CryoNet covers all components of the cryosphere - glaciers, ice shelves, ice sheets, snow, permafrost, sea ice, river/lake ice - through an extensive approach of standardized in situ observations.

CryoNet is an immediate priority in GCW development

The core Global Cryosphere Watch (GCW) surface-based observational network, called CryoNet, is comprised of stations with varying capabilities. It builds on existing cryosphere observing programmes and promotes the addition of standardized cryospheric observations to existing facilities in order to create more robust environmental observatories.

General objective of CryoNet

CryoNet is a comprehensive network of cryospheric *in-situ* observations. Its aims are:

- extensive monitoring of the cryosphere through **GCW (standardized) practices** for cryospheric observations;
- providing **cryospheric data** for improved process understanding and modelling;
- providing **calibration and validation** data for satellite data;
- linking **cryospheric ground truth** observations to cryospheric models;
- training in measurement methods.

“**IUGG urges snow and ice scientists, practitioners, and scientists from related disciplines to adopt these new schemes as standards.”**
The GCW surface observation network is comprised of core component, CryoNet, and contributing stations that are not part of CryoNet. The basic component of the GCW network is the Station. A station measures one or more components of the cryosphere and one or more variables of each component, for example the depth and density of snow. CryoNet stations must meet a minimum set of requirements, which includes providing ancillary meteorological measurements. A CryoNet Cluster generally encompasses an area greater than a conventional observing station and is comprised of two or more active GCW stations with varying capabilities that are operated as a coordinated unit. At least one station in a cluster has to be a CryoNet station. A cluster may encompass several micro-climatological regions or extend over larger altitudinal gradients.

Why be a part of CryoNet? GCW will drive performance and provide motivation for high quality observations. Being a CryoNet station means being part of an international, operational, global observing system and thus providing observations of known quality for research and operations. Being part of a global network brings better visibility and a recognition of the importance of your observations. GCW promotes the exchange of data, so CryoNet sites may see broader use of their data and products. For more information visit globalcryospherewatch.org.