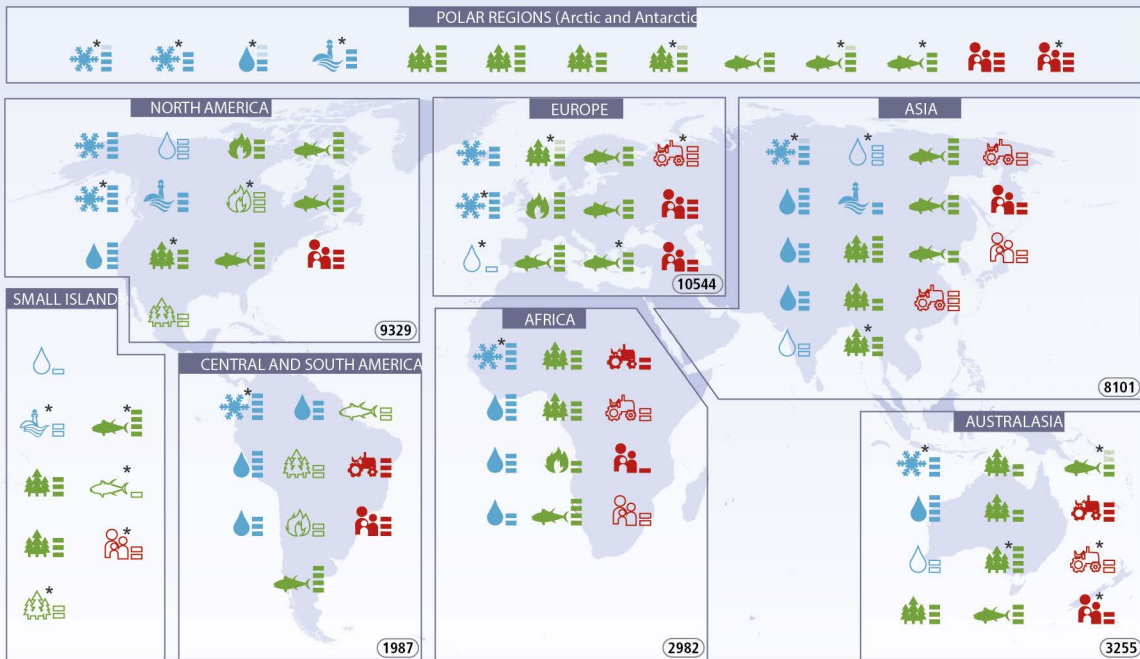
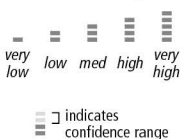


# Widespread impacts attributed to climate change based on the available scientific literature since the AR4



## Confidence in attribution to climate change



## Observed impacts attributed to climate change for

### Physical systems



### Biological systems



### Human and managed systems



\* Impacts identified based on availability of studies across a region

■ Outlined symbols = Minor contribution of climate change  
 ■ Filled symbols = Major contribution of climate change