

Synoptic Ocean Prediction and Process Studies using Feature Models

Condensed Course within “*Temas Atuais em Oceanografia*”
2-credit (post)graduate course

Open Registration

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1. Synoptic Ocean Prediction: Motivation and Background
2. Introduction to Feature Modeling of Fronts and Eddies
3. Multiscale Feature Models for the Western North Atlantic (1) The Gulf Stream Meander and Ring Region
4. Multiscale Feature Models for the Coastal WNA (2) Gulf of Maine and Georges Bank system
5. Multiscale Objective Analysis for Initialization and Assimilation of Feature Models
6. The *Forward* and *Backward* Problems of developing Feature Models
7. *Forward* Feature Models for the South Western Atlantic – The Brazil Current System
8. *Forward* Feature Models for Coastal SWA – Upwelling and Eddies (MEUS)
9. *Backward* Problems for Brazil Current System – Water-masses
10. Examples of Process Studies using FMs – An Overview
11. Example of Two Operational Modeling Systems: MARACOOS and TNBC
12. Presentations by Students