

## **THINK-TANK MEETING REPORT**

### **WG2: MEASUREMENT APPROACHES**

**17-18TH OF DECEMBER 2014, LLEIDA, SPAIN**

This document summarises the main outcomes of the first WG2 Think Tank meeting organised at the University of Lleida in December 2014. The meeting had 12 participants, 10 of these were funded by Connecteur. The participants represented five different EU countries. In the following sections we provide general details of the activities accomplished and outcomes obtained.

### **INTRODUCING CONNECTIVITY RESEARCH**

In the first part of the meeting each of the participants presented how they are measuring connectivity and what is their research agenda in relation to connectivity.

### **WHAT DO WE UNDERSTAND IN TERMS OF CONNECTIVITY?**

After this introduction there was a general discussion about if we are or not measuring connectivity and what type of connectivity we are measuring. There was a constructive discussion about (i) using new and perhaps more consistent terminology to describe connectivity, (ii) feedbacks between structural and functional connectivity and (iii) how we can revise the way in which we should measure connectivity based on, for instance, tracing water and sediments at multiple spatial and temporal scales.

### **BREAK-OUT GROUPS 1**

Following, all participants were divided in three groups based on the (spatial) scale of their research interest: plot or hillslope, reach and catchment. In each group they discussed the methods that are available to measure connectivity in water and sediment flux, and topography or structure. Each group presented their results and these were widely discussed. Each group elaborated on a space-time-technique diagram summarizing main findings.

### **BREAK-OUT GROUPS 2**

The second break-out had the aim of defining new parameters we could measure in an ideal scenario that could provide new insights into connectivity. Again, each group

concentrated on a different spatial scale but all on a semi-arid landscape/biome in order to facilitate discussions between scales. New variables in relation to water and sediment flux, and topography or structure were defined and discussed.

### **FUTURE PROGRESS WITHIN THE WORKING GROUP**

Finally, WG leaders reminded the group of the aim, objectives and deliverables of WG2. They presented the status of the google map that summarises the data pool ([click here to see it](#)). The entire group discussed the need to create a table summarizing all field/lab sites available in the pool. The table should have 5-6 fields and should be used by the user to look at the availability of sites based on basic characteristics (e.g. scale, biome). A code for each site would link this table with the google map. Therefore, once one knows the sites he/she is interested can go to the map and use the links to see and review more information. Ultimately, the user can contact the responsible of the site to ask for specific data.

### **OUTCOMES**

- Each of the group had a rapporteur who prepared a document summarizing all discussions. These documents were sent to WG2 leaders.
- A structure of a review paper was prepared: *Can we measure connectivity?*
- Sketches of the main figures of the paper were prepared.
- An abstract for the 2015 EGU was submitted with the aim of presenting main outcomes of the ThT meeting.
- The paper is now in preparation.

