Ozone Critical Levels Workshop CIEMAT, Madrid, Spain

7th - 9th November, 2016

Local organisers: Ignacio González (<u>ignacio.gonzalez@ciemat.es</u>), Rocío Alonso (<u>rocio.alonso@ciemat.es</u>) and Isaura Rábago (<u>isaura.rabago@ciemat.es</u>), Ecotoxicology of Air Pollution, Environment Department, CIEMAT, Madrid.

Meeting chair: Gina Mills (gmi@ceh.ac.uk), Head of the Programme Coordination Centre for the LRTAP Convention's ICP Vegetation², Centre for Ecology and Hydrology, Bangor

Purpose:

This LRTAP Convention workshop will review recent progress with flux-based ozone critical levels for trees, crops and (semi-)natural vegetation and consider revisions to Chapter 3 of the Modelling and Mapping Manual (click here for the latest version). Although this meeting will be open to interested participants, for practical reasons we will have to limit participation to a maximum of 60 people. In case there are more than 60 people willing to come, preference will be given to participants in the Critical Level Methodology Expert Panel meetings in Hindås and Deganwy, together with members of the ICP-Vegetation, ICP-Forests and other bodies contributing to the Convention on Long-Range Transboundary Air Pollution.

Discussions related to reviewing current and recommendation of new or revised flux-based critical levels for crops, (semi-)natural vegetation and trees will include overview presentations on the following subjects:

- Ozone gradient calculations (led by Giacomo Gerosa)
- Net annual increment in trees (led by Patrick Büker)
- Y threshold selection, choices made (led by Patrick Büker)
- Choice of 15 ppb as pre-industrial ozone and examples of flux calculations (led by Harry Harmens)
- Defining growing seasons, potential approaches (led by Per Erik Karlsson)
- Defining ozone sensitivity in (semi-)natural vegetation (led by Ignacio González-Fernández and Felicity Hayes)
- Representing certainty in the critical levels (led by Håkan Pleijel and Gina Mills)
- Review of current and recommendations for new or revised flux-based critical levels for:
 - Crops (led by Håkan Pleijel)
 - Forest trees (led by Patrick Büker)
 - (semi-)natural vegetation (led by Ignacio González-Fernández)

¹ United Nations Convention on Long-range Transboundary Air Pollution

² International Cooperative Programme on Effects of Air Pollution on Natural Vegetation and Crops

A background document will be prepared and circulated before the meeting, covering the content of the above presentations. The deadline for submission of these contributions (up to approx. 4 pages per item) is Friday 30th September.

Time slots for presenting novel experimental results will be very limited but interested participants are encouraged to present a poster. Please include your poster's title in the registration form.

Preliminary meeting plan

Monday 7th November

8:00 Bus to CIEMAT.

8:30 Registration and start of the meeting.

Lunch in CIEMAT.

19:00 End of the first day.

19:30 Bus leaving from CIEMAT.

Tuesday 8th November

8:00 Bus to CIEMAT.

8:30 Start of the discussions.

Lunch in CIEMAT.

19:00 End of the second day.

19:30 Bus leaving from CIEMAT.

20:30 Conference dinner.

Wednesday 9th November

8:00 Field trip to visit different Mediterranean ecosystems including the Guadarrama National Park for interested participants (please register for the field trip in the registration form). We will stop in different places to give an overview of the main ecosystems that may be found in the area. Please bring sturdy shoes and warm clothing as it may be cold in the mountains. A meal will provided during the excursion. We will be arriving back to Madrid around 16:00. If needed the bus could stop at the airport on the way back to Madrid.

Financial support

We are thankful to the Spanish Ministry of Agriculture, Food and Environment for providing financial support for the organisation of the meeting (meals, coffee breaks and field trip included in the programme).

Registration

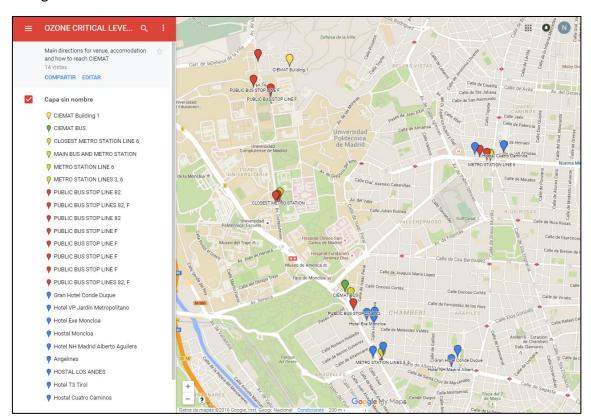
Please complete the attached registration document and return it as soon as possible to Ignacio González (Ignacio.gonzalez@ciemat.es)

Participants will need to arrange for their own accommodation. A list of hotels close to the meeting venue is provided below.

Venue

CIEMAT, Avenida Complutense 40. 28040, Madrid, Spain.

Building 1.



General map with venue, transportation and accommodation options (available on-line).

An on-line version of this map is accesible at:

https://drive.google.com/open?id=1pZNawnuOY3y2YZNu4CwpQTIAUL4&usp=sharing (CTRL+left click for opening).

You can click on the markers of the on-line map to get further information, like links to hotel websites.

Yellow dots: CIEMAT bus and Workshop venue. Green dots: closest metro stations between CIEMAT and accommodation options. Red dots: public bus stops to/from CIEMAT. Blue dots: accommodation options close to buses and metro stations connected with CIEMAT.

Getting to CIEMAT/hotels

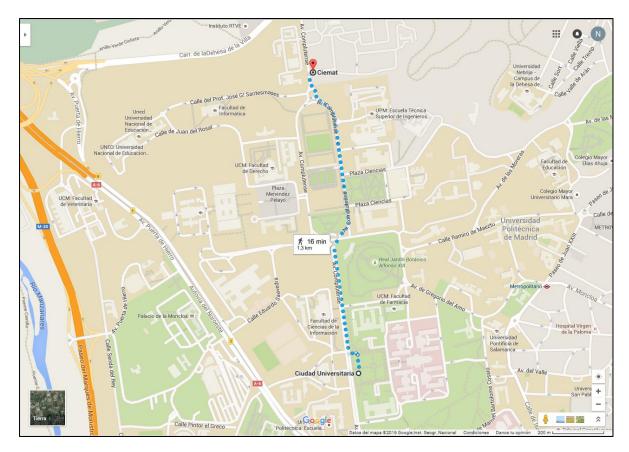
By air

Madrid-Barajas Airport (http://www.aeropuertomadrid-barajas.com/eng/home.html) is located at a 20 minutes ride by taxi (without traffic delays) from CIEMAT or accommodation options (fix price of 30€) or 50 minutes by metro (5 € one way). To come by metro you will need to take line 8 in the airport Terminal 2 until "Nuevos Ministerios" and connect with line 6 until "Moncloa" for hotels or "Ciudad Universitaria" for CIEMAT.

Travel to/from the hotels to CIEMAT

There will be a bus between CIEMAT and Moncloa, close to most accommodation options in the list (the exact address will be sent to registered participants before the meeting) on Monday and Tuesday.

The venue can also be reached by public transport using metro line 6 stop "Ciudad Universitaria" plus a 20 minute walk through the campus (see map below) or by public bus, lines 82 from Moncloa (stops at Ciudad Universitaria metro station and CIEMAT) or F from Cuatro Caminos (stops at Ciudad Universitaria metro station and at "Escuela de Telecomunicaciones", 3 minutes walking to CIEMAT). Please consult the Google map above for locating the nearest stops between CIEMAT and hotels.



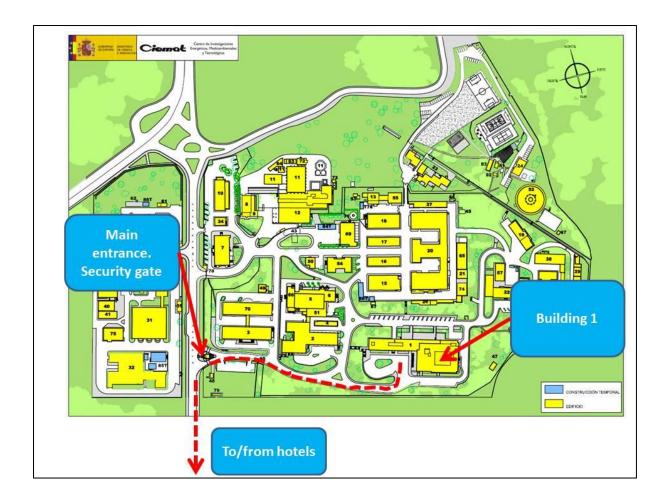
Walk between Ciudad Universitaria metro stop (line 6) and CIEMAT.

Getting into CIEMAT

Once you arrive to CIEMAT you will need to stop at the security gate and show your passport or ID to get a badge that allows your entrance to the Institute.

If your name is not on the list of attendants please contact the local organizers.

The meeting rooms are located in Building 1. Please see the CIEMAT map below.



If you have any further question, please contact us by e-mail in the address provided above.

List of accommodation options

Please plan to book you hotel well in advance because the area where the suggested accommodation options are located is a busy one. There is a plentiful offer of hotels, especially in the city centre, that are connected by metro with CIEMAT (stop "Ciudad Universitaria" line 6) or with the main metro/bus station ("Moncloa", metro lines 3 and 6) where the CIEMAT bus can be reached.

Please find below a list of suggested accommodation options that can be reached easily from CIEMAT by public transport or using the CIEMAT bus.

Hotel Exe Moncloa is the closest one to the CIEMAT bus stop.

Moncloa area (closest to the meeting venue)

Hotel Exe Moncloa

Calle Arcipreste Hita, 10, 28015 Madrid, España

www.hotelexemoncloa.com

+34 917 45 92 99

Hostal Moncloa

Calle de Hilarión Eslava, 16, 28015 Madrid, España

www.hostalmoncloa.com

+34 915 44 91 95

Hostal Angelines

Calle de Hilarión Eslava, 12, 28015 Madrid, Community of Madrid, España

www.hostalangelines.com

+34 915 43 56 40

Argüelles area (a bit further from the meeting venue)

Gran Hotel Conde Duque

Plaza Conde Valle de Suchil, 5, 28015 Madrid, España

www.granhotelcondeduque.com

+34 914 47 70 00

Hotel NH Madrid Alberto Aguilera

Calle de Alberto Aguilera, 18, 28015 Madrid, España

www.nh-hoteles.es

+34 914 46 09 00

HOSTAL LOS ANDES

Calle Gaztambide, 11, 28015 Madrid, España

www.hostallosandes.com

+34 915 44 02 43

Hotel T3 Tirol

Calle del Marqués de Urquijo, 4, 28008 Madrid, España

www.t3tirol.com

+34 915 48 19 00

Cuatro Caminos area (direct bus connection with CIEMAT in about 25 minutes)

Hotel VP Jardín Metropolitano

Av. de la Reina Victoria, 12, 28003 Madrid, España

www.metropolitano-hotel.com

+34 911 83 18 10

Hostal Cuatro Caminos

Calle de los Artistas, 7, 28020 Madrid, España

www.hostalcuatrocaminos.com

+34 915 53 19 92