International Commission on Dynamical Meteorology

Wednesday 22nd July 2009, 10.30am Palais des congrès de Montréal, Room 522b

Attendees

ICDM members: John Nielsen-Gammon (President), Peter Baines (Past President), Joan Alexander, Kenneth Gage, Richard Grotjahn, Nili Harnik, Michael Kurgansky, Igor Mokhov, Hisashi Nakamura, Richard Swinbank (Secretary)

Observers: Guoxiong Wu (IAMAS President), Hans Volkert (IAMAS Secretary-General), Jianping Li (IAMAS national representative for China).

1. Introduction

Before starting the planned meeting agenda, the attendees introduced one another. JNG welcomed the IAMAS President and Secretary-General and the two new members of the commission, NH and HN.

GW spoke about the importance of the input of ICDM to assessing uncertainties in climate change. He highlighted the important role of ICDM in IAMAS, and looked forward to the commission playing a bigger role.

HV noted that three past presidents of IAMAS had previously been members of ICDM, specifically Guoxoing Wu, Huw Davies and Brian Hoskins. He stressed the importance of our discussions of the programme for Melbourne in 2011, and the coordination of these plans with other commissions. He asked for a broad approach, with fewer, larger symposia. HV stressed that posters should be viewed as a different, not a second class, type of presentation. Ideally they should all be displayed together. RG asked about the 2011 conference venue; HV said that it would be in a new conference centre.

Before GW and HV left the meeting, the chairman thanked them for their interest, and particularly for funding the refreshments provided for the meeting.

2. Minutes of last meeting, Perugia, July 2007.

The minutes had been circulated following the previous meeting. PB proposed that they be approved, RS seconded. This was agreed.

3. Chairman's report.

JNG noted that following the meeting in Perugia, the revised Terms of Reference (i.e. bylaws) had been approved by IAMAS. He noted the election of 2 new members of the commission. Most of the activity of the commission has been linked to planning for the current conference. ICDM sponsored 5 symposia on its own, 2 jointly with other IAMAS commissions, and co-sponsored 6 joint inter-association symposia.

The IAMAS EC met on Monday. The main message was the move to few, larger umbrella sessions, as spelt out by HV.

4. Proposed Dynamical Meteorology Workshop.

RS explained that, following some discussion in Perugia about possible ICDM activities outside the biennial conferences, Adam Scaife, Mu Mu and he had discussed the idea of holding a workshop or summer school. They had discussed ideas for a workshop focusing on the connections between atmospheric dynamics and high-impact weather events. RS passed around some copies of an outline proposal for the workshop, and showed a few powerpoint slides summarising the main points. It was proposed to hold the workshop in China around August 2010, with 30-50 participants, including a mixture of key experts and younger scientists.

Yongyun Hu, from Peking University had agreed to lead the local organisation. However, we have not identified someone willing to take the lead in coordinating the scientific programme. Since there was a strong common interest in this area with the THORPEX Predictability & Dynamical Processes working group, RS had discussed this proposal with the co-chairs and Istvan Szunyogh has said he may be willing – so long as the administration is covered by others.

Several Chinese organisations would be likely to sponsor the workshop. GW and HV had indicated that IAMAS would provide some support, perhaps WMO may provide some funding because of its relevance to WWRP-THORPEX. RS asked whether ICDM would support the idea of meetings outside the conferences, and whether there was support for a workshop on these lines. There was general support for the workshop. He proposed a meeting on Friday for those interested in getting more involved.

JNG noted that it was some time since ICDM had got involved a similar event – which had been a one-off workshop

RG commented that the proposal was not well focused on specific questions. RS said that the original plan he and AS discussed was more clearly linked with the issue of how climate change may effect the occurrence of high-impact weather events. By emphasising short to medium-range forecasting, this focus has been lost. The consensus was that it would be good to focus on this issue; the original title "Links between climate dynamics and high-impact weather events" was preferred.

RG suggested we include a link with the statistics of extreme events. MK also commented that emphasis on the "large scale" was unattractive; RG agreed that many high-impact weather events are on a small scale.

KG volunteered to contact people in Boulder who may be interested in getting involved. He also suggested that the production of a book on this topic could be a key outcome of the workshop, and could be an incentive for experts to take part. RS agreed that this is a

good idea. This had been discussed by YH, AS, MM and RS, although RS thought that a book could be viewed as more of a chore than an incentive.

It was agreed that a good approach was to being together dynamical meteorologists with experts in other areas to explore linkages. RS described how ECMWF workshops were designed to bring together experts to address specific questions with discussion sessions to talk over the issues in more detail. While these work well, RS suggested that we ask for contributed talks as well as the expert lectures, NH suggested asking for poster contributions to complement the invited talks.

JL told the group a bit more about the possible venues in China. Kunming is known as the "supreme city". While both Beijing and Xian are strong cultural centres, many people have visited Beijing already. Beijing and Xian are also very hot at that time of year, while Kunming is very pleasant. He also confirmed that it should be possible to support the workshop using funds from the MOST project.

RS invited those interested in further discussions to meet again over lunch on Friday (24th).

5. Programme for IUGG 2011 in Melbourne.

Bearing in mind guidance from HV, the commission considered ideas for symposia, by considering the list of ICDM sessions for 2009, starting with the most well-supported.

MK commented that descriptions should avoid being restrictive (for example there was no symposium this year suitable for a paper on turbulence). He also made the point that there should only be one talk per person.

The following were suggested, showing subject, possible co-sponsorship and ICDM coordinator:

- 1) Tropical weather and climate (a blanket session including monsoons, cyclones and waves) (with ICCL, possibly IAPSO+)
- 2) High-impact weather and links with climate variability (with ICCL) RS/RG?
- 3) Data Assimilation, and Ensembles (given increasing emphasis on ensemble DA methods) (joint with IAPSO, IACS, IAHS, possibly IAGA) RS
- 4) Links between stratosphere, troposphere and ocean (with ICMA and IAPSO) JA
- 5) Predictability of climate change (with ICCL)
- 6) Advances in Atmospheric Dynamics (broadening previous "theory" session to catch general dynamics paper).NH.

RS highlighted the need to ensure proposed convenors have agreed before symposium proposals are finalised.

6. Membership of the commission.

JNG reviewed the current membership in the light of the revised bylaws.

Ernesto Hugo Berbery & Christof Schaer have asked to stand down. Mathieu Roualt & Chris Fairall have reached end of their term. *RS to write to thank them for their service*. Klaus Fraedrich reached end of term, but eligible for another term. *RS to ask if he wants to continue*. Michael Kurgansky and Mu Mu had reached the end of a 4-year term, and nominated for re-election. This was agreed.

Members were asked for nominations for new members. PB recommended Craig Bishop and either Brian Mapes or David Nolan. These nominees have already been involved in convening sessions on ensemble forecasting and tropical cyclones, respectively. [Sec. note: After the meeting HV suggested Olivia Martius would make a good member of ICDM. Jianping Li was also suggested due to his support for proposed workshop. Brian Mapes subsequently declined the invitation.] RS to draw up list and organise vote via email in next couple of months.

7. Other possible ICDM activities.

Electronic interaction: JNG outlined some of drawbacks of conventional conferences, including expense, carbon footprint, and suggested ICDM explore options for electronic interactions. He suggested a one-hour webcast with a speaker talking about recently published research papers, with associated weblog & discussions. JA said this could be very popular with students.

It would need a lot of publicity to generate interest – maybe the idea could be launched at a future conference. In the mean time it could be piloted on a small scale. JNG invited anyone interested to work with him to develop the idea.

RS noted that in the EC meeting HV suggested we need to develop IAMAS website both to enhance its content and to make it more professional. ICDM supply pages to John Turner to include on IAMAS website, so we should coordinate any improvements with JT. If electronic interaction is developed, this would be linked to our website. RS asked for other suggestions for developing our web presence.

8. Any other business.

None. Meeting closed at 12.30.

Addendum

Notes from discussion of workshop proposal on 24th July

Present: Peter Baines, Richard Swinbank, Hisashi Nakamura, Richard Grotjahn, Heini Wernli, Olivia Martius, Nili Harnik, Jianping Li

Unfortunately Yongyun Hu was not there, because his flight was severely delayed.

RS passed around copies of an updated version of the workshop "strawman" proposal, revised following comments at the ICDM meeting. This included re-emphasis of the climate dynamics aspects, and making the workshop more of a meeting of experts rather than a summer school.

PB suggested that representatives of all groups involved in predictability be invited to participate, since they could be viewed as the main customers. RS asked whether this meant all national weather services or research groups. RS said that we should be cautious about how to handle invitations, to ensure we get the appropriate people.

HW was keen that the event should be more like a summer school, with an emphasis on teaching participants from both China and other countries. But there was no consensus.

OM suggested we ask Stefan Brönniman about the practicalities of organising workshops; he has recently organised two successful events.

JL told the group that LASG/IAP would be willing to provide a substantial amount of support for the workshop, using funds from the MOST project. He thought that those funds could cover living expenses for up to about 30 expert scientists. A registration fee would be charged for other participants. He also said that LASG/IAP would be able to provide administrative support; they have a lot of experience in administering workshops. RS thanked him for this very generous offer, and RG noted the very successful administration of IAMAS 2005 by Jenny Lin, from LASG/IAP, and her helpers.

There was general agreement that the set of topics listed was very broad. The programme needs better focus, but there is a tension between this and additional topics being suggested for inclusion. It was agreed that we could envisage the planned workshop as being the first of a series that cold be held between the biennial conferences. It would make sense to focus this first one on tropical dynamics and interactions with extra-tropics – these aspects would be most relevant in China. A subsequent workshop focusing on middle and high latitudes could be held in a different location.

RS asked HW whether he thought IS is still interested in being the scientific lead organiser, bearing in mind the administrative support likely from IAP. HW said that IS's main interest was on mid-latitude dynamics, so may not be the best person.

RG said that the workshop could be designed to bring experts from Dynamics, Synoptics, NWP, and applications. These experts would be asked to apply their background to a problem where those interests intersect, whatever the overall focus of the workshop. For example, if the topic was a type of large scale severe weather (e.g. cold air outbreaks)

then the experts might focus on: the large scale synoptic weather pattern, how that pattern develops dynamically, whether forecast models pick up that pattern well, and statistical properties (like recurrence time) of such events.

RS raised some concerns about the timing. We need to confirm the science lead and the overall shape of the workshop in the next few weeks for the proposed July/August 2010 date. It was agreed that experts need to be invited in early autumn, not only to ensure their availability bit to give them opportunity to research specific issues for presentation at the workshop. It was suggested that a winter workshop could be a possibility, but less desirable,

RS said that it should be up to the scientific lead to decide the focus of the workshop; it is not feasible to decide this in the current discussion group. He suggested that the science programme be decided by the science lead, with 2-3 others to help with scientific organisation. It should also be up to him (or her) to decide the degree of emphasis on teaching. It was suggested that RS, RG, HN, OM, NH, JL are potential members of a small group to organise the science programme. The local organising committee should be Yongyun Hu, Jianping Li, Mu Mu, (and someone from Kunming).

The meeting finished as it approached time for the next conference session. It was agreed to continue discussion by email.

Subsequently, RS met Yongyun Hu in the coffee break. He is still keen to be involved, and was sorry he missed the meeting. He has talked with the University at Kunming and they are happy to host the workshop. He passed on a set of powerpoint slides, which he has planned to show at the discussion meeting.

RS also talked to Hans Volkert. While IAMAS is likely to support the workshop, HV said that IAMAS would prefer to provide grants to cover the registration fee, rather than travel costs.