

## **S. GEORGE PHILANDER**

Address Department of Geosciences  
Guyot Hall  
Princeton University  
Princeton N.J. 08540  
Phone 609-2585683  
E-mail: gphlder@princeton.edu

### **EDUCATION**

Bachelor of Science Degree, University of Cape Town (South Africa), 1962.  
Ph.D. Degree, Harvard University, 1970.

### **EMPLOYMENT**

1970-1971 Postdoctoral Fellow, Department of Meteorology, MIT, Cambridge,  
1971-1977 Research Associate, Geophysical Fluid Dynamics Program, Princeton University, Princeton, NJ  
1973-1977 Consultant to World Meteorological Organization, Geneva, Switzerland.  
1978-1989 Senior Research Oceanographer, Geophysical Fluid Dynamics Lab. NOAA, Princeton, NJ  
1982 Visiting Professor, Museum National d'Histoire Naturelle, Paris  
1990- Professor of Geosciences, Princeton University, Princeton, NJ  
1990-2006 Director of the Program in Atmospheric and Oceanic Sciences, Princeton .  
1994-2001 Chairman, Department of Geosciences, Princeton University.  
2002 Gordon Moore Scholar, California Institute of Technology.  
2005- Knox Taylor Professor of Geosciences at Princeton University  
2007- 2010 Research Professor University of Cape Town, South Africa  
2007- 2010 Research Director, African Centre for Climate and  
Earth System Science (ACCESS) Cape Town, South Africa.  
2017 -- Knox-Taylor Professor Emeritus, Princeton University

### **RECENT MEMBERSHIP ON COMMITTEES AND PANELS**

Member of the Council of the International Center for Theoretical Physics, Trieste, Italy;  
Member of the Board of ACCESS (Africa Centre for Climate and Earth System Studies);  
Member of the Committee on Science and Arts of the Franklin Institute, Philadelphia; Member  
of Commission on Geosciences, Environment and Resources (of the National Academy of  
Sciences, U.S.A.); Member of evaluation committees for departments of geosciences at  
Columbia Univ., Tulane Univ., Univ. of Copenhagen (Denmark), Texas A&M University,  
Woods Hole Oceanographic Institution, MIT, National Center for Atmospheric Research  
(Boulder, Co.), Univ of Kyoto (Japan) CSIR (South Africa); Yale University; Member of the  
editorial boards of scientific journals including "Annual Review of Earth and Planetary  
Sciences", "Dynamics of Atmospheres and Oceans", "Geofisica Internacional", "Oceanographie  
Tropicale"; Member of committees to organize and steer various international  
atmospheric/oceanic projects.

## AWARDS

NOAA Environmental Research Laboratories, Distinguished Authorship Award (1979, 1983)  
Sverdrup Gold Medal of the American Meteorological Society (1985)  
Department of Commerce Gold Medal (1985)  
Fellow of the American Meteorological Society (1986)  
Fellow of the American Geophysical Union (1991)  
Symons Memorial Lecturer of the Royal Meteorological Society U.K. (1994)  
Fellow of the American Academy of Arts and Sciences (2003)  
Member of the National Academy of Sciences (USA) (2004).  
President's Lecture, C.S.I.R. Pretoria, South Africa 2007  
Victor Starr Memorial Lecture, M.I.T. Cambridge, Mass. U.S.A. 2007  
Doctor of Science (Honoris causa) Univ. of Cape Town 2007.  
Fellow of TWAS (Third World Academy of Sciences) 2008  
Fellow of Academy of Science of South Africa 2010  
Eugene Rasmusson Lectureship, University of Maryland (2012).  
Annual Ludwig Lecture, Old Dominion University, 2014  
Priestly Lecture, CSIR, Melbourne, Australia, 2015  
Honorary Doctor of Marine Science, University of South Florida 2016  
Vetlesen Prize Columbia University and G. Unger Vetlesen Foundation 2017

## **PUBLICATIONS**

### **Books**

El Niño, La Niña and the Southern Oscillation, 289 pp., Academic Press, 1990.  
Is the Temperature Rising? *The Uncertain Science of Global Warming*  
254 pp., Princeton University Press, 1998.  
Our Affair with El Niño. *How we Transformed an Enchanting Peruvian Current  
into a Global Climate Hazard.* 275pp; Princeton University Press, 2004.  
Editor of "Encyclopedia of Global Warming and Climate Change"  
3 volumes, Sage Publications Ltd. Calif. 1<sup>st</sup> Edition: 2008; 2<sup>nd</sup> Edition: 2012

### **Chapters in Books**

Moore D.W. and Philander, S. G. H., Modeling of the Tropical Oceanic Circulation  
The Sea, Chapter 8, E. D. Goldberg (ed.), J. Marine Res., 35(3), 509-523, 1977.

Delecluse, P., and S. G. H. Philander, Variability of Coastal Zones in Low Latitudes  
Hydrodynamics of the Equatorial Ocean, Elsevier, pp. 219-235, 1983.

Philander, S. G. H., Tropical Oceanography,  
in Advances in Geophysics (28), A. Climate Dynamics, B. Saltzman (ed.),  
Academic Press, New York, 461-475, 1985.

Philander, S. G. H., and E. M. Rasmusson, The Southern Oscillation and EL Nino  
in Advances in Geophysics (28), A. Climate Dynamics,  
B. Saltzman (Ed.), Academic Press, New York, 197-213, 1985.

Philander, S.G.H., General Circulation Models of the Ocean, in  
Atmospheric and Oceanic Variability (H. Cattle Ed.), pp. 105-116, Royal  
Meteorological Society, Bracknell, 1987.

Philander, S.G.H., Ocean-Atmosphere Interactions in the tropics. In  
"Modelling Oceanic Climate Interactions", J. Willebrand,  
D.L.T. Anderson (Ed) pp. 35-66, Springer Verlag, 1993.

Gu D. and S.G.H. Philander, A Theory for Interdecadal Climate Fluctuations. In "Beyond El Niño" A. Navarra (Ed), pp 301-308, Springer, 1999.

Liu Z. and S.G.H. Philander, Tropical-Extratropical Oceanic Exchange Pathways In "Ocean Circulation and Climate" G. Siedler, J. Church and J. Gould (Ed) pp 247-258, Academic Press, 2001.

Philander S.G. Sextant to Satellite; the Education of a Land-based Oceanographer In *History of Physical Oceanography - Developments since 1960* M. Jochum and R. Martugudde (Ed). Publisher Springer /New York 2006.

## Articles in Refereed Journals

Philander, S. G. H., On the Flow Properties of a Fluid Between Concentric Spheres, J. Fluid Mechanics, 47, 799-809, 1971.

Philander, S. G. H., The Equatorial Dynamics of a Shallow Homogeneous Ocean, Geophys. Fluid Dynamics Journal, 2, 219-245, 1971.

Philander, S. G. H., The Equatorial Dynamics of a Deep Homogeneous Ocean, Geophys. Fluid Dynamics Journal, 3, 105-123, 1972.

Philander, S. G. H., The Equatorial Thermocline, Deep Sea Res., 20(1), 69-86, 1973.

Philander, S. G. H., The Equatorial Undercurrent: Measurements and Theories, Rev. Geophys. and Space Physics, 11(3), 513-570, 1973.

Philander, S. G. H., The Oceanographic Subprogramme of GATE, Bull. Am. Met. Soc., 55, 738-744, 1974.

Philander, S. G. H., Report on the Field Phase of the Oceanographic Subprogramme of GATE Report 16, World Meteorological Organization, Geneva, 9.1-9.81, 1975.

Duing, W., P. Hisard, E. Katz, J. Knauss, J. Meincke, K. Moroshkin, S. G. H. Philander, A. Rybnikov, and K. Voight, Meanders and Long Waves in the Equatorial Atlantic, Nature (London), 257, 280-284, 1975.

Philander, S. G. H., Instabilities of Zonal Equatorial Currents, J. Geophys. Res., 81(21), 3721-3725, 1976.

Philander, S. G. H., A Note on the Stability of the Tropical Easterlies, J. Meteorol. Soc. Japan, 54(5), 328-333, 1976.

Philander, S. G. H., Forced Oceanic Waves, Review of Geophys. and Space Phys., 16(1), 15-46, 1978.

Philander, S. G. H., Instabilities of Zonal Equatorial Currents, 2, J. Geophys. Res., 83(C7), 3679-3682, 1978.

Philander, S. G. H., Upwelling in the Gulf of Guinea, J. Marine Res., 37(1), 23-33, 1979.

Philander, S. G. H., Equatorial Waves in the Presence of the Equatorial Undercurrent, J. Phys. Oceanogr., 9(3), 254-262, 1979.

Philander, S. G. H., Nonlinear Coastal and Equatorial Jets, J. Phys. Oceanogr., 9(4), 739-747, 1979.

- Philander, S. G. H., Variability of the Tropical Oceans, Dynamics of Atmospheric and Oceans, 3, 191-208, 1979.
- Philander, S. G. H., and R. C. Pacanowski, The Generation of Equatorial Currents, J. Geophys. Res., 85(C2), 1123-1136, 1980.
- Philander, S. G. H., The Equatorial Undercurrent Revisited, Annual Rev. of Earth and Planetary Sci., 8, 191-204, 1980.
- Willebrand, J., S. G. H. Philander, R. C. Pacanowski, The Oceanic Response to Large-Scale Atmospheric Disturbances, J. Phys. Oceanogr., 10(3), 411-429, 1980.
- Philander, George, and Walter Duing, The Oceanic Circulation of the Tropical Atlantic, and its Variability, as Observed During GATE, GATE-2: Equatorial and A-Scale Oceanography, W. Duing (ed.), Deep Sea Res., 26(11), Pergamon Press, NY, 1-27, 1980.
- Philander, S. G. H., The Response of Equatorial Oceans to a Relaxation of the Trade Winds, J. Phys. Oceanogr., II(2), 176-189, 1981.
- Philander, S. G. H., and R.C. Pacanowski, Response of Equatorial Oceans to Periodic Forcing, J. Geophys. Res., 86(C3), 1903-1916, 1981.
- Philander, S. G. H., and R. C. Pacanowski, The Oceanic Response to Cross-Equatorial Winds (with application to coastal upwelling in low latitudes), Tellus, 33, 210-210, 1981.
- Gonella, Joseph, Michele Fieux, and George Philander, Evidence for Equatorial Rossby Waves in the Indian Ocean from Drifter Buoys, Proc. C. R. Academy of Sci., Paris, 292(II), 1397-1399, 1981.
- Pacanowski, R. C., and S. G. H. Philander, Parameterization of Vertical Mixing in Numerical Models of Tropical Oceans, J. Phys. Oceanogr., 1443-1451, 1981.
- Philander, S. G. H., and J.-H. Yoon, Eastern Boundary Currents and Coastal Upwelling, J. Phys. Oceanogr., 12(8), 862-879, 1982.
- Yoon, J.-H., and S. G. H. Philander, The Generation of Coastal Undercurrents, J. Oceanogr. Soc. Japan, 38(4), 215-224, 1982.
- Philander, S. G. H., El Nino Southern Oscillation Phenomena, Nature, 302,(5906), 295-301, 1983.
- Philander, S. G. H., and P. Delecluse, Coastal Currents in Low Latitudes with Application to the Somali and El Nino Currents, Deep Sea Res., 30(8A), 887-902, 1983.
- Philander, S. G. H., Anomalous El Nino of 1982-83, Nature, 305(5929), pp. 16, 1983.
- Halpern, David, Stanley P. Hayes, Ants Leetmaa, Donald V. Hansen, and George H. Philander, Oceanographic Observations of the 1982 Warming of the Tropical Eastern Pacific, Science, Vol. 221, pp. 1173-1175, 1983.
- Philander, S. G. H., T. Yamagata, and R. C. Pacanowski, Unstable Air-Sea Interactions in the Tropics, J. Atmos. Sci., 41(4), 604-613, 1984.
- Philander, S. G. H., and R. C. Pacanowski, Simulation of the Seasonal Cycle in the Tropics, J. Atmos. Sci., 41(4), 604-613, 1984.
- Carton, J. A. and S. G. H. Philander, Coastal Upwelling Viewed as a Stochastic Phenomena, Journal of Physical Oceanography, 14(9), 1499-1509, 1984.
- Philander, George, David Halpern, Donald Hansen, Richard Legeckis, Laury Miller, Carl Paul, Randolph Watts, Robert Weisberg, and Mark Wimbush, Long Waves in the Equatorial Pacific Oceans, EOS, Transaction, American Geophysical Union, 66(14), 154-156, 1985.

- Philander, S. G. H., and A. D. Seigel, Simulation of El Nino of 1982-1983, Proceedings of the Liege Colloquium (1984), World Climate Research Programme. J. C. J. Nihoul (ed.), Coupled-Ocean Atmosphere Models, pp. 517-541, Elsevier Science Publ., Amsterdam, Holland, May 1984.
- Garzoli, S., and S. G. H. Philander, Validation of an Equatorial Atlantic Model Using Inverted Echo Sounder Data, J. Geophys. Res., 90, 9099-9201, 1985.
- Philander, S. G. H., El Nino and La Nina, J. Atmos. Sci., 42, 2652-2662, 1985.
- Yamagata, T., and S. G. H. Philander, The Role of Damped Equatorial Waves in the Oceanic Response to Winds, J. Oceanogr. Soc. Japan, 41, 345-357, 1985.
- Philander, S. G. H., Predictability of El Nino, Nature, 321, 810-811, 1986.
- Philander, S. G. H., Unusual Condition in the Tropical Atlantic Ocean in 1984, Nature, 322, 236-238, 1986.
- Philander, S. G. H., and R. C. Pacanowski, A Model of the Seasonal Cycle in the Tropical Atlantic Ocean, J. Geophys. Res., 91, 14 14206, 1986.
- Philander, S. G. H., and R. C. Pacanowski, The Mass and Heat Budget in a Model of the Tropical Atlantic Ocean, J. Geophys. Res., 91, 14212-14220, 1986.
- Philander, S. G. H., W. J. Hurlin, and R. C. Pacanowski, Properties of Long Equatorial Waves in Models of the Seasonal Cycle in the Tropical Atlantic and Pacific Oceans, J. Geophys. Res., 91, 14207-14211, 1986.
- Richardson, P. L., and S. G. H. Philander, The Seasonal Variation of Surface Currents in the Tropical Atlantic Ocean, J. Geophys. Res., 92, 715-724, 1987.
- Philander, S. G. H., and R. C. Pacanowski, Nonlinear Effects in the Seasonal Cycle of the Tropical Atlantic Ocean, Deep Sea Res., 34, 123-137, 1987.
- Philander, S. G. H., and W. J. Hurlin, Initial Conditions for General Circulation Models of Tropical Oceans, J. Phys. Oceanogr., 17, 147-157, 1987.
- Philander, S. G. H., W. J. Hurlin, and A. D. Siegel, Simulation of the seasonal cycle of the tropical Pacific Ocean, J. Phys. Oceanogr., 17, 1986-2002, 1987.
- Philander, S. G. H., and W. H. Hurlin, The heat budget of the tropical Pacific Ocean in a simulation of El Nino of 1982-1983, J. of Phys. Oceanogr., 18, 926-931, 1988.
- Chang, P. and S. G. H. Philander, Rossby wave packets in baroclinic currents, Deep-Sea Research, 36, 17-37, 1989.
- Philander, S. G. H., N. C. Lau, R. C. Pacanowski, and M. J. Nath, Two different simulations of the Southern Oscillation and El Nino with coupled ocean-atmosphere General Circulation Models, Phil. Trans. Roy. Soc., London, A329, 167-178, 1989.
- Philander, S. G. H., El Nino and La Nina, American Scientist, 77, 451-460, 1989.
- Halpern, D., R. Knox, D. Luther, and S. G. H. Philander, Estimates of Equatorial Upwelling Between 140° and 110°W During 1984, J. Geophys. Res., 94, 8018,8020, 1989.
- Chang, P., and S. G. H. Philander, Quasigeostrophic Oceanic Adjustment in the Presence of Mean Current, Dyn. of Atm. and Oceans, 14, 387-414, 1990.
- Ravelo, A.C., R.C. Fairbanks and S.G.H. Philander, Reconstructing tropical Atlantic hydrography using planktonic foraminifera

and an ocean model, Paleoceanography, 5, 409-431, 1990.

Philander, S.G.H. and Yi Chao, On the contrast between the seasonal cycles of the equatorial Atlantic and Pacific Oceans, J. Phys. Oceanogr., 21, 1399-1406, 1991.

Gardiner, R. S., and S.G.H. Philander, Coastal Upwelling Induced by Winds with Shear, Reviews in Aquatic Sciences, 5, 231-245, 1991

Philander, S.G.H., El Niño, Oceanus, 33, 56-61, 1992.

Philander, S.G.H., R.C. Pacanowski, N.-G. Lau, and M.J. Nath, Simulations of ENSO with a Global Atmospheric GCM Coupled to a High-Resolution Tropical Pacific Ocean Journal of Climate, 5, 308-329, 1992.

Lau, N.-C., S.G.H. Philander, and M.J. Nath, Simulation of ENSO-like Phenomena with a Low-Resolution Coupled GCM of the Global Ocean and Atmosphere, Journal of Climate, 5, 284-307, 1992.

Philander, S.G.H., Ocean-Atmosphere Interactions in the Tropics: A Review of Recent Theories and Models, Applied Meteorology, 31, 938-945, 1992.

Matano, R.P. and S.G.H. Philander, The heat and mass balances of the South Atlantic Ocean, calculated from a numerical model. J. Geophysical Research, Vol. 98, 977-984, 1993.

Chao, Y. and S.G.H. Philander, On the structure of the Southern Oscillation, J. of Climate, 6, 450-469, 1993.

Philander, S.G.H., Climate governed by a child. Nature, 363, p.124, 1993.

Matano, R.P. and S.G.H. Philander, On the decay of meanders of eastward currents, J. of Phys. Oceanogr., 24, 298-304, 1994.

Liu, Z., S.G.H. Philander and R.C. Pacanowski, A GCM study of subtropical - tropical upper ocean mass exchange, J. of Phys. Oceanogr., Vol. 24, No. 12, 2606-2623, 1994.

Chang, P. and S.G.H. Philander, A coupled ocean-atmosphere instability of relevance to the seasonal cycle, J. of Climate, Vol. 51, No. 24, 3627-3648, 1994.

Koberle C. and S.G.H. Philander, On the processes that control seasonal variations of sea surface temperature in the tropical Pacific Ocean. Tellus, 46A, 481-496, 1994.

Xie, S. and S.G.H. Philander, A coupled ocean-atmosphere model of relevance to the ITCZ in the eastern Pacific. Tellus, 46A, 340-350, 1994.

Liu, Z., and S.G.H. Philander, How different Wind-Stress patterns affect the tropical-subtropical Circulation of the upper ocean, J. Phys. Oceanogr., 25, 449-462, 1995.

Mechoso, C., A. Robertson, N. Barth, M. Davey, P. Delecluse, P. Gent, S. Ineson, B. Kirtman, M. Latif, H. L. Treut, T. Nagai, D. Neelin, S. G. H. Philander, Y. Polcher, P. Schopf, T. Stockdale, M. Suarez, L. Terray, O. Thual and J. Tribbia, The seasonal cycle over the tropical Pacific in general circulation models Mon. Wea. Rev., 123, 2825-2838, 1995.

Gu, Daifang and S.G.H. Philander, Secular Changes of Annual and Interannual Variability in the Tropics during the Past Century J. of Climate, Vol. 8, No. 4, 864-876, 1995.

Li, Tianming and S.G.H. Philander, On the Annual Cycle of the Eastern Equatorial Pacific, J. of Climate, Vol. 9, No. 12, 2986-2998, 1996.

S.G.H. Philander, D. Gu, D. Halpern, G. Lambert, N.-C. Lau, T. Li and R.C. Pacanowski, The role of low-level stratus clouds in keeping the ITCZ mostly north of the equator, J. of Climate, Vol. 9, No. 12, 2958-2972, 1996.

Philander S.G.H., T.Li and G.Lambert: Climatic asymmetries relative to the equator.  
In "Numerical Simulations in the Environmental and Earth Sciences"  
Editors: F. Garcia Garcia, A. Fernandez-Eguiarte, R. Alvarez, G.Cisneros. Cambridge University Press 1996.

Gu, D., S.G.H. Philander and M. McPhaden, The seasonal cycle and Its Modulation in the Eastern Tropic Pacific Ocean, J. Phys. Oceanogr., 27, 2209-2218, 1997.

Gu D. and S.G.H. Philander, Interdecadal Climate Fluctuations that depend on Exchanges between the Tropics and Extratropics, Science, 275, 805-807, 1997.

Li, T. and S.G.H. Philander, On the Seasonal cycle of the equatorial Atlantic Ocean, J. of Climate, 10, 813-817, 1997.

Bush, A. and S.G.H. Philander, The role of ocean-atmosphere interactions on tropical sea surface temperatures during the last glacial maximum, Science, 279, 1341-1344, 1998.

Navarra A. and S. G. Philander El Niño 1997-1998: Un evento climatico eccezionale. Le Scienze (Italia) 32- 39, 1998.

Philander, S.G.H., Who is El Niño? EOS, Trans. Am. Geophy. Union, 79, p. 170, 1998.

Philander, S.G.H. Learning from El Niño Weather 53 (9) 270-274, 1998.

Masina S. and S. G.Philander : An analysis of tropical instability waves in a numerical model of the Pacific Ocean. Part I: spatial variability of the waves" J.Geophys. Res. 104, 29613-29636, 1999.

Masina, S. G.Philander and A. Bush: An analysis of tropical instability waves in a numerical model of the Pacific Ocean. Part II: generation and energetics of the waves" J. Geoph. Res. 104, 29637-29662,1999.

Philander S. G. : El Niño and La Niña, Predictable Climate Fluctuations, Reports on Progress in Physics 62 (2) 123 – 142, 1999.

Philander S. G. A review of tropical ocean-atmosphere interactions, Tellus, 51 (1) 71 – 90, 1999.

Bush, A.B.G. and S.G.H. Philander: The climate of the Last Glacial Maximum: Results from a coupled atmosphere-ocean general circulation model. J. Geophys. Res. 104, 24, 509-524, 1999

Goddard L. and S. G. H. Philander : The Energetics of El Niño and La Niña J. Climate 13, 1496-1516, 2000.

Fedorov A. and S. G. Philander: Is El Niño changing? Science 288, 1997-2001, 2000.

Fedorov A. and S. G. Philander A stability analysis of tropical ocean-atmosphere interactions. J. Climate 14, 3086-3101, 2001.

Fedorov A.V., S.L. Harper, S.G. Philander, B. Winter and A. Wittenberg, How Predictable is El Niño? Bull. Amer. Met. Soc. 84, 911-919, 2003.

Philander S.G. and A.V Fedorov, Is El Niño Sporadic or Cyclic? Annual Reviews of Earth and Planetary Sciences 31, 579-594, 2003.

Philander, S. G., and A. V. Fedorov, Role of the tropics in changing the response to Milankovich forcing some three million years ago, Paleoceanography, 18(2), 1045, doi:10.1029/2002PA000837, 2003.

Philander S.G. On dipoles and Spherical Cows Bull. Amer. Meteorol. Soc. 84, 1424, 2003

Philander S.G. El Niño and the Uncertain Science of Global Warming.

Daedalus, Journal of the American Academy of Arts and Sciences pp 105-108, Spring 2004.

Philander S.G. Science in an Uncertain World, News from ICTP, Trieste, Italy, 2004

Boccaletti G., R. Pacanowski, S.G. Philander and A. Fedorov The Thermal Structure of the Ocean  
J. Phys. Oceanogr. 34, 888-902, 2004

Fedorov A.V., R.C. Pacanowski, S. G. Philander and G. Boccaletti:  
The effect of salinity on the wind-driven circulation and the thermal structure of the upper ocean.  
J. Phys. Oceanogr. 34, 1949-1966, 2004.

Boccaletti G., R. Pacanowski, and S.G. Philander: A diabatic mechanism for decadal  
variability in the tropics. Dynamics of Atmospheres and Oceans 39, 3-19, 2005.

Philander SG. 2006. Sextant to satellite: the education of a land-based oceanographer. In *History of Physical Oceanography—  
Developments since 1960*, ed. M Jochum, R Martugudde, pp. 153–64. New York: Springer

Fedorov A., P. Dekens, M. McCarthy, C. Ravelo, M. Barreiro, R. Pacanowski, S.G. Philander: The Pliocene Paradox  
Science 312, 1485-1489, 2006

Barreiro M., S.G. Philander, R. Pacanowski, A. Fedorov: Simulations of warm tropical conditions with application to middle  
Pliocene atmospheres. Climate Dynamics 26, 349-365, 2006.

Fedorov A, G. Boccaletti, R. Pacanowski and S. G. Philander: The Freshening of Surface Waters in High Latitudes;  
Effects on the Thermohaline and Wind-driven Circulations. J. Physical Oceanography 37(4), 896-907, 2007.

Barreiro M., A. Fedorov, R. Pacanowski and S.G. Philander: Abrupt Climate Changes: How freshening of the  
northern Atlantic affects the thermohaline and wind-driven Circulations Ann Rev Earth and Planetary Science, 36, 33, 2008

Barreiro M. and S.G. Philander: Response of the tropical Pacific to changes in extra-tropical clouds  
Climate Dynamics 31, 713-729, 2008

Philander S.G. Where are you from? Why are you here? An African Perspective on Global Warming  
Ann Rev. Earth and Planetary Science 37, 1-18, 2009

Philander S. G. How Many Scientists does South Africa need?  
South African Journal of Science, 105, 172 – 173, 2009.

Philander S. George Welcome Home; “The fairest Cape in the whole Circumference of the Earth”  
Veld & Flora, pp 1-3, December 2009.

Philander S. G. Tilting at Connections, from Poles to Equator Science 321: 1488-1489, 2010

Burls N.J., C.J.C.Reason, P. Penvin and S.G. Philander: Similarities between the tropical Atlantic seasonal cycle and ENSO  
J. Geoph. Res, 116, doi:10.1029 JC007164, 2011

Burls N.J., C.J.C. Reason, P. Penvin and S.G. Philander: Energetics of the Tropical Atlantic Zonal Mode  
J Climate 25, 7442-7466, doi:10.1175/JCLI-D-11-00602.1, 2012

Philander S.G. and M. Barreiro: The Precarious Present: Is Global Warming Inhibiting and Incipient Ice Age?  
Proc. Nat Acad Sci. In Press 2018

Philander S.G. and M. Barreiro: On the Pacific’s Sporadic Response to Precession of the Equinoxes  
Proc. Nat Acad Sci. In Press 2018