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# Nuclear Explosions

*Their History and The Cold War*

1945-2023

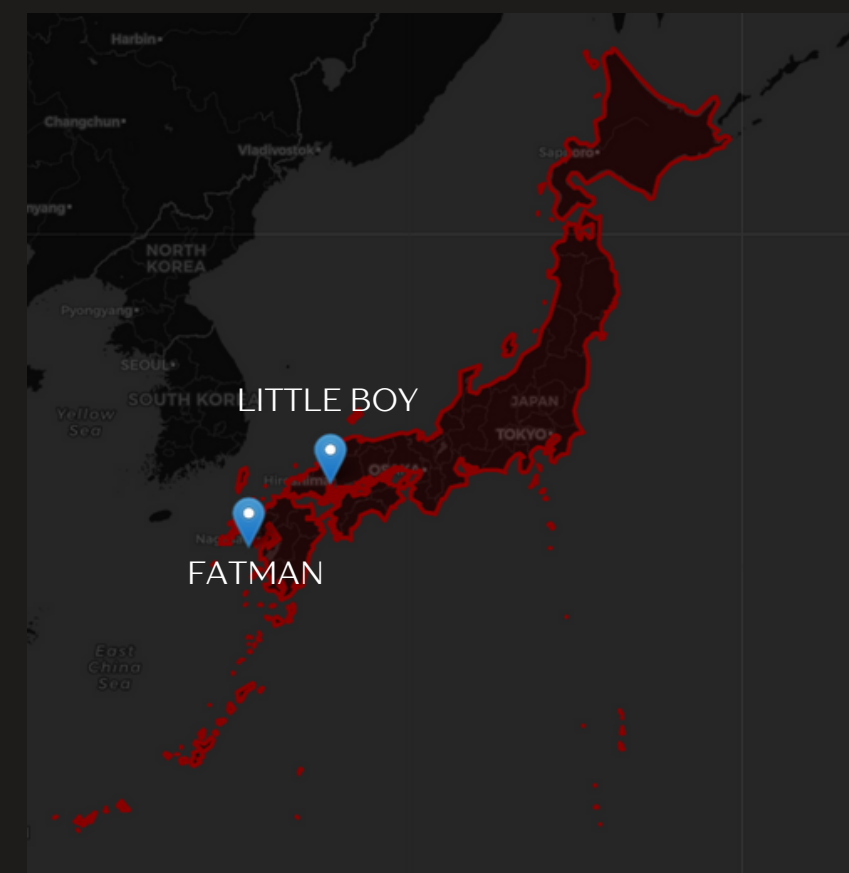
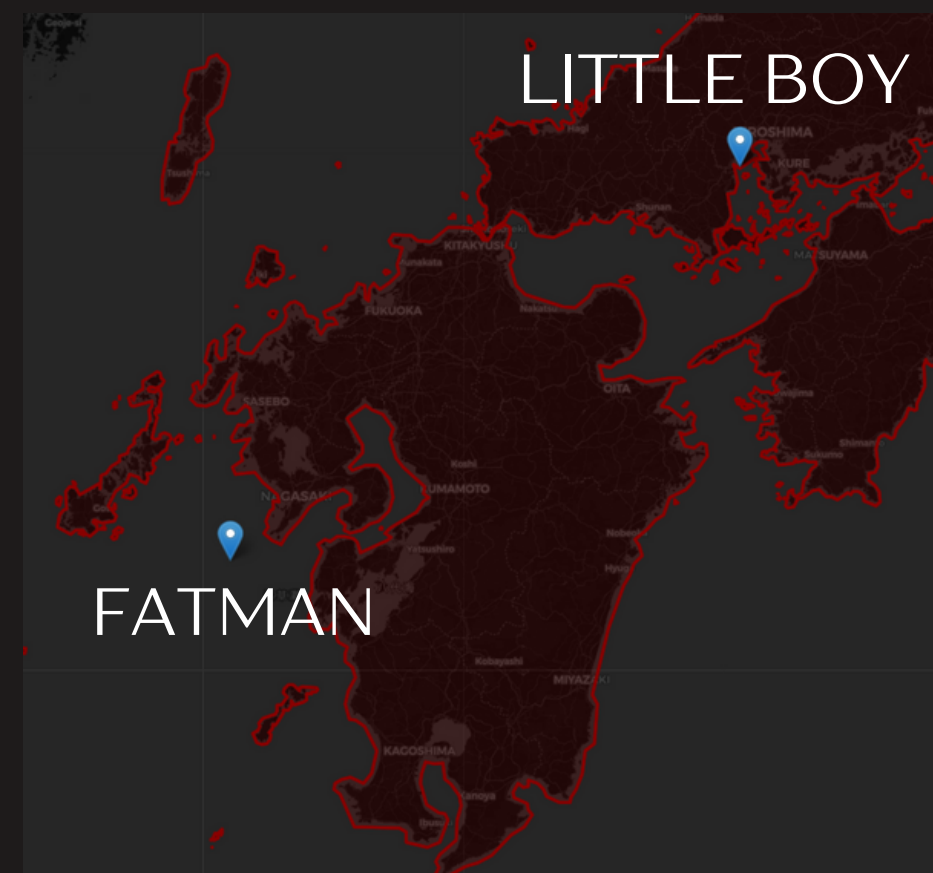


# The first 3 bombs

1. **Trinity:** 16 of July  
Yield of **21** Kilotons

2. **Little Boy:** 5 of August  
Yield of **15** Kilotons

3. **Fatman:** 9 of August  
Yield of **21** Kilotons



1945

1961

2023



# Russia Joins The Race

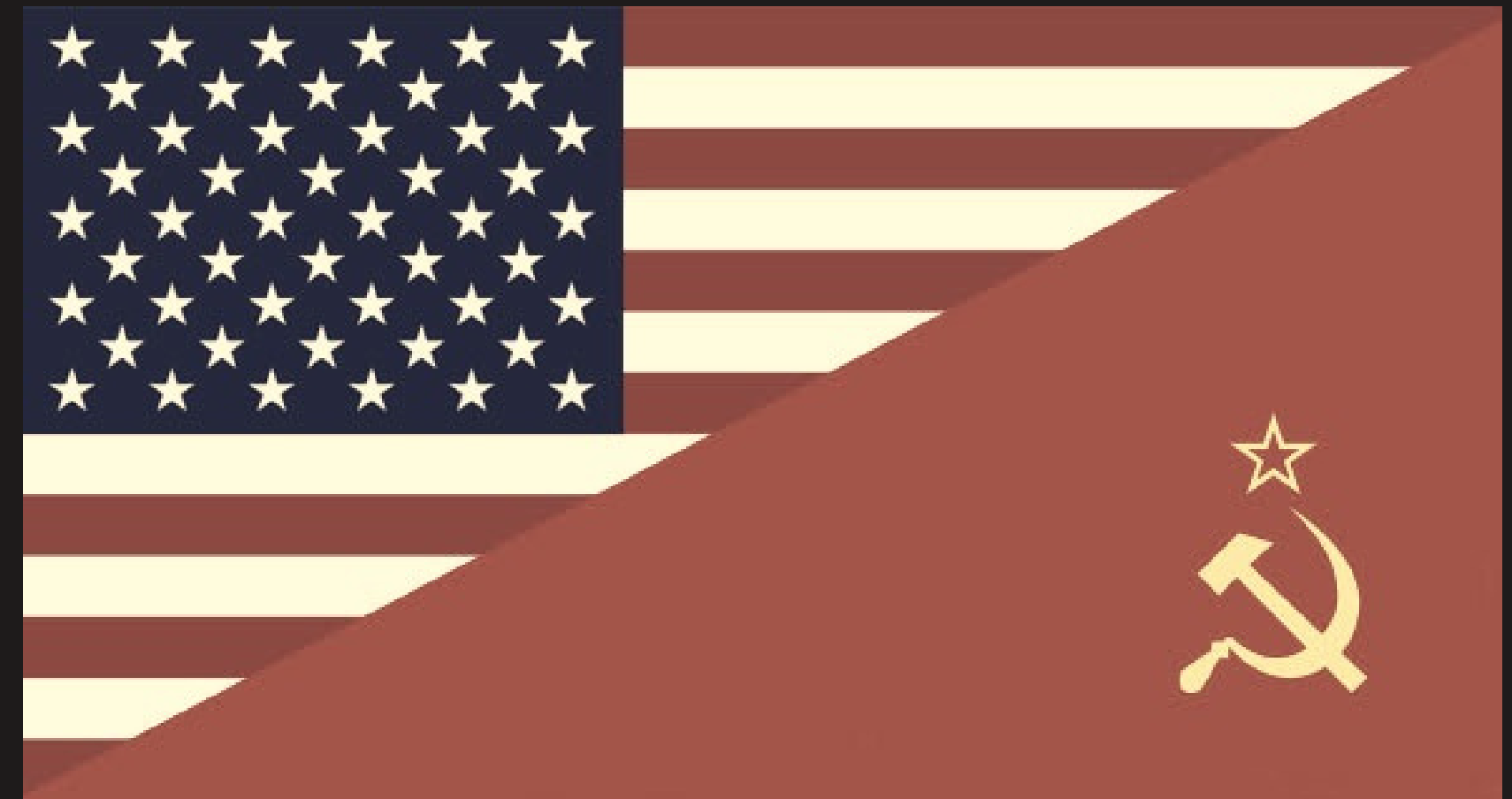
The Coldwar Has Begun — Tsar Bomba

— Overview

USSR drops their first  
bomb in 1949:  
“**First Lightning**”

Yield of **22** Kilotons

Only Nuclear Test in the World This Year  
Rare occurrence!



## US Military Expenditure

1949: **13,150** Million USD

1952: **46,089** Million USD

Ca **250%** increase

Source : [johnstonsarchive.net](http://johnstonsarchive.net)

1945 — **1961** — 2023

# Russia Joins The Race

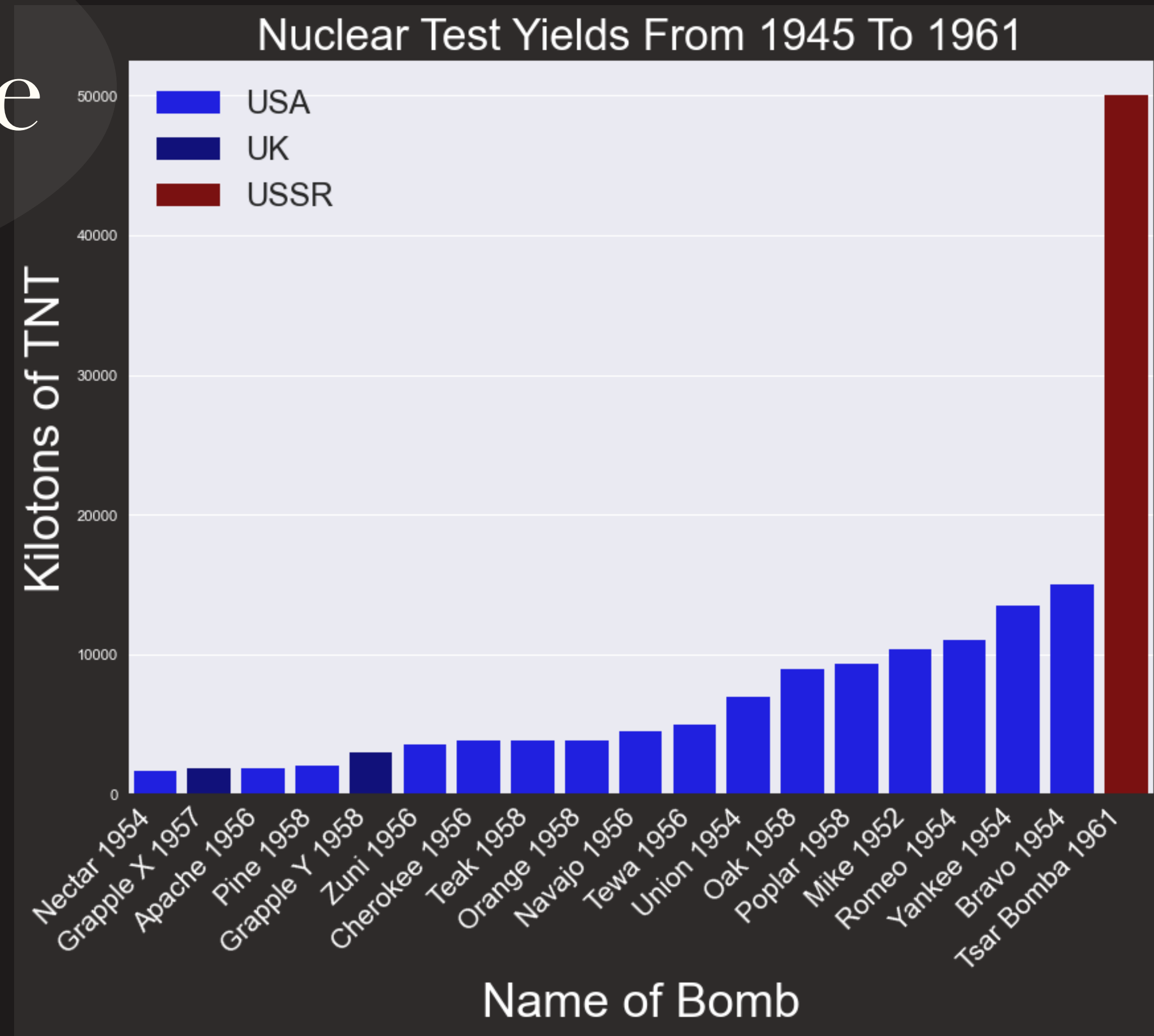
The Coldwar Has Begun — Tsar Bomba

— Overview

## The Tsar Bomba

The most powerful bomb ever dropped.

2380 Times  
more powerful  
than Trinity!



1945

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# Russia Joins The Race

The Coldwar Has Begun — Tsar Bomba

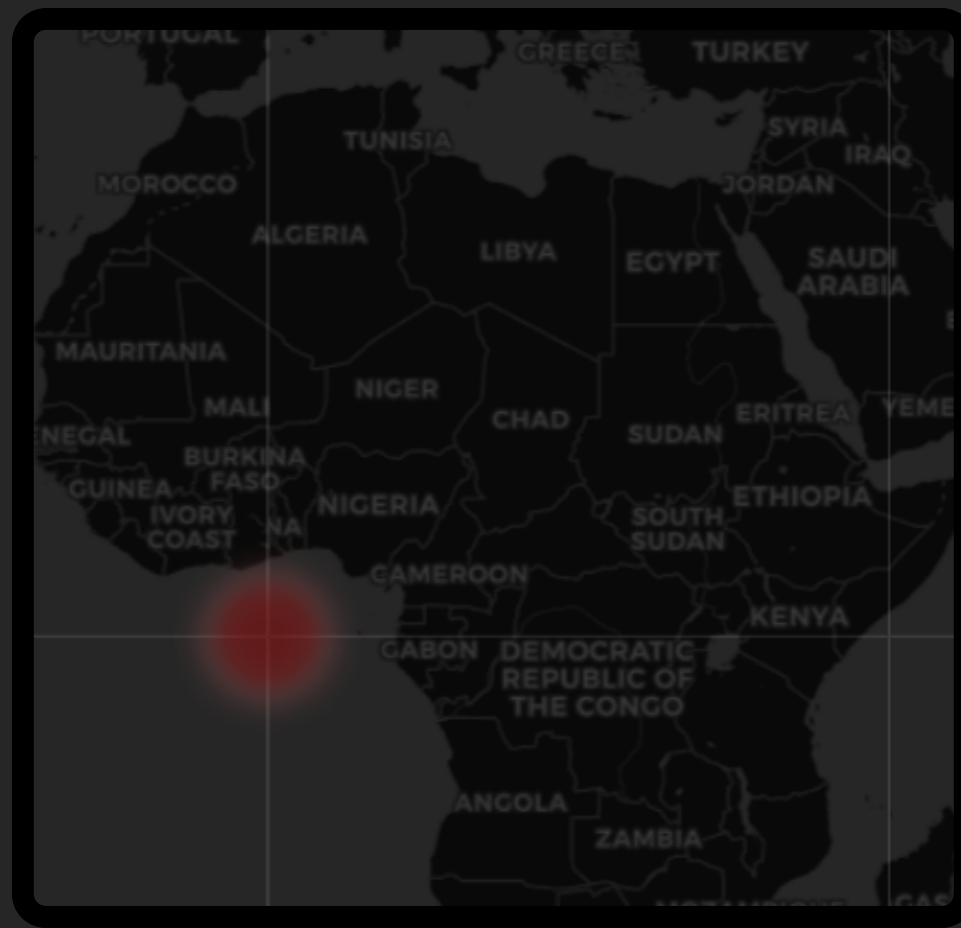
— Overview

Dropped a total of: **714**

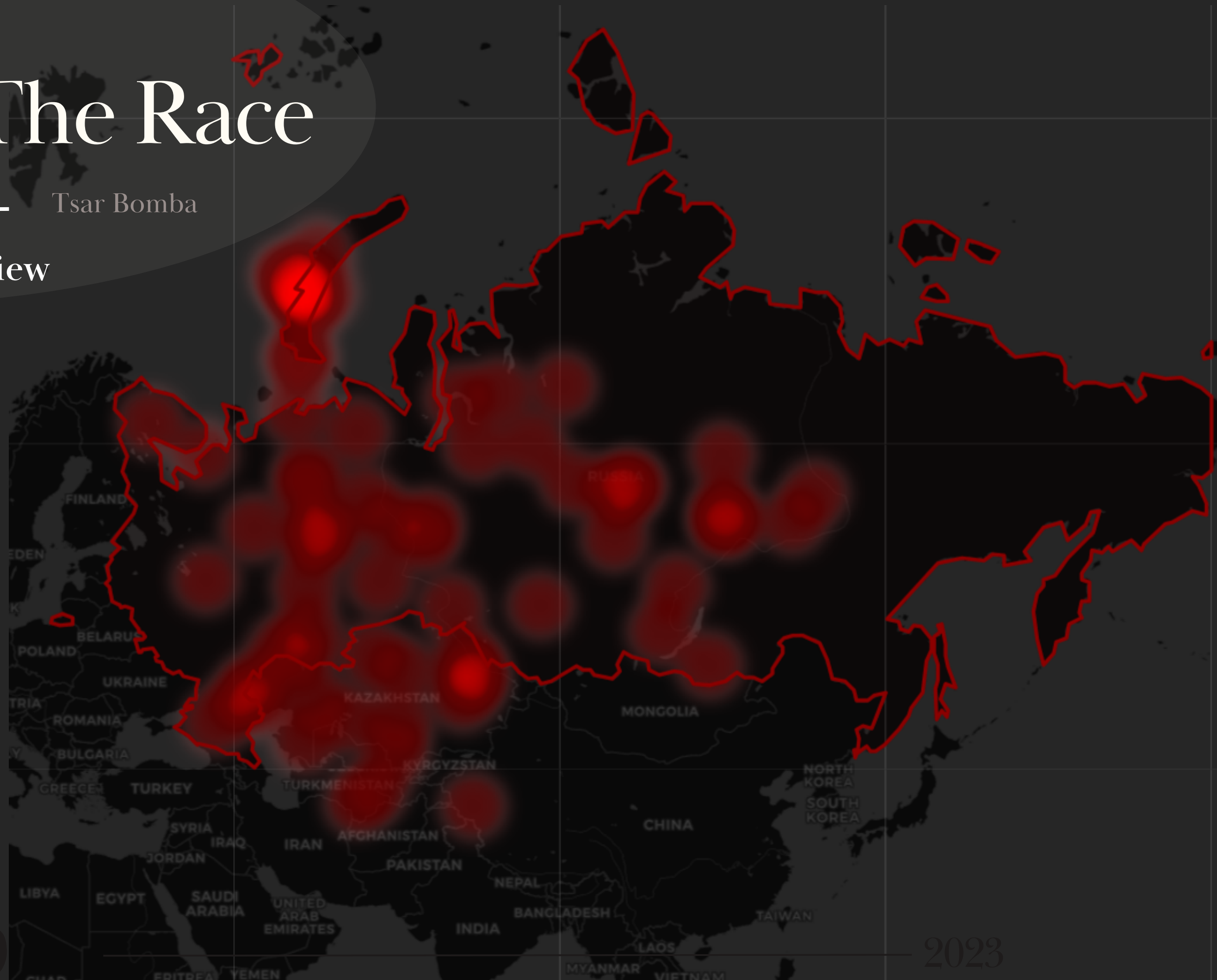
Total Yield of: **370460**

Kilotons

More than half although they  
dropped 1/3 of the bombs!



19



2023

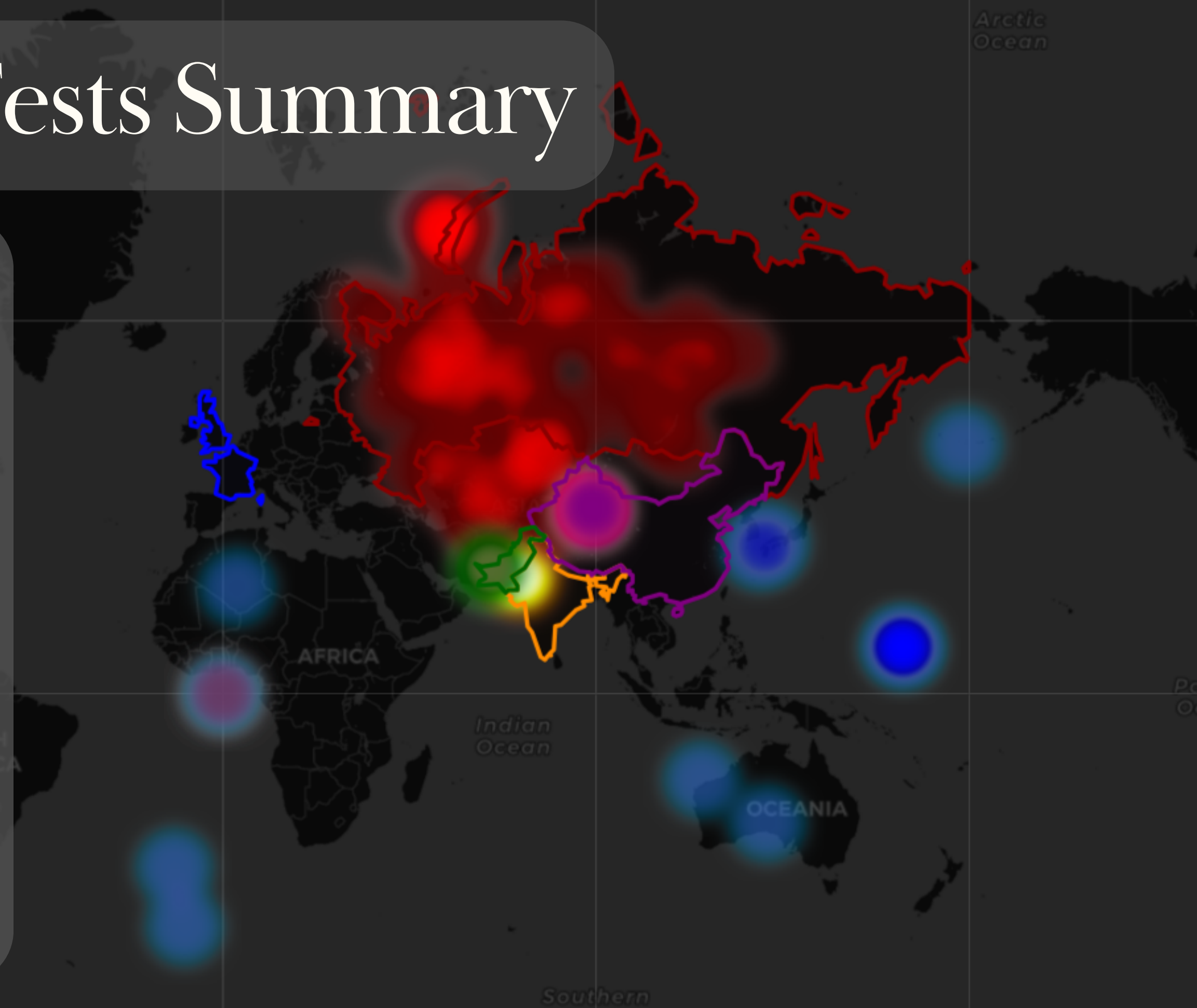
# All Tests Summary

Total Amount of Nuclear  
Explosions Recorded: **2048**  
Explosions

Total Amount of Yield in  
Kilotons Recorded: **661740**  
Kilotons

Most common detonation  
method: **Shaft** Ca 1100  
detonations

Most absurd detonation  
method: **Atmosphere**  
Ca 200 Drops



1949

1961

**2000**

2023



# All Tests Summary

## Challenges:

1. Getting stuck
2. Animation

## Learning:

1. Build more methods
2. Do it earlier

## Highlights:

1. Loved reading/learning on the subject
2. Heatmaps = Cool



Thank you!





# SLIDES

1. regarding the first test and two first drops
  - a. show the magnitude of each bomb in order
  - i. and their dropsites on a heatmap
2. russia gets in the race
  - a. usa increases mil exp
  - b. TSAR bomba
3. all other countries that do their tests
4. warning of North Korea's Nuclear Tests
5. Warning that potentially the two superpowers with the most amount of nukes are having a proxy war
  - a. (nuclear arsenals, combined power and potential to destroy the whole world?)
- 6.

# NOTES

- skulle kunna vara så att varje slide börjar med en heatmap som animerar alla bomber mellan tidhopp (Samt en flash på kartan)
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# STATS TO HAVE:

- total per country
- heatmap for each country
- biggest bomb, tsarbomba
  - kiloton
  - approx area
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