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Why more hydrologists need to look up

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Floods are no longer seen as random local events. Perspectives are now emerging that aim to link hydrological extremes to large-scale climate drivers at global and regional scales. For example, Atmospheric Rivers, narrow regions of water vapor transport in troposphere, have been associated with the most damaging floods in parts of the US and Europe. What is becoming increasingly apparent is that we need to better understand the driving mechanisms of the hydrological cycle over multi-decadal time-scales, bridging the fields of hydrology and climatology. This scientific knowledge can then be exploited to improve management of future extremes.