

The Project of Geological Mapping 1:25,000 in the Jeseníky Mts. – its Outputs and Products

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A new geological four-year project on the geological mapping of the Jeseníky Mts. started in 2001.

The project covers 6 map sheets on 1:25,000 scale and takes up a set of five map sheets 1:25,000 mapped in the Šumperk area in 1997–2000 (Aichler et al., 2000). The new project is carried out by a team of Czech Geological Survey's geologists in cooperation with specialists (petrophysics, tectonics, engineering geology) and is supported by the Ministry of the Environment. The first sheet 14–222 Vidnava has been finished by these days (Žáček et al., 2002).

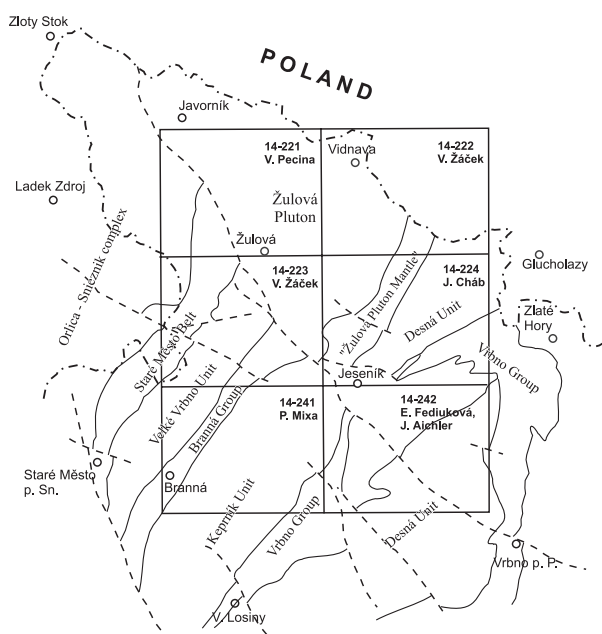


Fig. 1. Mapped sheets layout and chief-editors.

The main outputs of each map sheet are:

- Geological map supplemented by a lithostratigraphic legend, geological cross-section and geophysical schemes
- Explanations – separate detailed text related to the geology of the map sheet (see below)

- Map of documentation points
- Map of mineral deposits and occurrences
- Databases

The text of “Explanations” includes the following chapters:

- Introduction to the general geology and history of geological investigations
- Geological development and petrological description of each rock type including Quaternary sediments
- Geophysical conditions including both field and airborne measurements of gravimetry, magnetometry, radiometry and petrophysical properties of rocks
- The other chapters are: Tectonics/Hydrogeology/Engineering geology/Geochemistry/Mineral resources/Environmental problems/Key geological localities

The Map of mineral deposits and occurrences, which is usually not a regular part of detailed geological mapping, was included within the project because of extensive mining activity in the Jeseníky Mts. This map is accompanied by a separate explanatory text comprising a summary of old and current mining activities in the area and providing important information especially for urban and land-use planning issues.

The data obtained during the mapping (field documentation points, descriptions of thin sections, geochemical analyses, important geological localities, etc.) are summarized in the databases of the Czech Geological Survey. These data are gathered and administered on the CGS Data-Server, an integral part of the Informational Portal of the Czech Geological Survey (www.geology.cz). Full data or at least metadata (describing the data-sets) are freely accessible for the CGS staff, as well as for external customers.

Geological maps 1:25,000 are available as plotter prints in the CGS and CGS-Geofond archives and later also in printed version together with their text explanations. Both maps and explanations are published in a digital form as a HTML application. They are progressively being made accessible as a free version on the CGS Portal's Map and/or Data Servers (www.geology.cz) or as a saleable version on CD-ROM.