



Urban Climate Map Application in High Density Cities: A Case Study of Macau

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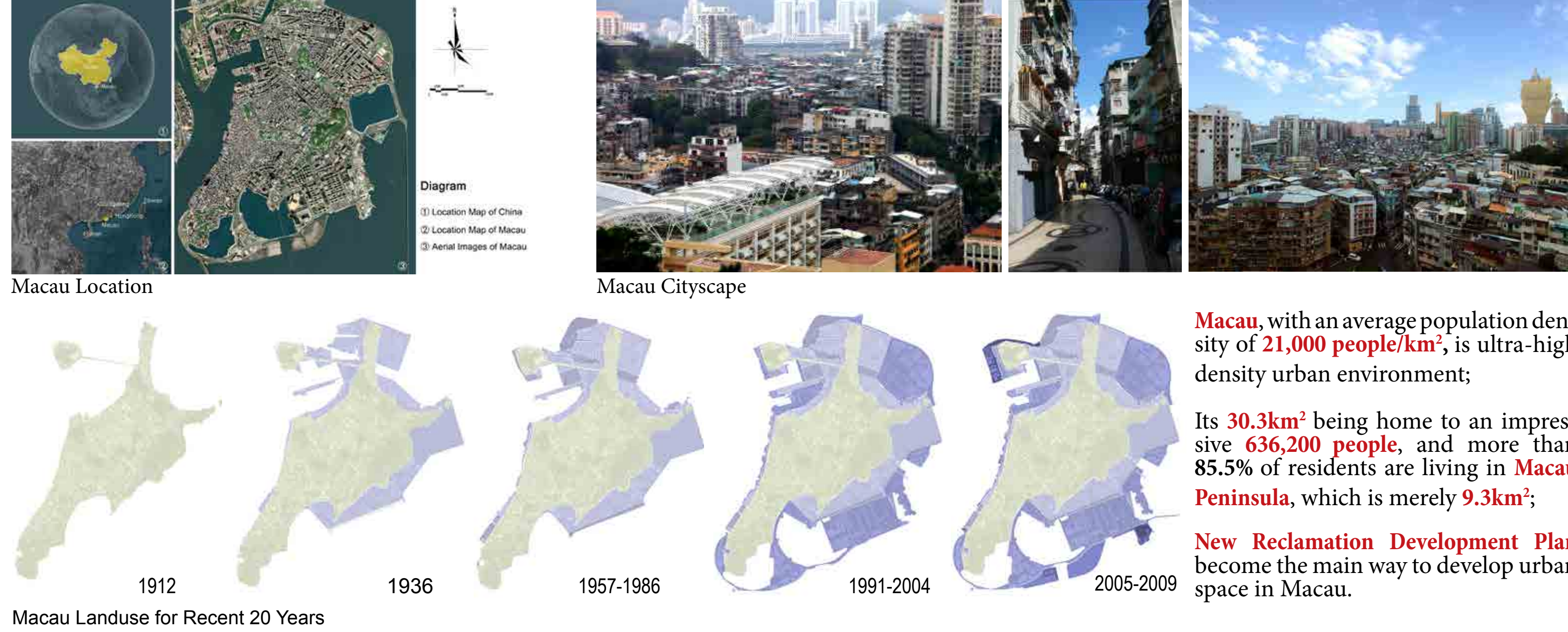
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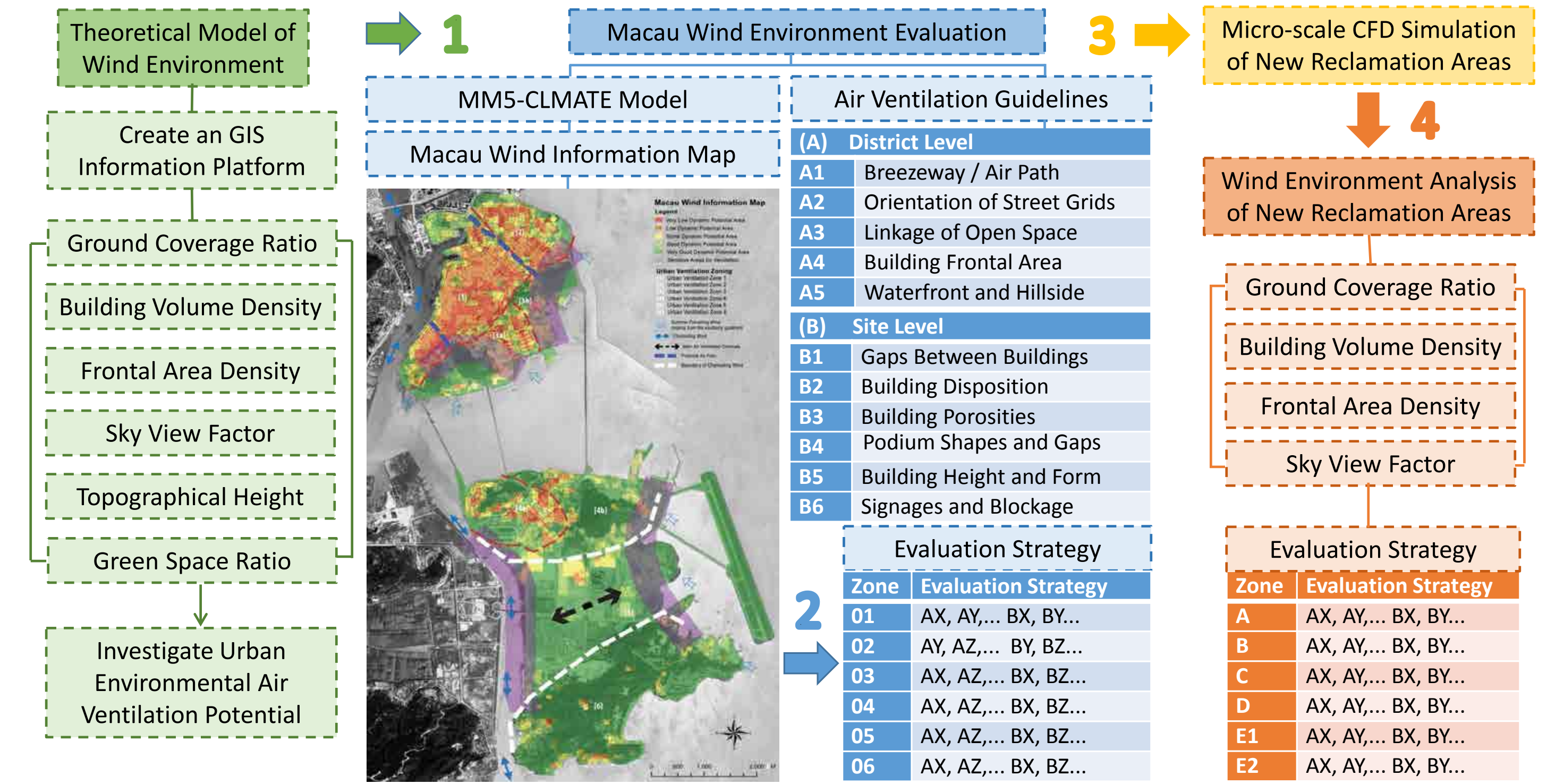
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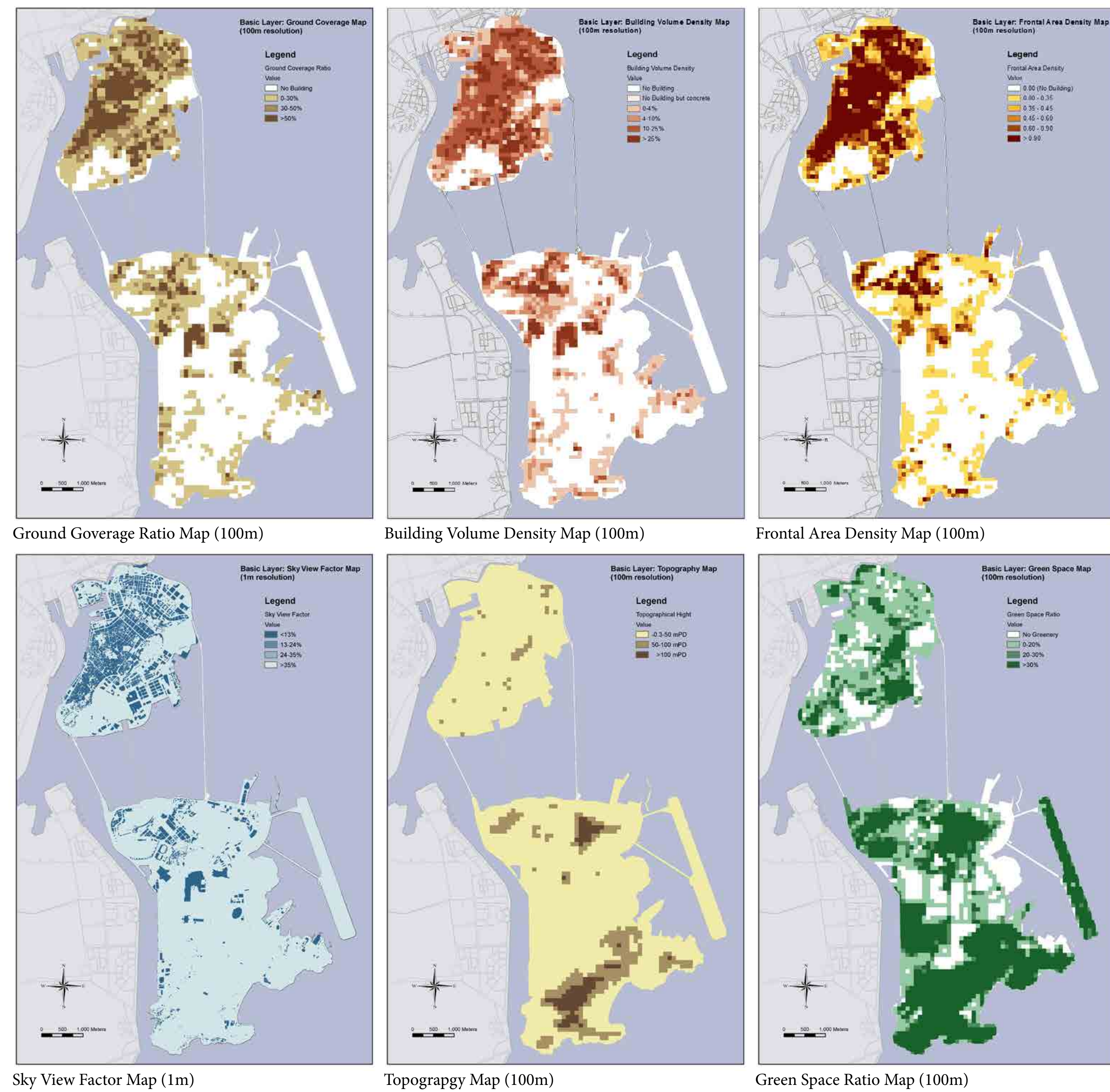
Background:



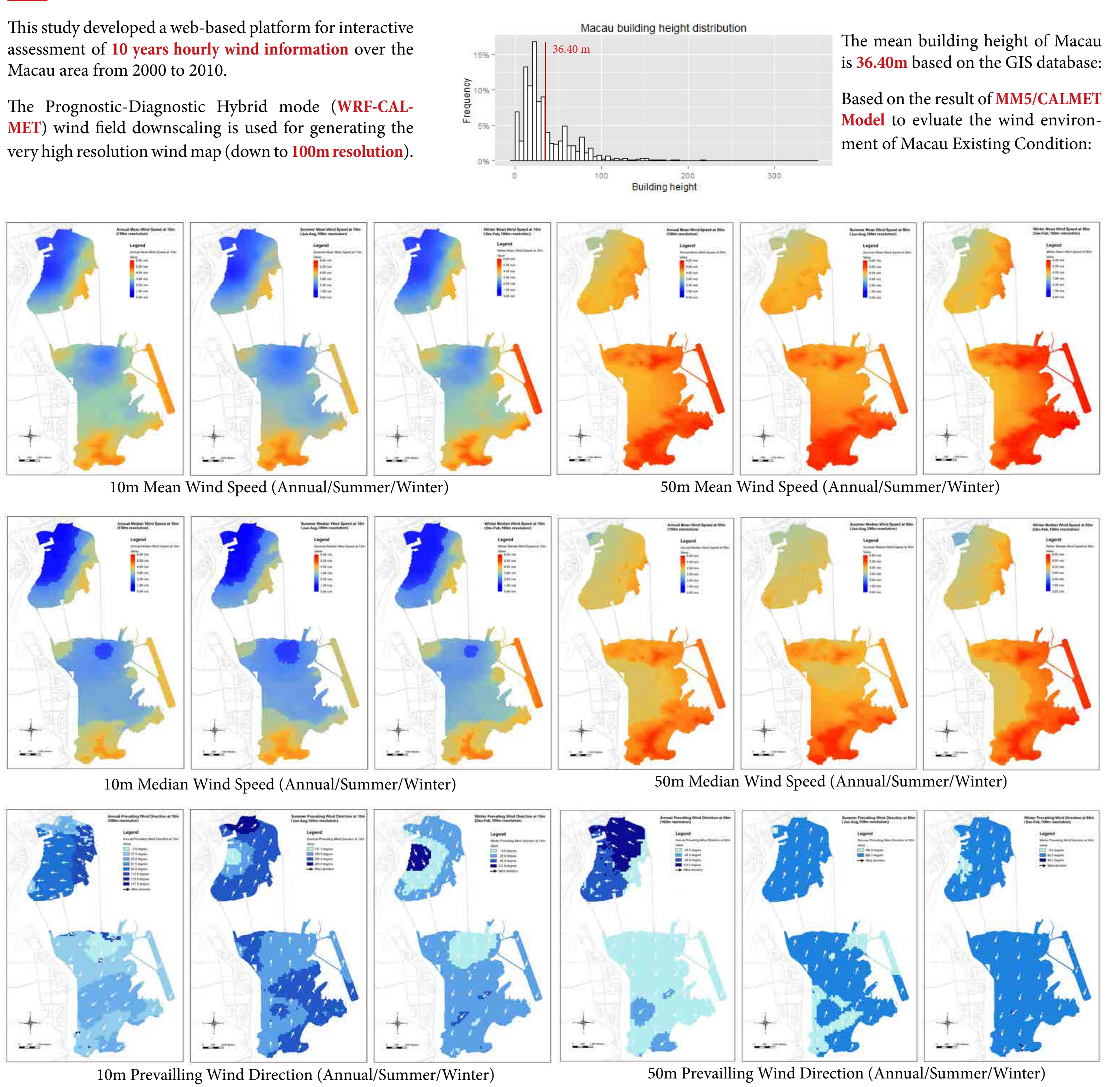
Technology Roadmap:



1. GIS-based Existing Analysis of Wind Environment:

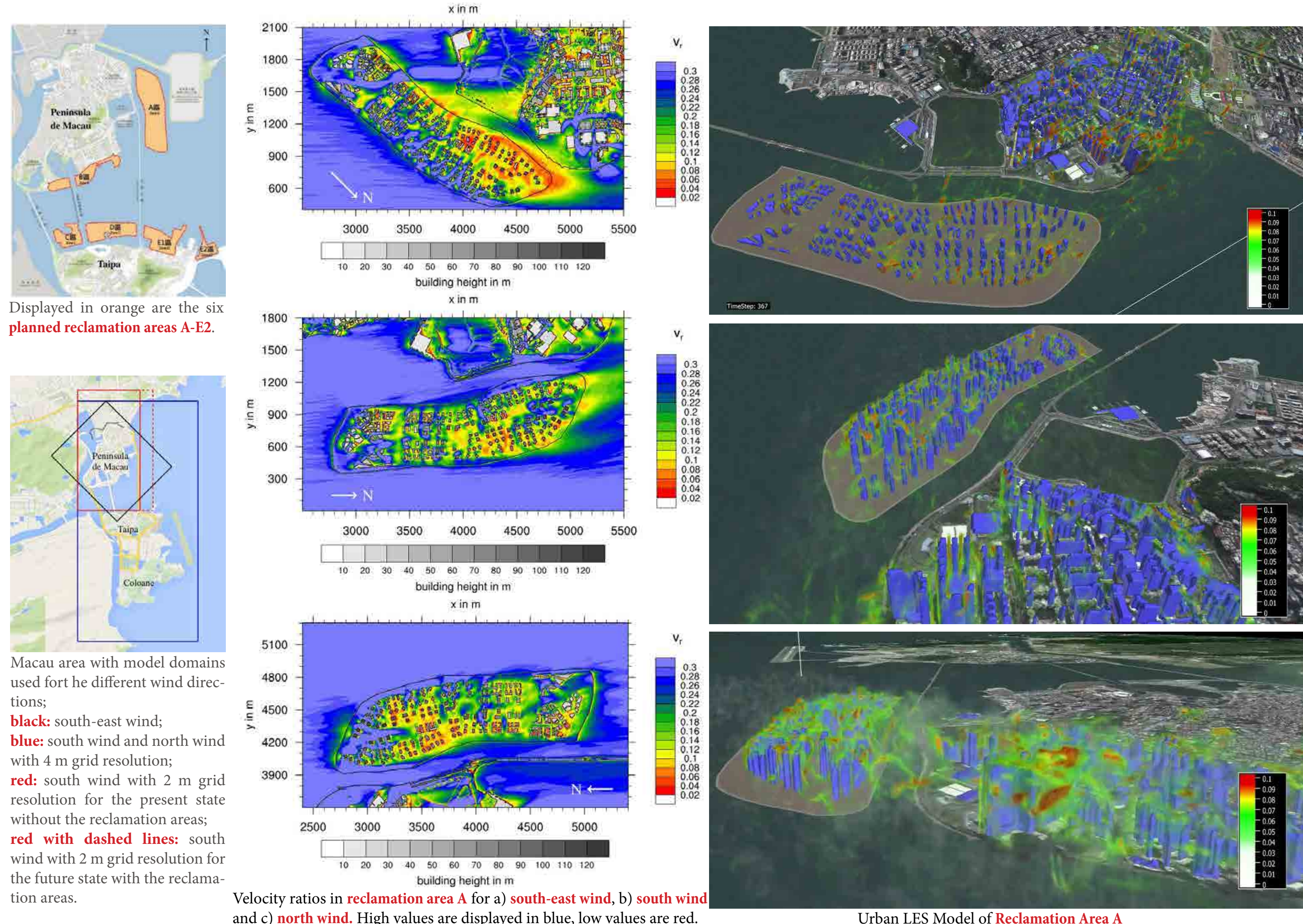


2. Wind Environment Evaluation of Macau Existing Condition:

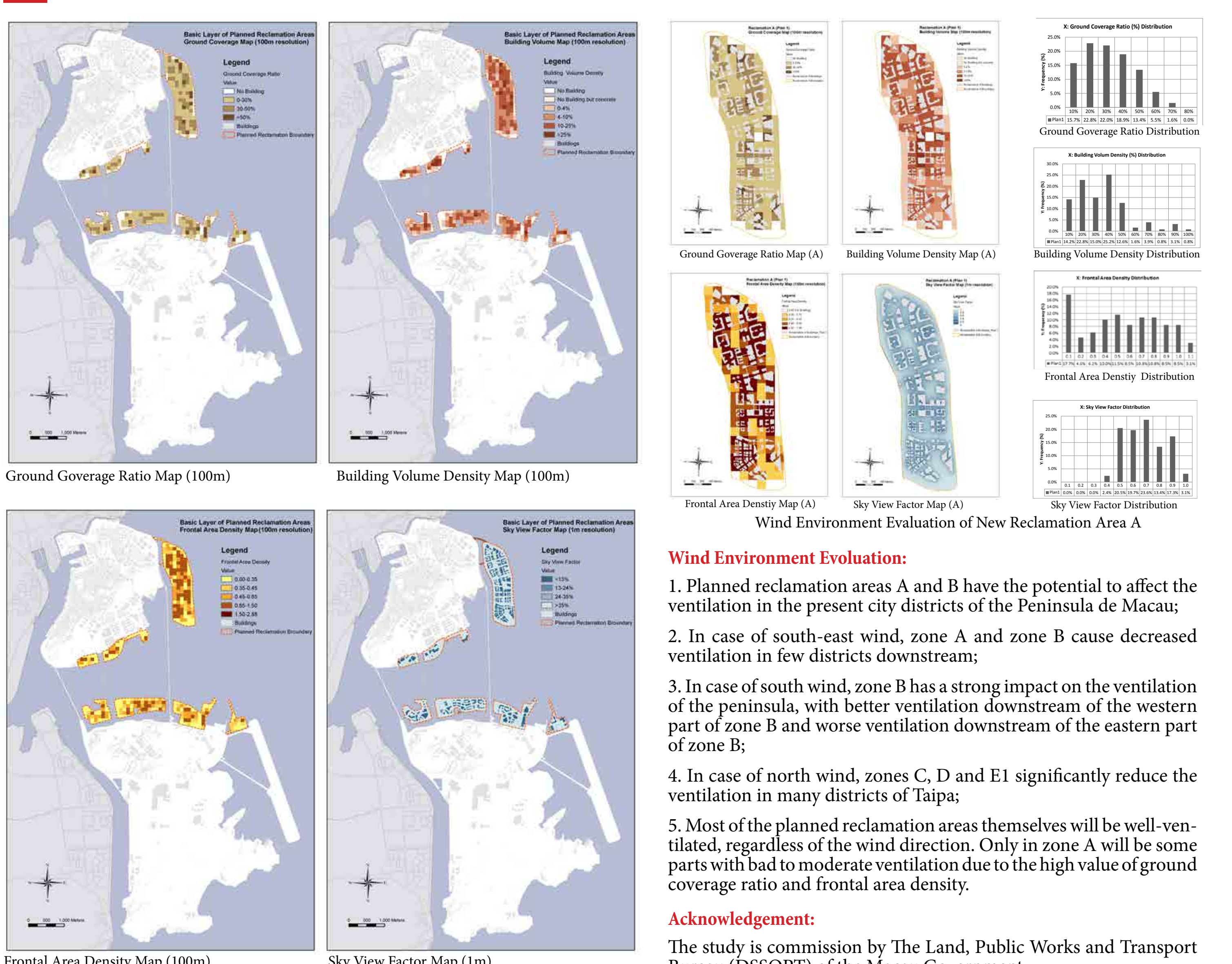


3. Micro-scale CFD Simulation of New Reclamation Areas:

This study investigates the **pedestrian level ventilation** in Macau using the **parallelized large-eddy simulation model PALM**. The aims of the study are: a) to analyze the ventilation in Macau's present city districts and in the planned reclamation areas, b) to evaluate the impact of the planned reclamation areas on the ventilation within the present city districts, c) to investigate how urban morphological quantities



4. Wind Environment Evaluation of New Reclamation Areas:



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Toulouse France