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# Long-term variations of the water balance components for Croatia

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In addition to the air temperature at 2m above ground following water balance components are considered: *precipitation amount, potential evapotranspiration, Palmer's runoff and river discharge.* Monthly air temperature and monthly values of all water balance components (some of them calculated by Palmer's method) are considered for 24 weather stations in Croatia for the period 1951-2000 and for Zagreb-Gric station for the period 1862-2000. The Sava river discharge for two hydrological stations (Zagreb and Zupanja) for the period 1931-2000 are used. Twenty-five moving averages have been applied on time series of the annual values and principal component analysis has been performed for the air temperature field. The results indicated a long-period negative trend in the air temperature, potential evapotranspiration, runoff (discharge) over the almost the whole territory of Croatia while precipitation amounts show more cyclic variations. Described positive trends for air temperature and potential evapotranspiration and negative for runoff (discharge) could be connected with global climate warming.