Attachment 1: Email communications from H. Metzen, DataKustik, Nov. 2006

"Rick,

Long range propagation including atmospheric refraction is not part of the standards used for (normal, "standard") noise calculations. It is known that atmospheric refraction may cause sound to be refracted downwards again and contributing strongly to the level at long distances. **The atmosphere in the standards existing is just homogeneous above height.**

However, there is also in Europe and in Germany some discussion going on about "atmospheric noise". Recently a study group has been set up here to look for possible solutions. This could end in new standards or in amendments of existing ones. The problem is that nobody knows the layer structure and the properties of the atmosphere vs. height. That's the situation right now.

With kind regards

H. Metzen

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