



Use of accelerometer for wave measurements

N. van de Giesen and G. de Boer

Delft University of Technology, Water Resources Management, Delft, Netherlands (n.c.vandegiesen@tudelft.nl)

With the fast development of microelectromechanical systems (MEMS) over the past decades, accelerometers have become very reliable and cost efficient. As such, accelerometers are finding their way into all types of hydrological applications. Here, we investigate the usefulness of an accelerometer for recording waves. We use the "USB-Accelerometer 3-axis Self Recording Accelerometer X16-1C" (Gulf Coast Data Concepts LLC) in this experiment. The X16-1C costs less than \$100. This instrument records with a frequency of up to 200 Hz acceleration along three dimensions. By fixing the instrument in a float, waves can readily be recorded. Here, we present the first results of field trials.