
[JJ] Evening Poster | A (Atmospheric and Hydrospheric Sciences) | A-CG Complex & General

[A-CG40]Material Circulations in Land Ecosystems

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Thu. May 24, 2018 5:15 PM - 6:30 PM Poster Hall (International Exhibition Hall7, Makuhari Messe)

Terrestrial ecosystem influences global climate through circulations of water, carbon, and nitrogen between land surface and atmosphere. For better understanding of those behaviors, a great effort has been paid for developing varieties of approaches and techniques such as biometric survey, eddy and chamber methods, near and satellite remote sensing, biosphere modeling and so on.

In particular, the JapanFlux, founded in 2006 as a researchers network of CO₂, H₂O and other trace gas flux measurement, has promoted the multi-disciplinary studies not only for flux measurement community, but also for remote sensing and biosphere modeling communities. Moreover, the Research-Group-on-Integrated-Land-Processes, which was founded in 2006, also has contributed to build networks between Japanese researchers to better understanding of physical and biological processes on interactions between terrestrial surface and atmosphere.

This session unites those multi-disciplinary activities, and promotes the oral and poster presentations on the role of terrestrial ecosystem in material circulations of water, carbon, nitrogen, energy and other substances by any approaches and techniques. This session takes over the former session in last year: A-CG47.

[ACG40-P04]Soil respiration measurements in managed and unmanaged deciduous forests in central Japan

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Keywords:satoyama management, deciduous forest, carbon balance

Vegetation management of deciduous broad-leaved forests near the human settlement supports conservation of good living environment and biodiversity. However, effects of such managements on the carbon balance of forests (especially the forest floor) and functions of greenhouse-gases absorption are unclear. We aim to obtain the knowledge about the relation of vegetation management and CO₂ (greenhouse gas) absorption function of deciduous broad-leaved forests. Vegetation managements contain undergrowth trimming, thinning, and removal accumulated leaf litter. Here, we examined the influence undergrowth trimming on soil respiration in a managed deciduous broad-leaved forest in central Japan.