



The climatic assessment of droughts in the Republic of Moldova between 1891 and 2007

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This study describes the drought episodes in the Republic of Moldova from 18 weather stations and from Chisinau Observatory, with monthly rainfalls measurements obtained during periods of 62 and 116 years, respectively. The catalogue of the droughts for spring, summer and autumn have been identified and elaborated. As a result of the analysis of drought catalogue for a period of over 100 years, an increase in the tendencies of frequency and intensities of the studied phenomena after the 1980s was observed. The longest drought periods were noticed at the beginning of the 1950s and 1960s reaching their highest points in the decades of 1981-1990 and 1991-2001 with the lowest points in the 1970s. Similarly, during the last 20 years, in 12 cases (1986, 1990, 1992, 1994, 1996, 1998, 2000, 2002, 2003, 2005, 2006 and 2007) of drought, 9 have been registered as being of a severe intensity degree and/or the extreme intensity degree. In 1990, 1992, 2003 and 2007 drought season occurred during the entire summer season. If it compare data for the whole period of more than a century, it will see that droughts have occurred once every 3 years, and after the 1980s their frequency has already increased to once every 2 years. Besides, the estimate of the territories affected by drought was made for every season for the first time, as well as for the whole vegetation period of each drought year. Surfer software (by Golden Software Inc.) as tools for estimating spatial lows of distribution drought event in the territory of Moldova it was used. Acknowledgements: This research was supported by Research Project MSM-6046070901.