The solitary wave transformation over a slopping bottom

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The results of the experimental research concerning solitary wave transformation over a slopping bottom are presented. The experiments were fulfilled at the hydro flume having 45 m length, 1.0 m width, and 1.2 m height. The solitary wave was generated by vacuum wavemaker. The horizontal part of the bottom is 10 m length. The slope with a scale 1:50 is 35 m length. The depth of the uniform bottom varied has the values 40, 50, and 55 cm. The wave height has the value from 10 to 30 cm. We have the breaking wave if its height exceeded this maximum value. The free surface elevation was measured by 10 wave gauges installed along the horizontal and the slopping bottom.
The obtained experimental data were compared with the theoretical data. Then the coincidence between these data was discussed.