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# Digging Deeper into Your Data.

Fully GIS integrated and easy to use.

## System requirements:

- > Windows® XP SP 2, Vista
- > ESRI ArcGIS with last Service Pack
- > ESRI® Spatial Analyst
- > ESRI.Net-Support

advangeo® is Winner of the GDI Sachsen e.V. GIS-Award 2009.

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DOVOC

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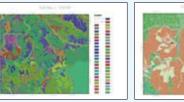
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## Prediction of Rainfall Generated Soil Erosion



### Source Data



Land Use Data

**Available Datasets** 

&

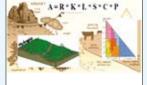
Terrain Model



Knowledge of **Controlling Parameters** 

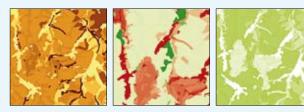
## Source Data Processing



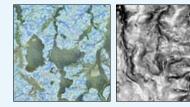


### **2** Model Input Data

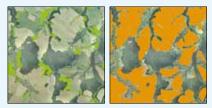
Soil Data



Soil Composition: Silt, Sand, Clay, Skeleton ...



Terrain Model: Slope, Flow Accumulation, Curvature ...



Land Use: Cropland, Grassland, Forest ...



> Damages to Infrastructure and Construction

**Process Features:** 

> Rainfall generated > Soil Erosion & Loss > Surface Water Pollution

> **Training Pattern:** Known Erosion Sites

**Controlling Parameters ③** Network Training **4** Validation  $\rightarrow$ **Model Output 6** Model Application **6** Presentation Simulation of Prevention Measures:

Adding of "New" Hedges as Flow Barriers

Without Hedgerows Adding Hedgerows With Hedgerows

Map of Erosion Probability