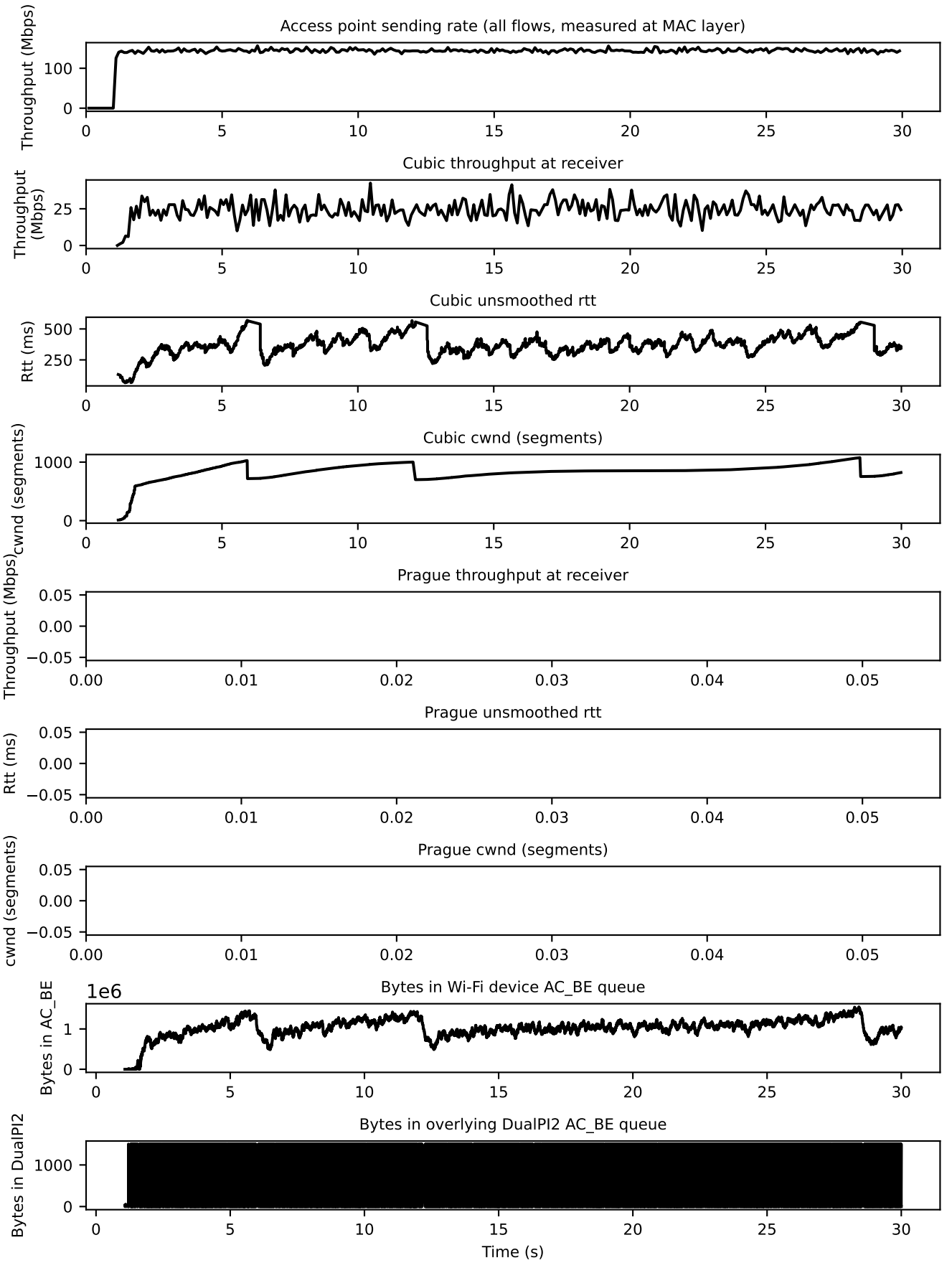Simulation ED3-MS2-AP0-LS1-TC1-TS3