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# Record of the Dansgaard-Oechger events in European eolian deposits.

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Loess deposits are covering a wide part of Northern Europe, an area expanding from the coasts of Brittany to the Russian plain. Since ten years or so, efforts have been concentrated in selecting European loess sequences along a main W-E transect at roughly 49˚N of latitude, from Northern France to Ukraine. First it has been demonstrated that the main eolian deposition over Europe occurred during the time interval comprised between 35 and 15 kyrs. Second, the high-resolution study of the sequences indicates the alternation of well-developed soils, embryonic or tundra gley paleosols and loess deposits. The succession of these different units show a particular pattern which is correlated with the DO sequence including Greenland IS 2 to 8, even if other shorter intervals, not labeled as DO events, are expressed in the eolian deposits. This correlation is supported by i) OSL and AMS dates on the organic matter preserved in the loess units, ii) mollusk assemblages variations, iii) d13C on organic matter preserved in the loess, and iv) grain size analysis. We present here the last results of our investigation showing that the DO events preserved in the European loess sequences correspond to interval of low eolian regime, showing higher moisture than during the deposition of the dust. The duration of the DO events also influence the nature of the associated units (paleosol, tundra gleys or embryonic soils, loess) whereas the Heinrich events in between DO events are intervals of dry and windy conditions expressed by coarser material.