The response of the Brewer-Dobson circulation to a quadruple CO$_2$ increase in WACCM. N. Calvo$^1$, D.R. Marsh$^{2,3}$, R. R. Garcia$^2$, G. Chiodo$^4$, L.M. Polvani$^5$

1. Universidad Complutense de Madrid. 2. ACOM/NCAR, USA. 3. University of Leeds, UK. 4. ETH, Switzerland. 5. Columbia University, USA

©All rights reserved.

Tropical Upwelling in the Shallow Branch

Change in tropical w* in the 4xCO2 simulation wrt picontr.

Change in tropical w* in the 4 x CO2 simulation with fixedSSTS wrt picontr.

Change in tropical surface $T$

100 hPa

yr

Tropical Upwelling in the Deep Branch

1 hPa

yr