

# NETWORK NEWSLETTER



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## EDITORIAL *Weather Affairs*

A while ago, I raised the notion of “climate affairs” (June 1999 editorial) as a theme for developing an education and training activity at the university/training center level. I have since given consideration to the notion of “weather affairs.” Weather affairs is a multi-disciplinary approach to the blending of physical, biological, and social science, education and research applications to societal needs. It also includes explicit consideration of ethical and equity aspects.

When it comes to research, education and training activities, the weather and climate communities are more or less separate. Although they are interested in many of the same atmospheric processes, they are interested for different reasons. For example, take extreme events. Climate change researchers want to know if the frequency, intensity, or location will likely change with global warming. The climate variability researchers want to know what extremes to expect on seasonal-to-interannual time scales in order to get society ready for them. The weather research community wants to understand what causes extreme events and how to better forecast their onset.

Back to weather affairs: a program would be composed of ***weather science, weather impacts, weather policy*** (including law and politics), ***weather economics, weather technology, and weather ethics***.

***Weather science*** includes an understanding of the structures and functions of weather systems, their variability, and extremes. ***Weather impacts*** includes impacts on ecosystems and human settlements (e.g., economies and the built environments).

There are many regulations, laws and policies that are weather-related, including: building codes, de-icing of aircraft, severe weather warning systems, land-use regulations, pollution controls, and so on. ***Weather politics*** refers to the political activities that are

associated with weather events and their impacts, which might include the politics that surrounded the impact and reconstruction following Hurricane Andrew in southern Florida, the decision to launch the Challenger under difficult weather conditions, “cloud rustling” claims surrounding weather modification programs, and so forth.

***Weather economics*** involves such issues as the value of weather information to various types of decisionmakers, the benefit-cost analyses of weather impacts for the insurance industry, weather derivatives, damages related to extreme events, and so forth.

The weather community has an important role in developing weather detection devices such as Doppler radar, wind profilers, nowcasting technologies and communication tools. This component can be labeled ***weather technology***.

Finally, an integral part of weather affairs programs must be ***weather ethics***. Ethical issues arise constantly: are the poor disproportionately disadvantaged by adverse extremes of weather such as tornadoes or flash floods? Are the poor or politically disadvantaged located in areas known to be at higher risk to extreme weather events? Do the poorer elements of society have the same access to weather information as wealthier members of society?

I believe that this weather affairs notion merits consideration, because it can help educators better understand the key role that weather plays in daily life and in society’s economic well-being – and because educators with weather affairs information would be in a better position to teach the next generation of decisionmakers how to better cope with weather extremes.

--Michael H. Glantz

### LET'S HEAR FROM YOU!!

This newsletter depends on YOUR input. Please send relevant information that comes across your desk, whether it is a news item, meeting, job opening, or publication, to the address on the back cover. Information to be included in the next newsletter must be received by **30 June 2002**. If you prefer to receive the newsletter on line, please let us know at [www.esig.ucar.edu/newshp](http://www.esig.ucar.edu/newshp) and you will be reminded when a new issue is released. Thanks for your input!

### UPDATE ON PREPCOM IV

The site of the fourth and final preparatory meeting for the Johannesburg Summit 2002 (26 August–4 Sept.) has been moved from Jakarta to Bali. The preparatory meeting, known as PrepCom IV, is still scheduled to take place from 27 May to 7 June 2002, and will include high-level ministerial participation. It will be the final meeting before governments, citizen groups, and businesses gather in Johannesburg for the World Summit on Sustainable Development (WSSD). The Indonesian Government has set up a dedicated website for logistical arrangements and preparations for PrepCom IV at [www.pc-wssd.com](http://www.pc-wssd.com) or you can visit the official website of the Summit at [www.johannesburgsummit.org](http://www.johannesburgsummit.org)

### WORLD WATER DAY

“Water for Development” was the theme for World Water Day 2002 (22 March each year). The International Atomic Energy Agency (IAEA) is the coordinating United Nations agency for 2002. The currently poor and deteriorating state of water resources in many parts of the world demands integrated water resources planning and management. Poverty reduction, economic impact, and improved health are four of the key goals of water sanitation and hygiene programs. The Water Supply and Sanitation Collaborative Council (WSSCC) has launched its WASH (Water, Sanitation and Hygiene for all) campaign to call attention to the water and sustainable livelihood approach. For more information, contact the WSSCD c/o WHO (CCW), 20 Avenue Appia, CH-1211 Geneva 27, Switzerland, email [wsscc@who.ch](mailto:wsscc@who.ch) or see the World Water Day website at [www.worldwaterday.org](http://www.worldwaterday.org) or visit the WSSCC website at [www.wsscc.org](http://www.wsscc.org)

### “NO WATER, NO FUTURE”

The United Nations Secretary General has appointed 12 persons to serve on a panel to help him prepare for the World Summit on Sustainable Development in Johannesburg. The Prince of Orange (The Netherlands) is a member of this panel, with a special focus on water resources development and management. He has written an initial contribution, “No Water, No Future: A Water Focus for Johannesburg,” in order to indicate directions that may contribute to overcoming the world water crisis. Comments on the document are invited from all interested water and development stakeholders. The Prince invites comments and feedback on the draft document, which is hosted at [www.nowaterofuture.org](http://www.nowaterofuture.org). Another revised version will be prepared in May 2002.

### 2002 ENVIRONMENTAL SUSTAINABILITY INDEX

The Environmental Sustainability Index (ESI) is a measure of overall progress toward environmental sustainability and has been developed for 142 countries. The ESI scores are based on a set of core “indicators,” which permits cross-national comparisons of environmental progress in a systematic fashion. It represents a first step toward a more analytically driven approach to environmental decisionmaking. The ESI is a result of collaboration among the World Economic Forum’s Global Leaders for Tomorrow Environment Task Force, the Yale Center for Environmental Law and Policy, and Columbia University’s Center for International Earth Science Information Network (CIESIN). The 2002 ESI is now available on line, as well as a Pilot Environmental Performance Index. For more information, see the website at [www.ciesin.org/indicators/ESI](http://www.ciesin.org/indicators/ESI) which contains complete documents plus a press release.



### FUNCEME CELEBRATES 30 YEARS!

FUNCEME (Meteorology and Water Resources Ceará Foundation) is a regional institute located in Fortaleza City, Ceará, Brazil, that develops activities in three areas: meteorology, environmental resources, and water resources. FUNCEME has contributed development action, through regional climate and weather forecasts, environmental planning and analysis, and water

resources monitoring, technology transfer, and providing support to civil defense, agricultural production, water resources management and more. visit the website at [www.funceme.br](http://www.funceme.br) to learn more about the institute.

(Contributed by Antonio Geraldo Ferreira, [geraldo@funceme.br](mailto:geraldo@funceme.br))

#### **ANIL AGARWAL 1947–2002**

Anil Agarwal passed away in January 2002 after a 7-year battle with cancer. He was renowned for his role in spreading the message in India and abroad about the importance of the environment in developing countries. He consistently argued in his writings that there is a deep relationship between poverty and the environment. A mechanical engineer by training, Agarwal began his journalistic career as a science correspondent for the *Hindustani Times* in 1973. In 1980, he founded the Centre for Science and Environment (CSE) to examine the relationship between environment and development and to raise public awareness about the need for sustainable development. In 1997, the UN Environment Programme elected him to its Global 500 Honor Roll for his work and in 2000 bestowed upon him the Global Environment Leadership Award. He created a science and environment newsmagazine, *Down to Earth*, with the goal of filling a critical information gap. This magazine will continue to be his "voice of reason." It is available at the CSE website at [www.cseindia.org](http://www.cseindia.org)

#### **ASSOCIATE PROGRAM ON FLOOD MANAGEMENT**

The Global Water Partnership (GWP) and the World Meteorological Organization (WMO), with support from the Japanese government, have launched an Associate Program on Flood Management (APFM). The emphasis of the APFM will be on adoption of flexible structural and non-structural solutions suited to each flood-prone region. One of the main purposes of the project is to establish and encourage close cooperation between agencies and institutions concerned with flood management in general. The ISDR (International Strategy for Disaster Reduction) Secretariat is involved with this initiative and will provide assistance in identifying international, national, and regional agencies relevant to this project. For more information, or to become involved in this project, write to Hydrology and Water Resource Dept., WMO, Case postale 2300, CH-1211, Geneva 2, Switzerland; email [miyake\\_k@gateway.wmo.ch](mailto:miyake_k@gateway.wmo.ch) (from *ISDR Highlights*)

#### **IGC INTERNET**

IGC (Institute for Global Communications) Internet has the vision to actively promote change toward a healthy society, one founded on the principles of social justice, broadly shared economic opportunity, a robust democratic process, and sustainable development practices. Its mission is to advance the work of progressive organizations and individuals for peace, justice, economic opportunity, human rights, democracy, and environmental sustainability through the strategic use of online technologies. From its beginning in 1987, it has grown to a national membership of more than 15,000, with links to networks worldwide. Today, IGC Internet offers a starting point to explore the Internet, with automated web tools to publicize events and calendars, with a focus on content, information sharing, and new, collaborative tools. Of particular interest to our readers is a collection of atmosphere and climate links and IGC discussion groups. See the website at [www.igc.org/igc/issues/ac/or.html](http://www.igc.org/igc/issues/ac/or.html) or the main website for the Institute at [www.igc.org](http://www.igc.org)

#### **VIRTUAL WATER FORUM (VWF)**

The Third World Water Forum (to be held in Japan in March 2003) is taking a new approach to finding new solutions for water problems by holding discussions with water experts, decisionmakers, and nongovernmental organizations (NGOs) from around the world. This approach is to create a discussion environment that operates beyond time, region, and language barriers, by using computer technology and the Internet. However, this Virtual Water Forum (VWF) is not only for people who have access to the Internet. There are many people living in an environment where Internet linkages are not complete. The editor of the *SOURCE Bulletin* has offered to collect voices from readers who cannot submit information on the website or by email. Write to Dick de Jong, answering the following questions: (1) What is the water situation in the area where you live? (2) What kind of problems and positive aspects can you think of? (3) What do you think about these situations? How would you like to see them resolved? Contact him at the IRC International Water and Sanitation Centre, PO Box 2869, CW Delft, The Netherlands; tel: 31-15-2192939; fax: 31-15-2190955. He will post your responses to his queries on the VWF website. If you do have web access, join the VWF at [www.worldwaterforum.org](http://www.worldwaterforum.org)

#### **CITIZENS GUIDE TO THE WCD**

The International Rivers Network (IRN) has just completed a new guide on how people can use the World Commission on Dams (WCD) report in struggles for justice and human rights. This 59-page booklet provides background on the formation of the WCD, a

detailed summary of the WCD's findings and recommendations, and responses from NGOs, institutions and governments to the report. The guide also provides suggestions of ways to use the report to stop destructive developments and promote better alternatives. In the next few months, the report will be translated into 6 languages. The *Citizens' Guide to the WCD* is available free of charge. If you wish to receive it in hard copy, write to IRN, 1847 Berkeley Way, Berkeley, CA 94703 USA; tel: 1-510-848-1155; fax: 1-510-848-1008; email [gila@irn.org](mailto:gila@irn.org). The IRN also has made the report available in PDF format at [www.irn.org/wcd/wcdguide.pdf](http://www.irn.org/wcd/wcdguide.pdf). The IRN supports local communities by working to halt destructive river development projects and by encouraging sustainable methods of meeting needs for water, energy, and flood management.



### **MOUNTAINS MATTER**

The International Year of Mountains (IYM) 2002 has been launched around the world. The UN Food and Agriculture Organization (FAO), the lead agency for the IYM, held its official launch at its Rome headquarters on 15 February as part of a series of events that served to inaugurate the Year in countries around the world. The IYM concept paper states that "sustainable mountain development includes a wide range of topics, calling for interdisciplinary, integrated approaches." Therefore, the FAO is collaborating with UN and other organizations to bring together the expertise needed to present a complete picture of what is meant by "sustainable mountain development" and what needs to be done to achieve it. The IYM website has created a "theme" page with papers on biodiversity, climate, conflicts, forests, gender, and water at [www.mountains2002.org/themes](http://www.mountains2002.org/themes) or contact the FAO Media Office at 39-06-5705-3625; fax: 39-06-570-53699/55924; email [media-office@fao.org](mailto:media-office@fao.org)

ICIMOD (International Centre for Integrated Mountain Development) has also created greeting cards and T-shirts to increase awareness about the IYM2002. Proceeds will be used to support various ICIMOD activities related to IYM2002. Designs are for both adults and children and the printed motifs are taken from the book, *Mountains Forever*. For more information, contact the ICIMOD website at [www.icimod.org](http://www.icimod.org) or contact them at 4/80 Jawalakhel, G.P.O. Box 3226, Kathmandu, Nepal; tel: 977-1-525313; fax: 977-1-524509, 536747; email: [icimod@icimod.org](mailto:icimod@icimod.org)

### **THE OZONE LAYER AND SMES**

The phaseout of ozone-depleting substances in small and medium-sized enterprises (SMEs) is one of the remaining challenges facing developing countries in complying with the Montreal Protocol. The UN Environment Programme's DTIE (Division of Technology, Industry and Economics) has released a handbook to assist SMEs in assessing whether their current operations involve the use of ozone-depleting substances and provides tools to substantially reduce and eventually eliminate their use. To ensure that the information is as widely available as possible, the OzonAction Programme has made the Handbook available on line at [www.uneptie.org/ozonaction](http://www.uneptie.org/ozonaction). The program has also developed a range of technical and policy publications to support this phaseout and transition to alternatives. For more information, contact Rajendra M. Shende, Chief, UNEP DTIE Energy and OzonAction Unit, Tour Mirabeau, 39-43 quai André Citroën, Paris 75739 cedex 15, France; tel: 33-1-4437-1450; fax: 33-1-4437-1474; email [ozonaction@unep.fr](mailto:ozonaction@unep.fr)

### **NATIONAL LIBRARY FOR THE ENVIRONMENT (NLE)**

The National Library for the Environment is maintained by the US National Council for Science and the Environment (NCSE) as its primary information dissemination program. The NLE is a universal and easy-to-use entry to environmental data and information for the use of all participants in the environmental enterprise. This online library includes directories of academic environmental programs, journals, links to population and environment, meetings, reports, references materials, and more. NCSE works to ensure that users understand the context and quality control relevant to all information provided. To access the online library, see [www.cnie.org/NLEonline/](http://www.cnie.org/NLEonline/) or write to the NCSE at 1725 K St., Suite 212, Washington, DC 20006 USA; tel: 1-202-530-5810; email [info@NCSEonline.org](mailto:info@NCSEonline.org)

### **EARTH DAY 2002: PROTECT OUR HOME**

The theme for 22 April 2002 Earth Day is "Protect Our Home." On the Earth Day website ([www.earthday.net](http://www.earthday.net)), participants are invited to conduct a community assessment of health and environment. Statistics about health are generally gathered at the national level. Such information does not convey how a community's environmental problems might impact the health of its residents. When people learn about the connection between health and the state of the local environment, it helps to demonstrate the importance of positive environmental practices to policymakers and the general public. How to do it: (1) Hold an Earth Day dialogue. Get

community members from all backgrounds together to talk about your local community's environmental health issues. (2) Send Earth Day your results. They will compile the results of community dialogs held throughout the world and present them at the World Summit on Sustainable Development in Johannesburg. (3) Take it further: develop key indicators of environmental health for your community. Email your results to the Earth Day organizers at [worldwide@earthday.net](mailto:worldwide@earthday.net) or mail them to Earth Day, 1616 P St. NW, Suite 200, Washington, DC 20036 USA; tel: 1-202-518-0044; fax: 1-202-518-8794.

### **SILENT OIL SPILL**

Thomas Beamish (University of Georgia) has written a book about the Guadalupe Dunes oil spill (located between Los Angeles and San Francisco), which persisted unattended for 38 years, as the basis for a broader study of environmental "blind spots." He argues that many of our most pressing pollution problems go unacknowledged because they do not cause large-scale social disruption or dramatic visible destruction of the sort that triggers responses. He has developed a model of social accommodation that helps explain why human systems seem inclined to do nothing as trouble mounts. *Silent Spill: The Organization of an Industrial Crisis* was published by MIT Press (2002). For more information, see the website at [mitpress.mit.edu/0262025124](http://mitpress.mit.edu/0262025124)

### **CHIEX**

The Climate and Health Information Exchange (CHIEX) is part of the Collaborative Research Network (CRN) funded by the Inter-American Institute for Global Change Research (IAI) to study diagnostics and prediction of climate variability and human health impacts in the tropical Americas. Members of CHIEX represent many disciplines and backgrounds, providing resources to the network to address research questions in climate and health. The information on the website will enable CRN members and participating institutions to communicate more effectively with each other. The CRN has members in 5 countries of Latin America and the Caribbean, as well as the United States. See the website to learn more at [chiex.net](http://chiex.net) or contact Joan Aron, Science Communication Studies, 5457 Marsh Hawk Way, Columbia, MD 21045-2261 USA. Tel: 1-410-740-0849; fax: 1-410-964-3598; email: [JoanAron@mmscnet.org](mailto:JoanAron@mmscnet.org)

### **CLIMATE COMPENDIUM**

Anyone seeking to better understand the problem of global climate change and to follow the ongoing public debate can quickly become overwhelmed by the range,

scope, and depth of issues and information sources. Given the rapid frequency of meetings, domestic policy developments, and private-sector endeavors, climate change policy is a moving target. The Climate Compendium on the CCKN (Climate Change Knowledge Network) website seeks to channel, condense, and consolidate the latest information in all fields – political, economic, scientific, and legal – into a frequently updated "cyber-brief." By providing background materials and extensive resource guides, the Compendium intends to provide the best possible starting point for people to better understand the issues related to global climate change. The Climate Compendium is produced through funding provided by the Canadian International Development Agency and the US Agency for International Development. Access the website at [www.cckn.net/compendium](http://www.cckn.net/compendium)

### **AMAZING GRACE**

The Gravity Recovery and Climate Experiment (GRACE) was launched on 17 March 2002 in Russia. This five-year mission, sponsored by NASA and the German Space Agency, consists of twin satellites flying in formation that are designed to measure the earth's water masses and map their effects on the gravity field, thereby providing possible additional information about global climate change. Variations in the earth's gravity field cause the range between the two satellites to vary. The microwave ranging system is so sensitive that it can detect separation changes as small as 10 microns. Scientists will use the five years of GRACE data to improve the accuracy of key atmospheric observations, which serve as input to weather forecast models. More information is on the GRACE website at [www.csr.utexas.edu/grace](http://www.csr.utexas.edu/grace)

### **SPACE WEATHER FORECASTING**

Space weather occurs in the area between the earth and the sun and refers to disturbances and storms in space, which sometimes has impacts on societies. NOAA has a Space Environment Center (SEC) in Boulder, Colorado, USA, which provides forecasts of solar and geomagnetic activity to users in government, industry, and the general public. Just like the US National Weather Service, the SEC provides real-time monitoring and forecasts. It is the national and world warning center for disturbances that can affect people and equipment working in the space environment. See the website at [www.sec.noaa.gov](http://www.sec.noaa.gov) – send comments and inquiries to Larry Combs ([Larry.Combs@noaa.gov](mailto:Larry.Combs@noaa.gov)) or Barbara Poppe ([Barbara.Poppe@noaa.gov](mailto:Barbara.Poppe@noaa.gov)) or write to Space Environment Center, R/SE, 325 Broadway, Boulder, CO 80305, USA.



## HOLISTIC DISASTER RECOVERY

The University of Colorado's *Natural Hazards Observer* has prepared an on-line version of the *Holistic Disaster Recovery* handbook, which helps small to medium-sized communities that have sustained a natural disaster to incorporate various aspects of a sustainable society (e.g., environmental quality, economic vitality, social equity) into all the decisions that must be made during the recovery period following a disaster. It contains background information, descriptions, and ideas about what sustainability is and how it can be applied during disaster recovery efforts. This version is available at [www.Colorado.EDU/hazards/holistic\\_recovery/](http://www.Colorado.EDU/hazards/holistic_recovery/) or may be ordered free of charge from the Public Entity Risk Institute, 113509 Random Hills Rd., Suite 210, Fairfax, VA 22030 USA; tel: 1-703-352-1846.

## FOR INDIAN ENVIRONMENT PROFESSIONALS

The first global online résumé/consultancy database for Indian environment professionals as well as those interested in India has been released. The project is sponsored by the Network of Indian Environment Professionals (NIEP). International environment professionals specializing in India are requested to submit a resume or profile so that they can be searched by Indian and international environmental organizations for specific consultancy positions, volunteer, and short-term internship positions. They are also invited to become a member. Professionals who do not have online access can contact NIEP directly to receive a text version of the form. Organizations that would like to take advantage of this data and wish to reduce costs of advertising are encouraged to contact Chandra Kishore, Founder and President, Network of Indian Environment Professionals, 3846 Highland Oaks Dr., Fairfax, VA 22033 USA. The website is [www.envindia.com](http://www.envindia.com)

## Job Opportunities and Internships

The UCAR Visiting Scientist program is seeking **two Postdoctoral candidates for research related to microwave remote sensing and radiative transfer modeling of snow, ice and frozen soil**. One position is located at the National Operational Hydrologic Remote Sensing Center (NOHRSC) in Chanhassen, Minnesota. The other is located at the NASA/GSFC in Greenbelt, Maryland. This research will focus both on operational remote sensing, modeling, and data assimilation activities at the NOHRSC and on observational data to

be collected during the NASA Cold Land Processes Experiment (CLPX) in 2002 and 2003. These data will include ground, airborne, and satellite remote sensing observations with intensive ground truth. The position will include assisting with the management of the CLPX and conducting a variety of analytical and data management tasks associated with the experiment. Successful candidates will have a background in snow hydrology, cryospheric science, or a related field. Please see the full text announcement at [www.vsp.ucar.edu](http://www.vsp.ucar.edu) and send applications to Don Cline, NOHRSC, 1735 Lake Drive West, Chanhassen, MN 55317 USA.

The UCAR Visiting Scientist Program, in cooperation with the National Oceanic and Atmospheric Administration, the National Weather Service, and the Office of Hydrology is seeking a **research scientist**. This position is located at the NWS/OH/Hydrologic Research Laboratory (HRL) in Silver Spring, Maryland. The appointment will provide hydrologic/hydrometeorological research opportunities. Applications are being sought for a visiting scientist to participate on a team conducting applied research, development and implementation of ensemble hydrologic forecasting techniques to produce probabilistic streamflow forecasts. The selected candidate will contribute to evaluation and application of existing methodology as well as development of new methodologies to be used in the National Weather Service River Forecast System (NWSRFS) Operational Forecast System (OFS) and Ensemble Streamflow Prediction System (ESP). Applicants must have a Masters or PhD in physical or natural science or engineering, with an emphasis in hydrology and/or statistics. For more information, contact the UCAR / Visiting Scientist Programs, PO Box 3000, FL-4 / Suite 2200, Boulder, CO 80307-3000, USA; tel: 1-303-497-8649; email: [vsp@ucar.edu](mailto:vsp@ucar.edu); web: [www.vsp.ucar.edu/VSPtoc.html](http://www.vsp.ucar.edu/VSPtoc.html)

The International Research Institute for Climate Prediction (IRI) is seeking an **Associate Research Scientist or Research Scientist in climate prediction research and operational forecasting**. The vacancy is in the forecast group, which is responsible for the routine issuance of global forecasts as well as designing and conducting research to maintain a state-of-the-art system. The candidate should be familiar with atmospheric general circulation models and statistical models, have knowledge and experience with intra-model and multi-model ensembling, understand techniques such as model output statistics, and be familiar with various verification measures. Candidates should submit a vita, research statement, and 3 references to Mary Mokhtari, Human Resources Manager, Lamont-Doherty Earth Observatory of Columbia University, Palisades, NY 10964 or email resume in ASCII format to [personnel@](mailto:personnel@)

admin.ideo.columbia.edu. For additional information, visit the website: [iri.columbia.edu/iri/job/](http://iri.columbia.edu/iri/job/)

A **UCAR visiting scientist position** is available in the Marine Modeling and Analysis Programs Branch of the Coast Survey Development Laboratory (CSDL), National Ocean Service, NOAA, Silver Spring, Maryland. This project seeks to develop and implement a predictive hydrodynamic circulation model for the St. John's River and Estuary in northern Florida, USA. The model system will eventually provide real-time and forecast river conditions, including information on water levels, currents, temperature and salinity. Specifically, the UCAR visiting scientist will work with CSDL scientists to select, develop, test, evaluate and implement a numerical hydrodynamic model for the St. Johns River & Estuary and work with NOS Office of Response and Restoration scientists to analyze the effectiveness of NOAA's existing trajectory models for use in forecasting the water-borne dispersion of hazardous materials. Candidates should have a PhD in ocean or atmospheric sciences with experience in numerical modeling. Fluency in the UNIX environment is necessary. For more information, contact the UCAR / Visiting Scientist Programs, PO Box 3000, FL-4 / Suite 2200, Boulder, CO 80307-3000, USA; tel: 1-303-497-8649; email: [vsp@ucar.edu](mailto:vsp@ucar.edu); web: [www.vsp.ucar.edu/VSPtoc.html](http://www.vsp.ucar.edu/VSPtoc.html)

## Past Meetings

The **International Expert Workshop on the Analysis of Economic and Public Health Impacts of Air Pollution** was held 6 September 2001 in Garmisch-Partenkirchen, Germany. Sponsored by the US Environmental Protection Agency, World Health Organization, US Agency for International Development, UN Environment Programme, among others, the workshop addressed specific methodological issues faced by air quality and public health researchers in developing countries, such as application of dose-response relationships and exposure models from developed countries, analysis of susceptible populations, and economic valuation of health effects. This workshop was the first in a series to improve international collaboration and harmonization of methodologies to analyze the health effects of air pollution in developing countries. It served as the initial step toward establishing a process to compile state-of-the-art information on the health benefits of improved air quality from technologies that reduce fossil fuel use. For meeting overview and summary, visit the website at [www.epa.gov/globalwarming/events/epa/overview.html](http://www.epa.gov/globalwarming/events/epa/overview.html)

A **Special Conference on African Climate and Environment** was held 13 January 2002 in Orlando,

Florida, USA. The meeting was sponsored by the American Meteorological Society and preceded the 82nd AMS Annual Meeting. In this conference, a series of invited lectures were presented by scientists from a variety of disciplines. Topics included: 1) monitoring and evaluating climate and the land surface, 2) the mean climate and its variability, 3) causes of variability, 4) feedbacks related to land surface processes, and 5) climate applications and forecasting. The conference was aimed at fostering a greater understanding of issues related to African climate and environment and helped clear up many of the misperceptions about these issues. For more information, contact the AMS, 45 Beacon St., Boston, MA 02108-3693 or visit the website at [www.ametsoc.org/AMS/meet/82annual/#scace](http://www.ametsoc.org/AMS/meet/82annual/#scace)

**Climate Affairs in Latin America: Climate Issues and Policy Responses** was held by Columbia University's Institute for Latin American Studies, New York City, on 31 January–2 February 2002. The impacts of extreme weather and climate events on energy consumption, water management, food security, health, and environmental justice in Latin America were the main topics of this conference. It brought together researchers from a wide range of disciplines and from various universities, including the Columbia Earth Institute, to include perspectives from the social sciences, the natural sciences, and the humanities. A workshop report is forthcoming. The conference agenda and participant information is available at [www.columbia.edu/cu/ilas/Conference/cl\\_conference.html](http://www.columbia.edu/cu/ilas/Conference/cl_conference.html)

A workshop on **Weather and Climate Modeling** was held in New Delhi, India, on 7–9 February 2002 under the auspices of the Indo-US Science & Technology Forum, which was implemented to strengthen and facilitate joint work and cooperation between the scientific communities of India and the US. The workshop brought together scientists involved in weather and climate modeling in both countries to exchange views and to plan future work. The workshop was hosted by the National Centre for Medium-Range Weather Forecasting (NCMRWF) located in New Delhi. More than 120 delegates attended. Three major themes were proposed for joint collaboration: (1) improvement of global analysis and forecast systems; (2) mesoscale models, including cloud and land surface processes; and (3) dynamical extended-range prediction. Detailed results can be obtained at the NCMRWF website at [www.ncmrwf.gov.in](http://www.ncmrwf.gov.in) or write to NCMRWF, INSAT Bldg., Mausam Bhavan, Lodhi Road, New Delhi 110003, India; tel: 91-11-469-4639; email [swati@ncmrwf.gov.in](mailto:swati@ncmrwf.gov.in)

**Delhi Sustainable Development Summit 2002** was held from 8–11 February 2002 in New Delhi, India. Organized by the Tata Energy Research Institute (TERI), the Summit was attended by almost 300 participants, including heads of governments and representatives of

business, industry, and NGOs. The overall theme was "Ensuring Sustainable Livelihoods: Challenges for Governments, Corporations and Civil Society," with the aim of revitalizing global commitment to sustainable development as a shared future goal. The topics addressed during the eleven plenary sessions included Agenda 21: ensuring sustainable livelihoods; governance structures and processes for sustainable development; managing natural resources for society: welfare and health implications; creating business models for the poor; food security and basic human needs; climate change and sustainable energy; ministers of the environment: challenges at Rio+10; and leadership for sustainable livelihoods. More information is available online at: [www.teriin.org/dsds/](http://www.teriin.org/dsds/) or contact The Summit Secretariat, TERI, Darbari Seth Block, Habitat Place, Lodhi Rd., New Delhi 110 003, India; fax: 91 11 468 2144; tel: 91 11 468 2100.

The **Conference on Continental Energy Markets and Greenhouse Gas Emissions** was held 20–21 February 2002 in Ottawa, Canada. The meeting was organized by the International Institute for Sustainable Development (IISD) and the Canadian Energy Research Institute (CERI), and was sponsored by Alcan, Environment Canada, Hydro One, Natural Resources Canada, Ontario Power Generation, Petro-Canada, Shell Canada, Suncor Energy, and TransCanada. Over 130 people from Canada, the US, and Mexico attended. The conference presented participants with an opportunity to examine strategies and approaches to meet North America's current and future energy needs, including the option of a continental energy strategy. Participants engaged in discussions on issues which included: the US energy policy; innovative approaches to meeting energy needs; and implications of energy issues for development in the continent's northern regions. Discussions and conclusions from this meeting are expected to contribute to the dialogue on policies and approaches to address the energy challenges facing North America. For more information, contact IISD's Head Office, 161 Portage Avenue East, 6th Floor, Winnipeg, Manitoba, Canada, R3B 0Y4; tel: 1-204-958-7700; fax: 1-204-958-7710; email: [info@iisd.ca](mailto:info@iisd.ca) or access the full conference report on the web at [www.iisd.ca/sd/sdcem/](http://www.iisd.ca/sd/sdcem/)

A conference on **Earth Dialogues: Globalization and Sustainable Development - Is Ethics the Missing Link?** was held 21–23 February 2002 in Lyon, France. Organized by Green Cross International, Earth Dialogues provided a forum for debate on how to forge necessary links between globalization, sustainable development, and ethics. The event included 8 roundtables which addressed 4 themes: ethical challenges in promoting sustainable development; the role of ethical norms in promoting sustainable development; policy recommendations for action and

implementation; and political strategies for Johannesburg and beyond. More information on this meeting is available online at: [www.earthdialogues.org/en/tables/rd\\_compilation.html](http://www.earthdialogues.org/en/tables/rd_compilation.html) or contact the Meeting Secretariat, 31, rue Fernadière, F-69002 Lyon; tel: 33-4-7241-7265; fax: 33-4-7241-7337; email [gci.lyon@wanadoo.fr](mailto:gci.lyon@wanadoo.fr)

The first **Climate Affairs Capacity Building Workshop** was held in Kuala Lumpur, Malaysia, on 25–28 February 2002. Sponsored by the UN University and NCAR and hosted by the University of Malaya, this workshop brought together participants from ten countries in South and Southeast Asia to discuss the possibility of implementing climate affairs components into institutional and university settings in the region. These components include: climate science, climate impacts, climate policy and law, climate politics, climate economics, and climate ethics. A website will be forthcoming with the deliberations from the workshop and links to related items. For more information, contact Zafar Adeel, UNU, at [adeel@hq.unu.edu](mailto:adeel@hq.unu.edu) or see the website at [www.unu.edu/env/govern/EINino/Workshop.html](http://www.unu.edu/env/govern/EINino/Workshop.html)

A conference entitled **Climate Change and Coastal Birds** was held 22–24 March 2002 at the University of Hull, United Kingdom. This conference sought to obtain an overview of the likely impacts of global climate change on coastal birds. The speakers reviewed areas identified as being likely to cause an impact of global climate change on coastal birds. The major objective of the conference was to highlight the uncertainties in the field, identify research priorities and the audience that needs to be reached if the health of the coastal ecosystem is to be maintained within the constraints of a global economy. For more information, contact Steve P. Dudley, PO Box 417, Orton Longueville, Peterborough, PE2 7GP, UK; tel: 44-1-733-390392; fax: 44-1-733390 408; email: [steve.Dudley@bou.org.uk](mailto:steve.Dudley@bou.org.uk); web: [www.bou.org.uk/meet1det.html](http://www.bou.org.uk/meet1det.html)

## Upcoming Meetings

An **International Environmental Law Course** will take place 4–5 April 2002 in Washington, DC. Cosponsored by the Environmental Law Institute with the cooperation of the ABA (American Bar Association) Section of International Law and Practice and the ABA Standing Committee on Environmental Law, the course will provide updates on multilateral environmental agreements and policy developments including the WSSD, international regulation on biotechnology and



key issues facing aviation, chemicals, and electronic sectors. The course benefits both experienced practitioners interested in the latest developments related to key treaties and initiatives from US negotiators, and those new to the field interested in understanding the breadth of this emerging area of environmental law and its effect on their practices. For more information visit the website: [www.aliaba.org/aliaba/cg056.htm](http://www.aliaba.org/aliaba/cg056.htm)

**The Programme on Climate Change: Science, Impacts and Policy Responses** will take place *15–19 April 2002* in London, UK. Imperial College, in collaboration with Oxford University and the Tyndall Centre for Climate Change Research, has developed a 5-day program to help provide professionals, particularly in government and industry, with an in-depth understanding of the issues surrounding climate change and the impacts on their organization. This program will be of significant interest to all those in organizations with a responsibility for understanding issues in climate change and its business impact. For more information, contact the Centre for Continuing Education, Imperial College of Science, Technology and Medicine, Room 318, Sheffield Bldg., Exhibition Road, South Kensington, LONDON SW7 2AZ, UK, tel: 44-207-594-6882 / 6884 /6886; fax 44-207-594-6883; email [cpd@ic.ac.uk](mailto:cpd@ic.ac.uk); web: [www.ad.ic.ac.uk/cpd/climate.htm](http://www.ad.ic.ac.uk/cpd/climate.htm)

**The 25th Conference on Hurricanes and Tropical Meteorology** will be held *25 April–3 May 2002* in San Diego, CA. Sponsored by the American Meteorological Society, the conference will address the following topics, including: seasonal to interannual prediction and predictability, tropical cyclones, large-scale dynamics and convection, tropical cyclone intensity change, tropical cyclone motion, tropical cyclone prediction, and monsoons. For more information, contact the AMS, 45 Beacon St., Boston, MA 02108-3693; tel: 1-617-227-2425; fax: 1-617-742-8718; email: [amsinfo@ametsoc.org](mailto:amsinfo@ametsoc.org); web: [www.ametsoc.org/AMS/](http://www.ametsoc.org/AMS/)

**The World Ecotourism Summit** will be held *19–22 May 2002* in Quebec, Canada. The United Nations has declared 2002 as the International Year Of Eco-tourism. The World Tourism Organization and the UN Environment Programme have taken the lead in organizing activities for this Year at the international level. The four main themes of the conference are: 1) eco-tourism policy and planning: the sustainability challenge; 2) regulation of eco-tourism: institutional responsibilities and frameworks; 3) product development, marketing and promotion of eco-tourism: fostering sustainable products and consumers; 4) monitoring costs and benefits of eco-tourism: ensuring equitable distribution among all stakeholders. For more information, contact the Ecotourisme 2002 Secretariat, 51, rue d'Auteuil, Québec, Québec, G1R 4C2, Canada;

tel: 1-418-692-1699; fax: 1-418-692-5587; email: [ecotourism2002@jpd.com](mailto:ecotourism2002@jpd.com); web: [www.tourisme.gouv.qc.ca/ecotourisme/anglais/index\\_a.html](http://www.tourisme.gouv.qc.ca/ecotourisme/anglais/index_a.html)

**NOTE: DATE CHANGE FROM LAST NEWSLETTER – The Conference on Climate Variability and Change and their Health Effects in the Caribbean** will be held *21–22 May 2002* in Bridgetown, Barbados. The conference organizers solicit presentations on climate and health objectives. Work conducted in or relevant to the Caribbean basin will be particularly welcome. The session topics will address climate and health aspects of infectious diseases, the marine environment, water resources, agriculture, natural disasters and adaptation for climate change. For more information, contact Pan American Health Organization (PAHO)/World Health Organization, Office of Caribbean Program Coordination, PO Box 508, Bridgetown, Barbados; tel: 1-246-426-3860; fax: 1-246-436-9779; email: [pcadmin@cpc.paho.org](mailto:pcadmin@cpc.paho.org); web: [www.pahocpc.org/whatsnew/climate\\_health\\_conf/chcw.htm](http://www.pahocpc.org/whatsnew/climate_health_conf/chcw.htm)

**The 10<sup>th</sup> International Conference on Modeling, Monitoring and Management of Air Pollution** will be held *1–3 July 2002* in Segovia, Spain. Air Pollution 2002 is the tenth conference in a major international series on modeling, monitoring and management of air pollution. The meeting places emphasis on the development of experimental and computational techniques, which can be used as tools to aid solution and understanding of practical air pollution problems. The conference attracts state-of-the-art contributions from researchers around the world. Information from these meetings has increased awareness of air pollution issues and laid the foundation for further research in this field. Scientists working in industry, research organizations, government and academia, who are working on monitoring, simulation and management of air pollution problems. For more information, contact Gabriella Cossutta, Conference Secretariat, Air Pollution 2002, Wessex Institute of Technology, Ashurst Lodge, Ashurst, Southampton, SO40 7AA; tel: 44-238-029 3223; fax: 44-238-029 2853; email: [gcossutta@wessex.ac.uk](mailto:gcossutta@wessex.ac.uk); web: [www.wessex.ac.uk/conferences/2002/air02/index.html](http://www.wessex.ac.uk/conferences/2002/air02/index.html)

**The 10<sup>th</sup> International Course on Community Based Disaster Management** will be held *8–19 July 2002* in Bangkok, Thailand. The course aims to promote understanding of community-based approaches to disaster risk management through strengthening local capacities. It will highlight the importance of collaborative work and development of strategies for local level partnerships between government, local officials and communities to achieve enhanced preparedness. The course will facilitate the sharing of successful community-based disaster risk management experiences from Asia and other parts of the world. For

more details, contact the Director, Training and Education, Asian Disaster Preparedness Center, Asian Institute of Technology, PO Box 4 Klong Luang, Pathumthani 12120, Thailand, tel: 66-2-524 5354 / 524 5355; fax: 66-2-524 5350 / 524 5360; email: tedadpc@ait.ac.th; web: www.adpc.ait.ac.th/training/te-cbdm10.html

**Energy, Climate, Environment, and Water: Issues and Opportunities for Irrigation and Drainage** will be held 10–13 July 2002 in San Luis Obispo, California. Irrigators are facing new challenges as competition for water supplies, coupled with significant increases in energy costs and environmental considerations, threaten the economic viability of irrigation. Climate change, whether natural or a result of human activity, is providing additional concerns. The Conference will provide a forum to discuss and evaluate these issues, with a focus on the technology being applied to meet the challenges. An Exhibition will feature this technology. For more information, contact the US Committee on Irrigation and Drainage (USCID), 1616 Seventeenth St., Suite 483, Denver, CO 80202 USA; tel: 1-303-628-5430; fax: 1-303-628-5431; email: stephens@uscid.org; web: www.uscid.org/~uscid/index.html

**The Quaternary Climatic Changes and Environmental Crises in the Mediterranean Region** will be held 15–18 July 2002 in Madrid, Spain. This meeting will be based on four parts: 1) paleo-biological indicators, geochemical indicators, and isotopic geochronology; 2) environmental crises and human evolution marine and terrestrial records as proxy of environmental changes, and paleoclimatic records from the Iberian Peninsula; 3) sea-level changes, catchment and neotectonics, and paleohydrology; and 4) climate models. For more information, contact Ana Valdeolmillos Rodríguez, Departamento de Geología. Edificio de Ciencias, Campus Universitario. Universidad de Alcalá, 28871 Alcalá de Henares (Madrid), Spain; tel: 34-91-885 49 55; fax: 34-91-885 50 90; email: climatic.changes@uah.es; web: www2.alcala.es/qchange2002/

**Atmospheric Chemistry in the Earth System: From Regional Pollution to Global Change** will be held 18–25 September 2002 in Crete, Greece. The topics discussed will include observing the changing atmosphere, drivers of atmospheric composition change, processes and mechanisms, major campaigns with a regional focus, and climate change impacts. For more information, contact Galatia Danalaki, IGAC2002 Secretariat, Dept. of Chemistry, University of Crete, PO Box 1470, 71409, Heraklion, Greece; tel: 30-810-393679; fax: 30-810-393601; email: igac2002@chemistry.uoc.gr; web: atlas.chemistry.uoc.gr/IGAC2002/

The **6<sup>th</sup> International Conference on Greenhouse Gas Control Technologies** will be held 1–4 October 2002 in Kyoto, Japan. The aim of this conference is to provide a forum for the discussion of the latest advances in the field of greenhouse gas control technologies, including capture, storage and utilization of carbon dioxide. Other mitigation options, such as efficiency increase and use of renewable sources of energy, will also be included, as well as options for non-CO<sub>2</sub> greenhouse gases, policy and economic measures and social impacts. The conference strives to promote international research and development collaborations and to encourage an exchange of ideas on future directions in this field. For more information, contact the GHGT-6 Secretariat, Norifumi Matsumiya, Planning & Survey Dept. RITE, 9-2 Kizugawadai, Kizu-cho Soraku-gun, Kyoto 619-0292, Japan; tel: 81-774-75-2301; fax: 81-774-75-2314; email: ghgt@rite.or.jp; web: www.ieagreen.org.uk/ghgt6.htm

The **2<sup>nd</sup> GLOBEC Open Science Meeting on Comparative Ecosystems and Climate Change** will be held 15–18 October 2002 in Qingdao, P. R. China. Organized by the International Global Ocean Ecosystem Dynamics (GLOBEC), the primary goal of the conference is to advance the understanding of the structure and functioning of the global ocean ecosystem, its major subsystems and its response to physical forcing so that a capability can be developed to forecast the responses of the marine ecosystem to global change. The conference topics are: decadal/centennial variability in marine ecosystems: a comparative approach; Antarctic marine ecosystems and global change; linking zooplankton with fishery dynamics; modeling of transport processes and early fish life history; regional and mesoscale coupled physical - biological models; comparative studies of North Atlantic ecosystems; social impacts from changes in marine ecosystem structure; ENSO and decadal-scale variability in North Pacific ecosystems. For more information, contact GLOBEC IPO, Plymouth Marine Lab, Prospect Place, Plymouth PL1 3DH, United Kingdom; tel: 44-1752 633 401; fax: 44-1752 633 160; email: globec@pml.ac.uk; web: www.pml.ac.uk/globec/OSM/

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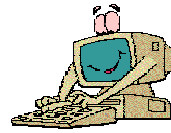
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Michael Glantz, *Network Newsletter* editor, created the Fragilecologies website as a public service to those interested in climate-society-environment interactions. See the website at [www.fragilecologies.com](http://www.fragilecologies.com)

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### **[www.esig.ucar.edu/cxa](http://www.esig.ucar.edu/cxa)**

This newly redesigned website contains new information about the notion of climate affairs, as well as links to the recent conferences held about climate affairs in Latin America and the South and Southeast Asian region.

### **[www.spaceweather.com](http://www.spaceweather.com)**

This site provides science news and information about the Sun-Earth environment, including current space weather conditions, forecasts, headlines and information on phenomena such as auroras, asteroid flybys etc.

### **[www.gristmagazine.com](http://www.gristmagazine.com)**

*Grist*, an online environmental magazine, is a project of Earth Day Network. *Grist* tackles environmental topics with energy and fresh perspective in order to inform, entertain, provoke, and encourage creative thinking about environmental problems and solutions.

### **[www.cap-net.org](http://www.cap-net.org)**

Cap-Net aims to enhance integrated water resources management and service delivery for improvement of livelihoods and the protection of the environment. This purpose will be achieved by building the capacity in developing countries and regions to manage water resources in an integrated way.

### **[www.panda.org/mediterranean](http://www.panda.org/mediterranean)**

The Mediterranean Programme Office has launched its website. The site is designed to be a reliable tool for those interested in the environmental issues of the region.

### **[www.cleanup.org](http://www.cleanup.org)**

Through the use of this website, you can access several sections of community-specific environmental information at no cost to the user or taxpayer. For community-specific information, simply enter your ZIP code, and the site will guide you to recycling, composting, energy conservation and other resources in your community.

### **[www.osei.noaa.gov](http://www.osei.noaa.gov)**

The Operational Significant Event Imagery team produces high-resolution, detailed imagery of significant environmental events, which are visible in remotely sensed data available at the NOAA Science Center in Suitland, Maryland.

### **[www.sej.org](http://www.sej.org)**

The Society of Environmental Journalists posts a selection of the most interesting news stories on environmental topics in print and on the air every weekday.

### **[www.dossier.kiev.ua](http://www.dossier.kiev.ua)**

"Green Dossier" was established in 1994. Since then, environmental journalism has been the mainstream activity of the center. Journalists collect information on the state of environment and environmental problems to create news stories, which are sent to more than 500 outlets in the Ukraine and abroad.

### **[www.ipcc.ch/pub/tar/about.htm](http://www.ipcc.ch/pub/tar/about.htm)**

This website contains the full text and graphics from the four *Climate Change 2001* reports by the IPCC's Working Groups.

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