Seismic signal of wave attack on Long Island's southshore

Michael Slattery and Henry Bokuniewicz School of Marine and Atmospheric Sciences Stony Brook University

A seismometer at the shoreline has been shown to record energy from the surf. Energy signals are seen near the incident water wave period (and its harmonics) as well as at the periods infragravity water waves. In preliminary trials, parameters of the seismograph appear to be correlated to wave height, allowing for the possibility of monitoring wave conditions responsible for beach erosion facing a secure, land-based instrument. In addition, long-period water wave conditions, associated with the generation of rip currents, can be monitored.