

ADVANCING FOR OPERATIONAL NINJO

Formación en técnicas y herramientas operativas de predicción en el marco del Proyecto de Modernización del Proceso de Predicción de AEMET.

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Madrid a 5 de Junio de 2013

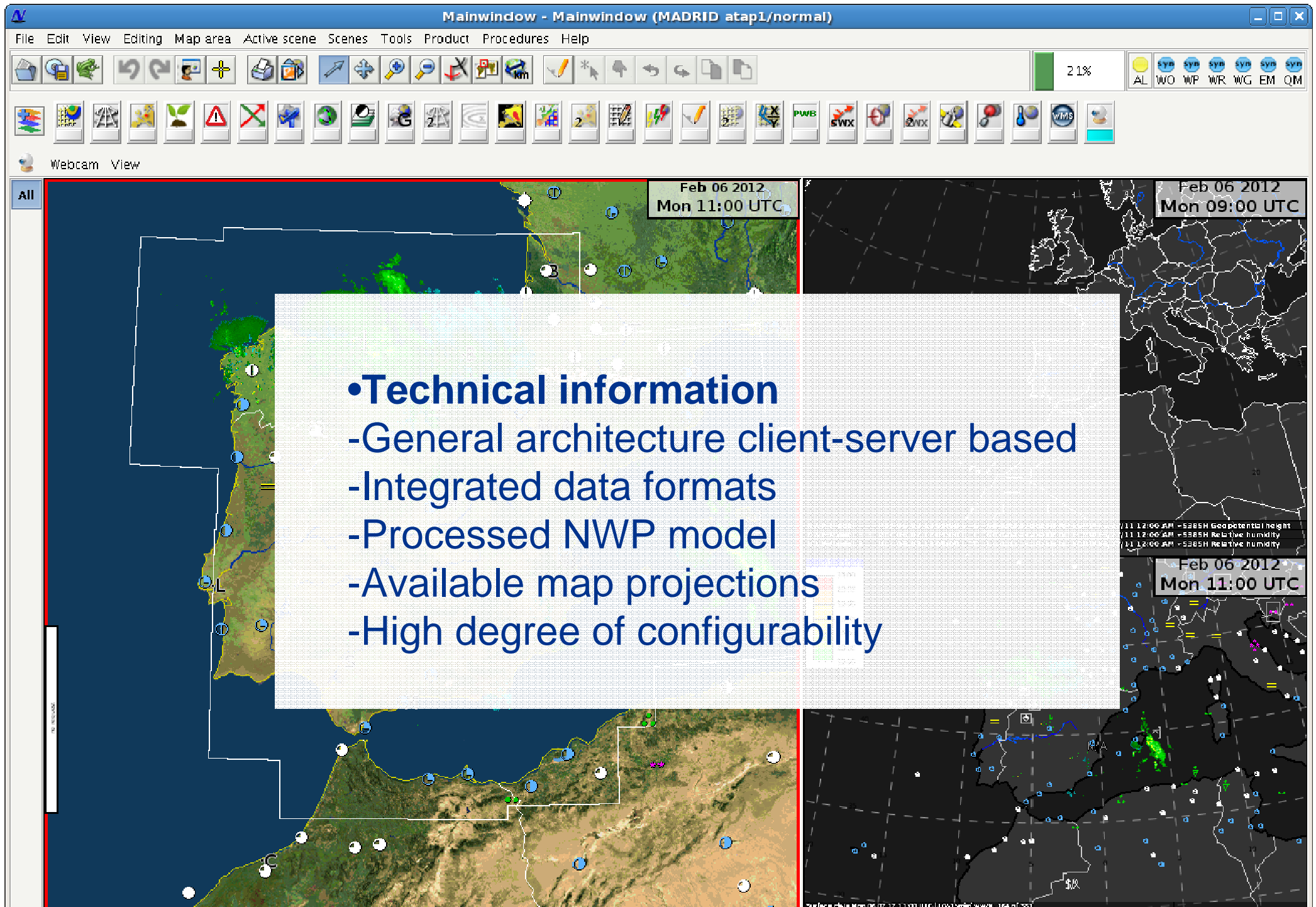
SUMMARY

- What was NinJo System?
- Working for an operating NinJo:
 - Improving the numerical models visualization
 - Making work easier for forecasters: MYGUI
 - Automating aemet products
 - NinJo Batch
 - NinJo Product Workbench
 - NinJo ConfigEditor
- In the near future...

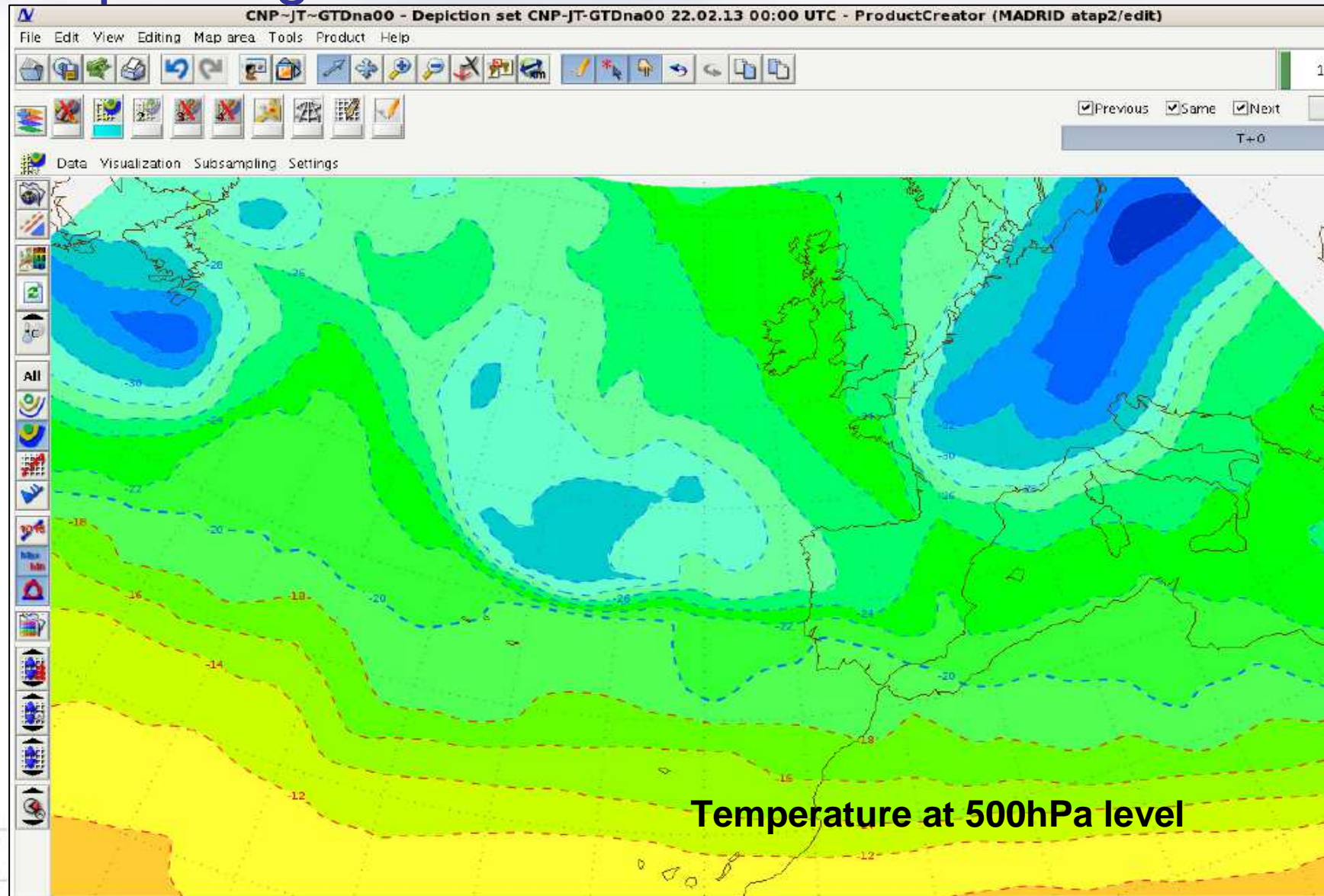
What is NinJo System?

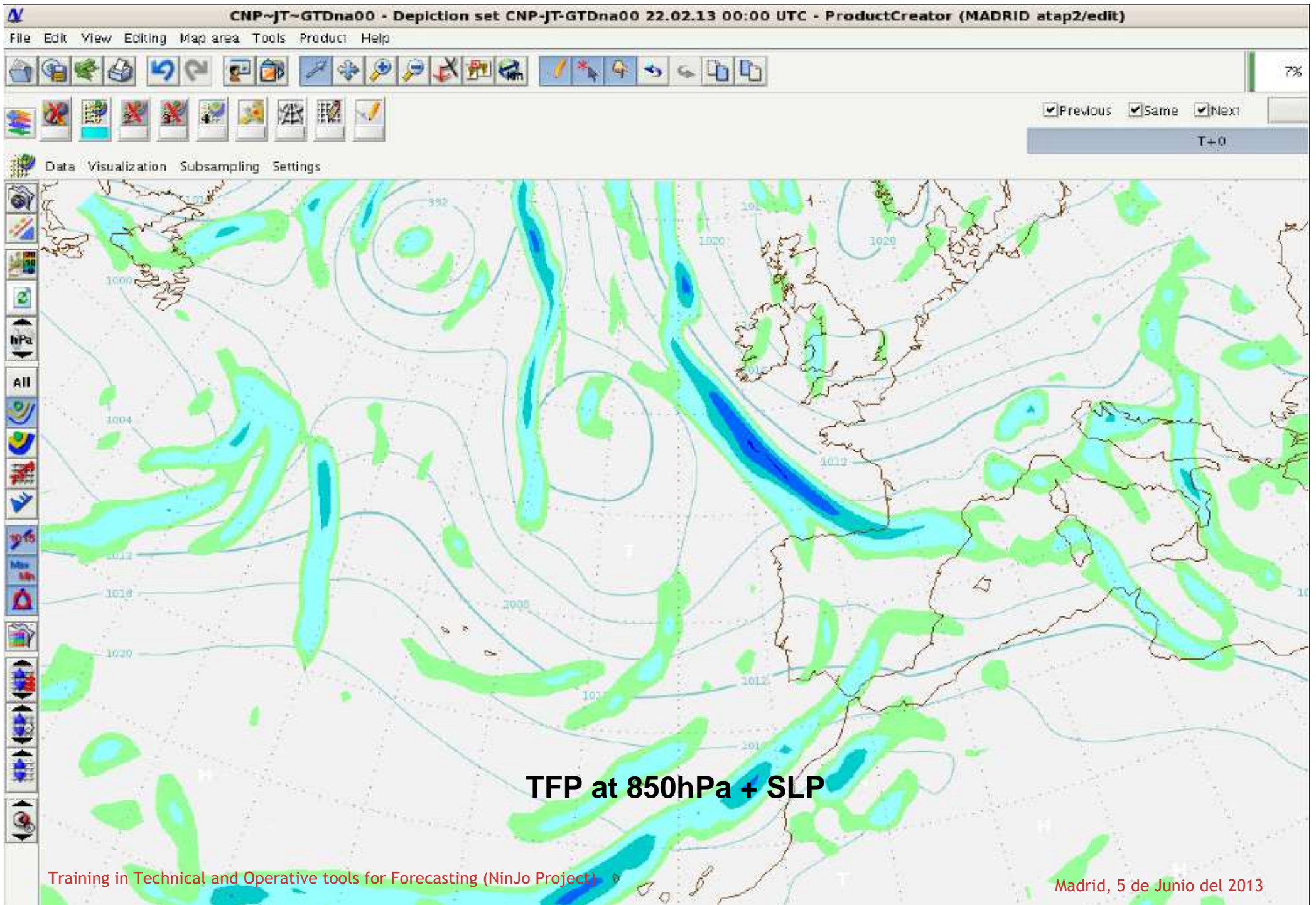
Meteorological workstation system. Features:

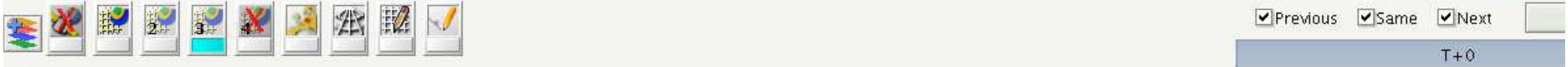
- Multi-window technology
- Layer-based visualisation of different data types
 - Surface observations and sounding data
 - Numerical Weather Prediction outputs: EPS and deterministic
 - Satellite, lightning and Radar data and derived products
 - AUTOMON. Warnings based on the monitoring of input data
 - Geographical information
 - Webcams
 -
- Metograms, cross sections and sounding diagrams



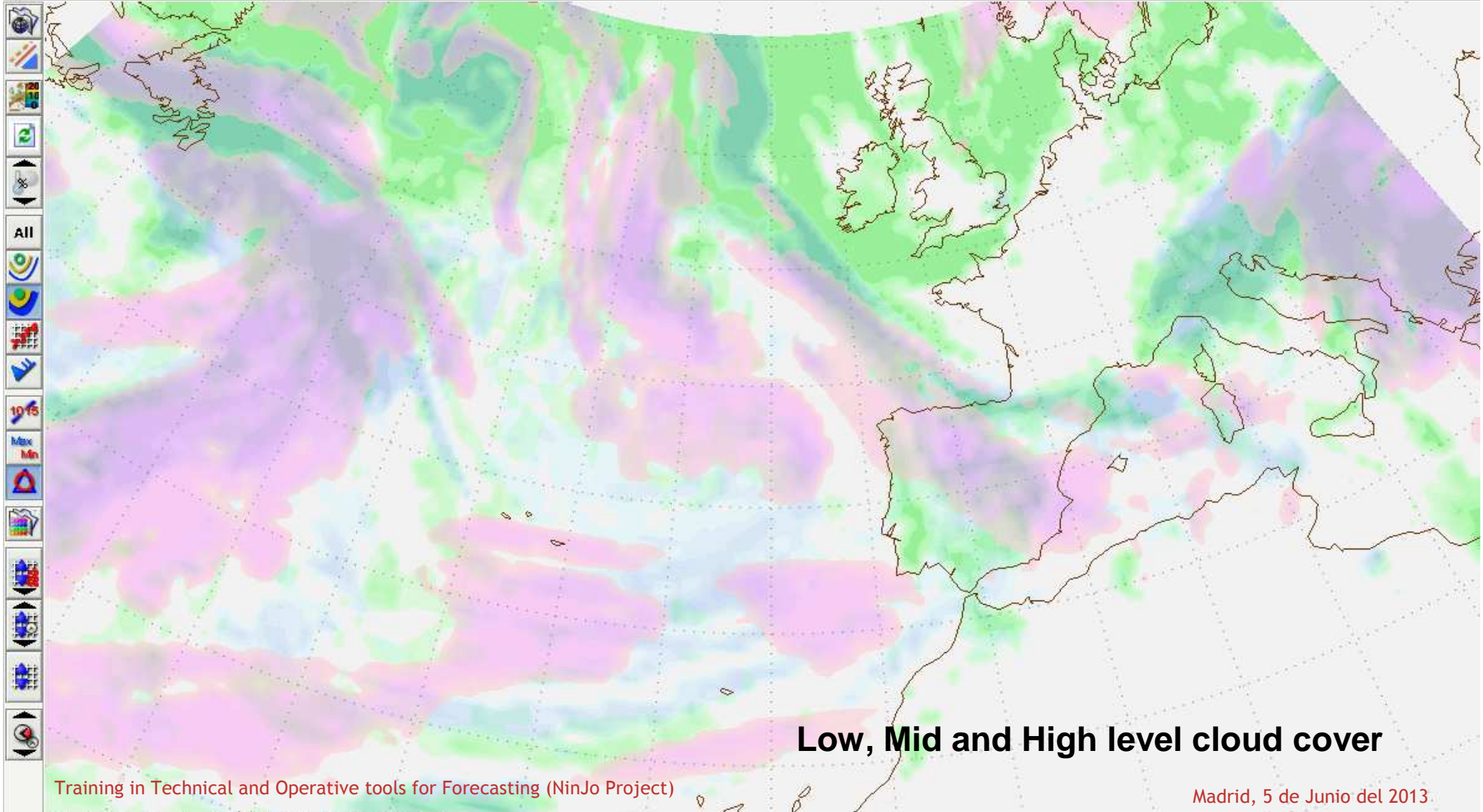
Working for an operational NinJo: Improving the numerical models visualization







Data Visualization Subsampling Settings



Low, Mid and High level cloud cover

Making work easier to forecasters: MYGUI

The screenshot displays the MYGUI software interface. The main window, titled "CNP~JT~GTDna00 - Depiction set CNP-JT-GTDna00 22.02.13 00:00 UTC - ProductCreator (MADRID atap2/edit)", features a menu bar (File, Edit, View, Editing, Map area, Tool Product, Help) and a toolbar. A callout box with a blue border and white background contains the text: "Simplify the way you change the data in a layer. Avoid system slowdowns." The interface includes a "Data" panel with a "myGUI" layer selected and circled in red. A red arrow points from this layer to the "MyGUI [Mainwindow]" control panel. This panel is divided into several sections: "GeoVector_7" with various icons; "Satellite" with radio buttons for "WV", "IR", "VIS", "WV HRV", "Cloud(D) HRV", "Conv.", "WV(1)", "WV(2)", "Cloud(D)", and "Airmass"; "Lightning" with "Time" (6m, 10m, 1h, 1h 30m, 30m) and "Event size" (Small, Medium, Large, Custom) options; and a large "NWP-Model" section with a grid of checkboxes for various parameters such as Z 300, OT 300, OV 300, VORG300, AVORG300, CONH850, etc. The background shows a weather map of Europe with red dashed contour lines and blue dashed contour lines labeled "100".

Configuring MYGUI files

The screenshot shows the Ninjo ConfigEditor interface. The title bar is labeled "Ninjo ConfigEditor". The main window displays an XML configuration file for "ninjo.client.grid.grid.pac.layer.mygui/Users/atap3/default (readOnly)". The XML code includes a header with version and encoding information, followed by a series of XML elements for different pressure levels. The "Z 300" option is selected in the UI and highlighted in the XML code.

```
1 version="1.0" encoding="UTF-8"?>
2 <MyGuiCfg i_version="1.3.0" i_dataVersion="1.3">
3   <base i_version="1.3.0" i_dataVersion="1.3">
4     <!-- 1st column -->
5     <column1 element="200700006" level="30000501" levelType="10000005" shortName="Z 300" />
6     <column1 element="200700006" level="50000501" levelType="10000005" shortName="Z 500" />
7     <column1 element="200700006" level="70000501" levelType="10000005" shortName="Z 700" />
8     <column1 element="200700006" level="85000501" levelType="10000005" shortName="Z 850" />
9     <column1 element="200700006" level="92500501" levelType="10000005" shortName="Z 925" />
10    <column1 element="200700006" level="100000501" levelType="10000005" shortName="Z 1000" />
11
12    <column1 element="000000000" level="00000000" levelType="00000000" shortName="" />
13    <column1 element="000000000" level="30000501" levelType="10000005" shortName="VORG300" />
14    <column1 element="000000000" level="50000501" levelType="10000005" shortName="VORG500" />
15
16    <column1 element="000000000" level="00000000" levelType="00000000" shortName="" />
17    <column1 element="205200006" level="50000501" levelType="10000005" shortName="HR 500" />
18    <column1 element="205200006" level="70000501" levelType="10000005" shortName="HR 700" />
19    <column1 element="205200006" level="85000501" levelType="10000005" shortName="HR 850" />
20    <column1 element="205200006" level="92500501" levelType="10000005" shortName="HR 925" />
21
22    <column1 element="000000000" level="00000000" levelType="00000000" shortName="" />
23    <column1 element="16020500006" level="50000501" levelType="10000005" shortName="THW 500" />
24    <column1 element="16020500006" level="70000501" levelType="10000005" shortName="THW 700" />
25    <column1 element="16020500006" level="85000501" levelType="10000005" shortName="THW 850" />
26    <column1 element="16020500006" level="92500501" levelType="10000005" shortName="THW 925" />
27
28    <column1 element="000000000" level="00000000" levelType="00000000" shortName="" />
29    <column1 element="22802400006" level="90501" levelType="100005" shortName="IS0C" />
30    <column1 element="000000000" level="90501" levelType="100005" shortName="IS0W" />
31
32    <column1 element="000000000" level="00000000" levelType="00000000" shortName="" />
33    <column1 element="207500006" level="90501" levelType="100005" shortName="NA" />
34    <column1 element="207400006" level="90501" levelType="100005" shortName="NM" />
35    <column1 element="207300006" level="90501" levelType="100005" shortName="NB" />
```

The UI shows a tree view on the left with the following structure:

- ninjo.client.grid.grid.pac.layer.mygui
 - default
 - default
 - Sites
 - Users
 - atap2
 - atap3
 - default
 - cnp3
 - uam
 - wab

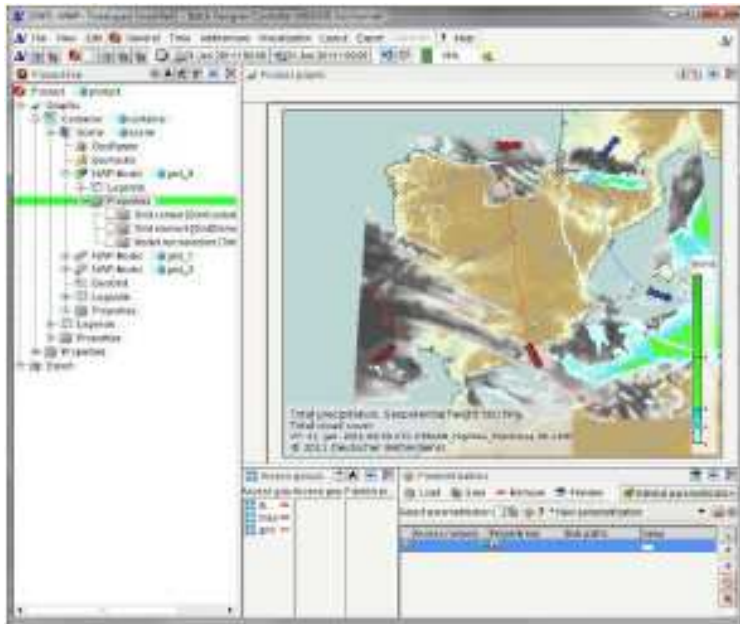
The "NWP-Model" section is expanded, showing a grid of radio buttons for different pressure levels and variables:

NWP-Model		
<input checked="" type="radio"/> Z 300	<input type="radio"/> T 300	<input type="radio"/> V 300
<input type="radio"/> Z 500	<input type="radio"/> T 500	<input type="radio"/> V 500
<input type="radio"/> Z 700	<input type="radio"/> T 700	<input type="radio"/> V 700
<input type="radio"/> Z 850	<input type="radio"/> T 850	<input type="radio"/> V 850
<input type="radio"/> Z 925	<input type="radio"/> T 925	<input type="radio"/> V 925
<input type="radio"/> Z 1000	<input type="radio"/> T 1000	<input type="radio"/> V 1000

Automating AEMET Products

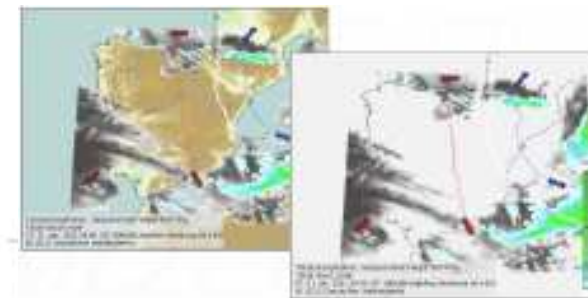
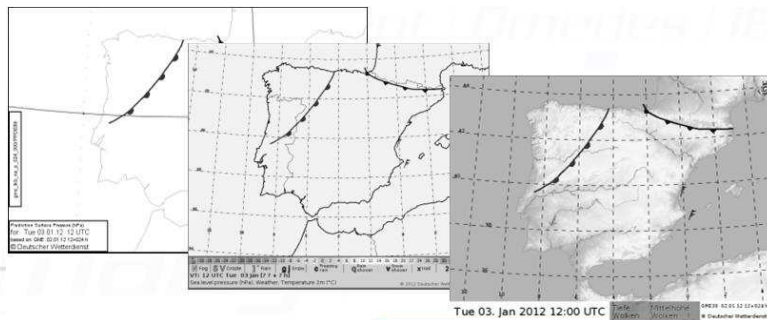
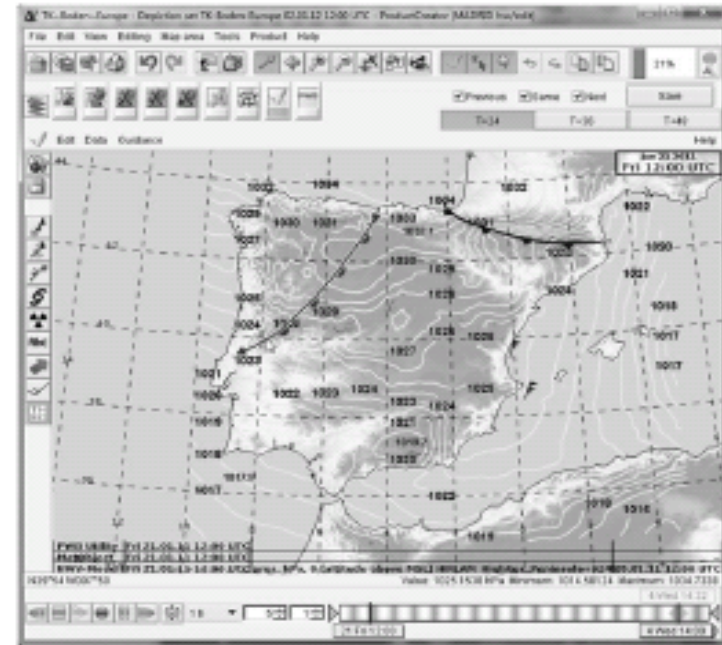
Automatic creation of graphical products from templates

NinJo Batch

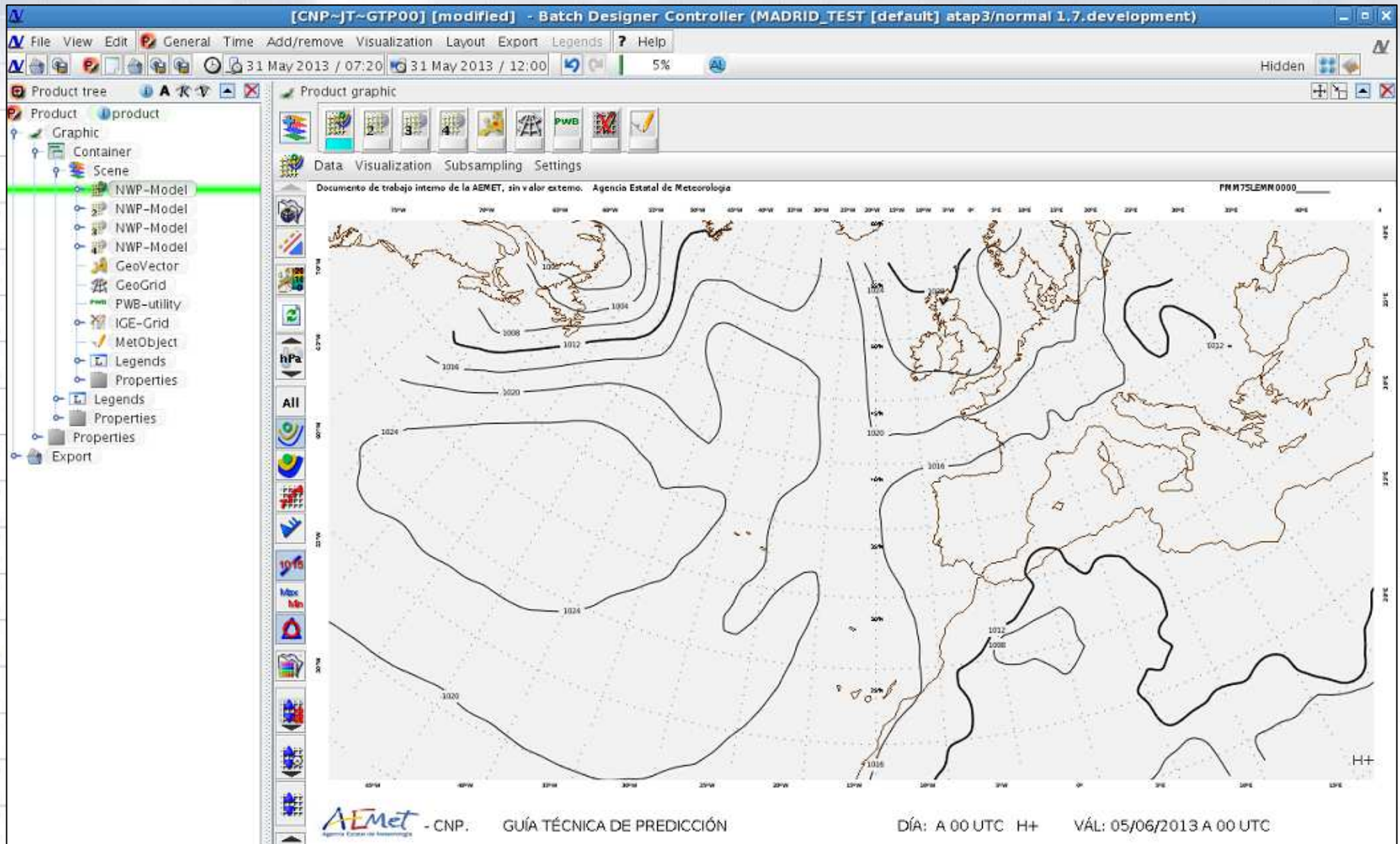


Interactive production of graphical weather analysis and forecast charts

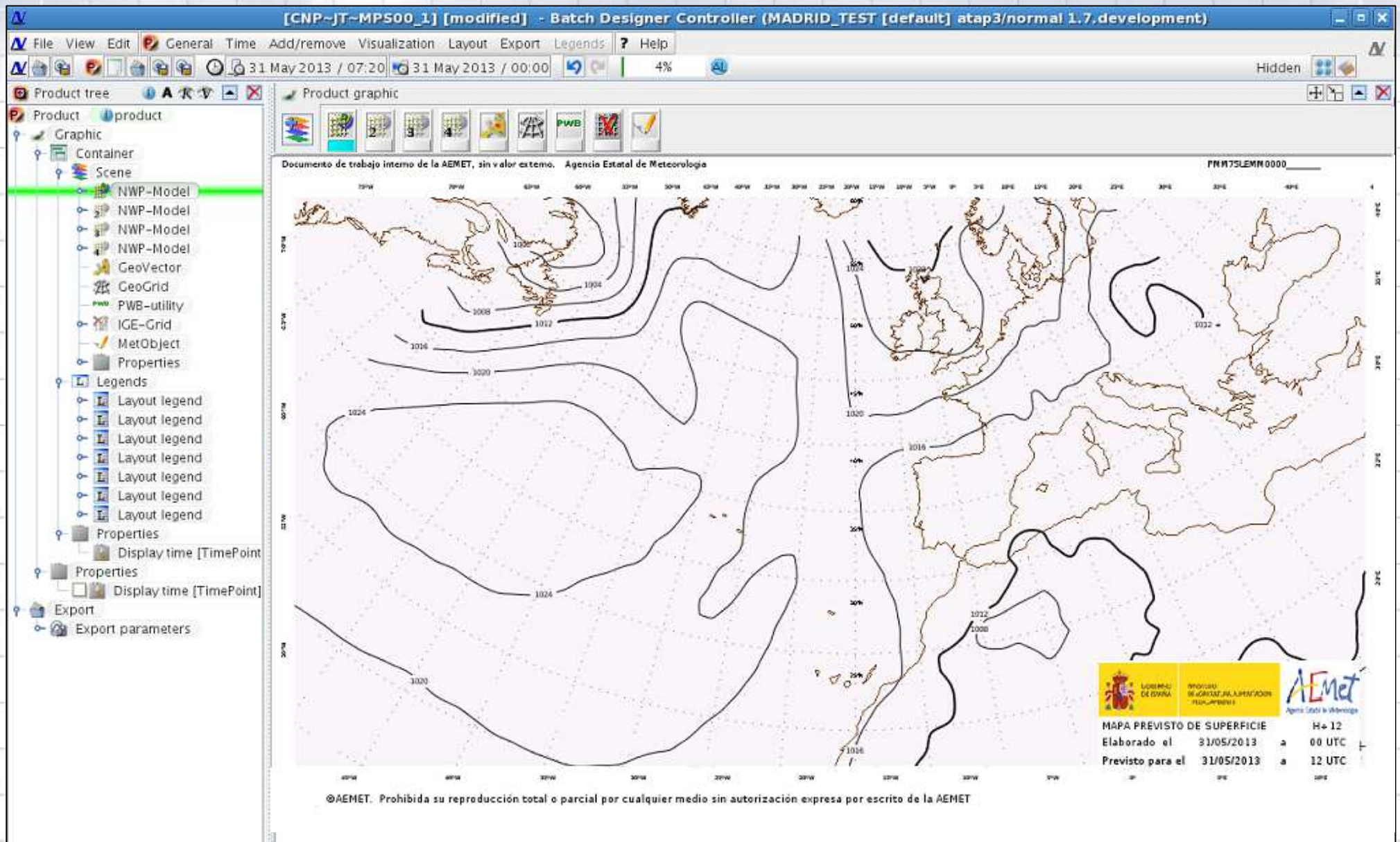
NinJo Product Workbench



NinJo Batch



NinJo Batch



NinJo Product Workbench

CNP~JT~GTP00 - Depiction set CNP-JT-GTP00 31.05.13 00:00 UTC - ProductCreator (MADRID_TEST [default] atap3/edit 1.7.development)

File Edit View Editing Map area Tools Product Help

T-Times Guidance

T+12 T+24 T+36 T+48

Size: 5 Color

Symbols Data Guidance Symbol: b

Advanced symbols...

Select Symbol

Add Symbols Replace Symbols

Ok Cancel Help

Line: Dash d

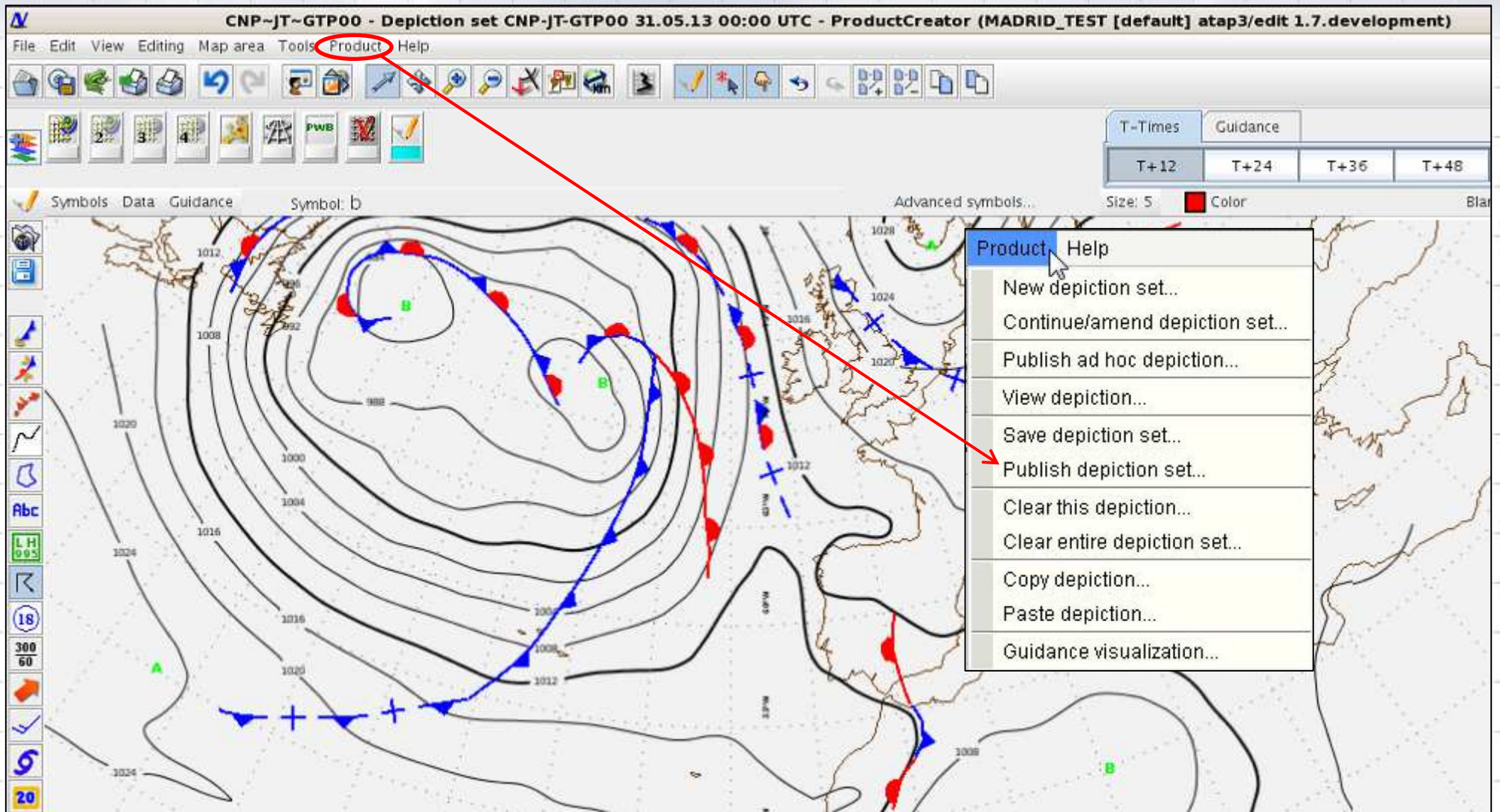
- No line
- Solid
- Dashed
- Dash dotted
- Dotted
- Ridged
- Scalloped
- Spiked
- Rounded
- Double scalloped
- Dash scalloped

Symbol types

Choose a symbol type for new symbols

Custom	⊗	X	AF	AC
B	b	A	a	,
///	•	▽	△	⋈
⋈	∞	=	≡	⋈
⋈	∞	+	⋈	⋈

NinJo Product Workbench



NinJo Product Workbench

Product Preview & Export

Select depiction to update preview. (Mouse wheel scales. Right-Click sets Export size. Left-Click fits into window.)

Publish	Depiction
<input checked="" type="checkbox"/>	T+12
<input type="checkbox"/>	T+24
<input type="checkbox"/>	T+36
<input type="checkbox"/>	T+48
<input type="checkbox"/>	T+60

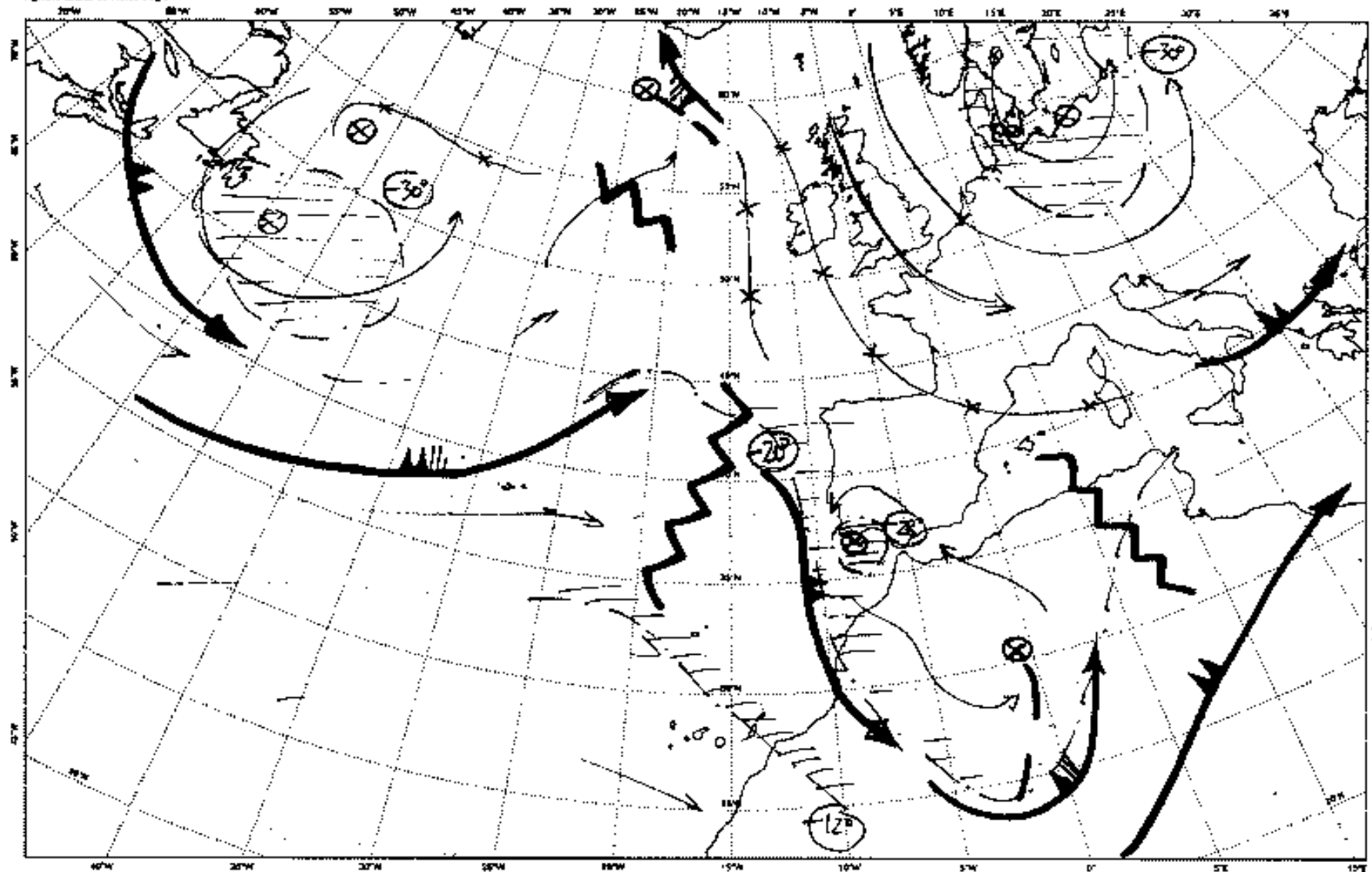
Documento de trabajo interno de la AEMET, sin valor externo. Agencia Estatal de Meteorología

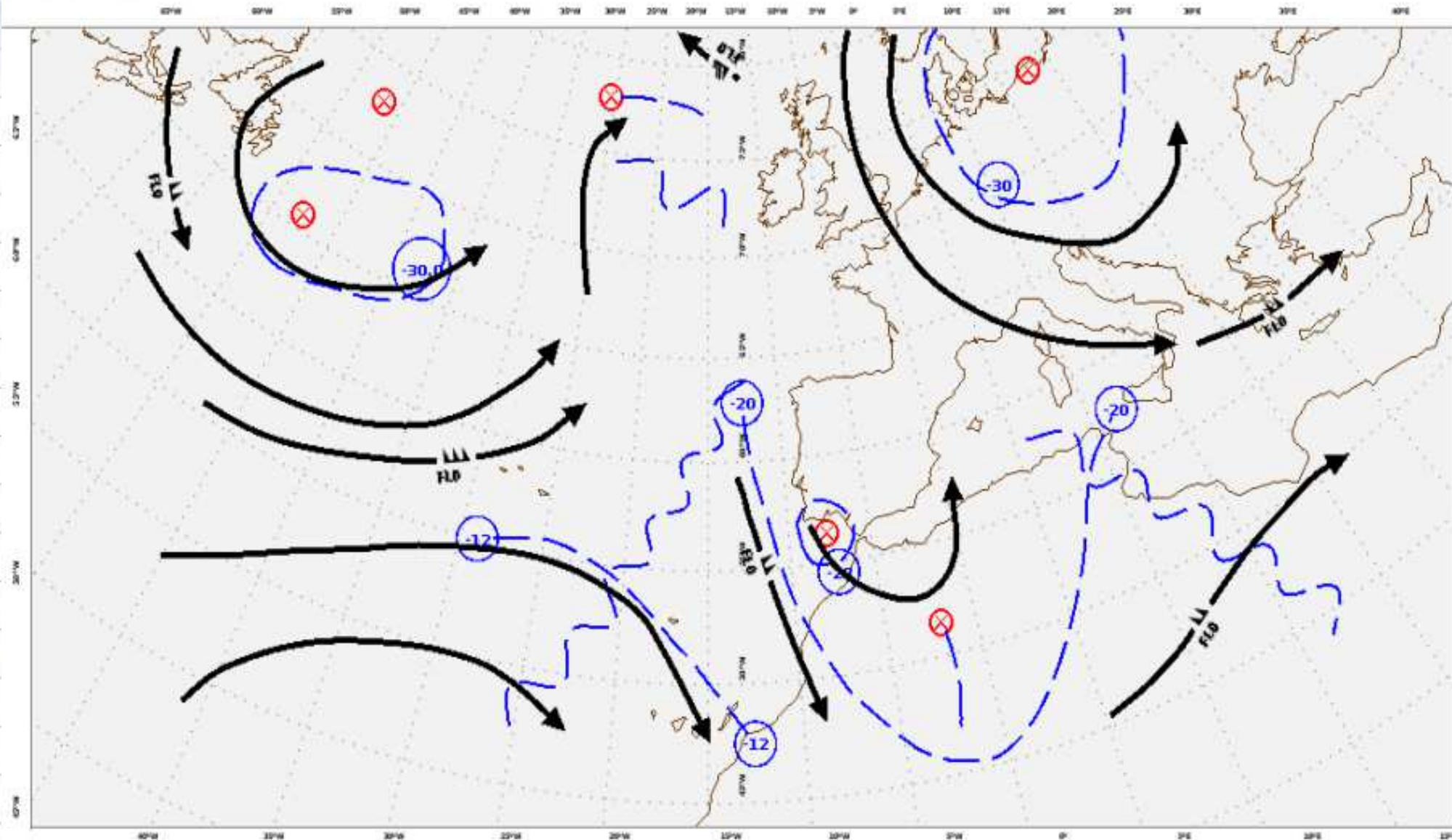
AEMET - CNP. GUÍA TÉCNICA DE PREDICCIÓN

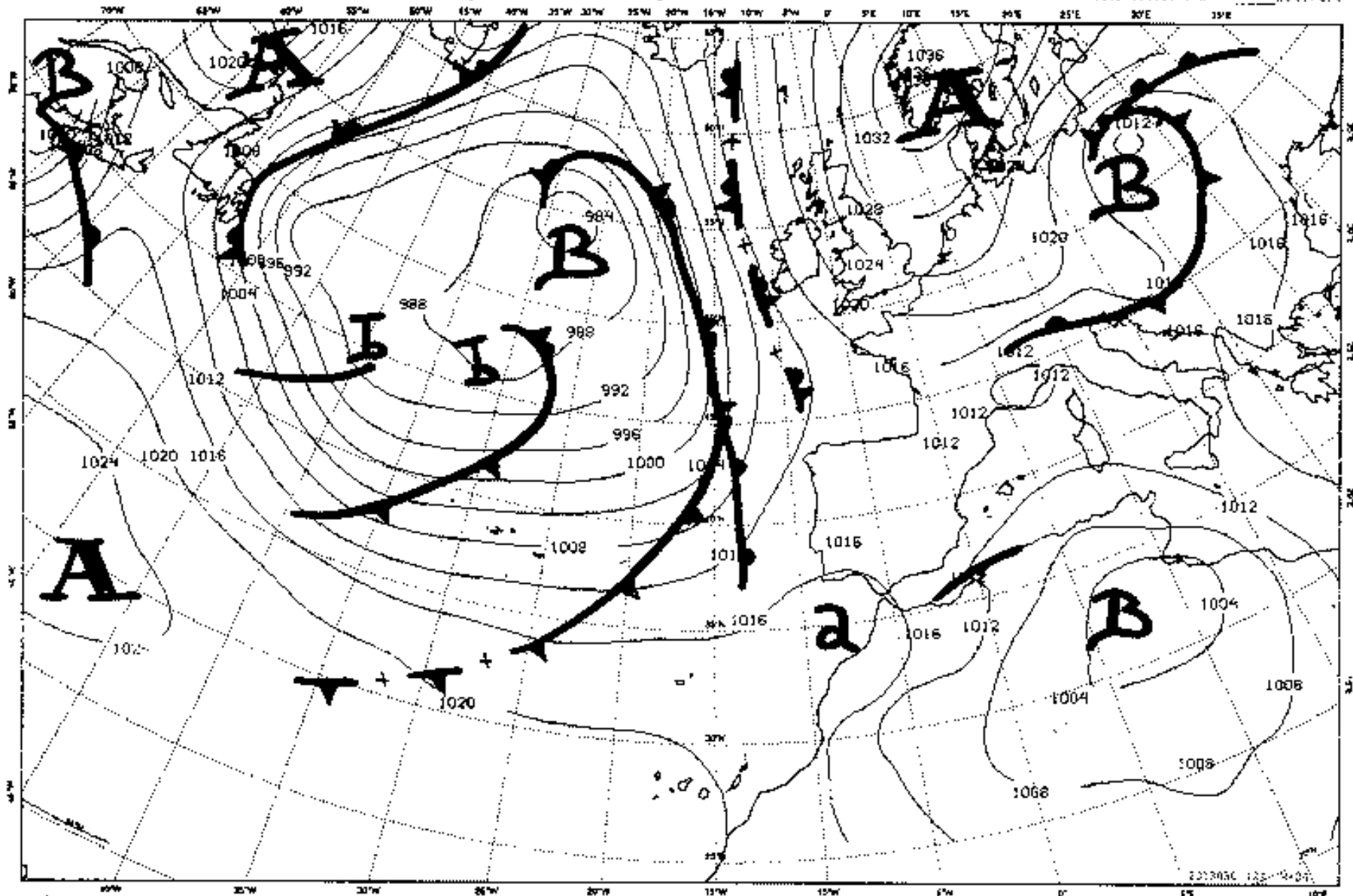
DÍA: 31/05/2013 A 00 UTC H+12 VÁL: 31/05/2013 A 12 UTC

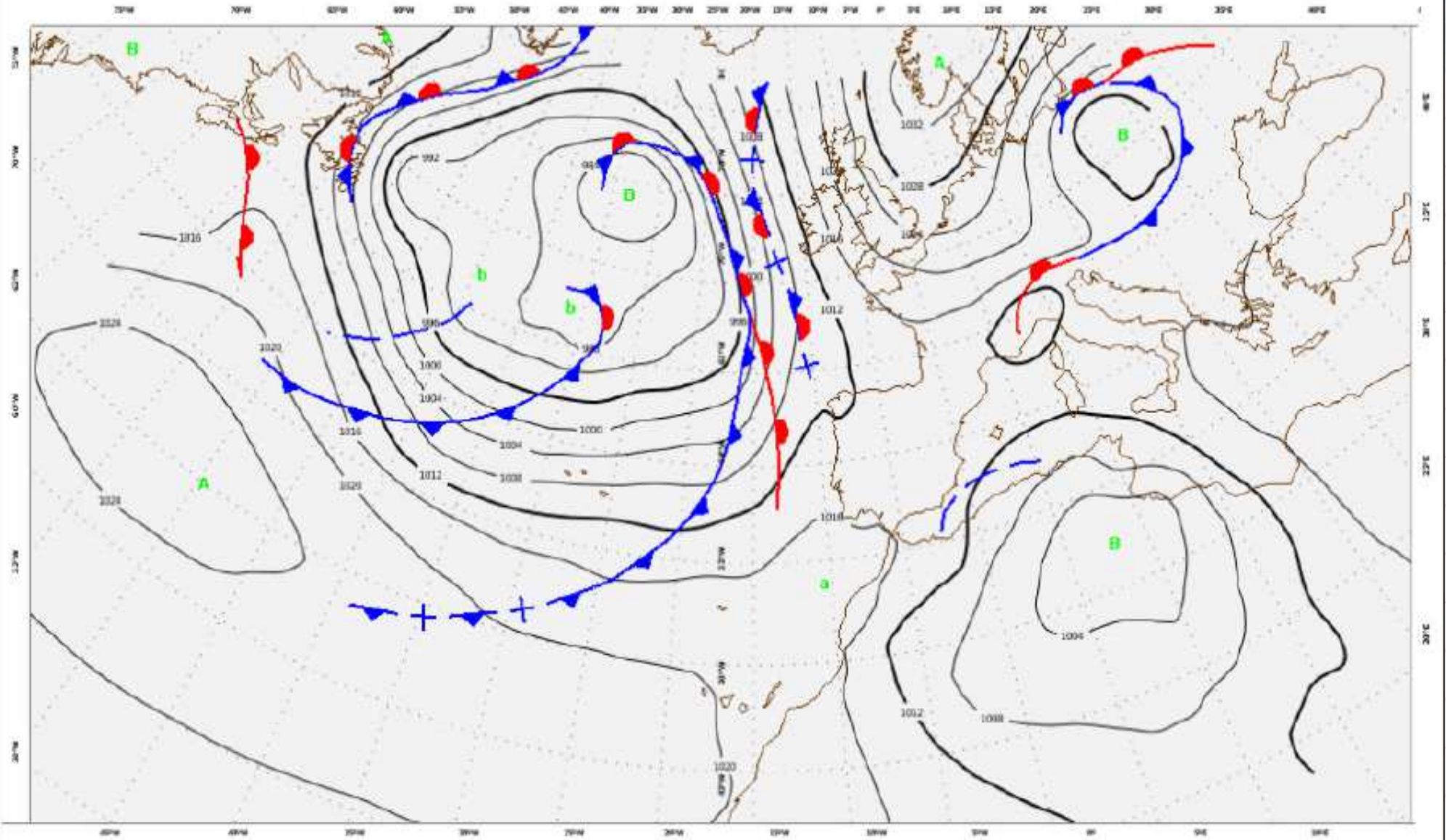
Preview Favourite: CNP-JT-GTP00
CNP-JT-GTP00
CNP-JT-MPS00

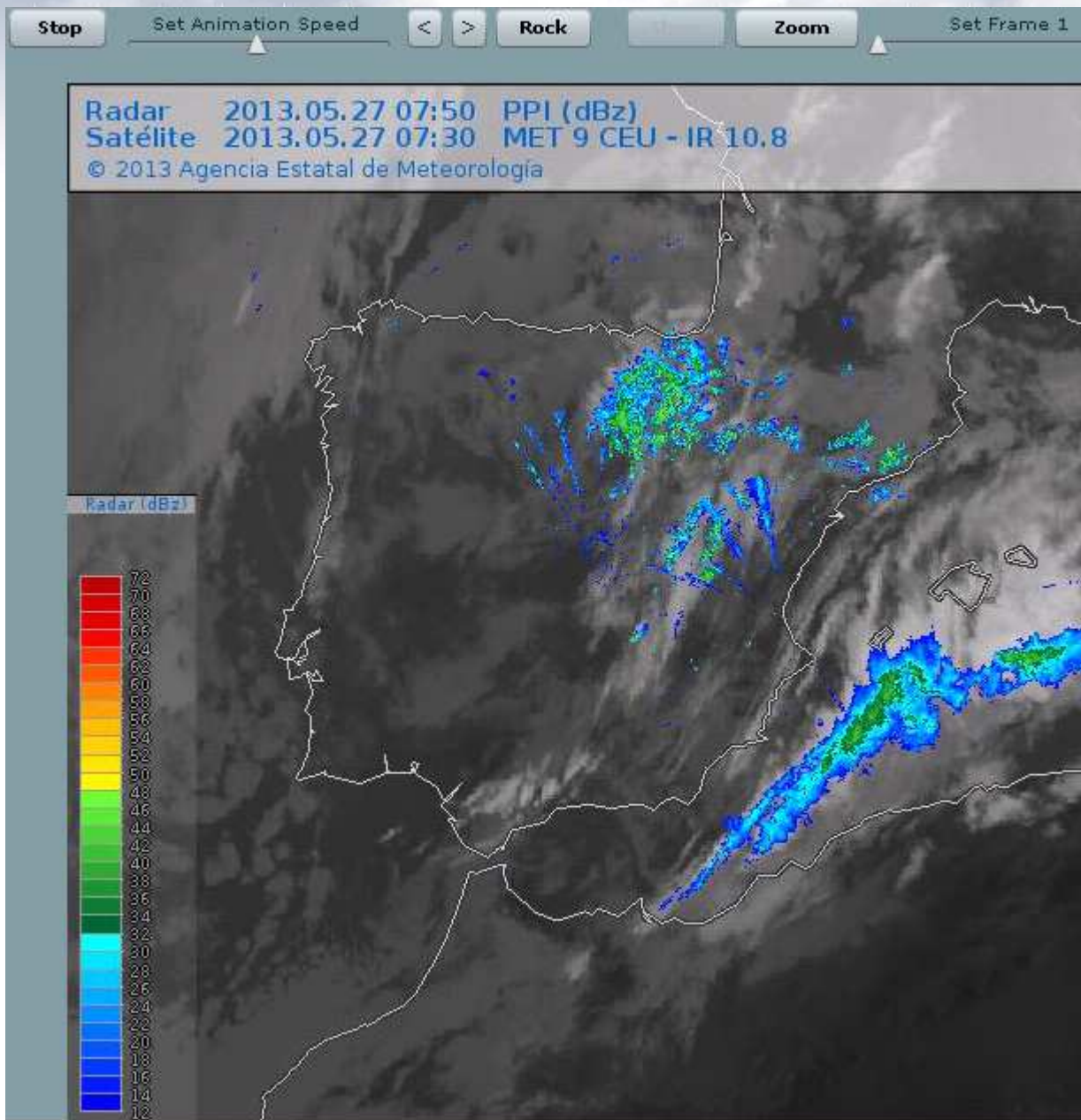
Print Print All Publish Cancel Help











- Example of Satellite + Radar products by NinJo Batch

<http://www0.inm.es/wwj/stapwww/ninjo/imagenes/radar/PPInacional/flanis.html>

In the near future...

- New templates for forecast charts:
 - Surface analysis (AS00 and AS12)
 - Diagnosis Technical Guide high levels (GTDna00 and GTDna12)
 - Diagnosis Technical Guide low levels (GTDnb00 and GTDnb12)
 - Technical Guide Prediction (GTP00 and GTP12)
- Workshop of NinJo's fronts
- New Products design:
 - Animations: radar+satellite+lightning...
 - Soundings...