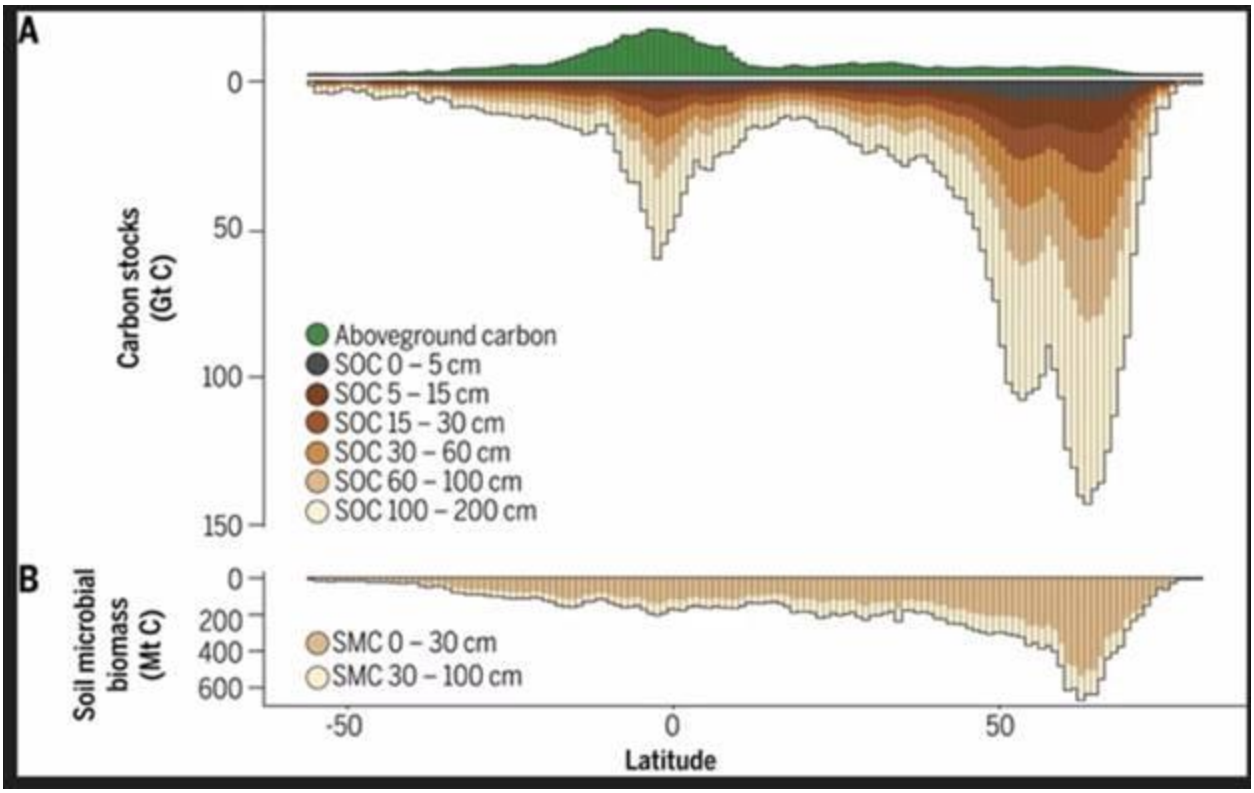
Carbon storage Aboveground vs Below Ground



Graph provided by The Nature Conservatory

This graph refers to the typical way in which carbon is stored in either aboveground or below ground stocks, specific to biologic sequestration or natural climate solutions. In this case, “aboveground carbon” refers to storage in things like trees and forests, whereas belowground refer to how soil, peatlands, and permafrost may store carbon.

Since this is a general graph, it does not necessarily capture all the nuance that applies to Alaska. For example, the Tongass is well above 0 degrees latitude, but is very rich in aboveground carbon storage. This recent peer-reviewed article shows that the Tongass represents ~20% of the total forest carbon stock in the entire National Forest system in the US, or 1.5x the 2019 US greenhouse gas emissions. The Tongass is also unique in that it is far less susceptible to wildfires than other forests may be, due to it being a temperate rainforest that receives substantial precipitation (wet forest = fewer fires). This means that the ecosystem itself automatically negates any concerns around carbon credit projects in forests that might later be faced with wildfire damage.