



A “seamless forecast service” for EXPO₂₀₁₅

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From May to October 2015, Milano hosted the universal exposition (EXPO₂₀₁₅) in a site covering 1.1 km² (0.42 sq mi) and located about 15 kilometres (9.3 mi) Northwest of Milan in the municipalities of Rho and Pero. Usually, during those months, high impact weather like thunderstorms, heavy rain, strong wind and heat waves are frequent. For this reason, weather services have been required by the Organizing Committee to support planning and coordination of the EXPO activities. Important issues concerned the weather effects on individual exhibition pavilions and potential impacts associated with the outdoor exposure of a large number of people and a high valuable property. ARPA Lombardia provided the weather service for EXPO₂₀₁₅ covering nowcasting and mid-term forecasts inspired by the “seamless forecast service” paradigm. Dense monitoring network, including weather stations, an X-band polarimetric weather radar and disdrometers. Timely automatic warnings were issued for severe weather, aimed at rapid actions by the EXPO₂₀₁₅ Operative Center. Forecasts, based on a mesoscale Short Range Ensemble Prediction System, were also provided for planning activities up to five days. This work describes the service provided, and shows results and lessons learnt.