



GEO Data providers workshop 20, 21 April 2017, Florence, Italy



European Region

Data provider short description.

Name: ILTER – International Long Term Ecosystem Research

Websites:

<http://www.ilternet.edu> (the website is being overhauled, a new version will be launched soon).

<https://data.ilter-europe.net/deims/>

Long-Term Ecosystem Research (ILTER) is an essential component of world-wide efforts to better understand ecosystems and the environment we depend on. Through research and long-term observation of representative sites around the globe, ILTER enhances our understanding of the structure and functions of ecosystems, which provide essential services to people. ILTER contributes to the knowledge base informing policy and to the development of management options in response to the Grand Challenges under Global Change.

ILTER capitalizes on research infrastructures such as the in-situ network of sites and information technology. Thousands of research projects have been carried out taking advantage of this infrastructure. The increasing complexity of ecosystem research led to the networking and global organization of ILTER.

ILTER consists of networks of scientists engaged in long-term, site-based ecological and socio-ecological research. ILTER improves the understanding of global ecosystems and thereby provides the prerequisites for knowledge-based solutions to many current and future environmental problems.

How do you contribute to the GEO Vision?

ILTER's vision is a world in which science helps prevent and solve environmental and socio-ecological problems. ILTER contributes to this scenario through question and problem-driven research with its unique ability to design collaborative, site-based projects, compare data from a global network of sites and detect global trends.

This vision is clearly in line with the GEO vision to realize a future where decisions and actions, for the benefit of humankind, are informed by coordinated, comprehensive and sustained Earth observation information and services.

Type of organization: governmental- NGO- UN..etc.

International Association (registered in Costa Rica), umbrella organisation of national associations, insofar a network of networks.

Type of data: Thematic description

Time series of ecosystem related data, covering a very wide range of topics, both data on biodiversity and non-biotic topics. Examples are: Soil, groundwater and surface water chemistry; air, soil, water temperature; gaseous and particulate compounds of atmospheric deposition; biodiversity observation on species, population dynamics, plant growth, and biomass in various habitats and phenology; socio-cultural assessments and sustainability criteria and indicators

Data policy adopted by your organization:

ILTER works towards an open data policy. Currently, a part of the data sets of ILTER's members are openly available whereas for other data sets different kinds of restrictions apply.

Already brokered or not by the GCI

No.

For newcomers:

- ***Why you are interested to join GEO- GCI***

ILTER provides via its meta-data portal DEIMS (Dynamic Environmental Information Management System) access to a wide range of in situ data. These data are in several regards valuable for the GEO communities:

As complementary information to satellite based remote sensing data

As a source of information to enable compound data products consisting of remotely sensed and in situ measured data

As a basis for calibrating and validating satellite data

ILTER runs a global site registry within its DEIMS. This registry goes beyond LTER sites, e.g. the Biosphere Reserves also register sites in it, or the Critical Zones Observatories. This registry is a valuable addition to the GCI because it enables an overview of existing in situ monitoring sites and also searches for particular sites, e.g. related to specific biogeographical zones.

ILTER is interested in and possesses the potential to be part of the nucleus of a GTOS successor. There has already been an informal exchange in this regard with other networks, e.g. Fluxnet.

- ***How GEO could benefit your organization***

ILTER covers a wide range of in situ measurements, and expects that an increased supplementary usage of remotely sensed data would help to interpret its data sets, especially in terms of upscaling. As a global network of national in situ monitoring networks, ILTER is always interested in widening its involvement and interaction with other globally operating pertinent initiatives for a mutual exchange of knowledge. Global collaboration regarding environmental monitoring increases ILTER's efficiency in that it can on the one hand join forces with other networks and on the other hand avoid duplication of work.