Improvements in medium range weather forecasting system of India

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Abstract

Medium range weather forecasts are being generated in real time using Global Data Assimilation Forecasting System (GDAFS) at NCMRWF since 1994. The system has been continuously upgraded in terms of data usage, assimilation and forecasting system. Recently this system was upgraded to a horizontal resolution of T574 (about 22 km) with 64 levels in vertical. The assimilation scheme of this upgraded system is based on the latest Grid Statistical Interpolation (GSI) scheme and it has the provision to use most of available meteorological and oceanographic satellite datasets besides conventional meteorological observations. The new system has an improved procedure for relocating tropical cyclone to its observed position with the correct intensity. All these modifications have resulted in improvement of skill of medium range forecasts by about 1 day.