

1. Cynar, H., Juranek, L. W., Pelland, N. A., Nielsen, J. M., Mordy, C. W., Eisner, L. B., Bell, S. W., Stabeno, P. J., **Monacci, N. M.**, Tabisola, H. M., Stalin, S. E. (2025). High-resolution primary and net community productivity estimates in the southeast Bering Sea from moored observations. *Journal of Geophysical Research: Oceans*, 130, e2024JC022013. <https://doi.org/10.1029/2024JC022013>
2. Pilcher, D. J., Cross, J. N., **Monacci, N.**, Mu, L., Kearney, K. A., Hermann, A. J., and Cheng, W.: Amplified bottom water acidification rates on the Bering Sea shelf from 1970–2022, *Biogeosciences*, 22, 3103–3125, <https://doi.org/10.5194/bg-22-3103-2025>, 2025.
3. Friedlingstein, P., O'Sullivan, M., Jones, M. W., Andrew, R. M., Hauck, J., Landschützer, P., Le Quéré, C., Li, H., Luijkx, I. T., Olsen, A., Peters, G. P., Peters, W., Pongratz, J., Schwingshackl, C., Sitch, S., Canadell, J. G., Ciais, P., Jackson, R. B., Alin, S. R., Arneeth, A., Arora, V., Bates, N. R., Becker, M., Bellouin, N., Berghoff, C. F., Bittig, H. C., Bopp, L., Cadule, P., Campbell, K., Chamberlain, M. A., Chandra, N., Chevallier, F., Chini, L. P., Colligan, T., Decayeux, J., Djeutchouang, L. M., Dou, X., Duran Rojas, C., Enyo, K., Evans, W., Fay, A. R., Feely, R. A., Ford, D. J., Foster, A., Gasser, T., Gehlen, M., Gkritzalis, T., Grassi, G., Gregor, L., Gruber, N., Gürses, Ö., Harris, I., Hefner, M., Heinke, J., Hurtt, G. C., Iida, Y., Ilyina, T., Jacobson, A. R., Jain, A. K., Jarníková, T., Jersild, A., Jiang, F., Jin, Z., Kato, E., Keeling, R. F., Klein Goldewijk, K., Knauer, J., Korsbakken, J. I., Lan, X., Lauvset, S. K., Lefèvre, N., Liu, Z., Liu, J., Ma, L., Maksyutov, S., Marland, G., Mayot, N., McGuire, P. C., Metzl, N., **Monacci, N. M.**, Morgan, E. J., Nakaoka, S.-I., Neill, C., Niwa, Y., Nützel, T., Olivier, L., Ono, T., Palmer, P. I., Pierrot, D., Qin, Z., Resplandy, L., Roobaert, A., Rosan, T. M., Rödenbeck, C., Schwinger, J., Smallman, T. L., Smith, S. M., Sospedra-Alfonso, R., Steinhoff, T., Sun, Q., Sutton, A. J., Séférian, R., Takao, S., Tatebe, H., Tian, H., Tilbrook, B., Torres, O., Tourigny, E., Tsujino, H., Tubiello, F., van der Werf, G., Wanninkhof, R., Wang, X., Yang, D., Yang, X., Yu, Z., Yuan, W., Yue, X., Zaehle, S., Zeng, N., and Zeng, J.: Global Carbon Budget 2024, *Earth Syst. Sci. Data*, 17, 965–1039, <https://doi.org/10.5194/essd-17-965-2025>, 2025.
4. **Monacci, N. M.**, Cross, J. N., Evans, W., Mathis, J. T., and Wang, H.: A decade of marine inorganic carbon chemistry observations in the northern Gulf of Alaska – insights into an environment in transition, *Earth Syst. Sci. Data*, 16, 647–665, <https://doi.org/10.5194/essd-16-647-2024>, 2024.
5. Sharp, J.D., Jiang, L.Q., Carter, B.R., Lavin, P.D., Yoo, H., and Cross, S.L. A mapped dataset of surface ocean acidification indicators in large marine ecosystems of the United States. *Sci Data* 11, 715 (2024). <https://doi.org/10.1038/s41597-024-03530-7>
6. Jiang, L.-Q., Boyer, T. P., Paver, C. R., Yoo, H., Reagan, J. R., Alin, S. R., Barbero, L., Carter, B. R., Feely, R. A., and Wanninkhof, R.: Climatological distribution of ocean acidification variables along the North American ocean margins, *Earth Syst. Sci. Data*, 16, 3383–3390, <https://doi.org/10.5194/essd-16-3383-2024>, 2024.
7. Duke, P. J., Hamme, R. C., Ianson, D., Landschützer, P., Swart, N. C., & Covert, P. A. (2024). High-resolution neural network demonstrates strong CO₂ source-sink juxtaposition in the coastal zone. *Journal of Geophysical Research: Oceans*, 129, e2024JC021134. <https://doi.org/10.1029/2024JC021134>.
8. Bakker, Dorothee C. E.; Alin, Simone R.; Bates, Nicholas; Becker, Meike; Gkritzalis,

- Thanos; Jones, Steve D.; Kozyr, Alex; Lauvset, Siv K.; Metzl, Nicolas; Nakaoka, Shin-ichiro; O'Brien, Kevin M.; Olsen, Are; Pierrot, Denis; Steinhoff, Tobias; Sutton, Adrienne J.; Takao, Shintaro; Tilbrook, Bronte; Wada, Chisato; Wanninkhof, Rik; Akl, John; Arbilla, Lisandro A.; Arruda, Ricardo; Azetsu-Scott, Kumiko; Barbero, Leticia; Beatty, Cory M.; Berghoff, Carla F.; Bittig, Henry C.; Burger, Eugene F.; Campbell, Katie; Cardin, Vanessa; Collins, Andrew; Coppola, Laurent; Cronin, Margot; Cross, Jessica N.; Currie, Kim I.; Emerson, Steven R.; Enright, Matt P.; Enyo, Kazutaka; Evans, Wiley; Feely, Richard A.; Flohr, Anita; Gehrung, Martina; Glockzin, Michael; González-Dávila, Melchor; Hamnca, Siyabulela; Hartman, Sue; Howden, Stephan D.; Kam, Kitty; Kamb, Linus; Körtzinger, Arne; Kosugi, Naohiro; Lefèvre, Nathalie; Lo Monaco, Claire; Macovei, Vlad A.; Maenner Jones, Stacy; Manalang, Dana; Martz, Todd R.; Mdokwana, Baxolele; **Monacci, Natalie M.**; Monteiro, Pedro M. S.; Mordy, Calvin; Morell, Julio M.; Murata, Akihiko; Neill, Craig; Noh, Jae-Hoon; Nojiri, Yukihiro; Ohman, Mark; Olivier, Léa; Ono, Tsuneo; Petersen, Wilhelm; Plueddemann, Albert J.; Prytherch, John; Rehder, Gregor; Rutgersson, Anna; Santana-Casiano, J. Magdalena; Schlitzer, Reiner; Send, Uwe; Skjelvan, Ingunn; Sullivan, Kevin F.; T'Jampens, Michiel; Tadokoro, Kazuaki; Telszewski, Maciej; Theetaert, Hannelore; Tsanwani, Mutshutshu; Vandemark, Douglas; van Ooijen, Erik; Veccia, Martín H.; Voynova, Yoana G.; Wang, Hongjie; Weller, Robert A.; Woosley, Ryan J. (2024). Surface Ocean CO2 Atlas Database Version 2024 (SOCATv2024) (NCEI Accession 0293257). NOAA National Centers for Environmental Information. Dataset. <https://doi.org/10.25921/9wpn-th28>.
9. Hauri, C., Irving, B., Dupont, S., Pagés, R., Hauser, D. D. W., and Danielson, S. L.: Insights into carbonate environmental conditions in the Chukchi Sea, *Biogeosciences*, 21, 1135–1159, <https://doi.org/10.5194/bg-21-1135-2024>, 2024.
 10. Hauri, C., Pagès, R., Hedstrom, K., Doney, S. C., Dupont, S., Ferriss, B., & Stuecker, M. F. (2024). More than marine heatwaves: A new regime of heat, acidity, and low oxygen compound extreme events in the Gulf of Alaska. *AGU Advances*, 5, e2023AV001039. <https://doi.org/10.1029/2023AV001039>
 11. P.J. Duke, B. Richaud, R. Arruda, J. Länger, K. Schuler, P. Gooya, M.M.M. Ahmed, M.R. Miller, C.A. Braybrook, K. Kam, R. Piuino, Y. Sezginer, G. Nickoloff, and A.C. Franco. 2023. Canada's marine carbon sink: an early career perspective on the state of research and existing knowledge gaps. *FACETS*. 8(0): 1-21. <https://doi.org/10.1139/facets-2022-0214>
 12. Friedlingstein, P., O'Sullivan, M., Jones, M. W., Andrew, R. M., Bakker, D. C. E., Hauck, J., Landschützer, P., Le Quéré, C., Luijkx, I. T., Peters, G. P., Peters, W., Pongratz, J., Schwingshackl, C., Sitch, S., Canadell, J. G., Ciais, P., Jackson, R. B., Alin, S. R., Anthoni, P., Barbero, L., Bates, N. R., Becker, M., Bellouin, N., Decharme, B., Bopp, L., Brasika, I. B. M., Cadule, P., Chamberlain, M. A., Chandra, N., Chau, T.-T.-T., Chevallier, F., Chini, L. P., Cronin, M., Dou, X., Enyo, K., Evans, W., Falk, S., Feely, R. A., Feng, L., Ford, D. J., Gasser, T., Ghattas, J., Gkritzalis, T., Grassi, G., Gregor, L., Gruber, N., Gürses, Ö., Harris, I., Hefner, M., Heinke, J., Houghton, R. A., Hurtt, G. C., Iida, Y., Ilyina, T., Jacobson, A. R., Jain, A., Jarníková, T., Jersild, A., Jiang, F., Jin, Z., Joos, F., Kato, E., Keeling, R. F., Kennedy, D., Klein Goldewijk, K., Knauer, J., Korsbakken, J. I., Körtzinger, A., Lan, X., Lefèvre, N., Li, H., Liu, J., Liu, Z., Ma, L., Marland, G., Mayot, N., McGuire, P. C., McKinley, G. A., Meyer, G., Morgan, E. J., Munro, D. R., Nakaoka, S.-I., Niwa, Y., O'Brien, K. M., Olsen, A., Omar, A. M., Ono, T., Paulsen, M., Pierrot, D., Pocock, K., Poulter, B., Powis, C. M., Rehder, G., Resplandy, L., Robertson, E., Rödenbeck, C., Rosan, T. M., Schwinger, J., Séférian, R., Smallman, T. L., Smith, S. M., Sospedra-Alfonso, R., Sun, Q.,

- Sutton, A. J., Sweeney, C., Takao, S., Tans, P. P., Tian, H., Tilbrook, B., Tsujino, H., Tubiello, F., van der Werf, G. R., van Ooijen, E., Wanninkhof, R., Watanabe, M., Wimart-Rousseau, C., Yang, D., Yang, X., Yuan, W., Yue, X., Zaehle, S., Zeng, J., and Zheng, B.: Global Carbon Budget 2023, *Earth Syst. Sci. Data*, 15, 5301–5369, <https://doi.org/10.5194/essd-15-5301-2023>, 2023.
13. Wang, H., Pilcher, D. J., Kearney, K. A., Cross, J. N., Shugart, O. M., Eisaman, M. D., and Carter, B. R.: Simulated Impact of Ocean Alkalinity Enhancement on Atmospheric CO₂ Removal in the Bering Sea, *Earth's Future*, <https://doi.org/10.1029/2022EF002816>, 2023.
 14. Friedlingstein, P., O'Sullivan, M., Jones, M. W., Andrew, R. M., Gregor, L., Hauck, J., Le Quéré, C., Luijkx, I. T., Olsen, A., Peters, G. P., Peters, W., Pongratz, J., Schwingshackl, C., Sitch, S., Canadell, J. G., Ciais, P., Jackson, R. B., Alin, S. R., Alkama, R., Arneth, A., Arora, V. K., Bates, N. R., Becker, M., Bellouin, N., Bittig, H. C., Bopp, L., Chevallier, F., Chini, L. P., Cronin, M., Evans, W., Falk, S., Feely, R. A., Gasser, T., Gehlen, M., Gkritzalis, T., Gloege, L., Grassi, G., Gruber, N., Gürses, Ö., Harris, I., Hefner, M., Houghton, R. A., Hurtt, G. C., Iida, Y., Ilyina, T., Jain, A. K., Jersild, A., Kadono, K., Kato, E., Kennedy, D., Klein Goldewijk, K., Knauer, J., Korsbakken, J. I., Landschützer, P., Lefèvre, N., Lindsay, K., Liu, J., Liu, Z., Marland, G., Mayot, N., McGrath, M. J., Metzl, N., **Monacci, N. M.**, Munro, D. R., Nakaoka, S.-I., Niwa, Y., O'Brien, K., Ono, T., Palmer, P. I., Pan, N., Pierrot, D., Pocock, K., Poulter, B., Resplandy, L., Robertson, E., Rödenbeck, C., Rodriguez, C., Rosan, T. M., Schwinger, J., Séférian, R., Shutler, J. D., Skjelvan, I., Steinhoff, T., Sun, Q., Sutton, A. J., Sweeney, C., Takao, S., Tanhua, T., Tans, P. P., Tian, X., Tian, H., Tilbrook, B., Tsujino, H., Tubiello, F., van der Werf, G. R., Walker, A. P., Wanninkhof, R., Whitehead, C., Willstrand Wranne, A., Wright, R., Yuan, W., Yue, C., Yue, X., Zaehle, S., Zeng, J., and Zheng, B.: Global Carbon Budget 2022, *Earth Syst. Sci. Data*, 14, 4811–4900, <https://doi.org/10.5194/essd-14-4811-2022>, 2022.
 15. Pilcher, D. J., Cross, J. N., Hermann, A. J., Kearney, K. A., Cheng, W., and Mathis, J. T.: Dynamically downscaled projections of ocean acidification for the Bering Sea, *Deep Sea Research Part II: Topical Studies in Oceanography*, <https://doi.org/10.1016/j.dsr2.2022.105055>, 2022.
 16. Wang, H., Lin, P., Pickart, R. S., Cross, J. N., 2022. Summer surface CO₂ dynamics on the Bering Sea and eastern Chukchi Sea shelves from 1989 to 2019. *Journal of Geophysical Research: Oceans*, 127, e2021JC017424. <https://doi.org/10.1029/2021JC017424>
 17. Hauri, C., Pagès, R., McDonnell, A. M. P. et al., 2021. Modulation of ocean acidification by decadal climate variability in the Gulf of Alaska. *Commun Earth Environ* 2, 191, <https://doi.org/10.1038/s43247-021-00254-z>
 18. Torres, O., Kwiatkowski, L., Sutton, A. J., Dorey, N., & Orr, J. C., 2021. Characterizing mean and extreme diurnal variability of ocean CO₂ system variables across marine environments. *Geophysical Research Letters*, 48, <https://doi.org/10.1029/2020GL090228>
 19. Jiang, L.-Q., Feely, R. A., Wanninkhof, R., Greeley, D., Barbero, L., Alin, S., Carter, B. R., Pierrot, D., Featherstone, C., Hooper, J., Melrose, C., **Monacci, N.**, Sharp, J., Shellito, S., Xu, Y.-Y., Kozyr, A., Byrne, R. H., Cai, W.-J., Cross, J., Johnson, G. C., Hales, B., Langdon, C., Mathis, J., Salisbury, J., and Townsend, D. W., 2021. Coastal Ocean Data Analysis Product in North America (CODAP-NA) – An internally consistent data product for discrete inorganic carbon, oxygen, and nutrients on the U.S. North American ocean margins, *Earth System Science Data Discussion*, <https://doi.org/10.5194/essd-13-2777-2021>

20. Hurst, T.P., Copeman, L.A., Andrade, J.F. et al., 2021. Expanding evaluation of ocean acidification responses in a marine gadid: elevated CO₂ impacts development, but not size of larval walleye pollock. *Mar Biol* 168, 119, <https://doi.org/10.1007/s00227-021-03924-w>
21. Wei-Jun Cai, Richard A. Feely, Jeremy M. Testa, Ming Li, Wiley Evans, Simone R. Alin, Yuan-Yuan Xu, Greg Pelletier, Anise Ahmed, Dana J. Greeley, Jan A. Newton, Nina Bednaršek, 2021. Natural and Anthropogenic Drivers of Acidification in Large Estuaries. *Annual Review of Marine Science*, 13:1, 23-55. <https://doi.org/10.1146/annurev-marine-010419-011004>
22. Bakker, D.C.E., et al. (>100 coauthors including **N. Monacci**). Surface Ocean CO₂ Atlas Database Version 2020 (SOCATv2020) (NCEI Accession 0210711). NOAA National Centers for Environmental Information. Dataset. <https://doi.org/10.25921/4xkx-ss49>, 2020.
23. Cai, WJ., Xu, YY., Feely, R.A. et al., 2020. Controls on surface water carbonate chemistry along North American ocean margins. *Nature Communications* 11, 2691, <https://doi.org/10.1038/s41467-020-16530-z>
24. Hauri, C., Schultz, C., Hedstrom, K., Danielson, S., Irving, B., Doney, S. C., Dussin, R., Curchitser, E. N., Hill, D. F., and Stock, C. A., 2020. A regional hindcast model simulating ecosystem dynamics, inorganic carbon chemistry, and ocean acidification in the Gulf of Alaska, *Biogeosciences*, 17, 3837–3857, <https://doi.org/10.5194/bg-17-3837-2020>
25. Cross, J.N., J. Turner, S.R. Cooley, J. Newton, K. Azetsu-Scott, C. Chambers, D. Dugan, K. Goldsmith, H. Gurney-Smith, A. Harper, E.J. Jewett, D. Joy, T. King, T. Klinger, M. Kurz, J. Morrison, J. Motyka, E. Ombres, G. Saba, E. Silva, E. Smits, J. Vreeland-Dawson, and L. Wickes, 2019. The knowledge-to-action pipeline: Connecting ocean acidification research and actionable decision support. *Front. Mar. Sci.*, 6, 356, *Oceanobs19: An Ocean of Opportunity*, <https://doi.org/10.3389/fmars.2019.00356>
26. Sutton, A. J., Feely, R. A., Maenner-Jones, S., Musielwicz, S., Osborne, J., Dietrich, C., Monacci, N., Cross, J., Bott, R., Kozyr, A., Andersson, A. J., Bates, N. R., Cai, W.-J., Cronin, M. F., De Carlo, E. H., Hales, B., Howden, S. D., Lee, C. M., Manzello, D. P., McPhaden, M. J., Meléndez, M., Mickett, J. B., Newton, J. A., Noakes, S. E., Noh, J. H., Olafsdottir, S. R., Salisbury, J. E., Send, U., Trull, T. W., Vandemark, D. C., and Weller, R. A.: Autonomous seawater *p*CO₂ and pH time series from 40 surface buoys and the emergence of anthropogenic trends, *Earth Syst. Sci. Data*, 11, 421–439, <https://doi.org/10.5194/essd-11-421-2019>, 2019.
27. Pilcher, D.J., D.M. Naiman, J.N. Cross, A.J. Hermann, S.A. Siedlecki, G.A. Gibson, and J.T. Mathis, 2019. Modeled effect of coastal biogeochemical processes, climate variability, and ocean acidification on aragonite saturation state in the Bering Sea. *Front. Mar. Sci.*, 5, 508, <https://doi.org/10.3389/fmars.2018.00508>
28. Andrade, J.F., Hurst, T.P., Miller, J.A., 2018. Behavioral responses of a coastal flatfish to predation-associated cues and elevated CO₂. *Journal of Sea Research*, 140, 11-21. <https://doi.org/10.1016/j.seares.2018.06.013>
29. Cross, JN, Mathis, JT, Pickart, RS, and Bates, NR, 2017. Formation and transport of corrosive water in the Pacific Arctic region. *Deep-Sea Res. II*, 152, 67-81. <https://doi.org/10.1016/j.dsr2.2018.05.020>
30. Talley, L.D., R.A. Feely, B.M. Sloyan, R. Wanninkhof, M.O. Baringer, J.L. Bullister, C.A. Carlson, S.C. Doney, R.A. Fine, E. Firing, N. Gruber, D.A. Hansell, M. Ishii, G.C. Johnson, K. Katsumata, R.M. Key, M. Kramp, C. Langdon, A.M. Macdonald, J.T. Mathis, E.L. McDonagh, S. Mecking, F.J. Millero, C.W. Mordy, T. Nakano, C.L. Sabine, W.M. Smethie,

- J.H. Swift, T. Tanhua, A.M. Thurnherr, M.J. Warner, and J.-Z. Zhang, 2016. Changes in ocean heat, carbon content, and ventilation: A review of the first decade of GO-SHIP global repeat hydrography. *Annu. Rev. Mar. Sci.*, 8(1), 185–215, <https://doi.org/10.1146/annurev-marine-052915-100829>
31. Strong, A.L., K.E. Lowry, Z.W. Brown, M.M. Mills, G.L. van Dijken, R.S. Pickart, L.W. Cooper, K.E. Frey, R. Benner, C.G. Ficht, J.T. Mathis, N.R. Bates, and K.R. Arrigo, 2016. Mass balance estimates of carbon export along flow paths of the Chukchi Sea shelf. *Deep-Sea Res. II*, 130, 88–99, <https://doi.org/10.1016/j.dsr2.2016.05.003>
 32. Reum, J.C.P., S.R. Alin, C.J. Harvey, N. Bednaršek, W. Evans, R.A. Feely, B. Hales, N. Lucey, J.T. Mathis, P. McElhany, J. Newton, and C.L. Sabine, 2016. Interpretation and design of ocean acidification experiments in upwelling systems in the context of carbonate chemistry co-variation with temperature and oxygen. *ICES J. Mar. Sci.*, 73, 582–595, <https://doi.org/10.1093/icesjms/fsu231>
 33. Oxtoby, L.E., J.T. Mathis, L.W. Juranek, and M.J. Wooller, 2016. Estimating stable carbon isotope values of microphytobenthos in the Arctic for application to food web studies. *Polar Biol.*, <https://doi.org/10.1007/s00300-015-1800-2>
 34. Feely, R.A., R. Wanninkhof, B.R. Carter, J.N. Cross, J.T. Mathis, C.L. Sabine, C.E. Cosca, and J.A. Tirnanes, 2016. Global ocean carbon cycle. In *State of the Climate in 2015*, Global Oceans. *Bull. Am. Meteorol. Soc.*, 97(8), S89–S92, Full report published at AMS online.
 35. Hurst, T.P., B.J. Laurel, J.T. Mathis, and L.R. Tabosa (2016): Effects of elevated CO₂ levels on eggs and larvae of a North Pacific flatfish. *ICES J. Mar. Sci.*, 73, 981–990, <https://doi.org/10.1093/icesjms/fsv050>
 36. Benway, H., S. Alin, E. Boyer, W.-J. Cai, P. Coble, J. Cross, M. Friedrichs, M. Goñi, P. Griffith, M. Herrmann, S. Lohrenz, J. Mathis, G. McKinley, R. Najjar, C. Pilskaln, S. Siedlecki, and R. Smith, 2016. A Science Plan for Carbon Cycle Research in North American Coastal Waters. In *Report of the Coastal CARbon Synthesis (CCARS) community workshop*, Ocean Carbon and Biogeochemistry Program and North American Carbon Program, 19–21 August 2014, 84 pp, <https://hdl.handle.net/1912/7777>
 37. Bakker, D. C. E., Pfeil, B., Landa, C. S., Metzl, N., O'Brien, K. M., Olsen, A., Smith, K., Cosca, C., Harasawa, S., Jones, S. D., Nakaoka, S., Nojiri, Y., Schuster, U., Steinhoff, T., Sweeney, C., Takahashi, T., Tilbrook, B., Wada, C., Wanninkhof, R., Alin, S. R., Balestrini, C. F., Barbero, L., Bates, N. R., Bianchi, A. A., Bonou, F., Boutin, J., Bozec, Y., Burger, E. F., Cai, W.-J., Castle, R. D., Chen, L., Chierici, M., Currie, K., Evans, W., Featherstone, C., Feely, R. A., Fransson, A., Goyet, C., Greenwood, N., Gregor, L., Hankin, S., Hardman-Mountford, N. J., Harlay, J., Hauck, J., Hoppema, M., Humphreys, M. P., Hunt, C. W., Huss, B., Ibáñez, J. S. P., Johannessen, T., Keeling, R., Kitidis, V., Körtzinger, A., Kozyr, A., Krasakopoulou, E., Kuwata, A., Landschützer, P., Lauvset, S. K., Lefèvre, N., Lo Monaco, C., Manke, A., Mathis, J. T., Merlivat, L., Millero, F. J., Monteiro, P. M. S., Munro, D. R., Murata, A., Newberger, T., Omar, A. M., Ono, T., Paterson, K., Pearce, D., Pierrot, D., Robbins, L. L., Saito, S., Salisbury, J., Schlitzer, R., Schneider, B., Schweitzer, R., Sieger, R., Skjelvan, I., Sullivan, K. F., Sutherland, S. C., Sutton, A. J., Tadokoro, K., Telszewski, M., Tuma, M., van Heuven, S. M. A. C., Vandemark, D., Ward, B., Watson, A. J., and Xu, S.: A multi-decade record of high-quality *f*CO₂ data in version 3 of the Surface Ocean CO₂ Atlas (SOCAT), *Earth Syst. Sci. Data*, 8, 383–413, <https://doi.org/10.5194/essd-8-383-2016>, 2016.
 38. Itoh, M., Pickart, R.S., Kikuchi, T., Fukamachi, Y., Ohshima, K.I., Simizu, D., Arrigo, K.R.,

- Vagle, S., He, J., Ashijan, C., Mathis, J.T., Nishino, S., Nobre, C., 2015. Water properties, heat and volume fluxes of Pacific water in Barrow Canyon during summer 2010. Deep Sea Research Part I: Oceanographic Research Papers. <http://dx.doi.org/10.1016/j.dsr.2015.04.004>
39. Liu, X., Byrne, R.H., Lindemuth, M., Easley, R., Mathis, J.T., 2015. An Automated procedure for laboratory and shipboard spectrophotometric measurements of seawater alkalinity: Continuously monitored single-step acid additions. Marine Chemistry. <http://dx.doi.org/10.1016/j.marchem.2015.06.008>
 40. Reum, J. C. P., Alin, S. R., Harvey, C. J., Bednarsek, N., Evans, W., Feely, R. A., Hales, B., Lucey, N., Mathis, J.T., McElhany, P., Newton, J., and Sabine, C. L., 2015. Interpretation and design of ocean acidification experiments in upwelling systems in the context of carbonate chemistry co-variation with temperature and oxygen. – ICES Journal of Marine Science, doi: 10.1093/icesjms/fsu231
 41. Oxtoby, L.E., J.T. Mathis, L.W. Juranek, and M.J. Wooller, 2015. Estimating stable carbon isotope values of microphytobenthos in the arctic for application to food web studies. Polar Biology. doi:10.1007/s00300-015-1800-2
 42. Evans, W., Mathis, J.T., Cross, J.N., Bates, N.R., Frey, K.E., and Else, B.G.T., et al., 2015. Sea-air CO₂ exchange in the western Arctic coastal ocean. Global Biogeochemical Cycles. <https://doi.org/10.1002/2015GB005153>
 43. Mathis, J.T., and Cross, J.N., Evans, W., and Doney, S.C., 2015. Ocean acidification in the Pacific-Arctic Region. Oceanography Magazine. <https://doi.org/10.5670/oceanog.2015.36>
 44. Yates, K.K., Turley, C., Hopkinson, B., Todgham, A., Cross, J.N., Greening, H., Van Hooidek, R., Williamson, P., Deheyn, D., and Johnson, Z., 2015. Transdisciplinary science: a path to understanding the impacts of ocean acidification on ecosystems and society. Oceanography Magazine. <https://doi.org/10.5670/oceanog.2015.43>
 45. Hurst, T. P., Laurel, B.J., Mathis, J.T., Tobosa, L. R., 2015. Effects of elevated CO₂ levels on eggs and larvae of a North Pacific flatfish. ICES Journal of Marine Science. <https://doi.org/10.1093/icesjms/fsv050>
 46. Evans, W., Mathis, J.T., Ramsay, J., Hetrick, J., 2015. On the Frontline: Tracking Ocean Acidification in an Alaskan Shellfish Hatchery. PLOS One. <https://doi.org/10.1371/journal.pone.0130384>
 47. Frisch, L.C., Mathis, J.T., Kettle, N.P., Trainor, S.F., 2015. Gauging perceptions of ocean acidification in Alaska. Marine Policy. <https://doi.org/10.1016/j.marpol.2014.11.022>
 48. Reisdorph, S.C. and Mathis, J.T., 2015. Assessing net community production in a glaciated Alaska fjord. Biogeosciences Discuss. <https://doi.org/10.5194/bg-12-5185-2015>
 49. Mathis, J.T., Cooley, S.R., Lucey, N., Colt, S., Ekstrom, J., Hurst, T., Hauri, C., Evans, W., Cross, J.N., Feely, R.A., 2015. Ocean Acidification Risk Assessment for Alaska's Fishery Sector. Progress in Oceanography. <https://doi.org/10.1016/j.pocean.2014.07.001>
 50. Mathis, J.T., Cross, J.N., Evans, W., Anderson, L., Yamamoto-Kawai, M., 2014. Ocean Acidification in the Arctic. In State of the Climate in 2013, Blunden J. and Arndt, D.S, eds. The Arctic. Bull. Am. Meteorol. Soc.
 51. Bates, N.R., Garley, R., Frey, K.E., Shake, K.L., Mathis, J.T., 2014. Sea-ice melt CO₂-carbonate chemistry in the western Arctic Ocean: meltwater contributions to air-sea CO₂ gas exchange, mixed layer properties and rates of net community production under sea ice. Biogeosciences Discussions. <https://doi.org/10.5194/bg-11-6769-2014>
 52. Cross, J.N., Mathis, J.T., Frey, K., Cosca, C., Danielson, S.L., Bates, N.R., Feely, R.A., Takahashi, T., Evans, W., 2014. Annual sea-air CO₂ fluxes in the Bering Sea: Insights from

- new autumn and winter observations of a seasonally ice-covered continental shelf. *Journal of Geophysical Research*. <https://doi.org/10.1002/2013JC009579>
53. Mathis, J.T., Grebmeier, J.M., Hansell, D.A., Hopcroft, R.R., Kirchman, D.L., Lee, S.H., Moran, S.B., Bates, N.R., VanLaningham, S., Cross, J.N., Cai, W.J., (2014). Carbon Biogeochemistry of the Western Arctic: Primary Production, Carbon Export and the Controls on Ocean Acidification. In *The Pacific Arctic Region: Ecosystem Status and Trends in a Rapidly Changing Environment*, J.M. Grebmeier and W. Maslowski (eds.), Springer Science+Business Media, Dordrecht, 223-268.
 54. Cai, W.J., Bates, N.R., Guo, L., Anderson, L.G., Mathis, J.T., Wanninkhof, R., Chen, L., (2014). Carbon Fluxes Across Boundaries in the Pacific Sector of the Arctic Ocean in a Changing Environment. In *The Pacific Arctic Region: Ecosystem Status and Trends in a Rapidly Changing Environment*, J.M. Grebmeier and W. Maslowski (eds.), Springer Science+Business Media, Dordrecht, 178–222.
 55. Reisdorph, S.C. and Mathis, J.T., 2014. The dynamic controls on carbonate mineral saturation states and ocean acidification in a glacially dominated estuary. *Estuarine, Coastal and Shelf Science*, Vol.144, 8-18, <http://dx.doi.org/10.1016/j.ecss.2014.03.018>
 56. Cross, J.N., Mathis, J.T., Lomas, M.W., Moran, S.B., Baumann, M.S., Shull, D., Mordy, C.W., Ostendorf, M. L., Bates, N.R., Stabeno, P.J., Grebmeier, J. M., 2014. Integrated Assessment of the Carbon Budget in the Southeastern Bering Sea. *Deep Sea Research II: Topical Studies in Oceanography*, <http://dx.doi.org/10.1016/j.dsr2.2014.03.003>
 57. Arrigo, K.R. Perovich, D.K., Pickart, R.S., Brown, Z.W., Dijken, G.L.V. Lowry, K.E., Mills, M.M., Palmer, M.A., Balch, W.M., Bates, N.R., Benitez-Nelson, C.R., Brownlee, E., Frey, K.E., Laney, S.R., Mathis, J.T., Matsuoka, A., Mitchell, B.G., Moore, G.W.K., Reynolds, R.A., Sosik, H.M., Swift, J.H., 2014. Phytoplankton blooms beneath the sea ice in the Chukchi Sea, *Deep Sea Research Part II: Topical Studies in Oceanography*, ISSN 0967-0645, <http://dx.doi.org/10.1016/j.dsr2.2014.03.018>
 58. Bakker, D. C. E., et al. (>100 coauthors including N. Monacci), 2014. An update to the surface ocean CO₂ atlas (SOCAT version 2). *Earth Syst. Sci. Data*, 6, <https://doi.org/10.5194/essd-6-69-2014>
 59. Sutton, A.J., Feely, R.A., Sabine, C.L., McPhaden, M.J., Takahashi, T., Chavez, F.P., Friederich, G.E., Mathis, J.T., (2014). Natural variability and anthropogenic change in equatorial Pacific surface ocean pCO₂ and pH. *Global Biogeochem. Cycles*, 28, 131-145, <https://doi.org/10.1002/2013GB004679>
 60. Evans, W., Mathis, J.T., Cross, J.N., 2014. Calcium Carbonate Corrosivity in an Alaskan Inland Sea. *Biogeosciences*, 11, 1–15, <https://doi.org/10.5194/bg-11-365-2014>
 61. Mathis, J.T. and Feely, R.A., 2013. Building an Integrated Coastal Ocean Acidification Monitoring Network in the U.S. *Elementa: Science of the Anthropocene* 1: 000007, <https://doi.org/10.12952/journal.elementa.000007>
 62. Hauri, C., Winsor, P., Juranek, L., McDonnell, A.M.P., Takahashi, T., Mathis, J.T., 2013. Wind-driven mixing causes a reduction in the strength of the continental shelf carbon pump in the Chukchi Sea. *Geophysical Research Letters*, Vol. 40, 1-5, <https://doi.org/10.1002/2013GL058267>
 63. Mathis, J.T., Cross, J.N., Monacci, N., Stabeno, P., Feely, R.A., 2013. Evidence of prolonged aragonite undersaturations in the bottom waters of the southern Bering Sea shelf from autonomous sensors. *Deep Sea Research II*, <http://dx.doi.org/10.1016/j.dsr2.2013.07.019i>
 64. Feely, R.A., Wanninkhof, R., Sabine, C.L., Mathis, J.T., Takahashi, T., Khatiwala, S., Park,

- G.-H., 2013. [Global Oceans] Global ocean carbon cycle [in “State of the Climate in 2012”]. Bull. Amer. Meteor. Soc., 94 (8), S121-S123.
65. Mathis, J.T., Hauri, C., Cross, J.N., 2013. Arctic Ocean acidification [in “State of the Climate in 2012”]. Bull. Amer. Meteor. Soc., 94 (8), S121-S123.
 66. Bates, N.R., Orchowska, M.I., Garley, R., Mathis, J.T., 2013. Summertime calcium carbonate undersaturation in shelf waters of the western Arctic Ocean – how biological processes exacerbate the impact of ocean acidification. Biogeosciences, 10, 1-29. <https://doi.org/10.5194/bg-10-5281-2013>
 67. Hurst, T.P., Fernandez, E.R., and Mathis, J.T., 2013. Effects of ocean acidification on hatch size and larval growth of walleye pollock (*Theragra chalcogramma*). ICES J. Mar. Sci., 70(4), <https://doi.org/10.1093/icesjms/fst053>
 68. Evans, W. and Mathis, J.T., 2013. The Gulf of Alaska coastal ocean as an atmospheric CO₂ sink. Cont. Shelf Res., 65, <https://doi.org/10.1016/j.csr.2013.06.013>
 69. Day, R.H., Weingartner, T.J., Hopcroft, R.R., Aerts, L.A., Blanchard, A.L., Gall, A.E., Gallaway, B.J., Hannay, D.E., Holladay, B.A., Mathis, J.T., Norcross, B.L., Questel, J.M., Wisdom, S.S., 2013. The offshore northeastern Chukchi Sea, Alaska: a complex high-latitude ecosystem. Cont. Shelf Res., <https://doi.org/10.1016/j.csr.2013.02.002>
 70. Mathis, J.T. and Questel, J.M., 2013. Assessing seasonal changes in carbonate parameters across small spatial gradients in the Northeastern Chukchi Sea, Continental Shelf Research, 67, 42-51, <https://doi.org/10.1016/j.csr.2013.04.041>
 71. Cross, J.N., Mathis, J.T., Bates, N.R., Byrne, R.H., 2013. Conservative and non-conservative variations of total alkalinity on the Southeastern Bering Sea Shelf. Marine Chemistry, Vol. 154, 100-112. <http://dx.doi.org/10.1016/j.marchem.2013.05.012>.
 72. Pickart, R.S., Spall, M.A., Mathis, J.T., 2013. Dynamics of Upwelling in the Alaskan Beaufort Sea and Associated Shelf-Basin Fluxes. Deep Sea Research Part 1: Oceanographic Research Papers, Vol. 76, Pgs. 35-51. <https://doi.org/10.1016/j.dsr.2013.01.007>
 73. Cooley, S.R., and Mathis, J.T., (2013). Addressing ocean acidification as part of sustainable ocean development. In Ocean Yearbook, Volume 27, A. Chircop, S. Coffen-Smout, M. McConnell (ed.), Martinus Nijhoff Publishers, Boston, 29-47.
 74. Evans, W., Mathis, J.T., Winsor, P., Whitledge, T., Statscewich, H., 2013. A regression modeling approach for studying carbonate saturation states on the northern Gulf of Alaska shelf. Journal of Geophysical Research: Oceans, Vol. 118, 1–14, <https://doi.org/10.1029/2012JC008246>
 75. Schuster, U., McKinley, G.A., Bates, N.R., Chevallier, F., Doney, S., Fay, A., González-Dávila, M., Gruber, N., Jones, S., Krijnen, J., Landschützer, P., Lefèvre, N., Manizza, M., Mathis, J.T., Metzl, N., Olsen, A., Rios, A., Santana-Casiano, J.M., Takahashi, T., Wanninkhof, R., Watson, A.J., 2013. An Assessment of the Atlantic and Arctic Sea-Air CO₂ Fluxes, 1990-2009. Biogeosciences, 10, 607-627, <https://doi.org/10.5194/bg-10-607-2013>
 76. Bates, N. R., Orchowska, M. I., Garley, R., and Mathis, J. T., 2013. Summertime calcium carbonate undersaturation in shelf waters of the western Arctic Ocean – how biological processes exacerbate the impact of ocean acidification, Biogeosciences, 10, 5281–5309, <https://doi.org/10.5194/bg-10-5281-2013>
 77. Easley, R.A., Patsavas, M.C., Byrne, R.H., Liu, X., Feely, R.A. Mathis, J.T., 2012. Spectrophotometric measurement of calcium carbonate saturation states in seawater. Environ. Sci. Tech., <https://doi.org/10.1021/es303631g>
 78. Cooley, S., Mathis, J.T., Yates, K., Turley, C., 2012. Frequently Asked Questions about

Ocean Acidification. US Ocean Carbon and Biogeochemistry Program and the UK Ocean Acidification Research Programme. Version 2, 24 September 2012, www.who.edu/OCB-OA/FAQs.

79. Hurst, T., Fernandez, E., Mathis, J.T., Miller, J.A., Stinson, C.M., Ahgeak, E.F., 2012. Resiliency of Juvenile Walleye Pollock to Projected Levels of Ocean Acidification. *Aquatic Biology*, VOL. 17: 247-259, <https://doi.org/10.3354/ab00483>
80. Arrigo, K.R., Perovich, D.K., Pickart, R.S., Brown, Z.W., Dijken, G.L., Lowry, K.E., Mills, M.M., Palmer, M.A., Balch, W.M., Bahr, F., Bates, N.R., Benitez-Nelson, C., Bowler, B., Brownlee, E., Ehn, J. K., Frey, K.E., Garley, R., Laney, S.R., Lubelczyk, L., Mathis, J.T., Atsushi, A., Mitchell, B.G., Kent Moore, G.W., Ortega-Retuerta, E., Pal, S., Polashenski, C.M., Reynolds, R.A., Scheiber, B., Sosik, H.M., Stephens, M., Swift, J.H., 2012. Massive Phytoplankton Blooms Under Arctic Sea Ice. *Science*, Vol. 336, <https://doi.org/10.1126/science.1215065>
81. Mathis, J.T., Byrne, R.H., McNeil, C.L., Pickart, R.P., Juranek, L., Liu, S., Ma, J., Easley, R.A., Elliot, M.W., Cross, J.N., Reisdorph, S. C., Morison, J., Lichendorph, T., Feely, R.A., 2012. Storm-Induced Upwelling of High pCO₂ Waters onto the Continental Shelf of the Western Arctic Ocean and Implications for Carbonate Mineral Saturation States. *Geophys. Res. Lett.* Vol. 39, L07606, <https://doi.org/10.1029/2012GL051574>
82. Lomas, M.W., Moran, S.B., Casey, J.R., Bell, D.W., Tiahlo, M., Whitefield, J., Kelly, R.P., Mathis, J.T., Cokelet, E.D., 2012. Spatial and seasonal variability of primary production in the Eastern Bering Sea shelf. *Deep Sea Research II*, <https://doi.org/10.1016/j.dsr2.2012.02.010>
83. Moran, S.B., Lomas, M.L., Kelly, R.P., Iken, K., Gradinger, R., Mathis, J.T., and Propenko, M., 2012. Sea-ice control of lower trophic carbon partitioning in the eastern Bering Sea. *Deep Sea Research II*, <https://doi.org/10.1016/j.dsr2.2012.02.011>
84. Cross, J. N., Mathis, J.T., Bates, N.R., 2012. Hydrographic Controls on Net Community Production and Total Organic Carbon Distributions in the Eastern Bering Sea. *Deep Sea Research II*, <https://doi.org/10.1016/j.dsr2.2012.02.003>
85. Mathis, J.T., 2012. The Arctic, Ocean acidification [in “State of the Climate in 2011”]. *Bull. Amer. Meteor. Soc.*, 93 (7), S145–S147.
86. Mathis, J.T., 2011. The Extent and Controls on Ocean Acidification the Western Arctic Ocean and Adjacent Continental Shelf Seas [in Arctic Report Card 2011], <http://www.arctic.noaa.gov/reportcard>
87. Mathis, J.T., Cross, J.N., Bates, N.R., 2011. The Role of Ocean Acidification in Systemic Carbonate Mineral Suppression in the Bering Sea. *Geophys. Res. Lett.*, 38, L19602, <https://doi.org/10.1029/2011GL048884>
88. Bates, N.R., Cai, W-J., Mathis, J.T., 2011. The Ocean Carbon Cycle in the Western Arctic Ocean: Distributions and Air-Sea Fluxes of Carbon Dioxide. *Oceanography* 24(3):186–201, <https://doi.org/10.5670/oceanog.2011.71>
89. Bates, N.R., Mathis, J.T., Jefferies, M.A., 2011. Air-Sea CO₂ fluxes on the Bering Sea Shelf. *Biogeosciences*, 8, 1237-1253, <https://doi.org/10.5194/bg-8-1237-2011>
90. Mathis, J.T., Cross, J.N., Bates, N.R., 2011. Coupling Primary Production and Terrestrial Runoff to Ocean Acidification and Carbonate Mineral Suppression in the Eastern Bering Sea. *J. Geophys. Res.*, 116, C02030, <https://doi.org/10.1029/2010JC006453>
91. Mathis, J.T., Cross, J.N., Bates, N.R., Lomas, M.L., Moran, S.B., Mordy, C.W., Stabeno, P., 2010. Seasonal Distribution of Dissolved Inorganic Carbon and Net Community Production

- on the Bering Sea Shelf. *Biogeosciences*, 7, 1769–1787, <https://doi.org/10.5194/bg-7-1769-2010>
92. Fabry, V.J., McClintock, J.B., Mathis, J.T., Grebmeier, J.M., 2009. Ocean Acidification at High Latitudes: The Bellwether. *Oceanography*, 22, 4, <https://doi.org/10.5670/oceanog.2009.105>
 93. Bates, N. R. and Mathis, J. T., 2009. The Arctic Ocean marine carbon cycle: evaluation of air-sea CO₂ exchanges, ocean acidification impacts and potential feedbacks. *Biogeosciences*, 6, 2433–2459, <https://doi.org/10.5194/bg-6-2433-2009>
 94. Bates, N. R., Mathis, J. T., L. Cooper, W., 2009. Ocean acidification and biologically induced seasonality of carbonate mineral saturation states in the western Arctic Ocean, *J. Geophys. Res.*, 114, C11007, <https://doi.org/10.1029/2008JC004862>
 95. Llinas, L., Pickart, R.S., Mathis, J.T., Smith, S.L., 2008. Zooplankton inside an Arctic Ocean cold-core eddy: Probable origin and date. *Deep Sea Research II*, <https://doi.org/10.1016/j.dsr2.2008.10.020>
 96. Mathis, J.T., Bates, N.R., Hansell, D.A., Babila, T., 2008. Interannual Variability of Net Community Production Over the Northeast Chukchi Sea Shelf. *Deep Sea Research II*, <https://doi.org/10.1016/j.dsr2.2008.10.017>
 97. Kadko, D., Pickart, R.S., Mathis, J.T., 2008. Age Characteristics of a Shelf-Break Eddy in the Western Arctic and Implications for Shelf-Basin Exchange. *Journal of Geophysical Research*, 113, C02018, <https://doi.org/10.1029/2007JC004429>
 98. Mathis, J.T., Hansell, D.A. Kadko, D., Bates, N.R., Cooper, L.W., 2007. Determining net dissolved organic carbon production in the hydrographically complex western Arctic Ocean. *Limnol. Oceanogr.*, 52(5), 1789–1799, <http://dx.doi.org/10.2307/4502335>
 99. Mathis, J.T., Pickart, R.S., Hansell, D.A., Kadko, D., Bates, N.R., 2007. Eddy transport of organic carbon and nutrients from the Chukchi Shelf: Impact on the upper halocline of the western Arctic Ocean. *J. of Geophys. Res.* 112, C05011, <https://doi.org/10.1029/2006JC003899>
 100. Lepore, K., Moran, S.B., Grebmeier, J. M., Cooper, L.W., Lalande, C., Maslowski, W., Hill, V., Bates, N.R., Hansell, D.A., Mathis, J.T., Kelly, R.P., 2006. Seasonal and interannual changes in POC export and deposition in the Chukchi Sea. *Journal of Geophysical Research, Oceans*, 112, C10024, <https://doi.org/10.1029/2006JC003555>
 101. Bates, N.R., Moran, S.B., Hansell, D.A., Mathis, J.M., 2006. An increasing CO₂ sink in the Arctic Ocean due to sea-ice loss? *Geophys. Res. Letters*, 33, L23609, <https://doi.org/10.1029/2006GL027028>
 102. Mathis, J.T., Hansell, D.A., Bates, N.R., 2005. Strong hydrographic controls on spatial and seasonal variability of dissolved organic carbon in the Chukchi Sea (*Deep-Sea Research II*, 52, 3245-3258, <https://doi.org/10.1016/j.dsr2.2005.10.002>