



Targeted observations during the Greenland flow distortion experiment

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Preliminary results are presented showing the impact of targeted observations carried out during the Greenland Flow Distortion Experiment (GFDex). GFDex was an aircraft-based field campaign operated from Iceland for three weeks during February and March 2007. Targeted observations were made by deploying dropsondes and the data was assimilated (in real-time) into the 12Z run of the Met Office global forecast model. The objective of targeted observing is to improve the forecast for a specific region and time. Additional observations are made in regions where the forecast has been objectively identified as sensitive to errors in the initial conditions.

Four targeted observing flights and one null flight (where observations were made in a non-sensitive area) were flown during the campaign. The impact of the targeted observations will be presented. Results show that although the extra observations were assimilated by the model there was limited consistent forecast improvement. The reasons for this are explored.