Supporting Information for "A QBO cookbook: Sensitivity of the Quasi-Biennial Oscillation to resolution, resolved waves, and parameterized gravity waves"

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Contents of this file

Introduction

The supplemental material contains additional three figures analogous to Figure 3 in the main body but for additional integrations. Supplemental Figure 4 compares the resolved wave power spectrum in our model to reanalysis data.

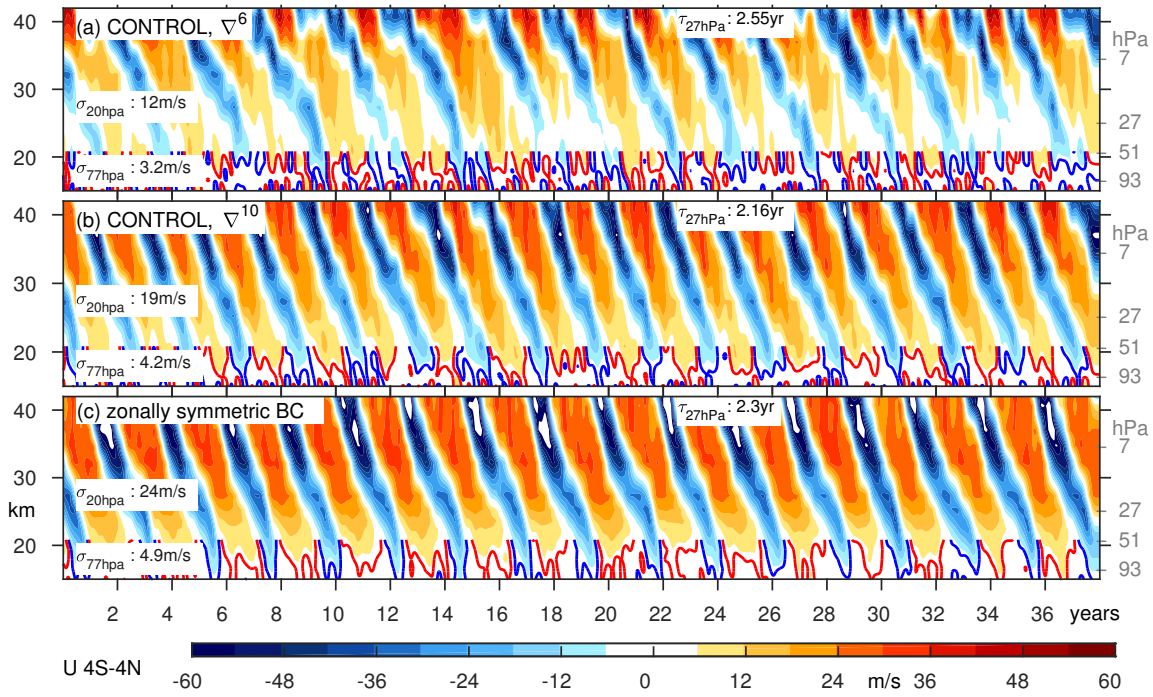

Figure S1. As in Figure 3 but exploring the role of hyperdiffusion of small scale resolved waves and stationary waves.

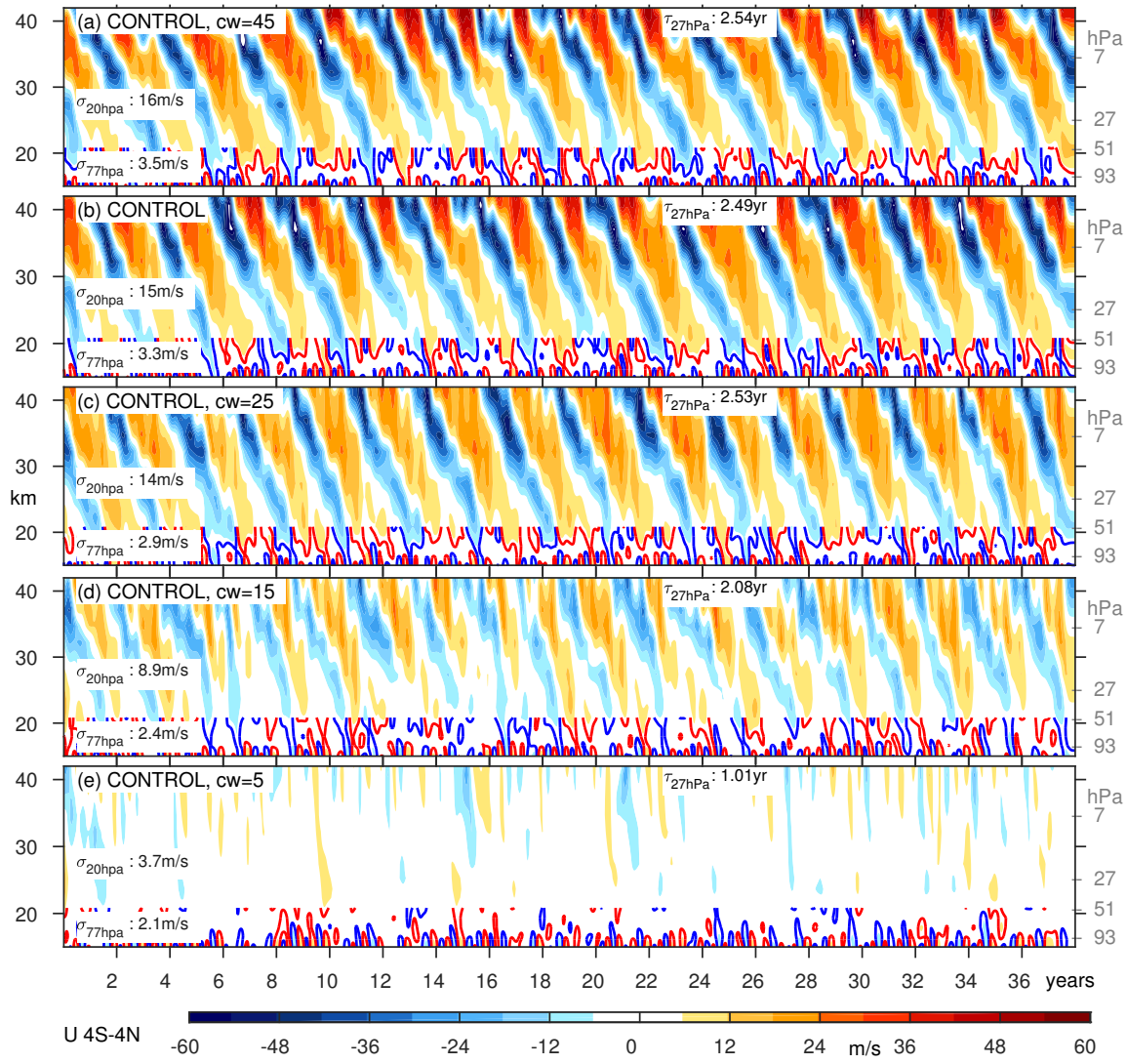

Figure S2. As in Figure 3 but exploring the role of the spectral width of the parameterized gravity wave forcing, with a spectral width in the tropics of (a) 45m/s; (b) 35 m/s; (c) 25m/s; (d) 15m/s; (e) 5m/s.

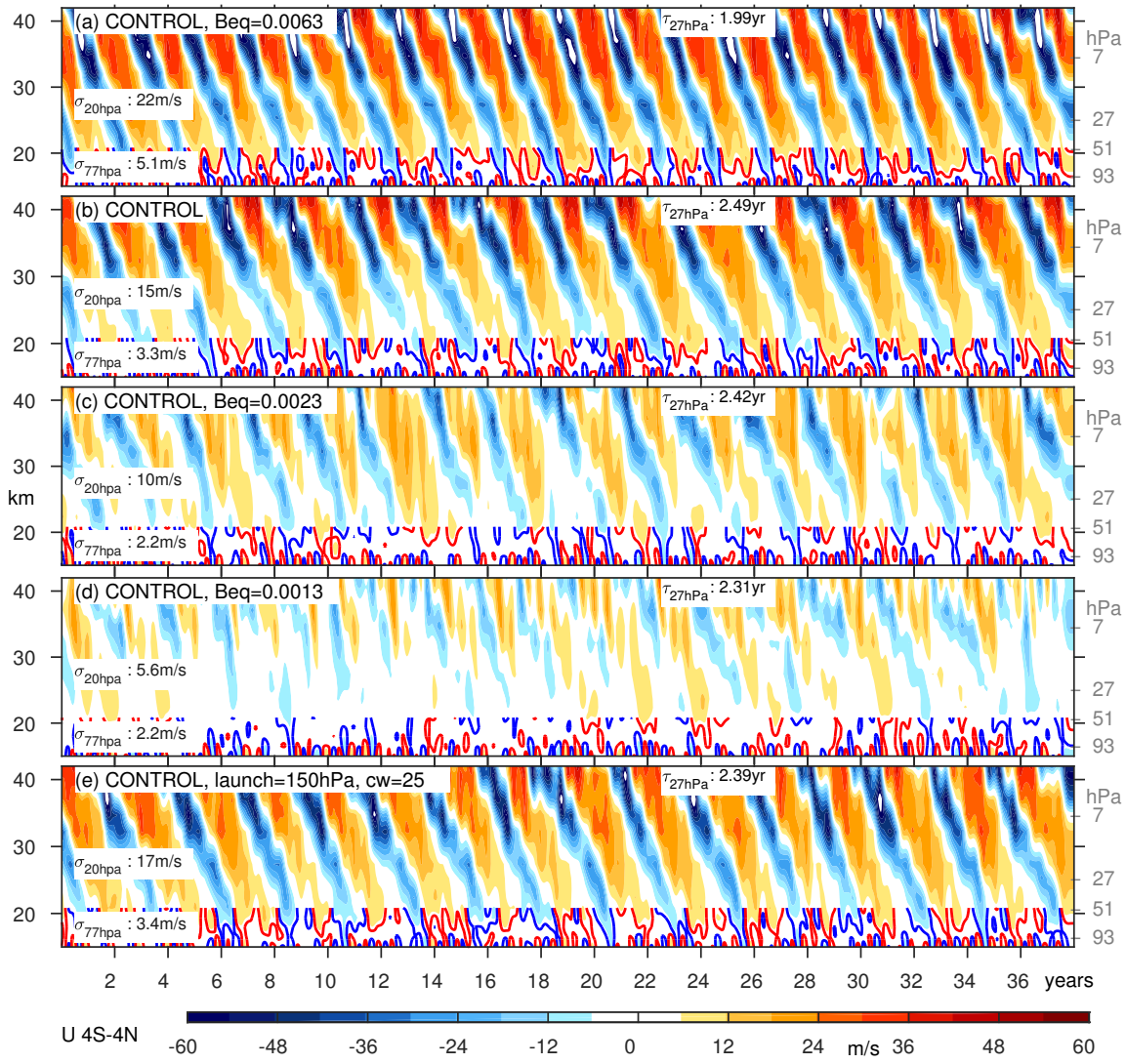

Figure S3. As in Figure 3 but exploring the role of the (a-d) amplitude of the parameterized gravity waves and (e) raising the launch height.

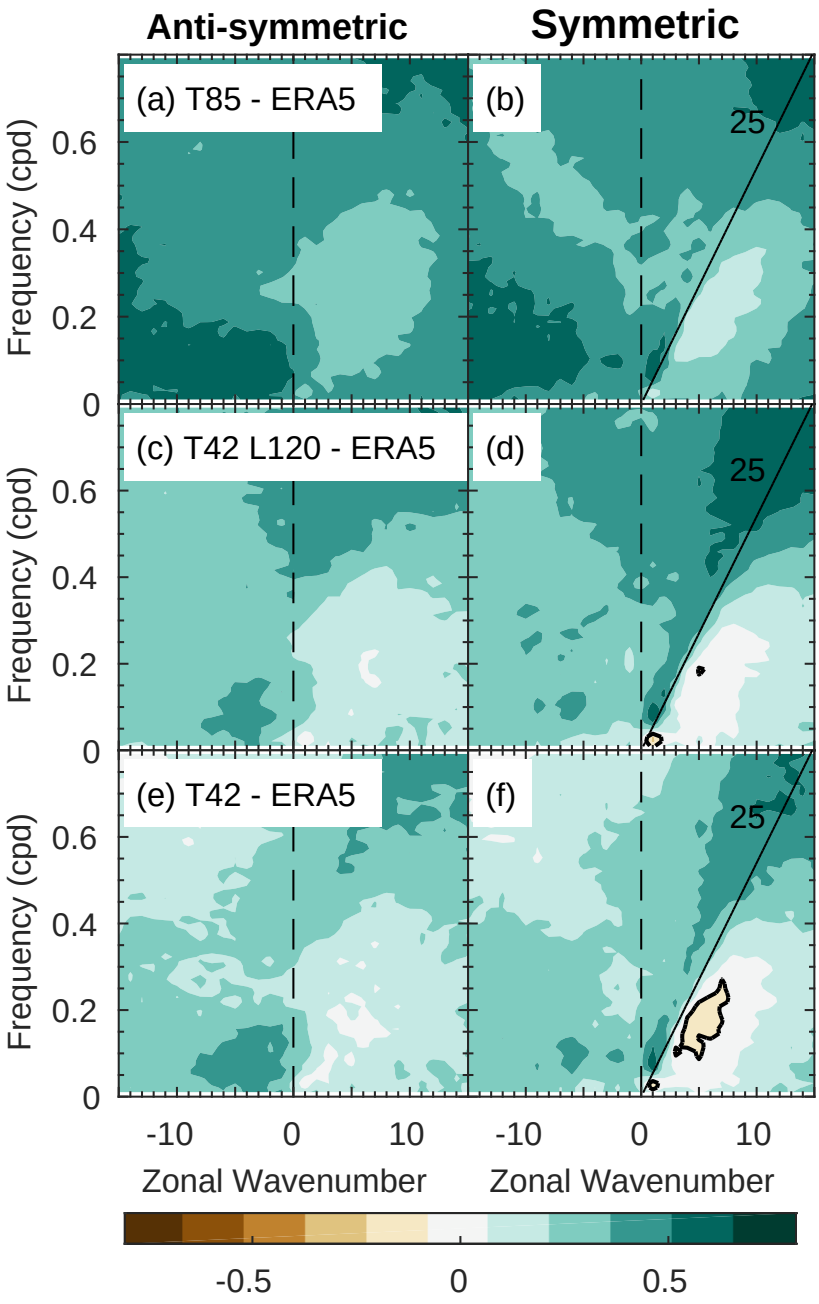

Figure S4. Difference of the log_{10} of the raw spectrums in MiMA shown in Figure 5c-h with that in ERA5 in Figure 5ab.