



## **Gravity Wave Propagation and Effects on the Middle Atmosphere Circulation analysed with different Parameterisation Schemes**

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In order to study numerically gravity waves in the middle atmosphere two alternative parameterisations were used in the mechanistic 3D model COMMA-LIM (COlogne Model of the Middle Atmosphere - Leipzig Institute for Meteorology). While the former standard version was based on the Lindzen parameterisation which treats waves as monochromatic disturbances, the new scheme based on that of Warner and McIntyre considers a spectrum of gravity waves. The different effects on the middle atmosphere in terms of the gravity waves drag and the derived eddy diffusion coefficient are discussed.