

Info-Electronics Systems Inc.
Systèmes Info-Électroniques Inc.



Met-WebGIS (BCIP)



Presentation de la Formation

Mai 2018



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

Objectifs

- 🔥 Présenter le contexte du projet
- 🔥 Présenter notre Innovation Met-WebGIS
- 🔥 Développements futures
- 🔥 Collaboration attendue
- 🔥 Initiation au démarrage rapide
- 🔥 Questions et réactions

Contenu de la Présentation

- 🔥 Introduction
- 🔥 Vue globale sur l'Innovation
- 🔥 Interface Utilisateur Graphique
- 🔥 Fonctionnalités d'opération
- 🔥 Démo
- 🔥 Développement futures
- 🔥 Échanges



Introduction: Produits....

- ❖ Société de service de droit Canadien en ingénierie, intégration de système et gestion de projet en TI, incorporée en 1981
- ❖ Siège à Montréal, Canada, et des bureaux à New Delhi, Inde depuis 1995
- ❖ IES développe et configure des solutions informatiques en observation/ mesure, télédétection, communication, et traitement des données, plus particulièrement dans le domaine de l'Environnement et de l'Hydrométéorologie
- ❖ Forte présence et expérience nationale et internationale dans la livraison de produits et services Clef en Main.
- ❖ Partenariats avec des compagnies réputées pour des produits et services d'intérêt pour nos clients
- ❖ Système de Gestion Qualité certifié ISO 9001:2008 par SAI GLOBAL



CERTIFICATE
OF REGISTRATION

This is to certify that

Info-Electronics Systems Inc.

1755, St-Réjean, Suite 100, Dollard-des-Ormeaux, Québec H6B 2M9 Canada

operates a

Quality Management System

which complies with the requirements of

ISO 9001:2008

for the following scope of registration

Design, development, integration, installation and support of software and hardware global solutions for Satellite Remota Sensing, Meteorology, and Hydrology systems and services.

Certificate No.: CERT-0092861 Original Certification Date: November 24, 2006
File No.: 013800 Current Certification Date: November 21, 2015
Issue Date: November 20, 2015 Certificate Expiry Date: September 14, 2018

Heather Ollch

Heather Ollch
Asst. Mgr.
Quality, Risk and Cert. Maint.



Accreditation number No. 6212
Date of accreditation 2013-10-09

SAI GLOBAL
SAI GLOBAL is a member of the International Register of Certificated Registrars (IRCA) and is authorized to issue certificates of registration for ISO 9001:2008.



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

ISO-9001
Certified System



Info-Electronics Systems Inc.
Systèmes Info-Électroniques Inc.

Introduction: Produits....

Station de travail
d'informations
météorologiques pour
l'aéronautique

**ULTIMA...
Your ultimate choice for WAFS**

WHY AN ULTIMA?
ULTIMA is a modular system and is:
 • A mature product for current and future needs.
 • Affordable and has the best quality/cost solution.
 • Open to Internet user interfaces.
 • Available from simple standalone to complex redundant multi-point configuration.

FEATURES
 • Interfaces with SAZIS and IBCS WAFS systems.
 • Handles Bulletins, T4 Charts, BUFR, GRIB, and imagery data.
 • Simultaneous reception, display and print capabilities.
 • Selective reception of user defined products.
 • Alert Message for user-specified products.
 • Aviation Weather and Terminal Forecasts.
 • Display vertical Cross Section along a route.
 • Data on geographical map background.
 • Product Archival.
 • Distribution of products to other systems via LAN or serial interface.

RECEIVE, STORE, DISPLAY, PRINT BULLETINS, GRIB, CHARTS AND IMAGERY

Graphical User Interface (GUI)
ULTIMA runs on Linux multitasking Operating System and provides a Graphical User Interface. This allows the simultaneous reception, display and printing of products, while at the same time, providing the user with an intuitive Graphical Interface to manipulate them.

Selection and Identification of Products
ULTIMA selects weather products using the WMO product header. By editing a Product Selection Table, you may specify the list of products to be accepted by your unit and those to be printed, received or those for which an alert is to be generated. You can also select any user's script to be executed on a specified product.

Aviation Weather and Terminal Forecasts
Report types TAF, METAR and SEBMET are retrieved, decoded and displayed in tabular and graphical format. Decoded data can be compared against a specified condition to extract only the reports meeting that specified condition (e.g. visibility less than five miles). In addition, decoders for UA and FT type reports can be provided. Pattern matching can also be defined and applied to the database to generate warnings.

Info-Electronics Systems Inc. www.info-electronics.com

Application de
visualisation des images,
produits dérivés et
données satellites
(Meteosat, GOES, INSAT,
etc..)

**GenericViewer...
Your Genius View on Weather Data**

ABOUT GenericViewer
The purpose of the GenericViewer application is to provide meteorologists and researchers with a powerful tool to integrate all the weather data within the same workstation. It provides the capability to visualize, analyze, and combine various products with each other and with GIS data. The resulting graphical products can be saved in different formats.

The application has the capability to interface with several sources of data such as: GTS, WAFS, MCD, INGT, IMDPO, METEOSAT, GOES, TIROD, and EEC Rawdat.

The GenericViewer Application is a Linux-PC based solution and is designed around a core module complete with the required Plug-in modules.

Core Module:
The core module provides all the facilities for display, screen navigation, file management and save facilities.

Plug-in Modules:
These modules load all the facilities specific to the ingested data type. They provide the application with the following facilities:
 • Interfaces to decode and read the information from the ingested data.
 • Query dialog interfaces to display the data.
 • Analysis dialog interfaces or programs specific to the data type.

SYSTEM DESCRIPTION
Application Functionality
The application consists of a multiple data type and is able to analyze a full range of meteorological data: Conventional, gridded numerical forecast, radar and satellite data.
 • Accesses and analyzes the following satellite data sets: GOES, METEOSAT, TIROD, INSAT, etc...
 • Accesses and analyzes GIG data format from GRAB3 or other GIG packages.
 • Performs standard meteorological analysis programs for conventional observation and grid-point data.

Info-Electronics Systems Inc. www.info-electronics.com

Application SIG-Web
d'informations météo,
hydro, etc..
... Système d'aide à la
décision



Système d'information "base Web-SIG"

... monitoring,
analyse, alerte ...

Système d'Aide à la Décision



Introduction: Innovation....

Met-WebGIS a été sélectionné par le Programme d'Innovation Construire au Canada (PICC) comme innovation dans le secteur des "Technologies Habilitantes"

Met-WebGIS sera personnalisé pour le Service Météorologique du Canada (SMC), Environnement et Changement climatique Canada

Innovations présélectionnées disponibles pour mise à l'essai

Vous trouverez une liste des innovations présélectionnées qui sont disponibles pour mise à l'essai. Ces innovations font partie d'un bassin constitué des propositions présélectionnées dans le cadre du Programme d'innovation Construire au Canada (PICC).

Comment faire l'essai d'une innovation à partir de la liste d'innovations présélectionnées

Étape 1 : [Vérifier si votre ministère est admissible](#)
Étape 2 : Trouvez une innovation dont vous souhaitez faire l'essai à partir de nos listes ci-dessous
Étape 3 : [Communiquez avec le Programme d'innovation Construire au Canada](#) pour nous informer que votre ministère souhaiterait devenir un partenaire susceptible de mettre à l'essai une innovation

Standard | Militaire

Innovations présélectionnées disponibles pour mise à l'essai du volet standard

Affiche 1 à 1 de 1 entrées (filtré de 40 entrées totales) | Afficher 10 entrées | Filtrer les articles | Met-

Organisation	Innovation	Description	Ville, Province	Secteur prioritaire	Ronde	Statut
Info-Electronics HP Systems Inc.	Met-WebGIS	Application Web destinée à l'affichage et au traitement configurés par l'utilisateur de données environnementales dans le contexte d'un SIG.	Dollard des Ormeaux, Quebec	Technologies habilitantes	007	Disponible pour mise à l'essai

1



Introduction: Cas d'utilisation

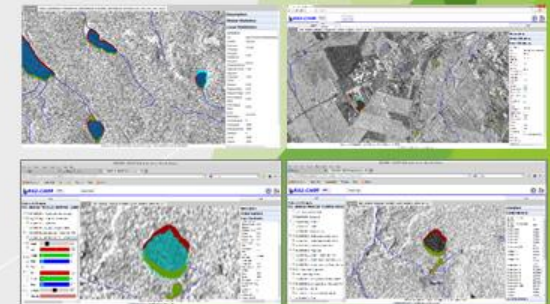
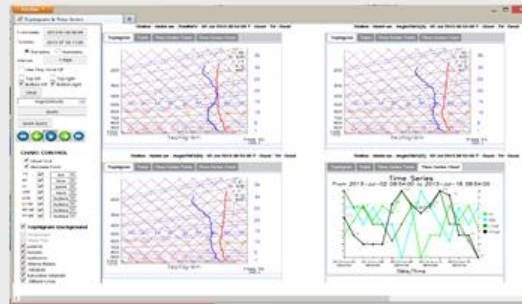
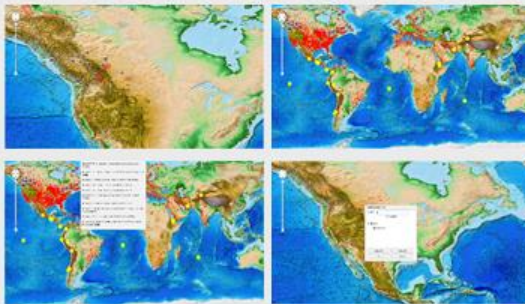
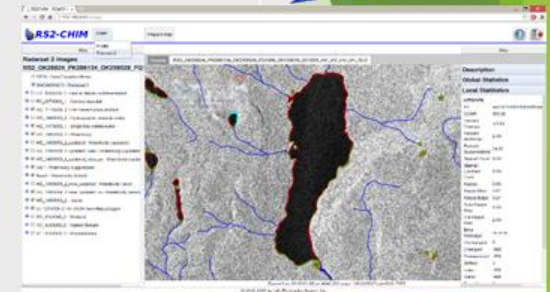
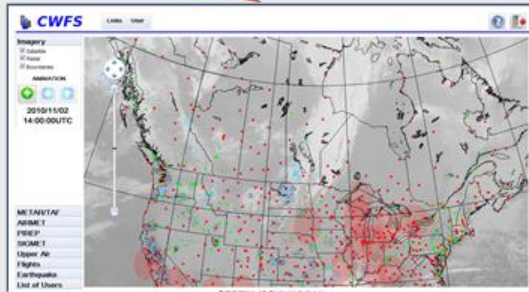


Exemples d'Application de WebGIS

Système collaboratif de prévision météo

Application pour un réseau de Radiomètres Micro-Onde

Mise à jour de la cartographie des eaux de surfaces - RadarSat2



Introduction: Base pour un système d'aide à la décision

Le meilleur choix de système d'information Web-SIG pour votre application ..

Vous êtes à quelques cliques de vos activités de suivi et d'aide à la décision

Affichage



Thématique



Analyse



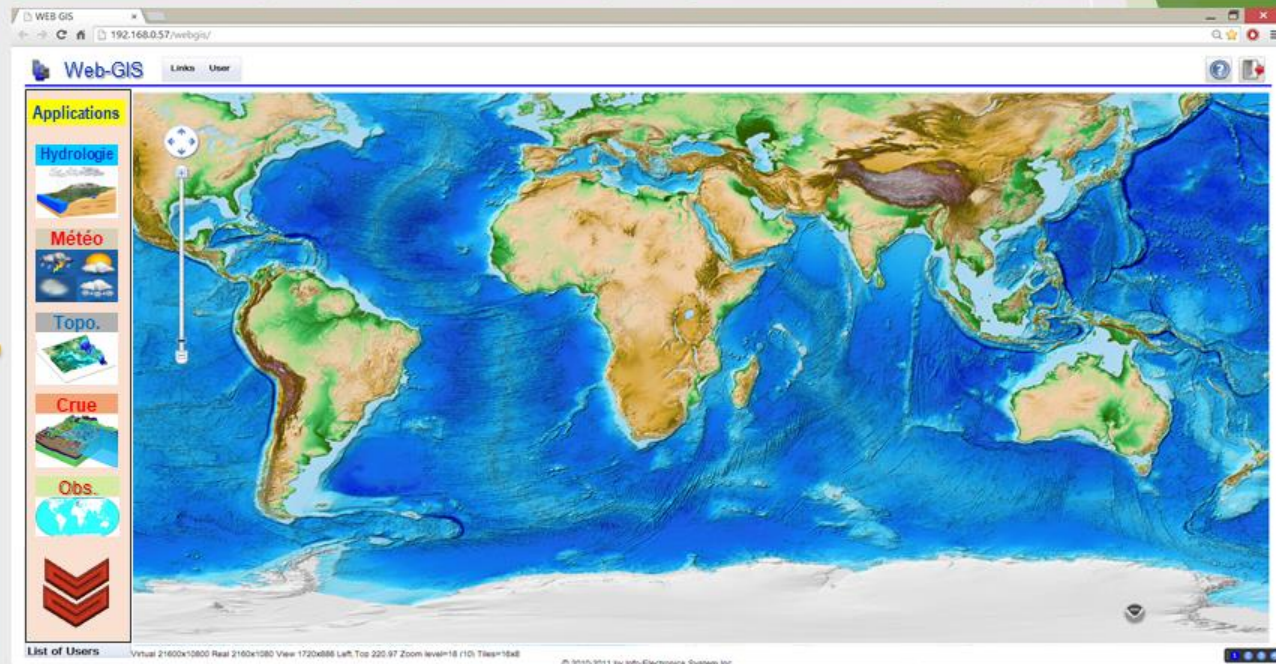
Décision

Réseaux
d'observation In-situ

Observation de la
terre par
télédétection

Sorties des modèles
numériques de
prévision

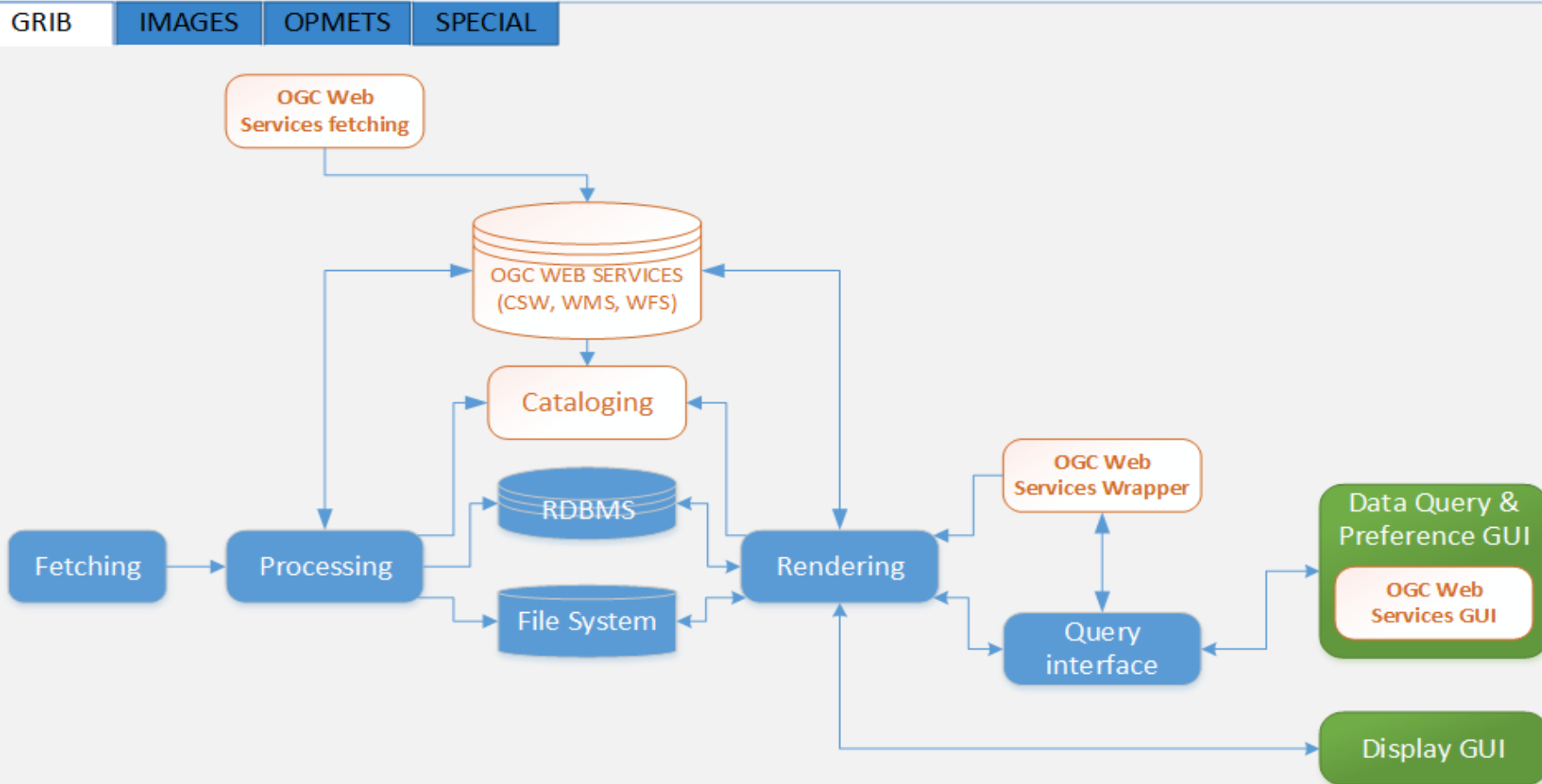
Bases de données
SIG d'information
thématique



Vue globale: Architecture

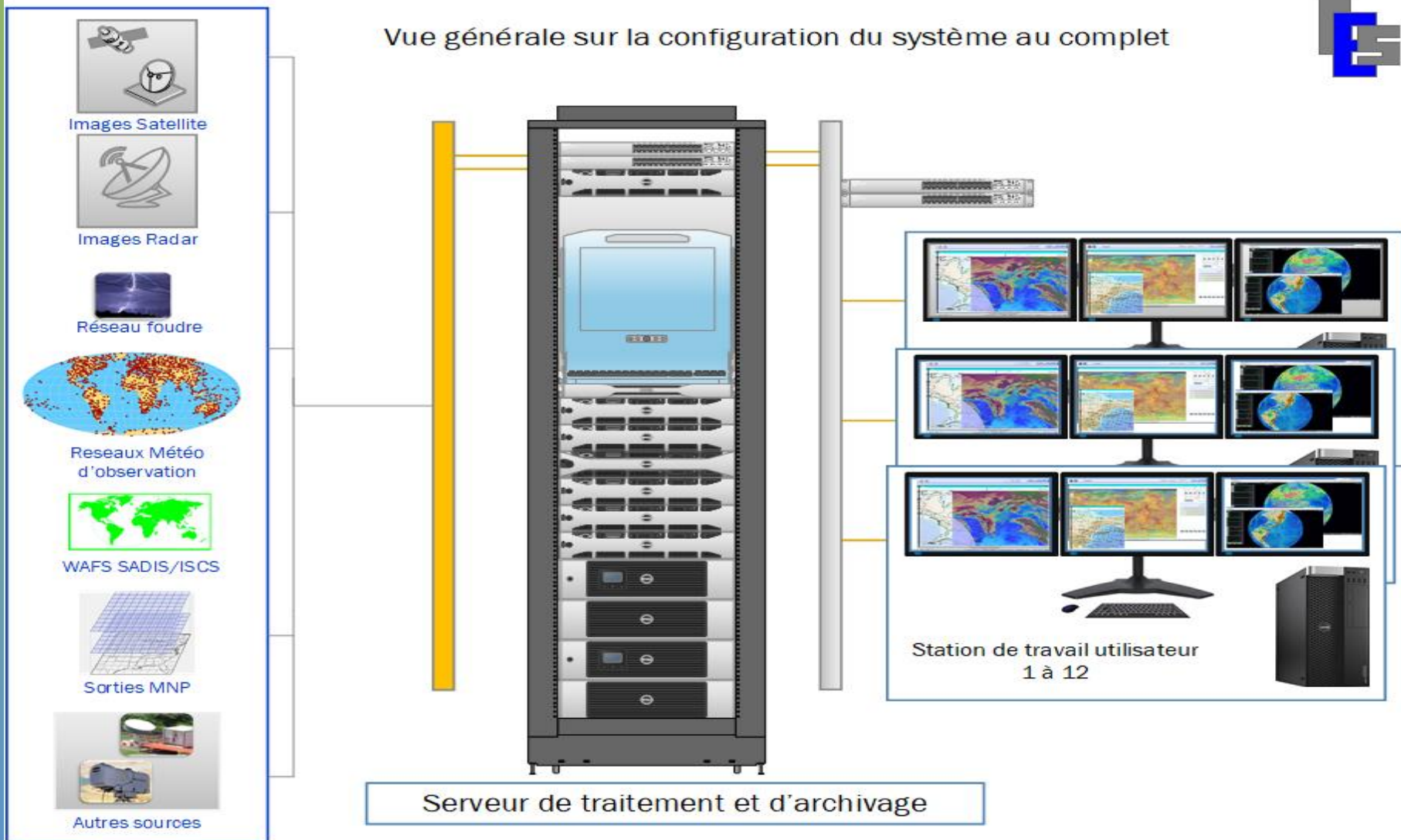


WebGIS Overall view – Vue globale



Vue globale: Met-WebGIS exemple de configuration

Vue générale sur la configuration du système au complet



Vue globale: Au sujet de Met-WebGIS

- 🔥 Une application pour le suivi et la prévision météo complètement basée sur le Web (Utilisation exclusive des navigateurs Web).
- 🔥 L'application permet aux prévisionnistes de traiter, analyser, illustrer et afficher les données météo de différents types afin de personnaliser, générer et distribuer des produits météorologiques avancés et à usages spécifiques.
- 🔥 Met-WebGIS permet aussi à l'utilisateur final de faire des requêtes pour générer et afficher des produits personnalisés selon les spécificités de son application et sa zone d'intérêt.
- 🔥 Met-WebGIS peut ainsi être configurée pour accéder et récupérer des données publiques ou privées.



Vue globale: Fonctionnalités

Affichage

Affichage géoréférencé, Information cohérente, Superposition de couches d'information, personnalisation des styles d'affichage, etc..

Thématique

Zone d'intérêt, Information auxiliaire, Information SIG contextuel Statique, etc.

Analyse

Filtrage, Calcul des produits dérivés, Comparaison (Superposition de couches d'information et affichage multi-panneaux), etc.

Décision

Alarme/ Avertissement, Génération de rapport, Validation des résultats, etc.

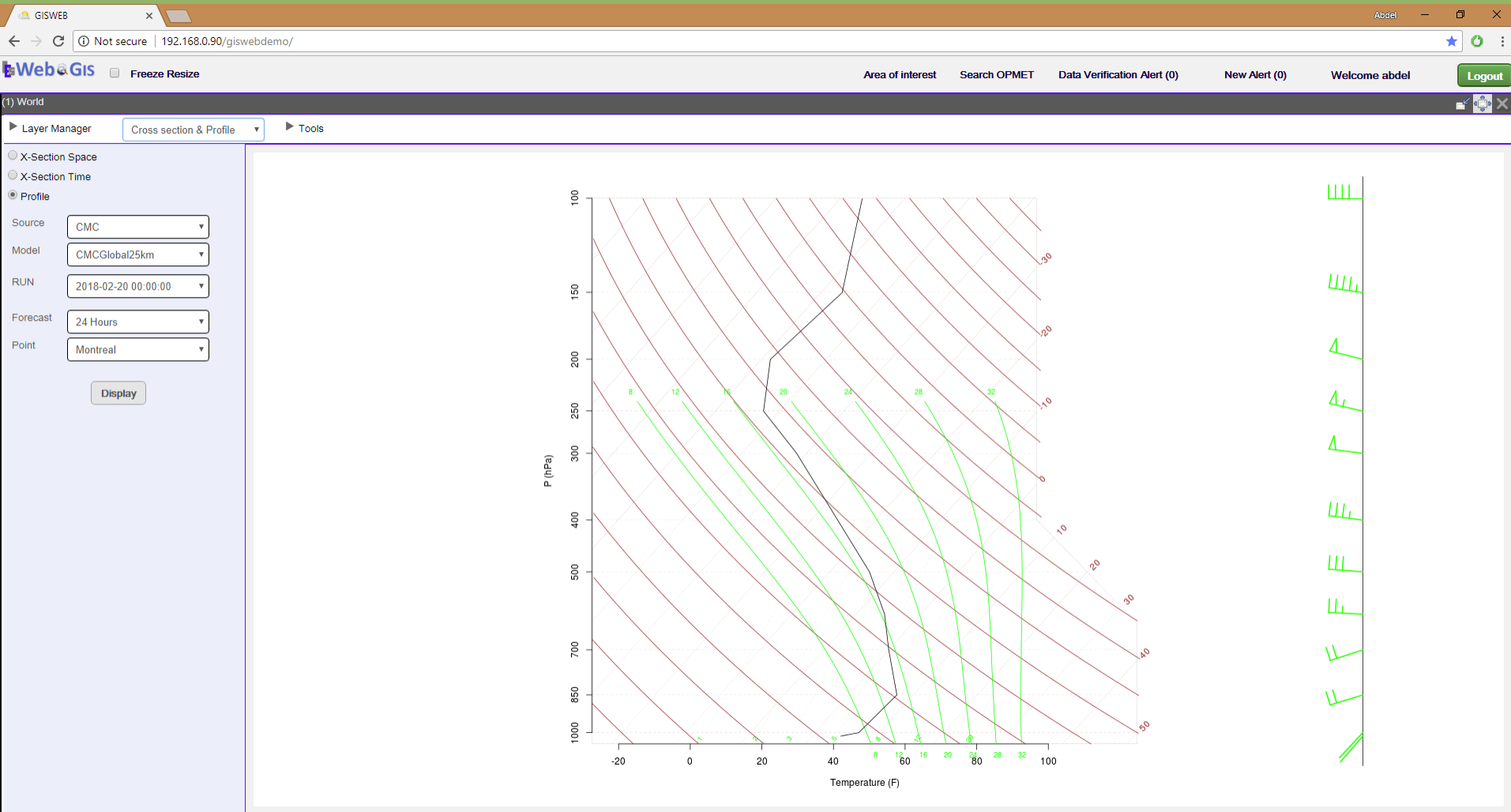


Interface Utilisateur: Initiation à Met-WebGIS

- 🔥 Portal (Menus et sections)
- 🔥 Régions d'intérêt
- 🔥 Couches de données statiques
- 🔥 Sources de données
- 🔥 Styles de présentation des données (Rendering)
- 🔥 Génération d'affichages
- 🔥 Génération d'image et animation
- 🔥 Et plus...



Interface Utilisateur: Profiles



© 2012-2013-2014 by Info-Electronics System Inc.

Data Ingest Status: ●



Environment and
Climate Change Canada

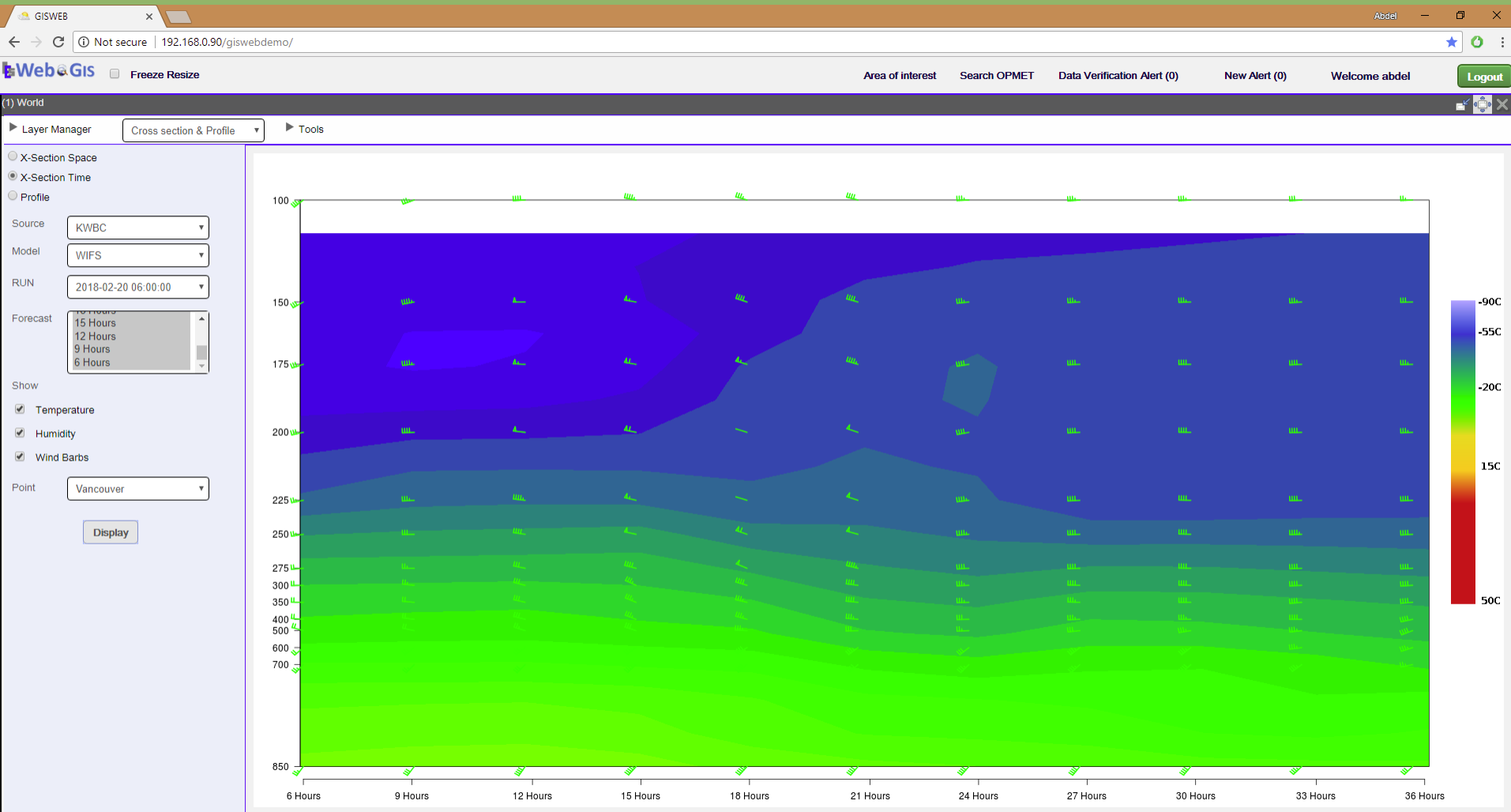
Environnement et
Changement climatique Canada

ISO-9001
Certified System



Info-Electronics Systems Inc.
Systèmes Info-Électroniques Inc.

Interface Utilisateur: Coupe dans le temps



© 2012-2013-2014 by Info-Electronics System Inc.

Data Ingest Status:



Environment and
Climate Change Canada

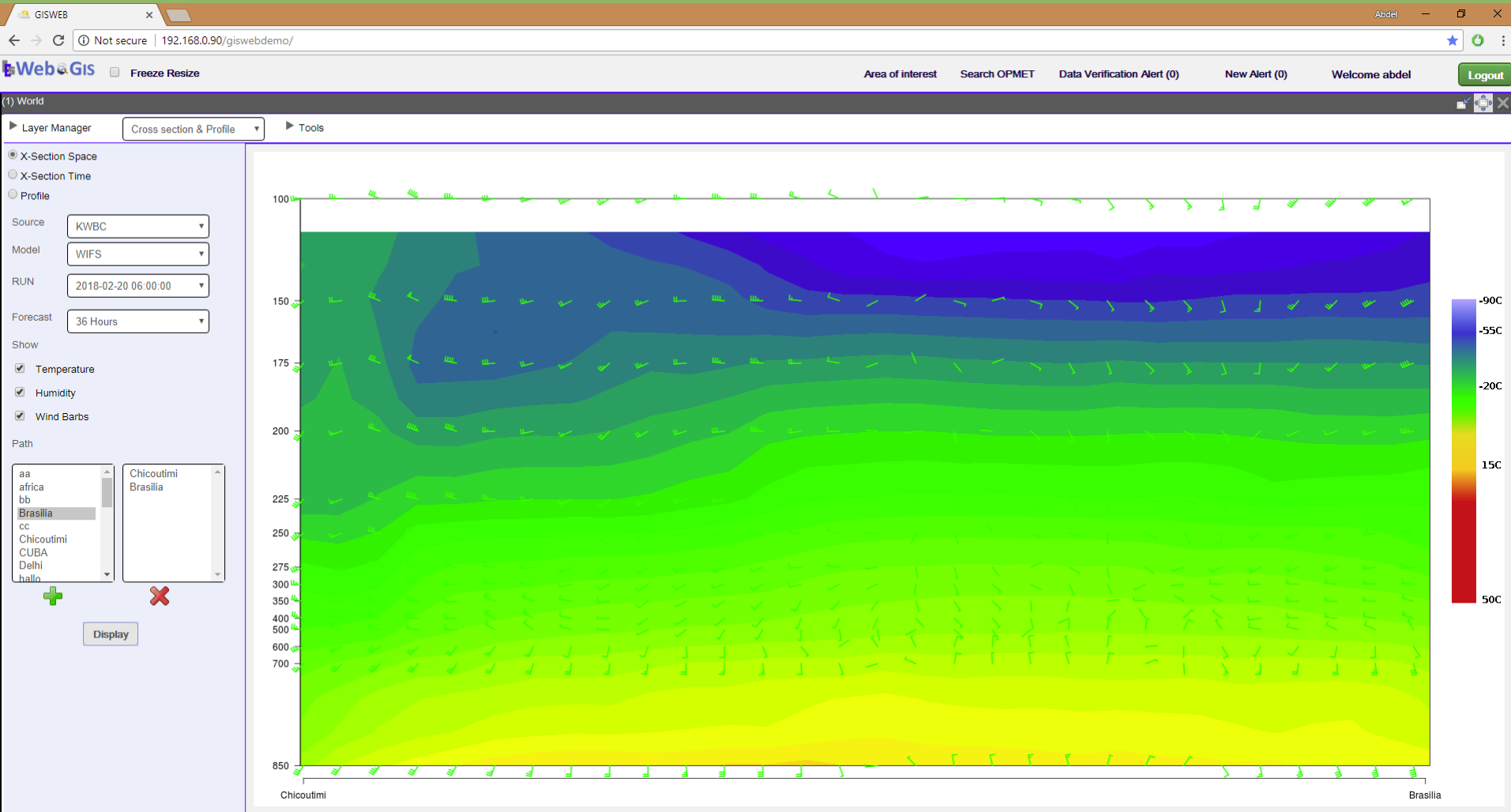
Environnement et
Changement climatique Canada

ISO-9001
Certified System



Info-Electronics Systems Inc.
Systèmes Info-Électroniques Inc.

Interface Utilisateur: Coupe dans l'espace



© 2012-2013-2014 by Info-Electronics System Inc.

Data Ingest Status: ●



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

ISO-9001
Certified System



Info-Electronics Systems Inc.
Systèmes Info-Électroniques Inc.

Interface Utilisateur: OPMET

WebGIS Freeze Resize **Area of Interest** Search OPMET Data Verification Alert (0) New Alert (171) Welcome abdel [Logout](#)

(3) TTAAll Search

Include unverified data

Aoi:

WMO ICAO

Period:

WMO Header (TTAAII DDHHMM,TTAAII ...)

SAJS21 221900, SAJS21 221918, SAJS21 221920, !

TT	AA	DD	HH	MM
SP	US	21	22	18
FT	MX	22		19
WA	FI	23		20
SA	GI	24		
WS	UK	25		
	GR			
	GL			
	FK			
	TU			
	NO			
	DL			
	IY			
	OS			
	BX			
	CY			
	AH			
	SN			
	LT			
	IS			
	DN			
	LV			
	SW			
	EO			
	FA			
	NP			
	AB			
	ZS			
	BE			
	NL			
	CO			
	MS			

83 message(s)

SAJS25 KWBC 221900 RRH

METAR PABR 221853Z 13012KT 10SM BKN026 BKN035 OVC043 M08/M09 A2937=

METAR PACD 221853Z AUTO 16039G59KT 6SM -RA BR OVC065 04/03 A2954=

METAR PAEN 221853Z 04003KT 8SM VCFG CLR M20/M22 A2981=

METAR PAFA 221853Z 02004KT 3/4SM -SN BR VV010 M14/M16 A2979=

METAR PAJN 221853Z 00000KT 10SM FEW008 OVC095 M06/M06 A2952=

METAR PAKN 221854Z 11005KT 10SM BKN110 M07/M08 A2985=

METAR PAKT 221853Z 14005KT 6SM R11/6000VP6000FT BR SCT007 OVC012 06/06 A2941=

METAR PANC 221853Z 00000KT 10SM CLR M16/M17 A2980=

METAR PAOM 221853Z 06004KT 10SM CLR M03/M06 A2959=

METAR PAOM 221853Z 06004KT 10SM CLR M03/M06 A2959=

METAR PAOR 221853Z 00000KT 3/4SM -SN BR BKN016 BKN025 OVC030 M26/M28 A2981=

METAR PAOT 221853Z 23012KT 9SM OVC033 M05/M08 A2954=

METAR PASC 221853Z 15007KT 4SM -SN BR BKN022 BKN080 OVC110 M13/M14 A2953=

METAR PASI 221853Z 32005KT 10SM -RA BKN049 OVC060 03/00 A2941=

METAR PAVD 221856Z VRB06KT 10SM FEW070 FEW100 SCT150 M03/M12 A2951=

METAR PAWG 221856Z 31004KT 8SM -FZRA SCT006 BKN010 OVC030 00/M01 A2946=

METAR PKWA 221900Z AUTO 06007KT 10SM SCT022 28/24 A2975 RMK AO2 T02760237=

SAJS23 KWBC 221900 RRO

METAR TNCM 221900Z 10007KT 060V160 9999 SCT021 29/23 Q1012 A2990 NOSIG=

SAJS25 KWBC 221900 RRI

METAR PASD 221856Z 21018KT 7SM -RA BKN017 BKN025 OVC033 04/01 A2996 RMK FK WND 22027/65 PRESFR KH=

SAJS23 KWBC 221900 RRP

METAR KTMB 221853Z COR 12005KT 10SM SCT030 28/18 A2989 RMK AO2 SLP122 T02780183=

SAJS23 KWBC 221900 RRL

METAR KJAX 221856Z 07011KT 10SM SCT036 BKN250 24/18 A2995 RMK AO2 SLP144 T02390156=

METAR KMOB 221856Z 01015G23KT 10SM FEW090 SCT150 BKN220 18/03 A2996 RMK AO2 SLP147 T01790033=



Fonctionnalités d'opération: Gestion des Alarmes

WebGIS

Area of Interest Search OPMET

Data Verification Alert (0) New Alert (141) Welcome abdel Logout

Filter INFO Acknowledge All

2017-11-26 20:43:34 - INFO - Signature of data file [262040.DAT] is VERIFIED.
2017-11-26 20:43:34 - INFO - Processing starts for [20171126_2040.DAT]
2017-11-26 20:43:33 - INFO - Data file [262040.DAT] downloaded successfully. Renamed to...
2017-11-26 20:43:31 - INFO - Digital Certificate has been VERIFIED.
2017-11-26 20:38:30 - INFO - Processing starts for [20171126_2035.DAT]
2017-11-26 20:38:30 - INFO - Signature of data file [262035.DAT] is VERIFIED.
2017-11-26 20:38:29 - INFO - Data file [262035.DAT] downloaded successfully. Renamed to...
2017-11-26 20:38:28 - INFO - Digital Certificate has been VERIFIED.
2017-11-26 20:33:27 - INFO - Signature of data file [262030.DAT] is VERIFIED.
2017-11-26 20:33:27 - INFO - Processing starts for [20171126_2030.DAT]
2017-11-26 20:33:26 - INFO - Data file [262030.DAT] downloaded successfully. Renamed to...
2017-11-26 20:33:24 - INFO - Digital Certificate has been VERIFIED.

Log Message

WMO Header Acknowledge all Period (Hours) 1

2017-11-26 20:25 - SPUS22 KWBC 262022 -
2017-11-26 20:25 - WSSR20 WSSS 262020 -
2017-11-26 20:25 - SPUR30 UKMS 262018 -
2017-11-26 20:25 - SPUS24 KWBC 262022 -
2017-11-26 20:25 - SPCN31 CWAO 262017 -
2017-11-26 20:25 - SPUS24 KWBC 262020 -

WMO Message

SPECI UKLL 262018Z 32002MPS 2800 -RASN OVC003 01/M00 Q1017
R31/290060 NOSIG=

Zoom=0 -178.23 86.68 Long=-178.230968 Lat=86.683047

© 2012-2013-2014 by Info-Electronics System Inc. Data Ingest Status: ●



Fonctionnalités d'opération: Gestion des Alarmes

WMO Header: PFXD01 RJTD 101500 Acknowledge all Period (Hours) 1

2017-03-10 15:05 - PFXD01 RJTD 101500 -

WMO Message

Click to load the png

10/1420Z 140E 150E 160E 170E 180E 170W 60N 60N 140E 140E 50N 50N SFC/FL200

10/2020Z 140E 150E 160E 170E 180E 170W 60N 60N 140E 140E 50N 50N SFC/FL190

11/0220Z 140E 150E 160E 170E 180E 170W 60N 60N 140E 140E 50N 50N SFC/FL180

11/0820Z 140E 150E 160E 170E 180E 170W 60N 60N 140E 140E 50N 50N NO VA EXP

VA ADVISORY
DPG: 20170310/1500Z
VAAC: TOKYO
VOLCANO: KLYUCHEVSKOY 300260
AREA: RUSSIA
SUMMIT ELEV: 4754M
ADVISORY NR: 2017/43
INFO SOURCE: HIMMARI-8
AVIATION COLOUR CODE: NIL

ERUPTION DETAILS: VA EMISSIONS CONTINUING
RISK: NIL
NXT ADVISORY: 20170310/1800Z

Zoom=0 130.97 -54.26 Long=130.968523 Lat=-54.261501

© 2012-2013-2014 by Info-Electronics System Inc.



Environment and
Climate Change Canada

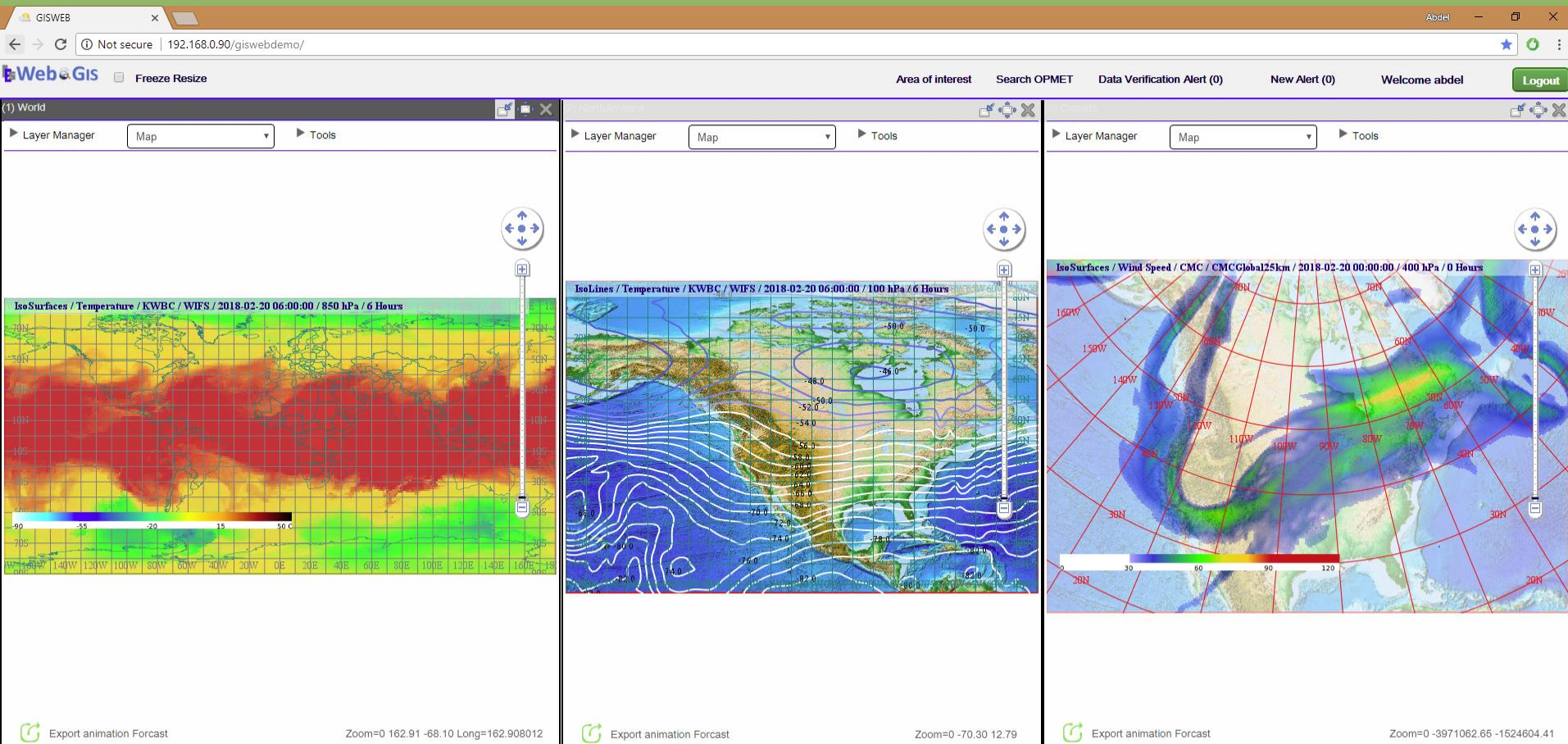
Environnement et
Changement climatique Canada

ISO-9001
Certified System



Info-Electronics Systems Inc.
Systèmes Info-Électroniques Inc.

Fonctionnalités d'opération: Multi-panneaux



© 2012-2013-2014 by Info-Electronics System Inc.

Data Ingest Status:



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

ISO-9001
Certified System

Info-Electronics Systems Inc.
Systèmes Info-Électroniques Inc.

Interface Utilisateur: Cartes

The screenshot displays a web browser window with the URL `192.168.0.90/giswebdemo/`. The application interface includes a top navigation bar with the 'WebGIS' logo, a 'Freeze Resize' checkbox, and several status indicators: 'Area of interest', 'Search OPMET', 'Data Verification Alert (0)', 'New Alert (0)', and 'Welcome abdel'. A 'Logout' button is located in the top right corner. Below the navigation bar, the main interface is divided into a left-hand control panel and a large map area. The control panel, titled '(1) World', contains a 'Layer Manager' section with a 'Map' dropdown and 'Tools' options. It also features a 'Quick query' section and an 'Advanced query' section with dropdown menus for 'World' and 'Abdel-Template', and buttons for 'Refresh AOI', 'Open Macro', and 'Save as Macro'. A 'Product type' dropdown is set to 'Grib'. There are checkboxes for 'Legend' (set to 'upper left'), 'Parent index', and 'Show All Layers'. A list of layers is shown with 'DEM' and 'BoundingBox' selected. At the bottom of the control panel are buttons for 'Up', 'Down', 'Add', 'Delete', 'print', 'Apply', and 'Anim'. The map area shows a global topographic map with a coordinate readout at the bottom: 'Zoom=0 -76.26 -89.34 Long=-76.263736 Lat=-89.340659'. A 'Data Ingest Status' indicator is visible in the bottom right corner of the map area.

© 2012-2013-2014 by Info-Electronics System Inc.

Data Ingest Status: ●



Fonctionnalités d'opération: Régions d'intérêt

The screenshot displays the Web-GIS application interface. At the top, the browser address bar shows '192.168.0.90/giswebdemo/'. The main interface includes a 'Layer Manager' with a 'Map' dropdown and 'Tools' options. A large world map is shown with a red bounding box over the Asian continent. An inset window provides a detailed view of this region. A dropdown menu titled 'Area of interest' is open, listing various regions and test areas. The main map on the right shows a 3D topographic view of the world with a red bounding box over the same region. At the bottom, a status bar indicates '8681 Lat=-89.340659' and 'Data Ingest Status: [green dot]'.

Area of interest

- Open
- Create
- Modify
- Delete
- Set Default

Search OPMET

- World
- World 360
- ICAO A
- ICAO ASIA
- ICAO B
- ICAO B1
- ICAO C
- ICAO D
- ICAO E
- ICAO F
- ICAO M
- ICAO MID
- ICAO EUR
- ICAO G
- ICAO H
- ICAO I
- ICAO L
- ICAO NAT
- ICAO J
- ICAO K
- Africa
- Mer-Africa
- PolSte-Abdel
- PolSte-Abdel-S
- New00002
- New000sam
- NorthAmerica
- Radar
- Radar (1)
- UKMet_test
- portrait_map
- BC-Map
- SA_Africa
- Canada
- Afrique
- Test01
- Test02
- Test03
- Test004



Fonctionnalités d'opération: Pointage

The screenshot displays the WebGIS application interface. The main window shows a map of North America with various weather data overlays, including pressure surfaces and station model parameters. The interface includes a navigation bar at the top with options like 'Area of interest', 'Search OPMET', 'Data Verification Alert (0)', 'New Alert (231)', and 'Welcome b'. A 'Logout' button is visible in the top right corner. The left sidebar contains a 'Layer Manager' and a 'Tools' section. Below the 'Tools' section, there is a 'Quick query' and 'Advanced query' section with various input fields and checkboxes. The 'Advanced query' section includes a 'Product type' dropdown set to 'OPMET', and checkboxes for 'Show META', 'SYNO', 'Upper air', 'SIGME', 'AIRMET', and 'PIREP'. The 'Number of Hours' is set to 'Last 18 Hours', and the 'Number of Forecast Hours' is set to '0'. The 'Station Model Parameter Display' section has checkboxes for 'Wind Barb' and 'Pressure'. The main map area shows a detailed view of the United States and Canada, with numerous weather data points and lines overlaid. A zoom level of 1 and coordinates (Lat=60.879121, Long=-154.075088) are displayed at the bottom of the map. The bottom of the interface includes a copyright notice for Info-Electronics System Inc. and a 'Data Ingest Status' indicator.



Fonctionnalités d'opération: Couches statiques

The screenshot displays the GISWEB application interface. The browser address bar shows the URL `192.168.0.90/giswebdemo/`. The application header includes navigation links: "Area of interest", "Search OPMET", "Data Verification Alert (0)", "New Alert (0)", "Welcome abdel", and a "Logout" button. The main interface is divided into a left-hand "Layer Manager" panel and a central map area.

The "Layer Manager" panel on the left contains the following elements:

- Layer Manager:** A dropdown menu set to "Map" and a "Tools" button.
- Quick query:** A section for rapid data retrieval.
- Advanced query:** A section with input fields for "Canada" and "Abdel-001", and buttons for "Refresh AOI", "Open Macro", and "Save as Macro".
- Product type:** A dropdown menu set to "Static layer".
- Legend:** A dropdown menu set to "upper left" and a "Parent index" checkbox.
- Show All Layers:** A checked checkbox.
- Layer List:** A list of layers with checkboxes: DEM, BoundingBox, graticules1, graticules5, graticules10, statesProvinces, adminCountries, and Airport. The "Airport" layer is highlighted with a purple border.
- Navigation:** Buttons for "Up", "Down", "Add", "Delete", "print", "Apply", and "Anim".

The central map area shows a topographic map of North America with a grid overlay. The "Airport" layer is visible as small black dots across the continent. The map includes a navigation wheel in the top right corner. At the bottom of the map, the coordinates are displayed: `Zoom=1 -1604650.79 304137.30 Long=-117.478168 Lat=49.158399`.

At the bottom of the application window, the copyright notice reads: "© 2012-2013-2014 by Info-Electronics System Inc." and the "Data Ingest Status" is shown as a green indicator.



Fonctionnalités d'opération: Couches statiques

The screenshot displays a web-based GIS application. The browser address bar shows the URL `192.168.0.90/giswebdemo/`. The application header includes navigation links for "Area of interest", "Search OPMET", "Data Verification Alert (0)", "New Alert (0)", and "Welcome abdel", along with a "Logout" button. The main interface is divided into a left-hand "Layer Manager" panel and a central map area.

Layer Manager Panel:

- Quick query
- Advanced query: Includes dropdowns for "Canada" and "Abdel-001", and buttons for "Refresh AOI", "Open Macro", and "Save as Macro".
- Product type: "Geomet"
- Legend: "upper left"
- Parent index:
- Show All Layers:
- Layer list (checked items):
 - OpenStreetMap
 - bEM**
 - BoundingBox
 - graticules1
 - graticules5
 - graticules10
 - statesProvinces
 - adminCountries
 - Airport
 - WMS - RADAR - Radar precipitation rate (Rain)
- Navigation buttons: Up, Down, Add, Delete, print, Apply, Anim

Map Area:

- Title: "WMS / RADAR - Radar precipitation rate (Rain) / 2018-02-20 13:50:00"
- Map content: A radar precipitation map showing intensity levels in shades of green and yellow over a geographic area with city labels and roads.
- Map controls: A navigation wheel and a vertical scale bar are visible on the right side.
- Coordinates: "Zoom=3 1091768.95 -221339.19 Long=-80.987899 Lat=45.942418"

At the bottom left, there is a "Export animation Forecast" button. At the bottom right, the "Data Ingest Status" is shown as a green dot.

© 2012-2013-2014 by Info-Electronics System Inc.

Data Ingest Status: ●



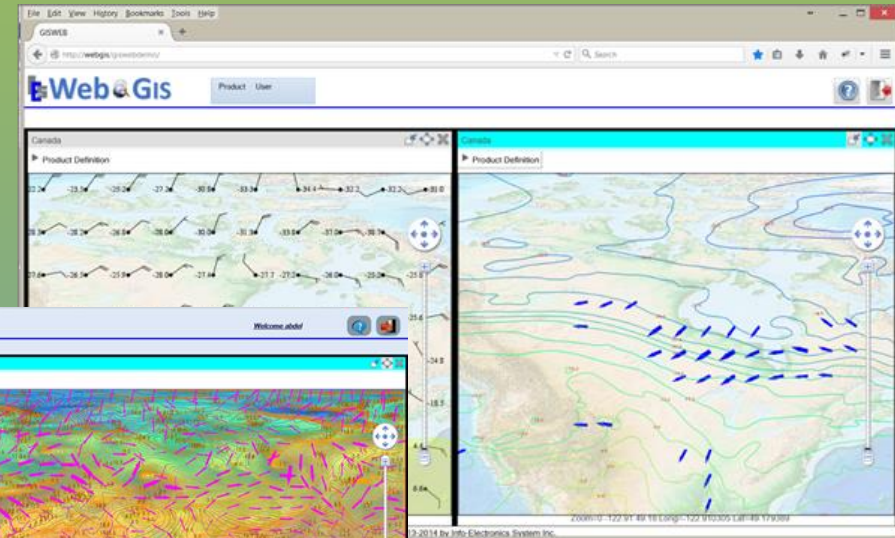
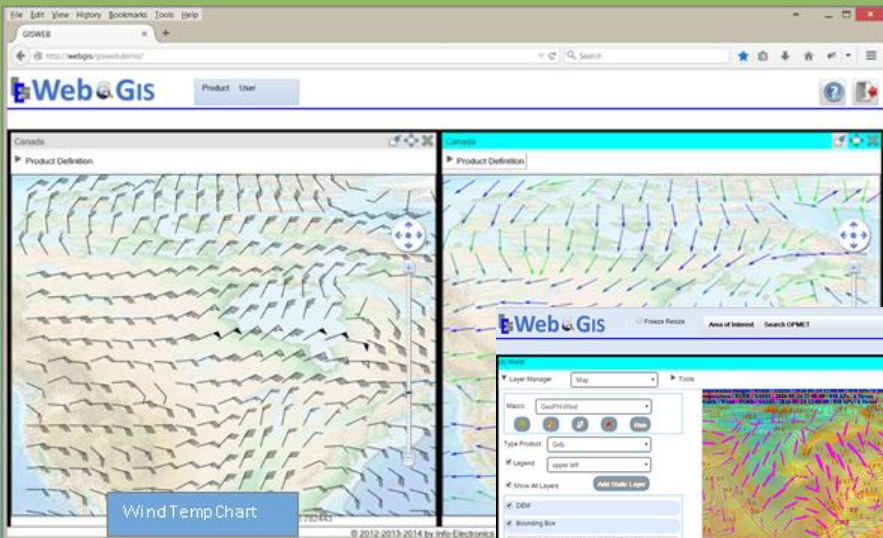
Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

ISO-9001
Certified System

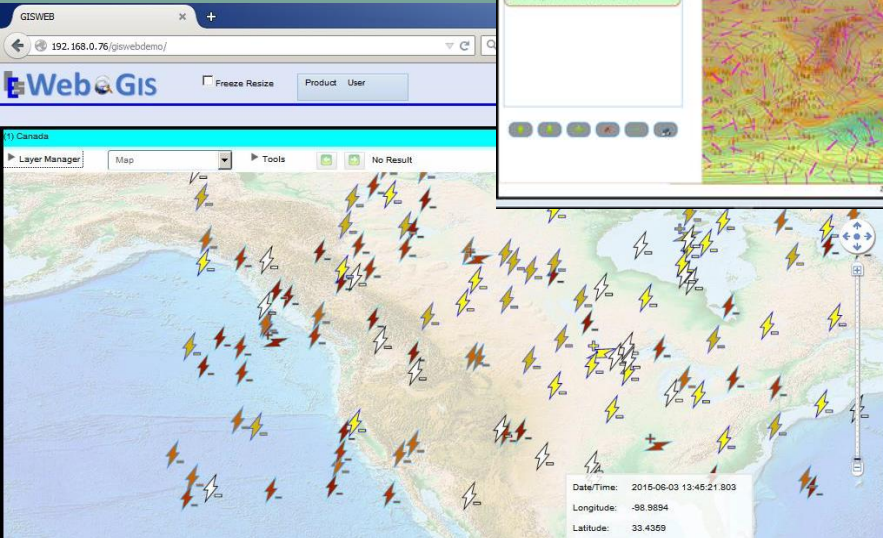
Info-Electronics Systems Inc.
Systèmes Info-Électroniques Inc.

Fonctionnalités d'opération: Génération d'affichages



Layer Manager

- DEM
- Includes: Elevation Height - 800 MPA - 6 Hours
- Includes: Temperature - 800 MPA - 6 Hours
- Includes: Temperature - 800 MPA - 6 Hours
- Areas By Month: 3000 - 800 MPA - 6 Hours



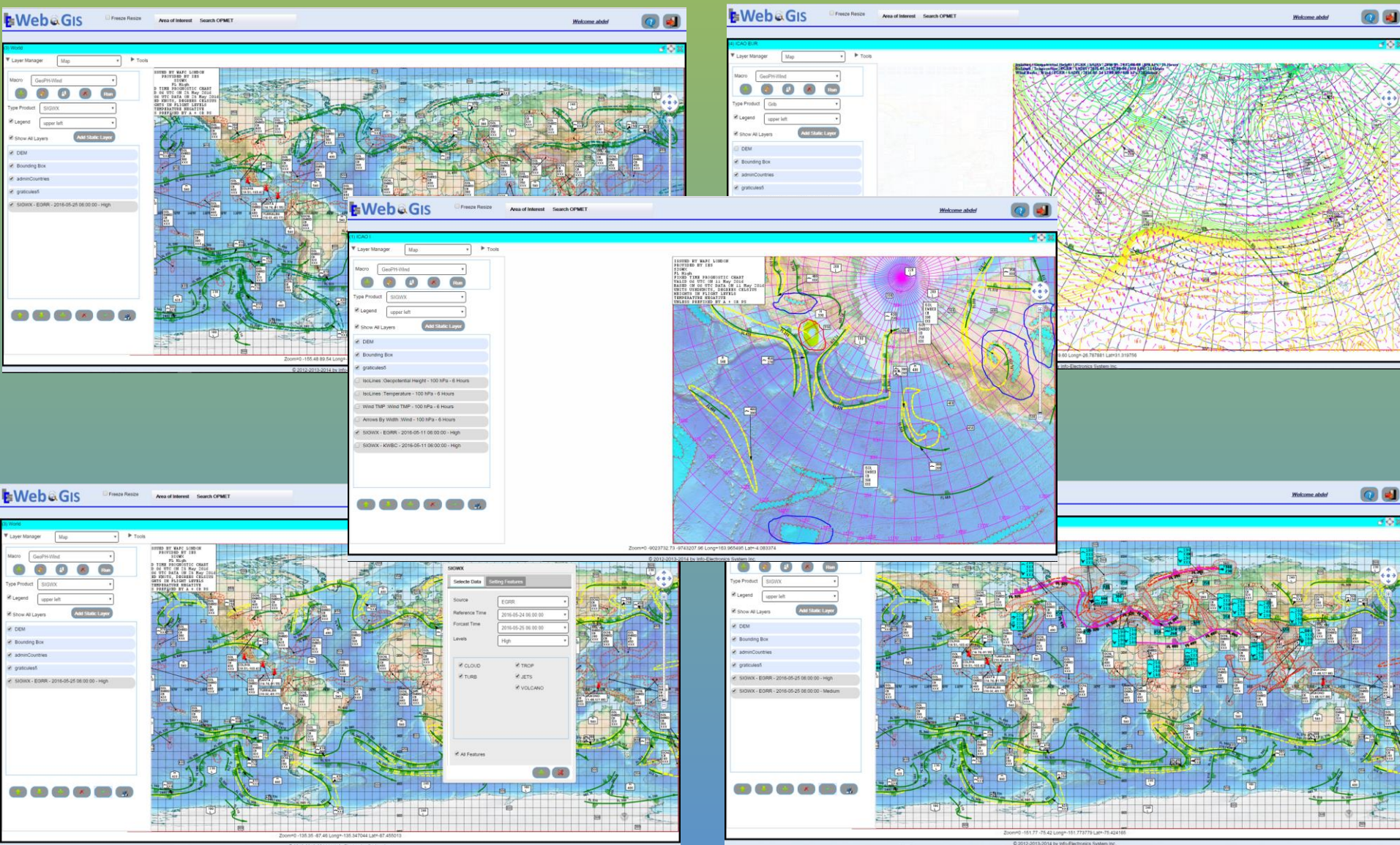
Period	CG+	CG-	IC+	IC-
0-10 min	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10-20 min	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20-30 min	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30-40 min	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40-50 min	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50-60 min	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
60-60 min	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Type	24H	Pct	60m	Pct
CG+	31	3.8	12	5.1
CG-	306	37.0	111	47.2
IC+	387	47.0	76	31.9
IC-	101	12.3	37	15.7
All	824		236	

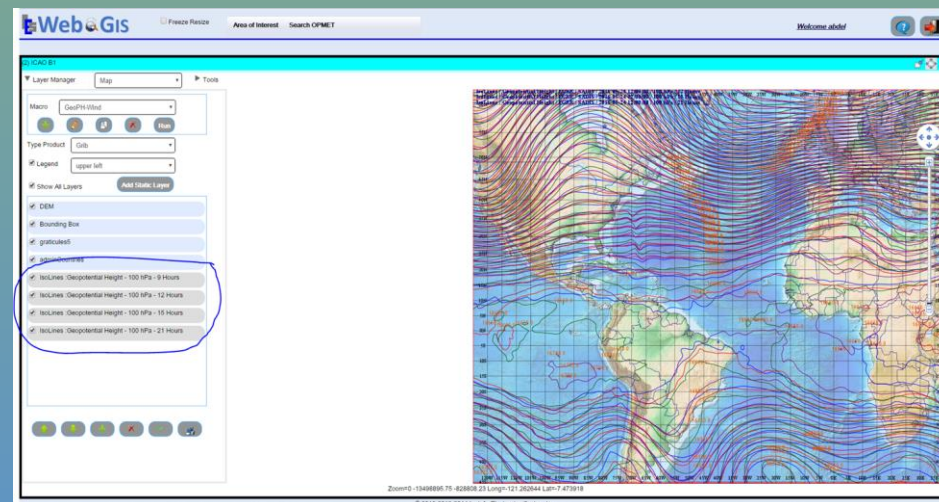
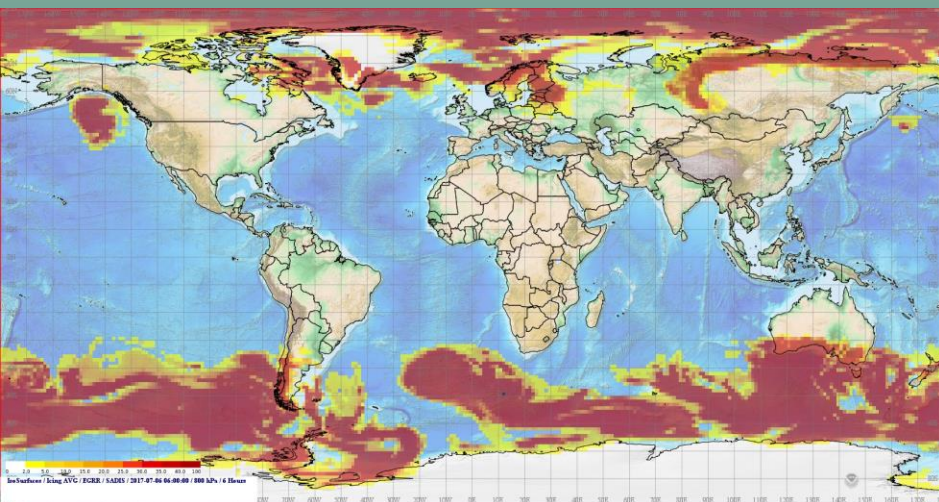
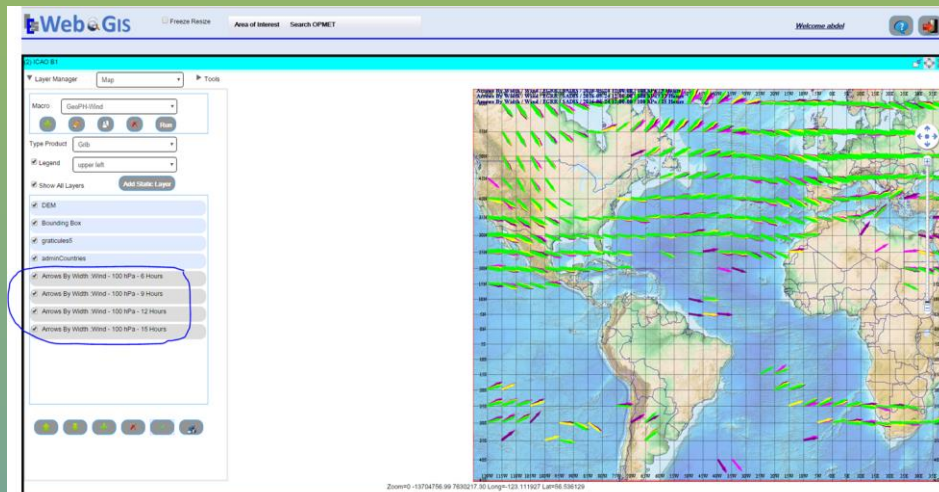
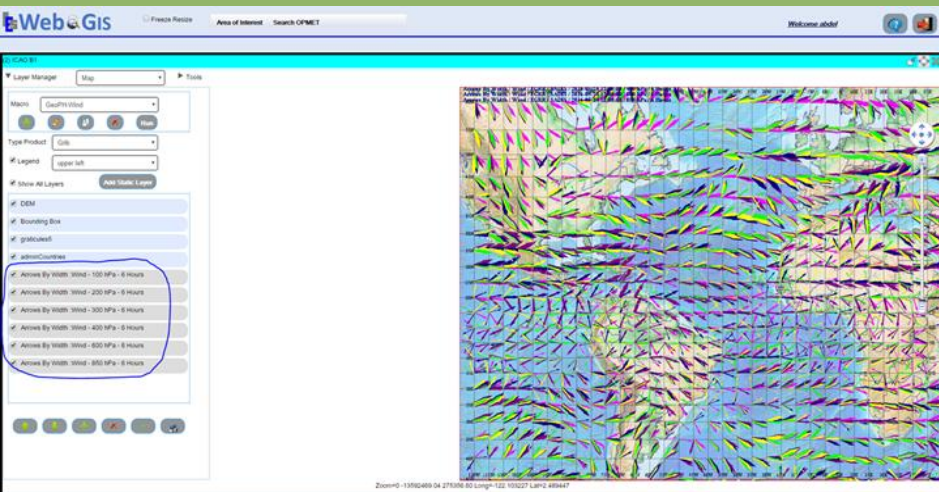
Date/Time: 2015-06-01 16:59:33 493
Longitude: -98.6079
Latitude: 49.5939
Type: Inter-Cloud (IC)
Current (kA): -8
Polarity: Negative (-)



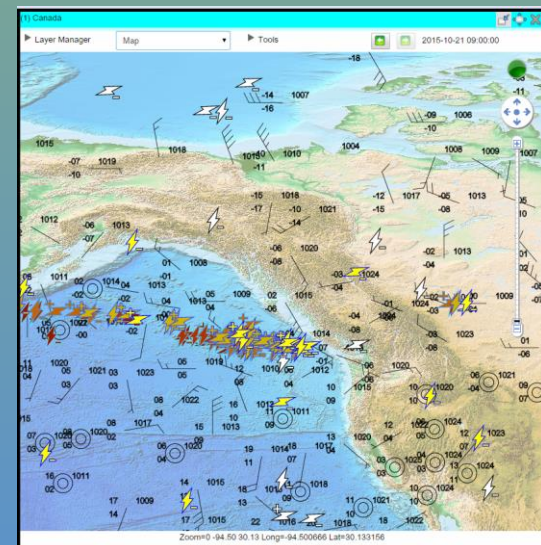
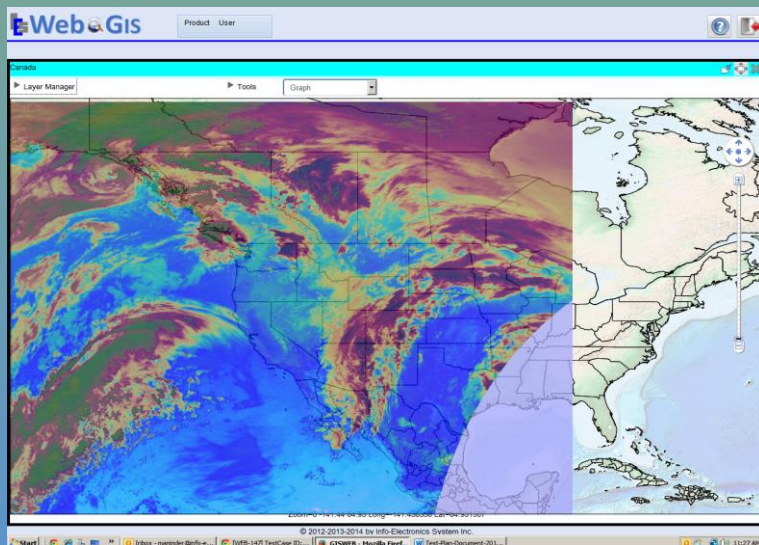
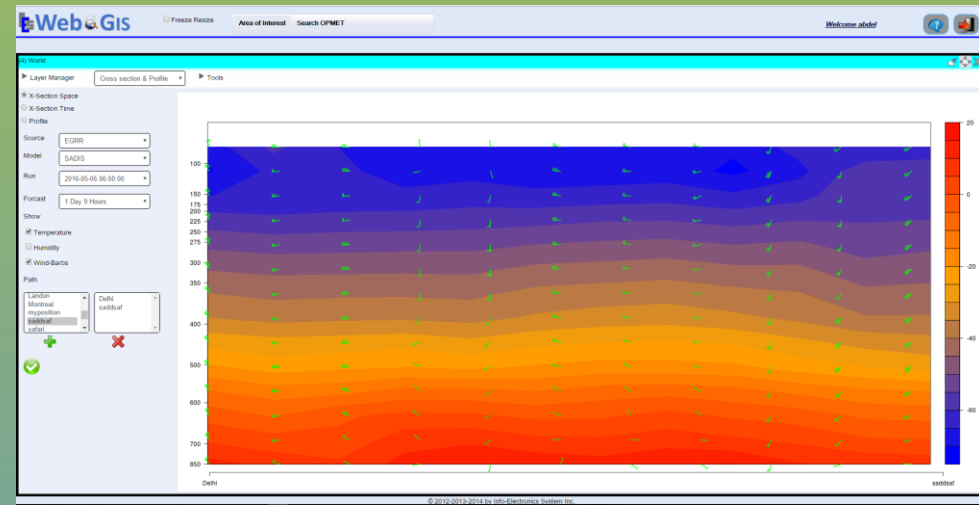
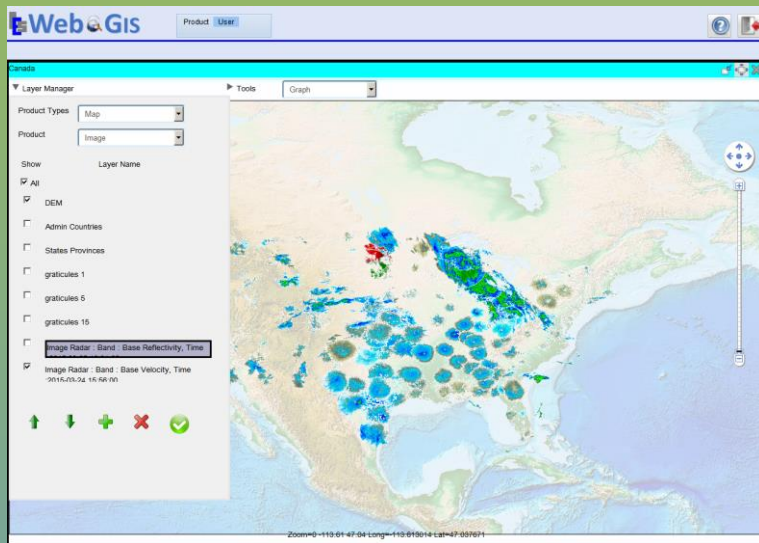
Fonctionnalités d'opération: Génération d'affichages



Fonctionnalités d'opération: Génération d'affichages



Fonctionnalités d'opération: Génération d'affichages



Environment and
Climate Change Canada

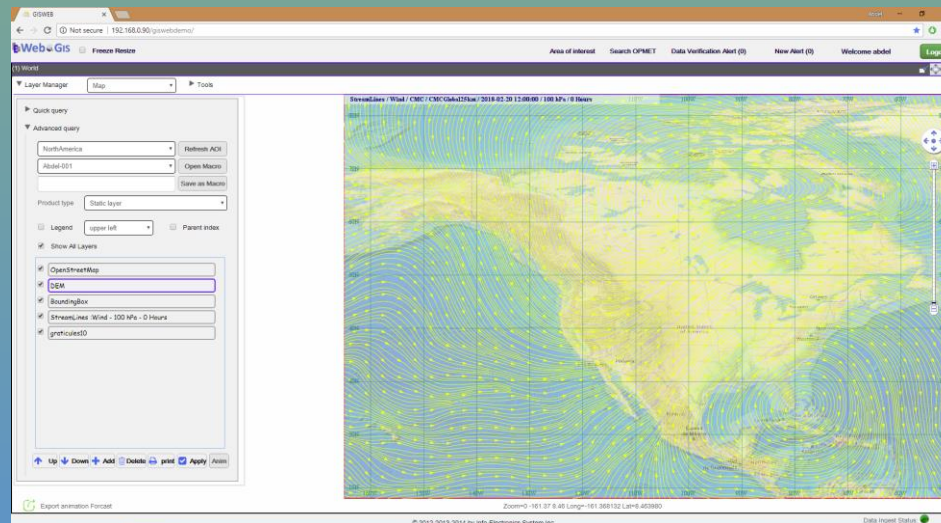
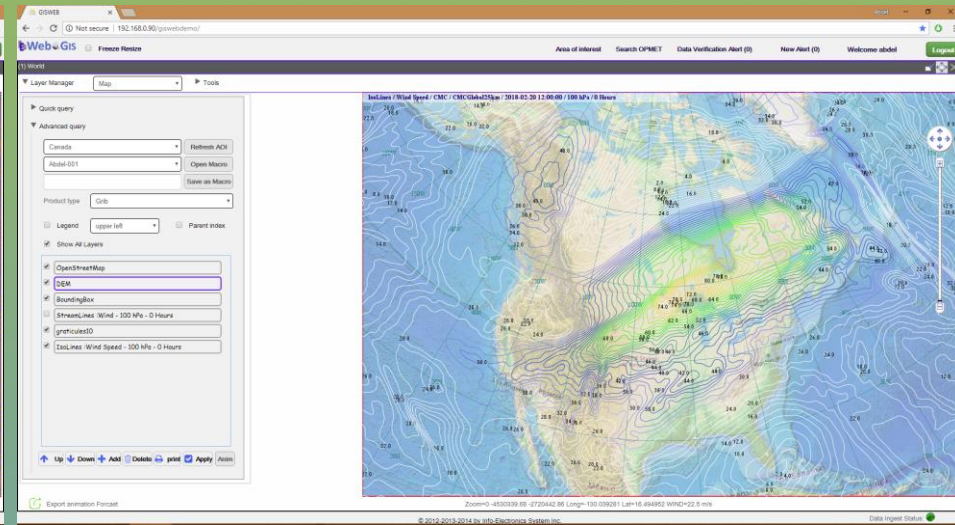
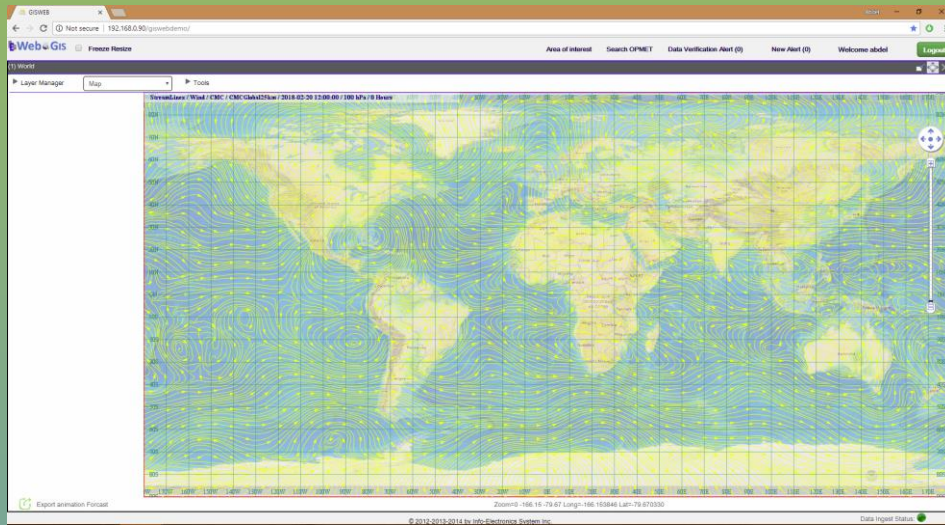
Environnement et
Changement climatique Canada

ISO-9001
Certified System

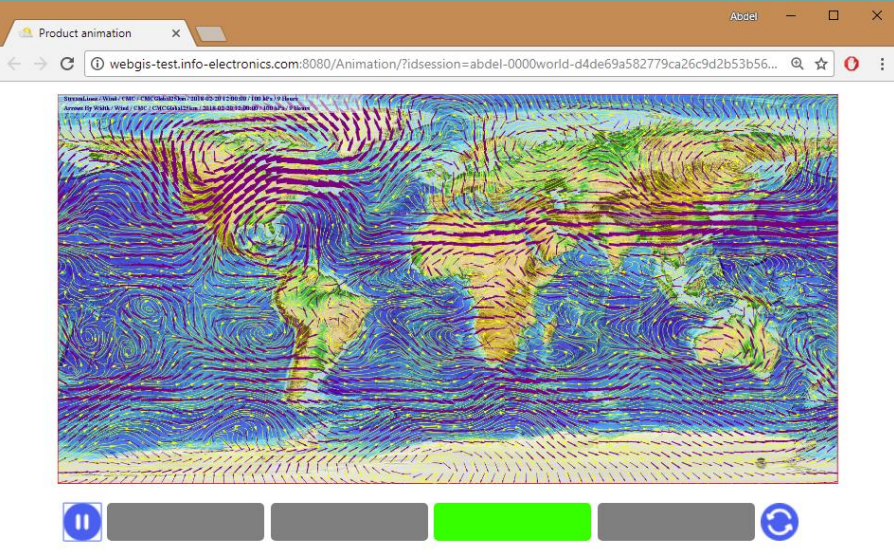
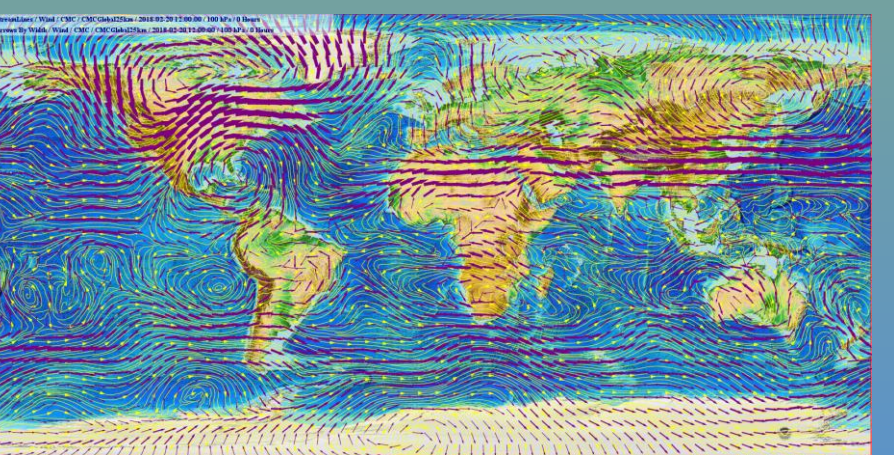
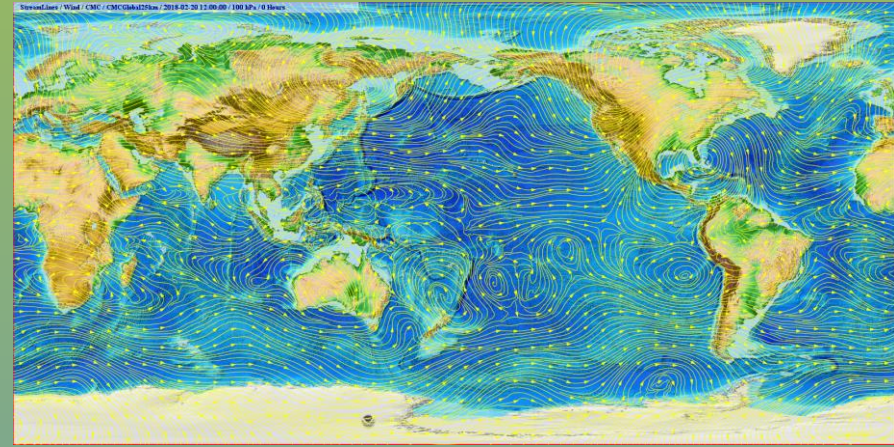
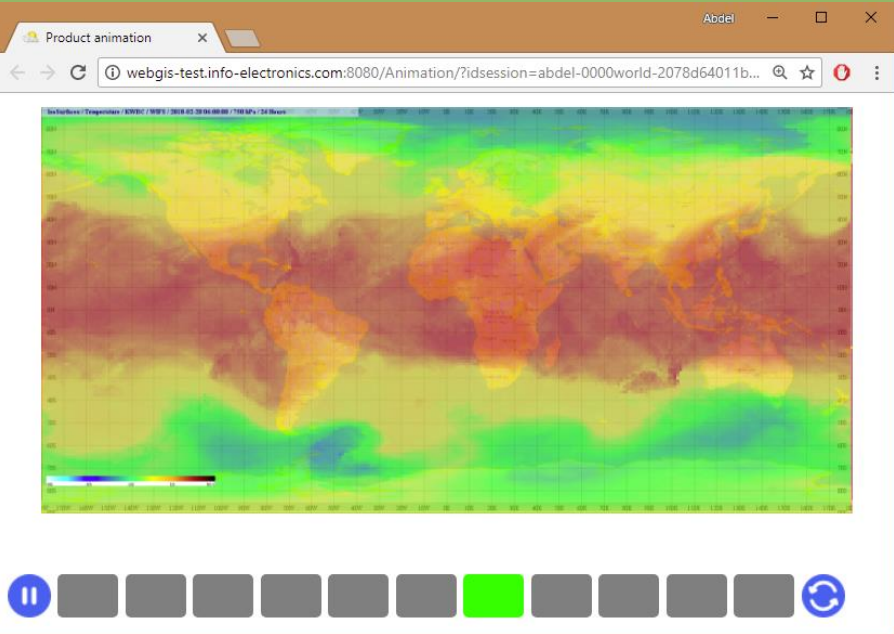


Info-Electronics Systems Inc.
Systèmes Info-Électroniques Inc.

Fonctionnalités d'opération: Génération d'affichages



Fonctionnalités d'opération: Images et Animations



Et plus...Macros

The screenshot displays the GISWEB application interface. At the top, the browser address bar shows "192.168.0.90/giswebdemo/". The application header includes "WebGIS" and navigation links like "Area of interest", "Search OPMET", "Data Verification Alert (0)", "New Alert (0)", and "Welcome abdel". A "Logout" button is visible in the top right.

The main interface is divided into several panels:

- Layer Manager:** Located on the left, it includes a "Quick query" section and an "Advanced query" section. The "Advanced query" section has dropdown menus for "World" and "Abdel-001", and buttons for "Refresh AOI", "Open Macro", and "Save as Macro". Below this, there are options for "Product type" (set to "Grib"), "Legend" (set to "upper left"), and "Parent index". A "Show All Layers" checkbox is checked. A list of layers is shown, including "DEM", "BoundingBox", "IsoLines :Wind Speed - 400 hPa - 6 Hours", and "SIGWX - E6RR - 2018-02-20 06:00:00 - High". At the bottom of this panel are navigation buttons: "Up", "Down", "Add", "Delete", "print", "Apply", and "Anim".
- Macro Manager:** Located in the center, it allows creating and managing macros. It has fields for "New Macro" (set to "New Macro") and "List Macro" (set to "Abdel-001"). There are "Create" and "Delete" buttons. Below, the "Product type" is set to "Grib", and there is an "Add Static Layer" button. A list of selected layers is shown: "DEM", "BoundingBox", "IsoLines : KWBC - WIFS - Wind Speed - 400 hPa", and "SIGWX - E6RR - High". At the bottom, there are navigation buttons (up, down, add, delete), "Save", "Preview", a timestamp "2018-02-20 10:25", and a "Scheduling" button with a red "X" icon.
- Map:** On the right, a weather map is displayed with various overlays. The title of the map is "IsoLines / Wind Speed / KWBC / WIFS / 2018-02-20 06:00:00 / 400 hPa / 6 Hours". The map shows contour lines, wind vectors, and other meteorological data over a geographical area.

At the bottom left, there is a "Export animation Forecast" button. At the bottom center, the copyright notice reads "© 2012-2013-2014 by Info-Electronics System Inc.". At the bottom right, there is a "Data Ingest Status" indicator.



Et plus...Planificateur

The screenshot displays the GISWEB application interface. At the top, the browser address bar shows '192.168.0.90/giswebdemo/'. The main interface includes a 'Macro Manager' panel on the left with fields for 'New Macro', 'List Macro' (Abdel-001), and 'Product type' (Grib). Below these are checkboxes for 'All layers' and 'Add Static Layer', and a list of selected layers: DEM, BoundingBox, IsoLines : KWBC - WIFS - Wind Speed - 400 hPa, and SIGWX - EGRR - High. A 'Scheduling' button is visible at the bottom of this panel.

In the center, a 'list of scheduled tasks' dialog box is open, showing a list of tasks: 'Task-AB-004' and 'Task-AB-003'. Below the list, there are 'Start' and 'Stop' buttons. Further down, configuration options for the macro are shown, including 'Macro' (Abdel-001), 'Area' (ICAO C), 'Forecast' (6 Hours), 'Multi Level' (unchecked), 'output' (Image), 'Command', and 'Task name'.

On the right, a weather map is displayed with various data layers. A 'Task' dialog box is open over the map, showing a list of generated task files: 'abdel_Task-AB-003_Abdel-001_2018-02-20-11:40:04.png', 'abdel_Task-AB-003_Abdel-001_2018-02-20-15:40:00.png', and 'abdel_Task-AB-003_Abdel-001_2018-02-20-16:40:00.png'. 'Refresh' and 'Close' buttons are at the bottom of this dialog.

At the bottom of the map area, the coordinates are displayed: 'Zoom=0 -11654651.44 3059762.80 Long=-104.695515 Lat=26.642828 WIND=5.9 m/s'.

© 2012-2013-2014 by Info-Electronics System Inc.

Data Ingest Status: ●



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

ISO-9001
Certified System

Info-Electronics Systems Inc.
Systèmes Info-Électroniques Inc.

Et plus...Calculateur

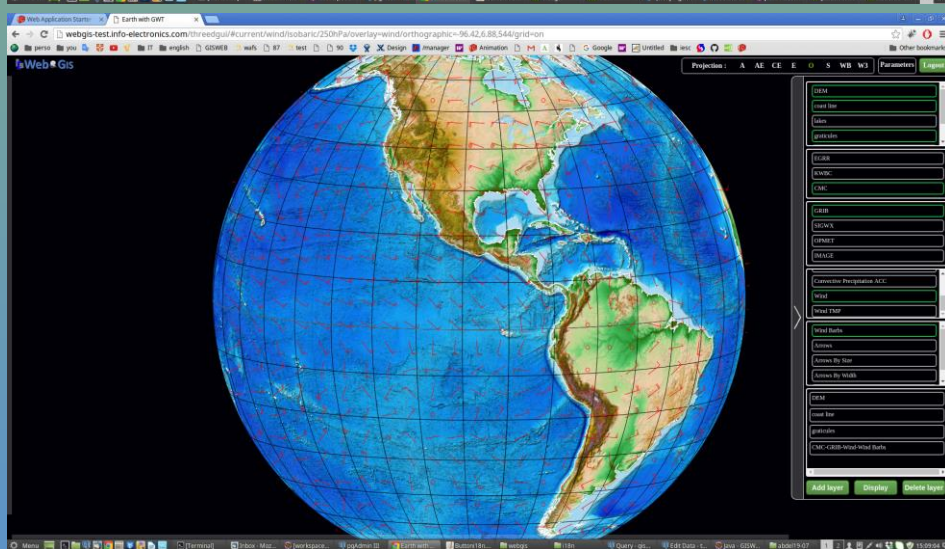
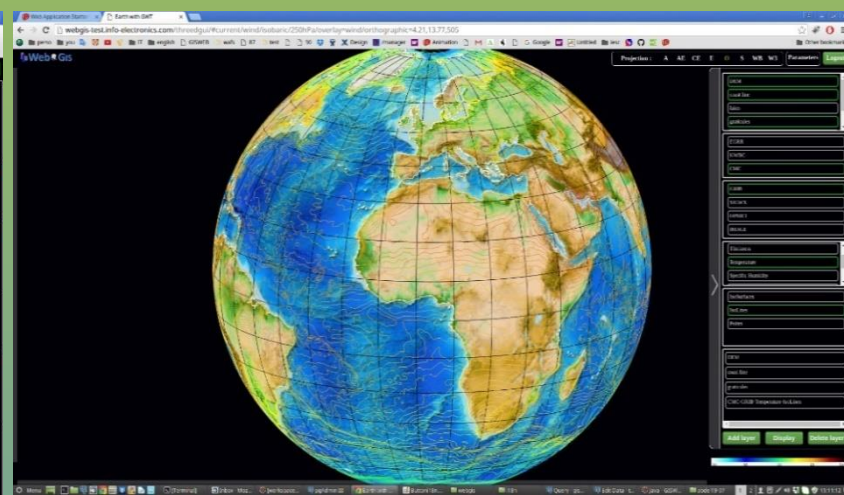
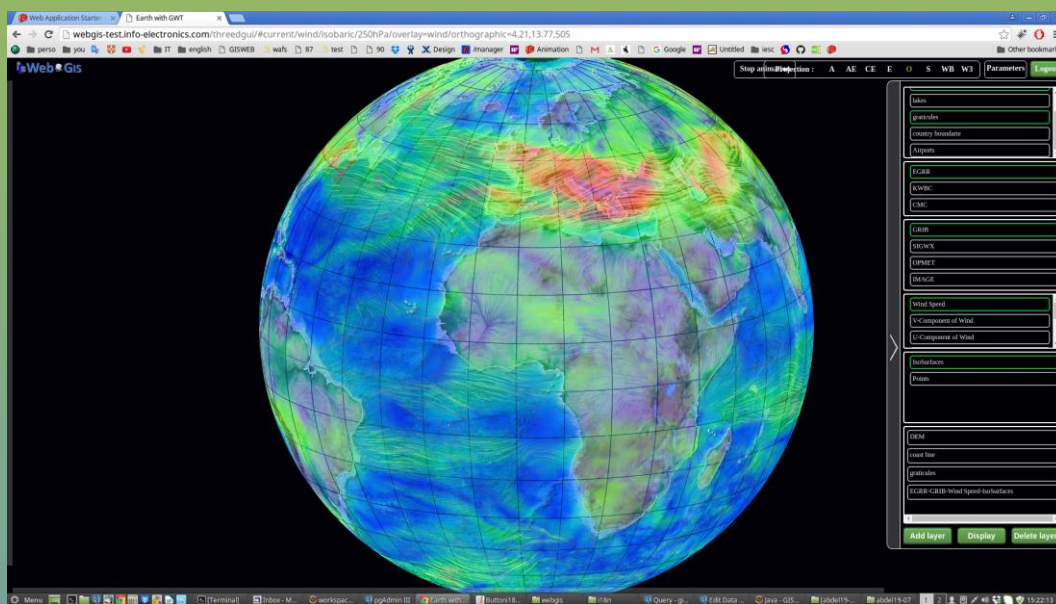
La liste suivante présente quelques fonctions prédéfinies :

- ♦ **GRADX** - X gradient
- ♦ **GRADY** - Y gradient
- ♦ **WSHD** - shearing deformation of the wind
- ♦ **WSTD** - stretching deformation of the wind
- ♦ **WDVR** - wind divergence
- ♦ **WVRT** - wind vorticity
- ♦ **VORT** - absolute vorticity of the wind
- ♦ **ADVECT** - advection of a field
- ♦ **SMTH** - smoothing by moving average
- ♦ **SMTH5** - smoothing by moving average repeated 5 times
- ♦ **SMTH9** - smoothing by moving average repeated 9 times
- ♦ **SMOO** - light smoothing by moving average
- ♦ **TMEAN** - temporal mean
- ♦ **TCORR** - temporal correlation (not standard terminology)
- ♦ **DEWPT** - calculates a set of Dew Point Temperature by a grid of temperature and relative humidity values
- ♦ **Q** - calculates a set of specific humidity (moist) values by a grid of temperature and relative humidity values and pressure value (scalar)
- ♦ **S2RHUM** - calculates a set of relative humidity values by a grid of temperature and specific humidity values and pressure value (scalar)

© 2012-2013-2014 by Info-Electronics System Inc.



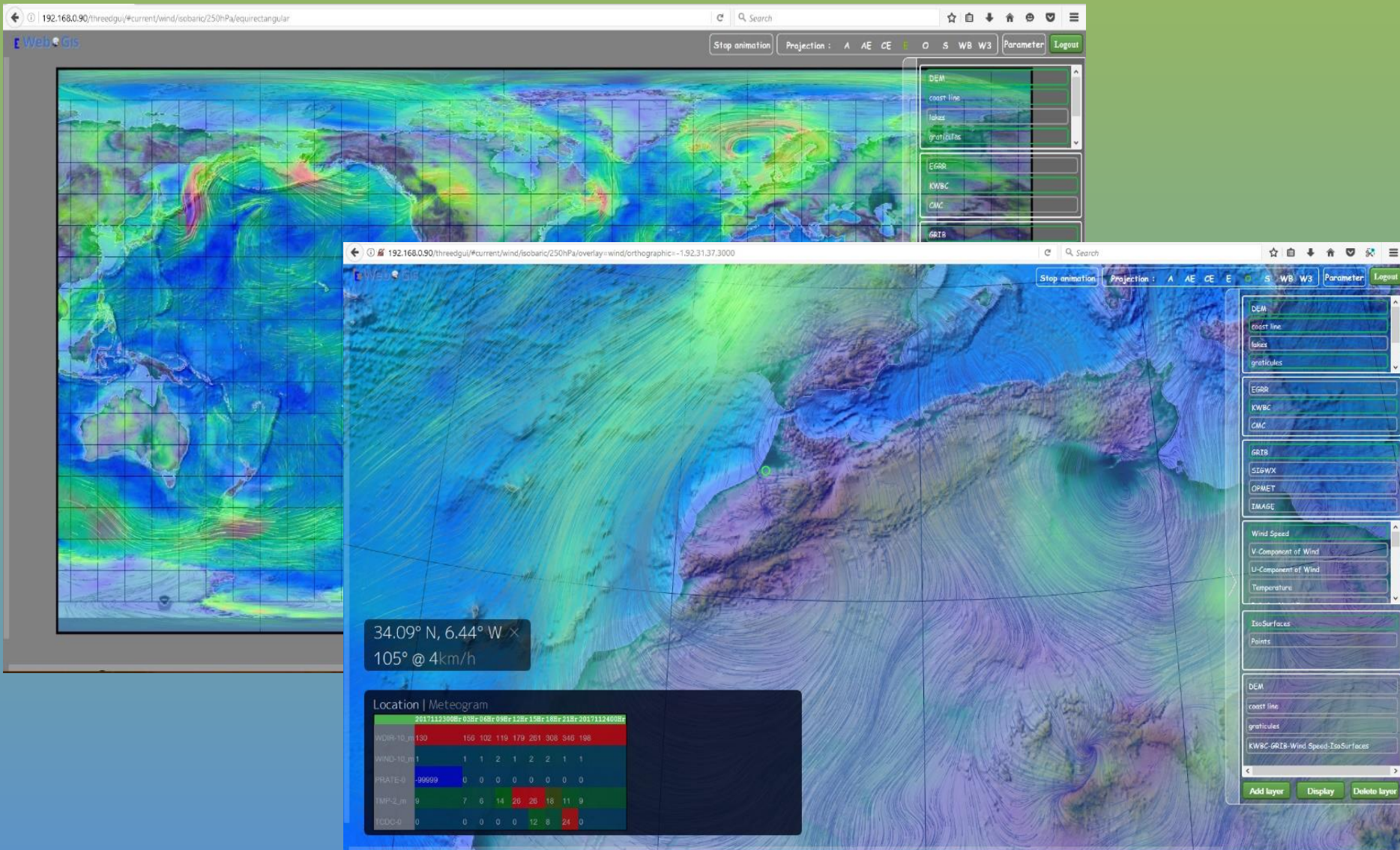
Et plus encore... 3D-Globe



Première partie complétée en fin 2017
Programme de financement des innovations
Conseil National de Recherches Canada (CNRC)



Et plus encore...3D-Globe



Initiation Material...

Met-WebGIS Home
Created by Abdel Brahm, last modified just a moment ago

Initiation Material for Met-WebGIS Application
Matériel d'initiation pour l'application Met-WebGIS

- Presentation (EN)
- Presentation (FR)

• Quick Start - Démarrage rapide

Login: <https://www.metwebgis.com>

Met-WebGIS Training Material
Created by Abdel Brahm, last modified on May 17, 2018

This page presents material to help in using the application functionalities.

Function	Description	Screen Animation
Login/ Exit	Show how to Login and Exit the application	• 1001-Met-WebGIS-Login.wmv
Area of Interest	Show how you can create, select, change and make as default an Area of Interest	• 2001-Met-WebGIS-GUI-Overview.wmv • 2002-Met-WebGIS-Aoi.wmv • 2003-Met-WebGIS-Aoi-Creation.wmv
Layers Menu	Show how to use the Layers Menu	• 2004-Met-WebGIS-Layer-Manager.wmv
Static Layers	Show how to add and setup preferences for available static layers	• 2005-Met-WebGIS-Static-Layers.wmv
Geomet Layers	Show how to add and setup preferences for Geomet WMS layers	• 3001-Met-WebGIS-Geomet-WMS-001.wmv • 3002-Met-WebGIS-Geomet-WMS-002.wmv • 3003-Met-WebGIS-Geomet-WMS-003.wmv • 3004-Met-WebGIS-Geomet-WMS-004.wmv • 3005-Met-WebGIS-Geomet-WMS-005.wmv • 3006-Met-WebGIS-Geomet-WMS-006.wmv
Additional WMS Layers	Show how to add and setup preferences for other WMS layers	• 4001-Met-WebGIS-Eumetsat-001.wmv • 4002-Met-WebGIS-Nowcast-001.wmv
GRIB Layers	Show how to add and setup preferences for rendering GRIB data layers	• 5001-Met-WebGIS-Grib-001.wmv • 5002-Met-WebGIS-Grib-002.wmv • 5003-Met-WebGIS-Grib-003.wmv • 5004-Met-WebGIS-Grib-004.wmv • 5005-Met-WebGIS-Grib-005.wmv
Opnet Layers	Show how to query and display Opnet data	
Profile/Cross-Section	Show how to select and render profiles from sounding as well as profile and cross-section from GRIB forecast	
Animation	Show how to generate products animations.	• 6001-Met-WebGIS-Anim-Geomet-001.wmv • 6002-Met-WebGIS-Anim-Geomet-002.wmv • 6003-Met-WebGIS-Anim-Geomet-003.wmv • 6005-Met-WebGIS-Anim-Grib-005.wmv • 6006-Met-WebGIS-Anim-Grib-006.wmv
Macro	Show how to create and save Macro as template for quick generation of products with predefined setting	

3004-Met-WebGIS-Geomet-WMS-004

Our Contact Info

Info-Electronics Systems Inc.

Montreal (Head Office):

1755 St. Regis, Suite 100
Dollard des Ormeaux
Quebec, Canada H9B 2M9
Tel.: (514) 421-0767
Fax: (514) 421-0769



E-mail: contact@info-electronics.com

www.info-electronics.com



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada