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## NASA Earth exchange: Big data solutions for Earth sciences

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NASA Earth Exchange (NEX) is designed to engage the global community of Earth scientists in cross-disciplinary research by combining global Earth observation datasets, shared scientific tools and workflows, and the power of cloud computing to enhance scientific collaboration and accelerate progress towards understanding emerging changes in the Earth system. NEX is developing resources for scientists seeking to enhance their skills on a variety of research topics. NEX learning resources include online lectures from the world's leading scientific experts and hands-on data analysis and modelling exercises enabled through virtual machines and shared workflows.

As part of this effort, we seek to encourage the development of open technology, data analytics, and experimental pedagogy structured around NASA's global, open, Earth observation data assets. The partnership provides NASA with a scalable, proven infrastructure that has a multitude of capabilities for lowering barriers to access and use of global data sets and supercomputing resources for researchers and the public.

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