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Blame Lies With Sun, Not Global Warming

By Julian Morris

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Millions are suffering and thousands have died from flooding in Pakistan and China. An extraordinary heat wave in Russia sparked fires that caused dreadful pollution and wiped out swathes of the wheat crop. Are these weather-related disasters caused by global warming?

In its most recent report, the UN's Intergovernmental Panel on Climate Change asserts that as the world becomes warmer, "flood magnitude and frequency are likely to increase in most regions." This seems plausible. A warmer world is also likely to be a wetter world, as more water evaporates from the oceans into the atmosphere. But, although rainstorms put out some of the fires, Russia has a drought.

The UN panel also claims that droughts are more likely in a warmer world — and that they have become more frequent since the 1970s, partly because of reduced precipitation. In fact, the number of droughts reached a low point between the mid-1970s and mid-1980s. Evidence shows that there has been no statistically significant increase in droughts since the 1950s. Given that global temperatures appear to have risen considerably since then, it seems a

stretch to blame the Russian drought on global warming.

Underpinning both the floods in Pakistan and China and the drought in Russia is a change in the usual pattern of the jet stream. Each hemisphere has a "polar" jet (seven to 12 kilometers above sea level) and a "subtropical" jet (at 10 to 16 kilometers). In the northern hemisphere, the polar jet pushes cooler air south and induces rain in mid-latitudes, while the subtropical jet pushes warm air north. But in mid-June, a kink appeared at the intersection, causing warm air to remain further north and east than normal and causing more cold air and rain to fall over northern Pakistan and China.

To make matters far worse, this kink in the jet stream was kept in place by a phenomenon called a "blocking event." This kept the Russian heat wave going for nearly two months and massively exacerbated the precipitation in Pakistan and China.

Such blocking events are rare, and there is no evidence of links with global warming. However, an explanation has been proposed by Professor Mike Lockwood, an astrophysicist at the University of Reading in Britain, who shows in a recent paper that blocking events in the winter are related primarily to solar activity. (Although he cautiously said in an e-mail to me that he "cannot say much (yet) about summer conditions as most of our work to date has been on wintertime, which shows relatively strong solar effects in the Eurasian region").

So the culprit is quite possibly the sun, not human emissions of greenhouse gases.

As for remedies, the current disasters demand a major humanitarian response. Worst affected is Pakistan, where an estimated 6 million people face cholera and other waterborne diseases unless they urgently get potable water. Pakistan's government responded slowly, making immediate national and international philanthropy even more important.

But what of the longer term? Floods, droughts and other weather disasters have plagued mankind for all of history. But deaths from such natural disasters have fallen by more than 90 percent in the past 100 years despite dramatic population growth. Why? Because higher wealth and better technology enable people better to cope. This is a silver lining to this summer's natural disasters.

Julian Morris is a visiting professor at the University of Buckingham and executive director of International Policy Network, London, an independent economic think tank. Richard Lourie will return to this spot in September.

The views expressed in opinion pieces do not necessarily reflect the position of The Moscow Times.

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