

Interactive comment on “Estimation of regional differences in wind erosion sensitivity in Hungary” by G. Mezősi et al.

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We would like to thank for taking time to read and make recommendations and for the positive review and valuable comment. We are glad that our method has found practical importance. In case of the relevant meteorological elements of the country (maximum wind speeds achieved in various regions of the country; their frequency, minimum soil moisture or duration of dry periods) we have only limited data, mainly country averages or only for a few stations. The main climatic parameters according to wind erosion are the following: the lowest amount of precipitation is usually occurring in the January-March period of the year, since water content in air is the lowest in this period of the year due to the low temperatures (Péczely 1998, MET 2012). Also

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the number of wet days ($RR > 1$ mm) is also low, 6 days/months in the January-March period (MET 2012). The average wind speed reaches its maximum in April and number of days on which the maximum wind speed is over 10 ms^{-1} is also the highest in April, on the middle part of the country (Budapest) 17 days with maximum wind speed is over 10 ms^{-1} occur in average (MET 2012a) (Fig. 2). Moreover, 4 days with maximum wind speed is over 15 ms^{-1} occur in average (MET 2012a). The maximum observed wind speed in the country was 47.7 ms^{-1} , measured in the western part of the country. Long-term detailed soil moisture data in the country are not available. Verifying the regional results is difficult, because only a few field measurements were carried out in the country, which were incorporated in the study. In the NW of Hungary with high sensitivity (Fig. 11) there are no available site-specific data. Indirect information can be gathered, such as the map of economic loss due to wind erosion and this map indicate high wind erosion damage in the NW part of the country.

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