



Climate change consequences on vegetation distribution and net primary production in china

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We studied the consequences of climate change on vegetation distribution and net primary production (NPP) in china, with a dynamic vegetation model Lund-Potsdam-Jena DGVM based on $0.5^{\circ} \times 0.5^{\circ}$ grid cells. We chose two period of 1991~2000 and 2011~2020 in order to find the different consequences of real climate and projected change with daily NCEP reanalysis data and Echam5 model A1B scenarios respectively. The simulation results showed:(1) the increase of the average NPP is about 16% for the period 2011~2020 in contrast to 1991~2000;(2) obvious northward shifts of the boreal, temperate deciduous and evergreen and tropical forests, a large expansion of tropical dry forest and reduction of tundra on the Tibetan Plateau.