

Future earth-climate of earth (around the equator) 250 million years later

[Environment](#), [Earth](#)



The story about the climate at the equator 250 million years ago is both interesting and frightening. Interesting, because it puts all the things we concern ourselves with right now in perspective, and they seem very insignificant, and frightening, because of what it suggests is in store for us. It is believed that 250 million years from now, by a process of 'subduction', a giant continent called 'Pangea Ultima' will be formed, which will consist of North America and Africa married to one another with South America rounding off the bottom of the supercontinent. A miniscule ocean basin will remain at the bottom of the two continents.

This marriage and other changes will cause a big effect on temperature. The huge landmass will mean that winds reaching the land will be denuded of their moisture. Much of what is now southern North America will fall on the Equator. Because it will be robbed of any moisture bearing winds, it will probably become barren, and may even form into a desert. The beaches of Miami will probably be replaced by an Arizona like landscape. In addition to the geosphere, the water bodies (the hydrosphere) will also make a big impact on the temperature and climate around the equator.

What is today the Indian Ocean will be trapped, creating a giant lake like body the size of modern Australia. Being trapped like a lake, the Indian Ocean will not be able to circulate air currents and therefore affect temperature. Parts of the Indian subcontinent that will then (and even today to) fall on the equator will likely not benefit from the South Western and North Eastern monsoons that bring rain and influence temperature. The atmosphere will not be left behind in this giant drama. The atmosphere acts

a conduit in the transfer of heat and water from the oceans and seas to the land.

The formation of a new giant ocean and a supercontinent will make the transmission of this heat energy from the sea to the land and water vapour (which is deposited on land as rain) more difficult. Instead of carrying moisture laden winds, large parts of the giant landmasses, particularly around the equator will be affected by hot, dry winds, which will increase temperature on the surface as well. In the same vein, the atmosphere may serve to radiate hot air outwards from the centre of these giant continents to the peripheries, which could increase the temperature in other regions, and also affect the surface temperature.

As a consequence, the temperature overall might rise, exacerbating the effect of climate change induced by human factors. The outlook is not all grim however. Higher temperatures, coupled with a giant lake like Indian Ocean (providing an abundant supply of water) could result in the proliferation of plant life in much of equatorial Africa, South America and Asia. The proliferation of plant life would bring down temperatures and reduce levels of carbon dioxide in the atmosphere, countering the effects of global warming.

The contortion of the landmass of Eurasia will bring the eastern parts of Russia, such as the port city of Vladivostok along the equator. The climate pattern in Russia in particular will therefore completely change, becoming much less severe and a lot more temperate and even equatorial. Finally, California and large parts of then equatorial North America will have very heavy, even torrential rainfall. Them being the first landmasses after several

thousand miles of ocean, huge amounts of water will be deposited as rain in these parts. This could have a cooling effect on the temperature there.