

Loess-paleosol

- ① Correction for carbonates, _____ *all three (two, one): 1% (10%, 20%) relative 1σ*
OM, volcanic inputs
- ② Assumed based on physical description: _____ *30% relative 1σ*
loess (= 0.98) vs. (paleo)soil (= 0.94)

Lake

- ① Correction for carbonates, _____ *all five (four, three, two, one): 1% (10%, 20%, 30%, 40%) relative 1σ*
OM, bSiO₂, volcanic inputs, sediment focusing
- ② Assumed _____ *50% relative 1σ*

Marine

- ① Correction for carbonates, _____ *all five (four, three, two, one): 1% (10%, 20%, 30%, 40%) relative 1σ*
OM, bSiO₂, river and volcanic inputs
- ② Based on ²³²Th _____ *33% relative 1σ*

Polar ice

- ① Antarctic ice cores: based on Coulter counter insoluble particle volume concentration data (no volcanic correction) _____ *15.3% relative 1σ*
- ② Greenland ice cores: based on assumed δ¹⁸O vs. calcium:dust concentration ratio (plus no volcanic correction) _____ *22.4% relative 1σ*

Peat

- ① PCA guides decision on dust geochemical proxies _____ *10% relative 1σ*
 - ↳ + volcanic correction applied _____ *1% relative 1σ*
(e.g., Nd isotopes)
- ② No PCA, multi-proxy approach, volcanic correction _____ *20% relative 1σ*
- ③ No PCA nor volcanic correction, multiple dust proxies considered _____ *30% relative 1σ*
- ④ No PCA, single-proxy approach, volcanic correction _____ *50% relative 1σ*
- ⑤ No PCA, single-proxy approach, no volcanic correction _____ *60% relative 1σ*