Most of the air traffic delay that is so costly to the airlines and the flying public is incurred during severe convective weather. MIT Lincoln Laboratory has developed the FAA prototype Corridor Integrated Weather System (CIWS) to provide detailed aviation-oriented forecasts of convection out to 2 hours in the future for FAA decision makers. A particularly challenging problem for short-term forecasting is the ability to identify when and where convection will first form. Imager data from the Geostationary Operational Environmental Satellite (GOES) can provide valuable information about convection in its early stages, when radar data is of little use. This talk will discuss how GOES imager data, including convection initiation indicators from the SATCAST system developed at CIMSS and the University of Alabama-Huntsville, can be used to help improve short-term convective forecasts. Ongoing research and development to enhance forecasts for aviation decision support out to 6 hours will also be discussed.

**Wednesday, 24 September 2008**

**1:00 p.m.**

**Room AOSS 351**