



A model simulation of biogeochemical conditions along the British Columbia Continental Shelf

Angelica Peña, Isaac Fine, and Diane Masson

Fisheries and Oceans Canada, Institute of Ocean Sciences, P.O. Box 6000, Sidney, BC, V8L 4B2, Canada

The British Columbia shelf is at the northern end of the California Current System and is influenced by summer coastal upwelling, mesoscale eddies, and freshwater inputs. A regional coupled circulation-biogeochemical (ROMS) model of this region has been developed to gain a better understanding of the potential impact of climate variability and change on lower trophic levels and the biogeochemistry of the region. A first step to address the impacts of climate variability on marine ecosystem is to develop biophysical models that simulate the present ecosystem state in relation to the climate record and can be used to examine the influence of different forcing acting, at different scales, on ecological processes. This talk will evaluate the capability of the model to reproduce observations and to respond to main episodic events (seasonal cycle and El Niño events).