

Package ‘volcanoes’

July 11, 2026

Title Holocene Volcanoes, Eruptions, and Eruption Events

Version 0.1.1

Description Tidy snapshots of the Smithsonian Institution Global Volcanism Program's Volcanoes of the World database. Provides three data frames covering Holocene volcanoes, their eruptions, and the events recorded during those eruptions. The schema follows the layout popularized by the 'rfordatascience/tidytuesday' 2020-05-12 release, refreshed against the current Global Volcanism Program database.

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Encoding UTF-8

Language en-US

LazyData true

LazyDataCompression xz

Depends R (>= 3.5)

RoxygenNote 7.3.3

URL <https://moderndive.github.io/volcanoes/>,
<https://github.com/moderndive/volcanoes>,
<https://volcano.si.edu/>

BugReports <https://github.com/moderndive/volcanoes/issues>

Suggests dplyr, fs, janitor, pkgdown, purrr, readr, rvest, tibble,
usethis

NeedsCompilation no

Author Chester Ismay [aut, cre]

Maintainer Chester Ismay <chester.ismay@gmail.com>

Repository CRAN

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eruptions	<i>Volcanic eruptions</i>
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Description

One row per eruption recorded by the Global Volcanism Program. Each eruption belongs to a single volcano (volcano_number) and may comprise many [events](#).

Usage

eruptions

Format

A tibble with one row per eruption. Columns include:

volcano_number Integer. GVP volcano identifier; joins to [volcanoes](#).

volcano_name Character.

eruption_number Integer. GVP unique eruption identifier; joins to [events](#).

eruption_category Character. Confirmation status (e.g. "Confirmed Eruption", "Uncertain Eruption", "Discredited Eruption").

area_of_activity Character. Named vent or sub-area within the volcano, when reported.

vei Numeric. Volcanic Explosivity Index, 0–8.

start_year, start_month, start_day Numeric. Eruption start date.

end_year, end_month, end_day Numeric. Eruption end date, where known.

evidence_method_dating Character. Method used to date the eruption.

latitude, longitude Numeric. WGS84 decimal degrees of the active vent.

Modifier and uncertainty columns from the raw GVP export are dropped during the build, matching the rfordatascience/tidytuesday 2020-05-12 layout.

Source

Smithsonian Institution, Global Volcanism Program. https://volcano.si.edu/search_eruption_results.cfm

events	<i>Eruption events</i>
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Description

One row per event observed during an eruption — for example a lava flow, pyroclastic surge, lahar, or ash plume. Many events typically belong to a single eruption.

Usage

events

Format

A tibble with one row per event. Columns include:

volcano_number Integer. Joins to [volcanoes](#).

volcano_name Character.

eruption_number Integer. Joins to [eruptions](#).

eruption_start_year Numeric. Start year of the parent eruption.

event_number Integer. GVP unique event identifier.

event_type Character. Event classification.

event_remarks Character. Free-text notes from GVP.

event_date_year, event_date_month, event_date_day Integer. Date the event was observed.

Source

Smithsonian Institution, Global Volcanism Program. https://volcano.si.edu/search_event_results.cfm

volcanoes	<i>Holocene volcanoes</i>
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Description

One row per volcano with at least one known Holocene eruption, sourced from the Smithsonian Institution's Global Volcanism Program "Volcanoes of the World" database.

Usage

volcanoes

Format

A tibble with one row per volcano. Columns include:

volcano_number Integer. GVP unique volcano identifier.

volcano_name Character. Volcano name.

primary_volcano_type Character. Morphological classification (e.g. stratovolcano, shield, caldera).

last_eruption_year Numeric. Year of the most recently confirmed eruption (negative values are BCE years), or NA for volcanoes with only undated activity.

country Character. Country containing the volcano.

region Character. GVP geographic region.

subregion Character. GVP geographic subregion.

latitude, longitude Numeric. WGS84 decimal degrees.

elevation Numeric. Summit elevation in meters above sea level.

tectonic_settings Character. Plate tectonic context and crustal type.

evidence_category Character. GVP evidence classification for activity (e.g. "Eruption Observed", "Eruption Dated").

dominant_rock_type Character. Primary rock composition where reported.

Additional columns from the GVP export are retained verbatim with names standardized via `janitor::make_clean_names()`.

Source

Smithsonian Institution, Global Volcanism Program. *Volcanoes of the World*. https://volcano.si.edu/volcanolist_holocene.cfm

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