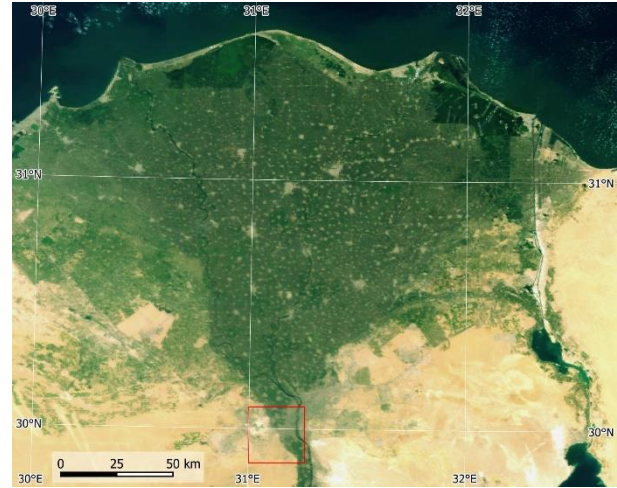
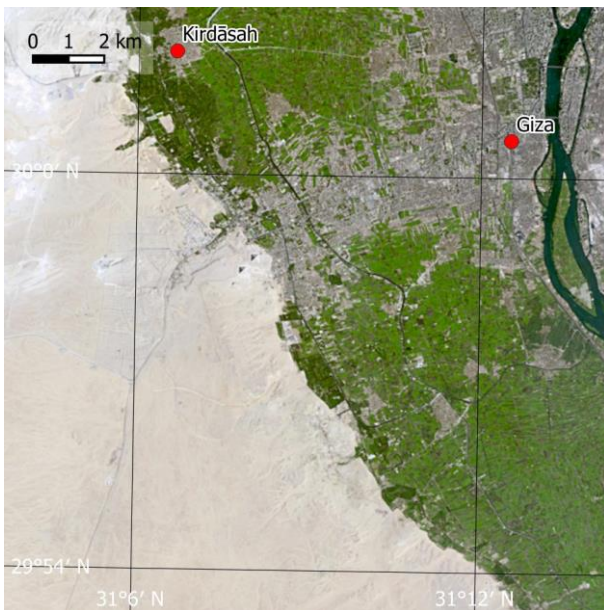


Nile Delta, 2002-12-05, Envisat MERIS



Nile Delta, 2023-05-25, Sentinel-3



Giza and the east of Cairo, 1987-04-13, Landsat 5



Giza and the east of Cairo, 2023-04-03, Sentinel-2

Located at the fertile banks of the Nile River, Cairo, the capital of Egypt, has a rich history that traces its roots back over more than 4,000 years. One fascinating aspect of Cairo's development is its proximity to the Giza Plateau, home to the Pyramids and the Great Sphinx.

Cairo's foundation dates to the 10th century AD when the Fatimid Caliphate established it as a strategic military outpost. Initially a center of governance and trade, the city gradually expanded as an urban hub. The influence of Giza's ancient monuments on the city's development cannot be understated, as the pyramids attracted pilgrims and travelers from around the world.

Over the centuries, Cairo became a melting pot of cultures, blending ancient Egyptian, Islamic, and various regional influences. The Islamic heritage of Cairo, evident in its mosques and palaces, merged with the ancient structures of Giza. As Cairo grew, it extended westward, embracing the Giza Plateau and incorporating the nearby villages.

In contemporary times, Cairo has evolved into a bustling metropolis, but its close association with Giza remains a vital aspect of its identity. The Pyramids of Giza and the Sphinx continue to serve as prominent symbols of Egyptian heritage, drawing tourists and archaeologists from across the globe. As a result, Cairo's proximity to these ancient wonders has played a significant role in establishing the city as an indispensable center for tourism, education, and cultural exchange.



Exercises

- Look at the overview satellite image maps on top of the previous page.
- Compare the overview satellite images showing the Nile delta in **2023** and **2002**. Where are the changes in the landscape most prominent?
- Where can you find an increase of agricultural land, where a decrease? What do you think are the sources of water required for irrigating these areas?
- Look at the detail satellite images showing Giza and the east of Cairo.
- Compare the images from **1987** and **2023**.
- Which differences can you identify? Focus on the built-up area.
- Can you identify the pyramids of Giza? How has their environment changed?

Additional Material



The Great Pyramids have been surrounded by the growing city of Cairo (photograph KaiAbuSir)

Links and Sources

- https://www.esa.int/ESA_Multimedia/Images/2021/11/Cairo_Egypt - growth of Cairo between 1985 and 2015, results of the World Settlement Footprint Evolution based on satellite data.
- https://www.esa.int/ESA_Multimedia/Images/2015/11/Cairo_Egypt - description of a Sentinel-2 dataset showing Cairo at the rim of the Nile delta.
- https://www.esa.int/Applications/Observing_the_Earth/Cairo_and_the_Nile_Delta_Egypt - Envisat ASAR radar satellite image of Cairo highlighting the fertile land in the valley and delta of the Nile (data: 2004).
- <https://earth.esa.int/web/earth-watching/image-of-the-week/content/-/article/cairo-egypt-sentinel/> - ESA Earth Watching page covering Cairo with Sentinel-1 and Sentinel-2 image (data: 2016).

