Abstract View

The Modeling of Tidal Flow in a Channel Using a Turbulence Energy Closure Scheme

B. Johns

Department Of Meteorology, University of Reading, Reading, England

ABSTRACT

A parameterization scheme is developed that is suitable for the modeling of turbulence in marine systems and an application is made to the determination of the tidal structure in an elongated channel. The model is used to investigate the practicality of the frequently employed depth-integrated technique and conclusions are drawn about the customary bottom stress parameterization inherent in that approach. Additionally, it is shown that the value of the roughness length of the elements at the floor of the channel is of importance in determining the frictional dissipation in the model and an evaluation is made of the tidally induced residual flow in the channel.

Options:
- Create Reference
- Email this Article
- Add to MyArchive
- Search AMS Glossary

Search CrossRef for:
- Articles Citing This Article

Search Google Scholar for:
- B. Johns

top ▲