

GEORREFERENCIACION RIO BAJIRA Y QUEBRADA EL INDIO MUNICIPIO BELEN DE BAJIRA- ANTIOQUIA (COLOMBIA)

PUNTO ANTENA MEDE

**Project Summary**

Project name: **belen1.ttp**

Surveyor:

Comment:

Linear unit: **Meters**

Projection: **Oeste**

Geoid: WGS-84

**Adjustment Summary**

Adjustment type: **Plane + Height. Minimal constraint**

Confidence level: **95 %**

Number of adjusted points: **2**

Number of plane control points: **1**

Number of used GPS vectors: **1**

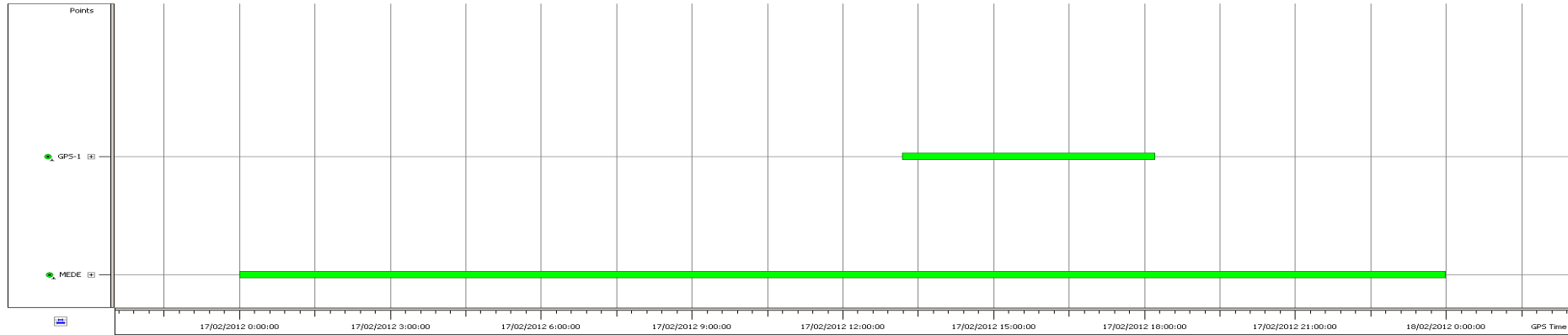
A posteriori plane UWE: **1** . Bounds: ( **1** . **1** )

Number of height control points: **1**

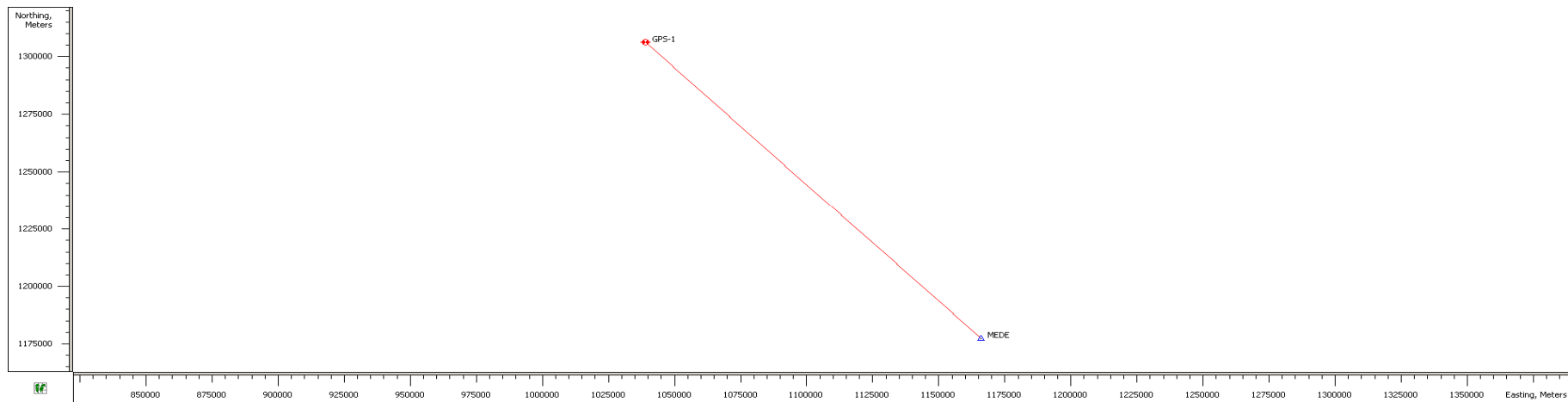
A posteriori height UWE: **1** . Bounds: ( **1** . **1** )

TABLA DE OBSERVACIONES Y AJUSTES

Used GPS Observations								
Name	Azimuth	Distance (m)	dN (m)	dE (m)	dHt (m)	Horz RMS (m)	Vert RMS (m)	
GPS-1-MEDE	135°28'25.2480"	180643.420	-128704.313	126761.742	1516.378	0.055	0.034	
GPS Observations								
Name	CorrXY	CorrXZ	CorrYZ	Start Time	Duration	Base Antenna Height (m)	Rover Antenna Height (m)	
GPS-1-MEDE	-0.1234	-0.1349	-0.0897	17/02/2012 13:11:30	05:02:00	1.697	0.000	
GPS Observation Residuals								
Name	dX (m)	dY (m)	dZ (m)	Elevation Angle	GPS Satellites	PDOP	VDOP	HDOP
GPS-1-MEDE	126838.268	14036.373	-127855.696	-0°19'59.0055"	14	2.846	2.569	1.225
Control Points								
Name	Grid Northing (m)	Grid Easting (m)	Elevation (m)	WGS84 Latitude	WGS84 Longitude	WGS84 Ell.Height (m)	Control	
GPS-1	1306227.646	1039110.195	37.043	7°21'54.65626"N	76°43'23.78541"W	37.043	None	
MEDE	1177523.333	1165871.937	1553.421	6°11'57.85708"N	75°34'44.09902"W	1553.421	Both	
Adjusted Points								
Name	Convergence	X (m)	Y (m)	Z (m)	Std Dev n (m)	Std Dev e (m)	Std Dev Hz (m)	Std Dev u (m)
GPS-1	0°02'43.4792"	1452770.204	-6156820.201	812208.086	0.012	0.053	0.055	0.034
MEDE	0°09'42.7271"	1579608.472	-6142783.828	684352.390	0.000	0.000	0.000	0.000



**TABLA DE DURACION DE TIEMPOS PUNTOS MEDE GPS-1**



**GRAFICO POSICIONAMIENTO PUNTOS MEDE. GPS-1**

**CUADRO DE COORDENADAS MAGNA-SIRGAS GAUSS-KRUGER ORIGEN OESTE PUNTOS MEDE Y GPS1**

Point Summary						
Name	Grid Northing (m)	Grid Easting (m)	Elevation (m)	WGS84 Latitude	WGS84 Longitude	Altura Ortométrica (snm)
GPS-1	1306227.646	1039110.195	37.043	7°21'54.65626"N	76°43'23.78541"W	24.049
MEDE	1177523.333	1165871.937	1553.421	6°11'57.85708"N	75°34'44.09902"W	1528.637

**GEORREFERENCIACION RIO BAJIRA Y QUEBRADA EL INDIO MUNICIPIO BELEN DE BAJIRA - ANTIOQUIA (COLOMBIA)**

**PUNTO ANTENA GPS1**

**Project Summary**

Project name: **belen2.ttp**

Surveyor:

Comment:

Linear unit: **Meters**

Projection: **Oeste**

Geoid: WGS-84

**Adjustment Summary**

Adjustment type: **Plane + Height. Minimal constraint**

Confidence level: **95 %**

Number of adjusted points: **4**

Number of plane control points: **1**

Number of used GPS vectors: **3**

A posteriori plane UWE: **1** . Bounds: ( **1** . **1** )

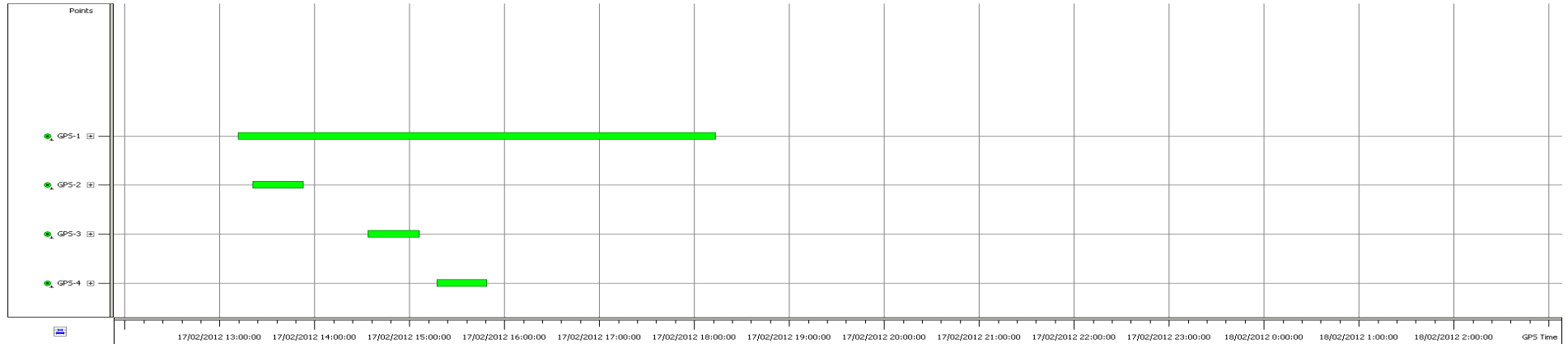
Number of height control points: **1**

A posteriori height UWE: **1** . Bounds: ( **1** . **1** )

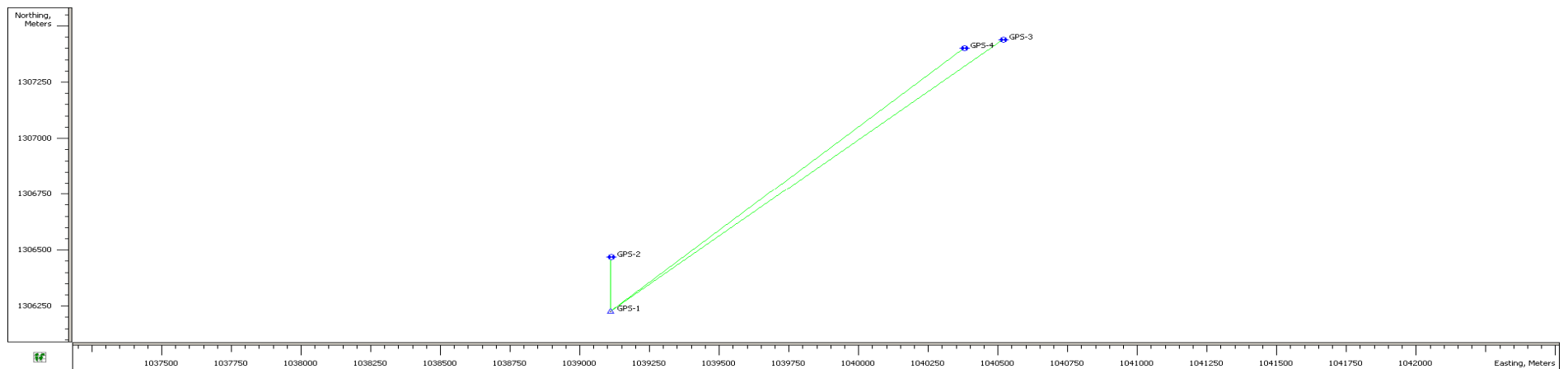
### TABLA DE OBSERVACIONES Y AJUSTES

Used GPS Observations								
Name	Azimuth	Distance (m)	dN (m)	dE (m)	dHt (m)	Horz RMS (m)	Vert RMS (m)	
GPS-1-GPS-2	0°18'17.7728"	241.807	241.807	1.095	0.345	0.002	0.004	
GPS-1-GPS-4	49°17'29.7092"	1855.216	1211.088	1405.345	13.654	0.002	0.006	
GPS-1-GPS-3	47°11'40.9605"	1726.866	1174.441	1266.030	1.269	0.002	0.003	
GPS Observations								
Name	CorrXY	CorrXZ	CorrYZ	Start Time	Duration	Base Antenna Height (m)	Rover Antenna Height (m)	
GPS-1-GPS-2	-0.6442	0.0493	-0.0278	17/02/2012 13:20:45	00:32:15	1.697	1.476	
GPS-1-GPS-4	-0.5762	0.2704	-0.5322	17/02/2012 14:33:30	00:33:00	1.697	1.525	
GPS-1-GPS-3	-0.4295	0.0395	-0.2107	17/02/2012 15:17:15	00:32:00	1.697	1.503	
GPS Observation Residuals								
Name	dX (m)	dY (m)	dZ (m)	Elevation Angle	GPS Satellites	PDOP	VDOP	HDOP
GPS-1-GPS-2	-5.789	30.136	239.852	0°04'50.5797"	7	2.631	2.397	1.084
GPS-1-GPS-4	1336.129	461.004	1201.691	0°24'48.0435"	7	2.328	2.143	0.908
GPS-1-GPS-3	1198.772	436.364	1163.872	0°02'03.6220"	8	1.984	1.764	0.907
Control Points								

Name	Grid Northing (m)	Grid Easting (m)	Elevation (m)	WGS84 Latitude	WGS84 Longitude	WGS84 Ell.Height (m)	Control	
GPS-1	1306227.646	1039110.195	37.043	7°21'54.65626"N	76°43'23.78541"W	37.043	Both	
GPS-2	1306469.454	1039111.290	37.388	7°22'02.52737"N	76°43'23.74345"W	37.388	None	
GPS-4	1307438.734	1040515.540	50.698	7°22'34.04176"N	76°42'37.93036"W	50.698	None	
GPS-3	1307402.087	1040376.225	38.313	7°22'32.85259"N	76°42'42.47393"W	38.313	None	
Adjusted Points								
Name	Convergence	X (m)	Y (m)	Z (m)	Std Dev n (m)	Std Dev e (m)	Std Dev Hz (m)	Std Dev u (m)
GPS-1	0°02'43.4792"	1452770.204	-6156820.201	812208.086	0.000	0.000	0.000	0.000
GPS-2	0°02'43.5328"	1452764.416	-6156790.065	812447.938	0.002	0.002	0.002	0.004
GPS-4	0°02'49.6079"	1454106.333	-6156359.197	813409.777	0.002	0.002	0.003	0.006
GPS-3	0°02'49.0170"	1453968.976	-6156383.837	813371.958	0.002	0.002	0.002	0.004



**TABLA DE DURACION DE TIEMPOS PUNTOS GPS1, GPS2, GPS3 Y GPS4**



**GRAFICO POSICIONAMIENTO PUNTOS GPS1, GPS2, GPS3 Y GPS4**



**CUADRO DE COORDENADAS MAGNA-SIRGAS GAUSS-KRUGER ORIGEN OESTE PUNTOS GPS1, GPS2, GPS3 Y GPS4**

Point Summary						
Name	Grid Northing (m)	Grid Easting (m)	Elevation (m)	WGS84 Latitude	WGS84 Longitude	Altura Ortométrica (snm)
GPS-1	1306227.646	1039110.195	37.043	7°21'54.65626"N	76°43'23.78541"W	24.049
GPS-2	1306469.454	1039111.290	37.388	7°22'02.52737"N	76°43'23.74345"W	24.394
GPS-4	1307438.734	1040515.540	50.698	7°22'34.04176"N	76°42'37.93036"W	37.744
GPS-3	1307402.087	1040376.225	38.313	7°22'32.85259"N	76°42'42.47393"W	25.359