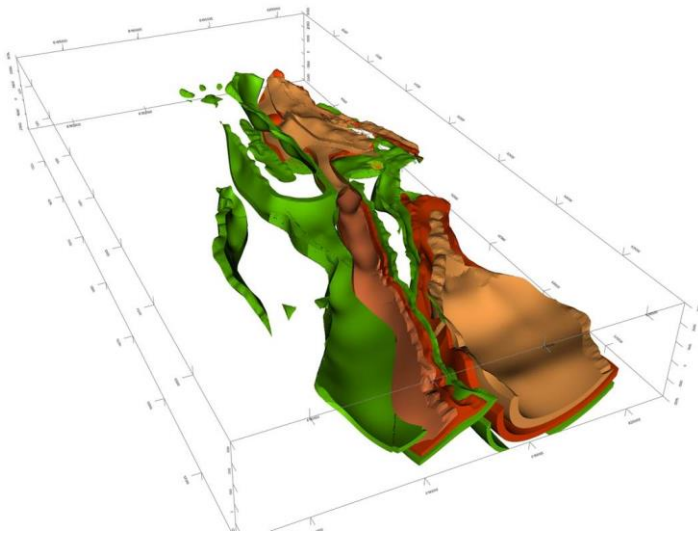


## 4th meeting of the European 3D GeoModelling Community “Delivering subsurface models for societal challenges” *First call & Program Proposal*

Following on from our successful meetings in Utrecht 2013, Edinburgh 2014 and  
Wiesbaden 2016, this is the first circular for the

### **4th meeting of the European 3D GeoModelling Community** that will be held **February 2018, 21<sup>st</sup> to 23<sup>rd</sup>**, in **Orléans (France)**

The workshop will be held at [Hotel Dupanloup](#) - International University Center for Research,  
not far away from the headquarters of [BRGM](#), the French Geological Survey.



This meeting is devoted to sharing experiences about the deployment of 3D Geological Modelling in geological institutes, surveys and the industry and its link with societal challenges.

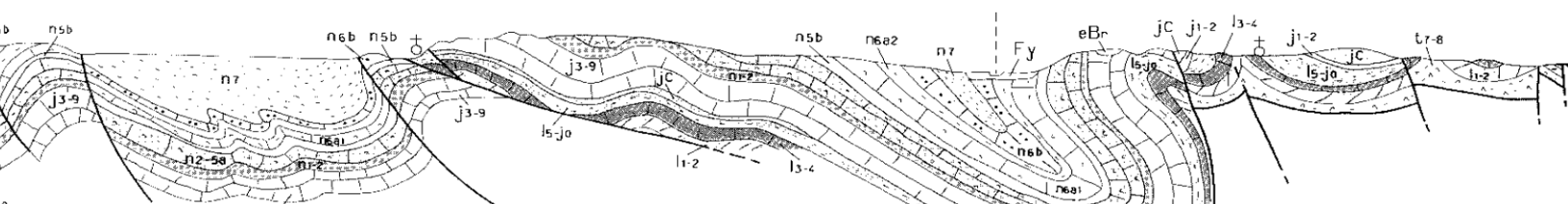
**Different aspects from gathering and disseminating data and geological models, innovative 3D modelling techniques, as well as model exploitation for end users will be covered.**

We kindly invite you to think about your possible contributions and let us know your intentions of participation or talks. Even if informal, we would like to gather the first intentions of participation before the end of April. A detailed circular shall follow shortly with detailed guidelines and a preliminary program. We are trying to keep numbers below 100 and therefore expect each organization to send a maximum of 5 representatives.

The meeting will be free of charge.

A contribution might be asked for people willing to join social events (city tour and/or dinner).

If interested [please pre-register here!](#)



Considering that the final program shall leave a large place to **discussion, round tables and demo sessions**, the following non exhaustive themes are already identified.

### Countries & European projects update

This session will make an update of current experience and place of 3D geological modelling in national surveying programs. Updates from European initiatives are warmly welcomed too (*e.g.* EPOS, GeoERA...).

### Geological data management for 3D models

Still today, the most time consuming task is collecting and “preparing” data so that they are ready for modelling. How to efficiently find and extract data from existing database for modeling purposes?

What are the current workflows/practices/issues? How to automatically extract the data which are pertinent for a given modelling scale? How to deal with scale dependent features? These recurring issues are closely linked to data models (ranging from representing field data to 3D geological models), interoperability, indexing, search capacities, traceability and versioning... Any feedback about innovative solutions and the current experience of practitioners is welcomed. The contributions shall include talk on services that allow web exploration of existing geological models: how to deal with the diversity of native representations of models, how to conciliate inconsistencies between different overlapping models...

### Case studies

Case studies shall focus on specific problematics and highlight modeling challenges either in terms of geological complexity and/or technical/algorithms bottleneck and/or addressed societal challenges. Talks highlighting the integration of field data and the use of modeling tools on the field and to support field works are most welcome as well as talks highlighting the usefulness of 3D geological models for end-users or “downstream” applications: communication, simulation, BIM, water resources, mineral resources, natural risk... One typical need for such applications is mesh generation out of 3D geological models and how to adapt model and meshes for different purposes, each simulation method/code often requiring specific mesh properties.

### Innovation: the 3D geological modeling *value chain*

This session will aim at specifying the future of the 3D geological modeling *value chain* from the point of view of Geological Surveys. In the digital era, 3D/4D models are becoming essentials in decision process, design, risk appraisal, calculations... Yet, asking for a 3D geological model is sometimes considered as dispensable from the point of view of stakeholders in business and/or policy driven practices. As they are a central aspect, this session will also deal with predictive geosciences and advances on how to compute and deliver the uncertainties associated to models, quality control procedures and current practices, highlighting structuration and integration needs for efficient 3D geological modeling workflows.

### Collaborative development initiatives

This special session aims at gathering people interested in sharing code/tools. Talks shall focus on strategies that can promote collaborative international initiatives, hopefully relying on existing examples, and identifying expected needs as well as already available tools/code that could be shared.

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