Geophysical Research Abstracts
Vol. 15, EGU2013-7854, 2013
EGU General Assembly 2013

Statistical characteristics of wind waves obtained in the south-eastern coast of Sakhalin Island

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Results of field experiments on the observation of wind waves in the south-east of the island of Sakhalin in 2006 - 2009 are presented. Data from the bottom pressure sensors were converted to water level fluctuations with use of the linear theory of water waves. It is shown that the waves in calm sea have low values of steepness and therefore the linear theory can be applied. As a result, totally 20 records of duration from 2 weeks to 3 months, containing from 150,000 to 1.2 million individual waves for three different observation points Sakhalin Island are chosen for analysis. The distributions of individual wave heights and significant wave heights in the south-eastern coast of Sakhalin Island are calculated. According to field observations the Weibull distribution is the best fit.