The physical properties of soil play an important role in determining the suitability of the soil for agricultural (Halecki et al., 2018), environmental and constructional use. Different soil functions are directly linked to the physical properties of the soil, such as, for example, water transport (Chen at al., 2017), the retention and availability of water (Jiu et al., 2019) and plant nutrients, the ease of rooting, and the flow of heat and air. Wind erosion is not only a soil removal process, but also a very effective sorting process. The coarsest particles remain on the soil, while the finer and most valuable soil particles (silt and clay), as well as organic matter, are carried away by the wind. The change of soil surface affects the ecological stability of the landscape (Muchová et al., 2018). The process of removing particles by wind is currently a problem facing large landscape units (Takáč at al., 2008). Wind erosion quantification is based on the measurement of horizontal soil removal, and can be used to derive the soil loss/silt emissions of those particles, or the deposition of transported particles. The loss of topsoil is, according to van Lynden (1995), the most significant aspect of wind erosion in Europe. Due to wind erosion, soil productivity is reduced, as is described by Jönsson (1992) and Veen et al. (1997) in the case of Sweden and Poland, respectively. IS THIS WHAT YOU MEAN? Recently, Borrelli et al. (2014) pointed to the need for a new phase of field measurements and local monitoring to increase the reliability of wind erosion modeling. This is necessary to meet the objectives of the EU Soil Protection Strategy (EC, 2006). Detailed quantitative studies examining the nutritional and chemical properties of the wound sediments I DO NOT UNDERSTAND THIS '.. ..' PERHAPS? are lacking, and few studies have focused on the quantitative analysis of changes in the particle size of the soil and eroded material due to wind erosion.