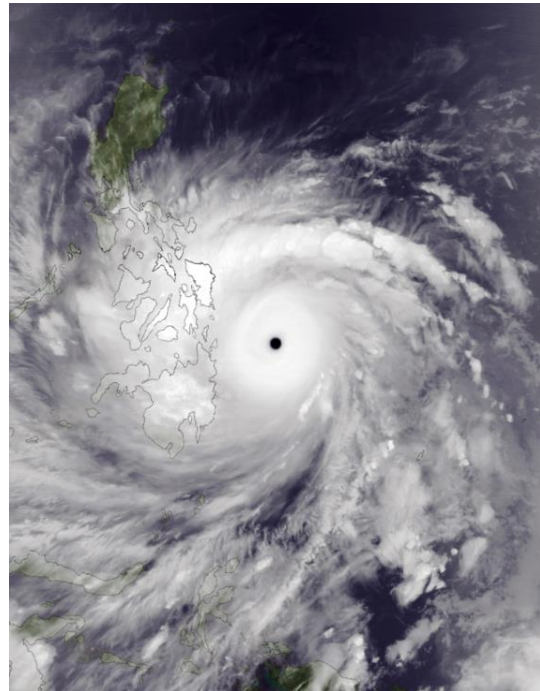


Tropical Storm Haiyan was one of the strongest tropical storms ever recorded, devastating portions of Southeast Asia in November 2013, particularly the Philippines. It was the deadliest tropical storm recorded in modern history in the Philippines, causing landslides, knocking out power lines and communication links, killing at least 6,340 people and injuring many others. The BBC reported that approximately 670,000 people were made homeless.

The Philippines consists of more than 7,000 islands but most of the population is concentrated on only 11 islands. The catastrophic damage caused by Tropical Storm Haiyan was widespread across the Philippines but was considerably worse in some areas.



Satellite image used courtesy of NASA via Wikipedia Commons

Tropical Storm Haiyan approaching the Philippines on 7 November 2013

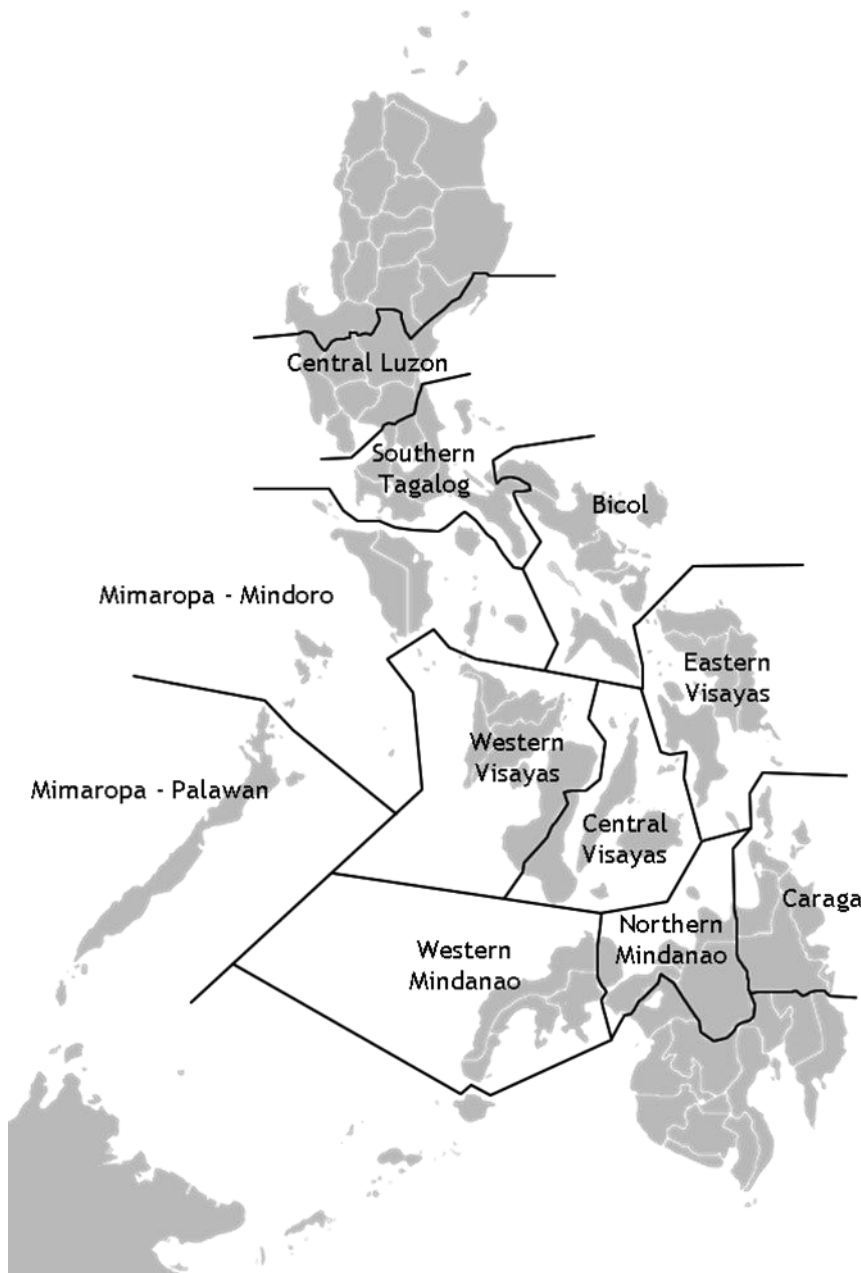
Choropleth maps are frequently used in geography. They use different colours or a graduated colour scale to show data in an area or region according to a predefined range of values. The table below can be used to create a choropleth map to show the number of people affected in different areas of the Philippines.

Tropical Storm Haiyan		
Area	Number of people affected	Colour on map
Central Luzon	<1000	
Caraga	<1000	
Southern Tagalog	<1000	
Bicol	1,001- 10,000	
Mimaropa - Mindoro	1,001- 10,000	
Western Mindanao	1,001- 10,000	
Northern Mindanao	10,001 - 100,000	
Western Visayas	100,001 - 500,000	
Central Visayas	>500,001	
Eastern Visayas	>500,001	
Mimaropa - Palawan	No data	

Student tasks

1. Decide on which colour will represent which range of values. The best order is to go from the lightest colour with the lowest values to the darkest colour with the highest values. The 'No data' category should be left blank/white.
2. Colour the key for the map accordingly.
3. Colour the areas on the map below according to the colours of your key.

A choropleth map to show the number of people affected in different areas of the Philippines



Key	Number of affected people
	>500,001
	100,001 - 500,000
	10,001 - 100,000
	1,001- 10,000
	<1000
	No data

Map used courtesy of Photo07, via Wikimedia Commons.

4. Use your choropleth map to **describe** the distribution of people affected by Tropical Storm Haiyan in the Philippines.

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5. **Suggest reasons** why different areas had different numbers of people affected.

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6. What advantages are there in showing this data on a choropleth map?

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7. What limitations are there when using this data and the choropleth map?

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Extension tasks

8. The data shows that the eastern and central Visayas areas had the highest number of people affected by the tropical storm. Use the internet to research these two areas. Why do you think these areas had the largest number of people affected by the tropical storm?
9. Tropical Storm Haiyan travelled north westwards from the Philippines and made landfall in southern China. Use the map below to calculate how much notice the authorities in China had to prepare for the tropical storm.

**Map showing the path of Tropical Storm Haiyan.
The dots indicate the position of the tropical storm at six-hour intervals.**



Image adapted from original. Used courtesy of NASA and Meow via Wikipedia Commons

10. Explain why the tropical storm 'died' when it reached China.

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