Two-particle dispersion in the Gulf of Gabès using a high resolution nested ocean model

Maher Bouzaiene, Milena Menna, A. Fehmi. Dilmahamod, Damiano Delrosso, Simona Simoncelli, Claudia Fratianni







structures.

Further work:

Improve the initial open boundary conditions and atmospheric forcing data inputs. Improve the spatial resolutions near the coasts.

From 0.7-2 km, the absence of the non-local exponential regime, the dispersion is locally driven by energetic submesoscale structures.

For scales ranging from 2-15 km, the presence of the theoretical Richardson regime (implies the presence of an inverse energy cascade range where energy is transferred from small to large scales). The diffusive regime is absent for any scales.