Modelscarp RJ-McMC

# How to install the library RJ-McMC.

* **Specify the path for the mpi library:**

PATH=$PATH:/export/apps/intel-v15/impi/5.0.3.048/bin64/:/export/apps/mpich2/bin

* **Configure the install file:**

./configure --prefix=/export/home/benedet/RJMCMC4/bin --with-openmpi-include-path=/export/apps/intel-v15/impi\_latest/intel64/

./configure --prefix=/Users/Jim/Documents/Work/Transdimensional/Modelscarp\_RJ-McMC/RJMCMC-4/bin --with-openmpi-include-path /opt/local/include/openmpi-mp --with-openmpi-lib-path=/opt/local/lib/openmpi-mp

Options:

--prefix : specify the path of the bin folder where the RJ-McMC library will be installed.

--with-openmpi-lib-path= specify the path of the “lib” folder of your mpi library.

--with-openmpi-include-path= specify the path of “include” folder of your the mpi library.

* **Install the RJ-McMC library :**

make clean

make

make install

Note: The “Make” soft is required to install the library.

# How to install the inversion routine of Modelscarp.

* **Specify the pkgconfig path localized in the directory of RJMCMC (bin/lib/pkconfig) :**

Export PKG\_CONFIG\_PATH = $PKG\_CONFIG\_PATH:/export/home/benedet/RJMCMC4/bin/lib/pkgconfig

*Expor tPKG\_CONFIG\_PATH = $PKG\_CONFIG\_PATH:/Users/Jim/Documents/Work/Transdimensional/Modelscarp\_RJ-McMC/RJMCMC-4/bin/lib/pkgconfig*

* **Configure the install file:**

./configure F77=mpif90 FC=mpif90

make clean

make rf\_mpi

Note: The “Make” soft is required to install the library. Specify the commands for 1) the mpi fortran compiler (F77), and the mpi C compiler (FC).

* **Prior execution of the inversion program, specify the path for the library of the RJ-McMC in the bin folder (bin/lib):**

export LD\_LIBRARY\_PATH=$LD\_LIBRARY\_PATH:/export/home/benedet/RJMCMC4/bin/lib

*export LD\_LIBRARY\_PATH = $LD\_LIBRARY\_PATH:/Users/Jim/Documents/Work/Transdimensional/RJMCMC-4/bin/lib*

# How to execute the inversion program.

* **Placed the data files in the “data” folder.**

The chemical data file must be called: data.txt

The chemical data file of the colluvial wedge must be called: coll.txt

The scaling factor file must be called: sf.txt

* **Edit the parameter file “modelscarp\_param/param\_site.in”.**
* **Execute the inversion.**

./Modelscarp\_inversion

* **On-going results for each chain of the inversion are placed in the folder “results/”.**

**Chain\_number**

Ex: for the chain 2, the result file is named: “2\_results.txt”