

Charge to EarthScope Steering Committee for Updated EarthScope Program Science Plan

It has been almost eight years since the original EarthScope Science Plan was developed through the 2001 Snowbird workshop (“Scientific Targets for the World’s Largest Observatory Pointed at the Solid Earth”) and National Research Council “Review of EarthScope Integrated Science”. Since then, the EarthScope MREFC has been completed and the EarthScope Facilities are operational, and many exciting scientific results have come out of the broad EarthScope community and beyond. It is appropriate to reexamine the EarthScope Program Science Plan in light of these new developments.

NSF therefore charges the EarthScope Steering Committee (ESSC) with coordinating a community process to develop an updated Science Plan for the EarthScope program. The plan should identify high-priority, new, and emerging areas of scientific exploration for the EarthScope Program over the next five to ten years from a broad range of Earth science disciplines, including geodesy, seismology, geology, hydrology, ocean science, weather and climate modeling, and space physics. The plan should emphasize transformative, interdisciplinary science and include some areas that may be speculative today, but with a high potential return. The plan will not make specific budgetary recommendations, but may identify areas where additional resources could be beneficial. As the plan is prepared, ESSC should bear in mind that the main goals for the new plan are to inform future NSF decisions on the EarthScope Program and related priorities, to expand and enhance the already vibrant EarthScope community, and to emphasize the critical contributions EarthScope will provide over the next decade.

The final Science Plan document is due to NSF no later than 31 January 2010, and should be written for a broad audience that includes NSF management and staff, policymakers, and the scientific community.