

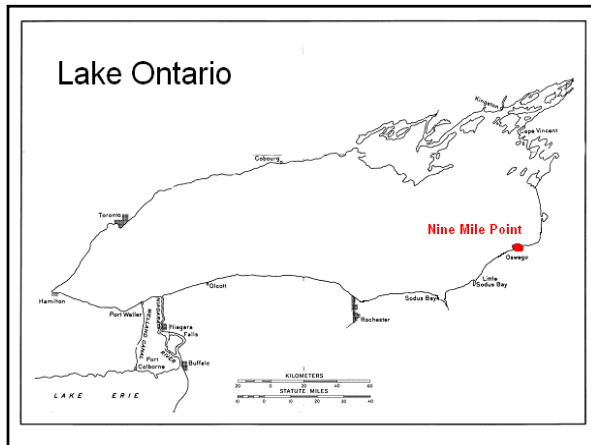
Meteorological Trends at Nine Mile Point

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NUMUG 2005

Analysis by On-site Meteorologists Thomas Galletta and Anthony Fabrizio

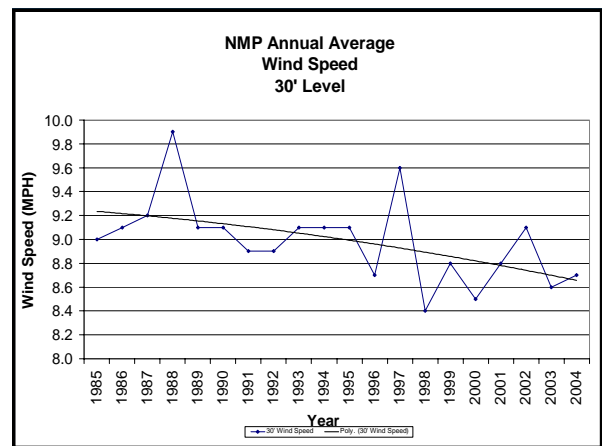
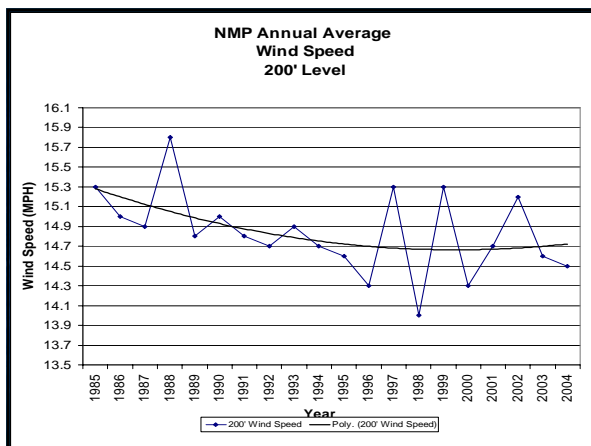
Background Information

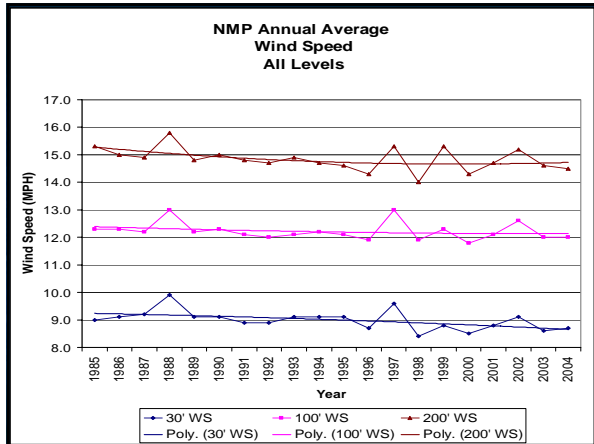
- Data is from Nine Mile Point Main Tower
- The Main Tower is instrumented at three levels (30', 100' & 200')
- The current database is 20 years
- An additional 10 years of Temperature data are included from a previous database



Wind Speed Trend

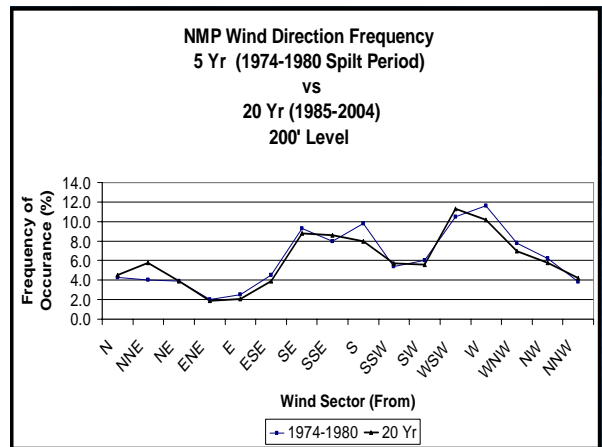
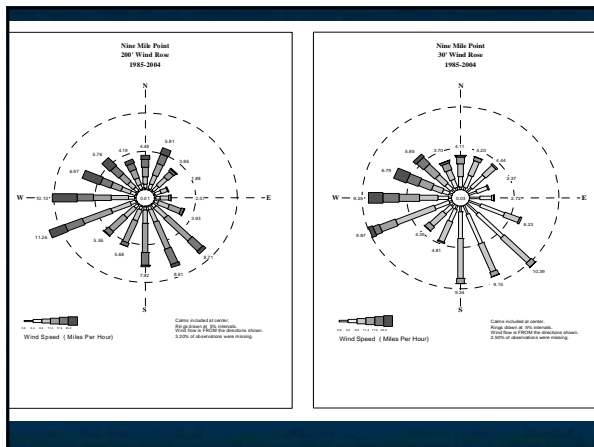
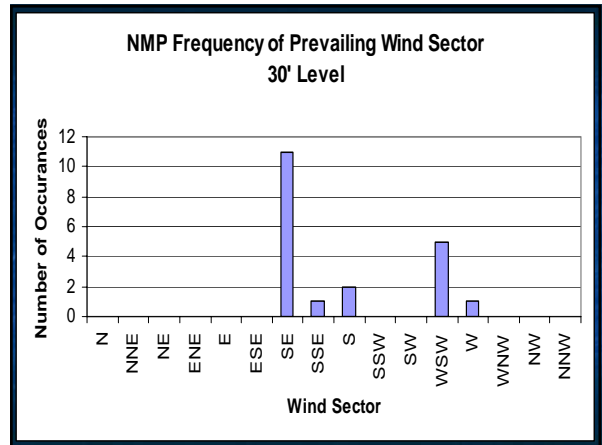
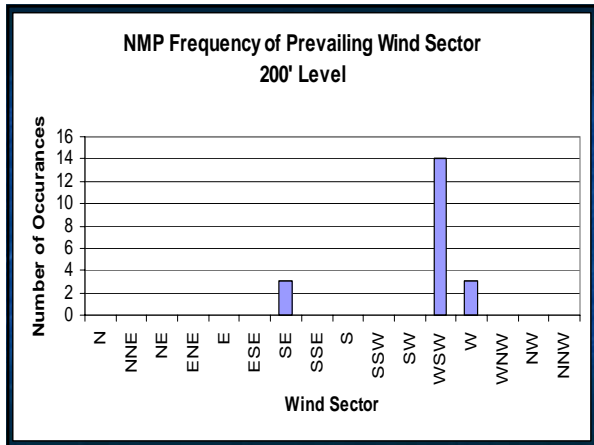
- Wind Speed has decreased from 1985 to 2004
 - 4% at the 200' level
 - 6% at the 30' level
- The speed decrease is marked with spikes from year to year throughout the downward trend

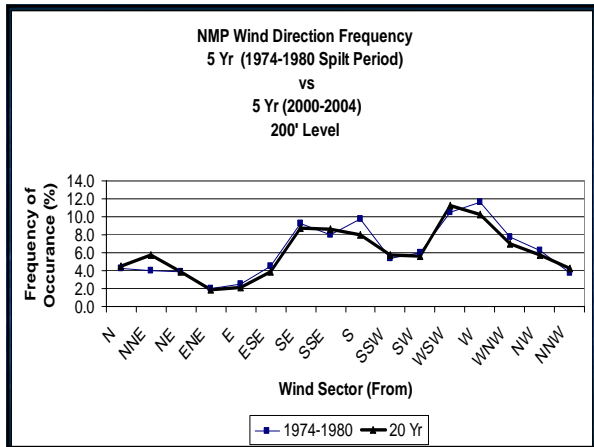
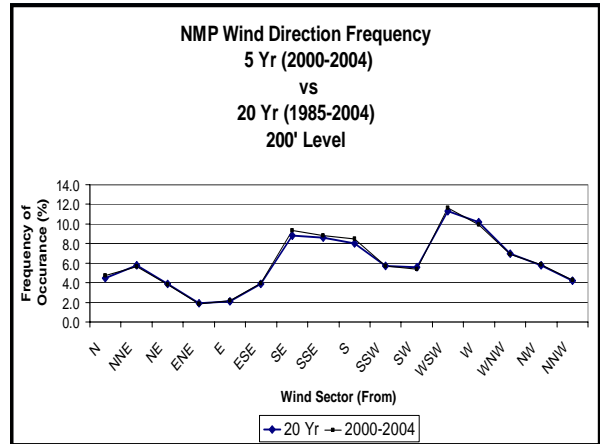
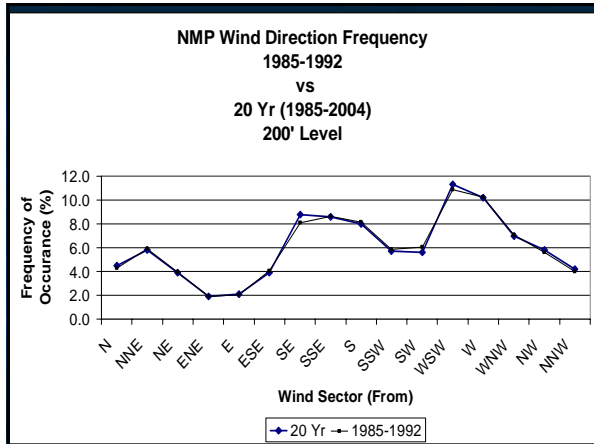




Wind Direction Trend

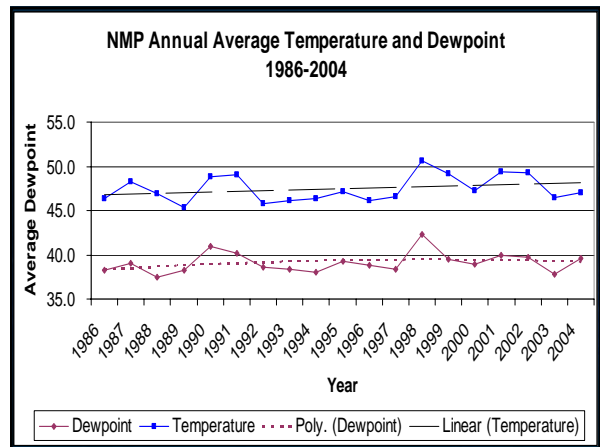
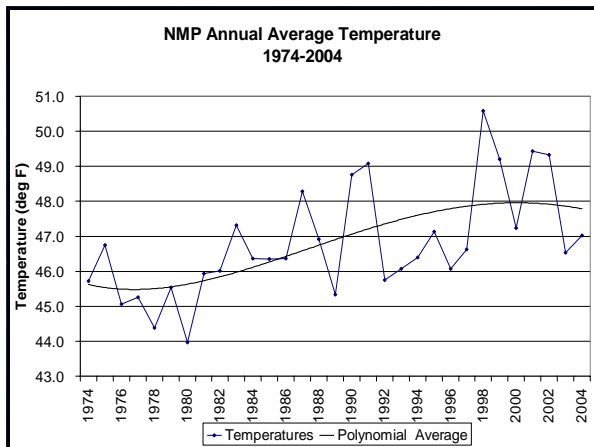
- Prevailing Wind Direction at 200' has been primarily WSW
 - With three different predominant sectors evident over the 20 year period
 - Within the limited 20 year data set we see the predominant wind sector change on a period of about 10 years
- Prevailing Wind Direction at 30' has been primarily SE
 - But five different sectors have predominated over the recent 20 year period

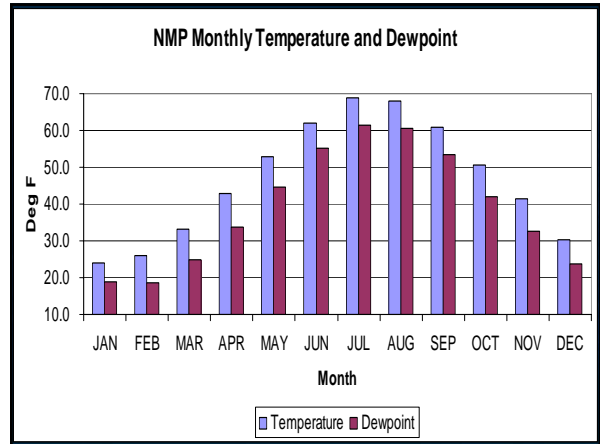
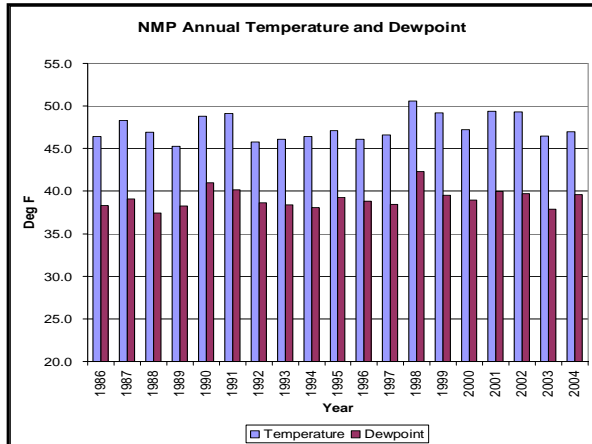




Temperature-Dew Point Trend

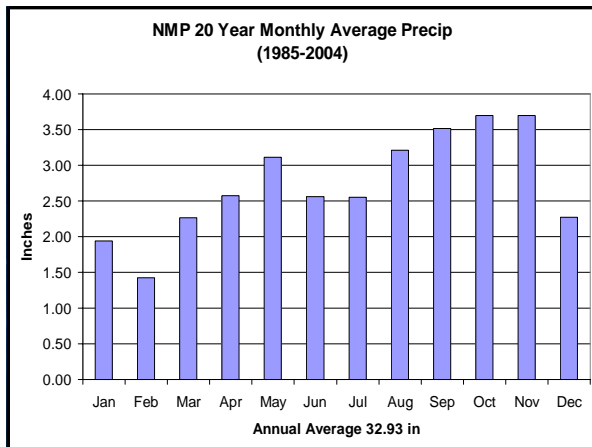
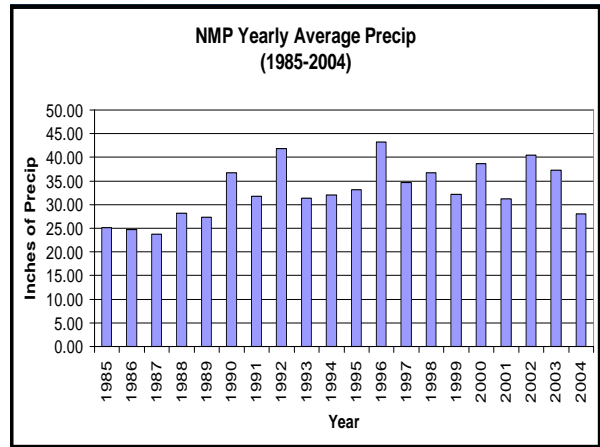
- Temperature-Dew Point increase ~5%.
- Temperature increase 2.2°F in 30 years
- Dew Point trend follows Temperature
- Average Relative Humidity ~75%





Precipitation Trend

- Annual Average precip is ~33 inches
- October and November are the wettest months
- February is the driest month



Conclusion

- Wind Speeds at all levels have decreased
- Prevailing wind direction differs with height and displayed a periodic variation
- Temperature and dewpoint have increased ~5%
- Precipitation displayed no apparent trend