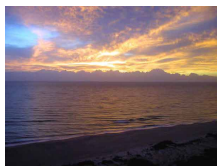


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By: Tudor Vieru, Science Editor



Understanding changes in the ocean could help scientists predict future rainfall
CarolWoodmanSee

[Oceanic Activity Explains Lack of Rainfall](#)

The equatorial and tropical regions register less and less annual rain

Understanding how oceans directly influence the forming of rain clouds above areas close to the "middle" of the Earth could provide scientists with novel ways of figuring out why rainfall has decreased so drastically over those regions in the past few years. Changes in the ocean's salinity have been identified as playing a role in offsetting the delicate balance in the atmosphere, which generates rain throughout the world. The freshening of waters in the Atlantic ocean has triggered great concerns about the effects it may have on the warm Gulf Stream current. Shutting down this water cycle, which now generates the temperate climate throughout western Europe, will have disastrous consequences on the "old continent," bringing about a new ice age, which will cover all countries with a thick ice shelf that will spread until it reaches the Mediterranean sea. Once again, global warming has been blamed for this variance in natural oceanic salinity, especially in sub-tropical regions, where the levels of salt have decreased far more than they would have, had they been influenced by natural factors. This fact could have significant repercussions on the incidence of rain in many regions, including some that are not in the immediate vicinity of tropical or equatorial areas. The forming of rain is an intricate process, which involves the "manipulation" of water that evaporates from oceans. Cooler, less salty water evaporates slower, which directly implies that less rain water will reach the upper layers of the atmosphere. And, with tropical storms usually bringing huge amounts of water down to earth, it really seems that there are little measures anyone can take to break this cycle. "Knowing how our oceans are changing over what are essentially vast data-sparse areas is important. It provides us with a window on changes in the hydrological cycle and gives us more certainty in projections of rainfall as the climate changes. In our region, for instance, this research could help us to refine projections of summer drying extending out from the Mediterranean basin," explained study leader Peter Stott, head of climate monitoring at Met Office.