PROPOSAL First Topo-Europe Young Researchers Workshop (TYRW'12)

Organizing committee¹

Flora Bajolet - University Roma TRE - Crystal2Plate David Fernández-Blanco - Vrije Universiteit Amsterdam - VAMP Jan Globig - Institute of Earth Sciences Jaume Almera-CSIC - TopoMOD Catalin Ionut Trifan - Vrije Universiteit Amsterdam - Thermo-Europe Wolfgang Reiter - University of Bremen - Thermo-Europe Anna Smetanová - Comenius University in Bratislava - Source-to-Sink Wouter van der Wal - Delft University of Technology - RESEL-GRACE

Scientific rationale and relevance to the program

The TYRW'12 aims at effectively bringing together the young researchers of the different TOPO-EUROPE CRP's. So far, a specific platform for young researchers has not been established within TOPO-EUROPE. The regular TOPO-EUROPE workshops were excellent opportunities to meet young scientists from other CRP's and to get an overview of the research contributions of all scientists involved in TOPO-EUROPE projects. However, the different projects cover a wide range of activities that cannot always be dealt with in the short time allotted for presentations in previous TOPO-EUROPE workshops. Although TOPO-EUROPE leadership promotes first discussions amongst young researchers, futher effort towards active participation of the young scientists is needed. Furthermore, it was felt that an additional workshop focussed on young researchers would be useful to gain an in-depth understanding of techniques and methods used by the other scientists. These are the reasons behind setting up the proposed low-cost workshop.

One of the objectives of the TYRW'12 is to let the young scientists introduce the methods that they employ in their research. During a PhD or post-Docs there is little time to become acquainted with the wide-variety of present day techniques in the Earth Sciences. Normal presentation time in a TOPO-EUROPE workshop or scientific meeting is 15-20 minutes. This is obviously not enough to grasp the detailed intricacies of new methods. Therefore, in the TYRW'12 we will dedicate two sessions of 1.5 to 2 hours to the specifics of the different methods, to be introduced by a young scientist who is a specialist in the field. This part of the workshop resembles a summer school but it covers more topics and aims at improved understanding rather than applying the techniques yourself. The relatively small numbers of participants, who are all at a similar level in their career, should make the threshold for asking questions lower than at usual scientific meetings. We envisage that these sessions help to make the young researchers more complete scientists, thus contributing to an important development in their career. This pertains directly to one of the four general objectives of the TOPO-EUROPE scientific programme: "To promote the mobility and training of young researchers in the field of topography evolution and its societal relevance" and to "encourage and facilitate scientific cooperation". Topics for the methods sessions are taken from the CRP's of TOPO-EUROPE, making sure that methods from most or all of the CRP's are addressed. Examples of topics are: geophysical modeling, dating and field methods. However, it is important to highlight that the specific topics will be finalized only after input from the participants.

¹Note: complete details on the organizing committee are in Appendix I

A second objective of the TYRW'12 is to use the knowledge from all participants to disarm practical and scientific problems encountered during PhD and post-Doc research. The usual meetings and workshops are not always an ideal forum to present problems and this type of feedback usually only takes place in scientific meetings in an informal manner. In this TYRW'12 we propose to formalize the feedback on pitfalls and opportunities by dedicating three sessions to 'open problems'. All participants are asked to bring one research problem to the table. The problems will be introduced by the contributing participants, after which there will be a brainstorming session with all the participants. A designated person will take notes. Such a setup occurs frequently in individual research groups but rarely in international meetings. Our strong network and wide ranging expertise provide an unique opportunity to approach a wide range of problems, and we want to establish a flow of knowledge by having such an interactive session at the TYRW'12. The 'open problems' sessions described directly matches one-to-one the following general objectives of the TOPO-EUROPE scientific programme: "To provide an interdisciplinary forum for sharing technology, know-how and information in the field of European topography evolution".

Many TOPO-EUROPE PhD students are getting close to the completion of their thesis. The third main target of the TYRW'12 is to offer opportunities to discuss within the group of participants for future carrier paths, benefiting from the joint knowledge of actual works in discussion on a broad range of institutions from all over Europe.

The fifth general objective of TOPO-EUROPE speaks in particular of 'mobility and training of young researchers'. One of the most vital activities in an academic career is the ability to obtain funding for research. An increasing part of the funding should come from large international projects. The young scientists in TOPO-EUROPE form a strong network, but this network has not yet been applied to generating ideas for large project proposals. Therefore, two sessions will be dedicated to this issue. The first session will be a brainstorming to generate ideas. In a second session, special working groups will work out the ideas to generate 'white papers' that can serve as foundation for future proposals.

We feel that the TYRW'12 is a great opportunity to use the potential of the TOPO-EUROPE to its fullest, on top of the scientific results that are exchanged at workshops and scientific meetings. Specifically, we expect that making it a workshop specifically for young researchers considerably lowers the threshold for the introductory sessions on methods and stimulate creativity for solving problems and writing interdisciplinary proposals. The workshop lays a foundation for future interaction and clearly goes beyond the individual CRP's of TOPO-EUROPE. We expect the workshop to have a lasting impact of the careers of the young researchers.

Preliminary Schedule

28^{th} April

14:00 – 16:30. Arrival and preparation

14:00 - 15:00. Train from Vienna to Bratislava

15:00 - 16:30. Leisure Time at Hotel Druzba

16:30-17:30. Introduction

16:30 - 17:15. Reception, tags, prints, abstracts + coffee/tea
17:15 - 17:30. Introduction to the YTRW'12

17:30 - 19:30. Session I - PhD future career paths

17:30 - 18:00. Talk by a professional outside the academia

18:00 - 18:30. Talk by a self-employer in/out academia

18:30 - 19:00. Talk by a professional in the academia

 $19{:}00\,-\,19{:}30.$ Talk about a Elsevier criteria for publishing

20:00 - 00:00. Ice-breaking events

20:00 – 21:30. Welcoming dinner at Druzba hotel

 $\mathbf{21:30}$ – $\mathbf{00:00.}$ Icebreaker party

29^{th} April

09:00 – 11:00. Session II - Methods I

Several talks

11:00 - 11:30. Coffee/tea break

11:30 – 13:30. Session III - Open questions/Problem-solving I

Several contributions

13:30 – 15:00. Lunch at Druzba hotel

15:00 - 17:00. Session IV - Open questions/Problem-solving II

Several contributions

17:00 - 17:30. Coffee/tea break

17:30 – 19:30. Session V - Open tables/Projects I Several contributions

20:00 – 21:30. Dinner at Druzba hotel

21:30 – 00:00. Optional - Visiting Bratislava

30^{th} April

 $08:30\,-\,10:00.$ Session VI - Methods II

Several talks

10:00 - 10:30. Coffee/tea break

- 10:30 12:00. Session VII Open tables/Projects II Several contributions
- 12:00 13:30. Lunch at Druzba hotel & Concluding remarks Closing remarks at the Druzba hotel (prof. Sierd Cloetingh)

13:30. Transportation from Bratislava to Vienna

Provisional participants and speakers

1. Participants

The YTRW'12 is intended for TOPO-EUROPE young researchers, thus every PhD or post-Doc within the TOPO-EUROPE framework is invited to join. We have planned for a maximum of 50 participants from all the CRPs. So far we only have confirmation from the young researchers involved in the organization. On the 20^{th} of Jan 2012 we sent an email asking the possible participants to join, with deadline at January the 30^{th} .

Confirmed participants

Table 1: Confirmed participants and their CRP

Participant	CRP's
Anna Smetanová	Source-to-Sink
Catalin Ionut Trifan	Thermo-Europe
Christoph von Hagke	Thermo-Europe
David Fernández-Blanco	VAMP
Flora Bajolet	Crystal2Plate (ITN network)
Jan Globig	TopoMOD
Martin Stange	PYRTEC
Michał Śmigielski	Thermo-Europe
Tamás Mikes	VAMP
Wolfgang Reiter	Thermo-Europe
Wouter van der Wal	RESEL-GRACE
Zoltán Erdős	PYRTEC

2. Contributing speakers

- 1. Dr. Jorge Gines: worker for Fugro UK. Geologic mapping via Satellite images. Contacted.
- 2. Dr. Roger Faber: creator of TerraMath software package for mapping with satellite images. Confirmed.
- 3. prof. Dr. Matthias Schardt, Dipl.-Forstwirt, Institute of Remote Sensing and Photogrammetry Graz University of Technology. Not yet contacted.
- 4. Tom Clark: Publisher Physical Sciences II, Elsevier. Contacted.
- 5. prof. Dr. Sierd Cloetingh is invited to give the concluding talk.

Justification of external speakers

In the YTRW'12 we want to start with an icebreaker session dedicated to the possible career paths after the PhD. For this purpose we invite four external speakers to talk about their experiences. We have planned for presentations and Q&A sessions by the following persons:

- 1. a professional from outside academia, working for one of the main oil-providing companies.
- 2. a self-employer who created his own software and is still publishing.
- 3. an established researcher from an academic institution.

Furthermore, their expertise is mutually related therefore it will be easy to make comparisons between the different career paths.

After this, a final talk will be given on publishing scientific articles, by a publisher from Elsevier.

Provisional dissemination and exploitation plan

The YTRW'12 has four main targets:

- 1. Making young researchers familiar with methods and techniques related to the science of TOPO-EUROPE: evolution of the topography and its relationship with surface-erodibility and deep-seated processes within Europe.
- 2. Collective problem-solving of pitfalls occurring in ongoing research by any young TOPO-EUROPE researcher.
- 3. Cross-disciplinary contributions to the scientific community, focused on questions that remain after TOPO-EUROPE.
- 4. Facilitate planning of career paths for young researchers.

Concrete deliverables

We foresee different deliverables. The presentations in the methods sections can be made available to young researchers outside of TOPO-EUROPE that do not participate in the workshop or that will start working only after TOPO-EUROPE. The collection of materials is a good introduction to techniques they encounter during their research. A second deliverables are the outlines for future research. They can serve as starting point for future proposals, and serve to inspire PhD students for writing their research proposal. The outlines can also be shaped in the form of article for popular magazines.

The networking period of the TOPO-EUROPE programme will be finished by February 2012. With this in mind, we would like to emphasize the relevance of this YTRW'12 for the young researchers involved in TOPO-EUROPE projects. The workshop will provide a strong networking platform for future collaborations. Moreover, the YTRW'12 is a vehicle to address scientific problems before scientific deliveries of the TOPO-EUROPE projects (papers, theses) are finalized. The YTRW'12 will also be an opportunity to help in the last steps of the dissemination process. This networking activity follows directly on the EGU conference, in the nearby city of Bratislava, to provide an extra incentive for participation in the TOPO-EUROPE session of EGU and to reduce costs.

Budget / Cost

Table 2: Expected assistance

Number of participants	50
Keynote Speakers	5 (including Sierd $)$
Participants + Keynote Speakers	55

Table 3: Detailed budget

Concept/Date	Item	Price p.p.(€)	Tot(€)
D1			
Diets			
28^{th} April	Tea/Coffee/Water caterin		214
	Welcome dinner	15	810
	Welcome drinks icebreaker	15.5	837
	Rent room icebreaker		22
29^{th} April	Breakfast	2.7	145.8
	Tea/Coffee/Water caterin		214
	Lunch	4.7	235
	Tea/Coffee/Water caterin		214
	Dinner	4.7	235
30^{th} April	Breakfast	2.7	135
1	Tea/Coffee/Water caterin		214
	Lunch	4.7	239.7
Total Diet			3515.5
Logistics			
28^{th} - 30^{th} April	Train Vienna-Bratislava v.v.	14	700
28^{th} - 30^{th} April	Bratislava station-Hotel Druzba v v	18	90
28^{th} - 29^{th} April	Hotel Druzba	24 885	2488 5
Feb'12-Feb'13	Webpage hosting \pm registration	3.5/month	42+1695
100 12 100 10	Printing/Administrative/Other cost	0.0/ 1101101	770
Total Logistics	С, ,		3637.45
Speakers			
28^{th} - 29^{th} April	Flight Origin-Vienna Airport v.v.	250	1250
28^{th} - 29^{th} April	Vienna Airport-Bratislava v.v.	14	70
28^{th} - 30^{th} April	Bratislava station-Hotel Druzba v v	18	9
28^{th} April	Hotel Druzba	49.77	199.08
Total Speakers			1528.08
1			
TOTAL cost			9151.03

Co-organizers	Institution	Email	Tlph.	CRP
Flora Bajolet	Dipartimento Scienze Geologiche University Roma TRE Largo San Leonardo Murialdo, 1, 00146 Rome, Italy	Flora	$+39\ 0657338024$	Crystal2Plate(ITN network)
David Fernández-Blanco	Dpt. of Tectonics Earth & Life Sciences Vrije Universiteit Amsterdam De Boelelaan 1085-1081HV Amsterdam, The Netherlands	David	$+31\ 205987278$	V.A.M.P.
Jan Globig	Group of Dynamics of the Lithosphere Institute of Earth Sciences Jaume Almera-CSIC Sole i Sabaris s/n, 08028 Barcelona, Spain	Jan	+34 934095275	TopoMOD
Catalin Ionut Trifan	Isotope Geochemistry Dpt. Earth & Life Sciences Vrije Universiteit Amsterdam De Boelelaan 1085-1081HV Amsterdam, The Netherlands	Catalin	+31 205987373	Thermo-Europe
Wolfgang Reiter	Department of Geosciences AG Geodynamics of the Polar Regions University of Bremen Klagenfurter Str., 28359 Bremen, Germany	Wolfgang	+49 42121865288	Thermo-Europe
Anna Smetanová	Dpt. of Physical Geography and Geoecology Natural Science Faculty Comenius University Mlynska dolina 84215 Bratislava, Slovak Republic	Anna	$+42\ 1944127344$	Source-to-Sink
Wouter van der Wal	Aerospace Engineering Dpt. Astrodynamics & Space Missions Delft University of Technology Kluyverweg 1, 2629HS Delft, the Netherlands	Wouter	$+31\ 152782086$	RESEL-GRACE

APPENDIX I - ORGANIZING COMMITTEE

Table 4: Committee members details



1st TOPO-EUROPE Young Researchers Workshop April 28-30, 2012 Bratislava, Slovak Republic

Final Scientific Report

Summary of the activity:

During the YTE1 we had effective interaction and active discussions as well as very productive sessions. During the first evening, Sierd Cloetingh underlined the lack of visibility of geology and insisted on the fact that young researchers have to be proactive to be recognized and the need of a good internal infrastructure. Robert Faber showed us the advantages and drawbacks in starting different types of company, and highlighted the interference of this step in the family life, and Dan Lovegrove detailed us each step of manuscript writing and review process. One the morning of the second day modeling, thermochronology and seismic methods are explained in a simple detailed manner. The active participation of the attendees and their interaction and dialog with the lecturer led to deepening in our understanding of the different methods. In the evening sessions discussion focused on solving specific scientific problems of the participants in three different groups and concluded with an open discussion involving all participants. It was pointed the need to create outstanding scientific proposals for a successful academic career, and it was decided to dedicate the last session of the meeting to this matter. In the last morning, a brief description of the geologist approach during fieldwork was shown before the the session on dynamics of proposal formulation. Each one of the four working groups generated one proposal, which was then discussed with the others. This session gave us insight in the process of creation and allowed us to judge and criticize the proposals made by the other teams.

Final program of the activity:

Saturday 28th April

16:00 – 17:00 Registration and Introduction

16:30 – 16:45 Registration, abstract book, badges, coffee and tea.

16:45 – 17:00 Introduction (David Fernández-Blanco).

17:00 – 19:30 Career Paths Session (chairs David Fernández-Blanco & Wolfgang Reiter)

17:00 – 17:40 TOPO-EUROPE and beyond: prospects for young scientists (Prof. Sierd Cloetingh)

17:40 - 18:20 From Student to Business in SE-Asia, Personal Experience (Dr. Robert Faber)

18:20 - 19:15 How to get published in research journals (Dr. Dan Lovegrove)

Sunday 29th April

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8:30 – 10:00 Methods Session 1, MODELLING (chair: Jan Globig)
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Numerical modelling of convection (Antoine Rozel)

Advantages and Pitfalls of Geodynamic Modelling (Sofie Gradmann)

- 10:30 10:45 Coffee break
- 10:45 12:15 Methods Session 2, THERMOCHRONOLOGY (chair: Wolfgang Reiter)
 Understanding erosion and Tectonics Using Low Temperature Thermochronology (Christoph von Hagke)
- 12:15 13:45 Lunch
- 13:45 15:15 Methods Session 3, SEISMOLOGY (chair: Anna Smetanova)

Slide structures on the seismic sections, sediment transportation pathways on Multibeam bathymetry (Hilmi Mert Kucuk)

2D-3D High resolution marine seismic method and GIS (Hakan Saritas)

- 15:15 15:30 Coffee break
- 15:30 17:00 Open questions/Problem-solving I: Scientific issues & research questions
- (chair: David Fernandez-Blanco)
- 17:15 18:15 Open questions/Problem-solving II: Non-scientific issues (chair: Flora Bajolet)

Monday 30th April

- 8:30 10:30 Methods Session 4, IN THE FIELD (chair: David Fernández-Blanco)
- 10:30 11:00 Coffee break
- 11:00 13:00 Team proposal creation essay (discussion amongst all participants)
 Division in teams of 5 to 7 participants
 Creation of conceptual proposals
 Presentation of the conceptual proposals and active discussion

Scientific content of the event:

Career paths session

TOPO-EUROPE and beyond: prospects for young scientists - Prof. Dr. Sierd Cloetingh (Utrecht University, Netherlands)

The scientific research agenda is closely connected to an environment characterized by rapid change. This requires more than ever a pro-active attitude of the scientists themselves. This applies in particular to the young scientists. In the field of Earth science, prime challenges exist in pursuing research on fundamental questions concerning the processes that control the System Earth. At the same time, there is a strong need for tightening the connection between basic research and addressing issues of great societal demand in, for example, the domains of environment, natural hazards and energy. In both basic research and research on issues related to sustainable Earth, the research agenda is far from static, often requiring cooperation between different subfields of Earth science, but also more and more the realisation of connections between Earth sciences and other disciplines. This development has strong implications for the future orientation of the young Earth scientists. At one side, excellence in a certain specialism is a must to advance that specialism and to be an attractive partner in large scale collaborative research programs such as TOPO-- EUROPE. At the same time, a broad interest and willingness to work together with other researchers from different fields is crucial. Mobility of researchers and preparedness to function in international teams is another key ingredient in this context. Considerable stress, including publication pressure and frequent lack of immediate career perspectives in terms of stability in terms of permanent positions often forces energy away from community service or long-term planning for issues, crucial to maintain the momentum of a research field at large. At the same time, the young generation of researchers cannot leave these issues solely to policy makers in government, industry and universities but it must in a pro-active way take an important role in the dialogue with these actors. This requires self-organisation of the young researchers, including the distribution amongst them of tasks to the benefit of their generation at large. Community building through programmes such as TOPO-EUROPE is seen by its present leadership as an important goal of this programme. Follow-ups of these programmes must not be taken as granted, but require a full and dedicated involvement of the young researchers community, investing as a joint effort time and sharing expertise. Networking is key in this respect. Scientific leadership is largely a matter of learning by doing and learning from experiences from others. In Europe growing awareness exists of the challenges facing the new researchers. To this aim, new funding instruments for substantial bottom-up funding, enabling top quality young researchers to build up a compact research team, are provided by the European Research Council (ERC), through its Starting Grants. The only criterium for these grants, open to all field of science, is scientific excellence. The creation of a Young European Academy is another very positive development. The organisation of workshops like this one by the young scientists themselves to discuss issues of prime concern to them and to their science can therefore be seen as a positive step in this direction.

From Student to Business in SE-Asia, Personal Experience

Dr. Robert Faber (TerraMath, Indonesia)

Personal experiences of the founder of the science related software company TerraMath. To establish an own company is still a step which is quite rare although many dream to become their own boss. Before whenever it is a step away from social security and fixed working hours. Most new "duties" were never done before. There are a lot of reasons to fail or to be less successful than expected. A good strategy to avoid disaster is to talk with / listen to people who have already done this step. This is the idea of the talk although each foundation of a company is unique as the involved characters are. Robert Faber started business with TerraMath in 2003 and will give insight in what happened with the initial idea. What he did to start and keep the business running, what he should have done better or at least thinks so. Starting with 2009 the main business was shifted to SE-- -Asia (Indonesia), what is the pro and contra to move to another region with higher growth rates and how does this all fit to a young family with two kids.

How to Get Published in Research Journal

Dr. Dan Lovegrove (Elsevier, United Kingdom)

The task of writing a research article can be daunting. You may have completed ground---breaking research, but unless the article is correctly written, at best publication will be delayed and at worst will never be published. The purpose of this presentation is to try and give an overview of how to write a well---structured research article for publication. Principally aimed at new authors, this presentation will give guidance about how to write an article, how to structure it and how to select the most appropriate journal. It will suggest what authors should do at all stages – before, during and after the article is written, and will include information about author rights and responsibilities.

After obtaining a PhD in geology from Oxford University, UK, Dan lovegrove joined Elsevier as an editorial assistant for a portfolio of Solid Mechanics journals in 2002. At the beginning of 2012 he moved to a portfolio of geology journals. Since he joined Elsevier, he have learnt more about journal publishing and have been given more opportunity develop the journals. I have also seen many technological advances in how journals are published, and how the information is presented in a more user-friendly fashion.

Modeling session

Numerical modelling of convection - Antoine Rozel (RomaTRE University, Italy)

In this short presentation, I will show simply how to solve the small set of equations that generates the convection in the mantle. I will give a quick overview of the new codes used in this field and go into more details about how to solve the physics. I will present the Stokes, continuity and heat equations and simple ways to solve them (velocity matrix inversion, Gauss seidel iterations, multigrid, flux methods). At the end, I will show quickly the impact of rheologies (Newtonian, non---Newtonian, temperature---dependent) on the global behaviour of the mantle. I hope to show and convince everybody that the mathematics hidden behind convection codes is absolutely not out of reach, as it is unfortunately often believed.

Advantages and pitfalls of geodynamic modelling - Antoine Rozel (RomaTRE University, Italy)

Numerical modelling has become increasingly popular in Earth sciences during the last decade, new method and technological developments make it possible. A large variety of software exists, both as in---house development and commercially available packages, and even a growing number of job advertisements and research proposals refer to numerical modelling. For some Earth scientists, numerical modelling is a magic black box; others mainly criticize it for not including field observations. Both scepticism and criticism are generally appropriate – numerical models are sometimes used wrongly, results are misinterpreted. A common misconception is, for example, that numerical models would simulate an individual structure, whereas they are much better suited to understand the related processes. Whereas the method development requires sound mathematical and programming skills, the application of numerical models to geological and geodynamic problems require a thorough understanding of the physically possible scenarios, such as the geological structures. The rapid advance of the modelling software has made it much easier for scientists without a strong mathematical background to employ numerical models in their studies. It has great advantages, but also disadvantages, which can to a large extent be reduced.

Thermochronology session

Understanding Erosion and Tectonics Using Low Temperature Thermochronology – Chrostoph v. Hagke (Postdam GFZ, Germany)

Thermochronology, amongst other applications, is widely used for the reconstruction of thermal and structural histories of mountain belts. The method reports a cooling signal which, under certain assumptions, can be translated into an exhumation history. Hence, thermochronology is suitable for deciphering timing and rate of crust removal. This talk will give an introduction on the apatite fission track and apatite (U-Th-)/He dating methods. These dating methods are sensitive to cooling intervals between c. 120-60 °C and 80-40 °C respectively. A combination of these two methods has been proven to be a powerful means for estimating low-temperature cooling histories. I will introduce the basic principles of the two methods and explain the drawbacks and caveats which scientists face when interpreting thermochronological data. Furthermore I will show what we can and cannot do with thermochronology, using the example of the European Alps.

Seismology session

Slide Structures on the Seismic Sections, Sediment Transportation Pathways on Multibeam - Hilmi Mert Küçük (Dokuz Eylul University, Turkey) High resolution marine geophysical methods have been used extensively in last decade to define the seabed morphology and erosional/sedimentological processes. Especially shallow and/or deep high resolution seismic reflection and multibeam bathymetry methods provide the primary data set to investigate structural, morphological, stratigraphical and sedimantologic features along the ocean bottoms. In 2010, a total of 1950 km high resolution multichannel seismic reflection, Chirp sub- -bottom profiler and multibeam bathymetric data have been collected offshore of Zonguldak and Amasra region along the Turkish continental margin of central Black Sea. A 1350 m- -long digital streamer with 216 channels was used and a GI gun seismic source of 45+45 cubic inches was fired every 25 m. Chirp sub- -bottom profiler system's frequency band is 2,7---6,7 kHz centered at 3,5 kHz. A 50 kHz pole- -mounted multibeam bathymetry system with 126 beams was used to collect bathymetric data. Processed multibeam bathymetry data clearly shows canyon systems, ridges, sediment waves and channels. Traces of the slide structures are seen on an unstable area offshore Amasra. Multichannel seismic reflection data show that debris flow deposits also exist along the continental rise. These structures are observed in the P---Q sediments and they have completely transparent internal facies. There are also wide BSR (Bottom---Simulating -- - Reflector) reflections on the seismic sections from abyssal plain to continental slope. BSR reflections are also reaching to slide structures and they are terminating below the slides. Seismic profiles also indicate reflection free and/or scattered zones interpreted as shallow gas accumulations. We also suggest that gas hydrate dissociation may be a secondary triggering factor for larger slides along with the seismicity.

2D-- -3D High resolution marine seismic method and GIS - Hakan Saritas (Dokuz Eylul University, Turkey)

In Seismic method, an energy source produces sound waves that are directed into the ground. These waves pass through the earth and are partially reflected at every boundary between rocks of different types. This reflection sequence is received by instruments on or near the surface, and recorded on magnetic tape for computer processing. The process is repeated many times along a seismic "line" (generally a straight line on the surface), and the resultant processed data provides a structural picture of the sub- -surface. This issue covers main application for both of 2D and 3D acquisition. Although 2D seismic data is still common (especially in frontier areas), there is increasing use of 3D seismic acquisition and processing, which solves some of the problems associated with 2D seismic data. New geographic information system (GIS) technology tools enable you to better understand and represent the systems at work in the seas and oceans. From the coastal shoreline to the bathymetric bottom, marine GIS has been adapted and implemented to help you achieve your goals in coastal zone management, research, ocean industries, and navigation.

 The physical .ppt documents of those participants that shared their presentations are available here:

 http://www.young-topo-europe.eu/presentations.html

 name:
 YTE1

 password:
 brAtislavA_2012

Actual expenditure:

Participants: 29 participants (+3 keynote speakers)

Flora Bajolet	flora.bajolet at uniroma3.it	Crystal2Plate, Italy
Georgie Bennett	bennett at ifu.baug.ethz.ch	SedyMONT, Switzerland

Alberto Carballo acarballo|at|ictja.csic.es **Zurab** Chemia zch|at|geo.ku.dk Yulia Cherepanova yc|at|geo.ku.dk Irene De Felipe defelipe | at | geol.uniovi.es Siddique A. Ehsan siddiquemir | at | hotmail.com Annette Eicker eicker|at|geod.uni-bonn.de Zoltan Erdos zoltan.erdos|at|geo.uib.no David Fernández-Blanco d.fernandezblanco|at|vu.nl Jan Globig jan_globig|at|yahoo.de Sofie Gradmann sofie.gradmann|at|ngu.no Savaş Gürçay savas.gurcay|at|deu.edu.tr Juraj Holec holecj|at|fns.uniba.sk Helene Anja Kraft hkraft|at|geomar.de Hilmi Mert Küçük mert.kucuk|at|ogr.deu.edu.tr Özel Özkan ozelozkan|at|gmail.com Martin Reiser martin.reiser|at|uibk.ac.at Wolfgang Reiter wreiter | at | uni-bremen.de Antoine Rozel antoinerozel|at|gmail.com Hakan Saritas h.saritas@deu.edu.tr **Alexey Shulgin** ashulgin|at|geomar.de Anna Smetanová smetanovaa|at|fns.uniba.sk **Uros Stojadinovic** u.stojadinovic|at|vu.nl Marten ter Borgh marten.ter.borgh|at|vu.nl **Catalin Trifan** trifanium|at|gmail.com Wouter van der Wal w.vanderwal|at|tudelft.nl Christoph von Hagke vonhagke|at|gfz-potsdam.de Mohammad Youssof ms|at|geo.ku.dk Sierd Cloetingh sierd.cloetingh|at|uu.nl **Robert Faber** robert.faber|at|terramath.com Dan P. Lovegrove acarballo | at | ictja.csic.es

Topolberia, Spain TopoScandiaDeep, Denmark TopoScandiaDeep, Denmark Pyrtec, Spain TOPOMOD, Spain **RESEL-GRACE**, Germany PyrTec, Norway VAMP, Netherlands TOPOMOD, Spain TopoScandiaDeep, Norway Source2Sink, Turkey Source2Sink, Slovakia TopoScandiaDeep, Denmark Source2Sink, Turkey Source2Sink, Turkey Source2Sink, Austria Thermo-Europe, Germany TOPOMOD, Italy Source2Sink, Turkey TopoScandiaDeep, Germany Source2Sink, Slovakia Source2Sink, Netherlands Source2Sink, Netherlands Thermo-Europe, Netherlands **RESEL-GRACE**, Netherlands Thermo-Europe, Germany TopoScandiaDeep, Denmark **Utrecht Universiteit** TerraMath Company Elsevier-Oxford

Assessment of the results and impact of the activity:

We consider that the YTE1 outstand as one unique event in the TOPO-EUROPE initiative and that acknowledge that discussions and feedbacks occurred amongst the participating members as never happened before in the "conventional" TOPO-EUROPE workshops. Therefore, the YTE1 has reached the highest spectations from the organizing committee and we consider the workshop a success by itself. Furthermore, we are confident that the YTE1 opened a new array of possibilities for the TOPO-EUROPE young researchers.. We are convinced that this interaction fomented a sense of real network and support within the participants that is leading and will lead to long-lasting scientific relationships and collaborations. This will impact deeply the future scientific development of the participants of the YTE1.