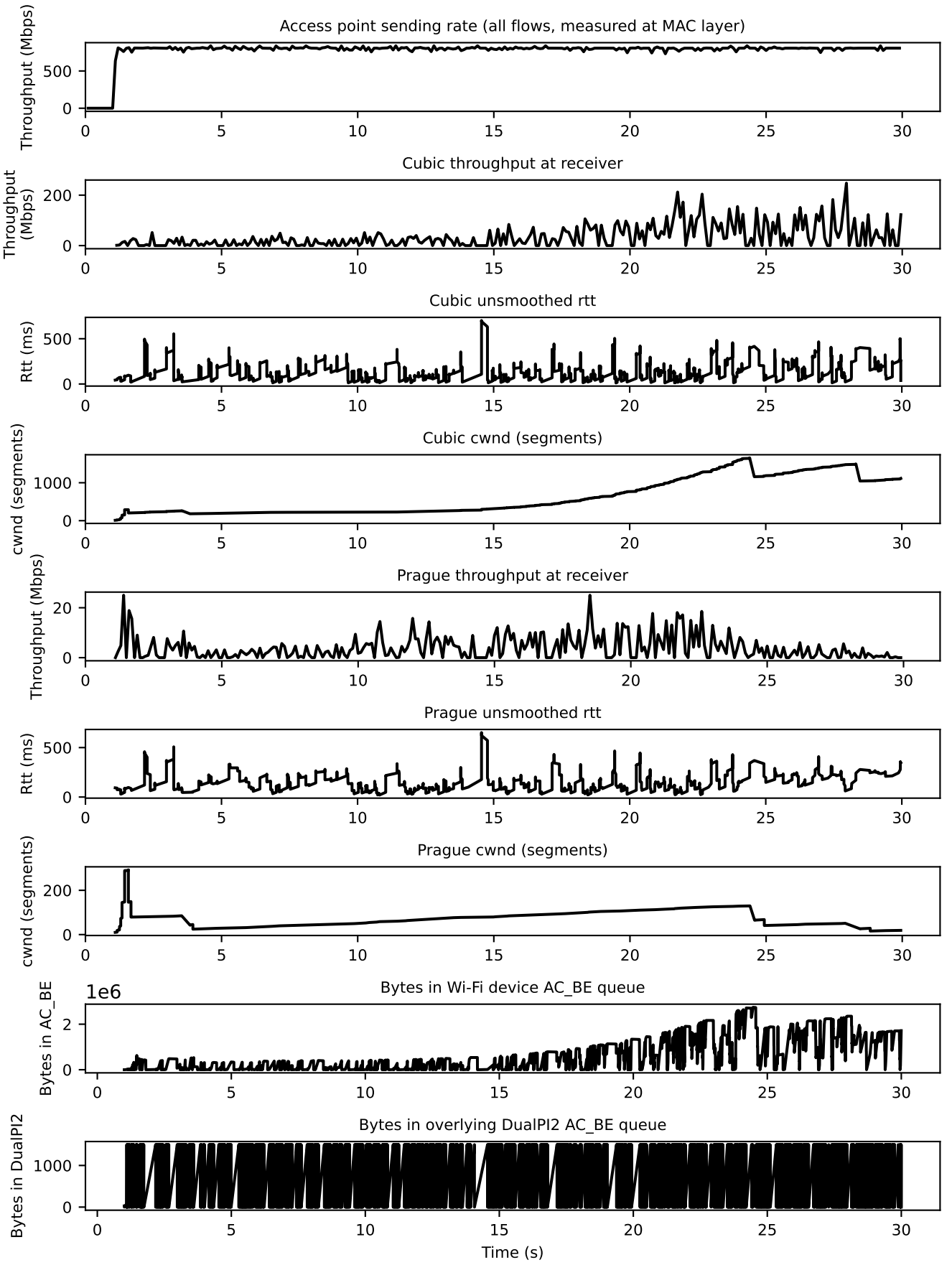Simulation ED1-MS2-AP0-LS3-TC3-TS2