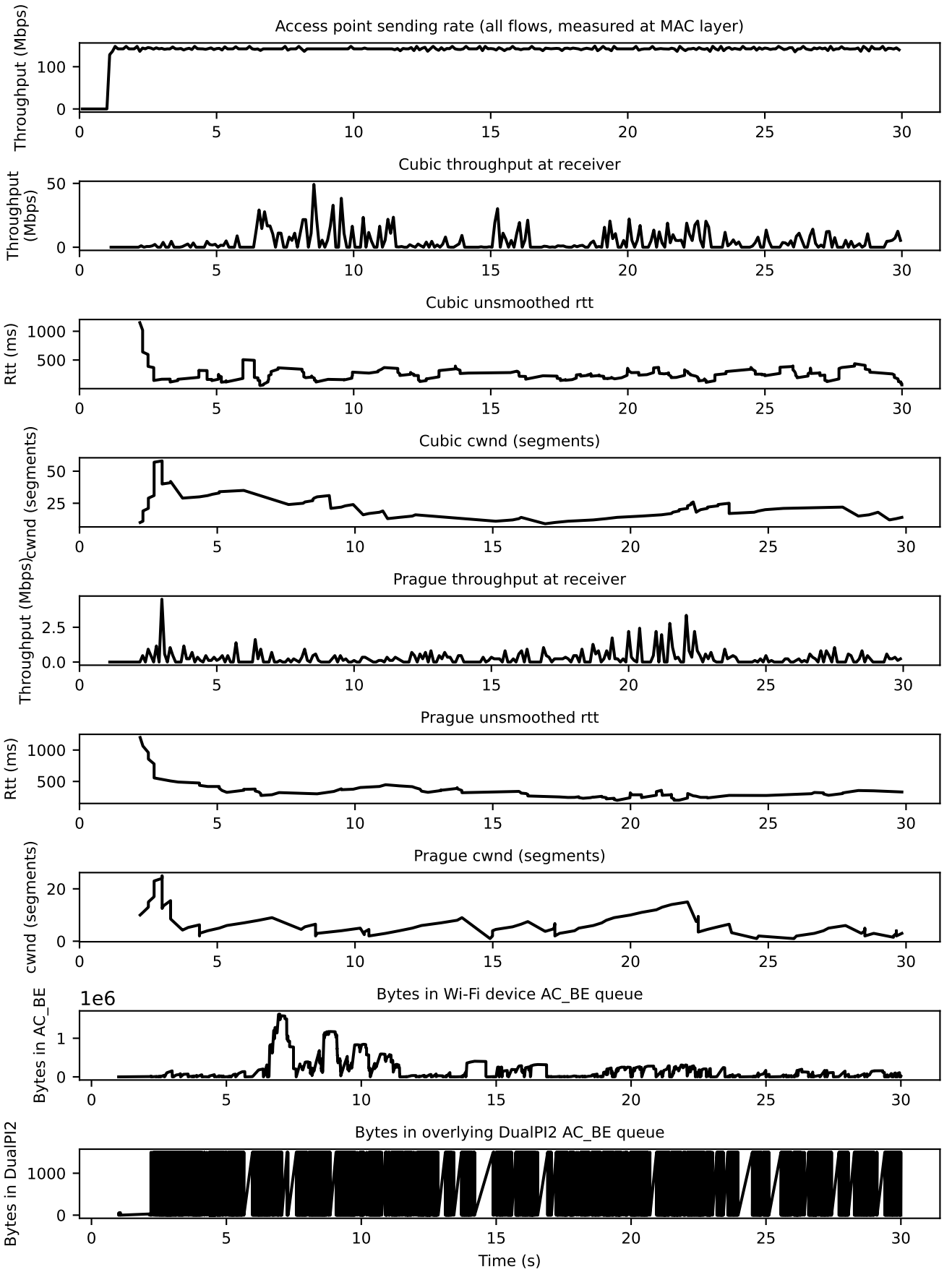Simulation ED1-MS2-AP0-LS1-TC4-TS2