

Radiometers Optimize Local Weather Prediction



Glenn Research Center

**Radiometrics Corporation
Boulder, Colorado**

Originating Technology/NASA Contribution

- ◆ Supercooled droplets in the atmosphere can form layers of ice on aircraft surfaces, reducing performance and even leading to catastrophic loss of control
- ◆ Glenn has led NASA efforts in developing anti-icing technologies to enhance aircraft safety



Partnership

- ◆ Small Business Innovation Research (SBIR) contracts with Radiometrics led to the creation of a radiometer for detecting icing conditions along flight paths
- ◆ Radiometrics commercialized a modular radiometer originally developed under the SBIR agreements

Product Outcome

- ◆ Radiometrics' radiometers provide profiling of atmospheric conditions that define local weather, improving short-term weather forecasting
- ◆ The devices detected situations for weather modification at the 2008 and 2010 Olympics
- ◆ The radiometers are also employed for soil moisture, snow, and sea surface measurements