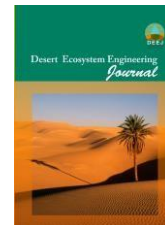




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Temporal and Spatial Study Groundwater Quality Using Geostatistical (Case study: Yazd – Ardakan Plain)

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Abstract

Yazd – Ardakan Plain is located in the center of Iran. That most of the population in Yazd Province are concentrated in this plain. So Temporal and spatial study of Groundwater Quality is necessary. In this research, 30 wells with suitable distribution were investigated and quality zoning was done using simple kriging method analyzed for indexes of EC, TDS and SAR during 2002 -2010 statistical periods. According to the obtained results in this research, Groundwater Quality in Yazd – Ardakan Plain has been decreased from South West and West to North, North East and East. reason of for this subject is Neogene formations in the East and Salt Desert around SIAH KOH desert in the North And also the direction of groundwater flow to the outlet area in the north of the basin, which also helps. And reduce the quality of groundwater. Maximum average for indicators of EC, TDS and SAR were occurred in years of 2002, 2007 and 2002, respectively and Minimum average for indicators of EC, TDS and SAR were occurred in years of 2003, 2003 and 2009, respectively. It seems that the trend of the three indicators follows from groundwater fluctuation pattern and drought. The three studied parameters studied have upward between the years 2005 to 2007 Upward and then to have downward.

Keyword: Trend Water quality, Yazd-Ardakan Plain, Electrical conductivity, Geostatistical.

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