

# CLOUDS SEEDING AND WATER EXTRACTION RIGHTS

Océane Sirop, Stanislas Villanova, Chloé Fontanesi

# 1) What is cloud seeding ?

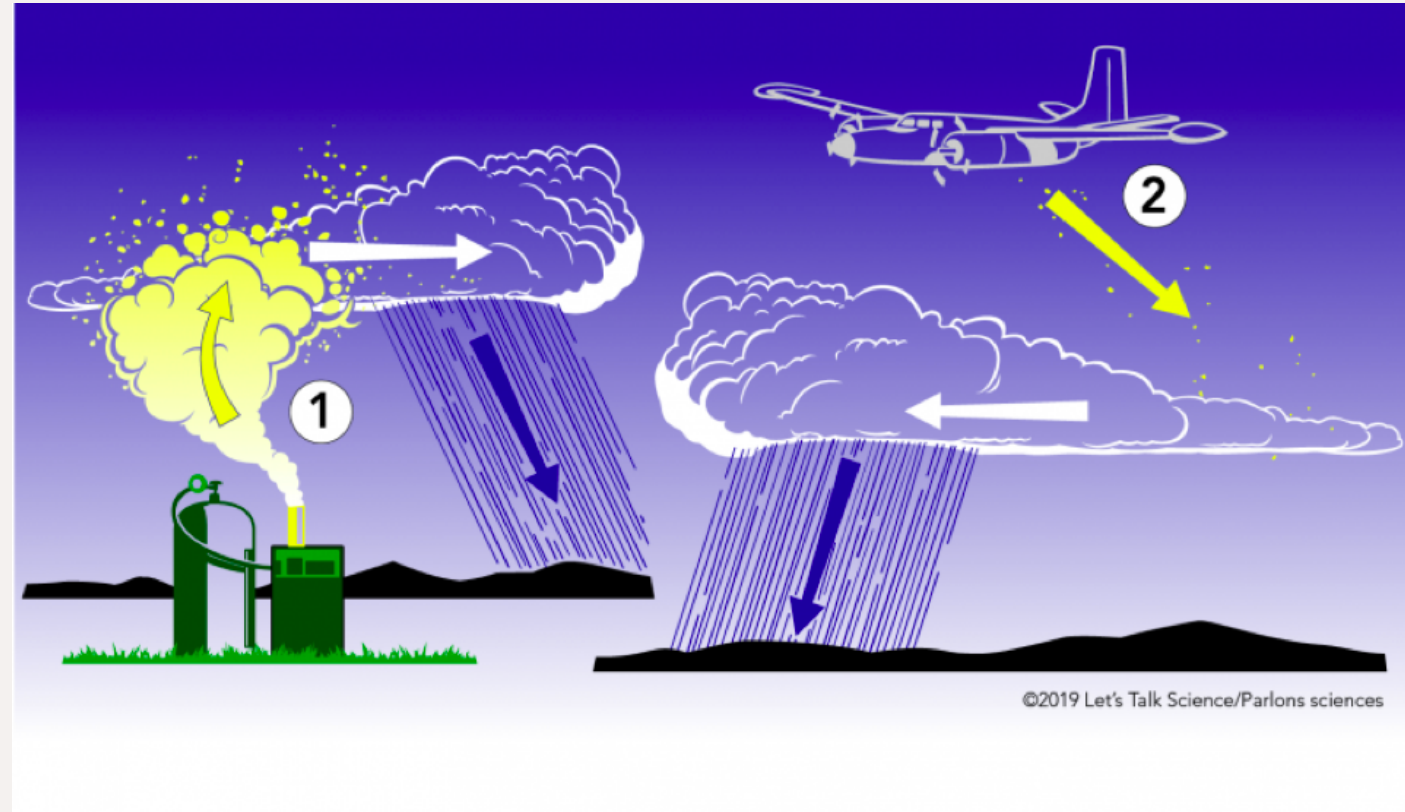
- When humans modify a cloud's structure to increase or decrease the chance of precipitations
- The concept was created in 1946
- By Bernard Vonnegut and Vincent Schaefer



# How does it work ?

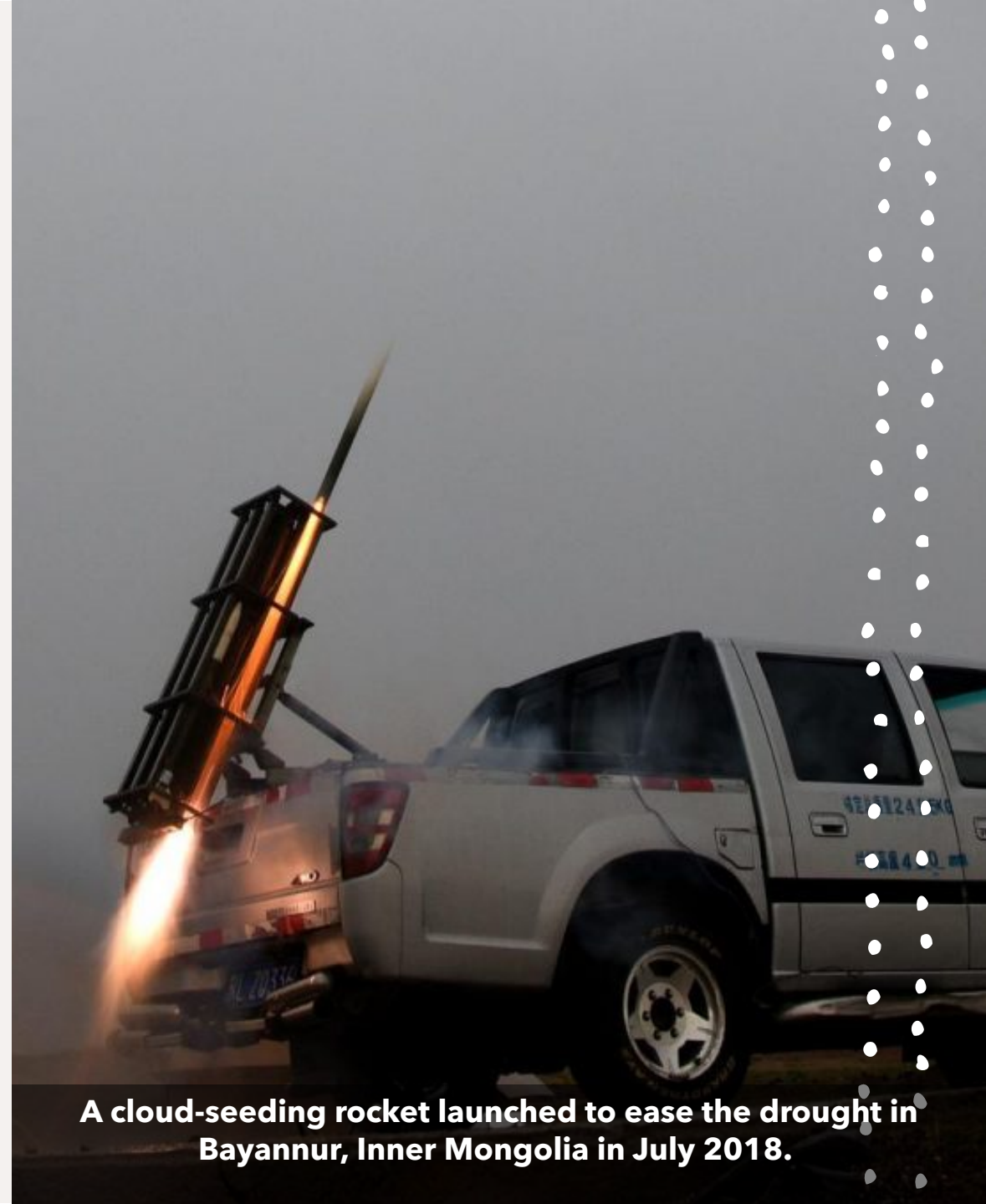
## What can be used :

- Large cannons that shoot particles into the sky
- Airplanes that drop the particles from above
- The silver iodide particles induce precipitations



## 2) Why do we use this technical ?

- Cloud seeding helps to dispel **fog** by turning it into precipitations, which can improve visibility near airports.
- To extinguish **forest fires**
- Fighting against a **severe drought**
- Increase the amount of **snow** on ski resorts



A cloud-seeding rocket launched to ease the drought in Bayannur, Inner Mongolia in July 2018.



3) Examples of the use of this technical

## 4) Water extraction rights

- **Who owns the water in the clouds ?**
  - Clouds, unlike land and water, are not part of legal frameworks.
- **Tensions between countries :**
  - States that try to bring clouds over their territory
  - When a State seeds clouds, this can have negative repercussions on a neighboring territory.



# Conclusion



- Cloud seeding is a very little known method
- It has been used for a very long time.
- **But, this method can have bad impacts on the environment :**
- Silver iodide, could be toxic for fauna and Flora
- Precipitations on command could damage the water cycle

