

GEOS 24705/ ENST 24705

U. Chicago

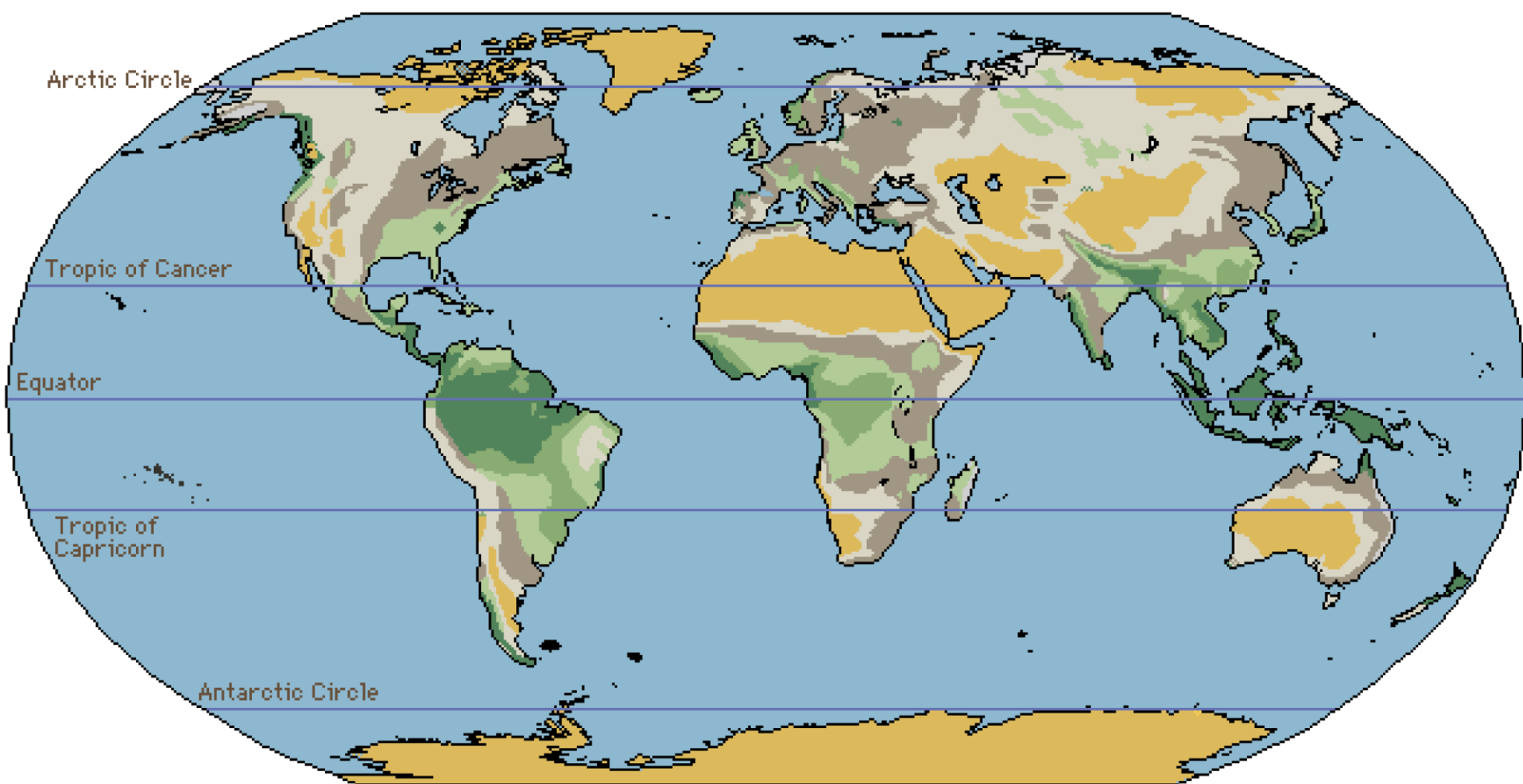
Mar., 2012

Global energy fluxes

There is a fact, or if you wish, a *law*, governing all natural phenomena that are known to date. There is no known exception to this law—it is exact so far as we know. The law is called the *conservation of energy*. It states that there is a certain quantity, which we call energy, that does not change in manifold changes which nature undergoes. That is a most abstract idea, because it is a mathematical principle; it says that there is a numerical quantity which does not change when something happens. It is not a description of a mechanism, or anything concrete; it is just a strange fact that we can calculate some number and when we finish watching nature go through her tricks and calculate the number again, it is the same.

—Richard Feynman, *The Feynman Lectures on Physics*

“Energy is a measure of the ability of a physical system to do work.”



PRECIPITATION

under 250 mm	under 10 in	500 - 1000 mm	20 - 40 in	1500 - 2000 mm	60 - 80 in
250 - 500 mm	10 - 20 in	1000 - 1500 mm	40 - 60 in	over 2000 mm	over 80 in