Strengthening Singapore's Resilience to Weather and Climate Change: The Climate Science Research Master Plan (CSRMP)

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Singapore is situated approximately one degree north of the equator, at the southern tip of the Malaysian Peninsula, within the Western Maritime Continent (WMC) region of Southeast Asia. The small (730sqkm) city-state has a typically tropical climate, with abundant rainfall, high and uniform temperatures, and high humidity all year round. Many climate variables, such as temperature and relative humidity, do not show large month-to-month variation. However, many variables exhibit prominent diurnal (or daily) variations from hour to hour, indicating the strong influence that solar heating has on the local climate. Singapore's climate is characterized by two monsoon seasons separated by inter-monsoonal periods. The Northeast Monsoon occurs from December to early March, and the Southwest Monsoon from June to September.

This talk will provide an overview of the key weather phenomena impacting Singapore, and key local user groups e.g. aviation, flooding, etc. A strategic framework, known as the Climate Science Research Master Plan (CSRMP) and related 10-year roadmap will be presented that defines the high-level pathways to impact of strategic research (e.g. tropical urban climate) to meet stakeholder needs. A brief review of CCRS's capabilities and key research projects will be provided.