Present situation of snow-cover/snow-accretion model applicable to forest

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Snow Model Intercomparison Project for forest snow processes (SnowMIP2) has been conducted. Through this project, we surveyed the present situation of snow model applicable to forest regions. Thirty three models participated in SnowMIP2. Although the purposes of snow model are various, process study is stressed rather than forecast in the participant modes in this project. According to questionnaire answers for 'what are the main applications of the model?', hydrological research, meteorological research and climate modelling are 29, 22 and 18, respectively. Snow accretion corresponds to snow interception process in hydrology, it means decreasing of water resources. In the intercomparison project, snow cover, snow accretion, energy/water fluxes and runoff were calculated with given meteorological data and vegetation parameters in/out forests of Switzerland, Canada, USA, Japan and Finland. Although results depend on sites, model outputs of the snow water equivalent vary widely both in and out of the forests. However, the average of all models in snow water equivalent indicates seasonal change similar to the observation.