

Publications

Multi-author Books and Reports Edited

- [1] K. Hamilton (editor), *Gravity Wave Processes - Their Parameterization in Global Climate Models*, Springer-Verlag, 414 pp. (1997).
- [2] L. Gray and K. Hamilton (editors). *Physics of the Equatorial Atmosphere*. Rutherford-Appleton Laboratory. Didcot, UK, 224 pp. (2003).
- [3] K. Hamilton and W. Ohfuchi (editors). *High Resolution Numerical Modelling of the Atmosphere and Ocean*. Springer Publishing, 293 pp. (2008).

Refereed Journal Articles

- [1] K. Hamilton. A Variational Principle for the Acoustic Attenuation of Metals in the Collision Regime. *Physica*, **A97**, 181-188. (1979).
- [2] K. Hamilton. Observations of the Solar Diurnal and Semidiurnal Surface Pressure Oscillations in Canada. *Atmosphere-Ocean*, **18**, 89-97. (1980).
- [3] K. Hamilton. The Geographical Distribution of the Solar Semidiurnal Surface Pressure Oscillation. *Journal of Geophysical Research*, **85**, 1945-1949. (1980).
- [4] K. Hamilton. Latent Heat Release as a Possible Forcing Mechanism for Atmospheric Tides. *Monthly Weather Review*, **109**, 3-17. (1981).
- [5] K. Hamilton. The Vertical Structure of the Quasi-biennial Oscillation: Observations and Theory. *Atmosphere-Ocean*, **19**, 236-250. (1981).
- [6] K. Hamilton. A Note on the Observed Diurnal and Semidiurnal Rainfall Variations. *Journal of Geophysical Research*, **86**, 12122-12126. (1981).
- [7] K. Hamilton. The Effects of Solar Tides on the General Circulation of the Martian Atmosphere. *Journal of the Atmospheric Sciences*, **39**, 481-485. (1982).
- [8] K. Hamilton. A Note on the Interaction Between a Thermally Forced Standing Internal Gravity Wave and the Mean Flow: Implications for the Theory of the Quasi-biennial Oscillation. *Journal of the Atmospheric Sciences*, **39**, 1881-1886. (1982).
- [9] K. Hamilton. Rocketsonde Observations of the Mesospheric Semiannual Oscillation at Kwajalein. *Atmosphere-Ocean*, **20**, 281-286. (1982).
- [10] K. Hamilton. Some Features of the Climatology of the Northern Hemisphere Stratosphere Revealed by NMC Upper Atmosphere Analyses. *Journal of the Atmospheric Sciences*, **39**, 2737-2749. (1982).
- [11] K. Hamilton. Aspects of Wave Behaviour in the Mid and Upper Troposphere of the Southern Hemisphere. *Atmosphere-Ocean*, **21**, 40-54. (1983).

- [12] K. Hamilton. Diagnostic Study of the Momentum Balance of the Northern Hemisphere Winter Stratosphere. *Monthly Weather Review*, **111**, 1434-1441. (1983).
- [13] K. Hamilton. Quasi-biennial and Other Long Period Variations in the Solar Semidiurnal Barometric Oscillation: Observations, Theory and a Possible Application to the Problem of Monitoring Changes in Global Ozone. *Journal of the Atmospheric Sciences*, **40**, 2432-2443. (1983).
- [14] K. Hamilton. Calculation of the Effect of Stratospheric Mean Wind Variations on the Solar Semidiurnal Barometric Oscillation. *Atmosphere-Ocean*, **22**, 48-66. (1984).
- [15] K. Hamilton. Evidence for a Normal Mode Kelvin Wave in the Atmosphere. *Journal of the Meteorological Society of Japan*, **62**, 308-311. (1984).
- [16] K. Hamilton. Mean Wind Evolution Through the Quasi-biennial Cycle of the Tropical Lower Stratosphere. *Journal of the Atmospheric Sciences*, **41**, 2113-2125. (1984).
- [17] K. Hamilton. A Study of the Occurrence of Dynamically Unstable Conditions in the Middle Atmosphere. *Canadian Journal of Physics*, **62**, 963-967. (1984).
- [18] K. Hamilton. Detection of the Lunar Diurnal Atmospheric Tide. *Monthly Weather Review*, **112**, 1620-1625. (1984).
- [19] K. Hamilton and R. Garcia. Long Period Variations in the Solar Semidiurnal Atmospheric Tide. *Journal of Geophysical Research*, **89**, 11705-11710. (1984).
- [20] W.J. Emery and K. Hamilton. Atmospheric Forcing of Interannual Variability in the Northeast Pacific Ocean, Connections with El Nino. *Journal of Geophysical Research*, **90**, 857-868. (1985).
- [21] K. Hamilton. A Possible Relationship Between Tropical Ocean Temperatures and the Observed Amplitude of the Atmospheric (1,1) Rossby Normal Mode. *Journal of Geophysical Research*, **90**, 8071-8074. (1985).
- [22] K. Hamilton. A Study of the Variability of the Return Migration Route of Fraser River Sockeye Salmon. *Canadian Journal of Zoology*, **63**, 1930-1943. (1985).
- [23] K. Hamilton. The Initial Westerly Acceleration Phase of the Stratospheric Quasi-biennial Oscillation as Revealed in FGGE Analyses. *Atmosphere-Ocean*, **23**, 188-192. (1985).
- [24] K. Hamilton. Dynamics of the Stratospheric Semiannual Oscillation. *Journal of the Meteorological Society of Japan*, **64**, 227-244. (1986).
- [25] K. Hamilton and R. Garcia. Theory and Observations of the Short Period Normal Mode Oscillations of the Atmosphere. *Journal of Geophysical Research*, **91**, 11867-11875. (1986).
- [26] K. Hamilton. Early Canadian Weather Observers and "The Year Without a Summer". *Bulletin of the American Meteorological Society*, **67**, 524-532. (1986).
- [27] K. Hamilton and R. Garcia. El Nino/Southern Oscillation Events and Their Associated Midlatitude Teleconnections 1532-1828. *Bulletin of the American Meteorological Society*, **67**, 1354-1361. (1986).

- [28] F. Zwiers and K. Hamilton. The Simulation of Atmospheric Tides in the Canadian Climate Centre General Circulation Model. *Journal of Geophysical Research*, **91**, 11877-11898. (1986).
- [29] P.F. Cummins, L.A. Mysak and K. Hamilton. Generation of Annual Rossby Waves in the North Pacific by the Wind Stress Curl. *Journal of Physical Oceanography*, **16**, 1165-1178. (1986).
- [30] K. Hamilton. General Circulation Model Simulation of the Structure and Energetics of Atmospheric Normal Modes. *Tellus*, **39A**, 435-459. (1987).
- [31] K. Hamilton. Interannual Environmental Variability and North American Fisheries. *Bulletin of the American Meteorological Society*, **68**, 1541-1548. (1987).
- [32] K. Hamilton. A Detailed Examination of the Extratropical Response to Tropical El Nino/Southern Oscillation Events. *Journal of Climatology*, **8**, 67-86. (1988).
- [33] K. Hamilton and A. Allingham. A Note on Equatorial Atlantic Sea Surface Temperature Variations 1890-1979. *Atmosphere-Ocean*, **26**, 668-678. (1988).
- [34] K. Hamilton and J.D. Mahlman. General Circulation Model Simulation of the Semian-
nual Oscillation in the Tropical Middle Atmosphere. *Journal of the Atmospheric Sciences*, **45**,
3212-3235. (1988).
- [35] K. Hamilton. Interhemispheric Asymmetry and Annual Synchronization of the Ozone
Quasi-biennial Oscillation. *Journal of the Atmospheric Sciences*, **46**, 1019-1025. (1989).
- [36] K. Hamilton. A Look at the Recently Proposed Solar-QBO-Weather Relationship. *Jour-
nal of Climate*, **3**, 497-503. (1990).
- [37] K. Hamilton. Climatological Statistics of Stratospheric Inertia-gravity Waves Deduced
from Historical Rocketsonde Wind and Temperature Data. *Journal of Geophysical Research*,
96, 20831-20839. (1991).
- [38] K. Hamilton and L. Yuan. Experiments on Tropical Stratospheric Mean Wind Variations
in a Spectral General Circulation Model. *Journal of the Atmospheric Sciences*, **49**, 2464-2483.
(1992).
- [39] E. Manzini and K. Hamilton. Middle Atmospheric Travelling Waves Forced by Latent
and Convective Heating. *Journal of the Atmospheric Sciences*, **50**, 2180-2200. (1993).
- [40] K. Hamilton. An Examination of Observed Southern Oscillation Effects in the Northern
Hemisphere Stratosphere. *Journal of the Atmospheric Sciences*, **50**, 3468-3473. (1993).
- [41] K. Hamilton. A General Circulation Model Simulation of El Nino Effects in the Extratro-
pical Northern Hemisphere Stratosphere. *Geophysical Research Letters*, **20**, 1803-1806.
(1993).
- [42] L. Yuan and K. Hamilton. Equilibrium Dynamics in a Forced-Dissipative f-Plane Shal-
low Water Model. *Journal of Fluid Mechanics*, **280**, 369-394. (1994).
- [43] K. Hamilton, R.J. Wilson, J.D. Mahlman and L.J. Umscheid. Climatology of the SKYHI
Troposphere-Stratosphere-Mesosphere General Circulation Model. *Journal of the Atmo-
spheric Sciences*, **52**, 5-43. (1995).

- [44] K. Hamilton. Interannual Variability in the Northern Hemisphere Winter Middle Atmosphere in Control and Perturbed Experiments with the SKYHI General Circulation Model. *Journal of the Atmospheric Sciences*, **52**, 44-66. (1995).
- [45] K. Hamilton. Comprehensive Modelling of Middle Atmospheric Climate: Some Recent Results. *Climate Dynamics*, **11**, 223-241. (1995).
- [46] K. Hamilton. Comment on “Global QBO in Circulation and Ozone. Part I: Reexamination of Observational Evidence”. *Journal of the Atmospheric Sciences*, **52**, 1834-1838. (1995).
- [47] K. Hamilton and R.A. Vincent. High-Resolution Radiosonde Data Offer New Prospects for Research. *Eos*, **74**, 497-507. (1995).
- [48] R.J. Wilson and K. Hamilton. Comprehensive Model Simulation of Tides in the Martian Atmosphere. *Journal of the Atmospheric Sciences*, **53**, 1290-1326. (1996).
- [49] K. Hamilton. Comprehensive Meteorological Modelling of the Middle Atmosphere: A Tutorial Review. *Journal of Atmospheric and Terrestrial Physics*, **58**, 1591-1628. (1996).
- [50] P.W. Jones, K. Hamilton and R.J. Wilson. A Very High-Resolution General Circulation Model Simulation of the Global Circulation in Austral Winter. *Journal of the Atmospheric Sciences*, **54**, 1107-1116. (1997).
- [51] J.M. Forbes, M.E. Hagan, X. Zhang and K. Hamilton. Upper Atmosphere Tidal Oscillations Due to Latent Heat Release in the Tropical Troposphere. *Annales Geophysicae*, **15**, 1165-1175. (1997).
- [52] K. Hamilton. Observation of an Ultra-Slow Large-Scale Wave Near the Tropical Tropopause. *Journal of Geophysical Research*, **102**, 13457-13464. (1997).
- [53] K. Hamilton and R.S. Hemler. Appearance of a Super-Typhoon in a Global Climate Model Simulation. *Bulletin of the American Meteorological Society*, **78**, 2874-2876. (1997).
- [54] K. Hamilton. An Imposed Quasi-biennial Oscillation in a Comprehensive General Circulation Model: Response of the Tropical and Extratropical Circulation. *Journal of the Atmospheric Sciences*, **55**, 2393-2418. (1998).
- [55] K. Hamilton. Observations of Tropical Stratospheric Winds Before World War II. *Bulletin of the American Meteorological Society*, **79**, 1367-1371. (1998).
- [56] K. Hamilton. Dynamics of the Tropical Middle Atmosphere: A Tutorial Review. *Atmosphere-Ocean*, **36**, 319-354. (1998).
- [57] K. Hamilton. Dynamical Coupling of the Middle and Lower Atmosphere: Historical Background to Current Research. *Journal of Atmospheric and Solar-Terrestrial Physics*, **61**, 73-84. (1999).
- [58] K. Hamilton, R.J. Wilson and R. Hemler. Middle Atmosphere Simulated with High Vertical and Horizontal Resolution Versions of a GCM: Improvement in the Cold Pole Bias and Generation of a QBO-Like Oscillation in the Tropics. *Journal of the Atmospheric Sciences*, **56**, 3829-3846. (1999).

- [59] J.N. Koshyk, K. Hamilton and J.D. Mahlman. Simulation of the Mesoscale Spectral Regime in the GFDL SKYHI General Circulation Model. *Geophysical Research Letters*, **26**, 843-846. (1999).
- [60] J.N. Koshyk, B.A. Boville, K. Hamilton, E. Manzini and K. Shibata. The Kinetic Energy Spectrum of Horizontal Motions in Middle Atmosphere Models. *Journal of Geophysical Research*, **104**, 27177-27190. (1999).
- [61] L. Bruhwiler and K. Hamilton. A Numerical Simulation of the Ozone QBO in a Comprehensive General Circulation Model. *Journal of Geophysical Research*, **104**, 30525-30558. (1999).
- [62] K. Hamilton and S. Fan. Effects of the Stratospheric QBO on Long-Lived Greenhouse Gasses in the Troposphere. *Journal of Geophysical Research*, **105**, 20581-20587. (2000).
- [63] K. Hamilton and R.A. Vincent. Field Experiment to Examine Gravity Waves in the Middle Atmosphere. *Eos*, **81**, 517. (2000).
- [64] S. Pawson, K. Kodera, K. Hamilton, T. Shepherd, S. Beagley, B. Boville, J. Farrara, T. Fairlie, A. Kitoh, W. Lahoz, U. Langematz, E. Manzini, D. Rind, A. Scaife, K. Shibata, P. Simon, R. Swinbank, L. Takacs, R. Wilson, J. Al-Saadi, M. Amodei, M. Chiba, L. Coy, J. de Grandpre, R. Eckman, M. Fiorino, W. Grose, H. Koeide, J. Koshyk, D. Li, J. Lerner, N. McFarlane, C. Mechoso, A. Molod, A. O'Neil, R. Pierce, W. Randel, R. Rood, and F. Wu. The GCM-Reality Intercomparison for SPARC: Scientific Issues and Initial Results. *Bulletin of the American Meteorological Society*, **81**, 781-796. (2000).
- [65] K. Hamilton, R.J. Wilson and R. Hemler. Spontaneous Stratospheric QBO-Like Oscillations Simulated by the GFDL SKYHI General Circulation Model. *Journal of the Atmospheric Sciences*, **58**, 3271-3292. (2001).
- [66] J.N. Koshyk and K. Hamilton. The Horizontal Kinetic Energy Spectrum and Spectral Budget Simulated by a High-Resolution Troposphere-Stratosphere-Mesosphere GCM. *Journal of the Atmospheric Sciences*, **58**, 329-348. (2001).
- [67] M. Baldwin, L. Gray, T. Dunkerton, K. Hamilton, P. Haynes, W. Randel, J. Holton, M. Alexander, I. Hirota, T. Horinouchi, D. Jones, J. Kinnnersley, C. Marquardt, K. Sato and M. Takahashi. The Quasi-biennial Oscillation. *Reviews of Geophysics*, **39**, 179-229. (2001).
- [68] K. Hamilton and W. Hsieh. Representation of the QBO in the Tropical Stratosphere Wind by Nonlinear Principal Component Analysis. *Journal of Geophysical Research*, **107**, D15, ACL3-1-10. (2002).
- [69] M. Bittner, D. Offermann, H.-H. Graf, M. Donner and K. Hamilton. An 18-year Time Series of OH Rotational Temperatures and Middle Atmosphere Decadal Variations. *Journal of Atmospheric and Solar-Terrestrial Physics*, **64**, 1147-1166. (2002).
- [70] G. Stenchikov, A. Robock, V. Ramaswamy, M. Schwarzkopf, K. Hamilton and S. Ramachandran. Arctic Oscillation Response to the 1991 Mount Pinatubo Eruption: Effects of Volcanic Aerosols and Ozone Depletion. *Journal of Geophysical Research*, **107**, D24, 4803-4818. (2002).

- [71] K. Hamilton. On the Quasi-decadal Modulation of Stratospheric QBO Period. *Journal of Climate*, **15**, 2562-2565. (2002).
- [72] W. Hsieh and K. Hamilton. Nonlinear Singular Spectrum Analysis of the Tropical Stratospheric Wind. *Quarterly Journal of the Royal Meteorological Society*, **129**, 2367-2382. (2003).
- [73] D. Offermann, M. Donner, P. Knieling, K. Hamilton, A. Menzel, B. Naujokat and P. Winkler. Indicators of Long-Term Changes in Middle Atmosphere Transports. *Advances in Space Research*, **32**, 1675-1684. (2003).
- [74] T. Horinouchi, S. Pawson, K. Shibata, U. Langematz, E. Manzini, M. Giorgetta, F. Sassi, R. Wilson, K. Hamilton, J. de Grandre, and A. Scaife. Tropical Cumulus Convection and Upward Propagating Waves in Middle Atmosphere GCMs. *Journal of the Atmospheric Sciences*, **60**, 2765-2782. (2003).
- [75] K. Hamilton, A. Hertzog, F. Vial and G. Stenchikov. Longitudinal Variation of the Stratospheric Quasi-biennial Oscillation. *Journal of the Atmospheric Sciences*, **61**, 383-402. (2004).
- [76] G. Stenchikov, K. Hamilton, A. Robock, V. Ramaswamy and M.D. Schwarzkopf. Arctic Oscillation Response to the 1991 Pinatubo Eruption in the SKYHI GCM with a Realistic Quasi-biennial Oscillation. *Journal of Geophysical Research*, **109**, doi:10.1029/2003JD003699. (2004).
- [77] K. Hamilton, R.A. Vincent and P.T. May. The DAWEX Field Campaign to Study Gravity Wave Generation and Propagation. *Journal of Geophysical Research*, **109**, doi:10.1029/2003JD004393. (2004).
- [78] W. Randel, P. Udelhofen, E. Fleming, M. Geller, M. Gelman, K. Hamilton, D. Karoly, D. Ortland, S. Pawson, R. Swinbank, F. Wu, M. Baldwin, M.-L. Chanin, P. Keckhut, K. Labitzke, E. Remsberg, A. Simmons, D. Wu. The SPARC Intercomparison of Middle Atmosphere Climatologies. *Journal of Climate*, **17**, 986-1003. (2004).
- [79] G.J. Boer, K. Hamilton and W. Zhu. Climate Sensitivity and Climate Change Under Strong Forcing. *Climate Dynamics*, **24**, 685-700. (2005).
- [80] M. Stowasser, K. Hamilton and G.J. Boer. Local and Global Climate Feedbacks in Models with Differing Climate Sensitivities. *Journal of Climate*, **19**, 193-209. (2006).
- [81] K. Hamilton and W. Ohfuchi. Progress and Perspectives in High-Resolution Modeling. *Eos*, **87**, 176. (2006)
- [82] G. Stenchikov, K. Hamilton, R. Stouffer, B. Santer, A. Robock, V. Ramaswamy and H. Graf. Arctic Oscillation Response to Volcanic Eruptions in the IPCC AR4 Climate Models. *Journal of Geophysical Research*, **111**, D07107, doi:10.1029/2005JD006286. (2006).
- [83] M. Stowasser and K. Hamilton. Relationships Between Cloud Radiative Forcing and Local Meteorological Variables in Several Global Climate Models. *Journal of Climate*, **19**, 4344-4359. (2006).
- [84] Y. Takahashi, K. Hamilton and W. Ohfuchi. Explicit Global Simulation of the Mesoscale Spectrum of Atmospheric Motions. *Geophysical Research Letters*, L12812, doi:10.1029.2006GL026429. (2006).

- [85] T. Zhou, M. Geller and K. Hamilton. The Role of the Hadley Circulation and Downward Control in Tropical Upwelling. *Journal of the Atmospheric Sciences*, **63**, 2740-2757. (2006).
- [86] K. Hamilton. High Resolution Global Modeling of the Atmospheric Circulation. *Advances in Atmospheric Sciences*, **23**, 842-856. (2006).
- [87] Y. Wang, L. Zhou and K. Hamilton. Effect of Convective Entrainment/Detrainment on Simulation of Tropical Precipitation Diurnal Cycle. *Monthly Weather Review*. **135**. 567-585. (2007).
- [88] H. Annamalai, K. Hamilton and K. Sperber. South Asian Summer Monsoon and Relationship with ENSO in the IPCC AR4 Simulations. *Journal of Climate*, **20**, 1071-1092 (2007).
- [89] G. Boer, M. Stowasser and K. Hamilton. Inferring Climate Sensitivity from Volcanic Events. *Climate Dynamics*, **28**, 481-502. (2007).
- [90] M. Stowasser, Y. Wang and K. Hamilton. Tropical Cyclone Changes in the Western North Pacific in a Global Warming Scenario. *Journal of Climate*, **20**, 2378-2396. (2007).
- [91] T. Zhou, M. Geller and K. Hamilton. Morphology of Tropical Upwelling in the Lower Stratosphere. *Journal of the Atmospheric Sciences*, in press (2008).
- [92] G. Boer and K. Hamilton: QBO Influence on Extratropical Predictive Skill. *Climate Dynamics*. doi10.1007/s00382-008-0379-5 (2008).

Other Refereed Publications (Book Chapters, Encyclopedia Articles etc.)

- [93] K. Hamilton and W.J. Emery. Regional Atmospheric Forcing of Surface Temperature and Sea Level Variability in the Northeast Pacific Ocean. *El Nino North*, (W. Wooster and D. Fluharty, eds.), Washington Sea Grant Publications, pp. 22-30. (1985).
- [94] K. Hamilton. Modelling Middle Atmosphere Interannual Variability. *Proceedings of the Fifth COSPAR Colloquium* (M. Teague, D. Baker and V. Papitashvili, eds.), Pergamon Press, pp. 751-757. (1994).
- [95] K. Hamilton. Meteorology and Climatology. *Encyclopedia of Applied Physics*, John Wiley and Sons, vol. 10, 215-237. (1994).
- [96] K. Hamilton. Aspects of Mesospheric Simulation in a Comprehensive General Circulation Model. *The Upper Mesosphere and Lower Thermosphere: A Review of Experiment and Theory* (T. Killeen and R. Johnston, eds.), American Geophysical Union, Geophysical Monographs, 87, 255-264. (1995).
- [97] K. Hamilton. Tides. *Encyclopedia of Climate and Weather*, Oxford University Press, 761-764. (1996).

- [98] K. Hamilton. Free and Forced Interannual Variability of the Circulation in the Extratropical Stratosphere. *Atmospheric Science Across the Stratopause* (S. Eckermann, D. Siskind and M. Summers, eds.), American Geophysical Union, *Geophysical Monographs*, **123**, 227-239. (2000).
- [99] K. Hamilton. The Quasi-biennial Oscillation. *Encyclopedia of Global Environmental Change*, Volume 1, (M. MacCracken and S. Perry eds.) John Wiley and Sons, 611-613. (2001).
- [100] K. Hamilton. Middle Atmosphere Semiannual Oscillation. *Encyclopedia of Atmospheric Sciences*, (J. Holton, J. Pyle and J. Curry eds.) Academic Press, 1336-1341. (2002).
- [101] K. Hamilton. Numerical Resolution and Modeling of the Global Atmospheric Circulation: A Review of Our Current Understanding and Outstanding Issues. *High Resolution Numerical Modelling of the Atmosphere and Ocean*. (W. Ohfuchi and K. Hamilton, eds.). Springer Publishing. 8-27. (2008).

Selected Unrefereed Publications

- K. Hamilton. Effects of Atmospheric Tides on the General Circulation of the Stratosphere, Mesosphere and Lower Thermosphere. *Middle Atmosphere Program Handbook*, **2**, 246-255. (1981).
- K. Hamilton. Stratospheric Circulation Statistics, NCAR Technical Report TN-191+STR, 174 pp. (1982).
- K. Hamilton. Evidence for Tropical-Midlatitude Teleconnections in the Eighteenth and Nineteenth Centuries. *Tropical Atmosphere-Ocean Newsletter*, **30**, 1-2. (1985)
- K. Hamilton. The Southern Oscillation and Coastal Sea Surface Temperature Variability off Oregon and Northern California. *Tropical Atmosphere-Ocean Newsletter*, **34**, 6-7. (1986).
- K. Hamilton and A.M. Allingham. Synoptic-Scale Sea Level Pressure Variability in ENSO and Non-ENSO Winters. *Tropical Atmosphere-Ocean Newsletter*, #41, 1-2. (1987).
- K. Hamilton. The Dark Day of 1819. *Chinook*, **9**, 72-74. (1987).
- K. Hamilton. A Review of Observations of the Quasi-biennial and Semiannual Oscillations of the Tropical Middle Atmosphere. *Transport Processes in the Middle Atmosphere*, (G. Visconti, ed.), D. Riedel Publishing Co., pp. 19-29. (1987).
- K. Hamilton. The Role of the Stratosphere in Modelling Tropospheric Climate. *World Meteorological Organization Technical Document #226*, pp. D1-D13. (1988).
- K. Hamilton. Evaluation of the Gravity Wave Field in the Middle Atmosphere of the GFDL "SKYHI" General Circulation Model. *World Meteorological Organization Technical Document #273*, pp. 264-271. (1989).
- K. Hamilton. What We Can Learn From General Circulation Models About the Spectrum of Middle Atmospheric Motions. *Coupling Processes in the Lower and Middle Atmosphere* (E. Thrane, T. Blix and D. Fritts, eds.), Kluwer Academic Publishers, pp. 161-174. (1993).

- K. Hamilton. Model Simulation of the Stratospheric Penetration of the Southern Oscillation. *TOGA Notes*, **13**, 7-11. (1993).
- K. Hamilton. Interdecadal Climate Variations over the High-Latitude North Atlantic as Seen in 235 Years of Surface Air Temperature Data. *Canadian Meteorological and Oceanographic Society Bulletin*, **22**, 11-14. (1994).
- K. Hamilton, R.J. Wilson and H. Vahlenkamp. Three-Dimensional Visualization of the Polar Stratospheric Vortex. *Canadian Meteorological and Oceanographic Society Bulletin*, **22**, 4-6. (1994).
- K. Hamilton. The GFDL SKYHI Model: Results of Relevance for Numerical Weather Prediction. *The Stratosphere and Numerical Weather Prediction*. European Center for Medium Range Weather Forecasts (A. Simmons, ed.), 213-231. (1994).
- K. Hamilton. Comprehensive Modelling of Vertically-Propagating Waves: Opportunities for Comparisons with Observations. *Proceedings of the Workshop on Middle Atmospheric Wind Observations*, (Publication of the Centre National d'Etudes Spatiales, Paris), 4.3-4.15. (1995).
- K. Hamilton. Do Historical "Zero Depth" Hydrographic Data Contain Useful Information on Climate Trends? *Canadian Meteorological and Oceanographic Society Bulletin*, **23**, 6, 6-8. (1995).
- K. Hamilton. Gravity Wave Processes and Their Parameterization in Global Models. *SPARC Newsletter*, **7**, 18-24. (1996).
- K. Hamilton. Progress Towards Gravity Wave Parameterization for Global Climate Models. *World Meteorological Organization Technical Document #814*, 295-298. (1997).
- K. Hamilton. Meteorological Measurements on Ozonesonde Ascents: A Valuable Resource for Stratospheric Climatology. *SPARC Newsletter*, **9**, 23. (1997).
- K. Hamilton. The Role of Parameterized Drag in a Troposphere-Stratosphere-Mesosphere General Circulation Model. *Gravity Wave Processes - Their Parameterization in Global Climate Models*, (K. Hamilton, ed.) Springer-Verlag, 337-350. (1997).
- K. Hamilton. Dynamics of the Tropical Middle Atmosphere. *Proceedings of the Canadian Summer School on the Middle Atmosphere* (J. Koshyk and T. Shepherd eds.) 212-256. (1998).
- K. Hamilton. The Gravity Wave Parameterization Problem for Global Simulation Models. *SPARC Newsletter*, **12**, 7-14. (1999).
- K. Hamilton. Convective Excitation of Gravity Waves Experiment. *Mesoscale Processes in the Stratosphere*, European Commission Air Pollution Report Series, 69, 93-98. (1999).
- Roff, G., S. Pawson, U. Langematz, K. Hamilton, A. Scaife, T. Horinouchi, and R.J. Wilson. Systematic Errors Found in GRIPS. *Modelling Systematic Errors* (J.D. Jasper and P.J. Meighen eds.) Australia Bureau of Meteorology Research Centre Report No. 80, 167-174. (2001).
- K. Hamilton. Gravity Wave Effects and Their Parameterization in Global Models. *Proceedings of the American Meteorological Society 13th Conference on Atmospheric and Oceanic Fluid Dynamics*, 145-149. (2001).

- K. Hamilton. Effects of Polar Vortex Perturbations on Tropospheric Winter Circulation. *Proceedings of the International Symposium on Stratospheric Variations and Climate*, 1-4. (2002).
- W. Randel, E. Fleming, M. Geller, M. Gelman, K. Hamilton, D. Karoly, D. Ortland, S. Pawson, R. Swinbank, P. Udelhofen. SPARC Intercomparison of Middle Atmosphere Climatologies. *World Meteorological Organization Technical Document #1142*, 96 pp. (2002).
- K. Hamilton, V. Balaji and R. Hemler. Gravity Waves Generated by Isolated Tropical Convection Simulated in a Cloud-Resolving Model. *Canadian Meteorological and Oceanographic Society Bulletin*, **30**, 40-44. (2002).
- K. Hamilton. Introduction to the Dynamics of the Tropical Stratosphere. *Physics of the Equatorial Atmosphere*, Rutherford-Appleton Laboratory, 1-87. (2003).
- K. Hamilton. The Darwin Area Wave Experiment (DAWEX). *SPARC Newsletter*, **20**, 19-20. (2003).
- K. Hamilton and W. Zhu. Large Perturbations to Terrestrial Climate Models and a Simulated Runaway Greenhouse Effect. *Canadian Meteorological and Oceanographic Society Bulletin*, **30**, 6-10. (2003).
- A. Levine and K. Hamilton. Role of Tropical Cyclones in the Large Scale Heat, Momentum and Moisture Budgets. *Proceedings of the American Meteorological Society 26th Conference on Hurricanes and Tropical Meteorology*, 320-321. (2004)
- K. Hamilton. Report on the Chapman Conference on Gravity Wave Processes and Parameterization. *SPARC Newsletter*, **23**, 15-19. (2004).
- K. Hamilton. Volcanos and the Weather. *Journal of High School Science*, **3**, 8-12. (2004).
- K. Hamilton. Gravity Waves in High Resolution Atmospheric GCM Simulations. *Proceedings of the Workshop on High Resolution Atmospheric Simulations and Cooperative Output Data Analysis*. Japan Agency for Marine-Earth Science and Technology. 19-22. (2005).
- K. Hamilton. Featured Commission: The International Commission on the Middle Atmosphere. *IAMAS Newsletter*, #6, 3 (2007).