Guide for filling out the VHF/UHF/SHF Propagation Verification Claim Form.

Band: In wavelength.

Propagation mode: Line of sight (LOS), Aurora, EME, F2, Tropospheric ducting or scatter, Rain scatter, surface reflection and Meteor scatter. (See on page-2 at 7)

QSO QTH: Mountain name, Place name, Trig name (specify)

LAT. LONG: Latitude and Longitude in degrees, minutes and seconds.

Grid Locator: Maidenhead locator.

Elevation: Above sea level in meters.

Location info: Mountain top, Hill side, Trig point, Car park, Bush hut.

NOTE: If the following is not known then estimate values.

Antenna/Gain: Type of antenna and estimated gain in dBd.

TX freq: Specify in megahertz.

TX type: Commercial (model number) or Home brew, Converter to commercial IF.

TX description: Description like 3456 MHz "SSB Electronics" converter from 144 MHz IF.

TX power: Specify in watts, or dBm.

Feedline loss: Specify loss in dB or give cable type and length.

Modulation type: Specify SSB, CW, MCW, NB-FM, WB-FM, FM/ATV, VSB and Digital Voice (DV) (Specify type from Page-2 at 11)

RX freq: Specify in megahertz.

RX type: Commercial (model number) or Home brew, Converter to commercial IF.

RX description: Description like 3456 MHz "SSB Electronics" converter to 144 MHz IF.

Feedline loss: Specify loss in dB (or give cable type and length)

Noise figure: Specified in dB above the perfect noise less receiver, which would add no extra noise to the signal received. Can be N/A or unknown.

RX bandwidth: 3 KHz SSB, 500 Hz CW filter, 12-15 KHz for NB-FM (specify)

RX sig/noise ratio: If a signal is equal to the noise this ratio is unity. If the signal received is 20dB above the noise, and the RX noise figure is 2dB the ratio is 18dB.

Additional info: This could include witness operators, signal strength reports, video and audio recordings, type of power supply system, time taken or days on site. Can be N/A or unknown.

Weather: Could include temperature, cloud cover, misty, windy or dusty.

Notes:

1) NZ 70cm band has now been reduced from 420-450 MHz to 430-440 MHz. The Video (ATV Record) of 31/01/1982 on 425 MHz lists as a 70cm band Record.
2) NZ 13cm band has now been reduced from 2300-2450 MHz to 2396-2450 MHz. The Records of 31/01/1982 and 18/10/1987 list as 13cm Records. This band is now known as 12cm band.
3) NZ 50 cm band was reduced and changed from 610-622 MHz to 614-622 MHz. The Record of 23/04/1988 lists as a 50 cm Record. This band no longer exists for amateur use.
4) /p means portable operation.
5) /# means operating in another state or district.
6) 32 cm 925 MHz ZL2TRV-ZL1TBG 30/11/2002 620 kms with high power permit.
7) Propagation Modes: Line Of Sight (LOS), Tropo Duct (TD), Sporadic E (TD/E), Tropo Scatter (TS), Meteor Scatter (MS), F2-Layer (F2) Earth Moon Earth (EME), Trans Equatorial Propagation (TEP), Precipitation Scatter (PS), Field Aligned Irregularities (FAI), Aurora and Aurora E (A/AE), E-Layer Back Scatter (EBS), F-Layer Refraction, Diffraction (D), Side Scatter (FR/FD/FS), Knife Edge Diffraction (KED), Solid Object Refraction (SOR), Surface Effect Reflection (SER), D/E-Layer Ionospheric Forward Scatter.
8) Sporadic E is a propagation mode that is difficult to verify and is therefore listed as a TD/E unless weather conditions across the path rule out TD and then E-Skip is the only possible mode.
9) 5760 MHz is traditionally known as 6cm band in many countries but listed as 5cm in NZ. Some other countries also list as 5cm being the calculated wavelength associated with this frequency.
10) Sub-Islands such as Kermadec, sub Antarctic Islands and Chatham Island are listed as "Sub."
11) Digital Voice (DV) modes are listed as either, D-Star, DMR, NXDN, YSF, or P25.