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Are extreme weather events becoming more common? - the case of NE Atlantic storminess.

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Answering the question if storms have become more severe in Northern Europe is a difficult task, since adequate data are hardly available. Wind observations, which would be the best data, suffer from serious inhomogeneities (i.e., influences unrelated to the regional wind climate, such as local conditions, instrumental changes etc.). In the past 20 years it became obvious, mainly through the European WASA project, that other proxies have to be employed – mainly based on air pressure and water level readings.

Such proxies indicate that the frequency of strong wind events (storms) has undergone some variations on time scales of decades (e.g. an increase 1960-1990), but that a systematic, ongoing trend is absent. Also in historical GCM-simulations links between hemispheric temperatures variations and changing intensities of storm activity have not been found so far.

Scenarios of possible, plausible future climate change indicate a slight increase in storminess (about 10% until the end of the 21st century), which is rather weak so that it is implausible that such changes would be detectable today.