



FIRE HISTORY BASELINES BY BIOME

A Global Paleofire Working Group Workshop
Coordinators: Anne-Laure Daniiau and Tim Br cher

Near Bordeaux, FRANCE
September 25 – 29, 2016

Dear Colleagues,

We are pleased to announce an open call for letters of interest to participate in a workshop on “Fire history baselines by biome”, for which a limited number of places are available. Early career scientists and researchers from developing countries who work on the topic of paleofire are especially encouraged to apply.

The workshop will be held September 25-29, 2016, near Bordeaux (France) at Ch teau de la Tour (Beguey, 33410). It is organized as part of a CNRS-PICS-funded project called “Investigating controls of orbital changes in biomass burning at the biome-level”, and is the first workshop of the PAGES’s Global Paleofire Working Group phase 2 (GPWG₂) <http://www.gpwg.paleofire.org/> which aims to merge global paleofire records with global Earth system models to understand how vegetation and climate controls fire during abrupt and transient climate changes.

Overview:

Fire is projected to increase in some regions of the globe in response to global warming and regional moisture anomalies from rising atmospheric greenhouse gases. Large uncertainties and biases remain, however, in integrating fire into global models of the Earth system. For some projections, only climate is considered for estimating fire risk, even though vegetation is an important determinant of fire dynamics and responds itself to climate. Drying can influence fire activity in opposing directions: a fire increase in fueled ecosystems, or a fire reduction in fuel-limited ecosystems. A solid understanding of the baseline variability of fire regimes that integrates both fire and vegetation feedbacks is therefore necessary to make accurate projections about regional fire regimes. The aim of the workshop is to foster interdisciplinary collaborations between data experts and fire modelers to explore fire-vegetation-climate linkages under different climate boundary conditions, in order to establish common rules of fire activity for the past, present, and future.

The workshop will focus specifically on analyzing transient and abrupt climate shifts of the late Quaternary documented in reconstructions and in models, which together can reveal the response of fire to various climate drivers.

Objectives:

- (1) Identify where and/or when climate change implies systematic shifts of fire regimes across different biomes
- (2) Identify processes causing fire regimes to change by comparing associated changes in vegetation
- (3) Determine whether a change in a fire regime leads or lags vegetation changes
- (4) Identify thresholds and reversibility of changes in fire regimes
- (5) Identify the resilience of vegetation in response to a change in fire regime

All research scientists with an interest in paleofire and/or vegetation relationships for the last climatic cycle are invited to apply to attend.

To apply: Email al.daniau@epoc.u-bordeaux1.fr with your name, position, affiliation and a short paragraph (15 lines) explaining why you would like to attend the workshop, what you hope to contribute to the efforts, and what you are most interested in studying. Please note whether you will need funding support to attend the workshop. **Deadline for applications is February 15, 2016.**

Schedule:

Sun., Sept. 25 / day 1: arrivals & dinner

Mon., Sept. 26 / day 2: overview & introductions, sub-groups formed

Tues., Sept. 27 / day 3: working group sessions, report-outs

Wed., Sept. 28 / day 4: working group sessions, plenary discussion, future plans

Thurs., Sept. 29 / day 5: departure

Confirmed speakers: **A.-L. Daniau**, CNRS Université de Bordeaux (France) - *ACER charcoal database*; **T. Brücher**, GEOMAR (Germany) - *Simulation of climate and fire for a full climatic cycle*; **B. Vannière**, CNRS Université de Franche Comté (France) - *Global Charcoal Database*; **J.R. Marlon**, Yale University (USA) *Paleofire data-model integration and links with other databases for multidisciplinary approaches*; **S. Brewer**, University of Utah (USA) *Vegetation during the last deglaciation*; **S.P. Harrison**, University of Reading (UK) *Biome – ACER pollen database*; **M. Kageyama**, CNRS LSCE (Paris) *Climate simulation for abrupt event*; **G. Lasslop**, MPI f. Meteorology (Germany) *Tree cover bistability in the MPI Earth system model due to fire-vegetation feedback*.

Two invited early-careers speakers to be selected.

Limited financial support from PAGES is available to supplement participant travel – particularly for Early Career scientists and researchers from less developed countries. For questions please contact Anne-Laure Daniau (al.daniau@epoc.u-bordeaux1.fr)

Location

Château de la Tour <http://www.hotel-restaurant-chateaudelatour.com/fr/index.php>
2 avenue de la Libération - 33410 Beguey, FRANCE