

Título del Resumen en Español/ Título do Resumo em Português
Title: Weather forecasting in Finland – Modelling and process approach

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ABSTRACT

The weather forecasting system operated by the Finnish Meteorological Institute (FMI) utilizing two high resolution limited area models will be discussed. The hydrostatic model HIRLAM (international HIRLAM consortium) with horizontal resolution 7.5 km makes four runs per day and performs forecast for the next 54 hours. HIRLAM uses ECMWF data as forcing at the forecasting area boundaries. As the smaller-area nested model FMI runs the non-hydrostatic HARMONIE model having 2.5 km horizontal resolution, eight runs per day (rapid update cycle), and also makes the 54h forecast. The NWP model data is processed at the meteorological work stations by manual edition or using the SMARTMET tools developed by FMI. The edited NWP data forms the basis of various customer products and services. During recent years attention has been paid to enhance services via enhanced utilization of weather radar polarimetric observations, as well as through diagnosis and probabilistic prediction of high-impact weather impacts, e.g. urban and river flooding, water and air pollution, economical, societal and environmental impacts.