CHANNEL CHARACTERIZATION FOR ACOUSTIC COMMUNICATIONS IN SHALLOW WATER USING QPSK DATA

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Abstract

In this paper we review common methods of characterization of digital communications channels and then present results from measurements made recently in shallow water. Channel characterization is performed for signals over a frequency range of 40 to 60 kHz with an intention to map the channel impulse response in order to be able to use the system identification method (SID) for equalization of received data. The results are then compared to standard methodology for data rates to 10kbps.

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