



Investigation on 10-daily rainfall by GIS in Gorgan region-Iran

H. Sharifan

Gorgan University, H_sharifan47@yahoo.com

Rainfall is an important water supply in Golestan province (Iran country). Climatology of this province changes from humid to dry. Rainfall is a important water potential for to provide water need of crops in Golestan south regions. So that manner of rainfall distribution in year is of importance at north regions of Golestan (climatology= semi dry to dry). Therefore in this research, forecasted 10-daily rainfalls have investigated by GIS. For forecasting of 10-daily rainfalls, the first assembled monthly-10 daily rainfalls of 34 meteorological stations in Golestan province (1974-2004 years). Rainfall forecasted by minitab-13 computer program and forecasting optimum model (for 2005,2006 years). Then monthly rainfalls divided to 10-daily rainfalls and plans of forecasted 10-daily rainfalls (2005, 2006 years) have drawn by Ilwis (GIS). In this research produced, 72, 24, 2 plans about 10-daily, monthly and yearly rainfalls respectively. Evaluations shown that: 1- with the advancement from south to north regions, rainfall values have decreased and their distribution has been in years unsuitability. 2. Forecasting error amounts decreased yearly, monthly, 10-daily rainfalls, respectively.