

Media Statement (Honolulu, 5. March, 2009)

Joint IPCC-WCRP-IGBP Workshop: New Science Directions and Activities Relevant to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change

3-6 March, 2009

University of Hawaii, Honolulu, Hawaii

Hosted by IPRC, Sponsored by IPCC, WCRP, and IGBP

From March 3 to 6, over 150 leading climate scientists from around the world gathered at the International Pacific Research Center of the University of Hawaii to discuss the latest developments in Climate Change science. The hosting institute is internationally known for its research in climate variability and climate change and serves as a meeting place for scientists from all over the world. The workshop was jointly sponsored by the Intergovernmental Panel on Climate Change (IPCC), the World Climate Research Programme (WCRP) and the International Geosphere-Biosphere Programme (IGBP).

The goal of this workshop was to identify the latest developments in Climate Change science and discuss their implications for our understanding of the Earth System and its response to ongoing accelerated emissions of greenhouse gases and pollution particulates (aerosols), and deforestation. The findings of the scientists will be made available for the planning of the Fifth Assessment Report of the IPCC which is due in 2013.

Increasing computational power, and advances in process understanding and observations, now permit global climate models to address regional climate change and extreme events in much greater detail. In an unprecedented effort involving all climate modelling centers around the world, including the participation of developing countries, the World Climate Research Programme (WCRP) is coordinating climate model experiments and their analyses which will be assessed for the next IPCC report. This will result in a better estimate of the uncertainty involved in climate change projections and accelerate the development of climate models.

In the framework of the International Geosphere-Biosphere Programme (IGBP), these computer models are now evolving into "Earth System" models which are more inclusive of the roles of biology and chemistry, and the role of human activities, in the climate system. These models will be the tools to understand how current and future changes in energy use and environmental management will affect our climate and ecosystems worldwide.

Among the findings that were discussed by the scientists are interactions between the cycling of carbon and nitrogen in the climate system and new feedback processes involving the atmosphere, oceans, land and ice, details of which are yet to be fully understood and quantified. The fate of the large ice sheets of Greenland and Antarctica in a warmer world and the role of warming oceans in promoting ice-shelf melt, is a continuing concern that has direct implications for uncertainties in the projection of global sea level rise.

The scientists, gathered from all over the world, who participated in the workshop have extensive experience in performing scientific assessments for policy makers worldwide. In seeking to advance knowledge about the vulnerability of this planet to human-induced climate change, scientific rigor must remain a hallmark of the information that will be used for responsible decisions and wise stewardship.

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Host and Sponsor Descriptions:

IPRC: "The International Pacific Research Center (IPRC) was founded to gain greater understanding of the nature and causes of climate variation in the Asia-Pacific region, to determine whether such variations are predictable, and to discover how global climate change affects the region. The center's mission is "to provide an international, state-of-the art research environment to improve understanding of the nature and predictability of climate variability in the Asia-Pacific sector, including regional aspects of global environmental change". The IPRC was conceived under the "U.S.-Japan Common Agenda for Cooperation in Global Perspective" and was established October 1997 in a cooperative agreement between the University of Hawaii and the Japan Marine Science and Technology Center and the National Space Development Agency of Japan. The agreement concerned the efforts of Japan's Frontier Research System for Global Change at the University of Hawaii."

IPCC: "The Intergovernmental Panel on Climate Change (IPCC) is a scientific body set up by the World Meteorological Organization (WMO) and the United Nations Environmental Programme (UNEP). The IPCC was established to provide the decision-makers and others interested in climate change with an objective source of information about climate change. The IPCC does not conduct any research nor does it monitor climate related data or parameters. Its role is to assess on a comprehensive, objective, open and transparent basis the latest scientific, technical and socio-economic literature produced worldwide relevant to the understanding of the risk of human-induced climate change, its observed and projected impacts and options for adaptation and mitigation. IPCC reports should be neutral with respect to policy, although they need to deal objectively with policy relevant scientific, technical and socio-economic factors. They should be of high scientific and technical standards, and aim to reflect a range of views, expertise and wide geographical coverage."

WCRP: "The World Climate Research Programme (WCRP), sponsored by the International Council for Science (ICSU), the World Meteorological Organization (WMO) and the Intergovernmental Oceanographic Commission (IOC) of UNESCO, is uniquely positioned to draw on the totality of climate-related systems, facilities and intellectual capabilities of more than 185 countries. Integrating new observations, research facilities and scientific breakthroughs is essential to progress in the inherently global task of advancing understanding of the processes that determine our climate. The two overarching objectives of the WCRP are to determine the predictability of climate; and to determine the effect of human activities on climate to facilitate analysis and prediction of Earth system variability and change for use in an increasing range of practical application of direct relevance, benefit and value to society. "

IGBP: "The International Geosphere-Biosphere Programme (IGBP) is a research programme that studies the phenomenon of Global Change. The vision of IGBP is to provide scientific knowledge to improve the sustainability of the living Earth. IGBP studies the interactions between biological, chemical and physical processes and interactions with human systems and collaborates with other programmes to develop and impart the understanding necessary to respond to global change. IGBP's research goals are to analyze the interactive physical chemical and biological processes that define Earth System dynamics; the changes that are occurring in these dynamics; and the role of human activities on these changes."