#### STATUS OF LIBRARIES, EXPORT VERSIONS, & GMKPACK

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- Status of libraries in Toulouse
- Status of « hirald » : management and libraries
- Status and management of « export » versions
- Status of gmkpack
- Status of local installations on the PCs at GMAP

# STATUS OF LIBRARIES : Cycle 31

- Available at Météo-France since May, 15th.
- No critical problem reported inside, but Aladin 3DVAR has not been validated so far.
- Some ingredients :
  - Gridpoint Q
  - Climatalogical files production (e923) works again
  - Bugfixes/optimisations in NH
  - Finalize a user-friendly setup for SLHD
  - Rationalisation of GFL attributes
  - Pre-ALARO-0 physics
  - Corrections in Lopez microphysics
  - Various optimisations and portability fixes (ECMWF)

## **STATUS OF LIBRARIES :** After cycle 31 in Toulouse

#### • Cycle 31T1 :

- deadline for contributions is end of May
- Elaboration from June 5th to July 14th.
- Expected ingredients so far :
  - SURFEX plug-in
  - SURFEX « Npromatisation » by Rachid Zaaboul
  - HIRLAM physics interface
  - Cleanings/optimisations in dynamics (direct, AD, TL) by Karim Yessad
  - If ready ... AD and TL SL for plane geometry

# **STATUS OF LIBRARIES : Content and timing of cycle 32**

- Timing :
  - October 2006, to fit in with the procurements at ECMWF and Météo-France (porting on the new computer starts in December 2006)
- Content :
  - Cycle 31T1
  - + ALARO-0 physics porting and partial plug-in
  - + ECMWF contributions

## **STATUS OF LIBRARIES : Operations at Météo-France**

- **Operations :** Cycle 29T2\_op2 since January 23rd, 2006. Notice :
  - New climatalogical files
- **E-suite :** Cycle 31T1\_op1 since February 19th, 2006. Notice :
  - Lopez microphysics scheme : Liquid water, Ice, Rain & Snow
  - 46 levels
  - QuickSCAT wind Aladin
- Next e-suite : in Summer 2006. Notice :
  - New observations in Arpege and Aladin
  - Algorithms improvement in Arpege 4D-Var
  - Flow-dependent  $\sigma_b$  (through a randomization) in Arpege
  - Jk term in Aladin
  - TKE in Arpege
  - Maybe increased resolution in Arpege

## STATUS OF « HIRALD » : management (1/2)

- User group at ECMWF administrated by the user « rme » (ie Ryad El Khatib)
- To belong to this group, one should : - be ECMWF member
  - be either Aladin or Hirlam member
  - and ask Claude Fischer (cc Ryad El Khatib),
    who will ask ECMWF for the registration.

# STATUS OF « HIRALD » : management (2/2)

- Arpege/Aladin/Arome source code stored on ECFS as tar files
- Arpege/Aladin/Arome « packs » installed on HPCD mostly by Guillaume Beffrey (« GCO » team) with gmkpack
- Gmkpack : installed and maintained by Ryad El Khatib
- ...Uncomfortable but temporary situation where 2 persons use the same account (rme) and the same SecurID !

## STATUS OF « HIRALD » : libraries (1/2)

- To have the last and last-but-one operational version at Météo-France installed
- To have the last and last-but-one e-suite version at Météo-France installed
- To have more versions installed for development, following the requests
- ... But the filesystem quota for hirald is not unlimited !
- => oldest packs would be removed regularly ...

# STATUS OF « HIRALD » : libraries (2/2)

- Cycle 29t2
- Cycle 29t2\_op2 .06 and .13 (operations)
- Cycle 30t1
- Cycle 30t1\_bf.01
- Cycle 30t1\_op1 .12 (e-suite)

Incoming :

- Next e-suite version
- Cycle 31

#### **STATUS OF « EXPORT » VERSION** definition

- A package containing :
  - Source code extracted from ClearCase (either a « main » version or a « branch »)
  - Can be a « full » version or an « incremental » version laying upon a full version, according to what source code has been extracted from ClearCase
  - Some namelists from Météo-France operations, suitable for this source code
  - Some documentations

### STATUS OF « EXPORTED » VERSION management

- Accessible by Aladin members only in the machine « andante » : ~marp001/public/export
- As a directory or a tar-gzipped file.
  - Full versions are « export\_main\* »
  - Incremental versions are « export\_icmt\* »
- Suffix refers to the ClearCase release, branch and version

## **STATUS OF « EXPORTED » VERSION** Last « export » versions published

- CY29T2\_01 (*main*)
- CY29T2\_bf.01 (main)
- CY29T2\_bf.02 (on top of bf.01 ; for e923)
- CY29T2\_bf.03 (on top of bf.02 ; for e923)
- icmt\_CY29T2\_op2.13 (*on top of \_01*; Operations)
- icmt\_CY29T2\_export.01 (on top of op2.13 ; forgotten bugfixes + pre-Alaro-0, including Pre-Alaro-0 documentation/namelists by M. Derkova)
- main\_CY30T1\_bf.01
- icmt\_CY30T1\_bf.02 (on top of bf.01 ; forgotten bugfixes)
- icmt\_CY30T1\_export.01 (on top of bf.01; forgotten bugfixes + pre-Alaro-0, including Pre-Alaro-0 documentation/namelists by M. Derkova)

Sofia, 16-19 May 2006

16th Aladin Workshop

# STATUS OF GMKPACK planning

- Current version is still 6.1
- Next version (6.2) under preparation :
  - 6.2 Beta available very soon (tests on VPP, IBM, PC)
  - Final version planned for Summer (tests to be performed on a NEC-SX, Cray XD1, PC-Cluster)
- A package of external libraries should be available with 6.2 Beta :
  - RGB, dummy IBM, dummy FDB, dummy WAM, dummy NAG (light), dummy C code by Blacklist, dummy MPI, dummy ODB

#### **STATUS OF GMKPACK main ingredients of next release**

- Full compliancy with Linux
- Much much easier handling of dummy subroutines
- Support for a cross-compiler
- Various ergonomic improvements
- Less bugs, hopefully
- Support for an easy work without ODB

#### STATUS OF LOCAL INSTALLATIONS on the PCs at GMAP

- Gmkpack test-version 6.1.7 and Cycle 30T1 installed with pgi compiler on « sxalgo1 »
- First Fullpos jobs and conf. 927 succesfull on « lxgmap42 » - my PC :-)
- *Planned* : to run all configurations, especially (e)923 and Arpege 4D-Var « toy »
- *Planned* : to make a complete portable installation package from scratch, to run and develop the whole software.