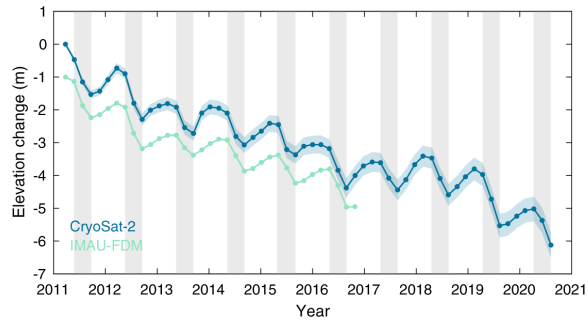
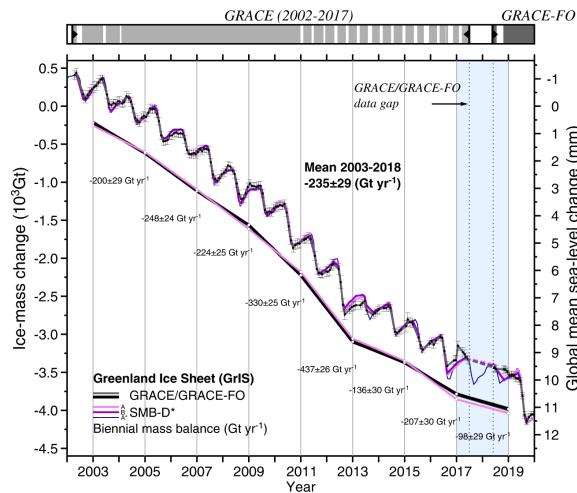
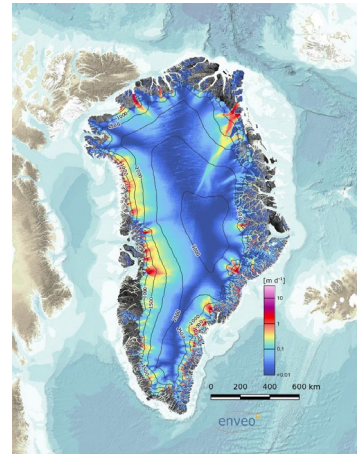
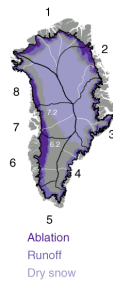


Mass Balance of the Cryosphere: The Greenland Ice Sheet

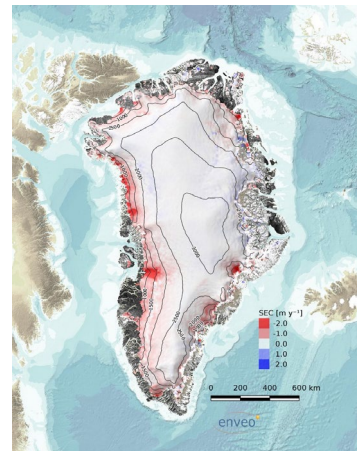
Current state



Slater et al., 2021



Sasgen et al., 2020



Remaining challenges

- To accurately be able to separate ice sheet from outer Glaciers and ice caps in the **gravimetric** mass balance -> this makes intercomparisons difficult.
- For the **mass budget** method and for basal melt estimates, more accurate bed topography is needed.
- Radar **altimetry** R&D is challenged by the great reduction in collected validation data (end of OIB and CryoVEX campaigns).
- A better understanding of firn processes in a warming climate is needed.
- We have now a lot of data – how to best handle/combine them.