



Influence of pan-oceanic connections on tropical climate during Eocene-Paleocene

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In order to understand the emergence of warm pools and the effect of continental configurations and oceanic pathways on the climate mean state and its variability, the stability structure of a conceptual two basin coupled tropical atmosphere-ocean model (i.e., huge Pacific and small Atlantic oceans) with both atmospheric and oceanic inter-basin coupling is analyzed using a conventional bifurcation/continuation package. The channel effects between two basins are used as a control parameter for the stability analysis. The results elucidate conceptually the past behavior of tropical climates and their modulation via tectonic-scale shifts of the continents.