Authors of Annual Report:
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Petr Vopěnka

Most of the photographs were taken during business trips to Malaysia.
Foreword

You are holding in your hands the IFER Annual Report for the year 2010 – the sixteenth year of the company’s existence.

Every time me and my colleagues in IFER put together this summary of information about the company’s activities, we are pleasantly surprised to see how much we have managed in the past year, how many places we have travelled to and how many interesting partners from both the Czech Republic and abroad we have met.

There is always a sneaking thought about whether our effort and diligence were enough. Will we find and maintain our submitters and clients in the upcoming years? What should we change about ourselves and our work so that our results are still desirable and needed and our clients happy?

The surroundings in which we live and work are merciless. In order to maintain our position in the market among other research and commercial forestry organizations, it is necessary that we always try to be one step ahead, that we think in advance and work on what our clients will only start to need in the future. We also need to constantly come up with new ideas and put the ideas in progress to practical ends. At the same time, we must try our best to listen to and understand well our clients’ needs.

In the year 2010 we started to work on the means of technological support to forest management planning and paid significant attention to presenting and advertising our company and its products – i.e. to communicating with our existing and potential clients – at specialized exhibitions, fairs and seminars.

We expect that the year 2011 – and the years to follow – will, from the economic point of view, still be more difficult than the previous ones. The ongoing consequences of the economic recession and the circumstances ruling in the science & research sector are not very inclined in favor of private institutions. Let us still hope that the seventeenth year of our existence will be successful, that our products and services will find their markets and that we in IFER will still enjoy our work.
Characterization, identification and history of the companies

IFER - Institute of Forest Ecosystem Research, s.r.o., is an independent, private research organization. The core activities of the company are primarily focused on forest production ecology, monitoring of forest health condition, methods of statistical forest inventory, forest management planning, wildlife ecology, balance of carbon and other substances in ecosystems, etc. IFER is capable of independent work at research tasks in these fields on the basis of current assignments of clients from amongst the Czech and foreign forest owners and managers, ministries, state administration and self-governments, the European Union and other international organizations and institutions. IFER is functioning with no basic budget or institutional contribution; its existence depends exclusively on the receipts from individual projects.

The history of the Institute of Forest Ecosystem Research dates back to the beginning of the year 1992 when a group of four colleagues made a decision to leave the Research Institute of Forest and Game Management (VÚLHM Jíloviště-Strnady) and to start independent work. In 1994, the group founded a limited company IFER s.r.o. and in 1996, the company’s seat was moved to Jílové u Prahy.

During its existence, IFER gained a lot of theoretical knowledge as well as practical experience which facilitate a long-term development of the methodology of statistical forest inventory and a closely linked complex technology of computer aided collection and processing of field data – Field-Map. The development and subsequent trading with the Field-Map technology was assigned to a spinoff limited company IFER – Monitoring and Mapping Solutions, s.r.o. founded for the purpose in 2005.
Contents

Foreword
Characterization, identification and history of the companies

Activities .............................................................. 5
Projects undertaken in 2010
IFER research articles and publications in 2010
Seminars and presentations in 2010
Final and progress reports presented to submitters in the year 2010

Support to users of Field-Map and other business activities..........................15
Business trips, trainings and work meetings in 2010
Important business trips in 2010
Participation at expert fairs and exhibitions in 2010
Participation in public tenders in 2010
Field-Map technology users
New users of Field-Map technology in 2010
Field-Map technology in specialized publications
Field-Map users meeting
Sponsorship
From its foundation until today, IFER – Institute of Forest Ecosystem Research – resolved more than 220 research projects – from purely domestic assignments through international projects up to those resolved and implemented abroad only. IFER can resolve research tasks falling into the sphere of basic research as well as practice-oriented technical jobs. In the last few years, IFER’s portfolio of activities was extended by tasks falling into the sphere of decision- and policy-making (e.g. expert counselling for state administration or ministries, preparation of documents for agendas relating to international conventions, etc.).

The centre of IFER’s activities lies in forestry, at all levels of the science – forest operations (logging, silviculture, etc.), forest management, monitoring of protected areas, forest policy, administration of databases, development of computer programs for the forest industry and many others. IFER has long been dealing also with the issue of climate change and with the related monitoring of carbon stock and inventory of the emissions of greenhouse gases. At present, IFER focuses on developing practically applicable systems and utilities capable of continuously updating data of forest management plans and last but not least on developing effective methods of studying the production potential of forests.

The background of theoretical knowledge and practical experience in all these disciplines made it possible for the Institute of Forest Ecosystem Research to develop on a long-term basis a methodology for statistical forest survey on the principles of which dwell today the solutions of most of its research projects. For the needs of forest inventory, IFER developed and is continually improving a complex technology for the collection of field data and their subsequent processing – Field-Map. The scope, process and goals of the inventory vary across the range of IFER’s projects and this is why the activities and projects which currently stand in the centre of IFER’s attention can be divided into the following groups:
Volume measurement and grading of standing trees

The determination and finding of effective procedures enabling to identify stem volume and individual assortments in standing trees is one of basic mensurational tasks and the theme is one of pivotal issues resolved by IFER from its foundation until these days. At the beginning of its existence, IFER succeeded in developing yield tables and growth models for MZe ČR (the Ministry of Agriculture of the Czech Republic). The experience is currently capitalized in the development and application of methods for standing crop grading. A great experience in this sense was cooperation with VLS s.p. (Military Forests and Farms, State enterprise) in 2007-2009, for which IFER developed a program support for grading the volume of timber to be felled in a certain year, which is in full operation today.

Monitoring of forest reserves

In the period from 1994-2004, IFER designed and administered an information system for MZe ČR (the Ministry of Agriculture of the Czech Republic) on forests based on a pattern of pilot research plots (PRP) and permanent sample plots (PSP). The gained experience enables IFER to design procedures for the establishment and monitoring of control plots for various institutions, e.g. LČR, s.p. (Forests of the Czech Republic, state enterprise), SCHKO ČR – today Agency for Nature Conservation and Landscape Protection, MŽP ČR (the Ministry of the Environment of the Czech Republic) etc. and to collaborate with international organizations such as Alterra in Wageningen (Netherlands), University of Lund (Sweden), Forest Research Institute of Malaysia, ANB – Agentschap voor Natuuren Bos (Belgium) and others.

Forest health assessment

Important projects in the history of IFER include e.g. the formulation of forest and soil management principles with respect to long-term acidification, nutritional degradation and eutrophication of forest soils or to the zoning of forest soils in the Czech Republic in relation to their acidification and nutritional degradation. On a long-term basis IFER dealt with the program for monitoring the health condition of forest stands at regional level (NP Šumava, KRNAP, NP Podyji, Beskydy, Jeseníky and Brdy). In 2009, a project was launched titled Forest adaptation strategy for the changing environment in conditions of the Moravian-Silesian Beskids (LASPROBES) in reaction to deteriorating health condition of spruce stands in the region.

Assessment of wildlife impact on the forest

IFER has been dealing with the issue of wildlife
impact on the forest: since 1995, national inventory of game damage has been conducted in five-year intervals (1995, 2000, 2005, 2010). IFER also carried out the inventory of game damage on regional level for VLS, s.p. and all its divisions (2006 and 2009) and for the Administration of Křivoklátsko Protected Landscape Area (2010). The portfolio of services provided by IFER in this field was in 2009 extended by a project for forensic valuation of game damages in the Aglaia game preserve, followed by another expert survey for a private forest owner in 2010.

Forest management
In the past years, IFER participated in the practical employment of new forest management methods - e.g. in the elaboration of Forest Management Plan for the NP Podyji or at the operational inventory of working-plan areas in the NP Šumava. The method has been successfully used in foreign projects too - e.g. in the evaluation of the state of forests in the locality of Nizhniy Bystriy in Ukraine. Within the project of foreign developmental cooperation, IFER helps the Ukrainian Lesprojekt in building an information system on forests. Forest management is also in the scope of the MOTIVE project which has been launched recently and seeks suitable forest management strategies in conditions of the changing environment. At present, IFER is intensively working on the development of technological support for the acquisition and continual updating of data of forest management plans.

Carbon stock monitoring
IFER developed a methodology of carbon stock monitoring for the FACE Foundation, which was subsequently verified in several inventory campaigns in national parks of Uganda (2003, 2008) and Malaysia (2007). In Malaysia, the measurements continued also in 2010. Important projects dealing with the quantification of carbon stock and its cycle in ecosystems included CzechCarbo (MŽP ČR - the Ministry of the Environment of the Czech Republic) or CARBOINVENT (EU). The solution of a new project CZECHFORSCE - Contribution of the forest sector in the balance of emissions in the Czech Republic and model prediction of forest management scenarios in the Czech Republic relates to this issue as well.

Emission inventories and modelling
Since 2006, IFER continually works on the inventory of GHG emissions and sinks within the framework of National Inventory System (NIS) for the sectors of “Agriculture” and “Land Use, Land-Use Change and Forestry” (LULUCF). In 2003-2005, Grant Agency of the Czech Republic funded the regional quantification of carbon stock and modelling of its development in connection with commitments of the Kyoto protocol. Apart from the inventory and monitoring, IFER tackles analytical projects and scenario modelling.

Inventory of forests and landscape at national and regional levels
One of the most important activities of IFER is development and application of methods for the inventory of forests and landscape. Since the elaboration of methodology for a large-scale forest inventory in the Czech Republic in 1994-2000, the scope of activities included technological and methodological support not only to Czech national forest inventory but also to national forest inventories in Ireland, Hungary, Austria, Slovakia, Cape Verde Islands, Russia, Iceland, Flanders or Ukraine. Forest survey methods are further used in operational regional inventories and regional identification of the state of forests in the Czech Republic, Switzerland, Germany, Poland, Vietnam and in several countries of Latin America. Principles of statistical inventory serve for example as a basis for the methodology of “national landscape inventory” employed in the extensive CzechTerra project. In the year 2010 the results of the CzechTerra project were presented and made available to a wider public of professionals.
Projects undertaken in 2010

- Technological and methodological support to the National Forest Inventory (NFI) of Russian Federation (GIL RF)
- CzechTerra – adaptation of landscape carbon reservoirs in the context of global change (SP/2d1/93/07)
- Reporting for the inventory of GHG emissions and sinks within the framework of National Inventory System (NIS) for the sectors of “Land Use, Land-Use Change and Forestry” (LCF/LULUCF) and “Agriculture”
- LASPROBES - Forest adaptation strategy for the changing environment in conditions of the Moravian-Silesian Beskids
- Models for adaptive forest management – MOTIVE

- Collaboration in the field of forest ecosystems inventory (Ukraine) – TechinLes II.
- Introduction of environment-friendly management according to FSC standard in the Czech Republic
- Establishment of stand composition on the research plots of LFE Eberswalde
- Technological support in forest surveys – Internal R & D project
- Technological and methodological assistance in data collection on research plots in Switzerland
- Technological and methodological assistance at National Forest Inventory in Cape Verde
- Contribution of forestry to the emission balance of the Czech Republic and model prediction of forest management scenarios in the conditions of the Czech Republic (CZECHFORSCEN)
- Preparation of a management plan for Jizera Mountains Beech Forests National Nature Reserve
- Inventory of game damage in forest stands – the Czech Republic
- Carbon monitoring campaign in Infapro, Sabah, Malaysia II
- Complex measurement of areas of intensive monitoring (LIFE+ FutMon)
- Distribution of common yew in the Czech Republic with respect to its ecological amplitude, evaluation of risk factors and preparation of a complex proposal of measures for the protection of this severely threatened species.
- Northern ToSIA
IFER research articles and publications in 2010

Cienciala E., Apltauer J. (2010). National Greenhouse Gas Inventory Report, NIR (reported inventory 2008), Chapter 7 - Land Use, Land-Use Change and Forestry (CRF sector 5) and Chapter 11 - KP LULUCF, CHMI Prague, 2010 (http://unfccc.int/national_reports)


Seminars and presentations in 2010

International Conference on “Landscape structures, functions and management: response to global ecological change”, 3 – 6 September 2010, Mendel University in Brno

Cienciala E., Černý M., Beranová J. (2010). Addressing the Challenges of Landscape Monitoring – The CzechTerra Landscape Inventory - expert presentation and contribution to the collection of abstracts

Technical workshop on LULUCF issues under the Kyoto Protocol, Organized by the JRC of the European Commission, Brussels, 9-10 November 2010


Resort seminar of MŽP (the Ministry of the Environment of the Czech Republic), the CzechTerra project, 24 November 2010

Presentation of the results of the “SP/2d1/93/07 CzechTerra - Adaptation of landscape carbon reservoirs in the context of global change” project under the Ministry of the Environment of the Czech Republic (2010). A part of the presentation was a workshop (oriented at the project’s visions and concepts, results and their application), presentations from potential users of the project outputs and press conference.

Silva Regina exhibition, Brno Congress Center, 22 March 2010

Černý M., Apltauer J., Mrázek M., Kneblík P.: Application of Field-Map in forest management planning - presentation of Field-Map functions with focus on possibilities of application in forest management planning. The seminar was intended for mensurationists, forest owners and forest managers, researchers and certified assessors in the field of forest valuation.

Černý M., Apltauer J., Beranová J., Podhrázská P.: Effective methods of identifying and assessing game damage - presentation of possible approaches to game damage assessment. The seminar was intended for specialists in the field of forest valuation, forest estate owners and managers and for the State Administration of Forestry and Game Management officers.

GPS workshop, Montpellier, 11.-13 October 2010, organized by the European Commission JRC

Russ R.: Field-Map technology – forestry oriented tool for measurement and mapping in difficult conditions. Presentation on application of Field-Map technology to mapping of plot areas within the Common Agricultural Policy (check activities, plot identification system etc.). The participants of the meeting were representatives of the individual member countries of the EU (officers of state audit bodies and subsidy agencies), JRC representatives and representatives of invited companies.

Closing seminar to the TechInLes project, Bojarka, 4 – 5 November 2010

Černý M.: Presentation of the TechInLes project activities oriented to modern technologies in the field of forestry and landscape management.

Černý M.: Prospective directions in the development of Czech-Ukrainian cooperation on applying modern IT in forestry.
Final and progress reports presented to submitters in the year
2010 (in a chronological order)

Game damage evaluation in forest stands of Game-preserve AGALIA pursuant to the Decree No. 55/1999 Coll. of the Ministry of Agriculture.

Operational Statistical Forest Inventory for the management-plan area Borová Lada

Carbon Monitoring Campaign, Manual Penggunaan Field-Map

Carbon Monitoring Campaign, Standard Operating Procedures

Inventory of game damage in forest stands - a final comprehensive report

CZECHTERRA - Landscape Inventory (English version) - the concept and first results

Methodology of data collection on inventory plots in KRNAP (The Krkonoše Mountains National Park)

Operational Statistical Forest Inventory, KRNAP, the Harrachov management-plan area

Report on completion of an UNFCCC on-line course in the LULUCF sector and KP reporting

Game damage evaluation on the management-plan area GERIMO – JAVORNÁ pursuant to the Decree No. 55/1999 Coll. of the Ministry of Agriculture – expert report No. 020/10

Distribution of common yew in the Czech Republic with respect to its ecological amplitude, evaluation of risk factors and preparation of a complex proposal of measures for the protection of this severely threatened species. (SP/2d4/31/07) - First Half Year Report 2010

Cooperation in the area of forest ecosystems inventory (TechInLes-2)

EFOREWOOD, TOSIA – A tool for sustainability impact assessment of the forest-wood chain

Distribution of common yew in the Czech Republic with respect to its ecological amplitude, evaluation of risk factors and preparation of a complex proposal of measures for the protection of this severely threatened species. (SP/2d4/31/07) - Third-Quarter 2010 Report

CZECHTERRA – adaptation of landscape carbon reservoirs in the context of global change - the “Development of a Dynamic Observation Network Providing Information on the Condition, Evolution of Forest Ecosystems, and Land Use” segment (PS3) - a report and the results of statistical data processing, August 2010

CZECHTERRA – adaptation of landscape carbon reservoirs in the context of global change - the “Development of a Dynamic Observation Network Providing Information on the Condition, Evolution of Forest Ecosystems, and Land Use” segment (PS3) - the concept and selected results, October 2010

Forest adaptation strategy for the changing environment in conditions of the Moravian-Silesian Beskids (LASPROBES) - an intermediate technical report for the year 2010 (DTZ1)
Inventory of game damage to forestry in the Czech Republic, Part II, Field survey - final report

Inventory of game damage to forestry in the Czech Republic, Results of field survey in the year 2010 - final report

Greenhouse gas emission trend and projection from the agriculture sector in the Czech Republic for the years 2010, 2015 and 2020 for the purposes of reporting pursuant to the Article 3.2 of Decision No. 208/2004/EC

Collaboration in the field of forest ecosystems inventory (Ukraine)

Game damage inventory in forest stands. The “Evaluation of game impact on forest ecosystems in the Křivoklátsko Landscape Protected Area” study

Management plan for Jizera Mountains Beech Forests National Nature Reserve for the period of 2012-2021

CZECHTERRA - adaptation of landscape carbon reservoirs in the context of global change - the “Development of a Dynamic Observation Network Providing Information on the Condition, Evolution of Forest Ecosystems, and Land Use” segment (PS3) - the concept and selected results, November 2010 (prepared for the resort seminar)

Contribution of forestry to the emission balance of the Czech Republic and model prediction of forest management scenarios in the conditions of the Czech Republic (CzechForScen). The current emission trend and the contribution of the forestry sector, report for the first year of the project implementation

Complex measurement of 16 areas of intensive monitoring (LIFE+ FutMon)

Project within the scope of the Czech Foreign Development Cooperation Programme aimed at the Ukraine. Collaboration in the field of forest ecosystems inventory - the Ukraine (TechInLes-2) - the project implementation final report.

A draft of a specialized publication “Utilisation of an advanced technology of Field-Map in forest management and landscaping: experience from the Czech-Ukrainian project TechInLes”.

Annexe 8 to the “Collaboration in the field of forest ecosystems inventory - the Ukraine” project implementation final report, IFER, 2008-2010 (in Russian).

Distribution of common yew in the Czech Republic with respect to its ecological amplitude, evaluation of risk factors and preparation of a complex proposal of measures for the protection of this severely threatened species. (SP/2d4/31/07) - project final report

Distribution of common yew in the Czech Republic with respect to its ecological amplitude, evaluation of risk factors and preparation of a complex proposal of measures for the protection of this severely threatened species. (SP/2d4/31/07) - electronic version of the report for the AOPK (Agency for Nature Conservation and Landscape Protection of the Czech Republic) including databases and maps
Support to users of Field-Map and other business activities
**Business trips, trainings and work meetings in 2010**

<table>
<thead>
<tr>
<th>Date</th>
<th>Institution</th>
<th>Country</th>
<th>Supervisor(-s)</th>
<th>Subject matter</th>
</tr>
</thead>
<tbody>
<tr>
<td>26.11.2009 -</td>
<td>Universidad Distrital FJC, IDEAM- Inventario Forestal Nacional, Servicios</td>
<td>Colombia</td>
<td>Radek Russ, Ana Maria Russová</td>
<td>Presentation of Field-Map technology, training</td>
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<tr>
<td>21.2.2010</td>
<td>Forestales, Producel Ingenieros</td>
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<td>13.-15.1.</td>
<td>Universidad de los Llanos</td>
<td>Colombia</td>
<td>Radek Russ, Ana Maria Russová</td>
<td>Field-Map practice</td>
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<tr>
<td>25.-27.1.</td>
<td>Forest Environmental Research and Services (Dr.Kevin Black)</td>
<td>CZ, Jílové u Prahy</td>
<td>Petr Blažek</td>
<td>Field-Map practice</td>
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<td>16.1.-6.2.</td>
<td>InfaPro, Face the future</td>
<td>Malaysia</td>
<td>Petr Vopěnka</td>
<td>Measurements and checks on inventory plots</td>
</tr>
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<td>29.-31.3.</td>
<td>Universidad de Córdoba</td>
<td>CZ, Jílové u Prahy</td>
<td>Radek Russ</td>
<td>Field-Map practice</td>
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<tr>
<td>3.-14.4.</td>
<td>University of Malaysia Sabah-UMS</td>
<td>Malaysia</td>
<td>Petr Blažek</td>
<td>Field-Map practice</td>
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<tr>
<td>13.-24.4.</td>
<td>Moscow State Forest University - Forestry Faculty, the Institute of</td>
<td>Russia</td>
<td>Pavel Moravčík, Anatolij Ivanov</td>
<td>Presentation of the technology, meeting with the existing users</td>
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<td>Professional Education of Forestry Experts, Moscow State Agricultural</td>
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<td>University - Forestry Faculty, Institute of Forestry Planning in Kazakhstan,</td>
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<td>Rosleszascita, Centresprojekt, Kurska kosa Reserve, Zdrovij Les, Roslesinforg</td>
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<td>21.4.</td>
<td>Czech University of Life Sciences</td>
<td>CZ, Prague</td>
<td>Petr Vopěnka, Radim Seydl</td>
<td>Presentation of international projects and technology</td>
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<td>2.-15.5.</td>
<td>InfaPro, Face the Future</td>
<td>Malaysia</td>
<td>Petr Vopěnka</td>
<td>Repeted measurements and checks on inventory plots</td>
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<td>9.-12.5.</td>
<td>Technical University in Zvolen</td>
<td>Slovakia</td>
<td>Radim Seydl, Petr Blažek</td>
<td>Field-Map practice</td>
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<td>12.-14.5.</td>
<td>Georg-August-Universität Göttingen</td>
<td>CZ, Jílové u Prahy</td>
<td>Radek Russ, Michal Novotný</td>
<td>Field-Map practice</td>
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<td>18-19.5.</td>
<td>MZe (Ministry of Agriculture of the Czech Republic), VLS (Military Forests</td>
<td>CZ, Jílové u Prahy</td>
<td>Jan Apitauer, Martin Černý, Petr Blažek</td>
<td>Presentation of new possibilities of FM in enumeration surveys, introduction to</td>
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<tr>
<td>Date</td>
<td>Institution</td>
<td>Country</td>
<td>Supervisor(-s)</td>
<td>Subject matter</td>
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<td>18.-22.5</td>
<td>UNECE, FAO</td>
<td>France - Bordeaux</td>
<td>Emil Cienciala</td>
<td>Expert work seminar on: European Forest Types - Reporting on using the new European forest types</td>
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<td>8.6</td>
<td>Forstliche Versuchs- und Forschungsanstalt Baden-Württemberg-FVA</td>
<td>Germany</td>
<td>Martin Černý, Emil Cienciala</td>
<td>Presentation of new possibilities of FM in forest enumeration surveys, sorting and forest inventory</td>
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<td>9.6</td>
<td>Cabinet Coudert</td>
<td>France</td>
<td>Martin Černý, Emil Cienciala</td>
<td>Work meeting on cooperation</td>
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<td>13.-19.6</td>
<td>Moscow Forestry Academy - Educational-methodical center, Russian Center of Forest Protection</td>
<td>Russia</td>
<td>Petr Blažek, Anatolij Ivanov</td>
<td>Introduction to Field-Map technology - teachers at forestry high schools in Russia</td>
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<td>21.-22.6</td>
<td>National Forest Centre, Slovak forestry institutions and mensurationists</td>
<td>Slovakia - Zvolen</td>
<td>Petr Blažek, Martin Černý</td>
<td>Presentation of new possibilities of FM in forest enumeration surveys, sorting and forest inventory</td>
</tr>
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<td>14.-26.8</td>
<td>MAP GeoSolutions, Ministerio de Agricultura</td>
<td>Peru</td>
<td>Radek Russ</td>
<td>Professional and technological assistance</td>
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<td>15.-25.8</td>
<td>Ministerio de Agricultura (Ministry of Agriculture)</td>
<td>Peru</td>
<td>Radek Russ</td>
<td>Field-Map practice</td>
</tr>
<tr>
<td>6.-8.9</td>
<td>Goskomleschoz</td>
<td>Ukraine</td>
<td>Martin Černý</td>
<td>TechInles project</td>
</tr>
<tr>
<td>11.-20.9</td>
<td>Chinese Academy of Forestry</td>
<td>China</td>
<td>Martin Černý, Petr Blažek</td>
<td>Field-Map practice</td>
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<td>16.-18.9</td>
<td>Universita' di Torino, Bosco e Territorio Forest Fair</td>
<td>Italy</td>
<td>Alan Zambarda, Petr Vopěnka</td>
<td>Presentation of Field-Map technology</td>
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<td>4.-6.10</td>
<td>Szkoła Główna Gospodarstwa Wiejskiego w Warszawie-SGGW</td>
<td>CZ, Jilové u Prahy</td>
<td>Petr Vopěnka, Radek Russ, Michal Novotný</td>
<td>Field-Map practice</td>
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<td>4.-6.10</td>
<td>Fergus McCaffery (University College Dublin-UCD)</td>
<td>CZ, Jilové u Prahy</td>
<td>Martin Černý, Jan Apitauer</td>
<td>Field-Map practice</td>
</tr>
<tr>
<td>9.-22.10</td>
<td>Direcção Geral de Agricultura Silvicultura e Pecuária-DGASP</td>
<td>Cape Verde</td>
<td>Petr Blažek</td>
<td>Professional and technological assistance</td>
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<td>10.-13.10</td>
<td>Agropolis International Montpellier</td>
<td>France</td>
<td>Radek Russ, Petr Muller</td>
<td>Presentation of Field-Map technology on a GPS workshop</td>
</tr>
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<td>16.-24.10</td>
<td>Universita' di Padova, Universita' della Tuscia</td>
<td>Italy</td>
<td>Alan Zambarda, Petr Vopěnka</td>
<td>Presentation of FM technology, meeting with potential users</td>
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Important business trips in 2010

<table>
<thead>
<tr>
<th>Date</th>
<th>Institution</th>
<th>Country</th>
<th>Supervisor(-s)</th>
<th>Subject matter</th>
</tr>
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<tr>
<td>3.-4.11.</td>
<td>Goskomleschoz</td>
<td>Ukraine</td>
<td>Martin Černý, Jana Beranová</td>
<td>TechInles project</td>
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<td>22.-23.11.</td>
<td>Universität für Bodenkultur Wien-</td>
<td>Austria - Vienna</td>
<td>Martina Roubalová</td>
<td>Work meeting of the MOTIVE project</td>
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<td>29.-30.11.</td>
<td>Centro di ricerca per la</td>
<td>Italy - Florence</td>
<td>Alan Zambarda</td>
<td>Field-Map seminar</td>
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<td></td>
<td>selvicultura-CRA SEL, Circondario</td>
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<td></td>
<td>Empolese Valdelsa, DREAM Italia,</td>
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<td></td>
<td>R.D.M. Progetti, Universita’ delle</td>
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<tr>
<td></td>
<td>Marche, private mensurationists</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>22.-23.11.</td>
<td>Universität für Bodenkultur Wien</td>
<td>Austria - Vienna</td>
<td>Martina Roubalová</td>
<td>Work meeting of the MOTIVE project</td>
</tr>
<tr>
<td>29.-30.11.</td>
<td>Representatives of various</td>
<td>Italy - Florence</td>
<td>Alan Zambarda</td>
<td>Field-Map seminar</td>
</tr>
<tr>
<td></td>
<td>institutions with deeper interest</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>in Field-Map</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>29.11-3.12.</td>
<td>Alterra, Wageningen</td>
<td>Netherlands</td>
<td>Emil Cienciala</td>
<td>Work meeting on cooperation on the CzechForScen project</td>
</tr>
</tbody>
</table>

Latin America


Colombia: Training in using Field-Map technology at the University of the Llanos in Pereira and presentation of Field-Map technology to potential customers: Colombia’s Institute of Hydrology, Meteorology and Environmental Studies (IDEAM), Corporation for the Sustainable Development of Special Management area La Macarena (CORMACARENA) and PRODUCEL.

Peru: Training in using Field-Map technology and systems of giving Field-Map trainings at MAP GeoSolutions – a Field-Map technology representative for Peru (gives trainings to end-customers). Calibration of 12 Field-Map LT sets for the Peruvian Ministry of Environment. Presentation of Field-Map technology application in statistical forest inventory at Colegio de Ingenieros – association forestry engineers in Peru and at US Forest Service in Peru.

China

12. - 19.9. 2010, Martin Černý, Petr Blažek

A Field-Map training was given to a new Field-Map customer – Chinese Academy of Forestry in Beijing. Also, a one-day seminar took place on modern technologies in data collection and processing. A promise of future cooperation has been acknowledged by a visit of Chinese Academy of Forestry executives to the Czech Republic in November 2010. The contacts which IFER established in China will be further developed via the company Laser Technology Asia.

Italy

17. - 18.9. 2010, Alan Zambarda, Petr Vopěnka

In September 2010, representatives of IFER MMS took part in an international forestry exhibition
“Bosco e Territorio” in Usseaux, Italy, where they gave a seminar for about 50 participants on new technologies applicable in forestry information systems; Field-Map technology was introduced by means of a presentation as well as a practical demonstration in the field. Also, a presentation at the University of Torino, the Faculty of Agriculture, was given to some of the teaching staff and students.

**Italy**

18. - 22.10. 2010, Alan Zambarda, Petr Vopěnka

Marketing activities in Italy continued in October. Theoretical as well as practical presentation of Field-Map took place at the University of Padua, the Faculty of Agriculture Sciences and also in Tuscia (Viterbo) and Florence. Also, a meeting with the director of an Italian forestry magazine Sherwood took place.

**Italy**

29. - 30.11. 2010, Alan Zambarda

In November, IFER organized a two-day seminar in Florence on applications of Field-Map (theory and practical demonstrations in the field) for about 50 foresters and several prospective customers from the field of landscaping, gardening and land-use planning.
Participation at expert fairs and exhibitions in 2010

In the year 2010 IFER increased its marketing and business activities and focused more on presenting itself at expert fairs and exhibitions both in the Czech Republic and abroad. Field-Map technology and its possibilities (primarily in the area of forest management planning - forest inventory, sorting etc.) were thus introduced to the public. Participating in trade fairs was overall beneficial for IFER; new contacts were established and we managed to bring our products and services to a wider awareness.

Banners and signs were made for the IFER exhibition stands. The IFER representatives tried to make the most of using modern technologies to present IFER technology, e.g. an overhead projector was used to show trailers on the back wall of the stand, videos were played on an LCD monitor in the foreground presenting working with IFER technology, etc. In connection with the participation at exhibitions, IFER staff prepared a number of new promotional materials in several languages - leaflets, booklets, brochures and catalogs.

Silva Regina 2010 – International Forestry and Hunting Fair
21.-25. 3. 2010, Brno, Czech Republic
A five-day Silva Regina 2010 was the first and the only Czech exhibition of the year of which IFER took part. On its stand, IFER introduced, apart from the individual hardware sets, also the innovations in Field-Map software - particularly its new application Stem Analyst which enables sorting and valuation of standing trees and allows using Field-Map technology in forestry surveys making mensurationists’ work faster and more effective.

Apart from running the stand, IFER organized two seminars for professionals at the Congress Center of the Brno Fairgrounds in order to present in greater detail some practical, concrete aspects of using Field-Map:
1. Application of Field-Map technology in forest management planning
2. Effective methods of identifying and assessing game damage

Euroforest 2010 – international forestry exhibition
17.-19. 6. 2010, Bourgogne, France
Despite the initial bad weather, many visitors came to see the IFER outdoor stand and to get acquainted with the Field-Map technology and services associated with it, among them were representatives of state forests, corporations, private forest owners, forestry experts, research institutes and universities. We managed to meet the participation target - to extend the possibilities of Field-Map application in France and establish new contacts in this field.

Intergeo 2010 – Conference and trade fair for geodesy, geoinformation and landmanagement
5.-7. 10. 2010, Cologne, Germany
At the Intergeo trade fair, IFER did not have its own exhibition stand either, but again used the opportunity to present Field-Map technology at the stand of its business partner - Laser Technology Inc.. On the first day of the exhibition, promotional materials of Field-Map were available at the stand and on the second and the third day there were also two IFER experts who provided visitors with more information about the technology. Besides the presentation of the Field-Map technology, several business meetings with representatives of hardware manufacturers also took place at this exhibition.
## Participation in public tenders in 2010

<table>
<thead>
<tr>
<th>Country</th>
<th>Institution</th>
<th>Purpose</th>
<th>Tender result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech Republic</td>
<td>ÚHÚL (Forest Management Institute)</td>
<td>Provision of compasses, field PCs and laser rangefinders</td>
<td>yes</td>
</tr>
<tr>
<td>Slovakia</td>
<td>TÚ Zvolen (Technical University in Zvolen)</td>
<td>Technology for field data collection</td>
<td>yes</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>ÚHÚL (Forest Management Institute)</td>
<td>Provision of field PCs</td>
<td>no</td>
</tr>
<tr>
<td>Brunei</td>
<td>Universiti Brunei</td>
<td>Technology for field data collection</td>
<td>pending</td>
</tr>
<tr>
<td>Vietnam</td>
<td>Forest Inventory and Planning Institute</td>
<td>Technology for field data collection</td>
<td>yes</td>
</tr>
<tr>
<td>Peru</td>
<td>Ministry of Agriculture</td>
<td>Technology for field data collection</td>
<td>yes</td>
</tr>
<tr>
<td>Colombia</td>
<td>Producel Ingenieros</td>
<td>Technology for field data collection</td>
<td>in the process of being approved</td>
</tr>
<tr>
<td>Poland</td>
<td>Warsaw University of Life Sciences-SGGW</td>
<td>Technology for field data collection</td>
<td>yes</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>VÚLHM (Forestry and Game Management Research Institute) in Jíloviště-Strnady</td>
<td>Complex measurement of 16 areas of intensive monitoring LIFE+ FutMon</td>
<td>yes</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>AOPK - Agency for Nature Conservation and Landscape Protection of the Czech Republic (the Administration of the Jizerské hory Protected Landscape Area)</td>
<td>Preparation of a management plan for Jizera Mountains Beech Forests National Nature Reserve</td>
<td>yes</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Ministry of Agriculture</td>
<td>Inventory of game damage to forestry in the Czech Republic, Part II, Field survey</td>
<td>yes</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Technology Agency of the Czech Republic</td>
<td>Program to support applied research and experimental development ALFA</td>
<td>no</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>MŠMT - Ministry of Education, Youth and Sports (COST Action)</td>
<td>Methods of refining estimation of standing volume and its change in forests and non-forest wood vegetation (IWREST)</td>
<td>not evaluated (a mistake in the tender dossier)</td>
</tr>
<tr>
<td>European Union</td>
<td>European Commission (Framework Programme 7)</td>
<td>Data collection and software support to the THERMOLIDAR project</td>
<td>in the process of being approved</td>
</tr>
</tbody>
</table>
New users of Field-Map technology in 2010

<table>
<thead>
<tr>
<th>Country</th>
<th>Institution</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaysia</td>
<td>University of Malaysia Sabah</td>
<td>research</td>
</tr>
<tr>
<td>Spain</td>
<td>Universidad de Córdoba</td>
<td>teaching and research</td>
</tr>
<tr>
<td>Colombia</td>
<td>Universidad De Los Llanos</td>
<td>teaching and research</td>
</tr>
<tr>
<td>Poland</td>
<td>Warsaw University of Life Sciences – SGGW</td>
<td>research</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Wageningen University Research Centre</td>
<td>teaching</td>
</tr>
<tr>
<td>China</td>
<td>Chinese Academy of Forestry</td>
<td>research</td>
</tr>
</tbody>
</table>
Field-Map technology in specialized publications

Using FM technology is documented by users in professional publications. In 2010 we established an archive of these publications which currently contains 56 items. Only in the year 2010, 10 papers on Field-Map (expert and science-popularization posts) were published:

Vacek S., Vacek Z., Schwarz O. et al. (2010). Struktura a vývoj lesních porostů na výzkumných plochách v národních parcích Krkonoš. Lesnická práce (forestry magazine), Kostelec nad Černými lesy, 566 pages.


Praktische Felddaten-Erfassung (2010). FORSTZEITUNG, 121 (7)


Field-Map users meeting

The third international meeting of Field-Map users was held between 29 September and 1 October 2010 in Doubice, a north Bohemian village located in the Bohemian Switzerland National Park.

This regular meeting’s primary mission was to exchange information and experience between users of Field-Map technology and its developers - that is the employees of the IFER company.

The meeting was attended by 31 users of Field-Map technology from 12 different countries from around the world.

During the first two days of the conference, discussion papers were presented. In the introductory block the participants learned about the new innovations in Field-Map software and hardware technologies. The IFER staff also presented an overview of new projects and new directions in using Field-Map based on their experience in project implementation.

Field-Map users then informed about their experience and about their projects in forest inventory, mapping, management of research plots, carbon stock monitoring and development of forest management plans.

At the end of the second day, two parallel workshops were arranged for those interested on Field-Map Stem Analyst and its application and on Field-Map scripting capabilities.

On the last day of the conference, an excursion took place to the Bohemian Switzerland National Park with a practical demonstration of working with the technology in the field.

The next meeting is scheduled for autumn 2012.
Sponsorship
to support charities, culture, sport and education

In 2010 IFER financially subsidized the following projects and activities to help the needy and to promote sports, culture and education.

Help to people affected by the earthquake in Haiti

The devastating earthquake measuring 7 on the Richter scale with its epicenter about 15 km from the capital Port-au-Prince affected this developing country on 12th January 2010. The disaster, according to official estimates, claimed about 300,000 lives, tens of thousands more were injured. Around three million people in the affected areas lacked drinking water supply, food, shelters and access to medical care. The People in Need foundation, which IFER cooperates with on a long-term basis, organized a humanitarian fundraiser to which IFER contributed € 50,000 right in January 2010.

Tomáš Slavata – Xterra triathlon

For several years already, IFER has been supporting Tomáš Slavata, a successful sportsman who apart from top sports is engaged in promoting children form children’s homes. Tomáš Slavata, whose life story appeared on Czech Television in November 2010 within the series “Třináctá komnata” (“The Thirteenth Chamber”), aims to ensure through sports that children living in children’s homes gain confidence and a desire to achieve something. In 2010, Tomáš organized several sports events (athletics, cycling) and sports camps for children.

Okrašlovací spolek (Association for the development of the region) in Jílové

Just like last year, IFER has again tried to support the development of the town where it is located. Therefore, it donated CZK 10,000 to the association to build its technical facilities where it now holds its members’ meetings, stores its tools and prepares plans for improvements in and around Jílové u Prahy.

Municipal library in Jílové

IFER donated CZK 5,000 to help launch a new information system in the Municipal library in Jílové u Prahy. The library has a long tradition and is actively used by many IFER employees.

CYCLIFER

IFER supported sports activities of its employees who are members of the Cyclifer sports club by a subsidy of CZK 30,000 which it gave the club in 2010.