

The launch of the "Lopez/L46" parallel suite in Toulouse:

(preliminary documentation by C. Fischer, Météo-France, as of 22 February 2006)

A new Arpège parallel suite has been launched with the 18UTC assimilation run of 20 February 2006.

Its notable components are the following:

- * 46 levels in the model and 4DVar data assimilation
- * LREGETA + RW2TLFF dynamical switches changed
- * no more linearized parametrization of stratiform precipitations in the second inner loop of 4DVar
- * linearized physics are applied at the start of the semi-Lagrangian trajectory
- * "modified Lopez" parametrization of microphysics with 4 new prognostic variables (liquid water, ice, rain and snow)
- * phys/dyn interface uses fluxes compatible with the laws of Cauty-Geleyn
- * microphysical adjustment on conservative cloudy variables, after turbulence
- * RRTM longwave radiation scheme from ECMWF
- * short wave radiation scheme from ECMWF (with 2 short-wave bands in ARPEGE instead of 6 at ECMWF)
- * modified sea surface albedo and emissivity for ECMWF radiation scheme
- * MODIS winds in assimilation from AQUA and TERRA satellites
- * variational quality control
- * channel 13 of AMSU-A is assimilated
- * modified threshold for SSMI quality control
- * NOAA18 is accepted in the code
- * observation error standard deviations: AMSU-A channels 11 (0.5 K instead of 0.6), 12 (0.8 K instead of 1.2); 13 (1.2 K)
- * ground-based GPS monitored
- * Arpège forecasts at ranges 57, 63, 69 hours are added to the production
- * new fields are available in the model files: resolved and convective clouds (compressed), extra radiation fields.
- * the cycle used is 30T1 plus bugfixes, release ID is cy30t1_op1.01.L0209 on 20/2/2006

A more complete documentation, hopefully in English, will follow.

An Aladin-France E-suite is planned for week 12, with all the above plus the activation of Quikscat winds in the assimilation.

ALADIN Lopez fields will be cycled in assimilation mode, but never coupled.