

# Hands on tutorial #2: Installing and running the 1D version of the LMDZ model (in sequential mode)

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November 2022

This tutorial shows you 3 possibilities to install the 1D version of LMDZ : 2 are of general use, and the 3rd is the one recommended for the practical work during this training. NOTE : for working with the 1D mode version, it is recommended to install LMDZ in sequential mode.

## **General method 1 : Installing the LMDZ model from scratch, including the 1D version**

This can be done as in Tutorial\_0, just by adding to the `./install_lmdz.sh` command the option `"-SCM"`, preferably with `"-parallel none"`. You can also add the `"-bench 0"` option to avoid the compilation of the 3D model and the execution of the Bench :

```
cd
wget http://web.lmd.jussieu.fr/~lmdz/pub/install_lmdz.sh
chmod +x install_lmdz.sh
./install_lmdz.sh -v 20221028.trunk -SCM -parallel none -bench 0"
```

## **General method 2 : Installing the 1D version when you have already the 3D version installed**

Supposing that you have already installed the 3D model, as in the exemple from Tutorial\_0, you only need to download the 1D version as a "tar" archive, unpack it, go to the resulting 1D directory and launch the `run.sh` script :

```
cd LMDZ_t0
cd LMDZ20221028.trunk
wget https://lmdz.lmd.jussieu.fr/pub/1D/1D.tar.gz
tar -xf 1D.tar.gz
cd 1D
./run.sh
```

## **Recommended for this training : blindly use the specially prepared script 'install\_lmdz\_seq.sh'**

Download and run the script `install_lmdz_seq.sh` , prepared for you to install the model with the appropriate options, as follows :

```
cd
wget https://lmdz.lmd.jussieu.fr/pub/Training/2022FormationMaroc/install_lmdz_seq.sh
chmod +x install_lmdz_seq.sh
./install_lmdz_seq.sh
```

By default the script will install the model in a folder named LMDZseq

In a different terminal window you may look at the differences between `install_lmdz_seq.sh` and the original `install_lmdz.sh`. As you will see, `install_lmdz_seq.sh` is equivalent to running `install_lmdz.sh` with the following options :

```
"-name LMDZseq -v 20221028.trunk -d 32x32x39 -SCM -parallel none -veget NONE  
-bench 0"
```

It will install the model in a folder named LMDZseq, and you will find the 1D version in LMDZseq/1D