

Open Seminar Series

Geoscience & Remote Sensing

Gert Jan Steeneveld, WUR
November 29th, 2016
12:40-13:30
CiTG room E



Urbanization affects human thermal comfort and health, especially for vulnerable groups such as the elderly and people with established health issues. Physical properties of the urban fabric often induce worse thermal human comfort, work productivity and public health than on the surrounding countryside, particularly on hot summer days. To facilitate meaningful weather forecasts for the urban environment, we have developed a high-resolution numerical weather prediction system for human thermal comfort in urban areas. The forecasting system is based on the WRF meso-scale model which is run with a numerical grid and landuse map of 100 meter resolution.

A full summer season of WRF forecasts is evaluated against a network of observations in Amsterdam. Moreover, first results will be presented on data-assimilation of urban weather observations into the forecasting system.