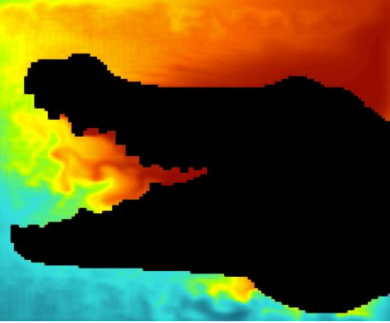
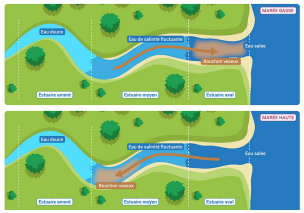
CROCO – training 2022



Introduction to ocean models

CROCO
Coastal and Regional Ocean COmmunity model

Ocean models

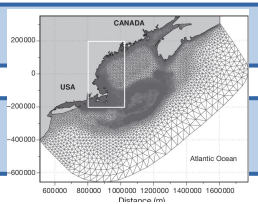


Beach, lagoon, estuary

Coast, continental shelf, regional

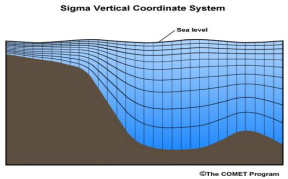
Offshore, ocean

Finite elements — **Coherens, Telemac …**

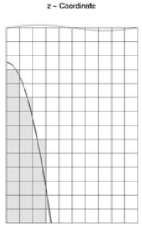


Finite Volumes — **FVCOM, MIKE3, MOHID…** — **MITgcm**

Finite Differences



Sigmas coordinates
MARS3D, CROCO, …



Z coordinates

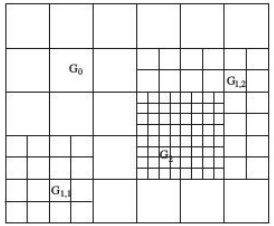
NEMO, …

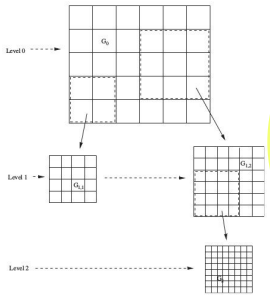
Finite Differences

Isopycnal or hybrid coordinates **HYCOM**

Choice of an ocean model

CROCO
Coastal and Regional Ocean COmmunity model





Zoom?
(Agrif : Adaptative Grid Refinement In Fortran)

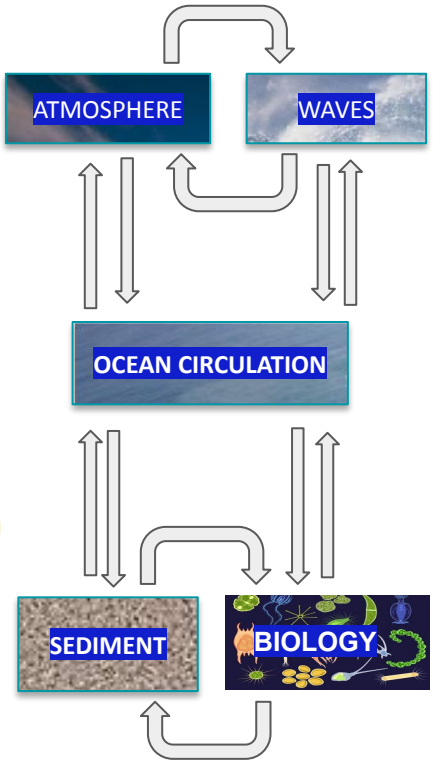
Modules?
(Biology, Sediments, …)

Interest

Community
(France, USA, …)

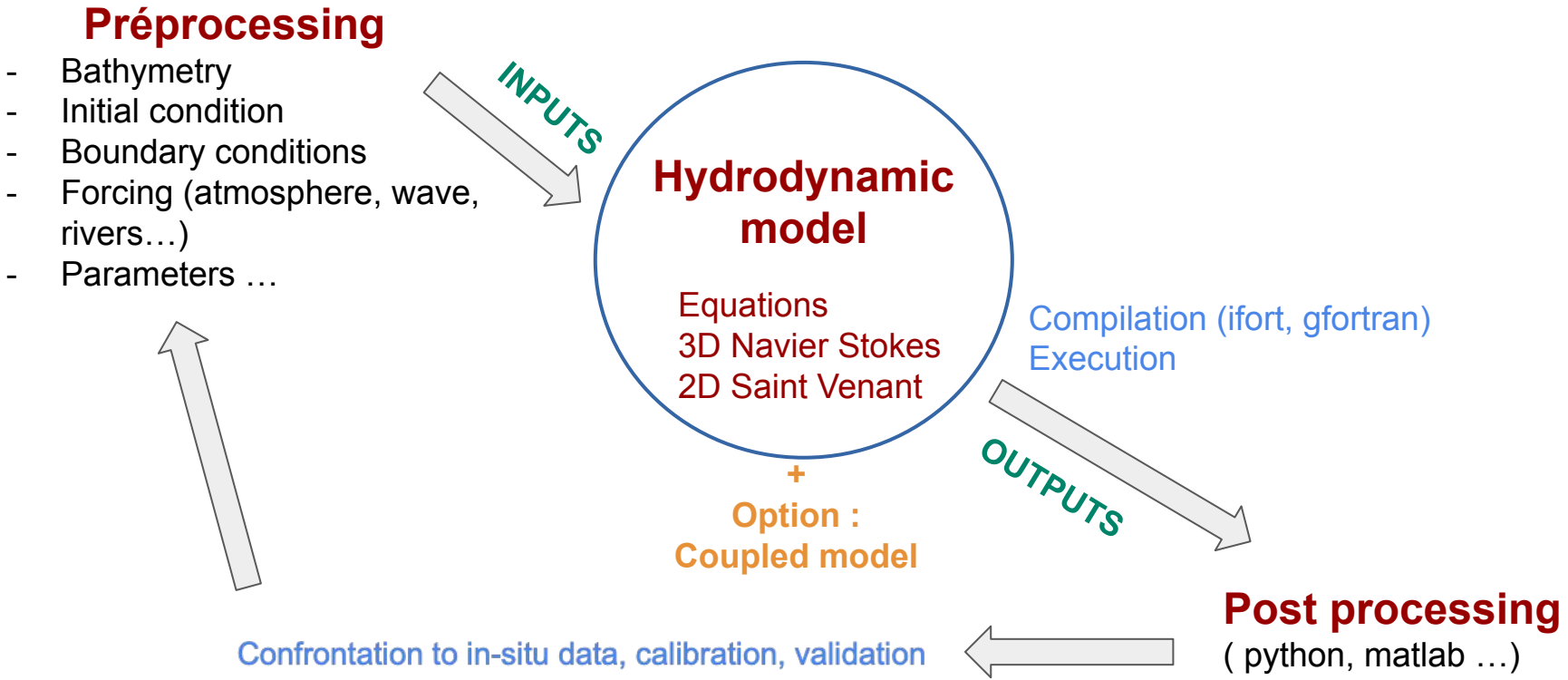
Coupling available?
(atmosphere, waves, …)

Available computing resources



How does it work?

CROCO
Coastal and Regional Ocean COmmunity model



What about CROCO ?