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Large-scale geological mapping of Moscow

12 maps and 4 geological cross-sections

Total area – 1081 km²

Papers: 737 pages 50*70 cm

Size of 1 map at scale 1:10000

5.5 * 6.3 m (65 pages 50*70 cm)

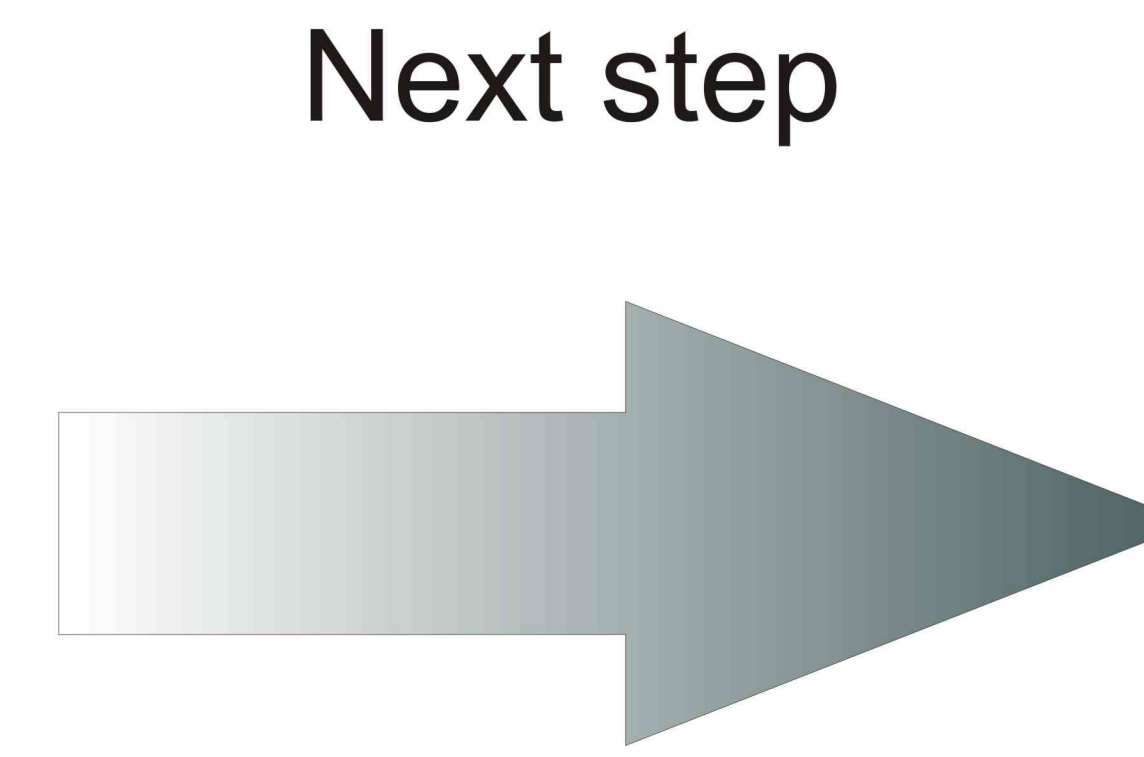
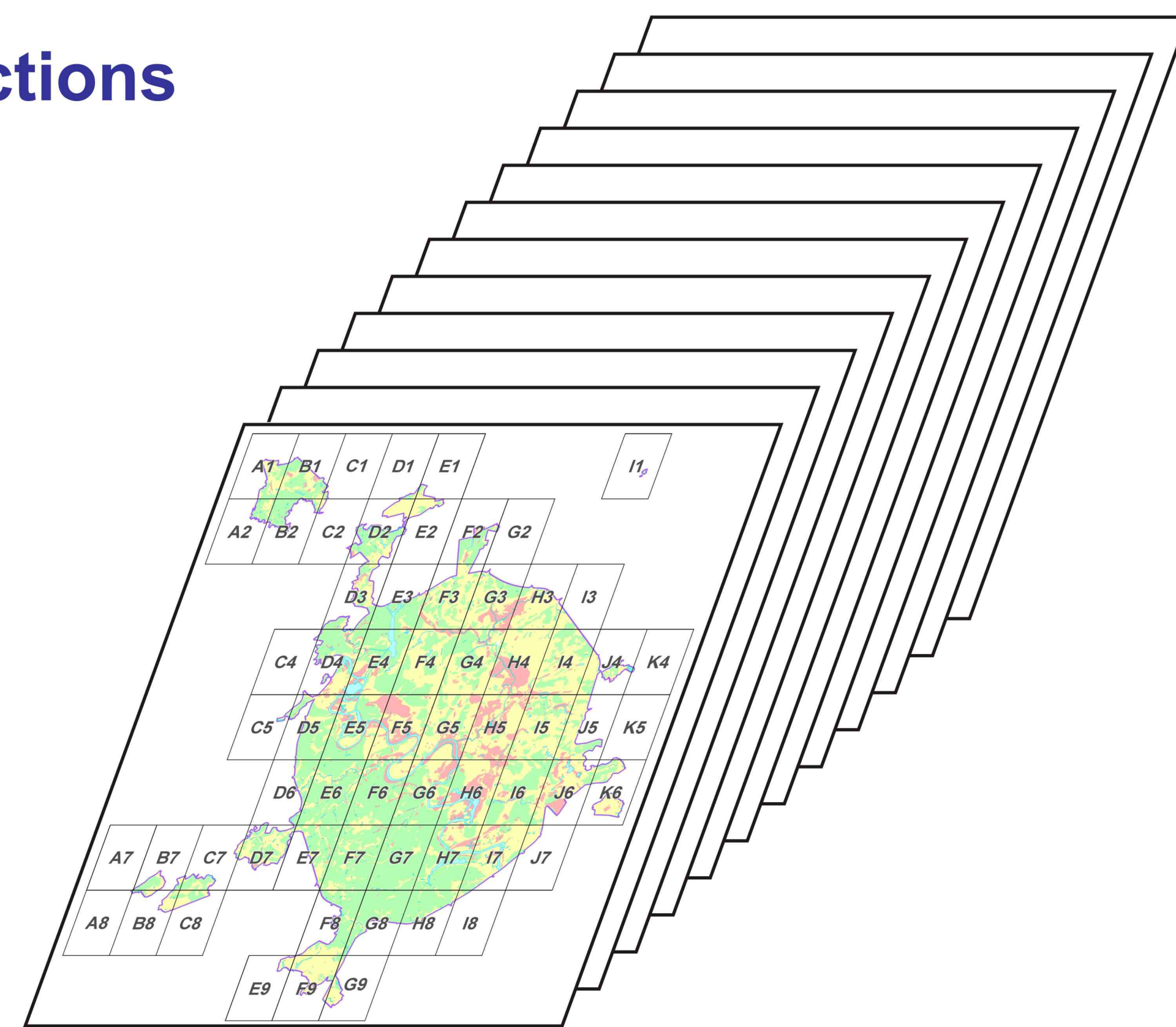
Work period - 2 years

(2008-2009)

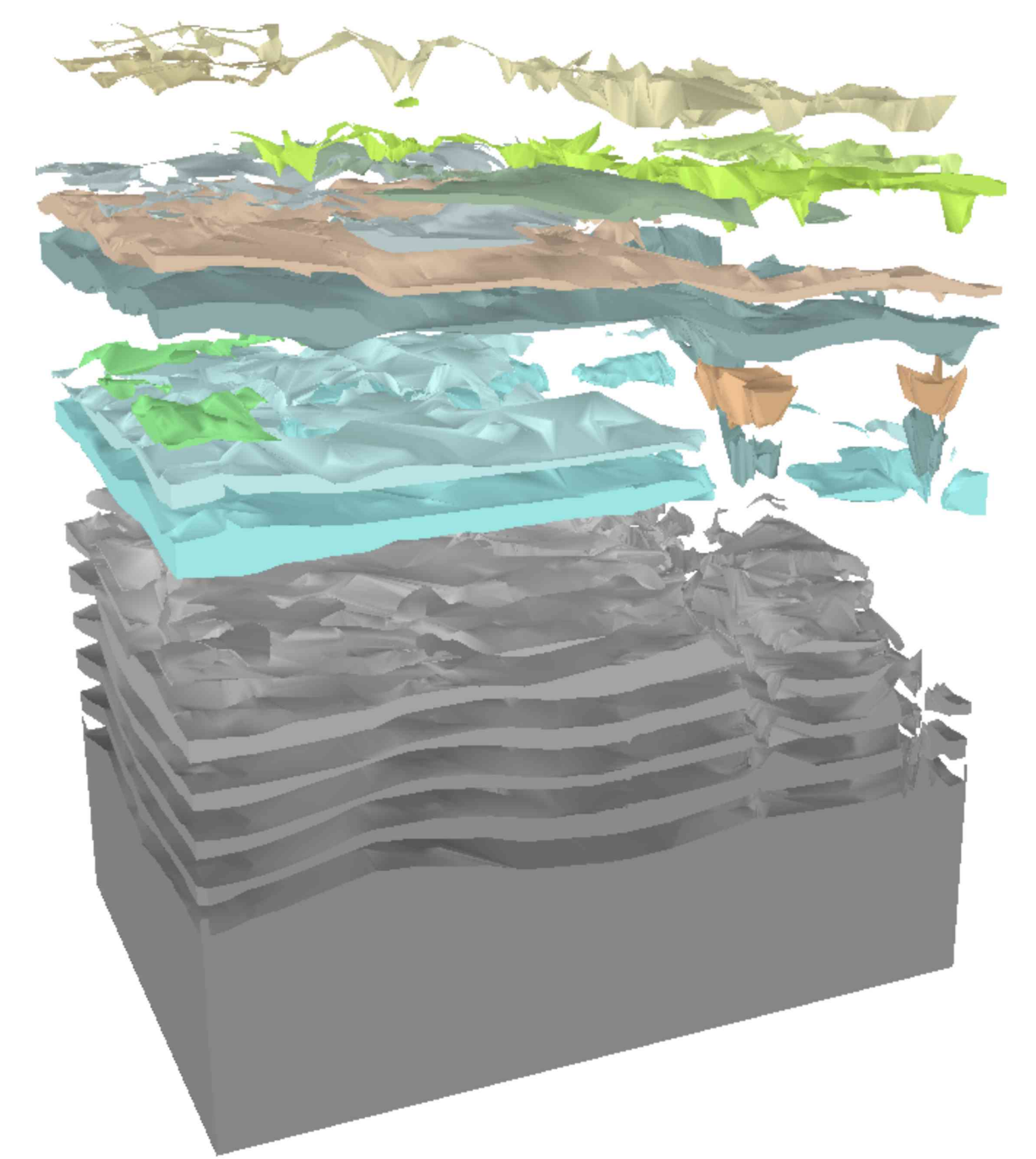
Stuff: more than 50 persons

Source database:

about 85000 borehole logs

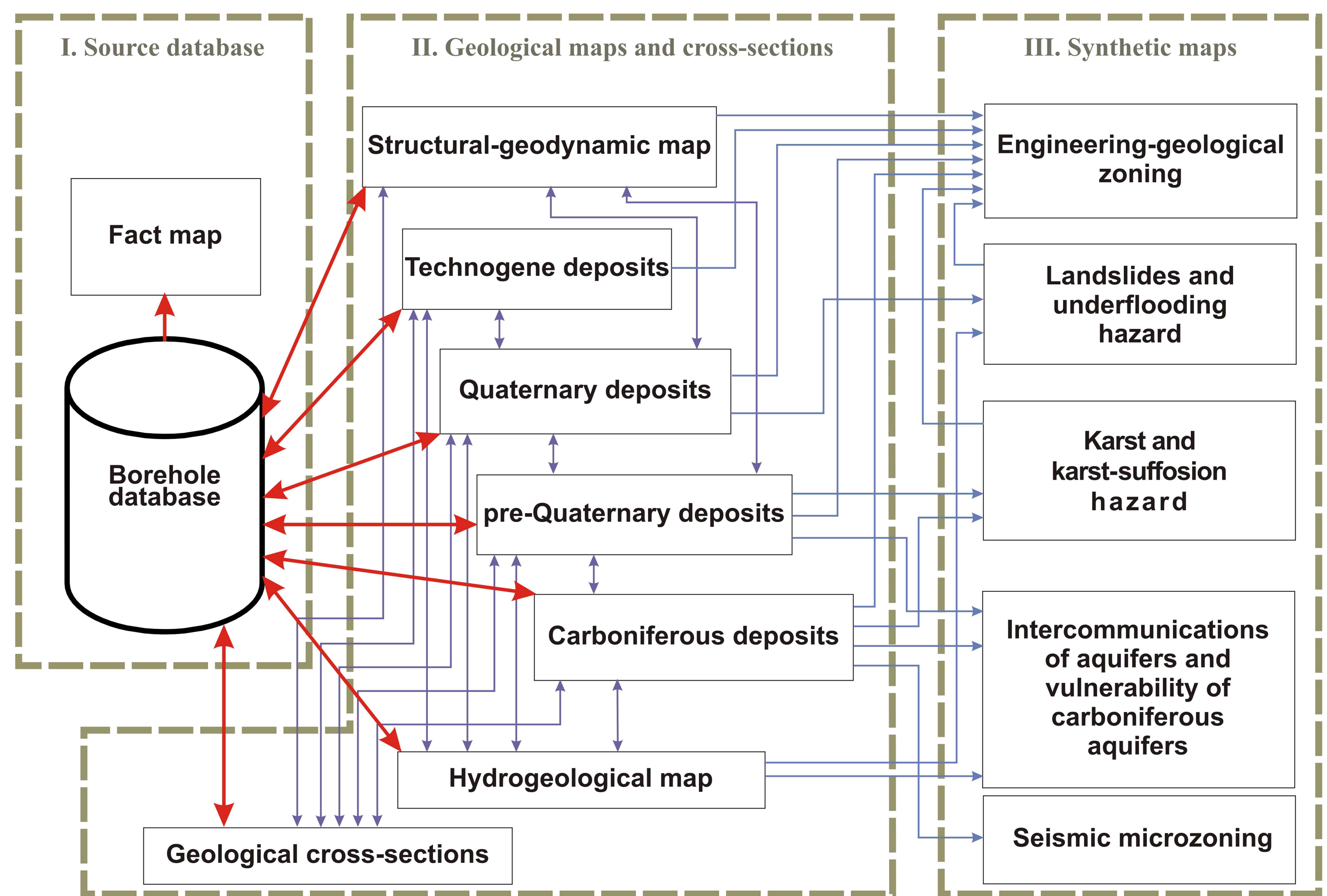


3D GIS



Informational flows between large-scale geological maps

Informational feedbacks are the main problem for data maintenance



GIS functionalities

1. Geodata maintenance
2. Drawing thematic fact maps
3. Drawing sketches for geological cross-sections
4. Working place for a map designer
5. Data matching check-up
6. Compiling synthetic maps
7. Digital elevation modeling
8. Integration with mathematical modeling systems

Reasons for permanent updating city geological geodata

1. New prospecting data
2. Informational complexity of data
3. Anthropogenic activity in the city
4. Changes in underground water regimes
5. Revision of geological concepts
6. Various interpretations due to lack of information

3d GIS advantages for geological geodata

1. Adequate model for geological data
2. Informational compatibility problems are solved with the data model
3. Automatic compiling of maps and cross-sections
4. Integration with mathematical modeling tools

