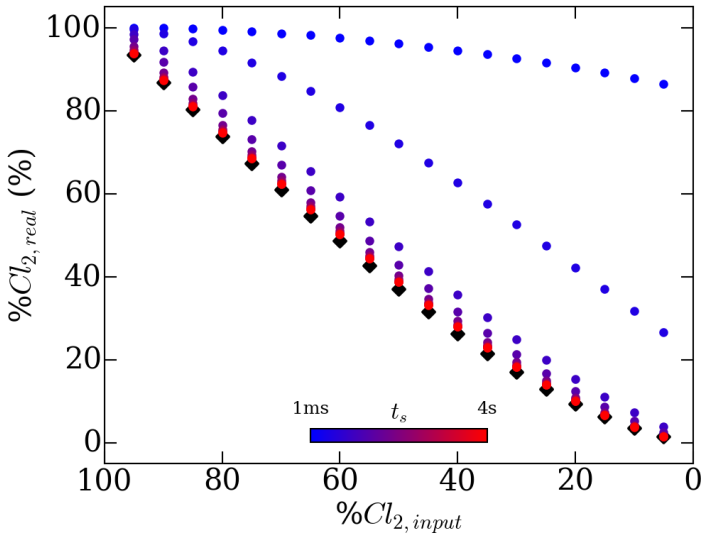

Figure 1 – Real percentage of Cl_2 ($\%Cl_{2,real}$) in the plasma during transitions from 100% Cl_2 to 100% Ar gas ($\%Cl_{2,input}$) for different feedgas switch durations t_s=[0.001, 0.01, 0.05, 0.1, 0.25, 0.5, 1.0, 2.0, 3.0, 4.0] seconds from blue to red. The black diamonds correspond to steady-states. P=10mTorr, PRF=800W, Q=60sccm is kept constant. **Shorts t_s induces discrepancies.**

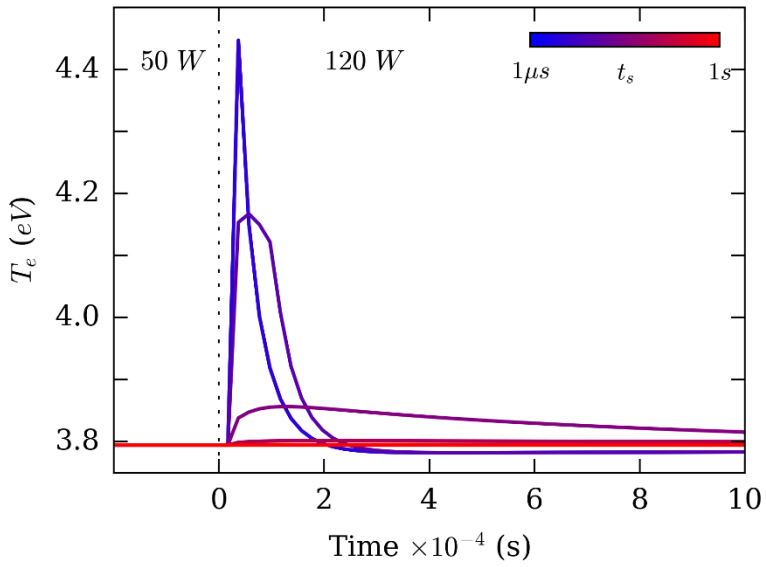

Figure 2 – Electron temperature T_e in pure Argon plasma when RF source power switch from 50W to 120W during a switch duration t_s=[10^{-6}, 10^{-5}, 10^{-4}, 10^{-3}, 10^{-2}, 10^{-1}, 1] seconds from blue to red. P=5mTorr, Q=10sccm. **Shorts t_s induces a T_e overshoots.**