

 **Corrigendum**

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[Emanuel \(2012\)](#) developed a simple model of tropical cyclone intensification beginning from a state of a perfectly saturated inner core and a fully developed anticyclone at the storm top. Figure 1 of that paper displayed time evolutions of the maximum winds speeds for three different values of the ratio of the surface exchange coefficients of enthalpy and momentum. While the figure and its labels are correct, the caption to that figure incorrectly states that the drag coefficient was varied to produce the three different ratios used, when in fact the enthalpy exchange coefficient was varied. This makes a difference because, while the steady-state intensity depends only on the ratio of exchange coefficients, the rate of intensification also depends on the value of the enthalpy exchange coefficient itself, as is apparent from Eq. (17) of that paper.


For clarity, we here present the equivalent of Fig. 1 with the correct caption and also present a panel in which the drag coefficient rather than the enthalpy exchange coefficient is varied. In the meantime, the model has been improved, so [Fig. 1](#) (left) here is not an exact replica of Fig. 1 of the original paper.

One notable feature of these results is that, while the analytical-solution intensification rate has a slight variation with drag coefficient, the full model integration hardly depends on it until shortly before the solution asymptotically approaches its steady value.

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REFERENCE

Emanuel, K., 2012: Self-stratification of tropical cyclone outflow: Part II: Implications for storm intensification. *J. Atmos. Sci.*, **69**, 988–996, <https://doi.org/10.1175/JAS-D-11-0177.1>.

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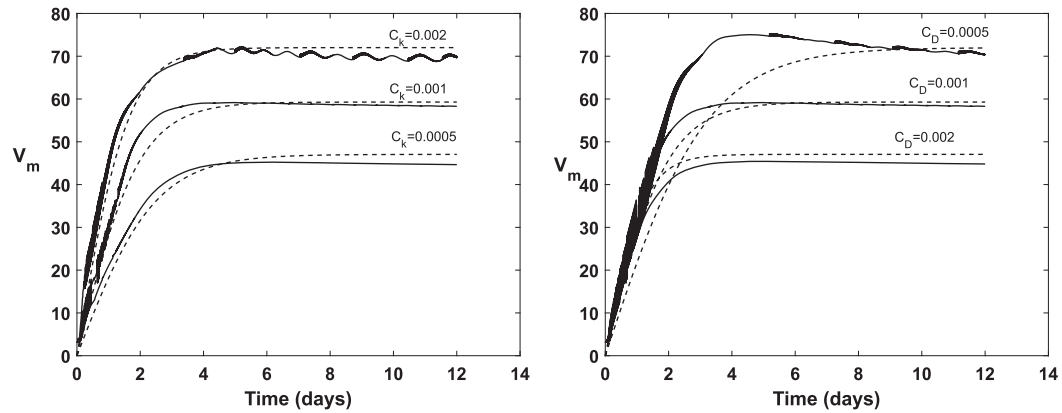


FIG. 1. (left) Updated version of Fig. 1 of Emanuel (2012), in which the surface enthalpy exchange coefficient is varied while the drag coefficient is held fixed at a value of 0.001. (right) In this case, the surface drag coefficient is varied while the surface enthalpy exchange coefficient is held fixed at a value of 0.001. Solid lines show the full model integration, and the dashed lines show the analytic approximations given by Eq. (17) of the original paper.