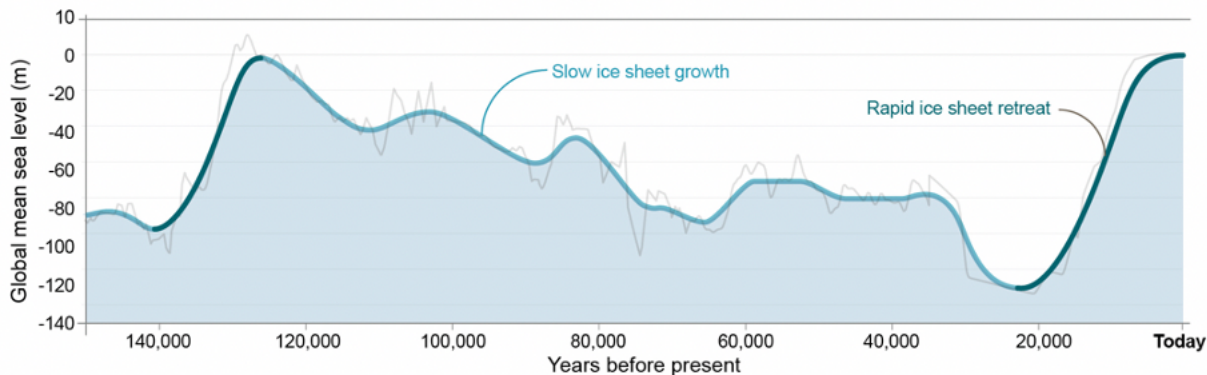
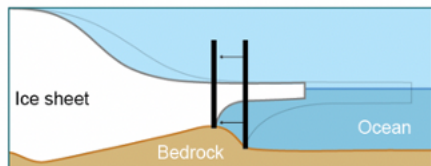


FAQ 9.1: Can melting of the ice sheets be reversed?

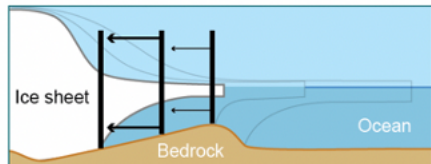
Once ice sheets are **destabilised**, it takes them tens of thousands of years to re-grow. These changes strongly affect **sea level**.



Melting driven by ocean temperature



When bedrock dips seaward or is flat, the retreat stops when warming stops. When ice sheet retreats, **less ice** is released into ocean

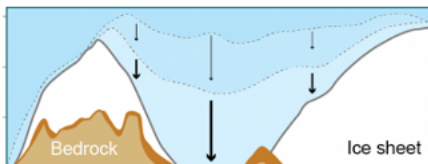


When bedrock dips landward the retreat is quick and self-sustained. When ice sheet retreats, **more ice** is released into ocean – ice sheet retreats further

Melting driven by air temperature



The ice sheet is very thick therefore its surface is very high and the air at high altitude is very cold



As the ice sheet melts, its **surface goes down** until it reaches a threshold, where the surrounding air is warmer and melts the ice even more quickly