[4th European Meeting on 3D Geological Modelling]

Wednesday 21 FEBRUARY			
8h30 - 12h	Welcome coffee & registrations &poster installation LIDAR demo in the quarry	Argonne : 5 groups of 20 persons **Dupanloup :**	
12h30 - 14h	Lunch break	130	
14h00-15h40	Session 1 talk **Countries update**	130	Chairmen :
15h40-16h10	Coffee break	130	
16h10 – 17h30	Session 2 talk **European & International projects**	130	Chairmen :
18h00- 20h	Ice Breaker	130	
Thursday 22 FEBRUARY			
8h30 – 10h	Session 3 talk **3D Models Storing, Updating & Delivering**	130	Chairmen
10h - 10h30	Coffee break	130	
10h30 – 12h00	Session 4 **talk** **Geological data management for 3D models Development initiatives**	130	Chairmen
12h 00 – 13h30	Lunch break	130	
13h30 – 15h30	Session 5 talk **The 3D geological modeling value chain**	130	Chairmen
15h30 -16h00	Coffee break	130	
16h00 – 18h00	POSTER session	130	Chairmen
19h30 – 00h	Repas du soir : Garden Ice	130	
Friday 23 FEBRUARY			
8h30 – 10h	Session 6 **talk** **3D geological modelling - Case studies**	130	Chairmen
10h - 10h30	Coffee break	130	
10h30 – 12h30	Session 7 **talk** **Urban geology**	130	Chairmen
12h 30 – 13h30	Lunch break	100	

Wednesday

Wednesday 14h-15h40 (10*10)

Countries update

- Introduction + Country update France - Toulhoat Pierre (Intro + France country update) 20 minutes
- Country update Germany - Diepolder Gerold - Country Overview Germany
- Country update Czech Republic - Franěk Jan- New advances in 3D geological modelling at the Czech geological survey
- Country update Finland – Kohonen Jarmo - Steps towards a National Geological 3D-framework of Finland
- Country update Poland - Szynkaruk Ewa - Poland – country update
- Country update Netherland - van der Meulen Michiel - Systematic 3D modelling at the Geological Survey of the Netherlands – country update
- Country update Switzerland - Wehrens Philip and Volken et al.- GeoQuat project: Semi-automated 3D voxel modelling of Quaternary deposits and post-products generation
- Country update Belgium – Deckers et al. - A new coherent 3D fault and (hydro)geological layer model for the eastern part of Flanders (Belgium) from the lower Carboniferous strata up to the surface
- Country update UK - Kessler Holger - Country Overview BGS

Wednesday 16h10 – 17h30 (4* 20 min)

European & International projects

- Visual3D – A European network of infrastructure with focus on 3D/4D geomodelling - Kampmann et al. - Luleå University of Technology
- Towards a European Fault Database - storage of 2D and 3D faults and properties – Ten Veen et al. - TNO
- Alberta's 3D Geological Framework: Enhancing Science-Based Decision Making and Communication of Complex Geoscience Information to Stakeholders – MacCormack et al. - Alberta Geological Survey / Alberta Energy Regulator
- Geological Mapping in the USA – Thorleifson et al. - University of Minnesota

Thursday

Thursday AM 8h30-10h (6*15 min)

3D Models Storing, Updating & Delivering

- How Geological Architecture Helps 3D Modelling – Calcagno et al. - BRGM
- Storing and delivering numerical geological models on demand – Loiselet et al. - BRGM
- Efficient management of 3d subsurface models and its metadata – Gabriel et al. - GiGa infosystems GmbH
- Increasing the usability of 3D geological models through applying user-centered design principles – Bang-Kittilsen – Geol. Survey of Norway
- Examples of how 3D models are used for protecting and managing groundwater resources- Jirner et al. – Geol. survey of Sweden

- Advancements in cloud based visualisation of geological models – Kessler and Lipke - BGS

Thursday 10h30-12h (6*15 min)

Geological data management for 3D models

- Vel-IO 3D: a recipe for 3D management of velocity data and time-depth conversion – D'Ambroghi et al. - Geological Survey of Italy
- RESQML V2.2 How the Geomodeling community can take benefit of this standard to exchange between Geomodeling Software – Rainaud et al. - GEOSIRIS SAS

Development initiatives

- BGS Groundhog - a useful tool for the digital subsurface – Wood et al. - BGS
- RINGMesh: An open source data model for integrative numerical geology – Bonneau et al. - RING - GeoRessources - ASGA - Université de Lorraine
- 3D implicit GeoStructural Simulator: On the inversion of geological data to build 3D models – Aillères et al. - Monash University
- Probabilistic Geomodelling and Geological Inference – Wellman et al. - RWTH Aachen University

Thursday 13h30-15h30 (8*15 min)

The 3D geological modeling value chain

- Overview of R&D on 3D Geological Modelling at BRGM – Courrioux et al. - BRGM
- Collaborative 3D modelling: Hidden pitfalls – A case study from Switzerland – Baumberger et al. - Swisstopo
- Framework for modelling national scale 3D geological models – Hillier et al. – Geol. Survey Canada
- The harmonized 3D modelling workflow for shallow geothermal use in Central Europe: An important deliverable of the GeoPLASMA-CE project – Goerz et al. - Saxon Geological Survey
- Visual KARSYS, a web-platform for the documentation of karst aquifers including online geological modelling – Malard et al. - ISSKA
- Bringing an outcrop back to the office: which methods and what to do with it? – Dewez et al. - BRGM
- Digging into 3D geological model – Dewez et al. – BRGM
- 15h15 – 15h30 : Presentation of the poster session & live-demo

POSTER SESSIONS (27)

- Mr Benagoune Farouk Contribution of 3D geological modeling in decrypting complex geological settings of water springs, Eastern Algerian area.
- Ms Bialkowski Anne 3D geological modeling of the superficial formations, practical applications
- Mr Bonneau Francois RING: Toward stochastic and multiscale geomodeling
- Mr Corti Luca 3D fabric domains estimation in the eclogitised continental crust of the Sesia Lanzo Zone (Mt. Mucrone area, Western Alps)
- Mr de la Varga Miguel GemPy: Model based machine learning in geological modelling
- Ms de Mesquita L Veloso Fernanda Lorraine Basin Case Study: how to represent complex geology of coal seams with GeoModeller
- Mr Fitzgerald Des 3D Geological Uncertainty – using Google Protocol Buffers for automation
- Mr Garcia-Crespo Jesus Geological Modelling of the Lopín structure, Ebro Basin (Spain)
- Ms Gibson Helen How to compute and deliver the uncertainties associated to models ? - Advances Presented (FitzGerald/Gibson)
- Mr Goerne Sascha 3D seismics in crystalline rocks: challenges of interpretation and 3D modelling (case study: deep geothermal research borehole)
- Mr Hummelman Jan Uncertainties in geo- and hydrogeological 3D layer models as integral part of modelling procedures
- Mr Issautier Benoit Paleogeography - Facies simulation of the Albian of the Paris Basin

- Ms Kondrova Lucie Metadata for 3D Geological Models and Their Coherence with the Semantic Web
- Ms Le Guern Cécile Urban 3D modelling: a typology of anthropogenic deposits to anticipate pollution issues
- Ms Maljers Denise Yes, we need to integrate our subsurface models!
- Mr Menzer Lionel 3D geological modelling of a salt-rich inverted rift system : the case of eastern Corbieres
- Mr Ogunfolabo Taofeek Petrophysics and Sequence Stratigraphic analyses
- Mr Pluemacher Joachim 3D geological modelling as a standard application in mining
- Ms Richmond Tanya BGS Groundhog Desktop
- Mr Švagera Ondřej 3D outcrop models and their benefits
- Ms Tomaszczyk Marta Using high resolution DEM from LIDAR data in surface-based 3D geological modelling.
- Mr van Haren Tom A 3D voxel model of Pleistocene gravel and sand deposits in Flanders (Belgium)
- Mr Wehrens Philip GeoQuat project: Semi-automated 3D voxel modelling of Quaternary deposits and post-products generation
- Mr Wood Ben Development of BGS Groundhog software with GTK for use in hydrogeological investigations and environmental monitoring in Finland
- Ms Yven Beatrice – *to be defined-*
- Mr Zehner Björn An approach and implementation for the management of diverse geoscientific data
- Ms Zuffetti Chiara Geological constraints to model complex hydrostratigraphy: case studies from the Quaternary Po Hydrogeological Basin (Northern Italy)
- Mr Żuk Tomasz Analogue study of the Permian fanglomerates based on pseudo-3D GPR data from the Zygmuntówka quarry, Chęciny, South Poland

Friday

Friday AM

3D geological modelling - Case studies 8h30-10h (6*15 min)

- The first step to a 3D model of the North German Basin – The TUNB “Pilotregion” – Steuer et al. – BGR
- 3D distribution of groundwater salinity as derived from airborne EM and a stochastic geological model – Dabekaussen et al. - TNO
- 3D Geological modelling and gravity inversion of a structurally complex carbonate area: Application for karstified massif localization – Husson et al. - BRGM
- Coupling of GeoModeller and FEFLOW : A Case Study with demonstration - Tunisian Groundwater challenges addressed – Hassen and Gibson et al.- Intrepid-Geophysics
- Reservoir Heterogeneity and modeling of the Oolithe Blanche (Dogger of the Paris Basin) – Issautier et al. - BRGM
- Geological modelling of the El Golfo multi-event landslide (El Hierro Island, Canary Archipelago) – Garcia-Crespo et al. – IGME

Urban geology 10h30-12h30 (8*15 min)

- A role to play for geological surveys in urban information platforms? – Robida et al. - BRGM
- Putting our models to work: Applications of 3D voxel models in real life situations – Stafleu et al. - TNO
- Modeling gypsum thickness in order to evaluate collapse hazard in Paris area – Bourgine et al. - BRGM
- The use of 3-D models to manage the groundwater resources of the Lower Greensand aquifer, Hertfordshire and North London, England – Cripps et al. - BGS
- 3D geological reconstructions for the development of geothematic layers useful for urban planning: El Papiol case study (Barcelona Metropolitan Area) – Pi Juan et al. - ICGC
- BIM and GIS : Excavated Material Management – Beaudouin et al. - SYSTRA
- Supporting BIM by integrated geological 3D-modeling of urban underground– case study Darmstadt, Hesse, Germany – Lehné et al. - HLNUG
- Setting interoperability between BIM and Geological Modeling: Feedback from the French MINnD UC8 project – Beaufils et al. - BRGM