Changes in Global Surface Temperatures
1900-2000 Temperature Change by Latitude Band

Temperature change varies significantly by latitude, as can be seen above. From the period of time between 1900 and 2000, the northern latitudes experienced temperature change that was much more extreme than either the low latitudes or the southern latitudes. The polar regions that are included in the northern and southern latitudes are warming more rapidly than equatorial regions. Snow and ice have a light color and high albedo (percentage of light reflected off the Earth’s surface, so they reflect most incoming radiation from the sun back into space. However, as the planet warms, snow and ice will begin to melt, resulting in less reflected light and more energy absorbed by the oceans and land surface. This causes even more warming in the polar regions, which in turn causes more snow and ice to melt. The northern latitudes experiences more warming than the southern latitudes because there is greater land area that is more absorbent of solar energy. This results in faster melting of snow and ice, causing increased warming and in turn even more melting.

Graphs based on data gathered from http://data.giss.nasa.gov/gistemp