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Alfred-Wagener Institute (AWI)

Data: Computing and Data Centre; Data Portal German Marine Research (MaNIDA)

Contacts: Dr Christian Schäfer-Neth, AWI, +49(471)4831-1554

Dr. Angela Schäfer, Coordination of MaNIDA, angela.schaefer@awi.de

Relevant collaborating data centers: PANGAEA, ICSU (World Data System)

DSS projects involvement:

Jameson Land onshore 1988, 1989

Scoresby Sud on-offshore 1990, 1994

EUROMARGINS eastern Greenland 2003

DSS data: *Unknown*

Data Protection: <https://www.awi.de/kontaktseiten/datenschutz.html> (in German)

British Geological Survey

Contact: enquiries@bgs.ac.uk

Relevant collaborating data centers: DATA.GOV.UK; NERC; VSA (Virtual Seismic Atlas)

DSS data:

BIRPS UK:

- Description: Data is made freely available under Open Government Licence subject to distribution charge costs (if required).
- Supply media/format: SEG Y
- Storage format: Digital
- Time: 1981-1991
- Coverage: N 65, E 24, S 48, W -16
- Copyright: NERC

BIRPS Westline:

- Description: Data is made freely available under Open Government Licence subject to distribution charge costs (if required).
- Supply media/format: SEG Y
- Storage format: Digital
- Time: 1993
- Coverage: N 56.82, E -10.2, S 53.71, W -14.75
- Copyright: NERC

BIRPS Faeroe-Iceland Ridge Experiment (FIRE):

- Description: Data is made freely available under Open Government Licence subject to distribution charge costs (if required).
- Supply media/format: SEG Y
- Storage format: Digital
- Time: 1994
- Coverage: N 65.02, E -7.28, S 62.17, W -13.92
- Copyright: NERC

BIRPS MONA LISA:

- Description: Data is made freely available under Open Government Licence subject to distribution charge costs (if required).
- Supply media/format: SEG Y

- Storage format: Digital
- Time: 1993-1995
- Coverage: N 56.38, E 7.89, S 53.88, W 2
- Copyright: NERC

Reflection surveys contacted by BGS in UK

- Description: Access for most academic and commercial purposes is through the standard BGS Data User Agreement procedure. A data usage fee is payable. Some data are co-owned by a third-party (e.g. a project sponsor). In such cases the intending user must obtain the co-owner's agreement and may have to pay the co-owner a separate fee.
- Supply media/format: PAPER; TAPE
- Storage format: Hardcopy; Paper copy
- Time: 1978-1988
- Coverage: N 61.02, E 3.56, S 49.76, W -9.57
- Copyright: NERC

Coal Authority Seismic Survey

- Description: Access to data must be approved by the BGS IPR department. BGS is the custodian of the Coal Authority data, but the Coal Authority has retained ownership. NERC is the copyright holder for purposes of data supply. All BGS staff have rights to enquire on data holdings. CA data are not free: internal users and external customers have to pay the costs involved, hence the retrieval restriction. These restrictions were set out in a Heads of Terms (HoT) document agreed between BGS and the Coal Authority in 1998/9 for 5 years. However, this was never fully ratified and expired 2004. The replacement is still subject to negotiations between BGS and CA. Until the new agreement is confirmed, it is assumed that the terms of the original HoT apply. Where data fall within an extant mining licence the permission of the licensee must be obtained. Use through the standard BGS Data User Agreement procedure.
- Supply media/format: PAPER; TAPE; SEG Y
- Storage format: Hardcopy; Paper copy; Digital
- Time: 1973-1994
- Coverage: N 56.99, E 2.94, S 50.72, W -6.94
- Copyright: NERC

Original Seismic Sections

- Description: Reproduction and use requires permission of data owners. (Although these data are deposited with BGS, BGS does not own them.) Only BGS owned data may be supplied externally.
- Supply media/format: PAPER
- Storage format: Hardcopy; Paper copy
- Time: 1960-...

- Coverage: N 61.02, E 3.56, S 49.76, W -9.57
- Copyright: NERC

Other Info

MONA LISA:

<https://data.gov.uk/dataset/birps-british-institutes-reflection-profiling-syndicate-mona-lisa-seismic-survey-1993-1995>

Bucharest University

Collaboration: National Institute of Earth Physics, Romanian

Contact: Dr. Ing. Constantin Ionescu, General Manager dirgen@infp.ro

Data: National Data Centre, <http://www.infp.ro/en/national-data-center/> (in Romanian)

Collaborating data holders: Prospectiuni S.A. (seismic data, Romania State Oil Company), <http://www.prospectiuni.ro/index>, contact: office@prospectiuni.com

DSS projects involvement:

VRANCEA99

DACIA PLAN 2001

DRACULA 2004

DSS data: *Unknown*

Other Info

DACIA PLAN:

Panea, I., Stephenson, R., Knapp, C., Mocanu, V., Drijkoningen, G., Matenco, L., Knapp, J., Prodehl, K., 2005. Near-vertical seismic reflection image using a novel acquisition technique across the Vrancea Zone and Focsani Basin, south-eastern Carpathians (Romania): Tectonophysics, 410, 293–309.

DRACULA:

Enciu-Mucuta, D. M., Knapp, C. C., Knapp, J. H., 2009. Revised Crustal Architecture of the Southeastern Carpathian Foreland from Active and Passive Seismic Data, Tectonics, vol. 28, TC4013, doi:10.1029/2008TC002381.

Cambridge

Contact: Prof. Simon Redfern, Prof. Of Mineral Physics, Head of Department of Earth Sciences, satr@cam.ac.uk

Prof. Keith Priestley, Geophysics, Geodynamics and Tectonics, kfp10@cam.ac.uk

DSS projects involvement:

Rockall Plateau 1969

Mid-Atlantic Ridge at 45o N 1975

North Sea wide-angle SALT 1980-1981

CSSP 1982

Tydemman Fracture Zone 1982

Hatton bank volcanic margin 1985

Goban Spur continental margin 1987

Madeira-Tore Rise, Josephine 1988

FAST-UNST-FLARE 1990s

DSS data: *Unknown*

Dublin Institute Of Advanced Studies (DIAS)

Contact in Geophysics: <https://www.dias.ie/cp/geo/>

Prof. Chris Bean, School Director, cbean@cp.dias.ie

Dr Brian M O'Reilly, Assistant Professor, bor@cp.dias.ie

DSS projects involvement:

ICSSP 1982

COOLE 1985

RAPIDS 1988, 1990, 1999, 2002

VARNET 1996

LEGS 1999

HADES 2002

Porcupine Basin 2004

DSS data: *Unknown*

Other Info

ICSSP:

Jacob, A.W.B., Kaminski, W., Murphy, T., Phillips, W.E.A., Prodehl, C., 1985. A Crustal Model for a Northeast-Southwest Profile through Ireland. *Tectonophysics*, 113, 75-103.

COOLE:

Lowe, C., Jacob, A.W.B., 1989. A north-south seismic profile across the Caledonian Suture zone in Ireland, *Tectonophysics*, 168, 297-318.

Durham University

Contact in Earth Sciences: <https://www.dur.ac.uk/earth.sciences/>

Prof. Christine Peirce, Professor of Marine Geophysics (involved in RAMESSES project), Christine.Peirce@durham.ac.uk

Prof. Andrew Aplin, Head of Department, <https://www.dur.ac.uk/contactperson/?lid=11542>

Prof. Ken McCaffrey (involved in West of Shetland Seismic Survey), k.j.w.mccaffrey@dur.ac.uk

DSS projects involvement:

Faeroe Ridge 1969

NASP Iceland to Scotland 1972

Hebridean Margin Seismic Project 1975

CSSP Caledonian Suture 1982

RAMESSES Reykjanes Ridge 1993

BRIDGE Reykjanes Ridge 1996

DSS data: *Unknown*

Other Info

BRIDGE:

<http://www.soton.ac.uk/~jtc/fierydeep.html>

CSSP:

<http://bullard.esc.cam.ac.uk/~basin/pubs/al-kindi-et-al.pdf>

Federal Institute for Geosciences and Natural Resources (BGR)

Contact: <http://www.bgr.bund.de/EN/>

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Prof. Dr. Ralph Watzel, President, buero.praesident@bgr.de

Dr. Volker Steinbach, Vice President, Gabriele.Ebenhoech@bgr.de (secretary)

Data: BGR Product Center <https://produktcenter.bgr.de/terraCatalog/Start.do>

Contact: geodatenmanagement@bgr.de

Relevant collaborating data centers: European Data Portal, Geo Data Portal Germany, Geo-Seas

DSS data:

Cruise ARK25/3

- Description: The multidisciplinary marine geoscientific expedition ARK-25/3 was focused on the Greenland part of northern Baffin Bay and was aimed to acquire new geoscientific data to be used for modelling the evolution of the Greenland continental margin and its hydrocarbon prospective. The cruise was performed under the direction of the Federal Institute for Geosciences and Natural Resources Hannover in cooperation with the Alfred-Wegener-Institute for Polar and Marine Research, Bremerhaven. Using 70 days of ship time onboard the research icebreaker R/V POLARSTERN a comprehensive data set was acquired along profiles extending from the deep oceanic basin in the central part of North Baffin Bay onto the Greenland continental margin in an area which was bordered by the Kane Basin in the North and Disko Island in the South. By means of multi-channel seismic, wide angle seismic, gravimetric and magnetic methods the structural inventory of the crust in the NW Baffin Bay was investigated. This report summarizes the working programme and contains the documentation of acquired data and first results of the expedition.
- Data format: Society of Exploration Geophysicists SEG Y
- Time: 2010
- Coverage: W -74.83, E -54.84, N 80.17, S 70.69
- Availability: Web data access with registration www.geo-seas.eu
- Copyright: BGR, General terms and conditions, see https://www.bgr.bund.de/AGB_en

Cruise AUR 2003

- Description: The late Tertiary and Quaternary development of the German EEZ was systematically investigated by seismic profiling. For that survey the privately owned motor vessel AURELIA was chartered for a period of 24 days from the 16th of September to 10th of October 2003. A more or less equidistant E-W and N-S grid of profiles with a length of 2500 km was surveyed by high-resolution multichannel seismic system. A 0.82 litre GI-Gun was employed every 12.5 m and the reflected signals were recorded by a 300 m long streamer. Simultaneously a deep-towed HUNTEC-Boomer or a GEO-Sparker was run (150km/620km). All seismic records were processed onboard for the quality control and for a first interpretation.
- Data format: Society of Exploration Geophysicists SEG Y

- Time: 2003
- Coverage: W 3.37, E 8.31, N 55.83, S 54.01
- Availability: Web data access with registration www.geo-seas.eu
- Copyright: BGR, General terms and conditions, see https://www.bgr.bund.de/AGB_en

Cruise BGR85

- Description: A geophysical reconnaissance survey across oceanic fracture zones has been carried out by the BGR in the eastern North Atlantic using S.V. PROSPEKTA. The geophysical measurements, including multichannel seismic reflection profiling, magnetics and gravity were concentrated on three oceanic crustal areas of Mesozoic crust which are crossed by the Hayes Fracture Zone, the Atlantis Fracture Zone and the Kane Fracture Zone respectively. 24 geophysical lines with a total length of 5,362 km have been measured during the time period from 25th October to 4th December 1985. Besides intracrustal seismic events a deep coherent seismic event is often recognizable in the monitor records between 10 - 12 s (TWT) along several lines, which probably is a reflection from the crust-mantle boundary.
- Data format: Society of Exploration Geophysicists SEG Y
- Time: 1985
- Coverage: W -26.34, E -15.37, N 32.79, S 19.09
- Availability: Web data access with registration www.geo-seas.eu
- Copyright: BGR, General terms and conditions, see https://www.bgr.bund.de/AGB_en

Cruise BGR95

- Description: The cruise BGR95 from 19th November to 28th December 1995 with M.S. AKADEMIK NEMCHINOV was designed to acquire new marine geophysical data for a better understanding of the geological processes and structural variations of the Cretaceous-aged oceanic crust of the Angola Basin in the South Atlantic regarding its reflectivity pattern, its shape of the basement surfaces and its crustal thickness. These evaluations were extended onshore to the 'Damara Igneous Province'. The aim of this study was the investigation of the rift-related volcanic-magmatic processes accompanying the initial stage of the opening of the South Atlantic Ocean. The survey was a co-operation of BGR, Alfred Wegener Institute for Polar and Marine Research (AWI), GeoForschungsZentrum Potsdam, University of Göttingen and Johann Wolfgang Goethe-University Frankfurt/Main. The M.S. AKADEMIK NEMCHINOV generated the seismic signals by a tuned airgun array of 3260 cu.in. (= 53.4 l) together with two AWI owned large volume guns of 2 x 2000 cu.in. (= 65.6 l), recorded the MCS signals with a 3000 m streamer and controlled the shot releases for the ocean bottom hydrophones (OBH's) and the onshore seismic stations (PEDAS). A total of 5,114 km of multichannel seismic reflection data in parallel with magnetic and gravity measurements have been collected onboard the M.S. AKADEMIK NEMCHINOV. 1069.4 km of the seismic work was done on 3 combined refraction/wide angle offshore and onshore traverses. The offshore part was recorded by 7 ocean bottom hydrophones (OBH) operated by the M.V. POLAR QUEEN (Reichert et al., 1996). The registration onshore Namibia was performed by 25 mobile seismic landstations (PEDAS) on each profile (Schulze et al., 1996). First results are described in the offshore and onshore reports of these investigations (Reichert et al., 1996, and Schulze et al., 1996). The data clearly show distinct series of the seaward dipping reflector sequences (SRDS) and isochronous variations in the accretion of the oceanic crust. The onshore and offshore registrations show deep arrivals from diving and refracted waves in a range up to 200 to 400 km.

- Data format: Society of Exploration Geophysicists SEG Y
- Time: 1995
- Coverage: W 1.62, E 14.23, N -14.25, S -29.49
- Availability: Web data access with registration www.geo-seas.eu
- Copyright: BGR, General terms and conditions, see https://www.bgr.bund.de/AGB_en

Cruise BGR97

- Description: The 3rd cooperative BGR/SMNG Arctic cruise was designed to acquire new scientific data for a better understanding of temporal and spatial lithospheric variations during rifting and its influence on the tectonic and structural evolution of the continental crust of the Laptev Sea undergoing extension since at least the Early Tertiary, and for tackling open questions regarding the evolution of the submarine permafrost zone. Although conditions for seismic measurements were worse in 1997 than in 1993 and 1994, along 4,622 km of seismic traverses reflection seismic data and wide angle reflection/refraction data from 23 OBH-(ocean bottom hydrophone) stations were collected in the Laptev and East Siberian Sea. The most prominent rift basin is the Ust' Lena Rift, which is at least 300 km wide at latitude 75°N. The Cenozoic sedimentary cover exceeds 3 km everywhere, increasing up to 14 km at two locations. In the northern part of the shelf, the complex mainly N-S-trending Anisin Basin has a basin fill of up to 10 km thickness. The New Siberian Basin which is located in the northwestern part of the study area shows an up to 9 km thick graben fill. The Laptev Horst crust is locally subdivided into several tilted blocks by deep-reaching faults and there are several half grabens of smaller extent which divide the Laptev Horst into three parts: the North, the South and the East Laptev Horst. A major west dipping listric fault of at least 250 km length separates the Laptev Horst from the Ust' Lena Rift. Results from the seismological investigation indicate that recent extension is concentrated within the narrow rift basins of the eastern Laptev Sea. From wide-angle reflection/refraction seismic measurements the seismic velocities of the crustal layers were estimated along five profiles. The layers with velocities of up to 3.5 km/s apparently consist of predominantly Cenozoic sediments. The sedimentary section showing relatively high seismic velocities of 4.5 to 5.2 km/s might be interpreted as Late Paleozoic to Mesozoic deposits or overcompacted/cemented syn-rift deposits. In the eastern shelf area a layer beneath the acoustic basement was interpreted to represent Ordovician to Early Mesozoic carbonates. The lower crust in the area under study shows relatively uniform seismic velocities of about 6.0-6.8 km/s and the velocities estimated for the crust-mantle transition are in the range of 8.0 to 8.2 km/s. The origin of a several 100 m thick layer with a relative high velocity of 3 to 3.5 km/s directly beneath the seafloor was inferred as sub-sea permafrost.
- Data format: Society of Exploration Geophysicists SEG Y
- Time: 1997
- Coverage: W 110.15, E 154.25, N 78.31, S 72.88
- Availability: Web data access with registration www.geo-seas.eu
- Copyright: BGR, General terms and conditions, see https://www.bgr.bund.de/AGB_en

Cruise ME67

- Description: The area of the 1st leg of METEOR cruise no. 67 lies off the Moroccan coast between longitudes 32.5°N and 35°N and latitude 12°W. Within this continental margin segment multichannel reflection seismic measurements were carried out in parallel with magnetic and gravimetric measurements on 22 lines with a total length of 4,378 km during the period from January 20th to

February 13th 1984, with the research objectives: i) to collect new geophysical data for a better understanding of magmatic-volcanic and tectonic processes during the initial drifting phase, and ii) to search for suitable positions for deep drilling sites of the "Ocean Drilling Programme" in the transition zone between continental and oceanic crust. A distinct and sharp reflection seismic boundary running from about 31°30'N/11°W in the south to 34°30'N/10°25'W in the north separates flat-lying Mesozoic sediments overlying slightly structured basement of the Jurassic "Magnetic Quiet Zone" from the complex Moroccan piercement zone in the east.

- Data format: Society of Exploration Geophysicists SEG Y
- Time: 1984
- Coverage: W -12.00, E -8.43, N 34.99, S 32.33
- Availability: Web data access with registration www.geo-seas.eu
- Copyright: BGR, General terms and conditions, see https://www.bgr.bund.de/AGB_en

Cruise MSM9/3

- Description: The cruise leg MSM09/3 was conducted as a cooperative project between the Alfred Wegener Institute for Polar and Marine Research (AWI), the Federal Institute for Geosciences and Resources (BGR), the Geological Survey of Denmark and Greenland (GEUS) and Dalhousie University. A geophysical survey covered areas of Baffin Bay and Davis Strait between Greenland and the Canadian Baffin Island. A component of the IPY 2007/08 Lead Project Plate Tectonics and Polar Gateways in the Earth System (PLATES & GATES), this project DAVIS GATE is aimed to develop a tectonic and sedimentary reconstruction of the opening process of this oceanic gateway. Baffin Bay and Davis Strait play an important role in the shallow water exchange from the Arctic to the Atlantic Ocean. The plate-tectonic evolution as well as the magmatic history of this region has been sparsely known and required a careful geophysical investigation in order to construct a set of gridded detailed paleotopographic maps for a complete geodynamic reconstruction of this gateway. With a set of three seismic refraction/wide-angle reflection profiles, using ocean-bottom seismometers on 62 stations, as well as multi-channel reflection seismic recordings with a 3000-m long streamer, data were acquired from the sedimentary cover to the deep crust and even from parts of the uppermost mantle. Additional seismic data supplement these profiles and provide insights into the structures of the basement and dominant fault zones such as the Ungava fault system.
- Data format: Society of Exploration Geophysicists SEG Y
- Time: 2008
- Coverage: W -65.83, E -54.56, N 72.19, S 65.51
- Availability: Web data access with registration www.geo-seas.eu
- Copyright: BGR, General terms and conditions, see https://www.bgr.bund.de/AGB_en

Cruise PQ2

- Description: Processed seismic data from Baltic Sea with research ship M/V Polar Queen. During the period from 14th to 28th of April 1996 BGR and GFZ chartered the Norwegian vessel M/V POLAR QUEEN for testing the new and updated marine seismic equipment of the BGR and for acquiring seismic lines. The operating area was the North Sea and Baltic Sea. The geophysical lines in the Baltic Sea were chosen as extended onshore DEKORP lines to evaluate the deep structure of the south western part of the Baltic Sea. For the seismic profiles a tuned source array consisting of 20 air guns in two

linear strings with a total volume of 52 l was used. The recording length was 26 s, the sample rate 4 ms and the shot interval 30 s. This time triggering for the shot release was chosen, because all shots were also recorded onshore by seismic stations for wide angle/refraction acquisition (GFZ). During this leg 810 km reflection lines and additional 230 km pure shooting could be surveyed. The preliminary interpretation of the seismic single traces was restricted on the ship to the upper time range. The main structures in the southern Baltic Sea could be evaluated. A full interpretation especially of the deeper part is only possible after a processing due to the nature of the single traces and the S/N ratio.

- Data format: Society of Exploration Geophysicists SEG Y
- Time: 1996
- Coverage: W 10.68, E 15.81, N 55.85, S 54.19
- Availability: Web data access with registration www.geo-seas.eu
- Copyright: BGR, General terms and conditions, see https://www.bgr.bund.de/AGB_en

Hamburg University (Institute of Geophysics)

Contact: Joachim Bülow, Permanent staff member, joachim.buelow@uni-hamburg.de

Prof. Dr. Dirk Gajewski, Permanent staff member, dirk.gajewski@uni-hamburg.de

Prof. Dr. Christian Hübscher, Permanent staff member, christian.huebscher@uni-hamburg.de

Prof. Dr. Céline Hadziioannou, Permanentes Institutsmitglied, celine.hadziioannou@uni-hamburg.de

DSS projects involvement:

Meteor 1964 – M04, M17, M18, M22, M33, M39, M46, M48, M50, M66, M67

Meteor offshore-onshore Peloponnese 1971

Island of Crete project 1973

Central Greece – Aegean Sea 1973-1974

Moroccan Meseta and Atlas 1975

North German Basin 1974, 1981-1984

Cyprus – Israel 1978

Northern Red Sea – Egypt 1978, 1981

Skagerrak offshore lines 1983

Meteor 1986 – M52 offshore Israel (2002)

Red Sea – Sudan, Yemen 1988

Scoresby Sud on-offshore 1988, 1989

DOBRE 1999

DSS data: Unknown

Other Info

DOBRE

<https://www.geo.uni-hamburg.de/geophysik/forschung/projekte/abgeschlossene-projekte/donbas-basin-region-deep-seismic-reflection-profiling-dobre.html>

Helmholtz Centre Potsdam (GFZ)

Data: GFZ Data and Research Infrastructure Search <http://dataservices.gfz-potsdam.de/mesi/index.html>

GFZ Data Services <http://dataservices.gfz-potsdam.de/portal/>

Availability: No automated download. Request form.

Contact: Dr. Kirsten Elger, Repository Manager, kelger@gfz-potsdam.de

Roland Bertelmann, Section Head, Library and Information Services, roland.bertelmann@gfz-potsdam.de

DSS projects involvement:

DEKORP 1990, 1995

DEKORP 2 1984, 1986

DEKORP 3 1989

DEKORP 3-DEKORP MVE 1990

DEKORP 4 1985

DEKORP 9 1988

BELKORP-DEKORP 1 1987, 1988

ECORS-DEKORP 9 1988

KTB wide angle 1985

GRANU 1995

DEKORP-BASIN 1996

TRANSALP 1998-2001

EUROBRIDGE 1994-1996, 1997

URSEIS 1995

DOBRE 1999

BOHEMA 2004

DOBRE 2 2006-2006

DESIRE 2006

DSS data:

DEKORP

- Description: DEKORP (Deutsches Kontinentales Reflexionsseismisches Programm) was carried out between 1984 - 1997 as the German national reflection seismic program funded by the Federal Ministry of Education, Science and Technology (BMFT), now Federal Ministry of Education and Science (BMBF). From 1983 to 1994 DEKORP was administrated by the former Geological Survey of Lower Saxony, Hannover, now Landesamt für Bergbau, Energie und Geologie (LBEG), Hannover. In 1994 the DEKORP management was taken over by Section 4.1 of the Helmholtz Centre Potsdam, GFZ German Research Centre For Geosciences.

- Associated projects: KTB 84/85, ISO 89, URSEIS 95, GRANU 95, BASIN 96, TSANSALP 89/99
- Data: In addition to its scientific impact, a comprehensive dataset was acquired and also significant advances with respect to experimental and processing methods were made. The database includes seismic data of all surveys (raw and processed) as well as supporting-data in digital or paper form.
- Aquisition parameters: Available, along with publications and results (GFZ webpage)
- Contacts: Prof. Dr. Onno Oncken, Section Head, Lithosphere Dynamics, onno.oncken@gfz-potsdam.de
Prof. Dr. Michael Weber, Section Head, Geophysical Deep Sounding, michael.weber@gfz-potsdam.de
Manfred Stiller, Scientist, Near-Surface Geophysics, manfred.stiller@gfz-potsdam.de

ECORS-DEKORP 1988

- Description: Information on this dataset can be found in CATS, the Seismic Processing and Archiving Centre (http://cats.u-strasbg.fr/en_GB/cats.html), in French.
- Formats: C.G.G 1; C.G.G 2, SEG Y 3

CyprusArc

- Description: Amphibious wide-angle seismic experiment carried out in South Turkey, Cyprus and south of Cyprus are presented. The aim of this project was to reveal the crustal structure of the Anatolian plateau, Cyprus and the Eratosthenes Seamount (ESM), south of Cyprus. Simultaneous data acquisition offshore with ocean bottom seismometers and airguns and onshore with seismic land stations and two land shots in South Turkey lead to a 650 km long amphibian seismic profile.
- Data: Raw-, SEG-Y and other supplementary data
- Availability: No automated download. Request form.

Other Info

BASIN 1996:

<https://www.gfz-potsdam.de/en/section/near-surface-geophysics/projects/past-projects/dekorp-german-continental-seismic-reflection-program/basin96/>

BOHEMA 2004:

<http://gfzpublic.gfz-potsdam.de/pubman/item/escidoc:8712:4/component/escidoc:8711/0612.pdf>

GRANU 1995:

<https://www.gfz-potsdam.de/en/section/near-surface-geophysics/projects/past-projects/dekorp-german-continental-seismic-reflection-program/granu95/>

DESIRE:

<https://www.gfz-potsdam.de/en/section/geophysical-deep-sounding/projects/past-projects/desire-dead-sea-integrated-research-project/>

EUROBRIDGE:

<http://www.seismo.helsinki.fi/english/research/projects/eurobridgeEng.html>

EUROBRIDGE Seismic Working Group, 1999. Seismic velocity structure across the Fennoscandia–Sarmatia suture of the East European Craton beneath the EUROBRIDGE profile through Lithuania and Belarus, *Tectonophysics* 314, 193–217

Yliniemi, J., Tiira, T., Luosto, U., Komminaho, K., Giese, R., Motuza, G., ... Doody, J. (2001). EUROBRIDGE'95: deep seismic profiling within the East European Craton. *TECTONOPHYSICS*, 339(1–2), 153–175. Retrieved from <http://urn.kb.se/resolve?urn=urn:nbn:se:uu:diva-37906>

URSEIS:

<http://www.geo.cornell.edu/geology/urseis/MainMenu/abstracts/AGU.html>

<https://www.gfz-potsdam.de/en/section/near-surface-geophysics/projects/past-projects/dekorp-german-continental-seismic-reflection-program/urseis95/>

Carbonell, R., Lecerf, D., Itzin, M., Gallart, J., Brown, D., 1998. Mapping the Moho beneath the southern Urals with wide-angle reflections: Geophysical. *Research Letters*, v. 25, p. 4229–4232, doi:10.1029/1998GL900107.

Helsinki University

Data: OpenFIRE <https://avaa.tdata.fi/web/fire/openfire>

Contact: Aleksi Aalto, working on FIRE database, aleksi.j.aalto@helsinki.fi

Collaborating data holders: INGV (POLAR profile)

DSS projects involvement:

EUROBRIDGE 1995-1997

POLONAISE 1997

CELEBRATION 2000

FIRE 2001-2005

ALP 2002

SUDETES 2003

POLAR

DSS data:

FIRE

- Description: The Finnish Reflection Experiment (FIRE) dataset consists of seismic reflection data from 2104 km of common mid-point (CMP) lines. The four FIRE transects cross-cut several geologically and economically important features of Fennoscandian Shield such as the Archaean-Proterozoic boundary and Outokumpu ore district. The original FIRE project took place between 2001 and 2005. It was conducted in co-operation between the Geological Survey of Finland (GTK), the Institute of Seismology at the University of Helsinki and the Institute of Geosciences and the Sodankylä Geophysical Observatory of the University of Oulu. The seismic contractor in the FIRE project was Specgeofizika S.E. together with Machinoexport S.E.
- Data format: SEG-Y
- Availability: Open access through the OpenFIRE database

Other Info

ALP:

<http://www.seismo.helsinki.fi/english/research/projects/alpEng.html>

CELEBRATION:

<http://www.seismo.helsinki.fi/english/research/projects/celebrationEng.html>

EUROBRIDGE:

<http://www.seismo.helsinki.fi/english/research/projects/eurobridgeEng.html>

FIRE:

http://tupa.gtk.fi/julkaisu/specialpaper/sp_043.pdf

POLONAISE:

<http://www.seismo.helsinki.fi/english/research/projects/polonaiseEng.html>

SUDETES:

<http://www.seismo.helsinki.fi/english/research/projects/sudetesEng.html>

Istituto Nazionale Di Geofisica E Vulcanologia (INGV)

European GeoTraverse project (EGT)

- Description: The European Geotraverse (EGT) was formulated to cross, in a single pathway from North Cape, Norway, to Central Tunisia, the range of crustal units involved in each of the major orogenic events from the oldest, of Archaean age, in northern Scandinavia, to the present day activity of the Mediterranean region. For practical purposes, the Geotraverse was divided into a Northern, Central and Southern Segment, and special attention was given to the boundary regions between them. The WG set up a Scientific Coordinating Committee (SCC), chaired by Professor Mueller, to be responsible for the direction, organisation and coordination of EGT. The research program was formulated in terms of a 'Joint Program' of 13 experiments supported by a series of 'Regional Studies'. On the recommendations of the ESRC, this Program was adopted as an 'Additional Activity' by the ESF Assembly in November 1982, to begin on 1 January 1983 and to last five to seven years". Dr. Roy Freeman has been the last responsible for the SCC of the EGT, from April 1, 1986 up to the end of the Project in the 1990.
- Description of data: The seismic data compilers agreed to catalog the seismic refraction data separately for each Segment of the EGT as Open File Reports. The compilation should include all the seismic refraction data collected on land and at sea. The Reports would be edited as a publication of the Institution that is responsible for the compilation and can be cited as such in the literature. The reports should also include the main references for older data collected in the same area prior to the EGT project. These same institutions would also provide copies of the digital data upon request. The data would be public and available to everybody after their first publication in a scientific journal.
- The compilation includes technical data for shots and recordings
- List of persons and institutes responsible for the EGT refraction seismic data:

POLAR Profile: UNI-Helsinki (U. Luosto)

FENNOLOGRA: Institute of Geophysics, UNI-Karlsruhe (F. Hauser); Institute of Geophysics, UNI-Uppsala (C. Lund)

EUGENO-S: Geodætisk Institut, Charlottenlund (S. Gregeresen); Institute of General Geology, Copenhagen (H. Thybo, now in Istanbul)

EUGEMI (EGT Central Segment Alps): Institute of Geophysics, UNI-Karlsruhe (B. Aichroth); Institute of Geophysics, ETH-Zurich (S. Ye)

PO PLAIN (Western Alps): Institute of Geophysics, FU-Berlin (data from 1983, H. Bunness); IGL-CNR Milano (data from 1986, S. Scarascia)

EGT-S (Southern Segment, from Ligurian Sea to Sardinia Channel): Institute of Geophysics, ETH-Zurich (A. Egger)

EGT-S (Southern Segment, Tunisia): LGIT-IRISM, Observatoire Grenoble (F. Thouvenot); IGL-CNR, Milano (S. Scarascia)

- Time: 1983-1990; Southern Segment: 1983-1986

Refraction/Wide Angle Reflections Database (ReWARD Project)

MS Marine seismic reflection data

- Database: SEISCAN
- Time: 1969-1972
- Coverage: 15,600 Km ca., Mediterranean sea (http://reward.mi.ingv.it/dati_ogs.html)
- Description of the archive: In the period 1997-2003, the Project's Partners produced an on-line dataset consisting of 10.392 scanned images of reflection seismic lines, over 1 Million seismic lines km long, covering the Mediterranean and other Euro-Seas.
- Selected reflection seismic lines locations: http://reward.mi.ingv.it/OGS_ms/ogsLlines_69_72.html
- Institute: Istituto Nazionale di Oceanografia e di Geofisica Sperimentale (OGS), Trieste
- Availability: *Unknown* (SEISCAN website not working)

DSS Refraction/Wide Angle Reflection

- Time: 1956-1982
- Coverage: 25,000 Km ca., Italy and surrounding seas (http://reward.mi.ingv.it/dss_crop.html)
- Institution: INGV (>2001)
- Waveform Data: DSS 465 Mbytes, WAR: 502 Mbytes (2 CD compressed)
- Description of data processing: The original seismic data were recorded or in analog form (magnetic tape FM-recordings, up to '90) or in digital form (floppy discs), after the first digital data-loggers became available in the '90s.

Information on analog data: http://reward.mi.ingv.it/data_retrieval.html

Information on digital data: http://reward.mi.ingv.it/data_proc.html

- Availability: Waveform Data free, upon request, maistrello@mi.ingv.it; Raw time/distance plots available online <http://reward.mi.ingv.it/dromocrone.html>

NVR Deep Near Vertical Reflection

- Data base: CROP, <http://www.crop.cnr.it/en/Database>
- Time: 1983-2002
- Coverage: 9,000 Km ca., Italy and surrounding seas
- Institute: CNR/AGIP/ENEL (consortium); Bologna Marine Geology Section (ISMAR)
- Description of archive: The CROP Project, started in the middle of '80s as a general feasibility study, came true at the beginning of '90s. The CNR/AGIP/ENEL convention has permitted the acquisition, the

processing and the interpretation of more than 10,000 km of land and sea seismic reflection profiles. This huge acquired scientific property has suggested the creation of the CROP Database which birth is to guarantee the data conservation through time and the CROP data management inside scientific community or not. The CROP Database is working from 2001 at the Bologna Marine Geology Section of the ISMAR-CNR with the approval of the Committee of Coordination and the Scientific Council of the CROP. Until 2005 the Data Centre had acquired more than 80% of original CROP existing data (paper and magnetic).

- Availability: Online request; Price list available (<http://www.crop.cnr.it/en/Database/Price%20List>)

Other Info

EGT:

http://reward.mi.ingv.it/EGT_S_brochure.html#tecto

ReWARD (results and bibliography):

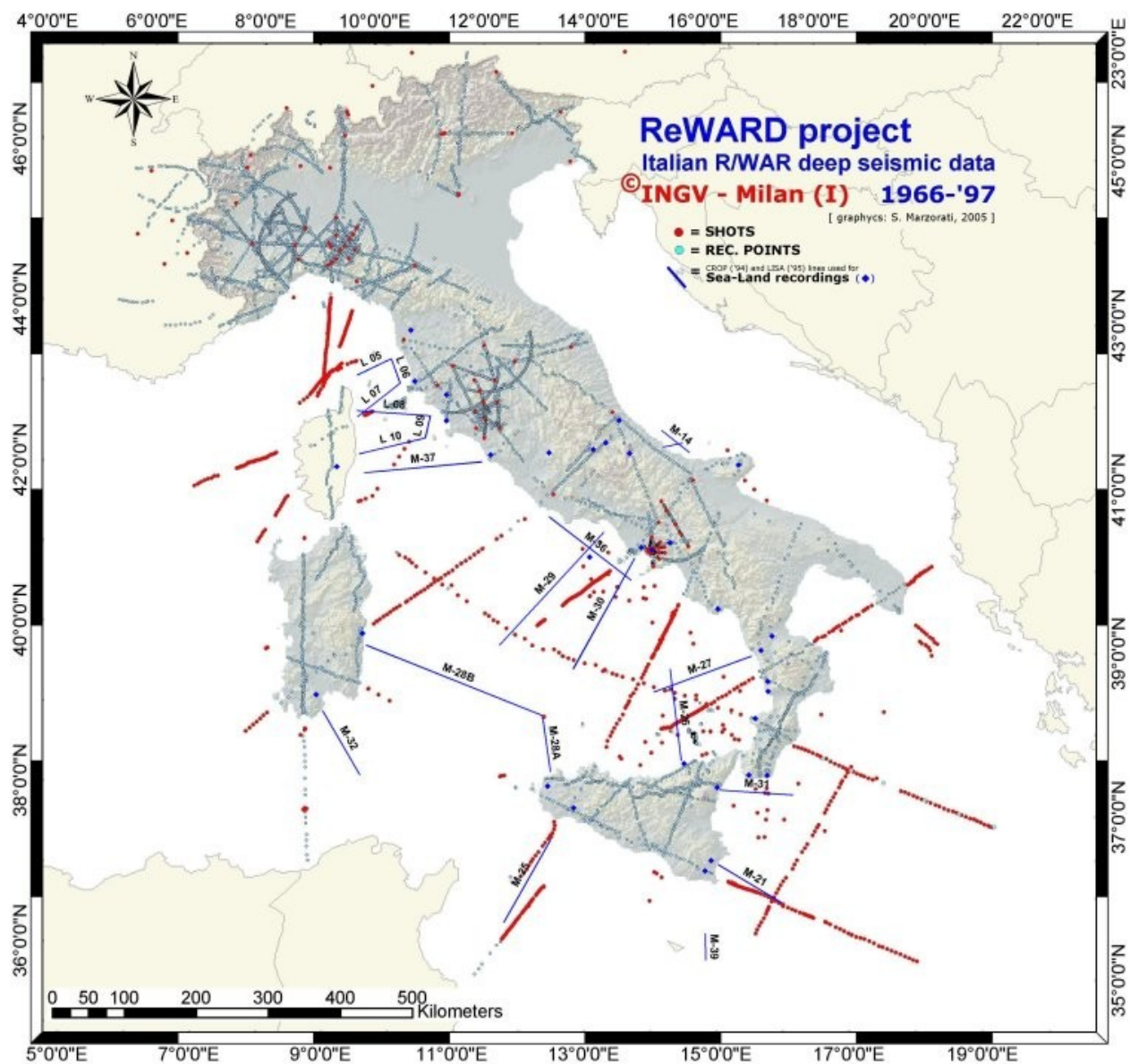
http://reward.mi.ingv.it/data_crust.html

EUGEMI:

Aichroth, B., Prodehl, C., Thybo, H., 1992. Crustal structure along the central segment of the EGT, in *The European Georrauerse*, Part 8, eds Freeman, R. Mueller St., *Tectonophysics*, 207, 43–64, doi.org/10.1016/0040-1951(92)90471-H.

FENNOLOLA:

Lund C.-E. 1980. Fennoscandian long range project 1979 (Fennolora), *Proc. 17th Assembly of the ESC*, Budapest, 1980, pp. 511–515.



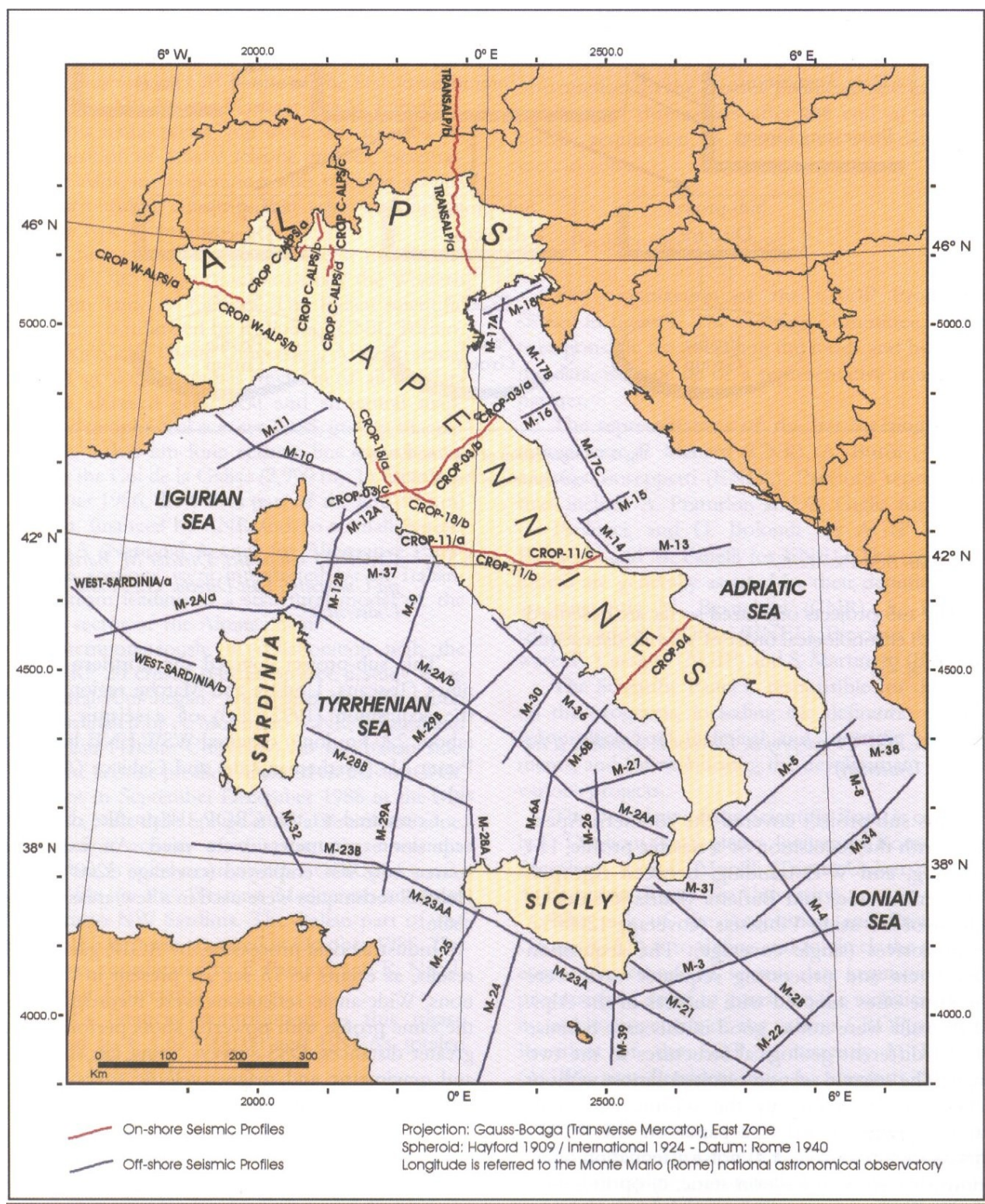


Fig. 2 - CROP Project seismic profiles: location map.
 - Progetto CROP: mappa di posizione dei profili sismici acquisiti.

Institute De Physique Du Globe De Paris (IPGP, France)

Contact in Geophysics: Paris Exploration Geophysics Group <http://www.ipgp.fr/en/node/11491>

Marie-Dominique Rocheron rocheron@ipgp.fr

Data: IPGP data center <http://centrededonnees.ipgp.fr/index.php?&lang=EN>

Contact: datacenter@ipgp.fr

Relevant collaborating data centers: EPOS, IRIS, CATS, IFREMER

DSS projects involvement:

Crustal Project France 1971

Lower Lithosphere 1971, 1973

Asthenosphere 1972

Rhonegraben 1972

Ligurian Sea 1974

Mid-Atlantic Ridge 1974-1975

Pyrenees 1978

Thyrranian Sea 1979

STREAMERS 1992

LISA 1995

SEISGRECE 1997

SEISMARMARA 2001

DSS data: *Unknown*

Other Data: Validated Navigation Data of French Oceanographic Cruises, IFREMER, <http://donnees-campagnes.flotteoceanographique.fr/search>

Other Info

LISA:

Contrucci, I., Nercessian, A., Béthoux, N., Mauffret, A., Pascal, G., 2001. A Ligurian (Western Mediterranean Sea) geophysical transect revisited, *Geophys. J. Int.*, 146, 74–97.

SEISGRECE:

<http://campagnes.flotteoceanographique.fr/campagnes/97080010/>

SEISMARMARA:

<http://campagnes.flotteoceanographique.fr/campagnes/1080050/>

<https://www.researchgate.net/publication/253596857> Seismarmara experiment results from reprocessing of selected multi-channel seismic reflection profiles

Incorporated Research Institutions for Seismology (IRIS)

Contact: info@iris.edu

DSS data:

PNE lines

- Description: Digitized earthquakes for four segments of PNE lines, QUARTZ, BATH1 and 2, BAZ, 1 and 2, and AGATE. The dataset consists of a total of 2850 records from 143 earthquakes recorded at 239 sites. EQ records are windowed on corresponding arrivals, generally in about 1400-s time windows at 25ms sampling intervals.
- Format: SEG-Y
- Time: 1984-1990
- Availability: No restriction

PNE: BAZALT-1 1989

- Description: Three seismic profiles recording chemical explosions in Krasnovodsk, Mari, and Termez. There are 87 chemical explosions of 3000-5000 kg.
- Format: SEG-Y
- Time: 1989
- Availability: No restriction

PNE: BAZALT-2 1990

- Description: The project included two seismic profiles recording chemical explosions in Abakan
- Format: SEG-Y
- Time: 1990
- Availability: No restriction

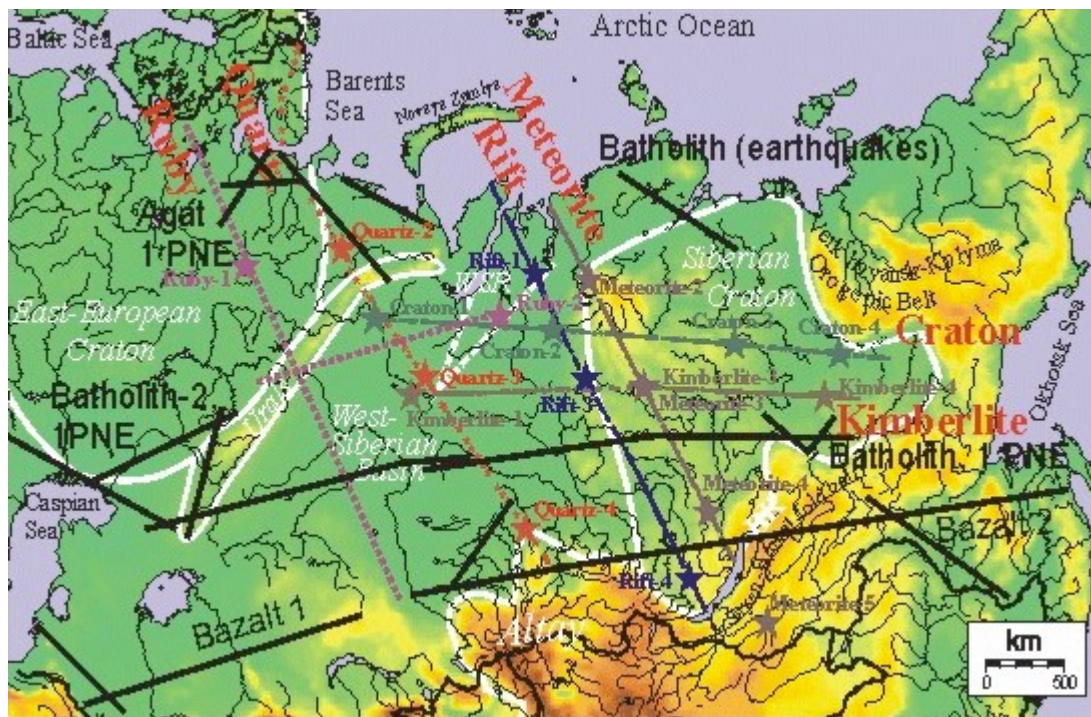
PNE: CRATON

- Description: Data from the CRATON long range profile from the Deep Seismic Sounding (DSS) project within the former Soviet Union is now available.
- Format: SEG-Y
- Time: 1978-1980
- Availability: No restriction

PNE: QUARTZ

- Description: Data from the Quartz long range profile from the Deep Seismic Sounding (DSS) project within the former Soviet Union is now available. This profile was completed in 1984-1987 and extends 3850 km across the former Soviet Union.
- Format: SEG-Y

- Time: 1984-1987
- Availability: No restriction



Other Info – Reports

BAZALT-1 1989:

http://ds.iris.edu/data/reports/2005/05-020/05-020_Bazalt-1.pdf

BAZALT-2 1990:

http://ds.iris.edu/data/reports/2005/05-021/05-021_Bazalt-2.pdf

CRATON:

<http://ds.iris.edu/data/reports/2002/02-010/Craton.pdf>

QUARTZ:

<http://ds.iris.edu/data/reports/2001/01-009/QUARTZ.pdf>

Report on PNE DSS data in IRIS:

http://www.ldeo.columbia.edu/res/pi/Monitoring/Doc/Srr_2005/PAPERS/01-11.pdf

Karlsruhe Institute Of Technology (KIT)

Contact in Geophysics Institute: Prof. Dr. Thomas Bohlen, Chair of Applied Geophysics, thomas.bohlen@kit.edu

DSS projects involvement:

Lago Lagorai 1961, 1962

Rhenish Massif Long Range project 1979

PNE Asthenosphere profiles 1977-1979, 1981-1988

Wildflecken 1982

Black Forest Reflection line/Wide angle seismic 1984

Rhinegraben 1990-1991, 1994

French Massif Central 1991-1992

Southern Calabria Hercynian Crust 1990

VRANCEA SE Carpathians 2001

ISLE Teleseismic project 2002-2003

FENNOLOGRA

EUGEMI

DSS data: *Unknown*

Other Info – Reports

Wildflecken:

Zeis, St., Gajewski, D. and Prodehl, C., 1990. Crustal structure of southern Germany from seismic refraction data. R. Freeman and St. Mueller, The European Geotraverse, Part 6. Tectonophysics, 176: 59-86.

Ludwig-Maximilians-Universität München (LMU)

Contact in Geophysics: Helmut Gebrande, Department of Earth and Environmental Sciences
Geophysics, helmut.gebrande@geophysik.uni-muenchen.de

DSS projects involvement:

ALP75 1975

METEOR 1964 M45 1977

Reykjanes Ridge – Iceland seismic project 1977

BASIN '96 Bornholm 1996

DSS data:

TRANSALP

Description: The TRANSALP project is an international and multidisciplinary research program for investigating orogenic processes driven by the collision of continental lithospheric plates. The near-vertical seismic reflection profiling was the backbone of TRANSALP: an almost 340 km long near-vertical reflection profile (main line) was measured in combination of high-fold vibroseis for imaging the upper crust and low-fold high-energy explosive sources to get images down to the upper mantle. The design followed closely very successful examples of former deep seismic profiling in the Western Alps. The survey was commissioned to a contractor company and was realized in two field campaigns in 1998 and 1999, both in late summer to autumn.

Collaboration: GFZ Potsdam in cooperation with IfAAG Munich and other partners, IfG Leoben (Austria) and partners, CROP (Crosta Profonda; CNR and ENI/AGIP; Italy) and partners, ETH Zürich/NFP20 (Switzerland).

Data status: The acquired data belongs to the international TRANSALP Working Group (Universities of Munich, Leoben, Salzburg, Bologna, Trieste, Milan, Rome, Zurich, GFZ Potsdam, ENI-AGIP Milan) and is processed by their member institutions.

Availability: Acquisition parameters can be found online,
<http://seismics.geophysik.uni-muenchen.de/pdfs/FieldCampaign98.pdf>,
<http://seismics.geophysik.uni-muenchen.de/pdfs/FieldCampaign99.pdf>

Other Info

TRANSALP:

https://www.geophysik.uni-muenchen.de/research/seismics/transalp?set_language=en

Kummerow, J., Kind, R., Oncken, O., Giese, P., Ryberg, T., Wylegalla, K., Scherbaum, F. and TRANSALP Working Group, 2004. *A natural and controlled source seismic profile through the Eastern Alps: TRANSALP*. Earth Planet Sci. Lett. 225, 115-129, doi:10.1016/j.epsl.2004.05.040.

Lippitsch, R., Kissling, K., and Ansorge, J., 2003. *Upper mantle structure beneath the Alpine Orogen from high-resolution teleseismic tomography*. J. Geophys. Res. 108 (B8), 5.1-5.15, doi:10.1029/2002JB002016.

Lüschen, E., Lammerer, B., Gebrande, H., Millahn, K., Nicolich, R. and TRANSALP Working Group, 2004.

Orogenic structure of the Eastern Alps, Europe, from TRANSALP deep seismic reflection profiling.
Tectonophysics 388, 85-102.

TRANSALP Working Group, 2001. *European Orogenic Processes Research Transects the Eastern Alps.* Eos 82 (40), 453, 460-461.

TRANSALP Working Group, 2002. *First deep seismic reflection images of the Eastern Alps reveal giant crustal wedges and transcrustal ramps.* Geophys. Res. Lett. 29 (10), 92.1-92.4, doi:10.1029/2002GL014911.

University of Copenhagen

Contact in Geophysics: Giampiero Iaffaldano, Associate Professor, Head of Research Group, giia@ign.ku.dk

Database: Geological Data Centre, Geological Survey of Denmark and Greenland (GEUS)

Contact: info-data@geus.dk

Availability: Interactive map can be found online, http://data.geus.dk/geusmap/?mapname=oil_and_gas

Pricelist: <http://www.geus.dk/UK/services/databank-info/oil-gas-dk/Pages/priskat-seismic-dk.aspx>

DSS project involvement:

EUROBRIDGE 1994-1996

Baremts Sea-Novaya Zemlya 1995-2001

ESTRID Danish Basin 2004-2005

SIGMA 1996

DSS data:

SIGMA 1996

- Description: SIGMA (Seismic Investigation of the Greenland MArgin) is a wide-angle and multichannel seismic project, between researchers at Woods Hole Oceanographic Institution (Woods Hole, Mass., USA) and the Danish Lithosphere Centre (DLC). Existing seismic data (Larsen & Jakobsdóttir, 1988; Larsen, 1990; Larsen et al., 1995, in press) had outlined the existence and location of the SDRS, but lacked good wide-angle data and the combination with crustal reflection data. The recognition of presumed underplated material at the base of the crust very close to the south-east coast of Greenland made it important that the SIGMA transects were continued onshore to ensure a firm base in continental crust undisturbed by the rifting process.
- Data acquisition: R/V Maurice Ewing, cruise EW-9607; 20 airguns; 33,000 shots;
- Time: August-October 1996
- Place: Greenland
- Data: Cruise data available online (<https://woodshole.er.usgs.gov/operations/obs/greenland96.html#data1>)

Other Info

<http://geus.dk/DK/publications/geol-gl-surv-bull/176/Documents/gsb176p50-54.pdf>

<https://woodshole.er.usgs.gov/operations/obs/greenland96.html#Top>

References

France:

Damotte, B., 2010. L'étude de la croûte en France par les méthodes sismiques: le programme ECORS (1983-1994). Travaux du Comité français d'Histoire de la Géologie, Comité français d'Histoire de la Géologie, 3^{ème} série (tome 24), pp.31-70.

ECORS Pyrenees team, 1988. The ECORS deep reflection seismic survey across the Pyrenees, *Nature*, 331, pp 508-511, Nature Publishing Group, [dx.doi.org/10.1038/331508a0](https://doi.org/10.1038/331508a0).

Czech-Poland:

Krysiński, L., Grad, M., POLONAISE Working Group, 2000. POLONAISE'97 - Seismic and Gravimetric Modelling of the Crustal Structure in the Polish Basin, *Phys. Chem. Earth (A)*, Vol. 25, No 4, pp. 355-363.

Beránek, B., Mayerova, M., Zouneková, M., Guterch, A., Materzok, R., Pajchel, J., 1973. Results of deep seismic sounding along International profile in Czechoslovakia and Poland: *Studia in Geophysica et Geodaetica*, Academy of Science, CSSR, Prague, v. 17, p. 205-217. doi: 10.1007/BF01626583

Grad M., Guterch A., Polkowska-Purys A., 2005. Crustal structure of the Trans-European Suture Zone in Central Poland — reinterpretation of the LT-2, LT-4 and LT-5 deep seismic sounding profiles. *Geol. Quart.*, 49 (3): 243–252.

Beránek, B. Study of the velocity conditions in the earth's crust in the regions of the Bohemian massif and the carpathian system along international profiles VI and VII, *Studia Geophysica et Geodaetica*, vol.15, issue.3-4, pp.316-330, 1971. doi : 10.1007/BF01589248.

Central-Southeastern Europe

Beránek, B., Dudek, A., Feifar, M., Hrdlicka, A., Suk M., Zoukova, M., Weiss, J., 1972. Czechoslovakia, in Sollogub, V.B., Prosen, D., Militzer, H., Crustal structure of central and southeastern Europe based on the results of explosion seismology (publ. in Russian, 1971). English translation edited by Szénás, Gy., *Geophysical Transactions*, spec. ed., Müszaki Könyvkiado, Budapest, chapter 24, p. 87–98.

Beránek, B., Weiss, J., Hrdlicka, A., Dudek, A., Zoukova, M., Suk, M., Feifar, M., Militzer, H., Knothe, H., Mituch, E., Posgay, K., Uchman, J., Sollogub, V.B., Chekunov, A.V., Prosen, D., Milovanovic, B., Roksandic, M., 1972. The results of the measurements along the international profiles, in Sollogub, V.B., Prosen, D., and Militzer, H., eds., Crustal structure of central and southeastern Europe based on the results of explosion seismology (publ. in Russian 1971). English translation edited by Szénás, Gy., *Geophysical Transactions*, spec. ed., Müszaki Könyvkiado, Budapest, chapter 3, p. 133–139.

Lüschen, E., Wenzel, F., Sandmeier, K.-J., Menges, D., Rühl, T., Stiller, M., Janoth, W., Keller, F., Söllner, W., Thomas, R., Krohe, A., Stenger, R., Fuchs, K., Wilhelm, H. and Eisbacher, G., 1987. Near Vertical and Wide-Angle Seismic Surveys in the Black Forest, SW Germany, *J. Geophys.*, 62, 1–30.

Heuer, B., Geissler, W., BOHEMA Working Group (2003): The BOHEMA project - receiver function from German data, (*Geophysical Research Abstracts*, Vol. 5, 10893, 2003), EGS-AGU-EUG Joint Assembly (Nice, France 2003).

Aichroth, B., Prodehl, C., Thybo, H., 1992. Crustal structure along the central segment of the EGT, in *The European Georrauerse*, Part 8, eds Freeman, R. Mueller St., *Tectonophysics*, 207, 43–64, [doi.org/10.1016/0040-1951\(92\)90471-H](https://doi.org/10.1016/0040-1951(92)90471-H).

UK-Ireland

- O'Reilly, B.M., Hauser, F., Jacob, A.W.B., Shannon, P.M., Makris, J., Vogt, U., 1995. The Transition between the Erris and the Rockall Basins: New Evidence from Wide-angle Seismic Data. *Tectonophysics*, 241, 143-163.
- Bamford, D., Nunn, K., Prodehl, C., Jacob, B., 1978. LISP-B-IV crustal structure of Northern Britain, *Geophys. J. R. Astron. Soc.*, 54, 43-60.
- Bamford D., Faber S., et al., 1976. A lithospheric seismic profile in Britain—1. Preliminary results. *Geophysical Journal of the Royal Astronomical Society* 44:145–160.
- Jacob, A.W.B., Kaminski, W., Murphy, T., Phillips, W.E.A., Prodehl, C., 1985. A Crustal Model for a Northeast-Southwest Profile through Ireland. *Tectonophysics*, 113, 75-103.
- Maguire, P., England, R., Hardwicj, A., 2011. LISP-B DELTA, a lithospheric seismic profile in Britain: analysis and interpretation of the Wales and southern England section, *Journal of the Geological Society*, Vol. 168, Part 1, pp. 61-82.
- Watremez, L., Prada, M., Minshull, T., O'Reilly, B., Chen, C., et al., 2016. Deep structure of the Porcupine Basin from wide-angle seismic data. *Geological Society, London, Petroleum Geology Conference series*, pp.1-30.
- O'Reilly, B. M., Hauser, F., Ravaut, C., Shannon, P.M., Readman, P. W., 2006. Crustal thinning, mantle exhumation and serpentinization in the Porcupine Basin, offshore Ireland: evidence from wide-angle seismic data, *Journal of the Geological Society, London*, Vol. 163, pp. 775–787. Printed in Great Britain.
- Freeman, B., Klemperer, S.L., Hobbs, R.W., 1988. The deep structure of northern England and the Iapetus Suture zone from BIRPS deep seismic reflection profiles, *Journal of the Geological Society, London*, Vol. 145, pp. 727-140.
- Horsefield, S. J., Whitmarsh, R. B., White, R. S., Sibuet, J.-C., 1993. Crustal structure of the Goban Spur rifted continental margin, NE Atlantic, *Geophys. J. Int.*, 119, 1-19.
- Lowe, C., Jacob, A.W.B., 1989. A north-south seismic profile across the Caledonian Suture zone in Ireland, *Tectonophysics*, 168, 297-318.
- Peddy, C., Masson, D., Scrutton, R., Warner, M.R., Pinet, B., Sibouet, J.-C., Lefort, J.P., Shroeder, I.J., 1989. Crustal structure of the Goban Spur continental margin, northeast Atlantic, from deep Seismic reflection profiling, *J. Geol. Soc. London*, 146, pp. 427-437.
- Klingelhöfer, F., Edwards, R. A., Hobbs, R. W., England, R. W., 2005. Crustal structure of the NE Rockall Trough from wide-angle seismic data modelling, *J. Geophys. Res.*, 110(B11).
- Roberts, D. G., Ginzberg, A., Nunn, K., McQuillin, R., 1988. The structure of the Rockall Trough from seismic refraction and wide-angle measurements, *Nature*, 332, pp. 632-635.
- O'Reilly, B. M., Hauser, F., Jacob, A.W.B., Shannon, P.M., 1996. The lithosphere below the rockall trough: wide-angle seismic evidence for extensive serpentinisation, *Tectonophysics*, 255, pp. 1-23.
- Al-Kindi, S., White, N., Sinha, M., England, R., Tiley, R., 2003. Crustal trace of a hot convective sheet: *Geology*, v. 31, no. 3, p. 207–210.
- Matthews, D. H., the BIRPS Group. 1990. Progress in BIRPS deep seismic reflection profiling around the British Isles. *Tectonophysics*, 173, 387—396.
- Beamish, D., Smythe, D.K., 1986. Geophysical image of the deep crust: the Iapetus suture. *J Geol Soc (Lond)*

143, 489–497, doi:10.1144/gsjgs.143.3.048.

Hungary

Posgay, K., Albu, I., Petrovics, I., Raner, G., 1981. Character of the earth's crust and upper mantle on the basis of seismic reflection measurements in Hungary, *Earth Evol. Sci.*, 3–4, pp. 272–279

Posgay, K., Hegedus, E., Timar, Z., 1990. The identification of mantle reflections below Hungary from deep seismic profiling, *Tectonophysics*, 173, 379–385.

Russia

Juhlin, C. Friberg, M., Echtler, H.P., Hismatulin, T., Rybalka, A., Green, A.G., Ansorge, J., 1998. Crustal structure of the Middle Urals: Results from the (ESRU) Europrobe seismic reflection profiling in the Urals experiments, *Tectonics*, 17, 710–725.

Juhlin, C., Knapp, J.H., Kashubin, S., Bliznetzov, M., 1996. Crustal evolution of the Middle Urals based on seismic reflection and refraction data. *Tectonophysics* 26:21–34.

Carbonell, R., Lecerf, D., Itzin, M., Gallart, J., Brown, D., 1998. Mapping the Moho beneath the southern Urals with wide-angle reflections: Geophysical. *Research Letters*, v. 25, p. 4229–4232, doi:10.1029/1998GL900107.

Solodilov L. N., 1997. The GEON Center: 25 Years of Implementation of PNE in Studies of Earth's Deep structure; in Fuchs K (ed.), *Upper Mantle Heterogeneity from Active and Passive Seismology*, NATO ASI Series, 1–10.

Northern Euroasia

Morozov, I.B., Morozova, E.A., Smithson, S.B., 2007. Digital database of deep seismic sounding profiles in Northern Euroasia, 29th Monitoring Research Review: Ground-Based Nuclear Explosion Monitoring Technologies, Sept 2007, Denver, Colorado.

Morozov, I.B., Smithson, S.B., Morozova, E.A., Solodilov, L. N., 2001. A Database of deep seismic sounding peaceful nuclear explosion recordings for seismic monitoring of Northern Euroasia,

23rd Seismic Research Review: Worldwide Monitoring of Nuclear Explosions, Oct 2001, Jackson Hole, Wyoming.

Yegorova T.P., Baranova E.P., Omelchenko V.D., Sosson M., Kaymakci N., Stephenson R., Bergerat

F., Starostenko V, 2010. The crustal structure of the Black Sea from reinterpretation of Deep Seismic Sounding data acquired in the 1960s, *Sedimentary Basin Tectonics from the Black Sea and Caucasus to the Arabian Platform*, Geological Society, London, Special Publications, pp. 43–56, Vol 340.

Romania

Cornea, I., Radulescu, F., Pmopilian, A., Sova, A., 1981. Deep Seismic Soundings in Romania, *PAGEOPH*, Vol. 119.

Hauser, F., Raileanu, V., Fielitz, W., Dinu, C., Landes, M., Bala, A., Prodehl, C., 2007. Seismic crustal structure between the Transylvanian Basin and the Black Sea, Romania, *Tectonophysics* 430, 1–25.

Enciu-Mucuta, D. M., Knapp, C. C., Knapp, J. H., 2009. Revised Crustal Architecture of the Southeastern Carpathian Foreland from Active and Passive Seismic Data, *Tectonics*, vol. 28, TC4013, doi:10.1029/2008TC002381.

Panea, I., Stephenson, R., Knapp, C., Mocanu, V., Drijkoningen, G., Matenco, L., Knapp, J., Prodehl, K., 2005. Near-vertical seismic reflection image using a novel acquisition technique across the Vrancea Zone and Focsani Basin, south-eastern Carpathians (Romania): *Tectonophysics*, 410, 293–309.

Raileanu, V., Diaconescu, C., Radulescu, F., 1994. Characteristics of Romanian lithosphere from deep seismic reflection profiling, *Tectonophysics*, 239, 165–185.

Raileanu, V., Hauser, F., Bala, A., Fielitz, W., Prodehl, C., Dinu, C., Landes, M., 2007. Deep seismic sounding across the Vrancea region, *International Symposium on Strong Vrancea Earthquakes and Risk Mitigation*, Oct 2007, Bucharest, Romania.

Raileanu, V., Talos, D., Varodin, V., Stiopol, D., 1993. Crustal seismic reflection profiling in Romania on the Urziceni-Mizil line, *Tectonophysics*, 223, 401–409.

Hauser F., Raileanu V., Fielitz W., Bala A., Prodehl C., Polonic G., Schulze A., 2001. VRANCEA99-the crustal structure beneath the southeastern Carpathians and the Moesian Platform from a seismic refraction profile in Romania, *Tectonophysics*, 340, 233–256.

South

ILIHA DSS Group, 1993. A deep seismic sounding investigation of lithospheric heterogeneity and anisotropy beneath the Iberian Peninsula, *Tectonophysics*, 221, 35–51.

González, A., D. Córdoba, D. Vales, 1999. Seismic crustal structure of Galicia continental margin, NW Iberian Peninsula, *Geophys. Res. Lett.*, 26, 1061–1064.

ECORS Pyrenees Team, 1988. The ECORS deep reflection seismic survey across the Pyrenees
Nature, 331, pp. 508–511.

ESCI-Valencia Trough Working Group, Gallart, J., Vidal, N., Danobeitia, J.J., 1994. Lateral variations in the deep crustal structure at the Iberian margin of the Valencia trough imaged from seismic reflection methods, *Tectonophysics*, Vol 232, Issues 1–4, pp. 59–75.

Gallart, J., Vidal, N., Estévez, A., Pous, J., Sábath, F., Santisteban, C., ESCI-Valencia Trough Group, 1995. The ESCI-Valencia Trough vertical reflection experiment: a seismic image of the crust from the NE Iberian Peninsula to the Western Mediterranean. *Revista de la Sociedad Geológica de Espana*, 8, 405–415.

Peirce, C., Barton, P. J., 1992. Southern Segment of the European Geotraverse - A Wide-Angle Seismic Refraction Experiment in the Sardinia Channel, *Marine Geophysical Researches*, Vol 14, Issue 3, pp 227–248.

Cassinis, R., 2011. Applied Geophysics in Italy: how the spectrum widened in 60 years, *Bollettino di Geofisica Teorica ed Applicata* Vol. 52, n. 2, doi:10.4430/bgta0001

Contrucci, I., Nercessian, A., Béthoux, N., Mauffret, A., Pascal, G., 2001. A Ligurian (Western Mediterranean Sea) geophysical transect revisited, *Geophys. J. Int.*, 146, 74–97.

Grevemeyer I., 2006. Short Cruise Report, RV METEOR: Cruise M69/2, Cartagena, Spain to Valletta, Malta.

Sumanovac, F., Oreskovic, J., Grad, M., ALP 2002 Working Group, 2009. Crustal structure at the contact of the Dinarides and Pannonian basin based on 2-D seismic and gravity interpretation of the Alp07 profile in the ALP 2002 experiment, *Geophys. J. Int.*, 179, 615–633, doi: 10.1111/j.1365-246X.2009.04288.x.

ILIHA DSS Group, A deep seismic sounding investigation of lithospheric heterogeneity and anisotropy beneath the Iberian, 1993. *Tectonophysics*, 221, 35-51.

Çetin, S., Voogd, B., Carton, H., Laigle, M., Becel, A., Saatçilar, R., Singh, S., Hirn, A., 2003. Seismarmara experiment: results from reprocessing of selected multi-channel seismic reflection profiles, AGU - EUG Joint Assembly, 6-11 April 2003, Nice, France.

East

Grad, M., Janik, T., Guterch, A., Środa, P., Czuba, W., EUROBRIDGE'94 -97, POLONAISE'97 & CELEBRATION 2000 Seismic Working Groups, 2006. Lithospheric structure of the western part of the East European Craton investigated by deep seismic profiles, *Geological Quarterly* 50 (1), 9-22.

North

EUROBRIDGE Seismic Working Group, 1999. Seismic velocity structure across the Fennoscandia-Sarmatia suture of the East European Craton beneath the EUROBRIDGE profile through Lithuania and Belarus, *Tectonophysics* 314, 193-217.

Weigel, W., Miller, H., Flüh, E. R., Butzke, A., Dehghanii, A., Gebhardt, V., Harder, I., Hepper, J., Jokat, W., Kläschen, D., Kreymann, S., Schüssler, S. and Zhao, Z., 1995. Investigations of the East Greenland Continental Margin between 70 and 72N by Deep Seismic Sounding and gravity studies, *Marine Geophysical Researches*, 17, pp. 167-199.

Horst, W., Flueh, E. R., Börngen, M., 1994. NIZUSE: a deep seismic reflection line in north-eastern Germany, *Geol Rundsch*, 83, 161-169.

Thybo, H., 2001. Crustal structure along the EGT profile across the Tornquist Fan interpreted from seismic, gravity and magnetic data. *Tectonophysics* 334, 155-190.

BABEL Working Group, 1993. Deep seismic reflection/refraction interpretation of crustal structure along BABEL profiles A and B in the southern Baltic Sea, *Geophys. J. Int.*, 112, 325-343.

Luosto, U., Hyvönen, T., 2001. Seismology in Finland in the twentieth century. *Geophysica* Vol. 37, No. 1-2, p. 147-185.

Bialas, J., Flüh, E.R., Jokat, W., 1990. Seismic investigations of the Ringkøbing-Fyn High on Langeland, Denmark, *Tectonophysics*, 176, pp. 25-41.

Galson, D. A., Mueller, St., 1986. An introduction to the European Geotraverse Project: first results and present plans, in *The European Geotraverse, Part 1*, *Tectonophysics*, 126, 1-30.

Kullinger, B., Lund, C.-E., 1986. A preliminary interpretation of S-wave traveltimes from Fennolora data. *Tectonophysics* 126: 375-388.

Lund C.-E. 1980. Fennoscandian long range project 1979 (Fennolora), *Proc. 17th Assembly of the ESC*, Budapest, 1980, pp. 511-515.

Von Knorring, M., Lund, C.-E., 1989. Description of the POLAR Profile transect display, *The European Geotraverse, Part 5: The POLAR Profile*. Freeman, M. von Knorring, H. Korhonen, C. Lund, St. Mueller (Eds.), *Tectonophysics*, 162, pp. 165-171.

McCann, T., Krawczyk, C. M., 2001. The Trans-European Fault: a critical reassessment. - *Geological Magazine*, 138, 1, 19-29. doi: 10.1017/S0016756801004915.

Freeman, R., Mueller, St., 1987. The European Geotraverse Project: a major European scientific venture, *Europhysics News* Vol. 18, No. 7-8, pp. 104–108.

Ivanova, N.M., Sakoulina, T.S., Roslov, Yu.V., 2006. Deep seismic investigation across the Barents–Kara region and Novozemelskiy Fold Belt (Arctic Shelf), *Tectonophysics* 420, 123–140.

Luosto, U., 1997. Structure of the Earth's Crust in Fennoscandia as Revealed from Refraction and Wide-Angle Reflection Studies, *Geophysica*, 33, 3-16.

Thybo, H., Sandrin, A., Nielsen, L., Lykke-Andersen, H., Kellerc, G.R., 2006. Seismic velocity structure of a large mafic intrusion in the crust of central Denmark from project ESTRID, *Tectonophysics*, Vol. 420, Issues 1–2, pp. 105-122, doi.org/10.1016/j.tecto.2006.01.029.

Sandoval S, Kissling E, Ansorge J, SVEKALAPKO Seismic Tomography Working Group, (CHE), 2004. High-resolution body wave tomography beneath the SVEKALAPKO array – II. Anomalous upper mantle structure beneath the central Baltic shield. *Geophys. J. Int.* 157, 200–214.

North Sea

MONA LISA Working Group, 1997. MONA LISA — Deep seismic investigations of the lithosphere in the southeastern North Sea, *Tectonophysics* 269, 1–19.

Abramovitz, T., Thybo, H., MONA LISA Working Group, 1998. Seismic structure across the Caledonian Deformation Front along MONA LISA profile 1 in the southeastern North Sea, *Tectonophysics* 288, 153-176.

Other

Artemieva, I. M., Thybo, H., Kaban, M. K., 2006. Deep Europe today: Geophysical synthesis of the upper mantle structure and lithospheric processes over 3.5 Ga. *Geological Society Special Publication*, 32, 11-41. doi: 10.1144/GSL.MEM.2006.032.01.02.

Brückl, E., 2011. Lithospheric Structure and Tectonics of the Eastern Alps – Evidence from New Seismic Data, in: *Tectonics*. Damien Closson (Ed.), ISBN: 978-953-307-545-7, INTECH, 39-64.

Brückl, E., Bodoky, T., Hegedüs, E., Hrubcová, P., Gosar, A., Grad, M., Guterch, A., Hajnal, Z., Keller, G.R., Špičák, A., Sumanovac, F., Thybo, H., Weber, F., 2003. Special Contribution: ALP 2002 Seismic Experiment, *Studia Geophysica et Geodaetica*. 47(3):671–679.

DEKORP Research Group, Anderle, H.-J., Bittner, R., Bortfeld, R., Bouckaert, J., Büchel, G., Dohr, G., Dürbaum, H.-J., Durst, H., Fielitz, W., et al., 1991. Results of the DEKORP 1 (BELCORP-DEKORP) deep seismic reflection studies in the western part of the Rhenish Massif, *Geophys. J. Int.*, Vol. 106, Issue 1, pp 203–227, doi.org/10.1111/j.1365-246X.1991.tb04612.x.