BOTTOM LEVEL ESTIMATION OF WATER MANAGEMENT INFRASTRUCTURES FROM HISTORIC PROJECT DOCUMENTATIONS

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Monitoring and maintenance of water management infrastructure require knowledge of their reference state characterizing their design parameters. The reference state is derived primarily from the available project documentation, which is appropriately chosen to be converted to a digital model of the bottom terrain. The current level of the bottom is determined by means of sonar technology. Differential analysis of individual datasets, which will be stored in a specialized information system, will allow an efficient maintenance and monitoring.

The presented work summarizes the problematic apsects identified in the georeferencing of the digitalized historic situational plans, which can negatively influence the correct localization of individual parts of waterworks and subsequent analysis of morphological changes of the bottom. The accuracy of the sonar technology applied for measuring the level of the botton is also assessed at a chosen study site.