Photo: F. Zwiers

Group 2: Improving capacity for collection, management and use of observational data

Outline

- Objective
  - Seek recommendations for the collection, management and use of observational data including through enhanced capacity and enhanced technical capacity as well as technical infrastructure
- Structure of the discussion
  - Collection and management of observational data
  - Use of observational data
- Benefited from a very wide range of perspectives, ranging from that of
  - producers of observations, to
  - users as scientists,
  - users as policy makers, and
  - interested parties in the private sector

Collection and management of observational data

- Specific need is to facilitate adaptation
  - need both high quality climatic data (in the broad sense, including land surface parameters, etc) and non-climatological data

Photo: F. Zwiers

Collection and management of observational data

- **Recommendation 1**: Countries catalogue and evaluate their climatic and non-climatic data holdings, assessing
  - the adequacy of networks from an adaptation perspective, ensuring that networks are of sufficient density and that they gather the elements needed to satisfy their adaptation needs and those that are needed to meet regional and global data exchange obligations
  - The assessment should also consider the practicality of collecting, organizing and documenting local and traditional knowledge
  - the efficacy of data collection, quality control, and documentation systems
  - the accessibility of the various data collections to users
  - the extent to which datasets "talk" to each other (i.e., the ease with which multidisciplinary teams using this data can access and interlink various types of data needed for adaptation)
- In making this recommendation it is recognized that climate data remains fundamental and of primary importance, but that convenient access to high quality, well documented non-climatic data is also required

Collection and management of observational data

- **Recommendation 2**: That countries use their assessments to develop integrated management and collection systems capable of providing the information required for adaptation

- **Recommendation 3a**: That countries undertake the training of multi-disciplinary teams of specialists that are expert in the full spectrum of data and observations that are needed for adaptation

Photo: F. Zwiers

Use of observational data

- The discussion here focussed extensively on the information for adaptation that is obtained from observational data
- Fundamental to appropriately using the data for adaptation is to ensure that countries have the capacity to use the data in their archives
- **Recommendation 3b**: That countries undertake the training of multi-disciplinary teams of specialists that are capable of interpreting observations of change in climatic and non-climatic data, and effectively communicating that information to policy and decision makers, and other users.

Use of observational data

- In order to use observation data most effectively, it is necessary to maintain dialog with those who use the information that is generated, both to inform users about the conclusions that can be drawn from observations, but also to inform analysts and researchers of the directions that they should pursue to best meet adaptation information needs
- **Recommendation 4**: That countries ensure a continuing dialog between its scientific adaptation research and development establishment, and its policy and decision makers, both in the public and private domains

Use of observational data

- Information used in policy and decision making, whether it is derived from direct observations or from observations that have been synthesised with the aid of models, is subject to uncertainty. Decision makers must be aware of the risks represented by this uncertainty, and take those risks into account in their decision making
- **Recommendation 5**: That countries ensure that their data and information systems include assessment and documentation describing the uncertainties that affect the data and information provided by those systems. This includes the provision of comprehensive meta data, assessment of the possible effects of limitations in observing network coverage, assessments of modelling uncertainties (e.g., when down scaling large scale information to finer scales), etc.

Use of observational data

- It is also recognized that there is information that is now available that is essentially free of uncertainty, and that this can be used to inform many adaptation decisions.
- **Recommendation 6**: In communication information to policy makers and users that is derived from observations, we should also clearly communicate information that is felt to be essentially free of uncertainty.