

Great Tables - Oceania

```

from great_tables import GT
from great_tables.data import country pops
import polars as pl
import polars.selectors as cs

# Get vectors of 2-letter country codes for each region of Oceania
oceania = {
    "Australasia": ["AU", "NZ"],
    "Melanesia": ["NC", "PG", "SB", "VU"],
    "Micronesia": ["FM", "GU", "KI", "MH", "MP", "NR", "PW"],
    "Polynesia": ["PF", "WS", "TO", "TV"],
}

# Create a dictionary mapping country to region (e.g. AU -> Australasia)
country_to_region = {
    country: region for region, countries in oceania.items() for country in
countries
}

wide_pops = (
    pl.from_pandas(country pops)
    .filter(
        pl.col("country_code_2").is_in(list(country_to_region))
        & pl.col("year").is_in([2000, 2010, 2020])
    )
    .with_columns(pl.col("country_code_2").replace(country_to_region).alias("region"))
    .pivot(index=["country_name", "region"], columns="year",
values="population")
    .sort("2020", descending=True)
)

(
    GT(wide_pops, rowname_col="country_name", groupname_col="region")
    .tab_header(title="Populations of Oceania's Countries in 2000, 2010, and
2020")
    .tab_spanner(label="Total Population", columns=cs.all())
    .fmt_integer()
)

```

```

/var/folders/_5/l_f9_2dj4n5dpm0ztth7n97c0000gp/

```

```

T/ipykernel_41564/3569039387.py:26: DeprecationWarning: The argument `columns`

```

for `DataFrame.pivot`` is deprecated. It has been renamed to ``on``.
`.pivot(index=["country_name", "region"], columns="year", values="population")`

Populations of Oceania's Countries in 2000, 2010, and 2020

		Total Population		
		2000	2010	2020
Australasia				
Australia		19,028,802	22,031,750	25,655,289
New Zealand		3,857,700	4,350,700	5,090,200
Melanesia				
Papua New Guinea		5,508,297	7,583,269	9,749,640
Solomon Islands		429,978	540,394	691,191
Vanuatu		192,074	245,453	311,685
New Caledonia		213,230	249,750	272,460
Polynesia				
French Polynesia		250,927	283,788	301,920
Samoa		184,008	194,672	214,929
Tonga		102,603	107,383	105,254
Tuvalu		9,638	10,550	11,069
Micronesia				
Guam		160,188	164,905	169,231
Kiribati		88,826	107,995	126,463
Micronesia (Federated States)		111,709	107,588	112,106
Northern Mariana Islands		80,338	54,087	49,587
Marshall Islands		54,224	53,416	43,413
Palau		19,726	18,540	17,972
Nauru		10,377	10,241	12,315