Supp. Mat. 1. Reference materials used to control the quality of the data obtained by bulk organic matter:

IAEA 600:

δ13C = -27.771 ± 0.043 ‰

δ15N = +1.0 ± 0.2 ‰

USGS 40:

C = 40.8 %

N = 9.52 %

δ13C = -26.39 ± 0,04 ‰

δ15N = -4.53 ± 0.06 ‰

Leco™ Soil:

C = 13.77 ± 0.15 %

N = 0.81 ± 0.03 %

Secondary marine sediment standard from Ubatuba (SE Brazil) (300 samples):

C = 2.04 ± 0.04 %

N = 0.21 ± 0.01 %

δ13C = -22.26 ± 0.16 ‰

δ15N = 5.13 ± 0.87 ‰