Abstract :

 In this paper, we propose a technique of random noise attenuation from seismic data using discrete and continuous wavelet transforms. Firstly, the discrete wavelet transform (DWT) is applied to denoise seismic data using the threshold method. After, we calculate the continuous wavelet transform of the denoised seismic seismogram, the final denoised seismic seismogram is the continuous wavelet transform coefficients at the lower scale. Application to a synthetic seismogram shows the robustness of the proposed tool for random noise attenuation. Application to real vertical seismic profile recorded in Algeria clearly shows the efficiency of the proposed tool for random noise attenuation.