

Course Title

Modeling Agricultural Watersheds using ArcAPEX

Date and Place

September 17-18, 2018, The Vrije Universiteit Brussel (VUB), Belgium

Course Description

Modeling agricultural watersheds are a great challenge due to the complexity in human-lands-crops interactions occurring at the field scale. APEX was developed to evaluate various land management strategies considering sustainability, runoff, erosion, water supply and quality, soil organic carbon and soil quality, plant competition, weather, pests and economics. This course offers the basics of the APEX model for use in whole farm/small watershed management with hands-on exercises. The objective of the workshop is to introduce new users to the model, review necessary inputs, and familiarize with the ArcAPEX and other supporting tools for APEX.

Instructor

Jaehak Jeong, Texas A&M AgriLife Research jeongj@tamu.edu

Topics

- APEX Theory
- Model application case studies
- ArcAPEX Basics
- Watershed delineation
- Subarea delineation and stream network definition
- Preparation for climate data, soils, and other inputs
- Simulation of agricultural managements
- APEX Editor tool
- Sensitivity analysis using APEX-CUTE
- Manual calibration
- Automatic calibration using APEX-CUTE
- ArcAPEX hands-on practices
- Visualization and interpretation of APEX outputs

Notes

- Participants should bring their own laptop computers. If you need a computer provided, please contact us.
- Hardware/Software requirements: Windows 7 or higher, ArcGIS 10.3.1