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Towards a Weather Forecast for Migraine Sufferers

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Although the link between weather and migraine remains to be understood, it is clear that a timely and reliable forecast of increased migraine risk would be valuable to migraine sufferers.
This study attempts to address a number of challenges related to preparing a scientifically substantial weather related migraine risk forecast as a derivative from the results of Numerical Weather Prediction (NWP) models. Numerous studies have provided divergent views in argument about the aspects of weather that are responsible for migraines and whether such link exists at all, therefore a literature review is carried out, focusing on the applicability of the results.
Sometimes, the approach used in studies cannot be directly applied to forecasting and therefore further analysis must be carried out. For instance, increase in daily mean temperature with respect to other days in a single calendar month is associated with migraine risk (1). If a forecast is created based on this approach, the quantity against which the increase in temperature is calculated must be specified.
The quality of weather forecast would influence the quality of „migraine forecast" even if the influence of weather on migraine would be known with certainty; therefore it is beneficial to verify the weather forecasts with respect to migraine related applications. Validation of selected migraine related parameters from the results of Numerical Weather Prediction models is carried out.

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