

## BIBLIOGRAPHY

- [Adams and Hinze, 1995] Adams, J.M. and W.J. Hinze, The gravity-geologic technique for mapping varied bedrock topography, *in* S.H. Ward (ed.), Geotechnical and Environmental Geophysics, Society of Exploration Geophysicists, Tulsa, OK, III, 99-106, 1995.
- [Ahrens, 1995] Ahrens, T.J. (ed.), Rock Physics & Phase Relations: A Handbook of Physical Constants, AGU Reference Shelf 3, American Geophysical Union, 1995.
- [Alsdorf et al., 1994] Alsdorf, D.E., R.R.B. von Frese, and the Geodynamics Branch, FORTRAN programs to process MAGSAT data for lithospheric, external field, and residual core components, NASA Tech. Mem. 104612, 1994.
- [Andersen and Knudsen, 1998] Andersen, O.B., and P. Knudsen, Global marine gravity field from the ERS-1 and Geosat geodetic mission altimetry, *J. Geophys. Res.*, 103, C4, 8129-8138, 1998.
- [Anderson et al., 1993] Anderson, A.J., D.T. Sandwell, G. Marquart, and H.-G. Scherneck, Arctic Geodynamics: Continental Shelf and Deep Ocean Geophysics - ERS-1 Satellite Altimetry: A First Look, Proceedings, First ERS-1 Symposium, Cannes, France, 4-6 November 1992, ESA SP-359, March 1993.
- [Anderson, 1998] Anderson, D.L., The scales of mantle convection, *Tectonophysics*, 284, 1-17, 1998.
- [Anderson, 1991] Anderson, G., Use of the gravity-geologic method: Error propagation and case study, Unpublished M.S. thesis, Dept. of Geological Sciences, the Ohio State University, 1991.
- [Ayrton, 1963] Ayrton, S.N., A contribution to the geological investigations in the region of Ivigtut, SW Greenland, *Meddr. Grønland*, 167, 3, 5-130, 1963.
- [Balkwill, 1987] Balkwill, H.R., Labrador Basin: Structural and stratigraphic style, *in* Beaumont, C., and A.J. Tankard (eds.), Sedimentary basins and basin forming mechanisms, Canadian Society of Petroleum Geologists, Memoir 12, 17-43, 1987.
- [Baltuck, 1997] Baltuck, M., Solid Earth Programs Meet Coolfont Goals, EOS, Am. Geophys. Union Trans., 78, 47, 537, 1997.
- [Bamber et al., 1997] Bamber, J.L., S. Ekholm, and W. Krabill, A high resolution digital elevation model of the Greenland ice sheet and validation with airborne laser altimetry, *presented at* the Third ERS Symposium (ESA), Florence, Italy, 18-21 March 1997.

- [Barnouin-Jha et al., 1997] Barnouin-Jha, K., E.M. Parmentier, and D.W. Sparks, Buoyant Mantle Upwelling and Crustal Production at Oceanic Spreading Centers: On-Axis Segmentation and Off-Axis Melting, *J. Geophys. Res.*, 102, B6, 11,979-11,989, 1997.
- [Barton, 1996] Barton, C.E., Revision of International Geomagnetic Reference Field Released [http://www.agu.org/eos\\_elec/95206e.html](http://www.agu.org/eos_elec/95206e.html), American Geophysical Union, 1996.
- [Bašić and Rapp, 1992] Bašić, T. and R.H. Rapp, Oceanwide prediction of gravity anomalies and sea surface heights using Geos-3, Seasat, and Geosat altimeter data and ETOPO5U bathymetric data, Dept. of Geodetic Science and Surveying Report 416, the Ohio State University, Columbus, OH, 1992.
- [Blakely, 1995] Blakely, R.J., Potential theory in gravity & magnetic applications, Cambridge University Press, New York, 1995.
- [Bott, 1995a] Bott, M.H.P., Mechanisms of rifting: Geodynamic modeling of continental rift systems *in* Olsen, K.H. (ed.), Continental rifts: Evolution, structure, and tectonics, Elsevier, New York, Developments in Geotectonics, 25, 1995.
- [Bott, 1995b] Bott, M.H.P., Rifted passive margins *in* Olsen, K.H. (ed.), Continental rifts: Evolution, structure, and tectonics, Elsevier, New York, Developments in Geotectonics, 25, 1995.
- [Bown and White, 1995] Bown, J.W., and R.S. White, Effect of finite extension rate on melt generation at rifted margins, *J. Geophys. Res.*, 100, B9, 18011-18029, 1995.
- [Bown and White, 1994] Bown, J.W., and R.S. White, Variation with spreading rate of oceanic crustal thickness and geochemistry, *Earth Planet. Sci. Lett.*, 121, 435-449, 1994.
- [Bradley and Frey, 1991] Bradley, L.M., and H. Frey, Magsat Magnetic Anomaly Contrast Across Labrador Sea Passive Margins, *J. Geophys. Res.*, 96, B10, 16161-16188, 1991.
- [Braile et al., 1995] Braile, L.W., G.R. Keller, S. Mueller, and C. Prodehl, Seismic Techniques *in* Olsen, K.H. (ed.), Continental rifts: Evolution, structure, and tectonics, Elsevier, New York, Developments in Geotectonics, 25, 1995.
- [Brozena et al., 1995] Brozena, J.M., Kinematic GPS and aerogeophysical measurement: gravity, topography and magnetics, Ph.D. Dissertation, Cambridge University, 1995.
- [Brozena et al., 1994] Brozena, J.M., M. Chalona, R. Forsberg, and G. Mader, New technology allows remote areas to be probed, *EOS, Am. Geophys. Union Trans.*, 74, p. 2 & 18, 1994.
- [Brozena et al., 1993] Brozena, J.M., M.F. Peters, and R. Forsberg, Airborne Measurements of Absolute Sea-Surface Heights, *GRL*, 20, 9, 875-878, 1993.
- [Brozena et al., 1998] Brozena, J.M., W.R. Roest, and L.C. Kovacs, Airborne geophysical study of the northeastern Canada Basin and adjacent shelf: implications for early opening, submitted to *Geophys. Res. Lett.*

- [Brun and Beslier, 1996] Brun, J.P., and M.O. Beslier, Mantle Exhumation at Passive Margins, *Earth Planet. Sci. Lett.*, 142, 161-173, 1996.
- [Chalmers, 1997] Chalmers, J.A., The continental margin off southern Greenland: along-strike transition from an amagmatic to a volcanic margin, abstract, *Ocean. Lit. Rev.*, 44, 11, 1285, 1997.
- [Chalmers, 1996] Chalmers, J.A., L.M. Larsen, and A.K. Pedersen, Widespread Palaeocene volcanism around the northern North Atlantic and Labrador Sea: evidence for a large, hot, early plume head, *Ocean. Lit. Rev.*, 43, 4, 379, 1996.
- [Chalmers and Laursen, 1995] Chalmers, J.A., K.H. Laursen, Labrador Sea: the extent of the continental and oceanic crust and the timing of the onset of seafloor spreading, *Mar. Pet. Geol.*, 12, 205-217, 1995.
- [Chian et al., 1995a] Chian, D., C. Keen, I. Reid, and K.E. Loudon, Evolution of nonvolcanic rifted margins: New results from the conjugate margins of the Labrador Sea, *Geology*, 23, 7, 589-592, 1995.
- [Chian and Loudon, 1994] Chian, D., and K.E. Loudon, The Continent-Ocean Crustal Transition Across the Southwest Greenland Margin, *J. Geophys. Res.*, 99, B5, 9117-9135, 1994.
- [Chian and Loudon, 1992] Chian, D., and K.E. Loudon, The Structure of Archean-Ketilidian Crust Along the Continental Shelf of Southwestern Greenland From A Seismic Refraction Profile, *Can. J. Earth Sci.*, 29, 301-313, 1992.
- [Chian et al., 1995b] Chian, D., K.E. Loudon, and I. Reid, Crustal structure of the Labrador Sea conjugate margin and implications for the formation of nonvolcanic continental margins, *J. Geophys. Res.*, 100, B12, 23239-24253, 1995.
- [Dahl-Jensen et al., 1998] Dahl-Jensen, T., H. Thybo, J. Hopper, and M. Rosing, Crustal Structure at the SE Greenland Margin From Wide-Angle and Normal Incidence Seismic Data, *Tectonophysics*, 288, 191-198, 1998.
- [Dam and Surlyk, 1997] Dam, G., and F. Surlyk, Stratigraphy of the Neill Kninter Group; a Lower - lower Middle Jurassic tidal embayment succession, Jameson Land, East Greenland, Geological Survey of Denmark and Greenland, Copenhagen, Denmark, *Geology of Greenland Survey Bulletin*, 175, 1997.
- [Davis, 1986] Davis, J.C., *Statistics and Data Analysis in Geology*, John Wiley and Sons, New York, 1986.
- [Davis, 1983] Davis, R.A., *Depositional Systems*, Prentice-Hall Inc., Englewood Cliffs, New Jersey, 1983.
- [Dawes, 1997] Dawes, P.R., *The Proterozoic Thule Supergroup, Greenland and Canada: history, lithostratigraphy and development*, Geological Survey of Denmark and Greenland, Copenhagen, Denmark, *Geology of Greenland Survey Bulletin*, 174, 1997.
- [Dehlinger, 1978] Dehlinger, P., *Marine gravity*, Elsevier Scientific Pub. Co., New York, 322, 1978.

- [Ekholm, 1996] Ekholm, S., A full coverage, high-resolution, topographic model of Greenland computed from digital elevation data, *J. Geophys. Res.*, B10, 21,961-21972, 1996.
- [Ernst and Buchan, 1998] Ernst, R.E., and K.L. Buchan, Locating pre-Mesozoic mantle plumes, *EOS, Am. Geophys. Union Trans.*, 79, 17, S345, 1998.
- [Escher and Pulvertaft, 1995] Escher, J.C., and T.C.P. Pulvertaft, Geological Map of Greenland, scale 1: 2 500 000, Copenhagen, Geological Survey of Greenland, 1995.
- [Escher and Watt, 1976] Escher, A., and W.S. Watt (eds.), *Geology of Greenland*, the Geological Survey of Greenland, Denmark, 1976.
- [Faure et al., 1996] Faure, S., A. Tremblay, and J. Angelier, State of intraplate stress and tectonism of northeastern America since Cretaceous times, with particular emphasis on the New England-Quebec igneous province, *Tectonophysics*, 255, 111-134, 1996.
- [Fechner and Jokat, 1996] Fechner, N., and W. Jokat, Seismic Refraction Investigations on the Crustal Structure of the Western Jameson Land Basin, East Greenland, *J. Geophys. Res.*, 101, B7, 15,867-15,881, 1996.
- [Feden et al., 1979] Feden, R.H., P.R. Vogt, and H.S. Fleming, Magnetic and bathymetric evidence for the "Yermak hot spot" Northwest of Svalbard in the Arctic Basin, *Earth Planet. Sci. Lett.*, 44, 18-38, 1979.
- [Forsberg, 1994] Forsberg, R., Gravity and GPS in Greenland, Proc. Nordic Geodetic Commission General Assembly, Ullensvang, Norway, May 1994.
- [Forsberg, 1996] Forsberg, R., The Geoid of Greenland - a Reference Surface for Remote Sensing, Proc. 6th Workshop of Mass Balance of the Greenland Ice Sheet, GGU, 1996.
- [Forsberg and Kenyon, 1995] Forsberg, R., and S. Kenyon, Downward Continuation of Airborne Gravity Data, Proceedings of IAG Symposium G4, IUGG XXI General Assembly, Boulder, Colorado, July 2-14, 1995.
- [Forsyth et al., 1986] Forsyth, D.A., P. Morel-A-L'Huissier, I. Asudeh, and A.G. Green, Alpha Ridge and Iceland - Products of the Same Plume?, *J. Geod.*, 6, 197-214, 1986.
- [von Frese, 1980] von Frese, R.R.B., Lithospheric interpretation and modeling of satellite elevation gravity and magnetic anomaly data, Ph.D. Dissertation, Purdue University, p. 165, 1980.
- [von Frese et al., 1981] von Frese, R.R.B., W.J. Hinze, and L.W. Braile, Spherical earth gravity and magnetic anomaly analysis by equivalent point source inversion, *Earth Planet. Sci. Lett.*, v. 53, 69-83, 1981.
- [von Frese et al., 1997] von Frese, R.R.B., M.B. Jones, J.W. Kim, J.-H. Kim, Analysis of Anomaly Correlations, *Geophys.*, 62, 1, 342-351, 1997.
- [von Frese et al., 1998] von Frese, R.R.B., D. R. Roman, J.W. Kim, J.-H. Kim, and A.J. Anderson, Satellite Mapping of the Antarctic Gravity Field, *Annali di Geofisica* (in review), 1998.

- [Friend et al., 1996] Friend, C.R.L., A.P. Nutman, H. Baadsgaard, P.D. Kinny, V.R. McGregor, Timing of Late Archean Terrane Assembly, Crustal Thickening and Granite Emplacement in the Nuuk Region, Southern West Greenland, *Earth Planet. Sci. Lett.*, 142, 353-365, 1996.
- [Garde, 1997] Garde, A.A., Accretion and evolution of an Archean high-grade grey gneiss - amphibolite complex: the Fiskefjord area, southern West Greenland, Geological Survey of Denmark and Greenland, Copenhagen, Denmark, *Geology of Greenland Survey Bulletin*, 177, 1997.
- [Gohl and Smithson, 1993] Gohl, K. and S.B. Smithson, Structure of Archean Crust and Passive Margin of Southwest Greenland From Seismic Wide-Angle Data, *J. Geophys. Res.*, B4, 6623-6638, 1993.
- [Grantz et al., 1998] Grantz, A., D.L. Clark, R.L. Phillips, and S.P. Srivastava, Phanerozoic stratigraphy of Northwind Ridge, magnetic anomalies in the Canada Basin, and the geometry and timing of rifting in the Amerasia Basin, Arctic Ocean, *GSA Bulletin*, 110, 6, 801-820, 1998.
- [Gregersen, 1984] Gregersen, S., Crustal Structure Anomalies Detected With Lg Waves in Grabens Near Continental Margins in Greenland and in the North Sea, *Marine Geophys. Res.*, 6, 409-413, 1984.
- [Gregersen, 1985] Gregersen, S., Regional Inhomogeneities in the Earth's Crust and Upper Mantle Detected With Seismic Waves, With Emphasis on the Surface Wave Amplitudes, *Meddelelse*, 57, 1985.
- [Gregersen, 1986] Gregersen, S., Crustal Inhomogeneities and Seismicity Near the Margins of the North Atlantic Ocean, *J. Geod.*, 6, 5-12, 1986.
- [Gregersen, 1989] Gregersen, S., The Seismicity of Greenland, *in* S. Gregersen and P.W. Basham (eds.), *Eartquakes at North-Atlantic Passive Margins: Neotectonics and Postglacial Rebound*, Kluwer Academic Publishers, 345-353, 1989.
- [Gregersen et al., 1988] Gregersen, S., C. Clausen, and T. Dahl-Jensen, Crust and Upper Mantle Structure in Greenland, *in* *Recent Seismological Investigations in Europe*, Proceedings of the 19th General Assembly of the ESC, Moscow, Nanka, 1988.
- [Gudmandsen, 1970] Gudmandsen, P., Notes on radar soundings of the Greenland ice sheet, *in* *Proc. of the international meeting on radioglaciology*, Elektromag. Inst., Technical University of Denmark, Lyngby, 124-133, 1970.
- [Harrison, 1987] Harrison, C.G.A., The Crustal Field, *in* *Geomagnetism: Volume 1*, J.A. Jacobs (ed.), Academic Press, New York, 513-598, 1987.
- [Hauser et al., 1995] Hauser, F., B.M. O'Reilly, A.W.B. Jacob, P.M. Shannon, J. Makris, and U. Vogt, The crustal structure of the Rockall Trough: Differential stretching without underplating, *J. Geophys. Res.*, 100, B3, 4097-4116, 1995.

- [Hayden, 1996] Hayden, K.J., Airborne gravity and magnetic surveys over rugged topography: a case study for the southern Appalachians, M.Sc. Thesis, the Ohio State University, 1996.
- [Heiskanen and Moritz, 1967] Heiskanen, W.A., and H. Moritz, Physical Geodesy, W. H. Freeman and Company, San Francisco, 1967.
- [Herman and Müntener, 1996] Hermann, J. and O. Müntener, Extension-Related Structures in the Malenco-Margna-System: Implications for Paleogeography and Consequences for Rifting and Alpine Tectonics, Schweiz. Mineral. Petrogr. Mitt., 76, 501-519, 1996.
- [Hermann et al., 1997] Hermann, J., O. Müntener, V. Trommsdorff, and W. Hansmann, Fossil Crust-to-Mantle Transition, Val Malenco (Italian Alps), J. Geophys. Res., 102, B9, 20,123-20,132, 1997.
- [Higgins and Ineson, 1997] Higgins, A.K., and J.R. Ineson, Review of Greenland Activities, 1996, Geological Survey of Denmark and Greenland, Copenhagen, Denmark, Geology of Greenland Survey Bulletin, 176, 1997.
- [Hinz et al., 1979] Hinz, K., H.-U. Schlüter, A.C. Grant, S.P. Srivastava, D. Umpleby, and J. Woodside, Geophysical transects of the Labrador Sea: Labrador to Southwest Greenland, Tectonophysics, 59, 151-183, 1979.
- [Hinze et al., 1988] Hinze, W.J., P.J. Hood, and the DNAG committee. Magnetic anomaly map of North America, The Leading Edge, 7, 19-21, 1988.
- [Holbrook et al., 1997] Holbrook, W.S., H.C. Larsen, P. Kelemen, T. Dahl-Jensen, J. Korenga, I. Reid, G. Kent, J. Hopper, R. Detrick, and D. Lizarralde, Spatial and Temporal Distribution of Magmatism During and After Continental Breakup, Southeast Greenland Margin, EOS, Am. Geophys. Union Trans., 78, 46, F668, 1997.
- [Hwang and Parsons, 1995] Hwang, C., and B. Parsons, Gravity anomalies derived from Seasat, Geosat, ERS-1 and TOPEX/POSEIDON altimetry and ship gravity data: a case study over the Reykjanes Ridge, Geophys. J. Int., 122, 551-568, 1995.
- [Ibrahim and Hinze, 1972] Ibrahim, A. and W.J. Hinze, Mapping Buried Bedrock Topography with Gravity, Ground Water, 10, 3, 18-23, 1972.
- [Ineson and Peel, 1997] Ineson, J.R., and J.S. Peel, Cambrian shelf stratigraphy of North Greenland, Geological Survey of Denmark and Greenland, Copenhagen, Denmark, Geology of Greenland Survey Bulletin, 173, 1997.
- [Jackson et al., 1986] Jackson, H.R., D.A. Forsyth, and G.L. Johnson, Oceanic affinities of the Alpha Ridge, Arctic Ocean, Mar. Geol. 73, 237-261, 1986.
- [Jackson et al., 1995] Jackson, H.R., A. Grantz, I. Reid, S.D. May, and P.E. Hart, Observations of anomalous oceanic crust in the Canada Basin, Arctic Ocean, Earth Planet. Sci. Lett., 134, 99-106, 1995.

- [Jackson et al., 1979] Jackson, H.R., C.E. Keen, and R.K.H. Falconer, New geophysical evidence for sea-floor spreading in central Baffin Bay, *Can. J. Earth Sci.*, 16, 2122-2135, 1979.
- [Jackson and Reid, 1994] Jackson, H.R., and I. Reid, Crustal thickness variations between the Greenland and Ellesmere Island margins determined from seismic refraction, *Can. J. of Earth Sciences*, 31, 1407-1418, 1994.
- [Jackson et al., 1997] Jackson, H.R., A. Scott, G.N. Oakey, and R. MacNab, First Edition Circum-Arctic Magnetic Map With Tectonic Overlay, GSC, 1997.
- [Jones, 1988] Jones, M.B., Correlative analysis of the gravity and magnetic anomalies of Ohio and their geologic significance, MS Thesis, Dept. of Geol. Sciences, The Ohio State University, 1988.
- [Jung and Vogt, 1997] Jung, W.-Y., and P.R. Vogt, A Gravity and Magnetic Anomaly Study of the Extinct Aegir Ridge, Norwegian Sea, *J. Geophys. Res.*, 102, B3, 5065-5089, 1997.
- [Keen et al., 1994] Keen, C.E., P. Potter, and S.P. Srivastava, Deep seismic reflection data across conjugate margins of the Labrador Sea, *Can. J. Earth Sci.*, 31, 192-205, 1994.
- [Kerr, 1980] Kerr, J.W., Stretching of the North American plate by a now dormant Atlantic spreading centre *in* J.W. Kerr, A.J. Fergusson, and L.C. Machan (eds.), *Geology of the North Atlantic Borderlands*, Memoir 7, Can. Soc. Petr. Geol., Calgary, Alberta, Canada, 245-278, 1981.
- [Kerr, 1982] Kerr, J.W., History and implications of the Nares conflict *in* Dawes, P.R., and J.W. Kerr (eds.), *Nares Strait and the drift of Greenland: A conflict in plate tectonics*, *Meddr. Grønland, Geosc.* 8, 37-49, 1982.
- [Kim, J.-H., 1995] Kim, J.-H., Improved recovery of gravity anomalies from dense altimeter data, Ph.D. Dissertation, the Ohio State University, Columbus, Ohio, 1995.
- [Kim, J.W., 1996] Kim, J.W., Spectral Correlation of satellite and airborne geopotential field measurements for lithospheric analysis, Ph.D. Dissertation, the Ohio State University, Columbus, Ohio, p. 171, 1996.
- [Kim et al., 1998] Kim, J.W., J.-H. Kim, R.R.B. von Frese, D.R. Roman, and K.C. Jezek, Spectral Attenuation of Track-Line Noise, *GRL*, 25, 2, 187-190, 1998.
- [King and Anderson, 1995] King, S.D., and D.L. Anderson, An alternative mechanism of flood basalt formation, *Earth Planet. Sci. Lett.*, 136, 269-279, 1995.
- [Knudsen and Andersen, 1996] Knudsen, P., and O.B. Andersen, Ocean Bottom Topography from ERS-1 Altimeter Data, *Earth Observation Quarterly (EOQ)*, 51, ESRIN, 16-18, 1996.
- [Kösters et al., 1997] Kösters, M., H/-J. Götze, S. Schmidt, J. Fritsch, and M. Araneda, Gravity Field of a Continent-Ocean Transition Mapped From Land, Air, and Sea, *EOS, Am. Geophys. Union Trans.*, 78, 2, 13, 1997.

- [LaBrecque and Ghidella, 1997] LaBrecque, J.L., and M.E. Ghidella, Bathymetry, Depth to Magnetic Basement, and Sediment Thickness Estimates From Aerogeophysical Data Over the Western Weddell Basin, *J. Geophys. Res.*, 102, B4, 7929-7945, 1997.
- [Langel and Thorning] Langel, R.A., and L. Thorning, A satellite magnetic anomaly map of Greenland, *Geophys. J. R. astr. Soc.*, 71, 599-612, 1982.
- [Larson et al., 1997] Larson, K.M., J.T. Freymueller, and S. Philipsen, Global Plate Velocities from the Global Positioning System, *J. Geophys. Res.*, 102, B5, 9961-0081, 1997.
- [Lawver and Müller, 1994] Lawver, L.A. and R.D. Müller, Iceland Hot Spot Track, *Geology*, 22, 311-314, 1994.
- [Laxon and McAdoo, 1994] Laxon, S., and D. McAdoo, Arctic Ocean Gravity Field Derived From ERS-1 Satellite Altimetry, *Science*, 265, 621-624, 1994.
- [Lemoine et al., 1997] Lemoine, F.G., D.E. Smith, L. Kunz, R. Smith, E.C. Pavlis, N.K. Pavlis, S.M. Klosko, D.S. Chinn, M. H. Torrence, R. G. Williamson, C.M. Cox, K.E. Rachlin, Y.M. Wang, S.C. Kenyon, R. Salman, R. Trimmer, R.H. Rapp, and R.S. Nerem, The Development of the NASA GSFC and NIMA Joint Geopotential Model, *in* J. Segawa, H. Fujimoto, and S. Okubo (editors), *Gravity, Geoid and Marine Geodesy*, Vol. 117, International Association of Geodesy Symposia, 461-469, 1997.
- [Lemoine et al., 1998a] Lemoine, F.G., N.K. Pavlis, S.C. Kenyon, R.H. Rapp, and B.F. Chao, New High-Resolution Model Developed for Earth's Gravitational Field, *American Geophysical Union, EOS, Am. Geophys. Union Trans.*, 79, 9, 113, 117-118, 1998.
- [Lemoine et al., 1998b] Lemoine, F.G., S.C. Kenyon, J.K. Factor, R.G. Trimmer, N.K. Pavlis, D.S. Chinn, C.M. Cox, S.M. Klosko, S.B. Luthcke, M.H. Torrence, Y.M. Yang, R.G. Williamson, E.C. Pavlis, R.H. Rapp, and T.R. Olson, The Development of the Joint NASA GSFC and National Imagery and Mapping Agency (NIMA) Geopotential Model EGM96, *NASA/TP-1998-206861*, Goddard Space Flight Center, Greenbelt, 1998.
- [Lepvrier et al., 1996] Lepvrier, C., J.T. van Berkel, and W.M. Schwerdtner, Early Tertiary Eureka palaeostresses in the Eastern Sverdrup Basin (Ellesmere and Axel Heiberg Island, Canadian Arctic Islands), *Tectonophysics*, 255, 229-241, 1996.
- [Louden et al., 1997] Louden, K.E., J.C. Osler, S.P. Srivastava, and C.E. Keen, Formation of oceanic crust at slow spreading rates: new constraints from an extinct spreading center in the Labrador Sea, abstract, *Ocean. Lit. Rev.*, 44, 5, 465, 1997.
- [Mateskon, 1985] Mateskon, S.R., Gravity and magnetic terrain effects computed by Gaussian quadrature integration, MS Thesis, Department of Geological Sciences, the Ohio State University, Columbus, OH, 1985.
- [McAdoo and Marks, 1992] McAdoo, D., K.M. Marks, Resolving Marine Gravity With ERS-1 Satellite Altimetry, *GRL*, 19, 22, 2271-2274, 1992.



- [McCormick and Thiruvathukal, 1976] McCormick, J.M., and J.V. Thiruvathukal, Elements of Oceanography, Saunders College Publishing, New York, 1976.
- [McKenzie and Fairhead, 1997] McKenzie, D., and D. Fairhead, Estimates of the effective elastic thickness of the continental lithosphere from Bouguer and free air gravity anomalies, *J. Geophys. Res.*, 102, B12, 27,523-727,552, 1997.
- [Meissner and Mooney, 1998] Meissner, R., and W. Mooney, Weakness of lower continental crust: A condition for delamination, uplift, and escape, *Tectonophysics*, 296, 47-60, 1998.
- [Morgan, 1981] Morgan, W.J., Hotspot tracks and the opening of the Atlantic and Indian Oceans *in* Emiliani, C. (ed.), *The Oceanic Lithosphere: The Sea*, volume 7, John Wiley and Sons, New York, 1981.
- [Morgan, 1983] Morgan, W.J., Hotspot tracks and the early rifting of the Atlantic, *Tectonophysics*, 94, 123-139, 1983.
- [Mueller, 1992] Mueller, I.I., Satellite Geodesy, class notes for Department of Geodetic Science and Surveying 777, the Ohio State University, Columbus, OH, 1992.
- [Müntener, and Hermann, 1996] Müntener, O., and J. Hermann, The Val Malenco Lower Crust - Upper Mantle Complex, and Its Field Relations (Italian Alps), *Schweiz. Mineral. Petrogr. Mitt.*, 76, 475-500, 1996.
- [Myhre et al., 1992] Myhre, A.M., O. Eldholm, J.I. Faleide, J. Skogseid, and E. Vågnes, Norway - Svalbard Continental Margin: Structural and Stratigraphical Styles *in* C.W. Poag and P.C. de Graciansky (eds.), *Geologic Evolution of Atlantic Continental Rises*, van Nostrand Reinhold, New York, 157-188, 1992.
- [Nadin et al., 1997] Nadin, P.A., N.J. Kusznir, and M.J. Cheadle, Early Tertiary plume uplift of the North Sea and Faeroe-Shetland Basins, *Earth Planet. Sci. Lett.*, 148, 109-127, 1997.
- [Nagarajan, 1994] Nagarajan, R., Gravity-geologic investigation of buried bedrock topography in northwestern Ohio, MS Thesis, Department of Geological Sciences, The Ohio State University, Columbus, OH, 1994.
- [NRC, 1991] National Research Council, Opportunities and Priorities in Arctic Geoscience, National Academy Press, Washington, D.C., 1991.
- [NSIDC, 1997] National Snow and Ice Data Center, SEASAT and GEOSAT Altimetry Data for the Antarctic and Greenland Ice Sheets, Digital data available from nsidc@kyros.colorado.edu, Boulder, Colorado: NSIDC Distributed Active Archive Center, University of Colorado at Boulder, 1997.
- [Neumann et al., 1993] Neumann, G.A., D.W. Forsyth, and D. Sandwell, Comparison of Marine Gravity From Shipboard and High-Density Satellite Altimetry Along the Mid-Atlantic Ridge. 30.5° – 35.5°S, *GRL*, 20, 15, 1639-1642, 1993.

- [Nielsen et al., 1997] Nielsen, T.K., H.C. Larsen, T. Dahl-Jensen, and J.R. Hopper, Contrasting Margin Style Formation Close to the Former Triple Junction South of Greenland, EOS, Am. Geophys. Union Trans., 78, 46, F668, 1997.
- [Nutman et al., 1996] Nutman, A.P., V.R. McGregor, C.R.L. Friend, V.C. Bennett, and P.D. Kinny, The Itsaq Gneiss Complex of southern West Greenland; the world's most extensive record of early crustal evolution (3900-3600 Ma), Precambrian Res., 78, 1-39, 1996.
- [O'Hanley, 1996] O'Hanley, D.S., Serpentinites: Records of tectonic and petrologic history, Oxford University Press, New York, 1996.
- [Oakey, 1994] Oakey, G., A structural fabric defined by topographic lineaments: Correlation with Tertiary deformation of Ellesmere and Axel Heiberg Islands, Canadian Arctic, J. Geophys. Res., 99, B10, 20,311-20,321, 1994.
- [O'Hanley, 1996] O'Hanley, D.S., Serpentinites: Records of Tectonic and Petrologic History, Oxford University Press, New York, 277, 1996.
- [Okulitch, 1991] Okulitch, A.V. (compiler), Geology of the Canadian Archipelago and North Greenland; Figure 2, *in* H.P. Trettin (ed.), Inuitian Orogen and Arctic Platform: Canada and Greenland, H.P., Geological Society of America, The Geology of North America, vol. E, scale 1: 2 000 000, 1991.
- [Olsen and Morgan, 1995] Olsen, K.H., and P. Morgan, Introduction: Progress in understanding continental rifts *in* Olsen, K.H. (ed.), Continental rifts: Evolution, structure, and tectonics, Elsevier, New York, Developments in Geotectonics, 25, 3-26, 1995.
- [Owen, 1983] Owen, H.G., Atlas of continental displacement, 200 million years to present, Cambridge University Press, New York, 1983.
- [Pari and Peltier, 1996] Pari, G., and W.R. Peltier, The Free-Air Gravity Constraint on Subcontinental Mantle Dynamics, J. Geophys. Res., 101, B12, 28,105-28,132, 1996.
- [Parker, 1973] Parker, R.L., The Rapid Calculation of Potential Anomalies, Geophys. J. R. astr. Soc., 31, 447-455, 1972.
- [Pedersen et al., 1989] Pedersen, R.B., G.R. Dunning, and B. Robins, U-Pb ages of nephiline syenite pegmatites from the Seiland Magmatic Province, N Norway *in* Gayer, R.A. (ed.), The Caledonide Geology of Scandinavia, Graham and Trotman, Boston, 3-8, 1989.
- [Press and Siever, 1982] Press, F. and R. Siever, Earth, third edition, W.H. Freeman and Company, San Francisco, 613, 1982.
- [Rao et al., 1993] Rao, D.B., M.J. Prakash, N.R. Babu, Gravity Interpretation Using Fourier Transforms and Simple Geometrical Models With Density Contrast, Geophysics, 58, 8, 1074-1083, 1993.
- [Rapp and Yi, 1996] Rapp, R.H., Y. Yi, Role of Ocean Variability and Dynamic Ocean Topography in the Recovery of the Mean Sea Surface and Gravity Anomalies Froma Satellite Altimeter Data, J. Geod., submittted, 1997.

- [Rapp et al., 1994] Rapp, R.H., Y. Yi, and Y.M. Yang, Mean Sea Surface and Geoid Gradient Comparisons With TOPEX Altimeter Data, *J. Geophys. Res.*, 99, C12, 24,657-24,667, 1994.
- [Rapp et al., 1991] Rapp, R.H., Y.M. Yang, and N.K. Pavlis, The Ohio State 1991 geopotential and sea surface topography harmonic coefficient models, Dept. of Geodetic Science and Surveying Report 410, the Ohio State University, Columbus, OH, 1991.
- [Reid and Jackson, 1997] Reid, I., and H.R. Jackson, Crustal structure of northern Baffin Bay: Seismic refraction results and tectonic implications, *J. Geophys. Res.*, 102, B1, 523-542, 1997.
- [Reid and Jackson, 1981] Reid, I., and H.R. Jackson, Oceanic spreading rate and crustal thickness, *Mar. Geophys. Res.*, 5, 165-172, 1981.
- [Roest, 1998] Roest, W.R., Circum-Greenland Plate Motions: New constraints from Magnetic and Gravity Data, EOS, *Am. Geophys. Union Trans.*, 79, 17, S72, 1998.
- [Roest and Srivastava, 1989] Roest, W.R., and S.P. Srivastava, Sea-floor spreading in the Labrador Sea: A new reconstruction, *Geology*, 17, 1000-10003, 1989.
- [Roman, 1996] Roman, D.R., Coherency Analysis of Altimetry Data in the Gulf of Mexico Region Using the Ohio State University Techniques, Exxon Exploration Company Report, Houston, Texas, 1996.
- [Roman and von Frese, 1998b] Roman, D. R. and R. R. B. von Frese, Crustal Geopotential Field Anomalies of Greenland, EOS, *Am. Geophys. Union Trans.*, 79, 17, S72, 1998.
- [Roman and von Frese, 1998a] Roman, D.R. and R. R. B. von Frese, Free-Air Gravity Anomaly Predictions from Spectrally Correlated Satellite Altimetry of Offshore Southern Africa and the Falkland Islands, Exxon Exploration Company Report, Houston, Texas, 1998.
- [Roman and von Frese, 1997a] Roman, D. R. and R. R. B von Frese, Gravity-Geologic Determination of Bathymetry from Altimeter-Implied Free-Air Gravity Anomalies, EOS, *Am. Geophys. Union Trans.*, 78, 17, S118, 1997.
- [Roman and von Frese, 1997b] Roman, D. R. and R. R. B. von Frese, Greenland Crustal Modeling and Mantle Interaction, EOS, *Am. Geophys. Union Trans.*, 78, 46, F713, 1997.
- [Roman et al., 1997] Roman, D.R., B. Csathó, K.C. Jezek, R.H. Thomas, W.B. Krabill, R.R.B. von Frese, and R. Forsberg, A Comparison of Geoid Undulation Models for West-Central Greenland, *J. Geophys. Res.*, vol. 102, no. B2, 2807-2814, 1997.
- [Roman et al., 1998] Roman, D.R., B. Csathó, K.C. Jezek, W.B. Krabill and K. Kuivinen, Gravity Values Measured on the Greenland Ice Sheet, BPRC Technical Report 98-01, Byrd Polar Research Center, The Ohio State University, Columbus, Ohio, 1998.

- [Roots and Srivastava, 1984] Roots, W.D., and S.P. Srivastava, Origin of the marine magnetic quiet zones in the Labrador and Greenland Seas, *Mar. Geophys. Res.*, 6, 395-408, 1984.
- [Sandwell and Smith, 1997] Sandwell, D.T., and W.H.F. Smith, Marine Gravity Anomalies From Geosat and ERS-1 Satellite Altimetry, *J. Geophys. Res.*, 102, B5, 10,039-10,054, 1997.
- [Scharroo and Visser, 1998] Scharroo, R., and P.N.A.M. Visser, Precise orbit determination and gravity field improvement for the ERS satellites, *J. Geophys. Res.*, 102, B5, 8113-8128, 1998.
- [Schwarz et al., 1990] Schwarz, K.P., M.G. Sideris, and R. Forsberg, The use of FFT techniques in physical geodesy, *Geophys. J. Int.*, 100, 485-514, 1990.
- [Scrutton, 1981] Scrutton, R.A., Crustal structure and development of sheared passive continental margins *in* R.A. Scrutton (ed.), *Dynamics of Passive Margins*, Geodynamics Series, volume 6, American Geophysical Union, Washington, D.C., 133-140, 1981.
- [Sellevoll et al., 1991] Sellevoll, M.A., S.J. Duda, A. Guterch, J. Pajchel, E. Perchue, and F. Thyssen, Crustal structure in the Svalbard region from seismic measurements, *Tectonophysics*, 189, 55-71, 1991.
- [Shive et al., 1992] Shive, P.N., R.J. Blakely, B.R. Frost, and D.M. Fountain, Magnetic properties of the lower crust *in* D.M. Fountain, R. Arculus, and R.W. Kay, *Continental Lower Crust*, *Developments in Geotectonics* 23, Elsevier, New York, 145-178, 1992.
- [Sleep, 1997] Sleep, N.H., Lateral flow and ponding of starting plume material, *J. Geophys. Res.*, 102, B5, 10,001-10,0012, 1997.
- [Smith et al., 1994] Smith, A.G., D.G. Smith, and B.M. Funnell, *Atlas of Mesozoic and Cenozoic Coastlines*, Cambridge University Press, New York, 1994.
- [Smith and Sandwell, 1994] Smith, W.H.F., and D.T. Sandwell, Bathymetric Prediction From Dense Satellite Altimetry and Sparse Shipboard Bathymetry, *J. Geophys. Res.*, 99, B11, 21,803-21,824, 1994.
- [Smith and Sandwell, 1997] Smith, W.H.F., and D.T. Sandwell, Global sea floor topography from satellite altimetry and ship depth soundings, *Science*, 277, 1956-1962, 26 September 1997.
- [Smith and Wessel, 1990] Smith, W.H.F. and P. Wessel, Gridding with continuous curvature splines in tension, *Geophysics*, 55, 293-305, 1990.
- [Snyder, 1984] Snyder, J.P., *Map Projections used by the U.S. Geological Survey*, U.S. Government Printing Office, WA, 1984.
- [Sohn and Csathó, 1998] Sohn, H.G., and B. Csathó, *Greenland GIS System (GGS)*, website:<http://polestar.mps.ohio-state.edu/~ckim/GSS.html>, 1998.

- [Sohn et al., 1994] Sohn, H.G., K.C. Jezek, R.H. Thomas, K. Kuivinen, and B. Csathó, Greenland ice sheet mapping with optical leveling and Global Positioning System, BPRC Technical Report 94-11, Byrd Polar research Center, the Ohio State University, Columbus, OH, 1994.
- [Srivastava, 1978] Srivastava, S.P., Evolution of the Labrador Sea and its bearing on the early evolution of the North Atlantic, *Geophys. J. R. Astron. Soc.*, 52, 313-357, 1978.
- [Srivastava, 1985] Srivastava, S.P., Evolution of the Eurasian Basin and its implications to the motion of Greenland along the Nares Strait, *Tectonophysics*, 114, 29-53, 1985.
- [Srivastava and Roest, 1995] Srivastava, S.P., W.R. Roest, Nature of Thin Crust Across the Southwest Greenland Margin and its Bearing on the Location of the Ocean-Continent Boundary *in* E. Banda, M. Torn'e, and M. Talwani (eds.), *Rifted Ocean-Continent Boundaries*, NATO ASI Series, Series C: Mathematical and Physical Sciences, Vol. 463, Kluwer Academic Publishers, Boston, 95-120, 1995.
- [Srivastava and Tapscott, 1986] Srivastava, S.P., and C.R. Tapscott, Plate kinematics of the North Atlantic, *in* Vogt, P.R. and B.E. Tucholke, eds., *The western North Atlantic region, The Geology of North America*, v. M, Geological Society of America, Boulder, Colorado, 379-404, 1986.
- [Stroud and Secrest, 1966] Stroud, A.H., and D. Secrest, *Gaussian Quadrature Formulas*, Prentice-Hall, New Jersey, 1966.
- [Sweeney and Weber, 1986] Sweeney, J.F., and J.R. Weber, Progress in understanding the age and origin of the Alpha Ridge, Arctic Ocean, *J. Geod.*, 6, 237-244, 1986.
- [Thomas et al., 1997] Thomas, R.H., B. Csathó, S. Gogineni, K.C. Jezek, and K. Kuivinen, Thickening of the Western Part of the Greenland Ice Sheet, *J. Glac.*, 43, 144, -, 1998.
- [Toft and Arkani-Hamed, 1993] Toft, P.B., and J. Arkani-Hamed, Induced Magnetization of the Oceanic Lithosphere and Oceanic-Continent Magnetization Contrast Inferred From Magsat Anomalies, *J. Geophys. Res.*, 98, B4, 6267-6282, 1993.
- [Torge, 1989] Torge, W., *Gravimetry*, Walter de Gruyter, New York, p. 465, 1989.
- [Tscherning et al., 1993] Tscherning, C.C., P. Knudsen, S. Ekholm, and O.B. Andersen, An Analysis of the Gravity Field in the Norwegian Sea and Mapping of the Ice Cap of Greenland Using ERS-1 Altimeter Measurements, *Proceedings, First ERS-1 Symposium*, Cannes, France, 4-6 November 1992, ESA SP-359, March 1993.
- [Turcotte and Schubert, 1982] Turcotte, D.L., and G. Schubert, *Geodynamics*, John Wiley and Sons, New York, 1982.
- [Verhoef et al., 1996] Verhoef, J., W.R. Roest, R. Macnab, J. Arkani-Hamed, and Members of the Project Team. Magnetic anomalies of the Arctic and North Atlantic Oceans and adjacent land areas; GSC Open File 3125, Parts a and b (CD-ROM and project report); Geological Survey of Canada, Dartmouth NS, 1996.

- [Vogt et al., 1982] Vogt, P.R., P.T. Taylor, L.C. Kovacs, and G.L. Johnson, The Canada Basin: Aeromagnetic Constraints on Structure and Evolution, *Tectonophysics*, 89, 295-336, 1982.
- [Vogt, 1986] Vogt, P.R., Geophysical and geochemical signatures and plate tectonics *in* B.G. Hurdle (ed.), *The Nordic Seas*, Springer-Verlag, New York, 413-664, 1986.
- [Vogt et al., 1998] Vogt, P.R., W.-Y. Jung, and J. Brozena, Arctic margin gravity highs remain puzzling, *EOS, Am. Geophys. Union Trans.*, 79, 49, 601, 605-606, 1998.
- [Wasilewski and Mayhew, 1982] Wasilewski, P.J., and M.A. Mayhew, Crustal xenolith magnetic properties and long wavelength anomaly source requirements, *Geophys. Res. Lett.*, 9, 4, 329-332, 1982.
- [Wasilewski and Mayhew, 1992] Wasilewski, P.J., and M.A. Mayhew, The Moho as a Magnetic Boundary Revisited, *Geophys. Res. Lett.*, 19, 22, 2259-2262, 1992.
- [Wasilewski et al., 1979] Wasilewski, P.J., H.H. Thomas, and M.A. Mayhew, The Moho as a magnetic boundary, *Geophys. Res. Lett.*, 6, 541-544, 1979.
- [Weatherford, 1994] Weatherford, L., Drilling Unearths "Fire and Ice" at Southeast Greenland Margin, *EOS, Am. Geophys. Union Trans.*, 75, 35, 401, 1994.
- [Webb, 1994] Webb, S., Exploring Arctic History Through Scientific Drilling, *EOS, Am. Geophys. Union Trans.*, 75, 25, 281, 1994.
- [Weber, 1987] Weber, J.R., Maps of the Arctic Basin Sea Floor Part II: Bathymetry and gravity of the Alpha Ridge: The 1983 CESAR expedition, *Arctic*, 40, 1, 1-15, 1987.
- [Weidick, 1993] Weidick, A., Neoglacial Change of Ice Cover and the Related Response of the Earth's Crust in West Greenland, *Rapp. Grønlands geol. Unders.*, 159, 121-126, 1993.
- [Wessel and Lyons, 1997] Wessel, P., and S. Lyons, Distribution of large Pacific seamounts from Geosat/ERS 1: Implications for the history of intraplate volcanism, *J. Geophys. Res.*, 102, B10, 22,459-22,476, 1997.
- [White and McKenzie, 1989] White, R. and D. McKenzie, Magmatism at Rift Zones: The Generation of Volcanic Continental Margins and Flood Basalts, *J. Geophys. Res.*, 94, B6, 7685-7729, 1989.
- [Yale et al., 1995] Yale, M.M., D.T. Sandwell, and W.H.F. Smith, Comparison of along-track resolution of stacked Geosat, ERS 1, and TOPEX satellite altimeters, *J. Geophys. Res.*, 100, B8, 15,117-15,127, 1995.
- [Zhao, 1989] Zhao, S., The computation of detailed geoids using the Fast Fourier Transform method, Dept. of Geodetic Science and Surveying Report 400, 1989.
- [Zhong, 1997] Zhong, S., Dynamics of Crustal Compensation and Its Influences on Crustal Isostasy, *J. Geophys. Res.*, 102, B7, 15,187-15,299, 1997.

[Zonenshain and Kuzmin, 1997] Zonenshain, L.P., and M.I. Kuzmin, Paleogeodynamics, American Geophysical Union, Washington, D.C., 218, 1997.