

Package: DegreeDayCalc (via r-universe)

May 21, 2026

Type Package

Title Degree-Day Phenology Calculator (Shiny Application)

Version 0.1.0

Description Provides a Shiny application to compute daily and cumulative degree-days from minimum and maximum temperatures using average, triangular, and sine-wave methods, optionally including an upper temperature threshold. The application maps cumulative thermal accumulation to user-defined developmental stage thresholds and allows exporting tabular and graphical results.

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Depends R (>= 4.1)

Imports shiny, DT, ggplot2

URL <https://github.com/almarazkrae-4081/DegreeDayCalc>

BugReports <https://github.com/almarazkrae-4081/DegreeDayCalc/issues>

Config/pak/sysreqs cmake make libuv1-dev zlib1g-dev

Repository <https://almarazkrae-4081.r-universe.dev>

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RemoteUrl <https://github.com/almarazkrae-4081/degreedaycalc>

RemoteRef HEAD

RemoteSha efd008d2bdc9e2e1b3aa2df29cea54df06afda3e

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degree_days	<i>Compute degree-days from daily minimum and maximum temperatures</i>
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Description

Calculates daily degree-days (thermal units) from Tmin and Tmax using several common methods (average, triangular, sine). Optionally, an upper threshold (Tupper) can be applied in methods supporting it.

Usage

```
degree_days(
  Tmin,
  Tmax,
  Tbase,
  Tupper = NULL,
  method = c("average", "average_cut", "triangle", "triangle_upper", "sine",
             "sine_upper")
)
```

Arguments

Tmin	Daily minimum temperature (°C).
Tmax	Daily maximum temperature (°C).
Tbase	Base (lower developmental threshold) temperature (°C).
Tupper	Optional upper temperature threshold (°C). Required for "triangle_upper" and "sine_upper" methods.
method	Degree-day method. One of "average", "average_cut", "triangle", "triangle_upper", "sine", "sine_upper".

Value

A numeric value (degree-days) rounded to 3 decimals.

DegreeDayCalc	<i>DegreeDayCalc</i>
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Description

Convenience wrapper to launch the Shiny application.

Usage

```
DegreeDayCalc()
```

Value

Runs a Shiny application.

run_app	<i>Launch the DegreeDayCalc Shiny application</i>
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Description

Opens the Degree-Day Phenology Calculator Shiny app bundled with the package.

Usage

```
run_app()
```

Value

Runs a Shiny application.

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