

SHORT TERM SCIENTIFIC MISSION (STSM) SHORT ABSTRACT

Action number: CA18135 - *Fire in the Earth System: Science & Society*
STSM title: *WUI flammability experiments at whole-plant scale*
STSM start and end date: 01/07/2021 to 15/08/2021
Grantee name: Juan Antonio Muñoz Navarro

ABSTRACT:

During this STSM we have collaborated with the Association for the Development of Industrial Aerodynamics (ADAI) of the University of Coimbra to carry out burning experiments on wild and ornamental plants from species typically present in the surroundings and the gardens of the wildland-urban interface settlements. We have sampled trees from these species before and after the burning tests to know their fuel and moisture distribution, and the changes in moisture content and the degree of fuel consumption of each fuel type after a fire. We have developed burning tests at both, full-scale and bench scale, recording data on mass depletion over time, flame temperature and geometry.