



Landsat5, 1984-04-23



Landsat5, 2010-09-22



Sentinel-2, 2016-07-20



Sentinel-2, 2023-05-10 (overlay: land reclamation projects)

Coastal city development

Wenzhou, a coastal city in southeastern China, is an example of the quick development of Chinese communes. To meet the growing demands of urban and economic development it has embarked on large land reclamation projects. These projects involve the creation of new land by filling in coastal areas with sand and soil and can be found in many places along the coast of China.

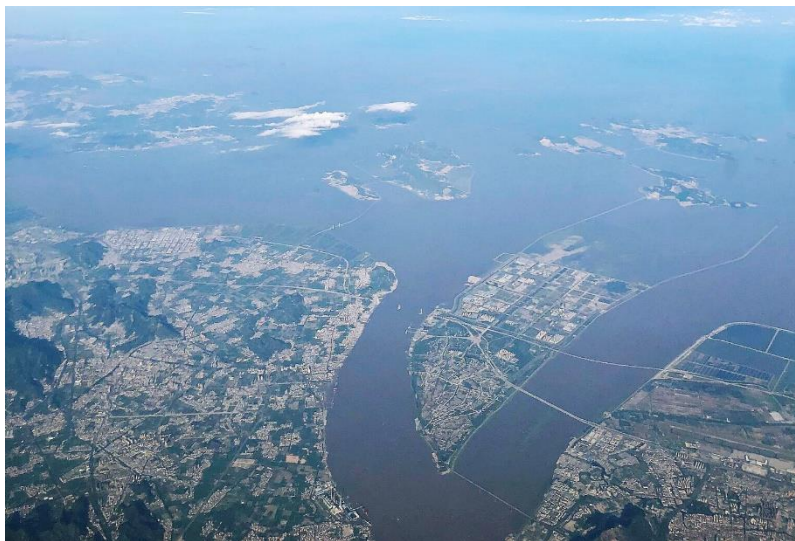
Wenzhou's land reclamation projects have been executed in several phases over the past few decades and have played a significant role in creating land for residential, commercial, and recreational purposes. Additionally, the projects aim at preventing coastal floods. The Oufei Project is the largest single land reclamation project in China. Comparing satellite maps of the region reveal the extent of the landscape change in the region.

Environmental sustainability is an important factor in Wenzhou's land reclamation projects, as they influence the local tidal currents and the marine ecosystem. Measures have been put in place to mitigate ecological impact, including the establishment of protected marine areas, the restoration of wetlands, and the implementation of eco-friendly construction practices.

Exercises

- **Satellite Maps:**
 - Look at the satellite image maps and discuss the changes that occurred in the region between 1984 and 2023.
 - Which factors have limited the growth of the settlement areas?
 - Try to identify areas in which these limitations have been overcome and describe how this was done.
 - Try to identify changes in the land-use in the region and especially the land-use in the newly gained areas.
 - Using the overlay of the land reclamation areas, try to estimate the areas gained by the projects.

Additional Material



Aerial view of the coast near Wenzhou (photograph: Simon Wade).

Links and Sources:

- <https://www.seetao.com/details/212920.html> - detailed description of the Oufei land reclamation project.