NEMO, NEMOGCM

├── nemo_init *initialise model and read namelists*
│   ├── cpl_init *read namelists*
│   └── sbc_init *initialise surface boundary conditions → LIM, see Fig. 3*
├── stp_c1d *time stepping*
│   ├── sbc *update boundary conditions*
│   │   ├── sbc_cpl_rcv *coupling, receiving fields*
│   │   └── sbc_ice_lim (nn_ice=3:LIM) *update ocean surface boundary conditions, → LIM, see Fig. 3*
│   ├── zdf* *vertical physics*
│   │   ├── zdf_tke *TKE mixing scheme, with Langmuir parameterisation*
│   │   ├── zdf_ddm *double diffusive mixing*
│   │   └── zdf_tmx *tidal mixing*
│   ├── dia_wri *output dynamics and tracers*
│   ├── tra* *advance active tracers T & S*
│   │   ├── tra_sbc *trend due to air-sea flux and associated concentration/dilution effect*
│   │   ├── tra_qsr *penetrative solar radiation*
│   │   ├── tra_dmp *internal damping trends*
│   │   ├── tra_zdf *vertical component of tracer mixing*
│   │   └── tra_nxt *modified leapfrog time stepping of T & S*
│   ├── dyn* *calculate dynamics tendencies (ua: trend; ub: before; un: now)*
│   │   ├── dyn_dmp *internal damping trends*
│   │   ├── dyn_cor_c1d *apply Coriolis force*
│   │   ├── dyn_zdf *vertical momentum diffusion*
│   │   └── dyn_nxt_c1d *Euler/leapfrog time stepping of u & v*
│   └── sbc_cpl_snd *coupling, sending: SST, α (ice and mixed), ice fraction and thickness, sfc current*
├── nemo_closefile
└── cpl_finalize