

There is wide variability at all elevations with the rainfall pH of daily and bi-weekly samples ranging between extreme values of 3.5 and 6.2. However, both the median and mean values showed a steady decline with increasing altitude. The mean value at sea-level was 5.2 decreasing to 4.3 at elevations above 2500 m MSL. The corresponding concentrations of sulfate ranged from 0.3 to 8.0 mg l⁻¹, but most of the values were <1.0 mg l⁻¹ and this is down by a factor 5 from the annual average in the region of maximum concentration in eastern North America (see Region Ap in Table 5).

Whiteface Mountain, N.Y.

Observations at the observatory atop Whiteface Mountain (elevation 1483m) have been compared with data from the nearest low-elevation MAP3S station at Ithaca. These show the pH of rain to be generally lower atop the Mountain. In addition, the Whiteface data shows the mean pH to be lower in non-precipitating clouds (i.e., small droplets) by about 0.4 to 0.5 units than in precipitating clouds (larger drops).

4.4 Observations at Remote Locations

In recent years sampling stations have been set up at remote locations by several agencies. The World Meteorological Organization (WMO) have instituted a global monitoring network to establish global trends in CO₂ and other atmospheric chemistry parameters. NOAA have also set up a less widespread