

monitoring and study on infrasound from water dam

The characteristics of infrasound waves (such as frequency spectra, amplitudes, attenuation over ground surface) generated by a water dam are presented in this paper. A possible infrasound generation mechanism is proposed based on earlier models of infrasound generation by large objects falling into water. The mechanism suggests that the water falling through dam's ducts into absorption pool causes local elevations of the water surface (surges) surrounding by rings of descending water levels, which generate infrasound in the air like dipole-like pistons. The attenuation of the amplitude of infrasound waves with increasing range from a dam along different directions is analyzed as a function of a water flow speed through the ducts. The infrasound characteristics estimated from the model developed here are consistent with those obtained from the experimental data.

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