

SnowPixel™ Pat. Pend.
DOE – SC 0022516

Miniaturized weather stations with rapid switching between precipitation and meteorological measurement modes

ARM/ASR PI Meeting Participants

Ryan Szczerbinski: Masters Student, University of Utah

Allan Reburn: PI, President, Particle Flux Analytics Inc.

Contact: info@particleflux.net



Particle Flux Analytics, Inc.

Vision:

Discovery, development and commercialization of innovative, precipitation measurement systems

Serving:

Asset, transportation, safety and scientific customers

5 Patents awarded or pending, 20 + publications

Deliverables include:

Real-time precipitation observations

Snow water equivalent measurement

Droplet by droplet data

Wind speed and direction

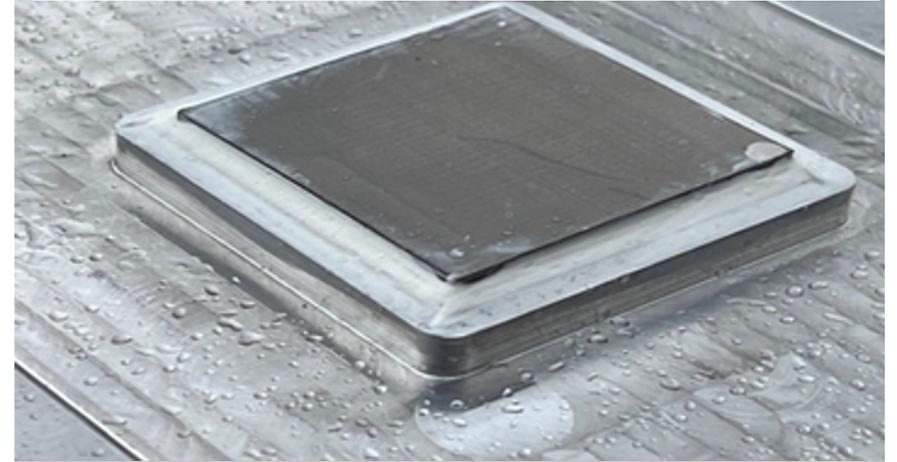
Roadmap candidates:

Dense networks enabling spatiotemporal measurement

Precipitation densities (avalanche management) use case

Radiation flux

576 individually controlled fast-response micro-electromechanical (MEMS) heaters (“pixels”)



ARM SAIL Site Gothic, CO



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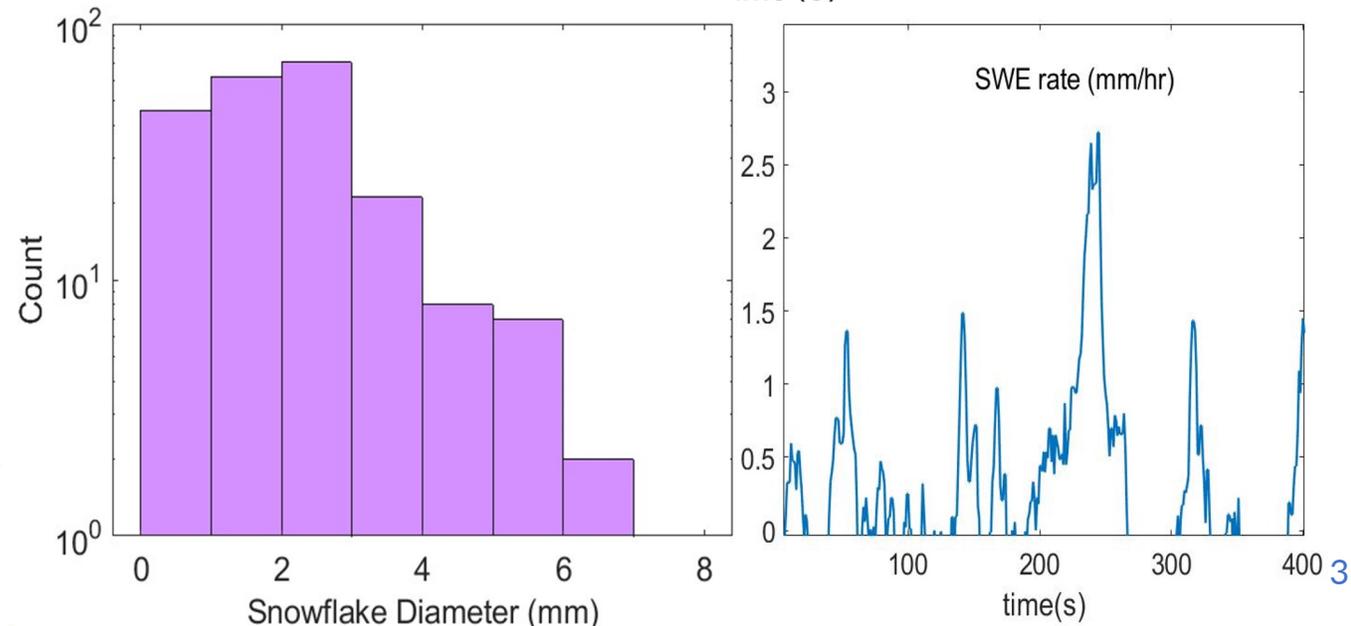
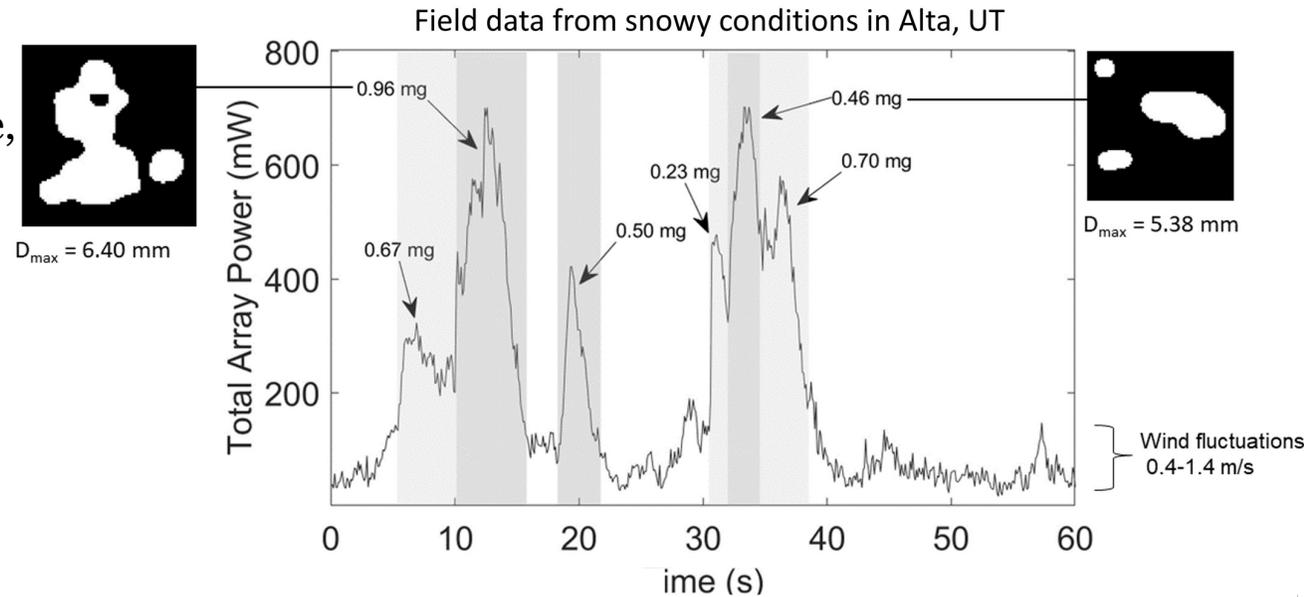
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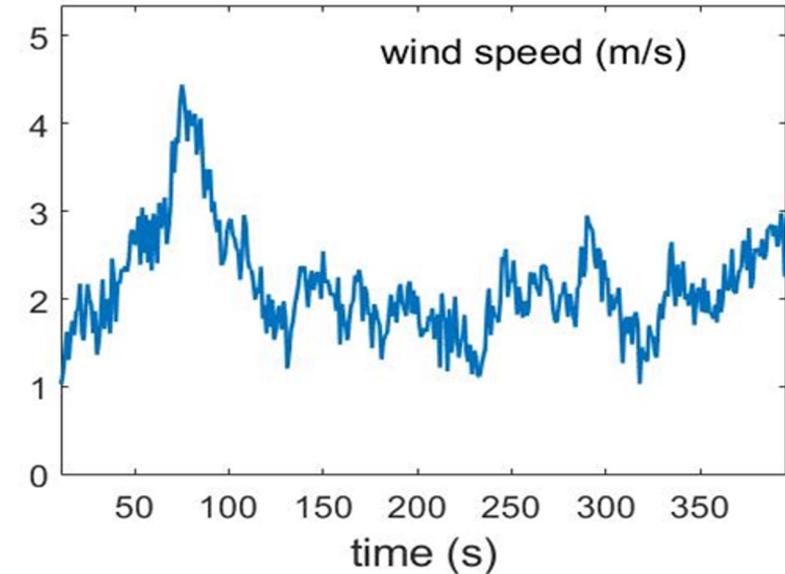
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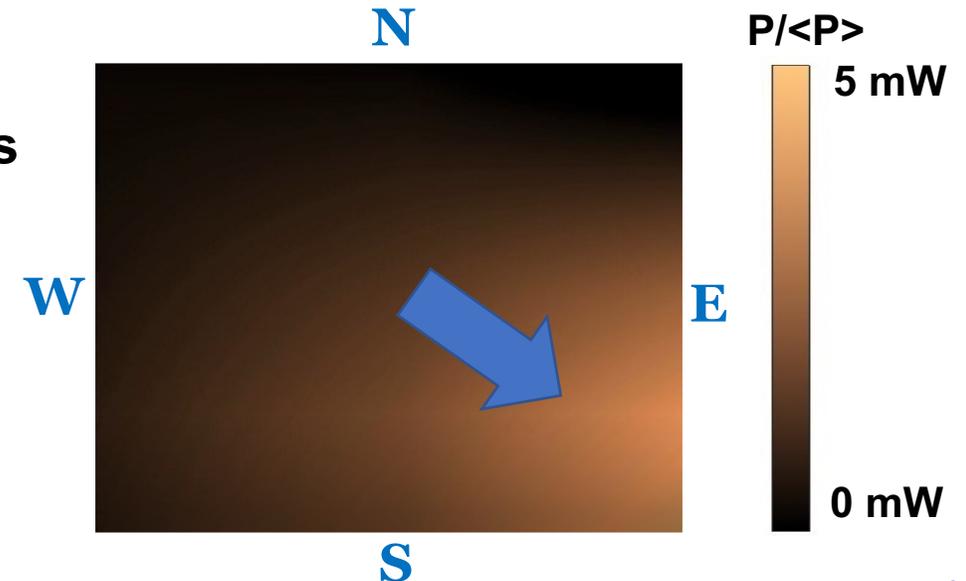
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4.2 m/s



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Summary:

First miniaturized weather station for simultaneous measurement of particle-by-particle precipitation and winds

Fully-operational customer purchased systems are deployed in the European Union and the US

Five scientific and industrial customers to date

TRL 6-7: field proven

Customer advisory board

R & D development and commercialization roadmap

Thank you for the opportunity!

We look forward to discussing your application!

Come see our poster during Session 1 on Wednesday!

Contact: info@particleflux.net