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WET LANDS

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Where does the Earth's rain fall? This question can nowadays be answered remarkably well because precipitation figures are part of possibly the most advanced global scientific data that is currently available in geosciences. Climate science is based on such accurate and reliable models. Maps about the global distribution of precipitation are also part of our basic understanding of the geography of the world. Climate observations from the past decades (such as those included in the WorldClim database used in this visualisation) provide information about the average monthly precipitation. This was used as a basis for a gridded cartogram transformation of the land surface in which each grid cell is resized according to the total amount of rain (and other precipitation) in that area. The main map shows the accumulated average annual precipitation patterns across the globe over the past five decades. In addition, a smaller series of cartograms visualises the average monthly variations over the same period.

The annual map shows the high rainfall volumes in the tropical regions north and south of the Equator. Areas of high seasonal precipitation volumes, such as the monsoon regions in Asia are less significant compared to the tropics, but still stand out from the dry regions. The large deserts on the planet virtually disappear, most strikingly the Sahara which minimises most of the northern parts of Africa. The areas with more even and moderate precipitation levels remain smaller but stay visible, such as Europe and parts of North America.

The monthly rainfall patterns reveal seasonal changes that are not shown in the annual precipitation cartogram in a high geographic detail. Monsoon rain in Asia, seasonal variation around the Equator, winter rain in the Mediterranean climates and other key patterns are some of the most important phenomena that become apparent in the monthly map series.