

European Geosciences Union - Vienna 2011



Climate: Past, Present & Future Division program



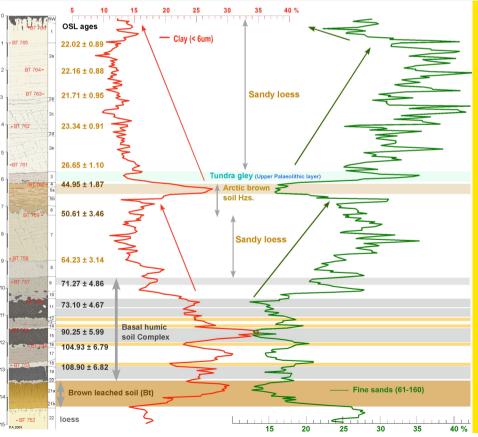
Dolní Vestonice (Czech Republic): a new high-resolution loesspalaeosol record of the last climatic cycle in Central Europe

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Material: 15m thick loess-palaeosol sequences including two main loess units for the Last glacial and two soil complexes

Methods:

High-resolution (5cm) approach: grain-size, magnetic susceptibility & environmental magnetism, geochemistry (organic carbon d¹³C). Geochronology: 14 OSL samples

Results:

- 1) First continuous multiproxy high-resolution record at DV
- 2) Grain size analysis: succession of abrupt coarse-grained events & global coarsening of the sedimentation during the last glacial.
- 3) **Correlations with western European** grain size records between 20 and 30 ka.
- 4) Exceptionally complete **Eemian / Early-weichselian soil complex** allowing a detailed reconstruction of environmental changes between **ca. 110 and 70 ka.**
- 5) According to OSL dates and palaeopedological investigations : the **main climatic events** expressed in the NGRIP d¹⁸O reference record from **GIS 25 to 19** have been recorded in the **basal soil complex**