

ANALYSIS OF GEODETIC DATA OF “DJERDAP I” (IRON GATE) DAM ON DANUBE, SERBIA AND MONTENEGRO

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Abstract: “Djerdap I” (Iron Gate) concrete gravity dam, the biggest one on the Danube and one of the biggest in Europe was constructed in 1972. Since May 1972 it is being monitored twice a year by geodetic methods. Since that time concepts, models and survey technique in engineering survey have changed dramatically. At the same time dam has become older and the critical question become : “Does existing geodetic method meet real demands about dam stability?” Another question is : ”Are existing geodetic data qualitative enough to be a base for reliable conclusions of state and behaviour of dam from contemporary point of view?”. First question is external and it comes out from geodetic system i.e. from users of geodetic data. Second one is internal and concerns with usefulness of existing geodetical data in future. In this paper answer for first question is searched by using system approach and hydroengineering discipline. Answer for second question is searched by using Kalman filter.