

MOSAIC

By Larry Atkinson

A SIMPLE COMPUTER program called Mosaic and the associated protocols have resulted in a quantum jump in making information available to oceanographers. Mosaic not only makes information available, but it has opened our eyes and mind to new ways of handling information. This column will review Mosaic and give newcomers some leads on what it can provide.

Mosaic is a software tool developed by some clever programmers at the National Center for Supercomputer Applications (NCSA) in Champagne-Urbana, IL. It was so successful that the original programmers have started companies to further develop the Mosaic concept. Mosaic allows you to create information source files on your computer that are then accessible to anyone on the Internet. The information can range from class schedules at a University to CTD data off Japan. Mosaic uses a simple language (HyperText Markup Language, HTML) that allows links to other data at other machines on the Internet.

Mosaic is World Wide Web browser. The World Wide Web (WWW) is becoming one of Internet's fastest growing methods of information distribution. The WWW system works by using a series of Hypertext links to link sites all over the Internet. To get more information on a subject, you simply click on the link, and your WWW browser will go fetch the information for you.

Before I go on I should say that the best way to learn about Mosaic is to use it. If you have Mosaic already I'm sure you have used it. If you don't have it, get it. There are several ways to obtain Mosaic. The first requirement is that you must be on Internet: either directly or via a modem using SLIP or PPP. The next step is to install Mosaic on your machine. Mosaic is

available from NCSA via anonymous FTP ([ftp.ncsa.uiuc.edu](ftp://ftp.ncsa.uiuc.edu)). There are also commercial versions of Mosaic available from a variety of vendors and Internet providers. A plain text version of Mosaic exists called "lynx". If your access is via a commercial Internet provider they should give you a copy of Mosaic. You also need to know that a URL (Uniform Resource Locator) is an address such as the one for NOAA (<http://www.noaa.gov>).

Assuming you are now on Mosaic, the question is where to go. We now face the only present problem with Mosaic. It is difficult to find things. Say you want some information about upwelling off South America. Presently, there is no easy way to search the worlds' Mosaic servers for the "upwelling" topic, but those programs are being designed and may, by now, be in service.

To get you started I've listed some of the favorite Mosaic sites from people I've talked to. Try them out.

Start here:

- The World-Wide Web Virtual Library: Oceanography
<http://www.mth.uea.ac.uk/ocean/oceanography.html>
- Oceanographic & Earth Science Data Services & Institutions Directory
<http://orpheus.ucsd.edu/sio/inst/>

Some Oceanographic favorites:

- East Coast Direct Broadcast Image Daily Composite
<http://www.rsmas.miami.edu/htbin/imagery/eastcoast>
- Ocean Research Institute Home Page
<http://www.ori.u-tokyo.ac.jp/>
- Satellite Active Archive Home Page
<http://ns.noaa.gov/saa/homepage.html>
- The Great Lakes Forecasting System
<http://glfs.eng.ohio-state.edu/>

- Latest GOES image of US
<http://www.digital.com/gnn/gnn.html>
- NODC Ocean Bulletin Board
gopher://gopher.nodc.noaa.gov/1m/nodc-new/bbs/mbox
- Weather
<http://rs560.cl.msu.edu/weather/interactive.html>

Other interesting places:

- Sunsite based Multimedia exhibits and expositions
<http://sunsite.unc.edu/exhibits/exex.html>
- Book Publishers and Retailers On-line
<http://www.cs.cmu.edu:8001/Web/booksellers.html>
- Powell's Technical Books
<http://www.technical.powells.portland.or.us/>
- The Chronicle of Higher Education—Academe This Week
<http://chronicle.merit.edu/>
- Clearinghouse for Subject-Oriented Internet Resource Guides
<http://www.lib.umich.edu/chhome.html>
- Le Web Louvre
<http://mistral.enst.fr/~pioch/louve/>

Here are some examples of Mosaic searching systems:

- The JumpStation Search Page
<http://www.stir.ac.uk/jsbin/js?search>
- Global Network Navigator Home Page
<http://gnn.com/>

If you have used Mosaic for a long time or are just starting you no doubt realize it is just the start of a revolution in how we use information and do our research. The ability to access the data of NOAA alone will change the way we do research.

Finally, there are many articles about the system that Mosaic accesses: the World Wide Web. See for example "The World Wide Web" by Brian Hayes in *American Scientist* (1994, 82:416-419).

I originally intended to review OPC-PLOT but felt that the incredible growth of Mosaic necessitated its review. OPC-PLOT is a DOS based package for plotting oceanographic data. It is aimed at

surface data such as buoy trajectories, model data, and other surface data. It contains world coastline and mapping functions. Utilities permit the ingestion of many data formats. To receive a copy

of OPCPLOT contact Dr. Murray Brown at National Ocean Service Center for Coastal Ecosystem Health, 2000 Bainbridge Avenue, Building FMB 61, Room 250, Charleston, SC 29408.□

**THE SCIENTIFIC COMMITTEE ON OCEANIC RESEARCH
THE INTERNATIONAL GEOSPHERE-BIOSPHERE PROGRAM**

ANNOUNCEMENT AND CALL FOR POSTERS

**THE JOINT GLOBAL OCEAN FLUX STUDY
FIRST INTERNATIONAL SCIENTIFIC SYMPOSIUM
VILLEFRANCHE-SUR-MER, MAY 9-12 1995**

JGOFS is organizing a Scientific Symposium to mark the mid-point of its activities and to synthesize the main findings since its inception in 1988. The program will consist of a series of invited lectures with considerable time allocated for discussion. The program has been designed to give special emphasis to daily poster sessions. Poster tours with brief oral presentations by the authors will be a feature of the meeting. There will also be demonstrations of JGOFS data bases and models.

The Symposium program includes sessions on the following topics:

Historical Overview of JGOFS and its Role in Global Change Research ★ The Global Extrapolation Problem ★ Carbon Dioxide ★ Time Series Measurements in JGOFS ★ The North Atlantic ★ The EUMELI Program ★ The Equatorial Pacific ★ The Iron Fertilization Experiment ★ The Southern Ocean ★ The Arabian Sea ★ Continental Margin Carbon Fluxes ★ Vertical Particle Flux, Remineralization and Sedimentary Processes ★ Global Synthesis and Modelling ★ Beyond JGOFS

Posters to accompany these sessions are now being solicited. Abstracts for them should reach the JGOFS Core Project Office in Kiel before March 31. The space for each poster will be 1m x 1.5m.

The Symposium is being hosted by the French National JGOFS Committee and will take place at "La Citadelle" and the Centre d'Océanologie in Villefranche which is close to Nice. **For additional information on the Symposium, to obtain a registration form, or to submit a poster abstract, please contact one of the following:**

Ms. E. Gross, Executive Director SCOR
Department of Earth and Planetary Sciences
The Johns Hopkins University
Baltimore, MD 21218
USA
Tel: 410-516-4070. Fax: 410-516-4019
E-mail: scor@jhuvms.hcf.jhu.edu

Ms. Aida Starke, JGOFS Core Project Office
Institut für Meereskunde
Universität Kiel
Düsternbrooker Weg 20
2300 Kiel, FRG
Tel: 49-431-597-4019. Fax: 49-431-565-876
E-mail: jgofs@ifm.uni-kiel.d400.de