Package: mgrsrev (via r-universe)

June 5, 2026

Title What the Package Does (One Line, Title Case)

Version 0.0.0.9000

Description What the package does (one paragraph).

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

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Contents

`mgrs_crs` *UTM CRS (EPSG code) for an MGRS zone and hemisphere*

Description

UTM CRS (EPSG code) for an MGRS zone and hemisphere

Usage

```
mgrs_crs(zone, northp)
```

Arguments

zone	Integer UTM zone number (1-60).
northp	Logical or integer; TRUE/1 = northern hemisphere.

Value

Character EPSG string, e.g. "EPSG:32755".

Examples

```
r <- mgrs_reverse("55GEP")
mgrs_crs(r["zone"], r["northp"])
# [1] "EPSG:32755"

# Full pattern: code -> lonlat bbox
# r <- mgrs_reverse("55GEP")
# reproj::reproj_extent(r[c("xmin","xmax","ymin","ymax")],
#                       "EPSG:4326", source = mgrs_crs(r["zone"], r["northp"]))
```

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mgrs_reverse *Decode an MGRS code to a UTM bounding box*

Description

Decode an MGRS code to a UTM bounding box

Usage

```
mgrs_reverse(code)
```

Arguments

code	Character MGRS code, spaces optional, e.g. "55GEP", "31UCT037872". Must be a standard UTM-zone code (GZD starts with digits 1-60). Precision 0-5 supported (4/5-char to 14/15-char codes).

Details

Returns the SW-corner bbox of the MGRS square, consistent with the NGA spec (truncation, not rounding). For precision 0, the full 100 km square; for precision N the sub-cell is 1e5 / 10^N metres on each side. Polar UPS zones (A, B, Y, Z) are not handled. No validity check is performed: any syntactically parseable code is decoded. Use mgrs_crs() to obtain the corresponding EPSG code.

Value

Named numeric vector: zone UTM zone number (1-60) northp 1 = northern hemisphere, 0 = southern xmin, xmax UTM easting of SW/NE corner (metres) ymin, ymax UTM northing of SW/NE corner (metres, false northing in S hemi)

See Also

mgrs_crs

Examples

```
mgrs_reverse("55GEP")
mgrs_reverse("55GEP5050")  # precision 2, 1 km cell
```

`mgrs_reverse_df` *Vectorised wrapper around mgrs_reverse*

Description

Vectorised wrapper around mgrs_reverse

Usage

```
mgrs_reverse_df(codes)
```

Arguments

`codes`	Character vector of MGRS codes

Value

data.frame with columns zone, northp, xmin, xmax, ymin, ymax

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