Observations:

1. In both the southern and northern hemispheres, as the latitude increases the humidity increases.
2. Per the northern and southern plots and linear regressions the cloudiness is highly varied over all latitudes. This is evident in the r-squared values of 0.26 and 0.23.
3. The linear regression representation of the data is the northern hemisphere and maximum temperature plot and linear regression. This is indicated by an r-squared value of 0.87