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| **NEMO** | |
| Model version | V4.0 |
| Horiz. resolution | 1/36° x 1/27° |
| Vertical discretization | 31 z-levels with partial steps (*ln\_hpg\_zps = .true.*) |
| Horiz. viscosity | Bi-Laplacian (*ln\_dynldf\_bilap = .true.)* |
| Horiz. diffusivity | Laplacian (*ln\_dynldf\_lap = .true.)* |
| Vertical visc. Scheme | TKE (*ln\_zdftke = .true.)* |
| Free-surface formulation | Split-explicit free surface (*ln\_dynspg\_ts = .true)* |
| Time-step | 150s (*rn\_rdt*), Number of barotropic sub-time steps  (*nn\_baro=100* ) |
| Initial condition | Sea Data Cloud- January 2014 |
| Air-sea fluxes | MFS-bulk formulae |
| Runoff | 72 rivers from SESAME project, 0[PSU]-salinity |
| Solar radiation | 2-Bands penetration (*ln\_qsr\_2bd = .true.*) *rn\_abs = 0.6, rn\_si0 = 0.3, rn\_si1 = 9* |
| Lateral momentum B.C. | No-sleep (*rn\_shlat = 2*) |
| Bottom momentum B.C | Non linear friction (*ln\_non\_lin = .true.*) |
| EOS | UNESCO, 1983 (*ln\_eos80 = .true.*) |
| Tracer advection | 2nd-order Flux Corrected Transport (*ln\_traadv\_fct = .true*) |
| Momentum advection | Vector form (energy and enstrophy cons. scheme) (*ln\_dynadv\_vec = .true. ln\_dynvor\_een = .true.*) |
| Back. Vertical visc. | *rn\_avt0* = 1.2e-5m2s-1 |
| Back. vertical dif. | *rn\_avm0* = 1.2e-6m2s-1 |