



Minutes of Meeting

Meeting Name	:	Business Meeting of the International Radiation Commission Chaired by T. Nakajima (President), R. Cahalan (Acting Vice President), C. Serio (Secretary)
Meeting Reference	:	Business Meeting/IUGG Conference
Date(s) of Meeting	:	09-July-2007
Place of Meeting	:	Hosted by IUGG and University of Perugia, Italy
Minute Taker	:	Carmine Serio
Participants	:	see Annex 1
Distribution	:	Participants + IRC members who did not attend
Attachments	:	Annex 1 (end of this document)

1. Introduction

These minutes summarize the IRC business meeting held in Perugia on July the 9th 2007 on occasion of the IUGG XXIV General Assembly, July 2-13, 2007, Perugia, Italy. The minutes and the annexed documents will be made available at the IRC website: <http://www.irc-iamas.org/>.

2. Meeting

FIRST POINT: INFORMATION AND NEWS FROM THE PRESIDENT.

The meeting was begun by the President, T. Nakajima who welcomed participants and invited the group to a short round of self-introduction. The President informed the group that the IRC Business Meetings were scheduled according to the following agenda:

- IRC business meetings**
- **2006, July 11, Madison, USA (AMS Radiation Symposium)**
- **2007, July 10, Perugia, Italy (IUGG General Assembly)**
- **2008, Brazil (IRS2008)**

He also gave a brief account on the financial situation of IRC, which is here summarized



Business Meeting of the International Radiation Commission

<input type="checkbox"/> Financial report to the date of 27 June 2007	
<input type="radio"/> Operations and date	Amount (Eur)
Status 1 January 2006	+16,341.75
US Dep of Energy (14 August 06) 5,000\$	+3,919.42
Bill of A. Deepak Publishing 5,000\$	-3,964.79
	=16,296.38
IRC meeting Perugia refreshments (15 June 07)	-330.00
Status 27 June 2007	= +15,966.38

The report was approved by the assembly.

The President informed participants about publications and meetings in which IRC has been involved and showed and commented on the following list:

PUBLICATIONS

- IUGG Year Book: IRC for 2004-2008
- IAMAS News Letter, July 2005, Featured Commission: The International Radiation Commission (IRC), pp 3.
- Kirill Kondratyev: Obituaries, BAMS 2006 Oct. 1420-1421, T. Nakajima, H. Bolle, W. Smith,
- J.Lenoble, and Y. Timofeev.
- IRC History, version 3 from J. Bolle, to be completed by autumn 2007.

RESOMMENDATIONS

- A letter supporting the climate sensors for the NPOESS satellite from the IRC president, Terry Nakajima, and the chair of GEWEX Radiation Panel, William B. Rossow, was sent to John Church, Chairman of the Joint Scientific Committee, and Ann Henderson-Sellers, Director of the Joint Planning Staff for the World Climate Research Programme.

MEETINGS

- IAMAS 2005, Beijing; IUGG 2007, Perugia
- Asian-Pacific Radiation Symposium, July 2006, Kanazawa, Japan

For the specific case of the IUGG assembly, IRC contributed to 4 sessions which, according to the President and participants at the meetings, were attended by a large number of persons, in some cases more than 100. The details of the IRC contributed sessions are here shown:

IRC sponsored sessions

- JM25: 3D Radiative Transfer in Complex Geophysical Media Including Clouds, Vegetation, Ice and Snow (IAMAS, IAHS, UCCS); IRC conveners: Robert F. Cahalan, Bernhard Mayer.
- JM03: Satellite Observations: Products and Applications (IAMAS, IAG, IAGA, IAHS, IAPSO, UCCS); IRC conveners: Hung Lung Allen Huang, Michael D. King.
- M03: Aerosols, Radiation and Clouds (IRC, ICCP, ICACGP); IRC conveners: T. Nakajima, G. Isaac, G.-Y. Shi, and L. Barrie
- M20: Solar Activity and its Influences on the Earth's Weather and Climate (IRC); IRC conveners: Werner Schmutz



Business Meeting of the International Radiation Commission

The President also informed the assembly about the most relevant outcomes from the IUGG/IAMAS business meetings. He announced the IAMAS officer nominations:

- **President: Guoxiong Wu, China**
- **Vice presidents: M.A. F. da Silva Dias, Brazil; A. Thompson, USA**
- **Secretary general: Hans Volkert, Germany**

and informed the commission of two foregoing important IUGG/IAMAS resolutions which should be worked out very soon (after the business meeting the second resolution has been made available at the IAMAS web site and is here reproduced (annex 2), for the benefit IRC members).

- **Aerosol Pollution and Precipitation**
- **The Urgency of Addressing Climate Change (see ANNEX 2)**

He also informed the commission about dates, locations and format for the proposal of sessions, of IAMAS 2009

- IAMAS 2009, 19-29 July, Montreal**
- Session proposal format**
 - **Type: joint associations, multi-commissions, & commission**
 - **A description of the scope and goals * half page max**
 - **Details of the conveners**
 - **Length in days**
 - **Possible number of attendees**
 - **Whether the symposium could possibly be held jointly with IAPSO and/or IACS**

A discussion was opened on possible proposals and in the end the following sessions and conveners were proposed:

- Link among aerosols, clouds, and Radiation (IRC, ICCP, ICACGP); IRC conveners: T. Nakajima, G. Isaac, G.-Y. Shi, and L. Barrie
- 3D Radiative Transfer in the atmosphere (IRC); IRC conveners: Robert F. Cahalan, Bernhard Mayer.
- Satellite Observations of the atmosphere (IRC); IRC conveners: Hung Lung Allen Huang, Michael D. King.
- Solar Activity and its Influences on the Earth's Weather and Climate (IRC); IRC conveners: Werner Schmutz

The conveners were encouraged to submit as soon as possible their proposal according to the format above. It was also decided to inform IRC members and ask for contributions.

SECOND POINT: IRS 2008

After the President's presentation the commission moved to discuss the second point of the agenda, which focused on the venue site, dates and organization of IRS2008. A presentation was given by Dr Marcia Yamasoe and the related electronic ppt file will be made available at the IRC web site. The presentation was



Business Meeting of the International Radiation Commission

welcomed and highly appreciated from IRC Commission. It was decided to have IRS2008 in Brazil, according to venue and dates proposed by the LOC committee.

The main organization aspects of IRS 2008 can be summarized as follows:

- Venue IRS2008: Brazil, Iguaçú, 3-8 August**
- LOC: Marcia Akemi Yamasoe (University of Sao Paulo)**
María Assunção F. Silva Dias (CPTEC/INPE); Paulo Artaxo (University of Sao Paulo); Pedro Leite Silva Dias (University of Sao Paulo); Luiz Augusto Machado (CTA – CPTEC/INPE); Regina Alvalá (INPE); Juan Carlos Ceballos (CPTEC – INPE); Alexandre Correia (CPTEC – INPE); Karla Longo (CPTEC – INPE); Marcelo Corrêa (Federal University of Itajubá); Aline Procópio (Federal University of Rio de Janeiro); José Vanderlei Martins (IRC Representative, UMBC, NASA/GSFC)
- Potential attendees: 350 members (proposed fees \$300) + 150 students expected (proposed fees \$60)**
- Fund raising: IAMAS: \$5,000 (only for people from developing countries)**
- Program committee (IRC officers + convenors)**
- Book publication (Nakajima and Yamasoe)**
- IRC gold medal award committee and IRC young scientists award committee (IRC officers+ senior scientists)**
- Young scientist award recipient: one or (possibly) two scientists**

During the discussion it was decided following the IRC rule that two former presidents Drs H. Fischer and W. Smith, will act as members of the committees for the IRC awards. Two other senior scientists will be appointed by the president at earliest timing. H. Fischer also made a recommendation to the IRS2008 LOC to select Hotels capable to propose cheap accommodations for young people and/or students.

The discussion then moved to the organization of the programme, sessions and sub-sessions of next IR2008. It was remembered to the commission that the past IRS Conference adhered to the following main topics, which are shown below:

- Session A: Topical Union Session**
- Session B: Radiative Transfer Theory and Modeling**
- Session C: Molecular Radiative Properties**
- Session D: Particle Radiative Properties**
- Session E: General Remote Sensing**
- Session F: Satellite Measurements**
- Session G: Surface Measurements and Field Experiments**
- Session H: Radiative Budget and Forcing**
- Session I: Weather and Climate Applications**

Although the above Format was appreciated from the Commission, there were many comments regarding how to update the various topics.

On behalf of LOC scientists, Dr M. Yamasoe proposed to have a session or sub-session able to deal with Energy issues and Amazon basin studies; Dr H. Bolle proposed to have a topic on radiation and climate in



Business Meeting of the International Radiation Commission

Megacities; Dr. A. Larar proposed to not predefine Session titles at this time but, rather, to identify topical areas in the Call for Papers and then use the submitted abstracts to best optimize conference session/program formulation; he also suggested the topical area list include new satellites/missions, such as CloudSat/Calipso and Metop/IASI.

In the end, it was recommended to have as soon as possible an e-mail exchange among IRC members in order to have feedback suggestions and comments.

THIRD POINT: REPORT FROM WORKING GROUPS AND NOTICES OR NEWS FROM MEMBERS.

Hung Lung Allen Huang reported on the activity of the **ITWG** working group. His ppt presentation will be soon available on the IRC website. The presentation was appreciated and congratulated from the attendees. In particular, the President praised the high efficiency and intercommunication with other bodies of the ITWG as a model for other WGs. However, H.-J. Bolle remarked with respect to the direct interaction between ITWG and other bodies that recommendations to international organizations would have to be channeled through IRC and IAMAS.

Robert F. Cahalan reported on the activity of the **3DRT** working group. His ppt presentation will be soon available on the IRC website. The presentation was appreciated and congratulated from the attendees.

Guang-Yu Shi presented a brief report on the workshop *From Dimming to Brightening and its Climate Implications*, which was held in Nanjing, China on May 20-21, 2007. His ppt presentation will be soon available on the IRC website. The presentation was appreciated and congratulated from the attendees.

FOURTH POINT: OTHER

The Vice President, R. Cahalan, introduced to the assembly the new IRC member, Dr Alexander Marshak, who works with NASA/GSFC. He was congratulated from the Commission.

Then, there was nothing else to discuss and the meeting was closed at 8:30 p.m.



Business Meeting of the International Radiation Commission

ANNEX 1: Participants List

Name	Affiliation
Allen Huang, H.L.	University of Wisconsin, USA
Blumthaler, M.	Innsbruck University, Austria
Bolle, H.J.	
Cahalan, R.	NASA/Goddard, USA
Chubarova, N.	Moscow State University, Russia
Di Girolamo, P.	University of Basilicata, DIFA, Italy
Emde, C.	DLR, Germany
Fischer, H.	Forschungszentrum Karlsruhe, Germany
Kopke, P.	MIM/Germany
Larar, A.	NASA/Langley, USA
Marshak, A.	NASA/Goddard, USA
Martins, J.V.	University of Sao Paulo, Brazil
Mayer, B.	DLR, Germany
Nakajima, T.	Center for Climate System Research, The University of Tokyo, Japan
Schmutz, W.	The World Radiation Centre, Davos, Switzerland
Serio	University of Basilicata, DIFA, Italy
Shi, G.-Y. Shi	Institute of Atmospheric Physics, Chinese Academy of Sciences, China
Yamasoe, M.	Dept. Atmospheric Science, Brazils



Business Meeting of the International Radiation Commission

ANNEX 2: Climate Resolution Passed by IUGG

At its meeting in Perugia, Italy during July 2007, IUGG passed the following important resolution on climate change:

IAMAS 1

The Urgency of Addressing Climate Change

The International Union of Geodesy and Geophysics,

Considering

- the advances in scientific understanding of the Earth system generated by collaborative international, regional, and national observations and research programs, and
- the comprehensive and widely accepted and endorsed scientific assessments carried out by the Intergovernmental Panel on Climate Change and regional and national bodies, which have firmly established, on the basis of scientific evidence, that human activities are the primary cause of recent climate change,

Realizing

- continuing reliance on combustion of fossil fuels as the world's primary source of energy will lead to much higher atmospheric concentrations of greenhouse gases, which will, in turn, cause significant increases in surface temperature, sea level, ocean acidification, and their related consequences to the environment and society,
- stabilization of climate to avoid "dangerous anthropogenic interference with the climate system", as called for in the UN Framework Convention on Climate Change, will require significant cutbacks in greenhouse gas emissions during the 21st century, and
- mitigation of and adaptation to climate change can be made more effective by reducing uncertainties regarding feedbacks and the associated mechanisms,

Urges

- nations collectively to begin to reduce sharply global atmospheric emissions of greenhouse gases and absorbing aerosols, with the goal of urgently halting their accumulation in the atmosphere and holding atmospheric levels at their lowest practicable value,
- national and international agencies to adequately support comprehensive observation and research programs that can clarify the urgency and extent of needed mitigation and promote adaptation to the consequences of climate change,



Business Meeting of the International Radiation Commission

- resource managers, planners, and leaders of public and private organizations to incorporate information on ongoing and projected changes in climate and its ramifications into their decision-making, with goals of limiting emissions, reducing the negative consequences of climate change, and enhancing adaptation, public well-being, safety, and economic vitality, and
- organizations around the world to join with IUGG and its member Associations to encourage scientists to communicate freely and widely with public and private decision-makers about the consequences and risks of on-going climate change and actions that can be taken to limit climate change and promote adaptation,

Resolves

- to act with its member Associations to develop and implement an integrated communication and outreach plan to increase public understanding of the nature and implications of human-induced impacts on the Earth system, with the aim of reducing detrimental consequences.