# National Atmospheric Deposition Program/National Trends Network

## 1978 Annual & Seasonal Data Summary for Site NE15

### Page 1: Summary of Sample Validity and Completeness Criteria

(Printed 08/29/2000)

<table>
<thead>
<tr>
<th>Site Identification</th>
<th>Sample Validity for Annual Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Name</td>
<td>Mead</td>
</tr>
<tr>
<td>Site ID</td>
<td>NE15</td>
</tr>
<tr>
<td>State</td>
<td>NE</td>
</tr>
<tr>
<td>County</td>
<td>Saunders</td>
</tr>
<tr>
<td>Operating Agency</td>
<td>SAES-University of Nebraska</td>
</tr>
<tr>
<td>Sponsoring Agency</td>
<td>SAES-University of Nebraska</td>
</tr>
<tr>
<td>Latitude</td>
<td>41:09:11</td>
</tr>
<tr>
<td>Longitude</td>
<td>96:29:34</td>
</tr>
<tr>
<td>Elevation</td>
<td>352 m</td>
</tr>
<tr>
<td>Number of samples</td>
<td>22</td>
</tr>
<tr>
<td>Valid Samples</td>
<td>15</td>
</tr>
<tr>
<td>with precipitation</td>
<td>12</td>
</tr>
<tr>
<td>with full chemistry**</td>
<td>8</td>
</tr>
<tr>
<td>without chemistry</td>
<td>4</td>
</tr>
<tr>
<td>without precipitation</td>
<td>3</td>
</tr>
<tr>
<td>Invalid Samples</td>
<td>7</td>
</tr>
<tr>
<td>with precipitation</td>
<td>2</td>
</tr>
<tr>
<td>missing precipitation data</td>
<td>5</td>
</tr>
</tbody>
</table>

### Summary Period Information

<table>
<thead>
<tr>
<th></th>
<th>Annual*</th>
<th>Summer*</th>
<th>Fall*</th>
</tr>
</thead>
<tbody>
<tr>
<td>First summary period day#</td>
<td>01/03/1978</td>
<td>05/30/1978</td>
<td>08/29/1978</td>
</tr>
<tr>
<td>Last summary period day</td>
<td>01/02/1979</td>
<td>08/29/1978</td>
<td>11/28/1978</td>
</tr>
<tr>
<td>Summary period duration</td>
<td>364</td>
<td>91</td>
<td>91</td>
</tr>
<tr>
<td>Number of samples</td>
<td>22</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Measured precipitation (cm)</td>
<td>8.1</td>
<td>3.7</td>
<td>3.7</td>
</tr>
<tr>
<td>Valid samples with full chemistry**</td>
<td>8</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Valid field pH measurements</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

### NADP/NTN Completeness Criteria

<table>
<thead>
<tr>
<th></th>
<th>Annual*</th>
<th>Summer*</th>
<th>Fall*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Summary period with valid samples (%)</td>
<td>30.8</td>
<td>23.1</td>
<td>61.5</td>
</tr>
<tr>
<td>2. Summary period with precip coverage (%)</td>
<td>34.6</td>
<td>38.5</td>
<td>61.5</td>
</tr>
<tr>
<td>3. Measured precipitation with valid samples (%)</td>
<td>76.4</td>
<td>65.5</td>
<td>100.0</td>
</tr>
<tr>
<td>4. Collector efficiency (%)</td>
<td>77.6</td>
<td>--</td>
<td>78.0</td>
</tr>
<tr>
<td>Precip with full chemistry and valid field pH (%)</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

* = Data do not meet NADP/NTN Completeness Criteria for this period.

** = Valid samples for which all Laboratory Chemical measurements were made (The ONLY samples described by the percentile distributions in the Statistical Summary of Precipitation Chemistry for Valid Samples).

*** = Measured precipitation for sample periods during which precipitation occurred and for which complete valid laboratory chemistry data are available.

# = Summary period start and end days do not correspond to the first or last sample day.
### Statistical Summary of Precipitation Chemistry for Valid Samples

#### Precipitation-Weighted Mean Concentrations

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Ca (mg/L)</th>
<th>Mg (mg/L)</th>
<th>K (mg/L)</th>
<th>Na (mg/L)</th>
<th>NH4 (mg/L)</th>
<th>NO3 (mg/L)</th>
<th>Cl (mg/L)</th>
<th>SO4 (mg/L)</th>
<th>H(lab) (mg/L)</th>
<th>H(fld) (mg/L)</th>
<th>pH(lab)</th>
<th>pH(fld)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual*</td>
<td>0.71</td>
<td>0.079</td>
<td>0.058</td>
<td>0.393</td>
<td>0.80</td>
<td>1.74</td>
<td>0.17</td>
<td>2.31</td>
<td>3.66E-03</td>
<td>--</td>
<td>5.44</td>
<td>--</td>
</tr>
<tr>
<td>Summer*</td>
<td>0.91</td>
<td>0.087</td>
<td>0.064</td>
<td>0.459</td>
<td>0.26</td>
<td>1.37</td>
<td>0.17</td>
<td>1.20</td>
<td>5.25E-04</td>
<td>--</td>
<td>6.28</td>
<td>--</td>
</tr>
<tr>
<td>Fall*</td>
<td>0.57</td>
<td>0.073</td>
<td>0.054</td>
<td>0.349</td>
<td>1.46</td>
<td>1.19</td>
<td>0.17</td>
<td>3.06</td>
<td>5.75E-03</td>
<td>--</td>
<td>5.24</td>
<td>--</td>
</tr>
</tbody>
</table>

#### Deposition

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Ca (kg/ha)</th>
<th>Mg (kg/ha)</th>
<th>K (kg/ha)</th>
<th>Na (kg/ha)</th>
<th>NH4 (kg/ha)</th>
<th>NO3 (kg/ha)</th>
<th>Cl (kg/ha)</th>
<th>SO4 (kg/ha)</th>
<th>H(lab) (kg/ha)</th>
<th>H(fld) (kg/ha)</th>
<th>pH(lab)</th>
<th>pH(fld)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual*</td>
<td>0.57</td>
<td>0.064</td>
<td>0.047</td>
<td>0.317</td>
<td>0.65</td>
<td>1.40</td>
<td>0.14</td>
<td>1.87</td>
<td>2.95E-03</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Summer*</td>
<td>0.34</td>
<td>0.033</td>
<td>0.024</td>
<td>0.172</td>
<td>0.10</td>
<td>0.51</td>
<td>0.06</td>
<td>0.45</td>
<td>1.97E-04</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Fall*</td>
<td>0.21</td>
<td>0.027</td>
<td>0.020</td>
<td>0.128</td>
<td>0.43</td>
<td>0.73</td>
<td>0.06</td>
<td>1.12</td>
<td>2.11E-03</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

#### Weekly Sample Concentrations

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Ca (mg/L)</th>
<th>Mg (mg/L)</th>
<th>K (mg/L)</th>
<th>Na (mg/L)</th>
<th>NH4 (mg/L)</th>
<th>NO3 (mg/L)</th>
<th>Cl (mg/L)</th>
<th>SO4 (mg/L)</th>
<th>H(lab) (mg/L)</th>
<th>H(fld) (mg/L)</th>
<th>pH(lab)</th>
<th>pH(fld)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0.24</td>
<td>0.025</td>
<td>0.010</td>
<td>0.085</td>
<td>0.26</td>
<td>0.60</td>
<td>0.10</td>
<td>1.20</td>
<td>1.02E-04</td>
<td>--</td>
<td>4.99</td>
<td>--</td>
</tr>
<tr>
<td>Percentile 10</td>
<td>0.22</td>
<td>0.023</td>
<td>0.009</td>
<td>0.077</td>
<td>0.23</td>
<td>0.54</td>
<td>0.09</td>
<td>1.08</td>
<td>9.21E-05</td>
<td>--</td>
<td>4.49</td>
<td>--</td>
</tr>
<tr>
<td>Percentile 25</td>
<td>0.26</td>
<td>0.040</td>
<td>0.037</td>
<td>0.195</td>
<td>0.61</td>
<td>1.09</td>
<td>0.13</td>
<td>1.57</td>
<td>1.94E-04</td>
<td>--</td>
<td>5.20</td>
<td>--</td>
</tr>
<tr>
<td>Percentile 50</td>
<td>1.02</td>
<td>0.119</td>
<td>0.067</td>
<td>0.394</td>
<td>0.98</td>
<td>2.38</td>
<td>0.18</td>
<td>3.13</td>
<td>4.91E-04</td>
<td>--</td>
<td>6.31</td>
<td>--</td>
</tr>
<tr>
<td>Percentile 75</td>
<td>1.40</td>
<td>0.178</td>
<td>0.237</td>
<td>0.978</td>
<td>2.20</td>
<td>4.23</td>
<td>0.37</td>
<td>6.04</td>
<td>6.32E-03</td>
<td>--</td>
<td>6.71</td>
<td>--</td>
</tr>
<tr>
<td>Percentile 90</td>
<td>2.04</td>
<td>0.208</td>
<td>0.240</td>
<td>6.370</td>
<td>2.27</td>
<td>4.32</td>
<td>1.02</td>
<td>6.97</td>
<td>9.21E-03</td>
<td>--</td>
<td>6.29</td>
<td>--</td>
</tr>
<tr>
<td>Maximum</td>
<td>2.27</td>
<td>0.231</td>
<td>0.267</td>
<td>7.078</td>
<td>2.52</td>
<td>4.80</td>
<td>1.13</td>
<td>7.74</td>
<td>1.02E-02</td>
<td>--</td>
<td>6.99</td>
<td>--</td>
</tr>
<tr>
<td>Arith. mean</td>
<td>0.98</td>
<td>0.118</td>
<td>0.117</td>
<td>1.264</td>
<td>1.30</td>
<td>2.57</td>
<td>0.32</td>
<td>3.84</td>
<td>2.94E-03</td>
<td>--</td>
<td>5.53</td>
<td>--</td>
</tr>
<tr>
<td>Arith. std dev</td>
<td>0.71</td>
<td>0.076</td>
<td>0.103</td>
<td>2.371</td>
<td>0.85</td>
<td>1.61</td>
<td>0.34</td>
<td>2.49</td>
<td>3.91E-03</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Below detection</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

#### Other Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Measured Precipitation*** cm</th>
<th>Conductivity uS/cm</th>
<th>Equivalence Ratios</th>
<th>Annual and Seasonal Equivalence Ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO4</td>
<td>SO4+NO3</td>
<td>H</td>
<td>Anion</td>
<td>SO4</td>
</tr>
<tr>
<td>Minimum value</td>
<td>0.03</td>
<td>8.3</td>
<td>1.13</td>
<td>7.42</td>
</tr>
<tr>
<td>Percentile 10</td>
<td>0.03</td>
<td>7.5</td>
<td>1.02</td>
<td>6.68</td>
</tr>
<tr>
<td>Percentile 25</td>
<td>0.18</td>
<td>9.3</td>
<td>1.61</td>
<td>16.02</td>
</tr>
<tr>
<td>Percentile 50</td>
<td>0.54</td>
<td>19.9</td>
<td>1.76</td>
<td>94.41</td>
</tr>
<tr>
<td>Percentile 75</td>
<td>1.21</td>
<td>34.1</td>
<td>2.53</td>
<td>1109.75</td>
</tr>
<tr>
<td>Percentile 90</td>
<td>2.21</td>
<td>40.1</td>
<td>4.07</td>
<td>1151.31</td>
</tr>
<tr>
<td>Maximum value</td>
<td>2.45</td>
<td>44.5</td>
<td>4.52</td>
<td>1279.24</td>
</tr>
</tbody>
</table>

*Please see page 1 for footnotes.*

---

**National Atmospheric Deposition Program/National Trends Network**

**1978 Annual & Seasonal Data Summary for Site NE15**

**Page 2: Statistical Summary of Precipitation Chemistry for Valid Samples**