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Numerical simulation of internal waves past a horizontal strip

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A numerical model for stratified flows has been developed and validated from laboratory experiments performed in a salty water channel at low Reynolds number, exhibiting reasonable agreement with data of Schlieren visualization, density marker and probe measurements of internal wave fields. In continuation to previous work concerning a vertical strip towed in a channel, new numerical results are presented for the more delicate case of horizontal plate. These results are discussed concerning theoretical approaches including singular components and observations in atmosphere and ocean.

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