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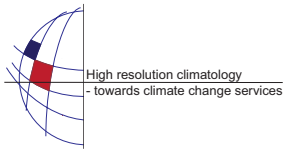

Long Term Precipitation Variability over the Northern Coasts of Persian Gulf and Oman Sea

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Annual precipitation totals (APT) for Bushehr (1887-2005) and Jask (1893-2005) stations, located on the coasts of Persian Gulf and Oman Sea, prepared from the sources: 1- Smithsonian Collections (WWR, 1954), 2- Royal Netherlands Meteorological Institute (KNMI, 2009), 3- Iranian Meteorological Organization (IRIMO, 2009). Existence gaps are filled by convenient methods. Mean APT during 1971-2000 are 270mm for Bushehr and 150mm for Jask. APT are subjected to Mann-Kendall trend test. Results show that there is no evidence to determine precipitation trend over the instrumental records for both stations. Nevertheless during 1961-2000, there is significant upward trend in Bushehr where is on the way of the circulation currents passing over Persian Gulf in winter time such as Mediterranean westerlies. Jask belongs to faraway and dry Oman Sea coast where precipitation affected mostly by seasonal changes. 30-year windows of Sen's slope moved over the total period and resulted significant increase/decrease of climatic precipitation in 5 to 7 spells for the last century that can compare to drought events. Statistical method of nonparametric slope moving windows is authentically suggested to the climate change study.