

# Mass, Heat, Salt and Nutrient Fluxes in the South Pacific

Journal of Physical Oceanography

13, 725-753

DOI: [10.1175/1520-0485\(1983\)013<0725:mhsanf>2.0.co;2](https://doi.org/10.1175/1520-0485(1983)013<0725:mhsanf>2.0.co;2)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Subsurface subtropical gyre of the North Atlantic and Pacific oceans. <i>Reviews of Geophysics</i> , 1983, 21, 1119-1123.	23.0	1
2	Poleward heat transport by the ocean. <i>Reviews of Geophysics</i> , 1983, 21, 1131-1137.	23.0	9
3	On meridional transports of heat and freshwater in the Pacific ocean. <i>Archives for Meteorology, Geophysics and Bioclimatology, Series A</i> , 1984, 33, 91-99.	0.4	2
4	An estimate of the upwelling rate in the equatorial Atlantic based on the distribution of bomb radiocarbon and quasi-geostrophic dynamics. <i>Journal of Geophysical Research</i> , 1984, 89, 7971-7978.	3.3	38
5	Direct evidence using tritium data for throughflow from the Pacific into the Indian Ocean. <i>Nature</i> , 1985, 315, 478-480.	27.8	92
6	The beta spiral method. <i>Deep-sea Research Part A, Oceanographic Research Papers</i> , 1985, 32, 465-484.	1.5	8
7	Heat and fresh water budgets of the Indian Ocean—revisited. <i>Deep-sea Research Part A, Oceanographic Research Papers</i> , 1985, 32, 917-928.	1.5	38
8	On the total geostrophic circulation of the South Pacific Ocean: Flow patterns, tracers and transports. <i>Progress in Oceanography</i> , 1986, 16, 1-61.	3.2	302
9	Synoptic Gulf Stream velocity profiles through simultaneous inversion of hydrographic and acoustic Doppler data. <i>Journal of Geophysical Research</i> , 1986, 91, 7573-7585.	3.3	49
10	Sensitivity studies of a simple inverse method applied to the Cox and Bryan model. <i>Journal of Geophysical Research</i> , 1986, 91, 9639-9654.	3.3	2
11	The Annual March of Heat Storage and Export in the Tropical Atlantic Ocean. <i>Journal of Physical Oceanography</i> , 1986, 16, 694-708.	1.7	9
12	Long-period variations of sea-level in Australasia. <i>Geophysical Journal International</i> , 1986, 87, 43-54.	2.4	59
13	Chromium behavior in the ocean: Global versus regional processes. <i>Global Biogeochemical Cycles</i> , 1987, 1, 131-154.	4.9	70
14	Renewal rates of East Atlantic deep water estimated by inversion of $^{14}\text{C}$ data. <i>Journal of Geophysical Research</i> , 1987, 92, 2953-2969.	3.3	45
15	Thermobaricity, cabbeling, and water-mass conversion. <i>Journal of Geophysical Research</i> , 1987, 92, 5448-5464.	3.3	172
16	Ocean currents and meridional transfers. <i>Quarterly Journal of the Royal Meteorological Society</i> , 1987, 113, 3-18.	2.7	3
17	Gulf Stream velocity structure through inversion of hydrographic and acoustic Doppler data. <i>Journal of Geophysical Research</i> , 1988, 93, 2227-2236.	3.3	14
18	Tracer Inverse Problems. , 1989, , 1-77.		9

#	ARTICLE	IF	CITATIONS
19	Determination of geostrophic flow by applying the principle of minimum energy and the inverse method. Chinese Journal of Oceanology and Limnology, 1989, 7, 43-58.	0.7	0
20	Oxygen consumption and nutrient regeneration ratios along isopycnal horizons in the Pacific Ocean. Marine Chemistry, 1989, 26, 133-153.	2.3	41
21	Simulations of radiocarbon in a coarse-resolution world ocean model: 1. Steady state prebomb distributions. Journal of Geophysical Research, 1989, 94, 8217-8242.	3.3	280
22	Large scale circulation of the North Pacific Ocean. Progress in Oceanography, 1989, 22, 171-204.	3.2	108
23	Inversion calculation of the western Pacific boundary current during October, 1988. Chinese Journal of Oceanology and Limnology, 1990, 8, 177-187.	0.7	1
24	A transpacific hydrographic section along latitude 24°N: the distribution of properties in the subtropical gyre. Deep-sea Research Part A, Oceanographic Research Papers, 1991, 38, S1-S20.	1.5	36
25	Diagnostic calculation for circulation and water mass movement in the deep Pacific. Journal of Geophysical Research, 1991, 96, 759-774.	3.3	50
26	South Atlantic interbasin exchange. Journal of Geophysical Research, 1991, 96, 2675-2692.	3.3	285
27	Mean flow and variability in the Kuroshio Extension from Geosat altimetry data. Journal of Geophysical Research, 1991, 96, 18491-18507.	3.3	96
28	Mass, heat, oxygen and nutrient fluxes and budgets in the North Atlantic Ocean. Deep-sea Research Part A, Oceanographic Research Papers, 1991, 38, S355-S377.	1.5	93
29	Climate Dynamics of the Tropics. , 1991, , .		367
30	Heat and Water Budgets. , 1991, , 78-113.		0
31	World ocean circulation diagnostically derived from hydrographic and wind stress fields: 1. The velocity field. Journal of Geophysical Research, 1992, 97, 11163-11176.	3.3	36
32	Sensitivities of a zonally averaged global ocean circulation model. Journal of Geophysical Research, 1992, 97, 12707-12730.	3.3	74
34	Property fluxes at 30°S and their implications for the Pacific-Indian throughflow and the global heat budget. Journal of Geophysical Research, 1993, 98, 6851-6868.	3.3	68
35	A hydrographic section across the subtropical South Indian Ocean. Deep-Sea Research Part I: Oceanographic Research Papers, 1993, 40, 1973-2019.	1.4	225
36	Physics of the ocean circulation. , 1993, , 10-98.		7
37	Modelling of Western Pacific Abyssal Circulation – Preliminary Experiment. Elsevier Oceanography Series, 1993, , 285-306.	0.1	2

#	ARTICLE	IF	CITATIONS
38	Diagnostic Approaches on Deep Ocean Circulation. Elsevier Oceanography Series, 1993, 59, 307-331.	0.1	1
39	Ocean heat transport across 24°N latitude. Geophysical Monograph Series, 1993, , 65-75.	0.1	21
40	Energy transports by ocean and atmosphere based on an entropy extremum principle. Part II: Two-dimensional transports. Meteorology and Atmospheric Physics, 1994, 53, 61-75.	2.0	7
41	Transport of oxygen, nutrients and carbonates by the Kuroshio Current. Chinese Journal of Oceanology and Limnology, 1994, 12, 220-227.	0.7	28
42	Mass and heat budgets in the East Australian current: A direct approach. Journal of Geophysical Research, 1994, 99, 3231.	3.3	72
43	Transports and budgets of volume, heat, and salt from a global eddy-resolving ocean model. Climate Dynamics, 1994, 10, 59-80.	3.8	21
44	Direct observations of advective nutrient and oxygen fluxes at 24°N in the Pacific Ocean. Deep-Sea Research Part I: Oceanographic Research Papers, 1994, 41, 143-168.	1.4	19
45	Effects of Indo-Pacific throughflow on the upper tropical Pacific and Indian Oceans. Journal of Geophysical Research, 1995, 100, 18409.	3.3	48
46	Some advances in understanding of the general circulation of the Pacific Ocean, with emphasis on recent U.S. contributions. Reviews of Geophysics, 1995, 33, 1335-1352.	23.0	7
47	Fluxes of seawater and some dissolved chemicals in the Bashi Strait. Chinese Journal of Oceanology and Limnology, 1995, 13, 240-246.	0.7	4
48	Currents in the deep ocean off Chile (30°S). Deep-Sea Research Part I: Oceanographic Research Papers, 1995, 42, 425-436.	1.4	83
49	Study of seasonal transport variations in the Indonesian seas. Journal of Geophysical Research, 1995, 100, 20517.	3.3	59
50	Seasonal simulation of the Southern Ocean coupled ice-ocean system. Journal of Geophysical Research, 1995, 100, 22733.	3.3	30
51	The water masses and circulation at 10°N in the Pacific. Deep-Sea Research Part I: Oceanographic Research Papers, 1996, 43, 501-544.	1.4	82
52	The effect of the Indonesian throughflow on ocean circulation and heat exchange with the atmosphere: A review. Journal of Geophysical Research, 1996, 101, 12217-12237.	3.3	320
53	Northward abyssal transport through the Samoan passage and adjacent regions. Journal of Geophysical Research, 1996, 101, 14039-14055.	3.3	123
54	The meridional circulation in the Southern Ocean and its seasonal variability as seen by the fine-resolution Antarctic model. Journal of Geophysical Research, 1996, 101, 6393-6407.	3.3	3
55	Modeling layered structure in deep Pacific circulation. Journal of Geophysical Research, 1996, 101, 3663-3674.	3.3	12

#	ARTICLE	IF	CITATIONS
56	Convection induced by cooling at one side wall in two-dimensional non-rotating fluid – applicability to the deep Pacific circulation. Journal of Oceanography, 1996, 52, 617-632.	1.7	3
57	An estimate of global ocean circulation and heat fluxes. Nature, 1996, 382, 436-439.	27.8	341
58	Deep tracer and dynamical plumes in the tropical Pacific Ocean. Journal of Geophysical Research, 1997, 102, 24953-24964.	3.3	16
59	Do Box Inverse Models Work?. Journal of Physical Oceanography, 1997, 27, 291-308.	1.7	38
60	Volume budget of the eastern boundary layer off the Iberian Peninsula. Deep-Sea Research Part I: Oceanographic Research Papers, 1997, 44, 1543-1574.	1.4	108
61	Role of the oceanic heat transport in climate dynamics A sensitivity study with an atmospheric general circulation model. Tellus, Series A: Dynamic Meteorology and Oceanography, 1997, 49, 371-387.	1.7	9
62	The global ocean circulation: a hydrographic estimate and regional analysis. Progress in Oceanography, 1998, 41, 281-382.	3.2	195
63	Interpretation of interbasin exchange in an isopycnal ocean model. Climate Dynamics, 1998, 14, 725-740.	3.8	11
64	Meridional transport of dissolved inorganic carbon in the South Atlantic Ocean. Global Biogeochemical Cycles, 1998, 12, 479-499.	4.9	62
65	The circulation of the subtropical South Pacific derived from hydrographic data. Journal of Geophysical Research, 1998, 103, 21443-21468.	3.3	56
66	Preliminary results from directly measuring middepth circulation in the tropical and South Pacific. Journal of Geophysical Research, 1998, 103, 24619-24639.	3.3	176
67	Testing global ocean carbon cycle models using measurements of atmospheric O <sub>2</sub> and CO <sub>2</sub> concentration. Global Biogeochemical Cycles, 1998, 12, 213-230.	4.9	145
68	Meridional Overturning and Diapycnal Transport in a z-Coordinate Ocean Model Including Eddy-Induced Advection. Journal of Physical Oceanography, 1998, 28, 1205-1223.	1.7	42
69	Oceanic Radiocarbon Between Antarctica and South Africa Along Woce Section 16 at 30°E. Radiocarbon, 1999, 41, 51-73.	1.8	19
70	Effect of seasonal forcing on global circulation in a world ocean general circulation model. Climate Dynamics, 1999, 15, 491-502.	3.8	11
71	On the deep western-boundary current in the Southwest Pacific Basin. Progress in Oceanography, 1999, 43, 1-54.	3.2	117
72	A Simple Predictive Model for the Structure of the Oceanic Pycnocline. Science, 1999, 283, 2077-2079.	12.6	460
73	A global model of silicon cycling: Sensitivity to eddy parameterization and dissolution. Global Biogeochemical Cycles, 1999, 13, 199-220.	4.9	78

#	ARTICLE	IF	CITATIONS
74	Mass, heat, and salt transport in the southeastern Pacific: A Circumpolar Current inverse model. <i>Journal of Geophysical Research</i> , 1999, 104, 5191-5209.	3.3	20
75	Diagnosing the mean strength of the Indonesian Throughflow in an ocean general circulation model. <i>Journal of Geophysical Research</i> , 1999, 104, 7889-7895.	3.3	10
76	Some aspects of ocean heat transport by the shallow, intermediate and deep overturning circulations. <i>Geophysical Monograph Series</i> , 1999, , 1-22.	0.1	85
77	Water Mass Transformation in the Southern Ocean of a Global Isopycnal Coordinate GCM. <i>Journal of Physical Oceanography</i> , 2000, 30, 1013-1045.	1.7	75
78	Deep Pacific Circulation Controlled by Vertical Diffusivity at the Lower Thermocline Depths. <i>Journal of Physical Oceanography</i> , 2000, 30, 2853-2865.	1.7	96
79	Variation of foraminiferal Sr/Ca over Quaternary glacial-interglacial cycles: Evidence for changes in mean ocean Sr/Ca?. <i>Geochemistry, Geophysics, Geosystems</i> , 2000, 1, n/a-n/a.	2.5	49
80	Warming and circulation change in the eastern South Pacific Ocean. <i>Geophysical Research Letters</i> , 2000, 27, 1247-1250.	4.0	45
81	Revisiting the South Pacific subtropical circulation: A synthesis of World Ocean Circulation Experiment observations along 32°S. <i>Journal of Geophysical Research</i> , 2001, 106, 19481-19513.	3.3	77
82	Correlation of ocean mass and temperature fluxes among hydrographic sections in the southern oceans. <i>Geophysical Research Letters</i> , 2001, 28, 2049-2052.	4.0	2
83	On the zonal and meridional circulation and ocean transports between Tasmania and Antarctica. <i>Journal of Geophysical Research</i> , 2001, 106, 2795-2814.	3.3	37
84	Interhemispheric exchanges of mass and heat in the Atlantic Ocean in January–March 1993. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2001, 48, 605-638.	1.4	48
85	On the influence of Mediterranean Water on the Central Waters of the North Atlantic Ocean. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2001, 48, 347-381.	1.4	72
86	Oceanic vertical exchange and new production: a comparison between models and observations. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2001, 49, 363-401.	1.4	107
87	Circulation, Renewal, and Modification of Antarctic Mode and Intermediate Water*. <i>Journal of Physical Oceanography</i> , 2001, 31, 1005-1030.	1.7	297
88	Is There a Meridional Overturning Cell in the Pacific and Indian Oceans?. <i>Journal of Physical Oceanography</i> , 2002, 32, 1947-1959.	1.7	15
89	On the freshwater forcing of the thermohaline circulation in the limit of low diapycnal mixing. <i>Journal of Geophysical Research</i> , 2002, 107, 14-1.	3.3	11
90	Response in a regional model for the Southeastern Pacific Ocean to open boundary conditions. <i>Journal of Geophysical Research</i> , 2002, 107, 4-1.	3.3	7
91	Physical and biogeochemical fluxes and net budgets in the subpolar and temperate North Atlantic. <i>Journal of Marine Research</i> , 2002, 60, 191-226.	0.3	29

#	ARTICLE	IF	CITATIONS
92	Ocean heat transport and its relationship to ocean circulation in the CMIP coupled models. <i>Climate Dynamics</i> , 2003, 20, 153-174.	3.8	16
93	Physical Transport of Nutrients and the Maintenance of Biological Production. , 2003, , 19-51.		97
94	Large-scale mass transports, water mass formation, and diffusivities estimated from World Ocean Circulation Experiment (WOCE) hydrographic data. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	171
95	Deep-water circulation at low latitudes in the western North Pacific. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2003, 50, 631-656.	1.4	76
96	Shallow, Intermediate, and Deep Overturning Components of the Global Heat Budget. <i>Journal of Physical Oceanography</i> , 2003, 33, 530-560.	1.7	298
97	Error Budget of Inverse Box Models: The North Atlantic. <i>Journal of Atmospheric and Oceanic Technology</i> , 2003, 20, 1641-1655.	1.3	68
98	Water flux estimates in the central Mediterranean Sea from an inverse box model. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	18
99	Circulation and variability in the Chile Basin. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2004, 51, 1367-1386.	1.4	30
100	The earth system model of intermediate complexity CLIMBER-3 $\pm$ . Part I: description and performance for present-day conditions. <i>Climate Dynamics</i> , 2005, 25, 237-263.	3.8	93
101	Variations of the deep western boundary current in Wake Island Passage. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2005, 52, 1121-1137.	1.4	33
102	A global comparison of subtropical underwater formation rates. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2005, 52, 1569-1590.	1.4	61
103	Circumpolar Deep Water Circulation and Variability in a Coupled Climate Model. <i>Journal of Physical Oceanography</i> , 2006, 36, 1523-1552.	1.7	22
105	Assimilation of Radiocarbon and Chlorofluorocarbon Data to Constrain Deep and Bottom Water Transports in the World Ocean. <i>Journal of Physical Oceanography</i> , 2007, 37, 259-276.	1.7	54
106	On the driving processes of the Atlantic meridional overturning circulation. <i>Reviews of Geophysics</i> , 2007, 45, .	23.0	491
107	The circulation of the western Mediterranean Sea in spring 2005 as inferred from observations and from model outputs. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2008, 55, 947-965.	1.4	28
108	The WOCE-era 3-D Pacific Ocean circulation and heat budget. <i>Progress in Oceanography</i> , 2009, 82, 281-325.	3.2	57
109	Volume transport and distribution of deep circulation at 165 $\hat{\text{A}}^{\circ}$ W in the North Pacific. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2009, 56, 2077-2087.	1.4	17
110	Changes in water properties and transports along 24 $\hat{\text{A}}^{\circ}$ N in the North Pacific between 1985 and 2005. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	18

#	ARTICLE	IF	CITATIONS
111	Pacific ocean circulation based on observation. Journal of Oceanography, 2010, 66, 389-403.	1.7	223
112	Deep ocean circulation and transport where the East Pacific Rise at 9°N meets the Lamont seamount chain. Journal of Geophysical Research, 2010, 115, .	3.3	16
113	Direct measurements of deep current at 162°E south of the equator in the Melanesian Basin: a trial to detect a cross-equatorial deep western boundary current. Journal of Oceanography, 2012, 68, 929-957.	1.7	3
114	Meridional overturning transports at 30°S in the Indian and Pacific Oceans in 2002–2003 and 2009. Progress in Oceanography, 2016, 146, 89-120.	3.2	34
115	Abyssal ocean overturning shaped by seafloor distribution. Nature, 2017, 551, 181-186.	27.8	81
116	A review of observational studies of circulation in intermediate and deep layers in the North Pacific. Oceanography in Japan, 2017, 26, 189-201.	0.5	0
118	A Deep Eastern Boundary Current in the Chile Basin. Journal of Geophysical Research: Oceans, 2019, 124, 27-40.	2.6	7
120	Mineral composition and geochemical characteristics of sinking particles in the Challenger Deep, Mariana Trench: Implications for provenance and sedimentary environment. Deep-Sea Research Part I: Oceanographic Research Papers, 2020, 157, 103211.	1.4	11
121	Dynamics of Deep Ocean Eastern Boundary Currents. Geophysical Research Letters, 2020, 47, e2019GL085396.	4.0	4
122	Moored Observations of Transport and Variability of Halmahera Sea Currents. Journal of Physical Oceanography, 2020, 50, 471-488.	1.7	13
123	Evaluation of Global Ocean Models on Simulating the Deep Western Boundary Current in the Pacific. Atmosphere - Ocean, 2020, 58, 219-230.	1.6	2
124	Ice Shelf Meltwater Overturning in the Bellingshausen Sea. Journal of Geophysical Research: Oceans, 2021, 126, e2020JC016957.	2.6	6
125	Water Mass Properties and Circulation in the Deep and Abyssal Philippine Sea. Journal of Geophysical Research: Oceans, 2021, 126, e2020JC016994.	2.6	9
126	New Radiocarbon Constraints on the Upwelling of Abyssal Water to the Ocean's Surface. , 1993, , 333-366.		76
127	Air-Sea Exchanges and Meridional Fluxes. , 1994, , 1-27.		3
128	Turbulent Mixing in the Ocean. , 1998, , 171-190.		17
129	Transports and budgets of volume, heat, and salt from a global eddy-resolving ocean model. Climate Dynamics, 1994, 10, 59-80.	3.8	2
130	Deep Eastern Boundary Currents: Realistic Simulations and Vorticity Budgets. Journal of Physical Oceanography, 2020, 50, 3077-3094.	1.7	3



#	ARTICLE	IF	CITATIONS
132	The World Ocean Circulation Experiment. , 1991, , 199-213.		0
133	Variability in the meridional overturning circulation at 32°S in the Pacific Ocean diagnosed by inverse box models. Progress in Oceanography, 2022, 203, 102780.	3.2	1