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**Acoustic methods in extremely shallow water: validity of the far
field approximation**

Fantina Madricardo^a, Silvano Buogo^b, Paola Calicchia^b and Emiliano Boccardi^a

^aCNR-Istituto di Scienze Marine, Riva Sette Martiri - Castello 1364/a, 30122 Venice, Italy

^bCNR-Istituto di Acustica 'O.M.Corbino', Via del Fosso del Cavaliere, 100, 00133 Rome, Italy

In this paper we present some experimental results concerning the possibility of using traditional echosounder in extremely shallow water environments. In the framework of the Echos Project, a collaboration between ISMAR and IA, a wide area of the Venice Lagoon has been explored with a traditional echosounder. Since the explored area was extremely shallow (up to 50 cm), it became necessary to check experimentally whether the far field approximation was still valid in such conditions. In this work the acoustic field of the echosounder ELAC LAZ72 used for the sub bottom investigation is experimentally characterized and the validity of the far field approximation is verified.