

What is GCO's job ? (1)

- * Management of the source code of the atmospheric models ARPEGE/ALADIN/AROME, and the model MOCAGE (diffusion of pollutants in the atmosphere), under ClearCase
- * Development and maintenance of ClearCase users and administration scripts
- * Compilation and link editions of atmospheric models on NEC SX8R/SX9 (also MOCAGE on SX9), on Linux cluster (PGI), and on ECMWF super-computer
- * Management and historisation of the elements of configuration of the atmospheric models, and MOCAGE/Meso-NH (binaries, namelists, constants)

What is GCO's job ? (2)

- * Participation in the implementation and in the follow-up of the models ALADIN intended for various partners: ALADIN partners, French overseas departments and territories, ALADIN FRANCE coupled on IFS, French army, various countries
- * First validation of any modification to do on operational models
- * OLIVE application administration, validations, and assistance to the users

OLIVE

- * OLIVE is a Web application allowing to launch runs of operational configurations of the atmospheric models, and also MOCAGE, and Meso-NH
- * OLIVE was collectively developed by GMAP and GCO
- * OLIVE validations consist in verifying that the results of the operational suite are reproducible under OLIVE (NB: all operational configurations are checked)

Participation in phasing :

1. Two kinds of phasing

- * Building of full cycles with ECMWF (ex: cycle CY37) – 1 per year
 - manual integration in ClearCase of ECMWF new cycle (1 to 2 days of work)
 - a large number of merge with conflicts to perform (2 to 3 days of work)
- * Building of intermediate cycles (ex: cycle CY36T2) – 1 or 2 per year
 - developments are sent to GCO through ClearCase branches (easier to integrate)
 - reasonable number of merge with conflicts to perform

Participation in phasing :

2. Perform merge operations

- * Gathering of all developers modifications, exclusively under ClearCase (merge operations), and try to solve as much as possible merge conflicts
- * Set labels on new versions of source code, as well on development branches as on the cycles
- * GCO's branches are used as base branches for all developers
- * A point on the status of phasing is regularly made, by e-mail or during the phasing meetings
- * Assistance to the ClearCase users

Participation in phasing :

3. Compilation

- * First test of compilation with gfortran and g95 allowing to reveal and to fix the possible errors of phasing, and to check portability of code
- * Compilation of « official » packs on hosts « yuki » (SX9), « tori » (SX8R), and « serran » (Linux cluster – PGI), with « gmckpack »
- * When phasing starts to reach the end, a compilation is also performed on ECMWF super-computer
- * GCO's packs are used as base packs for all developpers
- * Assistance to the users in case of compilation problems