Predicting soil erosion from fields and small catchments: The EUROSEM model

Introduction

The European Soil Erosion Model (EUROSEM) is a single-event, process-based model for predicting soil erosion by water from fields and small catchments. The model is based on a physical description of the erosion processes and operates for short time steps of about one minute.

Model Description

EUROSEM has a modular structure with each process described by a series of mathematical expressions. The water and sediment generated are routed over the land surface characterised as a series of interlinked uniform slope planes and channel elements.

New Developments

EUROSEM is currently being recoded into Delphi. The upgraded version of the model will incorporate a Graphical User Interface for Windows-based operating systems. New routines for infiltration, depression storage and crusting, together with a rainfall generator, will also be available. The new version of EUROSEM is due for release in October 2000.