



GIS-based transport modelling for point and diffuse pollution sources

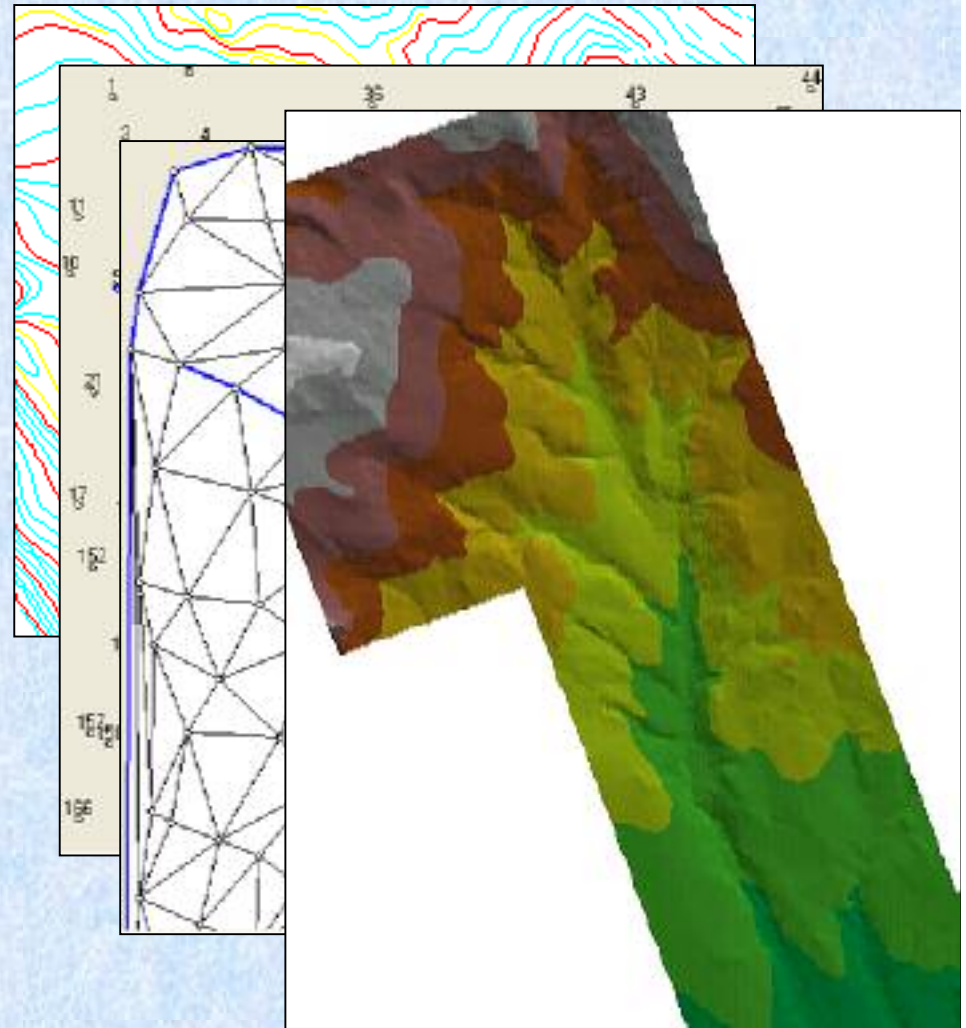
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www.digikom.hu



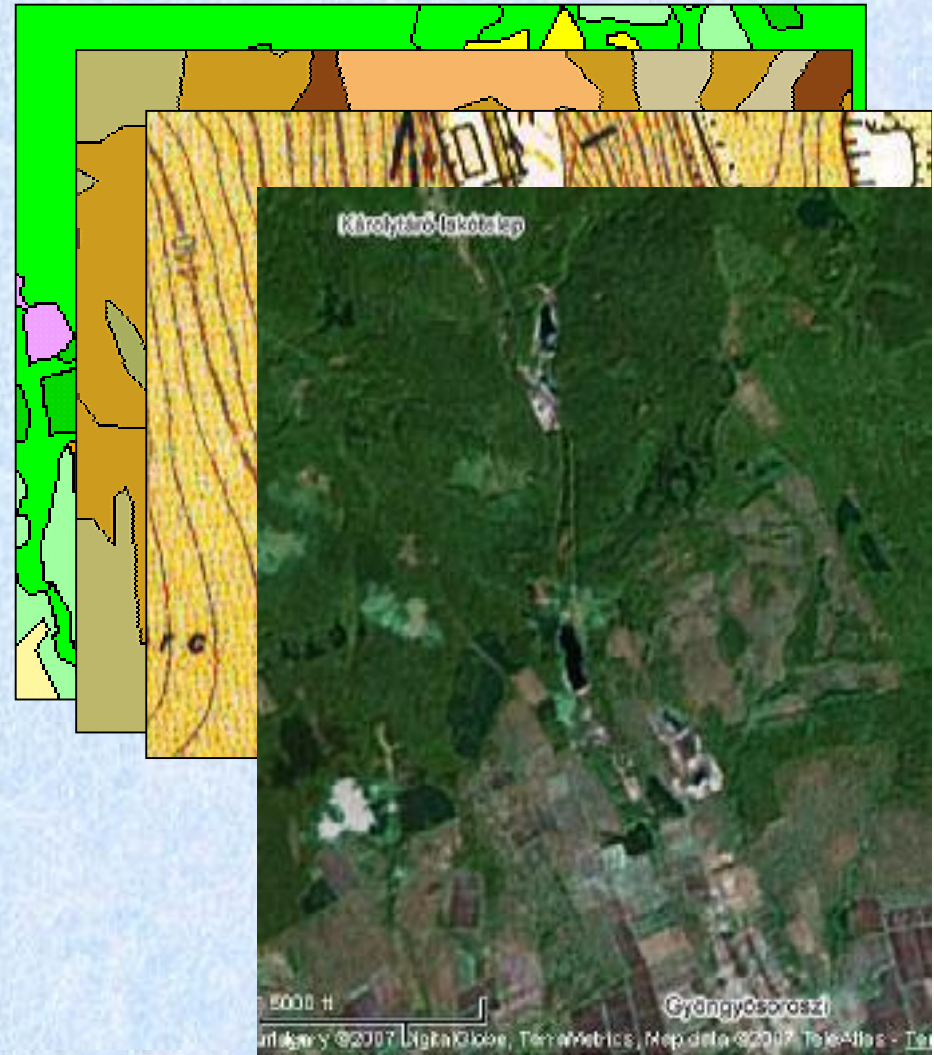
Map basis

- Digital Terrain Model
 - from contours
 - from scattered points
- Triangulation Irregular Network (TIN)
- Regular GRID
 - Interpolation
 - IDW
 - Kriging
 - Spline



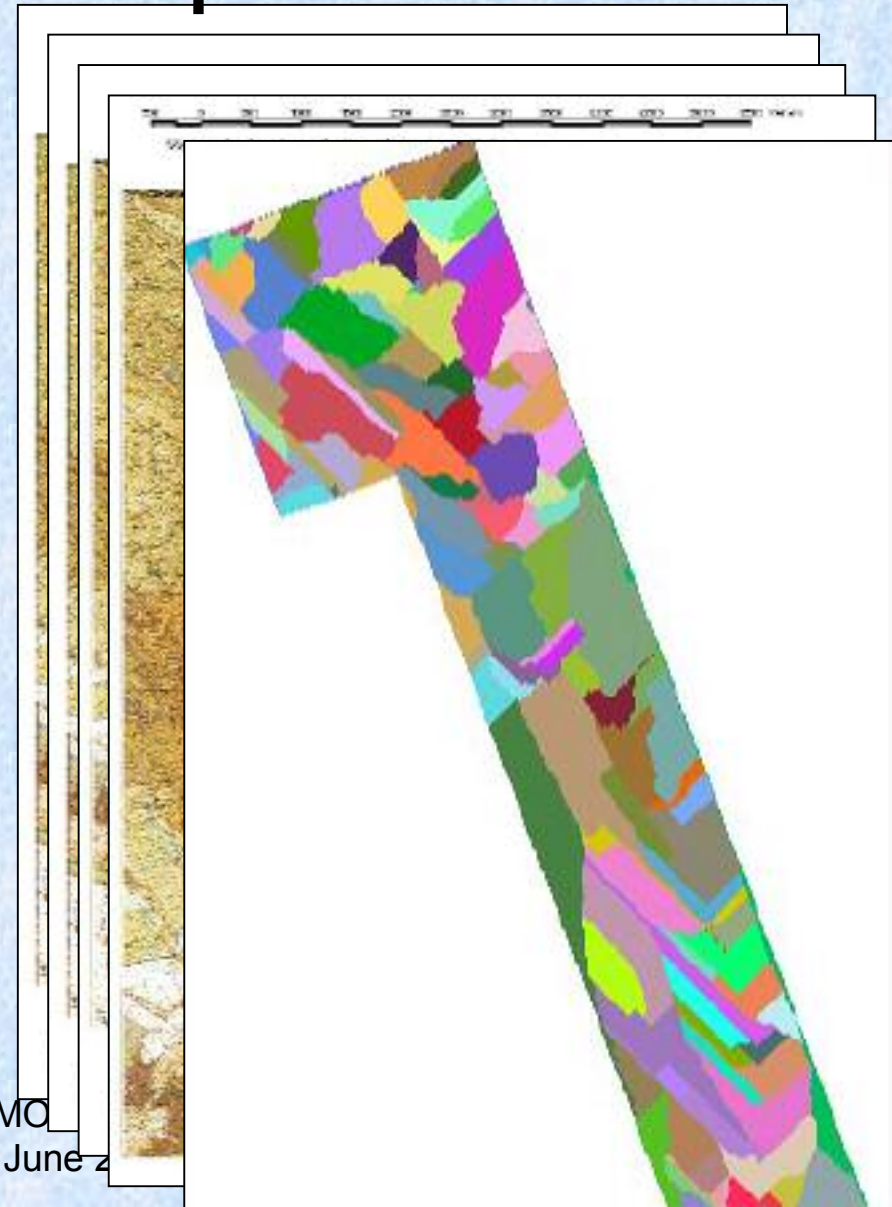
Map basis continued

- Land cover (CORINE)
- Soil map
- Scanned maps
- Orthophotos
- Rainfall data
- Sample data
- Climate change data?
- ...



Derived map data

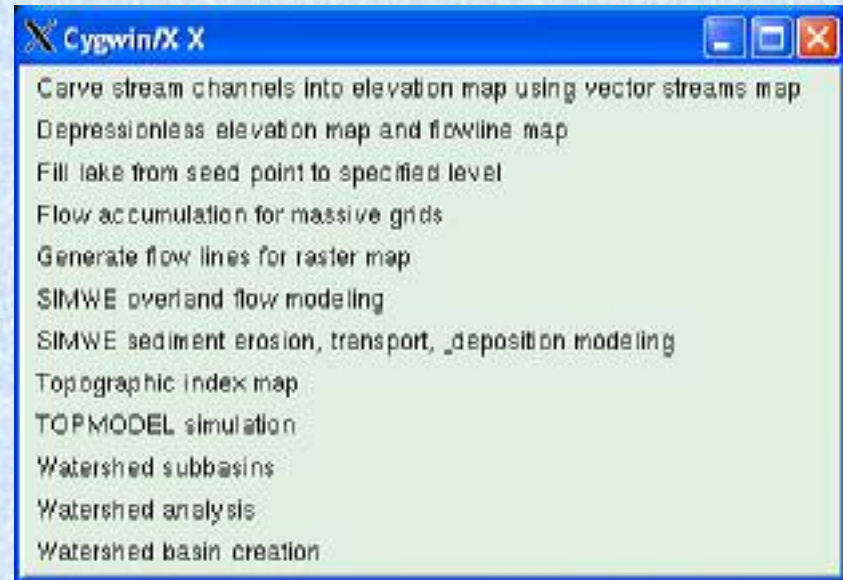
- Slope angles
- Aspect
- Flow directions
- Watershed



International MO
15th June 2

Modeling

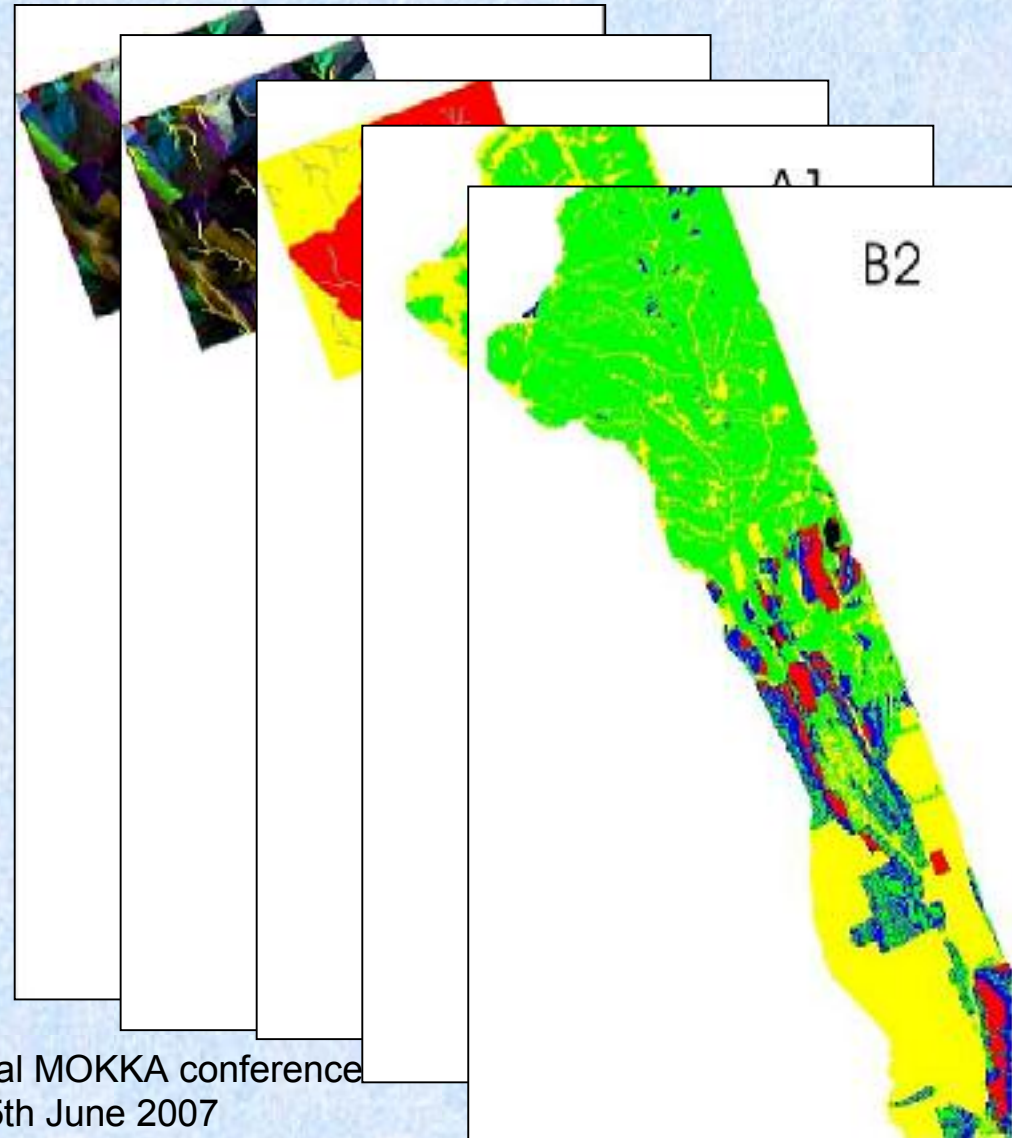
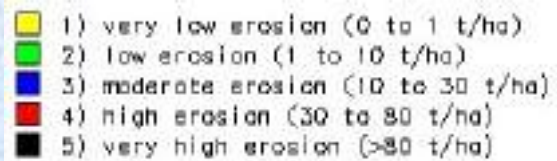
- Hydrologic model
 - TOPMODEL
r.topmodel
 - SIMWE r.sim.water
- Erosion
 - RUSLE
 - SIMWE r.sim.sediment



GRASS GIS
www.grass.itc.it

Model results

- Toka valley (Gyöngyösoroszi)
- ArcView/ArcGIS and GRASS GIS 5.4 – 6.2



Thanks for your attention!