CUSTOMER SUCCESS STORY

NASA's Global Modeling and Assimilation Office Helps Keep NASA Flying

NASA's Global Modeling and Assimilation Office (GMAO) analyzes weather and climate data from many observing systems to aid and guide NASA missions. GMAO's weather predictions are based on NASA's GEOS model that runs four times a day. The analysis integrates over five million observations every six hours. Accuracy, resolution and time to solution plus the ability to create more valuable software products depend on computing capability. NASA Goddard needed greater capacity. NASA Goddard's latest addition to the Discover HPC system is a cluster of Intel® Xeon® Scalable Processors and Intel® Omni-Path Architecture fabric. It enables GMAO to further their mission to support NASA's—and other agencies and researchers ongoing work around and over the globe.

> "The advances in computing technology have allowed us to scale from 50-km2 grid spacing 20 years ago with a single weather prediction per day to today's 12-km2 spacing with predictions done every six hours...they ran a global prediction at 1.5 km2, which was the highest-resolution global atmosphere simulation run by a US model at that time"
>
> **Dr. Bill Putman, researcher, NASA's Global Modeling and Assimilation Office**

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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/nasa-global-modeling-assimilation-customer-story.html