NINJO SYSTEM IMPLEMENTATION

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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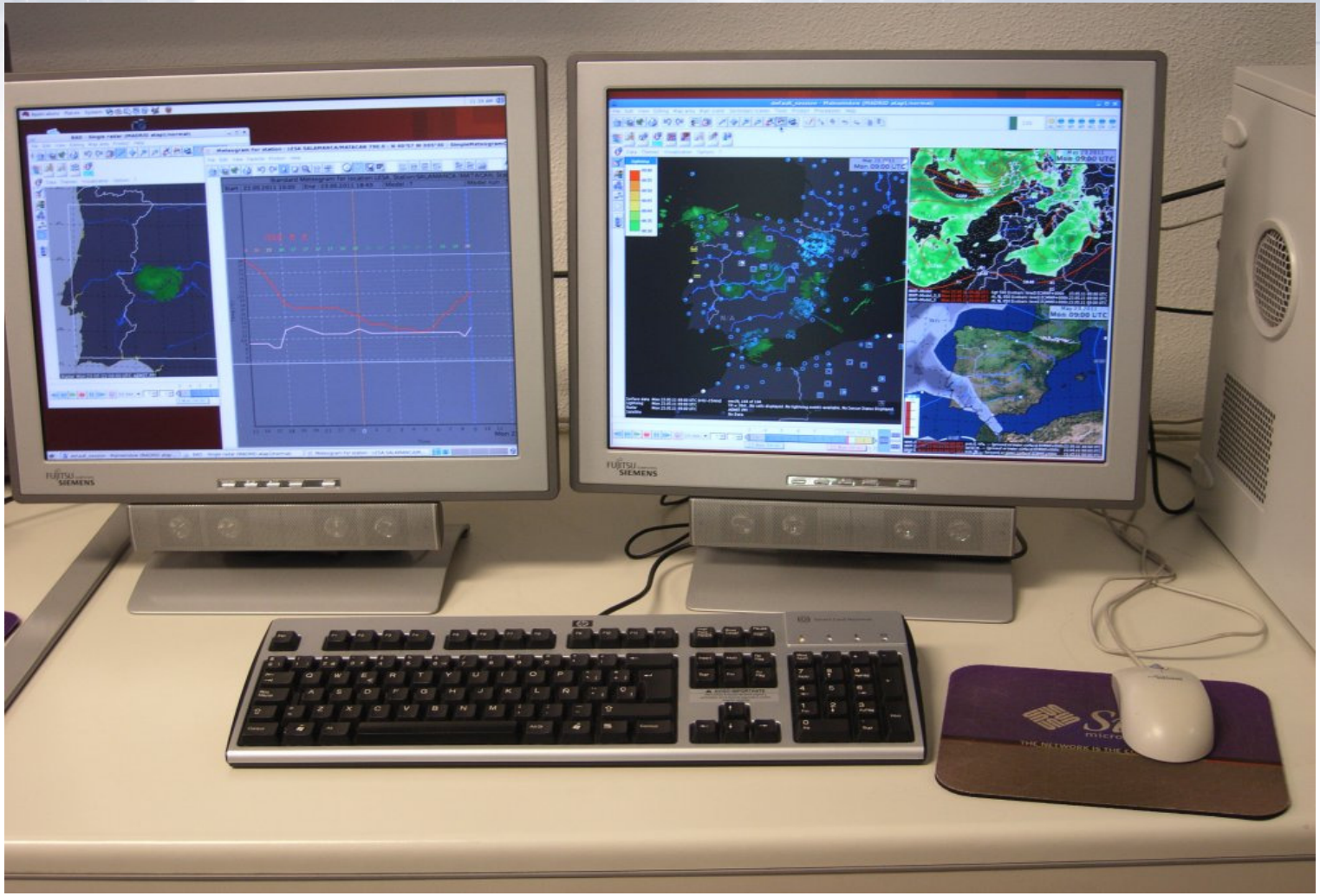
ATAP (Forecasting Techniques and Applications Area)

SUMMARY

- NinJo History
- NinJo advantages vs current systems
- NinJo Client
  - Webcam layer
  - Color Enhancements
  - NinJo Image Viewer
- NinJo Product:
  - NinJo Product Workbench
  - NinJo Batch
- Work on



NinJo: an advanced system of meteorogical workstations

NINJO HISTORY

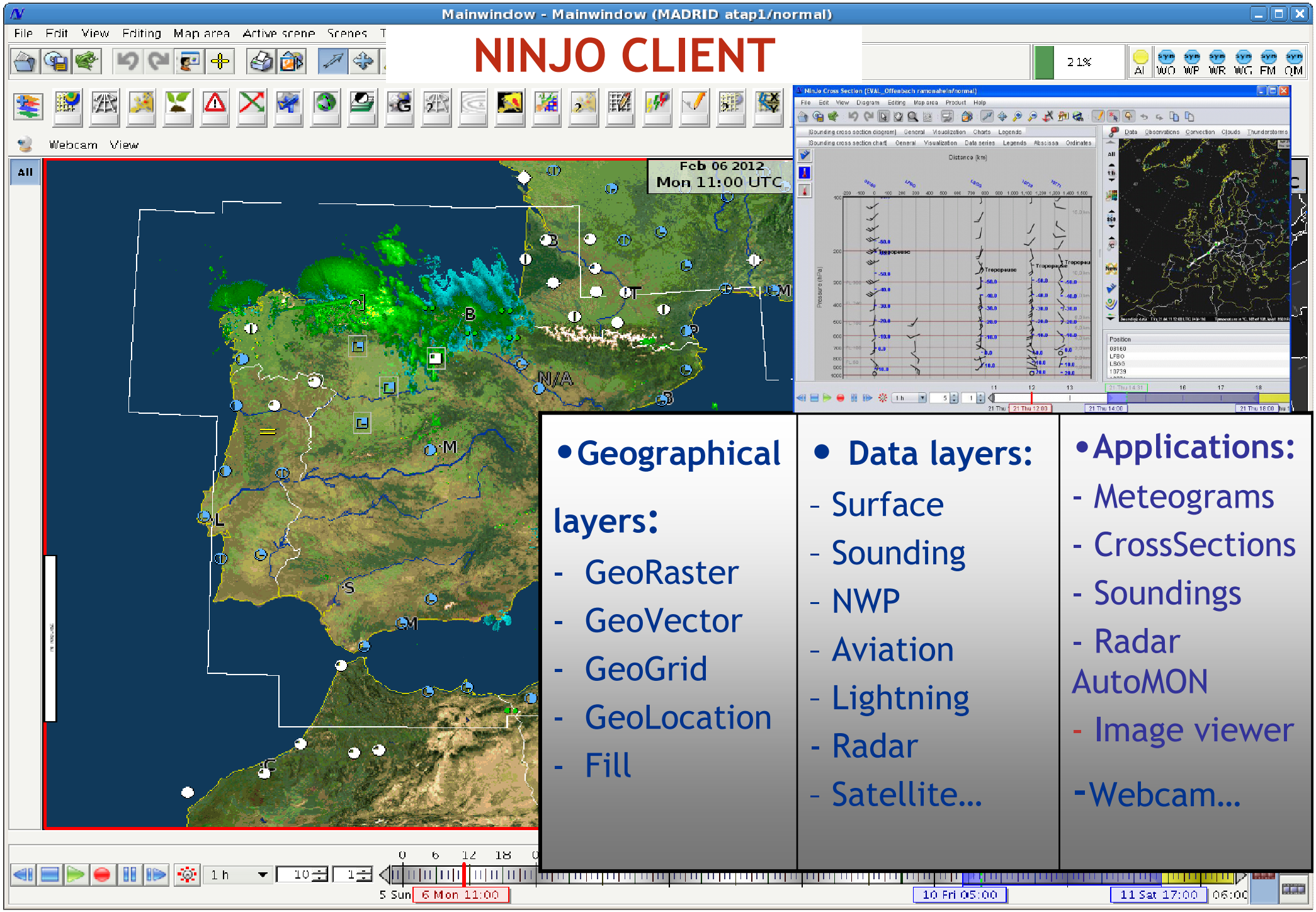
- Start of the project with the name GGS ("Gemeinsames Grafik System") was 2000
  - Original partners were Deutscher Wetterdienst (DWD) and the German Military Services (Bundeswehr Geoinformation Services)
  - Both had leagacy systems to be replaced
  - Partners joining the project
    - 2001: MeteoSwiss
    - 2002: Danish Meteorological Institute (DMI)
    - 2003: Meteorological Service of Canada (MSC)
- A NinJo View limited environment was installed in Madrid in 2008 for test purposes.

NINJO ADVANTAGES VS CURRENT SYSTEMS

- McIdas is less friendly for display and configuration.
- No production tools, rather a research tool.
- Intranet display tools: reduced data integration and data access. Not configurable.
- Basic display tools (eg: radar): not really for operational use

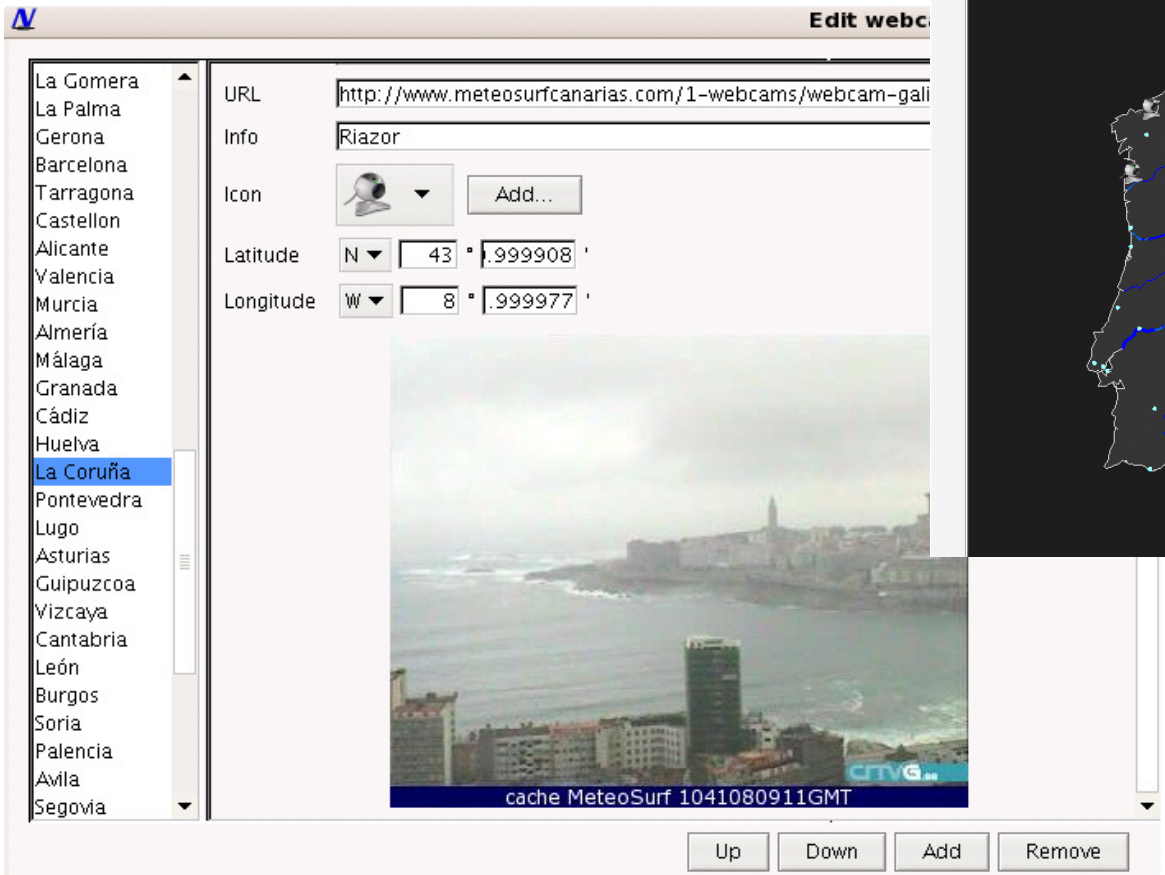
In consequence:

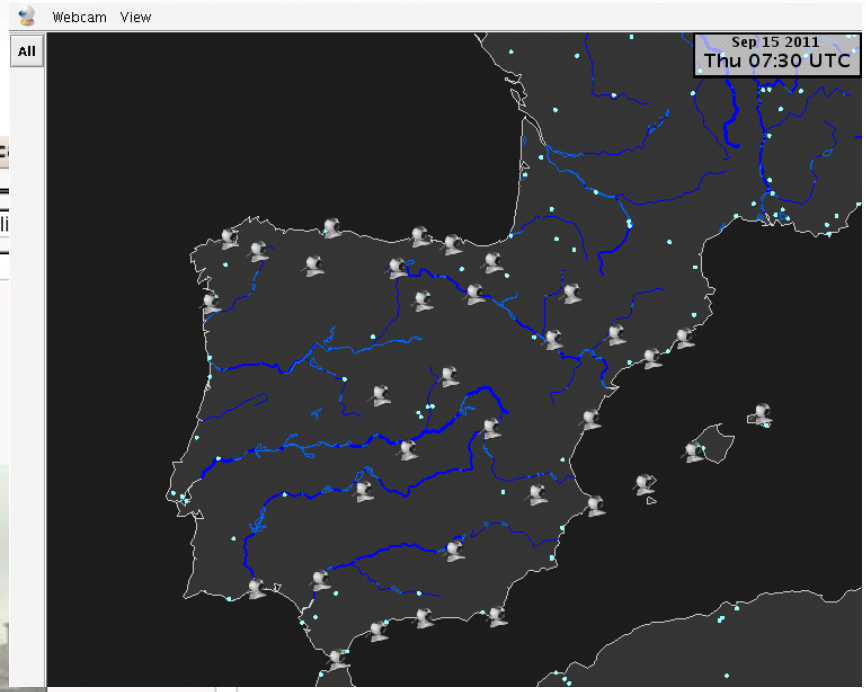
The adquisition of NinJo was decided in AEMET (in the frame of the wider Project for modernizing/upgrade of the forecasting procedure) to replace McIDAS in operations.


Mainwindow - Mainwindow (MADRID atap1/normal)
NINJO CLIENT
Webcam View
All
Feb 06 2012
Mon 11:00 UTC
N/A
Ninjo Cross Section (EVAL_Offenbach ramonahein/normal)
• Geographical layers:
- GeoRaster
- GeoVector
- GeoGrid
- GeoLocation
- Fill
• Data layers:
- Surface
- Sounding
- NWP
- Aviation
- Lightning
- Radar
- Satellite...
• Applications:
- Meteograms
- CrossSections
- Soundings
- Radar AutoMON
- Image viewer
- Webcam...
1 h
5 Sun
6 Mon 11:00
10 Fri 05:00
11 Sat 17:00

WEBCAM LAYER

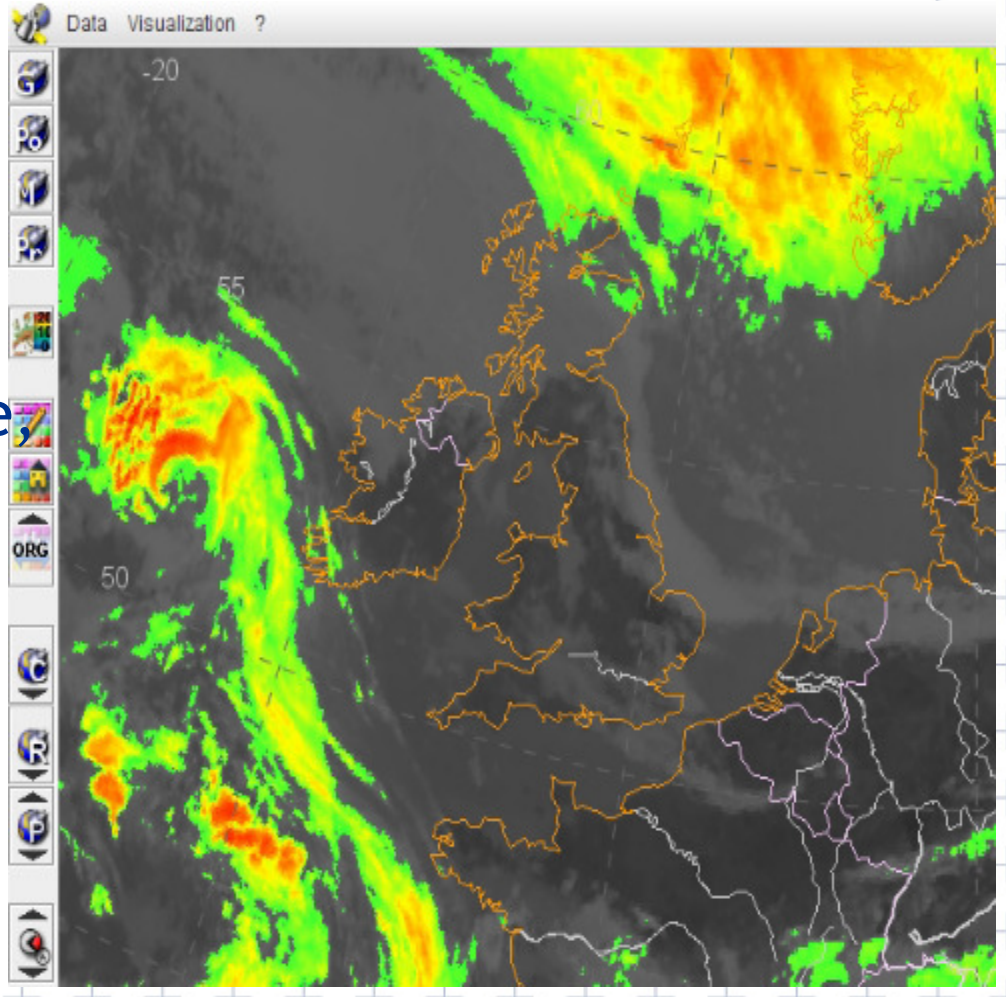
- Allows the display of webcam images to give the forecaster an idea of the current weather situation.



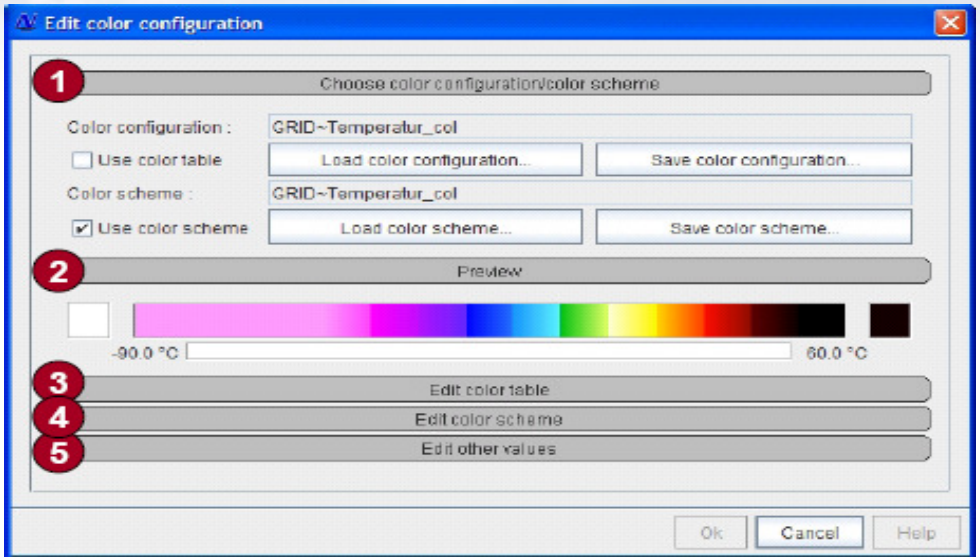


COLOR ENHANCEMENTS

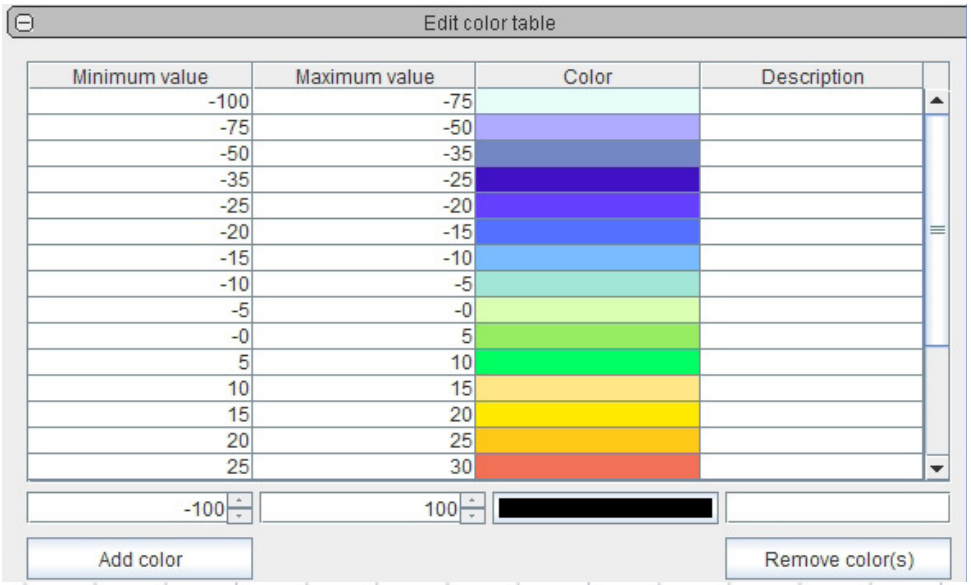
- Data provide vast amounts of information used to quantify physical properties.
- Provide detailed descriptions of atmospheric, ocean, and land features.
- McIDAS Enhancements (Satellite, also radar) are being adapted to NinJo considering differences, Brightness vs temperature...
- Same tools or part of it, are Used for other layers (as NWP)

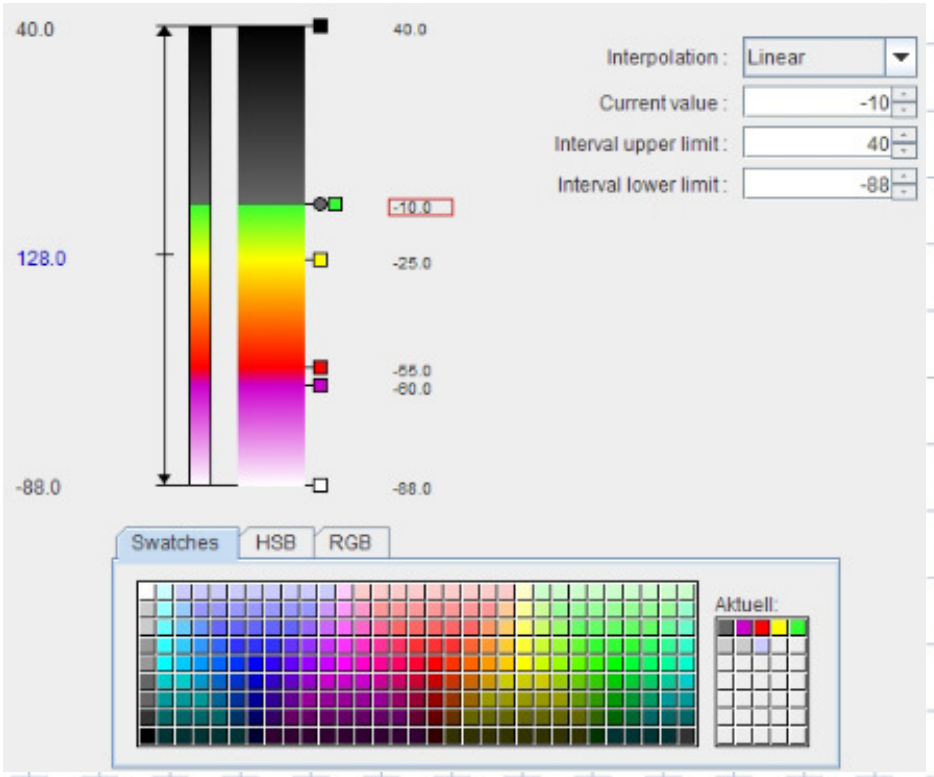


ENHANCEMENTS IN SATELLITE IMAGERY



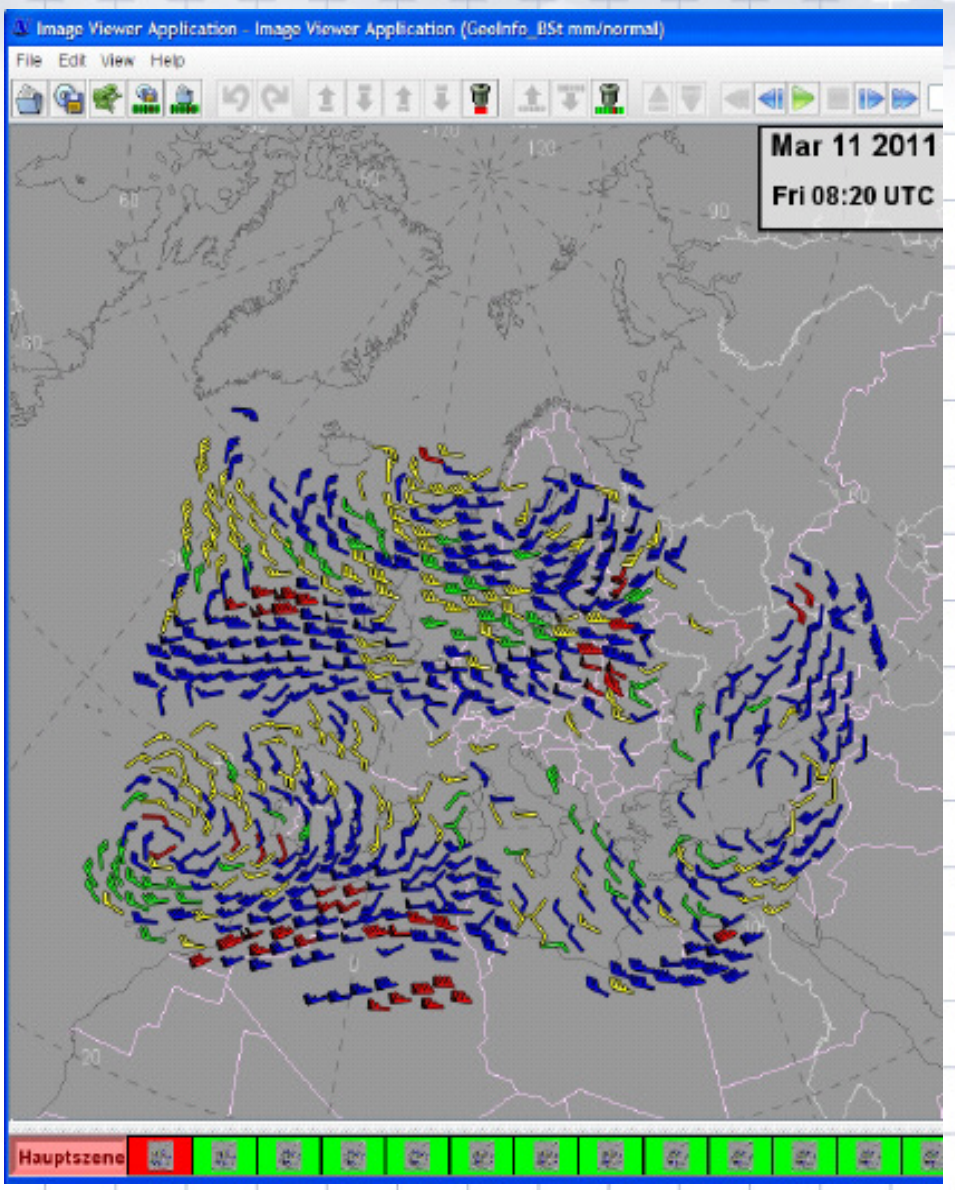
1	Selection of color configuration/color scheme, memory option for modified/own color configuration/schemes, activation of color tables/schemes
2	Preview of current color configuration
3	Creation/Modification of new/existing color table
4	Creation/Modification of new/existing color scheme
5	Change default colors and values





NINJO IMAGE VIEWER

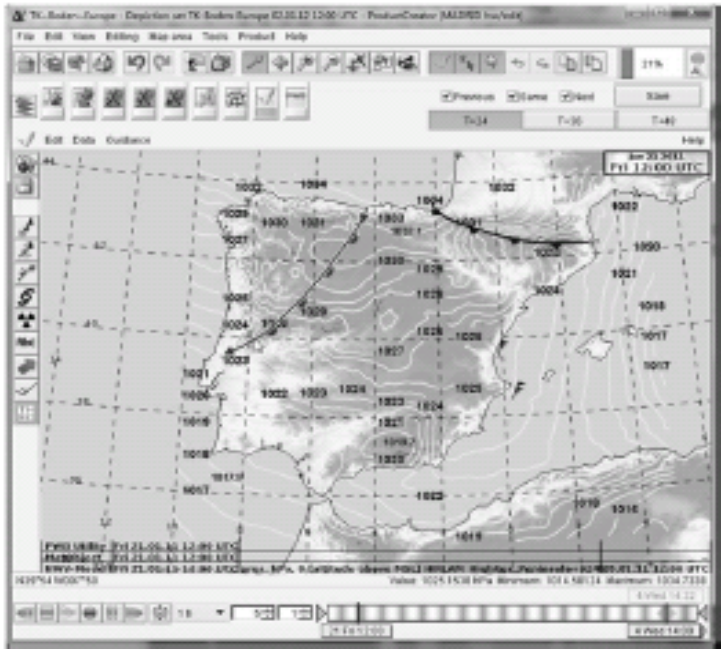
- Tool to store NinJo plots that are frequently used in order to show them very quickly without having to wait for the data to be reloaded.
- Supports consecutive recording of several image series.
- Provides various options to edit the image series.
- This tool is in principle attractive. It use for example considered, to merge diferent data in the same loop as Satellite data and then equivalent simulated images

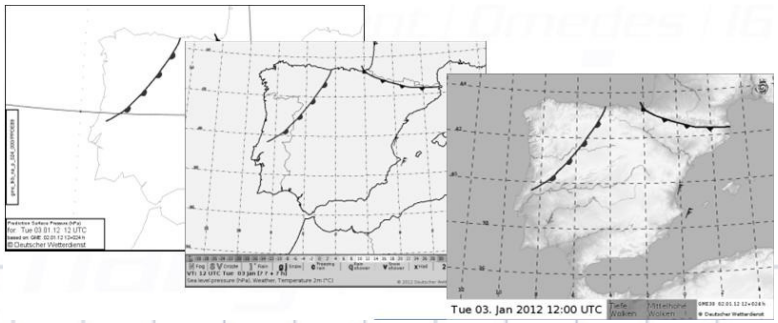


NINJO PRODUCT

Interactive production of graphical weather analysis maps

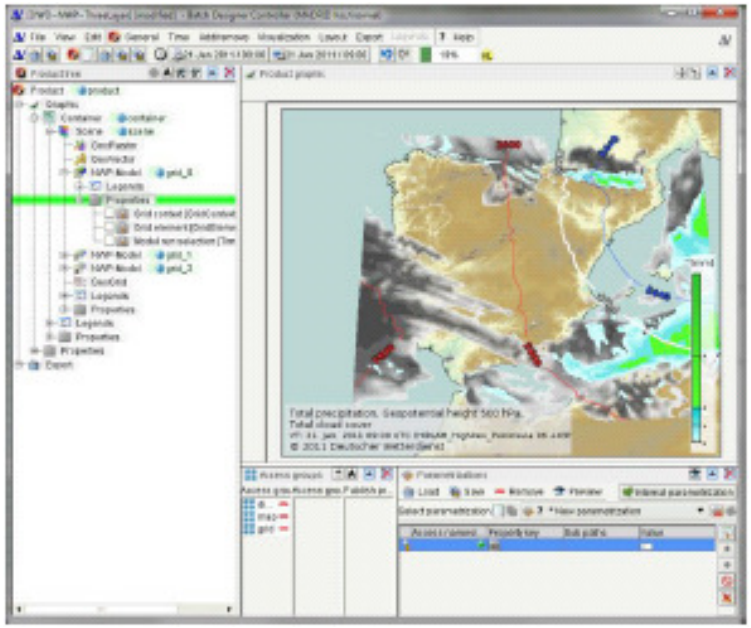
NinJo Product Workbench

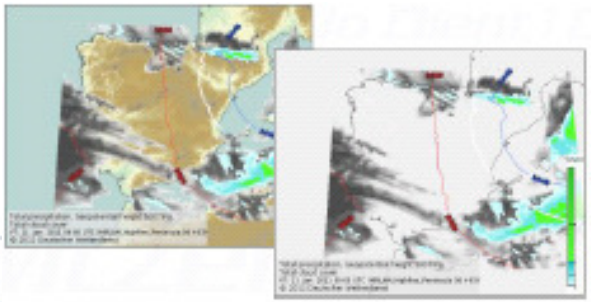




Automatic creation of graphical products from templates

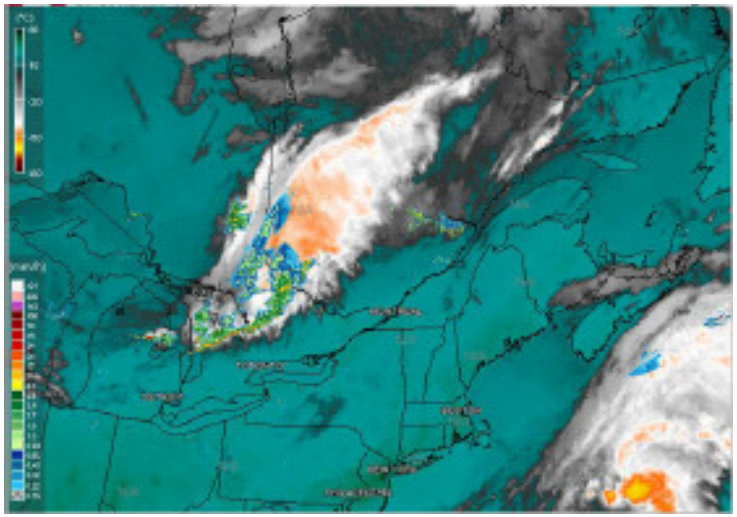
NinJo Batch



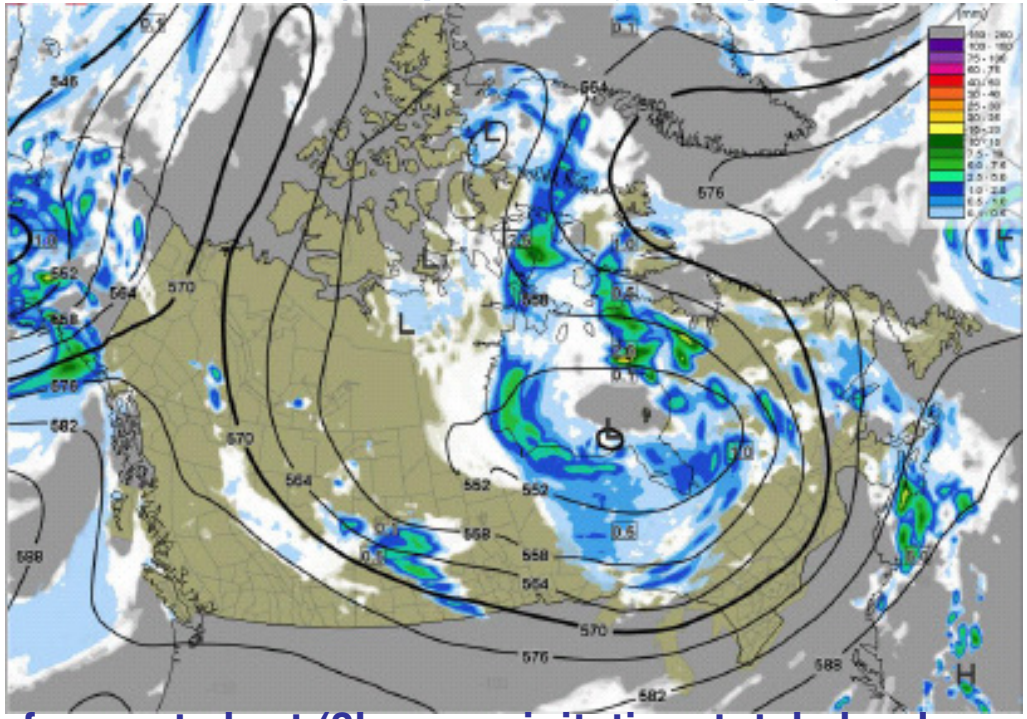


NINJO BATCH

- **Automated event/time-triggered production** of (almost) all meteorological data that can be graphically displayed using NinJo.
- Examples:
- satellite- and radar images
- forecast charts
- meteogramms, soundings,
- cross-sections…



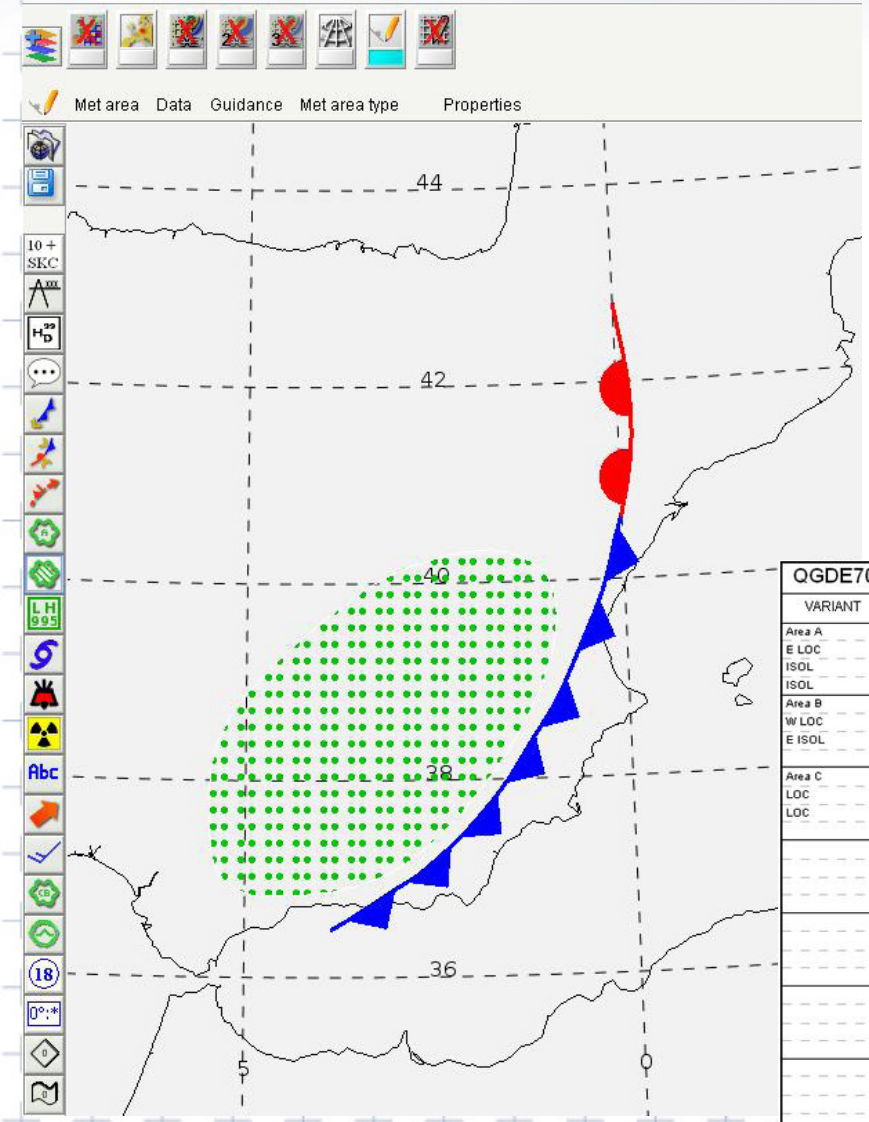
SAT + Radar composite

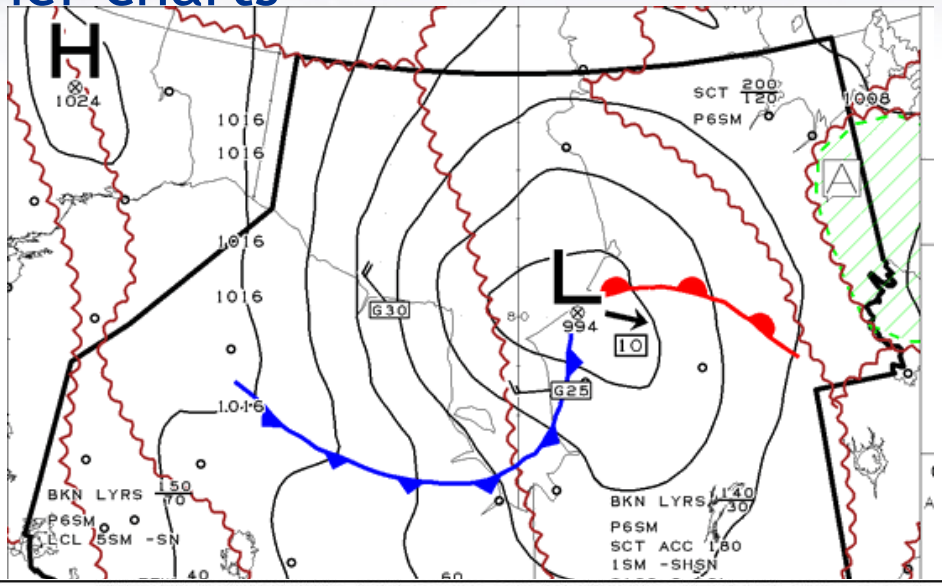


forecast chart (3hrs precipitation, total cloud coverage, pressure 500hPa)

NINJO PRODUCT WORKBENCH

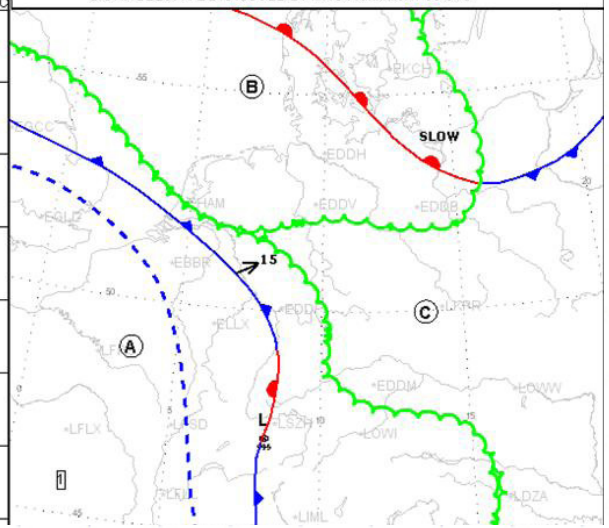
Interactive creation of weather charts





QGDE70 FIXED TIME CHART VALID 12 UTC 30-03-2010 BASED ON 00 UTC DATA ON 30-03-2010

VARIANT	VIS	WEATHER	CLOUDS, TURBULENCE, ICING	1st 0°C	2nd 0°C
Area A	10+	NIL	SCT/BKN LYR SC CU AC CI 030/XXX ~ ψ 050/170	E	
E LOC	4500	-RA	BKN/OVC ST SC AS CI 015/XXX ~ ψ 065/170 ⩓	065	
ISOL	4000	SHRA	ISOL TCU CB 015/XXX ⩓	W	
ISOL	2000	TSRA	EMBD CB 010/XXX ⩓	040	
Area B	10	NIL	BKN SC AC AS CI 020/XXX ~ ψ 060/170	NW	
W LOC	2500	RA	OVC ST SC AC AS CI 005/XXX ~ ψ 050/170	050	
E ISOL	5000	SHRA	ISOL TCU 025/200	SE	
				065	
Area C	10+	NIL	SCT/BKN AC CI 100/XXX ~	N	
LOC	1500	BR	SCT/BKN ST 005/030	055	
LOC	10+	NIL	SCT/BKN CU AC CI LYR 025/XXX	S	
				075	



WORK ON

- Color enhancements configuration and help to configuration.
- Development of Image Viewer
- Webcam layer: expert
- Support to Project managing:
  - summary of information on new updates/versions.
  - To make available useful documentation from NinJo user's group

NOVEDADES NINJO

Características generales del cliente, MainWindow, LayerContainer

Uso del Geocursor en la Ventana Principal doc 1 p.11	• Se puede activar un Geocursor para las escenas de la ventana principal a través del menú Ver.
Novedades GUI doc 1 p.12-7	• La escea activa se muestra con borde rojo y con un icono diferente • La selección de la escena activa se puede hacer a través del menú de la escena, o clic botón izquierdo sobre la selección de escenas • Los botones de selección de escena mostrará el número de escenas que tenemos abiertas junto con sus respectivos nombres. • Si activamos una escena secundaria se activa la GUI de dicha escena • La ventana principal puede mostrarse según dos tipos de diseño: Diseño por defecto y Diseño Grid. • La “escena principal” pasa a llamarse "escena activa". • El "Área del Mapa" ahora controla el mapa de la escena activa. • Las escenas secundarias ahora se llaman escenas y contienen submenús para cada una de ellas. • Los últimos colores que se han utilizado se conservan y pueden ser reutilizados en posteriores sesiones: • Las escenas en la ventana principal se pueden pasar a modo pantalla completa • Se incluye la posibilidad de borrar favoritos y configuraciones • Leyenda de las escenas: edición más amigable
Configuración general doc 1 p.18-9	• Posibilidad de borrar favoritos y configuraciones • NinJo pedirá confirmación para sobrescribir archivos o favoritos. • Si no tengamos permiso para una acción determinada, NinJo nos lo indicará.
Edición de la leyenda doc 1 p.11	• Ahora se puede editar la fuente de la leyenda de información de la escena

NINJO PROJECT OVERALL

- 2012:
  - Full installation (servers clients).
  - Exploration of all data types needed.
  - First post favourites (shifthead, aviation forecaster).
  - Firt preoperational products (fronts low level aviation).
  - Work on local favoutites
  - A complementary scheme for internal training
- 2013:
  - Operational post favourites
  - Production development…