SYNERGIE Updates and plans

Antoine Lasserre-Bigorry

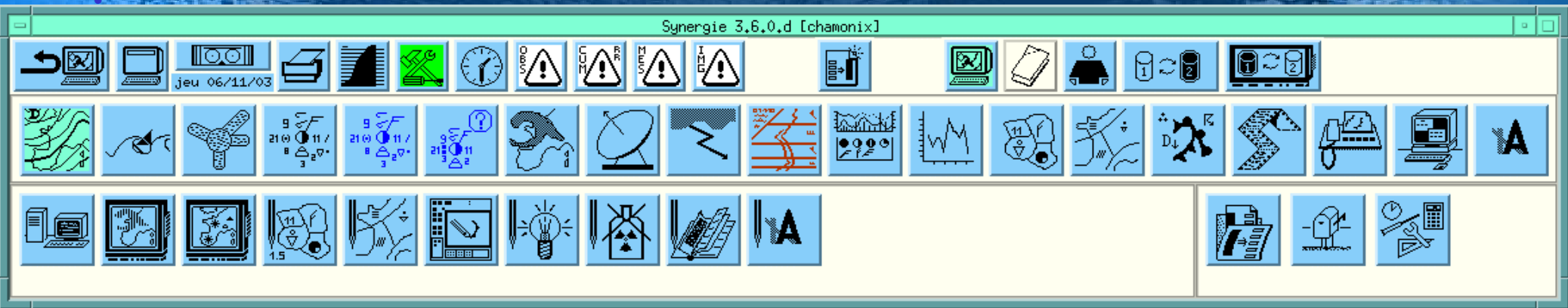
METEO FRANCE

Part 1 : SYNERGIE Programme

Orientations in Météo France on Meteorological and Production Workstations

Part 2 : Synergie tool

Meteo-France Meteorological workstation improvements



Part 1:
SYNERGIE Programme
and
Orientations in Météo France on Meteorological and Production Workstations

METEO FRANCE

Summary

- SYNERGIE in brief
  - Main objectives
  - Some numbers
- New Orientations for SYNERGIE
  - Commercialisation
  - Convergences with MF Production Systems
  - Include new functionalities

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PART 1 :
SYNERGIE
Programme

- SYNERGIE in brief
- Main objectives
- Some numbers
- New Orientations
  - Commercialisation
  - Convergences with MF Production Systems
  - Include new functionalities

1. Strategy

- Support Météo France Strategy, Organisation and Main Projects
- Contribution to cooperation and commerce

2. Regulation

- Optimisation of Human and Financial investment
- Coordination of Requirements, Development, Operations, Training

3. Developments

- Valorisation of all the meteorological data
- Tools for the forecasters and forecasting activities

4. Operations

- Deployment on national and international sites
- Administration and supervision within a common framework

See O. Rouzaud presentation Thursday

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- 7.6 MEuros investissment until 1989
- 130 men years for 13 years
- 90 % home made
- 100 % meteorological and computer standards
- 1 500 000 Code lines
- 13 new operational releases since 1993 (V3.6 today)
- 46 sites in the world (23 MF, 7 Army, 16 Export)
- 180 workstations in the world (130 in MF)
- About 1000 meteorologists using Synergie

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PART 1 :
SYNERGIE
Programme

➢SYNERGIE in brief

-Main objectives

-Some numbers

➢New Orientations

- Commercialisation
- Convergences with MF Production Systems
- Include new functainalities

• Commercialisation

- Météo-France in France
- Météo-France International outside France(2002)

• Convergences with Production Systems in MF

- Commun Organisation for Requirements Management
- Commun Functionalities (Forecasters Tools)
- Commun End users Production (Climatology, Forecasting)
- Commun Technologies (Operations)

• Include new functionalities

- Nowcasting
- Local forecast Symposium project
- Tropical cyclone forecast tools

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Part 2 :
Synergie tool :
Meteo-France Meteorological workstation improvements

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Summary

- Introduction
- 3.6 Release improvements
  - New observations (Seawind on Quikscat)
  - Inclusion of BUFR objects
  - Nowcasting including Rapid Developping thunderstorm (RDT) products
  - Radar water waves
  - MSG
- Futur Developments
- Linux

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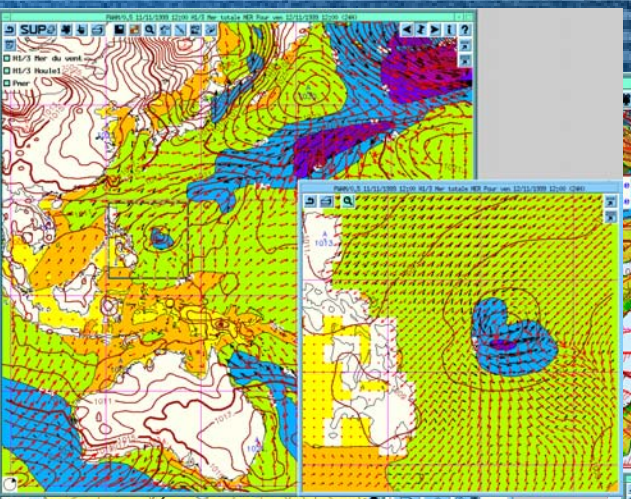
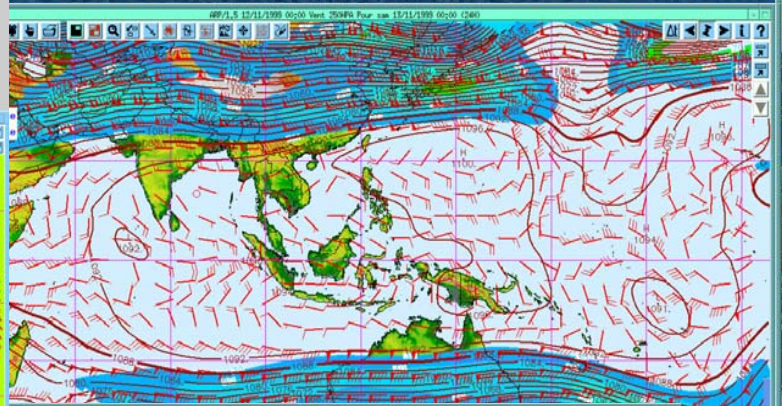
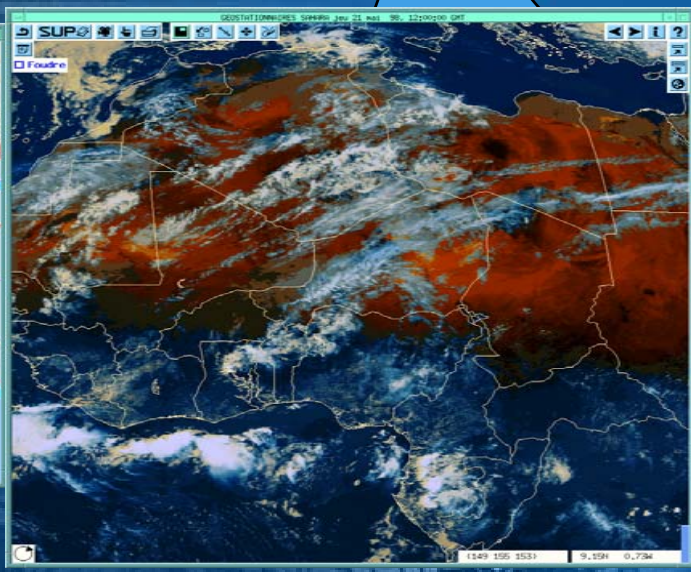
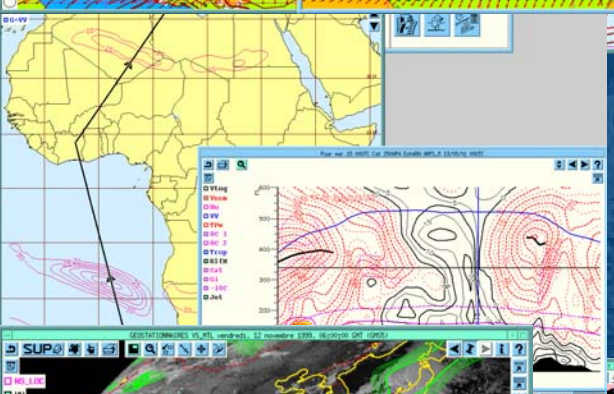
Introduction

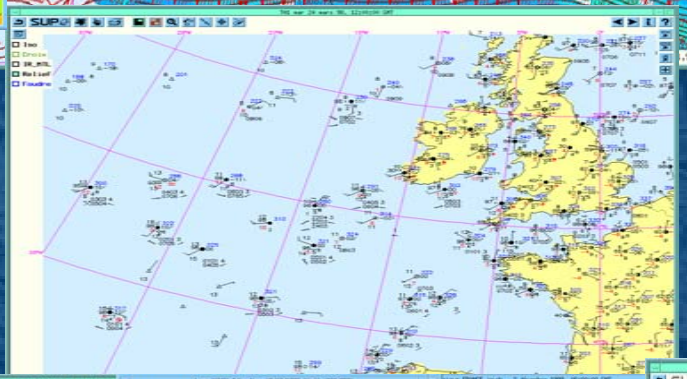
Sophisticated visualization tools

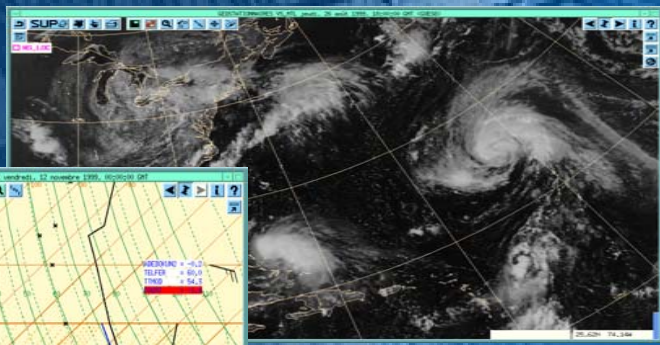


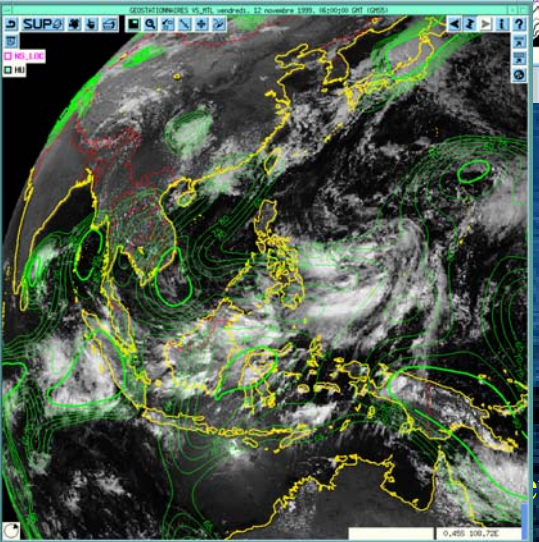


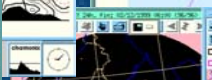


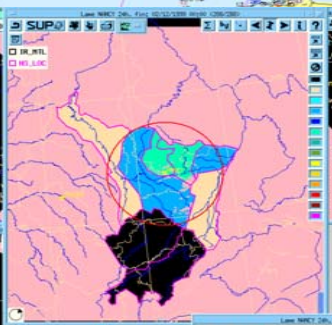


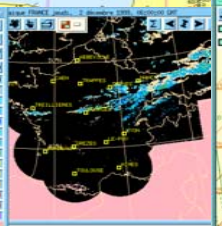


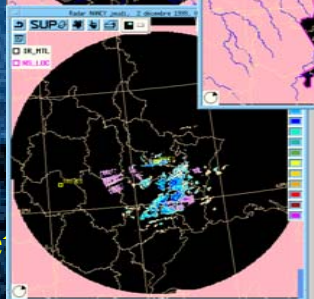


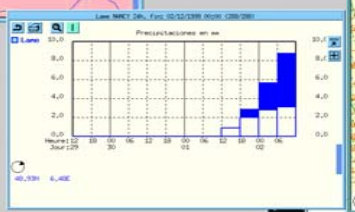


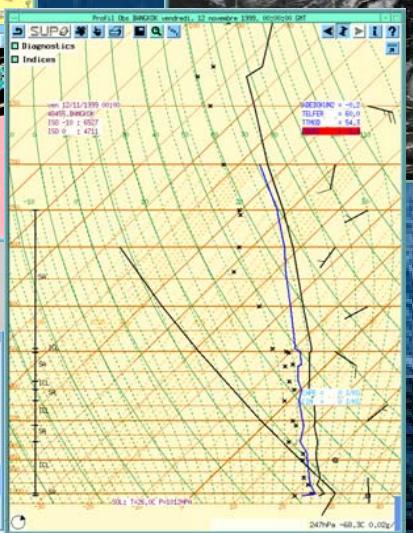






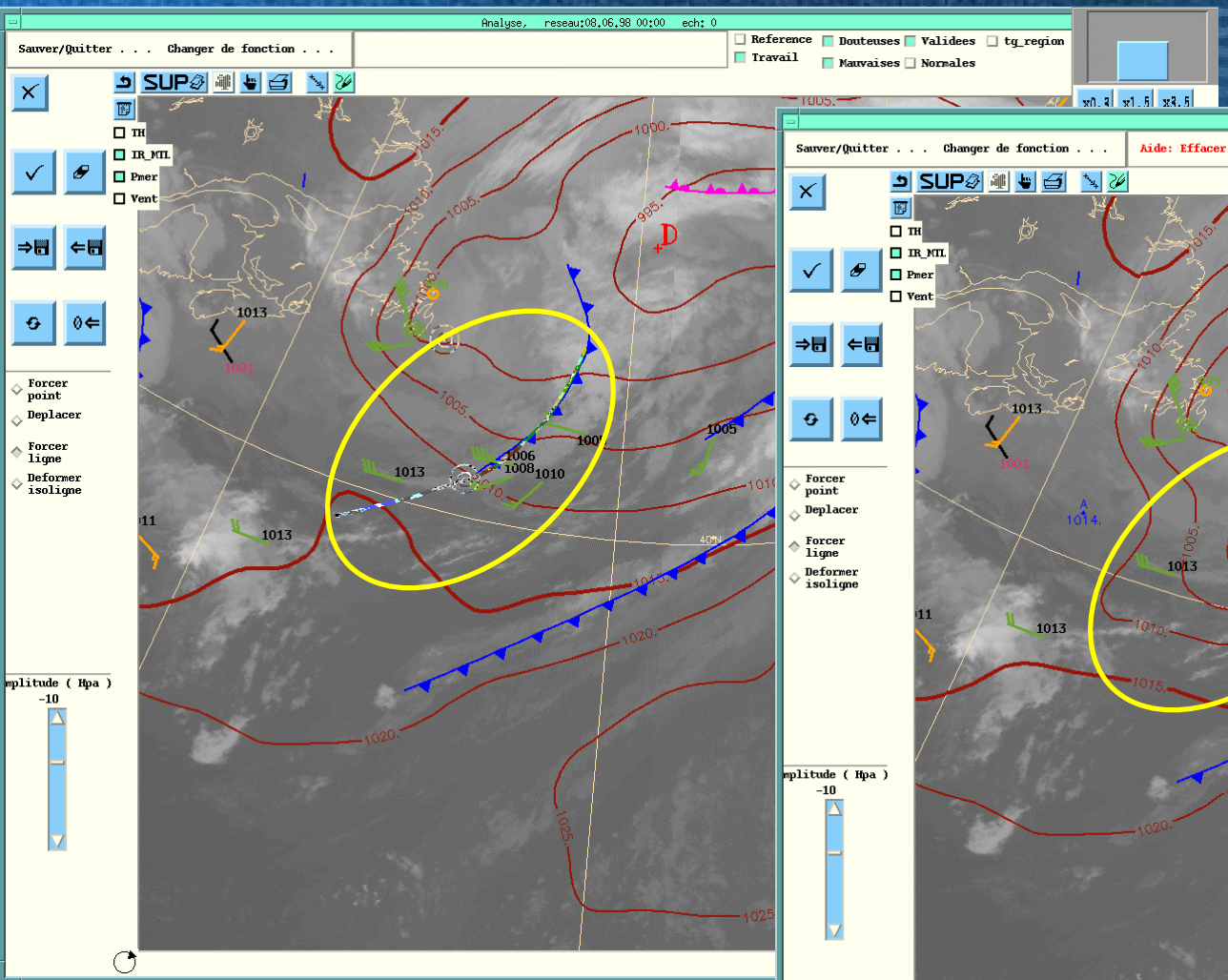


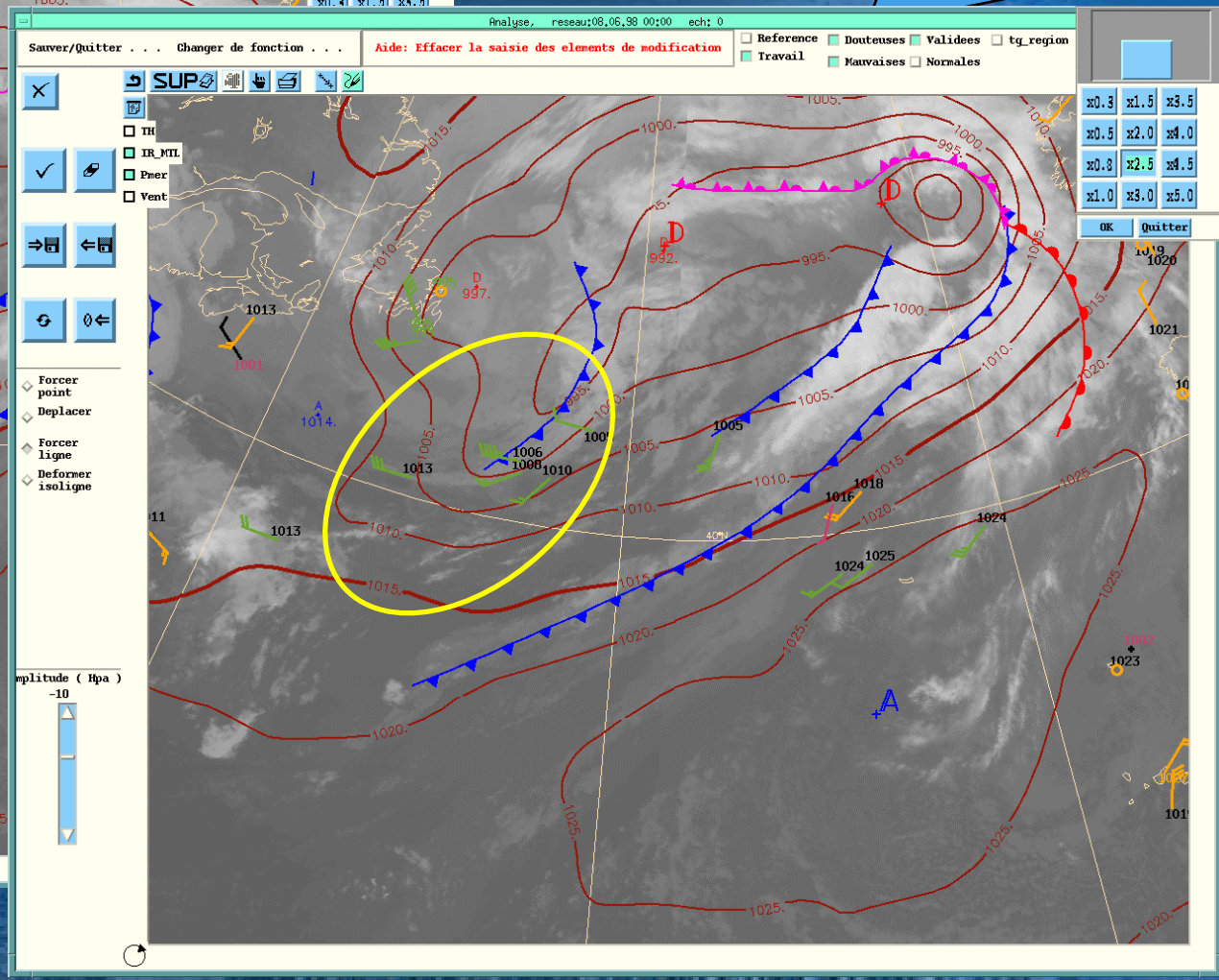




Introduction

Fields modification





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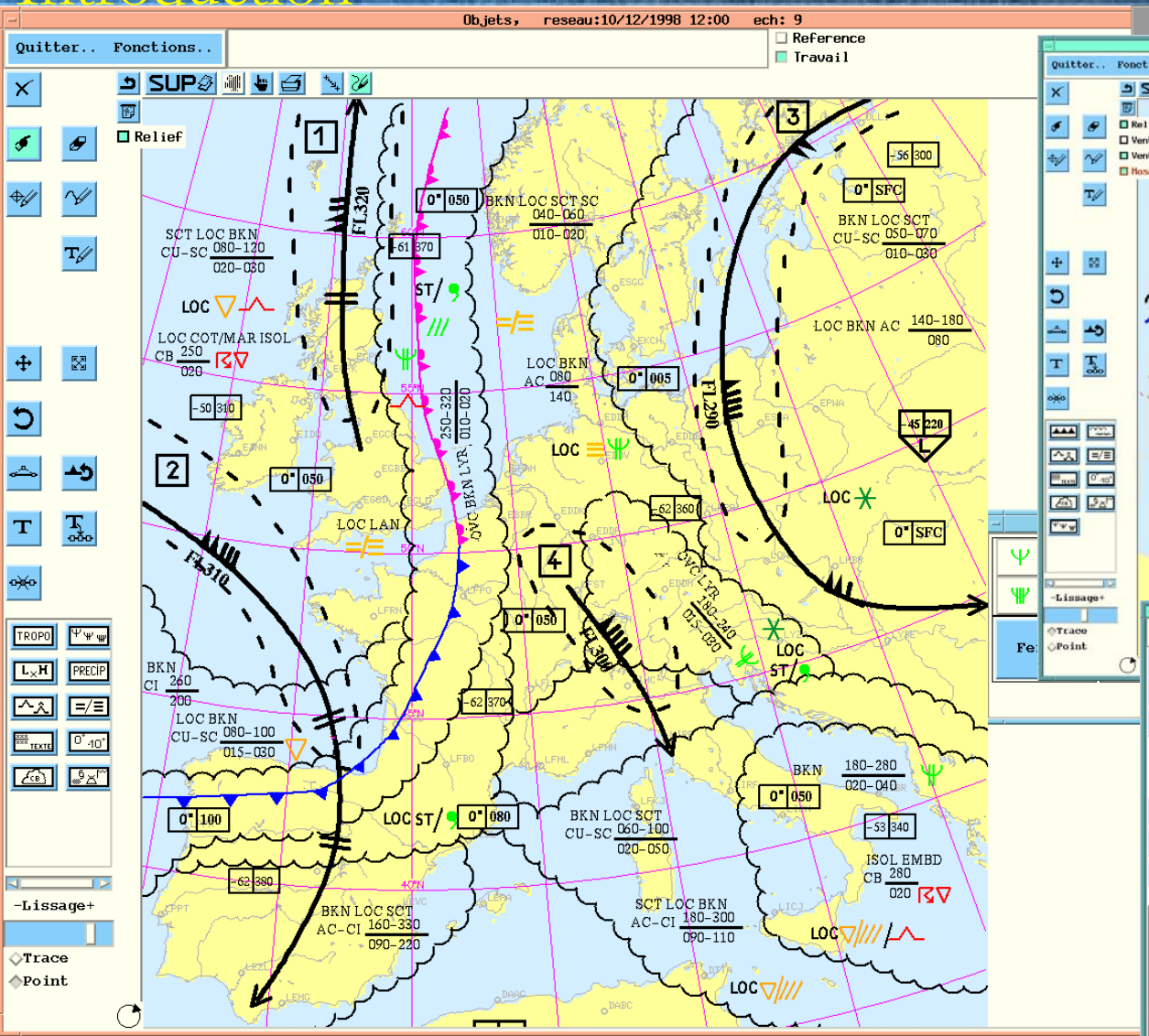
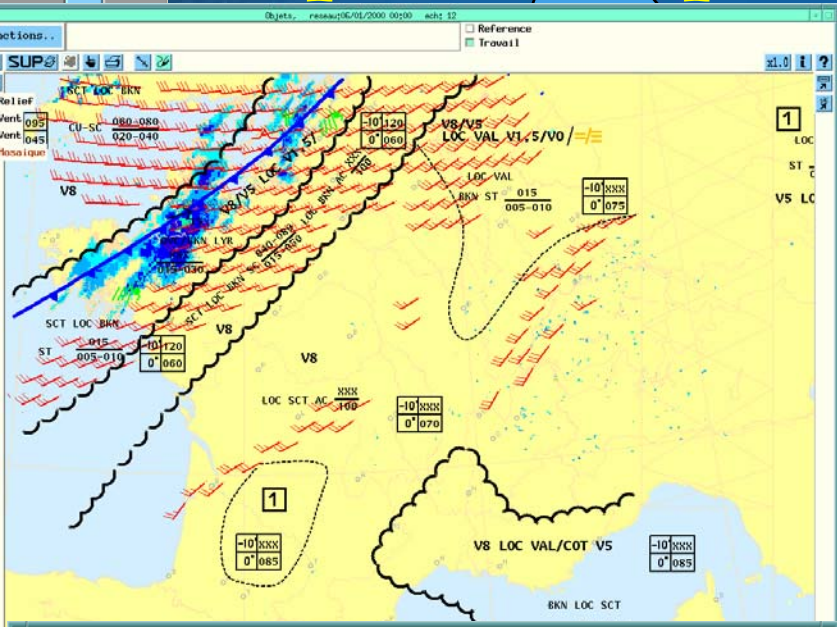
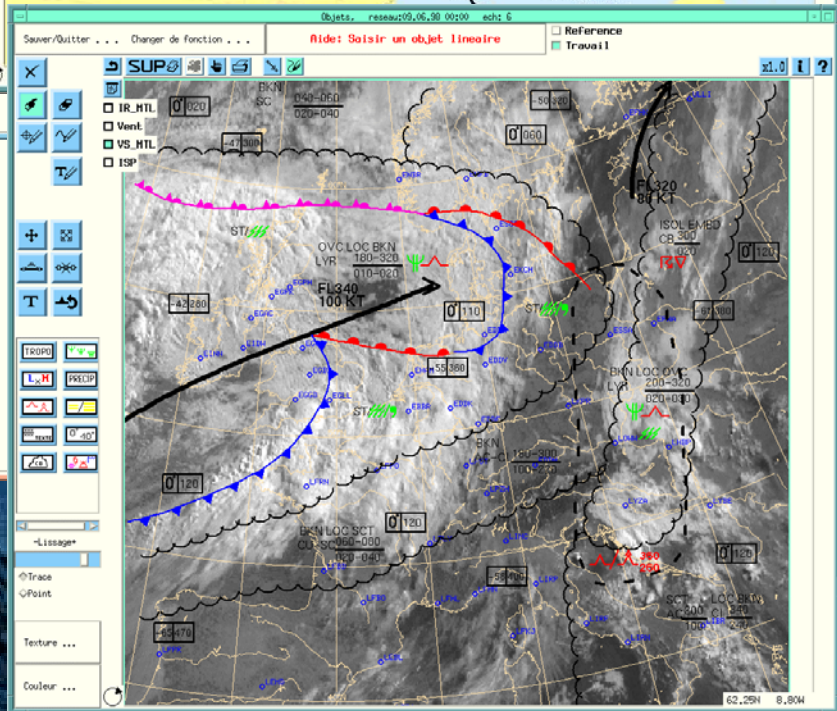
Introduction

Expertise input







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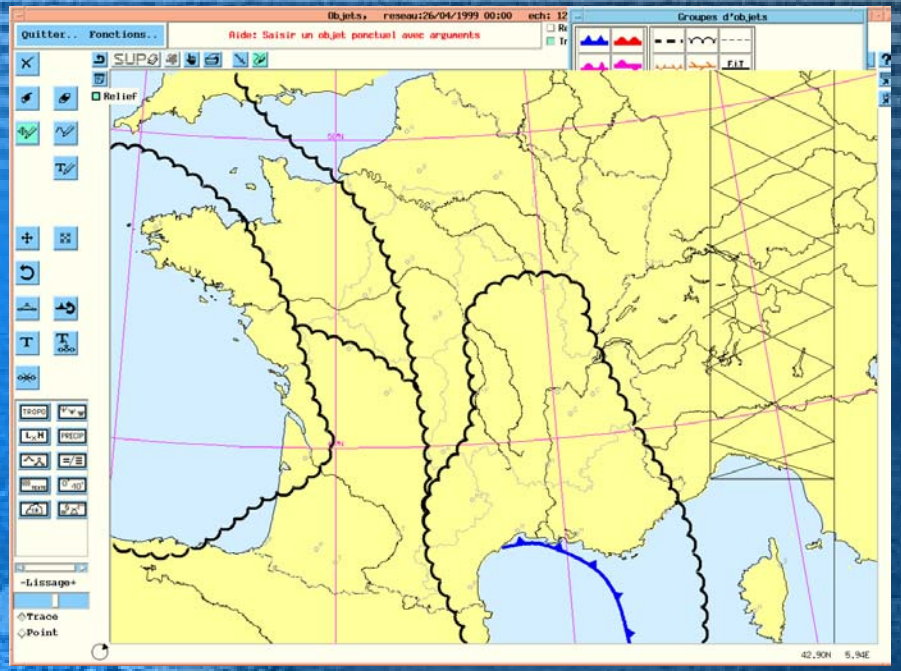
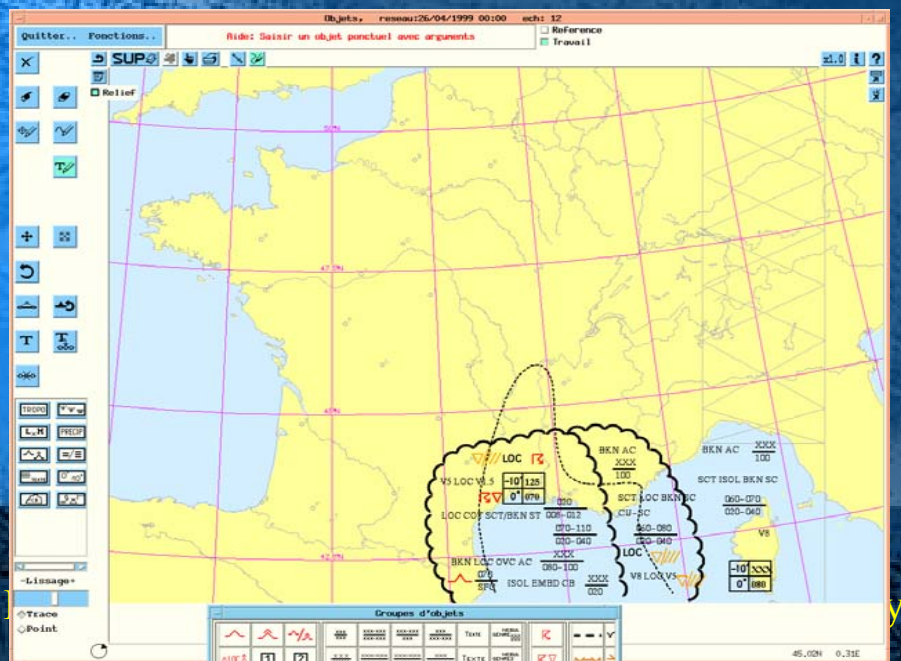
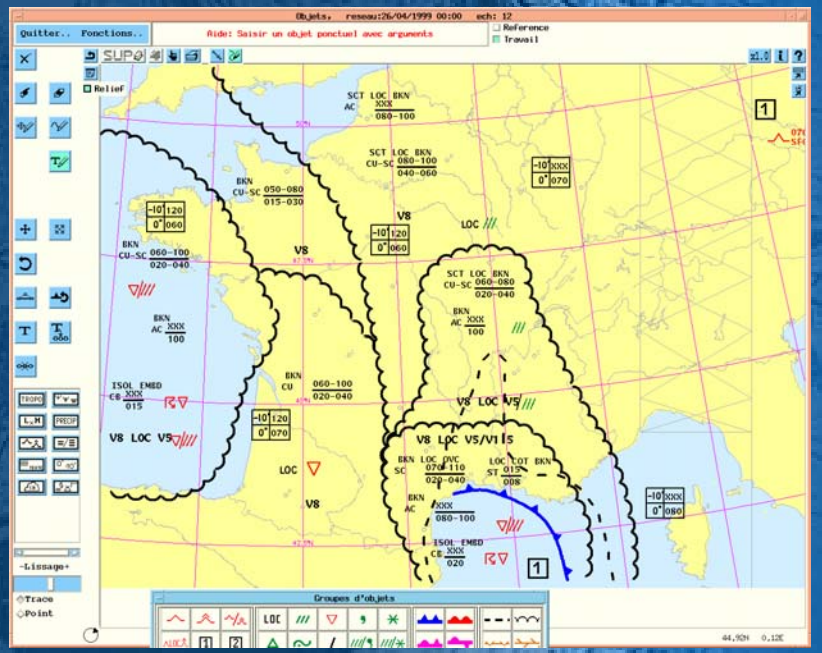
Cooperate and communicate







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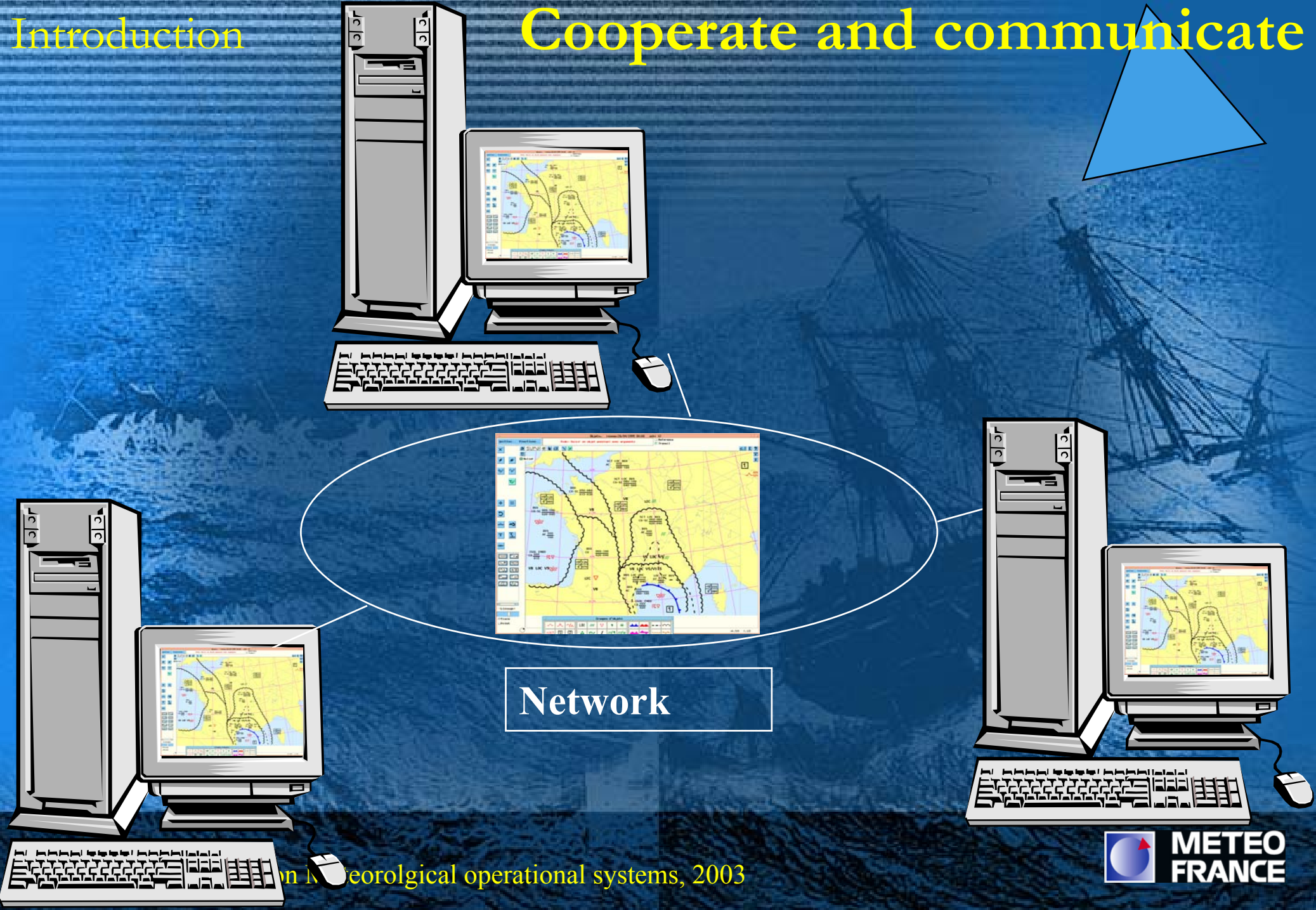
Cooperate and communicate



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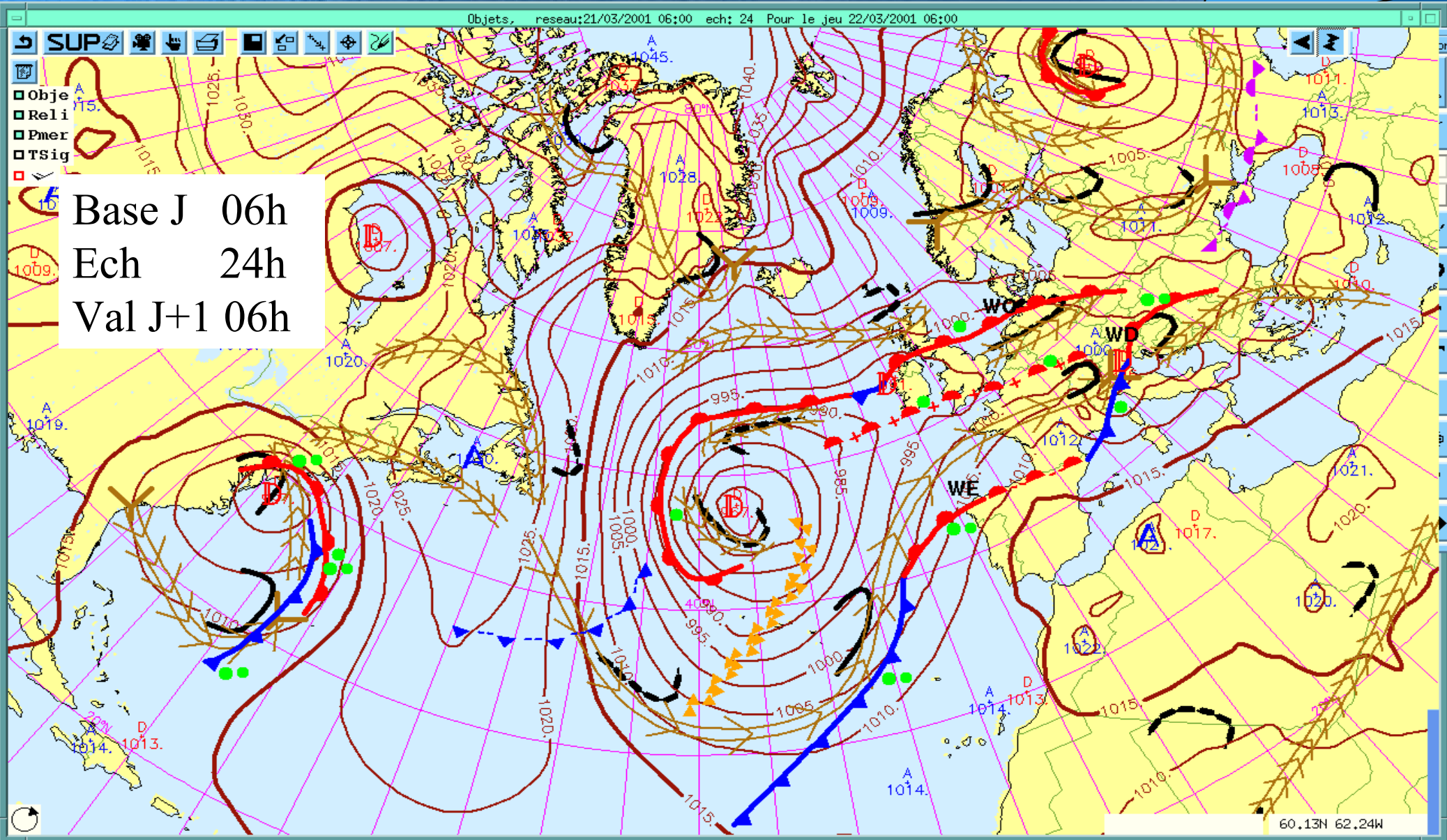
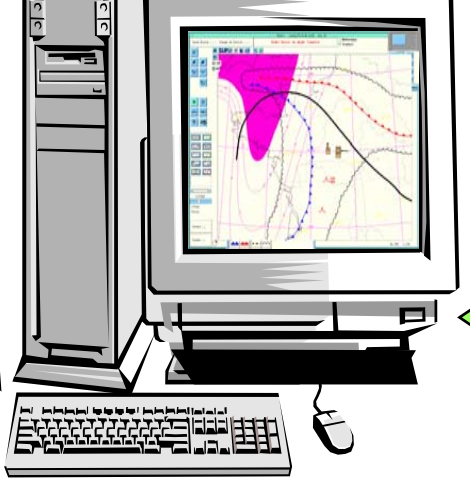
Support new methodologies



WEB production Processus



Interactive Synergie

Raw data

Data

BDM

Raw Basic data

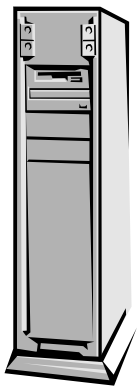
Expert data

Production data

Image prototyping

Images production management

Data



Images

Images visualisation systems

Professional GIS

WEB Server

Other systems

Synergie batch

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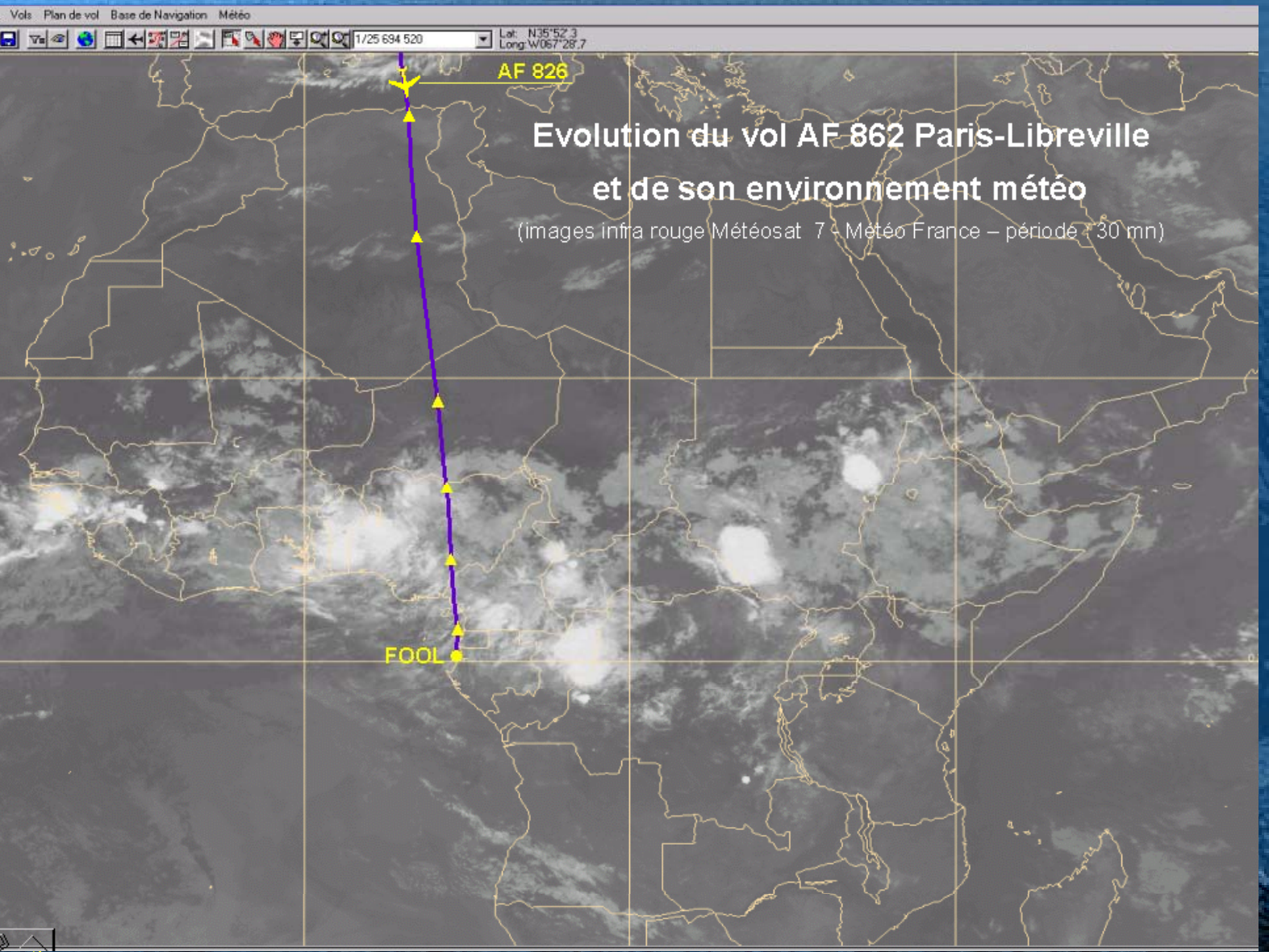
Graphical production



Example of use:
Professional Information System integration

for decision helping

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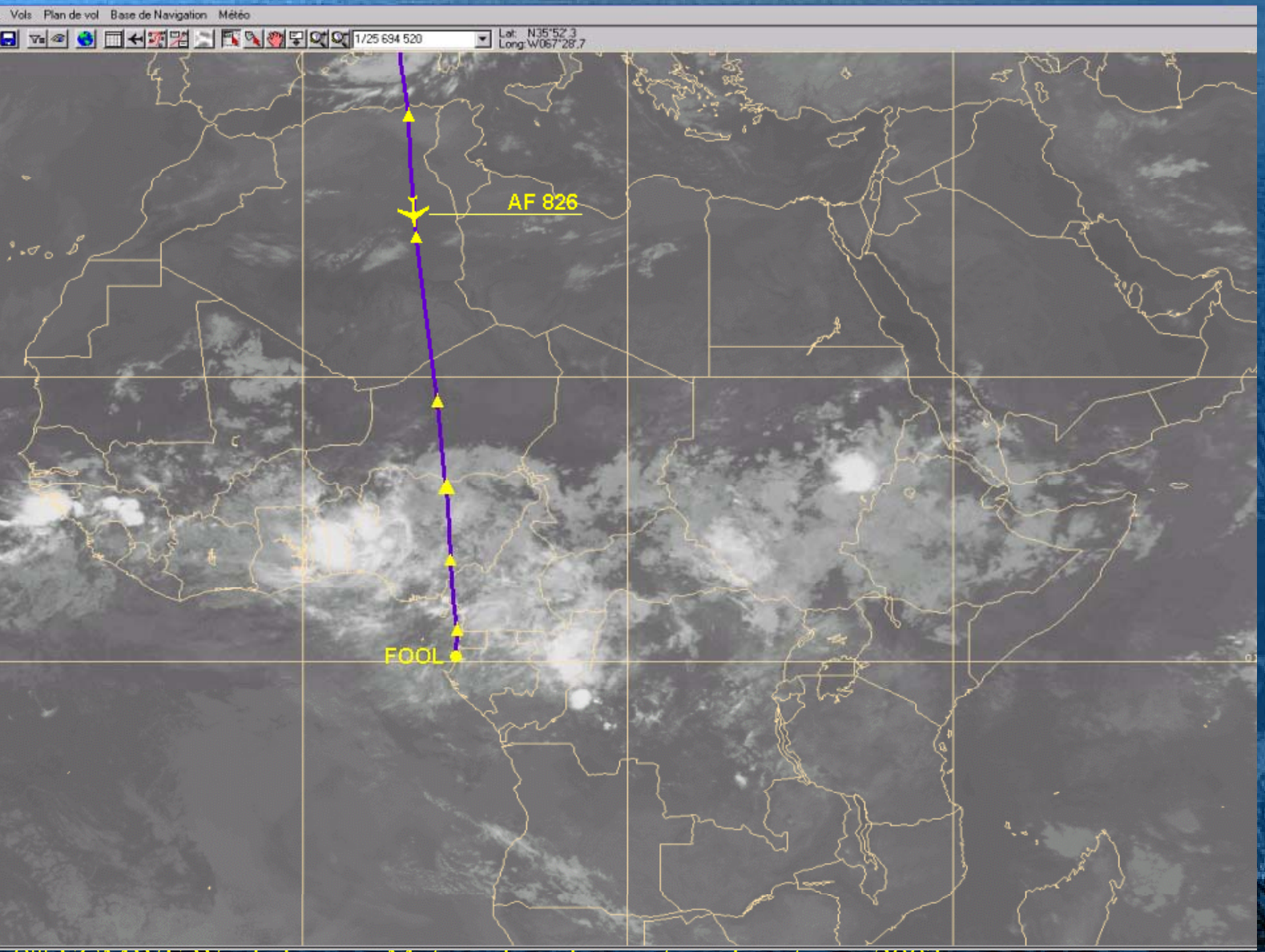
Graphical production



Example of use: Professional Information System integration

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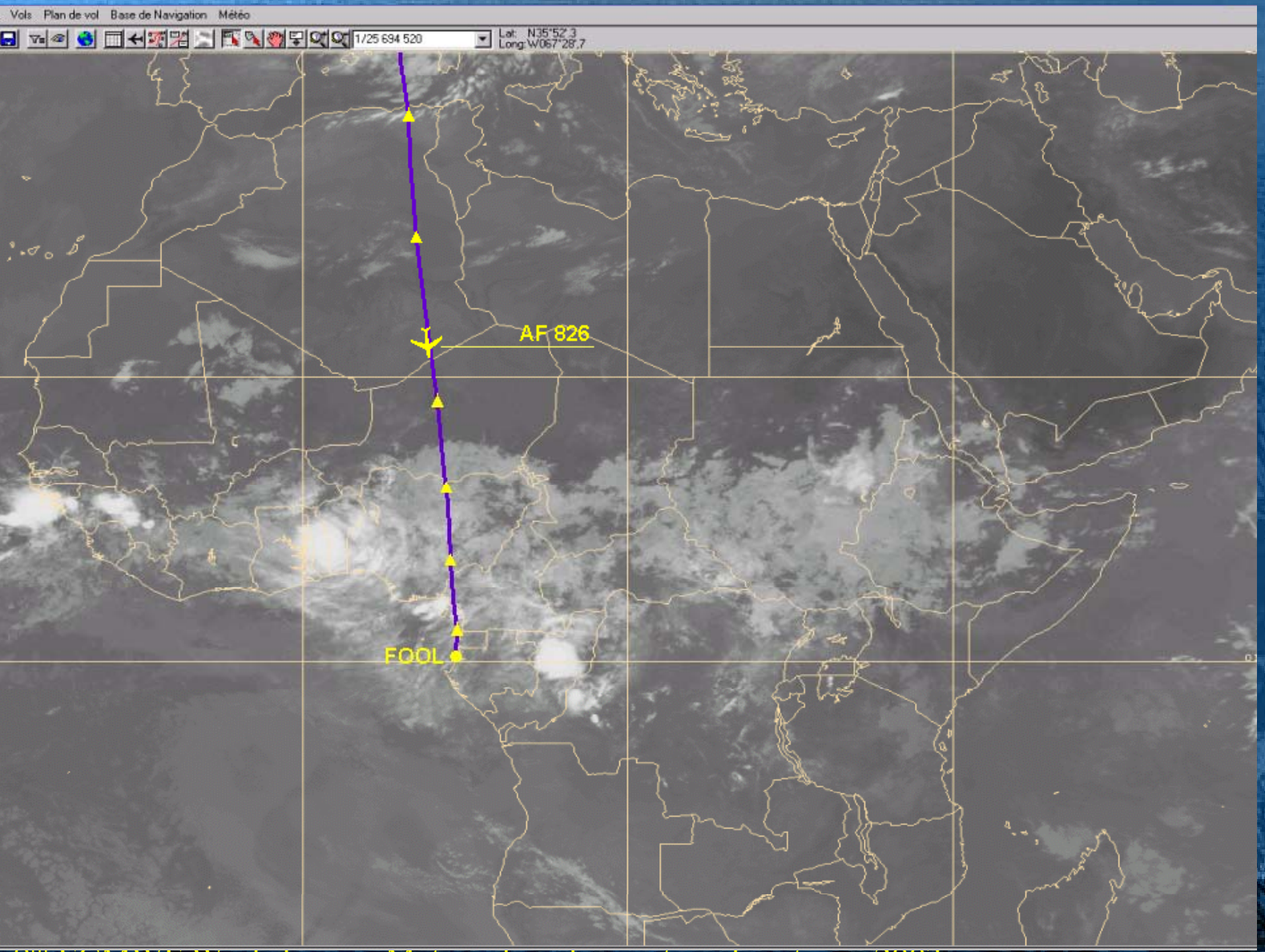
Graphical production



Example of use: Professional Information System integration

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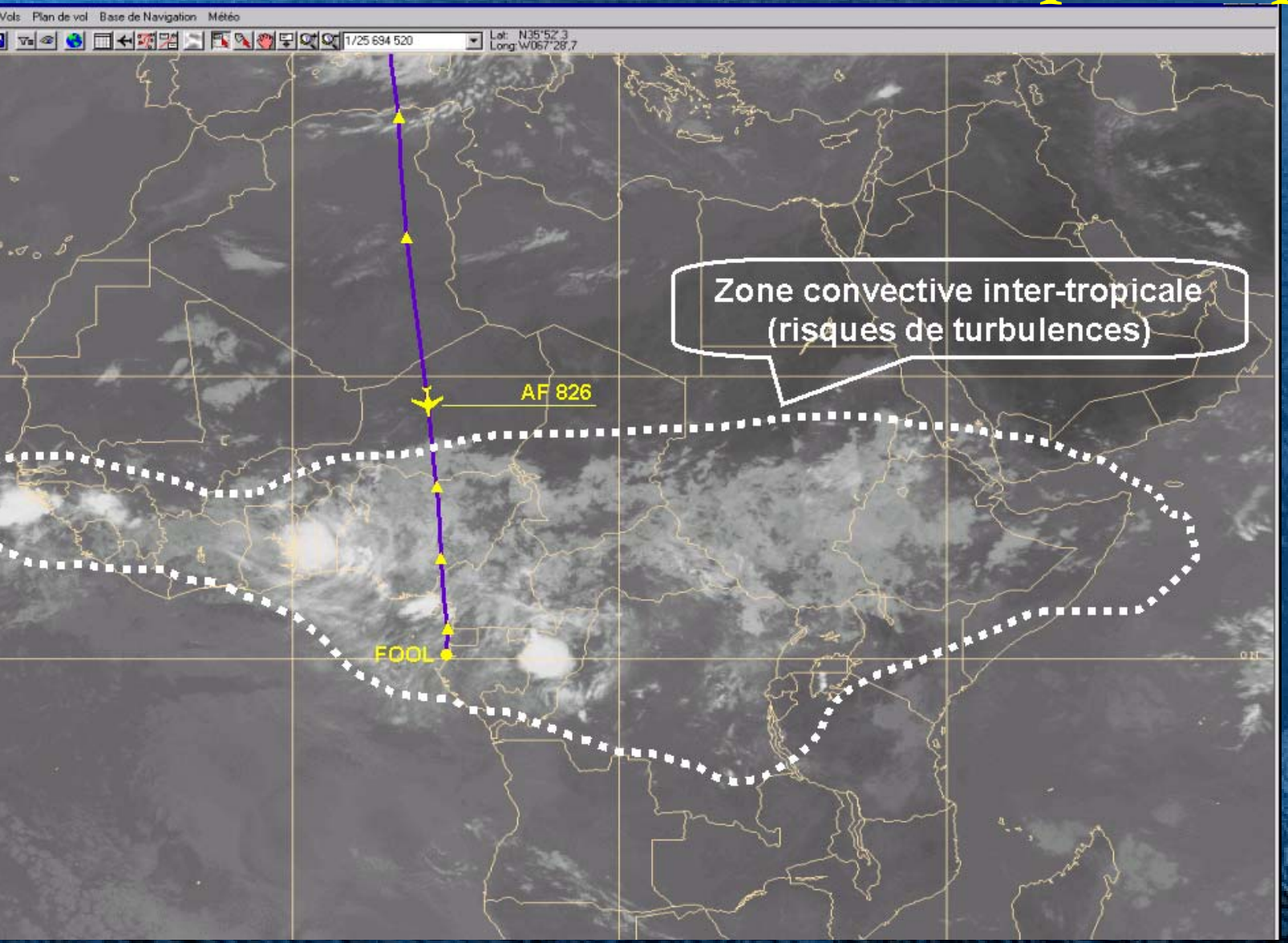
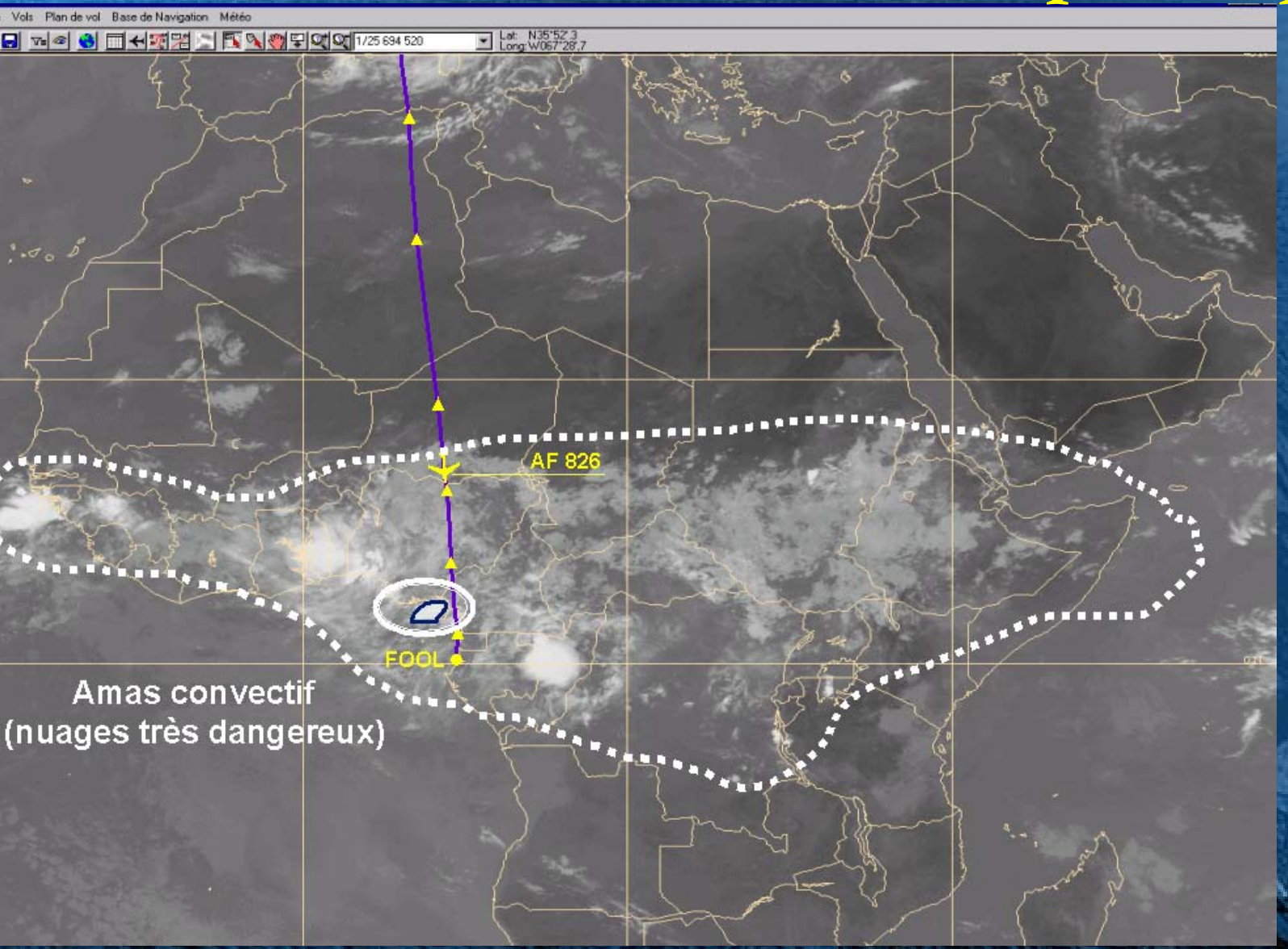
Graphical production



Example of use: Professional Information System integration

METEO FRANCE

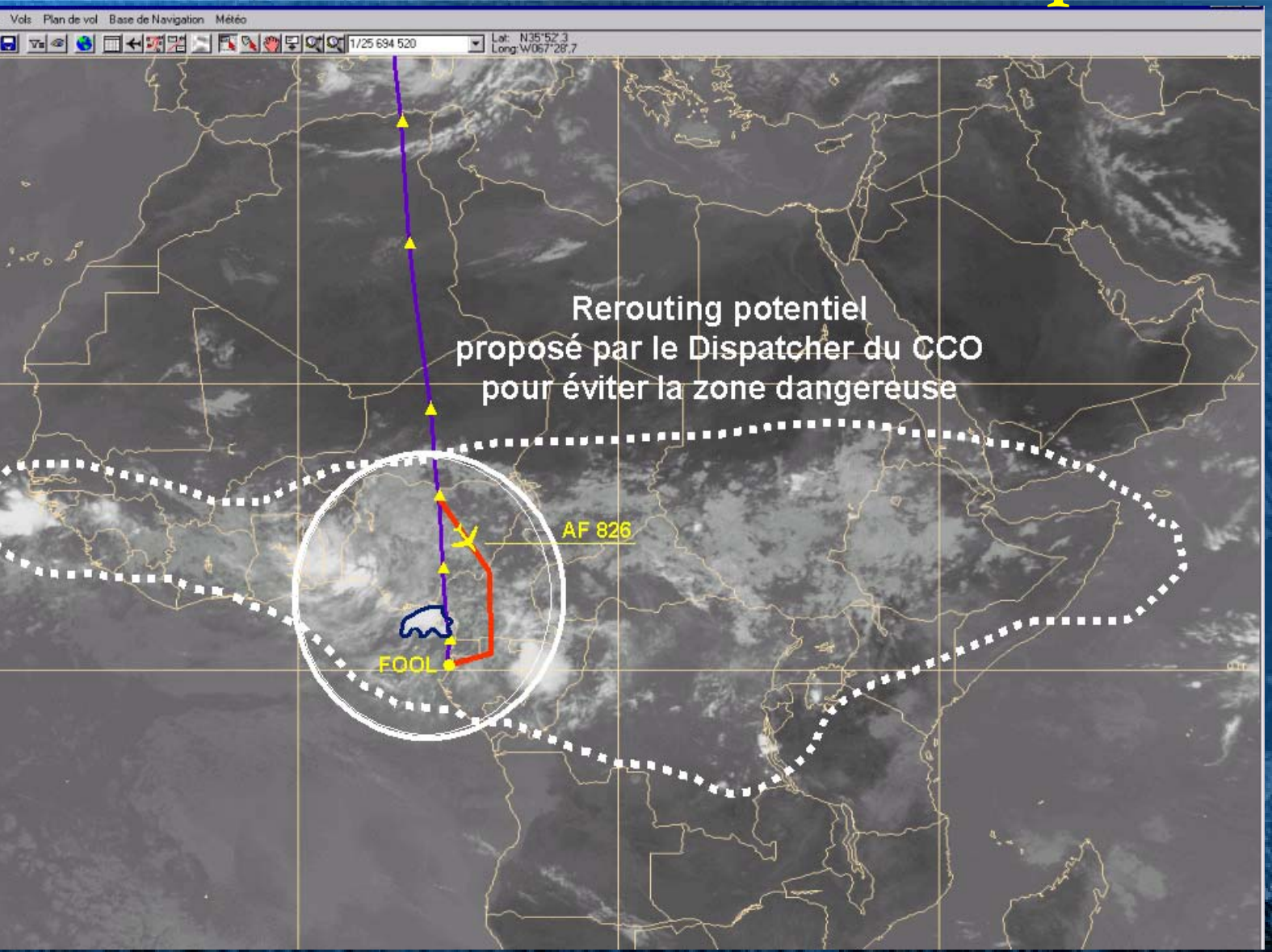
Graphical production



Example of use: Professional Information System integration

METEO FRANCE

Graphical production



Example of use: Professional Information System integration

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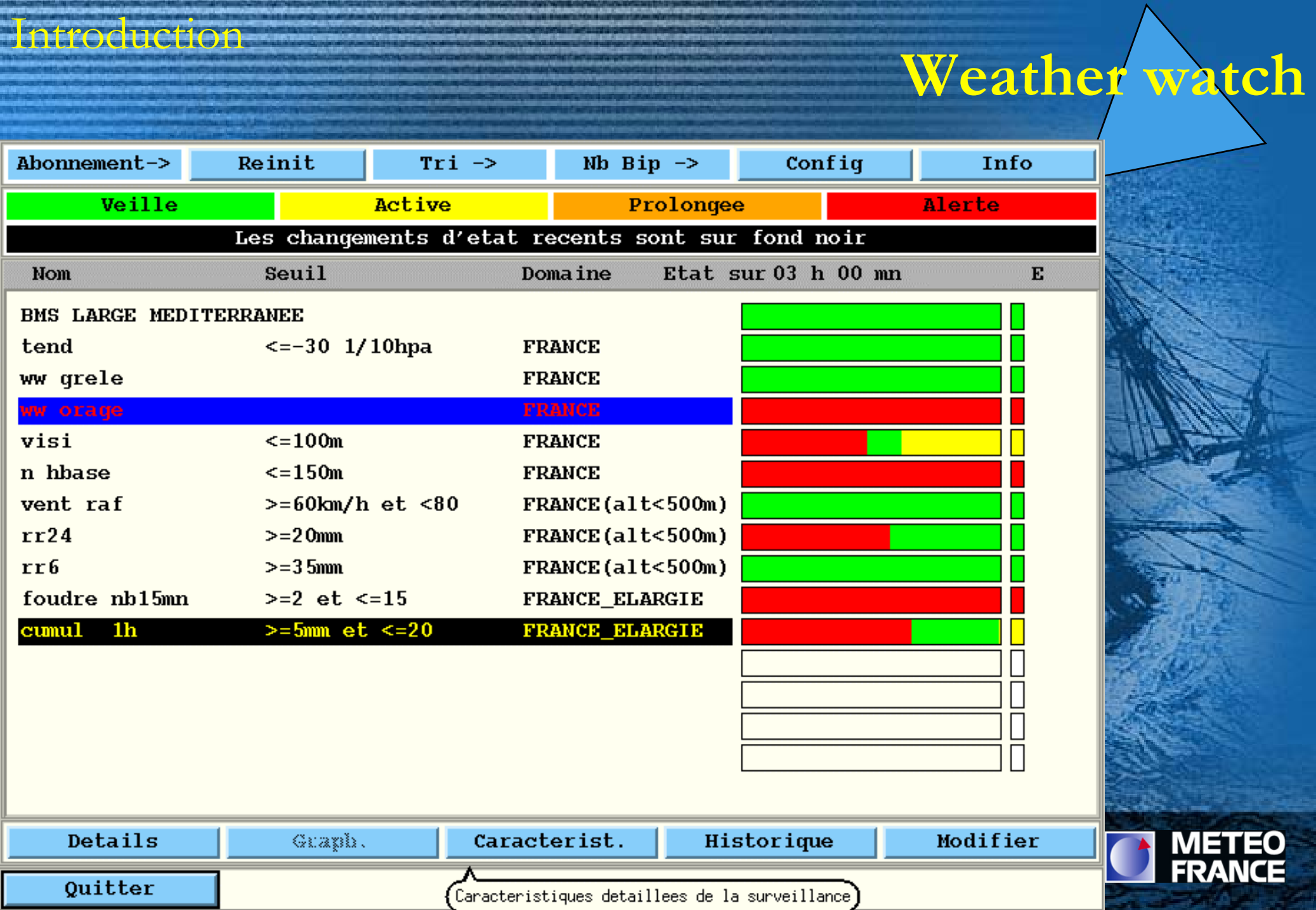
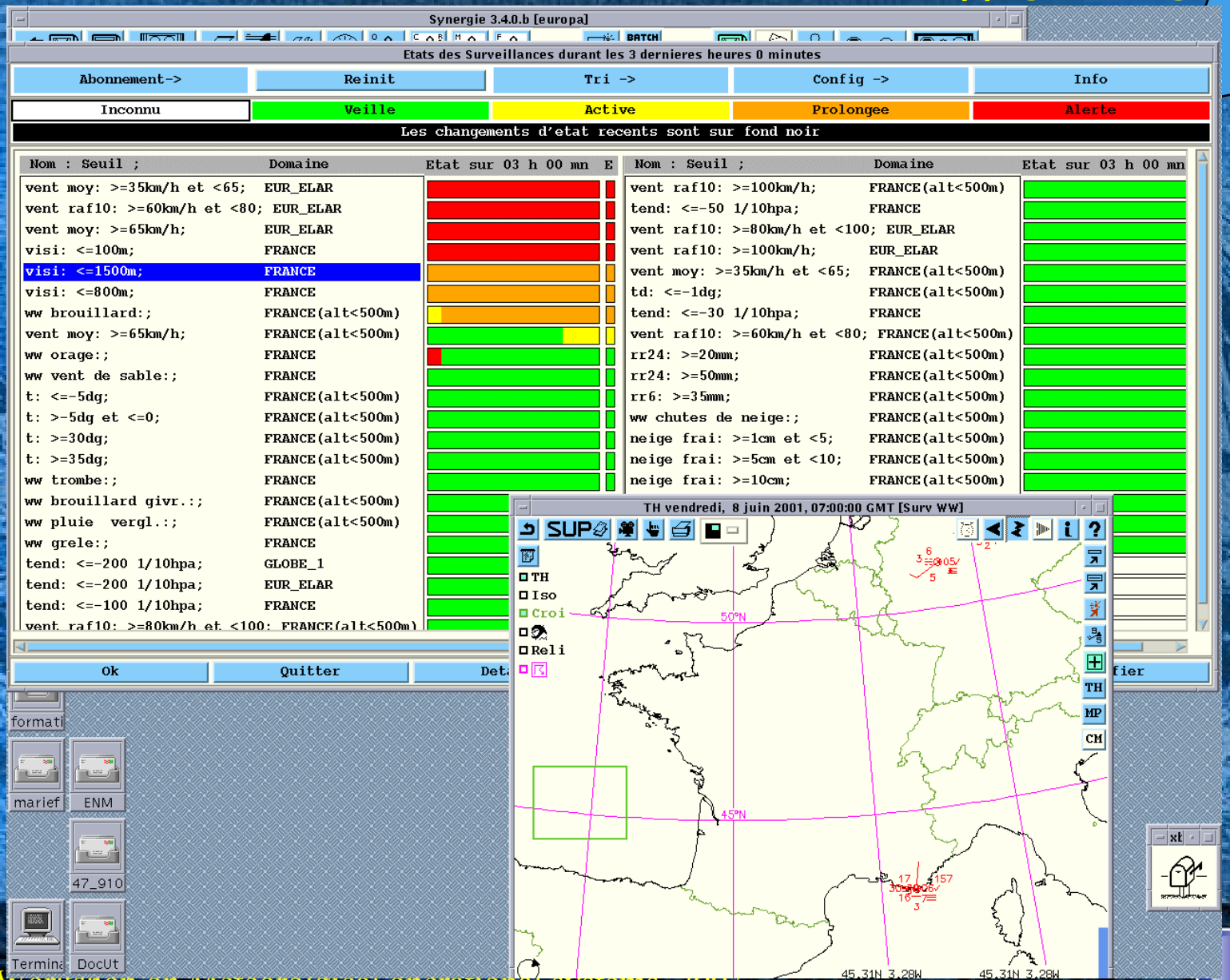
Introduction

Weather watch



Introduction

Weather watch



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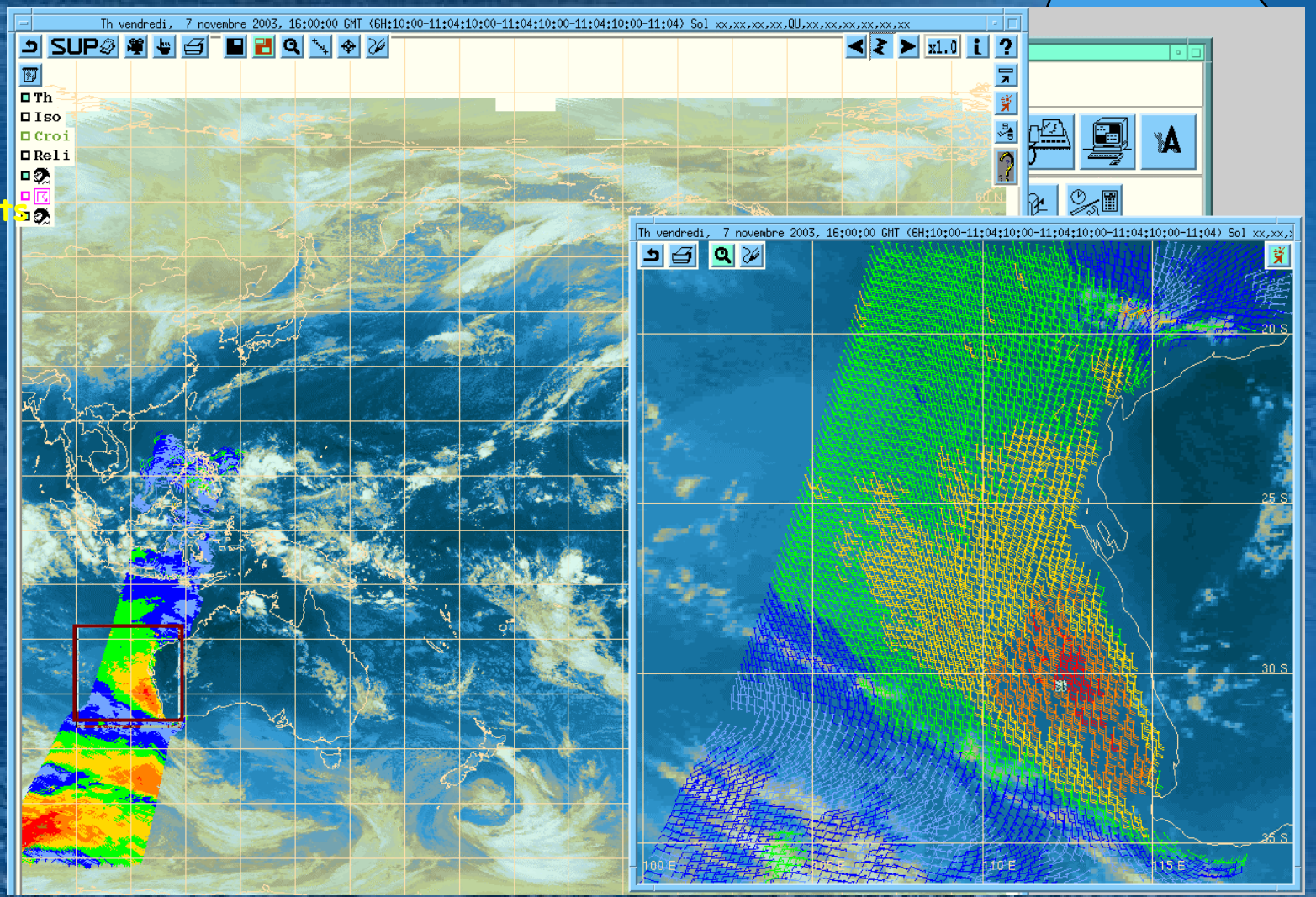
PART 2 :

Synergie tool

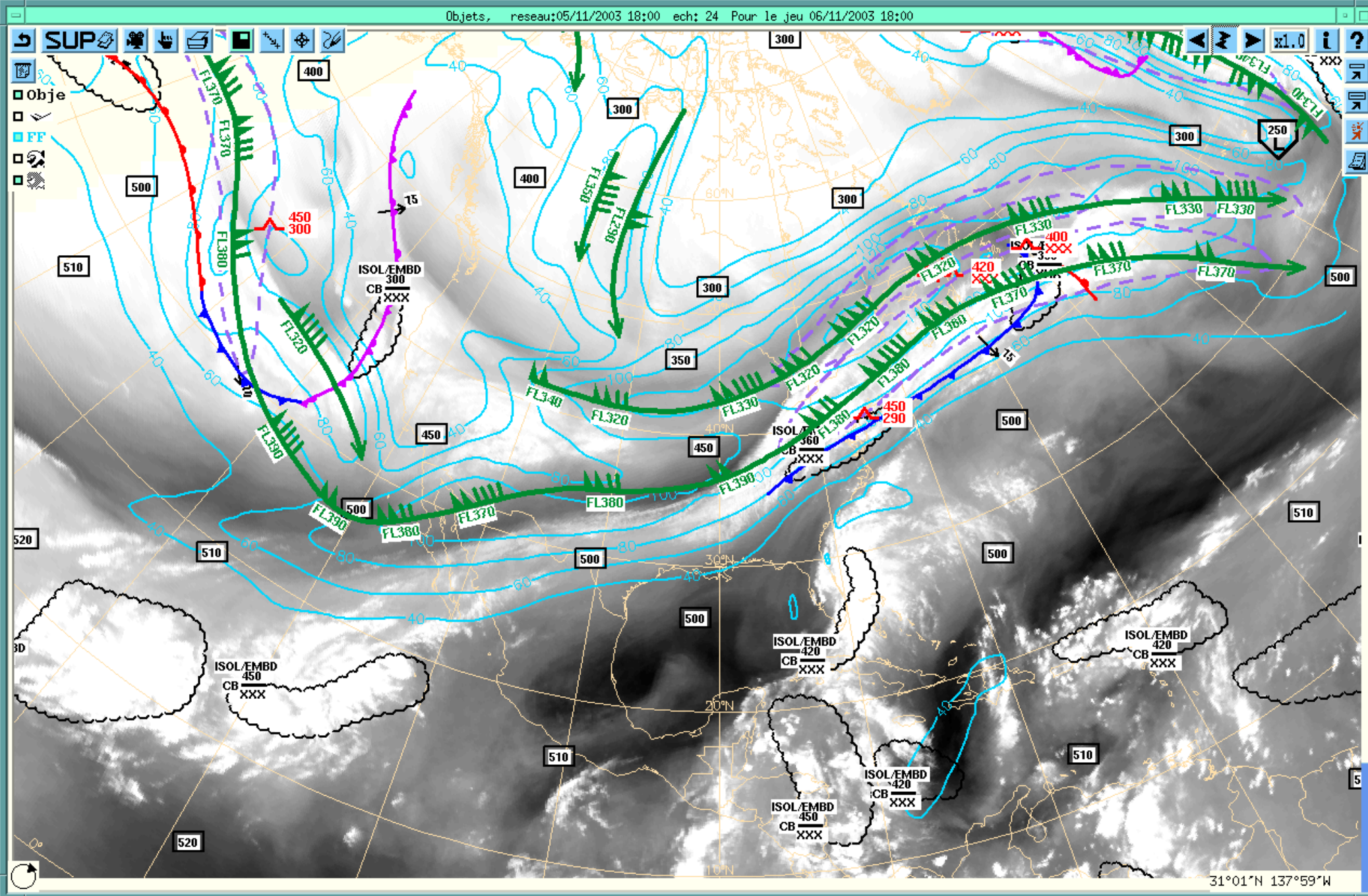
- Introduction
- 3.6 Release improvements
  - New observations
  - Inclusion of BUFR objects
  - Nowcasting
  - Radar water waves
  - MSG
- Futur developments
- Linux

New observations

- Seawind



METEO FRANCE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PART 2 :

Synergie t

- Introduction
- 3.6 Release i
  - New observat
  - Inclusion of objects
- **Nowcasting**
  - Radar water v
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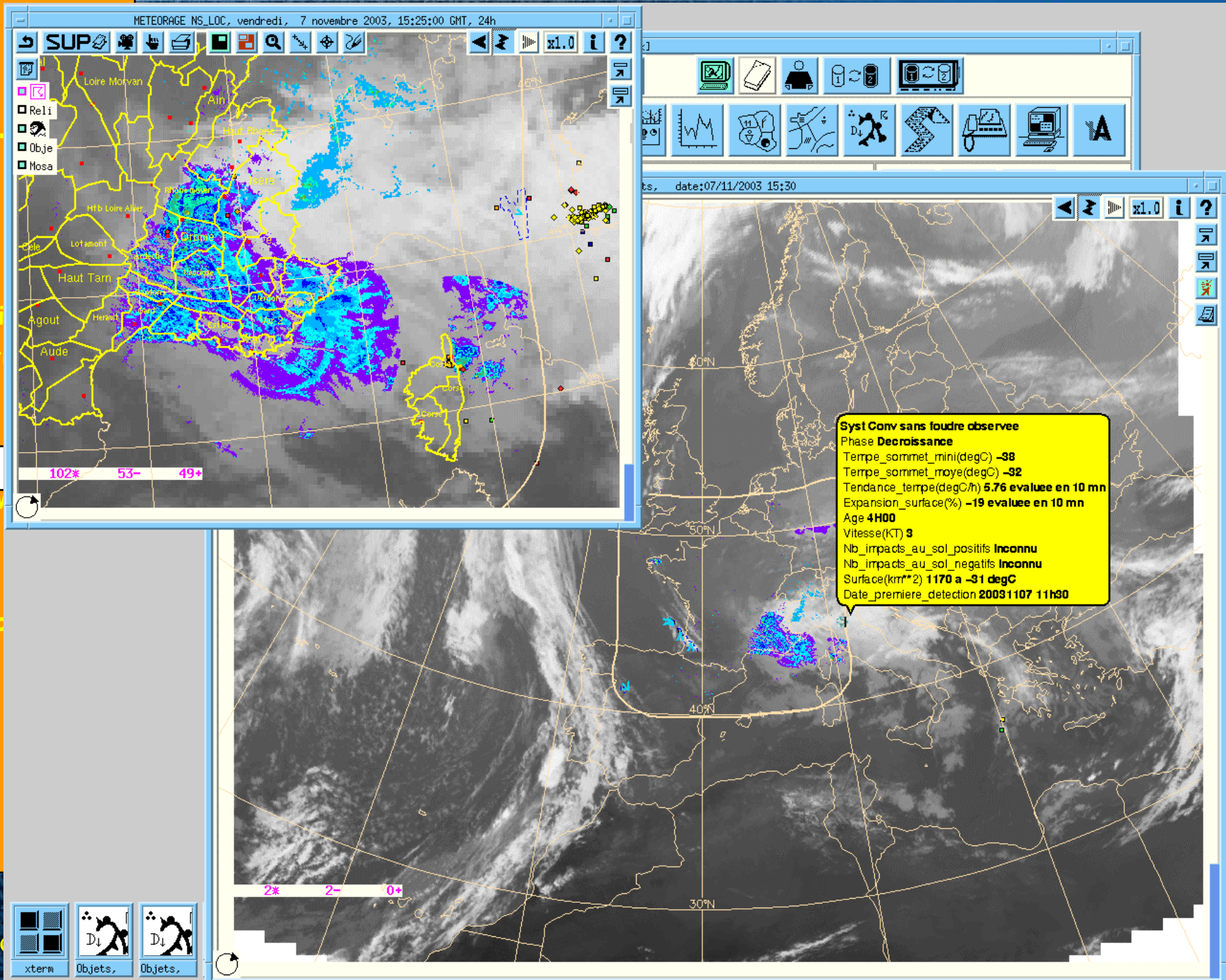
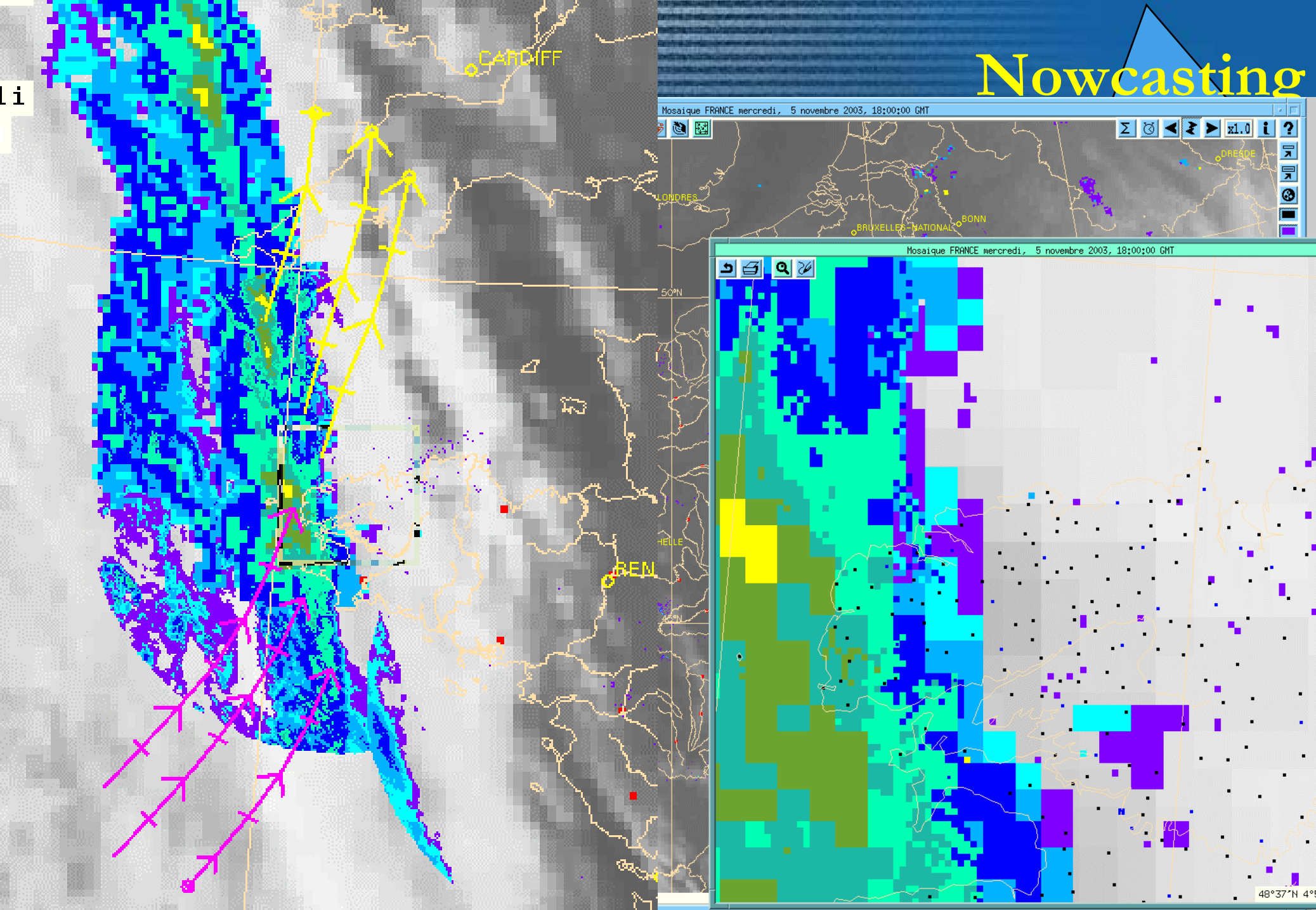
- Futur develop
- Linux



Nowcasting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Mosaique FRANCE mercredi, 5 novembre 2003, 18:00:00 GMT
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48°37'N

PART 2 :

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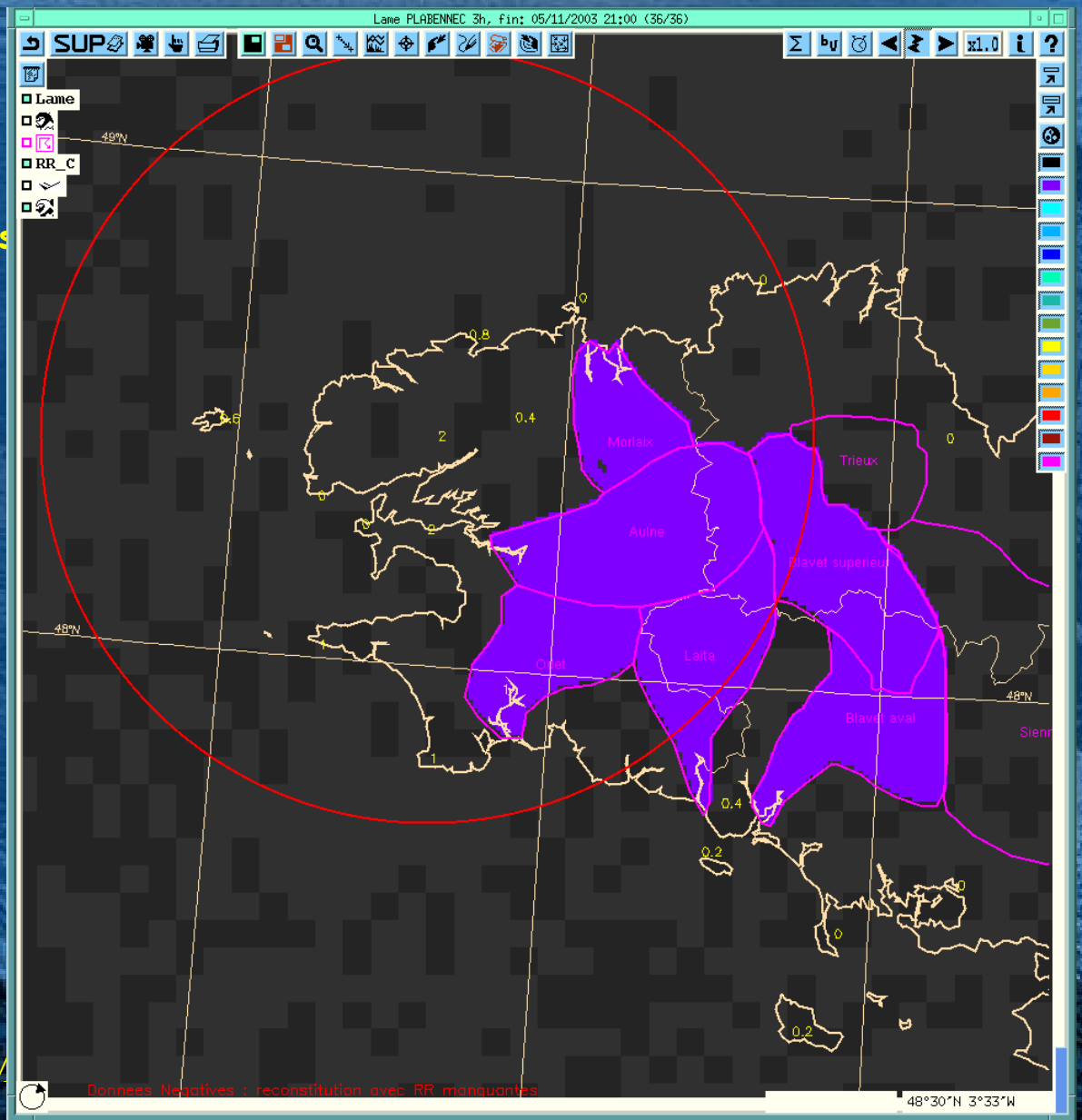
Radar water vaves



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PART 2 :

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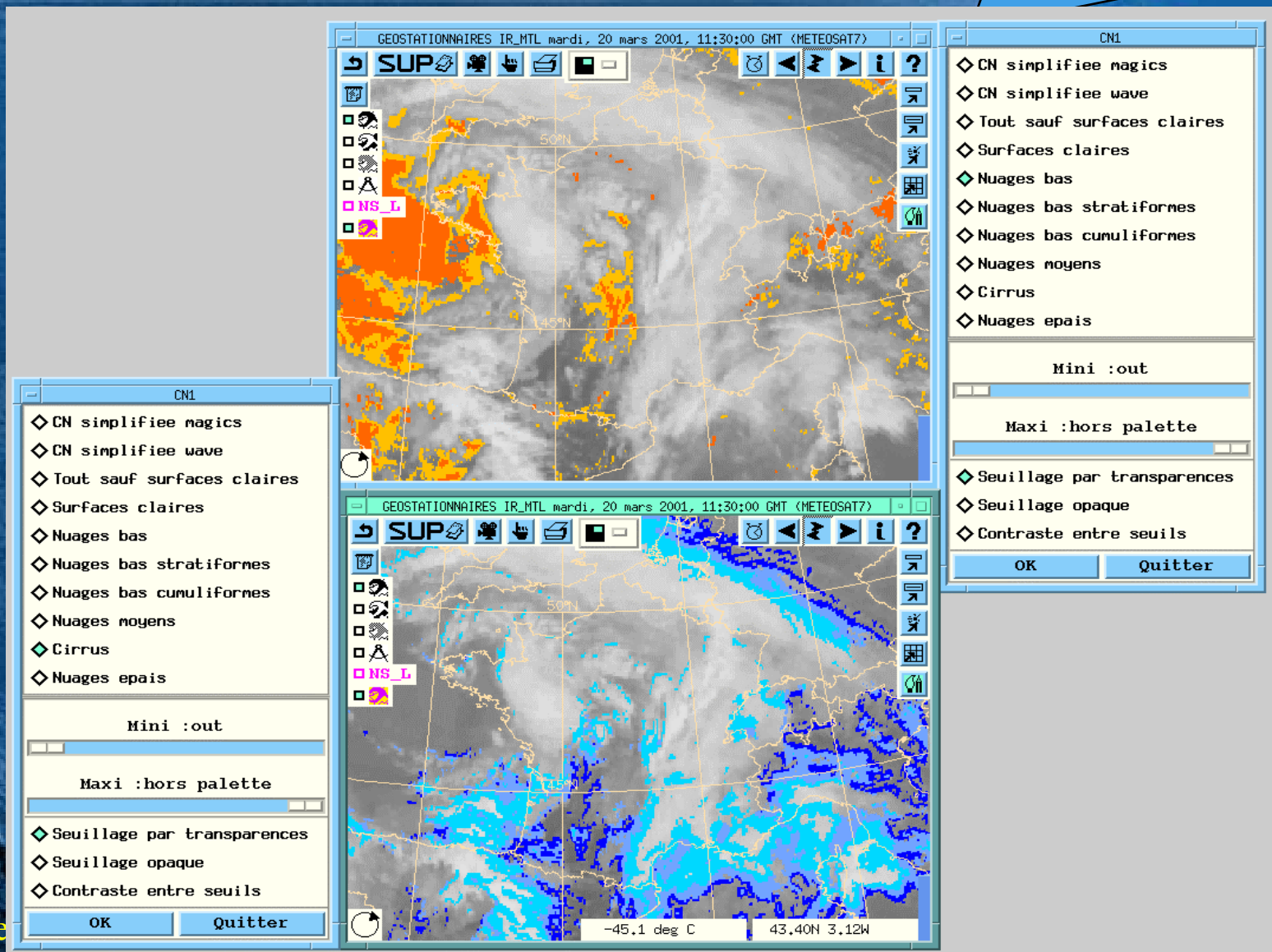
  - **MSG**
- Futur developments
- Linux

MSG



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- Linux

And further future ???

Sympo II

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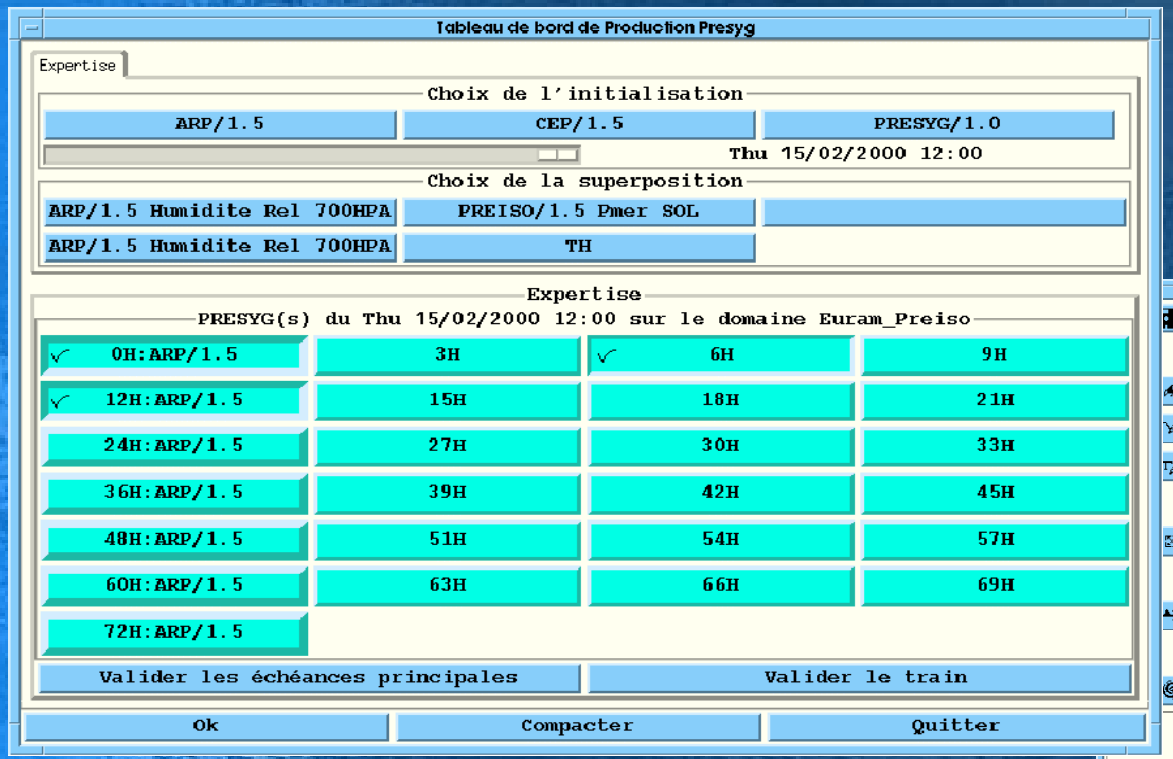
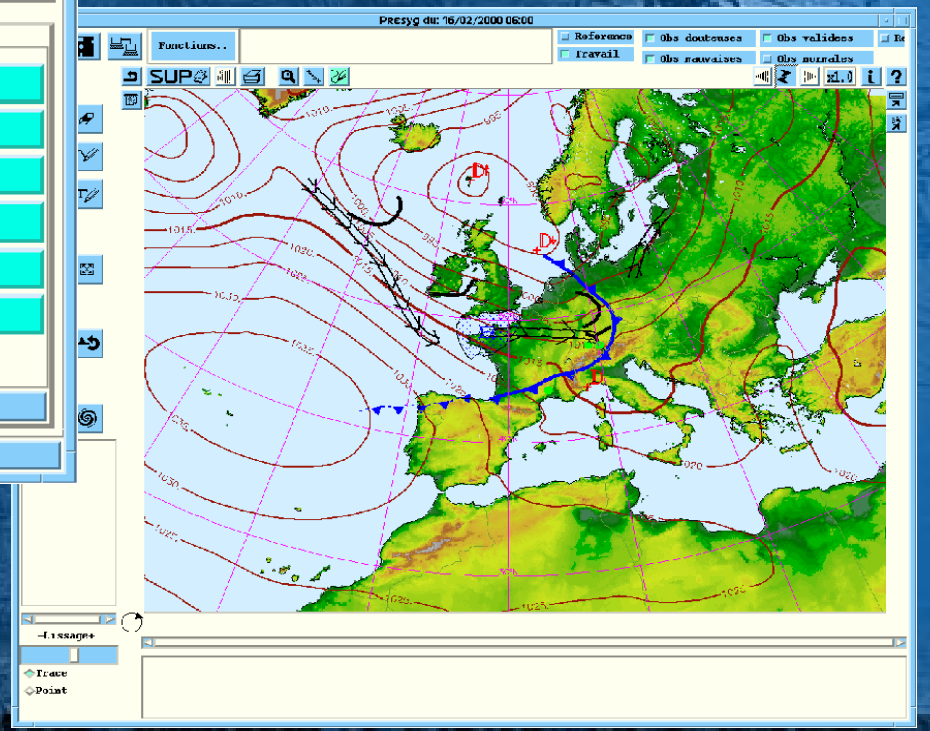
SYMPO II + SYNERGIE

First Guest Objects Production in the National Center





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SYMPO II + SYNERGIE

Coopertaive work between
Regional centers and
National Forecast center

Regionl centers

National
Forecast
Center

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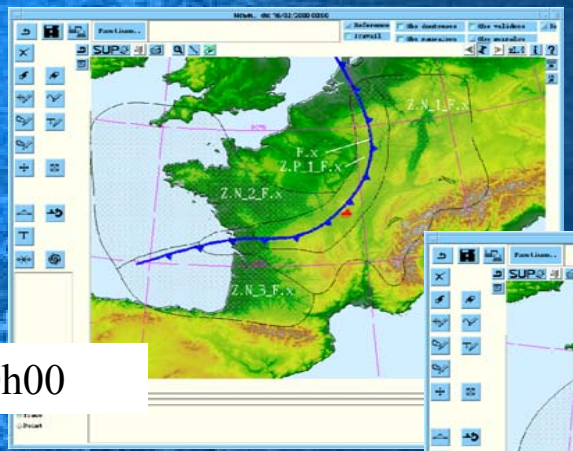
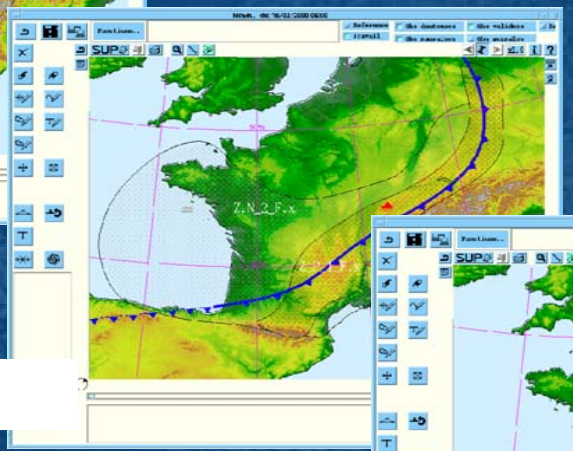
SYMPO II + SYNERGIE

Objects Temporal Interpolation at Regional Centers



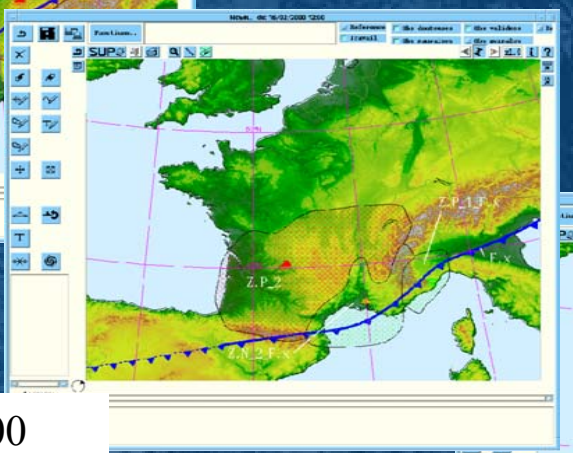
00h00

18

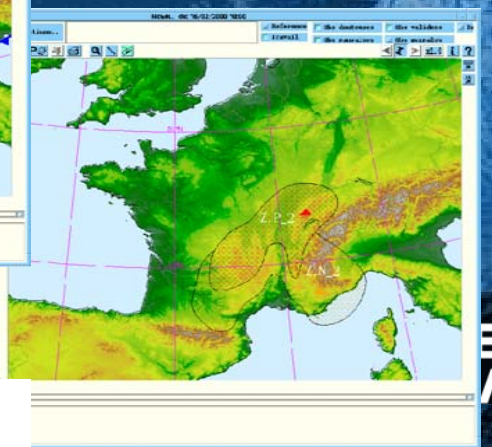


06h00

06



12h00



18h00

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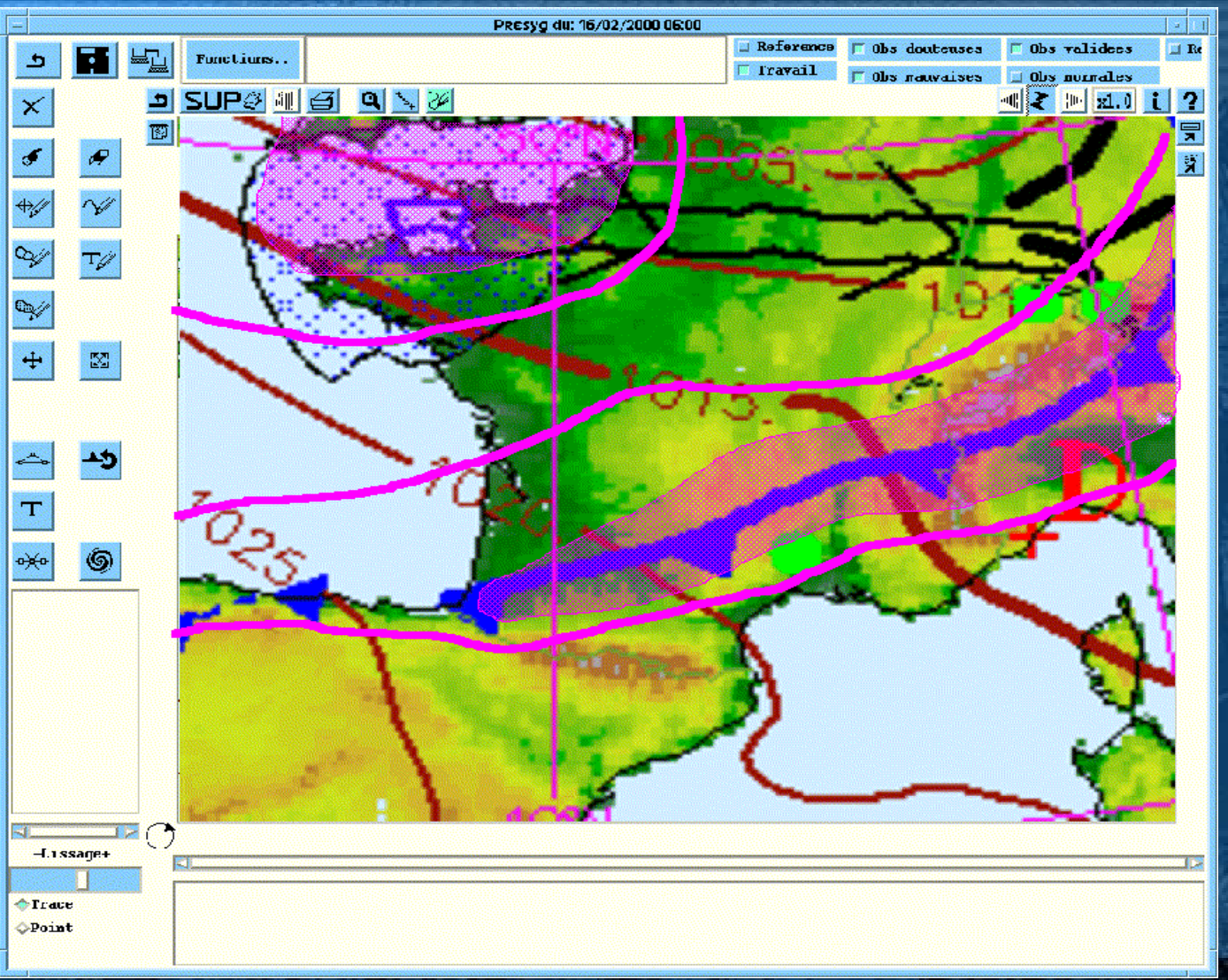
SYMPO II + SYNERGIE



Meso Scale Objects Prototypes Illustration

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And further future ???

Sympo II

More functionalities for Nowcasting

METEO FRANCE

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And further future ???

Sympo II

More functionalities for Nowcasting

Tropical Cyclone

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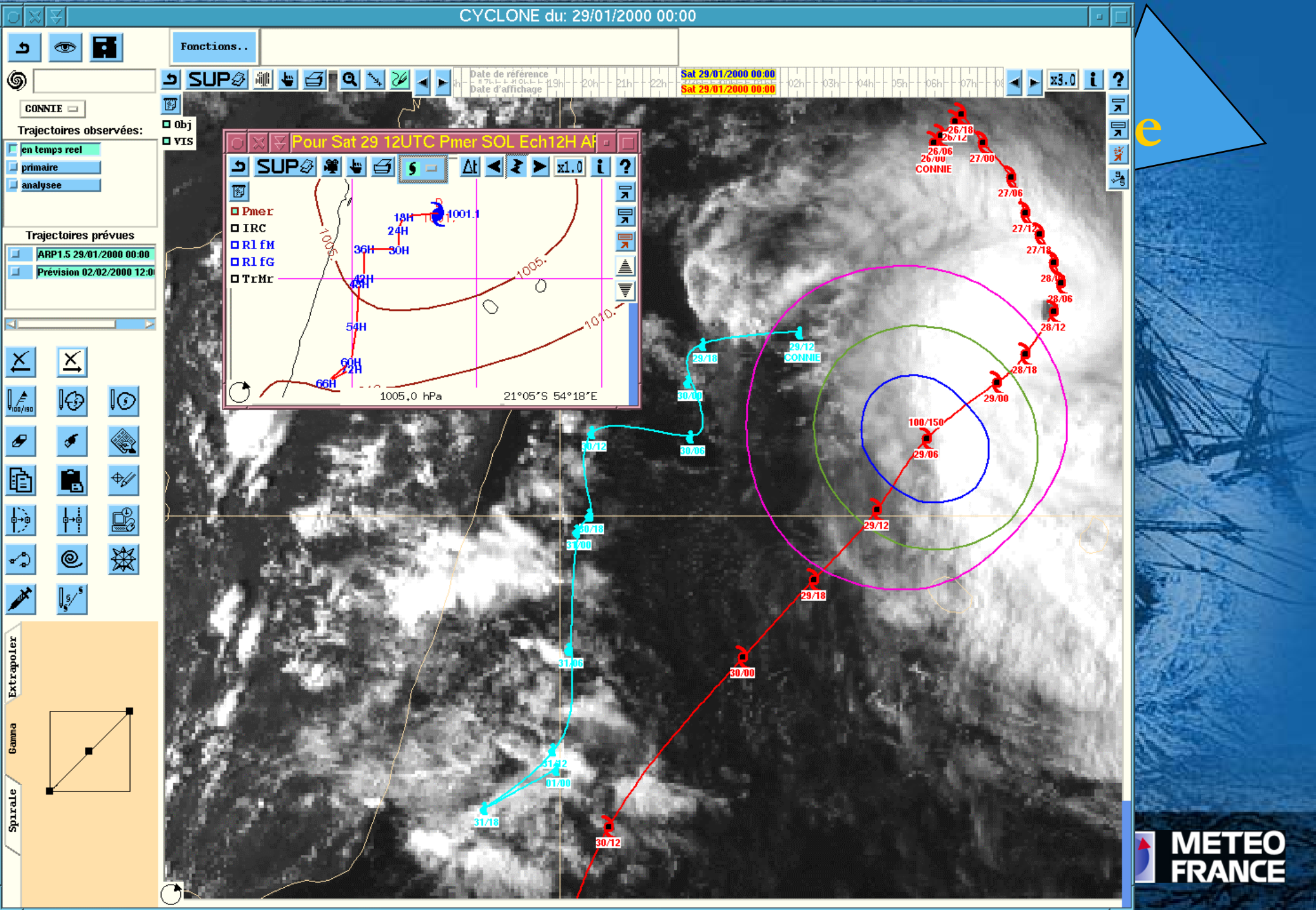
CYCLONE du: 29/01/2000 00:00
Fonctions..
CONNIE
Trajectoires observées:
en temps reel
primaire
analysee
Trajectoires prévues
ARP1.5 29/01/2000 00:00
Prévision 02/02/2000 12:0
Obj
VIS
Date de référence
Date d'affichage
Sat 29/01/2000 00:00
Sat 29/01/2000 00:00
Pour Sat 29 12UTC Pmer SOL Ech12H AF
Pmer
IRC
Rl fM
Rl fG
TrMr
1001.1
1005.
1010.
1005,0 hPa
21°05'S 54°18'E
Extrapoler
Gamma
Spirale
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PART 2 :

Synergie tool

- Introduction
- 3.6 Release improvements
  - New observations
  - Inclusion of BUFR objects
  - Nowcasting
  - Radar water waves
  - MSG
- **Futur developments**
- Linux

And further future ???

Sympo II

More functionalities for Nowcasting

Tropical Cyclone

Quality : integration in ISO 9000
Météo-France certification

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A Synergie PC release under Linux

In order to answer SMN and French army needs at lower costs

In order to have a transportable plateforme
For demonstrations
For exceptional assistances

Preparation for the hardware renewal planed for 2004 or 2005, including 4.0 version

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Thank you for your attention

Feel free to ask Questions

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