



COMPENDIUM OF CANADA'S ENGAGEMENT IN INTERNATIONAL ENVIRONMENTAL AGREEMENTS AND INSTRUMENTS

Memorandum of Understanding between China Meteorological Administration (CMA), People's Republic of China and Meteorological Service of Canada (MSC), Environment and Climate Change Canada (ECCC) on Cooperation in Science and Technology Related to Meteorology, Hydrology, Environmental Predictions and Climate Change

SUBJECT CATEGORY:

Meteorology

TYPE OF AGREEMENT / INSTRUMENT:

Bilateral

FORM:

Memorandum of Understanding

STATUS:

- Signed by Canada June 18, 2016
- Ratified by Canada June 18, 2016
- In force in Canada June 18, 2016
- In force internationally June 18, 2016
- Will be reviewed prior to its expiration on June 18, 2021.

LEAD & PARTNER DEPARTMENTS:

Lead: Environment and Climate Change Canada

Partner: China Meteorological Administration (CMA)

FOR FURTHER INFORMATION:

Web Links: N/A

Contacts:

[ECCC Inquiry Centre](#)

COMPENDIUM EDITION:

February 2017

PLAIN LANGUAGE SUMMARY

This agreement serves as a foundational framework for cooperation between Canada and China on a wide range of environmental topics, such as meteorology, hydrology, environmental predictions, and climate. The agreement formalizes the relationship that Canada has with China in these areas. It helps to improve Canada's quality of data, understand and anticipate new approaches to environmental predictions, and to work closely with China, an important country in global cooperation, and in Asia specifically. An interesting fact of this agreement worth highlighting is the recent development of joint publications and general cooperation between Canada and China in the area of climate extremes and climate observations.

OBJECTIVE

The Memorandum of Understanding (MOU) outlines the responsibilities of the Parties regarding collaboration on science and technology (S&T) as related to meteorology, hydrology, environmental predictions and climate change towards mitigating the social and economic risks and impacts caused by vulnerabilities to atmospheric and climate change and variability.

KEY ELEMENTS

This MOU recognizes the long-standing cooperation between the Parties and is intended to facilitate the exchange of information, technology, and management practices and to supply a mechanism through which future efforts can be coordinated.

EXPECTED RESULTS

This agreement is expected to:

- advance the development and application of S&T in Canada;

- improve the global quality and availability of critical meteorological, climatological, hydrological and related data;
- improve Canada's ability to anticipate and influence/improve the deployment of new approaches and scientific advances for weather and environmental predictions;
- assist China in addressing environmental problems which also impact Canadians;
- encourage and influence a greater engagement of China in environmental programs of global interest;
- enhance and improve the quality of Canada's advice on global environmental issues and science assessments.

CANADA'S INVOLVEMENT

This agreement is important to Canada as it formalizes Environment and Climate Change Canada's longstanding cooperation with the China Meteorological Association (CMA). China and Canada share many common interests including the use of Earth Observation to develop the tools, knowledge and expertise to improve environmental and natural resource information. China is an important player in multilateral fora and a major force in Asia. China's significant influence extends beyond the World Meteorological Organization, particularly on cryospheric issues, the Intergovernmental Panel on Climate Change and the intergovernmental Group on Earth Observations (GEO).

This agreement is implemented in Canada through two year workplans, with quarterly updates from project leads.

RESULTS / PROGRESS

Activities

The current workplan is organized under five themes: I) Health and Safety; II) Earth Observations; III) Climate Variability and Change; and, IV) Sustainability. Some recent activities include:

- Canada hosted a CMA delegation in September 2015, to celebrate accomplishments from the concluding XII workplan and confirm deliverables for the XIV workplan. Additionally the delegation was provided the opportunity to visit two MSC operational centres for further discussions and information sharing.
- Support in the areas of environmental monitoring, emerging environmental prediction, monitoring and science through accelerated developments in dual-polarization radar and radar quality control.
- Scientific collaboration on satellite retrieval techniques for snow cover information and evaluation of ECCO satellite snow cover retrieval techniques over study sites in China.
- Data exchange to homogenize surface observations.

Reports

Canada and China produce a summary report at the end of each Joint Working Group, which provides an overview of past activities and reviews the workplan for the next two years. A report was completed in September 2015.

Results

Selected results include:

- Collaboration related to experiment design and snow measurement instrumentation which will contribute to achieving objectives under the Global Cryosphere Watch (GCW) Snow Watch Task Team.
- Good progress has been made regarding the cooperation on techniques and statistical methods for the detection and attribution of changes in climate extremes
- Joint publications in the areas of climate extremes and climate observations.