

Surfex OFFLINE driver parallellization

Summer 2012 (1)

- Development with F. Suzat (CTI):
 - MPI
 - OPEN-MP
- Main modifications on driver and I/O routines
- Few cases of lines needed adaptations:
 - Max/min/sum needed on the whole domain.

Summer 2012 (2)

- Tests on :
 - ANETO (PC cluster, CTI)
 - TORI (SX8)
 - HPCF (AIX64)

- Tested configurations:
 - Surfex I/O formats
 - Main physical options for each tile
 - MPI only, OPEN-MP only, MPI+OPEN-MP, 1 to 40 procs/threads.

Spring 2013

- Tests on PREFIX (BULL):
 - No problems with MPI
 - A few adaptations needed for OPEN-MP (seen with D. Charpin): some routines need to be compiled with level 1 of optimization (because they don't work with level 2).

=> Contact with BULL to solve the underlying problem
(ongoing)
- Detailed scalability tests remain to be done