



## **Droplet Measurement Technologies**

# **Where Industry Meets Science**

# **Success Stories: RI & Industry Collaboration**

Adrien Danner, Business Development  
**Droplet Measurement Technologies, LLC**



# Droplet Measurement Technologies sits at the foothills of the Rocky Mountains



Credit Picture : AFAR

FSSP upgrades ~ 1987



First SBIR from ONR to develop Cloud Aerosol and Precipitation Spectrometer (CAPS) probe.



1987

1996

2006

2016

2017

2018

2020

2021

2022

2024

Droplet Measurement Technologies (Droplet) founded in 1987 by Darrel Baumgardner, Bill Dawson and Craig Walter with the purpose of providing services and accessories for Particle Measuring Systems' Airborne Probes.

Droplet adds manufacturing to its capabilities.



Multiple product releases and partners throughout the years expands Droplet portfolio

Droplet Acquired by Benford Capital Partners and Moves into 25,000 ft<sup>2</sup> (2780 m<sup>2</sup>) facility in Longmont, CO



Droplet Releases Products for Measuring Bioaerosols and Black Carbon

(re)Launch Droplet Science

CAIPEEX Program  
CU-Droplet UAE Program

Start to Develop Channel Partners



Launch UAV Sensor Series

Acquired HarvestTe<sup>c</sup>



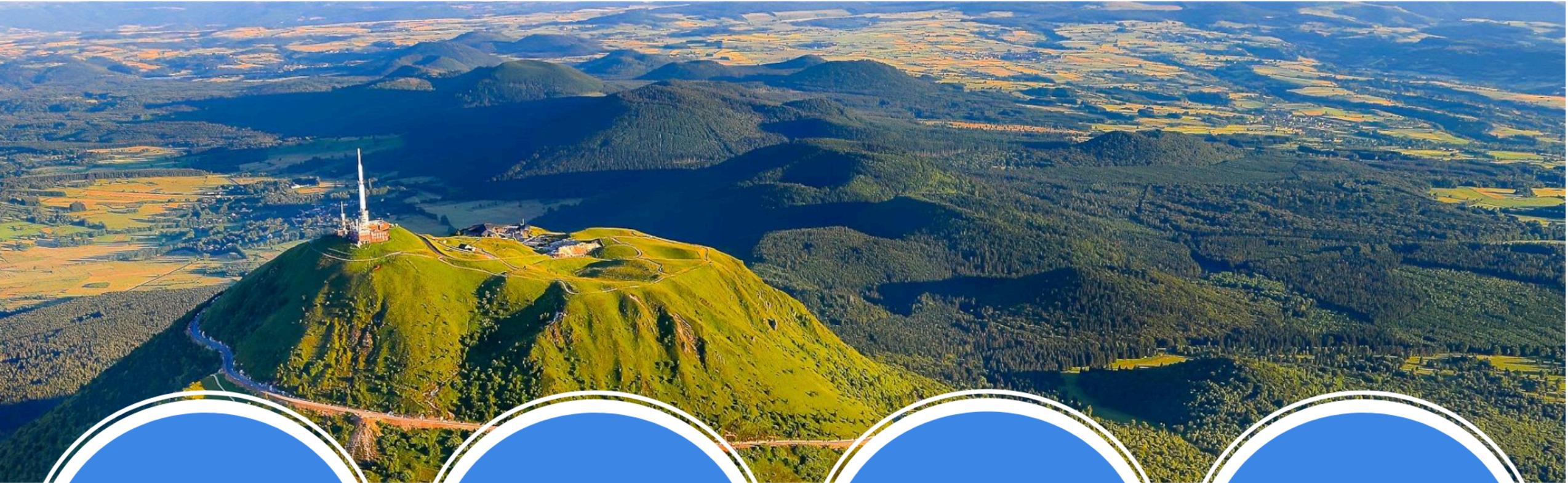
Acquired MicroPulse Lidar (MPL)

Launch GFAS





# Laboratory of Physical Meteorology LaMP



**Atmospheric  
Scientific  
Community**

**Part of ACTRIS-FR  
and ACTRIS- EU**

**Puy de Dôme  
Observation**

**Measurement  
Campaign  
RACLET**

# ATMO Access TNA program

- ◆ Measurement Campaign RACLET
- ◆ At the summit of Puy de Dôme
- ◆ An ACTRIS research installation
- ◆ 1<sup>st</sup> April to 30<sup>th</sup> April 2024
- ◆ Instrument in rugged conditions



# Feedback from the key stakeholders



**Evelyn Freney**  
Scientist at LaMP



This TNA project was an **excellent opportunity** for our research laboratory to have state of the art instrumentation installed over an intensive sampling period. We were able to assess how these instruments perform at our high altitude, in cloud environment. Additionally, this program fostered a **strong collaboration with Droplet**, enhancing knowledge exchange and advancing our scientific capabilities.

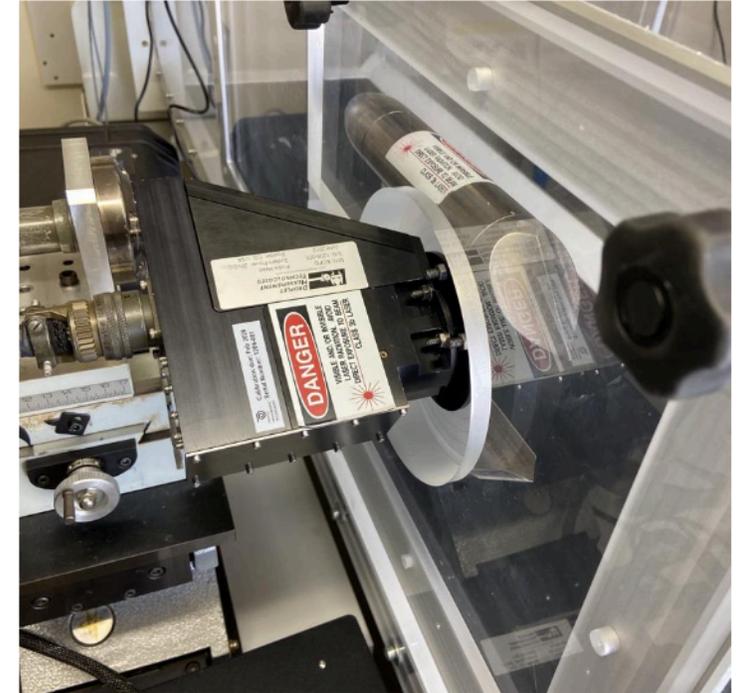
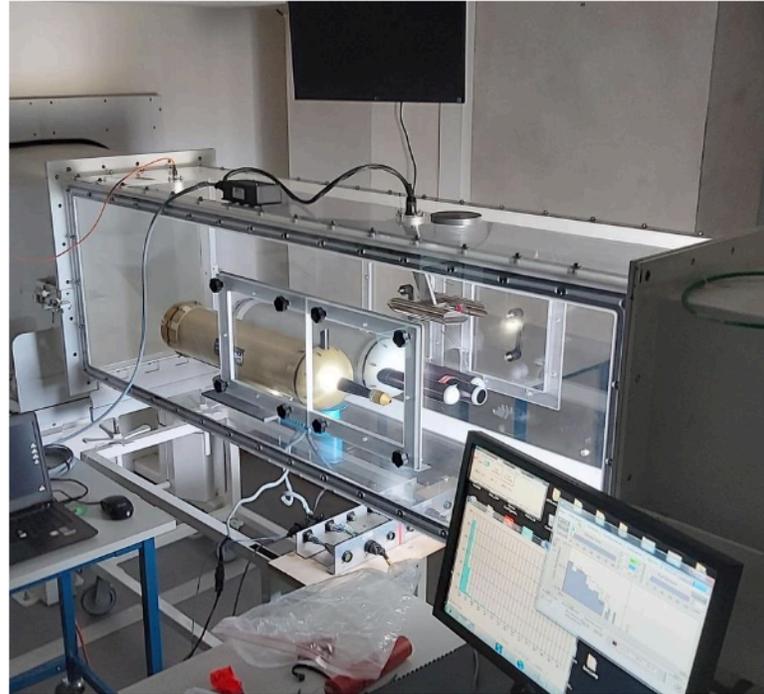


**Jusin Fisher**  
Head EU BD



This TNA program has been **extremely valuable** for our company. We are always looking for opportunities to push the boundaries of our instrument's capabilities in collaboration with our research partners, and the TNA program at Puy de Dome provided us with just that. We tested under **challenging conditions and learned much to influence future development**. TNA created a platform to engage and **collaborate** with the scientific community.

# How Industries Can Benefit from the LaMP Wind Tunnel



This natural wind tunnel draws in clouds with a controlled and variable airflow speed  
The velocity of cloud particles in this wind tunnel can reach up to 120 meters per second

# Workshop on Fog Measurement at LaMP



**Centre for Cloud  
Particle  
properties CcPar**

**Cloud in Situ  
Measurements  
expert**

**Collaboration  
between LaMP  
and DMT**

**DMT Science  
Team involve in  
the discussion**

# Benefits of the Actris facilities and TNA program



A clear framework  
to collaborate  
with the institute



Knowledge  
development  
through supplier  
expertise



Access to various  
scientific  
platforms in EU



Clearly defined  
roles for the  
experts in charge



Thank you for your Attention!

adanner@dropletmeasurement.com  
dropletmeasurement.com

