

Earth Science Europe

Second Town Meeting: 2-3 April 2014:

“Towards an Earth Model”

Host: Institut de Physique du Globe de Paris (IPGP)

1 rue Jussieu, 75005 Paris

Overarching aim: Creating a forum and a voice for earth sciences in Europe.

In this second meeting we want to focus on the science challenges that can be addressed in global earth sciences models. We would like to see our community take a globally leading position in an “**Earth Model**” possibly broadly based on the “**Human Brain Model**”. Our focus is specifically the solid Earth and its interactions with its envelopes.

The key questions we will address are:

- How can earth science data contribute to earth system models in terms of the solid earth component underpinning these models and can we in Europe lead on this thinking?
- How do we as a European community contribute to global models? Global strain models, global sedimentation, global volcano models, deep Earth models, palaeoclimate etc.? Clearly this must integrate data from many sources, but it could be the definitive global model for the solid components in the Earth that no one has taken leadership of to date and may be a defining step.
- How can we engage with private sector sponsors and the EC to underpin this sort of knowhow?

AGENDA

DAY 1

11:00 REGISTRATION & Coffee

12:00 1. Introduction & Welcome (*John Ludden, ESE and NERC-BGS*)

2. Presentation of the first output (draft document) “Earth Science for Europe”

3. Discussion of the objectives and format of the meeting

4. Infrastructure proposals – ESFRI and the EU list for Earth Sciences

The state of preparedness and ongoing activities (short maximum 10 minute presentations from: EPOS, EMSO, EGDI, ECORD, Research Drilling, Crustal fluids, Geochemistry, etc...)

Note . This will continue into the period after lunch if necessary

13:00 LUNCH –provided

Continued discussion on infrastructure and actions to be taken

14:00 Global Earth Models

Initial discussion of the concept and how Europe might contribute, followed by ..

Individual presentations by invited speakers (15 minutes presentation +5 discussion each)

Confirmed Speakers:

1. Global Earthquake Model & Global Volcano Model (*Anslem Smolka*)
2. Global strain rate model (*Richard Walters, Leeds University*)
3. OneGeology Global (*Marko Komac*)
4. Global stratigraphic models and industrial applications (*Andrew Davies, Nefitex*)

15:40 BREAK

16:00 Presentations continue:

5. Global seismic tomography (*Jean-Paul Montagner, IPGP*)
6. Global plate tectonics and geodynamics (*Carmen Gaina, CEED, University of Oslo*)
7. Global metallogeny, and georesources (*John Ludden*)
8. Paradigm shift in the orientation of geosciences R&D programs: the RGF example (*Patrick Landais, BRGM*)
9. A new ECORD in a new IODP (*Gilbert Camoin, CEREGE*)

18:00 Breakout discussion: The Global Earth Model

19:00 CLOSE, DRINKS RECEPTION

<http://www.earthscienceeurope.org>



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AGENDA (continued)

DAY 2

09:00 *Breakout discussions continue*

10:30 **BREAK**

11:00 **Wrap up and next steps (lead by John Ludden):**

1. The Global Earth Model; task force to be appointed
2. EarthScienceEurope: its role and future governance
3. Ongoing actions and reports

13:00 **LUNCH- provided**

14:00 **CLOSE.**