

S. Wacongne

CURRICULUM VITAE
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Personal:

born March 26, 1955
French citizen
married to an American citizen, 2 children

Education:

Ph.D. Physical Oceanography, Massachusetts Institute of Technology and Woods Hole Oceanographic Institution (MIT/WHOI) Joint Program in Oceanography, Cambridge and Woods Hole, MA., 1988.

Doctorat de 3ème cycle Physique des Liquides (S.M. equivalent), Université Pierre et Marie Curie, Paris, 1980.

Maîtrise Sciences Physiques (S.B. equivalent), Université Pierre et Marie Curie, Paris, France, 1977.

Award:

Best Student Paper Award for the 1988 Joint AGU and ASLO Meeting (New Orleans).

Memberships:

American Geophysical Union

Professional Experience:

Associate Scholar Scientist, Florida State University, Tallahassee, FL., USA. October 1999-present (part-time appointment).

Assistant Professor, Université de Bretagne Occidentale, Brest, France. January 1992–August 1999 (half-time appointment 1996–99).

Research Associate, Institut für Meereskunde an der Universität Kiel, F.R. Germany. February 1990–December 1991.

Post-doctoral fellow, IFREMER DERO/EO, UA CNRS, Brest, France. July 1989–December 1989.

Post-doctoral fellow, Centre ORSTOM de Brest, France. June 1988–June 1989.

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Post-doctoral investigator, Lamont-Doherty Geological Observatory of Columbia University (LDGO), N.Y. February–May 1988.

Graduate student and research assistant, MIT-WHOI Joint Program in Oceanography, Cambridge and Woods Hole, MA. 1981–1988.

Graduate student and research assistant, laboratoire d’Océanographie Physique du Museum National d’Histoire Naturelle (LOPMNHN), Paris, France. 1978-1980.

Scientific expeditions:

R. V. Noroît, 1979, ‘Tourbillon’ Experiment, North Atlantic, CNRS/IFREMER/LOPMNHN, France.

R. V. Moana Wave, 1989, WHOI 10°N transpacific section.

Current Research Interests:

Climate research.

Equatorial dynamics and inter-hemispheric exchanges.

Seasonal variability of the oceanic heat transport.

Southern Ocean air-sea fluxes.

Publications:

Wacongne, S., and A. Babiano (1982) Space-time turbulent characteristics in the atmospheric surface layer. *Boundary-Layer Meteorology* 24:429–450.

Wacongne, S. (1989) Dynamical regimes of a fully nonlinear stratified model of the Atlantic equatorial undercurrent. *Journal of Geophysical Research* 94 (C4):4801–4815.

Wacongne, S. (1990) On the difference in strength between Atlantic and Pacific undercurrents. *Journal of Physical Oceanography* 20: 792–799.

Wacongne, S., and B. Piton (1992) The near-surface circulation in the northeastern corner of the South Atlantic Ocean. *Deep-Sea Research*, 39: 1273–1298.

Wacongne, S. et R. Pacanowski (1996) Seasonal heat transport in a primitive equations model of the tropical Indian Ocean. *Journal of Physical Oceanography* 26: 2666–2699.

Marin, F., B.L. Hua and S. Wacongne (2000) The equatorial thermostat and subsurface countercurrents in the light of the dynamics of atmospheric Hadley cells. *Journal of Marine Research* 58: 405–437.

Wacongne, S. and L. Crosnier (2002) Seasonal variation of baroclinic geostrophic heat transport: is it resolved by existing climatologies of the Atlantic Ocean? *Journal of Physical Oceanography* 32: 278–294.

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Unpublished Manuscripts:

- Wacongne, S. (1980) Corrélations spatio-temporelles des fluctuations longitudinales de vitesse dans la zone inertielle de la couche de surface atmosphérique. Comparaison directe des fonctions de structure spatiale et temporelle. Thèse de 3ème cycle, Université P.et M.Curie, Paris, France, 152 pp.
- Babiano, A. and S. Wacongne (1981) Examen critique de l'hypothèse de Taylor dans la zone inertielle de la turbulence naturelle par la méthode des corrélations spatio-temporelles. Rapport scientifique du contrat ATP 'Recherches atmosphériques' RA(79)25, RA(80)4, LOPMNHN, Paris.
- Piton, B. and S. Wacongne (1985) Unusual amounts of very saline subsurface water in the eastern Gulf of Guinea in May 1984. Tropical Ocean-Atmospheric Newsletter 32, 5-8.
- Wacongne, S. (1988) Dynamics of the equatorial undercurrent and its termination. Ph.D. thesis, MIT/WHOI, WHOI-88-10, Woods Hole, MA., 365 pp.
- Wacongne, S. and R. Pacanowski (1994). Seasonal heat transport in a nonlinear primitive equations model of the tropical Indian Ocean. Proceedings of the International Conference on Monsoon Variability and Prediction, vol.II, July 1994, WCRP-84, WMO/TD-No.619.
- Godfrey J.S., A. Alexiou, A.G. Ilahude, D.M. Legler, M.E. Luther, J.P. McCreary, Jr., G.A. Meyers, K. Mizumo, R.R. Rao, S.R. Shetye, J.H. Toole, S. Wacongne (1995) The role of the Indian Ocean in the global climate system: recommendations regarding the Global Ocean Observing System, Report of the Ocean Observing System Development Panel, Texas A&M University, College Station, TX, USA, 89 pp.
- Wacongne, S. and L.Crosnier (1997) Can one estimate the oceanic baroclinic heat transport from climatological hydrography? International WOCE Newsletter 25, 29-31.

Manuscripts in progress:

- Wacongne, S., V. Sadoulet, K. Speer and R. Lumpkin. Warm water formation in the Southern Ocean.