



## Abstract View

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## Interaction of Ocean Waves with a Soft Bottom

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### ABSTRACT

Soft muddy bottoms have significant effects on properties of water waves which propagate over them. The wave dispersion equation is modified and wave energy is dissipated by the coupling between the waves in water and those induced in the mud layer. These effects are theoretically determined by assuming a viscoelastic mud layer. A boundary-value problem is solved for the water-mud system with sinusoidal waves. The theoretical dissipation rates are compared favorably with field measurements.

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