

## COMPUTATIONAL METHODS IN ENVIRONMENTAL FLUID MECHANICS

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### ABSTRACT

Many problems in geophysical and environmental fluid mechanics have energetic flow scale lengths that are highly nonhomogeneous. Computational methods for problems in environmental fluid mechanics have matured considerably in recent years. This mini-symposium will examine the latest developments in solving uncoupled and coupled flow and transport problems with environmental applications.

Topics of interest include:

Methodology of numerical simulation for environmental flow problems

Flow and transport processes in river, estuarine and coastal systems

Flood Disaster Mitigation

Water and air pollution and the sediment transport

Climate change

Fluid-structure interactions

High performance computing

Error analysis, verification and validation

Unstructured grid generation criteria

p and h refinement