# **BIOGRAPHICAL INFORMATION**

## ERIC JAMES BARRON

### Director, National Center for Atmospheric Research 1850 Table Mesa Drive Boulder, Colorado 80307

### **Date and Place of Birth:**

26 October 1951, Lafayette, Indiana

# **Education:**

B.S., 1973	Florida State University (Geology)
M.S., 1976	University of Miami (Oceanography)
Ph.D., 1980	University of Miami (Oceanography)

## **Positions:**

1980	Postdoctoral Research Fellow, National Center for Atmospheric Research, Boulder, Colorado
1981-1985	Scientist I & II, Climate Section, National Center for Atmospheric Research, Boulder, Colorado.
1985-1986	Associate Professor, University of Miami
1986-2002	Director, Earth System Science Center and Associate Professor of Geosciences, the Pennsylvania State University
1989-	Professor of Geosciences, the Pennsylvania State University
1998-2003	Director, EMS Environment Institute
2002-2006	Dean, College of Earth and Mineral Sciences, Penn State University
2002-2008	Trustee, University Corporation for Atmospheric Research (Chair, 2008)
2003-2007	Board of Governors, Joint Oceanographic Institutions, Inc.
2006-2008	Dean, Jackson School of Geosciences, University of Texas at Austin
2007-2008	Trustee, Consortium for Ocean Leadership, Inc. (Chair, 2008)
2008-	Director, National Center for Atmospheric Research

# **Professional Societies:**

American Geophysical Union
American Meteorological Society
Geological Society of America
American Association for the Advancement of Science
American Association of Petroleum Geologists
Phi Kappa Phi

### Honors:

1969-1973	Honors Student, Florida State University
1975-1977	Texaco Fellow
1976	National Center for Atmospheric Research Supercomputing Fellow
1977-1978	Outstanding Student Award, Miami Geological Society
1979-1980	Koczy Fellowship (most outstanding student in last year of study)
1980	Smith Prize (most creative dissertation)
1988	Excellence of Presentation Award, Society of Economic Paleontologists and Mineralogists
1989	Honorable Mention for Excellence of Presentation Award, Society of Economic Paleontologists and Mineralogists
1992	Wilson Research Award, College of Earth and Mineral Sciences, The Pennsylvania State University
1992, 1993	Provost Award for Collaborative Instruction and Curricular Innovations
1993	Excellence of Presentation Award, Society of Sedimentary Geology (SEPM)
1993	Fellow, American Geophysical Union
1993	Honorable Mention for Excellence of Presentation (Poster), American Association of Petroleum
	Geologists

1995	Fellow, American Meteorological Society
1997	American Association of Petroleum Geologist's Distinguished Lecturer
1999	Wilson Teaching Award, College of Earth and Mineral Sciences, the Pennsylvania State
	University
1999	NASA Outstanding Earth Science Education Product ("Discover Earth: Earth-as-a-System")
1999	Distinguished Professor of Geosciences, The Pennsylvania State University
2001	NASA Group Achievement Award for "Research Strategy for the Earth Science Enterprise"
2002	Fellow, the National Institute for Environmental eScience, Cambridge University, United
	Kingdom
2002	Frontiers in Geophysics Lecture, American Geophysical Union
2003	NASA Distinguished Public Service Medal
2004	Fellow, American Association for the Advancement of Science
2006	Jackson Chair in Earth System Science, University of Texas at Austin
2008	Fellow, Geological Society of America

# **Related Experience:**

### **Publications**

1982-1989	Member, Editorial Board, Geology
1984-1985	Member, Editorial Board, Palaeogeography, Palaeoclimatology, Palaeoecology
1985-1991	Editor-in-Chief, Palaeogeography, Palaeoclimatology, Palaeoecology
1988-1996	Editor, Global and Planetary Change
1989-1995	Associate Editor, Journal of Climate
1991	Member, American Geophysical Union, Selection Committee Paleoceanography Editor
1992-	Member, Editorial Board, Palaeogeography, Palaeoclimatology, Palaeoecology
1994-1996	Member, Editorial Board, Geotimes
1994-2000	Member, Editorial Board, Consequences
1995, 1997	Chair, American Geophysical Union, Selection Committee, Biogeochemical Cycles Editor
1995-1999	Editor-in-Chief, Earth Interactions (electronic journal of AMS, AGU and AAG)
1998	Editorial Board, Oxford University Press, Global Change Encyclopedia

# Service to Societies

1986-1990	Member, American Meteorological Society Committee on Climate Variations
1988-1991	Chair, American Meteorological Society Committee on Climate Variations
1988-1990	Member, Global Sedimentary Geology Program Committee, Society of Economic Paleontologists and Mineralogists
1991	Chair, Penrose Conference Committee, Geological Society of America
1990-1991	Member, American Geophysical Union, Maurice Ewing Medal Subcommittee
1991-1996	Chair, American Meteorological Society Annual Meeting Program Committee for Global Change
1994	Member, American Geophysical Union, Small Science Panel
1995-2002	Member, American Geophysical Union Atmospheric Sciences Executive Committee
1998	Citation Author-American Geophysical Union, Revelle Medal
1998-	Member, American Geophysical Union, Horton Award Sub-committee
2003	Member, American Meteorological Society, Mid-term Strategic Planning Assessment team
2005	Chair, American Geophysical Union, NASA Vision Panel
2008	Member, American Assoc. Petroleum Geologists Climate Change Committee
2008-	Member, AMS 2010 Annual Meeting Organizing Committee

# National Research Council

1987-1990	Member, Climate Research Committee
1990-1996	Chair, Climate Research Committee
1989	Member, Study Committee on Earth System History and Modeling, Global Change Committee
1990-1994	Member, Board on Global Change Research
1992-1996	Member, Committee on Human Dimensions of Global Change

1995-1997	Member, Board on Atmospheric Sciences and Climate
1997-1999	Co-Chair, Board on Atmospheric Sciences and Climate
1999-2003	Chair, Board on Atmospheric Sciences and Climate
1997-2002	Ex-officio, Committee on Global Change Research
1998-2000	Member, Panel on Grand Environmental Challenges
1999	Member, Panel on Assessment of NASA Post-2000 Plans
2002-2003	Member, Panel on Tracking and Predicting the Atmospheric Dispersion of Material Releases:
	Implications for Homeland Security
2003-2004	Chair, Committee on Metrics for Global Change Research
2004-2006	Member, Survey Steering Committee for Earth Science and Applications from Space:
	A Community Assessment and Strategy for the Future
	Chair, Panel on Climate Change and Variability
2006-2007	Member, Committee on Analysis of Global Change Assessments
2008-	Member, Energy Externalities Committee
2009-	Chair, An Ocean Infrastructure for U.S. Ocean Research in 2030

# Service to the Federal Government

1988	Member, NSF Review Panel, Ocean Drilling Program Plan, FY 1988-1990
1988-1990	Member, Ocean History Panel, NSF Ocean Drilling Program
1990-1994	Member, Science Executive Committee, NASA Earth Observing System
1994-1997	Chair, Science Executive Committee, NASA Earth Observing System
1990-1994	Chair, Climate and Hydrology Panel, NASA Earth Observing System
1990-1993	National Center for Atmospheric Research Scientific Computing Division Advisory Committee
1990-1993	Chair, NSF Advisory Committee, Marine Aspects of Earth System History (MESH)
1989-1993	Climate Systems Modeling Project Advisory Board
1991-1993	Member, NSF Review Panel for Geological Record of Global Change
1992-1993	Member, Earth Science and Applications Advisory Committee, NASA
1993	Chair, Earth Science and Applications Advisory Committee, NASA
1994-1997	Member, Earth Science and Applications Advisory Committee, NASA
1994-1995	National Center for Atmospheric Research Director's Advisory Committee
1994	Chair, USGCRP Forum on Global Change Modeling
1994-1996	Chair, U.S. National Committee for PAGES and NSF Earth System History Panel
1995-1996	Chair, Allocation Panel for Interagency Climate Simulation Laboratory
1995	Testimony, U.S. House of Representatives, Committee on Science, NASA Budget
1997	Testimony, U.S. Senate, Committee on the Environment and Public Works – Global Warming
1997-1999	Member, NSF Geosciences Advisory Committee
1997	Chair, NSF Committee of Visitors on Ocean Sciences Facilities
1997	Co-Chair, White House/USGCRP workshop on "Impact on Climate Variation in the Mid Atlantic
	States"
1997-2000	Member, USGCRP National Assessment of Climate Impacts Synthesis Team
1998-2000	Member, NSF Geosciences Strategic Planning Committee GEO-2000
1998-1999	Member, NOAA Panel on Long Term Climate Monitoring
1999-2005	Member, NASA Goddard Space Flight Center, Director's Advisory Committee
2000-2001	Member, DOE BERAC Subcommittee on Global Change
2000	Chair, Screening Committee, Director of Earth Sciences, Goddard Space Flight Center
2000	Member, EPA Review Panel, Integrated Assessment
2000	Member, DOE Review Panel, Climate Change Prediction
2001	Testimony U.S. Senate Committee on the Environment and Public Works - Climate Change
	Science
2001	Testimony, U.S. House of Representatives, Committee on Science- NOAA Budget
2001	Briefing, U.S. House of Representatives, Committee on Science-Climate Change Science
2003	Member, NSF Steering Committee for Cyberinfrastructure Research and Development in the
	Atmospheric Sciences
2003-2005	Member, Earth Science and Applications Advisory Committee, NASA
2005	Chair, NASA Senior Review for the Earth Sciences

2006	Chair, NSF Earth System History Review panel
2007	Member, Screening Committee, Geosciences Associate Director, NSF
2008	Chair, External Review Committee, NOAA Climate Services Plan
2008	Chair, Steering Committee, Options for a National Climate Service, NOAA
2009	Testimony, U.S. House of Representatives Committee on Science – Climate Services
2009-	Member, NOAA Science Advisory Board
International Ser	vice
1982-1987	Chair, International Geological Correlation Program (IGCP), Project 191, "Cretaceous
	Paleoclimatic Atlas Project"
1982-1986	Member, International Lithosphere Program (ILP), Working Group 7 "Paleoenvironmental
	Evolution of the Oceans and the Atmosphere"
	Participant, Conference on Scientific Ocean Drilling (COSOD) Organizer, Penrose Conference on
	Cretaceous Climates
1982-1986	Member, SCOR Working Group 79, "Geological Variations in Carbon Dioxide and the Carbon
	Cycle"
1986-1987	Member, Global Environmental Change Panel for Conference on Scientific Ocean Drilling
	(COSOD II)
1988-1990	Organizer, Global Sedimentary Geology Working Group on Paleogeography and
	Paleoclimatology
1995	International Review Member, Ocean Drilling Program
1996-1997	Member, Joint Steering Committee, World Climate Research Program
<u>Other</u>	
1980	Shipboard Scientist, RV Glomar Challenger Leg 75
1998	Chief Scientist, RV Oceanus
1998-2002	Elected, two terms, State College Area School Director

**Papers** (non-refereed articles are in italics)

- 1975 Wanless, H., E.J. Barron and J. Rine. A Progress Report on Sediments and Sedimentation in Inland Waterways, Marco Islands, Florida. <u>Scientific Report</u>, University of Miami, pp. 48.
- 1976 Barron, E.J. Suspended Sedimentation Processes, Marco Island, Florida. <u>University of Miami Technical</u> <u>Report</u> 76-9, pp. 182.
- 1977 Barron, E.J. Experimentation with Meridional Heat Transport Formulations in the Schneider and Gal-Chen Energy Balance Climate Model. <u>NCAR Technical Note 119:</u> 25-39.
- 1978 Barron, E.J., C.G.A. Harrison and W.W. Hay. A Revised Reconstruction of the Southern Continents. Transactions of the American Geophysical Union, 59:436-449.
- 1979 Barron, E.J. and C.G.A. Harrison. Reconstruction of the Campbell Plateau and the Lord Howe Rise. <u>Earth</u> and Planetary Science Letters, 45:87-92.
- 1979 Harrison, C.G.A., E.J. Barron and W.W. Hay. Mesozoic Evolution of the Antarctic Peninsula and the Southern Andes. <u>Geology</u>, 7:374-378.
- 1980 Barron, E.J. and C.G.A. Harrison. An Analysis of Past Plate Motions: The South Atlantic and Indian Oceans. In P.A. Davies and S.K. Runcorn (eds.), <u>Mechanisms of Continental Drift and Plate Tectonics</u>, Academic Press, p. 89-109.
- 1980 Barron, E.J. J.L. Sloan and C.G.A. Harrison. Potential Significance of Land-Sea Distribution and Surface Albedo Variations as a Climatic Forcing Factor: 180 M.Y. to the Present. <u>Palaeogeography</u>, <u>Palaeoclimatology</u>, Palaeoecology, 30:17-40.
- 1981 Barron, E.J. Paleogeography as a Climatic Forcing Factor. <u>Geologische Rundschau</u> Band 70, Heft 2, 737-747.
- 1981 Barron, E.J. and J.M. Whitman. Oceanic Sediments in Space and Time. In <u>The Sea</u>, Vol. 7, Emiliani, ed., J. Wiley and Sons, New York, pp. 689-731.
- 1981 Barron, E.J., C.G.A. Harrison, J.L. Sloan and W.W. Hay. Paleogeography, 180 M.Y. to the Present. Eclogae Geologae Helvetae, 74:443-470.
- 1981 Barron, E.J., S.L. Thompson and S. H. Schneider. Ice-free Cretaceous Climate? Results from Model Simulations. <u>Science</u>, 212:501-508.
- 1981 Hay, W.W., E.J. Barron., J.L. Sloan and J.R. Southam. Continental Drift and the Global Pattern of Sedimentation. <u>Geologische Rundschau</u> Band 70, Heft 1, 301-313.
- 1981 Thompson, S.L. and E.J. Barron. Comparison of Cretaceous and Present Earth Albedos: Implications for Paleoclimates. Journal of Geology, 89:143-167.
- 1982 Barron, E.J. and W.M. Washington. The Atmospheric Circulation During Warm, Geologic Periods: Is the Equator-to-Pole Surface Temperature Gradient the Controlling Factor? <u>Geology</u>, 10:633-636.
- 1982 Barron, E.J. and W.M. Washington. Cretaceous Climate: A Comparison of Atmospheric Simulations with the Geologic Record. <u>Palaeogeography</u>, <u>Palaeoclimatology</u>, <u>Palaeoecology</u>, 40:103-133
- 1982 Hay, W.W., J.F. Behensky, E.J. Barron and J.L. Sloan. Triassic-Liassic Paleoclimatology of the Proto-Central North Atlantic Rift System. <u>Palaeogeography, Palaeoclimatology, Palaeoecology</u>, 40:13-30.

- Hay, W.W., J.-C. Sibuet and Leg 75 Scientific Party. 1982: Sedimentation and Accumulation of Organic Carbon in the Angola Basin and on Walvis Ridge: Preliminary Results of Deep Sea Drilling Project Leg 75. <u>Geological Society of America Bulletin</u>, 93:1038-1050.
- 1982 Saltzman, E. and E.J. Barron. Deep Circulation in the Late Cretaceous: Oxygen Isotope Paleotemperatures from *Inoceramus* Remains in DSDP cores. <u>Palaeogeography</u>, <u>Palaeoclimatology</u>, <u>Palaeoecology</u>, 40:167-182.
- 1983 Barron, E.J. A Warm, Equable Cretaceous: The Nature of the Problem. <u>Earth Science Reviews</u>, 19:305-338.
- 1983 Barron, E.J. The Oceans and Atmosphere During Warm Geologic Periods. <u>Proceedings of the Joint</u> <u>Oceanographic Assembly</u> 1982-General Symposia, Canadian National Committee/Scientific Committee on Oceanic Research, Ottawa, Ontario, Canada, 64-71.
- 1983 Leg 75 Shipboard Scientific Party (including E.J. Barron). Site 530, Site 531, Site 532. In Hay, W.W. and J.-C. Sibuet et al., <u>Initial Reports of the Deep Sea Drilling Project</u>, v. 75.
- 1983 Steinmetz, J.C., E.J. Barron., A. Boersma, B. Keating, C. McNulty, C. Sancetta and H. Stradner. Summary of Biostratigraphy and Magnetostratigraphy of Deep Sea Drilling Project Leg 75. In Hay, W.W. and J.-C. Sibuet et al., <u>Initial Reports of the Deep Sea Drilling Project</u>, v. 75, p. 449-458.
- 1984 Barron, E.J. Climatic Implications of the Variable Obliquity Explanation of Cretaceous-Paleogene High Latitude Floras. <u>Geology</u>, 12:595-598.
- 1984 Barron, E.J. and W.M. Washington. The Role of Geographic Variables in Explaining Paleoclimates: Results from Cretaceous Climate Model Sensitivity Studies. <u>Journal of Geophysical Research</u>, 89:1267-1279.
- 1984 Barron, E.J., W.W. Hay and E.G. Kauffman. Penrose Conference Report-Cretaceous Climates, 2-7 October 1983, Florissant, Colorado. <u>Geology</u>, 12:377-378.
- 1984 Barron, E.J., E. Saltzman and D.A. Price. *Inoceramus*: Occurrence in the South Atlantic and Oxygen Isotopic Paleotemperatures at Hole 530A. In Hay, W.W. and J.-C. Sibuet, et al., <u>Initial Reports of the Deep</u> <u>Sea Drilling Project</u>, v. 75, p. 893-904.
- 1984 Barron, E.J., S.L. Thompson and W.W. Hay. Continental distribution as a forcing factor for global-scale temperature. <u>Nature</u>, 310:574-575.
- 1984 Berner, R.A. and E.J. Barron. Factors Affecting Atmospheric CO<sub>2</sub> and Temperature Over the Past 100 Million Years: Comments on the BLAG Model. <u>American Journal of Science</u>, 284:1183-1192.
- 1985 Barron, E.J. Ancient Climates: Investigations with Climate Models. <u>Reports on Progress in Physics</u>, 47:1563-1599.
- 1985 Barron, E.J. Climate Models: Applications for the Pre-Pleistocene. In <u>Historic and Paleoclimatic Analysis</u> and <u>Modeling</u>, A.D. Hecht, ed., J. Wiley & Sons, pp. 397-421.
- 1985 Barron, E.J. Explanations of the Tertiary global cooling trend. <u>Palaeogeography</u>, <u>Palaeoclimatology</u>, <u>Palaeoecology</u>, 50:45-62.
- 1985 Barron, E.J. Numerical Climate Modeling: A Frontier in Petroleum Source Rock Prediction. <u>American</u> <u>Association of Petroleum Geologists Bulletin</u>, 69:448-459.

- 1985 Barron, E.J. and W.M. Washington. Warm Cretaceous Climates: High Atmospheric CO<sub>2</sub> as a Plausible Mechanism. <u>The Carbon Cycle and Atmospheric CO<sub>2</sub>: Natural Variations Archean to Present</u>, Geophysical Monograph 32:546-553.
- 1985 Barron, E.J., M.A. Arthur and E.G. Kauffman. Cretaceous Rhythmic Bedding Sequences: A Plausible Link Between Orbital Variations and Climate. <u>Earth and Planetary Science Letters</u>, 72:327-340.
- 1985 Schneider, S.H., S.L. Thompson, and E.J. Barron. Mid Cretaceous, Continental Surface Temperatures: Are High CO<sub>2</sub> Concentrations Needed to Simulate Above Freezing Winter Conditions. <u>The Carbon Cycle on</u> <u>Atmospheric CO<sub>2</sub>: Natural Variations Archean to Present</u>, Geophysical Monograph 32:554-560.
- 1986 Barron, E.J. Mathematical Climate Models: Insights into the Relationship Between Climate and Economic Sedimentary Deposits. <u>Society Econ. Mineralogists and Paleontologists Short Course No. 18</u> (J. T. Parrish and Eric Barron), 162 pp.
- 1986 Barron, E.J. Modeling in Paleoceanography. <u>Surveys in Geophysics</u>, 8:1-2.
- 1986 Barron, E.J. Physical Paleoceanography: A Status Report. Mesozoic and Cenozoic Oceans, <u>American</u> <u>Geophysical Union</u>, pp. 1-9.
- 1986 Glancy, T.J., E.J. Barron and M.A. Arthur. An Initial Study of the Sensitivity of Modeled Cretaceous Climate to Cyclical Insolation Forcing, <u>Paleoceanography</u>, 1:523-538.
- 1987 Barron, E.J. Cretaceous Plate Tectonic Reconstructions. <u>Palaeogeography</u>, <u>Palaeoclimatology</u>, <u>Palaeoecology</u>, 59:3-29.
- 1987 Barron, E.J. Eocene Equator-to-Pole Surface Ocean Temperatures: A Significant Climate Problem. <u>Paleoceanography</u>, 2:729-739.
- 1987 Barron, E.J. Explaining Glacial Periods. <u>Nature</u>, 329:764-765.
- 1987 Barron, E.J. Nuclear Waste Disposal: A Climate Problem?--An Editorial. Climate Change, 10:107-109.
- 1987 *IGCP 191 (E. Barron, organizer). Global Cretaceous Paleogeography International Geologic Correlation Program 191, Palaeogeography, Palaeoclimatology, Palaeoecology, 59:207-214.*
- 1988 Covey, C.C. and E.J. Barron. The Role of Ocean Heat Transport in Climatic Change. <u>Earth Sciences</u> <u>Review</u>, 24:429-445.
- 1989 Barron, E.J. Climate Variations and the Appalachians from the Late Paleozoic to the Present: Results from Model Simulations. <u>Geomorphology</u>, 2(1-3):99-118.
- 1989 Barron, E.J. Earth's Shrouded Future: The Unfinished Forecast of Global Warming. <u>Sciences</u>, Sept/Oct issue, pp. 14-20.
- 1989 Barron, E.J. Pre-Pleistocene Climates: Data and Models, In: A. Berger et al. (eds.), <u>Climate and</u> <u>Geo-Sciences</u>, pp. 3-19 Kluwer Academic Publishers.
- Barron, E.J. Severe Storms During Earth History. <u>Geological Society of America, Bull.</u> 101: 601-612.
- 1989 Barron, E.J. Studies of Cretaceous Climates, In: A. Berger, et al., (eds.), <u>Understanding Climate Change</u>, pp. 149-157. Geophysical Monograph Series 52, UGG Volume 7, American Geophysical Union.

- 1989 Barron, E.J. and Peterson, W.H. Model Simulation of the Cretaceous Ocean Circulation. <u>Science</u>, 244:684-686.
- 1989 Barron, E.J., W.W. Hay and S. Thompson. The Hydrologic Cycle: A Major Variable During Earth History. Global and Planetary Change, vol. 1, no. 3, 157-174.
- 1989 Shinn, R. A. and E.J. Barron. Climate Sensitivity to Continental Ice Sheet Size and Configuration. Journal of Climate, 2(12):1517-1537.
- 1990 Barron, E.J. Paleoclimatology: Modeling Ancient Climates. <u>1991 McGraw Hill Yearbook of Science and</u> <u>Technology</u>. McGraw Hill Publishing Company, New York, p. 287-290.
- 1990 Barron, E.J. and L.A. Frakes. Climate Model Evidence for Variable Continental Precipitation and Its Significance for the Phosphate Problem, Chapter 21, in: W.C. Burnett and S. Riggs (eds.), <u>Phosphate</u> <u>Deposits of the World</u>, p. 260, Cambridge University Press
- 1990 Barron, E.J. and W.H. Peterson. Mid-Cretaceous Ocean Circulation: Results from Model Sensitivity Studies. <u>Paleoceanography</u>, 5(3):319-337.
- 1990 Barron, E.J. and S.L. Thompson. Sea Level and Climate Change. Chapter 11 in: R. Revelle (ed.), <u>Studies in Geophysics: Sea Level Change</u>, pp. 185-192, National Academy of Sciences, National Academy Press, Washington, DC.
- 1990 Hay, W.W., E.J. Barron and S.L Thompson. Global Atmospheric Circulation Experiments on an Earth with Polar and Tropical Continents. Journal of Geological Society, London, 149:749-757.
- 1990 Hay, W.W., E.J. Barron and S.L. Thompson. Results of Global Atmospheric Circulation Experiments on an Earth with a Meridional Pole-to-Pole Continent. Journal of Geological Society, London, 147:385-392.
- 1990 Kruijs, E. and E.J. Barron. Climate Model Prediction of Paleoproductivity and Potential Source Rock Distribution. <u>Deposition of Organic Facies</u>, pp. 195-216, American Association of Petroleum Geologists.
- 1990 Sloan, L. C. and E.J. Barron. "Equable" Climates During Earth History. <u>Geology</u>, 18:489-492.
- 1991 Barron, E.J. Abrupt Changes and Major Reorganizations in Ocean-Atmosphere Circulation in Earth History. <u>Advisory Panel Report on Earth System History</u>, National Science Foundation, G. Mountain (ed.), p. 37-49.
- 1991 Barron, E.J. Climate and Lacustrine Petroleum Source Prediction. Special volume, <u>Lacustrine Basin</u> <u>Exploration: Case Studies and Modern Analogs</u>, American Association of Petroleum Geologists, 1-18.
- 1991 Barron, E.J. The Role of the Ocean in Climate Change: Key Limitations in Current Understanding. In: M.E. Fernau and D.W. South (eds.), <u>Effects of Uncertainties on the Accuracy of Global Climate Change</u> <u>Predictions: A Survey of Recent Literature</u>, U.S. Department of Energy, Argonne National Laboratory, 4(1-4): 15.
- 1991 Barron, E.J. and W.H. Peterson. The Cenozoic Ocean Circulation Based on Ocean General Circulation Model Results. Palaeogeography, Palaeoclimatology, Palaeoecology, 83:1-28.
- 1991 Fawcett, P. and E.J. Barron. A Geological Perspective on Climatic Change: Computer Simulation of Ancient Climates. <u>Geoscience Canada</u> V. 18, no. 3, 111-117
- 1991 Sloan, L. C. and E.J. Barron. Comments and reply on "Equable climates during Earth History?" <u>Geology</u>, 19(5):539-542.

- 1992 Barron, E.J. Defining the EOS Mission: Part I--Reports from Disciplinary Science Panels. <u>Global and</u> <u>Planetary Change</u>, 98:1-2.
- 1992 Barron, E.J. Paleoclimatology. Chapter 24 in <u>Understanding the Earth</u>, C. Wilson (ed.), Cambridge University Press, Cambridge, UK, pp. 485-505.
- 1992 Schultz, P., E.J. Barron and J.R. Sloan. Assessment of NCAR General Circulation Model Precipitation in Comparison with Observations. <u>Global and Planetary Change</u>, 5(4):269-310.
- 1992 Sloan, L.C. and E.J. Barron. A Comparison of Eocene Climate Model Results to Quantified Paleoclimatic Interpretations. <u>Palaeogeography</u>, <u>Palaeoclimatology</u>, <u>Palaeoecology</u>, 93(3/4):183-202.
- 1992 Sloan, L. C. and E.J. Barron. Paleogene Climatic Evolution: A Climate Model Investigation of the Influence of Continental Elevation and Sea Surface Temperature Upon Continental Climate. Chapter 10 in D.R. Prothero and W.A. Berggren (eds.), <u>Eocene-Oligocene Climatic and Biotic Evolution</u>, Princeton University Press, pp. 202-217.
- 1993 Barron, E.J. and EOS Panel on Physical Climate and Hydrology. EOS Science Priorities for Physical Climate and Hydrology: Key Measurements. <u>Global and Planetary Change</u>, 7:253-278.
- 1993 Barron, E.J., P.J. Fawcett, D. Pollard and S.L. Thompson. Model Simulations of Cretaceous Climates: The Role of Geography and Carbon Dioxide. <u>Phil. Trans. Royal Society of London B</u>, 341:307-316.
- 1993 Barron, E.J., W.H. Peterson, D. Pollard and S.L. Thompson. Past Climate and the Role of Ocean Heat Transport: Model Simulations of Cretaceous. <u>Paleoceanography</u>, v. 8(6):785-798.
- 1993 Glancy, T.J., M.A. Arthur, E.J. Barron and E.G. Kauffman. The Model Paleoclimate of the North American Cretaceous Epicontinental Sea. In <u>Evolution of the Cretaceous Western Interior Basin</u>, p. 219-242. Geological Assoc. Canada Special Paper 39.
- 1994 Barron, E.J. Chill Over the Cretaceous. <u>Nature</u>, 370:415
- 1994 Barron, E.J. and G.T. Moore. Climate Model Application in Paleoenvironmental Analysis, Society for Sedimentary Geology, Short Course #33, pp. 339.
- 1994 Fawcett, P.J., E.J. Barron, V.D. Robison, and B.J. Katz. The Climatic Evolution of India and Australia from the Late Permian to Mid-Jurassic: A Comparison of Climate Model Results with the Geologic Record, <u>Geological Society of America Special Paper</u>, v. 288, pp. 139-148.
- 1994 Moore, G.T., E.J. Barron, Karen L. Bice and D.N. Hayashida. Paleoclimatic Controls on Neocomian-Barremian (Early Cretaceous) Lithostratigraphy in Northern Gondwana's Rift Lakes Interpreted from a General Circulation Model Simulation. Chapter 8 in A.Y. Huc (ed.), <u>Paleogeography, Paleoclimate and</u> <u>Source Rocks</u>, AAPG Studies in Geology 40, pp. 173-189.
- 1994 Moore, G.T., E.J. Barron and D.N. Hayashida. Kimmeridgian (Late Jurassic) General Lithostratigraphy and Source Rock Quality for the Western Tethys Sea Inferred from Paleoclimate Results Using a General Circulation Model. Chapter 7 in A.Y. Huc (ed.), <u>Paleogeography</u>, <u>Paleoclimate and Source Rocks</u>, AAPG Studies in Geology 40, pp. 157-172.
- 1995 Barron, E.J. Advances in Predicting Global Warming, <u>The Bridge</u>, National Academy of Engineering, 25(2): 10-15.
- 1995 Barron, E.J. Climate Models: How Useful for Policy Decisions, <u>Consequences</u>, 1 (3): 16-27.

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