

EGU22-4336

<https://doi.org/10.5194/egusphere-egu22-4336>

EGU General Assembly 2022

© Author(s) 2023. This work is distributed under the Creative Commons Attribution 4.0 License.



The new web application of the Phenological Network of Catalonia (Fenocat)

Montserrat Busto, Xavier de Yzaguirre, and Jordi Cunillera

Meteorological Service of Catalonia, Climatology Department, Barcelona, Spain (montserrat.busto@gencat.cat)

The Phenological network of Catalonia (Fenocat) was established by the Meteorological Service of Catalonia (SMC) in 2013, due to the lack of phenological records in Catalonia and with the aim to preserve the former phenological information available to study the impact of climate change on natural ecosystems.

Based on citizen science, today the network consists of 60 volunteers around Catalonia that observe 25 different species of wild and crop plants, 14 birds and 6 butterflies. The observation is done two or three times per week in order to record both the onset and the duration of the different phenophases. BBCH code is used for vegetal species, and the data is sent regularly to PEP725 database.

Until 2021, observers submitted their observations by email on a monthly base, which had to be manually inserted into the database. This slowed down the quality control and exploitation of the database, which could never be done in real time.

Since January 2022, an object-relational database is created with the open-source system PostgreSQL, permitting the storage and management of all the information from the Fenocat network, and conducting real-time inquiries to generate, visualize and download reports. In addition, observers are able to enter the information directly into the database via a web application. Fenocat web application makes data entry more flexible -the data can be introduced in situ at the same moment that is observed by any device with internet connection (mobile phone, tablet or PC computer)- and allows the observer to compare their observations with those produced by other observers.

Both, the new database and the web application, mean a significant step forward in the management of the Phenological Network of Catalonia, strengthening our relationship with the observers, enhancing the data analysis and opening the door to a network expansion.