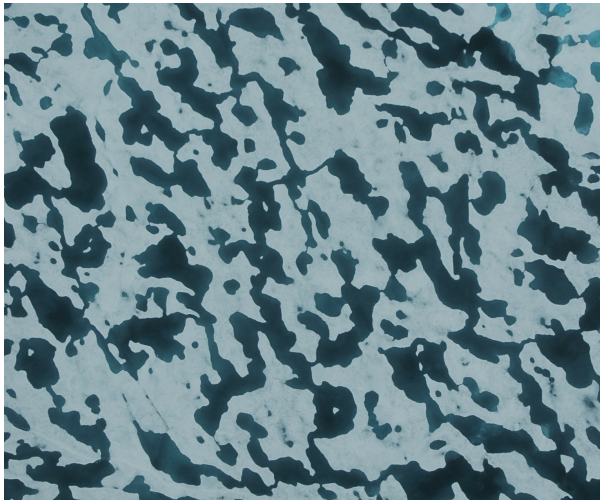


# challenge:

Represent sea ice more realistically in climate models to improve projections.



*How do patterns of dark and light evolve?*



Account for key processes

*e.g. melt pond evolution*

Including PONDS in simulations **LOWERS** predicted sea ice volume over time by 40%.

Flocco, Schroeder, Feltham, Hunke, *JGR Oceans* 2012

... and other sub-grid scale structures and processes.

*linkage of scales*

