Modeling of internal waves over the critical latitude

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The modeling of internal wave generation by the barotropic tide in the Barents Sea at latitudes over 77o N is done using the streamlined numerical model of K. Lamb. The place for modeling is chosen between the Spitsbergen Island and the Franz-Josef Land. Cross-section of 350 km of length is chosen. There are two banks of heights about 100 - 150 m on the background depth about 300 m. The intensive nonlinear internal waves with amplitudes from 10 to 50 m and lengths about 5 km are generated in this zone. Going away the generation area nonlinear waves have amplitude about 5 m.