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Some aspects of groundwater regime in Bulgaria with respect to climate variability

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Groundwater regime in Bulgaria is influenced by climate variability. The impact is evident especially for karst water. A time series analysis of spring discharge for selected karst basins was performed. The impact of the 1982–1994 drought period on groundwater regime was detected. For springs that drain open and mountainous karst, the impact of climate variability is similar to that on surface waters. In fact, the difference in degree of influence of the drought period is related to the specific geological structure of the karst massifs and recharge conditions. Furthermore, the porous waters are characterized by a weaker reaction to such an effect. In general, groundwater use during the 1982–1994 drought period was impacted by climate variability due to limited resource availability.

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