Package: nycterrain (via r-universe)

June 4, 2026

Title NYC Bare-Earth Terrain Elevation

Version 0.0.1.9000

Description Bare-earth digital elevation model for New York City, derived from 2010 LiDAR. Provides 50-foot and 100-foot resolution rasters masked to the NYC borough boundaries, plus contour lines suitable for ggplot2 overlays.

License MIT + file LICENSE

URL https://github.com/kjhealy/nycterrain

BugReports https://github.com/kjhealy/nycterrain/issues

Depends R (>= 3.5)

Encoding UTF-8

LazyData true

LazyDataCompression xz

Roxygen list(markdown = TRUE)

RoxygenNote 7.3.3

Imports terra (>= 1.7.0)

Suggests ggplot2, sf (>= 1.0.0), tibble (>= 3.0.0)

Config/pak/sysreqs libgdal-dev gdal-bin libgeos-dev libproj-dev libsqlite3-dev

Repository https://kjhealy.r-universe.dev

Date/Publication 2026-05-05 22:58:44 UTC

RemoteUrl https://github.com/kjhealy/nycterrain

RemoteRef HEAD

RemoteSha 6fcc3e985ef764ccfe93b183ecf6f4c07c28e49a

Contents

`nyc_terrain_100ft` *Get the NYC bare-earth elevation raster at 100ft or 50ft resolution*

Description

Returns a terra::SpatRaster of bare-earth elevation in feet above sea level (NAVD88), masked to the New York City borough boundaries. The single layer is named `elev`. CRS is EPSG:2263 (NAD83 / New York Long Island, ftUS). Cells outside the city boundary are `NA`.

Usage

```
nyc_terrain_100ft()

nyc_terrain_50ft()
```

Details

These rasters are mean-aggregated from the City of New York's 1-foot Digital Elevation Model derived from 2010 LiDAR.

Value

A terra::SpatRaster with one layer (`elev`).

Examples

```
## Not run:
library(terra)
r <- nyc_terrain_100ft()
plot(r)

# Hillshade with terra
slp <- terrain(r, "slope", unit = "radians")
asp <- terrain(r, "aspect", unit = "radians")
hs <- shade(slp, asp, angle = 35, direction = 315)
plot(hs, col = grey(0:100 / 100), legend = FALSE)

## End(Not run)
```

nyc_terrain_contours_sf *NYC bare-earth elevation contours*

Description

Contour lines derived from the 100-foot bare-earth Digital Elevation Model. Useful as a lightweight elevation overlay for ggplot2 maps. EPSG:2263, NAD83 / New York Long Island (ftUS).

Usage

```
nyc_terrain_contours_sf
```

Format

`nyc_terrain_contours_sf`**:**

A simple feature collection of multilinestrings:

elev_ft Contour level, in feet above sea level (NAVD88).

geometry MULTILINESTRING geometry in EPSG:2263.

Details

Contours are computed from the 100-foot mean-aggregated DEM via `terra::as.contour()` at 50 evenly spaced levels covering the city's elevation range. For higher-resolution work, derive your own contours from `nyc_terrain_50ft`.

Author(s)

Kieran Healy

Source

City of New York, 1-foot Digital Elevation Model (DEM): https://data.cityofnewyork.us/City-Government/1-foot-Digital-Elevation-Model-DEM-/dpc8-z3jc

nyc_terrain_path *Get the file path to a bundled NYC terrain GeoTIFF*

Description

Returns the path to a GeoTIFF bundled with the package. Useful when you want to read the raster with another tool (e.g. `stars`, GDAL, `rayshader`) instead of `terra`.

Usage

```
nyc_terrain_path(resolution = c("100ft", "50ft"))
```

Arguments

`resolution`	Either `"100ft"` (default) or `"50ft"`.

Value

A character string file path.

Examples

```
nyc_terrain_path()
nyc_terrain_path("50ft")
```

Index