

Network Newsletter

and

Issue #31



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Editorial

Paper Copy or Electronic Attachment?

This title is a play on words. Some decades ago, when credit cards were first issued, consumers were asked the now-all-too-familiar question: “cash or credit?” (i.e., plastic credit card). At first, many thought that paper money was on the way into the dustbin of history. Wrong. The two forms of currency came to peacefully coexist, leaving it up to the consumer to choose. In the United States, most Americans (and visitors to the country) have been asked many times at the grocery store, “paper or plastic?” This refers to the type of sack to be used to bag the groceries. It comes down to a choice between a plastic bag that does not biodegrade so easily, or a paper bag that can be recycled or will biodegrade in a relatively short period of time.

Well, it seems that a similar choice is being offered ever more frequently these days for newsletters like this one: “do you want the paper (hard copy) or the electronic version (PDF)?” This is a fair question to ask the readers of newsletters, as production costs to prepare, print, and mail the hard copies continue to increase.

One solution is to charge people for the newsletter. However, not everyone you would like to see receive the newsletter can afford to pay for a subscription. Nor do they have easy access to a computer or the Internet to read it online. Hard copy is their only way to see climate-related news that they might be able to use. For this reason, we have avoided charging people for this newsletter. How could we charge those in the North and not those in the South? So we made a decision to charge no one.

Over the years, we have had a few solid “backers” for the newsletter: NCAR has always been the mainstay support for it, and the UN Environment Programme (UNEP) supported it for many years until its financial crises occurred in the mid-1990s. NOAA’s Office of Global Programs also helped the newsletter for a few years and was instrumental in bringing the ENSO

Signal to NCAR (now combined with the Network Newsletter, with hopes that eventually we could bring two discrete newsletters back into play). UNEP and NCAR supported the first US “Networkshop” in 1985, which was designed to create a network of climate-related impacts research centers and individuals. In 1989, UNEP supported the first international Networkshop at NCAR.

Alas, the Network Newsletter is at another crossroads, one of several in its twenty-year history, and perhaps the most crucial one. Unless we can find a way to support the newsletter (most of the cost is in printing and for international postage), it seems that the newsletter will have had a great twenty-year run.

While it is understandable that organizations have become increasingly reluctant to support paper newsletters in favor of “going electronic,” we feel that it will lead to certain segments of the research and policy making communities without access to the “news you can use” that we strive to provide in this newsletter. To those of you who have relied on receiving the paper copy, we apologize. For those who receive the electronic version, we will endeavor to keep it going; however, this is only about 10 percent of our readership.

As with “credit cards vs. cash” and “paper vs. plastic,” hard copy and electronic newsletters will achieve a balance, with those needing the former getting them, while those who can access the latter will do so.

Whether there is a financial “knight in shining armor” on the horizon for the future of the newsletter remains a question, an 11th-hour question. In any event, we have enjoyed serving you these past two decades. In the absence of a miracle, we have one more issue ahead of us. Thanks for the numerous emails and letters of support that we have received from you over the years. It has made the entire task worthwhile.

--Michael H. Glantz



Institute for the Study of Society & Environment (ISSE)
National Center for Atmospheric Research (NCAR)
PO Box 3000, Boulder, CO 80307
www.isse.ucar.edu/newshp • jan@ucar.edu

LET'S HEAR FROM YOU!!

Budget constraints may not allow us to continue this newsletter in hard copy for much longer. However, we expect to have at least one more issue in hard copy. Information for this next issue must be received by **30 June 2005**. We will continue to seek funds for the newsletter. **Any ideas would be greatly appreciated.** If you prefer to receive the newsletter on line, please let us know at www.isse.ucar.edu/newshp and you will be reminded when a new issue is released. Thanks again for your contributions!

ELDIS CLIMATE CHANGE

Eldis is an Internet-based information service that provides filtering and structuring of sustainable development information via the web and email. It maintains a growing library of editorially selected and abstracted online documents, as well as an organizational directory of development-related Internet services. Eldis aims to support the documentation, exchange, and use of evidence-based development knowledge and communicate this knowledge to researchers, development practitioners, and policy makers at national and international levels. The focus is on both the North and the South. See the website at www.eldis.org for highlights on climate change issues in a development context.

www.fragilecologies.com

For a long time I have been reluctant to put personal items in the newsletter (aside from the editorials). However, with this exception, I'd like to make the readers of the Network Newsletter aware of my personal website, www.fragilecologies.com. Here you can find environmental editorials, guest editorials, and Idea Bank related to the environment and especially to climate-related impacts. Most of the editorials are about controversial matters or issues that should be discussed but have been overlooked. You are encouraged to send your suggestions for possible guest editorials or responses to existing ones to Michael Glantz at glantz@ucar.edu or mickeyglantz@hotmail.com

—Michael H. Glantz, Newsletter Editor

MARY FRAN MYERS AWARD

The Gender and Disaster Network and the Natural Hazards Center at the University of Colorado invite nominations of individuals working in the hazards field to be recognized for the promotion of gendered disaster research and advancing women's careers in emergency management. The Mary Fran Myers Award recognizes that vulnerability to disasters and emergencies is influenced by social, cultural, and economic structures that marginalize women and girls. The award aims to recognize people whose program-related activities, advocacy efforts, or research have had a lasting positive effect on reducing hazards vulnerability for women and girls. The award committee is especially interested in soliciting nominations from countries outside the United States. A Call for Nominations has been issued for the 2005 Award and must be submitted by 1 June 2005. To nominate someone for the Award, the criteria are listed at www.colorado.edu/hazards/mfmaward/ (click on "Call for Nominations") or write to Betty Hearn Morrow, 8215 SW 140 Ave., Miami, FL 33183; email morrowb@fiu.edu

US CLIMATE REFERENCE NETWORK

The US Climate Reference Network (USCRN) is a network of climate stations now being developed as part of a NOAA initiative. Its primary goal is to provide future long-term observations of temperature and precipitation that can be coupled to long-term historical observations for the detection and attribution of present and future climate change. Data from the USCRN will be used in climate monitoring activities to place current climate anomalies into perspective. The USCRN also aims to provide the US with a reference network to meet the requirements of the Global Climate Observing System (GCOS). The network will consist of about 110 stations across the nation when fully implemented (contingent on funding availability). For more information, see the website at www.ncdc.noaa.gov/crn/ or write to the National Climatic Data Center, Federal Bldg., 151 Patton Ave., Asheville NC 28801-5001.

EARTH DAY 2005: 35 YEARS!

On 22 April 2005, Earth Day will mark 35 years since the first celebration was held in 1970. The Earth Day Network (EDN) promotes environmental citizenship and year-round progressive action worldwide. EDN aims to build broad-based citizen support for sound, workable, and effective environmental and sustainable development policies. EDN has an environmental education program for students and teachers interested in environmental issues. The Educator's Network offers educators user-friendly tools for integrating environmental issues into core curriculum subjects and provides games and other activities for children.

Teachers of all grade levels are encouraged to register with the Educator's Network. Teachers who register will receive a free Environmental Jeopardy poster and Teacher's Guide. Environmental Jeopardy is a game and one-day lesson plan designed by EDN to challenge the way students think about issues such as recycling, energy, sustainability, transportation, and pollution, and how our daily choices affect our environment. For more information, see the website at www.earthday.net or contact EDN at Earth Day Network, 1616 P St. NW, Suite 340, Washington, DC 20036 USA; Tel: 1 202.518.0044; Fax: 1 202.518.8794.

MILLENNIUM ECOSYSTEM ASSESSMENT RELEASED

The Board of the Millennium Ecosystem Assessment (MA) approved the findings and reports of the assessment. On 30 March, these findings were presented to the public and are posted on the website at www.MAweb.org in advance of the final printed copies. A popularized version of the MA Synthesis Report, presented as a series of questions and answers, is available from GreenFacts on line at www.GreenFacts.org/ecosystems. The MA is an international work program designed to meet the needs of decision makers and the public for scientific information concerning the consequences of ecosystem change for human well-being and options for responding to those changes. The World Data Center for Biodiversity and Ecology (WDCBE), the UN Environment Programme (UNEP), the Center for International Earth Science Information Network (CIESIN), and the National Biological Information Infrastructure (NBII) will launch an interactive system to allow easy access to reports, maps, and the data collected during the MA global evaluation of ecosystems. It will be available at wdc.nbi.gov/ma. Follow-up assessments are expected to be planned for the future.

NEWS FROM INSNET

INSnet (InterNetwork for Sustainability), the portal site for sustainable development, has launched a website, SustainabilityStart, designed to help find information and links on sustainable development. It is intended to be a starting point with thousands of links covering hundreds of subjects, all accurately edited and categorized. At the present time, it is published in a beta-release format, so user feedback would be very much appreciated. Visit www.insnet.org/sustainabilitystart/

NEW UNU DATABASE AVAILABLE

The United Nations University (UNU) has launched a new Internet portal designed to provide better access to research materials from throughout the UN system. RUN, the Research in the United Nations database,

created and managed by UNU's International Institute for Software Technologies (UNU-IIST) in Macao, China, currently contains research reports from four UNU centers but will gradually grow to incorporate the work from many other UN research organizations and agencies. The RUN portal has been created as a single repository for research material from different UN organizations, allowing the public to have a global view of its research activities. Any organization or institution belonging to the United Nations can join RUN. Technical/research reports that present new research and development work, as well as surveys of previous work, can be included in the repository. For more information, visit the RUN website at run.iist.unu.edu/index.jsp or email run@iist.unu.edu

ANOTHER ECO-HEROINE HAS FALLEN: IN MEMORIAM



Sister Dorothy Stang, 73, was killed in Pará, Brazil, on 12 February 2005. Sister Dorothy was a naturalized Brazilian citizen and one of 9 siblings from a Catholic family in Dayton, Ohio. She was shot and killed by two men while visiting a remote encampment near the Trans-Amazon Highway in Pará state. Sister Dorothy had been working with peasants who had clashed with illegal loggers. Stang worked in Brazil for 37 years, living far from the city in a remote Amazonian jungle settlement named Anapu. She had a reputation for riding a motorcycle and for camping outside the offices of local officials who refused to grant her a hearing. In 2004, she traveled to Brasilia in order to give evidence before a congressional committee of inquiry into deforestation. In the week following Stang's death, the Brazilian government restored previously relaxed restrictions to tree harvesting and announced 8.2 million acres of new reserves.

Sister Dorothy was a worker in the Catholic Church's Pastoral Land Commission (CPT) since 1982. The CPT was created in 1975 in response to increasing episodes of violence as landowners used gunmen to clear the peasants from disputed land. Sister Dorothy's particular interest was in teaching sustainable farming methods to poor settlers, most of whom were unfamiliar with Amazon soils. She had received awards from several Brazilian organizations in recognition of her work. Sister Dorothy Stang was born on 7 June 1931 and is survived by 8 siblings.

NOBEL LAUREATE APPOINTED

Wangari Maathai, 2004 Nobel Peace Prize laureate, has been appointed by the African Union (AU) to chair an advisory commission on social and environmental policies. The AU has commissioned an 18-member council to help to build a partnership between African governments and all segments of African civil society in order to achieve the goal of a "people-centered" African community. Maathai won acclaim for her campaign to fight deforestation by planting 30 million trees in Africa and establishing the Green Belt Movement in Kenya. A new Foundation has been established in her name, the purpose of which is to contribute to the development of a just, peaceful and Earth-respecting human community. The Wangari-Maathai Foundation also aims to encourage the people of Africa to rediscover their cultural heritage. For more information about Wangari Maathai, the first African woman and Kenyan to receive the Nobel prize, see the website at www.wangari-maathai.org/ or learn about the Green Belt Movement at www.greenbeltmovement.org

Editor's Note: Wangari participated in a controversial 1991 ESIG/NCAR/UNEP workshop on "Winners and Losers with Global Warming in Malta."

WORDS & PUBLICATIONS MOVED!

Words and Publications is a design and editorial studio providing complete information design solutions. Their services include graphic design, illustration, editorial services, foreign language production, typesetting and printing. In their own words: "We're now based at our new studio on the edge of an idyllic woodland forest, surrounded by nature and wildlife, and just a mile from our old offices in Eynsham." Their new address: Wintersbrook Studio, 15 Broadmarsh Lane, Freeland, Oxfordshire, OX29 8QP, UK. www.words.co.uk

GREEN MAP SYSTEM AND GREEN ATLAS

The Green Map System (GMS) is a locally adaptable, globally shared framework to build more sustainable communities. GMS invites teams from around the world to create a Green Map illuminating connections within the natural and human environments by charting the significant sites in local urban or rural communities. The resulting Green Maps identify, promote, and link ecological and cultural resources in order to create an avenue to help users of the maps become involved in protecting their own environment, as well as to help find green initiatives used elsewhere that can be adapted. The GMS celebrated its tenth anniversary in March 2005, and has now grown to include projects in 45 countries. Of more than 200 Green Maps that have been created, 60 of them are available on line, and 3 million copies are in use. In 2004, GMS produced its first

collection of mapmaking stories, illustrating 10 projects in Asia and North America. For more information, see the website at www.greenmap.org or download the Green Atlas at GreenAtlas.org in PDF format.

ADPC GROWS IN STATURE

ADPC (Asian Disaster Preparedness Center) has been granted intergovernmental organizational status by the Royal Thai Government. The official signing of the charter with signatory states Thailand, Bangladesh, Cambodia, Nepal, Pakistan, and the Philippines was held 28 February 2005. ADPC is a regional resource center working towards disaster reduction for safer communities and sustainable development in Asia and the Pacific. The Center is recognized as an important neutral focal point for promoting disaster awareness and the development of local capabilities to foster institutionalized disaster management and mitigation policies. For more information, see the website at www.adpc.net or email adpc@adpc.net.



PROVENTION CONSORTIUM GRANTS

The Provention Consortium is a global partnership of governments, international organizations, academic institutions, the private sector, and civil society organizations aimed at reducing disaster impacts in developing countries. The Consortium functions as a network to share knowledge as well as to connect and leverage resources to reduce disaster risk. It is sponsoring a second round of grants to support research on innovative disaster risk management and to encourage young professionals dedicated to reducing disaster risk in developing countries. Students and young professionals from developing countries are invited to propose creative projects and ideas. They may include research projects, professional internships, or development programs. Awards will be made to projects that have the potential of making a significant contribution to the field. The themes should focus on the links between disasters, development, and the environment, and should fall into one of three general categories: risk identification and analysis; risk reduction; and risk sharing/transfer. Submission of proposals may be made via email at dmc@engr.wisc.edu until 15 May 2005, or sent by mail to Provention Consortium Grants, University of Wisconsin, Disaster Management Center, 432 N. Lake St., Madison, WI 53706. Details on guidelines for proposal submission is available at www.adpc.net/dms/AGDR2.html or www.proventionconsortium.org/projects/appliedres.htm

UPDATE ON POPS

POPs (Persistent Organic Pollutants) are the toxic substances that persist in the environment, bio-accumulate through the food chain, and pose a risk of causing adverse effects to human health and the environment. With the evidence of long-range transport of these substances to regions where they have never been used or produced, and the consequent threats they pose to the environment of the world, the international community has called for urgent global action to reduce and eliminate release of these chemicals. The Stockholm Convention on POPs entered into force on 17 May 2004, and the first meeting of the Conference of Parties will be held 2–6 May 2005 in Punta del Este, Uruguay. Argentina recently ratified the Stockholm treaty and commits itself to stop the poisoning of its ecosystems. **The treaty is the first global attempt to stop the production and use of these toxic substances, especially the 12 toxics known as the “dirty dozen.”** These 12 substances have been linked to cancer and immune and reproductive system damage. They are also toxic to wildlife and can threaten entire species. The first Core Group Meeting for a UN Environment Programme (UNEP) and Global Environment Facility (GEF) project on “Assessment of Existing Capacity and Capability Building Needs to Analyze POPs in Developing Countries” was held in February 2005. The Minutes for this meeting are available on line at www.chem.unep.ch/pops/ (first link), and the Stockholm website is at www.pops.int

KYOTO PROTOCOL ACCEPTED BY US CITIES

Several cities in the United States have gone ahead and adopted the Kyoto Protocol, even though the US federal government has rejected it. The Protocol took effect on 16 February 2005, and the Mayor of the City of Seattle, Washington, announced that day a 2005 Environmental Action Agenda to protect its air quality, the health of the community, and the environment. The cornerstone of Seattle’s agenda is to reduce regional greenhouse gas emissions to meet the Kyoto target or beyond. Mayor Greg Nickels seeks to build a “green” coalition of mayors and challenge all US cities to create a national grassroots effort to implement the Kyoto Protocol. The city also aims to reduce its use of paper by 30% by the end of 2006, publish a community action guide on climate protection by Earth Day (22 April), and explore the increased use of climate-friendly materials in City projects. Seattle has already reduced its carbon dioxide emissions by 60%, and neighborhoods will compete with each other for matching funds from the city based on emissions reduction efforts. See the Seattle website at www.ci.seattle.wa.us/mayor/issues/EAA/ and to learn more about the Protocol itself, see the website at unfccc.int/essential_background/items/2877.php

GEF: CORAL REEF TARGETED RESEARCH

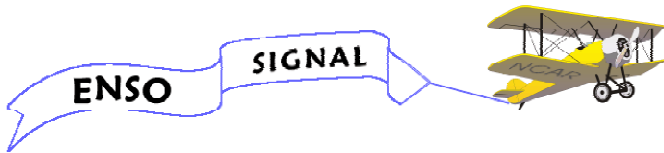
Over the past ten years, an increase in awareness of the importance of coral reefs has become evident, especially in light of their rapid decline in many regions and their importance to developing countries. However, what is unknown about these ecosystems is alarming, especially when management interventions are becoming increasingly significant. CRTR is shorthand for the “Coral Reef Targeted Research and Capacity Building for Management Project.” This project seeks to coordinate and target research for the first time in the global community’s history. It will establish a global network of eminent coral reef scientists working together across disciplines in order to identify key knowledge gaps to reduce uncertainty in the context of management and draw on a blend of biophysical and social scientists to produce multidisciplinary research. The trigger for the project was concern about climate change and unprecedented sea temperature increases and its effects on coral reefs. Support comes from four leading international research institutes. To learn more, visit www.GEFcoral.org or email info@GEFcoral.org

IUCN WATER INITIATIVE

IUCN (World Conservation Union) launched a new project to stimulate learning on transboundary water management on World Water Day 2005. The project is part of a broad-scale initiative: International Waters: Learn “Structured Learning.” Sponsored by the Global Environment Facility, the structured learning initiative intends to enhance transboundary water management through open dialogue and advanced communication. This initiative allows managers and other practitioners of large-scale regional projects which focus on aquifers, lakes, river basins, and large marine ecosystems to share their experiences and learn from one another. As one of four thematic project activity leaders of this initiative, the IUCN Global Marine Program is facilitating a four-year learning exercise around large marine ecosystem projects, by stimulating and coordinating a series of topic-based electronic and face-to-face discussions among regional projects around the world. Learn more at www.iucn.org/marine/

NEVILLE NICHOLLS HONORED

Neville Nicholls of Australia’s Bureau of Meteorology has recently been awarded the Fitzroy Prize of the Royal Meteorological Society, and was also presented with the Bureau’s Excellence Award. Nicholls is the Group Leader of the Climate Forecasting Group, which aims to improve understanding of Australian climate, including the effects of climate change. To learn more about Neville, see www.bom.gov.au/bmrc/climatehp.htm



ENSO = El Niño–Southern Oscillation

(www.esig.ucar.edu/signal)

CURRENT STATE OF THE TROPICAL PACIFIC

(Data summarized from the Climate Prediction Center, the Pacific ENSO Update, and Australia's Bureau of Meteorology, 20 March 2005)

Due to the abrupt onset of very dry conditions throughout much of Micronesia during February 2005, and other unusual weather conditions in other areas of the tropical Pacific (such as the occurrence of 3 hurricanes near Samoa), the *Pacific ENSO Update* issued a special bulletin to update information contained in its last full issue. According to the US Climate Prediction Center (CPC), the climate of the tropical Pacific entered El Niño conditions in the second half of 2004. Until now, the atmospheric response to El Niño has been weak.

Although the climate anomalies of February 2005 are typically associated with El Niño, it is not yet clear whether these very unusual weather patterns are being caused by El Niño or by some other short-term forcing of the climate system. In any case, the outlook from the CPC is still for the weak El Niño conditions to gradually subside back toward neutral ENSO conditions during mid-2005. In this scenario, one would expect drier-than-normal weather throughout much of Micronesia for the next few months, but the extreme dryness of February 2005 is unlikely to be repeated. The ENSO Wrap-Up of Australia's Bureau of Meteorology suggests that early March 2005 brought some easing of the El Niño indicators after the strong signals observed during February, when the Southern Oscillation Index (SOI) plummeted to its lowest value for any month since February 1983.

In the "Spring Barrier" period (March–June), model skill is at its lowest level of predictability. A Kelvin Wave should reach South America's coast by late April or early May. (A Kelvin Wave is defined as eastward-moving warm subsurface water.) The current Kelvin Wave is the strongest observed for the past two years. For more information, see the following websites for updates: *Pacific ENSO Update* at lumahai.soest.hawaii.edu/Enso/peu/update.html or the US Climate Prediction Center (CPC) at www.cpc.ncep.noaa.gov/products/analysis_monitoring/ens_o_advisory/

ENSO FORECASTS YOU CAN UNDERSTAND

The Australian Bureau of Meteorology's National Climate Centre (NCC) has created an easy-to-understand El Niño and La Niña Forecasts page. A table summarizes the NCC's opinion regarding the outputs from various reputable ocean or couple ocean-atmosphere forecasts models. NCC's interpretation may not necessarily be the same as the organizations producing the model output, so readers are encouraged to follow the links to the various institutions. The POAMA (Predictive Ocean Atmosphere Model for Australia) model, run at the Bureau of Meteorology, generates a new forecast every day for the following 8 months based on the latest observations. The POAMA model has recently increased the chance of warming above El Niño thresholds following the spring of 2005 to above 50%, which is around double the long-term average for this time of year. For more information and to see what the other models are predicting, see the website at www.bom.gov.au/climate/ahead/ENSO-summary.shtml

RAINMAN

The Queensland Government in Australia has recently completed a climate analysis tool for PCs, the **Rainman StreamFlow 4.3+**. This data CD contains historical monthly and daily rainfall for 3,800 locations in Australia, as well as monthly and daily streamflow for nearly 40 locations. It also contains worldwide monthly rainfall records for 9,500 locations. The Rainman CD gives the user power to analyze these records for individual locations for seasonal, monthly, and daily patterns; forecast seasonal rainfall based on the SOI (Southern Oscillation Index) or sea surface temperatures. Minimum system configuration is a Pentium II, Windows 95 or higher, and a CD-ROM drive. The Rainman CD also contains "*Will It Rain? The Effect of the Southern Oscillation and El Niño on Australia*," as interactive multimedia with animated illustrations. Rainman can be ordered from the Client Service Centre, Dept. of Primary Industries, PO Box 102, Toowoomba, Qld 4350, Australia; email qcca@dpi.qld.gov.au or see the website at www.dpi.qld.gov.au/rainman. The producers would like to increase the distribution of the versions of Rainman. Copies of Rainman International have been widely distributed in Indonesia, Southeast India, and Zimbabwe under an Australian aid project, and the meteorological services of the ASEAN countries. However, the producers feel that many others throughout the world will find it useful for research or for helping with decisions affected by climate variability.

PROBA SATELLITE AND CHRIS

The ESA (European Space Agency) satellite Proba, in orbit for almost four years, is making a big contribution to science. Proba applications range from studying land vegetation to water quality monitoring. Proba is about the same size and shape as a washing machine, and its largest instrument is the Compact High Resolution Imaging Spectrometer (CHRIS). More than fifty scientific teams worldwide are either currently using or planning to use CHRIS data. At the end of March, a three-day workshop held in Italy highlighted the use of CHRIS/Proba data as a valuable tool for research and applications. CHRIS's high-resolution and wide spectral range allows for collection of biophysical and biochemical properties, such as chlorophyll and water content, leaf area index, and overall biomass. CHRIS is also playing a part within ESA's TIGER Initiative, which is intended to apply earth observation services to the integrated water resource management in developing nations, with a particular focus on Africa. A follow-on satellite is due to be deployed by ESA during 2007 (Proba-2). For more information, visit the ESA website, www.esa.int, in particular the "Protecting the Environment" link at the top of the page.

SCRIPPS SCIENTISTS DETECT CLIMATE CHANGE

Tim Barnett and David Pierce of Scripps Institution of Oceanography conducted research that indicates preliminary evidence of anthropogenically produced warming in the upper 3,000 meters of the world's oceans. They cross-referenced data from the Parallel Climate Model (PCM) and the HadCM3 (Hadley Center, UK), factoring in the influence of greenhouse gases and sulfate aerosols over the last 50 years and found that, as the climate model's ocean temperature rose and penetrated into the oceans, the global ocean temperature down to 3,000 meters rose as well. This research appears in an article in *Science* (13 April 2005 issue). The work was a contribution on behalf of the International Detection and Attribution Group (IDAG), sponsored by NOAA's Climate Change Data Detection Program.

A TALE OF TWO NIÑOS

The Jet Propulsion Laboratory (JPL) earth science writer Rosemary Sullivant has written an article that details the work of University of Maryland researcher Eric Hackert and his colleagues, who used sea surface height data from the Topex/Poseidon and Jason satellites, and sea surface temperature data from NOAA satellites, to analyze two very different El Niño events. They compared the extraordinarily strong 1997–98 El Niño

with the mild 2002–03 El Niño event. One discovery was that Kelvin and Rossby waves for each event were markedly different as the El Niño events developed. Kelvin waves travel from west to east along the equator, and Rossby waves move in the opposite direction from east to west on either side of the equator. These waves create a change in ocean circulation and the ENSO cycle. The entire article is available on the web at topex-www.jpl.nasa.gov/ or contact Ocean Surface Topography Outreach, JPL, Mail Stop 264-331; 4800 Oak Grove Dr., Pasadena, CA 91109.

JOB OPPORTUNITIES

Visiting Scientist Program at GFDL (Geophysical Fluid Dynamics Laboratory) in Princeton, NJ. This program is part of the Climate Change Research Initiative. Appointments are made to postdoctoral and short-term senior scientists. GFDL expects some of the postdoctoral positions to evolve into permanent civil service positions. Deadline for applications to the program is 15 May 2005. Full text announcement and application requirements at www.vsp.ucar.edu.

Global Warming Project Manager in the Environmental Health Department in Aspen, CO. This person will be responsible for implementing global warming initiatives, coordinating conferences, and establishing an awareness campaign on global warming. He or she will serve as coordinator to the Aspen Global Warming Alliance. Minimum qualifications include a BA or MA in physics, chemistry, biology, or public administration. The position will remain open until filled, and applications will be processed upon receipt. Write to Lee Cassin, Director, City of Aspen Environmental Health Dept., 130 S. Galena St., Aspen, CO 81611; email leec@ci.aspen.co.us; Tel: 1-970-720-5075; website www.aspenpitkin.com.

The International Research Institute for Climate Prediction at Columbia University in Palisades, NY USA is seeking an individual for the position of **International Development Officer**. This is a new position in the Office of the Director General. The individual will lead initiatives to significantly increase all resourcing, especially pertaining to the advancement of major programs and projects in Africa, Asia, Latin America and the Caribbean to support core research and build institutional endowments. Qualifications include at least BA in development, international relations, communications, business, economics, environmental science, or related disciplines. Prospective candidates may learn more about the position at the website: <http://iri.columbia.edu/aboutiri/job/>

PAST MEETINGS

The Western Pacific Geophysics Meeting

When: 16-20 August 2004

Where: Hawaii, USA

Contact: AGU Meetings Dept., 2000 Florida Ave. NW; Washington, DC 20009; Tel: 800-966-2481, ext. 333 or 1-202-777-7333; E-mail: meetinginfo@agu.org (Subject: 2004 Western Pacific Geophysical Meeting) www.agu.org/meetings/wp04/

NOAA 29th Annual; Climate Diagnostics and Prediction Workshop

When: 18-22 October 2004

Where: Madison, Wisconsin, USA

Contact:

www.meteor.wisc.edu/calendar/content/cdwkshp.html

The Third International Workshop on Monsoons

When: 1-5 November 2004

Where: Beijing, China

Contact: C. P. Chang (cpchang@nps.edu);

www.nps.edu/Academics/gseas/IWM-III/Index.html

First International THORPEX Science Symposium

When: 6–10 December, 2004

Where: Montreal, Canada

Contact: www.wmo.int/thorpex/

COP10 side event: What is dangerous climate change? Results of the Beijing Symposium on Key Vulnerable Regions and Climate Change

When: 14 December 2004

Where: Buenos Aires, Argentina

Contact: Antonella Battaglini, Tel: 54 911 57717676; Dr. Martin Welp, martin.welp@pik-potsdam.de; Tel: 49 (0)331-288-2619; www.european-climate-forum.net/pdf/press_release_141204.pdf

Climate Change Effects on Fisheries and Aquatic Resources: Exploring the Reality of Adaptation in the Great Lakes Basin

When: 10–11 January 2005

Where: Windsor, Canada

Contact: C-CIARN Fisheries; Pacific Biological Station; Fisheries and Oceans Canada, 3190 Hammond Bay Rd.; Nanaimo, BC V9T 6N7; Tel: 250.756.0930; Fax 250.756.0970; www.fishclimate.ca

World Social Forum

When: 26-31 January 2005

Where: Porto Alegre, Brazil

Contact: World Social Forum Office in Porto Alegre: Av. Presidente João Goulart, 551, 4 andar, sala 402 - Usina do Gasômetro, Porto Alegre - RS, Brésil Cep: 90010-120- Brasil; E-mail: fsmcoa@forumsocialmundial.org.br; http://www.forumsocialmundial.org.br/index.php?cd_language=2

Avoiding Dangerous Climate Change

When: 1–3 February 2005

Where: Exeter, UK

Contact: MET Tel: 44 (0)1392 885680; Fax: 44 (0)1392 885681; email: enquiries@metoffice.gov.uk; www.stabilisation2005.com/

New Brunswick Climate Change Hub - Countdown to Kyoto

When: 16 February 2005

Where: Bathurst, Canada

Contact: Eddie Oldfield; Director, New Brunswick Climate Change Hub; Email: Address: 65 Brunswick St., Fredericton, New Brunswick, E3B 1G5, Canada; www.nbhub.org

International Coordination Meeting for the development of Tsunami Warning and Mitigation System for the Indian Ocean within a Global Framework

When: 3–8 March 2005

Where: UNESCO Headquarters, France

Contact: p.pissierssens@unesco.org; ioc.unesco.org/indotsunami/paris_march05.htm

Climate Change Science, Impacts & Responses

When: 11–15 April 2005

Where: London, UK

Contact: Imperial College London Tel: 44 (0)20 7594 6886; Fax: 44 (0)20 7594 6883; Email: cpd@imperial.ac.uk; <http://www.imperial.ac.uk/cpd/climate/generalinfo.htm>

EU Climate Change Policy Beyond Kyoto: Building a Global Climate Change Agreement

When: 19–20 April 2005

Where: Brussels, Belgium

Contact: EU Conferences Ltd, Festival Drive, Ebbw Vale, NP23 8XF, Wales UK ; Tel: 44 1495 300012; Tel/Fax: +44 1495 309372; Email: info@euconferences.com <http://www.euconferences.com/index2.htm>

UPCOMING MEETINGS

The workshop on **Emerging Climate Change Reporting Requirements** will be held *20 April 2005* in Calgary, Canada. Mandatory greenhouse gas reporting can raise many questions in your organization — why do we report, what do we report, and to whom must it be reported? The one-day workshop will include a summary of Kyoto, Federal Climate Change Plan for Canada, Alberta's Reg 251/2004, WRI/WBCSD GHG Protocol, and ISO 14064 Part 1. This workshop will be of interest to those who wish to understand that past, current and emerging greenhouse gas reporting requirements. For

more information contact Cheryl Harsch; PricewaterhouseCoopers LLP; Tel: 1-403-509-7500 ext. 6544; Email: cheryl.l.harsch@ca.pwc.com
www.pwc.com/ca/eng/about/events/index.html

The conference **Green Power Mediterranean** will be held 26–27 April 2005 in Rome, Italy. The conference is intended to create a focused venue for networking and knowledge transfer to further the adoption of renewable energy systems and energy efficiency programs in the Mediterranean region. Forum topics include: sustainable energy financing; regional emissions trading; regional interconnection and transmission; renewable islands; progressive policy and regulation; and presentation of a number of successful renewable energy systems case studies. For more information, please contact below: info@greenpowerconferences.com; web at www.greenpowerconferences.com

The **Carbon Expo** will be held 11–13 May 2005 in Cologne, Germany. The Carbon Expo Global Carbon Market Fair & Conference co-organized by the World Bank Carbon Finance Business, the International Emissions Trading Association and Kölnmesse. Participants will include: senior managers of corporate strategies and risk management; decision makers; technical experts; business representatives; industry associations; and government representatives. For more information contact: Kölnmesse GmbH, Sabrina Brauner, Messeplatz 1, 50679 Köln, Germany. Fax: 49-221-8213098. email: s.brauner@koelnmesse.de; www.carbonexpo.com

The **26th Summer Conference of the Natural Resource Law Center: Hard Times on the Colorado River – Drought, Growth and the Future of the Compact** will be held 8–10 June 2005 in Boulder, Colorado. The precipitous drawdowns of Lake Powell and Lake Mead are once again highlighting a host of legal, policy and management issues clouding the long-term future of the Colorado River. The conference will be an exploration of topics pertaining to the Law of the River, the ability of the system to meet delivery and hydropower obligations, potential impacts of shortages to water users and the environment, and solutions for future management. For more information contact the Natural resource Law Center, 401 UCB; Boulder CO 80309, USA. Tel: 303-492-1286; fax: 303-492-1297; email: nrlc@colorado.edu; www.colorado.edu/law/summerconference

The **17th Conference on Climate Variability and Change** will be held 13–17 June 2005 in Cambridge, MA. The conference will be held in conjunction with the 15th Conference on Atmospheric and Oceanic Fluid Dynamics (AOFD) and the 13th Conference on Middle Atmosphere (MA). For more information contact the American Meteorological Society (AMS) email:

amsmtgs@ametsoc.org;
www.ametsoc.org/meet/fainst/cambridge.html

The **Asia Oceania Geosciences 2nd Annual Meeting** will be held 20–24 June 2005 in Singapore. The meeting aims to act as a catalyst for Asian and international participants to develop partnerships and other professional networking. Scientific sessions will cover such topics as: Oceans and Atmosphere; Hydrological Science; Solid Earth; Planetary Science; Solar terrestrial; and Interdisciplinary Working Groups. It is organized by the Asia Oceania Geosciences Society. For more information contact: Cheng-Hoon Khoo, AOGS Secretariat Office, Meeting Matters International, 5 Toh Tuck Link, 596224; Singapore. Fax: 65-64677667. Email: kch@meetmatt.net; www.asiaoceania-conference.org

The **Coasts & Coastal People: Scenarios of Change & Responses** will be held 27–29 June 2005 in Egmond aan Zee, Netherlands. The meeting is part of the LOICZ II Inaugural Open Science Meeting. Aimed at human dimension and natural scientists, decision makers, managers and user groups in the coastal zone. Main themes include: Vulnerability of coastal systems and hazards to human society; Implications of global change for coastal ecosystems and sustainable development; and Anthropogenic influences on the river basin and coastal zone, among others. For more information contact Conference Organizer, LOICZ International Project Office, PO Box 59, 1790 AB Den Burg - Texel, The Netherlands. Fax: +31-222-369430. Email: loicz@nioz.nl; www.loicz.org

The **Human Security and Climate Change Workshop** will be held 21–23 June 2005 in Oslo, Norway. The workshop will bring together approximately 50 participants to discuss aspects of human security and climate change. The workshop will serve as a forum for formulating a research agenda related to human security and climate change. The network of scholars working in this field of research will be broadened through the workshop and various follow-up activities. A selection of the best papers from the workshop will be submitted as a special issue to an international academic journal. For more information contact HUMSEC, c/o CICERO, University of Oslo, PO Box 1129, Blindern, 0317 Oslo, Norway; Tel: 47–22 85 87 50; Fax: 47–22 85 87 51; email: humsec-secretariat@cicero.uio.no; www.cicero.uio.no/humsec/

The **4th International Symposium on Non-CO₂ Greenhouse Gases: Science, Control, Policy & Implementation** will be held 4–6 July 2005 in Utrecht, The Netherlands. Organized by the Clean Air Section of the Netherlands Association of Environmental professionals, the meeting will address the role of non-CO₂ greenhouse gases in human-induced climate

change. NCGG-4 will also focus on the implementation of new technologies in industry and society that are seen to be cost-effective options. For more information contact NCGG-4 Organizers, Netherlands; Association of Environmental Professionals, PO Box 2195, NL-5202; CD Den Bosch, The Netherlands. Fax: 31-73-6216985. Email: cfp@ncgg4.nl; www.ncgg4.nl

The **Second GIS in Weather, Climate and Impacts Workshop** will be held 6–8 July 2005 in Boulder, Colorado. The NCAR Geographic Information System (GIS) Initiative recognized that systematic methods for organizing and sharing geospatial information are essential to advancing earth system science and other aspects of the geosciences. A GIS seminar series and The GIS in Weather, Climate and Impacts Workshop will explore crucial issues related to integrating weather and climate data with complementary information from the physical sciences, social sciences, and related areas of the geosciences. For more information contact the NCAR GIS Initiative. Email: GISsupport@ucar.edu; www.gis.ucar.edu

The **AGCI's Summer Science Session - North American Weather and Climate Extremes: Progress in Monitoring and Research** will be held 15–21 July 2005 in Aspen, Colorado, USA. "Extreme events" span many weather and climate variables. Key variables include temperature-related parameters (severe freezes, heat waves), precipitation-related parameters (wet spells, heavy precipitation events, and droughts), tropical and extra-tropical storm frequency and intensity including extreme waves and coastal erosion, ice and hail, snow cover and depth, etc. The impact of climate extremes can be severe and wide ranging. Extremes affect all sectors of the economy - agriculture, utilities, transportation, water resources, and insurance industry. Among its many uses, information on climate extremes allows for real-time evaluation of ongoing or recent events placed in an historical context. For more information contact AGCI, Sue Bookhout, 100 East Francis St., Aspen CO 81611, Tel: 970-925-7376, Fax: 970-925-7097; email: sueb@agci.org; www.agci.org/conference/conference.cfm?eid=140

The **Chapman Conference on the Role of Marine Organic Carbon and Calcite Fluxes in Driving Global Climate Change, Past and Future** will be held 24–27 July 2005 in Woods Hole, MA, USA. The organizers plan a synthesis of theory, modern observation, and paleo reconstruction of the organic carbon to calcium carbonate rain ratio from the euphotic zone, through the water column, and to the sea floor, and it is hoped to constrain its potential to interact with past and future climate. The conference will organize not only what is understood about the subject, but also will define new research needs. For more information contact the AGU at Tel: 202-777-7331, Fax: 202-328-0566, or email:

meetinginfo@agu.org;
www.agu.org/meetings/cc05fcall.html

The **International Conference on Energy, Environment & Disasters** will be held 24–30 July 2005 in Charlotte, NC. Participants for INCEED 2005 will include researchers, corporate officials, policy makers, teachers and students. Over 100 sessions, panels and forums featuring keynote lectures, presentations, recorded debates and discussion. INCEED 2005 is an outgrowth of the regular ISEG conferences, begun in 1993, with the objective of addressing critical issues in sustainable development. For more information contact Hilary Inyang, International Society of Environmental Geotechnology, Global Institute for Energy & Environmental Systems, University of North Carolina, Charlotte, NC. Email: iseg@uncc.edu

The **PAGES Second Open Science Meeting** will be held 10–12 August 2005 in Beijing, China. The title of the IGBP-PAGES 2nd Open Science Meeting (OSM) is "Paleoclimate, Environmental Sustainability and Our Future". The meeting will focus on understanding past processes and natural variability—within the topics of climate, environmental change and human impact—in order to develop predictive models of the future. For more information contact PAGES IPO; Sulgeneckstrasse 38; 3007 Bern, Switzerland; Tel: 41-31-312 31 33; email: osm@pages.unibe.ch; www.pages2005.org

The **24th Session of the IPCC** will be held 26–28 September 2005 in Montreal, Canada. The role of the IPCC is to assess on a comprehensive, objective, open and transparent basis the scientific, technical and socio-economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts and options for adaptation and mitigation. For more information contact the IPCC Secretariat at IPCC-Sec@wmo.in; www.unep.ch/ipcc/

The **International Symposium on High-Elevation Glaciers and Climate Records** will be held 5–9 September 2005 in Lanzhou, China. High-elevation glaciers are widely distributed in the world, not only at low and middle latitudes but also in the polar regions. Even on the ice sheets in polar regions, some ice cores have been drilled at quite high elevation. Snow cover is another important process in high-elevation regions. Glacial variations, snow cover and glacial records are very important in the study of climatic changes, water resources and disasters in high-elevation regions. This symposium will focus on glacier variations, processes and their consequences, snow cover and related processes, and climate records from glaciers. The pre-registration deadline is 11 June 2005. Contact www.itpcas.ac.cn/system/igschina.asp

RECENT PUBLICATIONS

Books

Blatt, H., 2004: **America's Environmental Report Card: Are We Making the Grade?** The MIT Press, 5 Cambridge Center, Cambridge, MA 02142-1493; web: mitpress.mit.edu

Bonell, M. and L.A. Bruijnzeel (Eds.), 2005: **Forests, Water and People in the Humid Tropics: Past, Present and Future Hydrological Research for Integrated Land and Water Management.** Cambridge University Press, 40 W. 20th St., New York, NY 10011-4211; web: www.us.cambridge.org

Botterill, L. C. and D.A. Wilhite (Eds.), 2005: **From Disaster Response to Risk Management: Australia's National Drought Policy.** Springer-Verlag Heidelberg, Tiergartenstr. 17, D-69121 Heidelberg, Germany; www.Springeronline.Com

Brown, L.R., 2005: **Outgrowing the Earth: The Food Security Challenge in an Age of Falling Water Tables and Rising Temperatures.** Earthscan Publications Ltd., 120 Pentonville Road, London N1 9JN, UK; www.earthscan.co.uk

Dilley, M., R. Chen, U. Deichmann, A.L. Lerner-Lam, and M. Arnold, 2005: **Natural Disaster Hotspots: A Global Risk Analysis.** The World Bank, 1818 H Street, NW, Washington, DC 20433; www.worldbank.org/publications

Hassol, S.J., 2004: [Impacts of a Warming Arctic – Arctic Climate Impact Assessment](#). Cambridge University Press, 40 W. 20th St., New York, NY 10011-4211; web: www.us.cambridge.org

Keen, M., V.A. Brown, and R. Dyball (Eds.), 2005: **Social Learning in Environmental Management.** Earthscan Publications Ltd., 120 Pentonville Road, London N1 9JN, UK; www.earthscan.co.uk

Levy, D.L. and P.J. Newell (Eds.), 2004: **The Business of Global Environmental Governance.** The MIT Press, 5 Cambridge Center, Cambridge, MA 02142-1493; web: mitpress.mit.edu

Pardey, P.G. and V.H. Smith (Eds.), 2004: **What's Economics Worth? Valuing Policy Research.** Published for The International Food Policy Research Institute (IFPRI) by The Johns Hopkins University Press; www.press.jhu.edu

Spariosu, M.I., 2005: **Global Intelligence and Human Development: Toward an Ecology of Global**

Learning. The MIT Press, 5 Cambridge Center, Cambridge, MA 02142-1493; web: mitpress.mit.edu

Stănciulescu, F., 2005: **Modelling of High Complexity Systems with Applications.** WIT Press, Ashurst Lodge, Ashurst, Southampton, SO40 7AA, UK; www.witpress.com

Terry, J.P. and W.E. Murray (Eds.), 2004: **Niue Island: Geographical Perspectives on the Rock of Polynesia.** INSULA, c/o UNESCO-MAB, 1, Rue Miollis 75015, Paris, France; www.insula.org

UNEP (United Nations Environment Programme), 2005: **GEO Year Book 2004/5.** EarthPrint Ltd., P.O. Box 119, Stevenage, Hertfordshire SG1 4TP, UK; www.earthprint.com

UN/ISDR (United Nations International Strategy for Disaster Reduction), 2005: **Know Risk.** Tudor Rose, Tudor House, 6 Friar Lane, Leicester, LE1 5RA, UK; www.know-risk.org

Wessex Institute of Technology, 2005: **Environmental Health Risk III.** WIT Press, Ashurst Lodge, Ashurst, Southampton, SO40 7AA, UK; www.witpress.com

West, N., 2004: **Marine Affairs Dictionary: Terms, Concepts, Laws, Court Cases and International Conventions and Agreements.** Praeger Publishers, 88 Post Road West, Westport, CT 06881; www.greenwood.com

Wilhite, D. (Ed.), 2005: **Drought and Water Crises: Science, Technology, and Management Issues.** CRC Press, 2000 NW Corporate Blvd., Boca Raton, FL 33431-9868; www.crcpress.com

Wilkinson, C. (Ed.), 2004: **Status of Coral Reefs of the World: 2004.** Australian Institute of Marine Science, PMB No.3, Townsville MC Qld 4180, Australia; www.aims.gov.au

Worldwatch Institute, 2005: **State of the World 2005: Progress Towards a Sustainable Society.** 22nd Edition. Earthscan Publications Ltd., 120 Pentonville Road, London N1 9JN, UK; www.earthscan.co.uk

Reports

FAO (Food and Agriculture Organization of the United Nations), 2004: [The State of World Fisheries and Aquaculture](#). FAO, V. delle Terme di Caracalla, 00100 Rome, Italy; www.fao.org

Few, R., M. Ahern, F. Matthies, and S. Kovats, 2004: [Floods, Health, and Climate Change: A Strategic Review. Working Paper 63.](#) Tyndall Centre for Climate

Change Research, University of East Anglia, Norwich, NR4 7TJ, UK; web: www.tyndall.ac.uk

Fisher, R.J., K. Schmidt, B. Steenhof, and N. Akenshaev, 2004: **Poverty and Forestry: A Case Study of Kyrgyzstan with Reference to Other Countries in West and Central Asia**. LSP Working Paper 13, Access to Natural Resources Sub-Programme. Food and Agriculture Organization of the United Nations, V. delle Terme di Caracalla, 00100 Rome, Italy; email: isp@fao.org

Glantz, M.H. (Ed.), 2005: [Usable Science 9: El Niño Early Warning for Sustainable Development in the Pacific Rim and Islands](#). Report of workshop held 13-16 September 2004 in the Galapagos Islands, Ecuador. ISSE/NCAR, Boulder, CO.

Prinn, R., J. Reilly, M. Sarofim, C. Wang, and B. Felzer, 2005: [Effects of Air Pollution Control on Climate](#). Report 118. MIT Joint Program on the Science and Policy of Global Change.

UN Millennium Project, 2005: [Investing in Development: A Practical Plan to Achieve the Millennium Development Goals](#). Earthscan, 8-12 Camden High Street, London, NW1 0JH, UK; www.earthscan.co.uk

UNEP, 2005: **After the Tsunami: UNEP's Rapid Environmental Assessment Report**. EarthPrint Ltd., P.O. Box 119, Stevenage, Hertfordshire SG1 4TP, UK; www.earthprint.com

Winslow, M., B.I. Shapiro, R. Thomas, and S.V.R. Shetty, 2004: **Desertification, Drought, Poverty and Agriculture: Research Lessons and Opportunities**. Aleppo, Syria; Patancheru, India; and Rome, Italy: joint publication of the International Center for Agricultural Research in the Dry Areas (ICARDA), the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), and the UNCCD Global Mechanism (GM); www.icarda.org

Articles

Annamalai, H., S.P. Xie, J.P. McCreary, and R. Murtugudde, 2005: Impact of Indian Ocean sea surface temperature on developing El Niño. *Journal of Climate*, **18**(2), 302-319.

Barnston, A.G., A. Kumar, L. Goddard, and M.P. Hoerling, 2005: Improving seasonal prediction practices through attribution of climate variability. *Bulletin of the American Meteorological Society*, **86**(1), 59-72.

Berri, G.J., P.L. Antico, and L. Goddard, 2005: Evaluation on the Climate Outlook Forums' seasonal precipitation forecasts of southeast South America

during 1998-2002. *International Journal of Climatology*, **25**(3), 365-377.

Boer, G.J., K. Hamilton, and W. Zhu, 2005: Climate sensitivity and climate change under strong forcing. *Climate Dynamics*, Online First: doi: 10.1007/s00382-004-0500-3.

Boulanger, J.-P., J. Leloup, O. Penalba et al., 2005: Observed precipitation in the Paraná-Plata hydrological basin: Long-term trends, extreme conditions and ENSO teleconnections. *Climate Dynamics*, Online First: doi: 10.1007/s00382-004-0514-x.

Bowers, J.E., 2005: Influence of climatic variability on local population dynamics of a Sonoran Desert platyopuntia. *Journal of Arid Environments*, **61**(2), 193-210.

Bradshaw, B., H. Dolan, and B. Smit, 2004: Farm-level adaptation to climatic variability and change: Crop diversification in the Canadian prairies. *Climate Research*, **67**(1), 119-141.

Busalacchi, A. and T.N. Palmer, 2005: CLIVAR – The regional/global dichotomy. *CLIVAR Exchanges*, **10**(1), 2-3.

Camberlin, P., F. Chauvin, H. Douville, and Y. Zhao, 2004: Simulated ENSO-tropical rainfall teleconnections in present-day and under enhanced greenhouse gases conditions. *Climate Dynamics*, **23**(6), 641-657.

Chu, P.-S. and X. Zhao, 2004: Bayesian change-point analysis of tropical cyclone activity: The central North Pacific case. *Journal of Climate*, **17**(24), 4893-4901.

Collins, M. and the CMIP Modelling Groups, 2004: El Niño- or La Niña-like climate change? *Climate Dynamics*, **24**(1), 89-104.

Conway, D., E. Allison, R. Felstead, and M. Goulden, 2005: Rainfall variability in East Africa: Implications for natural resources management and livelihoods. *Philosophical Transactions: Mathematical, Physical & Engineering Sciences*, **363**(1826), 49-54.

Dessai, S. and M. Hulme, 2004: Does climate adaptation policy need probabilities? *Climate Policy*, **4**(2), 107-128.

Dilling L. and M.A. Brzezinski. 2004: Quantifying marine snow as a food choice for zooplankton using stable silicon isotope tracers. *Journal of Plankton Research*, **26**:1105-1114.

Doumbo, O.K., 2005: It takes a village: Medical research and ethics in Mali. *Science*, **307**(5710), 679-681.

- Downton, M., J.Z.B. Miller, and R.A. Pielke, Jr., 2005: Reanalysis of U.S. National Weather Service flood loss database. *Natural Hazards Review*, **6**(1), 13-22.
- El-Sheikh, M.A., 2005: Plant succession on abandoned fields after 25 years of shifting cultivation in Assuit, Egypt. *Journal of Arid Environments*, **61**(3), 461-481.
- Epstein, P.R. and J.J. McCarthy, 2004: Assessing climate stability. *Bulletin of the American Meteorological Society*, **85**(12), 1863-1870.
- Frederiksen, J.S. and G. Branstator, 2005: The predictability barrier and teleconnections pattern variability. *CLIVAR Exchanges*, **10**(1), 11-13.
- Geist, H.J and E.F. Lambin, 2004: Dynamic causal patterns of desertification. *BioScience*, **54**(9), 817-829.
- Goddard, L. and M. Dilley, 2005: El Niño: Catastrophe or opportunity. *Journal of Climate*, **18**(5), 651-665.
- Goldburg, R. and R. Naylor, 2005: Future seascapes, fishing, and fish farming. *Frontiers in Ecology and the Environment*, **3**(1), 21-28.
- Groenenberg, H., K. Block, and J. van der Sluijs, 2004: Global Triptych: A bottom-up approach for the differentiation of commitments under the Climate Convention. *Climate Policy*, **4**(2), 153-175.
- Huq, S., H. Reid, M. Konate et al., 2004: Mainstreaming adaptation to climate change in Least Developed Countries (LDCs). *Climate Policy*, **4**(1), 25-43.
- Johnston, P.A., E.R.M. Archer, C.H. Vogel, C.N. Bezuidenhout, W.J. Tennant, and R. Kuschke, 2004: Review of seasonal forecasting in South Africa: Producer to end-user. *Climate Research*, **28**, 67-82.
- Jones, R.N., 2004: Incorporating agency into climate change risk assessments. *Climate Research*, **67**(1), 13-36.
- Köhler, P. and A. Huth, 2004: Simulating growth dynamics in a South-East Asian rainforest threatened by recruitment shortage and tree harvesting. *Climatic Change*, **67**(1), 95-117.
- Ledoux, L., S. Cornell, T. O'Riordan, R. Harvey, and L. Banyard, 2005: Towards sustainable flood and coastal management: Identifying drivers of, and obstacles to, management realignment. *Land Use Policy*, **22**(2), 129-144.
- Leilah, A.A. and S.A. Al-Khateeb, 2005: Statistical analysis of wheat yield under drought conditions. *Journal of Arid Environments*, **61**(3), 483-496.
- Lepers, E., E.F. Lambin, A.C. Janetos et al., 2005: A synthesis of information on rapid land-cover change for the period 1981-2000. *BioScience*, **55**(2), 115-124.
- Leshner, A.I., 2005: Where science meets society. *Science*, **307**(5711), 815.
- Lin, A.C., 2004: Are foreign scientists good for the US scientific workforce? *BioScience*, **54**(10), 892.
- Lomnitz, C. and S. Nilsen-Hopseth, 2005: The Indian Ocean disaster: Tsunami physics and early warning dilemmas. *EOS*, **86**(7), 65 and 70.
- Luckman, B.H. and R.J.S. Wilson, 2005: Summer temperatures in the Canadian Rockies during the last millennium: A revised record. *Climate Dynamics*, Online First: doi: 10.1007/s00382-004-0511-0.
- Ma, J.Z., X.S. Wang, and W.M. Edmunds, 2005: The characteristics of ground-water resources and their changes under the impacts of human activity in the arid Northwest China: A case study of the Shiyang River Basin. *Journal of Arid Environments*, **61**(2), 277-295.
- Mann, M.E., M.A. Cane, S.E. Zebiak, and A. Clement, 2005: Volcanic and solar forcing of the tropical Pacific over the past 1000 years. *Journal of Climate*, **18**(3), 447-456.
- Maslin, M., 2004: Ecological versus climatic thresholds. *Science*, **306**(5705), 2197-2198.
- Meinke, H., P. de Voil, G.L. Hammer, R.C. Stone, and A. Potgieter, 2005: Rainfall variability at decadal and longer time scales: Signal or noise? *Journal of Climate*, **18**(1), 89-96.
- Metzger, K.L., M.B. Coughenour, R.M. Reich, and R.B. Boone, 2005: Effects of seasonal grazing on plant species diversity and vegetation structure in a semi-arid ecosystem. *Journal of Arid Environments*, **61**(1), 147-160.
- Morss, R.E., 2005: Problem definition in atmospheric science public policy: The example of observing-system design for weather prediction. *Bulletin of the American Meteorological Society*, **86**(2), 181-191.
- Morss, R.E., K.A. Miller, and M.S. Vasil, 2005: A systematic economic approach to evaluating public investment in observations for weather forecasting. *Monthly Weather Review*, **133**(2), 374-388.
- Mote, P.W., A.F. Hamlet, M.P. Clark, and D.P. Lettenmaier, 2005: Declining mountain snowpack in

western North America. *Bulletin of the American Meteorological Society*, **86**(1), 39-49.

Neubert, M., 2005: [Can we catch more fish and still preserve the stock?](#) *Oceanus*, **43**(2).

Oreskes, N., 2004: The scientific consensus on climate change. *Science*, **306**(5702), 1686.

Orlove, B.S., K. Broad, and A.M. Petty, 2004: Factors that influence the use of climate forecasts: Evidence from the 1997/98 El Niño event in Peru. *Bulletin of the American Meteorological Society*, **85**(11), 1735-1743.

Pala, C., 2005: To save a vanishing sea. *Science*, **307**(5712), 1032-1034.

Paul, E., 2004: Warning: Open access may be hazardous to the health of your scientific society. *BioScience*, **54**(12), 1060-1063.

Paixão Viega, J.A., V. Brahmananda Rao, and S.H. Franchito, 2005: Heat and moisture budgets of the Walker circulation and associated rainfall anomalies during El Niño events. *International Journal of Climatology*, **25**(2), 193-213.

Pielke, Jr., R.A. and D. Sarewitz, 2005: Bringing society back into the climate debate. *Population and Environment*, **26**(3), 255-268.

Pimentel, D., B. Berger, D. Filiberto et al., 2004: Water resources: Agricultural and environmental issues. *BioScience*, **54**(10), 909-918.

Pozo-Vázquez, D., S.R. Gámiz-Fortis, J. Tovar-Pescador, M.J. Esteban-Parra, and Y. Castro-Díez, 2005: El Niño-southern oscillation events and associated European winter precipitation anomalies. *International Journal of Climatology*, **25**(1), 17-31.

Reid, H. and M. Alam, 2005: Millennium development goals. *Tiempo*, **54**, 18-22.

Sanchez, P.A. and M.S. Swaminathan, 2005: Cutting world hunger in half. *Science*, **307**(5708), 357-359.

Sheppard, C. and R. Rioja-Nieto, 2005: Sea surface temperature 1871-2099 in 38 cells in the Caribbean region. *Marine Environmental Research*, **60**(3), 389-396.

Solberg, S., R.G. Derwent, Ø. Hov, J. Langner, and A. Lindskog, 2005: European abatement of surface ozone in a global perspective. *Ambio*, **34**(1), 47-53.

Solomon, A. and F.-F. Jin, 2005: A study of the impact of off-equatorial warm pool SST anomalies on ENSO cycles. *Journal of Climate*, **18**(2), 274-286.

Sparks, T.H. and P. Tryjanowski, 2005: The detection of climate impacts: Some methodological considerations. *International Journal of Climatology*, **25**(2), 271-277.

Stanhill, G., 2005: Global dimming: A new aspect of climate change. *Weather*, **60**(1), 11-14.

Sturm, M., J. Schimel, G. Michaelson et al., 2005: Winter biological processes could help convert Arctic tundra to shrubland. *BioScience*, **55**(1), 17-26.

Sun, L., D.F. Moncunill, H. Li, A.D. Moura, and F. Filho, 2005: Climate downscaling over Nordeste, Brazil, using the NCEP RSM97. *Journal of Climate*, **18**(4), 551-567.

Sutherland, K., B. Smit, V. Wulf, and T. Nakalevu, 2005: Vulnerability in Samoa. *Tiempo*, **54**, 11-15.

Tao, F., M. Yokozawa, Z. Zhang, Y. Hayashi, H. Grassl, and C. Fu, 2004: Variability in climatology and agricultural production in China in association with the East Asian summer monsoon and El Niño Southern Oscillation. *Climate Research*, **28**, 23-30.

Teske, A. and K. Edwards, 2005: [The depths of time in the depths of the ocean](#). *Oceanus*, **43**(2).

Thuburn, J., 2005: Climate sensitivities via a Fokker-Planck adjoint approach. *Quarterly Journal of the Royal Meteorological Society*, **131**(605), 73-92.

Turner, J., S. Colwell, G. Marshall et al., 2005: Antarctic climate change during the last 50 years. *International Journal of Climatology*, **25**(3), 279-294.

van den Berg, L. and K. Kellner, 2005: Restoring degraded patches in a semi-arid rangeland of South Africa. *Journal of Arid Environments*, **61**(3), 497-511.

Westbrooke, M.E., S.K. Florentine, and P. Milberg, 2005: Arid land vegetation dynamics after a rare flooding event: Influence of fire and grazing. *Journal of Arid Environments*, **61**(2), 249-260.

Wilhelmi, O.V. and T.L. Betancourt, 2005: Evolution of NCAR's GIS initiative: Demonstration of GIS interoperability. *Bulletin of the American Meteorological Society*, **86**(2), 176-178.

Zhou, S. and A.J. Miller, 2005: The interaction of the Madden-Julian Oscillation and the Arctic Oscillation. *Journal of Climate*, **18**(1), 143-159.

WEBSITES OF INTEREST

www.coralreef.noaa.gov/

The National Oceanic and Atmospheric Administration's (NOAA) Coral Reef Conservation Program supports effective management and sound science to preserve sustain and restore valuable coral reef ecosystems.

www.nodc.noaa.gov/

The National Oceanographic Data Center (NODC) archives and provides public access to global oceanographic and coastal data, products, and information.

www.managingclimate.gov.au

The Australian R&D Program, "Managing Climate Variability," has a new website. The MCV newsletter CLIMAG is available on the site, and the current edition features articles on evaporation trends and the generic answer to seasonal forecast value.

www.essic.umd.edu/

ESSIC is the Earth System Science Interdisciplinary Center at the University of Maryland. The goal of ESSIC is to enhance our understanding of how the atmosphere, ocean, land, and biosphere interact as a coupled system, and the influence of human activities on this system.

www.grid.unep.ch

The UN Environment Programme (UNEP) Division of Early Warning and Assessment (DEWA) has a Global Resource Information Database (GRID) of major centers for data and information management, with a unique, "value-adding" mandate in the handling of global and regional environmental data, which in turn support the environment assessment and early-warning activities of UNEP and its partners. At the same time, GRID-Europe occupies the niche of francophone centre for the global GRID network.

www.rdp.ro

The purpose of the RDP (Rural Development Project) in Romania is to strengthen local governance by improving the capacity of local administration to undertake socially, economically and technically viable investments. On this page, under "Additional Projects" is a new Handbook for Rural Teachers about Hygiene and Water.

www.cicero.uio.no/about/index_e.html

CICERO (Center for International Climate and Environmental Research - Oslo), founded by the Norwegian government in 1990, is an independent research center associated with the University of Oslo. CICERO's mandate is twofold: to both conduct research and provide information about issues of climate change.

www.futurefoundation.org

The Foundation for the Future was established with the mission to increase and diffuse knowledge concerning the long-term future of humanity. It conducts a broad range of programs and activities to promote an understanding of the factors in the social, genetic, biological, medial, psychological, physiological, cultural, technological, and ecological fields that may have an impact on human life during coming millennia.

www.esa.int/

The European Space Agency is Europe's gateway to space. Its mission is to shape the development of Europe's space capability and ensure that investment in space continues to deliver benefits to the citizens of Europe.

The NETWORK NEWSLETTER is intended for those interested and involved in climate-related impact assessment. It is hoped that it will serve to foster a growing network by keeping the community up to date on the many activities in this wide and varied field. Your involvement in supplying relevant information is essential to the success of this endeavor.

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tel: 1-303-497-8134; fax: 1-303-497-8125

E-mail: jan@ucar.edu; enso@ucar.edu

www.isse.ucar.edu/newshp

www.isse.ucar.edu/signal

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