

Open Data Project

Illiteracy and indigenous languages in Mexico in 2020

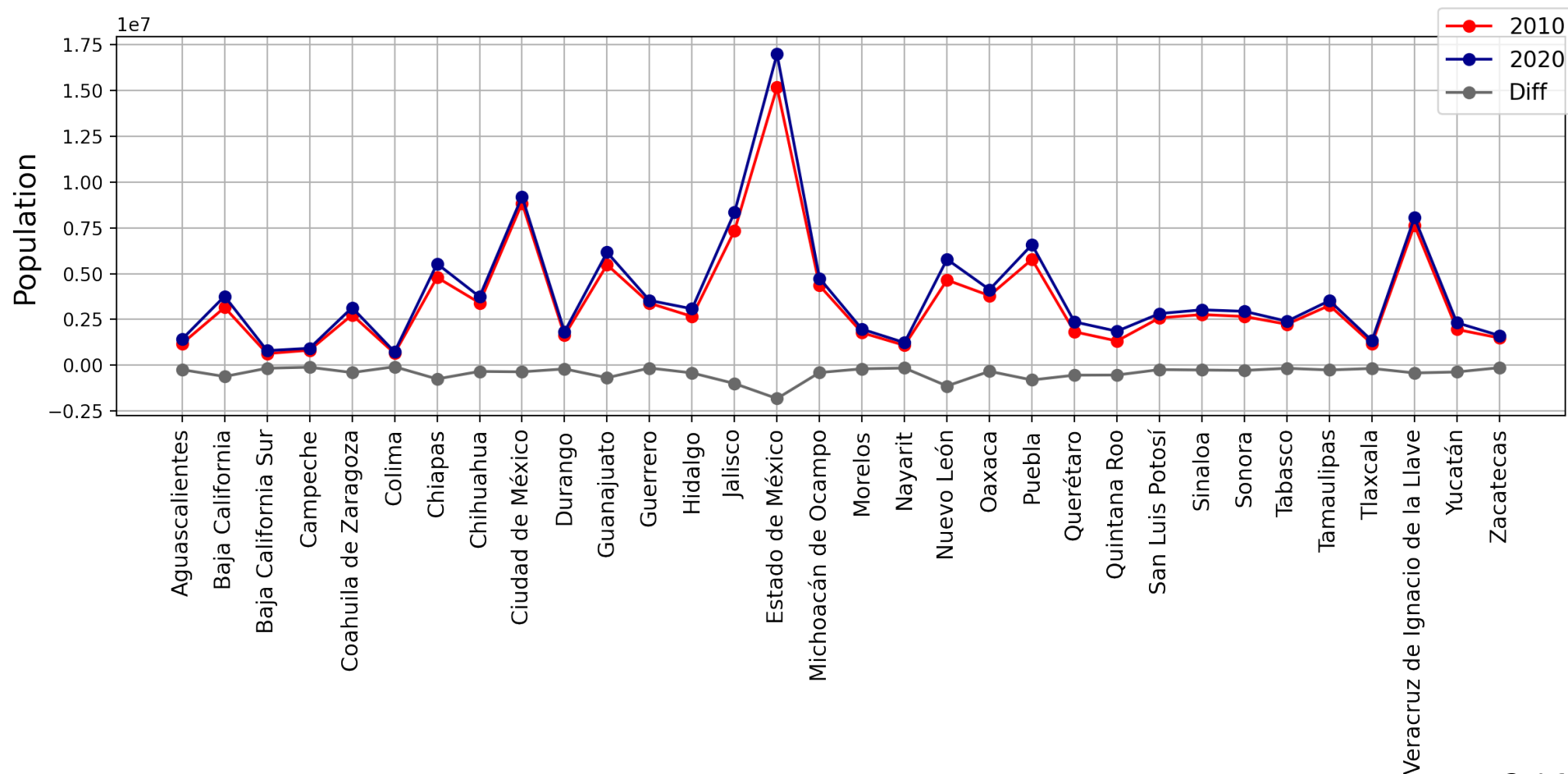
By
Rosalba Juarez Mosqueda



Mexican Population per state in 2010 and 2020



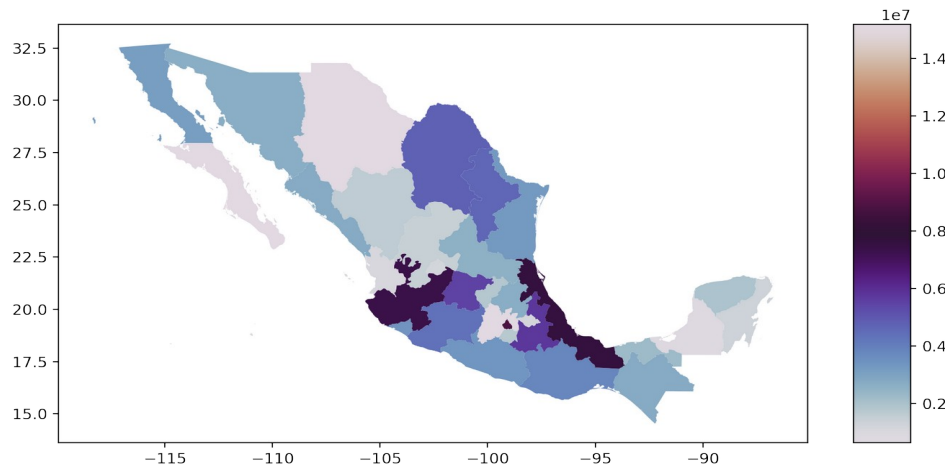
<https://datamexico.org/es/profile/geo/mexico>



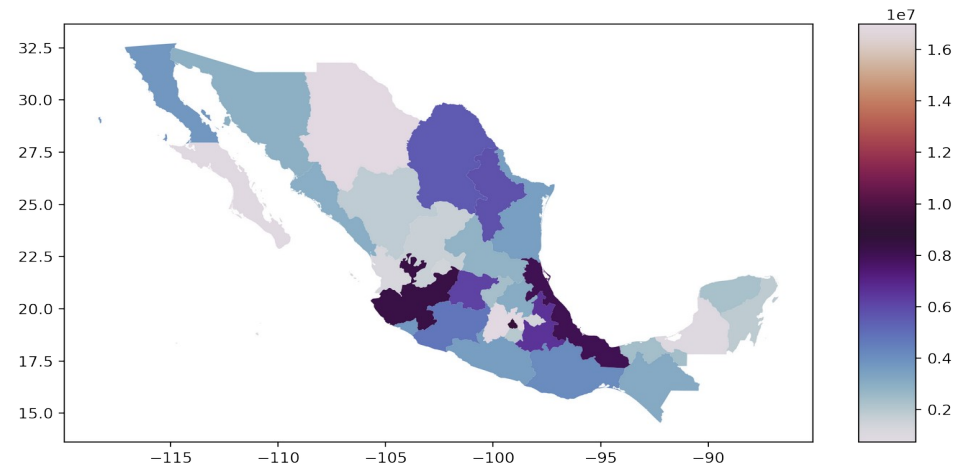
The total population of Mexico was **126,014,024** inhabitants in **2020** and **112,336,538** inhabitants in **2010**

Mexican Population per state in 2010 and 2020

2010

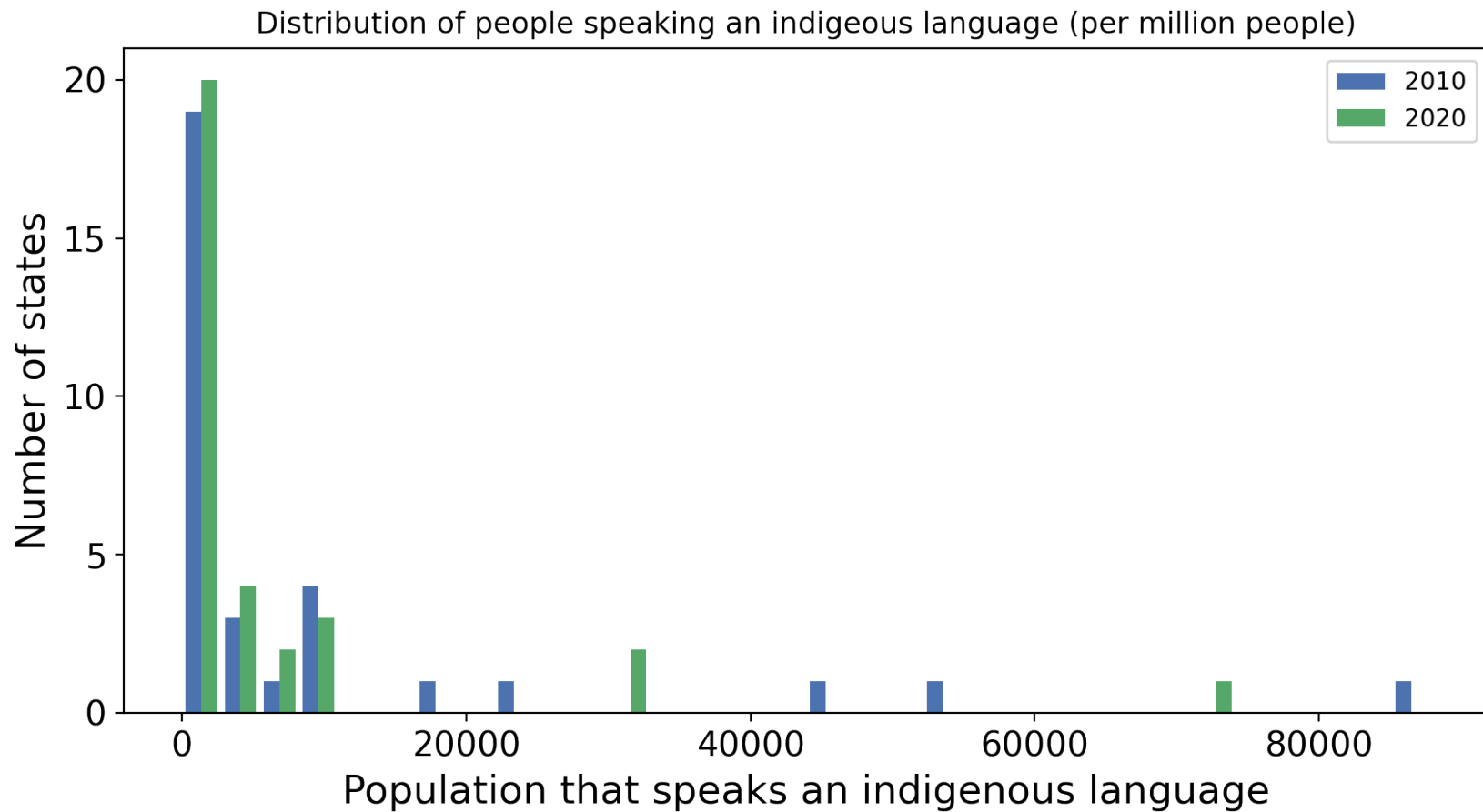


2020



- In 2010, the states with the largest population were Estado de México (15,175,862 inhabitants), Mexico City (8,851,080 inhabitants) and Veracruz (7,643,194 inhabitants).
- In 2020, the states with the largest population were Estado de México (16,992,418 inhabitants), Mexico City (9,209,944 inhabitants) and Jalisco (8,348,151 inhabitants).

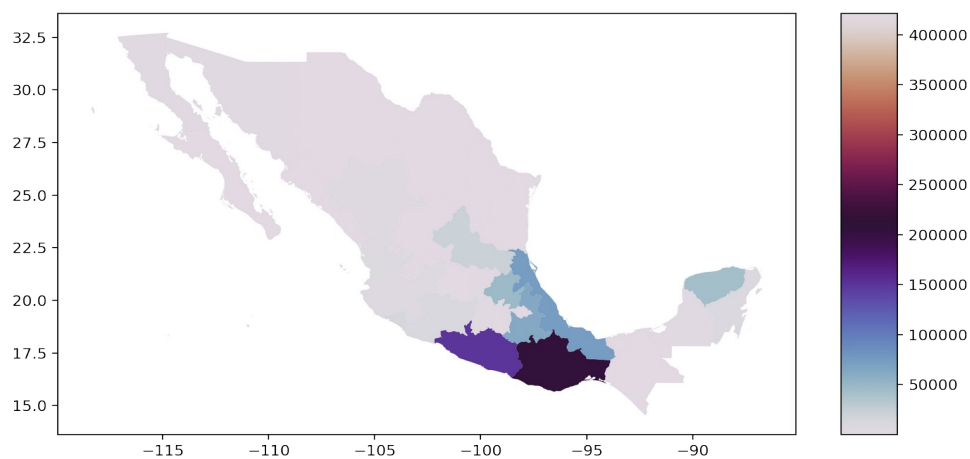
Distribution of Mexican states where an indigenous language was spoken in 2010 and 2020



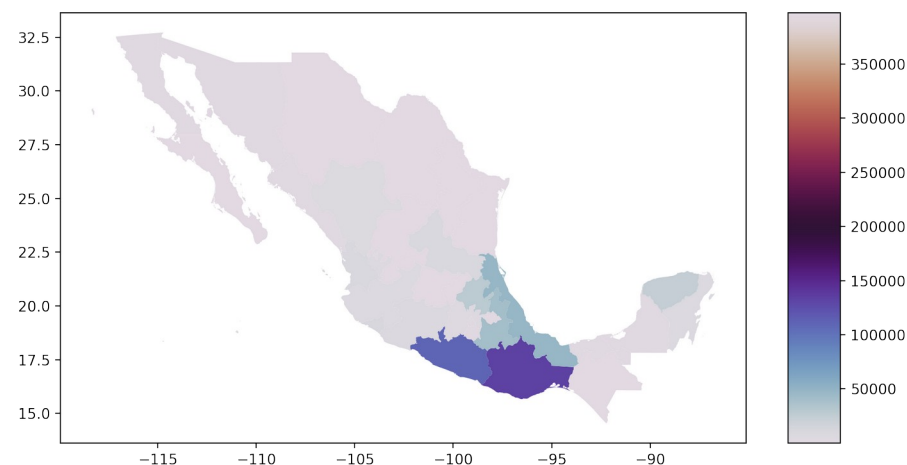
Data distribution: skewed left

Mexican Population (per state) speaking an indigenous language in 2010 and 2020

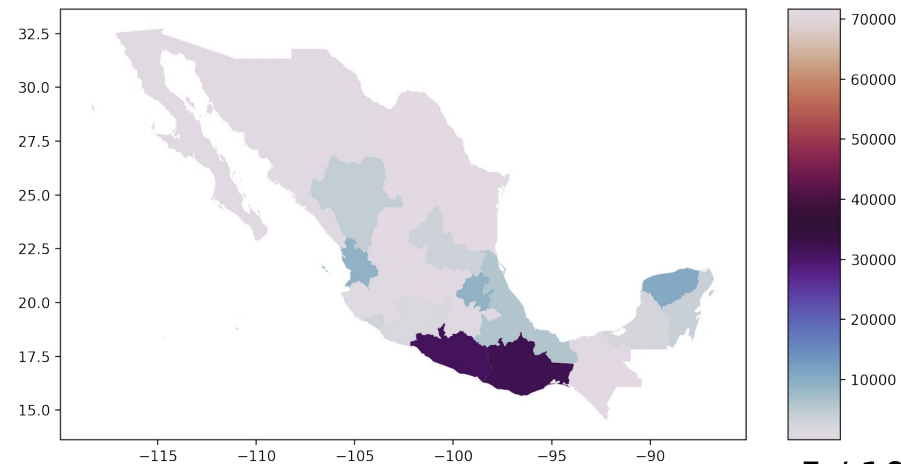
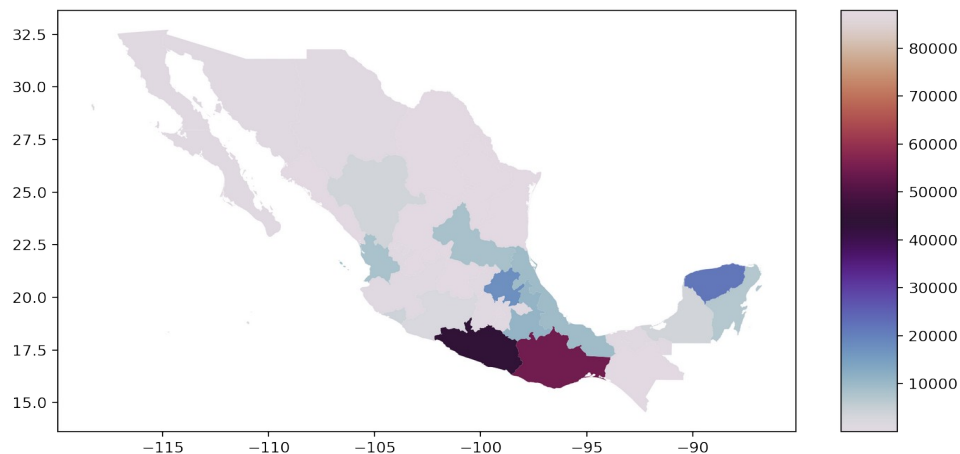
2010



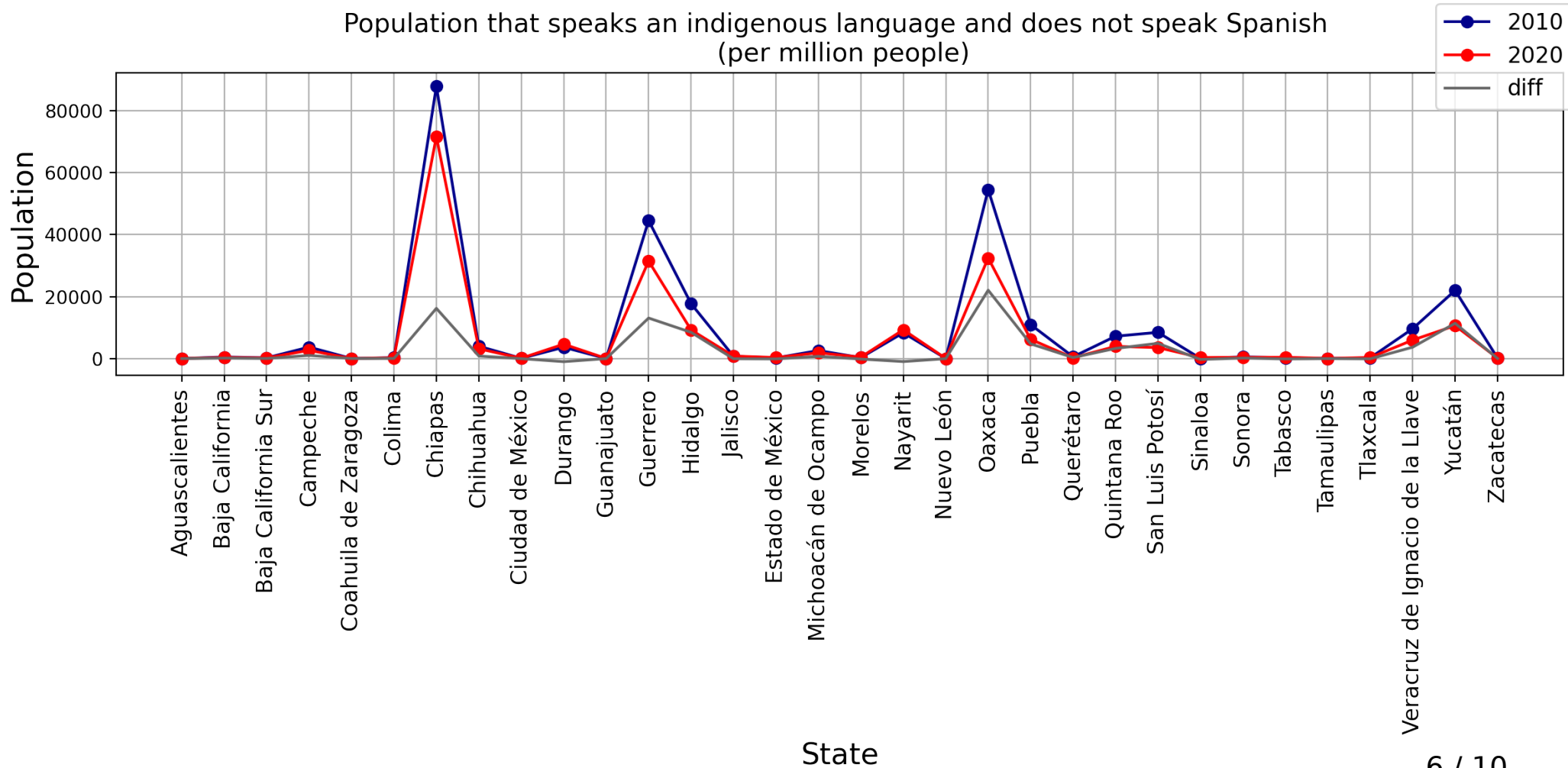
2020



Data per million people



Mexican Population (per state) speaking an indigenous language in 2010 and 2020



Distribution of total Mexican population speaking an indigenous language in 2010 and 2020

Question : Population that speak an indigenous language has significantly changed from 2010 to 2020 ?

$$H_0 : \mu_{2010} = \mu_{2020}$$

$$H_a : \mu_{2010} \neq \mu_{2020}$$

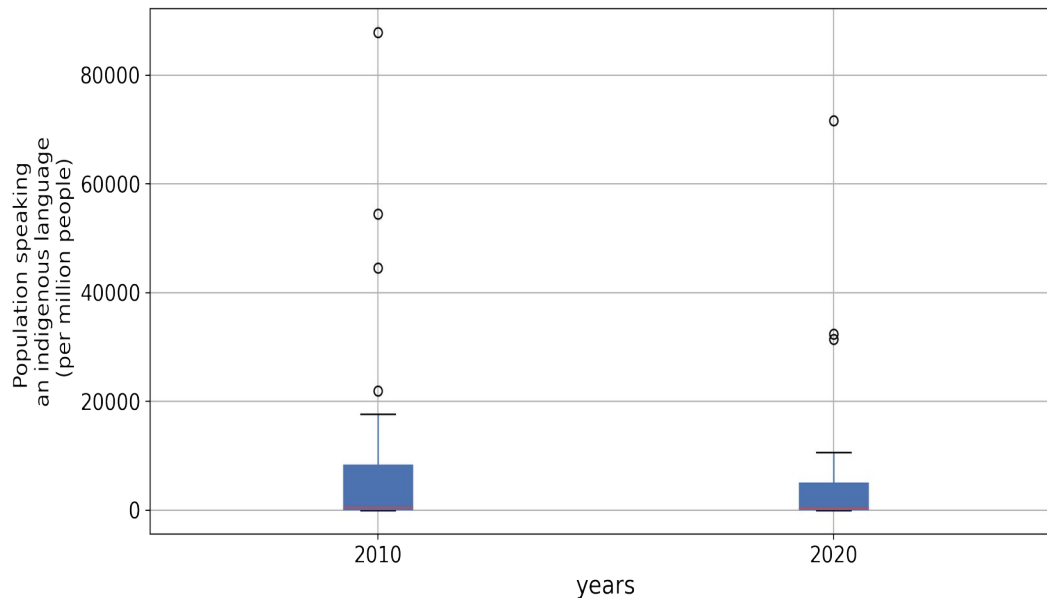
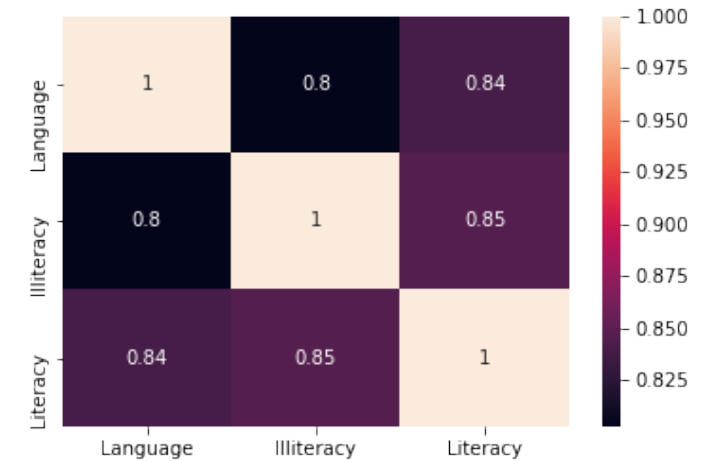
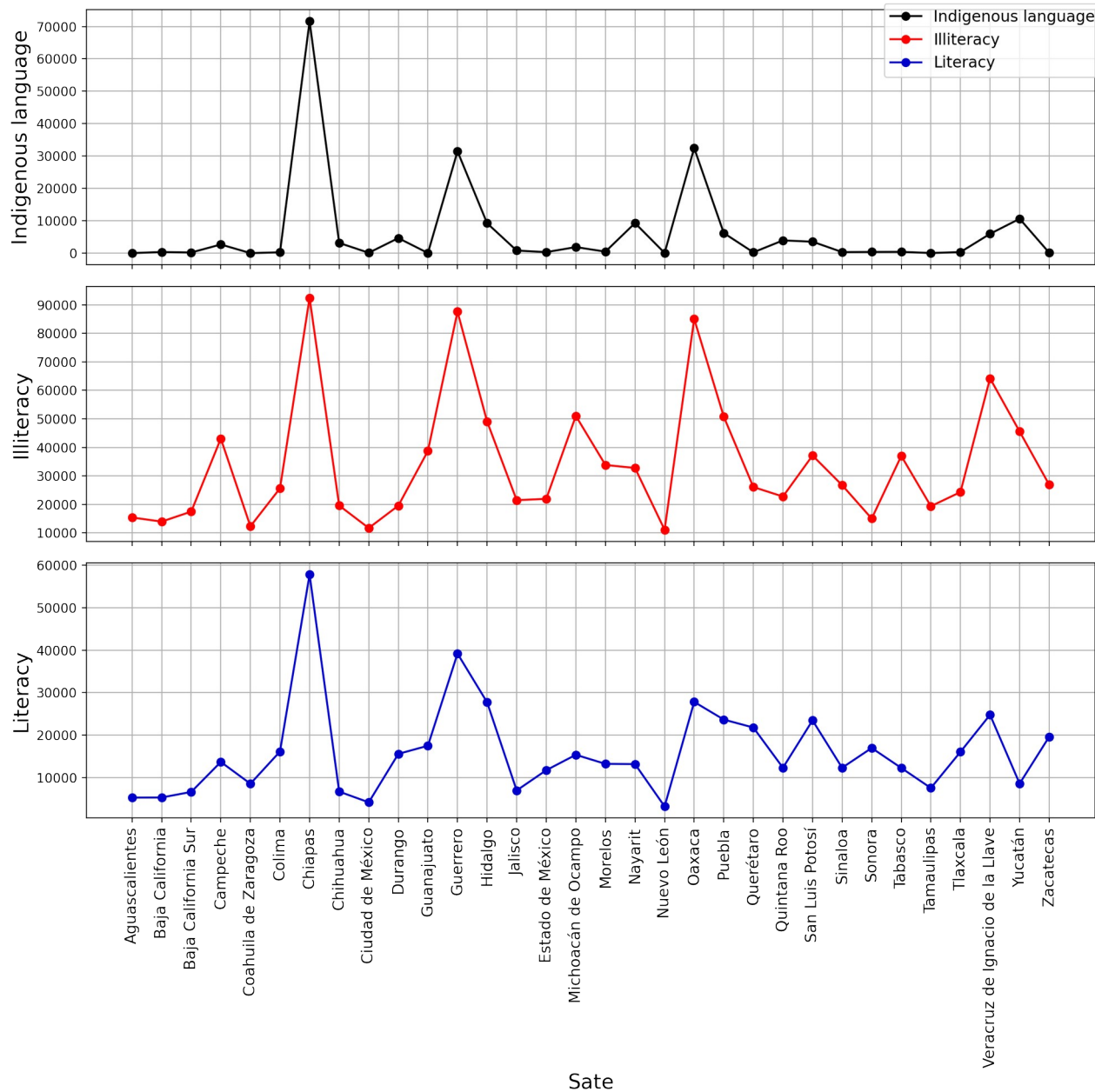


Table 1. Statistics of Mexican population of 3 years and plus that speak an indigenous language (not spanish) in 2010 and 2020

	2010	2020
μ	9040.089	6286.264
σ	19101.117	14302.599
t	0.653	
P value	0.258	

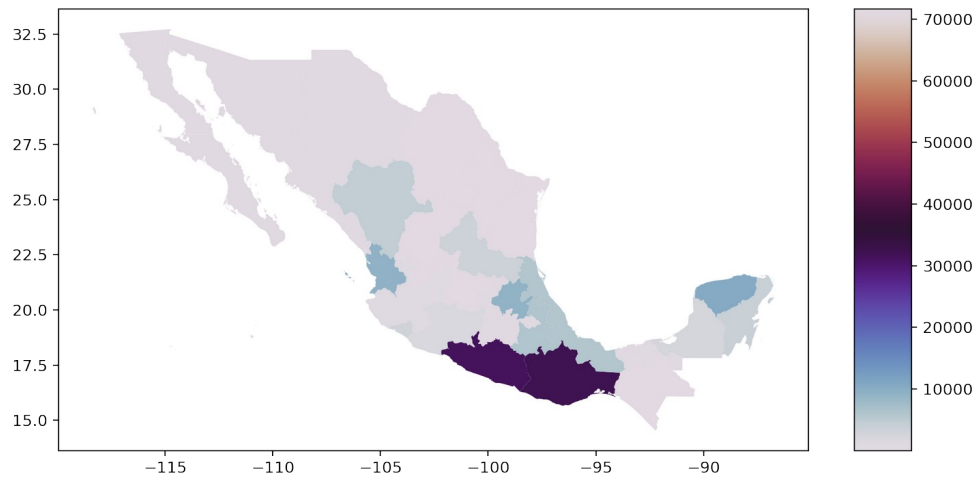
Since $p \text{ value} > 0.05$, we conclude that, with 95 % confidence, there has not been a significant change in the number of people who speak an indigenous language between 2010 and 2020. In other words, **we can not reject our null hypothesis.**

Mexican population speaking an indigenous language (non-spanish-speaking population), illiterate, and under a literacy program (survey in 2020)

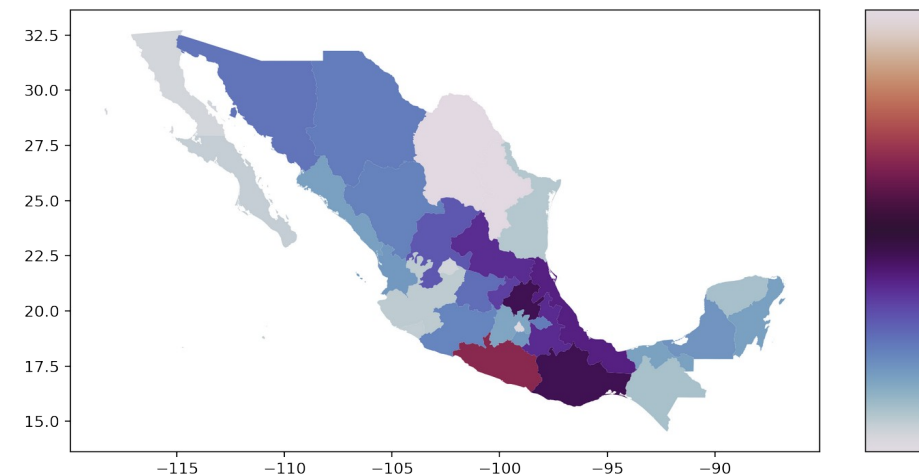


Mexican population speaking an indigenous language (non-spanish-speaking population), illiterate, and under a literacy program (survey in 2020)

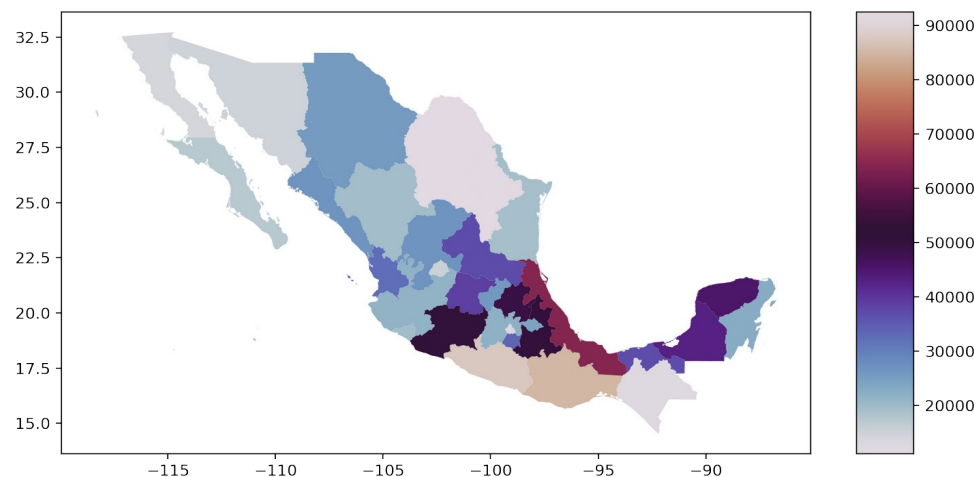
Indigenous language



Receiving literacy



Illiterate



Data per million people

Conclusions

- The total population of Mexico has increased by 10.85 % from 2010 to 2020
- Throughout the decade between 2010 to 2020, there have been four states that concentrate the largest population that speaks an indigenous language and does not speak Spanish :
 - Chiapas
 - Oaxaca
 - Guerrero
 - Yucatan
- Throughout same decade there was not a significant (with 95 % confidence) change in the number of people that speak an indigenous language.
- According to the data from the National Survey of 2020, there is not a strong correlation between the population that does not speak spanish and the population that is following a basic literacy

