Smart weather forecasting by computing network comprising the Earth Simulator and edge servers

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Japan Agency for Marine-Earth Science and Technology (JAMSTEC) and NTT Network Innovation Laboratories (NTT) have started a new collaborative research on the development of smart weather forecasting system that can bring new information infrastructure for future smart society. As illustrated in Fig.1, the system relies on a computing network, including the Earth Simulator at JAMSTEC and edge servers consisting the edge computing platform lead by NTT. The big data obtained from huge number of various IoT sensors are utilized to improve the forecasting in an efficient way in terms of both computation and network communication. The edge servers, in the vicinity of the users and devices, can provide detailed local weather information that can be of use for many local services. We will present the possible social applications as well as the new system itself.

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