Supplementary material

A multi-model comparison of meteorological drivers of surface ozone over Europe

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Figure S1. Standard deviations of the meteorological predictors: Maximum temperature (Tx), relative humidity (RH), solar radiation (SSRD), wind direction (Wdir) and wind speed-10m (W10m). Standard deviations are computed for each season, AMJ (top) and JAS (bottom), and for each region: England (EN), France (FR), Mid-EU (ME), NI (North Italy), EA (East-EU), IN (Inflow), SC (Scandinavia), IP (Iberian Peninsula), MD (Mediterranean) and Balkans (BA).



Figure S2. Correlation coefficients between MDA8 O3 and each potential predictor used in the MLR. Correlations are computed for each season, AMJ (top) and JAS (bottom), and for internal regions: England (EN), France (FR), Mid-EU (ME), NI (North Italy), EA (East-EU).



Figure S3. Correlation coefficients between MDA8 O3 and each potential predictor used in the MLR. Correlations are computed for each season, AMJ (top) and JAS (bottom), and for external regions: IN (Inflow), SC (Scandinavia), IP (Iberian Peninsula), MD (Mediterranean) and Balkans (BA).



Figure S4. Standardised coefficients values of the rest of the meteorological predictors (SSRD, Wdir and W10m) for each CTM-based and observation-based MLR in AMJ (top) and JAS (bottom) and for the internal regions: England (EN), France (FR), Mid-Europe (ME), North Italy (NI) and East-Europe (EA).



Figure S5. Standardised coefficients values of the rest of the meteorological predictors (SSRD, Wdir and W10m) for each CTM-based and observation-based MLR in AMJ (top) and JAS (bottom) and for the external regions: Inflow (IN), Iberian Peninsula (IP), Scandinavia (SC), Mediterranean (ME) and Balkans (BA).