Scientific information, technology, innovation and social responsibility

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Science, technology, innovation and social responsibility
Meteorology and systematic observations

Remarks on the present state of meteorological science
by John Ruskin (1839)

“Meteorology desires to have at its command, at stated periods, perfect systems of methodical and simultaneous observations”
A telegraph operator in 1898

Synoptic map of a cyclone in the Gulf of Aden in May-June 1885

WMO and the *réseau mondial*
Global infrastructure for meteorological observations
Meteorology is big science

Tropical cyclone approaching Yemen on 10 November 2015
In 2014 the amount of GHG in the atmosphere reached a new record high.
Since modern records started, each period of 30 years has been warmer than the previous one.
The development agenda 2030

Weather and climate information will provide an actionable tool for climate adaptation
Technology and Sustainable Development Goals

- International cooperation, knowledge sharing and improved coordination mechanisms
- Development, transfer, dissemination and diffusion of environmentally sound technologies
- Technology bank and science, technology and innovation capacity-building mechanism

Strengthen the means of implementation and revitalize the global partnership for sustainable development
Successful adaptation will require substantially increased investment in climate services.
Ethical principles: the case of climate change

Examples of ethical principles proposed by UNESCO/COMEST

- Solidarity of humankind
- Resilience
- Sustainability
  - Frugality
  - Renewable energy
  - Reforestation
- Precautionary principle
- The duty to share scientific knowledge
- Integrity of scientific research
  - Access to an adequate scientific knowledge base
  - Risk assessment
  - Integrity of climate science

Today, knowledge on climate change is much stronger and sounder than in 1992: ignorance or even uncertainty cannot longer be used as excuses for not acting
Weather reports for the future – happening now

TF1 - France

18 août
2050

Look at this mass of extremely hot air which covers the whole of Europe.

www.wmo.int/media/content/weather-reports-future-0
Thank you
Merci