

Supplementary material for A. Degeneve, R. Vicquelin, C. Mirat, B. Labegorre, P. Jourdain, J. Caudal, T. Schuller, Scaling relations for the length of coaxial oxy-flames with and without swirl, Proc. Combust. Inst. **37**, 2018.

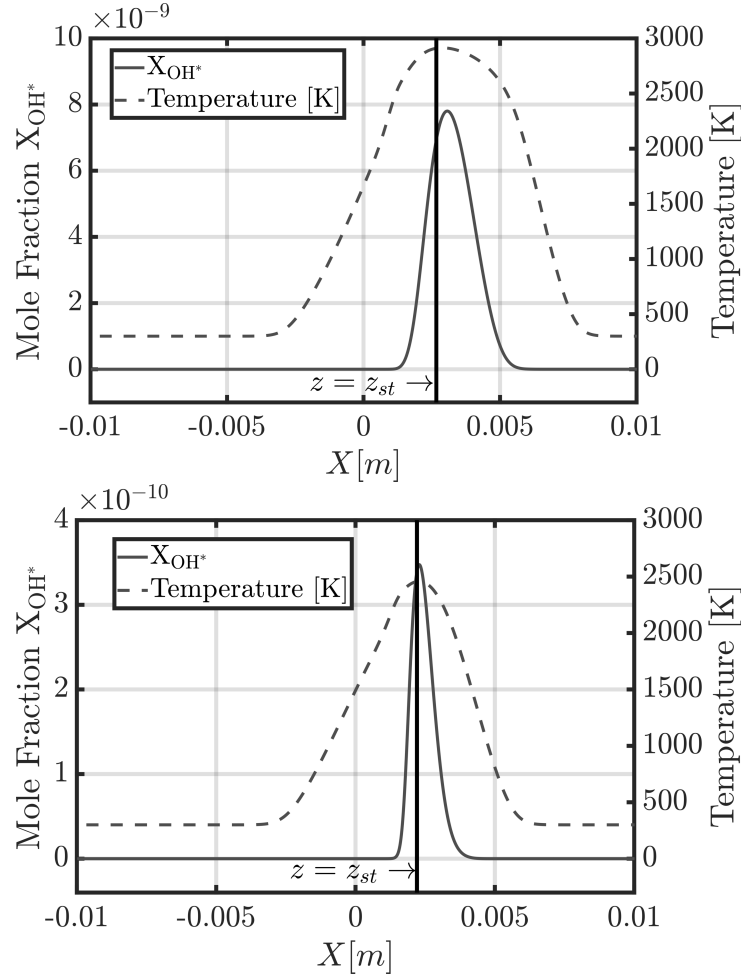


Figure S1: Numerical simulation of steady one-dimensional counterflow methane oxy-flames, with Grimech 3.0 mechanism completed with OH^* chemistry. Comparison between the location of the peak value of intermediate radical OH^* with the line $z = z_{st}$. Strain rate is 40s^{-1} . Fuel (left side) and Oxidizer (right side) are diluted with N_2 . At $Z = 0$, $\text{X}_{\text{CH}_4} = 1$ (top) / 0.54 (bottom). At $Z = 1$, $\text{X}_{\text{O}_2} = 0.80$ (top) / 0.37 (bottom).