

Environmental Forecasting at NIWA: A Progress Report

**Michael Uddstrom, Hilary Oliver, Stuart Moore, Stuart Webster,
Phil Andrews, Vanessa Sherlock, Trevor Carey Smith, Richard Turner,
Mike Revell, Ed Yang and Martyn Clark**

The New Zealand Limited Area Model (NZLAM) is an operational implementation of the Met Office Unified Model™ (i.e. OPS, VAR (FGAT7), UM, SCS) on a 12 km resolution domain using a 6 hour assimilation cycle. NZLAM predictions are also being used to forecast weather impacts, including river flood. In the context of New Zealand's complex and steep topography and short rise time catchments, flood forecast accuracy is very sensitive to timing and magnitude errors in quantitative precipitation forecasts (QPF), which in turn are sensitive to the accuracy of the analysis and (NWP) model resolution. The poster outlines the operational NWP system, information delivery system and indicative verification statistics, and reports on data assimilation and model resolution experiments carried out to better understand forecast accuracy constraints.

INTERNATIONAL
ATOVS
WORKING GROUP

*Proceedings of the
Sixteenth International
TOVS Study Conference*

Angra dos Reis, Brazil

7-13 May 2008

Sharing ideas, plans and
techniques to study
the earth's weather and climate
using space-based observations

