Codebook for "Relational Data between Parties to the UN Framework Convention on Climate Change"

Coded from the Earth Negotiations Bulletins, 1995 – 2013

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1. General dataset description

This file describes the coding procedures and rules used to compile all variables in the "Relational Data between Parties to the UN Framework Convention on Climate Change" (Relational UNFCCC Data) dataset. It lists all files included in the dataset, describes each variable and the values it can take, and explains and describes the data sources used.

The Relational UNFCCC Data dataset contains dyadic data on how parties to the UN Framework Convention on Climate Change (UNFCCC) react to other parties' oral interventions during the negotiations. It is based on hand-coding of summaries of the negotiations under the UN Framework Convention on Climate Change (UNFCCC). It covers all meetings of the official UNFCCC bodies reported in the Earth Negotiation Bulletins (ENBs) between February 1995 (11th Session of the INC in New York) and December 2013 (COP19 in Warsaw). The data covers not only the annual meetings of the Conference of the Parties (COP) to the UNFCCC, but also meetings of the permanent subsidiary bodies to the Convention (in charge of implementing its provisions and of providing scientific and technological guidance) and of ad-hoc negotiation groups established on a temporary basis to debate new agreements. It also covers meetings of specific technical workshops convened in order to inform the negotiation process.

Each UNFCCC meeting usually takes between one and two weeks of discussions, across several issue-areas, and sometimes among several of the UNFCCC bodies mentioned above. Most meetings are summarized through daily ENB reports. The first of these daily reports is usually a summary of the negotiation process in previous meetings that provides the context for the current meeting, and is therefore not coded. Then each subsequent day of negotiations is covered in an individual daily ENB report. The last ENB report for the meeting includes not only the negotiation summary for the final day of negotiations, but a summary of the whole meeting, descriptions of the main outputs of the negotiation round (e.g. conclusions and decisions adopted by the COP), and an analysis of the process and outputs. Given that this final ENB report repeats much of what has been reported in the previous, daily ones, it is usually not coded. Only for the cases of UNFCCC meetings that only have one such summary report instead of several daily reports (usually due to budgetary limitations), then this summary is coded instead of the daily issues.

The ENBs are published by the International Institute of Sustainable Development and can be accessed from http://enb.iisd.org/enb/vol12/. The ENBs have been chosen as the data source since they are seen as a detailed, consistent and objective source of information by many negotiators and observers in the climate talks, and because there are no publicly available official transcripts of the negotiations. Supplementary data relevant to the UNFCCC negotiations was also compiled from other sources described below.

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The dataset includes the following components:

- "**Data file ENB_relationships.dta**": This is the main data file, which contains relational data between parties to the UNFCCC.
- "**Data file statements_count.dta**": Data describing how active (in terms of total number of oral statements) each UNFCCC party is in the negotiations.
- "**Data file country_groups.dta**": Data on coalition membership of parties to the UNFCCC.
- "**Data file unfccc_ratification.dta**": Data on date of ratification, entry into force and withdrawal of both the UNFCCC and its Kyoto Protocol by their member states.
- "**Variable and value labels.xlsx**": This file lists all variable names and labels, as well as value labels used in the main dataset ("ENB_relationships.dta").

2. Data file ENB_relationships.dta

2.1 File description

This is the main data file, which contains relational data between parties to the UNFCCC. The data was obtained by hand-coding, from the ENBs, how parties to the UNFCCC (i.e. member states or coalitions of member states)[1] react to other parties' oral interventions during the negotiations.
Each observation in the dataset consists of a bargaining interaction between a country dyad at a specific negotiation day about a specific negotiation topic. The nature of such interaction may be cooperative (country 1 "speaks on behalf of", "supports", "agrees with" or "speaks with" country 2) or conflictive (country 1 "criticizes", "opposes" or "attempts to delay a proposition by" country 2).
The dataset includes 62 097 dyadic bargaining interactions among the 222 participants to the UNFCCC negotiations (including countries and coalitions) over a series of 461 negotiation days between 1995 and 2013. Only those interactions that actually took place are included. Thus, country pairs that did not interact on a specific negotiation day are not listed for that day. On the other hand, if a country pair interacted several times within a day, then each of these interactions is considered a separate observation.

2.2 Variable list and explanation

Variable	Description
obs_id	Numerical observation ID.
country1	Sender: Country judging the statement by *country2* (categorical variable; see full country list in **Section 6** below).
country2	Target: Country whose statement is being judged by *country1* (categorical variable; see full country list in **Section 6** below).
Country1	Sender: Country judging the statement by *country2* (string variable).
Country2	Target: Country whose statement is being judged by *country1* (string variable).
RELATIONAL ENB DATA	
relation	Type of interaction between country pair, categorical (see description of categories, coding rules and examples in **Section 2.3**).
relation2	Type of interaction between country pair, fewer categories. In this case, the categories "Agreement" and "With" (see descriptions in **Section 2.4**) have been combined into a single "Agreement" category, as their nature is not very different.

[1] Unless explicitly stated otherwise, in this codebook the terms „party" and „country" are used interchangeably to denote either an individual state that is member to the UNFCCC and is participating in the negotiations, or a coalition of such states that decides to put forward a common position in the negotiations.

behalf	Instances when *country1* spoke on behalf of *country2*, i.e. a dummy that takes the value 1 whenever the variable *relation* takes the value "On behalf of".
support	Instances when *country1* supported *country2*'s statement/position, i.e. a dummy that takes the value 1 whenever the variable *relation* takes the value "Support".
spokewith	Instances when *country1* spoke with *country2*, i.e. a dummy that takes the value 1 whenever the variable *relation* takes the value "With".
agreement	Instances when *country1* and *country2* agreed about a statement/position, i.e. a dummy that takes the value 1 whenever the variable *relation* takes the value "Agreement".
delay	Instances when *country1* delayed a proposal made by *country2*, i.e. a dummy that takes the value 1 whenever the variable *relation* takes the value "Delaying proposal".
opposition	Instances when *country1* opposed a statement/position made by *country2*, i.e. a dummy that takes the value 1 whenever the variable *relation* takes the value "Opposition".
criticism	Instances when *country1* criticized *country2* or its statement/position, i.e. a dummy that takes the value 1 whenever the variable *relation* takes the value "Criticism".
cooperation	Interaction between *country1* and *country2* is cooperative (1) or conflictive (0). An interaction is considered cooperative if *relation* takes the values "On behalf of", "Support", "With" or "Agreement". It is considered conflictive if *relation* takes the values "Delaying proposal", "Opposition" or "Criticism".
weight1	This variable can be used to correct for the two-directional nature of the interactions "Agreement" and "With": whenever *country1* agrees (or speaks with) *country2*, this is also coded as *country2* agreeing (or speaking with) *country1* so that we have two observations. *Weight1* takes the value of 0.5 whenever *relation* is "Agreement" or "With". All other relations are coded only in the direction from *country1* to *country2*, and for them *weight1* takes the value of 1.
topic	Topic of interaction between country pair, categorical (see description of categories, coding rules and examples in **Section 2.5**).
year	Year in which interaction took place.
date	Day in which interaction took place (YYYY-MM-DD, numeric).
date2	Day in which interaction took place (YYYY-MM-DD, string).
e_date	Date of negotiation day (DD-MMM-YYYY, Stata date format).
conference	Location and year of UNFCCC meeting in which interaction took place (string variable).
ENB_Nr	Issue number of Earth Negotiations Bulletin (Vol. 12) coded.
ENB_obs	Observation ID within the respective *ENB_Nr*. This variable consists of the 3-digit ENB issue number followed by an observation counter within that ENB. Corrections in the dataset have at some points affected the continuity of this variable.
quote	Quote of ENB text used for coding the respective observation. Not all observations include the relevant quote: particularly when several interactions are coded from the same sentence (e.g. when a sentence lists 5 countries agreeing with each other, so that 20 dyadic interactions are coded), the quote is frequently included only for the first of such observations.

DATA ON COALITION MEMBERSHIP

coalition	Dummy that takes the value of 1 when the sender or the target is a coalition (group of countries).
AILAC_sender	Sender country (*country1*) is member of AILAC (data sources and coding rules for this and all the following coalition membership variables are described in **Section 4.2** below; a full list of coalition acronyms and names can be found in **Section 6**).
AILAC_target	Target country (*country2*) is member of AILAC.
ALBA_sender	Sender country is member of ALBA.
ALBA_target	Target country is member of ALBA.
AOSIS_sender	Sender country is member of AOSIS.
AOSIS_target	Target country is member of AOSIS.
AfricanG_sender	Sender country is member of the African Group.

AfricanG_target	Target country is member of the African Group
ArabG_sender	Sender country is member of the Arab Group / League.
ArabG_target	Target country is member of the Arab Group / League.
BASIC_sender	Sender country is member of BASIC.
BASIC_target	Target country is member of BASIC.
COMIFAC_sender	Sender country is member of COMIFAC.
COMIFAC_target	Target country is member of COMIFAC.
CaribbeanC_sender	Sender country is member of CARICOM (Caribbean Community).
CaribbeanC_target	Target country is member of CARICOM (Caribbean Community).
CentralAm_sender	Sender country is member of Central America.
CentralAm_target	Target country is member of Central America.
CentralG11_sender	Sender country is member of Central Group 11 / Central Group.
CentralG11_target	Target country is member of Central Group 11 / Central Group.
CfRN_sender	Sender country is member of the Coalition for Rainforest Nations.
CfRN_target	Target country is member of the Coalition for Rainforest Nations.
CongoB_sender	Sender country is a Congo Basin country.
CongoB_target	Target country is a Congo Basin country.
EITs_sender	Sender country is an Economy in Transition.
EITs_target	Target country is an Economy in Transition.
EU_sender	Sender country is member of the EU.
EU_target	Target country is member of the EU.
EIG_sender	Sender country is member of the Environmental Integrity Group.
EIG_target	Target country is member of the Environmental Integrity Group.
G77_sender	Sender country is member of the G77 and China.
G77_target	Target country is member of the G77 and China.
G9_sender	Sender country is member of the G9 / CACAM.
G9_target	Target country is member of the G9 / CACAM.
CACAM_target	Target country is member of CACAM.
LDCs_sender	Sender country is a Least Developed Country.
LDCs_target	Target country is a Least Developed Country.
LMDC_sender	Sender country is member of the Like-minded developing countries.
LMDC_target	Target country is member of the Like-minded developing countries.
Mountain_sender	Sender country is member of the Mountain landlocked developing countries.
Mountain_target	Target country is member of the Mountain landlocked developing countries.
OPEC_sender	Sender country is member of OPEC.
OPEC_target	Sender country is member of OPEC.
SICA_sender	Sender country is member of the Central American Integration System.
SICA_target	Target country is member of the Central American Integration System.
SafricaDC_sender	Sender country is member of the Southern African Development Community.
SafricaDC_target	Target country is member of the Southern African Development Community.
Umbrella_sender	Sender country is member of the Umbrella Group.
Umbrella_target	Sender country is member of the Umbrella Group.
Visegrad_sender	Sender country is member of the Visegrad Group.
Visegrad_target	Target country is member of the Visegrad Group.
AsianG_target	Target country is member of the Asian Regional Group.

coalition_member	Dummy that takes the value 1 when the interaction is between a coalition and one of its members. It also takes the value 1 when the "member" is a smaller coalition (e.g. when there is an interaction between the G77/China and the African Group, whereas all members of the African Group are also members of the G77/China).
annexi_sender	Sender country is member of UNFCCC Annex I. Note that Annex I is not a coalition, but a group of countries that the UNFCCC Convention established as having specific emission reduction and reporting obligations.
annexi_target	Target country is member of UNFCCC Annex I.

2.3 Variable *relation*: Detailed coding rules

This variable was hand-coded from the Earth Negotiations Bulletins (ENBs). It can take following values:

- 1: On behalf of
- 2: Support
- 3: With
- 4: Agreement
- 5: Delaying proposal
- 6: Opposition
- 7: Criticism

The categories are ordered from most cooperative (1) to most conflictive (7), whereas it can be argued that categories 3 and 4 ("With" and "Agreement") are relatively equivalent.
The same information is provided by the variables *behalf*, *support*, *spokewith*, *agreement*, *delay*, *opposition* and *criticism*, which are binary dummies that take the value of 1 if the respective *relation* takes place, and otherwise take the value of 0.

On behalf of: when *country1* speaks **on behalf of** or **for** *country2*. Here it is clear that *country1* and *country2* (and probably together with a larger group of parties) have previously coordinated a common position, which is being presented by *country1* for the whole group. **On behalf of** is not coded when a member of an established coalition (see list below) speaks on behalf of this coalition (e.g. "Grenada, on behalf of AOSIS…" is coded simply as a statement by AOSIS). In this case, the membership of these coalitions is already fixed, and it is clear that if the coalition makes a statement, all of its members have already agreed to this position.
Examples:

- "COSTA RICA, for Chile, Colombia and Peru, encouraged the UNFCCC to further engage with other multilateral bodies, namely ICAO and IMO" (ENB No. 550).
- "PANAMA, also speaking for Colombia, Chile, Mexico, Guatemala, Peru, Uruguay and the Dominican Republic, stressed the importance of making progress on REDD (…)" (ENB No. 462).
- "COLOMBIA, on behalf of Peru and Guatemala, proposed that representatives of the COP (…) work on drafting the arrangements to complete work by COP 19" (ENB No. 560).

Support: is used when the text explicitly says that *country2* (or its statement) was supported by *country1*, even when this support is expressed in different sentences.
Examples:

- "He (the EU) said additional effort should be made to reduce uncertainty in GWPs but that parties should use them if they wish. Japan supported the GWP position (…). Australia (…) also supported continued use of GWPs" (ENB No. 2).
- "MAURITIUS, supported by MOROCCO and ZIMBABWE, welcomed AIJ contributions to capacity building in developing countries, if they adhere to national objectives, and asked the Secretariat to facilitate the initiation of AIJ projects to African countries" (ENB No. 39).

Agreement: when several countries are reported to hold the same position on an issue. This may be in text like "several parties, including Country 1, Country 2 and Country 3, proposed …". Agreement may be coded also when two different sentences refer to the same position being held by different countries, even though the relationship (agreeing with each other) is not explicitly written.

Examples:

- "The EU, the US and CANADA stressed the need to ensure consistency with the capacity building aspects of other discussions on technology transfer and adaptation" (ENB No. 145).
- "He (the EU) also noted that paragraphs proposed by a number of Parties including Norway, Iceland, New Zealand and Switzerland could be integrated into the EU proposal" (ENB No. 42).
- "MALAWI, URUGUAY, ETHIOPIA, COLOMBIA and ROMANIA welcomed activities implemented jointly (AIJ)" (ENB No. 75).

With: when the text says something like "Country 1, **with** Country 2 and Country 3, stated / mentioned / …". In this case it is clear that all these countries said more or less the same, but it is not clear whether *country1* explicitly supported the other countries, whether they just had the same position, or whether there has been any coordination between the parties in terms of their positions.

Examples:

- "On the election of the Board, SAMOA, with the EU and BULGARIA, called for consideration of gender balance" (ENB No. 185).
- "With the REPUBLIC OF KOREA, he (FRANCE) noted the need for joint or coordinated P&Ms at the international level" (ENB No. 39).

Delaying proposal: when *country1* proposes that *country2*'s idea or proposal be discussed at a later time.

Examples:

- "The EU recognized Kazakhstan's aspiration to join Annex B, while highlighting the need to comply with legal requirements relating to Annex B amendments. She supported deferring the issue to COP/MOP 6" (ENB No. 452).
- "TOGO, supported by MALAYSIA, proposed adjourning until numbers were proposed" (ENB No. 74).

Opposition: when the text reports *country1* opposing the statement or position expressed by *country2*. This has also been coded when the word "opposition" is not explicitly mentioned, but it is clear from the statements that they oppose each other.

Examples:

- "The G-77/CHINA supported this approach while the US, CANADA and JAPAN opposed it, stressing the need for a new and different mandate" (ENB No. 347).
- "MEXICO underscored its commitment to mechanisms and processes that increase the participation of observers. (…) NIGERIA noted that although participation of stakeholders has been positive, the UNFCCC is an intergovernmental process" (ENB No. 489).
- "Parties also discussed three annexes to the draft COP/MOP decision. BOLIVIA requested bracketing all of them, saying parties had not had time to analyze them (…). JAPAN stressed the "enormous effort" to provide text in the annexes to everyone a month before the meeting, and that the annexes "were adopted two days ago."" (ENB No. 497).
- "The G-77/CHINA stressed the importance of a paragraph on evaluating the real cost of preparing national communications. The EU, with AUSTRALIA, highlighted that this skill-set was not present in the CGE, and supported deleting the paragraph" (ENB No. 185).

Criticism: when *country1* directly criticizes *country2* or its position / statement.

Examples:

- "He (EU) said some developed countries, particularly the US, have not included binding measures in their proposals and emphasized the EU's conviction that P&Ms should be included to fully encompass the Berlin Mandate and Geneva Declaration" (ENB No. 42).
- "The MALDIVES lamented that reliance on the phrase "form should follow function" [used by China] is slowing down the negotiations" (ENB No. 494).
- "CHINA criticized the US presentation for changing the direction of the AGBM, failing to link development with the existing economic structure of a country and considering only the industrial development that has occurred since 1990" (ENB No. 24).

2.4 Variable *relation2*: Detailed coding rules

This variable is a simplification of the variable *relation*, given the fact that some of the categories in *relation* are very similar to each other and some others have very few observations. It can take following values:

- 1: On behalf of
- 2: Support
- 3: Agreement
- 4: Delaying proposal
- 5: Opposition

The categories are ordered from most cooperative (1) to most conflictive (5). In variable *relation2* the categories "With" and "Agreement" within *relation* are combined into a single "Agreement" category. In addition, the categories "Opposition" and "Criticism" in *relation* are also combined into a single "Opposition" category in *relation2*.

2.5 Variable *topic*: Detailed coding rules

This variable was hand-coded from the Earth Negotiations Bulletins (ENBs). It can take following values:

- 1: Adaptation
- 2: Mitigation
- 3: Finance
- 4: Capacity building
- 5: Technology
- 6: International transport
- 7: LULUCF (land use, land use change and forests)
- 8: Flexibility mechanisms
- 9: REDD (reducing emissions from deforestation)
- 10: Organisation
- 11: Institutional arrangements
- 12: Content of new agreement
- 13: Mitigation Annex1
- 14: Mitigation non-Annex1
- 15: Reporting
- 16: Principles
- 17: Response measures
- 18: Research / climate science
- 19: Agriculture

The categories indicate the topic or issue-area within climate change politics that is being discussed, and are not ordered.

Adaptation: Discussions related to measures aimed at adapting to the already existing impacts of climate change. Includes also discussions related to "loss and damage", "vulnerability", "adverse effects of climate change", "risk assessment and insurance".
Examples:

- "AOSIS stressed the urgency of the question of insurance and, with the MARSHALL ISLANDS, viewed the additions to the agenda item as technical rather than substantive" (ENB No. 80).
- "AUSTRALIA, MEXICO and PANAMA stressed the importance of adapting to the effects of climate change" (ENB No. 289).
- "AOSIS questioned opposition to a mechanism for loss and damage" (ENB No. 488).

Mitigation: Discussions related to emissions reductions, including who should take them up, the general level of "ambition" for mitigation (e.g. the 2°C goal), "AAU carry over", "low carbon growth", whether "offsetting" should at all be used, policies and measures ("P&M"), and discussions about "renewable energy" and "energy efficiency". Further, it includes discussions regarding "equity", "burden sharing" and "application of the CBDR principle" as long as they cannot be coded under another topic – e.g. finance. If only developed countries or only developing countries are explicitly mentioned, this is coded as **Mitigation Annex1** or **Mitigation non-Annex1**. Also coded under this topic are discussions about the possible mitigation gap between the first and the second commitment period of the Kyoto

Protocol; but if the discussion is about the continuation of a specific part of the protocol – for example the mechanisms – then it is coded as that topic (in this case **flexibility mechanisms**), and if it is about legal instruments to bridge the gap, then it is coded as **institutional arrangements**.
Examples:

- "Saudi Arabia and Kuwait urged caution in accepting new commitments, given scientific uncertainty and the inability of Annex I Parties to meet existing commitments" (ENB No. 4).
- "NORWAY, supported by CANADA and NEW ZEALAND, called for a single objective relating to all greenhouse gases through the use of a 'basket' approach containing as many greenhouse gases as possible" (ENB No. 39).
- "CHINA highlighted its proposed paragraph specifying the aim of reducing per capita emissions differences between developed and developing countries. The EU noted problems with such reporting, including lack of relevant developing country data" (ENB No. 186).
- "AOSIS and LDCs called for stabilizing greenhouse gas concentrations below 350 parts per million and limiting temperature increases to below 1.5°C" (ENB No. 398).
- "The AFRICAN GROUP, with Grenada, for the ALLIANCE OF SMALL ISLAND STATES (AOSIS), and Lesotho, for LEAST DEVELOPED COUNTRIES (LDCs), noted with concern the possible gap between the first and second commitment periods and urged concluding work under the AWG-KP in Cancún" (ENB No. 474).

Mitigation Annex1: Whenever mitigation actions or commitments are explicitly discussed for just developed (Annex I) countries. A typical keyword is "QELROs" (Quantified Emission Limitation or Reduction Objectives).
Examples:

- "SOUTH AFRICA said the EU's 30% emission reduction target by 2020 was not sufficiently ambitious (…)" (ENB No. 387).
- "Regarding the report on GHG inventory data for 1990-2007, China, for the G-77/CHINA, with BRAZIL, expressed concern at the trend of increase of GHG emissions in Annex I parties and suggested reflecting this concern in SBI conclusions" (ENB No. 452).
- "Some developing countries, including Iran, Uganda, Kenya, Mali and Algeria, urged Annex I Parties to meet their commitments" (ENB No. 4).
- "On the distribution of commitments, the US proposed flat rate reductions that would bind all Annex I Parties to the same QELROs. A number of Parties, including NORWAY, RUSSIA, ICELAND, AUSTRALIA, CANADA, JAPAN, CHILE, FRANCE, the REPUBLIC OF KOREA, IRAN and EGYPT, called for differentiation among Annex I countries in order to take account of differences in national circumstances and economic burdens" (ENB No. 39).

Mitigation non-Annex1: Whenever mitigation actions or targets for developing (non-Annex I) countries, including voluntary commitments, are discussed. A typical keyword is NAMAs (Nationally Appropriate Mitigation Actions). Includes also discussions about non-Annex I countries leaving this category, e.g. through "graduation" or the creation of a new sub-category of non-Annex1 countries. Also discussions about Kazakhstan joining Annex I (or Annex B) are coded as "Mitigation non-Annex1", because Kazakhstan is so far considered a developing country under the Convention.
Examples:

- "Nigeria objected to attempts to place new commitments on developing countries, and said new commitments could be considered only after Annex I Parties had met present commitments" (ENB No. 5).
- "The EU, BELARUS and other Annex I parties praised the Russian proposal (to develop appropriate procedures for the approval of voluntary commitments) (…). However, INDIA and SAUDI ARABIA opposed further consideration of this issue" (ENB No. 346).
- "CHINA, with CHILE, emphasized that action from developing countries should be carried out within the framework of sustainable development and requires financial and technological support from developed countries." (ENB No. 358)
- "SOUTH AFRICA (…) questioned the scientific basis for a 15-30% deviation from business-as-usual for developing countries by 2020" (ENB No. 387).
- "the AFRICAN GROUP expressed concern over the EU's proposal with regard to the possible "graduation" of parties" (ENB No. 369).

Finance: Discussions related to how much finance should be provided by developed countries to support adaptation and/or mitigation in developing countries; how should this finance be channeled; who should provide finance; and other discussions involving "means of implementation" in general (i.e. including the provision of "finance, technology, and capacity building"). If the discussion is both about adaptation and finance or mitigation and finance, priority is given to "**adaptation**" / "**mitigation**". But if the discussion is about finance for different purposes ("finance for adaptation AND mitigation should be provided from public sources…", then it is coded as finance.
Examples:

- "The EU reaffirmed the GEF's role as the UNFCCC's financial mechanism. The Philippines, for the G-77/CHINA, said the GEF is not the financial mechanism but its operating entity" (ENB No. 387).
- "With ECUADOR, FINLAND, the CARICOM states, the GAMBIA, VENEZUELA, CHINA, ECUADOR, BENIN, TANZANIA and UGANDA, he (France) highlighted the need for additional financial support, sustained transfer of information and technology, capacity building and institutional strengthening" (ENB No. 96).
- "The G-77/CHINA, with SAUDI ARABIA, BURKINA FASO, and the EU, called for increased funding for the participation of delegates from developing countries" (ENB No. 213).
- "SWITZERLAND, on behalf of itself, Canada, the EU, Iceland, New Zealand and Norway, reaffirmed the political commitment made during COP-6 part II to provide US$410 million to developing countries on an annual basis, beginning in 2005" (ENB No. 225).
- "On means of implementation, the AFRICAN GROUP, BOLIVIA, EL SALVADOR and PARAGUAY expressed preference for the use of public funds as opposed to market mechanisms, while INDIA and INDONESIA supported a combination of market and non-market approaches" (ENB No. 417).

Capacity Building: Discussions related to improving the capacity of developing countries (and their peoples, societies and policy-makers) to respond to climate change. Includes measures related to education. Typical keyword: "New Delhi Work Programme"; "UNFCCC Article 6 (Education, Sensitization of the Society)".
Examples:

- "The EU, the GAMBIA, JAPAN, IRAN, SENEGAL, KENYA and others stressed the need for a followup to the New Delhi work programme" (ENB No. 345).
- "BENIN, supported by UGANDA and CHAD, said that scientific assessments were difficult for developing countries in Africa and stressed the need to improve human resource development" (ENB No. 23).
- "A number of countries, including the EU, the G-77/CHINA, MALAYSIA, CANADA, SAUDI ARABIA, NIGERIA and THAILAND, emphasized the importance of specialized information centers and networks" (ENB No. 40).
- "The G-77/CHINA, the AFRICA GROUP and others said capacity building is necessary to ensure meaningful participation from developing countries" (ENB No. 120).

Technology: Discussions related to improving technology transfer to developing countries in order to support their response to climate change. Typical keywords are: "technology transfer", "IPRs" (intellectual property rights). If discussed in combination with finance (e.g. provision of finance for adaptation, mitigation, technology transfer and capacity building), then it is coded as finance.

- "The US said governments' role in technology transfer is to encourage technology diffusion and remove market barriers. The focus should be on informing developing country Parties of channels and conditions for financing" (ENB No. 49).
- "SAUDI ARABIA, supported by CHINA, PERU and PANAMA, stressed the need for actual transfer of technology in addition to information" (ENB No. 180).
- "The US, EU, and others stressed the private sector's role and CHINA underscored the public sector" (ENB No. 299).
- "The US, EU and JAPAN supported adopting the 2006 Work Plan of the Expert Group on Technology Transfer (EGTT) as proposed, while Malaysia and Ghana, both speaking for the G-77/CHINA, suggested some additions" (ENB No. 283).
- "AUSTRALIA, CANADA and the US emphasized that strong regimes to protect IPR are critical for technology development and deployment, and warned against undermining the TRIPS Agreement" (ENB No. 416).

International transport: Discussions related to how to deal with the emissions from international aviation and maritime transport. Typical keywords are: "international aviation", "bunker fuels", "IMO" (International Maritime Organization), "ICAO" (International Civil Aviation Organization).
Examples:

- "Several parties, including JAPAN, TUVALU and Slovenia, for the EU, identified the need to address international aviation and maritime transport emissions" (ENB No. 358).
- "On the issue of bunker fuels, SAUDI ARABIA, opposed by NORWAY, the EU and AOSIS, proposed deleting this agenda item" (ENB No. 324).

LULUCF (forests): Discussions related to how to account GHG emissions or removals from land use, land use change and forests. These discussions are usually about accounting in industrialized (Annex I) countries, unless it is about whether to include forest-related projects under the CDM (in which case it should be coded as **CDM**). Discussions related to reducing deforestation in developing countries should be coded under **REDD** below.
Examples:

- "ARGENTINA supported Option C, noting its relationship to forest conservation, the Convention to Combat Desertification and recovery of soils" (ENB No. 71).
- "FINLAND called for the use of existing FAO definitions, which countries are already familiar with. BOLIVIA stressed that adopting a simple, single threshold definition of a forest would result in a loss of accuracy" (ENB No. 138).
- "The US suggested reporting net national totals including all sources and sinks. The UK, CANADA and AUSTRALIA opposed this and stressed the need to distinguish sinks in the reporting to ensure transparency and comparability" (ENB No. 283).
- "AUSTRALIA, NEW ZEALAND, ICELAND and others also urged reviewing of rules on LULUCF and flexible mechanisms" (ENB No. 358, coded for both **LULUCF** and **Flexibility mechanisms**).

Flexibility mechanisms: Discussions regarding the market-based mechanisms introduced in the Kyoto Protocol: "CDM" (Clean Development Mechanism), "JI" (Joint Implementation) and "ET" (Emissions Trading). Also includes discussions about introducing new market-based mechanisms in a new agreement: "sectoral trading", "sectoral crediting", "new market mechanisms", "framework for various approaches". Other typical keywords are "additionality", "AIJ" (Activities Implemented Jointly), "designated operational entity", "HCFC-22" and "HFC-23".
Examples:

- "Germany: "agreement on joint implementation to facilitate the transfer of know-how and technology". Argentina: "reiterated support for a joint implementation pilot phase" (ENB No. 19).
- "SAUDI ARABIA, NORWAY, the EU, JAPAN and others supported including CCS under the CDM" (ENB No. 387).
- "GRENADA also objected to adopting terms of reference for CDM EB members, highlighting that it may bias countries with limited CDM knowledge and expertise. SAUDI ARABIA supported consideration of terms of reference" (ENB No. 452).
- "VENEZUELA, with CHINA, stated that market approaches play a limited role in the Protocol and are not mentioned in the Convention, suggesting their inclusion poses a legal problem. The US proposed emphasizing that the use of market mechanisms is voluntary (ENB No. 434).

REDD (reducing emissions from deforestation): Discussions related to promoting the reduction of emissions from deforestation and forest degradation in developing countries. Includes also measures to conserve or enhance forest carbon stocks and sustainable forest management (known as REDD+). Discussions about the financing of REDD are coded under this topic instead of under finance.
Examples:

- "SWITZERLAND, the EU and AUSTRALIA said a sufficient methodological basis now exists for REDD activities" (ENB No. 387).
- "INDIA, INDONESIA, COSTA RICA and others suggested including conservation, while Gabon, for the CONGO BASIN COUNTRIES, proposed a stabilization fund to sustain current efforts" (ENB No. 345).
- "ECUADOR, BOLIVIA, the PHILIPPINES, INDIA, MEXICO and many others highlighted the need for a safeguard on avoiding forest conversion, with BRAZIL proposing to "ensure that the actions are consistent with the conservation of native forests" (ENB No. 438).

Organisation: Discussions regarding the organization of the negotiation meetings and agenda setting, such as: observation of religious holidays when planning a meeting; gender questions when appointing a committee; when should something be discussed; whether a workshop on a specific topic should be organized; whether contact groups or informal discussions should be convened; whether two negotiation processes should be combined; which topics should be discussed; how much time should be spent on discussing specific topics; which discussions should be prioritized.
Examples:

- "the EIG outlined closing the AWG-LCA" (ENB No. 557).
- "JAPAN and CANADA, opposed by CHINA, proposed linking the AWG and other elements of the Bali roadmap" (ENB No. 346).
- "The COOK ISLANDS, supported by the PHILIPPINES, proposed highlighting the recommendations from the workshops and inviting organizations and parties to implement them" (ENB No. 347).
- "The EU, supported by ICELAND, SWITZERLAND and CHILE, indicated its intention to table a draft decision on enhancing the role of women in climate change decision-making under the UNFCCC" (ENB No. 558).
- "The EU highlighted the contact group's "very specific mandate" to address Croatia's appeal, while CANADA stated that the COP/MOP can take a comprehensive approach and also address the level of base year emissions. AUSTRALIA indicated that while the appeal must comply with the existing rules, it is also possible to address the broader issues" (ENB No. 491).
- "EU, CANADA, COLOMBIA and PANAMA, stressed the need to discuss the flexibility mechanisms" (ENB No. 412).

Institutional arrangements: Discussions about existing and new institutions or rules within the climate regime, such as: whether a new expert group / fund / committee / forum should be created (unless it is about a negotiating group, which would be coded as **Organisation**); what mandate a specific institution has; what are the terms of reference or rules of procedure or "modalities and procedures" for a particular body; whether the amendment procedures or voting rules should be changed; etc. Additionally coded under this topic are discussions about "the review of the commitments (under Article 4.2 (a) and (b))"; relationships between the UNFCCC and other external fora – for example discussions about where to deal with HFCs (if under the UNFCCC or under the Montreal Protocol), unless this is about addressing aviation and maritime emissions, which is coded under **International transport**; the introduction of a 'registry' for developing country NAMAs (but if the discussion is about what the registry should contain it is coded as **Mitigation non-Annex I**).
Examples:

- "The US and CANADA proposed that the CGE be mandated to examine non-Annex I national communications" (ENB No. 347).
- "BELARUS, the EU and UKRAINE favored simplifying amendment procedures" (ENB No. 526).
- "COSTA RICA, COLOMBIA, GUYANA, SURINAME and the EU opposed any change to the consensus rule" (ENB No. 530).
- "ECUADOR, with SYRIA, SUDAN, CHILE, SIERRA LEONE and EL SALVADOR, drew attention to the linkages between climate change impacts and water. He called for a process under the Convention to address water-related matters" (ENB No. 493).
- "The Secretariat introduced the issue of amending the Protocol to make the compliance mechanism legally binding. SAUDI ARABIA urged adopting this amendment, while JAPAN said it was not appropriate to try to introduce a legally-binding, punitive system, and the EU noted practical difficulties" (ENB No. 346).
- "Venezuela, for LMDC, stated that moving HFCs under the Montreal Protocol would adversely affect developing countries. CHINA expressed concern about GHGs being addressed under other international bodies. SAUDI ARABIA and INDIA supported China, stressing that HFCs should be considered under the UNFCCC" (ENB No. 578).
- "NORWAY proposed that a review process be conducted regularly" (ENB No. 465).

Content of new agreement: Discussions about reaching a new agreement (a protocol or similar), or about amending an existing agreement (e.g. continuing or amending the Kyoto Protocol). Also discussions about what "building blocks" or issue areas should be covered by a new agreement. If the discussion is about a specific topic (e.g. mitigation actions under the new agreement), then it should be coded under that specific topic.

- "Parties views diverged on the AWG-LCA Chair's text" (ENB No. 558).

- "He noted that the negotiating text should contain a more balanced and clear reflection of the Group's proposals." (ENB No. 411).
- "COSTA RICA and a number of AOSIS members urged the AWG-LCA to continue working with a clear mandate to adopt a legally-binding instrument at COP 17 in Durban. The EU suggested adding language on a legally-binding outcome under the two tracks. VENEZUELA urged adding text on reinforcing the current legal regime, as well as a reference to the Kyoto Protocol. SOUTH AFRICA acknowledged the need for an agreement, while highlighting that the matter is broader than just the AWG-LCA's outcome. She urged a balanced outcome that also establishes a second commitment period under the Kyoto Protocol" (ENB No. 494).

Reporting: Discussions regarding how to measure, monitor, report and/or review national levels of emissions, policies to address climate change, and similar. Typical keywords are "GHG inventories", "national communications", "MRV" (monitoring, reporting and verification), "ICA" (international consultation and analysis), "IAR" (international assessment and review).
Examples:

- "The G-77/CHINA, supported by COLOMBIA and INDIA, proposed Annex I parties communicate GHG emission limitations and commitments related to financial resources and technology transfer" (ENB No. 31).
- "On provision for the second review of the adequacy of Annex I Party commitments the PHILIPPINES, for the G-77/CHINA, supported by GAMBIA, INDIA, BURKINA FASO, SAUDI ARABIA, CHINA, COLOMBIA, VENEZUELA, BRAZIL, IRAN and KUWAIT said the Kyoto Protocol was the first step in the review process" (ENB No. 79).
- "The US, supported by CANADA and SWITZERLAND and opposed by CHINA, said the revision of guidelines was fundamental to improving second national communications" (ENB No. 113).
- "The EU and JAPAN supported the proposal, while the US expressed concern about eliminating in-country in-depth reviews" (ENB No. 281).
- "INDIA, supported by CHINA, explained that MRV in developing countries only applies to mitigation actions that are internationally enabled" (ENB No. 371).

Principles: Discussions about the principles of the Convention or the principles that should guide new agreements, but only if these discussions do not refer at the same time to more specific topics such as adaptation, mitigation, finance, etc. Examples of such principles are: equity, fairness, transparency, inclusiveness, CBDR (common but differentiated responsibilities), CBDR&RC (common but differentiated responsibilities and respective capabilities), effectiveness, historical responsibility, capacity, polluter pays principle, etc.
Examples:

- "CHINA, with SAUDI ARABIA and ALGERIA, stressed the need for additional work on the historical responsibility for climate change and on equity issues" (ENB No. 193).
- "CHILE, the EU and US objected to referring to the importance of adhering to adopted principles of free and unrestricted exchange of information, noting that such principles do not exist" (ENB No. 226).
- "EL SALVADOR, speaking on behalf of Argentina highlighted COP 18 as an important milestone for strengthening the multilateral climate regime under the principles of equity and CBDR" (ENB No. 557).

Response measures: Refers to discussions regarding the impact of climate policies ("response measures", "potential consequences", "spillover effects") on developing countries' economies (e.g. on the economy of oil-producing countries). The topic is frequently linked to adaptation, but we tried to code it as a separate issue. It is also frequently discussed in connection with "Convention Articles 4.8 and 4.9" and "Articles 2.3 and 3.14 of the Kyoto Protocol" (which refer both to the need to support adaptation and to minimize the impact of response measures).
Examples:

- "INDIA echoed the Republic of Korea's apprehensions on the implications of P&M on trade. The P&M that must be integrated into Annex I Parties' policies must be examined very carefully and may require accompanying measures to prevent adverse impacts" (ENB No. 27).
- "VENEZUELA, QATAR, KUWAIT, NIGERIA and SAUDI ARABIA called for a mechanism to compensate fossil fuel exporting countries for the economic losses resulting from the full implementation" (ENB No. 74).
- "The EU, US and AUSTRALIA questioned the need for 'forums' on insurance for adverse effects of response measures and on economic diversification prior to such adverse effects becoming apparent" (ENB No. 256).

- "CONVENTION ARTICLES 4.8 AND 4.9: Progress on implementation of decision 1/CP.10 (Buenos Aires programme of work): SAUDI ARABIA, supported by the UNITED ARAB EMIRATES and QATAR, noted that the issue had been pending for "a very long time" but requested that reference linking a workshop on 1/CP.10 to a workshop on Protocol Articles 2.3 and 3.14 be deleted" (ENB No. 493).

Agriculture*:* Discussions on how to enhance the adaptation of agriculture to climate change impacts.
Examples:

- "CHINA underscored the importance of agriculture for food security, poverty reduction and sustainable development, and with SOUTH AFRICA, indicated that adaptation is more important than mitigation in this sector" (ENB No. 468).
- "Several developing countries, including VIET NAM, SRI LANKA, ARGENTINA and THAILAND, underlined climate vulnerability of their agricultural sectors" (ENB No. 585).

Research / climate science: Discussions relating to the newest IPCC findings, about how to improve knowledge about climate science or climate change impacts, about what new scientific reports to request from the IPCC or what type of research is needed, or about the systems for monitoring the climate on earth.
Examples:

- "Supported by CHINA, KUWAIT and NIGERIA, he (Saudi Arabia) added that the SBSTA should only thank the IPCC for its assessment and transmit the synthesis report and the SAR to the COP. The SBSTA should not be selective or pick and choose conclusions" (ENB No. 26).
- "INDONESIA, MALAYSIA and others highlighted the need for regional and local modeling" (ENB No. 345).

2.6 Variables related to coalition membership: Detailed coding rules

The variables *AILAC_sender* to *AsianG_target* describe country membership to negotiation coalitions within the UNFCCC talks. Coalitions are more or less formal groupings of countries that voluntarily agree to coordinate positions and/or speak together at the negotiations in order to make their voice stronger. Given that several of these coalitions overlap with each other (so that some countries are members to 3 coalitions at the same time), and that their relevance (and even existence) changes over time, membership is coded through a series of dummies. For each coalition, there is a membership variable for *country1* (denoted *XXX_sender*), and a membership variable for *country2* (denoted *XXX_target*).

XXX_sender can take following values:

- 1: if *country1* is a member of coalition XXX (and the coalition does exist) at that point in time. *country1*, in this case, can be either an individual country or a coalition itself (e.g. *G77_sender* takes the value of 1 whenever *country1* is "India", but also whenever *country1* is "African Group", because all members of the African Group are also members of the G77 and China).
- 2: if *country1* is coalition XXX itself (e.g. *AILAC_sender* takes the value of 2 whenever *country1* is "AILAC"). And they take the value of 0 otherwise.
- 0: if *country1* is neither a member of XXX nor XXX itself. This is also the case when *country1* is a coalition that only partially overlaps with XXX.

The same coding rules were used for *XXX_target*, but just with respect to *country2*.

In this dataset, whenever possible, coalition membership is coded at the daily level: whenever we have information about the exact date in which a country became a member of a coalition, this exact date is used to start coding the respective membership variable as 1. The data file country_groups.dta (see **Section 4** below), while based on the same information, is aggregated at the year level, so that there we only have information on the year in which a country became a member of a specific coalition.

The membership data was obtained from different web sources, which are detailed in **Section 4.2** below.

2.7 Further coding rules

- If one text section refers to two topics in combination, e.g. if the discussion is about finance for adaptation, or about mitigation measures in the new agreement, or about a new institution to assess the impact of response measures, then this text section is coded only once. The topic that is perceived to be more central to the discussions is chosen. Some general rules for such prioritization are given above under each topic. Only if a text section refers to two clearly separated topics (e.g. in the text "AUSTRALIA and NEW ZEALAND urged reviewing of rules on LULUCF and flexible mechanisms"), then this text section is coded twice in the dataset (in this case, once for the topic **LULUCF** and one for the topic **flexibility mechanisms**).
- For **agreement** and **with**: as in these cases it is not clear in which direction the relationship goes, then it is coded in both directions: "SAMOA with EU" is coded as "Samoa – with – EU" and as "EU – with – Samoa".
- **Behalf** is also coded bi-directionally (e.g. "PERU, on behalf of CHILE and COLOMBIA" is coded as "Peru – behalf Chile", "Peru – behalf – Colombia", "Chile – behalf – Peru", "Chile – behalf – Colombia", "Colombia – behalf – Peru", and "Colombia – behalf – Chile"). This is because even if it is clear from the text that *country1* spoke for the rest of the group (and not the other way around), the rationale behind this type of relationship is that the whole group of countries coordinated a common position beforehand. In this sense, it does not really matter who was the actual speaker, it matters who belongs to the group.
- If several countries (more than 2) agree with each other, then each pair is coded as a new observation, and again in both directions (e.g. "AUSTRALIA, NEW ZEALAND, ICELAND and others…" is coded in different rows as "Australia – agreement – New Zealand", "Australia – agreement – Iceland", "New Zealand – agreement – Australia", "New Zealand – agreement – Iceland", "Iceland – agreement – Australia", "Iceland – agreement – New Zealand".
- If several countries oppose or support another one, then not only the opposition or the support is coded, but also the agreement between all countries that are supporting / opposing.
- Reactions (opposition, criticism, etc.) to what the Chair of the group or the UNFCCC Secretariat have proposed or organized are not coded, because the Chairs (even if they come originally from a specific country) are supposed to be neutral.
- In some sentences it is not clear what is the topic under discussion (e.g. "the EU and PAPUA NEW GUINEA supported a COP decision on methodological issues in Poznań"). In these cases, the sentences immediately before and after, and the heading of the ENB section are used to decide what the topic is (in the example above, from the previous text it becomes clear that the sentence refers to REDD).

2.8 Coding validation and inter-coder reliability

Four coders contributed to the data collection on negotiation interactions from the ENBs. In order to validate the codebook and ensure that the coding was consistent (inter-coder reliability), the following issues of the ENB were coded by all coders at the beginning of the process:

- No. 2
- No. 13
- No. 42
- No. 185
- No. 283
- No. 358
- No. 387
- No. 452
- No. 525
- No. 574.

The findings, and eventual differences across the coders were discussed as to ensure that all have the same understanding of how the coding should be done. Along the process, other ENB issues at random were double-coded to ensure that coding still remained consistent over time, and to allow testing of inter-coder reliability.

Inter-coder reliability was tested using Cohen's kappa. For the variable *relation*, Kappa between pairs of coders ranged from 0.77 to 0.98, which indicates substantial to almost perfect reliability (Landis and Koch, 1977).[2] If the categories Agreement and With, as well as Opposition and Criticism, are combined as in *relation2*, Kappa ranges from 0.90 to 0.98.

For the variable *topic*, Kappa ranged from 0.25 to 0.72, indicating fair to substantial reliability. This relatively low inter-coder reliability is due to the very complex nature of the climate change negotiations, and partly due to our attempt to have a quite detailed and disaggregated coding scheme. Inconsistencies have been detected, for example, in how "**Mitigation**", "**Mitigation Annex1**" and "**Mitigation non-Annex1**" were coded. This was due, in some instances, to different interpretations of the text. A typical example would be a discussion about the share of the mitigation burden that developing countries should take (which would generally be coded as "Mitigation non-Annex1"), and within that discussion, a country expresses the opinion that "only Annex I countries should contribute to mitigation" (which might be coded as "Mitigation Annex1", or as "Mitigation", depending on the context). Combining these three categories is thus suggested for more robust data analysis.

There were also issues when coding discussions about provision of support to developing countries, given that such support might refer to "**Finance**", "**Technology**" (transfer), or "**Capacity building**", or all three of them. Again, combining these categories into a broader "Support" category would be advisable.

More difficult to address were coding difficulties related to the distinction between substantial discussions and formal discussions. An attempt was made to use the category "**Organisation**" to encompass all discussions regarding the formal organization of the negotiations, from issues such as who is allowed to attend the meetings, to who is chairing them, to agenda setting. But then, it was often the case that there were discussions on a specific topic (say, "**Adaptation**"), where some of the statements were not about the substance of that topic (i.e. how should adaptation be dealt with at the UNFCCC), but about agenda setting (scheduling of meetings to discuss adaptation, whether a workshop on successful adaptation instruments should be organized, whether more time should be devoted to this topic, etc.). At some point, such "formal" discussions become the substance, because if no time is devoted to discussing adaptation, then no options for how to deal with it can be discussed. Therefore, disentangling between form ("**Organisation**") and substance ("**Adaptation**") became often difficult.

A similar difficulty arose in the coding of statements about institutions ("**Institutional arrangements**") that are related to a specific topic under discussion (e.g. discussions on the mandate for Expert Group of Technology Transfer could be coded as "**Institutional arrangements**" or as "**Technology**"). Similar problems were found in disentangling "**Content of new agreement**" from discussions about individual issue areas (mitigation, adaptation, finance) as part of those new agreements. Even though there were rules about what of these two aspects should be subsidiary to the other one, these rules were not used in a fully consistent way.

So, while no major coding inconsistencies are expected between broad substantial categories (mitigation, adaptation, finance or support, LULUCF, REDD, flexibility mechanisms, international transport, reporting, response measures, research), inconsistencies are more likely between each one of these substantial categories and the cross-cutting categories related to organization of meetings, institutions, or new agreements.

3. Data file statements_count.dta

3.1 File description

This data file includes a variable describing how active each UNFCCC party is in the oral negotiations. For each negotiation day, the variable counts how many times each party is reported by the ENB to make an intervention. The dataset is a full and balanced country-negotiation day panel. For each of the 461 negotiation days coded, it includes the whole set of 222 countries and coalitions identified to have ever made an oral intervention in the UNFCCC negotiations throughout the coded period. Thus, the dataset has a total of 102 342 observations.

[2] Landis, J.R. and Koch, G.G. (1977). The measurement of observer agreement for categorical data. *Biometrics* 33(1): 159-174.

3.2 Key variables, data sources and coding procedure

Variable	Description
country	Country whose level of oral participation in the negotiations is counted (see full country list in **Section 6** below).
ENB_Nr	Issue number of Earth Negotiations Bulletin (Vol. 12) coded.
Interventions	Number of oral interventions made by the country during the negotiation day (see coding procedure below).
Date	Day in which the interventions are counted (YYYY-MM-DD, numeric).
Date2	Day in which the interventions are counted (YYYY-MM-DD, string).
E_date	Date of negotiation day (DD-MMM-YYYY, Stata date format).

Given that *country* and *ENB_Nr* (or, alternatively, *date*, *date2* and *e_date*) are the same as in the data file ENB_relationships.dta, both datasets can be merged easily, once the user decides whether she needs to count the number of *interventions* for the sender (*country1* in ENB_relationships.dta) or the target (*country2* in ENB_relationships.dta). There is one important difference between both datasets though, which is the number of observations. While ENB_relationships.dta includes observations only for country dyads that actually interacted with each other within a negotiation day, statements_count.dta includes observations for all UNFCCC member states and coalitions within each day. Based on whether she needs the full universe of countries, or just the sample that actually interacts with each other at each point in time, the user will need to decide which of both data files to use as master dataset for such a merge.

The variable *interventions* is obtained from the ENBs. It is a count variable, ranging from 0 to 51, counting how many times a country (or coalition) is mentioned as a speaker in a specific issue number of the ENBs. In order to allow for quick coding of this data, a semi-automatic coding procedure based on word counts was adopted. All ENBs were first translated into plain text (UTF-8) format. Then, those sections that do not actually summarize the negotiations on the respective day, but comment on previous rounds or on the outcomes, were manually deleted. These include mainly an introductory paragraph, a section summarizing the previous negotiations history ("A brief history of the UNFCCC and the Kyoto Protocol" is a common heading for such a section), a section displaying informal comments by experts and negotiations on the current status of negotiations ("In the corridors"), and a section providing actual analysis of the meeting's negotiation process and outcomes ("A brief analysis of the XXX meeting").

After this cleaning process, all text files were uploaded into the software Jfreq (Lowe, 2011).[3] This software was used to rapidly count all words within the ENB texts. The word frequency matrix obtained in this way was cleaned manually in order to keep only names of countries and coalitions within it. Countries may at times be mentioned in the ENBs when they are not actually speaking at the negotiations (e.g. to describe the nationality of the chair of a meeting, or the nationality of the speaker of a coalition, or the author of a specific proposal being discussed). To avoid counting these instances, we used the fact that the ENBs generally use full capital letters (e.g. "INDIA") whenever they refer to a country or coalition when it is speaking at the negotiations, while they use normal capitalization ("India") whenever a country is mentioned but not as a speaker. Also, given the fact that many coalition names consist of several words, and that Jfreq only counts individual words, this and several other word characteristics were used to disentangle them from their more general use within a text. Care was also taken of certain words that could be part of several parties' names: "CHINA", for example, appears in ENBs to denote both the country "China" and the coalition "G77 and China". In this case, it was counted how often the word "G77" appeared, and then this was deducted from the frequency of the word "CHINA", so that the difference indicates how often the individual country was actually speaking. Finally, both the acronym and the full name of coalitions were counted after checking whether the appearance of both within the same *ENB_Nr* was related to redundancies: new coalitions are frequently denoted by their full name, but the acronym is adopted after a certain period of time.

[3] Lowe, W. (2011). JFreq: Count words, quickly. Java software version 0.5.4. Available at: http://www.conjugateprior.org/software/jfreq/.

4. Data file country_groups.dta

4.1 File description

Country-year panel that includes information on coalition membership of parties to the UNFCCC. Coalitions are more or less formal groupings of countries that voluntarily agree to coordinate positions and/or speak together at the negotiations in order to make their voice stronger. Some coalitions have been created specifically for the climate negotiations (e.g. AILAC or AOSIS), but others emerge from existing regional groups, UN groups or integration efforts (e.g. the EU, the LDCs or the African Group), and others still have emerged because they have a broader common political or economic agenda (e.g. ALBA, OPEC, G77 and China). Given that several of these coalitions overlap with each other (so that some countries are members to 3 coalitions at the same time), and that their relevance (and even existence) changes over time, membership is coded through a series of dummies. The data has been obtained from several web sources, including official websites of the respective coalitions, the UNFCCC website, and also written submissions to the UNFCCC (see details below).

As this data is at the country-year level, and given that the main UNFCCC meetings (COP meetings) take place at the end of November or beginning of December, we code a country as being member to a coalition if it joined this coalition at any time before December of the respective year. If it joined in December, then it is coded as a member only from the following year onwards.

4.2 Key variables, data sources and coding rules

Variable	Description and data sources
country	Country (or country coalition) whose coalition membership is coded, string format (see full country list in **Section 6** below).
year	Year for which coalition membership is coded.
coalition	Dummy indicating whether *country* is a coalition (1) or an individual country (0).
annexi	Dummy indicating whether *country* is member of UNFCCC Annex I (1) or not (0). Data on Annex I membership is obtained from the UNFCCC website: http://unfccc.int/files/essential_background/convention/background/application/pdf/convention_text_with_annexes_english_for_posting.pdf Kazakhstan is not an Annex I country, but in July 2001 it voluntarily adopted an Annex-I emissions reduction target. Despite this, it is not coded as an Annex I member. Country coalitions are coded according to whether their members are part of Annex I or not: Central Group Eleven, EITs (Economies in Transition), Umbrella Group and Visegrad Group are coded as members of Annex I because of all their members belong to Annex I. All other coalitions are coded as not belonging to Annex I because all or a large majority of their members do not belong to Annex I. The exception is the EIG (Environmental Integrity Group), which is coded as 0.5, because it has a similar number of members in both groups, and because it profiles itself as a group that seeks consensus across Annex I and non-Annex I.
AILAC	*Country* is member of AILAC (Independent Association of Latin America and the Caribbean). Alliance. Data on membership was obtained from the group's website: http://ailac.org/sobre/.
ALBA	*Country* is member of ALBA (Bolivarian Alliance for the Peoples of our America). The data was obtained from the group's website: http://alba-tcp.org; and from news: https://venezuelanalysis.com/news/5070.
AOSIS	*Country* is member of AOSIS (Alliance of Small Island States). The data was obtained from its website: http://aosis.org/about/members/. Given that no information is provided on timing of membership, it is assumed that all members joined when the Alliance was created, in 1990. Only for the case of Timor-Leste and Tonga, which joined the UNFCCC later on, the date of joining UNFCCC is used as date of joining AOSIS. Two states stopped belonging to AOSIS when they joined the EU: Malta and Cyprus. This change is included in the coding.
AfricanG	*Country* is member of the African Group. The data was obtained from the UN website on its regional groups: http://www.un.org/depts/DGACM/RegionalGroups.shtml.

ArabG	*Country* is member of the Arab Group / Arab League. Membership information was obtained from http://www.nationsonline.org/oneworld/arab_league.htm.
BASIC	*Country* is member of BASIC (Brazil, South Africa, India and China). Membership coded from secondary literature about the negotiations: https://www.sei-international.org/mediamanager/documents/Publications/Climate/sei-basic-preview-jun2011.pdf and https://www.tni.org/files/download/shifting_power-climate.pdf.
COMIFAC	*Country* is member of COMIFAC (Central African Forest Commission). Membership to COMIFAC was obtained from the group's website: http://www.comifac.org/en/etats-membres and http://www.comifac.org/fr/content/dates-cl%C3%A9s; and from the text of the Yaoundé Declaration on the Conservation and the Sustainable Management of Tropical Forests (http://d2ouvy59p0dg6k.cloudfront.net/downloads/yaounde_declaration__french_.pdf).
CaribbeanC	*Country* is member of CARICOM (Caribbean Community). The data was obtained from the group's website: http://caricom.org/membership.
CentralAm	*Country* is member of Central America. The data on the countries located in Central America was obtained from Wikipedia: https://en.wikipedia.org/wiki/Central_America.
CentralG11	*Country* is member of Central Group 11 / Central Group. This group originally brought together 11 economies in transition that were negotiating accession to the EU. Once members joined the EU, they stopped belonging to the Central Group. Information on membership is obtained from the UNFCCC Handbook (p. 50): https://unfccc.int/resource/docs/publications/handbook.pdf; from documentation about a CG11 workshop at UNCTAD (http://unctad.org/en/pages/MeetingsArchive.aspx?meetingid=15128); and from the dates of enlargement of the European Union (https://europa.eu/european-union/about-eu/countries_en#tab-0-1).
CfRN	*Country* is member of the Coalition for Rainforest Nations. The Rainforest Coalition is a relatively loose group of developing countries with tropical rainforests. While its website provides a list of members (http://www.rainforestcoalition.org/nations.aspx), it also points out that "countries participate on a voluntary basis" and that such participation "does not imply that countries adhere to any specific domestic policies or negotiating positions" (http://www.rainforestcoalition.org/AboutTheCoalition.aspx). To get a clearer grasp of the relevant membership in terms of the UNFCCC negotiation process, written submissions of positions to the UNFCCC on behalf of the group were used as data sources. An overview of such submissions and the countries supporting them was obtained from Allan and Dauvergne (2013).[4] This information was cross-checked with the original and some additional submissions (available from http://unfccc.int/documentation/documents/advanced_search/items/3594.php). A country was coded as being a member of the Rainforest Coalition from the date of the first of these submissions it supported onwards. Bolivia was reported to leave the coalition after joining (http://theredddesk.org/countries/bolivia), which has been coded accordingly.
CongoB	*Country* is a Congo Basin country. Membership data was obtained from http://www.worldwildlife.org/places/congo-basin.
EITs	*Country* is an Economy in Transition. Membership data was obtained from the UNFCCC website: http://unfccc.int/not_assigned/b/items/2555.php.
EU	*Country* is member of the EU. Information on EU membership was obtained from the EU website: https://europa.eu/european-union/about-eu/countries_en#tab-0-1.
EIG	*Country* is member of the Environmental Integrity Group. Membership information was obtained from the UNFCCC website: http://unfccc.int/parties_and_observers/parties/negotiating_groups/items/2714.php.
G77	*Country* is member of the Group of 77 and China. The information was obtained mainly from the group's website http://www.g77.org/doc/members.html; information on former members was obtained from Wikipedia (https://en.wikipedia.org/wiki/Group_of_77#Members) and cross-checked with other sources.
G9	*Country* is member of the G9 / CACAM. The Group of 9 is described in ENB No. 160 as "an

[4] Allan, J.I. and Dauvergne, P. (2013). The global south in environmental negotiations: The politics of coalitions in redd+. Third World Quarterly 34(8): 1307-1322.

	alliance of Central Asian and Trans-Caucasian countries, and Moldova", but no further information about its membership can be found. So, it is assumed that it has a similar membership as CACAM (Central Asia, Caucasus and Moldova Group). Information on CACAM membership is obtained from http://unfccc.int/resource/docs/cop7/12.pdf and from https://unfccc.int/parties_and_observers/parties/negotiating_groups/items/1031.php.
CACAM	*Country* is member of CACAM (Central Asia, Caucasus and Moldova Group). Information on CACAM membership is obtained from http://unfccc.int/resource/docs/cop7/12.pdf and from https://unfccc.int/parties_and_observers/parties/negotiating_groups/items/1031.php.
LDCs	*Country* is a Least Developed Country. Membership information was obtained from the UN: http://www.un.org/en/development/desa/policy/cdp/ldc/ldc_list.pdf. Information on former LDCs was obtained from Wikipedia (https://en.wikipedia.org/wiki/Least_developed_country#Current_LDCs) and cross-checked with other sources.
LMDC	*Country* is member of the group of Like-Minded Developing Countries. This informal group emerged recently in the UNFCCC negotiations, and its membership is rather loose. For this reason, membership was coded from written statements submitted to the UNFCCC negotiations (in a similar way as done for the Rainforest Coalition): a country is coded as being a member of the LMDCs from the date in which it first appears in a written statement by the group onwards. The written submissions listing members of the LMDC can be found under: http://unfccc.int/files/bodies/awg-lca/application/pdf/statement_india_others.pdf, http://unfccc.int/files/adaptation/application/pdf/17countriesfinancing2sep12.pdf, http://unfccc.int/files/adaptation/application/pdf/17countriesgcf3sep12.pdf, http://unfccc.int/files/bodies/application/pdf/bolivia_17parties_lca1b5_040912.pdf, http://unfccc.int/files/bodies/awg-lca/application/pdf/ecuador_mrv_climate_finance_040912.pdf, http://unfccc.int/files/adaptation/application/pdf/18parties5sep12.pdf, http://unfccc.int/files/adaptation/application/pdf/bolivia_et_al5sep12.pdf, http://unfccc.int/files/bodies/awg-lca/application/pdf/lmgc_final__-_draft_decision_on_enhanced_mitigation_of_developed_countries.pdf, http://unfccc.int/files/bodies/awg-lca/application/pdf/sharedvision_bolivia_231112.pdf, https://unfccc.int/files/documentation/submissions_from_parties/adp/application/pdf/adp_lmdc_workstream_1_20130313.pdf, http://unfccc.int/files/documentation/submissions_from_parties/adp/application/pdf/adp_lmdc_ws1_20140309.pdf, http://unfccc.int/files/documentation/submissions_from_parties/adp/application/pdf/adp2-5_submission_by_malaysia_on_behalf_of_the_lmdc_cover_note.pdf. Even though several of these submissions (most of those submitted during 2012) just list a group of countries without explicitly calling it the Like-Minded Group, these submissions were contemporaneous to official meetings of the group, so that it is possible to infer that those submissions were made on behalf of the coalition. Information on individual LMDC meetings is available from: http://www.twn.my/title2/climate/info.service/2012/climate20121005.htm, http://www.climatechangenews.com/2013/03/03/un-climate-talks-like-minded-group-lay-down-durban-platform-terms/, http://pib.nic.in/newsite/PrintRelease.aspx?relid=126913. In addition, the press reported that the Philippines left the coalition before COP20 in December 2014 (see https://bitsinbits.wordpress.com/2014/12/13/the-philippines-in-the-un-climate-negotiations-lonely-in-lima/), which has also been coded.
Mountain	*Country* is member of the group of Mountain Landlocked Developing Countries. Data on membership obtained from the UNFCCC website: http://unfccc.int/essential_background/glossary/items/3666.php.
OPEC	*Country* is member of OPEC (Organization of Petroleum Exporting Countries). Membership information obtained from its website: http://www.opec.org/opec_web/en/about_us/25.htm.
SICA	*Country* is member of SICA, the Central American Integration System. Membership information obtained from its website: https://www.sica.int/sica/sica_breve.aspx.

SAfricaDC	*Country* is member of the Southern African Development Community (SADC). Membership information obtained from its website: http://www.sadc.int/about-sadc/overview/history-and-treaty/.
Umbrella	*Country* is member of the Umbrella Group. Membership data obtained from the UNFCCC website: http://unfccc.int/essential_background/convention/items/6343.php.
Visegrad	*Country* is member of the Visegrad Group. Data obtained from its website: http://www.visegradgroup.eu/about/history.
AsianG	*Country* is member of the Asian Regional Group. Data obtained from the UN website: http://www.un.org/depts/DGACM/RegionalGroups.shtml.
worldregion	Geographical region (continent) of the world in which *country* is located (categorical variable). Coalitions have a missing value in this variable. The data for this variable is obtained from the Quality of Government Dataset (variable cspo_uiareg); some missing values are completed on the basis of information found online.
worldregion_coalitions	Geographical region (continent) of the world in which *country* is located. Coalitions that are located within a single world region are coded as belonging to that coalition, otherwise they have a missing value. The data for this variable is obtained from the Quality of Government Dataset (variable cspo_uiareg); some missing values are completed on the basis of information found online.

All coalition membership variables (*AILAC – AsianG*) can take following values:

- 1: if *country* is a member of the respective coalition (and the coalition does exist) at that point in time. *country*, in this case, can be either an individual country or a coalition itself (e.g. *G77* takes the value of 1 whenever *country* is "India", but also whenever *country* is "African Group", because all members of the African Group are also members of the G77 and China).
- 2: if *country* is the respective coalition itself (e.g. *AILAC* takes the value of 2 whenever *country* is "AILAC").
- 0: if *country* is neither a member of the coalition nor the coalition itself. This is also the case when there are partial overlaps between two coalitions (e.g. *G77* takes the value of 0 whenever *country* is "AOSIS", because not all AOSIS members are part of the G77 and China).

Thus, small coalitions are coded as "members" of larger (parent) coalitions if all of their members are also members of the larger one. If there is just one member of the small coalition not being part of the larger one, then the small coalition is coded as not being a member. Such membership of small coalitions within larger coalitions applies to:

- AILAC, ALBA, African Group, Arab Group, BASIC, COMIFAC, Caribbean Community, Central America, CfRN, Congo Basin Countries, LMDCs, OPEC, SICA, SADC as members of the G77/China;
- COMIFAC, Congo Basin Countries, SADC as members of the African Group;
- Congo Basin Countries as members of CfRN;
- Mountain Landlocked Developing Countries as members of G9;
- SICA as member of Central America.

The variables *worldregion* and *worldregion_coalitions* can take the following values:

- 1: Africa
- 2: Americas
- 3: Asia
- 4: Pacific
- 5: Europe

Following coalitions are coded in *worldregion_coalitions* as being located in one specific world region:

- Africa: African Group, COMIFAC, Congo Basin Countries, SADC
- Americas: AILAC, ALBA, Caribbean Community, Central America, SICA
- Asia: Asian Group, Mountain Landlocked Developing Countries
- Europe: Central Group Eleven, EU, Visegrad Group.

5. Data file unfccc_ratification.dta

5.1 File description

This file includes information on date of ratification, entry into force and withdrawal of both the UNFCCC and its Kyoto Protocol by their member states. The data was obtained from the UNFCCC website.

5.2 Key variables and data sources

Variable	Description and data sources
country	Country, string format (see full country list in **Section 6** below).
unfccc_rat	Date of UNFCCC ratification (DD-MMM-YYYY, Stata date format). Data obtained from: http://unfccc.int/essential_background/convention/status_of_ratification/items/2631.php.
kp_rat	Date of Kyoto Protocol ratification (DD-MMM-YYYY, Stata date format). Data obtained from: http://unfccc.int/kyoto_protocol/status_of_ratification/items/2613.php.
unfccc_forc	Date of UNFCCC entry into force (DD-MMM-YYYY, Stata date format). Data from: http://unfccc.int/essential_background/convention/status_of_ratification/items/2631.php.
kp_forc	Date of Kyoto Protocol entry into force (DD-MMM-YYYY, Stata date format). Data from: http://unfccc.int/kyoto_protocol/status_of_ratification/items/2613.php.
kp_withdr	Date of Kyoto Protocol withdrawal (DD-MMM-YYYY, Stata date format). Data from: http://unfccc.int/kyoto_protocol/status_of_ratification/items/2613.php.

6. List of countries and coalitions included in dataset

Individual countries:

Afghanistan	Dominican Republic	Libya	Samoa
Algeria	Ecuador	Liechtenstein	Saudi Arabia
Angola	Egypt	Lithuania	Senegal
Antigua and Barbuda	El Salvador	Luxembourg	Serbia
Argentina	Equatorial Guinea	Madagascar	Serbia and Montenegro
Armenia	Eritrea	Malawi	Seychelles
Australia	Estonia	Malaysia	Sierra Leone
Austria	Ethiopia	Maldives	Singapore
Azerbaijan	Fiji	Mali	Slovak Republic
Bahamas	Finland	Malta	Slovenia
Bahrain	France	Marshall Islands	Solomon Islands
Bangladesh	Gabon	Mauritania	Somalia
Barbados	Gambia	Mauritius	South Africa
Belarus	Georgia	Mexico	Spain
Belgium	Germany	Micronesia	Sri Lanka
Belize	Ghana	Moldova	St. Lucia
Benin	Greece	Monaco	St. Vincent and the Grenadines
Bhutan	Grenada	Mongolia	Sudan
Bolivia	Guatemala	Montenegro	Suriname
Bosnia and Herzegovina	Guinea-Bissau	Morocco	Swaziland
Botswana	Guyana	Mozambique	Sweden
Brazil	Haiti	Myanmar	Switzerland
Bulgaria	Honduras	Namibia	Syrian Arab Republic
Burkina Faso	Hungary	Nauru	Tajikistan
Burundi	Iceland	Nepal	Tanzania
Cambodia	India	Netherlands	Thailand
Cameroon	Indonesia	New Zealand	Timor-Leste

Canada	Iran	Nicaragua	Togo
Cape Verde	Iraq	Niger	Trinidad and Tobago
Central African Republic	Ireland	Nigeria	Tunisia
Chad	Israel	Niue	Turkey
Chile	Italy	Norway	Turkmenistan
China	Jamaica	Oman	Tuvalu
Colombia	Japan	Pakistan	Uganda
Comoros	Jordan	Palau	Ukraine
Congo, Democratic Rep.	Kazakhstan	Palestine	United Arab Emirates
Congo, Republic	Kenya	Panama	United Kingdom
Cook Islands	Kiribati	Papua New Guinea	United States
Costa Rica	Korea, Democratic Rep.	Paraguay	Uruguay
Cote d'Ivoire	Korea, Republic	Peru	Uzbekistan
Croatia	Kuwait	Philippines	Vanuatu
Cuba	Kyrgyz Republic	Poland	Venezuela
Cyprus	Lao PDR	Portugal	Vietnam
Czech Republic	Latvia	Qatar	Yemen
Denmark	Lebanon	Romania	Yugoslavia
Djibouti	Lesotho	Russian Federation	Zambia
Dominica	Liberia	Rwanda	Zimbabwe

Coalitions:

AILAC (Independent Association of Latin America and the Caribbean)
ALBA (Bolivarian Alliance of the Americas)
AOSIS (Alliance of Small Island States)
African Group
Arab Group
Asian Group
BASIC (Brazil, South Africa, India and China)
CACAM (Central Asia, Caucasus and Moldova)
COMIFAC (Central African Forest Commission)
Caribbean Community (CARICOM)
Central America
Central Group Eleven
Coalition for Rainforest Nations (CfRN)
Congo Basin Countries
EITs (Economies in Transition)
EU (European Union)
Environmental Integrity Group (EIG)
G77 (Group of 77 and China)
Group of 9 (G9)
LDCs (Least Developed Countries)
Like Minded Developing Countries (LMDC)
Mountain Landlocked Developing Countries
OPEC (Organization of Petroleum Exporting Countries)
SICA (Central American Integration System)
Southern African Development Community (SADC)
Umbrella Group
Visegrad Group