

Research at Hungarian Meteorological Service

January – June 2004

The main areas of interest for the first half of 2004 were on the one hand the 3d-var data assimilation scheme for ALADIN and on the other hand the development of the LAMEPS system based on the ALADIN model.

Some brief summaries of the activities are as follows:

a) Regarding 3d-var the data assimilation scheme was running in parallel suite and continuously compared to dynamical adaptation versions. At the beginning of the year the evaluation was also carried out subjectively (see the reports of Helga Toth in the same volume). The ATOVS satellite data was incorporated into the data assimilation system (see the report of Roger Randriamampianina and Regina Szotak in this Newsletter) around April and further impact studies were delivered on aircraft data. Preliminary work had been started on the application of wind-profiler data as well.

b) The first LAMEPS experiments were performed during this period and the sensitivity of the global singular vectors with respect to the target domain was investigated. The system was tested on some special cases as well (see more details in the report of Edit Hagel and Gabriella Szepszo in the same issue).

c) Beside these projects some work was done in the dynamical downscaling of ERA40 re-analysis data to high resolution. At the moment the basic configurations, plans were discussed and accepted and now the technical realisation is under elaboration.