FPS on the role of the air-sea coupling and small-scale ocean processes on regional climate

The **goals** of the FPS are the following:

- Investigate the **benefits of simulating realistic air-sea interactions** on the modelling of past and future regional climate.
- Determine the role of small scale oceanic processes on the evolution of regional climate including regional heat budgets
- **Provide a consistent and reliable database** of regional atmospheric and oceanic projections to be used by stakeholders (<u>including marine applications</u>).

Present status.

At present the FPS team has met once in a dedicated workshop (Rome, fall 2016) and will meet again during the HYMEX workshop (Barcelona, summer 2017). In this phase we have been discussing some technical aspects and trying to merge the FPS interests with the MedCORDEX roadplan. The FPS has been presented in the Regional Climate session of the European Geophysical Union Assembly in April but no specific results have been obtained yet.

The **timeline** for the FPS activities is the following:

2017: Refinement of scientific and technical aspects

2017-2018: Evaluation of the ocean-atmosphere coupling strength through sensitivity tests to the representation of the skin SST, SST diurnal cycle, air-sea turbulent fluxes, coupling frequency, wave impact and ocean vertical resolution

2017-2018: Evaluation of the impact of high-resolution ocean component on air-sea coupling.

2018-2019: Deep analysis of the results to assess the added value of coupled systems

2020-2021: Scenario simulations using the coupled systems.

Participants

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