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Wind waves and climate

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We discuss the role that wind waves play in modulating the various transfer and interaction processes between ocean and atmosphere. Independently of the coupling considered in the operational meteorological, circulation and wave modelling, waves are the regulation knob for the, e.g., momentum, energy, mass, radiation fluxes that take place at the sea surface.

We provide a qualitative overview of the main relevant surface gravity wave driven processes, It turns out that this may play an important role on the coupled climatic systems in general and on the atmosphere and oceanic boundary layers in particular.