CLOUD SEEDING

SARKAWT H. MUHAMMAD

DEFINITION

- WE WOULD LIKE TO INCREASE WATER SUPPLY IN OUR RIVER BASIN, AND ONE OF THE OPTIONS IS CLOUD SEEDING
- CLOUD SEEDING IS ADDING ICE NUCLEATING PARTICLES TO HELP A CLOUD BECOME A MORE EFFICIENT SNOW PRODUCER.

THE CLOUD SEEDING PROCESS

- **THE CLOUD SEEDING PROCESS HAS 5 STEPS:**

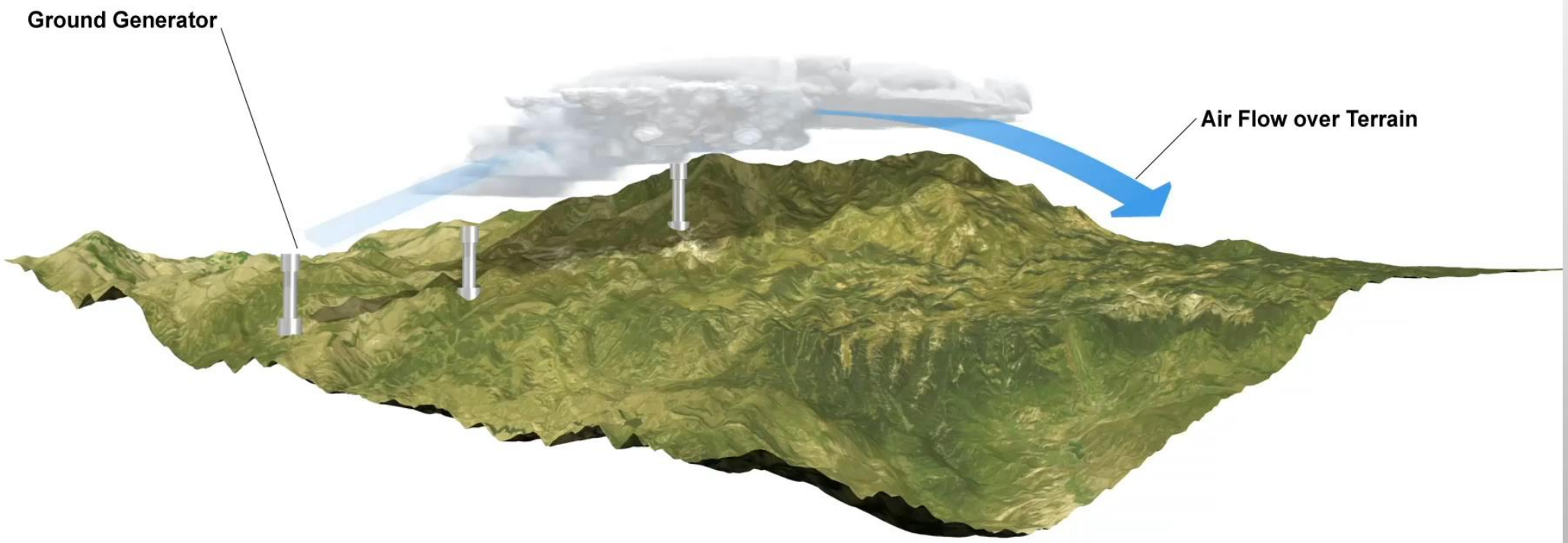
1. AIR FLOWS OVER A MOUNTAIN TO FORM A CLOUD,
2. RELEASE OF SILVER IODIDE PARTICLES,
3. SILVER IODIDE PARTICLES REACH THE TARGETED CLOUD,
4. THE SILVER IODIDE PARTICLES FORM ICE CRYSTALS,
5. THE ICE CRYSTALS GROW AT THE EXPENSE OF THE SUPERCOOLED WATER IN THE CLOUD AND BECOME LARGE ENOUGH TO FALL.

THE CLOUD SEEDING PROCESS

HOW CLOUD SEEDING WORKS

Simulation of mountain with various cloud seeding locations

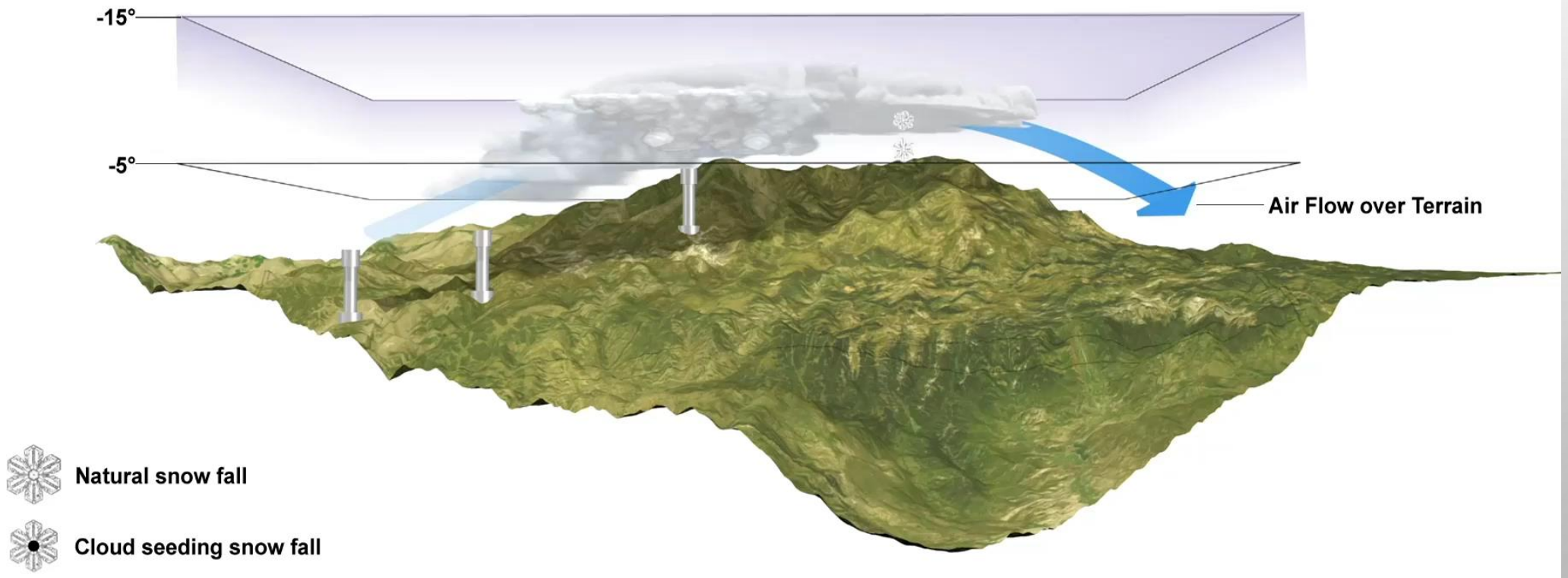
In order for cloud seeding to work, it is necessary for clouds to already exist in the area. The clouds that form over mountains are called orographic clouds.



OPTIMAL TEMPERATURE FOR SEEDING

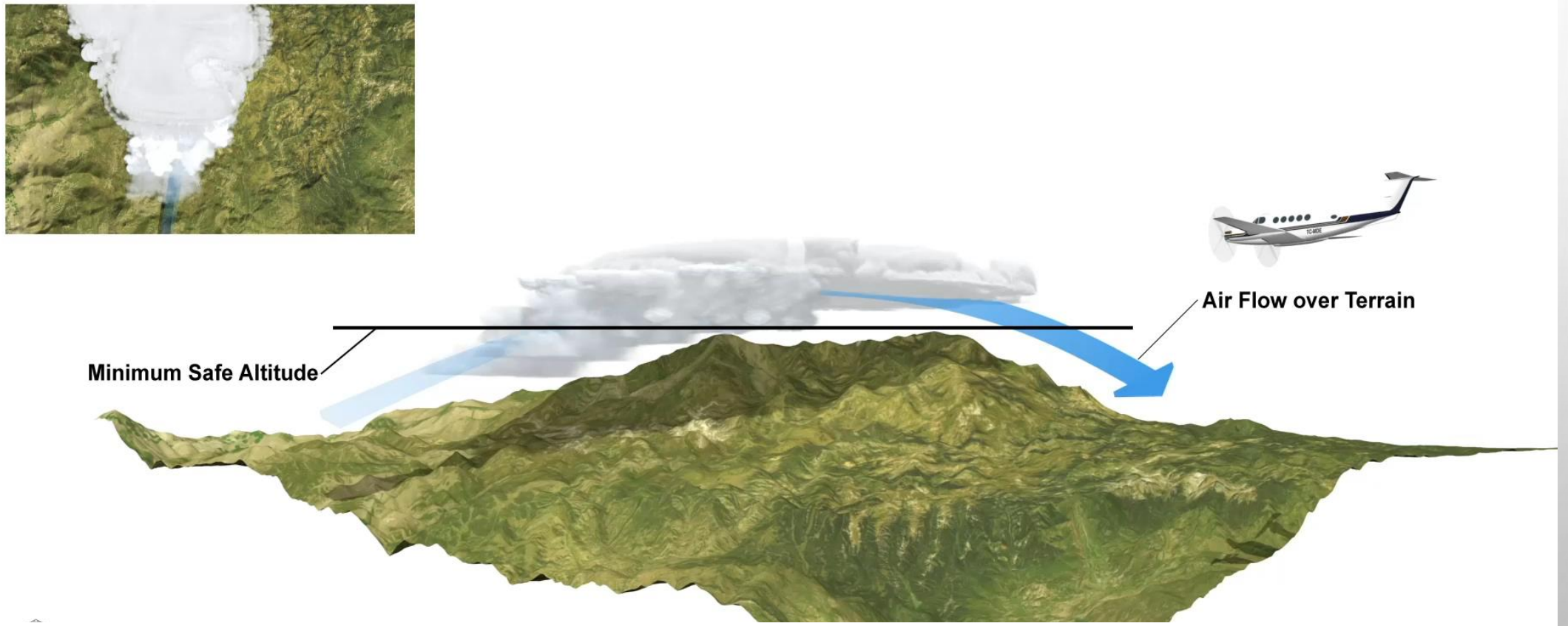
Simulation of mountain with various cloud seeding locations

In clouds containing supercooled liquid water, ice nuclei are activated and grow best when the temperature is between -5° to -15° C.



CLOUD SEEDING BY AIRCRAFT

Simulation of mountain with various cloud seeding locations



In order for The airplane needs to be flying just above or partially inside the clouds to release the particles. In this way, the aircraft can place the particles more precisely. seeding to work, it is necessary for clouds to already exist in the area. The clouds that form over mountains are called orographic clouds.