



# Project Number 282910

# ÉCLAIRE

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

Seventh Framework Programme

Theme: Environment

Deliverable 13.1:

# Finalised list of models for use in C3 and list of data requirements for each model

Due date of deliverable: **31/03/2012** 

Actual submission date: 13/04/2012

Start Date of Project: 01/10/2011

Duration: 48 months

Organisation name of lead contractor for this deliverable :  $\ensuremath{\textbf{NERC-CEH}}$ 

Project co-funded by the European Commission within the Seventh Framework Programme		
Dissemination Level		
PU	Public	X
PP	Restricted to other programme participants (including the Commission Services)	
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 models of vegetation and soil responses to air pollution and climate scenarios will be tested against plot-scale data from experimental and survey sites. Testing these models requires measurements or estimates for a) input variables and b) comparison with output variables. The set of models to be applied at plot scale has been finalised as: DO3SE; VSD-N14C-MultiMOVE; LPJ-GUESS; LandscapeDNDC; FORSPACE; VSD+-EUMOVE. The requirements of each of these models for inputs and comparison data have been listed. Each quantity has been assigned an importance score for each model, allowing prioritisation of data-gathering activities.

### **Objectives:**

- a) To make a final list of models to be included in plot-scale model testing.
- b) To make a final list of important or useful quantities required for model setup and testing

# 1. Activities:

- a) A template spreadsheet for gathering information about the models and their required quantities was prepared and circulated to the model owners.
- b) The model owners filled in required quantities and assigned importance to each on a scale of 0-2: 0 = not used or default value usually used; 1 = measurement useful but not essential e.g. default value can be used; 2 = measurement essential.
- c) Returns from all model owners were collated and identical requirements combined.
- d) Ambiguities were highlighted and the spreadsheet re-circulated for clarification.
- e) A final draft of the spreadsheet was circulated to Clare Howard (WP 21.3 Model protocols and uncertainty), Christof Ammann (WP21.2 Common measurement protocols), Eiko Nemitz (C1 leader), Mhairi Coyle (C1 data manager) and other project members involved with data mining and storage.

# 2. Results:

See attached spreadsheet.

#### 3. Milestones achieved:

Deliverable 13.1 delivered.

#### 4. Deviations and reasons:

None.

#### 5. Publications:

None.

# 6. Meetings:

None.

#### 7. List of Documents/Annexes:

• "Quantity requirements for ECLAIRE WP3.5 models.xlsx"