Geophysical Research Abstracts Vol. 17, EGU2015-4866, 2015 EGU General Assembly 2015 © Author(s) 2015. CC Attribution 3.0 License.



Numerical simulation of 3D breaking waves

Philippe Fraunie (1) and Frederic Golay (2)

(1) Universite de Toulon (UTLN-AMU-CNRS-IRD), Mediterranean Institute of Oceanography, La Garde Cedex, France (philippe.fraunie@univ-tln.fr), (2) Université de Toulon Imath

Numerical methods dealing with two phase flows basically can be classified in two ways : the "interface tracking" methods when the two phases are resolved separately including boundary conditions fixed at the interface and the "interface capturing" methods when a single flow is considered with variable density.

Physical and numerical properties of the two approaches are discussed, based on some numerical experiments performed concerning 3D breaking waves.

Acknowledgements : This research was supported by the Modtercom program of Region PACA.