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SCANNET – Scandinavian/North European Network of Terrestrial Field Bases

SCANNET is an expanding network of field site leaders, research station managers and user groups in parts of the Arctic that are collaborating to improve comparable observations and access to information on environmental change in the North Atlantic Region and beyond. At the outset SCANNET consisted of 9 sites, at present the SCANNET consortium consists of 17 partners that represent large geographical gradients in environmental conditions and land use throughout the North Atlantic Region, west Greenland and Siberia. SCANNET partners hold environmental data sets, provide stability for research and facilitate long-term observations in terrestrial and freshwater systems.

SCANNET is set within the context of major environmental and land use changes in the North and is as relevant today as it was at its inception in 2001. Globalisation of economy, markets and policies, impacts of climate change, trans-boundary pollution, subsidiarity, changes in land-use and other issues increasingly influence Northern terrestrial ecosystems and quality of life. Biodiversity, environmental quality and ecosystem function are under threat in these cold-dominated areas which represent the largest, relatively undisturbed, 'wilderness' of Europe and beyond. Changes within the region also have significant effects on conservation and resource use in lower, temperate latitudes. The overall objective for SCANNET has been to establish a network, which facilitates comparative and regional environmental science activities aimed at addressing questions of variation in system sensitivity and response to environmental change. Central aims of the project are to strengthen the capacity of Field Stations to store and access data and information for their own use; to enhance cross-site compatibility and exchange of data and information and to provide data and information to organisations concerned with national, regional and global policy.

Data on climate variability, climate scenarios, variability in biodiversity, variability in species performance and variability in human dimensions has been compiled for the SCANNET region and made easily available on the SCANNET web site. In addition, the meta databases of environmental monitoring activities, the site specific conditions in the North Atlantic Region, west Greenland and Siberia, the searchable bibliographies of research at the sites, the data bases and the compilations and summaries of data submitted in reports together provide highly accessible information. Not only has access to existing but previously widely distributed data been improved, but some previously unavailable data have been made available. Such information is already having an impact on the research community. The information now available can facilitate general overviews of the environments in the North Atlantic Region as well as in depth studies, for example the frequency of extreme climatic events.

SCANNET's output is benefiting six main groups of users at three geographical scales: local, regional and global. The main user groups are local communities, larger organisations, scientists, and international organisations. SCANNET is contributing to the need for more integrated monitoring in the North-Atlantic region, west Greenland and Siberia and improving the provision of data from these areas to regional and global observing systems. By operating an expanding network of field sites, linking and participating in other relevant networks (e.g.

Circumarctic Environmental Observatories Network - CEON), and by generating an accessible meta-database and database on environmental information, SCANNET is continuing to strengthening the regional infrastructure that is required to exploit existing data and observations of the impacts of changes in climate and land use.

The administrative matrix to cement SCANNET into a fully functional network is being provided by a Secretariat that ensures information flow among SCANNET partners and between SCANNET and the wider user community. Newsletters are regularly produced but a web site is our main method of making data more accessible. It includes a wide range of information including details of the Stations' infrastructures, research emphases, environmental and land use envelopes and databases with Internet interfaces.

SCANNET now provides a one "stop-shop" for environmental information in the North Atlantic region, West Greenland and Siberia. All SCANNET partners have signed a Memorandum of Understanding that ensures that we will continue our work together to make environmental data more easily accessible. SCANNET will hence also in the future provide a stable platform for research and environmental monitoring in these areas and beyond.