



2008 Meeting Report Form

Re: UNESCO-IUGS Contract and IUGS Contribution

Project Number and Title: Project 559 – Crustal Architecture and Images

MEETING:

Date: 8-13 July 2008

Place: Saariselka, Finland

Itinerary: Symposium program attached



SCOPE AND RESULTS OF MEETING:

Scope of Meeting (program or outline of geological study)

During the Seismix2008 Symposium, Saariselka, Finland, - **Deep Seismic Profiling of the Continents and their Margins**, IGCP Project 559 and its predecessor IGCP Project 474 sponsored keynote speakers to the meeting and conducted a session on classic seismic transects as part of the overall program.

Seismix2008 was the 13th in the series of deep seismic profiling symposia. It was held in Finland at the village of Saariselka, about 300 km north of the Arctic Circle in Lapland. The meeting was jointly organised by the Geological Survey of Finland and the Institute of Seismology, University of Helsinki.

The series of Seismix symposia aims to provide a venue every two years for discussing recent projects from around the world to determine crustal architecture in areas that have not previously been investigated in detail and encouraging the interchange of ideas on deep seismic profiling methods and data processing and imaging. The IGCP Project 559 session at the symposium contributed to the overall program of the whole meeting.

IGCP Project 559 also convened a business meeting during the Seismix2008 Symposium that gave six members of the IGCP 559 Working Group their first opportunity to discuss program for the next few years and ideas on promoting investigation of the geodynamics of deep crustal architecture and its influence on the day-to-day lives of many people around the world.

Achievements of Meeting

At the Seismix2008 symposium, one hundred and ten (110) delegates from around the world presented 67 oral papers in total and 97 poster papers in a variety of sessions. The overall format was very successful in promoting discussion across the various scientific specialist groups who rarely get an opportunity to meet and discuss scientific issues.

Outcome of Meeting

Some of the papers presented at the Seismix2008 symposium will be published in full in a special edition of Tectonophysics (Elsevier Press).

Ideas and suggestions from the IGCP Project 559 Business Meeting held during Seismix2008 symposium for the promotion of deep seismic investigations of crustal architecture and its influences on communities worldwide will be pursued during the lifetime of the project.

Shun-ichi Adachi 30.10.08
Signature of Project Leader and Date



IGCP Project 559 Business Meeting Agenda

- IGCP Project 474 review – 5 years of web site development and successful symposia sponsorship
- New IGCP Project 559 – Crustal Architecture and Images
- Project aims
- Working Group members and partnerships
- Web site development – new material
- Sponsored symposia – 2009 and beyond
- Funding
- Other business

SEISMIX2008 Programme

Monday (June 9th)

9:00 – 9:20 Opening

9:20 – 10:00 Passive continental margins

Chair: R.M. Clowes

*White, R.S., Roberts, A.W., Smith, L.K., Eccles, J.D., Christie, P.A.F. and Kuszniir, N.J.

MAGMATISM ON THE NORTH ATLANTIC CONTINENTAL MARGINS: SEISMIC CONSTRAINTS AND GEOLOGICAL INFERENCES

*Eccles, J.D., White, R.S. and Christie, P.A.F.

WIDE ANGLE CONVERTED SHEAR WAVES: FURTHER CONSTRAINT ON THE STRUCTURE OF VOLCANIC RIFTED CONTINENTAL MARGINS IN THE NORTH ATLANTIC

10:00 – 10:20 The continental mantle

Chair: R.M. Clowes

*Artemieva, I.M.

HETEROGENEOUS MANTLE: CONSTRAINTS FROM JOINT INTERPRETATION OF SEISMIC AND THERMAL DATA

10:50 – 12:30 The continental mantle (cont.)

Chair: R.S. White

*Clowes, R.M., White, D.J. and Hajnal, Z.

MANTLE HETEROGENEITIES AND THEIR SIGNIFICANCE: RESULTS FROM LITHOPROBE SEISMIC REFLECTION AND REFRACTION/WIDEANGLE STUDIES

*Pavlenkova, N.I.

RHEOLOGICAL MODEL OF THE UPPER MANTLE FROM THE LONGRANGE SEISMIC DATA

*Kanao, M., Fujiwara, A., Ikawa, T., Miyamachi, H., Usui, Y., Inoue, T. and Yamada, A.

UPPER MANTLE STRUCTURE OF THE PANAFRICAN MOVIL BELT, EAST ANTARCTICA, FROM ACTIVE AND PASSIVE STUDIES

*Thybo, H.

FINE SCALE HETEROGENEITY IN THE EARTH'S CRUST AND MANTLE

*Rawlinson, N. and Kennett, B.L.N.

EXPLORING DEEP AUSTRALIA USING ACTIVE AND PASSIVE SEISMIC ARRAYS

14:00 – 15:20 Seismic exploration of mineral resources and seismic studies on nuclear waste disposal

Chair: D.B. Snyder

*Brown, L.D. and Cathles, L.

DEEP SEISMIC IMAGING OF LITHOSPHERIC FLUIDS: "BRIGHT SPOTS" AND ORE GENESIS

*SorjonenWard, P., Blewett, R., Goleby, B.R. and Kukkonen, I.T.

SEISMIC IMAGING OF MINERAL SYSTEMS AT VARIOUS SCALES: SOME COMPARATIVE VIEWS FROM ON TOP AND DOWN UNDER IN FINLAND

*Juhlin, C.

SUBHORIZONTAL REFLECTIONS AT 25 KM DEPTH AT THREE DIFFERENT SITES ALONG THE BALTIC SEA AND THE GULF OF BOTHNIA: FRACTURE ZONES OR MAFIC SHEETS?

*Kukkonen, I.T. and HIRE Working Group

PROJECT HIRE: HIGH RESOLUTION REFLECTION SEISMIC SURVEYS IN ORE EXPLORATION OF CRYSTALLINE ROCK AREAS

15:50 – 17:10 Seismic exploration of mineral resources and seismic studies on nuclear waste disposal (cont.)

Chair: P. Heikkinen

*Cosma, C., Enescu, N., Juhlin, C. and Wood, G.

HIGH RESOLUTION SEISMIC IMAGING AT THE MILLENNIUM URANIUM DEPOSIT, CANADA

Cosma, C., *Juhojuntti, N., Juhlin, C. and Wood, G.

3D SEISMIC SURVEY AT THE MILLENNIUM URANIUM DEPOSIT IN THE ATHABASCA BASIN, CANADA

*Enescu, N. and Cosma, C.

BOREHOLE SEISMIC SIDESCANS FOR MINERAL RESOURCE DELINEATION

*Patison, N.L. SorjonenWard, P., Ojala, V.J. and Korja, A.

TECTONIC SETTING OF FINNISH MINERAL DEPOSITS: EVIDENCE FROM THE FINNISH REFLECTION EXPERIMENT (FIRE)

18:00 Invited talk: David Snyder

SEISMIC METHODS APPLIED TODAY IN MINERAL EXPLORATION AND FOR RESOURCE ASSESSMENT OF CRYSTALLINE ROCK

Tuesday (June 10th)

9:00 – 10:20 Active continental margins and subduction structures I

Chair: E. Lüschen

*Sato, H., Ito, K., Abe, S., Kato, N., Iwasaki, T., Hirata, N. and Kawanaka, N.

DEEP SEISMIC PROFILING IN THE KINKI REGION, CENTRAL JAPAN: SUBDUCTION, BASIN DEVELOPMENT AND SLIP PARTITIONING OF ACTIVE FAULTS

*Arai, R., Iwasaki, T., Sato, H., Abe, S. and Hirata, N.

COLLISION AND SUBDUCTION STRUCTURE OF THE IZUBONIN ARC IN CENTRAL JAPAN

*Gross, K., Buske, S., Wigger, P. and Shapiro, S.A.

SEISMIC IMAGING OF THE CHILEAN SUBDUCTION ZONE AROUND THE HYPOCENTER OF THE 1960 VALDIVIA EARTHQUAKE

*Park, J.O., Moore, G. and Fujie G.

3D PRESTACK DEPTH IMAGING OF A LOW VELOCITY ZONE ALONG THE NANKAI SUBDUCTION ZONE, SOUTHWEST JAPAN

10:50 – 12:30 Active continental margins and subduction structures I (cont.)

Chair: H. Sato

*Ito, T., Ikeda, Y., Iwasaki, T., Kano, K., Sato, H., Hirata, N., Abe, S., Miyauchi, T., Yamakita, S.,

Higashinaka, M., Suda, S. and Kawanaka, T.

INITIAL STRUCTURE OF THE ITOIGAWASHIZUOKA TECTONIC LINE EMERGING FROM THE RECENT DEEP SEISMIC PROFILINGS, CENTRAL JAPAN

*Shiomi, K. and Park, J.

STRUCTURAL FEATURES OF THE SUBDUCTING SLAB BENEATH THE KII PENINSULA, CENTRAL JAPAN: 1. SEISMIC EVIDENCE OF SLAB SEGMENTATION

*Lüschen, E., Müller, C., Kopp, H., Planert, L., Engels, M., Shulgin, A. and Djajadihardja, Y.S.

SUBDUCTION ALONG THE SUNDABANDA ARC TRANSITION

*Iidaka, T., Hiramatsu, Y. and Japanese University Group of the Joint Seismic Observations at NKTZ

SEISMIC ANISOTROPY STUDY AT THE HIGH STRAIN RATE ZONE (NIIGATAKOBÉ

TECTONIC ZONE), IN CENTRAL JAPAN

*Matsubara, M. and Obara, K.

HIGH POISSON'S RATIO ZONE ACCOMPANIED ACCOMPANYING SLOW EVENTS BENEATH THE SOUTHWESTERN JAPAN

14:00 – 14:40 Seismic studies in polar regions

Chair: H. Thybo

*Kozlovskaya, E. and POLENET/LAPNET Working Group

POLENET/LAPNET – A MULTIDISCIPLINARY SEISMIC ARRAY RESEARCH IN NORTHERN

FENNOSCANDIA: FIRST RESULTS

*Gohl, K.

INSIGHTS INTO THE STYLE AND GEODYNAMIC IMPLICATIONS OF CIRCUMANTARCTIC

PASSIVE CONTINENTAL MARGINS AND THEIR CONTINENT-OCEAN TRANSITIONS

14:40 – 15:20 Integrated multidisciplinary case studies

Chair: H. Thybo

*Juhlin, C., Lund, B., Dehghannejad M. and Malehmir, A.

REFLECTION SEISMIC IMAGING OF THE ENDGLACIAL PÄRVIE FAULT SYSTEM, NORTHERN SWEDEN

*Milshtein E.D., Kalicheva, T.I., Nikitin, A.A. and Erinchek Y.M.
3D MODEL OF EAST FENNOSCANDIA DEEP STRUCTURE: INTEGRATION OF SEISMIC
PROFILING AND GRAVIMETRIC DATA

15:50 – 16:50 Integrated multidisciplinary case studies (cont.)

Chair: E. Kozlovskaya

*Palomeras, I., Fernández, M., Carbonell, R., Simancas, F., Ayarza, P., Martínez Poyatos, D., Azor, A.,
GonzálezLodeiro, F. and PérezEstaún, A.

GEOPHYSIC MODEL OF THE LITHOSPHERE ACROSS THE VARISCAN BELT OF SW IBERIA:
MULTIDISCIPLINARY ASSESSMENT

*Iwasaki, T. and the Geophysical Research Group for the NiigataKobe Tectonic Zone
AN INTEGRATED GEOPHYSICAL RESEARCH FOR ATOTSUGAWA FAULT (AGF), CENTRAL
JAPAN

*Erinchek Y.M., Petrov, O.V., Lipilin, A.V. and Goleby B.R.
INTERNATIONAL WORKSHOP "MODELS OF THE EARTH'S CRUST AND UPPER MANTLE"

18:00 Invited talk: Marek Grad

EUROPEAN CRUST AND MOHO DISCONTINUITY: ONE HUNDRED YEARS FROM THE DISCOVERY OF THE
CRUSTMANTLE BOUNDARY

Wednesday (June 11th)

9:00 – 10:20 Classical transects

Chair: C. Juhlin

*Finlayson, D.M. and Goleby, B.R.
IGCP PROJECT 474: AN INFORMATION RESOURCE FOR DEEP SEISMIC PROFILING AND IMAGING

Parsieglia, N., *Gohl, K., UenzelmannNeben, G. and Stankiewicz, J.
THE AGULHAS-KAROO GEOSCIENCE TRANSECT: STRUCTURES AND PROCESSES ALONG
THE SOUTHERN AFRICAN CONTINENTAL MARGIN

*Heikkinen, P., Kukkonen, I.T., Suleimanov, A. and Zamoshnyaya, N.
SEISMIC IMAGE OF THE FENNOSCANDIAN SHIELD ALONG THE BALTIC SEA WHITE SEA TRANSECT

*Carbonell, R., Simancas, F., MartínezPoyatos, D., Ayarza, P., González, P., Tejero, R., MartínParra, L., Matas, J.,
GonzálezLodeiro, F., PérezEstaún, A., GarcíaLobon, J.L. and Mansilla, L.

SEISMIC IMAGING OF THE STRUCTURE OF THE CENTRAL IBERIAN ZONE: THE ALCUDIA DEEP
SEISMIC REFLECTION TRANSECT

10: 50 – 11:10 Intracontinental collision and accretion

Chair: K. Gohl

*Kukkonen, I.T., Kuusisto, M., Lehtonen, M. and Peltonen, P.
UPPERMOST MANTLE REFLECTORS AND MOHOCUTTING REFLECTORS IN CENTRAL FENNOSCANDIA:
DELAMINATION STRUCTURES?

11:10 – 12:10 Continental rifts and basins

Chair: K. Gohl

*Li, C.F., Zhou, Z., Li, J., Chen, B. and Geng, J.
SEISMIC STRUCTURE OF THE SOUTH CHINA SEA OCEAN BASIN

*Thybo, H., Lyngsø, S.B. and Nielsen, C.A.
CONTINENTAL RIFTING WITH FLAT MOHO

*Dena, O., Miller, K.C. and ten Brink, U.
CRUSTAL STRUCTURE OF NORTHERN LAKE BAIKAL, RUSSIA

Thursday (June 12th)

9:00 – 10:20 Active continental margins and subduction structures II

Chair: R. Carbonell

*Iidaka, T. and The Research Group for the 2007 Atotsugawa Fault Seismic Expedition
FINE SEISMIC STRUCTURE AROUND THE ATOTSUGAWA FAULT REVEALED BY SEISMIC
REFRACTION AND REFLECTION EXPERIMENTS

*Fernández Viejo, G., Pulgar, J.A., Gallastegui, J. and Gallart J.
LATERAL VARIATION OF SUBDUCTION COMPRESSION STRUCTURES ALONG THE NORTH
IBERIAN MARGIN FROM DEEP SEISMIC REFLECTION DATA

*Hino, R., Yamamoto, Y., Ito, Y., Azuma, R., Hasegawa, A., Yamada, T., Nakahigashi, K., Kuwano, A.,
Mochizuki, K., Sakai, S., Shinohara M., Kanazawa T., Takanami T., Murai, Y., Amamiya, S. and
Machida, Y.

3D SEISMIC STRUCTURE OF THE FOREARC AREA IN EASTERN HOKKAIDO, JAPAN, BY USING
OCEAN BOTTOM SEISMOGRAPHIC OBSERVATION

*Ito, Y., Matsubara, M. and Nakajima, J.
SEISMICITY AND TOMOGRAPHY ALONG JAPAN TRENCH REVEALED BY HYBRID METHOD FOR
HYPOCENTER DETERMINATION USING WAVEFORM AND TRAVEL TIME

10:50 – 11:10 Active continental margins and subduction structures II (cont.)

Chair: L.D. Brown

*Iwasaki, T., Ikeda, Y., Sato H., Ito, T., Kano, K., Higashinaka, M., Suda, S., Kawanaka T. and Research Group for Active Fault Systems along Itoigawa-Shizuka Tectonic Line
GEOMETRY OF ACTIVE FAULT SYSTEMS DEVELOPED ALONG ITOIGAWASHIZUKA TECTONIC LINE, CENTRAL JAPAN, FROM RECENT SEISMIC REFLECTION SURVEYS

11:10 – 12:30 Innovative seismic acquisition and processing techniques and Numerical modelling and inverse methods in seismology

Chair: L.D. Brown

*Hurich, C.A.

HETEROGENEITY MAPPING AS AN APPROACH TO CHARACTERIZING COMPLEX REFLECTION WAVE FIELDS

Abe, S., Saito, H., *Sato, H., Koshiya, S., Shiraishi, K., Kato, N. and Kawanaka, T.

INTEGRATED SEISMIC IMAGING OF ACTIVE AND PASSIVE DATA FOR THE DELINEATION OF ACTIVE FAULTS AND CRUSTAL STRUCTURE IN THE KITAKAMI LOWLAND, NORTHEAST JAPAN

*Saygin, E. and Fomin, T.

EVALUATION OF SEISMIC STRUCTURE OF NORTHEASTERN YILGARN CRATON FROM AMBIENT NOISE TOMOGRAPHY

Pylypenko, V.N., *Verpakhovska, O., Starostenko, V.I. and N.I. Pavlenkova

WAVE IMAGES OF THE CRUSTAL STRUCTURE FROM REFRACTIONS AND WIDEANGLE REFLECTIONS MIGRATION ALONG THE DOBRE PROFILE (DNIEPERDONETS PALEORIFT)

14:00 – 15:20 Innovative seismic acquisition and processing techniques and Numerical modelling and inverse methods in seismology (cont.)

Chair: M. Grad

*Carpentier, S.F.A., RoyChowdhury, K., Hurich, C.A. and Stephenson, R.A.

MAPPING CORRELATION LENGTHS OF LOWER CRUSTAL HETEROGENEITIES FROM DEEP REFLECTION DATA FOR DELINEATING TECTONIC UNITS

Jung, H., *Lee, J.M., Jang, Y.S., Moon, W.M., Baag, C.E., Kim, K.Y. and Jo, B.G.

SHALLOWDEPTH SHEAR WAVE VELOCITY STRUCTURE OF THE SOUTHERN KOREAN PENINSULA OBTAINED FROM TWO CRUSTALSCALE SEISMIC PROFILES

*Pylypenko, V.N., Makris, J. and Verpakhovska, O.

REFRACTION MIGRATION AT SEISMIC STUDIES: POSSIBILITIES AND PROBLEMS

*Oueity, J., Kumar, V., Clowes, R.M. and Herrmann, F.

CURVELET DENOISING: A NEW APPROACH FOR IMPROVED CRUSTAL REFLECTION IMAGES

15:50 – 16:50 Innovative seismic acquisition and processing techniques and Numerical modelling and inverse methods in seismology (cont.)

Chair: C.A. Zelt

*RoyChowdhury, K.

IMAGING & INTERPRETING CONTINENTAL LOWER CRUST: FROM POTENTIAL PROBLEMS TO PROBABLE PROCESSES

*Schmelzbach, C., Simancas, F., Juhlin, C. and Carbonell, R.

SEISMICREFLECTION IMAGING OVER THE SOUTH PORTUGUESE ZONE FOLD AND THRUST BELT, SW IBERIA

Giustiniani, M., Catalano, R., Accaino, F., Sulli, A., Di Marzo, L., *Nicolich, R. and Valenti, V.

A CRUSTAL SEISMIC PROFILE ACROSS SICILY (ITALY): PRELIMINARY RESULTS

18:00 Invited talk: Colin A. Zelt

FORWARD AND INVERSE MODELING OF CONTROLLED SOURCE SEISMIC DATA

Friday (June 13th)

9:00 – 10:20 Crust forming processes and seismic studies

Chair: A. Korja

*Kodaira, S., Takahashi, N., Sato, T., Obana, K., Takahashi, T. and Kaneda, Y.

FORMATION PROCESS OF CONTINENTAL CRUST IN THE IZUBONIN INTRAOCEANIC ARC REVEALED BY ACTIVE PASSIVE SEISMIC STUDIES

*Rybalka, A., Petrov, G., Kashubin, S. and Juhlin, C.

PALEOZOIC MANTLE-CRUSTAL OROGENIC STRUCTURES AND PRESENT SURFACE GEOLOGICAL FEATURES OF THE MIDDLE URALS (BASED ON THE ESRU TRANSECT DATA)

Goleby, B.R., Maher, J., Jones, L.E.A., Fomin, T., Costelloe, R., Tassell, H., Holzschuh, J.,

Nakamura, A. and *Saygin, E.

IMAGING AUSTRALIAN ENERGY PROVINCES USING SEISMIC REFLECTION PROFILING

*Stratford, W., Thybo, H., Faleide, J., Olesen, O. and Tryggvason, A.
LITHOSPHERIC STRUCTURE OF THE SOUTHERN SCANDES: RESULTS FROM THE MAGNUSREX
SEISMIC EXPERIMENT

10:50 – 12:10 Crust forming processes and seismic studies (cont.)

Chair: I.T. Kukkonen

*Korja, A., Kosunen, P. and Heikkinen, P.
COLLAPSE STRUCTURES OF THE SVECOFENNIAN OROGEN

*SorjonenWard, P., Lukkarinen, H., Paavola, J. and Äikäs, O.
SEISMIC IMAGING OF INTERACTION BETWEEN DEFORMATION AND PLUTON EMPLACEMENT
IN EASTERN FINLAND

*Kozlovskaya, E., Janik, T., Yliniemi, J. and Heikkinen, P.
PETROLOGICAL CRUSTMANTLE BOUNDARY VS. SEISMIC MOHO IN THE CENTRAL FENNOSCANDIAN SHIELD:
CONSTRAINTS FROM COLLOCATED WIDEANGLE AND NEAR-VERTICAL SEISMIC PROFILES

Kousa, J., *Rutland, R.W.R., SorjonenWard, P. and Williams, I.S.
GEOLOGICAL SIGNIFICANCE OF THE REGIONAL CHANGE IN REFLECTIVITY BETWEEN THE
UPPER AND MIDDLE CRUST IN THE SVECOFENNIAN PROVINCE

Poster papers

Passive continental margins

1. *Deemer, S.J., Hurich, C.A. and Hall, J.
MAPPING POST RIFT SILLS ALONG THE NEWFOUNDLAND PASSIVE MARGIN

2. *Deemer, S.J. and Hall, J.
A REGIONAL TRANSECT ACROSS THE SOUTH NEWFOUNDLAND BASIN NONVOLCANIC MARGIN

3. Smith, J., Hall, J. and *Deemer, S.J.
RIFTING IN THE NORTHERN NEWFOUNDLAND BASIN AT A NONVOLCANIC MARGIN

4. Domingos, M., *Afilhado, A., Matias, L., Hirn, A. and Moulin, M.
PRELIMINARY RESULTS OF OBS AND COINCIDENT MCS PROFILE STRIKING PARALLEL TO THE WEST IBERIAN
MARGIN

5. *Eccles, J.D., White, R.S. and Christie, P.A.F.
WIDE ANGLE CONVERTED SHEAR WAVES: FURTHER CONSTRAINT ON THE STRUCTURE OF VOLCANIC
RIFTED CONTINENTAL MARGINS IN THE NORTH ATLANTIC

The continental mantle

6. *Ayarza, P., Palomeras, I., Simancas, F., Carbonell, R., MartínezPoyatos, D., Azor, A., PérezEstaún,
A. and GonzalezLodeiro, F.
IDENTIFICATION OF THE HALES REFLECTOR IN SW IBERIA. SOME CONSTRAINTS ON ITS
NATURE

7. *Carbonell, R., Pazos, A., Morales, J., GarciaLobon, J.L., Cordoba, D., Pulgar, J., Harnafi, M., Diaz,
J., Villaseñor, A. and Gallart, J.

THE IBERARRAY SEISMIC PLATFORM: ASSESSING THE DEEP STRUCTURE OF THE
LITHOSPHERE BENEATH THE IBERIAN PENINSULA

8. *Kanao, M., Fujiwara, A., Ikawa, T., Miyamachi, H., Usui, Y., Inoue, T. and Yamada, A.
UPPER MANTLE STRUCTURE OF THE PANAFRICAN MOBIL BELT, EAST ANTARCTICA, FROM
ACTIVE AND PASSIVE STUDIES

9. Suvorov, V.D., Mishenkina, Z.R. and *Melnik, E.A.
STUDY OF THE UPPER MANTLE 3D STRUCTURE BENEATH SIBERIA FROM PEACEFUL
NUCLEAR EXPLOSION DATA

Seismic exploration of mineral resources and seismic studies on nuclear waste disposal

10. *Heinonen, S., Schijns, H., Schmitt, D., Heikkinen, P. and Kukkonen, I.T.
SEISMIC REFLECTIVITY AND ANISOTROPY IN OUTOKUMPU, FINLAND BASED ON HIGH
RESOLUTION SEISMIC SURVEY AND BOREHOLE DATA

11. Cosma, C., *Juhojuntti, N., Juhlin, C. and Wood, G.
3DSEISMIC SURVEY AT THE MILLENNIUM URANIUM DEPOSIT IN THE ATHABASCA BASIN,
CANADA

12. *Cosma, C., Enescu, N., Juhlin, C. and Wood, G.
HIGH RESOLUTION SEISMIC IMAGING AT THE MILLENNIUM URANIUM DEPOSIT, CANADA

13. *Enescu, N. and Cosma, C.
BOREHOLE SEISMIC SIDESCANS FOR MINERAL RESOURCE DELINEATION

14. *Iljina, M. and Salmirinne, H.
SUHANKO REFLECTION SEISMIC PROFILE AND INTEGRATED GEOLOGICALGEOPHYSICAL
MODEL OF THE PORTIMO AREA

15. Snyder, D.B.
SEISMIC METHODS APPLIED TODAY IN MINERAL EXPLORATION AND FOR RESOURCE ASSESSMENT OF CRYSTALLINE ROCK
16. *SorjonenWard, P., Blewett, R., Goleby, B.R. and Kukkonen, I.T.
SEISMIC IMAGING OF MINERAL SYSTEMS AT VARIOUS SCALES: SOME COMPARATIVE VIEWS FROM ON TOP AND DOWN UNDER IN FINLAND
17. *Trofimov, V. and Trofimov, A.
SPECIFICS OF DATA ACQUISITION AND PROCESSING FOR CARRYING OUT DEEP CMP SEISMIC INVESTIGATIONS IN OILBEARING REGIONS
18. *White, D.J. and Malinowski, M.
3D SEISMIC IMAGING IN THE FLIN FLON MINING CAMP, CANADA

Active continental margins and subduction structures

19. *Arai, R., Iwasaki, T., Sato, H., Abe, S. and Hirata, N.
CRUSTAL STRUCTURE BENEATH THE EASTERN PART OF THE IZU COLLISION ZONE, CENTRAL JAPAN, REVEALED BY REFRACTION/WIDEANGLE REFLECTION ANALYSIS
20. *Azuma, R., Hino, R., Ito, Y., Takanami, T., Miura, Y., Ichijo, K., Mochizuki, K., Igarashi, T., Uehira, K., Sato, T., Shinohara, M. and Kanazawa, T.
PWAVE VELOCITY STRUCTURE OF THE CRUST AND THE UPPERMOST MANTLE OF THE SUBDUCTED PACIFIC PLATE NEAR THE JAPAN TRENCH BY AIRGUN OBS SEISMIC SURVEY
21. Davey, F.J.
SEISMIC REFLECTION MEASUREMENTS ACROSS THE HIKURANGI BACKARC REGION, NEW ZEALAND
22. *Gross, K., Buske, S., Wigger, P. and Shapiro, S.A.
SEISMIC IMAGING OF THE CHILEAN SUBDUCTION ZONE AROUND THE HYPOCENTER OF THE 1960 VALDIVIA EARTHQUAKE
23. *Iidaka, T. and The Research Group for the 2007 Atotsugawa Fault Seismic Expedition.
FINE SEISMIC STRUCTURE AROUND THE ATOTSUGAWA FAULT REVEALED BY SEISMIC REFRACTION AND REFLECTION EXPERIMENTS
24. *Iidaka, T., Hiramatsu, Y. and Japanese University Group of the Joint Seismic Observations at NKTZ
SEISMIC ANISOTROPY STUDY AT THE HIGH STRAIN RATE ZONE (NIIGATAKOBE TECTONIC ZONE), IN CENTRAL JAPAN
25. *Ito, Y., Matsubara, M. and Nakajima, J.
SEISMICITY AND TOMOGRAPHY ALONG JAPAN TRENCH REVEALED BY HYBRID METHOD FOR HYPOCENTER DETERMINATION USING WAVEFORM AND TRAVEL TIME
26. *Iwasaki, T., Iidaka, T., Kurashimo, E., Katao, H., Kaneda, Y. and Research Group for 2006 Kii Seismic Expedition
SUBDUCTION STRUCTURE BENEATH THE EASTERN PART OF THE KII PENINSULA, SW JAPAN, FROM REFRACTION/WIDEANGLE REFLECTION EXPERIMENT
27. *Iwasaki, T., Ikeda, Y., Sato, H., Ito, T., Kano, K., Higashinaka, M., Suda, S., Kawanaka, T. and Research Group for Active Fault Systems along Itoigawa-Shizuka Tectonic Line
GEOMETRY OF ACTIVE FAULT SYSTEMS DEVELOPED ALONG ITOIGAWASHIZUKA TECTONIC LINE, CENTRAL JAPAN, FROM RECENT SEISMIC REFLECTION SURVEYS
28. *Kaneda, Y. and The Nankai trough Structural research group
RESEARCH IN COUPLED MEGATHRUST EARTHQUAKES AROUND THE NANKAI TROUGH SOUTHWESTERN JAPAN
29. Kikuchi, S., *Tsumura, N., Ito, T., Sato, H., Iwasaki, T., Hirata, N., Ikeda, Y., Abe, S., Aoyagi, Y., Kawanaka, T., Abe, S., Higashinaka, M. and Kozawa, T.
THE CONFIGURATION OF AN ASEISMIC SLAB BENEATH THE COLLISION ZONE BETWEEN IZU AND JAPANHONSHU ARCS, INFERRED FROM WIDEANGLE REFLECTION AND RECEIVER FUNCTION ANALYSES
30. *Kurashimo, E., Kato, A., Hirata, N., Iwasaki, T., Iidaka, T., Ito, K., Yamazaki, F., Miyashita, K. and Obara, K.
DETAILED STRUCTURE OF THE LOCKED-SLIDING TRANSITION ON THE SUBDUCTING PLATE BOUNDARY BENEATH THE SOUTHERN PART OF KII PENINSULA, SOUTHWESTERN JAPAN
31. *Lüschen, E., Müller, C., Kopp, H., Planert, L., Engels, M., Shulgín, A. and Djajadihardja, Y.S.
SUNDABANDA ARC TRANSITION: MARINE MULTICHANNEL SEISMIC PROFILING
32. *Matsubara, M. and Obara, K.
HIGH POISSON'S RATIO ZONE ACCOMPANIED ACCOMPANYING SLOW EVENTS BENEATH THE SOUTHWESTERN JAPAN
33. *Matsubara, M., Kimura, H., Takeda, T. and Obara, K.
CONFIGURATION OF PHILIPPINE SEA PLATE BENEATH KANTO AND TOKAI REGION, CENTRAL JAPAN, ESTIMATED WITH DISTRIBUTION OF REPEATING EARTHQUAKES AND SEISMIC TOMOGRAPHY

34. Nakanishi A., Fujie, G., Park, J.O., *Kodaira, S., Kaneda, Y. and Iwasaki, T.
SEISMIC TRANSECT ACROSS THE TONANKAITOKAI EARTHQUAKE SEGMENTATION
BOUNDARY, CENTRAL JAPAN
35. *Sato, H., Abe, S., Saito, H., Iwasaki, T., Kanazawa, T., Kato, N., Ito, T., Miyauchi, T., Miyazaki, S.,
Anada, F., Yoshida, S., Noguchi, T., Kawasaki, S. and Kawanaka, T.
A TWO-SHIP SEISMIC REFLECTION PROFILING OF THE SOURCE FAULT OF THE 2007 NOTO
HANTO EARTHQUAKE (M6.9), CENTRAL JAPAN
36. *Sato, H., Hirata, N., Iwasaki, T., Obara, K., Kodaira, S. and Iidaka, T.
ONGOING DEEP SEISMIC PROFILING PROJECTS IN JAPANESE ISLANDS FOR EARTHQUAKE
HAZARD MITIGATION
37. *Shiomi, K. and Park, J.
STRUCTURAL FEATURES OF THE SUBDUCTING SLAB BENEATH THE KII PENINSULA,
CENTRAL JAPAN: 1. SEISMIC EVIDENCE OF SLAB SEGMENTATION
38. *Shiomi, K. and Park, J.
STRUCTURAL FEATURES OF THE SUBDUCTING SLAB BENEATH THE KII PENINSULA,
CENTRAL JAPAN: 2. EVIDENCE FOR ANISOTROPIC ROCK EXISTENCE
39. Shulgin, A., Planert, L., Kopp, H., Müller, C., *Lüschen, E. and Flüß, E.R.
SUNDABANDA ARC TRANSITION: WIDEANGLE SEISMIC MODELLING
40. *Yamamoto, Y., Hino, R., Ito, Y., Suzuki, K., Yamada, T., Shinohara, M., Kanazawa, T., Aoki, G.,
Tanaka, M., Takanami, T., Uehira, K. and Kaneda, Y.
THREE DIMENSIONAL SEISMIC VELOCITY STRUCTURE OFF MIYAGI AND OFF THE FUKUSHIMA
FOREARC REGION
41. *Zelt, C.A., Christeson, G.L., Magnani, M.B., Clark, S.A., Guedez, M.C., Bezada, M., Levander, A.
and Schmitz, M.
BOLIVAR: CRUSTAL STRUCTURE OF THE CARIBBEAN–SOUTH AMERICAN PLATE BOUNDARY
BETWEEN 60°W AND 70°W FROM WIDEANGLE
SEISMIC DATA

Seismic studies in polar regions

42. *Kanao, M., Tanaka, S., Tsuboi, S. and Wiens, D.
BROADBAND SEISMIC DEPLOYMENTS IN EAST ANTARCTICA: IPY 20072008 CONTRIBUTION
TO UNDERSTANDING THE EARTH'S DEEP INTERIOR
43. *Majdanski, M., Sroda, P., Malinowski, M., Czuba, W., Grad, M. and Guterch, A.
3D MODEL OF THE UPPER CRUST OF THE ADMIRALTY BAY AREA
44. *Sakoulina, T.S., Roslov, Y.V., Verba, M.L., Ivanova, N.M., Belyaev, I.V., Kudinenko, N.M. and
Krupnova, N.A.
DEEP STRUCTURE OF THE NORTHERN PART OF THE BARENTS-KARA REGION ALONG THE
TRANSECT 4AR (TAIMYR PENINSULA – FRANZ JOSEF LAND ARCH)
45. Gohl, K.
INSIGHTS INTO THE STYLE AND GEODYNAMIC IMPLICATIONS OF CIRCUMANTARCTIC
PASSIVE CONTINENTAL MARGINS AND THEIR CONTINENT-OCEAN
TRANSITIONS

Integrated multidisciplinary case studies

46. Gaité, B., *Palomeras, I. and Carbonell, R.
ONLINE DEEP SEISMIC REFLECTION PROFILES WITHIN THE IBERIAN PENINSULA
47. *Grad, M., Tiira, T. & ESC Moho Working Group
EUROPEAN PLATE CRUST AND NEW DIGITAL MOHO DEPTH MAP
48. Hammer, P.T.C., *Clowes, R.M., van der Velden, A.J. and Cook, F.A.
LITHOPROBE'S TRANSCONTINENTAL LITHOSPHERIC CROSSSECTION: IMAGING THE
INTERNAL STRUCTURE OF NORTH AMERICA
49. *Juhlin, C. and the SDDP Working Group
THE SWEDISH DEEP DRILLING PROGRAM
50. *Kozlovskaya, E., Silvennoinen, H. and Janik, T.
COMPOSITION OF THE UPPER MANTLE BENEATH THE LAPLAND-KOLA OROGEN (NORTHERN
FENNOSCANDIAN SHIELD) OBTAINED BY 3D MODELING OF BOUGUER ANOMALY
51. Malehmir, A., *Juhlin, C., Tryggvason, A., Weihed, P., Thunehed, H., Hubert, J., Dehghannejad, M.
and García Juanatey, M.
3D/4D GEOLOGICAL MODELING OF THE PALAEOPROTEROZOIC SKELLEFTE ORE DISTRICT,
NORTHERN SWEDEN: IMPLICATION FOR CRUSTAL ARCHITECTURE AND MINERAL
POTENTIAL
52. *Mukhin, V.N., Kalicheva, T.I. and Afonova, E.V.
DEEP STRUCTURE MODEL OF THE SOUTH SIBERIAN PLATFORM BASED ON RESULTS OF
DEEP SEISMIC PROFILING AND GRAVIMETRIC DATA

53. *Silvennoinen, H., Kozlovskaya, E., Yliniemi, J., Tiira, T. and FIRE Working Group
INTERPRETATION OF WIDEANGLE REFLECTION AND REFRACTION RECORDINGS OF VIBROSEIS SIGNALS
AND 3D GRAVITY MODELLING ALONG FIRE4 PROFILE, NORTHERN FINLAND
54. *Stankiewicz, J., Parsiegla, N., Ryberg, T., Gohl, K., Weckmann, U., Trumbull, R. and Weber, M.
CRUSTAL STRUCTURE OF AFRICA'S SOUTHERN MARGIN FROM GEOPHYSICAL
EXPERIMENTS

Classical transects

55. *Finlayson, D.M. and Goleby, B.R.
IGCP PROJECT 474: AN INFORMATION RESOURCE FOR DEEP SEISMIC PROFILING AND
IMAGING
56. *Heikkinen, P., Kukkonen, I.T., Suleimanov, A. and Zamoshnyaya, N.
SEISMIC IMAGE OF THE FENNOSCANDIAN SHIELD ALONG THE BALTIC SEA WHITE SEA
TRANSECT
57. Parsiegla, N., *Gohl, K., UenzelmannNeben, G. and Stankiewicz, J.
THE AGULHAS-KAROO GEOSCIENCE TRANSECT: STRUCTURES AND PROCESSES ALONG
THE SOUTHERN AFRICAN CONTINENTAL MARGIN

Intracontinental collision and accretion

58. *Carbonell, R., Simancas, F., MartínezPoyatos, D., Ayarza, P., González, P., Tejero, R., Jabaloy, L., MartínParra, A., Matas, J., Azor, A., GonzálezLodeiro, F., PérezEstaún, A., GarcíaLobon, J.L. and Mansilla, L.
LITHOSPHERIC STRUCTURE OF THE SOUTHERN IBERIAN VARISCAIDES: A 600 KM LONG TRANSECT
59. *Juhojuntti, N., Dyrelus, D. and Juhlin, C.
SEISMIC IMAGING OF CRUSTAL DEFORMATION IN THE CENTRAL SCANDINAVIAN CALEDONIDES
60. *Korja, A., Heikkinen, P., Roslov, Y., Ivanova, N.M., Verba, M.L., Sakoulina, T.S. and Patison, N.L.
NORTH EUROPEAN TRANSECT – A PRELIMINARY COMPILATION
61. *Kukkonen, I.T., Kuusisto, M., Lehtonen, M. and Peltonen, P.
UPPERMOST MANTLE REFLECTORS AND MOHOCUTTING REFLECTORS IN CENTRAL FENNOSCANDIA:
DELAMINATION STRUCTURES?
62. *Oueity, J. and Clowes, R.M.
PALEOPROTEROZOIC SLAB SUBDUCTION IN NW CANADA FROM NEAR-VERTICAL AND WIDEANGLE
DATA
63. Pavlenkova G.A. and *Pavlenkova N.I.
LITHOSPHERE STRUCTURE OF THE SOUTHERN PART OF THE FENNOSCANDIA
64. Sroda, P.
PROPERTIES OF REFLECTIONS FROM THE UPPERMOST MANTLE OF THE WEST
CARPATHIANS – KINEMATIC AND AMPLITUDE MODELLING FROM CELEBRATION'2000 DATA
65. *Zhang, Z., Bai, Z., Mooney, W., Chen, Y. and Teng, J.
CRUSTAL STRUCTURE UNDER MOBAGUIDE DEEP SEISMIC PROFILE IN EAST TIBET

Continental rifts and basins

66. *Dena, O., Miller, K.C. and ten Brink, U.
CRUSTAL STRUCTURE OF NORTHERN LAKE BAIKAL, RUSSIA
67. *Perchuc, E., Gaczynski, E. and Malinowski, M.
STRUCTURE OF THE BAIKAL RIFT BASED ON THE INTERPRETATION OF P AND SWAVES
DATA –PHYSICAL DIFFERENTIATION OF THE CRUSTALMANTLE TECTONIC BLOCKS
68. *Stratford, W., Thybo, H., Faleide, J., Olesen, O. and Tryggvason, A.
CRUSTAL STRUCTURE OF THE CENTRAL OSLO GRABEN: RESULTS FROM THE MAGNUSREX
SEISMIC EXPERIMENT
69. *Zhang, Z., Chen, Q., Bai, Z., Chen, Y. and Badal, J.
CRUSTAL STRUCTURE ACROSS THE LITHOSPHERE THINNING BELT FROM WIDEANGLE
SEISMIC DATA IN NORTH CHINA

Innovative seismic acquisition and processing techniques and numerical modelling and inverse methods

70. Abe, S., Saito, H., *Sato, H., Koshiya, S., Shiraishi, K., Kato, N. and Kawanaka, T.
INTEGRATED SEISMIC IMAGING OF ACTIVE AND PASSIVE DATA FOR THE DELINEATION OF
ACTIVE FAULTS AND CRUSTAL STRUCTURE IN THE KITAKAMI LOWLAND, NORTHEAST JAPAN
71. Bogdanov, Y.B., Petrov, B.V., *Milshtein, E.D. and Erinchek, Y.M.
3D MODEL OF EAST FENNOSCANDIA DEEP STRUCTURE: RESULTS OF GEOLOGICAL INTERPRETATION
72. *Carpentier, S.F.A., RoyChowdhury, K., Hurich, C.A. and Stephenson, R.A.
DELINEATING TECTONIC UNITS IN THE ABITIBIGRENVILLE PROVINCE, CANADA, AND
DONBAS FOLDBELT, UKRAINE, BY MAPPING CORRELATION LENGTHS IN LITHOPROBE AND
DOBRE DEEP REFLECTION DATA

73. Derzsi, M.
ELECTRONIC AND MAGNETIC PROPERTIES AND LATTICE DYNAMICS OF γ -Fe₂SiO₄: GROUND STATE AND THE EFFECT OF PRESSURE
74. Eaton, D.W., Vasudevan, K. and Cook, F.A.
APPLICATION OF SKELETONIZATION/MIGRATION IN DEEP CRUSTAL REFLECTION SEISMIC PROFILING
75. *Ferahtia, J., Djarfour, N. and Baddari, K.
DETECTION ESTIMATION BASED ALGORITHMS FOR THE REMOVAL OF RANDOM AND GAUSSIAN NOISE FROM SEISMIC NOISY DATA
76. Guasch, L., Operto, S., Sallarés, V. and *Carbonell, R.
EFFECTS OF DECIMATION INPUT DATA ON FULL WAVEFORM TOMOGRAPHY. APPLICATION TO COMPLEX SYNTHETIC MODELS
77. *Hurich, C.A. and Deemer, S.J.
HOW MANY SOURCES ARE ENOUGH IN A VIRTUAL WORLD?
78. Jochym, P.T.
NUMERICAL EVALUATION OF THE CRYSTAL STRUCTURE AND PROPERTIES OF BRUCITE
79. *Majdanski, M. and Hobbs, R.W.
BAYESIAN DETERMINATION OF THE UNCERTAINTY IN THE TRAVEL TIME INVERSION
80. Ronin, A.L. and *Lebedkin, P.A.
STATISTICAL DYNAMICAL PROCESSING OF DEEP SEISMIC PROFILING DATA
81. *Sakoulina, T.S., Tikhonova, I.M., Krupnova, N.A. and Pavlenkova, N.I.
DEEP SEISMIC INVESTIGATIONS ALONG THE TRANSECT 2DW "MAGADAN SOUTHERN KURILS" IN THE OKHOTSK SEA
82. *Sakoulina, T.S., Matveev, Y.I., Roslov, Y.V., Kashubin, S.N., Lukashin, Y.P. and Pavlenkova, N.I.
OFFSHORE MULTI COMPONENT DEEP SEISMIC INVESTIGATIONS
83. *Stiller, M., Jaekel, K.H., Stier, F. and DESIRE group
EFFECTIVE SUPPRESSION OF (SUB)HARMONIC NOISE FROM VIBROSEIS RECORDS
84. Zelt, C.A.
FORWARD AND INVERSE MODELING OF CONTROLLED-SOURCE SEISMIC DATA

Crust forming processes and seismic studies

85. *Chen, Y., Zhang, Z.J. and Badal, J.
RADIAL ANISOTROPY IN THE CRUST AND UPPER MANTLE BENEATH THE TIBETAN PLATEAU
86. *Elbra, T., Lassila, I., Karlqvist, R., Raiskila, S., Hæggeström, E. and Pesonen, L.J.
ULTRASONIC SEISMIC VELOCITIES IN FIRE AND ODDP SAMPLES, FINLAND, FENNOSCANDIAN SHIELD
87. Hajnal, Z., *Takacs, E., Pandit, B., Reilkoff, B. and Annesley, I.
BRIGHT REFLECTOR IN THE UPPER CRUST BENEATH THE EASTERN ATHABASCA BASIN IN SASKATCHEWAN, CANADA
88. *Janik, T., Kozlovskaya, E., Heikkinen, P., Yliniemi, J. and Silvennoinen, H.
COMPARISON OF P- AND S-WAVE VELOCITY MODELS OF POLAR AND HUKKA WIDE ANGLE REFLECTION AND REFRACTION PROFILES WITH FIRE4 REFLECTION TRANSECT, THE NORTHERN FENNOSCANDIAN SHIELD
89. *Janik, T., Grad, M., Guterch, A. and CELEBRATION2000 Working Group
2.5D SEISMIC MODELING OF THE LITHOSPHERE BETWEEN EEC AND CARPATHIANS MOUNTAINS ON THE BASE OF THE NET OF CELEBRATION2000 PROFILES
90. Lundberg, E. and *Juhlin, C.
REFLECTION SEISMIC STUDIES OF THE ULLARED DEFORMATION ZONE, SOUTHERN SWEDEN
91. Miura, S., *Kodaira, S., Takahashi, N., Fujie, G., Sato, T., Yamashita, M., Kaiho, Y., No, T., Takizawa, K., Kaneda, Y., Kaneda, K. and Nishizawa, A.
INITIAL RIFTING STRUCTURE IN THE NORTHERNMOST MARIANA REGION REVEALED FROM DEEP SEISMIC PROFILES
92. *Palomeras, I., Flecha, I., Carbonell, R., Simancas, F., MartínezPoyatos, D., Ayarza, P., González, P., Jabaloy, A., MartínParra, L., Matas, J., Azor, A., GonzálezLodeiro, F. and PérezEstaún, A.
THE NATURE OF THE CRUST AND UPPER MANTLE ACROSS THE VARISCAN OROGEN OF SW IBERIA
93. Sato, T., *Kodaira, S., Takahashi, N., Miura, S. and Kaneda, Y.
VARIATION OF THE CRUST/MANTLE TRANSITION LAYER BENEATH THE VOLCANIC FRONT ALONG THE IZUBONIN ISLAND ARC DEDUCED FROM THE AMPLITUDE MODELING
94. *SorjonenWard, P., Lukkarinen, H., Paavola, J. and Äikäs, O.
SEISMIC IMAGING OF INTERACTION BETWEEN DEFORMATION AND PLUTON EMPLACEMENT IN EASTERN FINLAND
95. *Takahashi, N., Kodaira, S., Miura, S., Sato, T., Yamashita, M., No, T., Takizawa, K., Kaiho, Y. and Kaneda, Y.
VARIATIONS OF SEISMIC STRUCTURES IN THE IZUOGASAWAMARIANA ARC BROUGHT BY CRUSTAL EVOLUTION

96. Uski, M., Tiira, T., *Grad, M. and Yliniemi, J.

CRUSTAL VELOCITY MODELS AND MOHO MAP FOR THE KAINUUPERÄPOHJOLA REGION IN
FINLAND

97 Soloviev, V.M , Seleznev, V.S., Emanov, A.F., Salnikov, A.S., Kashun, V.N., Danilov, I.A.,
Liseikin, A.V., Elagin, S. and Chichinin, I.S.

APPLICATION OF POWERFUL VIBRO SOURCES FOR ACTIVE SEISMOLOGY AND DEEP EARTH SOUNDING