



**Number 0**

**November 1995**

*An evening ALADIN meeting has been held during the EWGLAM meeting in Sinaia. During this meeting, a need of something like a Newsletter appeared. This is the first attempt to answer this request. In this newsletter 0, we principally approach the organization questions. In order to make this Newsletter as useful as possible for the ALADIN team, we do need your remarks on this letter. For any comments, please contact :*

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### **E-mail alias**

An e-mail alias **aladin@cnrm.meteo.fr** has been created : the list should contain the address of any people interested in ALADIN news. The list now available is certainly incomplete. You will find it on both the ALADIN WWW server and the public ftp. Please let us know about any changes you would like to make in (modifications, additions or suppressions).

### **ALADIN WWW server on the Internet**

A WWW server is planed to display information on ALADIN. A first version is being prepared with very few topics : some news about operational versions of ALADIN, list of scientists present or expected in Toulouse, addresses of ALADIN participants, the list aladin@cnrm.meteo.fr, a short recapitulation of the participations to the ALADIN project, the last newsletters, quasi-operational bulletins, the next meetings, ...

This server will be completed with informations that you would like to see or to put on it, ... contingent on the agreement of Météo-France and the CNRM since this server will be part of the institutional Météo-France server.

To link to the ALADIN home page, it will be possible to go through the Météo-France home page :

**<http://www.meteo.fr/>**

Later, you will be informed by email about the direct access to the ALADIN Web pages.

## Informations available on a Public ftp

Most of the informations which will be available on the ALADIN WWW server will be obtained on a ftp anonymous : the file **readme** is in ASCII format and contains the name, format, date of last change and summary of each other files. To begin with, most of the files will be in Postscript format. If necessary, the text files could also be transformed in ASCII format, and the graphic ones in GIF format.

This public ftp is in read-only access and can be found on the workstation :

**cnrm-ftp.meteo.fr**

on the user anonymous and the directory **/pub-aladin**.

## Exchange of texts or graphics

If you want some texts or some graphics to be introduced in the ALADIN Web server or in the public ftp, please contact **patricia.pottier@meteo.fr**. For the moment, the text files should be in ASCII format and the graphic ones in postscript or gif format. A writable ftp is available for these exchanges but a password is requested and files can only stay a very short time on it (3 days). An e-mail contact is necessary to obtain the password for the first access and for any further access to avoid the automatic deletion of the files before we save them.

This public writable ftp is also on **cnrm-ftp.meteo.fr** and, provided you know the password, you can write on the directory **/pub-ext**.

## Quasi-operational News

In order to be consistent with the changes in the ARPEGE configuration that has been operational since Wednesday 18th of October, ALADIN has been running with 27 levels since that date (*more details in ALADIN Quasi-Operational Bulletin number 19*).

Due to a strike of a certain part of Météo-France's staff, you could not receive any forecasts from ARPEGE and ALADIN during the first weeks of November (*more details in ALADIN Quasi-Operational Bulletin number 20 and 21*).

A new version of ALADIN has been on test at the end of October. We expected it to be more compatible with the semi-Lagrangian ARPEGE, to reduce the excessive low level drag and to regularize energy spectra. The first scores confirm these expectations and this new ALADIN version should be operational before the end of November (*more details in a future ALADIN Quasi-Operational Bulletin, probably number 22*).

## **Participations in the ALADIN projects**

A summary of the participations in the ALADIN project is regularly produced since the beginning of the project. The last one was prepared on september 30, 1995 (see Web server or public ftp). More details can be asked individually to Patricia Pottier.

With effect from October 1st, the recapitulations will be modified, in order to take into account different changes in the ALADIN project : the deeper collaboration with the Instituto Nacional de Meteorologia (Spain), the deported versions of ALADIN on workstations, the GRIB reception, ...

Two types of recapitulations will be updated by Météo-France : one for the participation in the Toulouse part of the ALADIN project (similar as the previous recapitulations) ; one for the total participation, including deported work realized on the ALADIN project outside Toulouse. A quarterly updating is planed. To do this, we will need to collect informations from each country at the end of each quarter (probably by email or with the public writable ftp).

The first attempt to do this will be made for the last quarter of 1995. At the end of the year, every country will be kindly asked to send to us an estimate of its effort in term of participants (name, duration, subject) in the ALADIN project, with the exception of the stays in Toulouse.

**Things will be easier for us if each country could entrust someone with making the national recapitulations, so that we may ask these representatives.** Please send us the name of this representative as soon as you have identified him.

## **Minutes from the ALADIN evening meeting on 3rd October 1995 in Sinaia beside the SRNWM/EWGLAM meetings**

The idea of this meeting appeared originally from a discussion with Mr Ioana. We thank him for this suggestion; it proved to be a good idea and it will certainly be repeated during the next EWGLAM meetings.

### **1. Why this meeting ?**

*The ALADIN project is at a turning point :*

The ALADIN project is 5 years old and can be considered as finished in its first phase from the scientific point of view. The next steps must be defined.

From now on, we will have to face with some operational preoccupations, but they will be strongly connected with scientific challenges.

*We are in a good position to continue :*

We can rely on the ALADIN compatibility with ARPEGE/IFS.

We are in better position than HIRLAM due to our code environment.

Our plans seem less risky than those at DWD and UKMO.

The CANARI analysis will still be sufficient before 4D-VAR, since 3D-VAR couldn't bring too much before.

*Indeed, we have some disadvantages :*

Due to our dispersion, we need financial support for missions, exchanges and more coordination work.

If we decide to do any action, we will have a similar problem for coordination of deported research, but the situation is similar to that one in 1991, ... and we proved to be able to overcome this problem.

Some concrete solutions can be proposed to improve the communication inside the ALADIN team (production of some ALADIN Newsletter, email list to be installed, WWW server) but also external "publicity". The problem to find a standard for exchanging text files (Word, Latex, others ?) was raised.

## 2. Identification of the scientific subjects

The scientific subjects can be divided in 3 sorts : some obliged subjects, some "big specific subjects" and some "big SRNWP network imported subjects".

The obliged subjects will be imposed by the compatibility : IFS ----> ARPEGE ----> ALADIN, in term of modularity (necessity of phasing, merging, testing and coordination).

The "big specific subjects" were the main point for the meeting (no discussion on the "big SRNWP network imported subjects") with some parenthesis about different scientific technics.

*A specific physics for NH modelling :*

In this subject, we have both an historical advantage which is not available in the other groups, and a technical advantage (NH is only one switch !!!).

Problem in convection, thermal forcing (to be separated in T and P contributions) should be studied.

*SL interpolators :*

Facing costs reduction with SL, 2-t step scheme, NH should be possible : some interesting ideas have been presented by Mariano Hortal in Sinaia, other should come like CUD5.

The idea : good transport properties will give good models.

*4D-var assimilation specific to mesoscale :*

- *why possible ?*

quality connected with capacity to interpolate, to filter, to find the equivalent of the modelisation of errors in OI (only optimal), having automatically the dependance with the meteorological situation ;

- *why ALADIN ?*

ALADIN has advantages above all when you consider that future goes through incremental method using a reduced resolution model. Moreover, with non spectral LAMs, some problems at the boundaries may appear when integrating backwards.

To reduce cost, something similar to incremental with decremental in addition could be tried as it is well justified by what we can see in nature.

- *which risks ?*

No safe success can be assured for the method (precursors absent, model not good enough, not able to digest high resolution data); to find the structure functions for the new (NH) variables.

- *which tasks ?*

The next step would be to find if there is any precursor for mesoscale events ; if yes, to go further to study their effects and to be able to use as many data as possible (ie, how to use them), we have found the right data quality control (problem : how to produce good statistics).

## 3. An open question

At this stage, we should try to answer this question : do we start a collective effort on any or all of these three subjects ? An answer should be expected in about six months through the discussion list of ALADIN.