Global warming 'underestimated'

File image of a polar bear in the Arctic
Prof Field said rising temperatures could thaw Arctic permafrost

The severity of global warming over the next century will be much worse than previously believed, a leading climate scientist has warned.

Professor Chris Field, an author of a 2007 landmark report on climate change, said future temperatures "will be beyond anything" predicted.

Prof Field said the Intergovernmental Panel on Climate Change (IPCC) report had underestimated the rate of change.

He said warming is likely to cause more environmental damage than forecast.

Speaking at the American Science conference in Chicago, Prof Field said fresh data showed greenhouse gas emissions between 2000 and 2007 increased far more rapidly than expected.

"We are basically looking now at a future climate that is beyond anything that we've considered seriously in climate policy," he said.

Prof Field said the 2007 report, which predicted temperature rises between 1.1C and 6.4C over the next century, seriously underestimated the scale of the problem.

He said the increases in carbon dioxide have been caused, principally, by the burning of coal for electric power in India and China.

Wildfires

Prof Field said the impact on temperatures is as yet unknown, but warming is likely to accelerate at a much faster pace and cause more environmental damage than had been predicted.

The BBC's science reporter Matt McGrath says the most recent data is also
worrying because it threatens to kick-start what climate scientists call negative feedback effects.

Prof Field says that a warming planet will dry out forests in tropical areas making them much more likely to suffer from wildfires.

The rising temperatures could also speed up the melting of the permafrost, vastly increasing the amount of carbon in the atmosphere.