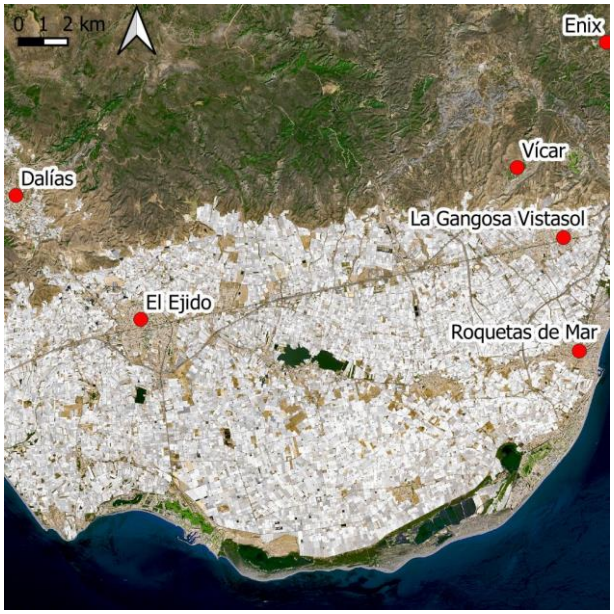
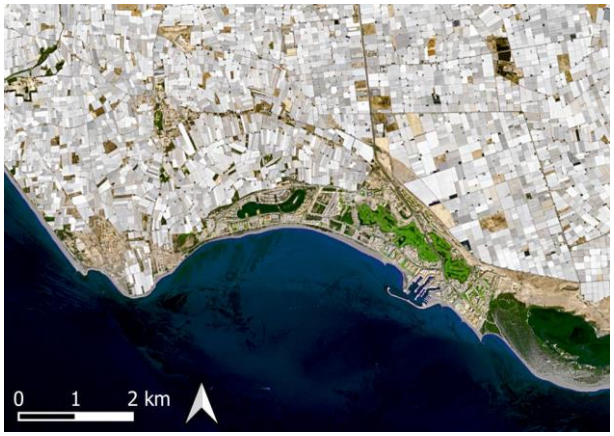
BIO09.1
El Ejido – Greenhouse agriculture



2022-09-10, Sentinel-2

1985-10-17, Landsat5



2022-09-10, Sentinel-2- detail

The coastal plain near the Spanish town El Ejido is famous for its extended greenhouses, the so-called Mar de Plástico. Covering an area of 30,000 hectares, this region has undergone significant coastal changes, which is well visible in the satellite images. An important player in Spain's economy, the Mar de Plástico sustains over 40,000 jobs.

Hand in hand with the landscape evolution, a massive expansion of plastic greenhouses took place, shaping both the physical and socio-economic fabric of the region. Detailed analysis of satellite images allows for a deeper understanding of these changes.

The development of the Mar de Plástico has different impacts. The social landscape is in flux, with shifting employment dynamics and community structures, partly related with illegal migration. Simultaneously, ecological considerations arise, including water usage patterns and concerns about chemical runoff, prompting a deeper exploration of the delicate balance between progress and environmental sustainability.

Exercises

- Look at the satellite image from **1985**.
- Which land cover classes can you identify?
- Compare the satellite images from **1985** and **2022**. Where are the modifications of the landscape most prominent?
- Where can you find an increase of the area covered by greenhouses, where a decrease?
- Focus on the area around the town El Ejido and compare the two satellite images. What can you say about the development of the town?
- Look at the detail Sentinel-2 image from 2022. What landuse do you expect along the coast? Justify your assumptions. Which potential landuse conflicts do you expect?

Additional Material

View over the greenhouses and the town of El Ejido (photograph: ANE)

Links and Sources

- https://www.esa.int/ESA_Multimedia/Images/2021/08/El_Ejido_Spain - Detailed image taken by ESA Astronaut Thomas Pesquet from the International Space Station ISS.