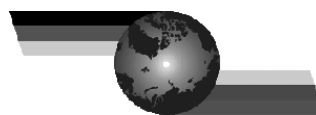


TERRA NOSTRA

Schriften der Alfred-Wegener-Stiftung 2002/3

Climate Drivers of the North

Program and Abstracts

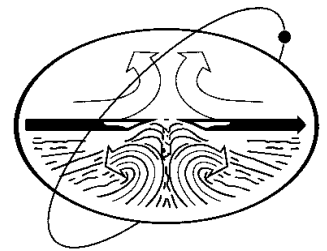


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IMPRESSUM

TERRA NOSTRA

Heft 2002/3 Climate Drivers of the North



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Climate Drivers of the North
Kiel, May 8-11, 2002

Program

Wednesday, May 8, 2002

15:00 - 19:00
19:00 - 21:00

Registration GEOMAR, Building 8, main entrance
Icebreaker on the museum ship „Jenny“ (GEOMAR pier)

Thursday, May 9, 2002

08:30 – 08:40 Welcome and opening by C. Dullo and H. Kassens

08:40 - 09:00 Ten years of Russian-German cooperation in geosciences
Thiede, J.

Session 1: Modern processes in polar seas

Conveners: J. Hölemann, I. Dmitrenko, M. Spindler, L. Timokhov

09:00 Interannual variability of summer sea ice thickness in the Siberian and central Arctic under different atmospheric circulation regimes
Haas, C.

09:15 Methane contents in different compartments of the Laptev Sea - preliminary results
Kobabe, S., Wagner, D., Schröder, H., Damm, E., Kassens, H., Pfeiffer, E.-M.

09:30 Climate scale variability of the arctic atmosphere and ocean circulation and its link with the arctic seas
Timokhov, L., Ivanov, V., Kochetov, S., Koltishev, A., Karklin, V., Priamikov, S., Yanes, A.

09:45 The drivers of Siberian arctic shallow seas hydrography within the scale of seasonal and interannual variability
Dmitrenko, I.A., Hölemann, J.A., Berezovskaya, S.L., Kirillov, S.A., Eicken, H., Kassens, H.

10:00 - 10:30 Coffee break

Session 1: Modern processes in polar seas (continued)

Conveners: J. Hölemann, I. Dmitrenko, M. Spindler, L. Timokhov

10:30 Transport dynamics on the Laptev Sea shelf: timing of seasonal processes as a control for interannual variability
Hölemann, J.A., Wegner, C., Dmitrenko, I., Kirillov, S.

10:45 Seasonal sediment dynamics on the Laptev Sea shelf - Implications for sediment budget calculations
Wegner, C., Hölemann, J.A., Dmitrenko, I., Kirillov, S., Niessen, F., Kassens, H.

11:00 Nutrients in the Laptev Sea System: distribution, variability, and budgets
Pivovarov, S., Nitishinsky, M.

- 11:15 Diel vertical migrations of mesozooplankton in the Laptev Sea inferred from acoustic backscatter signal: long- and short-term variations
Abramova, E., Ivanova, D., Tuschling, K., Dmitrenko, I., Hölemann, J., Akhmetshina, I., Wegner, C.
- 11:30 The Laptev Sea ecosystem research: now and then!
Schmid, M.K.
- 11:45 – 12:05 Poster presentation Session 1
- 12:05 - 12:45 Posters Session 1 and 2
- 12:45 – 13:45 Lunch

Session 2: Methane venting and gas hydrates – modes and mechanisms

Conveners: E. Suess, A. Obzhairov, V. Soloviev, E.-M. Pfeiffer

- 13:45 Hydrocarbon gases and gas hydrates in the mud volcanic deposits of the deep Black Sea, their composition and possible sources of formation
Ivanov, M., Stadnitskaya, A., van Weering, T., Blinova, V., Kozlova, E.
- 14:00 Methane in surface sediments of the Haakon Mosby Mud Volcano
Schlüter, M., Sauter, E., Boetius, A., Klages, M.
- 14:15 Methane distribution in the water column of the Okhotsk and Japan seas
Obzhairov, A.I., Vereshchagina, O.F., Shakirov, R.B., Saluyk, A.N., Suess, E., Biebow, N., Lobanov, V.B.
- 14:30 Hydroacoustic flare imaging and estimation of the methane flux from an active natural methane vent area on the northern Sakhalin slope
Salyuk, A., Obzhairov, A., Li, B., Biebow, N., Suess, E.
- 14:45 - 15:15 Coffee break

Session 2: Methane venting and gas hydrates – modes and mechanisms (continued)

Conveners: E. Suess, A. Obzhairov, V. Soloviev, E.-M. Pfeiffer

- 15:15 Thermal signals associated with seafloor hydrate accumulations and application for investigations in the Sea of Okhotsk
Poort, J., Kaulio, V., Soloviev, V.
- 15:30 Massive barite deposits and carbonate mineralization in the Derugin Basin, Sea of Okhotsk: Precipitation process at cold vent sites
Greinert, J., Bollwerk, S.M., Derkachev, A., Bohrmann, G., Suess, E.
- 15:45 Rising gas bubbles in sediments – A model for mixing the porewater
Haeckel, M.
- 16:00 Experimental investigations of gas hydrate formation and dissociation in sediments
Chuvilin, E.M., Kozlova, E.V., Makhonina, N.A.
- 16:15 Modeling permafrost and gas hydrate stability zone in the Laptev and Eastern Siberia seas
Eliseeva, A., Gavrilov, A. V., Kholodov, V., Romanovskii, N.
- 16:30 - 16:50 Poster presentation Session 2
- 16:50 – 17:30 Posters Session 1 and 2

17:30 – 19:00

Workshops

Posters

Session 1

Akhmetshina, I., Abramova, E. Zooplankton abundance, biomass and production in the Lena Delta polygon lakes: preliminary results

Aliev, T.A., Kuroshev, G.D. Usage of bathymetric maps and modern remote sensing technologies in investigations of polar seas

Berezovskaya, S., Dmitrenko, I., Kirillov, S. The Laptev Sea shelf hydrography under variable atmospheric forcing during summer

Ivanova, D., Abramova, E., Akhmetshina, I. Application of wavelet-analysis for studying zooplankton

Kirillov, S., Darovskikh, A., Dmitrenko, I. Delay in ice formation onset in the Laptev Sea: consequences of additional heat flux from the bottom layer

Kirillova, L. The water column structure in the Bering Strait

Klyuvitkin, A.A., Ponomareva, T.Ya., Shevchenko, V.P., Vinogradova, A.A. Atmospheric input of trace metals into the Laptev Sea

Krylov, A.A., Andreeva, I.A., Shilov, V., Kaban'kov, V.Ya., Mirolubova, E.S. Quaternary paleoceanography of the Mendeleev Rise, Amerasian basin of the Arctic Ocean

Luchsheva, L.N., Obzhurov, A.I., Selina, M.C., Zakharkov, S.P., Stonik, I.V., Shtraikhert, E.A., Suess, E., Biebow, N. The influence of the frontal zone of the East Sakhalin current on the development of phytoplankton and the distribution of mercury and methane concentrations in sea water

Narkevsky, E. Nutrient flux in the East Siberian Sea

Nitishinsky, M. Balance model of the hydrochemical regime of the Laptev Sea

Novigatsky, A.N., Lisitzin, A.P., Serova, V.V., Shevchenko, V.P., Stein, R. Sedimentary material transport by sea ice in the Laptev Sea and adjacent Arctic Ocean

Pavlova, G.Yu., Tishchenko, P.Ya., Semiletov, I.P., Volkova, T.I., Gukov, A.Yu. Nonconservative behavior of calcium in the Lena Delta and Laptev Sea

Peters, J., Tuschling, K. Dominance of opportunists? Feeding ecology of zooplankton as indicated by fatty acid composition

Pryakhina, G.V. New approach in the field of training specialists for the solution of problems of big cities and industrial zones

Shevchenko, V.P., Klyuvitkin, A.A., Kriews, M., Lisitzin, A.P., Nöthig, E.-M., Novigatsky, A.N., Smirnov, V.V., Stein, R., Vinogradova, A.A. Pathways and fluxes of natural and anthropogenic tracers in the Laptev Sea and adjacent Arctic Ocean

Sosnin, V., Tishchenko, P., Biebow, N. Diapycnal entrainment of shelf waters into intermediate depths across the Sakhalin continental slope (Sea of Okhotsk)

Steffens, M. Environmental factors affecting the macrobenthic community structure in the shallow eastern Laptev Sea

Terekhova, V.E., Sosnin, V., Shakirov, R.B., Obzhairov, A.I., Bouzoleva, L.S., Somov, G.
Discovery of *Listeria monocytogenes* in the northwest of the Okhotsk Sea

Wegner, C., Hölemann, J.A., Dmitrenko, I., Kirillov, S., Klagge, T., Mörz, T., Kassens, H.
Acoustic Doppler Current Profiler - a tool for the determination of sediment transport dynamics on arctic shelves

Session 2

Biebow, N., Obzhairov, A., Winckler, G., Sosnin, V., Salyuk, A., Suess, E. Seasonal variability of methane degassing at the sea floor and methane input into the atmosphere - Results from the joint Russian-German project KOMEX

Bollwerk, S.M., Greinert, J., Wallmann, K., Bohrmann, G., Eisenhauer, A., Suess, E. Pore water chemistry of vent fluids associated to massive barite deposits in the Derugin Basin, Sea of Okhotsk

Derkachev, A.N., Bohrmann, G., Greinert, J., Obzhairov, A.I., Suess, E. Barites of the Sea of Okhotsk: sedimentological and mineralogical aspects of their origin

Kaulio, V.V., Soloviev, V.A. Effect of gas hydrate formation on the geothermal field in gas-seepage areas

Kutzbach, L., Wille, C., Wagner, D., Pfeiffer, E.-M. Quantifying methane emissions from Siberian permafrost landscapes: the eddy covariance technique as a tool to determine trace gas fluxes on the ecosystem scale

Lembke, L., Tiedemann, R., Nürnberg, D., Biebow, N., Kaiser, A., Kokfelt, U., Kozdon, R. Benthic foraminiferal $\delta^{13}\text{C}$ anomalies in gravity core GE 99-24: evidence for extreme Holocene paleomethane anomalies off NE Sakhalin?

Lüdmann, T., Wong, H.K. Gas hydrates in the Okhotsk Sea - a first quantification of the associated methane

Mazurenko, L.L., Soloviev, V.A. On the composition of gas hydrate-forming mud volcano fluids

Pfeiffer, E.-M., Kobabe, S., Wagner, D. Methane fluxes in Siberia and their relevance for the permafrost related gas hydrate research

Sahling, H., Galkin, S.V., Foerstel, H., Greinert, J., Salyuk, A., Piepenburg, D., Suess, E. Interactions between cold-seep and deep-sea ecosystems on the Sakhalin continental shelf and slope and in the Derugin Basin (Sea of Okhotsk)

Shakirov, R.B., Obzhairov, A.I., Prisyazhnyuk, A.V. Gasgeochemical research of mud volcanoes on Sakhalin Island

Soloviev, V.A. Study of gas hydrate accumulations associated with fluid discharge areas: some suggestions to the Russian-German collaboration

Wong, C.S., Tishchenko, P.Ya., Johnson, W.K. Thermodynamic consideration of equilibrium of CO_2 -hydrate in sea water

Yakushev, V.S., Chuvilin, E.M., Perlova, E.V. Natural gas and gas hydrate association in permafrost of West Siberia

Friday, May 10, 2002

Session 3: Records of land-ocean linkages

Conveners: H. Bauch, M. Grigoriev, A. Abelmann, S. Gorbarenko

- 08:30 High-arctic Holocene records of land-ocean interactions
Bauch, H.A., Müller-Lupp, T., Polyakova, Ye.I., Röhl, U., Niessen, F.
- 08:45 Coastal processes and the sediment budget of the Laptev Sea
Rachold, V., Are, F.E., Grigoriev, M.N., Hubberten, H.-W., Rasumov, S., Schneider, W., Schwamborn, G.
- 09:00 Ostracoda of the Laptev Sea: Holocene to recent
Stepanova, A., Taldenkova, E., Bauch, H.A.
- 09:15 Holocene changes of riverine discharge and surface water salinity in the Laptev Sea inferred from diatom assemblages
Polyakova, Ye.I., Bauch, H.A.
- 09:30 Modern and past records of shelf hydrography in the Laptev Sea
Müller-Lupp, T., Bauch, H., Erlenkeuser, H.
- 09:45 Holocene environmental changes of the eastern Laptev Sea: evidence from fossil assemblages
Taldenkova, E., Bauch, H.A., Stepanova, A., Dem'yankov, S.
- 10:00 - 10:30 Coffee break

Session 3: Records of land-ocean linkages (continued)

Conveners: H. Bauch, M. Grigoriev, A. Abelmann, S. Gorbarenko

- 10:30 Radiolarians in the Sea of Okhotsk - tracers for past hydrographic and biological conditions
Abelmann, A., Matul, A., Nimmergut, A., Nürnberg, D., Tiedemann, R.
- 10:45 The polar planktic foraminifera *Neogloboquadrina pachyderma* (sinistral) in the Okhotsk Sea: carbon isotopes, habitat and the "Carbonate Ion Effect" under natural conditions
Bauch, D., Erlenkeuser, H., Winckler, G., Pavlova, G., Thiede, J.
- 11:00 High-frequency surface environmental and sedimentary changes in the Okhotsk Sea during the Late Pleistocene: geochemical, paleontological and lithological evidence
Gorbarenko, S., Leskov, V., Gvozdeva I.G., Bosin, A., Biebow, N., Tiedemann, R., Nuernberg, D.
- 11:15 Orbital to millennial-scale to century-scale paleoceanographic and paleoclimatic changes in the Sea of Okhotsk
Nürnberg, D., Tiedemann, R., Kaiser, A., Kozdon, R., Lembke, L., Biebow, N., Roehl, U.
- 11:30 Bottom current-controlled sedimentation and mass wasting in the northwestern Sea of Okhotsk
Wong, H.K., Lüdmann, T., Baranov, B.V., Karp, B.Ya., Konerding, P.
- 11:45 - 12:05 Poster presentation Session 3
- 12:05 - 12:45 Posters Session 2 and 3
- 12:45 - 13:45 Lunch

Session 4: Sea level, ice sheets and permafrost

Conveners: H.-W. Hubberten, L. Savatyugin, N. Romanovskii, D. Nürnberg

- 13:45 Environmental changes and catastrophic cold events after the last glacial extreme, Laptev Sea region
Romanovskii, N., Gavrilov, A.V., Kholodov, A.L., Tumskey, V.E.
- 14:00 Siberian permafrost as paleoenvironmental archive - new results and new perspectives
Schirrmeister, L., Siegert, C., Hubberten, H.-W., Meyer, H., Kienast, F., Andreev, A., Grosse, G., Kunitsky, V., Dereviagin, A., Kuznetsova, T., Kuzmina, S., Bobrov, A.
- 14:15 Evidence from the Laptev Sea shelf for the transformation of a late glacial permafrost landscape into a marine depositional environment
Bauch, H.A., Kassens, H., Müller-Lupp, T., Polyakova, Ye.I., Drachev, S., Meyer, H., Niessen, F.
- 14:30 Microbial controls on methane emission from Siberian tundra environments: open questions and future perspectives
Wagner, D., Pfeiffer, E.-M., Samarkin, V.
- 14:45 - 15:15 Coffee break

Session 4: Sea level, ice sheets and permafrost (continued)

Conveners: H.-W. Hubberten, L. Savatyugin, N. Romanovskii, D. Nürnberg

- 15:15 724-meter deep ice core from Academy of Sciences ice cap (Severnaya Zemlya) - accumulation rate, preliminary time scaling and data resolution
Fritzsche, D., Wilhelms, F., Pinglot, J.F., Meyer, H., Schütt, R., Weiler, K., Savatyugin, L.M., Miller, H., Hubberten, H.-W.
- 15:30 Paleoceanographic studies in the Sea of Okhotsk - Implications for the glaciation history of NE-Siberia
Nürnberg, D., Kaiser, A., Tiedemann, R., Biebow, N.
- 15:45 LGM glaciation and Siberian River Runoff in the Kara Sea: results from the RV "Boris Petrov" expedition 2001 (SIRRO project)
Niessen, F., Stein, R., Dittmers, K.
- 16:00 History of Eurasian ice sheets reflected in Arctic deep-sea sediments
Spielhagen, R., Nørgaard-Pedersen, N., Erlenkeuser, H., Vogt, C., Weiel, D.
- 16:15 - 16:35 Poster presentation Session 4
- 16:35 - 17:00 Posters Session 3 and 4
- 17:00 - 18:30 Round table: Perspectives in Geosciences
- 18:30 – 22:00 Conference barbecue

Posters

Session 3

Are, F.E., Hubberten, H.-W., Rachold, V., Reimnitz, E., Solomon, S. Mathematical description of erosional shoreface profiles in the arctic seas

Artyomova, A.V., Gorbarenko, S.A., Leskov, V.Yu., Psheneva, O.Yu., Zhuravlenko, O.A., Biebow, N., Tiedemann, R. Late Pleistocene and Holocene paleoceanography of the Okhotsk Sea based on diatom, geochemical and lithological data

Bubenshchikova, N.V., Khusid, T.A., Iushina, I.G., Gorbarenko, S.A. Benthic foraminifera evidence of Late Quaternary oceanographic changes in the southwestern Okhotsk Sea

Dem'yankov, S., Taldenkova, E., Bauch, H.A. Foraminifers of the Laptev Sea shelf as indicators of paleoenvironmental changes

Grigoriev, M.N., Are, F.E., Hubberten, H.-W., Razumov, S.O. Coastal dynamics of the Lena Delta, the Laptev Sea, Siberia

Kokfelt, U., Tiedemann, R., Nürnberg, D., Kaiser, A., Kozdon, R., Biebow, N. Holocene vegetation change and Amur River run-off based on the analysis of pollen, spores and chlorococcalean algae in core LV28-4-4 from the Sea of Okhotsk

Kozdon, R., Tiedemann, R., Nürnberg, D., Kaiser, A., Kokfelt, U., Biebow, N., Röhl, U. A high resolution Holocene geochemical record from the Sea of Okhotsk - Implications for climate change in the Siberian hinterland

Mardanian, I. Kodina, L. Peculiarities of organic carbon distribution in the Kara Sea sediments compared with the Laptev Sea

Matul, A., Abelmann, A. The radiolarian *Amphimelissa setosa* – a potential indicator for a North Pacific/North Atlantic link during marine isotopic stage 5

Naidina, O.D., Bauch, H.A. Holocene pollen records from the Laptev Sea

Nikolayeva, N.A., Derkachev, A.N., Gorbarenko, S.A. Sediment supply and distribution in the Sea of Okhotsk during the Late Quaternary (based on the analysis of heavy mineral associations)

Novichkova, T.S., Polyakova, Ye.I., Bauch, H.A. Detailed reconstructions of depositional environments and water salinity fluctuations on the eastern Laptev Sea shelf during the Early to Middle Holocene

Nürnberg, D., Tiedemann, R. Long-term environmental evolution in the Sea of Okhotsk - Evidence from a long IMAGES core

Nürnberg, D., Tiedemann, R., Kaiser, A., Kozdon, R., Lembke, L. Orbital to sub-orbital paleoceanographic and paleoclimatic changes in the Sea of Okhotsk

Psheneva, O.Yu., Gorbarenko, S.A., Artyomova, A.V., Leskov, V.Yu., Matul, A., Nürnberg, D., Biebow, N. Species and abundance changes of benthic foraminifera in core LV27-2-4 (far NW Okhotsk Sea)

Rudenko, O.V., Polyakova, Ye.I., Bauch, H.A. Postglacial environments on the eastern Laptev Sea shelf: evidence from diatom and aquatic palynomorphs assemblages

Schoster, F., Bourtman, M., Dittmers, K., Levitan, M., Niessen, F., Steinke, T., and Stein, R. Siberian River Run-Off: Transport pathways of terrigenous material from Ob and Yenisei rivers into the Kara-Sea

Tekleva, M.V., Kosenko, Ya.V., Naidina, O.D. Pollen in shelf sediments as indicator of climate change in Arctic Siberia

Session 4

Andreev, A.A., Schirrmeister, L., Siegert, Ch., Grosse, G., Novenko, E.Yu. Hubberten, H.-W. Environmental changes on the Laptev Sea coast during the Late Quaternary reflected in pollen records

Anisimov, M., Tumskoy, V.E. Environmental history of the Novosibirskiye Islands for the last 12 ka

Bolshiyarov, D.Yu., Fedorov, G.B., Savelieva, L.A. Climate changes in the Laptev Sea region in Holocene as inferred from data on the continental circumference

Drachev, S.S., Chizhov, D., Kaulio, V.V., Niessen, F., Tumskoi, V. Acoustic imaging of the submarine permafrost in the Laptev Sea

Fedorov, G.B., Bolshiyarov, D.Yu. Sea level and glaciations of Taymyr Peninsula in the Late Pleistocene

Grosse, G., Schirrmeister, L., Krbetschek, M., Schwamborn, G., Oezen, D., Kunitsky, V.V., Kuznetsova, T., Kuzmina, S. New data of late Quaternary terrestrial permafrost deposits of the Laptev Sea region by IR-OSL, radiocarbon and U/Th age determination

Kaiser, A., Nürnberg, D., Tiedemann, R. Glaciation history in NE Siberia - Implications from IRD and stable oxygen isotope records

Kholodov, A.L., Gavrilov, A.V., Romanovskii, N.N., Tipenko, G.S. Submarine permafrost on the Laptev Sea shelf: evolution during the Middle Pleistocene-Holocene and recent processes

Kobabe, S., Wagner, D., Kutzbach, L., Pfeiffer, E.-M. Methane production in Siberian tundra soils: influence of temperature and substrates

Leskov, V.Yu., Gorbarenko, S.A., Artemova, A.V., Biebow, N., Tiedemann, R., Nürnberg, D. Sea-ice change in the Okhotsk Sea and its paleoceanographical consequences during Last Glaciation-Holocene; evidence from ice rafted debris and diatom

Meyer, H., Dereviagin, A.Yu., Siegert, C., Hubberten, H.-W. Stable water isotopes of ice wedges as paleoclimate indicator for the Laptev Sea region, Northern Siberia

Müller-Lupp, W., Möller, R., Bölter, M. Temperature as a regulation force for gas evolution

Roudoy, A.S., Tverskaja, L.A., Roschina, D.V. On the importance of foraminifera of the genus *Retroelphidium* for paleogeographic and paleofacies reconstruction

Spieck, E., Lebedeva, E., Jozsa, P.-G. Occurrence of nitrifying bacteria in permafrost sediments

Tumskoy, V.E., Romanovskii, N.N., Gavrilov, A.V. Thermokarst formation at the end of the Late Pleistocene and Holocene and its impact on the permafrost of the eastern part of the Russian Arctic

Vanshtein, B.G., Cherkashev, G.A., Krinitzky, P.I., Firsov, Yu.G., Volkova, Yu.V., Mirolubova, E.S. Geological environment changes of Western Russia coastal zone by climate warming

Saturday, May 11, 2002

Session 5: High-resolution environmental archives

Conveners: J. Negendank, H. Oberhänsli, N. Dobrezov, A. Sher

- 09:00 Maar lake sediments: time-, environment and climate indicators
Negendank, J.F.W. & Team
- 09:15 The Late Quaternary climatic and environmental history of northern
Central Siberia - Evidence from lake sediments
Hubberten, H.-W., Andreev, A., Kumke, T., Melles, M., Schwamborn,
G., Siegert, C. Tarasov, P.
- 09:30 High-resolution continental paleoclimatic records from Lake Baikal
sedimentary cores
Bezrukova, E.V., Kuzmin, M.I., Kawai, T., Williams, D.F.,
Karabanov, E.B., Prokopenko, A.A., Bychinskyi, V.A., Geletyi, V.F.,
Kerber, E.B., Khomoutova, M.Yu.
- 09:45 Pleistocene climate drivers of the East Siberian shelf land
Sher, A., Kuzmina, S., Kuznetsova, T.
- 10:00 - 10:30 Coffee break

Session 5: High-resolution environmental archives (continued)

Conveners: J. Negendank, H. Oberhänsli, N. Dobrezov, A. Sher

- 10:30 Pleistocene-Holocene High-Resolution Continental Records from the
Lake Baikal: Timing and Connection to Climate of North Atlantic
E. Karabanov, M. Kuzmin², D. Williams, E. Bezrukova, G.
Khursevich, A. Prokopenko, S. Fedenia, S. Krapivina, A. Gvozdokov,
the Lake Baikal Drilling Project Team
- 10:45 Dynamics of vegetation and peat accumulation in the west Siberian
plain during the Holocene
Velichko, A.A., Bleuten, W., Borisova, O.K., Kremenetsky, K.V.,
Novenko, E.Yu., Pisareva, V.V., Zelikson, E.M.
- 11:00 The maars and their paleoclimatic records in China - A maar drilling
program for Chinese-German cooperation
Liu, J., Negendank, J.F.W., Chu, G., Mingram, J., Wang, W., Liu, Q.,
Gu, Z., Ni, Y., Liu, T.
- 11:15 Continuous loess record of the last 5 million years
An Zisheng
- 11:30 El'gygytgyn Lake, NE Russia: a millennial-scale record of climate
evolution in the Arctic over the past 3.6 million years
Melles, M., Niessen, F., Hubberten, H.-W., Nowaczyk, N.R., Minyuk,
P., Brigham-Grette, J.
- 11:45 Holocene multidecadal to centennial climate variability in the Sea of
Okhotsk
Tiedemann, R., Nürnberg, D., Kozdon, R., Lembke, L., Kaiser, A.,
Kokfelt, U.
- 12:00 - 12:20 Poster presentation Session 5
- 12:20 - 12:45 Posters Session 5 and 6
- 12:45 - 13:45 Lunch

Session 6: Geodynamic evolution of the Eurasian block

Conveners: H. Echtler, C. Gädicke, G. Grikurov, B. Baranov

- 14:00 Plate kinematic imprint on the structural pattern of the northeastern Eurasian marginal seas
Baranov, B.V., Karp, B.Ya., Wong, H.K.
- 14:15 Rift to drift transition in the Laptev Sea: geodynamics and environmental impact
Drachev, S.S., Belyaev, V.N., Goryachev, Yu.V., Kaul, N., McAdoo, D., Niessen, F., Antipov, A.A.
- 14:30 Geodynamic evolution of the Kurile-Kamchatka Island Arc system and variation of magma generation conditions
Avdeiko, G.P., Hoernle, K., Portnyagin, M., Ponomarev, G.P., Pilipchuk, N.A., Uspensky, V.S., Sachs, P.
- 14:45 The role of deep fluids in magma generation in the Kurile-Kamchatka Arc: an overview of goals, approaches and recent results of KOMEX Subproject 2
Portnyagin, M., Hoernle, K., Avdeiko, G., Mironov, N., Sachs, P., Werner, R.
- 15:00 - 15:30 Coffee break
- 15:30 - 15:50 Poster presentation Session 6
- 15:50 - 16:30 Posters Session 5 and 6
- 16:30 – 16:50 Sea level and climate: listen to tropical corals what they can tell
Dullo, W-Chr.
- 17:00 – 17:30 Panel discussion

Posters

Session 5

Bolshiyarov, D.Yu., Sviyashennikov, P.N., Fedorov, G.B., Pavlov, M.V., Terebenko, A.V. Arctic climate changes during the last 10,000 years

Brauer, A., Litt, T., Negendank, J.F.W. Nature and rapidity of Late Glacial changes in the varved lake record of Meerfelder Maar, Germany

Brauer, A., Negendank, J.F.W., ELDP Consortium. Advances in correlation of European high-resolution palaeoclimatic records

Brauer, A., Brathauer, U., Prasad, S., Litt, T., Negendank, J.F.W. Pleistocene maar lakes in the Eifel – varved lacustrine sediments – a high-resolution archives for environment changes and climate variability

Goldberg, E.L., Grachev, M.A., Phedorin, M.A., Chebykin, E.P., Khlystov, O.M., Vorobyeva, S.S., Zheleznykova, T.O., Kulipanov, G.N., Kondratev, V.I., Zolotarev, K.V., Tsukanov, V.M., Miginsky, E.G., Shaporenko, A. Multi proxy high-resolution paleoclimate records from Lake Baikal: orbital forcing during the last million years and millennial-scale climate changes during Holocene and LGP

Kremenetski, K.V., MacDonald, G.M., Gervais, B., Bottger, T., Hiller, A., Borisova, O.K., Snyder, J.A. Postglacial climate and vegetation history of Kola Peninsula, Russia

Kuzmina, S., Sher, A., Demyankov, S. Detailed reconstruction of the Laptev shelf land environment and climate during the last 50,000 years - Mamontovy Khayata revisited

Kuznetsova, T.V., Kuz'mina, S.A. Pleistocene and Holocene mammals, insects and deposits of the Lena Delta region (Olenyok Channel)

Migowski, C., Negendank, J.F.W., Stein, M. Holocene palaeoseismic and climatic record in laminated sediments from the Dead Sea, Israel

Migowski, C., Prasad, S., Negendank, J.F.W., Stein, M. Pleistocene-Holocene sediments from Lake Lisan and Dead Sea

Mingram, J., Schettler, G., Nowaczyk, N., Luo, X., Lu, H., Yancheva, G., Jiaqi, L., Negendank, J.F.W. A 78,000 year record of climatic changes from the South China coast – Huguang maar lake (Huguangyan)

Negendank, J.F.W., Brauer, A., ELDP Members (European Lake Drilling Programme) Advances in correlation of European high-resolution palaeoclimatic records

Negendank, J.F.W., Schwab, A., Schwab, M., the KIHZ Consortium. KIHZ I. KIHZ - Natural climate variations: overview and climate archives

Oberhänsli, H. Centennial resolution in the Baikal archive

Pavlov, M.V., Razina, V.V., Bolshiyarov, D.Yu. The last millenium climate changes and reconstruction of the Little Ice Age time by the bottom sediments of the arctic lakes

Ramrath, A., Nowaczyk, N.R., Wulf, S., Negendank, J.F.W. A high-resolution 14,000-year record from Lago di Mezzano, Central Italy – palaeoenvironmental changes and human impact

Razina, V.V., Pavlov, M.V., Bolshiyarov, D.Yu. Reconstruction of vegetation and climate situation in the Norilsk Lakes region, Putorana Plateau, for the last millenium according to pollen data

Schettler, G., Rein, B., Negendank, J.F.W. Geochemical evidence for Holocene palaeodrainage variations from a lacustrine record, Lake Schalkenmehrener Maar, Westeifel Volcanic Field, Germany

Schettler, G. Laghi di Monticchio – a geochemical study of the surface sediments

Schettler, G., Romer, R.L., O’Connell, M. Anthropogenic airborne lead in sediments from An Loch Mór, Inis Oírr, W. Ireland – new insights into atmospheric lead pollution in Europe during the Roman period

Schettler, G., Negendank, J.F.W. Annual laminated lake records and their different geochemical responses to palaeoenvironmental variations during the last 13 ka (Meerfelder Maar, Schalkenmehrener Maar, Holzmaar; Westeifel, Germany)

Schettler, G., Mingram, J., Negendank, J.F.W., Jiaqi, L. Atmospheric lead-210 flux variations for north-eastern China during the last 200 years

Schwab, M., Negendank, J.F.W., KIHZ Consortium. KIHZ III. The high resolution multi-proxy-parameter network and synthetic timescale in KIHZ (Natural Climate Variations in the Holocene)

Schwab, M., Frank, U., Brüchmann, C., Kulbe, T., Neumann, F., Stebich, M., Nowaczyk, N.R., Acksel, D., Negendank, J.F.W. Neue Maar-Sedimentkerne als Klimaarchiv für das Holozän – Lac Pavin (Massif Central) und Birkat Ram (Golan-Hights)

Sher, A., Gukov, A., Sofronov, Yu., Kuzmina, S., Sulerzhitsky, L. Moose and tall shrubs: new evidence on the Early Holocene climatic optimum in the Lena Delta

Tarasov, P.E. Holocene climate and environmental changes in the Great Steppe of Eurasia

Vaganov, E.A. High resolution records of temperature change during the last millenia in high latitudes of Siberia

Widmann, M., von Storch, H., the KIHZ Consortium. II. KIHZ - Numerical modelling in paleoclimatology

Wulf, S., Brauer, A., Frank, U., Mingram, J., Nowaczyk, N., Zolitschka, B., Negendank, J.F.W. The Lago Grande di Monticchio (Italy) – a high-resolution archive for palaeoenvironmental and tephrostratigraphical investigations of the last 101 ka

Session 6

Baranov, B., Werner, R., Hoernle, K., Tsoy, I.B., van den Bogaard, P., Tararin, I.A. Evidence for compressionally-induced high subsidence rates in the Kurile Basin (Okhotsk Sea)

Chernyh, A.A., Zayonchek, A.V., Gusev, E.A., Mennies, M.V., Romaschenko, E.G., Razouvaeva, E.I. New digital bathymetry map of the Laptev Sea

Dozorova, K.A., Baranov, B.V., Wong, H.K., Karp, B.Ya., Karnaukh, V.N., Lüdmann, T. Geological factors controlling the morphology of the East Sakhalin slope

Gramberg, I.S., Piskarev, A.L. Structure and crustal history of the Laptev Basin

Gusev, E.A., Mennies, M.V., Rekant, P.V., Roudoy, A.S., Rybakov, K.S. Termination of the Gakkel Ridge in the Laptev Sea

Gusev, E.A., Mennies, M.V., Romaschenko, O.G. Morphology of the continental margin of the Laptev and East Siberian seas

Gusev, E.A., Rekant, P.V., Roudoy, A.S. Paleogeographic changes in deep-sea arctic basins as indicators of the main stages of the Cenozoic evolution

Karp, B., Karnaukh, V., Baranov, B.V., Lüdmann, T., Wong, H.K. Interaction between Cenozoic sedimentation processes and tectonics in the Okhotsk Sea: results of the KOMEX expeditions

Piskarev, A.L. Potential field anomalies interpretation in the Eurasian Basin of the Arctic Ocean

Rekant, P.V. Pleistocene sedimentation and sediment transport on the Laptev Sea shelf and continental slope

Zayonchek, A.V., Chernyh, A.A. Transition from the Gakkel Ridge to the Laptev Sea shelf