Supporting Information

for

Modeling of Sandia Flame D with the non-adiabatic chemistry tabulation approach: the effects of different laminar flames on NO_X prediction

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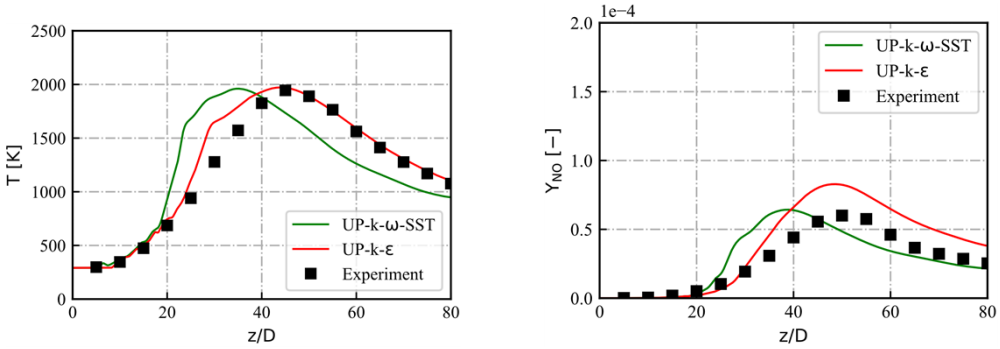
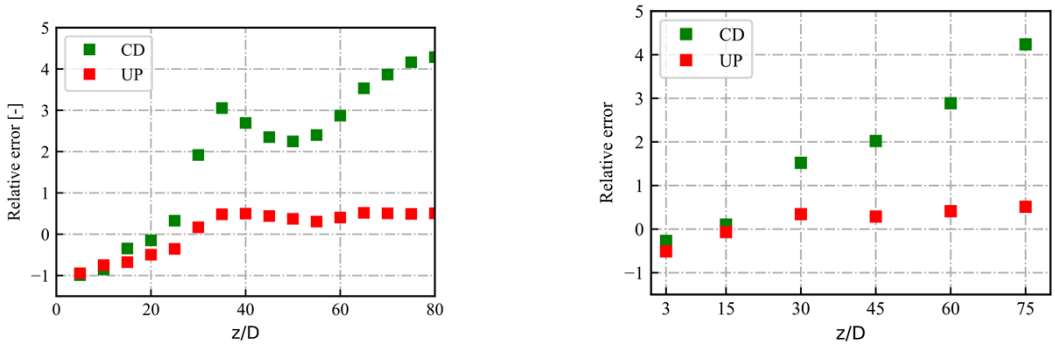


Figure S1. The temperature (left) and NO (right) profiles on the central axis with the UP library. Red line marks k-ϵ result, green line marks k-ω-SST result. Black dots mark experimental values.



(a) (b)

Figure S2. (a) Relative error of Y_{NO} on the central axis; (b) Relative error of maximum Y_{NO} in radial profiles at six axial locations. The green square represents the CD library, the red square represents the UP library.

Table S1. Relative error of maximum NO mass fraction (Y_{NO}) in radial profiles at six axial locations.

z/D	r/D for max(Y_{NO})	UP-relative error	CD-relative error
3	0.79	-51%	-27%
15	1.11	-7%	10%
30	1.67	34%	152%
45	1.11	29%	202%
60	0	41%	289%
75	0	51%	424%