

## Modern structure and dynamics cryolithozone the Barents and the Kara seas

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On the basis of results of interpretation electroprospecting and seismic works, logging the analysis paleogeographical and paleoclimate data the basic types cryolithozone are revealed and its structure is studied.

The map of types cryolithozone of the barents-kara a shelf is constructed.

Its roof is opened by drilling in a range of depths from 20-30 to 40-50? below a bottom surface. Its sole lies down on depth 70-100?.

The map on which the distribution areas are allocated is constructed:

- Single-layered cryolithozone, presented upper-Pleistocene – Holocene deposits ;
- Single-layered relict permafrost;
- Two-layer relict permafrost;
- Three-layer cryolithozone, presented Holocene and two-layer relict permafrost;
- Three-layer cryolithozone, presented Holocene and two-layer relict perennial cooling permafrost;
- talic postcryogenic permafrost.

The estimation of the factors influencing changes of a condition cryolithozone is made

Negative temperature on a bottom surface promote preservation of position of a permafrost, positive - to its lowering.

Change of position of a sole cryolithozone is connected with influence of the positive temperature gradient provided with receipt of a thermal stream from below.

Steady law of fall of benthonic temperature from the south on the north is established. Position of cryolithozone connection is established with bottom geomorphology.

The map of cryogenic geodynamics of a shelf of Barents and Kara seas is constructed.

On it the areas cryolithozone the characterised are allocated:

- A stable condition; The areas located in limits southern - barents syne?lise and ludlov mega - saddle
- Moderate thawing from below; The area located in limits the Novaya Zemlya trench; Sites, basically, are located in the field of negative geomorphological structures, such as it is central- barents syne?lise
- Intensive thawing from below; The basic structures are stretched in parallel coast of Novaya Zemlya through: Novaya Zemlya trench, a megashift of Litke and central kara depression .
- Moderate thawing from above and from below; The site located within the Jugorsky basin and the Central Kara depression .
- Intensive thawing from above and from below; Coastal area kara shelf
- Moderate thawing from above; The considerable area stretched from the south on the north along Novaya Zemlya
- Intensive thawing from above and moderated from below; Area located to the south from Novaya Zemlya
- Intensive thawing from below and moderated from above. The strip stretched from the east on the West in limits north - barents syne?lise and from the south on the north from southern-barents syne?lise to kolguev upland.