Flac3D to TOUGH2 mesh translator

The mesh translator from Flac3D files to TOUGH2 files can be found as a function script "FLAC2TOUGH.m". The use of this function is also straightforward, and does not require input. All you need are informations (files) from Flac3D. Here the commands to extract such information that can be saved as .txt files:

- `list zone`

  (to be saved on file *zone.txt*)

- `list zone gp`

  (to be saved on file *zone_gp.txt*)

- `list zone join`

  (to be saved on file *zone_join.txt*)

- `list gp pos`

  (to be saved on file *gp_pos.txt*)

save all these files in the same folder where you run *"FLAC2TOUGH"* (i.e. where you want "MESH" and "INCON" file to be created). As described above, the script need to be installed by changing the MATLAB path. After including the files in your selected folder in the path, simply run it as:

`>>FLAC2TOUGH()`

The script also include a function (called *"create_INCON"*) to produce the TOUGH2 "INCON" file. However the script will only produce the initial condition with a linear gradient (9800 Pa/m and 25°/km). The call is made in the FLAC2TOUGH script by:

`>>FLAC2TOUGH(ID,xyz_zones,0)`

while ID and xyz_zones are internal variable in the scope of the script and should not be changed, the number 0 can be changed according to the "depth of the zero" of your mesh. For example in te case of the example for the 2D irregular mesh, the number should be set to 1500, since the mesh depth was -1000 to 1000, but the mesh was supposed to simulate a domain ranging from -500 to -2500 m, hence the depth of the zero would 1500 (see also "examples/FLAC2TOUGH").

Note also that the INCON was meant for ECO2N module. If you need a different format then modify the function *"create_INCON"* according to your needs.