

## **CS-Track database: a central database of CS projects in Europe that can be key to understand the connection of CS and SDGs**

**Authors:** Patricia Santos (UPF), Miriam Calvera (UPF), Laia Albó (UPF), Julia Lorke (WiD), Ulrich Hoppe (RIAS), Davinia Hernández-Leo (UPF)

Corresponding author: Patricia Santos <[patricia.santos@upf.edu](mailto:patricia.santos@upf.edu)>

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CS-Track (<https://cstrack.eu/about/>) is a project that started in December 2019, which belongs to the SwafS-H2020 call. The main goal is to broaden the existing knowledge about Citizen Science (CS). One main contribution from CS-Track is the development of one central database aiming to compile a comprehensive collection of CS-projects, mainly visible on the Web, in the European Union and Associated Countries as complete as possible. In order to obtain data from CS projects, key national CS platforms have been analysed using web scraping extraction techniques. Additionally, we will contact experts to find information about projects not visible on the Web.

The CS-Track database opens *a new perspective on CS knowledge* by observing and characterizing initiatives through *a quantitative approach that relies on web-based and social-network analytics* [1]. We have followed the required fields proposed by Cavalier et al. (<https://www.wilsoncenter.org/article/ppsr-core-metadata-standards>) to extract metadata from CS platforms (but not all the required field are found in all the Platforms), so far our analysis have extended the number of platforms from 4 (the ones analyzed by Cavalier) to a total of 37 CS platforms.

The resulting datasets will contain information associated with CS projects like: type of actors, topics of interest, categories of projects by region, aspects related to education. This is a very valuable and innovative data source [2] that can be used to understand the connection and impact of CS and Sustainable Development Goals. For instance by identifying how many CS projects are focused on SDGs topics such as: Clean water and sanitation (SDG6), Climate action (SDG13) or Life on land (SDG15). Or to understand how the educational resources from CS activities can be collected to support Quality Education (SDG4).

In conclusion, the CS-Track database and datasets will show the current panorama of CS in Europe and have the potential to help different social agents: policy makers, CS organizers, educators... so that they can integrate and promote SDGs to improve its integration in our society.

[1] Hoppe, H.U. (2017). Computational methods for the analysis of learning and knowledge building communities. In Lang, C., Siemens, G., Wise, A., Gasevic, D. (2017), Handbook of Learning Analytics, Chapter 2 (pp. 21-40).

[2] Fritz, S., See, L., Carlson, T. et al. Citizen science and the United Nations Sustainable Development Goals. Nat Sustain 2, 922–930 (2019). <https://doi.org/10.1038/s41893-019-0390-3>

