



## **Boundary-layer instability in the rotating thermal annulus**

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Waves with periods short with respect to the inertial period are known to exist in the atmosphere (inertia gravity waves) and in the oceans (Poincaré waves). They have also been studied in the laboratory, both in the mechanically-forced and the thermally-forced rotating annulus. Their generation mechanism in the thermal annulus has not been well understood, however. We examine short period waves in a numerical model of the rotating annulus, and show how the results are consistent with those from earlier laboratory experiments. We then show how these waves are consistent with being inertia gravity waves generated by a thermal boundary layer instability.