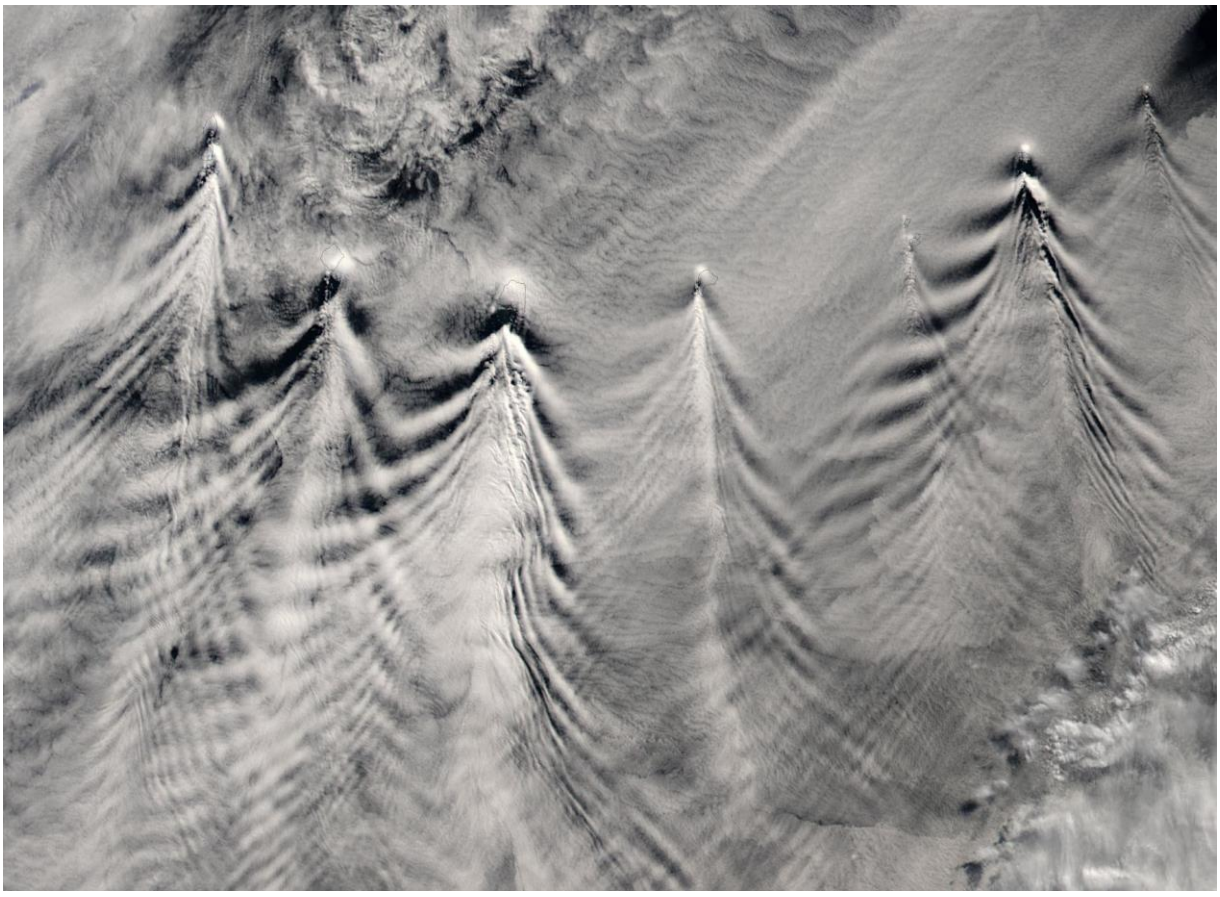
INSTITUTO DOM LUIZ

IDL Meetings

The impact of mountain waves in the atmosphere at local to global scale



Wednesday 12th April 13:00 - IDL Library, room 1.1.36

Miguel Teixeira, University of Reading

Despite their relatively small scales, mountain waves have important impacts on atmospheric dynamics and physics. These impacts can be local, such as the generation of clear-air turbulence (CAT) by wave breaking, downslope windstorms and the formation of rotors in the lee of mountains or hills; or global, such as the deceleration of the mid-latitude circulation, the modulation of temperatures in polar regions, or ozone transport and depletion.

This talk will begin with the illustration of the importance of mountain waves, and continue with examples of ongoing work at the University Reading to study the influence of vertical wind shear on these waves, and the implications for drag parameterization and CAT forecast.