

What is happening to our weather?

What is 'extreme' weather? Why are people talking about it these days? 'Extreme' weather is very unusual rain, heat, storms etc. For example, in 2010, 33 centimetres of rain fell in two days on Nashville, USA. According to weather experts, that was a 'once in 1000 years' event. But these days, extreme weather events are more frequent. Also in 2010, 28 centimetres of rain fell on Rio de Janeiro in 24 hours, and there was record rainfall in Pakistan.

The effects of this kind of rain are dramatic. In Rio de Janeiro, landslides followed the rain. Hundreds of people died. In Pakistan, it caused floods that affected 20 million people. The opposite situation is drought, when no rain falls. Australia, Russia and East Africa have suffered major droughts in the last ten years. Another example of extreme weather is a heat wave, such as in the summer of 2003. In Europe, 35,000 people died from heat-related problems.

So, what is happening? Are these extreme events part of a natural cycle? Are they happening because human activity affects the Earth's climate? The answer, Peter Miller says, is: probably a mixture of both of these things. On the one hand, the most important influences on weather events are natural cycles in the climate. Two of the most famous cycles are called El Niño and La Niña. They start in the Pacific Ocean, but they affect weather all around the world. On the other hand, the Earth's oceans are changing: their temperatures are increasing. And this is a result of human activity. The greenhouse gases we produce mean the atmosphere warms up. Warmer oceans produce more water vapour – think about what happens when you heat a pan of water in your kitchen. Information from satellites tells us that there is four percent more water vapour in the atmosphere than 25 years ago. This warm, wet air turns into rain, storms, hurricanes and typhoons.

Michael Oppenheimer, a climate scientist, says that we need to accept reality. Our weather is changing and we need to act to save lives and money.

Reading comprehension

Read the article and choose the correct option.

1 The article says extreme weather is ...

- a more common nowadays.
- b not natural.
- c more unusual in the USA.

2 Examples of extreme weather include ...

- a warm, wet air.
- b very hot weather in Europe.
- c El Niño and La Niña.

3 One cause of extreme weather is ...

- a floods across large areas.
- b very hot summers.
- c water vapour in the atmosphere.

Read the article again and choose the correct option.

4 Why was the rain in Nashville an extreme event?

- a It happened a thousand years ago.
- b A lot of rain fell over a long time period.
- c A lot of rain fell in a short time.

5 What happened after the extreme rain in Rio de Janeiro?

- a There were major floods.
- b There were many deaths.
- c Millions of people were affected.

6 What caused many deaths in 2003?

- a hot weather
- b floods
- c a drought

7 The article says that extreme weather events are the result of ...

- a natural cycles.
- b human activity.
- c natural cycles and human activity.

8 What is happening to the oceans?

- a They are getting bigger.
- b They are getting hotter.
- c They are producing greenhouse gases.

9 Satellites can measure ...

- a the temperature of the Pacific Ocean.
- b the number of hurricanes.
- c the amount of water vapour in the air.

Vocabulary practice

1 Complete the sentences with words from the *Keywords* box.

- 1 We had a _____ last year – the temperature was 35°C for 22 days.
- 2 A _____ crossed the Philippines in 2013 and it killed thousands of people.
- 3 Last year it rained for a week and there was a _____ of two metres in my town.
- 4 Greece has a Mediterranean _____ – the summers are hot but the winters are not very cold.
- 5 The Earth's _____ is 20 percent oxygen.
- 6 A large part of the coast fell into the sea in the _____.

2 Are these places from the article cities (C), countries (CO) or regions (R)?

- | | |
|----------------|-------|
| Australia | _____ |
| East Africa | _____ |
| Europe | _____ |
| Nashville | _____ |
| Pacific Ocean | _____ |
| Pakistan | _____ |
| Rio de Janeiro | _____ |
| Russia | _____ |

Grammar practice

3 Complete the questions by adding one word in the correct place. Find the answers to the questions in the article.

- 1 What 'extreme' weather?
- 2 Why people talking about extreme weather these days?
- 3 extreme events part of a natural cycle?
- 4 is happening to the weather?
- 5 When a heat wave affect Europe?
- 6 How people died in the 2003 heat wave?
- 7 How rain fell on Rio de Janeiro in 24 hours?
- 8 What we need to do, according to Michael Oppenheimer?

4 Write questions for these answers.

- 1 Yes, it's very hot in Sydney today.
- 2 No, it didn't rain last night.
- 3 Yes, it sometimes snows in winter here.
- 4 Hurricanes usually happen from June to November.
- 5 Yes, there was a big flood last year.
- 6 A typhoon is a type of hurricane in the east.

Flood
climate
heat wave
landslide
typhoon
atmosphere