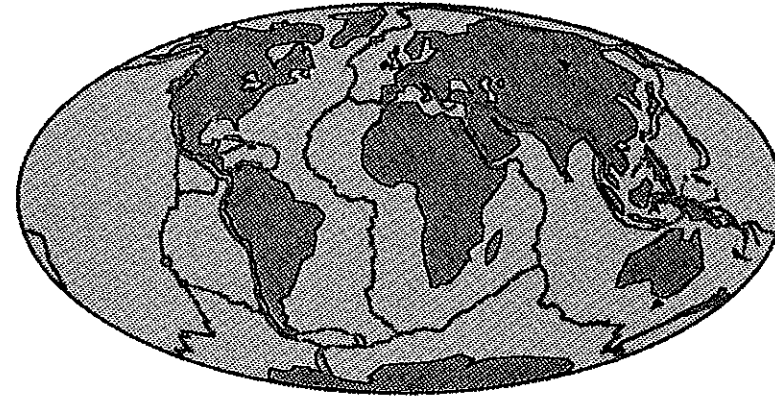


Progress Report No. 1-0192

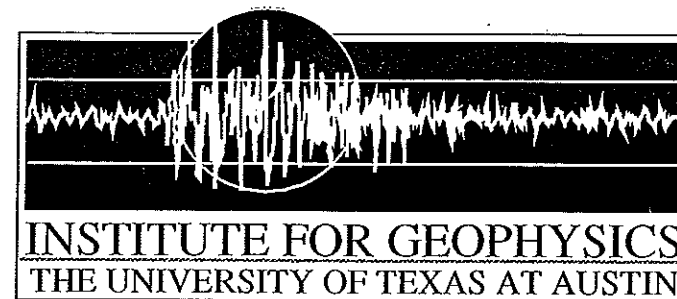
PLATES



**Atlas of Mesozoic/Cenozoic reconstructions
(200 Ma to Present Day)**

by

The PLATES Project



Phone: (512) 471-6156 Fax: (512) 471-8844
Internet: plates@utig.ig.utexas.edu

We kindly request that this atlas, or portions thereof, not be reproduced
in any form or lent to others without the written permission of
The University of Texas Institute for Geophysics

PLATES Project
Institute for Geophysics
The University of Texas at Austin
8701 Mopac Boulevard
Austin, Texas 78759
Telephone: (512) 471-6156
FAX: (512) 471-8844
e-mail: plates@utig.ig.utexas.edu

Reference: Coffin, M.F., L.M. Gahagan, L.A. Lawver, T.-Y. Lee, and E. Rosencrantz,
1992, Atlas of Mesozoic/Cenozoic reconstructions (200 Ma to Present Day), **PLATES**
Progress Report No. 1-0192, University of Texas Institute for Geophysics Technical
Report No. 122, pp. 49.

© 1992 - University of Texas Institute for Geophysics

Members of the **PLATES** research team include M.F. Coffin, L.M. Gahagan,
L.A. Lawver, T.-Y. Lee, and E. Rosencrantz.

This atlas was made possible through
the scientific contributions of the following researchers.
Their efforts are highly appreciated by members of the **PLATES** research team.

<u>Associates</u>	<u>Institution</u>	<u>Area(s) of Interest</u>
Ian Dalziel	UT Institute for Geophysics	Antarctica, Pre-Cambrian tectonics
R. Dietmar Müller*	Scripps Inst. of Oceanography	North Atlantic, absolute framework
Jean-Yves Royer*	Laboratoire de Géodynamique -France	Indian Ocean, absolute framework
David Sandwell*	Scripps Inst. of Oceanography	Tectonic use of satellite altimeter data

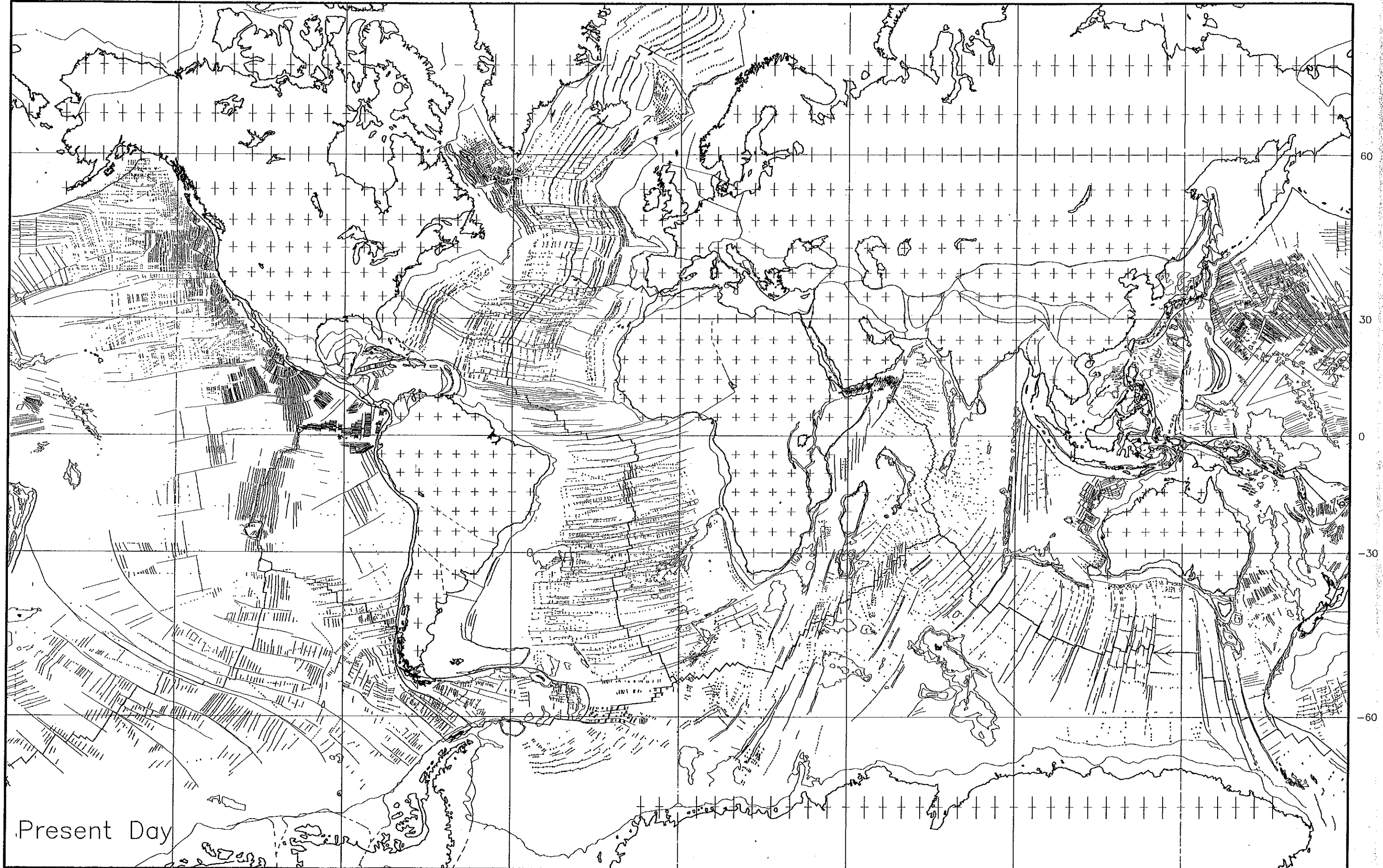
<u>Other contributors</u>	<u>Institution</u>	<u>Area(s) of Interest</u>
Tanya Atwater	UC Santa Barbara	Eastern Pacific
Peter Barker	BAS - United Kingdom	Southern Ocean
Hugh Bergh	BPI - South Africa	Southern Ocean
Steve Cande	Lamont-Doherty Geol. Obs.	South Atlantic, Indian, Pacific
Ted Chang	University of Virginia	Quantitative plate tectonics
Bob Fisher	Scripps Inst. of Oceanography	Indian Ocean
Anne Grunow	Ohio State University	Antarctica
Steve Hellinger	Consultant	Quantitative plate tectonics
Rob Kidd	University of Wales	Indian Ocean
Kim Klitgord	U.S. Geological Survey	North Atlantic
Roger Larson	Univ. Rhode Island	Pacific and Indian oceans
Keith Martin	NRI-Oceanology - South Africa	Indian and Southern oceans
Masao Nakanishi	Ocean Research Inst. -Univ. of Tokyo	Northwest Pacific
Ian Norton	Exxon Production Research Company	Indian Ocean
Dirk Nürnberg	GEOMAR - Kiel, Germany	South Atlantic Ocean
Philippe Patriat	IPG-Paris - France	Indian Ocean
Walter Roest	BIO - Canada	Northwest Atlantic
Roland Schlich	EOPG-Strasbourg - France	Indian Ocean
John Sclater*	Scripps Inst. of Oceanography	Indian Ocean
Jeff Severinghaus	UC Santa Barbara	East Pacific
Peter Shaw	Woods Hole Oceanographic Inst.	South Atlantic
Shiri Srivastava	BIO - Canada	Northwest Atlantic
Joann Stock	Harvard University	South Pacific
Ken Tamaki	Ocean Research Inst. -Univ. of Tokyo	North Pacific
Brian Tucholke	Woods Hole Oceanographic Inst.	Central North Atlantic

* formerly at the University of Texas at Austin Institute for Geophysics

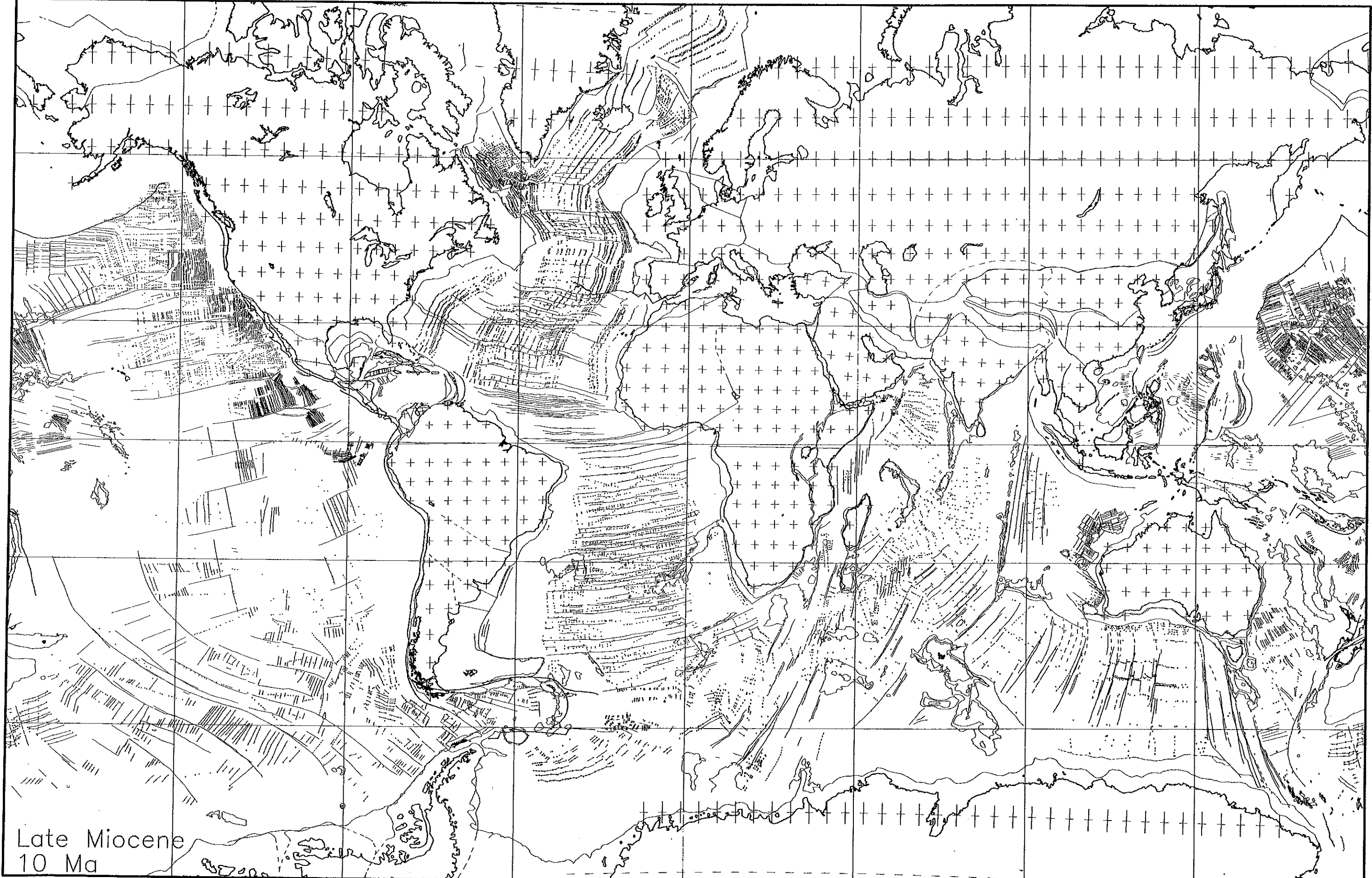
Student contributors

Lila Beckley	Robynn Tomlins
Cathy Mayes	Kyle Winn
Malcolm Ross	

-180 -135 -90 -45 0 45 90 135 180

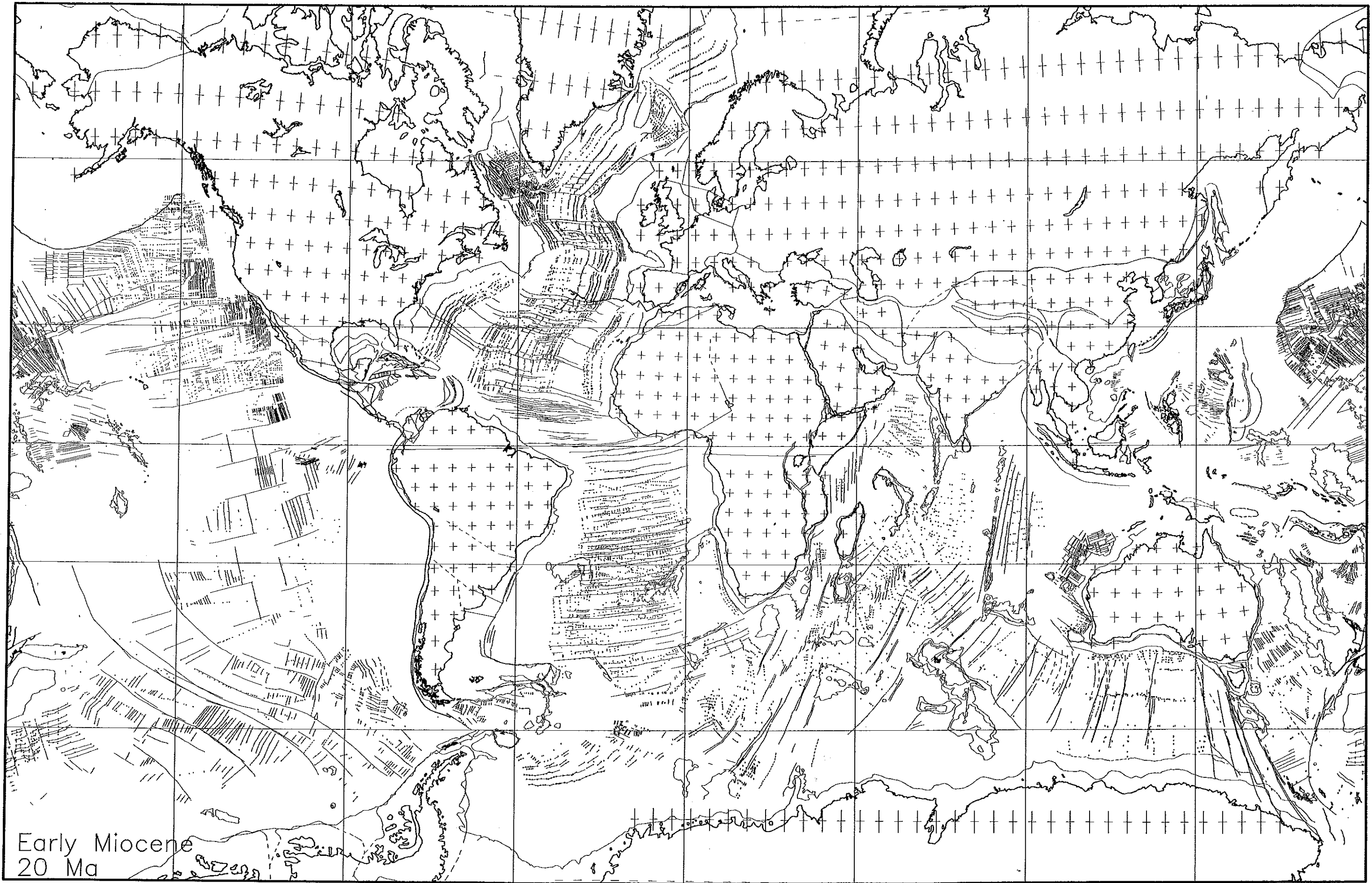


Present Day

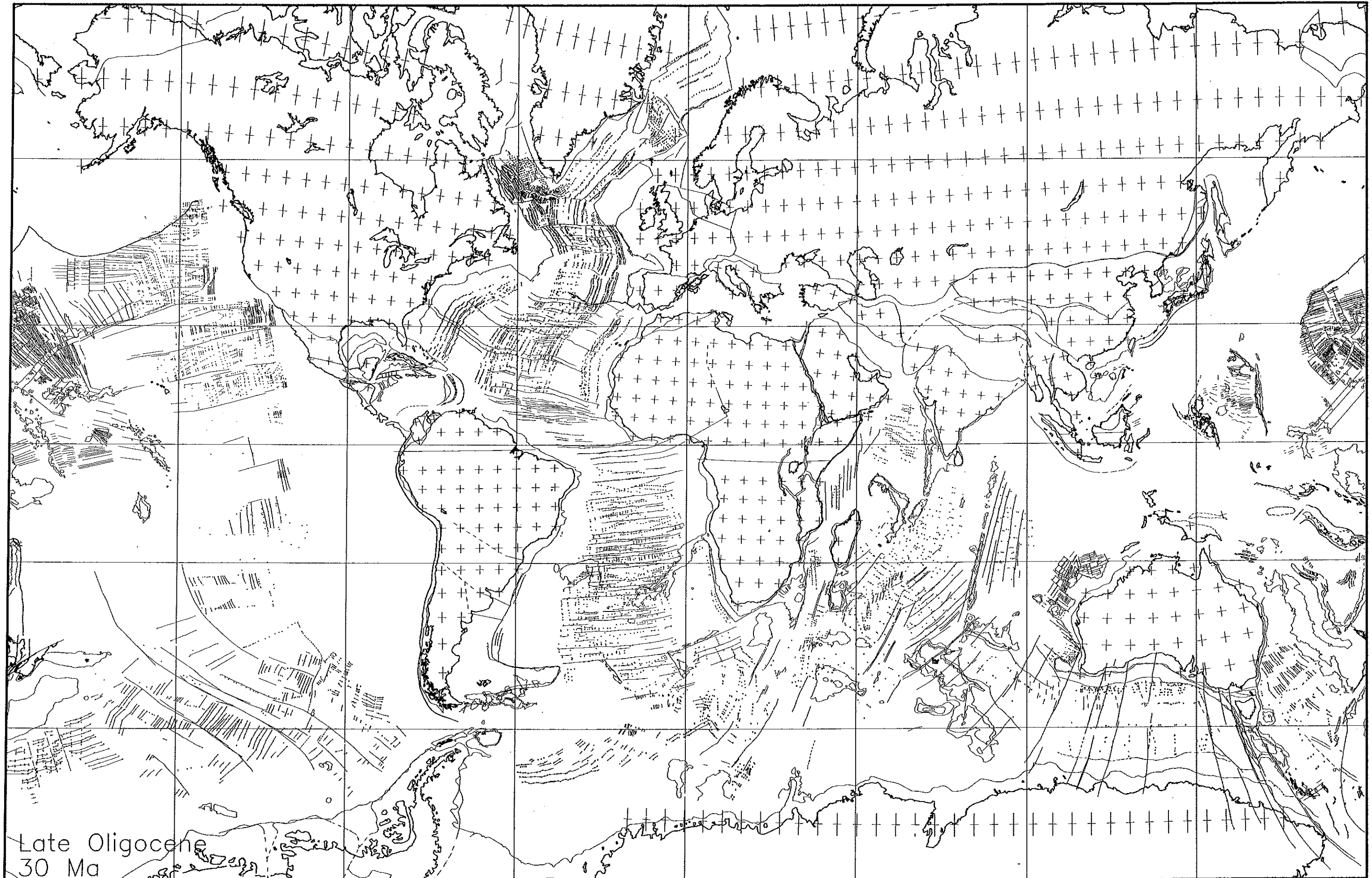


Late Miocene
10 Ma

8

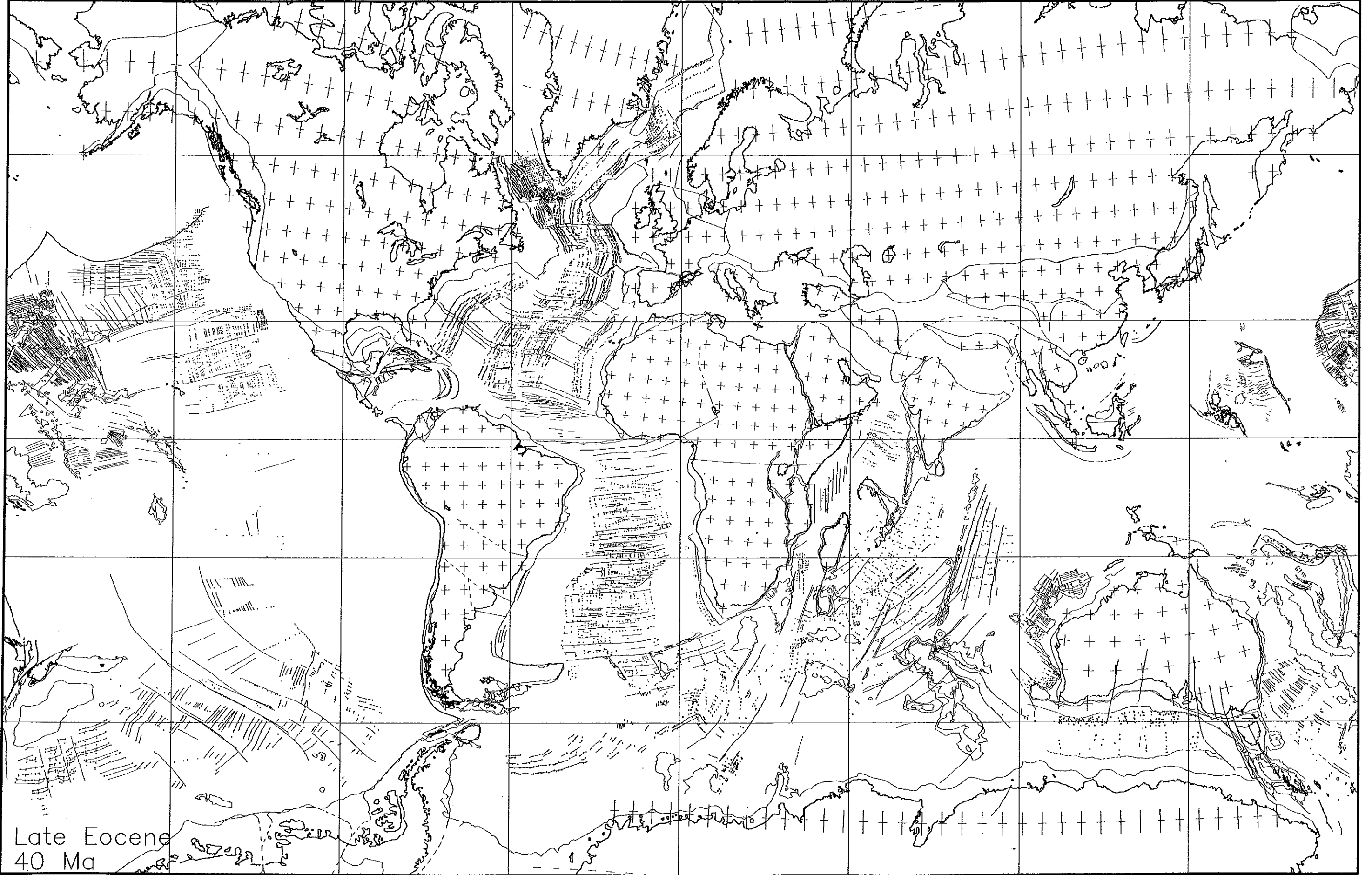


Early Miocene
20 Ma



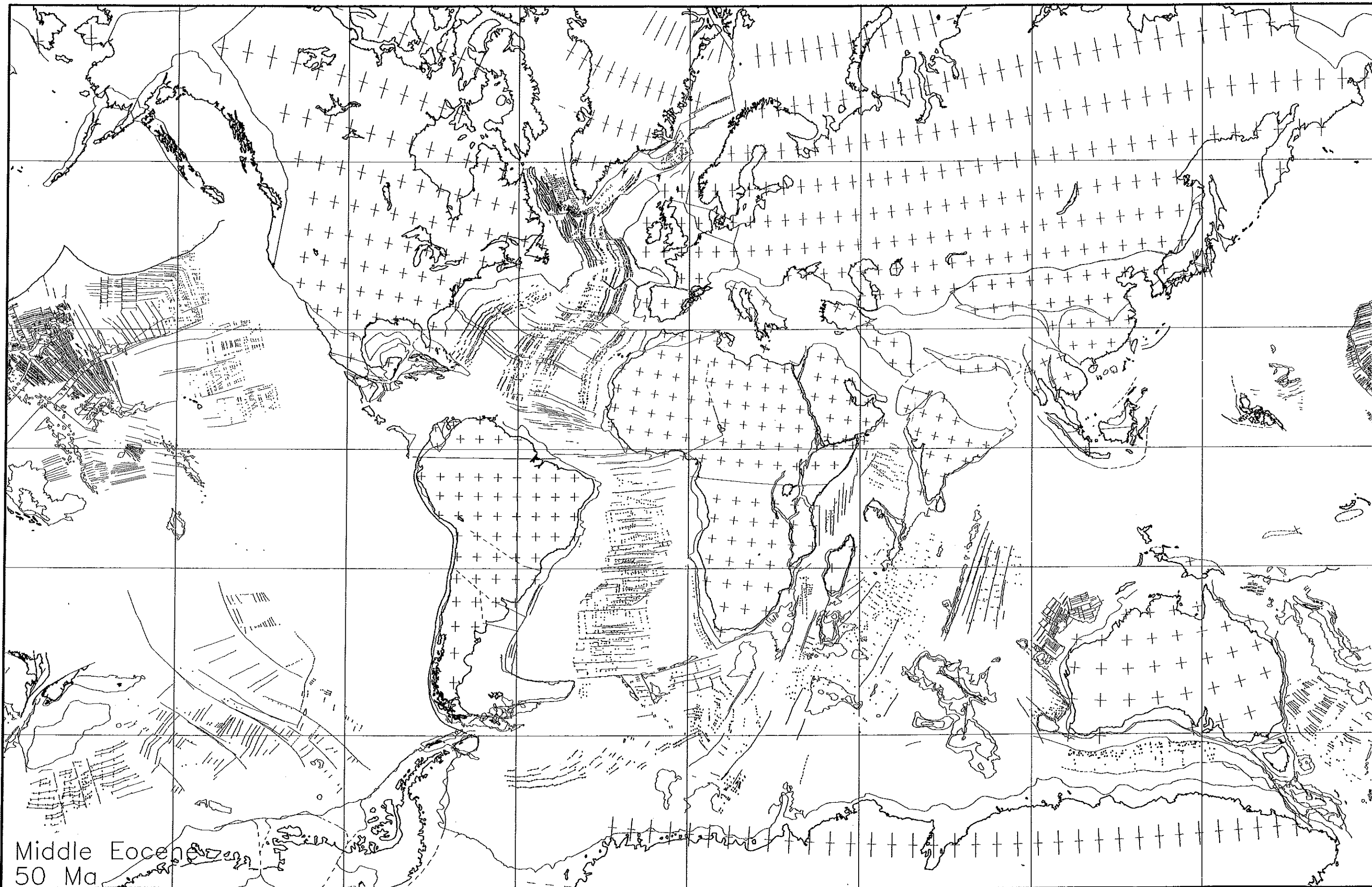
Late Oligocene
30 Ma

-180 -135 -90 -45 0 45 90 135 180



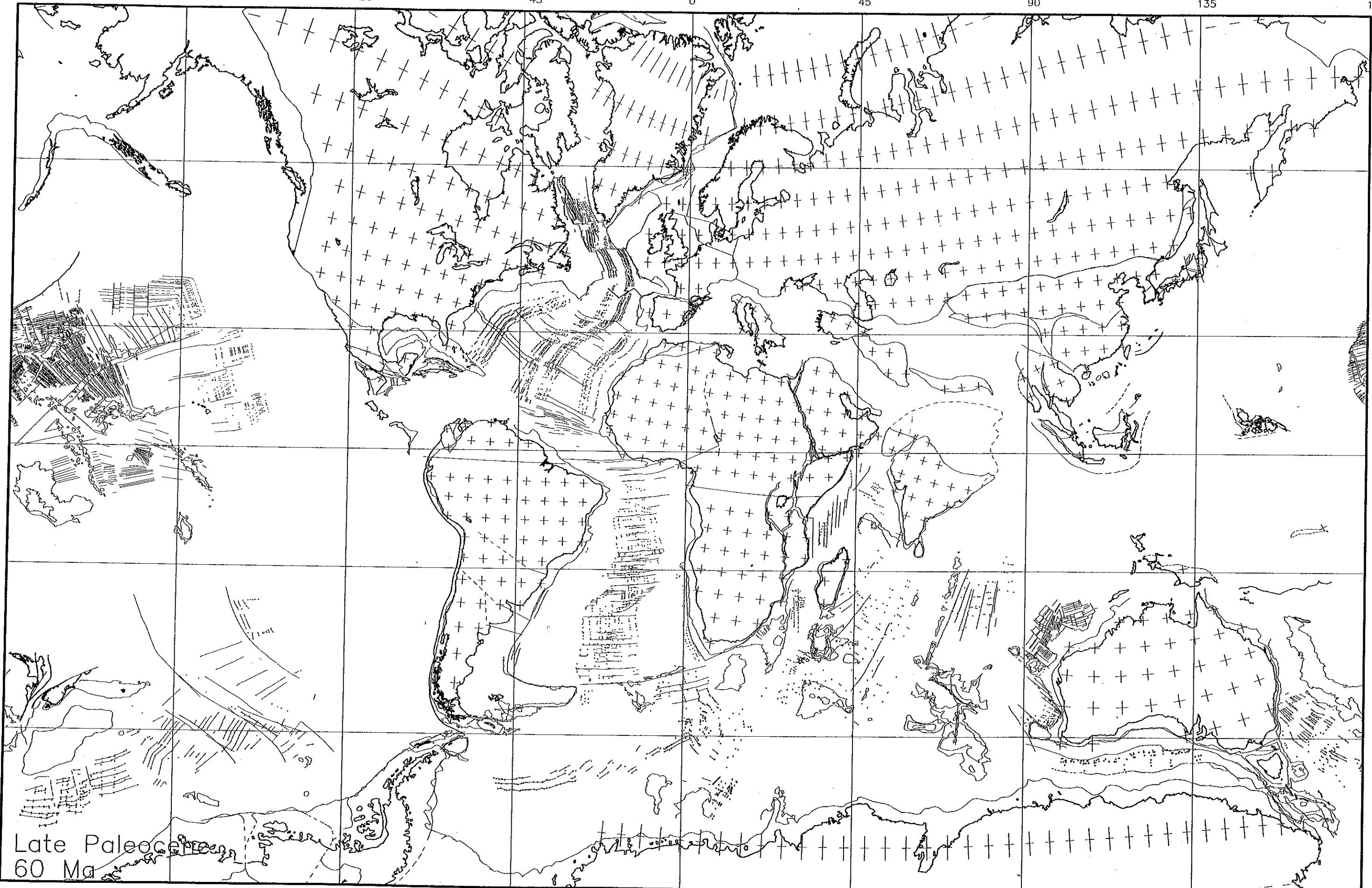
Late Eocene
40 Ma

-180 -135 -90 -45 0 45 90 135 180



Middle Eocene
50 Ma

-180 -135 -90 -45 0 45 90 135



Late Paleocene
60 Ma



-180

-135

-90

-45

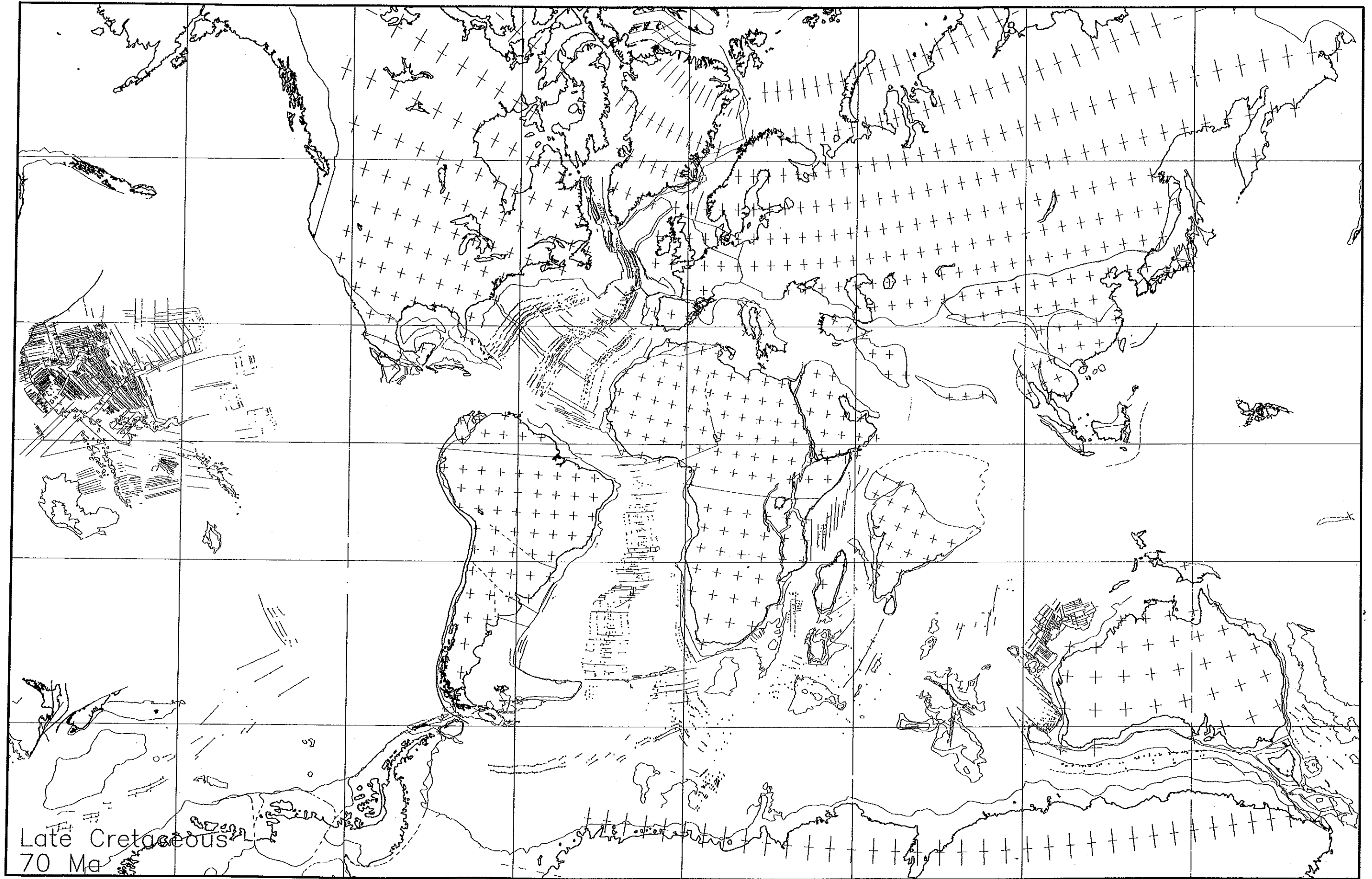
0

45

90

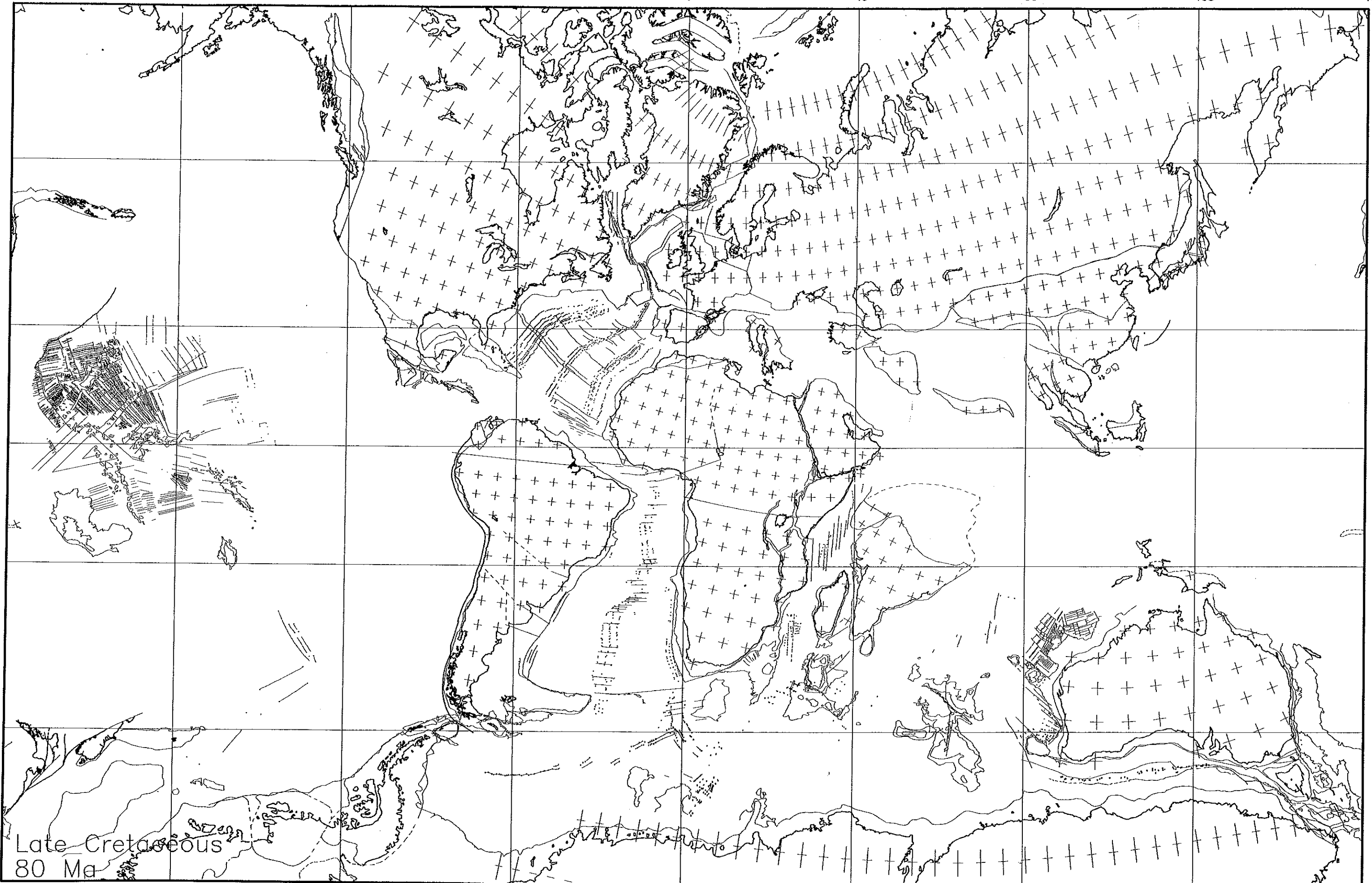
135

180



Late Cretaceous
70 Ma

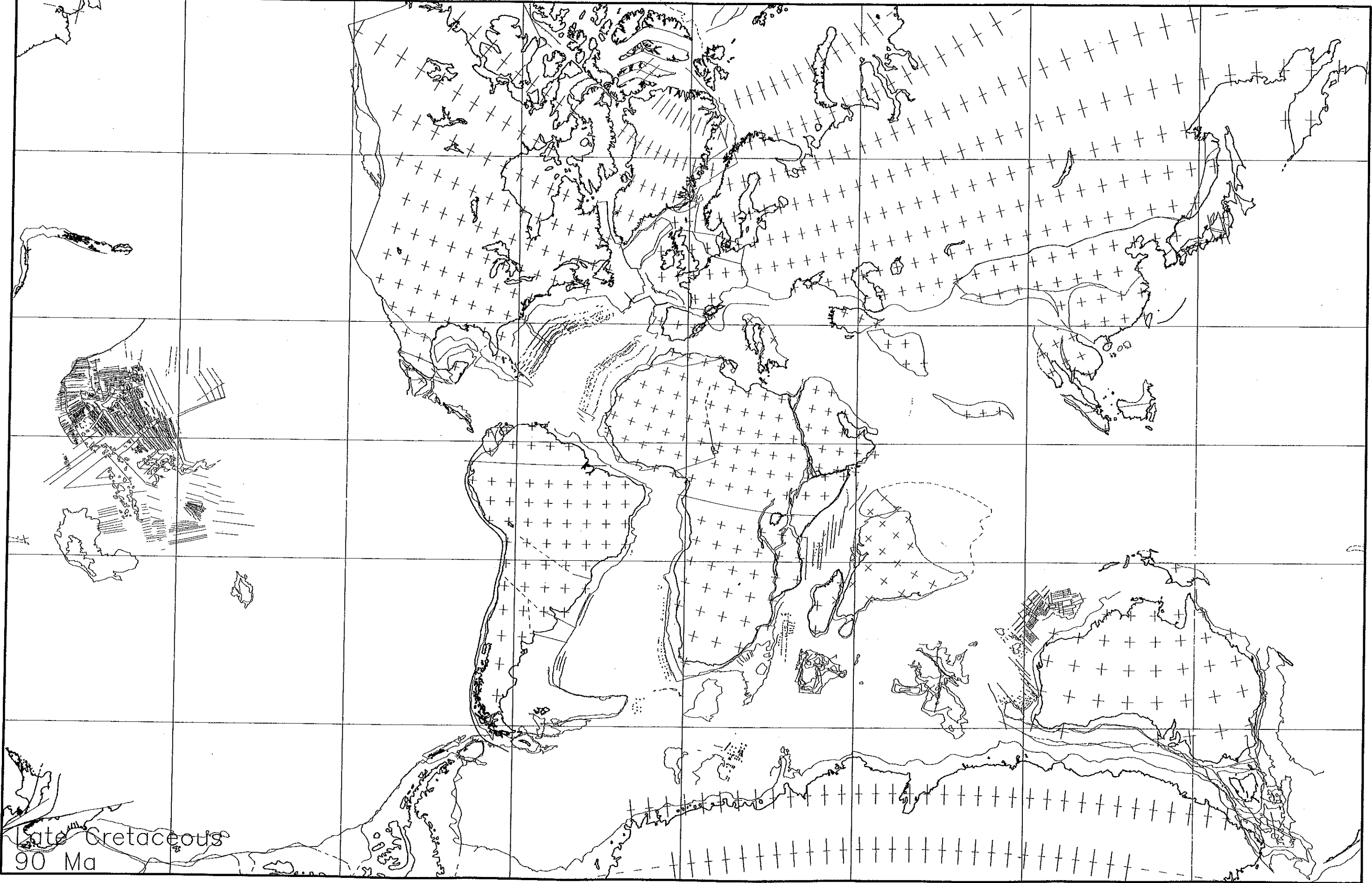
-180 -135 -90 -45 0 45 90 135 180



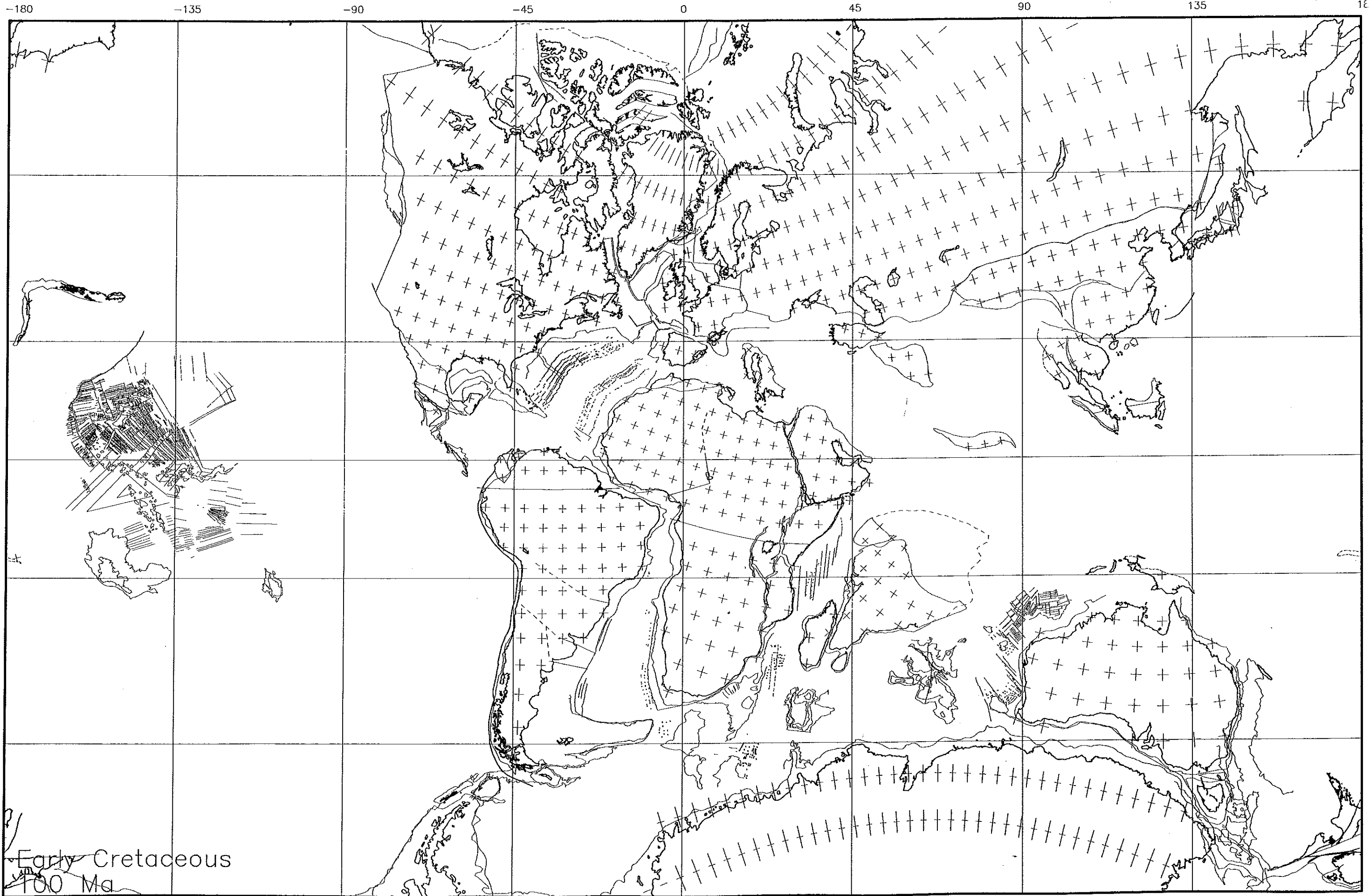
Late Cretaceous
80 Ma



-180 -135 -90 -45 0 45 90 135

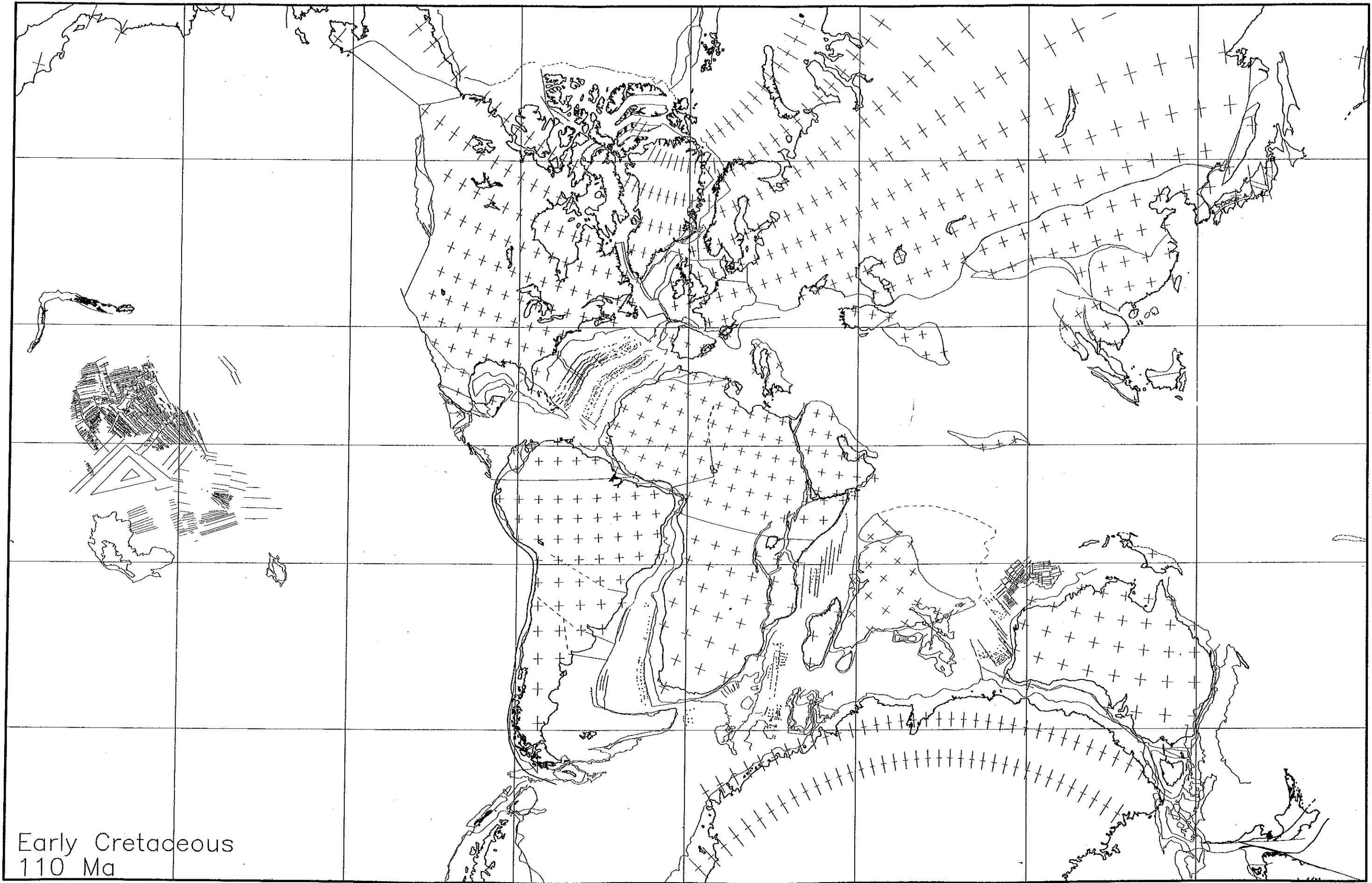


Late Cretaceous
90 Ma

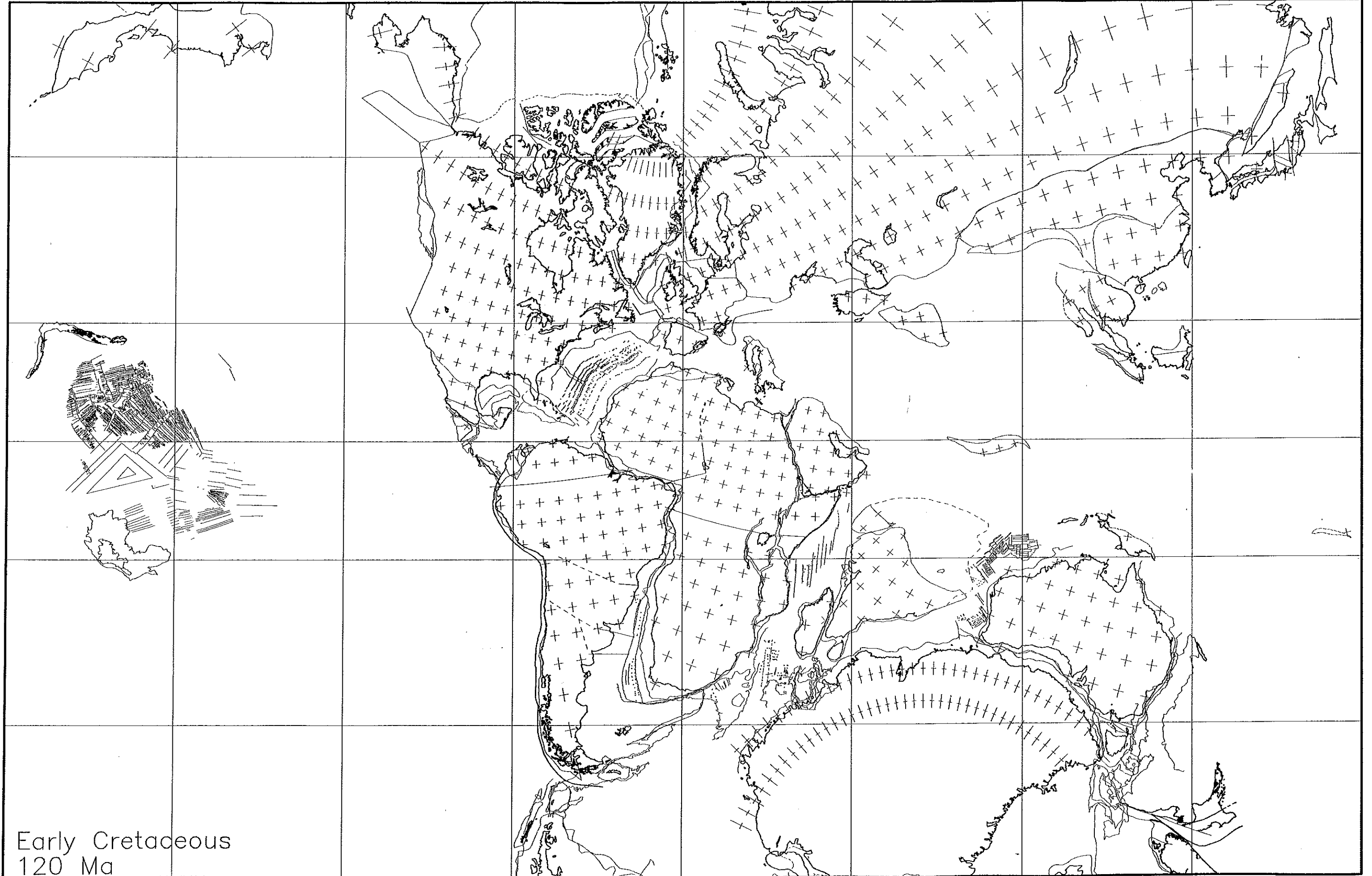


Early Cretaceous
100 Ma

-180 -135 -90 -45 0 45 90 135 180

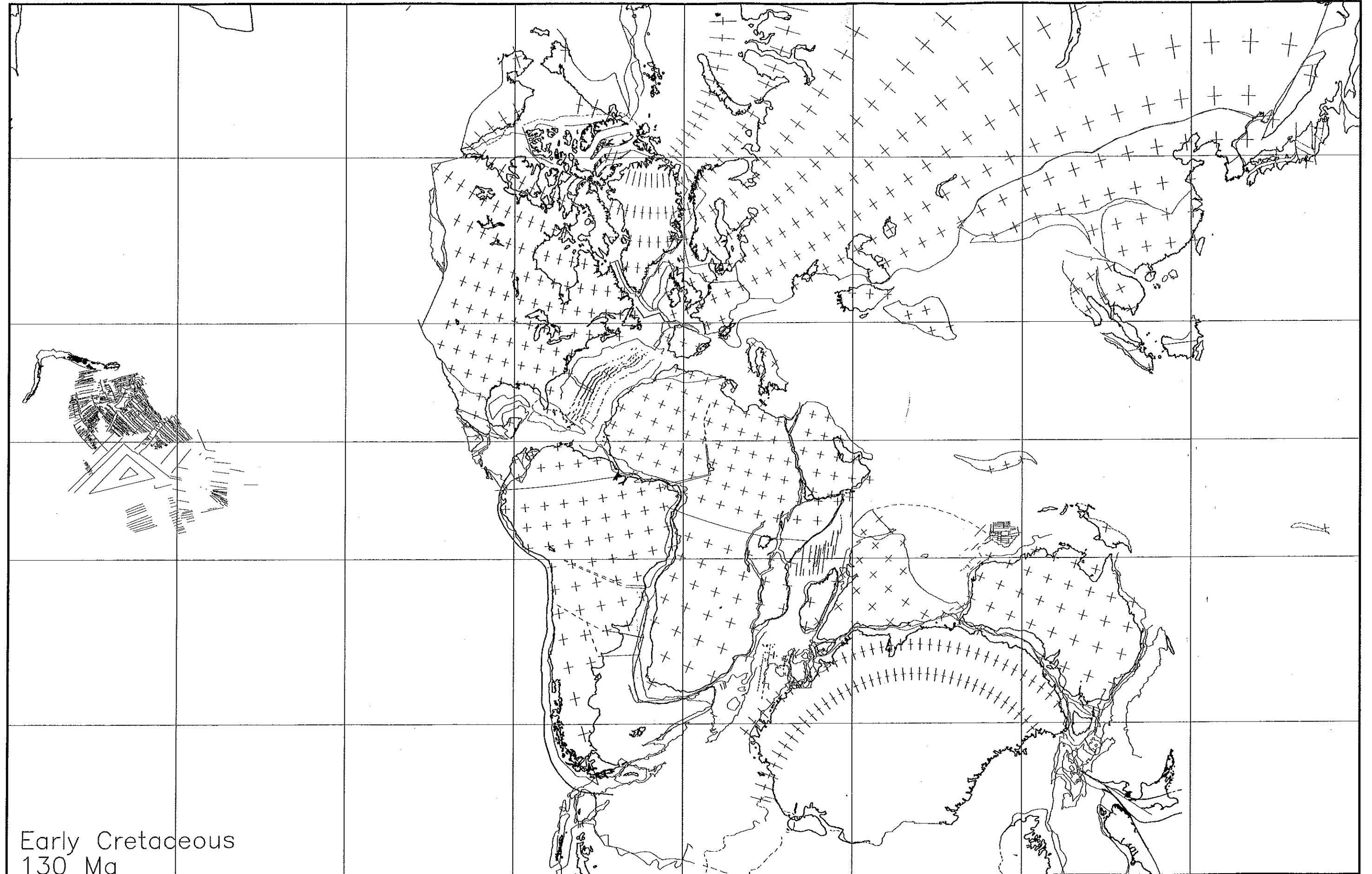


Early Cretaceous
110 Ma



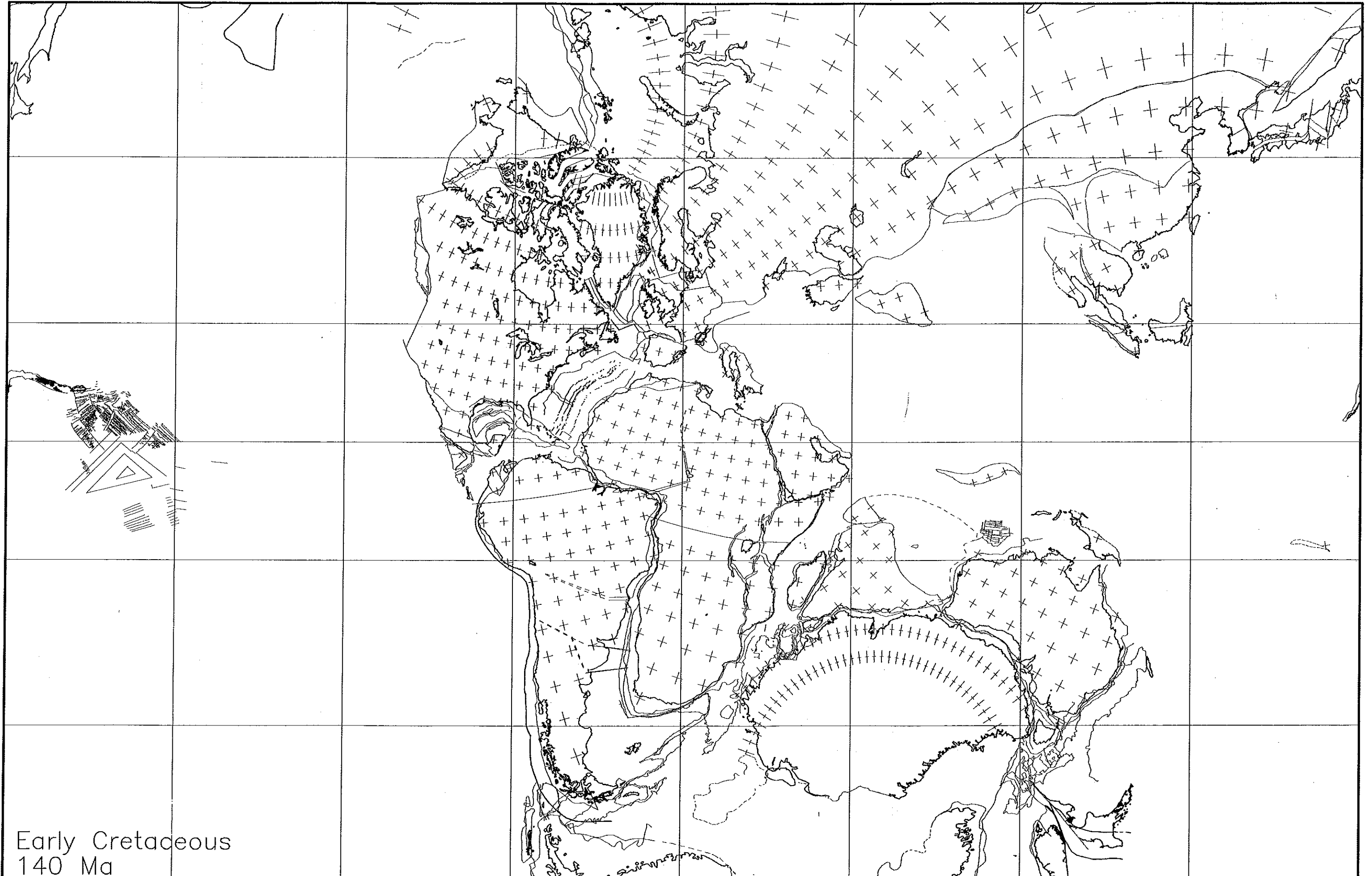
Early Cretaceous
120 Ma

-180 -135 -90 -45 0 45 90 135 18



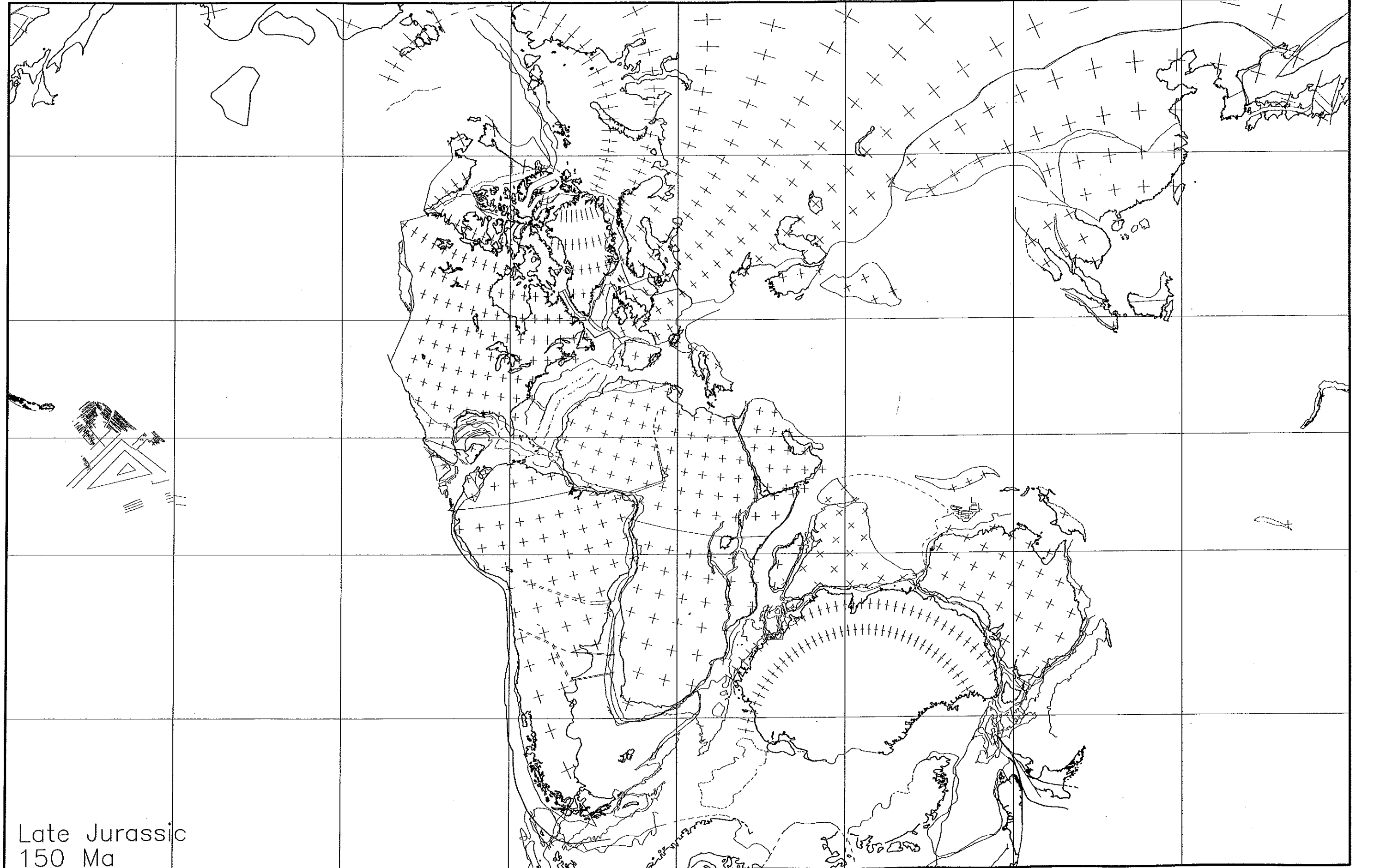
Early Cretaceous
130 Ma

-180 -135 -90 -45 0 45 90 135 18



Early Cretaceous
140 Ma

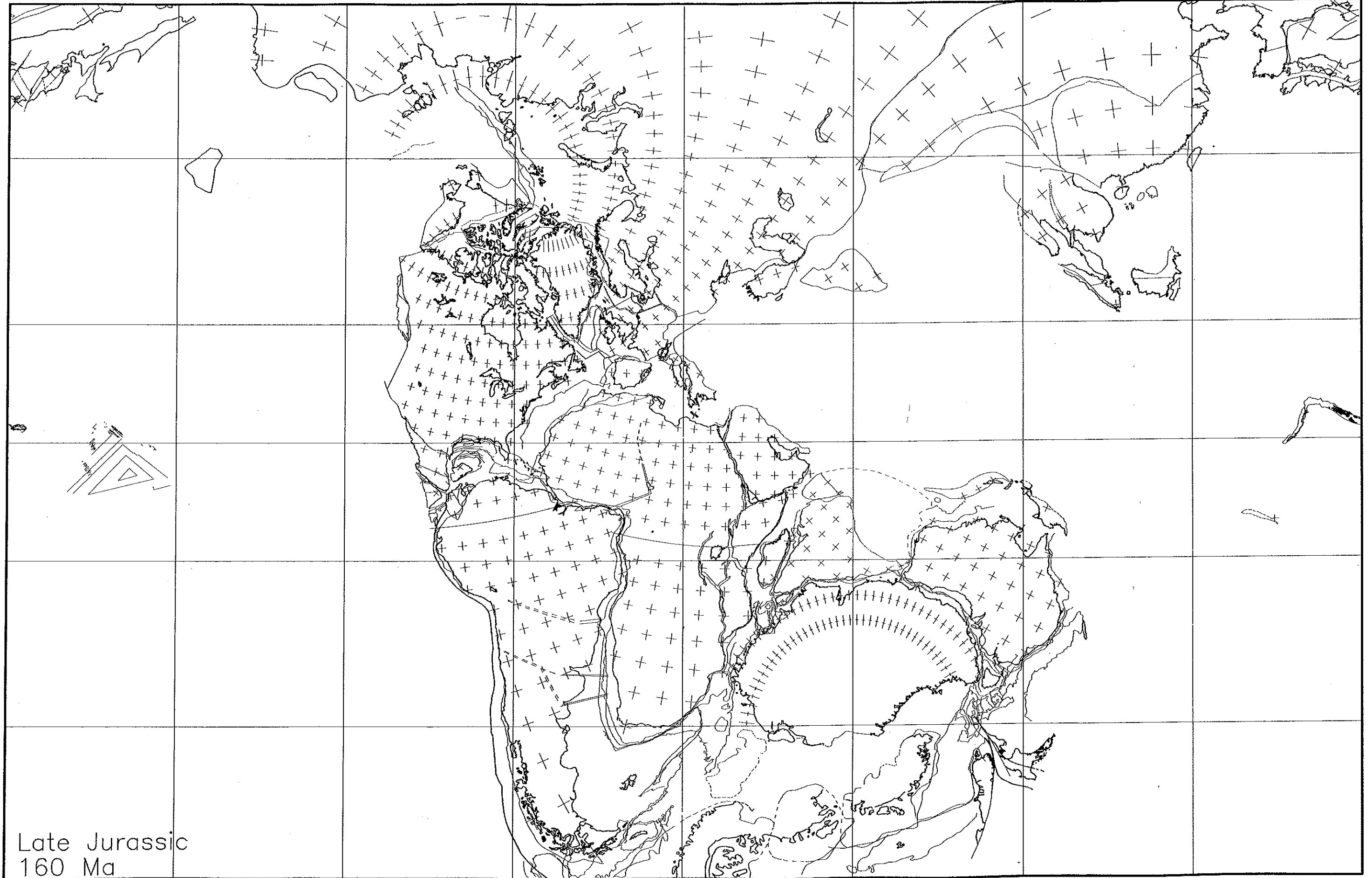
-180 -135 -90 -45 0 45 90 135 180



Late Jurassic
150 Ma

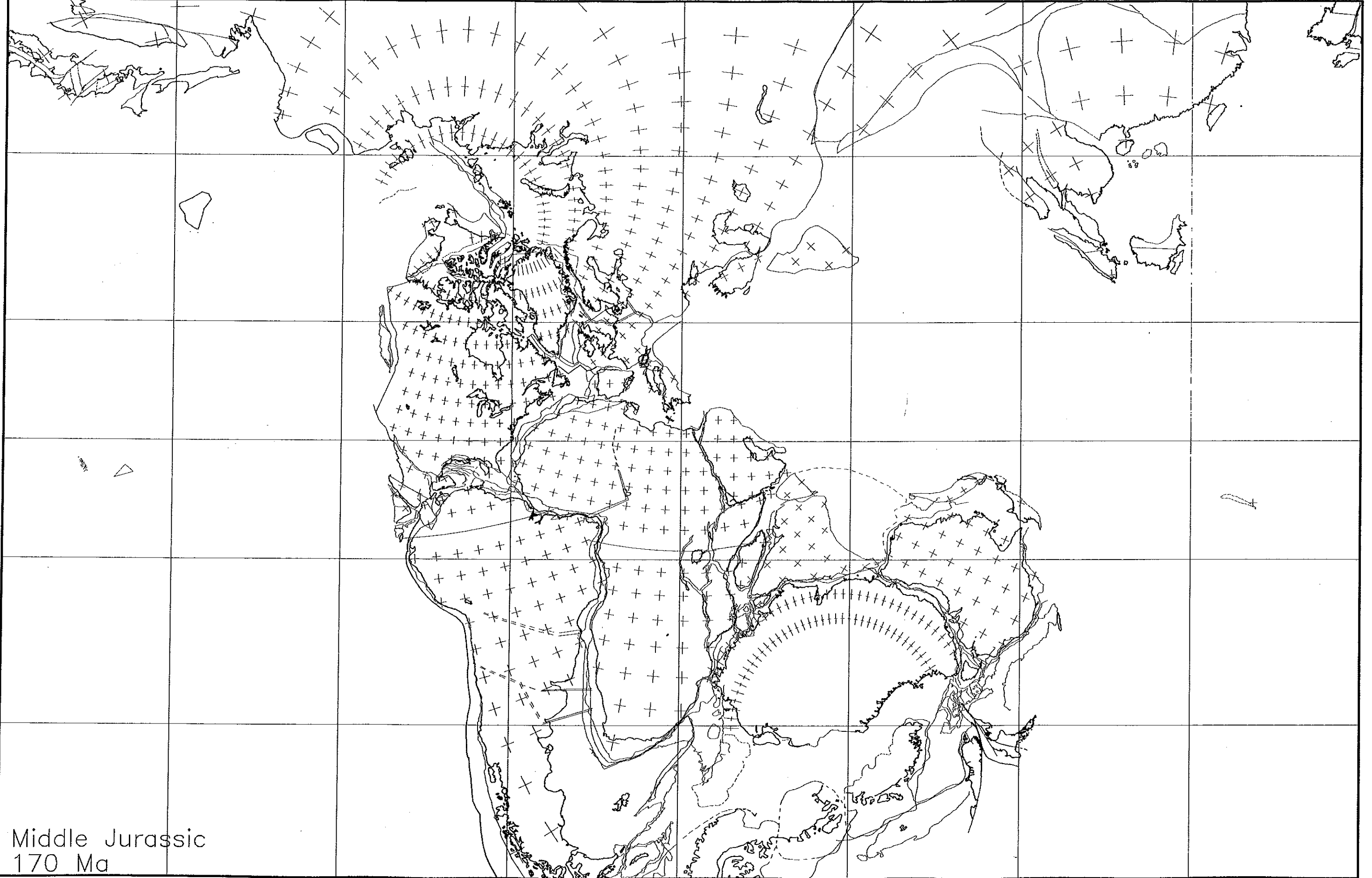


-180 -135 -90 -45 0 45 90 135 180



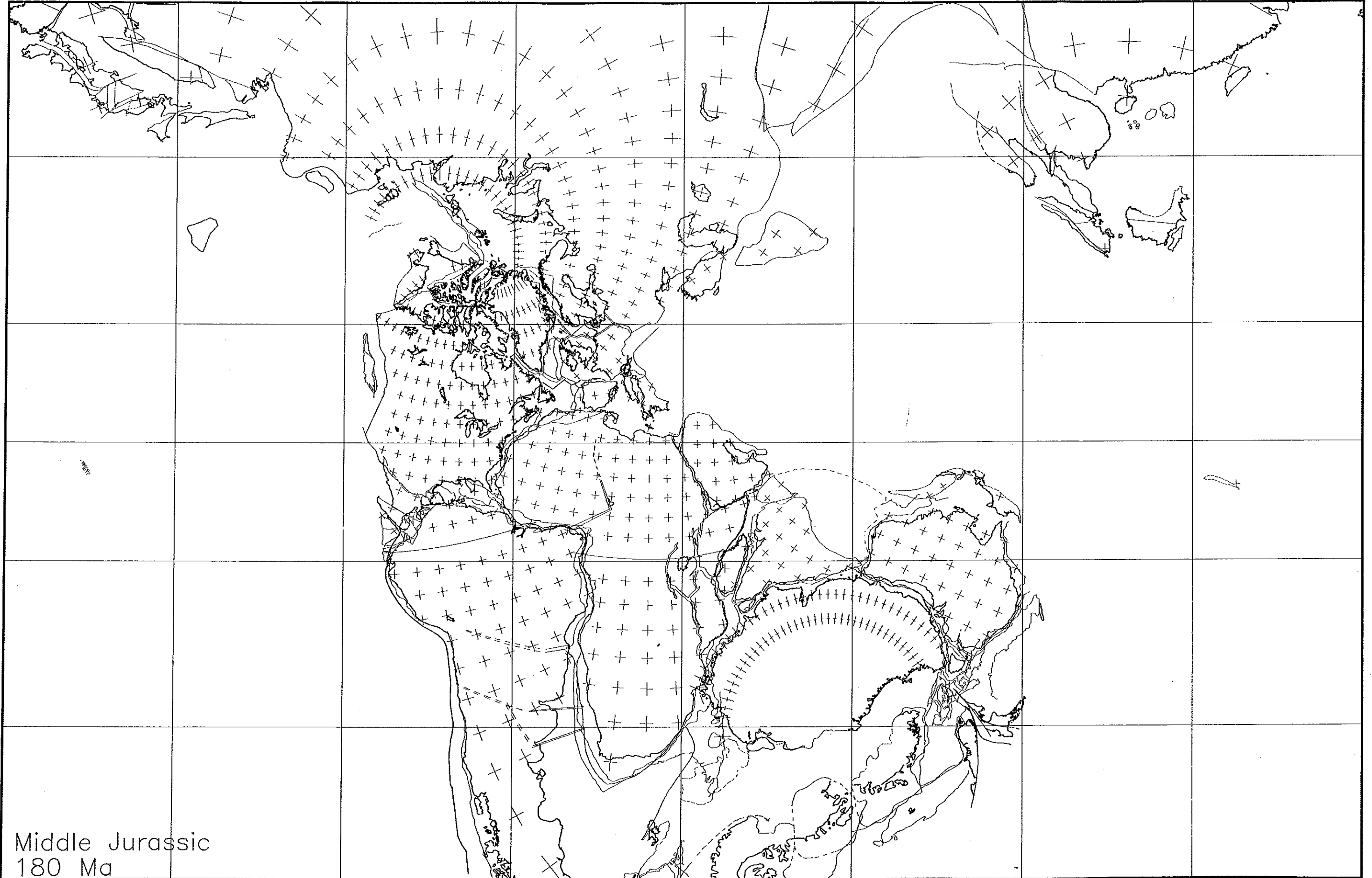
Late Jurassic
160 Ma

-180 -135 -90 -45 0 45 90 135 180



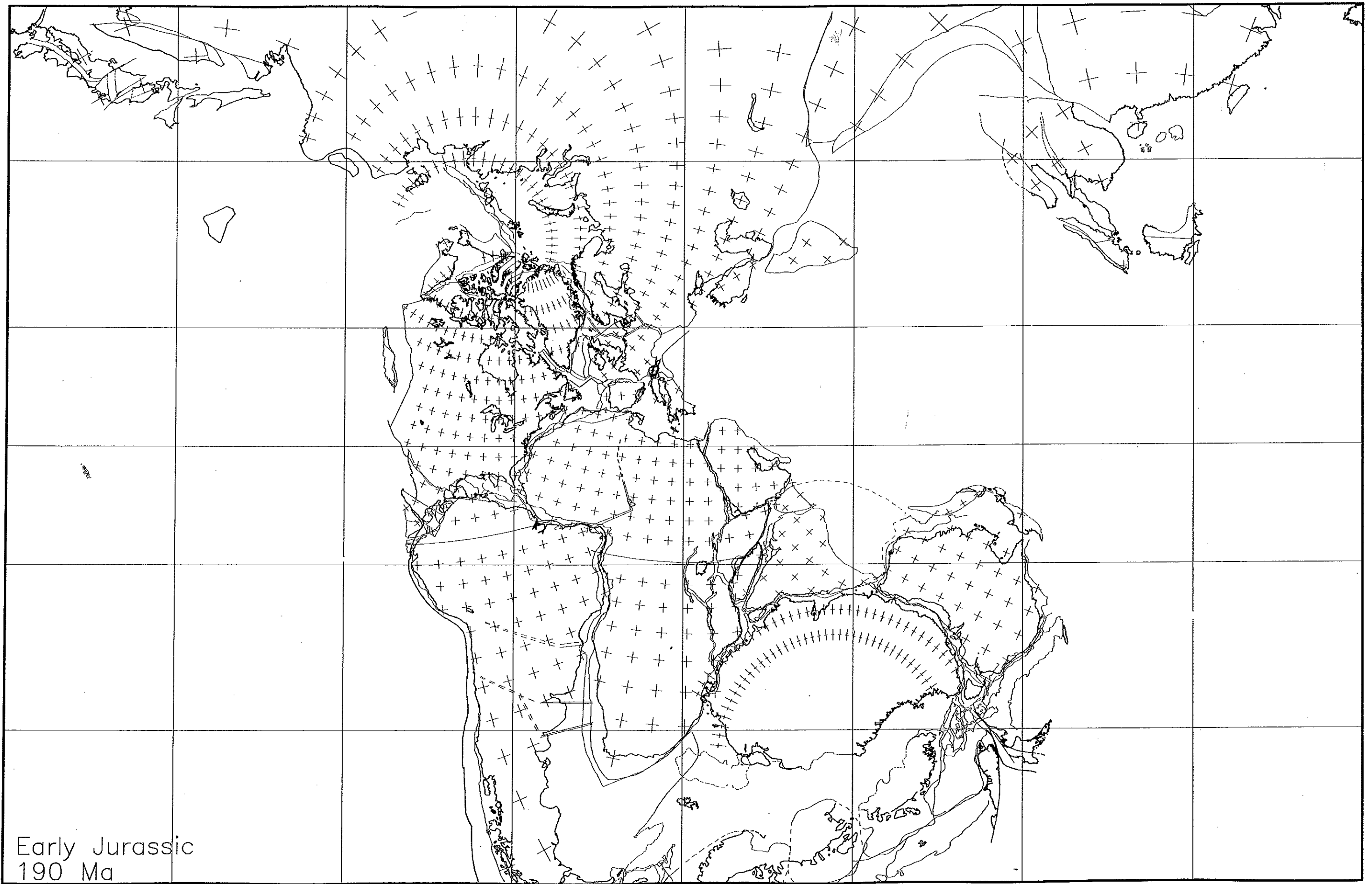
Middle Jurassic
170 Ma

-180 -135 -90 -45 0 45 90 135 180



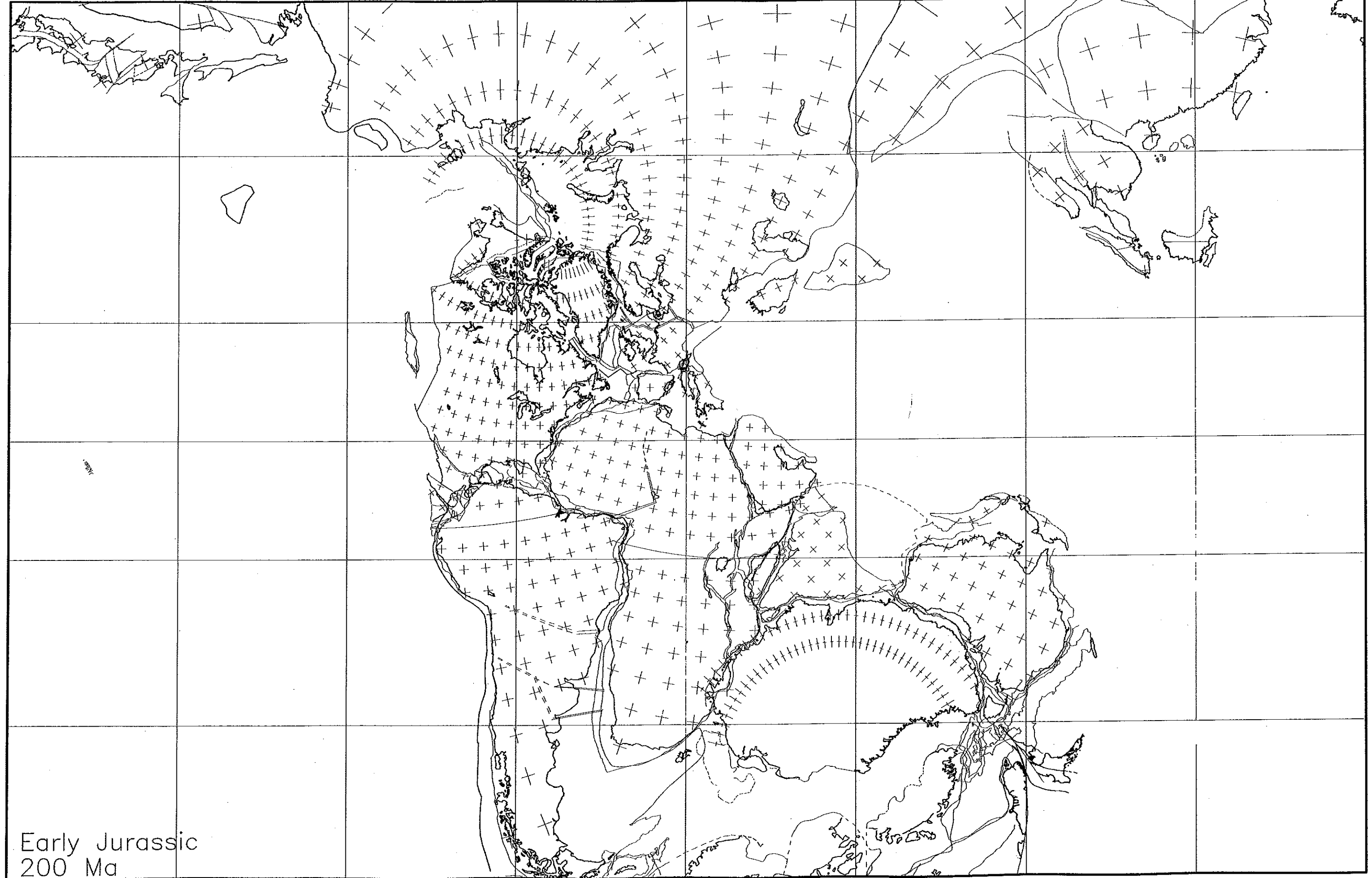
Middle Jurassic
180 Ma

-180 -135 -90 -45 0 45 90 135 180

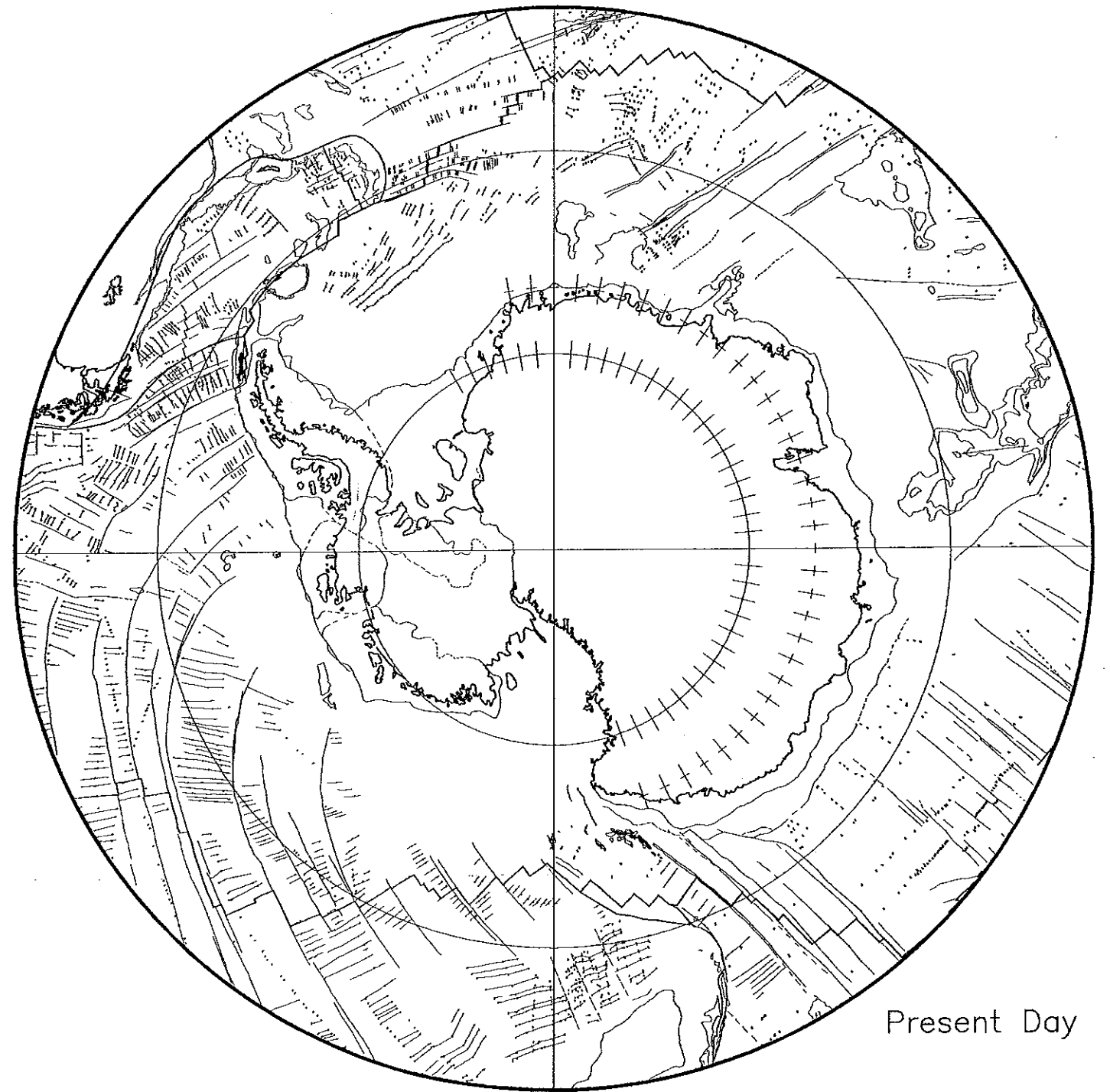
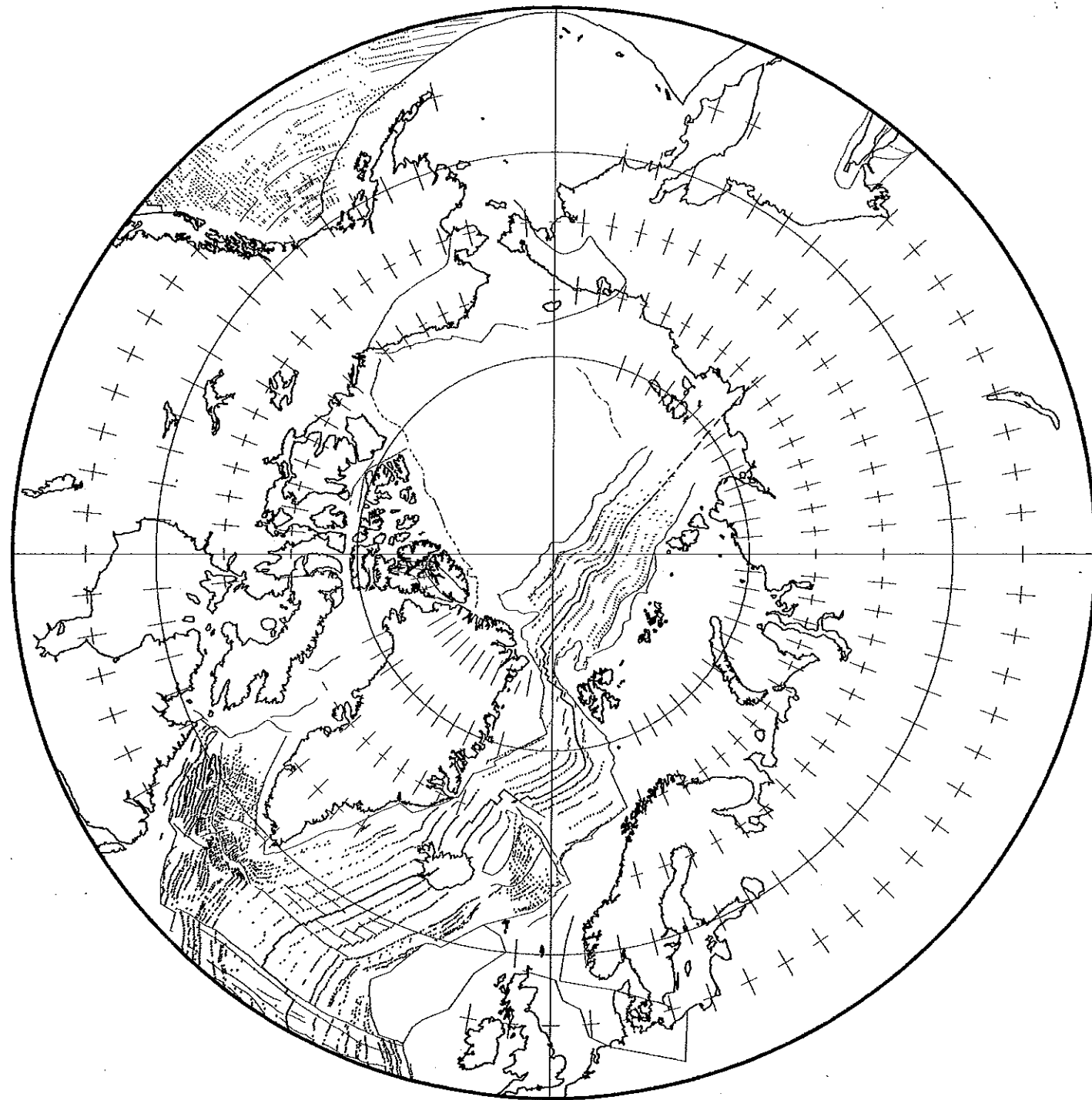


Early Jurassic
190 Ma

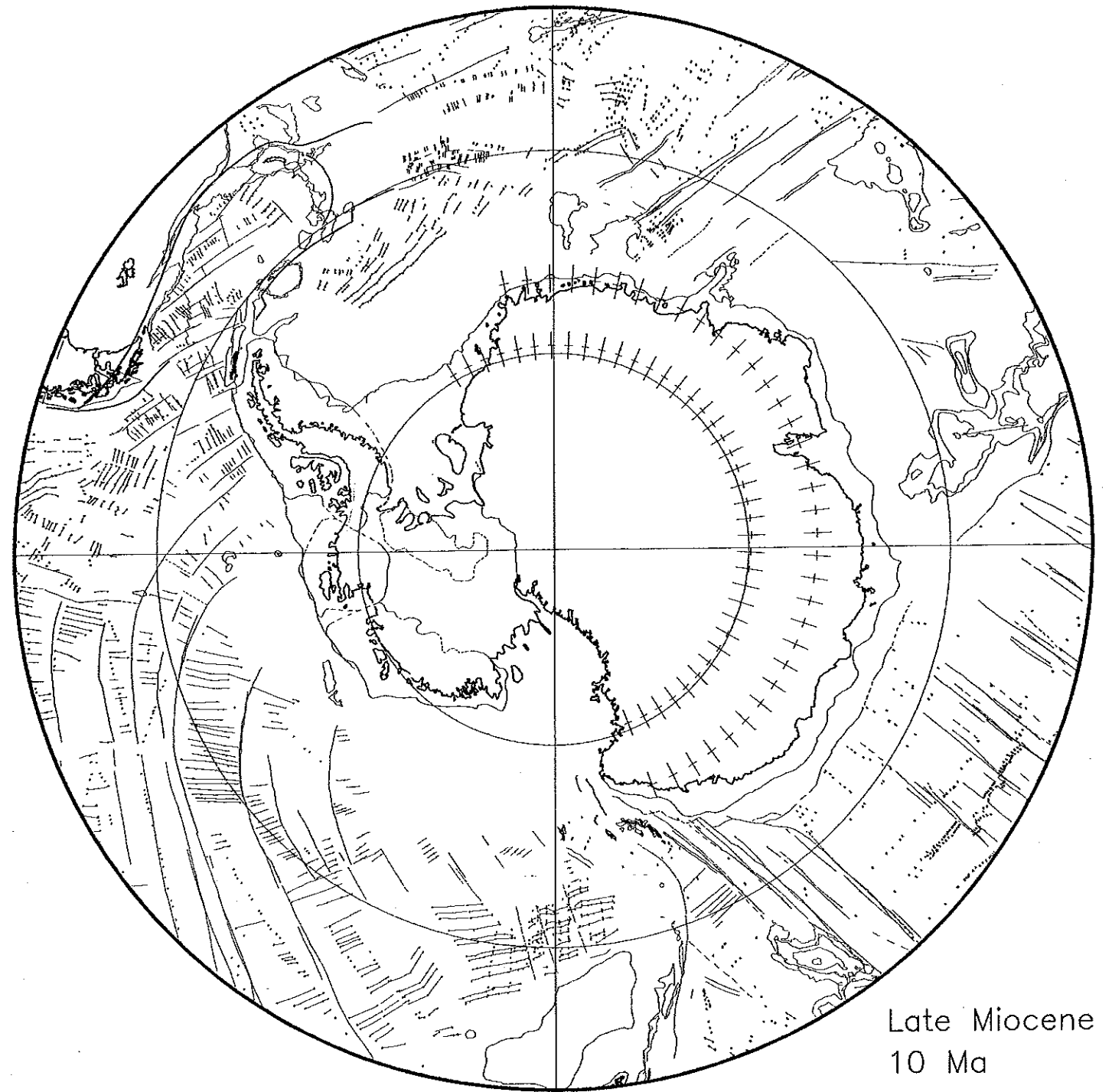
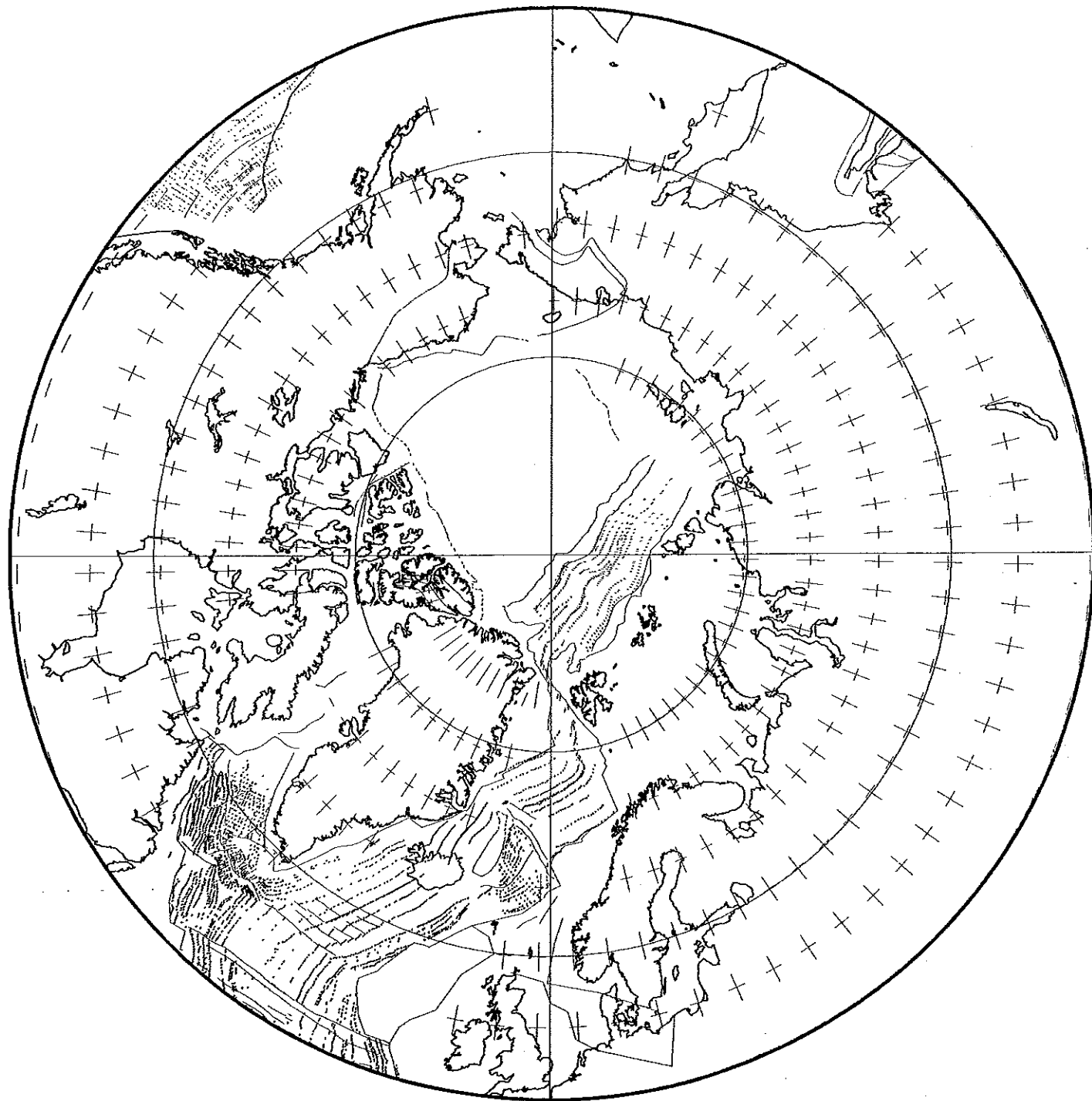
-180 -135 -90 -45 0 45 90 135 180



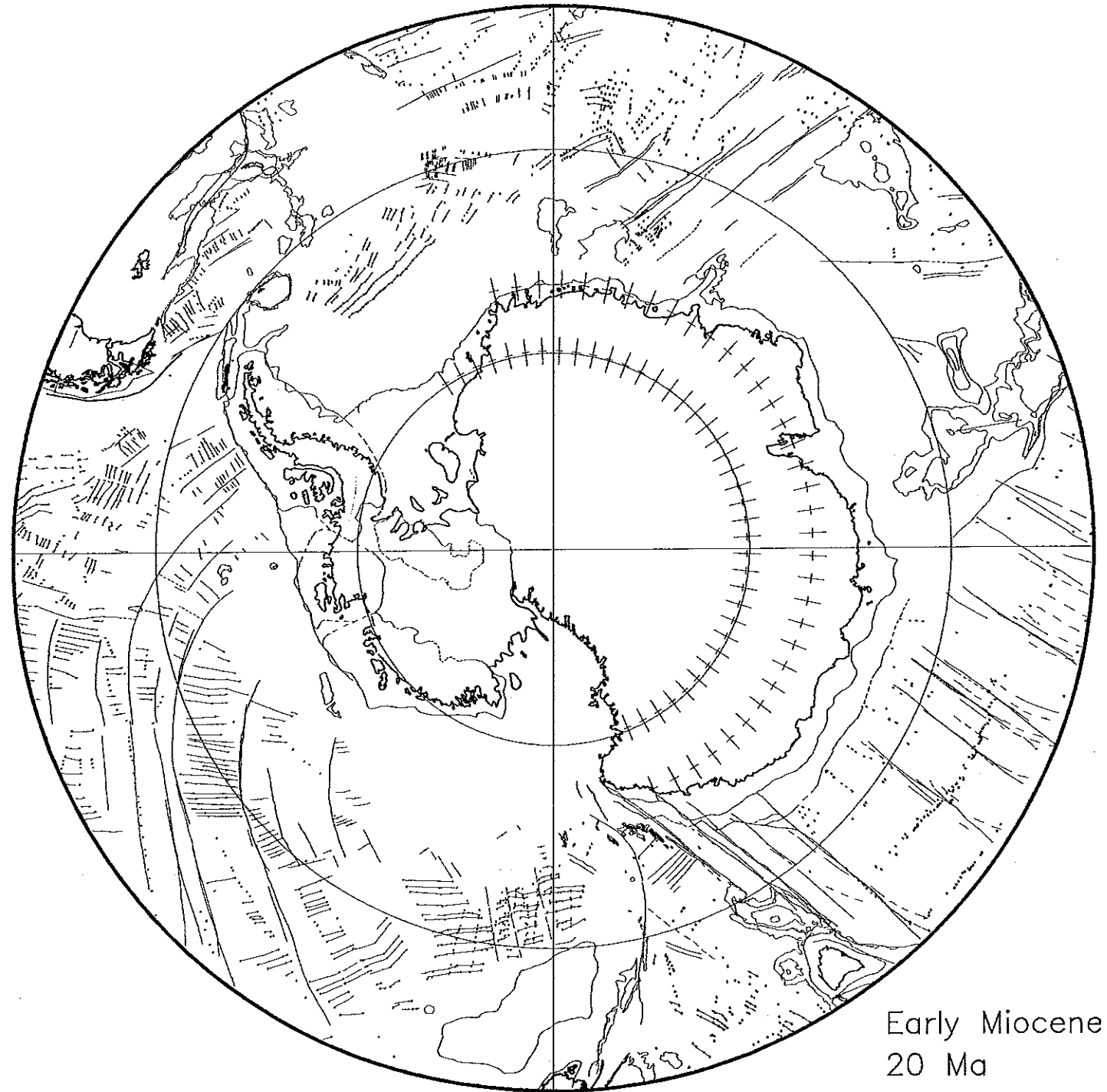
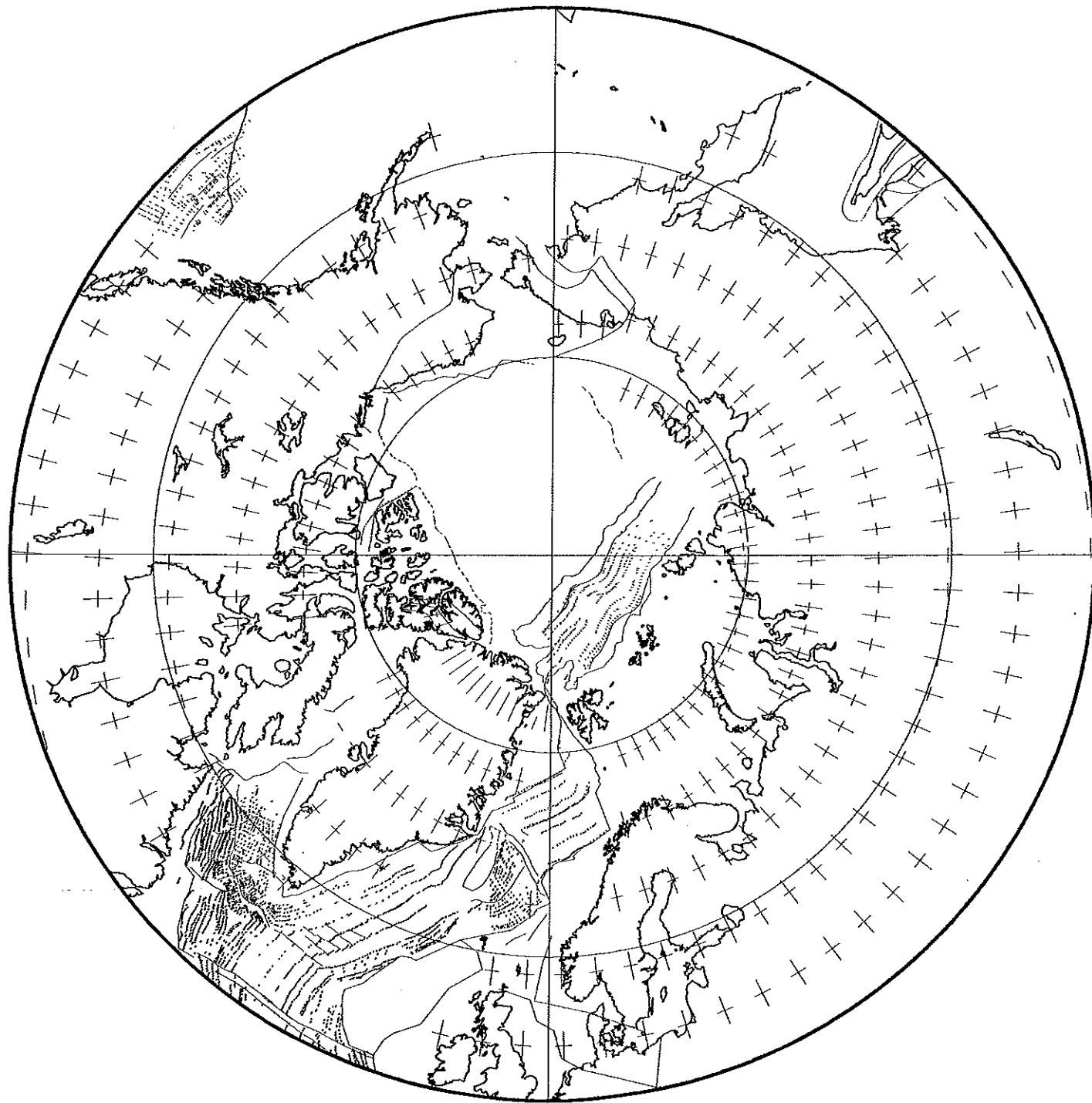
Early Jurassic
200 Ma



Present Day

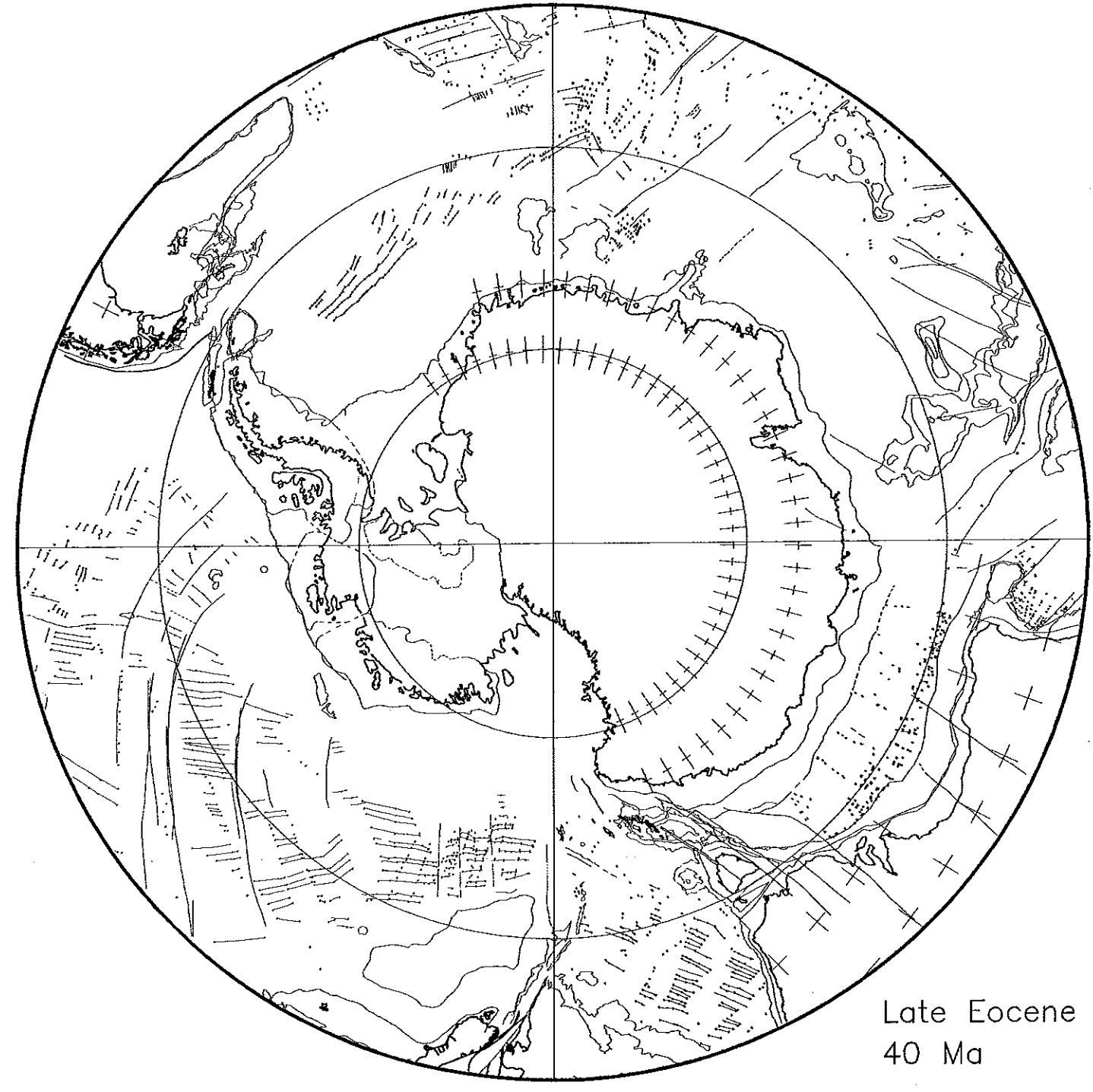
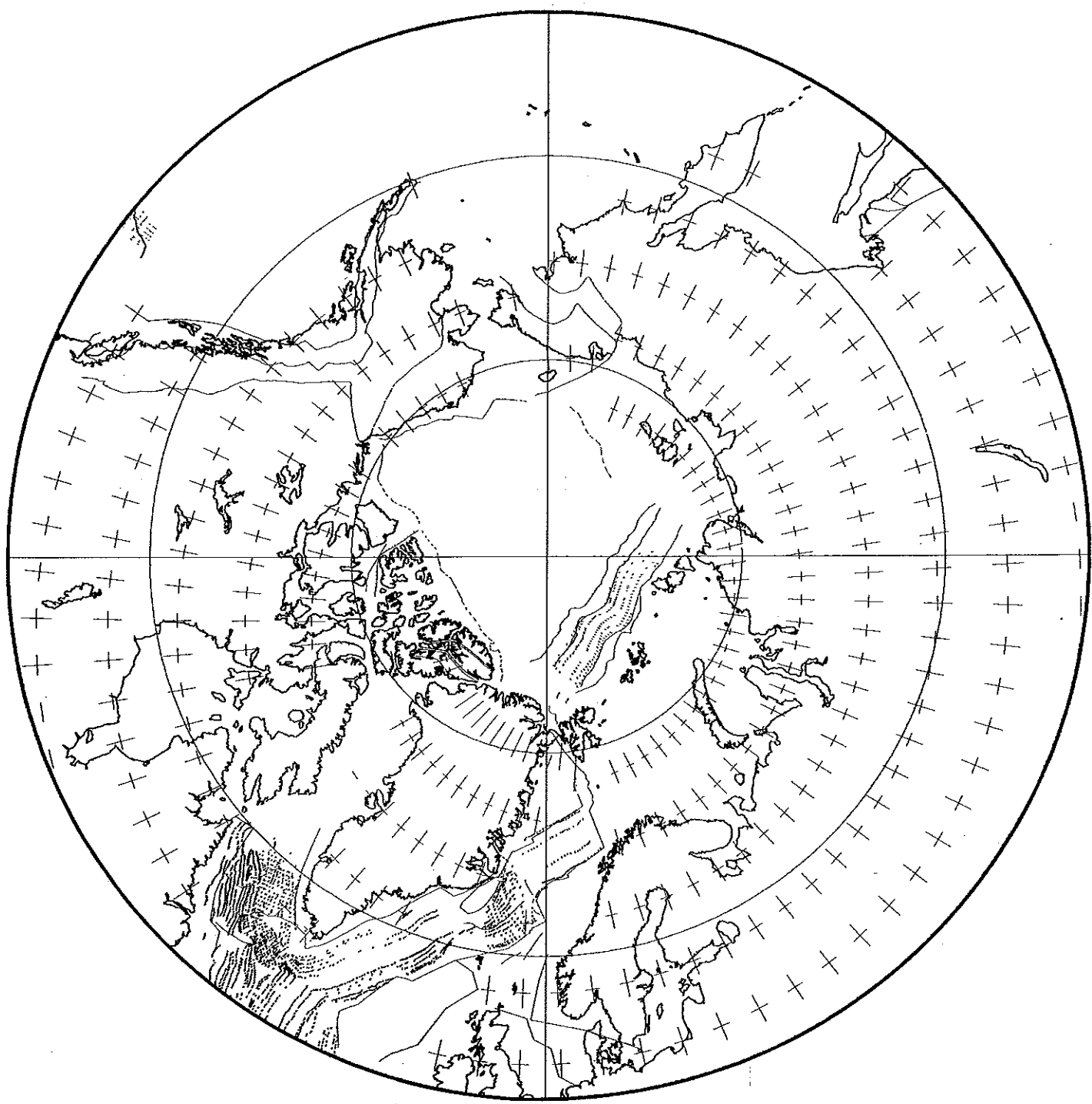


Late Miocene
10 Ma

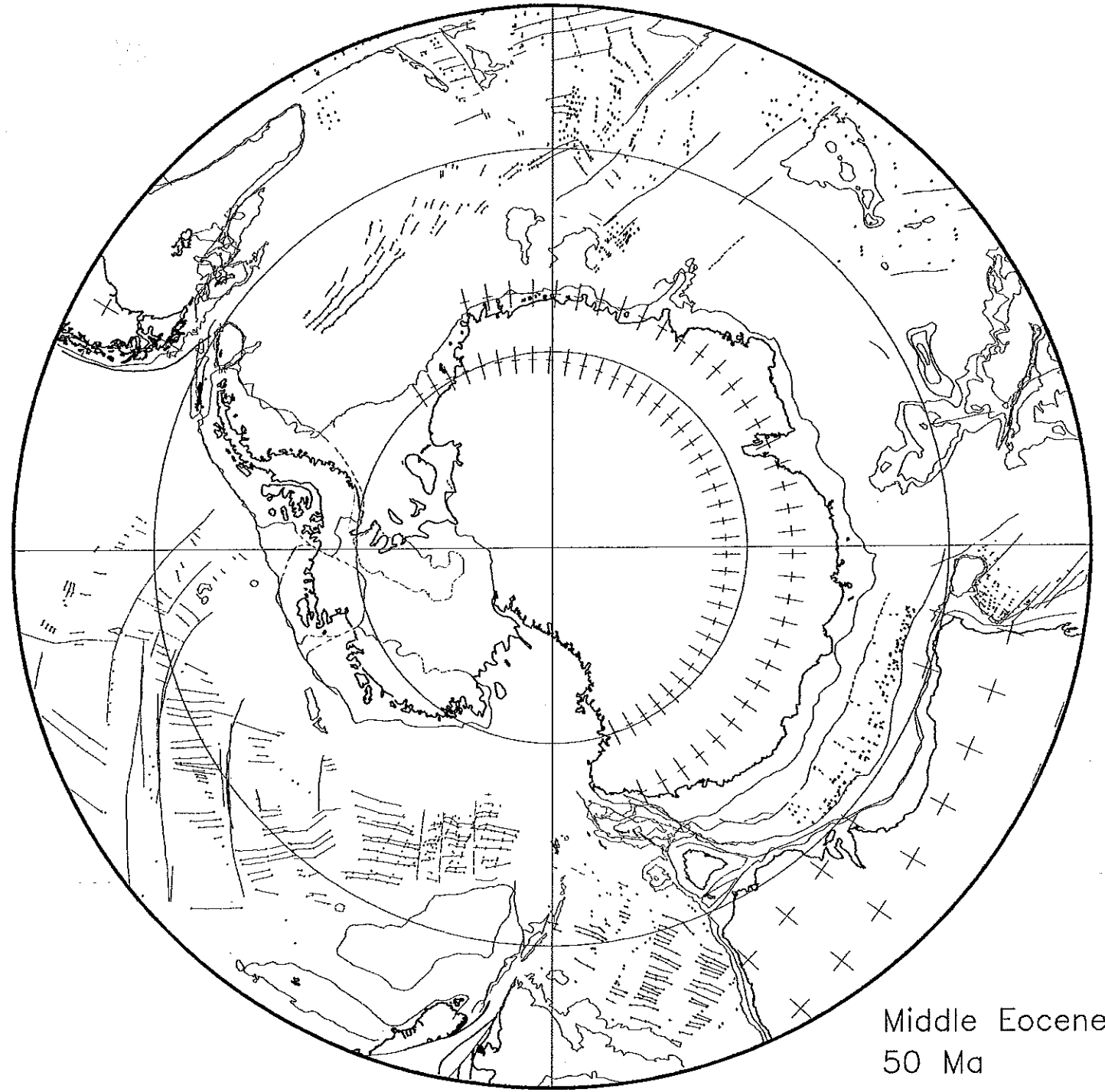
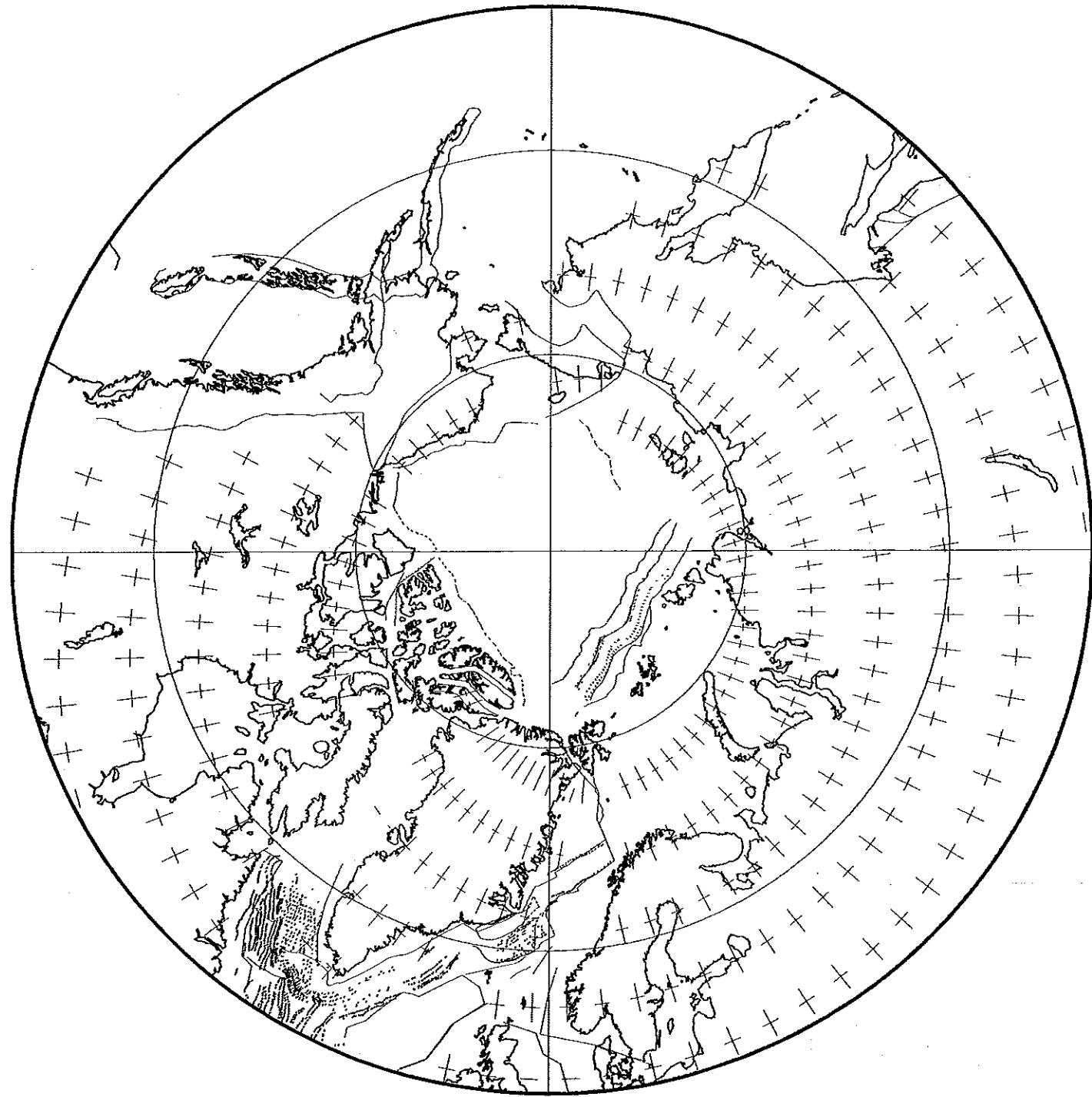


Early Miocene
20 Ma



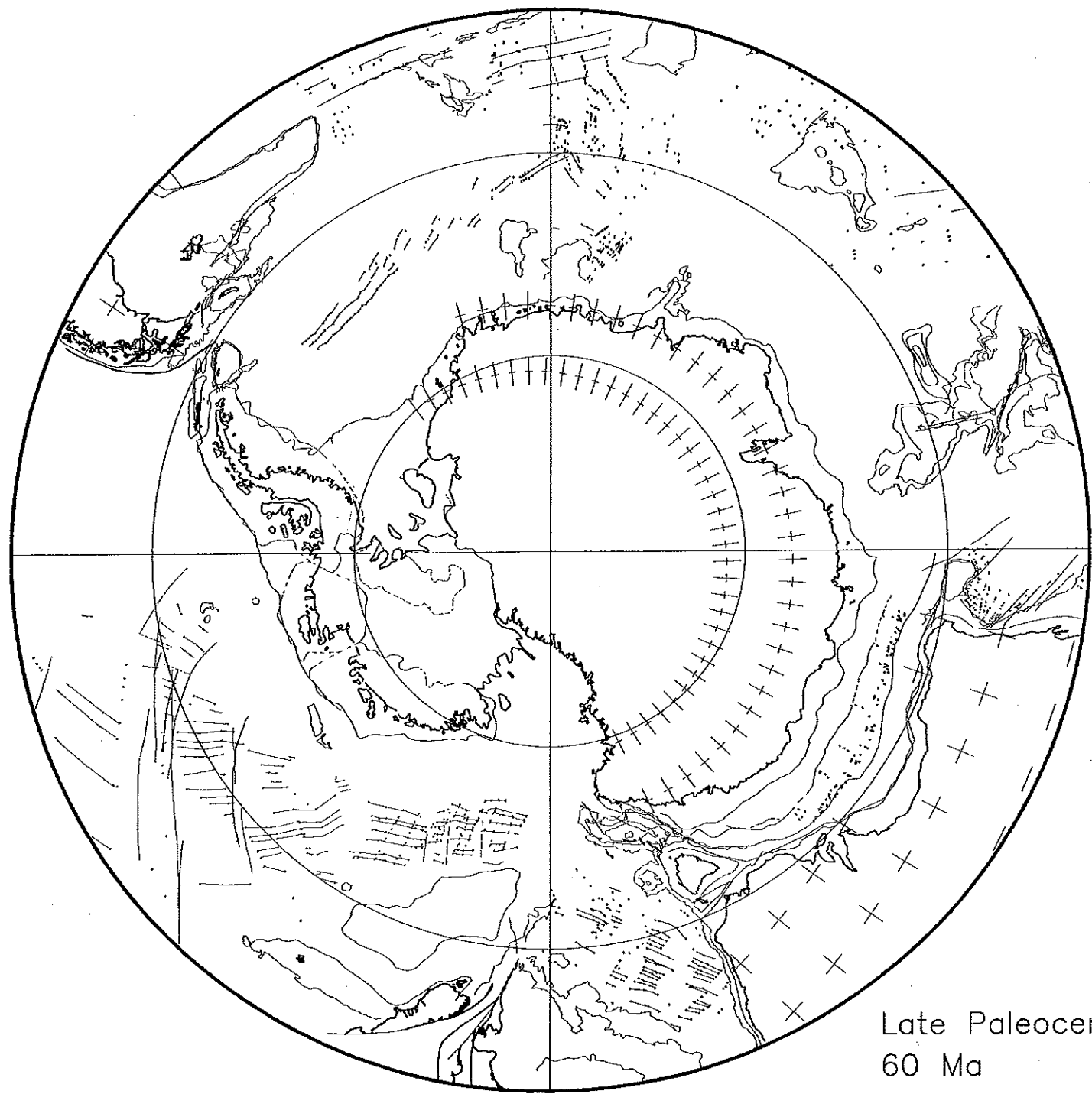
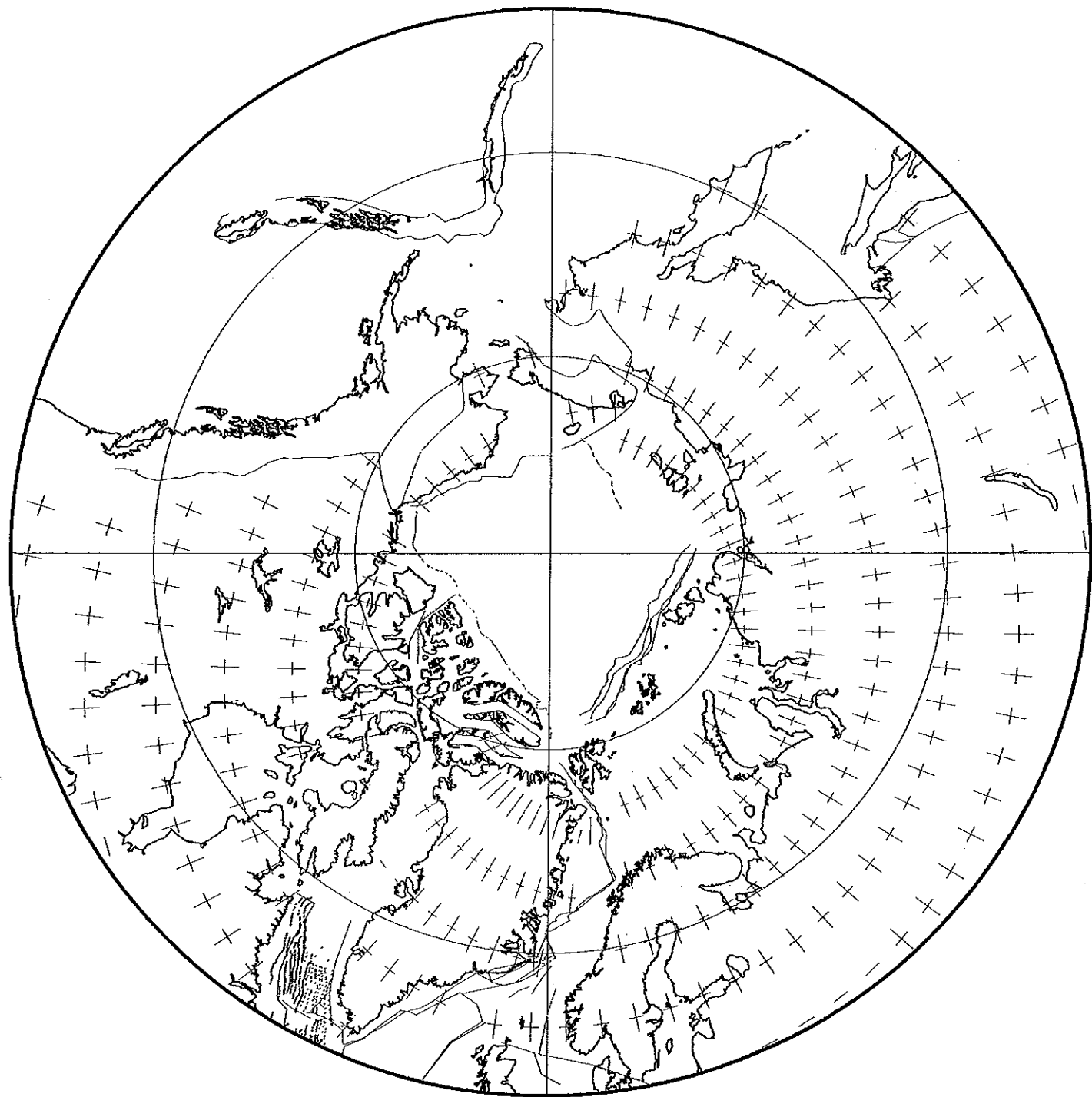


Late Eocene
40 Ma

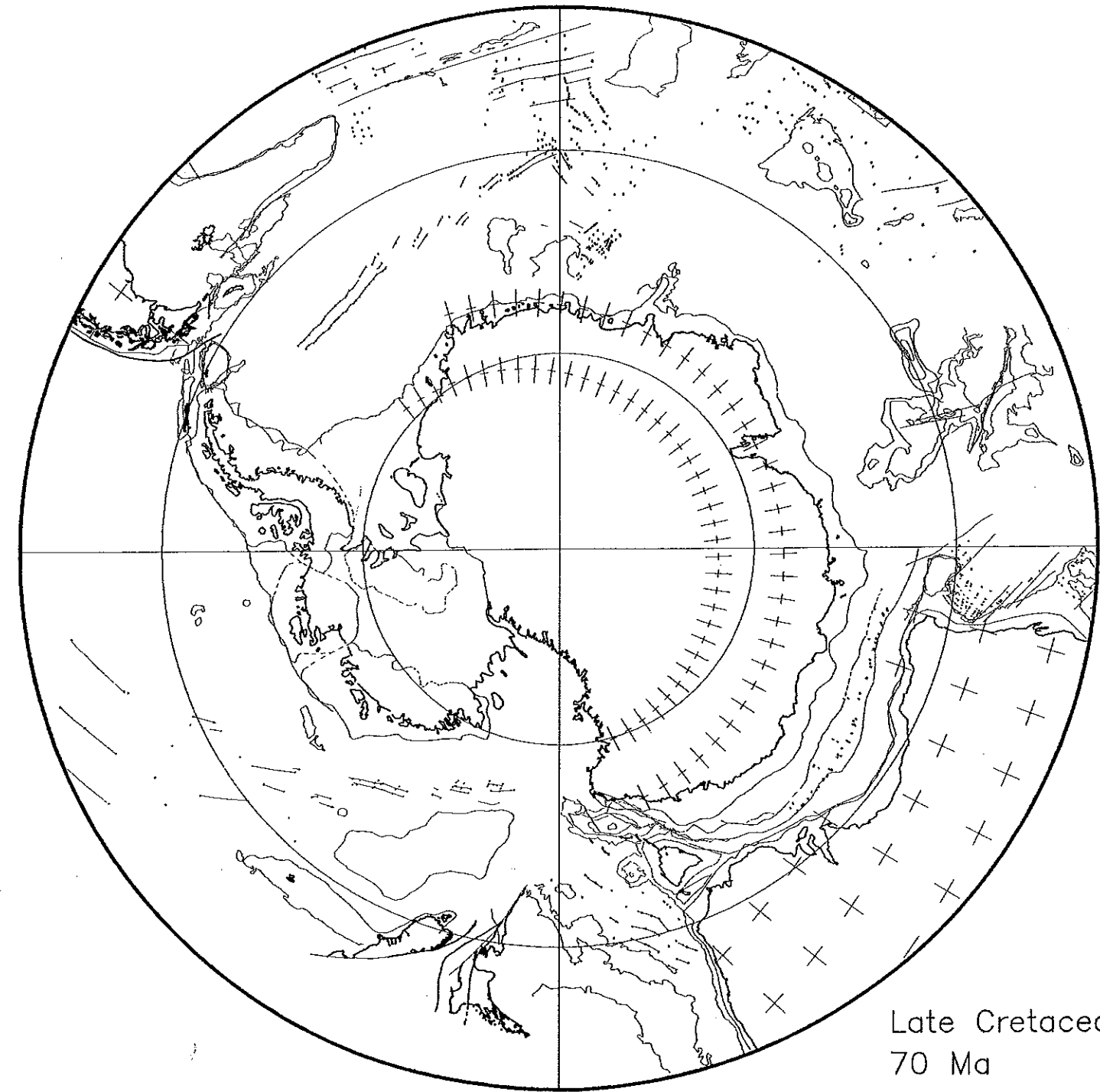
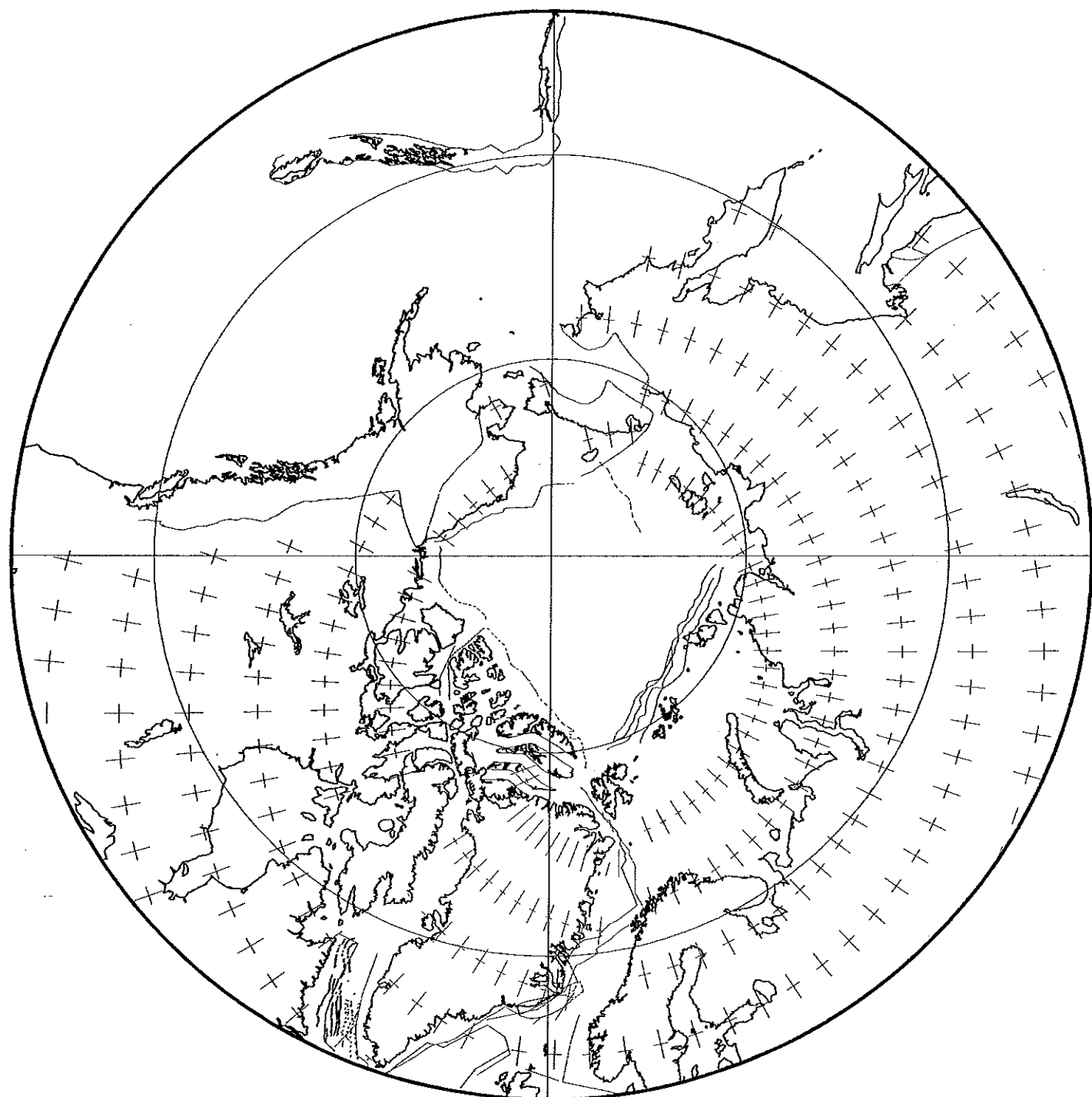


Middle Eocene
50 Ma

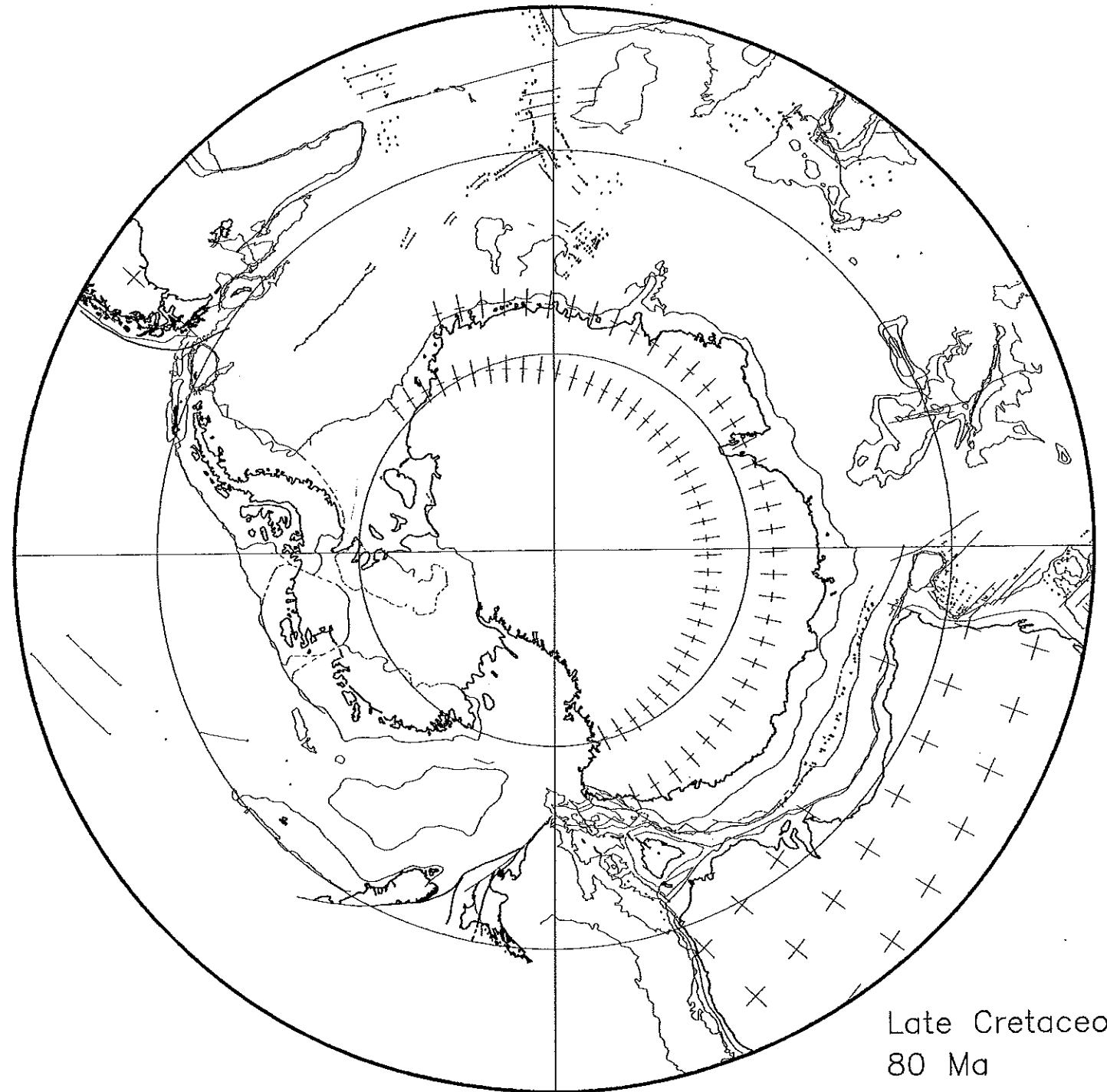
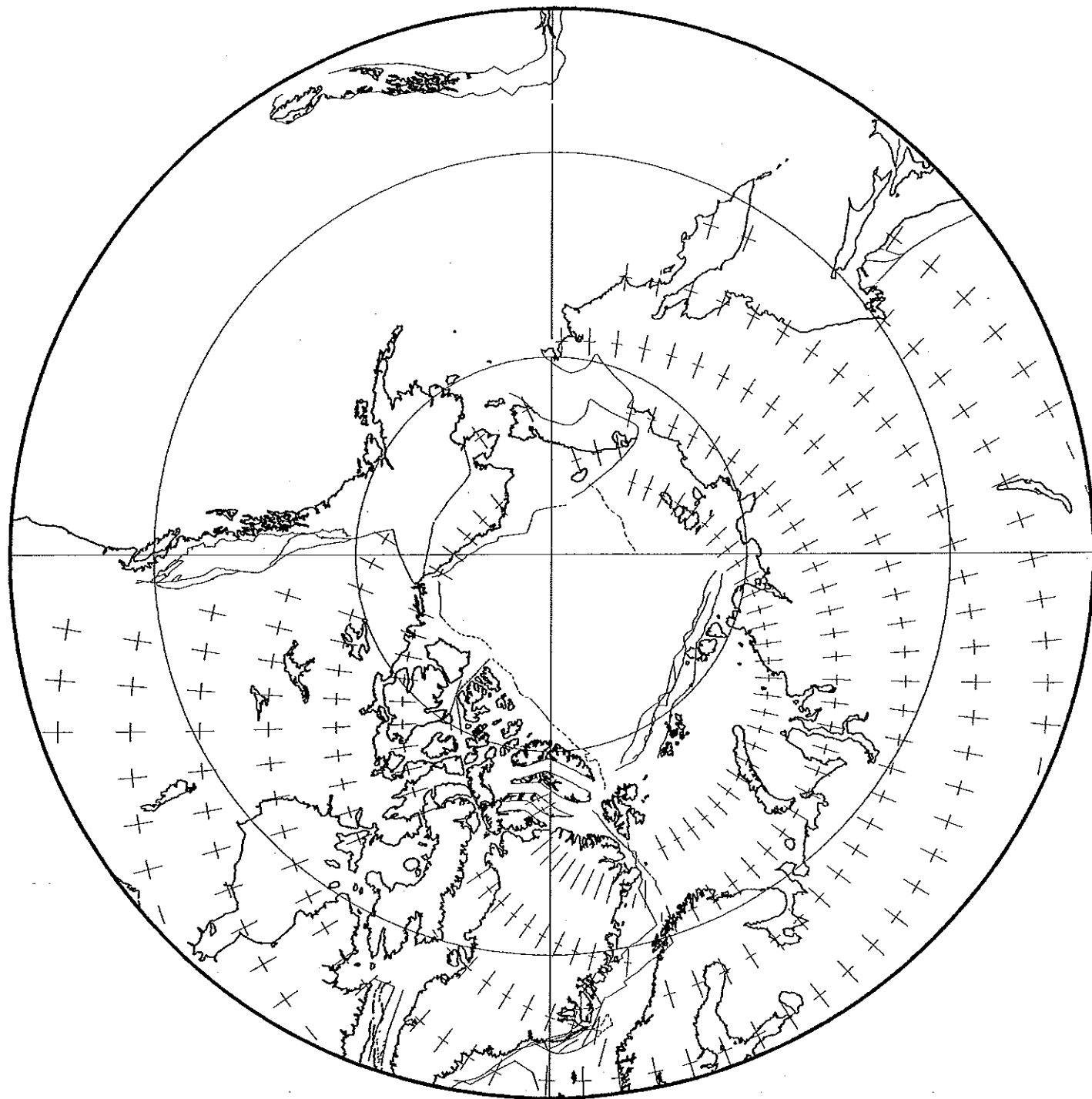




Late Paleocene
60 Ma

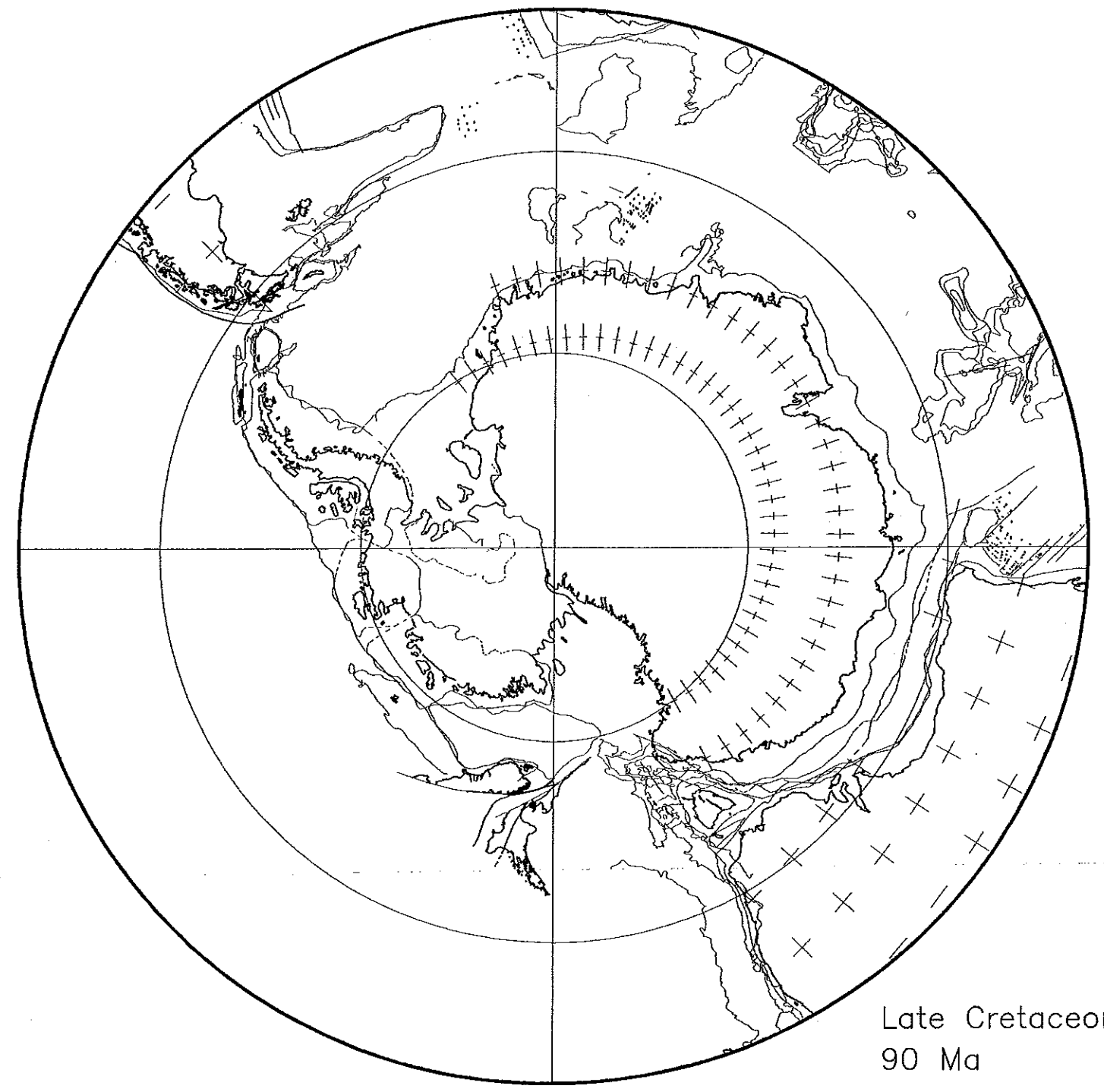
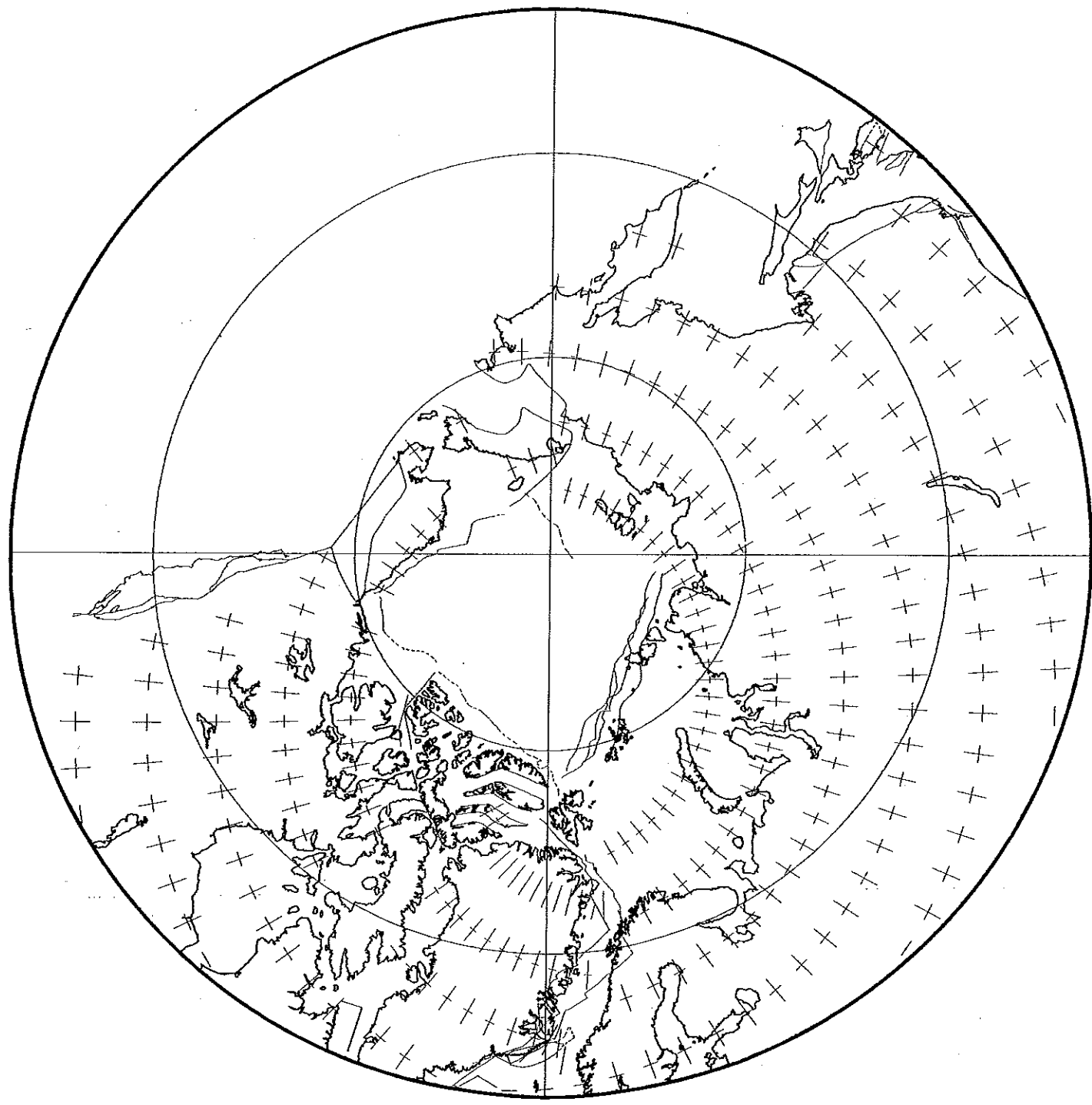


Late Cretaceous
70 Ma

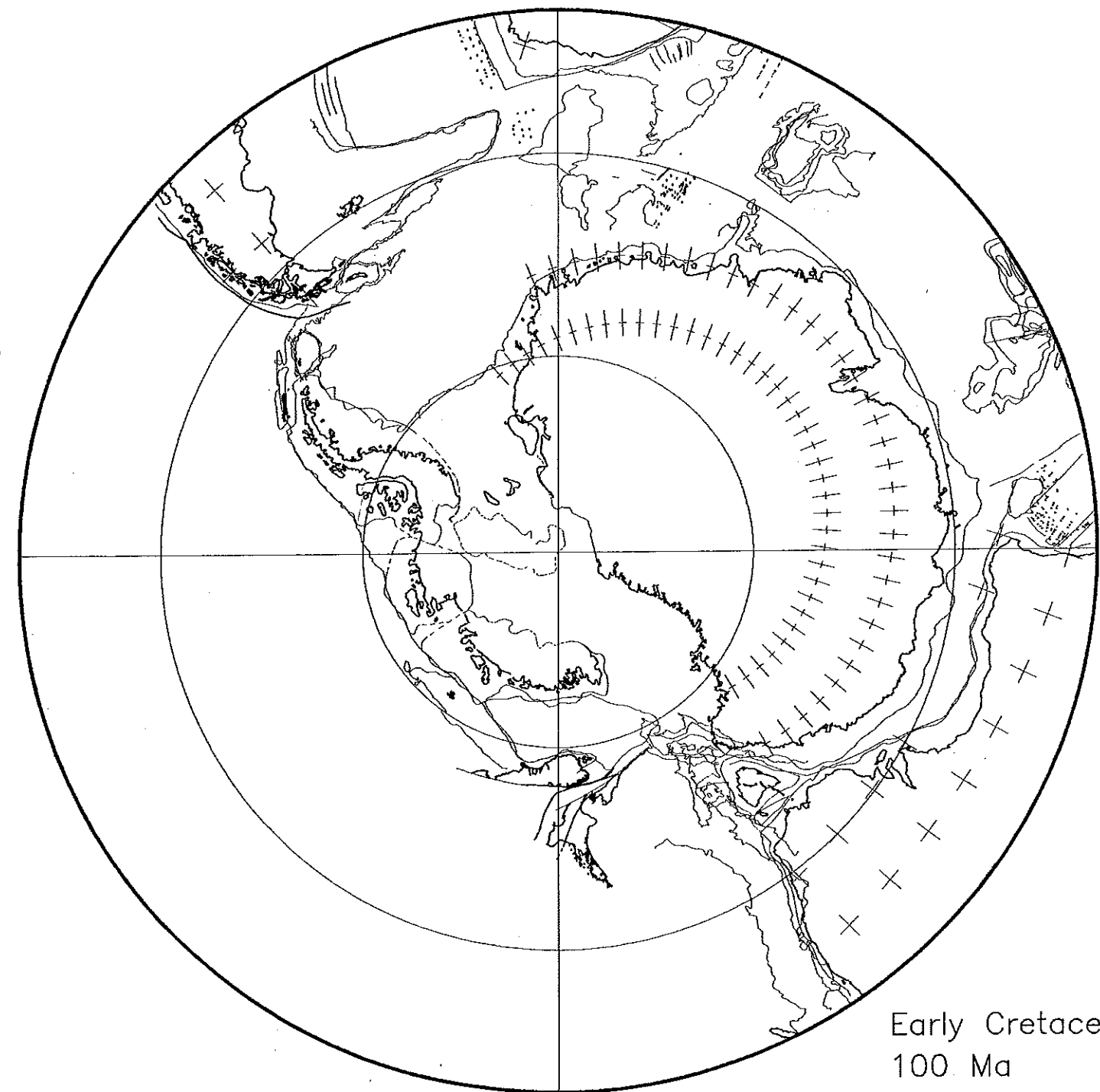
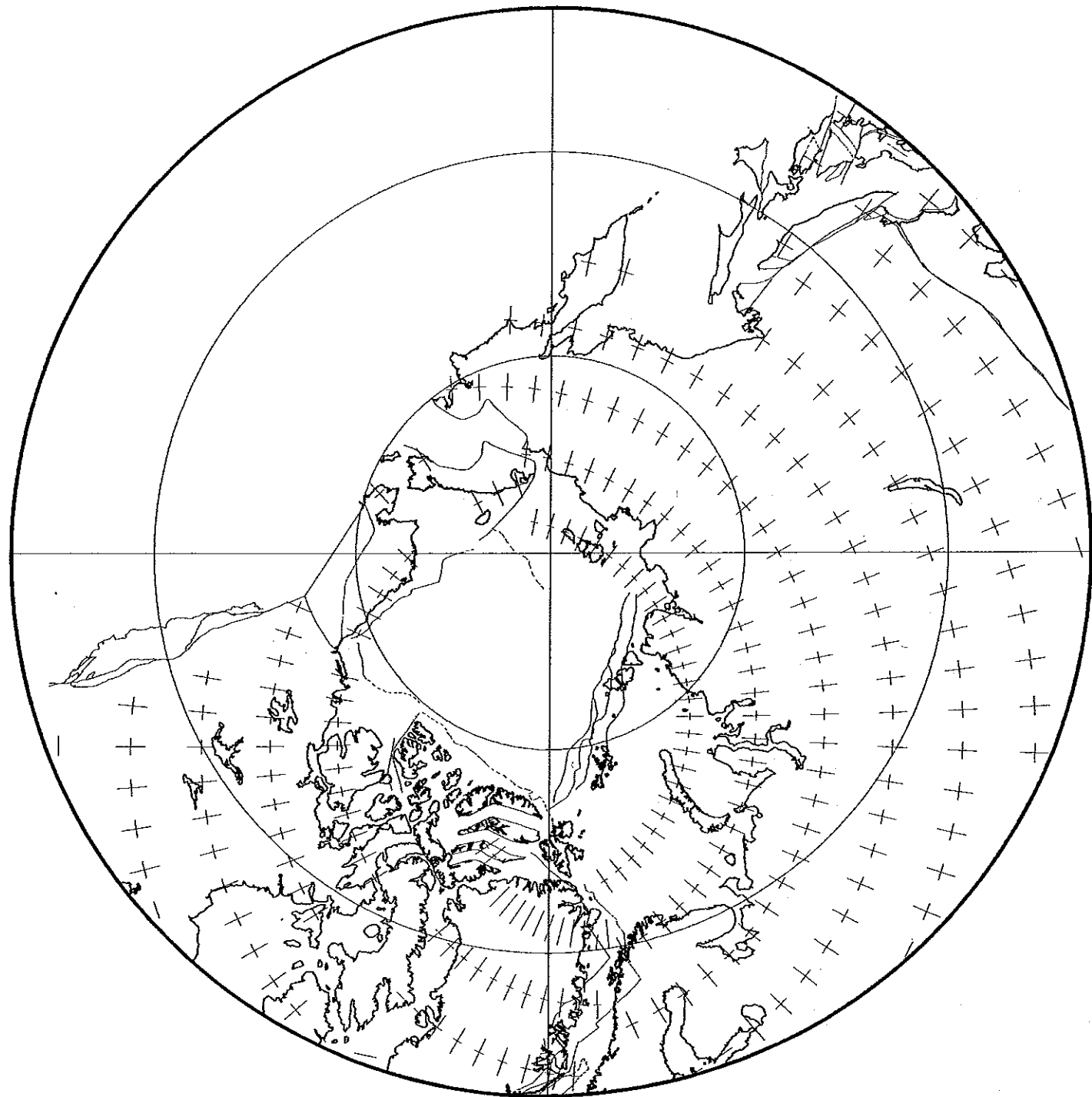


Late Cretaceous
80 Ma



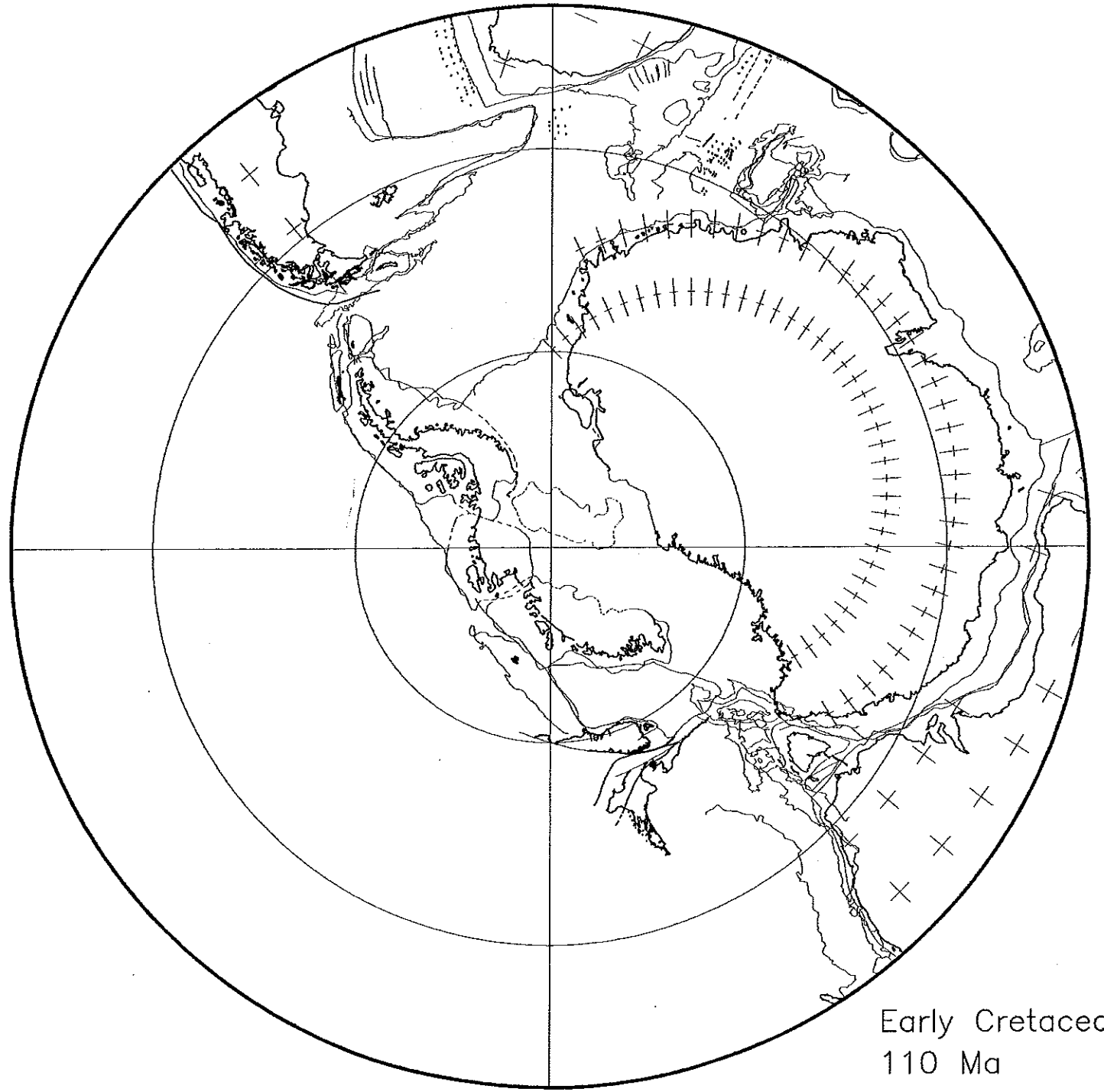
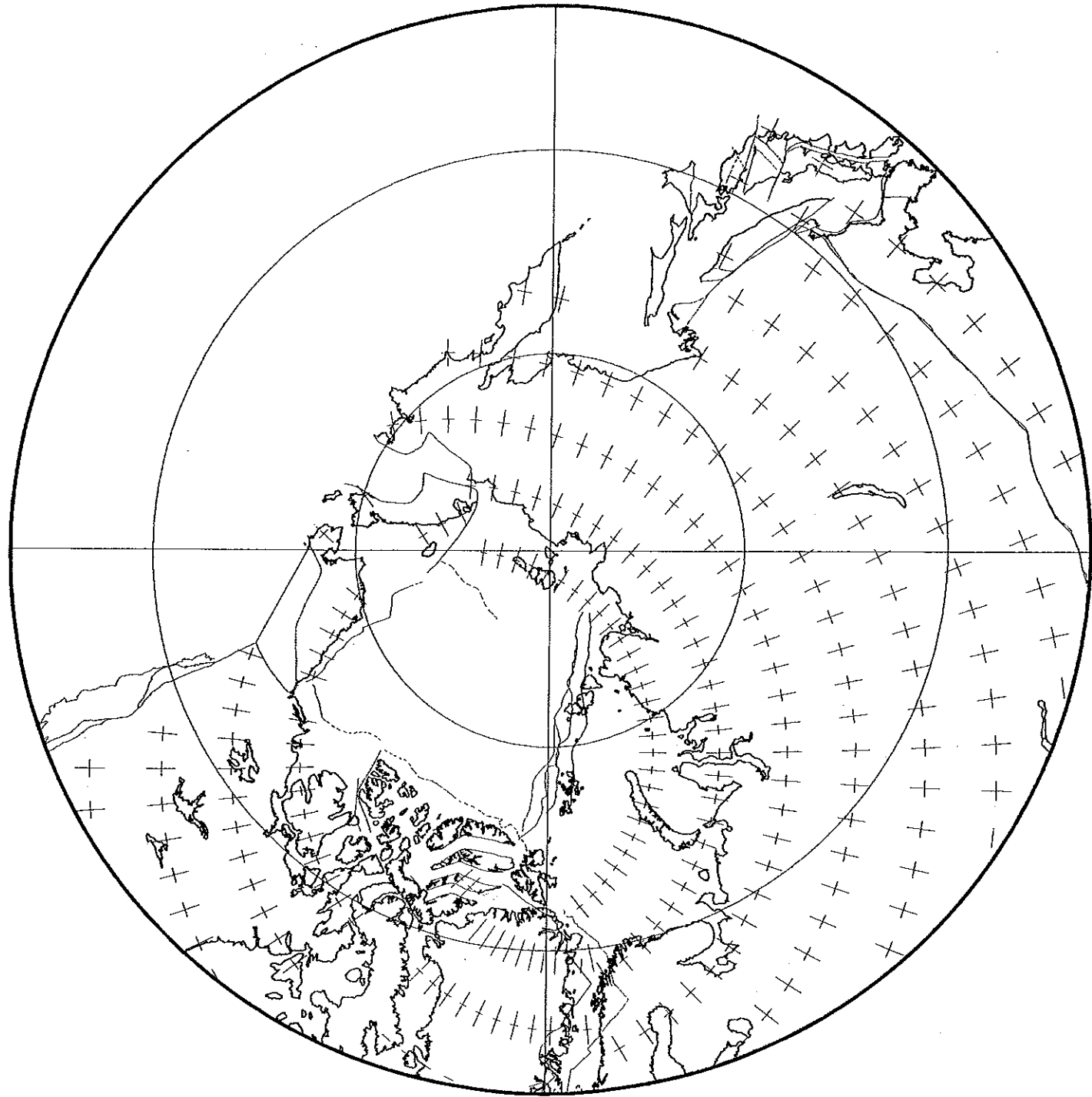


Late Cretaceous
90 Ma

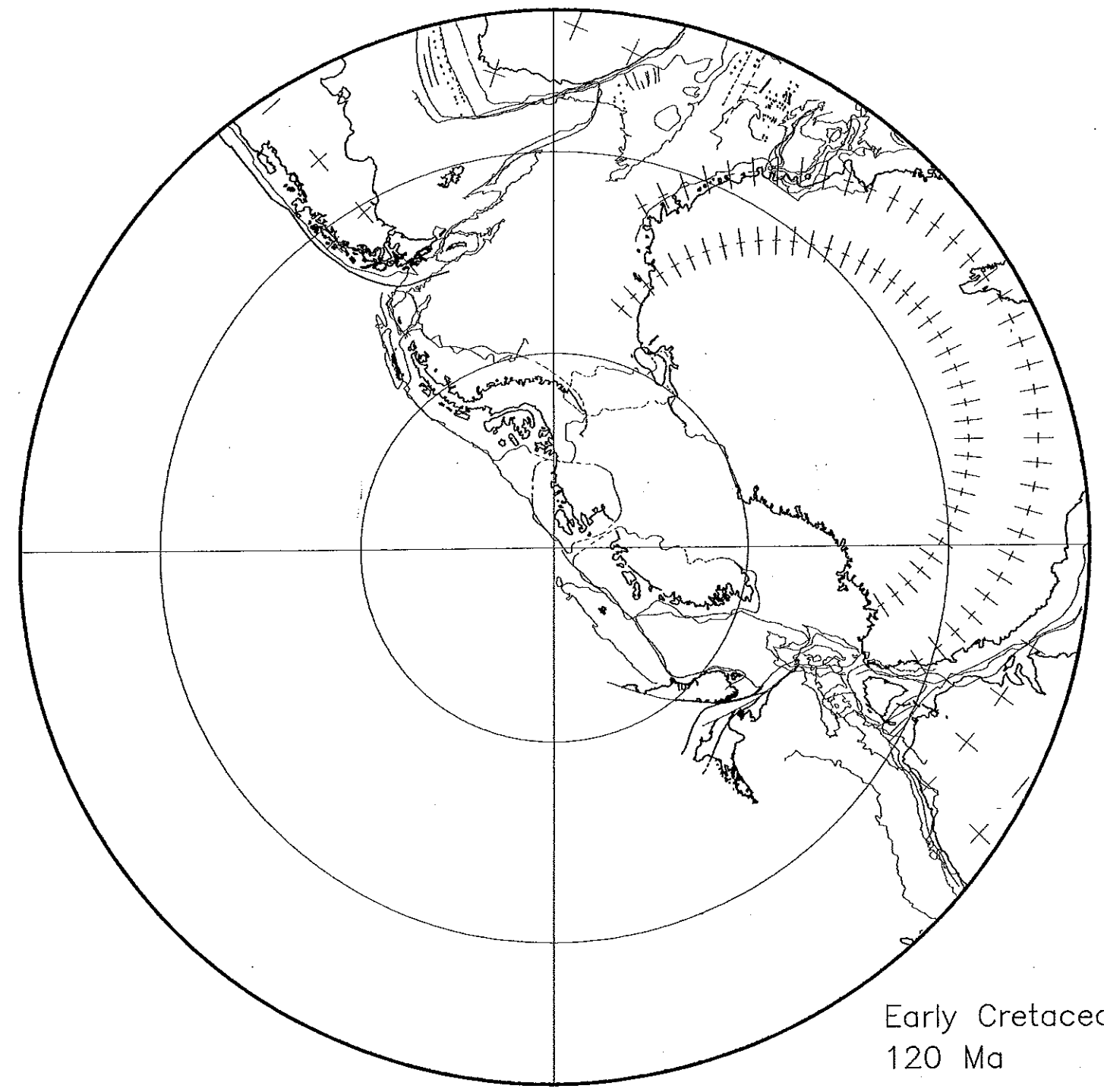
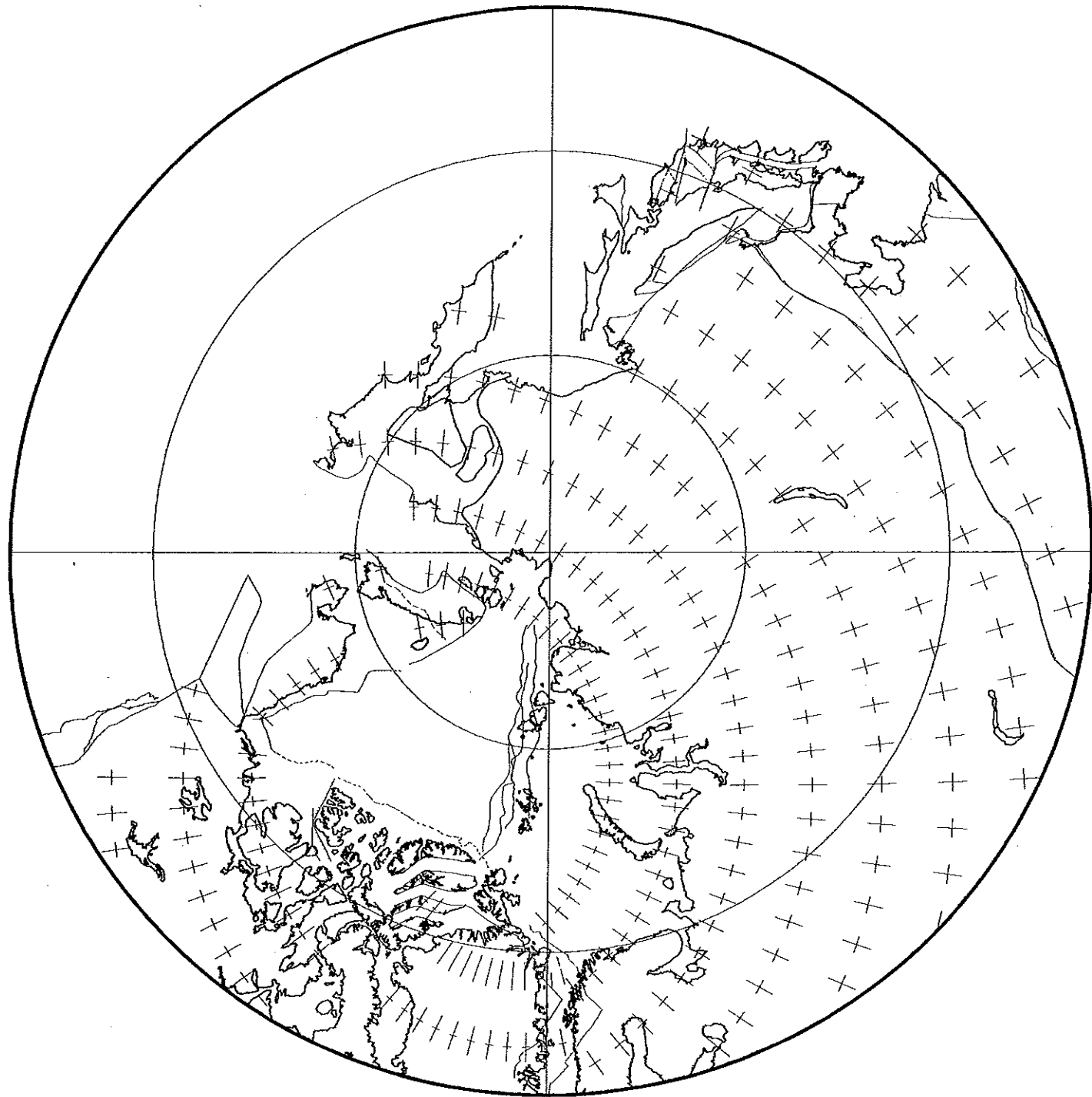


Early Cretaceous
100 Ma

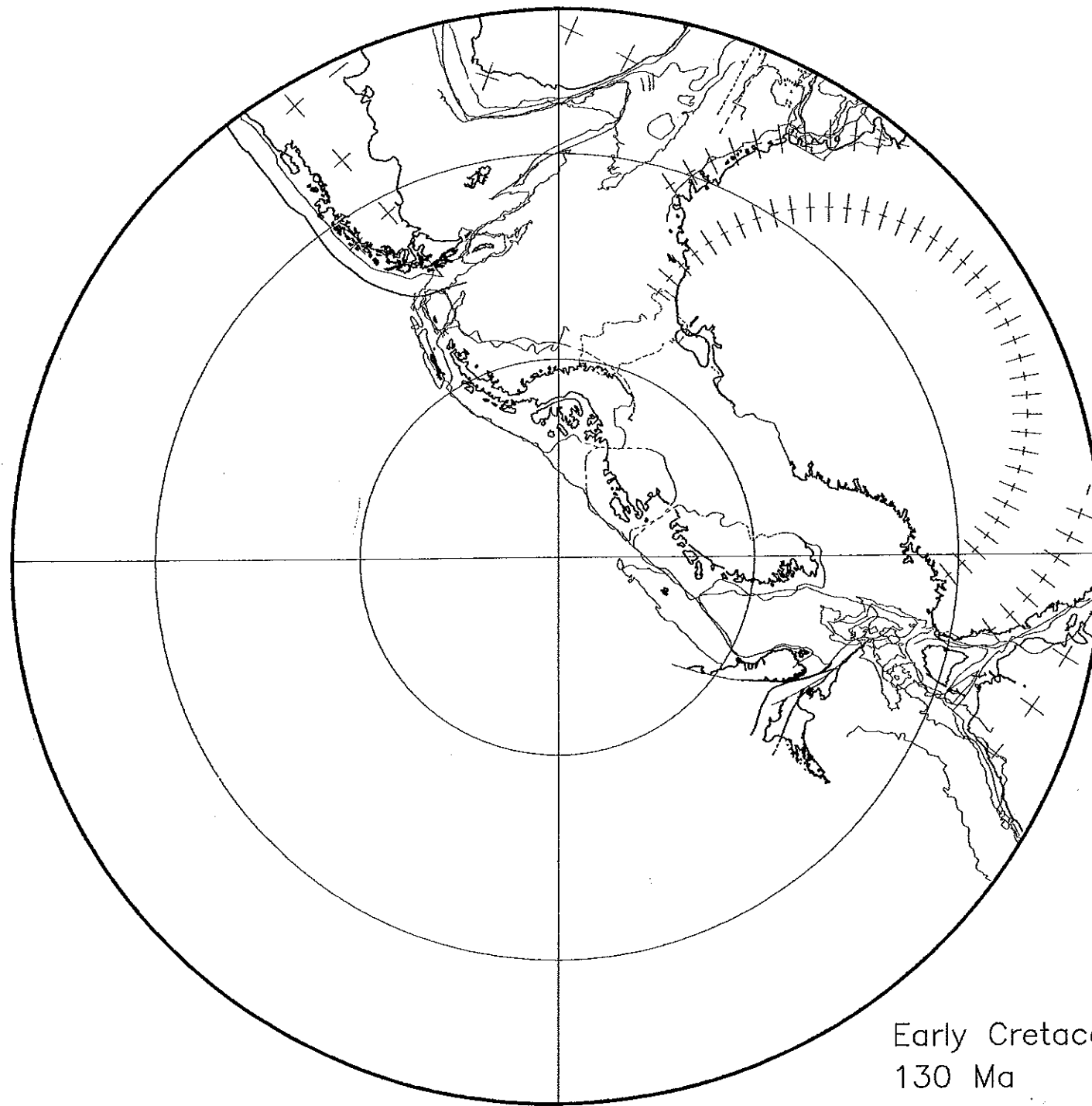
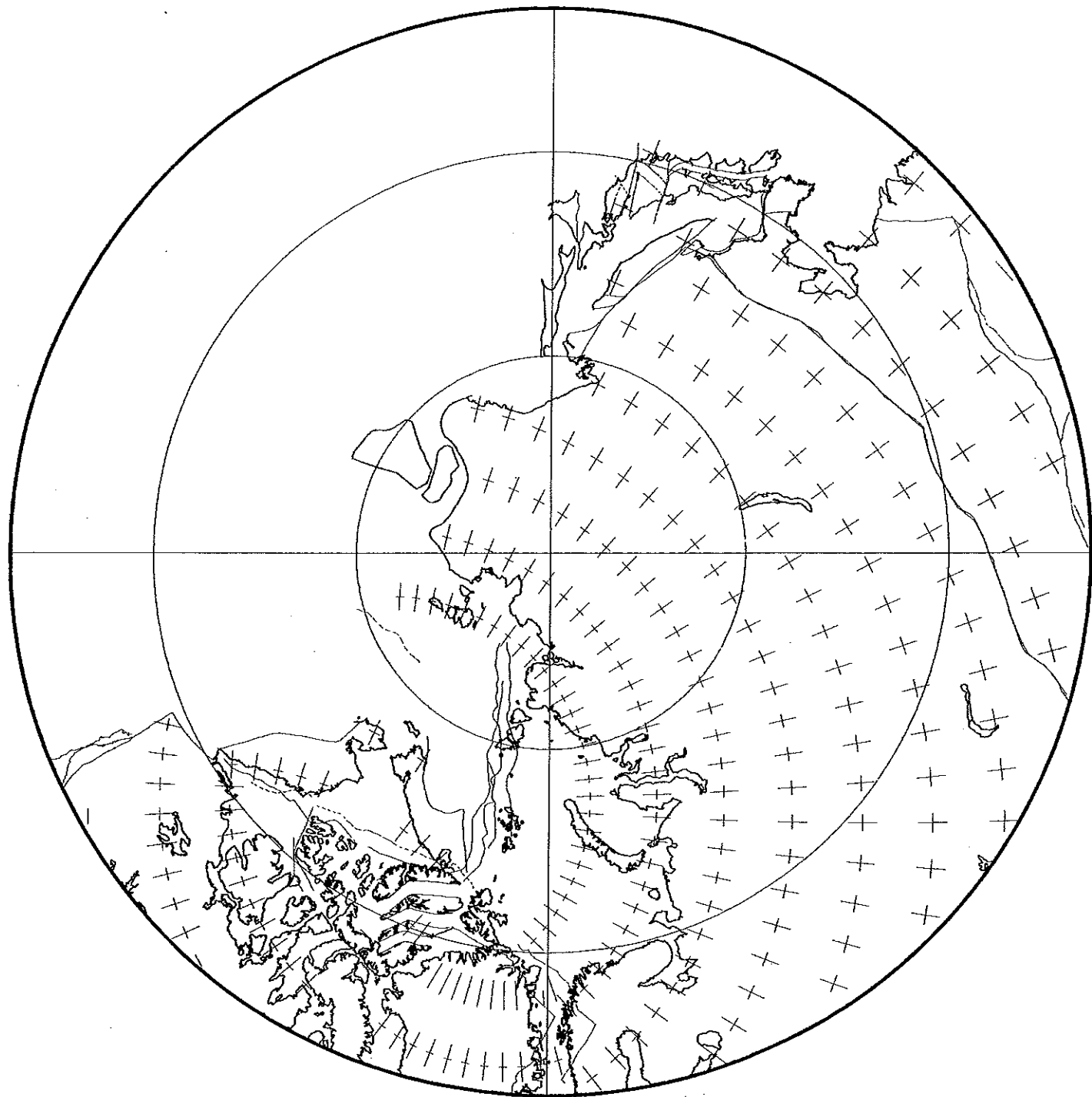




Early Cretaceous
110 Ma

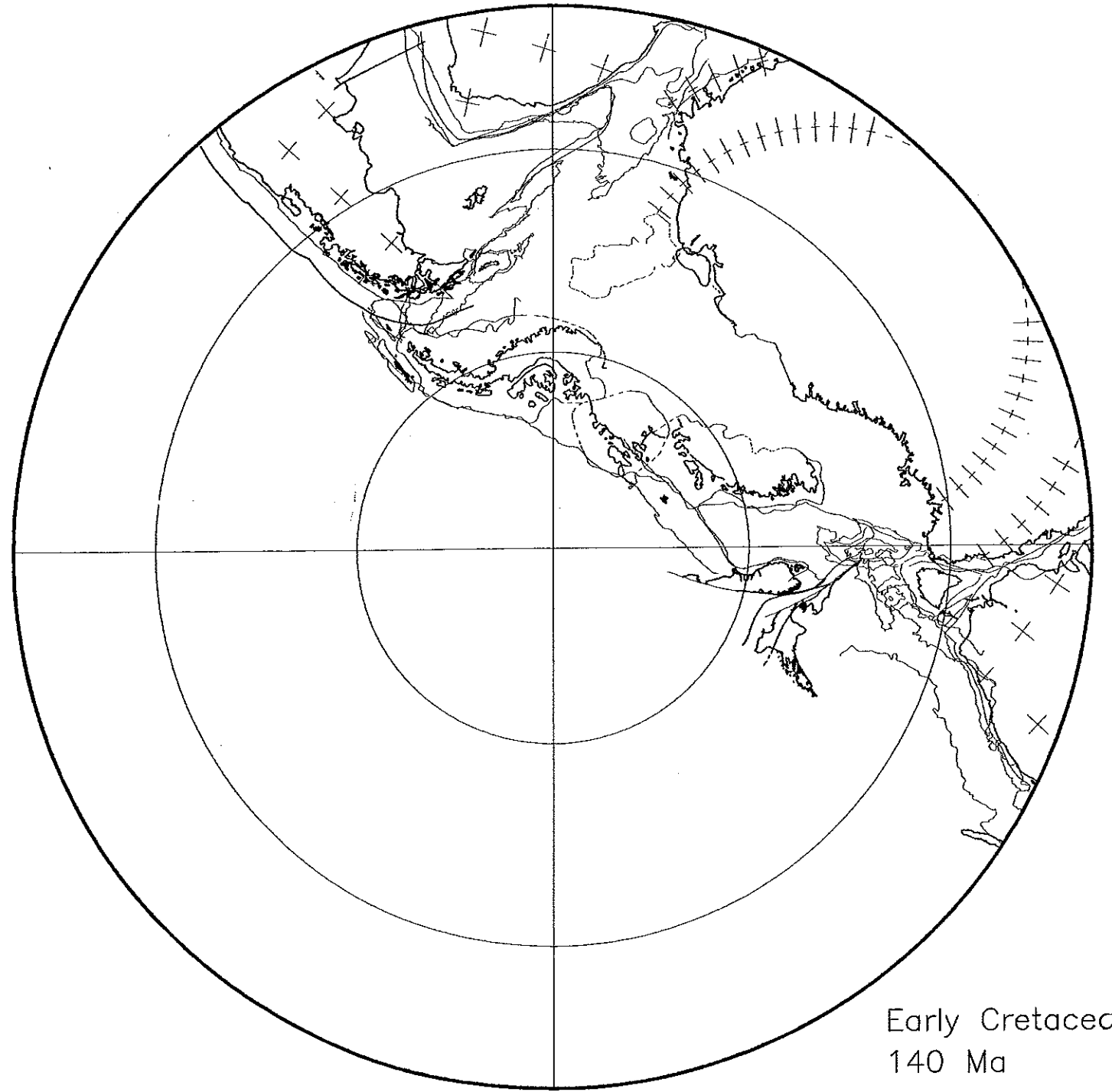
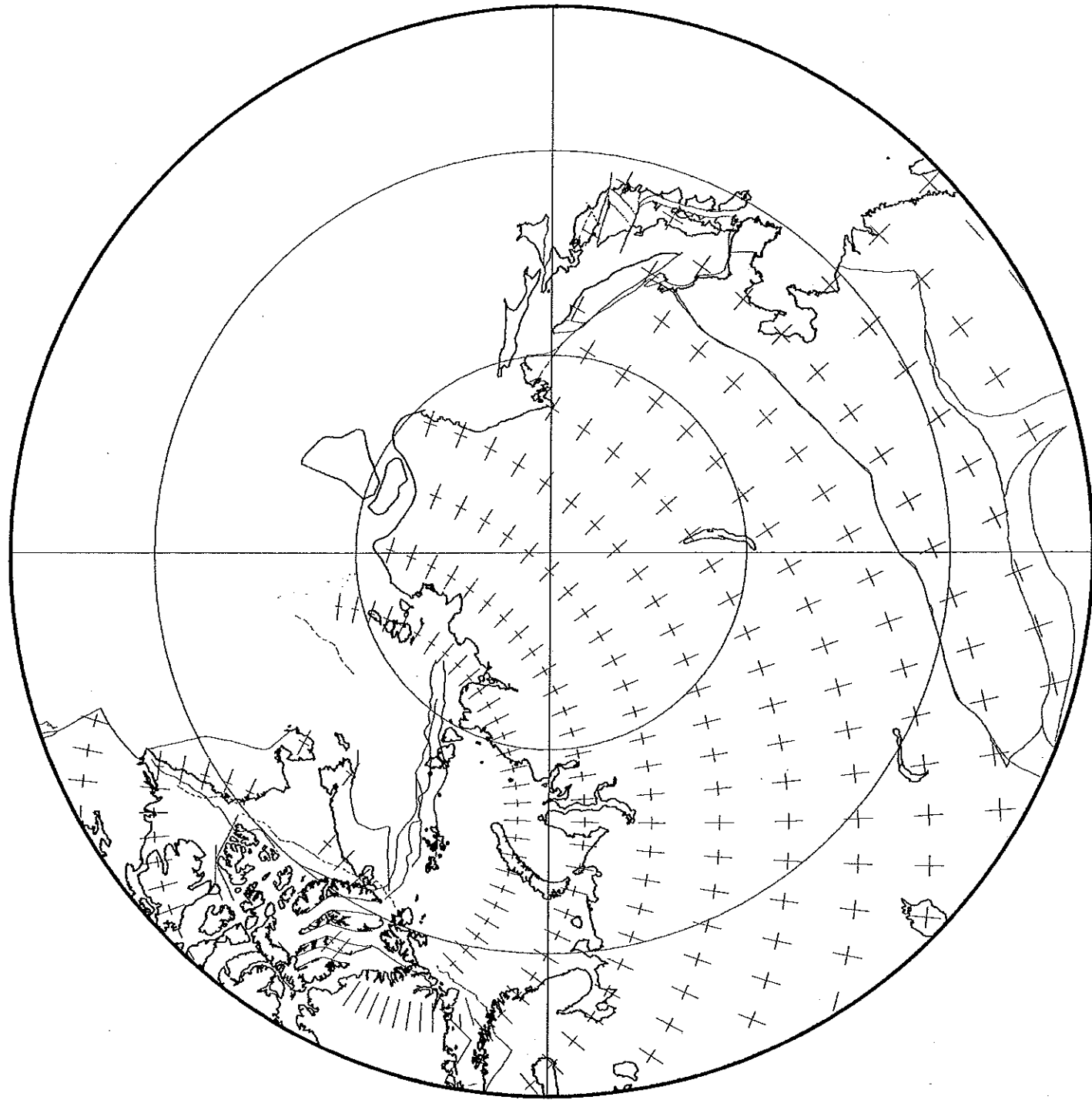


Early Cretaceous
120 Ma

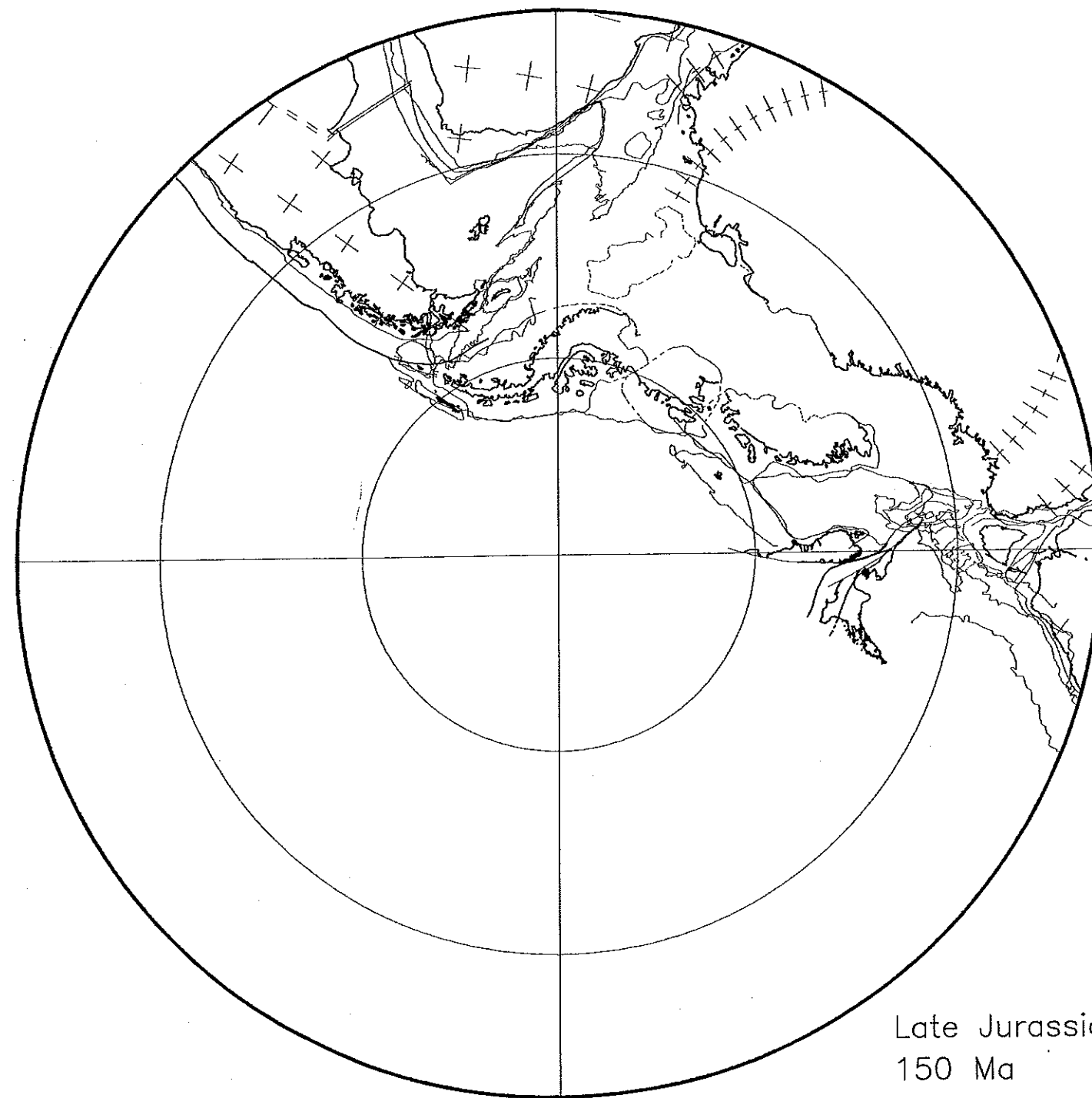
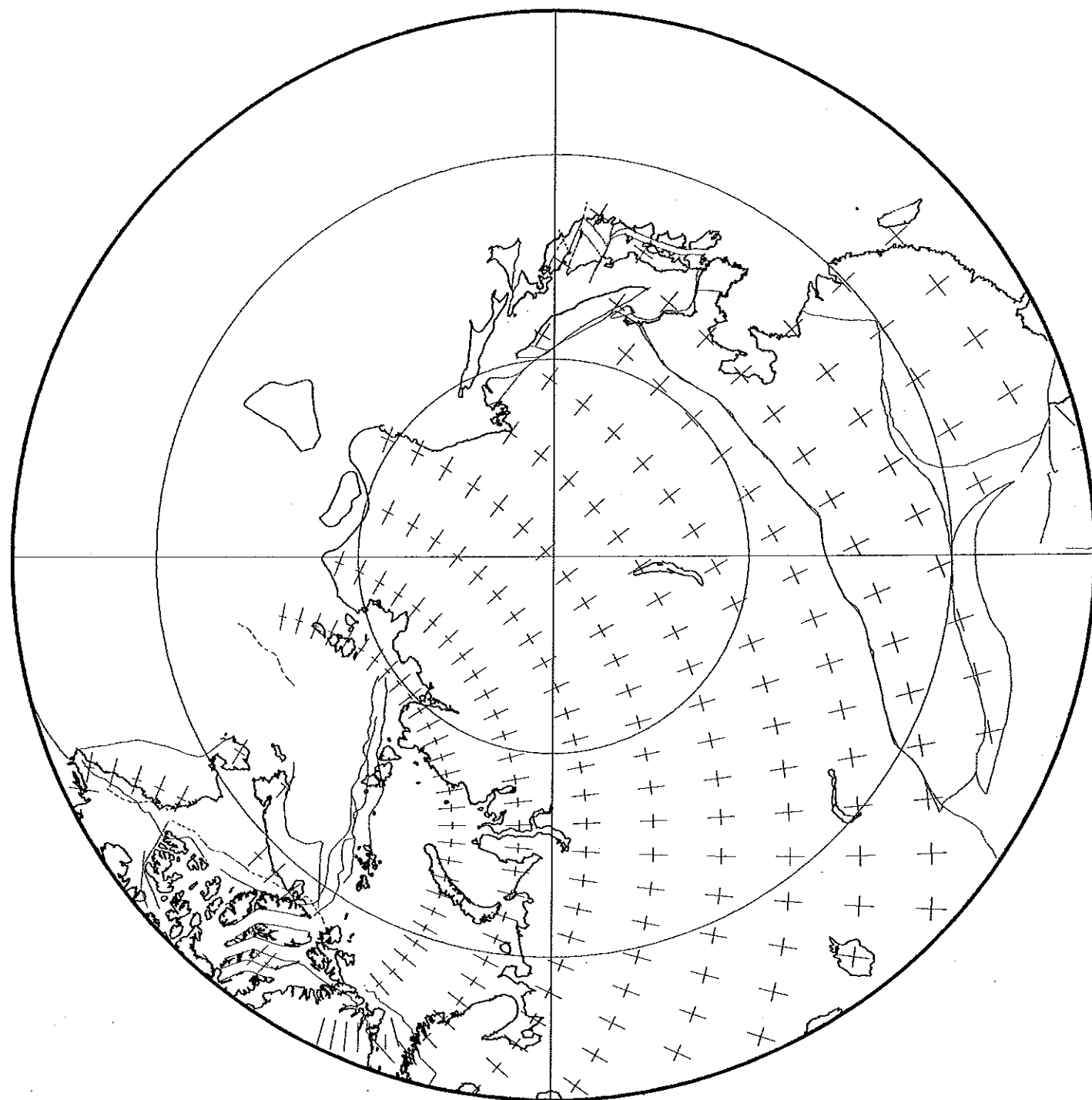


Early Cretaceous
130 Ma

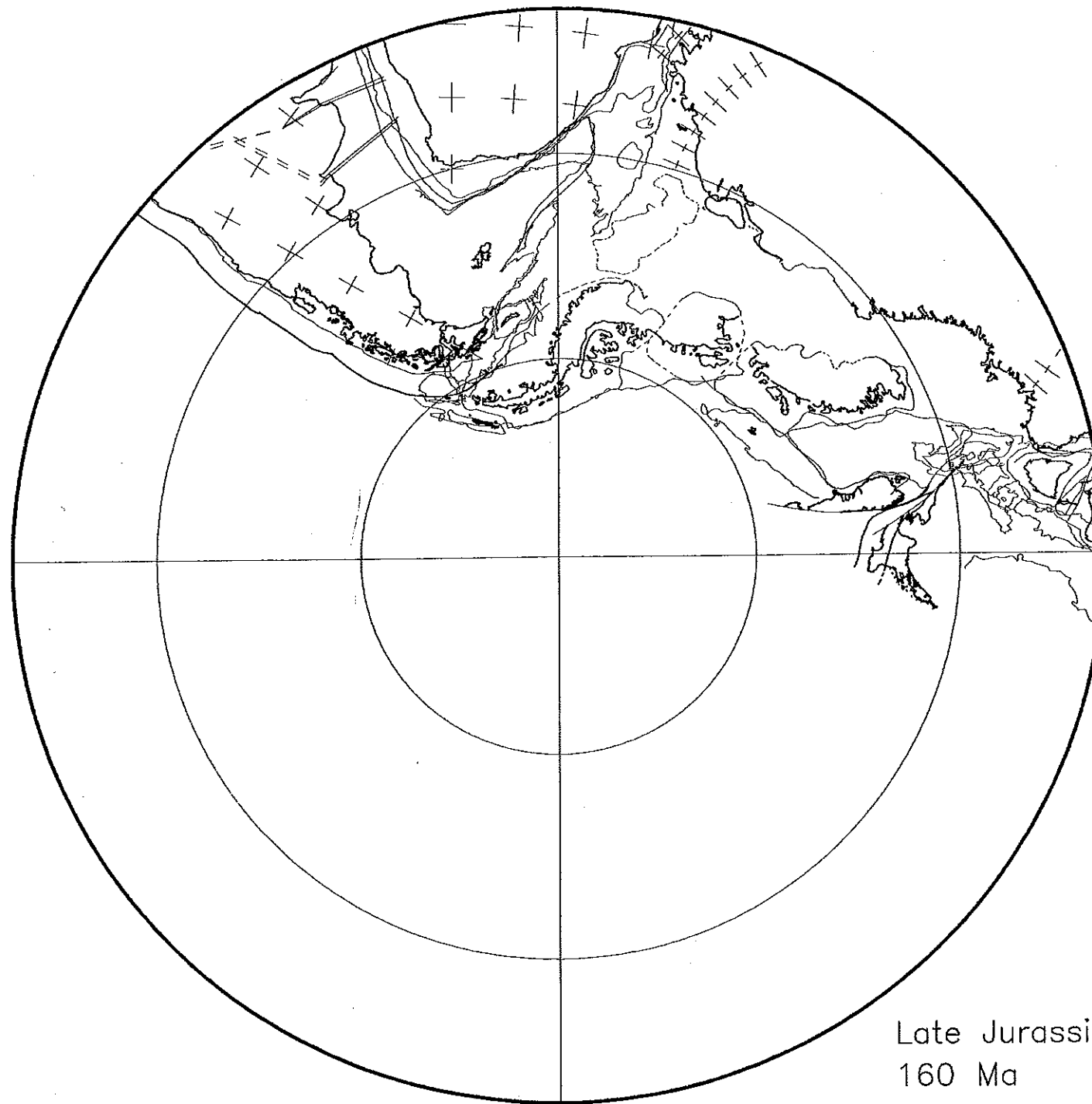
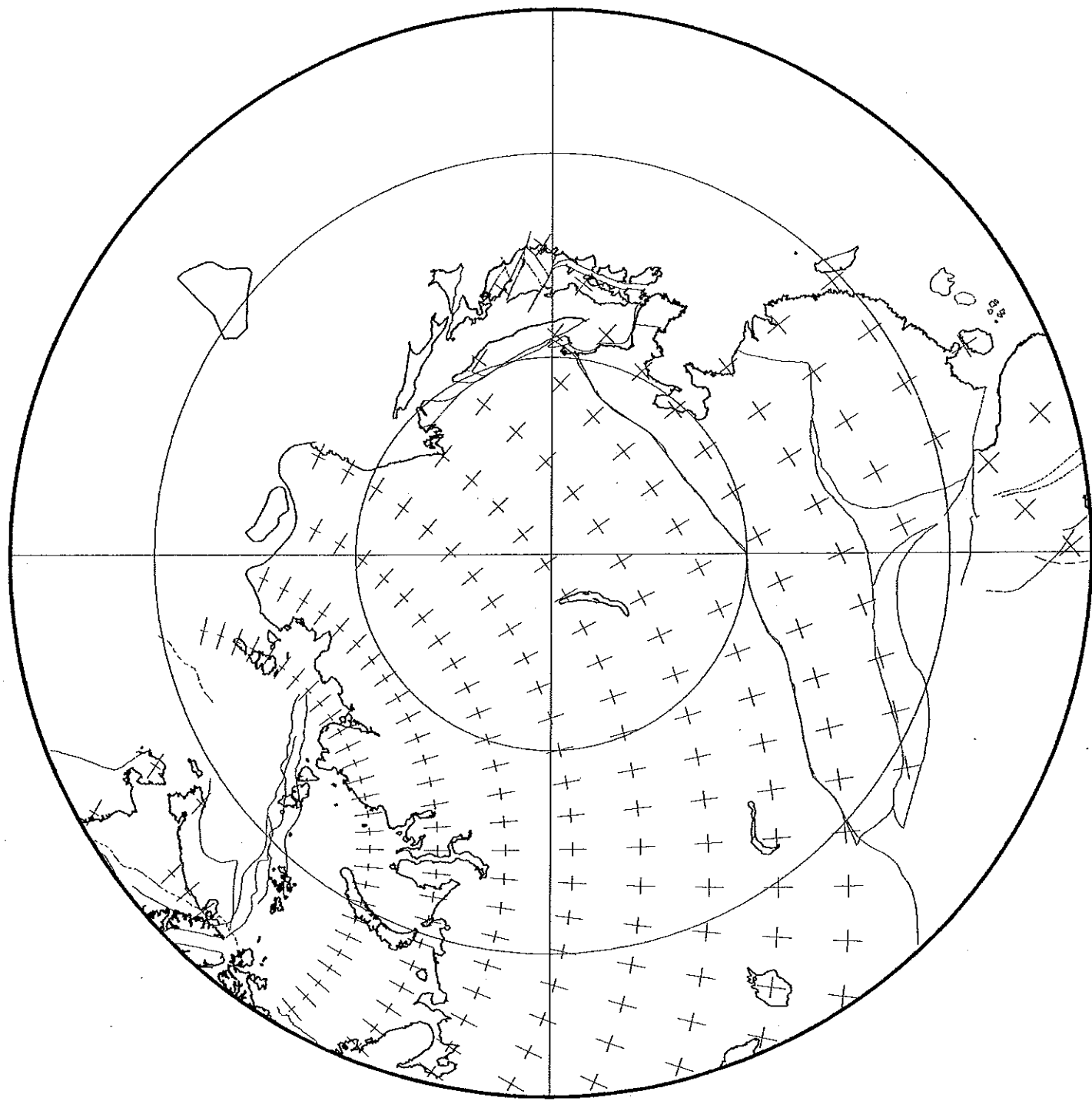




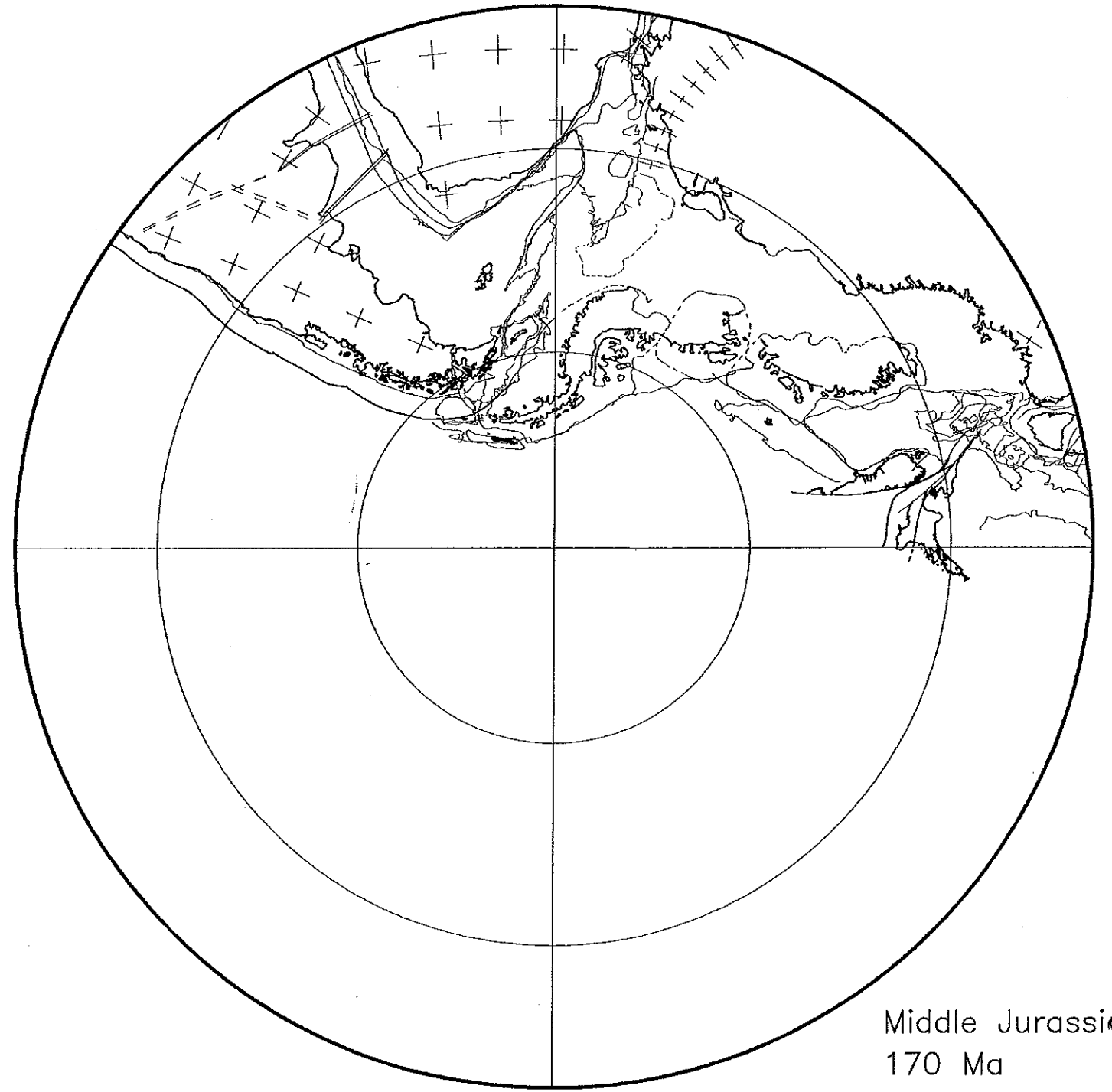
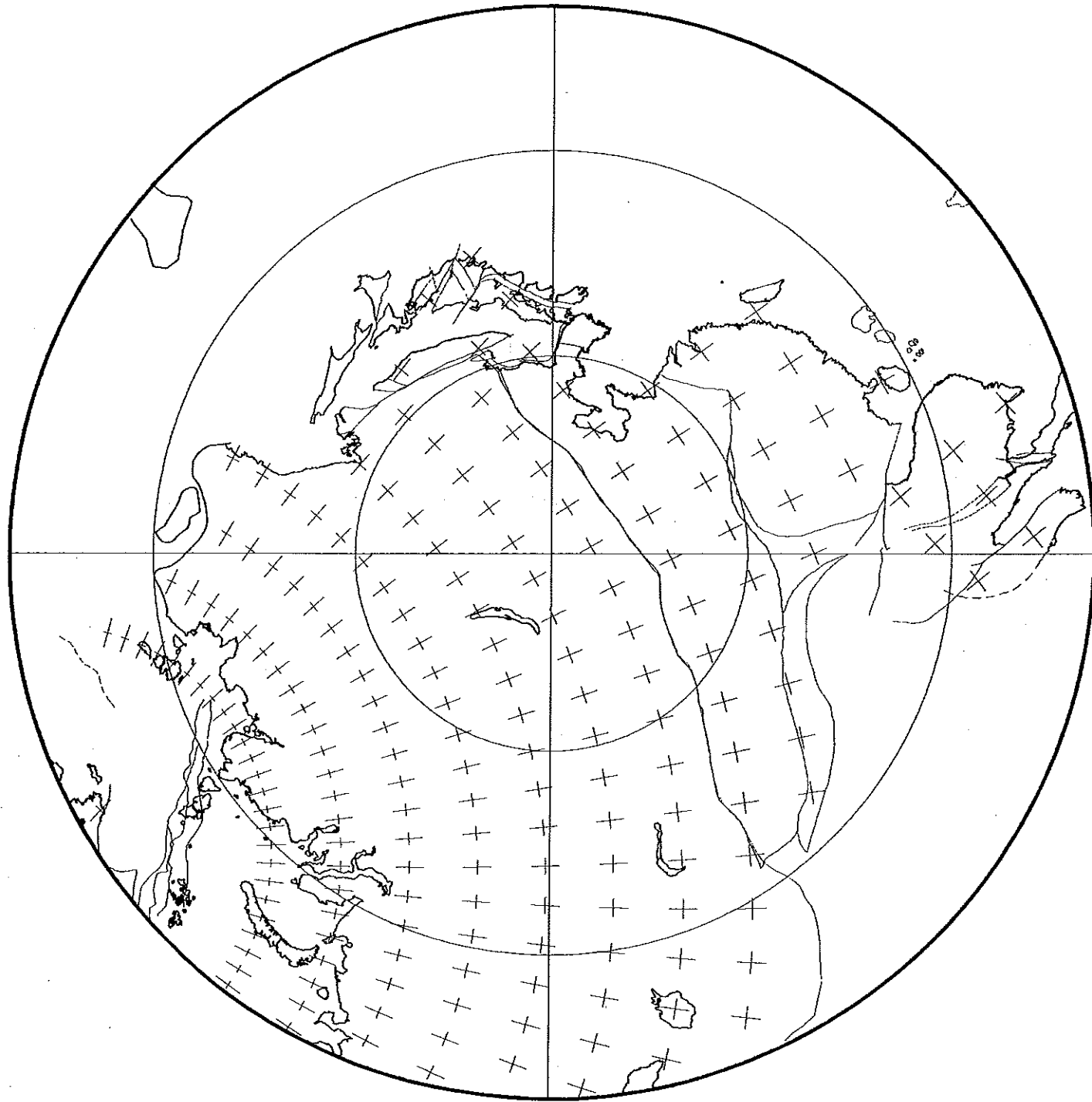
Early Cretaceous
140 Ma



Late Jurassic
150 Ma

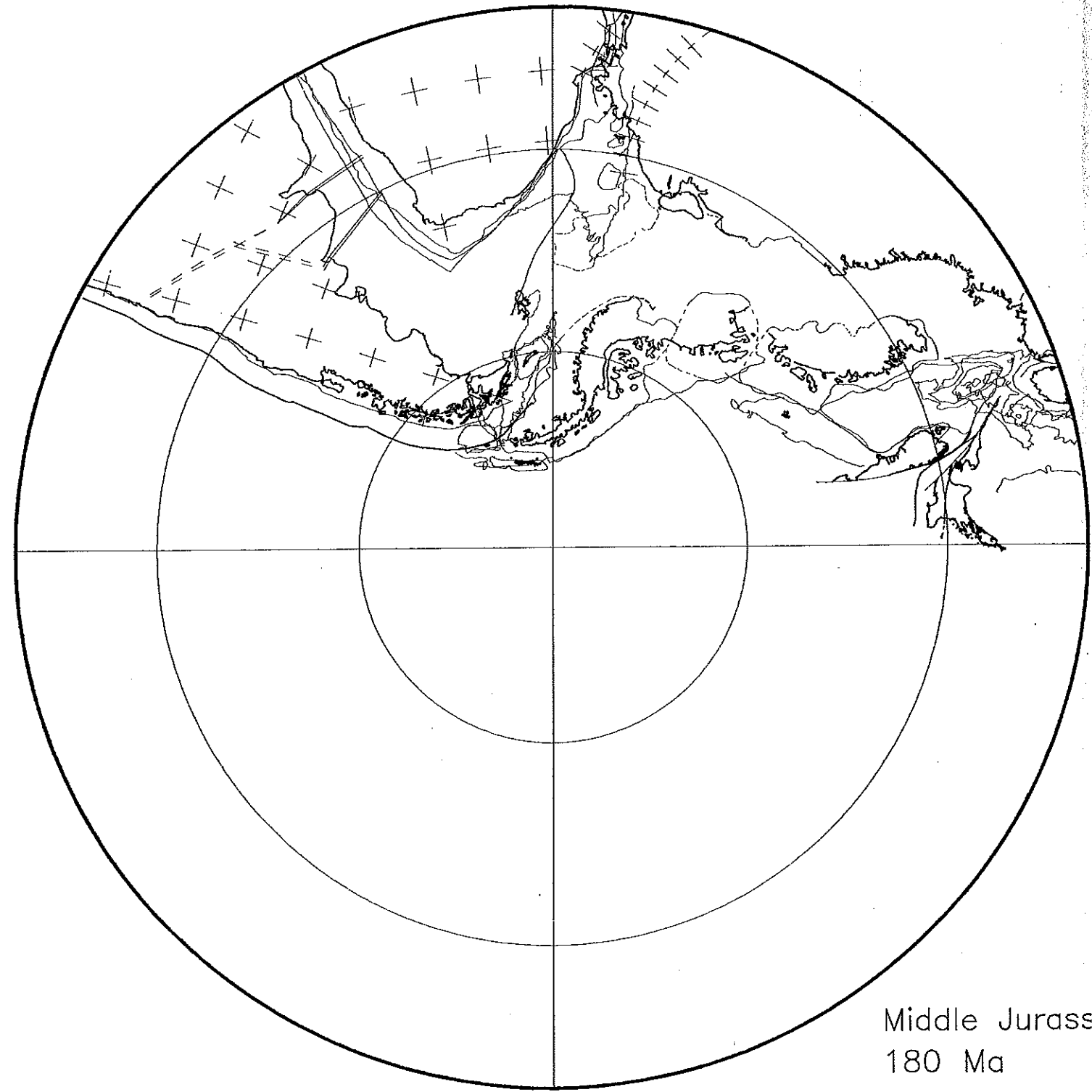
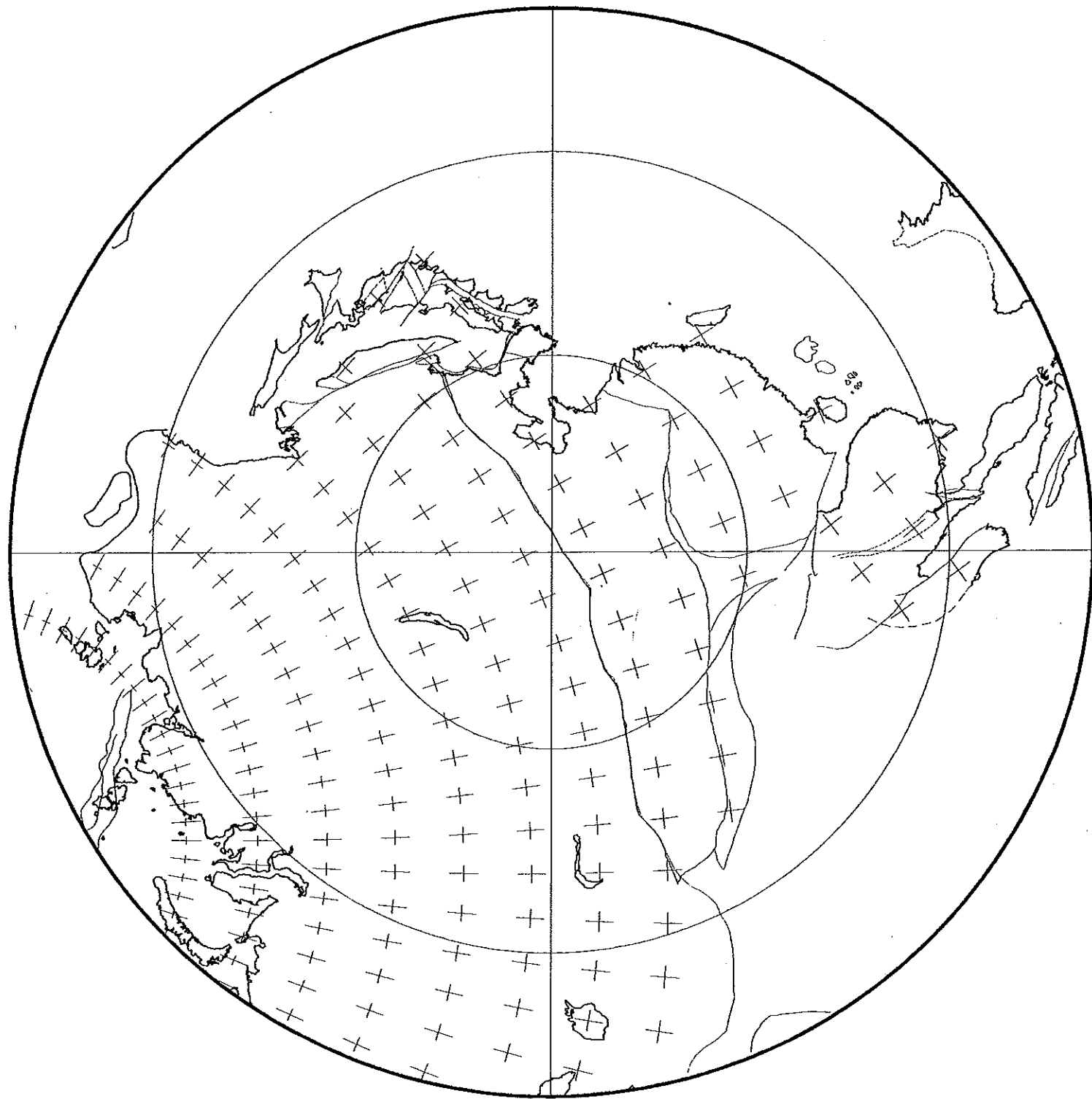


Late Jurassic
160 Ma

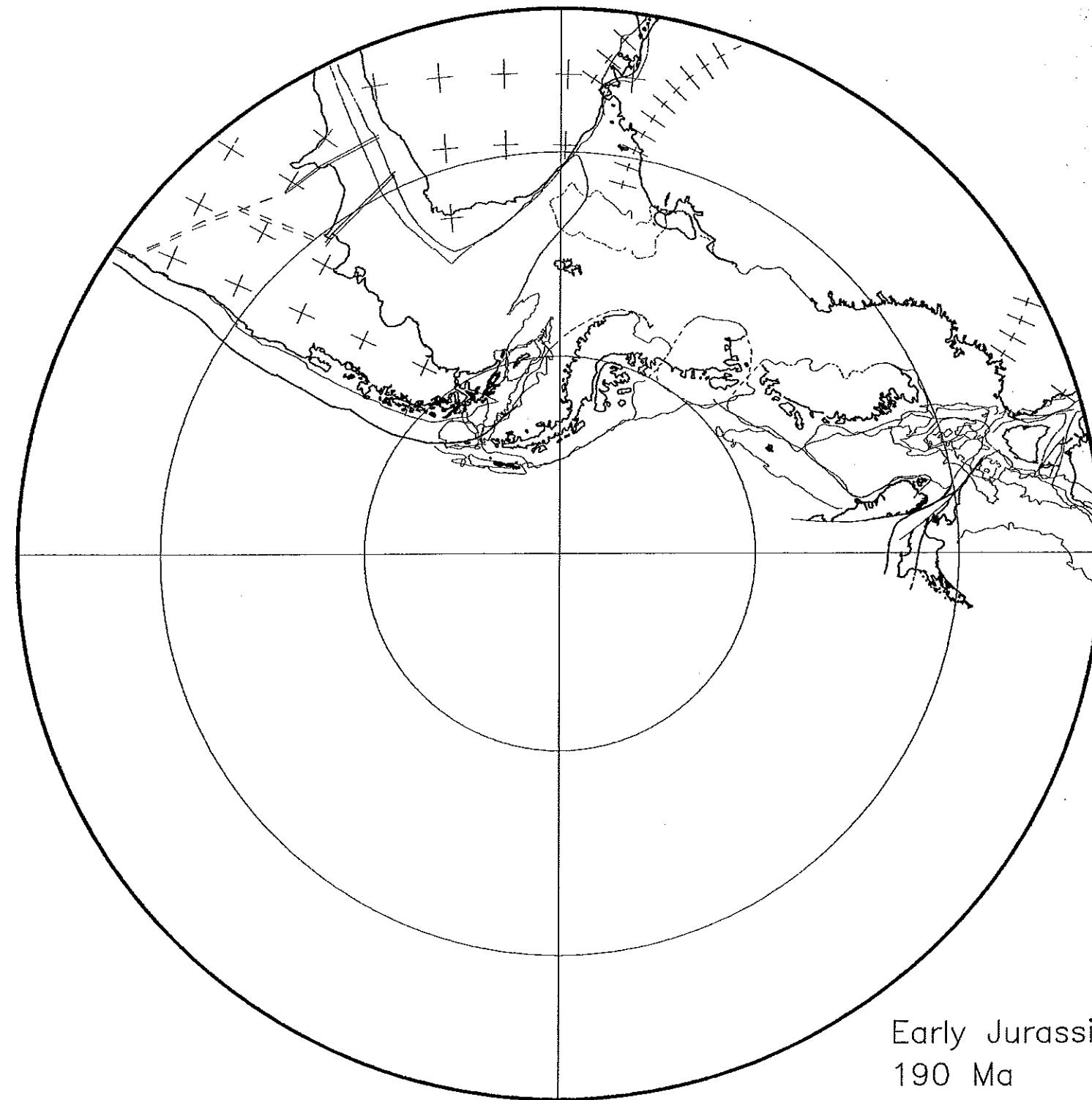
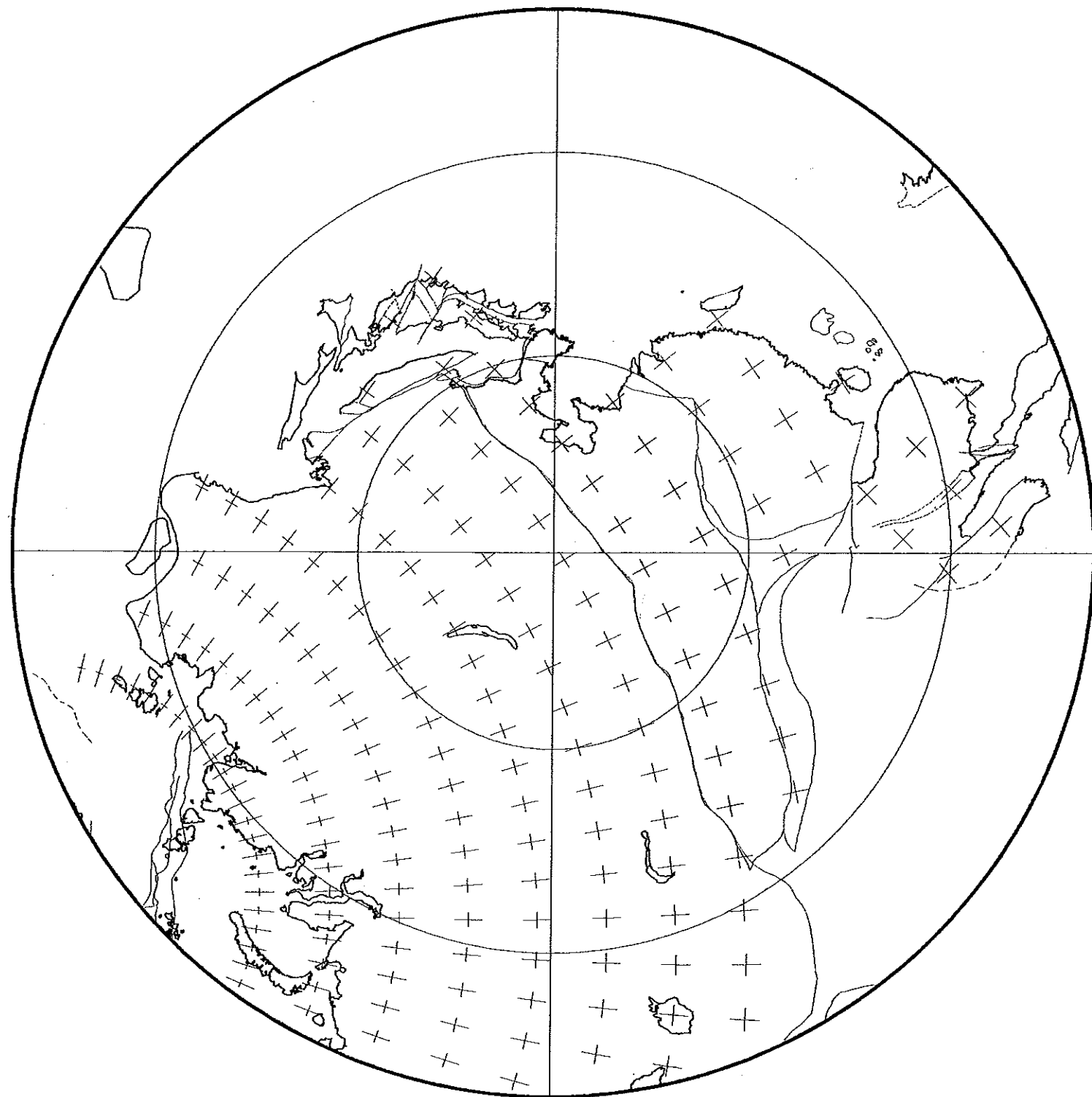


Middle Jurassic
170 Ma

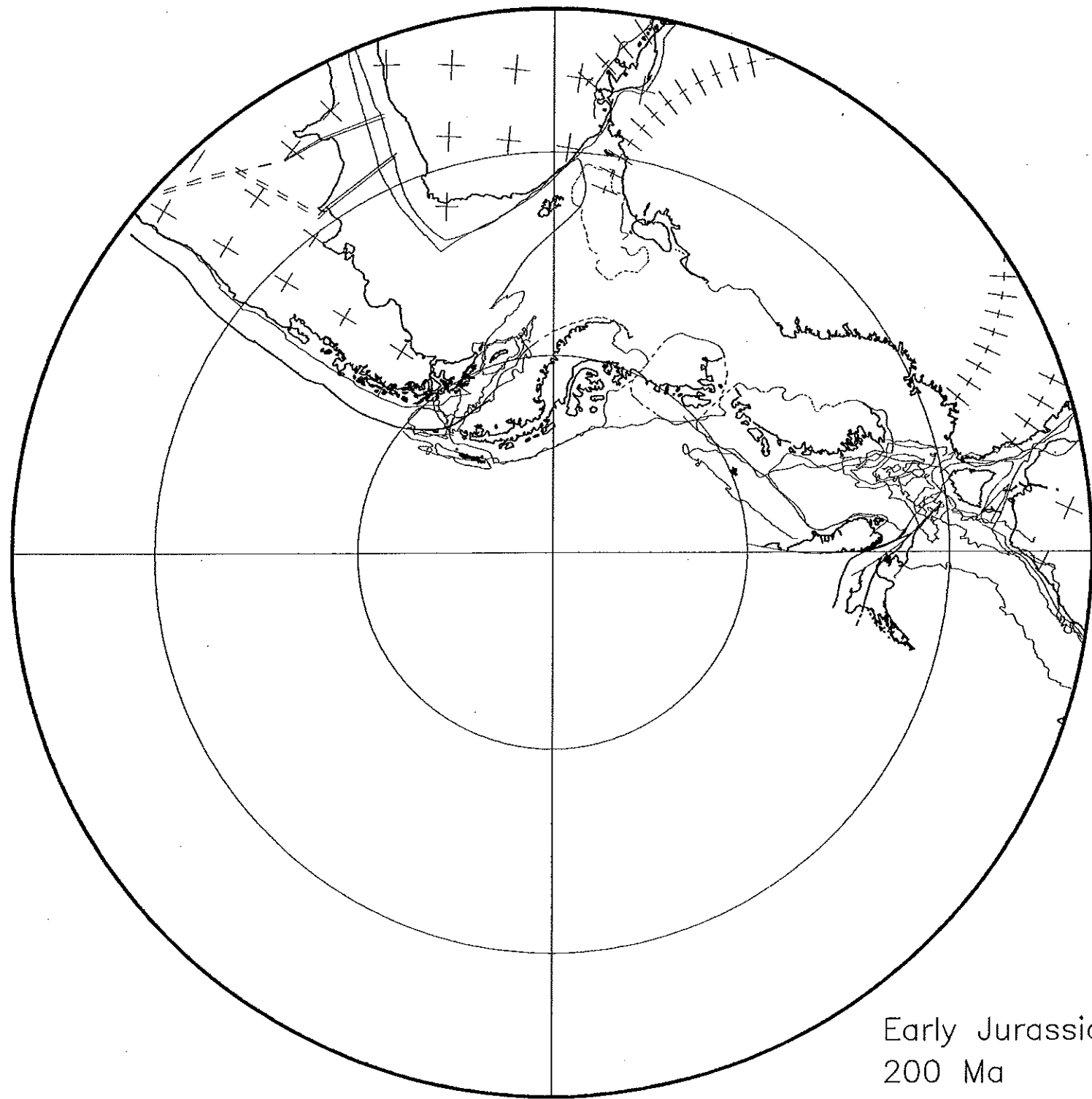
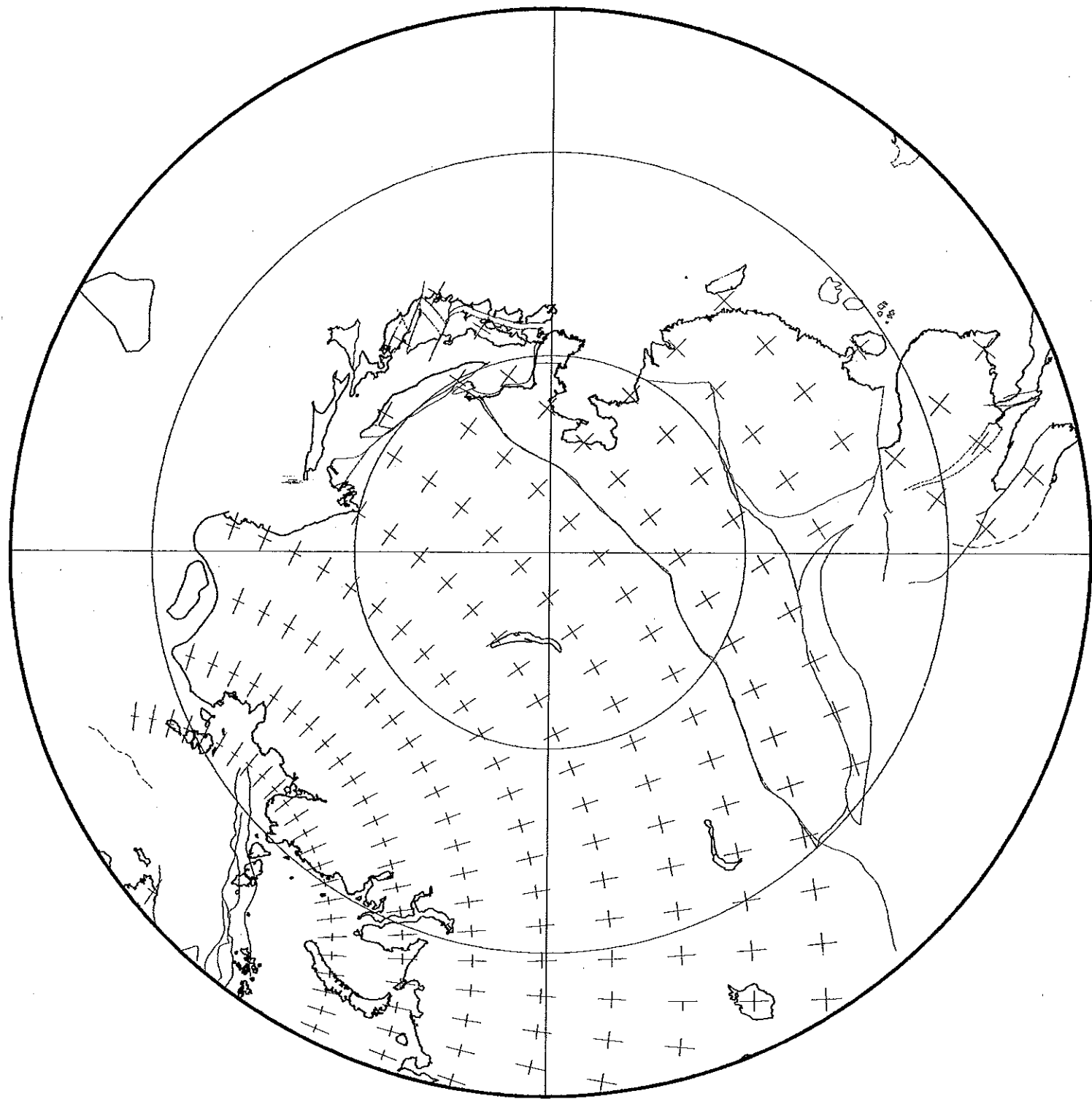




Middle Jurassic
180 Ma



Early Jurassic
190 Ma



Early Jurassic
200 Ma

References for global rotation model

- Achache, J., Courtillot, V. and Besse, J., 1983, Paleomagnetic constraints on the Late Cretaceous and Cenozoic tectonics of southeastern Asia, Earth and Planetary Science Letters, 63: 123-136.
- Audley-Charles, M.G., 1983, Reconstruction of eastern Gondwanaland, Nature, 306, 48-50.
- Audley-Charles, M.G., 1987, Dispersal of Gondwanaland: relevance to the evolution of angiosperms, in T.C. Whimore (ed.), Biogeography of the Malay archipelago, Oxford Monogr. on Biogeography, 4: 5-25.
- Audley-Charles, M.G., Ballantyne, P.D., and Hall, R., 1988, Mesozoic-Cenozoic rift-drift sequence of Asian fragments from Gondwanaland, Tectonophysics, 155: 317-330.
- Ben-Avraham, Z., 1978, The evolution of marginal basins and adjacent shelves in East and Southeast Asia, Tectonophysics, 45: 269-288.
- Besse, J., and Courtillot, V., 1988, Paleogeographic maps of the continents bordering the Indian Ocean since the Early Jurassic, Journal of Geophysical Research, 93: 11,791-11,808.
- Boucher, G. 1978, Rotation of Alaska and the opening of the Canada Basin, U.S. Geol. Survey, Open File Rep. 78-96, 12 pp.
- Burke, K. and Rutherford, E., 1987, Sumba as a sideways slipping sliver, unpublished manuscript.
- Cande, S., LaBrecque, J.L., and Haxby, W.B., 1988, Plate kinematics of the South Atlantic: Chron 34 to present, Journal of Geophysical Research, 93(B11): 13,479-13,492.
- Cande, S.C., and Leslie, R.B., 1986, Late Cenozoic tectonics of the southern Chile Trench, Journal of Geophysical Research, 91 (B1): 471-496.
- Chase, C.G., 1978, Plate kinematics: the Americas, East Africa and the rest of the world, Earth and Planetary Science Letters, 37: 355-368.
- Cocks, L.R.M., and Fortey, R.A., 1982, Faunal evidence for oceanic separations in the Paleozoic of Britain, Journal of Geological Society of London, 139: 465-478.
- Crook, K.A.W. and Belbin, L., 1978, The Southwest Pacific area during the last 90 million years, Journal of Geological Society of Australia 25(1): 23-40.
- Cullen, A.B. and Pigott, J.D., 1989, Post-Jurassic tectonic evolution of Papua New Guinea, Tectonophysics, 162: 291-302.
- Curry, J.R., Moore, D.G., Kerts, K., and Einsele, G., 1982, Tectonics and geological history of the passive continental margin at the tip of Baja California, Mexico, Initial Reports DSDP, 64: 1089-1116.
- Curry, J.R., Moore, D.G., Lawver, L.A., Emmel, F.J., Raitt, R.W., Henry, M., and Kieckhefer, R., 1979, Tectonic of the Andaman Sea and Burma, in Geological and geophysical investigations of continental margins, AAPG Memoir 29, pp. 189-198.
- DeMets, C., Gordon, R.G., Argus, D.F., and Stein, S., 1990, Current plate motions, Geophysical Journal International, 101: 425-478.
- Dlaey, M.C., Hooper, B.G.D., and Smith, D.G., 1987, Tertiary plate tectonics and basin evolution in Indonesia, Proceedings of Indonesian Petroleum Association, 16th Annual Convention, pp. 399-428.
- Dunbar, J.A. and Sawyer, D.S., 1989, Patterns of continental extension along the conjugate margins of the Central and North Atlantic oceans and Labrador Sea, Tectonics, 8: 1059-1077.
- Duncan, R.A. and Clague, D.A., 1985, Pacific plate motion recorded by linear volcanic chains, in The Pacific Ocean, Nairn, Stehli, and Uyeda (eds.), The Ocean Basins and Margins, 7: 89-121.
- Duncan, R.A. and Richards, M.A., 1991, Hotspots, mantle plumes, flood basalts, and true polar wander, Reviews of Geophysics, 29: 31-50.
- Engelbreton, D.C., 1983, Relative motions between oceanic and continental plates in the Pacific Basin, Ph.D., thesis, Stanford University, 211 pp.
- Fleitout, L., Dalloubeix, Ch., and Moriceau, Ch., 1989, Small-wavelength geoid and topography anomalies in the South Atlantic Ocean: a clue to new hot-spot tracks and lithospheric deformation, Geophysical Research Letters, 16(7): 637-640.
- Gallagher, J.J., Jr., 1984, Philippine Islands: A tectonic railroad siding, in M.T. Halbouty (ed.), Future Petroleum Provinces of the World, AAPG Memoir 40, pp. 515-527.
- Gordon, R.G., DeMets, C., Argus, D.F., and Stein, S., 1988, Current plate motions, EOS Trans., AGU, 69(44): 1416.
- Grunow, A.M., Kent, D.V., and Dalziel, I.W.D., New paleomagnetic data from Thurston Island: implications for the tectonics of West Antarctica and Weddell Sea opening, Journal of Geophysical Research, v. 96(B11), pp. 17,935-17,954.
- Haile, N.S., 1979, Paleomagnetic evidence for the rotation of Seram, Indonesia, in S. Uyeda, R.W. Murphy and K. Kobayashi (eds.), Geodynamics of the Western Pacific, pp. 191-198.
- Hall, R. and Nichols, G., 1990, Terrane amalgamation in the Philippine Sea margin, Tectonophysics, 181: 207-222.
- Hamilton, W., 1979, Tectonics of the Indonesian region, Geological Survey Professional Paper 1078, 345 p.
- Huchon, P. and LePichon, X., 1984, Sunda Strait and Central Sumatra fault, Geology, 12: 668-672.
- Hutchison, C.S., 1989, Geological evolution of South-east Asia, Oxford University Press, New York, pp. 368.
- Kimura, G., Miyashita, S., and Miyasaka, S., 1983, Collision tectonics in Hokkaido and Sakhalin, in Hashimoto, M. and Uyeda, S. (eds.), Accretion tectonics in the Circum-Pacific regions, pp. 123-134.
- Klitgord, K.D., and Schouten, H., 1986, Plate kinematics of the central Atlantic, in Vogt, P.R. and Tucholke, B.E., eds., The Geology of North America: The Western North Atlantic Region, GSA DNAG vol. M., 351-378.
- Ji, X., and Coney, P.J., 1985, Accreted Terranes of China, in: Tectonostratigraphic Terranes of the Circum-Pacific Region, D.G. Howell (ed.), pp. 349-361.
- Ladd, J.W., 1974, South Atlantic seafloor spreading and Caribbean tectonics, Ph.D. thesis, 251 pp., Columbia University, New York.
- Larson, R.L., and Ladd, J.W., 1973, Evidence for the opening of the South Atlantic in the Early Cretaceous, Nature, 246 (5430): 209-212.
- Lawver, L.A., Müller, R.D., Srivastava, S.P., and Roest, W., 1990, The Opening of the Arctic Ocean, in Geologic History of the Polar Oceans: Arctic Versus Antarctic, U. Bleil and J. Thiede (eds.), from the NATO Symposium (October, 1988) in Bremen, West Germany, pp. 29-62.
- Lawver, L.A., and Scotese, C.R., 1987, A revised reconstruction of Gondwanaland, in McKenzie, G.D., ed., Gondwana Six: Structure, Tectonics, and Geophysics, AGU Geophysical Monograph 40, 17-24.
- LePichon, X. and J.-M. Gaulier, 1988, The rotation of Arabia and the Levant fault system, Tectonophysics, 153: 271-294.
- Liou, J.G. and Maruyama, S., 1986, Post-Permian evolution of Asia, and some implications for Taiwan, Acta Geologica Taiwanica, No. 24, pp. 5-49.
- Martin, A.K., Goodlad, S.W., Hartnady, C.J.H., and du Plessis, A., 1982, Cretaceous paleopositions of the Falkland Plateau relative to southern Africa using Mesozoic seafloor spreading anomalies, Geophysical Journal of Royal Astronomy Society, 71: 567-579.
- Masson, D.G., and Miles, P.R., 1984, Mesozoic seafloor spreading between Iberia, Europe and North America, Marine Geology, 56: 279-287.
- Mayes, C.L., Lawver, L.A., and Sandwell, D.T., 1990, Tectonic history and new isochron chart of the South Pacific, Journal of Geophysical Research, 95(B6), pp. 8543-8567, 1990.
- McCabe, R.E., 1984, Implications of paleomagnetic data on the collision related bending of island arcs, Tectonics, 3: 409-428.
- McCabe, R.E., Celays, M., Cole, J. Han, H.-C., Ohnstad, T., Pajitprapapon, V., and Thitipawarn, V., 1988, Extension tectonics: The Neogene opening of the north-south trending basins of Central Thailand, Journal of Geophysical Research, 93: 11,899-11,910.
- McCabe, R., and Scotese, C.R., 1986, Paleomagnetic constraints for the fit of the continents and the Gulf of Mexico, Geology.
- McKenzie, C.P., Molnar, P., and Davies, D., 1970, Plate tectonics of the Red Sea and East Africa, Nature, 226: 243-248.
- McKerrow, W.S., and Scotese, C.R., The Ordovician through Devonian development of the Iapetus Ocean, in press.
- Miki, M., Matsuda, T., and Otofujii, Y., 1990, Opening of the Okinawa Trough: paleomagnetic evidence from the South Ryukyu Arc, Tectonophysics, 175: 335-347.
- Mitchell, A.H.G., 1985, Collision-related fore-arc and back-arc evolution of the northern Sunda Arc, Tectonophysics, 116: 323-334.
- Mitchell, A.H.G., Hernandez, F. and Dela Cruz, A.P., 1986, Cenozoic evolution of the Philippine Archipelago, Journal of Southeast Asian Earth Sciences, 1(1): 3-22.
- Molnar, P., Atwater, T., Mammerickx, J., and Smith, S.M., 1975, Magnetic anomalies, bathymetry and the tectonic evolution of the South Pacific since the Late Cretaceous, Geophysical Journal of Royal Astronomy Society, 40: 383-420.
- Molnar, P., Pardo-Casas, F., and Stock, J., 1988, The Cenozoic and Late Cretaceous evolution of the Indian Ocean basin: uncertainties in the reconstructed positions of the Indian, African and Antarctic plates, Basin Research, 1: 23-40.
- Müller, R.D., Royer, J.-Y., and Lawver, L.A., submitted, Evidence for hotspot group motion in the Late Cretaceous/Early Tertiary, submitted to Nature.
- Müller, R.D., Sandwell, D.T., Tucholke, B.E., Sclater, J.G., and Shaw, P.R., 1990, Depth to basement and geoid expression of the Kane Fracture Zone: a comparison, Marine Geophysical Researches, 13: 105-129.
- Mutter, J.C., and Cande, S.C., 1983, The early opening between Broken Ridge and Kerguelen Plateau, Earth and Planetary Science Letters, 65(2): 369-376.
- Norton, I.O. and Sclater, J.G., 1979, A model for the evolution of the Indian Ocean and the breakup of Gondwanaland, Journal of Geophysical Research, 84: 6803-6830.
- Nunns, A.G., 1983, in Bott, M., Saxov, S., Talwani, M. and Thiede, J., eds., Structure and Development of the Greenland - Scotland Ridge, pp. 11-30.
- Nürnberg, D. and Müller, R.D., 1990, The tectonic evolution of the South Atlantic from Late Jurassic to present, Tectonophysics, 191: 27-53.
- Otofujii, Y., Sasajima, S., Nishimura, S., Dharma, A., and Hehuwat, F., 1981, Paleomagnetic evidence for clockwise rotation of the northern arm of Sulawesi, Indonesia, Earth and Planetary Science Letters, 54: 272-280.
- Otsuki, K. and Ehiro, M., 1979, Major strike-slip faults and their bearing on spreading in the Japan Sea, in Uyeda, S., Murphy, R.W., and Kobayashi, K. (eds.), Geodynamics of the Western Pacific, Proceedings of the International Conference on Geodynamics of the Western Pacific-Indonesian Region, March 1978, Tokyo, Advances in Earth and Planetary Sciences, vol. 6, pp. 537-555.
- Patriat, P., 1983, Evolution du système de dorsales de l'Océan Indien, These Doctorat d'Etat, Université Pierre et Marie Curie, Paris.
- Pilger, R.H., Jr., 1983, Kinematics of the South American subduction zone from global plate reconstructions, in Geodynamics of the Eastern Pacific region, Caribbean and Scotia Arcs, Geodynamics Series, 9, ed. Ramón Cabré, S.J., AGU: Washington, 113-125.
- Pindell, J.L., 1985, Alleghenian reconstruction and subsequent evolution of the Gulf of Mexico, Bahamas, and proto-Caribbean, Tectonics, 4: 1-39.

- Pitman, W.C., III, and Talwani, M., 1972, Seafloor spreading in the North Atlantic, Geological Society of America Bulletin, 83: 619-646.
- Rabinowitz, P.D., Coffin, M.F., and Falvey, D., 1983, The separation of Madagascar and Africa, Science, 220: 67-69.
- Rabinowitz, P.D., and LaBrecque, J., 1979, The Mesozoic South Atlantic Ocean and evolution of its continental margins, Journal of Geophysical Research, 84(B11): 5973-6002.
- Ranken, B., Cardwell, R.K., and Karig, D.E., 1984, Kinematics of the Philippine Sea plate, Tectonics, 3: 555-575.
- Reksnes, P.A., and Vågnes, E., 1985, Evolution of the Greenland Sea and Eurasia Basin, Cand. Scient. thesis, Univ. of Oslo, 136 pp.
- Ridd, M.R., 1980, Possible Palaeozoic drift of SE Asia and Triassic collision with China, Journal of Geological Society of London, 137: 635-640.
- Roest, 1987, Seafloor Spreading Pattern of the North Atlantic between 10° and 40°N, Geologica Ultraiectina, Mededelingen van het Instituut voor Aardwetenschappen der Rijksuniversiteit te Utrecht, v. 40, 121 pp.
- Roest, W.R. and Srivastava, S.P., 1989, Seafloor spreading in the Labrador Sea: a new reconstruction, Geology, 17: 1000-1004.
- Rosa, J.W.C., and Molnar, P., 1988, Uncertainties in reconstructions of the Pacific, Farallon, Vancouver and Kula plates and constraints on the rigidity of the Pacific and Farallon (and Vancouver) plates between 72 and 35 Ma, Journal of Geophysical Research, 93(B4): 2997-3008.
- Ross, M.I., and Scotese, C.R., 1988, A hierarchical tectonic model of the Gulf of Mexico and Caribbean region, Tectonophysics, 155: 139-168.
- Rowley, D.B., Lottes, A.L., and Ziegler, A.M., 1985, North America-Greenland-Eurasia relative motions: Implications for circum-Arctic tectonic reconstructions (abs.), American Association of Petroleum Geologists Bulletin, 69: 303.
- Royer, J.-Y. and Chang, T., in press, Evidence for relative motions between the Indian and Australian plates during the last 20 Myr from plate tectonic reconstructions: implications for the deformation of the Indo-Australian plate, Journal of Geophysical Research
- Royer, J.-Y., Patriat, P., Bergh, H., and Scotese, C., 1988, Evolution of the southwest Indian Ridge from the Late Cretaceous (anomaly 34) to the Middle Eocene (anomaly 20), Tectonophysics, 155: 235-260.
- Royer, J.-Y. and Sandwell, D.T., 1989, Evolution of the Eastern Indian Ocean since the Late Cretaceous: Constraints from Geosat altimetry, Journal of Geophysical Research, 94(B10): 13,755-13,782.
- Sclater, J.G., Bowin, C., Hey, R., Hoskins, H., Peirce, J., Phillips, J., and Tapscott, C., 1976, The Bouvet Triple Junction, Journal of Geophysical Research, 81: 1857-1869.
- Sclater, J.G., Hellinger, S., and Tapscott, C., 1977, The paleobathymetry of the Atlantic Ocean from the Jurassic to the present, Journal Geology, 85: 509-552.
- Scotese, C.R., A continental drift "flip book", Computers and Geology, 2: 13-116, 1976.
- Scotese, C.R., Bambach, R.K., Barton, C., Van de Voo, R., and Ziegler, A.M., 1979, Paleozoic base maps, Journal Geology, 87: 217-277.
- Scotese, C.R., Gahagan, L.M., and Larson, R.L., 1988, Plate tectonic reconstructions of the Cretaceous and Cenozoic ocean basins, Tectonophysics, 155: 27-48.
- Scotese, C.R., and Van der Voo, R., 1982, Paleomagnetism, plate tectonics, and paleogeography: course report #1, Geol. Sci. 607, Tectonics Seminar, Winter 1982, Ann Arbor, Michigan.
- Scotese, C.R., 1984, An introduction to this volume: Paleozoic Paleomagnetism and the Assembly of Pangea, in Plate Reconstruction from Paleozoic Paleomagnetism, Van der Voo, R., Scotese, C.R., and Bonhommet, N., eds., Geodynamics, Amer. Geophys. Union, Washington, D.C., 12: 1-11.
- Shaw, P.R. and Cande, S.C., 21990, High-resolution inversion for South Atlantic plate kinematics using joint altimeter and magnetic anomaly data, Journal of Geophysical Research, 95: 2625-2644.
- Situmorang, B., 1982, The formation of the Makassar Basin as determined from subsidence curves, Proceedings of the Indonesian Petroleum Association 11th Annual Convention, pp. 83-107.
- Smith, A.B., 1988, Late Palaeozoic biogeography of East Asia and palaeontological constraints on plate tectonic reconstructions, Phil. Trans. R. Soc. Lond., A326: 189-227.
- Srivastava, S.P. and Roest, W.R., 1989, Seafloor spreading history II-IV, in East Coast Basin Atlas Series: Labrador Sea, J.S. Bell (co-ordinator). Atlantic Geoscience Centre, Geologic Survey of Canada, Map sheets L17-2 - L17-6.
- Srivastava, S.P., and Tapscott, C.R., 1986, Plate kinematics of the North Atlantic, in Tucholke, B.E., and Vogt, P.R., eds., The Geology of North America: The Western Atlantic Region, DNAG Series, vol. M, Geol. Soc. of America, 379-404.
- Stock, J., and Molnar, P., 1987, Revised history of early Tertiary plate motion in the south-west Pacific, Nature, 325: 495-499.
- Tapponnier, P., Lacassin, R., Leloup, P.H., Schärer, U., Zhou, D., Wu, H., Liu, X., Ji, S., Zhang, L., and Zhong, J., 1990, The Ailao Shan/Red River metamorphic belt: Tertiary left-lateral shear between Indochina and South China, Nature, 343: 431-437.
- Talwani, M., and Eldholm, O., 1977, Evolution of the Norwegian-Greenland Sea, Geological Society of America Bulletin, 88: 969-999.
- Veevers, J.J., 1986, Breakup of Australia and Antarctica estimated as mid-Cretaceous (95±5 Ma) from magnetic and seismic data at the continental margin, Earth and Planetary Science Letters, 77: 91-99.
- Vink, G.E., 1983, Continental rifting and plate tectonic reconstructions, with applications to the Norwegian-Greenland Sea, Doctoral thesis, Princeton University, Princeton, New Jersey, 138 p.
- Wang, X., Yan, J., and Lin, J., 1989, The inverted structure and its significance in petroleum geology, Earth Sci. JOURNAL of China Univ. of Geosciences, 14: 101-108 (in Chinese with English abstract).
- Weissel, J.K. and Anderson, R.N., 1978, Is there a Caroline Plate?, Earth and Planetary Science Letters, 41: 143-158.
- Weissel, J.K. and Hayes, D.E., 1977, Evolution of the Tasman Sea reappraised, Earth and Planetary Science Letters, 36: 77-84.
- Wells, R.E., 1989, Origin of the oceanic basalt basement of the Solomon Islands arc and its relationship to the Ontong Java Plateau - insights from Cenozoic plate motion models, Tectonophysics, 165: 219-235.
- Wilson, D.S., 1988, Tectonic history of the Juan de Fuca Ridge over the last 40 million years, Journal of Geophysical Research, 93: 11,863-11,876.
- Ziegler, A.M., Scotese, C.R., and Barrett, S.F., 1983, Mesozoic and Cenozoic paleogeographic maps, in Tidal Friction and the Earth's Rotation II, Broche/Sundermann, eds., Springer-Verlag, Berlin.
- Ziegler, A.M., Hansen, K.A., Kelly, M.E., Scotese, C.R., and Van der Voo, R., 1977, Silurian continental distributions, paleogeography, climatology, and biogeography, Tectonophysics, 40: 13-51.
- Ziegler, A.M., Barrett, S.F., and Scotese, C.R., 1980, Climate, sedimentation and continental accretion, in the Origin and Evolution of the Earth's Crust, Moorbat, S., and Windley, B.F., eds., Philosophical Transcripts of Royal Society of London, A301, 254-264.

References for database

- Geologic map of Antarctica, 1970, scale 1:5,000,000 at latitude 71°S, The American Geographical Society, compiled by Campbell Craddock, New York, New York.
- Index map to principal geographic features and locations discussed in chapter B, Antarctica. Base map modified from Sheet 4.1(1:10,000,000) of "Antarctica: Glaciological and Geophysical Folio", Scott Polar Research Institute, Cambridge (Drewry, 1983). Professional paper 1386-B, plate 1, Dept. of the Interior U.S. Geological Survey.
- Tectonic map of Australia and New Guinea, 1971, scale 1:5,000,000, Geological Society of Australia, Sydney, Australia.
- Atwater, T., 1990, Plate tectonic history of the northeast Pacific and western North America, in *The Eastern Pacific Ocean and Hawaii*, Winterer, E.L., Hussong, D.M., and Decker, R.W. (editors), *Decade of North American Geology*, vol. N, pp. 21-72.
- Atwater, T. and Severinghaus, J., 1990, Tectonic maps of the northeast Pacific, in *The Eastern Pacific Ocean and Hawaii*, Winterer, E.L., Hussong, D.M., and Decker, R.W. (editors), *Decade of North American Geology*, vol. N, pp. 15-20.
- Backman, J., Duncan, R.A., et al., 1988, Leg 115, Proceedings of the Ocean Drilling Program, Initial Reports, College Station, TX.
- Barker, P.F., 1982, The Cenozoic subduction history of the Pacific margin of the Antarctic Peninsula: ridge crest-trench interactions, *Journal of Geological Society of London*, 139: 787-801.
- Barker, P. and Lawver, L., 1986, unpublished.
- Barron, J., Larsen, B., et al., 1989, Leg 119, Proceedings of the Ocean Drilling Program, Initial Reports, College Station, TX.
- Bergh, H.W., pers. comm.
- Bergh, H.W., 1987, Underlying fracture zone nature of Astrid Ridge off Antarctica's Queen Maud Land, *Journal of Geophysical Research*, 92: 475-484.
- Bergh, H.W., and Barrett, D.M., 1980, Agulhas Basin magnetic bight, *Nature*, 287: 591-595.
- Bergh, H.W. and Norton, I.O., 1976, Prince Edward fracture zone and the evolution of the Mozambique Basin, *Journal of Geophysical Research*, 81: 5221-5239.
- Bott, M.N.P., 1987, The continental margin of central East Greenland in relation to North Atlantic plate tectonic evolution, *Journal of Geological Society of London*, 144: 561-568.
- British Antarctic Survey, 1985, Tectonic Map of the Scotia Arc, Scale 1:3,000,000. BAS (Misc.) 3. Cambridge, British Antarctic Survey.
- Buffler, R., Shaub, J., Huerta, R., Ibrahim, A. and Watkins, D., 1981, A model for the early evolution of the Gulf of Mexico Basin, *Oceanol. Acta*, C3, pp. 129-136.
- Burns, R.E., Andrews, J.E., et al., 1973, *Initial Reports of the Deep Sea Drilling Project*, Leg XXI, Washington (U.S. Govt. Printing Office).
- Canadian Hydrographic Service, 1981, General Bathymetric Map of the Oceans (GEBCO), scale 1:10,000,000, maps 5•8, 5•9, 5•14, 5•16.
- Cande, S.C., Herron, E.M., and Hall, B.R., 1982, The early Cenozoic history of the southeast Pacific, *Earth and Planetary Science Letters*, 57: 47-62.
- Cande, S., LaBrecque, J.L., and Haxby, W.B., 1988, Plate kinematics of the South Atlantic: Chron 34 to present, *Journal of Geophysical Research*, 93(B11): 13,479-13,492.
- Cande, S.C., Larson, R.L., and LaBrecque, J.L., 1978, Magnetic lineations in the Pacific Jurassic Quiet Zone, *Earth And Planetary Science Letters*, 41: 434-440.
- Caress, D.W., Menard, H.W., and Hey, R.N., 1988, Eocene reorganization of the Pacific-Farallon Spreading Center north of the Mendocino Fracture Zone, *Journal of Geophysical Research*, 93: 2813-2838.
- Carter, R.M., 1988, Plate boundary tectonics, global sea-level changes and the development of the eastern South Island continental margin, New Zealand, Southwest Pacific, *Marine and Petroleum Geology*, 5: 90-107.
- Case, J. and Holcombe, T., 1980, Geologic-tectonic map of the Caribbean region, scale 1:2,500,000.
- Christofel, D.A. and Falconer, R.F., 1972, Marine magnetic measurements in the southwest Pacific Ocean and the identification of new tectonic features, in *Antarctic Oceanology II - The Antarctic - New Zealand Sector*, D.E. Hayes (ed.), *Am. Geophys. Union., Ant. Res. Ser.*, 19: 197-209.
- Cochran, J. R., 1981, The Gulf of Aden: Structure and evolution of a young ocean basin and continental margin, *Journal of Geophysical Research*, 86: 263-287.
- Cochran, J.R., 1988, The Somali Basin, Chain Ridge and the origin of the northern Somali Basin gravity and geoid low, *Journal of Geophysical Research*, 93(B10): 11,985-12,008.
- Cochran, J.R., Stow, D.A.V., et al., 1989, Leg 116, Proceedings of the Ocean Drilling Program, Initial Reports, College Station, TX.
- Coffin, M.F., Davies, M.L., and Haxby, W.F., 1986, Structure of the Kerguelen Plateau province from Seasat altimetry and seismic reflection data, *Nature*, 324: 134-136.
- Crane, R.C., 1987, Arctic reconstruction from an Alaskan viewpoint, in *Tailleur, I.L. and Weimer, P. (eds.), Alaskan North Slope Geology*, Society of Economic Paleontologists and Mineralogists, Pacific Section, Los Angeles.
- Currie, R.G., Seeman, D.A., and Riddihough, R.P., 1982, Total field magnetic anomaly offshore British Columbia, Geological Survey of Canada Open-File Report 828, scale 1:1,000,000.
- Davies, T.A., Luyendyk, B.P., et al., 1974, Leg XXVI, *Initial Reports of the Deep Sea Drilling Project*, Washington (U.S. Govt. Printing Office).
- DePaor, D.G., Bradley, D.C., Eisenstadt, G., and Phillips, S.M., 1989, The Arctic Eureka orogen: A most unusual fold-and-thrust belt, *Geol. Soc. Am. Bull.*, 101: 952-967.
- DeVries Klein, G., Kobayashi, K., et al., 1980, *Initial Reports of the Deep Sea Drilling Project*, Leg LVIII, Washington (U.S. Govt. Printing Office).
- Drewry, D.J. and Jordan, S.R., 1983, Bedrock surface of Antarctica, sheet 3 of *Antarctica: Glaciological and Geophysical Folio*, Drewry, D.J. (ed.), Scott Polar Research Institute, Cambridge.
- Dunbar, J. and Sawyer, D., 1986, Crust extension within the Gulf of Mexico: Implications for the breakup of Western Pangea, abs. from 1986 Geodynamics Symposium.
- Dunbar, J.A. and Sawyer, D.S., 1989, Patterns of continental extension along the conjugate margins of the Central and North Atlantic oceans and Labrador Sea, *Tectonics*, 8: 1059-1077.
- Eldholm, O. and Thiede, J., 1987, Summary and preliminary conclusions, ODP Leg 104: *Proceedings*, Ocean Drilling Program Initial Reports, Part A, pp. 751-771.
- Eldholm, O., Faleide, J.I., and Myrhe, A.M., 1987, Continent-ocean transition at the western Barents Sea/Svalbard continental margin, *Geology*, 15: 1118-1122.
- Elvers, D., Potter, K., Seidel, D., and Morley, J., 1972, IDOE 1971 survey: Washington, D.C., National Oceanographic and Atmospheric Administration, National Ocean Survey Seemap Profiles Plate BGM-1-71.
- Elvers, D.J., Mathewson, C.C., Kohler, R.E., and Moses, R.L., 1967, Systematic ocean surveys by the USC and GSS Pioneer 1961-1963: Coast and Geodetic Survey Operational Data Report C and GSDR-1, 19 P.
- Emery, K.O. and Uchupi, E., 1984, *The Geology of the Atlantic Ocean*, Springer, New York, 1050 p.
- Fairhead, J.D., 1988, Mesozoic plate tectonic reconstructions of the central South Atlantic Ocean: the role of the West and Central African Rift System, *Tectonophysics*, 155: 181-192.
- Fischer, A.G., et al., 1971, *Initial Reports of the Deep Sea Drilling Project*, Leg VI, Washington (U.S. Govt. Printing Office).
- Fisher, R.L., pers. comm.
- Fisher, R.L., Sclater, J.G. and McKenzie, D., 1971, Evolution of the Central Indian Ridge, *Geological Society of America Bulletin* 82: 553-562.
- Fullerton, L.G., Sager, W.W., and Handschumacher, D.W., 1989, Late Jurassic - Early Cretaceous evolution of the eastern Indian Ocean adjacent to northwest Australia, *Journal of Geophysical Research*, 94(B3): 2937-2953.
- Geological World Atlas, publ. UNESCO, 1981.
- Goodlad, S.W., Martin, A.K., and Hartnady, C.J.H., 1982, Mesozoic magnetic anomalies in the southern Natal Valley, *Nature*, 295: 686-688.
- Guennoc, P., Pautot, G., and Coutelle, A., 1988, Surficial structures of the northern Red Sea axial valley from 23°N to 28°N: time and space evolution of neo-oceanic structures, *Tectonophysics*, 153: 1-23.
- Hagevang, T., Eldholm, O. and Aalstad, J., 1983, Pre-23 magnetic anomalies between Jan Mayen and Greenland-Senja fracture zones in the Norwegian Sea, *Marine Geophysical Research*, 5: 345-363.
- Håkansson, E. and Pederson, S.A.S., 1982, Late Paleozoic to Tertiary tectonic evolution of the continental margin in North Greenland, in *Arctic Geology and Geophysics*, Proc. Third Int. Sym. Arctic Geol., Embry, A.F. and Balkwell, H.R., eds., *Canad. Soc. Pet. Geol.*, Calgary, Canada, 1982.
- Hamilton, W., 1978, Tectonic map of the Indonesian region, USGS Survey, Map I-875-D, Reston, Va.
- Handschumacher, D.W., 1976, Post-Eocene plate tectonics of the Eastern Pacific, in *The Geophysics of the Pacific Ocean Basin and its Margins*, ed. G.H. Sutton, et al., *AGU Monograph* 19: 177-202.
- Handschumacher, D.W., Pilger, R.H. Jr., Foreman, J.A., and Campbell, J.F., 1981, Structure and evolution of the Easter plate, *GSA Memoir*, 154: 63-76.
- Handschumacher, D.W., Sager, W.W., and Hilde, T.W.C., 1988, Pre-Cretaceous tectonic evolution of the Pacific plate and extension of the geomagnetic polarity reversal time scale with implications for the origin of the Jurassic "Quiet Zone", *Tectonophysics*, 155: 365-380.
- Harris, C., Watters, B.R. and Groenewald, P.B., 1991, Geochemistry of the Mesozoic regional basic dykes of western Dronning Maud Land, Antarctica, *Contributions to Mineralogy and Petrology*, 107: 100-111.
- Hayes, D.E., Frakes, L.A., et al., 1975, Leg XXVIII, *Initial Reports of the Deep Sea Drilling Project*, Washington (U.S. Govt. Printing Office).
- Hayes, D.E. and Taylor, B., 1978, A geophysical atlas of the East and Southeast Asian Seas, GSA Map and Chart Series MC-25, Washington, D.C.
- Herron, E.M., 1972, Sea-floor spreading and the Cenozoic history of the east-central Pacific, *Geological Society of America Bulletin*, 83: 1671-1692.
- Hilde, T.W.C., Isezki, N., and Wageman, J.M., 1976, in *The Geophysics of the Pacific Ocean Basin and its Margins*, *Geophys. Monograph* 19, pp. 205-226.
- Hill, K.C. and Hayward, A.B., 1988, Structural constraints on the Tertiary plate tectonic evolution of Italy, *Mar. Petr. Geol.*, 5: 2-16.
- Hirkeson, E. and Pederson, S.A.S., 1982, Late Paleozoic to Tertiary tectonic evolution of the continental margin in North Greenland, in *Arctic Geology and Geophysics*, Proc. Third Int. Sym. Arctic Geol., Embry, A.F. and Balkwell, H.R., eds., *Canad. Soc. Pet. Geol.*, Calgary, Canada, 1982.
- Hotten, G., 1972, Madagascar (Représentation schématique du volcanisme, de la tectonique cassante, et des formations précambriennes), scale 1:2,000,000, published by Le Bureau de Recherches Géologiques et Minières en 1974.

- Hussong, D.M., Uyeda, S., et al., 1981, Initial Reports of the Deep Sea Drilling Project, Leg LX, Washington (U.S. Govt. Printing Office).
- Jennings, C.W., 1961, Geologic map of California: Kingman sheet, scale 1:250,000, California Division of Mines and Geology, Sacramento, CA.
- Johnson, H.P. and Holmes, M.L., 1989, Evolution in plate tectonics: The Juan de Fuca Ridge, in Winterer, E.L., Hussong, D.M. and Decker, R.W. (eds), The Eastern Pacific Ocean and Hawaii, The Geology of North America, Geological Society of America, Boulder, Colorado, Vol. N., pp. 73-91.
- Karasik, A. M., Mercuriev, S. A., Mitin, L. I., Sochenova, N. A., and Yanovsky, V.N., 1986, Izv. Acad. Sci. USSR, 286: 933-938.
- Karig, D.E., Ingle, J.C., Jr., et al., 1975, Initial Reports of the Deep Sea Drilling Project, Leg XXXI, Washington (U.S. Govt. Printing Office).
- Kennett, J.P., Houtz, R.E., et al., 1974, Leg XXIX, Initial Reports of the Deep Sea Drilling Project, Washington (U.S. Govt. Printing Office).
- Kent, D.V. and Gradstein, F.M., 1986, A Jurassic to recent chronology, in P.R. Vogt and B.E. Tucholke (eds), The Geology of North America, The Western North Atlantic Region, GSA DNAG vol. M, pp. 45-50.
- Klitgord, K.D. and Mammerickx, J., 1982, Northern East Pacific Rise: Magnetic anomaly and bathymetric framework, Journal of Geophysical Research, 87: 6725-6750.
- Klitgord, K.D., Popenoe, P. and Schouten, H., 1984, Florida: A Jurassic transform plate boundary, Journal of Geophysical Research, 89(B9): 7753-7772.
- Klitgord, K.D. and Schouten, H., 1986, Plate kinematics of the central Atlantic, in P.R. Vogt and B.E. Tucholke (eds), The Geology of North America, The Western North Atlantic Region, GSA DNAG vol. M, pp. 351-378.
- Kovacs, L.C., Srivastava, S.P. and Jackson, H.R., 1986, Results from an aeromagnetic investigation of the Nares Strait Region, J. Geodynamics, 6: 91-110.
- Kroenke, L.W., Jouannic, C. and Woodward, P., 1983, Bathymetry of the southwest Pacific, Geophysical Atlas of the southwest Pacific, chart 1, UNIGCP 110, United Nations ESCAP, New York.
- Kroenke, L., Scott, R., et al., 1980, Initial Reports of the Deep Sea Drilling Project, Leg LIX, Washington (U.S. Govt. Printing Office).
- Ladd, J.W., 1974, South Atlantic seafloor spreading and Caribbean tectonics, Ph.D.thesis, 251pp., Columbia University, New York, 1974.
- LaBrecque, J.L. and Cande, S.C., 1986, Total intensity magnetic anomaly profiles, Northwest Ocean Margin Drilling Program, Regional Data Synthesis Series, Atlas 13, S. Atlantic Ocean and Adjacent Antarctic Continental Margin.
- LaBrecque, J.L. and Hayes, D.E., 1979, Seafloor spreading history of the Agulhas Basin, Earth and Planetary Science Letters, 45: 411-428.
- Larson, R.L., 1975, Late Jurassic sea-floor spreading in the eastern Indian Ocean, Geology, 3: 69-71.
- Larson, R.L., Carpenter, G.B., and Diebold, J.B., 1978, A geophysical study of the Wharton Basin near the Investigator Fracture Zone, Journal of Geophysical Research, 83(B2): 773-782.
- Larson, R.L., Pitman, W.C., Golobchenko, X., Cande, S.C., Dewey, J.F., Haxby, W.F. and LaBrecque, J.L., 1985, The Bedrock Geology of the World (color map), Freeman and Co., New York, NY.
- Larson, R.L., Mutter, J.C., Diebold, J.B., Carpenter, G.B., and Symonds, D., 1979, Cuvier Basin: A product of ocean crust formation by Early Cretaceous rifting off Western Australia, Earth and Planetary Science Letters, 45: 105-114.
- Larsen, H.L., 1984, Geology of the East Greenland shelf: in Petroleum Geology of the North European Margin, Norweg. Pet. Soc., Graham & Trotman, pp. 329-339.
- Liu, C.S., Curray, J., and McDonald, J.M., 1982, New constraints on the tectonic evolution of the Eastern Indian Ocean, Earth and Planet. Sci. Letters, 331-342.
- Lonsdale, P., 1989, Structural patterns of the Pacific off-shore of Peninsula California, in Gulf and Peninsula Provinces of the Californias, AAPG Memoir, in press.
- Malahoff, A., Feden, R.H., and Fleming, H.S., 1982, Magnetic anomalies and tectonic fabric of marginal basins north of New Zealand, J. Geophys. Res., 87(B5): 4109-4125.
- Mammerickx, J. and Sharman, G.F., 1988, Tectonic evolution of the North Pacific during the Cretaceous Quiet Period, J. Geophys. Res., 93: 3009-3024.
- Mammerickx, J. Naar, D.F., and Tyuce, R.L., 1988, The Mathematician Paleo-plate, Journal of Geophysical Research, 93: 3025-3040.
- Mammerickx, J., Fisher, R.L., Emmel, K.J., and Smith, S.M., 1976, Bathymetry of the East and Southeast Asian Seas, GSA Map and Chart Series MC-17, Washington, D.C.
- Mammerickx, J., Herron, E.M., and Dorman, L., 1980, Evidence for two fossil spreading ridges in the southeast Pacific, Geological Society of America Bulletin, 91: 263-271.
- Markl, R.G., 1974, Evidence for the breakup of Eastern Gondwanaland by the Early Cretaceous, Nature, 251: 196-199.
- Markl, R.G., 1978, Further evidence for the Early Cretaceous breakup of Gondwanaland off Southwestern Australia, Earth and Planetary Science Letters, 39: 211-225.
- Martin, A.K., Goodlad, S.W., Hartnady, C.J.H., and du Plessis, A., 1982, Cretaceous paleopositions of the Falkland Plateau relative to southern Africa using Mesozoic seafloor spreading anomalies, Geophysical Journal of Royal Astronomy Society, 71: 567-579.
- Martin, A.K. and Hartnady, C.J.H., 1986, Plate tectonic development of the south west Indian Ocean: a revised reconstruction of East Antarctica and Africa, Journal of Geophysical Research, 91(B5): 4767-4786.
- Masle, J., Marinho, M. and Wannesson, J., 1986, The structure of the Guinean continental margin: Implications for the connection between the Central and Southern Atlantic ocean, Sond. Geol. Rundschau, 75(1): 57-70.
- Masson, D.P., Kidd, R.B., and Roberts, D.G., 1982, Late Cretaceous sediment sample from the Amirante Passage, western Indian Ocean, Geology, 10: 264-266.
- McKenzie, D. and Sclater, J.G., 1971, The evolution of the Indian Ocean since the Late Cretaceous, Geophys. J. Roy. astr. Soc., 25: 437-528.
- Mejorada, P., 1976, Carta geologica del la Republica Mexicana, scale 1:2,000,000.
- Miall, A.D., 1983, the Neves Strait problem: A re-evaluation of the geological evidence in terms of a diffuse oblique-slip plate boundary between Greenland and the Canadian Arctic Islands, Tectonophysics, 100:227-239.
- Molnar, P., Atwater, T., Mammerickx, J., and Smith, S.M., 1975, Magnetic anomalies, bathymetry, and the tectonic evolution of the South Pacific since the Late Cretaceous, Geophys. J.R. astr. Soc., 40: 383-420.
- Müller, R.D. and Roest, W.R., submitted to Journal of Geophysical Research, Fracture zones in the North Atlantic from combined Geosat and Seasat data.
- Nakanishi, M., Tamaki, K., and Kobayashi, K., 1989, Mesozoic magnetic anomaly lineations and seafloor spreading history of the Northwestern Pacific, Journal of Geophysical Research, 94(B11): 15,437-15,462.
- Norton, I.O. and Sclater, J.G., 1979, A model for the evolution of the Indian Ocean and the breakup of Gondwanaland, Journal of Geophysical Research, 84: 6803-6830.
- Nunns, A.G., 1983, in Bott, M., Saxov, S., Talwani, M. and Thiede, J., eds., Structure and Development of the Greenland - Scotland Ridge, pp. 11-30.
- Nürnberg, D. and Müller, R.D., 1991, The tectonic evolution of the South Atlantic from Late Jurassic to present, Tectonophysics, 191: 27-53.
- Ohta, Y., 1982, Morpho-tectonic studies around Svalbard and the northernmost Atlantic, Canadian Society of Petroleum Geologists Memoir 8, pp. 415-429.
- Olivet, J.-L., LePichon, X., Monti, S. and Sichler, B., 1974, Charlie-Gibbs Fracture Zone, Journal of Geophysical Research, 79(14): 2059-2072.
- Otsuki, K. and Masayuki, E., 1979, Major strike-slip faults and their bearing on spreading in the Japan Sea, in Uyeda, S., Murphy, R.W., and Kobayashi, K. (eds.), Geodynamics of the Western Pacific, Proceedings of the International Conference on Geodynamics of the Western Pacific-Indonesian Region, March 1978, Tokyo, Advances in Earth and Planetary Sciences, vol. 6, pp. 537-555.
- Packhorn, G.H. (ed.), 1982, The evolution of the India-Pacific plate boundaries, Tectonophysics, Special Issue, 87: 1-397.
- Pardo-Casas, F. and Molnar, P., 1987, Relative motion of the Nazca (Farallon) and South American plates since Late Cretaceous time, Tectonics, 6(3): 215-232.
- Patriat, P., 1987, Reconstitution de l'évolution du système de dorsales de l'Océan Indien par les méthodes de la cinématique des plaques, Territoire des Terres Australes et Antarctique Françaises (ed.), 308 p., PhD Thesis, Université de Paris VI, France. [Central Indian Ridge].
- Peirce, J., Weissel, J., et al., 1989, Leg 121, Proceedings of the Ocean Drilling Program, Initial Reports, College Station, TX.
- Perry, R.K., Fleming, H.S., Weber, J.R., Kristoffersenn, Y., Hall, J.K., Grantz, A., and Johnson, G.L., 1985, Bathymetry of the Arctic Ocean, Naval Research Laboratory - Acoustics Division, scale 1:4,704,075 at 78°N.
- Peter et al.
- Rabinowitz, P.D., Coffin, M.F., and Falvey, D., 1983, The separation of Madagascar and Africa, Science 220, (4592) 67-69.
- Rabinowitz, P.D. and LaBrecque, J., 1979, The Mesozoic South Atlantic Ocean and evolution of its continental margins. Journal of Geophysical Research, 84(B11): 5973-6002.
- Raff, A.D. and R.G. Mason, 1961, Magnetic survey off the west coast of North America, 40°N latitude to 52°N latitude, Geological Society of America Bulletin, 72(2): 1267-1270.
- Reksnes, P.A. and Vågenes, E., 1985, Evolution of the Greenland Sea and Eurasia Basin, Cand. Scient. thesis, Univ. of Oslo, 136 pp.
- Renkin, M., Master's thesis, The Univ. of TX at Austin, 1986.
- Roest, W.R. and Srivastava, S.P., 1989, Seafloor spreading history I: Magnetic anomalies along track, in East Coast Basin Atlas Series: Labrador Sea, J.S. Bell (coordinator), Atlantic Geoscience Centre, Geological Survey of Canada, Map sheet L17-1, in press.
- Rosencrantz, E., Ross, M. and Sclater, J.G., 1988, Age and spreading history of the Cayman Trough as determined from depth, heat flow, and magnetic anomalies, Journal of Geophysical Research, 93(B3): 2141-2157.
- Ross, M.I. and Scotese, C.R., 1988, A hierarchical tectonic model of the Gulf of Mexico and Caribbean region, Tectonophysics, 155: 139-168.
- Royer, J.-Y., 1987, new compilation, POMP Progress Report #29-1287.
- Royer, J.-Y., Patriat, P., Bergh, H.W., and Scotese, C. R., Evolution of the Southwest Indian Ridge from the Late Cretaceous (anomaly 34) to the Middle Eocene (anomaly 20), 1988, Tectonophysics, 155: 235-260, [See POMP Progress Report #25-0987].
- Royer, J.-Y. and Sandwell, D.T., 1989, Evolution of the Eastern Indian Ocean since the Late Cretaceous: Constraints from Geosat altimetry, Journal of Geophysical Research, 94(B10): 13,755-13,782.

- Royer, J.-Y. and Schlich, R., 1988, The Southeast Indian Ridge between the Rodriguez Triple Junction and the Amsterdam and Saint-Paul Islands: detailed kinematics for the past 20 Ma, Journal of Geophysical Research, 93(B11): 13,524-13,550.
- St. John, B., 1984, Sedimentary provinces of the world - hydrocarbon productive and nonproductive, Williams & Heinz Map Corporation, Capitol Heights, MD, 20743. Scale 1:31,368,000 or 500 miles to the inch at the equator. Van der Grinten projection.
- Sandwell, D.T., 1984, Along-track deflection of the vertical from Seasat: GEBCO overlays, NOAA Tech. Memo., NOS NGS-40.
- Sawyer, D., 1985, Total tectonic subsidence: A parameter for distinguishing crustal type at the U.S. Atlantic continental margin, Journal of Geophysical Research, 90(B9): 7751-7769.
- Schlich, R., 1982, The Indian Ocean: Aseismic ridges, spreading centers and basins, in Nairn, A.E.M., and Stehli, F.G. (eds), The Ocean Basins and Margins: The Indian Ocean, 6: 51-147.
- Schlich, R., Coffin, M. F., Munsch, M., Stagg, H.M.J., Li, Z.G., and Revill, K., 1987, Bathymetric Chart of the Kerguelen Plateau, joint publication of the Bureau of Mineral Resources, Canberra, Australia, and the Institut de Physique du Globe de Strasbourg, Strasbourg, France.
- Schlich, R., Dymont, J., and Munsch, M., 1990, Structure and age of the Mascarene and Madagascar basins, abstract in "Volcanisme intraplaque. Le Point Chaud de la Reunion," Ile de la Reunion, November 12-17, 1990.
- Schlich, R., Wise, S.W., Jr., et al., 1989, Leg 120, Proceedings of the Ocean Drilling Program, Initial Reports, College Station, TX.
- Sclater, J.G., Luyendyk, B.P., and Meinke, L., 1976, Magnetic lineations in the southern part of the Central Indian Basin, Geological Society of America Bulletin, 87: 371-378.
- Scripps Data Center.
- Searle, R., 1980, Tectonic pattern of the Azores spreading centre and triple junction, Earth And Planetary Science Let., 51: 415-434.
- Segoufin, J., 1981, Morphologie et structure du canal de Mozambique, Ph.D. thesis, Université Louis Pasteur, Strasbourg, 236 pp.
- Segoufin, J. and Patriat, P., 1981, Reconstructions de l'océan Indien occidental pour les époques des anomalies M21, m2 et 34, paléoposition de Madagascar, Bull. Soc. Geol. France, 23: 603-607.
- Sharman, G.F. and Risch, D.L., 1988, Northwest Pacific tectonic evolution in the Middle Mesozoic, Tectonophysics, 155: 331-344.
- Simpson, E.S.W., Schlich, R., et al., 1974, Initial Reports of the Deep Sea Drilling Project, Leg XXV, Washington (U.S. Govt. Printing Office).
- Smith, D.G., 1987, Late Paleozoic to Cenozoic reconstructions of the Arctic, in Tailleux, I.L. and Weimer, P. eds., Alaskan North Slope Geology, Society of Economic Paleontologists and Mineralogists, Pacific Section, Los Angeles.
- Srivastava, S.P. and Roest, W.R., in prep., Evolution of the North Atlantic: A case of jumping plate boundaries and microplates.
- Srivastava, S.P., Verhoeff, J. and Macnab, R., 1988, Results from a detailed aeromagnetic survey across the Northeast Newfoundland Margin, Part I: Spreading anomalies and relationship between magnetic anomalies and the ocean-continent boundary, J. Mar. Petr. Geol., 5(4): 306-323.
- Stock, J., 1981, Master Thesis, M.I.T., Cambridge, Massachusetts.
- Stock, J. and Molnar, P., 1987, Revised history of early Tertiary plate motion in the southwest Pacific, Nature, 325: 495-499.
- Talwani, M. and Eldholm, O., 1977, Evolution of the Norwegian -Greenland Sea, Geological Society of America Bulletin, 88: 969-999.
- Tamaki, K. and Larson, R.L., 1988, The Mesozoic tectonic history of the Magellan microplate in the western Central Pacific, Journal of Geophysical Research, 93: 2857-2874.
- Tamaki, K., Toshima, M. and Larson, R.L., 1979, Remnant Early Cretaceous spreading center in the central Pacific Basin, Journal of Geophysical Research, 84: 4501-4510.
- Tapscott, C., Patriat, P., Fisher, R.L., Sclater, J.G., Hoskins, H., and Parsons, B., 1980, The Indian Ocean triple junction, Journal of Geophysical Research, 85: 4723-4739.
- Theberge, A.E., Jr., 1971, Magnetic survey off southern California and Baja California: Rockwell, Maryland, National Oceanographic and Atmospheric Administration, National Ocean Survey, scale 1:1,000,000.
- Vaquier
- Veevers, J.J., 1986, Breakup of Australia and Antarctica estimated as mid-Cretaceous (95±5 Ma) from magnetic and seismic data at the continental margin, Earth and Planetary Science Letters, 77: 91-99.
- Veevers, J.J., Heirtzler, J.R., et al., 1974, Leg XXVII, Initial Reports of the Deep Sea Drilling Project, Washington (U.S. Govt. Printing Office).
- Veevers, J.J., Tayton, J.W., Johnson, B.D., and Hansen, L., 1985, Magnetic expression of the continent-ocean boundary between the western margin of Australia and the Eastern Indian Ocean, J. Geophys., 56: 106-120.
- Vogt, P.R., 1986, Magnetic anomalies of the North Atlantic Ocean, in: Vogt, P.R. and Tucholke, B.E., eds., The Geology of North America, vol. M, The Western North Atlantic Region, GSA, Plate 3.
- Vogt, P.R., Cherkis, N.Z., Morgan, G.A., 1983, Project Investigator I: Evolution of the Australia-Antarctic discordance deduced from a detailed aeromagnetic survey, in Antarctic Earth Science, R.L. Oliver, P.R. James and J.B. Lago (eds): Proceeding of the IV International Symposium on Antarctic Earth Science, Australian Academy Press, Canberra, pp. 608-613.
- Von der Borch, C.C., Sclater, J.G., et al., 1974, Initial Reports of the Deep Sea Drilling Project, Leg XXII, Washington (US Gov't Printing Office).
- Watts, A.B., Weissel, J.K., and Davey, F.J., 1977, in Talwani, M. and Pittman, W.C., eds., Island Arcs, Deep Sea Trenches and Back-arc Basins, pp. 419-427.
- Weissel, J.K., A.B. Watts, and A. Lapouille, 1982, Evidence for Late Paleocene to Late Eocene seafloor in the southern New Hebrides Basin, Tectonophysics, 87: 185-241.
- Weissel, J.K. and Hayes, D.E., 1972, Magnetic anomalies in the Southeast Indian Ocean, in Antarctic Oceanology II - The Antarctic - New Zealand Sector, D.E. Hayes(ed.), Am. Geophys. Union., Ant. Res. Ser., 19: 165-196.
- Weissel, J.K. and Hayes, D.E., 1977, Evolution of the Tasman Sea reappraised, Earth And Planetary Science Letters, 36: 77-84.
- Weissel, J.K., Hayes, D.E., and Herron, E.M., 1977, Plate tectonics synthesis: the displacements between Australia, New Zealand, and Antarctica since the Late Cretaceous, Marine Geology, 25: 231-277.
- Weissel, J.K. and Watts, A.B., 1979, Tectonic evolution of the Coral Sea Basin, Journal of Geophysical Research, 84(B9): 4572-4582.
- Whitmarsh, R.B., 1974, Some aspects of plate tectonics in the Arabian Sea, in R.B. Whitmarsh, O.E. Weser, D.A. Ross, et al., Init. Rep. D.S.D.P., Washington (U.S. Government Printing Office) 23: 527-535.
- World Data Bank #2 (CIA), Cartographic Database - Natural and manmade features of the world (digitized format), NTIS PB 271-874.
- Young, U.D., Voight, B. and Orkan, N.I., 1987, The Iceland Prospective: Its role in the development of plate tectonic theory, in 1987 Geodynamics Symposium, Silver Anniversary Celebration of Plate Tectonics, Texas A&M Univ., April 1987, pp. 96-98, abs.
- Ziegler, P.A., 1982, Geological atlas of Western and Central Europe, Shell Int. Petr. Maatschappij B.V. 130 p.
- Zonenshayn, L.P., Natapov, L.M., Savostin, L.A. and Stausuii, A.P., 1978, Recent plate tectonics of northeastern Asia in connection with the opening of the North Atlantic and Arctic Ocean Basins, Oceanology, 18(5): 550-555.