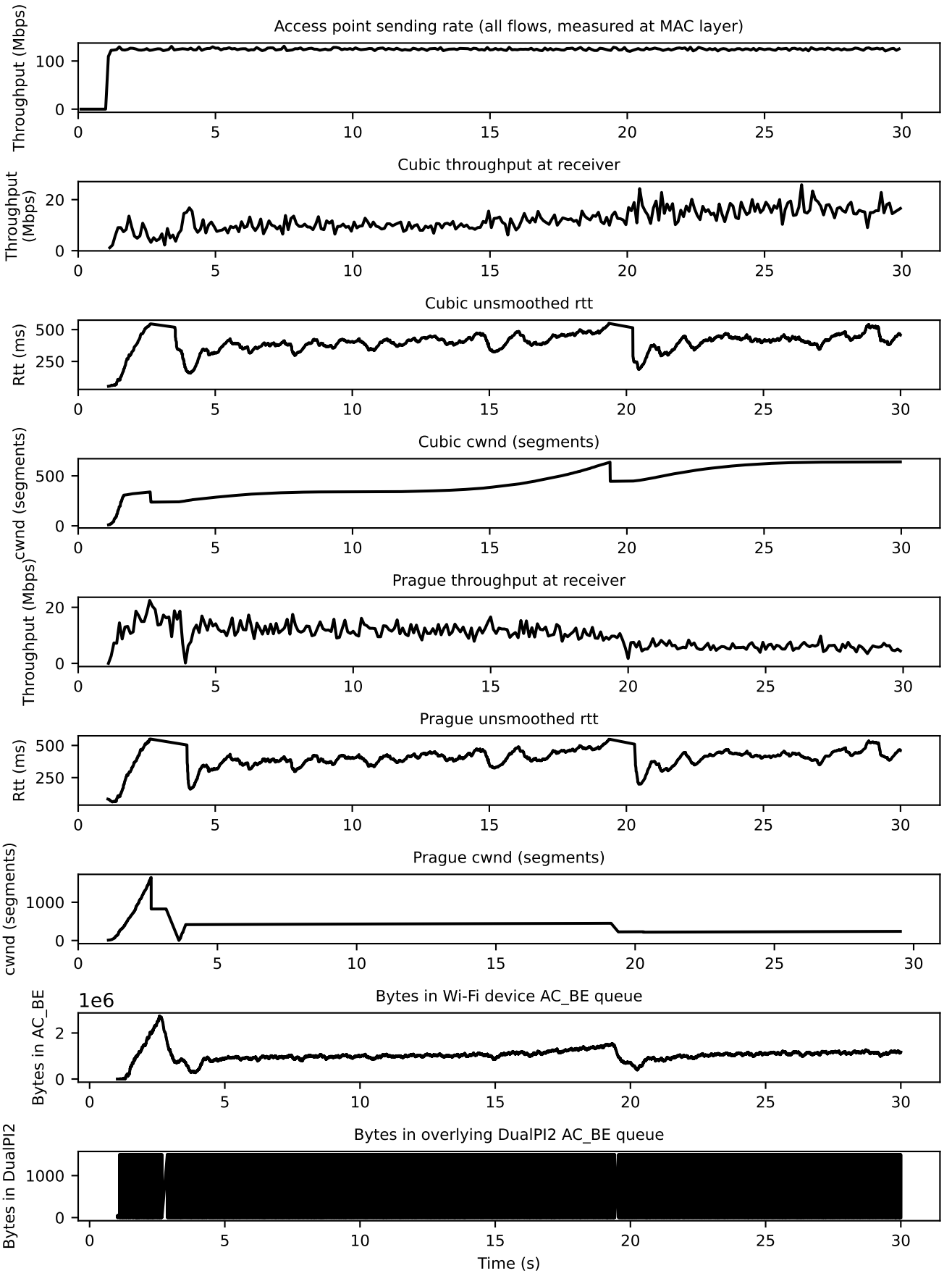Simulation ED4-MS2-AP0-LS1-TC3-TS3