### Site Identification

<table>
<thead>
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<th>Site Name</th>
<th>Buffalo National River</th>
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<td>Site ID</td>
<td>AR16</td>
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<tr>
<td>State</td>
<td>AR</td>
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<tr>
<td>County</td>
<td>Marion</td>
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<td>Operating Agency</td>
<td>NPS</td>
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<td>Sponsoring Agency</td>
<td>NPS</td>
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<td>Longitude</td>
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### Sample Validity for Annual Period

<table>
<thead>
<tr>
<th></th>
<th>Annual*</th>
<th>Winter</th>
<th>Spring</th>
<th>Summer*</th>
<th>Fall*</th>
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<tbody>
<tr>
<td>Number of samples</td>
<td>52</td>
<td>35</td>
<td>30</td>
<td>28</td>
<td>17</td>
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<tr>
<td>Valid Samples with precipitation</td>
<td>30</td>
<td>28</td>
<td>2</td>
<td>5</td>
<td>17</td>
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<tr>
<td>with full chemistry**</td>
<td></td>
<td></td>
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<tr>
<td>without chemistry</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
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<tr>
<td>without precipitation</td>
<td>5</td>
<td>5</td>
<td>5</td>
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<td>5</td>
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<td>17</td>
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<tr>
<td>with precipitation</td>
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<tr>
<td>missing precipitation data</td>
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### Summary Period Information

<table>
<thead>
<tr>
<th>Summary Period Information</th>
<th>Annual*</th>
<th>Winter</th>
<th>Spring</th>
<th>Summer*</th>
<th>Fall*</th>
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<tbody>
<tr>
<td>First summary period day</td>
<td>01/02/1985</td>
<td>12/04/1984</td>
<td>02/26/1985</td>
<td>06/04/1985</td>
<td>09/03/1985</td>
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<td>Summary period duration</td>
<td>363</td>
<td>84</td>
<td>98</td>
<td>91</td>
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<tr>
<td>Number of samples</td>
<td>52</td>
<td>12</td>
<td>14</td>
<td>13</td>
<td>13</td>
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<tr>
<td>Measured precipitation (cm)</td>
<td>122.1</td>
<td>33.3</td>
<td>42.3</td>
<td>15.7</td>
<td>44.0</td>
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<tr>
<td>Valid samples with full chemistry**</td>
<td>28</td>
<td>10</td>
<td>11</td>
<td>3</td>
<td>5</td>
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<tr>
<td>Valid field pH measurements</td>
<td>--</td>
<td>--</td>
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### NADP/NTN Completeness Criteria

<table>
<thead>
<tr>
<th>NADP/NTN Completeness Criteria</th>
<th>Annual*</th>
<th>Winter</th>
<th>Spring</th>
<th>Summer*</th>
<th>Fall*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Summary period with valid samples (%)</td>
<td>67.2</td>
<td>83.3</td>
<td>92.9</td>
<td>38.5</td>
<td>46.2</td>
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<tr>
<td>2. Summary period with precip coverage (%)</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>3. Measured precipitation with valid samples (%)</td>
<td>74.6</td>
<td>95.2</td>
<td>97.9</td>
<td>55.4</td>
<td>51.1</td>
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<td>4. Collector efficiency (%)</td>
<td>96.3</td>
<td>102.8</td>
<td>97.5</td>
<td>81.7</td>
<td>98.9</td>
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<tr>
<td>Precip with full chemistry and valid field pH (%)</td>
<td>--</td>
<td>--</td>
<td>--</td>
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</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.
### National Atmospheric Deposition Program/National Trends Network
#### 1985 Annual & Seasonal Data Summary for Site AR16

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

#### Precipitation-Weighted Mean Concentrations

<table>
<thead>
<tr>
<th></th>
<th>Ca</th>
<th>Mg</th>
<th>K</th>
<th>Na</th>
<th>NH4</th>
<th>NO3</th>
<th>Cl</th>
<th>SO4</th>
<th>H(lab)</th>
<th>Fld(lab)</th>
<th>pH(lab)</th>
<th>Fld(pH)</th>
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</thead>
<tbody>
<tr>
<td>Annual*</td>
<td>0.11</td>
<td>0.027</td>
<td>0.056</td>
<td>0.124</td>
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<td>0.74</td>
<td>0.21</td>
<td>1.05</td>
<td>1.53E-02</td>
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<td>4.81</td>
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<tr>
<td>Winter</td>
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<td>0.022</td>
<td>0.028</td>
<td>0.116</td>
<td>0.15</td>
<td>0.79</td>
<td>0.19</td>
<td>0.95</td>
<td>1.72E-02</td>
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<td>4.76</td>
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<tr>
<td>Spring</td>
<td>0.13</td>
<td>0.026</td>
<td>0.065</td>
<td>0.129</td>
<td>0.17</td>
<td>0.72</td>
<td>0.22</td>
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<tr>
<td>Summer*</td>
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<td>0.033</td>
<td>0.039</td>
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<td>0.26</td>
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<td>0.18</td>
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<tr>
<td>Fall*</td>
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<td>0.031</td>
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<td>1.55E-02</td>
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<td>4.81</td>
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#### Deposition

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<th>Mg</th>
<th>K</th>
<th>Na</th>
<th>NH4</th>
<th>NO3</th>
<th>Cl</th>
<th>SO4</th>
<th>H(lab)</th>
<th>Fld(lab)</th>
<th>pH(lab)</th>
<th>Fld(pH)</th>
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</thead>
<tbody>
<tr>
<td>Annual*</td>
<td>1.34</td>
<td>0.330</td>
<td>0.684</td>
<td>1.514</td>
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<td>9.04</td>
<td>2.54</td>
<td>12.80</td>
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<tr>
<td>Winter</td>
<td>0.24</td>
<td>0.073</td>
<td>0.093</td>
<td>0.386</td>
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<td>0.63</td>
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<tr>
<td>Spring</td>
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<td>0.110</td>
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<td>0.546</td>
<td>0.73</td>
<td>3.06</td>
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<tr>
<td>Summer*</td>
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<td>0.052</td>
<td>0.061</td>
<td>0.155</td>
<td>0.41</td>
<td>1.68</td>
<td>0.28</td>
<td>1.99</td>
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<tr>
<td>Fall*</td>
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<td>0.136</td>
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<td>0.624</td>
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#### Weekly Sample Concentrations

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<th>Mg</th>
<th>K</th>
<th>Na</th>
<th>NH4</th>
<th>NO3</th>
<th>Cl</th>
<th>SO4</th>
<th>H(lab)</th>
<th>Fld(lab)</th>
<th>pH(lab)</th>
<th>Fld(pH)</th>
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<tbody>
<tr>
<td>Minimum value</td>
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<td>0.010</td>
<td>0.003</td>
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<td>1.05E-03</td>
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<td>3.97</td>
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<tr>
<td>Percentile 10</td>
<td>0.04</td>
<td>0.017</td>
<td>0.013</td>
<td>0.043</td>
<td>0.02</td>
<td>0.30</td>
<td>0.06</td>
<td>0.39</td>
<td>2.28E-03</td>
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<tr>
<td>Percentile 25</td>
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<td>0.023</td>
<td>0.022</td>
<td>0.057</td>
<td>0.02</td>
<td>0.45</td>
<td>0.11</td>
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<td>Percentile 50</td>
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<td>0.035</td>
<td>0.100</td>
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<td>3.43E-02</td>
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<tr>
<td>Percentile 90</td>
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<td>5.98</td>
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#### Other Parameters

<table>
<thead>
<tr>
<th>Measured Precipitation cm</th>
<th>Conductivity uS/cm</th>
<th>Equivalence Ratios</th>
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<tbody>
<tr>
<td></td>
<td>SO4 / NO3</td>
<td>SO4+NO3 / Cation</td>
</tr>
</tbody>
</table>

| Minimum value | 0.01 | 4.3  | 0.41 | 0.58 | 0.58 |
| Percentile 10 | 0.24 | 4.7  | 0.94 | 1.52 | 0.82 |
| Percentile 25 | 0.80 | 7.3  | 1.32 | 1.77 | 0.90 |
| Percentile 50 | 1.97 | 12.5 | 1.85 | 2.01 | 0.97 |
| Percentile 75 | 4.03 | 21.0 | 2.21 | 3.33 | 1.03 |
| Percentile 90 | 9.29 | 24.2 | 3.15 | 10.88| 1.22 |
| Maximum value | 14.59| 59.2 | 11.19| 30.80| 2.74 |

#### Annual and Seasonal Equivalence Ratios

<table>
<thead>
<tr>
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<th>SO4 / NO3</th>
<th>SO4+NO3 / Cation</th>
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<tr>
<td>Annual*</td>
<td>1.83</td>
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<td>Winter</td>
<td>1.55</td>
<td>1.89</td>
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<td>Spring</td>
<td>2.08</td>
<td>2.63</td>
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<tr>
<td>Summer*</td>
<td>1.54</td>
<td>2.26</td>
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<tr>
<td>Fall*</td>
<td>2.01</td>
<td>1.72</td>
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</tbody>
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Please see page 1 for footnotes.