

Summary of 2nd 2008 M-F E-suite

under its R&D experimental environment OLIVE

The changes in the E-site mostly are related to physics:

- CY33T1
- assimilation of METOP/GRAS radio-occultation (as soon as regular data dissemination from provider has started)
- more microwave radiances over land
- ARPEGE physical parameterization:
 - identical horizontal diffusion of vorticity, divergence and temperature,
 - vertical turbulent diffusion scheme with prognostic turbulent kinetic energy following Cuxart, Bougeault and Redelsperger (2000),
 - shallow convection scheme from Bechtold et al. (2001).
- These changes lead to adjust parameters from other schemes, in particular within the extended Bougeault deep convection scheme.
 - move from 2 to 6 solar radiation bands in the Fouquart and Morcrette scheme
 - use of the sea surface turbulent fluxes scheme ECUME from the GMGEC/MEMO group (see Weil et al., 2003)
 - a scheme for improving entrainment at the top of the boundary layer ("GBM")
 - new Ozone monthly climatology (same as IFS)
- ALADIN-France : same changes as ARPEGE plus introduction of the surface assimilation (CANARI) adapted from ARPEGE.