

Climate Task CL-06-05

Task Number	Title
CL-06-05	Coordinate with the International Polar Year (IPY) to enhance the utilization of Earth observations in all appropriate realms (including, but not limited to, sea and land ice, permafrost, coastal erosion, marine and terrestrial ecosystem change, biodiversity monitoring and impacts of increased resource exploitation and marine transport).
Area	
Climate	
Relevant Committee	
UIC	

Description of the Work to be Performed

1. Identify IPY activities and projects most relevant to GEOSS implementation and to which GEO can significantly add value.
 1. Consider projects in line with 2006 GEO Work Plan and promoting: data interoperability; open and timely data access; recovery of relevant historical data; improved exploitation of available polar observing systems, logistical assets and infrastructure; development of new technological and logistical capabilities.
 2. Engage with bodies representing a community of practice for Arctic Earth observation use and monitoring.
 3. UIC RECOMMENDATION: "Research" has been removed to ensure a focus on a broader user set
2. Promote the development of these activities and projects.
 - Increase participation through advocacy for international collaboration at organization-, government-, and/or agency- level to (i) facilitate the collection of concurrent synoptic observations at various locations and (ii) provide international access to field sites that support polar regions observation and monitoring.
 - Develop cross-cutting aspects. Help connect scientific communities to (i) address interdisciplinary issues and possibly expand the use of specific methodologies to new disciplines; (ii) develop multi-purpose observation systems e.g. systems that cover multiple geophysical phenomena; and (iii) explore how to create linkages among observational and modeling communities on a regional basis.
 - Advocate funding for under-funded activities including data management and the operational implementation of relevant observation system components.
3. Ensure that project outcomes are integrated into the longer scheme of GEOSS implementation.
 - Contribute to the development and implementation of the IPY Data Management strategy. Support the Data Policy and Management subcommittee and the Data and Information Service to ensure that (i) all data collected as part of the IPY 2007-2008 are stored in a user-friendly format and will be accessible via the web in the future; (ii) IPY 2007-2008 leaves in place a system of data and information management that makes it easy for the polar research community to continue to store, find and distribute scientific data collected in the polar regions.
 - Identify and initiate further actions to make IPY project-outcomes durable (e.g. new observing sites & facilities to support polar research and monitoring). Create a plan to facilitate the transition of relevant observation system component (e.g. forecasting systems) from research to operational status.

Output & Deliverables

Plans of action to ensure the durability and sustainability of GEOSS-relevant IPY project outcomes.

Calendar (incl. milestones)

- (1) Q2 2006
- (2) Q2 2006 - Q4 2008

Climate Task CL-06-05

(3) Q2 2006 - Q4 2008

Financial Contributions (from GEO Operations Budget)

none

Actual Project Costs

NOTE: This is intended to report on the actual, consolidated cost of the task. It should contain and estimate of the contributions made to date to this task such as manpower, materials, travel costs, etc.

Current Status

No Task Point of Contact has been identified for this task yet.

A workshop is currently organised by IGOS-P and CliC to lead the IGOS cryosphere Theme plan towards implementation. Within that plan the link to IPY projects and in particular the integrated Arctic Ocean Observing System (iAOOS) and the IPY project Climate of Antarctica and the Southern Ocean (CASO) addressing the extension of utilisation of Earth observation remote sensing data for cryospheric research and also addressing Cal/Val issues is to be strengthened.

Coordination with other tasks of committees

GEO Member Potential Contributions Reported to date

GTOS

GTOS, through the GTOS Sec, will advocate the coordination with the International Polar Year (IPY) to enhance the utilization of Earth observations within the current proposed GTOS and GTOS partner activities for 2006.

ITALY

APAT Project: Technical and scientific assistance to the Ministry of Environmental and Territory for organising a national data base on GHG emissions.

Specific tasks by societal benefit area/Ecosystems, Agriculture, ClimateGeo Transverse activities

The ENEA Special Project "Global Climate" (CLIM) includes different projects, programmes and ENEA institutional activities/tasks. In general, the Project is aimed to provide scientific contributions to the national and international research on climate studies, with specific attention to the south-Europe and Mediterranean area. In particular the Project activities:

- contribute, on international basis, to improve scientific knowledge about climate process and its environmental impact;
- carry out in situ measurements and utilize space Earth observation in order to study and evaluate socio-economic and environmental impact of climate changes;
- support Italian Public Administration to manage environmental protection initiatives and to participate to the international Conventions on global change. <http://clima.casaccia.enea.it>

INGV: Contributing with ENEA to IPY International Polar Year activities

PORTUGAL

Set-up of two UV-Vis Spectrometers SPATRAM, one at the at the Italian Antarctic station of Terra Nova Bay (74.7S, 164.1E) and the other at the Italian-French Station of Dome/Concordia (75 06'S; 123 21'E) respectively for the measurements of the total column of Ozone and Nitrogen Dioxide and for the measurement of the above mentioned minor gases in directions different from the zenith in order to obtain not only the total column but also the vertical distribution of the analyzed atmospheric compounds.

Climate Task CL-06-05

Germany

German Antarctic Receiving Station (GARS) at O'Higgins Antarctica capturing critical polar data (such as GOME)

Japan

JAMSTEC will organize a symposium of related projects, such as Climate and Cryosphere (CliC).

"Take charge the bureau of National Committee for IPY. NIPR is the core Institute for Antarctic and Arctic research, and acts the role of planning and operation for IPY in both polar regions."

IGOS-P and CliC

On behalf of the IGOS partners, the IGOS Cryosphere Theme and the WCRP Climate and Cryosphere (CliC) International Project Office propose to work with other partners of the IPY 'State and Fate of the Cryosphere' project and the IPY GIIPSY Project to organize and convene a workshop in October 2006 at ESA ESTEC, the Netherlands.

This coordination workshop will contribute to GEOSS. The IGOS Cryosphere theme in conjunction with the CliC International Project Office aims for significant progress towards realizing an effective, integrated, cross-boundary approach for cryospheric observations through the IPY. A coordination plan will be generated.

The IGOS Cryosphere theme requests 15,000 USD in 2006 in order to develop and implement the above workshop and to respond to the integration and coordination challenges and opportunities that have arisen through the advent of GEO.

Relevant EC Projects

DG-RTD, DAMOCLES (Caisse des Dépôts et Consignations, France, Jean-Claude Gascard, gascard@lodyc.jussieu.fr)