

Erratum: Quasi-classical trajectory-based non-equilibrium chemical reaction models for hypersonic air flows [Phys. Fluids 31, 106102 (2019)]

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It was brought to our attention¹ that there is an error in Table IV in the original paper.² The corrected parameters, A , χ , η and D , in the NETT model which has the following form,

$$k(T_r, T_v) = A\beta^\chi T_t^\eta \exp\left(-\frac{D}{T_t}\right),$$

are tabulated in Table I. The corrections do not alter the results of our paper in any way.

Table I. Corrected NETT model parameters. (See Table IV in the original paper.²)

Reaction	$A(m^3s^{-1})$	χ	η	D(K)
$O_2 + O \rightarrow 3O$	2.0871×10^{-16}	0.526	0.382	57923.32
$O_2 + O_2 \rightarrow O_2 + 2O$	4.967×10^{-19}	2.387	0.906	57041.18
$N_2 + N \rightarrow 3N$	1.487×10^{-20}	3.948	1.342	111100.05
$N_2 + N_2 \rightarrow N_2 + 2N$	4.921×10^{-21}	3.944	1.426	109921.97

REFERENCES

¹O. Kunova, private communication (2019).

²T. K. Mankodi, R. S. Myong, “Quasi-classical trajectory-based non-equilibrium chemical reaction models for hypersonic air flows,” Phys. Fluids **31**, 106102 (2019).

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