CROCO Advanced Course

From 01/17/2022 to 01/21/2022

Day 1 (17th January) – Biogeochemistry

Vincent Echevin [VE]
Odette Vergara [OV]
Andres Sepulveda [AS]

Morning Classes 10 AM
C01 [45 min]: *Dynamical /biogeochemical coupling in models* [VE]
C02 [45 min]: *Biogeochemical modelling with PISCES* [VE]
C03 [45 min]: *Presentation of the Benguela CROCO-PISCES configuration* [VE]

Afternoon Practice from 3AM
P01: *Production and analysis of the base case CROCO-PISCES simulation* [OV and AS]

Day 2 (18th January) – Biogeochemistry

Vincent Echevin [VE]
Odette Vergara [OV]
Andres Sepulveda [AS]

Morning Classes 10 AM
C04 [45 min]: *Examples of ROMS/CROCO-PISCES applications* [OV and VE]
C05 and C06 [45 min]: *Biogeochemical modelling with PISCES* [OV and VE]
Debrief [15 min] [OE and AS]

Afternoon Practice from 3AM
P02: *Production and analysis of the sensitivity simulations* [OV and AS]
Debrief (15 min) [OV and AS]

Day 3 (19th January) – Ocean-Atmosphere-Wave Coupling

Fabien Desbiolles [FD]
Swen Jullien [SJ]
Lionel Renault [LR]
Gildas Cambon [GC]
Andres Sepulveda [AS]

Morning Classes from 10AM
C07 [45mn] - *Ocean-atmosphere mesoscale coupling: why does it matter ?* [FD]
C08 [45mn] - *Introduction to WaveWatchIII and its coupling with CROCO* [SJ]
C09 [45mn] - *OASIS and Coupling in CROCO* [LR]

Afternoon Practice from 10AM [AS and GC]
P03 – Coupling with a Toy
P04 – Ocean-Atmosphere Coupling: *The case of the Benguela Upwelling*
P05 – Ocean-Wave Coupling: *The case of the Benguela Upwelling*

Day4 (20th) – Sediments, the USGC Model

Rachid Benshila [RB]
Guillaume Morvan [GM]
Andres Sepulveda [AS]

Morning Classes from 10AM

C10 [45mn] - *Sediment modeling with CROCO: I. concept* [RB]
C11 [45mn] - *Sediment modeling with CROCO: II. Practice* [RB]
C12 [45mn] - *Presentation of Test Cases* [GM]

Afternoon Practice from 10AM [AS]
P06- *Idealized Cases*

Day 5 (21th) – NonHydrostatic Model (CROCO-NH)
Patrick Marchesiello [PM]
Laurent Roblou [LR]

Morning Classes from 10AM

C13 [2 hours] - *Advances in nonhydrostatic CROCO" [PM]*
C14 [45mn] - *Dynamics of the strait of Gibraltar - Application of the CROCO NBQ module [LR]*

Afternoon Practice from 10AM [AS]
P07- *Idealized Cases*