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Development of a Monitoring and Forecasting Air Quality Modelling System

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The present study focuses on the description of a versatile and flexible air quality monitoring and forecasting system. The system provides environmental information and advice to stakeholders and citizens via proper hardware & software infrastructure, scientific expertise and computational excellence. It is a combination of three-dimensional air quality models (WRF/CAMx), innovative models for anthropogenic and natural emissions (MOESS/NEMO), satellite data for updating emissions, air quality low-cost sensor networks, and computational intelligence and data fusion methodologies. The system has been implemented in two pilot areas in Greece, Thessaloniki and Heraklion and provides information concerning air pollutant concentrations and relevant indicators.

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