

PROBABILITY OF WIND CHILL

CDS #17-65

By a simple technique it is possible to estimate the probability of a critical level of wind chill. Data required (mean monthly air temperature and wind speed) are entered in chart at left, and the value of the predictor read off. This predictor is transferred to the probability chart at the right (curved lines) and followed to critical level desired (read on actual wind chill scale at extreme right); percentage frequency can be read off on the probability scale at either top or bottom of the right-hand chart. Example: At Duluth, January mean temperature (10.3° F) and wind speed (12.3 mph) entered in chart at left give a predictor of 1300. This 1300 predictor intersects the 1400 actual wind chill (conditions at which exposed flesh freezes) at 22 percent on the upper scale, or 78 per cent on lower scale indicating the danger of freezing 22 percent of time or safety from freezing 78 per cent of the time.

