



FIGURE 15.2: Position of a model domain compared to the data input domain when the zoom functionality is used.

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rn_atfp = 0.1 ! asselin time filter parameter
nn_acc = 0 ! acceleration of convergence : =1 used, rdt < rdttra(k)
! =0, not used, rdt = rdttra
rn_rdtmin = 28800. ! minimum time step on tracers (used if nn_acc=1)
rn_rdtmax = 28800. ! maximum time step on tracers (used if nn_acc=1)
rn_rdth = 800. ! depth variation of tracer time step (used if nn_acc=1)
ln_crs = .false. ! Logical switch for coarsening module
jphgr_msh = 0 ! type of horizontal mesh
! = 0 curvilinear coordinate on the sphere read in coordinate.nc
! = 1 geographical mesh on the sphere with regular grid-spacing
! = 2 f-plane with regular grid-spacing
! = 3 beta-plane with regular grid-spacing
! = 4 Mercator grid with T/U point at the equator
ppglam0 = 0.0 ! longitude of first row and column T-point (jphgr_msh = 1)
ppgphi0 = -35.0 ! latitude of first row and column T-point (jphgr_msh = 1)
ppe1_deg = 1.0 ! zonal grid-spacing (degrees)
ppe2_deg = 0.5 ! meridional grid-spacing (degrees)
ppe1_m = 5000.0 ! zonal grid-spacing (degrees)
ppe2_m = 5000.0 ! meridional grid-spacing (degrees)
ppsur = -4762.96143546300 ! ORCA r4, r2 and r05 coefficients
ppa0 = 255.58049070440 ! (default coefficients)
ppa1 = 245.58132232490 !
ppkth = 21.43336197938 !
ppacr = 3.0 !
ppdzmin = 10. ! Minimum vertical spacing
pphmax = 5000. ! Maximum depth
ldbletanh = .TRUE. ! Use/do not use double tanh function for vertical coordinates
ppa2 = 100.760928500000 ! Double tanh function parameters
ppkth2 = 48.029893720000 !
ppacr2 = 13.000000000000 !
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Searching an equilibrium state with an global ocean model requires a very long time integration period (a few thousand years for a global model). Due to the size of the time step required for numerical stability (less than a few hours), this usually requires a large elapsed time. In order to overcome this problem, Bryan [1984] introduces a technique that is intended to accelerate the spin up to equilibrium. It uses a larger time step in the tracer evolution equations than in the momentum evolution equations. It does not affect the equilibrium solution but modifies the