

## CURRICULUM VITAE – Denis Gilbert

### ADDRESS

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### EDUCATION

1991 Post-doctorate, Institute of Ocean Sciences, Dept. of Fisheries & Oceans, Sidney, BC, Canada  
1985-1990 Ph.D. Physical Oceanography, Dalhousie University, Halifax, Nova Scotia, Canada  
1982-1985 B.Sc. Physics, University of Quebec at Chicoutimi, Saguenay, Québec, Canada

### EMPLOYMENT

1991-... Research scientist, Maurice-Lamontagne Institute, Department of Fisheries and Oceans Canada, Mont-Joli, Québec, Canada

### ADJUNCT PROFESSOR

Institut des Sciences de la mer, Université du Québec à Rimouski, Rimouski, Québec, Canada

### RESEARCH INTERESTS

Ocean climate, [Argo profiling floats](#), dissolved oxygen and hypoxia, time series analysis and statistics, fisheries oceanography, internal waves, flow through straits.

### EXCELLENCE AWARDS

- 2016 Geoff Howell Excellence citation of the Department of Environment and Climate Change Canada pour my role in the development of operational coupled atmosphere-ice-ocean models.
- 2015 Prix d'Excellence of Fisheries and Oceans Canada for my contributions to the national Argo Canada program
- 2013 National Tour Speaker of the Canadian Meteorological and Oceanographic Society (CMOS)
- 2012 Prix d'Excellence of Fisheries and Oceans Canada for a study on the acidification of the deep waters of the Lower St. Lawrence Estuary

### INTERNATIONAL COMMITTEE MEMBERSHIPS

GO2NE - [Global Ocean Oxygen Network](#) (2016-...)  
Full member of [SCOR Working Group 142 on ocean biogeochemical sensors](#) (2012-...)  
Canadian representative on the [Argo Steering Team](#) (2010-2015)  
Co-chair of [SCOR Working Group 128 on coastal hypoxia](#) (2005-2010)  
Hypoxia Panel of the U.S. Environmental Protection Agency Science Advisory Board (2006-2007)  
ICES Working Group on Oceanic Hydrography (2003-2007)

## CANADIAN COMMITTEE MEMBERSHIPS

Head of the [Argo Canada](#) program (2010-2015)

[Atlantic Zone Oceanographic Monitoring Program](#) (AZMP, 1998-2007)

Fisheries Oceanography Committee (1993-2004)

## EDITORIAL FUNCTIONS

Chief editor (oceanography) of the refereed journal "[Atmosphere-Ocean](#)" (2008-2010)

Co-editor of [special issue of Biogeosciences on coastal hypoxia](#)

## PROFESSIONAL MEMBERSHIPS

Canadian Meteorological and Oceanographic Society (CMOS)

American Geophysical Union (AGU)

## PRIMARY PUBLICATIONS IN REFEREED JOURNALS

- 2019 Lavoie, D., Lambert, N. & **Gilbert, D.** [Projections of future trends in biogeochemical conditions in the northwest Atlantic using CMIP5 Earth System Models](#). *57*: 18-40. doi: 10.1080/07055900.2017.1401973
- 2018 Claret, M., Galbraith, E.D., Palter, J.B., Bianchi, D., Fennel, K., **Gilbert, D.** and Dunne, J.P. [Rapid coastal deoxygenation due to ocean circulation shift in the northwest Atlantic](#). *Nature Climate Change*, **8**: 868-872. doi: 10.1038/s41558-018-0263-1
- 2018 Mucci, A., Levasseur, M., Gratton, Y., Martias, C., Scarratt, M., **Gilbert, D.** Tremblay, J.-É., Ferreyra, G. and Lansard, B. [Tidally induced variations of pH at the head of the Laurentian Channel](#). *Can. J. Fish. Aquat. Sci.*, **75**:1128-1141. doi: 10.1139/cjfas-2017-0007
- 2018 Wolf, M.K., Hamme, R.C., **Gilbert, D.**, Yashayaev, I. & Thierry, V. [Oxygen saturation surrounding Deep Water formation events in the Labrador Sea from Argo-O2 data](#). *Global Biogeochemical Cycles*, **32**, 635–653. doi: 10.1002/2017GB005829
- 2018 Breitburg, D., Levin, L. A., Oschlies, A., Grégoire, M., Chavez, F. P., Conley, D. J., Garçon, V., **Gilbert, D.**, Gutiérrez, D., Isensee, K., Jacinto, G. S., Limburg, K. E., Montes, I., Naqvi, S. W. A., Pitcher, G. C., Rabalais, N. N., Roman, M. R., Rose, K. A., Seibel, B. A., Telszewski, M., Yasuhara, M. & Zhang, J. [Declining oxygen in the global ocean and coastal waters](#). *Science*, **359**, 11p. doi: 10.1126/science.aam7240
- 2017 Peterson, I., B. Greenan, **D. Gilbert** & D. Hebert. [Variability and wind forcing of ocean temperature and thermal fronts in the Slope Water region of the Northwest Atlantic](#). *J. Geophys. Res. Oceans*, **122**, 7325-7343. doi: 10.1002/2017JC012788
- 2017 Hudon, C., Gagnon, P., Rondeau, M., Hébert, S., **Gilbert, D.**, Hill, B., Patoine, M. & Starr, M. [Hydrological and biological processes modulate carbon, nitrogen and phosphorus flux from the St. Lawrence River to its estuary \(Quebec, Canada\)](#). *Biogeochemistry*, **135**: 251-276. doi: 10.1007/s10533-017-0371-4
- 2017 **Gilbert, D.** [Oceans lose oxygen](#). *Nature*, **542**: 303-304. doi: 10.1038/542303a
- 2016 Palter, J. B., Caron, C.-A., Law, K. L., Willis, J. K., Trossman, D. S., Yashayaev, I. M. & **Gilbert, D.** [Variability of the directly observed, middepth subpolar North Atlantic circulation](#). *Geophys. Res. Lett.*, **43**: 2700-2708. doi: 10.1002/2015GL067235
- 2016 Riser, S. C., Freeland, H. J., Roemmich, D., Wijffels, S., Troisi, A., Belbeoch, M., **Gilbert, D.**, Xu, J., Pouliquen, S., Thresher, A., Le Traon, P.-Y., Maze, G., Klein, B., Ravichandran, M., Grant, F., Poulain, P.-M., Suga, T., Lim, B., Sterl, A., Sutton, P., Mork, K.-A., Velez-Belchi, P. J., Ansorge, I., King, B., Turton, J., Baringer, M. & Jayne, S. R., [Fifteen years of](#)

- [ocean observations with the global Argo array](#). *Nature Clim. Change*, **6**, 145-153, doi: 10.1038/nclimate2872.
- 2015 Johnson, K.S., J.N. Plant, S.C. Riser and **D. Gilbert**. [Air oxygen calibration of oxygen optodes on a profiling float array](#). *J. Atmospheric and Oceanic Technology*, **32**, 2160-2172, doi: 10.1175/JTECH-D-15-0101.1
- 2013 Takeshita, Y., T.R. Martz, K.S. Johnson, J.N. Plant, **D. Gilbert**, S.C. Riser, C. Neill, and B. Tilbrook, [A climatology-based quality control procedure for profiling float oxygen data](#). *J. Geophys. Res.* **118**: 5640-5650. doi: 10.1002/jgrc.20399
- 2012 Lefort, S., Y. Gratton, A. Mucci, I. Dadou, and **D. Gilbert**. Hypoxia in the Lower St. Lawrence Estuary: How physics controls spatial patterns, *J. Geophys. Res.*, **117**, C07018, doi: 10.1029/2011JC007751
- 2012 Prakash, S., T.M. Balakrishnan Nair, T.V.S. Udaya Bhaskar, P. Prakash and **D. Gilbert**. [Oxycline variability in the central Arabian Sea: An Argo-oxygen study](#). *J. Sea Research*, **71**: 1-8. doi: 10.1016/j.seares.2012.03.003
- 2011 Juranek, L. W., R. A. Feely, **D. Gilbert**, H. Freeland, and L. A. Miller. Real-time estimation of pH and aragonite saturation state from Argo profiling floats: Prospects for an autonomous carbon observing strategy, *Geophys. Res. Lett.*, **38**: L17603, doi:10.1029/2011GL048580.
- 2011 Mucci, A., M. Starr, **D. Gilbert** and B. Sundby. Acidification of Lower St. Lawrence Estuary bottom waters. *Atmosphere-Ocean*, **49**: 206-218, doi: 10.1080/07055900.2011.599265.
- 2011 Genovesi, L., A. de Vernal, C. Hillaire-Marcel, A. Mucci and **D. Gilbert**. Recent changes in bottom water oxygenation and temperature in the Gulf of St. Lawrence: Micropaleontological and geochemical evidence. *Limnol. Oceanogr.*, **56**: 1319-1329.
- 2010 Thibodeau, B., M. F. Lehmann, J. Kowarzyk, A. Mucci, Y. Gélinas, **D. Gilbert**, R. Maranger and M. Alkhatib. Benthic nutrient fluxes along the Laurentian Channel: Impacts on the N budget of the St. Lawrence marine system. *Estuarine, Coastal and Shelf Science*, **90**: 195-205. doi:10.1016/j.ecss.2010.08.015
- 2010 **Gilbert, D.**, N.N. Rabalais, R.J. Díaz, and J. Zhang. Evidence for greater oxygen decline rates in the coastal ocean than in the open ocean. *Biogeosciences*, **7**: 2283-2296.
- 2010 Ekau, W., H. Auel, H.-O. Pörtner, and **D. Gilbert**. Impacts of hypoxia on the structure and processes in pelagic communities (zooplankton, macroinvertebrates and fish). *Biogeosciences*, **7**: 1669-1699.
- 2010 Zhang, J., **D. Gilbert**, A. J. Gooday, L. Levin, S. W. A. Naqvi, J. J. Middelburg, M. Scranton, W. Ekau, A. Peña, B. Dewitte, T. Oguz, P. M. S. Monteiro, E. Urban, N. N. Rabalais, V. Ittekkot, W. M. Kemp, O. Ulloa, R. Elmgren, E. Escobar-Briones, and A. K. Van der Plas. Natural and human-induced hypoxia and consequences for coastal areas: synthesis and future development. *Biogeosciences*, **7**: 1443-1467.
- 2010 Peña, M. A., S. Katsev, T. Oguz, and **D. Gilbert**. Modeling dissolved oxygen dynamics and hypoxia. *Biogeosciences*, **7**, 933-957.
- 2010 Rabalais, N. N., R. J. Diaz, L. A. Levin, R. E. Turner, D. Gilbert, and J. Zhang. Dynamics and distribution of natural and human-caused hypoxia. *Biogeosciences*, **7**: 585-619.
- 2009 Kemp, W. M., J. M. Testa, D. J. Conley, **D. Gilbert**, and J. D. Hagy. Temporal responses of coastal hypoxia to nutrient loading and physical controls. *Biogeosciences*, **6**: 2985-3008.
- 2009 Freeland, H. J. and **D. Gilbert**. Estimate of the steric contribution to global sea level rise from a comparison of the WOCE one-time survey with 2006-2008 Argo observations. *Atmosphere-Ocean*, **47**: 292-298.

- 2009 Lehmann, M. F., B. Barnett, Y. Gélinas, **D. Gilbert**, R. J. Maranger, A. Mucci, B. Sundby, and B. Thibodeau. Aerobic respiration and hypoxia in the Lower St. Lawrence Estuary: stable isotope ratios of dissolved oxygen constrain oxygen sink partitioning. *Limnology and Oceanography*, **54**: 2157-2169.
- 2007 Oguz, T. and **D. Gilbert**. Abrupt transitions of the top-down controlled Black Sea pelagic ecosystem during 1960–2000: Evidence for regime-shifts under strong fishery exploitation and nutrient enrichment modulated by climate-induced variations. *Deep-Sea Research I*, **54**: 220-242.
- 2005 **Gilbert, D.**, B. Sundby, C. Gobeil, A. Mucci, G.-H. Tremblay. A seventy-two-year record of diminishing deep-water oxygen in the St. Lawrence estuary: The northwest Atlantic connection. *Limnol. Oceanogr.*, **50**: 1654-1666.
- 2004 Drinkwater, K.F. and **D. Gilbert**. [Hydrographic variability in the waters of the Gulf of St. Lawrence, the Scotian Shelf and the eastern Gulf of Maine \(NAFO Subarea 4\) during 1991–2000](#). *J. Northw. Atl. Fish. Sci.*, **34**: 85-101. doi: 10.2960/j.v34.m545
- 2003 Saucier, F.J., F. Roy, **D. Gilbert**, P. Pellerin and H. Ritchie. Modeling the formation and circulation processes of water masses and sea ice in the Gulf of St. Lawrence, Canada. *J. Geophys. Res.*, **108(C8)**: 3269. doi:10.1029/2000JC000686
- 2003 Dionne, M., B. Sainte-Marie, E. Bourget and **D. Gilbert**. Distribution and habitat selection of early benthic stages of snow crab *Chionoecetes opilio*. *Mar. Ecol. Progr. Ser.*, **259**: 117-128.
- 1999 Dutil, J.-D., M. Castonguay, **D. Gilbert** and D. Gascon. Growth, condition and environmental relationships in Atlantic cod (*Gadus morhua*) in the northern Gulf of St. Lawrence and implications for management strategies in the northwest Atlantic. *Can. J. Fish. Aquat. Sci.*, **56**: 1818-1831.
- 1999 Castonguay, M., C. Rollet, A. Fréchet, P. Gagnon, **D. Gilbert** and J.-C. Brêthes. Distribution changes of Atlantic cod (*Gadus morhua* L.) in the northern Gulf of St. Lawrence in relation to an oceanic cooling. *ICES J. Mar. Sci.*, **56**: 333-344.
- 1997 **Gilbert, D.** and B. Pettigrew. Interannual variability (1948-1994) of the CIL core temperature in the Gulf of St. Lawrence. *Can. J. Fish. Aquat. Sci.* **54** (Suppl. 1): 57-67.
- 1995 Castonguay, M. and **D. Gilbert**. Effects of tidal streams on migrating Atlantic mackerel, *Scomber scombrus* L. *ICES J. Mar. Sci.*, **52**: 941-954.
- 1993 **Gilbert, D.** A search for evidence of critical internal wave reflection on the continental rise and slope off Nova Scotia. *Atmosphere-Ocean*, **31**: 99-122.
- 1989 **Gilbert, D.** and C.J.R. Garrett. Implications for ocean mixing of internal wave scattering off irregular topography. *J. Phys. Oceanogr.*, **19**: 1716-1729.

## OTHER PUBLICATIONS

- 2019 Greenan, B.J.W., James, T.S., Loder, J.W., Pepin, P., Azetsu-Scott, K., Ianson, D., Hamme, R.C., **Gilbert, D.**, Tremblay, J-E., Wang, X.L. and Perrie, W. Changes in oceans surrounding Canada; Chapter 7 in (eds.) E. Bush and B. Lemmen, Canada's Changing Climate Report; Government of Canada, Ottawa, Ontario, p. 343-423.
- 2019 Gilbert, D. [Grandes marées observées à Rimouski](#). *Bulletin La Zone Côtière*, **4**, 9-11.
- 2018 Galbraith, P.S., Chassé, J., Caverhill, C., Nicot, P., Gilbert, D., Lefaivre, D. and Lafleur, C. 2018. [Physical Oceanographic Conditions in the Gulf of St. Lawrence during 2017](#). DFO Can. Sci. Advis. Sec. Res. Doc. 2018/050. v + 79 p.

- 2017 Galbraith, P.S., Chassé, J., Caverhill, C., Nicot, P., **Gilbert, D.**, Pettigrew, B., Lefaivre, D., Brickman, D., Devine, L., and Lafleur, C. [Physical Oceanographic Conditions in the Gulf of St. Lawrence in 2016](#). *DFO Can. Sci. Advis. Sec. Res. Doc.* 2017/044. v + 91 p.
- 2017 Pettigrew, B., **Gilbert, D.** and Desmarais R. [Thermograph network in the Gulf of St. Lawrence: 2014-2016 update](#). *Can. Tech. Rep. Hydrogr. Ocean Sci.* **317**: vii + 54 p.
- 2016 Galbraith, P.S., Chassé, J., Caverhill, C., Nicot, P., **Gilbert, D.**, Pettigrew, B., Lefaivre, D., Brickman, D., Devine, L., and Lafleur, C. [Physical Oceanographic Conditions in the Gulf of St. Lawrence in 2015](#). *DFO Can. Sci. Advis. Sec. Res. Doc.* 2016/056. v + 90 p.
- 2016 Pettigrew, B., **Gilbert, D.** and Desmarais, R. [Thermograph network in the Gulf of St. Lawrence](#). *Can. tech. report of hydrography and ocean sciences*, **311**, vii + 77p.
- 2016 Thierry V., H. Bittig, **D. Gilbert**, T. Kobayashi, K. Sato, C. Schmid 2016: [Processing Argo oxygen data at the DAC level](#) (version 2.1). doi:10.13155/39795
- 2015 Lavoie, D., M. Starr, J. Chassé, **D. Gilbert** and N. Lambert. The Gulf of St. Lawrence biogeochemical model: a tool to study the evolution of hypoxic conditions and other habitat changes. ICES CM 2015/R:14.
- 2015 Galbraith, P.S., J. Chassé, P. Nicot, C. Caverhill, **D. Gilbert**, B. Pettigrew, D. Lefaivre, D. Brickman, L. Devine, and C. Lafleur. Physical Oceanographic Conditions in the Gulf of St. Lawrence in 2014. *DFO Can. Sci. Advis. Sec. Res. Doc.* 2015/032. v + 82 p.
- 2014 **Gilbert, D.** Enhancements to the Argo array. *CMOS Bulletin*, 42(6), 183-184.
- 2014 Galbraith, P.S., Chassé, J., **Gilbert, D.**, Larouche, P., Caverhill, C., Lefaivre, D., Brickman, D., Pettigrew, B., Devine, L., and Lafleur, C.. Physical Oceanographic Conditions in the Gulf of St. Lawrence in 2013. *DFO Can. Sci. Advis. Sec. Res. Doc.* 2014/062. vi + 84 p.
- 2013 Galbraith, P.S., Chassé, J., Larouche, P., **Gilbert, D.**, Brickman, D., Pettigrew, B., Devine, L., and Lafleur, C. Physical Oceanographic Conditions in the Gulf of St. Lawrence in 2012. *DFO Can. Sci. Advis. Sec. Res. Doc.* 2013/026. v + 89 p.
- 2013 Chabot, D. and **D. Gilbert** Description of the Atlantic Large Aquatic Basin as a habitat for marine fish and invertebrates. Ch. 1 (p.1–15) In: *Climate Change Impacts, Vulnerabilities and Opportunities Analysis of the Marine Atlantic Basin* [Shackell, N.L, B.J.W. Greenan, P. Pepin, D. Chabot and A. Warburton (Eds.)]. *Can. Manusc. Rep. Fish. Aquat. Sci.* 3012: xvi + 366 p.
- 2013 **Gilbert, D.** Argo's millionth profile milestone. *CNC-SCOR Newsletter*, 69: 2-3.
- 2012 Freeland, H.J., **D. Gilbert**, M. Ouellet, A. Tran, I. Yashayaev. One million Argo float profiles. *CMOS Bulletin*, 40: 185-188.
- 2012 Galbraith, P.S., J. Chassé, **D. Gilbert**, P. Larouche, D. Brickman, B. Pettigrew, L. Devine, A. Gosselin, R.G. Pettipas, and C. Lafleur. Physical Oceanographic Conditions in the Gulf of St. Lawrence in 2011. *DFO Can. Sci. Advis. Sec. Res. Doc.* 2012/023. iii + 85 p.
- 2011 Thierry, V., **D. Gilbert** and T. Kobayashi. Processing Argo oxygen data at the DAC level. [http://www.argodatamgt.org/content/download/2928/21973/file/ARGO\\_oxygen\\_proposition\\_v1p2.pdf](http://www.argodatamgt.org/content/download/2928/21973/file/ARGO_oxygen_proposition_v1p2.pdf), (version 1.2), 12p. last accessed September 25, 2012.
- 2011 Ouellet, M., B. Petrie, J. Chassé, **D. Gilbert**. Temporal and spatial scales of temperature, salinity and current velocity on the Newfoundland Grand Banks and in the Gulf of St. Lawrence. *Can. Tech. Rep. Hydrogr. Ocean Sci.*, 272: vi + 78p.
- 2011 **Gilbert, D.** [Aller en ligne droite sur une planète qui tourne : la force de Coriolis](#). *Accromath*, **6(2)**: 24-29.

- 2011 Galbraith, P.S., J. Chassé, **D. Gilbert**, P. Larouche, D. Brickman, B. Pettigrew, L. Devine, A. Gosselin, R.G. Pettipas and C. Lafleur. Physical oceanographic conditions in the Gulf of St. Lawrence in 2010. *DFO Can. Sci. Advis. Sec. Res. Doc.* 2011/045, iv + 82 p.
- 2011 de Vernal, A., G. St-Onge and **D. Gilbert**. Oceanography and Quaternary geology of the St. Lawrence Estuary and the Saguenay fjord. *IOP Conf Series: Earth and Environ. Science*, **14**, 012004.
- 2011 Pettigrew, B., P. Larouche and **D. Gilbert**. Validation des images composites des températures de surface produites au laboratoire de télédétection de l'Institut Maurice-Lamontagne. *Rapp. tech. can. hydrogr. sci. océan.* **270** : viii + 31 p.
- 2010 Galbraith, P.S., P. Larouche, **D. Gilbert**, J. Chassé and B. Petrie, Trends in sea-surface and CIL temperatures in the Gulf of St. Lawrence in relation to air temperature. *AZMP Bulletin PMZA*, **9**: 20-23.
- 2010 Christian, J., Peña, A., Denman, K., **Gilbert, D.** and Lyon, P. Information in support of Science Advisory Report (SAR) 2010/012: "Ocean Fertilization: Mitigating Environmental Impacts of Future Scientific Research". *DFO Can. Sci. Advis. Sec. Res. Doc.* 2010/106. iv + 17 p.
- 2010 Galbraith, P.S., R.G. Pettipas, J. Chassé, **D. Gilbert**, P. Larouche, B. Pettigrew, A. Gosselin, L. Devine and C. Lafleur, Physical Oceanographic Conditions in the Gulf of St. Lawrence in 2009. *DFO Can. Sci. Advis. Sec. Res. Doc.* 2010/035. iv + 73p.
- 2010 Fisheries and Oceans Canada, Ocean Fertilization: Mitigating Environmental Impacts of Future Scientific Research. *DFO Can. Sci. Advis. Sec. Sci. Advis. Rep.* 2010/012, 14p.
- 2010 Dale, V.H., C. Kling, J.L. Meyer, J. Sanders, H. Stallworth, T. Armitage, D. Wangsness, T.S. Bianchi, A. Blumberg, W. Boynton, D.J. Conley, W. Crumpton, M.B. David, **D. Gilbert**, R.W. Howarth, R. Lowrance, K. Mankin, J. Opaluch, H. Paerl, K. Reckhow, A.N. Sharpley, T.W. Simpson, C. Snyder, and D. Wright. Hypoxia in the Northern Gulf of Mexico. Springer, New York, 284p.
- 2010 Gruber, N., S.C. Doney, S.R. Emerson, **D. Gilbert**, T. Kobayashi, A. Körtzinger, G.C. Johnson, K.S. Johnson, S.C. Riser and O. Ulloa. Adding oxygen to Argo: Developing a global in-situ observatory for ocean deoxygenation and biogeochemistry. In "Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society (Vol. 2)", Venice, Italy, 21-25 September 2009, Hall, J., Harrison D.E. & Stammer, D., Eds., ESA Publication WPP-306, 10p.
- 2009 **Gilbert, D.** and P. Cummins. The interacting scales of ocean dynamics – a tribute to Chris Garrett (preface). *Atmosphere-Ocean*, **47-4**: i-vi.
- 2009 Gilbert, D., Argo float of the month - Crossing the Gulf Stream by a float with an oxygen sensor. (<http://w3.jcommops.org/FTPRoot/Argo/Doc/Floats/2009-05-Float.pdf>), 3p. last accessed March 09, 2010.
- 2009 Fennel, W., **D. Gilbert**, and J. Su. Physical processes in semi-enclosed marine systems. In *Watersheds, bays, and bounded seas: The science and management of semi-enclosed marine systems*, E. R. Jr. Urban, B. Sundby, P. Malanotte-Rizzoli, and J. Mellilo (editors), volume 70 of Scientific Committee on Problems of the Environment (SCOPE) Series, Island Press, Washington, DC., pp. 97-114.
- 2009 MacCracken, M., E. Escobar-Briones, **D. Gilbert**, G. Korotaev, W. Naqvi, G.M.E. Perillo, T. Rixen, E. Stanev, B. Sundby, H. Thomas, D. Unger, and E.R.Jr. Urban. Vulnerability of semi-enclosed marine systems to environmental disturbances. In *Watersheds, bays, and bounded seas: The science and management of semi-enclosed marine systems*, E. R. Jr. Urban, B.

- Sundby, P. Malanotte-Rizzoli, and J. Mellilo (editors), volume 70 of Scientific Committee on Problems of the Environment (SCOPE) Series, Island Press, Washington, DC., pp. 9-29.
- 2009 Rabalais, N.N. and **D. Gilbert**. Distribution and consequences of hypoxia. In *Watersheds, bays, and bounded seas: The science and management of semi-enclosed marine systems*, E. R. Jr. Urban, B. Sundby, P. Malanotte-Rizzoli, and J. Mellilo (editors), volume 70 of Scientific Committee on Problems of the Environment (SCOPE) Series, Island Press, Washington, DC., pp. 209-225.
- 2009 Galbraith, P.S., Pettipas, R.G., Chassé, J., **Gilbert, D.**, Larouche, P., Pettigrew, B., Gosselin, A., Devine, L. and Lafleur, C. Physical Oceanographic Conditions in the Gulf of St. Lawrence in 2008. DFO Can. Sci. Advis. Sec. Res. Doc. 2009/014. iv + 69 p.
- 2008 Chabot, D. and **D. Gilbert**, The impact of hypoxia on cod from the Baltic and the Gulf of St. Lawrence. ICES CM 2008/J:15, 23p.
- 2008 Galbraith, P.S., **D. Gilbert**, R.G. Pettipas, J. Chassé, C. Lafleur, B. Pettigrew, P. Larouche, L. Devine. Physical oceanographic conditions in the Gulf of St. Lawrence in 2007. Canadian Science Advisory Secretariat, Research Document 2008/001, 55p.
- 2008 Craig, J. and **D. Gilbert**. Estimation of mixed layer depth at the AZMP fixed stations. *AZMP Bulletin PMZA*, **7**: 37-42.
- 2008 **Gilbert, D.** and E. Nault. Temperature, salinity and oxygen measurements from Argo profiling floats in the Slope Water region. *AZMP Bulletin PMZA*, **7**: 47-52.
- 2007 Environmental Protection Agency, Hypoxia in the northern Gulf of Mexico: An update by the U.S. EPA Science Advisory Board, Washington, D.C., xxx+303p. (Available at [http://yosemite.epa.gov/sab/sabproduct.nsf/C3D2F27094E03F90852573B800601D93/\\$File/EPA-SAB-08-003complete.unsigned.pdf](http://yosemite.epa.gov/sab/sabproduct.nsf/C3D2F27094E03F90852573B800601D93/$File/EPA-SAB-08-003complete.unsigned.pdf))
- 2007 **Gilbert, D.**, D. Chabot, P. Archambault, B. Rondeau, S. Hébert. Appauvrissement en oxygène dans les eaux profondes du Saint-Laurent marin: causes possibles et impacts écologiques. *Le Naturaliste Canadien*, **131**: 67-75.
- 2007 Galbraith, P.S., **D. Gilbert**, C. Lafleur, P. Larouche, B. Pettigrew. Physical oceanographic conditions in the Gulf of St. Lawrence in 2006. Canadian Science Advisory Secretariat, Research Document 2007/024, 51p.
- 2007 Gruber, N., S.C. Doney, S.R. Emerson, **D. Gilbert**, T. Kobayashi, A. Körtzinger, G.C. Johnson, K.S. Johnson, S.C. Riser and O. Ulloa. The Argo-Oxygen program : A white paper to promote the addition of oxygen sensors to the international Argo float program. 60 p. ([http://www-argo.ucsd.edu/o2\\_white\\_paper\\_web.pdf](http://www-argo.ucsd.edu/o2_white_paper_web.pdf) )
- 2005 Pepin, P., B. Petrie, J.-C. Therriault, S. Narayanan, G. Harrison, J. Chassé, E. Colbourne, **D. Gilbert**, D. Gregory, M. Harvey, G. Maillet, M. Mitchel and M. Starr. The Atlantic Zone Monitoring Program (AZMP): review of 1998-2003. *Can. Tech. Rep. Hydrogr. Ocean Sci.*, **242**: v + 87p.
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