

STEPHEN RICH RINTOUL: PUBLICATIONS

PhD Thesis:

1. **Rintoul, S. R.**, 1988: Mass, heat and nutrient fluxes in the Atlantic ocean determined by inverse methods. Woods Hole Oceanographic Institution – Massachusetts Institute of Technology Joint Program in Oceanography, USA. Supervisor: Professor Carl Wunsch.

Edited volumes:

2. Khare, N., R. Ravindra and **S. R. Rintoul** (co-editors), 2008. Special Issue on Antarctica and Southern Ocean : Geoscientific and Biological Studies, Indian Journal of Marine Science, 37.

Refereed publications:

3. Silvano, A., **S. R. Rintoul**, B. Peña-Molino and G. D. Williams, 2017. Distribution of water masses and glacial meltwater on the continental shelf near the Totten Glacier. *Journal of Geophysical Research – Oceans*, 122, doi:10.1002/2016JC012115.
4. Kennicutt, M.C., Kim, Y.D., Rogan-Finnemore, M., Anandakrishnan, S., Chown, S.L., Colwell, S., Cowan, D., Escutia, C., Frenot, Y., Hall, J., Liggett, D., McDonald, A.J., Nixdorf, U., Siegert, M.J., Storey, J., Wählin, A., Weatherwax, A., Wilson, G.S., Wilson, T., Wooding, R., Ackley, S., Biebow, N., Blankenship, D., Bo, S., Baeseman, J., Cárdenas, C.A., Cassano, J., Danhong, C., Dañobeitia, J., Francis, J., Guldahl, J., Hashida, G., Corbalán, L.J., Klepikov, A., Lee, J., Leppe, M., Lijun, F., López-Martinez, J., Memolli, M., Motoyoshi, Y., Bueno, R.M., Negrete, J., Cárdenas, M.A.O., Silva, M.P., Ramos-Garcia, S., Sala, H., Shin, H., Shijie, X., Shiraishi, K., Stockings, T., Trotter, S., Vaughan, D.G., De Menezes, J.V.D.U., Vlasich, V., Weijia, Q., Winther, J.-G., Miller, H., **Rintoul, S.** and Yang, H. (2016) 'Delivering 21st century Antarctic and Southern Ocean science', *Antarctic Science*, 28(6), pp. 407–423. doi: 10.1017/S0954102016000481.
5. Rintoul, S. R., A. Silvano, B. Pena-Molino, E. van Wijk, M. Rosenberg, J. S Greenbaum, D. D. Blankenship, 2016. Ocean heat drives rapid basal melt of Totten Ice Shelf. *Science Advances*, 2, e1601610, DOI: 10.1126/sciadv.1601610.
6. Silvano, A., S. R. Rintoul and L. Herraiz-Borreguero, 2016. Ocean-ice shelf interaction in East Antarctica, *Oceanography*, 29(4):130–143, <https://doi.org/10.5670/oceanog.2016.105>.
7. Snow, K., B. M. Sloyan, S. R. Rintoul, A. McC. Hogg, and S. M. Downes, 2016. Controls on circulation, cross-shelf exchange and dense water formation in an Antarctic polynya. *Geophysical Research Letters*, 43, 7089-7096.
8. Peña-Molino, B., M. S. McCartney, and S. R. Rintoul (2016), Direct observations of the Antarctic Slope Current transport at 113°E, *J. Geophys. Res. Oceans*, 121, 7390–7407, doi:10.1002/2015JC011594.
9. Sallée, J.B., Mazloff, M, Meredith, M, Hughes, C, Rintoul, S., Gomez, R., Metzl, N., Lo Monaco, C., Schmidtko, S., Mata, M., Wahlin, A., Swart, S., Williams, M., Naveira-Garabato, A., Monteiro, P. (2016). State of the Southern Ocean in 2015, in *State of the Climate 2015*, Special Supplement to the Bulletin of the American Meteorological Society, 97: 166-168.
10. Fogwill, C. J., E. van Sebille, E. A. Cougnon, C. S. M. Turney, S. R. Rintoul, G. F. Clark, E. M. Marzinelli, E. B. Rainsley, and L. Carter, 2016. Brief Communication: Evidence of a developing Polynya off Commonwealth Bay, East Antarctica, triggered by grounding of iceberg, *The Cryosphere*, 10, 2603-2609, doi:10.5194/tc-10-2603-2016, 2016
11. Shadwick, EH, B. Tilbrook, N. Cassar, T.W. Trull, and **S. R. Rintoul**, 2015. Summertime physical and biological controls on O₂ and CO₂ in the Australian sector of the Southern Ocean. *Journal of Marine Systems*, 147, 21-28.

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13. Aoki, S., G. Mizuta, H. Sasaki, Y. Sasai, **S. R. Rintoul** and N. L. Bindoff, 2015. Atlantic-Pacific asymmetry of subsurface temperature change and frontal response of the Antarctic Circumpolar Current in the past three decades. *J. Oceanography*, 71, 623-636 accepted 12 March 2015, published on-line 28 Mar 2015. DOI: 10.1007/s10872-015-0284-6
14. Herraiz – Borreguero, L., R. Coleman, I. Allison, **S. R. Rintoul**, M. Craven, and G. Williams, 2015. Circulation of modified Circumpolar Deep Water and basal melt beneath the Amery Ice Shelf, East Antarctica. *J. Geophys. Res. – Oceans*, 120,3098-3112.
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18. **Rintoul, S. R.**, S. Sokolov, M.J.M. Williams, B. Peña Molino, M. Rosenberg and N.L. Bindoff, 2014. Antarctic Circumpolar Current transport and barotropic transition at Macquarie Ridge. *Geophysical Research Letters*, 41, 7254-7261, 10.1002/2014GL061880.
19. Peña-Molino, B., **S. R. Rintoul** and M. R. Mazloff, 2014. Barotropic and baroclinic contributions to along- and across-stream transport in the Antarctic Circumpolar Current. *J. Geophysical Research – Oceans*, 119, 8011-8028,10.1002/2014JC010020.
20. Kennicutt, M., S. L. Chown, J. Cassano, D. Liggett, R. Massom, L. Peck, **S. R. Rintoul**, J. Storey, D. Vaughn, T. Wilson, and 65 others, 2014. A roadmap for Antarctic and Southern Ocean science for the next two decades and beyond, *Antarctic Science*, 27, 3-18, doi:10.1017/S0954102014000674.
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22. Bass, A. M., N. C. Munksgaard, D. O'Grady, M.J.M. Williams, H. C. Bostock, **S. R. Rintoul** and M. I. Bird, 2014. Continuous shipboard measurements of oceanic $\delta^{18}\text{O}$, δD and $\delta^{13}\text{C}_{\text{DIC}}$ along a transect from New Zealand to Antarctica using cavity ring-down isotope spectrometry. *J. Marine Systems*, 137, 21-27, DOI: 10.1016/j.jmarsys.2014.04.003. (on line 13 Apr 2014; published Sept 2014).
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