3rd European meeting on 3D geological modelling

Roncalli Haus, Wiesbaden, Germany, June 16th and 17th, 2016

Agenda

Thursday, June 16th

08:00 Registration and Welcome Coffee

08:30 Opening & Introduction; Welcome Address: Fred Rosenberg (head of dept. Geology HLNUG)

08:45 Country Overviews & Highlights (5 min each, in alphabetical order of country code):
AT: Sebastian Pfleiderer (GBA), BE: Roel de Koninck (VITO), Griet Verhaert (ALBON) & Marleen van Damme (DOV), CH: Robin Allenbach (swisstopo), CZ: Jan Franěk (ČGS), DE: Gerold Diepolder (LfU/Kf3D), DK: Peter Sandersen (GEUS), ES: Conxi Alaya (IGME), FI: Salla Valpola (GTK), FR: Christelle Loiselet (BRGM), IE: Beatriz Mozo Lopez (GSI), IT: Chiara D'Ambrogi (ISPRA), NL: Michiel van der Meulen (TNO), PL: Ewa Szynkaruk (PGI), SE: Lars Kristian Stölen (SGU), SI: Dejan Šram (GeoZS), UK: Holger Kessler (BGS), "WW"/ 3D book progress: Keith Turner (CSM & BGS)

10:00 Session 1: Model storage management and delivery (versioning, metadata and quality, dissemination and visualization):
Ben Wood & Martin Nayembil (BGS): Management of 3D geological models at the BGS.
Markus Hölzner (BGR): Versioning and data management in decades-lasting projects.
Zbigniew Małolepszy (PGI): 3D regional geological modelling in Poland.

10:45 Coffee Break

11:15 Session 1 cont. & wrap-up:
Pieter de Graef (Geosparc): Using (hydro) geological models in the DOV web portal.
Marianne Wiese (GEUS): A conceptual data model for 3D geological data and testing databases and transformations with real data.
Paul Gabriel (GiGa infosystems): New applications and projects with GST. Technology for today's and tomorrow's problems.
Thorsten Agemar (LIAG): Data management and visualisation of 3D-objects in the Geothermal Information System GeotIS.
Discussion and wrap-up of session 1, constitution of afternoon breakout session (if required)

12:30 Lunch

13:30 Session 2: Model interoperability and standards (incl. data models, INSPIRE compliance and an update of relevant EU/trans-border initiatives):
Maryke den Dulk (TNO): 3D Modelling based on 2D seismic data: application to Belgium-Dutch cross-border hydrogeological projects.
Ronald Vernes (TNO) & Jef Deckers (VITO): The H3O-project: closing the gap between our nationwide (hydro)geological models.
Robin Allenbach for Roland Baumberger (swisstopo): Compiling a 3d geological model of the Swiss Molasse Basin – A review of the collaboration of 6 partners.
Mickaël Beaufils & Christelle Loiselet (BRGM): Raising multiscale 3D geological models inter-operability.
Michiel van der Meulen (TNO): An update of 3D relevant EU projects and initiatives.
Discussion and wrap-up of session 2, constitution of breakout session (if required)

15:00 Coffee Break

15:30 Open discussion & breakout sessions

17:00 Live demonstrations (multiplex / multi-station demonstrations, scheduling by arrangement) in alphabetical order of institution acronym:

Tanya Richmond (BGS): Groundhog desktop application;

Christelle Loiselet & Gabriel Courrioux (BRGM): BRGM geological modelling tool GDM-Multilayer.

Sebastian Pfleiderer (GBA): The 3D geological model viewer of the Austrian Geological Survey.

Katrien de Nil (DOV): DOV as Flanders webportal for 3D geological data online.

Christian Brogaard Pedersen (GEUS): Geothermal potential in Denmark, a website showing geology in 3D.

Paul Gabriel & Jan Gietzel (GiGa infosystems): Web based interactive 3d model inspection with the new features of GST 2.9.

Anu Eskelinen (GTK): 3D demonstration of Finnish esker/aquifer (3D pdf format).

Torben Bach (I-GIS): Cloud based 3D geological modelling - fast access to your data;

Zbigniew Małolepszy (PGI): Web-based delivery of 3D geological models. Demonstration of simple and intuitive viewer tool for sharing geological models.

Harry Middelburg (TNO): Browser based interactive 3D visualisation of layer and voxel models - from object to volume rendering.

Friday, June 17th

08:00 Coffee

08:30 Session 3: Model use and applications (esp. cross-domain use cases eg. in the urban environment, BIM, groundwater and environmental management):

Keith Turner (CSM) & Holger Kessler (BGS): Applying 3D Geological Modeling to Infrastructure Design.

Torben Bach (I-GIS): From 3D data to 3D model - AI based fast 3D modelling of AEM data.

Gabriel Courrioux (BRGM): From 2D maps to 3D modelling: much more than "just one more dimension".

Jonatan Ford (BGS): The UK's National Geological Model - recent developments, current applications and demands for further enhancement.

Hein Raat (TNO): Status update on GeoTop, a 3D voxel model of the Netherlands.

Ines Görz (TU BAF): Need for flexible volume meshing of a 3D surface model

10:00 Coffee Break

10:30 Session 3 cont. & wrap-up:

Katherina Seiter & Björn Panteleit (GDfB): The parameterised structural model of Bremen - a basis for detailed modelling of flow and transport.

Tina Živec (Elea iC): Using 3D geological modelling in Civil Industry - benefits and limitations.

Ina Zander (LfULG): Border crossing geological 3D-modelling - An insight into applied projects at the Saxon-Czech-Boundary.

Michael Howahr (OOWV): 3D Geological Models - Application in water resource management and groundwater protection.

Eva Jirner (SGU): 3-D geological modelling of the Uppsala Esker - a tool for analysis of Uppsala's drinking water source.

Stefan Volken (swisstopo): GeoQuat: developing a system for the sustainable management, 3D modelling and application (hydrogeology, geotechnics, raw materials) of Quaternary deposit data.

Rouwen Lehné (HLNUG): A geological 3D-information system for subsurface planning in urban areas - case study Darmstadt (Hesse, Germany).

Discussion and wrap-up of session 3, conclusions of the workshop & farewell

12:30 Lunch & further networking

13:15 End of event