

CFADAGA2004/141

Consideration of the Local Climate in the Prediction of long-term sound levels

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The propagation of sound over distances of more than 200 m is largely influenced by meteorological factors. In long-term noise prediction (e.g. of Lden) the local climate provides the relative contributions of different meteorological situations being favourable or adverse with respect to the propagation of noise. The paper presents a quantitative estimation of the climate effects on long-term noise predictions, proposes meteorological classifications, and sketches solutions for implementing them in practicable prediction tools for surface and air traffic noise.

The complete document was not available at the publication time. It has been replaced by the submitted abstract.