



Whales watching

Giovanni Romeo
Italy (giovanni.romeo@ingv.it)

In 1982 Erich Lippman patented a brilliant method to extend the frequency response of seismometers with electromagnetic transducer. Adopted by Lennartz Electronic GmbH this single-coil velocity-feedback strategy appears in a large part of the German company production. In case of strong signals from near events, seismometers using the Lippman method may produce recordings with a characteristic 'whale shape'. The seismometer's behavior is examined using a simulation model as well as a prototype to determine the whale origin and its mathematical form.