

Abstract: Exploring the full simulation modeling workflow on XSEDE, Y3

This project has been extremely successful, as we have been building/testing the XSEDE/Jetstream/OpenStack side of the cloud agnostic, Pangeo framework as an exemplar of the scientific computing platform of the future: scalable, data-proximate computing with interactive graphics, and all the scientist needs locally is a web browser and a hot-spot-level internet connection. This past year was productive in work finishing critical pieces of Pangeo going on Jetstream, most notably the kubernetes cluster autoscaling. Up to now, the Pangeo deployment on JetStream has not had much uptake, because without autoscaling the system is not really viable. Now Pangeo on Jetstream is ready for real use and with some adequate testing and publicity it should really take off.