

# Up Front

The Newsletter of the IABM

International Association  
of Broadcast Meteorology

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## View from the Chair

Whilst in Paris for the last IABM committee meeting I popped along to Issy-les-Moulineaux where the 11th annual Festival International de Meteo was under way. It was a good opportunity to meet with some old friends and colleagues, and indeed to make some new contacts. I could not help noticing that the Festival seemed smaller than in past years. It occupies a strange position, mid-way between scientific conference and PR event. In



Gerald Fleming, Chairman of the IABM and lead presenter on the Irish TV service - RTE

the early years, the novelty of the "competition" gave the Festival a focus and a raison d'être. This novelty has by now worn off, however, and one feels that the Festival needs a new dynamic; a renewed creativity, to carry it forward. The Festival has always been an excellent meeting-point for weather broadcasters - it would be a great pity if it did not survive and thrive.

The other big event in the weather broadcasters calen-

dar approaches; the annual broadcast conference of the AMS, taking place this year in colonial Williamsburg, Virginia. The AMS Broadcast Board have assembled an attractive programme, as always, and I would recommend all of our members to register and attend if at all possible. For those travelling from outside the US, of course, the strength of the US Dollar has made these conferences quite expensive; particularly the accommodation element. However, it will still be a very worthwhile experience.

The IABM will have a noticeable presence at this years AMS event, with four presentations slated from members of your committee. We will also be holding our own AGM in conjunction with the AMS event - on Wednesday June 26th, at 4.30 in the afternoon. Put it in your diary!

One of our principal tasks at the upcoming AMS Broadcast Conference will be to encourage support for the "First World Conference on Weather Broadcasting" which we plan to hold in Geneva, Switzerland in conjunction with the AMS and WMO in 2004. As a member of the IABM, you have already demonstrated your appreciation of the international dimension to our work. Therefore, at the AMS conference and elsewhere, I ask you to use every oppor-

tunity to publicise and support this event. It is our opportunity to bring our profession to the world stage. Aside from the importance of listening to, and learning from, colleagues from many lands this conference will help to give us a sense of what we can contribute to the safety and the economic development of all our communities and nations.

Remember, how others see us depends primarily on how we see ourselves. We occupy an important intersection between meteorology and the media. We need to be intellectually strong and confident not to be squeezed between these two worlds, but to assert ourselves and the importance of our work; so that we can deliver the best possible service to both science and society. We can build this strength through meeting, discussing, learning. We owe ourselves nothing less.



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### MEMBERS EMAIL

#### ADDRESS

Do we have your latest email address? Have you recently changed it and forgot to tell us.

It's vital that we have the latest - email

[secretary@iabm.org](mailto:secretary@iabm.org) with yours NOW

### Not to miss:

- *View from the Chair.....*
- Back Page Comment - in this issue its Daniel Corbett.
- More from the new series on the Climate Change Debate.....
- There's members news - Andrew Lane at the BBC has a new job.....
- *John Zillman, President of WMO*

## FLOODS IN PAMPAS HUMEDA IN 2001

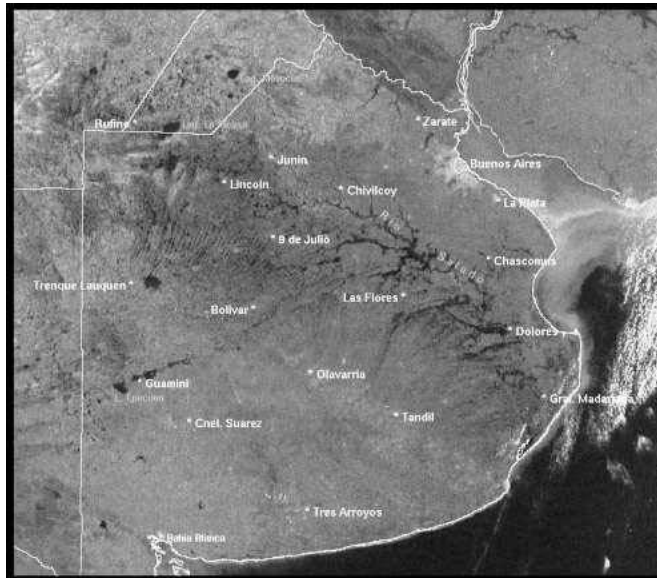


Nadia Zynfullone is a Broadcast Meteorologist and producer who works for the National Met Service in Argentina

**“The social and economic consequences of these changes are causing great alarm, in so much as this is an agricultural and cattle raising area for the whole country.”**

In Argentina, apart from a completely dry period from approximately 1920 – 1950, there has begun a long wet period with a gradual increase in the amount of floodwater. This increase has become marked since the 1970's with a remarkable increase on the 1980's. In the 1990's in some areas west of the province of

The regional change is directly related to climate change observed since the 1970's and this is directly linked to global warming. During the last 30 years, the records show that in Argentina there has been an increase in precipitation, at the same rate as the rise in temperatures. I have also noticed that the subtropical cyclones have moved away from



Ecuador towards this region. If the current rise in temperatures continues, it will increase the evaporation of the floodwaters that will in turn generate persistent and frequent amounts of rain in the Pampas region.

The social and economic consequences of these changes are causing great alarm, in so much as this is an agricultural and cattle raising area for the whole country.

In the past, this area has been liable to flooding. Notable floods occurred, for example, in 1959 and 1967 in the Buenos Aires province, and in 1985 and 1986 in the zone of the chained lagoons of Carhue. In 1993 Salty Rio had a strong swelling. But these and

Buenos Aires and the east Pampas area there has been an increase in precipitation in the order of 40%.

The situation in the Pampan Region (provinces of Pampas, Buenos Aires, the south of San Luis, Cordoba, Santa Fe and between Rios) meant that in the first quarter of 2001 it had already reached its annual rainfall. An area of 50,000 square kilometres was covered in water. Currently this has been reduced by about 40% to an area the size of Belgium. What occurred is that the long period of rain that started in the 1950's together with a very wet periods in the 1980's combined to cause the extensive floods. During the last three years, culminating in September 2001 heavy rains has left the grounds so saturated that it is no longer able to adsorb any more moisture. More heavy rain in October resulted in the worst flooding on record in this region.



Flooding causes misery and sets back any community.

The excess of water, not absorbed, and then looked to find the Atlantic Ocean. But the land that it has to cross is a very level plain with very little drop to the Ocean, leaving the excess water covering a great part of the territory. The satellite picture shows the swollen river with the surrounding darker areas that are floods.

other floods were restricted to a small area. They did not cover the huge area seen in 2001. On the other hand, the strong floods along the coast of Argentina in 1982/83, 1997/98 had to be because of El Nino; whereas those of the Pampas in the past few years must be due to Global Climate Change.



## New legislation on Meteorology in Switzerland: towards an marginalisation of the role of the Media in the dissemination of weather information.

**From 1st May 2000, the provision of services by Météosuisse has been governed by two new laws of the Swiss Federal Department of the Interior. The aim of these laws is to harmonise Swiss rules; to bring them into line with European norms; and to regulate the marketing and commercial use of data weather, in particular its use on the Internet.**

The services of the Federal Office of Meteorology are defined in Article 3 of the Ordinance on Meteorology and Climatology (OEMét) and are divided into two categories:

**Basic Services:** these include, among other things, the supply of meteorological data (such as satellite and radar animations, a selection of basic observations etc.) as well as public-service weather warning and general public weather forecasts.

**Additional Services:** these are items not included in the list of the basic services and which are provided only upon request. It is within this category that it is necessary to arrange for tailored media forecasts; for example the special forecasts which are put together for television.

The exhaustive list of the basic services defined in the new laws, and their associated pricing structure, are formulated on the perceived profits that can be generated within the field of meteorology (OEMét). While the stipulated costs can be lowered by the application of "volume discounts" according to the quantity of information required, various price supplements are defined which relate to the categories of use to which the data is put. (Article 8). For example:

Internet provider: Supplement of 4% for every 10,000 hits in the event of transmission on the Internet. The maximum that can be demanded is 300%.

Service provider: Supplement of 200%.

Broadcaster: Supplement of 100%.

The legislation also allows for, and regulates, the concurrent use of weather data:

For a company that is both Broadcaster and Internet provider the supplement is 400%.

The activities of both broadcaster and service provider the supplementary rate is 300%.

The complete texts of the two ordinances can be found on the official site of the Swiss Federal Department of the Interior at the following addresses: <http://www.admin.ch/ch/f/as/2000/664.pdf> and [http://www.admin.ch/ch/f/rs/172\\_044\\_29/](http://www.admin.ch/ch/f/rs/172_044_29/)

### Consequences of the new legislation for the SRG.

This new legal framework has forced the SRG (the Swiss State Broadcaster) and Météosuisse to re-examine their contractual relationship. The question of the Additional Services is currently the principal focus of negotiation between the various departments of the SRG on the one hand and the regional centres of Météosuisse on the other. However, the negotiations relating to Basic Services at the national level made it possible for SRG to obtain rights of use of the source data as Broadcaster, Net Provider and Service Provider for a reasonable price; about the same as was paid (under the old arrangements) up to the year 2000.

This new arrangement can appear satisfactory at first sight; however, it brings a certain number of restrictions. The status of Broadcaster only allows for the transmission of weather data on the airwaves (conventional broadcasting). Any additional transmission on the Internet is subject to separate invoicing within the context of Article 8 of OEMét. This situation results from an express decision of the Swiss legislator (in this case the Federal Department of the Interior) and does not allow for any derogation or exemption. It has obliged SRG to re-examine its

strategy on the dissemination of weather information, and to reduce to the bare minimum the transmission of source data on its Internet sites. Only the data agreed within Resolution 40 of the VMO, as well as radar images, can be used today.

Indirectly, this new legislative framework supports the development of the additional services on the Internet. In theory it should be possible to negotiate these in a flexible way, without violating by the principles of multiple use as defined in Article 8 of OEMét and opening up the possibility of negotiating various systems of partnership. However, in practice, Météosuisse - thanks to the new ordinances - is in a privileged position. This is so because, as of now, competition from the private sector is rather weak on the Swiss market and also because the status of Service Provider - which makes it possible for the SRG to use the source data in order to develop its own products - is now the subject of restrictions. Up to now SRG have paid a reasonable price for the use of data in the context of Service Provision, but now, as soon as the income relating to "added value" products passes a certain threshold, the invoices issued by Météosuisse could be re-examined and increased.

It can be said that the room for manoeuvre by the SRG in maintaining a weather service on the Internet is particularly restricted, and that there will inevitably be an impact on both the range and quality of weather pages provided on the broadcasters website.

Finally, it should be noted that Météosuisse can still charge the Media for the transmission of data and at the same time continue to disseminate this same information on its own Internet site. While other elements have been affected by the new legislation, the Media have been put in a particularly unequal position in relation to Météosuisse. This inevitably raises the question of how the new legislation accords with the concept and regulation of unfair competition.

Geneva, March 29, 2002 Philippe Jeanneret

*( translated from the original French text by a mixture of the Google translation*

Who won the first round?

**"This new legal framework has forced the SRG (Swiss State TV) and Météosuisse to re-examine their contractual relationship."**

Philippe Jeanneret, Broadcast Meteorologist for SRG and committee member of the IABM



## New Corporate Members

So far this year we have welcomed two new Corporate Members with The Weather Co. and AccuWeather. All of our Corporate Members are vital as the Association is solely supported by subscriptions from them and the ordinary members.

To recognise their importance, and so **Up Front** will feature articles from new Corporate Members. We are also keen to feature our existing Corporate Members - please email the Editor with your feature.



Mark Hardy

*“my feeling is that there will always be a place for a company that can take the complexity out of producing the weather segment and present it in a way the viewer can relate to.”*

## The Weather Co.

The Weather Company was established in September 1998. Since that time the business has grown steadily to the point where today it is the largest supplier of media weather services in Australia employing 12 people. The prime focus of the business is to provide value added weather services to media organisations. Traditionally in Australia media groups have produced all weather related programming internally. However with competitive pressures, greater information availability and more powerful graphics computing, a market has developed for out-sourcing highly specialised weather programming. The commercial weather services industry in Australia is therefore small but developing rapidly.

My personal background is strongly meteorological. From university I joined the Australian Bureau of Meteorology as a meteorologist in 1986. After several years forecasting I shifted to a more business focus by moving across to the commercial division and developed a system for providing customised newspaper services. Media was where I wanted to be so I left the Bureau and joined a TV Network for on a 12 month contract before establishing a media division for WNI in Australia. The Weather Company was born almost by accident when WNI decided to close the Sydney office leaving me with the choice of moving to Melbourne or leaving the company. Media in Australia is very Sydney centric so I decided to strike out on my own and complete what I had started. The business grew rapidly as new technology, centralisation and a philosophy of outsourcing took hold in Australia's television networks. Within three years more than half the TV networks in Australia were taking services from The Weather Company.

The Weather Company's services today can be best grouped into 5 areas:

1. Weather Graphics systems - development, sales, supply, installation and support of television weather presentation systems. Currently The Weather Company supplies 2 systems each pitched at key price/feature points to the market.

2. Weather Data - design, production, sales, delivery, management and integration with The

Weather Company and end user applications.

3. Consulting - weather programming and on-camera presentation, adding value to meteorological data.

4. Media meteorological services - interpretive analysis, face to face briefings, script writing and forecasting.

5. Graphics - design and production for television broadcast and new media (internet and interactive TV)

All areas are strongly represented in the business and complement each other in the various relationships we have with our clients. While most staff in The Weather Company come from a background in meteorology it has become apparent as the business has developed that the business is not really about meteorology. Sure, meteorological expertise is one of the things we sell but more important is knowing the client's business and how to make the weather really work as a piece of television programming. Understanding the client, the audience, developing leading edge technology and high levels of customer service must all mesh in with the meteorological aspects of the business.

So what about the future? Regardless of the changing trends in the television presentation of weather, my feeling is that there will always be a place for a company that can take the complexity out of producing the weather segment and present it in a way the viewer can relate to. Emerging technologies such as interactive television and broadband internet open up the potential for a new wave of on-demand video weather services. In this area we are experimenting already and it has become apparent this IS the future of communicating weather information. So while the traditional 2 minute weather segment at the end of the news may well die away, these new technologies will offer far more interesting and varied opportunities to distribute weather information in the visual medium.

### The Weather Co.

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www.theweather.com.au

# AccuWeather



Barry Lee Myers - Executive Vice President of AccuWeather.

AccuWeather Inc is pleased to become a corporate member of the International Association of Broadcast Meteorologists. Our membership is the latest step in a long history of working with broadcast stations worldwide, providing television stations with animation and display systems, data, graphics and forecasts; and providing radio stations with forecasts and broadcasts.

AccuWeather is celebrating its 40<sup>th</sup> anniversary this year. The company was founded in 1962 by Joel N. Myers, when he was a graduate student at The Pennsylvania State University. Initially specializing in pinpoint local forecasts for utility companies, ski resorts and highway departments, AccuWeather began serving broadcast stations in 1972. Today, thirty years later, five of the first seven stations served by AccuWeather, remain clients.

AccuWeather meteorologists began providing forecasts and broadcasts for radio in 1972, and today serve hundreds of stations.

Also in 1972, the company began providing forecasts and briefings to television meteorologists, as part of a service that also gives a television station exclusive right to brand their weather with the AccuWeather name. The first station to subscribe to this service was WPVI-TV in Philadelphia. At the time, their news was third in the ratings. Within three years, they were number one, and they have dominated the news ratings in their market ever since

Television meteorologists take advantage of this resource, using our briefing service to hone and refine their forecasts. Many stations also use our StormTeam Live™ severe weather service to augment their own weather broadcasts, and our WeatherTeam™ service to fill in when their meteorologists are unavailable. AccuWeather also offers the FirstWarn® storm-tracking and crawl-display systems that add to a station's overall weather coverage.

AccuWeather began offering ready-to-air graphics to television stations in 1983, and has offered weather graphics creation and display systems since 1988. Our groundbreaking Galileo™ Weather System has established a new standard of excellence and excitement for weather animation and presentation systems. It renders animations hundreds of times faster than any other available system, with ease of use and learning due to its familiar Windows interface. Galileo ingests AccuWeather's data feed as well as any local or international data in standard formats. It creates presentations in any standard font, in any language.

Our Global Headquarters includes satellite uplink

and downlink facilities and complete television and Internet broadcast studios, in addition to an extremely sophisticated computer infrastructure. AccuWeather has developed one of the world's most advanced forecast engines, and is also the leading provider of Internet weather content, furnishing text, graphics, streaming content, and weather marketing applications to more than 1,200 web sites worldwide, and on its site, [AccuWeather.com](http://AccuWeather.com).

In total, AccuWeather serves several hundred television stations worldwide, on every continent except Antarctica. Committed to serving the needs of broadcast meteorologists, AccuWeather continues its research and development work to ensure it provides the tools meteorologists need to create and present the most accurate, compelling, dynamic forecasts to their viewers. We welcome this affiliation with other professional meteorologists and the opportunity to work with them toward goals of mutual benefit.

Barry Lee Myers

**“In total, AccuWeather serves several hundred television stations worldwide, on every continent except Antarctica.”**



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USA

**IABM CORPORATE MEMBERS**

- ACCUWEATHER
- BBC (British Broadcasting Corporation)
- CNN (Cable News Network)
- METEORLOGIX
- MET OFFICE (UK)
- SAM (Servicios Audiovisuales de Meteorología)
- THE WEATHER CO.
- THE WEATHER INDEX
- WEATHER ONE
- WSI (Weather Services International)

## The AMS Annual conference – January 2002 in Orlando, Florida

For everyone who is deeply interested in Meteorology this conference is worth going to, even when you are on vacation! It covers the whole spectrum of meteorology and keeps you up-to-date on the newest developments.

Sometimes learning and/or refreshing are better than passively attending lectures. The conference always starts with different short courses. As some of them run on the same day it is difficult to decide which one to take, because the all are interesting.....:

*'Neural Network applications to Environmental Sciences'*,

*'The Fundamentals of Doppler and Polarimetric Weather Radar'*,

*'The Verification of Climate Forecasts'*,

*'Land Surface-Climate Interaction'*

*'Quantitative Precipitation-Estimation and Forecasting'*

*'Weather Entrepreneur Workshop'* and

*'Communications Workshop'* with interesting topics as *'Value of working with the Media Session'*, or *'Hands on Media and Science Communications at the AMS'*, and a contribution from Ronald D.

McPherson, AMS Executive Director, about *'Launching Media and Science Communications at the AMS'*. Surely, this is one of the most important topics nowadays – because science needs to be communicated to the Public, to be attractive enough to justify and generate future funding for the benefit of the whole society.

I just briefly name some other presentations:

Many of us use ECMWF and Ensemble prediction just to compare with the models we normally use for forecasting. *'ECMWF-status and Future Research Directions in Data Assimilations and Ensemble Prediction'* – an update on this matter – the lecture was held in the Symposium on Observations.

*'Facilitating the use of Environmental information'* was another Symposium. More specific the *'Conference on Interactive Information and Processing Systems for Meteorology, Oceanography and Hydrology'* with *'Quality and Visualization Issues and Internet Product Delivery'*. *'Probability and Statistics in Atmospheric Sciences'* was a theme with *'Approaches to Atmospheric Predictability on Medium and Extended Range'* to *'Poor Man's' Ensemble Prediction System for Short Range use'*.

Other Conferences were on Hydrology, Global Climate aspects around the world. There were Symposia on Education, on Integrated Observing Systems, on Atmospheric Chemistry.....and this was still only part of the whole programme!

Also, do not forget that the conference is always accompanied by a large exhibition. With relevant books, and the newest state-of-the-art technical equipment in Meteorology but also all kinds of TV-production support for weather!

Therefore, why not plan a visit to next year's AMS Annual Conference which will take place in the wonderful Long Beach in California, but for sure,



Inge Niedek is a Broadcast Meteorologist for ZDF, the German State Broadcaster. She is a vice-chairman of the IABM and past Chairman.

**Sometimes learning and/or refreshing are better than passively attending lectures“**

## Recruitment of members from Developing Countries

At the meeting of the Board of Directors on 26<sup>th</sup> June 2001, it was agreed that the IABM will forthwith offer free membership to potential members from countries listed by WMO as developing countries. This is not only in recognition of the difficulties facing potential new members in paying the subscription, but also as a means to raise the profile of those involved in broadcasting in those countries facing the increasing effects of climate change.

Potential candidates should email the Membership Secretary at [membership@iabm.com](mailto:membership@iabm.com) to discuss eligibility.

## Address by Dr John Zillman, President of the WMO.



Dr John Zillman, President of WMO, and the Director of the Australian Met Service.

**“We need a new framework within which we can practice meteorology successfully. Market forces are not exactly the right structure.”**

The World Meteorological Organisation.

Our profession, that of Meteorology, has some aspects that set it apart and make it distinct from other activities. In some respects it is like religion. We must have faith in ourselves. If things go wrong, we look within ourselves for the fault. In other respects it is like technology. When things go wrong, we seek to apportion blame and seek recompense. A fundamental difference, though, is that meteorology is based on sharing. The global interdependence of most meteorological activity, and the “public good” aspects of much meteorological infrastructure mean that the conventional market frameworks of demand and supply provide an inadequate framework for our profession.

Wider society always makes more demands on our profession that meteorology can reasonably supply. It is part of our integrity that we should sometimes refuse requests - say no. The stress of attempting to provide a good service handicaps science; we must make inferences, and publish before the results become known! The stress of necessity overcomes the laws of normal scientific conduct. It is part and parcel of the work of meteorology to manage unreasonable expectations.

We can try to analyse the environment within which we work. There are the sources of demand. The Public. Government. The media - sometimes as partner, sometimes as customer. Industry, in particular transportation, agriculture and energy. Education. Environment.

The objects of demand encompass infrastructure, research, and service; the service of climatic data, of forecasts and warnings, of advice and of attention to a variety of specific problems.

In trying to get a handle on the extent of the demand, we can measure the volume, the quality and the timeliness. The explosive growth of the Internet has included a growth in the demand for weather information. National demands tend to be influenced more by size and the details of the local climate than by the population.

Community awareness is very important with respect to what we can do. Accuracy in the provision of information is only part of our work; it must be transmitted to, and accepted by, a community sufficiently knowledgeable and aware to use that information optimally.

The structures of those organisations responsible for weather are undergoing rapid change and development at present in many countries. Unfortunately, this has frequently resulted in an erosion of the resources available for meteorology.

So what is the framework of meteorology? Governments have certain basic responsibilities. These include

the safety of the life and property of its citizens; the acquisition and assembly of records relating to its particular climate; the advancement of scientific knowledge that serves the community; and the meeting of a variety of international responsibilities and obligations.

Historically NMHS's were born of the need to address these responsibilities. The role of WMO is to coordinate the work of the NMHS's; to standardise procedures, and to improve meteorology as a science. The members are not NMHS's but nation states, following the UN model of international co-operation.

Now, however, there are forces for change. Chief among these is the trend towards economic globalisation, whereby goods and services can be traded worldwide. This trend puts a lot of reliance on market mechanisms as the principal means for the delivery of services. There is a simultaneous weakening, - in some cases even the demise - of the public sector.

We need a new framework within which we can practice meteorology successfully. Market forces are not exactly the right structure. We need something that is built upon a concept of “public good” in addition to the application of market forces to the more specialised needs.

Looking ahead to the coming decade, we can try to define some requirements for meteorology:

- New policies and framework are needed.
- We must have a robust infrastructure at National Met Service level.
- We need higher quality national climate records.
- We must continue to build an efficient framework for individual co-operation.
- Countries and institutions must work together on a global observational infrastructure.
- We need increased international research, and better co-operation with our sister sciences.
- We need better forecasts.
- We need better services for our users, with increased emphasis, for example, on urban meteorology; aviation meteorology, and environmental protection.
- We need better delivery of services.

The challenge for the coming decade will be to properly understand and quantify the demand for weather services so that it can be met in ways which result in the optimal use of national and international resources, and which confer the largest ultimate benefits on the users and customers of our services.



## Drop a Recorded Weatherman (Plus ça Change!)



Andrew Lane - appointed as Manager BBC Weather Centre in February.

**“All of us involved in broadcast meteorology are keenly aware of the importance of giving the public the best and most accurate weather information ”**

The BBC Weather Centre are Corporate Members of the IABM

The other day I happened across a fascinating old document, written almost exactly twenty-one years ago, which made me think about how much has changed - and how much has not - in Weather broadcasting over the years. The document, running to over a hundred and fifty duplicated pages (desktop publishing was only a dream in those days!) was published by the BBC's Television Presentation Department, which was then (and until recently) responsible for televised weather broadcasts.

No-one connected with the IABM will misinterpret the title and believe that any physical harm was done to weathermen! Many UK and overseas readers will, like me, have enjoyed the well-observed satirical look at life in a television newsroom 'Drop the Dead Donkey' (why, incidentally, is there no weather on that channel?) and most of us will have been 'dropped', in one way or another, in our careers. The thing that I found interesting was how things that go around really do come around again. (By the way, if you haven't caught the Dead Donkey habit take a look at this and similar pages!

[www.digiguide.com/pdb/p\\_20398.shtml](http://www.digiguide.com/pdb/p_20398.shtml)

Back in 1981 the BBC department responsible for running the (then) two networks was issuing guidance about how recorded weather forecasts might have to be dropped "because of rapid changes in the weather pattern". Now we have rather more channels (it seems to change by the day - but more than a dozen are broadcast from BBC Television Centre, with around a third taking weather from the BBC Weather Centre) and weather patterns are, arguably, more than ever likely to change rapidly - but we are having to look at reducing the number of live broadcasts because of pure business considerations.

I can only speak with any authority about the last eight years, as I was not part of the Weather Centre before that, but the intervening years have been ones of enormous increase - in the size of our team of Broadcast Meteorologists, in the number of broadcasts...in short, in the importance of weather to the BBC. For three exhilarating years we produced the Weather Show, which looked at subjects from global warming to artificial snow, and we have built up our online presence to become one of the top areas on the BBC's hugely successful website.

Now, to an extent, the pendulum is swinging back the other way - making it, some might think, a difficult time to be taking over responsibility for the BBC's weather services. I believe, however, that we have tremendous opportunities and I am very positive about the future. We have put our relationship with the Met Office onto a much more businesslike footing, we have developed services for new channels (including a new children's channel) and we are significantly increasing our interactive and online capacity. We are also, most importantly, reminding our masters of the importance of accurate and comprehensive weather services.

All of us involved in broadcast meteorology are keenly aware of the importance of giving the public the best and most accurate weather information in as clear and timely a way as possible. Climate change focuses all our minds ever more clearly on that duty -

and I believe that, in partnership with the Met Office and with the help and support of the IABM, we can start the pendulum swinging back again, meet the challenges of the future...and ensure that we never again need to drop a recorded weatherperson!

Andrew Lane, Manager BBC Weather Centre

## Aid for weather posts eyed

Peter Calamai of the Toronto Star

### U.S. asked to subsidize mothballed Arctic stations

The U.S. government is being asked to pay for the running of vital weather observation posts in the Canadian Arctic closed by federal budget slashing over the past 15 years. The subsidy to the cash-starved Meteorological Service of Canada would mirror American payments to maintain two observation posts in the Russian Arctic already tentatively approved by the National Science Foundation, a U.S. government agency with a \$7.5-billion (U.S.) annual budget for non-medical research.

The request for the U.S. subsidy comes from American researchers who say information from the mothballed stations in the Canadian and Russian Arctic is essential for understanding and predicting climate change. "You can't do everything from satellites. Some of the most crucial information can only be recorded on the spot using instruments there and in balloons," said Mark Serreze, a polar climate researcher from the University of

Colorado.

Serreze has taken a lead among U.S. climate scientists in urging the NSF to extend to Canada the same helping hand it does to Russia, which has become a research basket case after the breakup of the Soviet Union.

The idea got a favourable reception from the Canadian Meteorological Service, which has suffered a 40 per cent budget cutback since 1994 and been forced to close more than 50 weather stations. "We're definitely prepared to listen to any proposal," said Nancy Cutler, head of policy and corporate affairs for the meteorological service. The most crucial observation post for climate researchers is Mould Bay on Prince Patrick Island at the western edge of the Arctic archipelago. It

was mothballed at the end of the 1990s when the federal cabinet refused to provide enough money to the meteorological service to cover annual operating costs of roughly \$1.5 million. But Mould Bay provided the only weather and climate

(Continued on page 9)





The most crucial observation post for climate researchers is Mould Bay on Prince Patrick Island at the western edge of the Arctic archipelago.

*(Continued from page 8)*

observations for the entire Arctic Ocean, including temperature, humidity and wind speed measurements at regular intervals up to 10,000 metres crucial information for numerical weather forecasting and climate modellers. After Mould Bay was mothballed, England's main climate research centre began leaving the Canadian Arctic blank on its maps. International scientific bodies have voiced similar concern over the global impact of the Canadian budget cutting but Serreze's proposal is the first one to suggest foreign subsidies.

The American researcher spoke out during the recent Boston meeting of the American Association for the Advancement of Science.

At the same meeting, NSF president Rita Coldwell said her agency would consider Arctic science partnerships modelled after Antarctica, where the foundation is financing Russian scientists to drill into a deep subterranean lake. "I understand that the Russians cannot pay for their (Arctic) observation stations," Coldwell told reporters at a breakfast gathering. Although asked, she did not comment directly on possible subsidies for similar

Canadian weather stations.

The head of NSF Arctic sciences section, Tom

Pyle, said in an e-mail that he needed more details of the proposal before taking a position. The Mould Bay station would be more expensive to operate than Russian weather posts on Belyi and Wrangel islands because there is no other settlement on Prince Patrick Island to share the heavy costs of importing fuel or to provide non-scientific support staff. Several other Arctic observation posts that Canada has closed would be less expensive to operate because they are near native communities.

## ANNUAL GENERAL MEETING 2002

Under the terms of the Articles of the Association we are required to hold an Annual General Meeting:

**12. (1) Subject to sections 133 and 141 of the Act, (1) an annual general meeting and a meeting called for the passing of a special resolution shall be called by at least 28 days' notice in writing, and a meeting of the Association (other than an annual general meeting or a meeting for the passing of a special resolution) shall be called by at least 14 days' notice in writing. The notice shall be exclusive of the day on which it is served or deemed to be served and of the day for which it is given and shall specify the place, the day and the hour of meeting and, in the case of special business, the general nature of that business and shall be given, in manner hereinafter mentioned, to such persons as are, under the Articles of the Association, entitled to receive such notices from the Association.**

**(2) The secretary shall be required to issue notices to all members at least 56 days before the date on which a general meeting shall be held requesting submission of resolutions to be proposed at the general meeting. Any resolution proposed shall be set out in writing proposed by a full member and seconded by a full member and returned to the secretary at least thirty-five days before the date of the meeting. The secretary shall include the resolutions with the notice to be issued to the members.**

The closing date for resolutions is 1st June 2002. Please email your resolutions to [secretary@iabm.org](mailto:secretary@iabm.org)

The agenda for the AGM, including any resolutions received, will be included in the June **Up Front**.

Currently the AGM is scheduled to be held on Wednesday 26th June 2002, in Williamsburg USA during the AMS 31st Conference on Broadcast Meteorology. The meeting will be held in the Williamsburg Lodge and Conference Centre, Williamsburg, Virginia at 1630.

**“The secretary shall be required to issue notices to all members at least 56 days before the date on which a general**

**IABM**  
INTERNATIONAL ASSOCIATION OF  
BROADCAST METEOROLOGY

## FUTURE VOLCANIC ERUPTIONS MAY CAUSE OZONE HOLE OVER ARCTIC

**An "ozone hole" could form over the North Pole after future major volcanic eruptions, according to the cover story by a NASA scientist in a recent edition of the Proceedings of the National Academy of Sciences.**

Since the 1980s a seasonal ozone hole, characterized by severe loss of ozone, has appeared over the continent of Antarctica. However, scientists have not yet observed, on an annual basis, as severe a thinning of the protective ozone layer in the atmosphere over the Arctic. The ozone layer shields life on Earth from harmful ultraviolet radiation. A northern ozone hole could be significant since more people live in Arctic regions than near the South Pole.

"A 'volcanic ozone hole' is likely to occur over the Arctic within the next 30 years," said Azadeh Tabazadeh, lead author of the paper and a scientist at NASA's Ames Research Centre, Moffett Field, California. Her co-authors are: Katja Drdla, also of Ames; Mark R. Schoeberl of NASA's Goddard Space Flight Centre, Greenbelt, Md.; Patrick Hamill of San Jose State University, California.; and O. Brian Toon from the University of Colorado, Boulder. "If a period of high volcanic activity coincides with a series of cold Arctic winters, then a springtime Arctic ozone hole may reappear for a number of consecutive years, resembling the pattern seen in the Antarctic every spring since the 1980s," Tabazadeh said.

"Unlike the Antarctic where it is cold every winter, the winter in the Arctic stratosphere is highly variable," Tabazadeh said. NASA satellite and airborne observations show that significant Arctic ozone loss occurs only following very cold winters, according to Tabazadeh. Large volcanic eruptions pump sulphur compounds into the Earth's atmosphere. These compounds form sulphuric acid clouds similar to polar stratospheric clouds made of nitric acid and water. The clouds of nitric acid and water form in the upper atmosphere during very cold conditions and play a major part in the destruction of ozone over Earth's poles. Following eruptions, volcanic sulphuric acid clouds would greatly add to the ozone-destroying power of polar stratospheric clouds, researchers said.

"Volcanic aerosols also can cause ozone destruction at warmer temperatures than polar stratospheric clouds, and this would

expand the area of ozone destruction over more populated areas," Tabazadeh said. "Nearly one-third of the total ozone depletion could be a result of volcanic aerosol effects at altitudes below about 17km," said the researchers.

"Volcanic emissions can spread worldwide," said Schoeberl. "Our Mt. Pinatubo computer simulation shows that the volcanic plume spread as far north as the North Pole in the lowest part of the stratosphere within a few months after the eruption." Between about 15 and 25km in altitude, volcanic Arctic clouds could increase springtime ozone loss over the Arctic by as much as 70 percent, according to Drdla. "The combination of thick volcanic aerosols at lower altitudes and natural polar stratospheric clouds at higher altitudes could greatly increase the potential for ozone destruction over the North Pole in a cold year," Tabazadeh said.

"Both the 1982 El Chichon and 1991 Mt. Pinatubo eruptions were sulphur-rich, producing volcanic clouds that lasted a number of years in the stratosphere," Tabazadeh said. The Pinatubo eruption, as observed by NASA spacecraft, widely expanded the area of ozone loss over the Arctic.

Both of these eruptions did have an effect, however, over the South Pole, expanding the area and the depth of the ozone hole over the Antarctic, according to Tabazadeh. Computer simulations have shown that the early and rapid growth of the Antarctic ozone hole in the early 1980s may have been influenced in part by a number of large volcanic eruptions, she added.

"In 1993 the Arctic winter was not one of the coldest winters on record, and yet the ozone loss was one of the greatest that we've seen," Tabazadeh said. "This was due to the sulphurous Pinatubo clouds facilitating the destruction of additional ozone at lower altitudes where polar stratospheric clouds cannot form."

"Climate change combined with after effects of large volcanic eruptions will contribute to more ozone loss over both poles," Tabazadeh said. "This research proves that ozone recovery is more complex than originally thought."

What a dump!

**A 'volcanic ozone hole' is likely to occur over the Arctic within the next 30 years**

# Climate Change Debate

## Forecasts for the next century - is it possible or just fantasy?

by Bill Giles O.B.E., Director of The Weather Index, London, England. [www.wpindex.com](http://www.wpindex.com)

**It has been estimated that correctly forecasting the weather up to one month ahead saves the United Kingdom businesses upwards of £1 billion pounds a year, and is likely to save much more in the future.**

Forecasting anything is difficult enough to attempt, but looking at the weather, say, by the year 2100 might seem impossible, but that is precisely what many eminent scientists are attempting now.

The reason is, of course, that if our climate is going to change more rapidly than we expect by natural climatic variation, then politicians have to have something to base their decisions on how we, as the human race, advance.

Most of us have been in the weather forecasting business long enough to understand the difficulties of looking just a few days or even hours ahead and the problems that can bring, but I would submit that looking much further into the future is not fraught with so much danger.

One cynical reason, of course, is that the forecaster may not still be living to answer the critics should the forecast go wrong, but more to the point is that the further ahead you look the less detail you have to put in.

For instance, doing a forecast for the next 6 hours for a particular small area means that you really ought to try to give some great detail, such as when

the rain will start or end; how quickly it will move across the area; how heavy it is likely to be etc.

Whereas looking at a forecast for the next month means really trying to forecast the departures from normal, and not necessarily trying to pick out the weather on individual days.

Looking even further ahead to a prognosis 20, 50 or even 100 years hence would, at first glance, seem to be impossible. I would beg to differ, and would suggest that by following a few simple rules a trend to what is likely to happen is possible.

There are three parts to the equation to get the next century's trend. The relevant historical data, the most recent and acceptable long-term forecasts of global and regional changes and a reliable mathematical model. Then using the results of the historical and forecast, marry the two.

I have looked at the four major parameters that make up the weather on most days, namely temperature, rainfall, sunshine and wind, and studied them for southern and central England since the records began.

The temperature records go back nearly three hundred and fifty years and constitute the longest continuous meteorological record. It is fascinating to see that the mean temperature did not vary too much from about 9.1C for much of that time except for the last ten years when the mean has leapt to over 10C. Taking that figure as a base line

and using the latest predictions of temperature increase for central England, I have then arrived at the likely temperature changes through the century.

This is also done for sunshine, wind and rainfall but here it is not necessarily a linear change as possibly with temperature, and will vary much more through the seasons as well in, so much as the annual rainfall by the end of the century will probably increase, but whereas the winter rain will increase dramatically the summer rain will decrease.

By using the base line of the last ten years historical records and incorporating the most likely changes, you can end up with a prognosis for the next one hundred years based on the latest historical trends and the best possible model forecasts by assuming certain greenhouse gas emissions.

By using these calculations I have arrived at the conclusion that by the year 2040 the summer weather in London will be similar to that of southern France of today and that by 2100 the London summers will be similar to Athens of today.

Seems good but what happens to the weather in southern France or North Africa or India? If living south of 35 degrees north is impossible where will everyone move?

I still think that the biggest problem facing the politicians in the second half of the 21 century will be the migration of huge numbers of people from areas that have become inhabitable

## Climate Change Debate

- ◆ *This special feature is designed to help provide useful background for the times when the News Anchor throws that question "was this bad weather the result of global warming?"*
- ◆ *It needs your feedback and articles - so please email your contributions to Bill Giles at [bill@billgiles.co.uk](mailto:bill@billgiles.co.uk)*



**"I have arrived at the conclusion that by the year 2040 the summer weather in London will be similar to that of southern France of today"**



A stormy future for the world and mankind.....





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The next edition of **Up Front** will be  
published in early June.

It will contain the agenda for the AGM.

All contributions must be received by the  
editor no later than

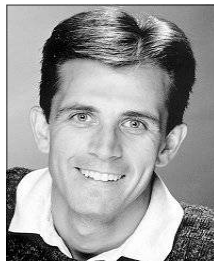
1st June 2002

Delivering weather to the public

## Back Page Comment

### Broadcasting and Forecasting in the U.S. and U.K.

#### A Comparison by Daniel Corbett.



There are many similarities between the U.S. and U.K. in broadcasting and forecasting but also many differences. During my career, I have had the unique opportunity to experience broadcast meteorology firsthand on both sides of the Atlantic.

I was born in London England, but spent my later school and university years in the U.S. I received my B.Sc. in Meteorology at the State University of New York. I began forecasting for the private sector in the north-east U.S. and spent several years forecasting for aviation, industry and the media before beginning my TV career. I worked at several TV stations in the States before returning to England to help launch and present weather for the BBC's new 24-hour channel BBC News 24. Whilst at the BBC I was also fortunate enough to experience working on the other BBC channels and Radio 4. In September 2000, I moved back to the U.S. with my English wife and am currently a broadcast meteorologist for an ABC affiliate KGUN 9 in Tucson Arizona.

A career in the American TV industry is generally more transient and probably more cut-throat than one in Britain. People begin their careers in the smaller markets and work their way towards the larger ones. As most of the broadcast meteorologist jobs in the U.S. are at local stations (the exceptions being CNN and the Weather Channel), the average TV weather presenter will have approximately 7 job moves during his or her career and probably live all over the U.S. This is necessary in order to reach one of the top cities and therefore earn a reasonable wage. Presenters tend to be contracted by the individual station for a fixed term and negotiated salary. As a result, agents are used far more frequently in the States in order to achieve the most advantageous package. In the U.K. there tend to be fewer job transitions because most of the jobs will be at the National Broadcasting level: BBC, ITV, Channel 4 or the regions. Unlike America, almost all of the British broadcast meteorologists have Met degrees. They are employed by the

Met Office, paid a government salary with broadcasting bonuses and contracted to the broadcaster they serve.

Ratings are probably the single most important factor in American television, and TV weather is, of course, no exception. The higher the ratings the more a station can charge for advertising time and thus generate more revenue. Since the ratings are so important many weather presenters fall under the whims and desires of the station management. One example being a fellow broadcast met who was told to dye his hair blonde! In another sweeps period, I was asked to go off and spot tornados in the field during a severe thunderstorm. My response was that it would be far more practical staying in the forecast centre running the Doppler radar so we could warn the viewers where the tornadoes were likely to touch down rather than being sent out on a wild goose chase to get that all important ratings-boosting tornado video. There are a greater number of non-meteorologists or 'personalities' who present the weather in the U.S. so the general trend, particularly in the less weather-sensitive markets is towards a more relaxed, chatty and personable performance. The weather presenter is always in the studio with the news presenters and will often join them at the news desk for some general weather chit-chat at the end of their broadcast. The national U.K. weather presentations still tend to be more formal and less chatty particularly if one is delivering the Radio 4 Shipping Forecast for example. Although certain programmes, particularly those in the regions, have adopted the more informal 'part of the team' type scenario there still seems to be a preference for the Weather Studio broadcast. My own style of presenting- more personable and upbeat with little catch phrases - certainly raised a few eyebrows when I appeared on the main BBC Breakfast news back in 1998. Apparently, there had never been such a response (positive and negative) from the viewers to a weather broadcaster and I still get emails from the British public today!

American weather graphics differ widely from station to station depending on what particular system the TV station has in place. The meteorologists like to show specific weather systems by using moving graphics and what they call 'fly throughs'. These are 3D type effects, which look impressive but can take hours to render. In contrast, graphics in the U.K. in the past tended to be more static than those used in the U.S. but have changed over the past few years to feature far more animation. The meteorologist will generally stand in front of the appropriate map and explain the various weather patterns rather than be off camera and use fancy moving pictures. Doppler radar is popular at TV stations across the U.S. particularly in weather-sensitive markets such as tornado alley, where the street level mapping is invaluable in pin-pointing severe storms and possible tornadic activity. There is no Doppler radar in operational use in the U.K. The meteorologists therefore rely on strong links to the National Met Centre from whom they receive frequent daily briefings ensuring continuity of the weather story. The broadcast radar data is not as detailed as it is in the U.S. and street level mapping is not used. The forecast area for the U.K. is obviously far smaller than that of the US but European and worldwide forecasting is undertaken in order to make sense of the bigger picture. The expertise of forecasting varies greatly across the U.S. American Broadcast Meteorologists either make their own forecasts, follow the National Weather Service word for word or have an outside source provide their forecast ie. AccuWeather. For the most part there is not such a close link between the National Weather Service and the local TV stations. Not surprisingly broadcast meteorologists frequently come up with different forecasts for the same region.

And finally..... from my experience of broadcast meteorology on both sides of the Pond, in some cases, a 5-day forecast in the U.S. can be as

This new section is to give you a chance to air your views - if you think something needs airing in our business - then drop the Editor an email