The important role of atmospheric composition in advancing Earth System Predictions – a WMO Global Atmospheric Watch Perspective

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Significant societal benefits come from services derived from environmental predication. Meeting the growing societal needs requires improved prediction skill at higher resolution and longer lead time.

To meet societal needs the Seamless predictions of air quality, weather and climate are needed to address many of the societal problems related to environmental hazards. Improving prediction capabilities via seamless coupling atmospheric composition modelling with weather and climate components via earth systems approaches is a key strategy of GAW to improve prediction capabilities and services. In this paper we describe efforts underway to advance atmospheric composition modelling in earth system models within the context of the recent WMO reforms.