Szilágyi's DEPTH Code: Information for DataFurnace Users

Edit Szilágyi's DEPTH code for accurately calculating energy resolution as a function of depth is essential for high resolution analyses.

Nuno Barradas has used this repeatedly for a series of very beautiful high resolution RBS analyses, and we have done our best to encourage users to make use of this code.

Now we are releasing an NDF that can fit roughness it becomes indispensable to have a good calculation of depth resolution. Edit Szilágyi has provided a new DEPTH that works with 50 layers to Nuno and has kindly agreed to make a zip file with the code and Manual available to us to put on this website so that DataFurnace users can access a code that we have tested with NDF.

Download a DataFurnace-compatible DEPTH here. You must install it (see manual) under C:\ or D:\, not under e.g. c:\iba\myprogs\ or whatever. Please refer to the NDF Manual section 13 for use of this code. The code has been updated (March 2005) to fix a bug preventing the use of protons above a certain energy (thanks, Edit)

Please note that this code currently does not support isotopes. Please also note that the multiple scattering component of it is in error for grazing angles of incidence and large depth since the theory assumes left/right symmetry: very clearly not the case for grazing incidence.