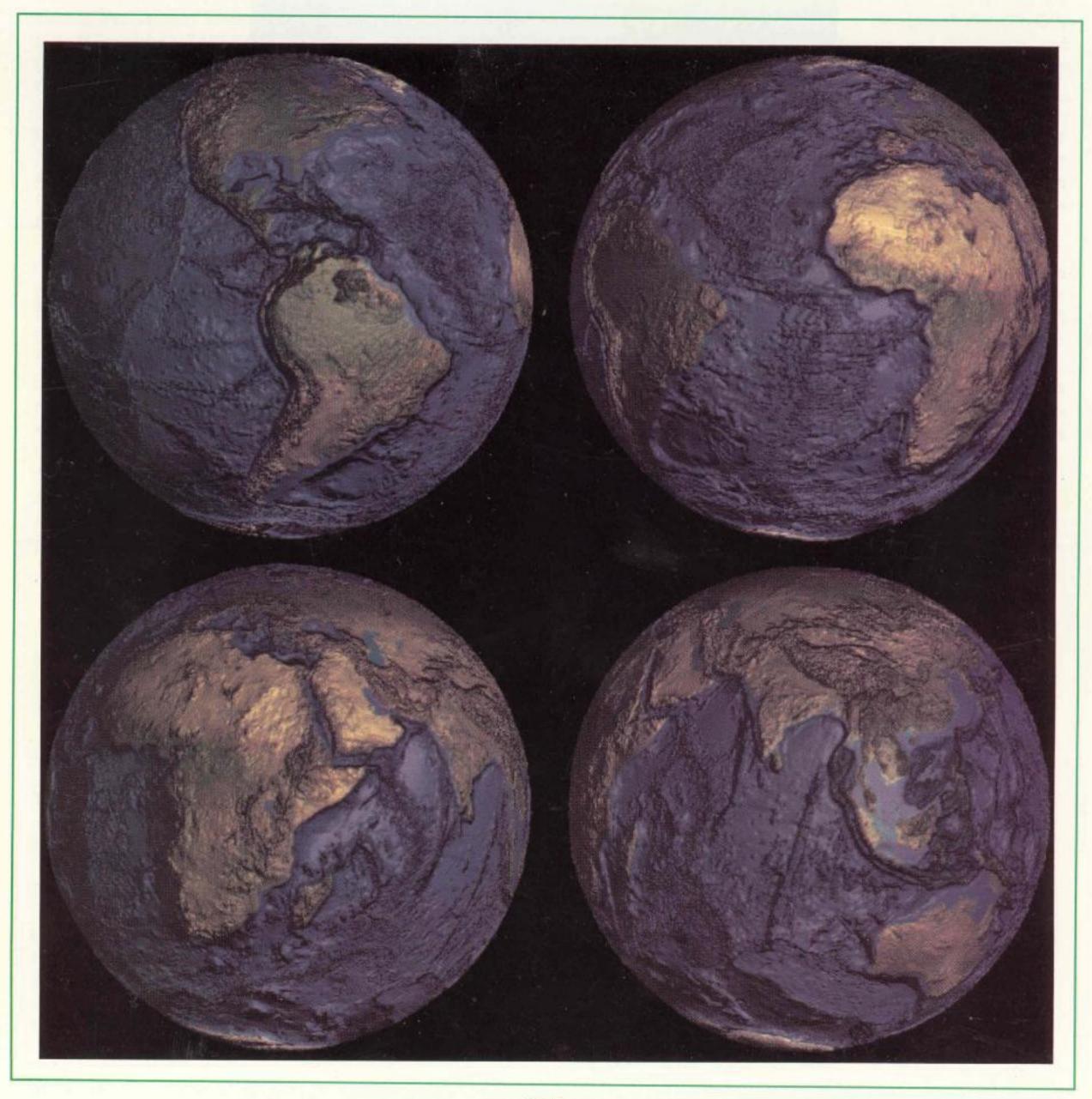
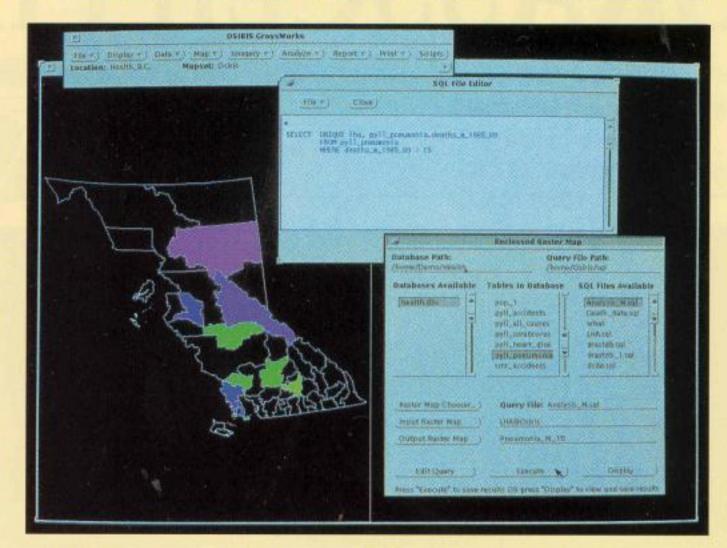


## GRASSCLIPPINGS

The Journal of Open Geographic Information Systems Winter 1992, Volume 6, Number 3



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## GREETINGS FROM THE OPEN GRASS FOUNDATION

The Open GRASS Foundation (OGF) inherits the short but rich tradition of the GRASS Inter-Agency Steering Committee (GIASC) and the GRASS GIS User Forum (GGUF). In this first OGF issue of GRASSCLIPPINGS, we wish to show our intention to continue working in that tradition and to create an even more active forum for the exchange of ideas and information vital to the development of the GRASS community and the cause of open Geographic Information Systems (GISs).

OGF came into existence because many people in the GIS community believe profoundly that GRASS represents a major trend in the use of software resources. GRASS is an open, free development system, available in source code form, and already widely used by end-users and GIS software vendors alike. It is very close to becoming a GIS software commondenominator because of its extensive source-level integration with other software tools and applications and because of

its broad acceptance in universities as a resource in both teaching and development. Like UNIX in the 1980's, GRASS has "caught on" and, driven by enthusiasm and a pure creative energy, it has begun to set a standard for the open GIS development environment. Researchers and business people alike are beginning to feel that resources like GRASS provide the basic tools for GIS development and, in times like these, nothing could make more sense either from a financial or technical point of view. This is the message we hope to convey in the current and future issues of GRASSCLIPPINGS! We intend to catalog the technical developments of the GRASS community and to promote awareness of the extent and quality of GRASS-based application systems successfully installed both nationally and internationally.

OGF is concerned with ideas; therefore, we will focus significant resources on making GRASSCLIPPINGS a strong and disciplined voice on behalf of GRASS.

OGF is also concerned with the commercial promotion of open GIS; hence, we will focus on the annual *GRASS* GIS Users' Conference and Exhibition and joint commercial ventures involving *GRASS*. The user meeting, like *GRASS-CLIPPINGS*, will be an active demonstration of the state of open GIS. Through our combined, community-wide efforts, we will showcase a broad range of software integrations and *GRASS*-based application systems.

Although some of what you will read in these pages is new, much concerns ideas that have been brewing in the GRASS community for some time. What is definitely new, and what we wish to emphasize, is that the world of open GIS is beginning to come into its own, and is generating a creative and dynamic market force that will have to be reckoned with.

David Schell, Chairman, OGF

## YES! SEND ME GRASSCLIPPINGS

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People living within the United States may help of fee is mandatory for overseas subscriptions. Plea	e.g. SUN 4, IBM RISC)? defray publication and mailing costs by sending an annual \$15 subscription fee. This use make checks payable to <i>The Open GRASS Foundation</i> and mail to OGF, Pamela niversity, 725 Commonwealth Ave., Boston, MA 02215; 617-353-5642;

# The Editor's Mark From Linda Roush

Well Folks, here it is -- the first issue of GRASSCLIPPINGS as a journal! And what a flurry of activity this journal produced! I hope you find the end result stimulating and resourceful.

As a journal, GRASSCLIPPINGS will retain many of the qualities developed during the five years it was published as a newsletter. It will continue to feature columns written by contributing editors, application articles from GRASS users, and programming tips from developers and programmers. Some of you might

#### GRASSCLIPPINGS, WINTER 1992

notice the absence of certain columns you've grown accustomed to reading each issue, such as Academic Turf by Jeff Wright and Cartographic Issues by Melissa Records. Their omission is nothing more than a result of the authors' busy, productive lives, and you may look forward to reading their columns in future issues.

I have encouraged longer, more technical feature articles and columns and an expanded section for *GRASS* activities around the world. As evidenced by the new section entitled **Corporate Developments**, *GRASSCLIPPINGS* has expanded also to reflect the GRASS community's increased commercial nature. In the future, I plan to include the *European GRASS Community Newsletter* (published by the *European Grass Foundation* (EGF)), more newsbriefs, more special-interest columns, and a Calendar of Events relevant to GIS activities in general.

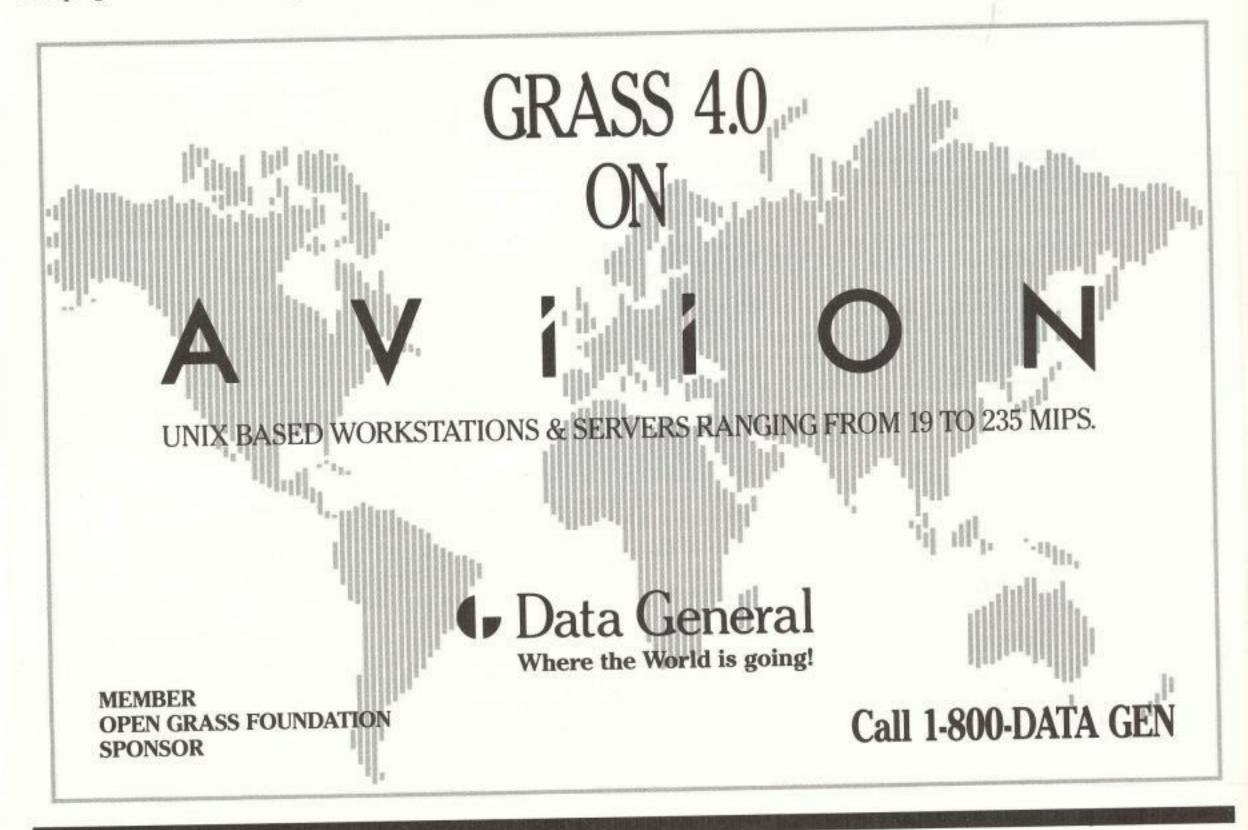
GRASSCLIPPINGS provides a forum for the discussion of products, issues, and events of interest to GRASS/GIS users and developers. It includes features of both a commercial trade magazine and a technical journal. We invite the submission of articles, advertisements, and announcements specific to GRASS. Also welcome are items of general interest to GIS users, such as software tricks, applications, and discussions of controversial developments.

I extend a sincere thank you to all the people who have contributed to this issue of GRASSCLIPPINGS. I also thank my husband and daughter for their patience and understanding.

Linda Roush, Managing Editor

The Open GRASS Foundation

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## GRASSCLIPPINGS

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"GRASSCLIPPINGS" is a periodic publication of The Open GRASS Foundation, a not-for-profit corporation. The purpose of this journal is to provide information about the Geographical Resource Analysis Support Systems (GRASS) software and to provide a forum for the promotion of open geographic information systems in general. Although GRASS is developed at the U.S. Army Construction Engineering Research Laboratory (USACERL), opinions expressed and advertisements placed herein are not to be considered an official expression or endorsement by USACERL, Reproductions of its contents is prohibted without express written permission from the editor. Copyright 1992, The Open GRASS Foundation. Articles, advertisements, inquires, and comments are welcome and should be addressed to: GRASSCLIPPINGS, c/ o Linda Roush, Managing Editor, P.O. Box 3879, Champaign, IL 61826-3879; 217-352-6511 ext. 670.

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## Kenn Gardels Current technology for information management limits the ability of global change researchers to a

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