

# Dwd

Extremely cold  
subarctic climate

## Location Examples:

- Oymyakon, Russia

study  
By Tian Lan

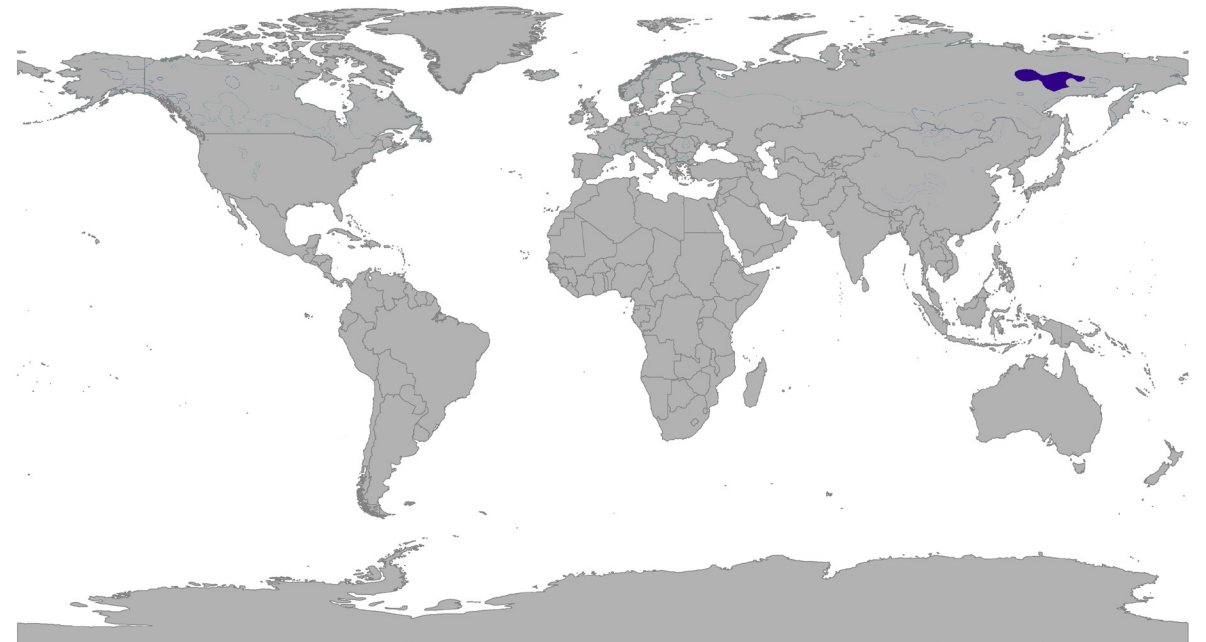
Regions with extremely cold subarctic climate have extremely long cold dry winters, and short, cool to mild summer. In the coldest months, the average temperature is  $-36.4^{\circ}\text{F}$  or below and 1-3 months is above  $50^{\circ}\text{F}$ . It is at least ten times as much precipitation in the wettest month of summer as in the driest month of winter.

This climate includes a small area in the northeastern part in Russia.

Building material in this region requires durability in extreme weather. Another important consideration of building materials is to prevent thermal bridging.

### Sources:

1. <http://www.la.utexas.edu/users/kimmel/GRG301K/grg301k-koppen.html>
2. [https://en.wikipedia.org/wiki/File:Russia\\_K%C3%B6ppen.svg](https://en.wikipedia.org/wiki/File:Russia_K%C3%B6ppen.svg)





# Vernacular Bank in Oymyakon

case study  
By Tian Lan

Location: Oymyakon, Russia



Architect: N/A

Owner: N/A

Year of completion: N/A

Climate: Extremely Cold Subarctic Climate

Material of interest: Wood

Application: Structure and Facade

**Properties of material:** Wood is a versatile and cost-effective material used in a huge variety of applications and situations. It is a renewable material and uses less energy and resources to process compared to many other building materials. As wood has the capacity to store and remove CO<sub>2</sub> from the atmosphere, it can have a particularly beneficial impact on the environment. Wood is also an excellent insulator and can be built faster than many other materials.

**Sources:**

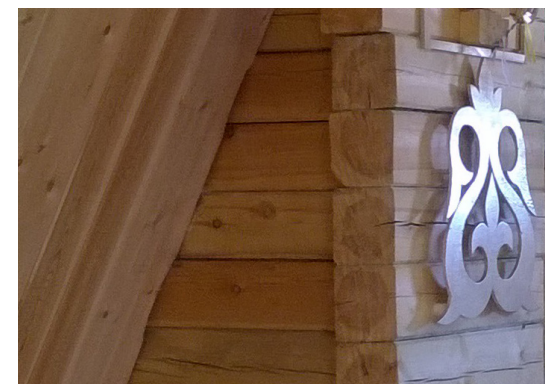
1. <https://www.archdaily.com/771059/shigeru-bans-nepalese-emergency-shelters-to-be-built-from-rubble>
2. [https://www.designingbuildings.co.uk/wiki/Wood\\_in\\_Architecture](https://www.designingbuildings.co.uk/wiki/Wood_in_Architecture)



# Vernacular Cafe in Oymyakon

case study  
By Tian Lan

Location: Oymyakon, Russia



Architect: N/A

Owner: N/A

Year of completion: N/A

Climate: Extremely Cold Subarctic Climate

Material of interest: Wood

Application: Structure and Facade

**Properties of material:** The dominant building material of Russian vernacular architecture, and material culture generally, for centuries was wood. Specifically houses were made from locally-cut rough-hewn logs, with little or no stone, metal, or glass. Traditional, old-style log house construction involved the use of simple tools, such as ropes, axes, knives, and spades. Nails were not generally used, as metal was relatively expensive, and neither were saws a common construction tool.

**Sources:**

1. <https://plus.google.com/photos/photo/116710382920936442579/6538384150351624642>
2. <https://en.wikipedia.org/wiki/Izba>