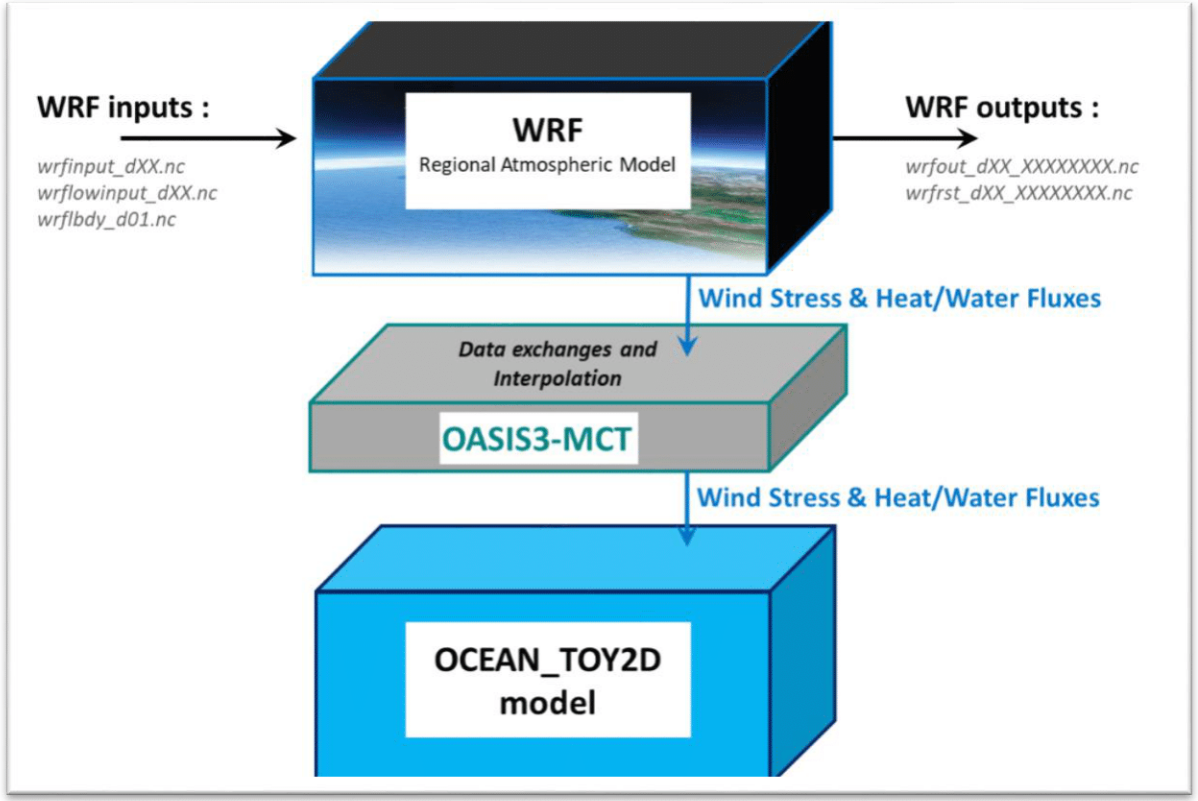
Outlines for the training week

1. Introduction – Presentation of the Model & coupler components
   – Installation of the coupling environment
2. Run an inter-annual **CROCO** simulation (**RUN1**)
3. Coupling **CROCO** with an atmospheric **TOY** model – spatial regridding (**RUN2**)
4. Run a **WRF** inter-annual simulation (**RUN3**)
5. **Coupling WRF with an ocean TOY model – time transformation** (**RUN4**)
6. Coupling **CROCO** with **WRF** : parallel coupling (**RUN5**)

Coupling WRF and OTOY2D



reads `namelist.input` `wrfrst_d01_XXX`

writes `wrfrst_d01_XXX`

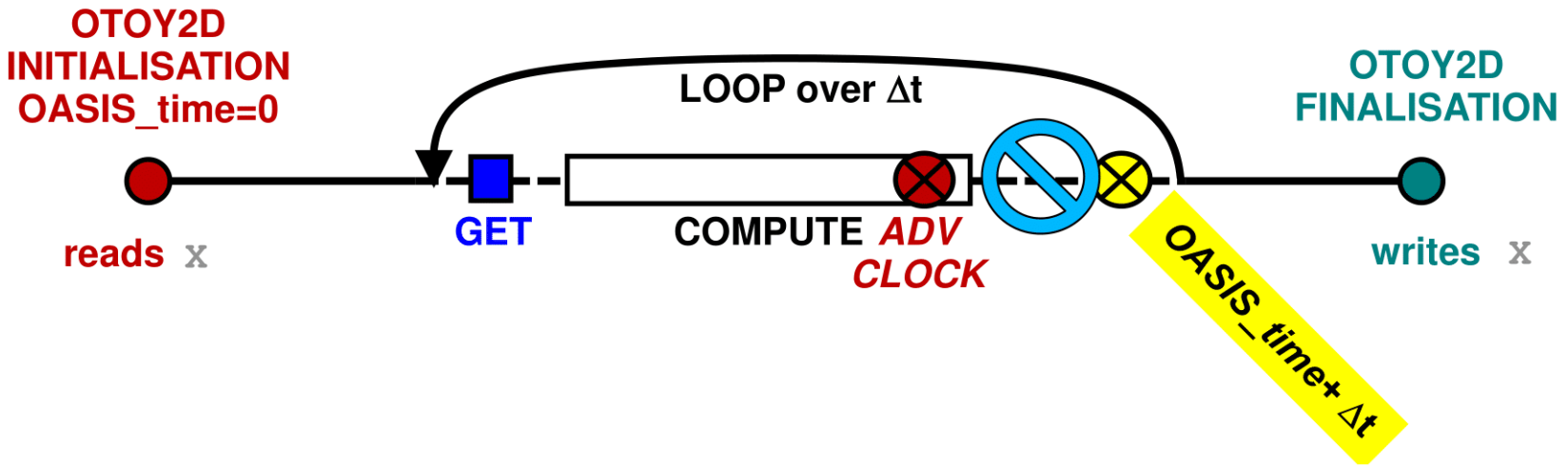
COMPUTE Y2012M12D31

WRF INITIALISATION

Coupling Frequency 3600s

WRF FINALISATION

Coupling in OTOY2D code

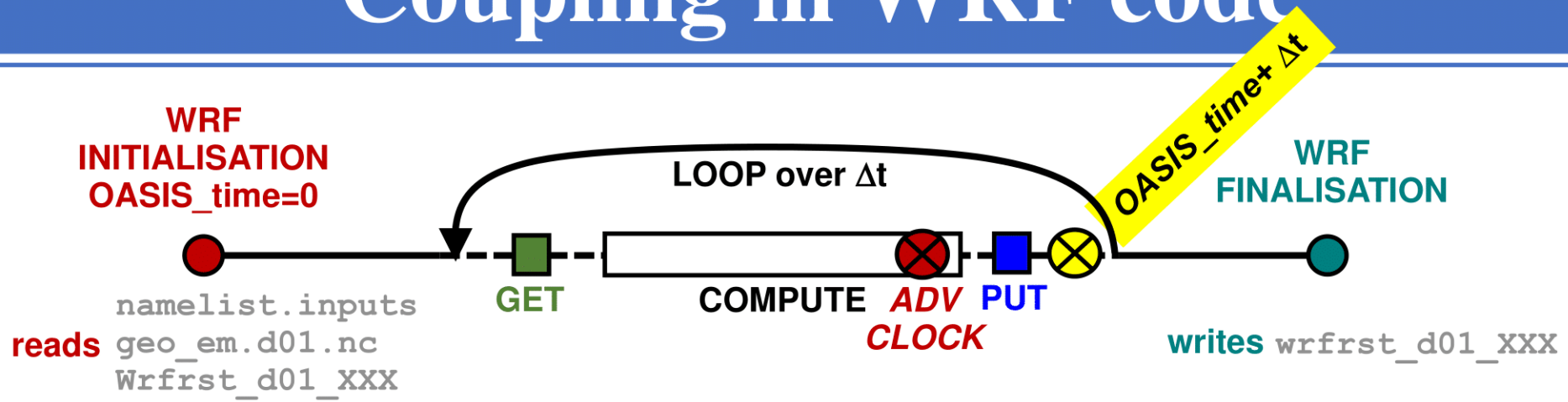


ATOY2D EXCHANGED FIELDS: (0=Parent, 1=first zoom, etc…)

RECEIVED

- `OTOYSRFL0` → 2D Field, just like a Solar Heat Flux field
- `OTOYEVPR0` → 2D Field, just like an Evaporation minus Precipitations field
- `OTOYSTFL0` → 2D Field, just like a Non-Solar Heat Flux field
- `OTOYTAUX0` → 2D Field, just like a surface zonal stress field
- `OTOYTAUY0` → 2D Field, just like a surface meridional stress field

Coupling in WRF code



WRF EXCHANGED FIELDS: (d01=Parent, d02=first zoom, etc…)

SENT

- `WRF_d01_EXT_d01_SURF_NET_SOLAR` → WRF Solar Heat Flux on grid **`wrp0`**
- `WRF_d01_EXT_d01_EVAP-PRECIP` → ROMS Evaporation minus Precipitations on grid **`wrp0`**
- `WRF_d01_EXT_d01_SURF_NET_NON-SOLAR` → ROMS Non-Solar Heat Flux on grid **`wrp0`**
- `WRF_d01_EXT_d01_TAUX` → WRF Stress along X axis on grid **`wrp0`**
- `WRF_d01_EXT_d01_TAUY` → WRF Stress along Y axis on grid **`wrp0`**

RECEIVED

- `WRF_d01_EXT_d01_SST` → WRF SST on grid **`wrp0`**
- `WRF_d01_EXT_d01_UOCE` → WRF Surface Zonal Current on grid **`wrp0`**
- `WRF_d01_EXT_d01_VOCE` → WRF Surface Meridional Current on grid **`wrp0`**