INTEGRATED USE OF AERIAL AND GROUND-BASED MEASUREMENT DATA TO ASSESS THE RADIATION SITUATION OF WATER BODIES

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Currently, a promising area is the use of the latest technologies and methods aimed at identifying and assessing the condition of objects. The purpose of this work is to improve the technological scheme for environmental monitoring. The proposed method is based on the results of integrated application of aerial photography and ground-based measurements for environmental monitoring in assessing the state of water bodies in radioecologically dangerous territories. As a result of this work, the sequence of work was described both when obtaining data using unmanned aerial vehicles and their subsequent photogrammetric processing, and when performing measurements using ground-based instrumental methods. A technological scheme is presented that allows integrating information obtained by various methods, which can be entered into modeling systems and predict the behavior of a water body depending on changes in natural and anthropogenic impacts.

Keywords: photogrammetry, digital aerial photography, unmanned aerial vehicle, orthophotoplane, 3D model, map, test site

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