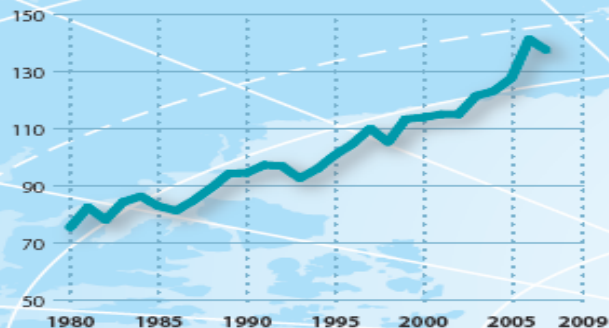


IGBP CLIMATE-CHANGE INDEX

Global-change trends for the public and policymakers

SEA-LEVEL RISE

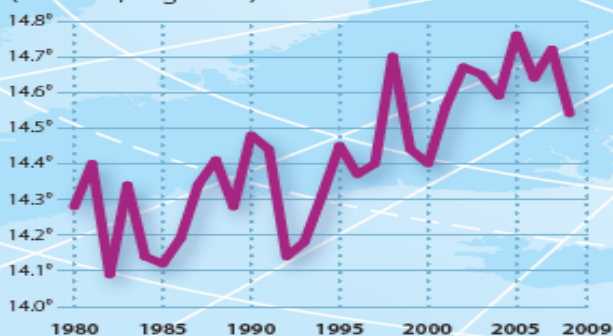
Sea-level rise (millimetres)



Source: Church and White global mean sea-level reconstruction, Permanent Service for Mean Sea Level, Proudman Oceanographic Laboratory, Natural Environment Research Council

GLOBAL AVERAGE TEMPERATURE

(absolute, degrees C)



Source: NASA

Rising index

A shift away from the current stable climate of the last 10,000 years

Falling index

A return to the planet's stable climate



The IGBP climate-change index combines the four key metrics that help unravel what is happening to the planet: temperature, carbon dioxide levels, sea level and Arctic sea ice. The index combines annual changes in each of these directly-measured parameters. Each year's change is added to the previous year. Natural variability sometimes obscures general trends in these metrics. By drawing together the four metrics as a single figure, the IGBP climate-change index exposes the underlying trend.

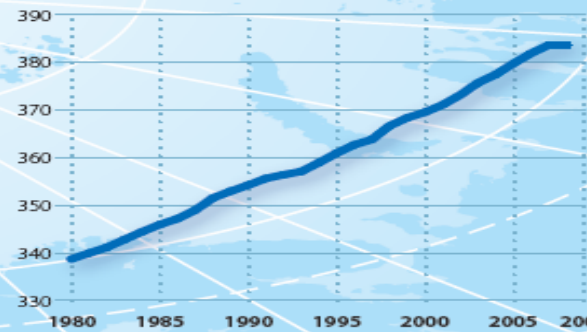


CURRENT TRAJECTORIES

Years to reach 450ppm CO₂ 40 years
Years to reach 550ppm CO₂ 100 years

ATMOSPHERIC CO₂

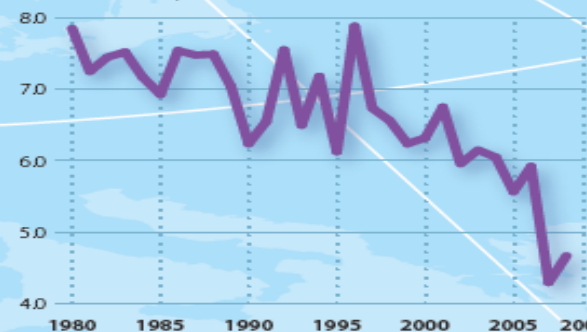
(parts per million by volume)



Source: Carbon Dioxide Information Analysis Center, Mauna Loa

ARCTIC SEA-ICE COVER

Northern hemisphere summer sea-ice minimum (millions of square kilometres)



Source: NOAA