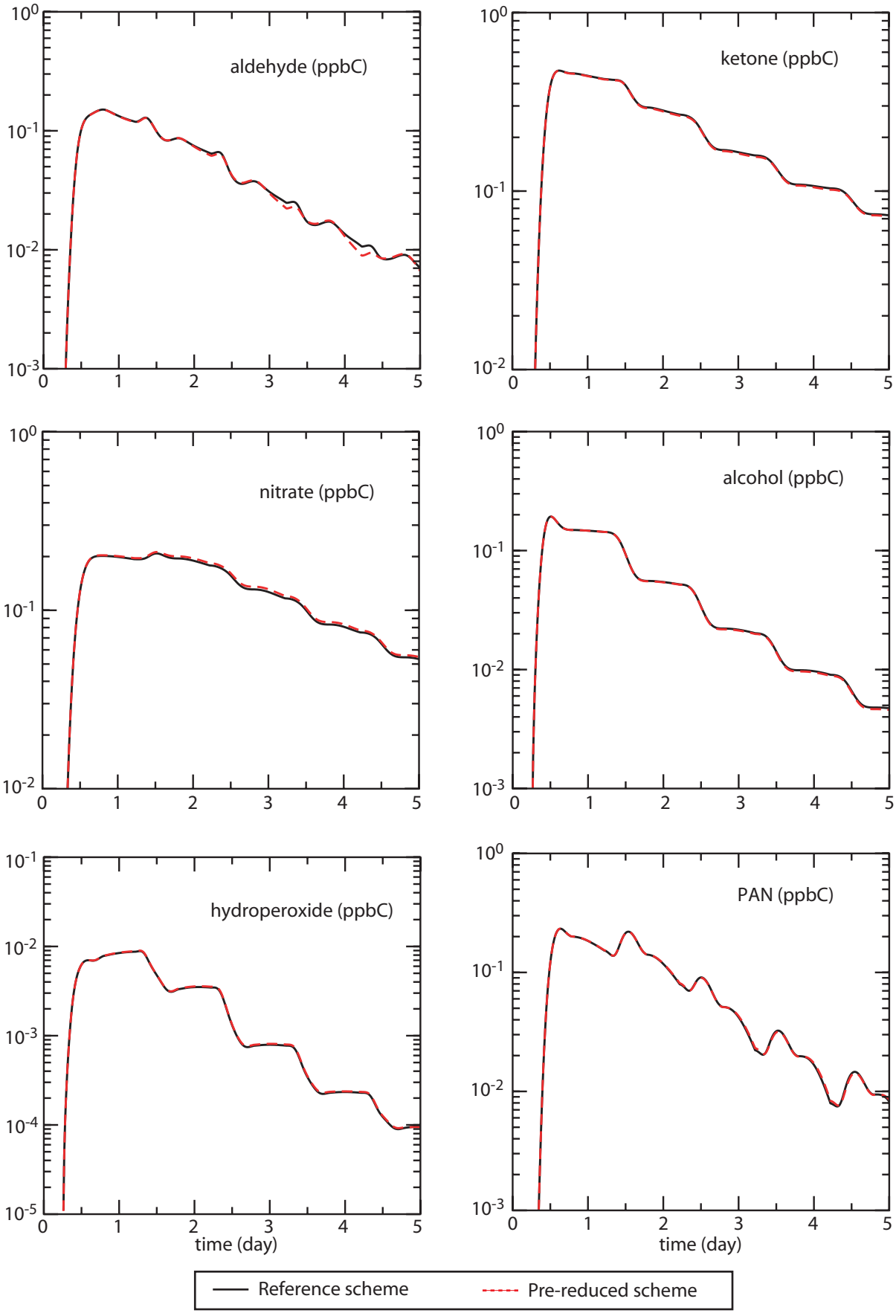
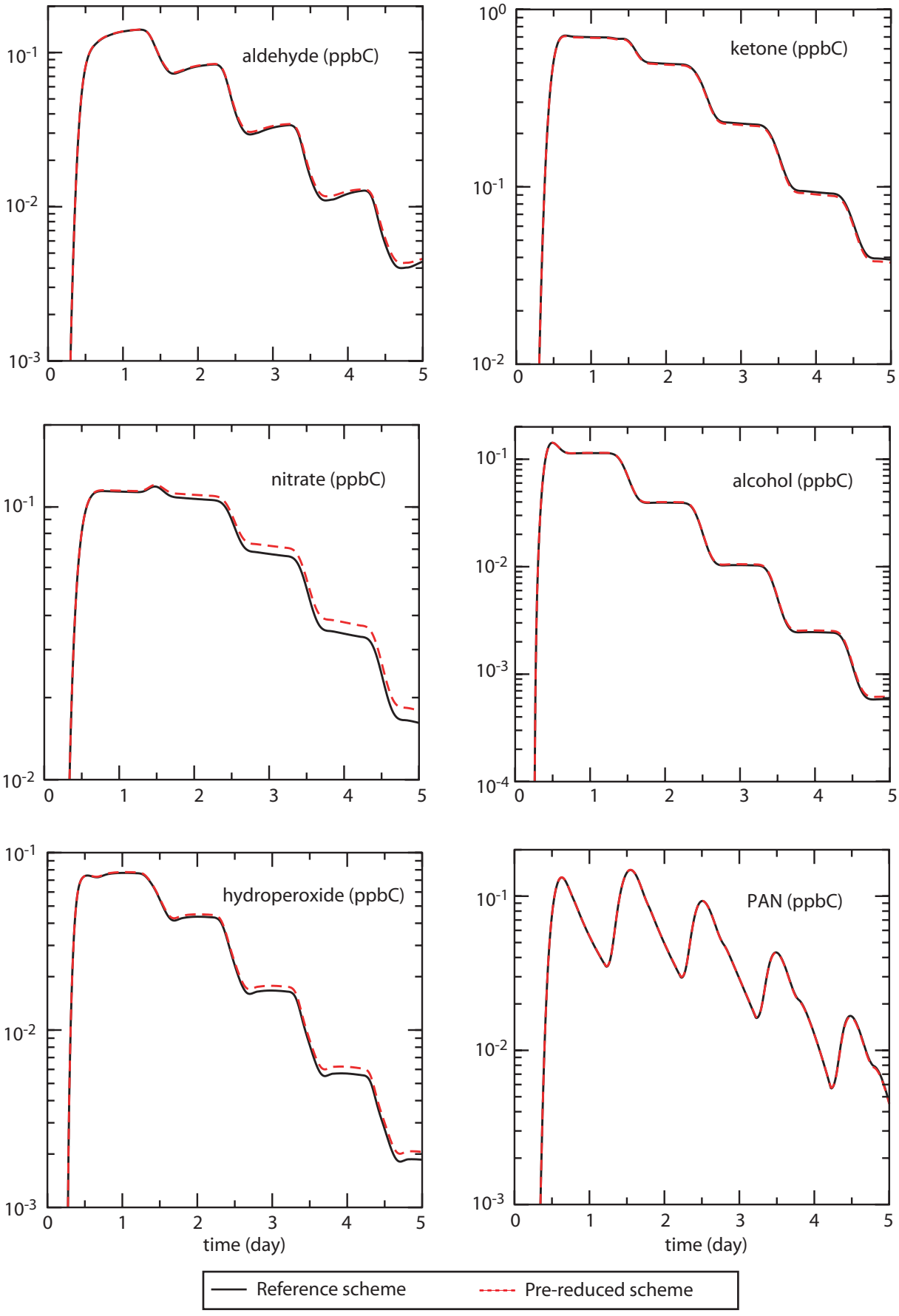
Appendix B

Concentration time series for organic functionalities simulated with the fully explicit chemical scheme and the pre-reduced chemical scheme. Results are for hexane and isoprene oxidation with initial mixing ratio set to 1 ppb. The simulation are run for 5 days under 4 NOx conditions: 3 cases in which the NOx level is set to a fixed value of 1 ppb, 100 ppt, 10 ppt ; and 1 case in which the NOx evolve freely starting with a mixing ratio of 1 ppb.

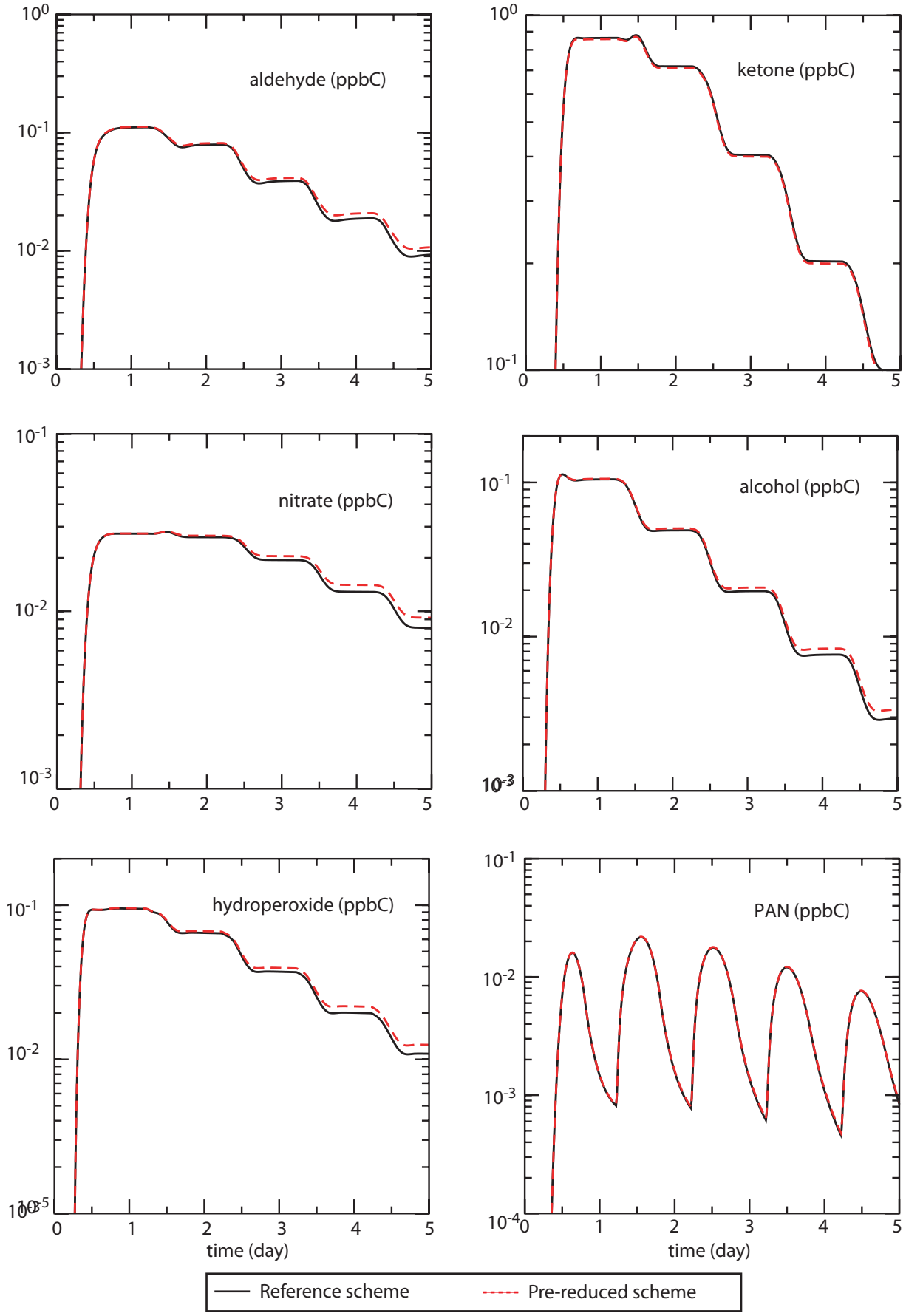
Hexane oxidation - NOx mixing ratio constrained to 1 ppb. Concentration time series for organic functionalities found in secondary VOC.



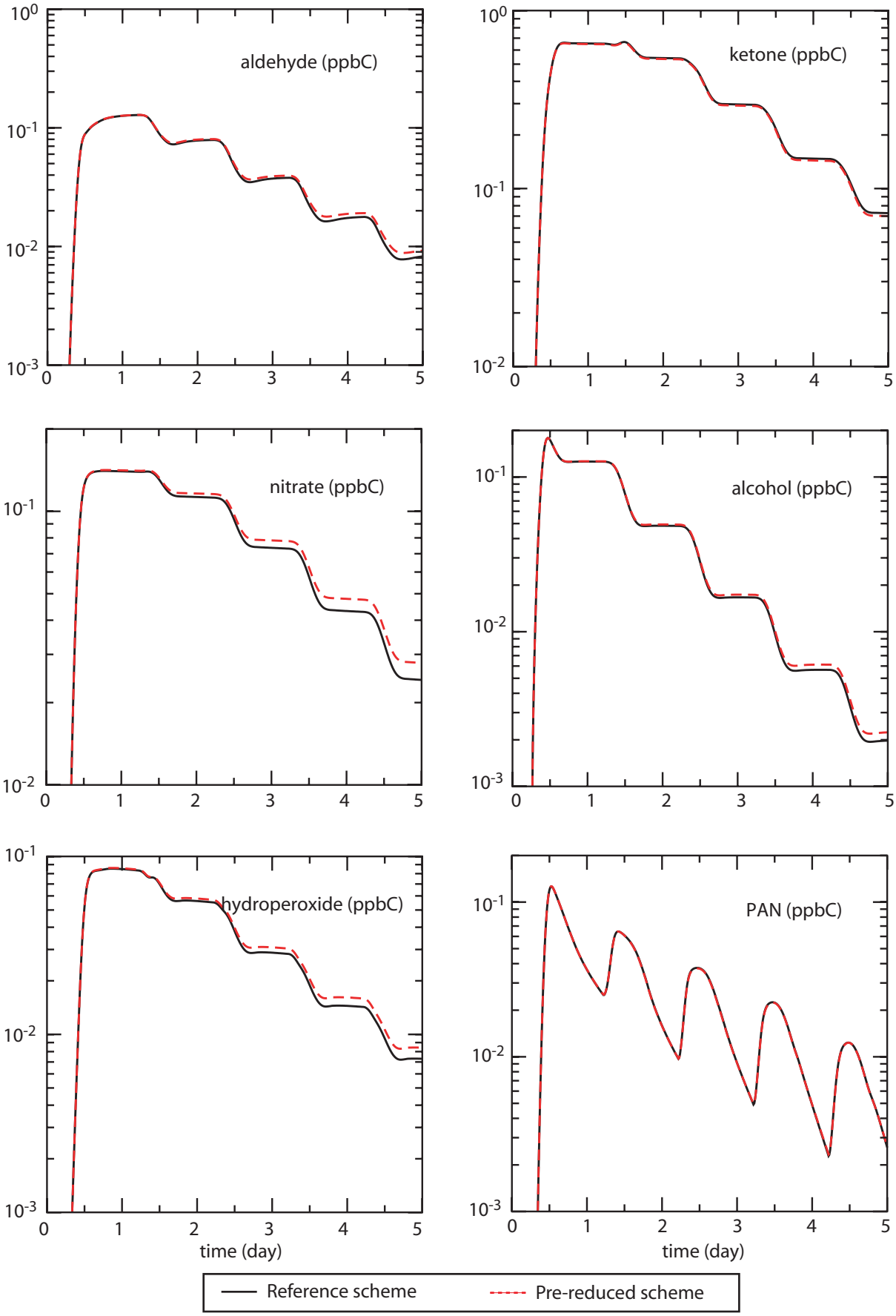
Hexane oxidation - NOx mixing ratio constrained to 100 ppt. Concentration time series for organic functionalities found in secondary VOC.



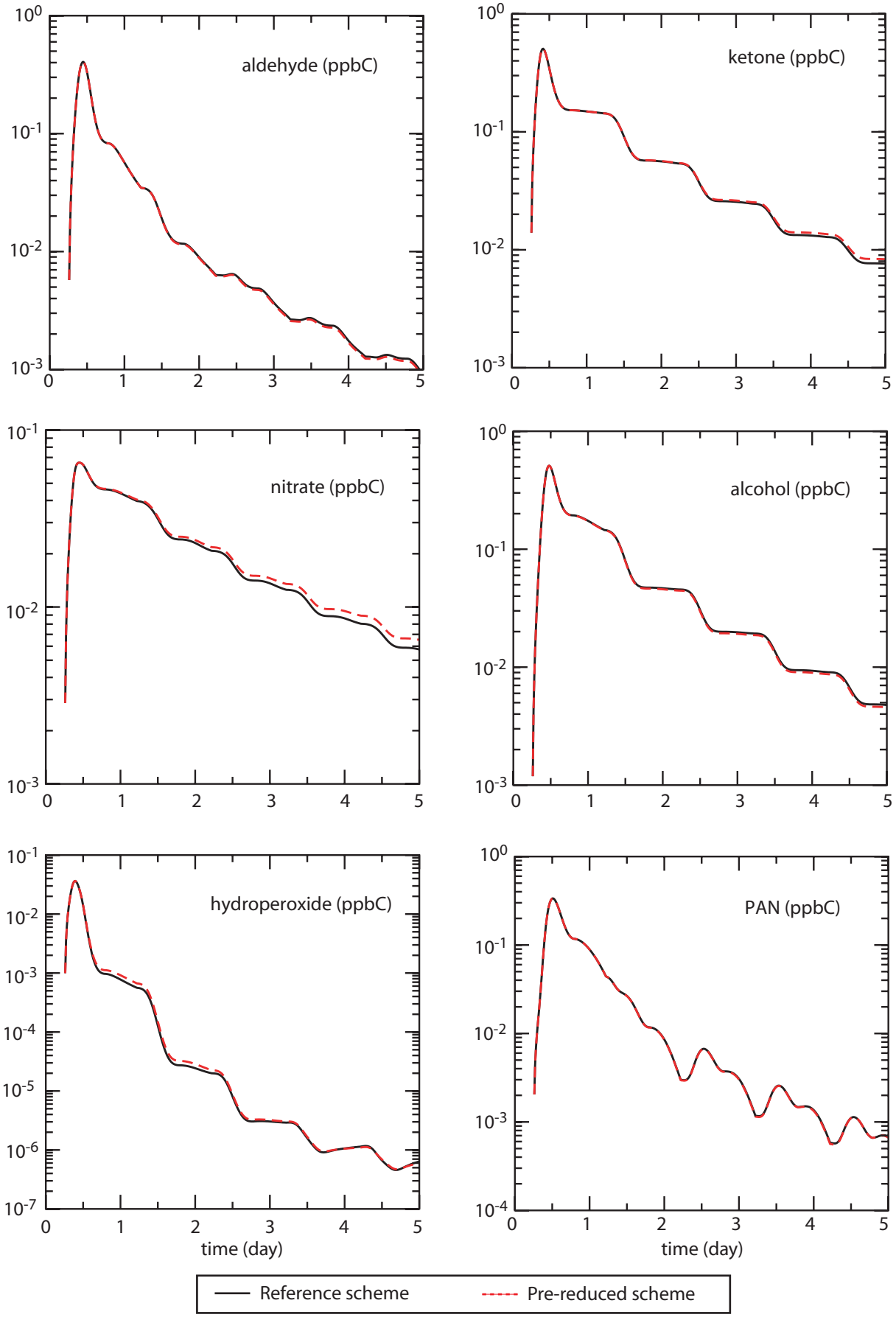
Hexane oxidation - NOx mixing ratio constrained to 10 ppt. Concentration time series for organic functionalities found in secondary VOC.



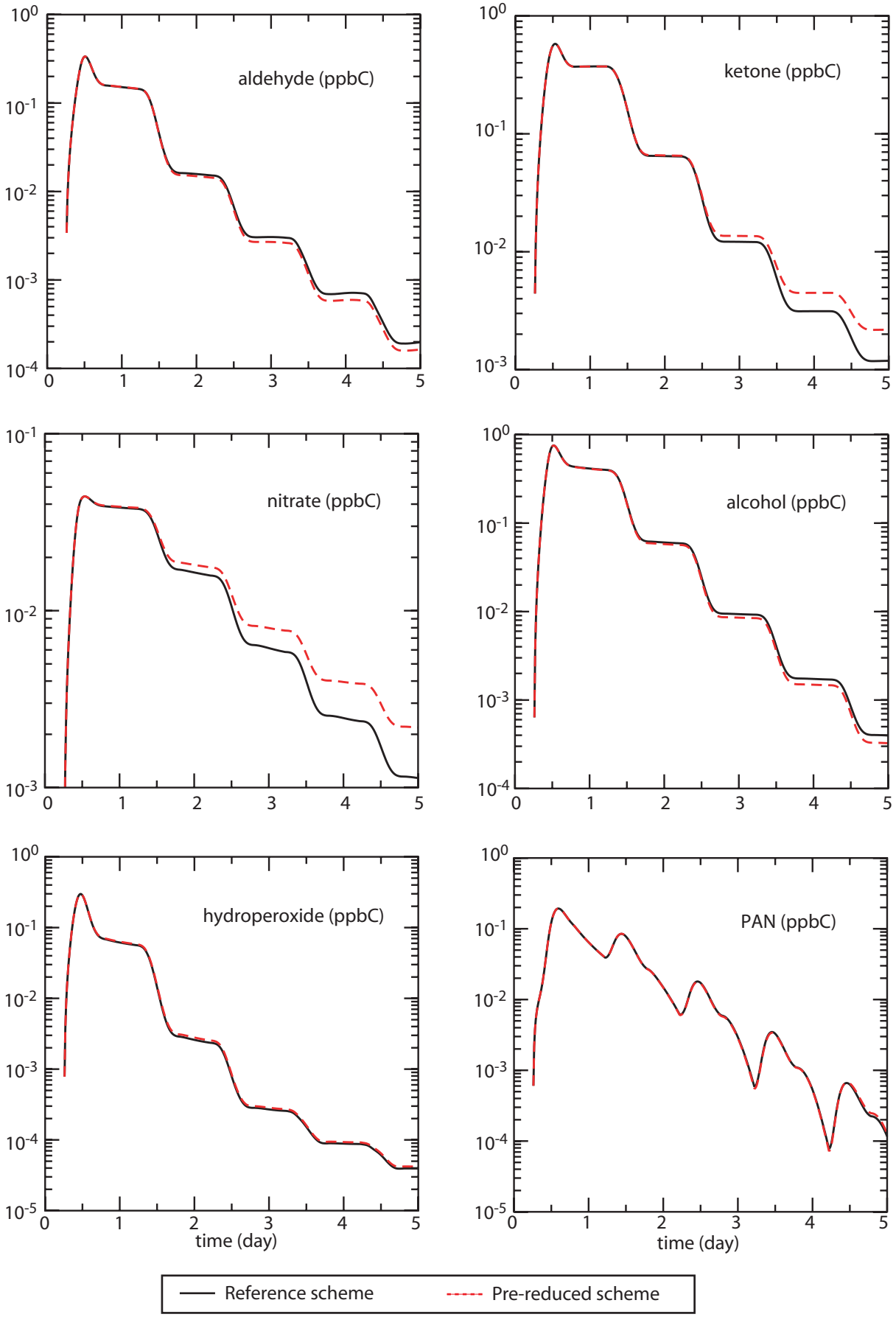
Hexane oxidation – NOx not constrained and set to an initial mixing ratio of 1 ppb. Concentration time series for organic functionalities found in secondary VOC.



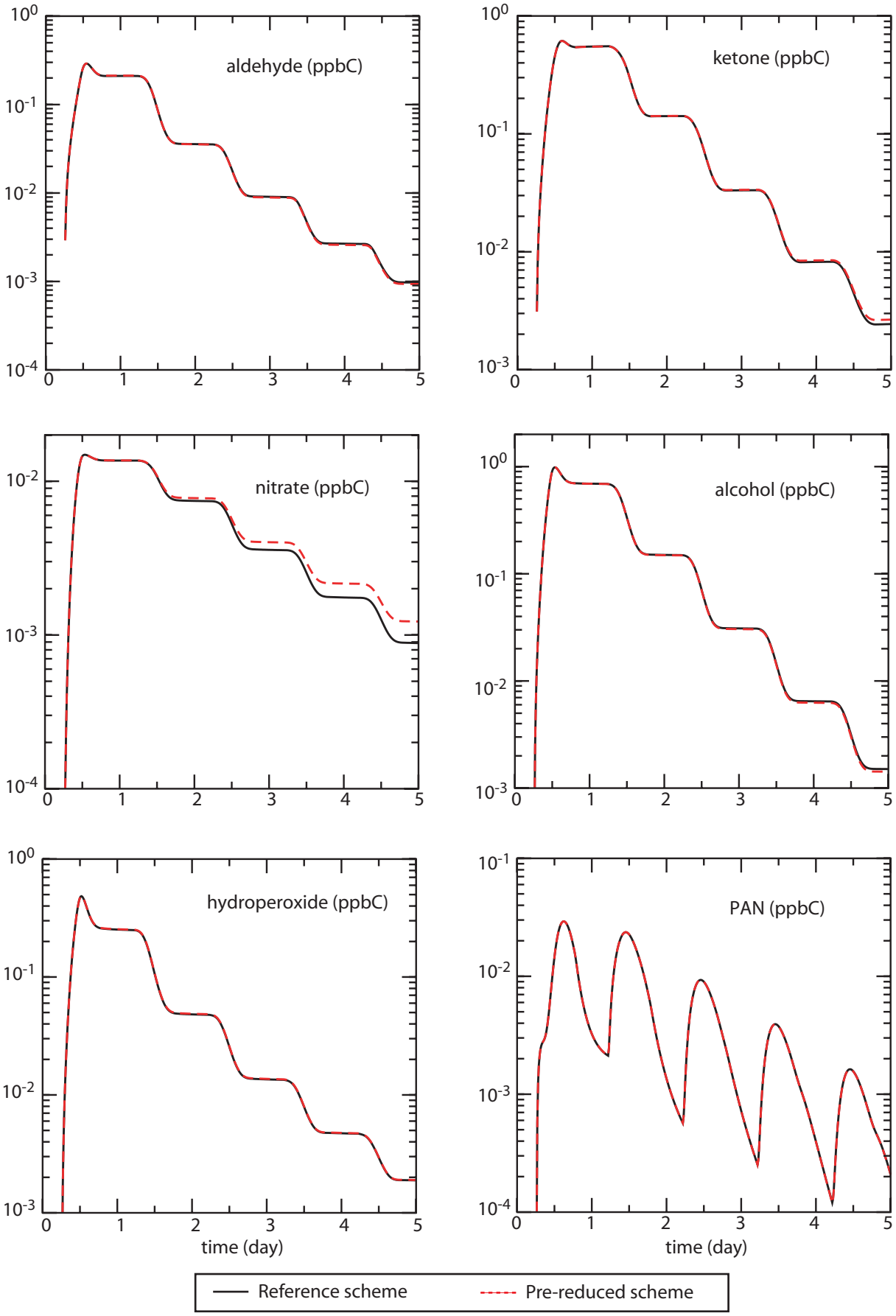
Isoprene oxidation under 1 ppb fixed NOx mixing ratio. Concentration time series for organic functionalities found in secondary VOC.



Isoprene oxidation under 100 ppt fixed NOx mixing ratio. Concentration time series for organic functionalities found in secondary VOC.



Isoprene oxidation under 10 ppt fixed NOx mixing ratio. Concentration time series for organic functionalities found in secondary VOC.



Isoprene oxidation – NOx not constrained and set to an initial mixing ratio of 1 ppb. Concentration time series for organic functionalities found in secondary VOC.