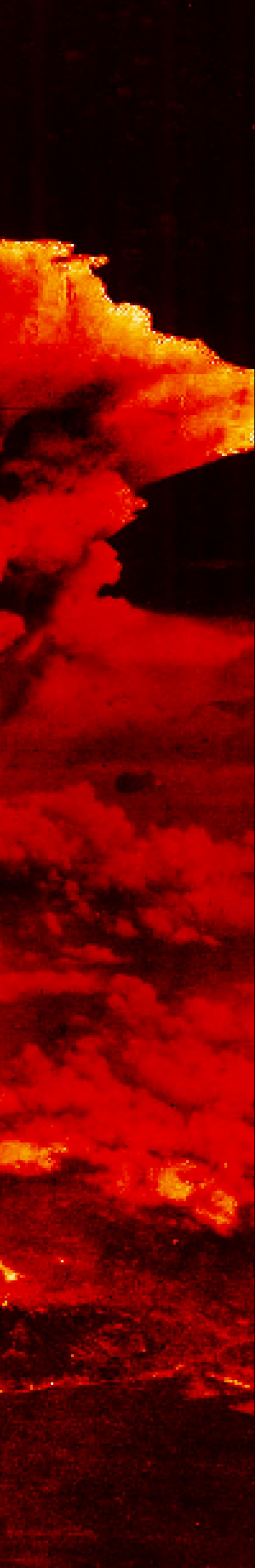




CLIMATE VANGUARD

This is what
a nuclear NUCLEAR WAR PT.2/2
world war
looks like.



In part 1 of this series on nuclear war, we investigated the US' plans for using nuclear weapons. In part 2, we focus on the terrifying outcomes of a thermonuclear World War III, which is the inevitable outcome of a nuclear exchange.

The following slides are primarily based on the book *Nuclear War: A Scenario*, by Annie Jacobsen. Spanning 15 years of research, including interviews with over 40 experts and the latest scientific research, Jacobsen's book is a fact-based depiction of what nuclear war could look like. Like the book, this post offers a detailed timeline of the impacts of a hypothetical nuclear war.

Trigger warning: This post contains graphic details of nuclear war. Viewer discretion is advised.



CLIMATE VANGUARD



The Scenario

An intercontinental ballistic missile (ICBM) enters its terminal phase. It is carrying a 1-megaton thermonuclear warhead.* Two minutes pass.

The missile strikes the heart of a busy city.
The nuclear warhead detonates.

* A thermonuclear bomb uses nuclear fusion, as opposed to an atomic bomb, which uses nuclear fission. A thermonuclear bomb is hundreds, even thousands of times more powerful than an atomic bomb.

Fraction of a Millisecond Passes

The detonation produces a gas that is 100 million degrees Celsius, approximately four to five times hotter than the Sun's core. It radiates its energy through soft X-ray light, superheating the air.

A Few Seconds Pass

A fireball forms, expanding at millions of miles per hour from ground zero.* Its light and heat are so intense that concrete explodes, metal evaporates, and stone shatters. Humans instantaneously dissolve into carbon.

The fireball ignites everything in its path several miles in each direction. Curtains, books, wood fences, clothing, trees all explode into flames. People and animals who don't quickly burn to death suffer third-degree burns. Most will be dead when found.

* Ground zero is the location where the nuclear warhead detonated.



Following the silent expansion of light and heat is a thunderous blast. A tsunami of highly compressed air is unleashed from ground zero, moving at 784 miles per hour (slightly faster than the speed of sound).

This nuclear shock front flattens people, hurls others into the air, bursts their lungs and ear drums, and bulldozes buildings. Objects as large as double-decker buses become airborne like ping pong balls.

35 Seconds Pass

The fireball rises into the atmosphere.
A mushroom cloud begins to form.

A reverse suction effect pulls people and objects back down. They become consumed by fire.

60 Seconds Pass

The mushroom cap grows into the troposphere, higher than where commercial planes fly. Radioactive fallout begins raining down onto the city. More than a million people are dead or dying in less than two minutes.*

* This death toll is estimated for a city with a similar urban density to Washington D.C.



2 Minutes Pass

An inferno comes next. Gas lines explode, tankers burst open, and chemical factories erupt.

Carbon dioxide sinks into basements and tunnels, asphyxiating people in hiding and commuters in their train seats. Those above ground have been blinded by the thermal light of the explosion.

Seven and a half miles from ground zero, hurricane-force winds stoke hundreds, thousands, eventually millions of fires. **The city becomes enveloped in a firestorm.**



8 Minutes Pass

10 to 12 miles from ground zero, survivors are in a state of shock. Tens of thousands have ruptured lungs and need urgent medical care. But they can't find emergency help. The electromagnetic pulse of the bomb has wiped out the electricity grid. No internet, cell service, radio, or TV.

The Next 24 Months

This city is one of thousands engulfed by a thermonuclear World War III. Earth is ablaze.

The fires deposit 150 teragrams (330.6 billion pounds) of soot into the upper troposphere and stratosphere, blocking the sun.* Global average temperatures fall below those experienced in the last Ice Age.

Areas in the northern mid-latitudes – US, Canada, Europe, Central and East Asia – are worst impacted. Places like Iowa and Ukraine are plunged into permanent sub-zero temperatures. Bodies of fresh water are invaded by thick ice sheets. A nuclear winter settles in.

* In the Northern hemisphere, solar radiation would decrease by 70%.
In the Southern hemisphere, solar radiation would decrease by 35%.



Many people who had survived the initial nuclear blast now become **sick from radiation poisoning**. There are no functioning hospitals. It is an excruciating way to die.

Others begin to starve. Nuclear winter has destroyed crops and livestock. Farming is basically impossible. Waterways are either covered in ice or so contaminated from chemicals that aquatic life dies out. **Famine stalks the world, claiming 5 billion lives.***

* This death toll is from a 2022 article published in the journal Nature Food. It is based on a nuclear war scenario between the US, its allies, and Russia.



Those who continue to eke out an existence face never-ending challenges. Once the noxious smog finally lifts, people find that warming rays have been replaced with deadly ultraviolet rays. The ozone layer has lost 75% of its shielding power. The sun blisters human skin within minutes. Survivors are forced underground.

Above ground, “the great thawing begins.” Frozen corpses begin to decompose, leading to massive disease outbreaks.

There is no way to “win” a thermonuclear world war. But imperialist countries, led by the US, have plans to use nuclear weapons in order to maintain their global dominance.

Flanked by the twin extermination threats of nuclear war and ecological breakdown, people across the world must unite in a common struggle against capitalist death, and for eco-socialist life.