

# Package ‘idmc’

July 22, 2025

**Title** Load and Wrangle IDMC Displacement Data

**Version** 0.3.1

**Description** Utilities to work with data from the Internal Displacement Monitoring Centre (IDMC) (<<https://www.internal-displacement.org/>>), with convenient functions for loading events data from the IDMC API and transforming events data to daily displacement estimates.

**License** GPL (>= 3)

**Encoding** UTF-8

**RoxygenNote** 7.2.3

**URL** <https://github.com/ocha-dap/idmc>

**BugReports** <https://github.com/ocha-dap/idmc/issues>

**Imports** dplyr, httr, jsonlite, lifecycle, magrittr, stringr, tidyr

**Suggests** knitr, rmarkdown, usethis

**VignetteBuilder** knitr

**Depends** R (>= 2.10)

**NeedsCompilation** no

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**Repository** CRAN

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| idmc_get_data | <i>Get data from the IDMC API</i> |
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### Description

`idmc_get_data()` calls the IDMC API to retrieve displacement data. The data is converted from JSON to a data frame, date columns converted to Date types, and returned as a [dplyr::tibble](#).

### Usage

```
idmc_get_data(api_url = NULL)
```

### Arguments

|                      |                                                                                            |
|----------------------|--------------------------------------------------------------------------------------------|
| <code>api_url</code> | URL to the IDMC API. If NULL, the default, searches for the IDMC_API environment variable. |
|----------------------|--------------------------------------------------------------------------------------------|

### Value

Tibble of displacement data. Description of the data frame variables are included in the documentation for the [IDMC IDU API](#). # nolint

### Examples

```
idmc_get_data()
```

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|                      |                                                        |
|----------------------|--------------------------------------------------------|
| idmc_transform_daily | <i>Transform displacement event data to daily data</i> |
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### Description

`idmc_transform_daily()` transforms event data from the IDMC API (accessed through `idmc_get_data()`). For each event, identified by an `event_id`, potentially duplicated data is filtered out. If there are Recommended figure rows based on the `role` column, then only those are kept. If there are no recommended figures, then only the latest update to the `event_id` data is kept, using `created_at` to find latest updates.

### Usage

```
idmc_transform_daily(
  df,
  min_date = as.Date("2018-01-01"),
  max_date = Sys.Date(),
  filter_min_date = TRUE
)
```

**Arguments**

|                              |                                                                                                                                                                                                                                                                                                          |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <code>df</code>              | Event displacement data frame, generated from <code>idmc_get_data()</code> .                                                                                                                                                                                                                             |
| <code>min_date</code>        | Date to backfill displacement data to. By default, <code>min_date</code> is set the first day of 2018. Only a few observations of the IDMC data are from before 2018, spanning back to 2011. If NULL, no backfilling is done, and the first reported case in the IDMC database is taken as the earliest. |
| <code>max_date</code>        | Date to extrapolate all data to, filling with 0. If the The latest date in the data frame is used if later than <code>max_date</code> . If NULL, no extrapolation is done.                                                                                                                               |
| <code>filter_min_date</code> | If TRUE, the default, filters the data to only contain data from <code>min_date</code> onward. Ensures that the few countries with observations from 2011 but nothing until 2018 do not skew results.                                                                                                    |

**Details**

The data for each event is spread out between the start and end date, with the total displacement uniformly distributed across all days. For each country and displacement type (conflict, disaster, or other), all displacement on a day is summed up to create a total daily displacement figure.

By default, data is backfilled for all countries and displacement types to the first reported date in the IDMC dataset. Data is always infilled with 0 between start and end dates.

**Value**

Data frame of daily displacement with the following columns:

- iso3** Country ISO3 code.
- country** Country or area name.
- displacement\_type** Type of displacement.
- date** Date.
- displacement\_daily** Daily level of displacement.

**Examples**

```
idmc_get_data() %>%
  idmc_transform_daily()
```

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