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OSCILLATIONS OF POSITION AND TARGET STRENGTH UNDER THE SURFACE

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Abstract

The dependence of value target strength (TS) on position of transducer and standard target under water surface was studied. TS was measured with a SIMRAD EK 60 split-beam echosounder operating at 120 kHz in the lakes 1.4-1.7 m. It was practically proven that oscillations of the TS in shallow waters exist and are consistent with the state of surface. When surface is not smooth we have less error in estimating of TS. Nice weather with mirror surface can be more dangerous than windy. Oscillations depend on the depth of transducer and the depth of target (DT). Then shallow targets with DT less than 0.5 meter are usually more influenced by oscillations. This study demonstrates that in very shallow waters we have to understand unusual behaviour of TS.

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