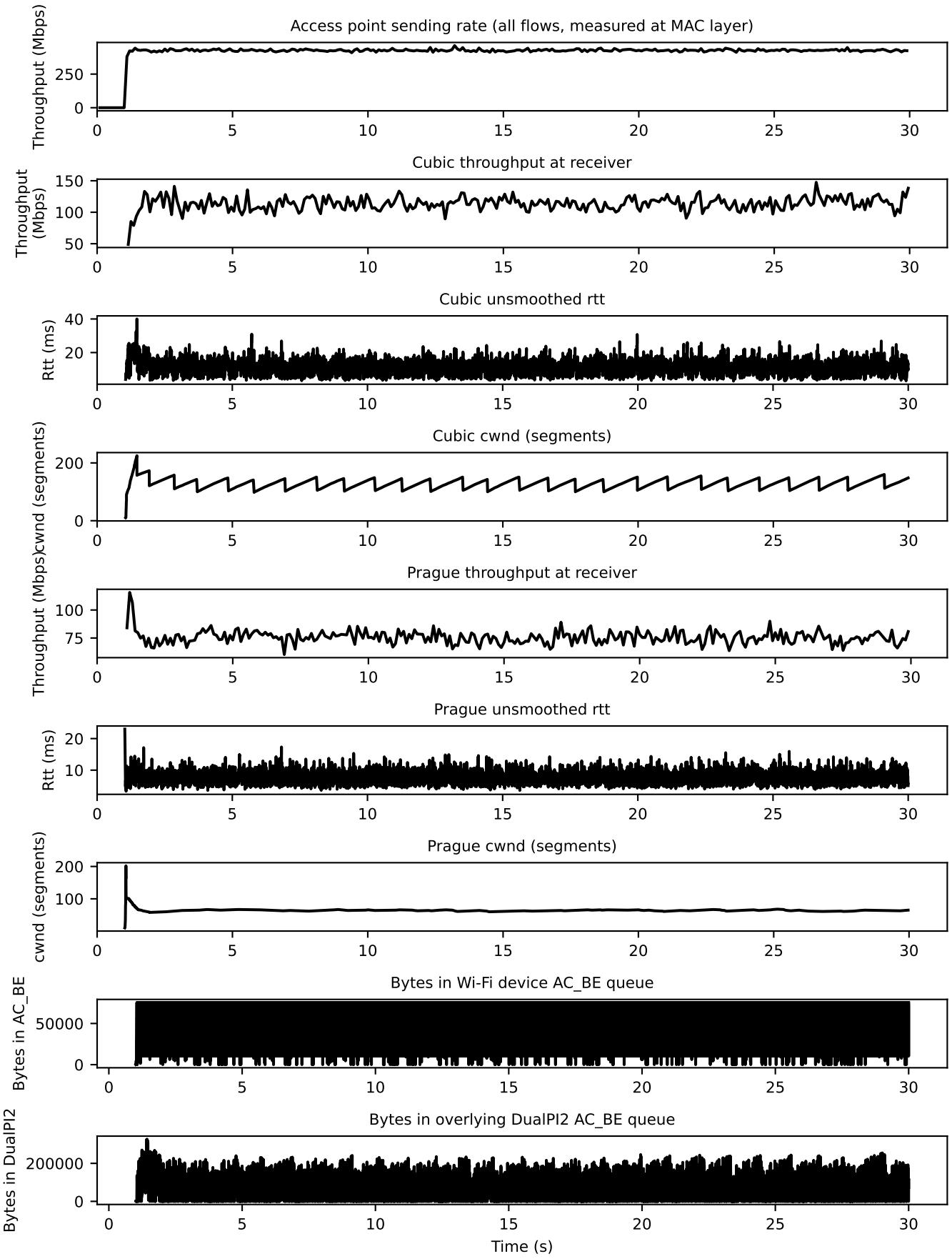Simulation ED4-MS1-AP1-LS2-TC3-TS1