



Project file data		Coordinate System	
Name:		Name:	World wide/UTM
Size:		Zone:	44 North
Modified:		Datum:	WGS 1984
Time zone:		Global reference datum:	WGS 1984
Reference number:		Global reference epoch:	
Description:		Geoid:	EGM96 (Global)
Comment 1:		Vertical datum:	
Comment 2:		Calibrated site:	
Comment 3:			

Baseline Processing Report

Processing Summary

Observation	From	To	Solution Type	H. Prec. (Meter)	V. Prec. (Meter)	Geodetic Az.	Ellipsoid Dist. (Meter)	ΔHeight (Meter)
MHG-1 (B1)	GB-1	MHG-1	Fixed	0.0086	0.0146	355°56'29. 0"	2537.4029	-13.4548
MHG-2 (B2)	GB-1	MHG-2	Fixed	0.0060	0.0117	0°39'14.3"	865.1619	-5.1503
MHG-3 (B3)	GB-1	MHG-3	Fixed	0.0078	0.0173	215°36'47. 4"	1507.4572	-13.3792
MHG-4 (B4)	GB-1	MHG-4	Fixed	0.0095	0.0173	297°00'55. 3"	1100.2040	-3.3348
MHG-05 (B5)	GB-1	MHG-05	Fixed	0.0050	0.0099	251°37'07. 5"	1152.5243	-4.7375
MHG-06 (B6)	GB-1	MHG-06	Fixed	0.0096	0.0153	3°38'26.6"	1584.3655	-0.1698

Acceptance Summary

Processed	Passed	Flag		Fail	
6	6	0		0	

GB-1 (10:40:46-14:16:36) (S1)

Baseline observation:	MHG-1 (B1)
Processed:	23-06-2025 17:25:52
Solution type:	Fixed
Frequency used:	Multiple Frequencies
Horizontal precision:	0.0086 m
Vertical precision:	0.0146 m
RMS:	0.0138 m
Maximum PDOP:	1.596
Ephemeris used:	Broadcast
Antenna model:	NGS Absolute
Processing start time:	20-03-2025 11:54:40 (Local: UTC+5hr)
Processing stop time:	20-03-2025 12:08:11 (Local: UTC+5hr)
Processing duration:	00:13:31
Processing interval:	1 second

Vector Components (Mark to Mark)

From:	GB-1				
Grid		Local		Global	
Easting	277365.508 m	Latitude	N19°49'55.39637"	Latitude	N19°49'55.39637"
Northing	2194298.229 m	Longitude	E78°52'27.45593"	Longitude	E78°52'27.45593"
Elevation	229.101 m	Height	160.152 m	Height	160.152 m

To:	MHG-1				
Grid		Local		Global	
Easting	277217.789 m	Latitude	N19°51'17.70483"	Latitude	N19°51'17.70483"
Northing	2196831.870 m	Longitude	E78°52'21.28343"	Longitude	E78°52'21.28343"
Elevation	215.565 m	Height	146.697 m	Height	146.697 m

Vector					
ΔEasting	-147.7192 m	NS Fwd Azimuth	355°56'29.0"	ΔX	7.9856 m
ΔNorthing	2533.6410 m	Ellipsoid Dist.	2537.4029 m	ΔY	-890.1149 m
ΔElevation	-13.536 m	ΔHeight	-13.4548 m	ΔZ	2376.2445 m

Standard Errors

Vector errors:					
σ ΔEasting	0.0059 m	σ NS fwd Azimuth	0°00'00.5"	σ ΔX	0.0067 m
σ ΔNorthing	0.0050 m	σ Ellipsoid Dist.	0.0051 m	σ ΔY	0.0133 m
σ ΔElevation	0.0146 m	σ ΔHeight	0.0146 m	σ ΔZ	0.0073 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000449856		
Y	0.0000403546	0.0001764770	
Z	0.0000227333	0.0000639497	0.0000527203

Occupations

	From	To
Point ID:	GB-1	MHG-1
Data file:	C:\Users\MECL\Documents\Trimble Business Center\Unnamed (2)\13710790.T04	C:\Users\MECL\Documents\Trimble Business Center\Unnamed (2)\00030790.t04
Receiver type:	R12i	R12i
Receiver serial number:	6347701371	6347701394
Antenna type:	R12i Internal	R12i Internal
Antenna serial number:	-----	-----
Antenna height (measured):	1.9950 m	2.0000 m
Antenna method:	Bottom of quick release	Bottom of quick release

GB-1 (08:46:22-14:03:13) (S2)

Baseline observation:	MHG-2 (B2)
Processed:	23-06-2025 17:43:04
Solution type:	Fixed
Frequency used:	Multiple Frequencies
Horizontal precision:	0.0060 m
Vertical precision:	0.0117 m
RMS:	0.0245 m
Maximum PDOP:	1.411
Ephemeris used:	Broadcast
Antenna model:	NGS Absolute
Processing start time:	22-03-2025 08:47:20 (Local: UTC+5hr)
Processing stop time:	22-03-2025 09:03:07 (Local: UTC+5hr)
Processing duration:	00:15:47
Processing interval:	1 second

Vector Components (Mark to Mark)

From:		GB-1			
Grid		Local		Global	
Easting	277365.508 m	Latitude	N19°49'55.39637"	Latitude	N19°49'55.39637"
Northing	2194298.229 m	Longitude	E78°52'27.45593"	Longitude	E78°52'27.45593"
Elevation	229.101 m	Height	160.152 m	Height	160.152 m

To:		MHG-2			
Grid		Local		Global	
Easting	277386.281 m	Latitude	N19°50'23.52931"	Latitude	N19°50'23.52931"
Northing	2195163.325 m	Longitude	E78°52'27.79529"	Longitude	E78°52'27.79529"
Elevation	223.924 m	Height	155.002 m	Height	155.002 m

Vector					
ΔEasting	20.7735 m	NS Fwd Azimuth	0°39'14.3"	ΔX	-67.2706 m
ΔNorthing	865.0964 m	Ellipsoid Dist.	865.1619 m	ΔY	-290.8932 m
ΔElevation	-5.177 m	ΔHeight	-5.1503 m	ΔZ	812.0496 m

Standard Errors

Vector errors:					
σ Δ Easting	0.0042 m	σ NS fwd Azimuth	0°00'01.0"	σ Δ X	0.0041 m
σ Δ Northing	0.0034 m	σ Ellipsoid Dist.	0.0034 m	σ Δ Y	0.0114 m
σ Δ Elevation	0.0117 m	σ Δ Height	0.0117 m	σ Δ Z	0.0043 m



Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000168429		
Y	0.0000090625	0.0001299456	
Z	-0.0000001125	0.0000316663	0.0000185706

Occupations

	From	To
Point ID:	GB-1	MHG-2
Data file:	C:\Users\MECL\Documents\Trimble Business Center\Unnamed (2)\13710810.T04	C:\Users\MECL\Documents\Trimble Business Center\Unnamed (2)\00030810.t04
Receiver type:	R12i	R12i
Receiver serial number:	6347701371	6347701394
Antenna type:	R12i Internal	R12i Internal
Antenna serial number:	-----	-----
Antenna height (measured):	1.9947 m	2.0000 m
Antenna method:	Bottom of quick release	Bottom of quick release

Acceptance Criteria

Vector Component	Flag 	Fail 
Horizontal Precision >	0.0500 m + 1.000 ppm	0.1000 m + 1.000 ppm
Vertical Precision >	0.1000 m + 1.000 ppm	0.2000 m + 1.000 ppm

GB-1 (09:04:14-12:25:36) (S3)

Baseline observation:	MHG-3 (B3)
Processed:	23-06-2025 17:53:57
Solution type:	Fixed
Frequency used:	Multiple Frequencies
Horizontal precision:	0.0078 m
Vertical precision:	0.0173 m
RMS:	0.0238 m
Maximum PDOP:	1.540
Ephemeris used:	Broadcast
Antenna model:	NGS Absolute
Processing start time:	23-03-2025 10:40:53 (Local: UTC+5hr)
Processing stop time:	23-03-2025 10:55:57 (Local: UTC+5hr)
Processing duration:	00:15:04
Processing interval:	1 second

Vector Components (Mark to Mark)

From:		GB-1			
Grid		Local		Global	
Easting	277365.508 m	Latitude	N19°49'55.39637"	Latitude	N19°49'55.39637"
Northing	2194298.229 m	Longitude	E78°52'27.45593"	Longitude	E78°52'27.45593"
Elevation	229.101 m	Height	160.152 m	Height	160.152 m

To:		MHG-3			
Grid		Local		Global	
Easting	276472.151 m	Latitude	N19°49'15.54235"	Latitude	N19°49'15.54235"
Northing	2193083.602 m	Longitude	E78°51'57.29214"	Longitude	E78°51'57.29214"
Elevation	215.754 m	Height	146.773 m	Height	146.773 m

Vector					
ΔEasting	-893.3569 m	NS Fwd Azimuth	215°36'47.4"	ΔX	939.0988 m
ΔNorthing	-1214.6269 m	Ellipsoid Dist.	1507.4572 m	ΔY	226.0666 m
ΔElevation	-13.347 m	ΔHeight	-13.3792 m	ΔZ	-1157.4556 m

Standard Errors

Vector errors:					
$\sigma \Delta \text{Easting}$	0.0055 m	$\sigma \text{ NS fwd Azimuth}$	0°00'00.7"	$\sigma \Delta X$	0.0069 m
$\sigma \Delta \text{Northing}$	0.0047 m	$\sigma \text{ Ellipsoid Dist.}$	0.0052 m	$\sigma \Delta Y$	0.0166 m
$\sigma \Delta \text{Elevation}$	0.0173 m	$\sigma \Delta \text{Height}$	0.0173 m	$\sigma \Delta Z$	0.0052 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000472060		
Y	0.0000671147	0.0002756106	
Z	0.0000154110	0.0000539779	0.0000268167

Occupations

	From	To
Point ID:	GB-1	MHG-3
Data file:	C:\Users\MECL\Documents\Trimble Business Center\Unnamed (2)\13710820.T04	C:\Users\MECL\Documents\Trimble Business Center\Unnamed (2)\00030820.t04
Receiver type:	R12i	R12i
Receiver serial number:	6347701371	6347701394
Antenna type:	R12i Internal	R12i Internal
Antenna serial number:	-----	-----
Antenna height (measured):	1.9970 m	2.0000 m
Antenna method:	Bottom of quick release	Bottom of quick release

Vector Components (Mark to Mark)

From:	GB-1				
Grid		Local		Global	
Easting	277365.508 m	Latitude	N19°49'55.39637"	Latitude	N19°49'55.39637"
Northing	2194298.229 m	Longitude	E78°52'27.45593"	Longitude	E78°52'27.45593"
Elevation	229.101 m	Height	160.152 m	Height	160.152 m

To:	MHG-4				
Grid		Local		Global	
Easting	276391.514 m	Latitude	N19°50'11.64704"	Latitude	N19°50'11.64704"
Northing	2194810.388 m	Longitude	E78°51'53.77191"	Longitude	E78°51'53.77191"
Elevation	225.744 m	Height	156.817 m	Height	156.817 m

Vector					
Δ Easting	-973.9935 m	NS Fwd Azimuth	297°00'55.3"	ΔX	928.4184 m
Δ Northing	512.1591 m	Ellipsoid Dist.	1100.2040 m	ΔY	-358.6666 m
Δ Elevation	-3.357 m	Δ Height	-3.3348 m	ΔZ	468.9539 m

Standard Errors

Vector errors:					
$\sigma \Delta$ Easting	0.0055 m	σ NS fwd Azimuth	0°00'01.3"	$\sigma \Delta X$	0.0068 m
$\sigma \Delta$ Northing	0.0061 m	σ Ellipsoid Dist.	0.0048 m	$\sigma \Delta Y$	0.0156 m
$\sigma \Delta$ Elevation	0.0173 m	$\sigma \Delta$ Height	0.0173 m	$\sigma \Delta Z$	0.0087 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000459402		
Y	0.0000619012	0.0002440346	
Z	0.0000134294	0.0000912971	0.0000753491

Occupations

	From	To
Point ID:	GB-1	MHG-4
Data file:	C:\Users\MECL\Documents\Trimble Business Center\Unnamed (2)\13710820.T04	C:\Users\MECL\Documents\Trimble Business Center\Unnamed (2)\00030820.t04
Receiver type:	R12i	R12i
Receiver serial number:	6347701371	6347701394
Antenna type:	R12i Internal	R12i Internal
Antenna serial number:	-----	-----
Antenna height (measured):	1.9970 m	2.0000 m
Antenna method:	Bottom of quick release	Bottom of quick release

GB-1 (10:29:50-13:19:07) (S4)

Baseline observation:	MHG-05 (B5)
Processed:	23-06-2025 17:58:16
Solution type:	Fixed
Frequency used:	Multiple Frequencies
Horizontal precision:	0.0050 m
Vertical precision:	0.0099 m
RMS:	0.0105 m
Maximum PDOP:	1.258
Ephemeris used:	Broadcast
Antenna model:	NGS Absolute
Processing start time:	16-04-2025 12:16:10 (Local: UTC+5hr)
Processing stop time:	16-04-2025 12:26:11 (Local: UTC+5hr)
Processing duration:	00:10:01
Processing interval:	1 second

Vector Components (Mark to Mark)

From:		GB-1			
Grid		Local		Global	
Easting	277365.508 m	Latitude	N19°49'55.39637"	Latitude	N19°49'55.39637"
Northing	2194298.229 m	Longitude	E78°52'27.45593"	Longitude	E78°52'27.45593"
Elevation	229.101 m	Height	160.152 m	Height	160.152 m

To:		MHG-05			
Grid		Local		Global	
Easting	276267.060 m	Latitude	N19°49'43.57647"	Latitude	N19°49'43.57647"
Northing	2193948.518 m	Longitude	E78°51'49.87091"	Longitude	E78°51'49.87091"
Elevation	224.368 m	Height	155.415 m	Height	155.415 m

Vector					
ΔEasting	-1098.4478 m	NS Fwd Azimuth	251°37'07.5"	ΔX	1096.1067 m
ΔNorthing	-349.7110 m	Ellipsoid Dist.	1152.5243 m	ΔY	-94.5347 m
ΔElevation	-4.734 m	ΔHeight	-4.7375 m	ΔZ	-343.5313 m

Standard Errors

Vector errors:					
σ ΔEasting	0.0036 m	σ NS fwd Azimuth	0°00'00.6"	σ ΔX	0.0039 m
σ ΔNorthing	0.0033 m	σ Ellipsoid Dist.	0.0036 m	σ ΔY	0.0095 m
σ ΔElevation	0.0099 m	σ ΔHeight	0.0099 m	σ ΔZ	0.0042 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000149358		
Y	0.0000132434	0.0000898281	
Z	0.0000037391	0.0000239165	0.0000176037

Occupations

	From	To
Point ID:	GB-1	MHG-05
Data file:	C:\Users\MECL\Documents\Trimble Business Center\Unnamed (2)\13711060.T04	C:\Users\MECL\Documents\Trimble Business Center\Unnamed (2)\00031060.t04
Receiver type:	R12i	R12i
Receiver serial number:	6347701371	6347701394
Antenna type:	R12i Internal	R12i Internal
Antenna serial number:	-----	-----
Antenna height (measured):	2.0000 m	2.0000 m
Antenna method:	Bottom of quick release	Bottom of quick release

GB-1 (10:29:50-13:19:07) (S4)

Baseline observation:	MHG-06 (B6)
Processed:	23-06-2025 17:58:16
Solution type:	Fixed
Frequency used:	Multiple Frequencies
Horizontal precision:	0.0096 m
Vertical precision:	0.0153 m
RMS:	0.0176 m
Maximum PDOP:	1.291
Ephemeris used:	Broadcast
Antenna model:	NGS Absolute
Processing start time:	16-04-2025 12:47:49 (Local: UTC+5hr)
Processing stop time:	16-04-2025 12:57:38 (Local: UTC+5hr)
Processing duration:	00:09:49
Processing interval:	1 second

Vector Components (Mark to Mark)

From:	GB-1				
Grid		Local		Global	
Easting	277365.508 m	Latitude	N19°49'55.39637"	Latitude	N19°49'55.39637"
Northing	2194298.229 m	Longitude	E78°52'27.45593"	Longitude	E78°52'27.45593"
Elevation	229.101 m	Height	160.152 m	Height	160.152 m

To:	MHG-06				
Grid		Local		Global	
Easting	277486.049 m	Latitude	N19°50'46.81540"	Latitude	N19°50'46.81540"
Northing	2195878.340 m	Longitude	E78°52'30.91360"	Longitude	E78°52'30.91360"
Elevation	228.883 m	Height	159.982 m	Height	159.982 m

Vector					
ΔEasting	120.5411 m	NS Fwd Azimuth	3°38'26.6"	ΔX	-202.2994 m
ΔNorthing	1580.1108 m	Ellipsoid Dist.	1584.3655 m	ΔY	-507.2909 m
ΔElevation	-0.219 m	ΔHeight	-0.1698 m	ΔZ	1487.3035 m

Standard Errors

Vector errors:					
$\sigma \Delta$ Easting	0.0067 m	σ NS fwd Azimuth	0°00'00.9"	$\sigma \Delta$ X	0.0062 m
$\sigma \Delta$ Northing	0.0063 m	σ Ellipsoid Dist.	0.0064 m	$\sigma \Delta$ Y	0.0150 m
$\sigma \Delta$ Elevation	0.0153 m	$\sigma \Delta$ Height	0.0153 m	$\sigma \Delta$ Z	0.0075 m

Aposteriori Covariance Matrix (Meter²)

	X	Y	Z
X	0.0000385889		
Y	0.0000009089	0.0002256476	
Z	-0.0000043563	0.0000561995	0.0000561215

Occupations

	From	To
Point ID:	GB-1	MHG-06
Data file:	C:\Users\MECL\Documents\Trimble Business Center\Unnamed (2)\13711060.T04	C:\Users\MECL\Documents\Trimble Business Center\Unnamed (2)\00031060.t04
Receiver type:	R12i	R12i
Receiver serial number:	6347701371	6347701394
Antenna type:	R12i Internal	R12i Internal
Antenna serial number:	-----	-----
Antenna height (measured):	2.0000 m	2.0000 m
Antenna method:	Bottom of quick release	Bottom of quick release