Long-Range Forecast Maps

All National Weather Service Forecast Offices, including Glasgow, produce detailed daily forecasts for 7 days. However, all long range outlooks beyond 7 days are produced on a national basis by the Climate Prediction Center in Maryland.

Detailed daily forecasts beyond a week have little or no accuracy due to the chaotic nature of weather. Generalized long range outlooks though can be made with limited accuracy for as much as a year in advance. These outlooks cover a one to three month period, and are limited to chances of temperatures and precipitation being above or below normal.

These outlooks are drawn on national maps and show 3 categories each for temperature and precipitation: Above and below normal chance areas; and also a middle area between: the equal chances area, where there is no tendency for either above or below. Since there are 3 categories, the maps show departures from a starting point of 33%. Additional contour lines on the map are drawn for chances that exceed 40, 50, 60, or 70 percent chance of being in that category. In other words, the higher values indicate increasing confidence for that category in the outlook.

The long range outlooks are issued on the 3rd Thursday of each month for the next month, but also 3 month outlooks are issued for up to a year in advance. These outlooks are often given limited exposure by media, but are always available from National Weather Service Offices. Follow the climate links on the left menu of our website for more information and long-range forecasts. The address is: http://www.cpc.ncep.noaa.gov/products/predictions/

Why such long range outlooks when they are very generalized and of limited accuracy? There is a demand for such outlooks from business, industry, and agriculture, to name just a few examples. Any competitive or preparative edge, however slight, can useful. Interest among the generally public has always been high. Any indication of what the coming winter or summer might be like, has forever been a source of speculation. Since the beginning of mankind, people have searched for long term weather answers from plants and crops, the behavior of animals, or establishing weather connections to past seasons, to name just a few.

The Climate Prediction Center has produced long range outlooks for many years in some form. Historical observations, climate, pattern correlations, statistical models and tools, sea surface temperatures, snow cover, soil moisture, vegetation state, seasonal cycles, recent trends, and numerous large-scale atmospheric and sea surface temperature oscillations such as in El Nino, all go into various computer climate models that are run for the Climate Prediction Center. Forecaster experience and interpretation must then go into evaluating and analyzing the entire process for presentation in the form of the final outlook maps.

Later this spring in **Under The Big Sky**: More long-term information.



