

World Meteorological Organization

Weather • Water • Climate

Global Multi-Hazard Strategy for Reducing Impacts of Hydro- Meteorological Disasters

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Programmes**

WMO
OMM

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About WMO ...

- Established in 1950
- Specilized United Nations Agency
- 187 Member countries
- Technical and scientific matters related to **weather**, **water** and **climate**
- Largest coordinated network of scientists (research and operations)
 - 10 major international programmes
- Works with 187 National Meteorological and National Hydrological Services

Strategic Focus (1950 – 2003): International, regional, national technical and scientific coordination/cooperation/capacity building

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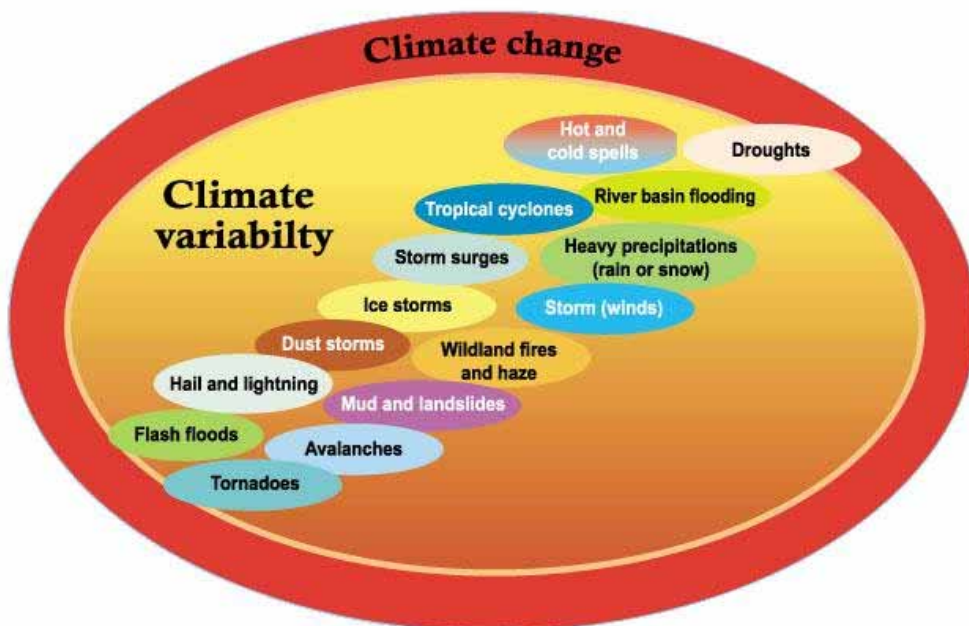
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Natural Hazards Related to Weather, Climate and Water ...



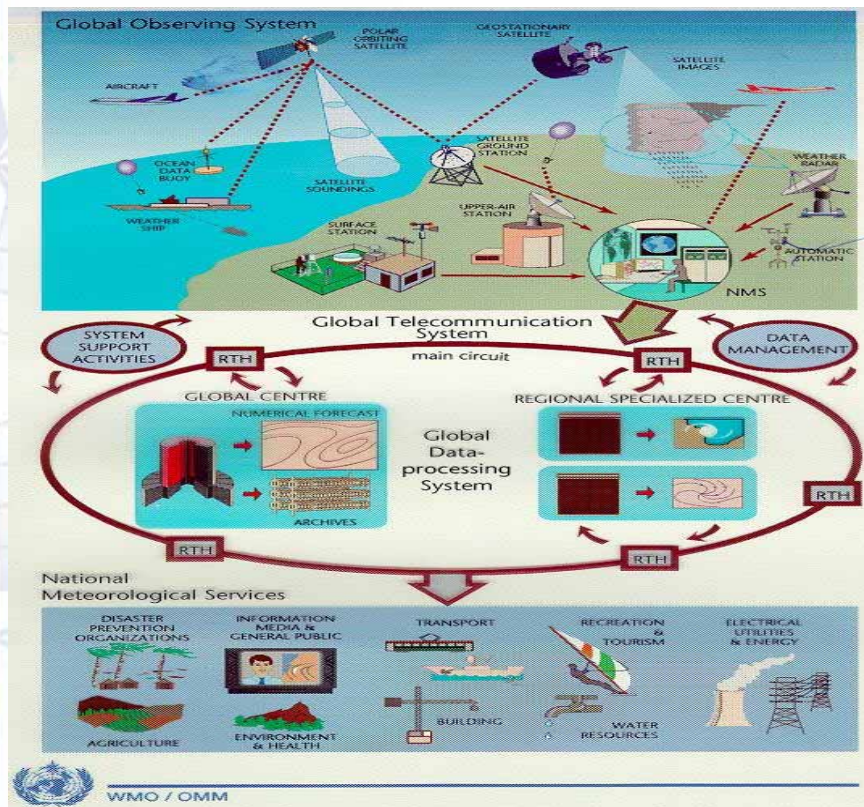
Severe storms, tropical cyclones (hurricanes and typhoons), storm surges, floods, cold spells, heat waves, droughts, forest fires, locust swarms, etc...

WMO Research Programmes Advance Knowledge of Natural Hazards and Their Changing Patterns



Extending limits and quality of predictions and early warnings of hazards from next hour to longer timescales

WMO's Global Operational Network?



187 National Meteorological and Hydrological Services

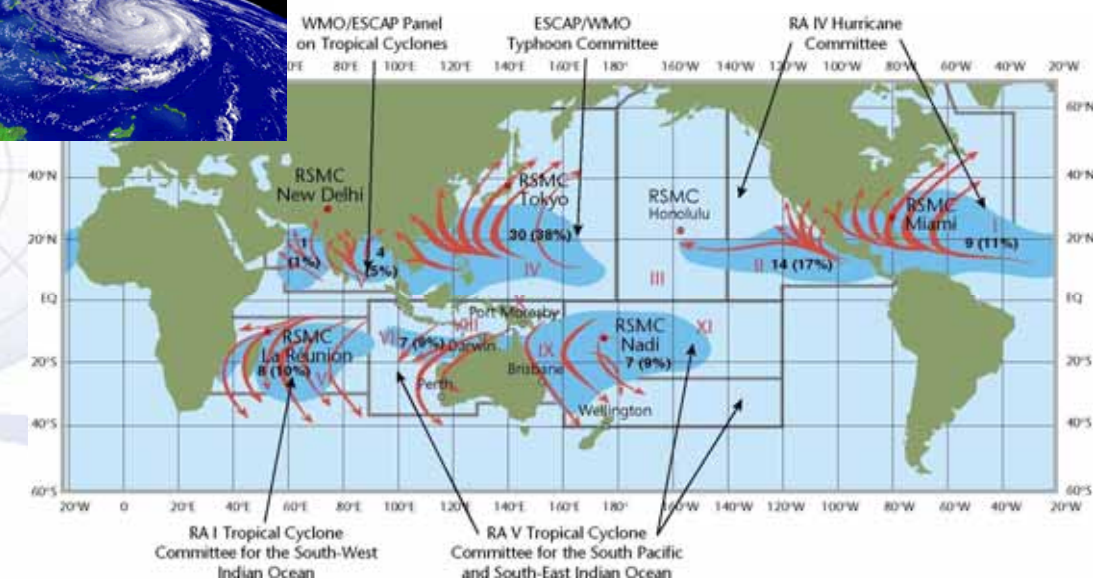
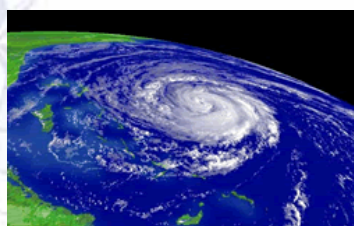
Global Telecommunication System

3 World Meteorological Centres

40 Regional Specialized Centers

NMHSs deliver data and early warning services

WMO's Global Tropical Cyclone Early Warning System



Despite Technical Progress Many Major Challenges ...

- Legislation and policy level
 - Disaster risk reduction structures, roles and responsibilities, data and information sharing
- Organizational
 - Resources, recognition, turf issues (incentives for collaboration!)
- Technical and operational
 - Sustainability, relevance, coordination
- Relevant scientific and technical information to empower decision-making
 - Untapped resources
- Communication, information sharing to risk management authorities, to people at-risk
- No feedback loop

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How Can we do Better?

Fourteenth WMO Congress (May 2003) initiated *WMO major programme on Natural Disaster Prevention and Mitigation ... to enhance cooperation and collaboration in the field of natural disaster activities*

Shift from a technology driven strategy to a more holistic approach to address the challenges ...

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Implementation Elements of the New WMO Strategy ...

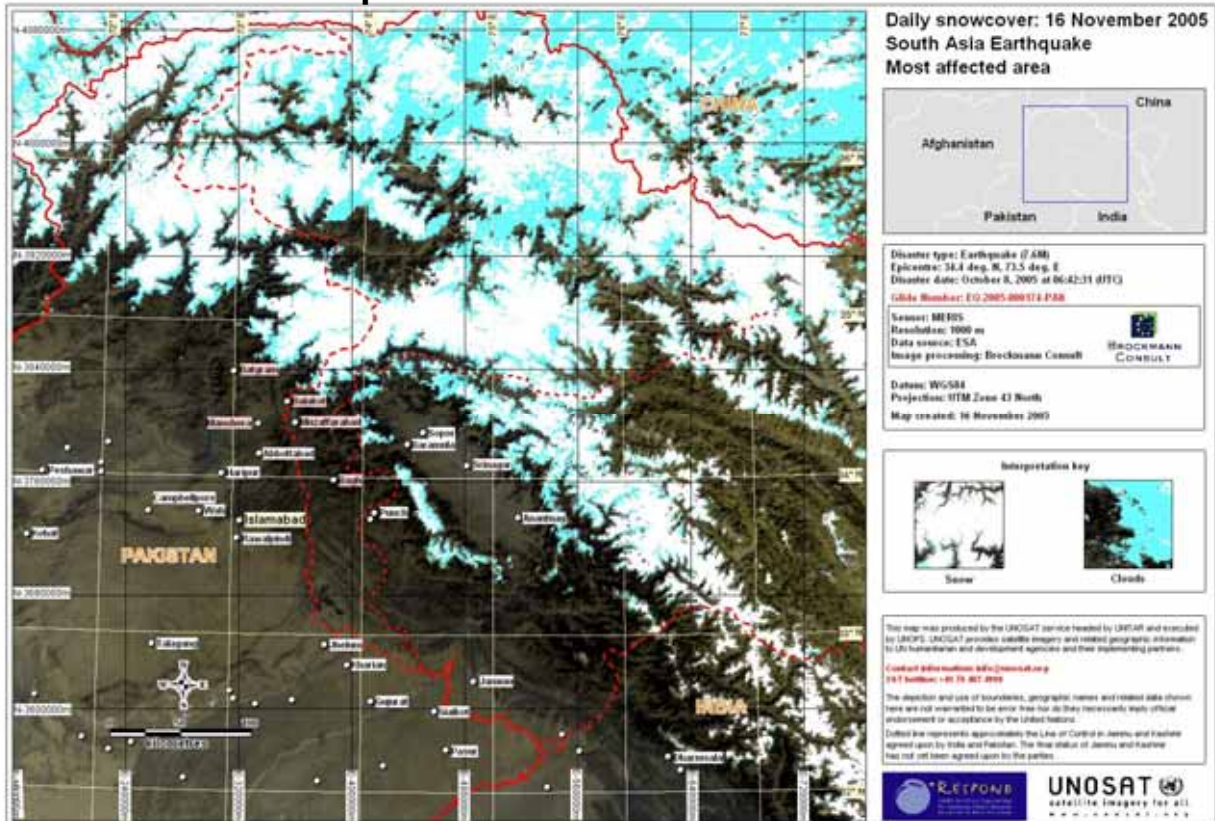
- Advocacy at the political level
 - Disaster Risk Reduction, particular focus on prevention
 - Benefits of hydro-meteorological technical services as a resource
 - Organizational capacity and inter-organizational collaboration
 - National data sharing policies
- Programmatic
 - Prioritization, systematic approach to address major gaps and needs
 - Build user-interface, communication, feedback loop
- Capacity Building & Deliverables of the NMHSs
 - Sustainable operational and technical capacity, linkage to users
 - Early warnings, Hazard Mapping, Hydro-meteorological hazard data for risk assessment, Education and public Outreach

Coordination, Strategic Partnerships

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South-Asia Earthquake



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Recommendations

- Global advocacy
- Risk identification and risk assessment
- Portfolio of financial risk transfer mechanisms for developing countries

User interface to motivate coordinated applied science programmes relevant for decision-making

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<http://www.wmo.int/disasters>