



New Report On Weather Extremes

The American Meteorological Society has released a [report](#) about the link between recent extreme events and climate change. Such attribution studies are very tricky, since natural variability is high. The most that can usually be said is that events of a certain magnitude have become more likely with climate change. The AMS report reflects a range of methodologies that can be used for this purpose. Some studies looked for statistical trends. Others compared temperatures or precipitation during specific days with days from earlier years where the wind patterns were similar. Others compared model runs with and without human climate forcing.

Notably the studies found signals of climate change in some events but not in others. They found little impact on the lack of precipitation in the central United States in 2012. On the other hand, they found that the heat waves observed in 2012 are now four times as likely because of climate change, and (using a different methodology) that the 2012 heat wave was more extreme because of climate change. The clearest finding related to arctic sea ice, which is disappearing at an unprecedented rate.

These findings do not “prove” the existence of climate change. They do add to the mounting evidence, however, that climate change has already begun to increase the number of extreme events and disasters.