

Boeing Atmospheric Research Update – HAIC/HIWC Science Team Meeting

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Current Scope of Work

- **Flight Campaign data analysis**

- Darwin

- CAY

- NASA DC8

- **NEXRAD analysis**

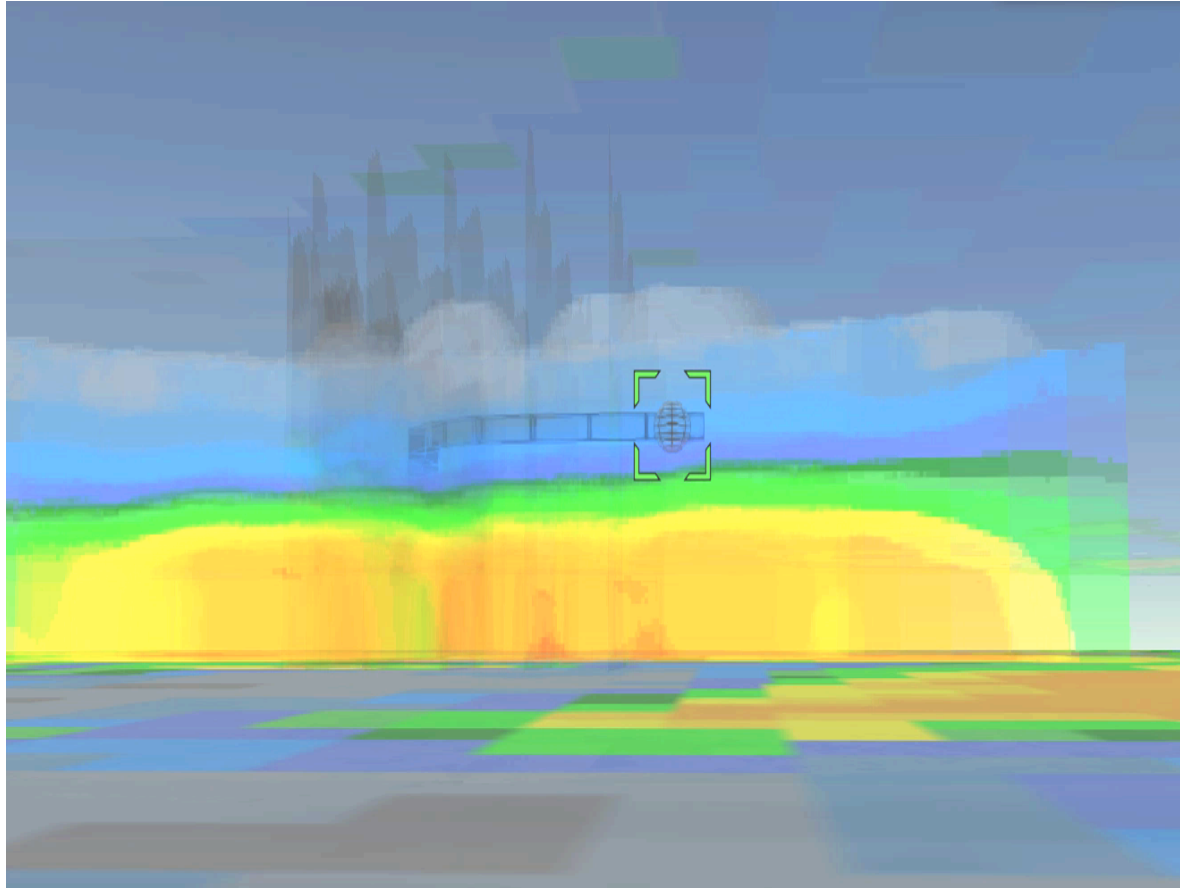
- **ICI Event Database reanalysis** – Environment characterization App D

- **Mesoscale Ice Following (MIF) model development**

Flight Campaign Data Analysis

■ Recent work: NASA DC8 KFLI flights

- Identified 21 flight legs with HIWC & within NEXRAD level 2 range
- Developing data analysis routines in Cesium API



ICI Event Database Reanalysis

- We've identified 3 types of analyses to include in the core logic. They are automated/objective procedures for;
 1. Extracting and compiling fundamental environmental parameter statistics
 2. Tracking evolution of large scale (mesoscale in this case) convective features
 3. Tracking embedded local storm features both spatially and temporally relative to ICI events (e.g. convective overshoots)

- Current work focused on manipulating satellite imagery
 - Parallax corrections
 - Scan time adjustments

Next Steps

- Complete analysis of NEXRAD/ RDR-4000 data from DC-8 flight campaign
- Complete Boeing event database reanalysis
- Late 2016, resume completion and validation of MIF model

Atmospheric MIF Model

