



## **Climate change consequences on vegetation distribution and net primary production in China**

Mao Huiqin, Yan Xiaodong

Institute of Atmospheric Physics, Chinese Academy of Sciences

The vegetation distribution and net primary production (NPP) in China are simulated with a dynamic vegetation model Lund2Pot sdam2J ena DGVM based on grid cells1 Result s show that simulated spatial and temporal dist ribution pat terns of vegetation are consistent with observations , and simulated leaf area index is consistent with remote sensing ret rieval data1 The annual NPP and it s dist ribution in China are also well simulated1Furthermore , we found that precipitation is the primary climate factor that affect s NPP1 However , in arid and semi2 arid areas , temperature is remarkable correlated with NPP1 It is indicated that the L PJ DGVM can successfully sim2ulate the effect s of climate on inter2annual vegetation dynamics and NPP , which is useful for further study on inter2actions between vegetation and climate1.