Goal: Calculate carbon stocks across all CCN synthesized soil data

Workflow:

Depthseries and Core-level Calculations

1. Standardize DBD, fraction OM, fraction C to a depth of 1m for each core depthseries (keep in mind that folks might want the option to look at deeper or multiple standard depths)
2. Calculate soil carbon density (gC cm-2) from DBD and fraction C for each interval (if fraction C is missing, gapfill using fraction OM relationship. If DBD is missing…TBD)
3. Calculate C stock (gC m-2) for each interval by multiplying the interval (cm) with the soil carbon density
4. Calculate C stock for whole core by summing the interval C stocks (need to work out an integrated estimate if intervals are not continuous). Multiple the core C stock by 3.67 to calculate the Mg CO2eq ha-1.
5. Scale each core C stock from gC m-2 to MgC ha and join the resulting table to the core-level CCN synthesis table

Country Level Calculations

1. Calculate the mean stock (with SE) for each country-habitat combination
2. Load in table with area of land cover type per country (this is GMW mangrove habitat area for now – no further stratifications, no timeseries)
3. Calculate stocks per country and area of specified land cover type (mangrove for now). Convert stock estimates (and associated SE) to TgC.