



**RAIN ENHANCEMENT
TECHNOLOGIES**

MORE RAIN. MORE SNOW. GUARANTEED.

**Providing More Water
From The Ground Up**





Differentiated Benefits

The **NATURAL** Advantage

A clear, memorable look at how our proprietary ionization technology sets a new standard for sustainable water optimization.

N

No Chemicals

Ecologically friendly ionization process. Zero silver iodide or toxic agents.

A

All-Year

All temperatures. Highly adaptable, designed to optimize warm rains as well as colder snowpacks

T

Turnkey

Swift, modular deployment. Operational within one week of arriving on-site. Up to 15-year lifespan.

U

Unattended

Fully autonomous on/off remote orchestration, requiring minimal to no on-site human presence; no planes or drones.

R

Results Guaranteed

10%+ precipitation enhancement, fully measurable and verified by public data and gauges on the ground.

A

Affordable

Extremely flexible funding and financing models with estimated ROI under 6 months.

L

Low Cost

Minimal operating expenses, powered sustainably by clean solar energy infrastructure.

>20%

SWE Increase

La Sal Mountains, UT (Winter 2025-26) during driest winter on record.



Seamless Water Integration & Seasonality

Deployment Advantages

01 / Infrastructure

Complementary System

100% Infrastructure Match

Integrates seamlessly into existing water management operations. Designed to operate as a non-disruptive, additive capability overlay, coexisting with traditional cloudseeding programs to expand operational windows.

02 / Seasonality

Seasonal Gap Filler

Optimizes Warmer Winters

Engineered specifically to fill seasonal gaps during warmer winter conditions. Dynamically triggers to optimize precipitation during critical weather windows.

03 / Reliability

Shoulder Season precip

Soil & Runoff Enhancement

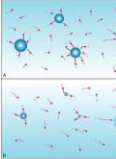
Significantly enhances soil moisture levels during spring and autumn shoulder seasons. Maximizes spring runoff volume and overall regional water supply reliability.

Rain Enhancement Tech Ionization Cloudseeding; Proven, Reliable Technology with Demonstrated Results

Bergeron-Findeisen Process

The Bergeron Process is the in-cloud formation of ice particles from supercooled water droplets.

Supercooled water evaporates, and is then deposited on the ice crystals.



1930s

Bergeron-Findeisen theorize around supercooled water droplets

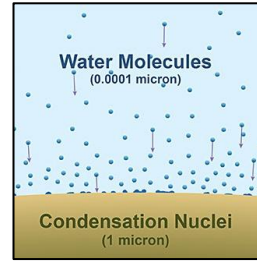


1990s

MIT's Atmospheric Lab conducts field trials in weather modification

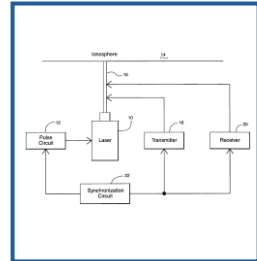
Water Molecules
(0.0001 micron)

Condensation Nuclei
(1 micron)



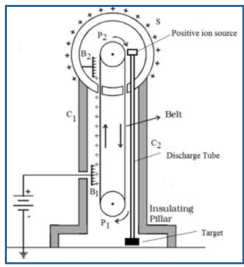
2017

Cloud condensation nuclei acknowledged as research principle



2022

Leading antenna physicist, Dr. Ted Anderson, builds roadmap for significant antenna improvement²



1931

Van De Graaff Generator introduces ionization principles

SUCULATION OF SUPERCOOLED WATER CLOUDS BY SILVER IODIDE SMOKE*

BERNARD VONNEGUT
General Electric Research Laboratory, Schenectady, New York
Received October 18, 1948

ABSTRACT:

Measurements have been carried out in a cold box on the mechanism of ice formation in supercooled clouds by silver iodide smoke particles. The process was produced by creating an artificial nucleus of silver and ammonium iodide in a hydrogen flame.

The measurements show that ice crystals do not form immediately on the silver iodide particles. The silver iodide can be regarded as a growth nucleus increasing the probability of ice crystal formation. The number of effective nuclei which can be produced per unit volume varies from about 10^{10} to 10^{12} per liter at -10°C .

INTRODUCTION:

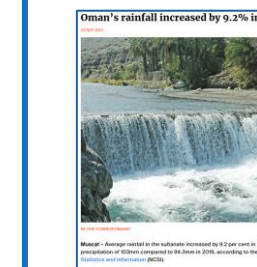
About a year and a half ago, it was found that silver iodide smoke had the property of causing supercooled clouds to form in a supercooled cloud. It is believed that silver iodide particles are good nuclei for ice formation because of the close resemblance of their crystal structure to that of ice. Experimentation has been under way to learn more about the production and behavior of these smoke. The work to be described in this account should be regarded as preliminary. The techniques and apparatus used in the work frequently have much to be learned in the way of precision. The results are tentative and await confirmation by better experiments. This work, despite the uncertainties in its interpretation, sheds light on the mechanism of nucleation and suggests new experiments and improved techniques for giving a more complete picture of the phenomena associated with nucleation by silver iodide.

APPARATUS AND TECHNIQUES FOR MEASUREMENTS ON SMOKES
Wind tunnel

1953

Dr. Vonnegut suggests influence of electricity, winds on storms

Oman's rainfall increased by 9.2% in 2020: NCSI



Source: Average rainfall in the Sultanate increased by 9.2 per cent in 2020, according to precipitation of 405mm compared to 365mm in 2019, according to the National Centre for Statistics and Information (NCSI).

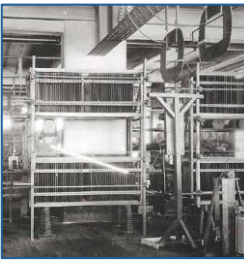
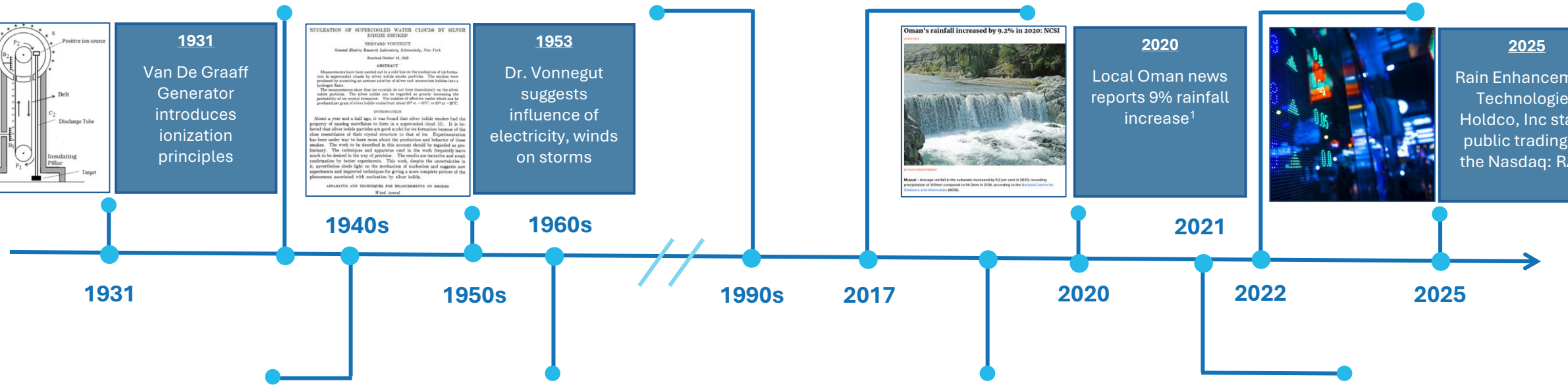
2020

Local Oman news reports 9% rainfall increase¹



2025

Rain Enhancement Technologies Holdco, Inc starts public trading on the Nasdaq: RAIN



1946

Dr. Vonnegut discovers effectiveness of silver iodide at GE Lab

a view of cloud physics and weather modification in the Soviet Union

Introduction

During the period 10 May to 31 May 1964, a group of seven atmospheric scientists from the United States visited the western part of the Soviet Union and discussed meteorological and hydrological research with Soviet scientists. The delegation was headed by Robert M. White, Chief of the U. S. Weather Bureau, and was made up of the following people: Philip D. Thompson, Frederick G. Skamene, Mary A. Kuhnle, Foster Outpost, Verner E. Sumi, and Louis J. Ratzon. This report is concerned only with a report of the activity in the area of cloud physics, weather modification and radar meteorology.

Main Admin

At the Main Admin. of the Soviet Union, the work of the delegation was supervised by Dr. F. F. Sumi, Chief of the Main Admin. of the Soviet Union, and by Dr. F. F. Sumi, Chief of the Main Admin. of the Soviet Union.

1964

Soviet scientists run successful supercooled fog dissipation experiments

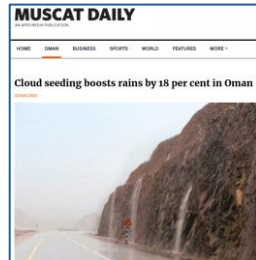


2018

First statistically significant results in 3rd party trials facilitated in part by Scott Morris in Oman¹

MUSCAT DAILY

Cloud seeding boosts rains by 18 per cent in Oman



2021

Oman news reports 18% rain increase over a 3rd party, 5-yr trial period from 2013-2018¹



Recent Headlines Underscore Urgent Need

WSJ

Aug 26, 2025

Punishing Droughts Put Fresh Pressure on Meat and Dairy Production

The Washington Post

April 29, 2026

More than 60 percent of U.S. is covered by drought as impacts worsen

abc NEWS

May 27, 2026

US agriculture industry at risk as drought conditions worsen

The New York Times

May 25, 2026

A Terrible Winter for Snow Heads Into a Bleak Summer of Drought

U.S. News

Feb 2026

Record Snow Drought Raises Concern for Spring Shortages

AP ASSOCIATED PRESS

April 1, 2026

Record low Colorado mountain snow won't bode well for water in the drought-stricken US West

The New York Times

May 13, 2026

A Texas City Bet Big on Industry. Now It's Running Out of Water.

In The News

Major features and investigative stories profiling our ground-based precipitation enhancement projects

June 22, 2026

yahoo!news

"No plane, no flare: Colorado tests solar system"

Covering our field testing of clean technology designed to operate continuously with minimal footprint.

June 17, 2026

CBS COLORADO

"Can cloud seeding boost Colorado's rainfall?"

Highlighting our historic pilot deployment to target deep drought basins using ground-ionization.

June 11, 2026

Bloomberg

"A Weird, New Rain Machine Takes Aim"

A deep-dive feature on how our clean technology is catching the eye of water managers in the US West.

May 20, 2026

FOX 11
KRXI-TV RENO

"New technology aims to boost Nevada snowfall without traditional cloud seeding "

Covering Nevada's deployment of our technology to boost mountain snowpack without chemicals.

May 12, 2026

NewScientist

"Can cloud seeding save us from bankruptcy?"

A high-level review of the global scale and long-term economic necessity of our weather systems.

March 9, 2026

FOX 13
SALT LAKE CITY

"Ionization system tested to boost Utah precipitation"

Profiling our solar ionization grid deployed to stimulate winter precipitation across Utah basins.

Technology Innovation

- ✓ Machine learning and advanced gauge monitoring allow for precise measurement
- ✓ Improving where and when to enhance rain
- ✓ Ongoing electronic monitoring to validate results

2

Ionized aerosols travel to the cloud layer in plumes, moved by local winds

1

Electrical charge directly ionizes naturally occurring aerosols through charge transfer

3

Ion plumes enhance cloud condensation nuclei, stimulating precipitation growth

No Feed Reagents

- ✓ No AgI, Gas or other CN (Condensation Nuclei) agents – reduce maintenance, no chemicals required
- ✓ Uses naturally occurring processes

Key Requirements

- ✓ 2000W solar panel energy requirement
- ✓ 1/10 of an acre fenced in area
- ✓ Install upwind of target area
- ✓ Proven operations in warm and cold temperatures
- ✓ Covers up to 230,000 acres / 360 sq miles

WETA System Technical Specifications

Advanced enhancement technology: key components and operational parameters

Physical Design & Materials

- Construction materials: Composite materials including fiberglass and ceramics for durability and performance
- Ionization antenna: 39ft (12m) wide fiberglass composite structure attached to ceramic insulators for high voltage operation
- Operational height: 26ft (8m) above ground level when fully extended
- Ionization surface: Stainless-steel wire with multiple kinks and frays creating numerous corona inception points for high ionization rates

San Juan County,
Utah



Electrical System & Operation

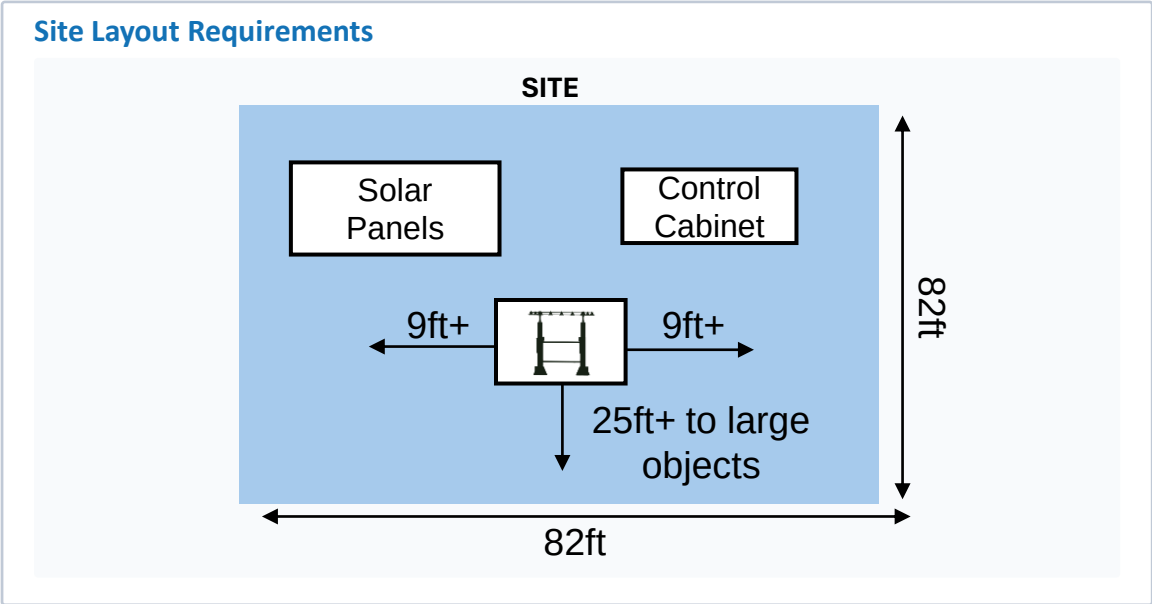
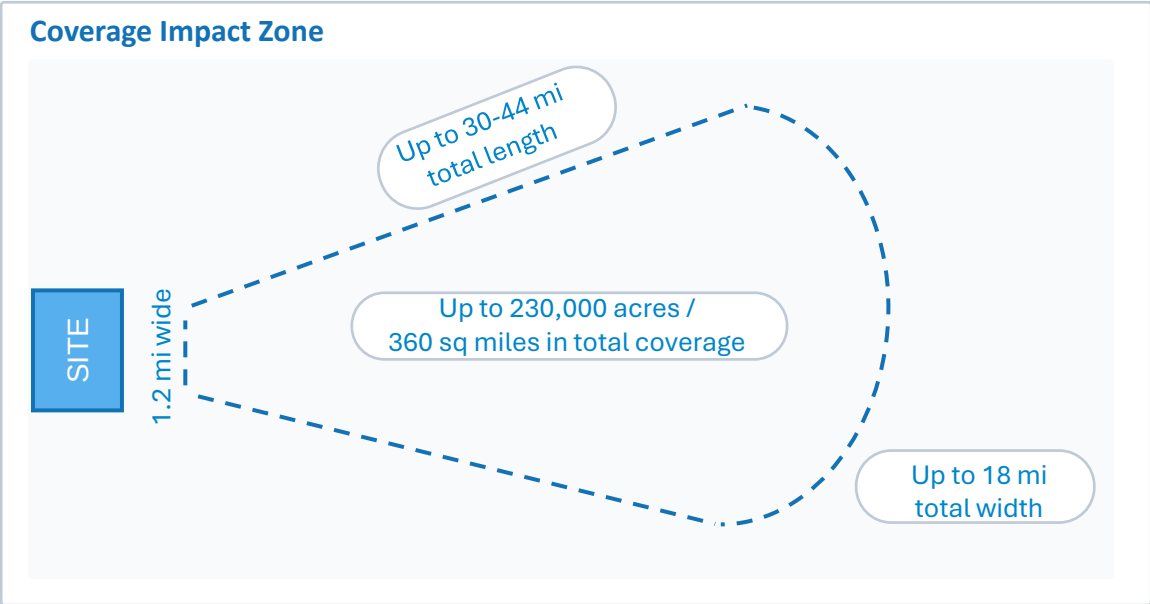
- Power source: -100kV DC energy applied via shielded high-voltage cable to the top triangular section
- Operating current: 0.01mA - 2mA typical, with higher currents during high humidity and rain events
- Intelligent control: Automated & remote monitoring system with fault detection and voltage adjustment capabilities
- Power consumption: <500W during enhancement and <90W in standby mode (with Starlink, lower when using cell networks)



Weld County,
Colorado

WETA Coverage & Monitoring System

Maximizing enhancement impact with minimal land footprint



Monitoring Methodology

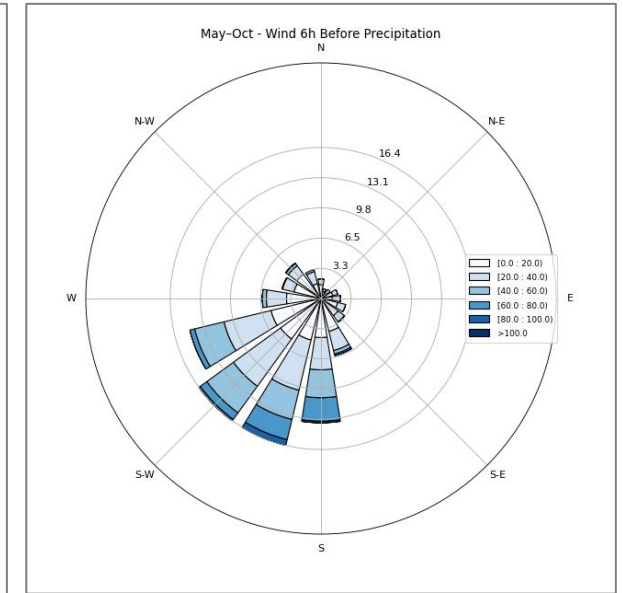
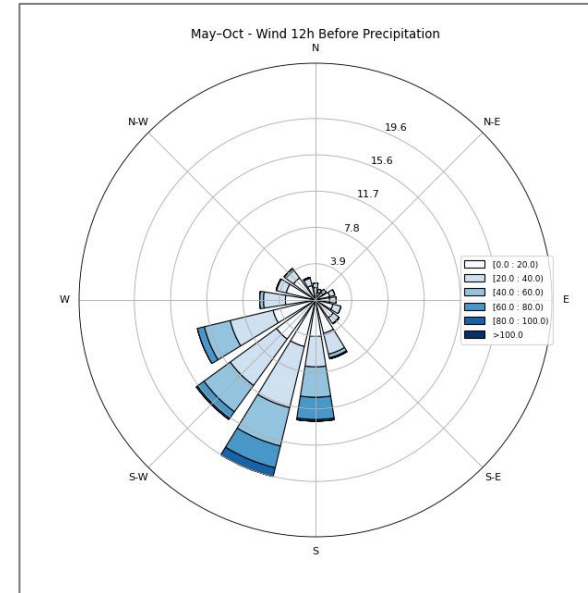
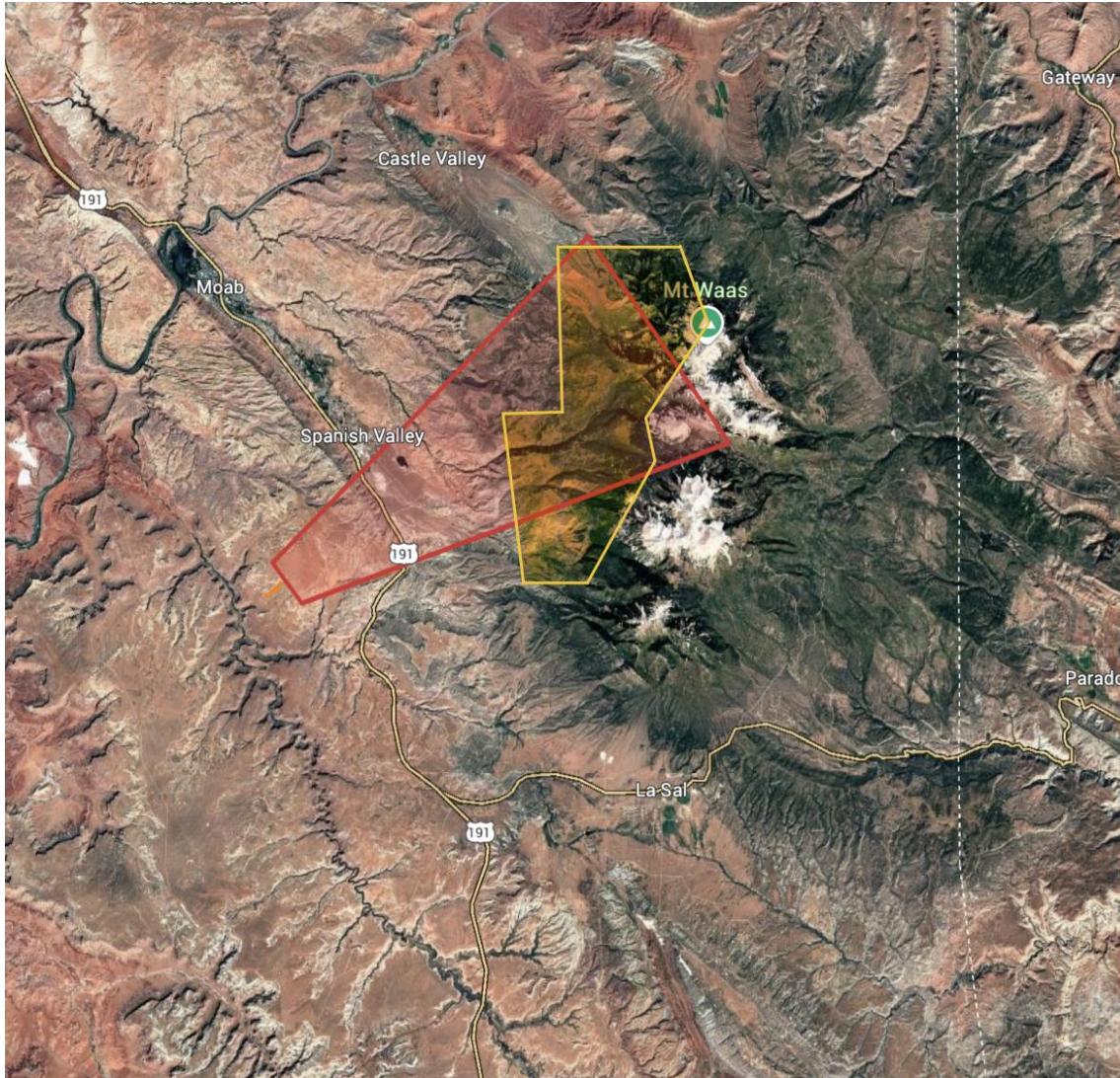
- Targeted monitoring: Defined target and control areas to quantify effectiveness
- Measurement network: Research grade rain and snow measurement documenting precipitation
- Data integration: Existing local measurement systems incorporated into analysis

Key Dimensions

- Recommended area: Level surface of 82 ft x 82 ft
- Can be installed in multiple smaller spaces, on ridges, slopes and hills
- Component spacing: 9 ft+ separation between system components
- Clearance: 25 ft+ distance required from array to large objects

WETA Site Illustration – La Sal Mountains, Utah

WARM MONTHS



- Southwesterly flow is most prevalent during precipitation events
- The ion plume is thus carried by the wind towards the northeast.
- For enhancement over the western La Sal, an optimal site for WETA is to the southwest.

Oman Trials: Methodology and Independent Validation

Rigorous multi-year testing in one of the world's most water-stressed regions with independent statistical validation



Trial Methodology & Dataset

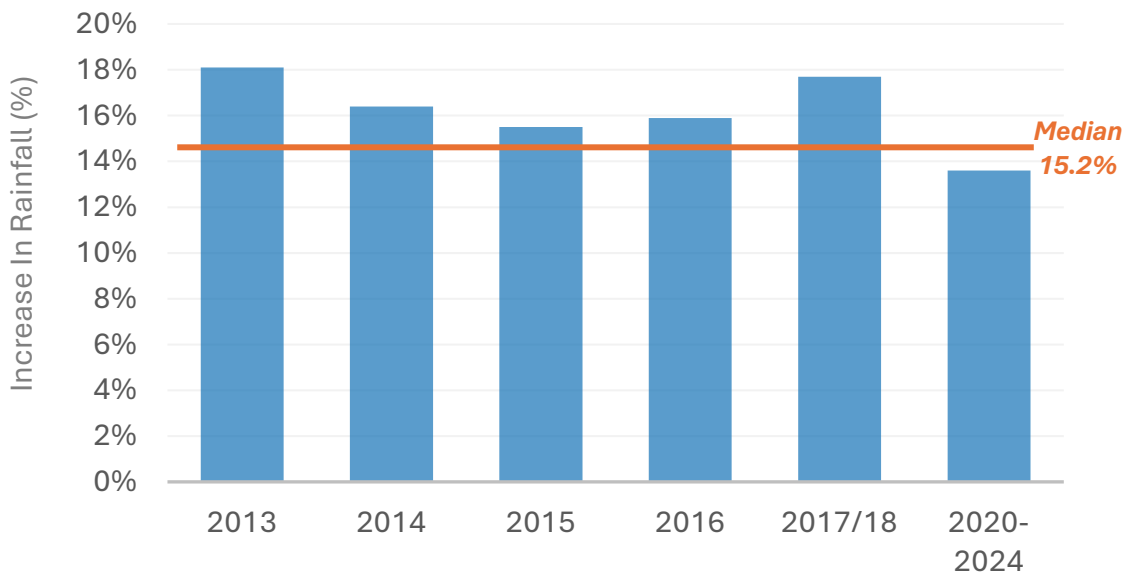
- Location & Period: Conducted in **Hajar Mountains from 2013-2018**, one of the most water-stressed/-stressed areas in the world. Still active.
- Monitoring Network: **~20 weather stations, ~200 rain gauges on 6mi grid**, and radiosonde data to track atmospheric conditions
- System Deployment: **12 devices over 6 years with 3 generations of systems** designed for improved ion generation and durability
- Operating Protocol: **Randomized operating schedule** defined yearly with systems switched on/off on designated days to enable statistical measurement
- Data Volume: **122,259 gauge-day and 740 days of data** collected for comprehensive statistical analysis



Scott Morris

VP of Engineering, Rain Enhancement Technologies
Precipitation Enhancement Expert

Yearly Precipitation Increase vs Natural Baseline (AGD, %)



COLORADO INSTALLATION — WELD COUNTY

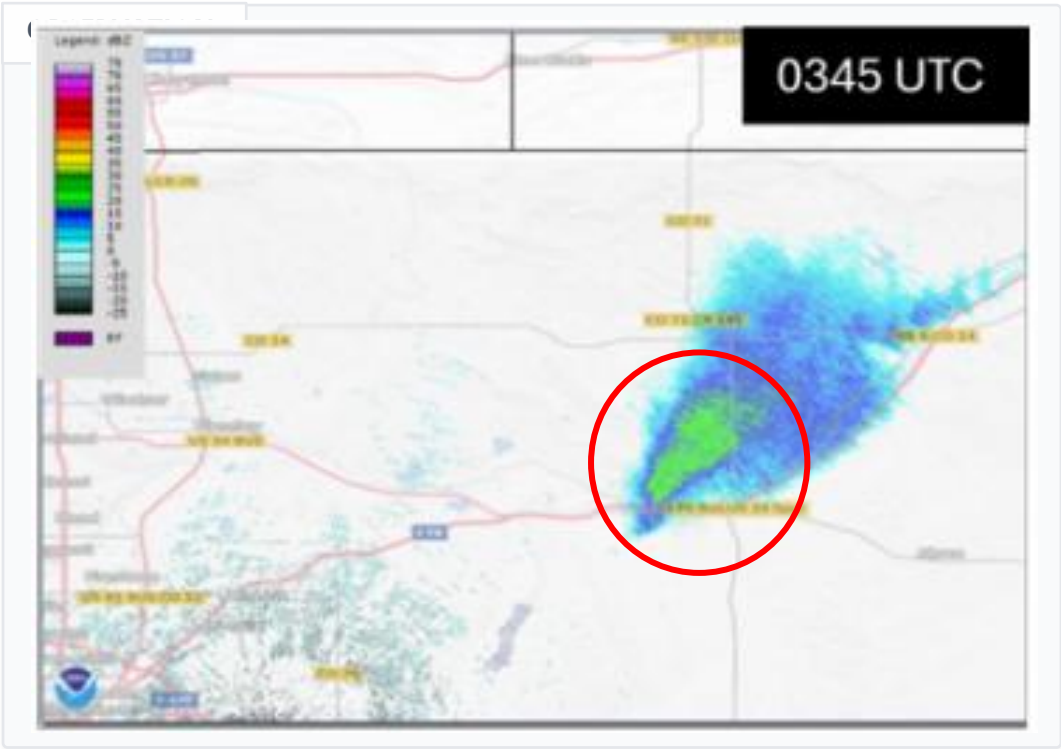
VIDEO

November 8, 2025 — Temporal Analysis of Precipitation Enhancement

Observation: Radar shows precipitation line intensifying ("brightening") abruptly between 03:30 and 03:45 UTC.

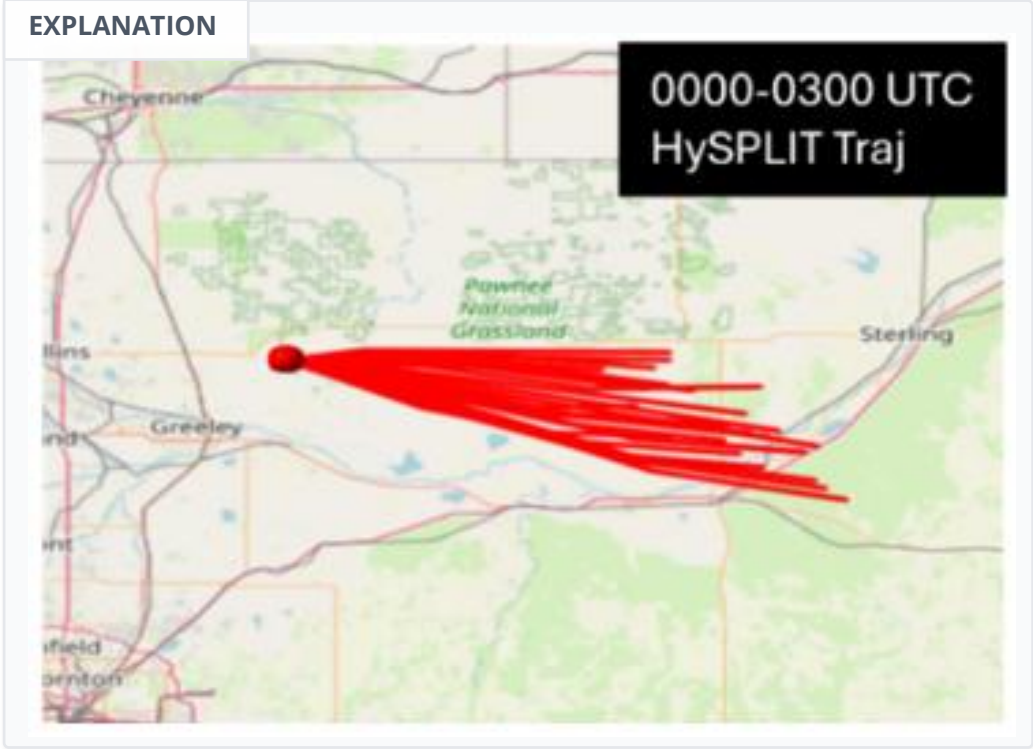
Validation: This intensification aligns precisely spatially and temporally with the arrival of the ion plume modeled by HySPLIT.

RADAR REFLECTIVITY PROGRESSION (WSR-88D KFTG)



Radar sequence shows precipitation enhancement intensifying by 0345 UTC.

CAUSAL MECHANISM: HYSPLIT ION PLUME MODELING



HySPLIT ion trajectory modeling confirms plume intersection with the storm system during this specific timeframe.

UTAH INSTALLATION — LA SAL MOUNTAINS

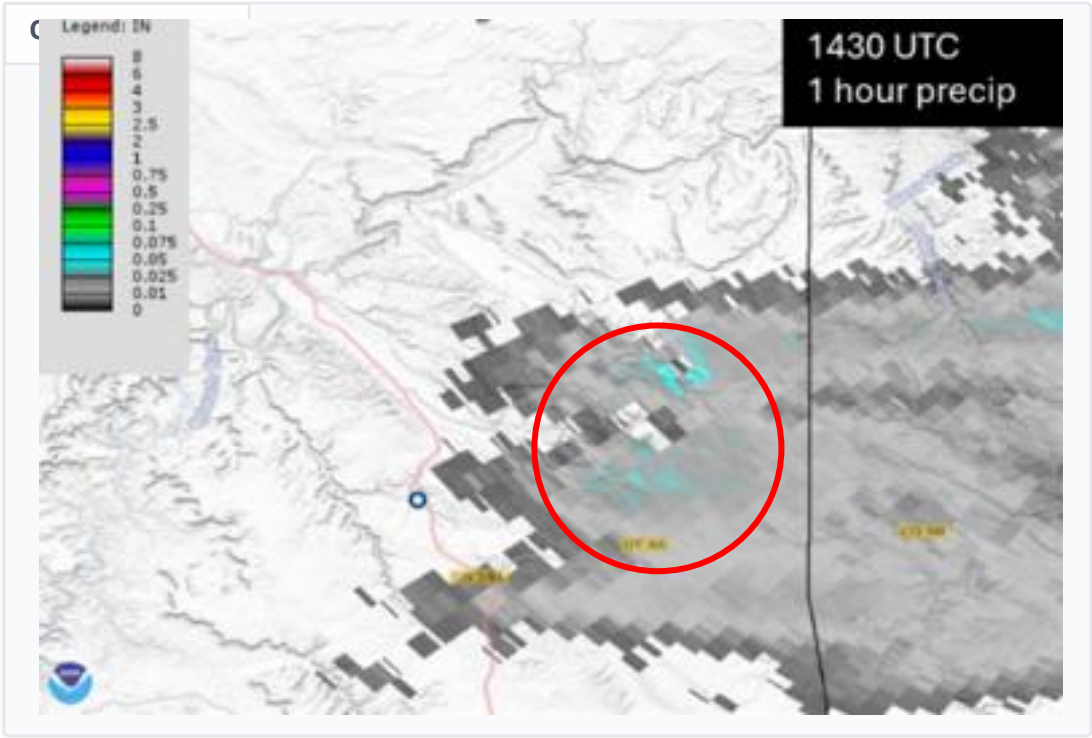
VIDEO

November 17, 2025 — Snowpack Enhancement Observations

Observation: Radar analysis revealed a distinct pattern of precipitation initiation and intensification directly over the La Sal Mountains.

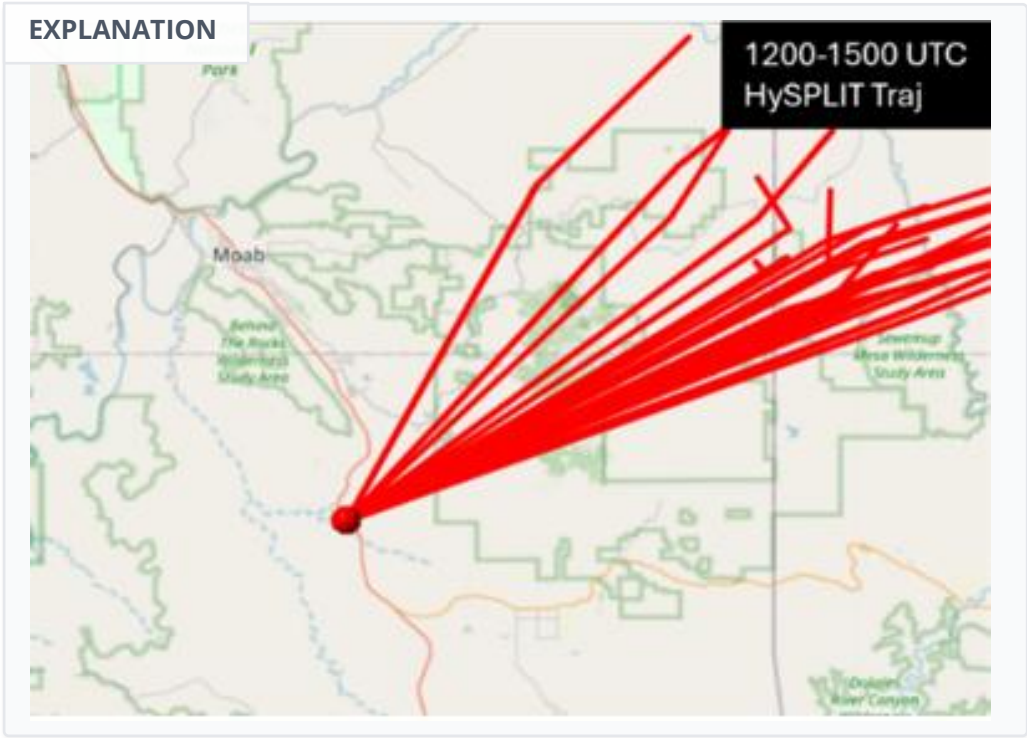
Validation: A maximum in precipitation occurred directly where HySPLIT modeling indicated maximum ion plume concentration intersecting the storm.

📡 RADAR-DERIVED PRECIPITATION (1430 UTC)



Radar-derived accumulated precipitation shows distinct enhancement over the mountains.

📡 HYSPLIT ION PLUME TRAJECTORY (1200-1500 UTC)

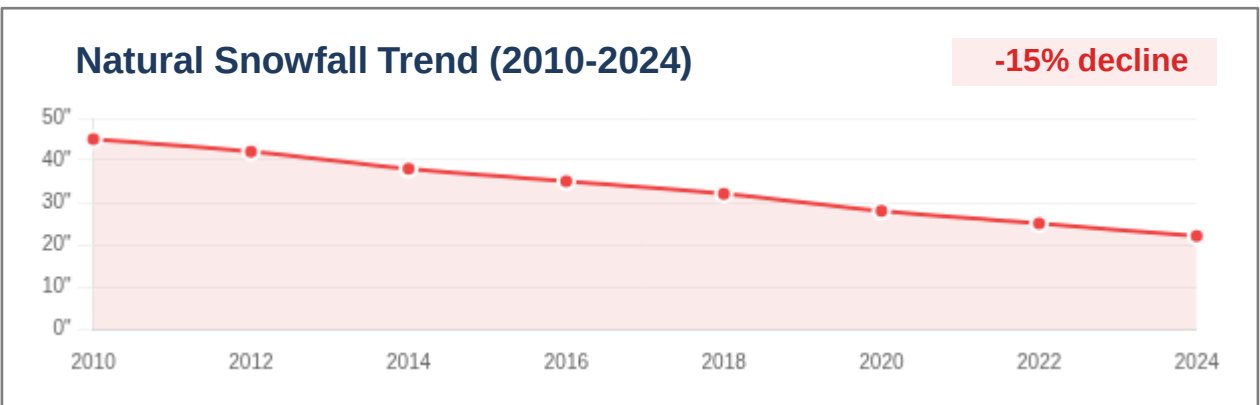


HySPLIT modeling confirms the ion plume (red lines) was transported directly into this precipitation zone during the event window.

The Shrinking Window for Cloud Seeding

Why Climate Warming Narrows Agl Seeding and Expands the Case for Ionization Technology

Natural Snowfall Decline Under Warming Conditions



33%
Fewer Seedable Storms

24%
Fewer Suitable Days

60% → 40%
Storm Suitability

-6°C to - 20°C
Effective Range

Key Takeaways

1 Traditional Seeding Declining
Warming reduces **Agl seeding effectiveness** by 33%

2 More Precipitation, Fewer Storms
Warming shifts precipitation to **fewer, more valuable storms**. WETA delivers higher value per storm.

3 Year-Round Operations
WETA operates **year-round** while traditional seeding misses warm-season precipitation entirely.

>20% SWE Enhancement During the Driest Winter on Record

Given the dry conditions of winter 2025-2026, these enhancements represent a **greater than 20 percent increase** in precipitation at La Sal.

December 2025

+2.0"

Snow Water Equivalent (SWE)
maintained despite below-average snowpack

▲ +4.0" Snow Depth Enhancement
>15% increase above baseline

⚙️ 13 operational days

🔄 Continuous operation through month end

⚠️ Condition: Below avg. snowpack

January 2026

+2.0"

Snow Water Equivalent (SWE)
maintained despite below-average snowpack

▲ +3.6" Snow Depth Enhancement
>20% increase above baseline

⚙️ 9 operational days

❄️ 3 major storms captured

⚠️ Condition: Below avg. snowpack

February 2026

+1.4"

Snow Water Equivalent (SWE)
maintained despite active regional snowmelt

▲ +2.4" Snow Depth Enhancement
>15% increase above baseline

⚙️ 9 operational days

❄️ 2 major storms captured

🌡️ Condition: Record-warm melt

The WETA system enhanced 34% of the Winter (31 of 90 days)

Fog Mitigation

Multi Billion-Dollar Market Opportunity



Aviation Impact
Flight delays at airports



Maritime Delays
Traffic suspension & Port Congestion



Energy Losses
Multi-million \$ lost opportunities



Industrial Impact
Safety-related shutdowns



Roadways & Bridges
Dangerous and costly disruptions

Australia Pilot Results

Validated

Field observations documented fog movement patterns consistent with ionization-induced dissipation, providing preliminary validation that the same technology demonstrating 15-18% rainfall enhancement could effectively address fog challenges.



WETA Platform Expansion



Same Core Technology
Proven ionization platform now applied to mitigation



Rigorous Protocols
Scientific validation with controlled testing

Texas ROI Comparison

Economic Metrics Key ROI indicators for both counties	County A 338,293 acres 2 units	County B 299,977 acres 2 units
Investment Required Total capex for WETA units	\$1.5M 2 units @ \$750K each	\$1.5M 2 units @ 750k each
Annual Benefit (+1") Conservative scenario	\$6.74M \$6,736,123 annually	\$5.20M \$5,201,287 annually
10-Year Benefit-Cost Ratio Discounted NPV at 4.1%	25.76:1 \$38.6M benefits vs \$3M cost	19.89:1 \$29.8M benefits vs \$3M cost
Payback Period Time to recover investment	81 days 0.22 years ● Fast ROI	105 days 0.29 years ● Fast ROI
Annual Benefit (+10%) Upside scenario	\$21.38M \$21,380,454 annually	\$17.14M \$17,143,441 annually

Industry-First Performance Guarantee

Contractually backed minimum 10% precipitation enhancement* for every WETA deployment

What Makes This Possible

10%

Guaranteed Minimum

15-18%

Oman Trial
(2013-2018)

>20%

Utah Winter
Deployment

15 years

Designed Operational
Lifespan

How the Guarantee Works: 3-Step Process



Step 1
Before Deployment

Establish baseline, identify
control sites



Step 2
During Operation

Real-time monitoring with
precision instrumentation



Step 3
Measurement & Reporting

Treatment vs control analysis
with transparent reporting

Why This Matters: Weather modification has historically been difficult to validate, leaving clients uncertain about ROI. Our guarantee changes that equation with contractual commitment to performance, statistical validation throughout deployment, and measurable results you can count on.

*Guarantee based on statistically validated median enhancement. Actual results vary by site conditions. Economic value depends on coverage area, precipitation patterns, and financing structure.

Frequently Asked Questions

What is Rain Enhancement Technologies?

Ground-based ionization technology that is proven to increase precipitation by creating negatively charged particles that enhance natural rainfall & snowfall patterns.

How is it Monitored?

- **10+ snow depth sensors and rain gauges** inside and outside target area
- **Weather stations** - existing local plus additional RAIN installations
- **Doppler radar** integration for storm tracking
- **Reporting** to NOAA and State Government bodies

Is it Safe? Yes.

- **No chemicals or aircraft** - no harmful emissions
- **Negative ion technology** - same as commercial air purifiers
- **No cloud theft** - research-proven, monitored during operation
- **Remote fenced installation** with automatic safety shutdowns

Can it Make Things Worse? No.

- **Short-term effects only** (hours, not permanent)
- **No operation** within 5 days of forecast severe weather
- **Automatic shutdown & lockout** controls for high wind and adverse conditions
- **Continuous monitoring** of operations. Public feedback welcome.

Can rain/snow be 'stolen'? No.

- Decades of global research confirm 'cloud theft' is not possible
- Natural clouds release only ~9% of moisture; a **15% enhancement brings this to just ~11%**
- Moisture **continuously replenishes** from oceans and land surfaces in our open atmospheric system
- Enhanced precipitation in one area **does not reduce** availability elsewhere

Questions or concerns?

Contact: operations@rainenhancement.com

Third-Party Independent Research

Supporting Ionization for Precipitation Enhancement and Weather Modification

1 Full Oman Study - Royal Statistical Society **Statistical Analysis**

Published in International Statistics Review, Royal Statistical Society. Rigorous multi-year testing in water-stressed regions with independent statistical validation.

[View Research Paper](#)

2 Chinese Field Trials - Wei Zheng et al. **Field Study**

Evaluation of the first negative ion-based cloud seeding and rain enhancement trial in China with documented results.

[View Research Paper](#)

3 Ion Plume Propagation - Shaoxiang Ma et al. **Physics**

Research on ion plume propagation, generation and transfer supporting WETA as an ion source.

[View Research Paper](#)

4 Feasibility Study - Neeta Doshi et al. (India) **Physics**

Effects of ionization on observed precipitation in small experimental areas when humidity was above 70%.

[View Research Paper](#)

5 UAV Ionization in Fog - Harrison et al. **UAV Study**

UAV observations in fog showing coalescence with ionizing discharge, demonstrating potential for cloud physics influence.

[View Research Paper](#)

6 Background Mathematics - Harrison et al. **Mathematical**

Background mathematics of why ionization would enhance precipitation and cloud formation dynamics.

[View Research Paper](#)

7 Collision Efficiencies - Mathematical Study **Mathematical**

Mathematical presentation on improved collision efficiencies by electrostatic charging, showing why ionization works.

[View Research Paper](#)

8 Ice Formation Study - Wei Zheng **Pre-field**

Pre-field trial research showing ice formation from ionization in a cloud chamber.

[View Research Paper](#)

The **NATURAL** Advantage

Key Takeaways



No Chemicals

Zero silver iodide or toxic agents



All-Year

Designed for all temperature precipitation production



Turnkey

Fully operational in under a week.



Unattended

100% remote autonomous orchestration.



Results

Statistically verified 10%+ increase.



Affordable

Flexible funding with <6 mo ROI.



Low Cost

Minimal opex powered by solar energy.

Questions?

Thank you for your time

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