

# **DRASTIC pH CHANGES**

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1. The most significant chemical species in the clouds and precipitation is the hydrogen ion (or hydroxide ion, correspondingly) concentration, as measured by the pH, according to the 1995 Nobel Prize winner for chemistry, Paul J. Crutzen, Director of Air Chemistry Division of the Max Planck Institut.
2. The magnitude of recently measured pH values of rainfall across the country shows a twenty fold increase in the number of hydroxide ions in the year 2000 vs. both 1990 and 1999 baseline data. This translates directly to a major change in pH and atmospheric chemistry during the recent year.
3. A statistical Student's t test applied to the year 2000 measured differences in rainfall pH is statistically significant at the 99.9%+ level.
4. A Wilcoxon's Signed Rank non-parametric statistical test, which makes no assumptions about the underlying distribution of the data (normal or otherwise), shows a statistically significant difference in the atmospheric chemistry of the year 2000 pH data at the 99.9999%+ level.
5. A 95% confidence interval for the average 2000 pH change relative to 1999 data indicates the average 2000 pH difference is expected to fall between +1.0 and +1.7. This corresponds to a 10 to 50 times increase in the hydroxide ion concentration in the atmosphere, occurring primarily within a twelve month period.
6. The atmospheric changes are correlated directly with the presence of sustained and extensive aircraft aerosol operations since the beginning of 1999.
7. These drastic changes and the results of these studies demonstrate the urgent need for a formal investigation into recent and radical changes in the atmospheric chemistry of the nation and globe. Citizens across the country are urged to organize and to demand this investigation without delay.

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