



Interface linear wave transmission on the “non-reflected” beach

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The study of nonlinear internal wave evolution in two-layer fluid under sloping bottom can be found in literature often now. Nevertheless the study of linear interface wave transformation is not accomplished yet. Some unexplored effects may be occurred for strong inhomogeneity of bottom slope. The rigorous analytical solutions of interface wave transformations above the special bottom profiles are obtained in the frames of linear shallow-water theory out of WKB approximation. Two so called “non-reflective” bottom profiles are found. The structure of traveling waves above such profiles is discussed.