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Forecasting wind erosion events in Europe - First results of a reanalysis

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The soil thematic strategy has been adopted in September 2006 by the European Commission to improve the protection of the protection of European Soils. Wind erosion is one of the threats outlined in there. Areas of wind erosion have been already outlined in several publications. However, a near real time forecasting of wind erosion events is missing. If a forecasting is performed, it would be useful to minimize effects for example on human health or agriculture production. Wind Force Integrals can be used to approximate the energy, which is available to erode soil surfaces. Data used in this approach are (i) texture data from the European soil database (II) and meterological forecast data from 2005/2006 created by the European Center for Medium Range Weather Forecast. Thereby a forecast is made for each 10 days, where and when wind erosion events occur. The system and the dataflow will be outlined and a reanalysis of forecasts will be presented. Additionally, the use of daily fractional vegetation cover provided via satellite by landsaf will be evaluated.