Frédéric Cyr | Ph.D.

Northwest Atlantic Fisheries Centre (NAFC) Fisheries and Oceans Canada, 80 East White Hills Rd. P.O Box 5667, St. John's, NL A1C 5X1 Canada.

1 ★ 1 709-772-8137 • ☑ Frederic.Cyr@dfo-mpo.gc.ca ↑ https://cyrf0006.github.io/ • ★ twitter.com/cyrf0006 github.com/cvrf0006

Canadian citizen, born 10 April 1984. Spoken and written languages: French (mother tongue) and English. Understand Spanish, Italian and Dutch. IT skills include Linux, Python, Matlab, LaTeX, HTML.

Education

Université du Québec à Rimouski (UQAR-ISMER)

Rimouski, Canada

Ph.D. - Oceanography

2009-2014

Citation of Excellence Université de Versailles-St-Quentin-en-Yvelines

Saclay, France

M.Sc. - Climatology

2007-2008

École Nationale Supérieure de Techniques Avanceée (ENSTA-Paristech)

Paris, France

M.Sc. - Environmental Engineering

2006-2008

Combined degree with École Polytechnique de Montréal

École Polytechnique de Montréal

Montréal, Canada

B.Eng. - Engineering Physics

Citation of Excellence & International Profile

2004-2008

Work Experience

Research Positions

Fisheries and Oceans Canada, Northwest Atl. Fish. Centre (NAFC) St. John's, Canada Physical Scientist

Mediterranean Institute of Oceanography (MIO) Marseille, France

Post-Doctoral research position (European project NeXOS) Development of a new glider optical sensor (MiniFluo-UV)

2016-2017

2017-

Dissolved organic matter dynamics in NW Mediterranean Sea

Royal Netherlands Institute for Sea Research (NIOZ)

Texel, Netherlands 2014-2015

Post-Doctoral Fellow (FRQNT funded, 2 years)

Mixing and biogeochemical exchanges caused by internal waves

Fisheries and Oceans Canada, Maurice Lamontagne Institute Mont-Joli, Canada

Physical scientist (PC-2, 3-month contract)

Thermal fronts in Canadian Coastal Waters

2013

Frédéric Cyr 1 / 9 October 11, 2017

Internships, Scientific Appointments and Other Training	
Alseamar-Alcen	Meyreuil, France
Training on SeaExplorer glider (1-week course)	2016
Learned how to work with SeaExplorer: Technology, deployment, piloting, r	maintenance, etc.
Leibniz Institute for Baltic Sea Research, Warnemünde (IOW)	Warnemünde, Germany
Internal wave mixing in the Baltic Sea (5-week IOW grant)	2015
Work on data from a scientific cruise in collaboration with the NIOZ	. (5-)
Air-Sea Interaction Laboratory, University of Delaware	Lewes (DE), USA
Air-flow separation over wind waves (3-month FRQNT grant) Built a platform to perform Particle Image Velocimetry (PIV) at sea	2012
Assisted PhD student M. Buckley in conducting PIV experiments above wi	nd waves
Université Laval	Québec, Canada
Coupled modeling ocean-ice-biology in the Canadian Arctic (4-month)	2008
Implemented ice-ridging scheme in numerical hydrodynamic model	
Performed particle-release simulations for off-line coupling with Individual-E	Based Model
Lab. de Glaciologie et Géophysique de l'Environnement	Grenoble, France
Surface melting in Antarctica (2-month)	2007
Detected surface melting events from remote sensing microwave observatio	
Compared observed melting events and results from $1D/3D$ models of Anta	arctica
Teaching	
Cégep de Rimouski	Rimouski, Canada
Teacher (college level)	2011-2012
W-2012: 982-003-50 - Science and Technology of the Environment (23 stu	dents)
W-2011: 203-221-RK - General Physics (27 students)	D: 1: 6 1
Université du Québec à Rimouski	Rimouski, Canada
Lecturer F-2010: MAT10309 - Calculus I (2 students)	2010
Université du Québec à Rimouski	Rimouski, Canada
Teaching Assistant	2010
F-2010: Responsible for mathematics free revision periods (Engineering dep	
W-2010: Responsible for mathematics free revision periods (Engineering de	•
W-2010: SCE11106 - Mathematics Knowledge (15 students)	,
École Polyvalente des Iles Iles d	le la Madeleine, Canada
High-school Teacher (3-month)	2009
Regular teacher in mathematics	
Frequent substitute teacher in other classes	
Grants, Scholarships and Awards	
IOW visiting grant (\$2,790)	2015
FRQNT Postdoctoral Fellowship (\$63,333)	2014-2016
FRQNT International Internship Award (\$6,700)	2012
UQAR Foundation grant (\$1,500)	2012
OWANT Candacion grant (41,000)	2012

FRQNT Doctoral Research Scholarship (\$60,000) Madeli-Aide Foundation, Excellence Scholarship (\$2,500) Grandes-Écoles Scholarship (\$9,000)	2009-2012 2007 2006-2008
École Polytechnique de Montréal / ENSTA-Paristech combined degree Desjardins Foundation grant (\$1,000)	2005
Other Awards	
Québec-Science Magazine, among 10 discoveries of the year Bourgault et al. (2014), <i>Environ. Res. Lett.</i> , 9, 054001.	2014
Best-Talk Award, Québec-Océan Annual General Meeting, Rivière-du-Loup	2013
Congress Support, Rockland Scientific International	2011
Registration fees, Warnemünde Turbulence Days, Germany	
Best-Talk Award, Québec-Océan Annual General Meeting, Lac Delage	2010
Research Experience	
Field Work	
2017: Atlantic Zone Monitoring Program, Spring Survey (Chief Scientist: E. Colbour	rne)
17-day cruise on board CCGS Teleost (6 - 23 April)	
2017: Atlantic Zone Monitoring Program, Summer Survey (Chief Scientist: S. Lewis)	
20-day cruise on board CCGS Teleost (8 - 28 July) 2016 : Glider deployment in the North Sea (Chief Scientist)	
Monitoring dissolved hydrocarbons in proximity of Statoil's Troll field (12 Nov 3 Dec.)	
7-day cruise on board Norwegian supply vessel Havila Troll	
14-day glider deployment	
2016: 2 glider benchmark experiments (1-day each) (Chief Scientist & Glider Pilot)	
in situ calibration of optical sensor by comparison with water samples (July & October)	
2016: 10-day glider deployment in the NW-Mediterranean (Chief Scientist & Glider Pilot)	
Dissolved organic matter dynamics accross the Northern Current (July-August)	Dila+)
2016 : 21-day glider deployment in the NW-Mediterranean (Chief Scientist & Glider Pilot) Survey of the Ligurian Sea to track an oil spill that occurred near Genoa on 23 April 2016	
2016 : 2-day cruise on the Mediterranean aboard R/V Tethys II (Chief Scientist: Julien Fenouil)	
In situ tests with the Moving Vessel Profiler (MVP) in the Ligurian Sea	,
2016: 19-day glider deployment in the Gulf of Lion, NW-Mediterranean (Chief Scient	tist)
Dissolved organic matter dynamics between Marseille metropolitan area and offshore water	ers
Deployment also in support of the SeaQUEST campaign (Chief Scientist: O. Ross)	
2015: 10-day OSCAHR campaign (Chief Scientist: A. Doglioli) Observing Submesoscale Coupling At High Resolution (OSCAHR), NW Mediterranean	
Was the ground-based scientist in charge of glider operations	
2014 : 11-day cruise aboard R/V Pelagia (Chief Scientist: H. van Haren)	
3D-mooring deployment at Mount Josephine, North Atlantic near Portugal	
2014: 4-day field experiment in the Delaware Bay (Chief Scientist: M. Buckley)	
In situ measurements of the air-flow above wind waves from Particle Image Velocimetry (PIV) 2012: A day cruise in the Culf of St. Lawrence about P./V. Cariolis II. (Chief Scientists II. Neumains)	
2013 : 4-day cruise in the Gulf of St. Lawrence aboard R/V Coriolis II (Chief Scientist: U. Neumeier)	

Recovery and re-deployments of 4 moorings

2013: 2-week campaign sampling internal waves in Saguenay Fjord (Chief Scientist: D. Bourgault)

Deployment and recovery of a mooring from small boat

Daily sampling (ADCP, CTD and time-lapse photography)

2012: Field experiment in the St. Lawrence Estuary (Chief Scientist)

3 opportunistic sorties (July-August)

Over-wintering mooring recovery in the St. Lawrence Estuary

2012: 2-day field experiment in the Delaware Bay (Chief Scientist: M. Buckley)

In situ measurements of the air-flow above wind waves from Particle Image Velocimetry (PIV)

2011: Field experiment in the St. Lawrence Estuary (Chief Scientist)

18 opportunistic sorties (May-November)

Deployment and recovery of two moorings and deployment of an over-wintering mooring

Realization of a two-week experiment with two boats and a 5 people crew (7 sorties)

2011: Field experiment in the Saguenay Fjord (Chief Scientist: D. Bourgault)

Deployment of a mooring and CTD transect along the Fjord

2010: Field experiment in the St. Lawrence Estuary (Chief Scientist)

14 opportunistic sorties (May-October)

Two-week experiment with two boats and a 6 people crew for simultaneous sampling (10 sorties)

2009: Field experiment in the St. Lawrence Estuary (Chief Scientist)

6 opportunistic sorties (July-August)

Realization of a sampling experiment at the head of the Laurentian Channel (4 days)

Training Highly Qualified Personnel Rémi Chassagne (Undergraduate), internship supervisor 2015

Internal tides generation by topographically-trapped waves (3-month)

Camil Hamel (Undergraduate), internship co-supervisor with D. Bourgault 2011

Turbulent nitrate fluxes in the Amundsen Gulf, part II (4-month)

Camil Hamel (Undergraduate), internship co-supervisor with D. Bourgault 2010

Turbulent nitrate fluxes in the Amundsen Gulf, part I (4-month)

Contributions to Research

Refereed Publications

2017: Cyr, F., M. Tedetti, F. Besson, L. Beguery, A. M. Doglioli, A. A. Petrenko and M. Goutx, A new glider-compatible optical sensor for dissolved organic matter measurements: test case from the NW Mediterranean Sea, *Frontiers in Marine Science*, 4(89) 10.3389/fmars.2017.00089.

2016: Dufour, K., F. Maps, S. Plourde, P. Joly and F. Cyr, Impacts of intraguild predation on Arctic copepod communities, *Frontiers in Marine Science*, 3(185) 10.3389/fmars.2016.00185.

2016: van Haren, H., A. A. Cimatoribus, F. Cyr and L. Gostiaux, Insights from a 3-D temperature sensors mooring on stratified ocean turbulence, *Geophysical Research Letters*, 43(9), 4483-4489, 10.1002/2016GL068032.

2016: Cyr, F., H. van Haren, F. Mienis, G. Duineveld and D. Bourgault, On the influence of cold-water coral mound size on flow hydrodynamics, and vice-versa, *Geophysical Research Letters*, 43(2), 775-783, doi:10.1002/2015GL067038.

- **2016**: Cyr, F. and H. van Haren, Observations of small-scale secondary instabilities during the shoaling of internal bores on a deep-ocean slope, *Journal of Physical Oceanography*, 46(1), 219-231, doi:10.1175/JPO-D-15-0059.1.
- **2015**: Bourgault, D. and F. Cyr, Hypoxia in the St. Lawrence Estuary: How a Coding Error Led to Believe that "Physics Controls Spatial Patterns", *PLOS ONE*, 10(9):e0138858, doi:10.1371/journal.pone.0138858.
- **2015**: Cyr, F., D. Bourgault, P. S. Galbraith and M. Gosselin, Turbulent nitrate fluxes in a large-scale estuary, *Journal of Geophysical Research-Oceans*, 120, 2308-2330, doi:10.1002/2014JC010272.
- **2015**: Cyr, F., D. Bourgault and P. S. Galbraith, Behavior and mixing of a cold intermediate layer above a sloping boundary, *Ocean Dynamics*, 65(3), p.357-374, doi:10.1007/s10236-014-0799-1.
- **2015**: Cyr, F. and P. Larouche, Thermal front atlas of Canadian coastal waters, *Atmosphere-Ocean*, 53(2) doi:10.1080/07055900.2014.986710.
- **2014**: Bourgault, D., F. Cyr, D. Dumont and A. Carter, Numerical simulations of the spread of floating passive tracer released at the Old Harry prospect, *Environmental Research Letters*, 9, 054001.
- **2012**: Bourgault, D., F. Cyr, P. S. Galbraith and E. Pelletier, Relative importance of pelagic and sediment respiration in causing hypoxia in a deep estuary, *Journal of Geophysical Research*, 117, C08033.
- **2011**: Cyr, F., D. Bourgault, and P. S. Galbraith, Interior versus boundary mixing of a cold intermediate layer, *Journal of Geophysical Research*, 116, C12029.
- **2011**: Bourgault D., C. Hamel, F. Cyr, J.-É. Tremblay, P. Galbraith, D. Dumont and Y. Gratton, Turbulent nitrate fluxes in the Amundsen Gulf during ice-covered conditions, *Geophysical Research Letters*, 38, L15602.

Theses and Technical Reports.....

- **2014**: Cyr, F, *Mélange turbulent dans l'estuaire maritime du Saint-Laurent*, Ph.D. thesis, Université du Québec à Rimouski, 201 pp., Rimouski, Canada.
- **2008**: Cyr, F, *Modélisation couplée océan-glace-biologie dans l'Arctique Canadien*, M.Sc. report, ENSTA-Paristech / Université de Versailles-St-Quentin-en-Yvelines, 44 pp., Paris, France.
- **2007**: Cyr, F, Fontes estivales en Antarctique: Comparaison entre observations et modèles météorologiques, research report, Laboratoire de Glaciologie et Géophysique de l'Environnement, 30 pp., Grenoble, France.

Selected Conferences and Abstracts

- **2017**: Cyr, F., E. van der Lee, M. Buckley, A. Cimatoribus, H. van Haren, C. Lappe and L. Umlauf, High-resolution observations of wind-driven mixing in the Baltic Sea, The 49^{th} Liège Colloquium on Ocean Dynamics and 8^{th} Warnemünde Turbulence Days. Marine Turbulence Re3-visited, Liège, Belgium (Talk).
- **2017**: Cyr, F., M. Tedetti and M. Goutx, MiniFluo fluorescence sensor, advances in FDOM Ocean Measurements, European Geosciences Union (EGU) Annual General Meeting, Vienna, Austria (Poster).
- **2016**: Cyr, F., M. Tedetti and M. Goutx, Dissolved organic matter dynamics in the NW Mediterranean from a new glider optical sensor, The 7^{th} EGO conference on autonomous ocean gliders and

- their applications, Southampthon, U.K. (Talk).
- **2016**: Cyr, F. , M. Goutx, N. Bhairy, M. Tedetti, F. Besson, M. Mery, A. Petrenko and A.M. Doglioli, Submesoscale dynamics of dissolved organic matter across the Northern Mediterranean Current revealed from a new glider-mounted optical sensor, The 48th International Liege Colloquium on Ocean Dynamics. Submesoscale Processes: Mechanisms, Implications And New Frontiers, Liège, Belgium (Poster).
- **2016**: Doglioli, A.M., G. Grégori, M. Thyssen, T. Wagener, P. Marrec, G. Rougier, N. Bhairy, J. Fenouil, A. de Verneil, L. Rousselet, F. Cyr, A. A. Petrenko, J.-M. André, L. Berline, F. d'Ovidio, A. Pietri, F. Nencioli, L. Jullion, C. Pinazo, C. Yohia, P. Marsalaix, Mapping the planktonic community across submesoscale physical features: the 2015 OSCAHR cruise in the NW Mediterranean, The 48th International Liege Colloquium on Ocean Dynamics. Submesoscale Processes: Mechanisms, Implications And New Frontiers, Liège, Belgium (Talk).
- : Cimatoribus, A, L. Gostiaux, F. Cyr and H. van Haren, NIOZ high-resolution moored temperature observations: benefits and new challenges, European Geosciences Union (EGU) Annual General Meeting, Vienna, Austria (Talk).
- : Chassagne, R., F. Cyr, L. Maas, A. Cimatoribus, H. van Haren and D. Bourgault, On the fate of topographically-trapped internal tides, NewWave: New challenges in internal wave dynamics, Lyon, France (Talk).
- : Cyr F., H. van Haren and D. Bourgault, Internal tides breaking and mixing efficiency over a deep-ocean sloping topography, 7th Warnemünde Turbulence Days, Insel Vilm, Germany (Talk).
- : Cyr F. and H. van Haren, High-frequency internal-wave observations in the Baltic Sea, European Geosciences Union (EGU) Annual General Meeting, Vienna, Austria (Poster).
- : Cyr F. and H. van Haren, On the efficiency of mixing above a deep sloping topography, European Geosciences Union (EGU) Annual General Meeting, Vienna, Austria (Talk).
- : Cyr F. and H. van Haren, On the efficiency of turbulent mixing in the ocean: observations above a deep sloping topography, Turbulent mixing in stratified fluids Symposium 567 of the European Mechanics Society, Cambridge, U.K. (Talk).
- : Cyr F. and P. Larouche, Physical-biological relationships evaluated using remote sensing in the Hudson Bay complex, ArcticNet Annual Scientific Meeting, Ottawa, Canada (Poster).
- : Cyr, F., D. Bourgault, P. S. Galbraith and M. Gosselin, Turbulent nitrate fluxes in a large-scale estuary, European Geosciences Union (EGU) Annual General Meeting, Vienna, Austria (Poster).
- : Cyr F. and P. Larouche, A sea surface temperature fronts climatology of Baffin Bay, ArcticNet Annual Scientific Meeting, Halifax, Canada (Poster).
- : Cyr, F., D. Bourgault, P. S. Galbraith and M. Gosselin, *Quantifier la "pompe à nutriments"* du Saint-Laurent, Québec-Océan Annual General Meeting, Rivière-du-Loup, Canada (Talk).
- : Cyr F. and D. Bourgault, *Old Harry I: Compte rendu et revue critique des évaluations environnementales*, 81e congrès de l'ACFAS, Québec, Canada (Talk).
- : Bourgault D. and F. Cyr, *Old Harry II: Résultats de simulations de la dispersion de déversement de polluants*, 81e congrès de l'ACFAS, Québec, Canada (Talk).
- : Bourgault D., F. Cyr, P. S. Galbraith and É. Pelletier, On the source of oxygen consumption in the Estuary and Gulf of St. Lawrence, Québec-Océan Annual General Meeting, Montréal, Canada (Poster).
- 2012: Cyr, F., D. Bourgault and P. S. Galbraith, Tidally-induced boundary mixing in a large scale

- estuary, Physics of Estuaries and Coastal Seas Symposium, New York, USA (Talk).
- : Cyr, F., D. Bourgault and P. S. Galbraith, On boundary mixing mechanisms in the Lower St. Lawrence Estuary, CMOS/SCMO Congress, Montréal, Canada (Talk).
- : Bourgault D., C. Hamel, F. Cyr, J.-É. Tremblay, P. Galbraith, D. Dumont and Y. Gratton, Turbulent nitrate fluxes in the Amundsen Gulf during ice-covered conditions, International Polar Year 2012 Conference, Montreal, Canada (Poster).
- : Cyr, F., D. Bourgault and P. S. Galbraith, Interior versus boundary mixing for the erosion of a cold intermediate layer in a subarctic estuary, Ocean Sciences Meeting 2012, Salt Lake City, USA (Poster).
- : Cyr, F., D. Bourgault and P. S. Galbraith, *Modulation de la turbulence par la marée dans l'estuaire du Saint-Laurent*, Québec-Océan Annual General Meeting, Lac Delage, Canada (Talk).
- : Bourgault D., C. Hamel, F. Cyr, J.-É. Tremblay, P. Galbraith, D. Dumont and Y. Gratton, Turbulent nitrate fluxes in the Amundsen Gulf during ice-covered conditions, Assemblée Générale Annuelle de Québec-Océan, Lac Delage, Canada (Poster).
- : Cyr, F., D. Bourgault and P. S. Galbraith, Interior versus boundary mixing of a cold intermediate layer, 5th Warnemünde Turbulence Days, Insel Vilm, Germany (Talk).
- : Cyr, F., D. Bourgault and P. S. Galbraith, What controls the erosion of the cold intermediate layer of the Gulf of St. Lawrence?, CMOS/SCMO Congress, Victoria, Canada (Talk).
- : Cyr, F., D. Bourgault and P. S. Galbraith, On the erosion of cold intermediate layers: A study case in the Gulf of St. Lawrence, Canada, AGU Fall Meeting 2010, San Francisco, USA (Poster).
- : Cyr, F., D. Bourgault and P. S. Galbraith, *L'érosion de la couche intermédiaire froide dans le golfe du St-Laurent*, Québec-Océan Annual General Meeting, Lac Beauport, Canada (Talk).

Other Non-Refereed contributions.....

- : Cyr, F., *Un duo capteur optique et planeur sous-marin pour une nouvelle génération de mesure in situ de la matière organique dissoute* (Seminar), 23 January 2017, Mediterranean Institute of Oceanography, Marseille, France.
- : Cyr, F., Rockall Bank: Funky ocean physics, deep ocean mixing and cold water coral biogeochemistry (TRR 181 conference), 12 January 2017, University of Hamburg, Hamburg, Germany.
- : Cyr, F., Presentation of a new glider-compatible optical sensor for measurements of fluorescent dissolved organic matter (Seminar), 11 January 2017, Helmholtz-Zentrum Geesthacht, Germany.
- : Cyr, F., Rockall Bank: Funky ocean physics, deep ocean mixing and cold water coral biogeochemistry (Seminar), 11 January 2017, Helmholtz-Zentrum Geesthacht, Geesthacht, Germany.
- : Cyr, F., On trapped internal tides, deep ocean mixing and cold water coral biogeochemistry (Seminar), 23 August 2016, Laboratoire d'océanographie physique et spatiale, Brest, France.
- : Cyr, F., Rockall Bank: where funky ocean's physics matters for the biogeochemistry, and vice-versa (Seminar), 19 January 2016, Northwest Atl. Fish. Centre, St. John's (NL), Canada.
- **2015**: Cyr, F., Rockall Bank: a place with funky tides, where the biogeochemistry matters for the physics, and vice-versa (NIOZ Colloquium), 22 September 2015, Royal Netherlands Institute for Sea Research (NIOZ), Texel, Netherlands.
- 2014: Cyr, F., Mélange turbulent dans l'estuaire maritime du Saint-Laurent (Ph.D. defense), 27

- March 2014, Institut des Sciences de la Mer, Université du Québec à Rimouski, Rimouski, Canada.
- **2014**: Cyr, F., *Mélange turbulent dans l'estuaire maritime du Saint-Laurent* (Seminar), 24 March 2014, Université Laval, Québec, Canada.
- **2014**: Cyr, F., Turbulent mixing in the Lower St. Lawrence Estuary (Seminar), 11 March 2014, Royal Netherlands Institute for Sea Research, 't Horntje, Netherlands.
- **2014**: Bourgault, D., D. Dumont, F. Cyr and A. Carter (2014), Oil and gas exploitation in the Gulf of St. Lawrence: what role for government and university researchers?, CMOS Bulletin, 42 (1), 28-32.
- **2014**: Bourgault D., F. Cyr, P. S. Galbraith and É. Pelletier, Hypoxia in the St. Lawrence Estuary, Québec-Océan Bulletin, 11, 1-2.
- **2013**: Cyr, F., *L'érosion de la couche intermédiaire froide: mélange aux frontières, marées internes et pompe à nutriments* (Seminar), 25 October 2013, Institut des Sciences de la Mer, Université du Québec à Rimouski, Rimouski, Canada.
- **2013**: Cyr, F. and D. Bourgault, *Old Harry: Petite revue critique des évaluations environnementales et nouvelles simulations de dispersion d'un traceur passif* (joint seminar with D. Bourgault), 8 May 2013, Université Laval, Québec, Canada.
- **2013**: Cyr, F. and D. Bourgault, *Old Harry: Petite revue critique des évaluations environnementales et nouvelles simulations de dispersion d'un traceur passif* (joint seminar with D. Bourgault), Midis des sciences naturelles, 24 April 2013, Université du Québec à Rimouski, Rimouski, Canada.
- **2012**: Bourgault D., F. Cyr, P. S. Galbraith and É. Pelletier, A new hypothesis for the source of hypoxia in the St. Lawrence, Québec-Océan Bulletin, 7, 1-2.
- **2012**: Cyr, F., On the erosion of the cold intermediate layer: Boundary mixing mechanisms (Seminar), 21 September 2012, Dalhousie University, Halifax, Canada.
- **2010**: Cyr, F., *L'érosion de la couche intermédiaire froide dans le golfe du Saint-Laurent* (Seminar), 8 December 2010, Institut des Sciences de la Mer, Université du Québec à Rimouski, Rimouski, Canada.

Archived Data and Software development.....

2016: Contributed to the SOCIB Glider Toolbox by adding the SeaExplorer glider case.

2014: All turbulence profiles from my PhD (1762) were processed and submitted for archiving in the Ocean Data Management System (ODMS) on the St. Lawrence Global Observatory (SLGO) portal. I have developed the archiving format since this type of data was new for the ODMS/SLGO.

2009-2014: Developed a *Matlab* library to process data from Vertical Microstructure Profilers (VMP)

Selected Media Appearances.....

2014: TV journalists help scientists confirm oil-spill model, EnvironmentalResearchWeb.org (IOP Publishing community website)

- 2014: Oceanography study examines risks of Old Harry development, The Telegram (Newspaper)
- 2014: Lessons from the whales, Western Star (Newspaper, open letter)
- **2014**: Une marée noire dans le golfe risquerait de frapper les îles de la Madeleine, Le Devoir (Newspaper)

- **2014**: Un déversement à Old Harry menacerait tout l'est du golfe, Le Soleil (Newspaper)
- 2013: Info-Réveil, Radio-Canada (Radio interview, 2013-05-07)
- 2013: Old Harry: des simulations de déversement jugées trop optimistes, Le Soleil (Newspaper)
- 2013: Radio-Canada cet après-midi, Radio-Canada (Radio interview, 2013-05-06)
- **2013**: Pourquoi l'eau de baignade est-elle si froide à Rimouski?, UQAR-Info (Newsletter)

Frédéric Cyr 9/9 October 11, 2017