

# British scientists offer explanations on global warming pause

July 23 2013, by Bob Yirka

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(Phys.org) —A team of climate experts from Britain's national weather service (The Met Office) has given a series of presentations at the Science Media Centre in London with the aim of trying to explain why global warming has flattened over the past decade. Journalists were invited to listen as climatologists explained theories that have been developed to describe the current "pause" in global temperature increases the planet has been experiencing.

Scientists around the world have noted that despite increasing amounts of carbon being pumped into the atmosphere, average [global temperatures](#) have leveled off since the late 1990's. The main theory to explain why this has occurred, members of the team explained, centers around the world's oceans. Researchers studying the temperature of the oceans have found that [surface temperatures](#) increased as expected—what's new is an increase in water temperature at much greater depths. The ocean is acting as a giant heat sink, they say, absorbing much of the heat that would otherwise be found in the atmosphere. They back this up by noting that satellites that measure the amount of heat that arrives and leaves our planet indicate that heat retained by the planet continues to rise, even as atmospheric temperatures have leveled off. That heat, the scientists said, has to be going somewhere, and since it's not likely being absorbed by dry [land areas](#), that leaves the sea. They acknowledged that no one really knows what impact rising deep [sea temperatures](#) might have on the planet.

Another possible explanation the team said was that the sun has

temporarily been putting out less heat than normal—not necessarily enough to explain a leveling off of global warming, but enough to cause a slight perturbation. They noted that volcanic eruptions spewing particulates into the atmosphere (reflecting heat back into space) have also worked to stabilize rising temperatures.

The team also pointed out that the pause in global warming is almost certainly temporary and that the consensus among world climatologists is that temperatures will once again begin to rise, likely sooner than later. They insisted that earlier projections of an average global rise in temperature of 2°C by the end of this century are still correct, insinuating that skeptics should not take the leveling off of temperatures as a sign that climatologists have been wrong. Periodic flattening of rising temperatures, they noted, have always been in the projection models.

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