

What is Denmark Strait Cataract?

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About Denmark Strait Cataract:

- It holds the distinction of being the **largest waterfall on Earth**.
- It is **situated in the underwater channel between Iceland and Greenland**.
- It drops an astonishing 11,500 feet (3,500 metres) from its summit to the ocean floor.
- With a vertical fall measuring 6,600 feet (2,000 metres), it's over **three times the height of the Angel Falls, the world's tallest land-based waterfall**, which stands at just over 3,200 feet (979 metres).
- Stretching across the width of the Denmark Strait, the cataract spans roughly 300 miles (480 kilometres).
- Despite its size, the Denmark Strait cataract **remains concealed beneath the waves** and undetectable from the surface.
- **Formation:**
 - It was formed during the **last Ice Age**, approximately 17,500 to 11,500 years ago.
 - **Glacial activity** in the region **shaped the sloping seabed**, which **now channels cold water from the Nordic Seas into the Irminger Sea** (marginal sea of the **North Atlantic Ocean**).
 - This process **contributes significantly to the thermohaline circulation**, a global system of ocean currents.

Q1: What is thermohaline circulation?

Thermohaline circulation describes the movement of ocean currents due to differences in temperature and salinity in different regions of water. Temperature and salinity change the density of water, resulting in the water to move accordingly. Cold water is usually denser than warm water (4°C is where water is densest). Water with a high salinity is also denser than less saline water. Deep ocean currents are driven by differences in the water density, which is controlled by temperature (thermo) and salinity (haline), hence the name “thermohaline circulation”.

Source: [The earth's largest hidden underwater waterfall: A 11,500-ft giant under the Arctic](#)

Source: <https://vajiramandravi.com/current-affairs/denmark-strait-cataract/>

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