### Site Identification

<table>
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<th>Site Name</th>
<th>Niwot Saddle</th>
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<td>Site ID</td>
<td>CO02</td>
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<td>State</td>
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<tr>
<td>County</td>
<td>Boulder</td>
</tr>
<tr>
<td>Operating Agency</td>
<td>INSTAAR-University of Colorado</td>
</tr>
<tr>
<td>Sponsoring Agency</td>
<td>INSTAAR-University of Colorado</td>
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<tr>
<td>Longitude</td>
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<td>Elevation</td>
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### Sample Validity for Annual Period

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<tr>
<th></th>
<th>Number of samples</th>
<th>Valid Samples</th>
<th>with precipitation</th>
<th>Valid Samples</th>
<th>with full chemistry**</th>
<th>with full chemistry**</th>
<th>without chemistry</th>
<th>without precipitation</th>
<th>Invalid Samples</th>
<th>with precipitation</th>
<th>missing precipitation data</th>
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</thead>
<tbody>
<tr>
<td></td>
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### Summary Period Information

<table>
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<th>Summary Period Information</th>
<th>Annual*</th>
<th>Winter*</th>
<th>Spring*</th>
<th>Summer*</th>
<th>Fall*</th>
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<tr>
<td>Summary period duration</td>
<td>363</td>
<td>91</td>
<td>91</td>
<td>98</td>
<td>91</td>
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<tr>
<td>Number of samples</td>
<td>52</td>
<td>13</td>
<td>13</td>
<td>14</td>
<td>13</td>
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<tr>
<td>Measured precipitation (cm)</td>
<td>176.1</td>
<td>74.6</td>
<td>50.1</td>
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<tr>
<td>Valid samples with full chemistry**</td>
<td>21</td>
<td>8</td>
<td>12</td>
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<td>Valid field pH measurements</td>
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<td>8</td>
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### NADP/NTN Completeness Criteria

<table>
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<th>NADP/NTN Completeness Criteria</th>
<th>Annual*</th>
<th>Winter*</th>
<th>Spring*</th>
<th>Summer*</th>
<th>Fall*</th>
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</thead>
<tbody>
<tr>
<td>1. Summary period with valid samples (%)</td>
<td>47.9</td>
<td>61.5</td>
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<td>2. Summary period with precip coverage (%)</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
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<td>51.7</td>
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<td>4. Collector efficiency (%)</td>
<td>23.0</td>
<td>13.5</td>
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<td>108.1</td>
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<tr>
<td>Precip with full chemistry and valid field pH (%)</td>
<td>39.3</td>
<td>46.5</td>
<td>81.5</td>
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</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
### 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>NH(_4)</th>
<th>NO(_3)</th>
<th>Cl</th>
<th>SO(_4)</th>
<th>H(lab)</th>
<th>H(fld)</th>
<th>pH(lab)</th>
<th>pH(fld)</th>
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</thead>
<tbody>
<tr>
<td>Annual*</td>
<td>0.27</td>
<td>0.037</td>
<td>0.029</td>
<td>0.094</td>
<td>0.25</td>
<td>1.02</td>
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<td>0.052</td>
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<tr>
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<td>0.99</td>
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<tr>
<td>Summer*</td>
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<td>0.014</td>
<td>0.008</td>
<td>0.018</td>
<td>0.23</td>
<td>0.84</td>
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<td>0.72</td>
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<td>4.95</td>
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<tr>
<td>Fall*</td>
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<td>0.048</td>
<td>0.020</td>
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<td>2.23</td>
<td>0.27</td>
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<td>1.79E-03</td>
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#### Deposition

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<th>Ca</th>
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<th>Na</th>
<th>NH(_4)</th>
<th>NO(_3)</th>
<th>Cl</th>
<th>SO(_4)</th>
<th>H(lab)</th>
<th>H(fld)</th>
<th>pH(lab)</th>
<th>pH(fld)</th>
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<tbody>
<tr>
<td>Annual*</td>
<td>4.72</td>
<td>0.652</td>
<td>0.511</td>
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<td>4.38</td>
<td>17.96</td>
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<td>12.31</td>
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<tr>
<td>Winter*</td>
<td>0.97</td>
<td>0.209</td>
<td>0.388</td>
<td>0.925</td>
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<td>1.42</td>
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<tr>
<td>Summer*</td>
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<td>0.023</td>
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<td>0.143</td>
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<td>6.63</td>
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#### Weekly Sample Concentrations

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<th>Na</th>
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<th>NO(_3)</th>
<th>Cl</th>
<th>SO(_4)</th>
<th>H(lab)</th>
<th>H(fld)</th>
<th>pH(lab)</th>
<th>pH(fld)</th>
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<td>Minimum value</td>
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<td>0.003</td>
<td>0.003</td>
<td>0.015</td>
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<tr>
<td>Percentile 10</td>
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<td>0.004</td>
<td>0.003</td>
<td>0.019</td>
<td>0.03</td>
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<td>0.004</td>
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<td>0.014</td>
<td>0.043</td>
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#### Other Parameters

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<th>Measured Precipitation** cm</th>
<th>Conductivity** uS/cm</th>
<th>Equivalence Ratios</th>
<th>SO(_4) NO(_3)</th>
<th>SO(_4)+NO(_3) Anion</th>
<th>Cation Anion</th>
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<td>0.69</td>
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<td>Percentile 75</td>
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<td>28.88</td>
<td>1.18</td>
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<tr>
<td>Percentile 90</td>
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#### Annual and Seasonal Equivalence Ratios

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<th>SO(_4)+NO(_3) Anion</th>
<th>Cation Anion</th>
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<tbody>
<tr>
<td>Annual*</td>
<td>0.88</td>
<td>7.70</td>
<td>1.13</td>
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<tr>
<td>Winter*</td>
<td>0.77</td>
<td>7.09</td>
<td>1.10</td>
</tr>
<tr>
<td>Spring*</td>
<td>0.92</td>
<td>9.86</td>
<td>1.15</td>
</tr>
<tr>
<td>Summer*</td>
<td>1.11</td>
<td>2.53</td>
<td>0.98</td>
</tr>
<tr>
<td>Fall*</td>
<td>0.62</td>
<td>32.50</td>
<td>0.69</td>
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</tbody>
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*Please see page 1 for footnotes.*