

Higher 2 (9173)	Tropical Environments	TMJC
Tutorial 4	Tropical Cyclones	2025

Essay Question:

Data Response Question:

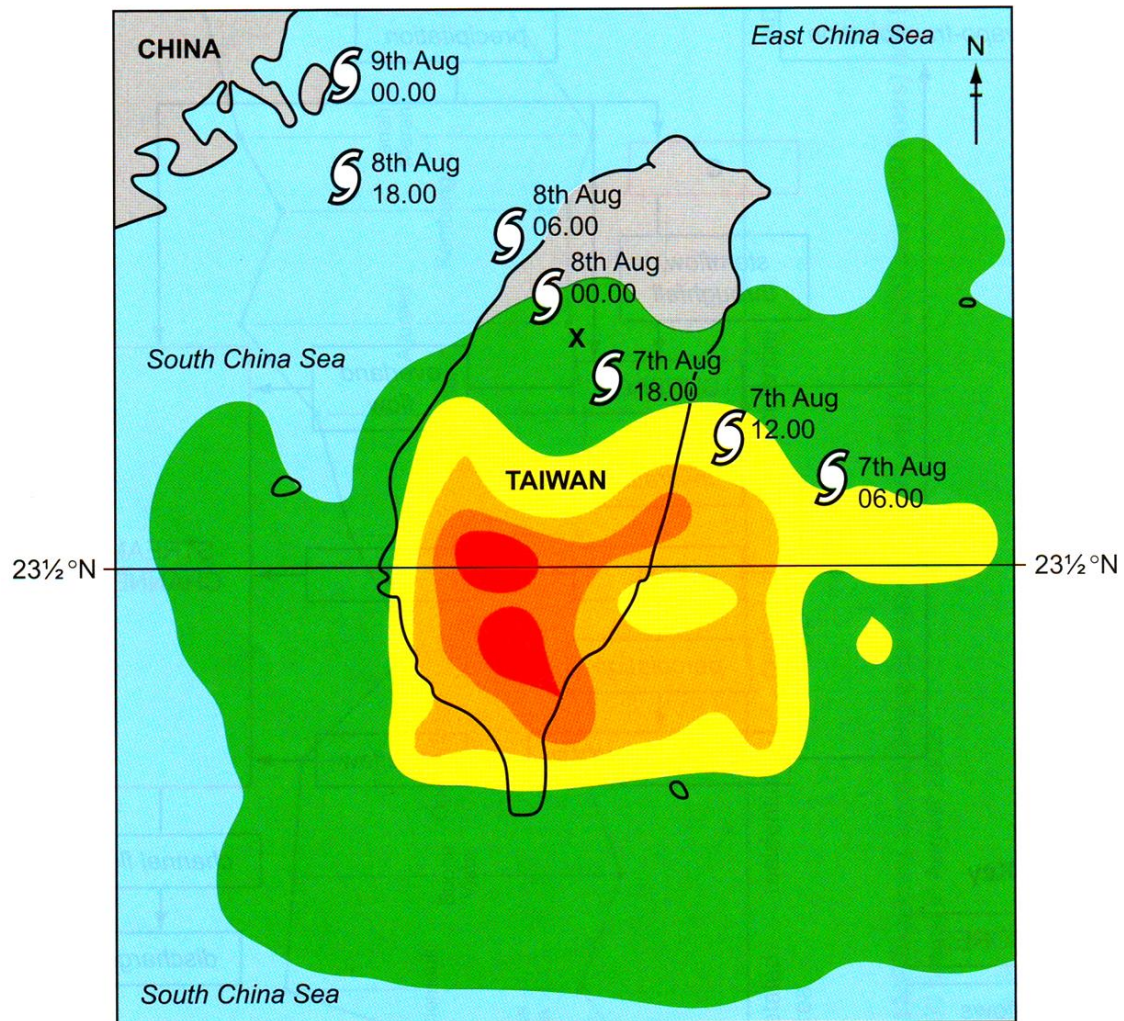
- 1 Tropical Cyclone Morakot attacked Taiwan on August 8th, 2009 and caused heavy rainfall in Taiwan. The precipitation from August 5th to 10th, 2009 in the survey station of Ali Mountain was about 3049.5mm.
Resource 4 shows the track of and weather conditions associated with Tropical Cyclone Morakot which crossed the South China Sea in August 2009.
Resource 5 shows the occurrence of tropical cyclone events and their paths.
Resource 6 depicts the distribution of rainfall in Taiwan during the Tropical Cyclone Morakot.
Resource 7 features the pictures of Shiao Lin Village in Kaoshiung County in Taiwan before and after Tropical Cyclone Morakot event.

- a) Using Resource 4, describe the passage of the weather system as it crossed the South China Sea and Taiwan. [2]
- b) With reference to Resource 5, describe the spatial and temporal global distribution of tropical cyclone. [4]
- c) With the help of Resources 4, 5 and your own knowledge, explain how atmospheric and surface conditions lead to the development of Tropical Cyclone Morakot. [8]

Use the resource first- don't just copy lecture notes

- d) Using Resource 6, describe the distribution of rainfall in Taiwan brought about by tropical Cyclone Morakot. [3]
- e) Using Resource 7, explain the socio-economic and environmental effects of the floods created by Tropical Cyclone Morakot. [8]

Resource 4 for Question 1



Key



increasing
intensity
of rainfall



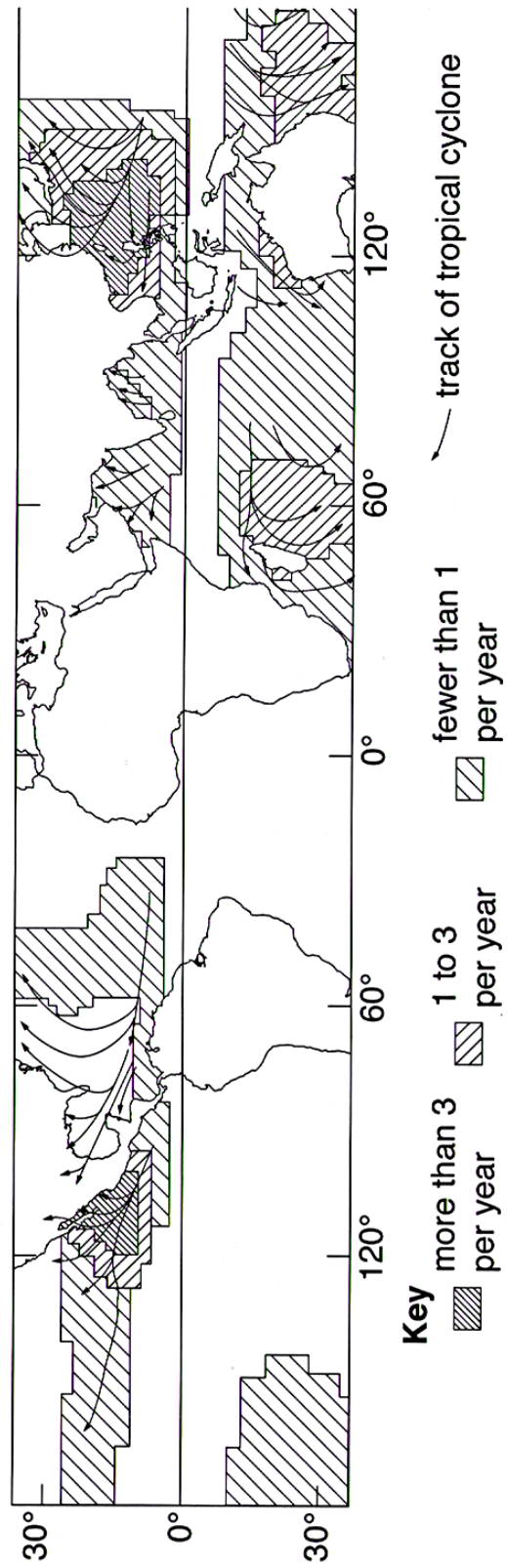
tropical cyclone



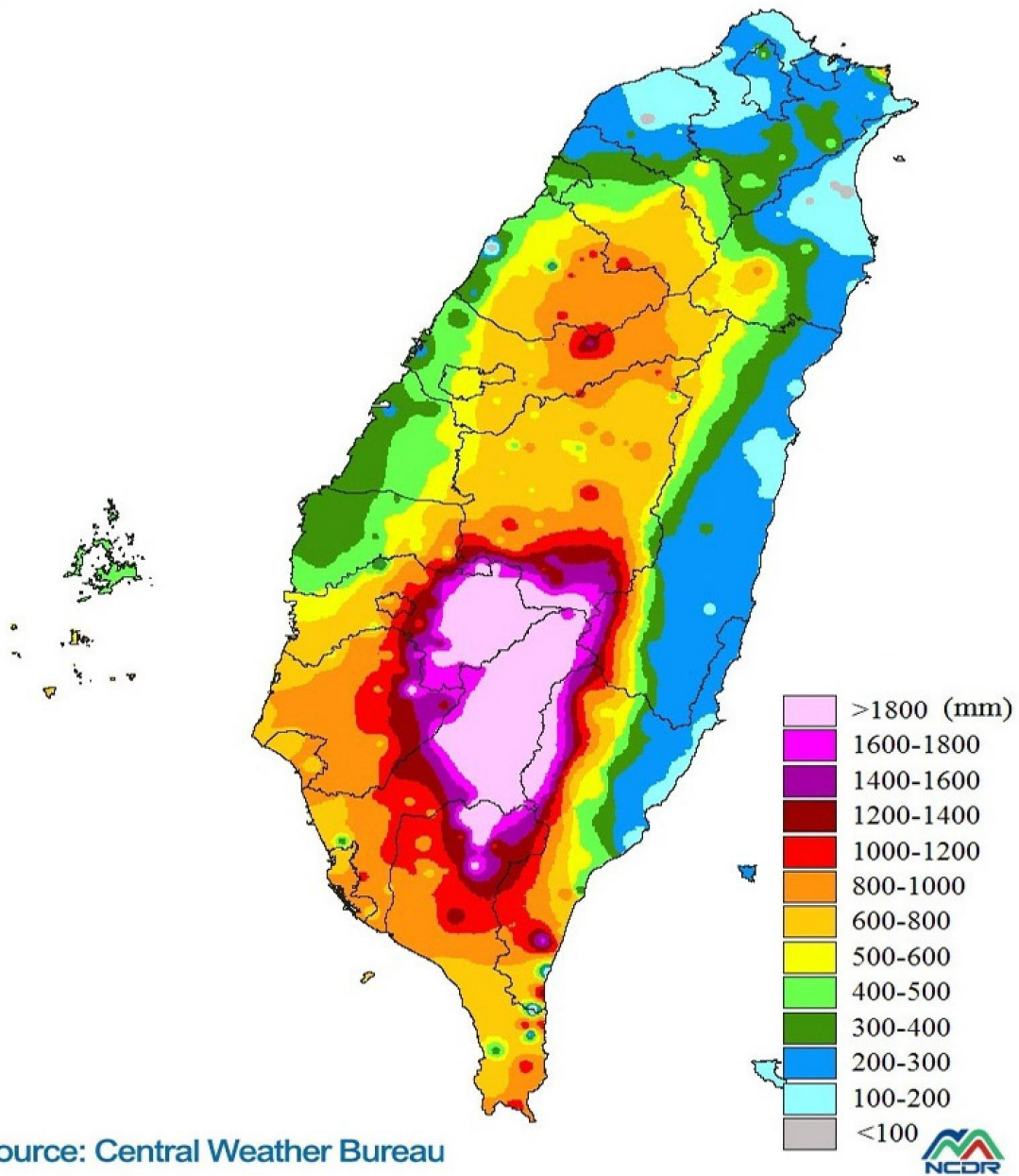
weather station

06.00 denotes time

Resource 5 for Question 1



Resource 6 for Question 1



Resource 7 for Question 1

Before



After



Before and after pictures of Village
Shiao Lin in Kaohsiung County