

**TWO NOVEL APPROACHES TO IMPROVE TEMPORAL
VARIABILITY IN EMISSIONS**

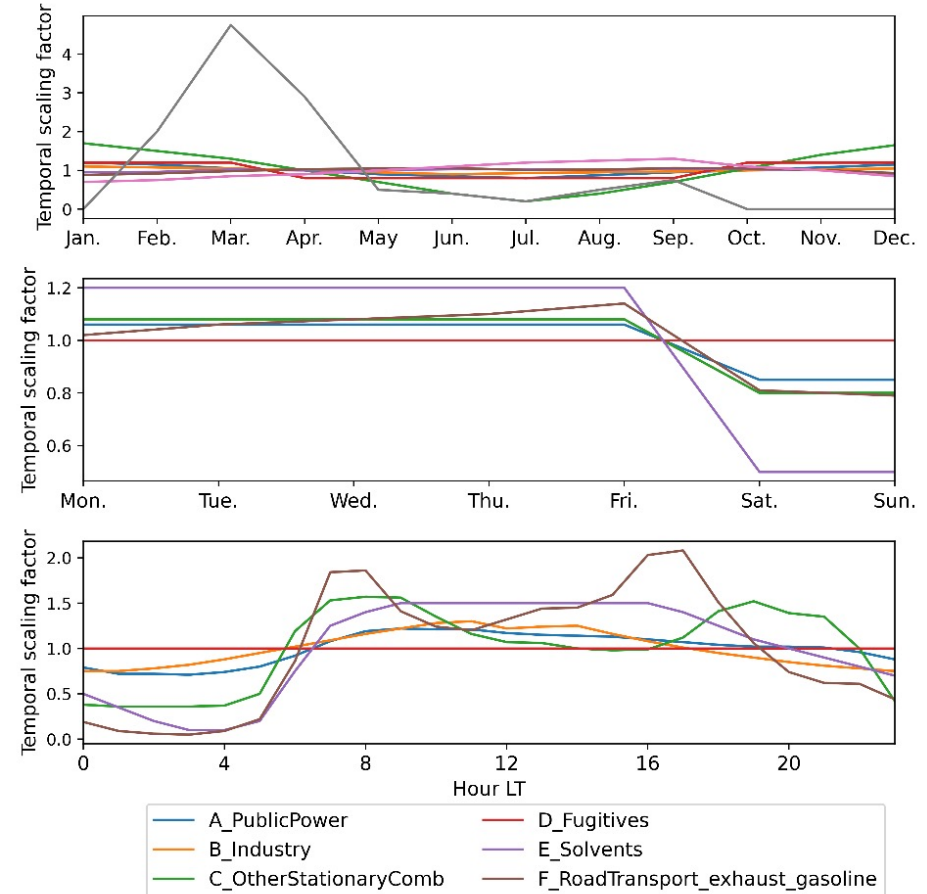
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MEIMA, ET AL.**

› THE DEFAULT APPROACH

DEFAULT TEMPORAL PROFILES

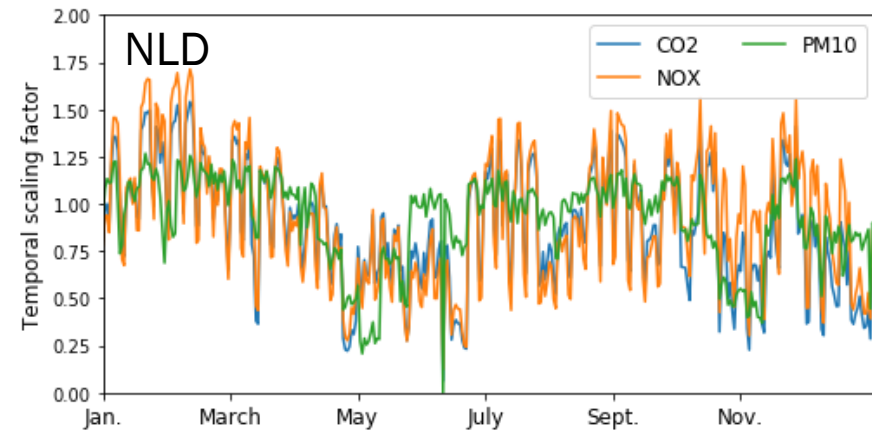
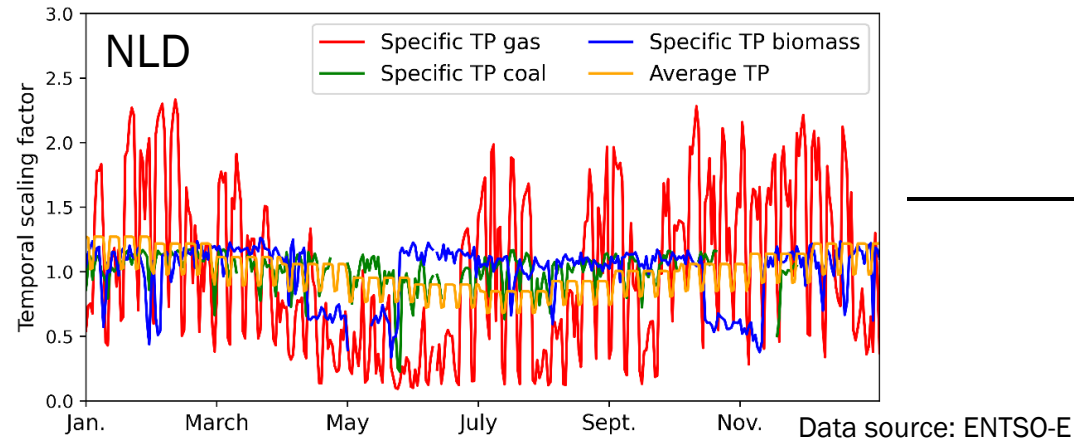
Temporal profiles based on average activity estimates for each month, day and hour. Limitations of this approach:

- › One set of profiles for the whole European domain: no differences between countries
- › Default profile for CAMS-REG emissions
- › Profiles are static and do not change from year to year, which has proven important in the case of COVID-19
- › Same profiles are used for all species (GHG + air pollutants), while
 - › Fuel mix can differ per species and different fuels can have different temporal profiles
 - › Type of activities within an aggregated sector can differ per species and these activities can have different temporal profiles

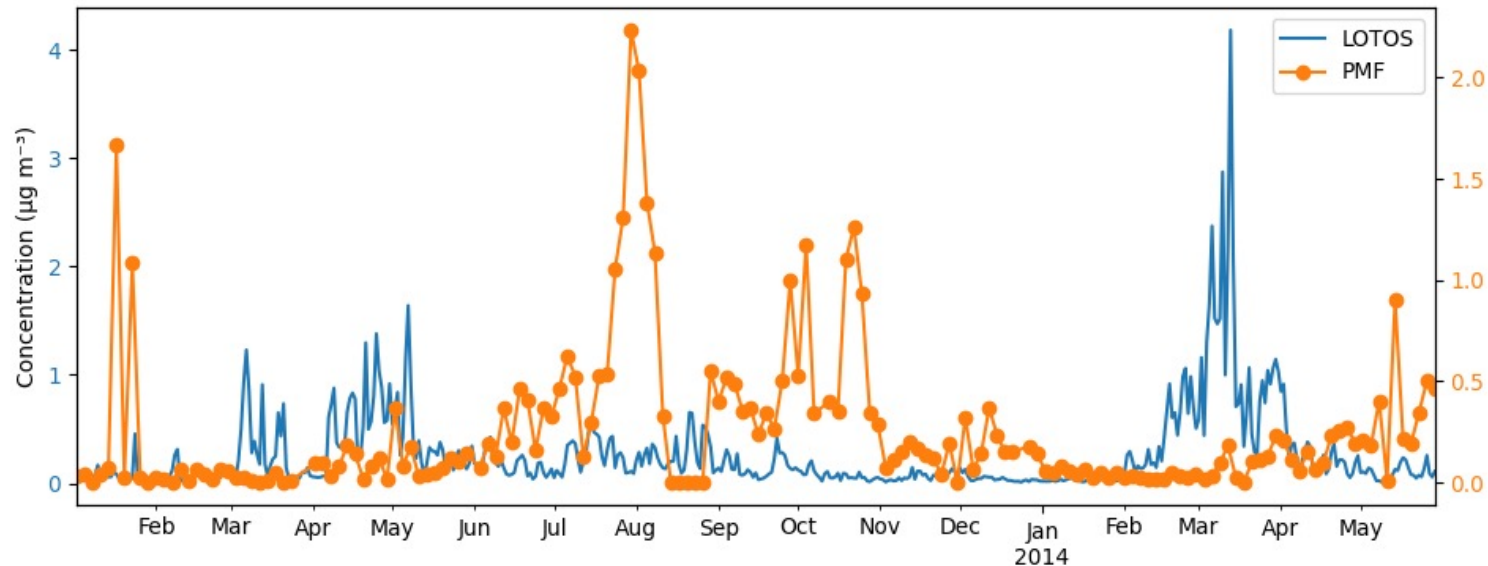


INCREASING DETAILS

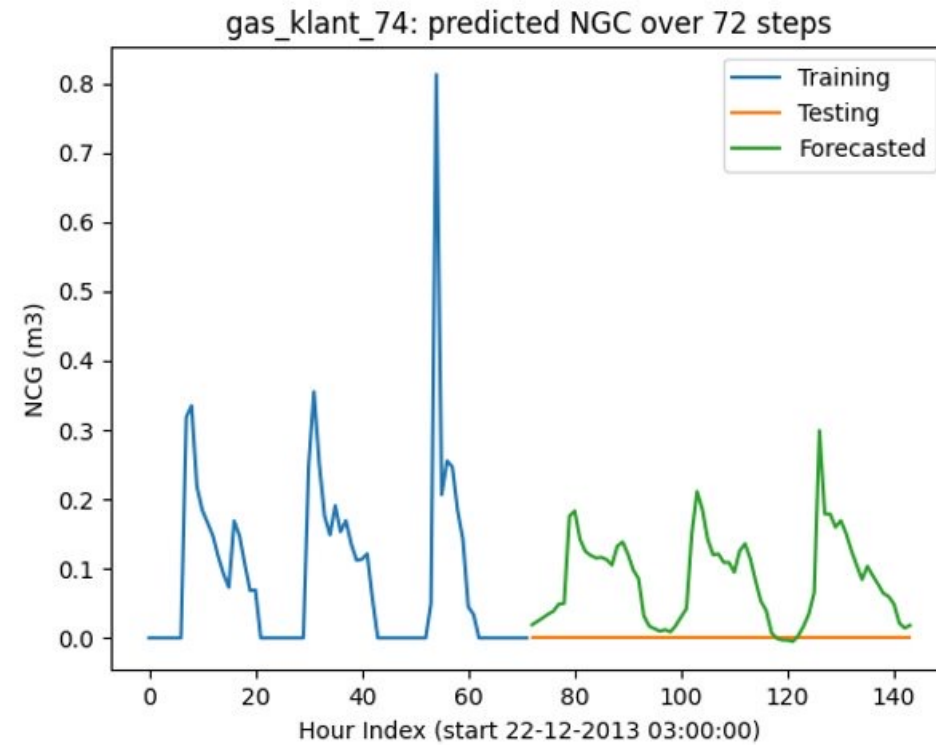
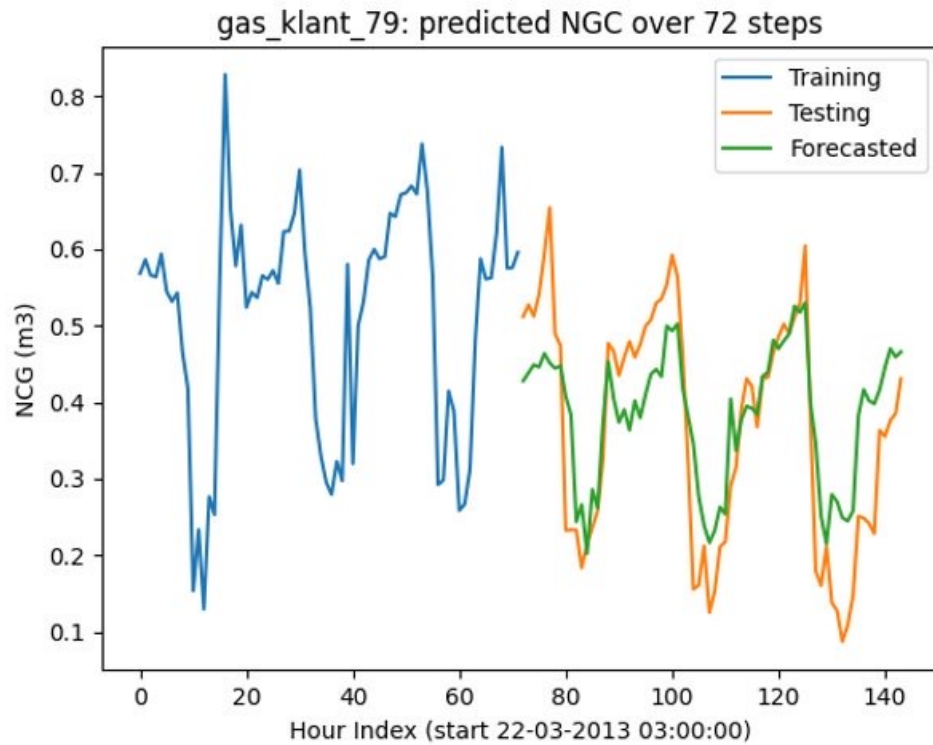
SPECIFY TEMPORAL VARIATIONS PER SPECIES



LEN : OC PMF PBOA vs ppm LOTOS agriculture



› MACHINE LEARNING AND PATTERN RECOGNITION MAKE USE OF STATISTICAL TECHNIQUES





› **THANK YOU FOR
YOUR TIME**

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