

# The land-sea interface mapping: China's coastal land covers at 10 meters for 2020

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## Motivation

- There is an urgent need to better understand human-environment interactions within those vulnerable land-sea interface (LSI) areas and prioritize the balance between conservation and development.
- Recent advances in multi-source and multi-scale remote sensing make possible new accuracy in large-scale monitoring of the complicated and highly dynamic LSI.
- **Inconsistent data quality, mapping standards, modelling methods, and spatiotemporal coverage of datasets** have often yielded different LSI mapping results, making elusive an accurate, reliable and comprehensive socio-ecological assessment.

## Data Summary and Methodology

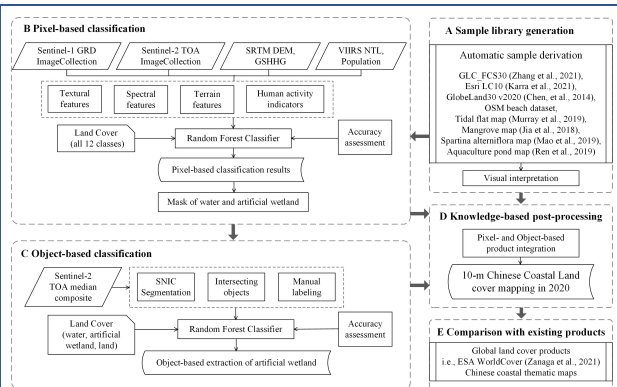


Fig. 1: Flowchart of the research methodology.

## Results

Table. 1 Comparison of mapping accuracy on China's coast.

Dataset	CCLC*	WorldCover	GLC_FCS30	GlobeLand30	EsriLC
OA	83%	69%	53%	57%	56%

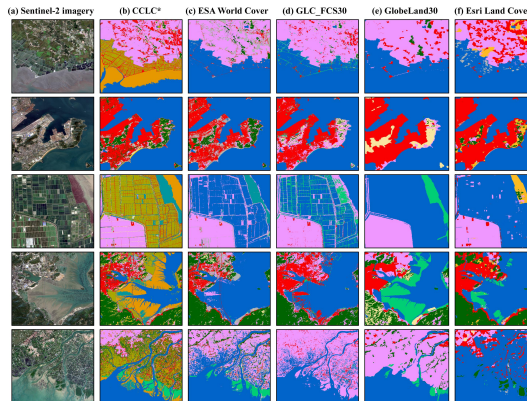


Fig. 2: Local details of five land cover products.

## Summary

- This study provides a reliable and spatially accurate LSI mapping result that can be used to quantify detailed coastal land covers at 10 meters in China for 2020.

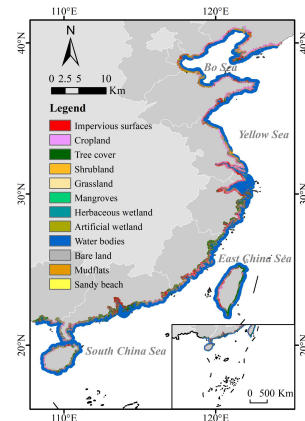


Fig. 3: Map of China's coastal land covers in 2020.

## References

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