



# Project Number 282910

# ÉCLAIRE

# Effects of Climate Change on Air Pollution Impacts and Response Strategies for European Ecosystems

# Seventh Framework Programme

**Theme: Environment** 

**D6.1** Initial dynamic biogenic emissions, based on synthesis of existing work and mainly for testing

Due date of deliverable: **30/06/2012** 

Actual submission date: 30/06/2012

Start Date of Project: 01/10/2011

Duration: 48 months

Organisation name of lead contractor for this deliverable : **ULund (now KIT)** 

Project co-funded by the European Commission within the Seventh Framework Programme		
Dissemination Level		
PU	Public	
PP	Restricted to other programme participants (including the Commission Services)	N
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

# **Executive Summary**

The aim of D6.1 was to produce a summary and synthesis overview of currently existing biogenic, pyrogenic and agricultural estimates produced by project partners that could be used in atmospheric chemistry transport models. Details of the availability and file transfer protocol of these data and technical information such as resolution and coverage were to be included in this synthesis.

Two documents have been made available to project partners via the ÉCLAIRE website: a spreadsheet containing the details listed above; and an accompanying document describing the data in more detail and providing information on the models used to generate the data.

In addition, the two documents also contain details of anthropogenic emissions inventories available to atmospheric chemistry transport models.

# **Objectives:**

WP6: To further understanding of the seasonal and geographic short-term variability and long-term trends of trace gas emissions from natural and agricultural ecosystems, including fire.

D6.1: To produce a synthesis of existing terrestrial biogenic and pyrogenic emission estimates from the consortium

Partners:

(1) To bring together relevant previous and ongoing simulation results (e.g., for biogenic volatile organic compounds (BVOCs), nitrogen oxides (NO<sub>x</sub>), ammonia (NH<sub>3</sub>), fire) that are currently available from the ÉCLAIRE partners.

(2) To establish and test for suitable input format and resolution with atmospheric chemistry and carbon cycle models.

(3) To publicise availability and file transfer protocol between modelling groups.

#### 1. Activities:

Synthesis of existing terrestrial emission estimates (biogenic, pyrogenic and agricultural) into 2 documents: spreadsheet of existing datasets and inventories for use in atmospheric chemistry transport models, together with details of availability and source of data; accompanying text document describing datasets and models used to generate estimates.

# 2. Results:

Production and circulation via ÉCLAIRE website of: a spreadsheet of existing datasets and inventories for use in atmospheric chemistry transport models, together with details of availability and source of data; an accompanying text document describing datasets and models used to generate estimates.

## 3. Milestones achieved:

N/A

## 4. Deviations and reasons:

In addition to terrestrial biogenic/natural emissions, both documents also contain details of currently available anthropogenic emissions inventories. This has been achieved in conjunction with CEH for completeness and convenience for the end-users of the inventories.

#### 5. Publications:

N/A

## 6. Meetings:

N/A

## 7. List of Documents/Annexes:

WP6D61\_Emissions\_Synthesis.xlsx Spreadsheet of existing emissions inventories (biogenic, pyrogenic, agricultural and anthropogenic) and their availability

WP6D61\_Emissions\_Description.docx Accompanying description of inventories (format of data, spatial and temporal resolution, spatial and temporal coverage)