

Iberonesia

Database Design

- Introduction
- System Description
 - Web Service
- Data Transmission
- Database
- Products Generation
- Quality Assurance

- Introduction
- Personal Profile
 - Bentorey Hernández Cruz
 - Master in Research Techniques
 - Computer Science Engineer
 - University of La Laguna

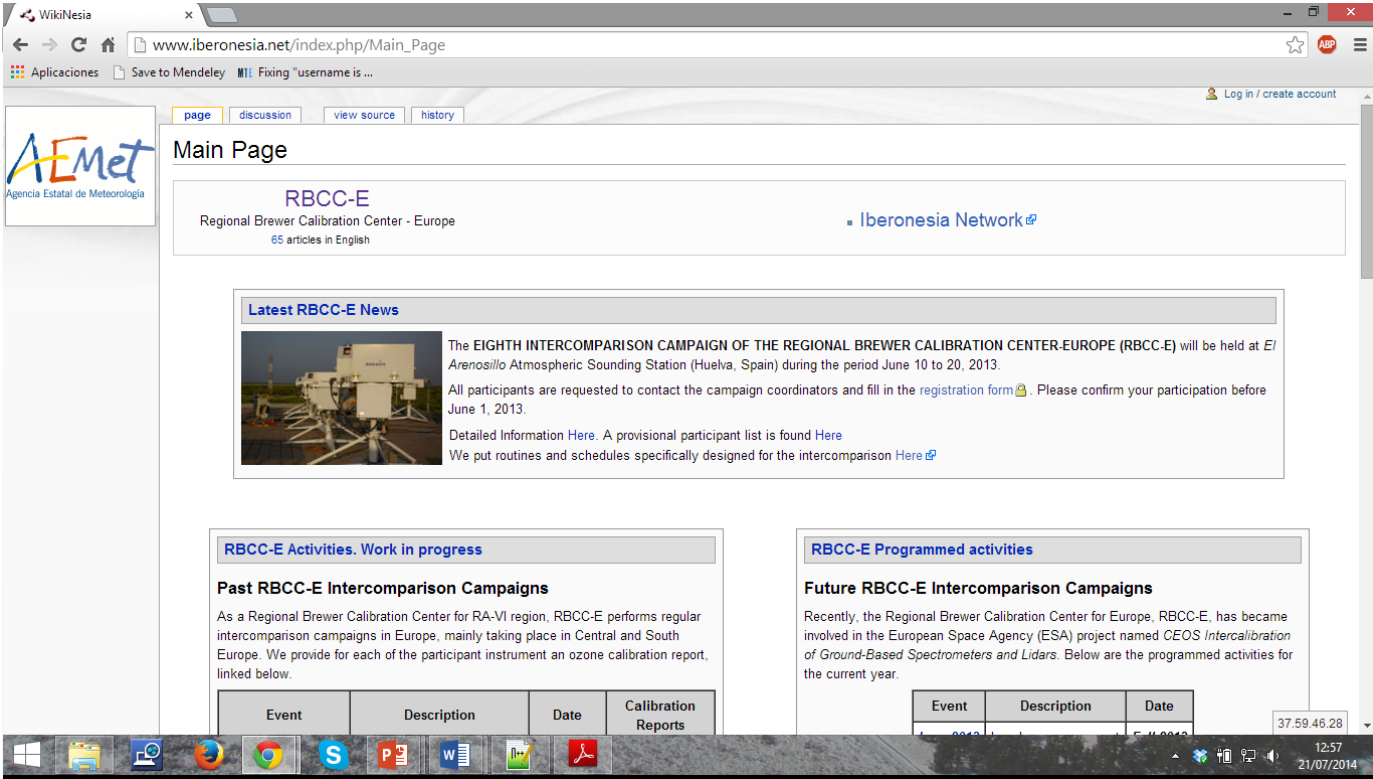
- Introduction

- Personal Profile

- Researcher: University of La Laguna
 - Earthcare ground-based spectrometer validation network
- Webmaster: Eubrewnet.org
- Colaborating: COST 1207

- Introduction
 - Network of Brewer Spectroradiometers
 - North Macaronesian and Iberian Peninsula
 - From 30W to 3E
 - From 28N to 44N

• Introduction



WikiNesia x

www.iberonesia.net/index.php/Main_Page

Aplicaciones Save to Mendeley Fixing "username is ...

Log in / create account

page discussion view source history

Main Page

RBCC-E
Regional Brewer Calibration Center - Europe
65 articles in English

Iberonesia Network

Latest RBCC-E News

The EIGHTH INTERCOMPARISON CAMPAIGN OF THE REGIONAL BREWER CALIBRATION CENTER-EUROPE (RBCC-E) will be held at *El Arenosillo* Atmospheric Sounding Station (Huelva, Spain) during the period June 10 to 20, 2013.
All participants are requested to contact the campaign coordinators and fill in the [registration form](#). Please confirm your participation before June 1, 2013.
Detailed Information [Here](#). A provisional participant list is found [Here](#)
We put routines and schedules specifically designed for the intercomparison [Here](#)

RBCC-E Activities, Work in progress

Past RBCC-E Intercomparison Campaigns
As a Regional Brewer Calibration Center for RA-VI region, RBCC-E performs regular intercomparison campaigns in Europe, mainly taking place in Central and South Europe. We provide for each of the participant instrument an ozone calibration report, linked below.

Event	Description	Date	Calibration Reports
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RBCC-E Programmed activities

Future RBCC-E Intercomparison Campaigns
Recently, the Regional Brewer Calibration Center for Europe, RBCC-E, has become involved in the European Space Agency (ESA) project named *CEOS Intercalibration of Ground-Based Spectrometers and Lidars*. Below are the programmed activities for the current year.

Event	Description	Date
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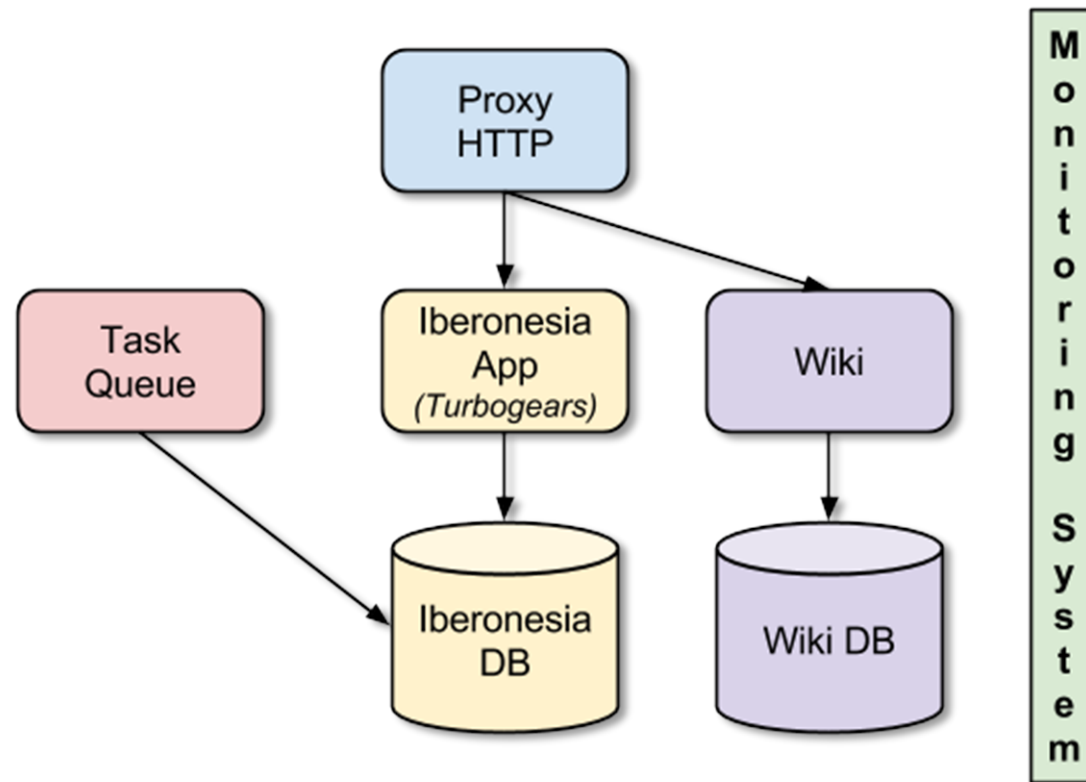
37.59.46.28

12:57
21/07/2014

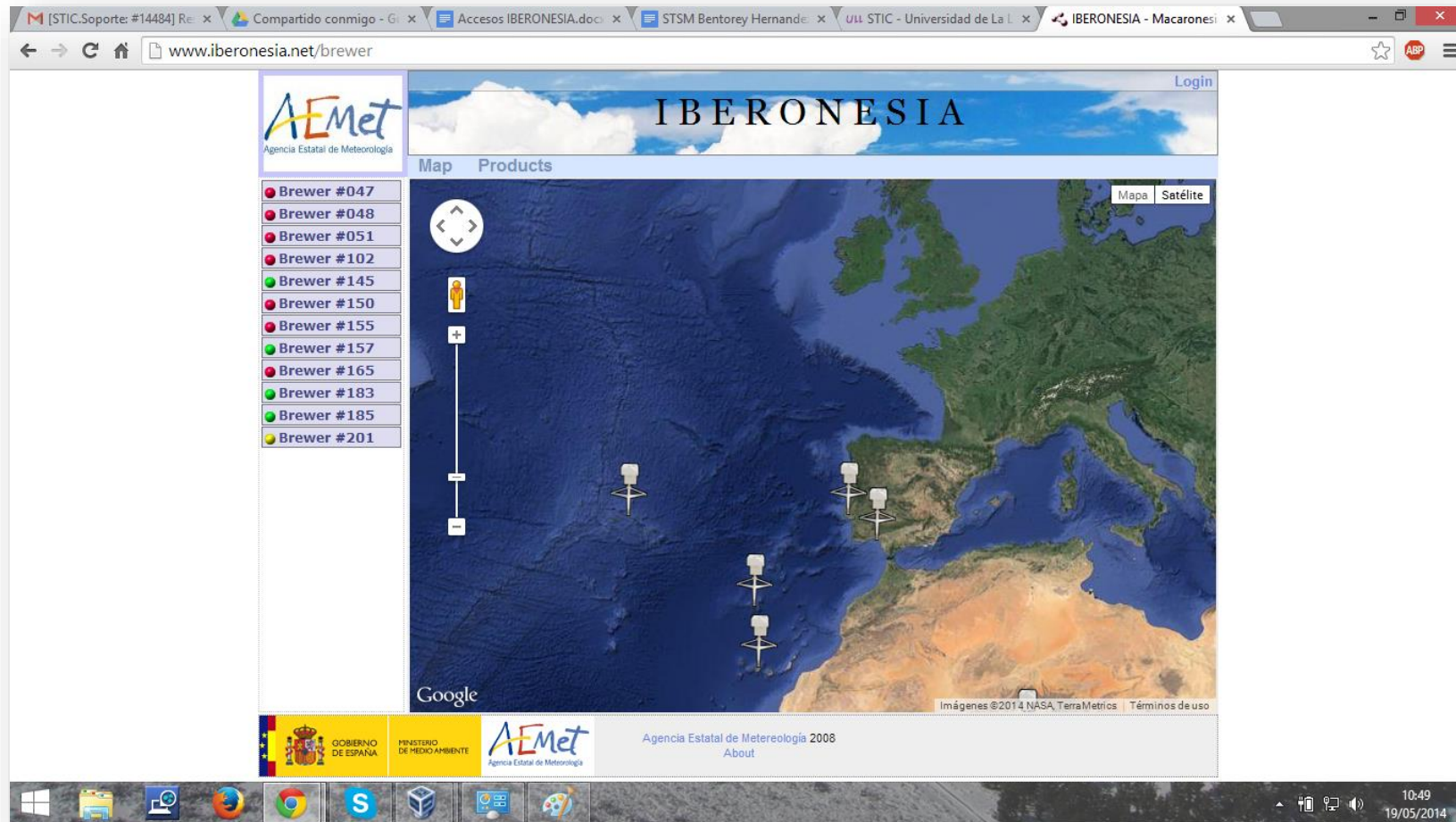
- System Description
 - Modules
 - Data Import
 - File schema and history
 - Processing
 - Database automated processing
 - Error Handling
 - Interactive process in case of error
 - Product Generation
 - Automated or in demand

- System Description
 - Cloud Server
 - Client - Server communication
 - OS
 - Server: Ubuntu server
 - Client: Python interpreter
 - Real Time (programmed tasks)

- Web service



- Web service



- Data Transmission
 - Data communication depending on the client
 - New files that are not stored in the server
 - Last change in the files
 - Change in a checksum based in md5
 - Only new information is sent to the server
 - Redundance of information
 - File System
 - Database

- Database
 - MySQL
 - Data issues:
 - Brewer Info
 - Code Error Messages
 - Log table
 - File status
 - Refresh information
 - Calibration and configuration
 - Neighborhood/Satellite Information

- Database
 - Brewer Table

TABLE `brewer\_t`

Fields:

`description` (**varchar**(64)): Id, place, research center
`last\_online` (**datetime**): Date of the last reception
`lat` and `long` (**float**): Position of the brewer
`active` (**tinyint**(4)): If the brewer is active

- Database
 - B File Table

TABLE `b\_t`

Fields:

`brewerid` (**int**(11)): Number of the brewer

`date` (**date**): Corresponding day

`latitude` and

`longitude` (**double**): Position extracted from the b file

`last` (**double**): Last value

- Database
 - Config Table

TABLE `config\_t`

Fields:

```
`brewerid` (int(11)): Corresponding brewer  
`icf_id` (int(11)): Id of the corresponding icf in database  
`o3ds`, `o3zs`, `o3fz`, `o3fm`, `no2ds`, `no2zs`, `no2fm`,  
`o3ds_maxstd`, `o3zs_maxstd`, `o3fz_maxstd`, `o3fm_maxstd`,  
`no2ds_maxstd`, `no2zs_maxstd`...
```

- Database
 - File Status Table

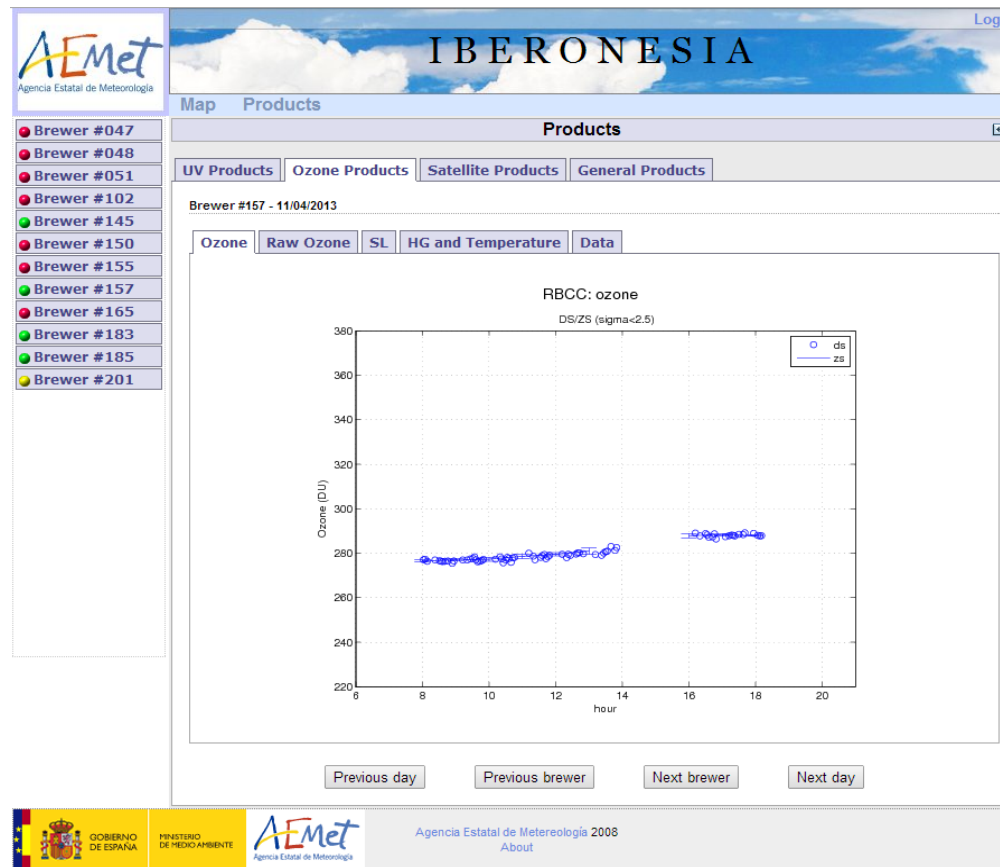
TABLE `file\_status\_t`

Fields:

`path` (**varchar**(255)): Absolute path to the file where is stored
`text` (text): Message with the status
`process\_date` (**date**): When was processed (day)
`process\_time` (**time**): When was processed (hour)

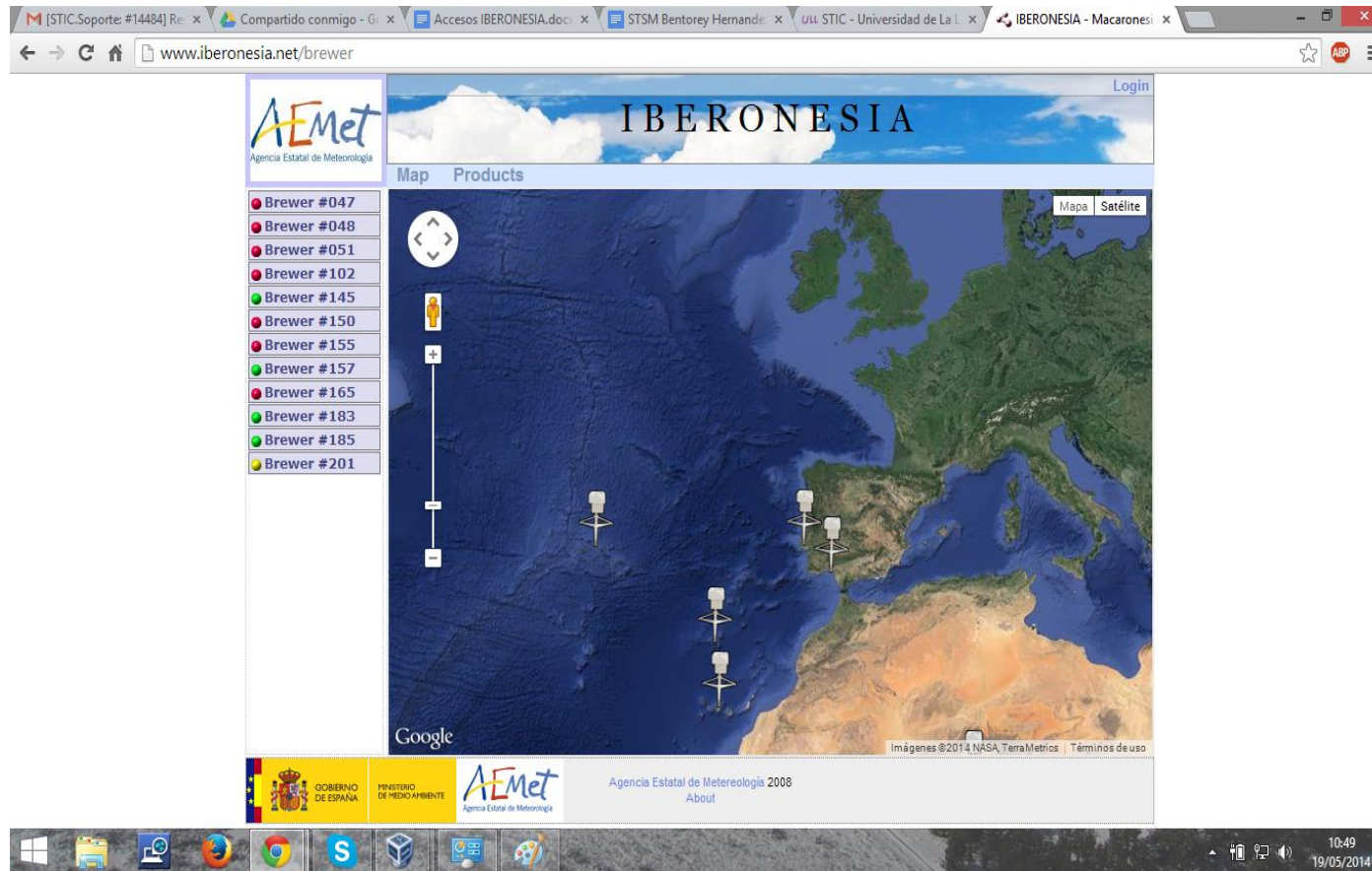
- Products Generation
 - Ozone and UV
 - Still under development
 - Several scripts in Matlab
 - Images accesible from the website

• Products Generation



- Quality Assurance
 - Real time connection control
 - Colour based tool
 - Green
 - Orange
 - Red
 - File status
 - Comprehensive message of fails:
 - Dates
 - Brewer
 - Type of message

- Quality Assurance



• Quality Assurance

The screenshot shows a web browser window with the URL www.iberonesia.net/brewer. The page features the AEMet logo and the title "IBERONESIA". On the left, a sidebar lists various Brewer IDs from #047 to #201. The main content area is titled "Brewer #157" and includes tabs for "Status", "Brewer Information", "UV Index", and "Current Ozone Value". The "Brewer Information" tab is active, displaying the following data:

On-line Brewer Information 157	
Brewer ID:	157
Connection:	2
Last File:	B13914.157
Last measured value:	ds
Time since last measurement:	2014-05-19 11:52:13 GMT

Below this, a "STATUS" table shows the current state:

ID	Code	Description
0	OK	File is OK

A "Messages" section at the bottom lists several warnings related to unknown sections in the data file:

```

WARNING : B13914.157 : line 12 : Unknown section 'b_hpscan'
WARNING : B13914.157 : line 18 : Unknown section 'b_hgscan'
WARNING : B13914.157 : line 22 : Unknown section 'b_reo3'
WARNING : B13914.157 : line 82 : Unknown section 'b_summary'
WARNING : B13914.157 : line 83 : Unknown section 'b_fv'
WARNING : B13914.157 : line 319 : Unknown section 'b_dz'
    
```

The footer of the page includes the AEMet logo, the text "Agencia Estatal de Meteorología 2008", and a link to "About". The Windows taskbar at the bottom shows the date as 19/05/2014 and the time as 12:35.

Questions and Answers

Thank you for your attention