

The Observatory

THE ELECTRONIC NEWSLETTER OF THE ST. LAWRENCE OBSERVATORY - WINTER 2000

SINCE THE LAST INFORMATION that you received about the St. Lawrence Observatory (OSL), all the energy of the OSL team (who are presented to you on page 4) has been focused on finding the first partners and on making the Web site a reality. The project highlights section (page 2) details the steps that had to be made over the last year and that finally led to the opening of the Internet site. With this newsletter we will also regularly inform you of current projects and products that will soon to be available on the Web (page 3)...since we are already working on them! And finally, in future editions of the newsletter, we will include new sections to gradually add links between our partners and clients. Don't hesitate to send us comments and suggestions (a section is reserved for this purpose on page 5). With your help, the OSL can gradually become *your* gateway to scientific information on the St. Lawrence!

THE WEB SITE: FINALLY OPEN TO ALL!

JANUARY 1ST 2000 WILL ALSO BE a historic day for the St. Lawrence Observatory: it is the day the Web site opened on the Internet. The OSL team worked hard for the past year to develop the site and to perfect the hidden computing "machinery" that supports it all. The Web site was made possible with the support of the first scientific partners who had confidence in the OSL for the distribution of their data and the promotion of their products. Since the first tests of reliability on the Internet were satisfactory, it is with pride that we now extend an invitation to you to discover the site:



www.osl.gc.ca

HAVE A NICE VISIT!



The OSL's logo is now registered and cannot be used without authorization.

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Project Highlights

Canadian Economic Development supports the OSL

IN OCTOBER 1998, Canada Economic Development (CED) announced the creation of the «*Technopole Maritime du Québec*» to consolidate scientific and maritime expertise in eastern Canada. The St. Lawrence Observatory was one of the nine projects approved in this regional strategic initiative. Following the deposition of the preliminary business plan in March 1999, an initial agreement between CED and the Maurice Lamontagne Institute (MLI) was signed to grant the OSL an annual working budget of \$175,000 for the implantation phase of the project. The agreement with CED was renewed in September 1999 and will continue through March 2001.



From Intranet to Internet

EARLY IN 1999, the prototype Web site was tested by the first partners involved in the project. The site remained at limited access for two months for testing. In May 1999, the site was opened on DFO's Intranet where it could be explored by employees from DFO's Laurentian Region until December 2000. During this internal trial phase, more than 4000 Web pages were consulted. This trial period allowed us to break in the material, the team, and the site before its opening on the Internet.

A committee to define the project's strategic orientations

THE FIRST MEETING of the orientation committee was held on 20 May 1999, bringing together the project's financial and scientific partners as well as the research scientists and the managers involved or interested in the project. The discussions centered on the committee's role and on the manner in which the partners could use the OSL. The next two meetings (10 December 1999 and 11 February 2000) allowed the group to discuss the various strategic options available to assure the project's independence within the next two years.

The Tide Tables... a project with national importance

IN MAY 1999, the OSL received the mandate from the Canadian Hydrographic Service (CHS) to develop the Web pages for the future site of the Canadian tide tables, in collaboration with the Physical Modeling Section of the Division of Ocean Sciences (MLI), which provides the calculations for tide predictions. The first phase of the project included the St. Lawrence and Northern Québec; the first demonstration was presented to the CHS in June. The project is still underway and now includes all of the Canadian coasts.

A team to promote the OSL and its partners

IN DECEMBER, a team made up of Viviane Haeberlé (Communications, MLI), Gilbert Des Rosiers (CED), Jean-Claude Therriault and Robert Siron (Div. of Ocean Sciences, DSO) started working on a strategy to promote the OSL during the next few months.

Major investments to consolidate the OSL

DURING 1999, we were able to consolidate the computing architecture—we acquired a second server that is on the Internet and supports the Web site. This server receives the user queries and communicates with the partners' servers where the data is located. The other server, the access of which is restricted to DFO's Intranet, supports the mirror site and is used for development and testing. In addition, the acquisition of several software packages and graphics equipment will permit us to meet all our future needs in this area.

To promote the project

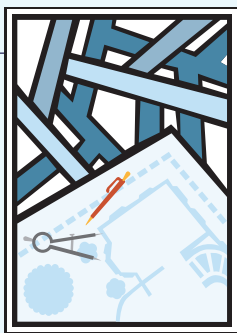
THE TEAM MEMBERS have presented several conferences on the project's progress to increase its visibility within the scientific community. On 20 May 1999, Robert Siron and Bernard Pelchat presented a joint conference at MLI on the St. Lawrence Observatory and the Oceanographic Data Management System (ODMS), two tools that will soon be integrated. Martin Desruisseaux, Java project leader, presented two technical seminars in February and September 1999 to present information on developments and uses of the Java language in the OSL (see the section on current projects). In November 1999, Robert Siron presented an overview of the project to the St. Lawrence Vision 2000 committee, «*Suivi du Saint-Laurent.*» Alain Desmeules made a presentation at the annual meeting of DFO's Information Management and Technology Services Directorate on 13 January 2000, where he discussed the technical aspects of the project. Several articles on the St. Lawrence Observatory have been published in DFO news bulletins. We were also present at the «*Forum québécois en sciences de la mer*» that was held on 4 and 5 November at MLI. On this occasion visitors could view a model of the Internet site before the grand opening.

Most of these articles and communications are available on the Web site, within the section [OSL Overview](#) for the general presentations and in the [Tool Box](#) for the technical presentations (Java developments).

Current projects

DURING THE last few months, we have initiated several projects with different partners to increase the amount of data accessible through the OSL. Here are the value-added products provided by the partners that will be available during the year 2000. (For more details on the projects, check the section **What's New?** on the Web site)

- Query interface for the Oceanographic Data Management System (ODMS) and integration with the OSL Web site, an initiative that fits within the Data Management Section's mandate (Div. Oceans Sciences-MLI).
- The revamping of MLI's Remote Sensing Laboratory's Web site and the diffusion of their satellite images of Gulf of St. Lawrence sea-surface temperature.
- The Web site on Canadian Tide Tables, in partnership with the Physical Modeling Section (Div. Ocean Sciences-MLI) and the Canadian Hydrographic Service (CHS-DFO).
- Real-time visualization of temperature and salinity data acquired continuously at the experimental buoy off shore of MLI, in collaboration with the St. Lawrence Thermograph Network and Technical Support team of the Div. of Ocean Sciences.
- Diffusion of regional data (phytoplankton, zooplankton, and physical characteristics of the water column) from the Rimouski, Gaspé Current, and Anticosti Gyre stations of the Zonal Monitoring Program of the northwest Atlantic, in collaboration with scientists from the Div. of Ocean Sciences who are implicated in the program.



Also of note... these projects are always being improved

The Numerical Forecast Laboratory (NFL) produces a number of numerical models and forecasts on the oceanography and climatology of the St. Lawrence. In collaboration with NFL scientists, the OSL diffuses some of their products, most notably those predicting currents in the Saguenay and in the Estuary and Gulf of St. Lawrence. The visualization of these data is dynamic and interactive, on maps that are generated according to the user's query (choice of area, date, and time).

Since the beginning, the OSL has supported the development of a Java application (commonly called an applet) that allows the visualization of oceanographic data. The Java application demonstrated on the site allows access to the archived data from the Thermograph Network (more than 700 sampling stations throughout the St. Lawrence) as well as data from surface currents in the Estuary from the NFL (MLI).

In addition, we are experimenting with the visualization of archived data on St. Lawrence water levels (the SINECO Network) in collaboration with the CHS and the Information Management and Technology Services Directorate at MLI. This project uses the visualization console VALIDISIN adapted to a Web environment (this project is currently limited to part of the data from a database under development).

OSL keeps watch and keeps you informed

To promote your activities, we offer publicity...free

ON THE SITE, you will find a bulletin board to broadcast the dates for upcoming conferences and other events of interest. If you are organizing an activity that you would like to announce to people interested in the St. Lawrence, send us your information. It will be our pleasure to post it for the benefit of all our partners and visitors.

Also on the bulletin board, we present recent publications on the St. Lawrence (science, environment, navigation, etc.). The authors and editors are invited to make us aware of their latest publication and send us the exact reference, accompanied by a brief summary (in French and English if available).

In the section on publications, a few scientific reports are available on line:

- The report on monitoring of toxic phytoplankton and IPM-type toxins in St. Lawrence mollusks: synthesis of results from 1989 to 1994 (by D. Blasco, M. Levasseur, R. Gélinas, R. Larocque, A.D. Cembella, B. Huppertz, and E. Bonneau) (*not available in English*);
- The report on the oceanographic conditions in the Gulf of St. Lawrence in 1998 (by D. Gilbert, C. Lafleur, P. Galbraith, and D. Swain).

Note : the annual updates of these two important reports will soon be available on the site.



We thank Maurice Levasseur and Denis Gilbert, research scientists from MLI, who had confidence in the OSL to make these reports available on the Web. We would like to take this opportunity to invite other scientists who need to diffuse their research reports to consider the OSL and the electronic diffusion services that it can offer.

The OSL team

Now that we are in operation, we will take the time to present the team that made this project a reality...

ROBERT SIRON
scientific coordinator

has more than ten years of experience in the university environment as an oceanographic researcher as well as three years as a scientific consultant in the private sector. He has long been interested in sharing scientific knowledge. He conceived of and participated in the realization of several projects on the St. Lawrence marine environment aimed at informing the public. For the past two years he has coordinated the OSL's development.

ALAIN DESMEULES
administrator of
computing systems

has been an analyst-programmer in the Information Management and Technology Services Directorate (DFO-Laurentian Region) for three years. Since 1998, he has been working solely on the OSL Project, where he is responsible for the computing systems and is in charge of R&D.

JOHANNE NOËL
graphic designer and
multimedia technician

has experience in scientific visualization, having worked for many years in the university environment. She has a baccalaureate in geography as well as a technical degree in multimedia production. She participated in the computerized graphic design of many documents and in the conception of several Web sites.

In addition to the full-time OSL team, there is also a scientific and technical support group without which the project could not have become a reality.

JEAN-CLAUDE THERRIAULT
project supervision
and administration

has more than 20 years experience as a researcher in oceanography and vast knowledge of the St. Lawrence ecosystem. He now holds the position of scientific manager of the Division of Ocean Sciences at MLI. He was one of the initiators of the St. Lawrence Observatory project and is one of its most ardent defenders. His efforts now lie in administrating the project's future direction.

BERNARD PELCHAT
scientific advisor
and data manager

has 14 years experience in oceanography, 12 of which he has spent as Section Head of the Data Management Section at MLI. He acts as scientific advisor of the St. Lawrence Observatory project. He also developed the Oceanographic Data Management System (ODMS).

ANDRÉ GOSSELIN
senior analyst

has 20 years experience as a computer scientist and system administrator in the Information Management and Technology Services Directorate (DFO – Laurentian Region). His expertise in scientific computing systems, graphics design, network programming, and systems security guarantees the quality of the OSL's development.

A section reserved for our partners and clients

In this first edition, we will present the partners already displaying scientific products via the OSL:

The Information Management and Technology Services Directorate (MLI)

The Division of Ocean Sciences (MLI)

Remote Sensing Laboratory (<http://oceans.qc.dfo.ca/tele>)

Numerical Forecast Laboratory

Northwest Atlantic Zonal Monitoring Program

Thermograph Network of the Gulf (<http://oceans.qc.dfo.ca/thermo>)

Data Management Section

Coastal Processes, Primary Production, and Secondary Production sections

The Canadian Hydrographic Service (<http://www.qc.dfo.ca/iml/hydro/hydro.htm>)

THROUGHOUT THIS SECTION, we want to progressively build up a network of information dealing with our partners and clients. So, for the next issue of this newsletter, we would like to receive your comments, suggestions, and other “leads” that you want to share; we will present here the most pertinent. These will allow us to improve the OSL to better answer your needs in matters of scientific visualization and data exchange and diffusion on the Internet.

Tell your colleagues about the OSL!

WE HAVE SEVERAL PROMOTIONAL PRODUCTS (pamphlets and bookmarks) available to let people know about the OSL, the services we offer, and the Web site’s address. As a partner interested in the project since the beginning, we would be happy to send you some of these products to distribute within your organization. We need your help to spread the word about this new tool that is aimed **at the whole community interested in the St. Lawrence and the research done there.**



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The Observatory is an electronic newsletter published by the St. Lawrence Observatory. It is sent in .pdf format to all who requested information or who showed interest in the project. If you would like to be included on our mailing list—or if you no longer want to receive the newsletter—please let us know at the address below.

This issue was sent to you in French or English, depending on the language that you used for your last information request from the OSL. If you would like to receive the other version, please let us know.

English translation: Laure Devine, Division of Ocean Sciences (MLI).

All comments or requests for information concerning this newsletter may be addressed to sironr@dfo-mpo.gc.ca