

RICHARD C. J. SOMERVILLE

COMPLETE PUBLICATIONS (1966-2012)

1. Somerville, R. C. J., 1966: A nonlinear spectral model of convection in a fluid unevenly heated from below. *Ph.D. dissertation*, New York University.
2. Somerville, R. C. J., 1967: Coupled disc dynamos. *Notes on the 1967 Summer Study Program in Geophysical Fluid Dynamics at the Woods Hole Oceanographic Institution*, Ref. No. 67-54, Vol. II, 132-139.
3. Somerville, R. C. J., 1967: A nonlinear spectral model of convection in a fluid unevenly heated from below. *Journal of the Atmospheric Sciences*, **24**, 665-676.
4. Somerville, R. C. J., 1970: Heat transfer in steady two-dimensional Benard convection. *Notes on the 1970 Summer Study Program in Geophysical Fluid Dynamics at the Woods Hole Oceanographic Institution*, Ref. No. 70-50, Vol. I, 87-89.
5. Somerville, R. C. J., 1970: Preferred modes in convection. *Notes on the 1970 Summer Study Program in Geophysical Fluid Dynamics at the Woods Hole Oceanographic Institution*, Ref. No. 70-50, Vol. I, 89-91.
6. Somerville, R. C. J., 1971: Benard convection in a rotating fluid. *Geophysical Fluid Dynamics*, **2**, 247-262.
7. Lipps, F. B., and R. C. J. Somerville, 1971: Dynamics of variable wavelength in finite-amplitude Benard convection. *Physics of Fluids*, **14**, 759-765.
8. Willis, G. E., J. W. Deardorff, and R. C. J. Somerville, 1972: Roll-diameter dependence in Rayleigh convection and its effect upon the heat flux. *Journal of Fluid Mechanics*, **54**, 351-367.
9. Somerville, R. C. J., 1973: Atmospheric predictability. *Some Problems in Geophysics* (J. J. Stoker, ed.), Courant Institute of Mathematical Sciences, New York University, IMM 394, 52-61.
10. Somerville, R. C. J., and F. B. Lipps, 1973: A numerical study in three space dimensions of Benard convection in a rotating fluid. *Journal of the Atmospheric Sciences*, **30**, 590-596.

11. Somerville, R. C. J., 1973: Numerical simulation of small-scale convection in the atmosphere. *Proceedings of the Third International Conference on Numerical Methods in Fluid Dynamics, Vol. II*, Springer-Verlag, Lecture Notes in Physics, **19**, 238-245.
12. Somerville, R. C. J., 1973: Recent results from the Goddard Institute for Space Studies model of the global atmosphere. *Proceedings of the (tenth) Stanstead Seminar, Publication in Meteorology No. 111*, McGill University, Montreal, 63-64.
13. Somerville, R. C. J., P. H. Stone, M. Hale, J. E. Hansen, J. S. Hogan, L. M. Druyan, G. Russell, A. A. Lacis, W. J. Quirk, and J. Tenanbaum, 1974: The GISS model of the global atmosphere. *Journal of the Atmospheric Sciences*, **31**, 84-117.
14. Somerville, R. C. J., et al., 1974: GISS global 9-level model. *Modelling for the First GARP Global Experiment*, GARP Publications Series, No. **14**, 46-60.
15. Stone, P. H., W. J. Quirk, and R. C. J. Somerville, 1974: The effect of small-scale vertical mixing of horizontal momentum in a general circulation model. *Monthly Weather Review*, **102**, 765-771.
16. Somerville, R. C. J., J. E. Hansen, P. H. Stone, W. J. Quirk, and A. A. Lacis, 1975: Numerical experiments on short-term meteorological effects of solar variability. *Possible Relationships Between Solar Activity and Meteorological Phenomena*, NASA, SP-366, 199-211.
17. Somerville, R. C. J., 1975: Recent results from the GISS model of the global atmosphere. *Proceedings of the Fourth International Conference on Numerical Methods in Fluid Dynamics*. Springer-Verlag, Lecture Notes in Physics, **35**, 373-378.
18. Gal-Chen T., and R. C. J. Somerville, 1975: On the use of a coordinate transformation for the solution of the Navier-Stokes equations. *Journal of Computational Physics*, **17**, 209-228.
19. Gal-Chen, T., and R. C. J. Somerville, 1975: Numerical solution of the Navier-Stokes equations with topography. *Journal of Computational Physics*, **17**, 276-310.
20. Druyan, L. M., R. C. J. Somerville, and W. J. Quirk, 1975: Extended-range forecasts with the GISS model of the global atmosphere. *Monthly Weather Review*, **103**, 779-795.
21. Stone, P. H., S. Chow, H. M. Helfand, W. J. Quirk, and R. C. J. Somerville, 1975: Seasonal changes in the atmospheric heat balance simulated by the GISS general circulation model. *Proceedings of the WMO/IAMAP Symposium on Long-Term Climatic Fluctuations*, WMO. No. **421**, 383-389.
22. GCM Steering Committee, 1975: *Development and Use of the NCAR GCM*. NCAR Tech. Note STR-101, National Center for Atmospheric Research, Boulder, CO, 177 pp.

23. Somerville, R. C. J., 1975: Computing the weather depends on math models and techniques. *SIAM News*, **8** (5), 1-3.
24. Somerville, R. C. J., 1975: Sensitivity of the NCAR general circulation model to vertical eddy viscosity. *The GARP Programme on Numerical Experimentation*, Report No. 9, 3-5.
25. Somerville, R. C. J., W. J. Quirk, J. E. Hansen, A. A. Lacis, and P. H. Stone, 1976: A search for short-term meteorological effects of solar variability in an atmospheric circulation model. *Journal of Geophysical Research*, **81**, 1572-1576.
26. Druyan, L. M., R. C. J. Somerville, and W. J. Quirk, 1976: Reply (to comments of F. Sanders). *Monthly Weather Review*, **104**, 1076-1077.
27. Somerville, R. C. J., 1976: Sensitivity of large-scale numerical weather forecasts to deficiencies in models. *Annalen der Meteorologie (Neue Folge)*, **11**, 266-268.
28. Somerville, R. C. J., 1976: General Circulation models and climate. *Notes on the 1976 Summer Study Program in Geophysical Fluid Dynamics at the Woods Hole Oceanographic Institution*, Ref. No. 76-81, 65-68.
29. Somerville, R. C. J., 1976: Metapredictability. *Weather Forecasting and Weather Forecasts: Models, Systems, Users*, NCAR/CQ-5+1976-ASP, 682-696.
30. Somerville, R. C. J., 1976: Model Verification. *Weather Forecasting and Weather Forecasts: Models, Systems, Users*, NCAR/CQ-5+1976-ASP, 699-703.
31. Somerville, R. C. J., 1976: Pattern recognition and multivariate verification. *Weather Forecasting and Weather Forecasts: Models, Systems, Users*, NCAR/CQ-5+1976-ASP, 776-794.
32. Somerville, R. C. J., 1977: The role of the upper ocean in large-scale numerical prediction of the atmosphere. *Modeling and Prediction of the Upper Layers of the Ocean*, E. B. Kraus, ed., Pergamon Press, 31-37.
33. Somerville, R. C. J., 1977: Sensitivity of large-scale numerical weather forecasts to deficiencies in models. *Aerospace Sciences Review*, AWS RP 105-2, 77-1, 7-10.
34. Somerville, R. C. J., 1977: Pattern recognition techniques for forecast verification. *Third Conference on Numerical Weather Prediction*, American Meteorological Society, 275-286.

35. Somerville, R. C. J., 1977: Verification of large-scale numerical weather forecasts using pattern recognition techniques. *Fifth Conference on Probability and Statistics in Atmospheric Sciences*, American Meteorological Society, 338-339.
36. Baker, W. E., E. C. Kung, and R. C. J. Somerville, 1977: Energetics diagnosis of the NCAR general circulation model. *Monthly Weather Review*, **105**, 1384-1401.
37. Somerville, R. C. J., 1977: Pattern recognition techniques for weather forecast verification. *Contributions to Atmospheric Physics*, **50**, 403-410.
38. Baumhefner, D. P., and R. C. J. Somerville, 1977: Reply (to comments of G. D. Hembree). *Monthly Weather Review*, **105**, 1602.
39. Baker, W. E., E. C. Kung, and R. C. J. Somerville, 1978: An energetics analysis of forecast experiments with the NCAR general circulation model. *Monthly Weather Review*, **106**, 311-323.
40. Somerville, R. C. J., and B. Shkoller, 1978: The effect of computational resolution on two-day 500 mb forecasts. *The GARP Programme on Numerical Experimentation*, Report No. 18, 50-52.
41. Somerville, R. C. J., 1978: Review of "General Circulation Models of the Atmosphere." *Bulletin of the American Meteorological Society*, **59**, 1032.
42. Laprise, R., and R. C. J. Somerville, 1978: Application of pattern recognition techniques to forecast verification. *Summer Fellowship in Scientific Computing*, NCAR Tech. Note TN-129+PROC, National Center for Atmospheric Research, Boulder, Colorado, 129-141.
43. Somerville, R. C. J., and T. Gal-Chen, 1979: Numerical simulation of convection with mean vertical motion. *Journal of the Atmospheric Sciences*, **36**, 805-815.
44. Gall, R. L., R. Blakeslee, and R. C. J. Somerville, 1979: Baroclinic instability and the selection of the zonal scale of the transient eddies of middle latitudes. *Journal of the Atmospheric Sciences*, **36**, 767-784.
45. Somerville, R. C. J., 1979: Effects of initial data and computational domain on numerical predictions of ultra-long waves. *The GARP Programme on Numerical Experimentation*, Report No. 19, 64-67.
46. Gall, R. L., R. Blakeslee, and R. C. J. Somerville, 1979: Cyclone-scale forcing of ultralong waves. *Journal of the Atmospheric Sciences*, **36**, 1692-1698.

47. Dobosy, R. J., and R. C. J. Somerville, 1979: Tests of simple momentum boundary-layer parameterizations in a numerical weather prediction model. *Contributions to Atmospheric Physics*, **52**, 190-203.
48. Somerville, R. C. J., 1979: Predictability of ultralong planetary waves. *Fourth Conference on Numerical Weather Prediction*, American Meteorological Society, 182-185.
49. Somerville, R. C. J., 1979: Sources of error in numerical forecasts of ultralong waves. *Proceedings of the (Thirteenth) Stanstead Seminar*, Publication in Meteorology No. 123, McGill University, Montreal, 95-101.
50. Somerville, R. C. J., 1980: Outline of a primitive-equation numerical weather prediction system. *Koninklijk Nederlands Meteorologisch Instituut Verslagen V-350*, DeBilt, The Netherlands, 23 pp.
51. Somerville, R. C. J., 1980: Tropical influences on the predictability of ultralong waves. *Journal of the Atmospheric Sciences*, **37**, 1141-1156.
52. Somerville, R. C. J., 1980: Pattern recognition techniques for verifying forecasts of ultralong waves. *WMO Symposium on Probabilistic and Statistical Methods in Weather Forecasting*, World Meteorological Organization, Geneva, 157-160.
53. Somerville, R. C. J., 1981: Error budgets of extended-range numerical weather prediction. *Proceedings of the Symposium on Current Problems of Weather Prediction*, Publication No. 253, Zentralanstalt fur Meteorologie und Geodynamik, Vienna, 130-133.
54. Roads, J. O., and R. C. J. Somerville, 1981: Predictability of quasi-geostrophic planetary waves in global and hemispheric domains. *Fifth Conference on Numerical Weather Prediction*, American Meteorological Society, 102-105.
55. Somerville, R. C. J., 1981: The effects of tropical data and a global computational domain on forecasts of ultralong waves. *International Conference on Preliminary FGGE Data Analysis and Results*, World Meteorological Association, Geneva, 324-331.
56. Roads, J. O., and R. C. J. Somerville, 1981: Domain effects on planetary wave predictability. *GARP and WCRP Numerical Experimentation Programme*, Report No. 2, 3.6-3.7.
57. Somerville, R. C. J., 1981: Reply (to comments of A. J. Gadd). *Journal of the Atmospheric Sciences*, **38**, 2544-2546.
58. Roads, J. O., and R. C. J. Somerville, 1982: Predictability of ultralong waves in global and hemispheric quasi-geostrophic barotropic models. *Journal of the Atmospheric Sciences*, **39**, 745-755.

59. Somerville, R. C. J., 1983: Benard convection and effects of rotation. *Mesoscale Meteorology--Theories, Observations and Models*, D. K. Lilly and T. Gal-Chen (eds.), D. Reidel Publishing Company, 497-505.
60. Hathaway, D. H., and R. C. J. Somerville, 1983: Three-dimensional simulations of convection in layers with tilted rotation vectors. *Journal of Fluid Mechanics*, **126**, 75-89.
61. Barnett, T. P., and R. C. J. Somerville, 1983: Advances in short term climate prediction. *Reviews of Geophysics and Space Physics*, **21**, 1096-1102.
62. Roads, J. O., and R. C. J. Somerville, 1983: Predictability of planetary waves: Interhemispheric differences and the effects of stationary forcing. (Preprint) *First International Conference on Southern Hemisphere Meteorology*, American Meteorological Society, 93-99.
63. Somerville, R. C. J., and J. O. Roads, 1983: Linear predictability: the effects of stationary forcing. *Research Activities in Atmospheric and Oceanic Modeling*, World Climate Research Program, World Meteorological Organization, 5, 3.1-3.3.
64. Roads, J. O., and R. C. J. Somerville, 1984: Linear predictability: Effects of stationary forcing. *Predictability of Fluid Motions*, G. Holloway and B. J. West (eds.), American Institute of Physics, 106, New York, 557-570.
65. Somerville, R. C. J., and L. A. Remer, 1984: Cloud optical thickness feedbacks in the CO₂ climate problem. *Journal of Geophysical Research*, **89**, 9668-9672.
66. Hathaway, D. H., and R. C. J. Somerville, 1984: Effects of rotation and shear in a three-dimensional model of tropical thermal convection. (Postprint) *15th Conference on Hurricanes and Tropical Meteorology*, Jan. 9-13, 1984, Miami, FL, American Meteorological Society, 522-526.
67. Somerville, R. C. J., 1984: Predictability. *Long-range Weather Forecasting: Recent Research*, N. Nicholls (ed.). World Meteorological Organization, Long-Range Forecasting Research Publications Series, 3, 3-6.
68. Somerville, R. C. J., 1985: Climate stabilization by cloud optical thickness feedbacks. *Third Conference on Climate Variations and Symposium on Contemporary Climate: 1850-2100*, American Meteorological Society, 101-102.
69. Hathaway, D. H., and R. C. J. Somerville, 1985: Numerical simulation in three space dimensions of time-dependent thermal convection in a rotating fluid. *Lectures in Applied Mathematics*, **22**, 309-319.
70. Somerville, R. C. J., 1985: Reply (to comments of C. F. Bohren). *Journal of Geophysical Research*, **90**, 5868.

71. Somerville, R. C. J., 1985: Clouds and climate regulation. *Nature*, **315**, 713-714.
72. Engquist, B. E., S. Osher, and R. C. J. Somerville (eds.), 1985: *Large-Scale Computations in Fluid Mechanics*, Lectures in Applied Mathematics, Vol. 22, American Mathematical Society, Providence, Rhode Island, 2 volumes, 779 pp.
73. Somerville, R. C. J., 1985: Cloud optical thickness feedbacks in the CO₂ climate problem. *Advances in Space Research*, **5**, 209-212.
74. Somerville, R. C. J., 1985: Review of "The Global Climate." *Bulletin of the American Meteorological Society*, **66**, 1171-1173.
75. Somerville, R. C. J., 1985: Planetary wave prediction: Benefits of tropical data and global models. *Proceedings of the First National Workshop on the Global Weather Experiment*, Woods Hole, MA, National Academy Press, 469-472.
76. Hathaway, D. H., and R. C. J. Somerville, 1986: Nonlinear interactions between convection, rotation and flows with vertical shear. *Journal of Fluid Mechanics*, **164**, 91-105.
77. Somerville, R. C. J., and B. Chertock, 1986: Cloud optical thickness feedbacks on climate: Evidence from satellite remote sensing. Final Report to Lawrence Livermore National Laboratory, Order No. 5896905, 15 pp.
78. Chertock, B., and R. C. J. Somerville, 1986: Oceanic cloud feedbacks on earth radiation budget parameters. *Proceedings of the Sixth Conference on Atmospheric Radiation*, Williamsburg, VA, American Meteorological Society, 255-258.
79. Chertock, B., and R. C. J. Somerville, 1986: Oceanic cloud-radiation feedbacks: Satellite data and model results. *WMO/IUGG International Symposium on Short- and Medium-Range Numerical Weather Prediction*, WMO/TD-No. **114**, Tokyo, 153-154.
80. Chertock, B., S. Iacobellis, and R. C. J. Somerville, 1986: Oceanic cloud-radiation feedbacks in the Southern Hemisphere. *Second International Conference On Southern Hemisphere Meteorology, Dec. 1-5, 1986, Wellington, New Zealand*, American Meteorological Society, 97-100.
81. Somerville, R. C. J., 1986: Review of "Advances in Geophysics, Vol. 28, Issues in Atmospheric and Oceanic Modeling, Part A, Climate Dynamics." *Bulletin of the American Meteorological Society*, **67**, 1405.
82. Somerville, R. C. J., and C. Gautier, 1987: Modeling the Indian Monsoon Onset. *Research in Air-Sea Interaction and Short-Term Climate Variability at the University of California 1987*, C. R. Mechoso and J. O. Roads (eds.), 109-112.

83. Hathaway, D. H., and R. C. J. Somerville, 1987: Thermal convection in a rotating shear flow. *Geophys. Astrophys. Fluid Dynam.*, **38**, 43-68.
84. Somerville, R. C. J., and S. Iacobellis, 1987: Cloud-radiation interactions: Effects of cirrus optical thickness feedbacks. *Short- and Medium- Range Numerical Weather Prediction*, T. Matsuno (ed.), Meteorological Society of Japan, 177-185.
85. Somerville, R. C. J., 1987: The predictability of weather and climate. *Climatic Change*, **11**, 239-246.
86. Chertock, B., S. Iacobellis, and R. C. J. Somerville, 1987: Remote sensing studies of oceanic cloud-radiation feedbacks. *Atmospheric Radiation Progress And Prospects*, K.-N. Liou and Z. Xiuji (eds.), Science Press and American Meteorological Society, 508-514.
87. Somerville, R. C. J., and S. Iacobellis, 1988: Air-sea interactions and cirrus cloud-radiation feedbacks on climate. *Preprint from the Seventh Conference on Ocean-Atmosphere Interaction*, American Meteorological Society, Feb. 1-5, Anaheim, CA, 53-55.
88. Somerville, R. C. J., and S. Iacobellis, 1989: Climate stability and cloud optical thickness feedbacks. *Preprint from the Symposium On The Role of Clouds In Atmospheric Chemistry And Global Climate*, American Meteorological Society, Jan. 30-Feb. 3, 1989, Anaheim, CA, 60-62.
89. Somerville, R. C. J., S. Iacobellis and S. Isakari, 1989: Tropical cirrus and climate stability. *Proceedings of the 18th Conference on Hurricanes and Tropical Meteorology*, American Meteorological Society, May 16-19, 1989, San Diego, CA, 1-2.
90. Iacobellis, S., and R. C. J. Somerville, 1989: Air-sea interactions and the summer monsoon onset. *Proceedings of the 18th Conference on Hurricanes and Tropical Meteorology*, American Meteorological Society, May 16-19, 1989, San Diego, CA, 79-80.
91. Iacobellis, S. F., and R. C. J. Somerville, 1989: A one dimensional coupled air-sea model for diagnostic studies during TOGA-COARE. *Proceedings of the Western Pacific International Meeting and Workshop on TOGA, COARE*, Noumea, New Caledonia, May 1989.
92. Isakari, S. M. and R. C. J. Somerville, 1989: Accurate numerical solutions for Daisyworld. *Tellus*, **41B**, 478-482.
93. Chertock, B., R. Frouin and R. C. J. Somerville, 1991: Global monitoring of net solar irradiance at the ocean surface: Climatological Variability and the 1982/1983 El Nino. *Journal of Climate*, **4**, 639-650.
94. Iacobellis, S., and R. C. J. Somerville, 1991: Diagnostic modeling of the Indian monsoon onset. Part I: Model description and validation. *Journal of Atmospheric Sciences*, **48**, 1948-1959.

95. Iacobellis, S., and R. C. J. Somerville, 1991: Diagnostic modeling of the Indian monsoon onset. Part II: Budget and sensitivity studies. *Journal of Atmospheric Sciences*, **48**, 1960-1971.
96. Somerville, R. C. J., and S. F. Iacobellis, 1993: Single-column diagnostic climate modeling in ARM. *Preprint from the Fourth Symposium on Global Change Studies*, American Meteorological Society, January 17-22, 1993, Anaheim, CA, 82-85.
97. Malvagi, F., N. Byrne, G. Pomraning and R. Somerville, 1993: Stochastic radiative transfer predictions of functional cloud cover. *Preprint from the Fourth Symposium on Global Change Studies*, American Meteorological Society, January 17-22, 1993, Anaheim, CA, 149-151.
98. Serra, Y., N. Byrne, S. F. Iacobellis, and R. C. J. Somerville, 1993: Effect of varying functional cloud cover on cloud feedback temperature stabilization. *Preprint from the Fourth Symposium on Global Change Studies*, American Meteorological Society, January 17-22, 1993, Anaheim, CA, 225-227.
99. Malvagi, F., R. N. Byrne, G. C. Pomraning, and R. C. J. Somerville, 1993: Stochastic radiative transfer in a partially cloudy atmosphere. *Journal of Atmospheric Sciences*, **50**, 2146-2158.
100. Somerville, R. C. J., 1993: *Change on Planet Earth*. UCSD Extension, University of California, San Diego, 166 pp.
101. Iacobellis, S. F., R. Frouin, H. Razafimpanilo, R. C. J. Somerville, and S. C. Piper, 1994: North African savanna fires and atmospheric carbon dioxide. *Journal of Geophysical Research*, **99**, 8321-8334.
102. Waliser, D. E., and R. C. J. Somerville, 1994: The preferred latitudes of the intertropical convergence zone. *Journal of the Atmospheric Sciences*, **51**, 1619-1639.
103. Somerville, R. C. J., 1994: Review of "Aerosol-Cloud-Climate Interactions." P. V. Hobbs (ed.) Academic Press, San Diego, CA, 1993. xii, 233 pp., illus., *Science*, **264**, 115.
104. Byrne, R. N., D. N. Arion, F. Malvagi, Y. Serra, R. C. J. Somerville, G. C. Pomraning, and B.J. Su, 1994: Stochastic radiation transport for climate models. *Proceedings of the Third Atmospheric Radiation Measurement (ARM) Science Team Meeting*, March 1-4, 1993, Norman, OK, 59-65.
105. Somerville, R. C. J., and S. F. Iacobellis, 1994: Diagnostic modeling of the atmospheric radiation measurement experimental configuration. *Proceedings of the Third Atmospheric Radiation Measurement (ARM) Science Team Meeting*, March 1-4, 1993, Norman, OK, 105-107.

106. Somerville, R. C. J., and S. F. Iacobellis, 1994: Diagnostic analysis of cloud radiative properties. *Preprint from the Fifth Symposium on Global Change Studies*, American Meteorological Society, January 23-28, 1994, Nashville, TN, 11-14.
107. Somerville, R. C. J., and S. F. Iacobellis, 1994: Monsoon mechanisms: Single-column diagnostic modeling. *Proceedings of the International Conference on Monsoon Variability and Prediction*, International Centre for Theoretical Physics, Trieste, Italy, 9-13 May 1994, 593-600.
108. Somerville, R. C. J., 1994: The mystery of cloud feedback. *Proceedings of the First NOAA Summer Institute on Climate and Global Change*, 13-17 June 1994, Steamboat Springs, CO, 58-62.
109. Lee, W.-H., and R. C. J. Somerville, 1995: Testing parameterizations of cloud-radiation feedbacks. *Preprint from the Symposium on the Regulation of Sea Surface Temperatures and Warming of the Tropical Ocean Atmosphere System*, American Meteorological Society, Jan. 15-20, 1995, Dallas, TX, 69-72.
110. Somerville, R. C. J., and S. F. Iacobellis, 1995: Diagnostic analysis of cloud radiative properties. *Proceedings of the Fourth Atmospheric Radiation Measurement (ARM) Science Team Meeting*, Feb. 28 - March 3, 1994, Charleston, SC, pp. 291-295.
111. Iacobellis, S. F., and R. C. J. Somerville, 1995: Validating GCM parameterizations with TOGA-COARE surface radiation budget data. *Preprint from 21st Conference on Hurricanes and Tropical Meteorology*, American Meteorological Society, April 24-28, 1995, Miami, FL, pp. 573-575.
112. Somerville, R. C. J., 1995: Teaching teachers about global change science: Project COPE, *Global Environmental Change Science: Education and Training*, NATO ASI Series, Series I: Global Environmental Change, Vol. 29, D. J. Waddington (ed.), Springer Publishing Company, 93-99.
113. Razafimpanilo, H., R. Frouin, S. F. Iacobellis, and R. C. J. Somerville, 1995: Methodology for estimating burned area from AVHRR reflectance data. *Remote Sensing of Environment*, **54**, 273-289.
114. *Elements of Change 1994*, 1995: Climate Radiation Feedbacks: The Current State of the Science, U. S. Department of Energy, Office of Energy Research, Report No. DE/ER-0661T, September 1995, 123 pp.
115. Somerville, R. C. J., and C. Gautier, 1995: Climate-Radiation Feedbacks: The Current State of the Science, Preface, *Elements of Change 1994, Part One*, Susan Joy Hassol John Katzenberger, (eds.), Aspen Global Change Institute, 6-8.

116. Somerville, R. C. J., and C. Gautier, 1995: Climate-Radiation Feedbacks: The Current State of the Science, Summary, *Elements of Change 1994, Part One*, Susan Joy Hassol, John Katzenberger, (eds.), Aspen Global Change Institute, 10-22.
117. Somerville, R. C. J., 1995: Testing cloud-radiation algorithms in GCMs and single-column models. *Elements of Change 1994, Part One*, Susan Joy Hassol, John Katzenberger, (eds.), Aspen Global Change Institute, 90-91.
118. Iacobellis, S. F., and R. C. J. Somerville, 1995: Single column model experiments in the TOGA-COARE region. *Proceedings of the International Scientific Conference on the Tropical Ocean Global Atmosphere (TOGA) Programme*, 2-7 April 1995, Melbourne, Australia, WCRP-91 - WMO/TD No. 717, Vol. II, December 1995, 746-750.
119. Somerville, R. C. J., 1996: *The Forgiving Air: Understanding Environmental Change*. University of California Press, 195 pp.
120. Soloviev, G. I., V. D. Shapiro, R. C. J. Somerville and B. Shkoller, 1996: The tilting instability with buoyant forcing in a two-dimensional viscous fluid. *Journal of the Atmospheric Sciences*, **53**, 2671-2684.
121. Lee, W.-H., and R. C. J. Somerville, 1996: Effects of alternative cloud radiation parameterizations in a general circulation model. *Annales Geophysicae*, **14**, 107-114.
122. Byrne, R. N., R. C. J. Somerville and B. Subasilar, 1996: Broken-cloud enhancement of solar radiation absorption. *Journal of the Atmospheric Sciences*, **53**, 878-886.
123. Byrne, R. N., R. C. J. Somerville and B. Subasilar, 1996: Broken-cloud enhancement of solar radiation absorption. *Proceedings of the Fifth Atmospheric Radiation Measurement (ARM) Science Team Meeting*, March 19-23, 1995, San Diego, CA, pp. 39-42.
124. Somerville, R. C. J., S. F. Iacobellis and W.-H. Lee, 1996: Effects of cloud-radiation schemes on climate model results. *World Resource Review*, **8**, 321-333.
125. Randall, D. A., K.-M. Xu, R. C. J. Somerville and S. Iacobellis, 1996: Single-column models and cloud ensemble models as links between observations and climate models. *Journal of Climate*, **9**, 1683-1697.
126. Somerville, R. C. J., 1996: Adiabatic processes. *Encyclopedia of Climate and Weather*, Stephen H. Schneider, (ed.), Oxford University Press, 3-6.
127. Somerville, R. C. J., 1996: Climate and weather. *Encyclopedia of Climate and Weather*, Stephen H. Schneider, (ed.), Oxford University Press, 127-129.
128. Somerville, R. C. J., 1996: Diabatic processes. *Encyclopedia of Climate and Weather*, Stephen H. Schneider, (ed.), Oxford University Press, 244-246.

129. Somerville, R. C. J., 1996: Cloud feedbacks and general circulation models. *Elements of Change 1995*, Susan Joy Hassol, John Katzenberger, (eds.), Aspen Global Change Institute, 177-178.
130. Smith, W. S., C.-Y. J. Kao, and R. C. J. Somerville, 1996: Implementation of a physically-based cloud parameterization for both convective and layered clouds in CCM2. *Preprint from Seventh Symposium On Global Change Studies*, American Meteorological Society, January 28-February 2, 1996, Atlanta, GA, 124-126.
131. Somerville, R. C. J., S. F. Iacobellis, and W.-H. Lee, 1996: Diagnostic analysis of cloud radiative properties in TOGA-COARE. *Preprint from Eighth Conference On The Global Ocean-Atmosphere-Land System (GOALS)*, American Meteorological Society, January 28-February 2, 1996, Atlanta, GA, J20-J24.
132. Lee, W.-H., S. F. Iacobellis, and R. C. J. Somerville, 1997: Cloud-radiation forcings and feedbacks: General circulation model tests and observational validation. *Journal of Climate*, **10**, 2479-2496.
133. Iacobellis, S. F., D. E. Lane, and R. C. J. Somerville, 1998: Single-column modeling, general circulation model parameterizations, and Atmospheric Radiation Measurement data. *Proceedings of the Seventh Atmospheric Radiation Measurement (ARM) Science Team Meeting*, March 3-7, 1997, San Antonio, Texas, pp. 431-435.
134. Iacobellis, S. F., D. E. Lane, J. Berque, and R. C. J. Somerville, 1998: Evaluation of cloud parameterizations using a diagnostic single-column model and observations from TOGA-COARE. *Preprint from the Ninth Conference on Interaction of the Sea and Atmosphere*, American Meteorological Society, January 11-16, 1998, Phoenix, AZ, 214-221.
135. Lane, D. E., R. C. J. Somerville, S. F. Iacobellis, and J. Berque, 1998: Sensitivity of single-column model results to horizontal and vertical resolution. *Preprint from the Ninth Symposium on Global Change Studies*, American Meteorological Society, January 11-16, 1998, Phoenix, AZ, 42-43.
- 136.** Iacobellis, S. F., D. E. Lane, J. Berque, and R. C. J. Somerville, 1998: Evaluation of cloud parameterizations using a diagnostic single-column model and observations from the Atmospheric Radiation Measurement Program. *Preprint from the Ninth Symposium on Global Change Studies*, American Meteorological Society, January 11-16, 1998, Phoenix, AZ, 328-330.
137. Somerville, R. C. J., 1998: Review of, “The Endangered Atmosphere: Preserving a Global Commons.” *Bulletin of the American Meteorological Society*, **79**, 104-105.
138. Lubin, D., B Chen, D. H. Bromwich, R. C. J. Somerville, W.-H. Lee, and K. M. Hines, 1998: The impact of Antarctic cloud radiative properties on a GCM climate simulation. *Journal of Climate*, **11**, 447-462.

139. Somerville, R. C. J., 1998: Cloud-Radiation Parameterizations as a Scaling Problem. *Elements of Change 1997*, Susan Joy Hassol, John Katzenberger, (Eds.), Aspen Global Change Institute, 128-135.
140. Somerville, R. C. J., 1998: *The Forgiving Air: Understanding Environmental Change*. University of California Press, revised paperback edition, 195 pp.
141. Barnett, T., D. Randall, B. Semtner, and R. Somerville, 1998: Strengthening the United States National Climate Modeling Effort, Appendix A, in *Capacity of U. S. Climate Modeling To Support Climate Change Assessment Activities*, National Academy Press, pp., 31-36.
142. Iacobellis, S. F., R. C. J. Somerville, D. E. Lane, and, J. Berque, 1998: Analysis of cloud-radiation interactions using ARM observations and a single-column model. *Proceedings of the Eighth Atmospheric Radiation Measurement (ARM) Science Team Meeting*, March 23-27, 1998, Tucson, AZ, pp. 337-341.
143. Lane, D. E., R. C. J. Somerville, S. F. Iacobellis, and J. Berque., 1998: Single-column model sensitivity to changes in horizontal and vertical resolution. *Proceedings of the Eighth Atmospheric Radiation Measurement (ARM) Science Team Meeting*, March 23-27, 1998, Tucson, AZ, pp. 409-412.
144. Lane, D. E., R. C. J. Somerville, S. F. Iacobellis, and J. Berque, 1999: Investigations of cloud-radiation interactions. *Preprint from the Tenth Symposium on Global Change Studies*, American Meteorological Society, January 10-15, 1999, Dallas, TX, 508-511.
145. Iacobellis, S. F., R. C. J. Somerville, D. E. Lane, and J. Berque, 1999: Sensitivity of cloud-radiation interactions to various cloud parameterizations using a single-column model and observations from the atmospheric radiation measurement program. *Preprint from the Tenth Symposium on Global Change Studies*, American Meteorological Society, January 10-15, 1999, Dallas, TX, 539-542.
146. Iacobellis, S. F., R. Frouin, and R. C. J. Somerville, 1999: Direct climate forcing by biomass burning aerosols: Impact of correlations between controlling variables. *Journal of Geophysical Research*, **104**, D10, 12,031-12,045.
147. Somerville, R. C. J., 1999: Scientists Explore An Alien World. *Explorations*, Scripps Institution of Oceanography, Vol. 6, No. 1, Summer 1999, University of California, San Diego, p. 19.
148. Somerville, R. C. J., 1999: Predicting decade-to-century climate change: Prospects for improving models. In “NASA Scientific Forum on Climate Variability and Global Change,” ed. R. A. Schiffer and S. Unninayar, pp. 31-41.

149. Somerville, R. C. J., and S. F. Iacobellis, 1999: Single-column models, ARM observations, and GCM cloud-radiation schemes. *Physics and Chemistry of the Earth* (B), Vol. **24**, No. 6, pp. 733-740.
150. Somerville, R. C. J., S. F. Iacobellis, and D. E. Lane, 1999: Testing cloud-radiation schemes with single-column models and ARM observations. *Proceedings of the Ninth Atmospheric Radiation Measurement (ARM) Science Team Meeting*, March 22-26, 1999, San Antonio, TX, pp. 1-8. (Electronic Publication).
151. Ghan, S. J., D. A. Randall, K.-M. Xu, and D. G. Cripe, R. T. Cederwall, S. C. Xie, and J. J. Yio, J. Hack, and J. Pedretti, S. F. Iacobellis and R. C. J. Somerville, S. Klein, S. K. Krueger, U. Lohmann, A. Robock and G. Stenchikov, L. Rotstayn, Y. Sud and G. Walker, M. Y. Zhang, 1999: An intercomparison of single-column model simulations of summertime midlatitude continental convection. *Proceedings of the Ninth Atmospheric Radiation Measurement (ARM) Science Team Meeting*, March 22-26, 1999, San Antonio, TX, pp. 1-7. (Electronic Publication).
152. Somerville, R. C. J., 1999: Analysis of Cloud-Radiation Interactions Using Field Observations and a Single-Column Model. *Elements of Change 1998*, Susan Joy Hassol, John Katzenberger, (Eds.), Aspen Global Change Institute, 157-161.
153. Somerville, R. C. J., 1999: Climate Change Science: Predicting 21st Century Climate. *University of California, IGCC Policy Brief*, ISSN 1089-8352, Number 12-2, 4 pp.
154. Iacobellis, S. F., and R. C. J. Somerville, 2000: Implications of microphysics for cloud-radiation parameterizations: Lessons from TOGA-COARE. *Journal of the Atmospheric Sciences*, **57**, 161-183.
155. Ghan, S. J., D. Randall, K. Xu, R. Cederwall, D. Cripe, J. Hack, S. Iacobellis, S. Klein, S. Krueger, U. Lohmann, J. Pedretti, A. Robock, L. Rotstayn, R. Somerville, G. Stenchikov, Y. Sud, G. Walker, S. Xie, J. Yio, and M. Zhang, 2000: A comparison of single-column model simulations of Summertime midlatitude continental convection. *Journal of Geophysical Research, D. (Atmospheres)*, **105** (D2), 2091-2124.
156. Lane, D. E., R. C. J. Somerville, and S. F. Iacobellis, 2000: Sensitivity of cloud and radiation parameterizations to changes in vertical resolution. *Journal of Climate*, **13**, 915-922.
157. Iacobellis, S. F., R. C. J. Somerville, and D. E. Lane, 2000: Evaluation of cloud-radiation sensitivities to alternative cloud and convection schemes. *Preprint from the Eleventh Symposium on Global Change Studies*, American Meteorological Society, January 9-14, 2000, Long Beach, CA, 328-331.
158. Lane, D. E., R. C. J. Somerville, and S. F. Iacobellis, 2000: Validation of a stochastic radiative transfer model. *Preprint from the Eleventh Symposium on Global Change Studies*, American Meteorological Society, January 9-14, 2000, Long Beach, CA, 336-339.

159. Iacobellis, S. F., R. C. J. Somerville, and D. E. Lane, 2000: Analysis of forcing methods for single-column models. *Preprint from the Eleventh Symposium on Global Change Studies*, American Meteorological Society, January 9-14, 2000, Long Beach, CA, 340-343.
160. Iacobellis, S. F., R. C. J. Somerville, and D. E. Lane, 2000: SCM sensitivity to microphysics, radiation and convection algorithms. *Proceedings of the Tenth Atmospheric Radiation Measurement (ARM) Science Team Meeting*, March 13-17, 2000, San Antonio, TX, pp. 1-4, (Electronic Publication).
161. Lane, D. E., R. C. J. Somerville, and S. F. Iacobellis, 2000: Evaluation of stochastic radiative transfer model using ground-based measurements. *Proceedings of the Tenth Atmospheric Radiation Measurement (ARM) Science Team Meeting*, March 13-17, 2000, San Antonio, TX, pp. 1-4, (Electronic Publication).
162. Somerville, R. C. J., 2000: Using single-column models to improve cloud-radiation parameterizations. *General Circulation Model Development: Past, Present and Future*, Academic Press, D. Randall (ed.), pp. 641-657.
163. McFarquhar, G. M., R. C. J. Somerville, S. F. Iacobellis, and P. Yang, 2001: Sensitivities of SCM models to improved parameterizations of cloud-radiative interactions for tropical cirrus. *Preprint from the Twelfth Symposium on Global Change and Climate Variations*, American Meteorological Society, January 14-18, 2001, Albuquerque, NM, 11-14.
164. Somerville, R. C. J., G. L. Potter, M. Kanamitsu, J. J. Hnilo, and J. Woolen, 2001: An apparent multi-decadal trend in shortwave cloud forcing over the Tropical Pacific. *Preprint from the Twelfth Symposium on Global Change and Climate Variations*, American Meteorological Society, January 14-18, 2001, Albuquerque, NM, 225-228.
165. Lane, D. E., R. C. J. Somerville, and S. F. Iacobellis., 2001: Simulation of radiative transfer through broken cloud fields using a stochastic approach. *Preprint from the Twelfth Symposium on Global Change and Climate Variations*, American Meteorological Society, January 14-18, 2001, Albuquerque, NM, 229-232.
166. Iacobellis, S. F., and R. C. J. Somerville, 2001: Evaluation of cloud and radiation parameterizations using a long-term data set produced by a single-column model forced with NCEP GSM data. *Preprint from the Twelfth Symposium on Global Change and Climate Variations*, American Meteorological Society, January 14-18, 2001, Albuquerque, NM, 233-236.
167. Shell, K. M., R. Frouin, S. F. Iacobellis, and R. C. J. Somerville, 2001: Influence of phytoplankton on climate. *Preprint from the Twelfth Symposium on Global Change and Climate Variations*, American Meteorological Society, January 14-18, 2001, Albuquerque, NM, 247-250.

168. Lane, D. E., R. C. J. Somerville, and S. F. Iacobellis, 2001: Evaluation of a stochastic radiative transfer model using ground-based measurements. In *IRS 2000: Current Problems in Atmospheric Radiation*, W. L. Smith and Yu. M. Timofeyev (Eds.) A. Deepak Publishing, Hampton, Virginia, pp. 245-248.
169. Iacobellis, S. F., R. C. J. Somerville, and D. E. Lane, 2001: SCM sensitivity to microphysics, radiation and convection algorithms. In *IRS 2000: Current Problems in Atmospheric Radiation*, W. L. Smith and Yu. M. Timofeyev (Eds.) A. Deepak Publishing, Hampton, Virginia, pp. 1287-1290.
170. McFarquhar, G. M., P. Yang, A. Macke, S. Iacobellis, and R. C. J. Somerville, 2001: Sensitivities of SCMs to new parameterizations of cloud-radiative interactions. *Proceedings of the Eleventh ARM Science Team Meeting*, March 19-23, 2001, Atlanta, GA, pp. 1-7, (Electronic Publication).
171. Iacobellis, S. F., and R. C. J. Somerville, 2002: Examining model sensitivities to cloud microphysics using a single-column model, NCEP forecasts and ARM data. *Preprint from the Thirteenth Symposium on Global Change and Climate Variations*, American Meteorological Society, January 13-17, 2002, Orlando, FL, 197-199.
172. Somerville R. C. J., 2002: Charles David Keeling. In *Encyclopedia of Global Environmental Change*, M. C. MacCracken and J. S. Perry (Eds.) J. Wiley & Sons. Ltd., Vol. 1., pp. 484-485.
173. Somerville, R. C. J., 2002: Cloud-Radiation Interactions. In *Encyclopedia of Global Environmental Change*, M. C. MacCracken and J. S. Perry (Eds.) J. Wiley & Sons. Ltd., Vol. 1, pp. 312-316.
174. Iacobellis, S. F., R. C. J. Somerville, G. M. McFarquhar, and D. L. Mitchell, 2002: Sensitivity of radiative fluxes and heating rates to cloud microphysics. *Proceedings of the Twelfth ARM Science Team Meeting*. St. Petersburg, FL, April 8-12, 2002. pp. 1-15, (Electronic publication).
175. McFarquhar, G. M., S. F. Iacobellis, R. C. J. Somerville, G. G. Mace, and Y. Zhang, 2002: Sensitivities of SCMs to new parameterizations of cloud-radiative interactions. *Proceedings of the Twelfth ARM Science Team Meeting*, St. Petersburg, FL, April 8-12, 2002, pp. 1-10, (http://www.arm.gov/publications/proceedings/conf12/extended_abs/iacobellis-sf.pdf)
176. McFarquhar, G. M., P. Yang, A. Macke, A. Baran, S. Iacobellis, and R. Somerville, 2002: Parameterizations of solar single-scattering radiative properties for tropical ice clouds. *Preprint from the Eleventh Conference On Cloud Physics*, American Meteorological Society, June 3-7, 2002, Ogden, Utah, J21-J24.

177. Iacobellis, S. F., R. C. J. Somerville, and G. M. McFarquhar, 2002: Sensitivity of radiative fluxes and heating rates to cloud microphysics using a single-column model and ARM data.. *Preprint from the Eleventh Conference On Cloud Physics*, American Meteorological Society, June 3-7, 2002, Ogden, Utah, J126-J129.
178. Xie, S., K-M. Xu, R. T. Cederwall, P. Bechtold, A. D. Del Genio, S. A. Klein, D. G. Cripe, S. J. Ghan, D. Gregory, S. F. Iacobellis, S. K. Krueger, U. Lohmann, J. C. Petch, D. A. Randall, L. D. Rotstain, R. C. J. Somerville, Y. C. Sud, K. von Salzen, G. K. Walker, A. Wolf, J. J. Yio, G-J. Zhang, M. Zhang, 2002: Intercomparison and evaluation of cumulus parameterizations under summertime midlatitude continental conditions. *Quarterly Journal of the Royal Meteorological Society*, **128**, pp. 1095-1136.
179. Somerville, R. C. J., 2002: Review of “Climate Change: A Multidisciplinary Approach” *Bulletin of the American Meteorological Society*, **83**, pp. 901-902.
180. Lane, D. E., K. Goris, and R. C. J. Somerville, 2002: Radiative transfer through broken clouds: Observations and model validation. *Journal of Climate*, **15**, pp. 2921-2933.
181. Somerville, R. C. J., 2002: Review of “The Atmospheric Environment: Effects of Human Activity.” M. B. McElroy (ed.), 326 pp., Princeton U. P., Princeton, NJ, 2002, *American Journal of Physics*, **70**, pp. 1166-1167.
182. Iacobellis, S. F., R. C. J. Somerville, G. M. McFarquhar, and D. Mitchell, 2003: Sensitivity of cloud-radiation interactions to cloud microphysics. *Preprint from the Fourteenth Symposium on Global Change and Climate Variations*, American Meteorological Society, February 9-13, 2003, Long Beach, CA, pp. 1-8.
183. Lane, D. E., R. C. J. Somerville, and S. F. Iacobellis, 2003: Development of a stochastic cloud-radiation parameterization, *Preprint from the Fourteenth Symposium on Global Change and Climate Variations*, American Meteorological Society, February 9-13, 2003, Long Beach, CA, pp. 1-5.
184. McFarquhar, G. M., S. Iacobellis, and R. C. J. Somerville, 2003: SCM simulations of tropical ice clouds using observationally based parameterizations of microphysics. *Journal of Climate*, **16**, pp. 1643-1664.
185. Iacobellis, S. F., G. M. McFarquhar, D. L. Mitchell, and R. C. J. Somerville, 2003: The sensitivity of radiative fluxes to parameterized cloud microphysics. *Journal of Climate*, **16**, pp. 2979-2996.
186. Shell, K., R. Frouin, S. Nakamoto, and R. Somerville, 2003: Atmospheric response to solar radiation absorbed by phytoplankton. *Journal of Geophysical Research*, **108** (D15), 4445, doi:10.1029/2003JD003440, 2003.

187. Berque, J., D. Lubin, and R. C. J. Somerville, 2004: Infrared radiative properties of the Antarctic Plateau from AVHRR Data. Part I: Effect of the snow surface. *Journal of Applied Meteorology*, **43**, pp. 350-362.
188. Lane-Veron, D. E., and R. C. J. Somerville, 2004: Stochastic theory of radiative transfer through generalized cloud fields. *Journal of Geophysical Research*, **109**, D18113, doi:10.1029/2004JD004524, 2004.
189. Shell, K. M., and R. C. J. Somerville, 2004: A generalized energy balance climate model with parameterized dynamics and diabatic heating. *Journal of Climate*, **18**, pp. 1753-1772, doi: 10.1175/JCLI3373.1.
190. Xu, K.-M., M. Zhang, Z. A. Eitzen, S. J. Ghan, S. A. Klein, X. Wu, M. Branson, A. D. DelGenio, S. F. Iacobellis, M. Khairoutdinov, W. Lin, U. Lohmann, D. A. Randall, R. C. J. Somerville, Y. C. Sud, G. K. Walker, A. Wolf, S. Xie, J. J. Yio, and J. Zhang, 2005: Modeling springtime shallow frontal clouds with cloud-resolving and single-column models. *Journal of Geophysical Research*, **110**, D15S04, doi:10.1029/2004JD005153.
191. Xie, S., M. Zhang, M. Branson, R. T. Cederwall, A. D. Del Genio, Z. A. Eitzen, S. J. Ghan, S. F. Iacobellis, K. J. Johnson, M. Khairoutdinov, S. A. Klein, S. K. Krueger, W. Lin, U. Lohmann, M. A. Miller, D. A. Randall, R. C. J. Somerville, Y. C. Sud, G. K. Walker, A. Wolf, X. Wu, K.-M. Xu, J. J. Yio, G. Zhang, and J. Zhang, 2005: Simulations of midlatitude frontal clouds by SCMs and CRMs during the ARM March 2000 Cloud IOP. *Journal of Geophysical Research*, **110**, D15S03, doi:10.1029/2004JD005119,
192. Iacobellis, S. F., and Richard C. J. Somerville, 2006: Evaluating parameterizations of the autoconversion process using a single-column model and ARM measurements. *Journal of Geophysical Research*, **111**, D02203, doi:10.1029/2005JD006296.
193. Somerville, R. C. J., 2006: Medical metaphors for climate issues: An editorial essay. *Climatic Change*, **76**, 1–6, doi: 10.1007/s10584-006-9084-8.
194. Shell, K. M., and R. C. J. Somerville, 2007: Direct radiative effect of mineral dust and volcanic aerosols in a simple aerosol climate model, *Journal of Geophysical Research*, **112**, D03205, doi:10.1029/2006JD007197.
195. Shell, K. M., and R. C. J. Somerville, 2007: Sensitivity of climate forcing and response to dust optical properties in an idealized model, *Journal of Geophysical Research* **112**, D03206, doi:10.1029/2006JD007198.
196. Rahmstorf, S., A. Cazenave, J. A. Church, J. E. Hansen, R. F. Keeling, D. E. Parker, and R. C. J. Somerville, 2007: Recent climate observations compared to projections. *Science*, **316**, 709 (2007); published online 1 February 2007 (10.1126/science.1136843).
197. Somerville, R., H. Le Treut, U. Cubasch, Y. Ding, C. Mauritzen, A. Mokssit, T. Peterson, and M. Prather, 2007: Historical Overview of Climate Change. In: *Climate*

Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K. B. Averyt, M. Tignor and H. L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

198. Solomon, S., D. Qin, M. Manning, R. B. Alley, T. Berntsen, N. L., Bindoff, Z. Chen, A. Chidthaisong, J. M. Gregory, G. C. Hegerl, M. Heimann, B. Hewitson, B. J. Hoskins, F. Joos, J. Jouzel, V. Kattsov, U. Lohmann, T. Matsuno, M. Molina, N. Nicholls, J. Overpeck, G. Raga, V. Ramaswamy, J. Ren, M. Rusticucci, R. Somerville, T. F. Stocker, P. Whetton, R. A. Wood and D. Wratt, 2007: Technical Summary. In: *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K. B. Averyt, M. Tignor and H. L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
199. IPCC, 2007: *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K. B. Averyt, M. Tignor and H. L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
200. Jouzel, J., et R. C. J. Somerville, 2007: Le groupe intergouvernemental d'experts sur l'évolution du climat: le consensus à l'échelle planétaire. *Comprendre le Changement Climatique*, Odile Jacob (Paris), J.-L. Fellous et C. Gautier (eds.), pp. 27-44.
201. Somerville, R.C.J., 2008: *The Forgiving Air: Understanding Environmental Change, Second Edition*. American Meteorological Society, Boston, MA, 224 pp.
202. Somerville, R. C. J., and J. Jouzel, 2008: The global consensus and the Intergovernmental Panel on Climate Change. *Facing Climate Change Together*, Cambridge University Press, C. Gautier and J.-L. Fellous (eds.), pp. 12-29.
203. Somerville, R. C. J., 2008: Reflections on the UN climate change negotiations in Bali. *Bulletin of the Atomic Scientists*, Web Edition, posted 17 January 2008, accessible at
 - a. <http://www.thebulletin.org/web-edition/features/reflections-the-un-climate-change-negotiations-bali>.
204. Somerville, R. C. J., 2008: Foreword. *Oil, Water, and Climate: An Introduction*, by C. Gautier, Cambridge University Press, xxvi-xxi.
205. Somerville, R. C. J., 2008: The ethics of climate change. *Yale Environment 360*, posted 3 June 2008, accessible at <http://e360.yale.edu/content/feature.msp?id=1365>.
206. Somerville, R. C. J., 2008: Connecting policy and science: The Intergovernmental Panel on Climate Change. *The Planetary Report*, **28**, 4, 12-17.

207. Somerville, R. C. J., 2008: Bert Bolin (1925-2007). *Bulletin of the American Meteorological Society*, **89**, 1046-1048.
208. Somerville, R. C. J., 2008: If I were President: A climate change speech. *Bulletin of the American Meteorological Society*, **89**, 1180-1182.
209. Pritchard, M. S., and R. C. J. Somerville, 2009: Empirical orthogonal function analysis of the diurnal cycle of precipitation in a multi-scale climate model. *Geophysical Research Letters*, **36**, L05812, doi:10.1029/2008GL036964.
210. Bowman, T. E., E. Maibach, M. E. Mann, S. C. Moser, and R. C. J. Somerville, 2009: Creating a common climate language. *Science*, **324**, 36-37.
211. Pritchard, M. S., and R. C. J. Somerville, 2009: Assessing the diurnal cycle of precipitation in a multi-scale climate model. *Journal of Advances in Modeling Earth Systems*, **1**, Art. # 12, 16pp., doi:10.3894/JAMES.2009.1.12.
212. Allison, I., N. L. Bindoff, R.A. Bindschadler, P.M. Cox, N. de Noblet, M.H. England, J.E. Francis, N. Gruber, A.M. Haywood, D.J. Karoly, G. Kaser, C. Le Quéré, T.M. Lenton, M.E. Mann, B.I. McNeil, A.J. Pitman, S. Rahmstorf, E. Rignot, H.J. Schellnhuber, S.H. Schneider, S.C. Sherwood, R.C.J. Somerville, K. Steffen, E.J. Steig, M. Visbeck, A.J. Weaver, 2009: *The Copenhagen Diagnosis: Updating the world on the Latest Climate Science*. The University of New South Wales Climate Change Research Centre, Sydney, Australia, 60 pp. <http://www.copenhagendiagnosis.com>
213. Somerville, R. C. J., 2010: The passing of a climate prodigy. *Bulletin of the Atomic Scientists*, Web Edition, posted 23 July 2010, accessible at <http://www.thebulletin.org/web-edition/op-eds/the-passing-of-climate-prodigy>
214. Somerville, R. C. J., 2010: The ethics of geoengineering: What is humanity's backup plan if climate change mitigation fails? *Lahey Clinic Journal of Medical Ethics*, **17**, 3, 6-8.
215. Bowman, T. E., E. Maibach, M. E. Mann, R. C. J. Somerville, B. J. Seltzer, B. Fischhoff, S. M. Gardiner, R. J. Gould, A. Leiserowitz, and G. Yohe, 2010: Time to take action on climate communication. *Science*, **330**, 1044.
216. Asilomar Scientific Organizing Committee, 2010: *The Asilomar Conference Recommendations on Principles for Research into Climate Engineering Techniques*. Climate Institute, Washington, DC. 37 pp. <http://www.climate.org>.
217. Pritchard, M. S., M. W. Moncrieff, and R. C. J. Somerville, 2011: Orogenic propagating precipitation systems over the US in a global climate model with embedded explicit convection. *Journal of the Atmospheric Sciences*, **68**, 1821-1840. doi:10.1175/2011JAS3699.1

218. Somerville, R. C. J., 2011: How much should the public know about climate science? *Climatic Change*, **104**, 509-514. doi:10.1007/s10584-010-9938-y.
219. Donner, L. W. Schubert and R. Somerville, (eds.), 2011: *The Development of Atmospheric General Circulation Models: Complexity, Synthesis and Computation*. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
220. Somerville, R. C. J., 2011: The co-evolution of climate models and the Intergovernmental Panel on Climate Change. In: *The Development of Atmospheric General Circulation Models: Complexity, Synthesis and Computation*. [Donner, L. W. Schubert and R. Somerville, (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 225-252.
221. Somerville, R. C. J., 2011: Computing the climate and more. *Science*, **331**, 149-150.
222. Somerville, R. C. J., 2011: An update on the science of climate change. *EA Chronicles*, UCSD. Vol. 10, No. 4, pp.1 – 3.
223. Allison, I., N. L. Bindoff, R.A. Bindschadler, P.M. Cox, N. de Noblet, M.H. England, J.E. Francis, N. Gruber, A.M. Haywood, D.J. Karoly, G. Kaser, C. Le Quéré, T.M. Lenton, M.E. Mann, B.I. McNeil, A.J. Pitman, S. Rahmstorf, E. Rignot, H.J. Schellnhuber, S.H. Schneider, S.C. Sherwood, R.C.J. Somerville, K. Steffen, E.J. Steig, M. Visbeck, A.J. Weaver, 2011: *The Copenhagen Diagnosis: Updating the World on the Latest Climate Science*. Elsevier, Amsterdam, The Netherlands.
224. Berque, J., D. Lubin and R. C. J. Somerville, 2011: Transect method for Antarctic cloud property retrieval using AVHRR data. *International Journal of Remote Sensing*, **32**, 2887-2903.
225. Somerville, R. C. J., and S. J. Hassol, 2011: Communicating the science of climate change. *Physics Today*, **64**, 10, 48-53.
226. Somerville, R. C. J., 2012: Science, politics and public perceptions of climate change. In: *Climate Change: Inferences from Paleoclimate and Regional Aspects*. [Berger, A., F. Mesinger and D. Sijacki (eds.)]. Springer, Berlin and Heidelberg, Germany, pp. 3-17.