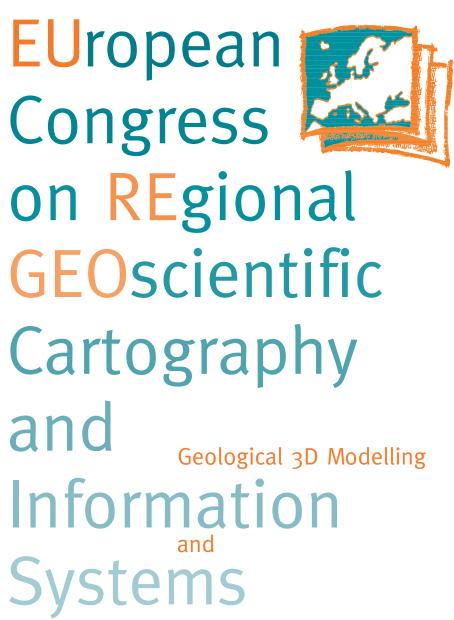






8th EUREGEO

Barcelona | Catalonia | Spain | june 15th - 17th 2015



Soils: functions and threats





Geological 3D Modelling and Soils: functions and threats

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Welcome to Barcelona 2015!

WELCOME OF THE ORGANISING COMMITTEE

The Organising Committee of the 8th European Congress on Regional Geoscientific Cartography and Information Systems (EUREGEO) is pleased to welcome you to the eight' conference which will be held in Barcelona from June 15th to 17th, 2015. It continues the dialogue started in 1994 by the European Regions of Bavaria, Catalonia and Emilia-Romagna, the Joint Research Centre (EC) and EuroGeoSurveys. Again, it shall serve as a platform for experts from regional and national geological surveys, from universities, research institutes and from the economy, building a bridge between scientific researches and practical applications.

If the 6th EUREGEO (Munich, 2009) contributed to the celebration of the International Year of Planet Earth, this edition supports the celebration of the International Year of Soils, declared by the General Assembly of the UN to increase awareness and importance of soil for food security and essential ecosystem functions. Reflecting the current importance of two major applied geoscientific issues, this 8th EUREGEO congress focusses on Geological 3D modelling and on Soil functions and threats.















On behalf of the Local Organising Committee, we would like to take this opportunity to express our most warm welcome to all of you to the 8th EUREGEO at the Casa de Convalescència, in Barcelona.

The EUREGEO'2015 will bring together geoscientists and technicians from Geological Surveys, Research Centres and Academics under the themes of Geological 3D Modelling and Soils. The participation and discussion in the sessions will encourage exchange of ideas and sharing experiences among the participants. Two post-congress fieldtrips, from June 17 to June 19, 2015 to the world class geological natural laboratory of the Southern Pyrenees will allow the participants to visit and enjoy some of the most relevant geologic and pedologic features in an area famous by its spectacular exposures and landscapes.

Additionally, the delegates will have the opportunity to visit the host city, Barcelona, which is one of the favourite tourist destinations in Southern Europe. In addition to its culture and exquisite architecture, the town has much to offer to the conference delegates.

Finally, we would like to welcome you to this conference which will be a milestone event in the new stage of the Cartographic and Geologic Institute of Catalunya. We hope that you will join us for what promises to be a stimulating and rewarding experience.







Geological 3D Modelling and Soils: functions and threats

Congress organisation

PROMOTING COMMITTEE

Artur Mas President de la Generalitat de Catalunya Santi Vila Conseller de Territori i Sostenibilitat

de la Generalitat de Catalunya

Horst Seehofer Bayerischer Ministerpräsident

Bayerischer Staatsministerin für Umwelt **Ulrike Scharf**

und Verbraucherschutz

Stefano Bonaccini Presidente della Regione Emilia-Romagna

Paola Gazzolo Assessore alla difesa del suolo e della

costa, protezione civile e politiche ambientali e della montagna. Regione

Emilia-Romagna

ORGANISING COMMITTEE

Generalitat de Catalunya: Antoni Roca, Xavier Berástegui

Freistaat Bayern: Claus Kumutat, Roland Eichhorn Raffaele Pignone, Michela Grandi **Emilia-Romagna:**

Luca Montanarella **European Commission:** Luca Demicheli **EuroGeoSurveys:**

SCIENTIFIC COMMITTEE

Michela Grandi Geological, Seismic and Soil Survey,

Regione Emilia-Romagna

Roland Eichhorn Bavarian Environment Agency.

Geological Survey

Cartographic and Geologic Institute Xavier Berástegui

of Catalonia

Coordination:

Geological 3D Modelling: Gerold Diepolder (Bavarian

Environment Agency, LfU)

Soils functions and threats: Luca Montanarella (Joint

Research Centre- European

Commission; JRC)

Conveners:

Magdalena Bottig (Geologische Bundesanstalt Austria; GBA),

Holger Kessler (British Geological Survey; BGS),

Josep Anton Muñoz (University of Barcelona, Catalonia; UB), Panagiotis Panagos (Joint Research Centre-European

Commission; JRC), Ana Payá Pérez (JRC),

Rosa M. Poch (University of Lleida, Catalonia; UdL)

Local Organising Committee

Carme Puig, Jorge Fleta and Eulàlia Pujal Cartographic and Geologic Institute of Catalonia

General information

THE EUREGEO-TIMETABLE - AN OVERVIEW

When?	What?	Where?
June 15th, 15:00	Start of registration	Congress site
June 15th, 16:00 - 18:00	Opening ceremony and keynote lectures	Congress site
June 15th, 18:00 - 19:00	Icebreaker	Garden of congress site
June 16th, 08:30 - 13:00	Morning scientific sessions	Congress site
June 16th, 15:00 - 18:30	Afternoon scientific sessions	Congress site
June 16th, 20:30	Social dinner	Restaurant La Barca del Salamanca
June 17th, 08:30 - 13:00	Morning scientific sessions	Congress site
June 17th, 13:00 - 13:30	Closing ceremony	Congress site
June 17th, 13:30-14:00	Farewell drink	Garden of congress site
June 17th, 16:00	Meeting for fieldtrips departure	Garden of congress site

CONGRESS VENUE

Casa Convalescència,

Sant Antoni Ma Claret, 171; 08041 Barcelona

Access to Casa Convalescència

UNDERGROUND

Yellow line (L4).

GUINARDÓ-HÓSPITAL DE SANT PAU station

• Blue line (L₅).

SANT PAU-DOS DE MAIG station

Lines: 15, 19, 20, 45, 47, 50, 51, 92 and 192.

FROM THE AIRPORT

Train + Underground

At the RENFE station, take the train to Sants-Estació. Once there take the Underground's blue line (L₅) till SANT PAU-DOS DE MAIG station.

* Bus + Underground

Outside the airport terminal, take the AEROBUS to Plaça Catalunya. Walk one corner till Plaça Urquinaona and take the Underground's yellow line (L4) to GUINARDÓ-HOSPITAL DE SANT PAU station.



Geological 3D Modelling and Soils: functions and threats



OPENING HOURS OF THE REGISTRATION DESK

The registration and information desk will be open at the congress site with the following schedule:

Monday, 15th 15.00 – 18.00 h Tuesday, 16th 08.00 – 18.00 h Wednesday, 17th 08.00 – 17.00 h

CONTACT DURING THE CONGRESS

Registration desk: Cristina (+34) 606 094 431

OPENING CEREMONY

Date: Monday, 15th of June, 16.00 – 18.00 h Location Congress site: Casa Convalescència Sant Antoni Mª Claret, 171 08041 Barcelona

The official beginning of the "8th European Congress on Regional Geoscientific Cartography and Information Systems EUREGEO" is the opening ceremony, on Monday afternoon. The session will start with the Official Opening by the Promoting Committee. The Catalan Minister of Territory and Sustainability, Mr.Santi Vila, the Minister of Soil, Coast, Civil Protection and Environment and Mountain Policy of Emilia-Romagna, Ms.Paola Gazzolo, and a Representative of the Bavarian Minister of Environment and Consumer Protection, will welcome the participants to the conference.

The ceremony will include remarks and greetings by Mr.Antoni Roca, on behalf of the Organising Committee and the Local Organising Committee, as well as from other Representative of the Geology and Soil Sciences and Technologies.

ICEBREACKER

Date: Monday, June 15th, 18.00 - 19.00 h

Location: Garden Congress site

Enjoy some refreshments and beverages as you socialize with other participants, meet old friends and make new acquaintances.

SOCIAL DINNER

Date: Tuesday, June 16th, 20.30 – 22.00 h

Location: Restaurant La Barca del Salamanca
Moll de Gregal 13-17 (Port Olímpic)
08005 Barcelona
Tel. 93 221 18 37

Please note: It is obligatory to show your ticket at the entrance to the restaurant.

All registered participants to the dinner will find their ticket in the conference bag.

SECURITY

The Congress Organization cannot accept liability for either personal accident or loss of or damage to private property of conference participants which may occur during or arise from the Congress. Participants are therefore advised to arrange appropriate insurance coverage.

Please note that lunch is not included on the congress fee. There are plenty of restaurants near the venue. You will find information at the registration desk.



Geological 3D Modelling and Soils: functions and threats

Instructions to speakers and poster authors

ORAL PRESENTATIONS

Time slots for oral presentations on Geological 3D Modelling will be 15 minutes, with a general discussion at the end of each block, and a general discussion and conclusions after each session.

Time slots for oral presentations on Soil Sessions will be 20 minutes.

In order to facilitate coordination of the sessions, we suggest meeting the chairperson at least 15 minutes before the beginning of your session. This will help us to double-check the audio-visual equipment necessary for your talk and also the chairperson to obtain any missing information about the authors and the organisation, which they represent. The chairperson will introduce each speaker and his/her presentation; manage the timekeeping of the presentation and promote the discussion.

Each lecture hall is equipped with a PC and beamer for Powerpoint Presentations. A technician will be available during the time of the sessions.

POSTER PRESENTATIONS

Your poster must fit to a display panel of 90 cm width and 120 cm height. Therefore, the maximum poster size is Din AO (84.1 cm wide and 118.9 cm high). Posters will be on display for the entire congress.

Material to fix the posters on the boards will be available at the poster exhibition area. Please use these instruments or materials only!

It should be arranged with the respective Chairpersons that at least one of the authors is present near her/his poster for discussion during the official poster sessions.

The authors of the posters on Soil Erosion and Soil Contamination are kindly asked to bring a PDF version of their presentations to be projected and discussed in the session room after the oral presentation.

Please do not forget to remove your poster after the congress. Posters not removed will be disposed of.

PUBLICATION

The proceedings of the EUREGEO congress containing the extended abstracts of each contribution will be published in PDF format under Creative Commons License (CC BY-NC-ND 4.0) and with ISBN identifier. The proceedings book will be included into a pen drive which will be available to the all the participants at the registration desk. Also, it is planned to publish the proceedings via Internet on the web page of the ICGC after the congress.

The speakers are kindly asked to allow the organisation for the post-congress publication of their respective Powerpoint documents, in PDF format, on the ICGC web page.

The authors of the poster presentations are kindly asked to allow the organisation to publish their posters in PDF format on the ICGC web page after the congress. The Local Organising Team will contact you during the congress to collect your poster.



Geological 3D Modelling and Soils: functions and threats

General programme

MONDAY, JUNE 15TH

15:00 - 18:00. Registration desk open.

Congress site. Casa Convalescència, Sant Antoni Ma Claret, 171 08041 Barcelona.

16:00 - 18:00. Official Opening Ceremony.

Congress site. Room A.

Antoni Roca, Deputy Director of the Cartographic and

Geologic Institute of Catalonia: Welcome by the Local Organizing Committee.

President of EUROGEOSURVEYS. Director Koen Verbruggen,

of the Geological Survey of Ireland.

Invited scientific/technical speech:

Santiago Martín Head of Cabinet, Instituto Geológico Alfageme, y Minero de España (IGME).

Ana Pavá-Pérez, Head of Soil Contamination activities.

Institute for Environment and Sustainability. European Commission Joint

Research Centre.

Invited scientific/technical speech:

Jaume Porta, President of the Spanish Society of Soil

Science. Member of the Institute of Cata-

lan Studies.

Roland Eichhorn, Member of the Organising and the Scien-

tific Committees. Head of the Geological

Survey of Bavaria.

Invited scientific/technical speech:

François Robida, Deputy Head of Information Systems

and Technologies Division, Bureau de Recherches Géologiques et Minières (BRGM), France. Member of the European Expert Group for INSPIRE.

Giuseppe Bortone, General Director. DG Environment Soil

and Coastal Defense of Emilia-Romagna

Damià Calvet, Director. Catalan Land Institute.

Icebreaker. Garden of the congress site. 18:00 - 19:00.

TUESDAY, JUNE 16TH

08:30 - 18:00. Registration desk open.

08:30 - 18:30. Scientific sessions at congress site (see

detailed programme).

Social dinner (official ticket required). 20:30.

WEDNESDAY, JUNE 17TH

Registration desk open.

08:30 - 13:00. 08:30 - 13:00. Scientific sessions at congress site (see

detailed programme).

Closing ceremony at congress site. 13:00 - 13:30. 13:30 - 14:00. Farewell drink at the garden of the con-

gress site.

Meeting for fieldtrips departure at the 16:00.

garden of the congress site (official tick-

et required).

THURSDAY, JUNE 18TH

08:00 - 19:00. Fieldtrip 1.

"From Field Data to 3D Models".

08:00 - 19:00. Fieldtrip 2.

"Soil information for the sustainable development in mountain areas".

FRIDAY, JUNE 19TH

08:00 - 11:00. Travel back to Barcelona (airport).



8th EUropean Congress on REgional GEOscientific Cartography and Information Systems Geological 3D Modelling and Soils: functions and threats

Programme

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Programme summary

June 15 th , 16:00 h	Opening Ceremony. Room A		
18:00h	Icebreaker. Garden of the congress site.		
Lecture rooms	Room B	Room C	
	Geological 3D Modelling. Session 1. Towards a transnational geodata infrastructure.	Soils: Functions and threats. Session 1	
	Block 1. From isolated applications	Soil Contamination	
June 16 th , 08.50h	Coordinator: Gerold W. Diepolder (LfU)	Coordinator: Luca Montanarella (JRC)	
	Conveners: Holger Kessler (BGS) and Magdalena Bottig (GBA)	Convener: Ana Payá- Pérez (JRC)	
	Chair: François Robida (BRGM) and Gerold W. Diepolder (LfU)	Chair: Ana Payá- Pérez (JRC)	
10.30h	Coffee break	•	
	Geological 3D Modelling. Session 1. Towards a transnational geodata infrastructure.	Soils: Functions and threats. Session 1. Soil Contamination (Continuation)	
11.00h	Block 2: to cross-border interoperability	Selected Posters presentation	
	Chair: François Robida (BRGM) and Gerold W. Diepolder (LfU)	Chair: Ana Payá- Pérez (JRC)	
13.00h	Lunch		
	Geological 3D Modelling. Session 2. How to integrate academic research	Soils: Functions and threats. Session 2.	
	Block 1. Challenges for academic research	Soil Maps	
14.30h	Coordinator: Gerold W. Diepolder (LfU)	Coordinator: Luca Montanarella (JRC)	
	Conveners: Holger Kessler (BGS), Magdalena Bottig (GBA)	Convener: Rosa M. Poch (UdL)	
10.001	Chair: Holger Kessler (BGS) and Magdalena Bottig (GBA)	Chair: Rosa M. Poch (UdL)	
16.00h	Coffee break	•	
40.001	Geological 3D Modelling. Session 2. How to integrate academic research	Soils: Functions and threats. Session 2.	
16.30h	Block 2. Applications in geo hazard assessment and model visualisation	Soil Maps (Continuation)	
40 20h	Chair: Holger Kessler (BGS) and Magdalena Bottig (GBA)	Chair: Rosa M. Poch (UdL)	
18.30h 20.30h	End of the da Social I	•	
20.30h	Geological 3D Modelling. Session 3. From external sources to external users	Soils: Functions and threats. Session 3	
	Block 1	Soil Erosion	
June 17 th , 08.30h	Coordinator: Gerold W. Diepolder (LfU)	Coordinator: Luca Montanarella (JRC)	
Julie 17 , 00.3011	Conveners: Gerold W. Diepolder (LfU) and Oscar Gratacós (UB)	Convener: Ana Payá-Pérez (JRC)	
	Chair: Gerold W. Diepolder (LfU) and Oscar Gratacós (UB)	Chair: Ana Payá-Pérez (JRC)	
10.30h			
Geological 3D Modelling. Session 3. From external sources to external users			
	Block 2	Special Session EUROGEOSURVEYS	
11.00h	Coordinator: Gerold W. Diepolder (LfU)		
	Conveners: Gerold W. Diepolder (LfU) and Oscar Gratacós (UB)	Minerals 4EU. Stakeholders Consultation and Information Session	
	Chair: Gerold W. Diepolder (LfU) and Oscar Gratacós (UB)		
13.00h	Closing Ceremony. Room B		
13.30h	Farewell drink. Garden of the congress site		
14.00h	End 8 th EUREGEO Barcelona'2015		

The poster presentations will be on display for the whole congress in the respective poster areas.

The authors of the poster presentations on Soils are kindly asked to bring a pdf image of them to be projected and discussed in the Room C. See the detailed programme oral presentations, next pages

Detailed programme oral presentations

Tuesday, June 16th, Morning. Oral presentations

08.50- 13.00 08.50- 10.30	Room B. Geological 3D Modelling. Session 1. Towards a transnational geodata infrastructure Coordinator: Gerold Diepolder (LfU) Conveners: Holger Kessler (BGS), Magdalena Bottig (GBA) Block 1. From isolated applications Chair: François Robida (BRGM) and Gerold W. Diepolder (LfU) Welcome and introduction to the Session	08.50- 13.00	Room C. Soils: Functions and threats. Soil Contamination Coordinator: Luca Montanarella (JRC) Convener: Ana Payá- Pérez (JRC)
09.00	Gerold Diepolder (LfU); Holger Kessler (BGS), Magdalena Bottig (GBA), François Robida (BRGM) 3D image of the Empordà Basin (NE Spain) obtained from rescued seismic data	08.50-	Welcome by the Convener and introduction to the Session
09.15	Beatriz Benjumea; Astrid Ribot; Albert Macau; Anna Gabàs; Ricard Puig, Sara Figueras	09.00	Ana Payá – Pérez. Joint Research Centre – Ispra, Italy
09.15- 09.30	Updating the 3D geological model of Catalunya v. 1.0: the northern sector of the Neogene Empordà Basin (NE Catalunya) Oscar Gratacós; Laura Serra; Josep Anton Muñoz; Xavier Berástegui; Joana Mencós	09.00- 09.30	Key note speech: Revision of soil indicator CSI015 for the management of contaminated sites in Europe Ana Payá Pérez- Joint Research Centre – Ispra, Italy
09.30- 09.45	3D Geological modeling of the coastal area in Emilia-Romagna, ITALY Lorenzo Calabrese; Luisa Perini; Samantha Lorito; Paolo Luciani; Alberto Martini; Paolo Severi; Annamaria Correggiari; Alessandro Remia	09.30- 09.50	Cartographic tools to support the management of contaminated sites: the "Pedogeochemical maps at 1:250.000 scale" of Emilia-Romagna Region Nazaria Marchi, Regione Emilia-Romagna-Servizio geologico sismico e dei suoli
09.45- 10.00	Calculating CO2 storage capacity in an unconformity trap formed at the backlimb of a fault-propagation fold: The Mar Cantabrico-E1 detritic reservoir (Cantabrian Margin, Spain) Jesús García-Senz; Adolfo Maestro; Fernando Bohoyo; Fernando Fernández-Sáez; María Najarro; José Luis García-Lobón; Ana Isabel López-Barrera; Marta Domínguez; Isabel Suárez	09.50- 10.10	Geochemical mapping and environmental risk assessment of contaminated soils associated with mining activity: El Campillo, (Huelva province, Spain). Maria Clara Zuluaga, Università degli Studi di Napoli Federico II. Napoli, Italy
10.00- 10.30	General discussion	10.10- 10.30	Elevated geogenic contents – exemplified for arsenic in soils of Bavaria Bernd Schilling, Bavarian Environment Agency, Germany
10.30- 11.00	Coffee br	eak. Post	ers
11.00- 13.00	Block 2: to cross-border interoperability Chair: François Robida (BRGM) and Gerold W. Diepolder (LfU)	11.00- 13.00	Room C. Soils: Functions and threats. Soil Contamination. Selected Posters presentation
11.00- 11.10	Introduction to the Block 2 François Robida (BRGM) and Gerold W. Diepolder (LfU)	11.00- 11.10	Introduction to the selected posters presentations Ana Payá – Pérez
11.10- 11.25	A 3D Model of the North German Basin – Challenges and approaches Christian Müller, Gabriela von Goerne, Björn Zehner, Stephan Steuer, Fabian Jähne-Klingberg, Stefan Knopf, Gesa Kuhlmann, and Project Group	11.10- 11.20	Selected poster presentation 1
11.25- 11.40	Cross-border geophysical and geological models between Romania and Ukraine in the Low Danube area Lucian Besutiu; Mykhailo Orlyuk; Luminita Zlagnean; Andriy Romenets; Ligia Atanasiu; Iryna Makarenko	11.20- 11.30	Selected poster presentation 2
11.40- 11.55	H3O – a (hydro)geological model that opens the frontier Ronald Vernes; Jef Deckers; Griet Verhaert and Erik Heskes	11.30- 11.40	Selected poster presentation 3
11.55- 12.10	A team collaboration tool and platform to share 3D geomodels Paul Gabriel; Jan Gietzel and Helmut Schaeben	11.40- 11.50	Selected poster presentation 4
12.10- 12.25	The limits of interoperability – model fusion needs more than technical solutions Robert Pamer and the GeoMol Team	11.50- 12.00	Selected poster presentation 5
12.25- 13.00	General discussion and conclusions	12.00- 13.00	General discussion and conclusions
13.00- 14.30	Lunch time		

Tuesday, June 16th, Afternoon. Oral presentations

14.30- 18.30	Room B. Geological 3D Modelling. Session 2. How to integrate academic research Coordinator: Gerold Diepolder (LfU) Conveners: Holger Kessler (BGS), Magdalena Bottig (GBA)	14.30- 18.30	Room C. Soils: Functions and threats. Session 2. Soil Maps. Coordinator: Luca Montanarella (JRC) Convener: Rosa M. Poch (UdL) Session sponsored by Curofins
14.30-	Block 1. Challenges for academic research	14.30-	Soil Maps
16.00	Chair: Holger Kessler (BGS) and Magdalena Bottig (GBA)	16.00	Convener: Rosa M. Poch (UdL)
14.30- 14.35	Introduction to the Session 2. Holger Kessler (BGS) and Magdalena Bottig (GBA)	14.30- 14.40	Welcome by the Convener and introduction to the Session 2 Rosa M Poch
14.35- 14.50	Basement characterization and cover deformation of the Linking Zone (NE Spain) from 2.5D and 3D geological and geophysical modelling Concepción Ayala , Esther Izquierdo-Llavall , Félix Rubio , Emilio Pueyo , Antonio Casas , Belén Oliva-Urcia , Adriana Rodríguez-Pintó , Carmen Rey-Moral and José F. Mediato	14.40- 15.10	Key note speech: Mapping soil organic carbon content using spectroscopic data. Marcela Rial Tubío; Antonio Martínez Cortizas, and Luis Rodríguez Lado.
14.50- 15.05	Results of academic research for use in the daily business of a Geological Survey – Case study Lower Main Plains (Germany) Hannah Budde, Christian Hoselmann, Rouwen Lehné, Heiner Heggemann,	15:10- 15:30	Hydric soils: Mapping and classification Angel Marqués-Mateu; Héctor Moreno-Ramón and Sara Ibáñez-Asensio
15.05- 15.20 15.20- 15.35-	3D geological modelling in Canada: Challenges and opportunities for academic research Martin Ross; Michel Parent; Amanda Taylor; Aaron Bustard and Tyler Hodder Steps towards a 3D model of the German Baltic Sea area – collaboration with academic research in the USO project Karsten Obst; André Deutschmann; Elisabeth Seidel and Martin Meschede Multi-institutional co-operations in geosciences as a key for supporting both sustainable land-use	15.30- 15.50	Assessing soil biodiversity and soil biological activity in europe Ece Aksoy; Ciro Gardi; Geertrui Louwagie; Christoph Schröder and Mirko Gregor
15.50 15.50- 16.10	management and an efficient daily business of a Geological Survey Rouwen J. Lehné; Hannah Budde and Christian Hoselmann General discussion	15:50- 16:10	General discussion
16.10- 16.30	Coffee break. Posters	16.10- 16.30	Coffee break. Posters
16.30-	Block 2. Applications in geo hazard assessment and model visualisation	16.30-	Soil Maps (Continuation)
18.30	Chair: Holger Kessler (BGS) and Magdalena Bottig (GBA)	18.30	Convener: Rosa M. Poch (UdL)
16.30- 16.35	Introduction to the Block 2 Holger Kessler (BGS) and Magdalena Bottig (GBA)	16.30- 16.35	Welcome by the Chair Rosa M. Poch
16.35- 16-50	3D paleoseismology to obtain net slip-rates for lateral strike slip faults with a reverse component Marta Ferrater; Maria Ortuño; Eulàlia Masana; Hector Perea; Stephane Baize; Raimon Pallàs; Eduardo García-Meléndez; Anna Echeverria; José J. Martínez-Díaz; Tom Rockwell	16.35- 16.55	Apparent soil electrical conductivity and ndvi to delineate management zones in fruit orchards José A. Martínez-Casasnovas, Alexandre Escolà, Manel Ribes, Jaume Arnó and Joan R. Rosell-Polo
16.50- 17.05	3D geological model of the central Po plain (Italy): subsurface geopotentials vs geological hazards Francesco E. Maesano , Chiara D'Ambrogi , Fernando Ferri , & the Italian GeoMol Team	16:55- 17:15	The soil map of the Institut Cartogràfic i Geològic de Catalunya Emilio Ascaso-Sastrón, Marc Vicens-Ferrer; Patricia López-Villalba and Ignasi Herms- Canellas
17.05- 17.20	Toward open data for borehole database and 3D geological modelling for seismic hazard assessment in the coastal plain adjacent to the Tokyo bay, Japan Katsumi Kimura , Masahiro Ooi , Yuki Hanashima and Tsutomu Ochiai	17:15- 17:35	Soil mapping in the Bavarian Alps – An experience report Robert Traidl
17.20- 17.35	Communicating 3D Geological Models – Innovative techniques of visualization Peter Wycisk & Lars Schimpf	17:35- 17:55	Tools to facilitate the use of soil maps in Emilia-Romagna region (Italy) Paola Tarocco
17.35- 17.50	New technologies of 2-D & 3-D modeling for analysis and management of natural resources Eugenia Cheremisina; Anna Lyubimova	17:55- 18:15	Soil analysis and soil mapping Miquel A Aran - Eurofins Agroambiental, S.A.
17.50- 18.30	General discussion and conclusions	18:15- 18:30	General discussion and conclusions
18.30	End of the	day sessi	ions

Wednesday, June 17th, Morning. Oral presentations

08.30- 12.55	Room B. Geological 3D Modelling. Session 3. From external sources to external users Coordinator: Gerold W. Diepolder (LfU) Conveners: Gerold W. Diepolder (LfU) and Òscar Gratacós (UB)	08.30- 10.30	Room C. Soils: Functions and threats. Session 3. Soil Erosion. Coordinator: Luca Montanarella (JRC) Convener: Ana Payá-Pérez (JRC)
08.30-	Block 1.	08.30-	Convener: Ana Payá-Pérez (JRC)
10.30	Chair: Gerold W. Diepolder (LfU) and Oscar Gratacós (UB)	10.30	
08.30- 08.40	Introduction to the Session 3 Gerold W. Diepolder (LfU) and Òscar Gratacós (UB)	08.30- 09.00	Keynote: Soil Degradation and International Commitment for the Protection of Soil Ana Payá-Pérez
	Keynote: From external sources to external users: A review of geological modelling development		•
08.40-	within National Geological Surveys	09.00-	Soil erosion; from modelling to mitigation: Can conservation agriculture be a solution?
09.10	Alan Keith Turner	09.20	Giampaolo Sarno et al,
09.10-	Compilation and dissemination of a digital deep subsurface model of the Netherlands.	09.20-	3D quantification method of linear erosion forms on vineyards using high resolution aerial
09.25	Maryke den Dulk : Hans Doornenbal and Johan ten Veen	09.40	images.
	3D geological information for professionals and the public – Two examples for providing target group		A. Farnós Viñals; D. Noll; M. Mota, and S. Burgos
09.25-	based data sets by the State Geological Survey of Baden-Württemberg (Germany)	09.40-	Selected Poster Presentation 1
09.40	Isabel Rupf& the LGRB 3D-Modelling Team	09.50	Selected Poster Presentation 1
09.40-	New geological models from the British Geological Survey	09.50-	
09.55	Steve Mathers and Holger Kessler	10.00	Selected Poster Presentation 2
		10.00-	Selected Poster Presentation 3
09.55-	The 3D GeoloGiro	10.10	Ocicica i osici i rescritation s
10.10	Francesca R. Lugeri, Nicola Lugeri, Gian Vito Graziano, Piero Farabollini , Vittorio Amadio	10.10- 10.30	General discussion and conclusions
10.10-			
10.10	Discussion	10.30	End of the session
10.30-	0.45		
11.00		e break	
11.00-	Block 2.	11.00-	Room C. Special Session EUROGEOSURVEYS. Minerals 4EU
12.55	Chair: Gerold W. Diepolder (LfU) and Òscar Gratacós (UB) Welcome by the Chair	12.55	Chair: David Ovadia
11.00- 11.10	Gerold W. Diepolder (LfU) and Òscar Gratacós (UB)		
	3D geological model to support the management of urban subsurface environment: Rucharest City		
11.10-	case study		
11.25	Irina Serpescu, Constantin Radu Gogu, Mohamed Amine Boukhemacha and Dragos Gaitanaru		
11.25-	Preparation of Gocad-Skua models for numerical simulations		
11.40	40 Ines Görz and Martin Herbst 40- A voxel model for mineral resources: Loess deposits in Flanders (Belgium) Tom van Haren; Chris De Groot; Roel De Koninck, Katrien De Nil 12		Minerals 4EU. Stakeholders Consultation and Information Session
11.40-			
11.55			
11.55-	Digital Modeling of Heavy Mineral Placer Deposits for Defining of Prospects of Further Deposit Development		
12.10	Nikolay Laverov, Irina Chizhova, Dmitry Khrushchov and Alexander Lalomov		
12.10-	GIS-based 3D geological analysis tools		
12.25	Mar Alcaraz, Violeta Velasco and Enric Vázquez Suñè		
12.25-	Wrap-up of the 3D Sessions		
12.55	Holger Kessler / Gerold W. Diepolder		
12.55	End Geological 3D Modelling Sessions 12.55 End Special Session Minerals 4EU		
13.00- 13.30	Room B. Clo	sing cere	mony
13.30- 14.00	Farewell drink		
14.00	End 8 th EUREGEO Barcelona'2015		

DETAILED PROGRAMME POSTER PRESENTATIONS

GEOLOGICAL 3D MODELLING

Coordinator: Gerold Diepolder (LfU)

Conveners: Holger Kessler (BGS), Magdalena Bottig (GBA), Òscar Gratacós (UB)

Chairs: François Robida (BRGM), Gerold W. Diepolder (LfU), Holger Kessler (BGS), Magdalena Bottig (GBA),

Òscar Gratacós (ÙB)

Posters will be on display from Tuesday, June 16th morning until Wednesday, June 17th afternoon.

Adonis Photiades and Irene Zananiri	Digital geological map of Greece in scale 1:1 000 000, harmonized to One Geology Europe
Alicia Arenillas, Ricardo Molinero, Ruxandra Nita, José F. Mediato, Jesús García-Crespo, Manuel Bernat, Silvia Cervel, Carmen Rey, Concepción Ayala, Adolfo Maestro, Fernando Bohoyo, Carlos Marín, Esther Izquierdo-Lavall	Workflow for 3D geological modelling in CO2 storage assessment
Ana Ruiz-Constán; Carlos Marín-Lechado; Antonio Pedrera; Jesús Galindo Zaldívar and Carlos Sanz de Galdeano	3D geometry of the sedimentary infill in the southern sector of the Guadix basin (S Spain): constrain on the fault activity
Ana Sevillano; Juan A. Rodríguez and Ángel Salazar	Data model for a new digital Quaternary map of Spain 1:1,000,000
André Deutschmann; Martin Meschede and Karsten Obst	Seismic interpretation and visualisation for a 3D model in the southern Baltic Sea west of Ruegen Island as part of the USO project
Andreu Badia; Oriol Oms; José Ángel López and Eudald Mujal	3D field model of the Post-Variscan sedimentary succession at the Nogueres (Pyrenees)
Andreu Vinyoles; Pablo Rodríguez-Salgado; Oriol Oms; Eduard Remacha and Jorge Navarro	3D seismic data in hydrocarbon exploration: example from the Western Desert (Egypt)
Barbara Aldighieri; Bruno Testa and Francesca Romana Lugeri	Outreach potential of the interaction between 3D model and geological mapping on a web platform
Björn Zehner	On Building Large-Scale 3D Geological Models without Using Map Projections
Carlos Marín-Lechado; José Luis García-Lobón; Sergio Martos-Rosillo; Carmen Rey; Concepción Fernández-Leyva; Ana Ruiz-Constán; Israel Pérez-Ortiz; Antonio Pedrera and Juan Antonio López-Geta	Groundwater assessment in carbonate aquifers from 3D geological models (Alicante, SE Spain).
Christian Formato and Alessio Valente	3D Geological modelling application in a contaminated site.
David García-Sellés; Gratacos, Oscar; Muñoz, Josep Anton and Arbues, Pau	New tools for the study of high-resolution digital outcrops oriented to the 3D geological models.
Elisabeth Seidel; Martin Meschede and Karsten Obst	Interpretation and visualization of seismic and borehole data for a 3D model in the southern Baltic Sea, East of Ruegen Island (Germany) as part of the USO project
Elisenda Costa; Jorge Buzzi; Asunción Riaza; Oscar Fernandez; David García-Sellés; Anna Tardà; Vicenç Palà; Luca Pipia; Josep Anton Muñoz and Jordi Corbera	Assessing the potential of imaging spectroscopy applied to geological mapping in the Montsec area (Pyrenees, Spain)
Fabio Carlo Molinari; Giulio Torri; Alberto Martini & the Italian GeoMol team	3D temperature model of the central Po Plain (Italy) : subsurface geopotentials
Ivan Marchesini ; Michele Santangelo, Francesco Bucci and Mauro Cardinali	From the interpretation of stereoscopic aerial photographs to the morpho-structural setting
Jesús García-Crespo, Alejandro Díez-Montes, Concepción Ayala, Teresa Sánchez-García, Carmen Rey, José L. García-Lobón, Félix Bellido, Félix Rubio, José F. Mediato, Santiago Martín-Alfageme	3D modelling of Río Tinto area. New insights into its geological structure.
Jesús García-Crespo, Teresa Sánchez-García, José F. Mediato, Concepción Ayala, Carmen Rey-Moral, José L. García-Lobón, Félix Bellido, Félix Rubio, Alejandro Díez- Montes, Santiago Martín-Alfageme	3D modelling of Santa Olalla de Cala area. New insights into the Cala region
Jesús García-Senz; Adolfo Maestro; Fernando Bohoyo; María Najarro; Fernando Fernández-Sáez; José Luis García-Lobón; Ana Isabel López-Barrera; Marta Domínguez; Isabel Suárez Jordi Pérez-Cano; Manel Zamorano; Oriol Oms and	Combined use of cross-sections, seismic and core data to assess CO2 storage capacity and seal geometry in a triangle zone of deformation: The MC-J1 prospect (Cantabrian Margin, Spain) The Ager basin (Eocene, Pyrenees, Spain): Tidal
Eduard Remacha José F Mediato, Concepción Ayala, Teresa Sánchez-	influenced deltas 3D building
García, José L. García-Lobón, Félix Bellido, Félix Rubio, Jesús García-Crespo, Carmen Rey-Moral, Alejandro Díez-Montes; Santiago Martín-Alfageme	3D gravity inversion of Cala mine (Ossa-Morena zone, Spain)
José F. Mediato, Jesús García-Crespo, Concepción Ayala(1,2), Esther Izquierdo, José L. García-Lobón, Félix Rubio, Carmen Rey-Moral, Emilio Pueyo	Geological modelling of the Lopín CO2 storage site, Spain
Konstantin Lobanov, Sharov Nikolay, Chicherov Mikhail, Chizhova Irina	The integrated deep geodynamic 3D model of the Pechenga district (Baltic Shield)
Maik Schilling; Christoph Jahnke, Andreas Simon and Thomas Höding	Brandenburg 3D – GIS goes underground – a geological 3D model for the public
Manuel Bernat; Silvia Cervel; Ricardo J. Molinero and Jose F. Mediato	3D geological model for CO2 storage research in the Central-Eastern Iberian System (Maestrazgo Region, Teruel - Castellón, Spain)



8th EUropean Congress on REgional GEOscientific Cartography and Information Systems Geological 3D Modelling and Soils: functions and threats

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Marc Diviu; Patricia Cabello and Miguel López-Blanco	3D facies modelling strategies in large fan-delta reservoirs and their implications in predictions. Data from Montserrat and Sant Llorenç del Munt outcropping analogues (Eocene, NE Spain)
Mario Wilhelm	From digital terrain model to shaded relief – practical examples from the Bavarian Environment Agency
Michele Santangelo, Ivan Marchesini; Francesco Bucci and Mauro Cardinali	3D-modelling of lithological boundaries from aerial photo- interpretation data.
Mikhail Finkelstein, Dmitriy Drovninov, and Maxim Churilin	Three-dimensional geological modelling with GIS integro use
Miquel Vilà; Pau Torrades; Roser P; David Albalat and Ona Monleon	The role of 3D modelling in the urban geological map of Catalonia
Montse Colomer; Ignasi Herms; Georgina Arnó and Victor Camps	Application of 3D modelling for groundwater management around the Cardona diapir
Oleg Mironov, Irina Galitskaya and Irina Pozdnyakova	Hydrogeological windows map based on 3D geological model
Oriol Oms and Jordi Pérez-Cano	Combined surface geology and well data: 3D understanding of thick evaporite formation in the Eocene Ebro basin (Manresa - Artés area, Catalonia, Spain).
Pablo Rodríguez-Salgado; Andreu Vinyoles; Oriol Oms; Eduard Remacha and Jorge Navarro	Regional tectonic framework, structure and evolution of the Alamein basin (western desert, Egypt) – inferences from 3D onshore reflection seismic data
Sascha Görne and Ottomar Krentz	Cross border 3D modelling - challenges and results of a transnational geothermal project
Vlad Codrea; Mihai Dumbrav□; Alexandru Solomon; Márton Venczel; Cristina F□rcaş and Ovidiu Barbu	A 3D database: a way to preserve detailed images of the terrestrial latest Cretaceous geological heritage in Transylvania (Romania)

DETAILED PROGRAMME POSTER PRESENTATIONS

SOILS: FUNCTIONS AND THREATS

Coordinator: Luca Montanarella (JRC)

Conveners: Ana Payá- Pérez (JRC) and Rosa M. Poch (UdL)
Chairs: Ana Payá- Pérez (JRC) and Rosa M. Poch (UdL)

Posters will be on display from Tuesday, June 16th morning until Wednesday, June 17th afternoon.

Soils: Functions and threats. Soil contamination Coordinator: Luca Montanarella Convener: Ana Payá-Pérez	
Ana Sevilla-Perea; María C. Romero-Puertas and Mª Dolores Mingorance	Effect of compost and bottom ashes on metal S and As release from contaminated soils: a leaching column study
Ana Sevilla-Perea; María C. Romero-Puertas Mª Dolores Mingorance	Modelling agrochemical properties and hazardous element availability of a multielement-contaminated soil amended with wastes
Chengkai Qu, Xinli Xing, Stefano Albanese, Angela Doherty, Huanfang Huang, Annamaria Lima, Shihua Qi, Benedetto De Vivo	Spatial and seasonal variations of atmospheric legacy and current- use pesticides in central China: regional source vs. long-range transport and air-soil exchange
Claudia Campanale, Valeria Ancona and Vito Felice Uricchio.	Assessment of soil quality restoration in a chronically polluted area treated with compost by combining different soil investigation techniques
Jose Antonio Rodríguez-Liébana; M. Dolores Mingorance and Aránzazu Peña	A kinetic study of pesticide sorption on various Mediterranean soils
Jose Antonio Rodríguez-Liébana; M. Dolores Mingorance and Aránzazu Peña	Pesticide sorption/desorption on Mediterranean soils modified by solution composition
Minolfi Giulia, Albanese Stefano, Lima Annamaria, De Vivo Benedetto	Multiscalar approach to assess the environmental geochemical risks from topsoils in the Campania Region (Italy)
Ramírez-Pérez, A.M. and de Blas, E.	Spatial variability of Cu in surface sediments of Ria de Vigo
Ramírez-Pérez, A.M. and de Blas, E.	Preliminary study of chemical forms of Pb in sediments of San Simon bay (NW, Spain)
Ramón Aznar, Beatriz Albero, Consuelo Sánchez-Brunete, José L. Tadeo	Analysis of pyrethroid and organochlorine insecticides in soil.
Teresa Balvis; Francesco Muntoni and Roberto Rizzo	Remote sensing in the study of the contaminated areas
Uwe Geuß; Edzard Hangen and Bernd Schilling	Hand-held XRF – a contribution to improve soil sampling strategy?
Soils: Functions and threats. Soil maps Coordinator: Luca Montanarella Convener: Rosa Maria Poch	
Carmela Rezza, Stefano Albanese, Annamaria Lima, Robert Ayuso, Benedetto De Vivo	Geochemical characterization, isotopic approach and environmental risk assessment in the Domizio Flegreo and Agro Aversano area (Campania region).
Concepción Paredes; Xavier Barber; Antonio Marín-Martínez; María Ángeles Bustamante; Mª Dolores Pérez-Murcia; Aurelia Pérez-Espinosa; Enrique Agulló; D. Aguilar and Raúl Moral	Hierarchical Bayesian spatial modelling to identify and map spatial variations of soil properties in vitivinicultural zoning studies
David López Lluch; Damián Aguilar Morales and José Antonio Marín – Martínez,	New technologies for delineating and classifying productive areas in the wine sector
Ece Aksoy; Ciro Gardi; Geertrui Louwagie; Christoph Schröder and Mirko Gregor	Assessing soil biodiversity and soil biological activity in Europe
Emilio Ascaso-Sastrón, Marc Vicens-Ferrer; Patricia López-Villalba and Ignasi Herms-Canellas	The soil map of the Institut Cartogràfic i Geològic de Catalunya
Emilio Ascaso-Sastrón; Patricia López-Villalba; Marc Vicens-Ferrer and Ignasi Herms-Canellas	Some soil quality indicators of the soils of Catalonia
Francesca R. Lugeri, Nicola Lugeri, Barbara Aldighieri, Gianluigi Giannella; Bruno Testa	Soils, GIS and wines
Kateřina Freyerová, Luděk Šefrna	Soil organic carbon quantification in podzol subsoil as an attempt to refine soil carbon invetories in the Czech Republic
Horea Bedelean; Vlad Codrea; Ovidiu Barbu; Cristina Fărcaș and Alexandru Solomon	Regional soil distribution on the western side of the Haţeg basin and possible relationships of soils with parent rocks
José A. Martínez-Casasnovas, Alexandre Escolà, Manel Ribes, Jaume Arnó and Joan R. Rosell-Polo	Apparent soil electrical conductivity and NDVI to delineate management zones in fruit orchards
Marcela Rial Tubío; Antonio Martínez Cortizas and Luis Rodríguez Lado	Mapping soil organic carbon content using spectroscopic data
Paola Tarocco	Tools to facilitate the use of soil maps in Emilia-Romagna Region (Italy)
Robert Traidl	Soil mapping in the Bavarian Alps – An experience report
Slobodan Miko; Ozren Hasan; Martina Šparica Miko; Andreja Steinberger; Helena Ćućuzović; Josip Halamić	Spatial distribution of topsoil organic carbon in Croatia
Soils: Functions and threats. Soil erosion Coordinator: Luca Montanarella Convener: Ana Payá-Pérez	
Demetrio Antonio Zema, Giuseppe Bombino, Pietro Denisi, Diego Fortugno, Santo Marcello Zimbone	Erosion modelling by wepp in plots treated with solar-dried citrus peel
Emanuele Giaccari; Giuseppe Spilotro;	Protection works against the erosion of the coasts near to Torre Ovo in Campomarino di Maruggio (Ta)
Igor Boni, Matteo Giovannozzi; Paolo F. Martalò and Federico Mensio.	Soil erosion assessment in Piedmont: A territorial approach under the rural development program.



Geological 3D Modelling and Soils: functions and threats

Field trips

From Wednesday 17th to Friday 19th, two optional post-congress fieldtrips are planned to the Southern Pyrenees in the spectacular Tremp area, a world class natural laboratory for Geology and Southern Pyrenean Soils.

Both fieldtrips

- Departure from Barcelona: Wednesday 17th of June, afternoon.
- Return to Barcelona: Friday 19th of June. Arrival to the airport is scheduled at 11:00h.
- Fee for each field trip: 280 euros, including guidebook, ground transportation, accommodation and meals.
- To register, please use the EUREGEO 2015 on-line registration form.

REGIONAL GEOLOGY

From field data to 3D models

Tremp, Southern Pyrenees 17th - 19th June 2015, Post-Congress

With the title of "From Field Data to 3D Models", this fieldtrip will allow the participants to enjoy some of the most relevant structural and stratigraphic features of the Southern Pyrenees and their connection to their 3D modelling.

This fieldtrip offers an overview on the tectonic structure of two of the main Southern Pyrenean Thrust sheets in the Tremp area, a world class natural laboratory for Geology.

Most of the stops consist of panoramic views along which the integration of outcrop data into their general, regional 3D geology context will be discussed. The hope is that every-one comes away with a "Pyrenean" way to read and interpret thrust and fold geometries and related stratigraphic features.

- · Montsec Thrust and Montsec Thrust Sheet: Mesozoic carbonates and Paleogene clastics and carbonates, including Ager and Tremp – Graus Piggy back, syncline basins.

 Boixols Thrust, Boixols – Sant Corneli related anticlines,
- and Boixols Thrust Sheet (Mesozoic and Paleogene carbonates and clastics).
- Morreres Backthrust.

- Wednesday 17th of June, afternoon: Departure from Barcelona. Accommodation near Tremp.
- Thursday 18th of June, full day: Fieldtrip.
- Friday 19th of June, morning: Departure back to Barcelona. Arrival to the airport is scheduled at 11:00 h.

 • Difficulty grade: Stop and short walk along paths.

Includes

- Fieldtrip guidebook
- Accommodation: Nights of 17th and 18th. Hotel Terradets,
- Meals: Dinner Wednesday 17th; Breakfast, field lunch and dinner Thursday 18th; Breakfast Friday 19th.
- Transportations: Barcelona to Tremp and Tremp to Barcelona; Field transportation.

Soils

Soil information for the sustainable development of mountainous areas

Tremp, Southern Pyrenees 17th - 19th June 2015, Post-Congress

With the title "Soil information for the sustainable development in mountainous areas", this fieldtrip will provide a unique opportunity to enjoy some of the most relevant Southern Pyrenean soil features on selected spots, showing their relations to the geological, landform and climatic parameters, and their relations with the vineyards in the region.

This fieldtrip offers an overview on the soil forming factors and processes taking place on the largest southern Pyrenean basin, in the Tremp area, a world class natural laboratory for geology, pedology and land use in mountainous areas.

- Soils developed on conglomerate debris (Comiols). Soils developed on tufa / travertine.
- Soils developed on sandstone debris.
- Soils with petrocalcic horizons, developed on residual alluvial fans.

- Wednesday 17th of June, afternoon: Departure from Barcelona. Accommodation near Tremp. Thursday 18th of June, full day: Fieldtrip.
- Friday 19th of June, morning: Departure back to Barcelona. Arrival to the airport is scheduled at 11:00 h.
- Difficulty grade: Stop and short walk along paths.

Includes

- Fieldtrip guidebook
- Accommodation: Nights of 17th and 18th. Hotel Terradets, single room.
- Meals: Dinner Wednesday 17th; Breakfast, field lunch and dinner Thursday 18th; Breakfast Friday 19th.
- Transportations: Barcelona to Tremp and Tremp to Barcelona; Field transportation.