

Lower cost Sensor Approach in Assessing Greenery's Impact on Thermal and Environmental Microscale Conditions across varying Greenspace Configurations

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Complexities of Urban Greenspaces (UGS)

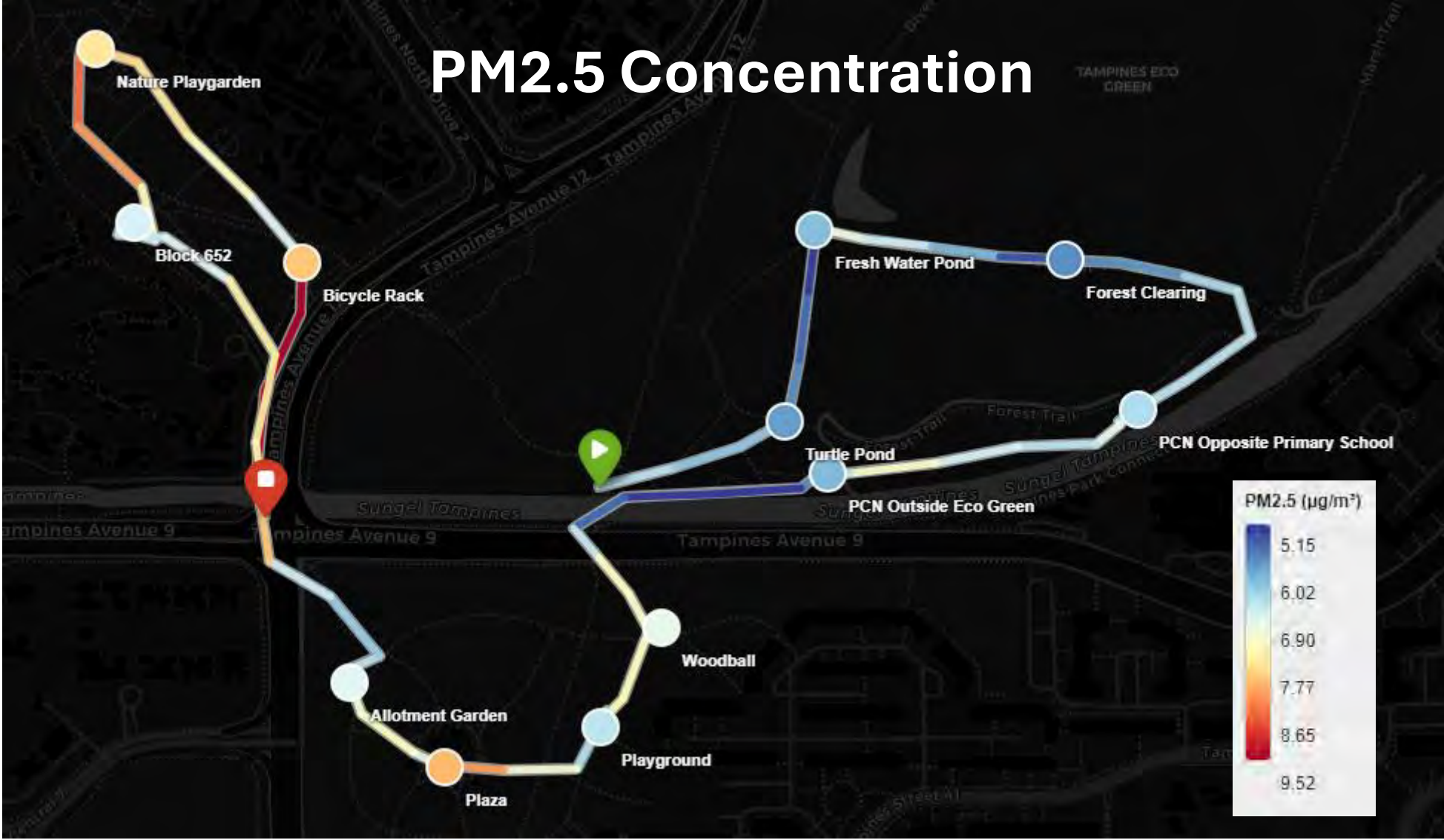
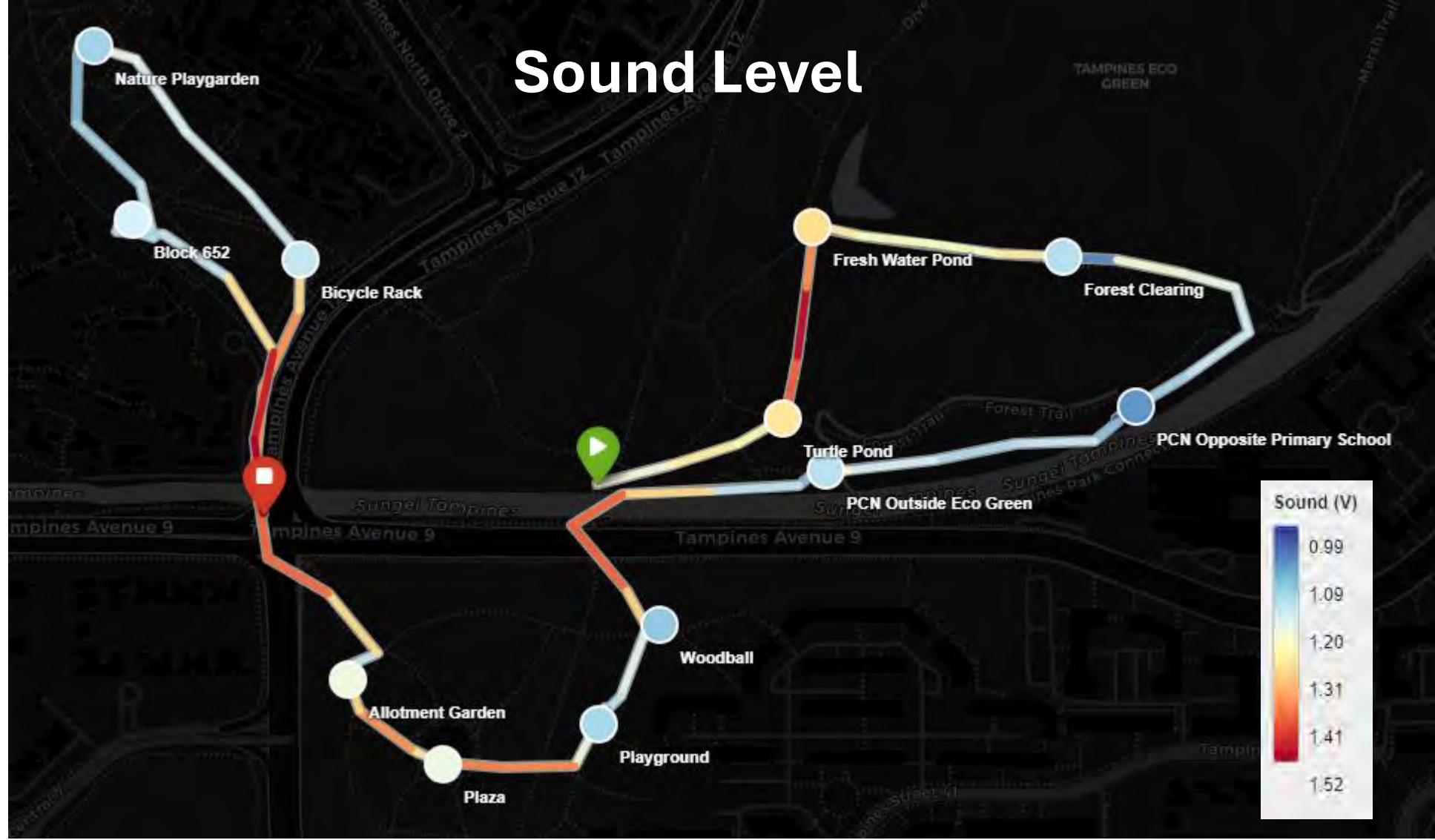
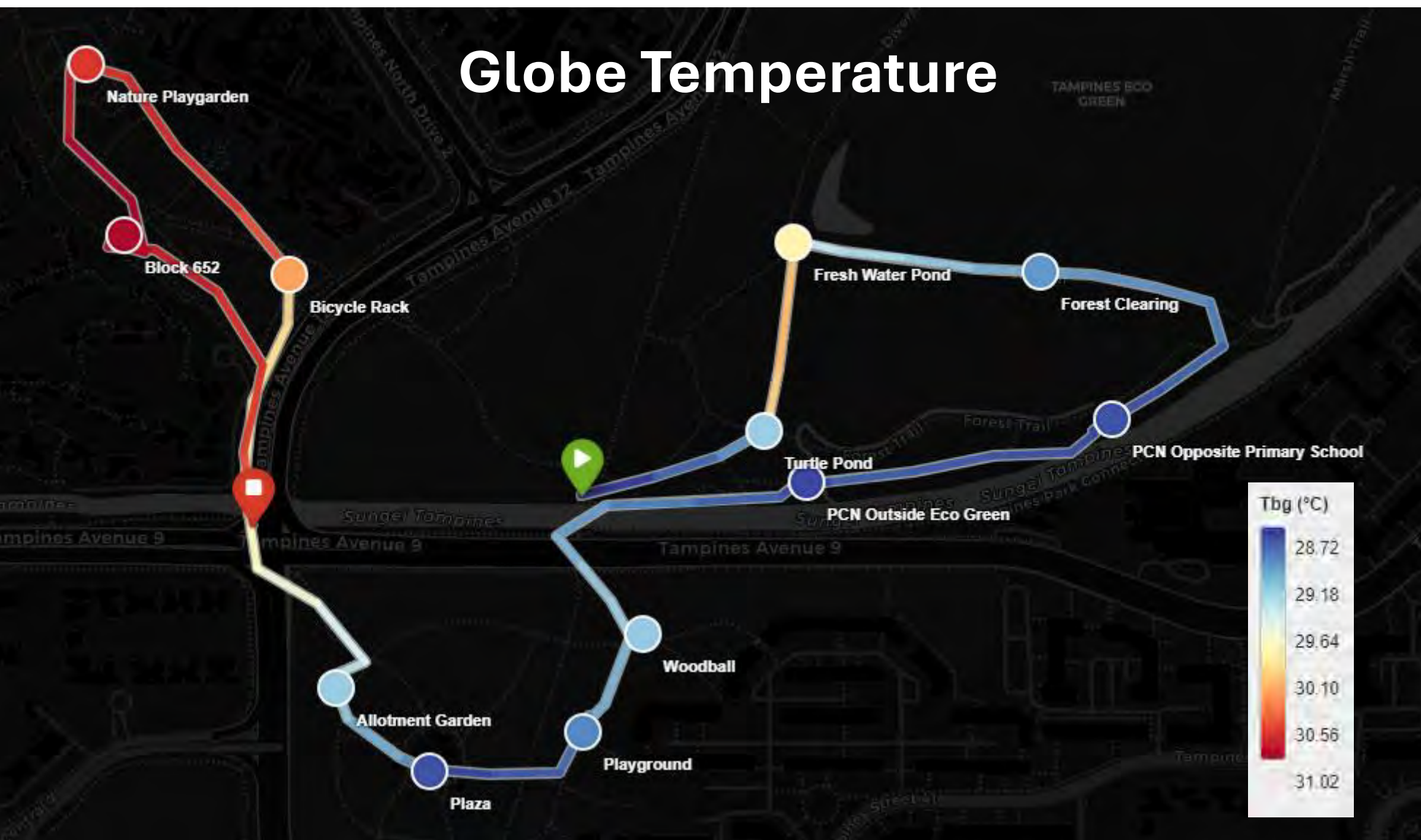
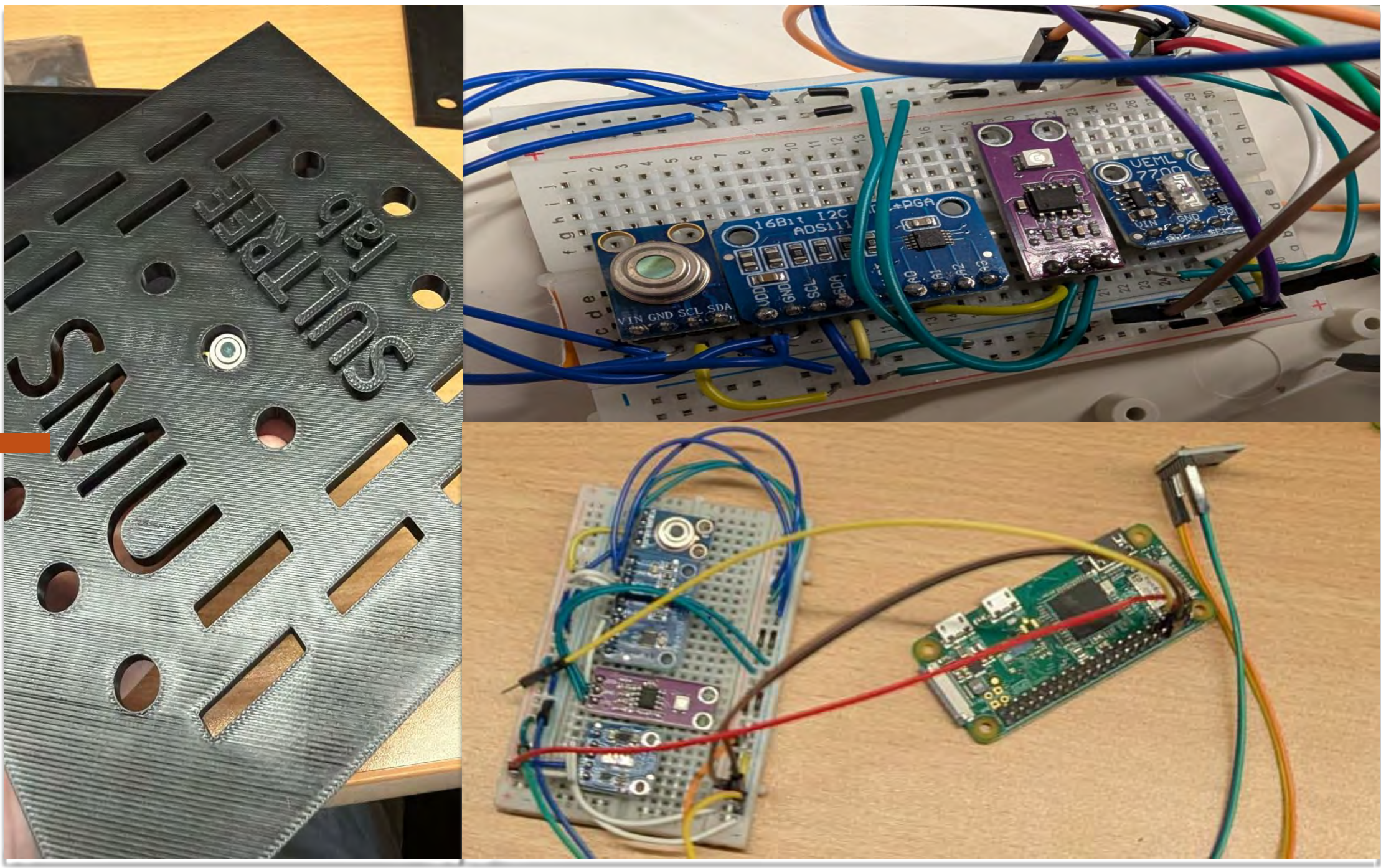
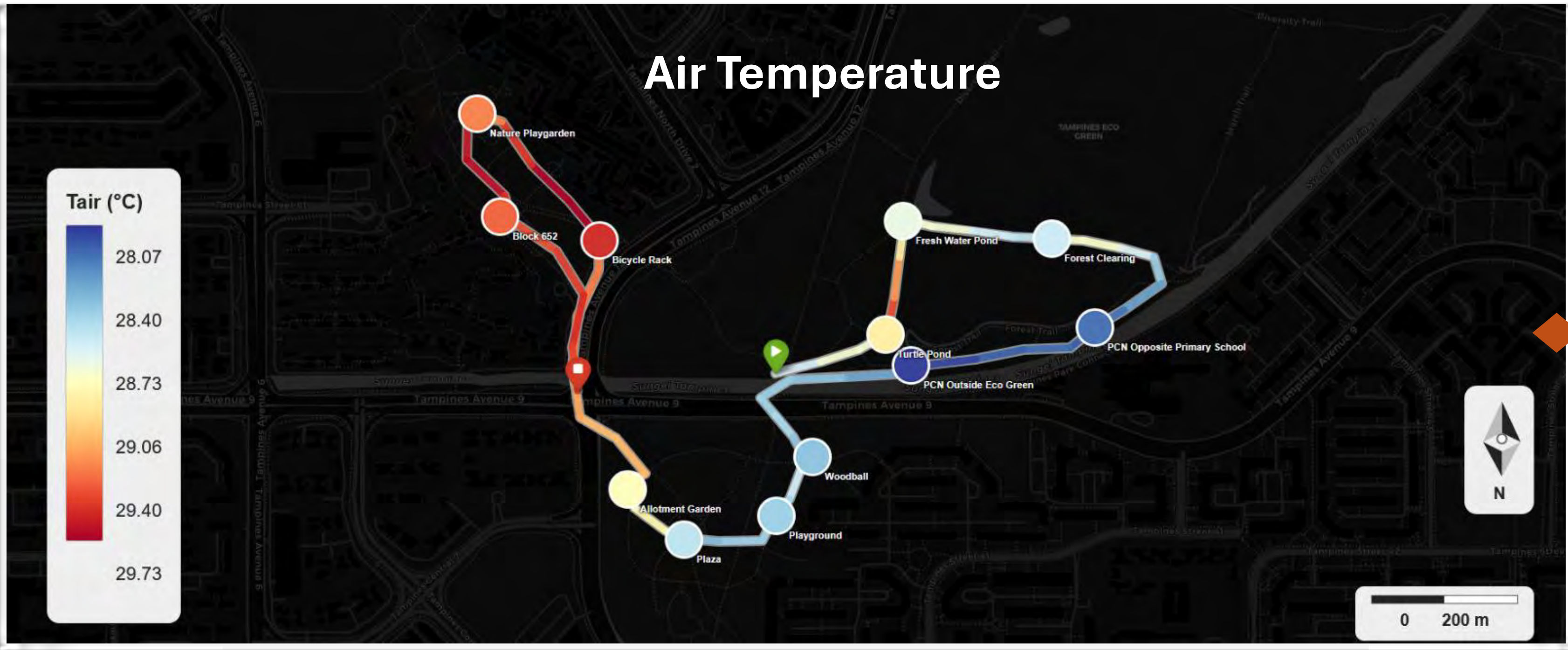
UGS in Singapore are developed to be complex in both configuration and function, leading to varied effects on cooling potential

These effects are not well documented owing to lack of simultaneous measurements and oftentimes not representative of users' experiences

Utility of lower-cost sensors in the tropics remain scant due to few studies assessing viability among practical reasons



Sensor Deployment and Key Findings



Modular, lower cost sensors grant flexibility in sensor parameters and raises potential of multi-site simultaneous measurements

Marked differences recorded in lowered Tair and PM2.5 when transitioning from dense TP Eco Green to older Sun Plaza Park to amenities-oriented TP Boulevard Park

Future collaborative efforts with National Parks Board to assess UGS users' experiences can shed light on thermal acceptability and thresholds