Evidence for adding categories to the Saffir-Simpson hurricane intensity scale

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Abstract

While it is currently unclear what the effect of global warming will be on the frequency of named tropical storms, there is strong evidence that increased ocean temperatures will lead to increased wind speed of the strongest storms of this type. We present several lines of evidence from both models and observations that the highest category (5) of the Saffir-Simpson scale does not adequately describe the risk of the most intense future storms. We propose two new categories, 6 and 7 based on logical extensions of the current categories. Two recent storms have already reached category 6 and the risk of more storms of such strong intensity will be demonstrated to already be with us.

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