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## Preliminary analysis of two-year long records of air and underground temperatures as measured at some automatic weather stations in Romania

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Data recorded in 2002 and 2003 at 10 stations out of the 70 of the Romanian automatic weather stations network are presented and analyzed in terms of the heat transfer from air to underground. The air temperature at 2 m, the soil temperatures at 5, 10, 20, 50 and 100 cm below soil surface as well as the wind speed and direction, precipitation, relative humidity, global radiation, and snow height have been monitored. The selected locations sample various climate environments in Romania. First order numerical modeling confirm that at certain locations and for certain time intervals soil temperatures track air temperature variations and consequently the heat transfer is by conduction, while at others, processes such as soil freezing and/or solar radiation heating play an important part in the heat flux balance at the air/soil interface.