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**In this lab assignment, you will analyze isotherms (temperature contours) and isodrotherms (dew point temperature contours) at 10°F intervals on the surface chart for 0630Z on 21 March 1955. Print 2 copies of the attached chart ([http://faculty.fiu.edu/~hajian/MET3502/SFC\\_21MAR55\\_0630Z.tif](http://faculty.fiu.edu/~hajian/MET3502/SFC_21MAR55_0630Z.tif)), one for drawing isotherms and one for drawing isodrotherms. You should start from the 0°F contour, then to 10, 20, 30, 40°F,...., and to -10, -20, -30, -40 °F, ...contours. Please label each of your contour with the temperature or dew point temperature value and unit.**

The analysis is tricky both because the isopleths have no relation to the winds and because values change with station altitude as well as a result of direct meteorological forcing. However, these contours are very important for frontal analysis. Fronts will generally be where the contours are most closely packed. We will use these contours to locate fronts when we do a final surface analysis for this synoptic time in lab 6 (next module). Then we will draw another complete surface analysis for 1830 Z on the 21<sup>st</sup> of March 1955.