

Climate is more than one storm

CM 7-2-11

John Cole

THROUGH weeks of record rains, winds and floods, protagonists on both sides of the climate change debate have claimed Queensland's sorry summer as vindicating their case.

At times the political point scoring has fully justified Mark Twain's lament about "lies, damned lies and statistics".

"Is it climate change?" quite simply is a question that cannot be asked usefully of any single flood, drought or cyclone or even a sequence of weather events because one event in itself yields no scientifically valid answer.

The science of climate change requires the data and perspective of decades and centuries, but in the hands of vested interests and ideologues is debated out of context with selective and incomplete information.

Even the elementary difference between weather and climate, explained by NASA as simply "a measure of time", is pretty much ignored.

Scientists talk about the weather as being what happens in the atmosphere over a few days or at most a season.

For a span of months and years they will refer to short-term "climate variability" like El Nino or La Nina, which some suggest may also be influenced by even longer patterns such as Pacific Decadal Oscillation (PDO) that tips every two or three decades.

By themselves, however, neither weather nor climate variability data explain the most important finding of climate science: that the global atmosphere is warming and that the human contribution through fossil fuel emissions is increasingly significant.

While the extreme, indeed highest on record, sea temperatures in the neighbouring western Pacific Ocean and Coral Sea principally explain current cyclonic intensity and record rainfalls, they are both reflective of climate variability - La Nina - and also of potentially longer-term patterns - climate change.

As for using 100 years of recorded weather data to make conclusions about future climate change, climate scientists are the first to acknowledge they have no, or very little, confidence in historical climate statistics as predictors of future climate.

A bigger Brisbane flood in 1893 than in 2011 does not disprove a link between the heat radiating functions of CO₂ molecules in the atmosphere and global warming.

Nothing relevant or useful is proved by all this conceptual confetti but for the community to be distracted from a genuinely well informed discussion about the risks we face from climate change.

Last year was the hottest and most severe weather year on record globally.

Queensland's worst cyclone in more than a century, the flooding that was Australia's largest natural disaster, economic dislocation across our state, and community upheaval and personal trauma give an insight to the future if the risks of climate change are ignored.

As US scientists told their Congress this week, it is time to end the "ideological and partisan" debate about climate change and get on to dealing with the economic, national security and health risks it brings.

Delayed action, they said, would mean more severe and costlier effects.

It applies equally to our own governments at all levels.

Professor John Cole is director of the Australian Centre for Sustainable Business and Development at the University of Southern Queensland.