



Universität Hamburg



ZENTRUM FÜR
MEERES- UND KLIMAFORSCHUNG

Liste der von ZMK-Wissenschaftlern veröffentlichten Literatur aus dem Zeitraum 1999-2004¹

Stand 09/2004

MI = Meteorologisches Institut

IfM = Institut für Meereskunde

IfG = Institut für Geophysik

IfBM = Institut für Bio-Geochemie und Meereschemie

IHF = Institut für Hydrobiologie und Fischereiwissenschaft

FNU = Forschungsstelle ‚Nachhaltige Umweltentwicklung‘

¹ Aufgeführt sind Publikationen deren Erscheinungsdatum in den Zeitraum 1999-2004 fällt, sowie eingereichte Publikationen. Die Liste folgt keiner durchgehend chronologischen oder alphabetischen Reihenfolge.

MI

Beese, F. O., K. Fraedrich, P. Klemmer, J. Kokott, L. Kruse-Graumann, C. Neumann, O. Renn, H.-J. Schellnhuber, E.-D. Schulze, M. Tilzer, P. Velsinger, and H. Zimmermann, 1999: *Welt im Wandel: Umwelt und Ethik* (World in Transition: Environment and Ethics) Metropolis-Verlag, Marburg, 149pp.

Betancor Gothe, M., M. Dreyer, S. Bakan, C. Costanzo (1999): Ground based passive remote sensing of ice clouds with scattered solar radiation in the near infrared. *Physics and Chem. Earth (B)*, 24, 219-224.

Brümmer, B., 1999: Roll and cell convection in wintertime Arctic cold-air outbreaks. *J. Atm. Res.*, 56, 2613-2636.

Brümmer, B. and H. Hoerber, 1999: A mesoscale cyclone over the Fram Strait and its effects on sea ice. *J. Geophys. Res.*, 104, 19.085-19.098.

Brümmer, B., S. Thiemann, 1999: Flugzeugmessungen in arktischen Zyklonen. Vortrag auf dem ACSYS-Status-Seminar, 8. und 9. Dezember 1998 in Bonn, Zusammenfassung der Zwischenberichte, S. 61-70.

Costanzo, C., S. Bakan 1999: Estimation of cirrus and multi-layer cloud parameters and multispectral measurements in the near-infrared. *Physics and Chem. Earth (B)*, 24, 191-196.

Donat, J. and Schatzmann, M., 1999: Wind Tunnel Experiments of Single Phase Heavy Gas Jets Released Under Various Angles into Turbulent Cross Flows. *Journ. Wind Eng. and Ind. Aerodynamics*, 83, pp. 361-370.

Dorn, M., and von Storch, H., 1999: Identification of regional persistent patterns through Principal Prediction Patterns. *Beitr. Phys. Atmos.*, 72, 105-111.

Fraedrich, K., 1999: A theory for the response of tropical convective complexes to primary circulation induced heating. *Meteorol. Atmos. Phys.*, 67, 83-92.

Fraedrich, K., A. Kleidon, and F. Lunkeit, 1999: A green planet versus a desert world: Estimating the effect of vegetation extremes on the atmosphere. *J. Climate*, 12, 3156-3163.

Frisius, T., 1999: A simple model for the baroclinic life cycle of meridionally elongated eddies in uniform shear. *J. Atmos. Sci.*, 56.

Gerstengarbe, F.-W., P.C. Werner, and K. Fraedrich, 1999: Applying non-hierarchical cluster analysis algorithms to climate classification: some problems and their solution. *Theor. Appl. Climatol.*, 64, 143-150.

Grassl, H. (1999): Global climate change. *Interdisciplinary Science Reviews*, Vol. 24, No. 3, 185-194.

Grassl, H. (1999): The cryosphere: an early indicator and global player. *Polar Research*, 18(2), 119-125.

Leitl, B., Schatzmann, M., 1999: Generation of high resolution reference data for the validation of micro-scale models. In: *Neuere Entwicklungen bei der Messung und Beurteilung der Luftqualität*. VDI-Kommission Reinhaltung der Luft, ISBN 3-18-091443-2, 1443, pp 647-656.

Leitl, B. und Schatzmann, M., 1999: Generierung umfassender Vergleichsdatensätze für die Entwicklung und Validierung mikroskaliger Ausbreitungsmodelle. *Gefahrstoffe-Reinhaltung der Luft*, 59, 10/99, Springer VDI-Verlag, pp. 391-395.

Luksch, U., and von Storch, H., 1999: An empirical approach for estimating macro-turbulent heat transport conditional upon the time mean state. *J. Atmos. Sci.*, 56, 2070-2080.

Meroney, R.N., Leitl, B., Rafailidis, S., and Schatzmann, M., 1999: Wind tunnel and numerical modeling of flow and dispersion about several building shapes. *Journ. of Wind Engineering and Industrial Aerodynamics*, 81, pp. 333-345.

Müller, G., Brümmer, B., and Alpers, W., 1999: Roll convection within an Arctic cold-air outbreak: interpretation of in-situ aircraft measurements and spaceborne SAR Imagery by a three-dimensional atmospheric model. *Mon. Wea. Rev.*, 127, 363-380.

Pavageau, M., and Schatzmann, M., 1999: Wind Tunnel Measurements of Concentration Fluctuations in an Urban Street Canyon. *Atmospheric Environment*, 33, pp. 3961-3971.

Raible C. C., G. Bischof, K. Fraedrich, and E. Kirk, 1999: Statistical single station short-term forecasting of temperature and probability of precipitation: Area interpolation and NWP-combination. *Wea. Forecasting*, 14, 203-214.

Schatzmann, M., 1999: Wind Tunnel Modelling of Fog Droplet Deposition on Coniferous Trees. *Journ. of Wind Engineering and Industrial Aerodynamics*, 83, 371-380.

Schatzmann, M., 1999: Zertifizierung von Gutachtern? Editorial, *Gefahrstoffe-Reinhaltung der Luft*, 59, p. 317-318.

Schatzmann, M., 1999: Zertifizierung von Modellen? Editorial, *Gefahrstoffe-Reinhaltung der Luft*, 59, p. 365.

Schatzmann, M., 1999: Report on COST action 615 'Database, Monitoring and Modelling of Urban Air Pollution'. *Int. Journal of Environmental and Pollution*, 14, pp.18-27.

Schatzmann, M., Leitl, B. und Liedtke, J., 1999: Validierung numerischer Modelle für Ausbreitungssimulationen in Stadtgebieten. *Gefahrstoffe-Reinhaltung der Luft*, 59, No. 9/99, Springer VDI-Verlag, S. 349-355.

Schatzmann, M., Liedtke, J., Leitl, B., 1999: Dispersion models for urban applications-A critical assessment of the present 'state of application'. In: *Neuere Entwicklungen bei der Messung und Beurteilung der Luftqualität*. VDI-Kommission Reinhaltung der Luft, ISBN 3-18-091443-2, 1443, pp.99-115.

von Salzen K. and Schlünzen K.H. (1999): A prognostic physico-chemical model of secondary and marine inorganic multicomponent aerosols I models tests. *Atmos. Environ.*, 33, 567 - 576.

von Salzen K. and Schlünzen K.H. (1999): A prognostic physico-chemical model of secondary and marine inorganic multicomponent aerosols: II. model application. *Atmos. Environ.*, 33, 1543 - 1552.

von Salzen K. and Schlünzen K.H. (1999): Simulation of the dynamics and composition of secondary and marine inorganic aerosols in the coastal atmosphere. *J. Geophys. Res.*, D 23 , 30201 - 30217.

Smith, L.A., C. Ziehmann, and K. Fraedrich, 1999: Uncertainty dynamics and predictability in chaotic systems. - *Q. J. R. Meteorol. Soc.*, 125, 2855-2886

Schulz, M., J. van Beusekom, K. Bigalke, U. Brockmann, W. Dannecker, H. Gerwig, H. Grassl, C.-J. Lenz, K. Michaelson, U. Niemeier, T. Nitz, E. Plate, T. Pohlmann, T. Raabe, A. Rebers, V. Reinhardt, M. Schatzmann, K.H. Schlünzen, R. Schmidt-Nia, T. Stahlschmidt, G. Steinhoff, K. von Salzen, 1999: The atmospheric impact on fluxes of nitrogen, POPs and energy in the German Bight. *Deutsche Hydrographische Zeitschrift*, Vol. 51 (1999), No. 2/3, 133-154.

Stehr, N., and von Storch, H., 1999: *Wetter, Klima, Mensch*. Beck Verlag, 128 pp.

von Storch, J.-S., 1999: What determines the spectrum of a climate variable at zero frequency? *J. Climate*, 12, 2124-2127.

von Storch, J.-S., 1999: On the reddest atmospheric modes and the forcings of the spectra of these modes. *J. Atmos. Sci.*, 56, 1614-1626.

Bagliani, M., K. Fraedrich, J. von Hardenberg, F. Lunkeit, and A. Provencale, 2000: Lagrangian tracer homogenization and dispersion in a simplified atmospheric GCM. *Il Nuovo Cimento*, 23C, 433-448.

Beese, F. O., K. Fraedrich, P. Klemmer, J. Kokott, L. Kruse-Graumann, C. Neumann, O. Renn, H.-J. Schellnhuber, E.-D. Schulze, M. Tilzer, P. Velsinger, and H. Zimmermann, 2000: *Welt im Wandel: Erhaltung und nachhaltige Nutzung der Biosphäre*. Berlin, Heidelberg, New York: Springer, 482pp. Translated: *World in Transition: Conservation and Sustainable Use of the Biosphere*. Earthscan, London 482pp.

Blender, R., M. Schubert, 2000: Cyclone tracking in different spatial and temporal resolutions. *Mon. Wea.*

Rev., 128, 377-384.

Brümmer, B., (Ed.) 2000: Fieldexperiment FRAMZY 1999: Cyclones over the Fram Strait and their impact on sea ice. – Field report with examples of measurements. Berichte Zentrum f. Meeres- und Klimaforschung, Reihe A, Nr. 33, 178 pp.

Brümmer, B., and S. Pohlmann 2000: Wintertime roll and cell convection over Greenland and Barents Sea regions: A climatology, JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES 105 (D12): 15559-15566

Brümmer, B. S. Thiemann, and A. Kirchgäßner, 2000: A cyclone statistics for the Arctic based on European Centre re-analysis data. Meteorol. Atm. Phys. 75, 233-250.

Fraedrich, K., R. Morison, and L.M. Leslie, 2000: Improved tropical cyclone track predictions by error recycling. *Meteorol. Atmos. Phys.*, 74, 51-56.

Franzke, C., K. Fraedrich and F. Lunkeit, 2000: Low frequency variability in a simplified atmospheric global circulation model: Storm track induced 'spatial resonance'. *Q. J. R. Meteorol. Soc.*, 126, 2691-2708.

Fisher, B.E.A., Kukkonen, J., and Schatzmann, M., 2000: Meteorology applied to urban air pollution problems -COST 715. Int. Journ. of Environment and Pollution 16, 1-6.

Fraedrich, K., R. Morrison, and L.M.Leslie, 2000: Improved tropical cyclone track predictions by error recycling. - Meteorology and Atmospheric Physics, 69, in press. (*Kat. 2*)

Grassl, H. (2000): Status and improvements of coupled general circulation models. Science, Vol. 288, 1991-1997.

Graßl, H., U. Schotterer, P. Andermatt (2000): Internationally co-ordinated Global Change research programmes - a prerequisite for Sustainable Development. GAIA, Vol. 9, No. 1, 37-40.

Graßl, H., U. Schotterer, P. Andermatt (2000): Heavy Metal Pollution - from a rapidly growing threat to a long lasting but decaying problem in Europe. GAIA, Vol. 9, No. 2, 109-112.

Grassl, H. (2000): Globale und allgegenwärtige Umweltprobleme: Bestands-aufnahme und qualitative Einschätzung, in: R. Kreibich und U.E. Simonis (Hrsg.): Global Change - Globaler Wandel, Ursachenkomplexe und Lösungsansätze, Berlin Verlag, 17-30.

Graßl, H., U. Schotterer, P. Andermatt (2000): From monitoring nuclear fallout to climate variability - the Global Network for Isotopes in Precipitation. GAIA. Vol. 9, No. 3, 211-214.

Grassl, H. (2000): Climate and oceans. in: J. Church, J. Gould, G. Siedler (Eds.): Ocean Circulation and Climate: Observing and Modelling the Global Ocean. Academic Press, 3-10, ISBN 0-12-641351-7.

von Hardenberg, J., K. Fraedrich, F. Lunkeit, and A. Provenzale, 2000: Transient chaotic mixing during a baroclinic life cycle. Chaos, 10, 122-134.

Kleidon, A., K. Fraedrich, and M. Heimann, 2000: A green planet versus a desert world: Estimating the maximum effect of vegetation on the surface energy balance. - Climate Change, 44, 471-493. (*Kat. 2*)

Kukkonen, J., Nikmo, J , Ramsdale, S.A., Martin, D., Webber, D.M., Schatzmann, M., and Liedtke, J. (2000): Dispersion from Strongly Buoyant Sources. In: Gryning, S.E. and Batchvarova, E. (Eds.) Air Pollution Modeling and Its Application XIII, Kluwer Academic/Plenum Publ, pp. 539-547.

Leitl, B. and Schatzmann, M. (2000): Physical Modelling of Emissions from Naturally Ventilated Underground Parking Garages. Environmental Monitoring and Assessment, 65, pp.221-229.

Leitl, B. (2000): Validation Data for Microscale Dispersion Modelling. EUROTRAC Newsletter, 22, pp. 28-32.

Lenz C.-J., Müller F. and Schlünzen K.H. (2000): The sensitivity of mesoscale chemistry transport model results to boundary values. *Env. Monitoring and Assessment*, 65, 287 -298.

Müller, F., Schlünzen, K.H., and Schatzmann, M. (2000): Test of two numerical solvers for chemical reaction mechanisms in a 3D-air quality model. *Journ. Environmental Modelling and Software*, 15, pp. 639-646.

Renn, O., Klinke, A., Schellhuber, H. J. und Fraedrich, K., 2000: Das Risikokzept des Wissenschaftlichen Beirats der Bundesregierung Globale Umweltveränderungen (WBGU). *Zeitschrift f. Angewandte Umweltforschung*, 13, 210ff.

Schatzmann, M. (2000): Report on COST action 615 'Database, Monitoring and Modelling of Urban Air Pollution'. *Int. J. Environment and Pollution*, Vol. 14, pp.18-27.

Schatzmann, M., Leitl, B., Hopf, D., Pflugbeil, M. und Frenzel, P.(2000): Ermittlung des Gefährdungspotentials durch Luftschadstoffe bei Baumaßnahmen an einem Kraftwerk mit Rauchgasableitung über Kühltürme. *Gefahrstoffe - Reinhaltung der Luft*, 60, Nr. 3, pp. 105-112.

Schatzmann, M., Leitl, B., Liedtke, J.: (2000): Dispersion in Urban Environments-Comparison of Field Measurements with Wind Tunnel Results". *Environmental Monitoring and Assessment*, 65, pp. 249-257.

Sheng L., Schlünzen K.H. and Wu Z. (2000): Three dimensional numerical simulation of the mesoscale wind structure over Shandong peninsula. *Acta Meteorol. Sinica*, 1, 97 - 107.

Sickmüller, M., R. Blender, and K. Fraedrich, 2000: Observed winter cyclone tracks of the northern hemisphere in re-analysed ECMWF data. - *Quarterly Journal of the Royal Meteorological Society*, 126, 1-30. (*Kat. 2*)

Sievers, O., K. Fraedrich, and C.C. Raible, 2000: Self-adapting analog ensemble predictions of tropical cyclone tracks. *Wea. Forecasting*, 15, 623-629.

Sura, P., F. Lunkeit, and K. Fraedrich, 2000: Decadal variability in a simplified wind-driven ocean model. *J. Phys. Oceanogr.*, 30, 1917-1930.

Schulz M., van Beusekom J., Bigalke K., Brockmann U., Dannecker W., Gerwig H., Grassl H., Lenz C.-J., Michaelsen K., Niemeier U., Nitz T., Plate E., Pohlmann T., Raabe T., Rebers A., Reinhardt V., Schatzmann M., Schlünzen K.H., Schmidt-Nia R., Stahlschmidt T., Steinhoff G. and von Salzen K. (2000): The atmospheric impact on fluxes of matter and energy in the German Bight. *Deutsche Hydrographische Zeitschrift*, 51, 133-154.

Werner, P.C., F.-W. Gerstengarbe, K. Fraedrich, and H. Oesterle, 2000: A climate change signal in the North Atlantic/European sector. *Int. J. Climatol.*, 20, 463-471.

Blender, R., 2001: Renormalisation group analysis of autoregressive processes and fractional noise. *Physical Review E*, 64, 067101.

Brümmer, B., G. Müller, B. Affeld, R. Gerdes, M. Karcher, and F. Kauker, 2001: Cyclones over Fram Strait: impact on sea ice and variability. *Polar Research* 20, 147-152.

Carissimo, B., Jagger, S.F., Daish, N.C., Halford, A., Selmer-Olsen, S., Riikonen, K., Perroux, J.M., Wuertz, J., Bartzis, J.G., Duijm, N.J., Ham, K., Schatzmann, M., Hall, R. (2001): The SMEDIS Database and Validation Exercise. *Int. Journal of Environment and Pollution*, 16, pp. 614-629.

de Leeuw G., Cohen L.H., Frohn L.M., Geernaert G., Hertel O., Jensen B., Jickells T., Klein L., Kunz G.J., Lund S., Moermann M.M., Müller F., Pederson B., Von Salzen K., Schlünzen K.H., Schulz M., Skjoth C.A., Sorensen L.L., Spokes L., Tamm S. and Vignati E. (2001): Atmospheric input of nitrogen into the North Sea: ANICE project overview. *Continental Shelf Research*, 21, 2073 - 2094.

Fisher, B.E.A., Kukkonen, J., and Schatzmann, M., (2001): Meteorology Applied to Urban Air Pollution Problems. *Int. Journ. of Environment and Pollution*, 16, 1-6.

Fraedrich, K. and T. Frisius, 2001: Two-level primitive equation baroclinic instability on an f-plane. *Q. J. R. Meteorol. Soc.*, 127, 2053-2068.

Fraedrich, K., F.W. Gerstengarbe, and P.C. Werner, 2001: Climate shifts in the last century. *Climatic Change*, 50, 405-417.

Franzke, C., K. Fraedrich, and F. Lunkeit, 2001: Teleconnections and low frequency variability in idealised experiments with two storm tracks. *Q. J. R. Meteorol. Soc.*, 127, 1321-1339.

Graßl, H., U. Schotterer, P. Andermatt (2001): Intergovernmental panel on climate change - Global action needs global assessment of knowledge. GAIA. Vol. 10, No. 1, 45-48.

Grassl, H. (2001): Climate and Oceans. in: Ocean Circulation and Climate, Academic Press, ISBN 0-12-641351-7, 3-9.

Graßl, H., U. Schotterer, P. Andermatt (2001): Partitioning of anthropogenic carbon dioxide – The fragile role of carbon sinks. GAIA, Vol. 10, No. 3, 199-202.

Grassl, H. (2001): Understanding climate variability: A prerequisite for predictions and climate change detection. in: E. Ehlers and T. Krafft (Eds.): Understanding the Earth System: Compartments, Processes and Interactions. Springer-Verlag, ISBN 3-540-67515-9, 139-146.

Grassl, H. (2001): Climate protection as the key to sustainable development. in: A. Markandya and N. Dale (Hrsg.): Measuring Environmental Degradation - Developing Pressure Indicators for Europe. Edward Elgar Publ. Cheltenham, UK, ISBN 1-84064-380-3, 54-62.

Grassl, H. (2001): Research Objectives of the World Climate Research Programme. In: L.O. Bengtsson and C.U. Hammer (Ed.): Geosphere-Biosphere Interactions and Climate, Cambridge Press, 280-284.

Jiang, J., K. Fraedrich, and Y.-R. Zou, 2001: A scanning t-test of multiscale abrupt changes and its coherence analysis. *Chinese Journal of Geophysics*, 44, 31-38.

Leitl, B., Schatzmann, M. (2001): Physical Modelling of Microscale Flow and Dispersion Phenomena in Idealized Urban Structures. In: Midgley, P.M., Reuther, M., and Williams, M.(Ed.) Transport and Chemical Transformation in the Troposphere. Springer Verlag, ISBN 3-350-41983-7, pp. 183-188.

Lunkeit, F, 2001: Synchronisation experiments with an atmospheric global circulation model. *Chaos*, 11, 47-51.

Müller, F., Schlünzen, K.H., and Schatzmann, M. (2001): Evaluation of the chemistry-transport model MECTM using TRACT-measurements - Effect of different solvers for the chemical mechanism. In: Gryning and Schiermeier (Eds): Air Pollution Modelling and Its Application XIV. Kluwer Acad./Plenum Publ., New York, pp. 583-590.

Pavageau, M., Rafailidis, S., and Schatzmann, M. (2001): A Comprehensive Experimental Databank for the Verification of Urban Car Emission Dispersion Models. *Int. Journ. of Environment and Pollution*, 15, pp. 417-425.

Raible, C., G. Bischof, K. Fraedrich, and E. Kirk: Comments on "Statistical Single-Station Short Term Forecasting of Temperature and Probability of Precipitation: Area Interpolation and NWP Combination". *Wea. Forecasting*, 16, 768-770.

Raible, Chr., U. Luksch, K. Fraedrich, and R. Voss, 2001: North Atlantic decadal regimes in a coupled GCM simulation. *Climate Dynamics*, 18, 321-330.

Raible, C. C., E. Kirk, K. Fraedrich, 2001: Kurzfristvorhersagen von Niederschlagswahrscheinlichkeit und Temperatur. *Promet*, 27, 80-86.

Sura, P., K. Fraedrich, and F. Lunkeit, 2001: Regime transitions in a stochastically forced double-gyre model. *J. Phys. Oceanogr.*, 31, 411-426.

Schatzmann, M., Brechler, J., and Fisher, B. (Eds.) (2001): Preparation of Meteorological Input Data for Urban Site Studies. Report EUR19446, Office for Official Publications of the European Communities, ISBN 92-894-0923-1, 103p.

Schatzmann, M. (2001): Physical Modelling of Flow and Dispersion. In: v. Storch, H. (Ed.) ,Models in Environmental Research', Springer Verlag Heidelberg, ISBN 3-540-67862-X, pp. 109-126.

Walter, K., U. Luksch, and K. Fraedrich, 2001: A response climatology of idealised midlatitude SST anomaly experiments with and without stormtrack. *J. Climate*, 14, 467-484.

Yano, Jun-Ichi, K. Fraedrich, and R. Blender, 2001: Tropical convective variability as 1/f-noise. *J. Climate*, 14, 3608-3616.

WBGU (Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen), Graßl, H., Kokott, J., Kulesa, M., Luther, J., Nuscheler, F., Sauerborn, R., Schellnhuber, H.-J., Schubert, R., Schulze, E.-D., : World in Transition 2: New Structures for Global Environmental Policy. London: Earthscan 2001, ISBN 1-85383-952-7

WBGU (Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen), Graßl, H., Kokott, J., Kulesa, M., Luther, J., Nuscheler, F., Sauerborn, R., Schellnhuber, H.-J., Schubert, R., Schulze, E.-D., : The Johannesburg Opportunity: Key Elements of a Negotiation Strategy. WBGU Policy Paper 1. Berlin : WBGU 2001, 20 papers, free of charge, ISBN 3-9807589-6-6

WBGU (Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen), Graßl, H., Kokott, J., Kulesa, M., Luther, J., Nuscheler, F., Sauerborn, R., Schellnhuber, H.-J., Schubert, R., Schulze, E.-D., : World in Transition: Conservation and Sustainable Use of the Biosphere. 1999 Report. London: Earthscan 2001, ISBN 1-85383-802-0

Brümmer, B., Kirchgäßner, A., Müller, G., Schröder D.; Lainiainen, J., and T. Vihma, 2002: BALTIMOS field experiments: A comprehensive atmospheric boundary layer data set for model validation over the open and ice-covered Baltic Sea. *Boreal Environment Research (Boreal Env. Res., BER) Vol. 7, No. 4, 371-378.*

Brümmer, B., Schröder, D., Launiainen, J., Vihma, T., Smedman, A.-S., and M. Magnusson 2002: Temporal and spatial variability of surface fluxes over the ice edge zone in the northern Baltic Sea. *J. Geophys. Res., Vol. 107, No. C8, 10.1029/2001JC000884*

Brümmer, B. and S. Thiemann, 2002: The atmospheric boundary layer in an Arctic wintertime on-ice air flow. *Boundary-Layer Meteorol. 104, 53-72.*

Chlond, A., and H. Grassl (2002): The atmospheric boundary layer – Special issue honouring the memory of Hans Hinzpeter. *Meteorologische Zeitschrift. Vol. 11, No. 4, 227.*

Etling, D., Harbusch, E., and B. Brümmer, 2002: Large eddy simulation of an off-ice air flow during BASIS, *Boreal Environment Research (Boreal Env. Res., BER) Vol. 7, 225-228.*

Etling, D., Harbusch, G., and B. Brümmer 2002: Large-Eddy-Simulation of an off-ice airflow during BASIS, *Boreal Environment Research (Boreal Env. Res., BER) Vol. 7, No. 3, 225-228.*

Fraedrich, K., 2002: Fickian diffusion and newtonian cooling: A concept for noise induced climate variability with long-term memory? *Stochastics and Dynamics, 2, 403-412.*

Grassl, H. (2002): HYPAM. *Meteorologische Zeitschrift, Vol. 11, No. 1, 2-4.*

Graßl, H. (2002): Internationale Koordination der Erforschung globalen Wandels. *GAIA, Vol 11, No. 1, 35-38.*

Grassl, H. (2002): CEOP – Global monitoring for improved prediction. *CEOP, Newsletter 2, 1.*

Graßl, H. (2002): Das Klimasystem. *Promet, Jahrg. 28, Nr. 3/4, 82-84.*

Graßl, H. (2002): Klimaschutz – in der Sackgasse? In: G. Hempel, M. Schulz-Baldes (Hrsg.): *Nachhaltigkeit und globaler Wandel – Guter Rat ist teuer*, Peter Lang Verlag, Frankfurt, 121-131.

Graßl, H. (2002): Messnetze zur Untersuchung des Klimas: Standardisieren und Globalisieren. W. Hauser (Hrsg.): *Klima. Das Experiment mit dem Planeten Erde*, Deutsches Museum, München, 18-53.

Jiang, J., R. Mendelsohn, F. Schwing, K. Fraedrich, 2002: Coherency detection of multiscale abrupt changes in historic Nile flood levels. *Geophys. Res. Letters, 29, 8, 112-(1-4).*

Jost, V., S. Bakan, and K. Fennig, 2002: HOAPS - A new Satellite-derived Freshwater Flux Climatology,

Meteorol. Z., 61-70.

Krüger, O. and Graßl, H. (2002) The indirect effect of aerosols over Europe, *Geophysical Research Letters*, vol. 29, no. 19, 1925, doi:10.1029/2001GL014081.

Krueger, O., H. Grassl (2002): The indirect aerosol effect over Europe. *Geophysical Research Letters*, Vol. 29, No. 19, 1925, doi:10.1029/2001GL014081, 2002.

Müller, W., R. Blender, and K. Fraedrich, 2002: Low frequency variability in idealised GCM experiments with circumpolar and localised storm tracks. *Nonlinear Processes Geophys.*, 9, 37-49.

Notz D., McPhee M.G., Worster M.G., Maykut G.A., Schlünzen K.H. and Eicken H. (2002): Impact of underwater-ice evolution on Arctic summer sea ice. *J. Geophys. Res.*, **108**, C7, 3223, doi: 10.1029/2001JC001173

Pascheke, F., Leitl, B., and Schatzmann, M. (2002): Results from Recent Observations in an Urban Boundary Layer. Workshop on Urban Boundary Layer Parameterisations, Office for Official Publications of the European Communities, ISBN 92-894-4143-7, pp. 73-83.

Pozdnyakov, D., A. Lyaskovsky, H. Grassl, L. Pettersson (2002): Numerical modelling of transspectral processes in natural waters: implications for remote sensing. *Int. J. Remote Sensing*, 23, 8, 1581-1607.

Schatzmann, M., and Leitl, B. (2002): Validation and application of obstacle resolving urban dispersion models. *Atmospheric Environment*, Vol.36, pp. 4811-4821.

Schatzmann, M., and Leitl, B. (2002): Model validation at the local scale. In: Midgley, P.M., and Reuther, M. (Eds.) *Transport and Chemical Transformation in the Troposphere*, Margraf Verlag, ISBN 3-8236-1385-5, pp. 183-188.

Schatzmann, M. (2002): Einführung von gestuften Studienabschlüssen im Studienfach Meteorologie an der Universität Hamburg. *Mitteilungen der Deutschen Meteorologischen Gesellschaft*, ISSN 0177-8501, Heft 3, S. 8-11.

Schatzmann, M. and Leitl, B. (2002) Obstacle resolving dispersion models and their application. In: Chicherin, S.S. (Ed.) *Problems of atmospheric boundary layer physics and air pollution*. Verlag Hydrometeoizdat, St. Petersburg, ISBN 5-286-01449-6, 216-229.

Schlünzen K.H. (2002):Simulation of transport and chemical transformations in the atmospheric boundary layer - review on the past 20 years developments in science and practice. *Meteorol. Zeitschrift*, **11**, 303-313.

Stoekelhuber, B. M., M. Wiesmann, E. Kirk, K. Suden, H. D. Weiss, 2002: The impact of seasonal and meteorological conditions on the incidence of thrombotic haemodialysis shunt occlusions. *Thromb. Haemost.*, **88**, 1074-1076.

Vihma, T. and B. Brümmner, 2002: Observations and modelling of of on-ice and off-ice air flow over the Northern Baltic Sea. *Boundary-Layer Meteorol.* **103**, 1-27.

WBGU (Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen), Graßl, H., Kokott, J., Kullessa, M., Luther, J., Nuscheler, F., Sauerborn, R., Schellhuber, H.-J., Schubert, R., Schulze, E.-D., : Charging the Use of Global Commons, Spezial Report. Berlin: WBGU 2002, 48 pages, free of charge, ISBN 3-9807589-8-2

Blender, R., and K. Fraedrich, 2003: Long time memory in global warming simulations. *Geophys. Res. Letters*, **30**, 14, 7-(1-4).

Blender, R., U. Luksch, K. Fraedrich, and C. Raible, 2003: Predictability study of the observed and simulated European climate using linear regression. *Q. J. R. Meteorol. Soc.*, **129**, 2299-2313.

Bordi, I., K. Fraedrich, J. Jiang, and A. Sutera, 2003: Dry and wet periods in Eastern China watersheds: Patterns and predictability. *Journal of Lake Sciences*, **15**, 56-67.

Borrego, C., Schatzmann, M. and Galmarini, S. (2003) Quality Assurance of Air Pollution Models. In: Moussopoulos, N. (Ed.): *Air Quality in Cities*. Springer-Verlag, ISBN 3-540-00842-x, pp. 155-183.

- Brümmer, B., Müller, G., and H. Hoerber, 2003:** A Fram Strait cyclone: properties and impact on ice drift as measured by aircraft and buoys. *J. Geophys. Res.*, Vol. 108, No. D7, 4217.
- Feichter, J., R. Sausen, H. Graßl, M. Fiebig (2003):** Comment on „Control of fossil-fuel particulate black carbon and organic matter, possibly the most effective method of slowing global warming“ by M.Z. Jacobson, *J. Geophys. Res.*, 108, D24, 4767.
- Fraedrich, K., C.C. Raible, and F. Sielmann, 2003:** Analog ensemble forecasts of tropical cyclone tracks in the Australian region. *Wea. Forecasting*, 18, 3-11.
- Fraedrich, K., and R. Blender, 2003:** Scaling of atmosphere and ocean temperature correlations in observations and climate models. *Phys. Rev. Lett.*, 90, 108501-(1-4).
- Fraedrich, K., E. Kirk, U. Luksch und F. Lunkeit, 2003:** Ein Zirkulationsmodell für Forschung und Lehre. *Promet*, 29, 34-48.
- Graßl, H. (2003):** Natürliche Klimaschwankungen – Eine Einführung. *Promet*, 29, Nr. 1-4, 1-2.
- Junge, M. M. and D. B. Stephenson, 2003:** Mediated and direct effects of the North Atlantic ocean on winter temperatures in northwest Europe. *Int. Journal Climat.*, 23, 245-261.
- Kleidon, A., K. Fraedrich, T. Kunz, and F. Lunkeit, 2003:** The atmospheric circulation and states of maximum entropy production. *Geophys. Res. Letters*, 30, 23, 9-(1-4).
- Klepp, C., S. Bakan, and H. Graßl, 2003:** Improvements of satellite derived cyclonic rainfall over the North Atlantic. *J. of Climate*, 16, 657-669.
- Knorr, G., G. Lohmann, 2003:** Southern Ocean origin for the resumption of Atlantic thermohaline circulation during deglaciation. *Nature*, 424, 532-536.
- de Leeuw G., Spokes L., Jickells T., Skjoth C.A., Hertel O.; Vignati E., Tamm S., Schulz M., Sorensen L.-L., Pedersen B., Klein L., Schlünzen K.H. (2003):** Atmospheric nitrogen inputs into the North Sea: effect on productivity. *Continental Shelf Research*, 23, 1743 - 1755.
- Moussiopoulos, N., Borrego, C., Bozo, L., Galmarini, S., Poppe, D., Schatzmann, M., and Sturm, P. (2003):** Urban and Local Scale Air Pollution. In: Midgley, P.M., and others (Eds.) *Towards Cleaner Air for Europe – Science Tools and Applications*, Markgraf Verlag, ISBN 3-8236-1390-1, pp. 123-155.
- Schlünzen K.H. and Katzfey J.J. (2003) :** Relevance of sub-grid-scale land-use effects for mesoscale models. *Tellus*, 55A, 232-246.
- Schlünzen, K.H., Hinneburg, D., Knoth, O., Lambrecht, M., Leidl, B., Lopez, S., Lüpkens, C., Pankus, H., Renner, E., Schatzmann, M., Schoenemeyer, T., Trepte, S., Wolke, R. (2003):** Flow and transport in the obstacle layer - First results of the micro-scale model MITRAS. *Journal of Atmospheric Chemistry*, 44, pp. 113-130.
- Schröder, D., Vihma, T., Kerber, A., and B. Brümmer 2003:** On the parameterization of turbulent surface fluxes over heterogeneous sea ice surfaces, *J. Geophys. Res.* Vol. 108, No. C6, 3195, doi:10.1029/2002JC001385.
- Thunis R., Galmarini S., Martilli A., Clappier A., Andronopoulos S., Bartzis J., Vlachogianni M., deRidder K., Moussiopoulos N., Sahm P., Almbauer R., Sturm P., Oettl D., Dierer S. and Schlünzen K.H. (2003):** MESOCOM: An inter-comparison exercise of mesoscale flow models applied to an ideal case simulation. *Atmos. Environ.*, 37, 363-382.
- Wulfmeyer, V., H.-S. Bauer, S. Crewell, G. Ehret, O. Reitebuch, C. Werner, M. Wirth, D. Engelbart, A. Rhodin, W. Wergen, A. Giesen, H. Grassl, G. Huber, H. Klingenberg, P. Mahnke, U. Kummer, C. Wührer, P. Ritter, R. Wallenstein, U. Wandinger (2003):** Lidar research network water vapor and wind. *Meteorologische Zeitschrift*, Vol. 12, No. 1, 5-23.

- Aigner, A. A. and K. Fraedrich, 2004:** Atmospheric and Oceanic Sciences. In *Encyclopedia of Nonlinear Science*, Routledge, New York, in press *Science*, Routledge, New York, in press.
- Aubrun, S., Leidl, B. (2004)** Unsteady characteristics of the dispersion process in the vicinity of a pig barn. Wind tunnel Experiments and comparison with field data. *Atmospheric Environment*, 38, pp. 81-93.
- Aubrun, S., Leidl, B. (2004)** Development of an approved physical modelling of a forest area in a wind tunnel. *Atmospheric Environment*, 38, pp. 2797-2801.
- Blender, R., K. Fraedrich, 2004:** Comment on "Volcanic forcing improves atmosphere-ocean coupled general circulation model scaling performance" by D. Vyushin, I. Zhidkov, S. Havlin, A. Bunde, and S. Brenner, *Geophys. Res. Letters*, in press.
- Blessing, S., K. Fraedrich, and F. Lunkeit, 2004:** The Climate in Historical Times. *Towards a Synthesis of Holocene Proxy Data and Climate Models*. (eds. H. Miller, J. F. W. Negendank, G. Flöser, H. von Storch, H. Fischer, G. Lohmann, and T. Kumke), (GKSS School of Environmental Research), Springer-Verlag, 383-396.
- Bordi, I., K. Fraedrich, Jian-Min Jiang, and A. Sutera, 2004:** Fluctuations and patterns of dry and wet periods: Eastern China. *Theor. Appl. Climatol.*, in press.
- Bordi, I., K. Fraedrich, F-W Gerstengarbe, P. C. Werner, and A. Sutera, 2004:** Potential predictability of dry and wet periods: Sicily and Elbe-Basin (Germany). *Theor. Appl. Climatol.*, 77, 125-138.
- Bordi, I., K. Fraedrich, F. Lunkeit, and A. Sutera, 2004:** On non-linear baroclinic adjustment with the stratosphere. *Tellus*, in revision.
- Brümmer, B., Kirchgäßner, A., Müller, G., 2004:** The atmospheric boundary layer over the Baltic Sea ice. (submitted to *Boundary Layer Meteorology*).
- Brümmer, B., G. Müller, C. Kreutzmann, and J. Launiainen, 2004:** The Arctic Inversion and its Representation in Operational Weather Models (submitted).
- Brümmer, B., G. Müller, and D. Schröder, 2004:** Field experiment FRAMZY 2002: Second experiment on cyclones over the Fram Strait and their impact on sea-ice.- Field report with measurement examples. *Berichte Zentrum f. Meeres- und Klimaforschung, Reihe A*, in Vorbereitung.
- Dethloff, K., W. Dorn, A. Rinke, K. Fraedrich, M. Junge, E. Roeckner, V. Gayler, U. Cubasch, J. H. Christensen, 2004:** The impact of Greenland's deglaciation on the Arctic circulation. *Geophys. Res. Letters*, in press.
- Dierer, S., Schlünzen, K.H., Birnbaum, G., Brümmer, B., and G. Müller, 2004:** Evaluation of a coupled atmosphere-sea ice model by comparison to measurements of a polar cyclone passage. Submitted to MWR on 28 March 2004.
- Fraedrich, K., and R. Blender, 2004:** Reply to: Scaling of atmosphere and ocean temperature correlations in observations and climate models. *Phys. Rev. Lett.*, 92, 039802-(1).
- Fraedrich, K., A. A. Aigner, E. Kirk, and F. Lunkeit, 2004:** General Circulation Models of the Atmosphere. In *Encyclopedia of Nonlinear Science*, Routledge, New York, in press.
- Fraedrich, K., U. Luksch, and R. Blender, 2004:** 1/f-model for long-time memory of the ocean surface temperature. *Phys. Rev. E*, 70, 037301(1-4).
- Franke, J., Hirsch, C., Jensen, A.G., Krüs, H.W., Schatzmann, M., Westbury, P.S., Miles, S.D., Wisse, J., Wright, N. (2004):** Recommendations on the Use of CFD in Predicting Pedestrian Wind Comfort. *Journ. of Wind Engineering and Industrial Aerodynamics* (submitted)
- Hjelstuen, B. Oline, H. P. Sejrup, H. Hafidason, A. Nygard, I. M. Berstad, G. Knorr, 2004:** Late Quaternary seismic stratigraphy and geological development of the south Vøring margin, Norwegian Sea. *Quaternary Science Reviews*, 1847-1867

Junge, M. M., F. Lunkeit, K. Fraedrich, V. Gayler, R. Blender and U. Luksch, 2004: A world without Greenland: impacts on northern hemisphere circulation in low and high resolution models, *Climate Dynamics*, in press.

Kleidon, A. and K. Fraedrich, 2004: Biotic entropy production and global atmosphere-biosphere interactions. In: *Non-Equilibrium Thermodynamics and the Production of Entropy. Life, Earth, and Beyond*. Series: Understanding Complex Systems. (eds. A. Kleidon, R. D. Lorenz). Springer-Verlag, in press.

Knorr, G., and Lohmann, G., 2004: The Southern Ocean as flywheel of the oceanic conveyor belt circulation. *PAGES News*, Vol. 12, No. 1, March 2004.

Krueger, O. and H. Grassl (2004): Albedo reduction by absorbing aerosols over China. *Geophysical Research Letters*, Vol. 31, L02 018, L2108-L2112.

Krüger, O., Marks, R. and Graßl, H. (2004) The influence of pollution on cloud reflectance, *Journal of Geophysical Research*, accepted for publication.

Metzger, S., M. Latif and K. Fraedrich, 2004: Combining ENSO-forecasts: A feasibility study. *Mon. Wea. Rev.*, 132, 456-472.

Müller, G., B. Brümmer, B. Affeld, D. Schröder, and J. Launiainen, 2004: Fram Strait cyclones and their impact on sea ice. Submitted to ACSYS Final Conference Proceedings.

Pérez-Munuzuri, V., M. N. Lorenzo, P. Montero, K. Fraedrich, E. Kirk, and F. Lunkeit, 2004: Spatio-temporal stochastic forcing of an ensemble of global circulation models. *Nonlinear Processes Geophys.*, 10, 453-461.

Raible, C., U. Luksch, and K. Fraedrich, 2004: Precipitation and northern hemisphere regimes. *Atmospheric Science Letters*, 5, 43-55.

Rotach, M., Vogt, R., Bernhofer, C., Batchvarova, E., Christen, A., Clappier, A., Feddersen, B., Gryning, S.E., Mayer, H., Mitev, V., Oke, T., Parlow, E., Richner, H., Roth, M., Roulet, Y.A., Ruffieux, D., Salmond, J.A., Schatzmann, M., Voogt, J.A. (2004) BUBBLE- A major effort in urban boundary layer meteorology. Theoretical and Applied Climatology (in press).

Segschneider, J., B. Grieger, H. U. Keller, F. Lunkeit, E. Kirk, K. Fraedrich, A. Rhodin, R. Greve, 2004: Response of the intermediate complexity Mars Climate Simulator to different obliquity angles. *Planetary and Space Science*, in press.

Semmler T., Jacob D., Schlünzen K. H. and Podzun R. (2004): Influence of sea ice treatment in a regional climate model on boundary layer values in the Fram Strait region. *Monthly Weather Review*, 132, 985-999.

Semmler T., Jacob D., Schlünzen K. H. and Podzun R. (2004): Influence of sea ice treatment in a regional climate model on boundary layer values in the Fram Strait region. *Monthly Weather Review*, 132, 985-999.

Schäfer, K., Emeis, S., Hoffmann, H., Jahn, C., Mueller, W.J., Heits, B., Haase, D., Drunkenmölle, W.D., Bächlin, W., Schlünzen, H., Leitl, B., Pascheke, F., Schatzmann, M. (2004) Field Measurements within a Quarter of a City Including a Street Canyon to Produce a Validation Data Set. *Int. Journal of Environment and Pollution* (submitted).

Schatzmann, M., Grawe, D., Leitl, B., and Müller, W.J. (2004) Analysis of data from an urban street monitoring station. *Atmospheric Environment* (submitted).

Schultz, M, Leitl, B., and Schatzmann, M. (2004) Effect of Roughness Inhomogeneities on the Development of the Urban Boundary Layer. *Int. Journal of Environment and Pollution* (submitted).

Stenzel, O.J. and J.-S. von Storch, 2004: On the effect of the thermal forcing on the global AAM and the general circulation. *Climate Dynamics*, 22, 415-427. (DFG-Projekt), STO377/2

Stenzel, O.J. and J.-S. von Storch, 2004: The effect of orography on the global atmospheric angular momentum and the general circulation. *Meteorologische Zeitschrift* (submitted) (DFG-Projekt, STO377/2)

Stenzel, O. J., 2004: Dynamische und thermodynamische Einflüsse auf den Drehimpuls der Atmosphäre und dessen Auswirkung auf die allgemeine Zirkulation. Doktorarbeit, Universität Hamburg (DFG-Projekt, STO377/2)

von Storch, J.-S., 2004: On statistical dissipation in GCM-climate. *Climate Dynamics*, 23, 1-15.

von Storch, J.-S., J. P. Montavez and B. Balan Sarojini, 2004: EMAD: an empirical model of air-sea fluxes. *Meteorologische Zeitschrift* (submitted) (SFB 512)

Trukenmüller, A., Grawe D. and Schlünzen K. H. (2004): A model system for the assessment of ambient air quality conforming to EC directives. *Meteorol. Zeitschrift*, in print.

Yano, J.-I., R. Blender, C. Zhang, and K. Fraedrich., 2004: 1/f - Noise and pulse-like events in the tropical atmospheric surface variabilities. *Q. J. R. Meteorol. Soc.*, 130, 1697-1721.

WBGU (Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen), Graßl, H., Kokott, J., Kulessa, M., Luther, J., Nuscheler, F., Sauerborn, R., Schellhuber, H.-J., Schubert, R., Schulze, E.-D., : World in Transition 3: Towards Sustainable Energy Systems. London: Earthscan, 2004 in print

IfM

Hoffmann, J., Behrendt, H., Lenhart, H. et al., 2004.

Catchment-coastal zone interaction based upon scenario and model analysis: Elbe and the German Bight case study. *Regional Environmental Change*, in press.

Lenhart, H.L. and Pohlmann, T., 2004.

North Sea hydrodynamic modelling: a review. *Senckenbergiana maritima*, 34(1-2): 53-88.

Luff, R. & Moll, A., 2004.

Seasonal dynamics of the North Sea sediments using a three-dimensional coupled water-sediment model system. *Continental Shelf Research*, 24(10): 1099-1127.

Pätsch, J. and Lenhart, H.-J., 2004.

Daily loads of nutrients, total alkalinity, dissolved inorganic carbon and dissolved organic carbon of the European continental rivers for the years 1977-2002. *Berichte aus dem Zentrum für Meeres- und Klimaforschung; Reihe B: Ozeanographie*, 48: 159pp.

Thomas, H., Bozec, Y., Elkalay, K., Frankignoulle, M., Kühn, W., Lenhart, H., Moll, A., Pätsch, J., Radach, G., Schiettecatte, L.-S., Borges, A., 2004.

Carbon and nutrient budgets of the North Sea (ERSEM simulation). in: Atkinson, L., Liu, K. K., Quinones, R., Talaue-McManus, L. (eds) "Carbon and nutrient fluxes in global continental margins", Springer, New York, accepted.

Radach, G. and Moll, A., 2004.

Review of three-dimensional ecological modelling related to the North Sea shelf system - Part 2: Model validation and data needs. *Progress in Oceanography*, submitted.

Wei, H., Jun, S., Moll, A., Zhao, L., 2004.

Phytoplankton dynamics in the Bohai Sea - observations and modeling. *Journal of Marine Systems*, 44(3-4): 233-251.

Windhorst, W., Colijn, F., Kabuta, S., Laane, R.P.W.M., Lenhart, H. J., 2004.

Defining a good ecological status of coastal waters - a case study for the Elbe plume. In: Vermaat JE, Bouwer LM, Salomons W, Furner RK (eds.) *Managing European coasts: past, present and future*, Springer, in press.

Brockmann, U., H. Lenhart, H. Schlünzen, & D. Topcu, D., 2003.

Nährstoffe und Eutrophierung. In: Lozán, J. L., E. Rachor, K. Reise, J. Sündermann & H. v. Westernhagen (Hrsg.). *Warnsignale aus Nordsee und Wattenmeer - Eine aktuelle Umweltbilanz*. GEO Das Reportage Magazin (ISBN 3-00-010166-7), Hamburg. 61-76.

de Leeuw, G., Spokes, L., Tamm, S. et al., 2003.

Atmospheric nitrogen inputs into the North Sea: effect on productivity. *Continental Shelf Research*, 23(17-19): 1743-1755.

- de Leeuw, G., Skjoth, C.A., Tamm, S. et al., 2003.
Deposition of nitrogen into the North Sea. *Atmospheric Environment*, 37(Supplement 1): S145-S165.
- ICES SGPBI, Hannah, C., Cotano, U., Moll, A. et al., 2003.
Report of the Study Group on Modelling of Physical/Biological Interaction (SGPBI), Chapel Hill, USA, 10-12 March 2003. ICES, CM 2003(C:04):45pp.
- Moll, A. & Radach, G., 2003.
Review of three-dimensional ecological modelling related to the North Sea shelf system - Part 1: Models and their results. *Progress in Oceanography*, 57(2): 175-217.
- Tamm, S. and Schulz, M., 2003.
Open-ocean aerosol composition obtained during 15 months on a North Sea ferry. *Atmospheric Environment*, 37(Supplement 1): S133-S143.
- von Beusekom, J., Brockmann, U., Elbrächter, M., Pätsch, J. & Wiltshire, K., 2003.
Die Bedeutung und die Gefahr von Algenblüten in Wattenmeer und Nordsee. in: Lozan, J. L., E. Rachor, K. Reise, J. Sündermann & H. v. Westernhagen (Hrsg.). "Warnsignale aus Nordsee und Wattenmeer - Eine aktuelle Umweltbilanz, Wissenschaftliche Auswertungen", GEO Das Reportage Magazin (ISBN 3-00-010166-7), pp 182-192.
- Brockmann, U., B. Heyden, M. Schütt, A. Starke, D. Topcu, K. Hesse, N. Ladwig, & H. Lenhart, 2002.
Assessment criteria for eutrophication areas - emphasis German Bight. UBA Report, Umweltbundesamt Berlin 252 pp.
- ICES SGPBI; Hannah, C.; Burchard, H.; Moll, A. et al. 2002.
Report of the Study Group on Modelling of Physical/Biological Interaction (SGPBI), Warnemünde 3-5 April 2002.
ICES CM 2002,C:09, 42 pages.
- Pätsch, J., W. Kühn, G. Radach, J.M. Santana Casiano, M. Gonzalez Davila, S. Neuer, T. Freudenthal & O. Llinas, 2002.
Interannual variability of carbon fluxes at the North Atlantic station ESTOC. *Deep Sea Res. II*. 49(1-3): 253-288.
- Sündermann, J. & G. Radach. 2002.
Synthese und Neukonzeption von Nordseeforschung (SYKON) – ein Verbundprojekt des BMBF. In: Bundesamt für Seeschifffahrt und Hydrographie, Umweltbundesamt (Hrsg.): Aktuelle Probleme der Meeresumwelt. Vorträge des 11. Symposiums, 171-178.
- Greve, W., Moll, A. & Sündermann, J., 2001.
Synthesis and new conception of North Sea Research (SYCON) - Areas of interdisciplinary knowledge: Chapter Modellierung. *Berichte aus dem Zentrum für Meeres- und Klimaforschung der Universität Hamburg* No. 3: 194-211.
- ICES SGPBI, Hannah, C.; Allain, G., Moll, A. et al. 2001.
Report of the Study Group on Modelling of Physical/Biological Interaction (SGPBI). ICES CM 2001 C:03, 25pp.
- Lenhart, H.-J., 2001.
Effects of River Nutrient Load Reduction on the Eutrophication of the North Sea, simulated with the Ecosystem Model ERSEM. In: KRÖNCKE, I. & TÜRKAY, M. & SÜNDERMANN, J. (eds), Burning issues of North Sea ecology, Proceedings of the 14th international Senckenberg Conference North Sea 2000, *Senckenbergiana marit.* 32(2), 299-311.
- Lenhart, H.-J. and Pätsch, J., 2001.
Daily nutrient loads of the European continental rivers for the years 1977-1998. *Berichte aus dem Zentrum für Meeres- und Klimaforschung; Reihe B: Ozeanographie*, No. 40, 146pp.
- Moll, A. and Radach, G., 2001.
Review of three-dimensional ecological modelling related to the North Sea shelf system. Synthesis and New Conception of North Sea Research (SYCON). Working Group 6. *Berichte aus dem Zentrum für Meeres- und Klimaforschung der Universität Hamburg* No. 8, 222 pp.
- Sündermann, J., S. Beddig, I. Kröncke, G. Radach, K.H. Schlünzen (Eds.), 2001.
The changing North Sea: Knowledge, Speculation and New Challenges. Synthesis and new conception of North Sea Research (SYKON). *Berichte aus dem Zentrum für Meeres- und Klimaforschung der Universität Hamburg* No. 3, 358 pp.
- Kühn, W., J. Pätsch, K. Herterich & G. Radach, 2000.
Effects of atmospheric nitrogen input on the marine ecosystem near ESTOC. In: Donner, B. & Wefer, G. (Hrsg.), Bericht über den 8. JGOFS Workshop, 2.-3.12.1999, *Berichte Fachbereich Geowissenschaften, Universität Bremen, Bremen*, 150:32-33.
- Pätsch, J., Kühn, W. and Radach, G., 2000.
CO₂-air sea flux at ESTOC. In: Donner, B. & Wefer, G. (Hrsg.), Bericht über den 8. JGOFS-Workshop, 2.-3.12.1999, *Berichte Fachbereich Geowissenschaften, Universität Bremen, Bremen*, 150:38.

- Moll, A., 2000.
Assessment of three-dimensional physical-biological ECOHAM1 simulations by quantified validation for the North Sea with ICES and ERSEM data. *ICES Journal of Marine Science*:57(4):1060-1068.
- Pätsch, J., Kühn, W., Radach, G., Santana-Casiano, J.M., Gonzales Davila, M., Llinas, O., Oschlies, A., 2000.
Interannual variability of carbon fluxes at the North Atlantic station ESTOC. In: Donner, B., and Wefer, G., Bericht über den 9. JGOFS Workshop, Berichte Fachbereich Geowissenschaften, Universität Bremen, Bremen, Nr. 162:87.
- Skogen, M.D. and Moll, A., 2000.
Interannual variability of the North Sea primary production: comparison from two model studies. *Continental Shelf Research*, 20 (2): 129-151.
- ICES Oceanographic Committee; Brander, K.; Heath, M.; Moll, A. et al. (1999).
Report of the Workshop on Gadoid Stocks in the North Sea During the 1960s and 1970s - Aberdeen 11-13 March 1999. ICES CM 1999,C:15, 53 pp. or ICES Cooperative Research Report, No. 244, 55pp.
- Kühn, W., 1999.
ESTOC - eine 1D-Modellstudie. In: Schlünz, B., & G. Wefer (Hrsg.), Bericht über den 7. JGOFS-Workshop, 3.-4.12.1998, Bremen. Berichte aus dem FB Geowissenschaften, Universität Bremen, 131: 34-35.
- Kühn, W., 1999
Biogeochemische Prozesse und Partikelfluss bei ESTOC - Modelle und Daten. In: Schlünz, B. & G. Wefer (Hrsg.), Bericht über den 7. JGOFS- Workshop, 3.-4.12.1998, Bremen. Berichte aus dem FB Geowissenschaften, Universität Bremen, 131: 35-36
- Lenhart, H.-J., 1999.
Eutrophierung im kontinentalen Küstenbereich der Nordsee, Reduktionsszenarien der Flußeinträge von Nährstoffen mit dem Ökosystemmodell-ERSEM. Dissertation. Universität Hamburg, ZMK-Berichte B 35: 1-169.
- Moll, A., 1999.
Variabilität der Primärproduktion aus dreidimensionalen Modellrechnungen für die Nordsee mit ECOHAM1. *Deutsche Hydrographische Zeitschrift, Supplement 10*: 161-164.
- J. Pätsch, W. Kühn, S. Determann, K. Herterich, G. Radach, M. Gonzalez-Davila & M. Gonzalez-Davila 1999
Ergebnisse der Modellieraktivitäten für die ESTOC-Station. In: Schlünz, B., & G. Wefer (Hrsg.), Bericht über den 7. JGOFS-Workshop, 3.-4.12.1999, Bremen. Berichte aus dem FB Geowissenschaften, Universität Bremen 131: 42-43.
- Pohlmann, T.; Raabe, T.; Doerffer, R.; Beddig, S.; Brockmann, U.; Dick, S.; Engel, M.; Hesse, K. J.; König, P.; Mayer, B.; Moll, A.; Murphy, D.; Puls, W.; Rick, H.-J.; Schmidt-Nia, R.; Schönfeld, W.; Sündermann, J. (1999):
Combined analysis of field and model data: A case study of the phosphate dynamics in the German Bight in summer 1994 *Deutsche Hydrographische Zeitschrift*, 51(2-3):331-353.
- Bersch, M., On the circulation of the northeastern North Atlantic, *Deep-Sea Res. I*, 42, 1583-1607, 1995.
- Bersch, M., J. Meincke und A. Sy, Interannual thermohaline changes in the northern North Atlantic 1991-1996, *Deep-Sea Res. II*, 46, 55-75, 1999.
- Bersch, M., North Atlantic Oscillation-induced changes of the upper layer circulation in the northern North Atlantic Ocean, *J. Geophys. Res.*, 107 (C10), 3156, doi: 10.1029/2001JC000901, 2002.
- Sy, A., M. Rhein, J. Lazier, K.P. Koltermann, J. Meincke, A. Putzka und M. Bersch, Surprisingly rapid spreading of newly formed intermediate waters across the North Atlantic Ocean, *Nature*, 386, 675-679, 1997.
- Meincke, J., B. Rudels and H. Friedrich (1997): The Arctic Ocean - Nordic Seas thermohaline systems. *ICES Journ. Mar. Sci.*, 54, 283-299.
- Sy, A., M. Rhein, J. Lazier, K. P. Koltermann, J. Meincke, A. Putzka and M. Bersch (1997): Surprisingly rapid spreading of newly formed intermediate waters across the North Atlantic Ocean. *Nature*, 386, 675-679.
- Bersch, M., J. Meincke and A. Sy (1999): Interannual thermohaline changes in the Northern North Atlantic 1991-1996. *Deep-Sea Res. Part II* (45) 55-75.
- Dickson, R.R., J. Meincke, I.M. Vassie, J. Jungclaus and S. Østerhus (1999): Possible predictability in overflow from Denmark Strait, *Nature*, 397, 243-246.

- Dickson, R.R., T.J. Osborn, J.W. Hurrell, J. Meincke, J. Blindheim, B. Ådlandsvik, T. Vinje, G. Alekseev and W. Maslowski (2000): The Arctic Ocean Response to the North Atlantic Oscillation. *Journ. Climate* 13 (15), 2671-2696
- Fahrbach, E., J. Meincke, S. Østerhus, G. Rohardt, U. Schauer, V. Tverberg and J. Verduin (2001): Direct measurements of volume transports through Fram Strait. *Polar Research* 20 (2), 217-224.
- Meincke, J. (2002): Climate Dynamics of the North Atlantic and NW-Europe: An Observation-Based Overview. In: Wefer, G.; W. Berger, K-E. Behre, E. Jansen (eds). *Climate, Development and History of the North Atlantic Realm*. Springer-Verlag, Berlin Heidelberg, pp 25-40.
- Meincke, J. (2002) 100 years of field work in hydrography: a retrospective of its impacts. *ICES Mar. Sci. Symp.*, 215, 87-99
- Dickson, R.R., I. Yashayev, J. Meincke, W.R. Turrell, S. Dye, and J. Holfort (2002) Rapid freshening of the deep North Atlantic Ocean over the past four decades. *Nature*, 416, 832-836.
- Rudels, B., E. Fahrbach, J. Meincke, G. Budeus, P. Eriksson (2002): The East Greenland Current and its contribution to the Denmark Strait overflow. *ICES Journ. Mar. Res.* 59, 1133-1154.
- Mohn, C., Bartsch, J. and J. Meincke (2002): Observations of the mass and flow field at Porcupine Bank. *ICES Journ. Mar. Science*, 59, 380-392.
- Koltermann, K.P., J. Meincke, V. Gouretzki (2004) *Global Ocean and Sea Ice*. In: Landolt-Boernstein, New Series, V/6, Climatology (M. Hantel, ed.), 61pp, (im Druck)
- Hansen, B., S. Oesterhus, D. Quadfasel, and B. Turrell (2004) Already the day after tomorrow? *SCIENCE* 305, 953-954.
- Wadhams, P., J.P. Wilkinson, V. Pavlov, E. Hansen and D. Quadfasel (2004) Long-term persistence and evolution of a deep convective chimney in the Greenland Sea. *Journal of Physical Oceanography* (in press)
- Gouretzki V.V. and K. Jancke (1999) A Description and quality assessment of the historical hydrographic data for the South Pacific Ocean. *Journal of Atmospheric and Oceanic Technology*, N9, B.1791-1815.
- Gouretzki V.V. and K. Jancke (2001) Systematic errors as the cause for an apparent deep water property variability: global analysis of the WOCE and historical hydrographic data. *Progress in Oceanography*, 48, p. 337-402.
- Stammer, D., and C. Wunsch, 1999: Temporal changes in eddy energy of the oceans, *Deep Sea Research II*, 46, 77-108.
- Stammer, D., and C. Dieterich, 1999: Space-born measurements of the time-dependent geostrophic ocean flow field, *J. Atm. Ocean Tech.*, 16, 1198-1207.
- Marotzke, J., R. Giering, Q. K. Zhang, D. Stammer, C. N. Hill, and T. Lee, 1999: Construction of the adjoint MIT ocean general circulation model and application to Atlantic heat transport sensitivity, *J. Geophys. Research*, 104, 29,529-29,548, 1999.
- Ponte, R. M., and D. Stammer, 1999: The role of regional mass and current changes in the ocean on seasonal polar motions fluctuations, *J. Geophys. Res.*, 104, 23,393-23,409.
- K.-W. Gurgel, G. Antonischki, H.-H. Essen and T. Schlick, 1999, Wellen Radar (WERA), a new ground-wave based HF radar for ocean remote sensing. *Coastal Engineering*, VOL 37, NOS. 3-4, ISSN 0378-3839, pp. 219...234, August 1999.
- K.-W. Gurgel, H.-H. Essen and S. P. Kingsley, 1999, HF radars: Physical limitations and recent developments. *Coastal Engineering*, VOL 37, NOS. 3-4, ISSN 0378-3839, pp. 201...218, August 1999.
- H.-H. Essen, K.-W. Gurgel and T. Schlick, 1999, Measurement of ocean waveheight and direction by means of HF radar: an empirical approach. *German Hydrographic Journal*, Volume 51 (1999), No. 4, pp. 369...383.

- Ufermann, S., and R. Romeiser, A new interpretation of multifrequency / multipolarization radar signatures of the Gulf Stream front, *J. Geophys. Res.*, 104, 25,697-25,706, 1999.
- Ufermann, S., and R. Romeiser, Numerical study on signatures of atmospheric convective cells in radar images of the ocean, *J. Geophys. Res.*, 104, 25,707-25,720, 1999.
- Brandt, P., R. Romeiser, and A. Rubino, On the determination of characteristics of the interior ocean dynamics from radar signatures of internal solitary waves, *J. Geophys. Res.*, 104, 30,039-30,045, 1999.
- Bao, M., W. Alpers, and C. Brüning, 1999: A new nonlinear integral transform relating ocean wave spectra to phase image spectra of an along-track interferometric synthetic aperture radar, *IEEE Trans. Geosci. Rem. Sens.*, 37, 461-466.
- Bauer, E., and P. Heimbach, 1999: Annual validation of significant wave heights of ERS-1 synthetic radar wave mode spectra using TOPEX/POSEIDON and ERS-1 altimeter data, *J. Geophys. Res.*, 104, 13,345-13,357.
- Brandt, P., A. Rubino, D. Quadfasel, W. Alpers, J. Sellschopp, and H. Fiekas, 1999: Evidence for the influence of Atlantic-Ionian stream fluctuations on the tidally induced internal dynamics in the Strait of Messina, *J. Phys. Oceanogr.*, 29, 1071-1080.
- Gade, M., and W. Alpers, 1999: Using ERS-2 SAR images for routine observation of marine pollution in European coastal waters, *Sci. Total Environ.*, 237-238, 441-448.
- Müller, G., B. Brümmer, and W. Alpers, 1999: Roll convection within an arctic cold-air outbreak: Interpretation of in situ aircraft measurements and spaceborne SAR imagery by a three-dimensional atmospheric model, *Mon. Weath. Rev.*, 127, 363-380.
- Stammer, D., C. Wunsch, and R. Ponte, 2000: De-Aliasing of Global High Frequency Barotropic Motions in Altimeter Observations, *Geophysical Res. Letters*, 27, 1175-1178.
- Stammer, D., and E.P. Chassignet, 2000: Ocean State Estimation and Prediction in Support of Oceanographic Research, *Oceanography*, 13, 51-56.
- Stammer, D., 2000: Flow charts, *Nature*, 408, p. 153.
- Ponte, R.M., and D. Stammer, 2000: Global and regional axial ocean angular momentum signals and length-of-day variations (1985-1996), *J. Geophys. Res.*, 105, 17,161-17,171.
- H.-H. Essen, K.-W. Gurgel and T. Schlick, 2000, On the accuracy of current measurements by means of HF radar. *IEEE Journal of Oceanic Engineering*, VOL. 25, NO. 4, October 2000, pp. 472...480.
- K.-W. Gurgel and H.-H. Essen, 2000, On the performance of a ship-borne current mapping HF radar. *IEEE Journal of Oceanic Engineering*, Vol. 25, no. 1, pp. 183...191, 2000.
- Metzner, M., M. Gade, I. Hennings, and A.B. Rabinovich, 2000: The observation of seiches in the Baltic Sea using a multi data set of water levels, *J. Marine Syst.*, 24, 67-84.
- Vlasenko, V., P. Brandt, and A. Rubino, 2000: On the structure of large-amplitude internal solitary waves, *J. Phys. Oceanogr.*, 30, 2172-2185.
- Ponte, R., D. Stammer and C. Wunsch, 2001: Improved ocean angular momentum estimates using an ocean model constrained by large-scale data, *Geophys. Res. Letters*, 28, 1775-1778.
- Stammer, D., C.W. Böning, and C. Dieterich, 2001: The Role of Variable Wind Forcing in Generating Eddy Energy in the North Atlantic, *Progress in Oceanography*, 48/2-3, pp 289-311
- Leeuwenburgh, O., and D. Stammer, 2001: Ocean Currents Affect Sea Surface Temperature, *J. Phys. Oceanogr.*, 28, Part 2, 2340-2358.
- Käse, R.H., A. Biastoch and D. Stammer, 2001, On the Mid-Depth Circulation in the Labrador and Irminger Seas *Geophysical Res. Letters*, 28 , 3433-3435.

- Porter, D.L., D.R. Thompson, W. Alpers, and R. Romeiser, Remotely sensed ocean observations of the Coastal Mixing and Optics site from synthetic aperture radars and advanced very high resolution radiometers, *J. Geophys. Res.*, 106, 9623-9638, 2001.
- Johannessen, J.A., R. Garello, B. Chapron, R. Romeiser, P. Pavlakis, I. Robinson, N. Connolly, K. Nittis, T. Hamre, S. Ufermann, W. Alpers, H. Espedal, B. Furevik, V. Cummins, and D. Tarchi, Marine SAR analysis and interpretation system – MARS AIS, *Ann. Telecommun.*, 56, 655-660, 2001.
- Romeiser, R., S. Ufermann, and W. Alpers, Remote sensing of oceanic current features by synthetic aperture radar – achievements and perspectives, *Ann. Telecommun.*, 56, 661-671, 2001.
- Hessner, K., A. Rubino, P. Brandt, and W. Alpers, 2001: The Rhine outflow plume studied by the analysis of synthetic aperture radar data and numerical simulations, *J. Phys. Oceanogr.*, 31, 3030-3044.
- Izquierdo, A., L. Tejedor, D. V. Sein, J. O. Backhaus, P. Brandt, A. Rubino, and B. A. Kagan, 2001: Control variability and internal bore evolution in the Strait of Gibraltar: a 2D two-layer model study, *Est. Coast. Shelf Sci.*, 53, 637-651.
- Kern, S., and G. Heygster, 2001: Sea ice concentration retrieval in the Antarctic based on the SSM/I 85 GHz polarization, *Ann. Glac.*, 33, 109-114.
- Melsheimer, C., W. Alpers, and M. Gade, 2001: Simultaneous observations of rain cells over the ocean by the synthetic aperture radar aboard the ERS-1/2 satellites and by weather radars, *J. Geophys. Res.*, 106, 4556-4677.
- Pierini, S., and A. Rubino, 2001: Modeling the oceanic circulation in the area of the Strait of Sicily: the remotely forced dynamics, *J. Phys. Oceanogr.*, 31, 1397-1412.
- Rubino, A., P. Brandt, and R. Weigle, 2001: On the dynamics of internal nonlinear, weakly nonhydrostatic disturbances in a three-layer ocean studied by numerical modeling and in situ observations, *J. Geophys. Res.*, 106, 26,899-26,916.
- Stammer, D., C. Wunsch, R. Giering, C. Eckert, P. Heimbach, J. Marotzke, A. Adcroft, C.N. Hill, and J. Marshall, 2002, The global ocean circulation during 1992-1997, estimated from ocean observations and a general circulation model, *J. Geophys. Res.*, 107(C9), 3118, doi:10.1029/2001JC000888.
- Stammer, D., C. Wunsch, I. Fukumori and J. Marshall, 2002: State estimation improves prospects for ocean resreach, *EOS, Transactions, American Geophysical Union, Volume 83, Nr. 27, p. 289, 294-295.*
- Leeuwenburgh, O., and D. Stammer, 2002: Uncertainties in space-born velocity measurements, *J. Geophys. Res.*, 107(10), 3175, doi:10.1029/2001JC000937.
- Brandt, P., A. Rubino, and J. Fischer, 2002: Large-amplitude internal solitary waves in the North Equatorial Counter Current, *J. Phys. Oceanogr.*, 32, 1567-1573.
- Braun, N., M. Gade, and P.A. Lange, 2002: The effect of artificial rain on wave spectra and multi-polarisation X band radar backscatter, *Int. J. Rem. Sens.*, 23, 4305-4322.
- Garrity, C., D. Lubin, S. Kern, and L.T. Pedersen, 2002: Linescan camera evaluation of SSM/I 85.5 GHz sea ice retrieval, *Rem. Sens. Environ.*, 83(3), 472-487.
- Rubino, A., K. Hessner, and P. Brandt, 2002: Decay of stable warm-core eddies in a layered frontal model, *J. Phys. Oceanogr.*, 32 188-201.
- Stammer, D., C. Wunsch, R. Giering, C. Eckert, P. Heimbach, J. Marotzke, A. Adcroft, C.N. Hill, and J. Marshall, 2003: Volume, Heat and Freshwater Transports of the Global Ocean Circulation 1993-2000, Estimated from a General Circulation Model Constrained by WOCE Data, *J. Geophys. Res.*, VOL. 108(C1), 3007, doi:10.1029/2001JC001115.
- Stammer, D., F. Wentz and C. Gentemann, 2003: Validation of new Microwave SST measurement for climate purposes, *J. of Climate*, 16, 73-87.

- Biastoch, A., R. Käse and D. Stammer, 2003: The sensitivity of the Denmark-Scotland Ridge Overflow to forcing changes, *J. of Phys. Oceanogr.*, 3, 2307-2319.
- Kumar, R., D. Stammer, K. Melville and P. Janssen, 2003: EM Bias estimates using T/P, buoy and WAM fields, *J. Geophys. Res.*, 108, 3351, doi:10.1029/2002JC001525.
- L. R. Wyatt, J. J. Green, K.-W. Gurgel, J. C. Nieto Borge, K. Reichert, K. Hessner, H. G"unther, W. Rosenthal, O. Sättra, and M. Reistad, 2003, Validation and intercomparisons of wave measurements and models during the EuroROSE experiments. *Coastal Engineering*, Vol 48, pp. 1..28, 2003.
- Gade, M., V. Barale, and H.M. Snaith, 2003: Multisensor Monitoring of Plume Dynamics in the North-western Mediterranean, *J. Coast. Conserv.*, 9, 91-96.
- He, Y., and W. Alpers, 2003: On the nonlinear integral transform of an ocean wave spectrum into an along-track interferometric synthetic aperture radar image spectrum, *J. Geophys. Res.*, 108(C6), 3205, doi:10.1029/2002JC0011560.
- Lin, I.-I., W. Alpers, and T.W. Liu, 2003: First evidence for the detection of natural surface films by the QuikSCAT scatterometer, *Geophys. Res. Lett.*, 30(13), 1713 doi: 1029/2003GL017415.
- Köhl, A. and D. Stammer, 2004: An adjoint approach for designing an ocean observing system, *J. Phys. Oceanogr.*, 34, 524-524.
- Lu, Y. and D. Stammer, 2004: Vorticity balance in a global ocean circulation model, *J. of Phys. Oceanogr.*, 34, 605-622.
- Stammer, D., K. Ueyoshi, A. Köhl, W.B. Large, S. Josey and C. Wunsch, 2004: Estimating Air-Sea Fluxes of Heat, Freshwater and Momentum Through Global Ocean Data Assimilation, *J. Geophys. Res.*, 109, C05023, doi:10.1029/2003JC002082.
- Romeiser, R., S. Ufermann, A. Androssov, H. Wehde, L. Mitnik, S. Kern, and A. Rubino, On the remote sensing of oceanic and atmospheric convection in the Greenland Sea by synthetic aperture radar, *J. Geophys. Res.*, 109, C03004, 14 pp., 2004.
- Snaith, H.M., M. Gade, G.W. Jolly, A. Mangin, V. Barale, O. Rud, and M. Ishii, 2004: Clean seas: a North Sea test site, *Int. J. Rem. Sens.*, 25, 1341-1347.
- Zeng, K., and W. Alpers, 2004: Generation of internal solitary waves in the Sulu Sea and their refraction by bottom topography studied by ERS SAR imagery and a numerical model, *Int. J. Rem. Sens.*, 25(7-8), 1277-1281, 2004.
- Logemann K., J.O. Backhaus and I.H. Harms (2004):** *SNAC: A statistical model of the North Atlantic circulation* Ocean Modelling, Volume 7, Issues 1-2, pp 97-110
- Karcher M.J., S. Gerland, I.H. Harms, M. Iosjpe, H.E. Heldal, P.J. Kershaw and M. Sickel (2004):** *The dispersion of ⁹⁹Tc in the Nordic Seas and the Arctic Ocean: a comparison of model results and observations* Journal of environmental radioactivity, Vol.74, 1-3, 2004, pp. 185-198.
- Backhaus J.O., E. Nøst Hegseth, H. Wehde, X. Irigoien, K. Hatten, and K. Logemann (2003):** *Convection and primary production in winter.* Marine Ecology Progress Series, Vol. 251: 1-14
- Brandt P., A. Rubino, D.V. Sein, B. Baschek, A. Izquierdo, J.O. Backhaus (2003): Sea level variations in the western Mediterranean studied by a numerical model of the Strait of Gibraltar. *J. Phys. Oceanography*, 56, 1256-1268
- Harms I., U. Hübner, J.O. Backhaus, M. Kulakov, V. Stanovoy, O. Stepanets, L. Kodina and R. Schlitzer (2003):** *Salt intrusions in Siberian River Estuaries - Observations and model experiments in Ob and Yenisei.* Proceedings in Marine Science In: Stein R., K. Fahl, D.K. Fütterer, E.M. Galimov and O.V. Stepanets (Eds): Siberian river runoff in the Kara Sea: Characterisation, quantification, variability and environmental significance. Proceedings in Marine Science, Vol. 6, Elsevier Amsterdam 2003, ISBN 0-444-51365-5, 484 pp
- Schrum C., I. Alkeseeva, and M. St. John (2003):** Effects of turbulence on aggregation at tidal mixing fronts. Marine Ecology Progress Series, submitted
- Schrum C., Hübner, U., Jacob, D., Podzun, R. (2003):** *A coupled atmosphere/ice/ocean model for the North Sea and the Baltic Sea.* Climate Dynamics DOI 10.1007/s00382-003-0322-8, 21:131-151,

- Schrum C., Siegismund, M. St. John (2003):** *Decadal Variations in the stratification and circulation patterns of the North Sea - Are the 90's unusual?* Hydrobiological Variability in the ICES Area 1990-1999. ICES Journal of Marine Science, Symposia series, Vol. 219, 121-131.
- Ivanov, L. I., J. O. Backhaus, E. Özsoy, and H. Wehde (2001):** *Convection in the Black Sea during cold winters* Journal of Marine Systems, 31/1-3, pp-65-76.
- Izquierdo A., L. Tejedor, D.V. Sein, J.O. Backhaus, P. Brandt, A. Rubino, B. Kagan (2001): Control variability and internal bore evolution in the Strait of Gibraltar: a 2-D two-layer *model study*. Estuarine, Coastal and Shelf Science (2001) 53, 637-651
- Janssen F., C. Schrum, U. Hübner and J.O. Backhaus (2001):** *Validation of a decadal simulation with a regional ocean model for North Sea and Baltic Sea*. Climate Research, 18, pp-55-62.
- Schrum C. (2001):** *Regionalization of climate change for the North Sea and the Baltic Sea*. Climate Research, 18, 31-37.
- Schrum C., J. Staneva, E. Stanev and E. Özsöy (2001):** *Air-sea exchange in the Black Sea estimated from atmospheric analysis data for the period of 1979-1993*. Journal of Marine Systems, 31/1-3, pp 3-19.
- Siegismund F. and C. Schrum (2001):** *Decadal variability of the wind field in the North Sea*. Climate Research, 18, pp 39-45.
- Wehde, H., J.O. Backhaus and E. Nost Hegseth (2001):** *The influence of oceanic convection in primary production* Ecological Modelling, Vol. 138/1-3, pp. 115-126
- Dethleff D., H. Nies, I.H. Harms I.H. and M.J. Karcher (2000):** *Dispersal of particle-bound and dissolved radionuclides through flaw lead produced sea-ice and dense water in the western Kara Sea*. Journal of Marine Systems, 24, pp. 233-248
- Harms I.H., M. Heath, A. Bryant, J.O. Backhaus and D. Hainbucher (2000):** *Modeling the northeast Atlantic circulation - Implications for the spring invasion of shelf regions by Calanus finmarchicus* ICES- Journal of Marine Science, Vol. 57, no. 6, pp. 1694-1707
- Harms I.H., M.J. Karcher and D. Dethleff (2000):** *Modelling Siberian river runoff -Implications for contaminant transport in the Arctic Ocean-* Journal of Marine Systems, 27, pp 95 - 115
- Verduin, J.J. and J.O. Backhaus (2000):** *Dynamics of plant-flow interactions for the seagrass Amphibolis antarctica: Field observations and model simulations*. Estuarine, Coastal and Shelf Science, Vol. 50, No. 2
- Wehde, H. and J.O. Backhaus (2000):** *The fate of Lagrangian tracers in oceanic convective conditions: on the influence of oceanic convection in primary production* Nonlinear Analysis: Real World Applications I, pp. 3-21.
- Backhaus, J.O. and J. Kämpf (1999):** *Simulations of sub-mesoscale Oceanic Convection and Ice-Ocean Interactions in the Greenland Sea* Deep-Sea Research II, 46, pp. 1427 - 1455
- Backhaus, J.O., H. Wehde, E. Nøst Hegseth and J. Kämpf (1999):** *'Phyto-Convection' - On the Role of Oceanic Convection in Primary Production - Marine Ecology Progress Series*, Vol. 189, pp. 77-92
- Becker, G.A., H. Giese, K. Isert, P. König, H. Langenberg, Th. Pohlmann and C.Schrum (1999):** *Mesoscale variability in the German Bight*. Deutsche Hydrographische Zeitung, Vol. 51, 2/3, 155-179
- Carroll J. and I.H. Harms (1999):** *Uncertainty Analysis of Partition Coefficients in a Radionuclide Transport Model* Water Research, Vol. 33, No. 11, pp 2617 - 2626
- Hainbucher D. and J.O. Backhaus (1999):** *Circulation of the eastern north Atlantic and north-west European continental shelf -a hydrodynamic modelling study* Fish. Oceanogr. 8 (Suppl. 1), pp. 1-12
- Harms I.H. and P.P. Povinec (1999):** *The outflow of Radionuclides from Novaya Semlya Bays - Modelling and monitoring strategies* Science of the Total Environment, 237/238 (1999)
- Harms, I.H. and M.J. Karcher (1999):** *Modelling the seasonal variability of circulation and hydrography in the Kara Sea*. Journal of Geophysical Research, Vol. 104, No. C6
- Heath M.R., J.O. Backhaus, K. Richardson, E. McKenzie, D. Slagstad, D. Beare, J. Dunn, J.G. Fraser, A. Gallego, D. Hainbucher, S. Hay, S. Jonasdotir, H. Madden, J. Mardaljevic, and A. Schacht (1999)** Climate fluctuations and the spring invasion of the North sea by Calanus finmarchicus. *Fish. Oceanogr.* 8 (Suppl. 1), 163-176.
- Huang D., J. Su and J.O. Backhaus (1999):** *Modelling the seasonal thermal stratification and baroclinic circulation in the Bohai Sea* Cont. Shelf Research, 19 (1999), pp. 1485-1505
- Backhaus, J.O., J. Kämpf, (1999):** Simulations of sub-mesoscale oceanic convection and ice-ocean interactions in the Greenland Sea. Deep Sea Research II, Vol. 46 (1999), No 6-7, pp. 1427-1456
- Kämpf, J. and J.O. Backhaus (1999):** *Ice-ocean interactions during shallow convection under conditions of steady winds: Three-dimensional numerical studies* Deep-Sea Research II, Vol. 46 (1999), No 6-7 pp. 1335 -1355
- Kämpf, J., J.O. Backhaus and H. Fohrmann (1999):** *Sediment-included slope convection: Numerical case studies* Journal of Geophysical Research, Vol. 104, No. C9, pp. 20.509-20.522
- Schrum, C. and J.O. Backhaus (1999):** *Sensitivity of atmosphere-ocean heat exchange and heat content in North Sea and Baltic Sea. A comparative Assessment* Tellus 51 A, pp. 526 - 549
- Delhez, E., J.M, P. Damm, E. de Goede, J.M. de Kok, F. Dumas, J.E. Jones, J. Ozer, T. Pohlmann, P.S. Rasch,

- M. Skogen, R. Proctor, What can we expect from shelf seas models: the NOMADS2 Project. *Journal of Marine Systems*, 45, 39-53, 2004.
- Hamann, I.**, G. Boehlert, C. Wilson, Effects of steep topography on the flow and stratification near Palmyra Atoll, *PECS special issue of Ocean Dynamics*, Springer Verlag, Vol. 54, Issue 2 2004
- Hamann, I.**, Playing a mixed double: marine scientists and the labour market in Europe, Report of the second CEMSE Workshop, Athens, 26 September 2002, *Special European EFMS Issue of Ocean Challenge*, The Challenger Society for Marine Science, Vol. 13, No. 2 2004
- Lenhart, H.-J., T. Pohlmann**, North Sea Hydrodynamic Modelling: a Review *Senckenbergiana maritime*, 34, 53-88, 2004.
- Luyten, P., **I. Hamann**, Chapter 58 "The CD-ROM: Prologue". In: *H. Baumert, J. Simpson and J. Sündermann (eds.) Marine Turbulence: Theories, Models and Observations*, Cambridge University Press 2004
- Stips, A., K. Bolding, **T. Pohlmann**, H. Burchard, Simulating the temporal and spatial dynamics of the North Sea using the new model GETM (general estuarine transport model), *Ocean Dynamics*, 54, 266-283, 2004.
- Beddig, S., I. Hamann**, Sensibilisierung der Gesellschaft für die Meeresumwelt - Eine Lobby für die Nordsee. In: *J.L. Lozan, E. Rachor, K. Reise, J. Sündermann, H. v. Westernhagen (Hrsg.) Warnsignale aus Nordsee & Wattenmeer - Eine Aktuelle Umweltbilanz*, GEO, 448 S. 2003
- Hainbucher, D.**, H. Wei, **T. Pohlmann, J. Sündermann**, S. Feng, Variability of the Bohai Sea circulation based on model calculations. *Journal of Marine Systems* 44, 153-174, 2003.
- Raabe, T., Zhiang Yu, Jing Zhang, Jun Sun, A. Starke, U. Brockmann and **D. Hainbucher**, Phase-transfer of nitrogen species within the water column of the Bohai Sea. *J. Mar. Systems*, 44, 213-232, 2003.
- Umlauf, L., and **H. Burchard**, A generic two-equation model for turbulent boundary layers, *J. Fluid Mech.*, accepted for publication, 2003.
- Wei, H., **D. Hainbucher, T. Pohlmann**, S. Feng, **J. Sündermann**, Tidal-induced Lagrangian and Eulerian mean circulation in the Bohai Sea. *Journal of Marine Systems* 44, 141-152, 2003.
- Wensheng J., **T. Pohlmann**, J. Sun, A. Starke, SPM transport in the Bohai Sea: field experiments and numerical modelling. *Journal of Marine Systems* 44, 175-188, 2003.
- Bolding, K., **H. Burchard, T. Pohlmann**, and A. Stips, Turbulent mixing in the Northern North Sea: a numerical model study, *Cont. Shelf Res.* 22, 2707-2724, 2002.
- Burchard, H.**, Energy-conserving discretisation of turbulent shear and buoyancy production, *Ocean Modelling* 4, 347-361, 2002.
- Burchard, H.**, K. Bolding, T. P. Rippeth, A. Stips, J. H. Simpson, and **J. Sündermann**, Microstructure of turbulence in the Northern North Sea: A comparative study of observations and model simulations, *J. Sea Res.* 47, 223-238, 2002.
- Goudsmit, H.-G., **H. Burchard**, F. Peeters, P. Reichert, and A. Wüest, Application of k-epsilon turbulence models to lakes - The role of internal seiches, *J. Geophys. Res.*, accepted for publication, 2002.
- Li, L., **T. Pohlmann**, The South China Sea Warm-Core Ring 94S and its influence on the distribution of Chemical Tracers. *Ocean Dynamics Vol 52*, 116-122, 2002.
- Pietrzak, J.D., J.B. Jacobson, **H. Burchard**, H.-J. Vested, and O. Petersen, A three-dimensional hydrostatic model for coastal and ocean modelling using a generalised topography following co-ordinate system, *Ocean Modelling* 4, 173-205, 2002.
- Simpson, J.H., **H. Burchard**, N.R. Fisher, and T.P. Rippeth, Modelling the cycle of tidal dissipation in a region of tidal straining, *Cont. Shelf Res.* 22, 1615-1628, 2002.
- Burchard, H.**, Note on the $q^2 l$ equation by Mellor and Yamada [1982], *J. Phys. Oceanogr.*, 31, 1377-1387, 2001.
- Burchard, H.**, Simulating the wave-enhanced layer under breaking surface waves with two-equation turbulence models, *J. Phys. Oceanogr.* 31, 3133-3145, 2001.
- Burchard, H.**, and K. Bolding, Comparative analysis of four second-moment turbulence closure models for the oceanic mixed layer, *J. Phys. Oceanogr.*, 31, 1943-1968, 2001.
- Burchard, H.**, and E.D. Deleersnijder, Stability of algebraic non-equilibrium second-order closure models, *Ocean Modelling*, 3, 33-50, 2001.
- Oebius, H. U., H.-J. Becker, **S. Rolinski**, and J. A. Jankowski, Parametrization and evaluation of marine environmental impacts produced by deep-sea manganese nodule mining, *Deep-Sea Research II: Environmental Impact Studies for the Mining of Polymetallic Nodules from the Deep Sea Vol. 48* 17-18, p.3453-3467, 2001.
- Rolinski, S.**, J. Segsneider, and **J. Sündermann**, Long-term propagation of tailings from deep-sea mining under variable conditions by means of numerical simulations, *Deep-Sea Research II: Environmental Impact Studies for the Mining of Polymetallic Nodules from the Deep Sea Vol. 48*, 17-18, p.3469-3485, 2001.
- Siegismund, F.**, and **C. Schrum**, Decadal changes in the wind forcing over the North Sea, *Climate Res.* 18, 39-45, 2001.
- Thomas, M.**, **J. Sündermann**, and E. Maier-Reimer, Consideration of ocean tides in an OGCM and impacts on

- subseasonal to decadal polar motion excitation, *Geophys. Res. Lett.*, Vol. 28, Nr. 12, p.2457-2460, 2001.
- Wünsch, J., **M. Thomas**, and T. Gruber, Simulation of oceanic bottom pressure for gravity space missions, *Geophys. J. Int.* 147, 428-434, 2001.
- Baumert, H., G. Chapalain, H. Smaoui, J. McManus, H. Yagi, M. Regener, **J. Sündermann**, and B. Szilagy, Modelling and numerical simulation of turbulence, waves and suspended sediments for preoperational use in coastal seas, *Coastal Eng.* 41, 63-93, 2000.
- Beckers, J.-M., **H. Burchard**, E. Deleersnijder, and P.-P. Mathieu, On the numerical discretization of rotated diffusion operators in ocean models, *Monthly Weather Rev.*, 128, 2711-2733, 2000.
- Harms I. H.**, M. Heath, A. Bryant, **J. O. Backhaus**, and **D. Hainbucher**, Modeling the northeast Atlantic circulation - Implications for the spring invasion of shelf regions by *Calanus finmarchicus*, *ICES-Journal of Marine Science* Vol. 57 no. 6, 1694-1707, 2000.
- Jiang, W., **T. Pohlmann**, and **J. Sündermann**, Shizuo Feng, Modelling study of SPM transport in the Bohai Sea, *J. Marine Syst.*, 24, 175-200, 2000.
- Müller-Navarra, S. H., and **H. Giese**, Improvements of an empirical model to forecast wind surge in the German Bight, *DHZ*, 51(4), 2000.
- Rolinski, S.**, and G. Eichweber, Deformations of the tidal wave in the Elbe estuary and their effect on suspended particulate matter dynamics, *Physics and Chemistry of the Earth (B)*, 25(4), 355-358, 2000.
- Sündermann, J.**, New challenges for North Sea research 20 years after FLEX'76, *Oceanologia*, 42 (1), 123-131, 2000.
- Becker, G. A., **H. Giese**, **K. Isert**, P. König, **H. Langenberg**, **T. Pohlmann**, and **C. Schrum**, Mesoscale structures, fluxes and the water mass variability of the German Bight as exemplified in the KUSTOS-experiments and numerical models, *DHZ*, 51(2/3), 1999.
- Burchard, H.**, Recalculation of surface slopes as forcing for numerical water column models of tidal flow, *Appl. Math. Modelling*, 23, 737-755, 1999.
- Burchard, H.**, and O. Petersen, Models of turbulence in the marine environment - A comparative study of two-equation turbulence models, *J. Marine Syst.*, 21, 2-53, 1999.
- Dick, S., U. H. Brockmann, J. E. E. van Beusekom, B. Fabiszysky, M. George, K.-J. Hesse, **B. Mayer**, **T. Nitz**, **T. Pohlmann**, K. Poremba, K. Schaumann, W. Schönfeld, A. Starke, U. Tillmann, and G. Weide, Exchange of matter and energy between the wadden sea and the coastal waters of the German Bight - Estimations based on numerical simulations and field measurements, *DHZ*, 51(3/4), 1999.
- Doerffer, R., U. Gärtner, H. Hakvoort, K.-J. Hesse, **K. Isert**, **A. Moll**, **T. Pohlmann**, **G. Radach**, A. Reimer, H. J. Rick, U. Tillmann, **J. Sündermann**, and J. van Beusekom, Variability of the primary production in the German Bight - a comparative study using in situ observations, modelling and remote sensing, *DHZ*, 51(3/4), 1999.
- Gallego A., J. Mardaljevic, M. R. Heath, **D. Hainbucher**, and D. Slagstad, A model of the spring migration into the North Sea by *Calanus finmarchicus* overwintering off the Scottish continental shelf, *Fish. Oceanogr.*, 8 (Suppl. 1), 107-125, 1999.
- Hainbucher D.**, and **J. O. Backhaus**, Circulation of the eastern North Atlantic and north-west European continental shelf - a hydrodynamic modelling study, *Fish. Oceanogr.*, 8 (Suppl. 1), 1-12, 1999.
- Heath M. R., **J. O. Backhaus**, K. Richardson, E. McKenzie, D. Slagstad, D. Beare, J. Dunn, J. G. Fraser, A. Gallego, **D. Hainbucher**, S. Hay, S. Jonasdottir, H. Madden, J. Mardaljevic, and A. Schacht, Climate fluctuations and the spring invasion of the North Sea by *Calanus finmarchicus*, *Fish. Oceanogr.*, 8 (Suppl. 1), 163-176, 1999.
- Langenberg, H.**, A. Pfitzenmayer, H. von Storch, and **J. Sündermann**, Storm-related sea-level variations along the North Sea coast: Natural variability and anthropogenic change, *Cont. Shelf Res.*, 19, 821-842, 1999.
- Pohlmann, T.**, **S. Beddig**, U. Brockmann, S. Dick, R. Doerffer, **M. Engel**, K.-J. Hesse, P. König, **B. Mayer**, **A. Moll**, D. Murphy, W. Puls, T. Raabe, H.-J. Rick, **R. Schmidt-Nia**, W. Schönfeld, and **J. Sündermann**, Combined analysis of field and model data: A case study of the phosphate dynamics in the German Bight in summer 1994, *DHZ*, 51(3/4), 1999.
- Puls, W., J. van Beusekom, U. Brockmann, R. Doerffer, U. Hentschke, P. König, D. Murphy, **B. Mayer**, A. Müller, **T. Pohlmann**, A. Reimer, **R. Schmidt-Nia**, and **J. Sündermann**, Suspended matter regimes in the German Bight and the German Wadden Sea, *DHZ*, 51(3/4), 1999.
- Puls, W., **T. Pohlmann**, **J. Sündermann**, Model simulation of temporal variability of suspended matter in the North Sea. In: *Computerized modelling of sedimentary systems. Eds.: J. Harff, W. Lemke, K. Stattegger. Springer-Verlag Berlin Heidelberg*, 37-62, 1999.
- Rolinski, S.**, On the dynamics of suspended matter transport in the tidal river Elbe: Description and results of a Lagrangian model, *J. Geophys. Res.*, 104, C11, 26043-26057, 1999.
- Rudels B., **H. J. Friedrich**, **D. Hainbucher**, and Gerrit Lohmann, On the parameterisation of oceanic sensible heat loss to the atmosphere and to ice in an ice-covered mixed layer in winter, *Deep-Sea Research II*, 46, 1385-1425, 1999.
- Schulz, M., J. von Beusekom, K. Bigalke, U. H. Brockmann, W. Dannecker, H. Gerwig, H. Graßl, C.-J. Lenz, K. Michaelsen, U. Niemeier, **T. Nitz**, E. Plate, **T. Pohlmann**, T. Raabe, A. Rebers, V. Reinhardt, M.

- Schatzmann, K. H. Schlünzen, **R. Schmidt-Nia**, T. Stahlschmidt, G. Steinhoff, and K. von Salzen, The atmospheric impact on fluxes of matter and energy in the German Bight, *DHZ*, 51(3/4), 1999.
- Sündermann, J.**, K.-J. Hesse, and **S. Beddig**, Coastal mass and energy fluxes in the southern eastern North Sea, *DHZ*, 51(3/4), 1999.
- Thomas, M.**, and **J. Sündermann**, Tides and tidal torques of the world ocean since the last glacial maximum, *J. Geophys. Res.*, 104, C2, 3159-3183, 1999.

IFG

1999

- Bergmann, T., Blanch, J.O., Robertsson, J.O.A., Holliger, K., 1999. A simplified Lax-Wendroff correction for staggered-grid FDTD modeling of electromagnetic wave propagation in frequency-dependent media. *Geophysics*, 64, 1369-1377.
- Ditmar, P., Penopp J., Kasig, R., Makris, J., 1999. Interpretation of shallow refraction seismic data by reflection/refraction tomography. *Geophysical Prospecting*, 47, 871-901.
- Essen, H.H., Grevemeyer, I., Exner, O., Villinger, H., 1999. Shear-wave velocity in marine sediments on young oceanic crust: constraints from dispersion analysis of Scholte waves. *Geophysical Journal International*, 20, 239-247.
- Essen, H.-H., Klusmann, J., Herber, R., Grevemeyer, I., 1999. Does microseisms in Hamburg (Germany) reflect the wave climate in North Atlantic? *Deutsche Hydrographische Zeitschrift*, 51, 17-29.
- Gajewski, D., Lambrecht, A., Oncken, O., 1999. An Attempt to Integrate Reflection Seismic and Balanced Profiles, *Pure Applied Geophysics*, 156, 207 – 232.
- Grevemeyer, I., 1999. Isostatic geoid anomalies over mid-plate swells in the Central North Atlantic. P. Charvis & J. J. Danobeitia (eds), *Hotspot and oceanic crust in interaction*. *Journal of Geodynamics*, 28, 41-50.
- Grevemeyer, I., Flüh, E., Herber, R., Villinger, H., 1999. Constraints on the shallow seismic structure at the Ocean Drilling Program Site 1107 from implosive bottom sources and airgun shots. *Geophysical Research Letters*, 26, 907-910.
- Grevemeyer, I., Kaul, N., Villinger, H., Weigel W., 1999. Hydrothermal activity and the evolution of the seismic properties of upper oceanic crust. *Journal of Geophysical Research*, 104, 5069 – 5079.
- Herber, R., Grevemeyer, I., Exner, O., Villinger, H., Weigel, W., 1999. A seismo/acoustic implosive source for seismic experiments on the ocean floor. *Marine Geophysical Research*, 20, 239 – 247.
- Hieke, W., Dehghani, G. A., 1999. The Victor Hensen Structure in the central Ionian Sea and its relation to the Medina Ridge (Eastern Mediterranean). *Zeitschrift der Deutschen Geologischen Gesellschaft* 149, 487 – 505.
- Leidenfrost, A., Ettrich, N., Gajewski, D., Kosloff, D., 1999. Comparison of Six Methods for Computing Travel Times. *Geophysical Prospecting*, 47, 269 - 297.
- Makris, J., Eglhoff, F., Nicolich, R., Rihm, R., 1999. Crustal Structure from the Ligurian Sea to the Northern Apennines – a Wide Angle Seismic Transect. *Tectonophysics*, 301, 305-319.
- Rabbel, W., Gajewski, D., 1999. Foreword: Seismic Exploration of the Deep Continental Crust. *Pure Applied Geophysics*, 156, 1 - 6.
- Trey, H., Cooper, A.K., Pellis, G., della Vedova, B., Cochrane, G., Brancolini, G., Makris, J., 1999. Transect across the West Antarctic Rift System in the Ross Sea, Antarctica. *Tectonophysics*, 308, 61-74.
- Weigel, W., Grevemeyer, I., 1999. The Great Meteor seamount: Seismic structure of a submerged intraplate volcano. P. Charvis & J. J. Danobeitia (eds), *Hotspot and oceanic crust interaction*, *Journal of Geodynamics*, 28, 27-40.
- Wiedicke, M., Kudraß, H.R., Hübscher, C., 1999. Oolite beach barriers of the last Glacial sea-level lowstand at the outer Bengal Shelf. *Marine Geology*, 157, 7-18.
- Zühlsdorff, L., Spieß, V., Hübscher, C., Breitzke, M., 1999. A high resolution seismic survey at the eastern Juan de Fuca Ridge flank – seismic evidences for upward fluid migration? *Journal of Geophysical Research*,

104, 15351-15364.

2000

- Dahm, T., 2000. Numerical simulations of the propagation path and the arrest of fluid-filled fractures in the earth. *Geophysical Journal International*, 141, 623-638.
- Dahm, T., 2000. On the shape and velocity of fluid-filled fractures in the earth. *Geophysical Journal International*, 142, 181-192
- Dahm, T., Sileny, J., Horalek, J., 2000. Comparison of moment tensor solutions for the January 1997 (West Bohemia) earthquake swarm. *Studia Geophysica et Geodaetica*, 44, 233-250.
- Grevemeyer, I., Herber, R., Essen, H.-H., 2000. Microseismological evidence for a changing wave climate in the northeast Atlantic Ocean. *Nature*, 408, 349-352.
- Groenenboom, J., Falk, J., 2000. Scattering by hydraulic fractures: Finite-difference modeling and laboratory data. *Geophysics*, 65, 612-622.
- Holliger, K., Bergmann, T., 2000. Modellierung von Bohrloch-Georadardaten. Special Issue of the Bulletin of the German Geophysical Society (DGG), 1, 53-59.
- Maia, M., Ackermann, D., Dehghani, G.A., Gente, P., Hekinian, R., Naar, D., O'Connor, J., Perrot, K., Phipps Morgan, J., Ramillien, G., Revillon, S., Sabetian, A., Sandwell, D., Stoffers, P., 2000. The Pacific-Antarctic Ridge Foundation hotspot interaction: a case study of a ridge approaching a hotspot. *Marine Geology*, 167, 61-84.
- Müller, G., Dahm, T., 2000. Fracture morphology of tensile cracks and rupture velocity. *Journal of Geophysical Research*, 105, 723-738.
- Tessmer, E., 2000. Seismic finite-difference modeling with spatially varying time steps. *Geophysics*, 65, 1290-1293.
- Zühlsdorff, L., Spieß, V., Hübscher, C., Villinger, H., Rosenberger, A., 2000. Seismic indicators for dewatering processes near ODP Sites 889 and 890, Cascadia accretionary prism. *International Journal of Earth Sciences*, 88, 655-667.

2001

- Dahm, T., 2001. Rupture dimensions and rupture processes of the fluid-induced microcracks in salt rock. *Journal of Volcanology and Geothermal Research*, 109, 149-162.
- Ettrich, N., Gajewski, D., Kashtan, B., 2001. Reference ellipsoids for anisotropic media. *Geophysical Prospecting*, 49, 321-334.
- Makris, J., Papoulia, J., Papanikolaou, D., Stavrakakis, G., 2001. Thinned continental crust below northern Evoikos Gulf, central Greece, detected from deep seismic soundings. *Tectonophysics*, 341, 225-236.
- Manthei, G., Eisenblätter, J., Dahm, T., 2001. Moment tensor evaluation of acoustic emission sources in salt rock. *Construction and Building Materials*, 15, 297-309.
- Pecher, I., Kukowski, N., Hübscher, C., Greinert, J., Bialas, J. and GEOPECO Working Group, 2001. The link between bottom simulating reflections and methane flux into the gas hydrate stability zone - New evidence from Lima Basin, Peru. *Earth and Planetary Science Letters*, 185, 343-354.
- Vanelle, C., Gajewski, D., 2001. Determining the optimum migration aperture from traveltimes. *Journal of Seismic Exploration*, 10, 205-224.

2002

- Dahm, T., Krüger, F., 2002. Rupture during the 1994 Bolivia deep earthquake; an example for extended source parameter retrieval. Ten years of German Regional Seismic Network (GRSN). Senate Commission for Geoscience, 25, 245-251.
- Dahm, T., Thorwart, M., Flueh, E.R., Braun, T., Herber, R., Favali, P., Beranzoli, L., D'Anna, G., Frugoni, F., Smriglio, G., 2002. Ocean Bottom Seismometers Deployed in the Tyrrhenian Sea, EOS, Transaction. American Geophysical Union, 83, 309+314-315.
- DOBREffection-2000 and DOBREFraction'99 Working Groups incl. C. Hübscher, 2002 DOBRE studies evolution of inverted intra-cratonic rifts in Ukraine. EOS, Transactions. American Geophysical Union, 83, 323-327.
- Gajewski, D., Coman, R., Vanelle, C., 2002. Amplitude Preserving Kirchhoff Migration: a Traveltime Based

Strategy. *Studia Geophysica et Geodaetica*, 46, 193-211.

- Holliger, K., Bergmann, T., 2002. Numerical modeling of borehole georadar data. *Geophysics*, 67, 1249-1257.
- Hübscher, C., Figueiredo, A., Kruse, L., Spieß, V., 2002. High-resolution analysis of the deposition. *Marine Geophysical Researches*, 23, 209-222.
- Krüger, F., Dahm, T., 2002. The 1992 Roermond earthquake, a regional event study. Ten years of German Regional Seismic Network (GRSN). *Senate Commission for Geoscience*, 25, 199-205.
- Menyoli, E., Gajewski, D., Hübscher, C., 2002. Time migrated CRS images of complex inverted basin structures. *SEG Technical Program, II*, 2054-2057.
- Vanelle, C., Gajewski, D., 2002. Second-order interpolation of traveltimes. *Geophysical Prospecting*, 50, 73-83.
- Vanelle, C., Gajewski, D., 2002. True-amplitude migration weights from traveltimes. *Pure and Applied Geophysics*, 159, 1583-1599.

2003

- Essen, H.H., Krüger, F., Dahm, T., Grevemeyer, I., 2003. On the generation of secondary microseism observed in north and central Europe. *Journal of Geophysical Research*, 108:10,1029/2002JB0002338.
- Hort M., Seyfried, R., Vöge M., 2003. Radar Doppler velocity of volcanic eruptions: Theoretical considerations and quantitative documentation of changes in eruptive behaviour at Stromboli volcano, Italy. *Geophysical Journal International*, 154, 515-532.
- Hübscher, C., Kukowski, N., 2003. A Complex BSR Pattern in the Yaquina Basin off Peru. *Geo-Marine Letters*, 23, 91-101.
- Maystrenko, Y., Stovba, S., Stephenson, R., Bayer, U., Menyoli, E., Gajewski, D., Hübscher, C., Rabbel, W., Saintot, A., Starostenko, V., Thybo, H., Tolkunov, A., 2003. Crustal scale pop-up structure in cratonic lithosphere: DOBRE deep seismic reflection study of the Donbas Foldbelt, Ukraine. *Geology*, 31, 733-736.
- Riedel, C., Ernst, G.G.J., Riley, M., 2003. Controls on the growth and geometry of pyroclastic constructs. *Journal of Volcanology and Geothermal Research*, 127, 121-152.
- Riedel, C., Petersen, T., Theilen, F., Neben, S., 2003. High b-values in the leaky segment of the Tjörnes Fracture Zone north of Iceland: are they evidence for shallow magmatic heat source. *Journal of Volcanology and Geothermal Research*, 128, 15-29.
- Schwenk, T., Spieß, V., Hübscher, C., Breitzke, M., 2003. Frequent channel avulsion within the active channel-levee system of the middle Bengal Fan - an exceptional channel-levee development derived from Parasound and Hydrosweep data. *Deep Sea Research II*, 50, 1023-1045.
- Soukina, S.M., Gajewski, D., Kashtan, B.M., 2003. Traveltime computation for 3-D anisotropic media by a finite-difference perturbation method. *Geophysical Prospecting*, 51, 431-441.
- Vanelle, C., Gajewski, D., 2003. Determination of geometrical spreading from traveltimes. *Journal of Applied Geophysics*, 54, 391-400.
- Wong, H. K., Lüdmann, T., Haft, C., Paulsen, A.-M., Hübscher, C., Geng, J., 2003. Quaternary sedimentation in the Molengraaff paleo-delta, northern Sunda Shelf (southern South China Sea), F.H. Sidi, D. Nummedal, P. Imbert, H. Darman, W.H. Posamentier (Eds.), *Tropical deltas of Southeast Asian Pacific Region: Sedimentology, Stratigraphy and Petroleum Geology. Soc. Econ. Paleont. Min. (SEPM) Spec. Publ.*, 76, 201-216.

2004

- Coman, R., Gajewski, D., 2004. Traveltime computation by wavefront-oriented ray tracing. *Geophysical Prospecting*, in press.
- Hampel, A., Kukowski, N., Bialas, J., Hübscher, C., Heinbockel, R., 2004. Ridge subduction at an erosive margin – the collision zone of the Nazca Ridge in southern Peru. *Journal of Geophysical Research*, 109, B02101, doi:10.1029/2003JB002593.
- Harris, A., Hort, M., Ripepe, M., 2004. Editorial: Conduit processes during explosive basaltic eruptions: an introduction. *Journal of Volcanology and Geothermal Research*, 137, vii-viii.
- Hübscher, C., Lykke-Andersen, H., Bak Hansen, M., Reicherter, K., 2004. Investigating the structural evolution of the western Baltic. *Transaction of the American Geophysical Union EOS*, 85(12), 115.

- Kaiser, A., Reicherter, K., Hübscher, C., Gajewski, D., 2004. Variations of the present-day stress field within the North German Basin insights from thin shell FE-modeling based on residual GPS-velocities. *Tectonophysics*, in press.
- Krabbenhöft, A., Bialas, J., Kopp, H., Kukowski, H., Hübscher, C., 2004. Crustal structure of the Peruvian continental margin from wide angle seismic studies. *Journal of Geophysical Research*, 159, in press.
- Kühn, D., Dahm, T., 2004. Simulation of Magma ascent by dykes in the mantle beneath mid-ocean ridges. *Journal of Geodynamics*, 38, 147-159.
- Kuhn, T., Riedel, C., Herzig, P., Theilen, F., 2004. The shallow 3D-structure of the Grimsey Lineament offshore North Iceland. *Marine Geology*, accepted.
- Menyoli, E., Gajewski, D., Hübscher, C., 2004. Imaging of complex basin structures with the CRS stack method. *Geophysical Journal International*, 157, 1206-1216.
- Riedel, C., Tryggvason, A., Dahm, T., Stefanson, R., Bödvarson, R., Gudmundsson., 2004. The seismic velocity structure north of Iceland. *Journal of Seismology*, accepted.
- Rüpke, L., Hort, M., 2004. The impact of sidewall cooling on the thermal history of magmatic bodies. *Journal of Volcanology and Geothermal Research*, 131, 165-178.
- Rüpke, L., Phipps Morgan, J., Hort, M., Connolly, J.A.D., 2004. Serpentine and the subduction zone water cycle. *Earth & Planetary Science Letters*, 223, 17-34.

Revised

- Dahm, T., Tilmann, F., Phipps-Morgan, J., 2004. Seismic broadband ocean bottom data and noise observed with free-fall stations: experiences from long-term deployments in the North Atlantic and Tyrrhenian Sea. *Bulletin of the Seismological Society of America*, revised.
- Rivalta, E., Böttinger, M., Dahm, T., 2004. Gelatine experiments on dike ascent in layered media. *Journal of Volcanology and Geothermal Research*, revised.

Submitted

- Dahm, T., Essen, H.H., Krüger, P., Hensch, M., 2004. Historic microseismic data and their relation to the wave-climate in the North Atlantic. *Zeitschrift für Meteorologie*, submitted.
- Ehrhardt, A., Hübscher, C., Ben-Avraham, Z., Gajewski, D., 2004. Pull apart induced sediment tectonics: Dead Sea Transform / Gulf of Aqaba (Elat). *Tectonophysics*, submitted.
- Ehrhardt, A., Hübscher, C., Gajewski, D., 2004. Conrad Ocean Deep, Northern Red Sea: Transtension Basin within the Axial Depression. *Tectonophysics*, submitted.
- Ehrhardt, A., Hübscher, C., Gajewski, D., 2004. Conrad-, Shaban-, and Kebrit Deeps: Classification of three northern Red-Sea Deeps. *Marine Geology*, submitted.
- Gardner, J.E., Burgisser, A., Hort, M., Rutherford, M., 2004. Experimental and model constrains on degassing of magma during ascent. *Geological Society of America Bulletin*, submitted.
- Gradmann, S., Hübscher, C., Ben-Avraham, Z., Gajewski, D., Netzeband, G., 2004. Salt tectonic off northern Israel. *Marine Geology*, submitted.
- Hort, M., Vöge, M., Seyfried, R., Ratdomopurbo, A., 2004. In situ observation of dome instabilities at Merapi volcano, Indonesia. *Nature*, submitted.
- Hübscher, C., Spieß, V., 2004. Forced regression system tracts of the eastern Bengal Shelf. *Marine Geology*, submitted.
- Netzeband, G.L., Hübscher, C., Gajewski, D., Grobys, J.W.G., Bialas, J., 2004. Seismic velocities from the Yaquina Forearc Basin off Peru: Evidence for Free Gas within the Gas Hydrate Stability Zone. *International Journal of Earth Sciences*, submitted.
- Phipps Morgan, J., Hasenclever, J., Hort, M., Rüpke, L., Parmentier, M., 2004. On Subducting Slab Entrainment of Buoyant Asthenosphere. *Nature*, submitted.
- Riedel, C., 2004. The history of the Tjörnes Fracture Zone resolved by a review of geoscientific data and literature. *International Journal of Earth Sciences*, submitted.
- Vanelle, C., Dettmer, J., Gajewski, D., 2004. Short note: Second-order interpolation of later-arrival traveltimes. *Geophysical Prospecting*, submitted.

IfBM

2004

BAHR, A., H. K. WONG, W.W.-S. YIM, G. HUANG, T. LÜDMANN, L.S. CHAN & W.N. RIDLEY THOMAS, in press (2005). Stratigraphy of Quaternary inner-shelf sediments in Tai O Bay, Hong Kong, based on ground-truthed seismic profiles. *Geo-Marine Lett.*

Blumenberg M., Seifert R., Reitner J., Pape T., Michaelis W. (2004) Membrane lipid patterns typify distinct anaerobic methanotrophic consortia. *Proc. Natl. Acad. Sci. USA* **101**, 11111-11116.

Emeis, K.-C., Brüchert, V., Currie, B., Endler, R., Ferdelman, T., Kiessling, A., Leipe, T., Noli-Peard, K., Struck, U. and Vogt, T., 2004. Shallow gas in shelf sediments of the Namibian coastal upwelling ecosystem. *Continental Shelf Research*, 24(6): 627-647.

Gebhardt, A.C., Gaye-Haake, B., Lahajnar, N., Unger, D. and Ittekkot, V., 2004. Particulate organic carbon and total suspended matter in the Ob and Yenisei estuaries and the adjacent Kara Sea (Siberia). *Marine Geology* 207, 225-245.

Jennerjahn, T.C., Ittekkot, V., Klöpffer, S., Seno Adi, Sutopo Purwo Nugroho, Nana Sudiana, Anyuta Yusmal, Prie Hartanto and Gaye-Haake, B., 2004. Biogeochemistry of a tropical river affected by human activities in its catchment: Brantas River estuary and adjacent coastal waters of Madura Strait, Java, Indonesia. *Estuarine, Coastal and Shelf Science* 60, 503-514.

LÜDMANN, T. & H. K. WONG, 2004. Gas hydrate occurrence and BSR in the northwestern Black Sea adjacent to the Dnieper Canyon (GHOSTDABS). Programme and Abstracts, Informal Conference on „Methane Seepage, Mud Volcanoes and Gas Hydrates in the Black Sea”, IfM-GEOMAR Leibnitz Institut für Meereswissenschaften, Kiel Germany, 6 February, 2004, p. 24 (abs.).

Lüdmann, T., H. K. Wong, P. Konerding, M. Zillmer, J. Petersen & E. Flüh, 2004. Heat flow and quantity of methane deduced from a gas hydrate field in the vicinity of the Dnieper Canyon, northwestern Black Sea. *Geo-Marine Letters*, 24(3), 182-193.

PAPE, T., R. SEIFERT, M. BLUMENBERG, K. NAUHAUS, F. WIDDEL, J. REITNER, P. KONERDING, H. K. WONG & W. MICHAELIS, 2004. Results of the GHOSTDABS I Project. Topic: Biogeochemistry. Programme and Abstracts, Informal Conference on „Methane Seepage, Mud Volcanoes and Gas Hydrates in the Black Sea”, IfM-GEOMAR Leibnitz Institut für Meereswissenschaften, Kiel Germany, 6 February, 2004, p. 12 (abs.).

Rohling, E.J., Sprovieri, M., Cane, T., Casford, J.S.L., Cooke, S., Bouloubassi, I., Emeis, K.C., Schiebel, R., Hayes, A., Jorissen, F.J. and Kroon, D., 2004. Reconstructing past planktic foraminiferal habitats using stable isotope data: a case history for Mediterranean sapropel S5. *Marine Micropaleontology*, 50: 89-123.

Rosell-Melé, A., Bard, E., Emeis, K.-C., Grieger, B., Hewitt, C., Müller, P.J. and Schneider, R.R., 2004. Glacial to modern sea surface temperature anomalies in the global ocean as estimated from alkenone unsaturation ratios: comparison with GCMs. *Geophysical Research Letters*, 31(3): L03208 10.1029/2003GL018151.

Steinbach A., Seifert R., Annweiler E., Michaelis W., 2004. Hydrogen and carbon isotope fractionation during anaerobic biodegradation of aromatic hydrocarbons- a field study. *Environ. Sci. Technol.* **38**(2), 609-616.

Wiesner, M.G., Wetzell, A., Catane, S.G., Listanco, E.L., Mirabueno, H.T., 2004. Grain size, areal thickness distribution and controls on sedimentation of the 1991 Mount Pinatubo tephra layer in the South China Sea. *Bulletin of Volcanology* 66, 226-242.

Zhang, Shuo, Herbell, J.-D. and Gaye-Haake, B., 2004. Biodegradable organic matter in municipal solid waste incineration bottom ash. *Waste Management* 24, 673-679.

ZHONG, G., J. GENG, H. K. WONG, Z. MA & N. WU, 2004. A semi-quantitative method for the reconstruction of eustatic sea level history from seismic profiles and its application to the southern South China Sea. *Earth Planet. Sci. Lett.*, **223**, 443-459.

2003

- Das, B.K. and Gaye-Haake, B., 2003. Geochemistry of Rewalsar Lake sediment, Lesser Himalaya, India: implications for source-area weathering, provenance and tectonic setting. *Geosciences Journal*, 7 (4), 299-312.
- Emeis, K.-C. and Dawson, A., 2003. Holocene paleoclimate records over Europe and the North-Atlantic. *The Holocene*, 13(3): 305-309.
- Emeis, K.-C., Schulz, H., Struck, U., Rossignol-Strick, M., Erlenkeuser, H., Howell, M.W., Kroon, D., Mackensen, H., Ishizuka, S., Oba, T., Sakamoto, T. and Koizumi, I., 2003a. Eastern Mediterranean surface water temperatures and $\delta^{18}\text{O}$ composition during deposition of sapropels in the late Quaternary. *Paleoceanography*, 18(1): 5-1 to 5-18.
- Emeis, K.-C., Struck, U., Blanz, T., Kohly, A. and Voss, M., 2003b. Salinity changes in the Central Baltic Sea (NW Europe) over the last 10000 years. *The Holocene*, 13(3): 413-423.
- Fahl, K., Gaye-Haake, B., Gebhardt, C., Kodina, L.A., Stein, R., Unger, D. and Ittekkot, V., 2003. Biomarkers in suspended matter and surface sediments from Ob and Yenisei estuaries and southern Kara Sea: Evidence for particulate organic carbon sources, pathways, and degradation. *Proceedings in Marine Sciences*, 6, 329-348.
- Gaye-Haake, B., Unger, D., Nöthig, E. Y. Okolodkov, Fahl, K. and Ittekkot, V., 2003. Particle fluxes from short-term sediment trap deployments in late summer in the southern Kara Sea. *Proceedings in Marine Sciences*, 6, 309-328.
- Giunta, S., Negri, A., Morigi, C., Capotondi, L., Combourieu-Nebout, N., Emeis, K.-C., Sangiorgi, F. and Vigliotti, L., 2003. Coccolithophorid ecostratigraphy and multi-proxy paleoceanographic reconstruction in the Southern Adriatic Sea during the last deglacial time (Core AD91-17). *Palaeogeography, Palaeoclimatology, Palaeoecology*, 190: 39-59.
- Hanebuth, T. J. J., K. Statterger, A. Schimanski, T. Lüdmann & H. K. Wong, 2003. Late Pleistocene forced-regressive deposits on the Sunda Shelf (Southeast Asia). *Marine Geology*, 199(1-2), 139-157.
- Kerner, M., Reckermann, M., Hohenberg, H., Ertl, S. and Spitzky, A., 2003. Self-organization of dissolved organic matter producing micelle-like microparticles in river water. *Nature* 422: 150-154.
- Köhler, H., Méon, B., Gordeev, V.V., Spitzky, A. and Amon, R.M.W., 2003. Dissolved organic matter (DOM) in the estuaries of Ob and Yenisei and the adjacent Kara-Sea (Russia). *Proc. Mar. Sci.*, 6: 281-310.
- Koppelman, R., Weikert, H. and Lahajnar, N., 2003. Vertical distribution of mesozooplankton and its $\delta^{15}\text{N}$ signature at a deep-sea site in the Levantine Sea (eastern Mediterranean) in April 1999. *Journal of Geophysical Research*, 108, C9, 8118.
- Lüdmann, T. & H. K. Wong, 2003. Characteristics of gas hydrate occurrences associated with mud diapirism and gas escape structures in the northwestern Sea of Okhotsk. *Marine Geology*, 201(4), 269-286.
- Lüdmann, T., H. K. Wong, P. Konerding, M. Zillmer, J. Petersen & E. Flüh, 2003. Gas hydrate occurrence and heat flow deduced from BSR depth in the northwestern Black Sea. *Geophysical Research Abstracts*, Vol. 5, EAE03-A-04069, European Geo-physical Society.
- Lüdmann, T., H.K. Wong, B. Baranov & B. Karp, 2003. Seismic investigations of gas hydrates and gas escape structures in the northwestern Sea of Okhotsk. *Geophysical Research Abstracts*, Vol. 5, EAE03-A-04085, European Geophysical Society.
- Schmiedl, G., Mitschele, A., Beck, S., Emeis, K.-C., Hemleben, C., Schulz, H., Sperling, M. and Weldeab, S., 2003. Benthic foraminiferal record of ecosystem variability in the eastern Mediterranean Sea during the times of sapropel S5 and S6. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 190: 139-164.
- Sperling, M., Schmiedl, G., Hemleben, C., Emeis, K.-C., Erlenkeuser, H. and Grootes, P., 2003. Black Sea impact on the formation of eastern Mediterranean sapropel S1? Evidence from the Marmara Sea. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 190: 9-21.
- Weldeab, S., Emeis, K.-C., Hemleben, C., Schmiedl, G. and Schulz, H., 2003. Spatial productivity variations during formation of sapropels S5 and S6 in the Mediterranean Sea: Evidence from Ba concentrations. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 191: 169-190.
- Thiel V., Blumenberg M., Pape T., Seifert R., Michaelis W., 2003 Unexpected emergence of hopanoids at gas

seeps in the Black Sea. *Org. Geochem.* **34**, 81-87.

Steinbach A., and Michaelis W., 2003. Combined $\delta^{13}\text{C}$ and $\delta^2\text{H}$ monitoring of in situ biodegradation of aromatic hydrocarbons in a contaminated aquifer. In *Geochemical processes in soil and groundwater, Measurement-Modelling-Upscaling*, Schulz H.D, and Haderler A. (Eds.), pp 169-180, Wiley-VCH, Weinheim.

Weldeab, S., Siebel, W., Wehausen, R., Emeis, K.-C., Schmiedl, G. and Hemleben, C., 2003. Late Pleistocene sedimentation in the Western Mediterranean Sea: Implications for productivity changes and climatic conditions in the catchment areas. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 190: 121-137.

Wong, H. K., T. Lüdmann, B. V. Baranov, B. Ya. Karp, P. Konerding & G. Ion, 2003. Bottom current-controlled sedimentation and mass wasting in the north-western Sea of Okhotsk. *Marine Geology*, 201(4), 287-305.

Wong, H. K., T. Lüdmann, C. Haft, A.-M. Paulsen, C. Hübscher & J. Geng, 2003. Quaternary sedimentation in the Molengraaff paleo-delta, northern Sunda Shelf (southern South China Sea). In: F.H. Sidi, D. Nummedal, P. Imbert, H. Darman and H.W. Posamentier (eds.), *Tropical Deltas of Southeast Asia Pacific Region - Sedimentology, Stratigraphy, and Petroleum Geology*. Soc. Econ. Paleont. Min. (SEPM) Spec. Publ. 76, 201-216, Tulsa, OK.

Wu Shiguo, Liu Zhan, Wang Wanyin, Guo Junhua, T. Lüdmann and H.K. Wong, 2003. Late Cenozoic tectonic deformation in the Dongsha islands and adjacent sea area. *Chinese Journal of Oceanology and Limnology*, 21(3).

2002

Anweiler E., Michaelis W., and Meckenstock R.U., 2002 Identical Ring Cleavage Products during Anaerobic Degradation of Naphtalene, 2-Methylnaphtalene, and Tetralin Indicate a New Metabolic Pathway. *Appl. Environ. Microbiol.* 68, 852-858.

Baranov, B., H. K. Wong, K. Dozorova, B. Karp, T. Lüdmann & V. Karnaukh, 2002. Opening geometry of the Kurile Basin (Sea of Okhotsk) as inferred from structural data. *The Island Arc*, 11(3), 206-219.

Brasse S., Nellen M., Seifert R., and Michaelis W., 2002 The carbon dioxide system in the Elbe estuary. *Biogeochemistry* 59, 25-40.

Christiansen, C., Edelvang, K., Emeis, K.-C., Graf, G., Jähmlich, S., Kozuch, J., Laima, M., Leipe, T., Löffler, A., Lund-Hansen, L.L., Miltner, A., Pazdro, K., Pempkowiak, J., Shimmield, G.B., Shimmield, T., Smith, J., Voss, M. and Witt, G., 2002. Material transport from the near shore to the basinal environment in the Southern Baltic Sea, I: Processes and mass estimates. *Journal of Marine Systems*, 35(3-4): 133-150.

Christiansen, C., Kunzendorf, H., Emeis, K.-C., Endler, R., Struck, U., Neumann, T. and Sivkov, V., 2002. Temporal and spatial sedimentation rate variabilities in the eastern Gotland Basin, the Baltic Sea. *Boreas*, 31: 65-74.

Christof O., Seifert R., and Michaelis W., 2002. Volatile halogenated organic compounds in European estuaries. *Biogeochemistry* 59, 143-160.

Emeis, K.-C., Christiansen, C., Edelvang, K., Jähmlich, S., Kozuch, J., Laima, M., Leipe, T., Löffler, A., Lund-Hansen, L.L., Miltner, A., Pazdro, K., Pempkowiak, J., Shimmield, G.B., Shimmield, T., Smith, J., Voss, M. and Witt, G., 2002. Material transport from the near shore to the basinal environment in the Southern Baltic Sea, II: Origin and properties of material. *Journal of Marine Systems*, 35(3-4): 151-168.

Emeis, K.-C., Endler, R., Struck, U. and Kohly, A., 2002. The post-glacial evolution of the Baltic Sea. In: G. Wefer, W. Berger, K.-H. Behre and E. Jansen (Editors), *Climate Development and History of the North Atlantic Realm*. Springer-Verlag, Berlin, pp. 205-221.

Michaelis W., Seifert R., Nauhaus K., Treude T., Thiel V., Blumenberg M., Knittel K., Gieseke A., Peterknecht K., Pape T., Boetius A., Amann R., Jørgensen B.B., Widdel F., Peckmann J., Pimenov N.V., and Gulin M.B., 2002. Microbial reefs in the Black Sea fuelled by anaerobic oxidation of methane. *Science* 297, 1013-1015.

Middelburg J. J., Nieuwenhuize J., Iversen N., Høgh N., De Wilde H., Helder W., Seifert R., Christof O., 2002. Methane distribution in European tidal estuaries. *Biogeochemistry* 59, 95-119.

Peckmann J., Goedert J.L., Thiel V., Michaelis W., and Reitner J., 2002. A comprehensive approach to the study of methane-seep deposits from the Lincoln Creek Formation, western Washington State, USA. *Sedimentology* **49**, 1-19.

Rohling, E.J., Cane, T.R., Cooke, S., Sprovieri, M., Bouloubassi, I., Emeis, K.-C., Schiebel, R., Kroon, D., Jorissen, F.J., Lorre, A. and Kemp, A.E.S., 2002. African monsoon variability during the previous interglacial maximum. *Earth and Planetary Science Letters*, 202(1): 61-75.

Schulz, H., Emeis, K.-C., Erlenkeuser, H., von Rad, U. and Rolf, C., 2002. The Toba Volcanic Event and interstadial/stadial climates at the marine isotopic stage 5 to 4 transition in the Northern Indian Ocean. *Quaternary Research*, 57(1): 22-31.

Sölter S., Dieckmann R., Blumenberg M., and Francke W. Baretin, 2002. *Tetrahedr. Lett.* 43, 3385-3386.

Struck, U., Emeis, K.-C., Alheit, J., Schneider, R.R., Eichner, C. and Altenbach, A.V., 2002. Changes of the upwelling rates of nitrate preserved in the $\delta^{15}\text{N}$ -signature of sediments and fish-scales from the diatomaceous mud belt off Namibia. *GeoBios*, 35: 3-11.

Thiel V., Blumenberg M., Hefter J., Pape T., Pomponi S., Reed J., Reitner J., Wörheide G., and Michaelis W., 2002 A chemical view of the most ancient metazoa - biomarker chemotaxonomy of hexactinellid sponges. *Naturwissenschaften* 89, 60-66.

Weigand H., Totsche K. U., Kögel-Knabner I., Annweiler E., Richnow H.H., and Michaelis W., 2002 Fate of anthracene in contaminated soil: transport and biodegradation under unsaturated flow conditions. *Europ. J. Soil Science* 53, 71-81.

Weldeab, S., Emeis, K.-C., Hemleben, C. and Vennemann, T.H., 2002a. Sr-Nd isotope and geochemical analysis of lithogenic components in Late Pleistocene sapropels and homogeneous sediments from the Eastern Mediterranean Sea: Implications for detrital influx and climatic conditions in the source areas. *Geochimica et Cosmochimica Acta*, 66(20): 3585-3598.

Weldeab, S., Hemleben, C., Emeis, -C. and Siebel, W., 2002b. Provenance of lithogenic surface sediments and path ways of riverine suspended matters in the Eastern Mediterranean Sea recorded by $^{143}\text{Nd}/^{144}\text{Nd}$ and $^{87}\text{Sr}/^{86}\text{Sr}$ isotope ratios. *Chemical Geology*, 186: 139-149.

Wu, S., I. Sakamoto, J. Xu & H. K. Wong, 2002. A comprehensive investigation of an offshore active fault in the western Sagami Bay, Central Japan. *Acta Geologica Sinica*, 76(3), 300-307.

Wu, S.-G. & H. K. Wong, 2002. Late Quaternary seismic sequences and sedimentation along the coast off Taishan, Guangdong, as revealed by high resolution seismic data. *Chinese Journ. Oceanology Limnol.*, 20(3), 270-276.

2001

Annweiler E., Michaelis W., and Meckenstock R., 2001. Anaerobic Cometabolic Conversion of Benzothiophene by a Sulfate-Reducing Enrichment Culture and in a Tar-Oil-Contaminated Aquifer. *Appl. Environ. Microbiol.* 67, 5077-5083.

Annweiler E., Steinbach A., and Michaelis W. , 2001. Compound specific stable isotope fractionation to assess intrinsic biodegradation in tar oil contaminated aquifers. *International Meeting on Organic Geochemistry*, pp. 222-223. Nancy.

Emeis, K.-C., Benoit, J.R., Deegan, L., Gilbert, A.J., Lee, V., McGlade, J.M., Meybeck, M., Olsen, S.B. and von Bodungen, B., 2001. Group Report: Unifying Concepts for Integrated Coastal Zone Management. In: B. von Bodungen and K. Turner (Editors), *Science and Integrated Coastal Zone Management*. Dahlem Workshop Report. Dahlem University Press, Berlin, pp. 341-364.

Giunta, S., Emeis, K.-C. and Negri, A., 2001. Sea-surface temperature reconstruction of the last 16,000 years in the Eastern Mediterranean Sea. *Riv. Ital. Paleont. Stratigr.*, 107(3): 463-476.

Haeckel, M., van Beusekom, J., Wiesner, M.G. and König, I., 2001. The impact of the 1991 Mount Pinatubo tephra fallout on the geochemical environment of the deep-sea sediments in the South China Sea. *Earth and Planetary Science Letters*, 193: 151-166.

Halbach P., Holzbecher E., Koschinsky A., Michaelis W., and Seifert R. , 2001. Deep-sea hydrothermal microplume generation - a case study from the North Fiji Basin. *Geo-Marine Letters* 21, 94-102.

Holmes, R.M., Peterson, B.J., Zhulidov, A.V., Gordeev, V.V., Makkaveev, P.A., Stunzhas, P.A., Kosmenko, L.S., Köhler, H. and Shiklomanov, A.I., 2001. Nutrient Chemistry of the Ob and Yenisei rivers, Siberia: results from June 2000 expedition and evaluation of long-term data sets. *Marine Chemistry* 75, 219-227.

Koschinsky, A., Gaye-Haake, B., Arndt, C., Maue, G., Spitzzy, A., Winkler, A. and Halbach, P., 2001. Experiments on the influence of sediment disturbances on the biogeochemistry of the deep-sea environment. *Deep Sea Res. II* 48: 3629-3651.

Kudrass, H.R., Hofmann, A., Doose, H., Emeis, K.-C. and Erlenkeuser, H., 2001. Modulation and amplification of climatic changes in the Northern Hemisphere by the Indian summer monsoon during the past 80 k.y. *Geology*, 29(1): 63-66.

Laima, M.J.C., Matthiesen, H., Christiansen, C., Lund-Hansen, L.C. and Emeis, K.-C., 2001. Transport of P, Fe and Mn along a depth gradient in the SW Baltic. *Boreal Environmental Research*, 6: 317-333.

Lüdmann, T., Wong, H.K. & Wang, P., 2001. Plio-Quaternary sedimentation processes and neotectonics of the northern continental margin of the South China Sea. *Marine Geology*, 172, 331-356.

Miltner, A. and Emeis, K.-C., 2001. Terrestrial organic matter in surface sediments of the Baltic Sea, NW Europe, as determined by CuO oxidation. *Geochimica et Cosmochimica Acta*, 65(8): 1285-1299.

Popescu, I., G. Lericolais, N. Panin, H. K. Wong, L. Droz, 2001. Late Quaternary channel avulsions on the Danube deep-sea fan, Black Sea. *Mar. Geol.*, 179(1-2), 25-37.

Rosell-Melé, A., Bard, E., Emeis, K.-C., Grimalt, J., Müller, P., Schneider, R., Bouloubassi, I., Epstein, B., Fahl, K., Flügge, A., Freeman, K., Goni, M., Güntner, U., Hartz, D., Hellebust, S., Herbert, T., Ikehara, M., Ishiwatari, R., Kawamura, K., Kenig, F., de Leeuw, J., Lehman, S., Ohkuchi, N., Pancost, R.D., Prahl, F., Quinn, J., Rontani, J.-F., Rostek, F., Rullkötter, J., Sachs, J., Sanders, D., Sawada, K., Schulz-Bull, D., Sikes, E., Ternois, Y., Versteegh, G., Volkman, J. and Wakeham, S., 2001. Inter-laboratory comparison of the quantification of the relative (Uk'37) and absolute abundance of alkenones. *Geochemistry, Geophysics, Geosystems*, 2: 2000GC000141.

Sohlenius, G., Emeis, K.-C., Andrén, E., Andrén, T. and Kohly, A., 2001. Development of anoxia during the Holocene fresh-brackish water transition in the Baltic Sea. *Marine Geology*, 177(3-4): 221-242.

Song, H.-B., J.-H. Geng, H. K. Wong, W.-S. Zhang, Y.-X. Fang, T.-Y. Hao & W.-W. Jiang, 2001. A preliminary study of gas hydrates in the Dongsha region, northern South China Sea. *Chinese Journ. Geophys.*, 44(5), 687-695 (in Chinese). English version published by AGU (see <http://www.agu.org/WPS/ChineseJGeo/>).

Struck, U., Emeis, K.-C., Rau, G.H., Voss, M. and Krom, M., 2001. Biological productivity during sapropel S5 formation in the eastern Mediterranean Sea - Evidence from stable isotopes of nitrogen and carbon. *Geochimica et Cosmochimica Acta*, 65(19): 3241-3258.

Suthhof, A., Ittekkot V. and Gaye-Haake, B., 2001. Millennial-scale oscillations of denitrification intensity in the Arabian Sea during the late Quaternary and its potential influence on atmospheric N₂O and global climate. *Global Biogeochem. Cycles*, 15, 637-650.

Thiel V., Peckmann J., Richnow H. H., Luth U., Reitner J., and Michaelis W. , 2001. Molecular signals for anaerobic methane oxidation in Black Sea seep carbonates and a microbial mat. *Marine Chemistry* 73, 97-112.

Thiel V., Peckmann J., Schmale O., Reitner J., and Michaelis W. , 2001. A new straight-chain hydrocarbon biomarker associated with anaerobic methane cycling. *Organic Geochemistry* 32, 1019-1023.

Witt, G., Leipe, T. and Emeis, K.-C., 2001. Using fluffy layer material to study the fate of particle bound organic pollutants in the southern Baltic Sea. *Environ. Sci. Technol.*, 35: 1567-1573.

2000

Chen, J., Chen R., Wiesner, M.G. and Zheng, L., 2000. Amino acids, amino sugars and carbohydrates in settling planktonic tests and their implications in the South China Sea. *Oceanologia et Limnologia Sinica*, 31: 596-603.

- Emeis, K.-C., Sakamoto, T., Wehausen, R. and Brumsack, H.-J., 2000. The sapropel record of the Eastern Mediterranean Sea - Results of Ocean Drilling Program Leg 160. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 158: 259-280.
- Emeis, K.-C., Struck, U., Leipe, T., Pollehne, F., Kunzendorf, H. and Christiansen, C., 2000. Changes in the burial rates and C:N:P ratios in Baltic Sea sediments over the last 150 years. *Marine Geology*, 167(1-2): 43-59.
- Emeis, K.-C., Struck, U., Schulz, H.-M., Bernasconi, S., Sakamoto, T. and Martinez-Ruiz, F., 2000. Temperature and salinity of Mediterranean Sea surface waters over the last 16,000 years: Constraints on the physical environment of S1 sapropel formation based on stable oxygen isotopes and alkenone unsaturation ratios. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 158: 259-280.
- Kerner, M. and Spitzky, A., 2000. Nitrate regeneration coupled to different size fractions of DON by the picoplankton in the Elbe estuary. *Microbial Ecology*, 41: 69-81.
- Leipe, T., Löffler, A., Emeis, K.-C., Jähmlich, S., Bahlo, R. and Ziervogel, K., 2000. Vertical patterns of suspended matter characteristics along a coastal-basin transect in the Western Baltic Sea. *Estuarine, Coastal and Shelf Science*, 51: 789-804.
- Löffler, A., Leipe, T. and Emeis, K.-C., 2000. The "fluffy layer" in the Pomeranian Bight (western Baltic Sea): geochemistry, mineralogy and environmental aspects. *Meyniana*, 52: 85-100.
- Miltner, A. and Emeis, K.-C., 2000. Origin and transport of terrestrial organic matter from the Oder lagoon to the Arkona Basin, Southern Baltic Sea. *Organic Geochemistry*, 31: 57-66.
- Rixen, T., Haake, B. and Ittekkot, V., 2000. Sedimentation in the western Arabian Sea: The role of water mass advection, coastal and open ocean upwelling. In: G. Gansen & G. Wefer (eds.) - *Particle Flux and its preservation in Deep Sea Sediments*. *Deep-Sea Res. II*, 47, 2155-2178.
- Rixen T., Ittekkot, V., Gaye-Haake, B. and Schäfer, P., 2000. The SW monsoon influence on the deep-sea organic carbon cycle. In: O. Pfannkuche & K. Lochte (eds.) - *Biogeochemistry of the Deep Arabian Sea*. *Deep-Sea Res. II*, 47, 2629-2651.
- Schulz, H.-M. and Emeis, K.-C., 2000. Sources and pathways of natural and anthropogenic hydrocarbons into the Natural dump Arkona Basin (southern Baltic Sea). *Environmental Geology*, 39(8): 839-848.
- Schulz, H.-M., Schöner, A. and Emeis, K.-C., 2000. Long-chain alkenone patterns in the Baltic Sea - an ocean-freshwater transition. *Geochimica et Cosmochimica Acta*, 64(3): 469-477.
- Staniszewski, A., Pazdro, K., Beldowski, J., Leipe, T., Emeis, K.-C. and Pempkowiak, J., 2000. Temporal and spatial changes of cadmium in the near-bottom suspended matter of the Pomeranian Bay- Arkona Deep system. *Oceanologia*, 42(4): 483-491.
- Struck, U., Emeis, K.C., Voss, M., Christiansen, C.C. and Kunzendorf, H., 2000. Records of Baltic Sea eutrophication in $\delta^{13}C$ and $\delta^{15}N$ of sedimentary organic matter. *Marine Geology*, 164: 157-171.
- Annweiler E., Antranikian G., Francke W., Franke S., Garms C., Hebenbrock S., Richnow H.H., and Michaelis W. , 2000. Naphthalene degradation and incorporation of naphthalene derived carbon into biomass by the thermophilic *Bacillus thermoleovorans*. *Appl. Environ. Microbiol.* 66, 518-523.
- Annweiler E., Materna A., Safinofsky M., Kappler A., Richnow H.H., Michaelis W., and Meckenstock R.U. , 2000. Anaerobic degradation of 2-methylnaphthalene by a sulfate-reducing enrichment culture. *Appl. Environ. Microbiol.* 66, 5329-5333.

Hedges J. I., Eglinton G., Hatcher P. G., Kirchmann D. L., Arnosti C., Derenne S., Evershed R. P., Kögel-Knabner I., de Leeuw J. W., Littke R., Michaelis W., and Rullkötter J. , 2000. The molecularly-uncharacterized component of nonliving organic matter in natural environment. *Organic Geochemistry* 31, 945-958.

Jenisch-Anton A., Adam P., Michaelis W., Connan J., Herrmann D., Rohmer M., and Albrecht P. , 2000. Molecular evidence for biodegradation of geomacromolecules. *Geochim. Cosmoch. Acta* 64, 3525-3537.

Koschinsky A., Seifert R., Halbach P. , Bau M., Brasse S., de Carvalho L. M., and Fonseca N. M. , 2000. Geochemistry of diffuse low-temperature hydrothermal fluids in the North Fiji Basin. *Geochim. Cosmochim. Acta* 66, 1409-1427.

Meckenstock R.U., Annweiler E., Michaelis W., Richnow H.H., and Schink B. , 2000. Anaerobic naphthalene degradation by a sulfate-reducing enrichment culture. *Appl. Environ. Microbiol.* 66, 2743-2747.

Reitner J., Thiel V., Zankl H., Michaelis W., Wöhrheide G., and Gautret P. , 2000. Organic and biogeochemical patterns in cryptic microbialites. In *Microbial Sediments* (eds. R. E. Riding, S. M. and Awramik), pp. 149-160. Springer Verlag, Berlin, Heidelberg.

Richnow H.H., Annweiler E., Koning M., Lüth J.-C., Stegmann R., Garms C., Francke W., and Michaelis W. , 2000. Tracing the transformation of labelled [1-¹³C]-phenanthrene in a soil bioreactor. *Environ. Pollution* 108, 91-101.

Winguth, C., H. K. Wong, N. Panin, C. Dinu, P. Georgescu, G. Ungureanu, V. V. Krugliakov & V. Podshuveit, 2000. Upper Quaternary sea level history and sedimentation in the northwestern Black Sea. *Marine Geology*, 167(1-2), 127-146.

Wu, S., I. Sakamoto, R. Iwase, K. Kawaguchi, Y. Misawa & H. K. Wong, 2000. Seafloor sedimentary processes on the western slope of Sagami Bay, Central Japan: deep tow observations. *JAMSTEC J. Deep Sea Res.*, 17, 43-52.

1999

Amon, R.M.W. and Spitz, A., 1999. Distribution of dissolved organic carbon during estuarine mixing in the southern Kara-Sea. *Rep.Polar Res.*, 300:102-109.

Arp G., Thiel V., Reimer A., Michaelis W., and Reitner J. , 1999. Biofilm exopolymers control microbialite formation at thermal springs discharging into the alkaline Pyramid Lake, Nevada, USA. *Sed. Geol.* 126, 159-174.

Blanz, T., Schulz-Bull, D.E., Emeis, K.-C., Petrick, G. and Duinker, J.C., 1999. Chlorobiphenyls in suspension and sediment of the southern Baltic Sea: a mass balance calculation since the onset of PCB-production. *Continental Shelf Research*, 19: 891-910.

Brasse S., Reimer A., Seifert R. and Michaelis W. , 1999. The influence of intertidal mudflats on the dissolved inorganic carbon and total alkalinity distribution in the German Bight, southeastern North Sea. *J. Sea Res.* 42, 93-103.

Chen, J. F., M. G. Wiesner, H. K. Wong, L. F. Zheng, L. Q. Xu & S. L. Zheng, 1999. Vertical changes of POC flux and indicators of early diagenesis of organic matter in the South China Sea. *Science in China, Ser. D*, 42(2), 120-128.

Chen, J., Wiesner, M.G., Wong, H.K., Zheng, L., Xu, L. and Zheng, S., 1999. Vertical changes in POC flux and indicators of early degradation of organic matter in the South China Sea. *Science in China*, 42: 120-128.

Lüdmann, T. & Wong, H.K. 1999. Neotectonic regime at the passive continental margin of the northern South China Sea. *Tectonophysics*, 311(1-4), 113-138.

Meckenstock R. U., Annweiler E., Schink B., Richnow H.H., and Michaelis W., 1999. $^{13}\text{C}/^{12}\text{C}$ stable isotope fractionation of toluene by anaerobic degradation. A new method to monitor biological degradation in situ? In Novel approaches for bioremediation of organic pollution (eds. R. Fass, Y. Flashner, and S. Reuveny), pp. 219-226. Kluwer Academic Publishers/Plenum Publishers, New York.

Meckenstock R. U., Morasch B., Warthmann R., Schink B., Annweiler E., Michaelis W., and Richnow H.H., 1999. $^{13}\text{C}/^{12}\text{C}$ isotope fractionation of aromatic hydrocarbons during microbial degradation. *J. Environm. Microbiol.* 1, 409-414.

Neuweiler F., Reitner J., Gautret P., Thiel V., and Michaelis W., 1999. Petrology of Lower Cretaceous mud mounds (Albian, N. Spain): Insights into organomineralic deposits of the geological record. *Sedimentology* 46, 837-859.

Peckmann J., Paul J., and Thiel V., 1999. Bacterially mediated formation of diagenetic aragonite and native sulfur in Zechstein carbonates (Upper Permian, Central Germany). *Sed. Geol.* 126, 205-222.

Peckmann J., Thiel V., Michaelis W., Clari P., Gaillard C., Martire L., and Reitner J., 1999. Cold seep deposits of Beauvoisin (Oxfordian; southeastern France) and Marmorito (Miocene; northern Italy): Microbially induced, authigenic carbonates. *Int. J. Earth Sciences* 88, 60-75.

Puls W., van Beusekom J., Brockmann U., Doerffer R., Hentschke U., König P., Murphy D., Mayer B., Müller A., Pohlmann T., Reimer A., Schmidt-Nia R., and Sündermann J., 1999. Suspended matter regimes in the German Bight and the German Wadden Sea: Comparisons between a model simulation and measurements *Dt. Hydrogr. Zeitschr.* 51, 221-244.

Reimer A., Brasse S., Doerffer R., Dürselen C.-D., Kempe S., Michaelis W., Rick H.-J., and Seifert R., 1999. Carbon cycling in the German Bight: An estimate of transformation processes and transport. *Dt. Hydrogr. Zeitschr.* 51, 311-328.

Richnow H.H., Annweiler E., Fritsche W., and Kästner M., 1999. Organic Pollutants associated with macromolecular soil organic matter and the formation of bound residues. In *Bioavailability of Organic Xenobiotics in the Environment* (eds. Ph. Baveye et al.), pp. 267-326, Kluwer Academic Publishers, Dordrecht.

Richnow H.H., Eschenbach A., Mahro B., Kästner M., Annweiler E., Seifert R., and Michaelis W., 1999. The formation of nonextractable soil bound residues - a stable isotope approach. *Environm. Sci. Technol.* 33, 3761-3767.

Seifert R., Delling N., Richnow H.H., Kempe S., and Michaelis W., 1999. Ethylene and methane in the upper water column of the subtropical Atlantic. *Biogeochemistry* 44, 73-91.

Thiel V., Jenisch A., Wörheide G., Löwenberg A., Reitner J., and Michaelis W., 1999. Mid-chain branched alkanolic acids from 'living fossil' demosponges: a link to ancient sedimentary lipids? *Org. Geochem.* 30, 1-14.

Thiel V., Peckmann J., Reitner J., Seifert R., Wehrung P., and Michaelis W., 1999. Highly isotopically depleted isoprenoids: Molecular markers for ancient methane venting. *Geochim. Cosmochim. Acta* 63, 3959-3966.

Weigand H., Totsche K.U., Kögel-Knabner I., Annweiler E., Richnow H.H., and Michaelis W., 1999. Desorption controlled mobility and intrinsic biodegradation of anthracene in unsaturated soil. *Phys. Chem. Earth* 24, 549-555.

Wu, S. G., H. K. Wong & T. Lüdmann, 1999. Gravity-driven sedimentation on the northwestern continental slope of the South China Sea: Results from high-resolution seismic data and piston cores. *Chinese Journ. Oceanology Limnology (Beijing-Utrecht)*, 17(2), 155-169.

Wu, S. G., H. K. Wong, Y. L. Luo & Z. R. Liang, 1999. Distribution and origin of sediments on the northern Sunda shelf, South China Sea. *Chinese Journ. Oceanology Limnology (Beijing- Utrecht)*, 17(1), 28-40.

Zengler K., Richnow H.H., Rossello-Mora R., Michaelis W., and Widdel F., 1999. Methane formation from long-chain saturated hydrocarbons in an anaerobic bacterial community. *Nature* 401, 266-269.

IHF

- ADAMS, M. S., BALLIN, U., GAUMERT, T., HALE, B. W., KAUSCH, H. & R. KRUSE, 2001: Monitoring selected indicators of ecological change in the Elbe River since the fall of the Iron Curtain. - *Env. Cons.* 28(4): 333-344
- ADAMS, M.S., KAUSCH, H. & K. GAERTNER, 2000: Historical changes, and a modern program to improve the ecology of the Altster River of Germany. - *Urban Ecosystems* 4: 171-192
- Adlerstein, S., H. Welleman 2000: Diel variation of stomach contents of North Sea cod (*Gadus morhua*) during a 24-h fishing survey: an analysis using generalized additive models.; *Canadian Journal of Fisheries and Aquatic Sciences* 57(12):2363-2367.
- Adlerstein, S., S. Ehrich 2000: Effect of deviation from vessel target speed over ground, trawl speed through water and time of day on catch rates of several fish species in North Sea surveys. *ICES C.M.* 2000/K:01.
- Adlerstein, S.A. and M. Dorn 1999: The effect of *Kudoa paniformis* infection on the reproductive effort of female Pacific hake. *Canadian Journal of Zoology* 76: 2285-2289.
- Adlerstein, S.A., Temming, A., and Mergardt, N. 2002. Comparison of stomach contents of haddock (*Melanogrammus aeglefinus*) from the 1981 and 1991 North Sea International Stomach Sampling Projects. *ICES Journal of Marine Science* 59: 497-515.
- Alekseeva, Irina, Corinna Schrum, Mike St. John A coupled ecosystem model of the North Sea and the Baltic Sea ECOSMO. Part I: Model description and annual characteristics. Submitted *Journal of Marine Systems*.
- Baumann, H., Hinrichsen, H.-H., Koester, F., and Temming, A., 2004. A new retention index for the Central Baltic Sea: long-term hydrodynamic modelling used to improve Baltic sprat recruitment models. *GLOBEC International Newsletter* 10/1: 11-12.
- Baumann, H., Hinrichsen, H.H., Köster, F.W. and A. Temming 2004. A new retention index for the central Baltic Sea: long-term hydrodynamic modelling used to study recruitment variability in central Baltic sprat, *Sprattus sprattus*. *ICES CM* 2004/L:02
- Baumann, H., Pepin, P., Davidson, F.J.M., Mowbray, F., Schnack, D., and Dower, J.F. 2003. Reconstruction of environmental histories to investigate patterns of larval radiated shanny (*Ulvaria subbifurcata*) growth and selective survival in a large bay of Newfoundland. *ICES Journal of Marine Science* 60: 243-258
- Benndorf, J., Wissel, B., Sell, A.F., Hornig, U., Ritter, P. & Böing, W. 2000. Food web manipulation by extreme enhancement of piscivory: an invertebrate predator compensates for the effects of planktivorous fish on a plankton community. *Limnologica* 30: 235-245.
- Beusekom, J.E.E. van, Fock, H., De Jong, F., Diel-Christiansen, S., Christiansen, B., 2001. Wadden Sea Specific Eutrophication Criteria. Common Wadden Sea Secretariat, Wilhelmshaven, 115 pp. [Abstract]
- Boettger-Schnack, R., Lenz, J., Weikert, H., 2004. Are taxonomic details of relevance to ecologists? An example from oncaeid microcopepods of the Red Sea. *Marine Biology*. 144 (6), 1127 - 1140
- Bos, A. R. 1999: Tidal transport of flounder larvae (*Pleuronectes flesus*) in the Elbe River, Germany. *Archive of Fishery and Marine Research* 47(1): 47-60.
- Böttger-Schnack, R., J. Lenz and H. Weikert 2004: Are taxonomic details of relevance to ecologists? An example from oncaeid microcopepods of the Red Sea. *Marine Biology* 144: 1127-1140.
- Brett, M.T., D.C. Müller-Navarra & S-K. Park. 2000. Empirical analysis of the effect of phosphorus limitation on algal food quality for freshwater zooplankton. *Limnol. Oceanogr.* 45: 1564-1575.
- Briand, F., J. Batista, J. Moranta, B. Galil, C. Gambi, R. Koppelman, A. Tselepides, L. Giuliano, C. Tamburini, M. Yakimov, G. Herndl, D. Billett, D. Desbruyères, P. Snelgrove, A. Metaxas and A.F. Medioni 2003: Mare incognitum? Exploring Mediterranean deep-sea biology. *CIESM Workshop Monographs* 23, Monaco, pp. 5-27.
- Buchholz, F. 2003. Experiments on the physiology of Southern and Northern krill, *Euphausia superba* and *Meganctiphanes norvegica*, with emphasis on moult and growth - a review, *Marine and freshwater behaviour*

and physiology, 36, 229-247.

- Buchholz, F., Saborowski, R. 2000. Metabolic and enzymatic adaptations in the Northern and Southern krill, *Meganyctiphanes norvegica* and *Euphausia superba*, Canadian Journal of Fisheries and Aquatic Sciences, 57, Suppl. 3, 115-129.
- Bühning, S.I., Christiansen, B., 2000. Lipids in selected benthopelagic animals: Links to the epipelagic? In: Schlünz, B., Wefer, G. (Eds.), Bericht über den 8. JGOFS-Workshop am 2. und 3. 12 1999 in Bremen. Im Anhang: Publikationen zum deutschen Beitrag zur Joint Global Ocean Flux Study (JGOFS), Stand 1/2000. Berichte, Fachbereich Geowissenschaften, Universität Bremen, Bremen, pp. 15-16.
- Bühning, S.I., Christiansen, B., 2001. Lipids in selected abyssal benthopelagic animals: links to the epipelagic zone? Progress in Oceanography 50, 369-382.
- Bühning, S.I., Koppelman, R., Christiansen, B., Weikert, H., 2002. Are Rhodophyceae a dietary component for deep-sea holothurians? Journal of the Marine Biological Association of the United Kingdom 82, 347-348.
- Christiansen, B., B. Drüke, R. Koppelman and H. Weikert 1999: The near-bottom zooplankton at the abyssal BIOTRANS-site, northeast Atlantic: Composition, abundance and variability. Journal of Plankton Research 21: 1847-1863.
- Christiansen, B., Beckmann, W. and H. Weikert 2001: The structure and carbon demand of the bathyal benthic boundary layer community: a comparison of two oceanic locations in the NE Atlantic. Deep-Sea Res. II. 48: 2409-2424.
- Christiansen, B., Boetius, A., 2000. Mass sedimentation of the swimming crab *Charybdis smithii* (Crustacea: Decapoda) in the deep Arabian Sea. Deep-Sea Research II 47, 2673-2685.
- Christiansen, B., Martin, B., 2000. Deep-sea benthopelagic nekton observations at two stations in the northern Arabian Sea: links to organic matter supply? Deep-Sea Research II 47, 3027-3038.
- Christiansen, B., Nuppenau, V., 1997. The IHF Fototrawl: experiences with a television-controlled, deep-sea epibenthic sledge. Deep-Sea Research 44, 533-540. [Abstract]
- Christiansen, B.: "OASIS: a new EU project on the ecology of Atlantic seamounts." ICES Annual Science Conference 2002, Copenhagen, 5 pp.
- Chukhlovina A.B., S.V. Tokalov, A.S. Yagunov, J. Westendorf, H. Reincke & L. Karbe 2001: In vitro suppression of thymocyte apoptosis by metal-rich complex environmental mixtures: potential role of zinc and cadmium excess. The Science of the Total Environment 281 (2001) 153-163
- Cieluch, U., Anger, K., Aujoulat, F., Buchholz, F., Charmantier-Daures, M., Charmantier, G. 2004. Ontogeny of osmoregulatory structures and functions in the green crab, *Carcinus maenas* (Crustacea, Decapoda), Journal of Experimental Biology, 207, 325-336.
- Costa, M. J., H. N. Cabral, P. Drake, A. Economou, C. Fernandez-Delgado, L. Gordo, J. Marchand, R. Thiel 2001: Chapter 3: Recruitment and production of commercial species in estuaries. (2001): In: Elliott, M & Hemingway, K.L. (Eds.). Fishes in estuaries. Blackwell Science Ltd., Oxford, UK (eingereicht)
- Culverhouse, P.F., Williams, R., Benfield, M., Flood, P., Sell, A.F., Grazia, M., Buttino, I. & Sieracki, M. Future of automatic image analysis of plankton in marine research. (in prep.)
- Cuzin-Roudy, A., Buchholz, F. 1999: Ovarian development and spawning in relation to the moult cycle in Northern krill, *Meganyctiphanes norvegica* (Crustacea: Euphausiacea), along a climatic gradient, Marine Biology, 133, 267-281.
- Dalsgaard A.-J.T.; St. John, M. Kattner, G., Müller-Navarra; Hagen, W. 2003. Fatty Acid Trophic Markers in the Pelagic Marine Environment. Advances in Marine Biology, 46: 227- 340.
- Dalsgaard, J, St. John M.A., 2004. Fatty acids biomarkers: validation of food web and trophic markers using stable carbon isotope labelled fatty acids in juvenile sandeel (*Ammodytes tobianus*) IN PRESS Canadian Journal of Fisheries and Aquatic Science
- Dalsgaard, J., M. St. John, G. Kattner, D. Müller-Navarra & W. Hagen. 2003. Fatty acid trophic markers in the pelagic marine environment: A synthesis of applications and critical review of suitability. Advances in Marine Biology: 46:226-340.
- Diel-Christiansen, S., Christiansen, B., 1999: Climate patterns and ambient temperatures. In: De Jong, F., Bakker, J.F., van Berkel, C.J.M., Dankers, N.M.J.A., Dahl, K., Gätje, C., Marencic, H., Potel, P. (Eds.), 1999 Wadden Sea Quality Status Report. Wadden Sea Ecosystem No. 9. Common Wadden Sea Secretariat, Trilateral Monitoring and Assessment Group, Quality Status Report Group, Wilhelmshaven, Germany, pp. 80-83.

- Enders, E.C.; Herrmann, J.P. 2003. Energetic costs of spontaneous activity in horse mackerel quantified by a computerized imaging analysis. *Archive of Fishery and Marine Research* 50/2, 205-219.
- Fabian, H., R. Koppelman and H. Weikert (subm.): Zooplankton composition at two deep station in the open Arabian Sea. *Indian Journal of Marine Sciences*. (submitted)
- Faubel, A., B. Cameron 2001: Platyhelminthes from salt marshes of Coomera river, southeastern Queensland, Australia. *Mem. Qld. Mus.* (in press)
- Floeter, J. & Temming, A. 2000: Synthesis and New Concept for North Sea Research (SYKON). Group 9: Higher Trophic Levels. Final Report, *Berichte aus dem Zentrum für Meeres- und Klimaforschung - Reihe Z: No. 11*, 319pp
- Floeter, J. & Temming, A. 2003: Explaining diet composition of North Sea cod (*Gadus morhua* L.): Prey size preference vs. prey availability. *Can J.Fish.Aquat.Sci.* 60. 140-150.
- Floeter, J. & Temming, A. 2003: North Sea Fish and higher trophic levels: a review. (North Sea 2000: Part 1: State of the Art in Marine Biology at the End of the 20th Century). *Senckenbergiana maritima*, 33, (1/2) 269-442.
- Freyhof, J; Scholten, M.; Bischoff, A.; Wanzenböck, J.; Staas, S.; Wolter, C. 2000: "Extensions to the known range of the whitefin gudgeon in Europe and biogeographical implications". *J. Fish Biol.* 57, 1339 - 1342.
- Gatermann R., S. Biselli, H. Hühnerfuss, G. G. Rimkus, M. Hecker, & L. Karbe 2002 Synthetic musks in the environment. Part 1: Species-dependent bioaccumulation of polycyclic and nitro musk fragrances in freshwater fish and mussels. *Arch. Environ. Contam. Toxicol.*, 42: 437-446
- Gatermann R., S. Biselli, H. Hühnerfuss, G. G. Rimkus, S. Franke, M. Hecker, R. Kallenborn, L. Karbe, W. A. König 2002: Synthetic musks in the environment. Part 2: Enantioselective transformation of the polycyclic musk fragrances HHCB, AHTN, AHDI, and ATII in freshwater fish *Arch. Environ. Contam. Toxicol.* 42:447-453
- Gatermann, R., H. Hühnerfuss, S. Biselli, G.G.Rimkus, M.Hecker, R.Kallenborn and L.Karbe 1999: Species-dependent enantioselective transformation of HHCB, AHTN and ATII in crucian carp (*Carassius carassius*) and tench (*Tinca tinca*), *Organohalogen Compounds*, 40: 595-598.
- Gerkens, M; Thiel, R. 2001: Habitat use of age-0 twaite shad (*Alosa fallax* Lacepede, 1803) in the tidal freshwater region of the Elbe River, Germany. *Bulletin Francais se La Peche et de La Pisciculture*: 773-784.
- Goni, R. F. Alvarez and S. Adlerstein 1999: Application of generalized linear modelling to catch rate analysis of western Mediterranean fisheries: the Castellón fleet as a case study. *Fisheries Research* 42: 291-302.
- Güss, S., D. Albrecht, H.-J. Krambeck, D.C. Müller-Navarra & H. Mumm. 2000. Impact of weather on a lake ecosystem, assessed by cyclo-stationary MCCA of long-term observations. *Ecology*. 81: 1720-1735.
- Halsband-Lenk, C., R. Koppelman and H. Weikert 2003: Carbon requirements of deep sea zooplankton estimated from ETS measurements in relation to size fraction and taxonomic composition. In: A. Yilmaz (ed.) *Oceanography of Eastern Mediterranean and Black Sea*, TUBITAK, Ankara, pp. 805-813.
- Hartmann, F. 2002: The impact of the Great Meteor Seamount on the nutritional condition of larval *Vinciguerria nimbaria*. *ICES/ASC, CM 2002/M18*: 17pp.
- Hartmann, F. M. & M. H. F. Kloppmann 2004: The impact of the Great Meteor Seamount (North-east Atlantic) on the nutritional condition of larval *Vinciguerria nimbaria* (Phosichthyidae) – A histological study. *Arch. Fish. Mar. Res.* 51 (1-3) pp. 71–88
- Hecker M., C.R.Tyler, M.Hoffmann, S.Maddix, & L.Karbe 2002 Plasma biomarkers in fish provide evidence for endocrine modulation in the Elbe River, Germany. *Environ. Sci. Technol.* 36: 2311-2321
- Hecker, M. 2001: Natural Variability of Endocrine Functions and their Modulation by Anthropogenic Influences: Investigations of the Bream (*Abramis brama* [L.]) along the Elbe River, and in a Reference Site. In: *Berichte aus dem Zentrum für Meeres- und Klimaforschung; Reihe E; 157 p; ISSN 0947-7160*
- Herrmann, J. P., E. Enders 2000: Effect of body size on the standard metabolism of horse mackerel. *Journal of Fish Biology* 57, 746-760
- Hillgruber, N., and M. Kloppmann 1999: Distribution and feeding of blue whiting *Micromesistius poutassou* larvae in relation to different water masses in the Porcupine Bank area, west of Ireland. *Mar. Ecol. Prog. Ser.*, Vol. 187: 213-225.
- Hillgruber, N., M. Kloppmann 2000: Vertical distribution and feeding of larval blue whiting in turbulent waters above Porcupine Bank. *Journal of Fish Biology* 57, 1290-1311

- Hillgruber, N.; Kloppmann, M. 2001: Small-scale patterns in distribution and feeding of Atlantic mackerel (*Scomber scombrus* L.) larvae in the Celtic Sea with special regard to intra-cohort cannibalism. *Helg Mar Res* 55, 135 – 149.
- Hinrichsen, H.-H., Boettcher, U., Köster, F.W., Lehmann, A. and St. John, M.A. 2003. Modelling the influences of atmospheric forcing conditions on Baltic cod early life stages: distribution and drift. *J. Sea Res./J. Sea Res.* 49: 187-201
- Hinrichsen, H.-H., St. John, M. A., Aro, E., Gronkjær, P., Voss, R. 2001. Testing the larval drift hypothesis in the Baltic Sea: Retention vs dispersion due to the influence of wind driven circulation. *ICES J. Mar. Sci.* 58: 973-984.
- HOLST, H., ZIMMERMANN-TIMM, H. & H. KAUSCH 2002: Longitudinal and ansversal distribution of planktonic rotifers and algae in the potamal of the river Elbe during late summer. - *Internat. Rev. Hydrobiol.* 87 (2-3): 267-280
- Hühnerfuss H., R.Gatermann, S.Biselli, G.G.Rimkus, M.Hecker, R.Kallenborn and L.Karbe 1999: Enantioselective transformation of polycyclic musks in aquatic biota, *Organohalogen Compounds*, 40: 401-404.
- Jansen, S. 2000: Interrelationships between the Brown Shrimp population and the multinational Brown Shrimp fishery with emphasis on recent changes in the population structure. Final Report of EU Study CFP96-007. 114pp.
- Kafemann, R. 2000: Räumliche und zeitliche Veränderungen der Struktur einer Brackwasserfischgemeinschaft und ihre Steuerung durch abiotische und biotische Umwelteinflüsse - Eine fischbiologische Studie im Nord-Ostsee-Kanal -. Dissertation.de - Verlag im Internet, Berlin: 277 pp.
- Kafemann, R., S. Adlerstein , R. Neukamm 2000: Variation in otolith strontium and calcium ratios as indicator of life-history strategies of freshwater fish species within a brackish water system. *Fisheries Research*. 46(2000): 313-325
- Kloppmann M.H.F.; Bailey, M.C.; Westernhagen, H.v. 2001: Distribution of larval, post-larval and juvenile mackerel in the Celtic Sea and Porcupine Bank area. *ICES CM* 2001/J:24.
- Kloppmann, M. 1999: Körperbau und Körperfunktionen. In: F.-W. Tesch: *Der Aal*. Parey Buchverlag Berlin: 11-79.
- Kloppmann, M., C. Mohn , J. Bartsch 2001: The distribution of blue whiting eggs and larvae on porcupine bank in relation to hydrography and currents. *Fisheries Research* 50 (1-2), 89-109.
- Koppelman, R. and H. Weikert 1999: Temporal changes of deep-sea mesozooplankton abundance in the temperate NE Atlantic and estimates of the carbon budget. *Marine Ecology Progress Series* 179: 27-40.
- Koppelman, R. and H. Weikert 2000: Transfer of organic matter in the deep Arabian Sea zooplankton community: insights from $\delta^{15}\text{N}$ analysis. *Deep-Sea Research II* 47: 2653-2672.
- Koppelman, R. and H. Weikert 2003: Deep-sea zooplankton ecology of the Eastern Mediterranean. State-of-the-art and perspectives. *CIESM Workshop Monographs* 23, Monaco, pp. 47-53.
- Koppelman, R. and H. Weikert (subm.): Temporal and vertical distribution of two ecologically different calanoid copepods (*Calanoides carinatus* KRØYER 1849 and *Lucicutia grandis* GIESBRECHT 1895) in the deep waters of the central Arabian Sea. *Journal of Plankton Research*. (submitted)
- Koppelman, R., C. Halsband-Lenk and H. Weikert 2003: The stable isotope signature of mesozooplankton in the Levantine Sea (Eastern Mediterranean). In: A. Yilmaz (ed.) *Oceanography of Eastern Mediterranean and Black Sea*, TUBITAK, Ankara, pp. 814-820.
- Koppelman, R., H. Fabian and H. Weikert 2003: Temporal variability of deep-sea zooplankton in the Arabian Sea. *Marine Biology* 142: 959-970.
- Koppelman, R., H. Weikert and N. Lahajnar 2003: Vertical distribution of mesozooplankton and its $\delta^{15}\text{N}$ -signature in the deep Levantine Basin (Eastern Mediterranean) in April 1999. *Journal of Geophysical Research* 108, No. C9, 8118, doi:10.1029/2002JC001351.
- Koppelman, R., H. Weikert, C. Halsband-Lenk and T. Jennerjahn 2004: Mesozooplankton community respiration and its relation to particle flux in the oligotrophic Eastern Mediterranean. *Global Biogeochemical Cycles* 18, doi:10.1029/2003GB02121.
- Koppelman, R., H. Zimmermann-Timm and H. Weikert (subm.): A comparison of bacterial and zooplankton abundance and biomass in the deep-sea of the NW Indian Ocean. *Deep-Sea Research I*. (submitted)

- Koppelman, R., P. Schäfer and R. Schiebel 2000: Organic carbon losses measured by heterotrophic activity of mesozooplankton and CaCO₃ flux in the bathypelagic zone of the Arabian Sea. *Deep-Sea Research II* 47: 169-187.
- Köster, F. W., Hinrichsen, H.-H., Schnack, D., St. John, M. A., MacKenzie, B. R., Tomkiewicz, J., Möllmann, C., Kraus, G., Plikshs, M., Makarchouk, A., Ero, A. 2003. Recruitment of Baltic cod and sprat stocks: identification of critical life stages and incorporation of environmental variability into stock-recruitment relationships. *Scientia Marina* 67 (suppl. 1): 129-154.
- Köster, F. W., Möllmann, C., Neuenfeldt, S., St. John, M.A., Plikshs, M., Voss, R. 2001. Developing recruitment models for Baltic cod I: Resolving spatial and temporal dynamics of spawning stock and recruitment. *Canadian Journal of Fisheries and Aquatic Science* 58: 1516-1533
- Koster, F.W., C. Mollerman, H. -H. Hinrichsen, M.A St. John ,M. Plikshs and D. Schnack. 2003. Impact of Hydrography and Species Interaction on Baltic Cod Recruitment: A Summary. *ICES Journal of Marine Science* 219: 294: 306.
- Köster, F.W., Hinrichsen,, H.-H., St. John, M.A., Schnack, D., MacKenzie, B., Plikshs, M., 2001. Developing Baltic cod recruitment models II: Incorporation of environmental variability and species interaction. *Canadian Journal of Fisheries and Aquatic Science*.58: 1534-1556
- Lange U., A. Goksøyr, D. Siebers & L. Karbe 1999: Cytochrom P450 1A dependent enzyme activities in the liver of dab (*Limanda limanda*): kinetic, seasonal changes and detection limits. *Comp. Biochem. Physiol. Part B* 123: 361-371
- Lass, S., Tarling, G.A., Virtue, P., Matthews, J.B.L., Mayzaud, P., Buchholz, F. 2001. On the food of northern krill *Meganyctiphanes norvegica* in relation to its vertical distribution, *Marine Ecology Progress Series*, 214, 177-200.
- Lemos, D., Salomon, M., Gomes, V., Phan, V.N., Buchholz, F. 2003. Citrate synthase and pyruvate kinase activities during early life stages on the shrimp *Farfantepenaeus paulensis* (Crustacea, Decapoda, Penaeidae): effects of ontogenetic development and temperature, *Comparative biochemistry and physiology b-biochemistry & molecular biology*, 135, 707-719.
- Maar, M., Nielsen, T.G., Gooding, S., Tönnesson, K., Tiselius, P., Zervoudaki, S., Christou, E., Sell, A. & Richardson, K. 2004. Trophodynamic function of copepods, appendicularians and protozooplankton in the late summer zooplankton community in the Skagerrak. *Marine Biology* 144: 917-933.
- Martin, B. 2002: Composition and distribution of zooplankton at the Great Meteor Seamount, subtropical NE Atlantic. *ICES/ASC, CM 2002/M27*: 11 pp.
- Matthews, J.B.L., Buchholz, F., Saborowski, R., Tarling, G. A., Dallot, S., Labat, J.P.1999: On the physical oceanography of the Kattegat and Clyde Sea area, 1996-98, as background to ecophysiological studies of the planktonic crustacean, *Meganyctiphanes norvegica* (Euphausiacea)., *Helgoland Marine Research*,53,70-84.
- Mehner, T. & Thiel, R. 1999: A review of predation impact by 0+ fish on zooplankton in fresh and brackish waters of the temperate northern hemisphere. *Environmental Biology of Fishes* 56: 169-181.
- Meyer, B., Saborowski, R., Atkinson, A., Buchholz, F., Bathmann, U. 2002. Seasonal differences in citrate synthase and digestive enzyme activity in larval and postlarval Antarctic krill, *Euphausia superba*, *Marine Biology*, 141, 855-862.
- Möllmann, C., Schmidt, J., Temming, A., Herrmann, J.-P., Floeter, J. & Sell, A., 2002. Video Plankton Recorder reveals environmental problems of marine copepod. *GLOBEC International Newsletter* 8 (2): 20-21.
- Müller-Navarra, D.C. 2002. On the Nutrition of Freshwater Zooplankton: What is known and what important on the Ecosystem level? pp. 21-27. In: G. Kleppel and S.E. Hazzard [eds.] *The Significance of Zooplankton Nutrition in the Aquatic Sciences. Outcomes from the International Workshop on Zooplankton Nutrition*. October 29-30, Columbia, South Carolina, USA.
- Müller-Navarra, D.C. 2003. Bedeutung von Nahrungsqualität und ω 3-ungesättigten Fettsäuren für *Daphnia* (Crustacea). *Habilitationsarbeit an der Universität Hamburg*.
- Müller-Navarra, D.C., Brett, M.T., Liston, A.M., and C.R. Goldman. 2000. A highly- unsaturated fatty acid predicts carbon transfer between primary producers and consumers. *Nature* 403: 74-77.
- Müller-Navarra, D.C., Brett, M.T., Park, S., Chandra, S., Ballantyne, A.P., Zorita, E. and C.R. Goldman. 2004. Unsaturated fatty acid content in seston and tropho-dynamic coupling in lakes. *Nature* 427: 69-72.
- Müller-Solger, A., A.D. Jassby & D.C. Müller-Navarra. 2002. Seasonal and habitat specific variation in the

- nutritional value of particulate organic matter in the Sacramento-San Joaquin Delta for *Daphnia* growth. *Limnol. Oceanogr.* 47: 1468-1476.
- Mumm, H. & Sell, A.F. 1995. Estimating the impact of *Chaoborus* predation on zooplankton: A new design for in situ enclosure studies. *Archiv für Hydrobiologie* 134: 195-206.
- Nellen, W. 1999: M 42/3 Cruise Report - Die Bedeutung der Meteorbank für die hydrographische Struktur und die Verteilung von Plankton, Nekton und Benthos im subtropischen Nordatlantik. *Meteor-Fahrtberichte*: 113 pp.
- Nellen, W. 2004: Prof. Dr. phil. and Dr. med. Alfred Willer (1889 - 1952) and three decades (1920 - 1950) of fisheries science and fishery policy in Germany. *Historisch-Meereskundliches Jahrbuch* 10, 7-50.
- Nellen, W., Meincke, J. 1999: Eine Unterwasserinsel mit 45 Fischarten - Die Große Meteorbank im subtropischen Nordatlantik. *uni-hh - Wissenschaftsberichte aus der Universität Hamburg, XXXIII/1999* (Hrsg. Pressestelle der Univ. Hamburg), ISSN 0724-9101, 17-22.
- Nellen, W., S. Ruseler 2002: Composition of ichthyoplankton an horizontal and vertical distribution of fish larvae taxa in the Great Meteor Seamount area in September 1998. *ICES/ASC, CM 2002/M12*: 29 pp.
- Nielsen, M. H.: "The baroclinic surface currents in the Kattegat". *Journal of Marine Systems*, in press, 2004.
- Nielsen, M.H., St. John, M.A., 2001 Modelling thermal stratification in the North Sea: Application of a 2-D potential energy model.. *Est. Coast. Shelf Sci.*53: 607-61
- Nielsen, Morten H., St. John M.A. 2003 Inter and intra annual variations in the onset of stratification and the timing and intensity of spring bloom in the Central North Sea in the 90's *ICES Journal of Marine Science*219: 384-386.
- Oesmann, S. Thiel, R. 2001: Feeding of juvenile twaite shad (*Alosa fallax* Lacepede, 1803) in the Elbe estuary. *Bulletin Francais se La Peche et de La Pisciculture*: 785-800.
- Paffenhöfer, G.-A., A. Ianora A, A. Miralto A, J.T. Turner, G.S. Kleppel, M. Ribera d'Alcala, R. Casotti, G.S. Caldwell, G. Pohnert, A. Fontana, D. Müller-Navarra, S. Jonasdottir, V. Armbrust, U. Båmstedt, S. Ban, M. G. Bentley, M. Boersma, M. Bundy, I. Buttino, A. Calbet, F. Carlotti, Y. Carotenuto, G. d'Ippolito, B. Frost, C. Guisande, W. Lampert, R.F. Lee, S. Mazza, M.G. Mazzocchi, J.C. Nejtgaard, S.A. Poulet, G. Romano, V. Smetacek, S. Uye, S. Wakeham, S. Watson & T. Wichard. Colloquium on diatom-copepod interactions. *Mar. Ecol. Progr. Ser.* In press.
- Park, S., M.T. Brett, D.C. Müller-Navarra, S.-C. Shin, A.M. Liston, & C.R. Goldman. 2003. Heterotrophic nanoflagellates and increased essential fatty acids during *Microcystis* decay. *Aquat. Microb. Ecol.* 33: 201-205.
- Park, S-K., D.C. Müller-Navarra & C.R. Goldman. 2003. Seston essential fatty acids and carbon to phosphorus ratios as predictors for *Daphnia pulex* dynamics in a large reservoir, Lake Berryessa. *Hydrobiologia* 505: 171-178.
- Park, S-K., M.T. Brett, D.C. Müller-Navarra & C.R. Goldman. 2002. Essential fatty acid content and the phosphorus to carbon ratio as indicators of food quality for *Daphnia*. *Freshw. Biol.* 47: 1377-1390.
- Park, S-K., S. Chandra, D.C. Müller-Navarra & C.R. Goldman. 2004. Diel and vertical variability of seston food quality and quantity in a small subalpine oligo-mesotrophic lake. *J. Plankt. Res.* In press.
- Paulsen, M. S., M. St. John, G. Lough, L Buckley. 2004. Comparison of the condition and lipid biomarker content in cod (*Gadus morhua*) and haddock (*Melanogrammus aeglefinus*) larvae on Georges Bank. Accepted *Canadian Journal of Fisheries and Aquatic Science* <>
- Peck M.A., Clemmesen C., Herrmann J.-P., Stäcker S., Temming A., in prep. The growth-feeding relationship and biochemical-based growth indicators for young post-larval Baltic sprat (*Sprattus sprattus* L.) in the laboratory. For submission to *Marine Ecology Progress Series*.
- Peck M.A., Clemmesen C., Herrmann J.-P., submitted. Ontogenic changes in the allometric scaling of the mass-length in a clupeid species, sprat (*Sprattus sprattus*). Submitted to *Journal of Fish Biology*
- Peck, M.A., Buckley, L.J., Herrmann, J.-P., Temming, A., in Prep. Metabolic ontogeny of Atlantic cod: Effects of body mass, temperature, and implications for biophysical modeling. For Submission to *Canadian Journal of Fisheries and Aquatic Sciences*.
- Peters, G., Saborowski, R., Buchholz, F., Mentlein, R.1999: Two distinct isoforms of the chitin-degrading enzyme N-acetyl-β-D-glucosaminidase, from the Antarctic krill: specialists in digestion and moult, *Marine Biology*,134,697-703.
- Purps, M.; Damm, U. 2001: Saisonale und regionale Unterschiede der 0-Gruppen-Schollen-Discards in der deutschen Garnelenfischerei. *Inf. Fischwirtschaft* 48(3).

- Purps, M.; Damm, U.; Neudecker, T. 2000: Analysis of data derived from fishing people of the German Wadden Sea. Bringing Fishers' Knowledge into Fisheries Science and Management: A Methodological Workshop. ISER press, Memorial University of St. Johns', Newfoundland, Canada
- Purps, M.; Damm, U.; Neudecker, T. 1999: Der NAO-Klimaindex und die Jahrgangsstärke von jungen Schollen (*Pleuronectes platessa*) und Seezungen (*Solea solea*). Berichte über Landwirtschaft, Klimawirkungsforschung im Bereich des BML - 2. Statusseminar des AK 'Klimaänderung' der Senatsarbeitsgruppe 'Ökosysteme u. Ressourcen' in Braunschweig.
- Ravet, J.L., M.T. Brett & D.C. Müller-Navarra. 2003. A test of the role of Polyunsaturated fatty acids in algal food quality for *Daphnia* using liposome supplementation. *Limnol. Oceanogr.* 48: 1938-1947.
- Rice, A.L., Gage, J.D., Weikert, H., Wolff, G., Hall, P., Vincx, M., Treguer, P., Laubier, L., Patching, J., Sibuet, M., Brey, T., Danovaro, R., Duineveld, G., Roberts, D., 1998. High resolution temporal and spatial study of the benthic biology and geochemistry of a north-eastern Atlantic abyssal locality (project Bengal). Third European marine science and technology conference (MAST conference), Lisbon, 23-27 May 1998: Project synopses Vol. 1: Marine systems. pp. 271-286. 1998.
- Rick, H.-J., Baumann, M. E. M., Beddig, S., Bleil, J., Brasse, S., Brockmann, U. H., Buchholz, F., Diel-Christiansen, S., Fehner, U., George, M., Kabatnik, C., Klawon, A., Kopp, R., Koschinski, P., Krause, M., Ladwig, N., Poremba, K., Raabe, T., Reimer, A., Rieling, T., Rick, S., Schaumann, K., Tillmann, A., Tillmann, U., Thomas, D. N., Weber, A., Weide, G., Wolff, G., Gärtner, U., Göbel, A., Mehrkühler, C., Müller, R., Schütt, M., Sündermann, J., Hesse, K.-J., Dürselen, C.-D. 1999: Balances and imbalances of production and respiration in German Bight pelagic systems, *Deutsche Hydrographische Zeitschrift* 51, 3-4.
- Ringelband U. 2001 Salinity dependence of vanadium toxicity against the brackish water hydroid *Cordylophora caspia*. *Ecotoxicology and Environmental Safety* 48,18-26
- Ringelband U. & O.Hehl 2000 Kinetics of vanadium bioaccumulation by the brackish water hydroid *Cordylophora caspia* (Pallas). *Bull. Environ. Contam. Toxicol.* 65:486-493
- Rotllant, G., Company, J. B., Busquets, X., Buchholz, F. 2004. Synchronous moulting of krill, *Euphausia superba*, in the Bransfield Strait (Antarctica), *Polar biology*, 27,380-382.
- Rückert, C., Floeter, J., A. Temming 2002: An estimate of horse mackerel biomass in the North Sea, 1991-1997. - *ICES Journal of Marine Science*, 59: 120-130.
- Saborowski, R., Bröhl, S., Tarling, G.A., Buchholz, F. 2002. Metabolic properties of Northern krill, *Meganyctiphanes norvegica*, from different climatic zones: Respiration and excretion., *Marine Biology*, 140, 547-556.
- Saborowski, R., Buchholz, F. 1999: A laboratory study on digestive processes in the Antarctic krill, *Euphausia superba*, with special regard to chitinolytic enzymes., *Polar Biology*, 21,295-304.
- Saborowski, R., Buchholz, F. 2002. Metabolic properties of Northern krill, *Meganyctiphanes norvegica*, from different climatic zones: Enzyme characteristics and activities., *Marine Biology*, 140, 557-565.
- Saborowski, R., Salomon, M., Buchholz, F. 2000. The physiological response of Northern krill (*Meganyctiphanes norvegica*) to temperature gradients in the Kattegat, *Hydrobiologia*, 426,157-160.
- Salomon, M., Buchholz, F. 2000. Effects of temperature on the respiration rates and the kinetics of citrate synthase in two species of *Idotea* (Isopoda, Crustacea), *Comparative Biochemistry and Physiology B-Biochemistry & Molecular Biology*, 125, 71-81.
- Salomon, M., Mayzaud, P., Buchholz, F. 2000. Studies on metabolic properties in the Northern Krill, *Meganyctiphanes norvegica* (Crustacea, Euphausiacea): influence of nutrition and season on pyruvate kinase., *Comparative Biochemistry and Physiology A-Molecular and Integrative Physiology*, 127, 505-514.
- Schmidt, J., Möllmann, C., Temming, A., Herrmann, J.-P., Floeter, J., Sell, A. & St. John, M., 2003. Unusual water mass advection affected Central Baltic key species 2: *Pseudocalanus* and the winter inflow. *GLOBEC International Newsletter* 9 (2): 28-29.
- Schmidt, J.O.; Floeter, J.; Herrmann, J.-P.; Sell, A; St. John, M.; Möllmann, C.; Temming, A.: 2003: Small scale distribution of reproducing female *Pseudocalanus* sp. in the Bornholm Basin (central Baltic Sea) during two contrasting hydrographic regimes in spring 2002 and 2003. *ICES CM* 2003 / P:37
- Scholten, M. 1999: Der Weißflossengründling *Gobio albipinnatus* Lukasch 1933, Cyprinidae: ein neuer - alter Bewohner der Mittelelbe? *Auenreport* 5/6, S. 62-67.
- Scholten, M. 2000: First record of the whitefin gudgeon, *Gobio albipinnatus* Lukasch 1933, in the River Elbe. *J.*

- Appl. Ichthyol.16, 131-133.
- Schrum, C., Irina Alekseeva, Mike St. John. Effects of turbulence on Aggregation at tidal mixing fronts. Submitted . Progresses in Oceanography <>
- Schrum, C., Siegismund F. , St. John M.A., 2003. Decadal Variations in the stratification and circulation patterns of the North Sea; are the 90's unusual? ICES Journal of Marine Science.219: 121-131.
- Schrum,C., M. St. John, I. Alekseeva. Modeling the biomass and production of phytoplankton and zooplankton in the North Sea: Seasonal characteristics from ECOSMO. Submitted Journal of Marine Systems.
- Sell, A.F. & Overbeck, J. 1992. Exudates: Phytoplankton-bacterioplankton interactions in Plussee. Journal of Plankton Research 14: 1199-1215.
- Sell, A.F. 1994. Phytoplankton-excreted organic carbon. pp. 81-91. In: Overbeck, J. & Cróst, R.J. (eds.), Microbiol Ecology of Lake Plussee. Springer, New York.
- Sell, A.F. 1996. Changes within the zooplankton community as a consequence of extreme biomanipulation: The role of the invertebrate predator Chaoborus. Ph.D. Thesis, University of Technology Dresden, Germany.
- Sell, A.F. 1998. Adaptation to oxygen deficiency: Contrasting patterns of haemoglobin synthesis in two coexisting Daphnia species. Comparative Biochemistry and Physiology - A 120: 119-125.
- Sell, A.F. 2000. Life in the extreme environment at a hydrothermal vent: Haemoglobin in a deep-sea copepod. Proceedings of the Royal Society of London: Biological Sciences 267: 2323-2326.
- Sell, A.F. 2000. Morphological defenses induced in situ by the invertebrate predator Chaoborus: Comparison of responses between Daphnia pulex and D. rosea. Oecologia 125: 150-160.
- Sell, A.F., Hornig, U. & Benndorf, J. 1997. Long-term effects of planktivore removal: Results from a manipulated and a reference lake. Verhandlungen der Internationalen Vereinigung für Limnologie 26: 782-785.
- Sell, A.F., van Keuren, D. & Madin, L.P. 2001. Predation by omnivorous copepods on early developmental stages of Calanus finmarchicus and Pseudocalanus spp. Limnology & Oceanography 46: 953-959.
- St. John, M. A. ,Budgell P., Nielsen, M.H., Lucas A. 2003 Resolving variations in the timing and intensity of the Spring Bloom in the Central North Sea during the 90's: A comparison of Remote Sensing and 2-D modelling approaches. ICES Journal of Marine Science. 219:190- 199.
- St. John, M.A., Clemmesen, C. Lund, T., Köster, F. W., 2001. Diatom production in the marine environment: Implications for larval fish growth and condition. ICES J. Mar. Sci., 58: 1106-1113
- Stibor, H. & D. Müller-Navarra. 2000. Constraints on the plasticity of Daphnia magna influenced by fish-kairomones. Funct. Ecol. 14: 455-459.
- Stöhr, S., Hagen, E., John, H.-Ch., Mittelstaedt, E., Schulz, K., Vanicek, M., Weikert, H., 1997. Poleward plankton transport along the Moroccan and Iberian continental slope. Berichte der Biologischen Anstalt Helgoland 12, 1-53. [Abstract]
- Tarling, G. A., Matthews, J. B. L., Buchholz, F. 1999: The effect of a lunar eclipse on the vertical migration behaviour of Meganyctiphanes norvegica (Crustacea: Euphausiacea) in the Ligurian Sea, Journal of Plankton Research,21,1475-1488.
- Tarling, G., Cuzin-Roudy, J., Buchholz, F. 1999: Vertical migration behaviour in the Northern krill, Meganyctiphanes norvegica is influenced by moult and reproductive processes, Marine Ecology-Progress Series, 190, 253-262.
- Tarling, G., Matthews, J., Burrows, M., Saborowski, R., Buchholz, F., Bedo, A., Mayzaud, P. 2000. An optimization model of the diel vertical migration of "Northern krill" (Meganyctiphanes norvegica) in the Clyde Sea and in the Kattegat Sea., Canadian Journal of Fisheries and Aquatic Sciences, 57, Suppl. 3, 38-50.
- Tarling, G.A., Matthews, J.B.L., David, P., Guerin, O., Buchholz, F. 2001. The swarm dynamics of northern krill (Meganyctiphanes norvegica) and pteropods (Cavolinia inflexa) during vertical migration in the Ligurian sea observed by an acoustic Doppler current profiler, Deep-Sea Research Part I-Oceanographic Research Papers, 48, 1671-1686.
- Temming, A & Mergardt, N. 2002. Estimating the mean time between meals in the fied from stomach content data and gastric evacuation functions of whiting (Merlangius merlangius L.) feeding on sandeel (Ammodytes marinus Raitt). ICES J. mar. Sci. 59 :782-2002.
- Temming, A. & Damm, U. 2002. Life cycle of Crangon crangon in the North Sea: a simulation of he timing of recruitment as a function of teh seasonal temperature signal. Fish. Oceanography, 11: 45-58.

- Temming, A. & Herrmann, J.P., 2003. Gastric evacuation in cod - Prey-specific evacuation rates for use in North Sea, Baltic Sea and Barents Sea multi species models. *Fisheries Research*, 63: 21-41.
- Temming, A., Böhle, B., Skagen, D.W. and Knudsen, F.R. 2002. Gastric evacuation in mackerel: the effects of meal size, prey type and temperature. *J.Fish Biol.* 61: 50-70.
- Temming, A., Götz, S., Mergardt, N. and Ehrich, S. 2004. Predation of whiting and haddock on sandeel: aggregative response, competition and diel periodicity. *J.Fish Biol.* 64: 1-22.
- Temming, A. and Herrmann, J.-P. 2001a. Gastric evacuation in horse mackerel. I. The effects of meal size, temperature and predator weight. *J.Fish.Biol.* 58: 1230-1245.
- Temming, A. and Herrmann, J.-P. 2001b. Gastric evacuation of horse mackerel. II. The effects of different prey types on the evacuation model. *J.Fish.Biol.* 58: 1246-1256.
- Thiel, R. 2000: Aktueller Zustand der Fischgemeinschaften in der mittleren Elbe: Ergebnisse der Habitatmodellierung und fischökologischen Bewertung. In [BFG/PROJEKTGRUPPE ELBE-ÖKOLOGIE (Hrsg.)] Statusseminar Elbe-Ökologie, Tagungsband. Mitteilungsreihe der BfG/Projektgruppe Elbe-Ökologie 6: 43-46.
- Thiel, R. 2001: Spatial gradients of food consumption and production of juvenile fish in the lower River Elbe. *Archiv für Hydrobiologie Supplement* 135/2-4: 441-462.
- Thiel, R., I. Potter 2001: The ichthyofaunal composition in the Elbe Estuary: an analysis in space and time. *Marine Biology* 138 (3): 603-616.
- Thiel, R., Y. Buslovich, M. Gerkens, S. Oesmann, M. Scholten, I. Brümmer, E. Fladung, D. Lill 2000: Ökologische Zusammenhänge zwischen Fischgemeinschafts- und Lebensraumstrukturen der Elbe. *ATV-DVWK-Schriftenreihe* 21: 237-258.
- Tiselius, P., Petersen, J.K., Nielsen, T.G, Maar, M., Møller, E.F., Satapoomin, S., Tønnesson, K., Zervoudaki, T., Christou, E., Giannakourou, A., Sell, A.F. & Vargas, C. 2003. Functional response of *Oikopleura dioica* to house clogging due to exposure to algae of different sizes. *Marine Biology* 142: 253-261.
- Uiblein, F., A. Geldmacher, F. Köster, W. Nellen, G. Kraus 1999: Species composition and depth distribution of fish species collected in the area of the Great Meteor Seamount, eastern central atlantic, during Cruise M42/3, with seventeen new records. *Informes Técnicos del Instituto Canario de Ciencias Marinas No. 5, Telde (Gran Canaria)*, 49-77.
- Ulrich, I., Müller, J., Schütt, C., Buchholz, F. 2001. A study of population genetics in the European lobster, *Homarus gammarus* (Decapoda, Nephropidae), *Crustaceana*, 74, 825-837.
- Vahl HH, L.Karbe, M.J.Prieto-Alamo, C.Pueyo, & J.Westendorf 2000 Sediment mutagenicity testing development of substance specific bacterial strains for the detection of mutagenic aromatic nitrogen compounds and oxidative mutagens. *Aquatic Ecosystem Health and Management* 3: 369-378
- van Beusekom, J.E.E., Fock, H., De Jong, F., Diel-Christiansen, S., Christiansen, B., 2001. *Wadden Sea Specific Eutrophication Criteria. Common Wadden Sea Secretariat, Wilhelmshaven*, 115 pp.
- Van Marlen, B.; D. de Haan, A.S. Revill, K.E. Dahm, H. Wienbeck, M. Purps, and J. Coenjaerts 2001: By-catch reduction devices in the European Crangon fisheries. *ICES CM* 2001/R:10.
- Vargas, C., Tønnesson, K., Sell, A.F., Maar, M., Møller, E.F., Zervoudaki, T., Giannakourou, A., Christou, E., Satapoomin, S., Petersen, J.K., Nielsen, T.G. & Tiselius, P. 2002. The downward export of biogenic carbon in coastal waters of Western Sweden: Importance of the pelagic tunicates versus copepods in the zooplankton mediated fluxes. *Marine Ecology Progress Series* 241: 125-138.
- Vetter, R.-A. H., Franke, H.-D., Buchholz, F. 1999: Habitat-related differences in the response to oxygen deficiencies in *Idotea baltica* and *Idotea emarginata* (Isopoda, Crustacea), *Journal of experimental marine Biology and Ecology*, 239, 259-272.
- Voss, R., Hinrichsen, H.-H, St. John, M.A. 1999: Larval drift and retention of Baltic cod-combining field and modelling approaches. *Fish. Oceanogr.* 8:199-212
- Wegner, G.; Damm, U.; Purps, M. 2003: Physical Influences on the stock dynamics of plaice and sole in the North Sea. *SCI. MAR.*, 67 (Suppl. 1):219-234.
- Weikert, H., Koppelman, R., Wiegratz, S., 2001. Evidence of episodic changes in deep-sea zooplankton abundance and composition in the Levantine Sea (Eastern Mediterranean). *Journal of marine Systems* 30, 221-

Zane, L., Ostellari, L., Maccatrozzo, L., Bargelloni, L., Cuzin-Roudy, J., Buchholz, F., Patarnello, T. 2000. Genetic differentiation in a pelagic crustacean (*Meganycitiphanes norvegica*, Euphausiacea), from the North East Atlantic and the Mediterranean Sea, *Marine Biology*, 136, 191-199.

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In press

- Fankhauser, S. and R.S.J. Tol (forthcoming), 'On Climate Change and Economic Growth', *Resource and Energy Economics*.
- Guillerminet M.-L. (forthcoming) "The Decision of Investment and its Funding in an Undergoing Institutional Environment : the Case of a Nuclear Power Plant", dans l'ouvrage intitulé "Option Valuation for Energy Issues", Eds. Patrick LLERENA, Katrin OSTERTAG, Alban RICHARD, Martin WIETSCHERL, IRB Stuttgart, Fraunhofer Series "Innovationspotenziale".
- Hamilton, J.M. (forthcoming) "Climate and the Destination Choice of German Tourists", *Tourism Management*.
- Link, P.M. and R.S.J. Tol (forthcoming), 'Possible Economic Impacts of a Shutdown of the Thermohaline Circulation: An Application of *FUND*', *Portuguese Economic Journal*
- Lise, W. and R.S.J. Tol (forthcoming), 'Attainability of International Environmental Agreements as a Social Situation', *International Environmental Agreements*.
- Rehdanz, K. and Maddison, D.J. (forthcoming), 'Climate and Happiness', *Ecological Economics*.
- Roson, R. and R.S.J. Tol (forthcoming), 'An Integrated Assessment Model of Economy-Energy-Climate – The Model Wiagem: A Comment', *Integrated Assessment*.
- Tol, R.S.J. (forthcoming), 'The Marginal Damage Costs of Carbon Dioxide Emissions: An Assessment of the Uncertainties', *Energy Policy*.
- Tol, R.S.J., R.J.T. Klein and R.J. Nicholls (forthcoming), 'Adaptation to Sea Level Rise along Europe's Coasts', *Journal of Coastal Research*.
- Yetkiner, I. H. and A. van Zon (forthcoming), "Physical Shocks on Economic Structure: Earthquake and Growth" *Structural Change and Economic Dynamics*.

2004

- Fuchs, R. (2004), "Regionales Mobilisierungs- und Verwertungskonzept für die Freie und Hansestadt Hamburg zur energetischen Nutzung von Holz als Beitrag zur CO₂-Emissionsreduktion", Forschungsstelle für Nachhaltige Umweltentwicklung, Universität Hamburg, Zentrum für Marine und Atmosphärische Wissenschaften, 28.
- Lau, M. (2004), 'Küstenzonenmanagement in der Volksrepublik China und Anpassungsstrategien an den Meeresspiegelanstieg', *Coastline Reports*, 1, 213-224.
- Kemfert, C., W. Lise and R.S.J. Tol (2004), 'Games of Climate Change with International Trade', *Environmental and Resource Economics*, 28, 209-232.
- Rehdanz, K. and Hamilton, J.M. (2004) Valuing the Impacts of Climate Change, in Lange, M.A. and Poszig, D. (Eds.) IRISEN-II Integrated Regional Impact Studies in the European North: Basic Issues, Methodologies and Regional Climate Modelling - II, Proceedings of an Advanced Study Course at Abisko, Sweden, from July 20 to August 3, 2002, pp. 353-366.
- Tol, R.S.J. (2004), 'On Dual-Rate Discounting', *Economic Modelling*, 21 (1), 95-98.
- Tol, R.S.J. (2004), 'Dynamic World: Land-Cover and Land-Use Change' (a review), *Environmental Science and Policy*, 7 (1), 77.
- Tol, R.S.J., T.E. Downing, O.J. Kuik and J.B. Smith (2004), 'Distributional Aspects of Climate Change Impacts', *Global Environmental Change*, 14 (3), 259-272.
- Tol, R.S.J. and R. Verheyen (2004), 'State Responsibility and Compensation for Climate Change Damages – A Legal and Economic Assessment', *Energy Policy*, 32 (9), 1109-1130.
- Tol, R.S.J. and J.P. Weyant (2004), 'Editorial', *Energy Economics*, 26 (1), v-vi.
- Zhou, Y. and R.S.J. Tol (2004), 'The Implications of Desalination to Water Resources in China – An Economic Perspective', *Desalination*, 163 (4), 225-240.

2003

- Jaeger, C.C. and R.S.J. Tol (2003), 'Economics' in J. Rotmans and D.S. Rothman (eds.), *Scaling in Integrated Assessment*, Swets & Zeitlinger, Lisse.
- Maddison, D.J. (2003), 'The Amenity Value of the Climate: The Household Production Function Approach', *Resource and Energy Economics*, **25** (2), 155-175.
- Maddison, D.J. and A. Bigano (2003), 'The Amenity Value of the Italian Climate', *Journal of Environmental Economics and Management*, **45**, 319-332.
- Maddison, D.J. and T. Foster (2003), 'Valuing Congestion Costs in the British Museum', *Oxford Economic Papers*, **55**, 173-190.
- Muysken, J., I.H. Yetkiner, and T. Ziesemer (2003), 'Health, Labour Productivity and Growth', in *Growth Theory and Growth Policy* (Eds. H. Hagemann and S. Seiter), Routledge, London.
- Riyanto, Y.E. and I.H. Yetkiner (2003), 'A Market Mechanism for Scientific Communication: Reply', *Kyklos*, **56** (3), 395-400.
- Schneider, U.A. and B.A. McCarl (2003). "Greenhouse Gas Mitigation Through Energy Crops in the U.S. With Implications for Asian-Pacific Countries." in *Global Warming and the Asian Pacific* (Eds. C.C. Cheng, D. Shaw and R.O. Mendelsohn) by Edward Elgar, Cheltenham.
- Schneider, U.A. and B.A. McCarl (2003) "Economic Potential of Biomass Based Fuels for Greenhouse Gas Emission Mitigation" *Environmental and Resource Economics*, **24** (4), 291-312.
- Gupta, J. and R.S.J. Tol (2003), 'Why Reduce Greenhouse Gas Emissions? Reasons, Issues Linkages, and Dilemmas', in E.C. van Ierland, J. Gupta and M.T.J. Kok (eds.) *Issues in International Climate Policy – Theory and Policy*, pp. 17-38, Edward Elgar, Cheltenham.
- Kuik, O.J., R.S.J. Tol and D.J.E. Grimeaud (2003), 'Linkages between the Climate Change Regime and the International Trade Regime', in E.C. van Ierland, J. Gupta and M.T.J. Kok (eds.) *Issues in International Climate Policy – Theory and Policy*, pp. 201-222, Edward Elgar, Cheltenham.
- Leggett, J., W. Pepper, A. Sankovski, J.B. Smith, R.S.J. Tol and T.M.L. Wigley (2003), 'Climate Change Risk Analysis Framework (CCRAF) – A Probabilistic Tool for Analyzing Climate Change Uncertainties', *Geophysical Research Abstracts*, **5**, 07416.
- Manders, T. and R.S.J. Tol (2003), 'Challenges of Future Climate Policy: What Can Be Expected', in E.C. van Ierland, J. Gupta and M.T.J. Kok (eds.) *Issues in International Climate Policy – Theory and Policy*, pp. 39-58, Edward Elgar, Cheltenham.
- Schleupner, C. (2003), 'Sonderkulturen als Impuls für die Regionalentwicklung? Eine Fallstudie über den Apfelanbau im Thak Khola/Zentralnepal unter besonderer Berücksichtigung der Waldentwicklung', *Marburger Geographische Gesellschaft, Jahrbuch 2002*, pp.207-213, Marburg.
- Andersen, M., R.S.J. Tol, L.P. Graham, S. Bergström, L. Ryden and C. Azar (2003), 'Impacts on the Global Atmosphere – Climate Change and Ozone Depletion', Chapter 10 in L. Ryden, P. Migula and M. Andersen (eds.) *Environmental Science*, pp. 297-323, Baltic University Press, Uppsala.
- Olsthoorn, A.A. and R.S.J. Tol (2003), 'Cost Implications of Storms, Floods and Droughts', *Encyclopedia of Life Support Systems*, UNESCO & EOLLS Publishers, Oxford (<http://www.eolss.net>)
- Tol, R.S.J. (2003), 'Economic Analysis of Climate Change', *Encyclopedia of Life Support Systems*, UNESCO & EOLLS Publishers, Oxford (<http://www.eolss.net>)
- Tol, R.S.J. (2003), 'Environmental Politics and Policy in Industrialised Countries' (a review), *Environmental Science and Policy*, **6** (5), 466-467.
- Tol, R.S.J. (2003), 'Is the Uncertainty about Climate Change Too Large for Expected Cost-Benefit Analysis?', *Climatic Change*, **56** (3), 265-289.
- Tol, R.S.J., N.M. van der Grijp, A.A. Olsthoorn and P.E. van der Werff (2003), 'Adapting to Climate Change: A Case Study of Riverine Flood Risks in the Netherlands', *Risk Analysis*, **23** (3), 575-583.
- Tol, R.S.J., R.J. Heintz and P.E.M. Lammers (2003), 'Methane Emission Reduction: An Application of *FUND*', *Climatic Change*, **57** (1-2), 71-98.
- van der Veeren, R.J.H.M. and R.S.J. Tol (2003), 'Game-theoretic Analyses of Nitrate Emission Reduction Strategies in the Rhine River Basin', *International Journal of Environmental Technology and Management*, **3** (1), 74-103.
- van Zon, Adriaan and I. Hakan Yetkiner (2003), 'An Endogenous Growth Model with Embodied Energy-Saving Technical Change', *Resource and Energy Economics*, **25** (1), 81-103.

2002

- Kempf, C. and R.S.J. Tol (2002), 'Equity, International Trade and Climate Policy', *International Environmental Agreements*, **2**, 23-48.
- Michaelowa, A. and R.S.J. Tol (eds.) (2002), *Special Issue of International Environmental Agreements: Politics, Law and Economics on New Paths for International Climate Policy*, Kluwer Academic Publishers, Dordrecht.
- Michaelowa, A. and R.S.J. Tol (2002), 'Outlook for the International Climate Policy Regime – Revolution or

- Reform', *International Environmental Agreements: Politics, Law and Economics*, **2** (3), 217-219.
- Schneider, U.A. (2002) "Les coûts de stockage de carbone dans les sols agricoles." Translated by T. Chevallier and P.A. Jayet, In: Arrouays, D., J. Balesdent, J.C. Germon, P.A. Jayet, J.F. Soussana, and P. Stengel (eds.). Mitigation of the greenhouse effect. Increasing carbon stocks in French agricultural soils? An assessment report compiled by the French Institute for Agricultural Research (INRA) on the request of the French Ministry for Ecology and Sustainable Development.
- Tol, R.S.J. (2002), 'Fearnside's Unified Index for Time Preference: A Comment', *Ecological Economics*, **41**, 33-34.
- Tol, R.S.J. (2002), 'Review of "The Impacts of Climate Change on the United States Economy" edited by Robert Mendelsohn and James E. Neumann', *Environment and Development Economics*, **7** (3), 600-601.
- Tol, R.S.J. (2002), 'New Estimates of the Damage Costs of Climate Change, Part I: Benchmark Estimates', *Environmental and Resource Economics*, **21** (1), 47-73.
- Tol, R.S.J. (2002), 'New Estimates of the Damage Costs of Climate Change, Part II: Dynamic Estimates', *Environmental and Resource Economics*, **21** (1), 135-160.
- Tol, R.S.J. (2002), 'Welfare Specification and Optimal Control of Climate Change: An Application of *FUND*', *Energy Economics*, **24** (4), 367-376.
- Tol, R.S.J. (2002), 'Elk Europees land zal zijn Kyoto-doelstelling halen – een reactie', *Utilities* (februari), 44-45.
- Tol, R.S.J. (2002), 'Review of Water Resources and Coastal Management' edited by R. Kerry Turner and Ian J. Bateman', *RECIEL*, **11** (3), 384-385.
- Susandi, A. and R.S.J. Tol (2002), 'The Impact of International Climate Policy on Indonesia', *Pacific-Asian Journal of Energy*, **12** (2), 111-121
- Yohe, G.W. and R.S.J. Tol (2002), 'Indicators for Social and Economic Coping Capacity – Moving Towards a Working Definition of Adaptive Capacity', *Global Environmental Change*, **12** (1), 25-40.
- Wirtz, K. R.S.J. Tol and K.G. Hooss (2002), 'Mythos Offene See: Nutzungskonflikte im Meeresraum', in J.L. Lozan, E. Rachor, K. Reise, J. Sündermann and H. von Westernhagen (eds.), *Warnsignale aus Nordsee und Wattenmeer – Eine aktuelle Umweltbilanz*, Wissenschaftliche Auswertungen, Hamburg.

2001

- Darwin, R.F. and R.S.J. Tol (2001), 'Estimates of the Economic Effects of Sea Level Rise', *Environmental and Resource Economics*, **19** (2), 113-129.
- Duraiappah, A.K. and R.S.J. Tol (eds.) (2001), *Special Issue of Computational Economics on Computational Techniques in the Field of Environmental Economics*, Kluwer Academic Publishers, Dordrecht.
- Hisschemöller, M., R.S.J. Tol and P. Vellinga (2001), 'The Relevance of Participatory Approaches in Integrated Environmental Assessment', *Integrated Assessment*, **2** (2), 57-72.
- Hourcade, J.-C., M. Haduong, A. Gruebler and R.S.J. Tol (2001), 'INASUD Project Findings on Integrated Assessment of Climate Policies', *Integrated Assessment*, **2** (1), 31-35.
- Hutjes, R.W.A., A.J. Dolman, G.J. Nabuurs, M.J. Schelhaas, H.W. ter Maat, P. Kabat, E. Moors, J. Huygen, R. Haarsma, R. Ronda, M. Schaeffer, J.D. Opsteegh, R. Leemans, L. Bouwman, G. Busch, B. Eickhout, E. Kreileman, M. Schaeffer, B. Strengers, B. de Vries, A. Verhagen, L. Vleeshouwers, W.J. Corre, R.E.E. Jongschaap, G. Kruseman, E. van Ierland, A.A.M. Holtslag, R. Ronda, F. Willemsen, C. Dorland and R.S.J. Tol (2001), *Land Use, Climate and Biogeochemical Cycles: Feedbacks and Options for Emission Reduction*, Report 410200107, RIVM, Bilthoven.
- van Ierland, E.C. and R.S.J. Tol (2001), 'Aanpassen of Reduceren?', *Economisch Statistische Berichten*, **86** (4328), D6-D7.
- Maddison, D.J. (2001), *The Amenity Value of the Global Climate*, London: EarthScan.
- Maddison, D.J., (2001), 'In Search of Warmer Climates? The Impact of Climate Change on Flows of British Tourists', *Climatic Change*, **49**, 183-208.
- Maddison, D.J. and S. Mourato (2001), 'Valuing Different Road Options for Stonehenge', *Conservation and Management of Archaeological Sites*, **4**, 203-212.
- Olsthoorn, A.A. and R.S.J. Tol (eds.) (2001), *Floods, Flood Management and Climate Change in the Netherlands*, Institute for Environmental Studies **R01-04**, Vrije Universiteit, Amsterdam, 149 pp.
- Policino, M. and D.J. Maddison (2001), 'Valuing the Benefits of Cleaning Lincoln Cathedral', *Journal of Cultural Economics*, **25**, 131-148.
- Smith, J.B., H.-J. Schellnhuber, M.M.Q. Mirza, S. Fankhauser, R. Leemans, E. Lin, L. Ogallo, B. Pittock, R.G. Richels, C. Rosenzweig, R.S.J. Tol, J.P. Weyant and G.W. Yohe (2001), 'Vulnerability to Climate Change and Reasons for Concern: A Synthesis', Chapter 19, pp. 913-967, in J.J. McCarthy, O.F. Canziani, N.A. Leary, D.J. Dokken and K.S. White (eds.), *Climate Change 2001: Impacts, Adaptation, and Vulnerability*, Cambridge University Press, Cambridge.
- Strzepek, K.M., D.N. Yates, G.W. Yohe, R.S.J. Tol and N. Mader (2001), 'Constructing "Not Implausible" Climate and Economic Scenarios for Egypt', *Integrated Assessment*, **2** (3), 139-157.

- Tol, R.S.J. (2001), 'Book Review Richard L. Revesz, Philippe Sands and Richard B. Stewart (editors), Environmental Law, the Economy and Sustainable Development', *RECIEL*, **10** (2), 246-247.
- Tol, R.S.J. (2001), 'Book Review Carsten Schmidt, Designing International Environmental Agreements: Incentive Compatible Strategies for Cost-Effective Cooperation', *RECIEL*, **10** (3), 351-352.
- Tol, R.S.J. (2001), 'Equitable Cost-Benefit Analysis of Climate Change', *Ecological Economics*, **36** (1), 71-85.
- Tol, R.S.J. (2001), 'Climate Coalitions in an Integrated Assessment Model', *Computational Economics*, **18**, 159-172.
- Tol, R.S.J. (2001), 'Impacts of Climate Change: An Economist's Perspective', in B. Parthier and D. Simon (eds.), *Climate Impact Research: Why, How and When?*, pp. 115-124, Akademie Verlag, Berlin.
- Tol, R.S.J. (2001), 'Global Warming' in R. Friedrich and P. Bickel (eds.), *Environmental External Costs of Transport*, Chapter 9, pp. 121-137, Springer Verlag, Berlin.
- Tol, R.S.J. and H. Dowlatabadi (2001), 'Vector-borne Diseases, Climate Change, and Economic Growth', *Integrated Assessment*, **2**, 173-181.
- Tol, R.S.J., T.E. Downing, S. Fankhauser, R.G. Richels and J.B. Smith (2001), 'Progrès dans l'Estimation des Coûts des Dommages des Émissions des Gas à Effet de Serre', *Pollution Atmosphérique – Numéro Spécial: Combien Vaut l'Air Propre?*, 155-179.
- Van der Veeren, R.J.H.M. and R.S.J. Tol (2001), 'Cost-Effective Nutrient Emission Control in the Rhine Basin', *Environmental and Resource Economics*, **18** (1), 19-41.

2000

- Carraro, C., A. Goria and R.S.J. Tol (2000), 'Integrating Climate Policies in the European Environment', *Change*, **51**.
- Hisschemoeller, M., R.S.J. Tol and P. Vellinga (2000), 'Approaches to Integrated Environmental Assessment', *Geïntegreerde Modellen: Brug tussen Onderzoek en Beleid?*, 135-164, Raad voor het Milieu- en Natuuronderzoek, Den Haag.
- Nicholls, R.J., R.S.J. Tol and A. de la Vega-Leinert (2000), 'European Vulnerability and Adaptation to Impacts of Accelerated Sea-Level Rise', *Mitteilungen Deutsche Gesellschaft für Meeresforschung*, **2/00**, 6-8.
- Tol, R.S.J. (2000), 'A Step in the Wrong Direction?', *Chemistry and Industry*, **3**, 106-107.
- Tol, R.S.J. (2000), 'The Impact of Climate Change on the United States Economy', *Economic Journal (Book Note)*, <http://www.res.org.uk/ecobjknotes/row.asp?id=16447>.
- Tol, R.S.J. (2000), 'International Climate Policy: An Assessment', *IHDP Newsletter*, **3/00**, 11-12.
- Tol, R.S.J. (2000), 'Mathematical Modeling in Economics, Ecology and the Environment', *Economic Journal (Book Note)*, <http://www.res.org.uk/ecobjknotes/row.asp?id=18329>.
- Tol, R.S.J. (ed.) (2000), *Weather Impacts on Natural, Social and Economic Systems in the Netherlands*, Institute for Environmental Studies **R00-02**, Vrije Universiteit, Amsterdam.
- Tol, R.S.J. and A. Langen (2000), 'A Concise History of Dutch River Floods', *Climatic Change*, **46**, 357-369.