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Second Annual Meeting
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Association of Scientific
Hydrology



Forest, water and climate interactions in SE Asia

Session HS3

Forests once covered most of SE Asia. The accelerating rate of conversion of natural forests to other land-uses is changing the rate of regional evapo-transpiration, thereby affecting river regimes and the transfer of vapour to the atmosphere. As the 'Maritime Continent' of SE Asia has the highest rate of vapour flux to the upper atmosphere, the forest loss may be impacting regional climate and global atmospheric circulation. There is, however, considerable debate about the magnitude of land-use change impacts on tropical evapo-transpiration, effects of rain-forest loss on large-scale river behaviour and the accuracy of General Circulation Model (GCM) predictions of the SE Asian climate and the impacts of tropical deforestation. This session aims to bring together hydrologists and meteorologists undertaking work on hydrological and hydro-climatic impacts of forestry and forest conversion in SE Asia. Issues that might be addressed include: (a) the measurement and modelling of evapo-transpiration from tropical forests and converted land-uses, (b) forest microclimatology, (c) climate cycle and change impacts on river behaviour, (d) effects of forest removal on river flashiness and water resources, (e) separation of forestry from climate effects on hydrological behaviour, (f) possible impacts of land-use change on the reorganization of precipitation patterns, (g) GCM prediction of tropical rainfall, (h) tropical land-use parameterisation within GCM models, (i) tropical deforestation simulations of GCMs.

If you would like to submit an abstract please send an email to one of the organisers of HS3: Dr Nick A Chappell of Lancaster University (UK): n.chappell@lancaster.ac.uk, or Dr Kawi Bidin of Universiti Malaysia Sabah: kbidin@ums.edu.my, or Dr Mike Bonell of UNESCO Paris: m.bonell@unesco.org, or Dr Giuseppe Arduino of UNESCO Jakarta: g.arduino@unesco.org.