



DOES IT RAIN LESS IN MALLORCA?



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Climate change has been causing several problems around the world, such as severe heatwaves, melting polar ice, rising sea levels, and intense storms. Most of these consequences are a big issue around the world, and the Balearic Islands are no exception, as they depend heavily on hydric resources, which have been affected in recent years due to the lack of rain. We are experiencing this problem firsthand. If we don't take action now, we face a future where living with drought will become increasingly difficult, which is why we have decided to take action as soon as possible and raise awareness about it.

INTRODUCTION

METHODOLOGY

In this graphic we have analyzed the rainfall in Mallorca from 1991 to 2026. To start with, we have done an investigation about real data and then we compared and analyzed different graphics. Specifically, we have used graphics from aemet, Conselleria de Medi Ambient i Territori and Sentinel. Based on the climate of Mallorca, a month is considered drought if its rainfall is under 30mm, and rainy if it is above 60mm. Between these two values it is considered normal.



Compared to other years, 2024-2025 winter has been much drier than the average from 1991 to 2020. Specifically, the average from 1991 to 2020 is of 120mm, and the average of 2024-25 is of 60mm. This decrease is one of the many consequences of climate change, and it is a serious problem in the Balearic Islands. [1]

RAINFALL EVOLUTION

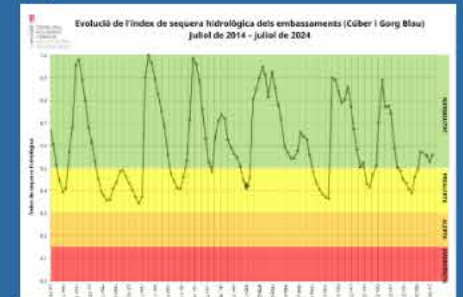
LEVEL OF THE CÚBER AND GORG BLAU RESERVOIRS

In the last 12 years there have been irregular high and low peaks. In recent years there has been an increase in terms of drought, that means that we are having less water overtime. [2]

[3]



[2]



JULY 2014-2024

SENTINEL-2

We see in this graphic that it starts at -0.175 and goes up to -0.130, that means that there is moderated drought in 2025.



The NDWI The Normalized Difference Water Index (NDWI) is used to highlight the appearance of water mass in a satellite image.
0.2 -> 1 = The water level is at surface level
0.0 -> 0.2 = Flooding, humidity
-0.3 -> 0.0 = Moderated Drought, surface without water
-1 -> -0.3 = Drought, surface without water

[4]

DANGERS OF THE DECREASE OF WATER LEVELS

- Loss of biodiversity
- Increased risk of forest fires
- Decreased agricultural productivity
- Water prices increase

WHAT CAN WE DO ABOUT IT?

- Protect local forests = less drought chance
- Repair of leaks in pipes = less drought chance
- Create regulations that limit water use in the tourism sector = More water = less drought chance
- Advertising campaigns for water saving = change people's mindset

REFERENCES

- [1] AEMET
- [2] Conselleria de Medi Ambient i Territori
- [3] Google Earth
- [4] EOS DATA ANALYTICS

CONCLUSIONS

- The rainfall has decreased significantly in the last decades.
- Decreased rainfall is causing more frequent periods of drought.
- These changes can affect different areas.
- It is necessary to conserve water resources.

**WITHOUT WATER THERE
IS NO LIFE.
WITHOUT ACTION THERE
IS NO FUTURE.**