



## **Approach for the parameterization of jet-generated inertia-gravity waves**

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Unbalanced flows may spontaneously emit inertia-gravity waves – a process which is not yet fully understood. Observations and simulations suggest that jet exit regions are preferred locations. For an empirical parameterization of wave amplitude and wave number, the Lagrangian deceleration is analyzed in terms of the cross-wind ageostrophic flow. We make two assumptions: (1) The flow components which are faster than the Coriolis parameter determine the amplitude and length, and (2) the direction of the wave number is upstream. This approach is applied to selected atmospheric datasets. The resulting wave packet characteristics can be used as input to a ray tracing algorithm.