# Debunk Myths About Weather By Ronald Kotulak

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What's causing Chicago's bad weather?

After suffering through record snows and tornadoes, heavy rains and the coldest July 4 in history, many Chicagoans are wondering if man is changing the climate by tinkering with his environment.

Yesterday's low temperature was 50 degrees at Midway airport, breaking the previous record for a July 5 of 52 degrees set in 1872. Tuesday's mean temperature of 59 degrees was the coldest July 4 on record.

## Atom Bomb Theory

According to the skeptical weather bureau, the most popular public theory that supports the reason for the weather changes is the explosion of nuclear bombs.

Coming up fast in second place is the air pollution theory. Advocates of this theory hold that increasing amounts of air pollution are playing havoc with our normal weather.

The space age, with rockets going in and out of the earth's mantle of air, and high flying jets that leave vapor trails are also becoming prime suspects as weather changers.

But the weather bureau discounts all of these theories.

"We have always had unusual weather and people have always looked for an unusual explanation for it," said Joe R. Fulks, chief of the weather bureau's Chicago area office.

Chicago's recent cold temperature was due to a complex combination of clouds, snow, oceans, mountains, forests, winds, and other factors that pushed a mass of chilly air down into the midwest from Canada, Fulks said.

The atom bomb theory looks good to many people because it releases a lot of force and produces fallout, he said. But a small thunderstorm will produce more power than many atomic bombs, Fulks said.

The eruption of a large volcano, on the other hand, can affect the weather because it sends up huge amounts of fine particles into the atmosphere where they can interfere with the radiation or possibly form clouds.

Air pollution may have a small local effect on the temperature but it can't be blamed for causing the massive weather changes that have plagued the Chicago area for the last six months, Fulks added.

#### **Keeps Heat Near Earth**

What does have meteorologists and other scientists concerned, however, is the increasing amount of carbon dioxide that our exhaust pipes and smoke stacks are pumping into the atmosphere.

Some scientists suspect that the carbon dioxide may trap heat that ordinarily escapes from the earth, thereby raising the temperature slightly.

"People will grab at any straw," Fulks said. "In the 1920s some people used to think that because radio was relatively new that it was the radio waves that were causing the unusual weather then."

### Man's Efforts Puny

Fulks said that there is a tendency to associate a man-made cause to weather changes. Chicago's cold weather over the Fourth of July holiday period gave a boost in some circles to the atomic bomb weather theory because it came shortly after the Red Chinese exploded a hydrogen bomb, he said.

"Man's handiwork in whatever form is too small to affect the enormous natural forces that are involved in our daily weather conditions," he said.

"The weather is still natural, still variable, and still ususual." However, the effect of man's creations on the long-range weather pattern is another matter and it is now being studied, he said.

#### Main Factors Known

While weathermen do not know all the factors that affect the weather they do know the main ones. The radiation and warmth from the sun is the over-all controling factor of our weather.

The way of heat is distributed around the world affects the climate. Cloud coverings are important because they block off the heat from the sun, causing the temperature to fall below them.

Other important factors are the temperatures of the oceans, and the geology of the land. Winds are generated when there is a difference in temperatures.



