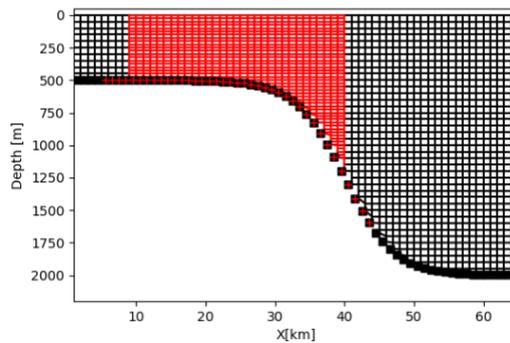


## Running the 2dv Overflow test case with an embedded change of vertical coordinate (AGRIF) – J. Chanut – March 2021

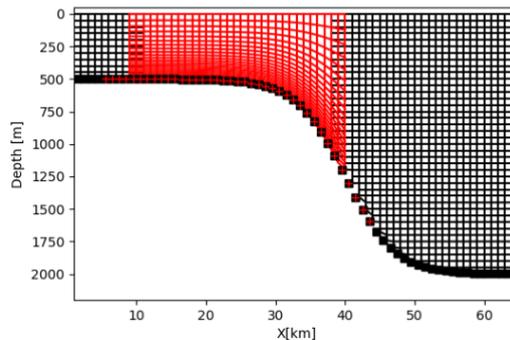
1. Compile Overflow test case with agrif cpp key:  
`./makenemo -j 4 -a OVERFLOW add_key "key_AGRIF"`
2. Get into tests/OVERFLOW/EXPREF/AGRIF directory where you can find all files that override or complement the default OVERFLOW tests case.
3. Pick one of the provided parent and child input domain files among OVF\_E\*\_domcfg.nc and 1\_OVF\_E\*\_domcfg.nc. Rename them as OVF\_domcfg.nc and 1\_OVF\_domcfg.nc or change expected input names in parent and child namelists accordingly.

The different available setups are given below. In any cases, parent grid has 40 evenly spaced geopotential levels with partial bottom cells:

- OVF\_E1\_domcfg.nc/ 1\_OVF\_E1\_domcfg.nc  
⇒ Child grid has 80 z-levels



- OVF\_E2\_domcfg.nc/ 1\_OVF\_E2\_domcfg.nc  
⇒ Child grid has 20 bottom stretched s-levels



- OVF\_E3\_domcfg.nc/ 1\_OVF\_E3\_domcfg.nc  
⇒ Child grid has 20 bottom stretched s-levels with smoothing near grid interface

