

# PUERTOS DEL ESTADO ONLINE SERVICE TO DOWNLOAD METEOROLOGICAL AND OCEANOGRAPHICAL DATA

## USER GUIDE



Puertos del Estado



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## PUERTOS DEL ESTADO ONLINE SERVICE TO DOWNLOAD METEOROLOGICAL AND OCEANOGRAPHIC DATA. USER GUIDE.

This service is used to request and download time series of oceanographical and meteorological data provided by Puertos del Estado monitoring systems: in-situ measurements and numerical modelling forecasting and hindcasting services. Puertos del Estado distributes this information, free of charge, to support a better knowledge of the Spanish coastal environment and the development of coastal and harbour activities.

Even if the access to this service is completely open, it is subject to certain conditions. Puertos del Estado only gives consent to use the data for the specific purposes of each request that under no circumstances can be transferred to third parties. Additionally, the source (Puertos del Estado) must be duly acknowledged in any report/article/publication that make use of the data.

Puertos del Estado will not be held responsible for the use be made of the data downloaded from this service. Although, in general, all data have gone through quality controls, these controls are not the same for all data sets, being in some cases more exhaustive and complete than in others. Therefore, it shall be the responsibility of users to use the data with due caution.


It is important to consider that Puertos del Estado data sets are under permanent revision, so they can suffer slight changes over time, thus it is strongly recommended to make a new request of data when it is needed again.



## Where can I find the download service?

The access to the service is made through the Oceanography section on Puertos del Estado web site:

<http://www.puertos.es/en-us/oceanografia/Pages/portus.aspx>

The download process is centralized from the Historical data menu. The access to the user download area is always available from the folder visible at the heading of the right hand menu :

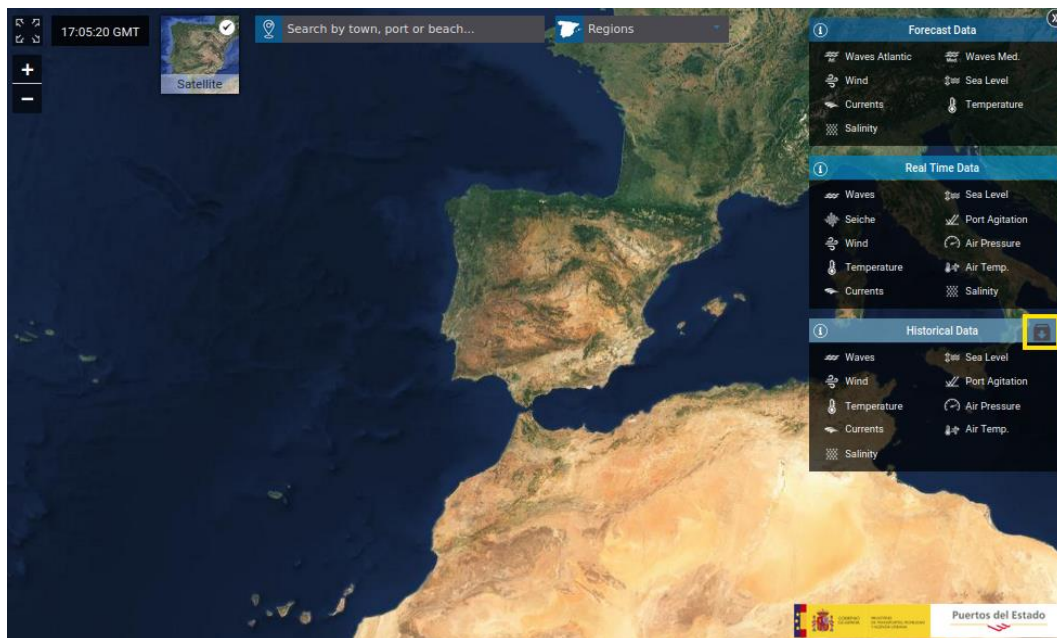


Figure 1. Snapshot of the web where the download area is highlighted in yellow

## How do I make a data request?

To start the request process, the first thing to do is to add items to your downloads list, please **select the variables** from the Historical Data menu on the right:

1. **Click on the stations/points** of your interest shown on the map, one by one:

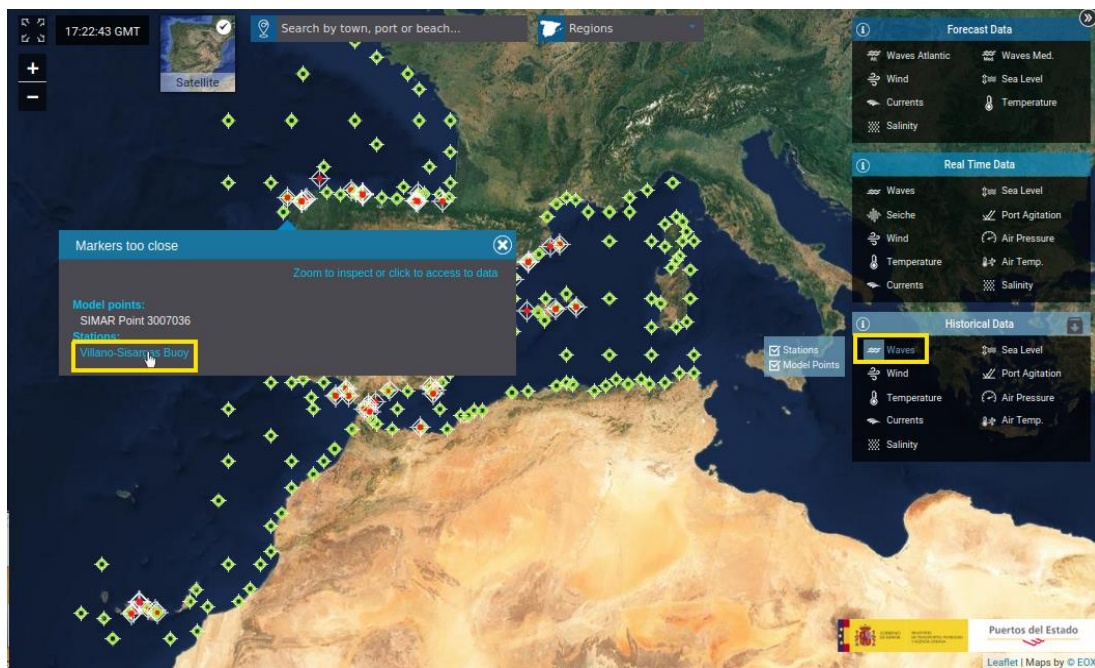
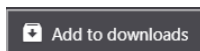


Figure 2. Snapshot of the web where parameter and station selection is highlighted in yellow.

## 2. Add items to your list. Click on the button:



Please note that users can choose individual variables, one by one, when the download is selected from the specific section of the variable. In this case, users will download as many files as variables selected

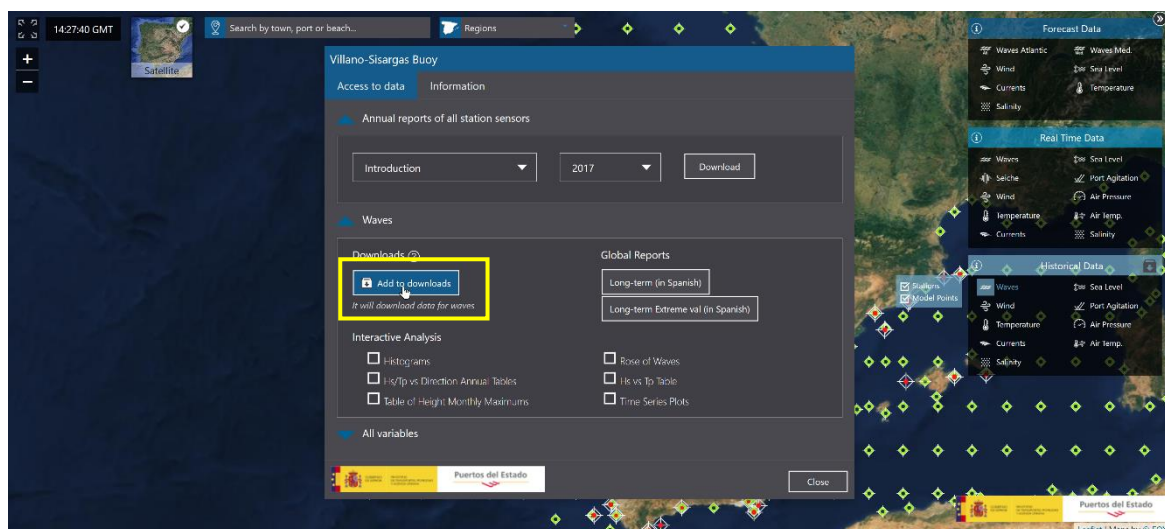


Figure 3. Snapshot of the web where individual download of waves from a buoy is selected as an example.





For those users who may need to download all the parameters available from a station or point they can do it *in one click* from the section All Variables (see Figure 4). When this option is selected, users will download a single file containing all the available variables:

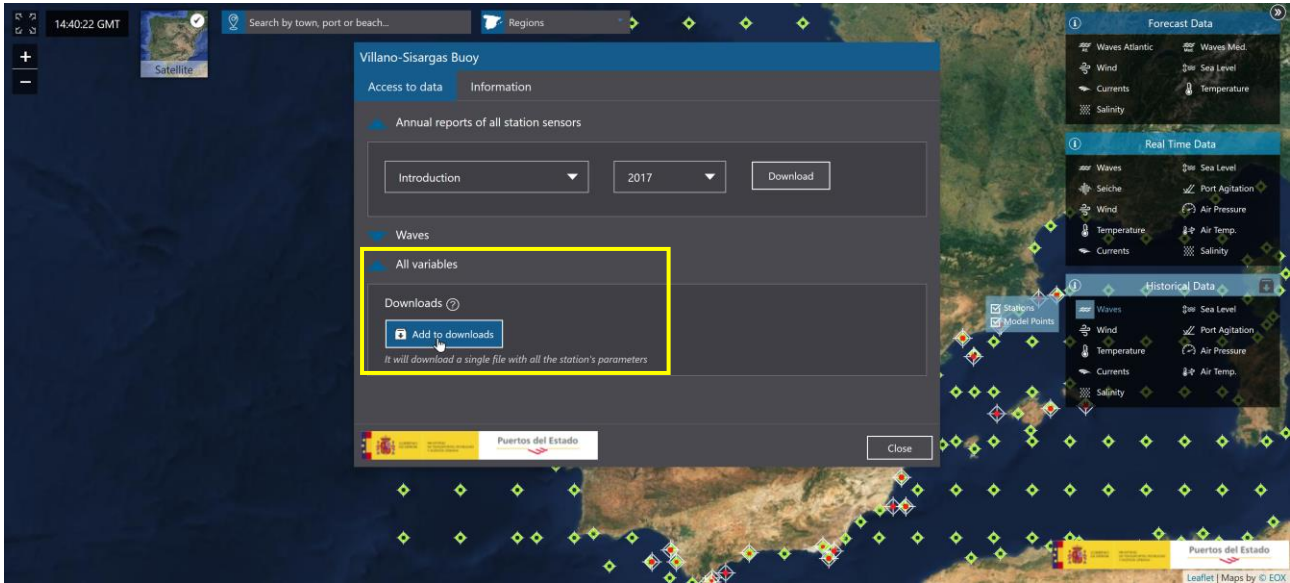



Figure 4. Snapshot of the web where "All Variables" download option is selected for a buoy as an example.

In the special case of data provided by tide-gauge stations, the option of downloading all the variables in one file is not enabled. Due to the sampling rate of these sensors, the resulting file sizes are too big to handle them easily. For these stations, selection of variables should be done one by one.

Users can add up to 5 files to the download list each time. When more data is needed users can make another request.

Each time that an item is added to the download list, it will be included in the download folder and the total number of items will be highlighted with a number over the folder icon :

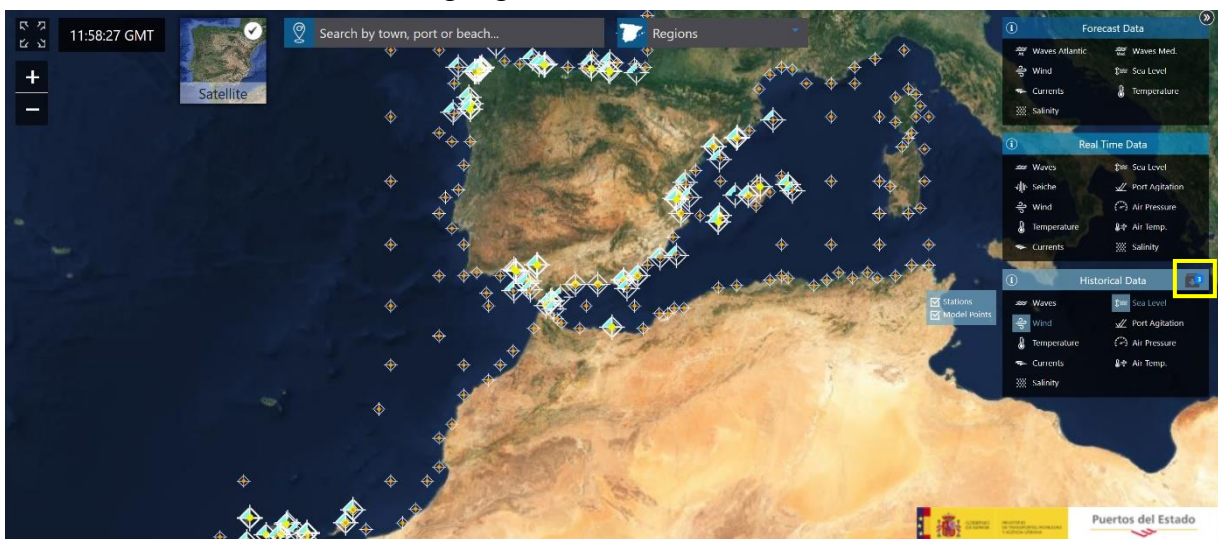


Figure 5. Snapshot of the web where the download folder showing the number of the items added is highlighted in yellow.



3. **Go to de Download Area** after the selection of data is complete. To do so, users must click on the download folder icon that can be found at the *Historical Data* menu (see Figure 5) on the right. A window where the list of the data selection is detailed.

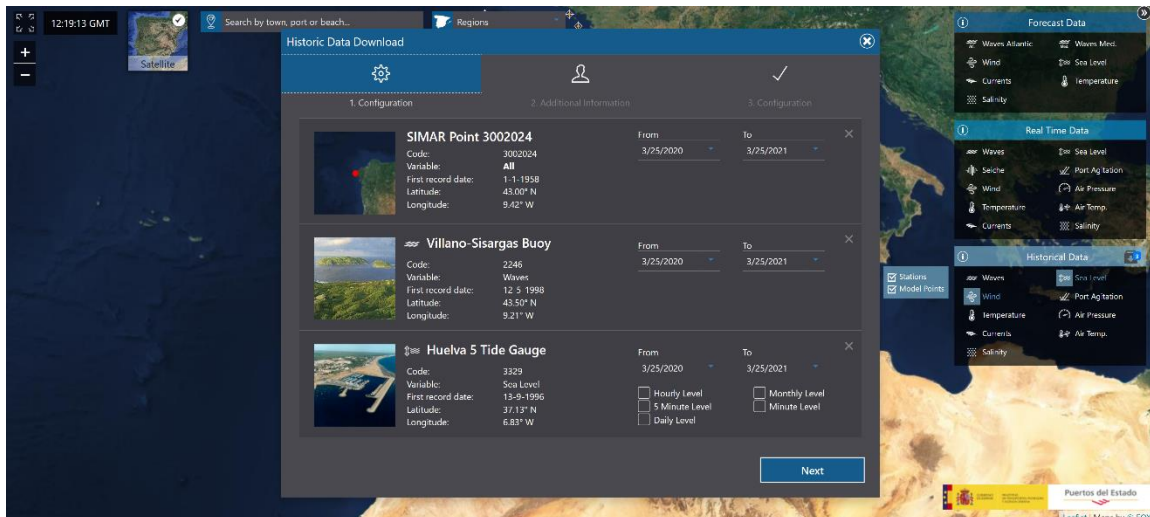



Figure 6. Snapshot of the web showing the download selection window

Please, take your time to look over your selection. In case of error, elements can be easily deleted from the list using the button .

4. **Set the range of dates** to download for each item in the list. Users can either enter start and end dates in the date range fields or select dates from a calendar. The earliest date available is shown at the details of the station/point:

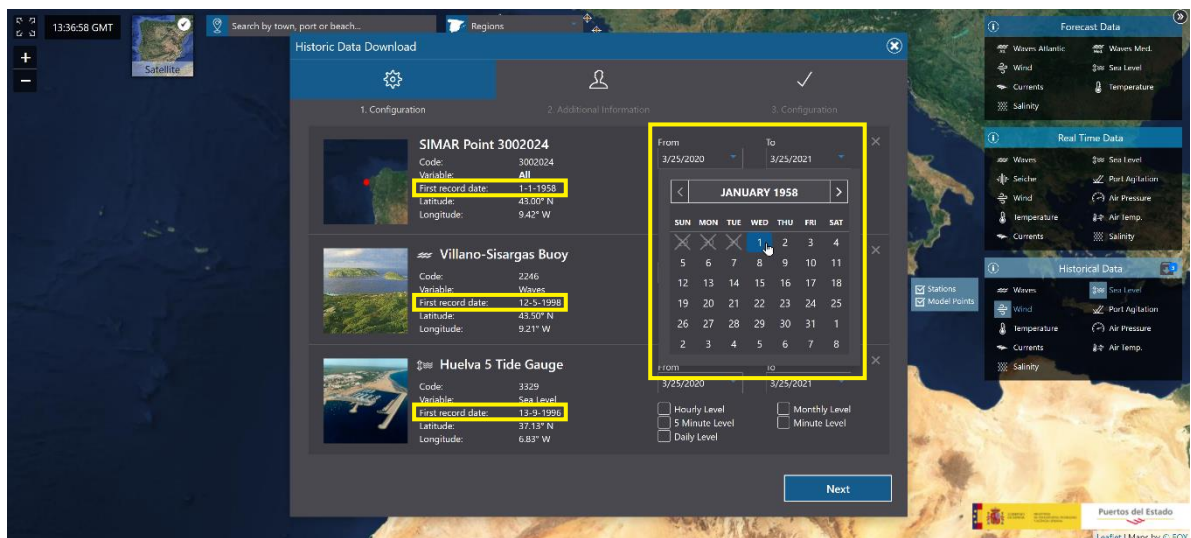


Figure 7. Snapshot of the web showing the calendar selection for dates and the first dates available highlighted in yellow

In case of long time series, click several times on the head of the calendar to open the year search.

In the case of sea level data, additionally, users need to select from the different sea level averages available: 1 minute data, 5-minute averages, hourly averages, daily levels and monthly levels.

When 1 minute sea level data is selected, any of the other sea level products will be disabled and vice versa.

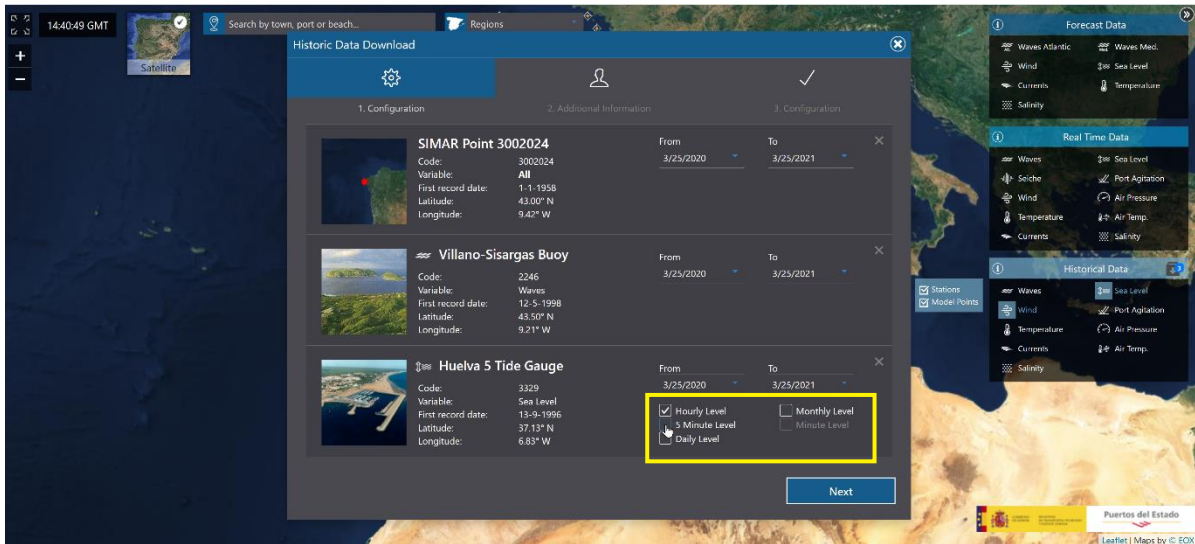


Figure 8. Snapshot of the web where the sea level data selection is highlighted in yellow

For 1 minute sampling data the date range is limited up to 2 years because of the resulting file sizes. There is no limitation for the rest of datasets.

When stations/point settings are completed, please continue to the next window.

- 5. Finish the registration process.** To complete the registration process, some personal information is required to users. Personal data provided here are strictly necessary to register and process the data requests and they will never be shared with third parties.

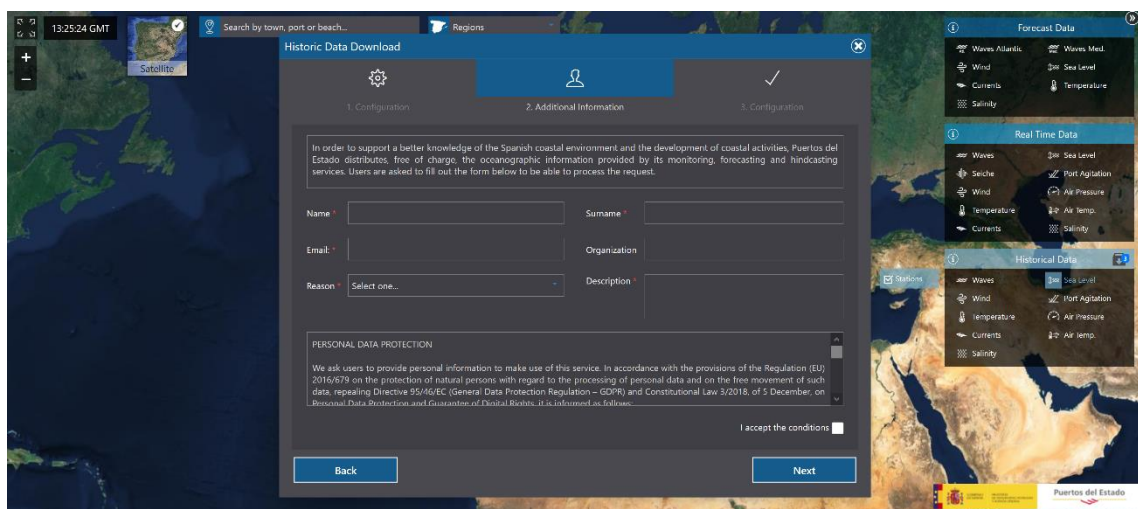


Figure 9. Snapshot of the web showing the last form to complete the registration process





Users are strongly requested to carefully read the text related to personal data protection before accepting the conditions

**6. Done!** Request will be registered once the Additional Information form is completed. An automated e-mail will be sent to the address provided in the form (see Figure 9) to confirm the reception. Puertos del Estado staff will process the request within one or two business days, however it can take longer during weekends. Once the request is approved, we will contact you again by e-mail to:

- a. Inform that the request has been accepted. In this case the message will also include the links to download the data requested.
- b. Inform that the request has been denied. If that was to be the case, the reasons for non-acceptance will be included in the message.

Request details	
<b>Pasajes Buoy</b> All 2010-03-15 - 2012-05-23	<a href="#">Download</a> <a href="#">+ info</a>
<b>Bilbao-Vizcaya Buoy</b> Currents 1990-11-07 - 2021-03-29	<a href="#">Download</a> <a href="#">+ info</a>
<b>Gijon Meteorological Station</b> Wind 1997-08-31 - 1999-12-31	<a href="#">Download</a> <a href="#">+ info</a>
<b>Gijon Meteorological Station</b> All 1997-08-31 - 1999-12-31	<a href="#">Download</a> <a href="#">+ info</a>

Figure 10. Part of an e-mail to inform that a request has been accepted where the list of data and download links are shown.

Requested data files will be available within 10 days after the request approval, then all files will be deleted from the server.

## What do files look like?

Data files have csv extension, using the tab as the column separator. Any text editor can be used to open them, including Excel. Data in the file are ordered in columns, being sorted by date that will be the first column. Files have a self-explanatory heading, however, if more information is needed, the confirmation email [+ info](#) button (see Figure 10) will link to a document describing the data set in detail.





Column1	Column2	Column3	Column4	Column5	Column6	Column7
Null value: -9999.9						
Date (GMT)	Wind Speed(m/s)	Maximum Wind Speed(m/s)	Wind coming-from Direction(0=N,90=E)	Coming from Direction of the Maximum Wind Speed(0=N,90=E)	Atmospheric Pressure(mb)	Air Temperature(°C)
1997 09 01 21	5.3	6.7	234.0	-9999.9	1024.0	15.7
1997 09 01 22	5.0	6.1	245.0	-9999.9	1024.0	15.8
1997 09 01 22	5.4	6.4	234.0	-9999.9	1024.0	15.9
1997 09 01 22	5.0	6.1	239.0	-9999.9	1024.0	15.9
1997 09 01 22	5.4	6.4	243.0	-9999.9	1024.0	15.8
1997 09 01 23	4.8	6.4	237.0	-9999.9	1024.0	15.5
1997 09 01 23	4.8	5.8	246.0	-9999.9	1025.0	15.4
1997 09 01 23	5.1	6.4	247.0	-9999.9	1024.0	15.2
1997 09 01 23	5.1	6.4	245.0	-9999.9	1024.0	15.1
1997 09 01 23	4.4	5.8	236.0	-9999.9	1024.0	15.0
1997 09 01 23	4.4	5.8	231.0	-9999.9	1024.0	14.8
1997 09 02 00	4.6	5.5	232.0	-9999.9	1024.0	14.8
1997 09 02 00	4.5	5.8	226.0	-9999.9	1024.0	14.5
1997 09 02 00	4.6	5.8	234.0	-9999.9	1024.0	14.3
1997 09 02 00	4.8	6.1	218.0	-9999.9	1024.0	14.2
1997 09 02 00	4.8	5.8	224.0	-9999.9	1025.0	14.1
1997 09 02 00	4.4	5.5	218.0	-9999.9	1025.0	14.3
1997 09 02 01	4.8	5.8	211.0	-9999.9	1024.0	14.0
1997 09 02 01	4.4	5.5	201.0	-9999.9	1024.0	14.1
1997 09 02 01	4.4	5.5	223.0	-9999.9	1024.0	14.1
1997 09 02 01	4.6	5.8	227.0	-9999.9	1024.0	14.3

Figure 11. Snapshot of a data file from a meteorological station, open with Excel

Missing values in the files will always be shown as -9999.9. Angle directions are expressed in degrees, with values ranging from 0 to 360 and increasing in the clockwise direction, where 0 degrees is pointing North and 90 degrees pointing East.

## Doubts or Questions

In case of problems, doubts or need of clarification, please, please do not hesitate to contact us at [bancodatos@puertos.es](mailto:bancodatos@puertos.es).