

New York State Department of Environmental Conservation

Bureau of Air Quality Surveillance

2005 Acid Deposition Annual Report

Station: New York Botanical Gardens
 County: Bronx
 Town: Bronx
 Location: New York Botanical Gardens
 Harding Laboratory
 200th St. & SE Blvd.
 Elevation: 24 meters

Site #: 709406
 AIRS #: 360050083
 Locality: Urban
 Zoning: Residential, Comm

Official Sampler

Total Precipitation (Inches of Rain): 48.88
 Valid Sample Precipitation: 48.88
 Number of Visits: 52
 Number of Valid Visits: 52
 Number of Samples: 38
 Number of Valid Samples: 38
 Number of Visits With Precipitation Events: 44
 Number of Valid Visits With Precipitation Events: 44
 Number of Anion Analyses: 36
 Number of Cation Analyses: 34
 Number of Conductivity Analyses: 38
 Number of pH Analyses: 37

	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	6.42	6.328	5.079	4.931	0.580	0.579	0.128	0.034	3.162	3.626	0.209	0.972	0.192	42.00	
Minimum	4.19	0.164	0.000	0.074	0.000	0.000	0.000	0.000	0.032	0.038	0.000	0.022	0.011	4.01	

Precipitation Weighted Mean

1st Quarter	13.36	4.50	1.506	1.288	0.771	0.045	0.118	0.024	0.000	0.483	0.295	0.020	0.111	0.043	19.89
2nd Quarter	9.00	4.54	2.134	1.531	1.132	0.006	0.067	0.004	0.004	0.634	0.560	0.027	0.146	0.084	23.14
3rd Quarter	5.54	4.45	1.622	3.227	0.321	0.001	0.016	0.000	0.000	0.147	0.701	0.031	0.200	0.054	26.23
4th Quarter	20.98	4.89	0.698	0.618	1.310	0.000	0.009	0.008	0.000	0.862	0.145	0.035	0.065	0.079	12.29
Annual	48.88	4.63	1.288	1.258	1.020	0.014	0.051	0.011	0.001	0.640	0.324	0.029	0.107	0.068	17.94

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	10.877	511.117	437.154	261.587	15.214	40.203	8.257	0.000	163.857	100.010	6.761	37.720	14.494
2nd Quarter	6.655	487.790	349.979	258.739	1.282	15.429	1.020	0.982	145.045	128.116	6.205	33.271	19.166
3rd Quarter	5.082	228.235	454.110	45.133	0.164	2.220	0.000	0.000	20.685	98.636	4.327	28.205	7.565
4th Quarter	6.905	372.029	329.566	697.902	0.044	4.690	4.091	0.000	459.400	77.255	18.436	34.825	42.197
Annual	29.519	1,599.171	1,570.809	1,263.361	16.704	62.542	13.369	0.982	788.987	404.017	35.728	134.021	83.423

NOTE: DEPOSITION SHOWN MEETS 1) FOR QUARTERS, A MINIMUM OF 75% DATA CAPTURE AND
 2) FOR ANNUAL, A MINIMUM OF 75% DATA CAPTURE WITH EACH QUARTER >50% DATA CAPTURE
 DATA CAPTURE = VALID SAMPLES WITH VALID PRECIPITATION FOR THE PERIOD / TOTAL PRECIPITATION FOR PERIOD