



## A General Method for Generating Bathymetric Data for Hydrodynamic Computer Models: Usgs Open-File Report 89-28

By J R Burau, R T Cheng

Bibliogov, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.To generate water depth data from randomly distributed bathymetric data for numerical hydrodymamic models, raw input data from field surveys, water depth data digitized from nautical charts, or a combination of the two are sorted to given an ordered data set on which a search algorithm is used to isolate data for interpolation. Water depths at locations required by hydrodynamic models are interpolated from the bathymetric data base using linear or cubic shape functions used in the finite-element method. The bathymetric database organization and preprocessing, the search algorithm used in finding the bounding points for interpolation, the mathematics of the interpolation formulae, and the features of the automatic generation of water depths at hydrodynamic model grid points are included in the analysis. This report includes documentation of two computer programs which are used to: (1) organize the input bathymetric data; and (2) to interpolate depths for hydrodynamic models. An example of computer program operation is drawn from a realistic application to the San Francisco Bay estuarine system. (Author s abstract).



READ ONLINE [ 6.14 MB ]

## Reviews

This book is very gripping and fascinating. Yes, it is play, nonetheless an interesting and amazing literature. I found out this ebook from my dad and i recommended this pdf to discover.

-- Lavada Nikolaus

This book is great. I could possibly comprehended everything using this published e book. I am easily could possibly get a enjoyment of reading a published pdf.

-- Deanna Rath I