

Past and Future Drylands Hydrology

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Wally Broecker and Richard Seager are hosting a two day meeting on 'Dryland hydrology, past and future, to be held at Lamont July 19 and 20, 2007. The meeting will bring together experts in climate modeling and proxy based reconstructions of past drylands climates from the Americas to Asia and Australia. The meeting was motivated by recent modeling-based studies that indicate that subtropical regions will significantly, and worryingly, dry as a result of anthropogenic global warming. The meeting will further examine these projections and place them in the context of the medieval period, when there is also evidence for greater subtropical aridity, and the last glacial when there is evidence for a moister subtropics. Proxy evidence for past Pleistocene and Holocene hydroclimate changes in the drylands will be examined together with model simulations of those periods to identify the changes in ocean and atmosphere circulation and the hydrological cycle that were responsible. By improving understanding of past hydroclimate changes we hope to be able to better assess the realism of future climate projections. Talks presented at the meeting will be placed online together with a brief summary of major findings.