



**THE PRESIDENT OF THE METEOROLOGICAL STATE AGENCY OF SPAIN
(AEMET)**

AND

**THE GENERAL DIRECTOR OF THE
NATIONAL INSTITUTE FOR AEROSPACE TECHNOLOGY
(INTA, SPAIN)**

ANNOUNCE (1st ANNOUNCEMENT)

**THE X INTERCOMPARISON CAMPAIGN OF THE REGIONAL BREWER
CALIBRATION CENTER-EUROPE**

&

COST ACTION ES1207 EUBREUNET CAMPAING

Will be held at “El Arenosillo” Atmospheric Sounding Station, INTA

(Huelva, Spain) May 27 – June 05 , 2015



Dear Brewer spectrophotometer user community,

This is an invitation to Brewer experts and/or operators to participate in the COST ACTION ES1207 European Brewer Network (EUBREWNET) campaign/ X Regional Brewer Calibration Center for Europe (RBCC-E) intercomparison that will be held at El Arenosillo Atmospheric Sounding Station of the “Instituto Nacional de Técnica Aeroespacial” (INTA) during the period 27 of May to 5 of June, 2015.

This campaign is part of the EUBREWNET ES1207 COST Action and is organized in collaboration with the “Area of Instrumentation and Atmospheric Research” of INTA, with the support of the Global Atmospheric Watch (GAW) program of the World Meteorological Organization (WMO) and a CEOS CALVAL project of the European Space Agency (ESA).

In November 2003, and within the GAW/WMO program, the Regional Brewer Calibration Centre for RA-VI Region (Europe) (RBCC-E) was established by Izaña Atmospheric Research Centre (I-ARC) at Izaña Observatory (IZO, Canary Islands), managed by the “Agencia Estatal de Meteorología” (AEMET, Spain). Technical and organization information of the RBCC-E can be obtained at www.rbcc-e.org.

At present the RBCC-E maintains a triad of reference instruments. The Regional Primary Reference Spectrophotometer (B157) and the Regional Travelling Reference Spectrophotometer (B185) are part of the triad. Each spectrophotometer is calibrated independently with the standard Langley method at IZO. Until now the IZO Triad has been linked to the EC-MS Word Reference Triad by yearly calibrations towards the International Ozone Services (IOS) travelling reference Brewer 017. Recently however as a result of doubts about the support of the world triad by (EC-MS), the WMO SAG authorized (at the meeting of 2011) that the RBCC-E transfers its own calibration based on Langley at Izaña Station.

The traveling reference (B017) operated IOS experts and the Kipp & Zonen travelling (B158) will participate to this intercomparison. That will allow participants to order IOS or Kipp & Zonen for technical servicing on their instruments during the campaign. The action focuses on the calibration of Brewer spectrophotometers from southern and central Europe.

Additionally, the QASUME unit of the Physikalisch-Meteorologisches Observatorium Davos / World Radiation Center (PMOD /WRC) will participate and provide a global UV reference spectrum for the ultraviolet measurements.



Contact information:

Brewer Campaign coordinator:

Alberto Redondas

Meteorological State Agency -AEMET

Izaña Atmospheric Research Center I-ARC

C/ La Marina, 20

38071 Santa Cruz de Tenerife

Spain

Tel: +34-922-574487

Fax: +34-922-574475

Email: aredondasm@aemet.es

Local organizer:

Dr Jose Manuel Vilaplana

National Institute for Aerospace Technology

Atmospheric Research and Instrumentation Branch
Atmospheric Sounding Station "El Arenosillo"

Ctra. San Juan del Puerto - Matalascañas Km.33

21130 Mazagon, Huelva

Spain

Tel: +34-959.20.88.58

Fax: +34-959.20.88.57

Email: vilaplanagjm@inta.es

Members of the Organizing Committee:

Dr. Emilio Cuevas(ecuevasa@aemet.es) Izaña Atmospheric Research Center, Director (AEMET)

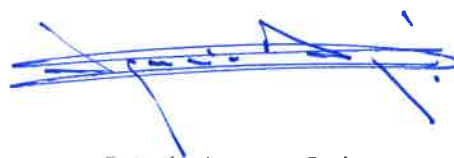
Dr. Manuel Gil (gilm@inta.es); Atmospheric Research and Instrumentation, Head (INTA)



Miguel Ángel López González

The Meteorological State Agency of Spain

President



Ignacio Azqueta Ortiz

National Institute for Aerospace Technology

General Director

Annex-1: Accommodation information:

The following hotels are in Mazagón (the nearest village to INTA / El Arenosillo) and they offer a special price for INTA.

Hotel Albaida ()** Telephone: +34.959376029/FAX: +34.959376108

E-mail: informacion@hotelalbaida.com

Double room for individual use: 65.97 €, breakfast + 1 meal included.

Hotel Martín Alonso Pizón ()** Telephone: +34.959377825/35

Double room for individual use: 65 € including breakfast + one meal.

http://www.hotelmartinalonsopinzon.com/index.php?option=com_content&task=view&id=12&Itemid=27&lang=english

Hotel Mazagonia (*)** Telephone: +34.959377870. Info@mazagonia.es

Double room for individual use 65€, including breakfast.

Double room for individual use 81€, including breakfast + one meal.

There is a number of rooms booked for this campaign, so please, when booking, do not forget to mention in the subject of your e-mail “**INTA Campaign**”

Please, contact Pilar Sanz (sanzcp@inta.es) for updated and accurate hotel information.



The following operations are offered by the RBCC-E during the intercomparison:

- Ozone calibration against the RBCC-E traveling reference (B185)
- Compilation of the calibration histories of the instruments
- Aerosol Optical Depth Calibration for DS measurements.

The QASUME (Quality Assurance of Spectral Ultraviolet Measurements in Europe) unit from the PMOD-WRC will provide a UV calibration.

Accommodation details El Arenosillo Atmospheric Sounding Station (INTA) see Annex 3.

Participants Registration

The organizers can invite up to 10 instruments with up to two operators per instrument. All participants are requested to contact the campaign coordinators and fill the registration forms (Annex 4).

Technical Requirements

- The instruments should be operative, equipped with tracker and tripods and preferably running by their usual operator.
- History of the instrument (AVG Files), last calibration and recent observations (B files) must be available at the intercomparison. Updated technical aspects can be checked through www.rbcc-e.org.

Funding for instruments maintenance

Traveling, instrument transportation and accommodation costs should be covered by the participants. Financial support for participants may be available from WMO (developing countries).

Extra financial support for developing countries or countries with economies in transition may be available from WMO-GAW. In case of major repairs of the instruments the participants must directly order the service and agree fees with the Kipp & Zonen or IOS Company.



Schedule of the Intercomparison

The campaign is scheduled in three main phases:

1. Initial calibration to assess the current calibration of the instruments.
2. Servicing, adjustments and maintenance works characterization test of the instruments.
3. Final calibration. In this phase the 'UV' calibrations against the QASUME
4. Specific measurements for Brewer

X RBCC-E Calibration Campaign, May 27- June 05, 2015

Date		Actions	Notes
Tuesday	26	Arrive	
Wednesday	27	Installation	BLIND DAYS First set of measurements to assess the current state of the instruments
Thursday	28	O3 Measurements	
Friday	29	O3 Measurements	
Saturday	30	O3 Measurements / O3 Services	SERVICING DAYS Servicing /Maintenance Works/ Characterization Test (Dispersion Test, etc.)
Sunday	31	O3 Measurements / O3 Services	
Monday	1	O3/UV Measurements O3 Services	
Tuesday	2	O3 Measurements/ UV	FINAL OZONE DAYS UV Comparison with QASUME unit
Wednesday	3	O3 Measurements/ UV	
Thursday	4	O3 Measurements /UV	
Friday	5	Laboratory	Packing