Elastic Compute Drives Advances in Weather Modeling and Prediction for NOAA

As one of the world's preeminent weather forecasting organizations, the National Oceanic & Atmospheric Administration (NOAA) needs ever-increasing HPC capacity to advance its numerical weather prediction models. NOAA is developing and prototyping its next-generation Rapid Refresh Forecast System (RRFS) on Intel® Xeon® Scalable processor-based cloud instances at Amazon Web Services (AWS). Intel HPC solutions are designed to meet the volume, performance, and throughput requirements of workloads such as NOAA's. Intel on AWS allows for granular provisioning of clusters for diverse workloads. Under General Dynamics Information Technology's (GDIT) prime Research and Development HPC System (RDHPCS) contract with NOAA, Parallel Works middleware streamlines management of NOAA's cloud-based resources. Together, this collaborative effort helps NOAA speed time-to-science while remaining within budget constraints.

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1 For more complete information about performance and benchmark results, visit https://www.intel.com/content/www/us/en/customer-spotlight/stories/noaa-customer-story.html