**Vendredi** 27 octobre 2017 **11h** TE / **Friday October 27th** 2017 **11h ET**

**Sujet/Subject**: A numerical weather model's ability to predict the characteristics of aircraft icing environments

**Conférencier/Lecturer**: Greg Thompson (NCAR)

**Langue/language :** anglais/English

**Résumé/Abstract**:

Recent advances in high-performance computing have enabled higher-resolution numerical weather models with increasingly complex data assimilation and more accurate physical parameterizations. With respect to aircraft and ground icing applications, a weather model's cloud physics scheme is responsible for the direct forecasts of the water phase and amount and is a critical ingredient to forecasting future icing conditions. In this talk, numerical model results are compared with aircraft observations taken during icing research flights and operational icing pilot reports (PIREPs), and the general characteristics of liquid water content, median volume diameter, droplet concentration, and temperature within aircraft icing environments were evaluated. The comparison reveals very promising skill by the model in predicting these characteristics consistent with observations. The application of model results to create explicit forecasts of ice accretion rates for an example case of aircraft and ground icing are shown