



Bulk density (BLD): 1500 kg / m³ (s.d. = ±100)

Organic carbon (ORC): 50‰ (s.d. = ±10)

Coarse fragments (CRF): 10% (s.d. = ±5)

Total volume of the block (HOT): 30 cm (· 1 ha)

Soil organic carbon stock (OCS): 203 tonnes / ha (±44)

$$\mathbf{OCS} = \text{ORC}/1000 \cdot \text{BLD} \cdot (100 - \text{CRF})/100 \cdot \text{HOT}/100$$

$$= 1/10,000,000 \cdot \text{ORC} \cdot \text{BLD} \cdot (100 - \text{CRF}) \cdot \text{HOT}$$

$$= 1/10,000,000 \cdot 50 \cdot 1500 \text{ kg / m}^3 \cdot (100 - 10) \cdot 30 \text{ cm}$$

$$= 20.25 \text{ kg / m}^2 = 203 \text{ tonnes / ha}$$

$$\mathbf{OCS.sd} = 1/10,000,000 \cdot \text{HOT} \cdot \text{sqrt}(\text{BLD}^2 \cdot (100 - \text{CRF})^2 \cdot \text{ORC.sd}^2 + \\ + \text{BLD.sd}^2 \cdot (100 - \text{CRF})^2 \cdot \text{ORC}^2 + \text{BLD}^2 \cdot \text{CRF.sd}^2 \cdot \text{ORC}^2)$$

$$= 4.4 \text{ kg / m}^2 = 44.1 \text{ tonnes / ha}$$