

Global climatology of explosive cyclones

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Explosive cyclones, which have rapidly intensifying winds and heavy rain, can seriously threaten life and property.

These "meteorological bombs" are difficult to forecast, in part because scientists need a better understanding of the physical mechanisms by which they form. In particular, the large-scale circulation conditions that may contribute to explosive cyclone formation are not well understood.

Black and Pezza analyzed broad-environment energetics in creating a global climatology of explosive cyclones.

They identify global hotspots for explosive cyclones and find that explosive cyclones in different geographical locations share a similar characteristic energy-conversion signature that can easily be identified in [satellite data](#).

The study could help improve storm track prediction.

More information: A universal, broad-environment energy conversion signature of explosive cyclones *Geophysical Research Letters*, [doi: 10.1002/grl.50114](#), 2013
<http://onlinelibrary.wiley.com/doi/10.1002/grl.50114/abstract>

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