



What does LANL do with supercomputers?

One major task of Los Alamos supercomputers is to model the behavior of materials inside nuclear weapons while they explode. The United States does not perform all-up tests of nuclear weapons, and hasn't since 1992. As these devices age, the nation increasingly depends on various forms of non-nuclear testing, including computer simulations. Central and challenging in this work is the study and modeling of turbulence.



Supercomputers at Los Alamos are also used to model weather patterns, ocean currents, and other factors that play a role in climate change. Here again, turbulent flow plays a major role. Lab scientists have developed models exploring the effects of large meteors or asteroids impacting on the oceans, and how a contagion can spread through a population, as well as trying out methods to manage such epidemics. These are the projects we've heard about. We suspect there are more.



5/2017