Online Climate Scenario Tools

The Scenarios Network for Alaska and Arctic Planning (SNAP) climate projections are available not only as GIS files but also in user-friendly formats for the general public, including students, community planners and urban and rural residents. Custom-selected charts and maps can be downloaded directly from the SNAP website at www.snap.uaf.edu.

Community Chart Tool
www.snap.uaf.edu/community-charts

This web tool allows users to select any one of 4,000 communities in Alaska and western Canada. The interface offers a choice of three greenhouse gas levels based on Intergovernmental Panel on Climate Change (IPCC) emission scenarios. Rollover text explains the background for each of these scenarios. The community chart tool automatically generates easy-to-read, full-color graphs depicting temperature (°F) and precipitation (inches) for five periods: 1961–1990 (based on historical data) and 2001–2010, 2031–2040, 2061–2070 and 2091–2100 (projected data).

These graphs depict average values from projections of five climate models used by the IPCC. Projections are based on composite data from global models selected by SNAP for accuracy in the far North and are downscaled to the local level. Due to variability among models and among years in a natural climate system, such graphs are useful for examining trends over time, rather than for precisely predicting monthly or yearly values.

Graphs for each community can be viewed online and printed or downloaded for use.

For more information on the derivation, reliability and variability among these projections, see the SNAP Climate Projections: Tools for Planners or visit the SNAP website at www.snap.uaf.edu.

Data Set
Temperature | Precipitation

Emissions Scenario
Low | Medium | High

Model Variability
Off | On

Note that graph scales differ by region.
Selected projections based on SNAP climate data are available via SNAP’s online map selection tool. This tool allows quick and easy access to a wide range of climate projections for the state of Alaska and western Canada at a 2 km or higher spatial resolution.

The web-based map interface allows users to view maps of estimated freezeup and thaw dates, or length of growing season, with accompanying explanations of how these projections were created. These maps can be selected according to greenhouse gas emissions scenario and decade. Custom-selected maps can be viewed online, printed, saved or downloaded for use in presentations or posters.