Geophysical Research Abstracts, Vol. 8, 04958, 2006
SRef-ID: 1607-7962/gra/EGU06-A-04958

Factors Influencing Hydraulic Parameters of Dolomite Aquifers in Slovenia

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Relational hydrogeological database combined with geological map in GIS environment was developed from data analysis of 298 wells in Slovenian dolomite aquifers. Data is based on systematical review of hydrogeological reports and comprises technical well parameters, lithological, and measured or calculated hydraulic parameters. The latter are hydraulic conductivity k, transmissivity T, specific capacity $q(= Q/s)$, linear specific capacity Q_l, and maximum discharges Q_{max}. Influence of several factors (lithology, topographic setting, diagenesis, aquifer age) on parameters is presented, along with a study of relationships between transmissivity and specific capacity, and between hydraulic conductivity and linear specific capacity. The results are mainly consistent with theoretical presumptions; some deviations appear mostly due to inappropriate use of methods for parameter estimation in hydrogeological reports.