**Temperature vs. Latitude:**

Temperature generally decreases as latitude moves away from the equator in both hemispheres. This relationship is evident from the scatter plots and linear regression lines for both the Northern and Southern Hemispheres. The linear regression models show a clear negative correlation, indicating that temperatures tend to be higher near the equator and lower towards the poles.

**Humidity vs. Latitude:**

Humidity does not exhibit a strong linear relationship with latitude in either hemisphere. The scatter plots show a scattered distribution of data points, and the linear regression lines have low coefficients of determination (R-squared values). This suggests that humidity levels can vary widely at any given latitude due to local weather patterns, proximity to bodies of water, and other factors.

**Cloudiness vs. Latitude:**

Cloudiness also shows variability across different latitudes without a clear linear trend. The scatter plots display data points scattered across the range of latitudes, and the linear regression lines are nearly flat with low R-squared values. This indicates that cloud cover is influenced by local weather conditions and atmospheric dynamics rather than latitude alone.

**Wind Speed vs. Latitude:**

Wind speed demonstrates variability with latitude, especially in the Northern Hemisphere where some correlation can be observed. The scatter plots show a slight increase in wind speed as latitude increases in the Northern Hemisphere, while in the Southern Hemisphere, the relationship appears less pronounced. The linear regression lines have modest slopes, suggesting a mild increase in wind speed with latitude in certain regions.