

Recovery of initial form of acoustic signals in laboratory experiments with rock samples

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Abstract. Formation of a signal in the receiving channel of data processing system Aline32D [2004] can be described by linear procedure of convolution (integral Duamel) as a first approximation. There is a possibility of reducing distortions caused by irregularity in amplitude-frequency characteristic of electro-acoustic converters and recovering real input signals. To solve the problem, we need information on the impulse characteristic of electro-acoustic converter including the input channel system. The procedure for recovering input acoustic signals is suggested.

Keywords: digital data, convolution and deconvolution, acoustic signal, recovering, subsidiary data processing, impulse characteristic.