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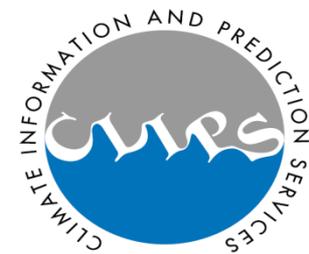
WMO WCRP IPY Workshop on CLIPS in Polar Regions: Climate Product Generation, User Liaison and Training

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CLIPS in Polar Regions



There is a need for consistent, useful, operational climate information, products and services for high latitudes:

Rapid change is affecting traditional way of life, health and safety; threatens land-based, freshwater and marine species



Industry including land and marine transportation, mining, oil and gas exploration and energy production must consider climate variability and change in planning and operations





WMO OMM

CLIPS in Polar Regions



Thawing permafrost is leading to additional GHG emissions, coastal erosion and damaged infrastructure



Tourism could open up, with both positive and negative implications for the local population and the environment at high latitudes



Problems that need climate input

- Community or airstrip relocation due to sea level rise, flooding, coastal erosion, or permafrost degradation
- Flood induced contamination of freshwater supply
- Protection of species
- Siting of energy development facilities (oil, gas)
- Fire safety (ecosystems and human communities)
- Safety of people engaged in traditional food-gathering activities
- Etc.

Courtesy Amy Holman





Context

- It can be a challenge to provide information and services to populations living and working in these challenging and remote environments.
 - Technology and automation both help and hinder delivery of valued services:
 - automated observations of the climate, semi-automated production of forecasts, automated service delivery mechanisms do ensure that some information flows to users
 - lack of provider-user interaction hinders uptake/use
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Questions

- Environmental, economic, political and social conditions at high latitudes are changing rapidly....People, sectors, governments need climate information...every day; decisions will not wait until we have better observations, better predictions...
 - Can we find a way to ensure they have high quality, useful products and services, reduce uncertainty, build resilience?
 - There is a need to identify vulnerability and climate information requirements, to improve the flow of useful information for decision-making, and to facilitate effective use of this information through improved liaison with user groups.
 - Can we identify opportunities for collaboration between NMHSs, northern organizations, partners and other stakeholders to do this?
 - What are the risks of inaction?
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PolarCLIPS Workshop Objectives

- To bring together climate and user representatives with interests in polar regions
 - To share information and identify requirements for climate information, products and services,
 - To engage in awareness and technical training and, ultimately,
 - To assess the potential for extension of the concept of Regional Climate Outlook Forums (RCOFs) to high latitudes (i.e. establish PCOFs)
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Polar CLIPS Workshop sessions

- Overview of international climate science programmes for polar climate;
 - Climate variability and change in Polar Regions;
 - Status of products and services relevant to polar communities;
 - Potential stakeholders, their vulnerability to climate and on how to identify their requirements for climate information;
 - Development and communication of information, products and services; and
 - Outstanding challenges.
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PolarCLIPS Workshop Recommendations (1)

- Exploit climate data – especially new IPY datasets
 - Measure the ECVs; Promote polar ‘supersites’
 - Correct precipitation datasets for known biases
 - Improve remote sensing of rainfall and snowfall
 - Promote free/open exchange of climate information
 - Conduct research into downscaling and improving predictions – improve models for high latitude areas
 - Develop/share statistical tools (e.g., for extremes)
 - Provide climate monitoring products to users, with information on interpretation and use
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PolarCLIPS Workshop Recommendations (2)

- ID the climate vulnerability of users at high latitudes and needs for climate information to address these – surveys
- Improve interdisciplinary collaboration and user liaison
- Develop new info and operational products for decision-making
- Develop the concept of PCOF as a viable operational mechanism to facilitate user services and feedback
- Publish PCOF concept in peer-reviewed journal
- Build capacity, including technical training for providers and joint efforts for providers and users together

Report available at:

http://www.wmo.int/pages/prog/wcp/wcasp/seriespubs/documents/WCASP78_TD1509.pdf

Continuity, accountability \Rightarrow capacity



Traditional knowledge face to face
with modern science:
Involving affected communities
brings a wide array of benefits



A modern glass skyscraper with a UN flag on top. The building is curved and has a grid-like structure. The sky is blue with some clouds. There are green trees in the foreground.

Thank you

Merci

Спасибо

Gracias

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