##### SAMPLE ATMOSPHERE DATA SHEETS

##### #1 MICROCLIMATE DATA

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | GROUP #1 | GROUP #2 | GROUP #3 | GROUP #4 |
| location description |  |  |  |  |
| wind direction at ground level |  |  |  |  |
| wind direction at 5 ft |  |  |  |  |
| wind velocity at 5 ft (MPH) |  |  |  |  |
| wind velocity at 5 ft (BFT) |  |  |  |  |
| WMO description for BFT |  |  |  |  |
| Site scan confirms BFT observed effects? |  |  |  |  |
| wind velocity at 1 ft (MPH) |  |  |  |  |
| wind velocity at 1 ft (BFT) |  |  |  |  |
| WMO description for BFT |  |  |  |  |
| Site scan confirms BFT observed effects? |  |  |  |  |
| anemometer air temperature (°F) |  |  |  |  |
| barometric pressure (MB) |  |  |  |  |
| barometric pressure (INHG) |  |  |  |  |
| barometric pressure (HPA) |  |  |  |  |
| altitude (FT) |  |  |  |  |
| air density (MG/CM3) |  |  |  |  |
| humidity (%) |  |  |  |  |
| psychrometer dry-bulb temperature (°F) |  |  |  |  |
| psychrometer wet-bulb temperature (°F) |  |  |  |  |
| relative humidity (%) |  |  |  |  |
| dew point temperature (°F) |  |  |  |  |
| light intensity (LUX) |  |  |  |  |
| cloud cover (OKTA) |  |  |  |  |
| type(s) of clouds present |  |  |  |  |

ND = missing or incorrect data

**MICROCLIMATE DATA**

# 1. Are there considerable differences between the data collected by one group and the data collected by others? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# 2. If there are, what are some of those differences and can you explain them by the differences in location alone? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# 3. If there are nothing more than slight differences, can you explain why that might be so despite the differences in the locations of the groups? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Using the appropriate field data, create your own surface observation diagram following the pattern found in *Interpreting Surface Observation Symbols*.

5. Compare the data of the control group with the data from the other groups and tell me if you see any differences in the data that might be caused by the presence of the buildings?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. Using the information in the course materials you read / watched, combine the atmospheric data you gathered and tell me what the weather would most likely be the following day. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

##### #2 PRESENCE OF PARTICULATE POLLUTION DATA

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | | F |
| Group | Tree Species | Sample | Trunk Direction | # Sections With Particulates  (0, 1, 2, 3) | | Tree Has 1 or More Sections With Particulates (yes, no) |
| 1 |  | side 1 |  |  | |  |
| side 2 |  |  | |
| 2 |  | side 1 |  |  | |  |
| side 2 |  |  | |
| 3 |  | side 1 |  |  | |  |
| side 2 |  |  | |
| 4 |  | side 1 |  |  | |  |
| side 2 |  |  | |
| total number of sections  containing particulates | | | | | \_\_\_ out of \_\_\_\_ |  |

1. Average percentage coverage of particulates for the sample site: \_\_\_\_\_\_\_\_\_\_ %

[Divide total number of sections containing particulates by 24. Multiply by 100.]

2. Number of trees showing evidence of particulate pollution \_\_\_\_\_\_\_\_\_\_

[Count the number of ‘yes’ entries in column F.]

3. Compare the entries in column D with those in column E.

Does there appear to be a correlation between direction and the presence of particulates? \_\_\_ Explain.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_