

Atmosphere Investigation

Integrated 1-Day Data Sheet

* Required Field

School Name: _____ Study Site: _____

Observer names: _____

Date: Year _____ Month _____ Day _____ Universal Time (hour:min): _____

Air Temperature

Current Temperature (°C): _____

Maximum Temperature (°C): _____ (record only when collected at Local Solar Noon)

Minimum Temperature (°C): _____ (record only when collected at Local Solar Noon)

Comments: _____

Barometric Pressure

(Check one): Sea Level Pressure Station Pressure

Pressure (mb): _____

Comments: _____

Relative Humidity

(Select instrument used):

| <input type="checkbox"/> Sling Psychrometer | <input type="checkbox"/> Digital Hygrometer |
|---|---|
| Dry bulb temperature (°C): _____ | Ambient air temperature (°C): _____ |
| Wet bulb temperature (°C): _____ | Relative Humidity (%): _____ |

Comments: _____

Precipitation (record only when collected at Local Solar Noon)

Days of accumulation: _____

Rainfall select one: Measurable Trace Missing

(if measurable is selected, complete the following fields)

Accumulation (mm): _____

Rain pH Measured With (select one): pH Paper pH Meter

pH of Rain: _____ (pH measurements only allowed when liquid amount is 3.5 mm or more)

Comments: _____

Study Site: _____ Date: _____ Time (UT): _____

New Snowfall

| Sample 1 | Sample 2 | Sample 3 |
|--|--|--|
| Select one: <input type="checkbox"/> Measurable <input type="checkbox"/> Trace <input type="checkbox"/> Missing | Select one: <input type="checkbox"/> Measurable <input type="checkbox"/> Trace <input type="checkbox"/> Missing | Select one: <input type="checkbox"/> Measurable <input type="checkbox"/> Trace <input type="checkbox"/> Missing |
| If measurable, record amount (mm): _____ | If measurable, record amount (mm): _____ | If measurable, record amount (mm): _____ |

Rain Equivalent of New Snow

Select one: Measurable Trace Missing

If measurable, record amount (mm): _____

Snowfall pH Measured with (select one): pH Paper pH Meter

pH of New Snowfall: _____ (pH measurements only allowed when liquid amount is 3.5 mm or more)

Comments: _____

Snowpack

| Sample 1 | Sample 2 | Sample 3 |
|--|--|--|
| Select one: <input type="checkbox"/> Measurable <input type="checkbox"/> Trace <input type="checkbox"/> Missing | Select one: <input type="checkbox"/> Measurable <input type="checkbox"/> Trace <input type="checkbox"/> Missing | Select one: <input type="checkbox"/> Measurable <input type="checkbox"/> Trace <input type="checkbox"/> Missing |
| If measurable, record amount (mm): _____ | If measurable, record amount (mm): _____ | If measurable, record amount (mm): _____ |

Rain Equivalent of Snowpack

Select one: Measurable Trace Missing

If measurable, record amount (mm): _____

Snowpack pH Measured with (select one): pH Paper pH Meter

Snowpack pH: _____ (pH measurements only allowed when liquid amount is 3.5 mm or more)

Comments: _____

Study Site: _____ Date: _____ Time (UT): _____

Clouds

Sky Conditions (Check one):

- Clear (no Clouds Visible)
- Clouds Visible (1% to 100% Covered by Clouds or Contrails)
- Obscured (More than 25% of the Sky is not Visible)

Note: selecting **Obscured** will prevent data entry on clouds and contrails; therefore skip the cloud type and cover and the contrail type and cover sections and proceed to the Obscured section. If clouds and contrails are visible in non-obscured areas of the sky, these data can be entered in the Metadata field.

If Clouds are Visible select all Cloud Types Seen

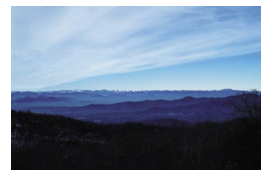
High (in the sky):
(Check all types seen)



Cirrus



Cirrocumulus



Cirrostratus

Middle (of the sky):
(Check all types seen)



Altostratus



Altocumulus

Low (in the sky):
(Check all types seen)



Stratus

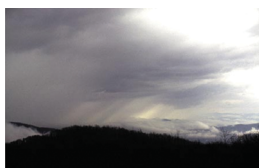


Stratocumulus



Cumulus

Rain or Snow Producing Clouds:
(Check all types seen)



Nimbostratus



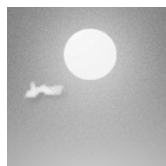
Cumulonimbus

What Percent of the Sky is Covered by Clouds? (Check One) *Three-quarters or More of the Sky is Visible: Cloud Cover (Check One)*



No Clouds

0%



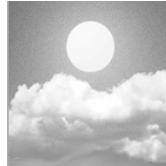
Clear

>0 to 10%



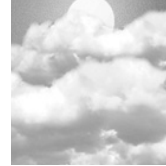
Isolated

10 to 25%



Scattered

25 to 50%



Broken

50 to 90%



Overcast

>90%

Study Site: _____ Date: _____ Time (UT): _____

Are There Contrails in the Sky? (Check One) No Contrails Contrails are Visible

If Contrails are Visible Record the Number of Each Type Seen

Short-lived



Number Observed

Persistent Non-Spreading



Number Observed

Persistent Spreading



Number Observed

What Percent of the Sky is Covered by Contrails? (Check one):

- 0 to 10%
- 10 to 25%
- 25 to 50%
- >50%

If you Selected Obscured (> 25% of the Sky is not Visible) Check all that apply:



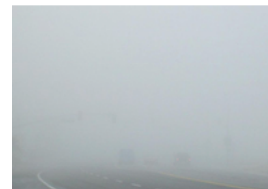
Blowing Snow



Heavy Snow



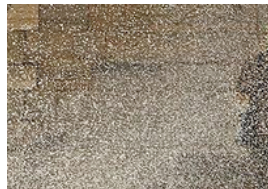
Heavy Rain



Fog



Sand



Spray



Volcanic Ash



Smoke



Dust



Haze

Comments: _____
