UN climate report riddled with errors on glaciers

Seth Borenstein, Associated Press, 1-21-10

Five glaring errors were discovered in one paragraph of the world's most authoritative report on global warming, forcing the Nobel Prize-winning panel of climate scientists who wrote it to apologize and promise to be more careful.

The errors are in a 2007 report by the Intergovernmental Panel on Climate Change, a U.N.-affiliated body. All the mistakes appear in a subsection that suggests glaciers in the Himalayas could melt away by the year 2035 — hundreds of years earlier than the data actually indicates. The year 2350 apparently was transposed as 2035.

The climate panel and even the scientist who publicized the errors said they are not significant in comparison to the entire report, nor were they intentional. And they do not negate the fact that worldwide, glaciers are melting faster than ever.

But the mistakes open the door for more attacks from climate change skeptics.

"The credibility of the IPCC depends on the thoroughness with which its procedures are adhered to," Yvo de Boer, head of the U.N. Framework Convention on Climate Change, told The Associated Press in an e-mail. "The procedures have been violated in this case. That must not be allowed to happen again because the credibility of climate change policy can only be based on credible science."

The incident follows a furor late last year over the release of stolen e-mails in which climate scientists talked about suppressing data and freezing out skeptics of global warming. And on top of that, an intense cold spell has some people questioning whether global warming exists.

In a statement, the climate change panel expressed regret over what it called "poorly substantiated estimates" about the Himalayan glaciers.

"The IPCC has established a reputation as a real gold standard in assessment; this is an unfortunate black mark," said Chris Field, a Stanford University professor who in 2008 took over as head of this part of the IPCC research. "None of the experts picked up on the fact that these were poorly substantiated numbers. From my perspective, that's an area where we have an opportunity to do much better."

Patrick Michaels, a global warming skeptic and scholar at the Cato Institute, a libertarian think tank, called on the head of the IPCC, Rajendra Pachauri, to resign, adding: "I'd like to know how such an absurd statement made it through the review process. It is obviously wrong."

However, a number of scientists, including some critics of the IPCC, said the mistakes do not invalidate the main conclusion that global warming is without a doubt man-made and a threat.

The mistakes were found not by skeptics like Michaels, but by a few of the scientists themselves, including one who is an IPCC co-author.

The report in question is the second of four issued by the IPCC in 2007 on global warming. This 838-page document had chapters on each continent. The errors were in a half-page section of the Asia chapter. The section got it wrong as to how fast the thousands of glaciers in the Himalayas are melting, scientists said.

"It is a very shoddily written section," said Graham Cogley, a professor of geography and glaciers at Trent University in Peterborough, Canada, who brought the error to everyone's attention. "It wasn't copy-edited properly."

Cogley, who wrote a letter about the problems to Science magazine that was published online Wednesday, cited these mistakes:

- _ The paragraph starts, "Glaciers in the Himalayas are receding faster than in any other part of the world." Cogley and Michael Zemp of the World Glacier Monitoring System said Himalayan glaciers are melting at about the same rate as other glaciers.
- _ It says that if the Earth continues to warm, the "likelihood of them disappearing by the 2035 and perhaps sooner is very high." Nowhere in peer-reviewed science literature is 2035 mentioned. However, there is a study from Russia that says glaciers could come close to disappearing by 2350. Probably the numbers in the date were transposed, Cogley said.
- _ The paragraph says: "Its total area will likely shrink from the present 500,000 to 100,000 square kilometers by the year 2035." Cogley said there are only 33,000 square kilometers of glaciers in the Himalayas.
- _ The entire paragraph is attributed to the World Wildlife Fund, when only one sentence came from the WWF, Cogley said. And further, the IPCC likes to brag that it is based on peer-reviewed science, not advocacy group reports. Cogley said the WWF cited the popular science press as its source.
- _ A table says that between 1845 and 1965, the Pindari Glacier shrank by 2,840 meters. Then comes a math mistake: It says that's a rate of 135.2 meters a year, when it really is only 23.5 meters a year.
- Still, Cogley said: "I'm convinced that the great bulk of the work reported in the IPCC volumes was trustworthy and is trustworthy now as it was before the detection of this mistake." He credited Texas state climatologist John Nielsen-Gammon with telling him about the errors.

However, Colorado University environmental science and policy professor Roger Pielke Jr. said the errors point to a "systematic breakdown in IPCC procedures," and that means there could be more mistakes.

A number of scientists pointed out that at the end of the day, no one is disputing the Himalayan glaciers are shrinking.

"What is happening now is comparable with the Titanic sinking more slowly than expected," de Boer said in his e-mail. "But that does not alter the inevitable consequences, unless rigorous action to reduce greenhouse gas emissions is taken."