

Timo Tiira  
Supervisor for doctoral programme  
Institute of Seismology  
Doctoral Programme in Geosciences  
**Type of address: Postal address.**  
Finland

## Qualifications

geophysics, PhD, Discrimination of seismic events using Finnish station network  
Award Date: 30 Jun 1998

physics, MSc, Seismisten signaalien havaitseminen Hutt&Murdock-detektorin ja digitaalisen suodatuksen avulla.,  
Department of Physics  
Award Date: 25 May 1989

## Principal Investigator

Period : 01.12.2009 - \* in Department of Geosciences and Geography

## Employment

### Institute of Seismology

University of Helsinki  
Helsingin yliopisto, Finland  
1 Jan 2010 → present

### Supervisor for doctoral programme

Doctoral Programme in Geosciences  
University of Helsinki  
Finland  
1 Jan 2020 → present

## Projects

### Development and applications of new methods in seismic research

Tiira, T., Korja, A., Komminaho, K., Vuorinen, T. & Kortström, J.  
01/01/2010 → ...

### DOLID: Development of Institute of Seismology University of Helsinki Data, Data products, Software and Services

Luhta, T., Tiira, T., Vuorinen, T., Korja, A., Salmenperä, I. E., Kortström, J., Oinonen, K., Veikkolainen, T., Uski, M. & Heikkilä, T. M.  
01/06/2017 → ...

### ESU 2015

Tiira, T., Komminaho, K., Väkevä, S., Skrzynic, T. & Janik, T.  
01/05/2015 → ...

### Evaluating seismic hazard for Pyhäjoki nuclear power plant

Korja, A., Tiira, T., Mäntyniemi, P., Uski, M., Valtonen, O., Kosonen, E., Laine, M., Mikkö, N., Huotari-Halkosaari, T., Airo, M., Sutinen, R., Högdahl, K., Lund, B., Stephens, M. & Grigull, S.  
01/03/2013 → 31/05/2016

### FLEX-EPOS: FLEX-EPOS - Flexible instrument network for enhanced geophysical observations and multidisciplinary research

Kukkonen, I., Koivisto, E., Junno, N., Vuorinen, T., Tiira, T., Oksanen, T. J., Lindblom, P., Haapanala, P., Hillers, G., Komminaho, K. & Juntunen, A. K.  
01/01/2020 → 31/12/2024

**Helsingin seisminen asemaverkko**

Luhta, T., Tiira, T., Vuorinen, T., Mäntyniemi, P., Seipäjärvi, P. J., Kortström, J., Keskinen, J., Lindblom, P., Juntunen, A. K., Veikkolainen, T., Arhe, K., Hällsten, J. M. A. & Oinonen, K.

01/08/2019 → ...

**HUKKA07**

Tiira, T., Korja, A., Komminaho, K., Grad, M., Janik, T., Kozlovskaya, E., Hegedus, E., Kovács, C. A., Brückl, E. & Silvennoinen, H.

01/01/2007 → 30/11/2014

**FIN-EPOS: Implementation of FIN-EPOS - a FINnish national initiative of the European Plate Observing System**

Korja, A., Kukkonen, I., Tiira, T., Vuorinen, T., Aalto, A., Veikkolainen, T. & Junno, N.

01/01/2016 → 31/12/2020

**Intraplate earthquake swarms in south-eastern Finland**

Tiira, T., Uski, M. & Komminaho, K.

01/12/2011 → ...

**Kokkola-Kymi Deep Seismic Sounding**

Tiira, T., Komminaho, K., Korja, A., Heinonen, A., Veikkolainen, T., Väkevä, S., Skrzynic, T. & Janik, T.

01/05/2012 → 17/03/2020

**Lithosphere-Asthenosphere boundary in Europe**

Tiira, T., Grad, M. & Komminaho, K.

01/07/2007 → ...

**Moho depth map for European plate**

Tiira, T., Grad, M. & Komminaho, K.

20/05/2005 → 20/12/2020

**Monitoring the monitoring**

Luhta, T., Oinonen, K., Vuorinen, T., Whipp, D., Veikkolainen, T., Kortström, J., Tiira, T., Oksanen, T. J., Voutilainen, A. I. & Hällsten, J. M. A.

02/03/2020 → ...

**OBF: Pyhäjoki seismic network**

Korja, A., Tiira, T., Uski, M., Kortström, J., Valtonen, O. & Vuorinen, T.

15/10/2011 → ...

**SCARCE: Scandinavian Arctic Continental Experiment**

Schiffer, C., Luhta, T., Komminaho, K., Pekkala, M. V. & Tiira, T.

01/11/2021 → ...

**SEISMIC RISK - Mit-ig-a-tion of in-duced seis-mic risk in urban en-vir-on-ments**

Korja, A., Fülop, L., Putkinen, N., Junno, N., Hillers, G., Mäntyniemi, P., Vuorinen, T., Veikkolainen, T., Bäcklund, P., Oinonen, K., Tuomisaari, J. M., Tiira, T., Rintamäki, A. E., Voutilainen, A. I., Sadeghibagherabadi, A., Oksanen, T. J., Rantanen, A. M., Metsalo, K. V. A. & Makkonen, E. I. A.

21/08/2020 → 30/11/2023

**FIN-EPOS-Seismo: Seismisen asemaverkon laajennus; FIRI-omarahoitusosuuus**

Korja, A., Lindblom, P., Tiira, T., Komminaho, K. & Kortström, J.

01/01/2015 → 31/01/2018

### **South Finland Coastal Deep Seismic Sounding**

Tiira, T., Janik, T., Veikkolainen, T., Komminaho, K., Skrzynik, T., Väkevä, S. & Heinonen, A.

01/05/2015 → 20/06/2023

### **Structure and evolution of the Eurasian plate**

Tiira, T., Korja, A., Heikkilä, P. & Komminaho, K.

01/01/2005 → ...

### **University profiling funding 7 InterEarth RESET**

Airavaara, M., Heiskanen, J., Huiskonen, J., Hyvärinen, M., Kulmala, M., Kulmala, M., Mervaala, E., Mäkelä, J., Primmer, C., Räsänen, A., Sironen, T., Toivonen, R., Ahonen, L., Alakukku, L., Auvinen, P., Betz-Heinemann, A., Citterico, M., Ecke, F., El Wali, M., Eronen, J. T., Fuentenebro Alonso, P., Gammal, J., Green, S., Heikinheimo, A., Heinonen, M., Holopainen, M., Hytyläinen, K., Kaartinen, T., Karhu, K., Kaukonen, M., Kermiinen, V., Kiljunen, S., Kolari, P., Korpela, K., Lajunen, A., Lampilahti, J., Lehto, K., Lewandowska, A., Lindroos, M., Lintunen, A., Luomanen, P., Mietola, R., Mühlleip, A. W., Norkko, J., Omija Korpela, J. A., Paasonen, P., Pietikäinen, J., Pihlatie, M., Raivonen, M., Ruohomäki, A. I., Ryhti, K., Sadeghibagherabadi, A., Siven, M., Syrjä, P., Taira, T., Tani, S., Tanskanen, T. T., Tatti, N., Thomas, D. N., Tiira, T., Toppinen, A., Uimari, P., Vainio, A., Varjosalo, M., Vartiainen, M., Veikkolainen, T. & Zaidan, M. A.

Academy of Finland, Suomen Akatemia Projektilaskutus

01/01/2023 → 31/12/2028

### **FIN-EPOS-Seismo: Upgrading Finnish national seismic network FIRI2014**

Korja, A., Lindblom, P., Tiira, T., Kortström, J., Kozlovskaya, E. & Mäntyniemi, P.

01/01/2015 → 31/12/2017

### **Vyborg Rapakivi Batholith Seismicity**

Luhta, T., Tiira, T., Mäntyniemi, P., Komminaho, K., Oinonen, K., Vuorinen, T., Whipp, D. & Veikkolainen, T.

01/06/2019 → ...

## **Publications**

### **Helsingin seisminen asemaverkko ja seismisyys 2023**

Veikkolainen, T., Oinonen, K., Vuorinen, T., Kortström, J., Mäntyniemi, P., Seipäjärvi, P. J., Hällsten, J. M. A. & Tiira, T., Apr 2024, Institute of Seismology, University of Helsinki. 20 p. (Report; no. T-110)

### **International Union of Geodesy and Geophysics (IUGG)**

Silvennoinen, S. E. E., Salminen, J., Näränen, J. A., Pettersson, H., Riihelä, A., Rämö, T., Tiira, T., Tuomi, L., Uotila, P., Uusikivi, J. A. J. & Vanhamäki, H., 16 Mar 2023, p. 65.

### **Helsingin seisminen asemaverkko ja seismisyys 2022**

Veikkolainen, T., Oinonen, K., Vuorinen, T., Kortström, J., Mäntyniemi, P., Lindblom, P., Seipäjärvi, P. J., Hällsten, J. M. A. & Tiira, T., Mar 2023, Institute of Seismology, University of Helsinki. 21 p. (Report; no. T-109)

### **OBF-verkon toiminta ja seismiset havainnot vuonna 2021**

Luhta, T., Hällsten, J. M. A., Vuorinen, T., Kortström, J., Oinonen, K. & Tiira, T., 29 Apr 2022, Helsinki: Seismologian laitos . 18 p. (Seismologian instituutin T-raportit; no. T-108)

### **Helsingin seisminen asemaverkko ja seismisyys 2021**

Veikkolainen, T., Oinonen, K., Vuorinen, T., Kortström, J., Mäntyniemi, P., Lindblom, P., Luhta, T., Hällsten, J. M. A. & Tiira, T., Mar 2022, Helsinki: Institute of Seismology, University of Helsinki. 35 p. (Report; no. T-106)

### **Seismic velocity models based on wide-angle refraction and reflection profiles in Finland**

Kolehmainen, K. O., Heinonen, S., Komminaho, K., Tiira, T. & Veikkolainen, T., Mar 2022, Helsinki: Institute of Seismology, University of Helsinki. 24 p. (Report; no. T-107)

### **Tammervoiman geotermisen voimalan seisminen monitorointi 2021**

Luhta, T., Oinonen, K., Kortström, J., Vuorinen, T., Seipäjärvi, P. J., Pekkala, M. V., Veikkolainen, T., Lindblom, P. & Tiira, T., Mar 2022, Helsinki: Helsingin yliopisto. 26 p. (Seismologian instituutin raportti; no. T-105)

**HelsinkiNet - a collaborative seismological research network of the Institute of Seismology, and the City of Helsinki**  
Veikkolainen, T., Oinonen, K., Vuorinen, T., Kortström, J., Mäntyniemi, P., Lindblom, P., Luhta, T., Hällsten, J. M. A., Seipäjärvi, P. J. & Tiira, T., 2022, XXX GEOFYSIKAN PÄIVÄT. Veikkolainen, T., Tuomi, L., Saari, T., Mäntyniemi, P., Suomi, I., Väkevä, S., Laaksonen, A. & Holappa, L. (eds.). Helsinki: Geofysiikan seura, p. 65-68 4 p. (Geofysiikan Päivät).

**Implications on crustal structure from the South Finland Coastal (SOFIC) deep seismic sounding profile**  
Tiira, T., Janik, T., Veikkolainen, T., Komminaho, K., Skrzynik, T., Väkevä, S. & Heinonen, A., 2022, In: Bulletin of the Geological Society of Finland . 94, 2, p. 165-180

#### **OBF-verkon toiminta ja seismiset havainnot vuonna 2020**

Luhta, T., Voutilainen, A. I., Vuorinen, T., Kortström, J. & Tiira, T., 7 May 2021, Seismologian laitos. 15 p. (Seismologian instituutin T-raportit; no. T-104)

#### **The Finnish National Seismic Network: Toward Fully Automated Analysis of Low-Magnitude Seismic Events**

Veikkolainen, T., Kortström, J., Vuorinen, T., Salmenperä, I. E., Luhta, T., Mäntyniemi, P., Hillers, G. & Tiira, T., 29 Apr 2021, In: Seismological Research Letters. 92, 3, p. 1581-1591 11 p.

#### **Helsingin seisminen asemaverkko ja seismisyys 2020**

Veikkolainen, T., Oinonen, K., Vuorinen, T., Kortström, J., Mäntyniemi, P., Lindblom, P., Uski, M. & Tiira, T., 2021, Institute of Seismology, University of Helsinki. 30 p. (Report; no. T-103)

#### **Lithosphere 2021: Eleventh symposium on structure, composition and evolution of the lithosphere**

Kukkonen, I. (ed.), Veikkolainen, T. (ed.), Heinonen, S. (ed.), Karell, F. (ed.), Kozlovskaya, E. (ed.), Luttinen, A. (ed.), Nikkilä, K. (ed.), Nykänen, V. (ed.), Poutanen, M. (ed.), Skyttä, P. (ed.), Tanskanen, E. (ed.) & Tiira, T. (ed.), 2021, Institute of Seismology, University of Helsinki. 179 p. (Report S; vol. 71)

#### **A benchmark case study for seismic event relative location**

Gibbons, S. J., Kvaerna, T., Tiira, T. & Kozlovskaya, E., Nov 2020, In: Geophysical Journal International. 223, 2, p. 1313–1326 14 p.

#### **Full-Scale Crustal Interpretation of Kokkola-Kymi (KOKKY) Seismic Profile, Fennoscandian Shield**

Tiira, T., Janik, T., Skrzynic, T., Komminaho, K., Heinonen, A., Veikkolainen, T., Väkevä, S. & Korja, A., Aug 2020, In: Pure and applied geophysics : PAGEOPH. 177, p. 3775-3795 21 p.

#### **Helsingin seisminen asemaverkko ja seismisyys 2019**

Luhta, T., Mäntyniemi, P., Vuorinen, T., Lindblom, P., Seipäjärvi, P. J., Oinonen, K., Kortström, J. & Tiira, T., 10 Mar 2020, Institute of Seismology, University of Helsinki. 21 p. (Report; no. T-101)

#### **The 2018 Geothermal Reservoir Stimulation in Espoo/Helsinki, Southern Finland: Seismic Network Anatomy and Data Features**

Hillers, G., Vuorinen, T. A. T., Uski, M., Kortström, J., Mäntyniemi, P., Tiira, T., Malin, P. E. & Saarno, T., Mar 2020, In: Seismological Research Letters. 91, 2, p. 770-786 17 p.

#### **OBF-VERKON TOIMINTA JA SEISMISET HAVAINNOT VUONNA 2019**

Vuorinen, T. A. T., Voutilainen, A. I., Kortström, J. T., Uski, M. R. & Tiira, T., 2020, Helsinki: Institute of Seismology, University of Helsinki. 16 p. (Report; no. T-100)

#### **Seismisyys Espoon Otaniemen syväreikähankkeen viimeistelyvaiheessa**

Veikkolainen, T., Uski, M., Voutilainen, A. I., Vuorinen, T., Oinonen, K., Kortström, J., Luhta, T., Mäntyniemi, P. & Tiira, T., 2020, Institute of Seismology, University of Helsinki. 33 p. (Report; no. T-102)

#### **OBF-VERKON TOIMINTA JA SEISMISET HAVAINNOT VUONNA 2018**

Vuorinen, T. A. T., Seipäjärvi, P. J., Kortström, J. T., Uski, M. R. & Tiira, T., 2019, Helsinki: Institute of Seismology, University of Helsinki. 14 p. (Report; no. T-99)

**Lithospheric structure along wide-angle seismic profile GEORIFT 2013 in Pripyat–Dnieper–Donets Basin (Belarus and Ukraine)**

Starostenko, V., Janik, T., Yegorova, T., Czuba, W., Środa, P., Lysynchuk, D., Aizberg, R., Garetsky, R., Karataev, G., Gribik, Y., Farfuliak, L., Kolomiyets, K., Omelchenko, V., Komminaho, K., Tiira, T., Gryn, D., Guterch, A., Legostaeva, O., Thybo, H. & Tolkunov, A., Mar 2018, In: *Geophysical Journal International*. 212, 3, p. 1932-1962 31 p.

**BABEL3&3a: Crustal-Scale Structures of the Precambrian Svecfennian Accretionary Orogen in the Fennoscandian Shield**

Korja, A., Heikkilä, P. J., Tiira, T. & Nikkilä, K. M., 2018, *Atlas of Structural Geological Interpretation from Seismic Images*. Misra, A. A. & Mukherjee, S. (eds.). 1. ed. Chichester, U.K.: John Wiley & Sons Ltd. , p. 205-208 4 p.

**OBF-VERKON TOIMINTA JA SEISMISET HAVAINNOT VUONNA 2017**

Vuorinen, T. A. T., Kaisko, O. S., Kortström, J. T., Uski, M. R. & Tiira, T., 2018, Helsinki: Institute of Seismology, University of Helsinki. 14 p. (Report; no. T-98)

**Refraction seismic studies along the Kokkola-Kymi transect, Central Fennoscandia**

Väkevä, L. S. O., Tiira, T., Janik, T., Veikkolainen, T. H. K., Skrzynik, T., Heinonen, A. P., Komminaho, K. J. & Korja, A., 2018, *Lithosphere 2018. Tenth symposium on structure, composition and evolution of the lithosphere. Programme and extended abstracts..* Oulu: Institute of Seismology, University of Helsinki, Vol. 10. p. 127-130

**Updated Fennoscandian GMPE**

Vuorinen, T. A. T., Tiira, T., Uski, M. R. & Lund, B., 2018, Helsinki: Institute of Seismology, University of Helsinki. 73 p. (Report; no. T-97)

**Heat flow, seismic cutoff depth and thermal modeling of the Fennoscandian Shield**

Veikkolainen, T., Kukkonen, I. T. & Tiira, T., 1 Dec 2017, In: *Geophysical Journal International*. 211, 3, p. 1414-1427 14 p.

**Crustal and Upper Mantle Velocity Model along the DOBRE-4 Profile from North Dobruja to the Central Region of the Ukrainian Shield: 1. Seismic Data**

Starostenko, V. I., Janik, T., Gintov, O. B., Lysynchuk, D. V., Środa, P., Czuba, W., Kolomiyets, E. V., Aleksandrowski, P., Omelchenko, V. D., Komminaho, K., Guterch, A., Tiira, T., Gryn, D. N., Legostaeva, O. V., Thybo, G. & Tolkunov, A. V., Mar 2017, In: *Izvestiya, Russian Academy of Sciences. Physics of the Solid Earth*. 53, 2, p. 193-204 12 p.

**Upper mantle structure across the Trans-European Suture Zone imaged by S-receiver functions**

Knapmeyer-Endrun, B., Krueger, F., Geissler, W. H., PASSEQ Working Grp, Komminaho, K. J. & Tiira, T., 15 Jan 2017, In: *Earth and Planetary Science Letters*. 458, p. 429-441 13 p.

**Automatic classification and onset estimation of seismic P and S wave signals recorded at local seismic network using artificial neural networks**

Tiira, T., 2017. 1 p.

**Automatic Classification of Seismic P and S Wave Signals Using Multiple Parameters, Frequency Ranges and Artificial Neural Network**

Tiira, T., 2017. 1 p.

**Crustal and Upper Mantle Velocity Model along the DOBRE-4 Profile from North Dobruja to the Central Region of the Ukrainian Shield: 2. Geotectonic Interpretation**

Starostenko, V. I., Janik, T., Gintov, O. B., Lysynchuk, D. V., Środa, P., Czuba, W., Kolomiyets, E. V., Aleksandrowski, P., Omelchenko, V. D., Komminaho, K., Guterch, A., Tiira, T., Gryn, D. N., Legostaeva, O. V., Thybo, G. & Tolkunov, A. V., 2017, In: *Izvestiya, Russian Academy of Sciences. Physics of the Solid Earth*. 53, 2, p. 205–213 9 p.

**Lithospheric studies along seismic profile KOKKY, between Gulf of Bothnia and Gulf of Finland, Baltic Shield**

Tiira, T., Skrzynik, T., Janik, T., Komminaho, K. J., Väkevä, L. S. O. & Korja, A., 2017. 1 p.

## **OBF-VERKON TOIMINTA JA SEISMISET HAVAINNOT VUONNA 2016**

Kaisko, O. S., Vuorinen, T. A. T., Kortström, J. T., Uski, M. R. & Tiira, T., 2017, Helsinki: Institute of Seismology, University of Helsinki. 30 p. (Report; no. T-96)

### **Seismic cutoff depth and geotherms of the Fennoscandian Shield**

Veikkolainen, T. H. K., Kukkonen, I. T. & Tiira, T., 2017, *Geofysiikan päivät 18.-19.5.2017*. Veikkolainen, T., Tuomi, L., Korja, T., Suomi, I., Nordman, M., Bilker-Koivula, M. & Väkevä, S. (eds.). Helsinki: Geofysiikan seura, p. 110-113 4 p. (Geofysiikan Päivät).

### **The GEORIFT 2013 wide-angle seismic profile, along Pripyat-Dnieper-Donets Basin**

Starostenko, V. I., Janik, T., Yegorova, T., Czuba, W., Środa, P., Lysynchuk, D. V., Aizberg, R., Garetsky, R., Karataev, G., Gribik, Y., Farfuliak, L., Kolomiyets, K., Omelchenko, V. D., Gryn, D. N., Guterch, A., Komminaho, K. J., Legostaeva, O. V., Thybo, H., Tiira, T. & Tolkunov, A. V., 2017. 1 p.

### **Local Seismic Events in the Area of Poland Based on Data from the PASSEQ 2006-2008 Experiment**

PASSEQ Working Group & Komminaho, K. J., Dec 2016, In: *Acta Geophysica*. 64, 6, p. 2092-2113 22 p.

### **Local seismic network for monitoring of a potential nuclear power plant area**

Tiira, T. E., Uski, M. R., Kortström, J. T., Kaisko, O. S. & Korja, A., Apr 2016, In: *Journal of Seismology*. 20, 2, p. 397-417 21 p.

### **Automatic classification of seismic events within a regional seismograph network**

Kortström, J., Uski, M. & Tiira, T., Feb 2016, In: *Computers & Geosciences*. 87, p. 22-30 9 p.

### **Phase velocities of Rayleigh and Love waves in central and northern Europe from automated, broad-band, interstation measurements**

Soomro, R. A., Weidle, C., Cristiano, L., Lebedev, S., Meier, T., PASSEQ Working Group, Komminaho, K. J. & Tiira, T., Jan 2016, In: *Geophysical Journal International*. 204, 1, p. 517-534 18 p.

### **Applying seismic cutoff depth in thermal modelling of the Fennoscandian Shield**

Veikkolainen, T. H. K., Kukkonen, I. T. & Tiira, T., 2016, *Lithosphere 2016 : Ninth Symposium on the Structure, Composition and Evolution of the Lithosphere in Fennoscandia Programme and Extended Abstracts*. Kukkonen ... [et al.], I. (ed.). Helsinki: Institute of Seismology, University of Helsinki, p. 149-152 4 p. (Report. S; no. 65).

### **Automatic data processing and analysis system for monitoring region around a planned nuclear power plant**

Kortström, J. T., Tiira, T. & Kaisko, O. S., 2016, In: *Advances in Geosciences*. 41, p. 73-81 9 p.

### **Lithosphere 2016 - Ninth Symposium on the Structure, Composition and Evolution of the Lithosphere in Finland: Programme and Extended Abstracts**

Kukkonen, I. T. (ed.), Heinonen, S. (ed.), Oinonen, K. J. (ed.), Arhe, T. K. (ed.), Eklund, O. (ed.), Karell, F. (ed.), Kozlovskaya, E. (ed.), Luttinen, A. V. (ed.), Lahtinen, R. (ed.), Lunkka, J. (ed.), Nykänen, V. (ed.), Poutanen, M. (ed.), Tanskanen, E. (ed.) & Tiira, T. (ed.), 2016, Helsinki: Institute of Seismology, University of Helsinki. 156 p. (Report S; no. S-65)

### **Evaluating Seismic Hazard for the Hanhikivi Nuclear Power Plant Site, Seismological Characteristics of the Source Areas, Attenuation of Seismic Signal, and Probabilistic Analysis of Seismic Hazard.**

Saari, J. (ed.), Lund, B., Malm, M. M., Mäntyniemi, P. B., Oinonen, K. J., Tiira, T., Uski, M. R. & Vuorinen, T. A. T., 1 Jun 2015, ÅF-Consult Ltd. 258 p.

### **Upper mantle structure around the Trans-European Suture Zone obtained by teleseismic tomography**

Janutyte, I., Majdanski, M., Voss, P. H., Kozlovskaya, E., Tiira, T. E., Komminaho, K. J. & PASSEQ Working Group, 16 Jan 2015, In: *Solid Earth*. 6, 1, p. 73-91 19 p.

**Seismic model of the crust and upper mantle in the Scythian Platform: the DOBRE-5 profile across the north western Black Sea and the Crimean Peninsula**

Starostenko, V., Janik, T., Yegorova, T., Farfuliak, L., Czuba, W., Środa, P., Thybo, H., Artemieva, I., Sosson, M., Volkman, Y., Kolomiyets, K., Lysynchuk, D., Omelchenko, V., Gryn, D., Guterch, A., Komminaho, K., Legostaeva, O., Tiira, T. & Tolkunov, A., 2015, In: Geophysical Journal International. 201, 1, p. 406-428 23 p.

**The European Arctic: A Laboratory for Seismoacoustic Studies**

Gibbons, S. J., Asming, V., Eliasson, L., Fedorov, A., Fyen, J., Kero, J., Kozlovskaya, E., Kvaerna, T., Liszka, L., Nasholm, S. P., Raita, T., Roth, M., Tiira, T. & Vinogradov, Y., 2015, In: Seismological Research Letters. 86, 3, p. 917-928 12 p.

**Seismic lithosphere–asthenosphere boundary beneath the Baltic Shield**

Grad, M., Tiira, T., Olsson, S. & Komminaho, K., 20 Oct 2014, In: Geologiska Förening i Stockholm Förhandlingar. 136, 4, p. 581-598 18 p.

**Mantle lithosphere transition from the East European Craton to the Variscan Bohemian Massif imaged by shear-wave splitting**

Vecsey, L., Plomerová, J., Babuška, V., PASSEQ Working Group, Tiira, T. E. & Komminaho, K. J., 6 Aug 2014, In: Solid Earth. 5, 2, p. 779–792

**Crustal Architecture of the Inverted Central Lapland Rift Along the HUKKA 2007 Profile**

Tiira, T., Janik, T., Kozlovskaya, E., Grad, M., Korja, A., Komminaho, K., Hegedus, E., Kovacs, C. A., Silvennoinen, H. & Bruckl, E., Jul 2014, In: Pure and applied geophysics : PAGEOPH. 171, 7, p. 1129-1152 24 p.

**Local seismic events in area of Poland based on data from PASSEQ 2006-2008 experiment**

Polkowski, M., Plesiewicz, B., Wiszniewski, J., Wilde-Piórko, M., PASSEQ Working Group Team, Komminaho, K. & Tiira, T., 2014, In: Geophysical Research Abstracts. 16, EGU2014-8431.

**Moho depth across the Trans-European Suture Zone from P-and S-receiver functions**

Knapmeyer-Endrun, B., Kruger, F., Wilde-Piórko, M., Geissler, H., Plomerova, J., Grad, M., Babuska, J., Bruckl, E., Cyziene, J., Czuba, W., England, R., Gaczynski, E., Gazdova, R., Gregersen, S., Guterch, A., Hanka, W., Hegedus, E., Heuer, B., Jedlicka, B., Lazauskiene, J., & 20 othersKeller, G. R., Kind, R., Klinge, K., Kolinsky, P., Komminaho, K., Kozlovskaya, E., Larsen, T., Majdanski, M., Malek, J., Motuza, G., Novotny, O., Pietrasik, R., Plenefisch, T., Ruzek, B., Sliaupa, S., Środa, P., Swieczak, M., Tiira, T., Voss, P. & Wiejacz, P., 2014, In: Geophysical Journal International. 197, 2, p. 1048-1075 28 p.

**SEISMIC STRUCTURE ALONG DOBRE-5 PROFILE, FROM THE NORTH DOBROGEA OROGEN ACROSS THE SW SHELF OF THE BLACK SEA AND CRIMEA PENINSULA, UKRAINE**

Starostenko, V., Janik, T., Yegorova, T., Farfuliak, L., Czuba, W., Środa, P., Sosson, M., Volkman, Y., Kolomiyets, K., Lysynchuk, D., Omelchenko, V., Gryn, D., Guterch, A., Komminaho, K., Legostaeva, O., Thybo, H., Tiira, T. & Tolkunov, A., 2014, *Unknown host publication*. P27

**THE GEORIFT 2013 WIDE-ANGLE SEISMIC PROFILE, PRELIMINARY RESULTS**

Janik, T., GEORIFT 2013 Working Group, Komminaho, K. & Tiira, T., 2014, *Unknown host publication*. P24

**Traces of the crustal units and the upper-mantle structure in the southwestern part of the East European Craton**

Janutyte, I., Kozlovskaya, E., Majdanski, M., Voss, P. H., Budraitis, M., PASSEQ Working Group, Komminaho, K. & Tiira, T., 2014, In: Solid Earth. 5, 2, p. 821-836 16 p.

**Upper Mantle Structure Around the Trans-European Suture Zone**

Janutyte, I., Majdanski, M., Voss, P. H., Kozlovskaya, E., PASSEQ Working Group Team, Komminaho, K. & Tiira, T., 2014 , In: Geophysical Research Abstracts. 16, EGU2014-4463.

**Mesozoic(?) lithosphere-scale buckling of the East European Craton in southern Ukraine: DOBRE-4 deep seismic profile**

Starostenko, V., Janik, T., Lysynchuk, D., Środa, P., Czuba, W., Kolomiyets, K., Aleksandrowski, P., Gintov, O., Omelchenko, V., Komminaho, K., Guterch, A., Tiira, T., Gryn, D., Legostaeva, O., Thybo, H. & Tolkunov, A., Nov 2013, In: Geophysical Journal International. 195, 2, p. 740-766 27 p.

**Seismic velocity model of the crust and upper mantle along profile PANCAKE across the Carpathians between the Pannonian Basin and the East European Craton**

Starostenko, V., Janik, T., Kolomiyets, K., Czuba, W., Środa, P., Grad, M., Kovács, I., Stephenson, R., Lysynchuk, D., Thybo, H., Artemieva, I. M., Omelchenko, V., Gintov, O., Kutas, R., Gryn, D., Guterch, A., Hegedus, E., Komminaho, K., Legostaeva, O., Tiira, T., & 1 othersTolkunov, A., 11 Jul 2013, In: *Tectonophysics*.

**Optimal configuration of the local Ostrobothnian seismic network OBF**

Valtonen, O., Uski, M., Tiira, T., Kortström, J. & Korja, A., 21 May 2013, *XXVI Geophysics Days*. Geofysiikan seura, p. 131-133 3 p. (Geofysiikan päivät).

**Seismic LAB beneath the Baltic Shield – or rigid Lithosphere?**

Grad, M., Tiira, T., Olsson, S. & Komminaho, K., 21 May 2013, *XXVI Geophysics Days*. Helsinki, p. 27-30 4 p.

**Structure of the mantle lithosphere around the TESZ - from the East European Craton to the Variscan Belt**

Vecsey, L., Plomerova, J., Babuska, V., PASSEQ Working Group, Komminaho, K. & Tiira, T., 12 Apr 2013, In: *Geophysical Research Abstracts*. 15, EGU2013-3133.

**SESA, SEISMIC SAFETY OF NUCLEAR POWER PLANTS – TARGETS FOR RESEARCH AND EDUCATION, SUBPROJECT 1, EARTHQUAKE HAZARD ASSESSMENT, PROGRESS REPORT 2012: Analysis of the waveforms collected in the SESA data bank, proposal for attenuation functions**

Tiira, T., Smedberg, I. & Heikkilä, P., Mar 2013, 12 p.

**Study of Local Seismic Events in Lithuania and Adjacent Areas Using Data from the PASSEQ Experiment**

Janutyte, I., Kozlovskaya, E., Motuza, G., PASSEQ Working Group, Tiira, T. & Komminaho, K., 3 Feb 2013, In: *Pure and applied geophysics : PAGEOPH*. 170, 5, p. 797-814 17 p.

**Tracing the influence of the Trans-European Suture Zone into the mantle transition zone**

Knapmeyer-Endrun, B., Krüger, F., Legendre, C. P., Geissler, W. H., Wilde-Piórko, M., Plomerová, J., Grad, M., Babuška, V., Brückl, E., Cyzine, J., Czuba, W., England, R., Gaczyński, E., Gazdova, R., Gregersen, S., Guterch, A., Hanka, W., Hegeđus, E., Heuer, B., Jedlička, P., & 22 othersLazauskiene, J., Keller, G. R., Kind, R., Klinge, K., Kolinsky, P., Komminaho, K., Kozlovskaya, E., Kruger, F., Larsen, T., Tiira, T., Majdański, M., Malek, J., Motuza, G., Novotný, O., Pietrasik, R., Plenefisch, T., Ružek, B., Sliaupa, S., Środa, P., Świeczak, M., Voss, P. & Wiejacz, P., 1 Feb 2013, In: *Earth and Planetary Science Letters*. 363, p. 73-87 15 p.

**Imaging the lithosphere-asthenosphere boundary across the transition from Phanerozoic Europe to the East-European Craton with S-receiver functions**

Knapmeyer-Endrun, B., Krüger, F., PASSEQ Working Group Team, Komminaho, K. & Tiira, T., 2013, In: *Geophysical Research Abstracts*. 15, EGU2013-6972.

**Mesozoic(?) lithosphere-scale buckling of the East European Craton in southern Ukraine: DOBRE-4 deep seismic profile**

Starostenko, V., Janik, T., Lysynchuk, D., Środa, P., Czuba, W., Kolomiyets, K., Aleksandrowski, P., Gintov, O., Omelchenko, V., Komminaho, K., Guterch, A., Tiira, T., Gryn, D., Legostaeva, O., Thybo, H. & Tolkunov, A., 2013, In: *Geophysical Research Abstracts*. 15, p. EGU2013-4348

**Optimal configuration of a micro-earthquake network**

Valtonen, O., Uski, M., Korja, A., Tiira, T. & Kortström, J., 2013, In: *Advances in Geosciences*. 34, p. 33-36 4 p.

**Preliminary results along deep seismic sounding profile DOBRE-5 from the North Dobrogea Orogen across the SW shelf of the Black Sea and Crimea Peninsula**

Starostenko, V., Janik, T., Farfuliak, L., Czuba, W., Środa, P., Volkman, Y., Kolomiyets, K., Lysynchuk, D., Omelchenko, V., Gintov, O., Gryn, D., Guterch, A., Komminaho, K., Legostaeva, O., Thybo, H., Tiira, T. & Tolkunov, A., 2013, In: *Geophysical Research Abstracts*. p. EGU2013-4871

**Seismic LAB or LID? The Baltic Shield case**

Grad, M., Tiira, T., Olsson, S. & Komminaho, K., 2013, In: Solid Earth Discussions. 5, p. 699-736 37 p.

**Seismic LAB or LID? The Baltic Shield Case**

Grad, M., Tiira, T., Olsson, S. & Komminaho, K., 2013, In: Geophysical Research Abstracts. 15, EGU2013-2187.

**Seismic safety of nuclear power plants: targets for research and education (SESA).**

Fulöp, L., Smedberg, I., Tiira, T., Mäntyniemi, P., Heikkinen, P., Malm, M., Leso, N., Saari, J., Puttonen, J. & Jussila, V., 2013, *SAFIR2014, The Finnish Research Programme on Nuclear Power Plant Safety 2011-2014, (Interim Report)*. Simola, K. (ed.). Espoo: VTT Technical Research Centre of Finland, Vol. 80. p. 373-381 8 p. (VTT Technology; vol. 80).

**Seismic LAB beneath the Baltic Shield - or rigid Lithosphere?**

Grad, M., Tiira, T., Olsson, S. & Komminaho, K., 24 Oct 2012, *The 43rd Nordic Seismology Seminar: Programme, Abstracts, List of Participants*. p. 8 1 p.

**Shallow swarm-type earthquakes in south-eastern Finland**

Smedberg, I., Uski, M., Tiira, T., Korja, A. & Komminaho, K., 24 Oct 2012, *The 43rd Nordic Seismology Seminar: Programme, Abstracts, List of Participants*. p. 28 1 p.

**Crustal seismic structure and depth distribution of earthquakes in the Archean Kuusamo region, Fennoscandian Shield**

Uski, M., Tiira, T., Grad, M. & Yliniemi, J., 2012, In: Journal of Geodynamics. 53, p. 61-80 20 p.

**Data processing and analysis system for the Pyhäjoki seismic network**

Kortström, J., Uski, M., Tiira, T. & Korja, A., 2012, Helsinki: Institute of Seismology, University of Helsinki. 15 p. (Report T; no. 86)

**Intraplate earthquake swarm in Kouvola, south-eastern Finland**

Smedberg, I., Uski, M., Tiira, T., Komminaho, K. & Korja, A., 2012, In: Geophysical Research Abstracts. 14, p. EGU2012-8446

**Moho depth of the European Plate from teleseismic receiver functions**

Grad, M. & Tiira, T., 2012, In: Journal of Seismology. 16, 2, p. 95-105 11 p.

**Seismicity and depth of faulting in the Archean Kuusamo region based on relocation of earthquakes with new velocity models**

Uski, M., Tiira, T., Grad, M. & Yliniemi, J., 2012, In: Geophysical Research Abstracts. 14, p. EGU2012-8096

**Simulations of a Microearthquake Network**

Valtonen, O., Uski, M., Korja, A., Tiira, T. & Kortström, J., 2012, In: Geophysical Research Abstracts. 14

**Yhteenveto Pyhäjoen seismisen paikallisverkon ja aineiston käsittelyn suunnittelusta**

Valtonen, O., Uski, M., Tiira, T., Kortström, J. & Korja, A., 2012, Helsinki: Helsingin yliopisto. 13 p. (Seismologian instituutti, raportti T; vol. 2012, no. 87)

**Pyhäjoki Seismic Network: a Preliminary Proposal**

Tiira, T., Uski, M., Kortström, J., Valtonen, O. & Korja, A., 31 Dec 2011, Helsinki: Institute of Seismology, University of Helsinki. 37 p. (Report; vol. T, no. 84)

**Crustal structure of the Western Carpathians and Pannonian Basin: Seismic models from CELEBRATION 2000 data and geological implications**

Grad, M., Guterch, A., Vozár, J., Bielik, M., Vozárova, A., Hegedüs, E., Kovács, C. A., Kovács, I., Keller, G. R., CELEBRATION 2000 Working Group, Tiira, T. & Komminaho, K., 2011, In: Journal of Geodynamics. 52, 2, p. 97-113 17 p.

**Velocity blocks and anisotropy in the crust of the central Fennoscandian Shield**

Hyvönen, T., Tiira, T., Korja, A. & Komminaho, K., 27 Oct 2010, *LITHOSPHERE 2010: SIXTH SYMPOSIUM ON THE STRUCTURE, COMPOSITION AND EVOLUTION OF THE LITHOSPHERE IN FINLAND*. Heikkinen, P., Arhe, K., Korja, T., Lahtinen, R., Pesonen, L. J. & Rämö, T. (eds.). Vol. 2010. p. 17-18 2 p. (Report S-55; vol. 2010, no. S-55).

**Crustal velocity blocks and anisotropy in the central Fennoscandian Shield**

Hyvönen, T., Korja, A., Tiira, T. & Komminaho, K., 6 Oct 2010, *The 41st Nordic Seminar on Detection Seismology*. p. 32 1 p.

**Depth distribution of earthquakes under the Finnish part of Archean Karelian craton**

Uski, M., Tiira, T., Grad, M. & Yliniemi, J., 2010, *Lithosphere 2010: Sixth Symposium on the Structure, Composition and Evolution of the Lithosphere in Finland. Programme and Extended Abstracts, Helsinki, Finland, October 27-28, 2010*. Heikkinen, P., Arhe, K., Korja, T., Lahtinen, R., Pesonen, L. J. & Rämö, T. (eds.). Vol. 2010. p. 139-142 4 p. (Inst. of Seismology, Univ. of Helsinki, Report S; vol. 2010, no. 55).

**From the Variscan to the Alpine Orogeny: crustal structure of the Bohemian Massif and the Western Carpathians in the light of the SUDETES 2003 seismic data**

Hrubcova, P., Sroda, P., Grad, M., Geissler, W. H., Guterch, A., Vozar, J., Hegedus, E., Tiira, T., Komminaho, K. & SUDETES 2003 Working Group, 2010, In: *Geophysical Journal International*. 183, p. 611-633 23 p.

**Preliminary P- and S-wave velocity model of HUKKA 2007 wide-angle reflection and refraction profile: an evidence for an unknown terrain boundary?**

Tiira, T., Janik, T., Kozlovskaya, E., Grad, M., Komminaho, K., Hegedűs, E., Kovács, C. A., Brückl, E., Korja, A. & Silvennoinen, H., 2010, *Lithosphere 2010: Sixth Symposium on the Structure, Composition and Evolution of the Lithosphere in Finland. Programme and Extended Abstracts, Helsinki, Finland, October 27-28, 2010*. Heikkinen, P., Arhe, K., Korja, T., Lahtinen, R., Pesonen, L. J. & Rämö, T. (eds.). Helsinki: Institute of Seismology, University of Helsinki, p. 129-132 4 p. (Report S; vol. 2010, no. 55).

**The Moho depth map of the European Plate**

Grad, M., Tiira, T., Komminaho, K., Kortström, J. & ESC Working Group, 2010, *Lithosphere 2010: Sixth Symposium on the Structure, Composition and Evolution of the Lithosphere in Finland. Programme and Extended Abstracts, Helsinki, Finland, October 27-28, 2010*. Heikkinen, P., Arhe, K., Korja, T., Lahtinen, R., Pesonen, L. J. & Rämö, T. (eds.). Helsinki: Institute of Seismology, University of Helsinki, p. 3-6 4 p. (Institute of Seismology, University of Helsinki, Report S; vol. 2010, no. 55).

**Upper crustal velocity and density models along FIRE4 profile, northern Finland**

Silvennoinen, H., Kozlovskaya, E., Yliniemi, J. & Tiira, T., 2010, In: *Geophysica*. 46, 1-2, p. 21-46 26 p.

**Examining three-dimensional crustal heterogeneity in Finland**

Korja, A., Hyvönen, T., Tiira, T. & Heikkinen, P., 15 Apr 2009, In: *Eos*. 90, 15, p. 129-136 3 p.

**Crustal structure of the eastern Alps and their foreland: seismic model beneath the CEL10/Alp04 profile and tectonic implications**

Grad, M., Brückl, E., Majdanski, M., Behm, M., Guterch, A., Komminaho, K., Tiira, T. & CELEBRATION 2000 and ALP 2002 Working Groups, 2009, In: *Geophysical Journal International*. 177, p. 279-295 17 p.

**Seismic structure of the lithosphere between the east European Craton and Carpathians from the net of CELEBRATION 2000 profiles in SE Poland**

Janik, T., Grad, M., Guterch, A., Komminaho, K., Tiira, T. & CELEBRATION 2000 Working Group, 2009, In: *Geological Quarterly*. 53, 1, p. 141-158 18 p.

**Seismic tomography image of the crust of Finland**

Tiira, T., Hyvönen, T., Komminaho, K., Korja, A. & Heikkinen, P., 2009, *XXIV GEOFYSIIKAN PÄIVÄT*. Tietäväinen, H. & Jokinen, J. (eds.). Helsinki, Vol. 24. p. 60 1 p. (Geofysiikan päivät; vol. 24).

**The Moho depth map of the European Plate**

Grad, M., Tiira, T., Komminaho, K., Kortström, J. & ESC Working Group, 2009, In: *Geophysical Journal International*. 176, 1, p. 279-292 14 p.

**Crustal structures and tectonic processes in the Eastern Alps revealed by recent controlled source seismic experiments.**

Bruckl, E., Behm, M., Tiira, T., Komminaho, K., CELEBRATION 2000 Working Group, ALP 2002 Working Group & ALPASS Working Group, 2008, In: *Geophysical Research Abstracts*. 10, 10 p.

**Indications of seismic anisotropy in the crust of the central Fennoscandian Shield**

Hyvönen, T., Tiira, T., Valtonen, O., Korja, A. & Komminaho, K., 2008, *LITHOSPHERE 2008*. Helsinki: University of Helsinki, p. 21-22 2 p.

**Interpretation of wide-angle reflection and refraction recordings of vibroseis signals and 3D gravity modelling along FIRE4 profile, northern Finland**

Silvennoinen, H., Kozlovskaya, E., Yliniemi, J. & Tiira, T., 2008, *LITHOSPHERE 2008*. Helsinki: University of Helsinki, p. 111-114 4 p.

**Passeq 2006-2008: passive seismic experiment in trans-European suture zone**

Wilde-Piorko, M., Geissler, W. H., Plomerova, J., Grad, M., Babuska, V., Bruckl, E., Cyzine, J., Czuba, W., England, R., Gaczynski, E., Gazdova, R., Gregersen, S., Guterch, A., Hanka, W., Hegedus, E., Heuer, B., Jedlicka, P., Lazauskiene, J., Keller, G. R., Kind, R., & 19 others Klinge, K., Kolinsky, K., Komminaho, K., Kozlovskaya, E., Kruger, F., Larsen, T., Majdanski, M., Makek, J., Motuza, G., Novotny, O., Pietrasik, R., Plenefisch, T., Ruzeck, B., Sliaupa, S., Sroda, P., Swieczak, M., Tiira, T., Voss, P. & Wiejacz, P., 2008, In: *Studia Geophysica et Geodaetica*. 52, p. 439-448 10 p.

**3D structure of the Earth's crust beneath the northern part of the Bohemian Massif**

Majdanski, M., Kozlovskaya, E., Grad, M., Komminaho, K., Tiira, T. & SUDETES 2003 Working Group, 2007, In: *Tectonophysics*. 437, p. 17-36 20 p.

**A new seismic model of the eastern alps and its relevance for geodesy and geodynamics**

Behm, M., Bruckl, E., Mitterbauer, U., Komminaho, K., Tiira, T. & CELEBRATION 2000 and ALP 2002 Working Groups, 2007, In: *Österreichische Zeitschrift für Vermessung & Geoinformation*. 95, 2, p. 121-133 13 p.

**A tomographic crustal velocity model of the central Fennoscandian shield**

Hyvönen, T., Tiira, T., Korja, A., Heikkilä, P., Rautioaho, E., SVEKALAPKO Seismic Tomography Working Group & Komminaho, K., 2007, In: *Geophysical Journal International*. 168, 3, p. 1210-1226 17 p.

**Crustal structure due to collisional and escape tectonics in the Eastern Alps region based on profiles Alp01 and Alp02 from the ALP 2002 seismic experiment**

Bruckl, E., Bleibinhaus, F., Gosar, A., Grad, M., Guterch, A., Hrbcová, P., Keller, G. R., Majdanski, M., Sumanovac, F., Tiira, T., Yliniemi, J., Hegedus, E. & Thybo, H., 2007, In: *Journal of Geophysical Research : Solid Earth*. 112, B06308

**Erkenntnisse über den Tiefbau der Ostalpen aus neuen seismischen Großexperimenten**

Behm, M., Brückl, E., Chwatal, W., Mitterbauer, U., Komminaho, K., Tiira, T. & CELEBRATION 2000 and ALP 2002 and ALPASS Working Groups, 2007, *Arbeitstagung 2007 der Geologischen Bundesanstalt*. Wien: Verlag d. Geologischen Bundesanstalt, p. 143-150 8 p.

**Evidence for early plate tectonics in the northern Fennoscandian shield derived from P- and S- wave velocity models of POLAR and HUKKA wideangle profiles and FIRE4 reflection profile**

Janik, T., Kozlovskaya, E., Heikkilä, P., Yliniemi, J., Silvennoinen, H., FIRE Working Group & Tiira, T., 2007, *XXIII GEOFYSIIKAN PÄIVÄT*. Kaila, K. & Korja, T. (eds.). Oulu: Geofysiikan seura, Vol. 23. p. 43-46 4 p. (Geofysiikan päivät).

**Kuoren yläosan nopeusrakenne FIRE4-linjan eteläosassa Pohjois-Suomessa**

Silvennoinen, H., Kozlovskaya, E., Yliniemi, J., Tiira, T. & FIRE Working Group, 2007, *XXIII Geofysiikan päivät*. Kaila, K. & Korja, T. (eds.). p. 139-142 4 p. (Geofysiikan päivät).

**Transects across the geological units of the Western Carpathians and interpretation (seismic, gravity, magnetotelluric).**  
Vozar, J., Szalaiová, V., Bielik, M., Potfaj, M., Grad, M., Guterch, A., Keller, G. R., Janik, T., Hegedüs, E., Slaczka, A., Tiira, T., Yliniemi, J. & Vozár, J., 2007, In: Mineralia Slovaca. 39, 1, p. 25-26 2 p.

**Variations in lithospheric structure across the margin of Baltica in central Europe and the role of the Variscan and Carpathian orogenies**

Grad, M., Guterch, A., Keller, G. R., Komminaho, K., Tiira, T. & POLONAISE '97 and CELEBRATION 2000 Working Groups, 2007, *4-D framework of continental crust*. Boulder, Colorado: Geological Society of America, p. 341-356 16 p.

**2-D seismic tomographic and ray tracing modelling of the crustal structure across Sudetes Mountains basing on SUDETES 2003 experiment data**

Majdanski, M., Grad, M., Guterch, A., Komminaho, K., Tiira, T. & SUDETES 2003 Working Group, 2006, In: *Tectonophysics*. 413, 3-4, p. 249-269 21 p.

**Acquisition and geophysical characteristics of reflection seismic data on FIRE transects, Fennoscandian shield**

Kukkonen, I. T., Heikkilä, P., Ehdahl, E., Hjelt, S-E., Yliniemi, J., Jalkanen, E., Korja, A., Tiira, T., Keskinen, J. & FIRE Working Group, 2006, *Finnish Reflection Experiment FIRE 2001-2005*. Kukkonen, I. T. & Lahtinen, R. (eds.). Espoo, p. 13-43 31 p. (Geological Survey of Finland, Special Paper; no. 42).

**A geological interpretation of the upper crust along FIRE 1**

Korja, A., Lahtinen, R., Heikkilä, P., Kukkonen, I. T., Tiira, T., Keskinen, J. & FIRE Working Group, 2006, *Finnish reflection experiment FIRE 2001-2005*. Kukkonen, I. T. & Lahtinen, R. (eds.). Espoo, p. 45-76 + 1 Appendix 32 p. (Geological Survey of Finland, Special Paper; no. 43).

**A geological interpretation of the upper crust along FIRE 2 and FIRE 2A**

Nironen, M., Korja, A., Heikkilä, P., Tiira, T., Keskinen, J. & FIRE Working Group, 2006, *Finnish Reflection Experiment FIRE 2001-2005*. Kukkonen, I. T. & Lahtinen, R. (eds.). Espoo, p. 77-103 + 1 Appendix 27 p. (Geological Survey of Finland, Special Paper; no. 43).

**A new seismic model of the eastern alpine crust**

Behm, M., Bleibinhaus, F., Bruckl, E., Grad, M., Mertl, S., Komminaho, K., Tiira, T. & CELEBRATION 2000 and ALP 2002 Working Groups, 2006, *Proceedings of the first european conference on earthquake engineering and seismology*. 10 p.

**Crustal tomography in central Fennoscandian Shield**

Hyvönen, T., Tiira, T., Korja, A. & Komminaho, K., 2006, *LITHOSPHERE 2006*. Helsinki: University of Helsinki, p. 45-46 2 p.

**Crust-mantle boundary in the central Fennoscandian Shield: Constraints from wide-angle P- and S-wave velocity models and results of FIRE reflection profiles**

Janik, T., Kozlovskaja, E., Yliniemi, J., Heikkilä, P., Korja, A., Tiira, T., Keskinen, J. & FIRE Working Group, 2006, *LITHOSPHERE 2006*. Helsinki: University of Helsinki, p. 47-50 4 p.

**EUROBRIDGE: new insight into the geodynamic evolution of the East European Craton**

Bogdanova, S., Gorbatschev, R., Grad, M., Komminaho, K. & Tiira, T., 2006, *European Lithosphere Dynamics: GSL 2006*. p. 599-625 27 p.

**EUROBRIDGE'95 studies**

Yliniemi, J., Tiira, T., Luosto, U. & Komminaho, K., 2006, *Structure and dynamics of the lithosphere of eastern Europe*. Moscow: GEOKART; GEOS, p. 236-246 11 p.

**EUROBRIDGE'97: Pripyat Graben and Ukrainian Shield structure (ch. 2.5.)**

Thybo, H., Janik, T., Omelchenko, V. D., Tiira, T., Luosto, U. & Komminaho, K., 2006, *Structure and dynamics of the lithosphere of eastern Europe*. Moscow: GEOKART; GEOS

**FIRE seismic reflection profiles 4, 4A and 4B: Insights into the crustal structure of northern Finland from Ranua to Näätämö**

Patison, N. L., Korja, A., Lahtinen, R., Ojala, V. J., Heikkinen, P., Tiira, T., Keskinen, J. & FIRE Working Group, 2006, *Finnish Reflection Experiment FIRE 2001-2005*. Kukkonen, I. T. & Lahtinen, R. (eds.). Espoo, p. 161-222 62 p. (Geological Survey of Finland, Special Paper; no. 43).

**FIRE transects: reflectivity of the crust in the Fennoscandian Shield**

Heikkinen, P., Kukkonen, I. T., Korja, A., Tiira, T., Keskinen, J. & FIRE Working Group, 2006, *LITHOSPHERE 2006*. Helsinki: University of Helsinki, p. 33-36 4 p.

**Gold exploration and the crustal structure of northern Finland as interpreted from FIRE seismic reflection profiles 4, 4A & 4B**

Patison, N. L., Ojala, V. J., Korja, A., Nykänen, V., Heikkinen, P., Tiira, T., Keskinen, J. & FIRE Working Group, 2006, *LITHOSPHERE 2006*. Helsinki: University of Helsinki, p. 149-154 6 p.

**Lithospheric structure beneath trans-Carpathian transect from Precambrian platform to Pannonian basin: CELEBRATION 2000 seismic profile CEL05**

Grad, M., Guterch, A., Keller, G. R., Janik, T., Hegedus, E., Vozar, J., Slaczka, A., Tiira, T. & Yliniemi, J., 2006, In: *Journal of Geophysical Research : Solid Earth*. 111, B03301

**Lithospheric structure of the western part of the East European Craton investigated by deep seismic profiles**

Grad, M., Janki, T., Guterch, A., Sroda, P., Czuba, W., Komminaho, K., Luosto, U., Tiira, T. & EUROBRIDGE'94-97, POLONaise'97 and CELEBRATION 2000 Seismic Working Groups, 2006, In: *Geological Quarterly*. 50, 1, p. 9-22 14 p.

**Post-collisional extension in central Svecofennian, central Finland**

Kosunen, P., Korja, A., Nironen, M., Heikkinen, P., Tiira, T., Keskinen, J. & FIRE Working Group, 2006, *LITHOSPHERE 2006*. Helsinki: University of Helsinki, p. 71-74 4 p.

**Structure of Fennoscandia-Sarmatia suture zone of the Eastern European Platform along EUROBRIDGE'96 profile**

Doody, J. J., Giese, R., Grad, M., Thybo, H., Tiira, T., Komminaho, K. & EUROBRIDGE Seismic Working Group, 2006, *Structure and dynamics of the lithosphere of eastern Europe*. Moscow: GEOKART; GEOS

**Studies on crustal structure and gravity in the Eastern Alps**

Brückl, E., Mitterbauer, U., Behm, M., Tiira, T., Komminaho, K. & CELEBRATION 2000 and ALP 2002 Working Groups, 2006, *Geodetic deformation monitoring*. p. 181-192 12 p.

**The 2003 earthquake swarm in Anjalankoski, south-eastern Finland**

Uski, M., Tiira, T., Korja, A. & Elo, S., 2006, In: *Tectonophysics*. 422, p. 55-69 15 p.

**Wide-angle observations of ALP 2002 shots o the TRANSALP profile: linking the two DSS projects**

Bleibinhaus, F., Brückl, E., Tiira, T. & ALP 2002 Working Group, 2006, In: *Tectonophysics*. 414, p. 71-78 8 p.

**ALPASS - Passive seismic monitoring in the Eastern Alps**

Brückl, E., Behm, M., Grad, M., Guterch, A., Hegedus, E., Keller, G. R., Komminaho, K., Kovacs, A., Kozlovskaya, E., Lambrecht, A., Mitterbauer, U., Oreskovic, J., Rumpfhuber, E., Sumanovac, F., Tiira, T., Velasco, A. & Wilde-Piórko, M., 1 Dec 2005, In: *Eos*. 86(52), p. A974

**DANUBE 2004 Lithosphere Research Program**

Hegedus, E., Brueckl, E., Csabafi, R., Fancsik, T., Grad, M., Guterch, A., Hajnal, Z., Keller, R., Kovacs, A. C., Komminaho, K., Kozlovskaya, E., Tiira, T., Torok, I. & Yliniemi, J., 1 Dec 2005, In: *Eos*. 86(52), p. B254

**Ein neues seismisches Modell der Ostalpen un seine Bedeutung für die Geothermieforschung**

Brückl, E., Behm, M., Tiira, T., Komminaho, K. & CELEBRATION 2000 and ALP 2002 Working Groups, 2005, *Geothermieforum 2005*. Wien: Institut für Geodäsie und Geophysik, Technische Universität Wien, p. 1-20 20 p.

**Lithological Moho boundary in precambrian shields: constraints from P- and S-wave velocity models and gravity modelling**  
Kozlovskaya, E., Yliniemi, J., Janik, T., Grad, M., Tiira, T. & Karatayev, G., 2005, *XXII Geofysiikan päivät*. Viljanen, A. & Mäntyniemi, P. (eds.). Helsinki: Geofysiikan seura, p. 101-104 4 p. (Geofysiikan päivät).

**Lithospheric structure of the Trans-European suture zone along the TTZ-CEL03 seismic transect (from NW to SE Poland)**  
Janik, T., Grad, M., Guterch, A., Dablez, R., Yliniemi, J., Tiira, T., Keller, G. R., Gaczyński, E., CELEBRATION 2000 Working Group & Komminaho, K., 2005, In: *Tectonophysics*. 411, p. 129-156 28 p.

#### **FIRE transects: New images of the Precambrian crust**

Heikkilä, P., Kukkonen, I. T., Ekdalh, E., Hjelt, S-E., Korja, A., Lahtinen, R., Yliniemi, J., Berzin, R. & Tiira, T., 2004, *LITHOSPHERE 2004: Third symposium on the Structure, Composition and Evolution of the Lithosphere in Finland, Geological Survey of Finland*. Ehlers, C., Eklund, O., Kruuna, A., Korja, A., Lahtinen, R. & Pesonen, L. (eds.). p. 11-16 6 p. (Institute of Seismology, Univ. of Helsinki; vol. 2004, no. S-45).

#### **Huge contrasts of the lithospheric structure revealed by new generation seismic experiments in Central Europe.**

POLONAISE'97 Working Group, CELEBRATION 2002 Working Group, ALP 2002 Working Group & SUDETES 2003 Working Group, 2004, In: *Przeglad geologiczny..* 52, 8/2, p. 753-760 8 p.

#### **Seismic tomographic images of the crust in southern and central Finland**

Hyvönen, T., Tiira, T., Rautioaho, E., Korja, A., Berzin, R. & Heikkilä, P., 2004, *LITHOSPHERE 2004: Third symposium on the Structure, Composition and Evolution of the Lithosphere in Finland*. Ehlers, C., Eklund, O., Korja, A., Kruuna, A., Lahtinen, R. & Pesonen, L. (eds.). p. 29-33 5 p.

#### **The Anjalankoski earthquake swarm in May 2003**

Uski, M., Tiira, T., Korja, A. & Elo, S., 2004, *LITHOSPHERE 2004: Third symposium on the Structure, Composition and Evolution of the Lithosphere in Finland*. Ehlers, C., Eklund, O., Korja, A., Kruuna, A., Lahtinen, R. & Pesonen, L. J. (eds.). p. 123-126

#### **Thermal modelling of crustal stacking and exhumation during the Palaeoproterozoic orogenic growth of the central Fennoscandian shield**

Kukkonen, I. T., Korja, A., Lahtinen, R., Heikkilä, P. & Tiira, T., 2004, *LITHOSPHERE 2004: Third symposium on the Structure, Composition and Evolution of the Lithosphere in Finland*. Ehlers, C., Eklund, O., Korja, A., Kruuna, A., Lahtinen, R. & Pesonen, L. J. (eds.).

#### **ALP 2002 seismic experiment.**

ALP 2002 Working Group, 2003, In: *Studia Geophysica et Geodaetica*. 47, p. 671-679 9 p.

#### **An overview of recent seismic refraction experiments in Central Europe.**

CELEBRATION 2000, ALP 2002, SUDETES 2003 Working Groups & Komminaho, K., 2003, In: *Studia Geophysica et Geodaetica*. 47, p. 651-657 7 p.

#### **CELEBRATION 2000 seismic experiment**

CELEBRATION 2000 Experiment Team & Komminaho, K., 2003, In: *Studia Geophysica et Geodaetica*. 47, p. 659-669 11 p.

#### **Crustal structure of the Trans-European suture zone region along POLONAISE'97 seismic profile P4**

Grad, M., Jensen, S. L., Keller, G. R., Guterch, A., Thybo, H., Janik, T., Tiira, T., Yliniemi, J., Luosto, U., Motuza, G., Nasedkin, V., Czuba, W., Gaczyński, E., Środa, P., Miller, K. C., Wilde-Piorko, M., Komminaho, K., Jacyna, J. & Korabliova, L., 2003, In: *Journal of Geophysical Research : Solid Earth*. 108

#### **Deep crustal structure along CELEBRATION 2000 seismic trans-Carpathian profiles extending from the East European Craton to the Pannonian basin**

Czuba, W., Gaczyński, E., Grad, M., Guterch, A., Janik, T., Malinowski, M., Środa, P., Wilde-Piorko, M., Acevedo, S., Harder, S., Kaip, G., Keller, G. R., Miller, K. C., Snellson, C., Bodoky, T., Fancsik, T., Takacs, E., Hegedus, E., Posgay, K., Vozar, J., & 20 others, Hrubcová, P., Spicák, A., Aric, K., Brueckl, E., Chwatal, W., Kohlbeck, F., Asudeh, I., Clowes, R., Hajnal, Z., Joergensen, P., Thybo, H., Selvi, O., Belinsky, A. A., Komminaho, K., Tiira, T., Yliniemi, J., Jentzsch, G.,

Krake, D., Kostiuchenko, S. L. & Morozov, A. F., 2003, In: Publications of the Institute of Geophysics. M. 28, p. 103-104 2 p.

**FIRE - Suomen kallioperän heijastusluotaustutkimukset**  
Tiira, T. & FIRE Working Group, 2003, In: Geofysiikan päivät. p. 63-66

**SUDETES 2003 seismic experiment**  
SUDETES Working Group, 2003, In: *Studia Geophysica et Geodaetica*. 47, p. 681-689 9 p.

**Upper lithospheric seismic velocity structure across the Pripyat Trough and the Ukrainian Shield along the EUROBRIDGE'97 profile**

Thybo, H., Janik, T., Omelchenko, V. D., Grad, M., Garetsky, R. G., Belinsky, A. A., Karataev, G. I., Zlotski, G., Knudsen, M. E., Sand, R., Yliniemi, J., Tiira, T., Luosto, U., Komminaho, K., Giese, R., Guterch, A., Lund, C. -E., Kharitonov, K. M., Ilchenko, T., Lysynchuk, D. V., & 2 others Skobelev, V. M. & Doody, J. J., 2003, In: *Tectonophysics*. 371, 1-4, p. 41-79 39 p.

**3D Refraction Tomographic Images from the Metra-Zemplen Region**  
CELEBRATION Working Group, 2002, In: *Geologica Carpathica*. 53, Special issue, 4 p.

**CELEBRATION 2000: CONTRASTS AT LITHOSPHERIC STRUCTURE IN THE TESZ (FROM NE TO SE POLAND) ALONG TTZ & C03 SEISMIC PROFILES**

CELEBRATION 2000 Working Group, 2002, In: *Geologica Carpathica*. 53, 4 p.

**Central European lithospheric experiment based on refraction 2000 the CELEBRATION 2000 seismic experiment**  
CELEBRATION 2000 Working Group, 2002, In: *Geologica Carpathica*. 53, 6 p.

**Comparison of Crustal Models of the Sarmatia and Fennoscandian Shields**

Yliniemi, J., Tiira, T. & Komminaho, K., 2002, *Lithosphere 2002: Second Symposium on the Structure, Composition and Evolution of the Lithosphere in Finland*. Lahtinen, R., Korja, A., Arhe, K., Eklund, O., Hjelt, S-E. & Pesonen, L. J. (eds.). Helsinki: University of Helsinki, Vol. S-42. p. 145-146 2 p.

**Crustal structure across the TESZ along POLONaise'97 seismic profile P2 in NW Poland**  
POLONaise P2 Working Group & Komminaho, K., 2002, In: *Tectonophysics*. 360, 1-4, p. 129-152 24 p.

**Lower lithospheric structure beneath the Trans-European Suture Zone from POLONaise'97 seismic profiles**  
POLONaise Working Group, 2002, In: *Tectonophysics*. 360, p. 153-168 16 p.

**NEW GEOPHYSICAL RESULTS ASSOCIATED WITH THE DEEP STRUCTURE OF THE PANNONIAN BASIN**  
CELEBRATION Working Group, 2002, In: *Geologica Carpathica*. 53, 6 p.

**Project FIRE: deep seismic reflection sounding in Finland 2001-2005**

FIRE Working Group, 2002, *Lithosphere 2002: Second Symposium on the Structure, Composition and Evolution of the Lithosphere in Finland*. Lahtinen, R., Korja, A., Arhe, K., Eklund, O., Hjelt, S-E. & Pesonen, L. J. (eds.).

**Seismologists Celebrate the New Millennium with an Experiment in Central Europe**

CELEBRATION 2000 Organizing Committee & CELEBRATION 2000 Experiment Team, 2002, In: *Eos*. 82, 45, p. 529,534-535 3 p.

**Three-dimensional seismic modelling of crustal structure in the TESZ region based on POLONaise'97 data**  
POLONaise Working Group, 2002, In: *Tectonophysics*. 360, p. 169-185 17 p.

**Upper crustal seismic structure of the Mazury complex and Mazowsze massif within East European Craton in NE Poland**  
Luosto, U. & POLONaise P5 Working Group, 2002, In: *Tectonophysics*. 360, p. 115-128 14 p.

**Crustal structure of the East European Craton along the POLONAISE '97 P5 profile**

Chuba, W., Grad, M., Luosto, U., Motuza, G., Nasedkin, V., POLONAISE P5 Working Group & Tiira, T., 2001, In: Acta geophysica Polonica. 49, 2, p. 145-168 24 p.

**EUROBRIDGE '95: deep seismic profiling within the East European Craton**

EUROBRIDGE Seismic Working Group & Komminaho, K., 2001, In: Tectonophysics. 339, 1-2, p. 153-175 23 p.

**Crustal structure of the Mid-Polish Trough beneath the TTZ seismic profile**

Grad, M., Janik, T., Yliniemi, J., Guterch, A., Luosto, U., Tiira, T., Komminaho, K., Sroda, P., Höing, K., Makris, J. & Lund, C-E., 1999, In: Tectonophysics. 314, p. 145-160 16 p.

**Detecting teleseismic events using artificial neural networks**

Tiira, T., 1999, In: Computers & Geosciences. 25, p. 929-938 10 p.

**Locating regional seismic events with global optimization based on interval arithmetic**

Tarvainen, M., Tiira, T. & Husebye, E. S., 1999, In: Geophysical Journal International. 138, p. 879-885 7 p.

**P- and S-wave velocity model of the southwestern margin of the Precambrian East European Craton; POLONAISE'97, profile P3**

POLONAISE Working Group, 1999, In: Tectonophysics. 314, p. 175-192 18 p.

**POLONAISE '97 - International seismic experiment between Precambrian and Variscan Europe in Poland**

POLONAISE Working Group & Komminaho, K., 1999, In: Tectonophysics. 314, 1-3, p. 101-121 21 p.

**Regional and teleseismic events recorded across the TESZ during POLONAISE'97**

POLONAISE Working Group, 1999, In: Tectonophysics. 314, p. 161-174 14 p.

**Seismic velocity structure across the Fennoscandia-Sarmatia suture beneath the EUROBRIDGE profile through Lithuania and Belarus**

EUROBRIDGE Seismic Working Group & Komminaho, K., 1999, In: Tectonophysics. 314, 1-3, p. 193-217 15 p.

**Slowness vector correction of teleseismic events with artificial neural networks**

Tiira, T., 1999, In: Physics of the Earth and Planetary Interiors. 112, p. 101-109 9 p.

**Eurobridge '96: deep seismic profiling of the junction zone between Fennoscandia and Sarmatia**

Garetsky, R., Belinsky, A., Karateyev, G. I., Terletsky, V., Zlotski, G., Astapienko, A., Thybo, H., Sand, R., Yliniemi, J., Tiira, T., Luosto, U., Komminaho, K., Giese, R., Motuza, G., Nasedkin, V., Seckus, R., Gaczynski, E., Janik, T., Grad, M., Guterch, A., & 5 others Yasiulevich, N. N., Kharitonov, O. M., Omelchenko, V. D., Doody, J. J. & Komminaho, K., 1998, In: Geofizicheski zhurnal. The journal of geophysics. 18, p. 758-761 4 p.

**Eurobridge '97: deep seismic profiling of the Ukrainian Shield**

Garetsky, R., Belinsky, A., Garateyev, G. I., Terletsky, V., Zlotski, G., Astapienko, A., Thybo, H., Sand, R., Yliniemi, J., Tiira, T., Luosto, U., Komminaho, K., Giese, R., Gaczynski, E., Janik, T., Grad, M., Guterch, A., Kharitonov, O. M., Omelchenko, V. D. & Doody, J. J., 1998, In: Geofizicheski zhurnal. The journal of geophysics. 18, p. 762-765 4 p.

**Seismology as a tool of public safety**

Tarvainen, M., Tiira, T. & Heikkinen, P., 1997, NBC Defence '97 Proceedings. Nieminen, K. & Pääkkönen, E. (eds.). Helsinki, p. 42-44 3 p.

**Discrimination of nuclear explosions and earthquakes from teleseismic distances with a local network of short period stations using neural network**

Tiira, T., 1996, In: Physics of the Earth and Planetary Interiors. 97, p. 247-268 22 p.

**Seismic event detector based on artificial neural networks**

Tiira, T., 1996, *Seismology in Europe: Papers presented at the XXV General Assembly*. Thorkelsson, B. (ed.). Reykjavik, p. 569-574 6 p.

**Spatial and diurnal noisecharacteristics of the FINESS array**

Tiira, T., Tarvainen, M. & Tuppurainen, A., 1996, *XXIV General Assembly of the European Seismological Commission: Proceedings and Activity Report 1992-1994*. Makropoulos, K. & Suhadolc, P. (eds.). Athens, p. 658-667 10 p.

**Noise characteristics of the upgraded FINESS array**

Tiira, T., Tuppurainen, A. & Tarvainen, M., 1995, In: *Geophysica*. 31, p. 71-84 14 p.

**Seismisten tapausten paikantaminen geneettisten algoritmien avulla**

Tarvainen, M. & Tiira, T., 1995, *XVII Geofysiikan päivät*. Kaikkonen, P. & Salmirinne, H. (eds.). Geofysiikan seura, p. 113-118 6 p.

**Study of the locating capability of genetic algorithms**

Tarvainen, M. & Tiira, T., 1995, In: *Geophysica*. 31, p. 1-18 18 p.

**Discrimination of teleseismic events in Central Asia with a local network of short period stations**

Tiira, T. & Tarvainen, M., 1994, In: *Annali di Geofisica*. 38, p. 433-449 16 p.

**Automatic location of teleseismic events with local area network**

Tiira, T., 1993, In: *Geophysica*. 29, p. 47-63 17 p.

**Polarization detector**

Tiira, T. & Tarvainen, M., 1993, *XXIII General Assembly of the European Seismological Commission: Proceedings and Activity Report 1990-1992*. Schenk, V. & Mayer-Rosa, D. (eds.). Prague, p. 205-208 4 p.

**Polarization detector: A new approach without eigenproblem solution**

Tiira, T. & Tarvainen, M., 1992, In: *Geophysica*. 28, p. 29-40 12 p.

**Crust and upper mantle structure along the DSS Baltic profile in SE Finland**

Luosto, U., Tiira, T., Korhonen, H., Azbel, I., Burmin, V., Buyanov, A., Kosminskaya, I., Ionkis, V. & Sharov, N., 1990, In: *Geophysical Journal International*. 101, p. 89-110 22 p.

**Seismisten tapausten interaktiivinen analyysi ja paikannus**

Heikkilä, P., Tiira, T., Nurminen, S. & Tuppurainen, A., 1988, University of Helsinki. ( Institute of Seismology, University of Helsinki, Report T; no. T-37)

**Seismisen kartan piirto-ohjelma**

Tiira, T., 1984, University of Helsinki. (Institute of Seismology, University of Helsinki, Report T; no. T-26)

**Prizes****The best GFF articles for 2013 and 2014**

Grad, Marek (Recipient), Tiira, Timo (Recipient), Olsson, Sverker (Recipient) & Komminaho, Kari (Recipient), 2014

**Press/Media****Därför höll forskarna på att missa Nord Stream-explosionerna – "En lite trist historia"**

Timo Tiira

02/11/2022

1 item of Media coverage

**Earthquake strikes in Ostrobothnia**

T. Tiira

05/04/2021

2 items of Media coverage

**Euroopan syvin maankuori Jyväskylän seudulla**

Toni Veikkolainen, Timo Tiira, Sakari Väkevää, Kari Komminaho, Aku Heinonen, Annakaisa Korja, Tomasz Janik & Tymon Skrzynic

26/03/2020

1 item of Media coverage

**Finland Detects Five Mystery Underwater Explosions in Russian Waters**

Timo Tiira

26/10/2022

1 item of Media coverage

**Finland discovered 5 mysterious explosions in Russian territorial waters**

Timo Tiira

26/10/2022

1 item of Media coverage

**Finland registrerer fem mystiske ekspløsioner i russisk farvand**

Timo Tiira

25/10/2022

1 item of Media coverage

**Finnish seismologists detect five blasts in Russian waters**

Timo Tiira

25/10/2022

1 item of Media coverage

**Gas pipe leak | Seismologists in Sweden and Denmark said that the gas leaks were caused by explosions – a Finnish expert considers the estimate to be reliable**

Timo Tiira

27/09/2022

1 item of Media coverage

**Haastattelu maanjäristysten ennustettavuudesta**

Timo Tiira

15/05/2011

1 Media contribution

**Kovat pamaukset säikäyttivät Etelä-Pohjanmaalla sunnuntaina – kyseessä maanjäristys**

Timo Tiira

05/04/2021

1 item of Media coverage

**Kraftig smäll överraskade Södra Österbotten på söndagskvällen – orsaken en jordbävning av magnituden 1,6**

Timo Tiira

05/04/2021

1 item of Media coverage

**Maa järisi tuntuvasti Espoon Koskelossa, syynä ilmeisesti lämpöläitos**

Timo Tiira

03/12/2020  
1 item of Media coverage

**Mild tremor jolts South Ostrobothnia**  
T. Tiira  
05/04/2021  
1 item of Media coverage

**Nord stream-explosioner uppmättes på Åland**  
Timo Tiira  
29/09/2022  
1 Media contribution

**Nuclear Bomb or Earthquake? Explosions Reveal the Differences**  
T. Tiira  
09/09/2019  
1 item of Media coverage

**Radiohaastattelu maanjäristyksestä Pohjanmaalla**  
Timo Tiira  
05/04/2021  
1 item of Media coverage

**Ruotsin ja Tanskan seismologit kertoivat kaasu-vuotojen johtuneen räjähdyksistä – Räjähdykset havaittiin myös suomalaisilla mittausasemilla**  
Timo Tiira  
27/09/2022  
1 item of Media coverage

**Suomenlahdella havaittiin viime viikolla viisi räjähdystä – Venäjän aluevesillä**  
Timo Tiira  
25/10/2022  
1 item of Media coverage

**Suomenlahdella havaittiin viime viikolla viisi räjähdystä – Venäjän aluevesillä**  
Timo Tiira  
25/10/2022  
1 item of Media coverage

**Tämä epäillyistä Nord Stream -iskuista tiedetään nyt**  
Timo Tiira  
28/09/2022  
1 item of Media coverage

**The deepest crust in Europe found in the Jyväskylä region**  
T. Tiira  
26/03/2020  
1 item of Media coverage

**Tutkimus: Euroopan syvin maankuori sijaitsee Jyväskylän seudulla**  
Toni Veikkolainen, Timo Tiira, Sakari Väkevä, Kari Komminaho, Aku Heinonen, Annakaisa Korja, Tomasz Janik & Tymon Skrzynik  
26/03/2020  
1 item of Media coverage

**Venäjällä uutisoitiin mystisistä räjähdyksistä Suomen-lahdella – tästä voi olla kyse**

Timo Tiira

24/10/2022

1 item of Media coverage

**Yle: Nord Stream -räjähdykset huomattiin Suomessa asti**

Timo Tiira

28/09/2022

1 item of Media coverage

## Activities

**Joint Nordic EPOS and 53rd Nordic Seismology Seminar**

Timo Tiira (Chair of organizing committee), Päivi Haapanala (Secretary of organizing committee), Annakaisa Korja (Member of organizing committee), Kati Oinonen (Member of organizing committee), Tommi Vuorinen (Member of organizing committee), Niina Junno (Member of organizing committee) & Annukka Elina Rintamäki (Member of organizing committee)

25 Oct 2022 → 27 Oct 2022

**ISC - International Seismological Center (External organisation)**

Timo Tiira (Board member)

Sept 2021 → ...

**Journal of Seismology (Journal)**

Timo Tiira (Member of editorial board)

6 Mar 2020 → ...

**Journal of Seismology (Journal)**

Timo Tiira (Reviewer)

2020

**Advances in Geophysics (Journal)**

Timo Tiira (Reviewer)

2019

**Computers & Geosciences (Journal)**

Timo Tiira (Reviewer)

2019

**Journal of Seismology (Journal)**

Timo Tiira (Reviewer)

2019

**Pure and applied geophysics : PAGEOPH (Journal)**

Timo Tiira (Reviewer)

2019

**ESC General Assembly Malta**

Timo Tiira (Poster Presentation)

2 Sept 2018 → 8 Sept 2018

**First AlpArray Science Meeting**

Timo Tiira (Attendee)

29 Aug 2018 → 30 Aug 2018

**Acta Geophysica (Journal)**

Timo Tiira (Reviewer)

2018

**Applied Geophysics (Journal)**

Timo Tiira (Reviewer)

2018

**EGU General Assembly 2018**

Timo Tiira (Poster Presentation)

2018

**Journal of Seismology (Journal)**

Timo Tiira (Reviewer)

2018

**IAG-IASPEI 2017**

Timo Tiira (Attendee)

30 Jul 2017 → 4 Aug 2017

**e-COST TIDES Council meeting and training school**

Timo Tiira (Attendee)

9 Jul 2017 → 14 Jul 2017

**CTBTO: Science and Technology 2017**

Timo Tiira (Attendee)

26 Jun 2017 → 30 Jun 2017

**EGU 2017 General Assembly**

Timo Tiira (Attendee)

24 Apr 2017 → 28 Apr 2017

**Tymon Skrzynic**

Timo Tiira (Host) & Kari Juhani Komminaho (Host)

27 Mar 2017 → 21 Apr 2017

**International Journal of Earth Sciences (Journal)**

Timo Tiira (Reviewer)

2017

**Journal of Seismology (Journal)**

Timo Tiira (Reviewer)

2017

**Computers & Geosciences (Journal)**

Timo Tiira (Reviewer)

22 Aug 2016 → 12 Sept 2016

**The Institute of Geophysics (IGP) of the National Academy of Sciences of Ukraine**

Timo Tiira (Visiting researcher)

26 Oct 2015 → 29 Oct 2015

**IUGG General Assembly**

Timo Tiira (Attendee)

25 Jun 2015 → 1 Jul 2015

**European Geosciences Union General Assembly 2015**

Timo Tiira (Attendee)

12 Apr 2015 → 17 Apr 2015

**e-COST TIDES (External organisation)**

Timo Tiira (Member)

2015 → 2018

**ILP / Finnish National Committee (External organisation)**

Timo Tiira (Member)

2015 → ...

**pro gradu/ Tommi Vuorinen**

Timo Tiira (Supervisor)

2015

**Pure and applied geophysics : PAGEOPH (Journal)**

Timo Tiira (Reviewer)

2014 → 2015

**Monika Wilde-Piorko**

Timo Tiira (Host)

17 Nov 2013 → 24 Nov 2013

**GeoPlanet: Earth and Planetary Sciences (Journal)**

Timo Tiira (Reviewer)

18 Oct 2013 → 20 Dec 2013

**European Geosciences Union General Assembly 2013**

Timo Tiira (Poster Presentation)

7 Apr 2013 → 12 Apr 2013

**Geophysical Journal International (Journal)**

Timo Tiira (Reviewer)

5 Feb 2013 → Mar 2013

**Lithosphere 2012 symposium**

Timo Tiira (Attendee)

6 Nov 2012 → 8 Nov 2012

**Geophysical Journal International (Journal)**

Timo Tiira (Reviewer)

27 Aug 2012 → 27 Sept 2012

**European Geosciences Union General Assembly 2012**

Timo Tiira (Poster Presentation)

22 Apr 2012 → 27 Apr 2012

**Varsovan Yliopisto, Geofysiikan laitos**

Timo Tiira (Visiting researcher)

17 Mar 2012 → 22 Mar 2012

**4th PASSEQ Workshop**

Timo Tiira (Attendee)

14 Mar 2012 → 17 Mar 2012

**MIDCRUST Workshop**

Timo Tiira (Attendee)

13 Feb 2012 → 14 Feb 2012

**Studia Geophysica et Geodaetica (Journal)**

Timo Tiira (Reviewer)

15 Nov 2011 → 5 Dec 2011

**Prof Marek Grad**

Timo Tiira (Host)

29 Aug 2011 → 28 Sept 2011

**University of Warsaw, Institute of Geophysics and Polish Academy of Sciences, Institute of Geophysics**

Timo Tiira (Visiting researcher)

13 Feb 2011 → 26 Feb 2011

**Workshop: Kallioperän 3D-hanke**

Timo Tiira (Attendee)

8 Feb 2011

**Lithosphere 2010**

Timo Tiira (Poster Presentation)

27 Oct 2010 → 28 Oct 2010

**Marek Grad**

Timo Tiira (Host)

20 Sept 2010 → 16 Oct 2010

**ESC 32nd General Assembly**

Timo Tiira (Poster Presentation)

5 Sept 2010 → 10 Sept 2010

**University of Warsaw**

Timo Tiira (Visiting researcher)

24 Jan 2010 → 6 Feb 2010

**Tectonophysics (Journal)**

Timo Tiira (Reviewer)

Dec 2009

**DOBRE4 working group (External organisation)**

Timo Tiira (Member)

1 Aug 2009 → ...

**Acta Geophysica (Journal)**

Timo Tiira (Reviewer)

Aug 2009

**European geophysical Union, General Assembly 2009**

Timo Tiira (Poster Presentation)

19 Apr 2009 → 25 Apr 2009

**Institute of Geophysics, Academy of Sciences of Ukraine**  
Timo Tiira (Visiting researcher)  
10 Oct 2008 → 23 Oct 2008

**PANCAKE working group (External organisation)**  
Timo Tiira (Member)  
1 Oct 2008 → ...

**31st General Assembly, European Seismological Comission**  
Timo Tiira (Chair)  
7 Sept 2008 → 12 Sept 2008

**SEISMIX 2008**  
Timo Tiira (Poster Presentation)  
8 Jun 2008 → 13 Jun 2008

**CELEBRATION 2000 Workshop, 22.-26.5.2008, Zakopane, Poland**  
Timo Tiira (Participant)  
22 May 2008 → 26 May 2008

**European Geophysical Union, General Assembly 2008**  
Timo Tiira (Poster Presentation)  
13 Apr 2008 → 18 Apr 2008

**Bulletin of the Seismological Society of America (Journal)**  
Timo Tiira (Reviewer)  
1 Jan 2008 → 31 Dec 2008

**Polish Polar Research (Journal)**  
Timo Tiira (Reviewer)  
1 Jan 2008 → 31 Dec 2008

**Marek Grad**  
Timo Tiira (Host)  
16 Sept 2007 → 12 Oct 2007

**Attila Kovacs**  
Timo Tiira (Host)  
18 Aug 2007 → 25 Aug 2007

**Endre Hegedus**  
Timo Tiira (Host)  
18 Aug 2007 → 25 Aug 2007

**Istvan Torok**  
Timo Tiira (Host)  
18 Aug 2007 → 25 Aug 2007

**Marek Grad**  
Timo Tiira (Host)  
24 Sept 2006 → 4 Nov 2006

**First European Conference on Earthquake Engineering and Seismology (1st ECEES)**

Timo Tiira (Chair)

3 Sept 2006 → 8 Sept 2006

**Geological Survey of Lithuania**

Timo Tiira (Visiting researcher)

13 Jun 2006 → 22 Jun 2006

**European Geophysical Union General Assembly 2006**

Timo Tiira (Poster Presentation)

2 Apr 2006

**Monika Wilde-Piorko**

Timo Tiira (Host)

15 Mar 2006 → 29 Mar 2006

**Polish Academy of Sciences, Institute of Geophysics**

Timo Tiira (Visiting researcher)

16 Feb 2006 → 18 Feb 2006

**European Seismological Commission, Sub-Commission D (External organisation)**

Timo Tiira (Secretary)

1 Jan 2006 → 31 Dec 2006

**Geophysical Journal International (Journal)**

Timo Tiira (Reviewer)

1 Jan 2006 → 31 Dec 2006

**PASSEQ working group (External organisation)**

Timo Tiira (Member)

1 Jan 2006 → ...

**Disaster Early Warning System Feasibility Study Seminar**

Timo Tiira (Attendee)

9 Dec 2005

**University of Warsaw**

Timo Tiira (Visiting researcher)

20 Nov 2005 → 26 Nov 2005

**Marek Grad**

Timo Tiira (Host)

18 Sept 2005 → 28 Oct 2005

**Vienna University of Technology**

Timo Tiira (Visiting researcher)

5 Sept 2005 → 15 Sept 2005

**Workshop: Geodynamics of Central Europe**

Timo Tiira (Attendee)

30 May 2005 → 3 Jun 2005

**ALPASS working group (External organisation)**

Timo Tiira (Member)

1 May 2005 → ...

**European Geophysical Union, General Assembly 2005**

Timo Tiira (Poster Presentation)

24 Apr 2005 → 30 Apr 2005

**EUROARRAY meeting**

Timo Tiira (Attendee)

14 Mar 2005 → 17 Mar 2005

**European Seismological Commission, Sub-Commission D (External organisation)**

Timo Tiira (Secretary)

1 Jan 2005 → 31 Dec 2005

**Geophysical Journal International (Journal)**

Timo Tiira (Reviewer)

1 Jan 2005 → 31 Dec 2005

**European Seismological Commission, Sub-Commission D (External organisation)**

Timo Tiira (Secretary)

1 Jan 2004 → 31 Dec 2004

**SUDETES 2003 working group (External organisation)**

Timo Tiira (Member)

1 Jun 2003 → ...

**ALP2002 working group (External organisation)**

Timo Tiira (Member)

1 Jun 2002 → 31 Dec 2009

**FIRE working group (External organisation)**

Timo Tiira (Member)

1 Jan 2001 → ...

**Marek Grad**

Timo Tiira (Host)

6 Nov 2000 → 17 Nov 2000

**Thomasz Janik**

Timo Tiira (Host)

6 Nov 2000 → 17 Nov 2000

**CELEBRATION 2000 Working group (External organisation)**

Timo Tiira (Member)

1 Jun 2000 → ...

**Jiri Halik**

Timo Tiira (Host)

6 Dec 1994 → 12 Dec 1994

**Annali di Geofisica (Journal)**

Timo Tiira (Reviewer)

1994

## **Activities**

**ISC - International Seismological Center (External organisation)**

Timo Tiira (Board member)

Sept 2021 → ...

**Journal of Seismology (Journal)**

Timo Tiira (Member of editorial board)

6 Mar 2020 → ...

**Journal of Seismology (Journal)**

Timo Tiira (Reviewer)

2020

**Advances in Geophysics (Journal)**

Timo Tiira (Reviewer)

2019

**Computers & Geosciences (Journal)**

Timo Tiira (Reviewer)

2019

**Journal of Seismology (Journal)**

Timo Tiira (Reviewer)

2019

**Pure and applied geophysics : PAGEOPH (Journal)**

Timo Tiira (Reviewer)

2019

**Acta Geophysica (Journal)**

Timo Tiira (Reviewer)

2018

**Applied Geophysics (Journal)**

Timo Tiira (Reviewer)

2018

**Journal of Seismology (Journal)**

Timo Tiira (Reviewer)

2018

**Tymon Skrzynic**

Timo Tiira (Host) & Kari Juhani Komminaho (Host)

27 Mar 2017 → 21 Apr 2017

**International Journal of Earth Sciences (Journal)**

Timo Tiira (Reviewer)

2017

**Journal of Seismology (Journal)**

Timo Tiira (Reviewer)

2017

**Computers & Geosciences (Journal)**

Timo Tiira (Reviewer)

22 Aug 2016 → 12 Sept 2016

**The Institute of Geophysics (IGP) of the National Academy of Sciences of Ukraine**

Timo Tiira (Visiting researcher)

26 Oct 2015 → 29 Oct 2015

**e-COST TIDES (External organisation)**

Timo Tiira (Member)

2015 → 2018

**ILP / Finnish National Committee (External organisation)**

Timo Tiira (Member)

2015 → ...

**pro gradu/ Tommi Vuorinen**

Timo Tiira (Supervisor)

2015

**Pure and applied geophysics : PAGEOPH (Journal)**

Timo Tiira (Reviewer)

2014 → 2015

**Monika Wilde-Piorko**

Timo Tiira (Host)

17 Nov 2013 → 24 Nov 2013

**GeoPlanet: Earth and Planetary Sciences (Journal)**

Timo Tiira (Reviewer)

18 Oct 2013 → 20 Dec 2013

**Geophysical Journal International (Journal)**

Timo Tiira (Reviewer)

5 Feb 2013 → Mar 2013

**Geophysical Journal International (Journal)**

Timo Tiira (Reviewer)

27 Aug 2012 → 27 Sept 2012

**Varsovan Yliopisto, Geofysikan laitos**

Timo Tiira (Visiting researcher)

17 Mar 2012 → 22 Mar 2012

**Studia Geophysica et Geodaetica (Journal)**

Timo Tiira (Reviewer)

15 Nov 2011 → 5 Dec 2011

**Prof Marek Grad**

Timo Tiira (Host)

29 Aug 2011 → 28 Sept 2011

**University of Warsaw, Institute of Geophysics and Polish Academy of Sciences, Institute of Geophysics**

Timo Tiira (Visiting researcher)

13 Feb 2011 → 26 Feb 2011

**Marek Grad**

Timo Tiira (Host)

20 Sept 2010 → 16 Oct 2010

**University of Warsaw**

Timo Tiira (Visiting researcher)

24 Jan 2010 → 6 Feb 2010

**Tectonophysics (Journal)**

Timo Tiira (Reviewer)

Dec 2009

**DOBRE4 working group (External organisation)**

Timo Tiira (Member)

1 Aug 2009 → ...

**Acta Geophysica (Journal)**

Timo Tiira (Reviewer)

Aug 2009

**Institute of Geophysics, Academy of Sciences of Ukraine**

Timo Tiira (Visiting researcher)

10 Oct 2008 → 23 Oct 2008

**PANCAKE working group (External organisation)**

Timo Tiira (Member)

1 Oct 2008 → ...

**CELEBRATION 2000 Workshop, 22.-26.5.2008, Zakopane, Poland**

Timo Tiira (Participant)

22 May 2008 → 26 May 2008

**Bulletin of the Seismological Society of America (Journal)**

Timo Tiira (Reviewer)

1 Jan 2008 → 31 Dec 2008

**Polish Polar Research (Journal)**

Timo Tiira (Reviewer)

1 Jan 2008 → 31 Dec 2008

**Marek Grad**

Timo Tiira (Host)

16 Sept 2007 → 12 Oct 2007

**Attila Kovacs**

Timo Tiira (Host)

18 Aug 2007 → 25 Aug 2007

**Endre Hegedus**

Timo Tiira (Host)

18 Aug 2007 → 25 Aug 2007

**Istvan Torok**  
Timo Tiira (Host)  
18 Aug 2007 → 25 Aug 2007

**Marek Grad**  
Timo Tiira (Host)  
24 Sept 2006 → 4 Nov 2006

**Geological Survey of Lithuania**  
Timo Tiira (Visiting researcher)  
13 Jun 2006 → 22 Jun 2006

**Monika Wilde-Piorko**  
Timo Tiira (Host)  
15 Mar 2006 → 29 Mar 2006

**Polish Academy of Sciences, Institute of Geophysics**  
Timo Tiira (Visiting researcher)  
16 Feb 2006 → 18 Feb 2006

**European Seismological Commission, Sub-Commission D (External organisation)**  
Timo Tiira (Secretary)  
1 Jan 2006 → 31 Dec 2006

**Geophysical Journal International (Journal)**  
Timo Tiira (Reviewer)  
1 Jan 2006 → 31 Dec 2006

**PASSEQ working group (External organisation)**  
Timo Tiira (Member)  
1 Jan 2006 → ...

**University of Warsaw**  
Timo Tiira (Visiting researcher)  
20 Nov 2005 → 26 Nov 2005

**Marek Grad**  
Timo Tiira (Host)  
18 Sept 2005 → 28 Oct 2005

**Vienna University of Technology**  
Timo Tiira (Visiting researcher)  
5 Sept 2005 → 15 Sept 2005

**ALPASS working group (External organisation)**  
Timo Tiira (Member)  
1 May 2005 → ...

**European Seismological Commission, Sub-Commission D (External organisation)**  
Timo Tiira (Secretary)  
1 Jan 2005 → 31 Dec 2005

**Geophysical Journal International (Journal)**  
Timo Tiira (Reviewer)  
1 Jan 2005 → 31 Dec 2005

**European Seismological Commission, Sub-Commission D (External organisation)**  
Timo Tiira (Secretary)  
1 Jan 2004 → 31 Dec 2004

**SUDETES 2003 working group (External organisation)**  
Timo Tiira (Member)  
1 Jun 2003 → ...

**ALP2002 working group (External organisation)**  
Timo Tiira (Member)  
1 Jun 2002 → 31 Dec 2009

**FIRE working group (External organisation)**  
Timo Tiira (Member)  
1 Jan 2001 → ...

**Marek Grad**  
Timo Tiira (Host)  
6 Nov 2000 → 17 Nov 2000

**Thomasz Janik**  
Timo Tiira (Host)  
6 Nov 2000 → 17 Nov 2000

**CELEBRATION 2000 Working group (External organisation)**  
Timo Tiira (Member)  
1 Jun 2000 → ...

**Jiri Halik**  
Timo Tiira (Host)  
6 Dec 1994 → 12 Dec 1994

**Annali di Geofisica (Journal)**  
Timo Tiira (Reviewer)  
1994