



How to modify source code in HARMONIE_MUSC

Laura Rontu

FMI, Meteorological Research

International HIRLAM-B programme, Physical parametrisations



MUSC working days
29.11 – 2.12.2011 FMI, Helsinki



Modèle Unifié, Simple Colonne



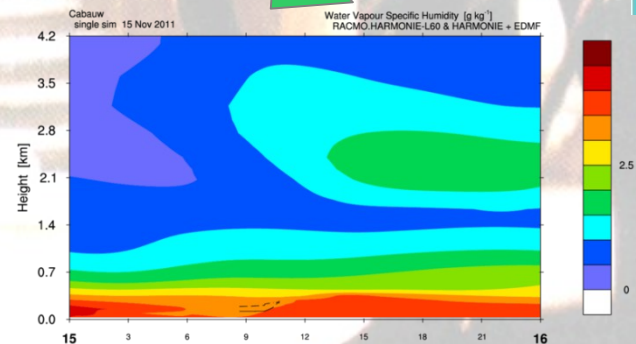
CONVERT
FROM LFA

gl

acadfa1D +
pgd + prep

PIC
COLI
CONVERT
TO FA/LFI
NAM -FILES

PLOT



Modify runtime namelist



- 1) say: mur murad
- 2) say: . ./tools.path
- 3) check that you have test input and namelist template in \$MU_WD
- 4) edit the namelist options:
LRRTM=.true., LRAY=.false., LRAYFM=.true.
- 5) Runmusc
- 6) cd \$MU_WRK
- 7) Ifadiffrelnz \\
MUTEST/OUTPUT \\
ARPEGE_25_300s_L70_ARPE/Out.012.0000.lfa
murad/OUTPUT \\
ARPEGE_25_300s_L70_ARPE/Out.012.0000.lfa



MUSC working days
29.11 – 2.12.2011 FMI, Helsinki



Modify source code



- 1) `mkdir -p src/arp/phys_dmn`
- 2) `cp $refmusc/src/arp/phys_dmn/aplpar.F90 \\ src/arp/phys_dmn`
- 3) `cd src/arp/phys_dmn, edit aplpar.F90`
- 4) `mur murad recompile (this may take some time)`
- 5) `mv $MU_WRK/MUTEST/OUTPUT \\ ARPEGE_25_300s_L70_ARPE/ $MU_WRK/MUTEST/OUTPUT/ ARPEGE_25_300s_L70_ARPRO`
- 6) `Runmusc`
- 7) `cd $MU_WRK/murad/OUTPUT`
- 8) `lfadiffrelnz \\ ARPEGE_25_300s_L70_ARPRO/Out.012.0000.lfa ARPEGE_25_300s_L70_ARPE/Out.012.0000.lfa`



MUSC working days
29.11 – 2.12.2011 FMI, Helsinki



Study mur



Options:

linkref, linkown, recompile, env_only

Is -la \$MYOWNEXE

Directory structures:



**MUSC working days
29.11 – 2.12.2011 FMI, Helsinki**



Directory structures:



/home/hirlam/harmonie_MUSC/

src/
scr/
reflib/
util/
bin/

/home/rontu/musc

scr/
EXP/EXPm - EXPn/

scratch/EXPm...EXPn/

src/
OUTPUT/

lib/src
bin/

general scripts
\$MU_WD:
modified source codes
output directories
\$MU_WRK:
compiled and source code
compiled MASTER



MUSC working days
29.11 – 2.12.2011 FMI, Helsinki

