



Insignificant Effect of Tibetan Plateau on ITCZ Climatology

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In my study, the effect of the Tibetan Plateau (TP) on the Intertropical Convergence Zone (ITCZ) is investigated using a coupled climate model. Removing the TP does not cause significant changes in the mean location and intensity of ITCZ. Specifically, the cross-equator atmosphere heat transport does not alter much with/without the TP, and thus the energy balance between the two hemispheres does not have to adjust by displacing the ITCZ. The Hadley cell is only slightly weakened in summer and nearly unchanged in winter without the TP, which eventually does not affect the ITCZ intensity. The ITCZ climatology is also not affected much even when a slab global land topography is used in the model.