

## RECOMMENDATION ITU-R P.1511

**Topography for Earth-to-space propagation modelling**

(Question ITU-R 202/3)

(2001)

The ITU Radiocommunication Assembly,

*considering*

- a) that information on ground topography is needed for the prediction of attenuation and scattering;
- b) that the information is needed for all locations of the globe, especially when regional or continental calculations are necessary,

*recommends*

**1** that the data in Annex 1 be used to obtain the height above mean sea level when no local data are available or when no data with a better spatial resolution is available. For easy reference the data are also shown in Fig. 1.

## ANNEX 1

**1 Topography**

The data file TOPO0DOT5.TXT contains the height (km) above mean sea level of the surface of the Earth with a resolution of  $0.5^\circ$  in both latitude and longitude. The companion data files TOPOLAT.TXT and TOPOLON.TXT contain respectively the latitudes and longitudes of the corresponding entries (gridpoints) in data file TOPO0DOT5.TXT.

The data is from  $0^\circ$  to  $360^\circ$  in longitude and from  $+90^\circ$  to  $-90^\circ$  in latitude. For a location different from the gridpoints, the height above mean sea level at the desired location by performing a bi-cubic interpolation on the values at the sixteen closest grid points.

The data files can be obtained from the ITU Radiocommunication Bureau (BR). Information on coastlines and country borders can be obtained from the ITU Digitized World Map, also obtainable from BR.

FIGURE 1  
Height above mean sea level (km)

