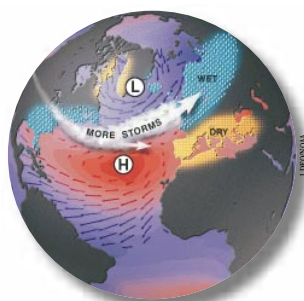


## Shifting pressures in the North Atlantic

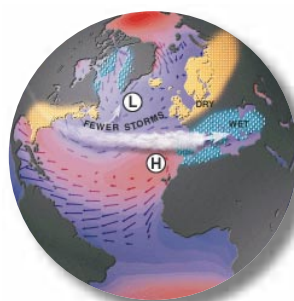
The North Atlantic Oscillation (NAO) dictates weather conditions from North America to Siberia. This coupled ocean-atmosphere phenomenon occurs about once every ten years, affecting climate across the Atlantic Basin. Long-term altimetry measurements are helping us to improve prediction of such climatic effects.

### Atmosphere

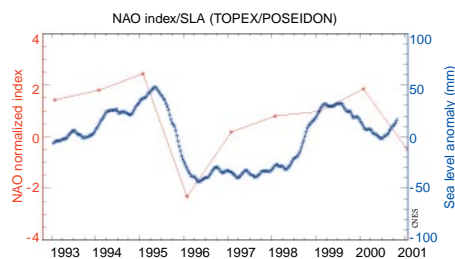
➤ During a positive NAO, pressures in the Azores high are unusually high and winds bring mild temperatures and rain to Europe.



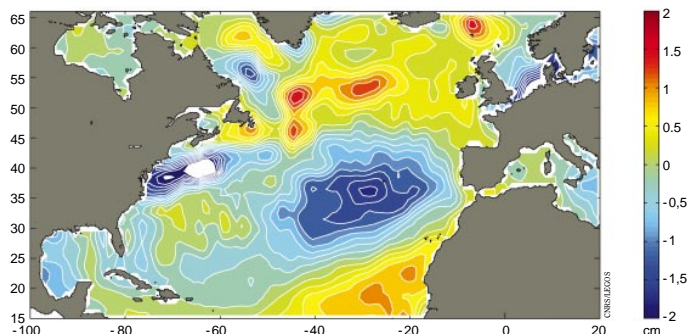
➤ During a negative NAO, the Azores high is weaker and further south, thus bringing less heat to Europe.



### Ocean



▲ NAO index —in red— (showing pressure differences between the Azores and Iceland) correlated to altimetry measurements —in blue— (sea level anomaly).



Sea level anomaly between March 1996 (negative NAO) and 1995 (positive NAO).

### Could sea level be a telltale sign of the NAO?

TOPEX/POSEIDON measurements between the winters of 1995 and 1996 show an abnormal fall in sea level (in blue) between the West Indies and Spain. This fall matches the NAO index over the same period.