

DANTE:

Dating the Anthropocene in Environmental archives



Bridging the gap between ^{210}Pb and radiocarbon age dating : 2nd announcement

This meeting aims to present to the paleocommunity the latest achievements in geochronology for the Anthropocene, especially on combining ^{210}Pb dates with traditional and bomb-pulse ^{14}C dates.

Overview

High resolution chronologies are needed for the last 500 years to reconstruct pollutant deposition, calibrate atmospheric transport models, investigate biodiversity changes in the past, understand long term sequestration of organic matter and carbon, validate and calibrate environmental archives-based paleoclimate records with instrumental and monitoring data, amongst others. Traditional sediment dating using conventional radiocarbon for deeper layers and ^{210}Pb for upper layers are the common used geochronological methods. Additional chronomarkers like ^{137}Cs pulse, well-known sedimentary events or relative changes in exotic pollen taxa are also frequently used. Despite that, there are issues on the precision and the quality of the ages provided by all techniques. There is an urgent need to develop and validate an integrated approach to make compatible the results of the resulting chronologies and integrate them into a unique conceptual and numerical approach.

The meeting aims to present to the paleocommunity the latest achievements in lake, peat and marine geochronology for the Anthropocene, especially on combining ^{210}Pb dates with traditional and bomb-pulse ^{14}C dates. Other archives (like speleothems) will be also included in the workshop. The meeting will be divided in 2 parts:

1. Users will be trained using idealized datasets and their own datasets. A special focus will be given on uncertainties and cross-checking between the different geochronological methods to ensure best practice and valuable data.

2. Time will be dedicated for a number of talks, posters and free discussions. Proposed sessions are:

Theory in age depth-models: bridging the gap between ^{210}Pb and ^{14}C

Other chronomarkers (exotic pollen taxons, μ -tephras, exogenous material...)

Case studies

Confirmed invited speakers/lecturers:

Dr. Maarten Blaauw (Queen's University, Belfast, UK)

Dr. Joan-Albert Sanchez-Cabeza (Universidad Nacional Autonoma de Mexico, Mexico)



WHEN?

19-21 October 2016

WHERE?

Toulouse downtown, France

Toulouse « la ville rose » is the most dynamic French city according to economic and student magazines.

You will enjoy the city lifestyle, french south-west gastronomy.

Deadlines:

15/06/2016: early bird registration opens!

Abstract submission opens!

15/09/2016: abstract submission closes

21/09/2016: early bird registration closes

30/09/2016: registration close

Organizing committee:

Gaël Le Roux (EcoLab, CNRS, Université de Toulouse)

François De Vleeschouwer (EcoLab, CNRS, Université de Toulouse)

Jeroen Sonke (GET, CNRS, Université de Toulouse)

Didier Galop (GEODE, CNRS, Université de Toulouse)

Emmanuel Chapron (GEODE, CNRS, Université de Toulouse)

Florence Mazier (GEODE, CNRS, Université de Toulouse)

Sandrine Baron (TRACES , CNRS, Université de Toulouse)

Pieter van Beek (LEGOS, CNRS, Université de Toulouse)

Maarten Blaauw (Queen's Univ., Belfast)

Marco Aquino Lopez (Queen's Univ., Belfast)

DETAILS AVAILABLE:

<http://inpact.inp-toulouse.fr/PEAT3/>

Register [HERE](#) to receive news and additional information about the workshop

