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*Shoaling Internal Solitary Waves in the South China Sea*

The interaction of the barotropic tide with Luzon Strait topography generates westward propagating internal bores and solitary waves that can have amplitudes of  $O(200)$  m. These waves eventually shoal and dissipate in the north-western South China Sea. Numerical simulations of the shoaling of internal solitary waves at the site of the Asian Seas International Acoustic Experiment have been undertaken to investigate the sensitivity of the shoaling to a variety of environmental factors including the bathymetry, stratification, effects of rotation and viscosity. Over the slope secondary solitary waves and mode-two wave packets are generated before viscous effects become important in shallow water on the shelf.