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OSD

Interactive Comment

## Interactive comment on "Turbulence closure: turbulence, waves and the wave-turbulence transition – Part 1: vanishing mean shear" by H. Z. Baumert and H. Peters

## Anonymous Referee #2

Received and published: 21 December 2008

In my opinion the manuscript presents interests for the Ocean Science. It tries to combine, in a simple way, effects of wave and shear as sources driving turbulence in the mixed layer. My comments are mainly related to the way the material is presented.

1. Abstract states that a novel model is suggested, but in reality it is only a piece of the model suited for the case of vanishing shear. Either a companion paper has to be cited, or 'novel' reserved for the full analysis.

2. The introductory part is too heavy for the elementary synthesis of wave and shear



Interactive Discussion

**Discussion Paper** 



driving the authors are considering. It is very difficult for a reader to understand where the novel part starts because the authors for more than half of the paper are just repeating the already known results. It should be reorganized to make the difference between the known and new part explicit.

3. In section 7 the manuscript states that to perform practical calculations with Eq. 32 it is necessary to use the dynamic equation for E. Is it then a two-equation turbulence model as the authors are writing a few times in the manuscript?

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Interactive Comment

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

**Discussion Paper** 



Interactive comment on Ocean Sci. Discuss., 5, 545, 2008.