

New York State Department of Environmental Conservation

Bureau of Air Quality Surveillance

2007 Acid Deposition Annual Report

Station: Belleayre Mt.
 County: Ulster
 Town: Shandaken
 Location: Belleayre Mountain Cross Cou
 Ski Area

Site #: 556503
 AIRS #: 361111005
 Locality: Rural
 Zoning: Commercial

Total Precipitation (Inches of Rain): 54.76
 Valid Sample Precipitation: 53.98
 Number of Visits: 53
 Number of Valid Visits: 53
 Number of Samples: 43
 Number of Valid Samples: 43
 Number of Visits With Precipitation Events: 46
 Number of Valid Visits With Precipitation Events: 46
 Number of Anion Analyses: 41
 Number of Cation Analyses: 40

Elevation: 619 meters

Official Sampler

| | Precipitation (Inches of Rain) | Lab pH | SO4 IPPM | NO3 IPPM | CL IPPM | F IPPM | NO2 IPPM | Br IPPM | HPO4 IPPM | Na IPPM | NH4 IPPM | K IPPM | Ca IPPM | Mg IPPM | Lab Conductivity Micro s/cm |
|----------------|-----------------------------------|-----------|-------------|-------------|------------|-----------|-------------|------------|--------------|------------|-------------|-----------|------------|------------|--------------------------------|
| Maximum | 5.220 | 4.357 | 2.638 | 0.376 | 0.000 | 0.017 | 0.026 | 0.000 | 0.199 | 0.767 | 0.107 | 0.287 | 0.051 | 33.50 | |
| Minimum | 4.250 | 0.203 | 0.223 | 0.022 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.004 | 0.000 | 0.009 | 0.000 | 3.97 | |

Precipitation Weighted Mean

| | | | | | | | | | | | | | | | |
|--------------------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1st Quarter | 8.49 | 4.68 | 0.880 | 0.797 | 0.118 | 0.000 | 0.000 | 0.001 | 0.000 | 0.074 | 0.113 | 0.015 | 0.062 | 0.006 | 11.19 |
| 2nd Quarter | 17.64 | 4.57 | 1.785 | 0.863 | 0.081 | 0.000 | 0.003 | 0.000 | 0.000 | 0.031 | 0.308 | 0.014 | 0.070 | 0.011 | 16.33 |
| 3rd Quarter | 11.62 | 4.52 | 2.204 | 0.968 | 0.060 | 0.000 | 0.000 | 0.000 | 0.000 | 0.008 | 0.348 | 0.003 | 0.099 | 0.007 | 17.68 |
| 4th Quarter | 17.01 | 4.70 | 1.238 | 0.867 | 0.126 | 0.000 | 0.001 | 0.000 | 0.000 | 0.055 | 0.207 | 0.020 | 0.047 | 0.011 | 10.07 |
| Annual | 54.76 | 4.61 | 1.560 | 0.876 | 0.097 | 0.000 | 0.001 | 0.000 | 0.000 | 0.042 | 0.251 | 0.014 | 0.066 | 0.009 | 14.12 |

Total Deposition

| | H+ | SO4 | NO3 | CL | F | NO2 | Br | HPO4 | Na | NH4 | K | Ca | Mg |
|--------------------|--------|----------|----------|---------|-------|-------|-------|-------|--------|---------|--------|--------|--------|
| | mg/m2 | mg/m2 | mg/m2 | mg/m2 | mg/m2 | mg/m2 | mg/m2 | mg/m2 | mg/m2 | mg/m2 | mg/m2 | mg/m2 | mg/m2 |
| 1st Quarter | 4.530 | 189.664 | 171.916 | 25.362 | 0.000 | 0.072 | 0.206 | 0.000 | 15.909 | 24.351 | 3.146 | 13.404 | 1.382 |
| 2nd Quarter | 12.081 | 799.627 | 386.471 | 36.359 | 0.000 | 1.187 | 0.000 | 0.000 | 13.842 | 138.197 | 6.177 | 31.288 | 5.020 |
| 3rd Quarter | 9.002 | 650.613 | 285.754 | 17.737 | 0.000 | 0.000 | 0.000 | 0.000 | 2.394 | 102.750 | 0.949 | 29.315 | 1.922 |
| 4th Quarter | 8.666 | 534.938 | 374.665 | 54.444 | 0.000 | 0.261 | 0.000 | 0.000 | 23.679 | 89.367 | 8.580 | 20.136 | 4.584 |
| Annual | 34.281 | 2174.841 | 1218.806 | 133.902 | 0.000 | 1.520 | 0.206 | 0.000 | 55.824 | 354.665 | 18.852 | 94.143 | 12.908 |