TWO MATHEMATICAL MODELS FOR INVESTIGATING WAVE GENERATION IN RESERVOIRS

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Abstract

In this paper, two mathematical models for investigating wave generation in reservoirs are considered: the first one is based on the small amplitude wave theory and the second one is based on the shallow water theory. For numerical solving the system of equations obtained, a completely conservative two-layerd finite difference scheme is constructed. Finally, the results of physical and mathematical simulations are compared.

KEY WORDS: Physical and Mathematical Models

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