



## **The Direct Stratosphere–Troposphere Connection**

**M. Ambaum** (1)

(1) Department of Meteorology, University of Reading

We will review some of the evidence for a direct connection of the stratosphere to the troposphere through potential vorticity inversion. This direct effect introduces medium range memory in the North Atlantic Oscillation and is therefore of great importance for our understanding of variability over the Atlantic on time scales of ten to twenty days. The memory is introduced because the stratosphere can only slowly respond to anomalous tropospheric circulation while the subsequent geostrophic adjustment to the changing stratosphere is effectively immediate. Some further evidence is shown that points to the importance of the stratosphere to the variability of the North Atlantic Oscillation.