

# **A machine learning revolution for weather forecasting?**

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## **ABSTRACT**

Machine learning has had a transformative effect in many fields, driven by advances in algorithms, hardware and huge datasets. In the field of weather forecasting there are a vast array of problems where machine learning is being explored as a possible force for good. At the European Centre for Medium-Range Weather Forecasts we have been bringing promising machine learning applications towards operationalisation to improve global forecasts. The past year has seen a rapid-rise of data-driven forecasting system, models capable of making forecasts with no explicit knowledge of physics. We will discuss these models, how they perform and forecast what the future holds for machine learning's impact in weather forecasting.