

Panel A- *PHYSICAL PROCESSES IN COASTAL WATERS*

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Points raised during the Panel discussions

- Needs for detailed studies of the submesoscale/mesoscale eddies, coastal fronts, instabilities and their impact on the ecosystem is stressed;
- Coastal areas and open sea exchange mass, passive materials and momentum. Interaction between coastal ocean and open sea strongly depends on the geometry of the coast (semienclosed bays/lagoons versus open straight coast), but it is also a function of external forcings. Joint studies are suggested;
- Canyon dynamics determines the exchange between coastal area and open sea and conditions also the benthic ecosystem. Joint Russian – Mediterranean scientist collaboration should address the role of canyon in the coastal – open-sea exchange;
- Needs for introduction of the high frequency/spatial resolution measurement techniques (coastal radars, moored and Lagrangian profilers, satellite data) is stressed in order to resolve smaller spatial/temporal scale processes taking place in the coastal and shelf areas;
- Further development of the modeling in function of the coastal operational oceanography should consist in intensifying data assimilation techniques;
- More efforts should be put into integration/intercomparison between numerical models and observational data;
- Comparative studies of the influence of the human and natural stressors on BS and MS ecosystems should be carried out;
- A concrete proposal is to develop efforts in possibly integrating the new Russian high resolution measurement technology - the Aqualog profiling system - in the upgrade of the successful HydroChange CIESM programme.
- More generally, broader inclusion of Russian scientists and institutions into the various CIESM on-going programmes is suggested.