地理学报(英文版) 2005年第15卷第2期

Findings through the AsiaFlux network and a view toward the future

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The preliminary results of long-term CO2 flux measurements at forest sites in East Asia are explained and compared with each other. The features of seasonal variation of CO2 fluxes are different among deciduous-broadleaf, evergreen-coniferous, deciduous-coniferous and tropical forests in East Asia, and the causes of difference are discussed. The integrated yearly NEP (net ecosystem production) estimated from the CO2 flux by eddy covariance method in various forests of East Asia has a notable difference in the range of 2 to 8 tC ha-1 yr-1. The main factors of this difference are the annual mean temperature and tree species. Furthermore, the remaining issues are discussed, such as the quantitative estimation of the CO2 flux by the eddy covariance method and the synthetic analysis of the carbon budget under collaborations with biological survey.

Paper（PDF）

关键词： net ecosystem production; forest sites; carbon budget; synthetic analysis doi: 10.1360/gs050202