

Wintersemester / Winter Term 2014/2015

BayCEER Kolloquium

Vortragsreihe Ökologie und Umweltforschung
Lecture series in Ecology and Environmental Research

Donnerstag 11.12.2014, 12:00 Uhr, H6

Anschließend Postkolloquium mit Mittagsimbiss im Foyer H6

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Secondary organic aerosol formation from stress-induced biogenic emissions and possible climate feedbacks

Secondary organic aerosol is formed by oxidation of biogenic volatile organic compounds. Besides constitutive emissions like monoterpenes trees emit sesquiterpenes, methyl salicylic acid, green leaf volatiles and other volatile organic compounds when they are exposed to e.g. biotic stressors.

As climate warming may deteriorate the living conditions of trees, which could lead to altered stress induced emissions, it is important to understand how these emissions affect secondary organic aerosol formation and aerosol climate couplings. Biotic stress that increases biogenic emissions thus supports negative climate feedback. This may be effective already today. But heat and drought can turn the negative feedback into a positive feedback in forests dominated by de-novo emitters.

Climate change will affect stress induced emissions from vegetation, these emissions and the secondary organic aerosol they induce have to be considered in future climate scenarios.



Do. / Thu. 12 st
Gebäude/Building
GEO
Hörsaal/Lecture hall
H6

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