Activity 2 – Ocean turbulence

Introduction

During this activity, we will analyse outputs from realistic ocean simulations.

Get the data
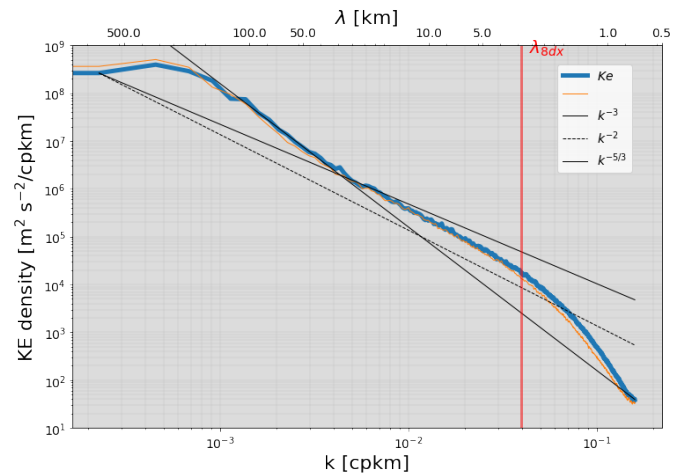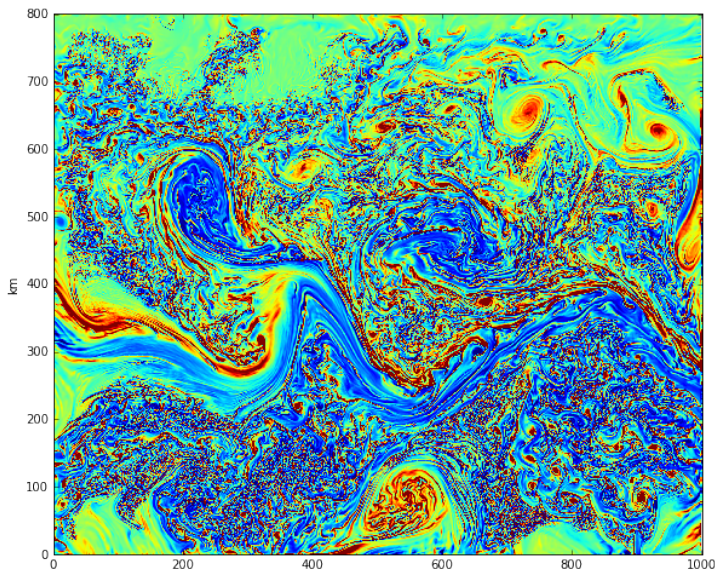
Files containing roms outputs are available here: **/forums/public/pub/Data/**

- **Atlantic_for_turb.nc** is a 5 km resolution simulation of the Atlantic ocean
- **GS_for_turb.nc** is a 500 m resolution simulation of the Gulf Stream after separation

An example notebook with 1d and 2d spectra is available here: **jgula.fr/Turb/**

Ocean turbulence

1. Compute the kinetic energy spectra and the tracer variance spectra at the surface for the different simulations

2. Compare the same spectra at depth.