

Summer short course from 2nd to 4th July 2018
Louvain-la-Neuve, Belgium

Supervised characterization of land cover and land use using optical time-series data

by **Professor Matthew C. Hansen**
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Content

Algorithms, feature space, and training data elements of the supervised characterization of land cover and land use extent and change will be examined. Newer machine learning methods will be compared to traditional algorithms. Methods for deriving feature spaces derived from multi-temporal, multi-spectral data will be presented, as will be strategies for collecting training data. Validation will be emphasized, for both accuracy assessment and area estimation. Various applications will be illustrated, all with a focus on large area studies.

Bio



Prof. Matthew Hansen is a world's leading remote sensing scientist with a research specialization in large area land cover and land use change mapping. His Global Land Analysis and Discovery lab (glad.umd.edu) is focused on developing improved algorithms, data inputs and thematic outputs which enable the mapping of land cover change at regional, continental and global scales. Exhaustive mining of the Landsat archive has been used to map forest disturbance at the global scale (e.g. *High-Resolution Global Maps of 21st-Century Forest Cover Change, Science, 2013*). Improving global cropland monitoring capabilities is another research focus, leading to global soybean cultivated area estimation using MODIS, Landsat and RapidEye.

Admission and registration

Remote sensing basics are prerequisite to attend this summer course. The attendance to three full days is mandatory for all participants. The number of seats available is limited and the participants are invited to register at the earliest using the following form <https://goo.gl/forms/riv03JyhVFM0OKHP2>. No fee is required to attend the short course and sandwiches will be supplied at lunchtime. Participants cover their own travel and housing expenses, visa fees and pocket money. A certificate of attendance from the Université catholique de Louvain will be delivered to all participants attending the short course.

Organization and location

This short course is organized by the Research Lab in Environmetry and Geomatics (Pr. P. Defourny) with the support of Lifewatch-WB infrastructure and UCLouvain. The class is scheduled from 9:00 to 17:15 in the SUD 01 auditorium located in Université catholique de Louvain's premises in Croix du Sud, Louvain-la-Neuve (Parking 20 – Biéreau).

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