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Albuquerque, NM 87131-0001, and **Alexander O Prokofiev**. *On Dissipation Function of Ocean  
Waves due to Whitecapping.*

Most of the current forecasting models for ocean waves are based on Hasselmann kinetic equation. This is equation describing the dynamics of waves distribution function. Coherent phenomena, like wave breaking, white capping, and solitons are out of the scope of statistical description. At the same time, some of them are extremely important for relevant description of water waves dynamics. Fortunately such catastrophic events like wave breaking and whitecapping can be taken into account by adding phenomenological dissipation terms. The formulae for these terms are still an open question. Experimental observation does not give us full information about the wave field. At the same time, numerical experiments can be completely controlled and provide all necessary information. We performed two numerical experiments in order to get enough information and compare currently popular formulae for dissipation terms with results of simulation. Our statement is the following: terms currently used in forecasting models have to be significantly corrected. Wave breaking and whitecapping dissipation are threshold-like phenomena. This fact is in good concordance with recent experimental observations. (Received February 23, 2010)