

Loss-On-Ignition Protocol

Organic matter provides a measure of the role of in situ biomass in causing accretion and thus the rate of sedimentation. The purpose of LOI is to determine how much organic matter is in a sediment subsample

Materials needed include:

1. Mass balance with (0.001g resolution)
2. Drying oven
3. Muffle furnace
4. Crucibles

Procedure:

1. Label [using needle, marker will not work] and weigh crucible
2. Place a ~10g of wet subsample in the crucible and weigh
3. Dry the sample in the oven at 100 deg C until dry (may take up to a few days).
4. Re-weigh the crucible+subsample, difference yields the water content
5. Place crucibles in muffle furnace, temperature set to 450 deg C and leave the crucible in it for 8 hours.
6. Remove crucibles, after cooling re-weigh crucible+subsample. The difference from the dry state yields the organic content.