## MODEL A

## moj\_init(comp\_name, namelist\_file)

Initialize the coupler

$$\begin{split} MPI\_MY\_COMM &= \textbf{moj\_get\_comm\_local}() \\ MPI\_MY\_RANK &= \textbf{moj\_get\_irank\_local}() \end{split}$$

Obtain MPI information from MOJ

 $moj\_def\_grid(grid\_name,\,nx,\,ny,\,nz,\,grid\_index)$ 

Set grid point index of own region

moj\_end\_grid\_def()

Finish grid point index setting

moj\_set\_interpolation\_table(send\_comp\_name, send\_grid\_name, recv\_comp\_name, recv\_grid\_name, send\_grid, recv\_grid, coef)

Set mapping table(global region)

moj\_init\_time(time)

Set initial time

moj\_put\_data(data\_name, data)

Put initial data (time step = 0)

Time integration loop

moj\_finalize(is\_exchange\_data, is\_call\_finalize)
Finalize coupling

## MODEL B

moj\_init(comp\_name, namelist\_file)

Initialize the coupler

MPI\_MY\_COMM = moj\_get\_comm\_local()

MPI\_MY\_RANK = moj\_get\_irank\_local()

Obtain MPI information from MOJ

moj\_def\_grid(grid\_name, nx, ny, nz, grid\_idex)

Set grid point index of own region

moj\_end\_grid\_def()

Finish grid point index setting

moj\_set\_interpolation\_table(send\_comp\_name, send grid name, recv comp name,

recv grid name)

Set mapping table

moj\_init\_time(time)

Set initial time

moj\_put\_data(data\_name, data)

Put initial data

Time integration loop

moj finalize(is exchange data, is call finalize)

Finalize coupling

multiple call permitted

single call only