



Data Article

Youth in global environmental negotiations: The YouthEarth dataset

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ABSTRACT

The YouthEarth dataset [3] is the first dataset to present data on youth participation in the international negotiations of three international processes: the United Nations Framework Convention on Climate Change (UNFCCC) conferences of the parties (COPs), the Convention on Biological Diversity (CBD) COPs, and the sustainable development negotiations, from 1993 until 2024. Data include all instances of youth participation in these processes, as well as the categorization of youth participants according to participation format, gender, geographical origin and organizational affiliation among others. The full dataset can serve as the basis for descriptive, diachronic, statistics on youth participation in global environmental politics, with, among others, the possibility to compare across environmental issues. The methodology of the dataset could be replicated for other research efforts to create datasets on the participation of non-state actors (beyond youth) to international negotiation processes (beyond environmental issues).

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Specifications Table

Subject	<u>Social Sciences</u>
Specific subject area	<i>Youth participation to global environmental negotiations on climate change, biodiversity and sustainable development from 1993 until 2024.</i>
Type of data	Table including Raw, Analyzed, Filtered and Processed data.
Data collection	The data was collected by using the lists of participants to the identified international negotiations. The lists of participants to the UNFCCC COPs are public. Most lists of participants to the CBD COPs are public; but some were obtained from the Secretariat of the CBD. Negotiations on sustainable development have been taking place in the framework of the Commission on Sustainable Development (CSD) from 1993 until 2013 and in the framework of the High-Level Political Forum (HLPF) from 2013 until 2024. The CSD and HLPF do not provide official lists of participants. Participants were retrieved from the official reports and agendas of these processes and from the Earth Negotiation Bulletin reports.
Data source location	The data were collected from online searches by the research team. Most primary data are stored online by the UNFCCC (Secretariat based in Bonn, Germany), the CBD (Secretariat based in Montreal, Canada) and the CSD and HLPF (Secretariats based in New York, United States). Some primary data was obtained from the CBD Secretariat by email exchanges. The dataset was elaborated and is now stored at UCLouvain Saint-Louis, Bruxelles, Belgium.
Data accessibility	Please note: the URL must be working at the time of submission and editors and reviewers must have anonymous access to the repository): Repository name: Dataverse UCLouvain Data identification number: DOI: 10.14428/DVN/5M9IMC Direct URL to data: https://doi.org/10.14428/DVN/5M9IMC
Related research article	Orsini, Amandine and Anaëlle Vergonjeanne. Tbp. "Addressing youth invisibility in global environmental politics. The YouthEarth dataset". Research note. Submitted, under evaluation.

1. Value of the Data

- These data are the first data on youth participation in international environmental processes. They are useful in describing and characterizing the expansion of the youth ecosystem (individuals and organizations) involved in multilateral, United Nations related, environmental processes since 1993 (see Fig. 1). It enables to describe, among others, the format of participation, gender, origin, organizational affiliation, frequency of participation and cross-regime participation of youth in these negotiations.
- Researchers, international and national policymakers, youth program managers, and young leaders may benefit from this dataset through its socio-demographic variables: the data can inform, among others, on existing youth networks; on the efficiency of existing youth-based instruments; and on the direction to adopt for a more comprehensive youth representation.
- These data can be analyzed with univariate, bivariate, and multivariate methods.
- More generally, these data enable to further discuss the role of non-state actors in international negotiations and their potential contribution to global governance, also with a historical perspective [1,2].

2. Background

The primary objective for compiling this dataset [3] was to create data on the topic of youth participation in international environmental negotiations. Lack of data on youth in such negotiations was problematic, considering the importance of recent environmental movements initiated by youth, such as the Fridays for Future movement initiated by Greta Thunberg to denounce governmental climate inaction [4,5]. This lack of quantitative data on youth participation in international negotiations was also very surprising, considering the existence of data on youth protestors in climate governance, i.e. youth who have been marching for the climate

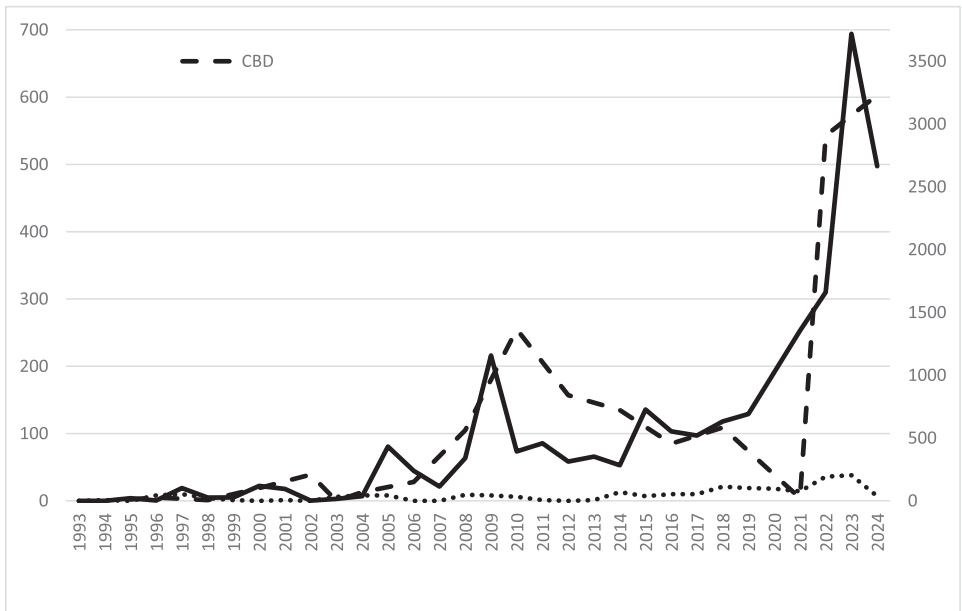


Fig. 1. Number of youth participations to the CBD COPs and CSD/HLPF (left axis) and to the UNFCCC COPs (right axis), across time.

worldwide [6]. To fill these gaps, the YouthEarth dataset produces data on youth in formal negotiation processes, not just in protests, and produces data beyond climate governance by including biodiversity and sustainable development as case studies. This enables to speak to ongoing qualitative research in these domains [7–10]. An additional objective was to understand the evolution of youth participation across time and environmental processes, to understand whether youth engagement in environmental governance is new, or evolved in several, historical, steps. In addition, the team wanted the dataset to describe the nature of youth participation in global environmental processes, by compiling metadata about the participants and their organizations. Some analytical developments based on the dataset are under evaluation [11]. For climate change, our dataset enables to compare with existing quantitative research on governmental delegates [12] and past research on environmental non-governmental organizations [13].

3. Data Description

The dataset contains all youth-related participations (as defined in [14]) to international environmental conferences between 1993 and 2024. The international environmental conferences covered are the yearly UNFCCC COPs (from COP1 in 1995 to COP29 in 2024) and UN summits of the CSD (from CSD1 1993 to CSD20 in 2013) and HLPF (from HLPF1 in 2013 to HLPF12 in 2024), and the biannual CBD COPs (from COP1 in 1994 to COP16 in 2024). While lists of participants include the name and surname of such participants, the data was anonymized for the YouthEarth dataset to comply with existing data policy at UCLouvain Saint-Louis Bruxelles and beyond, in particular regarding personal data. To anonymize the data, a unique identifier has been elaborated for each participant (see Table 1). The non-anonymized dataset has been stored in a secured storage place. It could be shared for research purposes under a data sharing agreement. For this, please contact the corresponding author.

Table 1
YouthEarthDatabase variables.

Variable Name	Value Format	Values (detail)	Percent coded	Data processing
Year	Numeric: date	Indicates the year of the registered participation, starting from 1993 to 2024	100%	Raw
Process	Character: acronym of process	Indicates the type of environmental summit attended, among the four international processes studied: UNFCCC; CBD; CSD; HLPF.	100%	Raw
Conference	Character: acronym and number	Indicates the official name of the conference attended, followed by the edition of the conference. Ex: COP1; COP10; HLPF1; etc.	100%	Raw
Subevent_within_conference	Character: category of sub-event	When available, only for sustainable development conferences, specifies the type of event the participation was registered in: main conference; side-event; roundtable; etc.	43% ¹	Raw
Venue	Character: name of city	Indicates the city where the conference took place	100%	Raw
Registration_status_detailed	Character: registration status	Indicates the open-ended status the participant belonged to at the registered event, according to the official registration lists: NGO; party; intergovernmental organizations, etc. It aggregates the status indicated in the original source when available; otherwise, it was coded by the authors.	99%	Raw or Filtered
Registration_status_categorised	Character: broader categories of registration	Attributes one broad category of registration: States; Non-State Actors; International Institutions. A fourth coding, Others, gathers all the other registration statuses. The parameters for this data processing process are detailed in Table 2.	100%	Processed
Organization	Character: name of organization	Name of the main registration organization of the participant for that conference	99%	Raw
Sub-organization	Character: name of sub-organizations	Name of other organizations mentioned in the registration record of the participant	49%	Raw
Position	Character: position within organization	Position held by the participant in the registration organization	73%	Raw
Department	Character: name of department	Name of the department the participant is affiliated with within the main registration organization	42%	Raw
Found_in	Character: source of raw data	Indicates the source of the participations' raw data: List of participants; ENB; Programmes; Reports; UNDESA Archives.	99%	Raw

(continued on next page)

Table 1 (continued)

Variable Name	Value Format	Values (detail)	Percent coded	Data processing
Anonymous_unique_identifier	Numeric	Unique identifier corresponding to one same participant across conferences	100%	Processed
Number_of_participations	Numeric	Aggregates the number of conferences included in the dataset attended by the same participant. This recording highlights multiple participations of one participant to different events. It identifies who comes back in these processes, how often, and cross-process participation.	100%	Analyzed
Gender	Character: unique letter	Indicates the gender of the participant as available in the original source: as F (female) or M (male).	99%	Raw
Country	Character: name of country	Indicates the country corresponding to the address indicated for registration, or, when not available, the country where the main registration organization is headquartered, harmonized according to the country_name_harmonization parameter (see Table 2)	99%	Raw or Filtered and Processed
Country_type	Character: type of country	Classifies the country into developed or developing country according to the country categorization parameters (see Table 2)	99%	Processed
UN_regional_subgroup	Character: name of regional sub-group	Based on the UN General Assembly subgroups parameter (see Table 2), indicates the subgroup the country is a member of	99%	Processed
Geographical_continent	Character: name of continent	Indicates the geographical continent the country is based depending on the continent parameter (see Table 2)	99%	Processed
Chronological_sorting	Numeric	Attributes a unique number to each line of the database (one participation to one event by one delegate), ordered into the following variables: year, conference, event, macro status, organization, position. This unique line identifier enables multi-variables statistical analysis of the dataset. It also helps maintain the stability of the dataset to control for errors in the analysis.	100%	Processed

¹ Subevents were only compiled for the sustainable development processes and cover 43% of sustainable development youth participations. Because of the small proportion of sustainable development participations in the overall dataset, 0,5% of all lines are coded for subevents.

Table 2
Parameters.

Variable Name	Values (detail)	Source
Country_name_harmonization	List of countries listed in the database	YouthEarthDatabase harmonized according to Developing Countries Database
UNFCCC_country_ categorization	Indicates if the country is on the Annex to the UNFCCC: Annex; Non-Annex. This indicates whether the country is categorized as developing or developed according to the UNFCCC.	Developing Countries Database
CBD_country_ categorization	Indicates if the CBD classifies the country into developed or developing.	Developing Countries Database
CSD_HLPF_country_ categorization	Indicates the International Monetary Fund (IMF) country classification: Developing; EcTrans (Economy in transition); Developed. The IMF is used as a proxy for country categorization in sustainable development processes.	Developing Countries Database
Helper_country_type_ categorization	Aggregates automatically the process type with the country category of that process, prior to attributing a processed category: CSDDeveloped; UNFCCCAnnex; CSDDeveloping, etc.	Processed from YouthEarthDatabase and Parameters
Country_type_ categorization	Classifies the country into developing or developed based on the helper. This makes transparent the choices made by the authors to go from several categorizations into two main categories: developed or developing.	Processed from YouthEarthDatabase and Parameters
UN_regional_subgroups_ categorization	Based on the UN General Assembly subgroups, indicates the subgroup each country is a member of.	UN Department for General Assembly and Conference Management
Geographical_Continent_ categorization	Indicates the geographical continent each country is in.	UNdata
Registration_status_detailed	Lists all the different granular status of registration (see Table 1).	YouthEarthDatabase
Registration_status_category	Attributes one of three macro-category to each granular status: States, International institutions, Non-State actors. This makes transparent the choices made by the authors to go from several registration statuses into three main categories (see Table 1).	Generic categorization of actors in IR as states, non-states or international institutions.

The dataset is made of in 1 .csv file that contains 2 sheets (YouthEarthDatabase; Parameters). A detailed overview of the YouthEarthDatabase sheet is given in [Table 1](#). A detailed overview of the Parameters sheet is given in [Table 2](#).

3.1. YouthEarthDatabase sheet

Each line of the YouthEarthDatabase sheet corresponds to one participation of one youth-related individual to one of the international conferences covered by the dataset. The sheet comprises 19 421 lines or unique participations (one person, one international negotiation process, one conference), of which 17 053 to the climate negotiation process, 2 103 to the biodiversity negotiation process, and 265 to the sustainable development negotiation process.

We coded these participations along 20 variables, organized in 4 sections: 5 about the participation event; 7 about the context of participation; 7 about the categorization of participation; 1

to facilitate the navigation in the dataset. All variables are listed in [Table 1](#) below, in their order of appearance in the YouthEarthDatabase sheet.

3.2. Parameters sheet

[Table 2](#) details the parameters used by the authors to process the raw data into new variables. Country classifications are based on the Developing countries database [15].

4. Experimental Design, Materials and Methods

The objective of the dataset is to list and categorize any participant in international environmental negotiations who identifies as a youth representative. This is a political definition of youth, which does not limit itself to the definition of youth as an age range. Indeed, our dataset methodology is not based on age data, which is, in any case, not available from the lists. Instead, it considers that the way actors define their own role through their registration data is the most relevant criteria to identify youth political activism.

As a consequence, we worked on individuals' own description records. In particular, the data was acquired in different steps. First, we collected the lists of participants to the international negotiation processes covered by the study through the corresponding secretariat websites: the UNFCCC website; the CBD website; the HLPF website and the CSD former websites; for on-site participation exclusively. Access to all the UNFCCC lists of participants is public as they all appear on the website. It is the same situation for the HLPF and CSD. However, not all the CBD's lists of participants were available online. In that case, the team contacted the CBD secretariat in the context of the YouthEarth project to obtain the missing lists by email. We also used the reporting online service of the Earth Negotiations' Bulletin (ENB) that provides summaries of global environmental events, and general online searches (including a UNDESA archive: <https://www.un.org/development/desa/youth/youth-at-the-sustainable-development-commission.html>), to check for additional attendance and to cross-check the data.

Second, we used keywords to identify youth actors within lists and official documents. All individuals attending international negotiations must register through an organization. We therefore searched both the participants' and organizations' descriptions for keywords including 'youth', 'young', 'child', 'jeune', 'joven', 'student', 'estudiant', 'étudiant', 'scout', 'girl', 'boy', and 'kid' and their derivatives. This means that students from Bachelor to PhD were also registered in the dataset. However, we excluded these (students), if the main organization of the participant was based in the country where the event was taking place. Indeed, in that case, we considered students to be more inclined to be there for educational purposes than for political influence.

Third, we developed a methodology to include in the dataset all participants from youth organizations which did not necessarily have youth-related keywords in their description. To do so, we collected the lists of organizations accredited to the UNFCCC Secretariat and to UN Environment (UNEP) under the official youth constituency and of organizations members of YOUNGO in 2018/2019. We included all the participants who registered with these organizations in the dataset.

On this basis, each youth participation record was described, processed or analyzed in the dataset (see [Table 1](#) and [2](#)). Finally, we anonymized the dataset, due to the sensitivity of personal data, in a domain where activists can be prosecuted for their environmental actions. In total, four different researchers worked on creating the dataset, constantly coordinating to compare coding results. Moreover, to ensure the robustness of the data, random checks were regularly performed to verify coding reliability. Finally, the team already produced several research articles using part of the dataset, meaning that it conducted verification procedures of the dataset for each of these publications.

Finally, to contribute to debates on multilateral environmental negotiations [16], we categorized country data into developing and developed in the `country_type` variable. To re-

flect existing categorization in each of the three processes, we followed the UN nomenclature of each of the processes when it was available in international treaties, as is the case for the CBD and UNFCCC processes. For the HLPF and CSD summits, as no official nomenclature existed, we processed with the most commonly used categorization in UN processes, i.e. is the IMF country classification. To simplify and harmonize our country_type variable across processes, we chose the most commonly used category for each country, with the Helper_country_type_categorization variable making this harmonization step explicit.

Limitations

The methodology has been developed to be as robust as possible, especially by combining several research steps. However, limitations can be identified:

- the lists of participants indicate planned attendance, but differences may happen between the individuals included in the lists and the ones who actually attend; the secretariats are trying to update lists during the negotiations but cannot foresee all last-minute changes;
- youth participants with no keywords in their description or of which organization has no official youth constituency accreditation by UNEP or UNFCCC might have been overlooked during data collection as no comprehensive list of youth organizations in these processes exists; our dataset aims at creating the first one;
- some students were excluded (see above), while some might have been there for political activism;
- the authors raise attention on the variety of methods used for collecting country data (see [Table 1](#)), which may create a bias in country-related data;
- data on participants from subevents was only collected for sustainable development processes as no list of participants was available for these summits. Collected data therefore differs slightly from one process to the other.
- anonymization of the dataset may limit its further use. However, non-anonymized data may be shared for academic purposes upon request to the authors.

Ethics Statement

The authors have read and followed the ethical requirements for publication in *Data in Brief* and confirm that participant data has been fully anonymized and that data redistribution policies were complied with.

Credit Author Statement

Anaëlle Vergonjeanne: Conceptualization, investigation, data curation, formal analysis, writing original draft preparation, visualization; **Amandine Orsini:** Conceptualization, methodology, investigation, writing and reviewing, supervision, project administration, funding acquisition.

Data Availability

[YouthEarth dataset \(Original data\)](#) (Open Data @ UCLouvain).

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Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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