



ESTUDIO DE COBERTURA

Madrid

Satel Iberia
Ejemplo de comunicación PTM
29 junio, 2020

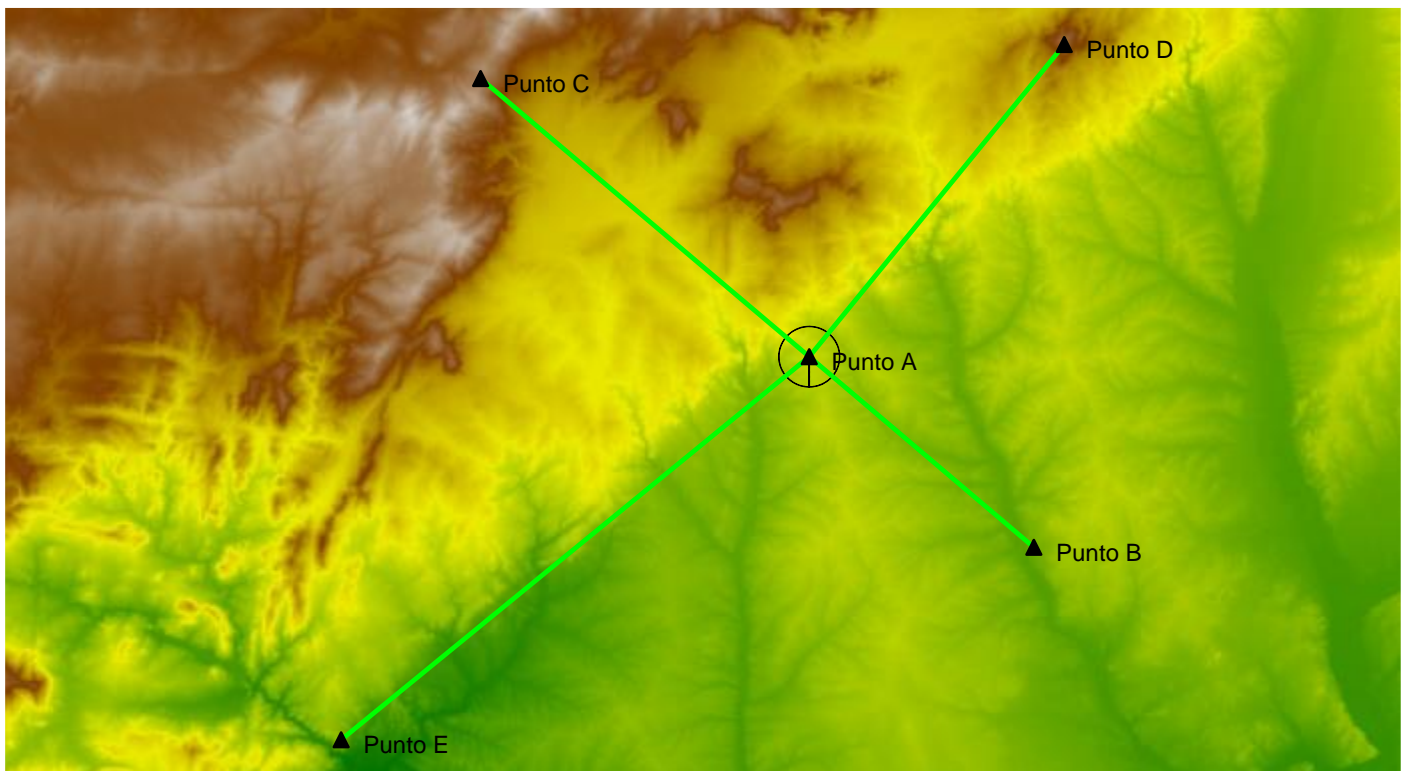
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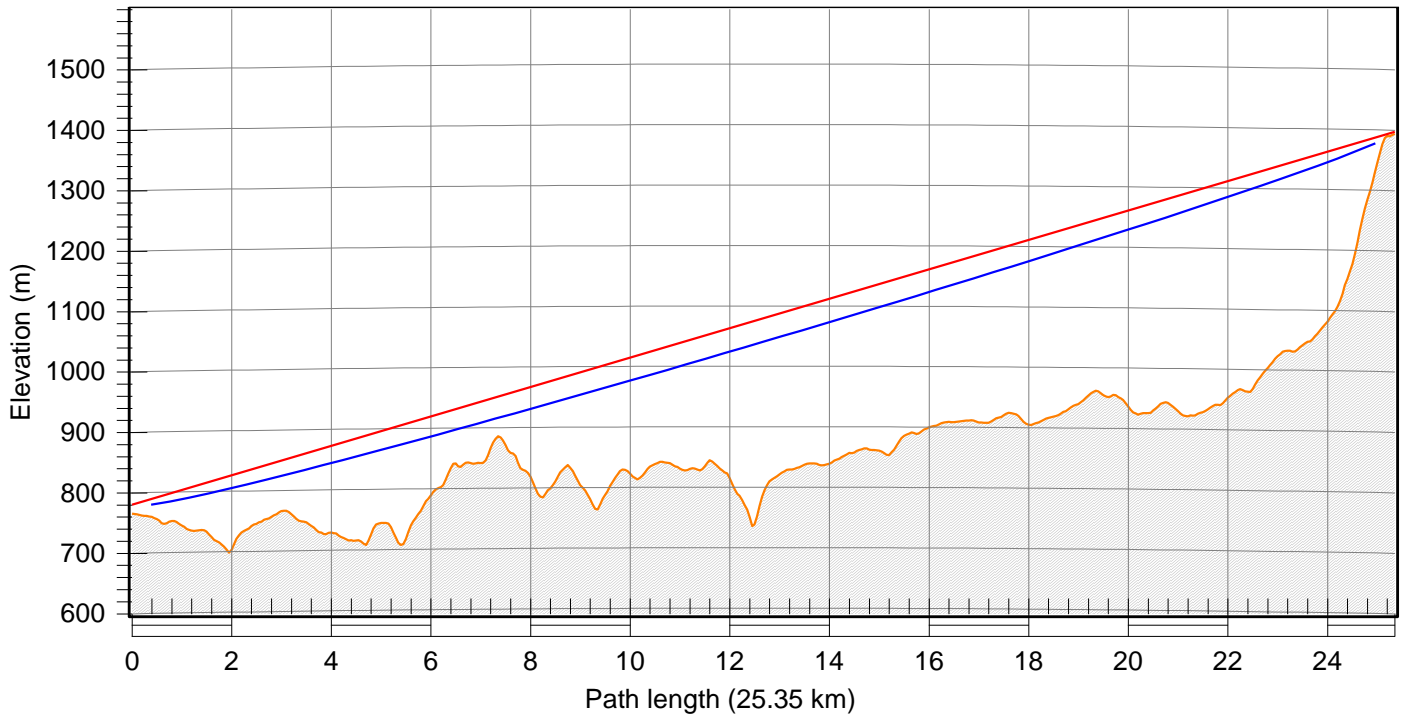
El balance energético está realizado para la utilización de equipos de radiofrecuencia Satel, los parámetros de comunicación como modulación, canalización, frecuencia y potencia son especificados en cada enlace.

Este estudio de cobertura solo tiene en cuenta el perfil orográfico, no elementos artificiales como edificios ni vegetación. En caso de tener en cuenta estas variables, se personalizarán en función de cada enlace.

Un enlace con un margen inferior a 15 dB no es fiable ("Thermal fade margin (dB)"). Se marcan los enlaces no fiables con color rojo y los enlaces críticos en color azul.



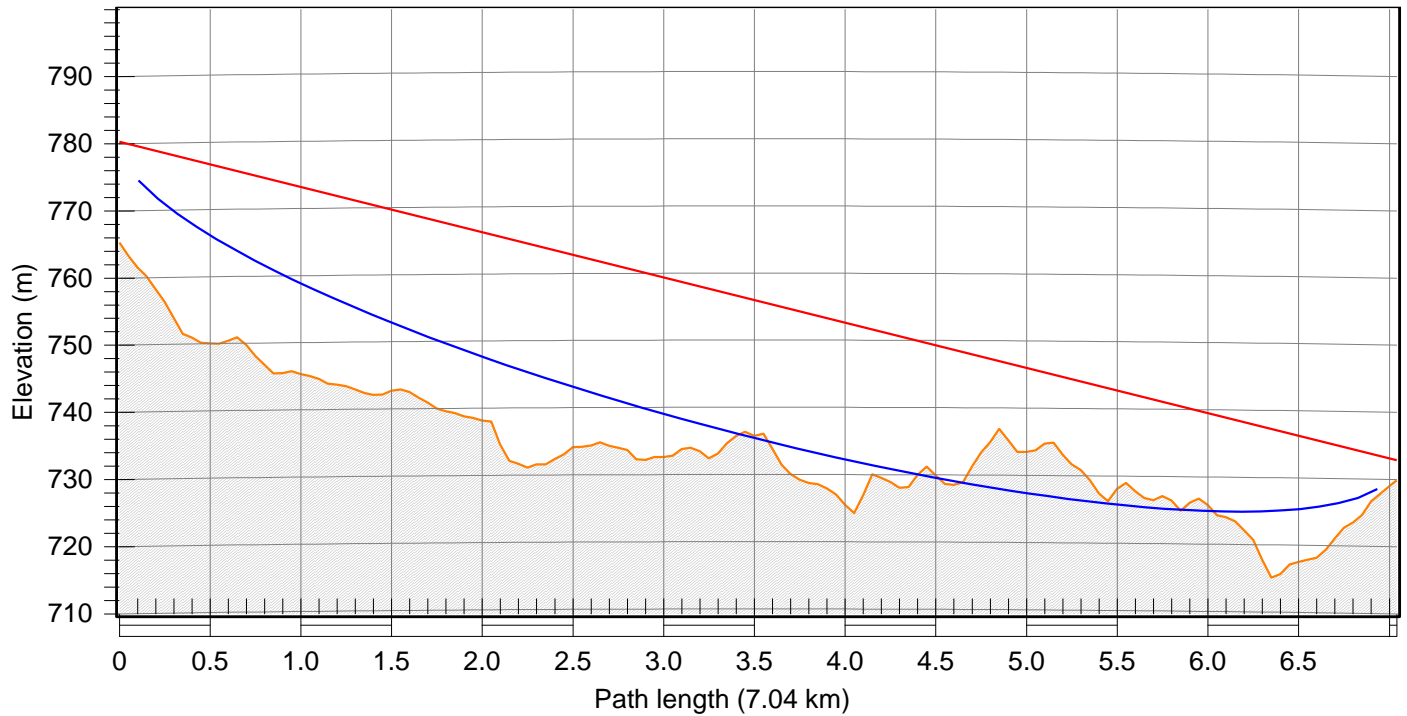
Transmission summary (Punto A-Punto D.pl5)



F = 450.00 MHz K = 1.33 %F1 = 60.0

	Punto A	Punto D
Latitude	40 33 10.82 N	40 43 41.94 N
Longitude	003 53 56.37 W	003 42 40.31 W
True azimuth (°)	39.15	219.28
Antenna model	CAC2 (TR)	CAY+ (TR)
Antenna gain (dBd)	5.85	5.85
Antenna height (m)	15.00	3.00
Antenna azimuth (°)	310.00	220.00
TX line model	ECOFLEX 10	ECOFLEX 10
TX line length (m)	20.00	7.00
TX line loss (dB)	1.82	0.64
TX loss (dB)	4.69	0.64
RX loss (dB)	4.69	0.64
Diffraction loss	3.25	
Radio model	SATELLAR XT 16-QAM SATELLAR XT 16-QAM	
TX power (dBm)	30.00	30.00
ERP (dbm)	34.03	35.21
ERP (watts)	2.53	3.32
Receive signal (dBm)	-86.26	-86.26
Receive signal (µv)	10.88	10.88
Thermal fade margin (dB)	24.74	24.74
Annual location availability (%)	100.00000	100.00000

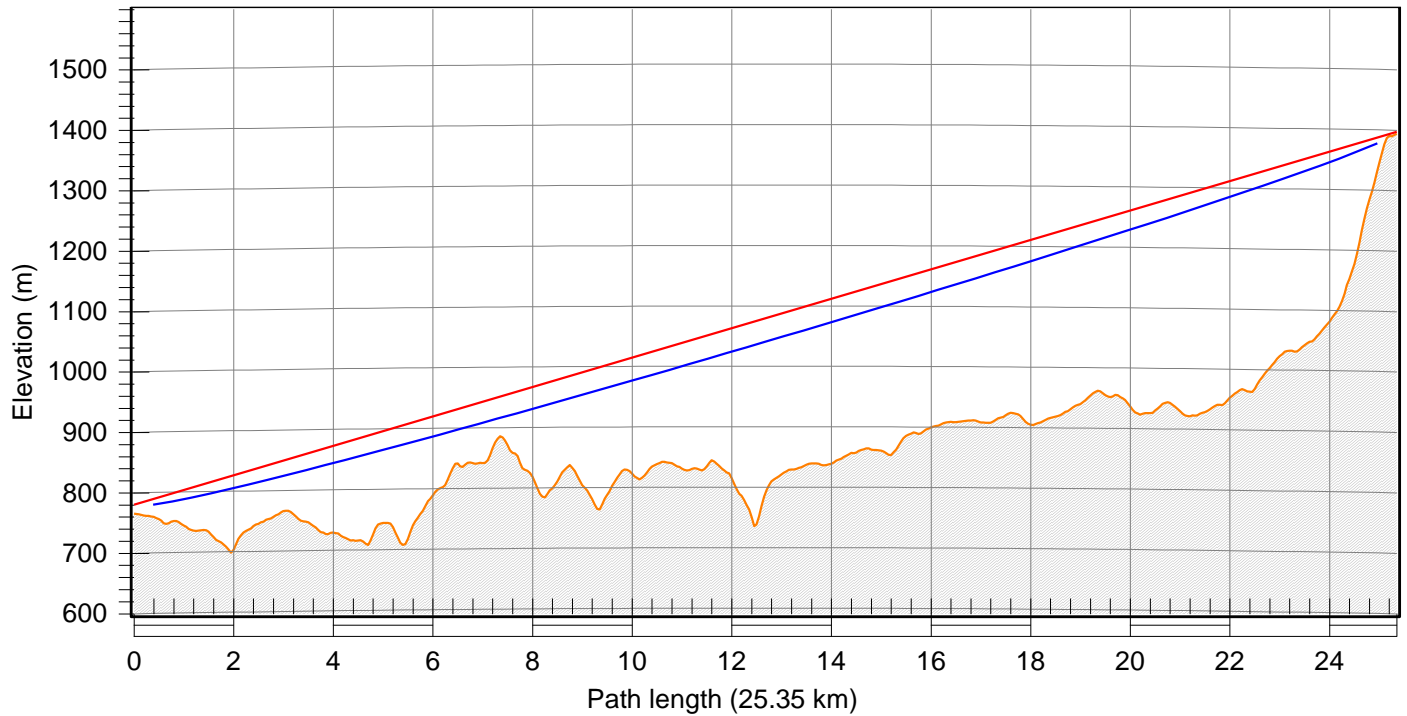
Transmission summary (Punto A-Punto C.pl5)



F = 450.00 MHz K = 1.33 %F1 = 60.0

	Punto A	Punto B
Latitude	40 33 10.82 N	40 26 43.40 N
Longitude	003 53 56.37 W	003 44 04.22 W
True azimuth (°)	130.55	310.65
Antenna model	CAC2 (TR)	CAY+ (TR)
Antenna gain (dBd)	5.85	5.85
Antenna height (m)	15.00	3.00
Antenna azimuth (°)	310.00	340.00
TX line model	ECOFLEX 10	ECOFLEX 10
TX line length (m)	20.00	7.00
TX line loss (dB)	1.82	0.64
TX loss (dB)	10.91	2.07
RX loss (dB)	10.91	2.07
Diffraction loss	4.57	
Radio model	SATELLAR XT 16-QAM SATELLAR XT 16-QAM	
TX power (dBm)	30.00	30.00
ERP (dbm)	34.03	35.21
ERP (watts)	2.53	3.32
Receive signal (dBm)	-84.06	-84.06
Receive signal (µv)	14.00	14.00
Thermal fade margin (dB)	26.94	26.94
Annual location availability (%)	100.00000	100.00000

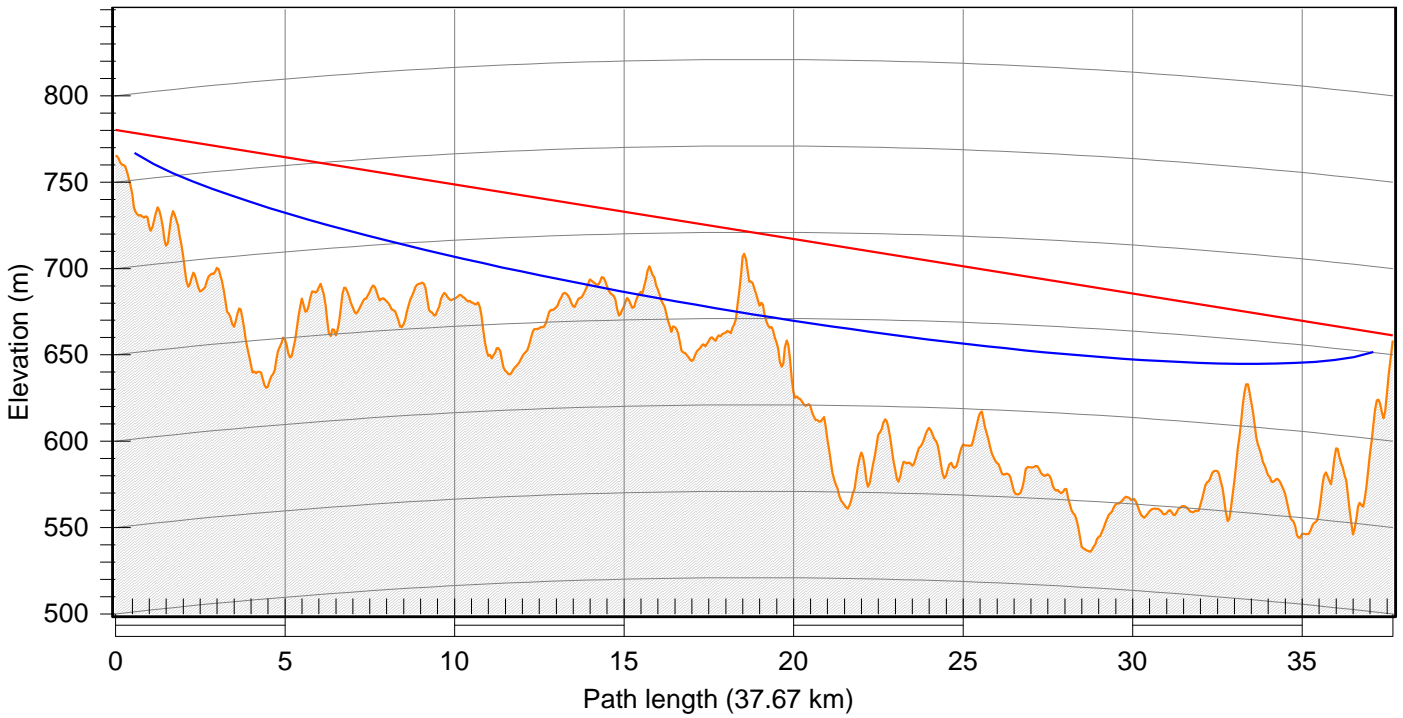
Transmission summary (Punto A-Punto D.pl5)



F = 450.00 MHz K = 1.33 %F1 = 60.0

	Punto A	Punto D
Latitude	40 33 10.82 N	40 43 41.94 N
Longitude	003 53 56.37 W	003 42 40.31 W
True azimuth (°)	39.15	219.28
Antenna model	CAC2 (TR)	CAY+ (TR)
Antenna gain (dBd)	5.85	5.85
Antenna height (m)	15.00	3.00
Antenna azimuth (°)	310.00	220.00
TX line model	ECOFLEX 10	ECOFLEX 10
TX line length (m)	20.00	7.00
TX line loss (dB)	1.82	0.64
TX loss (dB)	4.69	0.64
RX loss (dB)	4.69	0.64
Diffraction loss	3.25	
Radio model	SATELLAR XT 16-QAM SATELLAR XT 16-QAM	
TX power (dBm)	30.00	30.00
ERP (dbm)	34.03	35.21
ERP (watts)	2.53	3.32
Receive signal (dBm)	-86.26	-86.26
Receive signal (µv)	10.88	10.88
Thermal fade margin (dB)	24.74	24.74
Annual location availability (%)	100.00000	100.00000

Transmission summary (Punto A-Punto E.pl5)



F = 450.00 MHz K = 1.33 %F1 = 60.0

	Punto A	Punto E
Latitude	40 33 10.82 N	40 20 13.73 N
Longitude	003 53 56.37 W	004 14 29.38 W
True azimuth (°)	230.59	50.37
Antenna model	CAC2 (TR)	CAY++++ (TR)
Antenna gain (dBd)	5.85	9.85
Antenna height (m)	15.00	3.00
Antenna azimuth (°)	310.00	51.00
TX line model	ECOFLEX 10	ECOFLEX 10
TX line length (m)	20.00	7.00
TX line loss (dB)	1.82	0.64
TX loss (dB)	3.80	0.64
RX loss (dB)	3.80	0.64
Diffraction loss	6.74	
Radio model	SATELLAR XT 16-QAM	SATELLAR XT 16-QAM
TX power (dBm)	30.00	30.00
ERP (dbm)	34.03	39.21
ERP (watts)	2.53	8.34
Receive signal (dBm)	-88.35	-88.35
Receive signal (µv)	8.55	8.55
Thermal fade margin (dB)	22.65	22.65
Annual location availability (%)	100.00000	100.00000