

Basic Geological Map of Požega Mt.

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Abstract

The geological map of Požega Mt. was made according to the lithostratigraphic principle. Eighteen lithostratigraphic units and three members were defined and their spatial distribution was presented on the map. The defined lithostratigraphic units cover the time span from Lower Triassic until recent time. The map was compiled according to Guidelines for compilation of the Basic Geological Map of the Republic of Croatia, scale 1:50 000 (HGI, 2012) within the national project „Basic geological map of the Republic of Croatia“ (Halamić et al., 2019)

Standard workflow for the production of geological maps at the Department of Geology of the Croatian Geological Survey includes:

- Scanning and georeferencing of the preliminary geological maps and field maps at a scale of 1:25 000.
- Vectorization of geological boundaries and polygon construction of the observed lithostratigraphic units.
- Digitization and graphic processing of field observation points, measured structural elements (fractures, faults, etc.), and their spatial distribution on the appropriate topographic base map.
- Digitization and graphic processing of geological columns, geological cross sections, interpreters, and other parts of the standard basic geological map, scale 1:50 000.
- Finalization of the complete map sheet at a scale of 1:50 000 with all related parts according to the Guidelines for compilation of the Basic Geological Map of the Republic of Croatia.

Until 2017, the entire procedure was executed in Autodesk AutoCAD MAP. During 2018/2019 the transition was made to ESRI ArcGIS platform, and the map is finalized in the Adobe Illustrator using Avenza MAPublisher module. The basic geological map of Požeška gora Mt. is the first geological map of the Republic of Croatia scale 1:50 000 made entirely in GIS environment.

Keywords: Geological map, Požeška gora, GIS, Cartography