

TempoQuest Weather Prediction Software Achieves HPC Performance Breakthrough

BOULDER, COLORADO, USA, May 31, 2018 /EINPresswire.com/ -- For Immediate Release

Contact
Gene Pache
President, TempoQuest
402 578 1722
gene@tempoquest.com

Fred Thompson
President, Communications Collaborative
203 962 2011
FrederickThompson2@gmail.com

TempoQuest Weather Prediction Software Achieves HPC Performance Breakthrough
Weather start-up leverages cutting-edge NVIDIA GPU technology to achieve revolutionary speed for the most widely used weather and research forecast model

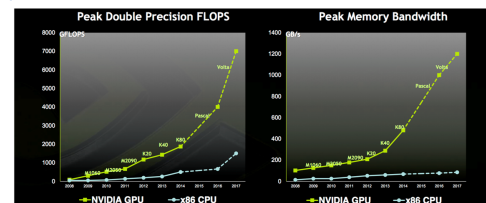
[Boulder, CO, May 31, 2018] Today, TempoQuest, Inc. (TQI) a software-based micro-local weather forecasting company, announced that it has achieved a breakthrough 700% acceleration of the weather community's Weather Research Forecast (WRF) model used extensively for real-time forecasting and weather research throughout the world.

The game-changing speeds are the result of TempoQuest's technology leadership in GPU development of weather modeling software combined with NVIDIA® Tesla® V100 GPUs to produce TempoQuest's customizable and proprietary AceCAST™ software platform for GPU computing.



TempoQuest logo

TempoQuest WRF Acceleration

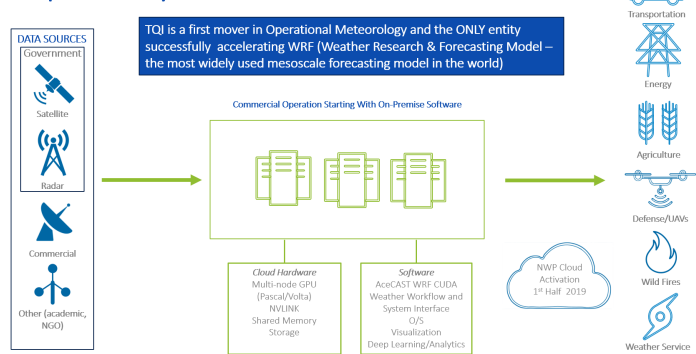


- A mesoscale model for resolutions greater than 500 meters
- Computation intensive code is compatible for GPU accelerators
- TQI porting WRF Fortran 90 code to CUDA enabling the use of NVIDIA GPUs
- Advancements in GPU chip technology is enabling the acceleration
- Acceleration come from proprietary coding techniques, integration and optimization combined with knowledge of HPC, Numerical Weather Prediction, Atmospheric science and CUDA, and WRF

Graphs provided by Nvidia

NVIDIA's GPUs Enable Weather Forecasting Acceleration

TempoQuest Systems Architecture



TempoQuest's System for Accelerating Weather Forecasts

Why is this milestone important?

_ A forecast requiring 60 minutes to produce by best available current forecasting technologies can now be completed in less than 10 minutes

_ The implications for saving lives, protecting property and ensuring the profitability of weather-related businesses (e.g., agriculture, renewable energy, automated aerial vehicles and ground transportation) are profound.

“The acceleration of regional weather processing times has presented a challenge to forecasters that has taken years to solve,” said TempoQuest President Gene Pache. “Current analytical processes are decades old and until the availability of recent computer acceleration technologies pioneered by NVIDIA, and software platforms like AceCAST™, there simply hasn’t been the ability to analyze all the data that drives forecasting speed and accuracy.”

“High-quality weather forecasts require a tremendous amount of computing speed,” said Stan Posey, Program Manager for Earth System Science at NVIDIA . “We look forward to continued collaboration with TempoQuest that will bring further breakthroughs to the weather modeling community.”

#

About TempoQuest

TempoQuest, Inc. is a weather technology company based in Boulder, CO. Their revolutionary approach has led to a suite of software solutions that deliver next-generation, accelerated weather forecasts to commercial weather entities, government agencies and other users around the world. TempoQuest is the future of forecasting - first to offer customizable supercomputing that delivers faster, more accurate micro-level weather data. For more information, please visit www.tempoquest.com

Fred Thompson
Communications Collaborative
203
email us here

This press release can be viewed online at: <http://www.einpresswire.com>

Disclaimer: If you have any questions regarding information in this press release please contact the company listed in the press release. Please do not contact EIN Presswire. We will be unable to assist you with your inquiry. EIN Presswire disclaims any content contained in these releases.

© 1995-2018 IPD Group, Inc. All Right Reserved.