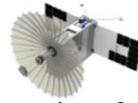
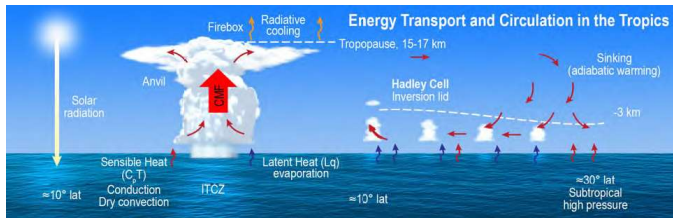


Radar Prototype of Next-Gen Rain Cube

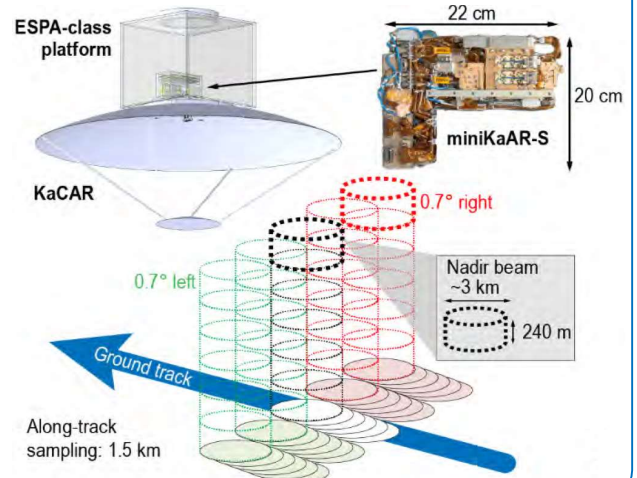
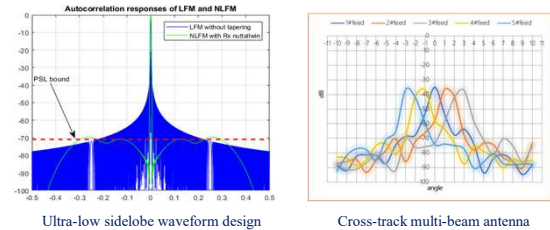
MOTIVATION



Life on Earth is fundamentally linked to reservoirs of freshwater. In the tropics, freshwater is replenished by the vertical transport of water and air in deep convective storms. This transport in the tropics, hereafter referred to as the convective mass flux (CMF). The Jet Propulsion Laboratory (JPL) flew a small rain mapping Radar on a 6U satellite (Rain Cube) to demonstrate the technology for mapping tropical storms (convective mass flux, CMF) and is currently studying a three small satellites mission concept in low Earth orbit to do global equatorial region mapping of the frequency and dynamics of these CMFs. The Satellite Research Centre (SaRC) at Nanyang Technological University (NTU), Singapore is studying the possibility of adding one or two satellites to that mission to allow more frequent spatial and temporal coverage.



RESEARCH FOCUS



DEVELOPMENT OF HARDWARE SYSTEM

