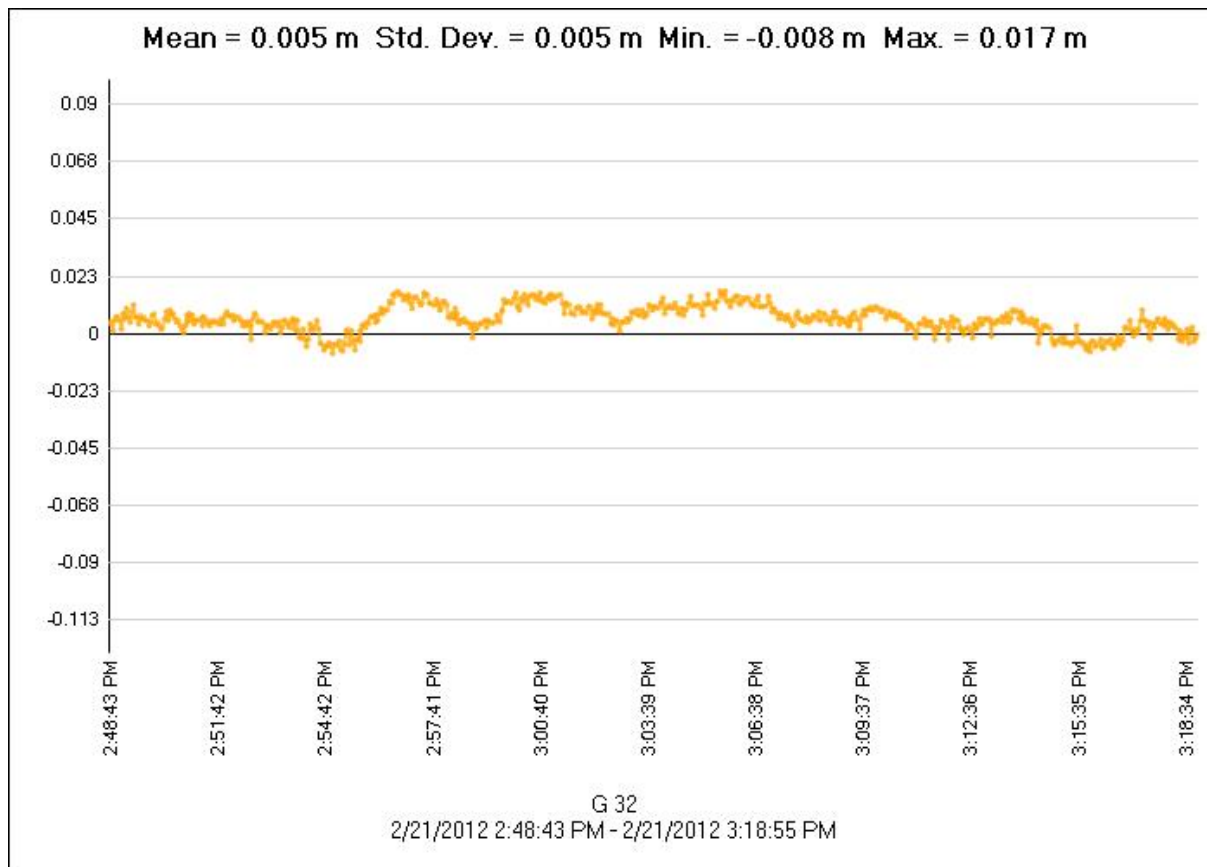












## Processing style

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

---

HH0645 - FVA12-B1 (12:25:29 PM-12:54:50 PM) (S310)

---

Baseline observation: HH0645 --- FVA12-B1 (B310)

Processed: 4/10/2012 8:47:21 AM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.028 m

Vertical precision: 0.031 m

RMS: 0.003 m

Maximum PDOP: 3.647

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/21/2012 12:25:29 PM (Local: UTC-7hr)

Processing stop time: 2/21/2012 12:54:50 PM (Local: UTC-7hr)

Processing duration: 00:29:21

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0645				
Grid		Local		Global	
Easting	252723.345 m	Latitude	N37°59'48.17255"	Latitude	N37°59'48.17255"
Northing	4209193.137 m	Longitude	W101°48'57.76498"	Longitude	W101°48'57.76498"
Elevation	995.279 m	Height	970.864 m	Height	970.864 m

To:	FVA12-B1				
Grid		Local		Global	
Easting	234187.256 m	Latitude	N37°44'19.37876"	Latitude	N37°44'19.37876"
Northing	4181110.750 m	Longitude	W102°00'59.56893"	Longitude	W102°00'59.56893"
Elevation	1089.241 m	Height	1065.073 m	Height	1065.073 m

Vector					
9Ughb[	-18536.089 m	NS Fwd Azimuth	211°41'52"	L	-20910.106 m
BcfA\jb[	-28082.387 m	Ellipsoid Dist.	33634.459 m	M	-13631.418 m
9`Yj Uhcb	93.962 m	<Y][\h	94.209 m	N	-22552.091 m

## Standard Errors

Vector errors:					
Point ID	0.005 m	Point Description	0°00'00"	Point Type	0.005 m
Point ID	0.011 m	Point Description	0.009 m	Point Type	0.011 m
Point ID	0.016 m	Point Description	0.016 m	Point Type	0.015 m


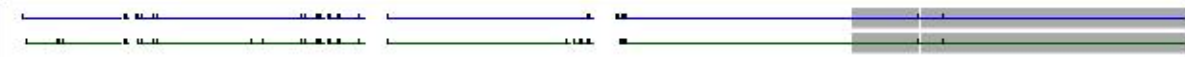


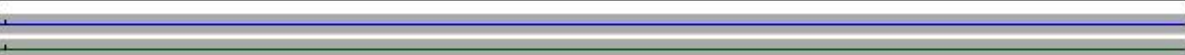

## Aposteriori Covariance Matrix (Meter<sup>2</sup>)

	X	Y	Z
X	0.0000269969		
Y	0.0000149869	0.0001297026	
Z	-0.0000354908	-0.0000697653	0.0002352298

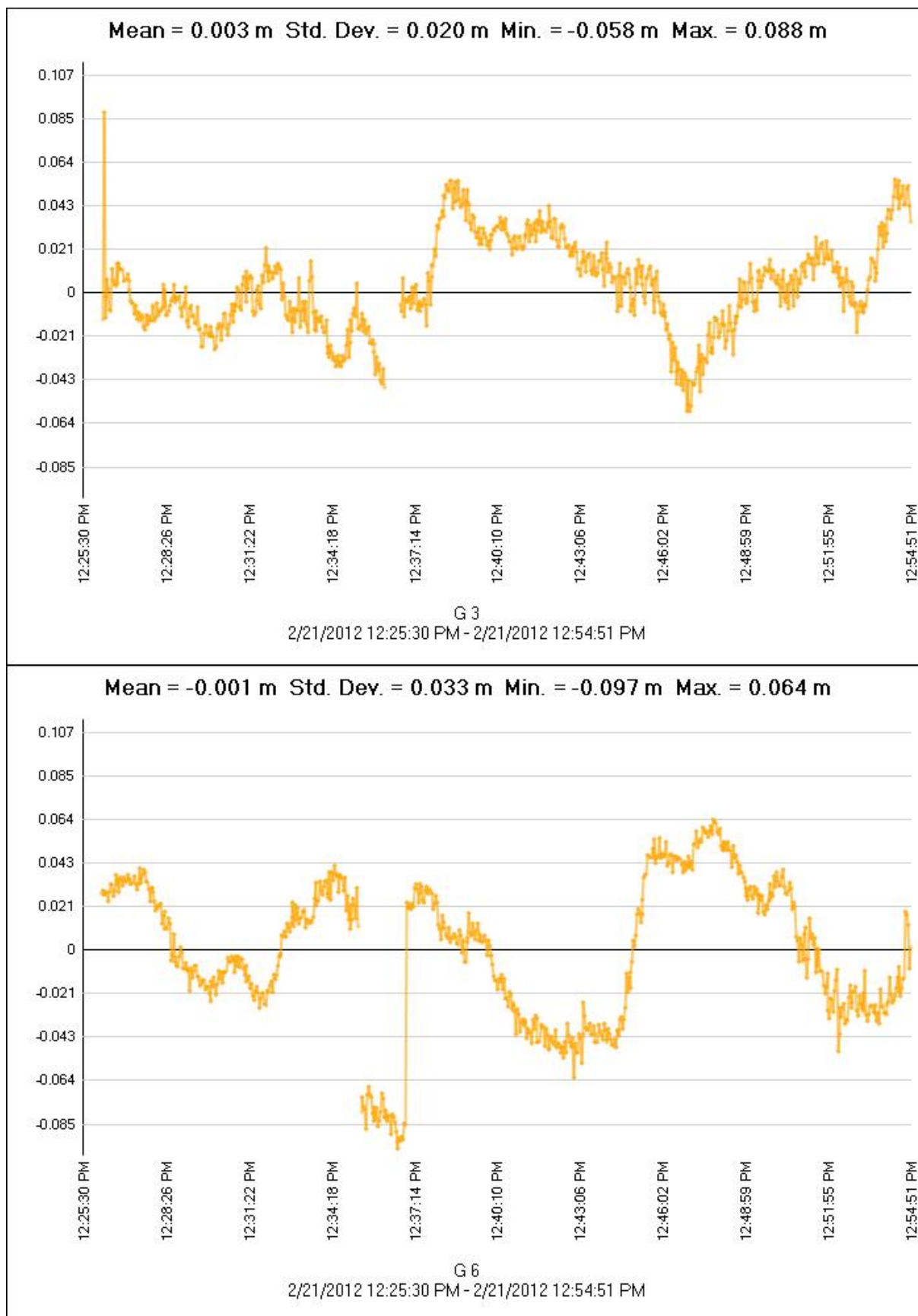
## Occupations

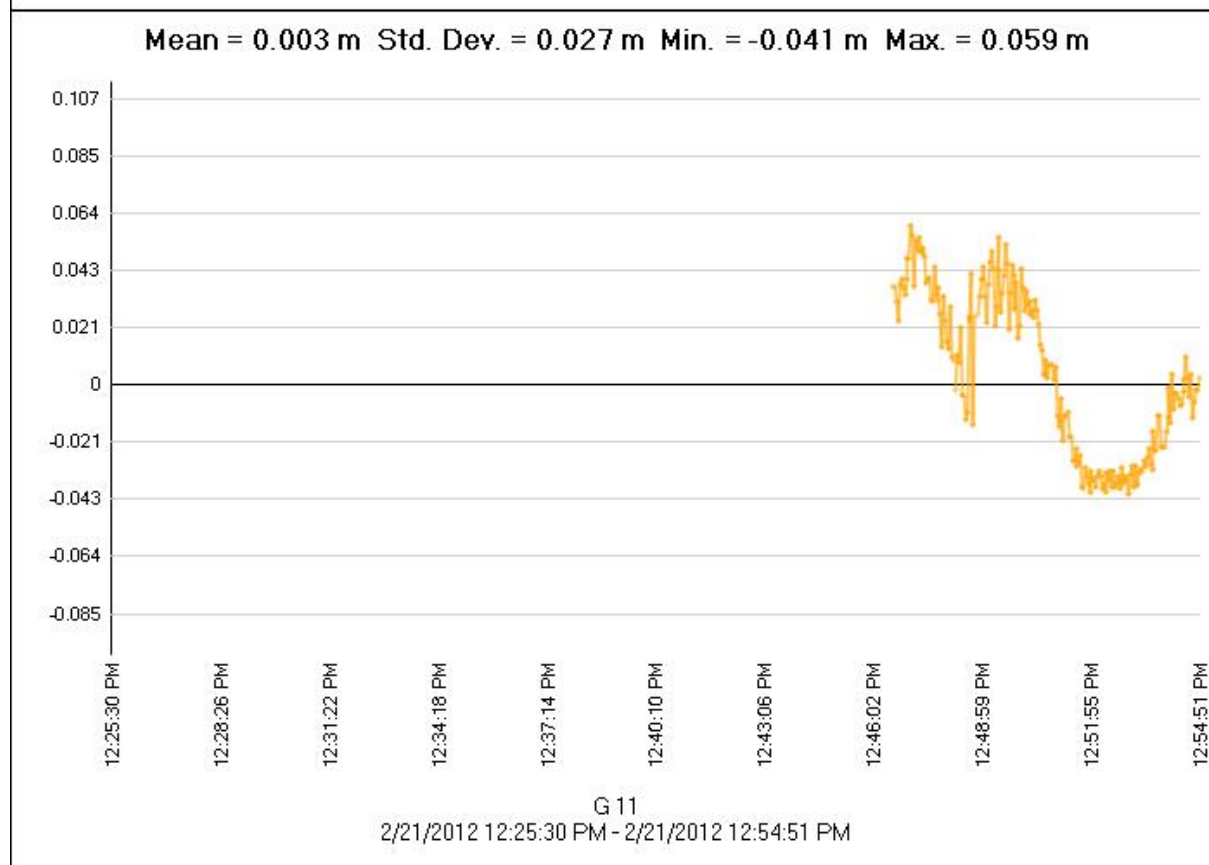
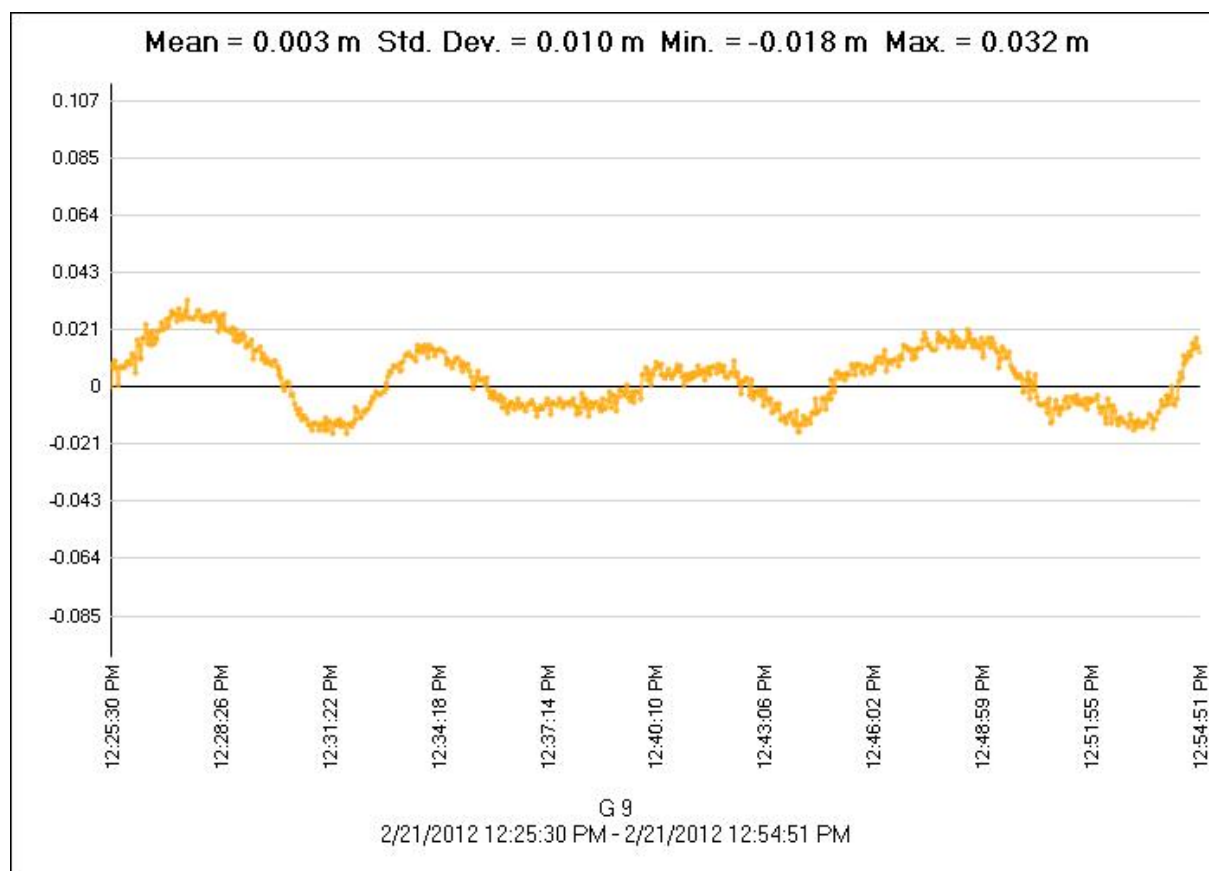
	From	To
Point ID:	HH0645	FVA12-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050520.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00110524.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

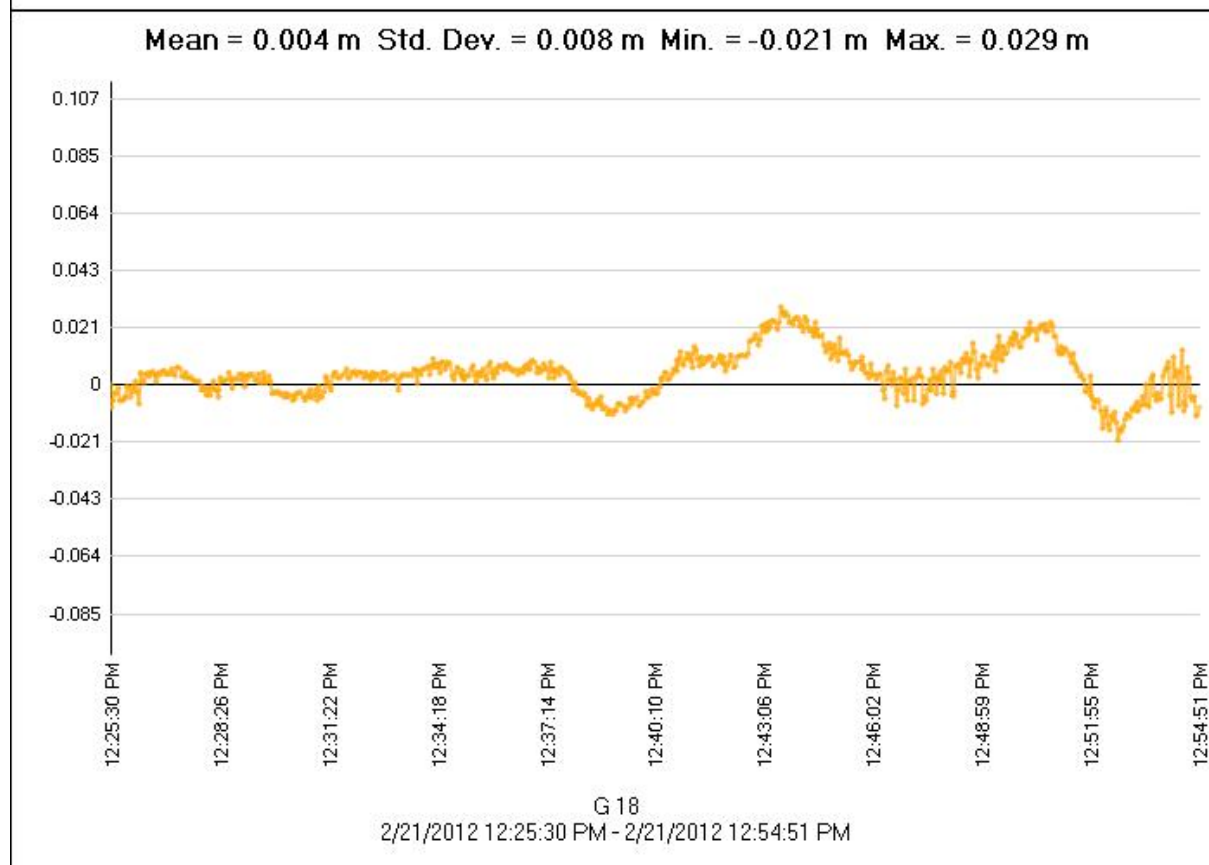
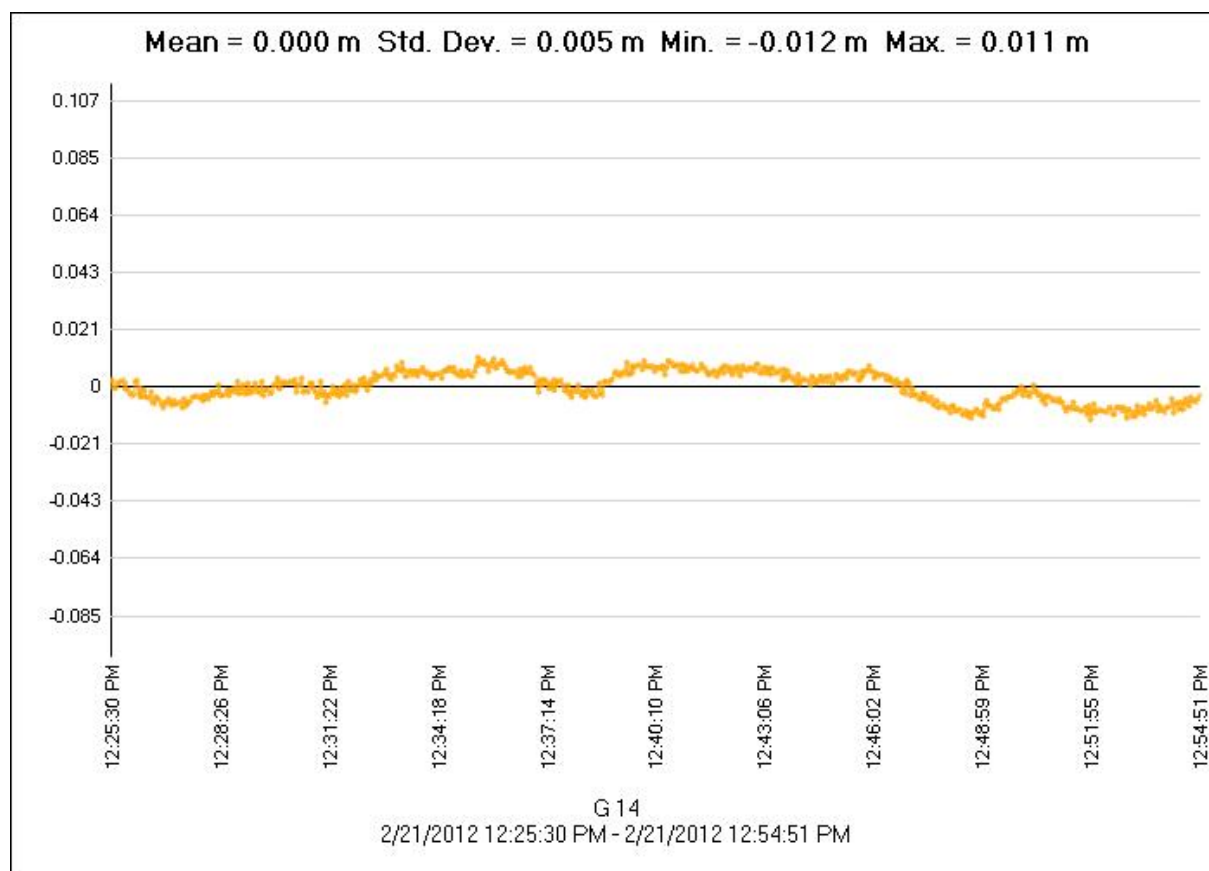
## Tracking Summary

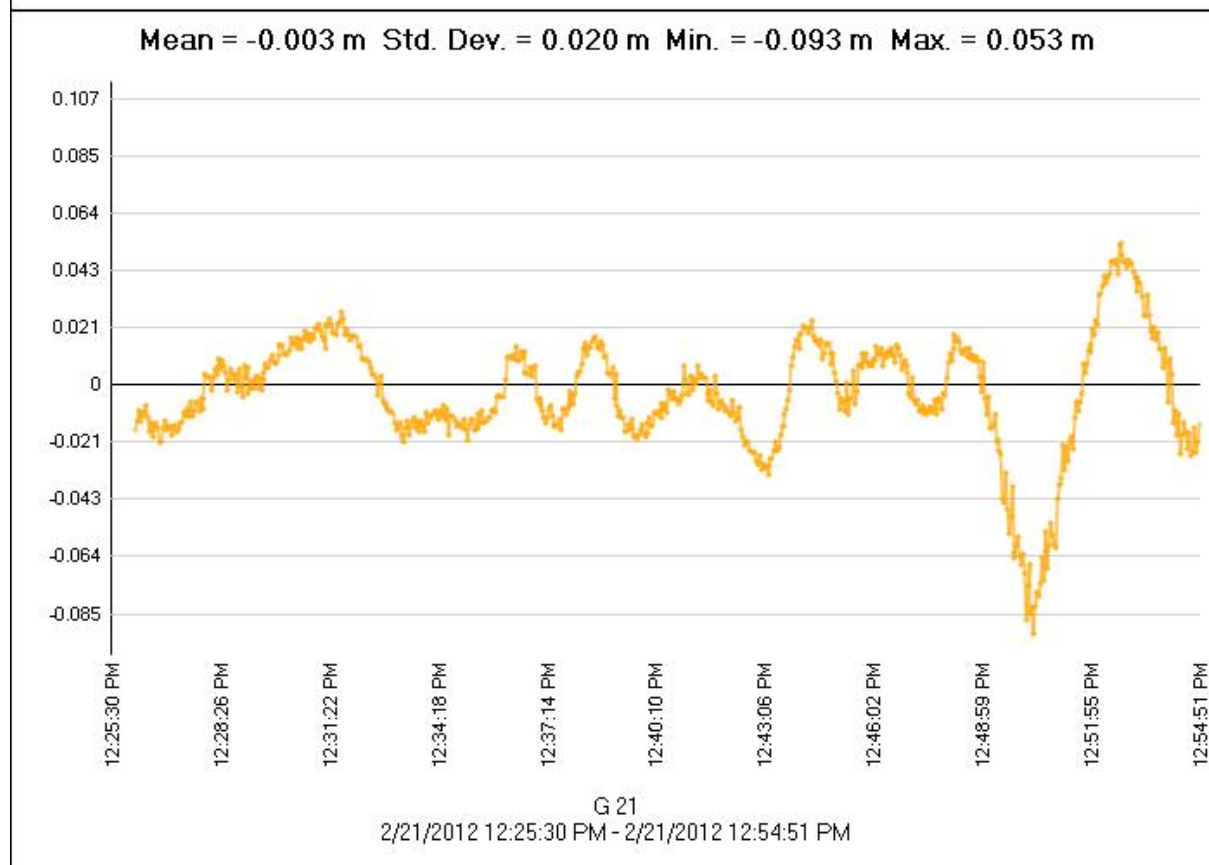
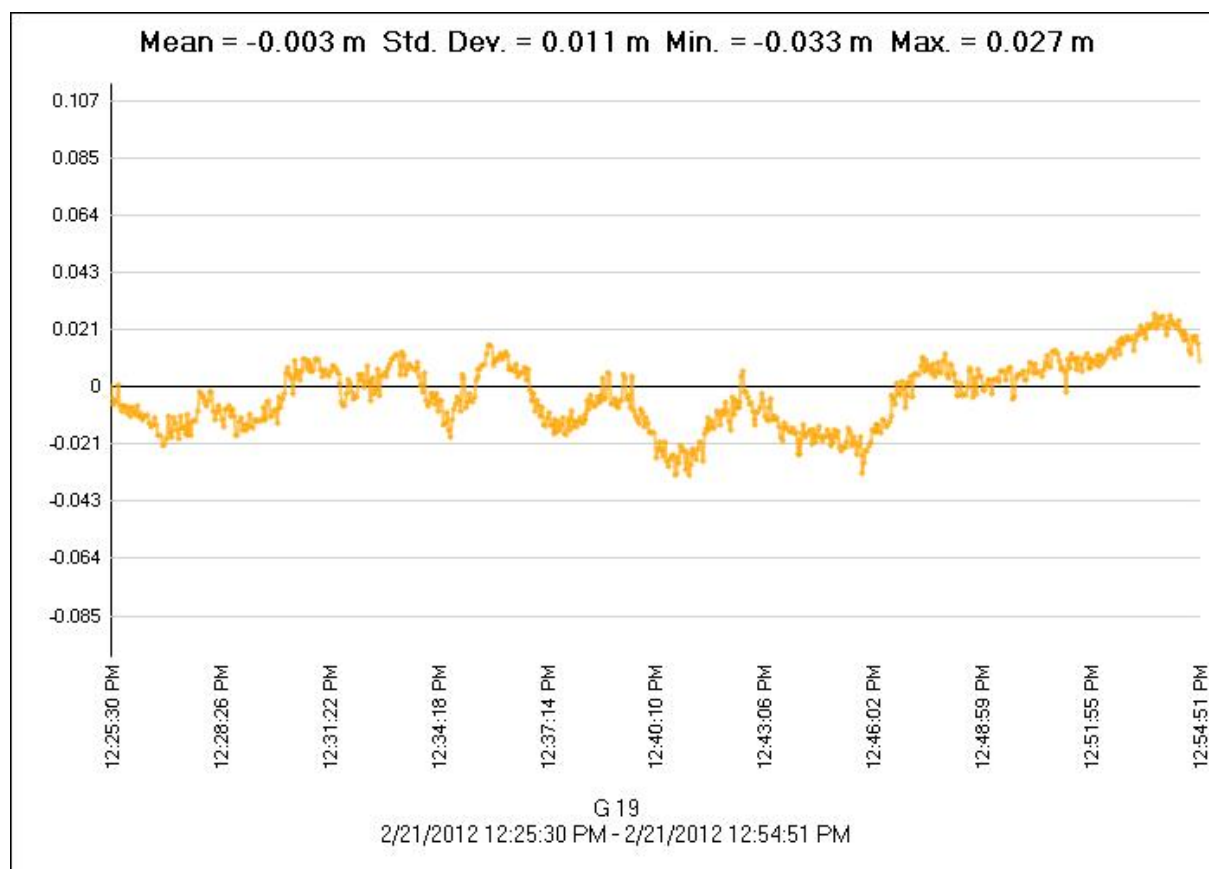
SV	2/21/2012 12:25:29 PM	Duration: 00:29:21 Major interval: 00:01:00	2/21/2012 12:54:50 PM
G 3			
G 6			
G 9			
G 11			
G 12			
G 14			
G 15			
G 18			
G 19			
G 21			
G 22			
G 27			
G 31			

## Residuals

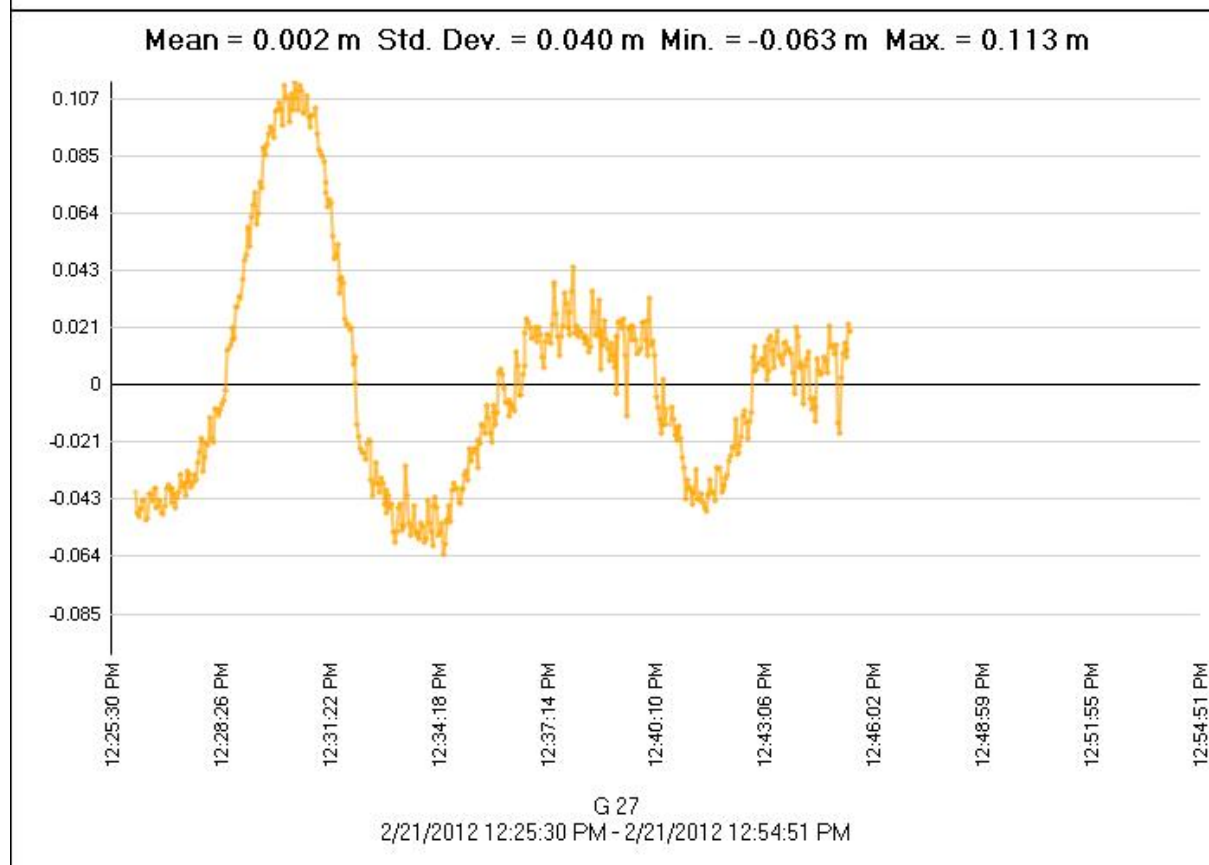
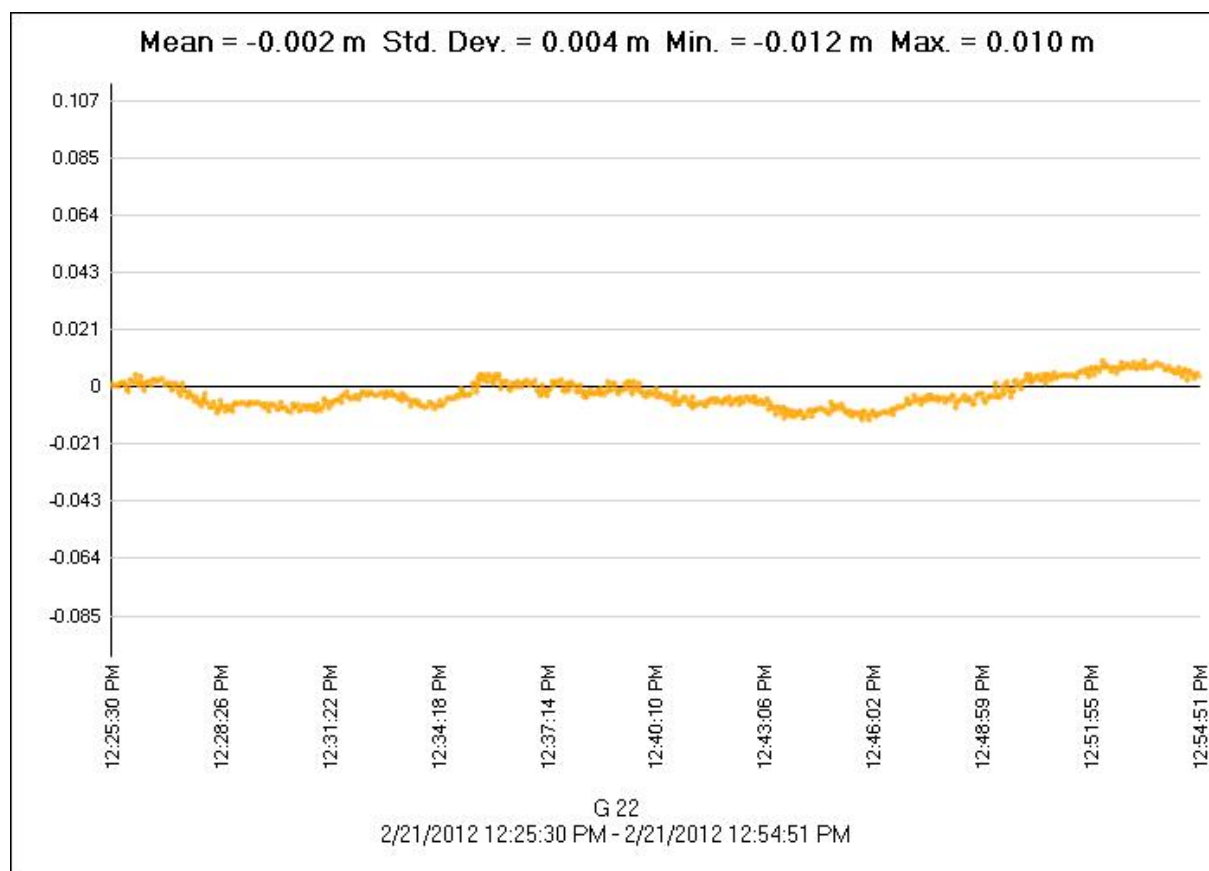


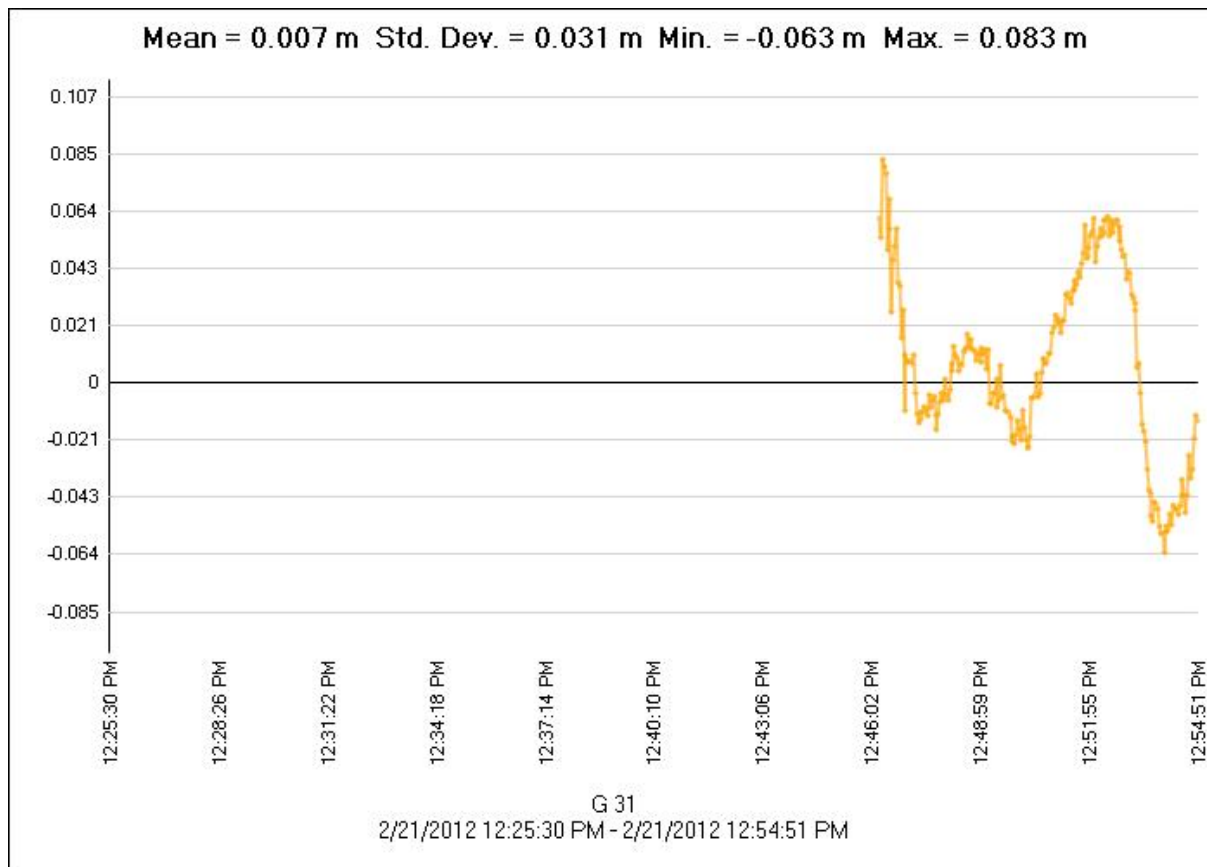












## Processing style

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

---

HH0645 - SVA13-B1 (11:20:47 AM-11:51:57 AM) (S311)

---

Baseline observation: HH0645 --- SVA13-B1 (B311)

Processed: 4/10/2012 8:47:19 AM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.007 m

Vertical precision: 0.011 m

RMS: 0.002 m

Maximum PDOP: 2.168

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/21/2012 11:20:47 AM (Local: UTC-7hr)

Processing stop time: 2/21/2012 11:51:57 AM (Local: UTC-7hr)

Processing duration: 00:31:10

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0645				
Grid		Local		Global	
Easting	252723.345 m	Latitude	N37°59'48.17255"	Latitude	N37°59'48.17255"
Northing	4209193.137 m	Longitude	W101°48'57.76498"	Longitude	W101°48'57.76498"
Elevation	995.279 m	Height	970.864 m	Height	970.864 m

To:	SVA13-B1				
Grid		Local		Global	
Easting	255013.355 m	Latitude	N37°43'21.86832"	Latitude	N37°43'21.86832"
Northing	4178690.888 m	Longitude	W101°46'46.75946"	Longitude	W101°46'46.75946"
Elevation	1005.760 m	Height	981.140 m	Height	981.140 m

Vector					
9Ughb[	2290.010 m	NS Fwd Azimuth	173°58'38"	L	-682.935 m
BcfA\jb[	-30502.249 m	Ellipsoid Dist.	30577.505 m	M	-18934.462 m
9`Yj U\jcb	10.481 m	<Y][\h	10.276 m	N	-24006.017 m

## Standard Errors

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

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

	X	Y	Z
X	0.0000046152		
Y	0.0000044707	0.0000196638	
Z	-0.0000043550	-0.0000118443	0.0000191296

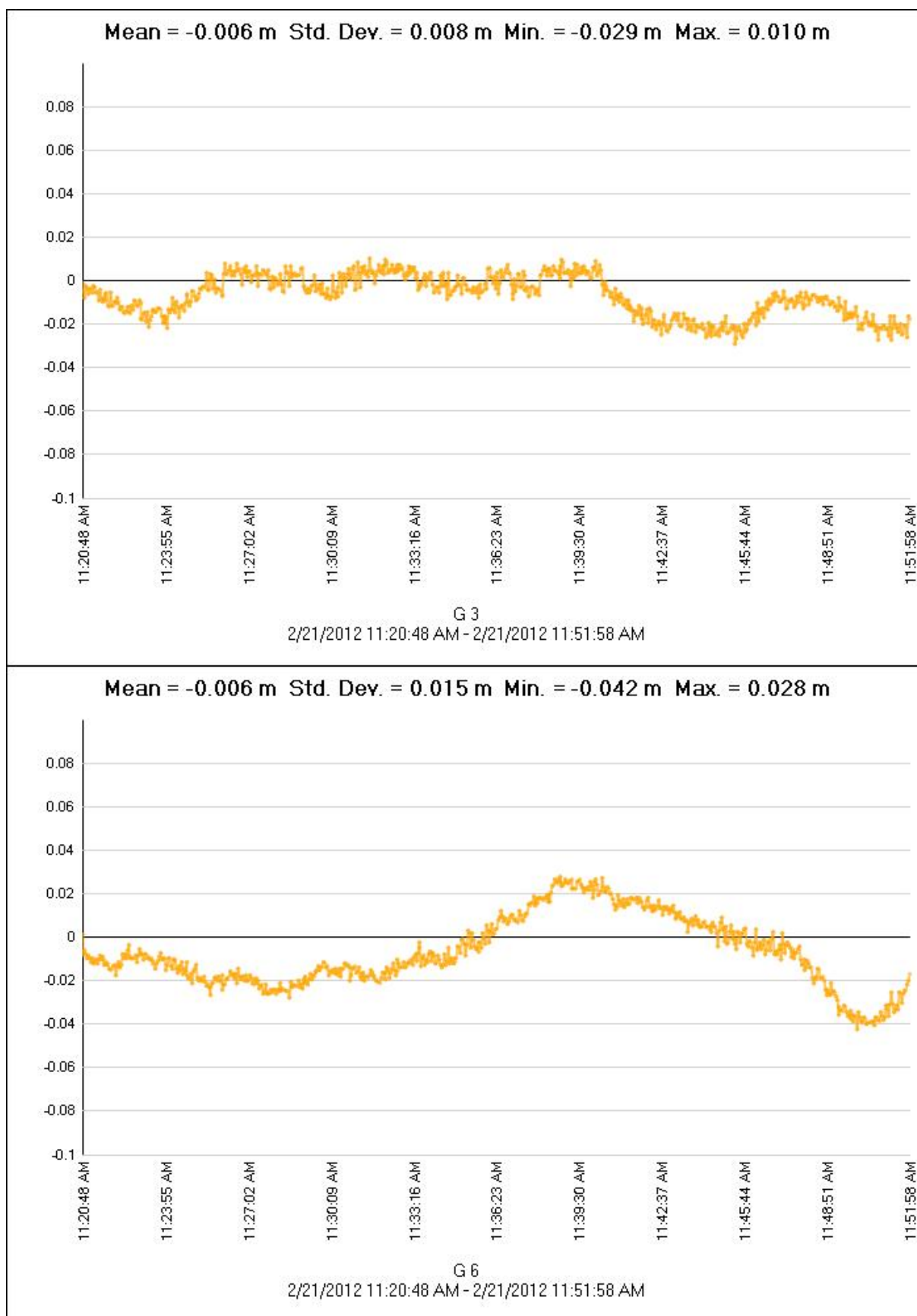
## Occupations

	From	To
Point ID:	HH0645	SVA13-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050520.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00110523.12o
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	2/21/2012 11:20:47 AM		Duration: 00:31:10 Major interval: 00:01:00		2/21/2012 11:51:57 AM	
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





Mean = 0.012 m Std. Dev. = 0.013 m Min. = -0.026 m Max. = 0.045 m



G 15

2/21/2012 11:20:48 AM - 2/21/2012 11:51:58 AM

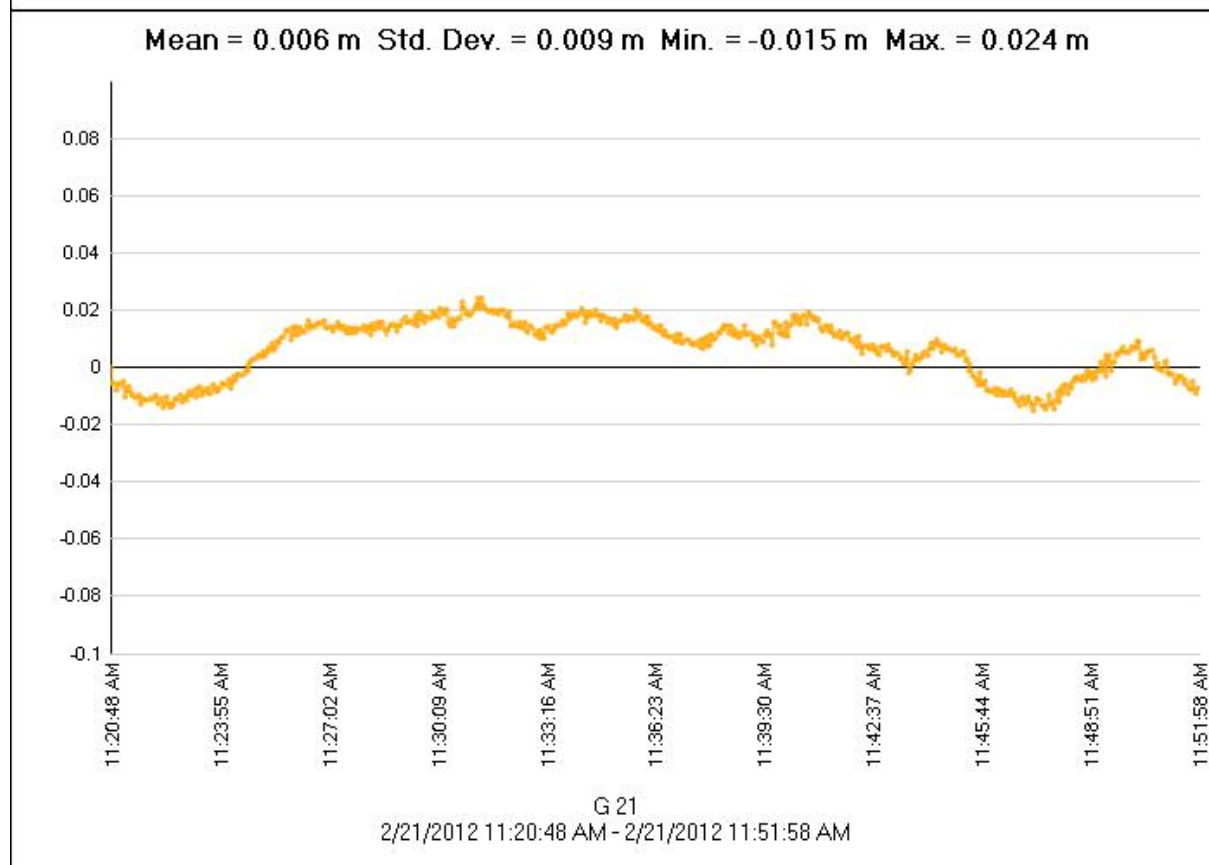
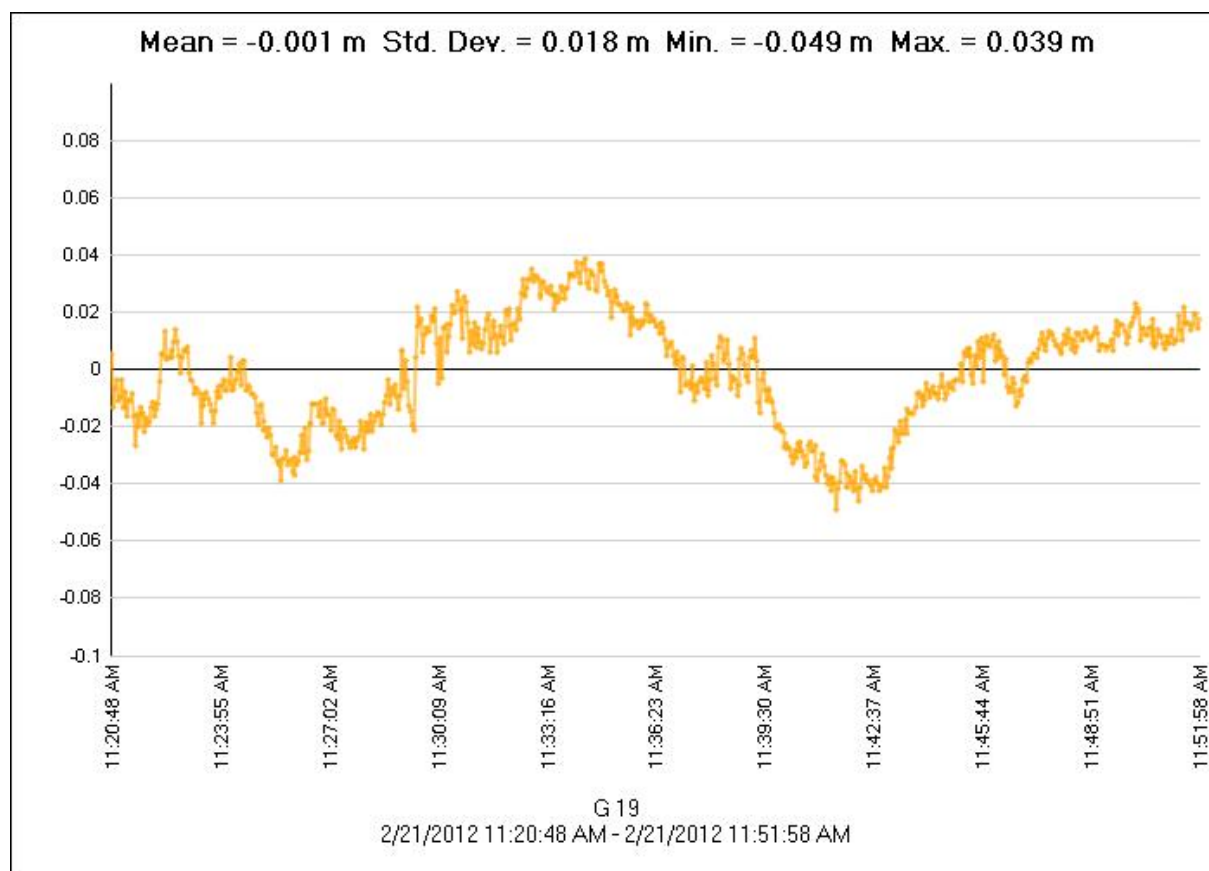
Mean = -0.004 m Std. Dev. = 0.010 m Min. = -0.025 m Max. = 0.014 m



G 18

2/21/2012 11:20:48 AM - 2/21/2012 11:51:58 AM





Mean = 0.003 m Std. Dev. = 0.006 m Min. = -0.013 m Max. = 0.018 m



G 22

2/21/2012 11:20:48 AM - 2/21/2012 11:51:58 AM

Mean = -0.004 m Std. Dev. = 0.014 m Min. = -0.035 m Max. = 0.031 m





G 27

2/21/2012 11:20:48 AM - 2/21/2012 11:51:58 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

---

HH0645 - FVA13-B1 (10:35:37 AM-11:06:08 AM) (S312)

---

Baseline observation: HH0645 --- FVA13-B1 (B312)

Processed: 4/10/2012 8:47:10 AM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.009 m

Vertical precision: 0.010 m

RMS: 0.004 m

Maximum PDOP: 2.066

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/21/2012 10:35:37 AM (Local: UTC-7hr)

Processing stop time: 2/21/2012 11:06:08 AM (Local: UTC-7hr)

Processing duration: 00:30:31

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0645				
Grid		Local		Global	
Easting	252723.345 m	Latitude	N37°59'48.17255"	Latitude	N37°59'48.17255"
Northing	4209193.137 m	Longitude	W101°48'57.76498"	Longitude	W101°48'57.76498"
Elevation	995.279 m	Height	970.864 m	Height	970.864 m

To:	FVA13-B1				
Grid		Local		Global	
Easting	255817.126 m	Latitude	N37°43'22.29973"	Latitude	N37°43'22.29973"
Northing	4178680.361 m	Longitude	W101°46'13.95110"	Longitude	W101°46'13.95110"
Elevation	1002.101 m	Height	977.459 m	Height	977.459 m

Vector					
9Ughb[	3093.780 m	NS Fwd Azimuth	172°28'52"	L	105.992 m
Bcfh\jb[	-30512.776 m	Ellipsoid Dist.	30658.678 m	M	-19087.631 m
9Yj Uhcb	6.822 m	<Y][\h	6.595 m	N	-23997.747 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[	0.004 m	'9~]dgc]X'8]gh	0.004 m	M	0.005 m
'9`Yj Uhcb	0.005 m	' <Y][ \h	0.005 m	N	0.004 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000056191		
Y	0.0000053429	0.0000213631	
Z	-0.0000011551	-0.0000038899	0.0000165378

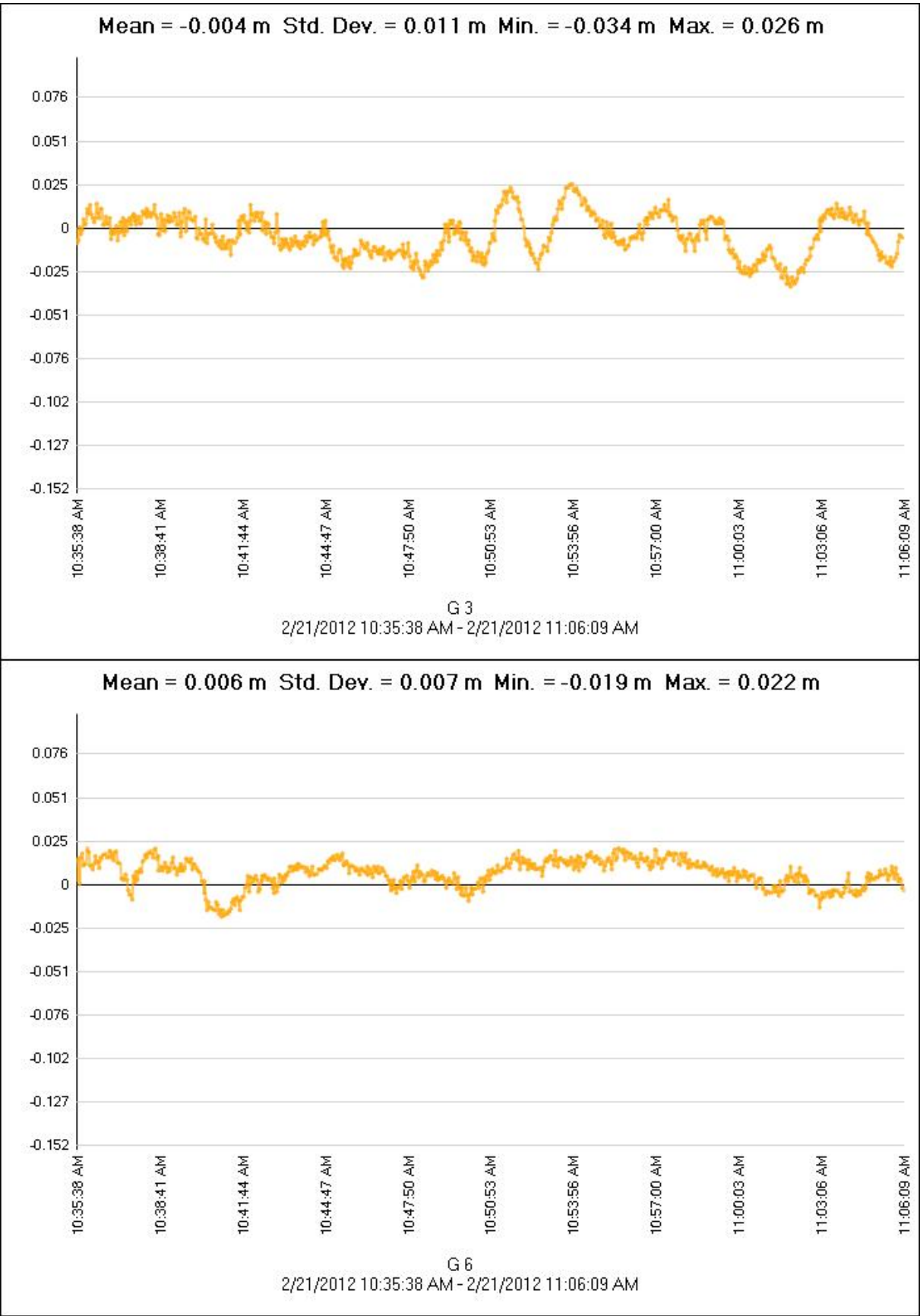
Occupations

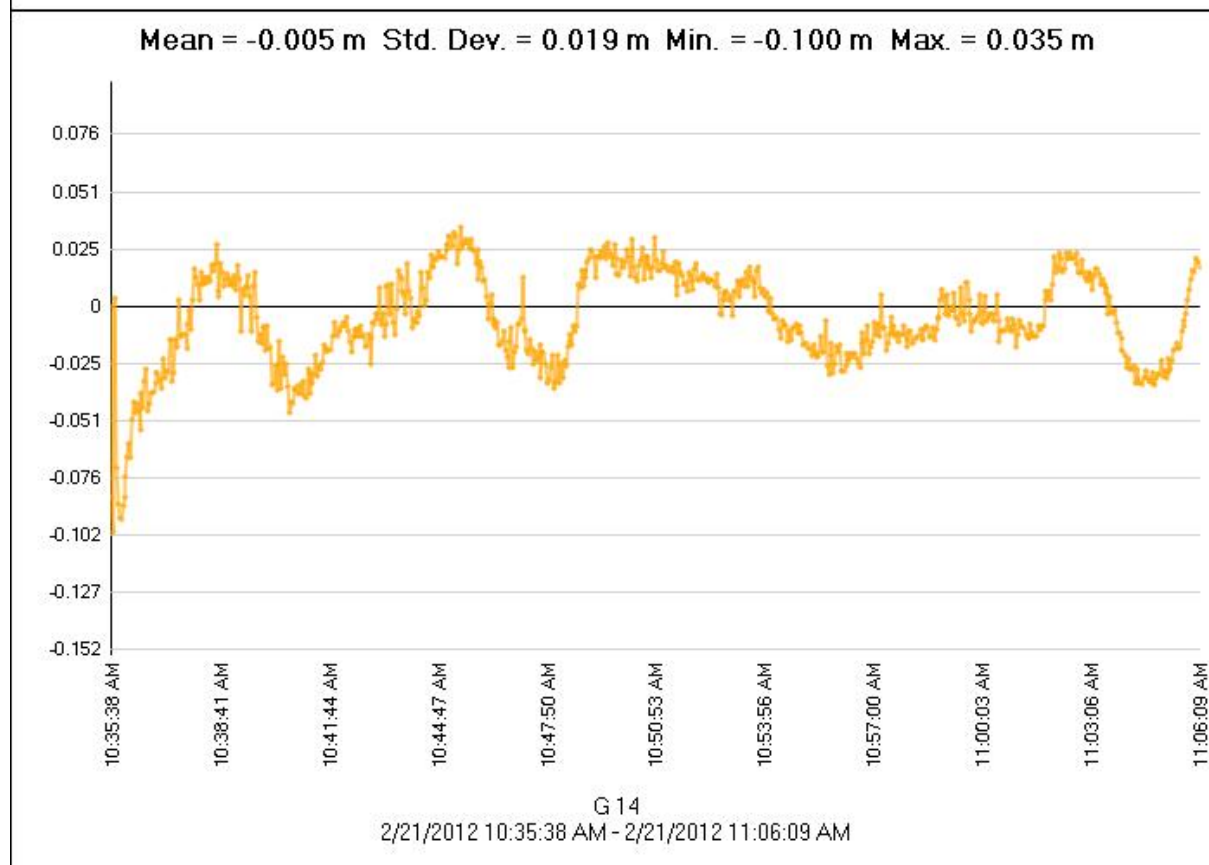
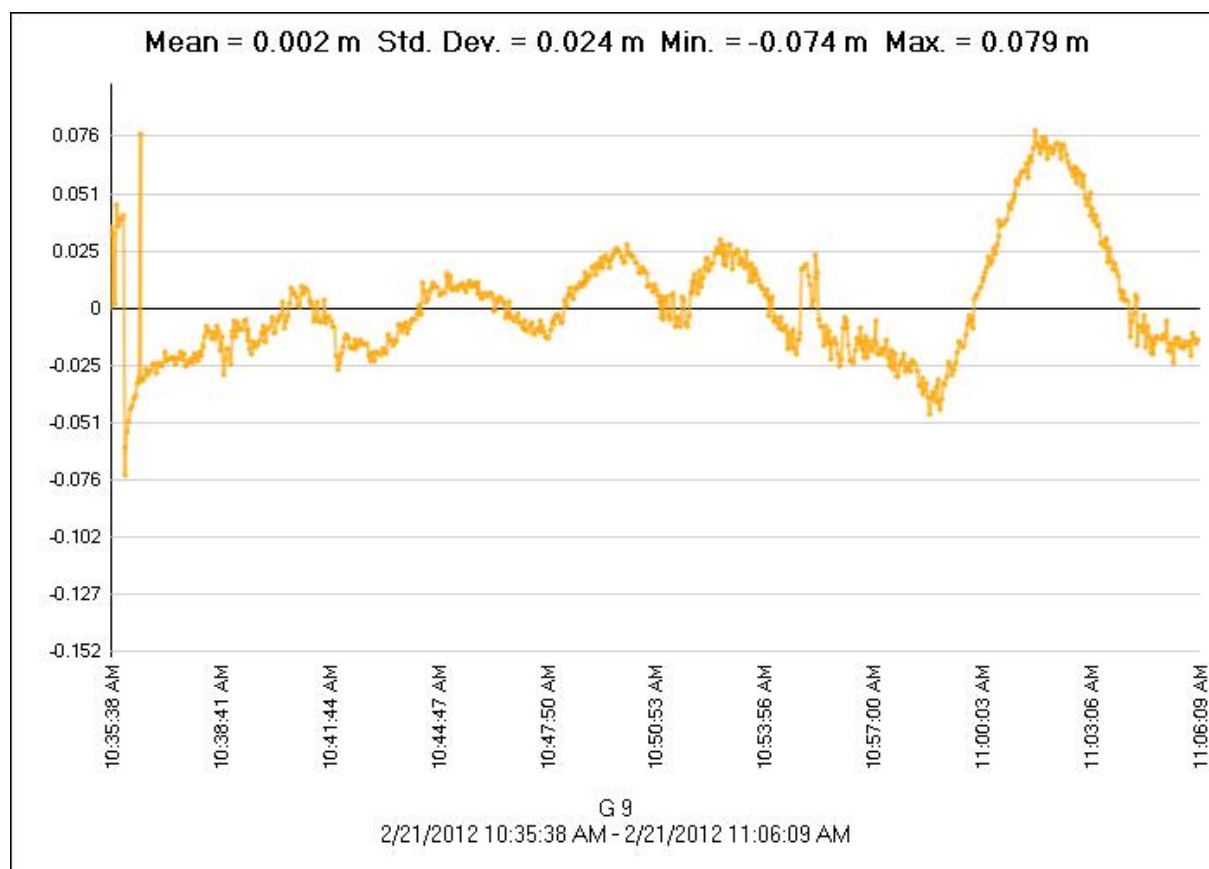
	From	To
Point ID:	HH0645	FVA13-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00050520.12o	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00110522.12o
Receiver type:	Unknown	Unknown
Receiver serial number:		
Antenna type:	Unknown External	Unknown External
Antenna serial number:	-----	-----
Antenna height (measured):	2.065 m	2.065 m
Antenna method:	Antenna Phase Center	Antenna Phase Center

## Tracking Summary

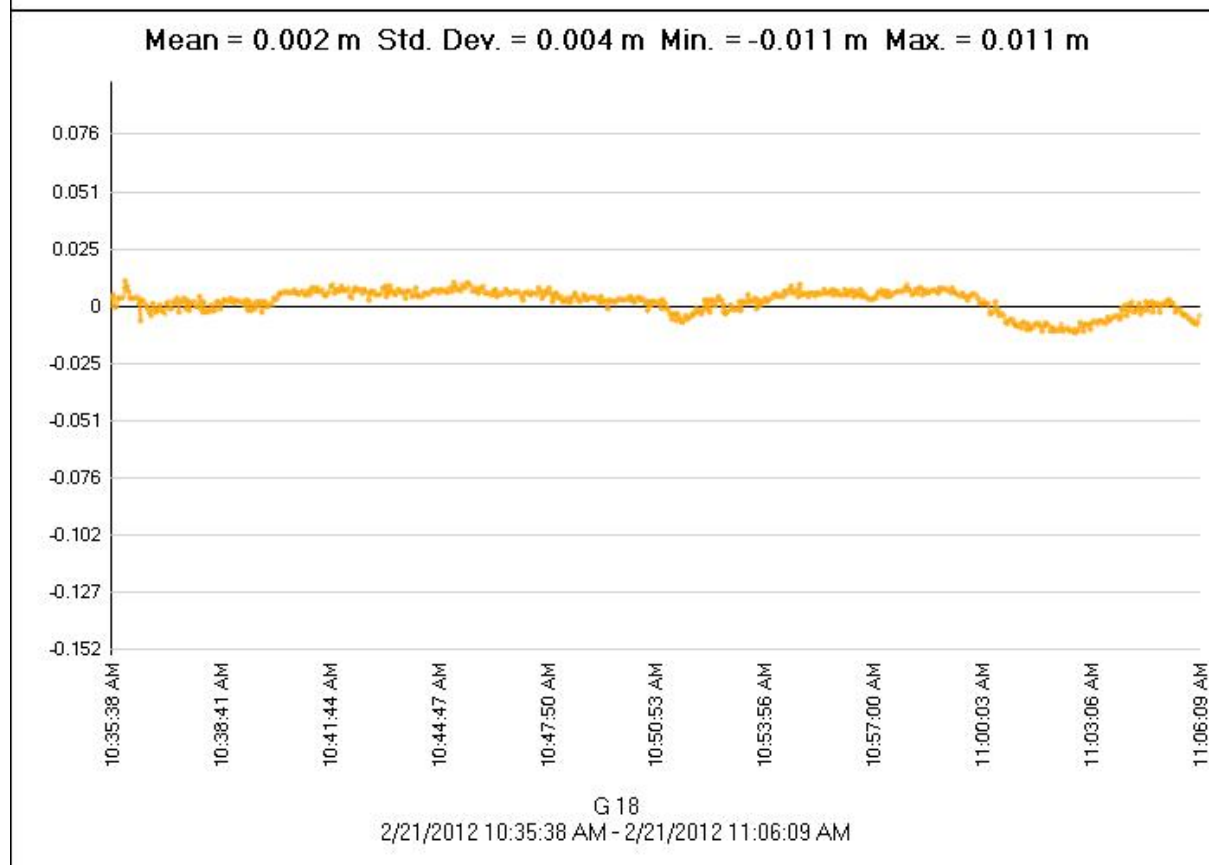
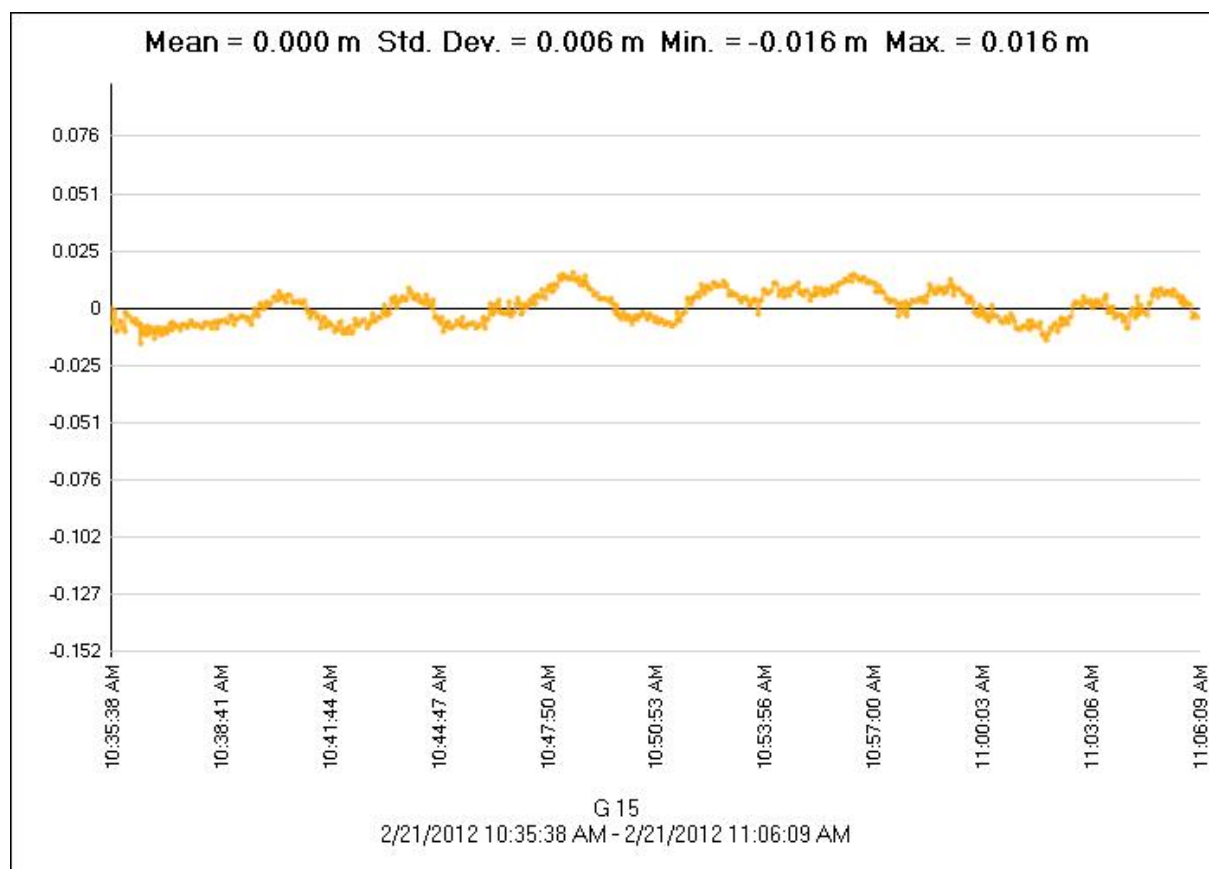
SV	2/21/2012 10:35:37 AM	Duration: 00:30:31	Major interval: 00:01:00	2/21/2012 11:06:08 AM
G 3				
G 6				
G 9				
G 14				
G 15				
G 16				
G 18				
G 19				
G 21				
G 22				
G 27				
G 29				

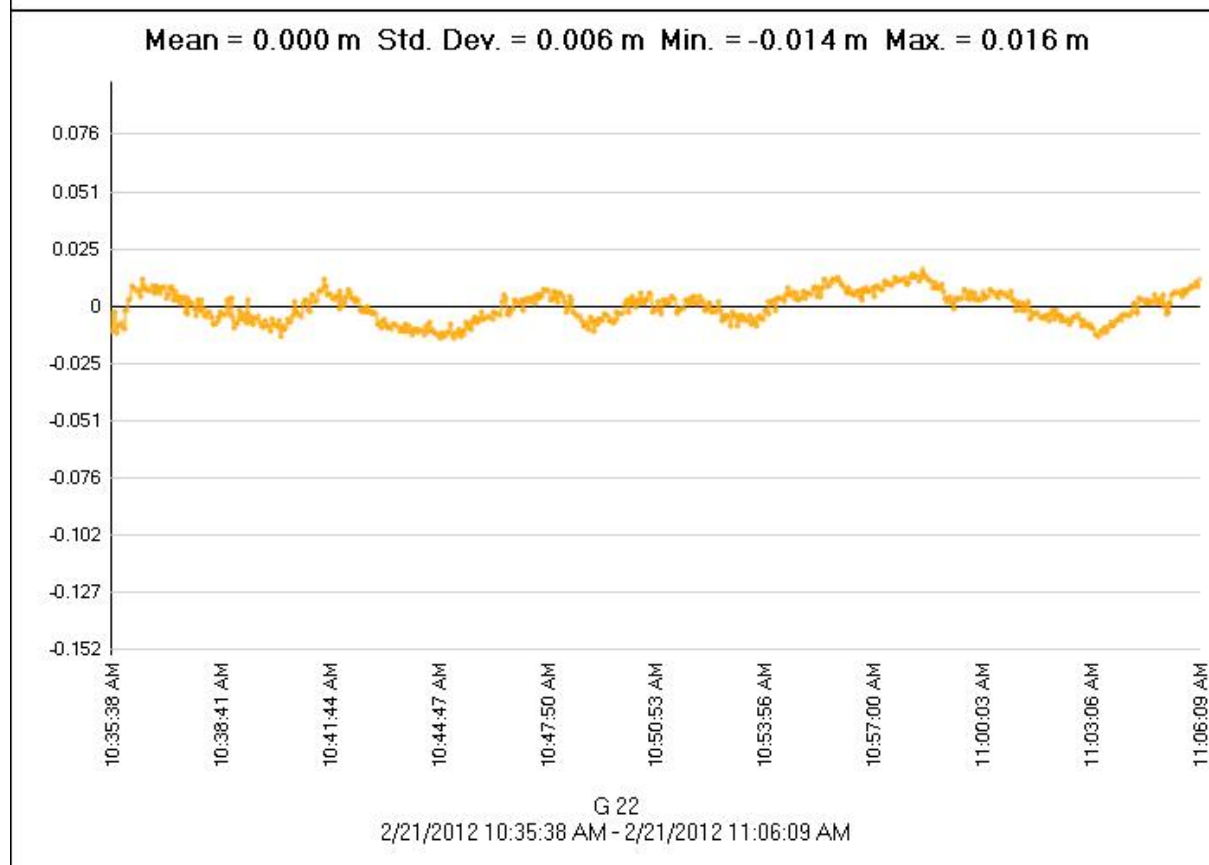
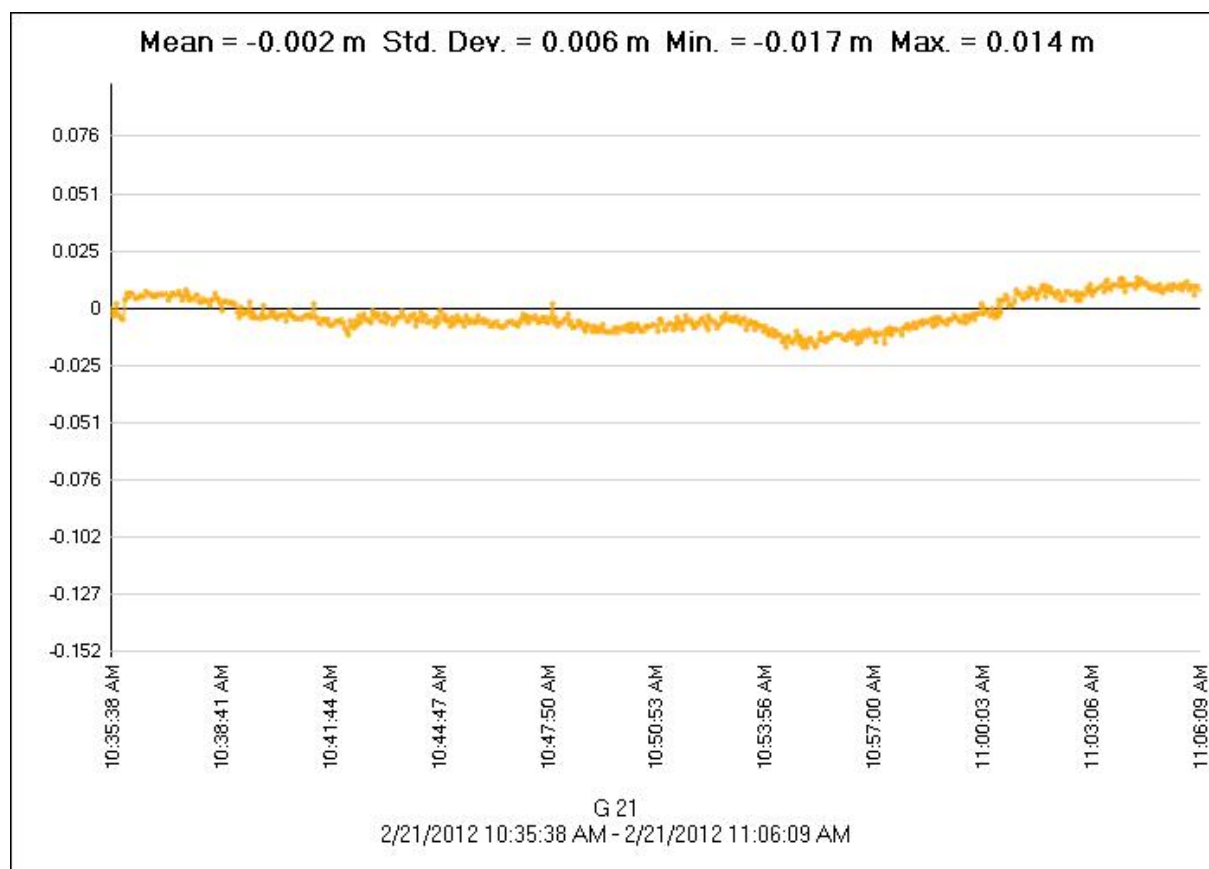
Residuals

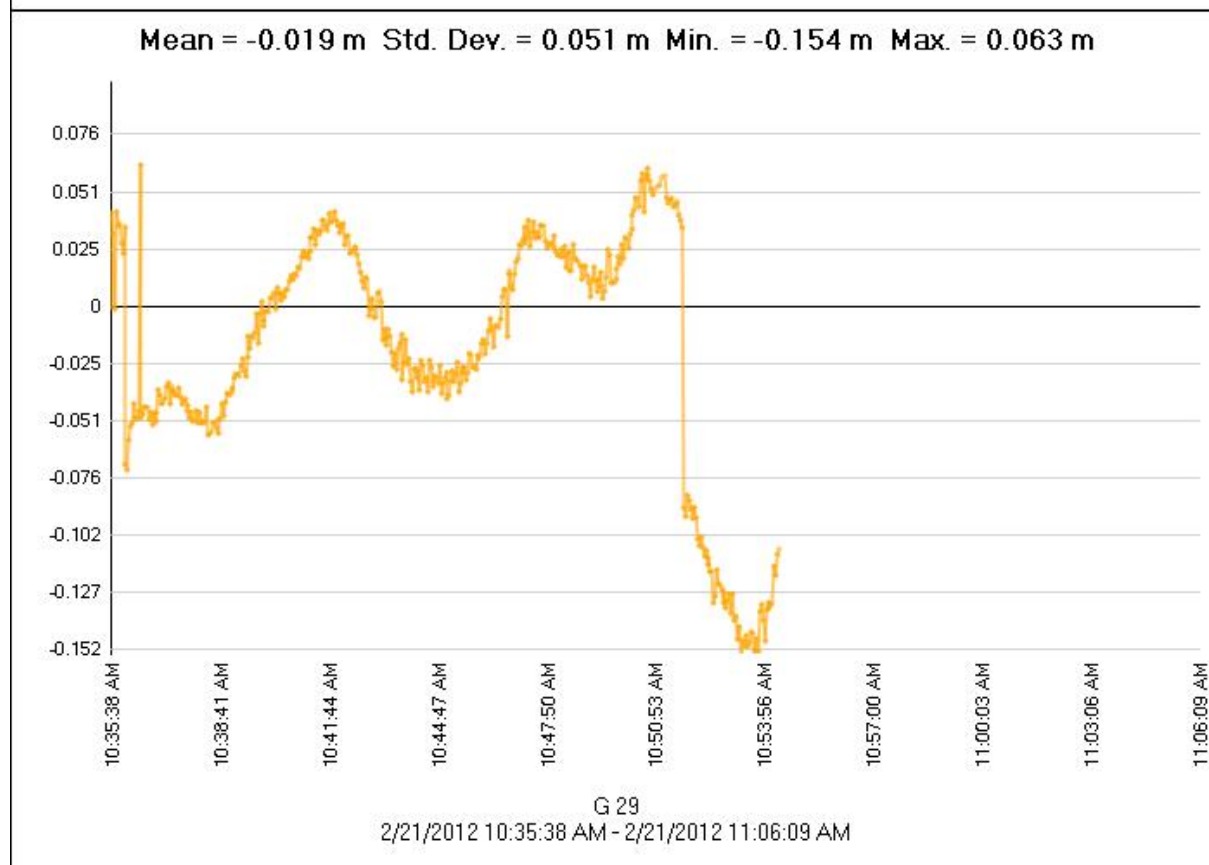
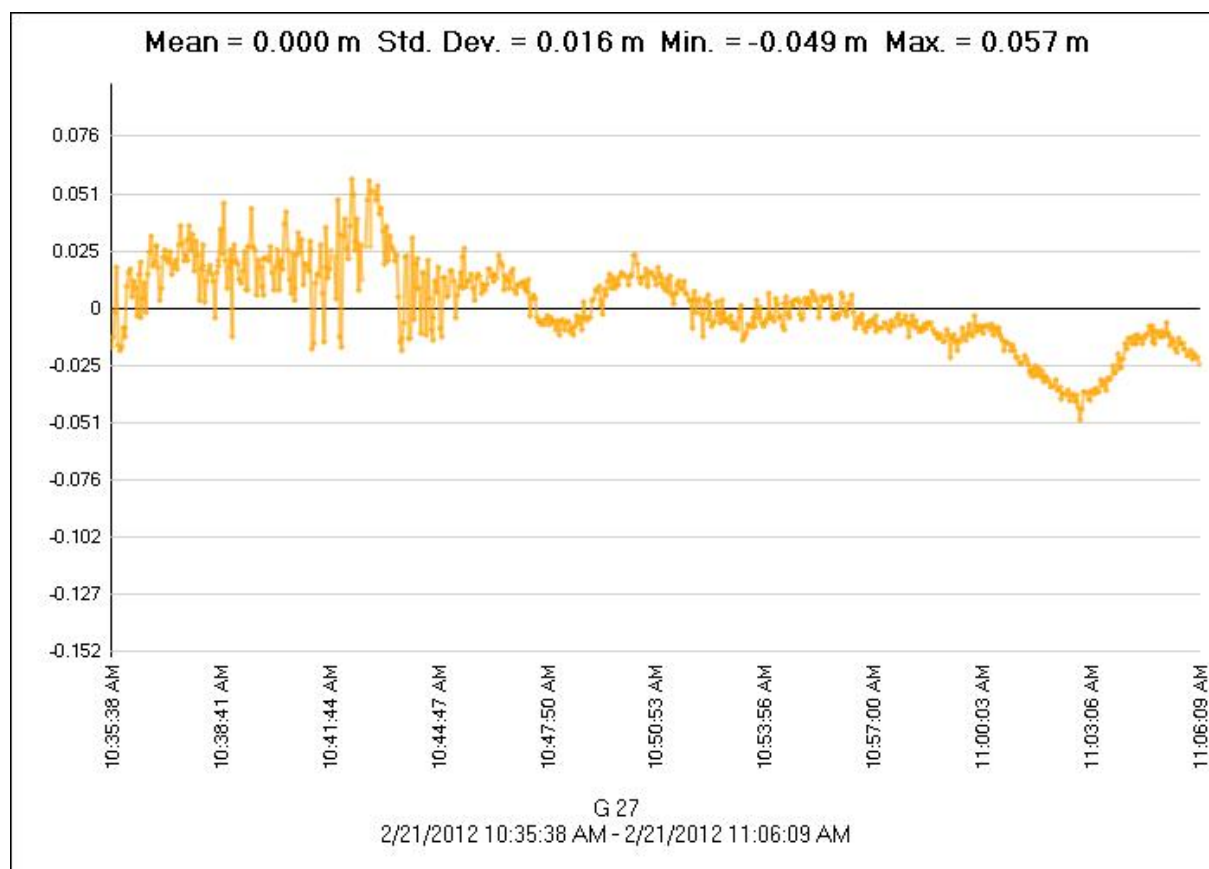














Processing style

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

---

HH0645 - SVA30-B1 (9:43:13 AM-10:13:12 AM) (S313)

---

Baseline observation: HH0645 --- SVA30-B1 (B313)

Processed: 4/10/2012 8:47:06 AM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.010 m

Vertical precision: 0.015 m

RMS: 0.003 m

Maximum PDOP: 2.872

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/21/2012 9:43:13 AM (Local: UTC-7hr)

Processing stop time: 2/21/2012 10:13:12 AM (Local: UTC-7hr)

Processing duration: 00:29:59

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0645				
Grid		Local		Global	
Easting	252723.345 m	Latitude	N37°59'48.17255"	Latitude	N37°59'48.17255"
Northing	4209193.137 m	Longitude	W101°48'57.76498"	Longitude	W101°48'57.76498"
Elevation	995.279 m	Height	970.864 m	Height	970.864 m

To:	SVA30-B1				
Grid		Local		Global	
Easting	261506.377 m	Latitude	N37°50'29.13391"	Latitude	N37°50'29.13391"
Northing	4191683.170 m	Longitude	W101°42'37.19627"	Longitude	W101°42'37.19627"
Elevation	1058.591 m	Height	1033.896 m	Height	1033.896 m

Vector					
9Ughb[	8783.031 m	NS Fwd Azimuth	151°37'48"	L	6931.542 m
BcfA\jb[	-17509.967 m	Ellipsoid Dist.	19582.899 m	M	-12315.639 m
9`Yj U\jcb	63.312 m	<Y][\h	63.032 m	N	-13560.721 m

## Standard Errors

Vector errors:					
Point ID	0.003 m	Point ID	0°00'00"	Point ID	0.004 m
Point ID	0.004 m	Point ID	0.003 m	Point ID	0.007 m
Point ID	0.008 m	Point ID	0.008 m	Point ID	0.005 m

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

	X	Y	Z
X	0.0000177076		
Y	0.0000184578	0.0000469907	
Z	-0.0000075179	-0.0000168657	0.0000209997

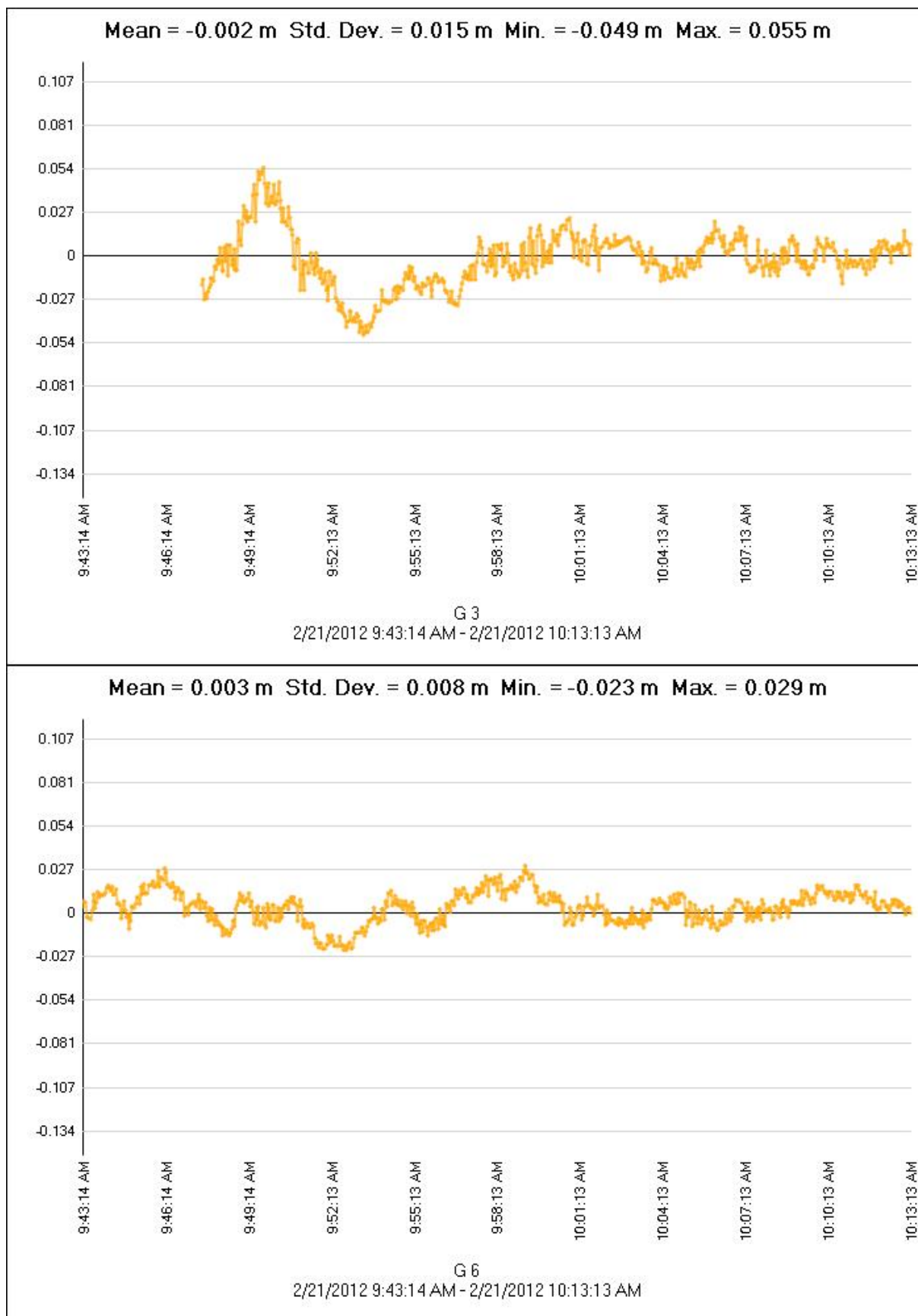
## Occupations

	From	To
Point ID:	HH0645	SVA30-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050520.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00110521.12o
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

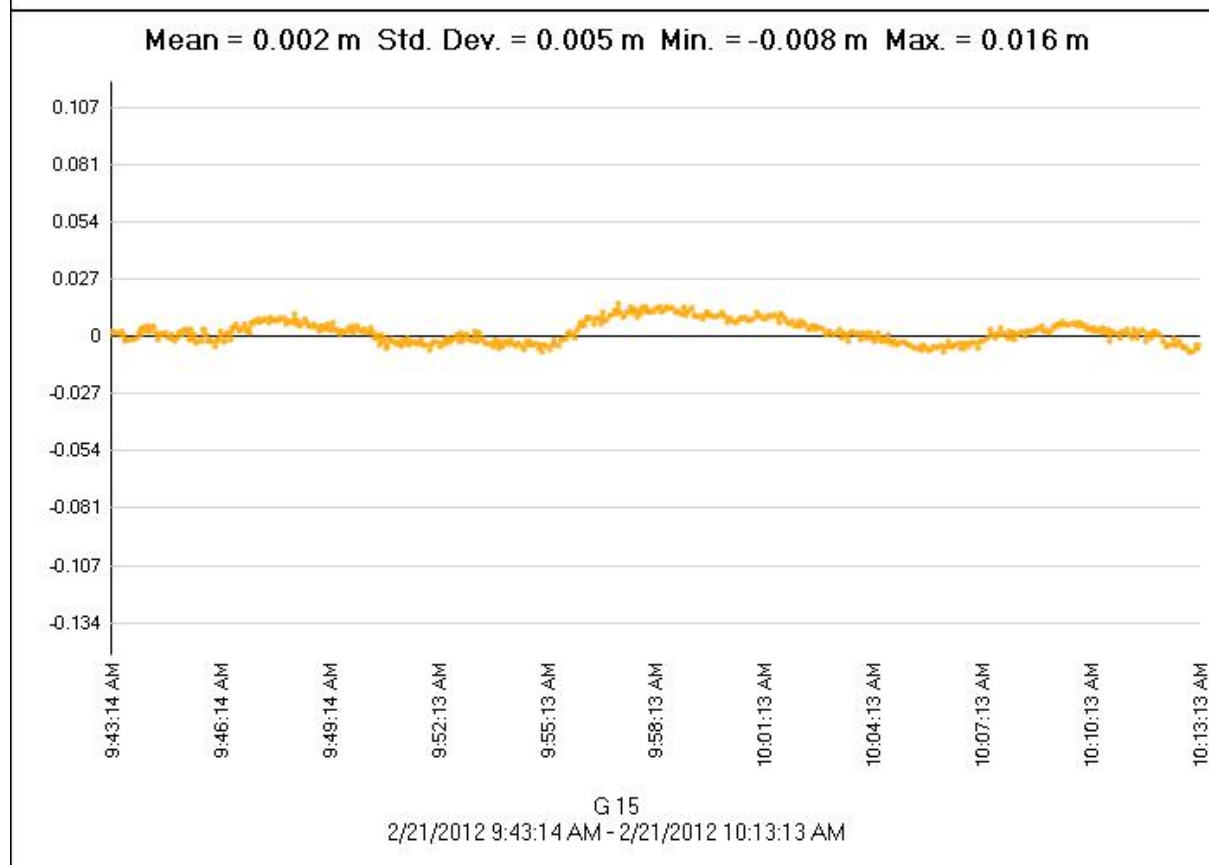
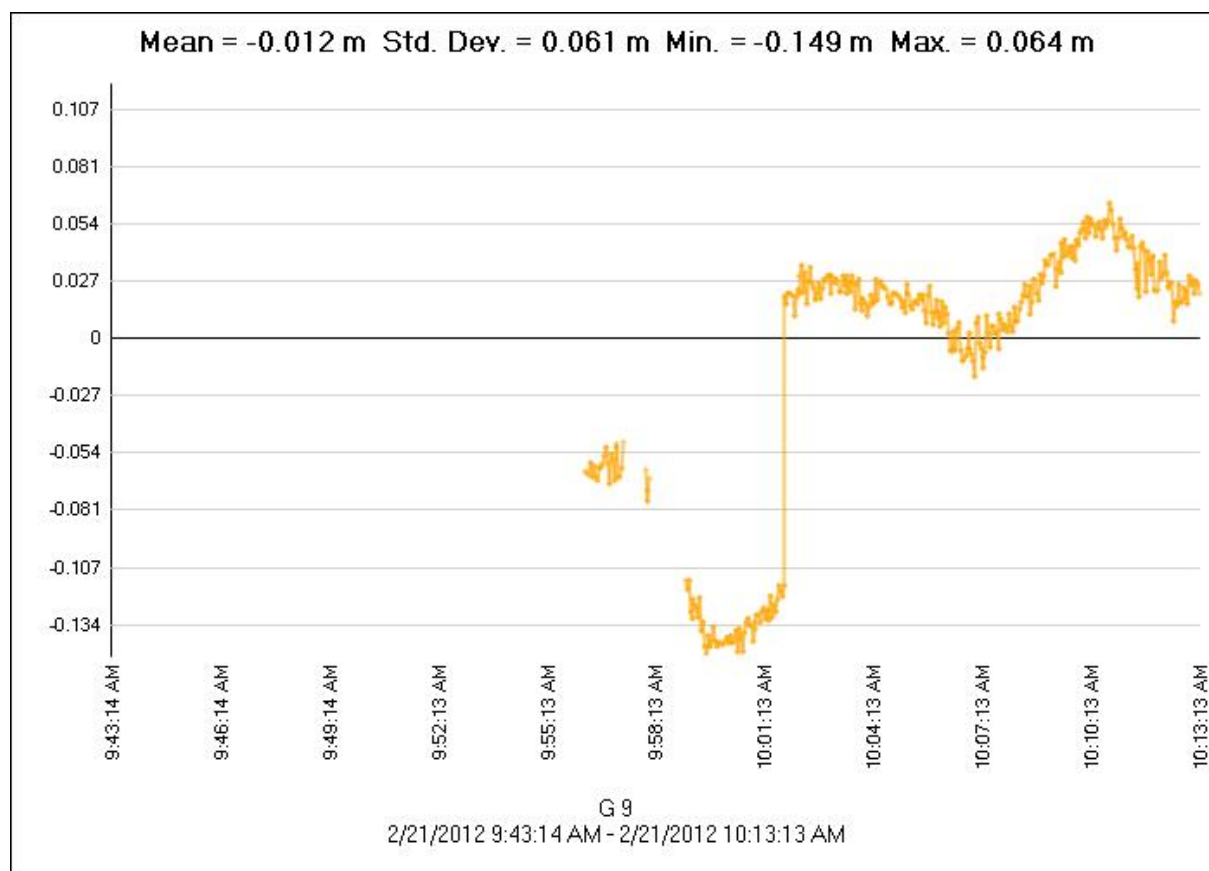
# Tracking Summary

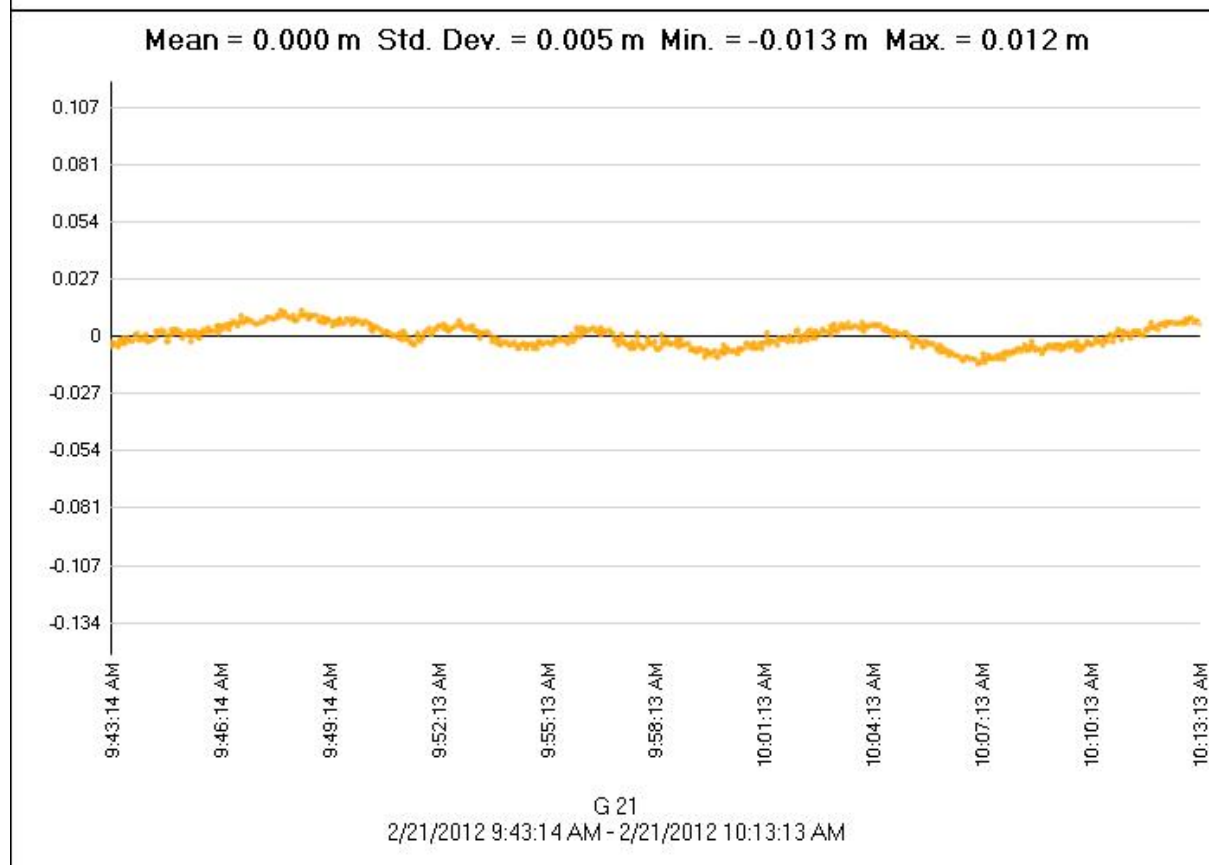
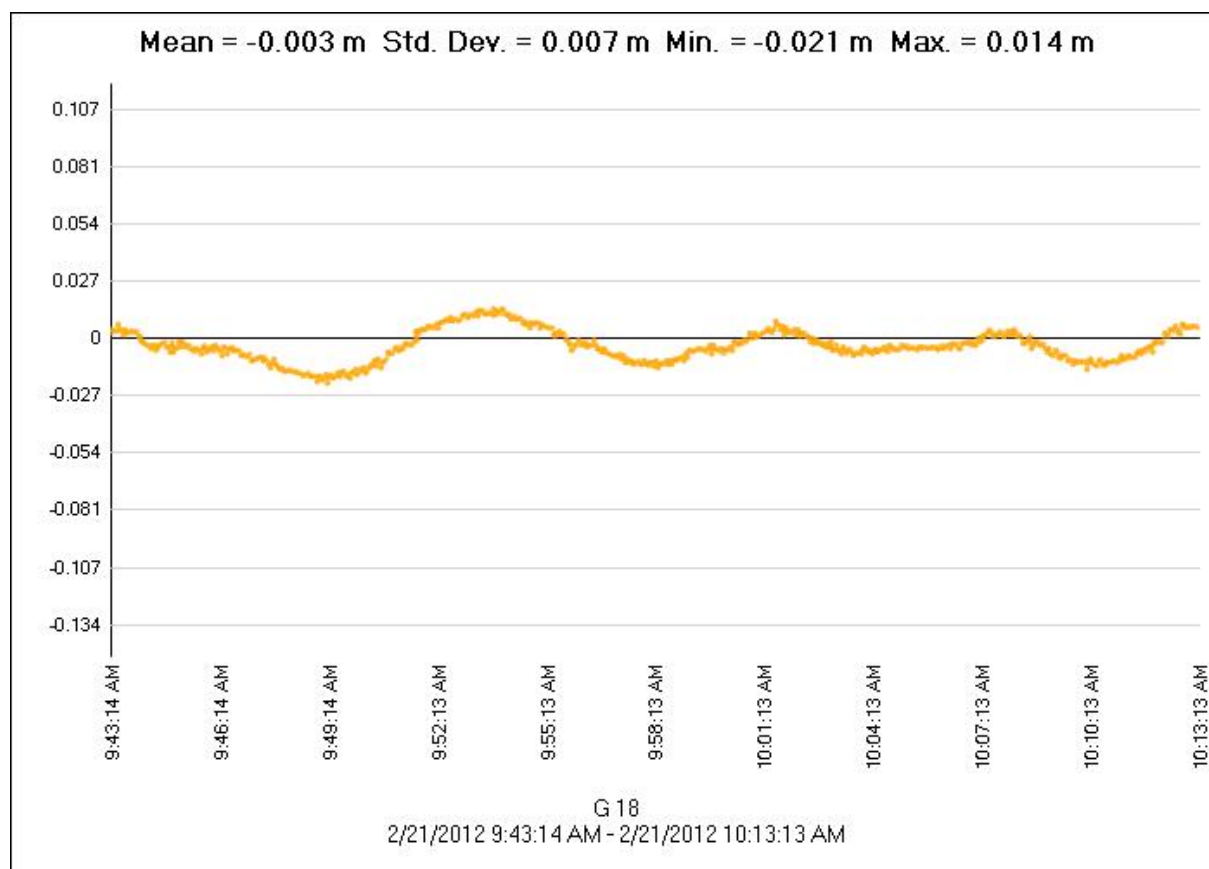
SV	2/21/2012 9:43:13 AM	Duration: 00:29:59	Major interval: 00:01:00	2/21/2012 10:13:12 AM
G 3	L1 L2			
G 5	L1 L2			
G 6	L1 L2			
G 9	L1 L2			
G 14	L1 L2			
G 15	L1 L2			
G 16	L1 L2			
G 18	L1 L2			
G 21	L1 L2			
G 22	L1 L2			
G 27	L1 L2			
G 29	L1 L2			
G 30	L1 L2			

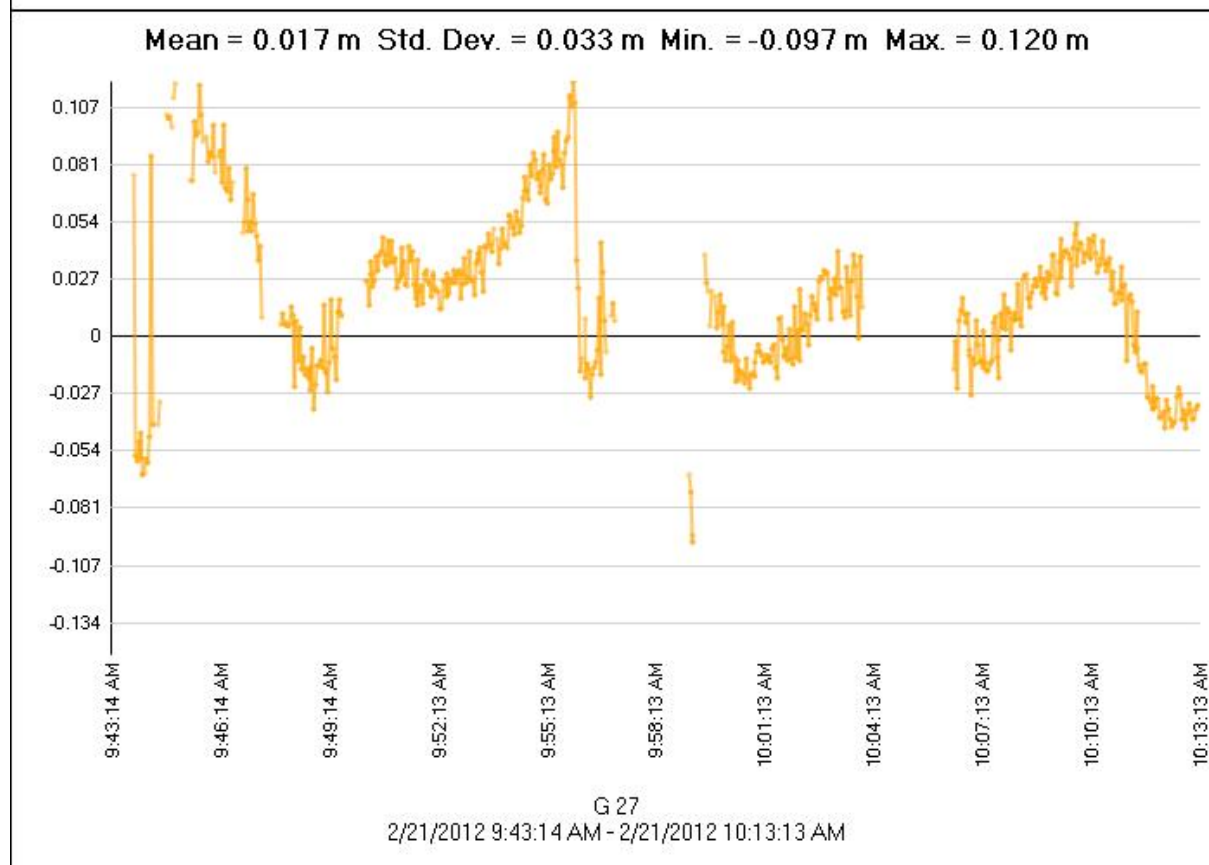
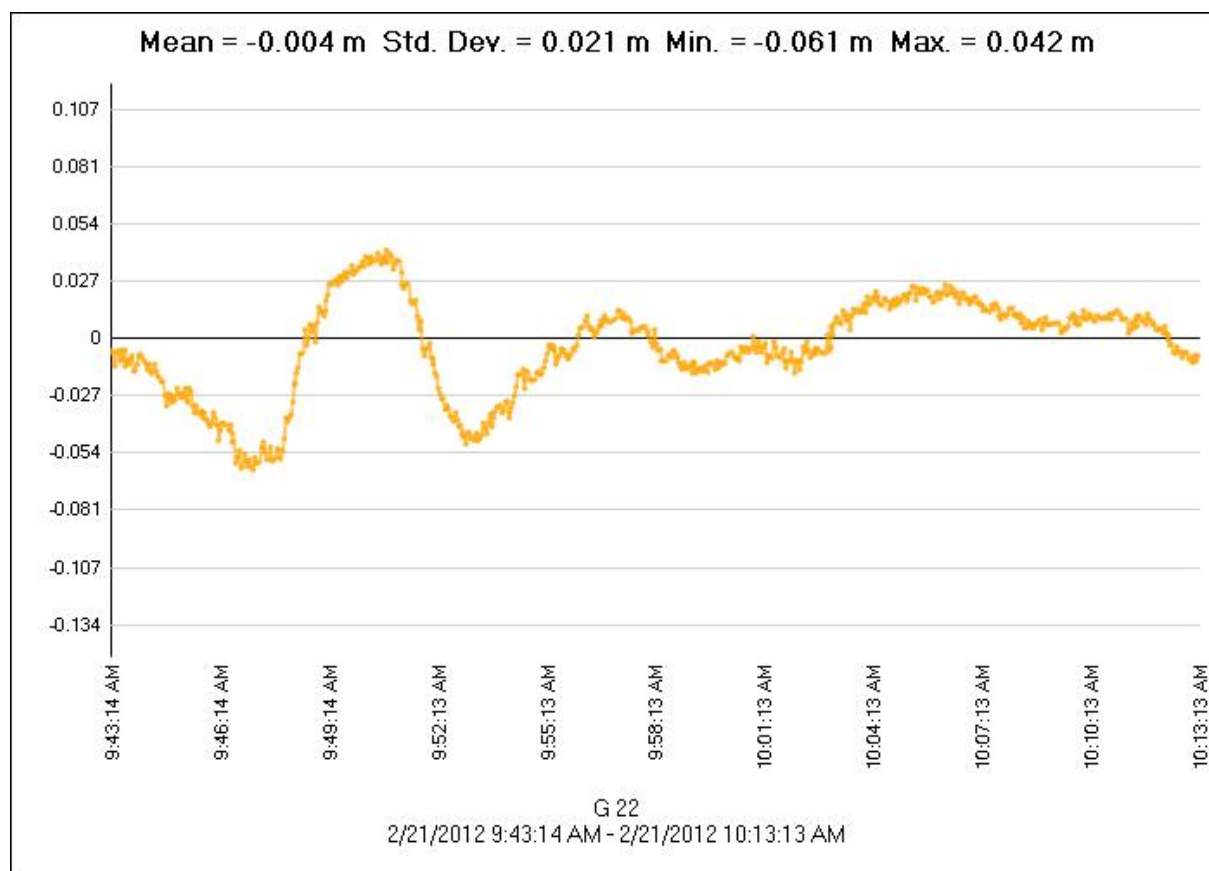
## Residuals

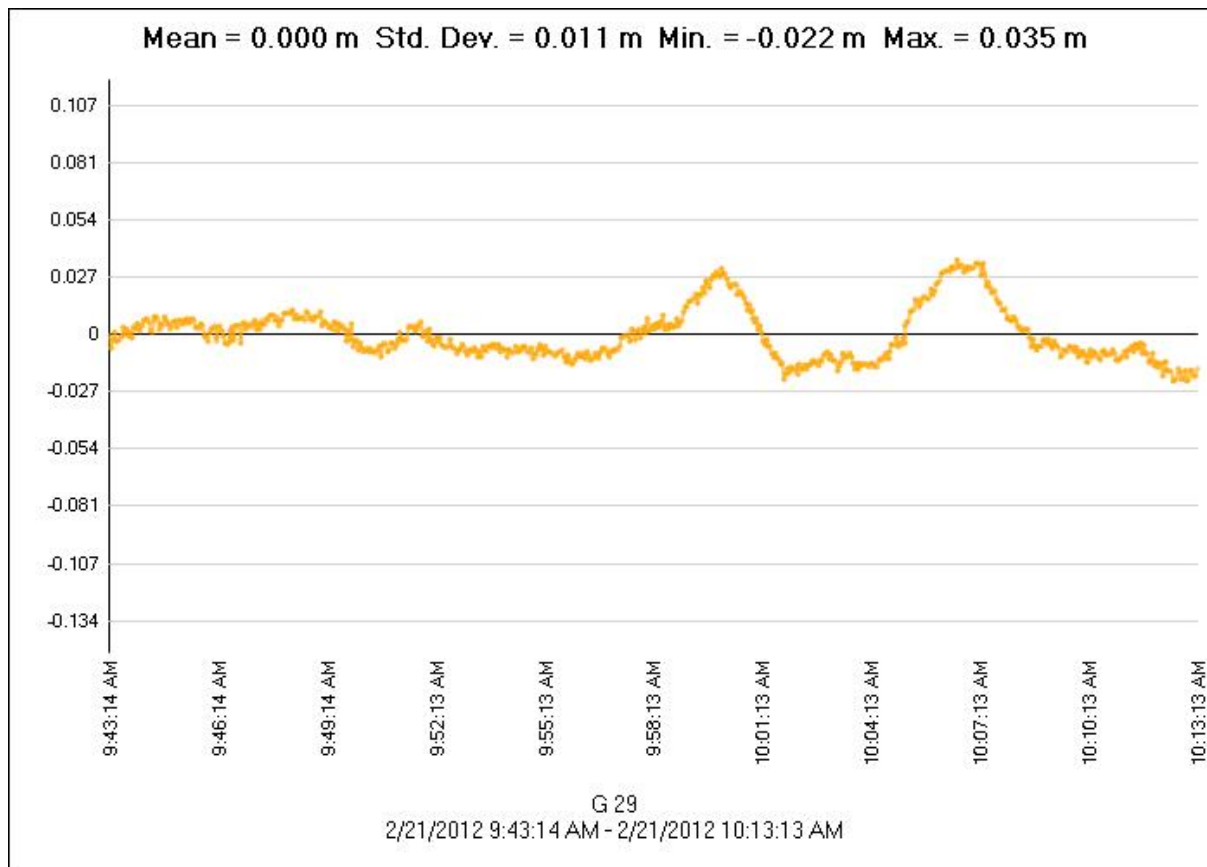














## Processing style

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

---

HH0645 - FVA30-B1 (8:56:58 AM-9:27:12 AM) (S314)

---

Baseline observation: HH0645 --- FVA30-B1 (B314)

Processed: 4/10/2012 8:47:16 AM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.011 m

Vertical precision: 0.023 m

RMS: 0.005 m

Maximum PDOP: 4.662

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/21/2012 8:56:58 AM (Local: UTC-7hr)

Processing stop time: 2/21/2012 9:27:12 AM (Local: UTC-7hr)

Processing duration: 00:30:13

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0645				
Grid		Local		Global	
Easting	252723.345 m	Latitude	N37°59'48.17255"	Latitude	N37°59'48.17255"
Northing	4209193.137 m	Longitude	W101°48'57.76498"	Longitude	W101°48'57.76498"
Elevation	995.279 m	Height	970.864 m	Height	970.864 m

To:	FVA30-B1				
Grid		Local		Global	
Easting	257736.133 m	Latitude	N37°49'37.76034"	Latitude	N37°49'37.76034"
Northing	4190208.408 m	Longitude	W101°45'09.50377"	Longitude	W101°45'09.50377"
Elevation	1063.978 m	Height	1039.349 m	Height	1039.349 m

Vector					
9Ughb[	5012.787 m	NS Fwd Azimuth	163°28'40"	L	3085.968 m
Bcfh\jb[	-18984.729 m	Ellipsoid Dist.	19628.741 m	M	-12513.890 m
9Yj Uhcb	68.699 m	<Y][\h	68.485 m	N	-14808.543 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	0.009 m
'9`Yj Uhcb	0.012 m	' <Y][ \h	0.012 m	N	0.009 m

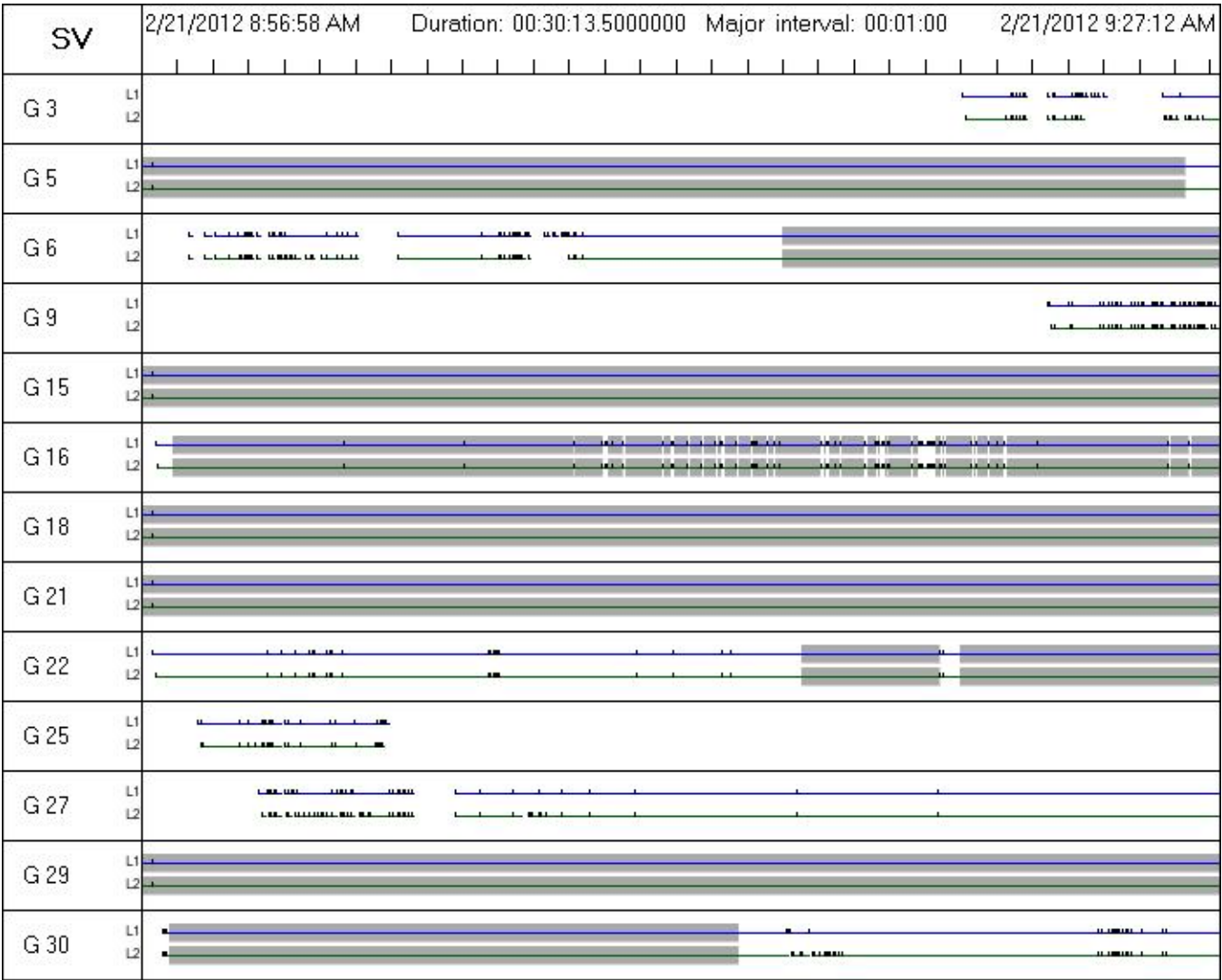
Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000128507		
Y	0.0000132695	0.0000747884	
Z	-0.0000078414	-0.0000653899	0.0000814184

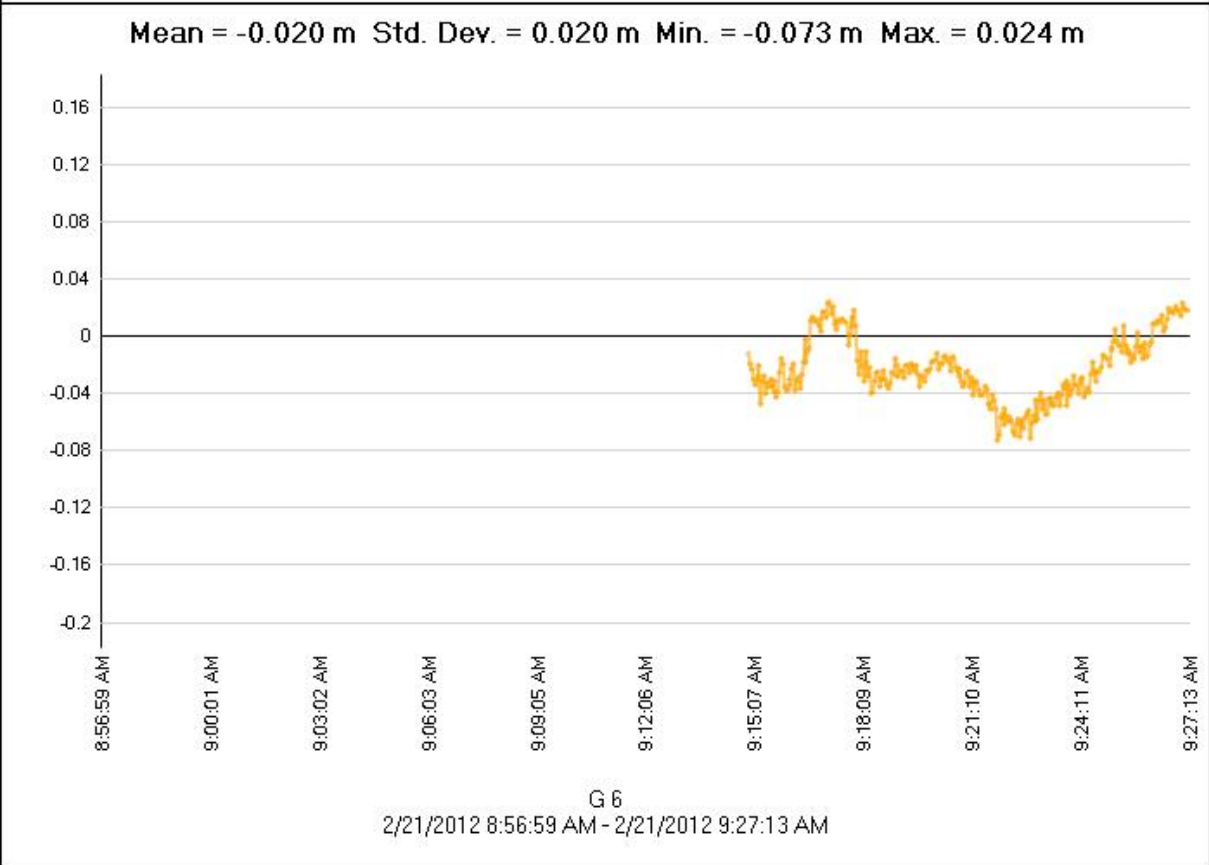
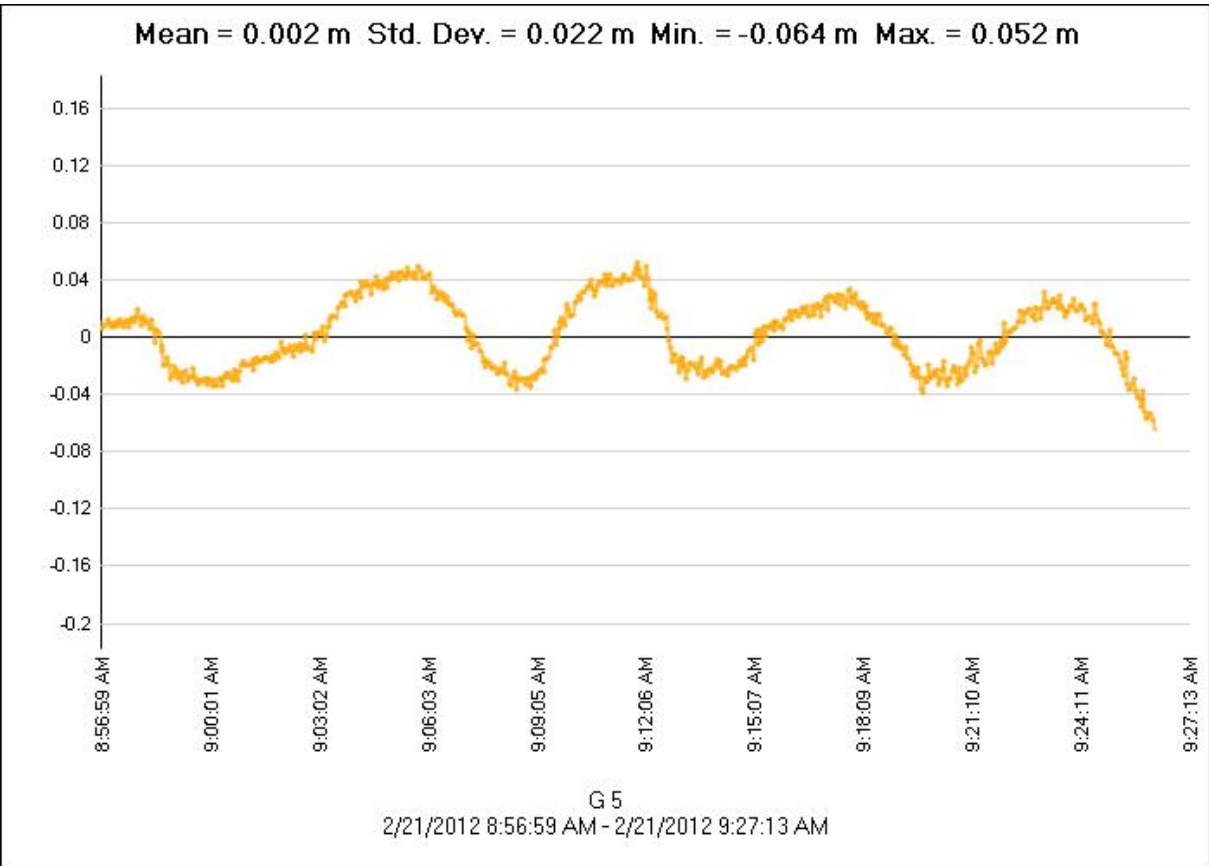
Occupations

	From	To
Point ID:	HH0645	FVA30-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00050520.12o	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00110520.12o
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

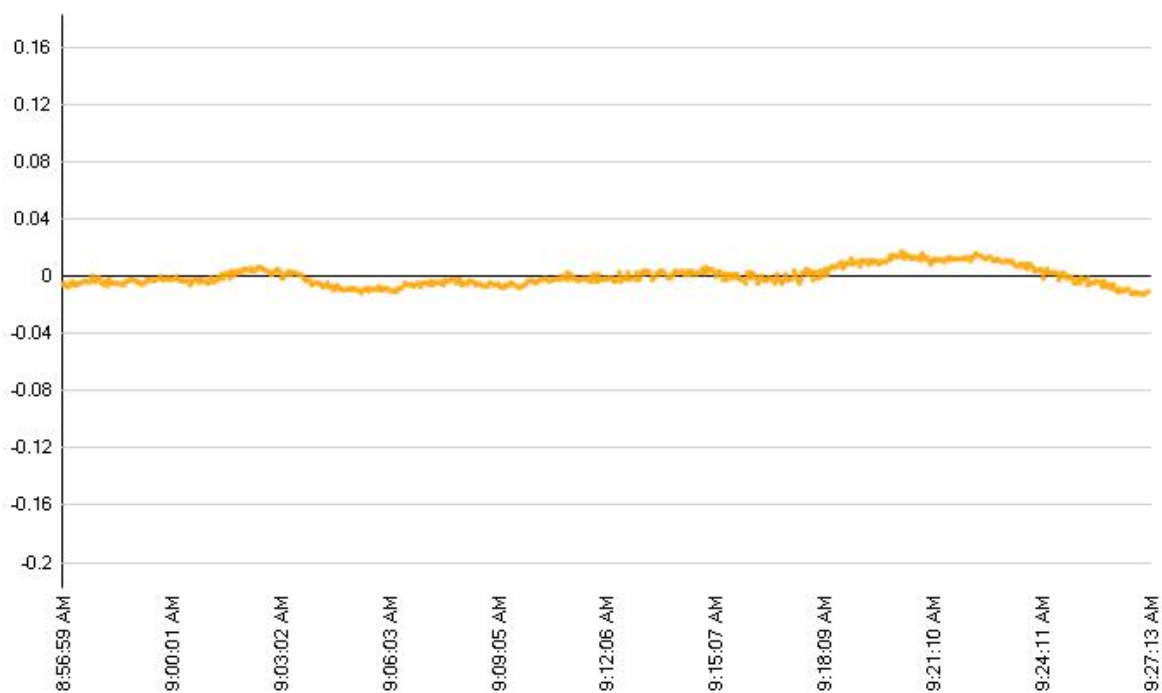


Residuals



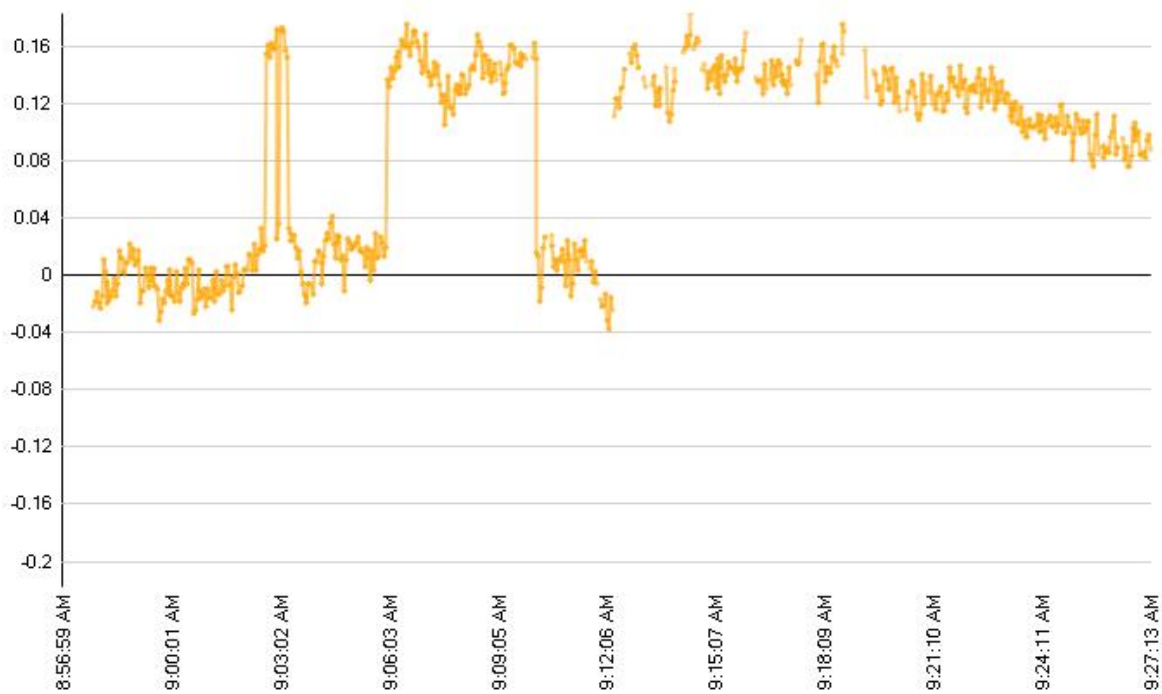


Mean = 0.000 m Std. Dev. = 0.006 m Min. = -0.013 m Max. = 0.017 m

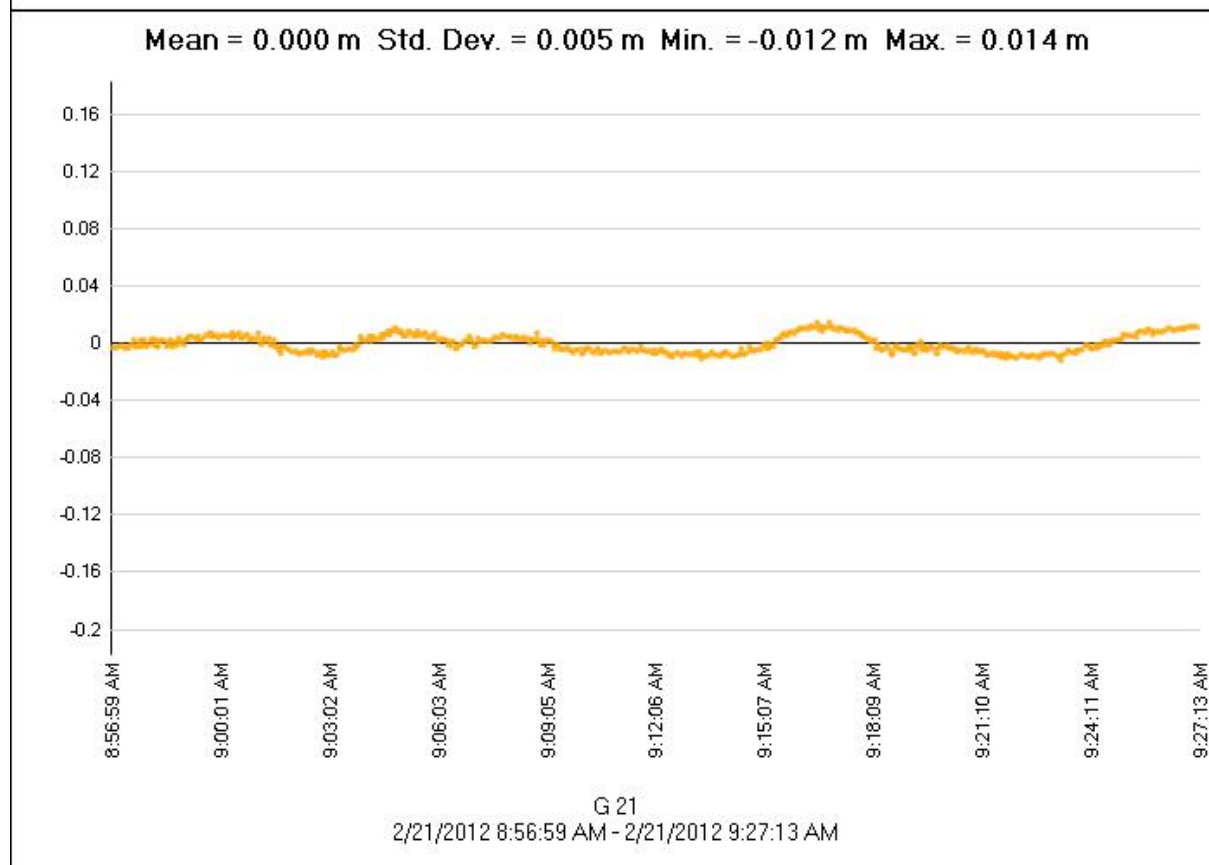
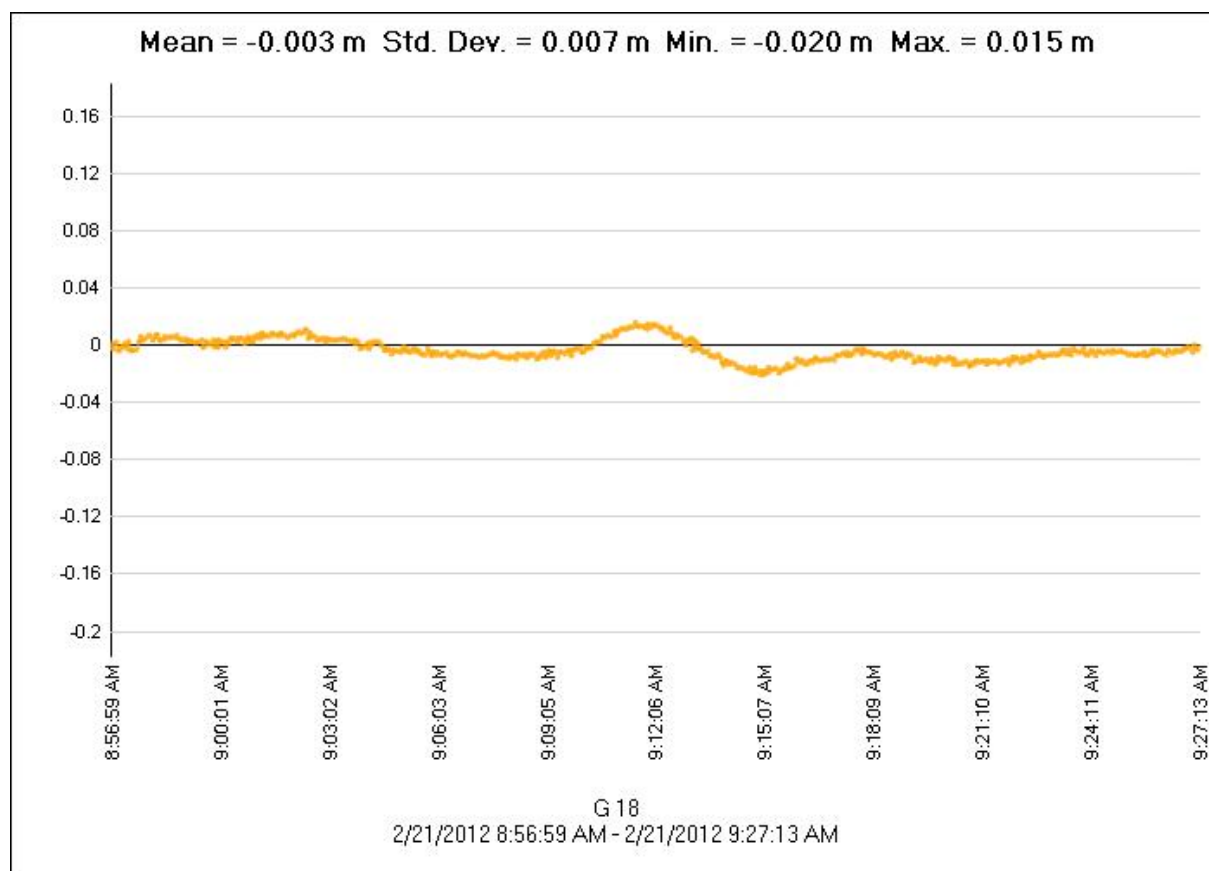


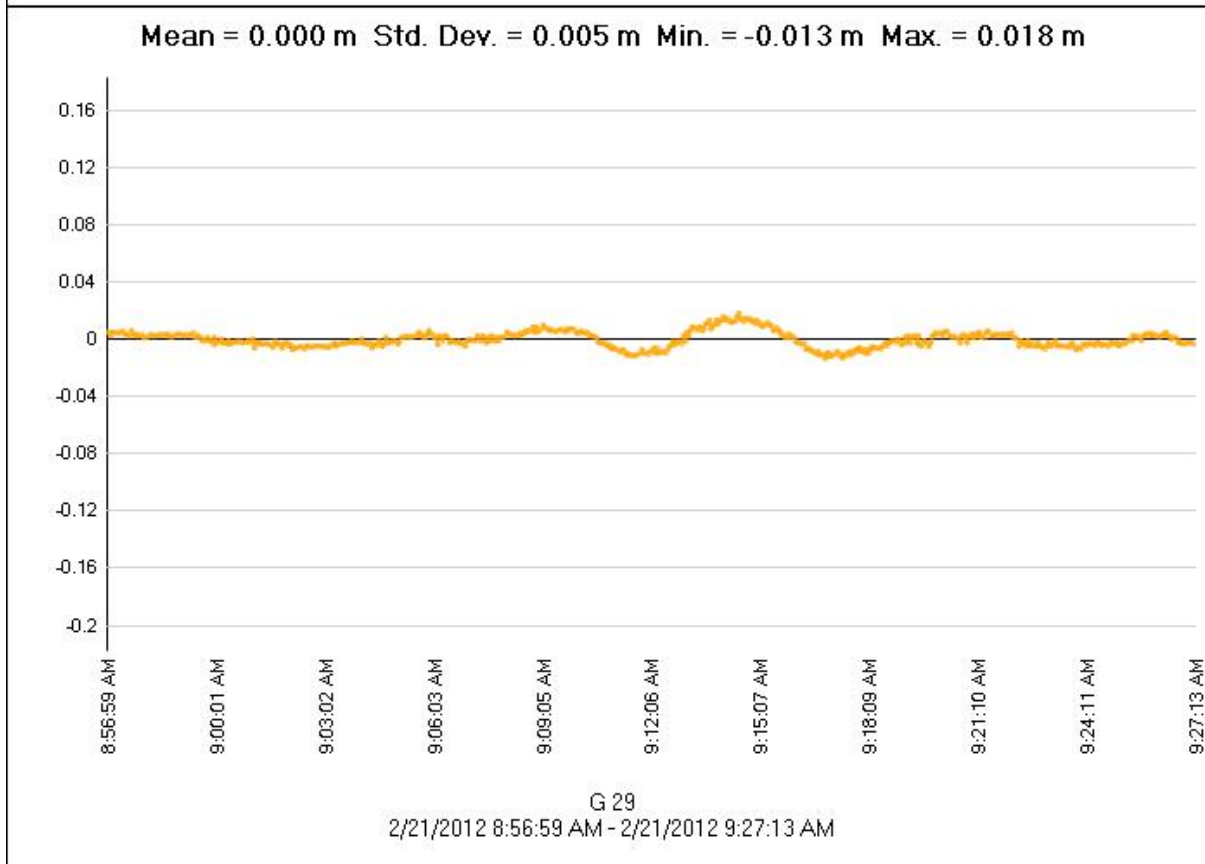
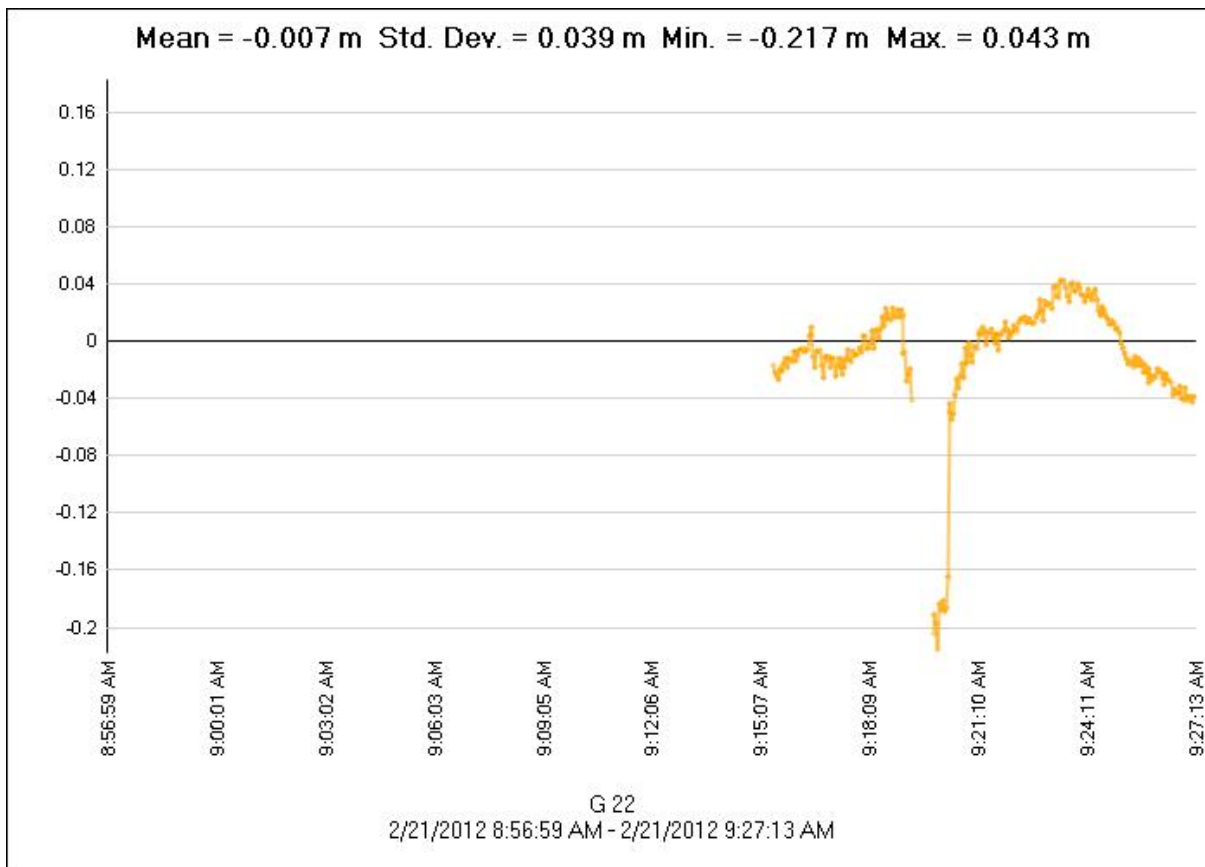
G 15  
2/21/2012 8:56:59 AM - 2/21/2012 9:27:13 AM

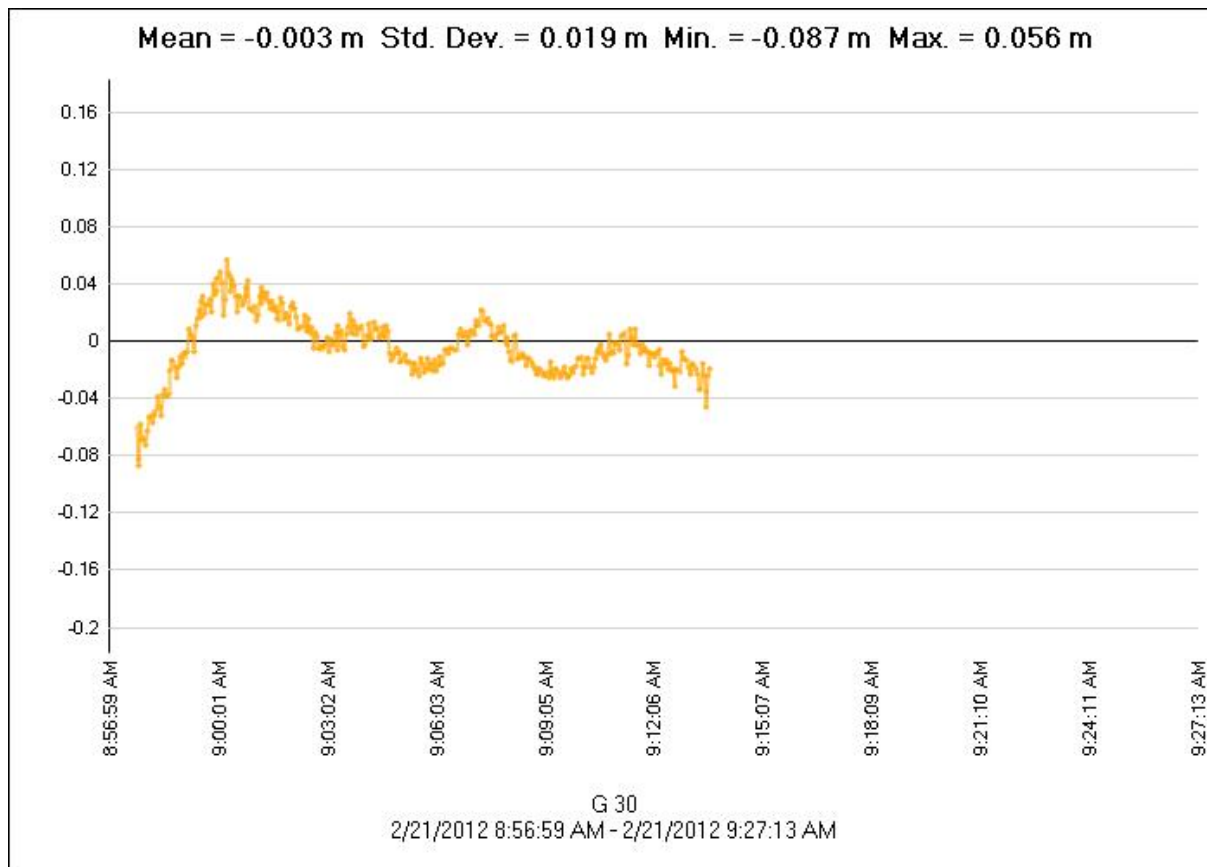
Mean = 0.081 m Std. Dev. = 0.063 m Min. = -0.037 m Max. = 0.183 m



G 16  
2/21/2012 8:56:59 AM - 2/21/2012 9:27:13 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

---

HH0645 - SVA15-B1 (2:38:17 PM-2:48:15 PM) (S315)

---

Baseline observation: HH0645 --- SVA15-B1 (B315)

Processed: 4/11/2012 7:22:01 AM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.016 m

Vertical precision: 0.029 m

RMS: 0.003 m

Maximum PDOP: 2.689

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/23/2012 2:38:22 PM (Local: UTC-7hr)

Processing stop time: 2/23/2012 2:44:07 PM (Local: UTC-7hr)

Processing duration: 00:05:45

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0645				
Grid		Local		Global	
Easting	252723.345 m	Latitude	N37°59'48.17255"	Latitude	N37°59'48.17255"
Northing	4209193.137 m	Longitude	W101°48'57.76498"	Longitude	W101°48'57.76498"
Elevation	995.279 m	Height	970.864 m	Height	970.864 m

To:	SVA15-B1				
Grid		Local		Global	
Easting	317364.147 m	Latitude	N37°41'46.29743"	Latitude	N37°41'46.29743"
Northing	4174127.335 m	Longitude	W101°04'17.63768"	Longitude	W101°04'17.63768"
Elevation	918.007 m	Height	892.303 m	Height	892.303 m

Vector					
9Ughb[	64640.801 m	NS Fwd Azimuth	116°44'59"	L	60182.953 m
BcfA\jb[	-35065.802 m	Ellipsoid Dist.	73526.651 m	M	-33002.735 m
9`Yj Uhcb	-77.272 m	<Y][\h	-78.561 m	N	-26391.764 m

Standard Errors

Vector errors:					
σ <sub>Ughb</sub>	0.004 m	σ <sub>BG'ZkX'5nJa i h</sub>	0°00'00"	σ <sub>L</sub>	0.005 m
σ <sub>Bcfh\]b</sub>	0.007 m	σ <sub>'9'']dgc[X'8]gh</sub>	0.005 m	σ <sub>M</sub>	0.010 m
σ <sub>'9'Yj Uhcb</sub>	0.015 m	σ <sub>'&lt;Y][\h</sub>	0.015 m	σ <sub>N</sub>	0.012 m

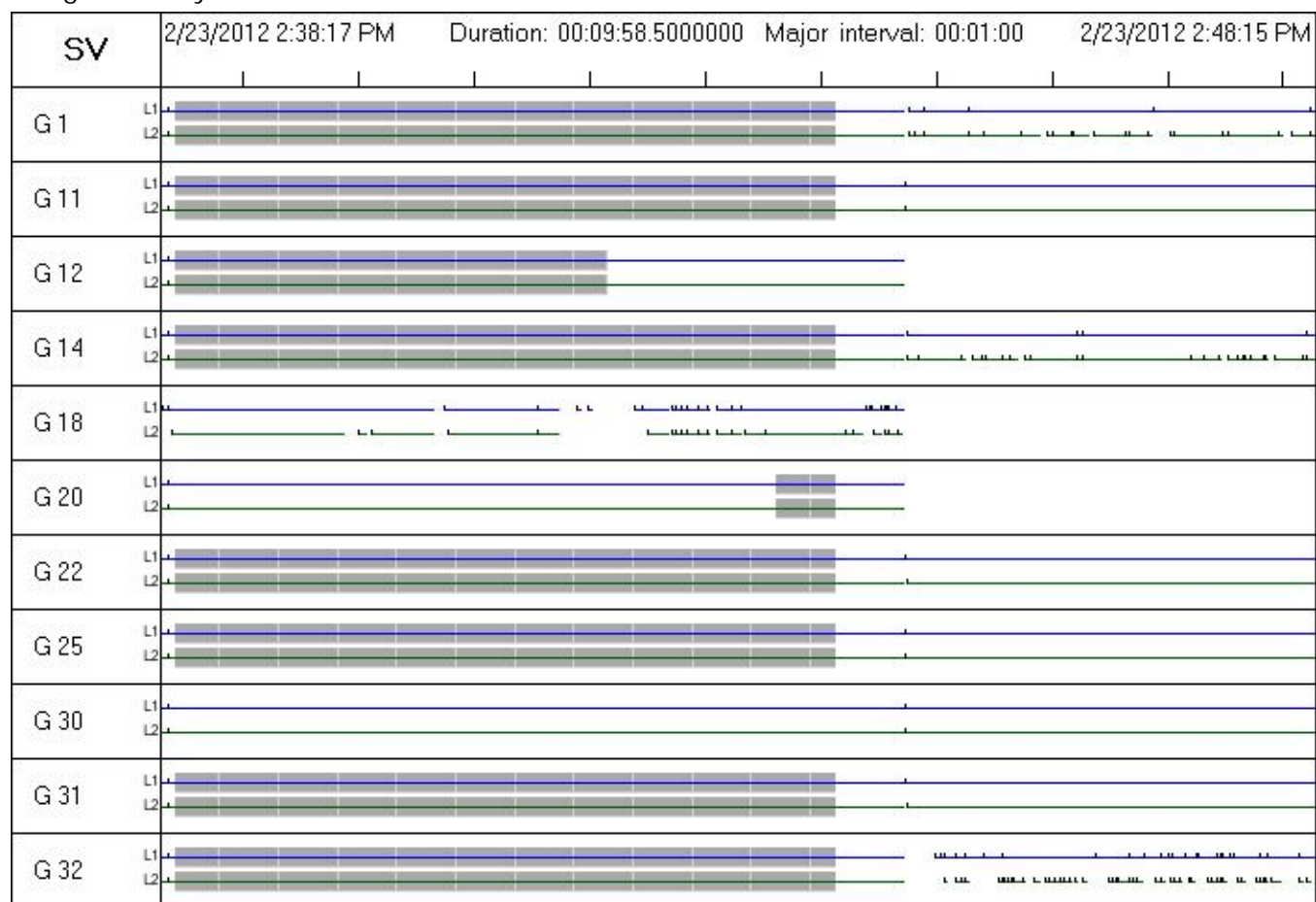
Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000290856		
Y	0.0000321049	0.0001053640	
Z	-0.0000238633	-0.0000887800	0.0001450512

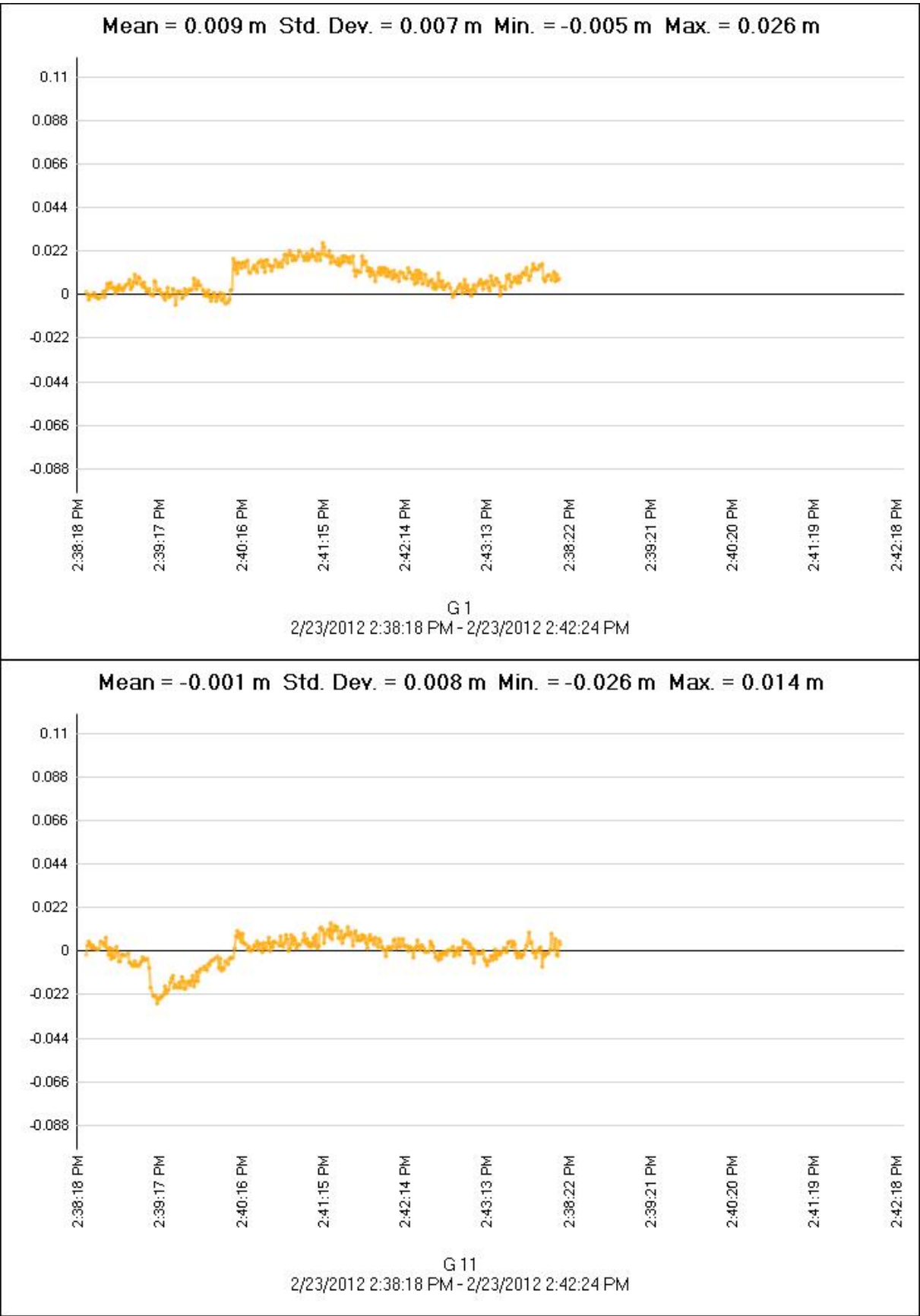
Occupations

	From	To
Point ID:	HH0645	SVA15-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00050540.12o	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj\00110541.12o
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

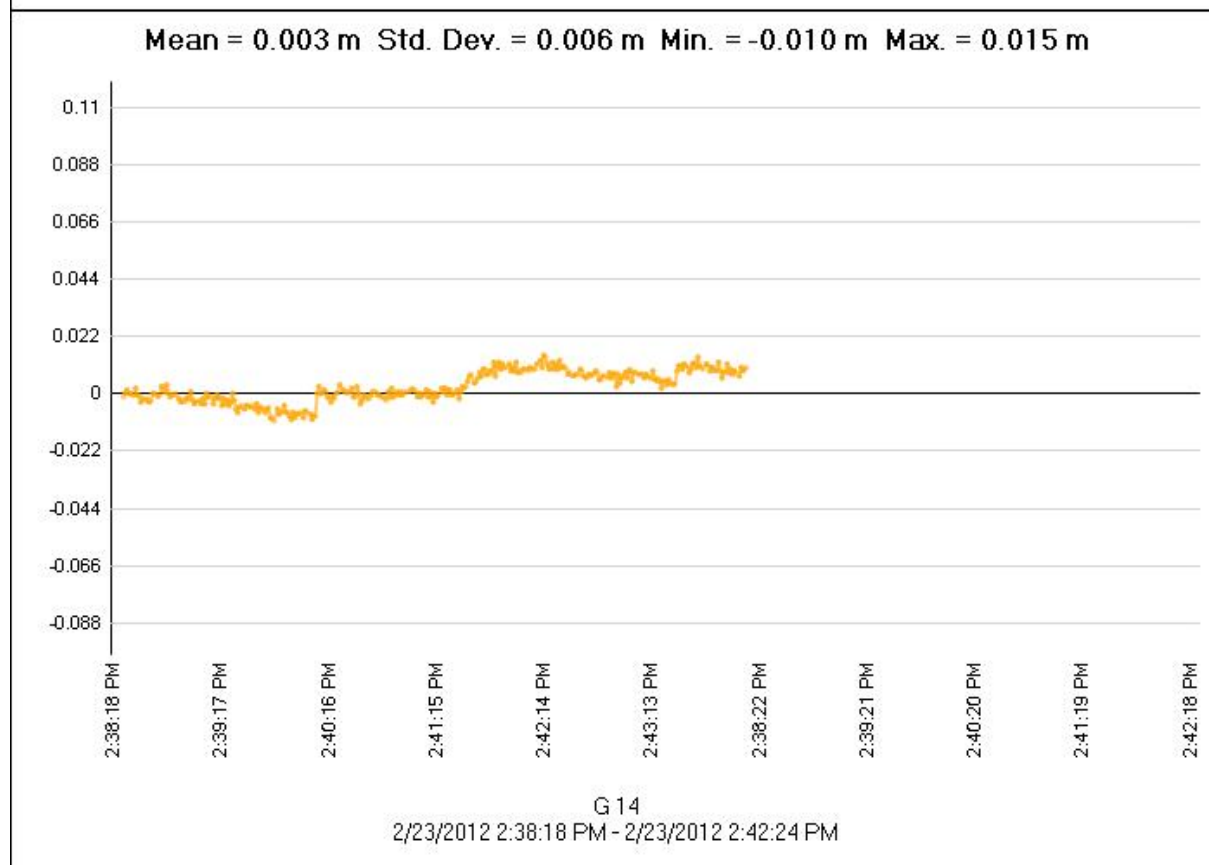
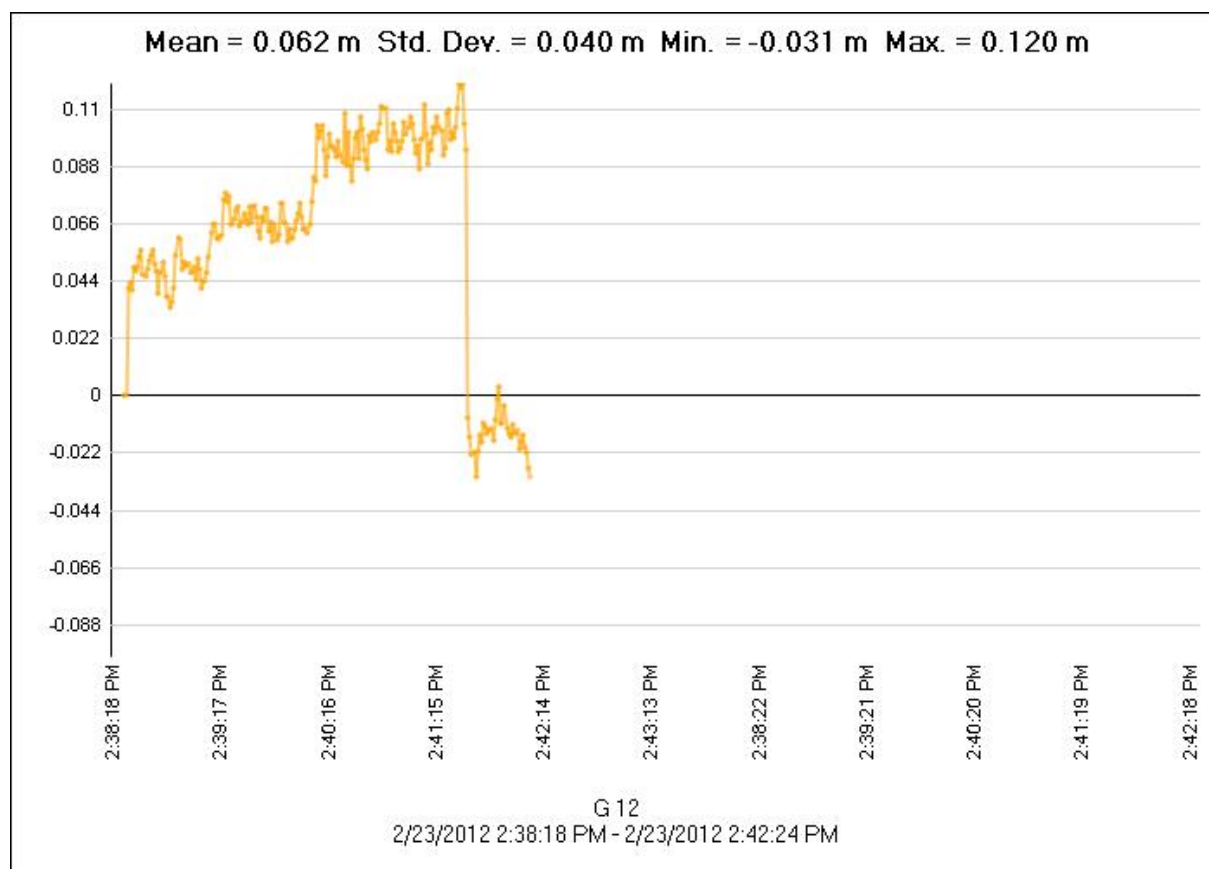
# Tracking Summary

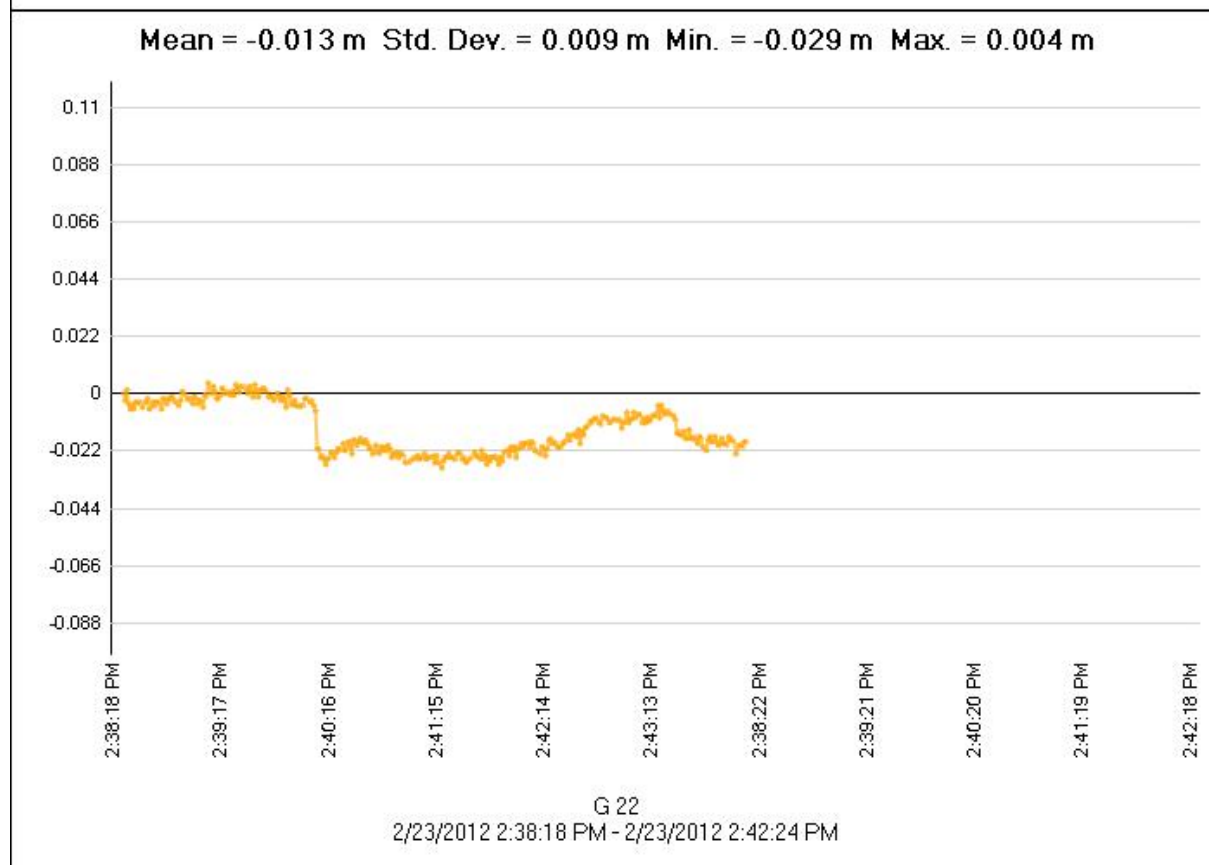
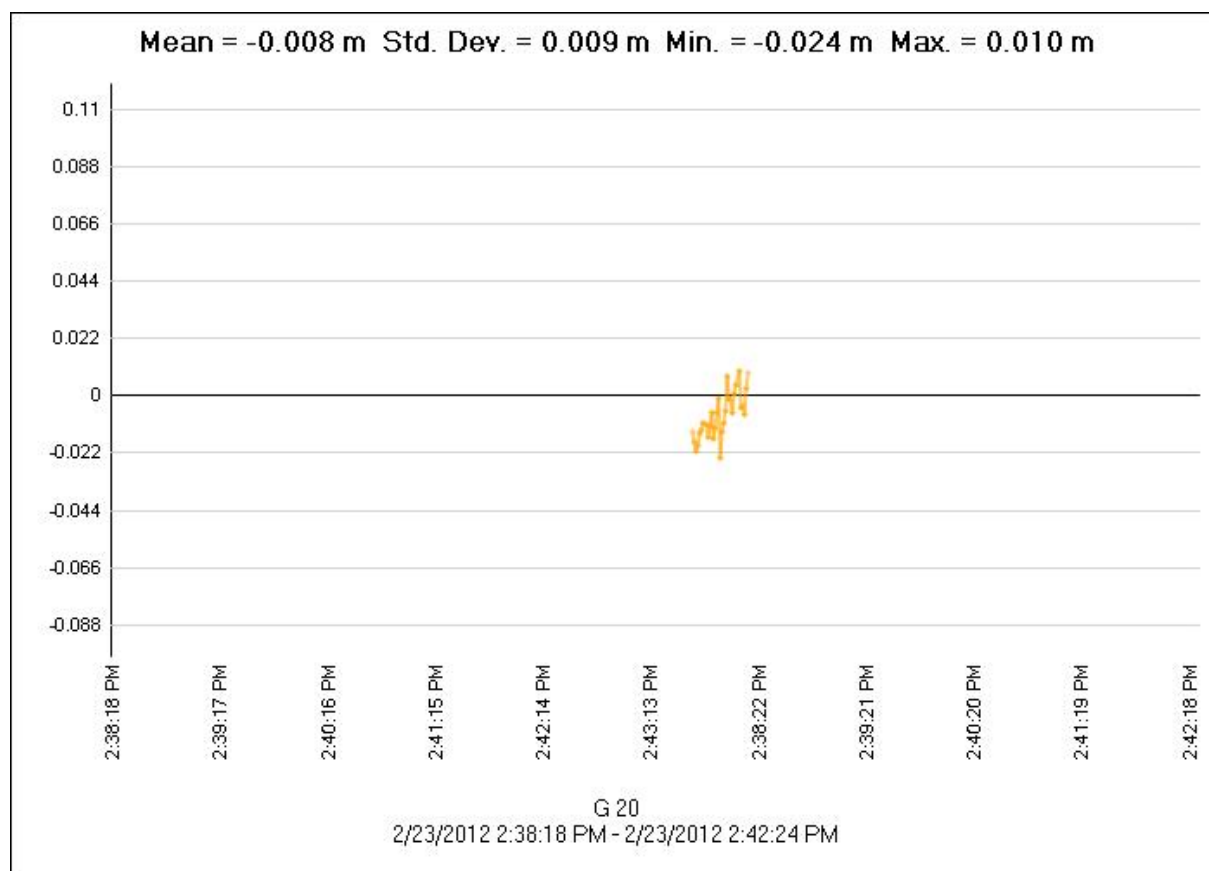


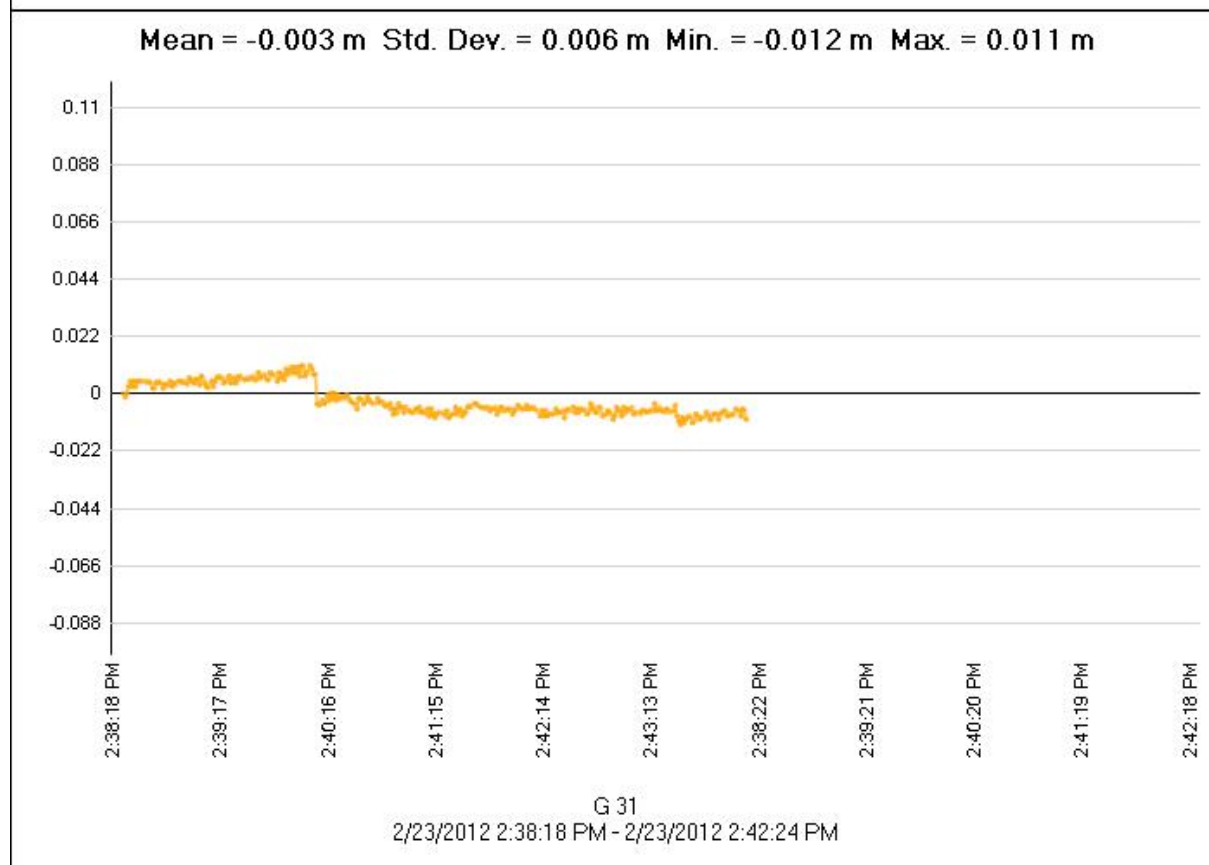
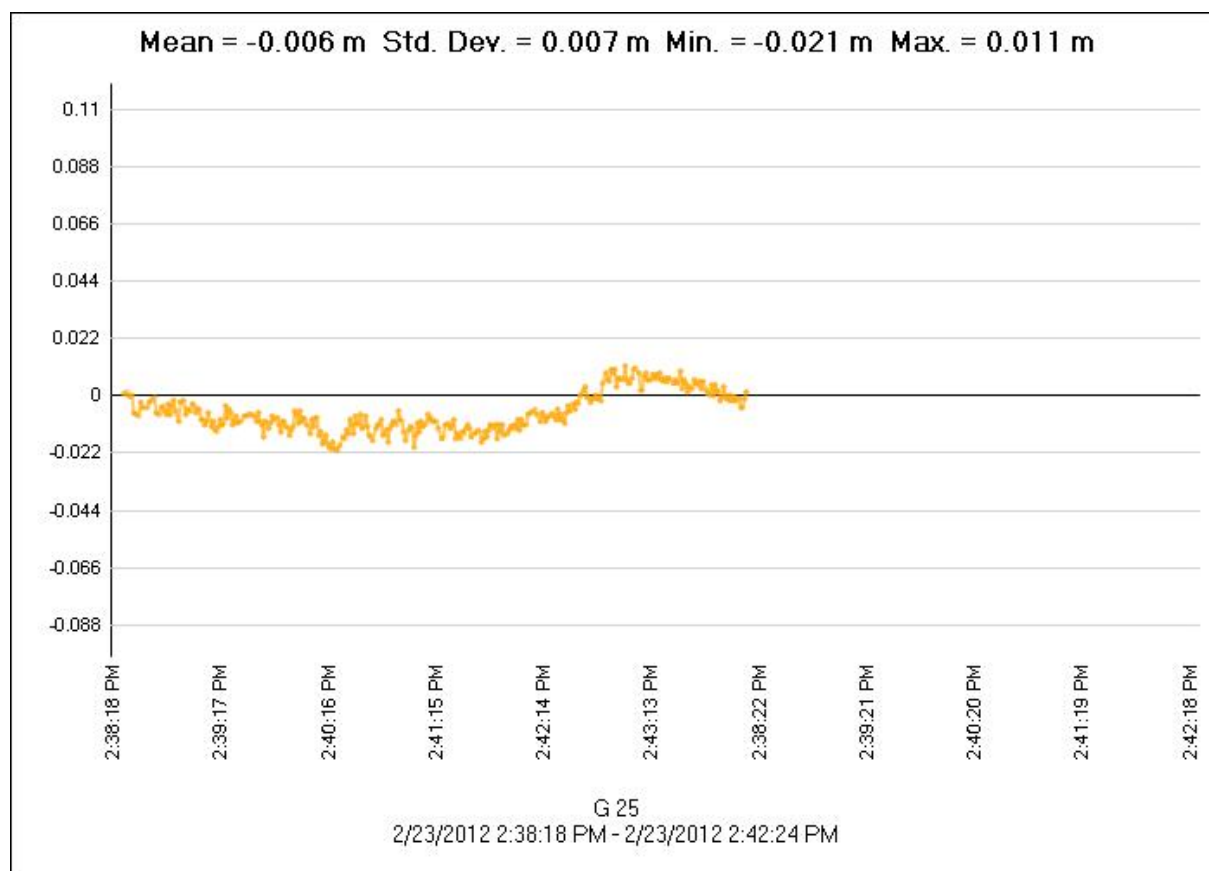
Residuals

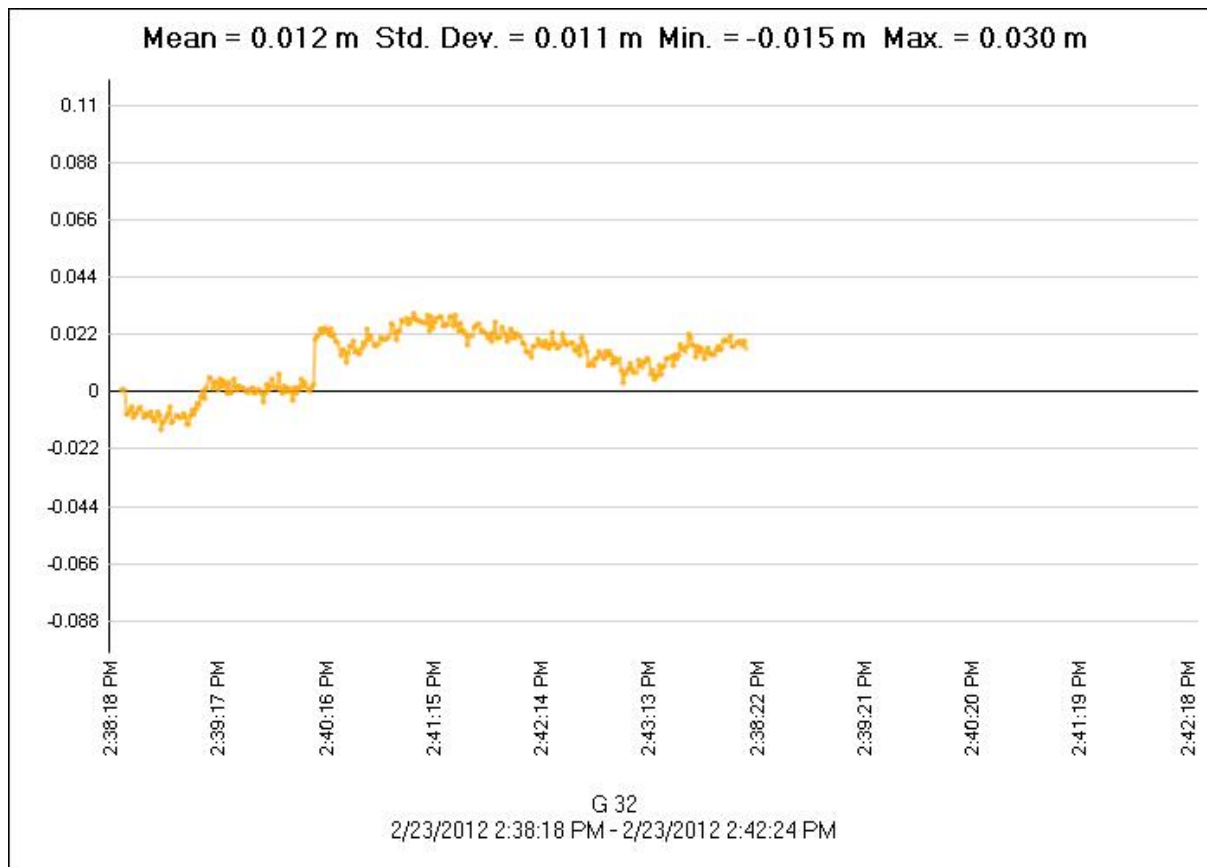












## Processing style

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

---

HH0645 - FVA15-B1 (1:56:29 PM-2:26:21 PM) (S316)

---

Baseline observation: HH0645 --- FVA15-B1 (B316)

Processed: 4/11/2012 7:25:03 AM

Solution type: Fixed

Frequency used: Dual Frequency (L1, L2)

Horizontal precision: 0.047 m

Vertical precision: 0.162 m

RMS: 0.003 m

Maximum PDOP: 2.686

Ephemeris used: Broadcast

Antenna model: US National Geodetic Survey Calibration

Processing start time: 2/23/2012 1:56:56 PM (Local: UTC-7hr)

Processing stop time: 2/23/2012 2:26:21 PM (Local: UTC-7hr)

Processing duration: 00:29:25

Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0645				
Grid		Local		Global	
Easting	252723.345 m	Latitude	N37°59'48.17255"	Latitude	N37°59'48.17255"
Northing	4209193.137 m	Longitude	W101°48'57.76498"	Longitude	W101°48'57.76498"
Elevation	995.279 m	Height	970.864 m	Height	970.864 m

To:	FVA15-B1				
Grid		Local		Global	
Easting	315789.770 m	Latitude	N37°42'25.94028"	Latitude	N37°42'25.94027"
Northing	4175384.853 m	Longitude	W101°05'23.03084"	Longitude	W101°05'23.03084"
Elevation	911.312 m	Height	885.637 m	Height	885.637 m

Vector					
9Ughb[	63066.425 m	NS Fwd Azimuth	116°27'56"	L	58755.386 m
Bcfh\jb[	-33808.284 m	Ellipsoid Dist.	71544.097 m	M	-31956.028 m
9`Yj Uhcb	-83.967 m	<Y][\h	-85.227 m	N	-25428.678 m

## Standard Errors

Vector errors:					
Point ID	0.018 m	Point ID	0°00'00"	Point ID	0.012 m
Point ID	0.012 m	Point ID	0.019 m	Point ID	0.072 m
Point ID	0.083 m	Point ID	0.083 m	Point ID	0.045 m

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

	X	Y	Z
X	0.0001488445		
Y	0.0001307152	0.0051679197	
Z	-0.0001020128	-0.0031349834	0.0019967014

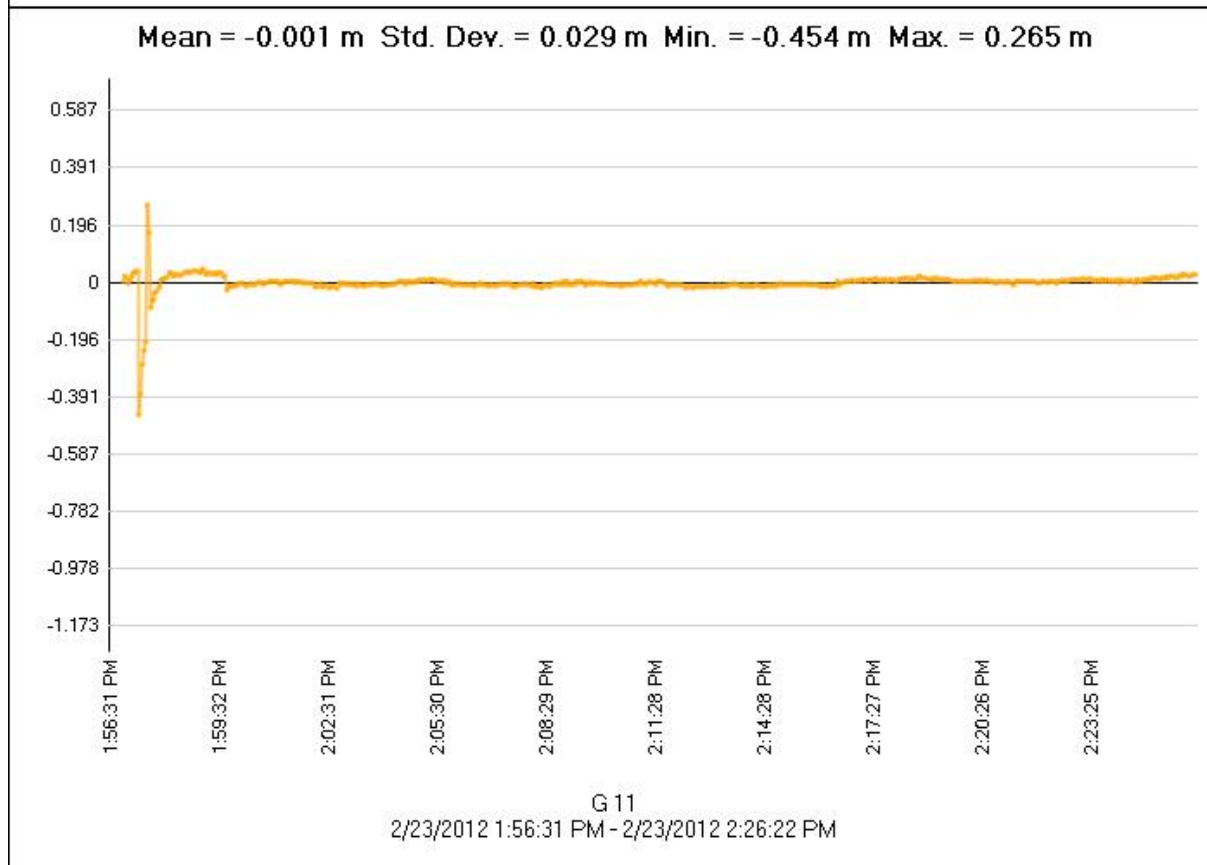
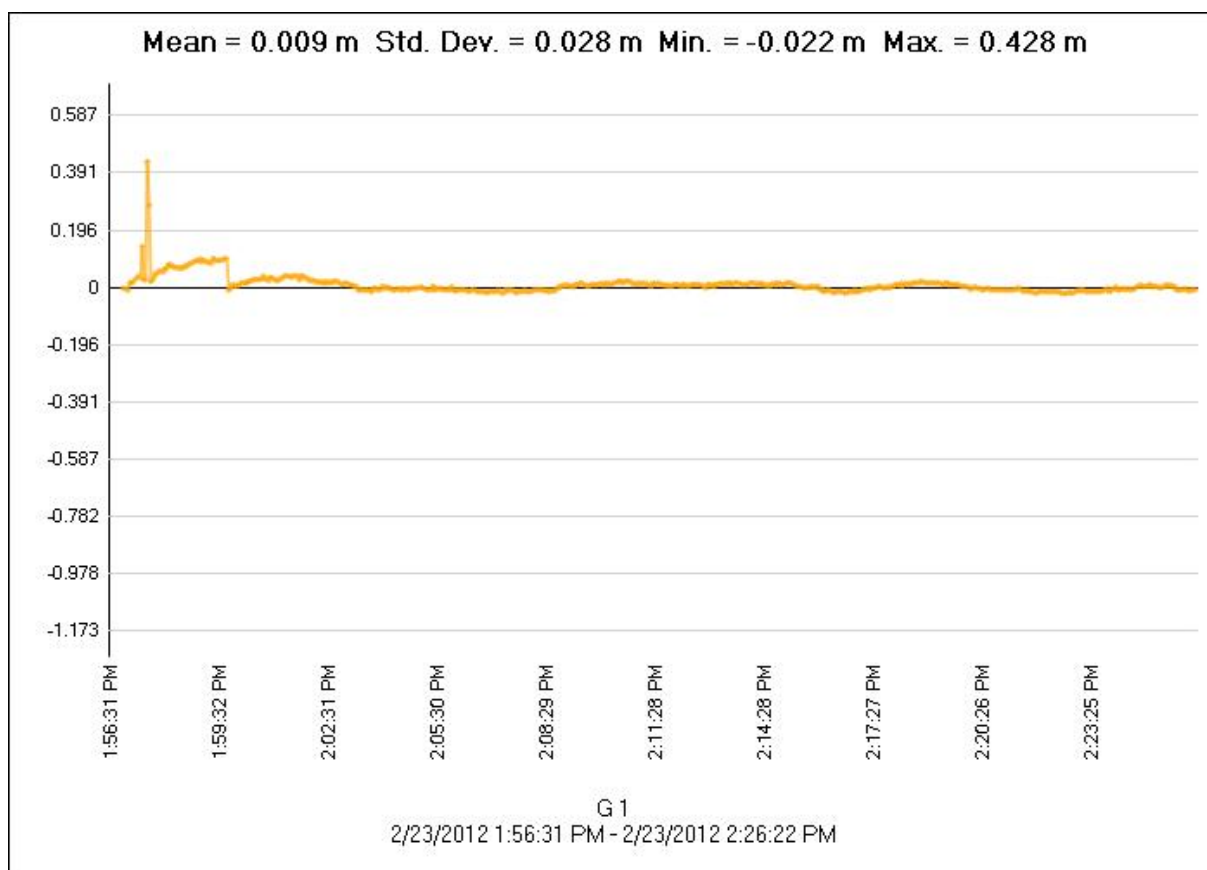
## Occupations

	From	To
Point ID:	HH0645	FVA15-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050540.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00110540.12o
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

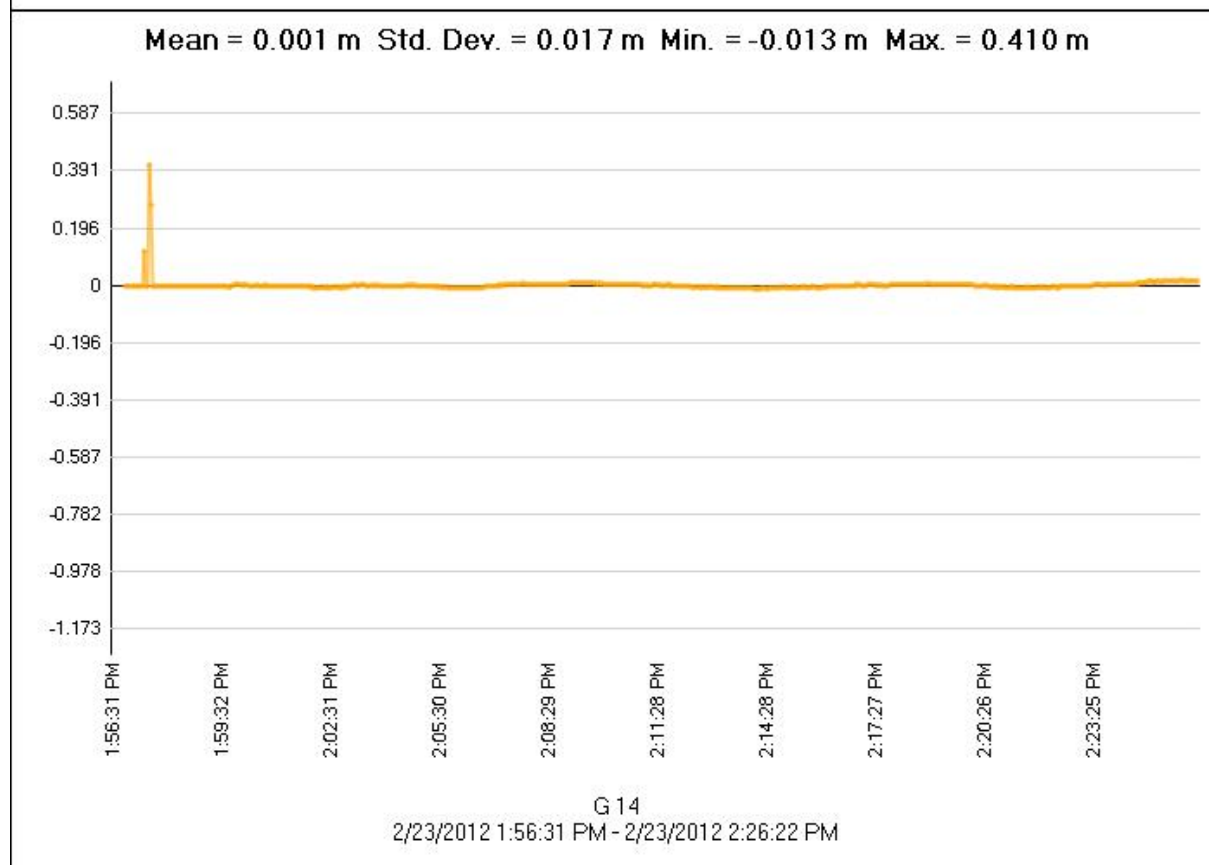
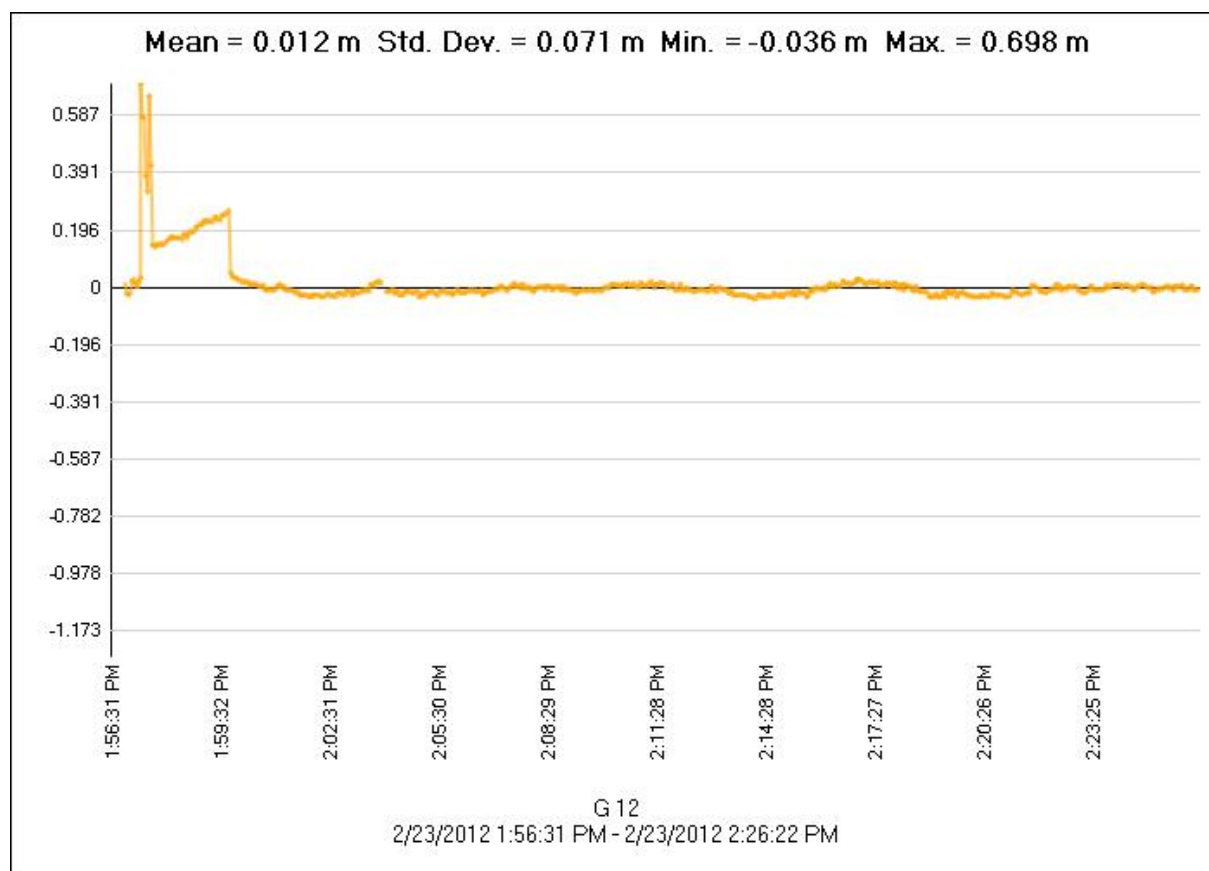
Tracking Summary

SV	2/23/2012 1:56:29 PM	Duration: 00:29:52	Major interval: 00:01:00	2/23/2012 2:26:21 PM
G 1	L1 L2			
G 9	L1			
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





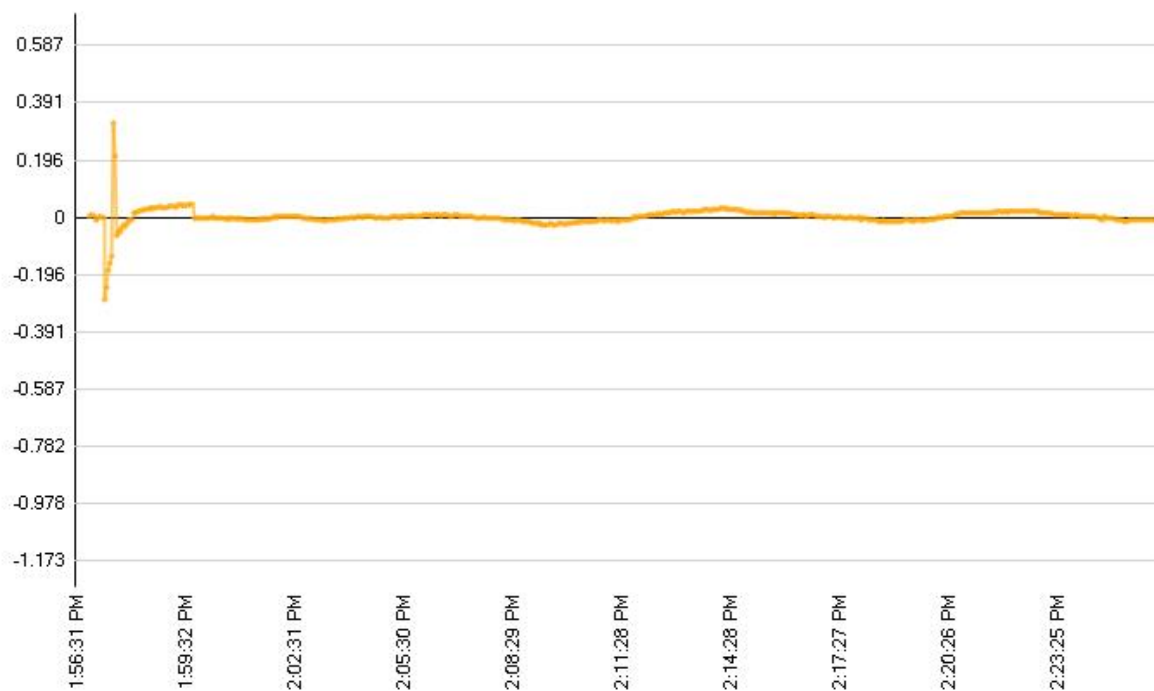


Mean = 0.007 m Std. Dev. = 0.066 m Min. = -0.330 m Max. = 0.319 m



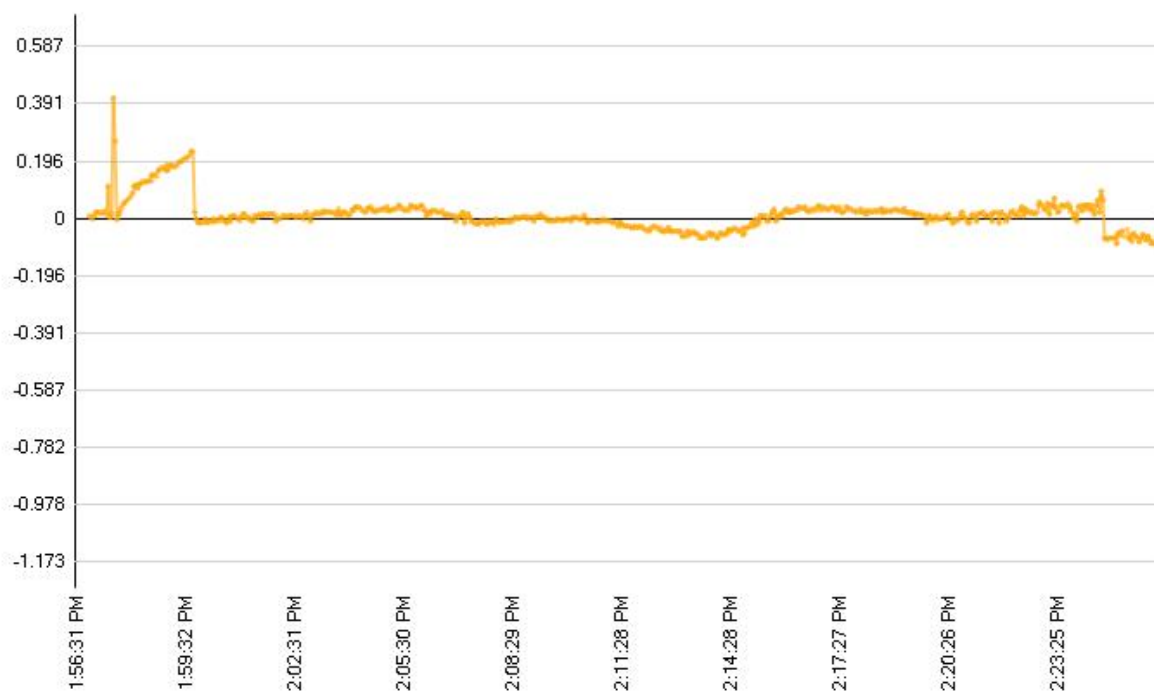
G 18  
2/23/2012 1:56:31 PM - 2/23/2012 2:26:22 PM

Mean = 0.002 m Std. Dev. = 0.024 m Min. = -0.282 m Max. = 0.324 m



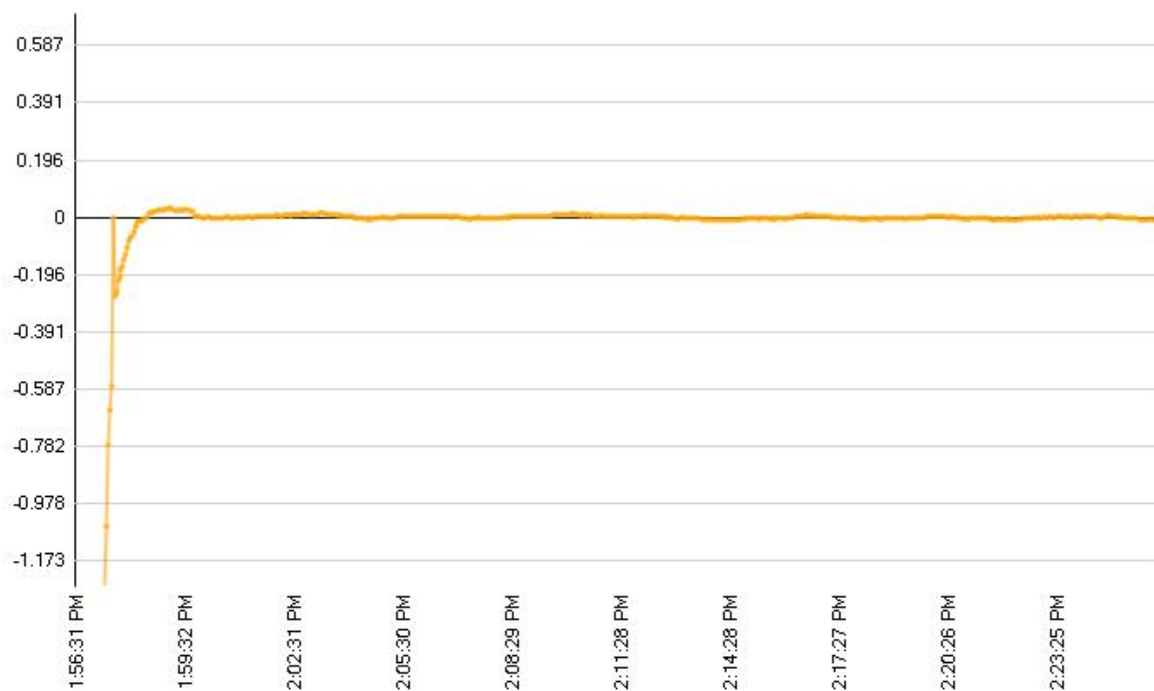
G 22  
2/23/2012 1:56:31 PM - 2/23/2012 2:26:22 PM

Mean = 0.011 m Std. Dev. = 0.049 m Min. = -0.088 m Max. = 0.409 m

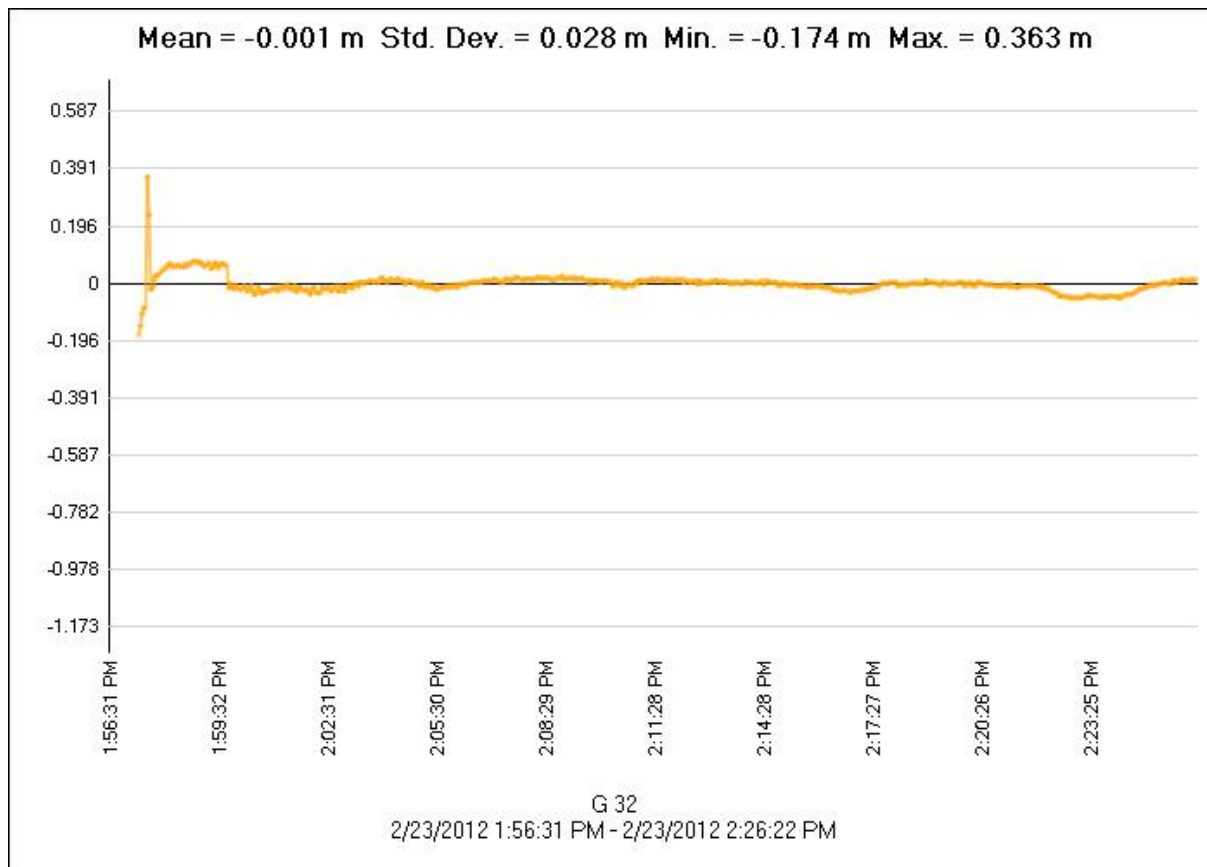


G 25  
2/23/2012 1:56:31 PM - 2/23/2012 2:26:22 PM

Mean = -0.007 m Std. Dev. = 0.072 m Min. = -1.258 m Max. = 0.036 m



G 31  
2/23/2012 1:56:31 PM - 2/23/2012 2:26:22 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

## Baseline observation:



HH0645 --- SVA16-B1 (B317)

Processed: 4/11/2012 2:29:15 PM  
 Solution type: Float  
 Frequency used: Dual Frequency (L1, L2)  
 Horizontal precision: 0.189 m  
 Vertical precision: 0.178 m  
 RMS: 0.001 m  
 Maximum PDOP: 1.871  
 Ephemeris used: Broadcast  
 Antenna model: US National Geodetic Survey Calibration  
 Processing start time: 2/21/2012 10:19:03 AM (Local: UTC-7hr)  
 Processing stop time: 2/21/2012 10:30:49 AM (Local: UTC-7hr)  
 Processing duration: 00:11:45  
 Processing interval: .5 second

## Vector Components (Mark to Mark)

From:	HH0645				
Grid		Local		Global	
Easting	252723.345 m	Latitude	N37°59'48.17255"	Latitude	N37°59'48.17255"
Northing	4209193.137 m	Longitude	W101°48'57.76498"	Longitude	W101°48'57.76498"
Elevation	995.279 m	Height	970.864 m	Height	970.864 m

To:	SVA16-B1				
Grid		Local		Global	
Easting	319071.678 m	Latitude	N37°23'42.84668"	Latitude	N37°23'42.84668"
Northing	4140678.949 m	Longitude	W101°02'38.26707"	Longitude	W101°02'38.26707"
Elevation	858.048 m	Height	831.891 m	Height	831.891 m

Vector					
9Ughb[	66348.333 m	NS Fwd Azimuth	134°11'47"	L	58681.811 m
BcfA\jb[	-68514.188 m	Ellipsoid Dist.	95358.368 m	M	-53403.863 m
9Yj Uhcb	-137.231 m	<Y][\h	-138.973 m	N	-52916.094 m

## Standard Errors

Vector errors:					
Point ID	0.036 m	Point Description	0°00'00"	Point Type	0.047 m
Point ID	0.076 m	Point Description	0.049 m	Point Type	0.084 m
Point ID	0.091 m	Point Description	0.091 m	Point Type	0.078 m

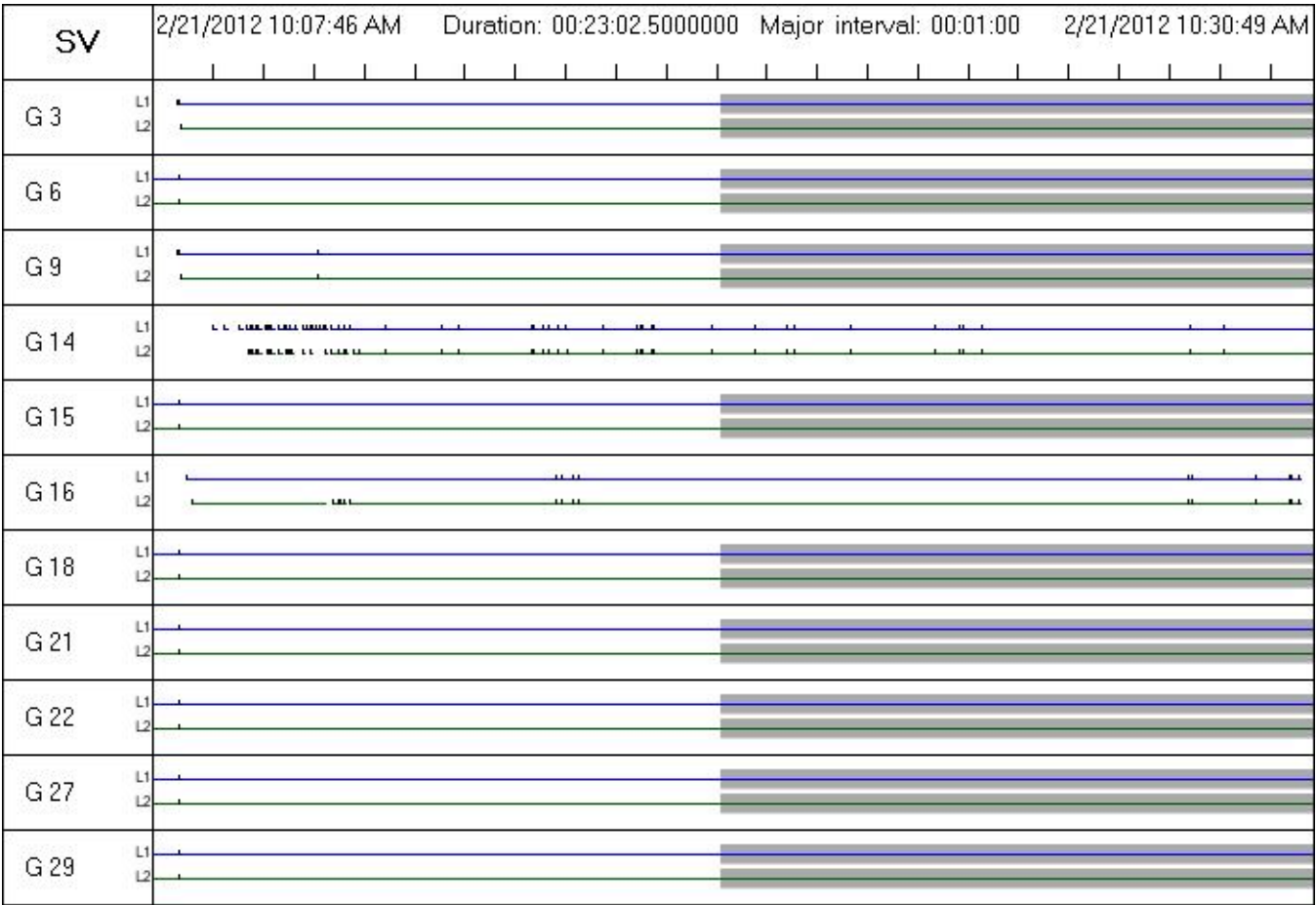
## Aposteriori Covariance Matrix (Meter<sup>2</sup>)

	X	Y	Z
X	0.0021886146		
Y	0.0027443347	0.0069742515	
Z	0.0000522073	-0.0010936270	0.0060298126

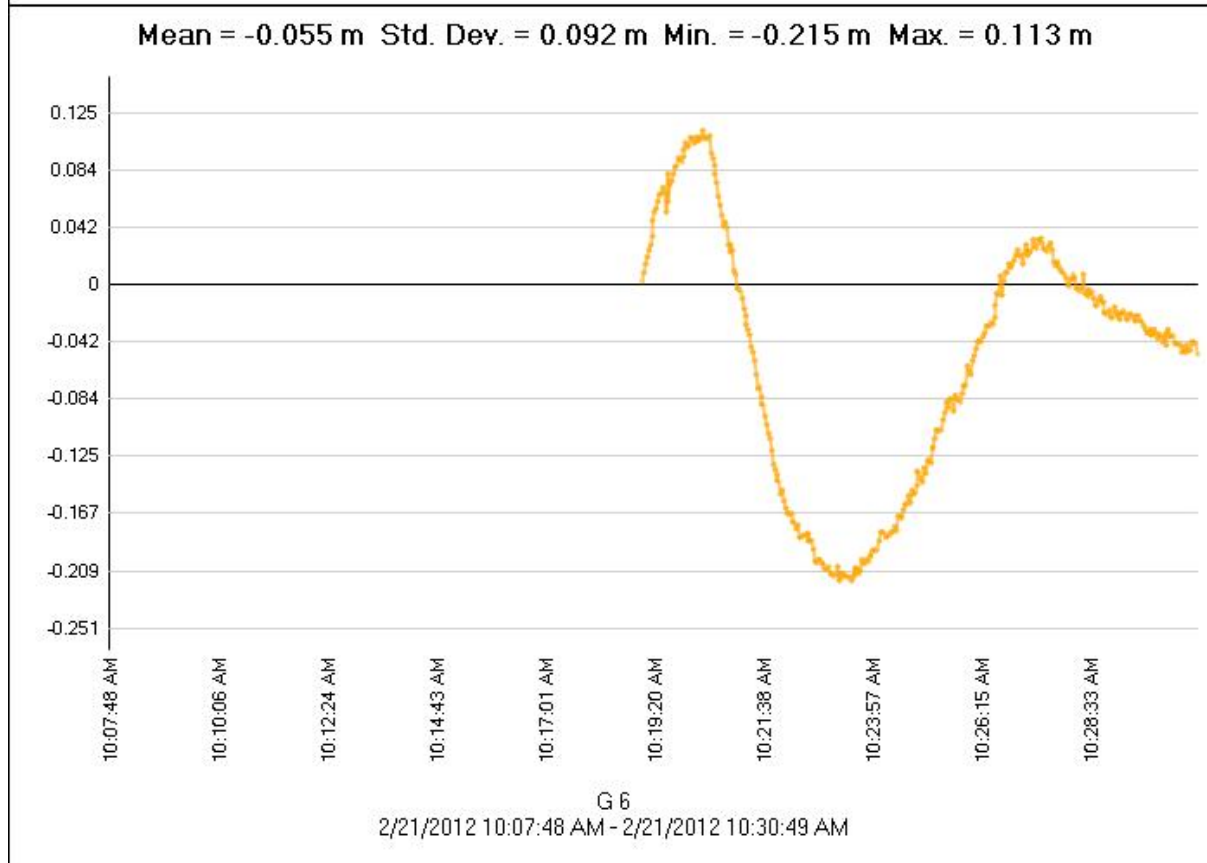
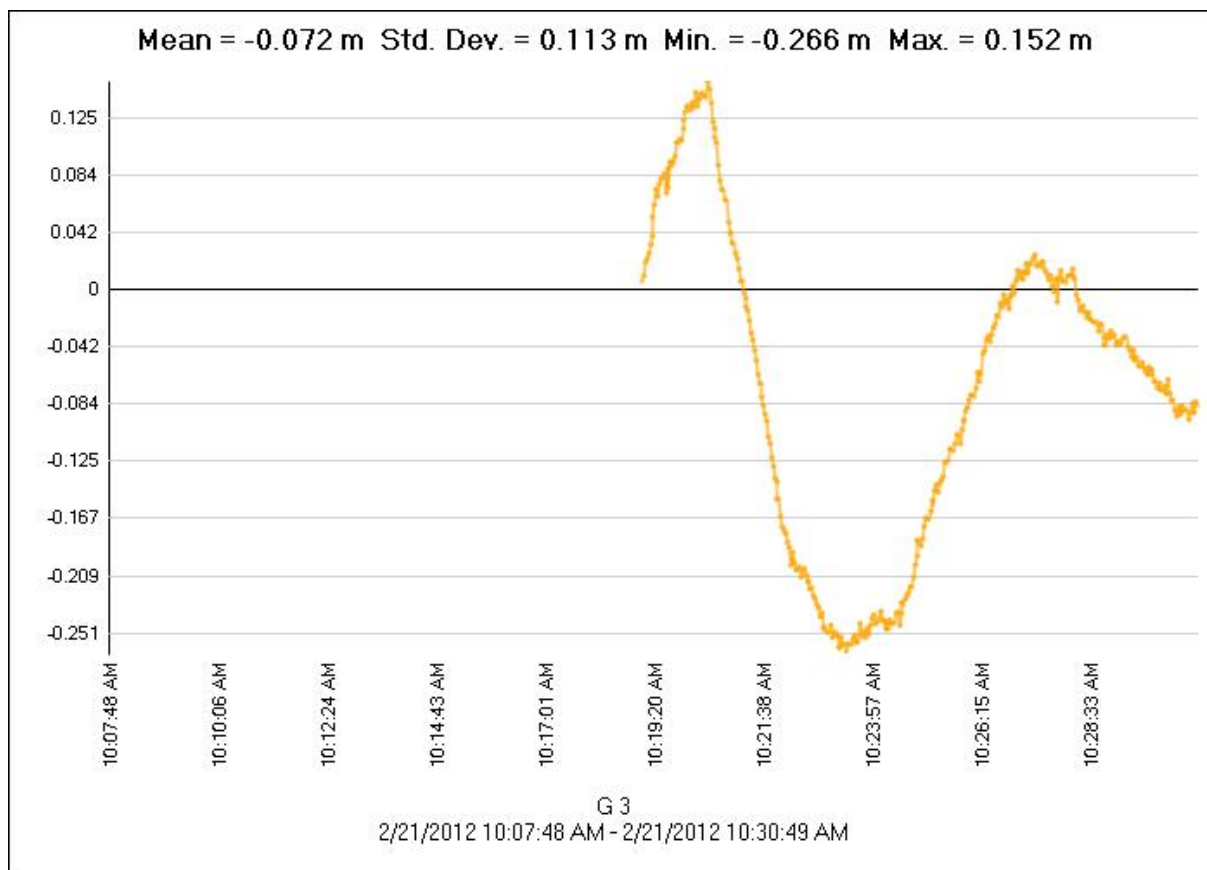
## Occupations

	From	To
Point ID:	HH0645	SVA16-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050520.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00040520.12o
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

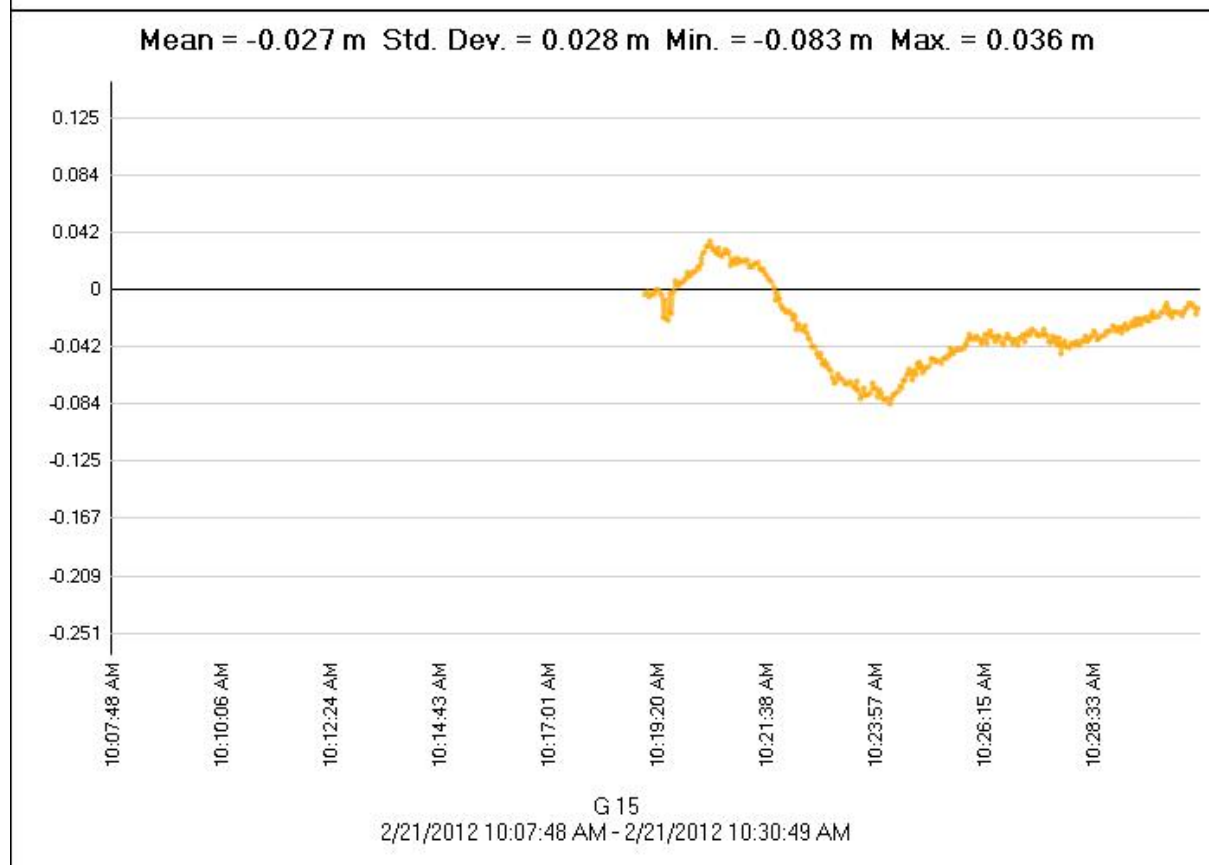
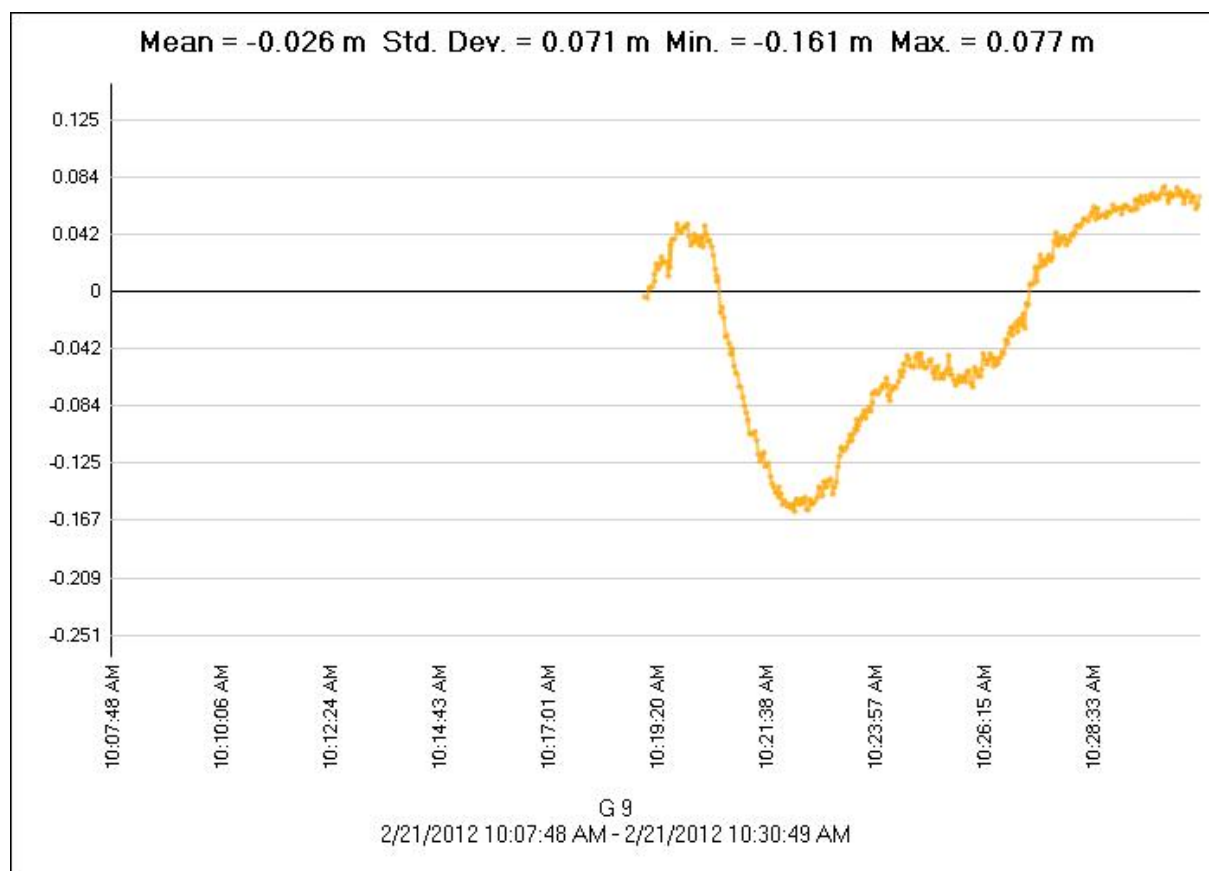
Tracking Summary

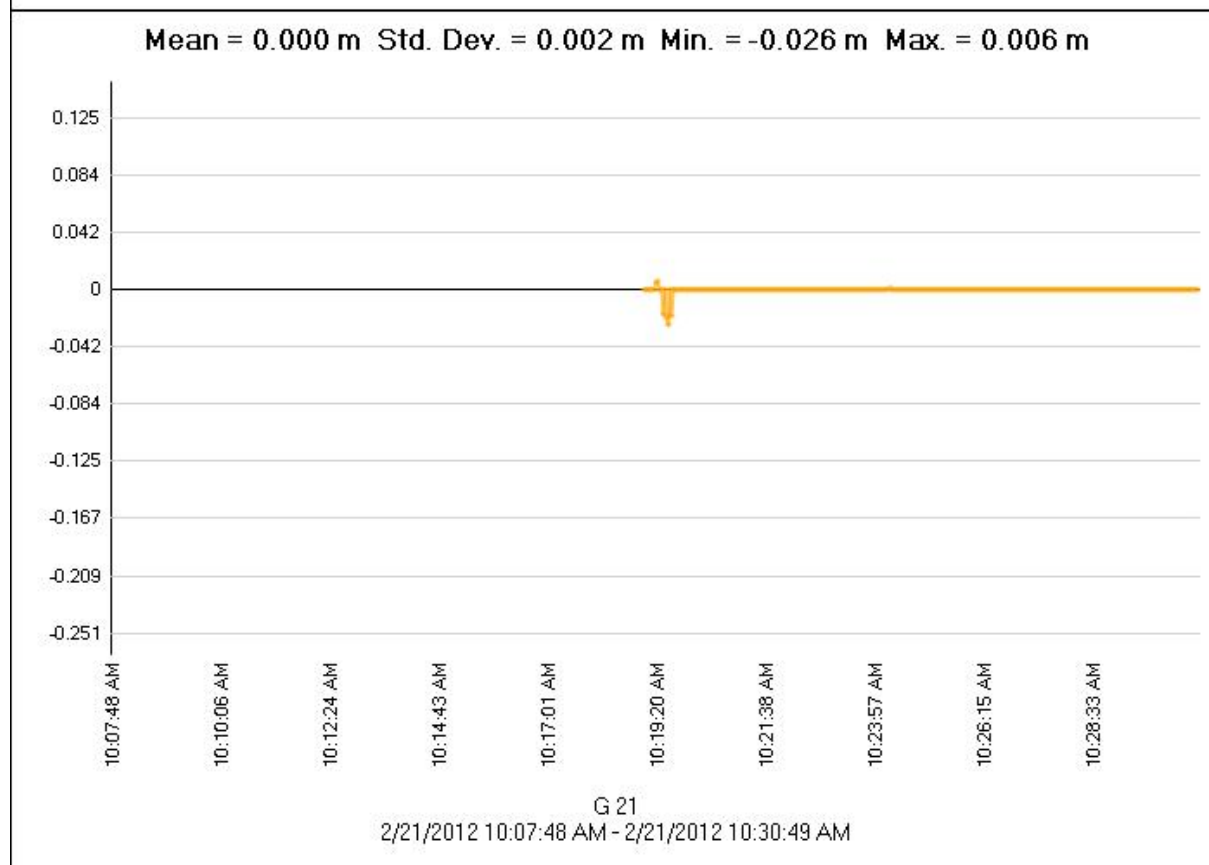
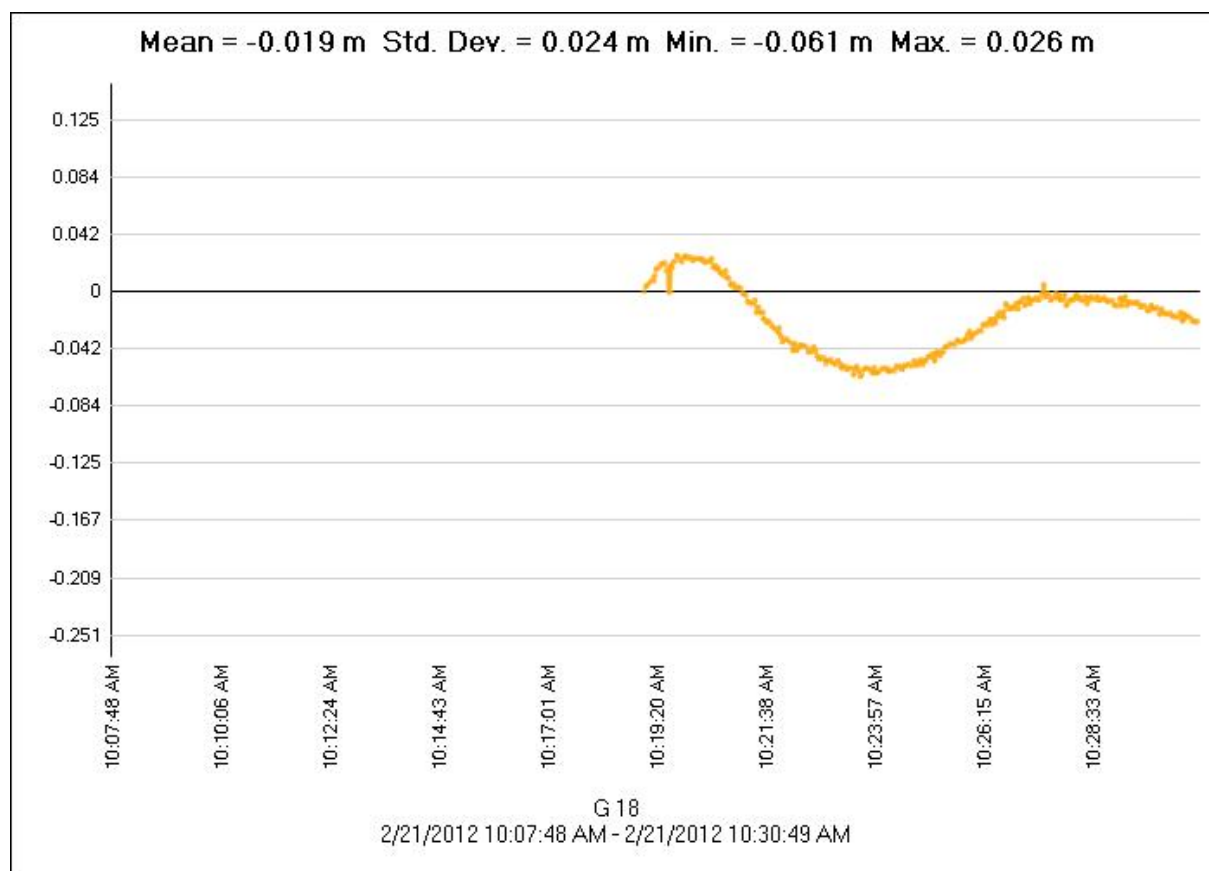


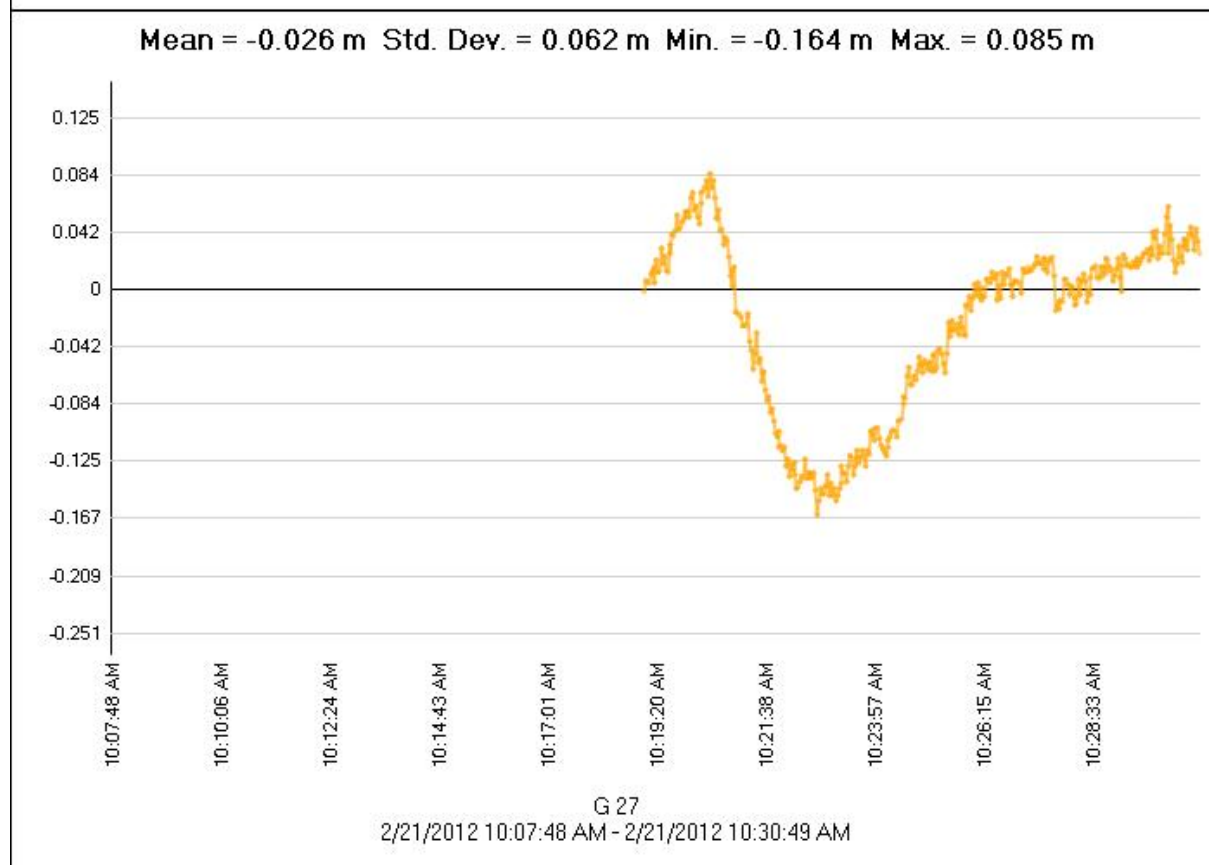
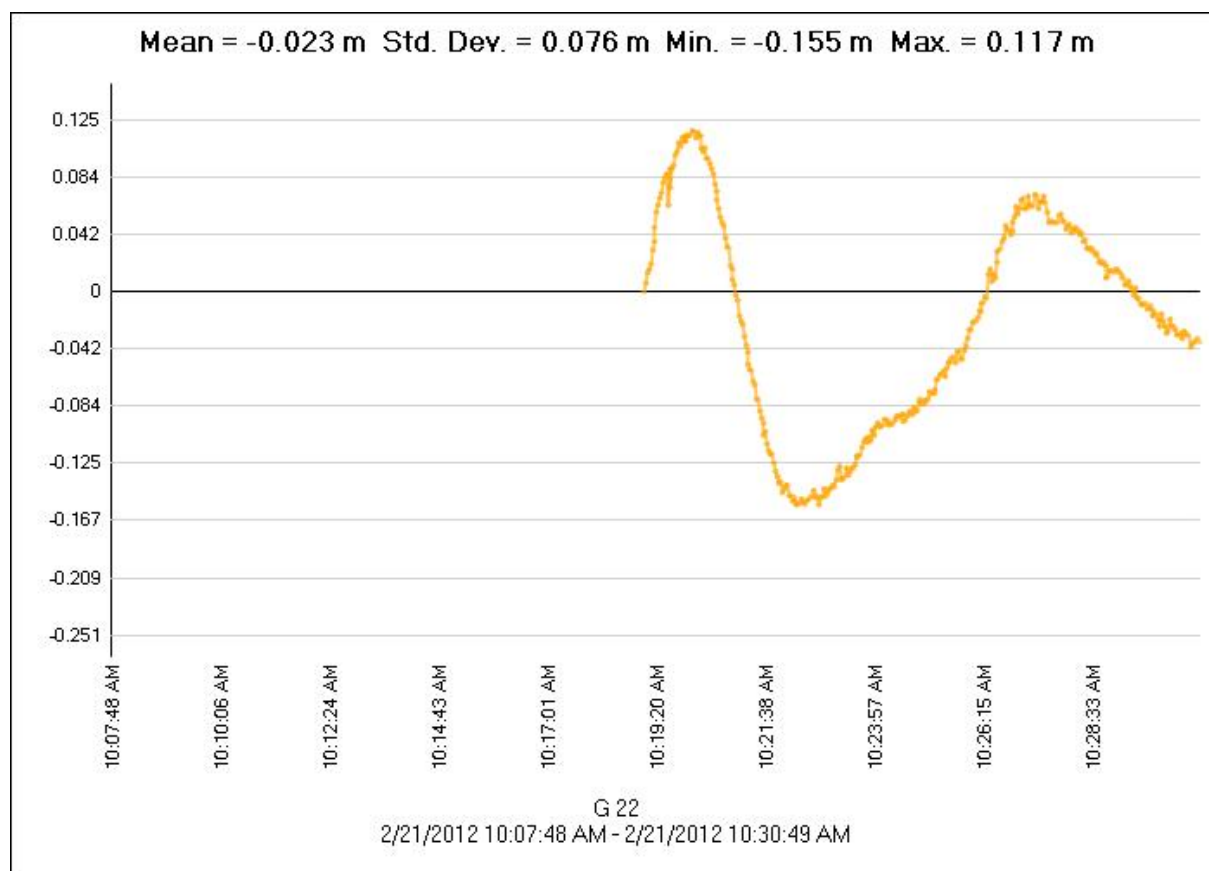
## Residuals

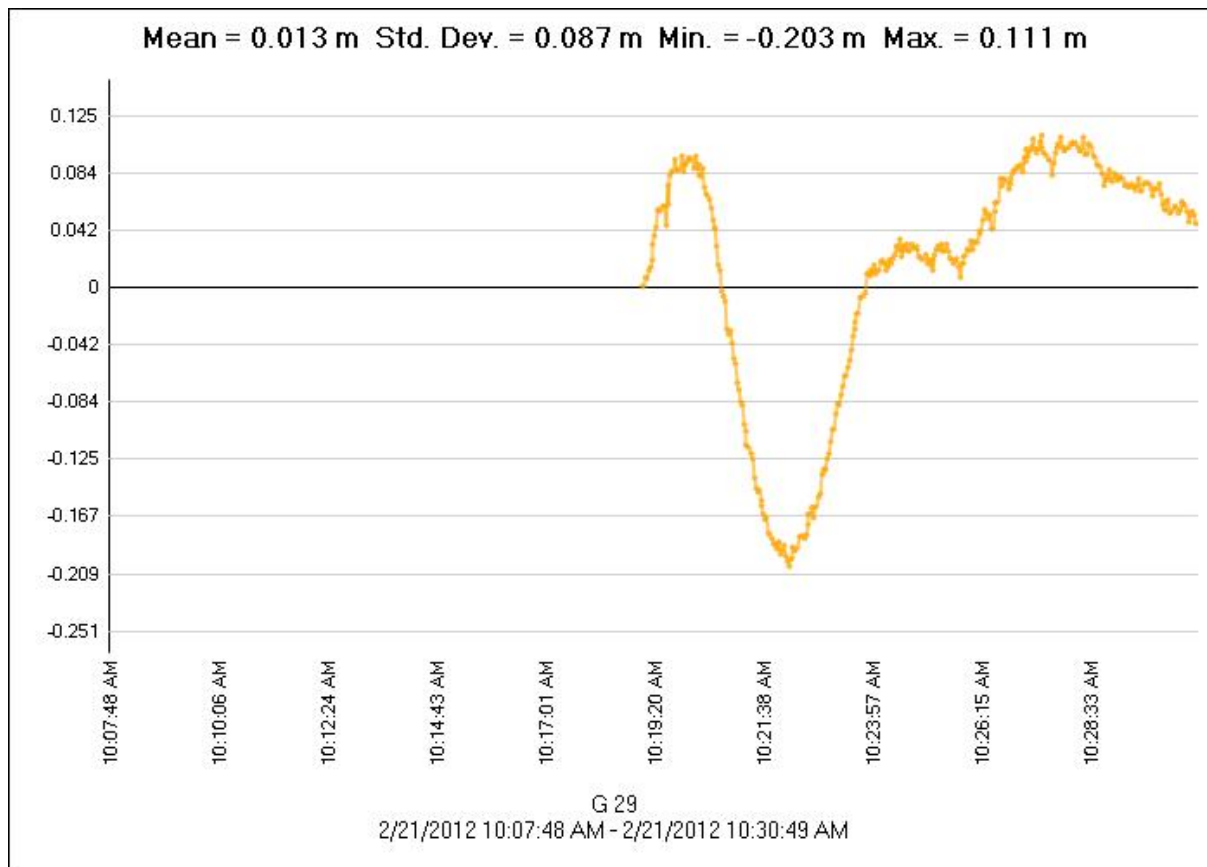














## Processing style

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

## Baseline observation:



HH0645 --- FVA16-B1 (B319)

Processed:

4/11/2012 2:28:23 PM

Solution type:

Float

Frequency used:

Dual Frequency (L1, L2)

Horizontal precision:

0.165 m

Vertical precision:

0.147 m

RMS:

0.003 m

Maximum PDOP:

1.904

Ephemeris used:

Broadcast

Antenna model:

US National Geodetic Survey Calibration

Processing start time:

2/21/2012 10:37:42 AM (Local: UTC-7hr)

Processing stop time:

2/21/2012 10:47:43 AM (Local: UTC-7hr)

Processing duration:

00:10:01

Processing interval:

.5 second

## Vector Components (Mark to Mark)

From:	HH0645				
Grid		Local		Global	
Easting	252723.345 m	Latitude	N37°59'48.17255"	Latitude	N37°59'48.17255"
Northing	4209193.137 m	Longitude	W101°48'57.76498"	Longitude	W101°48'57.76498"
Elevation	995.279 m	Height	970.864 m	Height	970.864 m

To:	FVA16-B1				
Grid		Local		Global	
Easting	320095.389 m	Latitude	N37°24'05.10934"	Latitude	N37°24'05.10933"
Northing	4141343.322 m	Longitude	W101°01'57.23931"	Longitude	W101°01'57.23931"
Elevation	879.628 m	Height	853.473 m	Height	853.473 m

Vector					
9Ughb[	67372.044 m	NS Fwd Azimuth	133°28'43"	L	59748.926 m
BcfA\jb[	-67849.815 m	Ellipsoid Dist.	95600.963 m	M	-53204.734 m
9Yj Uhcb	-115.651 m	<Y][\h	-117.391 m	N	-52357.663 m

## Standard Errors

Vector errors:					
Point ID	0.023 m	Point Description	0°00'00"	Point Type	0.028 m
Point ID	0.067 m	Point Description	0.052 m	Point Type	0.092 m
Point ID	0.075 m	Point Description	0.075 m	Point Type	0.038 m

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

	X	Y	Z
X	0.0007826372		
Y	0.0014466530	0.0084870625	
Z	0.0000880179	0.0003150816	0.0014284836

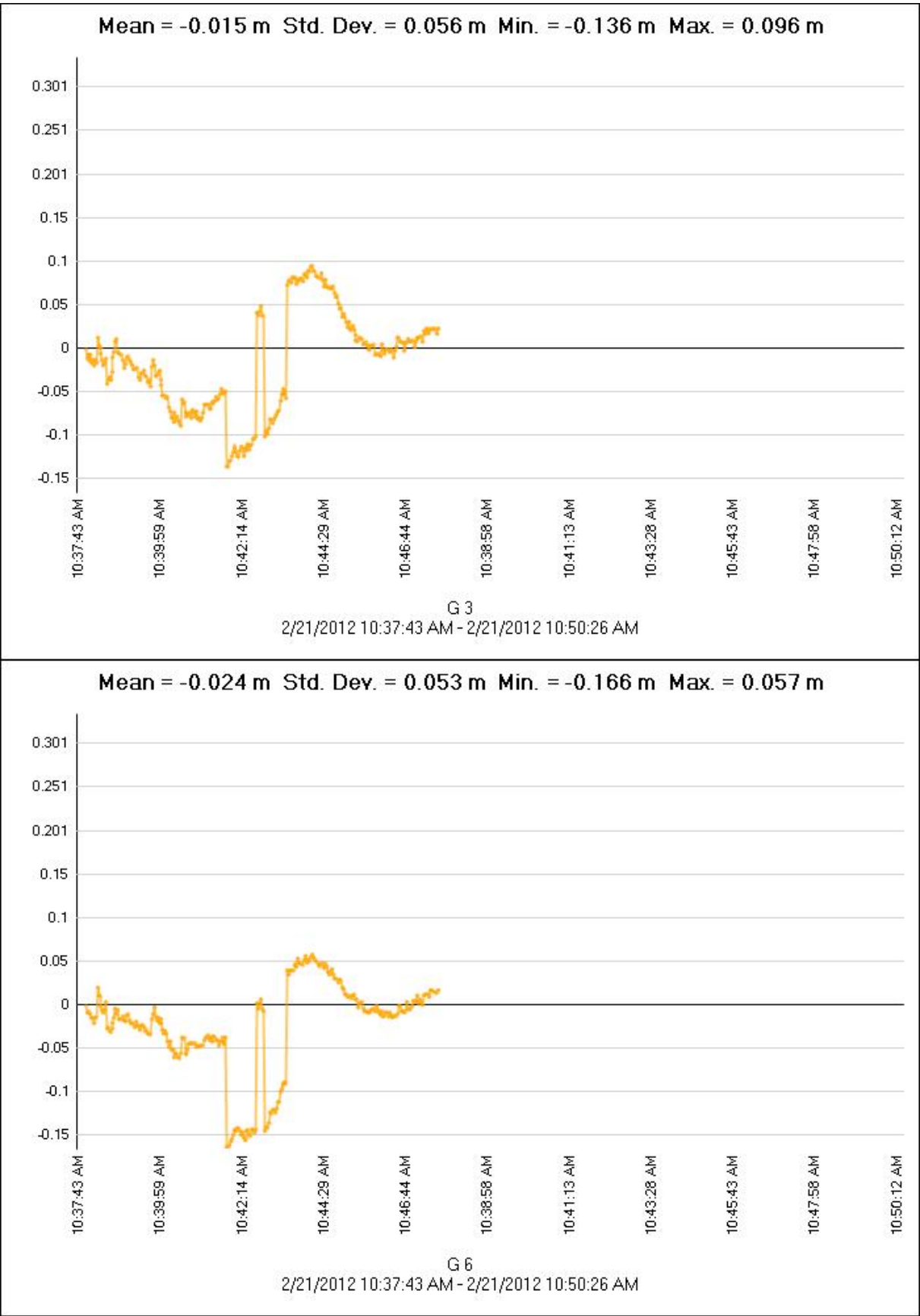
## Occupations

	From	To
Point ID:	HH0645	FVA16-B1
Data file:	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00050520.12o	F:\Projects\Kansas\Adjustments\TGO\231 Kansas CheckPointsAdj\00040521.12o
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

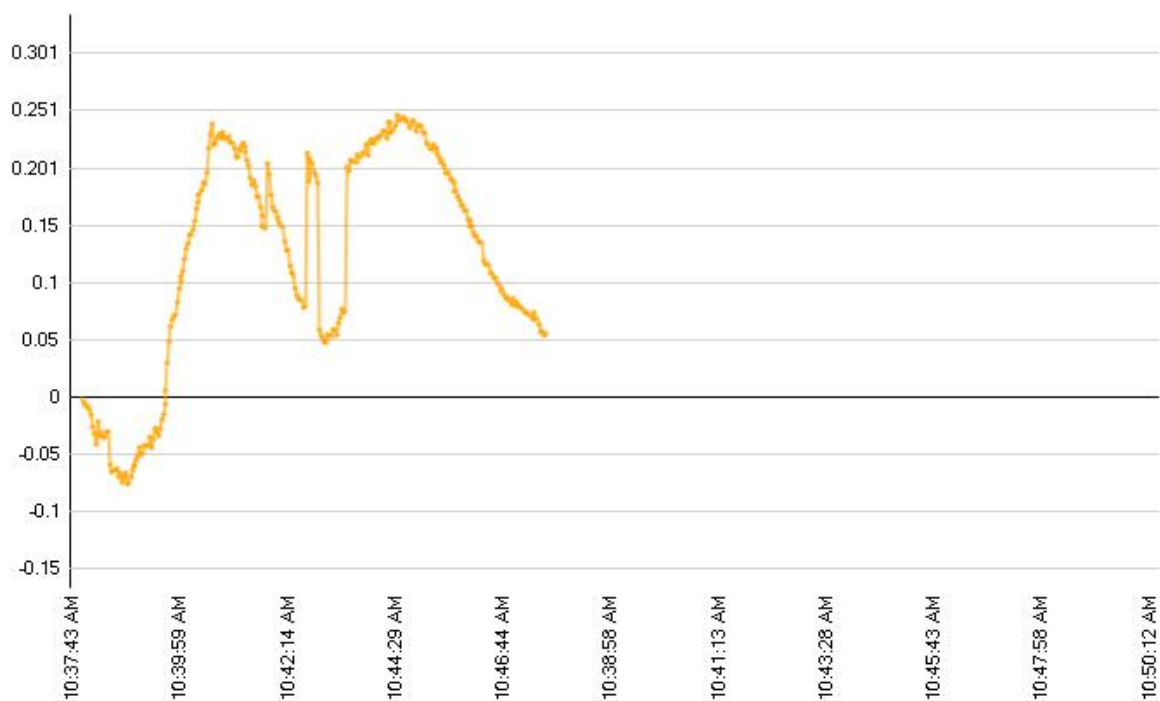
SV	2/21/2012 10:37:42 AM	Duration: 00:22:49	Major interval: 00:01:00	2/21/2012 11:00:31 AM
G 3	L1 L2			
G 6	L1 L2			
G 9	L1 L2			
G 14	L1 L2			
G 15	L1 L2			
G 18	L1 L2			
G 19	L1 L2			
G 21	L1 L2			
G 22	L1 L2			
G 27	L1 L2			
G 29	L1 L2			

Residuals





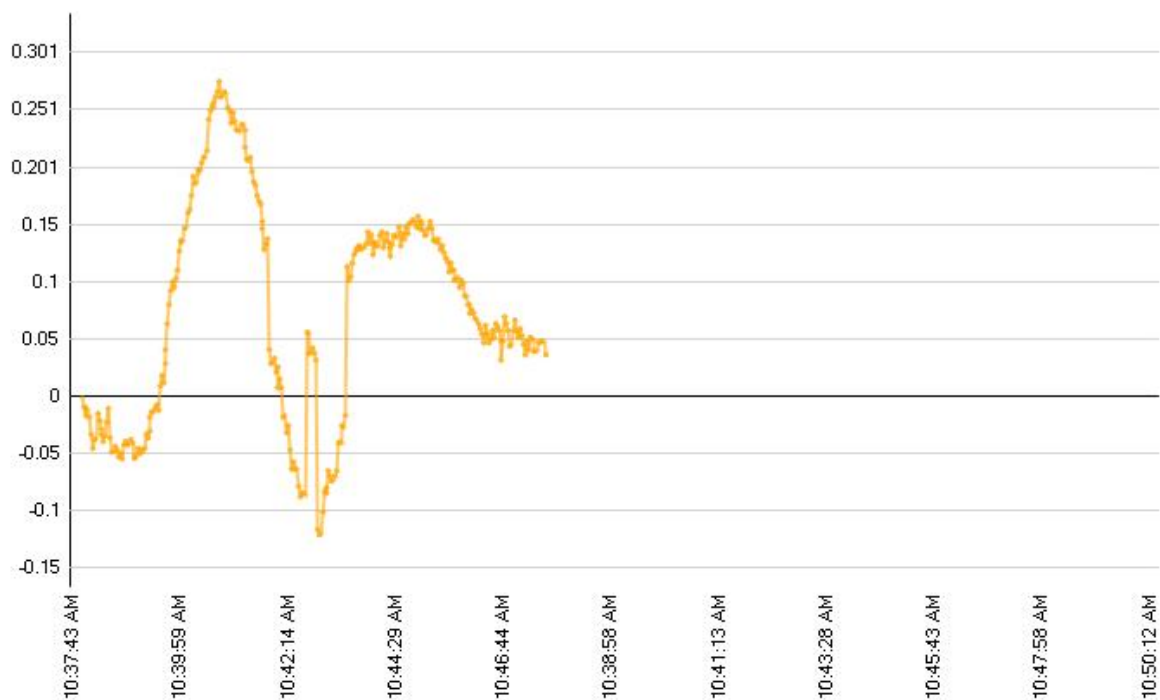
Mean = 0.121 m Std. Dev. = 0.096 m Min. = -0.076 m Max. = 0.247 m



G 9

2/21/2012 10:37:43 AM - 2/21/2012 10:50:26 AM

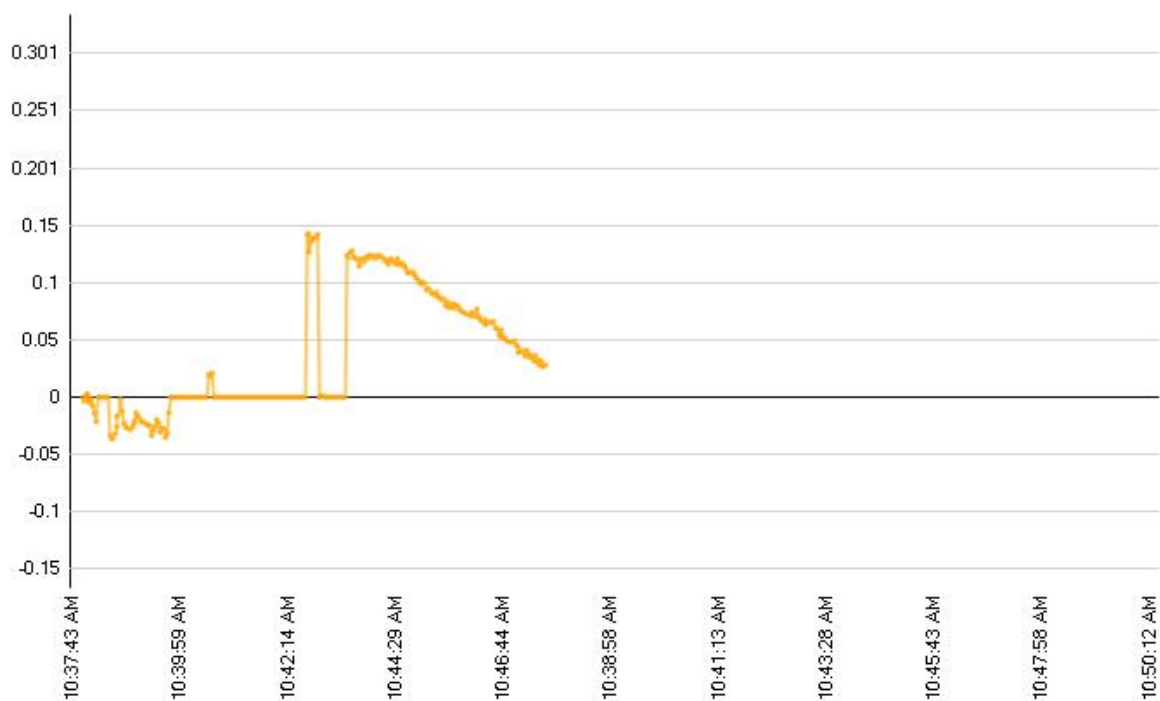
Mean = 0.073 m Std. Dev. = 0.094 m Min. = -0.122 m Max. = 0.275 m



G 14

2/21/2012 10:37:43 AM - 2/21/2012 10:50:26 AM

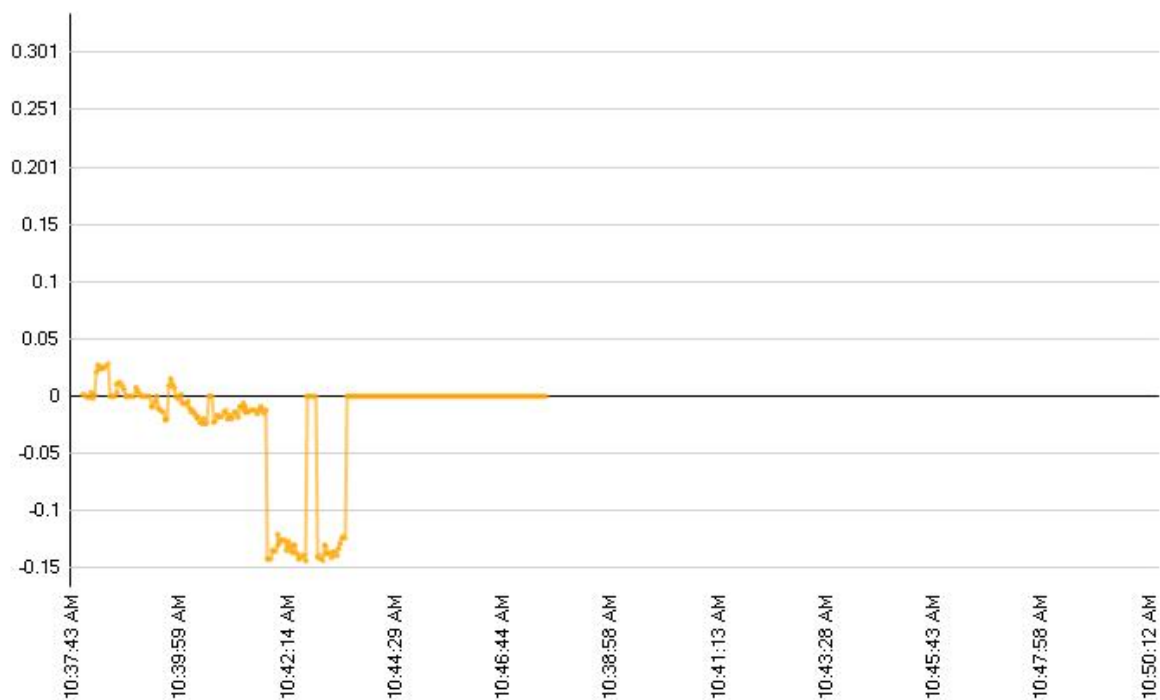
Mean = 0.036 m Std. Dev. = 0.051 m Min. = -0.036 m Max. = 0.144 m



G 15

2/21/2012 10:37:43 AM - 2/21/2012 10:50:26 AM

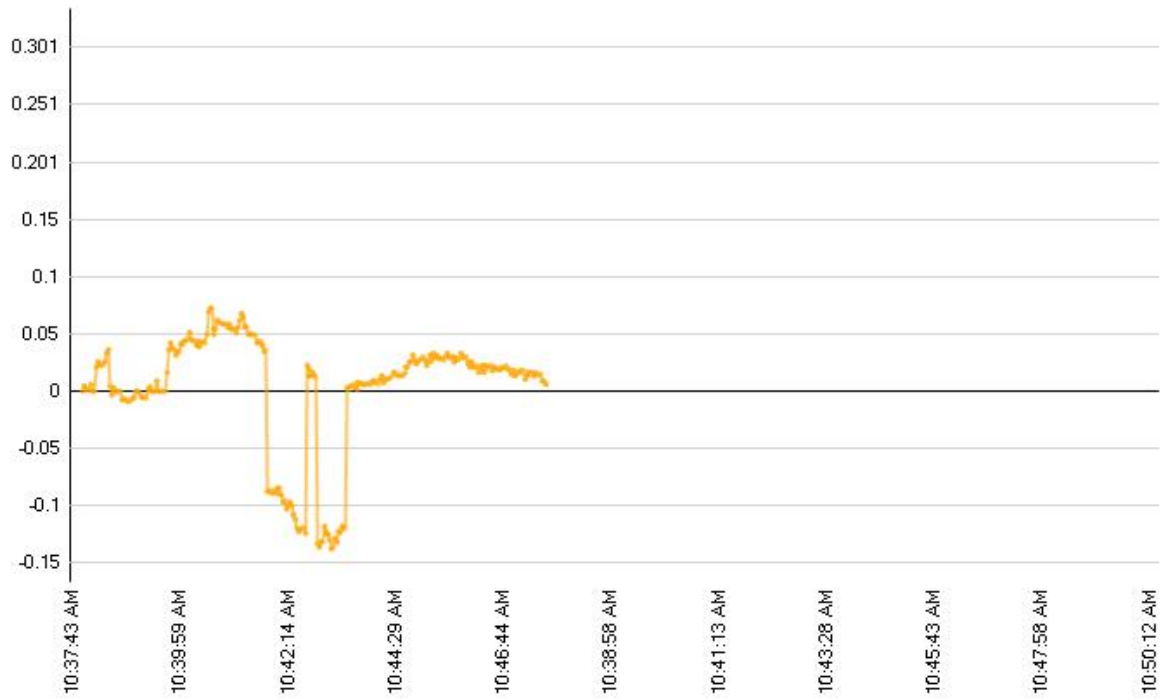
Mean = -0.021 m Std. Dev. = 0.047 m Min. = -0.144 m Max. = 0.028 m



G 18

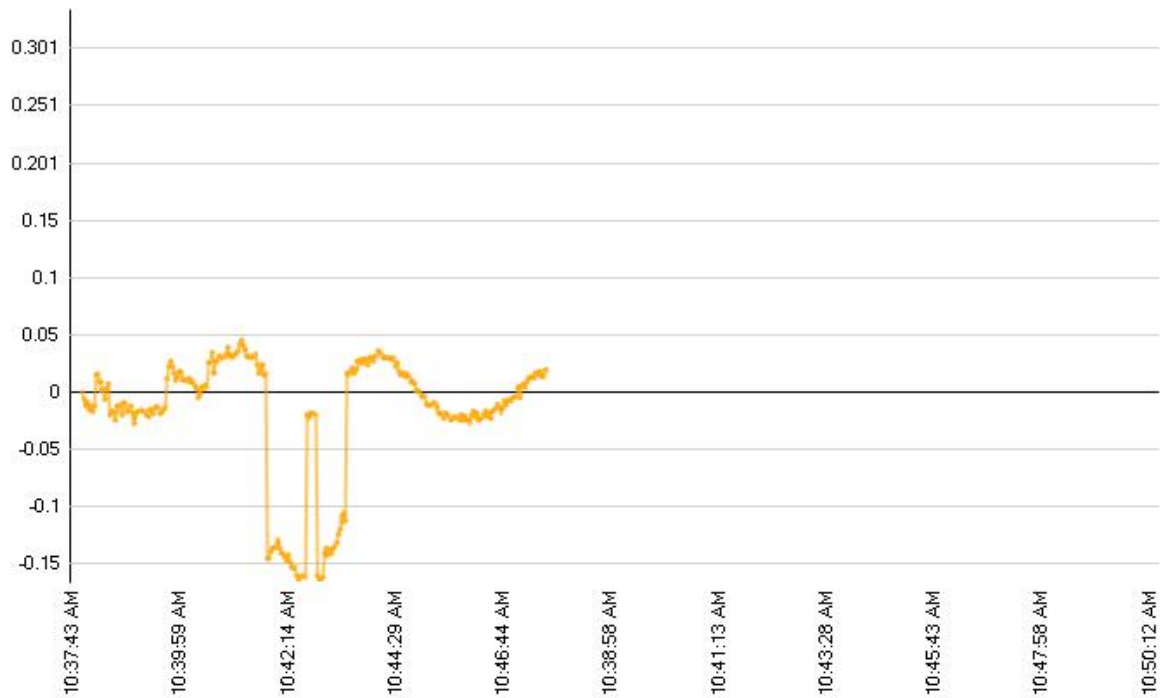
2/21/2012 10:37:43 AM - 2/21/2012 10:50:26 AM

Mean = 0.002 m Std. Dev. = 0.050 m Min. = -0.138 m Max. = 0.073 m



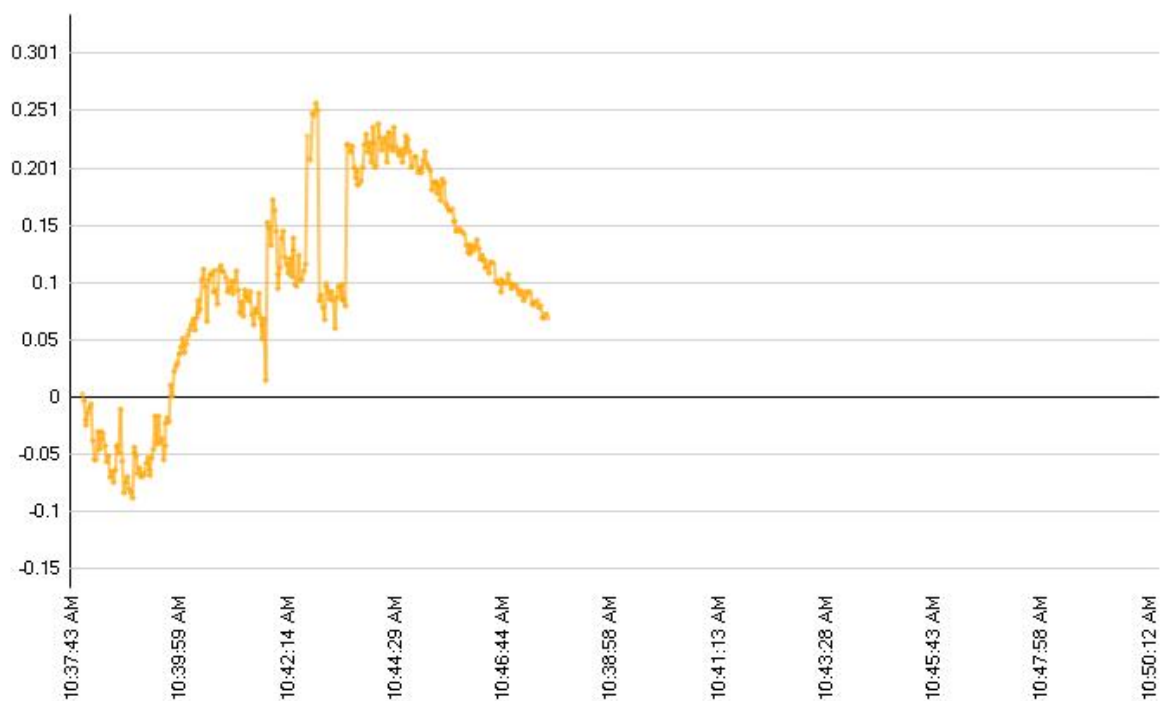
G 21  
2/21/2012 10:37:43 AM - 2/21/2012 10:50:26 AM

Mean = -0.018 m Std. Dev. = 0.054 m Min. = -0.165 m Max. = 0.046 m



G 22  
2/21/2012 10:37:43 AM - 2/21/2012 10:50:26 AM

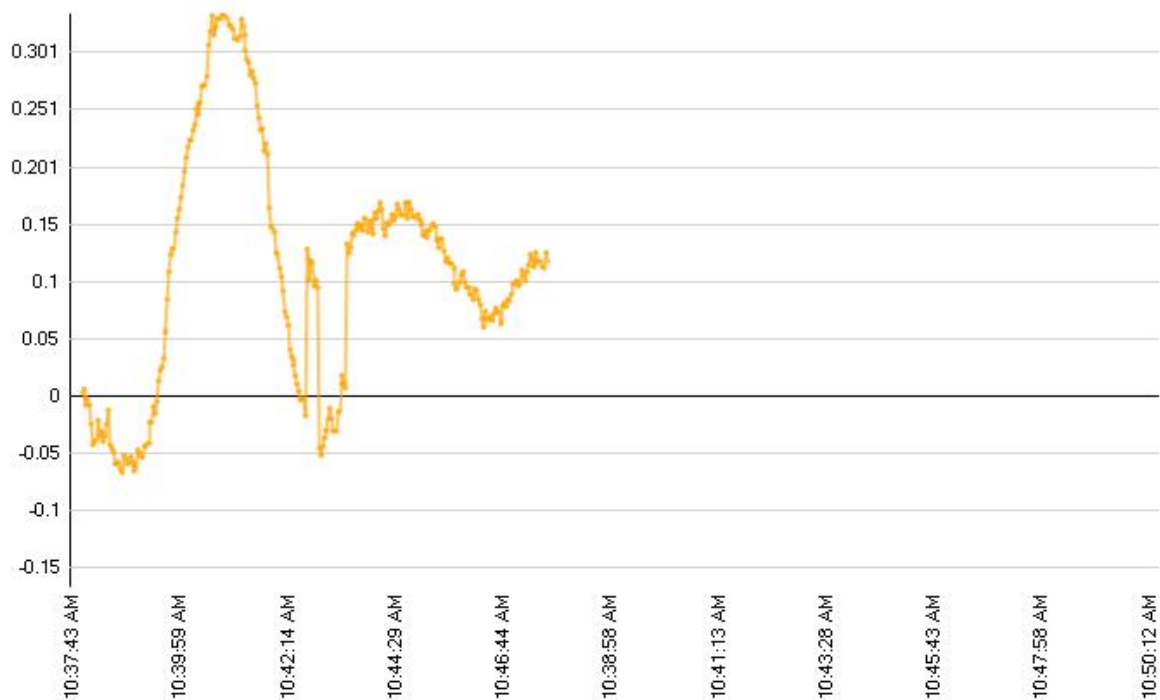
Mean = 0.095 m Std. Dev. = 0.086 m Min. = -0.088 m Max. = 0.257 m



G 27

2/21/2012 10:37:43 AM - 2/21/2012 10:50:26 AM

Mean = 0.109 m Std. Dev. = 0.106 m Min. = -0.067 m Max. = 0.336 m



G 29

2/21/2012 10:37:43 AM - 2/21/2012 10:50:26 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

4/25/2012 10:07:23 PM	F:\Projects\Kansas\Adjustments\TGO\2331 Kansas CheckPointsAdj.vce	Trimble Business Center
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