

Great Tables - Oceania

```

from great_tables import GT
from great_tables.data import countrypops
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(countrypops)
    .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	