

Corrigendum

Acoustic masking in marine ecosystems: intuitions, analysis, and implication

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- Fig. 6 erroneously states that the y-axis is $(171 - TL)$ (dB), where $(171 - TL)$ includes the -6 dB of RD , but what is plotted is $(165 - TL)$. We have corrected the y-axis and expanded its notation to be $SL - RD - TL$ (dB). The result is that the sound level at which $SE = 0$ is the point at which the plot crosses the ambient noise level.

The corrected figure and its caption are provided below.

- Furthermore, on page 211, at the end of the last complete paragraph of the left-hand column, the text for item (3) has been amended for clarification as follows:

This figure illustrates several important features of communication space: ... (3) the importance of RD in the calculation of SE , in that RD is negative when the summation of DI and SG is greater than DT , which leads to a situation in which the signal of interest can be recognized even when the SNR is greater than the signal's received level, RL , (4) the influence of noise level ...

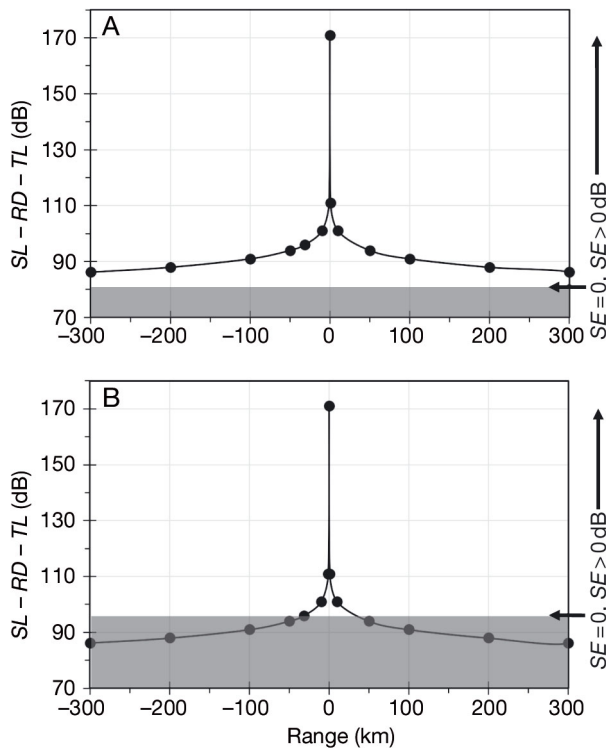


Fig. 6. Examples to illustrate the change in potential communication range for a low-frequency right whale call under 2 different levels of omnidirectional ambient noise (NL , shaded) and assuming $SL = 165$ dB, $RD = -6$ dB ($DT = 10$ dB, $SG = 16$ dB and $DI = 0$), $TL = 20\log[\text{range}/1\text{m}]$ dB for range ≤ 1 km and $TL = 60 + 10\log[\text{range}/1\text{km}]$ dB for range > 1 km: (A) $NL = 81$ dB, potential communication range > 300 km, area $> 282\,000$ km²; (B) $NL = 96$ dB, potential communication range = 32 km, area = 992 km². The arrow in the lower right points to the level at which $SE = 0$. Notes: in these examples RD is -6 dB, which leads to a 6 dB increase in the effective SNR . Absorption is not a factor for the frequencies and ranges considered here