HW # 4
CLIM/GGS-319

The Figure below shows terrestrial emission spectra measured from a satellite over northern Africa, the Mediterranean Sea, and Antarctica. The spectra are reported as a function of wavenumber, which is the inverse of wavelength.

1) Explain the dips at 600-700 cm^{-1} (14-16 μm) and 1000-1050 cm^{-1} (9.5-10 μm) in the emission spectra for the Sahara and Mediterranean Sea.
2) Why do these dips become bumps in the emission spectrum for Antarctica?

