WORKSHOP 7: Tree Mortality
Estoril, 25 October 2014

Organisers: Jordi Martínez-Vilalta & Steven Jansen

Topic description

Our topic aims at improving our capacity to **forecast tree mortality** events by studying the determinants of such events at different spatiotemporal scales. Our current activities are focused on performing a **global synthesis on radial growth patterns as predictors of tree mortality** (early warning signals). Some of the questions that will be addressed are: do we see common patterns (in terms of magnitude, trends or variability) in the growth of trees that are about to die that differ significantly from those of trees that survive? What is the best method (i.e., statistical model) to estimate mortality as a function of previous growth dynamics? Is this method applicable to all species? How does it depend on the type of abiotic stress triggering mortality? How much can we gain from considering entire chronologies as opposed to recent growth dynamics? We have identified a list of over 60 datasets (mostly from published sources) that would be potentially suitable for our analysis, and most of these datasets have already been collected in a standardized format and are currently going through a process of quality control. Data analyses with the final dataset will start in July 2014 taking advantage of an STSM awarded to Maxime Cailleret (ETH, Switzerland) so we hope to have preliminary (yet juicy) results by the time we meet in Portugal (October 2014).

Agenda TG7 workshop, Saturday October 25 (all day)

9:30 – 10:00h. Report on activities since Finland, by J Martínez-Vilalta.
10:00 – 11:00h. Preliminary results from our global growth-mortality synthesis, by M Cailleret.
11:00 – 11:30h. Coffee break.
11:30 – 13:00h. Briefing on the 'International interdisciplinary workshop on tree mortality', by S Jansen, and discussion on relationship with our TG activities (all TG participants).

13:00 – 14:30h. Lunch break.

14:30 – 16:30h. General discussion on how to move forward on our data synthesis effort. Planning and distribution of tasks. All TG participants.

16:30 – 17:00h. Coffee break.

17:00 – 19:00h. Extended discussion on additional TG objectives. Smaller meetings of working groups focusing on specific tasks (if required). All TG participants.

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