WEBINAR

September 29th, 2020 - 10:30

SENSOR PLACEMENT FOR SNOW & ICE MELT APPLICATIONS

Presented by: Jeremy Crawford

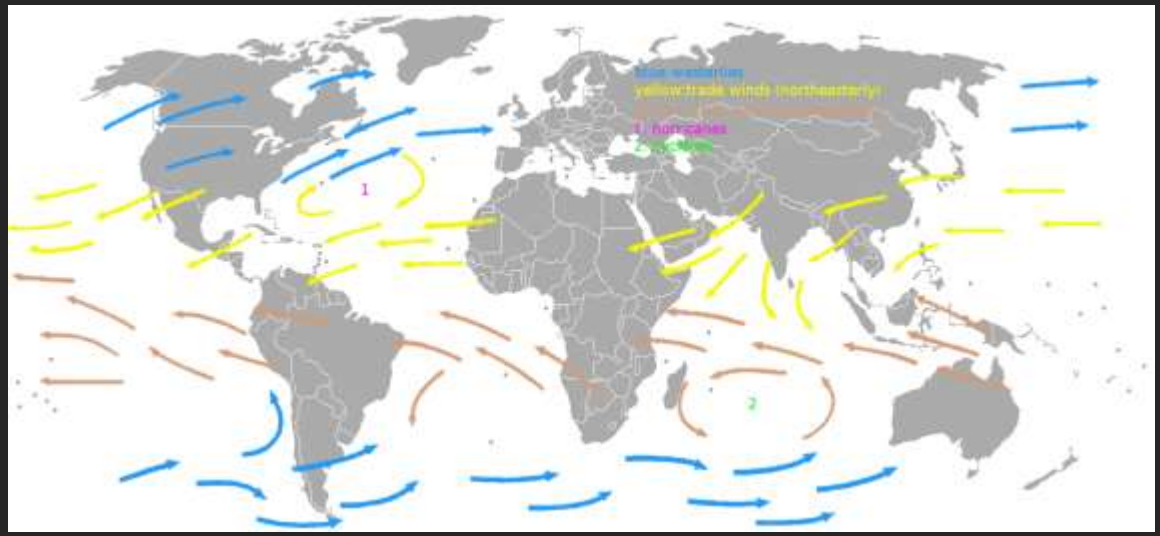
Sensor Placement
Finding The “Sweet Spot”

The four main considerations to be discussed today are the following:

- 1. Prevailing winds
- 2. Obstructions
- 3. Orientation of buildings and their effects on snow and drift patterns
- 4. Do I need more than one sensor?

Prevailing Winds

The prevailing wind in a region of the Earth's surface is a surface wind that blows predominantly from a particular direction. The dominant winds are the trends in direction of wind with the highest speed over a particular point on the Earth's surface.



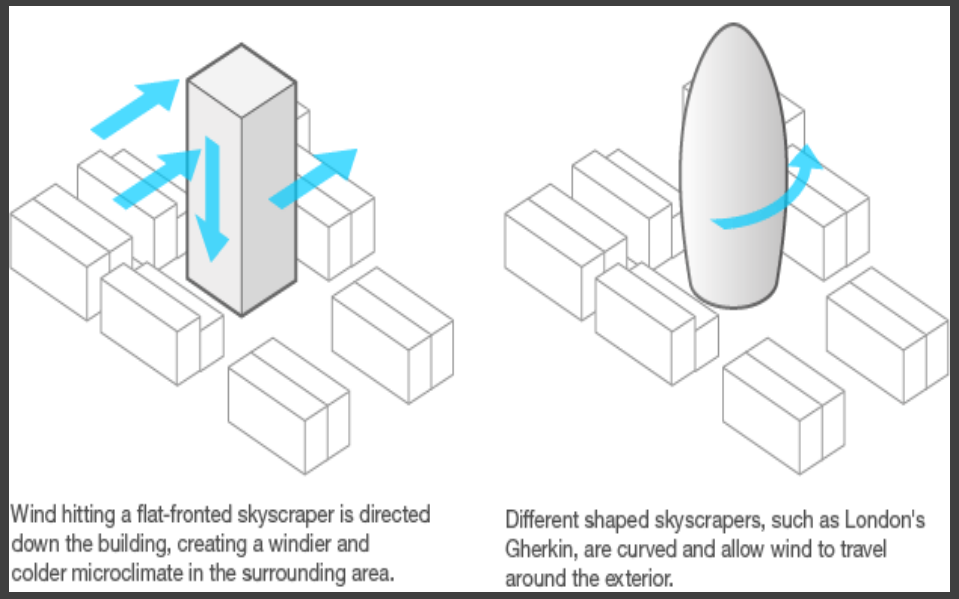
Sensor Placement-Prevailing Winds

Sources for determining prevailing winds by area:

https://www.climate.gov/maps-data/dataset/average-wind-speeds-map-viewer

https://www.wcc.nrcs.usda.gov/climate/windrose.html

Orientation of buildings and their effects on snow and drift patterns



Wind hitting a flat-fronted skyscraper is directed down the building, creating a windier and colder microclimate in the surrounding area.

Different shaped skyscrapers, such as London's Gherkin, are curved and allow wind to travel around the exterior.

Obstructions

- TREES
- BUSHES
- VEHICLES
- BUILDINGS
- ECT…

Even things that may seem far away can create variation in which the wind can blow over. It is important to also consider obstructions that may not be visible while installing.

Do I need more than one sensor?

The short answer to this is YES.

- ETI recommends at least two sensors no matter how small the application
- There are only positives to installing more sensors
- All ETI controllers can be paired with up to 5 sensors to ensure maximum coverage in any system

Aerial, Gutter and Pavement Sensors

Consider a standard driveway snow melt application…

Introduce Snow Owl

Q&A

THANK YOU!

1850 N Sheridan St • South Bend, IN 46628 USA
Voice: +01 (574) 233-1202 • Fax: +01 (574) 233-2152