





















Murielle Yao-Aurelie Legendre -Sanae Zouine

5. Transportation



1. Evaporation







5. Transportation



7. Deposition

3. Sublimation

Contra a

10. Plant Uptake





affect the transmission of certain diseases.



The water cycle affects the diffusion of water vapor in the atmosphere and therefore the humidity level of the atmosphere. The rise in temperature due to global warming induces an increase in evaporation. Also, a prolonged change in precipitation can





The rise in temperature on earth increases evaporation and disturbs the water cycle. In the past, we used to talk about global warming, but today we talk about climate change, or even climate disruption. This shift in vocabulary is materialized by this relationship which is therefore of fundamental importance.





Human health





Human health is affected by the movement of disease vectors, heat waves and armed conflicts.





Distribution areas







Extreme

weather



events, prolonged disturbance $\mathbf{0}^{\dagger}$ precipitation, and rising temperatures can lead to the displacement of distribution areas for some species.

Thermo-hygrometric conditions







conditions may cause sensitive species to move.



Temperature and relative humidity (thermo-hygrometry) are closely related; the water cycle plays on the diffusion of water vapour in the atmosphere. At high temperature the air absorbs more moisture. A long-term change in the thermo-hygrometric



Sporogonic cycle





The sporogonic cycle is the time required for the development of the parasite in the body of the vector. It depends on the species of the vector, the strain of the parasite but also on the ambient temperature and humidity. Under these conditions, it is conceivable that the geographical distribution of the disease may be affected by global warming.







Climate change changes the frequency, intensity, geographic distribution and duration of extreme weather events (storms, floods, droughts). When they persist, they cause some species to move.





Permafrost





The melting of the permafrost is due to rising temperatures. its thaw could "bring back to life" extinct viruses and increase disease-vector species.











Vectors of disease





Vector-borne diseases are expanding due to the expansion of the distribution areas of some species. Also the sporogonic cycle affects disease transmission.



disruption of ecosystems





Under the combined effects of climate change, many ecosystems are being disrupted. Living beings, when they cannot adapt to the physical changes of the environment, move.







Carbon dioxide emissions result in an increase in the burden of the atmosphere in greenhouse gases, which implies an increase in temperatures and thus a disruption of the water cycle.

