

عنوان مقاله:

Evaluation of groundwater quality by using Fuzzy Inference System for agricultural purposes (Case study: Sardasht, Iran)

محل انتشار:

سومین کنگره بین المللی علوم و مهندسی (سال: 1398)

تعداد صفحات اصل مقاله: 15

نویسنده:

Himan Mahmoudpour - M.Sc. in Hydrogeology, Faculty of Sciences, Urmia University

خلاصه مقاله:

Recognizing quality of groundwater as one of the most important and vulnerable resources of water supply in recent decades is a necessary and important issue. In the present study, a methodology based on fuzzy inference systems (FIS) to assess water quality is proposed. United States Salinity Laboratory diagram has been convert to the continuous form and then the concentration values of Electrical Conductivity (EC) and Sodium Adsorption Ratio (SAR) combined together by a Fuzzy Inference System (FIS). Finally, ground water quality of Sardasht area in Iran has been classified for irrigation purpose by proposed methods. Results obtained from FIS showed 91% general agreement with the results from the USSL diagram evaluation. Results showed that water quality classification with proposed method is more precise in comparison with USSL diagram classification and it improved error effects in hydro-chemical experiments.

کلمات کلیدی:

.Electrical conductivity, Fuzzy Inference System, Irrigation water quality classification, Sodium adsorption ration

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1042924>

