



City Weather Study

Version 2.0

Objectives

1. To study the geographical environment of Tsing Yi and the relationship between land use and climate.
2. To compare the climatic data of different field sites in Tsing Yi.
3. To discuss the utilization of climatic pattern in a city planning.

Equipment List

Items	Quantity	Checked	Returned
1. Base map (Individual)	x1	<input type="checkbox"/>	<input type="checkbox"/>
2. Clipboard (Individual)	x1	<input type="checkbox"/>	<input type="checkbox"/>
3. Compass (Individual)	x1	<input type="checkbox"/>	<input type="checkbox"/>
4. Colour pencils	x1	<input type="checkbox"/>	<input type="checkbox"/>
5. Digital thermohygrometer	x1	<input type="checkbox"/>	<input type="checkbox"/>
6. Anemometer	x1	<input type="checkbox"/>	<input type="checkbox"/>
7. Light meter	x1	<input type="checkbox"/>	<input type="checkbox"/>
8. Base map (1:20,000)	x1	<input type="checkbox"/>	<input type="checkbox"/>
9. Ruler	x1	<input type="checkbox"/>	<input type="checkbox"/>
10. Barometer	x1	<input type="checkbox"/>	<input type="checkbox"/>

Field Work

I. Weather observation

1. Base map 7.1 is showing the study area and the location of each field site.
2. Each group will be arranged to record the climatic data of one field site.
3. Within one hour, measure the temperature, relative humidity, wind speed, wind direction, light intensity and pressure every 5 minutes and record the data in Table 1.1.

II. Visibility

1. By using the base map (1:20,000), compass and ruler, try to measure the visibility of your field site. Locate the farthest visible landmark or building at the base map, then calculate the distance between the landmark and the field site. Record the data in Table 1.2

Data Processing

Group: _____

Date: _____

Site: _____

Surrounding environment: _____

Table 1.1 - Weather Observation Record

Time												
Light intensity (lx)												
Temp. (°C)												
Relative humidity (%)												
Wind speed (m/s)												
Wind direction												
Air Pressure (hPa)												

Table 1.2 - Visibility Observation Record

Time		
Direction		
The farthest visible landmark		
Distance	Distance on the map: _____ cm Map Scale: 1cm to _____ m Actual Distance: _____ m	Distance on the map: _____ cm Map Scale: 1cm to _____ m Actual Distance: _____ m

Data Processing

1. Draw appropriate diagrams and graphs to represent the climatic findings that you have recorded.
2. Summarize all climatic data of 8 groups.

Discussion

1. Describe and explain the changing characteristics of the climatic elements of your field site.

Group: _____ Site: _____

Climatic elements	Characteristics	Reasons
Light Intensity		
Temperature		
Relative humidity		
Wind direction		
Wind speed		
Air pressure		

Discussion

2. Compare and contrast the climatic elements of the field site of your group and another one, explain the data of two field sites.

Climatic elements	Differences between two field sites: _____ and _____	Reasons
Light Intensity		
Temperature		
Relative humidity		
Wind direction		
Wind speed		
Air pressure		