

The Beginnings of Public Weather Services in WMO

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*International Symposium on PWS
Geneva 3-5 December 2007*



The Beginnings of PWS in WMO

- Historical Context of International Cooperation in Meteorology
- The Developments of the 1980's and 90's
- Public Weather Services as a WMO Programme
- Social and Economic Value
- The PWS People



Cooperation in 1960's to 1970's

- Satellites
- Communications and Computing
- World Weather Watch
- The Global Weather Experiment

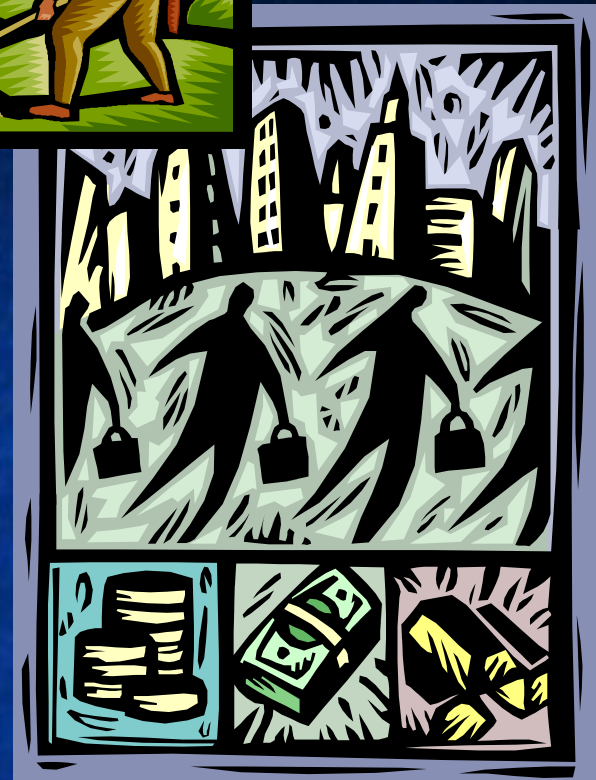


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Macro Developments in the 1980's and 90's

- “Sustainable Development”
- Economic rationalism
- Smaller government
- Commercialisation in some NMS's
- Threats to data Exchange

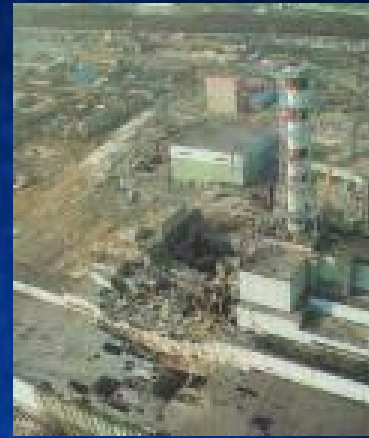


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Plus some events that would change global thinking and action!

- Chernobyl (1986)
- Global TV networks
- The International Decade for Natural Disaster Reduction (the 1990's)
- The Internet and the World Wide Web
- The “Service Revolution”



BBC WEATHER

BBC NEWS

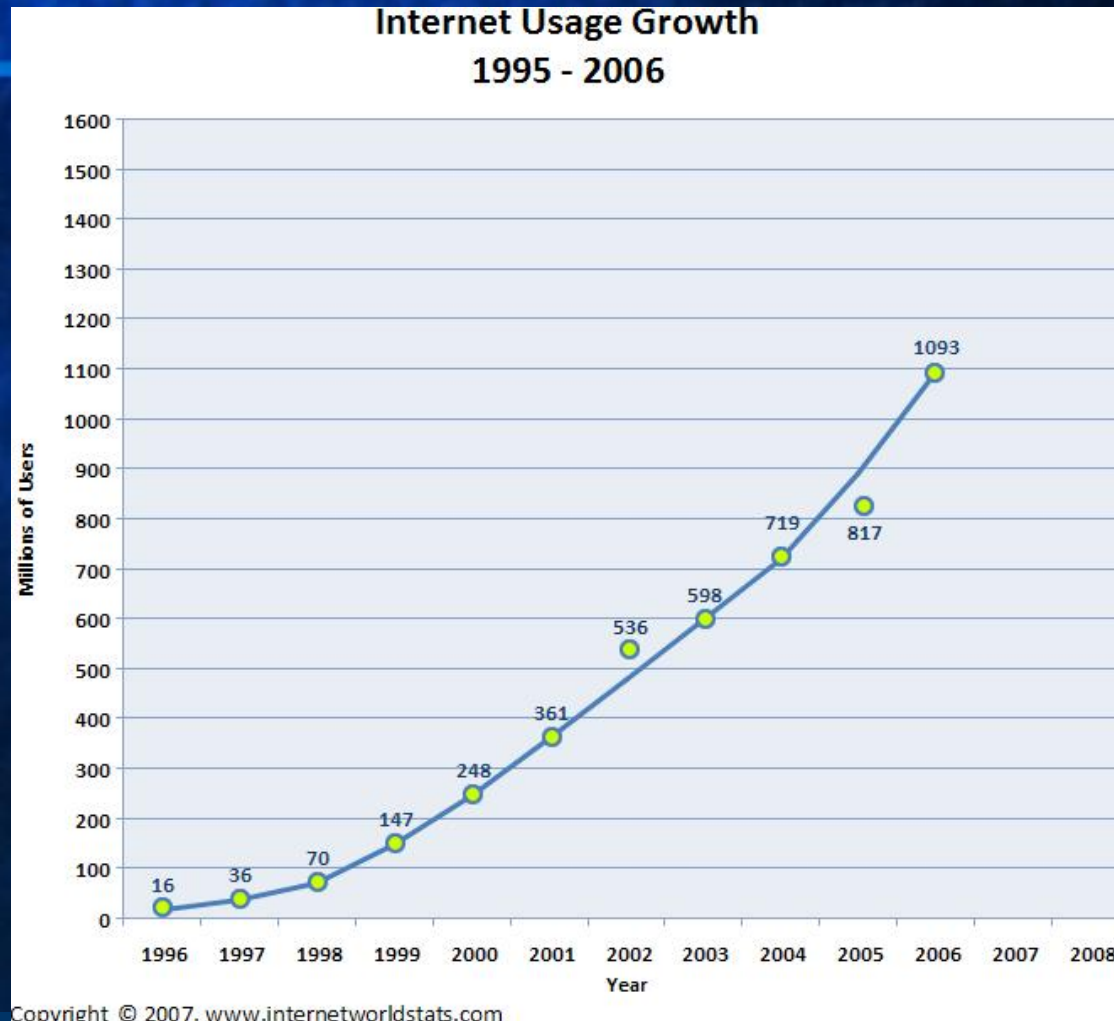
CNN



<http://www>



The Growth of the Internet



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Beginnings of PWS:
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1987 - WMO Congress Recognizes New Challenges

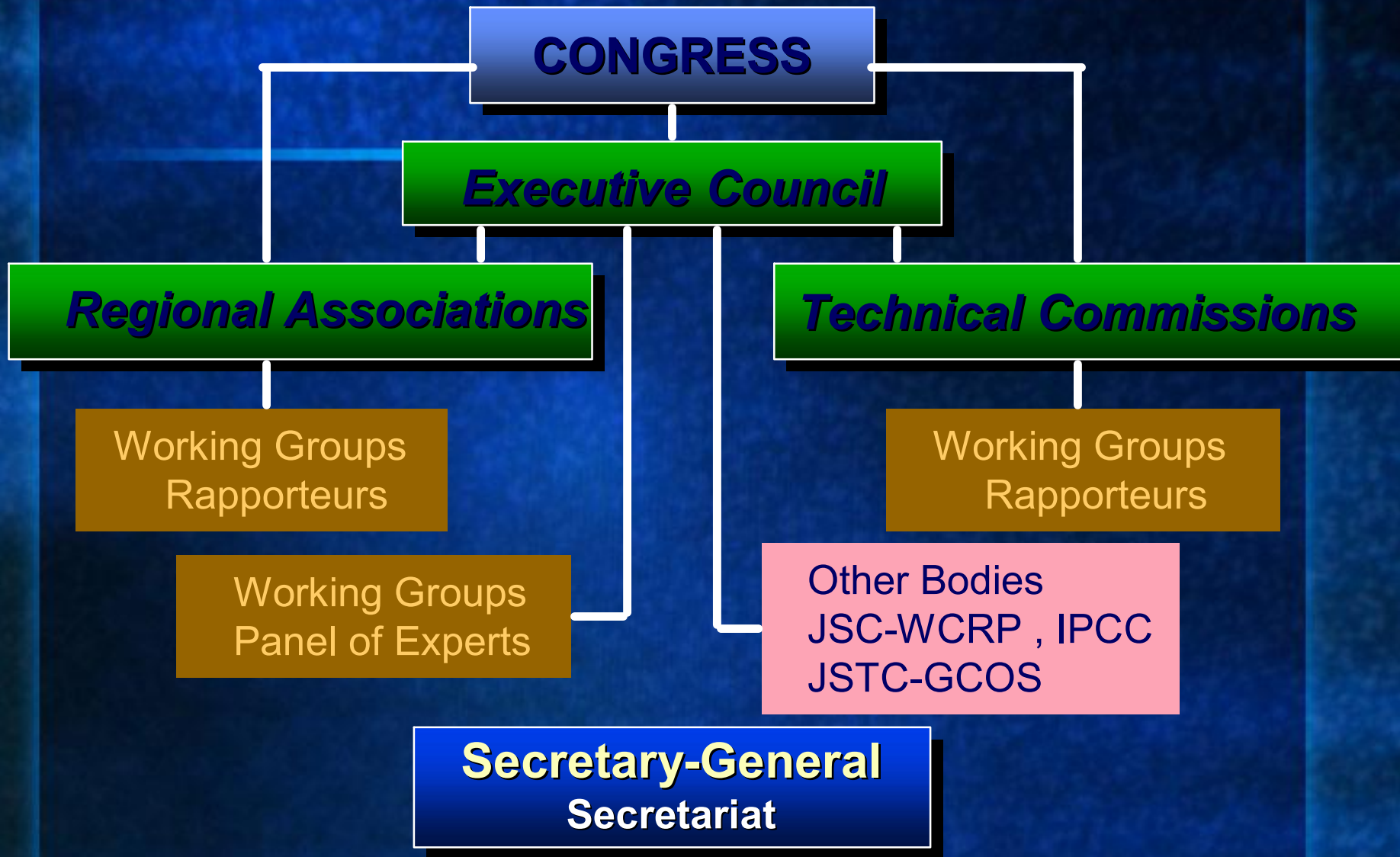
- Brundtland Commission report - “Our Common Future” - 1986
- “Corridor” discussions at Tenth Congress 1987
- Congress agrees on need for more focus on user needs



A typical four yearly WMO Congress session (1983)



Organizational Structure of WMO



1988 - Proposal for a WMO PWS Programme

- Jan 1988 WMO Bureau session first considers idea of a PWSP, but the “how” is problematic!
- Recognition of
 - Budget situation
 - Different needs of NMHS's
 - Links to World Weather Watch
- June 1988 WMO EC 40 supports idea to go to Congress in 1991, but
 - Seeks more work from Long Term Plan group and Commission for Basic Systems



1988-90 - Finding the right formulation

- CBS favours PWSP as a sub-programme of WWW
- EC proposes a separate “Applications Programme” (like aviation, marine and agriculture), but intergovernmental technical and policy matters handled through CBS and support from WWW Department
- CBS developed initial objectives in 1990



1991 - WMO Congress

“Decides...”

- Eleventh Congress in 1991 supports concept with enthusiasm
- Long-term objectives:
 - To strengthen Members’ capabilities to provide comprehensive weather services to the general public; and
 - To foster a better understanding by the general public of the capabilities of Meteorological Services and how best to use these services.



Initial Topic 1:

Formulation and content of forecasts and warnings

- To evaluate the effectiveness of different methods of preparation, formulation and content of weather messages, taking into account regional and climate variations, and develop appropriate guidance information for Members



Initial Topic 2

Presentation and dissemination techniques, public understanding, public information and education

- To survey, evaluate and propose guidance on the wide variety of possible ways to use communication media in the dissemination of public weather services and to develop guidance material for public awareness activities of meteorological services; and



Initial Topic 3:

Exchange and coordination of hazardous weather information among neighbouring countries

- To arrange for appropriate arrangements and procedures to coordinate and exchange warning information across national boundaries as appropriate, with the objective to provide the public with coherent and responsible public weather information minimising the discrepancies in time, location and severity that arise from uncoordinated statements.



1994-95 PWS Gains Momentum

- Full time WMO staff appointed - Haleh Kootval
- Expert meetings in 1994-95
- Work on preliminary Guide
- First TV training course in Singapore with help from BBC



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1995-99 - PWS Connects with Big Issues

- World Met Day 1995
- Twelfth Congress in 1995 strongly supports PWS
- Links to:
 - Commercialization
 - Data exchange (Resolution 40)
 - IDNDR
- The role of NMHS's



1995-99 - The Valuable Practical Steps

- CBS Working Group established 1996
- Expert group meets in Nassau in 1997
 - Preliminary PWS Guide
 - More detailed guides planned
 - Survey planned
- RA VI (Europe) PWS Group
- New “Core” group meets in Montevideo 1998 and sets up Teams
- Links with international broadcasters strengthened

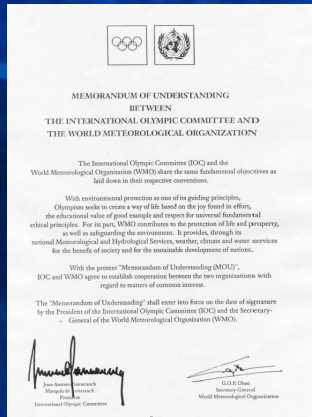


1999-2004 - Consolidation and Linkages

- CBS Open Programme Area Group (OPAG)
 - Expert Teams
 - ICT
- PWS Role in Disaster Management
- Verification
- Links with CAS World Weather Research Programme
- The Olympics



WMO and the Olympics



Olympics 2000 Weather Services Home Page

http://pandora.nla.gov.au/parchive/2000/S2000-Sep-15/www.olympic.bom.gov.au/olympic/index.htm

BUREAU OF METEOROLOGY *Australia*
DEPARTMENT OF THE ENVIRONMENT AND HERITAGE

This is the mirror of the Olympic Weather at www.bom.gov.au
The products marked with a use "olympic" as the "User Name" and "Password".

SYDNEY 2000 OLYMPIC WEATHER SUPPORT

This site has been prepared as part of the Bureau of Meteorology's support services for the 2000 Olympic Games. The site aims at providing a centralised location for accessing relevant meteorological services. These services include information for both the public, as part of the Bureau's basic service, and specialised information useful for SOCOG and Olympic competitors.

No Warnings Current.

Torch Relay Forecast

NEWS and NEW Information

Climate of Sydney The Olympic City [details and order form](#).
[International weather services](#) links and [public weather services](#) programme provided through the World Meteorological Organization (WMO). See the [Memorandum of Understanding](#) between the WMO and the International Olympic Committee.
Daylight Saving starts on 27 August 2000

Feedback... web.olympics@bom.gov.au

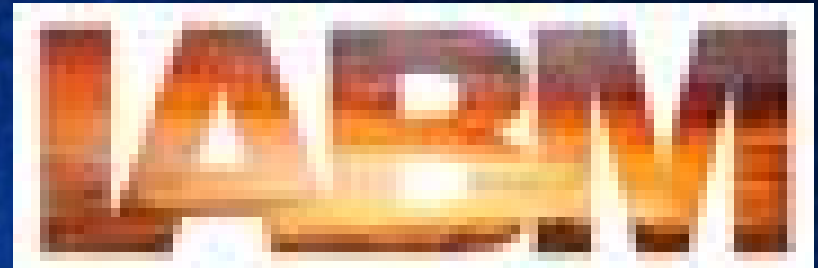


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Beginnings of PWS:
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First International Conference on Broadcast Meteorology 2004

- Forum 2004
Barcelona
- IABM holds major international conference
- WMO PWS a major contributor



2005 - 2007 PWS A Major Player

- Development of World Weather Information sites
- Major technical conference on PWS, St Petersburg, 2005
- PWS major role in assessing Socio Economic Benefits of weather, climate and water services, (eg Madrid 2007) and
- Addressing key issues of:





Social and Economic Benefits, Madrid 2007

The screenshot shows a web browser window with the address bar displaying 'http://www.wmo.int/pages/madrid07/'. The page title is 'Secure & Sustainable Living: Social & Economic Benefits of Weather, Climate and Water Services'. The main content area is titled 'A Social and Economic Benefits of Meteorological and Hydrological Services'. On the left, there is a sidebar with a 'List of participants' and a 'Media Kit' section containing links for 'Background', 'Practical info', 'BIOS', 'Media Prog', 'Conferences', 'Final Programme', 'Madrid Conference Statement and Action Plan', 'Focus Events', 'Presentations', 'Opening Addresses', 'Closing address by the Permanent Representative of Spain with WMO', and 'Regional/National Events'. The main text area features a sub-header 'Towards secure and sustainable living: the contribution of meteorological and hydrological services' and a paragraph describing the conference. To the right of the text are logos for the WHO and the 'MINISTERIO DE MEDIO AMBIENTE'. Below the text is a 'Latest News' box with a blue background and white text.

A Social and Economic Benefits of Meteorological and Hydrological Services

Towards secure and sustainable living: the contribution of meteorological and hydrological services

With the support of



MINISTERIO DE MEDIO AMBIENTE

The International Conference on Secure and Sustainable Living: Social and Economic Benefits of Weather, Climate and Water Services, organized by the [World Meteorological Organization](#) (WMO), was held in Madrid, Spain, from 19 to 22 March 2007, under the gracious patronage of Her Majesty Queen Sofia. The Conference was hosted by the Environment Ministry and the National Meteorological Institute of Spain and attended by some 450 participants from 115 countries.

The Conference provided a vital forum for dialogue among the producers and end-users of weather-, climate- and water-related information. It is thus an opportunity for the National Meteorological and Hydrological Services of WMO's 188 Members to learn more about how their products and services are appraised and actually used, as well as what improvements might be expected from them, in order to increase their effective value to the community. Equally important, the Conference rendered a rare opportunity for users to better understand the current capabilities of the National Meteorological and Hydrological Services, as well as their present limitations. It is noteworthy that the Conference was a significant event. In the past,

Latest News
over...
...but regular updates and follow-up
...will be available.
Thank you



2005 - 2007 PWS A Major Player

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PWS Delivering on Key Issues

- User focus
- Disaster management
- Nowcasting
- Socio-economics
- Communication
- Credibility of NMHSs
- Quality assurance
- Public awareness

World Meteorological Organization (WMO) - Public Weather Services (PWS)

http://www.wmo.int/pages/program/pwsp/index_en.html

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HOME CONTACT US TOPICS RELATED SITES UN SYSTEM

PWS Home

Programmes > AMP > PWS >

NEWS AND INFORMATION

- Official Forecasts & Warnings
 - World weather
 - Severe weather
 - User guide (pdf)
- PWS International Event
 - International Symposium on PWS, Geneva, (3-5 December 2007)

Every day of the year, people's lives are affected by weather and climate. Storms, floods, droughts and other extreme events frequently threaten safety of life and destroy property around the world. National Meteorological and Hydrological Services (NMHSs) have no greater responsibility than ensuring the safety of life, the protection of property and the well-being of their nations' citizens. Consequently, they must provide warnings and forecasts in a timely, reliable and comprehensive manner. Furthermore the forecasts and other information on weather- and climate-related events that the NMHSs provide are a vital component in the decision making processes for many weather-sensitive sectors, as well as for disaster management.

To help the NMHSs fulfill this task the World Meteorological Organization (WMO) in 1994 established the Public Weather Services Program (PWS) as a part of its Applications of Meteorology Programme (AMP). The main purpose of PWS is "to strengthen the capabilities of WMO Members to meet the needs of the community through provision of comprehensive weather services, with particular emphasis on public safety and welfare, and to foster a better understanding by the public of the capabilities of national Meteorological Services and how best to use their services"

By helping Members communicate weather warnings and forecasts to users, the PWS provides the final step

Friday	Saturday	Sunday
84	66	62
36	42	47

Extended Forecast

Legislated Responsibility of NMHSs

World weather

World Weather Information Service (WIS)



The PWS People



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The PWS People



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The PWS People



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The OPAG Leaders



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IABM



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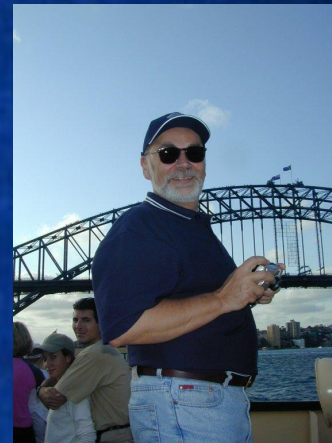
WMO PWS Staff



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CBS and WWW Support



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And other Supporters



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And Now to the Future.....

- No weather forecast or warning is valuable until someone takes it and uses it - to protect life and property or to advance economic and social benefit.
- PWS represents a clear pay-off for investment in vital meteorological infrastructure
- PWS the channel for environmental information in an era of climate change?



Thank you!



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