

Weather, Climate and Broadcast Meteorology

Or, why your weather team are so
important....

Introductions...

- Gerald Fleming
- Head of Forecasting with Met Éireann



- 25+ years experience as a Broadcast Meteorologist with Radio Telefís Éireann

A few of the players..

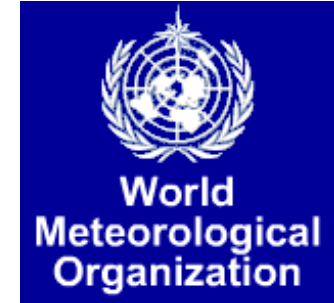
- World Meteorological Organisation



- A specialised scientific agency of the UN
- Co-ordinates Meteorology worldwide
- Represented by the National Meteorological Services

www.wmo.int

World Meteorological Organisation



- Public Weather Services
- Programme commenced 1994
- Aimed at improving delivery of weather services
 - Training
 - Best Practices
 - Guidelines
- Now looking at seasonal and climate time-scales

A few of the players..

- International Association of Broadcast Meteorology



- Professional Association for weather broadcasters
- Represents weather broadcasting (observer status) with WMO.

www.iabm.org

A few of the players..

- Climate Broadcasters Network - Europe



- Weather broadcasters active in raising awareness of Climate Change
- Supported by DG Environment of the European Commission

www.cbn-e.eu

A few of the players..

- American Meteorological Society



- Has an active Board of Broadcast Meteorology
- Supports training and certification programmes

www.ametsoc.org

American Meteorological Society



- Promotes concept of the “Station Scientist”
- Weather broadcaster may be the only person in the Newsroom with a scientific background.
- => Prepares reports of science and environment matters.

A few of the players..

- Forum International de la Météo

**6^e forum international
de la Météo**

- Annual gathering of weather broadcasters
- Run by Société Météorologie de la France
- Good reach through the Francophone countries

www.smf.asso.fr/fim.html

A few of the players..

- Minus 6% Team
- A Japanese initiative, driven strongly by weather broadcasters.
- Aim to reduce the CO2 emissions of Japan by 6% through individual effort
- Targets behavioural change
- Strongly media-based

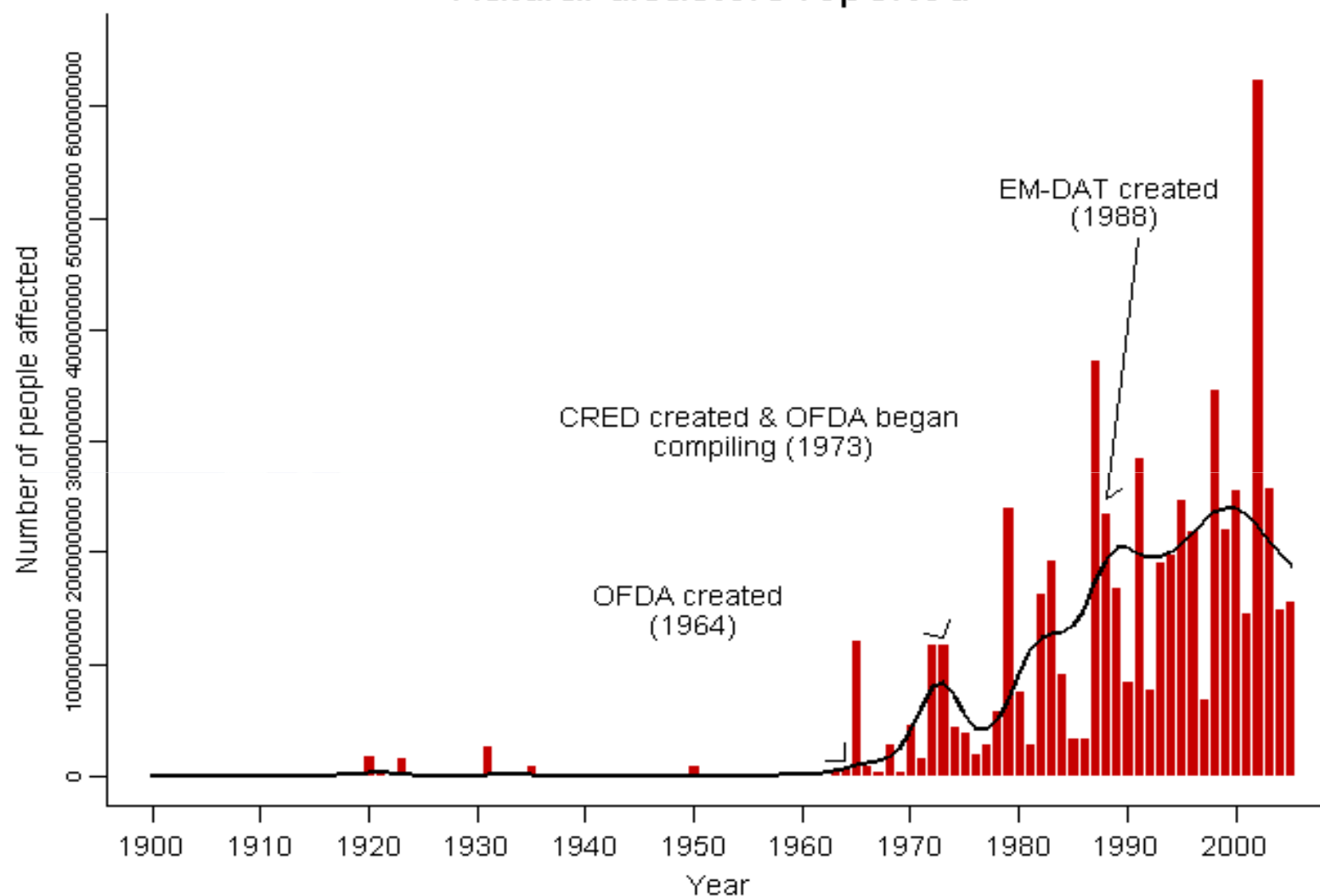
A few of the players..

- Huafeng Group
 - Audio-visual company of the China Meteorological Administration
 - Produces many weather broadcasts and weather-related programming in China
- National Environmental Educational Foundation (USA)
 - Produces environment-related programmes in the USA; some aimed at weather broadcasters.

What has science done for us?

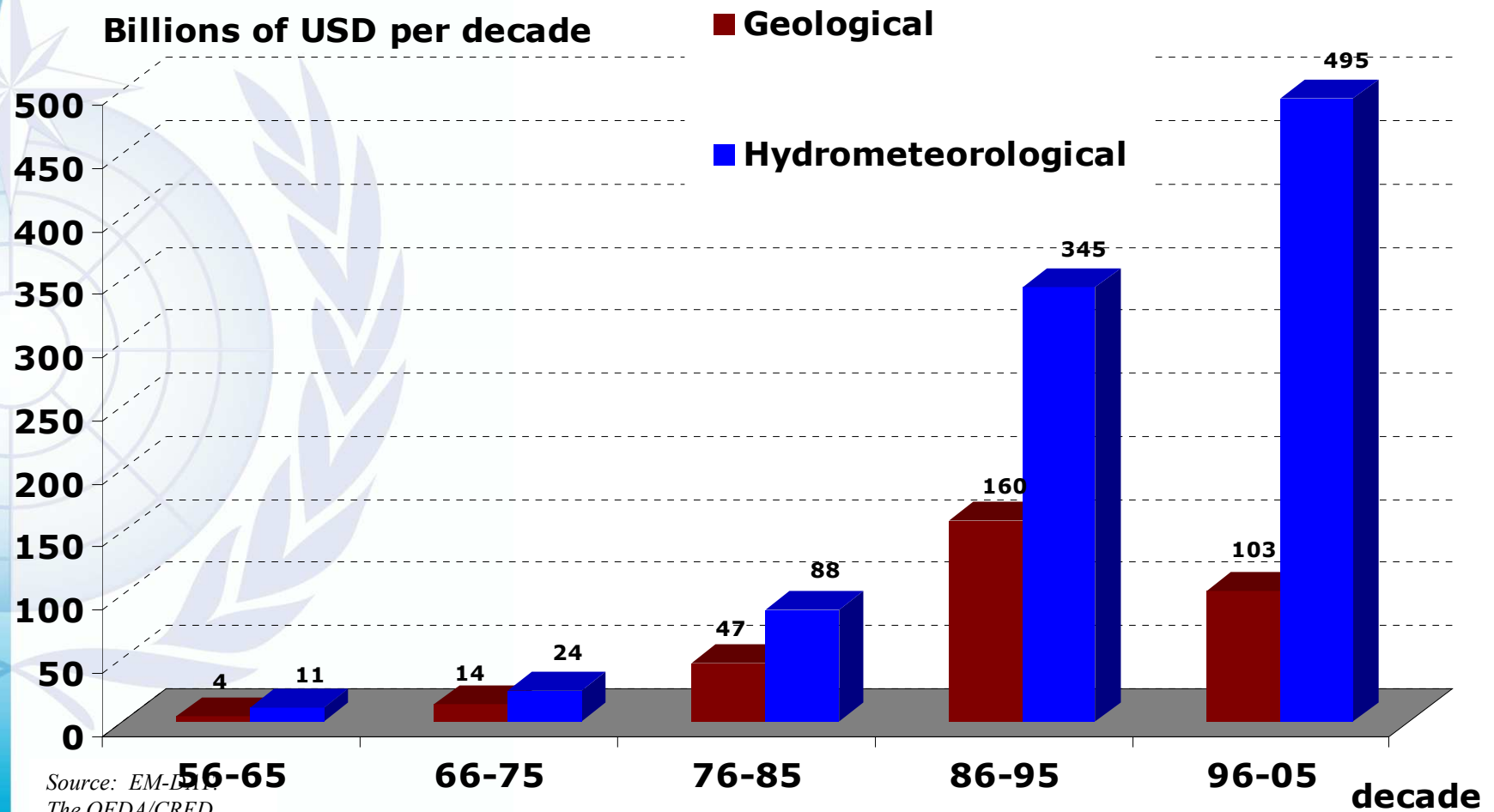
- Let's look at natural hazards
- Most of them are Meteorological!
 - Windstorms, floods, tropical storms, drought, heatwaves etc etc
- Some are Geological in origin
 - Earthquakes, Volcanoes....
- Some have elements of both
 - Tsunamis

Natural disasters reported



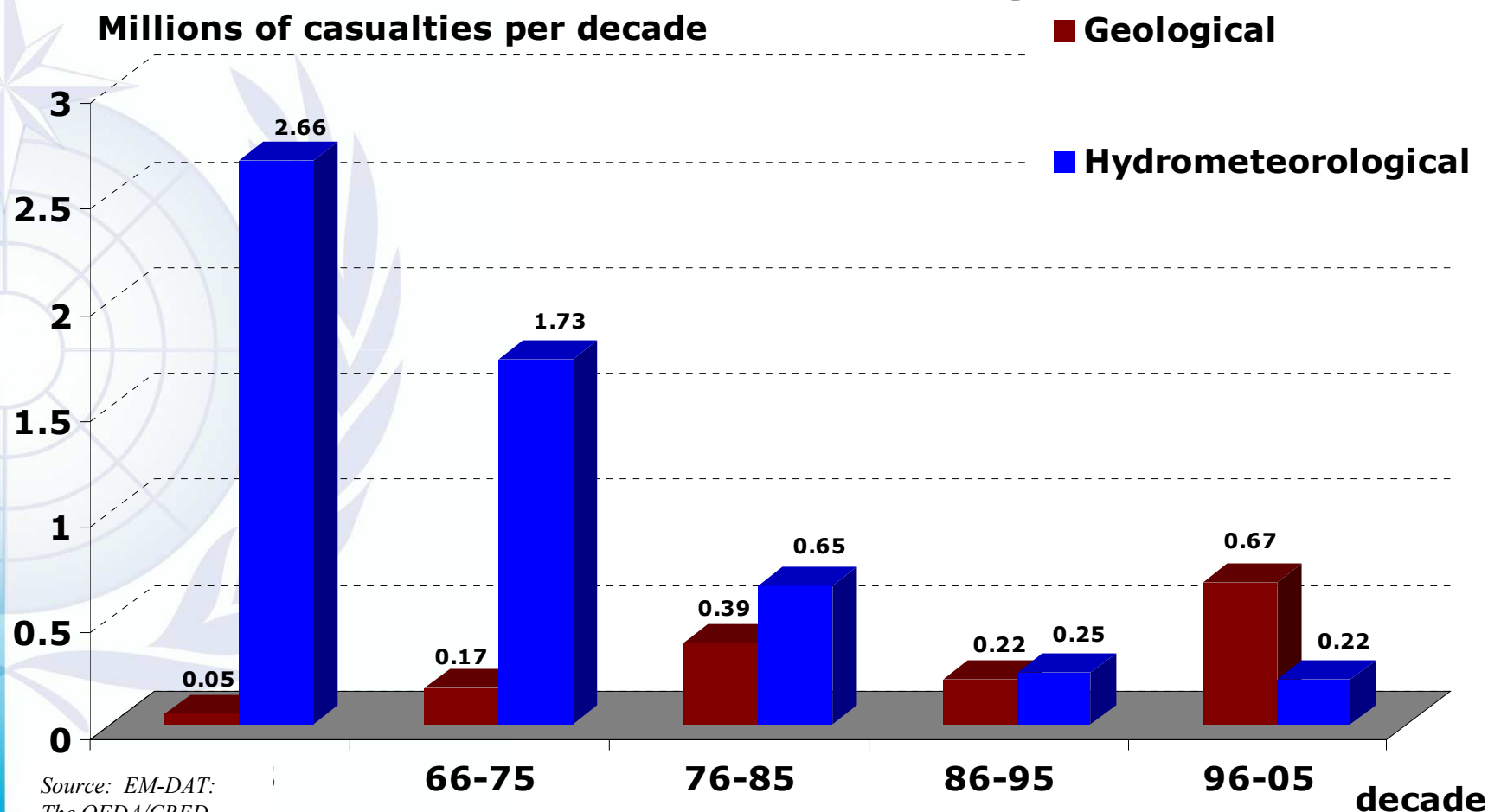
EM-DAT: The OFDA/CRED International Disaster Database - www.em-dat.net - Université Catholique de Louvain, Brussels - Belgium

Economic Losses going Up....



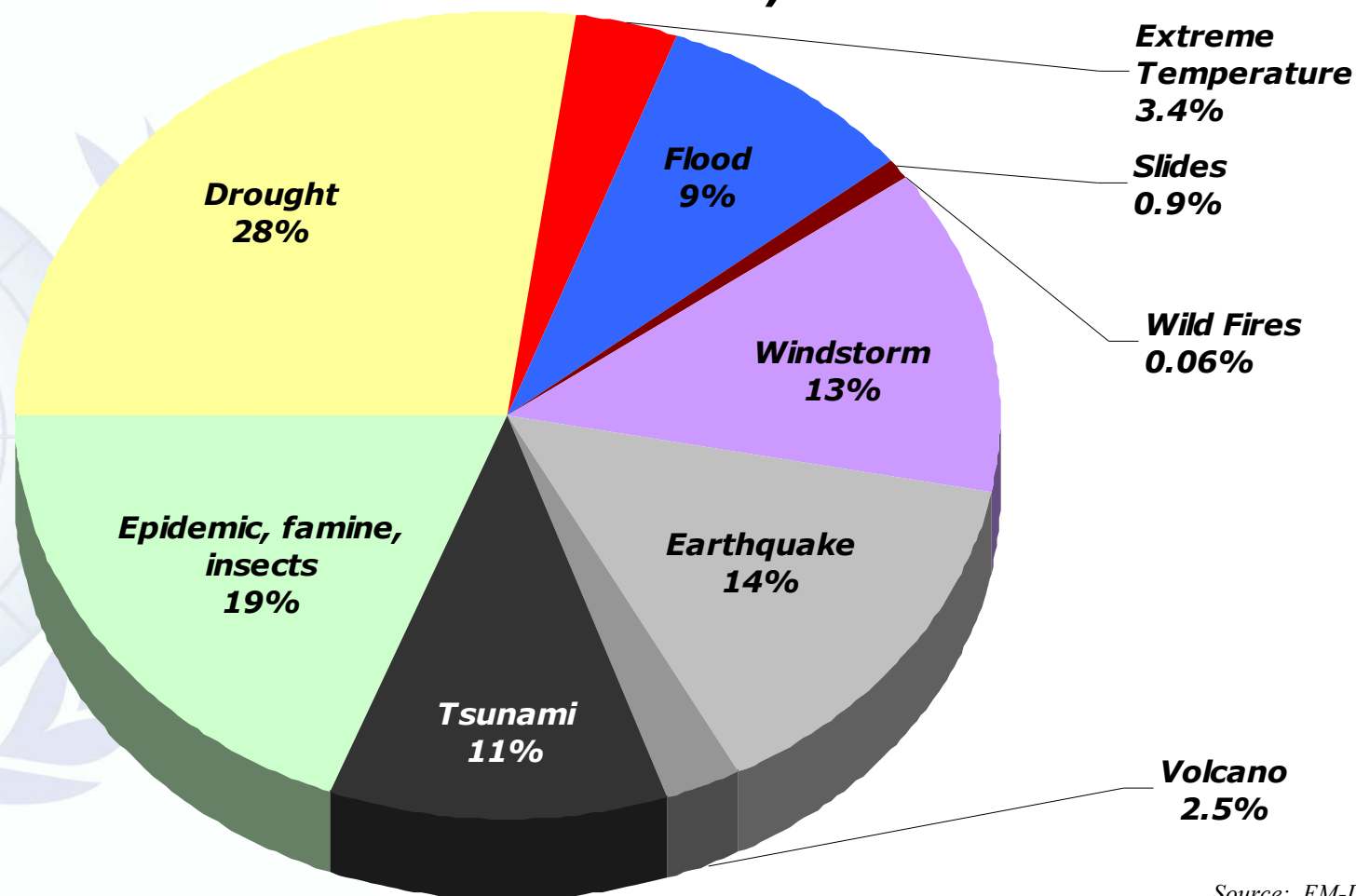
Source: EM-DAT
The OFDA/CRED
International Disaster
Database - www.em-dat.net - Université
Catholique de Louvain
- Brussels - Belgium

While Casualties are Decreasing



Source: EM-DAT:
The OFDA/CRED
International Disaster
Database - www.em-dat.net - Université
Catholique de Louvain
- Brussels - Belgium

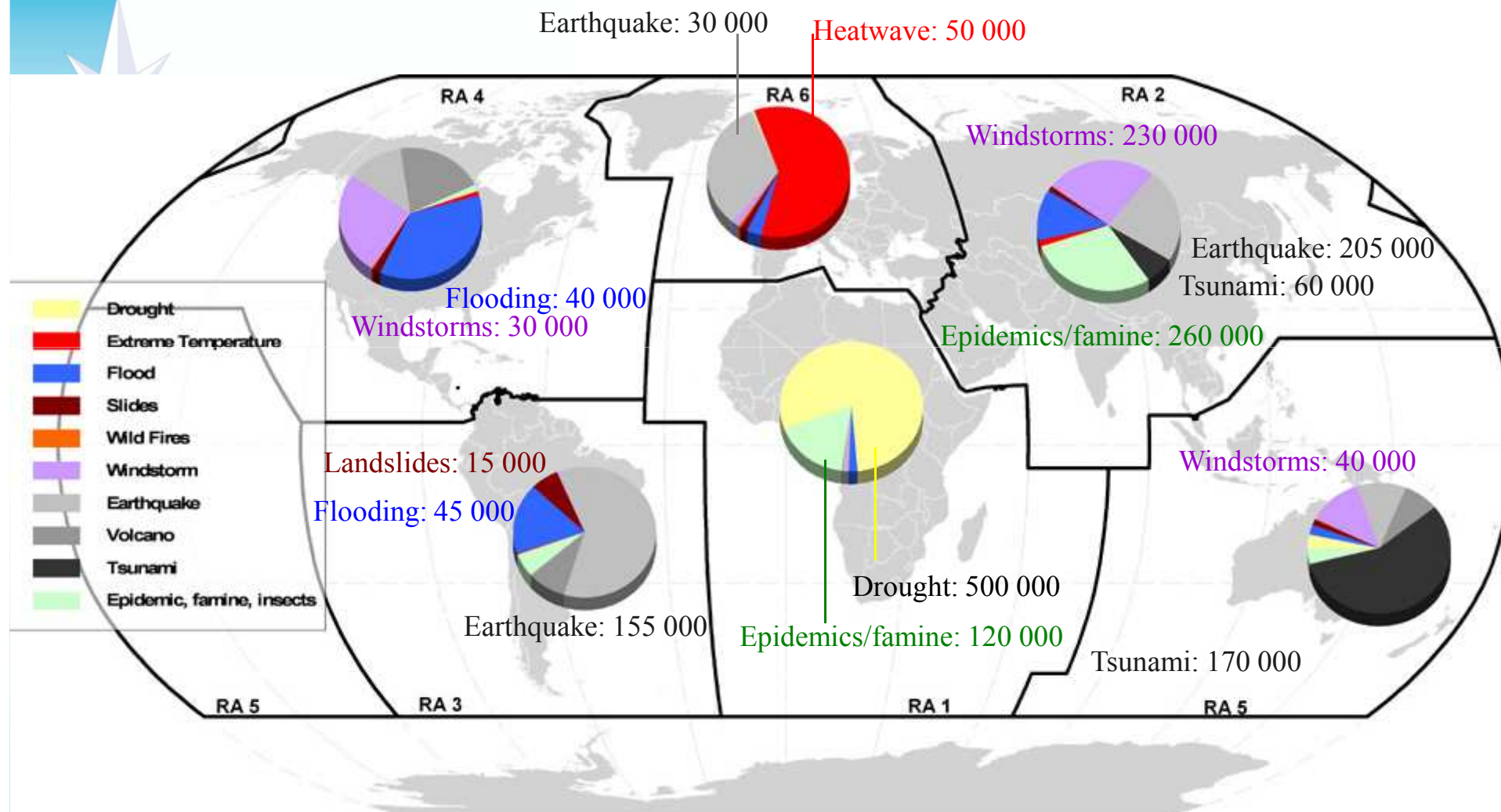
Loss of Human Life (1980-2005)



Nearly **70%** of loss of life are related to hydro-meteorological hazards.

Source: EM-DAT: The OFDA/CRED International Disaster Database - www.em-dat.net - Université Catholique de Louvain - Brussels - Belgium

Regional Distribution of Loss of life, 1980-2005



Communicating weather and climate

- Weather Broadcasters
 - The public faces and voices of weather
 - Popular with the media audience
 - High degree of credibility
 - Scientific understanding
 - Deep interest in the atmosphere
 - Well-placed to communicate information about climate change

Communicating weather and climate

- Weather and Climate are not the same
 - Climate forecasts are usually probabilistic
 - Different level of understanding and expectation to “normal” weather broadcasts
 - Climate Change has significant economic and political aspects
 - Important to stick to the science
- Weather Broadcasters have a professional responsibility to keep up-to-date with climate science.

World Climate Broadcasters Forum

- IABM
- CBN-E
- AMS
- FIM
- African ABM
- South American Rep
- Minus 6% Group



Intl Assoc. of Broadcast Meteorology

- Formed 15 years ago
- Raising standards in broadcast meteorology
- Organised First World Conference on Broadcast Meteorology (Barcelona 04)
- Training resource provided to WMO
- Bridging gap between Science, Government and the People
- Need to be involved at a more strategic level.

Climate Broadcasters Network - Europe

- New - less than 3 years old
- Not about “fighting” Climate Change. Explain and raise awareness
- Using our communications skills to make Climate Change understandable
- Decision-makers watch the weather forecast too!
- Members very active beyond the basic weather broadcasts

American Meteorological Society

- Weather is the top reason people watch TV Newscasts.
- Weather Broadcasters often involved in the community (schools etc).
- Community see us as science leaders
- PROBLEM – Many US weather broadcasters believe Climate Change is a scam!
- Should present science without personal prejudices coming through.

Forum International de la Météo

- Extreme weather events have led to a change in perception of weather broadcasters
- FIM attendees incorporate a rich diversity of national and cultural backgrounds
- Next FIM – October 2009 – will focus on weather in cities.
- Much weather information on the Internet – some of doubtful provenance
- Reclaim the position of the weather presenter

African Assoc of Broadcast Meteorology

- Drought is the chief problem in Africa
- Economic well-being / food security
- Mix of severe weather (flash floods, tropical cyclones) and long-term problems (drought, soil erosion, disease epidemics).
- Weather broadcasting is young in Africa
- Training of both meteorologists and media personnel is a significant need.

Minus 6% Team - Japan

- Over 3m individual members
- 30k corporate members
- Use local TV - find the local angle
- Use celebrities – effective in Japan
- Try new ways to communicate the message – such as Romantic Driving(!)
 - Do what we can
 - Focus on the east things
 - Keep it up!

Huafeng Group – China

- Three strategic directions:
 - Government Impetus
 - Technical Development
 - Mass Participation
- 400m Chinese annually impacted by severe weather
- Encourage social awareness
- Use old Chinese stories – the man who held back the floods; the beautiful lady as a metaphor for a healthy earth.

Nat. Environmental Educational Foundation

- Most Americans receive Climate information through the media.
- 73% of US citizens frequently use weather information from television;
- Average US citizen checks weather information three times a day
- NEEF prepare brief packages on climate and environment
- Focused on local climates and needs
- Visual packages and script for voice-over

Forum Recommendations

Commitments from weather broadcasters:

- Use their talents as communicators to educate the public about Climate Change and its impacts
- Base reports on current, accurate science
- Keep up-to-date with developments in science and society

Forum Recommendations

Interactions with others:

- Interact regularly with climate scientists to strengthen communication of the science
- Reach out to other communities, especially those of education and health
- Publically support research that will help us to know more.

Forum Recommendations

Supports for weather broadcasters:

- A particular challenge to support weather broadcasters in the developing world, who frequently speak to very vulnerable communities.

Forum Recommendations

Our time for effective action as a society is short

The window of opportunity is closing rapidly.