



-----

**Author:** Dr. He Yin, Assistant Professor, Department of Geography, Kent State University

Contact: hyin3@kent.edu

https://www.kent.edu/node/he-yin

\_\_\_\_\_\_

**Goal:** Assess the impacts of the war on agricultural lands in Gaza since the breakout of the 2023 Israel-Hamas War.

We focus on two agricultural land uses: tree crops and greenhouses.

**Satellite images:** 3-m PlanetScope and 50-cm SkySat imagery © Planet Labs PBC obtained in 2023 and 2025

## **Definitions:**

Tree crops: olives, orchards, etc.

Greenhouses: any crops that are covered in a structure with walls and a roof made principally of transparent material.

## Approaches:

Because tree crops and greenhouses are very different in their physical properties, I mapped their damages separately using different remote sensing algorithms. The methods of this work will be published in the journal *Science of Remote Sensing* (Yin et al., in press).

Yin, H. Eklund, L. Habash, D. Qumsiyeh, M. Van Den Hoek, J. (2025) Evaluating warinduced damage to agricultural land in the Gaza Strip since October 2023 using PlanetScope and SkySat imagery. *Science of Remote Sensing*. DOI: 10.1016/j.srs.2025.100199

\_\_\_\_\_\_

## Citation, attribution, use, and distribution

If you use these maps in your reporting, please include the following citation (hyperlinks embedded):

Source: Damage analysis by <u>Dr. He Yin</u> of Kent State University, based on the method published by Yin et al., (DOI: <u>10.1016/j.srs.2025.100199</u>)

Yin, H. et al., (2025) Evaluating war-induced damage to agricultural land in the Gaza Strip since October 2023 using PlanetScope and SkySat imagery. *Science of Remote Sensing*. DOI: 10.1016/j.srs.2025.100199

Please email a PDF and links to any published versions of these maps. If you can share a non-paywalled/gift version of the link, that would be much appreciated.