Ozone Layer Thins; Worst Near Poles

Protective stratospheric ozone has been disappearing at about twice the rate estimated earlier, according to an analysis of ozone measurements by an instrument, the Total Ozone Mapping Spectrometer (TOMS), carried aboard a NASA satellite. The losses were progressively worse toward the pole, with the most significant losses at 40 to 50 degrees North; they exceeded 8 percent at the latitude of Hudson Bay and Sweden.

"These data suggest depletion of four to five percent has occurred since 1978 over the United States," William Reilly, Administrator of U.S. EPA, announced in a statement on April 4. "Past studies had shown half that amount." He called the losses stunning, unexpected and disturbing.

The ozone layer limits the penetration of ultraviolet radiation to the surface of the earth. With protection from UV-B weakened, EPA scientists estimate there will be 12 million additional cases of skin cancer in the whole U.S. population (including those yet to be born) by the year 2050, with 200,000 more deaths. Under previous assumptions about the ozone layer, the scientists had estimated 500,000 additional cases of skin cancer, with 9,300 excess fatalities in the same time period. The radiation can also cause eye cataracts, damage the human immune system, interfere with phytoplankton reproduction, and harm some crops and wild plants.

Losses were high above a latitude of 30-35 degrees N extending across much of North America, Europe, the Soviet Union and most of Asia. The depletion was about 3 to 5 percent during springtime and lasted longer than before, dragging into April and May, when both plants and people are more exposed and more vulnerable.

Losses at a maximum of about nine percent, during February and March, were observed at 45 degrees N in the vicinity of such cities as Turin, Italy; Belgrade, Yugoslavia; and Portland, Oregon.

Evans Report Lays Out Ways To Cut CO2

Selecting a path between the Bush Administration and many environmental groups, a committee at the instigation of the U.S. Congress has recommended an "insurance policy" that would reduce or offset emissions of greenhouse gases, take certain proven adaptation and mitigation steps. A new law would set a 30 percent reduction in CO2 no later than 2005. A 25 percent reduction in CO2 could be achieved by 1999, if necessary.

Greenhouse Action Australia Calls Meeting On Ways To Achieve CO2 Goal

Greenhouse Action Australia, the Climate Institute and the United Nations Environment Programme are bringing together policy makers, business leaders and environmental groups for an informal exchange on ways to promote industry and consumer initiatives. Up to 500 participants are expected at the conference, Greenhouse Action for the Nineties, July 21-23 at the Melbourne Town Hall.

Australia was the first nation to announce a target of reduction of greenhouse gas emissions by 20 percent from 1988 levels by the year 2005, on the eve of the Second World Climate Conference in Geneva in the fall of 1990. This was the goal set at the historic 1988 Toronto conference, The Changing Atmosphere, where Ms. Gro Harlem Brundtland was keynote speaker.
Climate Institute News

Bruce

Dr. James Bruce has been added to the Institute’s Board of Advisors. His career has included service as head of Canada’s Atmospheric Environment Service and as Acting Deputy Secretary General of the World Meteorological Organization (WMO). He is currently Chair of the Canadian Climate Planning Board and has done work for the Institute for Research and Public Policy in Ottawa. As Canada’s Permanent Representative to the WMO, he was instrumental in placing atmospheric chemistry on the organization’s research and policy agenda.

Edgerton

Board Member Lynne Edgerton chaired a unique pilot program which brought together more than 5,000 Los Angeles elementary school children with the city’s Department of Water and Power and Southern California Edison in an energy conservation and environmental awareness project called, “Children Light the Way.” The program took place during Earth Week and was the brainchild of the Children’s Earth Fund.

Southern California Edison and the Department of Water and Power provided presentations for the children at 11 public and private elementary schools and, to foster conservation, gave each student one energy efficient, compact fluorescent light bulb.

“It’s vital to teach children to be good custodians of the environment, but it’s even more important to show our children that something as simple as changing a light bulb can make a difference,” said Ms. Edgerton.

The light bulbs use one fourth the energy of ordinary light bulbs. According to Southern California Edison, replacing one million conventional light bulbs with compact fluorescents prevents the emission of 437,000 pounds of carbon dioxide, 31,000 pounds of sulphur dioxide, and 4,000 pounds of nitrogen each year.

Each child was also given the opportunity to sign a petition which will be sent to world leaders attending the 1992 UNCED meeting in Brazil, urging them to help enlighten the world and persuade people to work together for a bright future.

Edgerton has written a book, “The Rising Tide,” about global warming and world sea levels which has just been published under the sponsorship of the Natural Resources Defense Council by Island Press. Ms. Edgerton is an attorney with NRDC.

The book provides background information and discusses the implications of global warming and sea level changes. Rising sea levels are expected to lead to the loss of coastal ecosystems, including wetlands and estuaries, and coastal protection systems, such as mangroves and coral reefs, as well as coastal barriers, ports, agriculture and critical habitats.

Edgerton urges planning now for a significant global sea level rise by the year 2050. She reviews international effects and policies and outlines recommendations for a state, national and international response to the effects of sea level rise and global climate change on coastal communities and ecosystems.

MacDonald

Board Member Gordon MacDonald has recently accepted a new position and moved from the Mitre Corporation in McLean, Virginia to La Jolla, California. Dr. MacDonald is now a professor at the Institute of Global Conflict and Cooperation of the University of California - San Diego. In March he was part of a Climate Institute briefing team, making a presentation on the science of climate change in Spanish at a seminar for ministers, policymakers and government officials in Honduras.

Goldberg

Mark Goldberg, the Institute Publications Chairman and also a Board Member, is the editor and publisher of a new Washington-based quarterly magazine on domestic policy, Domestic Affairs. The first issue, which will appear in May, includes an article by William Reilly, Administrator of the U.S. Environmental Protection Agency, on new initiatives to prevent pollution.

Parry

Board Member Martin Parry has recently written a volume entitled, Climate Change and World Agriculture, published by Earthscan in association with the International Institute for Applied Systems Analysis and the United Nations Environment Programme. A Professor of Environmental Management at the University of Birmingham, U.K., Dr. Parry is also coordinator of the Atmospheric Impacts Research Group at the University. He was the lead author of the assessment by the IPCC of potential impacts of climate change on agriculture and was director of a 1983-86 international research project on climate change and agriculture.

Results of Annual Election

At the Institute’s most recent annual meeting, the Chairman and Co-Chairman were both unanimously reelected. The Chairman is Sir Crispin Tickell who is also Warden of Green College of Oxford University and President of the Royal Geographic Society. Co-Chairman is Dr. Stephen Leatherman, Director of the Laboratory for Coastal Research at the University of Maryland. Also reelected were President John Topping, Vice President Dan Power, Treasurer John Bond, and Corporate Secretary Nancy Wilson.

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Stephen Leatherman, Co-Chairman
John G. Topping, Jr., President
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German CO2 Reduction Initiatives

The Federal Cabinet of the German Government made what it called a "trendsetting climate protection" decision in November 1990 on a far-ranging national CO2 emissions reduction program. The reduction strategy includes energy suppliers (power plants) and all sectors of energy consumption: industry, transport and private households, with a target decrease of 25 percent by the year 2005. The proposal includes introduction of a CO2 charge or climate protection tax.

While acknowledging that the energy efficiency of former East Germany is extremely low, the Federal Government sees a tremendous opportunity for achieving drastic reduction in CO2 emissions in the "new Lander." It is working toward construction of a gas and steam turbine lignite-fired power plant in each of the five new Lander as soon as possible. Block heating power stations are considered practicable.

In the building sector, the proposal covers improved heat insulation and heating technology. A reduced-interest credit program has been instituted, with 10 thousand million deutschmarks earmarked for modernization of private dwellings from 1990 to 1993.

The proposal also foresees greater use of waste heat and welcomes the pledge of the German pit coal industry to increase the use of mine gas as energy.

The Federal Government is committed to open up as soon as possible the economic potential of renewable energy. Within the European Community, it will lend its support to creation of an industrial cooperation project for solar energy.

It is promoting "environmentally friendly transport systems." The Federal Cabinet is appealing to the car industry to reduce energy consumption of cars voluntarily and the Federal Government is taking the initiative to limit CO2 emissions of vehicles. The government believes technical fuel saving measures are not enough; it is also necessary to take "administrative, investment-related and organizational measures to optimize traffic flow."

In agriculture and forestry, the reduction includes the possibility of a 5 percent admixture of ethanol to petrol and a 10 percent admixture of colza oil to diesel.

Because the industrial countries are the main sources of CO2 emissions and therefore share a particular responsibility, the Federal Government states, "They have to make their contribution to enable the developing countries and the countries of central and eastern Europe to build up more climate-compatible energy supply infrastructure." Agreeing that a world climate convention with specific protocols on CO2 reduction and forest conservation is needed, the Federal Government states it would be wrong to delay specific national measures and wait until the necessary international legal instruments are at last available. "Every individual country is called [on] to take national steps to reduce the CO2 load now."

Climate Change Impacts on Tonga

Under a climate change set of conditions in Tonga, a Pacific island nation between Hawaii and New Zealand, the wet season is likely to be shorter and the dry season longer and there may be shifts in surface wind patterns, ocean currents and upwelling zones. According to a report at the Asia/Pacific Climate Change Seminar in Nagoya, Japan, in January 1991, there will also be significant changes in energy production and in water resources on outlying islands and low-lying areas. The study was conducted by Ms. Netaata P. Fiffita, Ecologist, and Environmentalist of the Ministry of Lands, Survey and Natural Resources of Tonga.

The total area of the Kingdom of Tonga is about 720 square kilometers, about four times the size of Washington, D.C. The population of 100,000 lives on 36 islands of a 170-island archipelago, in a tropical climate modified by trade winds and subject to cyclones and deforestation.

Sea level rise accompanying climate change would result in a substantial reduction in the size of the exclusive economic zones and the total land area. Nuku'alofa, the capital of Tonga, is on a flat peninsula, large portions of which are from one-half to one meter in elevation. There are no building standards requiring cyclone safety construction nor restriction on construction in areas almost certain to be flooded during cyclones. Between 1940 and 1985, 41 tropical cyclones hit Northern Tonga and 38 hit Southern Tonga. A very destructive cyclone, Ofa, occurred in 1990.

Most of the inhabited islands are raised coral which contain a fresh water lens lying over salt water. On the larger islands, water supplies come from wells which extract water from the freshwater lens. Smaller islands rely on rainwater catchment. On smaller low-lying islands, such as the Ha'pai group, sea level rise would bring salt water intrusion into the aquifer and a reduction in the area of freshwater.

Inundation of coastal areas would destroy coastal trees and mangroves, important sources of firewood. Petroleum imports account for 30-40 percent of total energy consumption; biomass and limited wind and solar energy sources comprise the remainder.

With expected global warming, demand for air conditioning would escalate. As the only indigenous energy source in Tonga is biomass, if climate change brought a shorter wet season and longer dry period, most of the firewood species would die out or suffer stunted growth. On the other hand, the potential for solar energy would be increased. At present it is used for heating water, drying crops such as copra and vanilla, and photovoltaic panels for electrification of small outer islands.

Because small island countries are limited in the amount of planning and research into various degrees of global warming and sea level rise they can do, the report concludes that, "global and regional partnership is important to aid small island countries to better adapt to global warming socially, economically and politically."
Evans Report
(continued from page 1)

itigation measures, promote research, and participate in international programs to slow population growth. The measures are recommended by the Committee on Science, Engineering, and Public Policy (COSEPUP), a joint committee of the National Academy of Sciences, the National Academy of Engineering and the Institute of Medicine. The report, entitled Policy Implications of Greenhouse Warming, issued on April 10, 1991, was under the jurisdiction of a panel of scientists and economists chaired by a former U.S. senator, governor and civil engineer, Daniel Evans.

Acknowledging that there are great uncertainties about the extent of global climate change, the report points out that there are also possibilities for “dramatic surprises” such as the unexpected appearance of the ozone hole. It urges the adoption of measures to reduce production of greenhouse gases by:
• phasing out chlorofluorocarbons in accordance with international agreements
• adopting energy policies that include efficiency and conservation
• exploring an energy pricing mechanism that would reflect the cost of environmental degradation
• increasing efforts to reduce deforestation and encouraging reforestation
• taking measures to help human and ecologic systems adapt to future climate change.

The panel conducted both engineering and economic analyses of policy options and recommended those that would cost little or would produce net savings. Most could be achieved by currently available “best practice” technology. The panel estimated they would cut U.S. greenhouse gas emissions by 10 to 40 percent below 1990 levels. The report advocates a fuel efficiency increase from 27.5 to 32.5 miles per gallon on new autos.

Tickell Unveils Evans Report in UK

Sir Crispin Tickell, chairman of the Board of the Climate Institute, launched the “Evans Report” in Britain at the Royal Geographical Society of which he is president. Sir Crispin was a member of the panel which prepared the report.

Pricing energy at its full “social cost,” including the cost to the environment, Sir Crispin pointed out as probably the most aggressive and controversial proposal in the report. Such a cost basis would provide consumers and producers with the appropriate information for making choices among fuels, investments and research and development.

Sir Crispin highlighted two other significant report recommendations: 1) that the U.S. should be more active in international efforts to organize responses to global warming, and 2) that the U.S. should reverse its position on population growth.

Sir Crispin was permanent representative of the United Kingdom to the United Nations up until last fall and presided over UN Security Council deliberations on critical resolutions about a climate convention. He was a close adviser on the environment to Margaret Thatcher during the time she made important speeches on environmental affairs.

Although the Evans report is largely aimed at the U.S. administration, Sir Crispin said, it has wider international relevance. Since greenhouse warming is already too far advanced to be avoided, the report says government policies will of necessity have to be focussed on adaptation and mitigation. The measures recommended in the report for reducing greenhouse gas emissions by 10 to 40 percent through improved energy efficiency would cost no more than $9 a ton.

National Energy Strategy

The Evans report followed by 6 weeks President Bush’s National Energy Strategy (NES) which, like the COSEPUP panel, did not call for fixed caps on CO2 emissions or taxes on energy. The strategy advocated actions “justified for other energy and environmental reasons,” as opposed to the precautionary principle endorsed by a large number of OECD countries.

The NES study urges other countries to follow the U.S. “comprehensive approach” in reducing atmospheric emissions by considering all greenhouse gases, sources and sinks together, designing a single, least costly mix of policies to limit emissions. It recalls that as part of the 1990 Economic Summit, the U.S. and its major trading partners agreed to begin negotiations as soon as possible on an international agreement for the protection of forests.

It also calls attention to a program, set up at the June 1990 London meeting that updated the Montreal Protocol, designed to assist developing countries in adopting substitute processes and chemicals for ozone-depleting substances. While these agreements are not yet in force, the NES report expresses optimism that they will be accepted.

The strategy report also points out that the Clean Air Act Amendments of 1990 include funding for U.S. assistance programs for developing countries, demonstrating that the U.S. “continues to show global leadership on this important global environmental issue.”

Changing By Degrees

A couple of weeks earlier, during the International Negotiating Committee meetings in Chantilly, Virginia, the U.S. Congress’s Office of Technology Assessment (OTA) released a summary of a study, Changing by Degrees: Steps to Reduce Greenhouse Gases, assessing ways for the U.S. and other countries to cut carbon dioxide emissions and the economic costs of such actions. The U.S. could reduce its emissions of CO2 by as much as 35 percent below 1987 levels without relying on technological breakthroughs, although such a decrease might be difficult to achieve and costly, according to the study. If the U.S. took no action, emissions could increase by 50 percent in the next 25 years. Taking a middle course would stabilize CO2 emissions at 15 percent above 1987 levels by the year 2015.
Greenhouse Action (continued from page 1)

Believing that major competitive and other economic benefits will accrue to those nations and corporations that recognize the long-term importance of the greenhouse gas issue, the conference organizers are encouraging participating in a "Global 20 Percent Club," as a sequel to the Climate Institute's Cities and Global Change Conference in Toronto in June.

The conference is built around the theme:

Greenhouse action is —
how we live, work and play,
what we farm and what we eat,
energy use and transportation,
and how we will rear our children.

Six study themes have been enunciated: urban form, ecological health, energy use, transport, cleaner production, and community education, with panels to be led by representatives from academia, the National Farmers' Federation, the Renewable Energy Authority, the Environment Protection Authority and the Council of Adult Education.

The upcoming July meeting in Australia had its origins in a 10-city video conference, Greenhouse 88, organized by the Commission for the Future and was encouraged by a developing cooperative relationship with the Climate Institute. Earlier collaboration included the attendance of ten-person GAA delegation to the December 1989 Climate Institute conference in Cairo.

The charter of Greenhouse Action Australia closely resembles that of the Climate Institute, both working to advance public understanding of climate change issues, and GAA members now have dual membership in the Institute, which includes receiving Climate Alert. Both groups are jointly working on greenhouse software and slides which they will distribute.

In April, Topping and Regional UNEP Director Noel Brown spoke at a public meeting in Melbourne on Greenhouse, the Gulf and the Future. They also participated in a conference planning workshop, which included key officials from industry, government and independent sectors and which was opened by Victorian Premier, the Hon. Joan Kirner. Federal Environment Minister Ros Kelly and Resources Minister Alan Griffiths attended the workshop and expressed enthusiasm about the conference.

Ozone Layer Thins (continued from page 1)

Between 65 degrees N and 65 degrees S, ozone declined by 2.6 percent per decade, but no significant losses were observed in the tropics (from 30 degrees N to 30 degrees S). However, because there is naturally more sunlight in the tropics, UV-B levels are higher than in the mid-latitudes, even though they have less ozone depletion. For the same reason, UV-B exposure in the summer in the U.S. remains higher than in winter even though ozone is more depleted in the winter.

The USSR's North European and Western Siberian ozone observation stations report permanent abnormally low total ozone since 1988, with the lowest levels recorded in the spring and fall, and the mean monthly total ozone 5-15 percent below average since 1973. In 1990, the USSR reports 75 percent of its stations indicated absolute minimal total ozone values for all observation periods.

The TOMS measures column ozone, the amount of ozone in the atmosphere above a given spot on the earth's surface. In the Southern Hemisphere, inside the Antarctic ozone hole, column ozone has been depleted by as much as 50 percent.

Ozone in areas south of 40 degrees S was depleted by 4 percent or more per decade during all seasons. New Zealand has undertaken a public campaign, aimed at persuading people to abandon the ideal of a suntanned body. Children are urged to sit under a tree when they eat lunch in the playground. In other places in the Southern Hemisphere, losses averaged about 2 percent higher than in the Northern Hemisphere and the depletion lasted longer.

Around the whole globe, ozone is decreasing at an average rate of 2.3 percent per decade. "We are exploring the full range of options open to us," EPA Administrator Reilly concluded in his April statement, "including intensifying efforts to assist developing countries and accelerating efforts to bring ozone-safe substitutes on line."

Correction

An article on the Toronto "Cities and Global Change Conference" in the April issue of Climate Alert incorrectly identified the role of Mrs. Gro Harlem Brundland at the 1988 Toronto Conference on the Changing Atmosphere. She was Conference Keynoter; Ambassador Stephen Lewis was Conference Chairman.
Calendar of Climate-Related Events, 1991 - 92

June 10-12  Bangkok, Thailand
International Conference on Global Warming and Sustainable Development: An Agenda for the 90s, sponsored by Thailand Development Research Institute, Institute for Research on Public Policy (Ottawa) and Woods Hole Research Center.
Contact: George Woodwell, 508/540-9900

June 12-14  Toronto, Canada
International Conference on Cities and Global Change, convened by Climate Institute in partnership with City of Toronto, Municipality of Metropolitan Toronto, Province of Ontario
Contact: Jim McCulloch, 416/737-2064

June 17-21  Hampton, NH
Gordon Conference on Atmospheric Chemistry
Contact: Marie Molina, 617/253-5081

June 18-20  Glasgow, Scotland, UK
International Ocean Technology Congress: Opportunities for Development and Conservation
Contact: Claire Bowie, 44-41-332-0193

June 18-20  Luxemburg, Austria
Contact: Leo Scharrether, IIASA, A-2361, Luxemburg, Austria

June 21-23  Prague, Czechoslovakia
Europeon Environment Ministers’ Conference

June 23-27  Oslo, Norway
Environment, Health and Lifestyle, 30th World Congress of International Union of Local Authorities.
Contact: 30 UIULA World Congress 1991, 47 2 94 77 00

June 24-July 3  Madrid, Spain
Second Negotiating Session of the Biological Diversity Convention

July (no date specified)  United Kingdom
G7 Summit

July 7-20  Aberdeen, Scotland, UK
Contact: Sandra Raiston, 44-224-272-480

July 10-12  Los Angeles, CA
Impact of Natural Disasters, UCLA International Conference. Major themes: economic and environmental issues and international cooperation.
Contact: Samuel Amin, 213/659-7430

July 10-14  Bangkok, Thailand
Asian Pacific Cooperation and Coordination in the Year 2000 and Beyond: Challenging issues
Contact: East-West Center Alumni Office, 808/944-7205

July 21-23  Melbourne Metrop. Area, Australia
Contact: Phil Noyce, 03 329 0633

July 29-30  Fredericton, New Brunswick, Canada
Changing Climate in Relation to Sustainable Agriculture, symposium/workshop sponsored by Expert Committee on Agrometeorology et al, University of New Brunswick.
Contact: Peter Dzikowski, 403/442-4385

August 2-9  Beijing, China
XII INQUA Congress — Man and Global Change during the Quaternary, organized by Chinese Academy of Sciences
Contact: Secretariat, XII INQUA Congress, (96) 3062

August 11-24  Vienna, Austria
General Assembly of International Union of Geodesy and Geophysics
Contact: Peter Steinhauser, 43-223-36 44 53, x. 2001

August 12-30  Geneva, Switzerland
PrepCom Meeting, UNCED

August 18-25  San Francisco, CA
Global Change and the Biogeochemistry of Radiative Trace Gases, organized for Tenth International Symposium on Environmental Biogeochemistry. Contact: Ronald Oramal, 415/393-4482

August 25-28  Asahikawa, Japan
International Symposium on Environmental Change and Geographic Information Systems
Contact: Symposium Secretariat, Hokkaido Univ., 066 51-6151 (283)

August 25-28  Espoo, Finland
Energy and Environment, International Symposium organized by Centre of Energy Technology, Helsinki University of Technology, in cooperation with Department of Energy, Ministry of Trade and Industry
Contact: Imari Kurki-Suonio, 358-0-451 358

August 26-30  Lanzhou, China
Mountain Glaciology — Relation to Human Activities
Contact: Sec'y-Gen, International Glaciology Soc., Cambridge, UK, 233-355974

September 4-6  Seoul, Korea
Regional Conference on Air Pollution: Emerging Issues in Asia
Contact: Kang Rho Cho, 82-2-356-1427

September 8-20  Il Ciocco, Italy
The Global Carbon Cycle. A NATO Advanced Study Institute
Contact: M. Helmman, Max-Planck Inst. Meierei, Bundesstr. 55, D-2000 Hamburg 13, Ger.

September 10-13  Asignon, France
Transport and Air Pollution, Topics Include effects on health and greenhouse warming.
Contact: Robert Jouard, INFETS, Case 4, 69675 Bron Cedex, France

September 10-13  Salt Lake City, UT
Conference on Agricultural and Forest Meteorology, with several other conferences:
1. Applied Climatology, Possible topics: methods of using climatological information in a climate which may be changing; socio-economic and biophysical impacts of major climate events including climate change.

2. Special Session on Hydrometeorology, Topics include modeling possible effects of large-scale deforestation and its effect on hydrologic cycle and feedbacks to regional climate; model simulations suggesting changes in atmospheric CO2 concentrations.
Contact: William Kustas, 301/344-2498

3. Conference on Biometricology and Aerobiology, Topics include such issues as effects of climate change on human, animal, plant and insect ecology.
Contact: John Westbrook, 912/873-2577

September 15-21  Chiang Rai, Thailand
International Workshop on Evaluation for Sustainable Land Management in the Developing World
Contact: Merc Larham, IBSRAM, PO Box 9-109, Bangkok, Bangkok 10300, Thailand

September 16-19  Uppsala, Sweden
Second International Symposium on Environmental Geochemistry
Contact: Mats Olsson, 46-18-672212

September 16-20  Interlaken, Switzerland
Permafrost and Periglacial Environments in Mountain Areas, organized by International Permafrost Association
Contact: Laboratory of Hydraulics, Hydrology and Glaciology, Federal Technical Institute, Zurich, Switzerland

September 17-27  Paris, France
World Forestry Congress: A Heritage for the Future, sponsored by UN Food and Agriculture Organization
Contact: Organizing Comm., 93-94-44-44

September 23-26  Montreal, Canada
Biotechnology and Environment for a Sustainable Development
Contact: Diane Chaffour, 514/343-8873

September 29-October 4  Ierapetra, Greece
International Technical Meeting on Air Pollution and Its Application, organized by NATO-CISN
Contact: H. van Dijk, 41-22-730-8454

September 30-October 1  Glueckstadt, Germany
Energy and Water Cycles in the Climate System, A NATO Advanced Study Inst.
Contact: E. Raschke, GKSS Res. Ctr., D-2054 Geesthacht, Germany

October 2-4  Denver, CO
Conference on Climate Variations, sponsored by American Meteorological Society. Possible topics: detection and modeling of global climate change, modeling the coupled climate system
Contact: William Lau, 301/286-8772

October 2-4  Perth, Western Australia
Challenge for Sustainable Development, sponsored by Institution of Engineers et al. Hyatt Regency Hotel
Contact: Lloyd Towne, 61 6 327-5552


Calendar of Climate-Related Events, 1991 - 92

October 8-11  Cairo, Egypt
7th Meeting of the Contracting Parties to the Convention for Protection of the Mediterranean Sea

October 21  Cities Around World
Caring for the Earth - A Strategy for Conservation and Development, successor to World Conservation Strategy

October 22-23  Washington, DC
Contact: Robert Rogers, 313/984-1200, x. 3234

October 23-25  Seattle, WA

November (No date specified)  Khartoum, Sudan
Global Warming and Human Health, International symposium organized by International Heat Stress Research Centre
Contact: Moneim Attia, 7408

November 4-7  Genoa, Switzerland
World Clean Energy Conference, organized by the World Circle of Consensus (CMDC)
Contact: CMDC, 411 1483 02 26

November 5-7  Albuquerque, NM
Contact: Michael Greene, 202/479-4041

November 24-29  Vienna, Austria
Agenda of Science for Environment and Development into the 21st Century, convened by International Council of Scientific Unions
Contact: ICUS, 301 45 25 03 29

December 2-6  Baltimore, MD
Contact: Robert Sievers, 303/427-7493

December 3-5  Baltimore, MD
International CFC and Halon Alternatives Conference
Contact: Jan McCuller, 301/686-0762

December 9-13  Melbourne, Australia
Physical Causes of Drought and Desertification, convened by CSIRO Division of Atmospheric Research, Melbourne University.
Contact: Barrie Hunt, 61 3 565 7658

December 17-21  Paris, France
Global NGO Conference on Environment and Development 1992

January 5-10  Atlanta, GA
Sixth Conference on Satellite Meteorology and Oceanography, sponsored by American Meteorological Society.
Contact: James Purdon, 303/481-8446

January 27-31  New Orleans, LA
Ocean Sciences Meeting of American Geophysical Union
Contact: 202/462-6900

March (no date specified)  New York, NY
Precomm Meeting, UNCED

March (no date specified)  Caracas, Venezuela
Environment and Development, World Congress of International Council of Free Trade Unions

March 2-13  Kyoto, Japan
Eighth Conference of the Parties, CITES

April 8-11  Corvallis, OR
Regional Landscape Change: Impacts of Climate and Land Use, Seventh Annual U.S. Landscape Ecology Symposium
Contact: Robert Lackey, 503/767-4601

June 1-12  Rio de Janeiro, Brazil
UN Conference on Environment and Development

June 16-17  Washington, DC
ECO World '92, sponsored by American Society of Mechanical Engineers
Contact: Michele Vosco, 212/705-7148

June 22-26  Genoa, Italy
Ocean Management in Global Change, Part I, Oceans in the Context of Global Change.
Contact: Eni Colombo '92, (10) 284111

August 1-14  Washington, DC
Contact: Amer. Soc. Photogrammetry, 301/696-3762

August 17-21  Montreal, Quebec, Canada
International Conference on Clouds and Precipitation
Contact: 11th ICCP, McGill Univ., 514/398-3770

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PUBLICATIONS ORDER FORM
Please send me  copy/copies of Coping With Climate Change, Proceedings of the Second North American Conference on Preparing for Climate Change. Cost: $35 per copy ($30 to Climate Institute members), plus $2.50 postage and handling U.S., $6 for Canada, and $10 elsewhere.

Please send me  copy/copies of Cairo Compact & Panel Reports, the output of the World Conference on Preparing for Climate Change, Cairo Egypt, Dec. 17-21, 1989. Cost: $10 includes postage and handling.


Please send me  copy/copies of The Arctic and Global Change, October 25-27, 1989, Ottawa, Ontario, Canada. Cost: $25 plus $2 for postage and handling.

Please notify me when Proceedings of the North American Conference on Forestry Responses to Climate Change, May 15-17, 1990, Washington, D.C. have been issued (Conference registrants will receive free copy as part of registration fee.)

Please send me  set/sets of greenhouse effect slides. Approximately 40 slides with accompanying talking points script. Cost: $85 plus $10 shipping and handling.

Circle language(s) you wish to order: English, Spanish, Turkish, Indonesian, Arabic, French, Chinese, Russian

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News From Toronto Cities Conference

Participants in the Urban CO2 Project of the International Council for Local Initiatives (ICLE) will attend the Cities and Global Change Conference in Toronto, with representatives from European cities taking an active part in at least three panels. The Climate Institute sponsored meeting will take place from June 12-14.

The decade-long ICLE project will test municipal programs to develop a policy for CO2 reduction in cities. Nearly half the world’s population is projected to live in urban areas by the end of the next century.

LAST MINUTE CHANGE: Conference hotel registration rates have been renegotiated downward, and the new rate is $109 plus taxes.

Sen. Mitchell Writes Book on Saving the Earth

We should place global climate change at the top of the executive branch agenda, cut CO2 emissions 20 percent by 2025 and halve world population growth rate by 2000 if we are to win the most important war of all, writes Senate majority leader George Mitchell in his new book, World on Fire: Saving an Endangered Earth.

Senator Mitchell has been a champion of the environment in the Senate, sponsoring much of the anti-pollution legislation and participating actively in hearings of the Senate Committee for Environment and Public Works. He was honorary co-chairman of the Climate Institute’s first conference held in Washington, D.C., in October 1987, “The First North American Conference on Preparing for Climate Change: A Cooperative Approach.”

In his book, the Senator enumerates the planet’s most urgent distress signals: global warming — the five hottest years of this century were in the 1980s; the ozone hole — the current hole in the ozone layer is as wide as the U.S. and as tall as Mt. Everest; tropical deforestation — our tropical rainforests are being destroyed at a rate of 54 acres every minute, 27 million acres a year.

Besides reducing CO2 emissions and curbing population growth, Senator Mitchell advocates totally banning CFCs, creating new national energy strategies, reuse and recycling programs, and drastically cutting auto emissions.

The Climate Institute is a private nonprofit organization formed to advance public understanding of climate change including greenhouse effect and of strategies to avert stratospheric ozone depletion.