

As a result of partial American acceptance of these falsehoods, the Soviets are now able to destroy the United States. They have a civil defense; we have none. They have a strategic defense; we have none. They have a practical strategy and soldiers trained to use and win with nuclear devices; we do not.

1. Nuclear Winter: A Nuclear Snow Job

The "nuclear winter" advocates claim that smoke and dust from the effects of nuclear explosions during a nuclear war would obscure sunlight over the earth for an extended period of time. This allegedly would cause the earth to cool so much that we would all, in effect, freeze in the dark.

The nuclear winter hypothesis was first published in *Parade Magazine* in October 1983 by Carl Sagan, and then by Sagan and four co-authors in *Science* in December 1983. Actually this hypothesis had been formally considered by scientists 20 years earlier and has probably been under occasional informal consideration for over 30 years.

Carl Sagan and his co-authors in 1983, however, added a new element. That element was their claim that nuclear winter is a doomsday effect. Moreover, they claimed that this doomsday consequence would occur if as few as 100 nuclear weapons of one-megaton yield were exploded during a very small war.

According to Sagan, "*more than a billion people would instantly be killed*" in a major exchange, but "*the long term consequences could be much worse*" due to "nuclear winter".

Within two years, the scientific community had found so many errors and exaggerations in Sagan's published papers about "nuclear winter" that his nuclear winter doomsday scare had been completely discredited in scientific circles.

Why two years?

First, Sagan published the claims in *Parade Magazine* and then launched a major media campaign *before* he published in the scientific literature. Therefore, only his conclusions and not his supporting arguments were available for review during the early part of his publicity campaign.

Second, the Sagan paper which finally did appear in *Science* was a poorly written "snow job" that was difficult to critique and even more difficult to verify except by detailed and