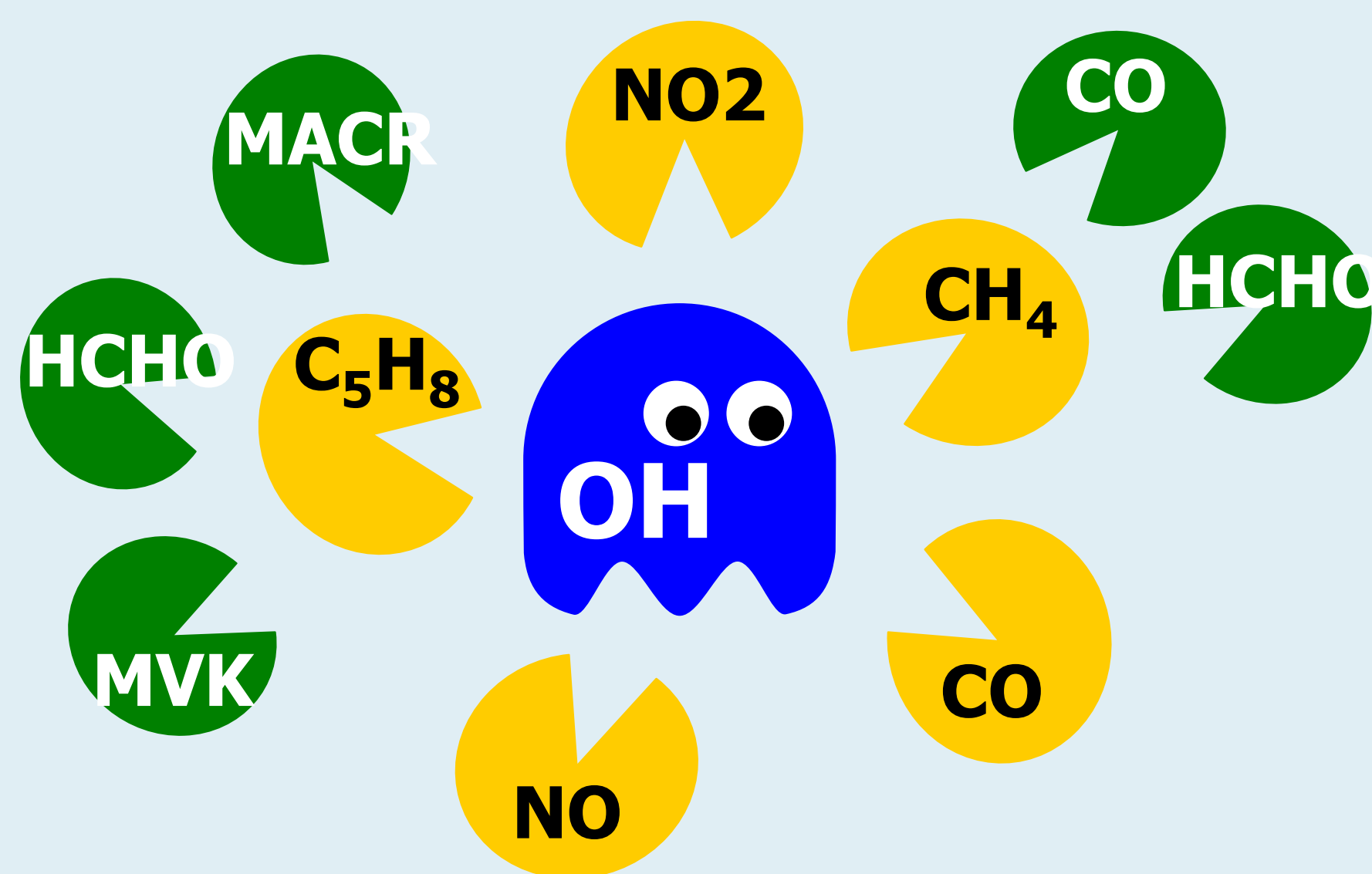


VOC Source Attribution of OH, O₃ and NO₃ Reactivity

Jane Coates and Tim Butler

Objective

- Allocate impact of VOC and degradation products on total oxidant reactivities.

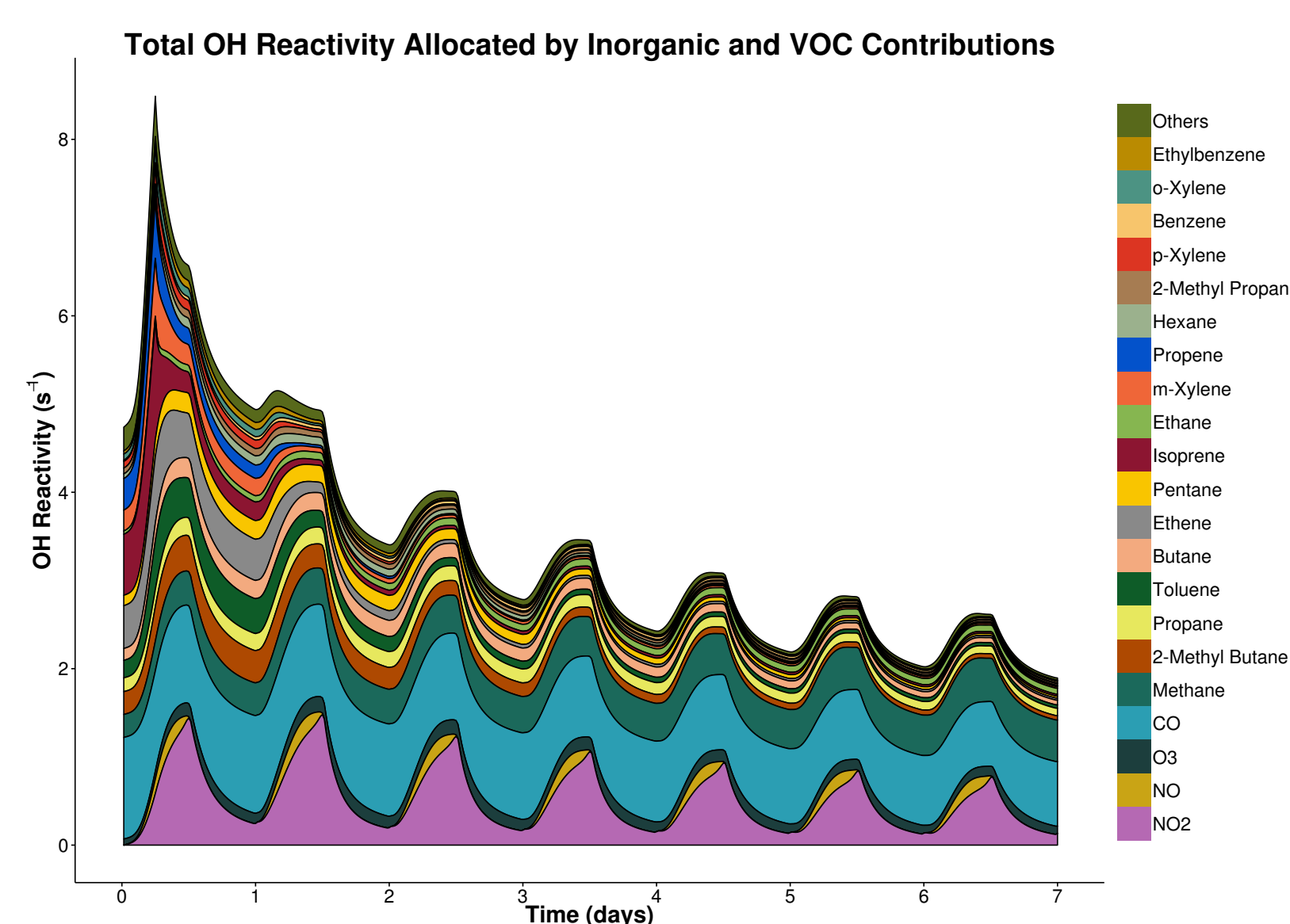
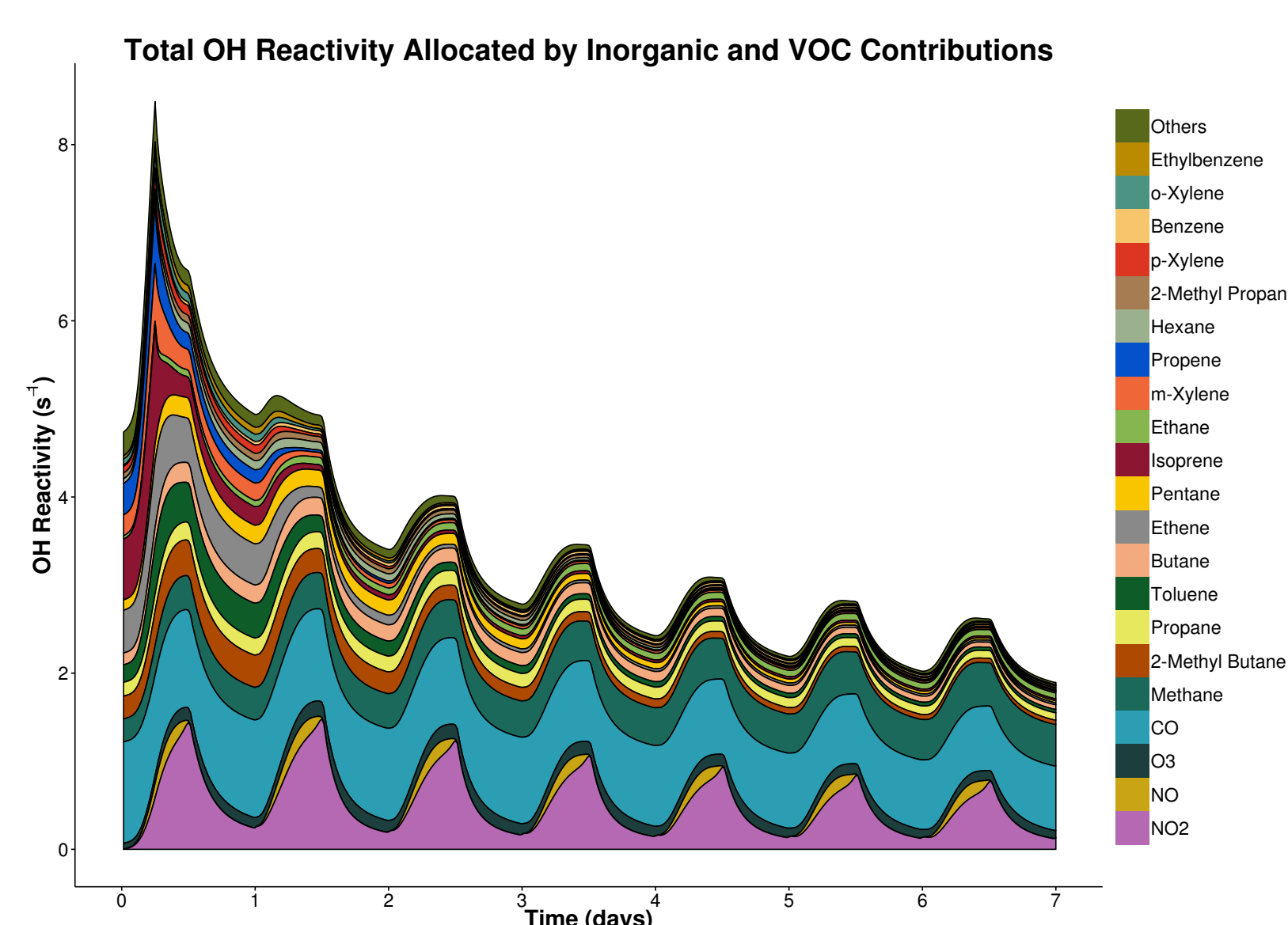


Approach

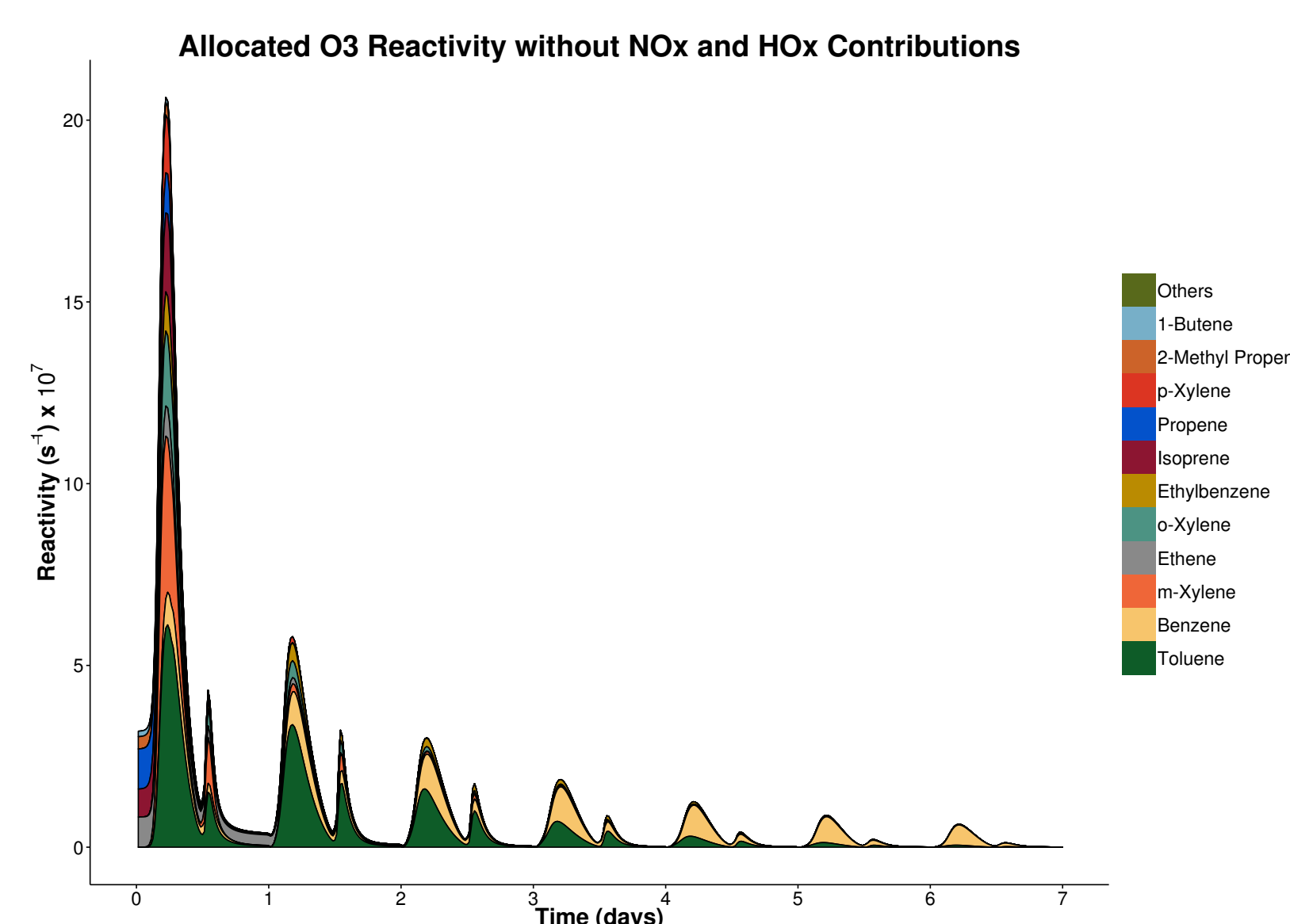
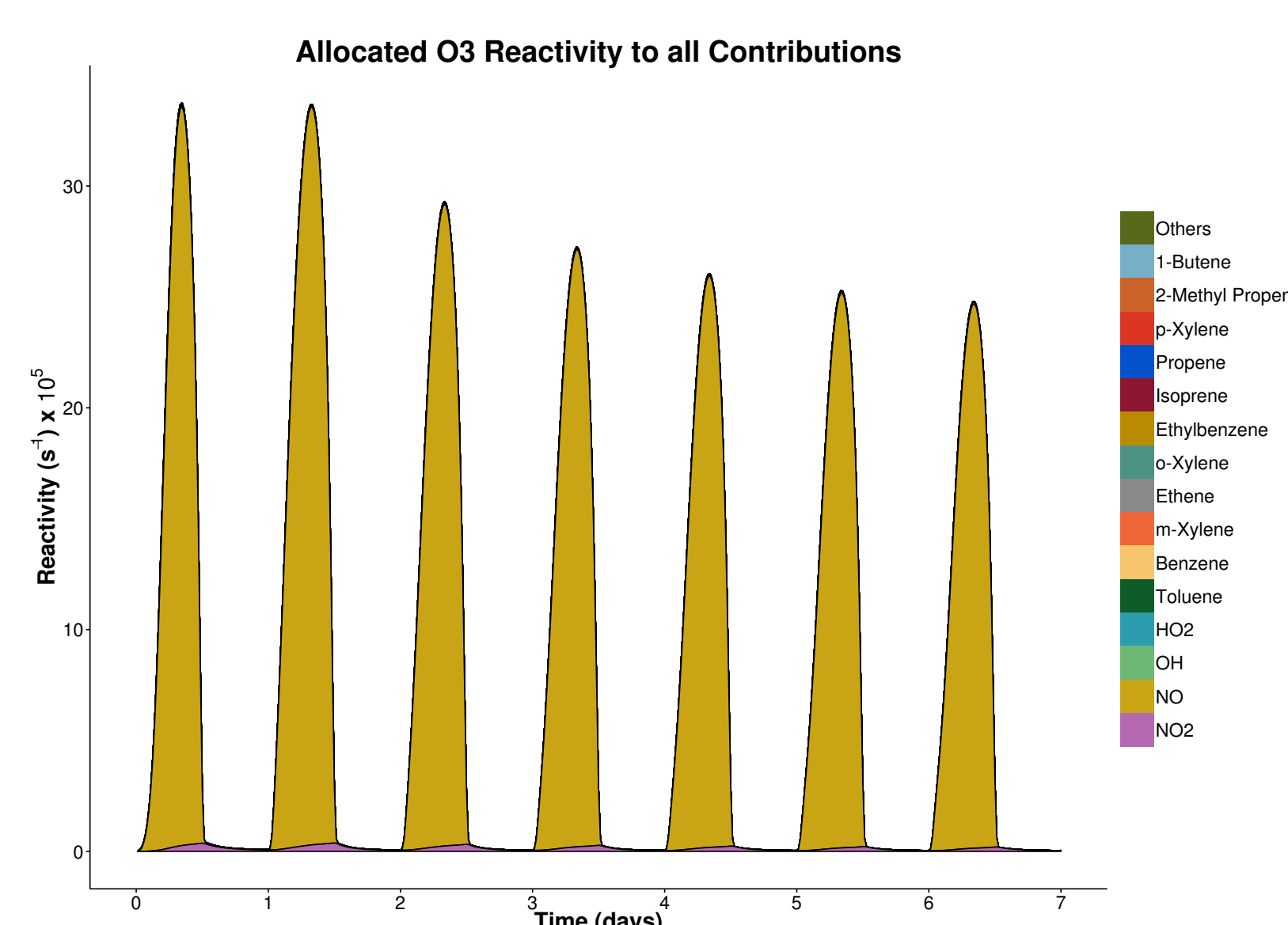
- Tagged Ozone Production Potentials (TOPPs) [1] calculated over 7 days for VOCs common to urban environments.

Results

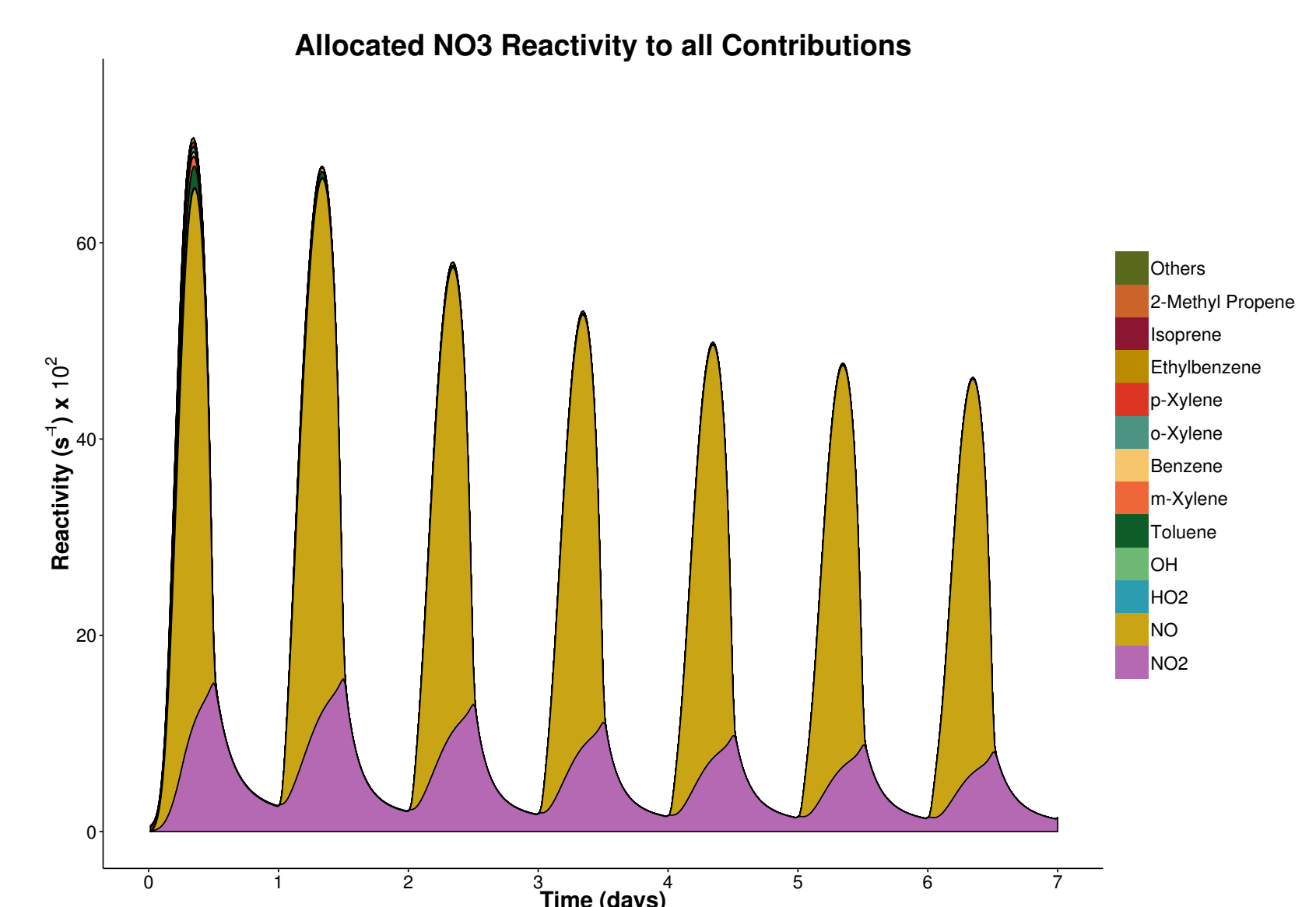
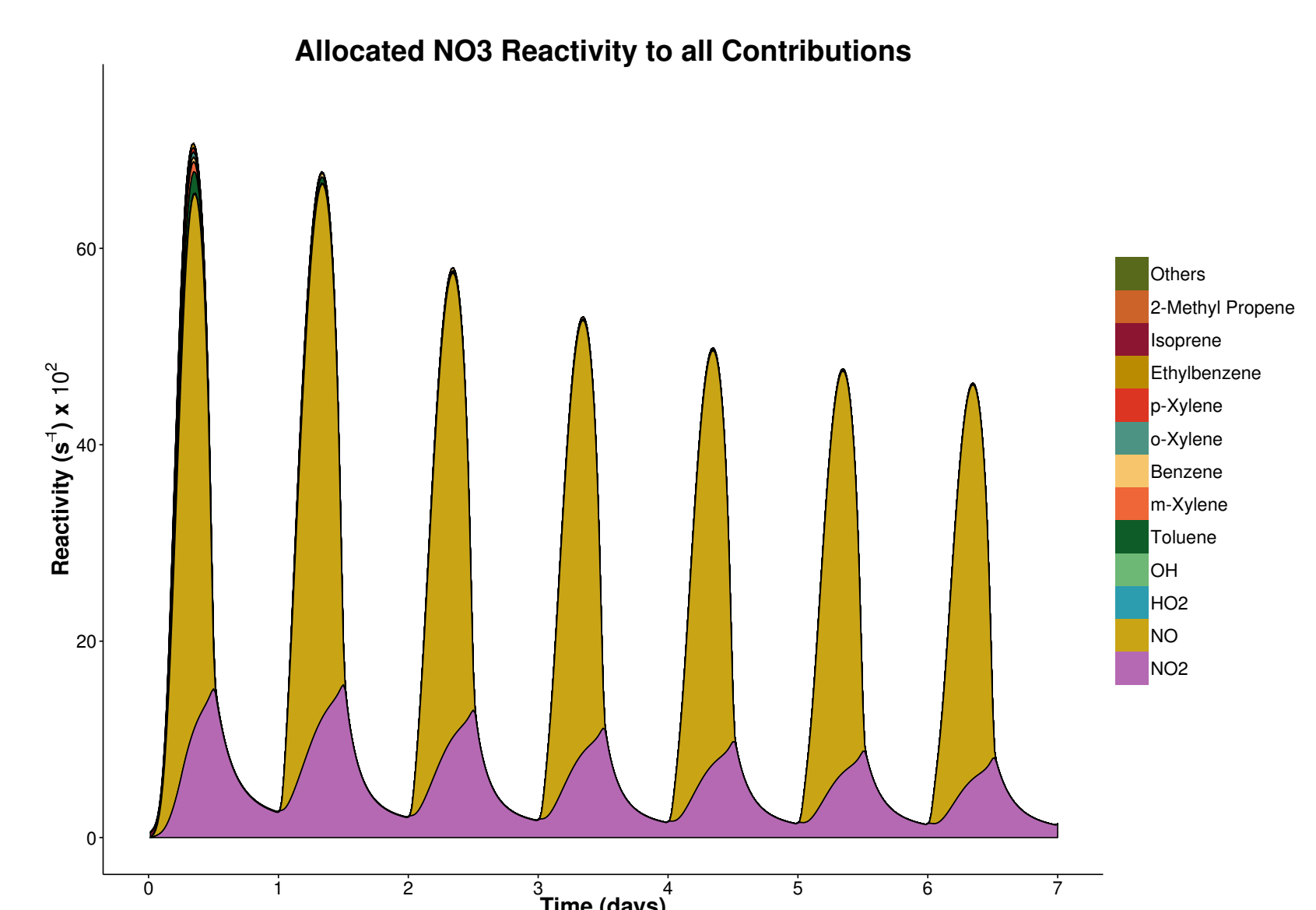
OH Reactivity



O₃ Reactivity



NO₃ Reactivity



Summary

- Near-explicit mechanisms have higher O_x production than less-explicit mechanisms.

References

- [1] T. M. Butler, M. G. Lawrence, D. Taraborrelli, and J. Lelieveld. Multi-day ozone production potential of volatile organic compounds calculated with a tagging approach. Atmospheric Environment, 45(24):4082–4090, 2011.

The IASS is sponsored by

SPONSORED BY THE

