MODELING, ANALYSIS, PREDICTION, AND PROJECTIONS

Research to advance our understanding, predictions, and projections of the Earth’s climate.
Development and transition to provide new products and services.

The Modeling, Analysis, Predictions, and Projections (MAPP) Program is located in the NOAA Office of Atmospheric and Oceanic Research’s Climate Program Office. MAPP provides support for improving understanding of the climate system, assessing climate impacts for decisionmaking, and improving NOAA products used in climate mitigation and adaptation efforts.

The MAPP Program aims to advance:

| Climate and Earth system modeling to improve the simulation of climate variability and change | Predictions of climate and Earth system changes on multi-annual to decadal timescales | Projections of long-term climate conditions |

ENHANCING SOCIETAL CLIMATE RESILIENCE

NOAA supports research to improve products and services that enhance societal resilience to climate extremes such as varying water resources and high-impact Earth system conditions. For example, the MAPP Program contributes to NOAA’s efforts to improve the monitoring, prediction, and understanding of drought as part of the National Drought Information System, as well as improve the understanding and prediction of heat extremes. Resilience directly depends upon our improved capability to model and predict aspects of the climate system.
EXTENDING NOAA’S RESEARCH CAPABILITY

The MAPP Program funds competitively-selected projects that enables collaboration between NOAA and non-NOAA scientists, and that bring the breadth of climate R&D into the agency. MAPP organizes task forces around major programmatic research thrusts to enhance the value and outcomes from funded projects. MAPP provides a flexible and dynamic system enabling NOAA to engage the external research community on high-priority research areas. This extends NOAA’s internal research capability and sustains scientific advances in the broad community in coordination with partner agencies and institutions.

MAPP Task Forces:

MAPP Task Forces create communities of practice in research areas highly relevant to NOAA’s mission goals. Task Forces enable conversation and collaboration across individually funded projects and between NOAA and external collaborators, and leadership opportunities for pre- and early career scientists. Task Forces have organized many journal special collections and conference sessions, produced important multi-author contributions to the literature, developed fact sheets and evaluations of ongoing events, and set community standards for research needs.