



March snowstorms in Washington, D.C.

The climate in the North is monitored by satellites and scattered meteorologists. The first weather stations were established in 1882, and the present network includes two in the high Arctic, one at Mould Bay on Prince Patrick Island and one at Eureka on Ellesmere. An automatic station on Axel Heiberg Island transmits wind, temperature and barometric pressure information every three hours.

The readings have changed over the years. From 1900 through 1945 the Arctic was warming up, at a rate of one degree Fahrenheit every decade, apparently because volcanic activity had slowed down and the industrial carbon dioxide in

the air was increasing. Then the rise stopped, and between 1947 and 1975 the world temperature dropped half a degree.

These ups and downs may be significant. If the Arctic cap continued to grow, world temperatures would cool and there would be less rainfall and fewer monsoons. This could have a disastrous effect on Asia and Africa. Some 3,500 years ago when the ice cap expanded, the monsoons stopped, crops failed, and the population of northwestern India was wiped out. If the Arctic should warm, the ice cap would begin to melt, and if the melting continued long enough, the coastal cities of the world would sink beneath the oceans' waves.



Jet Stream

Over the last three years the polar jet stream from western Canada has provided much of the United States with a continuous supply of pure Arctic air, making recent winters much more severe than usual.

Bob Ryan, meteorologist with NBC WRC-TV in Washington, D.C., has given the following explanation of how the jet stream works:

The high speed winds of the stream are on the leading edge of the frigid polar air masses. They generally flow from west to east, about ten miles above the earth, moving at speeds from 100 to 200 miles per hour. If the contrast between the cold air from the Arctic and the warm air in the south is