Fortran ESM	Fortran Interface	C Bridge	Python ML

ML initialization

atm_init_mct
init_ml()

ml_wapper_f
init_ml() bind(C, name="ml_init_c")

ml_wapper_c
init_py()

init_py
Load global data; Load pre-trained ml model

Data model

ML process

zm_conv
cape=cape_ml(t,p,q)

t,p,q

cape

ml_wapper_f
cape_ml() bind(C, name="cape_ml_c")

t,p,q

cape

ml_wapper_c
cape=cape_ml_py()

t,p,q

cape

cape_ml_py
cape = model.predict(t,p,q)